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Tabular channel-study WSSW

State Of Wisconsin-Educational Communications Board

REFERENCE CH# 206A - 89.1 MHz, Pwr= 0.13 kW, HAAT= 131.5 M, COR= 440 M DISPLAY DATES
42 45 50.7 N. Average Protected F(50-50)= 12.5 km DATA 09-16-14
90 24 19.7 W. Omni-directional SEARCH 09-16-14

CH CITY	CALL	TYPE ANT STATE	AZI -<--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
206A WSSW Platteville	LIC _CX WI	0.0 0.0	0.00 BLED20070202ACX	42 45 50.7 90 24 19.7	0.060 171	37.2 476	11.1 State Of Wisconsin-educati	-48.8*	-50.9*	
206B1 WNIE Freeport	LIC DCN IL	126.8 307.3	83.31 BLED19990528KA	42 18 45.0 89 35 38.0	6.000 110	71.3 368	22.9 Northern Illinois Universi	0.0	17.8	
209C3 KNSY Dubuque	LIC _EX IA	241.3 61.1	36.71 BLED20051223AAR	42 36 18.0 90 47 57.0	2.600 197	2.8 449	33.1 University Of Northern Iow	19.8	2.8	
206C2 WHAA Adams	LIC DC_ WI	25.8 206.4	155.51 BLED20100212AAK	44 01 13.0 89 33 31.0	28.500 177	125.9 487	47.8 State Of Wisconsin - Educa	17.7	66.5	
203A KIAD Dubuque	LIC DVX IA	198.7 18.6	42.19 BLED20060424ADO	42 24 16.0 90 34 12.0	0.750 158	1.6 435	22.9 American Family Associatio	27.4	18.5	
206A KPVV Postville	LIC DCX IA	291.3 110.5	101.06 BLED20090504AHB	43 05 20.0 91 33 54.0	3.000 75	68.2 408	19.5 Postville Chamber Of Comme	19.9	37.9	
204B WERN Madison GRANDFATHERED AT 20.5 KW @ 385 M W/PATTERN ODD951102IA	LIC DCN WI	65.1 245.7	77.95 BLED19951026KA	43 03 21.0 89 32 06.0	20.500 385	4.8 686	51.7 State Of Wisconsin - Educa	60.5	25.4	
207C1 WDLN-FM East Moline TRANSMITTER IS LOCATED IN ZONE 2	LIC _CN IL	182.4 2.4	135.35 BLED19791219AA	41 32 52.0 90 28 30.0	100.000 152	84.4 354	54.9 The Moody Bible Institute	38.0	60.9	
206A KXGM-FM Hiawatha	LIC _CX IA	232.4 51.6	132.10 BLED20131112ANO	42 01 57.0 91 40 24.0	3.600 94	72.9 339	21.5 Educational Media Foundati	45.1	63.9	
208B WCNP Baraboo	LIC DCX WI	39.4 219.9	95.86 BLED20130605ABC	43 25 40.3 89 39 06.5	6.500 321	3.4 610	42.5 Liberty And Freedom Inc.	80.1	51.0	
208D K208FO Prairie Du Chien	LIC _C_ WI	295.2 114.7	69.14 BLFT20120327AKE	43 01 36.0 91 10 30.0	0.205 20	1.0 294	10.7 Vcy America, Inc.	55.3	57.7	
205C2 WLSU La Crosse	LIC DCX WI	326.4 145.7	139.49 BLED20030624ABF	43 48 17.0 91 22 06.0	8.200 283	64.0 546	42.3 Board Of Regents, Univ. Of	64.3	75.5	
204D DK204FO Postville	LIC _C_ IA	292.9 112.2	80.17 BLFT20070524ABB	43 02 26.0 91 18 53.0	0.205 41	1.0 344	9.6 Horizon Christian Fellowsh	66.3	67.4	
204A 1199420 Coggon	APP DVX IA	250.8 70.0	102.05 BNPED20071022BMC	42 27 20.0 91 34 48.4	5.000 95	2.0 401	21.5 Plus Charities	86.0	76.5	
204A KNBO Coggon	CP DCX IA	250.9 70.1	102.00 BNPED20071019BBN	42 27 26.0 91 34 49.0	5.000 66	1.9 372	19.4 New Bohemia Group, Inc	86.0	79.7	

Terrain database is GLOBE 30 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= - Zone 2, Co to 3rd adjacent.
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 protected contour.
« = Station meets FCC minimum distance spacing for its class.

HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "IN " is the difference in kilometers between of the reference station's protected contour and the data file station's interference contour at the closest point between the contours. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, "IN" column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are those given in the FCC database. The column labeled "OUT " shows the greatest distance in kilometers of overlap or smallest of clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZI" column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships, some channel-six TV relationships and relationships with commercial channel stations providing clearance the minimum spacings values the "IN" and "OUT" columns can change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** (or lack of it) in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The call letters of stations meeting the minimum separation distances under the rules will be flagged by the characters "<<" appended to the right-hand side of the call sign. The "^" character appended to the call sign means the station has been "max-classed" according to the provisions of section 73.525 of the Rules.

The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N" or left blank.

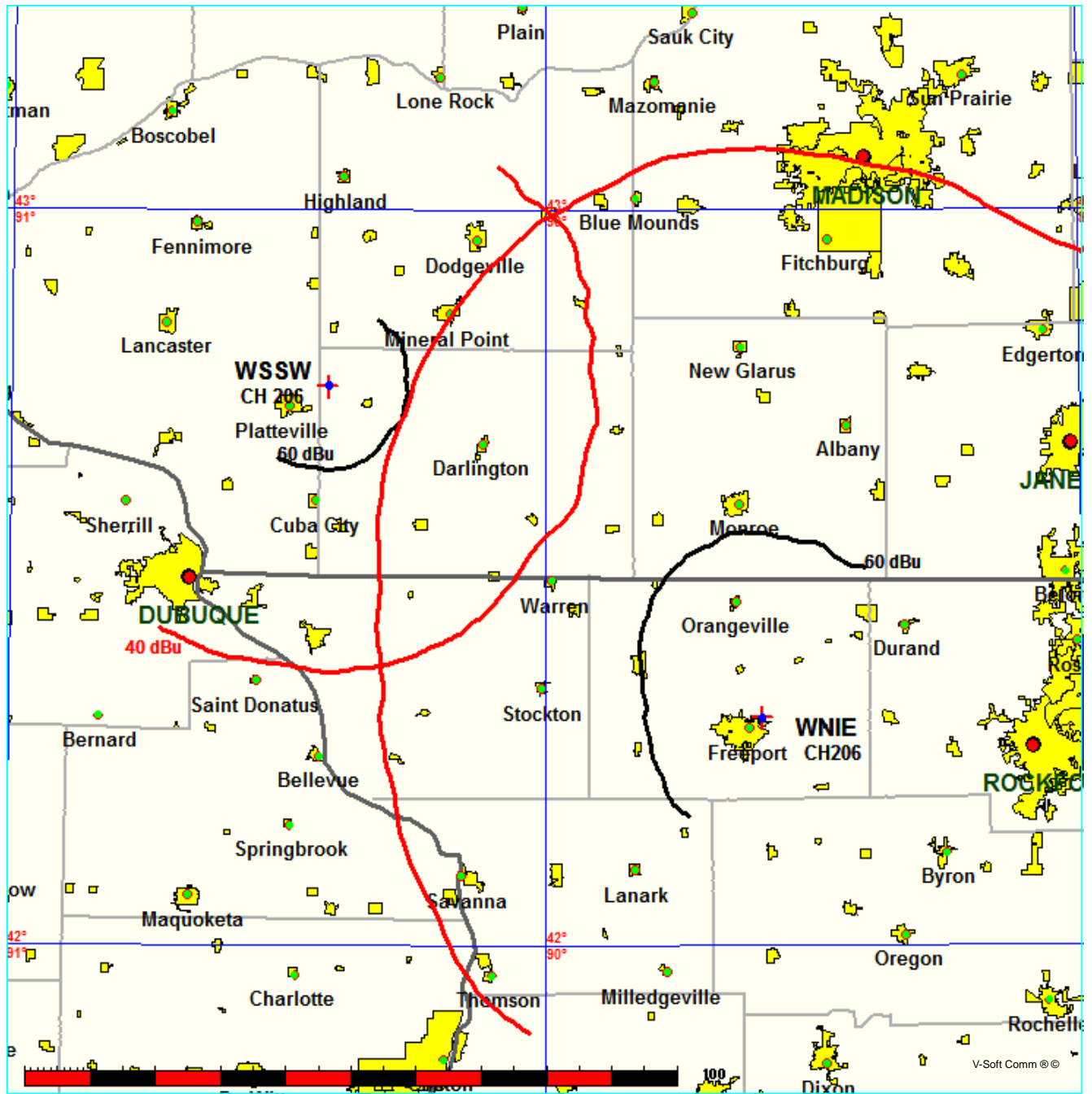
Translator relationships with LPTV/Translators is calculated using the 62 dBu protected and the F(50-10) interference contour, as defined in section 74.1205 of the Rules.

Contour-to-contour Map WSSW - WNIE
State Of Wisconsin-Educational Communications Board

FMCommander Single Allocation Study - 09-16-2014 - GLOBE 30 Sec
WSSW's Overlaps (In= 0.03 km, Out= 17.76 km)

WSSW CH 206 A
Lat= 42 45 50.7, Lng= 90 24 19.7
0.13 kW 131.5 M HAAT, 440 M COR
Prot.= 60 dBu, Intef.= 40 dBu

WNIE CH 206 B1 DA BLED19990528KA
Lat= 42 18 45.0, Lng= 89 35 38.0
6.0 kW 110 M HAAT, 368 M COR
Prot.= 60 dBu, Intef.= 40 dBu



