University of Northern Iowa

REFERENCE CH# 202A - 88.3 MHz, Pwr= 0.5 kW, HAAT=106.6 M, COR= 338 M DISPLAY DATES
40 57 41 N. Average Protected F(50-50)= 15.93 km DATA 07-29-05
92 22 13 W. Ave. F(50-10) 40 dBu= 53.3 54 dBu= 23.9 80 dBu= 5.1 100 dBu= 1.6 SEARCH 08-01-05

CH CALL / CITY	TYPE / STATE	AZI. <-- / FILE #	LAT. / LNG.	Pwr(kW) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
202A 970321	APP NCX	123.1 0.06	40 57 40	0.380	351	16.3	-71.04*	-72.83*
Ottumwa	IA	303.1 BPED19970321MA	92 22 11	128	53.5	University Of Northern Iow		
202A 970108	APP CN	332.5 7.83	41 01 26	0.250	279	10.4	-43.98*	-57.32*
Ottumwa	IA	152.5 BPED19970108MI	92 24 48	63	35.1	American Family Associatio		
201A 961010	APP CN	83.6 33.05	40 59 38	0.250	274	9.2	4.61	0.49
Fairfield	IA	263.8 BPED19961010MC	91 58 48	49	12.9	American Family Associatio		
201A 970321	APP NCX	67.0 36.68	41 05 21	0.250	326	12.8	1.93	0.38
Fairfield	IA	247.3 BPED19970321MB	91 58 05	99	19.1	University Of Northern Iow		
201A 970321	APP CN	67.0 36.68	41 05 21	0.250	326	12.8	1.93	0.38
Fairfield	IA	247.3 BPED19970321MB	91 58 05	99	19.1	University Of Northern Iow		
202C3 KCCKFM	LIC CN	29.3 121.07	41 54 33	10.000	366	35.4	6.55	33.46
Cedar Rapids	IA	209.7 BLED1408	91 39 17	126	99.1	Kirkwood Community College		
202A KNNU.C	CP CX	327.9 94.85	41 40 56	1.100	305	11.2	36.76	26.60
Newton	IA	147.5 BPED19981230MB	92 58 40	36	40.2	Broadcasting For The Chall		
204A KIGC	LIC HN	329.2 45.18	41 18 37	0.230	275	6.9	26.47	36.67
Oskaloosa	IA	149.1 BLED19910204KF	92 38 49	20	1.1	William Penn College		
203A DKDIC	LIC CN	341.7 92.12	41 44 53	0.130	332	7.2	66.37	61.75
Grinnell	IA	161.5 BLED19850115LR	92 43 10	43	10.3	Grinnell College Trustees		
203A DKDIC	CP CX	341.7 92.21	41 44 56	0.130	332	7.2	66.43	61.82
Grinnell	IA	161.5 BPED20041028AFF	92 43 10	44	10.3	Grinnell College Trustees		
203B WGCAFM	LIC CN	141.0 141.02	39 58 18	40.000	325	51.8	47.43	64.30
Quincy	IL	321.6 BLED19870930KA	91 19 42	162	76.8	Great Commission Broadcast		
204A KEWM.C	CP DVX	30.6 65.39	41 28 02	2.728	322	20.5	47.99	43.32
Williamsburg	IA	210.8 BPED19990602MX	91 58 16	74	2.0	Family Stations, Inc.		
205C2 KLRX.C	CP EX	81.9 101.72	41 04 59	13.500	356	37.1	82.48	63.01
Wapello	IA	262.7 BMPED20041201BZM	91 10 18	121	3.7	Educational Media Foundati		
06Z2E KMOSTV	LI HY	189.5 262.70	38 37 36	100.000	864	127.8	257.0R	5.7M
Sedalia	MO	9.1 BLET20010926ACE	92 52 03	596	27.3	Board Of Governors Of Cent		
06+2C KWQCTV	LI HY	67.0 171.54	41 32 49	100.000	611	114.5	257.0R	-85.5M•
Davenport	IA	248.3 BLCT19821108KN	90 28 35	435	27.9	Young Broadcasting Of Dave		
06+2C WOWTTV	LI HN	278.4 309.48	41 18 40	100.000	761	115.5	257.0R	52.5M
Omaha	NE	96.0 BLCT19831024KI	96 01 37	446	26.4	Gray Television Licensee,		
06-2C KAAL	LI HN	348.0 303.20	43 37 42	100.000	696	105.0	257.0R	46.2M
Austin	MN	167.5 BLCT2236	93 09 12	318	27.8	Kaal-tv, Llc		

ERP and HAAT are on direct line to and from reference station.
• affixed to TV6 Margin= no direct-line contour overlap.
"*"affixed to 'IN' or 'Out' values = site inside protected contour.

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. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined 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 sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap interference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

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

For I.F. relationships the "IN" and "OUT" columns 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** 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 omni. 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”.

