

Radio Station WSNR • 620 kHz, Class B • Jersey City, New Jersey

Skywave Interference Protection FCC Form 301 §III-A, Question 10.b.

The proposed facility meets all FCC Rules pertaining to skywave protection of all existing stations, permits, and applications, as summarized below.

RSS Calculations

The proposed facility enters into the 25% RSS of two other stations (WVMT and WPRO), but its contributions do not increase over those now authorized, as shown in the following Exhibit 15B.

The proposed facility enters into the 50% RSS of two other stations (WHEN and WZON), but its contributions comply with the reductions required by FCC Rules over those now authorized, as shown in the following Exhibit 15B.

As shown in the table below, two stations make up the 50% RSS of the proposed facility, giving an Interference-Free contour level of 20.09 mV/m:

To WSNR-P 620 kHz proposed												
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WHEN	620	293	147.9	53.4	25.5	38.6	0.2020	25.5	385.4	15.57	15.57	
WVMT	620	420	193.0	54.1	18.0	28.7	0.1293	18.0	491.2	12.70	20.09	- 50%
WZON	620	633	227.6	54.4	11.4	19.3	0.0705	11.4	364.1	5.14	20.74	- 25%
WKHB	620	457	80.4	52.0	16.4	26.6	0.1228	16.4	187.8	4.61		
WRJZ	620	987	54.0	49.8	6.1	11.4	0.0404	6.1	557.2	4.51		
CMDA	620	2108	15.5	43.2	0.0	1.7	0.0128	0.0	1695.0	4.34		
WWNR	620	684	58.0	50.7	10.3	17.7	0.0712	10.3	251.4	3.58		
WIP	610	127	30.7	51.8	48.2	61.7	0.3720	51.5	478.9	3.56		

“Clipping” Study

The proposed facility provides the required nighttime protections along the nighttime interference-free contours of all stations entitled to protection.

Skywave Study

There are no co-channel or first-adjacent Class A stations for which skywave contour protection is required.



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Following are definitions for column heading abbreviations used in the tables:

Freq	is frequency in kilohertz.
Dist	is distance, in kilometers.
Bear	is azimuth, in degrees east from true north.
GM	is geomagnetic latitude of path midpoint, in degrees.
Tmin	is lower pertinent departure angle, in degrees.
Tmax	is higher pertinent departure angle, in degrees.
Skywv	is the 10% skywave signal for 100 mV/m radiated at 1 km, in mV/m.
Thet	is the departure angle between Tmin and Tmax where the radiation is greatest, in degrees. Note: for interference to Canada and Mexico, Thet = Tmin = Tmax departure angle (1) of Section 73.190, Figure 6a.
Rmax	is the radiation at departure angle Thet, in mV/m at 1 km.
Limit	is 20 times the skywave field at the receive point for co-channel stations and 2 times the skywave field for first adjacent stations, in mV/m.
RSS	is the square root of the sum of the squares of the limits, using the 50% and 25% exclusion rules, in mV/m.

To WIP	610 kHz	Philadelphia, Pennsylvania										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WDAF	610	1676	80.5	50.8	1.1	4.3	0.0146	1.1	690.7	2.02	2.02	
WGIR	610	463	222.1	52.9	16.2	26.3	0.1177	16.2	84.0	1.98	2.83	
WIOD	610	1627	15.5	44.2	1.4	4.7	0.0200	1.4	476.4	1.90	3.41	
WCAO	600	149	70.5	51.0	43.6	57.7	0.3484	55.8	268.3	1.87	3.89	- 50%
WNTW	610	277	73.5	50.9	26.9	40.2	0.2229	26.9	33.1	1.47	4.16	
WHEN	620	370	165.6	52.9	20.4	32.0	0.1571	20.4	466.8	1.47	4.41	
CKTB	610	488	134.9	52.8	15.3	25.0	0.1097	15.3	63.8	1.40	4.62	
WTVNcp	610	665	84.8	51.1	10.7	18.2	0.0734	10.7	91.3	1.34	4.81	
WEZN	610	1264	52.5	48.0	3.6	7.9	0.0280	7.9	230.1	1.29	4.98	
WSNG	610	273	220.2	52.3	27.2	40.6	0.2217	27.2	28.7	1.27	5.14	- 25%
WFNZ	610	719	43.4	48.9	9.7	16.8	0.0689	16.8	71.6	0.99		
CMKA	600	2146	2.3	41.6	0.0	1.5	0.0129	0.0	3790.1	0.98		
CHNC	610	1200	224.6	55.5	4.1	8.5	0.0208	4.1	214.1	0.89		
WSNR -E	620	122	211.8	51.8	49.5	62.7	0.3788	59.9	68.8	0.52		
WSNR -P	620	127	211.2	51.8	48.2	61.7	0.3720	48.2	147.0	1.09		

To WGIR	610 kHz	Manchester, New Hampshire										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIP	610	463	39.6	52.9	16.2	26.3	0.1177	26.3	319.7	7.53	7.53	- 50%
CFLO	610	505	139.7	56.3	14.8	24.2	0.0917	14.8	140.2	2.57	7.96	- 25%
WVMT	620	219	139.8	55.3	32.8	47.0	0.2534	32.8	387.2	1.96		
CHNC	610	738	223.4	57.1	9.4	16.3	0.0470	9.4	197.6	1.86		
WTVNcp	610	1026	64.4	52.8	5.7	10.8	0.0334	10.8	215.6	1.44		
WSNR -E	620	343	43.1	53.4	22.0	34.1	0.1697	34.1	96.4	0.33		
WSNR -P	620	338	43.5	53.4	22.3	34.5	0.1727	34.5	101.6	0.35		