09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WSSW

WNIE BLED19990528KA

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Protected

60 dBu

Channel = 206B1

Max ERP = 6 kW

RCAMSL = 368 M

N. Lat. 42 18 45.0

W. Lng. 89 35 38.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
067.0	000.1300	0127.4	012.3	315.2	002.1732	0118.8	077.8	38.99	
068.0	000.1300	0127.9	012.3	315.1	002.1699	0118.8	077.6	39.04	
069.0	000.1300	0128.8	012.4	315.1	002.1673	0118.8	077.4	39.10	
070.0	000.1300	0129.2	012.4	315.0	002.1634	0118.8	077.2	39.15	
071.0	000.1300	0127.4	012.3	314.9	002.1544	0118.7	077.1	39.17	
072.0	000.1300	0124.5	012.2	314.8	002.1427	0118.7	076.9	39.19	
073.0	000.1300	0121.7	012.0	314.6	002.1313	0118.6	076.8	39.20	
074.0	000.1300	0119.9	012.0	314.5	002.1221	0118.6	076.7	39.22	
075.0	000.1300	0118.7	011.9	314.4	002.1139	0118.5	076.5	39.24	
076.0	000.1300	0118.2	011.9	314.3	002.1070	0118.5	076.4	39.27	
077.0	000.1300	0118.9	011.9	314.2	002.1025	0118.4	076.2	39.32	
078.0	000.1300	0120.7	012.0	314.2	002.0998	0118.4	075.9	39.38	
079.0	000.1300	0122.3	012.1	314.1	002.0966	0118.4	075.7	39.43	
080.0	000.1300	0121.7	012.0	314.0	002.0887	0118.3	075.6	39.46	
081.0	000.1300	0119.7	012.0	313.9	002.0781	0118.2	075.5	39.46	
082.0	000.1300	0118.1	011.9	313.7	002.0682	0118.1	075.3	39.47	
083.0	000.1300	0117.2	011.8	313.6	002.0595	0117.9	075.2	39.49	
084.0	000.1300	0117.1	011.8	313.5	002.0519	0117.8	075.1	39.51	
085.0	000.1300	0115.8	011.8	313.3	002.0423	0117.7	074.9	39.52	
086.0	000.1300	0114.9	011.7	313.2	002.0331	0117.6	074.8	39.53	
087.0	000.1300	0114.3	011.7	313.1	002.0245	0117.5	074.7	39.54	
088.0	000.1300	0115.2	011.7	313.0	002.0183	0117.4	074.5	39.58	
089.0	000.1300	0116.2	011.8	312.9	002.0122	0117.3	074.3	39.61	
090.0	000.1300	0117.3	011.8	312.8	002.0059	0117.2	074.2	39.65	
091.0	000.1300	0118.4	011.9	312.7	001.9994	0117.1	074.0	39.68	
092.0	000.1300	0118.8	011.9	312.6	001.9916	0117.0	073.8	39.70	
093.0	000.1300	0119.6	011.9	312.5	001.9842	0116.9	073.7	39.73	
094.0	000.1300	0120.5	012.0	312.4	001.9768	0116.9	073.5	39.76	
095.0	000.1300	0122.0	012.1	312.3	001.9700	0116.8	073.3	39.79	
096.0	000.1300	0122.8	012.1	312.2	001.9620	0116.7	073.2	39.82	
097.0	000.1300	0123.7	012.1	312.1	001.9541	0116.6	073.0	39.84	
098.0	000.1300	0123.9	012.1	311.9	001.9449	0116.6	072.9	39.86	
099.0	000.1300	0122.5	012.1	311.8	001.9334	0116.5	072.8	39.84	
100.0	000.1300	0121.6	012.0	311.6	001.9227	0116.4	072.8	39.84	
101.0	000.1300	0120.6	012.0	311.4	001.9117	0116.4	072.7	39.83	
102.0	000.1300	0119.8	012.0	311.3	001.9011	0116.4	072.6	39.83	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
103.0	000.1300	0119.7	012.0	311.1	001.8912	0116.4	072.5	39.84
104.0	000.1300	0119.4	011.9	311.0	001.8810	0116.4	072.5	39.84
105.0	000.1300	0119.4	011.9	310.8	001.8711	0116.4	072.4	39.84
106.0	000.1300	0119.8	012.0	310.7	001.8614	0116.5	072.3	39.85
107.0	000.1300	0120.2	012.0	310.6	001.8517	0116.5	072.2	39.86
108.0	000.1300	0120.7	012.0	310.4	001.8419	0116.6	072.1	39.88
109.0	000.1300	0121.4	012.0	310.3	001.8322	0116.6	071.9	39.89
110.0	000.1300	0122.3	012.1	310.1	001.8226	0116.7	071.8	39.90
111.0	000.1300	0123.4	012.1	310.0	001.8132	0116.8	071.7	39.92
112.0	000.1300	0124.9	012.2	309.8	001.8051	0116.9	071.6	39.94
113.0	000.1300	0126.3	012.3	309.7	001.7968	0117.0	071.5	39.97
114.0	000.1300	0127.3	012.3	309.5	001.7881	0117.1	071.4	39.98
115.0	000.1300	0127.8	012.3	309.4	001.7790	0117.3	071.3	39.99
116.0	000.1300	0127.8	012.3	309.2	001.7697	0117.4	071.2	39.99
117.0	000.1300	0127.5	012.3	309.0	001.7602	0117.5	071.2	39.98
118.0	000.1300	0127.0	012.3	308.8	001.7507	0117.7	071.2	39.97
119.0	000.1300	0125.9	012.2	308.7	001.7409	0117.8	071.2	39.95
120.0	000.1300	0124.5	012.2	308.5	001.7312	0117.9	071.2	39.92
121.0	000.1300	0122.9	012.1	308.3	001.7216	0118.1	071.3	39.89
122.0	000.1300	0121.3	012.0	308.1	001.7120	0118.2	071.3	39.86
123.0	000.1300	0119.6	011.9	308.0	001.7026	0118.3	071.4	39.83
124.0	000.1300	0118.0	011.9	307.8	001.6934	0118.5	071.5	39.79
125.0	000.1300	0116.8	011.8	307.6	001.6843	0118.6	071.5	39.76
126.0	000.1300	0115.9	011.8	307.5	001.6754	0118.8	071.5	39.73
127.0	000.1300	0115.3	011.8	307.3	001.6665	0118.9	071.6	39.71
128.0	000.1300	0115.0	011.7	307.1	001.6577	0119.0	071.6	39.69
129.0	000.1300	0115.0	011.7	307.0	001.6490	0119.2	071.6	39.67
130.0	000.1300	0115.3	011.8	306.8	001.6402	0119.3	071.6	39.66
131.0	000.1300	0116.0	011.8	306.6	001.6313	0119.4	071.6	39.64
132.0	000.1300	0116.9	011.8	306.5	001.6225	0119.6	071.5	39.63
133.0	000.1300	0118.0	011.9	306.3	001.6135	0119.7	071.5	39.62
134.0	000.1300	0119.2	011.9	306.1	001.6044	0119.8	071.5	39.61
135.0	000.1300	0120.4	012.0	306.0	001.5954	0119.9	071.5	39.60
136.0	000.1300	0121.3	012.0	305.8	001.5864	0120.0	071.5	39.58
137.0	000.1300	0122.0	012.1	305.6	001.5775	0120.1	071.5	39.56
138.0	000.1300	0122.8	012.1	305.4	001.5685	0120.2	071.5	39.54
139.0	000.1300	0123.6	012.1	305.3	001.5596	0120.3	071.5	39.51
140.0	000.1300	0124.4	012.2	305.1	001.5507	0120.3	071.5	39.48
141.0	000.1300	0125.4	012.2	304.9	001.5417	0120.4	071.5	39.46
142.0	000.1300	0126.7	012.3	304.8	001.5325	0120.5	071.5	39.44
143.0	000.1300	0128.1	012.3	304.6	001.5232	0120.6	071.5	39.41
144.0	000.1300	0129.4	012.4	304.4	001.5141	0120.6	071.6	39.38
145.0	000.1300	0130.3	012.4	304.2	001.5051	0120.7	071.6	39.35
146.0	000.1300	0131.0	012.5	304.0	001.4964	0120.7	071.7	39.31
147.0	000.1300	0131.3	012.5	303.9	001.4881	0120.8	071.7	39.27
148.0	000.1300	0131.4	012.5	303.7	001.4799	0120.8	071.8	39.22
149.0	000.1300	0131.9	012.5	303.6	001.4716	0120.9	071.9	39.17
150.0	000.1300	0133.0	012.6	303.4	001.4628	0120.9	071.9	39.13
151.0	000.1300	0134.2	012.6	303.2	001.4539	0120.9	072.0	39.09
152.0	000.1300	0134.9	012.7	303.0	001.4455	0120.9	072.1	39.05
153.0	000.1300	0135.1	012.7	302.9	001.4377	0120.9	072.2	38.99

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
154.0	000.1300	0135.3	012.7	302.7	001.4300	0121.0	072.3	38.94
155.0	000.1300	0135.7	012.7	302.6	001.4222	0121.0	072.4	38.88
156.0	000.1300	0136.2	012.7	302.4	001.4145	0121.0	072.5	38.83
157.0	000.1300	0136.0	012.7	302.3	001.4076	0121.0	072.6	38.77
158.0	000.1300	0135.4	012.7	302.1	001.4013	0121.0	072.8	38.70
159.0	000.1300	0135.1	012.7	302.0	001.3947	0120.9	072.9	38.64
160.0	000.1300	0135.8	012.7	301.9	001.3872	0120.9	073.0	38.58
161.0	000.1300	0137.0	012.8	301.7	001.3792	0120.9	073.1	38.52
162.0	000.1300	0137.9	012.8	301.5	001.3715	0120.9	073.2	38.46
163.0	000.1300	0138.3	012.8	301.4	001.3647	0120.9	073.4	38.40
164.0	000.1300	0138.9	012.9	301.3	001.3578	0120.9	073.5	38.34
165.0	000.1300	0139.3	012.9	301.1	001.3511	0120.8	073.6	38.27
166.0	000.1300	0139.5	012.9	301.0	001.3448	0120.8	073.8	38.21
167.0	000.1300	0139.3	012.9	300.9	001.3393	0120.8	073.9	38.14
168.0	000.1300	0139.2	012.9	300.8	001.3337	0120.8	074.1	38.07
169.0	000.1300	0139.6	012.9	300.6	001.3276	0120.8	074.3	38.00
170.0	000.1300	0139.9	012.9	300.5	001.3218	0120.8	074.4	37.93
171.0	000.1300	0139.5	012.9	300.4	001.3172	0120.7	074.6	37.86
172.0	000.1300	0138.5	012.8	300.3	001.3135	0120.7	074.8	37.79
173.0	000.1300	0137.8	012.8	300.3	001.3095	0120.7	075.0	37.71
174.0	000.1300	0137.5	012.8	300.2	001.3051	0120.7	075.2	37.64
175.0	000.1300	0138.4	012.8	300.0	001.2992	0120.7	075.4	37.57
176.0	000.1300	0139.6	012.9	299.9	001.2945	0120.6	075.5	37.51
177.0	000.1300	0140.8	012.9	299.8	001.2906	0120.6	075.7	37.45
178.0	000.1300	0140.9	013.0	299.7	001.2877	0120.6	075.9	37.38
179.0	000.1300	0140.9	013.0	299.6	001.2850	0120.6	076.1	37.32
180.0	000.1300	0140.8	012.9	299.5	001.2826	0120.6	076.3	37.25
181.0	000.1300	0140.8	012.9	299.4	001.2801	0120.6	076.5	37.18
182.0	000.1300	0140.8	012.9	299.4	001.2777	0120.6	076.7	37.11
183.0	000.1300	0140.6	012.9	299.3	001.2756	0120.5	076.9	37.04
184.0	000.1300	0139.5	012.9	299.3	001.2746	0120.5	077.1	36.97
185.0	000.1300	0138.3	012.8	299.2	001.2737	0120.5	077.3	36.90
186.0	000.1300	0137.5	012.8	299.2	001.2726	0120.5	077.5	36.83

