Technical Exhibit
Minor Modification of W248CH
481.5m RC-AMSL
331m AGL
250 Watts

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Interference Compliance

Contour protection, as required by C.F.R. Section 74.1204 to co-channel and first, second and third adjacent channels is demonstrated herein by Figures 1 and 2.

The proposed HAAT and the predicted 60 dBu contours were calculated in accordance with Section 47 C.F.R. 73.313. The average terrain elevations were calculated along 12 radials using the NED 03 Sec terrain database.

All contours displayed in exhibits are plotted in accordance with the propagation prediction curves of Section 73.333.

The instant application seeks a waiver of the second adjacent minimum distance separation requirement of 47 C.F.R. Section 74.1204. The proposed facility will not interfere with any authorized radio service, specifically, KYKY and KFTK.

Figure 3 shows a tabular output of the interfering 169 dBu F(50,10) contour of the proposed facility with respect to KYKY. The closest the contour comes to the ground is 330.8m. There are no tall buildings within the area.

Figure 3-1 shows a tabular output of the interfering 110 dBu F(50,10) contour of the proposed facility with respect to KFTK. The closest the interfering contour comes to the ground is 160.6m. There are no tall buildings within the area.

AM Fill-In Eligibility

Figure 4 shows the 60 dBu contour of the proposed facility completely within the lesser of 25 mile/40 kM limit of the main station, KHOJ AM 1460 or its 2 mV/m contour.

Mattoon Waiver Technical Factors

A waiver of CFR 74.1233(a) is requested. The proposed facility is mutually exclusive with the currently licensed facility and will rebroadcast KHOJ AM 1460 (see Figure 5).

RF Electromagnetic Exposure Analysis

The proposed facility will not have a significant environmental impact and complies with maximum permissible radio frequency electromagnetic exposure limits for a controlled environment, in accordance with OET Bulletin No. 65.

Using a worst case assumption of maximum downward radiation (F=1.0) the RF exposure at 2m above ground level is less than 0.1% of the controlled standard. This is inconsequential when added to existing RF on the tower. The site is fenced. The power will be reduced or shut off to allow necessary access to the tower.

Figure 1
Minor Modification to W248CH

REFERENCE CH# 248D - 97.5 MHz, Pwr= 0.25 kW DA, HAAT= 324.3 M, COR= 481.5 M DISPLAY DATES
38 34 49.8 N. Average Protected F(50-50)= 23.42 km DATA 02-03-16
90 19 44.6 W. Standard Directional SEARCH 02-09-16

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
248D ~~W248CH~~	CP DC_	0.0	0.00	38 34 49.8	0.250	64.9	21.3	-87.9*	-90.5*
Shrewsbury	MO	0.0	BPFT20150902AEC	90 19 44.6		436	Covenant Network		
251C1 KYKY	LIC _CX	155.1	0.75	38 34 27.7	90.000	9.6	70.1	-17.9*	-69.5*
St. Louis	MO	335.1	BLH20110919ADO	90 19 31.5	309	462	Cbs Radio Stations Inc.		
248D ~~W248CH~~	LIC DC_	94.6	26.60	38 33 39.5	0.200	34.6	10.2	-19.5*	-22.8*
Belleville	IL	274.8	BLFT20150324AAI	90 01 26.5		203	Covenant Network		
246C1 KFTK	LIC _CN	302.6	41.11	38 46 45.0	100.000	7.7	61.7	10.6	-21.7*
Florissant	MO	122.4	BLH19851127KC	90 43 43.0	171	334	Emmis Radio License, Llc		
249C2 KHZR	LIC NCX	208.9	78.83	37 57 31.0	26.500	79.9	52.9	-16.5*	1.3
Potosi	MO	28.6	BLH20061106ABW	90 45 47.0	207	483	Gateway Creative Broadcast		
248A WDLJ	LIC _CX	87.5	81.39	38 36 33.0	2.500	81.6	28.1	-13.2*	14.1
Breese	IL	268.0	BLH20030212AAV	89 23 35.0	156	290	Km Radio Of Breese, L.l.c.		
248B1 WBBA-FM	LIC _CN	340.2	118.40	39 34 53.0	10.000	97.1	39.4	-1.7	1.6
Pittsfield	IL	159.9	BLH19890821KE	90 47 52.0	93	297	Dj Two Rivers Radio, Inc.		
246D KFTK-FM1	LIC _CN	65.4	13.23	38 37 48.0	0.070	0.6	10.9	-0.7*	1.9
St. Louis	MO	245.5	BLFTB19940930TD	90 11 26.0	154	293	Emmis Radio License, Llc		
248A KJMO	LIC _CX	266.7	135.47	38 29 56.9	6.000	82.6	24.8	29.9	41.5
Linn	MO	85.7	BLH20060714AAX	91 53 00.4	100	320	Cumulus Licensing Llc		
247A WRAN	LIC _CX	42.6	132.32	39 27 08.0	4.600	43.3	28.2	67.2	74.7
Taylorville	IL	223.2	BLH20011109ACK	89 17 10.0	114	306	Miller Communications, Inc		
248C2 KOEA	LIC _CN	191.2	225.60	36 35 20.0	40.000	132.2	49.7	80.2	140.0
Doniphan	MO	10.9	BLH19890313KE	90 49 10.0	176	314	Eagle Bluff Enterprises		
247A KYRX	LIC _CN	170.6	135.20	37 22 49.0	3.600	37.0	23.1	88.9	98.0
Marble Hill	MO	350.8	BLH19991209ACW	90 04 49.0	130	335	Dana R. Withers		
249A WQLZ	LIC _CX	19.4	156.89	39 54 35.0	6.000	43.5	28.1	90.2	94.0
Petersburg	IL	199.8	BLH20020305AAR	89 43 01.0	100	273	Long Nine, Inc.		
248B WHMS-FM	LIC _CN	46.3	244.90	40 05 04.0	50.000	132.8	59.6	90.6	108.3
Champaign	IL	227.6	BLH19911022KB	88 14 53.0	109	328	D.w.s., Inc.		
249A WHET	LIC _C_	126.6	152.62	37 45 15.0	3.500	44.7	29.4	98.4	110.1
West Frankfort	IL	307.4	BLH19961030KC	88 56 05.0	132	269	Withers Broadcasting Of So		
247C3 KTCM	LIC _CX	301.8	185.85	39 26 45.4	12.000	58.1	38.8	105.0	112.8
Madison	MO	120.6	BLH20100610ACO	92 10 11.3	146	374	Christine Cp Co, Llc		
247B WRUL	LIC _CN	106.0	193.69	38 04 54.0	50.000	77.6	64.6	105.1	107.3
Carmi	IL	287.3	BLH19860107KC	88 12 04.0	149	272	Wrul, Llc		
246D W246BL	LIC _C_	87.3	122.09	38 37 29.0	0.099	0.7	5.6	108.1	116.0
Salem	IL	268.1	BLFT20070926AOF	88 55 30.0	31	192	Covenant Network		
250C2 KICK-FM	LIC _C_	322.7	165.20	39 45 26.0	43.000	5.6	49.7	136.5	113.9
Palmyra	MO	142.0	BLH20001016ABT	91 29 58.0	162	342	Townsquare Media Quincy-ha		

Terrain database is NED 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 2
Minor Modification to W248CH

FMCommander Single Allocation Study - 02-15-2016 - NED 03 SEC
W248CH.A's Overlaps (In= -16.51 km, Out= 1.31 km)

W248CH.A CH 248 D DA
Lat= 38 34 49.8, Lng= 90 19 44.6
0.25 kW 324.3 m HAAT, 481.5 m COR
Prot.= 60 dBu, Intef.= 54 dBu

KHZR CH 249 C2 73.215 N BLH20061106ABW
Lat= 37 57 31.0, Lng= 90 45 47.0
26.5 kW 207 m HAAT, 483 m COR
Prot.= 60 dBu, Intef.= 54 dBu

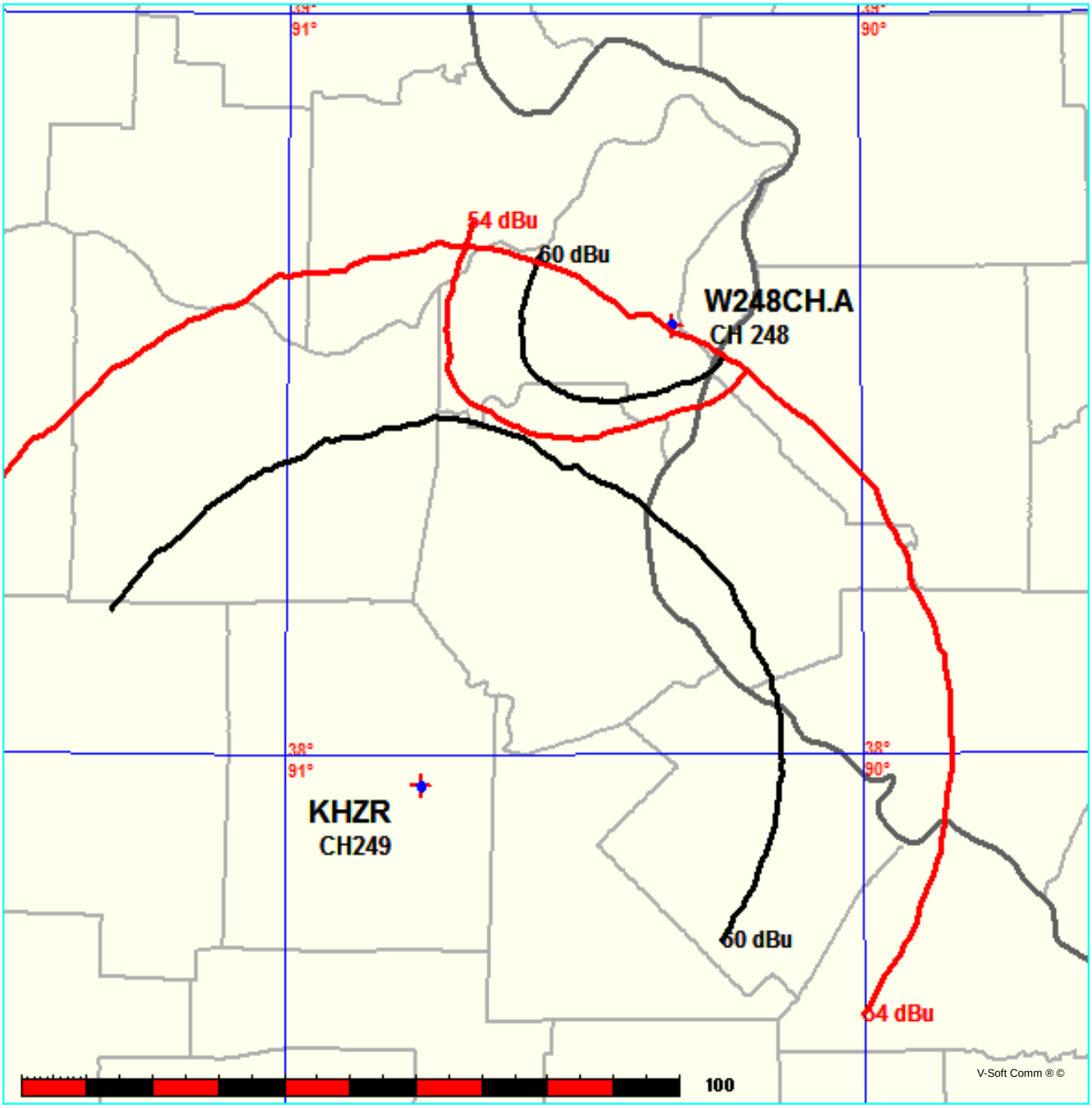


Figure 2-1

02-15-2016 Terrain Data: NED 03 SEC FMOver Analysis

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Protected
60 dBu

KHZR BLH20061106ABW

Channel = 249C2
Max ERP = 26.5 kW
RCAMSL = 483 m
N. Lat. 37 57 31.0
W. Lng. 90 45 47.0
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
149.0	000.2500	0347.7	024.2	046.0	026.5000	0231.7	069.9	57.31*	10.03
150.0	000.2500	0347.6	024.2	045.9	026.5000	0231.5	069.5	57.44*	10.42
151.0	000.2500	0347.3	024.2	045.8	026.5000	0231.2	069.1	57.57*	10.79
152.0	000.2500	0346.9	024.2	045.7	026.5000	0230.8	068.7	57.69*	11.15
153.0	000.2500	0347.0	024.2	045.6	026.5000	0230.5	068.3	57.82*	11.52
154.0	000.2500	0346.0	024.2	045.5	026.5000	0230.1	067.9	57.93*	11.87
155.0	000.2500	0344.5	024.1	045.3	026.5000	0229.6	067.5	58.05*	12.20
156.0	000.2500	0343.2	024.1	045.2	026.5000	0229.2	067.1	58.16*	12.53
157.0	000.2500	0342.1	024.0	045.0	026.5000	0228.9	066.7	58.28*	12.88
158.0	000.2500	0342.3	024.0	044.9	026.5000	0228.7	066.3	58.41*	13.25
159.0	000.2500	0342.7	024.0	044.8	026.5000	0228.5	065.9	58.53*	13.62
160.0	000.2500	0344.1	024.1	044.7	026.5000	0228.3	065.5	58.66*	13.99
161.0	000.2500	0344.1	024.1	044.5	026.5000	0228.0	065.2	58.78*	14.34
162.0	000.2500	0343.1	024.1	044.3	026.5000	0227.7	064.8	58.89*	14.67
163.0	000.2500	0340.5	024.0	044.1	026.5000	0227.5	064.5	59.00*	14.97
164.0	000.2500	0337.4	023.9	043.8	026.5000	0227.3	064.2	59.10*	15.26
165.0	000.2500	0333.7	023.7	043.5	026.5000	0227.2	063.9	59.20*	15.55
166.0	000.2500	0330.7	023.6	043.2	026.5000	0227.0	063.6	59.30*	15.82
167.0	000.2500	0328.4	023.6	043.0	026.5000	0226.5	063.3	59.39*	16.07
168.0	000.2500	0325.2	023.5	042.7	026.5000	0226.2	063.0	59.47*	16.32
169.0	000.2500	0323.3	023.4	042.4	026.5000	0226.1	062.7	59.58*	16.60
170.0	000.2500	0320.9	023.3	042.1	026.5000	0226.0	062.4	59.67*	16.86
171.0	000.2500	0317.9	023.2	041.8	026.5000	0225.6	062.2	59.75*	17.07
172.0	000.2500	0315.5	023.1	041.5	026.5000	0225.3	061.9	59.83*	17.30
173.0	000.2500	0315.3	023.1	041.3	026.5000	0225.0	061.6	59.93*	17.57
174.0	000.2500	0315.6	023.1	041.0	026.5000	0225.0	061.3	60.04*	17.87
175.0	000.2500	0315.9	023.1	040.8	026.5000	0225.0	061.0	60.15*	18.17
176.0	000.2500	0315.5	023.1	040.5	026.5000	0225.3	060.7	60.27*	18.48
177.0	000.2500	0317.6	023.2	040.3	026.5000	0225.6	060.4	60.41*	18.85
178.0	000.2500	0319.0	023.2	040.0	026.5000	0225.9	060.1	60.54*	19.20
179.0	000.2500	0321.4	023.3	039.8	026.5000	0226.2	059.7	60.67*	19.56
180.0	000.2500	0325.0	023.4	039.6	026.5000	0226.0	059.4	60.80*	19.89
181.0	000.2500	0325.0	023.4	039.3	026.5000	0226.4	059.1	60.91*	20.20
182.0	000.2500	0323.0	023.4	038.9	026.5000	0226.8	058.9	61.01*	20.44
183.0	000.2500	0326.7	023.5	038.7	026.5000	0227.3	058.6	61.16*	20.84
184.0	000.2500	0329.3	023.6	038.4	026.5000	0227.5	058.3	61.29*	21.17
185.0	000.2500	0328.8	023.6	038.0	026.5000	0227.8	058.1	61.38*	21.43
186.0	000.2500	0328.3	023.6	037.7	026.5000	0228.7	057.9	61.50*	21.73
187.0	000.2500	0327.6	023.5	037.3	026.5000	0228.2	057.7	61.56*	21.87
188.0	000.2500	0324.7	023.4	036.9	026.5000	0225.9	057.5	61.51*	21.73
189.0	000.2500	0324.1	023.4	036.6	026.5000	0225.2	057.4	61.55*	21.84
190.0	000.2500	0325.0	023.4	036.2	026.5000	0225.1	057.2	61.63*	22.03
191.0	000.2500	0324.5	023.4	035.8	026.5000	0224.7	057.0	61.68*	22.16
192.0	000.2500	0322.8	023.4	035.4	026.5000	0224.5	056.9	61.71*	22.24
193.0	000.2500	0323.0	023.4	035.0	026.5000	0224.2	056.7	61.77*	22.38
194.0	000.2500	0322.1	023.3	034.7	026.5000	0223.3	056.6	61.78*	22.40
195.0	000.2500	0322.3	023.4	034.3	026.5000	0222.9	056.4	61.82*	22.50
196.0	000.2500	0322.9	023.4	033.9	026.5000	0222.5	056.3	61.87*	22.61
197.0	000.2500	0323.9	023.4	033.5	026.5000	0221.8	056.1	61.90*	22.68
198.0	000.2500	0322.0	023.3	033.1	026.5000	0221.6	056.1	61.91*	22.71
199.0	000.2500	0321.5	023.3	032.7	026.5000	0221.3	056.0	61.93*	22.76
200.0	000.2500	0323.1	023.4	032.3	026.5000	0220.5	055.9	61.95*	22.81
201.0	000.2500	0324.0	023.4	031.9	026.5000	0220.1	055.7	61.98*	22.88
202.0	000.2500	0321.6	023.3	031.4	026.5000	0219.7	055.7	61.96*	22.83

