

STEPHEN S. LOCKWOOD, PE, PMP

THOMAS M. ECKELS, PE
ERIK C. SWANSON, PE, PMP
THOMAS S. GORTON, PE

JAMES B. HATFIELD, PE
BENJAMIN F. DAWSON III, PE
CONSULTANTS

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151

E-MAIL hatdaw@hatdaw.com

MAURY L. HATFIELD, PE
(1942-2009)
PAUL W. LEONARD, PE
(1925-2011)

Engineering Statement
WIIW-LD Nashville, TN
Statement regarding Protection of Land Mobile Radio Facilities
November 2023

This Engineering Statement has been prepared on behalf of Bridge News, LLC ("Bridge News"), licensee of digital LPTV station WIIW-LD, which holds a construction permit 00000213351 for displacement from Ch29 to Ch14. Construction of the displacement facility has been completed, and this exhibit has been prepared in order to address the condition on the construction permit which requires Bridge News to "take adequate measures to identify and substantially eliminate objectionable interference which may be caused to existing land mobile radio facilities in the 460 to 470 MHz band," and to provide documentation that objectionable interference will not be caused.

This study consists of two parts: 1) An analysis of the impact of out-of-band interference from WIIW-LD into LM receivers, and 2) analysis of LM receiver overload (desensitization) due to WIIW-LD operating on an adjacent channel.

Summary

The WIIW-LD transmitting antenna is located on a 417.4 meter tower with FCC Antenna Structure Registration number 1050735, located in western Nashville. The facility will operate elliptically polarized with 15 kW ERP horizontal and 3 kW ERP vertical, with a directional antenna and a specially-tuned 8-pole full service mask filter. Filter measurements were made by supplier Com-Tech. Those measurements are referenced in this Engineering Statement and used to support the attached calculations.

The interference study calculations confirm that the operation of the constructed WIIW-LD facility eliminates objectionable interference to existing land mobile radio facilities in all cases.

Likewise, the overload analysis calculations found no cases of potential LM receiver signal overload.

Interference Analysis

Detailed calculations have been performed, to evaluate the level of interference protection which is provided to all LMR records in the ULS database which list site coordinates within 100 kilometers of the WIIW-LD transmitter site, and which are within 5 MHz of the lower edge of the WIIW-LD 470-476 MHz spectrum. This analysis is depicted on the attached spreadsheet (Appendix A).

The several calculated fields of the spreadsheet are described in the following table:

WIIW-LD ERP H+V (dBm) The WIIW-LD ERP in dBm has been calculated on the azimuth to the listed LMR license site coordinates, from the authorized horizontally- and vertically-polarized components and directional pattern. The horizontally-polarized component was assumed to be attenuated by 10 dB, to account for cross-polarization loss for typical vertically-polarized LMR receive antennas.
Transmitter + Filter Net Attenuation (dB) The measured attenuation of the transmitter and filter, from a lookup table in the spreadsheet which includes interpolated attenuation values between the measurement points.
DTV Coupling into LM for LM=11.2 kHz (dB) The total DTV channel power needs to be adjusted to provide the equivalent channel power within the 11.2 kHz channel bandwidth used by most LMR stations. The adjustment factor to provide the signal power in a 11.2 kHz bandwidth (referencing typical 500 kHz bandwidth for the DTV transmitter lower adjacent channel sideband pre-filter response) is $10 * \text{LOG}(500/11.2) = 16.5 \text{ dB}$.
Worst case Power on LMR Frequency (dBm) ERP – measured attenuation – coupling factor This spurious energy would appear at the front end of the LMR receivers as broadband noise.
Free Space Loss (dB) Free space loss calculated per the distance to the LMR site, and the LMR frequency. $FSPL(dB) = 20\log(d) + 20\log(f) + 32.45 - (2 * 2.15 \text{ dB})$
LM Line Loss (dB) Transmission line loss presumed to be experienced between the LMR antenna and receiver.
Calculated interfering signal field strength (dBu) Worst case Power – Free Space Loss – LM Line Loss

Interference was considered to occur where the calculated field strength from Ch14 at the LMR site was 17 dBu or greater, per §73.687(e)(4)(ii) of the Commission's Rules.

The following table presents an example calculation of the interference study methodology.

Parameter	Value
LMR License	
WQHE537 site 8: 10.5 km from Ch14 at 229.5 degrees	
Land Mobile station frequency	467.7625 MHz
Ch14 transmit ERP total of H+V planes at given azimuth (including 10 dB cross-pol loss for H-pol component)	54.38 dBm
Transmitter + filter loss at LMR frequency	-114.32 dB
Free Space Path loss for dipole antenna at frequency and distance	-101.97 dB
DTV coupling into LM (Bandwidth: DTV=500 kHz, LM-11.2 kHz)	-16.5 dB
LM line loss	-2.0 dB
Effective received DTV station interference power	-180.41 dBm Equals: -51.96 dBu
Interference threshold signal level (LM receiver sensitivity)	17 dBu
Margin for interference	68.96 dB
Analysis result	Pass

The study results (presented at Appendix A) initially found 2 cases where this field strength threshold was exceeded, by at most 2.52 dB. Additional analysis was then performed on these 2 cases to evaluate the impact of other factors which would reduce the Ch14 field strength, namely adjustment for actual LM channel bandwidth, and adjustment for the Ch14 antenna elevation pattern on the depression angle to the LM receive antenna. While both of these LMR license frequencies (both utilized under license WQVI301) were found per the license to be operating with the standard 11.2 kHz bandwidth (and therefore no adjustment would be made on that factor), their fixed receive site is located at a relatively steep 13.17 degree depression angle from the

Ch14 antenna. The elevation pattern at this depression angle attenuates the Ch14 signal by an additional 16.56 dB, thus resolving this issue for the two cases.

Overload Analysis

Detailed calculations have been performed, to evaluate the potential for LM receiver overload (desensitization) to all LMR records in the ULS database which list site coordinates within 100 kilometers of the WIIW-LD transmitter site, and which are within 5 MHz of the lower edge of the WIIW-LD 470-476 MHz spectrum. This analysis is depicted on the attached spreadsheet (Appendix B).

This study found no cases of potential LM receiver signal overload

The following table presents an example calculation of the overload study methodology.

Parameter	Value
LMR License	
WQHE537 site 8: 10.5 km from Ch14 at 229.5 degrees	
Lower band edge frequency of TV station (Ch14)	470 MHz
Ch14 transmit ERP total of H+V planes at given azimuth (including 10 dB cross-pol loss for H-pol component)	54.38 dBm
Free Space Path loss for dipole antenna at frequency and distance	-102.02 dB
DTV coupling into LM (Bandwidth: DTV=5380 kHz, LM=11.2 kHz)	-26.8 dB
LM line loss	-2.0 dB
LM receiver out of band rejection ¹	-80.0 dB
Effective received DTV station interference power	-156.44 dBm
LM receiver sensitivity	-120.0 dBm
Margin for overload	36.44 dB
Analysis result	Pass

¹ Typical value per receiver manufacturers

Conclusion

The calculations described in this Engineering Statement demonstrate that the interfering signal level power from WIIW-LD would be below the noise floor of every fixed LMR station in the area and thus interference to these LMR stations is not predicted to occur.

Statement of Engineer

This Engineering Statement has been prepared by the undersigned. I am an engineer in the firm of Hatfield & Dawson Consulting Engineers, and am registered as a Professional Engineer in the State of Washington. I hereby declare that the facts set out in the foregoing Engineering Statement, except those of which official notice may be taken, are true and correct.

Signed this 29th day of November, 2023



Erik C. Swanson, P.E.

Appendices follow

Appendix A: LMR Interference Protection Calculations

Appendix B: LMR Overload Protection Calculations

Appendix C: Ch14 antenna technical and pattern data

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW																
WQV301	3	36	8	5 N	86	51	25.9	W	1	132.1	469.3625	66.20	-75.09	-16.5	-25.38	-81.58	-2.00	19.52	11.20	0.00	13.17	-16.56	2.96				
WQV31	3	36	8	5 N	86	51	25.9	W	1	132.1	469.3625	66.20	-76.28	-16.5	-26.30	-83.40	-2.00	18.35	11.20	0.00	13.17	-16.56	1.79				
WQV326	3	36	8	32.4 N	86	49	1.8	W	4.4	85.0	469.9250	66.63	-71.31	-16.5	-23.30	-94.46	-2.00	0.03	0.73								
WQV3203	6	36	10	48.9 N	86	51	6.8	W	4.5	15.6	469.9125	65.15	-71.24	-16.5	-22.59	-94.65	-2.00	9.25									
WQV369	2	36	9	1.5 N	86	48	7.7	W	5.8	79.4	469.6500	66.43	-70.98	-16.5	-21.05	-96.85	-2.00	8.59									
WQV399	2	36	7	56.6 N	86	47	44	W	6.4	98.5	469.7350	66.44	-70.24	-16.5	-20.30	-97.71	-2.00	8.48									
WRR0360	2	36	9	15.2 N	86	48	10	W	5.8	75.2	469.8875	66.42	-71.09	-16.5	-21.18	-96.86	-2.00	8.46									
WQJM969	2	36	9	1.5 N	86	48	7.7	W	5.8	79.4	469.9125	66.43	-71.24	-16.5	-21.30	-96.86	-2.00	8.33									
WNNX373	2	36	8	25.2 N	86	47	53	W	6.1	90.5	469.9750	66.52	-71.59	-16.5	-21.57	-97.30	-2.00	7.62									
WRH1Y470	1	36	9	6.3 N	86	47	35.3	W	6.6	79.4	469.8750	66.43	-71.02	-16.5	-21.09	-97.98	-2.00	7.42									
WRH1Y470	1	36	9	6.3 N	86	47	35.3	W	6.6	79.4	469.9625	66.43	-71.52	-16.5	-21.59	-97.98	-2.00	6.92									
WQF625	2	36	9	12.5 N	86	48	32.3	W	5.3	74.5	469.4500	66.41	-73.48	-16.5	-23.57	-96.07	-2.00	6.85									
WQMD594	3	36	9	30.7 N	86	47	3	W	7.6	74.9	469.7000	66.41	-70.49	-16.5	-20.58	-99.20	-2.00	6.71									
WQCE918	2	36	8	41.2 N	86	48	3	W	5.8	85.7	469.4750	66.47	-72.97	-16.5	-23.00	-96.85	-2.00	6.63									
WRU943	7	36	10	17.8 N	86	51	37.8	W	3.4	76.7	469.3250	64.54	-75.67	-16.5	-27.64	-92.21	-2.00	6.63									
WNAT848	2	36	9	33.2 N	86	46	55	W	7.8	74.7	469.7500	66.41	-70.45	-16.5	-20.54	-99.43	-2.00	6.52									
WP0A612	2	36	9	33.2 N	86	46	55	W	7.8	74.7	469.7500	66.41	-70.73	-16.5	-20.82	-99.43	-2.00	6.23									
WQF625	2	36	9	13.4 N	86	48	14.6	W	5.7	95.4	469.4375	66.42	-73.37	-16.5	-23.82	-96.70	-2.00	5.97									
WTQK907	2	36	9	29 N	86	46	36.6	W	5.8	76.5	469.6875	66.42	-70.61	-16.5	-20.69	-99.86	-2.00	5.93									
WQV257	4	36	9	50 N	86	47	5.4	W	7.7	70.5	469.6250	66.38	-71.22	-16.5	-21.34	-99.31	-2.00	5.83									
WQVE781	1	36	9	37.9 N	86	46	41.9	W	8.2	74.4	469.6750	66.41	-70.73	-16.5	-20.82	-99.86	-2.00	5.80									
WQF625	2	36	9	12.5 N	86	48	32.3	W	5.3	74.5	469.3750	66.41	-74.89	-16.5	-24.98	-96.07	-2.00	5.43									
WQQA563	33	36	10	45.8 N	86	46	38.7	W	9	61.5	469.7250	66.32	-70.24	-16.5	-20.42	-100.67	-2.00	5.40									
WRF880	2	36	9	40.4 N	86	46	42.5	W	8.2	73.8	469.9000	66.40	-71.16	-16.5	-21.26	-99.87	-2.00	5.36									
WRF880	3	36	9	40.4 N	86	46	42.5	W	8.2	73.8	469.9125	66.40	-71.24	-16.5	-21.33	-99.87	-2.00	5.29									
WRE0E559	2	36	9	11.8 N	86	47	6.4	W	7.4	79.1	469.9250	66.43	-72.23	-16.5	-22.28	-98.97	-2.00	5.24									
WRA9C15	2	36	8	43.1 N	86	48	32.4	W	5.1	84.4	469.3375	66.46	-75.48	-16.5	-25.52	-95.73	-2.00	5.23									
WQVY639	1	36	9	35.2 N	86	46	18.7	W	8.7	75.9	469.8375	66.42	-70.81	-16.5	-20.89	-100.38	-2.00	5.22									
WQVZ200	1	36	9	54.9 N	86	46	38.5	W	8.4	71.0	469.8875	66.39	-71.09	-16.5	-21.20	-100.08	-2.00	5.21									
WQRA699	2	36	9	25.9 N	86	46	36.2	W	8.2	77.1	469.6125	66.42	-71.35	-16.5	-21.43	-99.86	-2.00	5.20									
WQV882	2	36	7	29.6 N	86	46	2.6	W	9	101.3	469.6750	66.43	-70.73	-16.5	-20.80	-100.67	-2.00	5.02									
WREA17	3	36	9	50.4 N	86	46	43.5	W	8.2	74.7	469.7500	66.39	-71.72	-16.5	-21.83	-99.60	-2.00	4.79									
WQF625	2	36	9	50 N	86	46	40.6	W	6.4	96.0	469.4375	66.44	-73.99	-16.5	-24.01	-99.70	-2.00	4.75									
WQCP268	1	36	7	11 N	86	51	11.4	W	2.6	155.6	469.0375	65.73	-81.19	-16.5	-31.92	-89.87	-2.00	4.68									
WQQA563	33	36	10	45.8 N	86	46	38.7	W	9	61.5	469.9250	66.32	-71.31	-16.5	-21.49	-100.68	-2.00	4.33									
WROU617	10	36	9	56.8 N	86	46	6.9	W	9.2	72.3	469.6250	66.39	-71.22	-16.5	-21.33	-100.86	-2.00	4.29									
WQPL818	3	36	11	55 N	86	48	16	W	8.4	40.5	469.9750	66.09	-71.72	-16.5	-22.13	-100.07	-2.00	4.29									
WQR609	2	36	6	0.5 N	86	49	16.5	W	6	138.7	469.3375	66.12	-74.70	-16.5	-25.07	-97.14	-2.00	4.26									
WQPL818	2	36	10	3 N	86	46	24	W	8.8	70.3	469.9750	66.38	-71.72	-16.5	-21.84	-100.47	-2.00	4.17									
WREP471	1	36	7	35.4 N	86	46	36.7	W	8.1	101.3	469.3375	66.43	-74.70	-16.5	-24.76	-99.75	-2.00	1.97									
WREP473	1	36	7	35.4 N	86	46	36.7	W	8.1	101.3	469.3375	66.43	-74.70	-16.5	-24.76	-99.75	-2.00	1.97									
WPC631	1	36	9	33.2 N	86	46	55	W	7.8	59.7	469.3375	66.47	-79.10	-16.5	-29.13	-95.56	-2.00	1.79									
WPC631	4	36	8	38.5 N	86	48	35.1	W	5	85.9	469.3375	66.47	-79.10	-16.5	-25.40	-99.31	-2.00	1.77									
WQCY257	4	36	9	50 N	86	47	5.4	W	7.7	70.5	469.3500	66.38	-75.28	-16.5	-25.40	-99.31	-2.00	1.76									
WQVY787	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	469.4750	66.50	-72.97	-16.5	-22.96	-101.75	-2.00	1.76									
WREK7	2	36	9	58 N	86	48	24.8	W	6	61.1	469.4375	66.44	-76.17	-16.5	-38.10	-105.49	-2.00	1.63									
WQAG241	1	36	1	33 N	86	48	43	W	1.1	78.9	469.9750	66.43	-71.98	-16.5	-23.69	-100.07	-2.00	1.59									
WQXO340	3	36	9	33 N	86	46	42.7	W	8.1	75.4	469.6325	66.43	-75.09	-16.5	-26.17	-103.25	-2.00	1.58									
WPC631	1	36	9	33.2 N	86	46	55	W	7.8	74.7	469.3375	66.41	-75.48	-16.5	-26.17	-99.75	-2.00	1.56									
WQF625	2	36	9	12.5 N	86	48	32.3	W	5.3	74.5	469.1500	66.41	-78.84	-16.5	-28.93	-100.66	-2.00	1.48									
WQF625	2	36	14	36.5 N	86	49	18.																				

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW																
WPMU555	3	36	13	18.2 N	86	44	38 W		14.2	50.5	469.9625	66.22	-71.52	-16.5	-21.80	-104.64	-2.00	0.05									
WQDU756	3	36	9	51.8 N	86	46	15.5 W		8.9	90.0	469.8273	66.43	-75.87	-16.5	-29.14	-104.57	-2.00	0.00									
WVCA531	1	36	9	33.4 N	86	46	55.6 W		8.8	74.7	469.8273	66.41	-77.03	-16.5	-32.14	-99.42	-2.00	-0.08									
WNR2005	2	36	8	42.9 N	86	40	59.2 W		16.4	88.2	469.8273	66.50	-70.81	-16.5	-20.80	-105.89	-2.00	-0.20									
WNSR200	1	36	12	34.2 N	86	41	40 W		17.2	63.5	469.8273	66.33	-70.23	-16.5	-20.40	-106.30	-2.00	-0.21									
WQCY257	4	36	9	50 N	86	47	5.4 W		7.7	70.5	469.8250	66.38	-77.31	-16.5	-27.43	-99.31	-2.00	-0.26									
WQOS996	17	36	12	6.2 N	86	41	22 W		17.2	66.8	469.8200	66.35	-70.30	-16.5	-20.45	-106.30	-2.00	-0.26									
WQUP944	1	36	7	47.1 N	86	41	31.7 W		15.7	94.5	469.9250	66.48	-71.31	-16.5	-21.33	-105.51	-2.00	-0.35									
WNSR200	1	36	12	34.2 N	86	41	40 W		17.2	63.5	469.7625	66.33	-70.38	-16.5	-20.54	-106.30	-2.00	-0.35									
WRV620	7	36	9	26.6 N	86	47	8.1 W		7.4	75.6	469.2000	66.42	-77.82	-16.5	-27.90	-98.96	-2.00	-0.39									
WQJM756	1	36	7	51.8 N	86	46	1.5 W		8.9	97.0	469.2875	66.45	-76.26	-16.5	-26.31	-100.57	-2.00	-0.39									
WPXE452	2	36	9	33 N	86	46	42 W		8.1	75.4	469.2375	66.42	-77.05	-16.5	-27.14	-99.75	-2.00	-0.40									
WRDM296	1	36	6	25 N	86	40	47.5 W		17.3	64.3	469.8000	66.43	-70.59	-16.5	-20.66	-106.25	-2.00	-0.42									
WQTD30	1	36	5	10 N	86	41	41 W		16.5	111.6	469.6252	66.38	-70.86	-16.5	-20.98	-105.94	-2.00	-0.43									
WRKH589	12	36	9	0.5 N	86	41	6.5 W		16.3	85.3	469.8875	66.48	-71.09	-16.5	-21.11	-105.83	-2.00	-0.46									
WRBQ556	2	36	6	54.5 N	86	41	31.6 W		15.9	100.3	469.6125	66.44	-71.35	-16.5	-21.41	-105.61	-2.00	-0.54									
WCYH77	2	36	8	32.9 N	86	45	9.2 W		10.2	85.7	469.8200	66.50	-75.28	-16.5	-25.28	-105.75	-2.00	-0.55									
WRKZ993	2	36	10	34.2 N	86	41	40 W		15.1	63.5	469.8000	66.33	-70.85	-16.5	-20.30	-106.30	-2.00	-0.57									
WVPC611	1	36	9	33.3 N	86	46	55 W		7.8	47.7	469.1215	66.41	-77.56	-16.5	-27.65	-99.42	-2.00	-0.60									
WPW1400	2	36	16	4.9 N	86	47	44.7 W		15.4	23.9	469.8500	66.51	-70.88	-16.5	-21.77	-105.34	-2.00	-0.62									
WNSR200	1	36	12	34.2 N	86	41	40 W		17.2	63.5	469.8125	66.33	-70.66	-16.5	-20.83	-106.30	-2.00	-0.64									
WQTD30	1	36	5	10 N	86	41	41 W		16.5	111.6	469.8875	66.38	-71.09	-16.5	-21.22	-105.94	-2.00	-0.67									
WQTD30	1	36	5	10 N	86	41	41 W		16.5	69.3	469.6375	66.38	-71.10	-16.5	-21.23	-105.93	-2.00	-0.68									
WQRM718	2	36	11	1.7 N	86	52	41.4 W		4.9	346.7	469.1215	62.18	-77.56	-16.5	-31.89	-95.38	-2.00	-0.79									
WPLX690	1	36	8	44.2 N	86	41	31 W		15.6	88.0	469.6252	66.50	-71.84	-16.5	-21.84	-105.45	-2.00	-0.80									
WNOK542	2	36	7	6.2 N	86	40	9 W		17.9	98.0	469.8000	66.44	-70.59	-16.5	-20.65	-106.65	-2.00	-0.80									
WOX0340	3	36	9	33 N	86	46	42.7 W		8.1	75.4	469.1215	66.42	-77.56	-16.5	-27.65	-99.75	-2.00	-0.92									
WRBS977	4	36	12	24.8 N	86	41	32.2 W		17.2	67.4	469.6252	66.34	-70.95	-16.5	-21.11	-106.30	-2.00	-0.92									
WVY846	3	36	12	35.2 N	86	47	57 W		9.7	37.8	469.3250	66.03	-75.67	-16.5	-26.14	-101.31	-2.00	-0.97									
WVY873	3	36	12	34.2 N	86	41	40 W		17.2	63.5	469.8750	66.33	-71.02	-16.5	-21.19	-106.30	-2.00	-1.00									
WRRAW820	3	35	59	44.6 N	86	48	8.6 W		17.3	106.0	469.7500	65.47	-70.24	-16.5	-21.27	-106.25	-2.00	-1.03									
WQRC200	1	36	9	58.4 N	86	46	17.5 W		8.9	73.7	469.8200	66.39	-76.84	-16.5	-26.35	-100.51	-2.00	-1.04									
WQDM296	1	36	13	34.2 N	86	41	40 W		15.1	63.5	469.6375	66.33	-71.53	-16.5	-21.30	-105.39	-2.00	-1.08									
WQUM756	1	36	7	51.8 N	86	46	15.5 W		8.9	97.0	469.3273	66.45	-77.05	-16.5	-27.10	-105.57	-2.00	-1.19									
WNSR200	1	36	12	34.2 N	86	41	40 W		17.2	63.5	469.6125	66.33	-71.35	-16.5	-21.51	-106.30	-2.00	-1.32									
WQY877	2	36	8	32.9 N	86	45	9.2 W		10.2	88.9	469.3000	66.50	-76.06	-16.5	-26.06	-101.75	-2.00	-1.33									
WRX461	2	36	9	37.7 N	86	46	45.3 W		8.1	74.2	469.1875	66.41	-78.08	-16.5	-28.17	-99.75	-2.00	-1.44									
WRKH611	8	36	9	31.4 N	86	46	22.1 W		8.6	76.5	469.2125	66.42	-77.56	-16.5	-27.65	-100.27	-2.00	-1.44									
WQX820	1	36	9	45.7 N	86	46	54.5 W		7.9	72.1	469.1750	66.39	-78.33	-16.5	-28.44	-99.53	-2.00	-1.49									
WRRAW820	3	35	59	44.6 N	86	48	8.6 W		17.3	106.0	469.8250	65.47	-70.73	-16.5	-21.76	-106.25	-2.00	-1.52									
WQWC685	2	36	8	12.6 N	86	40	0.6 W		17.9	91.4	469.8375	66.51	-71.59	-16.5	-21.58	-106.64	-2.00	-1.74									
WRBK817	1	36	9	42.7 N	86	46	32.8 W		8.4	73.8	469.1875	66.40	-78.08	-16.5	-28.17	-100.06	-2.00	-1.76									
WRRA820	3	35	59	44.6 N	86	48	8.6 W		17.1	106.0	469.6250	65.47	-71.02	-16.5	-22.45	-106.25	-2.00	-1.81									
WRKZ993	2	36	9	37.4 N	86	46	47.4 W		8.1	74.2	469.6252	66.41	-78.95	-16.5	-28.68	-99.64	-2.00	-1.84									
WRKAW820	3	35	59	44.6 N	86	48	8.6 W		17.5	106.6	469.2500	65.47	-71.31	-16.5	-23.33	-106.35	-2.00	-2.00									
WPKC631	1	36	9	33.2 N	86	46	55 W		7.8	74.7	469.1375	66.41	-79.10	-16.5	-29.19	-99.42	-2.00	-2.13									
WPQH743	3	35	59	22.2 N	86	49	21 W		17.2	167.0	469.8500	65.01	-70.88	-16.5	-22.37	-106.30	-2.00	-2.18									
WPXE452	2	36	9	33 N	86	46	42 W		8.1	75.4	469.1500	66.42	-78.84	-16.5	-28.93	-99.75	-2.00	-2.20									
WRRAW820	3	35	59	44.6 N	86	48	8.6 W		17.3	106.0	469.6252	65.47	-71.52	-16.5	-22.55	-106.25	-2.00	-2.31									
WREX463	3	36	8	2.9 N	86	45	39.5 W		9.4	94.5	469.																

Appendix A: WIIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIIW												SOTD											
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	LMR Frequency (MHz)	WIIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBm)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIIW (deg)	WIIW Elevation Pattern (dB)	Field Strength (dBu)	
KX5603	2	36	12	29.2	N	86	41	39	W	17.1	64.0	469.3750	66.34	-74.89	-16.5	-25.05	-106.24	-2.00	-4.81						
WQV819	1	36	8	15	N	86	52	58	W	1.6	256.5	469.1625	49.41	-78.59	-16.5	-45.68	-85.66	-2.00	-4.86						
WQY257	4	36	9	50	N	86	47	5.4	W	7.7	70.5	469.0000	66.38	-81.92	-16.5	-32.04	-99.30	-2.00	-4.87						
WQY1639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	469.0500	66.42	-80.89	-16.5	-30.98	-100.36	-2.00	-4.87						
WRC0358	2	36	15	28.1	N	86	49	46.7	W	13.4	13.9	469.3125	65.01	-75.87	-16.5	-27.36	-104.12	-2.00	-5.00						
WQX340	3	36	9	33	N	86	46	42.7	W	8.1	75.4	469.0125	66.42	-81.66	-16.5	-31.75	-99.74	-2.00	-5.02						
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	469.3500	65.61	-75.28	-16.5	-26.17	-105.33	-2.00	-5.02						
WRK251	1	36	11	39.4	N	86	44	38.1	W	12.4	61.4	469.1875	66.32	-78.08	-16.5	-28.26	-103.45	-2.00	-5.23						
WQV810	1	36	8	15	N	86	52	58	W	1.6	256.5	469.1375	49.41	-79.10	-16.5	-46.19	-85.66	-2.00	-5.27						
WQV460	2	36	9	15	N	86	48	40	W	5.8	74.3	469.4250	66.44	-84.60	-16.5	-35.02	-96.84	-2.00	-5.39						
WQX356	1	36	9	42.3	N	86	46	23.5	W	26.6	118.1	469.2750	66.32	-71.72	-16.5	-21.89	-110.02	-2.00	-5.42						
WVCH173	5	35	55	10.5	N	86	42	55.7	W	20	151.2	469.8200	65.84	-70.88	-16.5	-21.54	-110.53	-2.00	-5.59						
WQI1947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	469.3750	66.44	-70.23	-16.5	-20.29	-111.80	-2.00	-5.60						
WRH366	1	36	0	24.3	N	86	35	10.4	W	29.2	120.6	469.8750	66.30	-71.02	-16.5	-21.22	-110.90	-2.00	-5.62						
WRCWA485	3	36	6	48.9	N	86	45	20	W	10.4	107.0	469.0875	66.40	-80.13	-16.5	-30.22	-101.92	-2.00	-5.66						
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	469.1875	66.30	-78.08	-16.5	-28.28	-103.92	-2.00	-5.72						
WQDA563	33	36	10	45.8	N	86	46	38.7	W	9	61.5	469.0250	66.32	-81.41	-16.5	-31.59	-100.66	-2.00	-5.77						
WQJM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	469.0125	66.45	-81.66	-16.5	-31.71	-100.56	-2.00	-5.80						
WRU7629	1	35	59	14.2	N	86	34	58.7	W	30.6	123.8	469.8375	66.28	-70.81	-16.5	-21.02	-111.30	-2.00	-5.84						
WQUP944	1	36	7	47.1	N	86	41	31.7	W	15.7	94.5	469.2500	66.48	-76.84	-16.5	-26.86	-105.50	-2.00	-5.88						
WQDV819	1	36	8	15	N	86	52	58	W	1.6	256.5	469.1125	49.41	-79.61	-16.5	-46.70	-85.66	-2.00	-5.89						
WQI1947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	469.8125	66.44	-70.66	-16.5	-20.72	-111.80	-2.00	-6.03						
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	469.2750	65.61	-76.45	-16.5	-27.34	-105.33	-2.00	-6.19						
WQWT531	1	36	12	3	N	86	44	21	W	13.1	59.7	469.1625	66.30	-78.59	-16.5	-28.79	-103.92	-2.00	-6.23						
WQW1654	1	36	24	2.4	N	86	41	30	W	8.0	84.4	469.0000	66.40	-80.08	-16.5	-20.44	-104.29	-2.00	-6.25						
WQDV819	1	36	8	15	N	86	52	58	W	1.6	256.5	469.0875	49.41	-80.13	-16.5	-47.22	-85.66	-2.00	-6.40						
WVKC593	3	36	23	25.1	N	86	46	25.5	W	28.0	16.5	469.8375	65.22	-70.81	-16.5	-22.10	-110.81	-2.00	-6.41						
WVMS632	1	36	14	8	N	86	45	32	W	14.2	42.2	469.1875	66.12	-78.08	-16.5	-20.42	-112.49	-2.00	-6.43						
WVRM445	3	36	11	34.1	N	86	28	51	W	35.1	80.4	469.7625	66.44	-70.36	-16.5	-20.44	-112.49	-2.00	-6.44						
WVR1344	2	36	12	53.9	N	86	47	1	W	11	41.7	469.0875	66.10	-80.13	-16.5	-30.52	-102.40	-2.00	-6.45						
WQMM949	2	36	9	41.6	N	86	47	2	W	7.7	72.5	469.8125	66.39	-83.55	-16.5	-33.65	-99.30	-2.00	-6.48						
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	469.2500	65.61	-76.84	-16.5	-27.73	-105.33	-2.00	-6.58						
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	469.2375	66.47	-77.05	-16.5	-27.08	-105.98	-2.00	-6.58						
WUS632	1	36	14	8	N	86	45	32	W	14.2	42.2	469.1875	66.12	-78.08	-16.5	-20.30	-113.32	-2.00	-6.60						
WVRN448	2	35	59	34.7	N	86	34	38.1	W	30.7	122.3	469.5875	66.29	-71.59	-16.5	-21.80	-111.33	-2.00	-6.65						
WVRM445	3	36	11	34.1	N	86	28	51	W	35.1	80.4	469.6875	66.44	-70.61	-16.5	-20.67	-112.49	-2.00	-6.68						
WRCW485	3	36	6	48.9	N	86	45	20	W	10.4	107.0	469.0375	66.40	-81.15	-16.5	-31.24	-101.91	-2.00	-6.69						
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	469.1375	66.30	-79.10	-16.5	-29.30	-103.92	-2.00	-6.75						
WRK251	1	36	11	39.9	N	86	45	36.8	W	12.4	61.4	469.1125	66.32	-79.61	-16.5	-29.79	-103.44	-2.00	-6.76						
WQW1654	3	36	14	53	N	86	45	45	W	8.0	40.4	469.0000	66.40	-82.83	-16.5	-33.40	-106.06	-2.00	-6.85						
WQW808	1	36	13	53.5	N	86	46	12.9	W	11.5	28.7	469.1000	65.80	-75.87	-16.5	-30.56	-102.79	-2.00	-6.88						
WVMS632	2	35	55	20.5	N	86	53	54.5	W	24.4	187.0	469.8125	65.11	-70.66	-16.5	-24.05	-109.34	-2.00	-6.90						
WQDV819	1	36	8	15	N	86	52	58	W	14.5	256.5	469.0625	49.41	-80.64	-16.5	-47.73	-85.66	-2.00	-6.91						
WOPL818	2	36	10	9.5	N	86	46	26.6	W	38.6	101.8	469.7375	66.43	-70.23	-16.5	-20.30	-107.90	-2.00	-6.98						
WNNCB11	2	35	57	30.2	N	86	28	51	W	35.1	80.4	469.0000	66.50	-81.92	-16.5	-31.92	-101.75	-2.00	-7.17						
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	469.1125	66.30	-79.61	-16.5	-29.81	-103.92	-2.00	-7.26						
WQW1654	1	36	8	15	N	86	45	58	W	1.5	256.5	469.0375	49.41	-81.19	-16.5	-48.24	-85.66	-2.00	-7.42						
WQDV819	2	36	9	25.9	N	86	46	36.2	W	8.2	77.3	469.8875	66.42	-84.01	-16.5	-34.09	-99.85	-2.00	-7.46						
WQDT469	10	35	57	55.7	N	86	29	16.1	W	39.2	119.8	469.7125	66.32	-70.36	-16.5	-20.54	-113.45	-2.00	-7.51						
WQDV815	2	36	6	17.4	N	86	40	39.3	W	17.4	103.3	469.1250	66.42	-77.56	-16.5	-21.53	-112.49	-2.00	-7.54						
WPBP949	2	36	10	4.2	N	86	46	7	W	9.2	70.9	469.8375	66.38	-83.08	-16.5	-33.20	-100.85	-2.00	-7.58						
WQDV469	6	35	57	37.6	N	86	29	21.4	W	39.4	120.6	469.7625	66.30	-70.38	-16.5	-20.57	-113.50	-2.00	-7.58						
WQDT073	4	35	59	46.2	N	86	29	39.9	W	37.1	115.6	469.6250	66.35	-70.95	-16.5	-21.10	-112.98	-2.00	-7.59						
WQDV815	1	36	10	8	N	86	45	32	W	14.2	42.2	469.1375	66.12	-79.10	-16.5	-28.20	-105.93	-2.00	-7.65						
WQDV810	2	35	57	5.5	N	86	41	41	W	16.5	111.6	469.1875	66.38	-78.08	-16.5	-20.51	-113.67	-2.00	-7.69						
WQW1718	2	36	11	1.7	N	86	52	48.4	W	4.9	346.7	468.8625	62.18	-84.47	-16.5	-38.80	-95.37	-2.00	-7.70						
WQDV815	1	36	12	3.4	N	86	45	30	W	15.3	60.7	469.8625	62.69	-76.43	-16.5	-32.64	-104.51	-2.00	-7.76						
WQW1731	1	36	13</td																						

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW																
WQW1531	1	36	12	1	N	86	44	21	W	13.1	59.7	469.0375	66.30	-81.15	-16.5	-31.35	-103.92	-2.00	-8.80								
WQW1536	1	36	6	54.5	N	86	41	31.6	W	15.9	104.3	469.0375	66.41	-79.61	-16.5	-29.40	-104.50	-2.00	-8.80								
WQW1535	2	36	4	46.5	N	86	24	20.4	W	4.8	94.6	469.0375	66.51	-71.38	-16.5	-21.37	-113.93	-2.00	-8.81								
WQW1572	2	36	8	36.4	N	86	49	39.3	W	4.9	86.6	469.0375	66.48	-90.09	-16.5	-40.12	-95.37	-2.00	-9.02								
WQW1555	3	36	11	34.1	N	86	28	51.5	W	35.1	80.4	469.0375	66.44	-72.09	-16.5	-23.03	-112.49	-2.00	-9.03								
WQW1529	1	35	54	54.3	N	86	50	51.1	W	25.1	176.3	469.0375	64.38	-73.73	-16.5	-25.95	-109.58	-2.00	-9.05								
WQV1561	4	35	53	52.5	N	86	57	29.7	W	28.2	197.2	469.0375	61.75	-70.23	-16.5	-24.98	-110.59	-2.00	-9.09								
WQW1532	1	36	14	8	N	86	45	32	W	14.2	42.2	469.0625	66.12	-80.64	-16.5	-31.01	-104.62	-2.00	-9.16								
WQW1530	1	36	5	10	N	86	41	41	W	16.5	111.6	469.1125	66.38	-79.61	-16.5	-29.74	-105.93	-2.00	-9.19								
WRDK577	3	35	55	37.6	N	86	34	40.7	W	35.1	132.5	469.4750	66.20	-72.97	-16.5	-23.26	-112.49	-2.00	-9.27								
WQW1531	1	36	12	1	N	86	44	21	W	13.3	59.7	469.0125	66.30	-81.66	-16.5	-31.86	-103.92	-2.00	-9.31								
WQK1507	2	36	9	29	N	86	46	36.6	W	8.2	76.5	468.875	66.42	-85.86	-16.5	-35.95	-99.85	-2.00	-9.32								
WPP2273	1	36	22	35.2	N	86	25	20	W	47.7	55.5	469.750	66.28	-70.45	-16.5	-20.67	-115.16	-2.00	-9.34								
WQQT469	4	35	57	50	N	86	29	25.5	W	39.1	120.1	469.050	66.30	-72.21	-16.5	-22.41	-113.43	-2.00	-9.35								
WRM0326	2	35	48	42.9	N	86	50	19.8	W	36.6	176.2	469.8375	64.28	-70.81	-16.5	-23.03	-112.86	-2.00	-9.40								
KNJB624	2	35	57	50.2	N	86	29	10	W	39.4	110.9	469.5250	66.32	-72.21	-16.5	-22.39	-113.49	-2.00	-9.40								
WRE151	1	36	35	35.4	N	86	46	36.6	W	8.1	101.1	469.0125	66.43	-80.09	-16.5	-36.16	-98.74	-2.00	-9.43								
WQPP473	1	36	35	35.4	N	86	46	36.7	W	8.1	100.3	468.750	66.43	-80.09	-16.5	-36.04	-98.74	-2.00	-9.43								
WQW0899	14	36	11	53	N	86	19	33.4	W	48.8	83.9	469.0175	66.45	-70.53	-16.5	-20.57	-115.36	-2.00	-9.43								
WQW1524	3	35	59	47.0	N	86	36	13.9	W	28.5	124.2	469.6325	66.28	-75.09	-16.5	-25.31	-110.68	-2.00	-9.50								
WRV620	3	36	10	26.2	N	86	31	4.6	W	31.5	83.2	469.4000	66.45	-74.50	-16.5	-24.55	-111.55	-2.00	-9.61								
WPP2273	1	36	22	35.2	N	86	25	20	W	47.7	55.5	469.8250	66.28	-70.73	-16.5	-20.95	-115.16	-2.00	-9.62								
WRU0617	10	36	9	56.8	N	86	46	6.9	W	9.2	72.3	468.8250	66.39	-85.17	-16.5	-35.27	-100.85	-2.00	-9.65								
WPM3532	3	36	9	7.4	N	86	42	26.4	W	14.3	84.9	469.0250	66.46	-81.41	-16.5	-31.44	-104.68	-2.00	-9.65								
WQW1532	1	36	14	8	N	86	45	32	W	14.2	42.2	469.0375	66.12	-81.15	-16.5	-31.53	-104.62	-2.00	-9.67								
WQW1530	1	36	5	10	N	86	41	41	W	16.5	111.6	469.0875	66.38	-80.13	-16.5	-30.25	-105.92	-2.00	-9.70								
WQX837	3	35	50	36.2	N	86	33	46	W	42.8	104.1	469.9750	66.09	-71.59	-16.5	-22.00	-114.22	-2.00	-9.73								
WRPH815	2	36	8	4.9	N	86	43	41.7	W	12.4	93.1	468.9500	66.49	-82.85	-16.5	-32.86	-103.44	-2.00	-9.83								
WRMC824	2	35	59	20	N	86	49	25.9	W	17.3	167.5	469.1625	65.01	-78.59	-16.5	-30.08	-106.34	-2.00	-9.94								
KNNF400	2	36	28	42.2	N	86	53	14	W	37.5	35.0	469.750	63.59	-70.45	-16.5	-23.36	-113.07	-2.00	-9.94								
WQJQ335	1	36	14	0.5	N	86	46	31.5	W	51.1	78.2	469.8125	66.43	-70.66	-16.5	-20.74	-104.05	-2.00	-10.00								
WRD625	2	36	9	12.5	N	86	48	32.4	W	5.3	35.6	469.7250	66.40	-70.35	-16.5	-22.92	-113.61	-2.00	-10.04								
WQW1509	1	36	30	3	N	86	52	9	W	39.9	35.0	469.750	63.92	-70.04	-16.5	-23.77	-109.19	-2.00	-10.07								
WRC1555	2	35	55	44.5	N	86	55	15	W	24	191.9	469.4500	62.51	-73.48	-16.5	-27.37	-109.19	-2.00	-10.07								
WQW1597	14	36	9	47.6	N	86	46	40.8	W	8.3	72.5	468.7500	66.39	-86.56	-16.5	-36.66	-99.95	-2.00	-10.14								
WRPS259	1	35	55	35.9	N	86	31	13.9	W	39.1	127.4	469.4750	66.25	-72.97	-16.5	-23.21	-113.43	-2.00	-10.16								
WQW1532	1	36	14	8	N	86	45	32	W	14.2	42.2	469.0125	66.12	-81.66	-16.5	-32.04	-104.62	-2.00	-10.18								
WQW1532	1	36	14	8	N	86	46	36.7	W	8.1	101.3	468.7250	66.43	-82.07	-16.5	-37.09	-99.74	-2.00	-10.36								
WREP473	1	36	7	35.4	N	86	46	36.7	W	8.1	101.3	468.7250	66.43	-82.07	-16.5	-37.09	-99.74	-2.00	-10.36								
WQY877	2	36	8	32.9	N	86	45	9.2	W	10.2	88.9	468.8250	66.50	-85.17	-16.5	-35.16	-101.74	-2.00	-10.44								
WQD409	4	36	30	3	N	86	52	9	W	39.9	359.5	469.6750	63.82	-70.73	-16.5	-23.41	-113.61	-2.00	-10.53								
WQW1555	1	35	56	28.6	N	86	28	49.4	W	41.2	126.6	469.750	66.29	-72.41	-16.5	-34.84	-113.68	-2.00	-10.58								
WQW1531	1	35	56	53.9	N	86	25	51	W	41.8	126.6	469.9500	66.52	-71.59	-16.5	-21.82	-112.29	-2.00	-10.62								
WRPG365	3	35	53	44.5	N	86	31	18.9	W	41.3	110.3	469.4750	66.51	-72.07	-16.5	-23.26	-113.88	-2.00	-10.65								
WQW15253	2	35	53	6.6	N	86	21	17.8	W	54	121.5	469.8250	66.30	-70.73	-16.5	-20.94	-116.24	-2.00	-10.68								
WQJQ335	1	36	14	0.5	N	86	18	31.5	W	51.1	78.2	469.6125	66.43	-71.35	-16.5	-21.42	-115.75	-2.00	-10.69								
WRPG235	6	35	52	37.6	N	86	32	40.2	W	41.2	135.3	469.4750	66.16	-72.97	-16.5	-23.31	-113.88	-2.00	-10.70								
WRPG261	5	35	58	30	N	86	26	42.3	W	42.3	115.9	469.4750	66.35	-72.97	-16.5	-23.12	-114.07	-2.00	-10.71								
WQD530	1	36	5	10	N	86	41	41	W	16.5	111.6	469.0375	66.38	-81.15	-16.5	-31.27	-105.92	-2.00	-10.72								

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										LMR											
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LM Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)
WRPG265	6	35	47	58.2	N	86	34	3.6	W	46.4	144.7	469.4750	66.02	-72.97	-16.5	-23.45	-114.91	-2.00	-11.88				
WQCB99	14	36	11	9.3	N	86	19	35.4	W	48.8	80.3	469.4750	66.45	-72.97	-16.5	-23.34	-115.29	-2.00	-11.88				
WRPG262	6	35	50	60.6	N	86	29	42.3	W	47.6	138.3	469.4750	66.45	-72.97	-16.5	-23.34	-115.13	-2.00	-11.96				
WQYQ930	2	35	56	44.9	N	86	51	24.9	W	21.7	177.9	469.2000	64.19	-77.83	-16.5	-30.13	-108.98	-2.00	-11.96				
WRM2209	1	35	38	33.1	N	86	38	43.6	W	58.8	160.2	469.7500	65.47	-70.45	-16.5	-21.47	-116.98	-2.00	-11.96				
WQF442	2	36	38	22.7	N	86	35	3.6	W	50.9	24.3	469.7123	65.65	-70.36	-16.5	-21.21	-117.26	-2.00	-11.99				
WRPH867	5	35	58	6.9	N	86	21	49.2	W	49.1	112.9	469.4750	66.37	-72.97	-16.5	-23.10	-115.40	-2.00	-12.02				
WRPG262	6	35	56	47.8	N	86	22	39.5	W	49	116.1	469.4750	66.34	-72.97	-16.5	-23.13	-115.39	-2.00	-12.03				
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	468.9750	65.61	-82.39	-16.5	-33.28	-105.32	-2.00	-12.13				
WQYR76	1	36	0	15.5	N	86	31	35.1	W	34.1	116.4	469.2875	66.34	-76.26	-16.5	-26.42	-112.23	-2.00	-12.17				
WQDQ941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	469.9125	66.21	-71.24	-16.5	-21.52	-117.23	-2.00	-12.26				
WRG260	2	35	48	36.6	N	86	30	10.2	W	49.2	138.3	469.4750	66.12	-72.97	-16.5	-23.34	-115.42	-2.00	-12.28				
WQVE463	1	36	4	28	N	86	55	17	W	8.9	214.2	469.0875	58.37	-80.13	-16.5	-38.25	-100.56	-2.00	-12.34				
WRQ360	2	36	9	15.2	N	86	48	10	W	5.8	75.2	468.8475	66.42	-91.89	-16.5	-41.97	-96.83	-2.00	-12.34				
WNQB788	11	35	46	1.2	N	86	23	38	W	59.4	134.3	469.9500	66.18	-71.45	-16.5	-21.77	-117.07	-2.00	-12.35				
WQI442	3	36	38	22.7	N	86	35	3.6	W	60.8	24.3	469.6750	65.65	-70.73	-16.5	-21.58	-117.26	-2.00	-12.36				
WQF625	2	36	9	12.5	N	86	48	32.2	W	5.3	74.5	469.4750	66.41	-92.72	-16.5	-42.05	-105.05	-2.00	-12.40				
WQF625	1	35	54	33.8	N	86	23	28.5	W	5.1	120.1	469.4750	66.39	-72.97	-16.5	-23.16	-113.97	-2.00	-12.43				
WRG264	1	35	54	35.6	N	86	22	32.4	W	51.1	120.1	469.4750	66.39	-72.97	-16.5	-23.16	-115.75	-2.00	-12.43				
WOGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	468.8875	66.22	-84.03	-16.5	-34.29	-104.62	-2.00	-12.44				
WOGG952	3	36	13	18.2	N	86	44	38	W	14.2	50.5	468.8875	66.22	-84.03	-16.5	-34.29	-104.62	-2.00	-12.44				
WRG265	3	35	48	31.4	N	86	29	6.1	W	50.4	137.0	469.4750	66.14	-72.97	-16.5	-23.33	-115.63	-2.00	-12.48				
WQI443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	468.8375	65.73	-70.81	-16.5	-21.58	-117.41	-2.00	-12.50				
WRB8242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	468.8375	65.73	-70.81	-16.5	-21.58	-117.41	-2.00	-12.50				
WQZT608	2	36	9	26.7	N	86	46	25.2	W	8.5	77.4	468.6375	66.42	-88.81	-16.5	-38.89	-100.16	-2.00	-12.58				
WQWT531	1	36	12	1	N	86	44	21	W	13.3	59.7	468.8375	66.30	-84.94	-16.5	-35.14	-103.92	-2.00	-12.58				
WQJM969	2	36	9	1.5	N	86	48	7.7	W	5.8	79.4	468.4750	66.43	-92.16	-16.5	-42.23	-96.83	-2.00	-12.59				
WQJQ507	2	36	10	3.2	N	86	48	25	W	6.1	60.5	468.5000	66.30	-91.63	-16.5	-41.83	-97.27	-2.00	-12.63				
WQI442	3	36	38	22.7	N	86	35	3.6	W	60.8	24.3	468.9750	65.65	-71.02	-16.5	-21.87	-117.27	-2.00	-12.65				
WREP471	1	36	7	35.4	N	86	46	36.7	W	8.1	101.3	468.6125	66.43	-89.33	-16.5	-39.39	-99.74	-2.00	-12.66				
WREP473	1	36	7	35.4	N	86	46	36.7	W	8.1	101.3	468.6125	66.43	-89.33	-16.5	-39.39	-99.74	-2.00	-12.66				
WRDM321	2	35	59	23.2	N	86	34	37.1	W	30.5	122.8	468.6125	66.29	-77.56	-16.5	-27.38	-118.38	-2.00	-12.67				
WQF52	2	36	9	16.8	N	86	47	38.8	W	7.6	468.8375	66.44	-91.31	-16.5	-41.60	-99.69	-2.00	-12.69					
WRK577	5	35	44	6.2	N	86	39	2.7	W	49	155.7	469.4750	65.65	-72.97	-16.5	-23.82	-115.39	-2.00	-12.72				
WPPY736	3	36	22	42.6	N	86	2	18	W	30.6	329.7	469.8750	59.08	-70.52	-16.5	-27.94	-111.30	-2.00	-12.75				
WRP819	2	35	46	7.3	N	86	31	15.6	W	51.7	143.0	469.4750	66.03	-72.97	-16.5	-23.43	-115.85	-2.00	-12.80				
WRH867	2	35	43	44.7	N	86	40	19.7	W	48.9	159.1	469.4750	65.63	-72.97	-16.5	-23.94	-115.37	-2.00	-12.83				
WQVE463	1	36	4	28	N	86	55	17	W	8.9	214.2	469.6293	58.37	-80.64	-16.5	-38.76	-100.56	-2.00	-12.85				
WRV764	2	35	57	5.5	N	86	29	7.5	W	40.2	121.5	469.3375	66.30	-75.48	-16.5	-25.68	-113.66	-2.00	-12.86				
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	469.6625	66.19	-70.86	-16.5	-21.16	-118.18	-2.00	-12.86				
WRMF451	4	36	1	48.7	N	86	33	39.9	W	30	114.1	469.1875	66.35	-78.08	-16.5	-28.22	-111.12	-2.00	-12.87				
WRV557	1	35	50	15.3	N	86	24	26.4	W	53.3	129.1	469.4750	66.23	-72.97	-16.5	-23.23	-116.12	-2.00	-12.87				
WQZE593	1	35	50	8	N	86	24	28	W	53.4	129.4	469.4750	66.23	-72.97	-16.5	-23.23	-116.13	-2.00	-12.89				
WRPG264	2	35	43	38.3	N	86	38	34.7	W	50.1	156.4	469.4750	65.65	-72.97	-16.5	-23.82	-115.58	-2.00	-12.91				
WQZB862	1	36	7	6.8	N	86	40	17.4	W	17.6	98.0	468.9500	66.44	-82.85	-16.5	-32.91	-106.48	-2.00	-12.92				
WQUS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	469.8125	65.73	-70.66	-16.5	-21.43	-118.48	-2.00	-13.00				
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	25.5	469.6875	65.73	-70.61	-16.5	-21.38	-118.55	-2.00	-13.44				
WRFA329	2	35	49	43.6	N	86	40	45.5	W	38.5	154.2	469.3125	65.73	-75.87	-16.5	-26.64	-113.29	-2.00	-13.45				
WQYQ938	2	36	35	43.5	N	86	40	40.6	W	38.5	154.0	469.6625	66.29	-75.74	-16.5	-26.60	-112.90	-2.00	-13.46				
WQK6332	1	36	18	4.8	N	86	45	42.3	W	15.1	469.3375	65.63	-84.94	-16.5	-33.31	-104.62	-2.00	-13.46					
WQKG440	4	35	48	7.9	N	86	23	29.9	W	56.9	131.3	469.4750	66.21	-72.97	-16.5	-23.26	-116.68	-2.00	-13.46				
WRGK655	5	35	55	45.3	N	86	16	31.1	W	58.1	133.7	469.4750	66.36	-72.97	-16.5	-23.11	-116.87	-2.00	-13.49				
WRKH589	11	36	2	23.7	N	86	38	49	W	22.6	119.7	469.0375	66.32	-81.15	-16.5	-31.33							