09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WNIE BLED19990528KA

WSSW

Channel = 206B1

Max ERP = 6 kW

RCAMSL = 368 M

N. Lat. 42 18 45.0

W. Lng. 89 35 38.0

Protected

60 dBu

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
247.0	000.7776	0107.3	018.1	138.7	000.1300	0123.4	076.0	27.52	
248.0	000.7776	0107.3	018.1	138.6	000.1300	0123.3	075.7	27.61	
249.0	000.7776	0107.2	018.1	138.6	000.1300	0123.3	075.4	27.69	
250.0	000.7776	0107.2	018.1	138.5	000.1300	0123.2	075.1	27.78	
251.0	000.7776	0107.1	018.1	138.4	000.1300	0123.1	074.8	27.86	
252.0	000.7776	0106.8	018.0	138.3	000.1300	0123.0	074.5	27.94	
253.0	000.7776	0106.4	018.0	138.1	000.1300	0122.9	074.3	28.02	
254.0	000.7776	0105.7	017.9	138.0	000.1300	0122.8	074.0	28.09	
255.0	000.7776	0105.3	017.9	137.9	000.1300	0122.7	073.7	28.16	
256.0	000.7776	0104.7	017.8	137.7	000.1300	0122.6	073.5	28.23	
257.0	000.7776	0104.0	017.8	137.6	000.1300	0122.5	073.3	28.30	
258.0	000.7776	0103.4	017.7	137.4	000.1300	0122.4	073.0	28.37	
259.0	000.7776	0102.9	017.7	137.2	000.1300	0122.2	072.8	28.43	
260.0	000.7776	0103.1	017.7	137.1	000.1300	0122.1	072.5	28.51	
261.0	000.7798	0103.8	017.8	137.0	000.1300	0122.1	072.2	28.60	
262.0	000.7819	0104.6	017.9	137.0	000.1300	0122.0	071.9	28.69	
263.0	000.7841	0105.3	017.9	136.9	000.1300	0121.9	071.6	28.78	
264.0	000.7863	0105.3	018.0	136.7	000.1300	0121.8	071.3	28.86	
265.0	000.7884	0105.5	018.0	136.6	000.1300	0121.7	071.1	28.93	
266.0	000.7906	0105.9	018.0	136.5	000.1300	0121.6	070.8	29.01	
267.0	000.7928	0106.4	018.1	136.3	000.1300	0121.5	070.5	29.09	
268.0	000.7950	0106.8	018.1	136.2	000.1300	0121.4	070.2	29.17	
269.0	000.7972	0107.2	018.2	136.1	000.1300	0121.3	070.0	29.25	
270.0	000.7994	0107.6	018.2	135.9	000.1300	0121.2	069.7	29.33	
271.0	000.8059	0106.1	018.2	135.7	000.1300	0121.0	069.5	29.37	
272.0	000.8125	0104.6	018.1	135.4	000.1300	0120.8	069.4	29.40	
273.0	000.8192	0103.1	017.9	135.2	000.1300	0120.6	069.2	29.43	
274.0	000.8258	0102.6	017.9	135.0	000.1300	0120.4	069.0	29.48	
275.0	000.8325	0102.9	018.0	134.8	000.1300	0120.2	068.8	29.55	
276.0	000.8393	0103.5	018.1	134.7	000.1300	0120.1	068.5	29.63	
277.0	000.8460	0104.6	018.2	134.5	000.1300	0119.9	068.2	29.72	
278.0	000.8528	0105.2	018.3	134.4	000.1300	0119.7	067.9	29.80	
279.0	000.8596	0106.0	018.5	134.2	000.1300	0119.5	067.6	29.87	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
280.0	000.8664	0107.1	018.6	134.1	000.1300	0119.3	067.3	29.96
281.0	000.8801	0108.2	018.8	133.9	000.1300	0119.1	067.0	30.05
282.0	000.8940	0109.1	018.9	133.8	000.1300	0118.9	066.7	30.14
283.0	000.9079	0109.6	019.1	133.6	000.1300	0118.7	066.4	30.21
284.0	000.9220	0109.6	019.1	133.4	000.1300	0118.4	066.2	30.27
285.0	000.9361	0109.3	019.2	133.1	000.1300	0118.1	066.0	30.32
286.0	000.9504	0109.1	019.2	132.9	000.1300	0117.9	065.8	30.37
287.0	000.9648	0109.2	019.3	132.7	000.1300	0117.6	065.5	30.43
288.0	000.9793	0109.7	019.4	132.4	000.1300	0117.3	065.3	30.50
289.0	000.9939	0110.7	019.6	132.2	000.1300	0117.1	065.0	30.57
290.0	001.0086	0112.1	019.8	132.0	000.1300	0116.9	064.7	30.66
291.0	001.0358	0113.2	020.0	131.8	000.1300	0116.7	064.3	30.76
292.0	001.0634	0113.9	020.2	131.6	000.1300	0116.5	064.0	30.85
293.0	001.0914	0114.5	020.4	131.3	000.1300	0116.2	063.8	30.93
294.0	001.1197	0115.3	020.6	131.1	000.1300	0116.0	063.5	31.01
295.0	001.1484	0116.5	020.8	130.8	000.1300	0115.8	063.1	31.11
296.0	001.1775	0118.0	021.1	130.6	000.1300	0115.6	062.8	31.21
297.0	001.2069	0119.4	021.3	130.3	000.1300	0115.5	062.5	31.31
298.0	001.2367	0120.1	021.5	130.0	000.1300	0115.3	062.2	31.39
299.0	001.2668	0120.5	021.6	129.7	000.1300	0115.2	062.0	31.46
300.0	001.2974	0120.7	021.8	129.4	000.1300	0115.1	061.8	31.53
301.0	001.3452	0120.8	022.0	129.0	000.1300	0115.0	061.5	31.61
302.0	001.3939	0120.9	022.2	128.7	000.1300	0115.0	061.3	31.69
303.0	001.4435	0120.9	022.3	128.4	000.1300	0115.0	061.1	31.77
304.0	001.4940	0120.8	022.5	128.0	000.1300	0115.0	060.9	31.84
305.0	001.5453	0120.4	022.7	127.7	000.1300	0115.1	060.7	31.91
306.0	001.5975	0119.9	022.8	127.3	000.1300	0115.2	060.5	31.97
307.0	001.6506	0119.1	022.9	126.9	000.1300	0115.3	060.4	32.02
308.0	001.7045	0118.3	023.0	126.5	000.1300	0115.5	060.3	32.07
309.0	001.7593	0117.6	023.1	126.1	000.1300	0115.8	060.2	32.12
310.0	001.8150	0116.8	023.2	125.8	000.1300	0116.1	060.1	32.16
311.0	001.8816	0116.4	023.4	125.4	000.1300	0116.4	060.0	32.23
312.0	001.9494	0116.6	023.6	124.9	000.1300	0116.9	059.8	32.31
313.0	002.0184	0117.4	023.8	124.5	000.1300	0117.3	059.6	32.41
314.0	002.0886	0118.3	024.1	124.1	000.1300	0117.9	059.4	32.52
315.0	002.1600	0118.8	024.3	123.6	000.1300	0118.6	059.3	32.61
316.0	002.2326	0118.8	024.5	123.2	000.1300	0119.2	059.2	32.68
317.0	002.3064	0118.3	024.6	122.8	000.1300	0120.0	059.2	32.73
318.0	002.3814	0117.4	024.7	122.3	000.1300	0120.7	059.2	32.77
319.0	002.4576	0116.9	024.9	121.9	000.1300	0121.4	059.2	32.81
320.0	002.5350	0116.7	025.0	121.5	000.1300	0122.2	059.2	32.86
321.0	002.6255	0116.4	025.2	121.0	000.1300	0122.9	059.1	32.91
322.0	002.7176	0115.5	025.3	120.6	000.1300	0123.6	059.2	32.93
323.0	002.8112	0114.4	025.4	120.1	000.1300	0124.3	059.3	32.94
324.0	002.9065	0113.7	025.5	119.7	000.1300	0124.9	059.3	32.95
325.0	003.0033	0113.5	025.7	119.2	000.1300	0125.6	059.4	32.98
326.0	003.1018	0113.4	025.8	118.8	000.1300	0126.2	059.4	32.99
327.0	003.2018	0113.0	026.0	118.3	000.1300	0126.7	059.5	32.99
328.0	003.3034	0112.2	026.1	117.9	000.1300	0127.1	059.6	32.97
329.0	003.4066	0111.1	026.2	117.5	000.1300	0127.3	059.8	32.92
330.0	003.5113	0109.9	026.2	117.1	000.1300	0127.5	060.0	32.86

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
331.0	003.6084	0108.9	026.3	116.7	000.1300	0127.6	060.2	32.79
332.0	003.7068	0108.4	026.4	116.3	000.1300	0127.7	060.4	32.73
333.0	003.8065	0108.7	026.6	115.8	000.1300	0127.8	060.5	32.69
334.0	003.9075	0109.4	026.8	115.3	000.1300	0127.8	060.6	32.66
335.0	004.0098	0109.7	027.0	114.9	000.1300	0127.7	060.7	32.60
336.0	004.1135	0108.7	027.0	114.5	000.1300	0127.6	061.0	32.50
337.0	004.2185	0106.9	027.0	114.2	000.1300	0127.4	061.4	32.36
338.0	004.3248	0105.1	026.9	113.9	000.1300	0127.2	061.7	32.22
339.0	004.4324	0104.2	026.9	113.6	000.1300	0126.9	062.0	32.10
340.0	004.5414	0103.8	027.0	113.2	000.1300	0126.5	062.3	31.99
341.0	004.6306	0103.2	027.1	112.9	000.1300	0126.2	062.6	31.86
342.0	004.7206	0102.3	027.1	112.6	000.1300	0125.8	062.9	31.72
343.0	004.8115	0101.5	027.1	112.3	000.1300	0125.4	063.3	31.58
344.0	004.9033	0101.4	027.2	112.0	000.1300	0124.8	063.6	31.45
345.0	004.9959	0101.5	027.3	111.6	000.1300	0124.3	063.9	31.33
346.0	005.0894	0102.0	027.5	111.2	000.1300	0123.8	064.2	31.20
347.0	005.1838	0102.5	027.7	110.9	000.1300	0123.3	064.5	31.08
348.0	005.2791	0102.7	027.8	110.5	000.1300	0122.9	064.8	30.96
349.0	005.3752	0102.8	028.0	110.2	000.1300	0122.6	065.1	30.83
350.0	005.4721	0102.9	028.1	109.9	000.1300	0122.2	065.5	30.70
351.0	005.5238	0102.6	028.1	109.7	000.1300	0122.0	065.9	30.55
352.0	005.5758	0101.6	028.0	109.5	000.1300	0121.9	066.4	30.40
353.0	005.6280	0101.1	028.0	109.3	000.1300	0121.7	066.8	30.25
354.0	005.6804	0100.5	028.0	109.1	000.1300	0121.6	067.2	30.10
355.0	005.7330	0099.3	027.9	109.0	000.1300	0121.5	067.7	29.95
356.0	005.7859	0098.2	027.8	108.9	000.1300	0121.4	068.2	29.79
357.0	005.8391	0097.6	027.8	108.8	000.1300	0121.3	068.7	29.64
358.0	005.8925	0096.9	027.8	108.7	000.1300	0121.2	069.1	29.50
359.0	005.9461	0096.2	027.7	108.6	000.1300	0121.1	069.6	29.35
000.0	006.0000	0095.7	027.7	108.5	000.1300	0121.0	070.1	29.20
001.0	006.0000	0095.3	027.7	108.4	000.1300	0121.0	070.5	29.05
002.0	006.0000	0094.8	027.6	108.3	000.1300	0120.9	071.0	28.90
003.0	006.0000	0093.7	027.4	108.3	000.1300	0120.9	071.5	28.75
004.0	006.0000	0092.9	027.3	108.3	000.1300	0120.9	072.0	28.60
005.0	006.0000	0092.1	027.2	108.3	000.1300	0120.9	072.5	28.45
006.0	006.0000	0092.1	027.2	108.2	000.1300	0120.9	073.0	28.31

Contour-to-contour map - WSSW vs KNSY
State of Wisconsin-Educational Communications Board