Figure 2-1

203.0	000.2500	0319.5	023.3	031.0	026.5000	0218.7	055.8	61.92*	22.70
204.0	000.2500	0318.6	023.2	030.6	026.5000	0217.3	055.7	61.87*	22.57
205.0	000.2500	0316.4	023.2	030.2	026.5000	0216.1	055.8	61.81*	22.39
206.0	000.2500	0317.2	023.2	029.8	026.5000	0215.6	055.7	61.81*	22.40
207.0	000.2500	0319.5	023.3	029.4	026.5000	0215.3	055.6	61.84*	22.46
208.0	000.2500	0317.9	023.2	028.9	026.5000	0215.5	055.6	61.83*	22.45
209.0	000.2500	0316.2	023.1	028.5	026.5000	0215.9	055.7	61.82*	22.43
210.0	000.2500	0320.0	023.3	028.1	026.5000	0215.3	055.6	61.85*	22.49
211.0	000.2500	0320.0	023.3	027.7	026.5000	0215.2	055.6	61.84*	22.46
212.0	000.2500	0322.3	023.4	027.3	026.5000	0216.8	055.5	61.93*	22.71
213.0	000.2500	0325.9	023.5	026.8	026.5000	0219.0	055.4	62.05*	23.04
214.0	000.2500	0325.6	023.5	026.4	026.5000	0220.4	055.5	62.09*	23.15
215.0	000.2500	0324.5	023.4	026.0	026.5000	0219.9	055.6	62.03*	22.99
216.0	000.2500	0325.1	023.5	025.6	026.5000	0217.4	055.6	61.90*	22.66
217.0	000.2500	0323.9	023.4	025.2	026.5000	0215.0	055.8	61.76*	22.26
218.0	000.2500	0320.9	023.3	024.8	026.5000	0212.2	056.0	61.57*	21.74
219.0	000.2500	0323.9	023.4	024.4	026.5000	0208.9	055.9	61.43*	21.36
220.0	000.2500	0322.6	023.4	024.0	026.5000	0207.0	056.1	61.29*	20.98
221.0	000.2500	0320.6	023.3	023.6	026.5000	0207.2	056.3	61.22*	20.82
222.0	000.2500	0318.8	023.2	023.2	026.5000	0208.5	056.5	61.21*	20.79
223.0	000.2500	0316.5	023.2	022.9	026.5000	0210.8	056.7	61.23*	20.86
224.0	000.2500	0318.0	023.2	022.5	026.5000	0214.0	056.8	61.33*	21.15
225.0	000.2500	0315.9	023.1	022.1	026.5000	0215.2	057.0	61.29*	21.07
226.0	000.2500	0316.4	023.2	021.7	026.5000	0215.1	057.1	61.23*	20.91
227.0	000.2500	0319.6	023.3	021.3	026.5000	0215.7	057.2	61.23*	20.92
228.0	000.2500	0319.0	023.2	021.0	026.5000	0217.7	057.4	61.23*	20.95
229.0	000.2500	0321.9	023.3	020.5	026.5000	0219.8	057.5	61.28*	21.09
230.0	000.2500	0322.7	023.4	020.2	026.5000	0220.7	057.7	61.25*	21.02
231.0	000.2500	0321.6	023.3	019.8	026.5000	0220.8	057.9	61.16*	20.80
232.0	000.2500	0319.5	023.3	019.5	026.5000	0221.4	058.2	61.08*	20.59
233.0	000.2500	0322.1	023.3	019.2	026.5000	0222.6	058.3	61.08*	20.59
234.0	000.2500	0323.5	023.4	018.8	026.5000	0224.3	058.5	61.07*	20.59
235.0	000.2500	0320.6	023.3	018.5	026.5000	0226.0	058.8	61.01*	20.46
236.0	000.2500	0317.5	023.2	018.3	026.5000	0227.1	059.2	60.93*	20.26
237.0	000.2500	0315.8	023.1	018.0	026.5000	0228.0	059.5	60.85*	20.05
238.0	000.2500	0316.6	023.2	017.7	026.5000	0228.5	059.7	60.78*	19.87
239.0	000.2500	0316.6	023.2	017.4	026.5000	0228.9	060.0	60.70*	19.66
240.0	000.2500	0316.8	023.2	017.1	026.5000	0230.0	060.2	60.64*	19.51
241.0	000.2500	0317.3	023.2	016.8	026.5000	0231.0	060.5	60.58*	19.36
242.0	000.2500	0316.4	023.1	016.6	026.5000	0231.9	060.8	60.50*	19.15
243.0	000.2500	0313.5	023.0	016.4	026.5000	0232.2	061.1	60.37*	18.82
244.0	000.2500	0310.6	022.9	016.2	026.5000	0232.3	061.5	60.24*	18.46
245.0	000.2500	0311.6	023.0	015.9	026.5000	0232.5	061.8	60.15*	18.21
246.0	000.2500	0313.3	023.0	015.6	026.5000	0232.6	062.1	60.05*	17.95
247.0	000.2500	0316.1	023.1	015.3	026.5000	0233.0	062.3	59.98*	17.75
248.0	000.2500	0318.6	023.2	015.0	026.5000	0233.9	062.6	59.91*	17.58
249.0	000.2500	0319.6	023.3	014.8	026.5000	0234.4	062.9	59.82*	17.33
250.0	000.2500	0321.4	023.3	014.5	026.5000	0234.5	063.2	59.72*	17.05
251.0	000.2500	0321.1	023.3	014.3	026.5000	0234.6	063.5	59.60*	16.71
252.0	000.2500	0323.1	023.4	014.1	026.5000	0234.6	063.8	59.50*	16.41
253.0	000.2500	0324.8	023.4	013.8	026.5000	0234.7	064.1	59.39*	16.10
254.0	000.2500	0324.8	023.4	013.6	026.5000	0234.7	064.5	59.27*	15.75
255.0	000.2500	0324.1	023.4	013.5	026.5000	0234.7	064.9	59.14*	15.38
256.0	000.2500	0323.7	023.4	013.3	026.5000	0234.7	065.2	59.01*	15.02
257.0	000.2500	0324.0	023.4	013.2	026.5000	0234.9	065.6	58.89*	14.68
258.0	000.2500	0323.8	023.4	013.0	026.5000	0235.1	065.9	58.78*	14.34
259.0	000.2500	0320.3	023.3	013.0	026.5000	0235.2	066.4	58.63*	13.92
260.0	000.2500	0315.5	023.1	013.0	026.5000	0235.2	066.8	58.48*	13.49
261.0	000.2500	0310.5	022.9	013.0	026.5000	0235.2	067.2	58.33*	13.05
262.0	000.2500	0306.0	022.8	013.0	026.5000	0235.2	067.7	58.19*	12.61
263.0	000.2500	0305.2	022.7	012.9	026.5000	0235.4	068.1	58.06*	12.26
264.0	000.2500	0306.0	022.8	012.7	026.5000	0235.6	068.4	57.95*	11.91
265.0	000.2500	0305.0	022.7	012.7	026.5000	0235.7	068.8	57.82*	11.53
266.0	000.2500	0309.1	022.9	012.4	026.5000	0235.8	069.1	57.71*	11.21
267.0	000.2500	0309.3	022.9	012.3	026.5000	0236.0	069.5	57.59*	10.85
268.0	000.2500	0309.9	022.9	012.2	026.5000	0236.2	069.9	57.46*	10.49

Figure 2-1

KHZR BLH20061106ABW

Channel = 249C2
Max ERP = 26.5 kW
RCAMSL = 483 m
N. Lat. 37 57 31.0
W. Lng. 90 45 47.0
Protected
60 dBu

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
329.0	026.5000	0215.3	052.9	250.1	000.2028	0321.7	069.2	39.41	
330.0	026.5000	0216.2	053.0	250.3	000.2037	0322.0	068.3	39.76	
331.0	026.5000	0215.6	052.9	250.4	000.2041	0321.9	067.4	40.10	
332.0	026.5000	0215.7	052.9	250.5	000.2047	0321.8	066.5	40.44	
333.0	026.5000	0217.0	053.0	250.7	000.2056	0321.5	065.6	40.77	
334.0	026.5000	0213.1	052.7	250.5	000.2048	0321.8	064.6	41.11	
335.0	026.5000	0213.3	052.7	250.6	000.2052	0321.7	063.7	41.44	
336.0	026.5000	0214.0	052.8	250.7	000.2058	0321.5	062.8	41.78	
337.0	026.5000	0212.9	052.7	250.7	000.2057	0321.5	061.9	42.12	
338.0	026.5000	0210.6	052.5	250.6	000.2051	0321.7	061.0	42.46	
339.0	026.5000	0209.3	052.4	250.5	000.2047	0321.8	060.0	42.80	
340.0	026.5000	0211.1	052.5	250.6	000.2054	0321.6	059.1	43.15	
341.0	026.5000	0217.0	053.0	251.1	000.2076	0321.0	058.2	43.52	
342.0	026.5000	0220.7	053.3	251.4	000.2089	0321.1	057.3	43.91	
343.0	026.5000	0226.0	053.8	251.8	000.2108	0321.7	056.3	44.33	
344.0	026.5000	0228.0	053.9	251.9	000.2114	0322.8	055.4	44.75	
345.0	026.5000	0222.3	053.5	251.4	000.2090	0321.1	054.5	44.99	
346.0	026.5000	0221.8	053.4	251.3	000.2084	0321.1	053.5	45.34	
347.0	026.5000	0223.3	053.5	251.3	000.2086	0321.1	052.6	45.71	
348.0	026.5000	0219.3	053.2	250.9	000.2065	0321.2	051.7	46.02	
349.0	026.5000	0218.4	053.1	250.6	000.2054	0321.6	050.8	46.36	
350.0	026.5000	0217.5	053.1	250.4	000.2043	0321.9	049.9	46.70	
351.0	026.5000	0216.8	053.0	250.1	000.2031	0321.9	049.0	47.02	
352.0	026.5000	0221.6	053.4	250.4	000.2041	0321.9	048.0	47.43	
353.0	026.5000	0226.1	053.8	250.5	000.2050	0321.7	047.0	47.84	
354.0	026.5000	0227.5	053.9	250.4	000.2044	0321.9	046.1	48.21	
355.0	026.5000	0227.0	053.8	250.1	000.2028	0321.7	045.2	48.54	
356.0	026.5000	0227.3	053.9	249.8	000.2007	0320.9	044.3	48.85	
357.0	026.5000	0228.3	053.9	249.5	000.1986	0320.3	043.4	49.17	
358.0	026.5000	0231.6	054.2	249.4	000.1980	0320.1	042.4	49.57	
359.0	026.5000	0233.0	054.3	249.2	000.1957	0319.8	041.5	49.91	
000.0	026.5000	0236.3	054.6	249.0	000.1946	0319.6	040.5	50.32	
001.0	026.5000	0242.5	055.0	249.1	000.1955	0319.8	039.4	50.81	
002.0	026.5000	0248.0	055.4	249.1	000.1955	0319.8	038.4	51.29	
003.0	026.5000	0243.1	055.1	248.0	000.1869	0318.7	037.6	51.40	
004.0	026.5000	0244.1	055.1	247.5	000.1827	0317.4	036.7	51.68	
005.0	026.5000	0244.3	055.2	246.8	000.1775	0315.3	035.9	51.90	
006.0	026.5000	0242.3	055.0	245.8	000.1702	0313.0	035.1	52.01	
007.0	026.5000	0243.9	055.1	245.2	000.1653	0312.1	034.2	52.29	
008.0	026.5000	0243.5	055.1	244.2	000.1586	0309.9	033.4	52.43	
009.0	026.5000	0241.2	054.9	243.1	000.1501	0313.3	032.8	52.63	
010.0	026.5000	0239.1	054.8	241.8	000.1416	0316.7	032.1	52.80	
011.0	026.5000	0238.7	054.7	240.7	000.1339	0317.5	031.4	52.95	
012.0	026.5000	0237.2	054.6	239.3	000.1256	0316.6	030.7	52.98	
013.0	026.5000	0235.2	054.5	237.9	000.1169	0316.7	030.2	52.99	
014.0	026.5000	0234.6	054.4	236.5	000.1091	0316.9	029.5	53.06	
015.0	026.5000	0233.9	054.4	235.0	000.1009	0320.5	029.0	53.17	
016.0	026.5000	0232.5	054.3	233.4	000.0924	0323.4	028.5	53.17	
017.0	026.5000	0230.4	054.1	231.7	000.0836	0320.0	028.0	52.90	
018.0	026.5000	0228.0	053.9	229.8	000.0749	0322.9	027.7	52.73	
019.0	026.5000	0223.3	053.5	227.7	000.0672	0319.3	027.5	52.25	
020.0	026.5000	0220.7	053.3	225.8	000.0603	0315.9	027.3	51.84	
021.0	026.5000	0217.4	053.1	223.8	000.0536	0318.1	027.2	51.48	
022.0	026.5000	0215.2	052.9	221.8	000.0474	0319.3	027.0	51.09	
023.0	026.5000	0209.7	052.4	219.7	000.0413	0323.4	027.1	50.50	
024.0	026.5000	0207.1	052.2	217.7	000.0366	0322.1	027.1	49.95	

