

Doug Vernier, Telecommunications Consultants
401 Main St., Ste 213, Cedar Falls, IA 50613

Channel Study - Contour to Contour
Edgewater Broadcasting, Inc.

REFERENCE CH# 265D - 100.9 MHz, Pwr= 0.16 kW DA, HAAT= 127.9 M, COR= 490.7 M DISPLAY DATES
44 36 48.0 N. Average Protected F(50-50)= 12.97 km DATA 10-17-15
90 02 14.0 W. Standard Directional SEARCH 10-17-15

CH CITY	CALL	TYPE STATE	ANT AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
263C3 WDTX Rothschild		LIC NC_ WI	40.7 220.9	32.82 BLH20100125AAO	44 50 13.0 89 45 57.0	25.000 84	3.8 461	36.9 Sunrise Broadcasting Llc.	-4.2*<***
262D W262AX Marshfield		LIC V_ WI	296.9 116.8	9.02 BLFT20070618AAH	44 38 59.9 90 08 20.5	0.250 14	1.1 387	7.1 Edgewater Broadcasting, In	1.1
265D W265CR Nekoosa		LIC V_ WI	161.0 341.1	31.96 BLFT20131024AAT	44 20 29.4 89 54 22.3	0.120	19.6 328	5.9 Wrvm, Inc.	10.5
266D W266CC Abbotsford		CP C_ WI	329.2 149.0	43.21 BMPFT20150507ABD	44 56 49.1 90 19 05.2	0.120	10.2 450	7.0 Wrvm, Inc.	19.4
268C3 WWJC Augusta		LIC CX WI	274.7 94.1	73.30 BLED20140801AHI	44 39 50.0 90 57 40.0	1.000 466	2.1 785	38.5 Lbn, Inc.	34.1
265C3 AU9498263 Tomahawk		VAC WI	9.3 189.4	99.93 RM10985	45 30 01.0 89 49 50.0	25.000 100	114.0 559	39.9 Results Broadcasting Of Rh	41.3
265C3 1599592 Tomahawk		RSV-A WI	9.3 189.4	99.93	45 30 01.0 89 49 50.0	25.000 100	114.0 559	39.9 Results Broadcasting Of Rh	41.3
265C3 1560164 Tomahawk		APP WI	9.3 189.4	99.93 BSFH20130204ACZ	45 30 01.0 89 49 50.0	25.000 100	114.0 559	39.9 Results Broadcasting Of Rh	41.3
265C3 1598907 Tomahawk		APP NCX WI	20.0 200.3	87.51 BNPH20130724AFV	45 21 08.0 89 39 13.0	3.000 149	85.9 599	30.3 Results Broadcasting Of Rh	41.7
267D W267BB Wausau		LIC C_ WI	38.1 218.3	48.11 BLFT20111011AAY	44 57 12.4 89 39 36.9	0.120 18	0.8 409	5.9 Wrvm, Inc.	42.1
264C1 WBIZ-FM Eau Claire		LIC CN WI	287.0 105.9	123.83 BLH19970410KA	44 55 44.0 91 32 31.0	100.000 147	90.4 441	60.5 Capstar Tx Llc	46.0
211A WVCS Owen		LIC DCX WI	321.4 141.1	57.91 BLED20120725AFH	45 01 11.0 90 29 48.0	1.900 153	39.1 558	25.8 Vcy America, Inc.	9.5R 48.4M

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= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
Incoming contour overlap is ignored.
***affixed to 'IN' or 'OUT' values = site inside restricted contour.
Reference station has protected zone issue: AM tower - Fill-in to be located on the AM tower
<*** Protected using U/D, see Satellite Map and distance to contour table - WDTX Signal at proposed site = 62.4 dBu

HOW TO READ THE FM COMPUTER PRINT-OUT

Translator Reference Station

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. The 60 dBu protected contour is predicted from the Commission's F(50-50) table. 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.

All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90. The column labeled "* OUT *" shows the greatest distance in kilometers of overlap (or smallest distance 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. Since translators are able to receive interference there is no "In" or incoming column in this report.