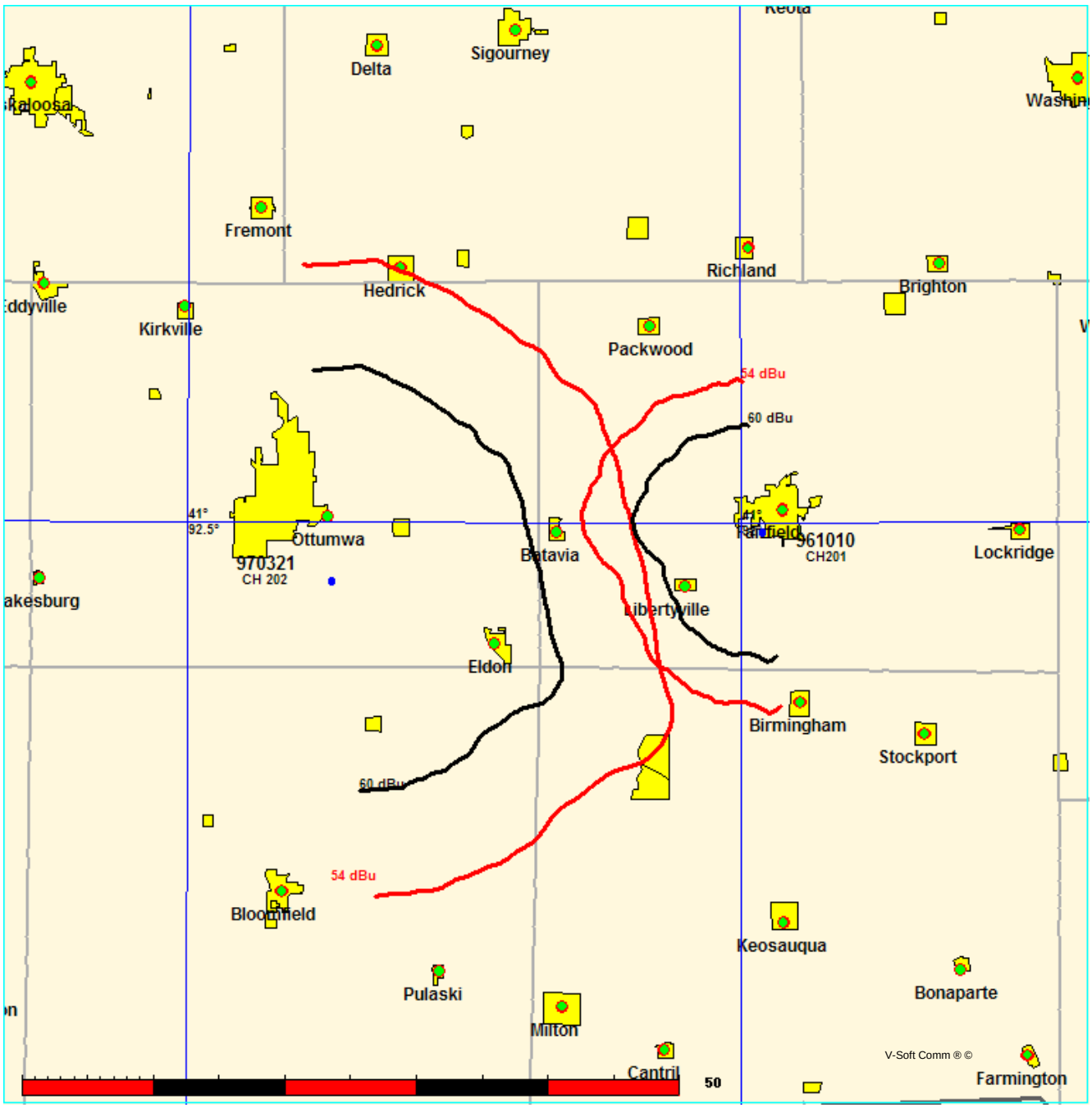
University of Northern Iowa
With CH201, Fairfield, VS Proposed