Figure 2-1

025.0	026.5000	0213.8	052.8	216.0	000.0328	0325.1	026.4	50.06
026.0	026.5000	0219.9	053.3	214.2	000.0290	0325.6	025.7	49.96
027.0	026.5000	0218.2	053.1	212.1	000.0249	0322.9	025.8	49.20
028.0	026.5000	0215.2	052.9	210.0	000.0211	0320.2	026.0	48.28
029.0	026.5000	0215.4	052.9	208.0	000.0193	0317.9	025.9	47.86
030.0	026.5000	0215.8	052.9	206.0	000.0177	0317.3	026.0	47.44
031.0	026.5000	0218.6	053.2	203.9	000.0160	0319.0	025.8	47.16
032.0	026.5000	0220.2	053.3	201.8	000.0145	0321.9	025.8	46.78
033.0	026.5000	0221.6	053.4	199.7	000.0131	0322.6	025.9	46.31
034.0	026.5000	0222.6	053.5	197.7	000.0122	0322.7	026.1	45.89
035.0	026.5000	0224.2	053.6	195.7	000.0113	0322.1	026.3	45.43
036.0	026.5000	0225.0	053.7	193.7	000.0105	0322.2	026.5	44.92
037.0	026.5000	0226.3	053.8	191.8	000.0097	0323.2	026.8	44.43
038.0	026.5000	0227.9	053.9	189.9	000.0090	0324.9	027.1	43.93
039.0	026.5000	0226.7	053.8	188.3	000.0085	0324.6	027.7	43.34
040.0	026.5000	0226.0	053.8	186.7	000.0081	0328.1	028.2	42.87
041.0	026.5000	0225.0	053.7	185.3	000.0077	0328.7	028.8	42.31
042.0	026.5000	0225.8	053.7	183.7	000.0073	0328.7	029.3	41.76
043.0	026.5000	0226.5	053.8	182.2	000.0070	0323.5	029.9	41.07
044.0	026.5000	0227.4	053.9	180.8	000.0066	0325.2	030.5	40.57
045.0	026.5000	0228.8	054.0	179.4	000.0064	0323.3	031.1	40.03
046.0	026.5000	0231.7	054.2	178.0	000.0062	0319.1	031.6	39.55
047.0	026.5000	0233.8	054.4	176.6	000.0061	0316.1	032.2	39.08
048.0	026.5000	0237.2	054.6	175.2	000.0060	0315.9	032.8	38.71
049.0	026.5000	0238.2	054.7	174.2	000.0059	0315.8	033.5	38.29
050.0	026.5000	0238.9	054.7	173.2	000.0059	0315.5	034.3	37.85
051.0	026.5000	0240.2	054.9	172.2	000.0058	0315.7	035.1	37.44
052.0	026.5000	0240.1	054.8	171.5	000.0057	0316.3	035.9	37.02
053.0	026.5000	0240.1	054.8	170.7	000.0057	0318.5	036.7	36.64
054.0	026.5000	0244.3	055.2	169.7	000.0056	0321.8	037.5	36.36
055.0	026.5000	0246.9	055.3	168.8	000.0056	0323.8	038.3	36.04
056.0	026.5000	0249.7	055.5	168.0	000.0055	0325.3	039.1	35.66
057.0	026.5000	0251.5	055.7	167.3	000.0055	0327.2	039.9	35.29
058.0	026.5000	0247.5	055.4	167.2	000.0055	0327.5	040.9	34.85
059.0	026.5000	0243.6	055.1	167.2	000.0055	0327.7	041.9	34.41
060.0	026.5000	0243.0	055.1	166.8	000.0055	0329.0	042.9	34.04
061.0	026.5000	0242.0	055.0	166.6	000.0055	0329.2	043.8	33.65
062.0	026.5000	0242.9	055.1	166.2	000.0055	0330.1	044.7	33.30
063.0	026.5000	0241.6	055.0	166.0	000.0055	0330.6	045.7	32.92
064.0	026.5000	0246.2	055.3	165.4	000.0055	0332.4	046.6	32.62
065.0	026.5000	0245.3	055.2	165.2	000.0055	0332.8	047.5	32.25
066.0	026.5000	0242.3	055.0	165.3	000.0055	0332.6	048.5	31.86
067.0	026.5000	0236.6	054.6	165.6	000.0055	0331.7	049.5	31.44
068.0	026.5000	0235.7	054.5	165.6	000.0055	0331.8	050.5	31.08
069.0	026.5000	0238.1	054.7	165.2	000.0055	0332.8	051.4	30.75
070.0	026.5000	0239.0	054.8	165.0	000.0055	0333.5	052.3	30.41
071.0	026.5000	0242.3	055.0	164.7	000.0055	0335.1	053.3	30.08
072.0	026.5000	0244.8	055.2	164.5	000.0054	0336.0	054.2	29.73
073.0	026.5000	0247.0	055.3	164.3	000.0054	0336.7	055.2	29.38
074.0	026.5000	0243.7	055.1	164.5	000.0054	0335.9	056.2	28.99
075.0	026.5000	0243.7	055.1	164.5	000.0054	0335.9	057.1	28.63
076.0	026.5000	0248.1	055.4	164.2	000.0054	0336.9	058.1	28.27
077.0	026.5000	0245.5	055.2	164.4	000.0054	0336.1	059.0	27.90
078.0	026.5000	0244.3	055.2	164.6	000.0054	0335.6	060.0	27.54
079.0	026.5000	0246.3	055.3	164.5	000.0054	0335.9	061.0	27.18
080.0	026.5000	0244.3	055.2	164.7	000.0055	0335.0	061.9	26.81
081.0	026.5000	0243.0	055.1	164.9	000.0055	0334.2	062.9	26.45
082.0	026.5000	0239.8	054.8	165.2	000.0055	0332.8	063.8	26.07
083.0	026.5000	0238.4	054.7	165.4	000.0055	0332.2	064.7	25.71
084.0	026.5000	0239.0	054.8	165.5	000.0055	0332.0	065.7	25.36
085.0	026.5000	0238.0	054.7	165.7	000.0055	0331.5	066.6	25.01
086.0	026.5000	0238.1	054.7	165.8	000.0055	0331.3	067.5	24.66
087.0	026.5000	0236.8	054.6	166.1	000.0055	0330.5	068.5	24.30
088.0	026.5000	0237.5	054.6	166.2	000.0055	0330.1	069.4	23.95

Figure 2-2
Minor Modification to W248CH

FMCommander Single Allocation Study - 02-15-2016 - NED 03 SEC
W248CH.A's Overlaps (In= -1.68 km, Out= 1.59 km)

W248CH.A CH 248 D DA
Lat= 38 34 49.8, Lng= 90 19 44.6
0.25 kW 324.3 m HAAT, 481.5 m COR
Prot.= 60 dBu, Intef.= 37 dBu

WBBA-FM CH 248 B1 BLH19890821KE
Lat= 39 34 53.0, Lng= 90 47 52.0
10.0 kW 93 m HAAT, 297 m COR
Prot.= 57 dBu, Intef.= 40 dBu

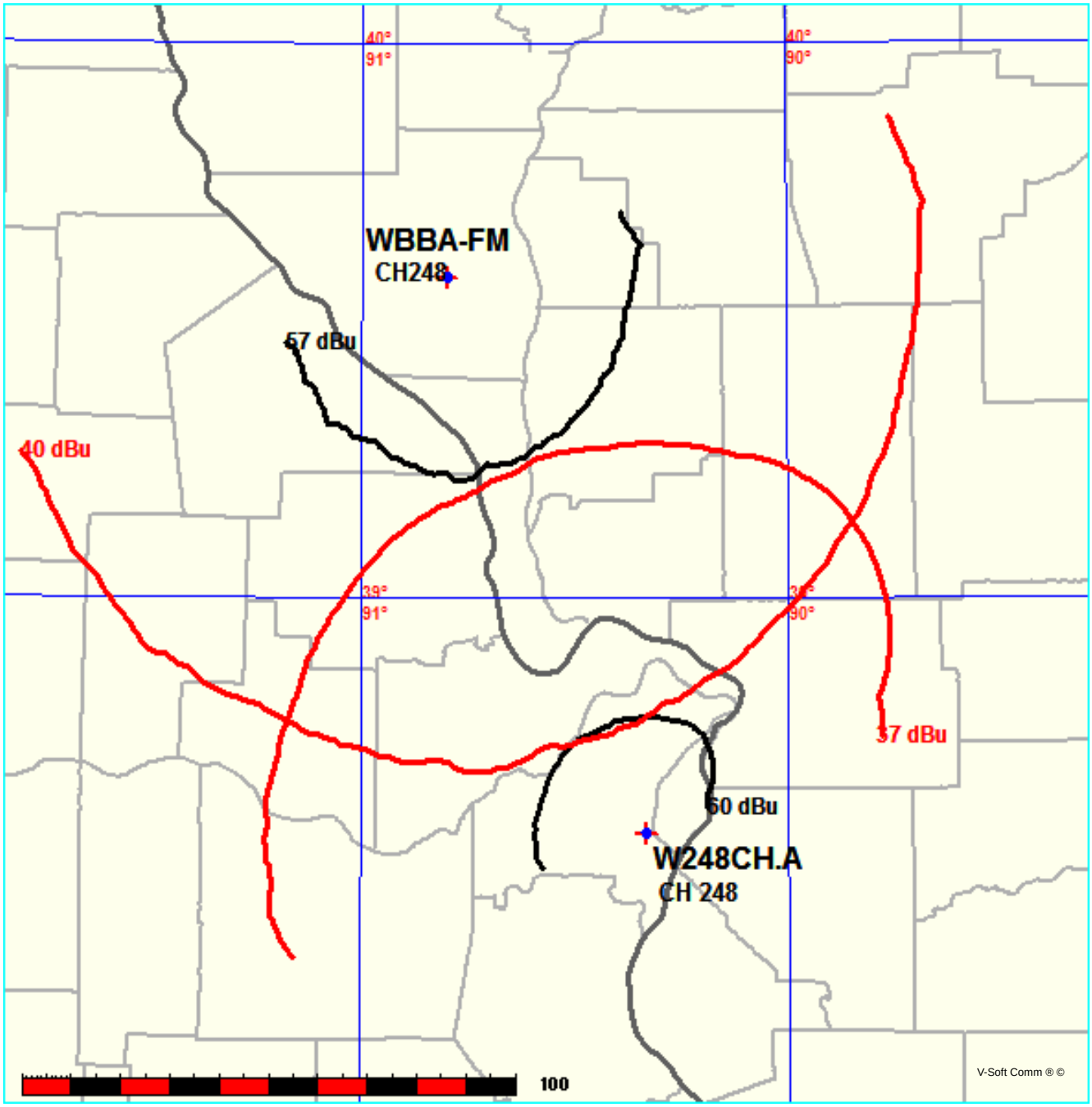


Figure 2-3

02-15-2016 Terrain Data: NED 03 SEC FMOver Analysis

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Protected
60 dBu

WBBA-FM BLH19890821KE

Channel = 248B1
Max ERP = 10 kW
RCAMSL = 297 m
N. Lat. 39 34 53.0
W. Lng. 90 47 52.0
Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
280.0	000.2500	0301.3	022.6	170.2	010.0000	0116.1	108.9	37.44	
281.0	000.2500	0301.5	022.6	170.2	010.0000	0115.9	108.6	37.51	
282.0	000.2500	0299.7	022.5	170.1	010.0000	0115.7	108.2	37.57	
283.0	000.2500	0300.1	022.6	170.0	010.0000	0115.5	107.9	37.64	
284.0	000.2500	0300.3	022.6	169.9	010.0000	0115.5	107.5	37.71	
285.0	000.2500	0299.4	022.5	169.8	010.0000	0115.4	107.1	37.78	
286.0	000.2500	0299.3	022.5	169.7	010.0000	0115.2	106.8	37.85	
287.0	000.2500	0297.9	022.5	169.6	010.0000	0114.6	106.5	37.90	
288.0	000.2500	0296.5	022.4	169.5	010.0000	0113.9	106.1	37.94	
289.0	000.2500	0296.1	022.4	169.4	010.0000	0113.2	105.8	37.99	
290.0	000.2500	0296.2	022.4	169.3	010.0000	0112.5	105.5	38.04	
291.0	000.2500	0295.3	022.4	169.1	010.0000	0111.8	105.1	38.08	
292.0	000.2500	0295.5	022.4	169.0	010.0000	0111.2	104.8	38.13	
293.0	000.2500	0297.6	022.5	169.0	010.0000	0110.7	104.4	38.20	
294.0	000.2500	0299.5	022.5	168.9	010.0000	0110.3	104.1	38.26	
295.0	000.2500	0300.5	022.6	168.8	010.0000	0109.8	103.7	38.32	
296.0	000.2500	0301.9	022.6	168.6	010.0000	0109.5	103.4	38.39	
297.0	000.2500	0304.8	022.7	168.6	010.0000	0109.1	103.0	38.46	
298.0	000.2500	0304.5	022.7	168.4	010.0000	0108.3	102.7	38.50	
299.0	000.2500	0305.1	022.7	168.3	010.0000	0107.7	102.4	38.55	
300.0	000.2500	0305.2	022.7	168.1	010.0000	0107.2	102.1	38.60	
301.0	000.2500	0306.3	022.8	168.0	010.0000	0106.9	101.8	38.66	
302.0	000.2500	0305.1	022.7	167.8	010.0000	0106.9	101.5	38.72	
303.0	000.2500	0305.8	022.8	167.7	010.0000	0107.1	101.2	38.79	
304.0	000.2500	0307.8	022.8	167.6	010.0000	0107.4	100.9	38.88	
305.0	000.2500	0307.4	022.8	167.4	010.0000	0108.2	100.6	38.97	
306.0	000.2500	0306.2	022.8	167.2	010.0000	0108.7	100.4	39.05	
307.0	000.2500	0306.6	022.8	167.0	010.0000	0109.0	100.1	39.12	
308.0	000.2500	0308.1	022.9	166.9	010.0000	0109.5	099.8	39.21	
309.0	000.2500	0310.0	022.9	166.7	010.0000	0110.0	099.5	39.30	
310.0	000.2500	0311.6	023.0	166.6	010.0000	0110.4	099.2	39.39	
311.0	000.2500	0310.8	022.9	166.4	010.0000	0110.8	099.0	39.45	
312.0	000.2500	0311.5	023.0	166.2	010.0000	0111.5	098.7	39.54	
313.0	000.2500	0311.9	023.0	166.0	010.0000	0112.2	098.5	39.62	
314.0	000.2500	0311.5	023.0	165.8	010.0000	0112.7	098.3	39.70	
315.0	000.2500	0312.4	023.0	165.6	010.0000	0112.9	098.1	39.76	
316.0	000.2500	0315.3	023.1	165.4	010.0000	0112.7	097.8	39.82	
317.0	000.2500	0315.4	023.1	165.2	010.0000	0112.3	097.6	39.86	
318.0	000.2500	0315.3	023.1	165.0	010.0000	0112.1	097.4	39.90	
319.0	000.2500	0315.4	023.1	164.8	010.0000	0111.8	097.2	39.93	
320.0	000.2500	0314.5	023.1	164.6	010.0000	0111.2	097.1	39.94	
321.0	000.2500	0314.4	023.1	164.4	010.0000	0111.0	096.9	39.98	
322.0	000.2500	0315.0	023.1	164.1	010.0000	0110.9	096.7	40.02*	0.07
323.0	000.2500	0313.1	023.0	163.9	010.0000	0111.6	096.6	40.07*	0.27
324.0	000.2500	0313.1	023.0	163.7	010.0000	0112.1	096.5	40.12*	0.49
325.0	000.2500	0312.6	023.0	163.5	010.0000	0112.5	096.4	40.17*	0.66
326.0	000.2500	0310.1	022.9	163.2	010.0000	0112.6	096.3	40.18*	0.72
327.0	000.2500	0309.4	022.9	163.0	010.0000	0112.9	096.2	40.22*	0.86
328.0	000.2500	0306.7	022.8	162.7	010.0000	0114.0	096.2	40.27*	1.05
329.0	000.2500	0303.4	022.7	162.5	010.0000	0114.6	096.3	40.29*	1.13
330.0	000.2500	0303.0	022.7	162.3	010.0000	0114.3	096.2	40.29*	1.15
331.0	000.2500	0300.5	022.6	162.0	010.0000	0113.7	096.2	40.27*	1.06
332.0	000.2500	0299.0	022.5	161.8	010.0000	0113.5	096.2	40.26*	1.04
333.0	000.2500	0300.5	022.6	161.6	010.0000	0113.7	096.0	40.30*	1.19