Listed antenna heights and power are the specific antenna heights and power from the FCC database.

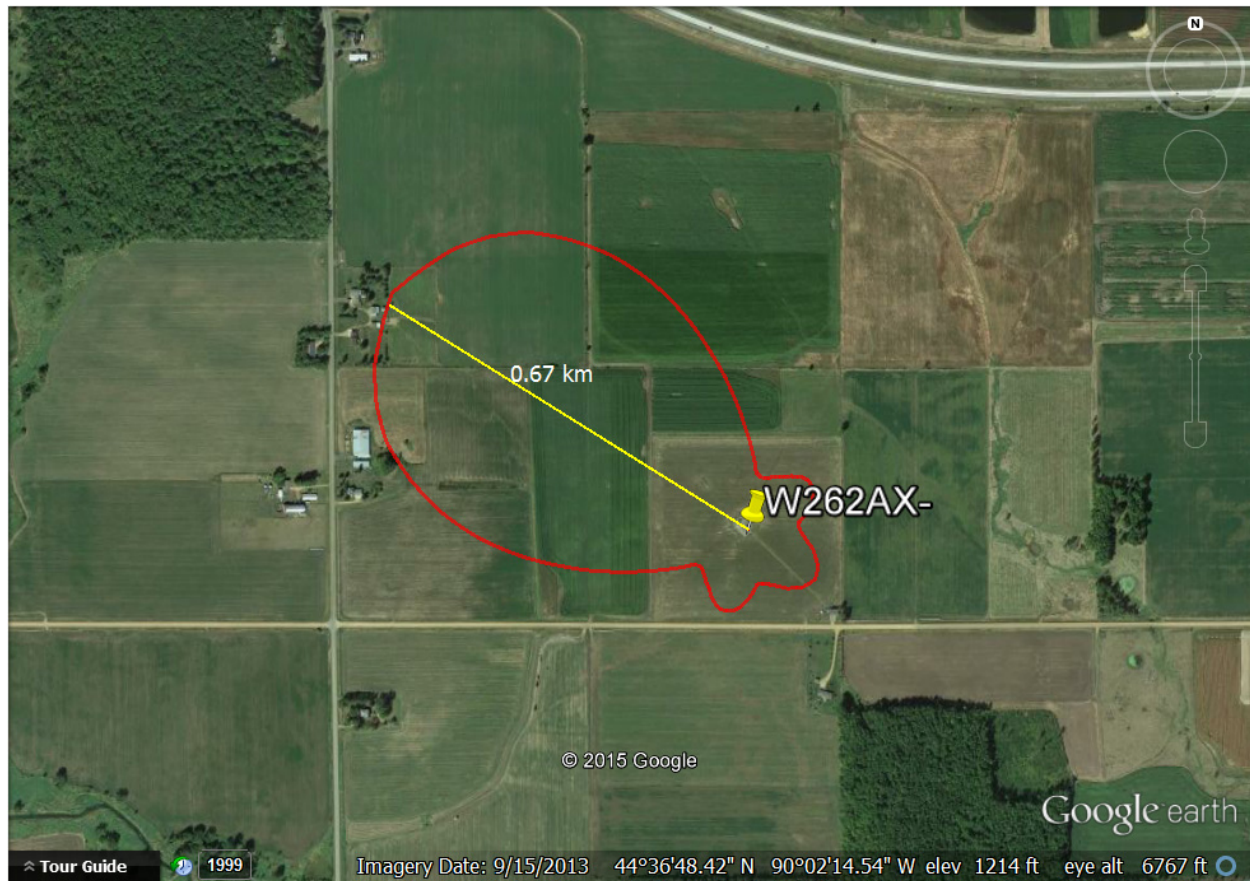
Under the "AZI" column, the first row of numbers indicate the True North azimuths from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station. Bearings are calculated using spherical trigonometry.

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 the minimum spacings the "OUT" columns change its significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column displays the **available clear space** separation 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 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.