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To WTVNcp 610 kHz Columbus, Ohio

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIP	610	665	269.7	51.1	10.7	18.2	0.0734	18.2	561.2	8.24	8.24	
WDAF	610	1012	82.6	50.1	5.8	11.0	0.0384	5.8	685.6	5.26	9.77	- 50%
WSLC	610	354	316.5	49.6	21.3	33.2	0.1752	33.2	108.9	3.82	10.49	
WEZN	610	764	26.6	47.5	8.9	15.6	0.0647	15.6	270.4	3.50	11.06	
WNTW	610	403	277.5	50.6	18.7	29.7	0.1481	18.7	112.3	3.33	11.55	
WRJZ	620	407	11.5	48.9	18.5	29.5	0.1502	18.5	1043.0	3.13	11.97	- 25%
WIOD	610	1547	351.2	43.9	1.8	5.3	0.0220	1.8	492.7	2.17		
WFNZ	610	507	340.3	48.6	14.7	24.1	0.1141	24.1	93.0	2.12		
KARV	610	1023	59.2	48.3	5.7	10.8	0.0399	5.7	246.8	1.97		
WSNR -E	620	737	262.2	51.6	9.4	16.3	0.0617	16.3	86.3	0.11		
WSNR -P	620	739	261.8	51.6	9.4	16.2	0.0613	16.2	75.7	0.09		

To WSNB 610 kHz Torrington, Connecticut

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIP	610	273	38.8	52.3	27.2	40.6	0.2217	40.6	414.1	18.36	18.36	-50&25%
WGIR	610	190	223.2	53.9	36.7	51.0	0.2908	51.0	67.9	3.95		
WVMT	620	309	177.4	54.6	24.3	37.0	0.1849	24.3	551.8	2.04		
CFLO	610	567	159.0	55.6	13.0	21.6	0.0792	13.0	113.1	1.79		
WSNR -E	620	153	45.2	52.7	42.9	57.1	0.3384	52.4	122.0	0.83		
WSNR -P	620	148	46.3	52.8	43.9	57.9	0.3443	48.2	110.9	0.76		

To WSLC 610 kHz Roanoke, Virginia

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIP	610	514	237.9	50.0	14.5	23.8	0.1094	23.8	313.2	6.85	6.85	
WFNZ	610	236	18.7	47.5	30.9	44.9	0.2639	44.9	120.2	6.34	9.34	
WNTW	610	264	217.6	49.5	28.0	41.5	0.2364	28.0	117.0	5.53	10.85	- 50%
WTVNcp	610	354	134.7	49.6	21.3	33.2	0.1752	21.3	116.7	4.09	11.60	
WDAF	610	1288	93.8	49.2	3.5	7.6	0.0260	3.5	689.0	3.58	12.14	
WEZN	610	750	53.7	46.5	9.2	16.0	0.0678	16.0	239.7	3.25	12.56	- 25%
WIOD	610	1273	0.5	42.8	3.6	7.8	0.0313	3.6	481.7	3.01		
CKTB	610	642	186.9	51.4	11.2	19.0	0.0768	11.2	122.7	1.88		
WSJS	600	135	11.9	47.9	46.6	60.3	0.3702	46.6	239.6	1.77		
WSNR -E	620	626	233.4	50.4	11.5	19.5	0.0819	11.5	122.6	0.20		
WSNR -P	620	630	233.1	50.5	11.4	19.3	0.0810	11.4	156.4	0.25		

To WEXS 610 kHz Patillas, Puerto Rico

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
XHJLR	610	507	106.6	30.2	14.7	24.1	0.1397	14.7	294.9	8.24	8.24	
WAEIapp	600	123	98.6	29.6	49.3	62.6	0.4111	49.3	570.6	4.69	9.48	- 50%
X4VJS	610	667	94.2	29.8	10.7	18.2	0.1005	10.7	190.8	3.84	10.23	
CMKA	600	1097	103.4	30.9	5.0	9.8	0.0504	5.0	3759.4	3.79	10.91	
CMJA	610	1030	103.5	30.8	5.6	10.7	0.0553	5.6	307.7	3.40	11.43	
WIOD	610	1696	118.1	33.6	1.0	4.2	0.0245	1.0	613.5	3.01	11.82	- 25%
WIP	610	2582	157.6	40.5	0.0	0.0	0.0093	0.0	1188.4	2.22		
ABS	620	456	282.7	29.0	16.5	26.6	0.1593	16.5	639.1	2.04		
XCMGA	610	1518	103.6	31.5	2.0	5.5	0.0306	2.0	309.3	1.90		
WSNR -E	620	2656	160.1	41.0	0.0	0.0	0.0088	0.0	456.8	0.08		
WSNR -P	620	2660	160.2	41.0	0.0	0.0	0.0087	0.0	1280.0	0.22		



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To WNTW		610 kHz Winchester, Virginia										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIP	610	277	255.4	50.9	26.9	40.2	0.2229	40.2	482.9	21.53	21.53	-50&25%
WTVNcp	610	403	94.5	50.6	18.7	29.7	0.1481	29.7	143.0	4.24		
WDAF	610	1414	83.9	50.2	2.6	6.4	0.0209	2.6	689.8	2.88		
WSLC	610	264	36.5	49.5	28.0	41.5	0.2364	28.0	48.4	2.29		
WSNR -E	620	374	242.8	51.4	20.2	31.7	0.1601	20.2	81.3	0.26		
WSNR -P	620	378	242.2	51.4	20.0	31.5	0.1579	20.0	76.7	0.24		