Figure 2-3

334.0	000.2500	0301.1	022.6	161.3	010.0000	0114.1	096.0	40.34*	1.33
335.0	000.2500	0301.8	022.6	161.1	010.0000	0114.5	095.9	40.37*	1.47
336.0	000.2500	0302.6	022.7	160.9	010.0000	0114.6	095.8	40.40*	1.55
337.0	000.2500	0302.5	022.6	160.6	010.0000	0115.0	095.8	40.42*	1.64
338.0	000.2500	0303.1	022.7	160.4	010.0000	0114.9	095.8	40.43*	1.67
339.0	000.2500	0301.3	022.6	160.2	010.0000	0114.3	095.8	40.39*	1.52
340.0	000.2500	0303.0	022.7	159.9	010.0000	0113.8	095.7	40.39*	1.52
341.0	000.2500	0305.8	022.8	159.7	010.0000	0113.8	095.6	40.41*	1.61
342.0	000.2500	0309.0	022.9	159.4	010.0000	0113.4	095.5	40.42*	1.66
343.0	000.2500	0312.6	023.0	159.2	010.0000	0112.9	095.4	40.43*	1.68
344.0	000.2500	0314.5	023.1	158.9	010.0000	0112.3	095.4	40.41*	1.62
345.0	000.2500	0312.3	023.0	158.7	010.0000	0112.1	095.5	40.38*	1.47
346.0	000.2500	0313.6	023.1	158.5	010.0000	0111.6	095.5	40.36*	1.40
347.0	000.2500	0313.6	023.0	158.2	010.0000	0111.6	095.6	40.34*	1.34
348.0	000.2500	0312.8	023.0	158.0	010.0000	0112.4	095.6	40.35*	1.38
349.0	000.2500	0312.2	023.0	157.8	010.0000	0113.2	095.7	40.36*	1.41
350.0	000.2500	0310.5	022.9	157.5	010.0000	0113.9	095.9	40.35*	1.38
351.0	000.2500	0310.0	022.9	157.3	010.0000	0114.3	096.0	40.34*	1.35
352.0	000.2500	0307.8	022.8	157.1	010.0000	0114.7	096.2	40.31*	1.23
353.0	000.2500	0307.4	022.8	156.9	010.0000	0115.1	096.3	40.30*	1.18
354.0	000.2500	0307.3	022.8	156.6	010.0000	0115.2	096.4	40.27*	1.07
355.0	000.2500	0308.1	022.9	156.4	010.0000	0114.6	096.5	40.23*	0.89
356.0	000.2500	0309.7	022.9	156.2	010.0000	0113.7	096.6	40.17*	0.66
357.0	000.2500	0310.2	022.9	155.9	010.0000	0112.6	096.7	40.10*	0.38
358.0	000.2500	0310.8	022.9	155.7	010.0000	0112.0	096.8	40.04*	0.16
359.0	000.2500	0313.3	023.0	155.5	010.0000	0111.8	096.9	40.01*	0.05
000.0	000.2500	0312.4	023.0	155.3	010.0000	0111.6	097.1	39.96	
001.0	000.2500	0312.3	023.0	155.0	010.0000	0111.6	097.2	39.91	
002.0	000.2500	0312.3	023.0	154.8	010.0000	0111.3	097.4	39.86	
003.0	000.2500	0311.4	023.0	154.6	010.0000	0110.9	097.6	39.79	
004.0	000.2500	0311.0	023.0	154.4	010.0000	0110.8	097.8	39.73	
005.0	000.2500	0311.2	023.0	154.2	010.0000	0110.8	098.0	39.68	
006.0	000.2500	0311.6	023.0	154.0	010.0000	0110.3	098.2	39.62	
007.0	000.2500	0312.6	023.0	153.8	010.0000	0109.8	098.4	39.55	
008.0	000.2500	0311.7	023.0	153.6	010.0000	0109.2	098.7	39.47	
009.0	000.2500	0311.3	023.0	153.4	010.0000	0108.5	098.9	39.39	
010.0	000.2500	0310.5	022.9	153.3	010.0000	0107.6	099.2	39.29	
011.0	000.2500	0311.5	023.0	153.1	010.0000	0106.4	099.4	39.19	
012.0	000.2500	0310.3	022.9	152.9	010.0000	0106.0	099.7	39.11	
013.0	000.2500	0309.9	022.9	152.7	010.0000	0106.0	099.9	39.05	
014.0	000.2500	0310.5	022.9	152.5	010.0000	0106.3	100.2	39.00	
015.0	000.2500	0312.8	023.0	152.3	010.0000	0106.9	100.4	38.98	
016.0	000.2500	0314.6	023.1	152.2	010.0000	0107.6	100.6	38.95	
017.0	000.2500	0314.7	023.1	152.0	010.0000	0108.3	100.9	38.91	
018.0	000.2500	0316.8	023.2	151.8	010.0000	0109.0	101.1	38.88	
019.0	000.2500	0318.0	023.2	151.6	010.0000	0109.6	101.4	38.85	
020.0	000.2500	0319.0	023.2	151.5	010.0000	0110.3	101.7	38.81	
021.0	000.2450	0319.6	023.2	151.3	010.0000	0110.5	102.0	38.73	
022.0	000.2401	0321.6	023.1	151.2	010.0000	0110.8	102.4	38.67	
023.0	000.2352	0322.2	023.0	151.1	010.0000	0110.9	102.7	38.59	
024.0	000.2304	0324.0	023.0	151.0	010.0000	0111.1	103.1	38.51	
025.0	000.2261	0325.2	022.9	150.9	010.0000	0111.3	103.4	38.44	
026.0	000.2214	0326.7	022.8	150.8	010.0000	0111.5	103.8	38.37	
027.0	000.2167	0327.5	022.7	150.7	010.0000	0111.4	104.2	38.28	
028.0	000.2121	0328.6	022.7	150.6	010.0000	0111.3	104.5	38.20	
029.0	000.2075	0329.9	022.6	150.5	010.0000	0111.0	104.9	38.10	
030.0	000.2030	0330.4	022.5	150.5	010.0000	0110.7	105.3	38.01	
031.0	000.1949	0330.0	022.3	150.5	010.0000	0110.7	105.8	37.91	
032.0	000.1866	0330.0	022.0	150.5	010.0000	0110.8	106.2	37.82	
033.0	000.1785	0330.0	021.8	150.5	010.0000	0110.8	106.7	37.73	
034.0	000.1710	0330.6	021.6	150.5	010.0000	0110.8	107.1	37.64	
035.0	000.1636	0331.3	021.4	150.5	010.0000	0110.9	107.5	37.55	
036.0	000.1560	0332.4	021.2	150.5	010.0000	0111.0	107.9	37.47	
037.0	000.1486	0332.6	020.9	150.6	010.0000	0111.1	108.4	37.38	
038.0	000.1418	0331.5	020.6	150.6	010.0000	0111.3	108.8	37.30	
039.0	000.1351	0330.8	020.4	150.7	010.0000	0111.4	109.3	37.22	

Figure 2-3

WBBA-FM BLH19890821KE

Channel = 248B1
Max ERP = 10 kW
RCAMSL = 297 m
N. Lat. 39 34 53.0
W. Lng. 90 47 52.0
Protected
57 dBu

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Interfering
37 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
100.0	010.0000	0096.7	036.7	357.8	000.2500	0310.5	104.9	28.35	
101.0	010.0000	0095.8	036.6	357.6	000.2500	0310.4	104.3	28.53	
102.0	010.0000	0095.5	036.5	357.5	000.2500	0310.3	103.7	28.71	
103.0	010.0000	0095.8	036.6	357.5	000.2500	0310.2	103.1	28.91	
104.0	010.0000	0096.5	036.7	357.4	000.2500	0310.2	102.4	29.11	
105.0	010.0000	0095.9	036.6	357.3	000.2500	0310.1	101.8	29.29	
106.0	010.0000	0097.5	036.9	357.3	000.2500	0310.1	101.1	29.51	
107.0	010.0000	0097.3	036.8	357.2	000.2500	0310.2	100.6	29.70	
108.0	010.0000	0098.4	037.0	357.1	000.2500	0310.2	099.9	29.91	
109.0	010.0000	0099.7	037.2	357.1	000.2500	0310.2	099.2	30.12	
110.0	010.0000	0099.3	037.2	356.9	000.2500	0310.2	098.6	30.30	
111.0	010.0000	0100.0	037.3	356.8	000.2500	0310.1	098.0	30.50	
112.0	010.0000	0100.5	037.4	356.7	000.2500	0310.1	097.4	30.70	
113.0	010.0000	0098.9	037.1	356.4	000.2500	0309.8	096.9	30.83	
114.0	010.0000	0098.4	037.0	356.2	000.2500	0309.8	096.4	31.00	
115.0	010.0000	0098.5	037.0	356.0	000.2500	0309.7	095.8	31.17	
116.0	010.0000	0099.5	037.2	355.9	000.2500	0309.6	095.1	31.37	
117.0	010.0000	0102.4	037.7	355.9	000.2500	0309.6	094.3	31.62	
118.0	010.0000	0102.5	037.7	355.7	000.2500	0309.4	093.8	31.79	
119.0	010.0000	0103.2	037.8	355.6	000.2500	0309.2	093.2	31.98	
120.0	010.0000	0103.4	037.8	355.4	000.2500	0309.0	092.6	32.15	
121.0	010.0000	0101.5	037.5	355.0	000.2500	0308.0	092.2	32.23	
122.0	010.0000	0100.7	037.4	354.7	000.2500	0307.8	091.8	32.36	
123.0	010.0000	0101.2	037.5	354.4	000.2500	0307.8	091.2	32.54	
124.0	010.0000	0100.9	037.4	354.2	000.2500	0307.5	090.8	32.68	
125.0	010.0000	0102.2	037.6	354.0	000.2500	0307.3	090.1	32.87	
126.0	010.0000	0102.7	037.7	353.7	000.2500	0306.9	089.6	33.03	
127.0	010.0000	0104.3	038.0	353.6	000.2500	0306.8	088.9	33.23	
128.0	010.0000	0104.3	038.0	353.3	000.2500	0307.0	088.5	33.39	
129.0	010.0000	0102.4	037.7	352.8	000.2500	0307.5	088.2	33.48	
130.0	010.0000	0103.0	037.8	352.6	000.2500	0307.5	087.7	33.64	
131.0	010.0000	0104.1	037.9	352.3	000.2500	0307.5	087.1	33.82	
132.0	010.0000	0104.6	038.0	352.0	000.2500	0307.7	086.6	33.99	
133.0	010.0000	0106.1	038.3	351.8	000.2500	0308.3	086.0	34.20	
134.0	010.0000	0105.3	038.1	351.4	000.2500	0309.3	085.7	34.33	
135.0	010.0000	0104.3	038.0	350.9	000.2500	0310.1	085.5	34.44	
136.0	010.0000	0104.5	038.0	350.6	000.2500	0310.3	085.1	34.57	
137.0	010.0000	0105.0	038.1	350.2	000.2500	0310.2	084.6	34.71	
138.0	010.0000	0104.6	038.0	349.8	000.2500	0310.6	084.3	34.82	
139.0	010.0000	0106.0	038.2	349.5	000.2500	0310.9	083.8	35.00	
140.0	010.0000	0107.1	038.4	349.2	000.2500	0311.7	083.3	35.18	
141.0	010.0000	0107.7	038.5	348.8	000.2500	0312.4	082.9	35.33	
142.0	010.0000	0110.4	038.9	348.5	000.2500	0312.6	082.3	35.55	
143.0	010.0000	0110.2	038.9	348.1	000.2500	0312.8	082.0	35.64	
144.0	010.0000	0109.4	038.7	347.6	000.2500	0313.0	081.8	35.70	
145.0	010.0000	0109.9	038.8	347.2	000.2500	0313.4	081.5	35.82	
146.0	010.0000	0108.1	038.6	346.7	000.2500	0313.8	081.5	35.83	
147.0	010.0000	0107.1	038.4	346.2	000.2500	0313.9	081.4	35.87	
148.0	010.0000	0107.0	038.4	345.8	000.2500	0313.2	081.2	35.91	
149.0	010.0000	0108.6	038.6	345.3	000.2500	0312.6	080.8	36.02	
150.0	010.0000	0109.0	038.7	344.9	000.2500	0312.3	080.6	36.09	
151.0	010.0000	0111.1	039.0	344.5	000.2500	0313.1	080.1	36.27	
152.0	010.0000	0108.3	038.6	343.9	000.2500	0314.6	080.4	36.23	
153.0	010.0000	0106.2	038.3	343.4	000.2500	0314.0	080.5	36.15	
154.0	010.0000	0110.2	038.9	343.0	000.2500	0312.7	079.8	36.34	
155.0	010.0000	0111.5	039.1	342.6	000.2500	0310.7	079.6	36.37	