FMCommander Allocation Study
08-01-2005

970321 CH 202 A
.5 kW 338 M COR
Prot. = 60 dBu
Intef. = 54 dBu

961010 CH 201 A BPED19961010MC
.25 kW, 274 M COR
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:750,000



08-01-2005 30 Sec. Terrain Data FMOver Analysis

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Protected
60 dBu

961010 BPED19961010MC
Channel = 201A
Max ERP = 0.25 kW
RCAMSL = 274 M
N. Lat = 40 59 38
W. Lng = 91 58 48
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
024.0	000.5000	0102.3	015.6	292.0	000.2500	0052.7	028.5	41.64
025.0	000.5000	0101.9	015.5	291.9	000.2500	0052.7	028.3	41.81
026.0	000.5000	0101.2	015.5	291.7	000.2500	0052.7	028.0	41.97
027.0	000.5000	0100.7	015.4	291.6	000.2500	0052.7	027.7	42.13
028.0	000.5000	0100.5	015.4	291.5	000.2500	0052.2	027.5	42.21
029.0	000.5000	0100.6	015.4	291.4	000.2500	0052.2	027.2	42.38
030.0	000.5000	0100.8	015.4	291.4	000.2500	0052.2	026.9	42.55
031.0	000.5000	0100.7	015.4	291.3	000.2500	0052.2	026.7	42.73
032.0	000.5000	0100.4	015.4	291.1	000.2500	0052.2	026.4	42.90
033.0	000.5000	0100.2	015.4	290.9	000.2500	0052.2	026.2	43.07
034.0	000.5000	0100.0	015.4	290.8	000.2500	0052.2	025.9	43.24
035.0	000.5000	0100.0	015.3	290.6	000.2500	0052.2	025.6	43.42
036.0	000.5000	0099.9	015.3	290.5	000.2500	0051.7	025.4	43.51
037.0	000.5000	0099.7	015.3	290.2	000.2500	0051.7	025.1	43.69
038.0	000.5000	0099.4	015.3	290.0	000.2500	0051.7	024.9	43.86
039.0	000.5000	0099.5	015.3	289.8	000.2500	0051.7	024.6	44.04
040.0	000.5000	0100.4	015.4	289.8	000.2500	0051.7	024.3	44.25
041.0	000.5000	0101.6	015.5	289.8	000.2500	0051.7	024.1	44.46
042.0	000.5000	0102.7	015.6	289.8	000.2500	0051.7	023.8	44.67
043.0	000.5000	0103.3	015.6	289.6	000.2500	0051.7	023.5	44.87
044.0	000.5000	0103.1	015.6	289.3	000.2500	0051.4	023.3	45.00
045.0	000.5000	0102.2	015.5	288.8	000.2500	0051.4	023.0	45.16
046.0	000.5000	0101.0	015.4	288.3	000.2500	0051.6	022.9	45.34
047.0	000.5000	0100.1	015.4	287.8	000.2500	0051.6	022.7	45.49
048.0	000.5000	0099.6	015.3	287.4	000.2500	0052.3	022.4	45.78
049.0	000.5000	0099.8	015.3	287.0	000.2500	0052.3	022.2	45.96
050.0	000.5000	0100.5	015.4	286.8	000.2500	0052.3	022.0	46.16
051.0	000.5000	0101.7	015.5	286.6	000.2500	0052.3	021.7	46.38
052.0	000.5000	0103.3	015.6	286.5	000.2500	0052.3	021.4	46.63
053.0	000.5000	0105.0	015.8	286.4	000.2500	0053.2	021.1	47.03
054.0	000.5000	0106.5	015.9	286.2	000.2500	0053.2	020.8	47.27
055.0	000.5000	0107.5	016.0	285.9	000.2500	0053.2	020.5	47.49
056.0	000.5000	0107.9	016.0	285.5	000.2500	0053.9	020.2	47.80
057.0	000.5000	0107.8	016.0	284.9	000.2500	0053.9	020.0	47.97
058.0	000.5000	0107.1	016.0	284.3	000.2500	0054.3	019.9	48.18
059.0	000.5000	0106.2	015.9	283.5	000.2500	0054.3	019.7	48.30
060.0	000.5000	0105.4	015.8	282.8	000.2500	0054.5	019.6	48.44