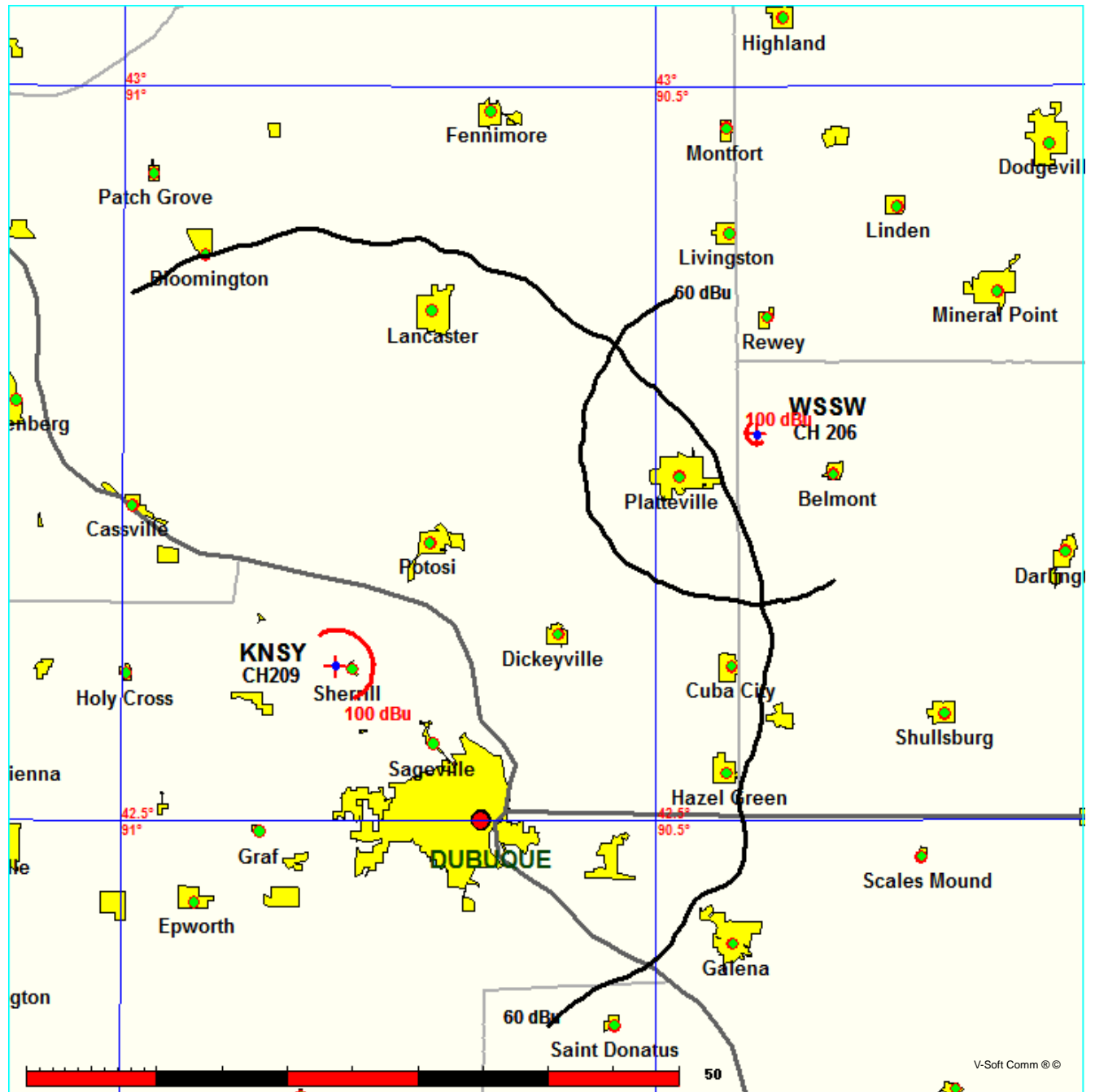
FMCommander Single Allocation Study - 09-16-2014 - GLOBE 30 Sec
WSSW's Overlaps (In= 19.81 km, Out= 2.8 km)

WSSW CH 206 A

Lat= 42 45 50.7, Lng= 90 24 19.7
0.13 kW 131.5 M HAAT, 440 M COR
Prot.= 60 dBu, Intef.= 100 dBu

KNSY CH 209 C3 BLED20051223AAR

Lat= 42 36 18.0, Lng= 90 47 57.0
2.6 kW 197 M HAAT, 449 M COR
Prot.= 60 dBu, Intef.= 100 dBu



09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WSSW

KNSY BLED20051223AAR

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Protected

60 dBu

Channel = 209C3

Max ERP = 2.6 kW

RCAMSL = 449 M

N. Lat. 42 36 18.0

W. Lng. 90 47 57.0

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
181.0	000.1300	0140.8	012.9	081.4	002.6000	0210.7	032.3	61.80	
182.0	000.1300	0140.8	012.9	081.4	002.6000	0210.7	032.1	61.92	
183.0	000.1300	0140.6	012.9	081.3	002.6000	0210.8	031.9	62.03	
184.0	000.1300	0139.5	012.9	081.1	002.6000	0211.0	031.7	62.15	
185.0	000.1300	0138.3	012.8	080.9	002.6000	0211.2	031.5	62.27	
186.0	000.1300	0137.5	012.8	080.7	002.6000	0211.4	031.3	62.40	
187.0	000.1300	0137.2	012.8	080.6	002.6000	0211.6	031.1	62.52	
188.0	000.1300	0137.0	012.8	080.5	002.6000	0211.8	030.8	62.65	
189.0	000.1300	0136.8	012.8	080.3	002.6000	0212.0	030.6	62.77	
190.0	000.1300	0136.9	012.8	080.2	002.6000	0212.2	030.4	62.90	
191.0	000.1300	0137.5	012.8	080.1	002.6000	0212.3	030.2	63.04	
192.0	000.1300	0138.2	012.8	080.0	002.6000	0212.5	030.0	63.17	
193.0	000.1300	0138.8	012.8	079.9	002.6000	0212.6	029.8	63.31	
194.0	000.1300	0139.1	012.9	079.7	002.6000	0212.8	029.6	63.44	
195.0	000.1300	0139.3	012.9	079.6	002.6000	0213.1	029.3	63.58	
196.0	000.1300	0139.4	012.9	079.4	002.6000	0213.3	029.1	63.71	
197.0	000.1300	0140.1	012.9	079.3	002.6000	0213.6	028.9	63.85	
198.0	000.1300	0141.3	013.0	079.1	002.6000	0213.7	028.7	64.00	
199.0	000.1300	0142.9	013.0	079.1	002.6000	0213.9	028.5	64.16	
200.0	000.1300	0144.3	013.1	079.0	002.6000	0214.0	028.2	64.31	
201.0	000.1300	0145.3	013.2	078.8	002.6000	0214.2	028.0	64.46	
202.0	000.1300	0145.6	013.2	078.6	002.6000	0214.3	027.8	64.60	
203.0	000.1300	0146.2	013.2	078.3	002.6000	0214.3	027.6	64.73	
204.0	000.1300	0146.9	013.2	078.1	002.6000	0214.2	027.4	64.86	
205.0	000.1300	0147.5	013.3	077.9	002.6000	0214.0	027.2	64.99	
206.0	000.1300	0147.8	013.3	077.6	002.6000	0213.5	027.0	65.10	
207.0	000.1300	0148.0	013.3	077.3	002.6000	0213.0	026.8	65.20	
208.0	000.1300	0148.2	013.3	077.0	002.6000	0212.5	026.6	65.31	
209.0	000.1300	0148.4	013.3	076.7	002.6000	0212.3	026.4	65.42	
210.0	000.1300	0148.8	013.3	076.4	002.6000	0212.3	026.3	65.55	
211.0	000.1300	0149.3	013.4	076.1	002.6000	0212.3	026.1	65.68	
212.0	000.1300	0150.4	013.4	075.8	002.6000	0212.2	025.9	65.81	
213.0	000.1300	0151.9	013.5	075.5	002.6000	0212.0	025.7	65.96	
214.0	000.1300	0153.3	013.6	075.2	002.6000	0212.0	025.4	66.10	
215.0	000.1300	0154.1	013.6	074.9	002.6000	0211.9	025.3	66.23	
216.0	000.1300	0153.5	013.6	074.4	002.6000	0211.6	025.1	66.31	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
217.0	000.1300	0152.3	013.5	073.9	002.6000	0211.2	025.0	66.36
218.0	000.1300	0151.7	013.5	073.5	002.6000	0211.0	024.9	66.44
219.0	000.1300	0152.8	013.5	073.1	002.6000	0210.9	024.7	66.56
220.0	000.1300	0154.6	013.6	072.7	002.6000	0210.9	024.5	66.71
221.0	000.1300	0156.0	013.7	072.3	002.6000	0211.0	024.3	66.85
222.0	000.1300	0157.4	013.8	071.9	002.6000	0210.9	024.2	66.98
223.0	000.1300	0158.9	013.8	071.5	002.6000	0210.7	024.0	67.10
224.0	000.1300	0160.4	013.9	071.1	002.6000	0210.4	023.8	67.22
225.0	000.1300	0161.6	014.0	070.6	002.6000	0210.3	023.6	67.34
226.0	000.1300	0162.1	014.0	070.1	002.6000	0210.1	023.5	67.42
227.0	000.1300	0162.0	014.0	069.6	002.6000	0209.8	023.4	67.48
228.0	000.1300	0162.5	014.0	069.0	002.6000	0209.6	023.3	67.55
229.0	000.1300	0163.8	014.1	068.5	002.6000	0209.3	023.2	67.65
230.0	000.1300	0164.7	014.1	068.0	002.6000	0209.0	023.0	67.73
231.0	000.1300	0164.5	014.1	067.4	002.6000	0208.4	023.0	67.75
232.0	000.1300	0163.4	014.1	066.8	002.6000	0207.8	023.0	67.74
233.0	000.1300	0162.0	014.0	066.1	002.6000	0207.4	023.0	67.72
234.0	000.1300	0160.8	013.9	065.5	002.6000	0207.3	023.0	67.72
235.0	000.1300	0160.3	013.9	064.9	002.6000	0207.7	022.9	67.75
236.0	000.1300	0160.6	013.9	064.3	002.6000	0208.4	022.9	67.82
237.0	000.1300	0161.1	013.9	063.7	002.6000	0209.2	022.8	67.90
238.0	000.1300	0161.3	014.0	063.1	002.6000	0210.0	022.8	67.95
239.0	000.1300	0160.9	013.9	062.5	002.6000	0210.9	022.8	67.99
240.0	000.1300	0160.8	013.9	061.9	002.6000	0211.9	022.8	68.04
241.0	000.1300	0161.3	014.0	061.3	002.6000	0212.7	022.8	68.09
242.0	000.1300	0162.8	014.0	060.7	002.6000	0213.0	022.7	68.16
243.0	000.1300	0164.2	014.1	060.0	002.6000	0212.8	022.6	68.20
244.0	000.1300	0165.0	014.1	059.4	002.6000	0212.1	022.6	68.19
245.0	000.1300	0165.4	014.1	058.8	002.6000	0211.1	022.6	68.14
246.0	000.1300	0164.8	014.1	058.2	002.6000	0210.0	022.7	68.06
247.0	000.1300	0163.8	014.1	057.6	002.6000	0209.4	022.8	67.96
248.0	000.1300	0161.8	014.0	057.0	002.6000	0209.2	022.9	67.85
249.0	000.1300	0159.7	013.9	056.5	002.6000	0209.1	023.0	67.74
250.0	000.1300	0157.8	013.8	055.9	002.6000	0209.1	023.2	67.63
251.0	000.1300	0156.2	013.7	055.4	002.6000	0209.1	023.3	67.53
252.0	000.1300	0155.3	013.7	054.9	002.6000	0208.6	023.4	67.43
253.0	000.1300	0154.7	013.6	054.3	002.6000	0208.2	023.5	67.34
254.0	000.1300	0154.1	013.6	053.8	002.6000	0207.3	023.6	67.22
255.0	000.1300	0153.7	013.6	053.3	002.6000	0206.2	023.7	67.10
256.0	000.1300	0153.2	013.6	052.8	002.6000	0205.1	023.8	66.97
257.0	000.1300	0152.7	013.5	052.3	002.6000	0204.1	024.0	66.84
258.0	000.1300	0152.4	013.5	051.8	002.6000	0203.3	024.1	66.72
259.0	000.1300	0152.5	013.5	051.3	002.6000	0202.8	024.2	66.63
260.0	000.1300	0153.4	013.6	050.8	002.6000	0202.9	024.3	66.58
261.0	000.1300	0154.3	013.6	050.2	002.6000	0203.1	024.3	66.53
262.0	000.1300	0154.7	013.6	049.7	002.6000	0203.1	024.4	66.45
263.0	000.1300	0154.3	013.6	049.3	002.6000	0202.7	024.6	66.33
264.0	000.1300	0153.7	013.6	048.9	002.6000	0202.0	024.7	66.19
265.0	000.1300	0152.7	013.5	048.5	002.6000	0201.3	024.9	66.03
266.0	000.1300	0151.8	013.5	048.1	002.6000	0200.4	025.1	65.86
267.0	000.1300	0150.1	013.4	047.8	002.6000	0199.7	025.3	65.69