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering signal field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
WNNG651	2	36	41	18 N	86	29	11 W			69.6	29.0	469.9500	65.84	-71.45	-16.5	-22.11	-118.44	-2.00	-14.06					
WRD267	2	36	38	9 N	86	53	46 W			55	35.7	469.9500	63.59	-71.1	-16.5	-24.24	-116.40	-2.00	-14.13					
WRJU404	2	36	13	10 N	86	25	35 W			40.5	77.4	469.9500	66.43	-76.84	-16.5	-26.92	-113.73	-2.00	-14.37					
WQUD634	3	35	49	6 N	86	53	19.4 W			18.8	183.3	469.9325	63.59	-75.09	-16.5	-28.00	-112.66	-2.00	-14.38					
WDXG96	14	36	21	5.6 N	86	6	32.9 W			73.3	71.1	469.9750	66.39	-71.72	-16.5	-21.83	-118.89	-2.00	-14.23					
WR78322	2	35	47	41.6 N	86	23	2.2 W			59.1	130.5	469.9500	66.22	-72.48	-16.5	-22.76	-117.01	-2.00	-14.29					
WQSD416	1	35	32	44.8 N	86	38	4.4 W			69.2	162.5	469.6125	65.35	-71.35	-16.5	-22.50	-118.39	-2.00	-14.40					
WZV591	3	36	16	12.2 N	86	52	18 W			14.3	357.8	468.9250	63.59	-83.31	-16.5	-36.23	-104.68	-2.00	-14.44					
WNSR200	1	36	12	34.2 N	86	41	40 W			17.2	63.5	468.6225	66.33	-84.47	-16.5	-34.64	-106.28	-2.00	-14.45					
WRJU641	5	36	31	47.5 N	86	52	58.8 W			43.2	357.9	469.4375	63.59	-73.73	-16.5	-26.65	-114.29	-2.00	-14.46					
WQF818	2	36	10	3 N	86	46	24 W			8.8	70.3	468.5625	66.38	-90.35	-16.5	-40.47	-100.46	-2.00	-14.46					
WRGP259	3	35	45	29.6 N	86	20	6.1 W			64	131.5	469.4750	66.21	-72.97	-16.5	-23.26	-117.71	-2.00	-14.48					
WQTD530	1	36	5	10 N	86	41	41 W			16.5	111.6	468.8375	66.38	-84.94	-16.5	-35.06	-105.92	-2.00	-14.51					
WRPH867	4	35	41	59.3 N	86	25	9.3 W			63.4	140.5	469.4750	66.09	-72.97	-16.5	-23.38	-117.62	-2.00	-14.52					
WRGP262	1	35	56	18.4 N	86	10	33.7 W			66.1	109.7	469.4750	66.39	-72.97	-16.5	-23.08	-117.99	-2.00	-14.58					
WPQH743	3	35	59	22.2 N	86	49	21 W			17.2	167.0	468.9250	65.01	-83.31	-16.5	-34.81	-106.28	-2.00	-14.62					
WQZJ443	2	36	38	27.4 N	86	33	42.5 W			61.8	25.0	469.9250	65.73	-72.97	-16.5	-24.74	-110.40	-2.00	-14.66					
WRGP264	2	36	50	27.8 N	86	33	42.5 W			61	26.0	469.9750	65.73	-72.99	-16.5	-23.34	-117.40	-2.00	-14.68					
WN4F645	3	36	20	59 N	86	49	59 W			10.5	163.9	468.7500	65.38	-88.05	-16.5	-39.27	-101.99	-2.00	-14.79					
WRV7276	2	35	47	4.3 N	86	30	2.6 W			51.4	140.2	469.6325	66.09	-75.09	-16.5	-25.40	-115.80	-2.00	-14.81					
WRMV933	1	36	44	2 N	86	38	59 W			68.6	15.3	469.5750	65.21	-71.72	-16.5	-23.01	-118.31	-2.00	-14.83					
WRW306	2	35	51	35.8 N	86	24	27.2 W			51.7	127.0	469.3500	66.25	-75.28	-16.5	-25.53	-115.85	-2.00	-14.90					
WQAS444	5	36	16	44 N	86	40	12.6 W			23.3	48.2	468.8375	66.20	-82.16	-16.5	-32.45	-108.92	-2.00	-14.90					
WRP819	3	35	49	5.3 N	86	13	31.6 W			67.9	121.7	469.4750	66.30	-72.97	-16.5	-23.17	-118.22	-2.00	-14.91					
WRPH867	1	35	45	3.3 N	86	17	12.8 W			67.8	129.6	469.4750	66.23	-72.97	-16.5	-23.23	-118.21	-2.00	-14.96					
WRGP235	5	35	41	56.3 N	86	21	18.1 W			67.3	136.8	469.4750	66.15	-72.97	-16.5	-23.32	-118.14	-2.00	-14.98					
WQE593	4	35	41	52 N	86	21	19 W			67.4	136.8	469.4750	66.15	-72.97	-16.5	-23.32	-118.16	-2.00	-14.99					
KNNF902	2	36	41	44.2 N	86	8	54.9 W			89	45.9	469.8000	66.16	-70.59	-16.5	-20.93	-120.58	-2.00	-15.02					
WPMP299	2	36	41	44.2 N	86	8	54.9 W			89	45.9	469.8000	66.16	-70.59	-16.5	-20.93	-120.58	-2.00	-15.02					
WRGP259	4	35	39	29 N	86	25	21.7 W			66.8	143.3	469.4750	66.03	-72.97	-16.5	-23.43	-118.08	-2.00	-15.03					
WRJU641	3	35	39	33.2 N	87	1	59.1 W			55.5	195.8	469.6875	62.04	-70.61	-16.5	-25.07	-116.47	-2.00	-15.06					
WRK775	2	36	2	46.5 N	86	24	26 W			42.6	101.0	469.2500	66.42	-77.31	-16.5	-27.30	-114.17	-2.00	-15.08					
WRCP130	3	36	45	46.5 N	86	11	24 W			92.6	14.1	469.6875	66.42	-77.31	-16.5	-20.80	-118.88	-2.00	-15.09					
WRK270	1	35	56	36.9 N	86	22	14.4 W			51	126.4	469.7500	66.36	-76.35	-16.5	-25.13	-116.47	-2.00	-15.12					
WRK9888	2	36	1	59.2 N	86	46	35.4 W			14.4	145.2	468.6253	65.97	-86.32	-16.5	-36.85	-104.74	-2.00	-15.12					
WRCS254	2	36	9	51.2 N	86	46	43.9 W			8.2	71.5	468.5000	66.39	-91.63	-16.5	-41.74	-99.84	-2.00	-15.12					
WRTR727	6	35	29	39.8 N	86	24	40.4 W			82.6	150.2	469.6375	65.87	-71.10	-16.5	-21.73	-119.92	-2.00	-15.17					
WQJQ335	1	36	14	0.5 N	86	18	31.5 W			51.1	78.2	469.3125	66.43	-75.87	-16.5	-25.94	-115.75	-2.00	-15.21					
WRGP260	6	35	39	35.9 N	86	23	14 W			68.6	141.0	469.4750	66.07	-72.97	-16.5	-23.39	-118.31	-2.00	-15.22					
WRP819	1	35	39	35.8 N	86	23	16.7 W			68.6	141.0	469.4750	66.07	-72.97	-16.5	-23.42	-118.46	-2.00	-15.39					
WQWTS30	1	35	43	27 N	86	19	10 W			67.6	133.1	469.6253	66.19	-73.22	-16.5	-23.53	-118.18	-2.00	-15.23					
WQWQ941	1	35	46	49.3 N	86	21	43 W			60.5	131.3	469.4125	66.21	-74.24	-16.5	-24.53	-117.22	-2.00	-15.27					
WRPH867	6	35	41	8.9 N	86	19	17.8 W			70.4	135.8	469.4750	66.16	-72.97	-16.5	-23.31	-118.53	-2.00	-15.36					
WQZE593	5	35	38	22.2 N	86	23	53.9 W			69.8	142.8	469.4750	66.05	-72.97	-16.5	-23.42	-118.46	-2.00	-15.39					
WPY736	3	36	22	42.6 N	87	2	18 W			30.6	323.7	469.6425	59.08	-73.22	-16.5	-30.64	-111.30	-2.00	-15.46					
WPX450	1	35	4	29.7 N	86	14	45.6 W			72.5	125.3	469.7500	66.23	-72.97	-16.5	-23.41	-118.79	-2.00	-15.47					
WRGP275	2	36	2	46.4 N	86	24	41 W			92.6	104.2	469.6253	66.43	-78.80	-16.5	-27.60	-114.01	-2.00	-15.59					
WQD173	1	36	4	5.5 N	86	18	31.5 W			51	15	469.3975	66.43	-76.36	-16.5	-26.33	-117.79	-2.00	-15.60					
WRK617	10	36	9	56.8 N	86	46	6.9 W			9.2	72.3	468.8250	66.39	-91.13	-16.5	-41.22	-100.84	-2.00	-15.60					
WRHY470	1	36	9	6.3 N	86	47	35.3 W			6.6	79.4	468.3875	66.43	-94.14	-16.5	-44.21	-97.95	-2.00	-15.70					
WQTC810	2	36	39	17.2 N	87	2	31 W			59.2	344.6	469.8000	61.89	-70.59	-16.5	-25.20	-117.03	-2.00	-15.75					
WPLX690	1	36	8	44.2 N	86	41	31 W			15.6	88.0	468.3775												

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WQQT469	2	35	57	59.7 N	86	29	21.2 W			39	119.7	469.0875	66.32	-80.13	-16.5	-30.31	-113.40	-2.00	-2.00	-17.23						
WNYH457	1	36	8	44.2 N	86	41	45 W			15.6	80.0	469.6252	66.50	-88.30	-16.5	-38.53	-101.41	-2.00	-2.00	-12.26						
WQUM204	1	36	29	21.3 N	86	51	35.5 W			38.7	0.8	469.1875	63.93	-78.08	-16.5	-30.65	-113.33	-2.00	-2.00	-17.50						
WRK775	2	36	2	46.5 N	86	24	26 W			42.6	104.2	469.1000	66.42	-79.87	-16.5	-29.95	-114.16	-2.00	-2.00	-17.64						
WNYK915	1	36	10	37.7 N	86	47	23.9 W			7.4	66.2	469.8323	66.35	-94.70	-16.5	-44.85	-98.95	-2.00	-2.00	-17.34						
WQYK907	2	35	51	39.9 N	86	25	30.7 W			50.4	128.0	469.1750	66.24	-78.33	-16.5	-44.54	-99.29	-2.00	-2.00	-17.37						
WQQT469	2	35	57	59.7 N	86	29	21.2 W			39	119.7	469.6253	66.32	-80.64	-16.5	-30.82	-113.40	-2.00	-2.00	-17.74						
WQVY931	8	36	35	54.2 N	86	31	48.2 W			59	30.5	469.6253	65.87	-76.65	-16.5	-27.28	-117.00	-2.00	-2.00	-17.79						
WRZ3252	3	35	57	11.1 N	86	22	44.2 W			48.5	115.4	469.1500	66.35	-78.84	-16.5	-29.00	-115.29	-2.00	-2.00	-17.81						
WRV377	3	36	11	7.4 N	86	16	14.7 W			53.7	84.5	469.1875	66.46	-78.08	-16.5	-28.11	-116.18	-2.00	-2.00	-17.81						
WRAC528	2	36	0	1 N	86	30	7 W			36.3	111.5	469.0250	66.35	-81.41	-16.5	-31.56	-112.77	-2.00	-2.00	-17.86						
WRV309	3	36	10	56.4 N	86	17	5.9 W			52.4	80.8	469.6252	66.40	-78.13	-16.5	-29.06	-101.69	-2.00	-2.00	-17.86						
WRMG241	1	36	8	42.4 N	86	43	43 W			2.1	78.9	468.8320	66.43	-94.12	-16.5	-41.19	-103.32	-2.00	-2.00	-17.95						
WPGRH743	5	35	55	10.5 N	86	42	55.7 W			28	151.3	469.8300	65.84	-83.31	-16.5	-33.98	-110.52	-2.00	-2.00	-18.02						
WRY596	2	36	39	47.2 N	87	10	36.4 W			64.3	334.5	469.7750	60.15	-70.45	-16.5	-26.80	-117.75	-2.00	-2.00	-18.06						
WQVE464	1	35	50	30 N	86	23	27 W			54.2	127.8	469.1875	66.25	-78.08	-16.5	-28.32	-116.26	-2.00	-2.00	-18.10						
WQXG525	1	36	26	28.4 N	87	2	16.9 W			36.8	33.2	469.3133	60.36	-75.57	-16.5	-31.72	-112.90	-2.00	-2.00	-18.13						
WRCK228	1	36	13	1.3 N	86	19	20.9 W			49.6	80.0	469.1373	66.44	-79.10	-16.5	-29.16	-115.49	-2.00	-2.00	-18.17						
WQAU829	3	36	19	15.2 N	86	42	49 W			24.2	34.2	468.8375	65.97	-84.94	-16.5	-35.46	-109.25	-2.00	-2.00	-18.24						
WQDG229	2	36	7	56.5 N	86	47	41 W			6.4	98.4	468.6252	66.44	-96.97	-16.5	-47.02	-97.68	-2.00	-2.00	-18.25						
WQQT469	4	35	57	50 N	86	29	25.5 W			39.1	120.1	469.0375	66.30	-81.15	-16.5	-31.34	-113.42	-2.00	-2.00	-18.29						
WRNS201	2	35	42	16.6 N	86	19	50.5 W			68.4	135.0	469.8375	66.16	-76.26	-16.5	-26.60	-118.28	-2.00	-2.00	-18.40						
WRK775	3	36	2	46.5 N	86	24	26 W			42.6	104.2	469.6253	66.42	-80.64	-16.5	-30.72	-114.16	-2.00	-2.00	-18.41						
WQS842	2	36	48	26.1 N	87	9	23.8 W			78.4	340.7	469.7250	61.30	-70.24	-16.5	-25.44	-119.47	-2.00	-2.00	-18.43						
WQR477	2	35	47	53.4 N	86	23	0.8 W			57.8	131.2	469.2000	66.21	-77.82	-16.5	-28.11	-116.82	-2.00	-2.00	-18.45						
WERY596	2	36	39	47.2 N	87	10	36.4 W			64.3	334.5	469.8500	60.15	-70.88	-16.5	-27.23	-117.75	-2.00	-2.00	-18.49						
WQVU909	3	36	11	1.7 N	86	52	41.4 W			4.9	34.0	469.3750	62.18	-95.1	-16.5	-40.32	-95.51	-2.00	-2.00	-18.50						
WQVJ453	3	36	39	45.4 N	86	46	38.8 W			6.9	65.5	468.8320	66.52	-94.14	-16.5	-44.32	-105.69	-2.00	-2.00	-18.50						
WQJW204	1	35	29	21.3 N	86	51	35.5 W			38.7	0.8	469.1373	63.93	-79.10	-16.5	-31.67	-113.33	-2.00	-2.00	-18.53						
WQVE463	1	36	4	28 N	86	55	17 W			8.9	214.2	468.6252	58.37	-86.32	-16.5	-44.45	-100.56	-2.00	-2.00	-18.54						
WQVE464	1	35	50	30 N	86	23	27 W			54.2	127.8	469.1625	66.25	-78.59	-16.5	-28.83	-116.26	-2.00	-2.00	-18.61						
WPKF452	2	36	9	33 N	86	46	42 W			8.1	75.4	468.3375	66.42	-95.27	-16.5	-45.35	-99.73	-2.00	-2.00	-18.62						
WQUY469	2	36	42	21.3 N	87	10	19 W			68.5	336.5	469.8750	60.55	-71.02	-16.5	-26.97	-118.30	-2.00	-2.00	-18.79						
WNSR200	1	36	12	34.2 N	86	41	40 W			17.2	63.5	468.6375	66.33	-88.81	-16.5	-38.98	-106.28	-2.00	-2.00	-18.79						
WPU1909	3	36	7	30 N	86	40	36 W			17.1	95.9	468.6250	66.47	-89.07	-16.5	-39.10	-106.23	-2.00	-2.00	-18.86						
WQDY331	2	35	29	13.3 N	86	25	46 W			82.6	151.5	469.3750	65.84	-74.89	-16.5	-25.55	-119.92	-2.00	-2.00	-18.99						
WQVR294	2	35	54	25.9 N	86	24	3.7 W			49.2	121.7	469.1000	66.30	-79.87	-16.5	-30.07	-115.41	-2.00	-2.00	-19.01						
WQVQ483	4	35	54	50.2 N	86	49	17 W			25.5	171.0	468.8875	64.70	-84.01	-16.5	-35.81	-109.70	-2.00	-2.00	-19.04						
WRV7464	2	35	57	5.5 N	86	29	7.5 W			40.2	121.5	469.0125	66.30	-81.66	-16.5	-31.86	-113.66	-2.00	-2.00	-19.05						
WPPA592	2	36	25	5.2 N	86	44	30 W			32.7	19.8	468.6252	65.41	-82.62	-16.5	-33.71	-111.86	-2.00	-2.00	-19.10						
WRAX661	1	36	28	30.5 N	86	51	18.4 W			37.1	114.1	469.0875	64.01	-80.13	-16.5	-32.61	-112.96	-2.00	-2.00	-19.10						
WQVJ452	1	35	60	52 N	86	21	35.9 W			60.8	131.1	469.0250	66.21	-78.08	-16.5	-28.37	-117.23	-2.00	-2.00	-19.11						
WQVE464	1	35	50	30 N	86	43	27 W			54.2	127.8	469.3750	66.25	-79.10	-16.5	-29.00	-116.26	-2.00	-2.00	-19.13						
WNVQ788	10	35	59	13.2 N	86	24	27 W			3.1	120.2	469.1500	66.33	-79.36	-16.5	-32.63	-113.11	-2.00	-2.00	-19.26						
WQXK820	1	36	9	45.7 N	86	46	54.5 W			7.9	72.1	468.3000	66.39	-96.12	-16.5	-46.22	-99.51	-2.00	-2.00	-19.28						
WQNR882	2	36	19	27.9 N	86	37	22.9 W			29.8	46.7	468.6252	66.18	-84.47	-16.5	-34.79	-111.06	-2.00	-2.00	-19.38						
WRCR983	2	36	24	30.5 N	87	1	30.5 W			33	334.4	469.2125	60.15	-77.56	-16.5	-33.92	-111.95	-2.00	-2.00	-19.39						
WQUN714	2	36	8	33.2 N	86	48	3 W			5.8	88.1	468.1500	66.50	-99.67	-16.5	-49.07	-96.83	-2.00	-2.00	-19.43						
WRTCS39	1	36	31	15 N	87	13	10 W			67.6	133.1	469.1875	65.72	-71.09	-16.5											

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP HxV (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WRJA234	2	36	4	43.2	N	86	40	56.8	W	17.9	112.7	468.5500	66.37	-90.61	-16.5	-40.74	-106.62	-2.00	-20.90							
WQO521	2	36	28	1	N	86	28	37.9	W	50.3	40.7	468.5000	66.47	-81.14	-16.5	-31.48	-115.51	-2.00	-20.90							
WRJG15	1	36	53	13.9	N	86	57	35.4	W	45.6	34.9	468.5250	66.51	-78.59	-16.5	-32.48	-114.94	-2.00	-20.84							
WNDA491	2	36	7	36.2	N	86	41	13	W	46.5	55.3	468.5000	66.47	-91.63	-16.5	-41.66	-105.75	-2.00	-20.95							
WOMV526	2	36	34	22.5	N	87	17	27	W	61.3	321.7	468.2500	57.08	-70.73	-16.5	-30.16	-117.34	-2.00	-21.01							
WQX911	2	36	7	30.8	N	86	40	4.8	W	17.9	95.8	468.3375	66.47	-90.86	-16.5	-40.89	-106.62	-2.00	-21.05							
WQX9461	2	36	9	57.1	N	86	46	46.6	W	8.2	70.1	468.2375	66.38	-97.56	-16.5	-47.68	-99.84	-2.00	-21.06							
WQUN476	2	36	36	14.4	N	87	15	37.5	W	62.4	325.6	469.7500	58.13	-71.72	-16.5	-30.09	-117.49	-2.00	-21.09							
WREY596	2	36	39	47.2	N	87	10	36.4	W	64.3	334.5	469.4500	60.15	-73.48	-16.5	-29.83	-117.75	-2.00	-21.10							
WQTY777	2	36	8	32.9	N	86	45	9.2	W	10.2	88.9	468.3125	66.50	-95.83	-16.5	-45.83	-101.73	-2.00	-21.10							
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	469.1375	66.19	-79.10	-16.5	-29.41	-118.17	-2.00	-21.11							
WPNS563	1	35	37	21.3	N	87	2	56	W	59.8	196.0	469.3125	61.89	-75.87	-16.5	-30.48	-117.11	-2.00	-21.11							
WQKJ569	2	35	44	1.9	N	86	55	7	W	45.4	186.0	469.1125	63.23	-79.61	-16.5	-32.88	-114.72	-2.00	-21.13							
WQVE464	1	35	50	30	N	86	23	27	W	54.2	127.8	469.0375	66.25	-81.15	-16.5	-31.40	-116.25	-2.00	-21.18							
WRBK816	1	36	33	8	N	86	54	51.5	W	45.9	354.6	469.1125	63.23	-79.61	-16.5	-32.88	-114.81	-2.00	-21.22							
WNUW714	2	36	8	33.2	N	86	48	3	W	5.8	88.1	468.1000	66.50	-100.87	-16.5	-50.87	-96.83	-2.00	-21.24							
KVU523	3	36	34	22.5	N	87	17	27	W	61.3	321.7	468.2375	67.08	-70.98	-16.5	-30.75	-116.59	-2.00	-21.25							
WQUN501	2	36	50	54.6	N	86	34	48.2	W	50.9	30.5	469.0875	65.67	-80.01	-16.5	-30.75	-116.89	-2.00	-21.27							
WRU1362	2	36	7	58	N	86	19	12.3	W	49.1	90.9	468.7500	66.53	-82.39	-16.5	-32.37	-115.39	-2.00	-21.29							
WRTB555	2	35	55	44.5	N	86	55	15	W	24	191.9	468.8500	62.61	-84.70	-16.5	-38.59	-109.17	-2.00	-21.30							
WQY691	2	35	59	31	N	86	34	14	W	31.3	121.9	468.7500	66.30	-86.09	-16.5	-36.29	-111.48	-2.00	-21.30							
WRM609	1	36	30	14.7	N	87	15	28.6	W	53.5	319.1	469.5700	56.55	-71.72	-16.5	-31.67	-116.15	-2.00	-21.33							
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	468.8375	66.38	-91.89	-16.5	-42.01	-105.91	-2.00	-21.46							
WPNS563	1	35	37	21.3	N	87	2	56	W	59.8	196.0	469.125	61.23	-70.71	-16.5	-32.85	-113.98	-2.00	-21.47							
WQX931	1	35	53	5.8	N	86	25	51.8	W	48.4	128.1	468.0750	66.50	-101.47	-16.5	-33.38	-117.51	-2.00	-21.47							
WQF553	1	35	37	21.3	N	87	4	56	W	59.8	196.0	469.2875	61.89	-76.26	-16.5	-30.87	-117.11	-2.00	-21.50							
WQH4407	2	36	35	34.6	N	86	26	44.5	W	31	82.6	468.8250	66.44	-85.17	-16.5	-35.22	-113.19	-2.00	-21.94							
WQJM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	468.2350	66.45	-97.87	-16.5	-47.91	-100.55	-2.00	-22.00							
WQRA380	2	36	47	38.9	N	87	23	10.5	W	86.2	327.5	469.5700	58.61	-70.30	-16.5	-28.19	-120.30	-2.00	-22.00							
WQUN946	5	36	9	30	N	86	46	33.6	W	8.3	76.4	468.2000	66.42	-98.47	-16.5	-48.55	-99.94	-2.00	-22.03							
WQRE664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	468.7500	66.36	-86.09	-16.5	-36.23	-112.28	-2.00	-22.04							
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	469.0875	66.19	-80.64	-16.5	-30.95	-118.17	-2.00	-22.06							
WQPA892	2	36	48	57.2	N	87	7	40	W	78.5	342.7	469.4125	61.60	-74.24	-16.5	-29.15	-119.48	-2.00	-22.14							
WQAO563	33	36	10	45.8	N	86	46	38.7	W	9	61.5	468.2250	66.32	-97.87	-16.5	-48.05	-100.64	-2.00	-22.23							
WQAZ704	1	36	10	0	N	86	47	0	W	7.9	66.7	468.1750	66.37	-99.07	-16.5	-49.20	-99.51	-2.00	-22.25							
WQC5170	2	36	10	0	N	86	47	0	W	7.9	66.7	468.1750	66.37	-99.07	-16.5	-49.20	-99.51	-2.00	-22.25							
WPNS563	1	35	37	21.3	N	87	2	56	W	59.8	196.0	469.3375	61.89	-77.05	-16.5	-31.66	-117.11	-2.00	-22.29							
WRV764	3	35	57	5.5	N	86	29	7.5	W	40.2	121.5	468.8375	66.30	-84.94	-16.5	-35.14	-113.65	-2.00	-22.32							
WRD8492	2	36	42	35.5	N	86	34	9.9	W	68.5	22.6	469.1125	65.57	-79.61	-16.5	-30.54	-118.29	-2.00	-22.36							
WRD8492	2	36	42	34.2	N	86	41	40	W	17.2	60.3	468.8433	66.33	-92.44	-16.5	-42.42	-107.97	-2.00	-22.47							
WQYU282	1	36	16	10.4	N	86	34	14.3	W	60	30.8	469.0375	65.57	-91.19	-16.5	-31.79	-117.14	-2.00	-22.44							
WNUH714	2	36	8	33.3	N	86	48	3	W	15.6	88.0	468.4125	65.50	-93.57	-16.5	-43.57	-105.43	-2.00	-22.53							
WQTY777	2	36	8	32.9	N	86	45	9.2	W	10.2	88.9	468.2500	66.50	-97.26	-16.5	-47.26	-101.73	-2.00	-22.53							
WQWB779	2	36	13	12.2	N	86	19	40	W	49.2	79.5	468.9125	66.43	-83.55	-16.5	-33.61	-115.41	-2.00	-22.55							
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	469.6253	66.19	-80.64	-16.5	-30.95	-118.17	-2.00	-22.64							
WQTL947	2	36	2	32.2	N	86	30	35.4	W	32.4	81.3	468.7125	66.44	-87.28	-16.5	-37.34	-117.78	-2.00	-22.65							
WQWZ239	3	35	37	14.3	N	86	25	37	W	70	144.5	469.0750	65.99	-80.39	-16.5	-30.89	-118.48	-2.00	-22.69							
WNNHG551	2	36	41	18.8	N	86	29	11	W	69.6	29.0	469.0750	65.84	-80.38	-16.5	-31.04	-118.43	-2.00	-22.99							
WQMT530	1	35	43	27	N	86	19	10	W	57.6	133.1	469.0375	66.19	-81.15	-16.5	-31.46	-118.17	-2.00	-23.16							
WNUJ714	2	36	8	33.2	N	86	48	3	W	5.8	88.1	468.2500	66.50	-102.88	-16.5	-52.8										

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WPQJ708	2	36	27	8.7	N	87	22	16.4	W	57.3	307.5	469.6875	53.08	-70.61	-16.5	-34.03	-116.72	-2.00	-24.26							
WQTD409	1	36	30	3	N	86	52	9.1	W	39.3	359.5	469.625	63.82	-84.7	-16.5	-37.15	-115.50	-2.00	-24.27							
WQUN743	1	35	50	23.6	N	87	2	56.6	W	59.8	309.0	469.9125	61.69	-79.10	-16.5	-33.40	-117.11	-2.00	-24.34							
WIRV654	2	35	24	36.3	N	86	26	43.6	W	72.3	148.8	469.0250	65.92	-81.41	-16.5	-31.98	-118.85	-2.00	-24.37							
WQYU669	2	36	42	23.3	N	87	10	19.0	W	68.5	336.8	469.525	60.55	-76.65	-16.5	-32.60	-118.29	-2.00	-24.42							
WIRV286	2	36	37	14.8	N	87	15	49.8	W	64.3	326.4	469.325	58.37	-75.09	-16.5	-33.21	-117.72	-2.00	-24.45							
WPQJ708	2	36	27	8.7	N	87	22	16.4	W	57.3	307.5	469.625	53.08	-70.86	-16.5	-34.27	-116.72	-2.00	-24.51							
WRCH702	2	36	16	40.0	N	87	3	55.0	W	23.5	310.4	469.1125	54.08	-79.61	-16.5	-42.03	-109.00	-2.00	-24.55							
WRWC305	1	36	9	44.2	N	86	38	57.3	W	19.6	82.9	468.4125	66.44	-93.57	-16.5	-43.63	-107.41	-2.00	-24.57							
WRIV871	1	35	55	54.2	N	86	54	41.0	W	23.6	190.1	468.625	62.75	-88.30	-16.5	-42.05	-109.03	-2.00	-24.61							
WRD6001	2	36	37	30.9	N	87	15	24.4	W	64.2	327.1	469.3375	58.61	-75.48	-16.5	-33.36	-117.73	-2.00	-24.61							
WQWF750	2	36	29	26.5	N	86	51	34.0	W	38.8	0.8	468.8250	63.93	-85.17	-16.5	-37.74	-113.35	-2.00	-24.62							
WQAZ704	1	36	10	0	N	86	47	0.0	W	7.9	68.7	468.0750	66.37	-101.47	-16.5	-51.60	-99.51	-2.00	-24.66							
WQCI570	2	36	10	0	N	86	47	0.0	W	7.9	68.7	468.5500	66.16	-101.47	-16.5	-40.95	-110.19	-2.00	-24.67							
WQTH648	3	36	18	36.5	N	86	38	57.8	W	27	45.8	468.5500	66.16	-90.61	-16.5	-33.85	-117.39	-2.00	-24.77							
WQZJ443	2	36	38	27.4	N	86	33	42.4	W	61.8	25.0	469.9375	65.73	-83.08	-16.5	-33.85	-117.39	-2.00	-24.77							
WRKJ642	2	36	27	27.5	N	86	33	42.5	W	61.8	25.0	469.9375	65.73	-83.08	-16.5	-34.45	-117.39	-2.00	-24.77							
WQUN714	1	35	8	33.4	N	86	46	48.0	W	5.8	88.1	469.9750	66.59	-104.43	-16.5	-54.45	-98.61	-2.00	-24.82							
WQUN714	2	36	8	33.2	N	86	48	3.0	W	5.8	88.1	469.9750	66.59	-104.45	-16.5	-54.45	-98.82	-2.00	-24.82							
WQCG884	2	36	35	4.2	N	87	17	37.0	W	62.4	322.3	469.8375	57.35	-74.70	-16.5	-33.84	-117.48	-2.00	-24.85							
WPNS363	1	35	37	23.3	N	87	2	56.0	W	59.8	196.0	469.1125	61.89	-79.61	-16.5	-34.22	-117.11	-2.00	-24.86							
WPMM435	2	36	32	1.2	N	87	25	44.0	W	66.8	311.0	469.9000	54.38	-71.16	-16.5	-33.28	-118.09	-2.00	-24.88							
WQVE564	1	35	50	30.0	N	86	23	27.0	W	54.2	127.8	468.8375	66.25	-84.94	-16.5	-35.18	-116.25	-2.00	-24.96							
WQWN435	2	36	7	45.7	N	86	24	20.8	W	41.4	91.6	468.7000	66.51	-87.53	-16.5	-37.52	-113.91	-2.00	-24.96							
WQYQ930	3	35	56	44.9	N	86	51	24.9	W	21.7	177.9	468.5375	64.19	-90.86	-16.5	-43.17	-108.29	-2.00	-25.00							
WPXK313	2	36	7	30.0	N	86	40	36.0	W	17.3	95.9	468.3375	66.47	-95.27	-16.5	-45.30	-106.22	-2.00	-25.06							
WQTM457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	469.7844	49.53	-70.50	-16.5	-37.47	-114.14	-2.00	-25.11							
WQTM457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	469.7875	49.53	-70.52	-16.5	-37.49	-114.14	-2.00	-25.13							
WQTM457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	469.7906	49.53	-70.54	-16.5	-37.50	-114.14	-2.00	-25.15							
WQJQ335	1	36	14	0.5	N	86	18	31.5	W	51.3	78.2	468.7875	66.43	-85.86	-16.5	-35.93	-115.74	-2.00	-25.20							
WQAZ704	1	36	10	0	N	86	47	0.0	W	7.9	68.7	468.0500	66.37	-102.09	-16.5	-52.23	-95.51	-2.00	-25.28							
WQCI570	2	36	10	0	N	86	34	40.0	W	6.0	154.6	468.9300	65.93	-83.70	-16.5	-34.01	-117.22	-2.00	-25.30							
WPNS363	1	35	50	50.0	N	86	24	56.0	W	59.8	468.9375	61.69	-80.13	-16.5	-34.73	-117.11	-2.00	-25.37								
WQPS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	468.9325	65.73	-82.62	-16.5	-33.39	-118.46	-2.00	-25.38							
WRVM933	1	36	44	2.0	N	86	38	59.0	W	68.6	16.3	468.9750	65.23	-82.39	-16.5	-33.68	-118.30	-2.00	-25.50							
WNUJ714	1	36	8	33.2	N	86	48	3.0	W	5.8	88.1	467.9500	66.50	-105.24	-16.5	-55.24	-96.82	-2.00	-25.61							
WNUJ714	2	36	8	33.2	N	86	48	3.0	W	5.8	88.1	467.9500	66.50	-105.24	-16.5	-55.24	-96.82	-2.00	-25.61							
WQLQ795	2	36	10	59.3	N	86	16	22.7	W	53.5	84.8	468.7500	66.46	-86.09	-16.5	-36.13	-116.14	-2.00	-25.80							
WPNS363	1	35	37	21.3	N	87	2	56.0	W	59.8	196.0	469.625	61.89	-80.64	-16.5	-35.25	-117.11	-2.00	-25.88							
WQD903	2	35	56	49.3	N	86	29	15.0	W	40.3	122.3	468.8500	66.29	-88.56	-16.5	-38.77	-113.67	-2.00	-25.97							
WRCX604	2	35	54	15.9	N	86	52	14.9	W	26.2	181.0	468.8575	63.82	-89.84	-16.5	-42.52	-109.93	-2.00	-25.98							
WPTM560	2	36	23	58.0	N	87	23	41.0	W	54.7	309.8	468.9125	60.73	-86.50	-16.5	-35.50	-117.09	-2.00	-26.07							
WPTM560	4	36	23	58.0	N	87	30	3.0	W	72.5	308.5	468.9375	60.73	-86.49	-16.5	-35.50	-117.09	-2.00	-26.07							
WQTM007	2	35	51	39.9	N	86	25	20.7	W	5.9	30.8	468.8375	65.47	-84.40	-16.5	-35.50	-117.09	-2.00	-26.18							
WQTM644	2	35	57	5.5	N	86	29	29.5	W	28.4	121.3	468.8375	66.30	-91.89	-16.5	-42.09	-110.63	-2.00	-26.26							
WQVE464	1	35	50	30.0	N	86	23	27.0	W	54.2	127.8	468.625	66.25	-86.32	-16.5	-36.57	-116.25	-2.00	-26.35							
WQWL345	1	36	42	55.9	N	86	34	50.8	W	68.7	21.7	468.9125	65.53	-83.55	-16.5	-34.52	-118.31	-2.00	-26.36							
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	468.8750	62.75	-84.24	-16.5	-37.99	-114.85	-2.00	-26.37							
WRH5273	1	36	43	10.6	N	87	15	12.5	W	73	331.8	469.2375	59.53	-77.05	-16.5	-34.02	-118.84	-2.00	-26.39							
WPNS363	1	35	37	21.3	N	87	2	56.0	W	59.8</td																

Appendix A: WIIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	LMR Frequency (MHz)	WIIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIIW (deg)	WIIW Elevation Pattern (dB)	Field Strength (dBu)
WQC570	2	36	10	0	N	86	47	0	W	7.9	68.7	467.9750	66.37	-104.45	-16.5	-54.59	-99.51	-2.00	-27.64					
WRP425	1	36	8	36	N	86	38	15.1	W	20.3	80.2	468.7500	66.51	-96.40	-16.5	-48.46	-101.89	-2.00	-27.72					
WRC436	1	36	1	42	N	86	36	23.9	W	2.5	118.1	468.3750	66.32	-94.14	-16.5	-44.31	-109.89	-2.00	-27.68					
WRM296	2	35	60	45.7	N	86	29	11.9	W	48.4	132.5	468.3750	66.20	-88.81	-16.5	-39.11	-115.26	-2.00	-27.91					
WRC983	2	36	24	30.5	N	87	1	30.5	W	33	334.4	468.7500	60.15	-86.09	-16.5	-42.45	-111.04	-2.00	-27.92					
WQH864	3	35	53	59	N	86	53	32.2	W	36.9	182.1	468.3750	62.35	-91.13	-16.5	-44.27	-110.16	-2.00	-27.96					
WQY466	2	36	8	38.7	N	86	40	2.8	W	17.8	88.8	468.2500	66.50	-97.87	-16.5	-47.86	-106.57	-2.00	-27.97					
WQJ335	3	36	7	12.9	N	86	24	34.4	W	41.1	93.1	468.5000	66.49	-90.61	-16.5	-40.61	-113.84	-2.00	-27.99					
WQG879	2	36	35	32	N	87	15	22	W	61.3	325.2	469.1500	58.13	-78.84	-16.5	-37.21	-117.30	-2.00	-28.03					
WRU729	1	35	59	14.2	N	86	34	58.7	W	30.6	123.8	468.4375	66.28	-93.01	-16.5	-43.22	-111.28	-2.00	-28.04					
WQT1947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	468.4500	66.44	-92.72	-16.5	-42.78	-111.77	-2.00	-28.09					
WUQ5251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	468.8125	65.73	-85.40	-16.5	-36.17	-118.46	-2.00	-28.16					
WPB819	3	35	54	34.2	N	86	53	54	W	25.8	185.1	468.5000	63.23	-91.63	-16.5	-44.90	-109.80	-2.00	-28.24					
WPPC229	2	36	8	55.2	N	86	12	47	W	58.7	89.0	468.8750	66.51	-87.79	-16.5	-37.78	-116.94	-2.00	-28.25					
WPEC304	4	36	48	26.6	N	87	24	58.3	W	88.9	326.6	469.3000	58.37	-76.06	-16.5	-34.19	-120.56	-2.00	-28.27					
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	468.7625	66.19	-86.32	-16.5	-36.63	-118.17	-2.00	-28.33					
WQW404	1	36	0	0	N	85	47	0	W	7.9	0.1	468.7500	66.57	-105.74	-16.5	-55.37	-102.51	-2.00	-28.42					
WQCS210	2	36	10	30	N	86	47	0	W	6.9	68.7	469.9500	66.37	-102.34	-16.5	-55.37	-99.51	-2.00	-28.42					
WNVF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	468.8875	66.16	-84.01	-16.5	34.35	-120.56	-2.00	-28.44					
WVW303	2	36	12	34.2	N	86	41	40	W	17.2	69.5	468.2000	66.33	-98.47	-16.5	-48.63	-106.27	-2.00	-28.44					
KD26551	1	36	0	29.2	N	86	35	45	W	28.4	121.3	468.3750	66.30	-94.14	-16.5	-44.34	-110.63	-2.00	-28.51					
WRX948	2	36	12	51.8	N	86	33	28.1	W	28.0	73.4	468.3750	66.40	-94.14	-16.5	-44.23	-110.78	-2.00	-28.55					
WPY388	5	36	16	26.2	N	86	39	47.5	W	23.4	50.8	468.3125	66.22	-95.83	-16.5	-46.12	-108.95	-2.00	-28.60					
WNWN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	468.7500	66.23	-99.07	-16.5	-49.34	-105.80	-2.00	-28.68					
WQOB999	10	35	57	12.5	N	86	48	51.4	W	21.3	167.5	468.3250	65.01	-95.55	-16.5	-47.04	-108.13	-2.00	-28.71					
WPYD562	6	36	30	12.2	N	87	15	33	W	53.5	318.9	469.1500	56.29	-78.84	-16.5	-39.05	-116.14	-2.00	-28.72					
WQZC684	2	36	35	4.2	N	87	17	37	W	62.4	322.3	469.1625	57.35	-78.59	-16.5	-37.74	-117.48	-2.00	-28.74					
WQAY855	1	36	9	41	N	86	48	14	W	6	67.6	468.7500	66.36	-108.10	-16.5	-58.24	-97.12	-2.00	-28.91					
WRFM502	2	35	55	20.5	N	86	53	54.5	W	24.4	187.0	468.4500	63.11	-92.72	-16.5	-46.11	-109.31	-2.00	-28.96					
WRV286	2	36	37	14.8	N	87	15	48.8	W	64.1	326.4	469.1125	58.37	-79.61	-16.5	-37.74	-117.71	-2.00	-28.98					
WQAB846	1	36	42	27	N	86	34	33.9	W	68	22.3	468.7625	65.57	-86.32	-16.5	-37.25	-118.22	-2.00	-29.00					
WQH101	3	36	30	5.1	N	86	52	9.9	W	39.5	359.5	468.3750	63.82	-89.33	-16.5	-42.24	-111.50	-2.00	-29.13					
WJH702	2	36	25	45.4	N	87	40	59	W	42	313.9	469.0125	56.53	-91.87	-16.5	-44.51	-114.04	-2.00	-29.18					
WQNW641	2	36	13	52.2	N	86	43	51	W	15.5	51.8	468.1500	66.23	-99.67	-16.5	-49.94	-105.89	-2.00	-29.28					
WQUR442	5	36	4	6.2	N	87	7	38	W	24.9	251.2	469.1375	49.34	-79.10	-16.5	-46.26	-109.50	-2.00	-29.28					
WQKF625	2	36	9	12.5	N	86	48	32.3	W	5.3	74.5	468.6250	66.41	-109.73	-16.5	-59.82	-96.02	-2.00	-29.41					
WVW286	2	36	37	14.8	N	87	15	48.8	W	64.1	326.4	469.0783	58.37	-80.13	-16.5	-38.25	-117.71	-2.00	-29.49					
WQN2346	5	36	4	25.4	N	86	9	41.5	W	63.8	96.5	468.6250	66.46	-88.30	-16.5	-38.34	-117.66	-2.00	-29.54					
WQX625	2	36	9	12.5	N	86	48	32.3	W	5.3	74.5	469.9250	66.41	-109.86	-16.5	-59.95	-96.02	-2.00	-29.54					
WQKG440	4	35	48	7.9	N	86	23	29.9	W	56.9	131.3	468.6250	66.21	-89.07	-16.5	-39.36	-116.67	-2.00	-29.56					
WQBG709	2	36	35	32	N	87	15	22	W	61.3	325.2	469.0750	58.13	-80.38	-16.5	-38.75	-117.30	-2.00	-29.57					
WQUS708	3	36	18	52.3	N	86	24	6.7	W	45.9	65.0	468.5250	66.35	-91.12	-16.5	-41.27	-114.80	-2.00	-29.61					
WQWM699	2	36	9	1.5	N	86	48	7.7	W	5.8	79.4	466.3500	66.43	-109.20	-16.5	-59.27	-96.79	-2.00	-29.64					
WRC694	2	35	54	15.9	N	86	52	14.9	W	26.2	181.0	468.4125	63.82	-93.57	-16.5	-46.25	-109.93	-2.00	-29.72					
WNWN224	2	36	45	30.2	N	86	10	37	W	92.2	41.7	468.8375	66.10	-84.94	-16.5	-35.33	-120.87	-2.00	-29.73					
WNWN224	3	36	55	30.2	N	86	10	37	W	92.2	41.7	468.8375	66.10	-84.94	-16.5	-35.33	-120.87	-2.00	-29.73					
WQH107	1	35	50	49.9	N	86	36	13	W	53.5	323.5	469.0375	57.61	-91.19	-16.5	-40.03	-116.21	-2.00	-29.76					
WQHE664	1	36	3	2.3	N	86	31	0	W	15.1	113.6	468.4000	66.35	-92.86	-16.5	-43.99	-113.57	-2.00	-29.86					
WQNW641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	468.1250	66.23	-102.27	-16.5	-50.54	-105.80	-2.00	-29.88					
WQSY470	3	36	10	3.2	N	86	48	25	W	6.1	60.5	466.4750	66.30	-108.93	-16.5	-59.12	-97.23	-2.00	-29.93					
WQPVY883	2	36	8	55.1	N	86	47	56.7	W	6	81.7	466.2000	66.44	-109.27	-16.5	-59.33	-97.08	-2.00	-30.00					
WRYM427	2	35	34	6.8	N	86																		

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering signal field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
WQOJ35	3	36	7	12.9 N	86	24	34.4	W	41.1	93.1	468.4000	66.49	-93.86	-16.5	-43.86	-113.84	-2.00	-31.24						
WQUL544	3	36	5	8.8 N	87	23	1.2	W	47	26.7	468.1235	49.47	-75.47	-16.5	-40.70	-115.02	-2.00	-31.24						
WQOF206	1	36	6	56.8 N	86	47	44	W	6.4	98.8	468.6565	66.44	-109.99	-16.5	-60.61	-100.61	-2.00	-31.27						
WQKF635	4	36	9	12.5 N	86	48	32.3	W	5.3	74.5	467.8793	66.41	-111.61	-16.5	-61.70	-96.03	-2.00	-31.29						
WQNU389	2	35	43	58.2 N	86	57	41.1	W	46.3	190.8	468.6123	62.75	-89.33	-16.5	-43.08	-114.84	-2.00	-31.45						
WQW9941	3	35	46	47.6 N	86	20	58.2	W	51.4	130.7	468.5123	66.22	-90.35	-16.5	-40.62	-117.33	-2.00	-31.50						
WNNG984	2	36	9	29.2 N	86	47	4	W	7.5	75.2	466.4500	66.42	-108.91	-16.5	-59.00	-99.03	-2.00	-31.60						
WQHE537	18	36	6	31 N	86	45	58	W	9.6	111.8	467.9000	66.38	-106.81	-16.5	-56.94	-101.20	-2.00	-31.68						
WQVZ577	1	36	10	43.3 N	86	52	41.3	W	4.4	345.0	466.2000	62.04	-109.27	-16.5	-63.74	-94.39	-2.00	-31.70						
WNWN641	2	36	13	52.2 N	86	43	23	W	16.3	51.8	468.0500	66.23	-102.09	-16.5	-52.36	-105.80	-2.00	-31.71						
WQNE407	2	36	11	3.6 N	86	26	44.5	W	38.1	82.6	468.3500	66.44	-94.99	-16.5	-45.04	-113.18	-2.00	-31.76						
WQJQ35	1	36	14	0.5 N	86	18	31.5	W	51.1	78.2	468.4625	66.43	-92.44	-16.5	-42.51	-115.73	-2.00	-31.78						
WPFC229	2	36	8	55.2 N	86	12	47	W	58.7	89.0	468.5123	66.51	-91.38	-16.5	-41.36	-116.94	-2.00	-31.84						
WQF421	1	36	31	15.6 N	87	20	43.8	W	60.3	314.7	469.1000	55.23	-79.87	-16.5	-41.14	-117.18	-2.00	-31.84						
WQQT469	4	35	57	50 N	86	25	25.5	W	39.1	120.1	468.3253	66.30	-94.70	-16.5	-44.90	-113.41	-2.00	-31.84						
WQRF789	1	36	7	43 N	86	51	8	W	1.8	138.6	467.4875	66.12	-121.37	-16.5	-71.74	-86.65	-2.00	-31.95						
WQW450	3	36	5	35 N	86	49	21	W	6.4	147.5	468.0250	66.29	-102.29	-16.5	-49.60	-102.60	-2.00	-32.01						
WQVP568	1	36	6	12 N	86	31	14	W	5.1	256.7	468.8250	49.41	-85.17	-16.5	-52.26	-106.38	-2.00	-32.17						
WPKK857	5	36	2	40.3 N	87	20	42.9	W	44.5	256.2	469.3793	49.41	-77.05	-16.5	-44.14	-114.55	-2.00	-32.21						
WQCY257	4	36	9	50 N	86	47	5.4	W	7.7	70.5	466.6500	66.38	-109.29	-16.5	-59.41	-99.26	-2.00	-32.24						
WREP474	1	36	8	57.1 N	86	47	43.9	W	6.4	81.6	467.1123	66.44	-110.98	-16.5	-61.04	-97.66	-2.00	-32.26						
WNTX602	3	36	45	21.2 N	86	11	4	W	91.6	41.5	468.7000	66.10	-87.53	-16.5	-37.93	-120.81	-2.00	-32.27						
WQV828	2	36	9	22.7 N	86	47	33.6	W	6.8	75.2	467.9500	66.42	-110.45	-16.5	-60.53	-98.19	-2.00	-32.28						
WQMM949	3	36	9	41.6 N	86	47	2	W	7.7	72.5	466.6750	66.39	-109.34	-16.5	-59.45	-99.26	-2.00	-32.28						
WQNR670	1	36	7	20.4 N	86	52	15.7	W	2.3	193.4	467.4125	62.33	-116.58	-16.5	-70.75	-87.99	-2.00	-32.30						
WPPA592	2	36	25	5.2 N	86	44	30	W	32.7	19.8	468.3125	65.41	-95.83	-16.5	-46.92	-111.85	-2.00	-32.31						
WRUW620	9	36	9	29.8 N	86	47	5.7	W	7.5	75.0	468.6500	66.42	-109.71	-16.5	-59.79	-99.03	-2.00	-32.39						
WQRA699	2	36	9	25.9 N	86	46	36.2	W	8.2	77.1	466.4250	66.42	-108.95	-16.5	-59.03	-99.80	-2.00	-32.40						
WQXQ340	3	36	9	33 N	86	46	42.7	W	8.1	75.4	466.5375	66.42	-109.06	-16.5	-59.14	-99.70	-2.00	-32.41						
WRUQ329	2	36	9	40.1 N	86	46	42.7	W	8.1	73.9	466.5375	66.40	-109.06	-16.5	-59.15	-99.70	-2.00	-32.42						
WQUL544	3	36	5	8.8 N	87	23	1.3	W	47	262.7	469.2375	49.67	-77.05	-16.5	-43.89	-115.02	-2.00	-32.43						
WQMM939	3	36	13	52 N	86	43	25	W	5.1	51.8	468.8000	66.23	-102.49	-16.5	-53.15	-105.80	-2.00	-32.49						
WQKU130	2	36	9	26.5 N	86	46	45.4	W	7.9	66.7000	466.6250	66.42	-109.40	-16.5	-50.48	-99.48	-2.00	-32.53						
WQKU827	2	36	9	19.8 N	86	46	32.4	W	8.3	78.5	466.5000	66.43	-108.98	-16.5	-50.05	-99.91	-2.00	-32.53						
WQTK807	2	36	9	29 N	86	46	36.6	W	8.2	76.5	466.3250	66.42	-109.09	-16.5	-50.18	-99.80	-2.00	-32.55						
WPAQ612	2	36	9	33.2 N	86	46	55	W	7.8	74.7	466.0250	66.41	-109.53	-16.5	-50.62	-99.36	-2.00	-32.56						
WPUE564	1	36	9	10.7 N	86	48	28	W	5.4	75.4	467.2625	66.42	-112.75	-16.5	-62.84	-96.19	-2.00	-32.58						
WQVQ483	4	35	54	50.2 N	86	49	17	W	25.5	171.0	468.2375	64.70	-97.56	-16.5	-49.36	-109.69	-2.00	-32.59						
WRUQ329	2	36	9	40.1 N	86	46	42.7	W	8.1	73.9	466.6250	66.40	-109.24	-16.5	-59.33	-99.70	-2.00	-32.60						
WPYF461	6	36	9	32.9 N	86	46	42.6	W	8.3	75.4	466.1750	66.42	-109.31	-16.5	-59.39	-99.69	-2.00	-32.66						
WPEX452	2	36	9	33 N	86	46	42	W	8.1	75.4	466.6255	66.42	-109.32	-16.5	-59.40	-99.70	-2.00	-32.67						
WQH521	2	35	35	52 N	86	24	6	W	50.8	124.6	468.4250	66.28	-93.29	-16.5	-43.51	-115.68	-2.00	-32.73						
WQXQ340	3	36	9	33 N	86	46	42.7	W	8.1	75.4	466.7000	66.42	-109.40	-16.5	-59.48	-99.70	-2.00	-32.75						
WQCY257	4	36	9	50 N	86	47	5.4	W	7.7	70.5	469.6000	66.38	-109.81	-16.5	-59.93	-99.26	-2.00	-32.76						
WRCV864	1	36	11	37.4 N	86	48	3.4	W	8.3	44.6	466.4250	66.15	-108.95	-16.5	-50.30	-99.91	-2.00	-32.78						
WQVU791	1	36	5	51 N	86	49	21	W	4.7	51.9	467.1235	66.42	-114.03	-16.5	-64.24	-86.60	-2.00	-32.80						
WQAU747	2	36	10	49.8 N	86	46	55.9	W	4.6	341.3	466.6250	61.45	-100.40	-16.5	-64.44	-84.79	-2.00	-32.80						
WQVH495	3	36	9	41.6 N	86	47	3	W	7.7	72.1	466.7500	66.39	-109.89	-16.5	-60.08	-89.49	-2.00	-33.13						
WQH7933	2	36	9	33.7 N	86	46	24.2	W	8.5	76.0	466.3000	66.42	-109.13	-16.5	-59.21	-100.11	-2.00	-32.90						
WQVY639	1	36	9	35.2 N	86	46	18	W	51.1	78.2	468.4125	66.43	-93.57	-16.5	-43.65	-115.73	-2.00	-32.91						
WQOJ355	1	36	14	0.5 N	86	18	31.5	W	8.7	75.9	466.4375	66.42	-108.93	-16.5	-50.02	-100.32	-2.00	-32.91						
WPEX272	1	36	8	40.2 N	86	46	1	W	8.9</td															