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
061.0	000.5000	0104.8	015.8	282.1	000.2500	0054.9	019.5	48.62
062.0	000.5000	0104.3	015.7	281.4	000.2500	0055.3	019.3	48.80
063.0	000.5000	0103.9	015.7	280.7	000.2500	0055.3	019.2	48.92
064.0	000.5000	0103.6	015.7	280.0	000.2500	0055.5	019.0	49.07
065.0	000.5000	0103.6	015.7	279.3	000.2500	0056.0	018.9	49.29
066.0	000.5000	0103.6	015.7	278.6	000.2500	0056.0	018.7	49.42
067.0	000.5000	0103.6	015.7	277.9	000.2500	0056.6	018.6	49.62
068.0	000.5000	0103.3	015.6	277.1	000.2500	0056.8	018.5	49.76
069.0	000.5000	0102.9	015.6	276.3	000.2500	0057.1	018.4	49.88
070.0	000.5000	0102.3	015.5	275.4	000.2500	0057.1	018.3	49.94
071.0	000.5000	0101.6	015.5	274.6	000.2500	0057.1	018.2	49.99
072.0	000.5000	0101.1	015.4	273.8	000.2500	0056.8	018.2	50.00
073.0	000.5000	0100.7	015.4	272.9	000.2500	0056.3	018.1	49.97
074.0	000.5000	0100.4	015.4	272.1	000.2500	0055.9	018.1	49.97
075.0	000.5000	0100.3	015.4	271.3	000.2500	0055.5	018.0	49.96
076.0	000.5000	0100.4	015.4	270.4	000.2500	0055.1	017.9	49.97
077.0	000.5000	0100.7	015.4	269.6	000.2500	0055.1	017.8	50.04
078.0	000.5000	0100.9	015.4	268.8	000.2500	0054.7	017.8	50.04
079.0	000.5000	0101.0	015.4	267.9	000.2500	0053.6	017.7	49.90
080.0	000.5000	0101.1	015.4	267.0	000.2500	0052.7	017.7	49.77
081.0	000.5000	0101.3	015.5	266.2	000.2500	0051.7	017.6	49.65
082.0	000.5000	0101.7	015.5	265.3	000.2500	0050.6	017.6	49.49
083.0	000.5000	0102.1	015.5	264.4	000.2500	0049.5	017.5	49.32
084.0	000.5000	0102.8	015.6	263.5	000.2500	0049.5	017.4	49.38
085.0	000.5000	0103.7	015.7	262.6	000.2500	0048.7	017.4	49.29
086.0	000.5000	0104.5	015.7	261.7	000.2500	0048.0	017.3	49.19
087.0	000.5000	0105.6	015.8	260.8	000.2500	0047.0	017.3	49.06
088.0	000.5000	0106.4	015.9	259.8	000.2500	0046.1	017.2	48.89
089.0	000.5000	0106.8	015.9	258.9	000.2500	0045.0	017.2	48.66
090.0	000.5000	0107.2	016.0	257.9	000.2500	0043.9	017.3	48.40
091.0	000.5000	0107.5	016.0	257.0	000.2500	0042.7	017.3	48.11
092.0	000.5000	0108.3	016.1	256.1	000.2500	0041.5	017.3	47.84
093.0	000.5000	0109.2	016.2	255.1	000.2500	0040.5	017.3	47.60
094.0	000.5000	0110.0	016.2	254.1	000.2500	0039.7	017.3	47.41
095.0	000.5000	0110.6	016.3	253.2	000.2500	0039.2	017.4	47.25
096.0	000.5000	0111.8	016.4	252.2	000.2500	0038.9	017.4	47.15
097.0	000.5000	0113.3	016.5	251.1	000.2500	0038.8	017.4	47.12
098.0	000.5000	0114.5	016.6	250.1	000.2500	0039.0	017.4	47.12
099.0	000.5000	0115.8	016.7	249.1	000.2500	0039.2	017.5	47.14
100.0	000.5000	0117.4	016.8	248.1	000.2500	0039.6	017.5	47.19
101.0	000.5000	0118.9	016.9	247.1	000.2500	0040.1	017.6	47.25
102.0	000.5000	0120.3	017.1	246.1	000.2500	0040.6	017.7	47.30
103.0	000.5000	0122.0	017.2	245.1	000.2500	0041.0	017.8	47.33
104.0	000.5000	0124.3	017.3	244.0	000.2500	0041.2	017.8	47.31
105.0	000.5000	0126.6	017.5	242.9	000.2500	0041.2	017.9	47.25
106.0	000.5000	0129.3	017.7	241.8	000.2500	0041.2	018.0	47.19
107.0	000.5000	0132.3	017.9	240.6	000.2500	0041.3	018.0	47.16
108.0	000.5000	0135.7	018.2	239.4	000.2500	0041.7	018.1	47.18
109.0	000.5000	0139.3	018.4	238.1	000.2500	0041.9	018.2	47.16
110.0	000.5000	0142.6	018.6	236.9	000.2500	0042.0	018.3	47.10
111.0	000.5000	0145.2	018.8	235.8	000.2500	0042.2	018.5	47.00

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
112.0	000.5000	0147.1	019.0	234.9	000.2500	0042.3	018.7	46.85
113.0	000.5000	0147.9	019.0	234.3	000.2500	0042.3	018.9	46.64
114.0	000.5000	0148.1	019.0	233.7	000.2500	0042.3	019.2	46.41
115.0	000.5000	0147.9	019.0	233.3	000.2500	0042.3	019.5	46.16
116.0	000.5000	0147.4	019.0	232.9	000.2500	0042.3	019.8	45.91
117.0	000.5000	0146.6	018.9	232.6	000.2500	0042.3	020.1	45.64
118.0	000.5000	0145.4	018.8	232.5	000.2500	0042.3	020.5	45.37
119.0	000.5000	0143.6	018.7	232.4	000.2500	0042.3	020.8	45.09
120.0	000.5000	0140.8	018.5	232.5	000.2500	0042.3	021.2	44.80
121.0	000.5000	0136.9	018.3	232.9	000.2500	0042.3	021.6	44.48
122.0	000.5000	0132.7	018.0	233.3	000.2500	0042.3	022.0	44.17
123.0	000.5000	0128.5	017.7	233.8	000.2500	0042.3	022.4	43.86
124.0	000.5000	0125.2	017.4	234.1	000.2500	0042.3	022.8	43.58
125.0	000.5000	0122.7	017.2	234.2	000.2500	0042.3	023.1	43.32
126.0	000.5000	0120.9	017.1	234.3	000.2500	0042.3	023.4	43.08
127.0	000.5000	0119.6	017.0	234.3	000.2500	0042.3	023.7	42.85
128.0	000.5000	0118.5	016.9	234.3	000.2500	0042.3	024.0	42.63
129.0	000.5000	0117.8	016.9	234.2	000.2500	0042.3	024.3	42.41
130.0	000.5000	0117.0	016.8	234.2	000.2500	0042.3	024.7	42.20
131.0	000.5000	0115.7	016.7	234.3	000.2500	0042.3	025.0	41.99
132.0	000.5000	0114.1	016.6	234.4	000.2500	0042.3	025.3	41.77
133.0	000.5000	0112.8	016.5	234.5	000.2500	0042.3	025.6	41.56
134.0	000.5000	0112.0	016.4	234.5	000.2500	0042.3	025.9	41.36
135.0	000.5000	0111.8	016.4	234.5	000.2500	0042.3	026.2	41.18
136.0	000.5000	0111.9	016.4	234.3	000.2500	0042.3	026.4	40.99
137.0	000.5000	0112.3	016.4	234.2	000.2500	0042.3	026.7	40.81
138.0	000.5000	0113.1	016.5	234.0	000.2500	0042.3	027.0	40.64
139.0	000.5000	0114.3	016.6	233.7	000.2500	0042.3	027.3	40.46
140.0	000.5000	0115.6	016.7	233.5	000.2500	0042.3	027.6	40.29
141.0	000.5000	0116.5	016.8	233.3	000.2500	0042.3	027.8	40.11
142.0	000.5000	0116.8	016.8	233.2	000.2500	0042.3	028.1	39.94
143.0	000.5000	0116.3	016.7	233.3	000.2500	0042.3	028.4	39.77
144.0	000.5000	0115.4	016.7	233.4	000.2500	0042.3	028.7	39.60