Figure 2-3

156.0	010.0000	0112.9	039.2	342.1	000.2500	0309.1	079.3	36.41
157.0	010.0000	0114.8	039.5	341.6	000.2500	0307.6	079.0	36.47
158.0	010.0000	0112.4	039.2	341.1	000.2500	0306.2	079.3	36.32
159.0	010.0000	0112.4	039.2	340.6	000.2500	0304.5	079.2	36.28
160.0	010.0000	0113.9	039.4	340.1	000.2500	0303.2	079.0	36.31
161.0	010.0000	0114.6	039.5	339.6	000.2500	0302.0	078.9	36.29
162.0	010.0000	0113.7	039.4	339.1	000.2500	0301.2	079.1	36.22
163.0	010.0000	0112.8	039.2	338.6	000.2500	0301.8	079.2	36.18
164.0	010.0000	0111.3	039.0	338.1	000.2500	0302.7	079.5	36.12
165.0	010.0000	0112.1	039.1	337.6	000.2500	0303.4	079.5	36.15
166.0	010.0000	0112.2	039.1	337.2	000.2500	0302.6	079.6	36.10
167.0	010.0000	0109.1	038.7	336.7	000.2500	0302.4	080.1	35.91
168.0	010.0000	0106.9	038.4	336.3	000.2500	0302.6	080.6	35.76
169.0	010.0000	0111.0	039.0	335.7	000.2500	0302.5	080.2	35.91
170.0	010.0000	0115.5	039.6	335.2	000.2500	0302.2	079.7	36.04
171.0	010.0000	0118.8	040.0	334.6	000.2500	0301.0	079.5	36.08
172.0	010.0000	0122.2	040.5	334.0	000.2500	0301.1	079.3	36.15
173.0	010.0000	0125.8	040.9	333.4	000.2500	0301.0	079.1	36.21
174.0	010.0000	0125.8	040.9	332.9	000.2500	0300.3	079.4	36.10
175.0	010.0000	0127.6	041.1	332.4	000.2500	0299.3	079.4	36.05
176.0	010.0000	0127.1	041.1	331.9	000.2500	0299.0	079.8	35.93
177.0	010.0000	0127.3	041.1	331.5	000.2500	0299.7	080.0	35.86
178.0	010.0000	0126.0	040.9	331.1	000.2500	0300.3	080.5	35.72
179.0	010.0000	0121.3	040.4	330.8	000.2500	0301.0	081.4	35.47
180.0	010.0000	0115.2	039.6	330.7	000.2500	0301.5	082.4	35.15
181.0	010.0000	0113.1	039.3	330.3	000.2500	0302.5	083.0	34.99
182.0	010.0000	0113.2	039.3	329.9	000.2500	0303.0	083.3	34.89
183.0	010.0000	0114.5	039.5	329.5	000.2500	0303.3	083.6	34.83
184.0	010.0000	0116.8	039.8	329.0	000.2500	0303.5	083.7	34.79
185.0	010.0000	0115.9	039.7	328.6	000.2500	0304.3	084.2	34.65
186.0	010.0000	0115.8	039.6	328.3	000.2500	0305.5	084.6	34.56
187.0	010.0000	0112.7	039.2	328.1	000.2500	0306.3	085.4	34.34
188.0	010.0000	0112.7	039.2	327.7	000.2500	0307.4	085.8	34.23
189.0	010.0000	0110.4	038.9	327.5	000.2500	0308.1	086.5	34.03
190.0	010.0000	0106.8	038.4	327.4	000.2500	0308.4	087.4	33.77
191.0	010.0000	0107.6	038.5	327.1	000.2500	0309.3	087.7	33.69
192.0	010.0000	0106.7	038.3	326.8	000.2500	0309.6	088.3	33.51
193.0	010.0000	0107.7	038.5	326.4	000.2500	0309.3	088.7	33.38
194.0	010.0000	0104.3	038.0	326.4	000.2500	0309.3	089.5	33.12
195.0	010.0000	0104.3	038.0	326.1	000.2500	0309.7	090.0	32.97
196.0	010.0000	0103.5	037.8	325.9	000.2500	0310.4	090.6	32.81
197.0	010.0000	0104.7	038.0	325.6	000.2500	0311.6	091.0	32.72
198.0	010.0000	0102.6	037.7	325.5	000.2500	0311.8	091.7	32.50
199.0	010.0000	0100.4	037.4	325.4	000.2500	0312.0	092.5	32.28
200.0	010.0000	0099.0	037.1	325.3	000.2500	0312.2	093.1	32.08
201.0	010.0000	0097.6	036.9	325.2	000.2500	0312.4	093.8	31.87
202.0	010.0000	0096.7	036.7	325.0	000.2500	0312.5	094.4	31.69
203.0	010.0000	0095.6	036.5	324.9	000.2500	0312.6	095.1	31.49
204.0	010.0000	0093.9	036.2	324.9	000.2500	0312.6	095.8	31.27
205.0	010.0000	0094.7	036.4	324.6	000.2500	0312.7	096.2	31.13
206.0	010.0000	0096.6	036.7	324.3	000.2500	0313.4	096.7	31.02
207.0	010.0000	0097.4	036.8	324.0	000.2500	0313.2	097.2	30.86
208.0	010.0000	0098.4	037.0	323.8	000.2500	0312.7	097.7	30.69
209.0	010.0000	0098.7	037.1	323.6	000.2500	0312.5	098.2	30.50
210.0	010.0000	0099.7	037.2	323.3	000.2500	0312.6	098.8	30.34
211.0	010.0000	0101.0	037.5	323.1	000.2500	0313.0	099.3	30.19
212.0	010.0000	0099.5	037.2	323.1	000.2500	0313.0	100.0	29.97
213.0	010.0000	0097.7	036.9	323.1	000.2500	0312.9	100.7	29.74
214.0	010.0000	0096.7	036.7	323.1	000.2500	0313.0	101.3	29.54
215.0	010.0000	0099.1	037.1	322.8	000.2500	0313.6	101.8	29.40
216.0	010.0000	0098.6	037.1	322.7	000.2500	0313.8	102.5	29.21
217.0	010.0000	0098.5	037.0	322.6	000.2500	0314.1	103.1	29.02
218.0	010.0000	0103.5	037.9	322.1	000.2500	0315.0	103.5	28.92
219.0	010.0000	0106.5	038.3	321.7	000.2500	0314.7	104.1	28.74

Figure 2-4
Minor Modification to W248CH

FMCommander Single Allocation Study - 02-15-2016 - NED 03 SEC
W248CH.A's Overlaps (In= -0.71 km, Out= 1.88 km)

W248CH.A CH 248 D DA
Lat= 38 34 49.8, Lng= 90 19 44.6
0.25 kW 324.3 m HAAT, 481.5 m COR
Prot.= 60 dBu, Intef.= 100 dBu

KFTK-FM1 CH 246 D BLFTB19940930TD
Lat= 38 37 48.0, Lng= 90 11 26.0
0.07 kW 154 m HAAT, 293 m COR
Prot.= 60 dBu, Intef.= 100 dBu

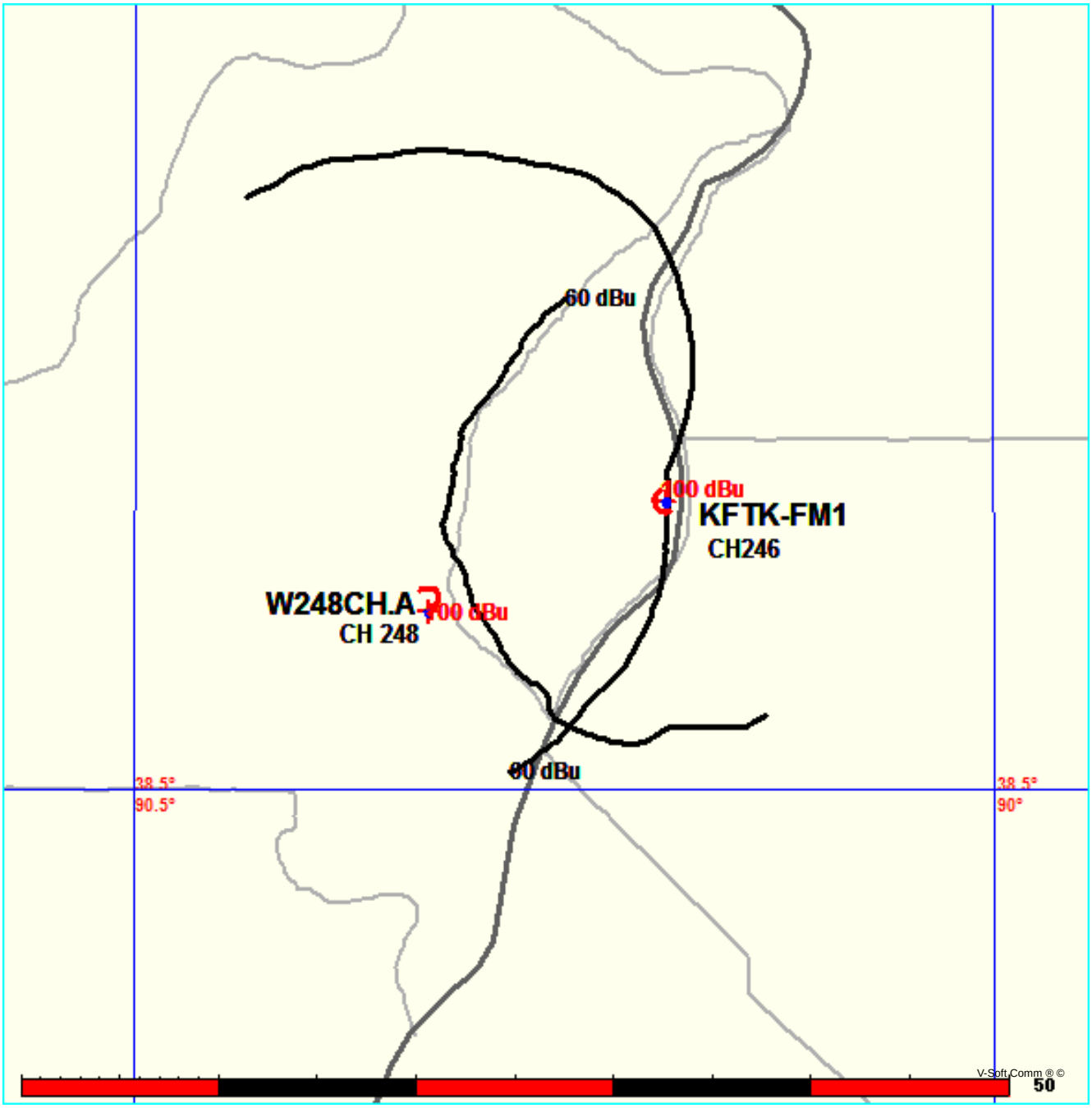


Figure 2-5

02-15-2016 Terrain Data: NED 03 SEC FMOver Analysis

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Protected
60 dBu

KFTK-FM1 BLFTB19940930TD

Channel = 246D
Max ERP = 0.07 kW
RCAMSL = 293 m
N. Lat. 38 37 48.0
W. Lng. 90 11 26.0
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
005.0	000.2500	0311.2	023.0	330.1	000.0700	0140.5	020.1	50.76	
006.0	000.2500	0311.6	023.0	331.0	000.0700	0141.7	019.8	51.02	
007.0	000.2500	0312.6	023.0	332.1	000.0700	0142.4	019.6	51.22	
008.0	000.2500	0311.7	023.0	333.0	000.0700	0142.9	019.4	51.46	
009.0	000.2500	0311.3	023.0	333.9	000.0700	0142.8	019.1	51.65	
010.0	000.2500	0310.5	022.9	334.9	000.0700	0143.4	018.9	51.89	
011.0	000.2500	0311.5	023.0	335.9	000.0700	0146.2	018.7	52.24	
012.0	000.2500	0310.3	022.9	336.9	000.0700	0148.7	018.4	52.62	
013.0	000.2500	0309.9	022.9	337.9	000.0700	0150.7	018.2	52.93	
014.0	000.2500	0310.5	022.9	338.9	000.0700	0151.1	018.0	53.14	
015.0	000.2500	0312.8	023.0	340.1	000.0700	0151.7	017.8	53.31	
016.0	000.2500	0314.6	023.1	341.3	000.0700	0152.6	017.6	53.51	
017.0	000.2500	0314.7	023.1	342.4	000.0700	0153.3	017.4	53.74	
018.0	000.2500	0316.8	023.2	343.7	000.0700	0154.8	017.2	53.97	
019.0	000.2500	0318.0	023.2	344.9	000.0700	0156.2	017.0	54.22	
020.0	000.2500	0319.0	023.2	346.1	000.0700	0157.6	016.8	54.47	
021.0	000.2450	0319.6	023.2	347.0	000.0700	0157.1	016.5	54.69	
022.0	000.2401	0321.6	023.1	348.1	000.0700	0157.7	016.3	54.94	
023.0	000.2352	0322.2	023.0	349.1	000.0700	0159.0	016.0	55.28	
024.0	000.2304	0324.0	023.0	350.2	000.0700	0158.7	015.7	55.48	
025.0	000.2261	0325.2	022.9	351.3	000.0700	0157.5	015.4	55.64	
026.0	000.2214	0326.7	022.8	352.4	000.0700	0157.9	015.1	55.90	
027.0	000.2167	0327.5	022.7	353.5	000.0700	0159.9	014.9	56.16	
028.0	000.2121	0328.6	022.7	354.6	000.0700	0161.3	014.6	56.57	
029.0	000.2075	0329.9	022.6	355.8	000.0700	0162.9	014.3	57.00	
030.0	000.2030	0330.4	022.5	356.9	000.0700	0163.5	014.0	57.40	
031.0	000.1949	0330.0	022.3	357.7	000.0700	0163.8	013.6	57.94	
032.0	000.1866	0330.0	022.0	358.5	000.0700	0163.9	013.2	58.48	
033.0	000.1785	0330.0	021.8	359.4	000.0700	0164.1	012.8	59.05	
034.0	000.1710	0330.6	021.6	000.3	000.0700	0164.9	012.4	59.65	
035.0	000.1636	0331.3	021.4	001.2	000.0700	0165.6	012.0	60.25	
036.0	000.1560	0332.4	021.2	002.1	000.0700	0167.5	011.6	60.95	
037.0	000.1486	0332.6	020.9	003.0	000.0700	0169.8	011.2	61.72	
038.0	000.1418	0331.5	020.6	003.7	000.0700	0170.2	010.8	62.44	
039.0	000.1351	0330.8	020.4	004.5	000.0700	0169.9	010.4	63.13	
040.0	000.1282	0330.8	020.1	005.3	000.0700	0169.8	009.9	63.85	
041.0	000.1218	0330.9	019.9	006.2	000.0700	0169.4	009.5	64.55	
042.0	000.1156	0331.5	019.6	007.1	000.0700	0169.1	009.1	65.26	
043.0	000.1092	0331.8	019.4	007.9	000.0700	0169.1	008.7	66.04	
044.0	000.1034	0331.8	019.1	008.7	000.0700	0169.0	008.3	66.83	
045.0	000.0977	0331.7	018.8	009.5	000.0700	0168.6	007.9	67.63	
046.0	000.0921	0331.2	018.5	010.2	000.0700	0168.3	007.5	68.54	
047.0	000.0867	0331.3	018.3	010.9	000.0700	0167.6	007.1	69.48	
048.0	000.0812	0331.8	018.0	011.6	000.0700	0167.4	006.6	70.52	
049.0	000.0762	0332.2	017.7	012.3	000.0700	0167.5	006.2	71.62	
050.0	000.0713	0331.7	017.4	012.9	000.0700	0167.3	005.8	72.81	
051.0	000.0663	0330.6	017.0	013.1	000.0700	0167.3	005.3	74.15	
052.0	000.0615	0330.4	016.7	013.3	000.0700	0167.3	004.9	75.48	
053.0	000.0571	0330.3	016.4	013.5	000.0700	0167.5	004.5	76.85	
054.0	000.0527	0330.8	016.0	013.5	000.0700	0167.5	004.0	78.36	
055.0	000.0484	0331.2	015.7	013.3	000.0700	0167.3	003.6	79.97	
056.0	000.0443	0331.5	015.3	012.7	000.0700	0167.4	003.1	81.72	
057.0	000.0404	0332.0	015.0	011.6	000.0700	0167.4	002.7	83.69	
058.0	000.0369	0332.0	014.7	010.1	000.0700	0168.3	002.3	85.88	