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
268.0	000.1300	0148.3	013.3	047.5	002.6000	0199.1	025.5	65.51
269.0	000.1300	0146.8	013.2	047.2	002.6000	0198.4	025.7	65.33
270.0	000.1300	0146.4	013.2	046.9	002.6000	0197.8	025.9	65.19
271.0	000.1300	0146.3	013.2	046.5	002.6000	0197.4	026.1	65.06
272.0	000.1300	0146.2	013.2	046.2	002.6000	0197.2	026.2	64.93
273.0	000.1300	0146.3	013.2	045.8	002.6000	0197.1	026.4	64.82
274.0	000.1300	0147.4	013.3	045.4	002.6000	0197.2	026.5	64.73
275.0	000.1300	0148.0	013.3	045.0	002.6000	0197.6	026.7	64.64
276.0	000.1300	0148.4	013.3	044.7	002.6000	0198.1	026.8	64.55
277.0	000.1300	0148.3	013.3	044.4	002.6000	0198.6	027.0	64.45
278.0	000.1300	0148.0	013.3	044.1	002.6000	0199.1	027.2	64.34
279.0	000.1300	0147.8	013.3	043.8	002.6000	0199.7	027.4	64.24
280.0	000.1300	0147.0	013.3	043.6	002.6000	0200.2	027.6	64.12
281.0	000.1300	0145.3	013.2	043.5	002.6000	0200.4	027.9	63.97
282.0	000.1300	0143.1	013.1	043.5	002.6000	0200.6	028.1	63.81
283.0	000.1300	0141.4	013.0	043.4	002.6000	0200.7	028.4	63.67
284.0	000.1300	0140.9	013.0	043.2	002.6000	0201.2	028.6	63.56
285.0	000.1300	0140.6	012.9	043.0	002.6000	0201.6	028.8	63.44
286.0	000.1300	0140.8	012.9	042.8	002.6000	0202.0	029.0	63.34
287.0	000.1300	0140.7	012.9	042.6	002.6000	0202.4	029.2	63.23
288.0	000.1300	0140.7	012.9	042.4	002.6000	0202.8	029.4	63.13
289.0	000.1300	0140.7	012.9	042.2	002.6000	0203.2	029.6	63.02
290.0	000.1300	0139.9	012.9	042.1	002.6000	0203.3	029.8	62.89
291.0	000.1300	0138.4	012.8	042.1	002.6000	0203.4	030.0	62.75
292.0	000.1300	0136.8	012.8	042.1	002.6000	0203.4	030.3	62.62
293.0	000.1300	0135.6	012.7	042.0	002.6000	0203.5	030.5	62.48
294.0	000.1300	0135.2	012.7	041.9	002.6000	0203.7	030.7	62.37
295.0	000.1300	0134.8	012.7	041.8	002.6000	0203.8	030.9	62.25
296.0	000.1300	0134.9	012.7	041.7	002.6000	0204.0	031.2	62.14
297.0	000.1300	0135.3	012.7	041.6	002.6000	0204.1	031.4	62.03
298.0	000.1300	0135.9	012.7	041.4	002.6000	0204.3	031.6	61.92
299.0	000.1300	0136.2	012.7	041.3	002.6000	0204.3	031.8	61.81
300.0	000.1300	0136.1	012.7	041.2	002.6000	0204.4	032.0	61.70

09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KNSY BLED20051223AAR

WSSW

Channel = 209C3

Max ERP = 2.6 kW

RCAMSL = 449 M

N. Lat. 42 36 18.0

W. Lng. 90 47 57.0

Protected

60 dBu

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
001.0	002.6000	0204.0	032.4	295.1	000.1300	0134.8	034.8	43.67	
002.0	002.6000	0202.6	032.3	295.3	000.1300	0134.8	034.2	43.94	
003.0	002.6000	0201.8	032.2	295.6	000.1300	0134.8	033.7	44.21	
004.0	002.6000	0201.2	032.2	295.9	000.1300	0134.8	033.1	44.48	
005.0	002.6000	0200.5	032.1	296.1	000.1300	0134.9	032.6	44.76	
006.0	002.6000	0200.8	032.1	296.5	000.1300	0135.1	032.1	45.03	
007.0	002.6000	0202.8	032.3	297.1	000.1300	0135.4	031.6	45.29	
008.0	002.6000	0205.1	032.5	297.8	000.1300	0135.7	031.1	45.56	
009.0	002.6000	0207.6	032.7	298.5	000.1300	0136.1	030.7	45.84	
010.0	002.6000	0209.9	032.9	299.2	000.1300	0136.2	030.2	46.12	
011.0	002.6000	0211.6	033.0	299.8	000.1300	0136.1	029.7	46.40	
012.0	002.6000	0211.0	033.0	300.1	000.1300	0136.0	029.1	46.73	
013.0	002.6000	0208.5	032.8	300.0	000.1300	0136.1	028.5	47.10	
014.0	002.6000	0205.7	032.5	299.9	000.1300	0136.1	027.9	47.49	
015.0	002.6000	0205.4	032.5	300.2	000.1300	0136.0	027.4	47.83	
016.0	002.6000	0207.5	032.7	300.8	000.1300	0135.7	026.9	48.14	
017.0	002.6000	0208.9	032.8	301.4	000.1300	0135.6	026.3	48.49	
018.0	002.6000	0208.1	032.7	301.5	000.1300	0135.6	025.8	48.88	
019.0	002.6000	0205.3	032.5	301.3	000.1300	0135.6	025.2	49.30	
020.0	002.6000	0202.9	032.3	301.1	000.1300	0135.6	024.6	49.72	
021.0	002.6000	0201.8	032.2	301.1	000.1300	0135.6	024.0	50.13	
022.0	002.6000	0202.4	032.3	301.5	000.1300	0135.6	023.4	50.53	
023.0	002.6000	0204.0	032.4	302.0	000.1300	0135.7	022.9	50.93	
024.0	002.6000	0205.5	032.5	302.6	000.1300	0135.9	022.4	51.35	
025.0	002.6000	0206.7	032.6	303.0	000.1300	0136.1	021.8	51.78	
026.0	002.6000	0207.4	032.7	303.4	000.1300	0136.2	021.3	52.22	
027.0	002.6000	0207.2	032.7	303.5	000.1300	0136.3	020.7	52.67	
028.0	002.6000	0206.0	032.6	303.4	000.1300	0136.2	020.1	53.12	
029.0	002.6000	0204.0	032.4	303.0	000.1300	0136.1	019.5	53.57	
030.0	002.6000	0201.6	032.2	302.5	000.1300	0135.9	019.0	54.02	
031.0	002.6000	0199.6	032.0	302.0	000.1300	0135.7	018.4	54.46	
032.0	002.6000	0198.1	031.9	301.7	000.1300	0135.7	017.8	54.91	
033.0	002.6000	0197.4	031.8	301.4	000.1300	0135.6	017.3	55.37	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
034.0	002.6000	0196.8	031.8	301.2	000.1300	0135.6	016.7	55.82
035.0	002.6000	0196.6	031.8	301.0	000.1300	0135.7	016.2	56.28
036.0	002.6000	0196.6	031.8	300.8	000.1300	0135.7	015.6	56.75
037.0	002.6000	0197.2	031.8	300.8	000.1300	0135.7	015.1	57.22
038.0	002.6000	0199.0	032.0	301.1	000.1300	0135.6	014.5	57.70
039.0	002.6000	0201.6	032.2	301.7	000.1300	0135.7	013.9	58.39
040.0	002.6000	0203.8	032.4	302.1	000.1300	0135.8	013.3	59.14
041.0	002.6000	0204.5	032.4	302.0	000.1300	0135.7	012.8	59.91
042.0	002.6000	0203.5	032.4	301.2	000.1300	0135.6	012.2	60.68
043.0	002.6000	0201.5	032.2	299.8	000.1300	0136.1	011.7	61.49
044.0	002.6000	0199.3	032.0	298.2	000.1300	0136.0	011.2	62.26
045.0	002.6000	0197.6	031.9	296.7	000.1300	0135.1	010.7	63.01
046.0	002.6000	0197.1	031.8	295.4	000.1300	0134.8	010.2	63.85
047.0	002.6000	0198.0	031.9	294.6	000.1300	0135.0	009.7	64.84
048.0	002.6000	0200.1	032.1	294.3	000.1300	0135.1	009.1	65.94
049.0	002.6000	0202.3	032.2	293.8	000.1300	0135.3	008.5	67.09
050.0	002.6000	0203.1	032.3	292.5	000.1300	0136.1	008.0	68.24
051.0	002.6000	0202.8	032.3	290.3	000.1300	0139.5	007.5	69.53
052.0	002.6000	0203.6	032.4	288.3	000.1300	0140.8	007.0	70.87
053.0	002.6000	0205.6	032.5	286.7	000.1300	0140.8	006.4	72.35
054.0	002.6000	0207.7	032.7	284.6	000.1300	0140.6	005.9	73.89
055.0	002.6000	0208.8	032.8	281.5	000.1300	0144.3	005.4	75.53
056.0	002.6000	0209.1	032.8	277.1	000.1300	0148.2	005.0	77.01
057.0	002.6000	0209.2	032.8	271.7	000.1300	0146.2	004.6	78.00
058.0	002.6000	0209.8	032.9	265.7	000.1300	0152.1	004.3	79.44
059.0	002.6000	0211.5	033.0	259.0	000.1300	0152.5	003.9	80.74
060.0	002.6000	0212.8	033.1	251.0	000.1300	0156.2	003.7	81.87
061.0	002.6000	0212.9	033.1	242.0	000.1300	0162.8	003.6	82.41
062.0	002.6000	0211.7	033.0	233.1	000.1300	0161.8	003.7	81.83
063.0	002.6000	0210.1	032.9	225.2	000.1300	0161.8	004.0	80.88
064.0	002.6000	0208.8	032.8	218.4	000.1300	0152.0	004.3	79.32
065.0	002.6000	0207.6	032.7	212.7	000.1300	0151.4	004.7	78.07
066.0	002.6000	0207.3	032.7	207.4	000.1300	0148.1	005.0	76.81
067.0	002.6000	0208.0	032.7	202.3	000.1300	0145.8	005.4	75.65
068.0	002.6000	0209.0	032.8	197.7	000.1300	0140.9	005.7	74.28
069.0	002.6000	0209.6	032.9	194.0	000.1300	0139.1	006.2	72.95
070.0	002.6000	0210.0	032.9	190.9	000.1300	0137.4	006.6	71.58
071.0	002.6000	0210.4	032.9	188.4	000.1300	0136.8	007.1	70.27
072.0	002.6000	0211.0	033.0	186.2	000.1300	0137.4	007.6	69.09
073.0	002.6000	0210.9	033.0	184.6	000.1300	0138.7	008.1	68.03
074.0	002.6000	0211.2	033.0	183.1	000.1300	0140.5	008.7	67.09
075.0	002.6000	0211.9	033.0	181.6	000.1300	0140.8	009.2	66.08
076.0	002.6000	0212.3	033.1	180.6	000.1300	0140.8	009.8	65.07
077.0	002.6000	0212.5	033.1	179.7	000.1300	0140.8	010.3	64.08
078.0	002.6000	0214.1	033.2	178.4	000.1300	0140.9	010.9	63.17
079.0	002.6000	0213.9	033.2	178.0	000.1300	0140.9	011.4	62.23
080.0	002.6000	0212.5	033.1	178.1	000.1300	0140.9	012.0	61.33
081.0	002.6000	0211.1	033.0	178.3	000.1300	0140.9	012.6	60.48
082.0	002.6000	0210.4	032.9	178.2	000.1300	0140.9	013.2	59.68
083.0	002.6000	0211.8	033.0	177.6	000.1300	0140.8	013.8	58.94
084.0	002.6000	0214.1	033.2	176.7	000.1300	0140.5	014.3	58.23