Satellite Map – 102.4 dBu Contour (62.4 dBu + 40 dBu U/D)



N. Lat. = 443648.0 W. Lng. = 900214.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - GLOBE 30 SEC

Proposed 2nd adjacent interference contour

Azi.	AV EL	HAAT	ERP kw	dBk	Field	102.4-F1
000	367.8	122.9	0.0088	-20.54	0.235	0.16
010	368.6	122.1	0.0031	-25.04	0.140	0.09
020	362.2	128.5	0.0030	-25.29	0.136	0.09
030	357.7	133.0	0.0037	-24.32	0.152	0.10
040	357.1	133.6	0.0047	-23.25	0.172	0.12
050	360.0	130.7	0.0057	-22.48	0.188	0.13
060	356.1	134.6	0.0052	-22.85	0.180	0.12
070	358.1	132.6	0.0037	-24.32	0.152	0.10
080	359.0	131.7	0.0024	-26.16	0.123	0.08
090	361.4	129.3	0.0026	-25.81	0.128	0.09
100	358.9	131.8	0.0035	-24.55	0.148	0.10
110	351.7	139.0	0.0047	-23.25	0.172	0.12
120	358.2	132.5	0.0057	-22.43	0.189	0.13
130	358.4	132.3	0.0056	-22.52	0.187	0.13
140	352.0	138.7	0.0045	-23.45	0.168	0.11
150	351.9	138.8	0.0033	-24.85	0.143	0.10
160	350.1	140.6	0.0025	-25.95	0.126	0.08
170	350.2	140.5	0.0026	-25.88	0.127	0.09
180	356.0	134.7	0.0040	-23.99	0.158	0.11
190	359.2	131.5	0.0054	-22.66	0.184	0.12
200	355.5	135.2	0.0056	-22.52	0.187	0.13
210	353.4	137.3	0.0045	-23.45	0.168	0.11
220	353.8	136.9	0.0035	-24.55	0.148	0.10
230	359.1	131.6	0.0029	-25.35	0.135	0.09
240	364.4	126.3	0.0036	-24.38	0.151	0.10
250	369.1	121.6	0.0111	-19.56	0.263	0.18
260	370.2	120.5	0.0315	-15.01	0.444	0.30
270	373.5	117.2	0.0668	-11.75	0.646	0.43
280	377.7	113.0	0.1050	-9.79	0.810	0.55
290	377.9	112.8	0.1360	-8.66	0.922	0.62
300	386.2	104.5	0.1540	-8.13	0.981	0.66
310	381.1	109.6	0.1509	-8.21	0.971	0.65
320	373.2	117.5	0.1310	-8.83	0.905	0.61
330	367.4	123.3	0.0973	-10.12	0.780	0.52
340	365.8	124.9	0.0591	-12.28	0.608	0.41
350	367.4	123.3	0.0262	-15.81	0.405	0.27