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist from WiIw (km)	Az from WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
WREA477	3	36	9	50.4 N	86	46	43.5	W	8.2	71.7	467.0250	66.39	-110.23	-16.5	-60.35	-99.81	-2.00	-33.72						
WPBP557	3	36	2	40.3 N	87	20	42.4	W	4.5	252.4	467.3710	49.41	-78.43	-16.5	-54.45	-104.54	-2.00	-33.75						
WPPC222	1	36	8	40.4 N	86	46	31	W	8.9	87.3	468.3732	66.49	-100.68	-16.5	-59.59	-100.52	-2.00	-33.78						
WNVK915	1	36	10	22.2 N	86	47	29	W	9	60.9	467.0873	66.30	-110.76	-16.5	-60.96	-99.27	-2.00	-33.79						
WNWL306	3	36	9	33.2 N	86	46	55	W	7.8	74.7	467.0873	66.41	-110.76	-16.5	-60.85	-99.38	-2.00	-33.80						
WQOA563	33	36	10	45.8 N	86	46	38	7 W	9	61.5	466.0750	66.32	-109.45	-16.5	-59.62	-100.60	-2.00	-33.82						
WQOA563	33	36	10	45.8 N	86	46	38	7 W	9	61.5	466.0500	66.32	-109.49	-16.5	-59.67	-100.60	-2.00	-33.86						
WPUE564	1	36	9	10.7 N	86	48	28	W	5.4	75.4	467.3123	66.42	-114.03	-16.5	-64.11	-96.19	-2.00	-33.86						
WQP259	3	36	6	51.7 N	86	46	13	7 W	9	109.0	465.8793	66.39	-109.58	-16.5	-59.69	-100.60	-2.00	-33.88						
WPBP894	2	36	10	4.2 N	86	46	7	W	9.2	70.9	466.2500	66.38	-109.45	-16.5	-59.57	-100.81	-2.00	-33.94						
WQLJ544	3	36	5	8.8 N	87	23	1.3	W	47	262.7	469.1625	49.67	-78.59	-16.5	-45.42	-115.02	-2.00	-33.96						
WQIV611	2	36	19	16 N	86	34	10.9	W	33.3	52.8	468.1215	66.24	-98.17	-16.5	-48.42	-112.01	-2.00	-33.97						
WPYF461	2	36	30	2 N	86	46	12	W	9.3	71.1	465.7873	66.39	-109.58	-16.5	-59.69	-100.71	-2.00	-33.97						
WRQJ617	10	36	9	56.8 N	86	46	6	9 W	9.2	72.3	466.0500	66.39	-109.49	-16.5	-59.60	-100.79	-2.00	-33.97						
WQQA563	33	36	10	45.8 N	86	46	38	7 W	9	61.5	466.8125	66.32	-109.63	-16.5	-59.81	-100.62	-2.00	-34.00						
WQZN460	2	36	9	31.5 N	86	46	30	9 W	8.4	76.2	467.0375	66.42	-110.34	-16.5	-60.42	-100.02	-2.00	-34.01						
WQJN30	6	36	0	3.3 N	85	30	0	5.5 W	36.4	111.2	465.3735	66.35	-97.56	-16.5	-47.72	-112.78	-2.00	-34.01						
WQDNW641	2	36	13	52.4 N	86	43	23	W	34.8	467.0670	66.43	-104.41	-16.5	-54.74	-101.60	-2.00	-34.06							
WURCS57	3	36	26	36.2 N	86	28	37	W	51.1	468.7500	66.12	-94.42	-16.5	-44.80	-115.73	-2.00	-34.07							
WQD335	3	36	7	12.9 N	86	24	34.4	W	41.1	93.1	468.2750	66.49	-96.68	-16.5	-46.69	-113.84	-2.00	-34.07						
WRUC798	2	36	4	9.5 N	86	26	46.2	W	38.6	101.8	468.3200	66.43	-97.26	-16.5	-47.33	-113.29	-2.00	-34.16						
WQD0712	2	36	48	3.2 N	87	23	22	W	87	327.6	468.9750	58.61	-82.39	-16.5	-40.28	-120.36	-2.00	-34.17						
WRYS596	2	36	39	47.2 N	87	10	36.4	W	64.3	334.5	468.5700	60.15	-86.56	-16.5	-42.91	-117.73	-2.00	-34.17						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.4500	66.50	-108.91	-16.5	-58.91	-101.70	-2.00	-34.18						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.4750	66.50	-108.93	-16.5	-58.92	-101.70	-2.00	-34.20						
WQRM718	2	36	11	1.7 N	86	52	41.4	W	4.9	346.7	467.1125	62.18	-110.98	-16.5	-65.30	-95.34	-2.00	-34.21						
WPQA892	2	36	48	57.2 N	87	7	40	W	78.5	342.7	468.7625	61.60	-86.32	-16.5	-41.23	-119.47	-2.00	-34.22						
WPYD562	4	36	32	41 N	87	30	3	W	72.5	308.5	469.1500	53.42	-78.84	-16.5	-41.92	-118.78	-2.00	-34.23						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.5000	66.50	-108.98	-16.5	-58.98	-101.70	-2.00	-34.25						
WQGX314	1	36	5	31.1 N	86	51	48.9	W	5.4	178.1	467.2375	64.10	-112.11	-16.5	-64.52	-96.19	-2.00	-34.27						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.3750	66.50	-109.02	-16.5	-59.02	-101.70	-2.00	-34.29						
WREX463	5	36	8	2.9 N	86	45	39.5	W	9.4	91.1	466.4500	66.48	-109.51	-16.5	-59.51	-101.50	-2.00	-34.31						
WQHJ537	18	36	8	31.1 N	86	45	40.6	W	11.6	467.8500	66.50	-109.50	-16.5	-59.58	-101.30	-2.00	-34.43							
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.6000	66.50	-109.19	-16.5	-59.19	-101.70	-2.00	-34.46						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.2500	66.50	-109.20	-16.5	-59.20	-101.69	-2.00	-34.47						
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.2000	66.50	-109.27	-16.5	-59.27	-101.69	-2.00	-34.45						
WOGX335	2	36	11	22.7 N	86	47	55.7	W	8.1	47.8	467.1125	66.19	-110.98	-16.5	-61.29	-99.71	-2.00	-34.55						
WQPA846	1	36	42	27 N	86	34	33.9	W	6.8	123.3	468.8750	65.57	-91.89	-16.5	-42.82	-118.21	-2.00	-34.57						
WQF5693	3	36	49	10 N	86	33	20	W	80.3	20.1	468.5625	65.47	-90.35	-16.5	-41.38	-119.66	-2.00	-34.57						
WQJL820	2	35	32	52.3 N	87	33	18.1	W	90.6	23.5	469.1000	56.03	-79.87	-16.5	-40.33	-120.72	-2.00	-34.58						
WPLW690	1	36	8	44.2 N	86	41	31	W	15.6	88.0	467.9375	66.50	-105.63	-16.5	-55.63	-105.42	-2.00	-34.59						
WQDS15	3	36	18	52.3 N	86	24	6.7 W	45.9	65.0	468.3000	66.35	-96.12	-16.5	-46.27	-114.80	-2.00	-34.61							
WPIC977	4	36	9	15.2 N	86	45	3 W	10.4	81.7	466.5625	66.44	-109.11	-16.5	-59.17	-101.87	-2.00	-34.61							
WQTY777	2	36	8	32.9 N	86	45	9.2	W	10.2	88.9	466.6750	66.50	-109.34	-16.5	-59.34	-101.70	-2.00	-34.61						
WQWM949	3	36	5	41.6 N	86	47	2 W	30.6	320.9	469.0125	56.79	-81.66	-16.5	-41.37	-120.15	-2.00	-35.05							
WQSK787	4	36	5	50.8 N	86	45	19.2	W	11	115.9	466.5000	66.35	-108.98	-16.5	-59.13	-102.35	-2.00	-35.06						
WRCM798	2	36	9	22.9 N	86	46	31.1	W	10.2	77.9	467.1750	66.42	-111.51	-16.5	-61.59	-99.92	-2.00	-35.07						
WQTY777	2	36	9	32.9 N	86	45	6.9	W	10.2	88.9	466.3000	66.35	-98.41	-16.5	-49.89	-100.26	-2.00	-34.58						
WRFB300	3	36	9	40.4 N	86	45	42.5	W	8.2	13.8	467.1875	66.40	-115.94	-16.5	-61.71	-99.82	-2.00	-35.09						
WREAA77	1	36	9	50.4 N	86	46	43.5	W	8.2	71.7	467.1875	66.39	-111.61	-16.5	-61.73	-99.82	-2.00	-35.10						
WRFK376	1	36	10	21.4 N	86	46	59.3	W	8.2	64.4	467.1875	66.34	-111.63	-16.5	-61.77	-99.82	-2.00	-35.15						
WQHE537	18	36	6	31 N	86	45	58 W	9.6	111.8	467.8375														

Appendix A: WIIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist from WIIW (km)	Az From WIIW	LMR Frequency (MHz)	WIIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIIW (deg)	WIIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WQNC265	74	36	8	20.4	N	86	53	2.4	W	1.7	263.0	467.8500	49.72	-109.56	-16.5	-76.34	-86.16	-2.00	-36.05							
WQDL307	31	36	9	58.9	N	86	46	16.2	W	1.8	71.4	467.1230	66.49	-111.13	-16.5	-81.47	-104.63	-2.00	-36.12							
WQH76	7	36	10	32.4	N	86	45	9.2	W	10.2	88.9	467.1433	65.50	-110.83	-16.5	-60.87	-104.74	-2.00	-36.14							
WQDM932	5	36	5	52	N	87	23	54.0	W	51.2	264.8	469.0373	49.76	-80.19	-16.5	-67.87	-115.76	-2.00	-36.15							
WQAZ204	7	35	53	55.6	N	86	52	47.6	W	36.9	182.7	468.1500	63.70	-99.67	-16.5	-52.47	-110.15	-2.00	-36.16							
WQHP822	2	35	53	59	N	86	53	32.2	W	36.9	182.3	468.1625	62.35	-99.37	-16.5	-52.52	-110.15	-2.00	-36.21							
WQWF642	3	36	2	21	N	87	19	32	W	42.9	254.8	469.0250	49.38	-81.41	-16.5	-48.53	-114.22	-2.00	-36.28							
WQWQ941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	468.3375	66.21	-95.27	-16.5	-45.56	-117.20	-2.00	-36.29							
WREX463	5	36	8	2.9	N	86	45	39.5	W	9.4	94.5	467.2000	66.48	-111.72	-16.5	-61.74	-101.00	-2.00	-36.30							
WPBK857	5	36	2	40.3	N	87	20	42.9	W	44.5	256.2	469.0375	49.41	-81.15	-16.5	-48.24	-114.54	-2.00	-36.31							
WRCB856	4	36	24	42.6	N	86	22	10.8	W	53.8	53.7	468.2875	66.27	-96.40	-16.5	-46.63	-116.18	-2.00	-36.34							
WQY877	2	36	8	32.9	N	86	45	9.2	W	10.2	88.9	467.1250	66.50	-111.08	-16.5	-61.08	-101.71	-2.00	-36.35							
WRS442	1	36	5	48.7	N	86	44	40.4	W	11.9	114.2	468.6125	66.35	-109.63	-16.5	-59.78	-103.04	-2.00	-36.39							
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	467.3375	66.39	-112.11	-16.5	-62.23	-100.63	-2.00	-36.41							
WPFD864	2	36	37	13.2	N	87	13	21.2	W	62.1	322.2	468.6750	59.08	-88.05	-16.5	-45.47	-117.43	-2.00	-36.43							
WQNQ474	2	36	37	49.1	N	87	26	5.3	W	74.6	317.1	468.9125	56.03	-83.55	-16.5	-44.01	-119.03	-2.00	-36.57							
WQWU322	12	36	12	30.9	N	86	41	47	W	16.8	67.1	468.1250	66.24	-106.41	-16.5	-46.80	-106.06	-2.00	-36.58							
WKNF902	2	36	4	44.2	N	86	8	54.9	W	45.9	468.4750	66.61	-92.16	-16.5	-42.50	-105.01	-2.00	-36.59								
WVPM939	2	36	45	44.2	N	86	8	54.9	W	89	468.4750	66.16	-92.16	-16.5	-42.50	-120.55	-2.00	-36.59								
WQJU331	1	35	53	5.8	N	86	25	51	W	48.4	125.9	468.3375	66.27	-75.56	-16.5	-47.79	-115.26	-2.00	-36.59							
WQNO478	6	36	36	35.4	N	87	25	56.5	W	72.8	316.0	468.9125	55.76	-83.55	-16.5	-44.29	-118.81	-2.00	-36.63							
WQNS241	5	36	39	27.6	N	87	26	49.5	W	77.5	318.0	468.9125	55.29	-83.55	-16.5	-43.76	-119.36	-2.00	-36.64							
WNFL569	2	36	8	13.2	N	86	44	24	W	11.3	92.1	465.5500	66.50	-110.50	-16.5	-60.50	-102.57	-2.00	-36.66							
WPQJ708	2	36	27	8.7	N	87	22	16.4	W	57.3	307.5	468.9375	53.08	-83.08	-16.5	-46.50	-116.71	-2.00	-36.73							
WQHQ482	4	36	37	16.6	N	87	26	3.4	W	73.8	316.5	468.9125	55.76	-83.55	-16.5	-44.29	-118.93	-2.00	-36.75							
WQAZ204	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	468.1250	63.70	-100.27	-16.5	-53.07	-110.15	-2.00	-36.76							
WQHQ482	2	36	39	59	N	87	27	9.8	W	78.6	318.2	468.9125	56.29	-83.55	-16.5	-43.76	-119.48	-2.00	-36.76							
WTQW457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	468.8375	49.53	-82.16	-16.5	-49.12	-114.12	-2.00	-36.77							
WQVU322	4	36	37	21.6	N	87	26	10.5	W	74	316.5	468.9125	55.76	-83.55	-16.5	-44.29	-118.96	-2.00	-36.77							
WQVU322	5	36	37	24.9	N	87	26	3.9	W	74	316.7	468.9125	55.76	-83.55	-16.5	-44.29	-118.96	-2.00	-36.77							
WQVU322	6	36	37	24.9	N	87	26	3.9	W	74	316.7	468.9125	55.76	-83.55	-16.5	-44.29	-118.96	-2.00	-36.77							
WQWU322	7	36	38	56.6	N	87	26	35.4	W	76.6	317.1	468.9125	56.03	-83.55	-16.5	-44.29	-118.99	-2.00	-36.81							
WQWU322	2	36	38	56.6	N	87	26	27.3	W	74.6	316.5	468.9125	55.76	-83.55	-16.5	-44.29	-119.00	-2.00	-36.82							
WQWU322	3	36	37	32.1	N	87	26	21.8	W	74.4	315.6	468.9125	55.76	-83.55	-16.5	-44.29	-119.00	-2.00	-36.82							
WQUR834	1	36	9	7.1	N	86	42	50.5	W	13.7	84.8	466.4875	66.46	-108.95	-16.5	-58.99	-104.26	-2.00	-36.83							
WTQW457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	468.9844	49.53	-82.22	-16.5	-49.18	-114.12	-2.00	-36.83							
WQHQ474	1	36	37	32.7	N	87	26	34.9	W	74.7	316.4	468.9125	55.76	-83.55	-16.5	-44.29	-119.04	-2.00	-36.86							
WQUR834	1	36	9	7.1	N	86	42	50.5	W	13.7	84.8	466.6125	66.46	-109.00	-16.5	-59.04	-104.26	-2.00	-36.88							
WQUR607	2	36	31	46.1	N	87	21	35.1	W	61.9	314.5	468.8500	64.01	-97.26	-16.5	-45.97	-113.69	-2.00	-36.98							
WRTM806	2	36	5	15.2	N	86	44	10.0	W	13.3	117.0	466.1000	66.33	-109.42	-16.5	-59.58	-103.87	-2.00	-37.03							
WQWU322	6	36	35	50.8	N	87	26	48.0	W	74	316.3	468.9125	55.50	-83.55	-16.5	-44.55	-118.96	-2.00	-37.03							
WQWU322	4	36	35	56.9	N	87	26	40.5	W	74.1	315.6	468.9125	55.50	-83.55	-16.5	-44.55	-118.97	-2.00	-37.04							
WQWU322	31	36	9	58.6	N	86	46	16.3	W	8	313.4	467.5232	65.39	-112.71	-16.5	-63.87	-109.63	-2.00	-37.05							
WQH736	1	36	36	57.5	N	87	26	51.5	W	74.2	315.6	468.9125	55.50	-83.55	-16.5	-44.55	-118.98	-2.00	-37.06							
WQJM229	1	36	1	33.4	N	86	47	24.3	W	14.4	152.0	467.8750	65.80	-108.10	-16.5	-58.80	-104.72	-2.00	-37.07							
WQUR834	1	36	9	7.1	N	86	42	50.5	W	13.7	84.8	466.6125	66.46	-109.21	-16.5	-59.25	-104.26	-2.00	-37.09							
WQVU321	1	36	38	27.7	N	87	27	43.5	W	77.1	316.3	468.9125	55.76	-83.55	-16.5	-44.29	-119.31	-2.00	-37.13							
WQHQ478	4	36	40	16.8	N	87	28	0.6	W	79.8	317.8	468.9125	56.03	-83.55	-16.5	-44.29	-119.49	-2.00	-37.13							
WQHQ478	5	36	35	58.9	N	87	26																			

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW																
WQNQ481	5	36	39	53.1 N	87	29	34.5 W		80.9	316.2	468.9125	55.76	-83.55	-16.5	-44.29	-119.73	-2.00	-37.55									
WQDZ121	5	36	37	34.9 N	87	28	41.2 W		77	313.7	468.8125	55.23	-83.55	-16.5	-44.33	-119.50	-2.00	-37.54									
WQDZ124	5	36	52	23.3 N	86	28	47.2 W		45.3	130.5	468.7125	66.21	-90.0	-16.5	-49.33	-114.76	-2.00	-37.65									
WOT409	3	36	26	3 N	86	52	9 W		39	339.9	468.8250	63.62	-87.89	-16.5	-50.55	-113.58	-2.00	-37.67									
WQDZ178	5	36	40	40.5 N	87	29	36 W		82	316.9	468.9125	55.76	-83.55	-16.5	-44.29	-119.85	-2.00	-37.67									
WQDZ107	31	36	9	58.9 N	86	46	16.3 W		9	71.4	467.8795	66.39	-113.39	-16.5	-63.50	-100.62	-2.00	-37.69									
WQNQ241	1	36	40	18.2 N	87	30	23.6 W		82.3	316.0	468.9125	55.76	-83.55	-16.5	-44.29	-119.88	-2.00	-37.70									
WQDQ340	3	36	9	33 N	86	46	42.7 W		8.1	75.4	467.3250	66.42	-114.35	-16.5	-64.43	-99.71	-2.00	-37.70									
WRCZ766	3	36	9	39.7 N	86	46	32.2 W		8.4	74.4	467.3125	66.41	-114.03	-16.5	-64.12	-100.03	-2.00	-37.70									
WQLH736	6	36	40	38.7 N	87	30	2.7 W		82.4	316.6	468.9125	55.76	-83.55	-16.5	-44.29	-119.89	-2.00	-37.71									
WQG952	2	36	18	18.2 N	86	44	38 W		14.2	50.5	466.1500	66.22	-109.35	-16.5	-59.63	-104.57	-2.00	-37.77									
WQG952	3	36	18	18.2 N	86	44	38 W		14.2	50.5	466.1500	66.22	-109.35	-16.5	-59.63	-104.57	-2.00	-37.77									
WNHW277	4	36	5	3.2 N	86	53	56 W		7	205.4	468.8250	60.36	-109.66	-16.5	-65.80	-98.44	-2.00	-37.80									
WRDP811	2	36	5	3.2 N	86	53	56 W		7	205.4	468.8250	60.36	-109.66	-16.5	-65.80	-98.44	-2.00	-37.80									
WNYH487	1	36	8	44.2 N	86	41	31 W		15.6	88.0	464.6425	66.50	-105.39	-16.5	-58.90	-105.39	-2.00	-37.86									
WQKX695	10	36	2	57.3 N	86	41	31 W		15.6	88.0	464.6425	66.50	-105.39	-16.5	-58.90	-105.39	-2.00	-37.86									
WQDQ483	6	36	39	18.6 N	87	27	21.3 W		21.3	118.6	467.9250	66.32	-106.03	-16.5	-56.20	-108.12	-2.00	-37.87									
WQDQ483	6	36	39	18.6 N	87	27	21.3 W		77.5	312.7	468.8125	56.03	-84.47	-16.5	-44.29	-114.40	-2.00	-37.87									
WQDZ123	12	36	10	34.9 N	86	41	47 W		16.8	64.7	468.7760	66.34	-108.10	-16.5	-58.27	-106.08	-2.00	-37.87									
WPGH710	3	36	15	21.2 N	86	49	21 W		13.3	16.8	466.3750	65.21	-109.02	-16.5	-60.31	-104.00	-2.00	-37.89									
WPLH600	1	36	8	44.2 N	86	41	31 W		15.6	88.0	466.5125	66.50	-109.00	-16.5	-59.00	-105.39	-2.00	-37.97									
WQA2704	7	35	53	55.6 N	86	52	47.6 W		26.9	182.7	468.0750	63.70	-101.47	-16.5	-54.27	-110.15	-2.00	-37.97									
WQUP944	1	36	7	47.1 N	86	41	31 W		15.7	94.5	466.4250	66.48	-108.95	-16.5	-58.97	-105.44	-2.00	-37.99									
WQVQW941	1	35	46	49.3 N	86	21	43 W		60.5	131.3	468.6252	66.21	-96.97	-16.5	-47.26	-117.19	-2.00	-37.99									
WQUQ901	2	36	29	37.7 N	86	51	33.8 W		39.2	0.8	468.2000	63.93	-98.47	-16.5	-51.04	-113.42	-2.00	-38.01									
WRPT870	2	36	11	45.2 N	86	58	0.3 W		11	304.0	468.2375	51.94	-97.56	-16.5	-62.13	-102.39	-2.00	-38.06									
WQLH736	3	36	37	12.2 N	87	30	22.6 W		78.3	313.1	468.9125	54.96	-83.55	-16.5	-45.09	-119.45	-2.00	-38.06									
WQH736	4	36	34	26.7 N	87	28	57.9 W		73.3	311.3	468.9125	54.38	-83.55	-16.5	-45.67	-118.87	-2.00	-38.07									
WQAZ704	5	36	12	50.2 N	86	19	24.5 W		49.4	80.4	468.7500	66.44	-99.07	-16.5	-49.13	-115.43	-2.00	-38.10									
WNYH487	1	36	8	44.2 N	86	41	31 W		15.6	88.0	466.2375	66.50	-109.21	-16.5	-59.21	-105.39	-2.00	-38.17									
WPLX690	1	36	8	44.2 N	86	41	31 W		15.6	88.0	467.1250	66.50	-109.22	-16.5	-59.22	-105.38	-2.00	-38.18									
WREP474	1	36	5	57.1 N	86	47	43.9 W		6.4	467.4250	66.44	-116.90	-16.5	-66.96	-97.67	-2.00	-38.18										
WQH736	2	36	10	42.2 N	86	46	7.0 W		9.2	74.7	468.7375	66.48	-113.30	-16.5	-63.83	-108.82	-2.00	-38.20									
WQDZ123	1	36	26	29.9 N	86	46	57 W		7.1	75.4	468.7375	66.42	-113.30	-16.5	-63.83	-109.27	-2.00	-38.20									
WNEY596	2	36	39	47.2 N	87	10	36.6 W		64.3	334.5	468.5500	60.15	-90.61	-16.5	-46.96	-117.73	-2.00	-38.22									
WPLX690	1	36	8	44.2 N	86	41	31 W		15.6	88.0	466.6375	66.50	-109.27	-16.5	-59.26	-105.39	-2.00	-38.23									
WQAZ704	6	35	52	23.3 N	86	52	28 W		45.7	130.5	468.1500	66.22	-99.67	-16.5	-49.95	-114.76	-2.00	-38.25									
WPMI753	3	36	2	59.2 N	86	49	59 W		10.5	163.9	467.7500	65.28	-111.51	-16.5	-62.73	-101.96	-2.00	-38.25									
WNYH487	1	36	8	44.2 N	86	41	31 W		15.6	88.0	466.6252	66.50	-109.32	-16.5	-59.32	-105.39	-2.00	-38.28									
WQDQ483	3	36	39	18.8 N	87	28	31.4 W		79.1	316.5	468.6252	55.76	-84.47	-16.5	-45.21	-119.53	-2.00	-38.28									
WURB631	13	35	58	9 N	86	48	48 W		19.8	163.9	467.9000	66.32	-106.81	-16.5	-56.99	-103.95	-2.00	-38.41									
WQYJ639	1	36	2	57.3 N	86	39	28.9 W		21.3	118.6	467.9000	66.32	-106.81	-16.5	-56.99	-108.12	-2.00	-38.65									
WHRH338	2	36	39	38.9 N	87	26	16.5 W		77.2	318.6	468.8000	66.29	-85.63	-16.5	-45.84	-119.32	-2.00	-38.69									
WNYH487	1	36	8	44.2 N	86	41	31 W		15.6	88.0	468.6252	66.50	-109.73	-16.5	-59.73	-105.40	-2.00	-38.69									
WQAZ704	5	36	12	50.2 N	86	19	24.5 W		49.4	80.4	468.1500	66.44	-99.67	-16.5	-49.73	-115.43	-2.00	-38.70									
WPUP095	3	36	7	30 N	86	40	36 W		37.3	95.9	468.4875	66.47	-108.95	-16.5	-58.98	-106.19	-2.00	-38.74									
WQDQ484	1	36	47	42 N	86	41	31 W		15.6	88.0	466.8750	66.50	-109.58	-16.5	-59.58	-106.58	-2.00	-38.75									
WQDZ124	1	36	6	47 N	86	41	33 W		15.6	101.1	467.8500	66.43	-109.56	-16.5	-59.63	-105.58	-2.00	-38.75									
WQDM296	3	36	6	25 N	86	40	47.5 W		17.3	162.7	466.4125	66.43	-108.97	-16.5	-59.04	-106.19	-2.00	-38.80									

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
WOAZ704	5	36	12	50.2	N	86	19	24.5	W	49.4	80.4	468.1250	66.44	-100.27	-16.5	-50.33	-115.43	-2.00	-39.31					
WQW332	3	36	13	20	N	86	44	38.1	W	34.2	50.3	468.0000	66.22	-100.29	-16.5	-51.55	-105.55	-2.00	-39.31					
WQW230	3	36	8	54.8	N	86	46	38.1	W	8.4	71.0	467.9300	66.59	-112.63	-16.5	-65.74	-100.03	-2.00	-39.32					
WQD596	17	36	12	62	N	86	41	22	W	1.5	66.8	466.1373	66.35	-109.36	-16.5	-59.51	-106.23	-2.00	-39.32					
WQD661	12	36	12	19	N	86	41	47	W	16.8	64.7	467.8500	66.34	-109.56	-16.5	-59.72	-106.23	-2.00	-39.33					
WPPD303	2	36	12	34.2	N	86	41	40	W	17.2	69.5	466.1350	66.33	-109.38	-16.5	-59.55	-106.22	-2.00	-39.36					
WQR508	1	36	6	15.4	N	86	47	57.5	W	7.2	124.3	467.4250	66.28	-116.90	-16.5	-67.12	-98.69	-2.00	-39.36					
WQA2704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	468.0250	63.70	-102.88	-16.5	-55.68	-110.15	-2.00	-39.38					
WNSR200	1	36	12	34.2	N	86	41	40	W	17.2	63.5	466.0875	66.33	-109.44	-16.5	-59.60	-106.23	-2.00	-39.41					
WPPD303	2	36	12	34.2	N	86	41	40	W	17.2	63.5	466.7250	66.33	-109.45	-16.5	-59.61	-106.24	-2.00	-39.43					
WNDA491	2	36	7	38.2	N	86	41	12	W	16.2	95.3	465.7000	66.47	-110.11	-16.5	-60.14	-105.70	-2.00	-39.43					
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	468.1000	66.22	-100.87	-16.5	-51.15	-114.76	-2.00	-39.45					
WNSR200	1	36	12	34.2	N	86	41	40	W	17.2	63.5	466.7625	66.33	-109.53	-16.5	-59.69	-106.24	-2.00	-39.50					
WPQ708	2	36	27	8.7	N	87	22	16.4	W	57.1	307.5	468.8753	53.08	-85.86	-16.5	-49.28	-116.70	-2.00	-39.51					
WPUP909	3	36	7	30	N	86	40	36	W	17.1	95.9	465.8875	66.47	-109.72	-16.5	-59.75	-106.18	-2.00	-39.51					
WPQH710	3	36	15	21.2	N	86	49	21	W	13.3	15.8	467.0750	65.21	-110.66	-16.5	-61.95	-104.01	-2.00	-39.52					
WQD5925	1	36	55	43.3	N	86	53	20.6	W	18.1	12.5	467.4250	63.23	-106.03	-16.5	-59.72	-105.27	-2.00	-39.53					
WQD5937	31	36	58	43.3	N	86	46	16	W	1.3	71.4	467.3625	66.59	-112.13	-16.5	-65.42	-106.63	-2.00	-39.60					
WQW5977	2	36	12	24.5	N	86	41	31.3	W	17.2	64.7	468.8123	66.34	-109.63	-16.5	-59.79	-106.24	-2.00	-39.60					
WQIE781	9	35	29	24	N	87	3	34	W	73.7	191.4	468.4250	62.61	-93.29	-16.5	-47.18	-118.91	-2.00	-39.63					
WQNY594	2	36	7	36.2	N	86	40	54	W	16.6	95.4	465.6500	66.47	-110.24	-16.5	-60.27	-105.91	-2.00	-39.77					
WQPA892	2	36	48	57.2	N	87	7	40	W	78.5	342.7	468.4875	61.60	-91.89	-16.5	-46.79	-119.46	-2.00	-39.79					
WQLF442	3	36	38	22.7	N	86	35	3.6	W	60.8	24.3	468.1213	65.65	-98.17	-16.5	-49.02	-117.24	-2.00	-39.79					
KITS45	2	36	7	57.2	N	86	40	17	W	17.5	93.0	465.8000	66.49	-109.85	-16.5	-59.86	-106.37	-2.00	-39.82					
WRRM273	1	36	10	24	N	86	44	2.4	W	12.4	72.9	467.2625	66.39	-112.75	-16.5	-62.86	-103.41	-2.00	-39.83					
WQV1907	1	36	9	39	N	86	46	50	W	8	73.7	467.4125	66.40	-116.58	-16.5	-66.67	-99.61	-2.00	-39.84					
WQHE537	7	36	2	42	N	86	39	51	W	21	120.4	468.7850	66.30	-108.10	-16.5	-58.30	-108.00	-2.00	-39.84					
WQK661	15	35	57	21.6	N	86	48	53.5	W	21	167.5	467.9000	65.01	-106.81	-16.5	-58.30	-108.00	-2.00	-39.85					
WRC4454	2	36	8	4.5	N	86	40	9.4	W	17.7	92.2	465.8375	66.50	-109.80	-16.5	-59.79	-106.47	-2.00	-39.85					
WQA2704	5	36	12	50.2	N	86	19	24.5	W	49.4	80.4	468.1000	66.44	-100.87	-16.5	-50.93	-115.43	-2.00	-39.91					
WPUP909	3	36	7	30	N	86	40	36	W	17.3	95.9	465.8875	66.47	-110.14	-16.5	-60.17	-106.17	-2.00	-39.93					
WQZK80	1	36	9	5.7	N	85	48	8	W	5.8	467.6250	66.43	-119.50	-16.5	-59.57	-96.61	-2.00	-39.94						
WQK660	1	36	52	57.3	N	86	40	17	W	5.6	93.0	468.5000	66.49	-109.86	-16.5	-59.87	-106.37	-2.00	-39.95					
WQI690	10	36	2	57.3	N	86	39	28.9	W	21.3	118.6	467.8750	66.32	-108.10	-16.5	-58.28	-108.12	-2.00	-39.95					
WQWY625	2	35	26	16.6	N	86	24	55.8	W	83.1	150.7	468.3123	65.87	-95.83	-16.5	-46.46	-119.95	-2.00	-39.95					
WQLQ653	3	36	9	27.6	N	86	46	26.2	W	8.5	77.2	467.4000	66.42	-116.26	-16.5	-66.34	-100.13	-2.00	-40.03					
WRI1815	2	36	9	27.9	N	86	46	26	W	8.5	77.1	467.4000	66.42	-116.26	-16.5	-66.34	-100.13	-2.00	-40.03					
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	468.0750	66.22	-101.47	-16.5	-51.75	-114.75	-2.00	-40.05					
WQGX335	3	36	11	22.7	N	86	47	55.7	W	8.1	47.8	467.4125	66.19	-116.58	-16.5	-66.89	-99.71	-2.00	-40.16					
WQA2704	7	35	53	55.6	N	86	41	40	W	17.2	63.5	467.0625	66.33	-110.55	-16.5	-60.72	-106.25	-2.00	-40.53					
WNSR200	1	36	12	34.2	N	86	41	57.2	W	7.7	75.4	467.4375	66.42	-117.63	-16.5	-67.72	-99.27	-2.00	-40.53					
WQVA768	1	36	9	0.8	N	86	41	6.2	W	16.3	85.3	467.1375	66.48	-111.19	-16.5	-61.21	-105.78	-2.00	-40.55					
WQHE537	19	36	11	38	N	86	37	3	W	23.1	75.1	467.8750	66.42	-108.10	-16.5	-58.19	-108.82	-2.00	-40.56					
WQHE537	9	35	57	55	N	86	48	3	W	20.3	163.4	467.8750	65.28	-108.10	-16.5	-59.33	-107.70	-2.00	-40.58					
WQHE537	6	36	37	32	N	86	42	11	W	22.3	40.8	467.8750	66.09	-108.10	-16.5	-58.51	-108.52	-2.00	-40.58					
WREB104	1	36	0	45.9	N	86	37	1	W	26.5	12.5	467.4000	66.49	-106.13	-16.5	-61.03	-100.20	-2.00	-40.60					
WREB104	2	36	16	43.9	N	86	47	44.9	W	15.4	23.9	467.1000	65.51	-108.89	-16.5	-61.76	-105.29	-2.00	-40.61					
WIF409	10	35	38	44.4	N	86	55	11.3	W	5.5	185.1	468.3375	63.35	-97.56	-16.5	-50.71	-116.40	-2.00	-40.65					
WQAZ704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	468.0500	66.22	-102.09	-16.5	-52.38	-114.75	-2.00	-40.68					
WQDS321	2	36	12	48.5	N	86	41	53	W	17.1	61.7	467.1000	66.32	-110.87	-16.5	-61.05	-106.20	-2.00	-40.81					
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	467.4125	66.39	-116.58	-16.5	-66.69	-100.63	-2.00	-40.88					
WRUN723	7	36	0																					

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	WIW										Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW																
WQVY639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	467.4373	66.42	-117.63	-16.5	-67.72	-100.33	-2.00	-41.61								
WRDN225	1	35	58	43.3	N	86	53	20.6	W	18.3	185.7	467.7505	63.23	-108.10	-16.5	-64.84	-105.71	-2.00	-41.63								
WQVY13	3	36	53	53.4	N	86	40	9.8	W	17.1	193.7	467.1183	66.49	-111.61	-16.5	-64.62	-105.50	-2.00	-41.68								
WRQ224	1	36	7	46.4	N	86	40	10.9	W	17.2	93.8	467.1873	66.49	-111.60	-16.5	-61.63	-105.50	-2.00	-41.68								
WQI0877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	467.2503	66.39	-106.53	-16.5	-56.13	-112.00	-2.00	-41.68								
WRKQ232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	468.1750	65.57	-99.07	-16.5	-50.00	-118.14	-2.00	-41.68								
WNSR200	1	36	12	34.2	N	86	41	40	W	17.2	63.5	467.8125	66.33	-111.74	-16.5	-61.91	-106.26	-2.00	-41.72								
WQH537	20	35	55	7	N	86	49	39	W	24.9	172.1	467.9000	64.62	-106.81	-16.5	-58.69	-109.48	-2.00	-41.72								
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	467.9500	63.70	-105.24	-16.5	-58.04	-110.15	-2.00	-41.73								
KD26551	1	36	0	29.2	N	86	35	46	W	28.4	121.3	467.8875	66.30	-107.38	-16.5	-57.58	-110.62	-2.00	-41.75								
WQWV390	2	36	15	11.2	N	86	40	34	W	21.3	53.6	466.9500	66.25	-109.92	-16.5	-60.16	-108.02	-2.00	-41.75								
WQH095	1	36	7	47.4	N	86	39	57.5	W	18	93.8	465.1375	66.49	-111.57	-16.5	-61.57	-106.61	-2.00	-41.78								
WRB631	13	35	58	9	N	86	48	15.1	W	19.8	163.9	467.8500	65.28	-109.56	-16.5	-60.78	-107.49	-2.00	-41.81								
WPLV778	3	35	59	22.2	N	86	49	21	W	17.2	167.0	467.6253	65.01	-110.55	-16.5	-62.04	-106.25	-2.00	-41.86								
WQD5321	2	36	12	48.5	N	86	41	53	W	17.1	61.7	467.2250	66.32	-111.93	-16.5	-62.11	-106.20	-2.00	-41.87								
WQAZ704	5	36	12	50.2	N	86	49	19	24.5	W	49.4	80.4	468.0250	66.44	-102.88	-16.5	-52.94	-115.43	-2.00	-41.92							
WQD3107	31	36	9	58.9	N	86	46	16.3	W	17.1	47.7	467.6253	66.49	-111.63	-16.5	-67.75	-116.63	-2.00	-41.93								
WQH537	1	36	20	8.1	N	86	22	16	W	57.6	307.5	468.6253	63.68	-88.03	-16.5	-51.63	-116.70	-2.00	-41.95								
WQH2346	3	36	8	27.7	N	86	22	16.4	W	57.1	307.5	468.6253	63.08	-88.30	-16.5	-51.72	-116.70	-2.00	-41.95								
WQH537	21	36	19	7	N	86	36	2	W	30.9	50.2	467.9000	66.22	-106.81	-16.5	-57.09	-111.35	-2.00	-41.99								
WQH537	19	36	11	38.8	N	86	37	3	W	23.1	75.1	467.8500	66.42	-109.56	-16.5	-59.64	-108.82	-2.00	-42.01								
WQH537	7	36	2	42.8	N	86	39	51	W	21	120.4	467.8375	66.30	-110.28	-16.5	-60.48	-108.00	-2.00	-42.02								
WQH537	9	35	57	55	N	86	48	3	W	20.3	163.4	467.8500	65.28	-109.56	-16.5	-60.78	-107.70	-2.00	-42.03								
WQH537	6	36	17	32	N	86	42	11	W	22.3	40.8	467.8500	66.09	-109.56	-16.5	-59.97	-108.52	-2.00	-42.03								
KNEF390	3	35	59	22.2	N	86	49	21	W	17.2	167.0	465.4500	65.01	-110.76	-16.5	-62.25	-106.22	-2.00	-42.06								
WQD235	7	35	45	59.4	N	86	23	33.3	W	59.5	134.2	468.0875	66.18	-101.17	-16.5	-51.49	-117.05	-2.00	-42.08								
WQD6409	2	36	16	8.7	N	86	39	10.1	W	23.8	53.1	466.6375	66.25	-109.27	-16.5	-59.51	-109.06	-2.00	-42.14								
WQR375	3	36	18	10.7	N	86	41	51	W	23.5	39.9	466.2500	66.07	-109.20	-16.5	-59.63	-108.94	-2.00	-42.15								
WZC700	12	35	53	10	N	86	52	54	W	28.3	182.9	467.9500	63.70	-105.24	-16.5	-58.04	-110.59	-2.00	-42.17								
WQRW312	8	36	8	0.8	N	86	46	20.8	W	8.4	95.5	467.4500	66.47	-118.57	-16.5	-68.60	-100.03	-2.00	-42.18								
WRA5495	1	36	8	54.4	N	86	47	53	W	8.1	80.0	467.4875	66.44	-121.37	-16.5	-71.42	-97.25	-2.00	-42.23								
WQD423	5	35	52	23.3	N	86	28	47.2	W	45.1	130.5	468.6253	66.22	-103.84	-16.5	-64.25	-118.75	-2.00	-42.25								
WQTS408	1	35	59	30.9	N	86	51	53	W	27.3	178.9	467.9500	64.01	-106.03	-16.5	-58.51	-118.14	-2.00	-42.28								
WQH0999	10	35	57	12.5	N	86	48	51.4	W	21.3	167.5	466.6000	65.03	-109.19	-16.5	-60.68	-108.10	-2.00	-42.35								
WQVJ967	1	36	16	2.5	N	86	44	46.2	W	17.7	37.3	467.7235	66.03	-111.83	-16.5	-62.29	-106.50	-2.00	-42.35								
WNPV397	9	36	5	48.7	N	86	25	3.5	W	49.9	264.5	468.7500	49.76	-86.56	-16.5	-53.30	-115.53	-2.00	-42.36								
WQCD910	2	36	18	36.2	N	86	42	53	W	23.2	35.7	466.0500	65.99	-109.49	-16.5	-60.00	-108.83	-2.00	-42.41								
WPPD303	2	36	12	34.2	N	86	41	40	W	17.2	63.5	467.2500	66.33	-112.43	-16.5	-62.60	-106.25	-2.00	-42.41								
WQI0877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	467.9000	66.39	-106.81	-16.5	-56.92	-112.00	-2.00	-42.47								
WPHH945	2	36	19	30.2	N	86	42	24	W	24.9	34.8	466.4375	65.97	-105.97	-16.5	-59.46	-109.45	-2.00	-42.48								
WQH537	33	35	58	57	N	86	48	37.2	W	20.6	166.1	466.6253	65.08	-109.94	-16.5	-61.37	-107.81	-2.00	-42.47								
WQH537	9	35	57	55.5	N	86	48	3	W	20.3	163.4	467.8375	65.28	-110.28	-16.5	-61.51	-107.70	-2.00	-42.47								
WQV0907	1	36	9	39	N	86	46	50	W	8	73.7	467.6252	66.40	-119.50	-16.5	-69.60	-99.61	-2.00	-42.76								
WQH537	6	36	17	32.0	N	86	42	11	W	22.3	40.8	467.8375	66.09	-110.28	-16.5	-60.69	-108.52	-2.00	-42.76								
KB67713	12	36	7	53.2	N	86	40	9.4	W	17.7	93.3	467.2625	66.49	-112.73	-16.5	-62.76	-106.50	-2.00	-42.82								
WRRM678	1	36	10	22.5	N	86	47	11.4	W	8	63.3	467.6253	66.33	-119.50	-16.5	-69.67	-99.61	-2.00	-42.83								
WPHH945	2	36	23	58.0	N	86	47	23	W	50.7	103.9	467.7125	50.73	-87.28	-16.5	-53.05	-116.33	-2.00	-42.91								
WQTS2211	1	36	5	0.9	N	86	41	51.3	W	16.4	314.4	467.2875	66.37	-113.39	-16.5	-63.52	-105.84	-2.00	-42.92								
WQH537	13	36	10	55.8	N	86	46	41	1.5																		

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED				
																			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression	WIW Elevation Pattern (dB)	Field Strength (dBu)
KD26551	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.7125	66.30	-109.42	-16.5	-59.62	-110.60	-2.00	-43.79				
WQD307	3	36	9	58.9	N	86	46	16	W	7.4	466.6252	66.39	-119.50	-16.5	-69.61	-110.43	-2.00	-45.60					
WDR345	2	36	52	40	N	86	23	44	W	66.8	311.0	468.8375	66.38	-90.07	-16.5	-52.36	-118.05	-2.00	-43.81				
WDRN225	1	35	58	43.3	N	86	53	20.6	W	18.1	186.7	467.8375	63.23	-110.28	-16.5	-63.56	-106.71	-2.00	-43.81				
WOZA704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	467.9500	66.22	-105.24	-16.5	-55.52	-114.75	-2.00	-43.82				
WQH537	33	35	58	57	N	86	33	11	W	33.2	122.0	467.8750	66.29	-108.10	-16.5	-58.32	-111.98	-2.00	-43.84				
WNSU828	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.7375	66.30	-109.47	-16.5	-59.68	-110.60	-2.00	-43.84				
WPQ1467	2	36	0	20.2	N	86	35	30	W	28.9	121.3	466.1500	66.30	-109.35	-16.5	-59.55	-110.74	-2.00	-43.87				
WNSU828	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.8795	66.30	-109.58	-16.5	-59.78	-110.60	-2.00	-43.95				
KD26551	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.8375	66.30	-109.68	-16.5	-59.88	-110.60	-2.00	-44.05				
WQSJ462	3	36	1	7.8	N	86	35	11.1	W	28.6	118.3	466.8250	66.32	-109.66	-16.5	-59.83	-110.66	-2.00	-44.06				
WPKQ232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	468.0750	65.57	-101.47	-16.5	-52.40	-118.14	-2.00	-44.09				
WQVA833	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	468.1500	66.18	-99.67	-16.5	-49.99	-120.68	-2.00	-44.21				
WRPQ757	2	36	1	22.2	N	86	33	59.7	W	29.9	115.9	467.6250	66.35	-109.45	-16.5	-59.60	-111.04	-2.00	-44.21				
WNSU828	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.9375	66.30	-109.89	-16.5	-60.09	-110.60	-2.00	-44.26				
WOZA704	5	36	12	50.2	N	86	19	24.5	W	49.4	80.4	467.9500	66.44	-105.24	-16.5	-55.30	-115.43	-2.00	-44.27				
WQZ624	3	35	59	45.4	N	86	36	12.2	W	28.6	122.0	466.8375	66.28	-109.42	-16.5	-50.69	-116.69	-2.00	-44.29				
WDR3200	1	36	13	34.2	N	86	41	40	W	3.1	60.3	467.7623	66.63	-114.33	-16.5	-64.49	-106.26	-2.00	-44.30				
WPQH743	5	35	56	10.5	N	86	42	55.7	W	28	151.2	468.8000	65.84	-109.60	-16.5	-60.26	-110.48	-2.00	-44.31				
KD26551	1	36	0	29.2	N	86	35	46	W	28.4	121.3	466.9623	66.30	-109.94	-16.5	-60.14	-110.60	-2.00	-44.31				
WPSM789	2	36	17	46.2	N	86	35	4	W	30.6	55.5	466.6500	66.27	-109.29	-16.5	-59.52	-111.24	-2.00	-44.33				
WRWH504	4	35	55	42.7	N	86	51	51.2	W	23.6	179.7	466.6875	64.01	-109.37	-16.5	-61.86	-108.99	-2.00	-44.42				
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	128.8	467.8750	64.01	-108.10	-16.5	-60.59	-110.28	-2.00	-44.42				
WQAZ704	2	35	35	36.4	N	87	2	15.7	W	62.7	194.3	468.1750	62.18	-99.07	-16.5	-53.39	-117.50	-2.00	-44.44				
WQH537	8	36	4	47.9	N	86	57	14	W	10.5	229.5	467.9000	54.38	-106.81	-16.5	-68.93	-101.98	-2.00	-44.45				
WURN423	6	35	57	19.9	N	86	45	52.2	W	22.5	156.2	465.1750	65.65	-111.47	-16.5	-62.32	-108.55	-2.00	-44.46				
WQH537	20	35	55	7	N	86	49	39	W	24.9	172.1	467.8500	64.62	-109.56	-16.5	-61.44	-109.48	-2.00	-44.46				
WQWN302	2	36	18	10.9	N	86	36	22.3	W	29.5	52.1	466.8750	66.24	-109.76	-16.5	-60.02	-110.93	-2.00	-44.51				
WPQ708	2	36	27	8.7	N	87	22	16.4	W	57.3	307.5	468.5375	53.08	-90.86	-16.5	-54.28	-116.70	-2.00	-44.51				
WQZ672	2	35	56	12.7	N	86	48	41.5	W	23.3	167.9	467.0750	65.01	-110.66	-16.5	-62.15	-108.81	-2.00	-44.52				
WQAZ724	1	35	59	45.1	N	86	36	12.1	W	28.6	124.3	467.0125	66.28	-110.13	-16.5	-60.35	-110.66	-2.00	-44.57				
WQH537	2	36	8	30.2	N	86	30	45	W	31.8	81	466.8125	66.51	-109.49	-16.5	-60.43	-110.51	-2.00	-44.57				
WQH537	1	35	54	50.4	N	86	49	17	W	20.5	171.0	466.8123	64.70	-109.83	-16.5	-61.63	-109.66	-2.00	-44.66				
WQH537	1	35	57	57.8	N	86	42	11.1	W	23	467.2500	66.09	-111.93	-16.5	-62.34	-108.78	-2.00	-44.67					
WNSU828	1	36	0	29.2	N	86	35	46	W	28.4	121.3	467.0375	66.30	-110.34	-16.5	-60.54	-110.60	-2.00	-44.71				
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	468.0500	65.57	-102.09	-16.5	-53.02	-118.14	-2.00	-44.71				
WQVA224	15	36	13	32.2	N	86	47	1.4	W	11.9	37.9	467.4375	66.03	-117.63	-16.5	-68.10	-103.06	-2.00	-44.71				
WRHW495	2	36	10	11.7	N	86	30	5	W	32.9	84.2	466.6250	66.46	-109.24	-16.5	-59.28	-111.87	-2.00	-44.72				
WQFA650	1	35	57	38.3	N	86	48	37.2	W	20.6	166.1	467.2250	65.08	-111.93	-16.5	-63.35	-107.82	-2.00	-44.73				
WQH537	21	36	19	7	N	86	36	2	W	30.9	50.2	467.8500	66.22	-109.56	-16.5	-59.84	-111.35	-2.00	-44.74				
WQPU352	9	36	27	8.7	N	87	22	16.4	W	57.3	307.5	468.5156	53.08	-91.31	-16.5	-54.73	-116.70	-2.00	-44.96				
WQR676	1	36	0	15.5	N	86	31	35.1	W	34.4	116.4	466.5375	66.34	-109.06	-16.5	-59.22	-112.18	-2.00	-44.97				
WRF620	9	36	0	29.8	N	86	47	4.8	W	7.5	70.5	467.8750	66.42	-112.03	-16.5	-74.06	-106.00	-2.00	-44.98				
WQH537	1	35	54	58.8	N	86	49	10.1	W	25.3	170.6	466.6879	64.78	-110.14	-16.5	-63.68	-109.57	-2.00	-45.02				
WQH537	0	36	25	8.7	N	86	23	16.4	W	21.1	309.5	468.8128	53.09	-91.38	-16.5	-54.79	-116.70	-2.00	-45.03				
WPQ708	2	36	27	8.7	N	87	22	16.4	W	57.3	307.5	468.5125	53.08	-91.38	-16.5	-54.79	-116.70	-2.00	-45.03				
WQVZ704	2	35	35	36.4	N	87	2	15.7	W	62.7	194.3	468.1500	62.18	-99.67	-16.5	-53.99	-117.50	-2.00	-45.04				
WPVNU352	9	36	27	8.7	N	86	31	7	W	31.9	78.0	468.5094	53.08	-91.44	-16.5	-54.86	-116.70	-2.00	-45.09				
WQWP249	14	36	12	0.2	N	86	31	7	W	31.9	78.0	469.9250	66.43	-109.86	-16.5	-59.94	-111.61	-2.00	-45.11				
WQFAS56	2	36	10	8	N	86	30	50	W	31.8	84.3	466.9269	66.46	-109.94	-16.5	-59.98	-111.58	-2.00	-45.13				
WNSU828	1	36	0	29.2	N	86	35	46	W	28.4	121.3	467.0875	66.30	-110.76	-16.5	-60.97	-110.60	-2.00	-45.13				
WRPR963	1	36	11	4.9	N	86	31	0	W	34.3	113.6	466.7000	66.36	-109.40	-16.5	-59.53	-112.24	-2.00	-45.34				
WPUL752	3	36	24	44.2	N	86	43																

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WRMA655	1	36	11	34.1	N	86	28	51	W	35.1	80.4	466.8500	66.44	-109.71	-16.5	-59.77	-112.44	-2.00	-45.78							
WRU723	1	35	55	49.9	N	86	49	20.3	W	23.7	170.5	466.8500	64.79	-109.71	-16.5	-61.00	-102.00	-2.00	-47.78							
WRP903	1	36	11	43.9	N	86	23	32.9	W	35.4	82.0	466.8793	66.44	-109.68	-16.5	-59.74	-112.51	-2.00	-45.82							
WRP903	1	36	11	43.9	N	86	29	32.9	W	35.4	82.0	466.8500	66.44	-109.71	-16.5	-59.76	-112.51	-2.00	-45.84							
WRCT539	1	36	31	15.9	N	87	13	10.6	W	52.8	323.0	468.4338	57.63	-97.41	-16.5	-56.30	-116.02	-2.00	-45.85							
WQH407	2	36	11	36.6	N	86	26	44.5	W	38.1	82.6	466.5500	66.44	-109.08	-16.5	-59.14	-113.15	-2.00	-45.86							
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	467.8500	64.01	-109.56	-16.5	-62.05	-110.28	-2.00	-45.87							
WRFMS80	5	35	54	17.9	N	86	52	59.6	W	26.2	183.5	466.8793	63.59	-109.58	-16.5	-62.49	-109.90	-2.00	-45.96							
WQOQ442	5	36	18	42	N	86	36	21	W	30.1	50.7	467.8250	66.22	-111.01	-16.5	-61.29	-111.12	-2.00	-45.97							
WQTG808	2	36	13	54.1	N	86	28	47.4	W	36.1	73.6	466.8129	66.40	-109.63	-16.5	-59.73	-112.68	-2.00	-45.98							
WQY483	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	468.0750	66.18	-101.47	-16.5	-51.79	-120.68	-2.00	-46.02							
WQH537	33	35	58	57	N	86	33	11	W	33.2	122.0	467.8375	66.29	-110.28	-16.5	-60.50	-111.97	-2.00	-46.02							
WQB2816	1	36	9	28.6	N	86	47	1.7	W	7.6	75.4	467.5125	66.42	-123.23	-16.5	-73.31	-99.16	-2.00	-46.03							
WQH537	7	36	2	42	N	86	39	51	W	21	120.4	467.6725	66.30	-114.32	-16.5	-64.52	-107.99	-2.00	-46.06							
WQQT469	2	35	57	59.7	N	86	29	21.2	W	39	139.7	466.4125	66.32	-108.97	-16.5	-59.15	-113.35	-2.00	-46.07							
WQQT469	2	35	57	59.7	N	86	29	21.2	W	39	139.7	466.5000	66.32	-108.98	-16.5	-59.16	-113.35	-2.00	-46.08							
WRU728	2	36	4	9.5	N	86	26	46.2	W	38.6	101.3	466.8500	66.43	-109.71	-16.5	-60.25	-116.26	-2.00	-46.09							
WQH544	1	36	6	47.9	N	86	41	51.1	W	30.5	100.2	467.4250	66.43	-116.90	-16.5	-66.57	-105.57	-2.00	-46.09							
WQQT469	6	35	57	37.6	N	86	29	21.4	W	39.4	120.6	466.6425	66.30	-108.90	-16.5	-59.10	-113.44	-2.00	-46.11							
KYU718	4	36	18	5.2	N	86	37	42	W	27.8	49.9	465.0250	66.21	-111.86	-16.5	-62.15	-110.38	-2.00	-46.13							
WQQT469	4	35	57	50.5	N	86	29	25.5	W	39.1	120.1	466.3875	66.30	-109.00	-16.5	-59.20	-113.37	-2.00	-46.14							
WQQT469	2	35	57	50.7	N	86	29	21.2	W	39	139.7	466.3250	66.32	-109.09	-16.5	-59.27	-113.35	-2.00	-46.20							
WQQT469	6	35	57	37.6	N	86	29	21.4	W	39.4	120.6	466.5125	66.30	-109.00	-16.5	-59.20	-113.44	-2.00	-46.21							
WPPIA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	466.6255	65.41	-109.73	-16.5	-60.82	-111.82	-2.00	-46.21							
WQQT469	4	35	57	50.5	N	86	29	25.5	W	39.1	120.1	466.3250	66.30	-109.09	-16.5	-59.29	-113.37	-2.00	-46.23							
WQY5596	1	35	57	48.4	N	86	29	25.6	W	39.1	120.2	466.3250	66.30	-109.09	-16.5	-59.29	-113.37	-2.00	-46.23							
WQAZ704	2	35	35	36.4	N	87	2	15	W	62.7	194.3	468.1000	62.18	-100.87	-16.5	-55.19	-117.50	-2.00	-46.24							
WRN07	3	36	9	31	N	86	46	53	W	7.8	75.3	467.5125	66.42	-123.23	-16.5	-73.31	-99.39	-2.00	-46.26							
WRUN723	12	35	56	33.3	N	86	39	9.4	W	29.2	139.0	465.1750	66.10	-111.47	-16.5	-61.86	-110.81	-2.00	-46.27							
WQG984	1	35	51	36.9	N	86	21	8.3	W	55.8	123.9	467.9250	66.28	-106.03	-16.5	-56.24	-116.49	-2.00	-46.27							
WQV483	3	35	54	58.7	N	86	49	10.5	W	25.3	170.6	467.1625	64.78	-111.40	-16.5	-63.12	-109.60	-2.00	-46.28							
WPKJ32	2	36	42	8.1	N	86	34	30	W	67.5	120.1	466.8500	65.57	-103.67	-16.5	-54.24	-118.41	-2.00	-46.28							
WQH544	1	35	54	50.4	N	86	53	3	W	35.1	188.3	466.6125	63.59	-109.41	-16.5	-63.24	-104.47	-2.00	-46.30							
WQH496	2	35	57	34.1	N	86	57	43.9	W	13.9	218.5	466.2500	57.35	-109.24	-16.5	-68.39	-104.39	-2.00	-46.35							
WNNI438	4	36	0	49.2	N	86	34	50.5	W	29.1	119.0	465.0500	66.32	-111.79	-16.5	-61.97	-110.78	-2.00	-46.35							
WPPIA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	466.3975	65.41	-109.89	-16.5	-60.98	-111.83	-2.00	-46.37							
WRUN723	10	35	56	22.1	N	86	52	41.1	W	22.4	182.9	465.1750	63.70	-111.47	-16.5	-64.27	-108.51	-2.00	-46.37							
WQPV754	1	35	57	25	N	86	48	49	W	20.9	167.1	467.2875	65.01	-113.39	-16.5	-64.88	-107.94	-2.00	-46.39							
WRNR750	2	36	3	28.8	N	86	26	7.7	W	39.8	103.3	466.6125	66.42	-109.21	-16.5	-59.29	-113.53	-2.00	-46.39							
WQB9664	1	35	54	26.1	N	86	53	54.7	W	26.1	186.5	466.8500	63.23	-109.71	-16.5	-62.98	-109.87	-2.00	-46.41							
WPEE492	3	35	59	53.2	N	86	35	20	W	29.5	122.5	467.2000	66.29	-111.72	-16.5	-61.93	-110.94	-2.00	-46.43							
WQQT469	6	35	57	37.6	N	86	29	21.4	W	39.4	120.6	466.6375	66.30	-109.27	-16.5	-59.46	-113.44	-2.00	-46.47							
WQH537	5	35	50	47	N	86	25	4	W	51.9	129.0	467.9000	66.23	-106.81	-16.5	-57.08	-115.86	-2.00	-46.48							
WQH537	7	36	15	24	N	86	37	38	W	69.7	280.9	466.8675	49.55	-87.79	-16.5	-54.74	-118.43	-2.00	-46.70							
WRV474	1	36	9	55.5	N	86	29	7.5	W	40.2	121.5	466.6255	66.30	-109.32	-16.5	-59.52	-113.61	-2.00	-46.70							
WRE477	1	36	9	50.4	N	86	46	43.5	W	8.2	71.7	467.5125	66.39	-123.23	-16.5	-73.34	-99.82	-2.00	-46.72							
KNDT530	2	35	57	48.2	N	86	29	13	W	39.4	120.0	466.6255	66.30	-109.53	-16.5	-59.72	-113.44	-2.00	-46.73							
WPWPS81	2	36	44	8.8	N	87	28	40.5	W	35.9	320.6	468.4250	56.79	-93.29	-16.5	-53.00	-120.24	-2.00	-46.78							
WQH537	10	35	51	18.6	N	86	37																			