To WFNZ		610 kHz Charlotte, North Carolina										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WEZN	610	584	68.3	45.5	12.5	20.9	0.0980	20.9	274.4	5.38	5.38	
WIP	610	719	226.9	48.9	9.7	16.8	0.0689	9.7	311.9	4.30	6.89	
WIOD	610	1053	356.3	41.8	5.4	10.4	0.0429	5.4	484.2	4.16	8.05	- 50%
WNTW	610	494	209.4	48.5	15.1	24.7	0.1183	15.1	162.1	3.84	8.91	
WDAF	610	1283	104.4	48.1	3.5	7.7	0.0272	3.5	689.0	3.74	9.67	
WRJZ	620	277	105.3	46.8	26.8	40.2	0.2302	40.2	729.3	3.36	10.23	
WSLC	610	236	199.2	47.5	30.9	44.9	0.2639	30.9	57.0	3.01	10.67	- 25%
WTVNcp	610	507	159.1	48.6	14.7	24.1	0.1141	14.7	112.7	2.57		
KILT	610	1485	62.5	43.6	2.2	5.8	0.0238	2.2	397.7	1.89		
WSJS	600	103	208.2	46.9	54.1	66.4	0.4062	54.1	210.0	1.71		
WSNR -E	620	837	225.2	49.4	7.9	14.0	0.0537	7.9	157.3	0.17		
WSNR -P	620	842	225.0	49.5	7.8	13.9	0.0531	7.8	216.6	0.23		

To KMNS		620 kHz Sioux City, Iowa										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WIMJ	620	688	269.7	53.0	10.3	17.6	0.0655	10.3	437.1	5.72	5.72	
WRJZ	620	1296	307.0	49.9	3.4	7.5	0.0249	3.4	953.4	4.75	7.44	
KMKI	620	1015	0.4	47.8	5.8	11.0	0.0410	5.8	488.6	4.01	8.45	- 50%
CMDA	620	2616	330.3	43.6	0.0	0.0	0.0083	0.0	1695.0	2.82	8.91	
CKCK	620	1083	141.6	55.8	5.1	10.0	0.0250	5.1	464.6	2.32	9.20	- 25%
KTAR	620	1680	49.4	47.1	1.1	4.3	0.0172	1.1	608.6	2.09		
WTMT	620	1015	299.7	51.0	5.8	11.0	0.0369	5.8	279.3	2.06		
WDAF	610	407	338.4	50.7	18.6	29.5	0.1464	18.6	637.9	1.87		
WSNR -E	620	1840	282.8	53.0	0.3	3.2	0.0104	0.3	87.4	0.18		
WSNR -P	620	1841	282.6	53.1	0.3	3.2	0.0103	0.3	88.6	0.18		

To KMKI		620 kHz Plano, Texas										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	1926	310.8	39.0	0.0	2.7	0.0168	0.0	1695.0	5.70	5.70	
XENK	620	1563	8.8	36.2	1.7	5.2	0.0261	1.7	621.0	3.24	6.56	- 50%
XEBU	620	1043	58.6	40.5	5.5	10.5	0.0440	5.5	299.5	2.64	7.07	
XEGH1	620	821	10.5	39.6	8.1	14.4	0.0638	8.1	197.8	2.52	7.50	
WRJZ	620	1201	259.0	45.4	4.1	8.5	0.0328	4.1	292.6	1.92	7.75	- 25%
WTMT	620	1128	243.3	46.4	4.7	9.4	0.0356	9.4	257.1	1.83		
KMNS	620	1015	180.5	47.8	5.8	11.0	0.0410	5.8	202.5	1.66		
JBC	620	2542	315.5	36.8	0.0	0.0	0.0111	0.0	692.0	1.54		
WSNR -E	620	2133	253.9	48.4	0.0	1.6	0.0102	0.0	86.2	0.18		
WSNR -P	620	2136	253.8	48.5	0.0	1.6	0.0101	0.0	57.7	0.12		



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To WDNC		620 kHz Durham, NC									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WRJZ	620	438	87.9	47.2	17.2	27.6	0.1400	17.2	420.4	11.77	11.77
CMDA	620	1493	6.8	40.6	2.1	5.7	0.0248	2.1	1693.3	8.40	14.46 - 50%
WDAE	620	969	19.7	43.2	6.3	11.7	0.0481	6.3	453.9	4.36	15.10 - 25%
WVNR	620	280	133.3	48.2	26.5	39.8	0.2259	26.5	80.1	3.62	
WHEN	620	820	197.8	50.9	8.1	14.4	0.0530	8.1	313.3	3.32	
WTMT	620	648	111.0	48.4	11.1	18.8	0.0814	11.1	195.0	3.18	
WSNR -E	620	664	218.6	49.8	10.7	18.3	0.0761	10.7	158.2	2.41	
WSNR -P	620	670	218.5	49.8	10.6	18.1	0.0751	10.6	230.1	3.46	