08-01-2005 30 Sec. Terrain Data

961010 BPED19961010MC
Channel = 201A
Max ERP = 0.25 kW
RCAMSL = 274 M
N. Lat = 40 59 38
W. Lng = 91 58 48
Protected
   60 dBu

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Interfering
   54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
204.0	000.2500	0051.3	009.4	099.6	000.5000	0117.4	029.5	51.15
205.0	000.2500	0051.0	009.4	099.5	000.5000	0117.4	029.3	51.24
206.0	000.2500	0050.5	009.3	099.3	000.5000	0115.8	029.2	51.21
207.0	000.2500	0050.0	009.3	099.1	000.5000	0115.8	029.0	51.30
208.0	000.2500	0049.8	009.2	099.0	000.5000	0115.8	028.9	51.38
209.0	000.2500	0049.4	009.2	098.8	000.5000	0115.8	028.7	51.47
210.0	000.2500	0049.0	009.2	098.6	000.5000	0115.8	028.6	51.55
211.0	000.2500	0048.6	009.1	098.4	000.5000	0114.5	028.5	51.53
212.0	000.2500	0048.5	009.1	098.3	000.5000	0114.5	028.3	51.62
213.0	000.2500	0048.2	009.1	098.1	000.5000	0114.5	028.2	51.70
214.0	000.2500	0047.9	009.0	097.9	000.5000	0114.5	028.1	51.78
215.0	000.2500	0047.7	009.0	097.7	000.5000	0114.5	027.9	51.87
216.0	000.2500	0048.0	009.1	097.6	000.5000	0114.5	027.8	51.96
217.0	000.2500	0048.5	009.1	097.6	000.5000	0114.5	027.6	52.07
218.0	000.2500	0048.9	009.2	097.5	000.5000	0113.3	027.5	52.07
219.0	000.2500	0049.0	009.2	097.3	000.5000	0113.3	027.3	52.16
220.0	000.2500	0048.9	009.2	097.1	000.5000	0113.3	027.2	52.25
221.0	000.2500	0048.8	009.1	096.9	000.5000	0113.3	027.1	52.33
222.0	000.2500	0048.6	009.1	096.7	000.5000	0113.3	026.9	52.41
223.0	000.2500	0047.9	009.1	096.4	000.5000	0111.8	026.9	52.35
224.0	000.2500	0047.1	009.0	096.0	000.5000	0111.8	026.8	52.39
225.0	000.2500	0046.2	008.9	095.6	000.5000	0111.8	026.7	52.43
226.0	000.2500	0045.4	008.8	095.3	000.5000	0110.6	026.7	52.38
227.0	000.2500	0044.5	008.7	094.9	000.5000	0110.6	026.6	52.42
228.0	000.2500	0043.7	008.6	094.5	000.5000	0110.6	026.6	52.45
229.0	000.2500	0043.2	008.5	094.2	000.5000	0110.0	026.5	52.44
230.0	000.2500	0042.7	008.5	093.9	000.5000	0110.0	026.4	52.49
231.0	000.2500	0042.4	008.4	093.6	000.5000	0110.0	026.4	52.54
232.0	000.2500	0042.3	008.4	093.4	000.5000	0109.2	026.3	52.53
233.0	000.2500	0042.3	008.4	093.1	000.5000	0109.2	026.2	52.60
234.0	000.2500	0042.3	008.4	092.9	000.5000	0109.2	026.1	52.66
235.0	000.2500	0042.3	008.4	092.6	000.5000	0109.2	026.0	52.72
236.0	000.2500	0042.2	008.4	092.3	000.5000	0108.3	025.9	52.70
237.0	000.2500	0042.0	008.4	092.0	000.5000	0108.3	025.8	52.75