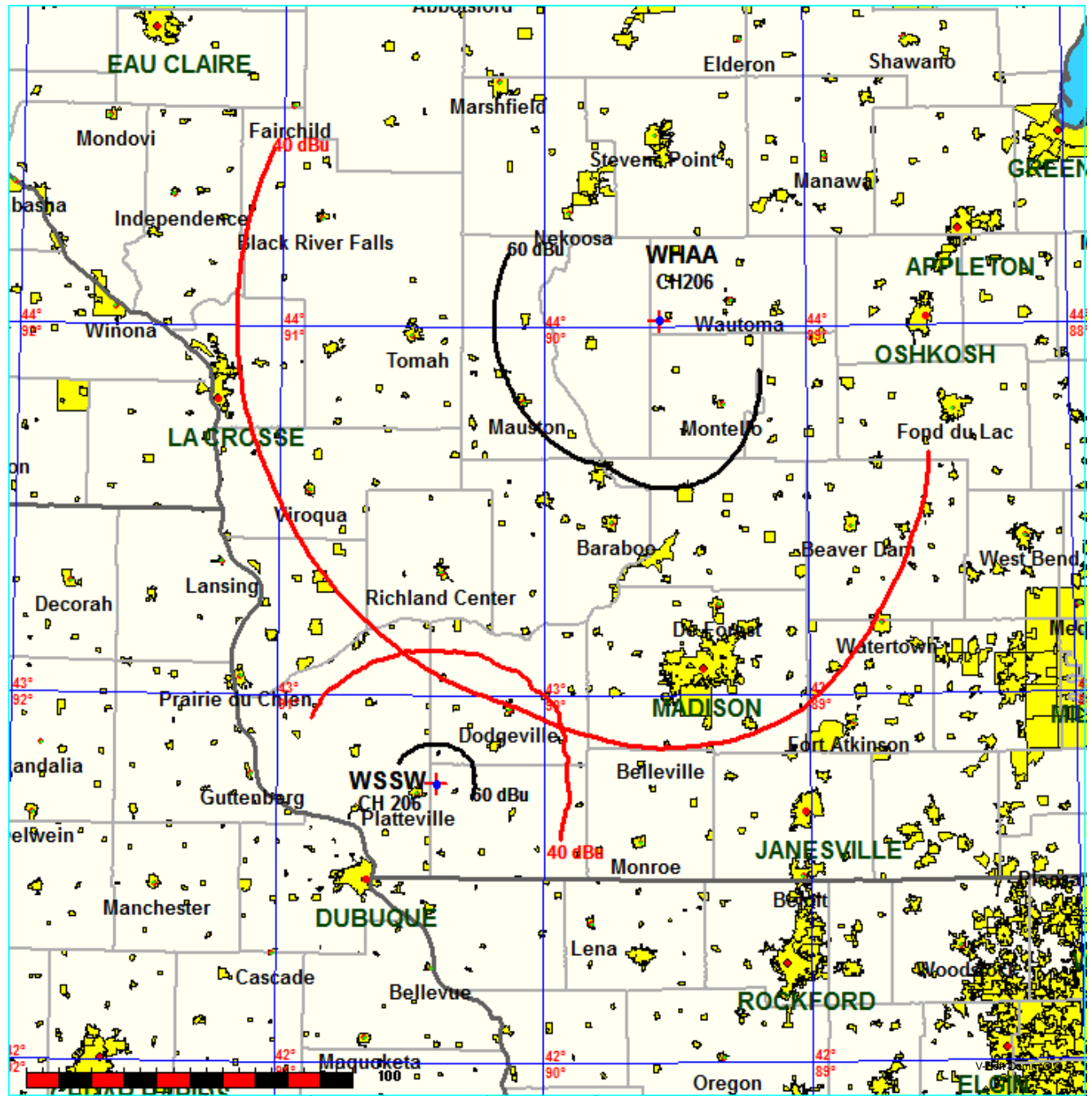
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
085.0	002.6000	0215.9	033.4	176.1	000.1300	0139.7	014.9	57.52
086.0	002.6000	0217.3	033.5	175.6	000.1300	0139.2	015.5	57.11
087.0	002.6000	0216.6	033.4	175.9	000.1300	0139.5	016.1	56.64
088.0	002.6000	0214.6	033.3	176.5	000.1300	0140.2	016.6	56.21
089.0	002.6000	0212.7	033.1	177.1	000.1300	0140.8	017.2	55.77
090.0	002.6000	0210.8	032.9	177.6	000.1300	0140.8	017.8	55.30
091.0	002.6000	0209.6	032.9	178.0	000.1300	0140.9	018.3	54.84
092.0	002.6000	0208.6	032.8	178.4	000.1300	0140.9	018.9	54.39
093.0	002.6000	0207.4	032.7	178.8	000.1300	0140.9	019.5	53.94
094.0	002.6000	0206.5	032.6	179.2	000.1300	0140.9	020.0	53.49
095.0	002.6000	0207.1	032.7	179.2	000.1300	0140.9	020.6	53.03
096.0	002.6000	0207.9	032.7	179.2	000.1300	0140.9	021.2	52.59
097.0	002.6000	0208.8	032.8	179.2	000.1300	0140.9	021.8	52.14
098.0	002.6000	0209.4	032.8	179.3	000.1300	0140.8	022.3	51.70
099.0	002.6000	0208.6	032.8	179.7	000.1300	0140.8	022.9	51.28
100.0	002.6000	0207.3	032.7	180.2	000.1300	0140.8	023.4	50.88
101.0	002.6000	0206.2	032.6	180.6	000.1300	0140.8	024.0	50.48
102.0	002.6000	0204.7	032.5	181.2	000.1300	0140.8	024.5	50.10
103.0	002.6000	0203.2	032.3	181.7	000.1300	0140.8	025.0	49.72
104.0	002.6000	0202.4	032.3	182.1	000.1300	0140.8	025.6	49.35
105.0	002.6000	0201.9	032.2	182.5	000.1300	0140.9	026.1	48.98
106.0	002.6000	0202.0	032.2	182.8	000.1300	0140.8	026.7	48.60
107.0	002.6000	0202.4	032.3	183.0	000.1300	0140.7	027.2	48.23
108.0	002.6000	0204.3	032.4	182.9	000.1300	0140.7	027.8	47.85
109.0	002.6000	0207.8	032.7	182.7	000.1300	0140.9	028.4	47.47
110.0	002.6000	0212.5	033.1	182.3	000.1300	0140.8	029.1	47.06
111.0	002.6000	0217.5	033.5	182.0	000.1300	0140.8	029.8	46.66
112.0	002.6000	0221.5	033.8	181.8	000.1300	0140.8	030.4	46.28
113.0	002.6000	0225.1	034.1	181.7	000.1300	0140.8	031.1	45.92
114.0	002.6000	0227.9	034.3	181.8	000.1300	0140.8	031.7	45.59
115.0	002.6000	0230.6	034.4	181.9	000.1300	0140.8	032.3	45.26
116.0	002.6000	0232.3	034.6	182.1	000.1300	0140.8	032.9	44.96
117.0	002.6000	0232.3	034.6	182.6	000.1300	0140.9	033.5	44.69
118.0	002.6000	0230.1	034.4	183.2	000.1300	0140.4	034.0	44.42
119.0	002.6000	0225.1	034.1	184.2	000.1300	0139.2	034.4	44.16
120.0	002.6000	0218.4	033.5	185.4	000.1300	0138.0	034.7	43.92

Contour-to-contour Map WSSW - WHAA
State Of Wisconsin-Educational Communications Board

FMCommander Single Allocation Study - 09-16-2014 - GLOBE 30 Sec
WSSW's Overlaps (In= 17.72 km, Out= 66.45 km)

WSSW CH 206 A
Lat= 42 45 50.7, Lng= 90 24 19.7
0.13 kW 131.5 M HAAT, 440 M COR
Prot.= 60 dBu, Intef.= 40 dBu

WHAA CH 206 C2 DA BLED20100212AAK
Lat= 44 01 13.0, Lng= 89 33 31.0
28.5 kW 177 M HAAT, 487 M COR
Prot.= 60 dBu, Intef.= 40 dBu