To WJDX		620 kHz Jackson, Mississippi									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
CMDA	620	1409	321.7	38.6	2.7	6.4	0.0287	2.7	1692.2	9.73	9.73
WRJZ	620	708	237.3	45.1	9.9	17.0	0.0751	17.0	336.8	5.06	10.97 - 50%
KMKI	620	601	97.4	43.2	12.1	20.3	0.0959	12.1	220.2	4.22	11.75
WTMT	620	775	213.0	46.1	8.8	15.4	0.0649	8.8	294.2	3.82	12.36
WDAE	620	886	306.3	41.1	7.2	13.1	0.0561	7.2	301.7	3.39	12.81 - 25%
KMNS	620	1240	151.6	47.7	3.8	8.1	0.0292	3.8	508.2	2.97	
XENK	620	1697	29.7	36.2	1.0	4.2	0.0229	1.0	621.3	2.84	
JBC	620	2041	324.1	36.4	0.0	2.1	0.0166	0.0	692.0	2.30	
WSNR -E	620	1691	241.4	48.0	1.1	4.2	0.0165	1.1	101.0	0.33	
WSNR -P	620	1695	241.3	48.0	1.0	4.2	0.0164	1.0	90.9	0.30	

To WKHB		620 kHz Irwin, Pennsylvania									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WRJZ	620	599	35.9	49.3	12.2	20.4	0.0895	20.4	612.4	10.96	10.96
WVNR	620	308	25.0	50.3	24.3	37.1	0.2019	24.3	173.7	7.01	13.01 - 50%
CMDA	620	1957	3.1	42.7	0.0	2.5	0.0148	0.0	1695.0	5.03	13.95
WDNC	620	477	352.5	49.4	15.7	25.5	0.1221	15.7	191.3	4.67	14.71 - 25%
WHEN	620	427	224.3	53.0	17.7	28.3	0.1307	28.3	107.9	2.82	
WTMJ	620	746	108.3	52.6	9.2	16.1	0.0582	9.2	240.4	2.80	
WTMT	620	561	65.1	50.4	13.1	21.8	0.0960	13.1	143.3	2.75	
WSNR -E	620	455	264.6	51.9	16.5	26.7	0.1237	26.7	90.6	2.24	
WSNR -P	620	457	263.9	52.0	16.4	26.6	0.1228	23.5	80.4	1.97	

To WVNR		620 kHz Beckley, West Virginia									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WRJZ	620	306	48.4	48.0	24.5	37.3	0.2080	37.3	576.4	23.98	23.98 - 50%
CMDA	620	1676	359.0	41.5	1.1	4.3	0.0201	1.1	1694.5	6.81	24.93 - 25%
WTMT	620	395	97.2	49.1	19.1	30.3	0.1552	19.1	160.0	4.97	
WDNC	620	280	314.7	48.2	26.5	39.8	0.2259	39.8	87.3	3.94	
WKHB	620	308	206.0	50.3	24.3	37.1	0.2019	24.3	96.2	3.88	
WSNR -E	620	680	242.7	50.7	10.4	17.8	0.0719	10.4	92.6	1.33	
WSNR -P	620	684	242.4	50.7	10.3	17.7	0.0712	10.3	80.5	1.15	

To WDAE		620 kHz St. Petersburg, Florida									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
CMDA	620	598	344.0	36.5	12.2	20.4	0.1043	12.2	1639.1	34.21	34.21 -50&25%
JBC	620	1215	335.8	34.2	4.0	8.4	0.0407	4.0	690.0	5.61	
CMKF	620	1115	317.4	35.6	4.8	9.6	0.0448	4.8	284.9	2.55	
XENK	620	1925	57.5	34.4	0.0	2.7	0.0195	0.0	621.4	2.42	
WSNR -E	620	1621	210.2	45.7	1.4	4.7	0.0193	1.4	149.4	0.58	
WSNR -P	620	1627	210.1	45.7	1.4	4.7	0.0191	1.4	201.6	0.77	



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To WTMJ		620 kHz Milwaukee, Wisconsin										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	2319	345.1	43.8	0.0	0.7	0.0105	0.0	1695.0	3.55	3.55	- 50%
JBC	620	2923	342.4	41.6	0.0	0.0	0.0071	0.0	692.0	0.99	3.68	
XENK	620	2793	19.3	41.4	0.0	0.0	0.0078	0.0	621.4	0.97	3.81	- 25%
KTAR	620	2321	56.8	48.2	0.0	0.6	0.0087	0.0	540.0	0.94		
WDAF	610	690	51.0	51.3	10.2	17.6	0.0689	10.2	674.5	0.93		
KJSL	630	481	20.4	51.3	15.6	25.3	0.1164	15.6	359.5	0.84		
WSNR -E	620	1155	285.1	53.1	4.5	9.1	0.0263	4.5	86.8	0.46		
WSNR -P	620	1155	284.8	53.2	4.5	9.1	0.0263	4.5	93.4	0.49		

To WRJZ		620 kHz Knoxville, Tennessee										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	1502	349.8	40.5	2.1	5.6	0.0246	2.1	1693.3	8.32	8.32	- 50%
WTMT	620	307	146.9	48.1	24.4	37.2	0.2069	24.4	81.3	3.36	8.97	
WWNR	620	306	229.9	48.0	24.5	37.3	0.2080	24.5	62.8	2.61	9.35	- 25%
WDAE	620	910	352.9	43.0	6.9	12.7	0.0531	6.9	217.1	2.30		
WJDX	620	708	53.8	45.1	9.9	17.0	0.0751	17.0	144.2	2.17		
JBC	620	2095	344.1	38.3	0.0	1.8	0.0149	0.0	692.0	2.06		
WSNR -E	620	983	240.1	49.8	6.1	11.4	0.0408	6.1	103.3	0.84		
WSNR -P	620	987	239.9	49.8	6.1	11.4	0.0404	6.1	101.6	0.82		