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WQGN459	10	35	53	54	N	86	52	54	W	26.9	183.1	465.5000	63.59	-110.63	-16.5	-63.54	-110.10	-2.00	-47.24							
WQQT469	3	35	57	50	N	86	29	25	S	39.1	123.1	465.1212	66.40	-110.13	-16.5	-62.46	-110.50	-2.00	-47.27							
WQH575	3	35	56	42	N	86	24	40	W	42.6	104.4	465.6763	66.42	-109.63	-16.5	-59.58	-114.12	-2.00	-49.27							
WQUN423	7	35	56	48	N	86	52	29	W	24.5	181.9	465.1750	63.82	-111.49	-16.5	-64.15	-109.53	-2.00	-47.28							
WQOF335	10	35	57	43	N	86	33	24	W	24.2	126.3	465.5200	66.27	-111.22	-16.5	-61.50	-112.18	-2.00	-47.28							
WQUT547	1	35	54	58	N	86	49	10	W	35.3	170.6	467.8000	64.78	-112.41	-16.5	-64.12	-109.61	-2.00	-47.29							
WVRWB328	2	35	57	30	N	86	49	11	W	20.7	168.5	467.3250	64.93	-114.35	-16.5	-65.92	-107.86	-2.00	-47.34							
WPVVW981	2	36	44	8	N	87	28	40	W	85.9	320.6	468.4000	56.79	-93.86	-16.5	-53.56	-120.24	-2.00	-47.34							
WBRBW969	1	36	12	35	N	86	30	50	W	32.5	75.2	465.0000	66.42	-111.92	-16.5	-62.01	-111.74	-2.00	-47.34							
WPBQ324	1	36	10	28	N	86	22	42	W	44	85.0	466.1500	66.47	-109.35	-16.5	-59.38	-114.39	-2.00	-47.34							
WQYF381	1	36	35	0.5	N	86	41	22	W	51.6	17.7	467.9000	65.28	-106.81	-16.5	-58.03	-115.81	-2.00	-47.38							
WQJQ877	136	36	13	53	N	86	30	46	W	33.3	72.1	467.8125	66.39	-111.74	-16.5	-61.85	-112.00	-2.00	-47.39							
WQVA383	12	36	42	12	N	86	8	10.6	W	90.4	466.80250	66.18	-108.28	-16.5	-53.20	-120.68	-2.00	-47.43								
WQUT953	2	36	8	33	N	86	23	43	W	42.3	89.6	466.9125	66.51	-109.84	-16.5	-59.83	-114.06	-2.00	-47.45							
WF5750	8	35	57	53	N	86	33	24	W	34	125.1	465.1625	66.27	-111.50	-16.5	-61.73	-112.13	-2.00	-47.46							
WRPH252	2	35	53	44	N	86	55	21	W	27.6	189.7	466.9500	62.87	-109.92	-16.5	-63.55	-110.35	-2.00	-47.46							
WQFJ404	2	35	55	36	N	87	2	15	W	62.7	194.3	468.4000	62.18	-102.09	-16.5	-56.24	-110.50	-2.00	-47.46							
WQJQ1248	2	35	54	40	N	86	40	40	W	38.5	154.0	466.9375	65.73	-109.89	-16.5	-60.60	-113.24	-2.00	-49.47							
WQZ9206	1	36	7	50	N	86	44	29	W	21	11.1	467.8479	66.47	-121.37	-16.5	71.40	-102.53	-2.00	-47.48							
WQD307	31	36	9	58	N	86	46	16	W	9	71.4	467.5123	66.39	-123.23	-16.5	73.34	-100.63	-2.00	-47.53							
WQUL833	1	36	10	12	N	86	49	37	W	17.3	79.0	467.4375	66.43	-117.63	-16.5	-67.70	-106.31	-2.00	-47.56							
WNRNS29	1	36	15	59	N	86	40	24	W	22.2	50.9	467.3425	66.22	-115.30	-16.5	-65.59	-108.47	-2.00	-47.61							
WPZP5466	2	36	9	30	N	86	23	1	W	43.4	87.3	466.8750	66.49	-109.76	-16.5	-59.77	-114.28	-2.00	-47.62							
WQVP754	1	35	57	25	N	86	48	49	W	20.9	167.1	467.3375	65.01	-114.63	-16.5	-66.16	-107.95	-2.00	-47.66							
WQS638	1	36	12	1	N	86	47	57.5	W	8.9	42.0	467.5125	66.12	-123.23	-16.5	-73.61	-100.53	-2.00	-47.70							
WN2L596	2	36	1	23	N	86	47	27.1	W	14.7	152.8	467.4500	65.80	-118.57	-16.5	-69.26	-104.89	-2.00	-47.71							
WTRN521	1	36	14	1.3	N	86	29	33.6	W	35.1	72.7	467.1875	66.39	-111.61	-16.5	-61.72	-112.45	-2.00	-47.73							
WQHP822	2	35	53	59	N	86	53	32	W	26.9	181.2	465.4000	63.35	-110.89	-16.5	-64.03	-110.10	-2.00	-47.73							
WQND532	6	35	53	59.3	N	86	53	33.4	W	26.9	188.2	465.4000	63.35	-110.89	-16.5	-64.03	-110.10	-2.00	-47.73							
WRCP593	1	35	56	58.4	N	86	50	36.2	W	21.3	174.6	467.3125	64.45	-114.03	-16.5	-66.08	-108.11	-2.00	-47.75							
WQHE537	5	35	50	47	N	86	51	25	W	51.9	120.0	467.8750	66.23	-108.10	-16.5	-58.37	-115.86	-2.00	-47.78							
WRAU813	1	35	52	48	N	86	29	23	W	12.2	467.3375	66.23	-109.63	-16.5	-63.94	-116.94	-2.00	-49.78								
WQUT898	10	36	16	47	N	86	24	58	W	12.3	467.8750	66.24	-108.10	-16.5	-58.36	-115.89	-2.00	-47.80								
WQOM201	1	36	22	19	N	86	25	21	W	47.4	57.0	466.5125	66.28	-109.00	-16.5	-59.22	-115.04	-2.00	-47.84							
WQRN225	1	35	58	43.3	N	86	53	20.6	W	18.1	186.7	467.6725	63.23	-114.32	-16.5	-67.59	-106.70	-2.00	-47.85							
WPPA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	467.6125	65.41	-114.40	-16.5	-62.49	-111.83	-2.00	-47.88							
WQTQ449	3	35	44	33.8	N	86	57	57	W	10.5	229.5	467.8375	54.38	-110.28	-16.5	-72.40	-101.98	-2.00	-47.93							
WQHE537	8	36	4	47	N	86	57	14	W	10.5	40.3	467.0250	66.42	-110.23	-16.5	-60.32	-114.06	-2.00	-47.94							
WREB883	12	36	42	16	N	86	8	10.6	W	33.7	162.5	465.1125	65.35	-111.63	-16.5	-62.78	-112.05	-2.00	-48.21							
WQJQ335	1	36	14	0.5	N	86	19	31	W	51.1	78.2	466.6525	66.43	-109.11	-16.5	-59.18	-115.70	-2.00	-48.45							
WRPA704	1	36	10	44.2	N	86	19	32.1	W	48.8	84.8	467.8500	66.46	-109.56	-16.5	-59.60	-115.32	-2.00	-48.47							
WQHE537	28	36	21	12	N	86	19	33	W	48.8	88.8	467.8500	66.45	-109.56	-16.5	-59.61	-115.32	-2.00	-48.47							
WQJQ335	1	36	13	0.5	N	86	18	31	W	51.3	74.3	466.6525	66.43	-109.11	-16.5	-59.00	-116.00	-2.00	-48.53							
WQH575	1	36	13	58	N	86	49	103.1	W	23.5	176.6	467.7500	64.78	-116.68	-16.5	-68.40	-109.61	-2.00	-48.56							
WZC700	12	36	53	10	N	86	52	54	W	28.3	189.9	465.1125	63.70	-111.63	-16.5	-64.43	-110.54	-2.00	-48.57							
WURN424	11	36	52	24.9	N	86	51	17.7	W	39.7	178.2	465.1125	64.10	-111.63	-16.5	-64.02	-110.96	-2.00	-48.59							
WQTQ449	3	35	44	33.8	N	86	57	26	W	44.9	190.6	467.9000	62.75	-106.81	-16.5	-60.56	-114.60	-2.00	-48.71							
KOB688	3	36	23	7.5	N	86	27	43.8	W	45.3	52.9	465.3375	66.24	-110.27	-16.5	-60.53	-114.63	-2.00	-48.75							
WRCI978	20	35	57	36.9	N	86	31	19	W	36.9	122.9	467.2375	66.29	-112.11	-16.5	-62.33	-112.8									

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
WQUL987	7	35	56	38.5	N	86	23	19.7	W	48.2	116.9	465.5875	66.34	-110.40	-16.5	-60.56	-115.17	-2.00	-49.32					
WQUL987	7	35	51	28	N	86	28	8.0	W	47.6	131.3	465.6323	66.21	-110.40	-16.5	-60.51	-115.06	-2.00	-49.26					
WQUL987	4	35	23	43.4	N	86	23	6.0	W	47.1	45.5	465.5373	66.23	-110.27	-16.5	-60.51	-115.31	-2.00	-49.43					
WQIG440	4	35	48	7.9	N	86	23	29.9	W	56.9	131.3	465.6250	66.31	-108.95	-16.5	-59.24	-116.63	-2.00	-49.44					
WPE1389	6	36	28	42.4	N	86	28	37	W	50.3	43.6	465.6750	66.14	-109.97	-16.5	-60.33	-115.57	-2.00	-49.47					
WQHE537	21	36	18	7	N	86	36	2.0	W	30.9	50.3	467.7623	66.22	-114.32	-16.5	-64.60	-111.35	-2.00	-49.50					
WQAF578	1	35	50	51.4	N	86	25	30.9	W	51.3	129.3	466.9623	66.23	-109.94	-16.5	-60.21	-115.74	-2.00	-49.51					
WQV297	4	36	23	43.2	N	86	25	6.0	W	49.1	54.7	465.6000	66.26	-110.37	-16.5	-60.61	-115.33	-2.00	-49.53					
WPPX251	4	36	9	27.4	N	86	22	59.1	W	43.5	87.4	465.1000	66.49	-111.66	-16.5	-61.67	-114.27	-2.00	-49.54					
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	466.8875	63.82	-109.79	-16.5	-62.47	-113.55	-2.00	-49.59					
WNPV397	14	36	30	24.2	N	86	52	51	W	40.6	358.1	466.0250	63.70	-109.53	-16.5	-62.33	-113.69	-2.00	-49.60					
WNRN221	50	36	2	46.6	N	86	24	25.7	W	42.6	104.2	467.7125	66.42	-111.83	-16.5	-61.91	-114.13	-2.00	-49.60					
WPPX251	5	36	12	17	N	86	22	13	W	45.3	80.8	465.2125	66.44	-111.37	-16.5	-61.43	-114.59	-2.00	-49.62					
WQHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	467.8750	62.99	-108.10	-16.5	-61.62	-114.46	-2.00	-49.63					
WQFH798	1	35	50	45	N	86	25	1	W	52	120.9	466.9623	66.23	-109.94	-16.5	-60.21	-115.86	-2.00	-49.63					
WREX463	2	36	8	2.9	N	86	45	39.5	W	9.4	94.5	467.5375	66.48	-125.10	-16.5	-75.12	-101.01	-2.00	-49.68					
WPE142	3	35	59	53.2	N	86	35	20.0	W	29.5	122.3	467.4875	66.29	-114.38	-16.5	-65.54	-110.49	-2.00	-49.69					
WQD719	1	35	56	26.8	N	86	40	56.4	W	41	24.3	465.4875	65.61	-111.44	-16.5	-62.32	-113.78	-2.00	-49.70					
WPOF547	3	36	28	47.2	N	86	40	54.0	W	41.3	23.6	465.1875	65.51	-111.44	-16.5	-62.32	-113.78	-2.00	-49.70					
WQW3931	2	36	23	31.1	N	86	39	24	W	76.4	291.7	468.8875	49.38	-89.84	-16.5	-56.96	-119.23	-2.00	-49.72					
WQRM808	1	35	54	53.8	N	86	52	49.5	W	25.1	183.0	467.3000	63.59	-113.71	-16.5	-66.62	-109.54	-2.00	-49.72					
WPTM560	2	36	23	58.0	N	86	23	4	W	54.7	301.9	468.8875	50.73	-94.14	-16.5	-59.91	-116.32	-2.00	-49.77					
WQVA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	467.5900	66.18	-105.24	-16.5	-55.56	-120.68	-2.00	-49.78					
WF5750	10	35	51	19	N	86	28	5	W	47.8	131.5	465.4250	66.21	-110.82	-16.5	-61.11	-115.10	-2.00	-49.80					
WQG1584	1	35	51	36.9	N	86	21	8.3	W	55.8	123.9	467.8500	66.28	-109.56	-16.5	-59.77	-116.48	-2.00	-49.81					
WSB879	5	35	51	33	N	86	28	9	W	47.5	131.2	465.4000	66.21	-110.89	-16.5	-61.18	-115.04	-2.00	-49.81					
WQAZ704	2	35	35	36.4	N	86	87	2	W	62.7	194.3	467.9750	62.18	-104.45	-16.5	-58.78	-117.50	-2.00	-49.82					
WQDB839	3	36	1	37	N	86	21	8	W	45.6	254.0	468.8375	49.38	-94.42	-16.5	-61.55	-114.74	-2.00	-49.82					
WQUT547	1	35	54	58.4	N	86	49	10.1	W	25.3	170.6	467.7500	64.78	-114.96	-16.5	-66.68	-109.61	-2.00	-49.84					
WZK668	3	36	23	25.2	N	86	26	58	W	46.5	53.2	465.3000	66.23	-111.15	-16.5	-61.39	-114.85	-2.00	-49.84					
WQV297	4	36	23	43.2	N	86	25	6	W	49.3	54.7	465.4750	66.26	-110.69	-16.5	-60.93	-115.33	-2.00	-49.85					
WQUT547	7	35	56	38.5	N	86	23	19	W	48.2	117.1	466.7500	66.34	-110.95	-16.5	-61.24	-115.40	-2.00	-49.87					
WQD719	5	35	51	6.0	N	86	26	9	W	47.1	131.2	465.5373	66.21	-110.95	-16.5	-59.69	-116.63	-2.00	-49.89					
WQIG440	4	35	49	7.0	N	86	23	29.9	W	56.9	166.7	466.7000	66.21	-109.40	-16.5	-59.69	-116.63	-2.00	-49.89					
WQJU987	5	35	51	28	N	86	28	8	W	47.6	131.3	465.3750	66.23	-110.95	-16.5	-61.24	-115.06	-2.00	-49.89					
WQJV442	5	36	18	42.0	N	86	36	21	W	30.1	50.7	467.7500	66.22	-114.96	-16.5	-65.24	-111.12	-2.00	-49.91					
WPIR704	1	36	10	44.2	N	86	19	32.1	W	48.8	84.8	467.8250	66.46	-111.01	-16.5	-61.05	-115.32	-2.00	-49.92					
WNBNQ288	10	35	50	13.2	N	86	24	27	W	53.3	129.2	467.0000	66.23	-110.02	-16.5	-60.29	-116.07	-2.00	-49.92					
WSB879	5	35	51	33	N	86	28	9	W	47.5	131.2	465.3500	66.21	-111.02	-16.5	-61.30	-115.04	-2.00	-49.94					
WNBNQ288	11	35	46	1.2	N	86	23	38	W	59.4	134.3	466.3500	66.18	-109.06	-16.5	-59.38	-117.00	-2.00	-49.95					
WQWQ941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	466.6253	66.21	-109.13	-16.5	-59.46	-117.00	-2.00	-50.03					
WF5750	10	35	51	19	N	86	28	5	W	47.8	131.5	465.2873	66.21	-111.18	-16.5	-61.47	-115.09	-2.00	-50.16					
WQEK235	5	36	32	40.6	N	86	42	20.9	W	47	17.6	465.5875	65.28	-110.40	-16.5	-61.62	-114.95	-2.00	-50.16					
WQWR477	2	35	47	53.4	N	86	23	0.8	W	57.8	131.2	466.7500	66.21	-109.55	-16.5	-61.47	-115.09	-2.00	-50.16					
WRUZ687	1	35	44	58.2	N	86	28	5	W	47.8	131.5	466.3750	66.23	-110.40	-16.5	-61.69	-115.09	-2.00	-50.18					
WF5750	10	35	51	19	N	86	28	28	W	57.8	131.2	466.7500	66.21	-109.55	-16.5	-61.47	-115.09	-2.00	-50.18					
WKRN723	11	35	49	29.2	N	86	53	28.6	W	35.1	183.8	465.1750	63.59	-111.47	-16.5	-64.38	-112.41	-2.00	-50.39					
WQWQ941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	466.6253	66.21	-109.37	-16.5	-59.66	-117.17	-2.00	-50.39					
WQOZ337	1	36	5	18.6	N	86	20	12.9	W	42.8	262.3	468.1323	49.67	-95.83	-16.5	-62.67	-114.19	-2.00	-50.40					
WQWQ937	4	35	59	39.9	N	86	48	32.6	W	17.3	162.7	467.6253	65.35	-119.50	-16.5	-70.65	-106.20	-2.00	-50.41					
WZK668	3	36	23	25.2	N	86	26	58	W	46.5	53.2	465.0750	66.25	-111.73	-16.5	-61.97	-114.85	-2.00						

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	466.7625	65.87	-109.53	-16.5	-60.15	-117.05	-2.00	-50.77							
WQTB94	2	36	0	55.5	N	86	30	0.6	W	36.4	112.1	467.4125	66.35	-114.35	-16.5	-64.31	-117.76	-2.00	-50.82							
WQK232	0	35	48	15.1	N	86	52	32.4	W	36.3	88.14	465.4125	66.32	-111.63	-16.5	-64.31	-112.04	-2.00	-50.85							
WQJ553	5	35	16	44	N	86	23	25.3	W	53.9	127.4	467.1000	66.25	-110.25	-16.5	-61.12	-116.57	-2.00	-50.85							
WQT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	466.8793	62.75	-108.97	-16.5	-62.70	-114.57	-2.00	-50.85							
WQV297	4	36	23	43.2	N	86	25	6	W	49.1	54.7	465.0879	66.26	-111.70	-16.5	-61.94	-115.32	-2.00	-50.86							
WIS879	2	35	50	38.2	N	86	23	31	W	53.9	127.6	465.4000	66.25	-110.89	-16.5	-61.13	-116.14	-2.00	-50.86							
WRV546	2	36	9	55.2	N	86	18	21.3	W	50.4	86.7	467.2000	66.48	-111.72	-16.5	-61.74	-115.59	-2.00	-50.89							
KSZ237	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	465.2500	63.82	-111.34	-16.5	-64.02	-113.28	-2.00	-50.90							
WQE235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	465.2500	63.82	-111.34	-16.5	-64.02	-113.28	-2.00	-50.90							
WRK856	4	36	24	42.6	N	86	22	10.8	W	53.8	55.7	467.1125	66.27	-110.98	-16.5	-61.20	-116.15	-2.00	-50.92							
WNQ788	11	35	46	1.2	N	86	23	38	W	59.4	134.3	467.0000	66.18	-110.02	-16.5	-60.34	-117.01	-2.00	-50.92							
WQV297	4	36	23	43.2	N	86	25	6	W	49.1	54.7	465.6265	66.26	-111.76	-16.5	-62.00	-115.32	-2.00	-50.92							
WSB879	2	35	50	38.2	N	86	23	31	W	53.9	127.6	465.3750	66.25	-110.95	-16.5	-61.20	-116.14	-2.00	-50.93							
WQKG440	4	35	48	7.9	N	86	23	29.9	W	56.9	131.3	467.0500	66.21	-110.45	-16.5	-60.74	-116.64	-2.00	-50.94							
WRV703	1	36	13	54	N	86	19	46	W	49.3	78.0	465.0000	66.43	-111.92	-16.5	-61.99	-115.36	-2.00	-50.95							
WQV297	2	36	23	43.2	N	86	25	5	W	49.1	54.7	465.2500	66.26	-111.82	-16.5	-62.26	-115.29	-2.00	-50.99							
WSB879	2	35	50	38.2	N	86	23	31	W	53.9	127.6	465.3500	66.23	-110.40	-16.5	-61.26	-114.14	-2.00	-50.99							
WQK235	5	36	29	40.6	N	86	42	20.9	W	47	17.6	455.6265	65.58	-111.24	-16.5	-62.46	-114.95	-2.00	-51.00							
WQW9941	3	35	46	47.6	N	86	20	58.2	W	61.4	130.7	466.9250	66.22	-109.86	-16.5	-60.15	-117.30	-2.00	-51.01							
KNV993	6	36	24	11.2	N	86	24	15.5	W	50.6	54.7	465.1250	66.26	-111.60	-16.5	-61.84	-115.58	-2.00	-51.02							
WQK235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	465.1563	63.82	-111.52	-16.5	-64.20	-113.28	-2.00	-51.07							
WQH537	32	35	44	48	N	86	56	8	W	44.2	188.2	467.8500	62.99	-109.56	-16.5	-63.07	-114.46	-2.00	-51.08							
WQQP235	13	35	44	30	N	86	30	11	W	55.3	143.6	465.4625	66.03	-110.72	-16.5	-61.19	-116.33	-2.00	-51.11							
WQUN213	2	36	40	10	N	86	40	0	W	61.3	16.8	466.5000	65.21	-108.98	-16.5	-60.27	-117.28	-2.00	-51.12							
WQUN240	1	35	49	11.7	N	86	53	45.4	W	35.7	184.4	467.2250	63.46	-111.93	-16.5	-64.97	-112.59	-2.00	-51.12							
WSB879	4	35	49	16.1	N	86	23	35.6	W	55.4	129.8	465.4000	66.23	-110.89	-16.5	-61.15	-116.38	-2.00	-51.12							
WRNC453	1	35	57	31.1	N	86	29	48.8	W	38.9	121.3	467.3125	66.30	-114.03	-16.5	-64.23	-113.34	-2.00	-51.13							
WPY736	3	36	22	42.6	N	87	2	18	W	30.6	329.7	466.6425	59.08	-108.90	-16.5	-66.32	-111.24	-2.00	-51.14							
WF5750	9	35	50	9.2	N	86	24	42.5	W	53.3	129.6	465.2500	66.23	-112.17	-16.5	-61.54	-116.01	-2.00	-51.14							
WRT832	2	35	47	41.6	N	86	22	2.2	W	59.3	130.5	467.0375	66.22	-110.34	-16.5	-60.62	-116.97	-2.00	-51.15							
WRFN21	50	36	2	46.6	N	86	24	25.7	W	42.6	104.3	467.8750	66.42	-113.40	-16.5	-64.87	-114.31	-2.00	-51.16							
WQK235	13	35	49	46.4	N	86	38	36.9	W	49.1	156.4	465.3250	65.65	-111.40	-16.5	-62.28	-113.34	-2.00	-51.18							
WQKG440	2	35	47	58.4	N	86	23	32.7	W	57.3	131.6	467.0750	66.21	-110.66	-16.5	-60.95	-116.67	-2.00	-51.18							
WSB879	4	35	49	16.1	N	86	23	35.6	W	55.4	129.8	465.3750	66.23	-110.95	-16.5	-61.22	-116.38	-2.00	-51.19							
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	466.6425	65.87	-109.94	-16.5	-60.57	-117.06	-2.00	-51.19							
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	467.1700	66.23	-111.30	-16.5	-61.56	-116.07	-2.00	-51.20							
WQK235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	465.1063	63.82	-111.65	-16.5	-64.33	-113.28	-2.00	-51.20							
WQUN240	3	35	49	13.3	N	86	53	59.5	W	35.7	180.5	467.2250	63.35	-108.50	-16.5	-65.08	-112.59	-2.00	-51.23							
WQJL987	6	35	45	51.8	N	86	24	16.2	W	58.9	135.1	465.5875	66.16	-110.40	-16.5	-60.74	-116.91	-2.00	-51.24							
WSB879	4	35	49	16.1	N	86	23	35.6	W	55.4	129.8	465.3500	66.23	-110.02	-16.5	-61.28	-116.38	-2.00	-51.25							
WQUL544	5	36	8	35.9	N	87	17	31.9	W	38.4	207.0	468.2500	49.89	-97.87	-16.5	-64.47	-113.25	-2.00	-51.26							
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	467.9000	66.10	-106.81	-16.5	-57.21	-120.51	-2.00	-51.27							
WF5750	9	35	50	9.2	N	86	24	44.1	W	52	128.1	465.2000	66.23	-111.40	-16.5	-61.67	-116.00	-2.00	-51.27							
WQFQ2509	3	36	30	3	N	86	52	9	W	39.9	359.5	467.2000	63.82	-111.72	-16.5	-64.40	-113.56	-2.00	-51.52							
KSZ237	2	36	30	30.2	N	86	53	7	W	40.8	357.5	465.2250	63.59	-111.34	-16.5	-64.25	-113.72	-2.00	-51.57							
WSB879	4	35	49	16.1	N	86	23	35.6	W	55.4	129.8	465.2500	66.23	-111.34	-16.5	-61.61	-116.37	-2.00	-51.58							
WQH798	1	35	50	45.8	N	86	25	1.4	W	52	120.5	467.1250	66.23	-111.43	-16.5	-62.45	-115.24	-2.00	-51.62							
WQQP235	3	35	46	32.1	N	8																				

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
WNQB788	11	35	46	1.2	N	86	23	38	W	59.4	134.3	467.1500	66.18	-111.30	-16.5	-61.62	-117.01	-2.00	-52.19					
WF5750	3	35	46	0.2	N	86	23	32	W	59.6	134.2	467.1500	66.18	-111.27	-16.5	-61.54	-116.49	-2.00	-52.20					
WQH884	2	35	46	31.1	N	86	30	45.9	W	59.5	134.2	466.6793	65.73	-109.39	-16.5	-60.14	-118.49	-2.00	-52.20					
WQT449	3	35	46	33.8	N	86	57	26.3	W	44.9	199.6	467.0373	62.75	-110.34	-16.5	-64.09	-114.58	-2.00	-52.24					
WOD521	2	36	12	48.5	N	86	41	53	W	71.3	61.7	467.5000	66.32	-122.30	-16.5	-72.48	-106.21	-2.00	-52.24					
WQE6320	2	35	49	32	N	86	16	0	W	64.3	122.9	467.0879	66.29	-110.76	-16.5	-60.97	-117.70	-2.00	-52.24					
WRI12687	1	35	44	58.2	N	86	55	14.8	W	43.7	186.5	467.1250	63.23	-111.08	-16.5	-64.35	-114.35	-2.00	-52.26					
WQVE381	1	36	35	0.5	N	86	41	22.3	W	51.6	17.7	467.8123	65.28	-111.74	-16.5	-62.96	-115.80	-2.00	-52.31					
WQQP235	7	35	45	59.4	N	86	23	33.3	W	59.5	134.2	465.2000	66.18	-111.40	-16.5	-61.73	-116.99	-2.00	-52.32					
WF5750	7	35	46	0.2	N	86	23	32	W	59.6	134.2	465.2000	66.18	-111.40	-16.5	-61.73	-117.01	-2.00	-52.33					
WPYD562	4	36	32	41	N	87	30	3	W	72.5	308.5	468.2625	53.42	-96.97	-16.5	-60.04	-118.77	-2.00	-52.35					
WQQP235	7	35	45	59.4	N	86	23	33.3	W	59.5	134.2	465.1625	66.18	-111.50	-16.5	-61.82	-116.99	-2.00	-52.41					
WRAC850	4	35	33	59.6	N	86	21	34.5	W	78.4	143.3	465.5000	66.02	-108.98	-16.5	-59.46	-119.41	-2.00	-52.45					
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	26.5	466.8125	65.73	-109.63	-16.5	-60.40	-118.50	-2.00	-52.46					
WPMS332	1	36	16	12.2	N	86	52	18	W	14.3	357.8	467.4875	63.59	-121.37	-16.5	-74.28	-104.65	-2.00	-52.49					
KIF409	8	35	38	44.4	N	86	55	11.3	W	55.2	185.1	466.1000	63.35	-109.42	-16.5	-62.57	-116.36	-2.00	-52.50					
WQH837	36	35	32	3.8	N	86	13	35.8	W	88.7	137.3	467.4750	66.10	-108.10	-16.5	-61.52	-118.51	-2.00	-52.56					
WQUB815	3	36	41	18.1	N	86	20	18.1	W	66.6	28.0	466.9369	65.84	-109.63	-16.5	-60.63	-118.39	-2.00	-52.58					
WONX166	1	36	3	5.9	N	86	23	40.7	W	43.5	103.1	467.3373	66.43	-114.67	-16.5	-64.74	-114.31	-2.00	-52.61					
WQV1224	3	36	0	2.8	N	86	29	21.8	W	37.3	116.6	467.3873	66.35	-115.94	-16.5	-66.09	-112.98	-2.00	-52.62					
KIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	465.1250	65.90	-111.60	-16.5	-62.20	-116.83	-2.00	-52.63					
WQRA282	1	36	28	16.5	N	86	47	0	W	39.2	10.8	467.3125	64.78	-114.03	-16.5	-65.75	-113.41	-2.00	-52.71					
WRCK784	1	35	57	6.3	N	86	48	38.2	W	21.6	166.8	467.6425	65.08	-119.50	-16.5	-70.92	-108.23	-2.00	-52.71					
KIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	465.0750	65.90	-111.73	-16.5	-62.33	-116.83	-2.00	-52.76					
WDH861	1	36	6	37.2	N	86	58	1	W	9.7	249.6	465.4000	49.38	-109.89	-16.5	-78.00	-101.24	-2.00	-52.84					
WTRC956	1	35	46	48.8	N	86	22	11.5	W	60	131.8	465.0000	66.21	-112.92	-16.5	-62.21	-117.06	-2.00	-52.87					
WOSD416	1	35	32	44.8	N	86	38	4.4	W	69.2	162.5	466.9125	65.35	-109.84	-16.5	-60.99	-118.34	-2.00	-52.89					
WQQT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	467.8250	62.75	-111.01	-16.5	-64.76	-114.60	-2.00	-52.91					
WPMA747	2	35	45	4.2	N	86	55	47	W	43.6	187.6	465.625	63.11	-111.76	-16.5	-65.15	-114.29	-2.00	-53.04					
WQWF804	2	36	21	5.7	N	86	51	32.6	W	73.3	71.1	467.0625	66.39	-110.55	-16.5	-60.66	-118.84	-2.00	-53.07					
WRFN221	50	36	2	46.6	N	86	24	25.7	W	42.6	104.2	467.3625	66.42	-115.30	-16.5	-65.39	-114.13	-2.00	-53.08					
WQDF494	3	36	12	42.5	N	86	49	19	W	49.5	80.4	467.3125	66.44	-114.03	-16.5	-64.03	-115.43	-2.00	-53.08					
WQH833	3	35	30	39.8	N	86	48	14	W	73.6	136.4	466.5369	66.13	-110.43	-16.5	-60.63	-116.89	-2.00	-53.09					
WQAS444	5	35	46	44.4	N	86	40	12.6	W	21.3	48.7	467.4750	66.20	-120.49	-16.5	-70.73	-108.89	-2.00	-53.18					
WIR8977	5	36	12	24.8	N	86	41	32.2	W	17.2	64.7	467.5125	66.34	-123.23	-16.5	-73.39	-106.26	-2.00	-53.20					
WQZQ501	1	35	59	45.8	N	86	29	39.7	W	37.1	115.6	467.4125	66.35	-116.58	-16.5	-66.73	-112.93	-2.00	-53.22					
WHE537	28	36	11	12	N	86	19	33	W	48.8	83.8	467.6725	66.45	-114.32	-16.5	-64.37	-115.32	-2.00	-53.24					
WYK530	11	35	43	26.7	N	86	59	16.2	W	27.8	136.4	465.5750	66.23	-110.81	-16.5	-64.61	-115.04	-2.00	-53.24					
WQPF719	4	36	33	57.2	N	86	15	50	W	71.7	48.6	466.5125	66.16	-109.00	-16.5	-59.34	-120.52	-2.00	-53.43					
KNNF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	466.5250	66.16	-109.03	-16.5	-59.37	-120.52	-2.00	-53.46					
WPMM299	2	36	41	44.2	N	86	8	54.9	W	89	45.9	466.5250	66.16	-109.03	-16.5	-59.37	-120.52	-2.00	-53.46					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.0500	66.16	-109.04	-16.5	-66.40	-116.40	-2.00	-53.47					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.0500	66.16	-109.04	-16.5	-65.89	-113.33	-2.00	-53.49					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.1000	66.16	-110.87	-16.5	-61.15	-118.78	-2.00	-53.50					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	467.2750	66.21	-113.07	-16.5	-63.36	-116.67	-2.00	-53.59					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.6200	66.16	-110.81	-16.5	-61.24	-118.84	-2.00	-53.68					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	465.4000	66.15	-110.89	-16.5	-61.24	-118.84	-2.00	-53.68					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.4125	66.16	-110.88	-16.5	-61.24	-118.84	-2.00	-53.68					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.3750	66.16	-110.89	-16.5	-61.24	-118.84	-2.00	-53.68					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.3750	66.16	-110.89	-16.5	-61.24	-118.84	-2.00	-53.68					
WQH833	3	36	41	44.4	N	86	8	54.9	W	89	45.9	466.3750	66.16	-110.89	-16.5	-61.24	-118.84	-2.00	-53.68					

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WPMM299	2	36	41	44.2	N	86	8	54.9	W	89	45.9	467.0250	66.16	-110.23	-16.5	-60.57	-120.52	-2.00	-54.66							
WYK530	2	35	38	13.7	N	86	54	6.1	W	56	183.1	467.0750	63.59	-107.2	-16.5	-64.46	-114.40	-2.00	-54.71							
WQF830	2	35	50	20.4	N	87	3	59.8	W	60.3	399.73	466.6200	61.73	-109.27	-16.5	-64.93	-117.13	-2.00	-54.73							
WQH537	36	35	20	3	N	86	13	35	W	101.3	139.3	467.8375	66.10	-120.26	-16.5	-60.68	-120.51	-2.00	-54.74							
WNR895	2	35	53	10.5	N	86	22	15.9	W	52.8	122.3	467.3500	66.29	-114.98	-16.5	-65.20	-116.00	-2.00	-54.75							
WQE381	1	36	35	0.5	N	86	41	23.3	W	51.6	17.7	467.7625	65.28	-114.32	-16.5	-65.54	-115.80	-2.00	-54.89							
WNVJ362	2	35	29	53.3	N	86	4	23	W	101.1	134.8	466.1000	66.18	-109.42	-16.5	-59.74	-121.61	-2.00	-54.93							
WPX899	2	35	34	6.8	N	86	27	40.3	W	73.3	150.1	467.2500	65.87	-111.93	-16.5	-62.56	-118.84	-2.00	-54.96							
WNZA388	5	35	22	27.7	N	86	25	28.9	W	82.5	151.1	465.4000	65.84	-110.89	-16.5	-61.55	-119.84	-2.00	-54.98							
WNPK819	3	36	0	49.2	N	86	34	59	W	29.1	119.0	467.4750	66.32	-120.43	-16.5	-70.61	-110.82	-2.00	-54.99							
WQE235	6	36	34	0.2	N	87	1	30	W	49.4	343.3	465.2500	61.75	-111.27	-16.5	-66.03	-115.38	-2.00	-55.00							
WRN407	2	35	51	39.9	N	86	25	30.7	W	50.4	128.0	467.3750	66.24	-115.62	-16.5	-65.88	-115.59	-2.00	-55.03							
WRJ749	2	35	38	34.1	N	87	3	24.7	W	57.9	197.3	466.9875	61.75	-109.99	-16.5	-64.75	-116.79	-2.00	-55.10							
WQRX643	1	36	46	58.6	N	86	59	55.6	W	72.2	350.6	466.3000	62.75	-109.13	-16.5	-62.88	-118.69	-2.00	-55.15							
WNZA388	5	35	22	7.7	N	86	25	28.9	W	82.5	151.1	465.3250	65.84	-111.08	-16.5	-61.74	-119.83	-2.00	-55.17							
WQA704	3	36	4	26.9	N	87	23	3.5	W	47.3	261.1	468.1500	49.59	-99.67	-16.5	-66.58	-115.05	-2.00	-55.17							
WQW252	2	35	29	10.2	N	86	28	14.5	W	80.9	157.3	465.4000	65.77	-111.19	-16.5	-61.70	-117.00	-2.00	-55.18							
WQW252	3	35	54	1.8	N	86	48	4.5	W	2.1	67.9	467.4875	65.01	-121.13	-16.5	-72.86	-108.82	-2.00	-55.23							
WQRX643	1	36	46	58.6	N	86	59	55.6	W	72.2	350.6	466.2500	62.75	-109.24	-16.5	-62.99	-118.69	-2.00	-55.26							
KJF409	7	35	35	31.6	N	87	3	35.4	W	63.4	196.1	466.0500	61.89	-109.53	-16.5	-64.14	-117.56	-2.00	-55.28							
WQF857	1	35	49	22	N	86	21	21	W	58	127.5	467.3375	66.25	-114.67	-16.5	-64.91	-116.81	-2.00	-55.28							
WQD757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	467.1875	65.47	-113.61	-16.5	-62.64	-119.09	-2.00	-55.29							
WQRX643	1	36	46	58.6	N	86	59	55.6	W	72.2	350.6	466.2000	62.75	-109.27	-16.5	-63.02	-118.69	-2.00	-55.30							
WQE781	9	35	29	24	N	87	1	34	W	73.7	191.4	466.4000	62.61	-108.99	-16.5	-62.87	-118.87	-2.00	-55.32							
WRKCS80	2	35	37	20.6	N	87	3	59.8	W	60.3	197.5	466.9500	61.75	-109.92	-16.5	-64.67	-117.14	-2.00	-55.37							
WRFN221	50	36	2	46.6	N	86	24	25.7	W	42.6	104.2	467.4375	66.42	-117.63	-16.5	-67.72	-114.13	-2.00	-55.41							
WUO939	2	35	36	57.4	N	87	6	2.5	W	62	200.0	466.1750	61.30	-109.31	-16.5	-64.51	-117.37	-2.00	-55.46							
WQF648	1	35	35	47.4	N	87	3	22.6	W	62.8	195.9	466.9625	62.04	-109.94	-16.5	-64.41	-117.49	-2.00	-55.46							
WQAR408	2	35	36	28.8	N	87	3	58.8	W	61.8	197.0	466.9250	61.75	-109.86	-16.5	-64.62	-117.35	-2.00	-55.54							
WQT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	467.7750	62.75	-113.68	-16.5	-67.43	-114.60	-2.00	-55.58							
WP5L46	2	35	47	0	N	87	4	14	W	43.8	205.0	465.1500	60.36	-111.53	-16.5	-67.68	-114.33	-2.00	-55.61							
WNQ720	4	35	29	53	N	86	28	25.1	W	79.6	153.6	465.4000	65.77	-110.79	-16.5	-65.35	-117.10	-2.00	-56.04							
WQWQ312	2	35	37	5.3	N	87	2	39	W	60.2	195.5	465.4000	62.04	-110.89	-16.5	-65.35	-117.10	-2.00	-56.04							
WTU520	1	35	25	20	N	86	24	31.0	W	83.5	150.1	466.4000	65.87	-111.93	-16.5	-65.34	-119.07	-2.00	-56.09							
WQH557	1	36	19	45.1	N	87	21	45.4	W	26.5	322.4	467.4875	57.35	-110.27	-16.5	-72.54	-101.00	-2.00	-56.10							
WQH532	6	35	26	33.5	N	87	31	35.4	W	67.1	196.1	465.6200	61.69	-110.37	-16.5	-64.98	-117.55	-2.00	-56.12							
WQWQ312	2	35	37	5.3	N	87	21	39	W	60.2	195.5	465.3500	62.04	-113.02	-16.5	-65.48	-117.10	-2.00	-56.17							
KCQ754	2	36	42	12.6	N	86	8	10.6	W	90.4	46.0	465.1125	66.18	-111.63	-16.5	-61.95	-120.62	-2.00	-56.18							
WNWV224	2	36	45	30.2	N	86	10	37	W	92.2	41.7	467.1625	66.10	-111.40	-16.5	-61.80	-120.83	-2.00	-56.19							
WNWV224	3	36	45	30.2	N	86	10	37	W	92.2	41.7	467.1625	66.10	-111.40	-16.5	-61.80	-120.83	-2.00	-56.19							
WXY571	4	36	16	21.2	N	87	3	56	W	23.2	309.3	465.2750	53.76	-112.13	-16.5	-73.95	-108.81	-2.00	-56.36							
WQA704	3	36	4	26.9	N	87	23	3.5	W	47.3	261.1	468.1000	49.59	-100.87	-16.5	-67.78	-115.05	-2.00	-56.38							
WQGQ225	1	36	44	55	N	86	11	32	W	90.5	41.5	465.5000	66.10	-111.79	-16.5	-62.19	-120.63	-2.00	-56.42							
WQRX643	1	36	46	58.6	N	86	59	55.6	W	72.2	350.6	467.0500	62.75	-110.45	-16.5	-64.20	-118.71	-2.00	-56.47							
WQV668	1	36	6	17.1	N	87	3	14	W	17.4	256.7	467.3750	49.41	-109.47	-16.5	-76.56	-106.34	-2.00	-56.48							
WQGQ225	4	36	44	55	N	86	10	36.5	W	91.4	42.1	465.5000	66.12	-111.79	-16.5	-62.17	-120.72	-2.00	-56.49							
WPLT529	1	35	33	21.3	N	86	24	33	W	83.5	150.4	467.2500	65.87	-112.30	-16.5	-63.06	-119.97	-2.00	-56.60							
KUQ497	3	36	0	29.2	N	86	35	46	W	28.4	121.3	467.5000	66.30	-122.30	-16.5	-72.50	-110.61	-2.00	-56.67							
WQGQ303	1	35	45	10.4	N	86																				

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering field strength (dBu)			LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
																			SORTED							
WQDX539	5	35	33	21.2	N	87	3	14	W	67.1	194.7	465.0379	62.18	-111.82	-16.5	-66.15	-118.03	-2.00	-57.78							
WRAT620	2	35	56	33.8	N	86	39	49.3	W	28.3	140.5	467.125	66.09	-123.2	-16.5	-73.34	-141.94	-2.00	-56.46							
WQDX539	1	35	29	11.4	N	86	24	10.4	W	53.5	151.4	465.0379	65.67	-114.71	-16.5	-64.34	-119.28	-2.00	-53.87							
WQDX537	1	36	34	15.7	N	87	14	16.8	W	59.3	326.2	465.6000	58.13	-109.19	-16.5	-67.56	-116.84	-2.00	-57.97							
WQDX539	2	36	23	31.1	N	87	39	24	W	76.4	291.7	468.1213	49.38	-98.19	-16.5	-65.28	-119.22	-2.00	-58.05							
WQHAG479	1	36	45	25.2	N	86	33	51.7	W	73.5	21.4	467.3379	65.53	-114.67	-16.5	-65.64	-118.87	-2.00	-58.07							
WQDX539	1	36	36	5	N	86	31	32	W	59.5	30.6	467.4250	65.87	-116.90	-16.5	-67.53	-117.03	-2.00	-58.12							
WRP319	5	36	42	21.3	N	87	10	19	W	68.5	336.5	465.6063	60.55	-110.35	-16.5	-66.31	-118.22	-2.00	-58.12							
WRUW493	2	36	37	55.5	N	87	15	1.3	W	64.5	327.9	466.3500	58.61	-109.06	-16.5	-66.94	-117.72	-2.00	-58.24							
WRD5994	1	36	5	44.1	N	86	20	7.2	W	48	95.9	467.4629	66.47	-119.50	-16.5	-69.53	-115.17	-2.00	-58.25							
WRH273	1	36	43	10.6	N	87	15	12.5	W	73	331.8	466.4875	59.53	-108.95	-16.5	-65.92	-118.79	-2.00	-58.29							
WRN8520	1	35	54	42.3	N	86	49	31.2	W	25.7	171.9	467.5125	64.70	-123.23	-16.5	-75.03	-109.74	-2.00	-58.33							
WQF929	12	36	37	14.1	N	87	15	42.5	W	64	326.5	466.4000	58.37	-108.99	-16.5	-67.11	-117.65	-2.00	-58.33							
WQAZ704	3	36	4	26.9	N	87	23	3.5	W	47.3	261.1	468.0250	49.59	-102.88	-16.5	-69.79	-115.05	-2.00	-58.39							
WRB271	2	36	37	9.3	N	87	15	42.9	W	63.9	326.4	465.5438	58.37	-107.09	-16.5	-67.20	-117.64	-2.00	-58.41							
WPQA892	2	36	48	57.2	N	87	7	40	W	78.5	342.7	467.0625	61.60	-110.55	-16.5	-65.45	-119.43	-2.00	-58.45							
WRH412	3	35	50	13.9	N	86	4	23.1	W	11.1	467.4523	66.53	-115.12	-16.5	-65.46	-115.50	-2.00	-58.51								
WPYH464	1	36	11	47.2	N	86	19	16.4	W	49.4	382.6	467.4523	66.44	-115.50	-16.5	-69.01	-115.42	-2.00	-58.53							
WQH537	12	36	34	52	N	87	17	51	W	52.4	318.1	467.8750	57.08	-108.10	-16.5	-67.53	-117.46	-2.00	-58.53							
WQD240	1	36	3	47.6	N	86	26	1.4	W	39.8	102.4	467.4875	66.43	-111.37	-16.5	-71.44	-113.54	-2.00	-58.54							
WQDX537	1	36	34	15.7	N	87	14	16.8	W	58.3	325.2	466.8750	58.13	-109.76	-16.5	-68.13	-116.85	-2.00	-58.54							
WQUN476	2	36	36	14.4	N	87	15	37.5	W	62.4	326.5	466.2900	58.13	-109.20	-16.5	-67.57	-117.43	-2.00	-58.57							
WRB319	5	36	42	21.3	N	87	10	19	W	68.5	336.5	465.3388	60.55	-110.97	-16.5	-66.92	-118.22	-2.00	-58.73							
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	467.6725	66.10	-114.32	-16.5	-64.72	-120.51	-2.00	-58.78							
WRQV268	2	36	33	44.7	N	87	14	19.8	W	57.5	324.6	466.9250	57.88	-109.86	-16.5	-68.49	-116.73	-2.00	-58.78							
WQBP922	1	35	42	42	N	86	58	49	W	48.7	192.2	467.3875	62.47	-115.94	-16.5	-69.98	-115.29	-2.00	-58.83							
WRPC813	2	36	34	58.7	N	87	15	56.6	W	60.8	324.0	466.7625	57.88	-109.53	-16.5	-68.15	-117.21	-2.00	-58.92							
WQF929	12	36	37	14.1	N	87	15	42.5	W	64	326.5	466.8000	58.37	-109.60	-16.5	-67.73	-117.66	-2.00	-58.95							
WQQT757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	467.3625	65.47	-115.30	-16.5	-66.33	-119.09	-2.00	-58.98							
WRUN723	9	35	56	53.4	N	87	8	26.4	W	32.7	229.2	465.1750	54.38	-111.47	-16.5	-73.59	-111.79	-2.00	-58.98							
WRUV660	1	35	30	31.3	N	86	29	38.9	W	77.8	154.4	467.3625	65.73	-115.30	-16.5	-66.07	-119.36	-2.00	-58.99							
WRD6061	2	36	37	30.9	N	87	15	24.4	W	64.2	326.5	466.4300	58.61	-109.89	-16.5	-67.78	-116.50	-2.00	-59.03							
WRAT624	3	35	57	3.9	N	87	8	16	W	53.4	229.3	465.1123	54.38	-111.86	-16.5	-67.53	-114.59	-2.00	-59.03							
WPYD562	6	36	30	12.2	N	87	19	33	W	53.5	318.9	465.8793	56.29	-109.16	-16.5	-69.37	-116.10	-2.00	-59.04							
WQYB25	5	36	16	32.4	N	87	7	5.3	W	27.2	303.6	465.6250	51.53	-110.30	-16.5	-75.27	-110.20	-2.00	-59.06							
WQKQ440	2	35	47	58.4	N	86	23	32.7	W	57.1	131.6	467.4500	66.23	-118.57	-16.5	-68.86	-116.68	-2.00	-59.09							
WQYB25	5	36	16	32.4	N	87	7	5.3	W	27.2	303.6	465.6250	51.53	-110.34	-16.5	-75.30	-110.20	-2.00	-59.09							
WRB8271	2	36	37	9.3	N	87	15	42.9	W	63.9	326.4	466.8813	58.37	-109.77	-16.5	-67.90	-117.64	-2.00	-59.11							
WRCM610	1	36	30	14.7	N	87	15	28.6	W	53.5	319.1	465.8500	56.53	-109.71	-16.5	-69.66	-116.10	-2.00	-59.33							
WRP319	3	36	42	21.3	N	87	10	10	W	74.1	206.6	465.4000	60.35	-110.89	-16.5	-69.43	-114.21	-2.00	-59.31							
WQH777	1	36	35	50.4	N	86	36	30	W	74.1	206.4	467.3875	65.47	-115.94	-16.5	-66.97	-119.09	-2.00	-59.63							
WQH777	1	36	35	50.4	N	86	13	10	W	74.1	206.6	467.3875	65.47	-115.94	-16.5	-68.71	-117.44	-2.00	-59.71							
WQUN476	2	36	36	14.4	N	87	15	37.5	W	62.4	325.6	467.0375	58.13	-110.34	-16.5	-66.25	-119.98	-2.00	-59.78							
WPLT259	1	35	29	11.3	N	86	24	33	W	83.5	150.4	467.3750	65.87	-115.62	-16.5	-66.25	-119.98	-2.00	-59.78							
WQBY325	5	36	16	32.4	N	87	7	5.3	W	27.2	303.6	465.3375	51.53	-110.98	-16.5	-75.95	-110.20	-2.00	-59.81							
WRCL978	20	35	57	36.9	N	86	31	19	W	36.9	122.9	467.5125	66.29	-123.23	-16.5	-73.44	-112.89	-2.00	-59.88							
WQAZ704	3	36	4	26.9	N	87	23	3.5	W	47.3	261.1	467.9750	49.59	-104.45	-16.5	-71.36	-115.05	-2.00	-59.96							
WQB325	5	36	16	32.4	N	87	7	5.3	W	27.2	303.6	465.2750	51.53	-111.21	-16.5	-69.37	-117.28	-2.00	-60.22							
WRW547	2	36	30	37.1</td																						

Appendix A: WiIw-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WiIw (km)	Az From WiIw	LMR Frequency (MHz)	WiIw ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering signal field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WiIw (deg)	WiIw Elevation Pattern (dB)	Field Strength (dBu)
WNPZ334	5	36	30	34.2	N	87	21	5	W	59.8	313.4	467.0500	54.96	-110.45	-16.5	-71.99	-117.07	-2.00	-62.62					
WPMM435	2	36	32	14	N	87	25	41	W	66.8	311.0	464.7500	54.49	-109.93	-16.5	-72.42	-118.02	-2.00	-63.64					
WNPZ352	5	36	29	8.7	N	87	22	16.4	W	57.1	307.5	465.4500	53.68	-109.00	-16.5	-72.42	-116.66	-2.00	-62.65					
WNPZ352	6	36	27	8.7	N	87	22	16.4	W	57.1	307.5	465.3875	53.68	-109.00	-16.5	-72.42	-116.66	-2.00	-62.65					
WNPZ352	5	36	27	8.7	N	87	22	16.4	W	57.1	307.5	465.3125	53.68	-109.00	-16.5	-72.42	-116.66	-2.00	-62.65					
WNPZ352	9	36	27	8.7	N	87	22	16.4	W	57.1	307.5	465.3844	53.68	-109.01	-16.5	-72.42	-116.66	-2.00	-62.66					
WQFW615	7	36	6	26.8	N	87	12	59.8	W	31.8	263.4	465.4500	49.72	-110.76	-16.5	-77.54	-111.56	-2.00	-62.69					
WQEF521	1	36	28	2	N	86	28	37	W	50.3	43.7	467.5125	66.14	-123.23	-16.5	-73.60	-115.58	-2.00	-62.73					
WPLT529	1	35	29	11.3	N	86	24	33	W	83.5	150.4	467.5000	65.87	-118.57	-16.5	-69.19	-119.98	-2.00	-62.73					
WPNU352	9	36	27	8.7	N	87	22	16.4	W	57.1	307.5	463.2500	53.08	-109.09	-16.5	-72.51	-116.66	-2.00	-62.74					
WRW693	1	36	44	42.5	N	86	34	5.8	W	72.2	21.5	467.4625	65.53	-119.50	-16.5	-70.47	-118.72	-2.00	-62.74					
WNVA319	3	36	33	38.2	N	87	23	7	W	65.9	315.2	465.5375	55.50	-110.27	-16.5	-71.27	-117.89	-2.00	-62.75					
WPB8475	3	36	27	9.2	N	87	22	16	W	57.1	307.6	465.6252	53.08	-109.11	-16.5	-72.53	-116.66	-2.00	-62.76					
WQVF591	2	35	31	36.3	N	87	14	30	W	76.1	206.5	467.3000	60.15	-113.71	-16.5	-70.06	-119.17	-2.00	-62.79					
WPNU352	5	36	27	8.7	N	87	22	16.4	W	57.1	307.5	466.6125	53.08	-109.21	-16.5	-72.63	-116.66	-2.00	-62.86					
WNVA319	3	36	33	38.2	N	87	23	7	W	65.9	315.2	465.5875	55.50	-110.40	-16.5	-71.40	-117.89	-2.00	-62.88					
WQEF521	3	36	35	51	N	86	24	18.1	W	52	120.7	465.4500	66.25	-123.12	-16.5	-72.02	-117.59	-2.00	-62.90					
WGCS11	2	36	31	48.5	N	87	24	16	W	61	314.8	465.4500	55.23	-110.76	-16.5	-72.32	-117.30	-2.00	-62.92					
WPMM435	2	36	31	12.3	N	87	23	44	W	66.8	311.0	463.2500	54.38	-109.24	-16.5	-71.36	-118.02	-2.00	-62.95					
WNPV397	10	36	27	8.7	N	87	22	16.4	W	57.1	307.5	466.1250	53.08	-109.38	-16.5	-72.80	-116.65	-2.00	-63.03					
WNPZ334	5	36	30	34.2	N	87	21	5	W	59.8	313.4	467.3000	54.96	-110.87	-16.5	-72.41	-117.07	-2.00	-63.05					
WNPZ352	5	36	27	8.7	N	87	22	16.4	W	57.1	307.5	466.7125	53.08	-109.42	-16.5	-72.84	-116.66	-2.00	-63.07					
WNPV397	10	36	27	8.7	N	87	22	16.4	W	57.1	307.5	466.7250	53.08	-109.55	-16.5	-72.97	-116.66	-2.00	-63.20					
WRJ641	4	36	32	40	N	87	21	53.8	W	63.4	315.2	467.1250	55.50	-111.08	-16.5	-72.08	-117.58	-2.00	-63.23					
WQLH735	1	36	36	57.5	N	87	26	51.5	W	74.2	315.6	466.8625	55.50	-109.73	-16.5	-70.74	-118.94	-2.00	-63.24					
WPB8475	3	36	27	9.2	N	87	22	16	W	57.1	307.6	466.8125	53.08	-109.63	-16.5	-73.05	-116.67	-2.00	-63.28					
WNPV397	10	36	27	8.7	N	87	22	16.4	W	57.1	307.5	466.8250	53.08	-109.66	-16.5	-73.07	-116.67	-2.00	-63.31					
WRJ658	1	36	31	37.2	N	87	21	30.5	W	61.6	314.3	465.2875	55.23	-111.18	-16.5	-72.44	-117.30	-2.00	-63.34					
WQZQ503	1	35	45	10.1	N	86	58	5	W	44	192.1	467.4875	62.47	-121.37	-16.5	-75.40	-114.41	-2.00	-63.37					
WQZH453	3	36	32	3.3	N	87	20	23.9	W	61	316.0	467.2125	55.76	-111.83	-16.5	-72.57	-117.25	-2.00	-63.38					
WPNS974	1	36	40	1	N	87	27	24	W	78.9	318.1	467.0125	56.29	-110.13	-16.5	-70.34	-119.48	-2.00	-63.38					
WNU681	5	35	24	13.7	N	87	22	22.8	W	64.3	465.4500	55.50	-111.15	-16.5	-72.15	-117.61	-2.00	-63.40						
WPVW584	3	36	40	6.8	N	87	28	40.4	W	50	320.6	466.9300	56.79	-109.24	-16.5	-69.32	-116.22	-2.00	-63.40					
WPSS35	10	36	31	32.6	N	87	21	33.5	W	51.6	314.2	465.4200	55.23	-111.30	-16.5	-72.57	-117.30	-2.00	-63.46					
WPSS35	10	36	31	32.6	N	87	21	33.5	W	61.6	314.2	465.4375	55.23	-111.31	-16.5	-72.57	-117.30	-2.00	-63.47					
WPSS35	10	36	31	32.6	N	87	21	33.5	W	61.6	314.2	465.2344	55.23	-111.31	-16.5	-72.58	-117.30	-2.00	-63.47					
WTRJ433	1	35	35	49.9	N	87	4	20.7	W	63.1	197.2	467.4375	61.75	-117.63	-16.5	-72.39	-117.55	-2.00	-63.49					
WQLH735	6	36	40	53.2	N	87	29	20.2	W	82	317.3	466.8625	56.03	-109.73	-16.5	-70.20	-119.81	-2.00	-63.58					
WPMM435	2	36	32	1.2	N	87	25	44	W	66.8	311.0	465.7500	54.38	-109.91	-16.5	-72.03	-118.01	-2.00	-63.63					
WQLH735	4	36	40	0.4	N	87	29	17.7	W	80.8	316.6	465.8625	55.76	-109.73	-16.5	-70.48	-119.68	-2.00	-63.73					
WQZC684	2	36	35	42.2	N	87	17	37	W	62.4	322.3	467.3000	57.35	-113.71	-16.5	-72.86	-117.45	-2.00	-63.86					
WQH735	5	36	40	15.4	N	87	30	24.2	W	82.3	316.0	466.8625	55.76	-109.73	-16.5	-70.48	-119.84	-2.00	-63.89					
WRU604	2	36	31	46	N	87	21	35.1	W	61.9	314.5	467.2000	55.23	-111.72	-16.5	-72.99	-117.37	-2.00	-63.92					
WQVF591	2	35	31	36.3	N	87	14	30	W	76.1	205.5	467.3500	60.15	-114.98	-16.5	-71.34	-119.17	-2.00	-64.07					
WQFH533	1	36	13	48	N	87	2	47	W	19	301.5	467.4375	50.73	-117.63	-16.5	-83.40	-107.12	-2.00	-64.08					
WRQ421	1	35	46	10.4	N	86	55	34.3	W	41.6	187.5	467.5125	63.11	-123.23	-16.5	-76.62	-113.93	-2.00	-64.10					
WRB412	1	35	46	20.4	N	87	20	34.1	W	44.6	259.4	466.8625	49.41	-109.06	-16.5	-76.15	-114.51	-2.00	-64.23					
WQH735	3	36	24	27.9	N	87	23	52.1	W	73.4	311.3	466.6232	49.48	-109.73	-16.5	-71.31	-118.85	-2.00	-64.27					
WRQ412	2	36	14	57.3	N	87	17	30.8	W	67.5	307.5	466.6232	49.38	-109.94	-16.5	-73.07	-113.65	-2.00	-64.29					
WRK8771	2	36	27	9.3	N	87	15	42.9	W	63.9	326.4	467.3500	58.37	-114.98	-16.5	-73.11	-117.65	-2.00	-64.32					
WQDQ1717	1	36	34	15.7	N	87	14	16.8	W	58.3	325.2	467.3750	58.13	-115.62	-16.5	-73.99	-116.							