Figure 2-5

059.0	000.0333	0331.8	014.3	006.9	000.0700	0169.1	001.9	88.32	
060.0	000.0299	0331.7	013.9	001.1	000.0700	0165.6	001.4	92.16	
061.0	000.0289	0332.4	013.8	002.8	000.0700	0169.6	001.2	93.87	
062.0	000.0281	0333.3	013.7	006.3	000.0700	0169.3	000.9	95.88	
063.0	000.0271	0333.5	013.6	009.2	000.0700	0168.6	000.7	98.71	
064.0	000.0262	0333.4	013.5	016.2	000.0700	0166.7	000.4	102.70*	0.16
065.0	000.0253	0333.4	013.4	037.0	000.0700	0166.5	000.2	109.93*	0.40
066.0	000.0243	0333.2	013.3	140.6	000.0700	0156.0	000.1	111.94*	0.44
067.0	000.0236	0332.8	013.2	167.2	000.0700	0152.5	000.4	103.78*	0.21
068.0	000.0227	0332.7	013.0	175.3	000.0700	0145.1	000.6	99.34	
069.0	000.0219	0332.7	012.9	177.6	000.0700	0144.2	000.9	96.47	
070.0	000.0210	0332.8	012.8	180.1	000.0700	0146.2	001.1	94.28	
071.0	000.0204	0333.3	012.7	179.9	000.0700	0146.0	001.4	92.64	
072.0	000.0200	0334.1	012.7	179.2	000.0700	0144.4	001.6	89.52	
073.0	000.0195	0334.7	012.6	179.5	000.0700	0144.7	001.8	88.03	
074.0	000.0189	0335.1	012.5	180.0	000.0700	0146.1	002.1	86.61	
075.0	000.0184	0335.4	012.4	180.5	000.0700	0147.5	002.3	85.28	
076.0	000.0180	0336.2	012.4	180.4	000.0700	0147.1	002.5	84.02	
077.0	000.0174	0336.6	012.3	181.0	000.0700	0149.3	002.7	82.89	
078.0	000.0169	0337.4	012.2	181.5	000.0700	0151.0	003.0	81.85	
079.0	000.0165	0338.6	012.2	181.5	000.0700	0151.0	003.2	80.88	
080.0	000.0160	0339.3	012.1	182.1	000.0700	0154.2	003.4	80.09	
081.0	000.0156	0339.9	012.0	182.4	000.0700	0155.1	003.6	79.26	
082.0	000.0151	0340.6	012.0	183.0	000.0700	0157.0	003.9	78.50	
083.0	000.0148	0341.1	011.9	183.3	000.0700	0158.6	004.1	77.78	
084.0	000.0143	0341.7	011.8	184.0	000.0700	0162.0	004.3	77.17	
085.0	000.0139	0342.6	011.7	184.3	000.0700	0162.9	004.5	76.50	
086.0	000.0136	0343.4	011.7	184.7	000.0700	0163.5	004.7	75.85	
087.0	000.0131	0344.4	011.6	185.3	000.0700	0164.8	004.9	75.26	
088.0	000.0128	0344.9	011.5	185.8	000.0700	0165.7	005.1	74.67	
089.0	000.0123	0345.6	011.4	186.5	000.0700	0166.7	005.3	74.10	
090.0	000.0120	0345.8	011.4	187.0	000.0700	0167.0	005.6	73.51	
091.0	000.0117	0346.2	011.3	187.5	000.0700	0167.4	005.8	72.94	
092.0	000.0113	0346.8	011.2	188.0	000.0700	0167.9	006.0	72.39	
093.0	000.0110	0347.3	011.1	188.5	000.0700	0168.8	006.2	71.88	
094.0	000.0107	0348.0	011.1	189.0	000.0700	0169.3	006.4	71.37	
095.0	000.0104	0348.6	011.0	189.5	000.0700	0169.6	006.6	70.86	
096.0	000.0102	0348.9	010.9	189.8	000.0700	0169.7	006.8	70.37	
097.0	000.0099	0348.8	010.9	190.4	000.0700	0169.8	006.9	69.88	
098.0	000.0096	0349.5	010.8	191.0	000.0700	0170.0	007.1	69.42	
099.0	000.0093	0350.0	010.7	191.5	000.0700	0170.1	007.3	68.98	
100.0	000.0090	0350.1	010.6	192.1	000.0700	0170.1	007.5	68.55	
101.0	000.0088	0351.0	010.6	192.4	000.0700	0170.1	007.7	68.13	
102.0	000.0086	0351.4	010.5	192.8	000.0700	0170.1	007.9	67.74	
103.0	000.0085	0351.8	010.5	193.2	000.0700	0170.2	008.1	67.38	
104.0	000.0083	0352.2	010.4	193.6	000.0700	0170.2	008.3	67.02	
105.0	000.0081	0352.0	010.3	194.0	000.0700	0170.2	008.4	66.66	
106.0	000.0079	0351.3	010.3	194.6	000.0700	0170.2	008.6	66.32	
107.0	000.0077	0350.5	010.2	195.1	000.0700	0170.1	008.8	65.98	
108.0	000.0076	0348.5	010.1	195.7	000.0700	0170.0	009.0	65.64	
109.0	000.0074	0348.2	010.0	196.2	000.0700	0170.1	009.1	65.32	
110.0	000.0072	0347.5	010.0	196.7	000.0700	0170.1	009.3	65.01	
111.0	000.0071	0346.7	009.9	197.2	000.0700	0170.0	009.5	64.70	
112.0	000.0069	0345.5	009.8	197.8	000.0700	0170.2	009.6	64.41	
113.0	000.0067	0344.9	009.7	198.3	000.0700	0169.9	009.8	64.10	
114.0	000.0066	0344.7	009.7	198.8	000.0700	0169.8	010.0	63.80	
115.0	000.0064	0344.7	009.6	199.3	000.0700	0169.6	010.1	63.51	
116.0	000.0062	0344.3	009.5	199.8	000.0700	0169.4	010.3	63.22	
117.0	000.0061	0344.3	009.5	200.3	000.0700	0169.2	010.4	62.95	
118.0	000.0059	0344.4	009.4	200.8	000.0700	0169.1	010.6	62.68	
119.0	000.0058	0344.8	009.3	201.2	000.0700	0168.8	010.8	62.41	
120.0	000.0056	0345.2	009.3	201.7	000.0700	0168.4	010.9	62.13	
121.0	000.0056	0344.9	009.3	201.8	000.0700	0168.3	011.1	61.87	
122.0	000.0056	0344.2	009.2	202.0	000.0700	0168.4	011.2	61.62	
123.0	000.0056	0344.7	009.2	202.1	000.0700	0168.6	011.4	61.37	
124.0	000.0056	0343.5	009.2	202.4	000.0700	0168.7	011.5	61.14	

Figure 2-5

KFTK-FM1 BLFTB19940930TD

Channel = 246D
Max ERP = 0.07 kW
RCAMSL = 293 m
N. Lat. 38 37 48.0
W. Lng. 90 11 26.0
Protected
60 dBu

W248CH.A

Channel = 248D
Max ERP = 0.25 kW
RCAMSL = 481.5 m
N. Lat. 38 34 49.8
W. Lng. 90 19 44.6
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
185.0	000.0700	0164.2	012.1	120.8	000.0056	0345.0	012.8	54.60	
186.0	000.0700	0165.9	012.2	121.5	000.0056	0344.5	012.6	54.81	
187.0	000.0700	0167.0	012.2	122.1	000.0056	0344.2	012.5	55.05	
188.0	000.0700	0167.9	012.3	122.7	000.0056	0344.3	012.3	55.31	
189.0	000.0700	0169.3	012.3	123.3	000.0056	0344.6	012.1	55.57	
190.0	000.0700	0169.7	012.3	123.8	000.0056	0343.8	011.9	55.83	
191.0	000.0700	0170.0	012.3	124.3	000.0056	0343.2	011.7	56.10	
192.0	000.0700	0170.1	012.3	124.7	000.0056	0342.9	011.5	56.38	
193.0	000.0700	0170.1	012.3	125.1	000.0056	0342.5	011.3	56.67	
194.0	000.0700	0170.2	012.3	125.5	000.0056	0342.2	011.1	56.97	
195.0	000.0700	0170.1	012.3	125.9	000.0056	0342.3	010.9	57.28	
196.0	000.0700	0170.0	012.3	126.3	000.0056	0342.7	010.7	57.60	
197.0	000.0700	0170.0	012.3	126.7	000.0056	0342.8	010.5	57.92	
198.0	000.0700	0170.1	012.3	127.1	000.0056	0342.4	010.3	58.23	
199.0	000.0700	0169.7	012.3	127.4	000.0056	0341.7	010.1	58.54	
200.0	000.0700	0169.3	012.3	127.7	000.0056	0341.7	009.9	58.87	
201.0	000.0700	0169.1	012.3	128.1	000.0056	0342.0	009.7	59.21	
202.0	000.0700	0168.4	012.3	128.3	000.0056	0341.9	009.5	59.56	
203.0	000.0700	0169.0	012.3	128.8	000.0056	0341.8	009.3	59.88	
204.0	000.0700	0168.7	012.3	129.1	000.0056	0342.5	009.1	60.23	
205.0	000.0700	0168.6	012.3	129.4	000.0056	0342.6	008.9	60.57	
206.0	000.0700	0168.0	012.3	129.6	000.0056	0342.8	008.7	60.93	
207.0	000.0700	0167.7	012.3	129.8	000.0056	0343.3	008.4	61.28	
208.0	000.0700	0166.5	012.2	129.9	000.0056	0343.3	008.2	61.64	
209.0	000.0700	0162.8	012.1	129.1	000.0056	0342.5	008.0	62.02	
210.0	000.0700	0157.1	011.8	127.7	000.0056	0341.7	007.7	62.41	
211.0	000.0700	0149.6	011.5	125.5	000.0056	0342.2	007.5	62.83	
212.0	000.0700	0147.5	011.4	125.0	000.0056	0342.5	007.3	63.20	
213.0	000.0700	0144.9	011.3	124.2	000.0056	0343.3	007.1	63.57	
214.0	000.0700	0143.4	011.3	123.7	000.0056	0344.0	006.9	63.94	
215.0	000.0700	0142.7	011.2	123.4	000.0056	0344.5	006.7	64.31	
216.0	000.0700	0144.3	011.3	123.9	000.0056	0343.6	006.5	64.68	
217.0	000.0700	0146.4	011.4	124.7	000.0056	0343.0	006.3	65.06	
218.0	000.0700	0145.9	011.4	124.4	000.0056	0343.1	006.1	65.46	
219.0	000.0700	0145.9	011.4	124.3	000.0056	0343.2	005.9	65.88	
220.0	000.0700	0145.8	011.4	124.0	000.0056	0343.5	005.7	66.31	
221.0	000.0700	0147.2	011.4	124.4	000.0056	0343.1	005.5	66.75	
222.0	000.0700	0146.4	011.4	123.8	000.0056	0343.8	005.3	67.20	
223.0	000.0700	0146.3	011.4	123.4	000.0056	0344.5	005.1	67.65	
224.0	000.0700	0145.5	011.3	122.6	000.0056	0344.3	004.9	68.09	
225.0	000.0700	0144.3	011.3	121.6	000.0056	0344.4	004.8	68.51	
226.0	000.0700	0143.7	011.3	120.6	000.0056	0345.0	004.6	68.97	
227.0	000.0700	0142.3	011.2	119.2	000.0057	0345.0	004.4	69.49	
228.0	000.0700	0142.2	011.2	118.3	000.0059	0344.6	004.2	70.07	
229.0	000.0700	0140.9	011.2	116.6	000.0061	0344.2	004.1	70.70	
230.0	000.0700	0139.5	011.1	114.7	000.0064	0344.8	003.9	71.35	
231.0	000.0700	0138.0	011.0	112.6	000.0068	0345.0	003.8	72.00	
232.0	000.0700	0137.1	011.0	110.6	000.0071	0347.2	003.6	72.67	
233.0	000.0700	0136.5	011.0	108.6	000.0075	0348.3	003.5	73.33	
234.0	000.0700	0136.6	011.0	106.8	000.0078	0350.8	003.3	74.03	
235.0	000.0700	0136.7	011.0	104.7	000.0082	0352.1	003.1	74.73	
236.0	000.0700	0137.1	011.0	102.5	000.0086	0351.6	003.0	75.45	
237.0	000.0700	0137.0	011.0	099.8	000.0091	0350.1	002.9	76.18	
238.0	000.0700	0137.2	011.0	096.9	000.0099	0348.7	002.7	77.05	
239.0	000.0700	0136.7	011.0	093.4	000.0109	0347.6	002.6	77.84	
240.0	000.0700	0137.2	011.0	090.0	000.0120	0345.8	002.5	78.73	