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
238.0	000.2500	0041.9	008.4	091.8	000.5000	0108.3	025.8	52.80
239.0	000.2500	0041.7	008.4	091.5	000.5000	0107.5	025.7	52.78
240.0	000.2500	0041.5	008.3	091.2	000.5000	0107.5	025.6	52.82
241.0	000.2500	0041.3	008.3	090.8	000.5000	0107.5	025.6	52.85
242.0	000.2500	0041.2	008.3	090.6	000.5000	0107.5	025.5	52.90
243.0	000.2500	0041.2	008.3	090.3	000.5000	0107.2	025.5	52.91
244.0	000.2500	0041.2	008.3	090.0	000.5000	0107.2	025.4	52.95
245.0	000.2500	0041.0	008.3	089.7	000.5000	0107.2	025.4	52.98
246.0	000.2500	0040.6	008.2	089.3	000.5000	0106.8	025.3	52.96
247.0	000.2500	0040.1	008.2	089.0	000.5000	0106.8	025.3	52.97
248.0	000.2500	0039.6	008.1	088.6	000.5000	0106.8	025.3	52.96
249.0	000.2500	0039.2	008.1	088.3	000.5000	0106.4	025.3	52.93
250.0	000.2500	0039.0	008.0	087.9	000.5000	0106.4	025.3	52.95
251.0	000.2500	0038.8	008.0	087.6	000.5000	0106.4	025.3	52.96
252.0	000.2500	0038.9	008.0	087.3	000.5000	0105.6	025.2	52.93
253.0	000.2500	0039.2	008.1	087.0	000.5000	0105.6	025.2	52.98
254.0	000.2500	0039.7	008.1	086.8	000.5000	0105.6	025.1	53.04
255.0	000.2500	0040.5	008.2	086.5	000.5000	0104.5	025.0	53.03
256.0	000.2500	0041.5	008.3	086.2	000.5000	0104.5	024.8	53.13
257.0	000.2500	0042.7	008.5	085.9	000.5000	0104.5	024.7	53.24
258.0	000.2500	0043.9	008.6	085.6	000.5000	0104.5	024.5	53.36
259.0	000.2500	0045.0	008.7	085.3	000.5000	0103.7	024.4	53.38
260.0	000.2500	0046.1	008.9	085.0	000.5000	0103.7	024.2	53.48
261.0	000.2500	0047.0	009.0	084.6	000.5000	0103.7	024.1	53.56
262.0	000.2500	0048.0	009.1	084.3	000.5000	0102.8	024.0	53.57
263.0	000.2500	0048.7	009.1	083.9	000.5000	0102.8	023.9	53.63
264.0	000.2500	0049.5	009.2	083.5	000.5000	0102.8	023.8	53.69
265.0	000.2500	0050.6	009.3	083.1	000.5000	0102.1	023.7	53.70
266.0	000.2500	0051.7	009.4	082.7	000.5000	0102.1	023.6	53.78
267.0	000.2500	0052.7	009.5	082.3	000.5000	0101.7	023.5	53.80
268.0	000.2500	0053.6	009.6	081.9	000.5000	0101.7	023.5	53.85
269.0	000.2500	0054.7	009.7	081.4	000.5000	0101.3	023.4	53.88
270.0	000.2500	0055.1	009.8	081.0	000.5000	0101.3	023.4	53.89
271.0	000.2500	0055.5	009.8	080.6	000.5000	0101.3	023.4	53.89
272.0	000.2500	0055.9	009.8	080.1	000.5000	0101.1	023.4	53.88
273.0	000.2500	0056.3	009.9	079.7	000.5000	0101.1	023.4	53.87
274.0	000.2500	0056.8	009.9	079.3	000.5000	0101.0	023.4	53.87
275.0	000.2500	0057.1	009.9	078.8	000.5000	0101.0	023.4	53.86
276.0	000.2500	0057.1	009.9	078.4	000.5000	0100.9	023.4	53.81
277.0	000.2500	0056.8	009.9	078.0	000.5000	0100.9	023.5	53.75
278.0	000.2500	0056.6	009.9	077.7	000.5000	0100.9	023.6	53.69
279.0	000.2500	0056.0	009.8	077.3	000.5000	0100.7	023.7	53.60
280.0	000.2500	0055.5	009.8	077.0	000.5000	0100.7	023.8	53.52
281.0	000.2500	0055.3	009.8	076.6	000.5000	0100.7	023.9	53.46
282.0	000.2500	0054.9	009.7	076.3	000.5000	0100.4	024.0	53.36
283.0	000.2500	0054.5	009.7	075.9	000.5000	0100.4	024.1	53.28
284.0	000.2500	0054.3	009.7	075.6	000.5000	0100.4	024.2	53.21
285.0	000.2500	0053.9	009.7	075.3	000.5000	0100.3	024.3	53.11
286.0	000.2500	0053.2	009.6	075.0	000.5000	0100.3	024.4	53.01
287.0	000.2500	0052.3	009.5	074.8	000.5000	0100.3	024.6	52.90
288.0	000.2500	0051.6	009.4	074.6	000.5000	0100.3	024.7	52.79