Appendix A: WIW-LD Ch14 Nashville

LMR Interference Protection Calculations

Interference criteria (typical LM receiver sensitivity): 17.0 dBu

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	LMR Frequency (MHz)	WIW ERP H+V (dBm)	Transmitter + Filter Net Attenuation (dB)	DTV Coupling into LM for LM=11.2 kHz (dB)	Worst case Power on LMR Frequency (dBm)	Free Space Loss (dB)	LM line loss (dB)	SORTED					
																			Calculated interfering signal field strength (dBu)	LM Bandwidth (kHz)	Coupling Adjustment (dB)	Depression Angle from WIW (deg)	WIW Elevation Pattern (dB)	Field Strength (dBu)
WRKQ705	1	36	42	47.6 N	86	34	25.1 W			68.7	22.2	467.5125	65.57	-123.23	-16.5	-74.16	-118.28	-2.00	-66.00					
WQ14549	1	35	45	33.8 N	85	57	26.1 W			44.9	19.6	467.3250	62.75	-124.16	-16.5	-71.50	-119.50	-2.00	-66.06					
WPKC549	1	35	45	50.4 N	87	23	4 W			53.9	327.9	467.3250	58.61	-114.35	-16.5	-72.23	-120.32	-2.00	-66.11					
WPKM4435	2	36	39	1.2 N	89	25	44 W			66.8	311.0	467.2500	54.38	-112.49	-16.5	-74.55	-118.04	-2.00	-66.15					
WN1Q538	5	36	10	56.3 N	87	20	14.2 W			42.7	276.4	465.0750	49.76	-111.73	-16.5	-78.47	-114.11	-2.00	-66.18					
WN1Q538	2	36	10	59.2 N	87	20	20 W			42.8	276.5	465.0500	49.76	-111.73	-16.5	-78.53	-114.13	-2.00	-66.26					
WQF472	2	36	14	57.1 N	87	17	39.8 W			40.4	287.4	467.2500	49.38	-111.93	-16.5	-79.06	-113.67	-2.00	-66.28					
WQZG684	3	36	35	4.2 N	87	17	37 W			62.4	322.3	467.4000	57.35	-116.26	-16.5	-75.41	-117.45	-2.00	-66.41					
WPYD562	4	36	32	41 N	87	30	3 W			72.5	308.5	467.1375	53.42	-111.19	-16.5	-74.27	-118.75	-2.00	-66.57					
WNPK418	3	36	5	48.7 N	87	25	3.5 W			49.9	264.5	465.4000	49.76	-110.89	-16.5	-77.63	-115.47	-2.00	-66.69					
WRNA496	1	35	56	32 N	87	19	23 W			46.7	241.9	465.0000	50.22	-111.92	-16.5	-78.20	-114.89	-2.00	-66.69					
WQWF642	1	36	2	21 N	87	19	32 W			42.9	254.8	467.2125	49.38	-111.83	-16.5	-78.95	-114.19	-2.00	-66.70					
WPQCS45	1	36	48	9.2 N	87	23	4 W			86.9	327.9	467.3500	58.61	-114.98	-16.5	-72.87	-120.32	-2.00	-66.75					
WQFW615	4	36	5	50.8 N	87	25	57.4 W			51.3	264.8	465.6250	49.76	-110.72	-16.5	-77.47	-115.71	-2.00	-66.77					
WQWP550	6	36	43	55 N	87	28	2 W			84.9	320.9	467.2875	56.79	-113.39	-16.5	-73.10	-120.12	-2.00	-66.78					
WQFW615	4	36	5	50.8 N	87	25	57.4 W			51.3	264.8	465.4375	49.76	-110.79	-16.5	-77.53	-115.71	-2.00	-66.83					
WQX35	1	36	0	48.9 N	87	20	9.4 W			44.7	251.5	467.3250	49.41	-111.13	-16.5	-78.91	-118.51	-2.00	-66.88					
WQZB260	6	36	56	44.2 N	87	65	12.8 W			46.6	324.7	467.4375	57.88	-112.63	-16.5	-76.26	-117.09	-2.00	-66.90					
WN1Q538	3	36	5	52.2 N	87	25	54 W			51.2	264.8	465.4000	49.76	-110.89	-16.5	-77.63	-115.69	-2.00	-66.91					
WQFW615	4	36	5	50.8 N	87	25	57.4 W			51.3	264.8	465.1875	49.76	-111.44	-16.5	-78.18	-115.70	-2.00	-67.48					
WNPK418	3	36	5	48.7 N	87	25	3.5 W			49.9	264.5	465.0500	49.76	-111.79	-16.5	-78.53	-115.46	-2.00	-67.60					
WQVF591	2	35	31	36.3 N	87	14	30 W			76.1	206.5	467.4500	60.15	-118.57	-16.5	-74.92	-119.17	-2.00	-67.65					
WQST213	1	36	31	34.4 N	87	16	44.3 W			56.6	319.2	467.4375	56.55	-117.63	-16.5	-77.58	-116.60	-2.00	-67.74					
WQB9560	3	36	15	24 N	87	37	38 W			69.7	280.9	466.6250	49.55	-108.90	-16.5	-75.85	-118.39	-2.00	-67.81					
WN1Q538	3	36	5	52.2 N	87	25	54 W			51.2	264.8	465.5000	49.76	-111.79	-16.5	-78.53	-115.69	-2.00	-67.82					
WQFW615	9	36	13	35.6 N	87	26	25.8 W			52.6	280.6	465.1750	49.55	-111.47	-16.5	-78.42	-115.92	-2.00	-67.94					
WQWP550	6	36	43	55 N	87	28	2 W			84.9	320.9	467.3375	56.79	-114.67	-16.5	-74.37	-120.12	-2.00	-68.05					
WNWU391	3	36	19	56.2 N	87	25	43 W			54.9	293.0	467.1500	49.57	-111.30	-16.5	-78.22	-116.33	-2.00	-68.12					
WQF421	1	36	31	15.6 N	87	20	43.8 W			60.3	314.7	467.4000	55.23	-116.26	-16.5	-77.53	-117.15	-2.00	-68.23					
WPQCS45	1	36	48	9.2 N	87	23	4 W			86.9	327.9	467.4250	58.61	-116.90	-16.5	-74.79	-120.32	-2.00	-68.67					
WQB9560	3	36	15	24 N	87	37	38 W			69.7	280.9	466.5975	49.55	-109.99	-16.5	-76.94	-118.40	-2.00	-68.91					
WQW615	13	36	43	55 N	87	30	45 W			59.4	281.1	467.3250	49.48	-111.61	-16.5	-78.53	-116.60	-2.00	-69.06					
WQW615	1	36	43	55 N	87	28	2 W			59.4	320.9	467.3250	56.79	-112.90	-16.5	-75.55	-119.12	-2.00	-69.13					
WKG308	2	35	16	14.2 N	87	4	5 W			23.2	308.5	467.2500	53.42	-124.16	-16.5	-87.24	-108.86	-2.00	-69.65					
WKHV238	2	36	39	38.9 N	87	26	16.5 W			77.2	318.6	467.4375	56.29	-116.90	-16.5	-77.11	-119.30	-2.00	-69.96					
WRR661	2	36	2	57 N	87	20	51 W			44.6	256.9	467.3500	49.41	-114.98	-16.5	-82.08	-114.53	-2.00	-70.16					
WQF427	7	35	49	39.2 N	87	34	2 W			72.2	241.3	465.0750	50.22	-111.70	-16.5	-77.98	-118.67	-2.00	-70.25					
WQH507	2	36	6	21.7 N	87	38	9.5 W			69.5	267.0	465.6250	49.91	-111.76	-16.5	-78.35	-118.34	-2.00	-70.29					
WQF421	1	36	31	15.6 N	87	20	43.8 W			60.3	314.7	467.4500	55.23	-118.57	-16.5	-79.83	-117.15	-2.00	-70.54					
WQX835	1	36	0	48.9 N	87	20	9.1 W			44.7	251.6	467.3625	49.34	-115.30	-16.5	-82.46	-114.55	-2.00	-70.57					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.3313	49.78	-111.06	-16.5	-77.78	-119.21	-2.00	-70.59					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.6250	49.78	-111.23	-16.5	-77.95	-119.21	-2.00	-70.76					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.6250	49.78	-111.24	-16.5	-77.96	-119.21	-2.00	-70.77					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.2594	49.78	-111.25	-16.5	-77.97	-119.21	-2.00	-70.77					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.1188	49.78	-111.61	-16.5	-78.33	-119.21	-2.00	-71.14					
WQD754	7	36	25	52.1 N	87	38	28.6 W			76.8	295.1	465.6888	49.78	-111.74	-16.5	-78.46	-119.21	-2.00	-71.27					
WRR6229	2	35	23	53.6 N	87	30	15.4 W			64.1	291.4	467.4375	49.85	-114.35	-16.5	-81.10	-117.68	-2.00	-72.53					
WPSP494	1	36	60	1.1 N	87	27	24 W			78.9	318.1	467.4375	56.29	-110.49	-16.5	-79.71	-114.49	-2.00	-72.75					
WKR271	2	36	57	0.3 N	87	15	42.9 W			61.9	326.4	467.5375	58.57	-112.10	-16.5	-83.22	-117.66	-2.00	-74.43					
WOZH453	3	36	32	3.3 N	87	20	23.9 W			61	316.0	467.5123	55.76	-122.23	-16.5	-83.97	-117.25	-2.00	-74.78					
WRMV710	1	36	49	3.1 N	87	25	16.6 W			90.1	326.7	467.5123	58.37	-123.23	-16.5	-81.36	-120.64	-2.00	-75.55					
WQZ639</																								

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQVI301	3	36	8	5N		86	51	25.9W		1	132.1	470.0000	66.20	-26.8	-80.00	-81.59	-2.00	-124.19
WQVI301	3	36	8	5N		86	51	25.9W		1	132.1	470.0000	66.20	-26.8	-80.00	-81.59	-2.00	-124.19
WQRF789	1	36	7	43N		86	51	8W		1.8	138.6	470.0000	66.12	-26.8	-80.00	-86.70	-2.00	-129.37
WQRF789	1	36	7	43N		86	51	8W		1.8	138.6	470.0000	66.12	-26.8	-80.00	-86.70	-2.00	-129.37
WRBQ360	4	36	7	43.9N		86	50	38.7W		2.3	124.6	470.0000	66.28	-26.8	-80.00	-88.83	-2.00	-131.35
WRCP268	1	36	7	11N		86	51	11.4W		2.6	154.6	470.0000	65.73	-26.8	-80.00	-89.89	-2.00	-132.96
WQVZ398	2	36	7	44.1N		86	50	13.7W		2.9	117.4	470.0000	66.33	-26.8	-80.00	-90.84	-2.00	-133.31
WQNR670	1	36	7	20.4N		86	52	15.7W		2.1	193.4	470.0000	62.33	-26.8	-80.00	-88.04	-2.00	-134.51
WQNR670	1	36	7	20.4N		86	52	15.7W		2.1	193.4	470.0000	62.33	-26.8	-80.00	-88.04	-2.00	-134.51
WRFU298	2	36	9	53N		86	50	32W		3.4	38.3	470.0000	66.05	-26.8	-80.00	-92.22	-2.00	-134.97
WRBU943	7	36	10	17.8N		86	51	37.8W		3.4	7.6	470.0000	64.54	-26.8	-80.00	-92.22	-2.00	-136.49
WOYS266	8	36	8	32N		86	49	17.7W		4.4	88.0	470.0000	66.50	-26.8	-80.00	-94.46	-2.00	-136.76
WOWA791	6	36	9	51.3N		86	49	21.7W		4.7	55.9	470.0000	66.27	-26.8	-80.00	-95.03	-2.00	-137.56
WOWA791	1	36	9	51.3N		86	49	21.7W		4.7	55.9	470.0000	66.27	-26.8	-80.00	-95.03	-2.00	-137.56
WOWA791	1	36	9	51.3N		86	49	21.7W		4.7	55.9	470.0000	66.27	-26.8	-80.00	-95.03	-2.00	-137.56
WRAF470	1	36	10	5.7N		86	49	33.9W		4.7	49.3	470.0000	66.21	-26.8	-80.00	-95.03	-2.00	-137.62
WORV472	2	36	8	36.4N		86	48	39.3W		4.9	86.6	470.0000	66.48	-26.8	-80.00	-95.40	-2.00	-137.72
WQQA514	4	36	8	38.5N		86	48	35.1W		5	85.9	470.0000	66.47	-26.8	-80.00	-95.57	-2.00	-137.90
WRAC915	2	36	8	43.1N		86	48	32.4W		5.1	84.4	470.0000	66.46	-26.8	-80.00	-95.74	-2.00	-138.08
WRAQ869	3	36	8	45.6N		86	48	33.5W		5.1	83.5	470.0000	66.45	-26.8	-80.00	-95.89	-2.00	-138.09
WGWP944	1	36	9	8.2N		86	48	38.8W		5.1	75.5	470.0000	66.42	-26.8	-80.00	-95.74	-2.00	-138.13
WOXS203	6	36	10	48.8N		86	51	6.8W		4.5	470.0000	65.15	-26.8	-80.00	-94.66	-2.00	-138.31	
WOXS203	6	36	10	48.8N		86	51	6.8W		4.5	15.6	470.0000	65.15	-26.8	-80.00	-94.66	-2.00	-138.31
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WOXF625	2	36	9	12.5N		86	48	32.3W		5.3	74.5	470.0000	66.41	-26.8	-80.00	-96.08	-2.00	-138.47
WPUE564	1	36	9	10.7N		86	48	28W		5.4	75.4	470.0000	66.42	-26.8	-80.00	-96.24	-2.00	-138.62
WPUE564	1	36	9	10.7N		86	48	28W		5.4	75.4	470.0000	66.42	-26.8	-80.00	-96.24	-2.00	-138.62
WRJU850	2	36	9	13.4N		86	48	14.6W		5.7	75.4	470.0000	66.42	-26.8	-80.00	-96.71	-2.00	-139.09
WNBH581	4	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000	66.50	-26.8	-80.00	-96.86	-2.00	-139.16
WNUN714	2	36	8	33.2N		86	48	3W		5.8	88.1	470.0000						

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WOAY855	1	36	9	41N		86	48	14W		6	67.6	470.0000	66.36	-26.8	-80.00	-97.15	-2.00	-139.59
WRKE317	2	36	9	58.9N		86	48	24.8W		6	61.7	470.0000	66.32	-26.8	-80.00	-97.15	-2.00	-139.64
WRAA595	1	36	8	54.4N		86	47	53W		6.1	82.0	470.0000	66.44	-26.8	-80.00	-97.30	-2.00	-139.65
WRKY207	1	36	11	11.4N		86	50	23.9W		5.6	24.3	470.0000	65.65	-26.8	-80.00	-96.56	-2.00	-139.71
WRJZ492	2	36	9	53.8N		86	48	15.4W		6.1	64.0	470.0000	66.34	-26.8	-80.00	-97.30	-2.00	-139.76
WQOJ307	2	36	10	3.2N		86	48	25W		6.1	60.5	470.0000	66.30	-26.8	-80.00	-97.30	-2.00	-139.79
WOYC590	3	36	10	3.2N		86	48	25W		6.1	60.5	470.0000	66.30	-26.8	-80.00	-97.30	-2.00	-139.79
WQSY470	3	36	10	3.2N		86	48	25W		6.1	60.5	470.0000	66.30	-26.8	-80.00	-97.30	-2.00	-139.79
WQXR609	2	36	6	0.5N		86	49	16.6W		6	138.7	470.0000	66.12	-26.8	-80.00	-97.15	-2.00	-139.83
WQNU208	1	36	11	6.2N		86	49	35.7W		6	35.4	470.0000	65.99	-26.8	-80.00	-97.15	-2.00	-139.96
WNVFV433	2	36	8	5.2N		86	47	40W		6.4	96.0	470.0000	66.46	-26.8	-80.00	-97.72	-2.00	-140.05
WNVFV433	3	36	8	5.2N		86	47	40W		6.4	96.0	470.0000	66.46	-26.8	-80.00	-97.72	-2.00	-140.05
WQOB399	2	36	7	56.6N		86	47	44W		6.4	98.5	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WQOG229	2	36	7	56.5N		86	47	41W		6.4	98.4	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WQQM206	1	36	7	56.6N		86	47	44W		6.4	98.5	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WQOB399	2	36	7	56.6N		86	47	44W		6.4	98.5	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WREP474	1	36	8	57.1N		86	47	43.9W		6.4	81.6	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WREP474	1	36	8	57.1N		86	47	43.9W		6.4	81.6	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WREP474	1	36	8	57.1N		86	47	43.9W		6.4	81.6	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WREP474	1	36	8	57.1N		86	47	43.9W		6.4	81.6	470.0000	66.44	-26.8	-80.00	-97.72	-2.00	-140.07
WRHY470	1	36	9	6.3N		86	47	35.3W		6.6	79.4	470.0000	66.43	-26.8	-80.00	-97.98	-2.00	-140.35
WRHY470	1	36	9	6.3N		86	47	35.3W		6.6	79.4	470.0000	66.43	-26.8	-80.00	-97.98	-2.00	-140.35
WRFC809	1	36	9	6.2N		86	47	35.2W		6.6	79.4	470.0000	66.43	-26.8	-80.00	-97.98	-2.00	-140.35
WRVM952	2	36	9	16.6N		86	47	38.5W		6.6	76.6	470.0000	66.42	-26.8	-80.00	-97.98	-2.00	-140.37
WRWE360	1	36	5	35N		86	49	32W		6.4	145.9	470.0000	65.99	-26.8	-80.00	-97.72	-2.00	-140.52
WRWE360	1	36	5	35N		86	49	32W		6.4	145.9	470.0000	65.99	-26.8	-80.00	-97.72	-2.00	-140.52
WRWE360	1	36	5	35N		86	49	32W		6.4	145.9	470.0000	65.99	-26.8	-80.00	-97.72	-2.00	-140.52
WQVJ828	2	36	9	22.7N		86	47	33.6W		6.8	75.2	470.0000	66.42	-26.8	-80.00	-98.24	-2.00	-140.63
WQVQ523	3	36	5	45.2N		86	49	0W		6.7	138.7	470.0000	66.12	-26.8	-80.00	-98.11	-2.00	-140.79
WQVQ523	1	36	5	45.2N		86	49	0W		6.7	138.7	470.0000	66.12	-26.8	-80.00	-98.11	-2.00	-140.79
WQOX314	1	36	5	31.1N		86	51	48.9W		5.4	178.1	470.0000	64.10	-26.8	-80.00	-96.24	-2.00	-140.94
WRBS946	2	36	9	54.1N		86	47	34.9W		7.1	67.5	470.0000	66.36	-26.8	-80.00	-98.62	-2.00	-141.06
WQVZ577	1	36	10	43.3N		86	52	41.3W		4.4	345.0	470.0000	62.04	-26.8	-80.00	-94.46	-2.00	-141.22
WRAR508	1	36	6	15.4N		86	47	57.5W		7.2	124.3	470.0000	66.28	-26.8	-80.00	-98.74	-2.00	-141.26
WROE559	2	36	9	11.8N		86	47	6.4W		7.4	79.1	470.0000	66.43	-26.8	-80.00	-98.98	-2.00	-141.34
WRJV620	7	36	9	26.6N		86	47	8.1W		7.4	75.6	470.0000	66.42	-26.8	-80.00	-98.98	-2.00	-141.36
WRJV620	7	36	9	26.6N		86	47	8.1W		7.4	75.6	470.0000	66.42	-26.8	-80.00	-98.98	-2.00	-141.36
WNYK915	3	36	10	3.7N		86	47	23.8W		7.4	66.2	470.0000	66.35	-26.8	-80.00	-98.98	-2.00	-141.42
WNYK915	3	36	10	3.7N		86	47	23.8W		7.4	66.2	470.0000	66.35	-26.8	-80.00	-98.98	-2.00	-141.42
WNYK915	3	36	10	3.7N		86	47	23.8W		7.4	66.2	470.0000	66.35	-26.8	-80.00	-98.98	-2.00	-141.42
WRJV620	9	36	9	29.8N		86	47	5.7W		7.5	75.0	470.0000	66.42	-26.8	-80.00	-99.09	-2.00	-141.48
WRJV620	9	36	9	29.8N		86	47	5.7W		7.5	75.0	470.0000	66.42	-26.8	-80.00	-99.09	-2.00	-141.48
WNNG984	2	36	9	29.2N		86	47	4W		7.5	75.2	470.0000	66.42	-26.8	-80.00	-99.09	-2.00	-141.48
WQQB216	1	36	9	28.6N		86	47	1.7W		7.6	75.4	470.0000	66.42	-26.8	-80.00	-99.21	-2.00	-141.59
WQQB216	1	36	9	28.6N		86	47	1.7W		7.6	75.4	470.0000	66.42	-26.8	-80.00	-99.21	-2.00	-141.59
WQDM594	3	36	9	30.7N		86	47	3W		7.6	74.9	470.0000	66.41	-26.8	-80.00	-99.21	-2.00	-141.60
WQKN467	2	36	9	41.1N		86	47	4.9W		7.6	72.5	470.0000	66.39	-26.8	-80.00	-99.21	-2.00	-141.62
WQZA963	1	36	9	29.8N		86	46	57.2W		7.7	75.4	470.0000	66.42	-26.8	-80.00	-99.32	-2.00	-141.71
WQZA963	1	36	9	29.8N		86	46	57.2W		7.7	75.4	470.0000	66.42	-26.8	-80.00	-99.32	-2.00	-141.71
WQMM949	2	36	9	41.6N		86	47	2W		7.7	72.5	470.0000	66.39	-26.8	-80.00	-99.32	-2.00	-141.73
WQMM949	3	36	9	41.6N		86	47	2W		7.7	72.5	470.0000	66.39	-26.8	-80.00	-99.32	-2.00	-141.73
WQMM949	3	36	9	41.6N		86	47	2W		7.7	72.5	470.0000	66.39	-26.8	-80.00	-99.32	-2.00	-141.73
WQMM949	3	36	9	41.6N		86	47	2W		7.7	72.5	470.0000	66.39	-26.8	-80.00	-99.32	-2.00	-141.73
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WQYQ257	4	36	9	50N		86	47	5.4W		7.7	70.5	470.0000	66.38	-26.8	-80.00	-99.32	-2.00	-141.74
WRAN292	2	36	9	23.5N		86	46	51.3W		7.8	77.0	470.0000	66.42	-26.8	-80.00	-99.43	-2.00	-141.81
WRAN292	2	36	9	23.5N		86	46	51.3W		7.8	77.0	470.0000	66.42	-26.8	-80.00	-99.43	-2.00	-141.81
WNYK915	1	36	10	27.2N		86	47	28W		7.7	60.9	470.0000	66.30	-26.8	-80.00	-99.32	-2.00	-141.82

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED	Calculated interfering signal field strength (dBu)
WREP473	1	36	7	35.4N		86	46	36.7W		8.1	101.3	470.0000	66.43	-26.8	-80.00	-99.76	-2.00	-142.13	
WOXQ340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WPXE452	2	36	9	33N		86	46	42W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WOQX340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WOQX340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WPXE452	2	36	9	33N		86	46	42W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WOQX340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WPXE452	2	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WOQX340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WPXE452	2	36	9	33N		86	46	42W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WOQX340	3	36	9	33N		86	46	42.7W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WPYP461	6	36	9	32.9N		86	46	42.6W		8.1	75.4	470.0000	66.42	-26.8	-80.00	-99.76	-2.00	-142.15	
WRJX461	2	36	9	37.7N		86	46	45.3W		8.1	74.2	470.0000	66.41	-26.8	-80.00	-99.76	-2.00	-142.15	
WRJQ329	2	36	9	40.1N		86	46	42.7W		8.1	73.9	470.0000	66.40	-26.8	-80.00	-99.76	-2.00	-142.16	
WRJQ329	2	36	9	40.1N		86	46	42.7W		8.1	73.9	470.0000	66.40	-26.8	-80.00	-99.76	-2.00	-142.16	
WQSI477	2	36	10	49.8N		86	52	55.9W		4.6	341.3	470.0000	61.45	-26.8	-80.00	-94.85	-2.00	-142.20	
WRMM801	1	36	7	45.2N		86	46	32W		8.2	99.0	470.0000	66.44	-26.8	-80.00	-99.87	-2.00	-142.23	
WQRA699	2	36	9	25.9N		86	46	36.2W		8.2	77.1	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WQVL563	2	36	9	26N		86	46	37W		8.2	77.1	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WQRA699	2	36	9	25.9N		86	46	36.2W		8.2	77.1	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WQRA699	2	36	9	25.9N		86	46	36.2W		8.2	77.1	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WOTK807	2	36	9	29N		86	46	36.6W		8.2	76.5	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WOTK807	2	36	9	29N		86	46	36.6W		8.2	76.5	470.0000	66.42	-26.8	-80.00	-99.87	-2.00	-142.25	
WQVE781	1	36	9	37.9N		86	46	41.9W		8.2	74.4	470.0000	66.41	-26.8	-80.00	-99.87	-2.00	-142.26	
WQVE781	1	36	9	37.9N		86	46	41.9W		8.2	74.4	470.0000	66.41	-26.8	-80.00	-99.87	-2.00	-142.26	
WRFFF880	3	36	9	40.4N		86	46	42.5W		8.2	73.8	470.0000	66.40	-26.8	-80.00	-99.87	-2.00	-142.26	
WRFFF880	2	36	9	40.4N		86	46	42.5W		8.2	73.8	470.0000	66.40	-26.8	-80.00	-99.87	-2.00	-142.26	
WRFFF880	2	36	9	40.4N		86	46	42.5W		8.2	73.8	470.0000	66.40	-26.8	-80.00	-99.87	-2.00	-142.26	
WRFFF880	3	36	9	40.4N		86	46	42.5W		8.2	73.8	470.0000	66.40	-26.8	-80.00	-99.87	-2.00	-142.26	
WRFFF880	3	36	9	40.4N		86	46	42.5W		8.2	73.8	470.0000	66.40	-26.8	-80.00	-99.87	-2.00	-142.26	
WREA477	3	36	9	50.4N		86	46	43.5W		8.2	71.7	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WRC524	2	36	9	51.2N		86	46	43.9W		8.2	71.5	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WRC524	2	36	9	51.2N		86	46	43.9W		8.2	71.5	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WREA477	1	36	9	50.4N		86	46	43.5W		8.2	71.7	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WVRB373	1	36	9	51.1N		86	46	46.8W		8.2	71.4	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WREA477	1	36	9	50.4N		86	46	43.5W		8.2	71.7	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WREA477	3	36	9	50.4N		86	46	43.5W		8.2	71.7	470.0000	66.39	-26.8	-80.00	-99.87	-2.00	-142.28	
WQXA961	2	36	9	57.1N		86	46	46.6W		8.2	70.1	470.0000	66.38	-26.8	-80.00	-99.87	-2.00	-142.29	
WRFF376	1	36	10	21.4N		86	46	59.3W		8.2	64.4	470.0000	66.34	-26.8	-80.00	-99.87	-2.00	-142.33	
WREJ827	2	36	9	19.8N		86	46	32.4W		8.3	78.5	470.0000	66.43	-26.8	-80.00	-99.97	-2.00	-142.35	
WRCM798	2	36	9	22.9N		86	46	31.1W		8.3	77.9	470.0000	66.42	-26.8	-80.00	-99.97	-2.00	-142.35	
WRCM798	2	36	9	22.9N		86	46	31.1W		8.3	77.9	470.0000	66.42	-26.8	-80.00	-99.97	-2.00	-142.35	
WQUN946	5	36	9	30N		86	46	33.6W		8.3	76.4	470.0000	66.42	-26.8	-80.00	-99.97	-2.00	-142.36	
WVRJ345	2	36	9	44.5N		86	46	37.2W		8.3	73.2	470.0000	66.40	-26.8	-80.00	-99.97	-2.00	-142.37	
WQGX335	3	36	11	22.7N		86	47	55.7W		8.1	47.8	470.0000	66.19	-26.8	-80.00	-99.76	-2.00	-142.37	
WQGX335	3	36	11	22.7N		86	47	55.7W		8.1	47.8	470.0000	66.19	-26.8	-80.00	-99.76	-2.00	-142.37	
WQGX335	3	36	11	22.7N		86	47	55.7W		8.1	47.8	470.0000	66.19	-26.8	-80.00	-99.76	-2.00	-142.37	
WRVX997	14	36	9	47N		86	46	40.8W		8.3	72.5	470.0000	66.39	-26.8	-80.00	-99.97	-2.00	-142.38	
WRVX997	14	36	9	47N		86	46	40.8W		8.3	72.5	470.0000	66.39	-26.8	-80.00	-99.97	-2.00	-142.38	
WQRW312	8	36	8	0.8N		86	46	20.8W		8.4	95.5	470.0000	66.47	-26.8	-80.00	-100.08	-2.00	-142.41	
WRTF788	1	36	9	16.3N		86	46	23.6W		8.4	79.6	470.0000	66.43	-26.8	-80.00	-100.08	-2.00	-142.44	
WOZN460	2	36	9	31.5N		86	46	30.9W		8.4	76.2	470.0000	66.42	-26.8	-80.00	-100.08	-2.00	-142.46	
WRCZ766	3	36	9	39.7N		86	46	32.2W		8.4	74.4	470.0000	66.41	-26.8	-80.00	-100.08	-2.00	-142.47	
WRME250	2	36	9	41.8N		86	46	32.7W		8.4	74.0	470.0000	66.41	-26.8	-80.00	-100.08	-2.00	-142.47	
WRBK817	1	36	9	42.7N		86	46	32.8W		8.4	73.8	470.0000	66.40	-26.8	-80.00	-100.08	-2.00	-142.47	
WRBK817	1	36	9	42.7N		86	46	32.8W		8.4	73.8	470.0000	66.40	-26.8	-80.00	-100.08	-2.00	-142.47	
WRBS975	3	36	9	42.3N		86	46	34.7W		8.4	73.8	470.0000	66.40	-26.8	-80.00	-100.08	-2.00	-142.47	
WRBS975	2	36	9	42.3N		86	46	34.7W		8.4	73.8	470.0000	66.40	-26.8	-80.00	-100.08	-2.00	-142.47	
WQYZ200	1	36	9	54.9N		86	46	38.5W		8.4	71.0	470.0000	66.39	-26.8	-80.00	-100.08	-2.00	-142.49	
WQYZ200	1	36	9	54.9N		86	46	38.5W		8.4	71.0	470.0000	66.39	-26.8	-80.00	-100.08	-2.00	-142.49	
WQYZ200	3	36	9	54.9N		86	46	38.5W		8.4	71.0	470.0000	66.39	-26.8	-80.00	-100.08	-2.00	-142.49	
WQYZ200	3	36	9	54.9N		86	46	38.5W		8.4	71.0	470.0000	66.39	-26.8	-80.00	-100.08	-2.00	-142.49	

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED	Calculated interfering signal field strength (dBu)
WOZT608	2	36	9	26.7	N	86	46	25.2	W	8.5	77.4	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WOLG653	3	36	9	27.6	N	86	46	26.2	W	8.5	77.2	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WREL815	2	36	9	27.9	N	86	46	26	W	8.5	77.1	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WQLC653	3	36	9	27.6	N	86	46	26.2	W	8.5	77.2	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WREL815	2	36	9	27.9	N	86	46	26	W	8.5	77.1	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WOZT608	3	36	9	26.7	N	86	46	25.2	W	8.5	77.4	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WRMT933	2	36	9	33.7	N	86	46	24.2	W	8.5	76.0	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WRMT933	2	36	9	33.7	N	86	46	24.2	W	8.5	76.0	470.0000	66.42	-26.8	-80.00	-100.18	-2.00	-142.56	
WRCV864	1	36	11	37.4	N	86	48	3.4	W	8.3	44.6	470.0000	66.15	-26.8	-80.00	-99.97	-2.00	-142.63	
WRKH611	8	36	9	31.4	N	86	46	22.1	W	8.6	76.5	470.0000	66.42	-26.8	-80.00	-100.28	-2.00	-142.67	
WQZX951	2	36	9	33.6	N	86	46	23.7	W	8.6	76.0	470.0000	66.42	-26.8	-80.00	-100.28	-2.00	-142.67	
WQVV639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	470.0000	66.42	-26.8	-80.00	-100.38	-2.00	-142.77	
WQVV639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	470.0000	66.42	-26.8	-80.00	-100.38	-2.00	-142.77	
WQVV639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	470.0000	66.42	-26.8	-80.00	-100.38	-2.00	-142.77	
WQVV639	1	36	9	35.2	N	86	46	18.7	W	8.7	75.9	470.0000	66.42	-26.8	-80.00	-100.38	-2.00	-142.77	
WQPL818	3	36	11	55	N	86	48	16	W	8.4	40.5	470.0000	66.09	-26.8	-80.00	-100.08	-2.00	-142.79	
WQPL818	3	36	11	55	N	86	48	16	W	8.4	40.5	470.0000	66.09	-26.8	-80.00	-100.08	-2.00	-142.79	
WQPL818	3	36	11	55	N	86	48	16	W	8.4	40.5	470.0000	66.09	-26.8	-80.00	-100.08	-2.00	-142.79	
WQPL818	3	36	11	55	N	86	48	16	W	8.4	40.5	470.0000	66.09	-26.8	-80.00	-100.08	-2.00	-142.79	
WPEX272	1	36	8	40.2	N	86	46	1	W	8.9	87.3	470.0000	66.49	-26.8	-80.00	-100.58	-2.00	-142.89	
WPEX272	1	36	8	40.2	N	86	46	1	W	8.9	87.3	470.0000	66.49	-26.8	-80.00	-100.58	-2.00	-142.89	
WQPL818	2	36	10	3	N	86	46	24	W	8.8	70.3	470.0000	66.38	-26.8	-80.00	-100.48	-2.00	-142.90	
WQPL818	2	36	10	3	N	86	46	24	W	8.8	70.3	470.0000	66.38	-26.8	-80.00	-100.48	-2.00	-142.90	
WQPL818	2	36	10	3	N	86	46	24	W	8.8	70.3	470.0000	66.38	-26.8	-80.00	-100.48	-2.00	-142.90	
WQPL818	2	36	10	3	N	86	46	24	W	8.8	70.3	470.0000	66.38	-26.8	-80.00	-100.48	-2.00	-142.90	
WQPL818	2	36	10	3	N	86	46	24	W	8.8	70.3	470.0000	66.38	-26.8	-80.00	-100.48	-2.00	-142.90	
WRCV420	1	36	11	38.8	N	86	47	44.3	W	8.6	46.6	470.0000	66.18	-26.8	-80.00	-100.28	-2.00	-142.90	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQUM756	1	36	7	51.8	N	86	46	1.5	W	8.9	97.0	470.0000	66.45	-26.8	-80.00	-100.58	-2.00	-142.93	
WQYK311	2	36	9	58.4	N	86	46	17.1	W	8.9	71.5	470.0000	66.39	-26.8	-80.00	-100.58	-2.00	-142.99	
WQYK311	2	36	9	58.4	N	86	46	17.1	W	8.9	71.5	470.0000	66.39	-26.8	-80.00	-100.58	-2.00	-142.99	
WQWB356	2	36	10	2	N	86	46	18	W	8.9	70.8	470.0000	66.38	-26.8	-80.00	-100.58	-2.00	-143.00	
WQWB356	2	36	10	2	N	86	46	18	W	8.9	70.8	470.0000	66.38	-26.8	-80.00	-100.58	-2.00	-143.00	
WPXW447	1	36	10	1.2	N	86	46	19.7	W	8.9	70.8	470.0000	66.38	-26.8	-80.00	-100.58	-2.00	-143.00	
WQQZ534	1	36	7	33	N	86	46	3.4	W	9	100.7	470.0000	66.44	-26.8	-80.00	-100.68	-2.00	-143.04	
WQQZ534	1	36	7	33	N	86	46	3.4	W	9	100.7	470.0000	66.44	-26.8	-80.00	-100.68	-2.00	-143.04	
WQVI882	2	36	7	29.6	N	86	46	2.6	W	9	101.3	470.0000	66.43	-26.8	-80.00	-100.68	-2.00	-143.04	
WQVI882	2	36	7	29.6	N	86	46	2.6	W	9	101.3	470.0000	66.43	-26.8	-80.00	-100.68	-2.00	-143.04	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQDL307	31	36	9	58.9	N	86	46	16.3	W	9	71.4	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WQPP259	3	36	6	51.7	N	86	46	13.7	W	9	109.0	470.0000	66.39	-26.8	-80.00	-100.68	-2.00	-143.09	
WCWP710	1	36	10	8	N	86	46	16.7	W	9	69.7	470.0000	66.38	-26.8	-80.00	-100.68	-2.00	-143.10	
WCWP710	1	36	10	8	N	86	46	16.7	W	9	69.7	470.0000	66.38	-26.8	-80.00	-100.68	-2.00	-143.10	
WQWW437	2	36	7	51.2	N	86	45	53.7	W	9.1	96.9	470.0000	66.46	-26.8	-80.00	-100.77	-2.00	-143.11	
WQWW437	3	36	7	51.2	N	86	45	53.7	W	9.1	96.9	470.0000	66.46	-26.8	-80.00	-100.77	-2.00	-143.11	
WQWW437	3	36	7	51.2	N	86	45	53.7	W	9.1	96.9	470.0000	66.46	-26.8	-80.00	-100.77	-2.00	-143.11	
WQOA563	33	36	10	45.8	N	86	46	38.7	W	9	61.5	470.0000	66.32	-26.8	-80.00	-100.68	-2.00	-143.16	
WQOA563	33	36	10	45.8	N	86	46	38.7	W	9	61.5	470.0000	66.32	-26.8	-80.00	-100.68	-2.00	-143.16	

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQSK787	4	36	5	50.8	N	86	45	19.2	W	11	115.9	470.0000	66.35	-26.8	-80.00	-102.42	-2.00	-144.87
WQSK787	4	36	5	50.8	N	86	45	19.2	W	11	115.9	470.0000	66.35	-26.8	-80.00	-102.42	-2.00	-144.87
WQSK787	4	36	5	50.8	N	86	45	19.2	W	11	115.9	470.0000	66.35	-26.8	-80.00	-102.42	-2.00	-144.87
WQSK787	4	36	5	50.8	N	86	45	19.2	W	11	115.9	470.0000	66.35	-26.8	-80.00	-102.42	-2.00	-144.87
WQXZ926	1	36	7	50	N	86	44	29.9	W	11.2	95.8	470.0000	66.47	-26.8	-80.00	-102.58	-2.00	-144.91
WNFL569	2	36	8	13.2	N	86	44	24	W	11.3	92.1	470.0000	66.50	-26.8	-80.00	-102.65	-2.00	-144.95
WQVD819	1	36	8	15	N	86	52	58	W	1.6	256.5	470.0000	49.41	-26.8	-80.00	-85.67	-2.00	-145.07
WQVD819	1	36	8	15	N	86	52	58	W	1.6	256.5	470.0000	49.41	-26.8	-80.00	-85.67	-2.00	-145.07
WQVD819	1	36	8	15	N	86	52	58	W	1.6	256.5	470.0000	49.41	-26.8	-80.00	-85.67	-2.00	-145.07
WQVD819	1	36	8	15	N	86	52	58	W	1.6	256.5	470.0000	49.41	-26.8	-80.00	-85.67	-2.00	-145.07
WQVD819	1	36	8	15	N	86	52	58	W	1.6	256.5	470.0000	49.41	-26.8	-80.00	-85.67	-2.00	-145.07
WQVJ344	2	36	12	53.9	N	86	47	1	W	11	41.7	470.0000	66.10	-26.8	-80.00	-102.42	-2.00	-145.12
WQVJ344	2	36	12	53.9	N	86	47	1	W	11	41.7	470.0000	66.10	-26.8	-80.00	-102.42	-2.00	-145.12
WNCG265	74	36	8	20.4	N	86	53	2.4	W	1.7	263.0	470.0000	49.72	-26.8	-80.00	-86.20	-2.00	-145.28
WNCG265	74	36	8	20.4	N	86	53	2.4	W	1.7	263.0	470.0000	49.72	-26.8	-80.00	-86.20	-2.00	-145.28
KNAF645	3	36	2	59	N	86	49	59	W	10.5	163.9	470.0000	65.28	-26.8	-80.00	-102.02	-2.00	-145.54
WPMU753	3	36	2	59.2	N	86	49	59	W	10.5	163.9	470.0000	65.28	-26.8	-80.00	-102.02	-2.00	-145.54
KNAF645	3	36	2	59	N	86	49	59	W	10.5	163.9	470.0000	65.28	-26.8	-80.00	-102.02	-2.00	-145.54
WRAS442	1	36	5	48.7	N	86	44	40.4	W	11.9	114.2	470.0000	66.35	-26.8	-80.00	-103.10	-2.00	-145.55
WRAS442	1	36	5	48.7	N	86	44	40.4	W	11.9	114.2	470.0000	66.35	-26.8	-80.00	-103.10	-2.00	-145.55
WRMG241	1	36	9	42.1	N	86	43	59	W	12.1	78.9	470.0000	66.43	-26.8	-80.00	-103.25	-2.00	-145.62
WRMG241	1	36	9	42.1	N	86	43	59	W	12.1	78.9	470.0000	66.43	-26.8	-80.00	-103.25	-2.00	-145.62
WRAR728	2	36	13	48.2	N	86	48	20.8	W	11.3	28.4	470.0000	65.80	-26.8	-80.00	-102.65	-2.00	-145.65
WRAR728	2	36	13	48.2	N	86	48	20.8	W	11.3	28.4	470.0000	65.80	-26.8	-80.00	-102.65	-2.00	-145.65
WRPI393	1	36	13	9	N	86	46	36	W	11.8	42.5	470.0000	66.12	-26.8	-80.00	-103.03	-2.00	-145.71
WRKH611	7	36	5	24.8	N	86	44	47	W	12.1	117.7	470.0000	66.33	-26.8	-80.00	-103.25	-2.00	-145.71
WQGY299	1	36	3	24.6	N	86	51	53.4	W	9.3	179.6	470.0000	64.01	-26.8	-80.00	-100.96	-2.00	-145.75
WRPH815	2	36	8	4.9	N	86	43	41.7	W	12.4	93.1	470.0000	66.49	-26.8	-80.00	-103.46	-2.00	-145.77
WOFV808	2	36	13	55.1	N	86	48	12.9	W	11.5	28.7	470.0000	65.80	-26.8	-80.00	-102.81	-2.00	-145.80
WOFV808	2	36	13	55.1	N	86	48	12.9	W	11.5	28.7	470.0000	65.80	-26.8	-80.00	-102.81	-2.00	-145.80
WRMM273	1	36	10	24	N	86	44	2.4	W	12.4	72.9	470.0000	66.39	-26.8	-80.00	-103.46	-2.00	-145.87
WRMM273	1	36	10	24	N	86	44	2.4	W	12.4	72.9	470.0000	66.39	-26.8	-80.00	-103.46	-2.00	-145.87
WQVA224	15	36	13	32.2	N	86	47	1.4	W	11.9	37.9	470.0000	66.03	-26.8	-80.00	-103.10	-2.00	-145.87
WQVA224	15	36	13	32.2	N	86	47	1.4	W	11.9	37.9	470.0000	66.03	-26.8	-80.00	-103.10	-2.00	-145.87
WRCK251	1	36	11	39.4	N	86	44	38.1	W	12.4	61.4	470.0000	66.32	-26.8	-80.00	-103.46	-2.00	-145.94
WRCK251	1	36	11	39.4	N	86	44	38.1	W	12.4	61.4	470.0000	66.32	-26.8	-80.00	-103.46	-2.00	-145.94
WRUS307	2	36	9	26.2	N	86	43	19.3	W	13	81.9	470.0000	66.44	-26.8	-80.00	-103.87	-2.00	-146.23
WRUS307	3	36	9	26.2	N	86	43	19.3	W	13	81.9	470.0000	66.44	-26.8	-80.00	-103.87	-2.00	-146.23
WRTM806	2	36	5	15.2	N	86	44	10	W	13.1	117.0	470.0000	66.33	-26.8	-80.00	-103.94	-2.00	-146.40
WRTM806	2	36	5	15.2	N	86	44	10	W	13.1	117.0	470.0000	66.33	-26.8	-80.00	-103.94	-2.00	-146.40
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQWT531	1	36	12	1	N	86	44	21	W	13.1	59.7	470.0000	66.30	-26.8	-80.00	-103.94	-2.00	-146.44
WQVB681	11	36	2	11	N	86	47	47	W	13.2	151.8	470.0000	65.84	-26.8	-80.00	-104.00	-2.00	-146.96
WQTF542	3	36	1	59.3	N	86	49	6.3	W	12.7	160.5	470.0000	65.47	-26.8	-80.00	-103.67	-2.00	-146.99
WPMS332	3	36	9	7.4	N	86	42	26.4	W	14.3	84.9	470.0000	66.46	-26.8	-80.00	-104.70	-2.00	-147.04
WNVH277	4	36	5	3.2	N	86	53	56	W	7	205.4	470.0000	60.36	-26.8	-80.00	-98.49	-2.00	-146.94
WRDP811	2	36	5	3.2	N	86	53	56	W	7	205.4	470.0000	60.36	-26.8	-80.00	-98.49	-2.00	-146.94
WRDP811	2	36	5	3.2	N	86	53	56	W	7	205.4	470.0000	60.36	-26.8	-80.00	-98.49	-2.00	-146.94
WRDP811	2	36	5	3.2	N	86	53	56	W	7	205.4	470.0000	60.36	-26.8	-80.00	-98.49	-2.00	-146.94
WRDP811	2	36	5	3.2	N	86	44	44	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.45	-2.00	-147.18
WPMU555	3	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	3	36	13	18.2	N	86	44											

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WOZX554	2	36	13	20.3	N	86	44	38.5	W	14.2	50.3	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	3	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	3	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	3	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	2	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQGG952	3	36	13	18.2	N	86	44	38	W	14.2	50.5	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQND532	9	36	13	20	N	86	44	38	W	14.2	50.3	470.0000	66.22	-26.8	-80.00	-104.64	-2.00	-147.22
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQSU632	1	36	14	8	N	86	45	32	W	14.2	42.2	470.0000	66.12	-26.8	-80.00	-104.64	-2.00	-147.32
WQDU493	1	36	7	22.8	N	86	42	10.5	W	14.8	97.7	470.0000	66.45	-26.8	-80.00	-105.00	-2.00	-147.34
WPZT953	2	36	4	39.6	N	86	43	25.9	W	14.6	118.8	470.0000	66.32	-26.8	-80.00	-104.88	-2.00	-147.35
WPZT953	2	36	4	39.6	N	86	43	25.9	W	14.6	118.8	470.0000	66.32	-26.8	-80.00	-104.88	-2.00	-147.35
WRDE755	2	36	1	41.3	N	86	47	37.3	W	14.1	152.7	470.0000	65.80	-26.8	-80.00	-104.58	-2.00	-147.57
WRDB988	2	36	1	59.2	N	86	46	35.4	W	14.4	146.2	470.0000	65.97	-26.8	-80.00	-104.76	-2.00	-147.59
WPLV704	2	36	15	21.2	N	86	49	21	W	13.3	16.8	470.0000	65.21	-26.8	-80.00	-104.07	-2.00	-147.66
WRGH710	3	36	15	21.2	N	86	49	21	W	13.3	16.8	470.0000	65.21	-26.8	-80.00	-104.07	-2.00	-147.66
WPGH710	3	36	15	21.2	N	86	49	21	W	13.3	16.8	470.0000	65.21	-26.8	-80.00	-104.07	-2.00	-147.66
WPGH748	3	36	14	27.1	N	86	45	26.3	W	14.8	41.1	470.0000	66.10	-26.8	-80.00	-105.00	-2.00	-147.69
WQQP636	1	36	7	42.7	N	86	41	36.6	W	15.5	95.0	470.0000	66.47	-26.8	-80.00	-105.40	-2.00	-147.73
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WNYH487	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WNYH487	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WNYH487	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WNYH487	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WNYH487	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX690	1	36	8	44.2	N	86	41	31	W	15.6	88.0	470.0000	66.50	-26.8	-80.00	-105.45	-2.00	-147.75
WPLX																		