To WHEN		620 kHz Syracuse, New York										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	2307	9.8	44.2	0.0	0.7	0.0104	0.0	1695.0	3.53	3.53	
WRJZ	620	1026	37.3	50.8	5.7	10.8	0.0365	10.8	459.1	3.35	4.87	
WZON	620	623	254.5	55.5	11.6	19.6	0.0686	11.6	235.3	3.23	5.84	
WSNR -E	620	297	330.0	53.4	25.2	38.2	0.1993	25.2	78.3	3.12	6.62	- 50%
WSNR -P	620	293	329.1	53.4	25.5	38.6	0.2020	38.6	67.7	2.73		
WIP	610	370	346.3	52.9	20.4	32.0	0.1571	20.4	986.2	3.10	7.31	
WTMJ	620	968	83.4	54.2	6.3	11.7	0.0345	6.3	424.8	2.93	7.88	
WMAL	630	460	9.7	52.4	16.3	26.4	0.1202	16.3	836.3	2.01	8.13	- 25%
WDNC	620	820	16.0	50.9	8.1	14.4	0.0530	8.1	160.9	1.71		
WPRO	630	425	291.8	53.9	17.7	28.4	0.1281	24.4	562.9	1.44		
WDAE	620	1787	17.1	46.8	0.6	3.6	0.0155	0.6	419.6	1.30		
WSNG	610	297	301.0	53.9	25.2	38.1	0.1967	25.2	322.5	1.27		
WKHB	620	427	41.9	53.0	17.7	28.3	0.1307	17.7	48.0	1.26		

To WVMT		620 kHz Burlington, Vermont										
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WZON	620	352	266.2	56.2	21.4	33.4	0.1508	21.4	257.2	7.76	7.76	- 50%
WHEN	620	287	55.0	55.3	26.0	39.1	0.1967	26.0	90.9	3.57	8.54	
WPRO	630	343	334.0	54.6	22.0	34.1	0.1639	22.0	1037.8	3.40	9.19	
CMDA	620	2525	14.3	45.0	0.0	0.0	0.0084	0.0	1695.0	2.86	9.63	
WSNR -E	620	426	12.3	54.1	17.7	28.3	0.1270	17.7	107.3	2.72	10.01	- 25%
WSNR -P	620	420	12.2	54.1	18.0	28.7	0.1293	18.0	98.9	2.56		
WTMJ	620	1210	75.3	55.1	4.1	8.4	0.0213	4.1	468.1	1.99		
CHLT	630	137	231.7	56.4	46.2	59.9	0.3343	55.6	264.7	1.77		
WRJZ	620	1307	40.1	51.7	3.3	7.4	0.0226	7.4	370.3	1.67		
CHRQ	620	761	121.8	57.9	9.0	15.7	0.0418	9.0	154.9	1.30		
WDAE	620	2030	21.7	47.6	0.0	2.1	0.0117	0.0	484.3	1.13		



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To WZON		620 kHz		Bangor, Maine									
From		Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA		620	2695	21.3	45.3	0.0	0.0	0.0073	0.0	1695.0	2.48	2.48	
WSNR -E		620	638	43.5	54.3	11.3	19.1	0.0697	11.3	91.0	1.27	2.78	- 50%
WSNR -P		620	633	43.8	54.4	11.4	19.3	0.0705	19.3	86.7	1.22		
WRJZ		620	1605	47.6	52.0	1.5	4.8	0.0148	1.5	408.4	1.21	3.03	
WTMJ		620	1562	74.7	55.5	1.7	5.2	0.0121	1.7	472.4	1.14	3.24	
WDAE		620	2247	29.3	47.9	0.0	1.0	0.0094	0.0	590.8	1.11	3.43	
CHLT		630	248	101.2	56.6	29.6	43.4	0.2189	43.4	252.7	1.11	3.60	
WVMT		620	352	83.1	56.2	21.4	33.4	0.1508	21.4	34.8	1.05	3.75	
CFCY		630	463	252.1	57.1	16.2	26.3	0.1003	26.3	492.8	0.99	3.88	
WPRO		630	397	30.3	54.8	19.0	30.2	0.1362	30.2	357.6	0.97	4.00	- 25%
WHEN		620	623	69.4	55.5	11.6	19.6	0.0686	11.6	69.2	0.95		
CFRP		620	424	176.8	58.2	17.8	28.4	0.1069	17.8	39.6	0.85		
JBC		620	3094	13.4	42.9	0.0	0.0	0.0061	0.0	692.0	0.84		
ABS		620	3145	349.5	42.5	0.0	0.0	0.0060	0.0	692.0	0.82		
WWNR		620	1299	49.0	52.9	3.4	7.5	0.0213	3.4	166.0	0.71		