09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WSSW

WHAA BLED20100212AAK

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Protected

60 dBu

Channel = 206C2

Max ERP = 28.5 kW

RCAMSL = 487 M

N. Lat. 44 01 13.0

W. Lng. 89 33 31.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
326.0	000.1300	0122.9	012.1	210.4	028.5000	0160.3	149.8	35.63	
327.0	000.1300	0122.2	012.1	210.3	028.5000	0160.2	149.6	35.65	
328.0	000.1300	0121.9	012.1	210.3	028.5000	0160.2	149.4	35.68	
329.0	000.1300	0122.0	012.1	210.3	028.5000	0160.1	149.3	35.71	
330.0	000.1300	0122.8	012.1	210.2	028.5000	0160.1	149.1	35.74	
331.0	000.1300	0123.9	012.1	210.2	028.5000	0160.0	148.9	35.77	
332.0	000.1300	0124.4	012.2	210.2	028.5000	0160.0	148.7	35.80	
333.0	000.1300	0122.9	012.1	210.1	028.5000	0159.9	148.5	35.83	
334.0	000.1300	0120.4	012.0	210.0	028.5000	0159.8	148.4	35.84	
335.0	000.1300	0118.9	011.9	210.0	028.5000	0159.7	148.3	35.86	
336.0	000.1300	0118.7	011.9	209.9	028.5000	0159.6	148.1	35.89	
337.0	000.1300	0118.9	011.9	209.9	028.5000	0159.6	147.9	35.91	
338.0	000.1300	0118.2	011.9	209.8	028.5000	0159.5	147.8	35.93	
339.0	000.1300	0117.0	011.8	209.7	028.5000	0159.4	147.7	35.95	
340.0	000.1300	0116.2	011.8	209.7	028.5000	0159.3	147.5	35.97	
341.0	000.1300	0116.1	011.8	209.6	028.5000	0159.2	147.4	36.00	
342.0	000.1300	0116.1	011.8	209.6	028.5000	0159.1	147.2	36.02	
343.0	000.1300	0116.6	011.8	209.5	028.5000	0159.1	147.1	36.05	
344.0	000.1300	0117.7	011.9	209.5	028.5000	0159.0	146.9	36.08	
345.0	000.1300	0118.7	011.9	209.4	028.5000	0158.9	146.7	36.11	
346.0	000.1300	0118.9	011.9	209.4	028.5000	0158.9	146.6	36.13	
347.0	000.1300	0118.5	011.9	209.3	028.5000	0158.8	146.4	36.15	
348.0	000.1300	0117.4	011.8	209.2	028.5000	0158.7	146.3	36.16	
349.0	000.1300	0116.0	011.8	209.2	028.5000	0158.6	146.3	36.18	
350.0	000.1300	0115.1	011.7	209.1	028.5000	0158.5	146.2	36.19	
351.0	000.1300	0115.0	011.7	209.0	028.5000	0158.4	146.0	36.21	
352.0	000.1300	0115.3	011.7	209.0	028.5000	0158.3	145.9	36.23	
353.0	000.1300	0114.8	011.7	208.9	028.5000	0158.2	145.8	36.25	
354.0	000.1300	0114.2	011.7	208.8	028.5000	0158.1	145.7	36.26	
355.0	000.1300	0113.5	011.7	208.7	028.5000	0158.0	145.6	36.27	
356.0	000.1300	0113.3	011.7	208.7	028.5000	0157.9	145.5	36.29	
357.0	000.1300	0113.0	011.6	208.6	028.5000	0157.8	145.4	36.30	
358.0	000.1300	0112.9	011.6	208.5	028.5000	0157.7	145.3	36.32	
359.0	000.1300	0113.0	011.6	208.5	028.5000	0157.6	145.2	36.33	
000.0	000.1300	0113.1	011.6	208.4	028.5000	0157.5	145.1	36.35	
001.0	000.1300	0113.1	011.6	208.3	028.5000	0157.4	145.0	36.36	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
002.0	000.1300	0112.9	011.6	208.2	028.5000	0157.3	144.9	36.38
003.0	000.1300	0112.7	011.6	208.2	028.5000	0157.2	144.9	36.39
004.0	000.1300	0112.2	011.6	208.1	028.5000	0157.1	144.8	36.39
005.0	000.1300	0112.1	011.6	208.0	028.5000	0157.0	144.7	36.41
006.0	000.1300	0112.5	011.6	208.0	028.5000	0156.9	144.6	36.42
007.0	000.1300	0113.7	011.7	207.9	028.5000	0156.8	144.5	36.44
008.0	000.1300	0114.6	011.7	207.8	028.5000	0156.7	144.4	36.46
009.0	000.1300	0114.7	011.7	207.7	028.5000	0156.6	144.3	36.47
010.0	000.1300	0114.8	011.7	207.7	028.5000	0156.5	144.3	36.48
011.0	000.1300	0115.1	011.7	207.6	028.5000	0156.4	144.2	36.49
012.0	000.1300	0115.0	011.7	207.5	028.5000	0156.3	144.1	36.50
013.0	000.1300	0114.9	011.7	207.4	028.5000	0156.2	144.1	36.50
014.0	000.1300	0115.5	011.8	207.3	028.5000	0156.1	144.0	36.51
015.0	000.1300	0117.0	011.8	207.3	028.5000	0156.0	143.9	36.53
016.0	000.1300	0118.2	011.9	207.2	028.5000	0155.9	143.8	36.54
017.0	000.1300	0119.0	011.9	207.1	028.5000	0155.7	143.7	36.56
018.0	000.1300	0119.4	011.9	207.0	028.5000	0155.6	143.7	36.56
019.0	000.1300	0119.6	012.0	207.0	028.5000	0155.5	143.7	36.57
020.0	000.1300	0119.5	011.9	206.9	028.5000	0155.4	143.6	36.57
021.0	000.1300	0119.0	011.9	206.8	028.5000	0155.3	143.6	36.56
022.0	000.1300	0118.7	011.9	206.7	028.5000	0155.2	143.6	36.56
023.0	000.1300	0118.9	011.9	206.6	028.5000	0155.0	143.6	36.56
024.0	000.1300	0119.0	011.9	206.5	028.5000	0154.9	143.6	36.56
025.0	000.1300	0118.6	011.9	206.5	028.5000	0154.8	143.6	36.55
026.0	000.1300	0117.8	011.9	206.4	028.5000	0154.7	143.7	36.55
027.0	000.1300	0117.0	011.8	206.3	028.5000	0154.6	143.7	36.53
028.0	000.1300	0116.4	011.8	206.2	028.5000	0154.4	143.7	36.52
029.0	000.1300	0116.5	011.8	206.1	028.5000	0154.3	143.7	36.52
030.0	000.1300	0117.2	011.8	206.0	028.5000	0154.2	143.7	36.52
031.0	000.1300	0118.2	011.9	206.0	028.5000	0154.1	143.7	36.52
032.0	000.1300	0119.5	011.9	205.9	028.5000	0153.9	143.7	36.53
033.0	000.1300	0121.1	012.0	205.8	028.5000	0153.8	143.6	36.53
034.0	000.1300	0123.1	012.1	205.7	028.5000	0153.7	143.5	36.54
035.0	000.1300	0125.1	012.2	205.6	028.5000	0153.6	143.5	36.55
036.0	000.1300	0127.0	012.3	205.5	028.5000	0153.5	143.4	36.55
037.0	000.1300	0128.0	012.3	205.4	028.5000	0153.3	143.4	36.55
038.0	000.1300	0128.0	012.3	205.4	028.5000	0153.2	143.5	36.54
039.0	000.1300	0127.3	012.3	205.3	028.5000	0153.1	143.6	36.52
040.0	000.1300	0127.3	012.3	205.2	028.5000	0153.0	143.6	36.50
041.0	000.1300	0127.7	012.3	205.1	028.5000	0152.9	143.7	36.49
042.0	000.1300	0127.8	012.3	205.0	028.5000	0152.7	143.7	36.48
043.0	000.1300	0126.9	012.3	204.9	028.5000	0152.6	143.8	36.46
044.0	000.1300	0124.9	012.2	204.9	028.5000	0152.5	144.0	36.43
045.0	000.1300	0122.6	012.1	204.8	028.5000	0152.4	144.2	36.39
046.0	000.1300	0121.9	012.1	204.7	028.5000	0152.3	144.3	36.37
047.0	000.1300	0123.2	012.1	204.7	028.5000	0152.2	144.3	36.36
048.0	000.1300	0125.6	012.2	204.6	028.5000	0152.1	144.3	36.36
049.0	000.1300	0128.0	012.3	204.5	028.5000	0151.9	144.3	36.36
050.0	000.1300	0129.7	012.4	204.4	028.5000	0151.8	144.3	36.35
051.0	000.1300	0130.9	012.5	204.3	028.5000	0151.7	144.3	36.34
052.0	000.1300	0132.1	012.5	204.2	028.5000	0151.6	144.4	36.33

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
053.0	000.1300	0133.6	012.6	204.1	028.5000	0151.4	144.4	36.32
054.0	000.1300	0134.7	012.7	204.0	028.5000	0151.3	144.5	36.30
055.0	000.1300	0135.8	012.7	203.9	028.5000	0151.2	144.6	36.29
056.0	000.1300	0137.2	012.8	203.8	028.5000	0151.1	144.6	36.27
057.0	000.1300	0138.1	012.8	203.8	028.5000	0151.0	144.7	36.25
058.0	000.1300	0138.2	012.8	203.7	028.5000	0150.9	144.8	36.23
059.0	000.1300	0137.5	012.8	203.6	028.5000	0150.8	145.0	36.20
060.0	000.1300	0136.6	012.7	203.6	028.5000	0150.7	145.2	36.16
061.0	000.1300	0135.8	012.7	203.5	028.5000	0150.6	145.3	36.13
062.0	000.1300	0134.2	012.6	203.5	028.5000	0150.5	145.5	36.09
063.0	000.1300	0132.1	012.5	203.4	028.5000	0150.5	145.7	36.05
064.0	000.1300	0130.2	012.4	203.4	028.5000	0150.4	145.9	36.02
065.0	000.1300	0128.9	012.4	203.3	028.5000	0150.4	146.1	35.98
066.0	000.1300	0127.7	012.3	203.3	028.5000	0150.3	146.3	35.95
067.0	000.1300	0127.4	012.3	203.2	028.5000	0150.2	146.5	35.92
068.0	000.1300	0127.9	012.3	203.2	028.5000	0150.1	146.6	35.89
069.0	000.1300	0128.8	012.4	203.1	028.5000	0150.0	146.7	35.87
070.0	000.1300	0129.2	012.4	203.0	028.5000	0150.0	146.9	35.84
071.0	000.1300	0127.4	012.3	203.0	028.5000	0149.9	147.1	35.80
072.0	000.1300	0124.5	012.2	203.0	028.5000	0149.9	147.4	35.76
073.0	000.1300	0121.7	012.0	203.0	028.5000	0149.9	147.6	35.72
074.0	000.1300	0119.9	012.0	202.9	028.5000	0149.9	147.8	35.68
075.0	000.1300	0118.7	011.9	202.9	028.5000	0149.8	148.0	35.65
076.0	000.1300	0118.2	011.9	202.9	028.5000	0149.8	148.2	35.61
077.0	000.1300	0118.9	011.9	202.8	028.5000	0149.7	148.3	35.59
078.0	000.1300	0120.7	012.0	202.7	028.5000	0149.6	148.5	35.56
079.0	000.1300	0122.3	012.1	202.7	028.5000	0149.5	148.6	35.54
080.0	000.1300	0121.7	012.0	202.6	028.5000	0149.5	148.8	35.51
081.0	000.1300	0119.7	012.0	202.6	028.5000	0149.5	149.0	35.47
082.0	000.1300	0118.1	011.9	202.6	028.5000	0149.5	149.2	35.43
083.0	000.1300	0117.2	011.8	202.6	028.5000	0149.4	149.4	35.40
084.0	000.1300	0117.1	011.8	202.5	028.5000	0149.4	149.6	35.37
085.0	000.1300	0115.8	011.8	202.5	028.5000	0149.4	149.8	35.34