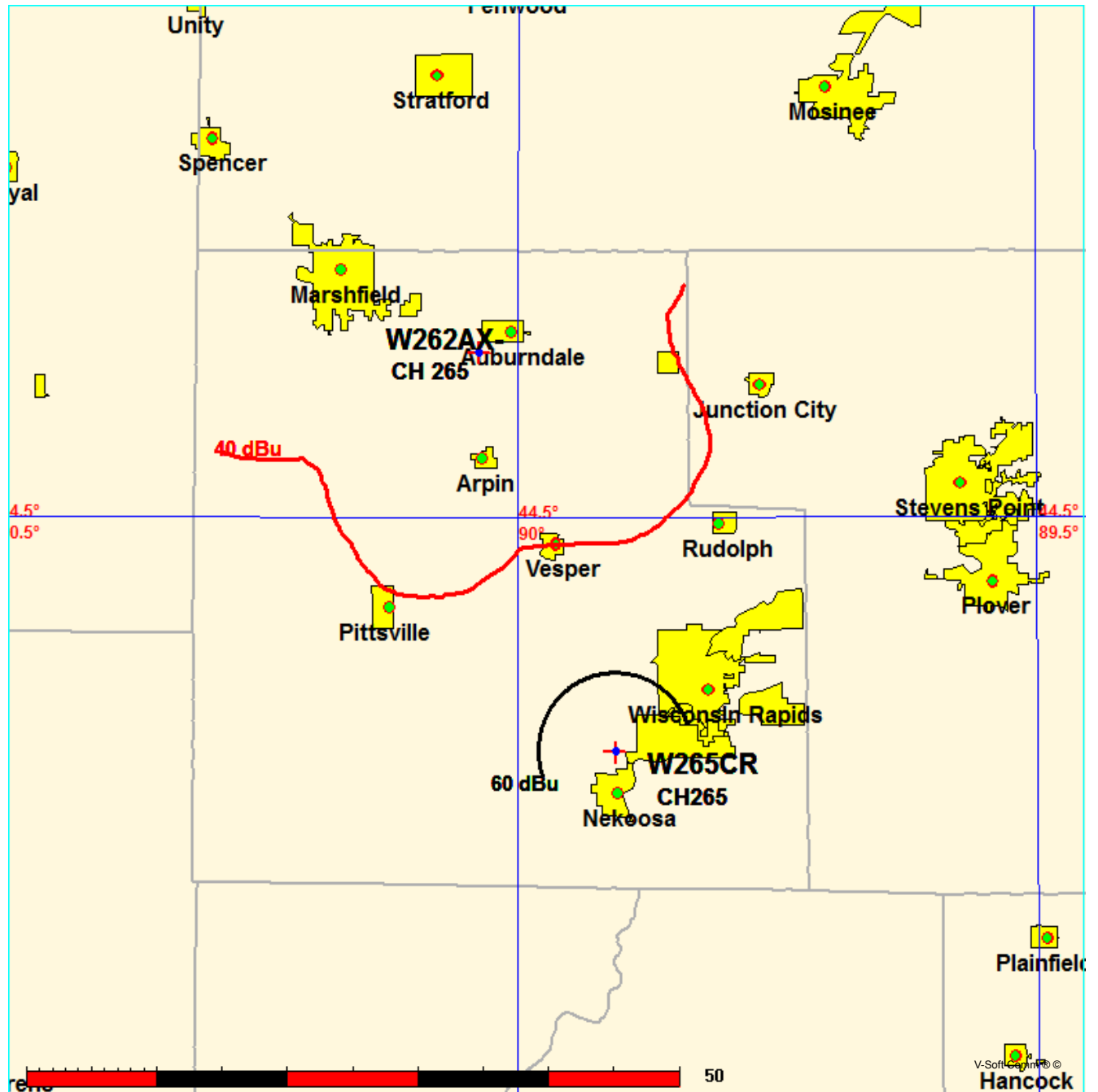
Ave E1= 362.51 M HAAT= 128.19 M AMSL= 490.7

Channel Study - Contour to Contour

FMCommander Single Allocation Study - 11-17-2015 - GLOBE 30 Sec
W262AX-'s Overlaps (In= 7.25 km, Out= 10.47 km)

W262AX- CH 265 D DA
Lat= 44 36 48.0, Lng= 90 02 14.0
0.16 kW 127.9 m HAAT, 490.7 m COR
Prot.= 60 dBu, Intef.= 40 dBu

W265CR CH 265 D BLFT20131024AAT
Lat= 44 20 29.4, Lng= 89 54 22.3
0.12 kW 0 m HAAT, 328 m COR
Prot.= 60 dBu, Intef.= 40 dBu