Figure 2-5

241.0	000.0700	0138.0	011.0	086.4	000.0134	0344.0	002.4	79.71
242.0	000.0700	0138.3	011.0	082.2	000.0151	0340.7	002.3	80.58
243.0	000.0700	0139.0	011.1	077.8	000.0170	0337.2	002.2	81.48
244.0	000.0700	0137.4	011.0	072.6	000.0197	0334.6	002.2	81.98
245.0	000.0700	0136.0	010.9	067.6	000.0230	0332.8	002.3	82.47
246.0	000.0700	0135.3	010.9	062.9	000.0272	0333.6	002.3	83.08
247.0	000.0700	0135.8	010.9	058.1	000.0364	0332.0	002.3	84.34
248.0	000.0700	0134.7	010.9	053.8	000.0536	0330.7	002.4	85.66
249.0	000.0700	0133.7	010.9	049.8	000.0723	0331.9	002.5	86.56
250.0	000.0700	0133.3	010.8	045.9	000.0924	0331.3	002.6	87.26
251.0	000.0700	0133.6	010.9	042.1	000.1149	0331.6	002.6	87.91
252.0	000.0700	0134.2	010.9	038.4	000.1392	0331.3	002.7	88.43
253.0	000.0700	0135.5	010.9	034.5	000.1673	0331.0	002.8	88.97
254.0	000.0700	0136.1	011.0	031.3	000.1925	0329.7	002.9	89.16
255.0	000.0700	0138.0	011.0	027.5	000.2142	0327.9	003.0	89.32
256.0	000.0700	0140.6	011.1	023.6	000.2323	0323.3	003.1	89.36
257.0	000.0700	0140.1	011.1	021.8	000.2411	0321.5	003.2	88.94
258.0	000.0700	0140.4	011.1	019.7	000.2500	0318.8	003.4	88.57
259.0	000.0700	0142.3	011.2	017.0	000.2500	0314.7	003.5	88.13
260.0	000.0700	0144.8	011.3	014.1	000.2500	0310.6	003.6	87.68
261.0	000.0700	0145.7	011.4	012.4	000.2500	0309.5	003.8	87.16
262.0	000.0700	0145.4	011.3	011.6	000.2500	0311.0	004.0	86.62
263.0	000.0700	0146.2	011.4	010.2	000.2500	0310.7	004.2	86.12
264.0	000.0700	0146.2	011.4	009.5	000.2500	0311.0	004.4	85.60
265.0	000.0700	0144.6	011.3	009.6	000.2500	0310.7	004.6	85.06
266.0	000.0700	0142.4	011.2	010.1	000.2500	0310.5	004.8	84.54
267.0	000.0700	0140.8	011.1	010.3	000.2500	0311.0	005.0	84.07
268.0	000.0700	0139.2	011.1	010.6	000.2500	0311.5	005.2	83.60
269.0	000.0700	0137.3	011.0	011.0	000.2500	0311.5	005.4	83.13
270.0	000.0700	0135.7	010.9	011.2	000.2500	0311.3	005.6	82.67
271.0	000.0700	0136.0	010.9	010.8	000.2500	0311.5	005.8	82.26
272.0	000.0700	0134.9	010.9	010.9	000.2500	0311.5	006.0	81.83
273.0	000.0700	0134.2	010.9	010.9	000.2500	0311.5	006.2	81.42
274.0	000.0700	0133.8	010.9	010.8	000.2500	0311.5	006.4	81.02
275.0	000.0700	0133.6	010.9	010.7	000.2500	0311.5	006.6	80.64
276.0	000.0700	0133.3	010.8	010.6	000.2500	0311.5	006.7	80.26
277.0	000.0700	0132.9	010.8	010.7	000.2500	0311.5	006.9	79.88
278.0	000.0700	0133.7	010.9	010.3	000.2500	0310.9	007.1	79.51
279.0	000.0700	0135.2	010.9	009.8	000.2500	0310.5	007.3	79.14
280.0	000.0700	0133.7	010.9	010.2	000.2500	0310.7	007.5	78.79
281.0	000.0700	0132.6	010.8	010.6	000.2500	0311.5	007.7	78.46
282.0	000.0700	0132.8	010.8	010.6	000.2500	0311.4	007.9	78.11
283.0	000.0700	0132.1	010.8	010.8	000.2500	0311.5	008.1	77.78
284.0	000.0700	0131.1	010.8	011.1	000.2500	0311.4	008.3	77.45
285.0	000.0700	0131.5	010.8	011.1	000.2500	0311.4	008.4	77.13
286.0	000.0700	0132.6	010.8	010.9	000.2500	0311.5	008.6	76.79
287.0	000.0700	0133.1	010.8	010.9	000.2500	0311.5	008.8	76.47
288.0	000.0700	0135.3	010.9	010.4	000.2500	0311.3	009.0	76.12
289.0	000.0700	0134.7	010.9	010.8	000.2500	0311.5	009.2	75.81
290.0	000.0700	0134.6	010.9	011.0	000.2500	0311.5	009.4	75.49
291.0	000.0700	0133.8	010.9	011.3	000.2500	0311.2	009.6	75.18
292.0	000.0700	0131.7	010.8	012.0	000.2500	0310.2	009.7	74.86
293.0	000.0700	0130.8	010.7	012.4	000.2500	0309.5	009.9	74.55
294.0	000.0700	0129.1	010.7	013.0	000.2500	0310.0	010.1	74.28
295.0	000.0700	0128.1	010.6	013.5	000.2500	0310.5	010.3	74.01
296.0	000.0700	0126.9	010.6	013.9	000.2500	0310.5	010.4	73.73
297.0	000.0700	0125.8	010.5	014.4	000.2500	0311.2	010.6	73.47
298.0	000.0700	0125.0	010.5	014.8	000.2500	0312.4	010.8	73.23
299.0	000.0700	0122.4	010.4	015.5	000.2500	0313.8	010.9	73.02
300.0	000.0700	0122.6	010.4	015.7	000.2500	0314.2	011.1	72.75
301.0	000.0700	0122.0	010.4	016.0	000.2500	0314.7	011.3	72.50
302.0	000.0700	0120.7	010.3	016.5	000.2500	0315.1	011.4	72.26
303.0	000.0700	0120.9	010.3	016.7	000.2500	0314.8	011.6	71.98
304.0	000.0700	0120.5	010.3	017.0	000.2500	0314.7	011.8	71.72

Figure 3

W248CH.A Shrewsbury, MO
74.1204(d) Showing
Translator Maximum Licensed ERP = 0.25
Translator Antenna Height AG = 331 Meters
W248CH.A Antenna Model = PSI FML 1

Protected Station's Contour = 128.9891 dBu
Translator's full Interference contour 168.9891

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 1.000
Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW
Distance between stations = 0.7 km
Protected Station= KYKY, 90 kW, 462.2 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	000.3940	000.3940	331.000
01.00	1.0	1.0	0.2500	000.3940	000.3940	330.993
02.00	0.999	1.0	0.2495	000.3936	000.3934	330.986
03.00	0.998	1.0	0.2490	000.3932	000.3927	330.979
04.00	0.997	1.0	0.2485	000.3928	000.3919	330.973
05.00	0.996	1.0	0.2480	000.3924	000.3909	330.966
06.00	0.994	1.0	0.2470	000.3917	000.3895	330.959
07.00	0.992	1.0	0.2460	000.3909	000.3880	330.952
08.00	0.99	1.0	0.2450	000.3901	000.3863	330.946
09.00	0.988	1.0	0.2440	000.3893	000.3845	330.939
10.00	0.985	1.0	0.2426	000.3881	000.3822	330.933
11.00	0.982	1.0	0.2411	000.3869	000.3798	330.926
12.00	0.978	1.0	0.2391	000.3853	000.3769	330.920
13.00	0.974	1.0	0.2372	000.3838	000.3739	330.914
14.00	0.97	1.0	0.2352	000.3822	000.3708	330.908
15.00	0.966	1.0	0.2333	000.3806	000.3677	330.901
16.00	0.961	1.0	0.2309	000.3787	000.3640	330.896
17.00	0.956	1.0	0.2285	000.3767	000.3602	330.890
18.00	0.951	1.0	0.2261	000.3747	000.3564	330.884
19.00	0.954	1.0	0.2275	000.3759	000.3554	330.878
20.00	0.94	1.0	0.2209	000.3704	000.3480	330.873
21.00	0.933	1.0	0.2176	000.3676	000.3432	330.868
22.00	0.927	1.0	0.2148	000.3653	000.3387	330.863
23.00	0.92	1.0	0.2116	000.3625	000.3337	330.858

24.00	0.913	1.0	0.2084	000.3597	000.3286	330.854
25.00	0.906	1.0	0.2052	000.3570	000.3235	330.849
26.00	0.899	1.0	0.2021	000.3542	000.3184	330.845
27.00	0.891	1.0	0.1985	000.3511	000.3128	330.841
28.00	0.883	1.0	0.1949	000.3479	000.3072	330.837
29.00	0.875	1.0	0.1914	000.3448	000.3015	330.833
30.00	0.866	1.0	0.1875	000.3412	000.2955	330.829
31.00	0.857	1.0	0.1836	000.3377	000.2894	330.826
32.00	0.848	1.0	0.1798	000.3341	000.2834	330.823
33.00	0.839	1.0	0.1760	000.3306	000.2772	330.820
34.00	0.829	1.0	0.1718	000.3266	000.2708	330.817
35.00	0.819	1.0	0.1677	000.3227	000.2643	330.815
36.00	0.809	1.0	0.1636	000.3188	000.2579	330.813
37.00	0.798	1.0	0.1592	000.3144	000.2511	330.811
38.00	0.788	1.0	0.1552	000.3105	000.2447	330.809
39.00	0.777	1.0	0.1509	000.3062	000.2379	330.807
40.00	0.766	1.0	0.1467	000.3018	000.2312	330.806
41.00	0.755	1.0	0.1425	000.2975	000.2245	330.805
42.00	0.743	1.0	0.1380	000.2928	000.2176	330.804
43.00	0.731	1.0	0.1336	000.2880	000.2106	330.804
44.00	0.719	1.0	0.1292	000.2833	000.2038	330.803
45.00	0.707	1.0	0.1250	000.2786	000.1970	330.803
46.00	0.695	1.0	0.1208	000.2738	000.1902	330.803
47.00	0.682	1.0	0.1163	000.2687	000.1833	330.803
48.00	0.669	1.0	0.1119	000.2636	000.1764	330.804
49.00	0.656	1.0	0.1076	000.2585	000.1696	330.805
50.00	0.643	1.0	0.1034	000.2534	000.1629	330.806
51.00	0.629	1.0	0.0989	000.2478	000.1560	330.807
52.00	0.616	1.0	0.0949	000.2427	000.1494	330.809
53.00	0.602	1.0	0.0906	000.2372	000.1427	330.811
54.00	0.588	1.0	0.0864	000.2317	000.1362	330.813
55.00	0.573	1.0	0.0821	000.2258	000.1295	330.815
56.00	0.559	1.0	0.0781	000.2203	000.1232	330.817
57.00	0.545	1.0	0.0743	000.2147	000.1170	330.820
58.00	0.53	1.0	0.0702	000.2088	000.1107	330.823
59.00	0.515	1.0	0.0663	000.2029	000.1045	330.826
60.00	0.5	1.0	0.0625	000.1970	000.0985	330.829
61.00	0.485	1.0	0.0588	000.1911	000.0926	330.833
62.00	0.469	1.0	0.0550	000.1848	000.0868	330.837
63.00	0.454	1.0	0.0515	000.1789	000.0812	330.841
64.00	0.438	1.0	0.0480	000.1726	000.0757	330.845
65.00	0.432	1.0	0.0467	000.1702	000.0719	330.846
66.00	0.407	1.0	0.0414	000.1604	000.0652	330.853
67.00	0.391	1.0	0.0382	000.1541	000.0602	330.858
68.00	0.375	1.0	0.0352	000.1478	000.0554	330.863
69.00	0.358	1.0	0.0320	000.1411	000.0506	330.868

70.00	0.342	1.0	0.0292	000.1348	000.0461	330.873
71.00	0.325	1.0	0.0264	000.1281	000.0417	330.879
72.00	0.309	1.0	0.0239	000.1218	000.0376	330.884
73.00	0.292	1.0	0.0213	000.1151	000.0336	330.890
74.00	0.276	1.0	0.0190	000.1087	000.0300	330.895
75.00	0.259	1.0	0.0168	000.1021	000.0264	330.901
76.00	0.242	1.0	0.0146	000.0954	000.0231	330.907
77.00	0.225	1.0	0.0127	000.0887	000.0199	330.914
78.00	0.208	1.0	0.0108	000.0820	000.0170	330.920
79.00	0.191	1.0	0.0091	000.0753	000.0144	330.926
80.00	0.174	1.0	0.0076	000.0686	000.0119	330.932
81.00	0.156	1.0	0.0061	000.0615	000.0096	330.939
82.00	0.139	1.0	0.0048	000.0548	000.0076	330.946
83.00	0.122	1.0	0.0037	000.0481	000.0059	330.952
84.00	0.104	1.0	0.0027	000.0410	000.0043	330.959
85.00	0.087	1.0	0.0019	000.0343	000.0030	330.966
86.00	0.07	1.0	0.0012	000.0276	000.0019	330.972
87.00	0.052	1.0	0.0007	000.0205	000.0011	330.980
88.00	0.035	1.0	0.0003	000.0138	000.0005	330.986
89.00	0.017	1.0	0.0001	000.0067	000.0001	330.993
90.00	0.001	1.0	0.0000	000.0004	000.0000	331.000

Figure 3-1

W248CH.A Shrewsbury, MO
74.1204(d) Showing
Translator or LPFM Maximum Licensed ERP = 0.25
Translator or LPFM Antenna Height AG = 331 Meters
W248CH.A Antenna Model = PSI FML 1

Protected Station's Contour = 70.24633 dBu
Translator's or LPFM's full Interference contour 110.24633