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
KNB544	2	36	6	47.2	N	86	41	33	W	15.9	101.2	470.0000	66.43	-26.8	-80.00	-105.62	-2.00	-147.99
WNDA491	3	36	7	38.2	N	86	41	12	W	16.2	95.3	470.0000	66.47	-26.8	-80.00	-105.78	-2.00	-148.11
WNDA491	2	36	7	38.2	N	86	41	12	W	16.2	95.3	470.0000	66.47	-26.8	-80.00	-105.78	-2.00	-148.11
WNDA491	2	36	7	38.2	N	86	41	12	W	16.2	95.3	470.0000	66.47	-26.8	-80.00	-105.78	-2.00	-148.11
WRKH589	12	36	9	0.5	N	86	41	6.5	W	16.3	86.3	470.0000	66.48	-26.8	-80.00	-105.84	-2.00	-148.16
WRVA768	1	36	9	0.8	N	86	41	6.2	W	16.3	86.3	470.0000	66.48	-26.8	-80.00	-105.84	-2.00	-148.16
WRCY205	2	36	8	42.9	N	86	40	59.2	W	16.4	88.2	470.0000	66.50	-26.8	-80.00	-105.89	-2.00	-148.19
WPXZ548	1	36	8	0.2	N	86	41	0	W	16.4	92.8	470.0000	66.50	-26.8	-80.00	-105.89	-2.00	-148.19
WRUN723	7	36	0	58.8	N	86	48	54.4	W	14.5	161.9	470.0000	65.41	-26.8	-80.00	-104.82	-2.00	-148.21
WRUJ776	1	36	4	59.5	N	86	42	2.9	W	16.2	113.4	470.0000	66.36	-26.8	-80.00	-105.78	-2.00	-148.22
WRUN424	7	36	1	0.8	N	86	49	11.7	W	14.4	163.4	470.0000	65.28	-26.8	-80.00	-104.76	-2.00	-148.28
WOTZ611	1	36	5	0.9	N	86	41	51.3	W	16.4	112.8	470.0000	66.37	-26.8	-80.00	-105.89	-2.00	-148.32
WOTZ611	1	36	5	0.9	N	86	41	51.3	W	16.4	112.8	470.0000	66.37	-26.8	-80.00	-105.89	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WPQA386	7	36	7	37.2	N	86	40	53	W	16.6	95.3	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WNSP342	1	36	7	36.2	N	86	40	54	W	16.6	95.4	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WQNY594	2	36	7	36.2	N	86	40	54	W	16.6	95.4	470.0000	66.47	-26.8	-80.00	-105.99	-2.00	-148.32
WNDQ926	2	36	7	2.2	N	86	41	0	W	16.6	99.0	470.0000	66.44	-26.8	-80.00	-105.99	-2.00	-148.35
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQTD530	1	36	5	10	N	86	41	41	W	16.5	111.6	470.0000	66.38	-26.8	-80.00	-105.94	-2.00	-148.37
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WQWDN641	2	36	13	52.2	N	86	43	23	W	16.3	51.8	470.0000	66.23	-26.8	-80.00	-105.84	-2.00	-148.40
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53
WPJ400	2	36	16	4.9	N	86	47	44.7	W	15.4	23.9	470.0000	65.61	-26.8	-80.00	-105.34	-2.00	-148.53</td

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WRDM296	1	36	6	25N		86	40	47.5W		17.1	102.7	470.0000	66.43	-26.8	-80.00	-106.25	-2.00	-148.62
WRDM296	1	36	6	25N		86	40	47.5W		17.1	102.7	470.0000	66.43	-26.8	-80.00	-106.25	-2.00	-148.62
WPGH486	3	36	7	1.9N		86	40	37.4W		17.2	98.8	470.0000	66.44	-26.8	-80.00	-106.30	-2.00	-148.66
KX5603	2	36	12	29.2N		86	41	39W		17.1	64.0	470.0000	66.34	-26.8	-80.00	-106.25	-2.00	-148.71
WRUL823	1	36	10	12.5N		86	40	37.9W		17.3	79.0	470.0000	66.43	-26.8	-80.00	-106.35	-2.00	-148.72
WQDS321	2	36	12	48.5N		86	41	53W		17.1	61.7	470.0000	66.32	-26.8	-80.00	-106.25	-2.00	-148.73
WQDS321	2	36	12	48.5N		86	41	53W		17.1	61.7	470.0000	66.32	-26.8	-80.00	-106.25	-2.00	-148.73
WQDS321	2	36	12	48.5N		86	41	53W		17.1	61.7	470.0000	66.32	-26.8	-80.00	-106.25	-2.00	-148.73
WQDS321	2	36	12	48.5N		86	41	53W		17.1	61.7	470.0000	66.32	-26.8	-80.00	-106.25	-2.00	-148.73
WQDS321	2	36	12	48.5N		86	41	53W		17.1	61.7	470.0000	66.32	-26.8	-80.00	-106.25	-2.00	-148.73
WQGS896	17	36	12	6.2N		86	41	22W		17.2	66.8	470.0000	66.35	-26.8	-80.00	-106.30	-2.00	-148.75
WQGS896	17	36	12	6.2N		86	41	22W		17.2	66.8	470.0000	66.35	-26.8	-80.00	-106.30	-2.00	-148.75
WOUS465	2	36	8	53.5N		86	40	15.9W		17.5	87.3	470.0000	66.49	-26.8	-80.00	-106.45	-2.00	-148.76
KITS45	2	36	7	57.2N		86	40	17W		17.5	93.0	470.0000	66.49	-26.8	-80.00	-106.45	-2.00	-148.76
KITS45	3	36	7	57.2N		86	40	17W		17.5	93.0	470.0000	66.49	-26.8	-80.00	-106.45	-2.00	-148.76
WRBS977	4	36	12	24.8N		86	41	32.2W		17.2	64.7	470.0000	66.34	-26.8	-80.00	-106.30	-2.00	-148.76
WRBS977	4	36	12	24.8N		86	41	32.2W		17.2	64.7	470.0000	66.34	-26.8	-80.00	-106.30	-2.00	-148.76
WRBS977	5	36	12	24.8N		86	41	32.2W		17.2	64.7	470.0000	66.34	-26.8	-80.00	-106.30	-2.00	-148.76
WRBS977	2	36	12	24.5N		86	41	31.3W		17.2	64.7	470.0000	66.34	-26.8	-80.00	-106.30	-2.00	-148.76
WVY873	3	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
KNDZ493	2	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WPPD303	2	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WPPD303	2	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36	12	34.2N		86	41	40W		17.2	63.5	470.0000	66.33	-26.8	-80.00	-106.30	-2.00	-148.77
WNSR200	1	36																

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQWX937	4	35	59	39N		86	48	32.6W		17.1	162.7	470.0000	65.35	-26.8	-80.00	-106.25	-2.00	-149.70
WQWX937	2	35	59	39N		86	48	32.6W		17.1	162.7	470.0000	65.35	-26.8	-80.00	-106.25	-2.00	-149.70
WRWC305	1	36	9	44.2N		86	38	57.3W		19.6	82.9	470.0000	66.44	-26.8	-80.00	-107.44	-2.00	-149.79
WRWC305	1	36	9	44.2N		86	38	57.3W		19.6	82.9	470.0000	66.44	-26.8	-80.00	-107.44	-2.00	-149.79
WPGH486	1	36	16	12.2N		86	52	10W		14.3	358.6	470.0000	63.70	-26.8	-80.00	-104.70	-2.00	-149.80
WZWS91	3	36	16	12.2N		86	52	18W		14.3	357.8	470.0000	63.59	-26.8	-80.00	-104.70	-2.00	-149.91
WPMS332	1	36	16	12.2N		86	52	18W		14.3	357.8	470.0000	63.59	-26.8	-80.00	-104.70	-2.00	-149.91
WPMS332	1	36	16	12.2N		86	52	18W		14.3	357.8	470.0000	63.59	-26.8	-80.00	-104.70	-2.00	-149.91
WPLV778	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
WPGH743	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
WPGH743	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
WPLV778	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
WPGH743	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
KNEF390	3	35	59	22.2N		86	49	21W		17.2	167.0	470.0000	65.01	-26.8	-80.00	-106.30	-2.00	-150.10
WRPH825	2	36	8	36N		86	38	15W		20.5	89.2	470.0000	66.51	-26.8	-80.00	-107.83	-2.00	-150.12
WRPH825	3	36	8	36N		86	38	15W		20.5	89.2	470.0000	66.51	-26.8	-80.00	-107.83	-2.00	-150.12
WRMC824	2	35	59	20N		86	49	25.9W		17.3	167.5	470.0000	65.01	-26.8	-80.00	-106.35	-2.00	-150.15
WPYQ241	2	36	17	3.2N		86	51	48.1W		15.9	0.7	470.0000	63.93	-26.8	-80.00	-105.62	-2.00	-150.49
WQHE537	7	36	2	42N		86	39	51W		21	120.4	470.0000	66.30	-26.8	-80.00	-108.04	-2.00	-150.53
WQHE537	7	36	2	42N		86	39	51W		21	120.4	470.0000	66.30	-26.8	-80.00	-108.04	-2.00	-150.53
WQHE537	7	36	2	42N		86	39	51W		21	120.4	470.0000	66.30	-26.8	-80.00	-108.04	-2.00	-150.53
WQHE537	7	36	2	42N		86	39	51W		21	120.4	470.0000	66.30	-26.8	-80.00	-108.04	-2.00	-150.53
WQHE537	7	36	2	42N		86	39	51W		21	120.4	470.0000	66.30	-26.8	-80.00	-108.04	-2.00	-150.53
WRUN422	10	35	58	47.6N		86	46	19.2W		19.7	154.8	470.0000	65.73	-26.8	-80.00	-107.48	-2.00	-150.55
WRJV620	4	36	3	4.8N		86	39	27W		21.2	118.0	470.0000	66.32	-26.8	-80.00	-108.12	-2.00	-150.59
WRUN424	9	36	0	35.1N		86	53	9.6W		14.7	187.2	470.0000	63.11	-26.8	-80.00	-104.94	-2.00	-150.62
WOWWW390	2	36	15	11.2N		86	40	34W		21.1	53.6	470.0000	66.25	-26.8	-80.00	-108.08	-2.00	-150.62
WQJX690	10	36	2	57.3N		86	39	28.9W		21.3	118.6	470.0000	66.32	-26.8	-80.00	-108.16	-2.00	-150.63
WQJX690	10	36	2	57.3N		86	39	28.9W		21.3	118.6	470.0000	66.32	-26.8	-80.00	-108.16	-2.00	-150.63
WQJX690	10	36	2	57.3N		86	39	28.9W		21.3	118.6	470.0000	66.32	-26.8	-80.00	-108.16	-2.00	-150.63
WQJX690	10	36	2	57.3N		86	39	28.9W		21.3	118.6	470.0000	66.32	-26.8	-80.00	-108.16	-2.00	-150.63
WPXE452	5	36	2	57.7N		86	39	25W		21.4	118.4	470.0000	66.32	-26.8	-80.00	-108.20	-2.00	-150.68
WOQM460	1	35	59	5.8N		86	43	52.3W		21.1	145.1	470.0000	65.99	-26.8	-80.00	-108.08	-2.00	-150.88
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26.8	-80.00	-100.58	-2.00	-151.00
WQVE463	1	36	4	28N		86	55	17W		8.9	214.2	470.0000	58.37	-26				

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)	SORTED
WQFA564	1	36	17	57.8N		86	42	1.1W		23	40.0	470.0000	66.09	-26.8	-80.00	-108.83	-2.00	-151.53	
WOAS444	5	36	16	44N		86	40	12.6W		23.3	48.7	470.0000	66.20	-26.8	-80.00	-108.94	-2.00	-151.54	
WOAS444	5	36	16	44N		86	40	12.6W		23.3	48.7	470.0000	66.20	-26.8	-80.00	-108.94	-2.00	-151.54	
WPY388	5	36	16	26.2N		86	39	47.5W		23.4	50.8	470.0000	66.22	-26.8	-80.00	-108.98	-2.00	-151.56	
WQFA650	1	35	57	38.3N		86	48	37.2W		20.6	166.1	470.0000	65.08	-26.8	-80.00	-107.87	-2.00	-151.59	
WQFA650	1	35	57	38.3N		86	48	37.2W		20.6	166.1	470.0000	65.08	-26.8	-80.00	-107.87	-2.00	-151.59	
WQOG409	2	36	16	8.7N		86	39	10.1W		23.8	53.2	470.0000	66.25	-26.8	-80.00	-109.12	-2.00	-151.67	
WQOG409	2	36	16	8.7N		86	39	10.1W		23.8	53.2	470.0000	66.25	-26.8	-80.00	-109.27	-2.00	-151.69	
WNY473	3	36	12	56.2N		86	36	47W		24.2	69.8	470.0000	66.38	-26.8	-80.00	-109.00	-2.00	-151.71	
WQCD910	2	36	18	36.2N		86	42	53W		23.2	35.7	470.0000	65.99	-26.8	-80.00	-108.90	-2.00	-151.71	
WQCD910	2	36	18	36.2N		86	42	53W		23.2	35.7	470.0000	65.99	-26.8	-80.00	-108.90	-2.00	-151.71	
WORK375	3	36	18	10.7N		86	41	51W		23.5	39.9	470.0000	66.07	-26.8	-80.00	-109.01	-2.00	-151.74	
WQRK375	3	36	18	10.7N		86	41	51W		23.5	39.9	470.0000	66.07	-26.8	-80.00	-109.01	-2.00	-151.74	
WNWC811	2	35	57	30.2N		86	49	11W		20.7	168.5	470.0000	64.93	-26.8	-80.00	-107.91	-2.00	-151.78	
WRWB328	2	35	57	30.2N		86	49	11W		20.7	168.5	470.0000	64.93	-26.8	-80.00	-107.91	-2.00	-151.78	
WRUN423	6	35	57	19.9N		86	45	52.2W		22.5	156.2	470.0000	65.65	-26.8	-80.00	-108.64	-2.00	-151.79	
WQVP754	1	35	57	25N		86	48	49W		20.9	167.1	470.0000	65.01	-26.8	-80.00	-107.99	-2.00	-151.79	
WQVP754	1	35	57	25N		86	48	49W		20.9	167.1	470.0000	65.01	-26.8	-80.00	-107.99	-2.00	-151.79	
WQVP754	1	35	57	25N		86	48	49W		20.9	167.1	470.0000	65.01	-26.8	-80.00	-107.99	-2.00	-151.79	
WQIK661	15	35	57	21.6N		86	48	53.5W		21	167.5	470.0000	65.01	-26.8	-80.00	-108.04	-2.00	-151.83	
WQIK661	15	35	57	21.6N		86	48	53.5W		21	167.5	470.0000	65.01	-26.8	-80.00	-108.04	-2.00	-151.83	
WQIK661	15	35	57	21.6N		86	48	53.5W		21	167.5	470.0000	65.01	-26.8	-80.00	-108.04	-2.00	-151.83	
WQOB8999	10	35	57	12.5N		86	48	51.4W		21.3	167.5	470.0000	65.01	-26.8	-80.00	-108.16	-2.00	-151.95	
WQOB8999	10	35	57	12.5N		86	48	51.4W		21.3	167.5	470.0000	65.01	-26.8	-80.00	-108.16	-2.00	-151.95	
WQOB8999	10	35	57	12.5N		86	48	51.4W		21.3	167.5	470.0000	65.01	-26.8	-80.00	-108.16	-2.00	-151.95	
WQOB8999	10	35	57	12.5N		86	48	51.4W		21.3	167.5	470.0000	65.01	-26.8	-80.00	-108.16	-2.00	-151.95	
WRCK784	1	35	57	6.3N		86	48	38.2W		21.6	166.8	470.0000	65.08	-26.8	-80.00	-108.28	-2.00	-152.00	
WRK1668	2	35	57	17.6N		86	49	41W		20.9	170.7	470.0000	64.78	-26.8	-80.00	-107.99	-2.00	-152.01	
WQAU829	3	36	19	15.2N		86	42	49W		24.2	34.2	470.0000	65.97	-26.8	-80.00	-109.27	-2.00	-152.09	
WQAU829	1	36	19	15.2N		86	42	49W		24.2	34.2	470.0000	65.97	-26.8	-80.00	-109.27	-2.00	-152.09	
WRDN225	1	35	58	43.3N		86	53	20.6W		18.1	186.7	470.0000	63.23	-26.8	-80.00	-106.75	-2.00	-152.32	
WRDN225	1	35	58	43.3N		86	53	20.6W		18.1	186.7	470.0000	63.23	-26.8	-80.00	-106.75	-2.00	-152.32	
WRDN225	1	35	58	43.3N		86	53	20.6W		18.1	186.7	470.0000	63.23	-26.8	-80.00	-106.75	-2.00	-152.32	
WRDN225	1	35	58	43.3N		86	53	20.6W		18.1	186.7	470.0000	63.23	-26.8	-80.00	-106.75	-2.00	-152.32	
WRDN225	1	35	58	43.3N		86	53	20.6W		18.1	186.7	470.0000	63.23	-26.8	-80.00	-106.75	-2.00	-152.32	
WPRH945	2	36	19	30.2N		86	42	24W		24.9	34.8	470.0000	65.97	-26.8	-80.00	-109.52	-2.00	-152.34	
WPRH945	2	36	19	30.2N		86	42	24W		24.9	34.8	470.0000	65.97	-26.8	-80.00	-109.52	-2.00	-152.34	
WPRH945	2	36	19	30.2N		86	42	24W		24.9	34.8	470.0000	65.97	-26.8	-80.00	-109.52	-2.00	-152.34	
WRUN422	8	35	57	53.6N		86	41	24W		25.5	140.1	470.0000	66.09	-26.8	-80.00	-109.72	-2.00	-152.43	
WREK366	1	36	1	42.6N		86	36	23.6W		26.4	118.1	470.0000	66.32	-26.8	-80.00	-110.02	-2.00	-152.50	
WREK366	1	36	1	42.6N		86	36	23.6W		26.4	118.1	470.0000	66.32	-26.8	-80.00	-110.02	-2.00	-152.50	
WREK366	1	36	1	42.6N		86	36	23.6W		26.4	118.1	470.0000	66.32	-26.8	-80.00	-110.02	-2.00	-152.50	
WRCP593	1	35	56	58.4N		86	50	36.2W		21.3	174.6	470.0000	64.45	-26.8	-80.00	-108.16	-2.00	-152.51	
WRCP593	1	35	56	58.4N		86	50	36.2W		21.3	174.6	470.0000	64.45	-26.8	-80.00	-108.16	-2.00	-152.51	
WRBR304	1	36	0	45.9N		86	37	1.8W		26.5	122.5	470.0000	66.29	-26.8	-80.00	-110.06	-2.00	-152.57	
WNPV397	13	36	17	55.2N		86	53	55W		17.8	350.4	470.0000	62.75	-26.8	-80.00	-106.60	-2.00	-152.65	
WNPV397	13	36	17	55.2N		86	53	55W		17.8	350.4	470.0000	62.75	-26.8	-80.00	-106.60	-2.00	-152.65	
WQZ5672	3	35	56	12.7N		86	48	41.5W		23.1	167.9	470.0000	65.01	-26.8	-80.00	-108.86	-2.00	-152.66	
WQZ5672	2	35	56	12.7N		86	48	41.5W		23.1	167.9	470.0000	65.01	-26.8	-80.00	-108.86	-2.00	-152.66	
WRAH504	2	35	57	5.1N		86	51	28.1W		21	178.1	470.0000	64.10	-26.8	-80.00	-108.04	-2.00	-152.74	
WRT2279	4	36	0	41N		86	36	29.8W		27.3	121.8	470.0000	66.30	-26.8	-80.00	-110.32	-2.00	-152.82	
WRBC967	1	36	1	27.9N		86	35	50.8W		27.4	118.2	470.0000	66.32	-26.8	-80.00	-110.35	-2.00	-152.82	
WRBC967	1	36	1	27.9N		86	35	50.8W		27.4	118.2	470.0000	66.32	-26.8	-80.00	-110.35	-2.00	-152.82	
WRFM527	1	36	0	36.5N		86	36	29.5W		27.3	122.1	470.0000	66.29	-26.8	-80.00	-110.32	-2.00	-152.83	
WOTH648	3	36	18	36.5N		86	38	57.8W		27	45.8	470.0000	66.16	-26.8	-80.00	-110.22	-2.00	-152.86	
WDR1270	2	35	55	58.5N		86	48	42.6W		23.6	168.2	470.0000	64.93	-26.8	-80.00	-109.05	-2.00	-152.92	
WQYQ930	3	35	56	44.9N		86	51	24.9W		21.7	177.9	470.0000	64.19	-26.8	-80.00	-108.32	-2.00	-152.93	
WQYQ930	2	35	56	44.9N		86	51	24.9W		21.7	177.9	470.0000	64.19	-26.8	-80.00	-108.32	-2.00	-152.93	
WQTY341	2	36	1	40.7N		86	35	23.6W		27.8	116.8	470.0000	66.34	-26.8	-80.00	-110.47	-2.00	-152.93	
KYU718	4	36	18	5.2N		86	37	42W		27.8	49.9	470.0000	66.21	-26.8	-80.00	-110.47	-2.00	-153.06	
KYU718	4	36	18	5.2N		86	37	42W		27.8	49.9	470.000							

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WRAH504	4	35	55	42.7	N	86	51	51.2	W	23.6	179.7	470.0000	64.01	-26.8	-80.00	-109.05	-2.00	-153.84
WRON488	2	35	59	34.7	N	86	34	38.1	W	30.7	122.3	470.0000	66.29	-26.8	-80.00	-111.33	-2.00	-153.85
WRNS820	1	35	54	42.3	N	86	49	31.2	W	25.7	171.9	470.0000	64.70	-26.8	-80.00	-109.79	-2.00	-153.89
WRQN321	2	35	59	23.2	N	86	34	37.1	W	30.9	122.8	470.0000	66.29	-26.8	-80.00	-111.39	-2.00	-153.90
WRJV620	3	36	10	26.2	N	86	31	4.6	W	31.5	83.2	470.0000	66.45	-26.8	-80.00	-111.56	-2.00	-153.91
WNFL596	2	36	8	30.2	N	86	30	45	W	31.8	89.7	470.0000	66.51	-26.8	-80.00	-111.64	-2.00	-153.93
WOHE537	21	36	19	7	N	86	36	2	W	30.9	50.2	470.0000	66.22	-26.8	-80.00	-111.39	-2.00	-153.97
WQHE537	21	36	19	7	N	86	36	2	W	30.9	50.2	470.0000	66.22	-26.8	-80.00	-111.39	-2.00	-153.97
WQHE537	21	36	19	7	N	86	36	2	W	30.9	50.2	470.0000	66.22	-26.8	-80.00	-111.39	-2.00	-153.97
WQHE537	21	36	19	7	N	86	36	2	W	30.9	50.2	470.0000	66.22	-26.8	-80.00	-111.39	-2.00	-153.97
WQHE537	21	36	19	7	N	86	36	2	W	30.9	50.2	470.0000	66.22	-26.8	-80.00	-111.39	-2.00	-153.97
WQYGG691	2	35	59	31	N	86	34	14	W	31.3	121.9	470.0000	66.30	-26.8	-80.00	-111.50	-2.00	-154.00
WQZV454	1	35	54	32.9	N	86	49	38.8	W	25.9	172.4	470.0000	64.62	-26.8	-80.00	-109.86	-2.00	-154.04
WQWP249	14	36	12	0.2	N	86	31	7	W	31.9	78.0	470.0000	66.43	-26.8	-80.00	-111.67	-2.00	-154.04
WQVB529	1	35	54	54.3	N	86	50	51.1	W	25.1	176.3	470.0000	64.28	-26.8	-80.00	-109.59	-2.00	-154.11
WQVB529	1	35	54	54.3	N	86	50	51.1	W	25.1	176.3	470.0000	64.28	-26.8	-80.00	-109.59	-2.00	-154.11
WTQL947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	470.0000	66.44	-26.8	-80.00	-111.80	-2.00	-154.16
WTQL947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	470.0000	66.44	-26.8	-80.00	-111.80	-2.00	-154.16
WTQL947	2	36	11	3.2	N	86	30	35.4	W	32.4	81.3	470.0000	66.44	-26.8	-80.00	-111.80	-2.00	-154.16
WTQL947	3	36	11	3.2	N	86	30	35.4	W	32.4	81.3	470.0000	66.44	-26.8	-80.00	-111.80	-2.00	-154.16
WRBW969	1	36	12	35.7	N	86	30	50.9	W	32.5	76.2	470.0000	66.42	-26.8	-80.00	-111.83	-2.00	-154.21
WQZ917	1	35	54	10.8	N	86	49	36.5	W	26.6	172.5	470.0000	64.62	-26.8	-80.00	-110.09	-2.00	-154.27
WRHW495	2	36	10	11.7	N	86	30	5	W	32.9	84.2	470.0000	66.46	-26.8	-80.00	-111.94	-2.00	-154.27
WRDK577	2	35	56	5.9	N	86	36	50.9	W	32.2	135.3	470.0000	66.16	-26.8	-80.00	-111.75	-2.00	-154.39
WRKC593	1	36	23	25.1	N	86	46	25.5	W	28.9	16.5	470.0000	65.21	-26.8	-80.00	-110.81	-2.00	-154.40
WRKC593	1	36	23	25.1	N	86	46	25.5	W	28.9	16.5	470.0000	65.21	-26.8	-80.00	-110.81	-2.00	-154.40
WPZH577	3	35	58	31.2	N	86	33	54	W	32.7	124.2	470.0000	66.28	-26.8	-80.00	-111.88	-2.00	-154.40
WPZH577	3	35	58	31.2	N	86	33	54	W	32.7	124.2	470.0000	66.28	-26.8	-80.00	-111.88	-2.00	-154.40
WQJQ877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	470.0000	66.39	-26.8	-80.00	-112.04	-2.00	-154.45
WQJQ877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	470.0000	66.39	-26.8	-80.00	-112.04	-2.00	-154.45
WQJQ877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	470.0000	66.39	-26.8	-80.00	-112.04	-2.00	-154.45
WQJQ877	136	36	13	53.2	N	86	30	46.2	W	33.3	72.2	470.0000	66.39	-26.8	-80.00	-112.04	-2.00	-154.45
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQHE537	33	35	58	57	N	86	33	11	W	33.2	122.0	470.0000	66.29	-26.8	-80.00	-112.01	-2.00	-154.53
WQIV611	2	36	19	16	N	86	34	10.9	W	33.3	52.8	470.0000	66.24	-26.8	-80.00	-112.04	-2.00	-154.60
WRUN423	7	35	54	48.7	N	86	52	29.3	W	25.2	181.9	470.0000	63.82	-26.8	-80.00	-109.62	-2.00	-154.60
WCYR676	1	36	0	15.5	N	86	31	35.1	W	34.1	116.4	470.0000	66.34	-26.8	-80.00	-112.25	-2.00	-154.71
WCYR676	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WCYR664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WCYR664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WCYR664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WRE664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WRE664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WRE664	1	36	1	2.2	N	86	31	0	W	34.3	113.6	470.0000	66.36	-26.8	-80.00	-112.30	-2.00	-154.74
WFS750	8	35	57	53	N	86	33	24	W	34	125.1	470.0000	66.27	-26.8	-80.00	-112.22	-2.00	-154.75
WNTY793	1	35	54	59.2	N	86	53	3	W	25	183.8	470.0000	63.59	-26.8	-80.00	-109.55	-2.00	-154.77
WNTY793	1	35	54	59.2	N	86	53	3	W	25	183.8	470.0000	63.59	-26.8	-80.00	-109.55	-2.00	-154.77
WQOP235	10	35	57	43	N	86	33	24.1	W	34.2	125.5	470.0000	66.27	-26.8	-80.00	-112.27	-2.00	-154.80
WORM808	1	35	54	53.8	N	86	52	49.5	W	25.1	183.0	470.0000	63.59	-26.8	-80.00	-109.59	-2.00	-154.80
WORM808	1	35	54	53.8	N	86	52	49.5	W	25.1	183.0	470.0000	63.59	-26.8	-80.00	-109.59	-2.00	-154.80
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRA455	3	36	11	34.1	N	86	28	51	W	35.1	80.4	470.0000	66.44	-26.8	-80.00	-112.50	-2.00	-154.86
WRTN521	1	36	14	1.3	N	86	29	33.6	W	35.1	72.7	470.0000	66.39	-26.8	-80.00	-112.50	-2.00	-154.91
WROE321	1	35	53	27.8	N	86	50	21.3	W	27.8	175.1	470.0000	64.36					

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED	
																		Calculated interfering signal field strength (dBu)	
WRPR963	1	36	11	4.9	N	86	28	32.2	W	35.4	82.0	470.0000	66.44	-26.8	-80.00	-112.57	-2.00	-154.93	
WRPR963	1	36	11	4.9	N	86	28	32.2	W	35.4	82.0	470.0000	66.44	-26.8	-80.00	-112.57	-2.00	-154.93	
WRPR963	1	36	11	4.9	N	86	28	32.2	W	35.4	82.0	470.0000	66.44	-26.8	-80.00	-112.57	-2.00	-154.93	
WRCK694	2	35	54	15.9	N	86	52	14.9	W	26.2	181.0	470.0000	63.82	-26.8	-80.00	-109.96	-2.00	-154.94	
WRCK694	2	35	54	15.9	N	86	52	14.9	W	26.2	181.0	470.0000	63.82	-26.8	-80.00	-109.96	-2.00	-154.94	
WRAK454	2	35	57	40	N	86	32	54.5	W	34.8	124.9	470.0000	66.28	-26.8	-80.00	-112.42	-2.00	-154.94	
WRFM502	2	35	55	20.5	N	86	53	54.5	W	24.4	187.0	470.0000	63.11	-26.8	-80.00	-109.34	-2.00	-155.03	
WRFM502	2	35	55	20.5	N	86	53	54.5	W	24.4	187.0	470.0000	63.11	-26.8	-80.00	-109.34	-2.00	-155.03	
WQWQ937	3	35	54	2.8	N	86	52	22.7	W	26.6	181.4	470.0000	63.82	-26.8	-80.00	-110.09	-2.00	-155.07	
WRDK577	3	35	55	37.6	N	86	34	40.7	W	35.1	132.5	470.0000	66.20	-26.8	-80.00	-112.50	-2.00	-155.09	
WRV1871	1	35	55	54.2	N	86	54	41	W	23.6	190.1	470.0000	62.75	-26.8	-80.00	-109.05	-2.00	-155.10	
WRUV661	1	35	55	54.2	N	86	54	39.5	W	23.6	190.0	470.0000	62.75	-26.8	-80.00	-109.05	-2.00	-155.10	
WPLU752	3	36	24	44.2	N	86	43	48	W	32.5	21.9	470.0000	65.53	-26.8	-80.00	-111.83	-2.00	-155.10	
WPLU752	3	36	24	44.2	N	86	43	48	W	32.5	21.9	470.0000	65.53	-26.8	-80.00	-111.83	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WQTS498	1	35	53	39.9	N	86	51	53	W	27.3	179.8	470.0000	64.01	-26.8	-80.00	-110.32	-2.00	-155.10	
WRC528	2	36	0	1	N	86	30	7	W	36.3	115.5	470.0000	66.35	-26.8	-80.00	-112.79	-2.00	-155.24	
WQJD703	6	36	0	3.3	N	86	30	0.5	W	36.4	115.2	470.0000	66.35	-26.8	-80.00	-112.81	-2.00	-155.27	
WQKT894	2	36	0	5.5	N	86	30	0.6	W	36.4	115.1	470.0000	66.35	-26.8	-80.00	-112.81	-2.00	-155.27	
WPPA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	470.0000	65.41	-26.8	-80.00	-111.88	-2.00	-155.27	
WPPA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	470.0000	65.41	-26.8	-80.00	-111.88	-2.00	-155.27	
WPPA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	470.0000	65.41	-26.8	-80.00	-111.88	-2.00	-155.27	
WPPA592	2	36	25	5.2	N	86	44	30	W	32.7	19.8	470.0000	65.41	-26.8	-80.00	-111.88	-2.00	-155.27	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35	53	55.6	N	86	52	47.6	W	26.9	182.7	470.0000	63.70	-26.8	-80.00	-110.19	-2.00	-155.29	
WQAZ704	7	35																	

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WRAV764	3	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	2	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	2	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	2	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	3	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAT830	1	35	57	6.7N		86	29	6.3W	40.2	121.4	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	2	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRAV764	2	35	57	5.5N		86	29	7.5W	40.2	121.5	470.0000	66.30	-26.8	-80.00	-113.68	-2.00	-156.18	
WRUU948	1	35	50	13.6N		86	47	13.7W	34.4	168.2	470.0000	64.93	-26.8	-80.00	-112.32	-2.00	-156.19	
WRDI903	2	35	56	49.3N		86	29	15W	40.3	122.3	470.0000	66.29	-26.8	-80.00	-113.70	-2.00	-156.21	
WREI796	1	36	7	36.8N		86	24	23.5W	41.3	92.0	470.0000	66.50	-26.8	-80.00	-113.91	-2.00	-156.21	
WREI796	1	36	7	36.8N		86	24	23.5W	41.3	92.0	470.0000	66.50	-26.8	-80.00	-113.91	-2.00	-156.21	
WREI796	1	36	7	36.8N		86	24	23.5W	41.3	92.0	470.0000	66.50	-26.8	-80.00	-113.91	-2.00	-156.21	
WQWN435	2	36	7	45.7N		86	24	20.8W	41.4	91.6	470.0000	66.51	-26.8	-80.00	-113.93	-2.00	-156.22	
WQWN435	2	36	7	45.7N		86	24	20.8W	41.4	91.6	470.0000	66.51	-26.8	-80.00	-113.93	-2.00	-156.22	
WRAV426	2	35	57	38.3N		86	28	12.3W	40.9	119.3	470.0000	66.32	-26.8	-80.00	-113.83	-2.00	-156.31	
WRPH252	2	35	53	44.4N		86	55	2.1W	27.6	189.7	470.0000	62.87	-26.8	-80.00	-110.41	-2.00	-156.34	
WRPH252	2	35	53	44.4N		86	55	2.1W	27.6	189.7	470.0000	62.87	-26.8	-80.00	-113.30	-2.00	-156.37	
WRFA329	2	35	49	43.6N		86	40	45.5W	38.5	154.2	470.0000	65.73	-26.8	-80.00	-113.30	-2.00	-156.37	
WRUL218	2	35	49	43.5N		86	40	40.6W	38.5	154.0	470.0000	65.73	-26.8	-80.00	-113.30	-2.00	-156.37	
WRUL218	2	35	49	43.5N		86	40	40.6W	38.5	154.0	470.0000	65.73	-26.8	-80.00	-113.30	-2.00	-156.37	
WRPG265	4	35	56	28.2N		86	28	49.7W	41.2	122.6	470.0000	66.29	-26.8	-80.00	-113.89	-2.00	-156.40	
WQUT953	2	36	8	33.2N		86	23	43.8W	42.3	89.6	470.0000	66.51	-26.8	-80.00	-114.12	-2.00	-156.41	
WQHE537	8	36	4	47N		86	57	14W	10.5	229.5	470.0000	54.38	-26.8	-80.00	-102.02	-2.00	-156.43	
WQHE537	8	36	4	47N		86	57	14W	10.5	229.5	470.0000	54.38	-26.8	-80.00	-102.02	-2.00	-156.43	
WQHE537	8	36	4	47N		86	57	14W	10.5	229.5	470.0000	54.38	-26.8	-80.00	-102.02	-2.00	-156.43	
WQHE537	8	36	4	47N		86	57	14W	10.5	229.5	470.0000	54.38	-26.8	-80.00	-102.02	-2.00	-156.43	
WQOY553	1	36	21	43.6N		86	29	50.9W	41.2	53.2	470.0000	66.25	-26.8	-80.00	-113.89	-2.00	-156.44	
WQOY553	2	36	21	43.6N		86	29	50.9W	41.2	53.2	470.0000	66.25	-26.8	-80.00	-113.89	-2.00	-156.44	
WQUT294	2	36	9	50.8N		86	23	41W	42.4	86.4	470.0000	66.48	-26.8	-80.00	-114.14	-2.00	-156.46	
WQUT294	2	36	9	50.8N		86	23	41W	42.4	86.4	470.0000	66.48	-26.8	-80.00	-114.14	-2.00	-156.46	
WQUT294	2	36	9	50.8N		86	23	41W	42.4	86.4	470.0000	66.48	-26.8	-80.00	-114.14	-2.00	-156.46	
WRPG260	3	35	53	44.5N		86	31	18W	41.2	131.3	470.0000	66.21	-26.8	-80.00	-113.89	-2.00	-156.48	
WRJE858	2	36	2	46N		86	24	37.5W	42.3	104.3	470.0000	66.42	-26.8	-80.00	-114.12	-2.00	-156.50	
WRJE858	2	36	2	46N		86	24	37.5W	42.3	104.3	470.0000	66.42	-26.8	-80.00	-114.12	-2.00	-156.50	
WRPG235	6	35	52	37.6N		86	32	40.2W	41.2	135.3	470.0000	66.16	-26.8	-80.00	-113.89	-2.00	-156.53	
WRPG261	5	35	58	30N		86	26	42.3W	42.1	115.9	470.0000	66.35	-26.8	-80.00	-114.08	-2.00	-156.53	
WQUL355	3	35	49	5.5N		86	43	56.1W	37.8	161.5	470.0000	65.41	-26.8	-80.00	-113.14	-2.00	-156.53	
WRTC737	2	36	2	45.7N		86	24	31.5W	42.5	104.3	470.0000	66.42	-26.8	-80.00	-114.16	-2.00	-156.54	
WRDK577	1	35	58	7.2N		86	26	52W	42.2	116.9	470.0000	66.34	-26.8	-80.00	-114.10	-2.00	-156.56	
WRKN775	3	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRKN775	3	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRKN775	2	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRKN775	2	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRKN775	3	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRFN221	50	36	2	46.6N		86	24	25.7W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRKN775	3	36	2	46.5N		86	24	26W	42.6	104.2	470.0000	66.42	-26.8	-80.00	-114.18	-2.00	-156.56	
WRPN257	1	36	2	39.6N		86	23	55.7W	43.4	104.2	470.0000	66.42	-26.8	-80.00	-114.34	-2.00	-156.73	
WRPN257	1	36	2	39.6N		86	23	55.7W	43.4	104.2	470.0000	66.42	-26.8	-80.00	-114.34	-2.00	-156.73	
WQXN366	1	36	3	5.9N		86	23	40.7W	43.5	103.1	470.0000	66.42	-26.8	-80.00	-114.36	-2.00	-156.74	
WQXN366	1	36	3	5.9N		86	23	40.7W	43.5	103.1	470.0000	66.42	-26.8	-80.00	-114.36	-2.00	-156.74	
WRPW857	2	36	2	38.8N		86	23	52.5W	43.5	104.2	470.0000	66.42	-26.8	-80.00	-114.36	-2.00	-156.75	
WPPX251	4	36	9	27.4N		86	22	59.1W	43.5	87.4	470.0000	66.49	-26.8	-80.00	-114.36	-2.00	-156.77	
WQRX548	1	36	0	20.4N		86	24	55.4W	43.2	110.2	470.0000	66.38	-26.8	-80.00	-114.30	-2.00	-156.72	
WRNQ257	1	36	2	39.6N		86	23	55.7W	43.4	104.2	470.0000	66.42	-26.8	-80.00	-114.34	-2.00	-156.73	
WRNQ257	1	36	2	39.6N		86	23	55.7W	43.4	104.2	470.0000	66.42	-26.8	-80.00	-114.34	-2.00	-156.73	
WQXN366	1	36	3	5.9N		86	23	40.7W	43.5	103.1	470.0000	66.42	-26.8	-80.00	-114.36	-2.00	-156.74	
WQXN366	1	36	3	5.9N		86	23	40.7W	43.5	103.1	470.0000	66.42	-26.8	-80.00	-114.36	-2.00	-156.74	
WRPG261	1	35	51	23N		86	32	34.8W	42.9	137.4	470.0000	66.14	-26.8	-80.00	-114.24	-2.00	-156.91	
WQXY837	3	35	50	36.2N		86	33	46W	42.8	140.4	470.0000	66.09	-26.8	-80.00	-114.22	-2.00	-156.93	
WQXY837	2	35	50	36.2N		86	33											

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WPPX251	5	36	12	17	N	86	22	13	W	45.1	80.8	470.0000	66.44	-26.8	-80.00	-114.68	-2.00	-157.04
WPJV719	3	36	28	47.2	N	86	40	54	W	41.1	23.6	470.0000	65.61	-26.8	-80.00	-113.87	-2.00	-157.06
WPOF547	3	36	28	47.2	N	86	40	54	W	41.1	23.6	470.0000	65.61	-26.8	-80.00	-113.87	-2.00	-157.06
WRPG259	2	35	52	30.3	N	86	29	53.8	W	44.3	131.7	470.0000	66.21	-26.8	-80.00	-114.52	-2.00	-157.11
WRPH867	3	35	50	35.8	N	86	32	40.7	W	43.9	138.8	470.0000	66.12	-26.8	-80.00	-114.44	-2.00	-157.12
WQOU634	1	35	50	26.7	N	86	52	56.1	W	33.3	182.6	470.0000	63.70	-26.8	-80.00	-112.04	-2.00	-157.14
WQOG410	2	36	22	47.5	N	86	27	38.1	W	45	53.7	470.0000	66.25	-26.8	-80.00	-114.66	-2.00	-157.20
WRPG261	2	35	53	1.3	N	86	28	53	W	44.9	129.5	470.0000	66.23	-26.8	-80.00	-114.64	-2.00	-157.20
KO6888	3	36	23	7.5	N	86	27	43.8	W	45.3	52.9	470.0000	66.24	-26.8	-80.00	-114.71	-2.00	-157.27
WQSJ515	3	36	18	52.3	N	86	24	6.7	W	45.9	65.0	470.0000	66.35	-26.8	-80.00	-114.83	-2.00	-157.28
WQSJ515	3	36	18	52.3	N	86	24	6.7	W	45.9	65.0	470.0000	66.35	-26.8	-80.00	-114.83	-2.00	-157.28
WQSJ515	3	36	18	52.3	N	86	24	6.7	W	45.9	65.0	470.0000	66.35	-26.8	-80.00	-114.83	-2.00	-157.28
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.00	-114.79	-2.00	-157.37
WQA2704	6	35	52	23.3	N	86	28	47.2	W	45.7	130.5	470.0000	66.22	-26.8	-80.0			

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
KNNF400	2	36	28	42.2	N	86	53	14	W	37.5	357.0	470.0000	63.59	-26.8	-80.00	-113.07	-2.00	-158.29
KNNF400	2	36	28	42.2	N	86	53	14	W	37.5	357.0	470.0000	63.59	-26.8	-80.00	-113.07	-2.00	-158.29
WQOE521	1	36	28	2	N	86	28	37	W	50.3	43.7	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WQOE521	1	36	28	2	N	86	28	37	W	50.3	43.7	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WPNY570	2	36	28	2.2	N	86	28	35	W	50.3	43.7	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WPEI389	6	36	28	4.2	N	86	28	37	W	50.3	43.6	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WZX668	6	36	28	2.1	N	86	28	36.9	W	50.3	43.7	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WZX668	6	36	28	2.1	N	86	28	36.9	W	50.3	43.7	470.0000	66.14	-26.8	-80.00	-115.62	-2.00	-158.29
WRPG265	3	35	48	31.4	N	86	29	6.1	W	50.4	137.0	470.0000	66.14	-26.8	-80.00	-115.64	-2.00	-158.31
WQW5708	3	36	10	56.4	N	86	17	5.9	W	52.4	84.8	470.0000	66.46	-26.8	-80.00	-115.98	-2.00	-158.32
WQW5708	3	36	10	56.4	N	86	17	5.9	W	52.4	84.8	470.0000	66.46	-26.8	-80.00	-115.98	-2.00	-158.32
WQUA901	2	36	29	37.7	N	86	51	33.8	W	39.2	0.8	470.0000	63.93	-26.8	-80.00	-113.46	-2.00	-158.33
WQUA901	2	36	29	37.7	N	86	51	33.8	W	39.2	0.8	470.0000	63.93	-26.8	-80.00	-113.46	-2.00	-158.33
WQES411	2	36	12	47.4	N	86	17	22.2	W	52.4	81.0	470.0000	66.44	-26.8	-80.00	-115.98	-2.00	-158.34
WQES411	3	36	12	47.4	N	86	17	22.2	W	52.4	81.0	470.0000	66.44	-26.8	-80.00	-115.98	-2.00	-158.34
KS237	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	470.0000	63.82	-26.8	-80.00	-113.37	-2.00	-158.35
KS237	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	470.0000	63.82	-26.8	-80.00	-113.37	-2.00	-158.35
WQEK235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	470.0000	63.82	-26.8	-80.00	-113.37	-2.00	-158.35
WQEK235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	470.0000	63.82	-26.8	-80.00	-113.37	-2.00	-158.35
WQEK235	3	36	29	26.5	N	86	52	2.6	W	38.8	359.8	470.0000	63.82	-26.8	-80.00	-113.37	-2.00	-158.35
WQFA578	1	35	50	51.4	N	86	25	30.9	W	51.3	129.3	470.0000	66.23	-26.8	-80.00	-115.79	-2.00	-158.36
WRVV306	2	35	51	35.8	N	86	24	27.2	W	51.7	127.0	470.0000	66.25	-26.8	-80.00	-115.86	-2.00	-158.41
WQYK415	1	35	50	41.8	N	86	25	19	W	51.7	129.4	470.0000	66.23	-26.8	-80.00	-115.86	-2.00	-158.43
WQYK415	1	35	50	41.8	N	86	25	19	W	51.7	129.4	470.0000	66.23	-26.8	-80.00	-115.86	-2.00	-158.43
WRCF557	3	36	28	36.2	N	86	28	37	W	51.1	42.9	470.0000	66.12	-26.8	-80.00	-115.76	-2.00	-158.44
WOSC638	1	35	51	31	N	86	24	18.1	W	52	127.0	470.0000	66.25	-26.8	-80.00	-115.91	-2.00	-158.46
WQHE537	5	35	50	47	N	86	25	4	W	51.9	129.0	470.0000	66.23	-26.8	-80.00	-115.90	-2.00	-158.46
WQHE537	5	35	50	47	N	86	25	4	W	51.9	129.0	470.0000	66.23	-26.8	-80.00	-115.90	-2.00	-158.46
WQHE537	5	35	50	47	N	86	25	4	W	51.9	129.0	470.0000	66.23	-26.8	-80.00	-115.90	-2.00	-158.46
WQHE537	5	35	50	47	N	86	25	4	W	51.9	129.0	470.0000	66.23	-26.8	-80.00	-115.90	-2.00	-158.46
WRUUA813	1	35	52	40	N	86	23	10	W	52.2	124.0	470.0000	66.28	-26.8	-80.00	-115.95	-2.00	-158.46
WRUUA813	1	35	52	40	N	86	23	10	W	52.2	124.0	470.0000	66.28	-26.8	-80.00	-115.95	-2.00	-158.46
WRUUA813	1	35	52	40	N	86	23	10	W	52.2	124.0	470.0000	66.28	-26.8	-80.00	-115.95	-2.00	-158.46
WRUUA813	1	35	52	40	N	86	23	10	W	52.2	124.0	470.0000	66.28	-26.8	-80.00	-115.95	-2.00	-158.46
WPUY596	1	35	51	5.7	N	86	24	44.1	W	52	128.1	470.0000	66.24	-26.8	-80.00	-115.91	-2.00	-158.47
WQUL987	8	35	51	46	N	86	24	0	W	52.1	126.3	470.0000	66.26	-26.8	-80.00	-115.93	-2.00	-158.47
WQUL987	8	35	51	46	N	86	24	0	W	52.1	126.3	470.0000	66.26	-26.8	-80.00	-115.93	-2.00	-158.47
WQFH798	1	35	50	45	N	86	25	1	W	52	129.0	470.0000	66.23	-26.8	-80.00	-115.91	-2.00	-158.48
WQFH798	1	35	50	45	N	86	25	1	W	52	129.0	470.0000	66.23	-26.8	-80.00	-115.91	-2.00	-158.48
WOIT898	10	35	50	47	N	86	24	58	W	52.1	128.9	470.0000	66.24	-26.8	-80.00	-115.93	-2.00	-158.48
WOIT898	10	35	50	47	N	86	24	58	W	52.1	128.9	470.0000	66.24	-26.8	-80.00	-115.93	-2.00	-158.48
WQJIT898	10	35	50	47	N	86	24	58	W	52.1	128.9	470.0000	66.24	-26.8	-80.00	-115.93	-2.00	-158.48
WRMF451	2	35	44	21	N	86	38	34.9	W	48.9	155.8	470.0000	65.69	-26.8	-80.00	-115.38	-2.00	-158.49
WQLQ795	2	36	10	59.3	N	86	16	22.7	W	53.5	84.8	470.0000	66.46	-26.8	-80.00	-116.16	-2.00	-158.50
WPKP981	2	36	30	19	N	86	51	24.1	W	40.4	1.1	470.0000	64.01	-26.8	-80.00	-113.72	-2.00	-158.51
WRVF276	2	35	47	4.3	N	86	30	2.6	W	51.4	140.2	470.0000	66.09	-26.8	-80.00	-115.81	-2.00	-158.52
WRDV217	2	35	46	54.2	N	86	30	19.3	W	51.4	140.8	470.0000	66.09	-26.8	-80.00	-115.81	-2.00	-158.52
WRBV377	3	36	11	7.4	N	86	16	14.7	W	53.7	84.5	470.0000	66.46	-26.8	-80.00	-116.19	-2.00	-158.53
WRBV377	3	36	11	7.4	N	86	16	14.7	W	53.7	84.5	470.0000	66.46	-26.8	-80.00	-116.19	-2.00	-158.53
WRDK577	5	35	44	8.2	N	86	39	2.7	W	49	156.7	470.0000	65.65	-26.8	-80.00	-115.40	-2.00	-158.55
WOTI508	2	36	29	55.2	N	86	52	11.7	W	39.7	359.4	470.0000	63.82	-26.8	-80.00	-113.57	-2.00	-158.55
WOTI508	2	36	29	55.2	N	86	52	11.7	W	39.7	359.4	470.0000	63.82	-26.8	-80.00	-113.57	-2.00	-158.55
WQTJ508	2	36	29	55.2	N	86	52	11.7	W	39.7	359.4	470.0000	63.82	-26.8	-80.00	-113.57	-2.00	-158.55
WRVP316	6	35	44	1.3	N	86	41	40.8	W	47.7	161.2	470.0000	65.41	-26.8	-80.00	-115.16	-2.00	-158.55
WQEK235	5	36	32	40.6	N	86	42	20.9	W	47	17.6	470.0000	65.28	-26.8	-80.00	-115.03	-2.00	-158.55
WQEK235	5	36	32	40.6	N	86	42	20.9	W	47	17.6	470.0000	65.28	-26.8	-80.00	-115.03	-2.00	-158.55
WQEK235	5	36	32	40.6	N	86	42	20.9	W	47	17.6	470.0000	65.28	-26.8	-80.00	-115.03	-2.00	-158.55
WRWB395	2	35	53	10.5	N	86	22	15.9	W	52.8	122.3	470.0000	66.29	-26.8	-80.00	-116.04	-2.00	-158.56
KAG384	13	35	44	8.5	N	86	38	50	W	49.1	156.4	470.0000	65.65	-26.8	-80.00	-115.41	-2.00	-158.56
KAG384	13	35	44	8.5	N	86	38	50	W	49.1	156.4	470.0000	65.65	-26.8	-80.00	-115.41	-2.00	-158.56
WORH501	1	35	48	43.5	N	86	27	7.7	W	52.2	134.4	470.0000	66.18	-26.8	-80.00	-115.95	-2.00	-158.57
WOTD409	4	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WOTD409	4	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WOTD409	4	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.			

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	4	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WQTD409	3	36	30	3	N	86	52	9	W	39.9	359.5	470.0000	63.82	-26.8	-80.00	-113.61	-2.00	-158.59
WRP1819	2	35	46	7.3	N	86	31	15.6	W	51.7	143.0	470.0000	66.03	-26.8	-80.00	-115.86	-2.00	-158.63
WRVN547	2	36	30	37.1	N	86	51	24.3	W	41	1.1	470.0000	64.01	-26.8	-80.00	-113.85	-2.00	-158.64
WQVG360	1	35	50	4.4	N	86	24	53.6	W	53	129.9	470.0000	66.23	-26.8	-80.00	-116.08	-2.00	-158.65
WQVG360	1	35	50	4.4	N	86	24	53.6	W	53	129.9	470.0000	66.23	-26.8	-80.00	-116.08	-2.00	-158.65
WQVG360	1	35	50	4.4	N	86	24	53.6	W	53	129.9	470.0000	66.23	-26.8	-80.00	-116.08	-2.00	-158.65
WRPH867	2	35	43	44.7	N	86	40	19.7	W	48.9	159.1	470.0000	65.53	-26.8	-80.00	-115.38	-2.00	-158.65
WF5750	9	35	50	9.2	N	86	24	42.5	W	53.1	129.6	470.0000	66.23	-26.8	-80.00	-116.09	-2.00	-158.66
WF5750	9	35	50	9.2	N	86	24	42.5	W	53.1	129.6	470.0000	66.23	-26.8	-80.00	-116.09	-2.00	-158.66
WF5750	9	35	50	9.2	N	86	24	42.5	W	53.1	129.6	470.0000	66.23	-26.8	-80.00	-116.09	-2.00	-158.66
WF5750	9	35	50	9.2	N	86	24	42.5	W	53.1	129.6	470.0000	66.23	-26.8	-80.00	-116.09	-2.00	-158.66
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WRVS557	1	35	50	15.3	N	86	24	26.4	W	53.3	129.1	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.2	470.0000	66.23	-26.8	-80.00	-116.13	-2.00	-158.69
WNBQ788	10	35	50	13.2	N	86	24	27	W	53.3	129.							