11-17-2015

Terrain Data: GLOBE 30 Sec

FMOver Analysis

W265CR BLFT20131024AAT

W262AX-

Channel = 265D

Max ERP = 0.12 kW

RCAMSL = 328 m

N. Lat. 44 20 29.4

W. Lng. 89 54 22.3

Protected

60 dBu

Channel = 265D

Max ERP = 0.16 kW

RCAMSL = 490.7 m

N. Lat. 44 36 48.0

W. Lng. 90 02 14.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
281.0	000.1200	0022.2	005.9	171.0	000.0027	0140.3	029.5	29.98	
282.0	000.1200	0022.0	005.9	170.9	000.0027	0140.3	029.4	30.03	
283.0	000.1200	0021.9	005.9	170.8	000.0027	0140.4	029.3	30.07	
284.0	000.1200	0021.8	005.9	170.7	000.0027	0140.4	029.2	30.11	
285.0	000.1200	0021.7	005.9	170.7	000.0027	0140.4	029.1	30.15	
286.0	000.1200	0021.5	005.9	170.6	000.0027	0140.4	029.0	30.19	
287.0	000.1200	0021.1	005.9	170.5	000.0026	0140.4	028.9	30.23	
288.0	000.1200	0020.8	005.9	170.4	000.0026	0140.4	028.8	30.27	
289.0	000.1200	0020.6	005.9	170.3	000.0026	0140.5	028.7	30.31	
290.0	000.1200	0020.4	005.9	170.2	000.0026	0140.5	028.6	30.34	
291.0	000.1200	0020.3	005.9	170.1	000.0026	0140.5	028.5	30.38	
292.0	000.1200	0020.1	005.9	170.0	000.0026	0140.5	028.4	30.41	
293.0	000.1200	0019.9	005.9	169.9	000.0026	0140.4	028.4	30.43	
294.0	000.1200	0019.7	005.9	169.8	000.0025	0140.4	028.3	30.45	
295.0	000.1200	0019.5	005.9	169.6	000.0025	0140.4	028.2	30.47	
296.0	000.1200	0019.3	005.9	169.5	000.0025	0140.4	028.1	30.49	
297.0	000.1200	0019.1	005.9	169.4	000.0025	0140.4	028.0	30.50	
298.0	000.1200	0018.8	005.9	169.3	000.0025	0140.3	027.9	30.52	
299.0	000.1200	0018.4	005.9	169.1	000.0024	0140.3	027.9	30.53	
300.0	000.1200	0017.9	005.9	169.0	000.0024	0140.3	027.8	30.54	
301.0	000.1200	0017.4	005.9	168.8	000.0024	0140.2	027.7	30.58	
302.0	000.1200	0016.8	005.9	168.7	000.0024	0140.2	027.6	30.63	
303.0	000.1200	0016.2	005.9	168.6	000.0024	0140.1	027.6	30.67	
304.0	000.1200	0015.7	005.9	168.4	000.0024	0140.0	027.5	30.71	
305.0	000.1200	0015.3	005.9	168.3	000.0024	0139.9	027.4	30.76	
306.0	000.1200	0015.0	005.9	168.1	000.0024	0139.9	027.3	30.80	
307.0	000.1200	0014.9	005.9	167.9	000.0024	0139.8	027.3	30.84	
308.0	000.1200	0014.8	005.9	167.8	000.0024	0139.8	027.2	30.88	
309.0	000.1200	0014.7	005.9	167.6	000.0024	0139.7	027.1	30.92	
310.0	000.1200	0014.5	005.9	167.4	000.0024	0139.7	027.1	30.96	
311.0	000.1200	0014.3	005.9	167.3	000.0024	0139.7	027.0	31.00	
312.0	000.1200	0014.0	005.9	167.1	000.0024	0139.6	027.0	31.03	
313.0	000.1200	0013.7	005.9	166.9	000.0024	0139.6	026.9	31.07	
314.0	000.1200	0013.5	005.9	166.7	000.0024	0139.6	026.8	31.11	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
315.0	000.1200	0013.2	005.9	166.5	000.0024	0139.6	026.8	31.15
316.0	000.1200	0013.0	005.9	166.3	000.0024	0139.6	026.7	31.18
317.0	000.1200	0012.8	005.9	166.1	000.0024	0139.7	026.7	31.22
318.0	000.1200	0012.6	005.9	166.0	000.0024	0139.7	026.6	31.25
319.0	000.1200	0012.3	005.9	165.8	000.0024	0139.8	026.6	31.29