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
289.0	000.2500	0051.4	009.4	074.3	000.5000	0100.4	024.9	52.73
290.0	000.2500	0051.7	009.4	073.9	000.5000	0100.4	024.9	52.68
291.0	000.2500	0052.2	009.5	073.6	000.5000	0100.4	025.0	52.64
292.0	000.2500	0052.7	009.5	073.2	000.5000	0100.7	025.1	52.62
293.0	000.2500	0053.0	009.6	072.8	000.5000	0100.7	025.1	52.56
294.0	000.2500	0053.2	009.6	072.5	000.5000	0100.7	025.2	52.50
295.0	000.2500	0053.2	009.6	072.2	000.5000	0101.1	025.3	52.46
296.0	000.2500	0052.9	009.6	072.0	000.5000	0101.1	025.5	52.36
297.0	000.2500	0052.2	009.5	071.9	000.5000	0101.1	025.6	52.25
298.0	000.2500	0051.4	009.4	071.7	000.5000	0101.1	025.8	52.13
299.0	000.2500	0050.8	009.3	071.6	000.5000	0101.1	026.0	52.02
300.0	000.2500	0050.4	009.3	071.4	000.5000	0101.6	026.1	51.97
301.0	000.2500	0050.1	009.3	071.2	000.5000	0101.6	026.3	51.88
302.0	000.2500	0049.9	009.3	071.0	000.5000	0101.6	026.4	51.78
303.0	000.2500	0049.6	009.2	070.8	000.5000	0101.6	026.5	51.69
304.0	000.2500	0049.2	009.2	070.7	000.5000	0101.6	026.7	51.59
305.0	000.2500	0048.6	009.1	070.6	000.5000	0101.6	026.9	51.48
306.0	000.2500	0047.8	009.0	070.6	000.5000	0101.6	027.0	51.36
307.0	000.2500	0047.0	009.0	070.5	000.5000	0101.6	027.2	51.25
308.0	000.2500	0046.4	008.9	070.5	000.5000	0102.3	027.4	51.20
309.0	000.2500	0046.0	008.8	070.4	000.5000	0102.3	027.5	51.10
310.0	000.2500	0045.6	008.8	070.3	000.5000	0102.3	027.7	51.00
311.0	000.2500	0045.5	008.8	070.1	000.5000	0102.3	027.8	50.92
312.0	000.2500	0045.6	008.8	070.0	000.5000	0102.3	028.0	50.84
313.0	000.2500	0045.9	008.8	069.8	000.5000	0102.3	028.1	50.76
314.0	000.2500	0046.2	008.9	069.6	000.5000	0102.3	028.2	50.68
315.0	000.2500	0046.5	008.9	069.4	000.5000	0102.9	028.3	50.66
316.0	000.2500	0046.7	008.9	069.2	000.5000	0102.9	028.5	50.58
317.0	000.2500	0046.9	008.9	069.0	000.5000	0102.9	028.6	50.50
318.0	000.2500	0047.2	009.0	068.9	000.5000	0102.9	028.7	50.42
319.0	000.2500	0047.3	009.0	068.7	000.5000	0102.9	028.9	50.33
320.0	000.2500	0047.2	009.0	068.7	000.5000	0102.9	029.0	50.24
321.0	000.2500	0046.7	008.9	068.7	000.5000	0102.9	029.2	50.14
322.0	000.2500	0046.1	008.8	068.7	000.5000	0102.9	029.4	50.04
323.0	000.2500	0045.5	008.8	068.7	000.5000	0102.9	029.5	49.95
324.0	000.2500	0045.2	008.8	068.7	000.5000	0102.9	029.7	49.86