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQZE593	3	35	44	4.4 N		86	31	15.8 W		54.8	145.4	470.0000	65.99	-26.8	-80.00	-116.37	-2.00	-159.17
WRP1819	5	35	51	32.8 N		86	20	28.6 W		56.7	123.4	470.0000	66.28	-26.8	-80.00	-116.66	-2.00	-159.18
WQQP235	13	35	44	30 N		86	30	11 W		55.1	143.6	470.0000	66.03	-26.8	-80.00	-116.41	-2.00	-159.18
WPPC229	2	36	8	55.2 N		86	12	47 W		58.7	89.0	470.0000	66.51	-26.8	-80.00	-116.96	-2.00	-159.25
WPPC229	2	36	8	55.2 N		86	12	47 W		58.7	89.0	470.0000	66.51	-26.8	-80.00	-116.96	-2.00	-159.25
WOND532	7	36	8	54 N		86	12	47 W		58.7	89.0	470.0000	66.51	-26.8	-80.00	-116.96	-2.00	-159.25
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WOKG440	4	35	48	7.9 N		86	23	29.9 W		56.9	131.3	470.0000	66.21	-26.8	-80.00	-116.69	-2.00	-159.28
WRPT870	2	36	11	45.2 N		86	58	0.3 W		11	304.0	470.0000	51.94	-26.8	-80.00	-102.42	-2.00	-159.28
WRPT870	3	36	11	45.2 N		86	58	0.3 W		11	304.0	470.0000	51.94	-26.8	-80.00	-102.42	-2.00	-159.28
WRPG265	5	35	55	45.3 N		86	16	31.1 W		58.1	113.7	470.0000	66.36	-26.8	-80.00	-116.88	-2.00	-159.31
WOKG440	2	35	47	58.4 N		86	23	32.7 W		57.1	131.6	470.0000	66.21	-26.8	-80.00	-116.72	-2.00	-159.31
WOKG440	2	35	47	58.4 N		86	23	32.7 W		57.1	131.6	470.0000	66.21	-26.8	-80.00	-116.72	-2.00	-159.31
WOKG440	2	35	47	58.4 N		86	23	32.7 W		57.1	131.6	470.0000	66.21	-26.8	-80.00	-116.72	-2.00	-159.31
WRVS557	2	35	52	20.2 N		86	18	49.5 W		58	120.9	470.0000	66.30	-26.8	-80.00	-116.86	-2.00	-159.36
WQYE381	1	36	35	0.5 N		86	41	22.3 W		51.6	17.7	470.0000	65.28	-26.8	-80.00	-115.84	-2.00	-159.37
WQYE381	1	36	35	0.5 N		86	41	22.3 W		51.6	17.7	470.0000	65.28	-26.8	-80.00	-115.84	-2.00	-159.37
WQYE381	1	36	35	0.5 N		86	41	22.3 W		51.6	17.7	470.0000	65.28	-26.8	-80.00	-115.84	-2.00	-159.37
WRPG260	5	35	41	34.4 N		86	42	11 W		51.8	163.6	470.0000	65.28	-26.8	-80.00	-115.88	-2.00	-159.40
WQCV857	1	35	49	22 N		86	21	21 W		58	127.5	470.0000	66.25	-26.8	-80.00	-116.86	-2.00	-159.41
WQCV857	1	35	49	22 N		86	21	21 W		58	127.5	470.0000	66.25	-26.8	-80.00	-116.86	-2.00	-159.41
WRMCM791	3	36	33	7 N		86	29	56.1 W		56.3	35.6	470.0000	65.99	-26.8	-80.00	-116.60	-2.00	-159.41
WQRV477	2	35	47	53.4 N		86	23	0.8 W		57.8	131.2	470.0000	66.21	-26.8	-80.00	-116.83	-2.00	-159.42
WQRV477	2	35	47	53.4 N		86	23	0.8 W		57.8	131.2	470.0000	66.21	-26.8	-80.00	-116.83	-2.00	-159.42
WRDK577	4	35	41	23.2 N		86	38	59.5 W		53.7	158.8	470.0000	65.57	-26.8	-80.00	-116.19	-2.00	-159.42
WRJJ641	5	36	31	47.5 N		86	52	58.8 W		43.2	357.9	470.0000	63.59	-26.8	-80.00	-114.30	-2.00	-159.52
WRTB332	2	35	47	41.6 N		86	22	2.2 W		59.1	130.5	470.0000	66.22	-26.8	-80.00	-117.02	-2.00	-159.61
WRTB332	2	35	47	41.6 N		86	22	2.2 W		59.1	130.5	470.0000	66.22	-26.8	-80.00	-117.02	-2.00	-159.61
WRTB332	2	35	47	41.6 N		86	22	2.2 W		59.1	130.5	470.0000	66.22	-26.8	-80.00	-117.02	-2.00	-159.61
WQUL987	6	35	45	51.8 N		86	24	16.2 W		58.9	135.1	470.0000	66.16	-26.8	-80.00	-116.99	-2.00	-159.63
WQUL987	6	35	45	51.8 N		86	24	16.2 W		58.9	135.1	470.0000	66.16	-26.8	-80.00	-116.99	-2.00	-159.63
WQZE593	6	35	46	8.2 N		86	23	50 W		59.1	134.3	470.0000	66.18	-26.8	-80.00	-117.02	-2.00	-159.64
WRPG235	2	35	46	7.7 N		86	23	48.3 W		59.1	134.3	470.0000	66.18	-26.8	-80.00	-117.02	-2.00	-159.64
WRVB622	2	36	35	40.1 N		86	35	36.8 W		55.9	25.7	470.0000	65.69	-26.8	-80.00	-116.54	-2.00	-159.65
WRCR421	1	35	46	10.4 N		86	55	34.3 W		41.6	187.5	470.0000	63.11	-26.8	-80.00	-113.97	-2.00	-159.66
WRPG235	1	35	46	7.4 N		86	23	44.7 W		59.2	134.2	470.0000	66.18	-26.8	-80.00	-117.04	-2.00	-159.66
WNQB788	11	35	46	1.2 N		86	23	38 W		59.4	134.3	470.0000	66.18	-26.8	-80.00	-117.07	-2.00	-159.69
WNQB788	11	35	46	1.2 N		86	23	38 W		59.4	134.3	470.0000	66.18	-26.8	-80.00	-117.07	-2.00	-159.69
WNQB788	11	35	46	1.2 N		86	23	38 W		59.4	134.3	470.0000	66.18	-26.8	-80.00	-117.07	-2.00	-159.69
WNQB788	11	35	46	1.2 N		86	23	38 W		59.4	134.3	470.0000	66.18	-26.8	-80.00	-117.07	-2.00	-159.69
WNQB788	11	35	46	1.2 N		86	23	38 W		59.4	134.3	470.0000	66.18	-26.8	-80.00	-117.07	-2.00	-159.69
WQWP615	2	35	44	37.9 N		86	53	32.6 W		44.1	183.1	470.0000	63.59	-26.8	-80.00	-114.48	-2.00	-159.70
WQQP235	7	35	45	59.4 N		86	23	33.3 W		59.5	134.2	470.0000	66.18	-26.8	-80.00	-117.08	-2.00	-159.70
WQQP235	7	35	45	59.4 N		86	23	33.3 W		59.5	134.2	470.0000	66.18	-26.8	-80.00	-117.08	-2.00	-159.70
WQQP235	7	35	45	59.4 N		86	23	33.3 W		59.5	134.2	470.0000	66.18	-26.8	-80.00	-117.08	-2.00	-159.70
WQQP235	7	35	45	59.4 N		86	23	33.3 W		59.5	134.2	470.0000	66.18	-26.8	-80.00	-117.08	-2.00	-159.70
WQQP235	7	35	45	59.4 N		86	23	33.3 W		59.5	134.2	470.0000	66.18	-26.8	-80.00	-117.08	-2.00	-159.70
WF5750	7	35	46	0.2 N		86	23	32 W		59.6	134.2	470.0000	66.18	-26.8	-80.00	-117.10	-2.00	-159.72
WF5750	7	35	46	0.2 N		86	23	32 W		59.6	134.2	470.0000	66.18	-26.8	-80.00	-117.10	-2.00	-159.72
WF5750	7	35	46	0.2 N		86	23	32 W		59.6	134.2	470.0000	66.18	-26.8	-80.00	-117.10	-2.00	-159.72
WRP1819	6	35	46	11.8 N		86	23	4.2 W		59.8	133.5	470.0000	66.19	-26.8	-80.00	-117.13	-2.00	-159.73
WRC1956	1	35	46	48.8 N		86	23	11.5 W		60	131.8	470.0000	66.21	-26.8	-80.00	-117.15	-2.00	-159.74
WQZE593	2	35	45	12 N		86	24	13 W		59.9	135.9	470.0000	66.16	-26.8	-80.00	-117.14	-2.00	-159.78
WQVA353	2	36	35	23.4 N		86	31	40 W		58.3	31.1	470.0000	65.90	-26.8	-80.00	-116.91	-2.00	-159.81
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82
WQQW941	1	35	46	49.3 N		86	21	43 W		60.5	131.3	470.0000	66.21	-26.8				

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	WIIW Parameters										LM & OOB Rejection										Interference Metrics	
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
WQQW941	1	35	46	49.3	N	86	21	43	W	60.5	131.3	470.0000	66.21	-26.8	-80.00	-117.23	-2.00	-159.82					
KNIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	470.0000	65.90	-26.8	-80.00	-116.92	-2.00	-159.82					
KNIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	470.0000	65.90	-26.8	-80.00	-116.92	-2.00	-159.82					
KNIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	470.0000	65.90	-26.8	-80.00	-116.92	-2.00	-159.82					
KNIV993	4	36	35	14.4	N	86	31	13.4	W	58.4	31.8	470.0000	65.90	-26.8	-80.00	-116.92	-2.00	-159.82					
WCY931	8	36	35	54.2	N	86	31	48.2	W	59	30.5	470.0000	65.87	-26.8	-80.00	-117.01	-2.00	-159.94					
WCQW941	3	35	46	47.6	N	86	20	58.2	W	61.4	130.7	470.0000	66.22	-26.8	-80.00	-117.36	-2.00	-159.94					
WCQW941	3	35	46	47.6	N	86	20	58.2	W	61.4	130.7	470.0000	66.22	-26.8	-80.00	-117.36	-2.00	-159.94					
WCQW941	3	35	46	47.6	N	86	20	58.2	W	61.4	130.7	470.0000	66.22	-26.8	-80.00	-117.36	-2.00	-159.94					
WRUZ687	1	35	44	58.2	N	86	55	14.8	W	43.7	186.5	470.0000	63.23	-26.8	-80.00	-114.40	-2.00	-159.97					
WRUZ687	1	35	44	58.2	N	86	55	14.8	W	43.7	186.5	470.0000	63.23	-26.8	-80.00	-114.40	-2.00	-159.97					
WRUZ687	1	35	44	58.2	N	86	55	14.8	W	43.7	186.5	470.0000	63.23	-26.8	-80.00	-114.40	-2.00	-159.97					
WRZ352	4	35	43	51.2	N	86	24	38.9	W	61.3	137.9	470.0000	66.14	-26.8	-80.00	-117.34	-2.00	-160.01					
WOTK893	1	36	36	5	N	86	31	32	W	59.5	30.6	470.0000	65.87	-26.8	-80.00	-117.08	-2.00	-160.01					
WN2N346	5	36	4	25.4	N	86	9	41.5	W	63.8	96.5	470.0000	66.46	-26.8	-80.00	-117.69	-2.00	-160.03					
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	470.0000	65.87	-26.8	-80.00	-117.11	-2.00	-160.04					
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	470.0000	65.87	-26.8	-80.00	-117.11	-2.00	-160.04					
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	470.0000	65.87	-26.8	-80.00	-117.11	-2.00	-160.04					
WQVK663	2	36	36	7.1	N	86	31	20.7	W	59.7	30.8	470.0000	65.87	-26.8	-80.00	-117.11	-2.00	-160.04					
WPMAT47	2	35	45	4.2	N	86	55	47	W	43.6	187.6	470.0000	63.11	-26.8	-80.00	-114.38	-2.00	-160.07					
WQTU282	1	36	36	16.3	N	86	31	14.3	W	60	30.8	470.0000	65.87	-26.8	-80.00	-117.15	-2.00	-160.08					
WQE6320	2	35	49	32	N	86	16	0	W	64.3	122.9	470.0000	66.29	-26.8	-80.00	-117.76	-2.00	-160.27					
WQE6320	2	35	49	32	N	86	16	0	W	64.3	122.9	470.0000	66.29	-26.8	-80.00	-117.76	-2.00	-160.27					
WQUK369	2	35	44	1.9	N	86	55	7	W	45.4	186.0	470.0000	63.23	-26.8	-80.00	-114.73	-2.00	-160.30					
WRPG259	3	35	45	29.6	N	86	20	6.1	W	64	131.5	470.0000	66.21	-26.8	-80.00	-117.72	-2.00	-160.30					
WRMZ209	1	35	38	33.1	N	86	38	43.6	W	58.8	160.2	470.0000	65.47	-26.8	-80.00	-116.98	-2.00	-160.31					
WNVK978	3	35	38	50.2	N	86	34	40	W	60.6	154.6	470.0000	65.73	-26.8	-80.00	-117.24	-2.00	-160.31					
WHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	470.0000	62.99	-26.8	-80.00	-114.50	-2.00	-160.31					
WHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	470.0000	62.99	-26.8	-80.00	-114.50	-2.00	-160.31					
WHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	470.0000	62.99	-26.8	-80.00	-114.50	-2.00	-160.31					
WHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	470.0000	62.99	-26.8	-80.00	-114.50	-2.00	-160.31					
WQHE537	32	35	44	48	N	86	56	8	W	44.2	188.2	470.0000	62.99	-26.8	-80.00	-114.50	-2.00	-160.31					
WRPH867	4	35	41	59.3	N	86	25	9.3	W	63.4	140.5	470.0000	66.09	-26.8	-80.00	-117.63	-2.00	-160.34					
WRBK816	1	36	33	8	N	86	54	51.5	W	45.9	354.6	470.0000	63.23	-26.8	-80.00	-114.83	-2.00	-160.40					
WRBK816	1	36	33	8	N	86	54	51.5	W	45.9	354.6	470.0000	63.23	-26.8	-80.00	-114.83	-2.00	-160.40					
WRPG262	1	35	56	18.4	N	86	10	33.7	W	66.1	109.7	470.0000	66.39	-26.8	-80.00	-118.00	-2.00	-160.41					
WOLF442	3	36	38	22.7	N	86	35	3.6	W	60.8	24.3	470.0000	65.65	-26.8	-80.00	-117.27	-2.00	-160.42					
WOLF442	2	36	38	22.7	N	86	35	3.6	W	60.8	24.3	470.0000	65.65	-26.8	-80.00	-117.27	-2.00	-160.42					
WOLF442	3	36	38	22.7	N	86	35	3.6	W	60.8	24.3	470.0000	65.65	-26.8	-80.00	-117.27	-2.00	-160.42					
WOLF442	2	36	38	22.7	N	86	35	3.6	W	60.8	24.3	470.0000	65.65	-26.8	-80.00	-117.27	-2.00	-160.42					
WCY203	2	35	38	12.2	N	86	41	52	W	57.9	164.9	470.0000	65.21	-26.8	-80.00	-116.85	-2.00	-160.44					
WOZU443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRKB242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WQZJ443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRKB242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WQZJ443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRKB242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WQZJ443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRKB242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WQZJ443	2	36	38	27.4	N	86	33	42.4	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRKB242	2	36	38	27.5	N	86	33	42.5	W	61.8	26.0	470.0000	65.73	-26.8	-80.00	-117.41	-2.00	-160.48					
WRCC983	2	36	24	30.5	N	87	1	30.5	W	33	334.4	470.0000	60.15	-26.8	-80.00	-117.41	-2.00	-160.62					
WRCC983	2	36	24	30.5	N	87	1	30.5	W	33	334.4	470.0000	60.15	-26.8	-80.00	-117.41	-2.00	-160.62					
WRCC983	2	36	24	30.5	N	87	1	30.5	W	33	334.4	470.0000	60.15	-26.8	-80.00	-117.41	-2.00	-160.62					
WQTT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69					
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69					
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69					

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	3	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WQTT449	2	35	44	33.8	N	86	57	26.2	W	44.9	190.6	470.0000	62.75	-26.8	-80.00	-114.64	-2.00	-160.69
WRP1819	3	35	49	5.3	N	86	13	31.6	W	67.9	121.7	470.0000	66.30	-26.8	-80.00	-118.23	-2.00	-160.73
WDH861	1	36	6	37.2	N	86	58	1	W	9.7	249.6	470.0000	49.38	-26.8	-80.00	-101.33	-2.00	-160.74
WRPX317	2	35	44	24.4	N	86	57	11.5	W	45.2	190.1	470.0000	62.75	-26.8	-80.00	-114.69	-2.00	-160.75
WRPH867	1	35	45	3.3	N	86	17	12.8	W	67.8	129.6	470.0000	66.23	-26.8	-80.00	-118.22	-2.00	-160.78
WQZ0503	1	35	45	10.1	N	86	58	5	W	44	192.1	470.0000	62.47	-26.8	-80.00	-114.46	-2.00	-160.79
WQZ0503	1	35	45	10.1	N	86	58	5	W	44	192.1	470.0000	62.47	-26.8	-80.00	-114.46	-2.00	-160.79
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WQWT530	1	35	43	27	N	86	19	10	W	67.6	133.1	470.0000	66.19	-26.8	-80.00	-118.19	-2.00	-160.80
WRPG235	5	35	41	56.3	N	86	21	18.1	W	67.3	136.8	470.0000	66.15	-26.8	-80.00	-118.15	-2.00	-160.80
WOZEF593	4	35	41	52	N	86	21	19	W	67.4	136.8	470.0000	66.15	-26.8	-80.00	-118.17	-2.00	-160.82
WRPG259	4	35	39	29	N	86	25	21.7	W	66.8	143.3	470.0000	66.03	-26.8	-80.00	-118.09	-2.00	-160.85
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389	2	35	43	58.2	N	86	57	41.1	W	46.1	190.8	470.0000	62.75	-26.8	-80.00	-114.87	-2.00	-160.92
WRUQ389</																		

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WPQK232	2	36	42	8.1	N	86	34	30	W	67.5	22.5	470.0000	65.57	-26.8	-80.00	-118.18	-2.00	-161.41
WNN5974	2	36	33	35.2	N	86	14	28	W	72.8	50.0	470.0000	66.22	-26.8	-80.00	-118.83	-2.00	-161.42
WQAB846	1	36	42	27	N	86	34	33.9	W	68	22.3	470.0000	65.57	-26.8	-80.00	-118.24	-2.00	-161.47
WQAB846	1	36	42	27	N	86	34	33.9	W	68	22.3	470.0000	65.57	-26.8	-80.00	-118.24	-2.00	-161.47
WQAB846	1	36	42	27	N	86	34	33.9	W	68	22.3	470.0000	65.57	-26.8	-80.00	-118.24	-2.00	-161.47
WQAB846	1	36	42	27	N	86	34	33.9	W	68	22.3	470.0000	65.57	-26.8	-80.00	-118.24	-2.00	-161.47
WQH1498	2	35	47	18	N	86	10	3	W	74.1	121.8	470.0000	66.30	-26.8	-80.00	-118.99	-2.00	-161.49
WOWQ557	1	36	19	45.1	N	87	2	45.4	W	26.5	322.4	470.0000	57.35	-26.8	-80.00	-110.06	-2.00	-161.50
WOWQ557	1	36	19	45.1	N	87	2	45.4	W	26.5	322.4	470.0000	57.35	-26.8	-80.00	-118.28	-2.00	-161.51
WRDB492	2	36	42	35.5	N	86	34	9.9	W	68.5	22.6	470.0000	65.57	-26.8	-80.00	-118.31	-2.00	-161.54
WRDB492	2	36	42	35.5	N	86	34	9.9	W	68.5	22.6	470.0000	65.57	-26.8	-80.00	-118.31	-2.00	-161.54
WQUS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	470.0000	65.73	-26.8	-80.00	-118.48	-2.00	-161.55
WQUS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	470.0000	65.73	-26.8	-80.00	-118.48	-2.00	-161.55
WQUS251	4	36	42	16.5	N	86	31	1.2	W	69.9	26.3	470.0000	65.73	-26.8	-80.00	-118.48	-2.00	-161.55
WQUS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	470.0000	65.73	-26.8	-80.00	-118.48	-2.00	-161.55
WQUS251	8	36	42	16.5	N	86	31	1.2	W	69.9	26.3	470.0000	65.73	-26.8	-80.00	-118.48	-2.00	-161.55
WRKO705	1	36	42	47.6	N	86	34	25.1	W	68.7	22.2	470.0000	65.57	-26.8	-80.00	-118.33	-2.00	-161.56
KW0403	3	35	39	36	N	86	18	14	W	73.6	136.4	470.0000	66.15	-26.8	-80.00	-118.93	-2.00	-161.58
KW0403	3	35	39	36	N	86	18	14	W	73.6	136.4	470.0000	66.15	-26.8	-80.00	-118.93	-2.00	-161.58
WQND542	5	35	39	36.3	N	86	18	14.3	W	73.6	136.4	470.0000	66.15	-26.8	-80.00	-118.93	-2.00	-161.58
KW0403	3	35	39	36	N	86	18	14	W	73.6	136.4	470.0000	66.15	-26.8	-80.00	-118.93	-2.00	-161.58
KW0403	3	35	39	36	N	86	18	14	W	73.6	136.4	470.0000	66.15	-26.8	-80.00	-118.93	-2.00	-161.58
WYKS30	11	35	43	26.7	N	86	59	16.2	W	47.5	193.4	470.0000	62.33	-26.8	-80.00	-115.13	-2.00	-161.60
WYKS30	11	35	43	26.7	N	86	59	16.2	W	47.5	193.4	470.0000	62.33	-26.8	-80.00	-115.13	-2.00	-161.60
WQWL345	1	36	42	55.9	N	86	34	50.8	W	68.7	21.7	470.0000	65.53	-26.8	-80.00	-118.33	-2.00	-161.60
WRD1267	2	36	38	9	N	86	53	48	W	55	357.1	470.0000	63.59	-26.8	-80.00	-116.40	-2.00	-161.61
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	26.5	470.0000	65.73	-26.8	-80.00	-118.56	-2.00	-161.63
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	26.5	470.0000	65.73	-26.8	-80.00	-118.56	-2.00	-161.63
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	26.5	470.0000	65.73	-26.8	-80.00	-118.56	-2.00	-161.63
WROU384	2	36	42	31.3	N	86	30	45.2	W	70.5	26.5	470.0000	65.73	-26.8	-80.00	-118.56	-2.00	-161.63
WPZP216	2	36	43	4.6	N	86	34	55.7	W	68.9	21.5	470.0000	65.53	-26.8	-80.00	-118.36	-2.00	-161.63
WQJB922	1	35	42	42	N	86	58	49	W	48.7	192.2	470.0000	62.47	-26.8	-80.00	-115.34	-2.00	-161.68
WCVB887	2	36	43	23.4	N	86	34	32.9	W	69.6	21.7	470.0000	65.53	-26.8	-80.00	-118.44	-2.00	-161.72
WRVN664	2	35	34	36.3	N	86	26	43.6	W	73.2	148.8	470.0000	65.92	-26.8	-80.00	-118.88	-2.00	-161.76
WYKS30	9	35	38	13.7	N	86	54	6.1	W	56	183.3	470.0000	63.59	-26.8	-80.00	-116.56	-2.00	-161.77
WYKS30	9	35	38	13.7	N	86	54	6.1	W	56	183.3	470.0000	63.59	-26.8	-80.00	-116.56	-2.00	-161.77
WPRX899	2	35	34	6.8	N	86	27	40.3	W	73.3	150.1	470.0000	65.87	-26.8	-80.00	-118.89	-2.00	-161.82
WPRX899	2	35	34	6.8	N	86	27	40.3	W	73.3	150.1	470.0000	65.87	-26.8	-80.00	-118.89	-2.00	-161.82
WQSD416	1	35	32	44.8	N	86	38	4.4	W	69.2	162.5	470.0000	65.35	-26.8	-80.00	-118.39	-2.00	-161.85
WQSD416	1	35	32	44.8	N	86	38	4.4	W	69.2	162.5	470.0000	65.35	-26.8	-80.00	-118.39	-2.00	-161.85
WQSD416	1	35	32	44.8	N	86	38	4.4	W	69.2	162.5	470.0000	65.35	-26.8	-80.00	-118.39	-2.00	-161.85
KIF409	10	35	38	44.4	N	86	55	11.3	W	55.2	185.1	470.0000	63.35	-26.8	-80.00	-116.43	-2.00	-161.88
KIF409	8	35	38	44.4	N	86	55	11.3	W	55.2	185.1	470.0000	63.35	-26.8	-80.00	-116.43	-2.00	-161.88
WOKW312	4	35	38	44.4	N	86	55	11.3	W	55.2	185.1	470.0000	63.35	-26.8	-80.00	-116.43	-2.00	-161.88
WYKS30	4	35	38	44.4	N	86	55	11.3	W	55.2	185.1	470.0000	63.35	-26.8	-80.00	-116.43	-2.00	-161.88
WRMV933	1	36	44	2	N	86	38	59	W	68.6	16.3	470.0000	65.21	-26.8	-80.00	-118.32	-2.00	-161.91
WRMV933	1	36	44	2	N	86	38	59	W	68.6	16.3	470.0000	65.21	-26.8	-80.00	-118.32	-2.00	-161.91
WRMV933	1	36	44	2	N	86	38	59	W	68.6	16.3	470.0000	65.21	-26.8	-80.00	-118.32	-2.00	-161.91
WRPB877	2	35	33	42	N	86	26	43	W	74.6	149.4	470.0000	65.90	-26.8	-80.00	-119.05	-2.00	-161.95
WRMG912	3	35	50	13	N	86	4	23	W	79	115.1	470.0000	66.35	-26.8	-80.00	-119.54	-2.00	-162.00
WQSK559	2	36	44	44.3	N	86	34	5.8	W	72.2	21.5	470.0000	65.53	-26.8	-80.00	-118.76	-2.00	-162.04
WRVW693	1	36	44	42.5	N	86	34	5.8	W	72.2	21.5	470.0000	65.53	-26.8	-80.00	-118.76	-2.00	-162.04
WQSK559	2	36	44	44.3	N	86	34	5.8	W	72.2	21.5	470.0000	65.53	-26.8	-80.00	-118.76	-2.00	-162.04
WOXA996	2	36	31	52.2	N	87	1	33.1	W	45.6	341.7	470.0000	61.45	-26.8	-80.00	-114.77	-2.00	-162.12
WPWG336	6	35	46	58	N	87	3	7.9	W	43.1	202.9	470.0000	60.93	-26.8	-80.00	-114.28	-2.00	-162.15
WRMG479	1	36	45	25.2	N	86	33	51.7	W	73.5	21.4	470.0000	65.53	-26.8	-80.00	-118.92	-2.00	-162.19
WRMG479	1	36	45	25.2	N	86	33	51.7	W	73.5	21.4	470.0000	65.53					

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQQP586	1	35	49	18.8	N	86	3	29.9	W	80.9	115.8	470.0000	66.35	-26.8	-80.00	-119.75	-2.00	-162.20
WRAC850	4	35	33	59.6	N	86	21	34.5	W	78.4	144.3	470.0000	66.02	-26.8	-80.00	-119.48	-2.00	-162.26
WQHA642	2	36	41	41	N	86	18	49	W	78.9	38.6	470.0000	66.05	-26.8	-80.00	-119.53	-2.00	-162.28
WQOJ757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	470.0000	65.47	-26.8	-80.00	-119.14	-2.00	-162.47
WQOJ757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	470.0000	65.47	-26.8	-80.00	-119.14	-2.00	-162.47
WQOJ757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	470.0000	65.47	-26.8	-80.00	-119.14	-2.00	-162.47
WQOJ757	1	36	46	39	N	86	34	12.1	W	75.4	20.4	470.0000	65.47	-26.8	-80.00	-119.14	-2.00	-162.47
WQUV660	1	35	30	31.3	N	86	29	38.9	W	77.8	154.4	470.0000	65.73	-26.8	-80.00	-119.41	-2.00	-162.48
WQUV660	1	35	30	31.3	N	86	29	38.9	W	77.8	154.4	470.0000	65.73	-26.8	-80.00	-119.41	-2.00	-162.48
WQEK235	6	36	34	0.2	N	87	1	30	W	49.4	343.3	470.0000	61.75	-26.8	-80.00	-115.47	-2.00	-162.52
WQEK235	6	36	34	0.2	N	87	1	30	W	49.4	343.3	470.0000	61.75	-26.8	-80.00	-115.47	-2.00	-162.52
WNLY257	4	35	29	53.7	N	86	28	25	W	79.6	153.6	470.0000	65.77	-26.8	-80.00	-119.61	-2.00	-162.64
WRDK478	2	36	46	17.5	N	86	42	55.9	W	71.3	10.8	470.0000	64.78	-26.8	-80.00	-118.65	-2.00	-162.67
WQIW262	2	35	29	10.2	N	86	28	14.9	W	80.9	153.8	470.0000	65.77	-26.8	-80.00	-119.75	-2.00	-162.78
WQWP705	1	35	29	37.2	N	86	26	12.4	W	81.6	151.6	470.0000	65.84	-26.8	-80.00	-119.83	-2.00	-162.79
WQWP705	1	35	29	37.2	N	86	26	12.4	W	81.6	151.6	470.0000	65.84	-26.8	-80.00	-119.83	-2.00	-162.79
WRQP517	1	35	29	33	N	86	26	14	W	81.7	151.7	470.0000	65.84	-26.8	-80.00	-119.84	-2.00	-162.80
WRED989	2	35	29	35.9	N	86	25	10.9	W	82.4	150.7	470.0000	65.87	-26.8	-80.00	-119.91	-2.00	-162.84
WRTR727	6	35	29	39.8	N	86	24	40.4	W	82.6	150.2	470.0000	65.87	-26.8	-80.00	-119.93	-2.00	-162.86
WPLSL546	2	35	47	0	N	87	4	14	W	43.8	205.0	470.0000	60.36	-26.8	-80.00	-114.42	-2.00	-162.86
WNVA388	5	35	29	22.7	N	86	25	28.9	W	82.5	151.1	470.0000	65.84	-26.8	-80.00	-119.92	-2.00	-162.88
WNVA388	5	35	29	22.7	N	86	25	28.9	W	82.5	151.1	470.0000	65.84	-26.8	-80.00	-119.92	-2.00	-162.88
WQTR751	1	36	26	43.6	N	87	4	47.6	W	38.9	330.5	470.0000	59.31	-26.8	-80.00	-113.39	-2.00	-162.88
WQYY331	2	35	29	13.3	N	86	25	46	W	82.6	151.5	470.0000	65.84	-26.8	-80.00	-119.93	-2.00	-162.89
WRVM625	2	35	29	16.6	N	86	24	55.8	W	83.1	150.7	470.0000	65.87	-26.8	-80.00	-119.98	-2.00	-162.91
WRKW716	2	35	29	27.7	N	86	24	20.7	W	83.2	150.0	470.0000	65.87	-26.8	-80.00	-119.99	-2.00	-162.92
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WPLTS29	1	35	29	11.3	N	86	24	33	W	83.5	150.4	470.0000	65.87	-26.8	-80.00	-120.03	-2.00	-162.95
WQFS693	3	36	49	10	N	86	33	20	W	80.3	20.1	470.0000	65.47	-26.8	-80.00	-119.69	-2.00	-163.01
WQFS693	5	36	49	10	N	86	33	20	W	80.3	20.1	470.0000	65.47	-26.8	-80.00	-119.69	-2.00	-163.01
WNVV224	5	36	43	25.5	N	86	12	59.5	W	87	41.7	470.0000	66.10	-26.8	-80.00	-120.38	-2.00	-163.08
WRCK942	2	36	45	25.4	N	86	50	28	W	68.4	1.8	470.0000	64.01	-26.8	-80.00	-118.29	-2.00	-163.08
KNNF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
WPMM299	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
KNNF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
KNNF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
WPMM299	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
KNNF902	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
WPMM299	2	36	41	44.2	N	86	8	54.9	W	89	45.9	470.0000	66.16	-26.8	-80.00	-120.58	-2.00	-163.22
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQHE537	36	35	32	3	N	86	13	35	W	88.7	139.3	470.0000	66.10	-26.8	-80.00	-120.55	-2.00	-163.25
WQEE781	11	35	47	17.6	N	87	5	20.4	W	44	207.2	470.0000	59.95	-26.8	-80.00	-114.46	-2.00	-163.31
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34
WQYA383	12	36	42	12.6	N	86	8	10.6	W	90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)	SORTED
WOYQA383	12	36	42	12.6 N		86	8	10.6 W		90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34	
WOYQA383	12	36	42	12.6 N		86	8	10.6 W		90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34	
WQYQA383	12	36	42	12.6 N		86	8	10.6 W		90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34	
KCD754	2	36	42	12.6 N		86	8	10.6 W		90.4	46.0	470.0000	66.18	-26.8	-80.00	-120.72	-2.00	-163.34	
WQOG225	5	36	44	46 N		86	11	32 W		90.3	41.6	470.0000	66.10	-26.8	-80.00	-120.71	-2.00	-163.40	
WRPX736	1	36	43	48.5 N		86	9	53 W		90.7	43.5	470.0000	66.14	-26.8	-80.00	-120.74	-2.00	-163.41	
WQOG225	1	36	44	55 N		86	11	32 W		90.5	41.5	470.0000	66.10	-26.8	-80.00	-120.72	-2.00	-163.42	
WQTH657	2	35	27	54.3 N		86	47	0 W		75.3	174.3	470.0000	64.45	-26.8	-80.00	-119.13	-2.00	-163.48	
WNNS975	3	36	44	53.2 N		86	10	39 W		91.4	42.1	470.0000	66.12	-26.8	-80.00	-120.81	-2.00	-163.49	
WQOG225	4	36	44	55 N		86	10	36.5 W		91.4	42.1	470.0000	66.12	-26.8	-80.00	-120.81	-2.00	-163.49	
WNXT602	3	36	45	21.2 N		86	11	4 W		91.6	41.5	470.0000	66.10	-26.8	-80.00	-120.83	-2.00	-163.53	
WOKV304	2	36	39	14.2 N		87	1	18 W		58.6	346.3	470.0000	62.18	-26.8	-80.00	-116.95	-2.00	-163.57	
WQBC780	3	36	45	49 N		86	11	2 W		92.2	41.2	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	2	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	3	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	2	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	3	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	2	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNVV224	3	36	45	30.2 N		86	10	37 W		92.2	41.7	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WQBC780	3	36	45	49 N		86	11	2 W		92.2	41.2	470.0000	66.10	-26.8	-80.00	-120.89	-2.00	-163.58	
WNIT259	11	36	46	15.2 N		86	11	33 W		92.3	40.5	470.0000	66.09	-26.8	-80.00	-120.90	-2.00	-163.60	
WRCH702	2	36	16	40 N		87	3	55 W		23.5	310.4	470.0000	54.08	-26.8	-80.00	-109.01	-2.00	-163.73	
WRCH702	2	36	16	40 N		87	3	55 W		23.5	310.4	470.0000	54.08	-26.8	-80.00	-109.01	-2.00	-163.73	
WQEE781	12	35	31	2 N		86	8	38 W		95.1	136.6	470.0000	66.15	-26.8	-80.00	-121.16	-2.00	-163.81	
WQJG805	1	35	36	54.3 N		87	2	7 W		60.3	194.7	470.0000	62.18	-26.8	-80.00	-117.20	-2.00	-163.82	
WRAM550	2	35	29	9.3 N		86	10	44.9 W		95.5	139.4	470.0000	66.10	-26.8	-80.00	-121.19	-2.00	-163.89	
WRJF749	2	35	38	34.1 N		87	3	24.7 W		57.9	197.3	470.0000	61.75	-26.8	-80.00	-116.85	-2.00	-163.90	
WXYS71	4	36	16	21.2 N		87	3	56 W		23.2	309.3	470.0000	53.76	-26.8	-80.00	-108.90	-2.00	-163.94	
KUL720	4	35	37	5.3 N		87	2	39 W		60.2	195.5	470.0000	62.04	-26.8	-80.00	-117.18	-2.00	-163.95	
WQWK312	2	35	37	5.3 N		87	2	39 W		60.2	195.5	470.0000	62.04	-26.8	-80.00	-117.18	-2.00	-163.95	
WQWK312	2	35	37	5.3 N		87	2	39 W		60.2	195.5	470.0000	62.04	-26.8	-80.00	-117.18	-2.00	-163.95	
WQTC810	2	36	39	17.2 N		87	2	31 W		59.2	344.6	470.0000	61.89	-26.8	-80.00	-117.04	-2.00	-163.95	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2.00	-164.04	
WPNS363	1	35	37	21.3 N		87	2	56 W		59.8	196.0	470.0000	61.89	-26.8	-80.00	-117.13	-2		

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQWK312	6	35	35	31.6 N		87	3	35.4 W		63.4	196.1	470.0000	61.89	-26.8	-80.00	-117.63	-2.00	-164.54
WYK530	7	35	35	31.6 N		87	3	35.4 W		63.4	196.1	470.0000	61.89	-26.8	-80.00	-117.63	-2.00	-164.54
WRJT343	1	35	35	49.9 N		87	4	20.7 W		63.1	197.2	470.0000	61.75	-26.8	-80.00	-117.59	-2.00	-164.64
WQJD512	4	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
WQM2728	2	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
WPWG336	2	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
WQOX539	5	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
KUJ720	8	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
WQOX539	5	35	33	21.2 N		87	3	14 W		67.1	194.7	470.0000	62.18	-26.8	-80.00	-118.13	-2.00	-164.75
WQRX643	1	36	46	58.6 N		86	59	55.6 W		72.2	350.6	470.0000	62.75	-26.8	-80.00	-118.76	-2.00	-164.81
WQRX643	1	36	46	58.6 N		86	59	55.6 W		72.2	350.6	470.0000	62.75	-26.8	-80.00	-118.76	-2.00	-164.81
WQRX643	1	36	46	58.6 N		86	59	55.6 W		72.2	350.6	470.0000	62.75	-26.8	-80.00	-118.76	-2.00	-164.81
WQRU939	2	35	36	57.4 N		87	6	2.5 W		62	200.0	470.0000	61.30	-26.8	-80.00	-117.44	-2.00	-164.94
WQEEF781	9	35	29	24 N		87	1	34 W		73.7	191.4	470.0000	62.61	-26.8	-80.00	-118.94	-2.00	-165.13
WQEEF781	9	35	29	24 N		87	1	34 W		73.7	191.4	470.0000	62.61	-26.8	-80.00	-118.94	-2.00	-165.13
WORH533	1	36	13	48 N		87	2	47 W		19	301.5	470.0000	50.73	-26.8	-80.00	-107.17	-2.00	-165.24
WORH533	1	36	13	48 N		87	2	47 W		19	301.5	470.0000	50.73	-26.8	-80.00	-107.17	-2.00	-165.24
WQVP668	1	36	6	17.1 N		87	3	14 W		17.4	256.7	470.0000	49.41	-26.8	-80.00	-106.40	-2.00	-165.79
WQVP668	1	36	6	17.1 N		87	3	14 W		17.4	256.7	470.0000	49.41	-26.8	-80.00	-106.40	-2.00	-165.79
WQVP668	1	36	6	17.1 N		87	3	14 W		17.4	256.7	470.0000	49.41	-26.8	-80.00	-106.40	-2.00	-165.79
WRUN424	8	35	57	3.4 N		87	8	16.3 W		32.3	229.3	470.0000	54.38	-26.8	-80.00	-111.78	-2.00	-166.20
WRUN723	9	35	56	53.4 N		87	8	26.4 W		32.7	229.2	470.0000	54.38	-26.8	-80.00	-111.88	-2.00	-166.30
WRCH702	8	36	25	45 N		87	10	5.9 W		42	319.8	470.0000	56.55	-26.8	-80.00	-114.06	-2.00	-166.31
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WREY596	2	36	39	47.2 N		87	10	36.4 W		64.3	334.5	470.0000	60.15	-26.8	-80.00	-117.76	-2.00	-166.41
WRQI567	2	36	48	48.2 N		87	6	42 W		77.8	343.7	470.0000	61.75	-26.8	-80.00	-119.41	-2.00	-166.46
WOYU469	2	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WOYU469	2	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WOYU469	2	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WOYU469	2	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WRP1319	5	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WRP1319	5	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WRP1319	5	36	42	21.3 N		87	10	19 W		68.5	336.5	470.0000	60.55	-26.8	-80.00	-118.31	-2.00	-166.56
WPOE628	2	36	37	53.2 N		87	11	30 W		61.8	331.9	470.0000	59.53	-26.8	-80.00	-117.41	-2.00	-166.68
WQUR785	2	36	48	57.2 N		87	7	40 W		78.5	342.7	470.0000	61.60	-26.8	-80.00	-119.49	-2.00	-166.69
WPQA892	2	36	48	57.2 N		87	7	40 W		78.5	342.7	470.0000	61.60	-26.8	-80.00	-119.49	-2.00	-166.69
WPQA892	2	36	48	57.2 N		87	7	40 W		78.5	342.7	470.0000	61.60	-26.8	-80.00	-119.49	-2.00	-166.69
WPQA892	2	36	48	57.2 N		87	7	40 W		78.5	342.7	470.0000	61.60	-26.8	-80.00	-119.49	-2.00	-166.69
WPQA892	2	36	48	57.2 N		87	7	40 W		78.5	342.7	470.0000	61.60	-26.8	-80.00	-119.49	-2.00	-166.69
WQUP320	2	36	45	6.2 N		87	11	21 W		73.7	337.0	470.0000	60.75	-26.8	-80.00	-118.94	-2.00	-166.99
WPDF864	2	36	37	13.2 N		87	13	21.2 W		62.1	329.2	470.0000	59.08	-26.8	-80.00	-117.45	-2.00	-167.17
WRTC539	1	36	31	15 N		87	13	10.6 W		52.8	323.2	470.0000	57.62	-26.8	-80.00	-116.04	-2.00	-167.23
WRTC539	1	36	31	15 N		87	13	10.6 W		52.8	323.2	470.0000	57.62	-26.8	-80.00	-116.04	-2.00	-167.23
WOTQ717	1	36	31	49.3 N		87	13	27.7 W		53.9	323.5	470.0000	57.62	-26.8	-80.00	-116.22	-2.00	-167.40
KIP690	3	35	32	19 N		87	13	10 W		74.1	205.6	470.0000	60.36	-26.8	-80.00	-118.99	-2.00	-167.43
KIP690	3	35	32	19 N		87	13	10 W		74.1	205.6	470.0000	60.36	-26.8	-80.00	-118.99	-2.00	-167.43
WQUR442	2	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00	-167.55
WQBY325	5	36	16	32.4 N		87	7	5.3 W		27.2	303.6	470.0000	51.53	-26.8	-80.00	-110.28	-2.00</td	

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WPWG336	7	35	37	55.5 N		87	14	59.5 W		66.3	211.6	470.0000	59.08	-26.8	-80.00	-118.02	-2.00	-167.74
WQVF591	2	35	31	36.3 N		87	14	30 W		76.1	206.5	470.0000	60.15	-26.8	-80.00	-119.22	-2.00	-167.87
WQVF591	2	35	31	36.3 N		87	14	30 W		76.1	206.5	470.0000	60.15	-26.8	-80.00	-119.22	-2.00	-167.87
WQVF591	2	35	31	36.3 N		87	14	30 W		76.1	206.5	470.0000	60.15	-26.8	-80.00	-119.22	-2.00	-167.87
WRDD601	2	36	37	30.9 N		87	15	24.4 W		64.2	327.1	470.0000	58.61	-26.8	-80.00	-117.74	-2.00	-167.93
WRDD601	2	36	37	30.9 N		87	15	24.4 W		64.2	327.1	470.0000	58.61	-26.8	-80.00	-117.74	-2.00	-167.93
WRDD601	2	36	37	30.9 N		87	15	24.4 W		64.2	327.1	470.0000	58.61	-26.8	-80.00	-117.74	-2.00	-167.93
WRPK360	1	36	35	27.7 N		87	15	18.3 W		61	325.2	470.0000	58.13	-26.8	-80.00	-117.30	-2.00	-167.97
WRMU493	2	36	37	55.5 N		87	15	1.3 W		64.5	327.9	470.0000	58.61	-26.8	-80.00	-117.78	-2.00	-167.97
WQGB709	2	36	35	32 N		87	15	22 W		61.1	325.2	470.0000	58.13	-26.8	-80.00	-117.31	-2.00	-167.98
WQGB709	2	36	35	32 N		87	15	22 W		61.1	325.2	470.0000	58.13	-26.8	-80.00	-117.31	-2.00	-167.98
WRTZ280	8	36	34	47.5 N		87	15	12.8 W		59.9	324.7	470.0000	57.88	-26.8	-80.00	-117.14	-2.00	-168.06
WOEO973	2	36	35	49.2 N		87	15	52.8 W		62	325.0	470.0000	58.13	-26.8	-80.00	-117.44	-2.00	-168.11
WQKI484	2	36	35	49.2 N		87	15	52.8 W		62	325.0	470.0000	58.13	-26.8	-80.00	-117.44	-2.00	-168.11
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRB271	2	36	37	9.3 N		87	15	42.9 W		63.9	326.4	470.0000	58.37	-26.8	-80.00	-117.70	-2.00	-168.13
WRRS273	1	36	43	10.6 N		87	15	12.5 W		73	331.8	470.0000	59.53	-26.8	-80.00	-118.86	-2.00	-168.13
WRRS273	1	36	43	10.6 N		87	15	12.5 W		73	331.8	470.0000	59.53	-26.8	-80.00	-118.86	-2.00	-168.13
WRRS273	1	36	43	10.6 N		87	15	12.5 W		73	331.8	470.0000	59.53	-26.8	-80.00	-118.86	-2.00	-168.13
WRRS273	1	36	43	10.6 N		87	15	12.5 W		73	331.8	470.0000	59.53	-26.8	-80.00	-118.86	-2.00	-168.13
WRRS273	1	36	43	10.6 N		87	15	12.5 W		73	331.8	470.0000	59.53	-26.8	-80.00	-118.86	-2.00	-168.13
WQFX929	12	36	37	14.1 N		87	15	42.5 W		64	326.5	470.0000	58.37	-26.8	-80.00	-117.72	-2.00	-168.14
WQFX929	12	36	37	14.1 N		87	15	42.5 W		64	326.5	470.0000	58.37	-26.8	-80.00	-117.72	-2.00	-168.14
WQFX929	12	36	37	14.1 N		87	15	42.5 W		64	326.5	470.0000	58.37	-26.8	-80.00	-117.72	-2.00	-168.14
WQFX929	12	36	37	14.1 N		87	15	42.5 W		64	326.5	470.0000	58.37	-26.8	-80.00	-117.72	-2.00	-168.14
WRAV286	2	36	37	14.8 N		87	15	48.8 W		64.1	326.4	470.0000	58.37	-26.8	-80.00	-117.73	-2.00	-168.15
WRAV286	2	36	37	14.8 N		87	15	48.8 W		64.1	326.4	470.0000	58.37	-26.8	-80.00	-117.73	-2.00	-168.15
WQUN476	2	36	36	14.4 N		87	15	37.5 W		62.4	325.6	470.0000	58.13	-26.8	-80.00	-117.50	-2.00	-168.16
WQUN476	2	36	36	14.4 N		87	15	37.5 W		62.4	325.6	470.0000	58.13	-26.8	-80.00	-117.50	-2.00	-168.16
WQUN476	2	36	36	14.4 N		87	15	37.5 W		62.4	325.6	470.0000	58.13	-26.8	-80.00	-117.50	-2.00	-168.16
WRPC813	3	36	34	58.7 N		87	15	56.6 W		60.8	324.0	470.0000	57.88	-26.8	-80.00	-117.27	-2.00	-168.19
WRPC813	2	36	34	58.7 N		87	15	56.6 W		60.8	324.0	470.0000	57.88	-26.8	-80.00	-117.27	-2.00	-168.19
WRCM610	1	36	30	14.7 N		87	15	28.6 W		53.5	319.1	470.0000	56.55	-26.8	-80.00	-116.16	-2.00	-168.41
WRCM610	1	36	30	14.7 N		87	15	28.6 W		53.5	319.1	470.0000	56.55	-26.8	-80.00	-116.16	-2.00	-168.41
WRCM610	1	36	30	14.7 N		87	15	28.6 W		53.5	319.1	470.0000	56.55	-26.8	-80.00	-116.16	-2.00	-168.41
WRCM610	1	36	30	14.7 N		87	15	28.6 W		53.5	319.1	470.0000	56.55	-26.8	-80.00	-116.16	-2.00	-168.41
WPYD562	6	36	30	12.2 N		87	15	33 W		53.5	318.9	470.0000	56.29	-26.8	-80.00	-116.16	-2.00	-168.67
WPYD562	6	36	30	12.2 N		87	15	33 W		53.5	318.9	470.0000	56.29	-26.8	-80.00	-116.16	-2.00	-168.67
WPYD562	6	36	30	12.2 N		87	15	33 W		53.5	318.9	470.0000	56.29	-26.8	-80.00	-116.16	-2.00	-168.67
WPYD562	6	36	30	12.2 N		87	15	33 W		53.5	318.9	470.0000	56.29	-26.8	-80.00	-116.16	-2.00	-168.67
WOST213	1	36	31	31.4 N		87	16	44.3 W		56.6	319.2	470.0000	56.55	-26.8	-80.00	-116.65	-2.00	-168.90
WRON448	2	36	35	12 N		87	17	19 W		62.4	322.7	470.0000	57.35	-26.8	-80.00	-117.50	-2.00	-168.94
WQZC684	2	36	35	4.2 N		87	17	37 W		62.4	322.3	470.0000	57.35	-26.8	-80.00	-117.50	-2.00	-168.94
WQZC684	2	36	35	4.2 N		87	17	37 W		62.4	322.3	470.0000	57.35	-26.8	-80.00	-117.50	-2.00	-168.94
WQZC684	3	36	35	4.2 N		87	17	37 W		62.4	322.3	470.0000	57.35	-26.8	-80.00	-117.50	-2.00	-168.94
WQZC684	2	36	35	4.2 N		87	17	37 W		62.4	322.3	470.0000	57.35	-26.8	-80.00	-117.50	-2.00	-168.94
WQUR442	5	36	4	6.2 N		87	7	38 W		24.9	251.2	470.0000	49.34	-26.8	-80.00	-109.52	-2.00	-168.97
WQVM626	2	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
KVE523	3	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
KVE523	3	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
WQVM626	2	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
WQVM626	2	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
WQVM626	2	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
WQVM626	2	36	34	22.5 N		87	17	27 W		61.3	321.7	470.0000	57.08	-26.8	-80.00	-117.34	-2.00	-169.06
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000	57.08	-26.8	-80.00	-117.50	-2.00	-169.22
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000	57.08	-26.8	-80.00	-117.50	-2.00	-169.22
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000	57.08	-26.8	-80.00	-117.50	-2.00	-169.22
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000	57.08	-26.8	-80.00	-117.50	-2.00	-169.22
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000	57.08	-26.8	-80.00	-117.50	-2.00	-169.22
WQHE537	12	36	34	52 N		87	17	54 W		62.4	321.8	470.0000						