To WMTT		620 kHz		Louisville, Kentucky									
From		Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WRJZ		620	307	328.0	48.1	24.4	37.2	0.2069	24.4	152.3	6.30	6.30	
CMDA		620	1793	346.4	41.6	0.5	3.5	0.0178	0.5	1694.9	6.03	8.72	- 50%
WTMJ		620	527	157.0	51.3	14.1	23.2	0.1025	14.1	187.0	3.83	9.53	- 25%
WKHB		620	561	248.9	50.4	13.1	21.8	0.0960	13.1	94.9	1.82		
WDNC		620	648	295.0	48.4	11.1	18.8	0.0814	11.1	108.8	1.77		
KMKI		620	1128	56.9	46.4	4.7	9.4	0.0356	4.7	240.6	1.72		
WSNR -E		620	1010	257.8	50.9	5.8	11.0	0.0373	5.8	86.0	0.64		
WSNR -P		620	1013	257.6	51.0	5.8	11.0	0.0371	11.0	66.6	0.49		

To CKCM	620 kHz	Grand Falls, Newfoundland										
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS		
WZON	620	1097	60.7	7.4	7.4	0.0552	7.4	841.2	9.28	9.28	-	50%
CFRP	620	984	83.0	8.8	8.8	0.0658	8.8	290.9	3.83			
CHRQ	620	1881	78.6	1.6	1.6	0.0127	1.6	1086.8	2.76			
WSNR -E	620	1724	52.0	2.5	2.5	0.0168	2.5	235.7	0.79			
WSNR -P	620	1719	52.2	2.5	2.5	0.0169	2.5	64.5	0.22			
CMDA	620	3664	31.0	0.0	0.0	0.0023	0.0	1695.0	0.77			
CKCK	620	3466	73.2	0.0	0.0	0.0026	0.0	997.8	0.51			

To CFRP	620 kHz		Forestville, Quebec									
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS		
WZON	620	424	357.0	23.3	23.3	0.1386	23.3	911.5	25.27	25.27		
WVMT	620	555	33.2	17.8	17.8	0.1172	17.8	584.7	13.71	28.75	- 50%	
CHRQ	620	905	84.0	9.9	9.9	0.0745	9.9	893.7	13.32			
WHEN	620	825	39.2	11.2	11.2	0.0834	11.2	201.2	3.35			
WTMJ	620	1610	59.3	3.2	3.2	0.0211	3.2	442.6	1.87			
WSNR -E	620	966	23.7	9.0	9.0	0.0677	9.0	85.7	1.16			
WSNR -P	620	960	23.8	9.1	9.1	0.0683	9.1	68.1	0.93			

To JBC		620 kHz		Spur Tree, Jamaica								
From		Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA		620	632	145.7	15.4	15.4	0.1073	15.4	1606.7	34.49	34.49	- 50%
WDAE		620	1215	153.8	6.2	6.2	0.0448	6.2	919.8	8.24		
HISD		620	808	267.1	11.5	11.5	0.0854	11.5	475.0	8.12		
CMKF		620	405	223.1	24.4	24.4	0.1423	24.4	255.1	7.26		
WSNR	-E	620	2555	187.8	0.0	0.0	0.0054	0.0	87.3	0.09		
WSNR	-P	620	2561	187.8	0.0	0.0	0.0053	0.0	327.2	0.35		



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To CHRQ	620 kHz	Timmins, Ontario								
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WVMT	620	761	307.8	12.4	12.4	0.0913	12.4	944.9	17.25	17.25
WIMJ	620	822	36.8	11.3	11.3	0.0837	11.3	879.9	14.74	22.68 - 50%
WHEN	620	719	327.7	13.3	13.3	0.0968	13.3	402.3	7.79	
WZON	620	1041	297.2	8.1	8.1	0.0602	8.1	612.5	7.37	
WRJZ	620	1399	7.5	4.6	4.6	0.0320	4.6	1055.2	6.75	
WSNR -E	620	1015	329.3	8.4	8.4	0.0627	8.4	89.4	1.12	
WSNR -P	620	1011	329.0	8.4	8.4	0.0630	8.4	89.4	1.13	

To CKCK	620 kHz	Regina, Saskatchewan								
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WIMJ	620	1518	309.6	3.8	3.8	0.0254	3.8	495.2	2.52	2.52
KMKI	620	2011	343.2	0.9	0.9	0.0102	0.9	865.5	1.77	3.08
KDBZcp	620	1441	61.3	4.3	4.3	0.0295	4.3	294.0	1.74	3.53 - 50%
KTAR	620	1968	15.7	1.1	1.1	0.0110	1.1	715.3	1.57	
CJCI	620	1293	100.3	5.5	5.5	0.0390	5.5	132.6	1.03	
WVMT	620	2428	296.6	0.0	0.0	0.0062	0.0	809.3	1.00	
WSNR -E	620	2560	304.7	0.0	0.0	0.0053	0.0	86.3	0.09	
WSNR -P	620	2558	304.5	0.0	0.0	0.0053	0.0	152.2	0.16	

To CMDA	620 kHz	Colon, Cuba								
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
WDAE	620	598	163.3	16.4	16.4	0.1117	16.4	900.9	20.13	20.13
JBC	620	632	326.9	15.4	15.4	0.1073	15.4	662.5	14.22	24.64 - 50%
CMKF	620	659	291.3	14.7	14.7	0.1042	14.7	274.6	5.72	
HISD	620	1236	294.1	6.0	6.0	0.0431	6.0	485.4	4.18	
XEXX	620	818	63.3	11.3	11.3	0.0843	11.3	196.2	3.31	
WSNR -E	620	2102	199.0	0.5	0.5	0.0090	0.5	95.7	0.17	
WSNR -P	620	2108	199.0	0.4	0.4	0.0090	0.4	106.9	0.19	