320.0	000.1200	0011.9	005.9	165.6	000.0024	0139.8	026.5	31.32
321.0	000.1200	0011.6	005.9	165.4	000.0024	0139.9	026.5	31.36
322.0	000.1200	0011.4	005.9	165.2	000.0024	0140.0	026.5	31.39
323.0	000.1200	0011.3	005.9	164.9	000.0024	0140.0	026.4	31.42
324.0	000.1200	0011.1	005.9	164.7	000.0024	0140.1	026.4	31.45
325.0	000.1200	0010.9	005.9	164.5	000.0024	0140.1	026.3	31.48
326.0	000.1200	0010.6	005.9	164.3	000.0024	0140.2	026.3	31.50
327.0	000.1200	0010.3	005.9	164.1	000.0024	0140.3	026.3	31.53
328.0	000.1200	0010.1	005.9	163.9	000.0024	0140.3	026.2	31.56
329.0	000.1200	0009.9	005.9	163.7	000.0024	0140.4	026.2	31.60
330.0	000.1200	0009.6	005.9	163.5	000.0024	0140.5	026.2	31.64
331.0	000.1200	0009.3	005.9	163.2	000.0025	0140.5	026.2	31.67
332.0	000.1200	0009.0	005.9	163.0	000.0025	0140.6	026.2	31.70
333.0	000.1200	0008.7	005.9	162.8	000.0025	0140.6	026.1	31.73
334.0	000.1200	0008.5	005.9	162.6	000.0025	0140.6	026.1	31.76
335.0	000.1200	0008.3	005.9	162.3	000.0025	0140.7	026.1	31.79
336.0	000.1200	0007.8	005.9	162.1	000.0025	0140.7	026.1	31.82
337.0	000.1200	0007.4	005.9	161.9	000.0025	0140.7	026.1	31.83
338.0	000.1200	0007.1	005.9	161.7	000.0025	0140.7	026.1	31.84
339.0	000.1200	0006.8	005.9	161.4	000.0025	0140.7	026.1	31.84
340.0	000.1200	0006.5	005.9	161.2	000.0025	0140.7	026.1	31.85
341.0	000.1200	0006.1	005.9	161.0	000.0025	0140.7	026.1	31.85
342.0	000.1200	0005.7	005.9	160.8	000.0025	0140.7	026.1	31.86
343.0	000.1200	0005.5	005.9	160.5	000.0025	0140.7	026.1	31.87
344.0	000.1200	0005.5	005.9	160.3	000.0025	0140.6	026.1	31.88
345.0	000.1200	0005.3	005.9	160.1	000.0025	0140.6	026.1	31.89
346.0	000.1200	0005.0	005.9	159.9	000.0025	0140.5	026.1	31.89
347.0	000.1200	0004.6	005.9	159.6	000.0026	0140.5	026.1	31.90
348.0	000.1200	0004.1	005.9	159.4	000.0026	0140.4	026.1	31.90
349.0	000.1200	0003.6	005.9	159.2	000.0026	0140.4	026.1	31.90
350.0	000.1200	0003.2	005.9	159.0	000.0026	0140.4	026.2	31.90
351.0	000.1200	0002.9	005.9	158.7	000.0026	0140.3	026.2	31.90
352.0	000.1200	0002.7	005.9	158.5	000.0026	0140.3	026.2	31.90
353.0	000.1200	0002.6	005.9	158.3	000.0026	0140.3	026.2	31.90
354.0	000.1200	0002.5	005.9	158.1	000.0026	0140.3	026.2	31.89
355.0	000.1200	0002.4	005.9	157.9	000.0026	0140.3	026.3	31.90
356.0	000.1200	0002.3	005.9	157.7	000.0026	0140.3	026.3	31.90
357.0	000.1200	0002.2	005.9	157.5	000.0027	0140.3	026.3	31.91
358.0	000.1200	0002.2	005.9	157.2	000.0027	0140.2	026.4	31.91
359.0	000.1200	0002.3	005.9	157.0	000.0027	0140.2	026.4	31.91
000.0	000.1200	0002.3	005.9	156.8	000.0027	0140.2	026.5	31.91
001.0	000.1200	0002.3	005.9	156.6	000.0027	0140.1	026.5	31.91
002.0	000.1200	0002.4	005.9	156.4	000.0028	0140.1	026.5	31.90
003.0	000.1200	0002.7	005.9	156.2	000.0028	0140.1	026.6	31.90
004.0	000.1200	0003.1	005.9	156.0	000.0028	0140.0	026.6	31.89
005.0	000.1200	0003.4	005.9	155.8	000.0028	0140.0	026.7	31.87