09-16-2014

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WHAA BLED20100212AAK

WSSW

Channel = 206C2

Max ERP = 28.5 kW

RCAMSL = 487 M

N. Lat. 44 01 13.0

W. Lng. 89 33 31.0

Protected

60 dBu

Channel = 206A

Max ERP = 0.13 kW

RCAMSL = 440 M

N. Lat. 42 45 50.7

W. Lng. 90 24 19.7

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
146.0	012.2347	0204.2	045.1	042.2	000.1300	0127.7	138.9	13.32	
147.0	012.7898	0203.8	045.4	042.3	000.1300	0127.7	138.0	13.48	
148.0	013.3573	0202.9	045.7	042.3	000.1300	0127.7	137.2	13.65	
149.0	013.9371	0202.1	046.1	042.3	000.1300	0127.7	136.3	13.82	
150.0	014.5292	0201.7	046.4	042.4	000.1300	0127.7	135.5	13.99	
151.0	015.2085	0201.6	046.8	042.4	000.1300	0127.6	134.6	14.16	
152.0	015.9033	0201.7	047.2	042.5	000.1300	0127.6	133.7	14.34	
153.0	016.6136	0201.8	047.6	042.5	000.1300	0127.5	132.8	14.52	
154.0	017.3394	0201.3	047.9	042.5	000.1300	0127.5	131.9	14.69	
155.0	018.0807	0200.5	048.2	042.5	000.1300	0127.5	131.0	14.87	
156.0	018.8376	0199.7	048.5	042.5	000.1300	0127.5	130.1	15.04	
157.0	019.6100	0198.9	048.8	042.5	000.1300	0127.6	129.2	15.21	
158.0	020.3979	0197.9	049.1	042.4	000.1300	0127.6	128.3	15.38	
159.0	021.2013	0197.0	049.4	042.4	000.1300	0127.6	127.4	15.55	
160.0	022.0203	0196.3	049.7	042.3	000.1300	0127.7	126.5	15.72	
161.0	022.5039	0195.7	049.8	042.2	000.1300	0127.7	125.6	15.87	
162.0	022.9928	0195.4	050.0	042.1	000.1300	0127.8	124.8	16.03	
163.0	023.4869	0195.0	050.1	041.9	000.1300	0127.8	124.0	16.18	
164.0	023.9862	0194.3	050.3	041.8	000.1300	0127.8	123.2	16.32	
165.0	024.4909	0193.4	050.4	041.6	000.1300	0127.8	122.4	16.47	
166.0	025.0008	0192.2	050.5	041.4	000.1300	0127.8	121.6	16.61	
167.0	025.5159	0191.0	050.5	041.2	000.1300	0127.8	120.8	16.74	
168.0	026.0363	0189.7	050.6	041.0	000.1300	0127.7	120.0	16.88	
169.0	026.5619	0188.4	050.7	040.8	000.1300	0127.6	119.3	17.01	
170.0	027.0928	0187.3	050.8	040.5	000.1300	0127.5	118.5	17.14	
171.0	027.2319	0186.1	050.7	040.2	000.1300	0127.4	117.9	17.25	
172.0	027.3714	0184.9	050.7	039.9	000.1300	0127.2	117.3	17.36	
173.0	027.5112	0184.1	050.6	039.6	000.1300	0127.2	116.6	17.47	
174.0	027.6514	0183.8	050.7	039.3	000.1300	0127.2	116.0	17.59	
175.0	027.7920	0183.8	050.7	039.1	000.1300	0127.3	115.3	17.72	
176.0	027.9329	0183.6	050.7	038.7	000.1300	0127.5	114.7	17.84	
177.0	028.0741	0183.3	050.7	038.4	000.1300	0127.7	114.1	17.96	
178.0	028.2157	0182.6	050.7	038.1	000.1300	0127.9	113.5	18.08	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
179.0	028.3577	0182.1	050.7	037.7	000.1300	0128.1	112.9	18.19
180.0	028.5000	0181.6	050.7	037.4	000.1300	0128.2	112.4	18.30
181.0	028.5000	0181.1	050.7	037.0	000.1300	0128.0	111.9	18.39
182.0	028.5000	0180.2	050.6	036.6	000.1300	0127.8	111.4	18.47
183.0	028.5000	0178.7	050.5	036.2	000.1300	0127.3	111.0	18.53
184.0	028.5000	0177.1	050.3	035.8	000.1300	0126.6	110.7	18.58
185.0	028.5000	0175.7	050.2	035.4	000.1300	0125.9	110.3	18.62
186.0	028.5000	0174.0	050.0	034.9	000.1300	0125.0	110.0	18.65
187.0	028.5000	0171.8	049.8	034.5	000.1300	0124.0	109.8	18.66
188.0	028.5000	0169.4	049.5	034.0	000.1300	0123.1	109.6	18.67
189.0	028.5000	0167.3	049.3	033.5	000.1300	0122.1	109.5	18.67
190.0	028.5000	0165.7	049.1	033.1	000.1300	0121.3	109.3	18.68
191.0	028.5000	0164.1	048.9	032.6	000.1300	0120.5	109.1	18.69
192.0	028.5000	0162.9	048.8	032.2	000.1300	0119.8	108.9	18.70
193.0	028.5000	0161.7	048.7	031.8	000.1300	0119.1	108.8	18.71
194.0	028.5000	0160.1	048.5	031.3	000.1300	0118.5	108.7	18.71
195.0	028.5000	0157.7	048.2	030.8	000.1300	0118.0	108.7	18.68
196.0	028.5000	0155.2	047.8	030.4	000.1300	0117.5	108.8	18.65
197.0	028.5000	0152.8	047.5	029.9	000.1300	0117.1	108.9	18.61
198.0	028.5000	0150.7	047.2	029.4	000.1300	0116.7	109.0	18.58
199.0	028.5000	0149.1	047.0	029.0	000.1300	0116.5	109.0	18.57
200.0	028.5000	0148.2	046.9	028.6	000.1300	0116.3	109.0	18.57
201.0	028.5000	0148.2	046.9	028.1	000.1300	0116.4	108.9	18.59
202.0	028.5000	0148.8	047.0	027.7	000.1300	0116.5	108.7	18.64
203.0	028.5000	0149.9	047.1	027.3	000.1300	0116.8	108.5	18.69
204.0	028.5000	0151.3	047.3	026.9	000.1300	0117.1	108.3	18.75
205.0	028.5000	0152.7	047.5	026.4	000.1300	0117.5	108.0	18.81
206.0	028.5000	0154.1	047.7	026.0	000.1300	0117.8	107.8	18.86
207.0	028.5000	0155.6	047.9	025.5	000.1300	0118.2	107.6	18.91
208.0	028.5000	0157.0	048.1	025.1	000.1300	0118.5	107.5	18.96
209.0	028.5000	0158.3	048.2	024.6	000.1300	0118.8	107.4	18.99
210.0	028.5000	0159.7	048.4	024.2	000.1300	0119.0	107.2	19.02
211.0	028.5000	0161.1	048.6	023.7	000.1300	0119.0	107.2	19.04
212.0	028.5000	0162.3	048.7	023.3	000.1300	0119.0	107.1	19.05
213.0	028.5000	0163.2	048.8	022.8	000.1300	0118.9	107.2	19.04
214.0	028.5000	0163.8	048.9	022.3	000.1300	0118.8	107.2	19.02
215.0	028.5000	0164.1	048.9	021.9	000.1300	0118.7	107.4	18.99
216.0	028.5000	0164.3	049.0	021.5	000.1300	0118.8	107.5	18.95
217.0	028.5000	0164.5	049.0	021.0	000.1300	0119.0	107.7	18.92
218.0	028.5000	0164.6	049.0	020.6	000.1300	0119.2	108.0	18.88
219.0	028.5000	0164.7	049.0	020.1	000.1300	0119.4	108.2	18.83
220.0	028.5000	0164.9	049.0	019.7	000.1300	0119.6	108.5	18.79
221.0	028.5000	0165.4	049.1	019.3	000.1300	0119.7	108.7	18.74
222.0	028.5000	0166.0	049.2	018.8	000.1300	0119.6	109.0	18.69
223.0	028.5000	0166.8	049.3	018.4	000.1300	0119.5	109.2	18.63
224.0	028.5000	0167.6	049.3	018.0	000.1300	0119.4	109.5	18.57
225.0	028.5000	0168.3	049.4	017.6	000.1300	0119.3	109.8	18.50
226.0	028.5000	0168.9	049.5	017.1	000.1300	0119.1	110.2	18.43
227.0	028.5000	0169.4	049.5	016.7	000.1300	0118.9	110.5	18.35
228.0	028.5000	0169.8	049.6	016.3	000.1300	0118.6	110.9	18.26
229.0	028.5000	0170.2	049.6	015.9	000.1300	0118.2	111.4	18.17

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
230.0	028.5000	0170.5	049.7	015.6	000.1300	0117.8	111.8	18.07
231.0	028.5000	0170.9	049.7	015.2	000.1300	0117.3	112.3	17.97
232.0	028.5000	0171.2	049.7	014.8	000.1300	0116.7	112.7	17.86
233.0	028.5000	0171.6	049.8	014.5	000.1300	0116.2	113.2	17.75
234.0	028.5000	0172.1	049.8	014.1	000.1300	0115.7	113.7	17.64
235.0	028.5000	0172.6	049.9	013.7	000.1300	0115.2	114.3	17.53
236.0	028.5000	0173.0	049.9	013.4	000.1300	0115.0	114.8	17.43
237.0	028.5000	0173.3	050.0	013.1	000.1300	0114.9	115.4	17.32
238.0	028.5000	0173.5	050.0	012.8	000.1300	0114.9	116.0	17.22
239.0	028.5000	0173.5	050.0	012.5	000.1300	0115.0	116.6	17.11
240.0	028.5000	0173.5	050.0	012.2	000.1300	0115.0	117.2	17.00
241.0	028.5000	0173.5	050.0	011.9	000.1300	0115.0	117.9	16.88
242.0	028.5000	0173.4	050.0	011.6	000.1300	0115.0	118.5	16.77
243.0	028.5000	0173.4	050.0	011.3	000.1300	0115.1	119.2	16.65
244.0	028.5000	0173.4	050.0	011.1	000.1300	0115.1	119.9	16.53
245.0	028.5000	0173.5	050.0	010.8	000.1300	0115.0	120.6	16.41
246.0	028.5000	0173.6	050.0	010.6	000.1300	0115.0	121.3	16.28
247.0	028.5000	0173.7	050.0	010.3	000.1300	0114.9	122.0	16.16
248.0	028.5000	0173.8	050.0	010.1	000.1300	0114.8	122.7	16.03
249.0	028.5000	0174.0	050.0	009.9	000.1300	0114.8	123.4	15.90
250.0	028.5000	0174.3	050.1	009.7	000.1300	0114.7	124.2	15.77
251.0	028.5000	0174.8	050.1	009.4	000.1300	0114.7	124.9	15.64
252.0	028.5000	0175.6	050.2	009.2	000.1300	0114.7	125.6	15.51
253.0	028.5000	0176.5	050.3	009.0	000.1300	0114.7	126.4	15.38
254.0	028.5000	0177.3	050.4	008.8	000.1300	0114.7	127.1	15.24
255.0	028.5000	0178.2	050.4	008.6	000.1300	0114.7	127.9	15.10
256.0	028.5000	0179.1	050.5	008.4	000.1300	0114.7	128.7	14.95
257.0	028.5000	0179.8	050.6	008.2	000.1300	0114.7	129.5	14.80
258.0	028.5000	0180.2	050.6	008.1	000.1300	0114.6	130.3	14.65
259.0	028.5000	0180.5	050.6	007.9	000.1300	0114.5	131.1	14.49
260.0	028.5000	0180.6	050.7	007.8	000.1300	0114.5	131.9	14.32
261.0	028.5000	0180.8	050.7	007.7	000.1300	0114.4	132.8	14.16
262.0	028.5000	0180.9	050.7	007.6	000.1300	0114.3	133.6	13.99
263.0	028.5000	0180.9	050.7	007.5	000.1300	0114.2	134.5	13.82
264.0	028.5000	0180.8	050.7	007.4	000.1300	0114.1	135.3	13.65
265.0	028.5000	0180.9	050.7	007.3	000.1300	0114.0	136.2	13.48