To CMKF	620 kHz	Moa, Cuba								
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
CMDA	620	659	109.1	14.7	14.7	0.1042	14.7	1614.4	33.63	33.63
JBC	620	405	42.2	24.4	24.4	0.1423	24.4	619.5	17.63	37.97 - 50%
HISD	620	578	295.5	17.0	17.0	0.1142	17.0	458.6	10.48	
WDAE	620	1115	134.3	7.2	7.2	0.0534	7.2	905.2	9.67	
ABS	620	1433	287.9	4.4	4.4	0.0300	4.4	688.1	4.12	
WSNR -E	620	2239	181.6	0.0	0.0	0.0076	0.0	86.3	0.13	
WSNR -P	620	2244	181.6	0.0	0.0	0.0075	0.0	526.9	0.79	

To HRLP17	620 kHz	San Pedro Sula, Honduras								
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
CMDA	620	1095	224.1	7.5	7.5	0.0553	7.5	1673.6	18.51	18.51 - 50%
JBC	620	1148	257.6	6.9	6.9	0.0504	6.9	686.0	6.92	
WDAE	620	1485	203.2	4.0	4.0	0.0271	4.0	1044.8	5.67	
XEHGR	620	596	116.2	16.5	16.5	0.1120	16.5	245.1	5.49	
WSNR -E	620	3106	209.1	0.0	0.0	0.0033	0.0	144.5	0.10	
WSNR -P	620	3112	209.0	0.0	0.0	0.0033	0.0	192.3	0.13	



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To XEHR	620 kHz	Villahermosa, Mexico									
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
XENK	620	660	103.0	14.7	14.7	0.1040	14.7	595.2	12.38	12.38	
CMDA	620	1367	249.3	4.9	4.9	0.0340	4.9	1685.9	11.45	16.87	- 50%
HRLP17	620	596	297.7	16.5	16.5	0.1120	16.5	269.3	6.03		
WDAE	620	1535	226.1	3.7	3.7	0.0246	3.7	902.8	4.44		
XEKX	620	553	251.7	17.9	17.9	0.1175	17.9	188.8	4.44		
WSNR -E	620	3104	220.5	0.0	0.0	0.0033	0.0	171.4	0.11		
WSNR -P	620	3109	220.5	0.0	0.0	0.0033	0.0	235.3	0.16		

To XEKX	620 kHz	Felipe Carrillo Puerto, Mexico									
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	818	245.9	11.3	11.3	0.0843	11.3	1646.9	27.76	27.76	- 50%
WDAE	620	1078	212.1	7.6	7.6	0.0568	7.6	1002.4	11.38		
JBC	620	1118	280.7	7.2	7.2	0.0531	7.2	685.5	7.28		
HRLP17	620	451	359.7	22.0	22.0	0.1334	22.0	256.8	6.85		
WSNR -E	620	2695	212.9	0.0	0.0	0.0047	0.0	160.4	0.15		
WSNR -P	620	2700	212.9	0.0	0.0	0.0046	0.0	220.3	0.20		

To ABS	620 kHz	Antigua & Barbuda									
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
HISD	620	870	98.7	10.4	10.4	0.0783	10.4	477.6	7.48	7.48	- 50%
CMDA	620	2088	103.8	0.5	0.5	0.0092	0.5	1694.9	3.12		
JBC	620	1670	90.8	2.8	2.8	0.0187	2.8	691.0	2.58		
CMKF	620	1433	103.6	4.4	4.4	0.0300	4.4	285.1	1.71		
WSNR -E	620	2891	151.7	0.0	0.0	0.0039	0.0	740.1	0.58		
WSNR -P	620	2895	151.8	0.0	0.0	0.0039	0.0	1527.4	1.19		

To HISD	620 kHz	Santo Domingo, Dominican Republic									
From	Freq	Dist	Bear	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMDA	620	1236	110.3	6.0	6.0	0.0431	6.0	1681.3	14.49	14.49	
JBC	620	808	84.7	11.5	11.5	0.0854	11.5	675.4	11.54	18.52	
ABS	620	870	281.2	10.4	10.4	0.0783	10.4	670.4	10.50	21.29	- 50%
CMKF	620	578	113.8	17.0	17.0	0.1142	17.0	270.8	6.19		
WDAE	620	1661	126.2	2.8	2.8	0.0190	2.8	925.0	3.52		
WRJZ	620	2376	141.2	0.0	0.0	0.0065	0.0	977.2	1.28		
WSNR -E	620	2515	169.0	0.0	0.0	0.0056	0.0	214.2	0.24		
WSNR -P	620	2520	169.1	0.0	0.0	0.0056	0.0	973.6	1.08		

To WUNO	630 kHz	San Juan, Puerto Rico									
From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS
CMHA	630	1282	102.7	31.5	3.5	7.7	0.0397	3.5	1690.3	13.41	13.41 - 50%
XNEW	640	540	297.6	28.8	13.7	22.6	0.1316	13.7	2098.2	5.52	14.50
CMOA	630	1773	98.9	31.7	0.6	3.7	0.0239	0.6	978.5	4.67	15.23 - 25%
XHIAF	630	600	104.5	30.7	12.1	20.4	0.1135	12.1	149.7	3.40	
ABS	620	478	288.0	29.3	15.7	25.5	0.1509	15.7	643.9	1.94	
WMAL	630	2523	152.0	40.3	0.0	0.0	0.0098	0.0	987.4	1.94	
WSNR -E	620	2608	160.0	41.2	0.0	0.0	0.0090	0.0	458.6	0.08	
WSNR -P	620	2612	160.1	41.2	0.0	0.0	0.0090	0.0	1281.8	0.23	



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To WMAL 630 kHz Washington, D.C.