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
006.0	000.1200	0003.9	005.9	155.6	000.0028	0139.9	026.7	31.84
007.0	000.1200	0004.5	005.9	155.4	000.0028	0139.9	026.8	31.82
008.0	000.1200	0004.9	005.9	155.3	000.0028	0139.8	026.8	31.79
009.0	000.1200	0005.2	005.9	155.1	000.0028	0139.8	026.9	31.76
010.0	000.1200	0005.6	005.9	154.9	000.0028	0139.7	027.0	31.74
011.0	000.1200	0005.9	005.9	154.7	000.0029	0139.7	027.0	31.72
012.0	000.1200	0006.0	005.9	154.5	000.0029	0139.6	027.1	31.70
013.0	000.1200	0006.0	005.9	154.4	000.0029	0139.5	027.1	31.67
014.0	000.1200	0006.2	005.9	154.2	000.0029	0139.4	027.2	31.64
015.0	000.1200	0006.3	005.9	154.0	000.0029	0139.4	027.3	31.62
016.0	000.1200	0006.7	005.9	153.9	000.0029	0139.3	027.3	31.59
017.0	000.1200	0007.3	005.9	153.7	000.0029	0139.2	027.4	31.56
018.0	000.1200	0008.1	005.9	153.6	000.0030	0139.1	027.5	31.53
019.0	000.1200	0009.1	005.9	153.4	000.0030	0139.0	027.5	31.49
020.0	000.1200	0010.1	005.9	153.3	000.0030	0139.0	027.6	31.46
021.0	000.1200	0010.9	005.9	153.1	000.0030	0138.9	027.7	31.43
022.0	000.1200	0011.2	005.9	153.0	000.0030	0138.8	027.8	31.39
023.0	000.1200	0011.2	005.9	152.8	000.0030	0138.8	027.9	31.36
024.0	000.1200	0011.2	005.9	152.7	000.0030	0138.8	027.9	31.32
025.0	000.1200	0011.6	005.9	152.6	000.0030	0138.7	028.0	31.28
026.0	000.1200	0012.0	005.9	152.4	000.0031	0138.7	028.1	31.25
027.0	000.1200	0012.3	005.9	152.3	000.0031	0138.7	028.2	31.21
028.0	000.1200	0012.6	005.9	152.2	000.0031	0138.7	028.3	31.17
029.0	000.1200	0012.8	005.9	152.1	000.0031	0138.7	028.3	31.13
030.0	000.1200	0013.3	005.9	152.0	000.0031	0138.7	028.4	31.09
031.0	000.1200	0013.8	005.9	151.9	000.0031	0138.7	028.5	31.05
032.0	000.1200	0014.2	005.9	151.8	000.0031	0138.7	028.6	31.01
033.0	000.1200	0014.5	005.9	151.7	000.0031	0138.7	028.7	30.97
034.0	000.1200	0014.7	005.9	151.6	000.0031	0138.7	028.8	30.92
035.0	000.1200	0015.0	005.9	151.5	000.0031	0138.7	028.9	30.88
036.0	000.1200	0015.4	005.9	151.4	000.0031	0138.7	029.0	30.83
037.0	000.1200	0015.8	005.9	151.3	000.0032	0138.7	029.1	30.79
038.0	000.1200	0016.1	005.9	151.2	000.0032	0138.7	029.2	30.74
039.0	000.1200	0016.5	005.9	151.1	000.0032	0138.7	029.3	30.70
040.0	000.1200	0016.9	005.9	151.1	000.0032	0138.7	029.4	30.65