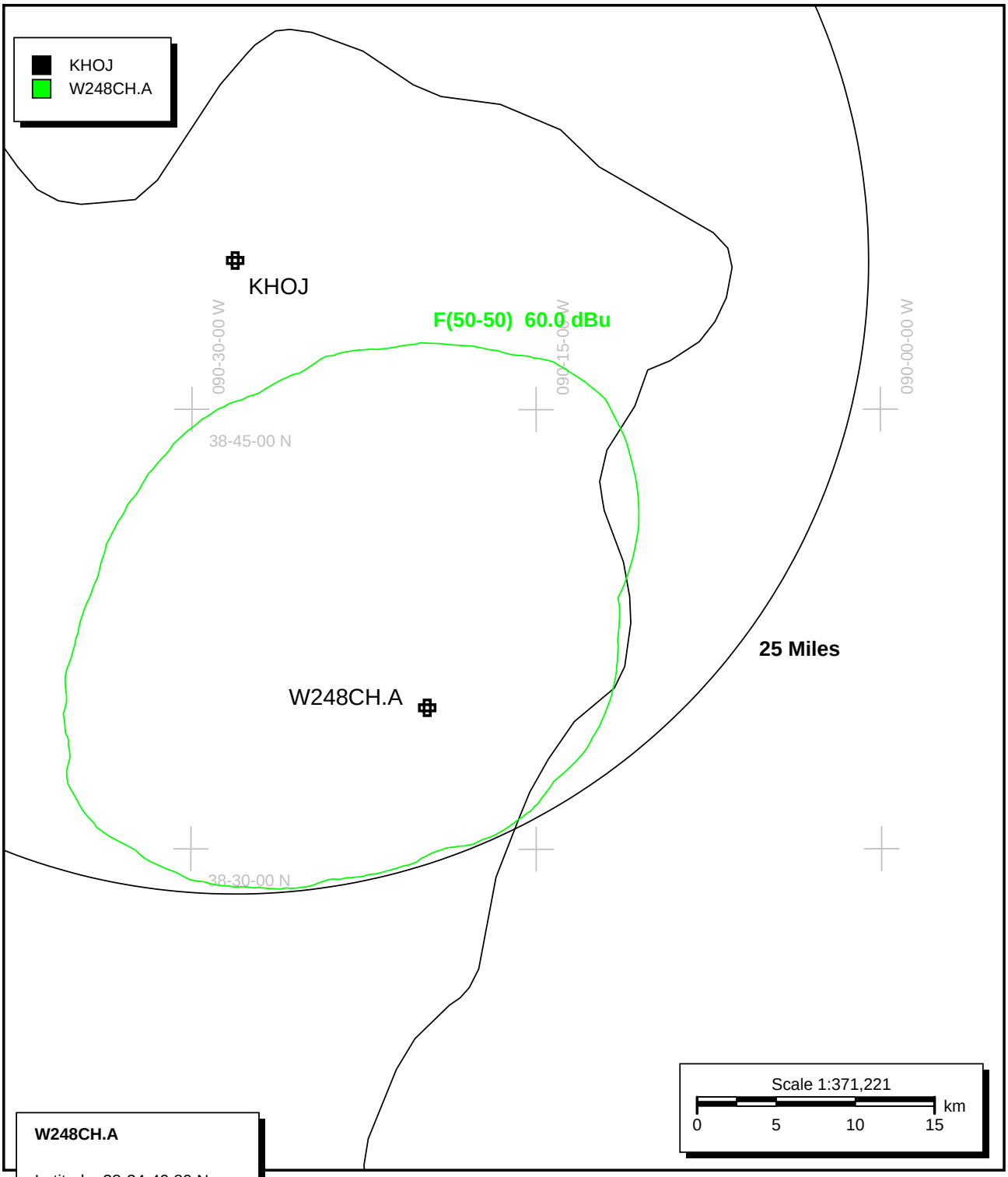
Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 1.000
Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW
Distance between stations = 41.1 km
Protected Station= KFTK, 100 kW, 334 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	340.9208	340.9208	331.000
01.00	1.0	1.0	0.2500	340.9208	340.8689	325.050
02.00	0.999	1.0	0.2495	340.5799	340.3724	319.114
03.00	0.998	1.0	0.2490	340.2390	339.7727	313.193
04.00	0.997	1.0	0.2485	339.8980	339.0701	307.290
05.00	0.996	1.0	0.2480	339.5571	338.2650	301.406
06.00	0.994	1.0	0.2470	338.8753	337.0189	295.578
07.00	0.992	1.0	0.2460	338.1934	335.6726	289.785
08.00	0.99	1.0	0.2450	337.5116	334.2270	284.027
09.00	0.988	1.0	0.2440	336.8297	332.6828	278.308
10.00	0.985	1.0	0.2426	335.8070	330.7053	272.688
11.00	0.982	1.0	0.2411	334.7842	328.6333	267.120
12.00	0.978	1.0	0.2391	333.4205	326.1345	261.678
13.00	0.974	1.0	0.2372	332.0569	323.5463	256.303
14.00	0.97	1.0	0.2352	330.6932	320.8702	250.998
15.00	0.966	1.0	0.2333	329.3295	318.1079	245.763
16.00	0.961	1.0	0.2309	327.6249	314.9333	240.694
17.00	0.956	1.0	0.2285	325.9203	311.6791	235.710
18.00	0.951	1.0	0.2261	324.2157	308.3474	230.812
19.00	0.954	1.0	0.2275	325.2384	307.5190	225.113
20.00	0.94	1.0	0.2209	320.4656	301.1391	221.394
21.00	0.933	1.0	0.2176	318.0791	296.9524	217.011
22.00	0.927	1.0	0.2148	316.0336	293.0212	212.612
23.00	0.92	1.0	0.2116	313.6471	288.7137	208.448

24.00	0.913	1.0	0.2084	311.2607	284.3508	204.399
25.00	0.906	1.0	0.2052	308.8743	279.9351	200.464
26.00	0.899	1.0	0.2021	306.4878	275.4694	196.645
27.00	0.891	1.0	0.1985	303.7604	270.6525	193.096
28.00	0.883	1.0	0.1949	301.0331	265.7964	189.674
29.00	0.875	1.0	0.1914	298.3057	260.9040	186.379
30.00	0.866	1.0	0.1875	295.2374	255.6831	183.381
31.00	0.857	1.0	0.1836	292.1691	250.4378	180.522
32.00	0.848	1.0	0.1798	289.1008	245.1714	177.800
33.00	0.839	1.0	0.1760	286.0326	239.8871	175.216
34.00	0.829	1.0	0.1718	282.6233	234.3054	172.959
35.00	0.819	1.0	0.1677	279.2141	228.7188	170.849
36.00	0.809	1.0	0.1636	275.8049	223.1309	168.886
37.00	0.798	1.0	0.1592	272.0548	217.2726	167.273
38.00	0.788	1.0	0.1552	268.6456	211.6956	165.605
39.00	0.777	1.0	0.1509	264.8955	205.8624	164.296
40.00	0.766	1.0	0.1467	261.1453	200.0489	163.139
41.00	0.755	1.0	0.1425	257.3952	194.2586	162.134
42.00	0.743	1.0	0.1380	253.3041	188.2417	161.506
43.00	0.731	1.0	0.1336	249.2131	182.2629	161.037
44.00	0.719	1.0	0.1292	245.1221	176.3260	160.724
45.00	0.707	1.0	0.1250	241.0310	170.4347	160.565
46.00	0.695	1.0	0.1208	236.9400	164.5923	160.560
47.00	0.682	1.0	0.1163	232.5080	158.5701	160.954
48.00	0.669	1.0	0.1119	228.0760	152.6127	161.506
49.00	0.656	1.0	0.1076	223.6441	146.7237	162.214
50.00	0.643	1.0	0.1034	219.2121	140.9068	163.074
51.00	0.629	1.0	0.0989	214.4392	134.9510	164.349
52.00	0.616	1.0	0.0949	210.0072	129.2934	165.512
53.00	0.602	1.0	0.0906	205.2343	123.5131	167.093
54.00	0.588	1.0	0.0864	200.4614	117.8283	168.823
55.00	0.573	1.0	0.0821	195.3476	112.0468	170.981
56.00	0.559	1.0	0.0781	190.5747	106.5680	173.006
57.00	0.545	1.0	0.0743	185.8018	101.1949	175.173
58.00	0.53	1.0	0.0702	180.6880	095.7501	177.768
59.00	0.515	1.0	0.0663	175.5742	090.4274	180.504
60.00	0.5	1.0	0.0625	170.4604	085.2302	183.377
61.00	0.485	1.0	0.0588	165.3466	080.1616	186.385
62.00	0.469	1.0	0.0550	159.8919	075.0647	189.824
63.00	0.454	1.0	0.0515	154.7780	070.2678	193.092
64.00	0.438	1.0	0.0480	149.3233	065.4590	196.789
65.00	0.432	1.0	0.0467	147.2778	062.2423	197.521
66.00	0.407	1.0	0.0414	138.7548	056.4366	204.241
67.00	0.391	1.0	0.0382	133.3000	052.0845	208.297
68.00	0.375	1.0	0.0352	127.8453	047.8917	212.464
69.00	0.358	1.0	0.0320	122.0497	043.7387	217.057

70.00	0.342	1.0	0.0292	116.5949	039.8778	221.437
71.00	0.325	1.0	0.0264	110.7993	036.0727	226.237
72.00	0.309	1.0	0.0239	105.3445	032.5532	230.811
73.00	0.292	1.0	0.0213	099.5489	029.1053	235.801
74.00	0.276	1.0	0.0190	094.0941	025.9359	240.551
75.00	0.259	1.0	0.0168	088.2985	022.8533	245.710
76.00	0.242	1.0	0.0146	082.5028	019.9592	250.948
77.00	0.225	1.0	0.0127	076.7072	017.2554	256.259
78.00	0.208	1.0	0.0108	070.9115	014.7433	261.638
79.00	0.191	1.0	0.0091	065.1159	012.4247	267.080
80.00	0.174	1.0	0.0076	059.3202	010.3008	272.581
81.00	0.156	1.0	0.0061	053.1836	008.3198	278.471
82.00	0.139	1.0	0.0048	047.3880	006.5951	284.073
83.00	0.122	1.0	0.0037	041.5923	005.0688	289.718
84.00	0.104	1.0	0.0027	035.4558	003.7061	295.738
85.00	0.087	1.0	0.0019	029.6601	002.5850	301.453
86.00	0.07	1.0	0.0012	023.8645	001.6647	307.194
87.00	0.052	1.0	0.0007	017.7279	000.9278	313.296
88.00	0.035	1.0	0.0003	011.9322	000.4164	319.075
89.00	0.017	1.0	0.0001	005.7957	000.1011	325.205
90.00	0.001	1.0	0.0000	000.3409	000.0000	330.659

Figure 4



W248CH.A

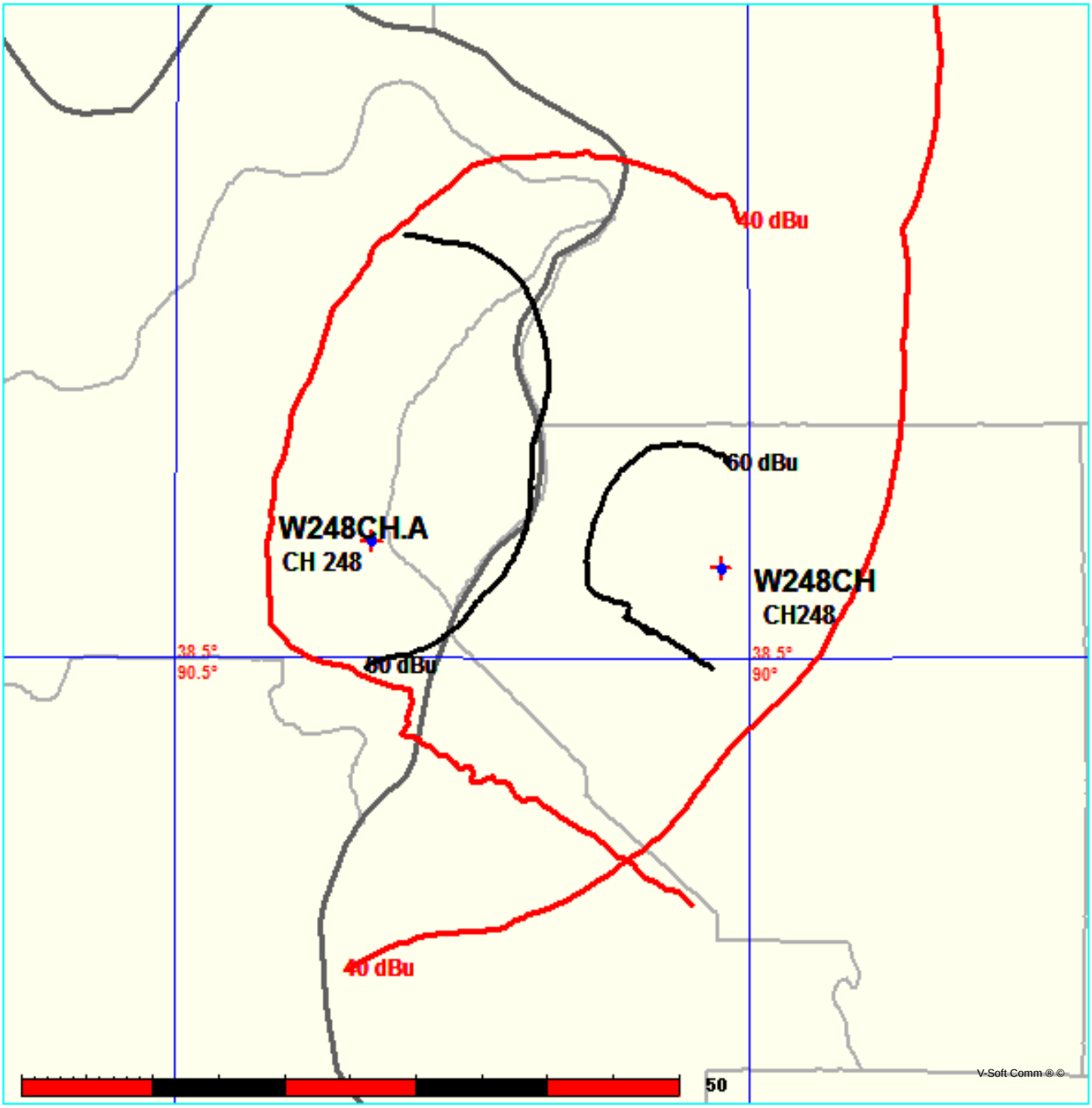
Latitude: 38-34-49.80 N
Longitude: 090-19-44.60 W
ERP: 0.25 kW
Channel: 248
Frequency: 97.5 MHz
AMSL Height: 481.5 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

Figure 5
Minor Modification to W248CH

FMCommander Single Allocation Study - 02-15-2016 - NED 03 SEC
W248CH.A's Overlaps (In= -19.48 km, Out= -22.81 km)

W248CH.A CH 248 D DA
Lat= 38 34 49.8, Lng= 90 19 44.6
0.25 kW 324.3 m HAAT, 481.5 m COR
Prot.= 60 dBu, Intef.= 40 dBu

W248CH CH 248 D DA BLFT20150324AAI
Lat= 38 33 39.5, Lng= 90 01 26.5
0.2 kW 0 m HAAT, 203 m COR
Prot.= 60 dBu, Intef.= 40 dBu



W248CH.A 02-15-2016 RMS(V)= .689

Azi	Field	dBk	kW
000	1.000	-06.021	0.250
010	1.000	-06.021	0.250
020	1.000	-06.021	0.250
030	0.901	-06.926	0.203
040	0.716	-08.922	0.128
050	0.534	-11.470	0.071
060	0.346	-15.239	0.030
070	0.290	-16.773	0.021
080	0.253	-17.958	0.016
090	0.219	-19.212	0.012
100	0.190	-20.446	0.009
110	0.170	-21.412	0.007
120	0.150	-22.499	0.006
130	0.150	-22.499	0.006
140	0.145	-22.793	0.005
150	0.145	-22.793	0.005
160	0.145	-22.793	0.005
170	0.150	-22.499	0.006
180	0.160	-21.938	0.006
190	0.190	-20.446	0.009
200	0.230	-18.786	0.013
210	0.290	-16.773	0.021
220	0.410	-13.765	0.042
230	0.550	-11.213	0.076
240	0.720	-08.874	0.130
250	0.900	-06.936	0.202
260	1.000	-06.021	0.250
270	1.000	-06.021	0.250
280	1.000	-06.021	0.250
290	1.000	-06.021	0.250
300	1.000	-06.021	0.250
310	1.000	-06.021	0.250
320	1.000	-06.021	0.250
330	1.000	-06.021	0.250
340	1.000	-06.021	0.250
350	1.000	-06.021	0.250

Graph is Relative Field