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WOZH453	2	36	32	3.3	N	87	20	23.9	W	61	316.0	470.0000	55.76	-26.8	-80.00	-117.30	-2.00	-170.34
WOZH453	2	36	32	3.3	N	87	20	23.9	W	61	316.0	470.0000	55.76	-26.8	-80.00	-117.30	-2.00	-170.34
WRBW854	2	36	45	58	N	87	23	18	W	83.7	326.2	470.0000	58.37	-26.8	-80.00	-120.05	-2.00	-170.47
WQRA380	2	36	47	38.9	N	87	23	10.5	W	86.2	327.5	470.0000	58.61	-26.8	-80.00	-120.30	-2.00	-170.49
WPQC545	1	36	48	9.2	N	87	23	4	W	86.9	327.9	470.0000	58.61	-26.8	-80.00	-120.37	-2.00	-170.56
WPQC545	1	36	48	9.2	N	87	23	4	W	86.9	327.9	470.0000	58.61	-26.8	-80.00	-120.37	-2.00	-170.56
WPQC545	1	36	48	9.2	N	87	23	4	W	86.9	327.9	470.0000	58.61	-26.8	-80.00	-120.37	-2.00	-170.56
WPQB712	2	36	48	3.2	N	87	23	22	W	87	327.6	470.0000	58.61	-26.8	-80.00	-120.38	-2.00	-170.57
WPQB712	2	36	48	3.2	N	87	23	22	W	87	327.6	470.0000	58.61	-26.8	-80.00	-120.38	-2.00	-170.57
WPNT225	3	36	48	5.2	N	87	23	34	W	87.2	327.5	470.0000	58.61	-26.8	-80.00	-120.40	-2.00	-170.59
WQFW615	7	36	6	26.8	N	87	12	59.8	W	31.8	263.4	470.0000	49.72	-26.8	-80.00	-111.64	-2.00	-170.72
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQJF421	1	36	31	15.6	N	87	20	43.8	W	60.3	314.7	470.0000	55.23	-26.8	-80.00	-117.20	-2.00	-170.77
WQXD478	1	36	32	16.2	N	87	21	14.7	W	62.2	315.4	470.0000	55.50	-26.8	-80.00	-117.47	-2.00	-170.77
WQTIB69	2	36	48	50.2	N	87	24	44	W	89.3	327.0	470.0000	58.61	-26.8	-80.00	-120.61	-2.00	-170.80
WPYD209	2	36	31	21.2	N	87	21	5	W	60.8	314.4	470.0000	55.23	-26.8	-80.00	-117.27	-2.00	-170.84
WRUJ641	4	36	32	40	N	87	21	53.8	W	63.4	315.2	470.0000	55.50	-26.8	-80.00	-117.63	-2.00	-170.94
WQSP916	2	36	31	48.2	N	87	21	16	W	61.6	314.8	470.0000	55.23	-26.8	-80.00	-117.38	-2.00	-170.95
WRJT658	1	36	31	37.2	N	87	21	30.5	W	61.6	314.3	470.0000	55.23	-26.8	-80.00	-117.38	-2.00	-170.95
WPSG835	10	36	31	32.6	N	87	21	33.5	W	61.6	314.2	470.0000	55.23	-26.8	-80.00	-117.38	-2.00	-170.95
WPSG835	10	36	31	32.6	N	87	21	33.5	W	61.6	314.2	470.0000	55.23	-26.8	-80.00	-117.38	-2.00	-170.95
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WPNP234	5	36	30	34.2	N	87	21	5	W	59.8	313.4	470.0000	54.96	-26.8	-80.00	-117.13	-2.00	-170.97
WRUJ604	2	36	31	45	N	87	21	35.1	W	61.9	314.5	470.0000	55.23	-26.8	-80.00	-117.43	-2.00	-170.99
WRUJ604	2	36	31	45	N	87	21	35.1	W	61.9	314.5	470.0000	55.23	-26.8	-80.00	-117.43	-2.00	-170.99
WPPEC304	4	36	48	26.6	N	87	24	58.3	W	88.9	326.6	470.0000	58.37	-26.8	-80.00	-120.57	-2.00	-171.00
WPPEC304	4	36	48	26.6	N	87	24	58.3	W	88.9	326.6	470.0000	58.37	-26.8	-80.00	-120.57	-2.00	-171.00
WPPEC304	4	36	48	26.6	N	87	24	58.3	W	88.9	326.6	470.0000	58.37	-26.8	-80.00	-120.57	-2.00	-171.00
WQVV807	3	36	31	45.2	N	87	21	44	W	62	314.3	470.0000	55.23	-26.8	-80.00	-117.44	-2.00	-171.01
WNUU681	5	35	44	13.7	N	87	22	22.8	W	64.1	225.7	470.0000	55.50	-26.8	-80.00	-117.73	-2.00	-171.03
WRMV710	1	36	49	3.1	N	87	25	16.6	W	90.1	326.7	470.0000	58.37	-26.8	-80.00	-120.69	-2.00	-171.11
WNAV319	3	36	33	38.2	N	87	23	7	W	65.9	315.2	470.0000	55.50	-26.8	-80.00	-117.97	-2.00	-171.27
WNAV319	3	36	33	38.2	N	87	23	7	W	65.9	315.2	470.0000	55.50	-26.8	-80.00	-117.97	-2.00	-171.27
WQDP576	2	36	41	41	N	87	26	38.5	W	80.4	320.1	470.0000	56.79	-26.8	-80.00	-119.70	-2.00	-171.70
WQNO474	2	36	37	49.1	N	87	26	5.3	W	74.6	317.1	470.0000	56.03	-26.8	-80.00	-119.05	-2.00	-171.81
WRHV338	2	36	39	38.9	N	87	26	16.5	W	77.2	318.6	470.0000	56.29	-26.8	-80.00	-119.34	-2.00	-171.85
WRHV338	3	36	39	38.9	N	87	26	16.5	W	77.2	318.6	470.0000	56.29	-26.8	-80.00	-119.34	-2.00	-171.85
WRHV338	2	36	39	38.9	N	87	26	16.5	W	77.2	318.6	470.0000	56.29	-26.8	-80.00	-119.34	-2.00	-171.85
WRHV338	2	36	39	38.9	N	87	26	16.5	W	77.2	318.6	470.0000	56.29	-26.8	-80.00	-119.34	-2.00	-171.85
WQNO478	6	36	36	35.4	N	87	25	56.5	W	72.8	316.0	470.0000	55.76	-26.8	-80.00	-118.83	-2.00	-171.88
WONS241	5	36	39	27.6	N	87	26	49.5	W	77.5	318.0	470.0000	56.29	-26.8	-80.00	-119.38	-2.00	-171.89
WQNO482	4	36	37	16.6	N	87	26	3.4	W	73.8	316.5	470.0000	55.76	-26.8	-80.00	-118.95	-2.00	-172.00
WQNO482	2	36	39	59	N	87	27	9.8	W	78.6	318.2	470.0000	56.29	-26.8	-80.00	-119.50	-2.00	-172.01
WQVU322	4	36	37	21.6	N	87	26	10.5	W	74	316.5	470.0000	55.76	-26.8	-80.00	-118.98	-2.00	-172.02
WQVU322	5	36	37	24	N	87	26	7	W	74	316.6	470.0000	55.76	-26.8	-80.00	-118.98	-2.00	-172.02
WQVU322	6	36	37	24.9	N	87	26	3.9	W	74	316.7	470.0000	55.76	-26.8	-80.00	-118.98	-2.00	-172.02
WQBE220	2	36	38	46	N	87	26	45	W	76.5	317.4	470.0000	56.03	-26.8	-80.00	-119.27	-2.00	-172.03
WQNU474	4	36	38	56.6	N	87	26	35.4	W	76.6	317.7	470.0000	56.03	-26.8	-80.00	-119.28	-2.00	-172.04
WPSN974	1	36	40	1	N	87	27	24	W	78.9	318.1	470.0000	56.29	-26.8	-80.00	-119.53	-2.00	-172.04
WPSN974	1	36	40	1	N	87	27	24	W	78.9	318.1	470.0000	56.29	-26.8	-80.00	-119.53	-2.00	-172.04
WQNO481	1	36	37	34.3	N	87	26	7.7	W	74.3	316.8	470.0000	55.76	-26.8	-80.00	-119.01	-2.00	-172.05
WQVU322	2	36	37	27.3	N	87	26	21.8	W	74.4	316.5	470.0000	55.76	-26.8	-80.00	-119.02	-2.00	-172.07
WQVU322	3	36	37	32.1	N	87	26	21.1	W	74.4	316.6	470.0000	55.76	-26.8	-80.00	-119.02	-2.00	-172.07
WQNO474	1	36	37	32.7	N	87	26	34.9	W	74.7	316.4	470.0000	55.76	-26.8	-80.00	-119.06	-2	

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Site Information													Performance Metrics			Calculated signal field strength (dBu)
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIW (km)	Az From WIW	Lower Band Edge Frequency (MHz)	WIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	
WQNS241	6	36	39	27.4 N		87	27	13.4 W		77.9	317.7	470.0000	56.03	-26.8	-80.00	-119.42	-2.00	-172.19
WCVU322	1	36	39	18.6 N		87	27	22 W		77.9	317.4	470.0000	56.03	-26.8	-80.00	-119.42	-2.00	-172.19
WNQ474	3	36	39	19.2 N		87	27	28.9 W		78	317.3	470.0000	56.03	-26.8	-80.00	-119.43	-2.00	-172.20
WFQX759	2	36	38	12 N		87	26	45 W		75.7	316.9	470.0000	55.76	-26.8	-80.00	-119.17	-2.00	-172.22
WQNS241	2	36	36	50.8 N		87	26	48 W		74	315.5	470.0000	55.50	-26.8	-80.00	-118.98	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WPWW981	2	36	44	8.8 N		87	28	40.5 W		85.9	320.6	470.0000	56.79	-26.8	-80.00	-120.27	-2.00	-172.28
WQNS241	4	36	36	59.6 N		87	26	40.5 W		74.1	315.8	470.0000	55.50	-26.8	-80.00	-118.99	-2.00	-172.29
WLH736	1	36	36	57.5 N		87	26	51.5 W		74.2	315.6	470.0000	55.50	-26.8	-80.00	-119.00	-2.00	-172.30
WLH735	1	36	36	57.5 N		87	26	51.5 W		74.2	315.6	470.0000	55.50	-26.8	-80.00	-119.00	-2.00	-172.30
WCVU321	1	36	38	27.7 N		87	27	43.5 W		77.1	316.3	470.0000	55.76	-26.8	-80.00	-119.33	-2.00	-172.38
WNQ478	4	36	40	16.8 N		87	28	0.6 W		79.8	317.8	470.0000	56.03	-26.8	-80.00	-119.63	-2.00	-172.40
WNQ474	5	36	35	58.9 N		87	26	42.5 W		72.8	314.7	470.0000	55.23	-26.8	-80.00	-118.83	-2.00	-172.40
WCVU320	3	36	35	51.1 N		87	26	57.1 W		72.9	314.4	470.0000	55.23	-26.8	-80.00	-118.85	-2.00	-172.41
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQB475	3	36	27	9.2 N		87	22	16 W		57.1	307.6	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WQN2346	3	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQJ708	2	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPQB475	3	36	27	9.2 N		87	22	16 W		57.1	307.6	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	5	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	5	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	5	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU352	9	36	27	8.7 N		87	22	16.4 W		57.1	307.5	470.0000	53.08	-26.8	-80.00	-116.72	-2.00	-172.44
WPNU3																		

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site	Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	SORTED Calculated interfering signal field strength (dBu)
WQNO482	6	36	40	19.4	N	87	29	0.1	W	80.9	317.1	470.0000	56.03	-26.8	-80.00	-119.75	-2.00	-172.52
WQNO478	1	36	39	3.7	N	87	28	31.5	W	78.7	316.3	470.0000	55.76	-26.8	-80.00	-119.51	-2.00	-172.55
WQNO478	2	36	39	0.8	N	87	28	39.2	W	78.8	316.1	470.0000	55.76	-26.8	-80.00	-119.52	-2.00	-172.57
WQNO481	3	36	37	42.6	N	87	28	13.3	W	76.6	315.2	470.0000	55.50	-26.8	-80.00	-119.28	-2.00	-172.58
WQNO483	3	36	39	18.8	N	87	28	31.4	W	79.1	316.5	470.0000	55.76	-26.8	-80.00	-119.56	-2.00	-172.60
WQLH735	6	36	40	53.2	N	87	29	20.2	W	82	317.3	470.0000	56.03	-26.8	-80.00	-119.87	-2.00	-172.63
WQNO481	3	36	37	49	N	87	28	31	W	77.1	315.1	470.0000	55.50	-26.8	-80.00	-119.33	-2.00	-172.63
WQNO482	1	36	36	32.5	N	87	27	58.7	W	74.9	314.2	470.0000	55.23	-26.8	-80.00	-119.08	-2.00	-172.65
WQNO481	4	36	39	16.6	N	87	29	5.4	W	79.6	316.0	470.0000	55.76	-26.8	-80.00	-119.61	-2.00	-172.65
WQNO481	2	36	40	51.9	N	87	29	32.1	W	82.2	317.2	470.0000	56.03	-26.8	-80.00	-119.89	-2.00	-172.66
WQNO481	6	36	38	15.7	N	87	28	16.9	W	77.4	315.7	470.0000	55.50	-26.8	-80.00	-119.37	-2.00	-172.67
WQVU321	5	36	40	55.3	N	87	29	40	W	82.4	317.1	470.0000	56.03	-26.8	-80.00	-119.91	-2.00	-172.68
WQNO483	4	36	39	44.7	N	87	28	48.7	W	79.9	316.7	470.0000	55.76	-26.8	-80.00	-119.64	-2.00	-172.69
WQLH736	5	36	39	44.7	N	87	28	48.7	W	79.9	316.7	470.0000	55.76	-26.8	-80.00	-119.65	-2.00	-172.70
WQNO482	5	36	39	39.6	N	87	29	2	W	80	316.4	470.0000	55.76	-26.8	-80.00	-118.87	-2.00	-172.71
WQVU320	4	36	35	36.8	N	87	27	24.1	W	73.1	313.7	470.0000	54.96	-26.8	-80.00	-119.70	-2.00	-172.74
WQVU321	4	36	39	48.2	N	87	29	12.1	W	80.4	316.5	470.0000	55.76	-26.8	-80.00	-119.90	-2.00	-172.74
WQNO482	3	36	36	53	N	87	28	19.4	W	75.7	314.3	470.0000	55.23	-26.8	-80.00	-119.17	-2.00	-172.74
WQVU321	2	36	35	34.9	N	87	27	57.6	W	73.6	313.3	470.0000	54.96	-26.8	-80.00	-118.93	-2.00	-172.77
WQLH735	4	36	40	0.4	N	87	29	17.7	W	80.8	316.6	470.0000	55.76	-26.8	-80.00	-119.74	-2.00	-172.78
WQNO481	5	36	39	53.1	N	87	29	34.5	W	80.9	316.2	470.0000	55.76	-26.8	-80.00	-119.75	-2.00	-172.79
WQVU321	3	36	37	34.9	N	87	28	41.7	W	77	314.7	470.0000	55.23	-26.8	-80.00	-119.32	-2.00	-172.89
WQNO478	5	36	40	40.5	N	87	29	36	W	82	316.9	470.0000	55.76	-26.8	-80.00	-119.87	-2.00	-172.91
WQNS5241	1	36	40	18.2	N	87	30	23.6	W	82.3	316.0	470.0000	55.76	-26.8	-80.00	-119.90	-2.00	-172.94
WQLH735	5	36	40	15.4	N	87	30	24.2	W	82.3	316.0	470.0000	55.76	-26.8	-80.00	-119.90	-2.00	-172.94
WQNO483	2	36	40	38.4	N	87	30	2.5	W	82.4	316.6	470.0000	55.76	-26.8	-80.00	-119.91	-2.00	-172.95
WQLH736	6	36	40	38.7	N	87	30	2.7	W	82.4	316.6	470.0000	55.76	-26.8	-80.00	-119.91	-2.00	-172.95
WOCF472	2	36	14	57.1	N	87	17	39.8	W	40.4	287.5	470.0000	49.38	-26.8	-80.00	-113.72	-2.00	-173.14
WOCF472	2	36	14	57.1	N	87	17	39.8	W	40.4	287.5	470.0000	49.38	-26.8	-80.00	-113.72	-2.00	-173.14
WPUS970	2	35	45	57	N	87	27	8	W	67.3	231.9	470.0000	53.76	-26.8	-80.00	-118.15	-2.00	-173.19
WPUS970	2	35	45	57	N	87	27	8	W	67.3	231.9	470.0000	53.76	-26.8	-80.00	-118.15	-2.00	-173.19
WQR1359	2	35	45	57	N	87	27	8	W	67.3	231.9	470.0000	53.76	-26.8	-80.00	-118.15	-2.00	-173.19
WPUS970	2	35	45	57	N	87	27	8	W	67.3	231.9	470.0000	53.76	-26.8	-80.00	-118.15	-2.00	-173.19
WNLQ538	5	36	10	56.3	N	87	20	14.2	W	42.7	276.4	470.0000	49.76	-26.8	-80.00	-114.20	-2.00	-173.24
WNLQ538	5	36	10	56.3	N	87	20	14.2	W	42.7	276.4	470.0000	49.76	-26.8	-80.00	-114.20	-2.00	-173.24
WNLQ538	2	36	10	59.2	N	87	20	20	W	42.8	276.5	470.0000	49.76	-26.8	-80.00	-114.22	-2.00	-173.26
WQNO483	1	36	37	11.6	N	87	30	23.1	W	78.3	313.1	470.0000	54.96	-26.8	-80.00	-119.47	-2.00	-173.31
WQLH736	3	36	37	12.2	N	87	30	22.6	W	78.3	313.1	470.0000	54.96	-26.8	-80.00	-119.47	-2.00	-173.31
WQLH736	4	36	34	26.7	N	87	28	57.9	W	73.3	311.3	470.0000	54.38	-26.8	-80.00	-118.89	-2.00	-173.31
WQNO483	5	36	34	26.3	N	87	28	58.9	W	73.4	311.2	470.0000	54.38	-26.8	-80.00	-118.91	-2.00	-173.32
WQLH735	3	36	34	27.9	N	87	28	57.1	W	73.4	311.3	470.0000	54.38	-26.8	-80.00	-118.91	-2.00	-173.32
WQOJ337	1	36	5	18.6	N	87	20	12.9	W	42.8	262.3	470.0000	49.67	-26.8	-80.00	-114.22	-2.00	-173.35
WRJU641	2	36	5	45.4	N	87	20	32.4	W	43.2	263.5	470.0000	49.72	-26.8	-80.00	-114.30	-2.00	-173.39
WCTV457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	470.0000	49.53	-26.8	-80.00	-114.14	-2.00	-173.41
WOTW457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	470.0000	49.53	-26.8	-80.00	-114.14	-2.00	-173.41
WQTW457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	470.0000	49.53	-26.8	-80.00	-114.14	-2.00	-173.41
WQTW457	2	36	12	53.6	N	87	19	39.8	W	42.4	281.4	470.0000	49.53	-26.8	-80.00	-114.14	-2.00	-173.41
WPQF555	6	35	55	58.2	N	87	19	4	W	46.8	240.5	470.0000	50.34	-26.8	-80.00	-115.00	-2.00	-173.46
WQJL820	2	35	32	52.3	N	87	33	18.1	W	90.6	223.5	470.0000	56.03	-26.8	-80.00	-120.73	-2.00	-173.50
WX8805	2	35	32	52.3	N	87	33	18.1	W	90.6	223.5	470.0000	56.03	-26.8	-80.00	-120.73	-2.00	-173.50
WX8805	2	35	32	52.3	N	87	33	18.1	W	90.6	223.5	470.0000	56.03	-26.8	-80.00	-120.73	-2.00	-173.50
WRNA496	1	35	56	32	N	87	19	23	W	46.7	241.9	470.0000	50.22	-26.8	-80.00	-114.98	-2.00	-173.56
WQWF642	3	36	2	21	N	87	19	32	W	42.9	254.8	470.0000	49.38	-26.8	-80.00	-114.24	-2.00	-173.67
WQWF642	1	36	2	21	N	87	19	32	W	42.9	254.8	470.0000	49.38	-26.8	-80.00	-114.24	-2.00	-173.67
WQVX343	2	36	2	28.2	N	87	20	12.3	W	43.9	255.5	470.0000	49.41	-26.8	-80.00	-114.44	-2.00	-173.83
WPRK857	5	36	2	40.3	N	87	20	42.9	W	44.5	256.2	470.0000	49.41	-26.8	-80.00	-114.56	-2.00	-173.95
WPRK857	5	36	2	40.3	N	87	20	42.9	W	44.5	256.2	470.0000	49.41	-26.8	-80.00	-114.56	-2.00	-173.95
WRLB661	2	36	2	57	N	87	20	51	W	44.6	256.9	470.0000	49.41	-26.8	-80.00	-114.58	-2.00	-173.97
WRLB661	2	36	2	57	N	87	20	51	W	44.6	256.9	470.0000	49.41	-26.8	-80.00	-114.58	-2.00	-173.97
WPFF205	7	36	3	31	N	87	21	15.7	W	45	258.4	470.0000	49.48	-26.8	-80.00	-114.66	-2.00	-173.97
WQXI835	1	36	0	48.9	N	87	20	9.1	W	44.7	251.6	470.0000	49.34	-26.8	-80.00	-114.60	-2.00	-174.06
WQXI835	1	36	0	48.9	N	87	20	9.1	W	44.7	251.6	470.0000	49.34	-26.8	-80.00	-114.60	-2.00	-174.06
WQY2639	1	36	3	26.6	N	87	21	36.9	W	45.5	258.4	470.0000	49.48	-26.8	-80.00	-114.75	-2.00	-174.07
WQUL544	3	3																

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Appendix B: WIIW-LD Ch14 Nashville

LMR Overload Protection Calculations

LM receiver sensitivity: -120.0 dBm

Callsign	Site														SORTED			
		Latitude Deg	Latitude Min	Latitude Sec	Lat NS	Longitude Deg	Longitude Min	Longitude Sec	Lon EW	Dist From WIIW (km)	Az From WIIW	Lower Band Edge Frequency (MHz)	WIIW ERP H+V (dBm)	DTV Coupling into LM for LM=11.2 kHz (dB)	LM Receiver OOB Rejection (dB)	Free Space Loss (dB)	LM line loss (dB)	Calculated interfering signal field strength (dBu)
WQDU754	7	36	25	52.1 N		87	38	28.6 W		76.8	295.1	470.0000	49.78	-26.8	-80.00	-119.30	-2.00	-178.32
WQCY306	2	36	23	17.4 N		87	39	5.4 W		75.8	291.6	470.0000	49.38	-26.8	-80.00	-119.19	-2.00	-178.60
WQUC392	2	35	54	38.5 N		87	39	11.8 W		75.5	250.4	470.0000	49.31	-26.8	-80.00	-119.15	-2.00	-178.64
WQWX391	2	36	23	31 N		87	39	24 W		76.4	291.7	470.0000	49.38	-26.8	-80.00	-119.25	-2.00	-178.67
WQWX391	2	36	23	31 N		87	39	24 W		76.4	291.7	470.0000	49.38	-26.8	-80.00	-119.25	-2.00	-178.67
WQWX391	2	36	23	31 N		87	39	24 W		76.4	291.7	470.0000	49.38	-26.8	-80.00	-119.25	-2.00	-178.67
WQWX391	2	36	23	31 N		87	39	24 W		76.4	291.7	470.0000	49.38	-26.8	-80.00	-119.25	-2.00	-178.67

TECHNICAL DOCUMENTATION

Nashville, TN

Bridge News



BROADCAST

WIIW 12-Bay Directional 20% V

KATHREIN

Summary

Antenna Specifications

Antenna Type	Coaxial Slot
Antenna Model	ATC-BCE312UA-V1-14

Electrical Specifications

Channel(s)	14
Frequency Range (MHz)	470 - 476
Polarization	Elliptical
Horizontal Azimuth Pattern	UA
Directivity	1.70
dB	2.30
Vertical Azimuth Pattern	V1-Wide Cardioid
Directivity	2.16
dB	3.34
Vertical Component	20 %
Azimuth Peak of Beam	90 °
Elevation Pattern	BC12
Directivity	12.00
dB	10.79
Electrical Beam Tilt	0.75 °

Antenna Peak Power Gain

Horizontal Gain Power	17.00
Horizontal Gain Ratio	12.30 dBd
Vertical Gain Power	3.40
Vertical Gain Ratio	5.31 dBd
Line Type	1-5/8" 50 Ohm Foam Flex Line

Line Length

Total Line Loss	3.44 dB
Effective Radiated Power (ERP)	15 kW
ERP Vertical Power	3.00 kW

Transmitter Power Output (TPO)

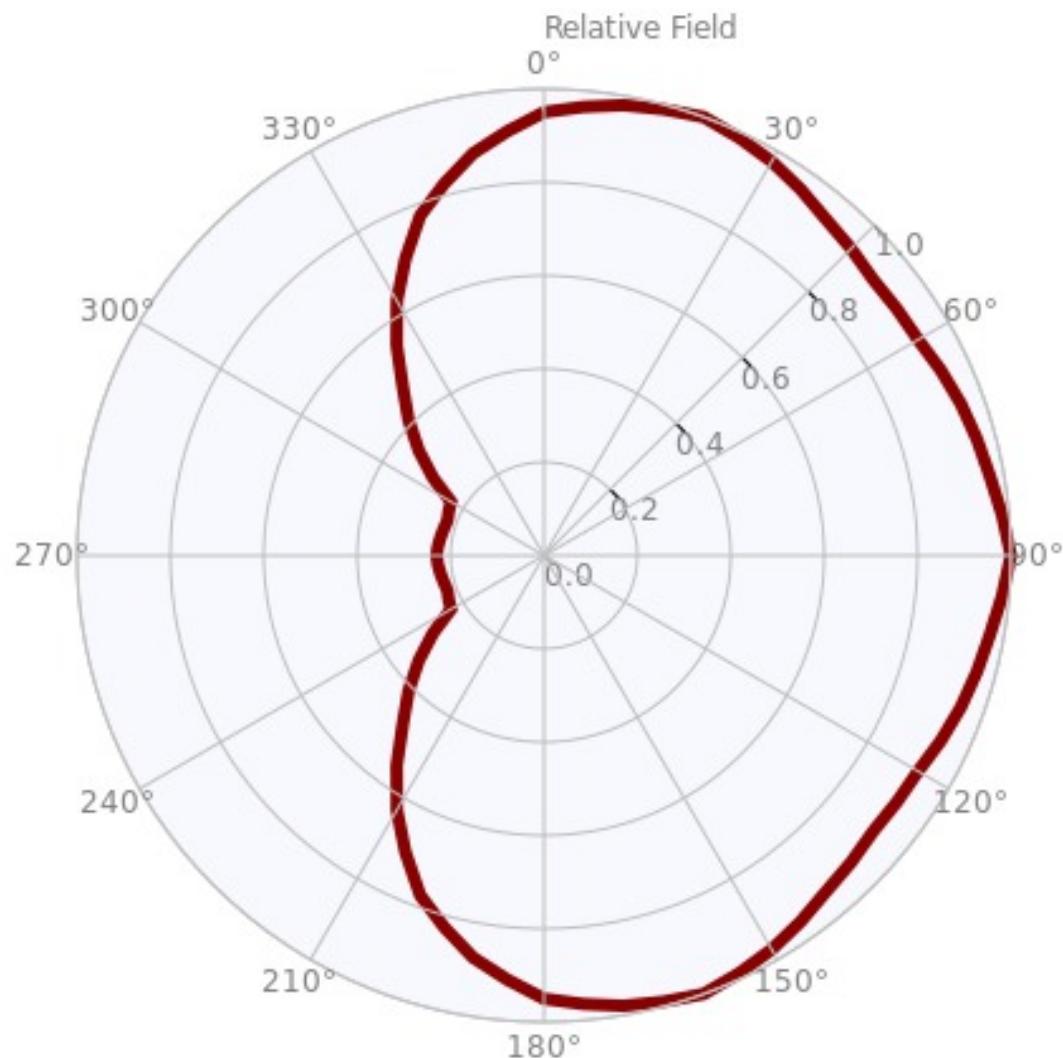
TPO Power	1.95 kW
TPO Ratio	2.89 dBk
Input Type	EIA 1-5/8"

Mechanical Specifications

Mount Type	Side Mount
Length of Antenna	28.59 ft
Center of Radiation	14.29 ft
Radome Diameter	TBD
Color	White
Calculated Weight	Contact Alive Telecom 1 2
Windload (Shear)	Contact Alive Telecom 1 2

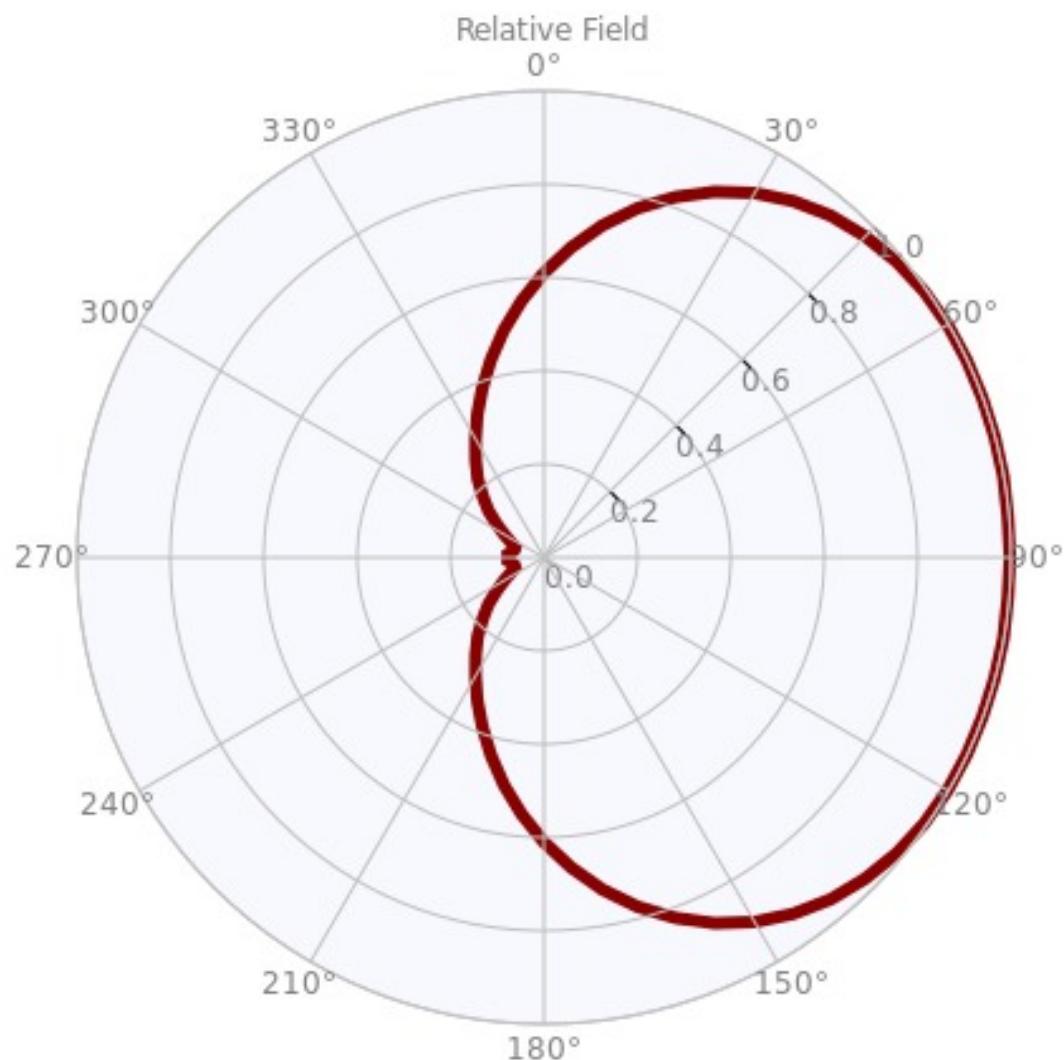


Horizontal Azimuth Pattern



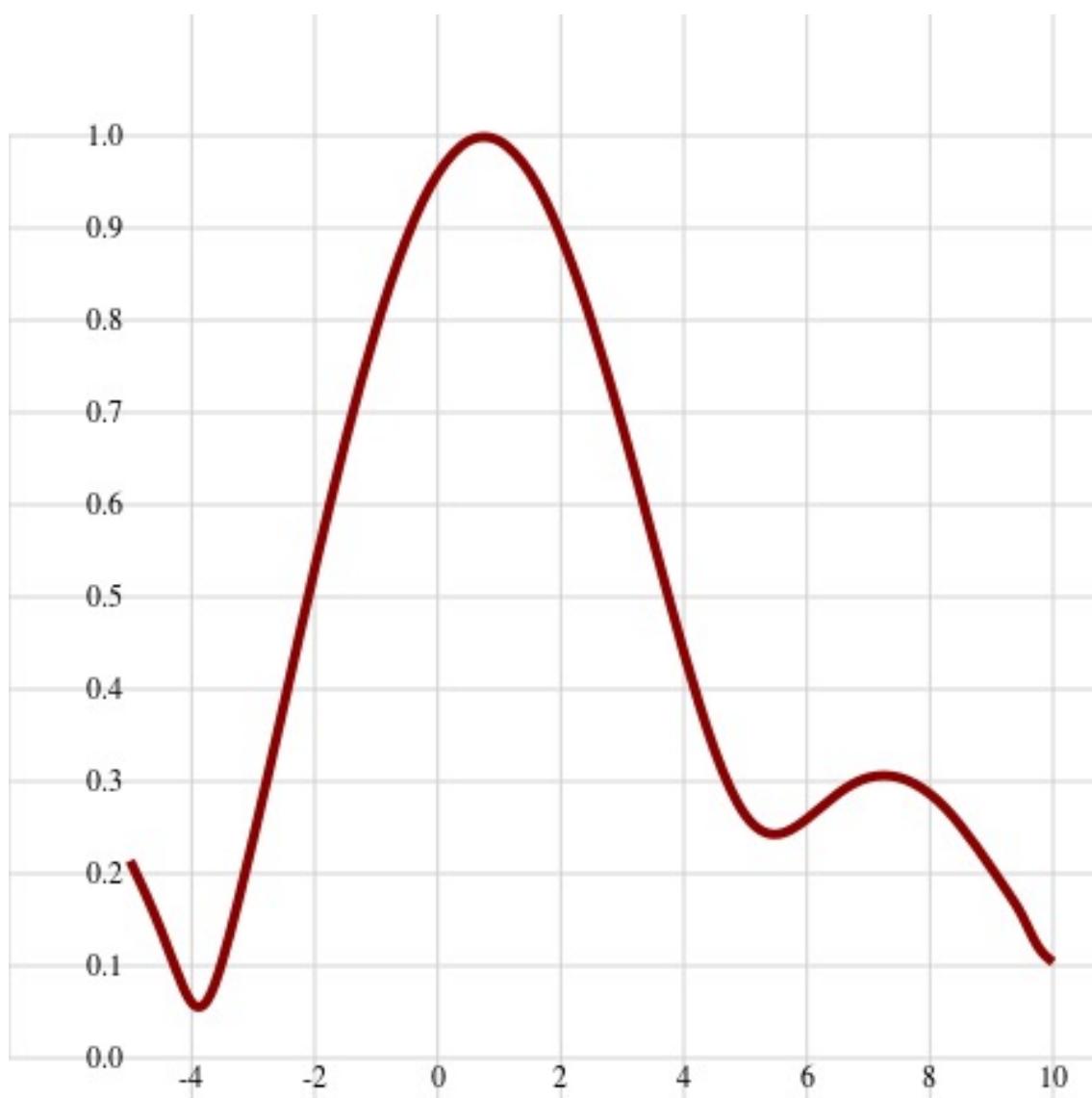


Vertical Azimuth Pattern

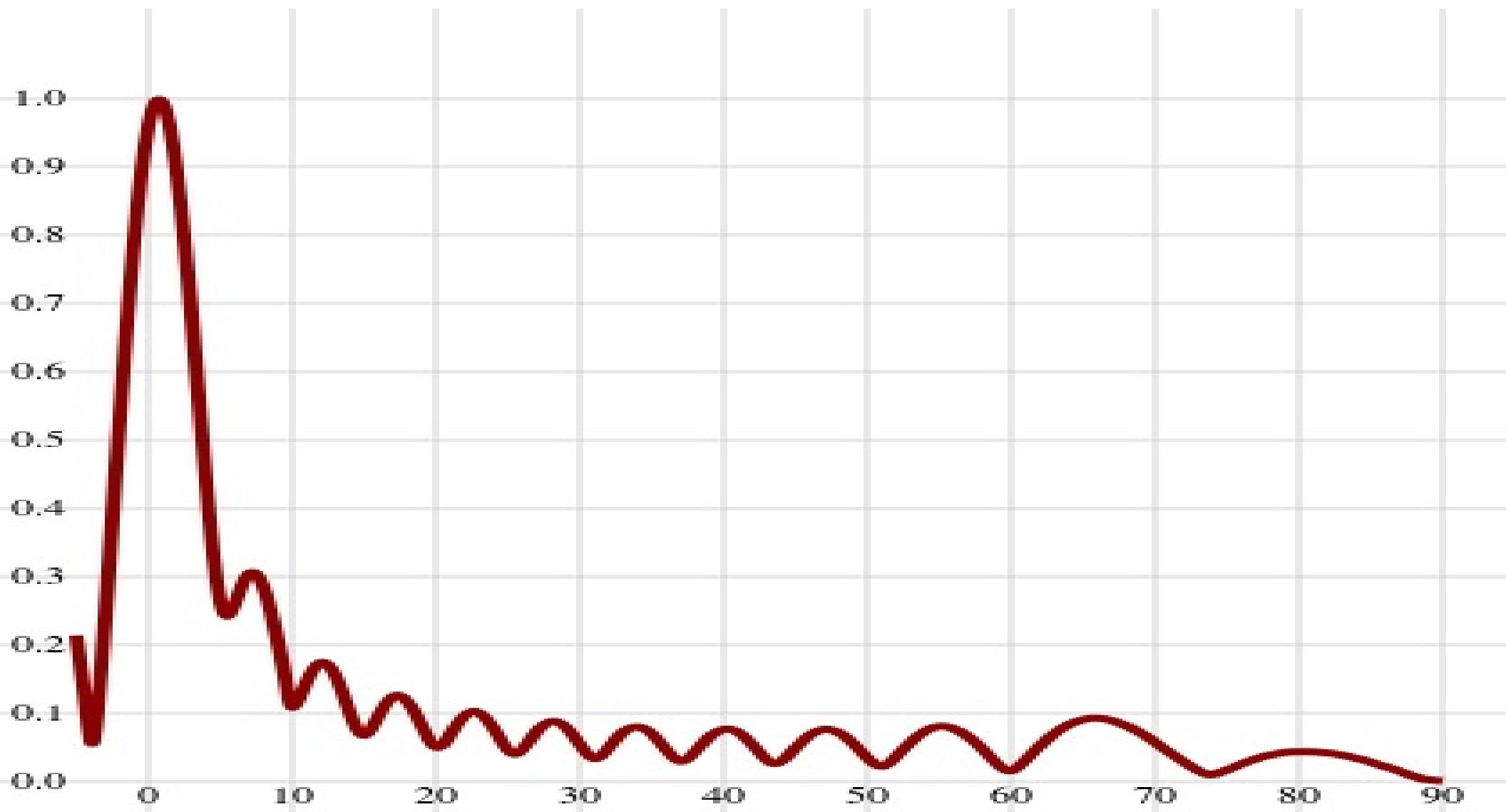




Elevation pattern -5 to 10



Elevation pattern -5 to 90



Azimuth Horizontal Pattern Tabulation

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	0.950	-0.45	90°	1.000	0.00	180°	0.950	-0.45	270°	0.230	-12.77
2°	0.954	-0.41	92°	1.000	0.00	182°	0.941	-0.53	272°	0.229	-12.80
4°	0.961	-0.35	94°	0.989	-0.10	184°	0.922	-0.71	274°	0.228	-12.84
6°	0.969	-0.27	96°	0.981	-0.17	186°	0.903	-0.89	276°	0.227	-12.88
8°	0.976	-0.21	98°	0.978	-0.19	188°	0.884	-1.07	278°	0.226	-12.92
10°	0.980	-0.18	100°	0.970	-0.26	190°	0.875	-1.16	280°	0.225	-12.96
12°	0.982	-0.16	102°	0.970	-0.26	192°	0.862	-1.29	282°	0.224	-13.00
14°	0.988	-0.10	104°	0.962	-0.34	194°	0.838	-1.54	284°	0.223	-13.03
16°	0.992	-0.07	106°	0.958	-0.37	196°	0.812	-1.81	286°	0.222	-13.07
18°	0.998	-0.02	108°	0.952	-0.43	198°	0.788	-2.07	288°	0.221	-13.11
20°	1.000	0.00	110°	0.950	-0.45	200°	0.775	-2.21	290°	0.220	-13.15
22°	0.997	-0.03	112°	0.947	-0.47	202°	0.757	-2.42	292°	0.221	-13.11
24°	0.991	-0.08	114°	0.941	-0.53	204°	0.721	-2.84	294°	0.224	-13.00
26°	0.984	-0.14	116°	0.934	-0.59	206°	0.684	-3.30	296°	0.226	-12.92
28°	0.978	-0.19	118°	0.928	-0.65	208°	0.648	-3.77	298°	0.229	-12.80
30°	0.975	-0.22	120°	0.925	-0.68	210°	0.630	-4.01	300°	0.230	-12.77
32°	0.971	-0.26	122°	0.924	-0.69	212°	0.610	-4.29	302°	0.245	-12.22
34°	0.962	-0.34	124°	0.923	-0.70	214°	0.570	-4.88	304°	0.275	-11.21
36°	0.953	-0.42	126°	0.922	-0.71	216°	0.530	-5.51	306°	0.305	-10.31
38°	0.944	-0.50	128°	0.921	-0.71	218°	0.490	-6.20	308°	0.335	-9.50
40°	0.940	-0.54	130°	0.920	-0.72	220°	0.470	-6.56	310°	0.350	-9.12
42°	0.938	-0.56	132°	0.922	-0.71	222°	0.458	-6.78	312°	0.365	-8.75
44°	0.932	-0.61	134°	0.928	-0.65	224°	0.436	-7.21	314°	0.395	-8.07
46°	0.928	-0.65	136°	0.932	-0.61	226°	0.408	-7.79	316°	0.425	-7.43
48°	0.922	-0.71	138°	0.938	-0.56	228°	0.379	-8.43	318°	0.455	-6.84
50°	0.920	-0.72	140°	0.940	-0.54	230°	0.350	-9.12	320°	0.470	-6.56
52°	0.921	-0.71	142°	0.944	-0.50	232°	0.335	-9.50	322°	0.490	-6.20
54°	0.922	-0.71	144°	0.953	-0.42	234°	0.305	-10.31	324°	0.530	-5.51
56°	0.923	-0.70	146°	0.962	-0.34	236°	0.275	-11.21	326°	0.570	-4.88
58°	0.924	-0.69	148°	0.971	-0.26	238°	0.245	-12.22	328°	0.610	-4.29
60°	0.925	-0.68	150°	0.975	-0.22	240°	0.230	-12.77	330°	0.630	-4.01
62°	0.928	-0.65	152°	0.978	-0.19	242°	0.229	-12.80	332°	0.648	-3.77
64°	0.934	-0.59	154°	0.984	-0.14	244°	0.226	-12.92	334°	0.684	-3.30
66°	0.941	-0.53	156°	0.991	-0.08	246°	0.224	-13.00	336°	0.721	-2.84
68°	0.947	-0.47	158°	0.997	-0.03	248°	0.221	-13.11	338°	0.757	-2.42
70°	0.950	-0.45	160°	1.000	0.00	250°	0.220	-13.15	340°	0.775	-2.21
72°	0.952	-0.43	162°	0.998	-0.02	252°	0.221	-13.11	342°	0.788	-2.07
74°	0.958	-0.37	164°	0.992	-0.07	254°	0.222	-13.07	344°	0.812	-1.81
76°	0.962	-0.34	166°	0.988	-0.10	256°	0.223	-13.03	346°	0.838	-1.54
78°	0.968	-0.28	168°	0.982	-0.16	258°	0.224	-13.00	348°	0.862	-1.29
80°	0.970	-0.26	170°	0.980	-0.18	260°	0.225	-12.96	350°	0.875	-1.16
82°	0.974	-0.23	172°	0.976	-0.21	262°	0.226	-12.92	352°	0.884	-1.07
84°	0.981	-0.17	174°	0.969	-0.27	264°	0.227	-12.88	354°	0.903	-0.89
86°	0.989	-0.10	176°	0.961	-0.35	266°	0.228	-12.84	356°	0.922	-0.71
88°	0.996	-0.03	178°	0.954	-0.41	268°	0.229	-12.80	358°	0.941	-0.53



Azimuth Pattern Tabulation, FCC

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	0.950	-0.45	90°	1.000	0.00	180°	0.950	-0.45	270°	0.230	-12.77
10°	0.980	-0.18	100°	0.970	-0.26	190°	0.875	-1.16	280°	0.225	-12.96
20°	1.000	0.00	110°	0.950	-0.45	200°	0.775	-2.21	290°	0.220	-13.15
30°	0.975	-0.22	120°	0.925	-0.68	210°	0.630	-4.01	300°	0.230	-12.77
40°	0.940	-0.54	130°	0.920	-0.72	220°	0.470	-6.56	310°	0.350	-9.12
50°	0.920	-0.72	140°	0.940	-0.54	230°	0.350	-9.12	320°	0.470	-6.56
60°	0.925	-0.68	150°	0.975	-0.22	240°	0.230	-12.77	330°	0.630	-4.01
70°	0.950	-0.45	160°	1.000	0.00	250°	0.220	-13.15	340°	0.775	-2.21
80°	0.970	-0.26	170°	0.980	-0.18	260°	0.225	-12.96	350°	0.875	-1.16

Elevation Pattern Tabulation

-5 to 10 in 0.25 increments, 10 to 90 in 0.50 increments

Angle	Field	dB									
-5.00	0.214	-13.39	8.75	0.230	-12.77	35.00	0.071	-22.97	62.50	0.062	-24.15
-4.75	0.179	-14.94	9.00	0.206	-13.72	35.50	0.060	-24.44	63.00	0.071	-22.97
-4.50	0.140	-17.08	9.25	0.181	-14.85	36.00	0.047	-26.56	63.50	0.078	-22.16
-4.25	0.095	-20.45	9.50	0.157	-16.08	36.50	0.035	-29.12	64.00	0.084	-21.51
-4.00	0.053	-25.51	9.75	0.117	-18.64	37.00	0.028	-31.06	64.50	0.088	-21.11
-3.75	0.054	-25.35	10.00	0.104	-19.66	37.50	0.032	-29.90	65.00	0.091	-20.82
-3.50	0.103	-19.74	10.50	0.121	-18.34	38.00	0.043	-27.33	65.50	0.093	-20.63
-3.25	0.167	-15.55	11.00	0.147	-16.65	38.50	0.055	-25.19	66.00	0.093	-20.63
-3.00	0.237	-12.51	11.50	0.167	-15.55	39.00	0.066	-23.61	66.50	0.092	-20.72
-2.75	0.309	-10.20	12.00	0.177	-15.04	39.50	0.073	-22.73	67.00	0.090	-20.92
-2.50	0.383	-8.34	12.50	0.173	-15.24	40.00	0.077	-22.27	67.50	0.086	-21.31
-2.25	0.458	-6.78	13.00	0.158	-16.03	40.50	0.077	-22.27	68.00	0.082	-21.72
-2.00	0.531	-5.50	13.50	0.132	-17.59	41.00	0.073	-22.73	68.50	0.077	-22.27
-1.75	0.602	-4.41	14.00	0.102	-19.83	41.50	0.065	-23.74	69.00	0.071	-22.97
-1.50	0.670	-3.48	14.50	0.075	-22.50	42.00	0.055	-25.19	69.50	0.065	-23.74
-1.25	0.734	-2.69	15.00	0.064	-23.88	42.50	0.043	-27.33	70.00	0.058	-24.73
-1.00	0.792	-2.03	15.50	0.076	-22.38	43.00	0.031	-30.17	70.50	0.050	-26.02
-0.75	0.845	-1.46	16.00	0.097	-20.26	43.50	0.025	-32.04	71.00	0.043	-27.33
-0.50	0.891	-1.00	16.50	0.115	-18.79	44.00	0.028	-31.06	71.50	0.036	-28.87
-0.25	0.930	-0.63	17.00	0.126	-17.99	44.50	0.038	-28.40	72.00	0.029	-30.75
0.00	0.960	-0.35	17.50	0.127	-17.92	45.00	0.050	-26.02	72.50	0.022	-33.15
0.25	0.982	-0.16	18.00	0.119	-18.49	45.50	0.060	-24.44	73.00	0.016	-35.92
0.50	0.996	-0.03	18.50	0.104	-19.66	46.00	0.069	-23.22	73.50	0.011	-39.17
0.75	1.000	0.00	19.00	0.083	-21.62	46.50	0.074	-22.62	74.00	0.010	-40.00
1.00	0.996	-0.03	19.50	0.061	-24.29	47.00	0.077	-22.27	74.50	0.013	-37.72
1.25	0.982	-0.16	20.00	0.048	-26.38	47.50	0.076	-22.38	75.00	0.017	-35.39
1.50	0.961	-0.35	20.50	0.052	-25.68	48.00	0.072	-22.85	75.50	0.021	-33.56
1.75	0.931	-0.62	21.00	0.069	-23.22	48.50	0.066	-23.61	76.00	0.026	-31.70
2.00	0.893	-0.98	21.50	0.086	-21.31	49.00	0.057	-24.88	76.50	0.030	-30.46
2.25	0.849	-1.42	22.00	0.098	-20.18	49.50	0.046	-26.74	77.00	0.033	-29.63
2.50	0.799	-1.95	22.50	0.104	-19.66	50.00	0.035	-29.12	77.50	0.037	-28.64
2.75	0.744	-2.57	23.00	0.102	-19.83	50.50	0.025	-32.04	78.00	0.039	-28.18
3.00	0.686	-3.27	23.50	0.093	-20.63	51.00	0.021	-33.56	78.50	0.041	-27.74
3.25	0.625	-4.08	24.00	0.079	-22.05	51.50	0.026	-31.70	79.00	0.043	-27.33
3.50	0.562	-5.01	24.50	0.062	-24.15	52.00	0.037	-28.64	79.50	0.044	-27.13
3.75	0.500	-6.02	25.00	0.045	-26.94	52.50	0.048	-26.38	80.00	0.044	-27.13
4.00	0.439	-7.15	25.50	0.038	-28.40	53.00	0.058	-24.73	80.50	0.044	-27.13
4.25	0.383	-8.34	26.00	0.045	-26.94	53.50	0.067	-23.48	81.00	0.044	-27.13
4.50	0.332	-9.58	26.50	0.060	-24.44	54.00	0.074	-22.62	81.50	0.043	-27.33
4.75	0.291	-10.72	27.00	0.074	-22.62	54.50	0.079	-22.05	82.00	0.042	-27.54
5.00	0.261	-11.67	27.50	0.084	-21.51	55.00	0.081	-21.83	82.50	0.041	-27.74
5.25	0.245	-12.22	28.00	0.089	-21.01	55.50	0.081	-21.83	83.00	0.039	-28.18
5.50	0.241	-12.36	28.50	0.088	-21.11	56.00	0.078	-22.16	83.50	0.037	-28.64
5.75	0.247	-12.15	29.00	0.081	-21.83	56.50	0.073	-22.73	84.00	0.034	-29.37
6.00	0.259	-11.73	29.50	0.069	-23.22	57.00	0.066	-23.61	84.50	0.032	-29.90
6.25	0.273	-11.28	30.00	0.055	-25.19	57.50	0.058	-24.73	85.00	0.029	-30.75
6.50	0.287	-10.84	30.50	0.040	-27.96	58.00	0.048	-26.38	85.50	0.025	-32.04
6.75	0.298	-10.52	31.00	0.032	-29.90	58.50	0.037	-28.64	86.00	0.022	-33.15
7.00	0.305	-10.31	31.50	0.036	-28.87	59.00	0.026	-31.70	86.50	0.019	-34.42
7.25	0.307	-10.26	32.00	0.049	-26.20	59.50	0.017	-35.39	87.00	0.015	-36.48
7.50	0.305	-10.31	32.50	0.062	-24.15	60.00	0.014	-37.08	87.50	0.011	-39.17
7.75	0.298	-10.52	33.00	0.073	-22.73	60.50	0.021	-33.56	88.00	0.008	-41.94
8.00	0.287	-10.84	33.50	0.079	-22.05	61.00	0.031	-30.17	88.50	0.004	-47.96
8.25	0.272	-11.31	34.00	0.081	-21.83	61.50	0.042	-27.54	89.00	0.003	-50.46
8.50	0.252	-11.97	34.50	0.078	-22.16	62.00	0.053	-25.51	89.50	0.002	-53.98
8.75	0.230	-12.77	35.00	0.071	-22.97	62.50	0.062	-24.15	90.00	0.001	-60.00

Azimuth Vertical Pattern Tabulation

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	0.610	-4.29	90°	0.998	-0.02	180°	0.610	-4.29	270°	0.078	-22.16
2°	0.632	-3.99	92°	0.998	-0.02	182°	0.587	-4.63	272°	0.079	-22.05
4°	0.656	-3.66	94°	0.997	-0.03	184°	0.563	-4.99	274°	0.080	-21.94
6°	0.678	-3.38	96°	0.997	-0.03	186°	0.540	-5.35	276°	0.076	-22.38
8°	0.701	-3.09	98°	0.997	-0.03	188°	0.517	-5.73	278°	0.073	-22.73
10°	0.723	-2.82	100°	0.999	-0.01	190°	0.495	-6.11	280°	0.069	-23.22
12°	0.744	-2.57	102°	0.999	-0.01	192°	0.472	-6.52	282°	0.067	-23.48
14°	0.765	-2.33	104°	0.999	-0.01	194°	0.449	-6.96	284°	0.065	-23.74
16°	0.784	-2.11	106°	1.000	0.00	196°	0.428	-7.37	286°	0.065	-23.74
18°	0.804	-1.89	108°	0.999	-0.01	198°	0.407	-7.81	288°	0.065	-23.74
20°	0.822	-1.70	110°	0.999	-0.01	200°	0.386	-8.27	290°	0.065	-23.74
22°	0.841	-1.50	112°	0.999	-0.01	202°	0.367	-8.71	292°	0.070	-23.10
24°	0.857	-1.34	114°	0.999	-0.01	204°	0.348	-9.17	294°	0.076	-22.38
26°	0.873	-1.18	116°	0.999	-0.01	206°	0.329	-9.66	296°	0.083	-21.62
28°	0.888	-1.03	118°	0.999	-0.01	208°	0.311	-10.14	298°	0.089	-21.01
30°	0.902	-0.90	120°	0.998	-0.02	210°	0.293	-10.66	300°	0.098	-20.18
32°	0.914	-0.78	122°	0.996	-0.03	212°	0.276	-11.18	302°	0.106	-19.49
34°	0.926	-0.67	124°	0.995	-0.04	214°	0.263	-11.60	304°	0.117	-18.64
36°	0.937	-0.57	126°	0.992	-0.07	216°	0.249	-12.08	306°	0.130	-17.72
38°	0.946	-0.48	128°	0.990	-0.09	218°	0.235	-12.58	308°	0.142	-16.95
40°	0.956	-0.39	130°	0.986	-0.12	220°	0.221	-13.11	310°	0.155	-16.19
42°	0.963	-0.33	132°	0.982	-0.16	222°	0.206	-13.72	312°	0.167	-15.55
44°	0.969	-0.27	134°	0.976	-0.21	224°	0.191	-14.38	314°	0.179	-14.94
46°	0.976	-0.21	136°	0.969	-0.27	226°	0.179	-14.94	316°	0.191	-14.38
48°	0.982	-0.16	138°	0.963	-0.33	228°	0.167	-15.55	318°	0.206	-13.72
50°	0.986	-0.12	140°	0.956	-0.39	230°	0.155	-16.19	320°	0.221	-13.11
52°	0.990	-0.09	142°	0.946	-0.48	232°	0.142	-16.95	322°	0.235	-12.58
54°	0.992	-0.07	144°	0.937	-0.57	234°	0.130	-17.72	324°	0.249	-12.08
56°	0.995	-0.04	146°	0.926	-0.67	236°	0.117	-18.64	326°	0.263	-11.60
58°	0.996	-0.03	148°	0.914	-0.78	238°	0.106	-19.49	328°	0.276	-11.18
60°	0.998	-0.02	150°	0.902	-0.90	240°	0.098	-20.18	330°	0.293	-10.66
62°	0.999	-0.01	152°	0.888	-1.03	242°	0.089	-21.01	332°	0.311	-10.14
64°	0.999	-0.01	154°	0.873	-1.18	244°	0.083	-21.62	334°	0.329	-9.66
66°	0.999	-0.01	156°	0.857	-1.34	246°	0.076	-22.38	336°	0.348	-9.17
68°	0.999	-0.01	158°	0.841	-1.50	248°	0.070	-23.10	338°	0.367	-8.71
70°	0.999	-0.01	160°	0.822	-1.70	250°	0.065	-23.74	340°	0.386	-8.27
72°	0.999	-0.01	162°	0.804	-1.89	252°	0.065	-23.74	342°	0.407	-7.81
74°	1.000	0.00	164°	0.784	-2.11	254°	0.065	-23.74	344°	0.428	-7.37
76°	0.999	-0.01	166°	0.765	-2.33	256°	0.065	-23.74	346°	0.449	-6.96
78°	0.999	-0.01	168°	0.744	-2.57	258°	0.067	-23.48	348°	0.472	-6.52
80°	0.999	-0.01	170°	0.723	-2.82	260°	0.069	-23.22	350°	0.495	-6.11
82°	0.997	-0.03	172°	0.701	-3.09	262°	0.073	-22.73	352°	0.517	-5.73
84°	0.997	-0.03	174°	0.678	-3.38	264°	0.076	-22.38	354°	0.540	-5.35
86°	0.997	-0.03	176°	0.656	-3.66	266°	0.080	-21.94	356°	0.563	-4.99
88°	0.998	-0.02	178°	0.632	-3.99	268°	0.079	-22.05	358°	0.587	-4.63