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMHA	630	1962	2.2	41.6	0.0	2.5	0.0152	0.0	1695.0	5.15	5.15	
CMOA	630	1998	14.2	41.6	0.0	2.3	0.0147	0.0	978.6	2.87	5.89	- 50%
WPRO	630	580	240.0	51.9	12.6	21.1	0.0881	12.6	126.2	2.22	6.30	
WUNO	630	2523	337.4	40.3	0.0	0.0	0.0098	0.0	822.5	1.61	6.50	- 25%
CFCO	630	569	128.7	52.0	12.9	21.5	0.0904	12.9	59.1	1.07		
KJSL	630	1123	84.0	50.1	4.8	9.5	0.0320	4.8	159.2	1.02		
CFBK	630	718	165.6	53.5	9.7	16.8	0.0597	16.8	85.0	1.01		
WSNR -E	620	309	231.0	51.3	24.3	37.0	0.1983	24.3	100.2	0.40		
WSNR -P	620	314	230.4	51.3	23.9	36.6	0.1950	23.9	158.5	0.62		

To WPRO 630 kHz Providence, Rhode Island

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMHA	630	2351	13.9	43.0	0.0	0.5	0.0104	0.0	1695.0	3.54	3.54	
WVMT	620	343	152.7	54.6	22.0	34.1	0.1639	22.0	626.2	2.05	4.09	- 50%
CMOA	630	2474	23.0	43.2	0.0	0.0	0.0094	0.0	978.6	1.84	4.48	
WUNO	630	2641	350.3	41.6	0.0	0.0	0.0087	0.0	938.0	1.63	4.77	
CJET	630	508	130.5	54.8	14.7	24.0	0.0969	24.0	80.3	1.56	5.02	
CFCY	630	818	235.5	55.6	8.1	14.4	0.0430	8.1	177.8	1.53	5.25	
CFCO	630	906	90.2	53.6	7.0	12.7	0.0401	7.0	186.1	1.49	5.45	
WSNR -E	620	276	65.8	52.8	26.9	40.3	0.2171	26.9	338.1	1.47	5.65	
WSNR -P	620	272	66.8	52.8	27.3	40.7	0.2199	27.3	174.7	0.77		
CHLT	630	395	173.4	55.0	19.1	30.3	0.1360	19.1	53.9	1.47	5.84	- 25%
WMAL	630	580	56.2	51.9	12.6	21.1	0.0881	21.1	82.2	1.45		
WMFDcp	630	1017	32.9	49.5	5.8	10.9	0.0389	5.8	180.4	1.40		
WNNZ	640	126	110.4	53.5	48.4	61.8	0.3661	48.4	154.0	1.13		
WZON	620	397	212.0	54.8	19.0	30.2	0.1362	19.0	401.8	1.09		
WLAP	630	1188	65.9	51.5	4.2	8.7	0.0273	4.2	172.0	0.94		

To WBMQ 630 kHz Savannah, Georgia

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
CMHA	630	1225	346.4	38.0	3.9	8.3	0.0365	3.9	1689.2	12.34	12.34	
WMAL	630	848	205.5	46.8	7.7	13.8	0.0559	7.7	708.1	7.91	14.66	
CMOA	630	1165	8.1	38.1	4.4	9.0	0.0394	4.4	975.0	7.69	16.55	-50&25%
KJSL	630	1104	129.0	46.4	4.9	9.7	0.0369	4.9	344.2	2.54		
WLAP	630	742	154.1	46.2	9.3	16.2	0.0691	9.3	167.6	2.32		
WMFDcp	630	375	229.9	44.5	20.2	31.7	0.1705	20.2	66.0	2.25		
WSNR -E	620	1138	213.5	47.8	4.6	9.3	0.0338	4.6	159.9	0.11		
WSNR -P	620	1144	213.5	47.8	4.6	9.2	0.0335	4.6	222.6	0.15		

To WMFDcp 630 kHz Wilmington, North Carolina

From	Freq	Dist	Bear	GM	Tmin	Tmax	Skywv	Thet	Rmax	Limit	RSS	
WBMQ	630	375	48.2	44.5	20.2	31.7	0.1705	31.7	304.0	10.37	10.37	
CMHA	630	1433	0.0	39.2	2.5	6.2	0.0275	2.5	1692.6	9.30	13.93	- 50%
WLAP	630	721	124.5	47.4	9.7	16.7	0.0707	9.7	394.1	5.57	15.00	
WMAL	630	533	188.3	48.0	13.9	23.0	0.1079	13.9	247.5	5.34	15.92	
CMOA	630	1474	17.5	39.2	2.3	5.9	0.0262	2.3	977.6	5.12	16.73	- 25%
WUNO	630	2116	328.6	38.0	0.0	1.7	0.0148	0.0	728.1	2.15		
WDNC	620	216	155.0	46.5	33.2	47.4	0.2829	33.2	347.1	1.96		
WFNC	640	125	135.4	46.0	48.6	62.0	0.3805	48.6	157.1	1.20		
WSNR -E	620	792	204.8	48.9	8.5	15.0	0.0593	8.5	115.7	0.14		
WSNR -P	620	798	204.8	49.0	8.4	14.9	0.0586	14.9	150.6	0.18		