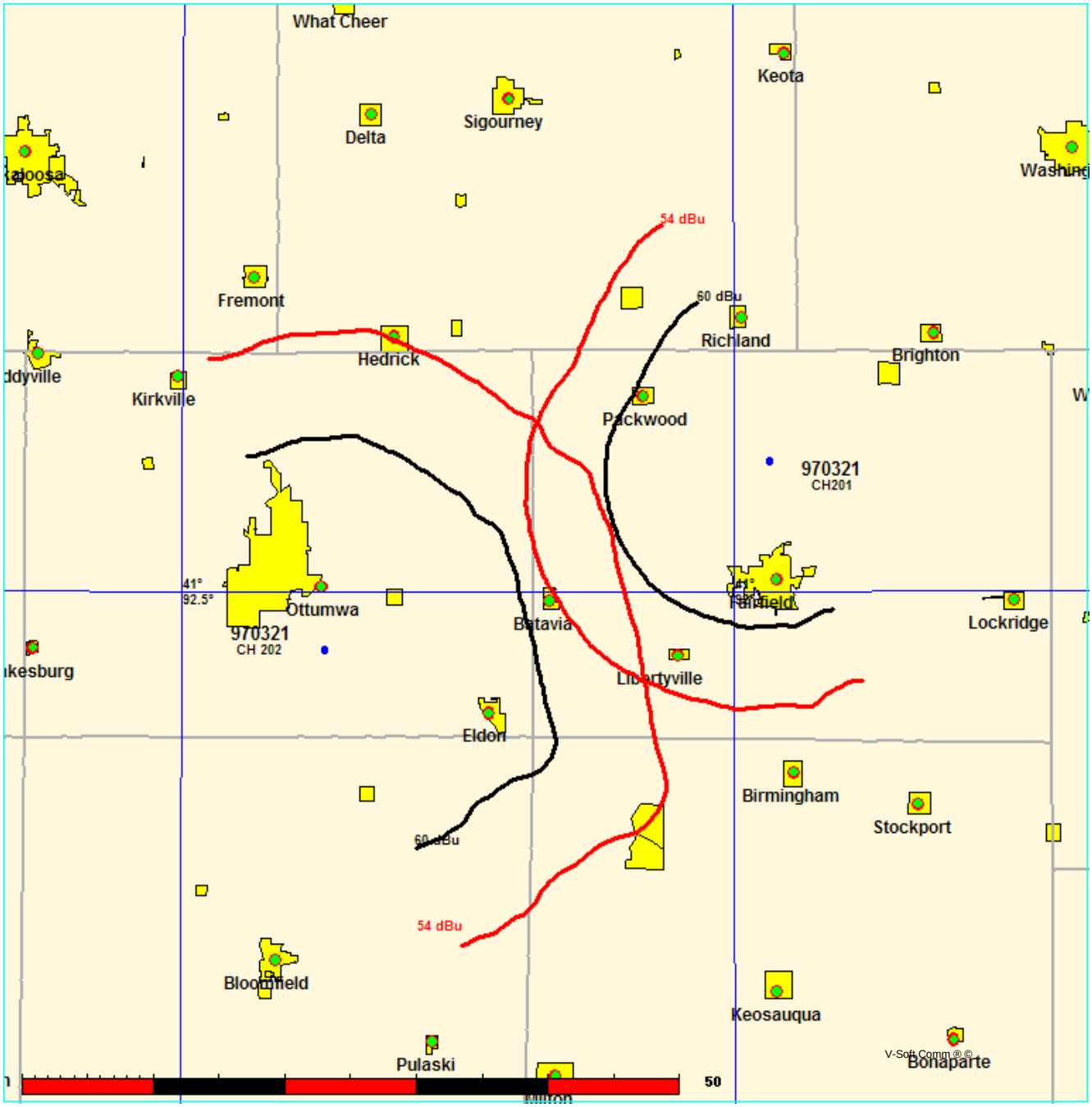
University of Northern Iowa
With CH201, Fairfield, UNI, VS Proposed

FMCommander Allocation Study
08-01-2005

970321 CH 202 A
.5 kW 338 M COR
Prot. = 60 dBu
Intef. = 54 dBu

970321 CH 201 A BPED19970321MB
.25 kW, 326 M COR
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:750,000



08-01-2005 30 Sec. Terrain Data FMOver Analysis

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Protected
60 dBu

970321 BPED19970321MB
Channel = 201A
Max ERP = 0.25 kW
RCAMSL = 326 M
N. Lat = 41 05 21
W. Lng = 91 58 05
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
007.0	000.5000	0109.1	016.1	273.4	000.2500	0092.1	031.9	44.67
008.0	000.5000	0109.5	016.2	273.5	000.2500	0092.1	031.6	44.81
009.0	000.5000	0109.4	016.2	273.4	000.2500	0092.1	031.3	44.95
010.0	000.5000	0108.5	016.1	273.2	000.2500	0092.1	031.0	45.09
011.0	000.5000	0107.5	016.0	273.0	000.2500	0092.1	030.8	45.22
012.0	000.5000	0106.6	015.9	272.7	000.2500	0092.1	030.5	45.37
013.0	000.5000	0106.1	015.9	272.6	000.2500	0092.1	030.2	45.51
014.0	000.5000	0105.7	015.9	272.4	000.2500	0092.2	030.0	45.66
015.0	000.5000	0105.3	015.8	272.2	000.2500	0092.2	029.7	45.81
016.0	000.5000	0104.7	015.8	272.0	000.2500	0092.2	029.5	45.95
017.0	000.5000	0104.0	015.7	271.7	000.2500	0092.2	029.2	46.09
018.0	000.5000	0103.5	015.7	271.5	000.2500	0092.2	029.0	46.24
019.0	000.5000	0103.5	015.7	271.3	000.2500	0092.5	028.7	46.43
020.0	000.5000	0103.5	015.7	271.2	000.2500	0092.5	028.4	46.58
021.0	000.5000	0103.3	015.6	270.9	000.2500	0092.5	028.2	46.74
022.0	000.5000	0102.9	015.6	270.7	000.2500	0092.5	028.0	46.89
023.0	000.5000	0102.6	015.6	270.4	000.2500	0092.9	027.7	47.08
024.0	000.5000	0102.3	015.6	270.1	000.2500	0092.9	027.5	47.23
025.0	000.5000	0101.9	015.5	269.8	000.2500	0092.9	027.2	47.38
026.0	000.5000	0101.2	015.5	269.5	000.2500	0093.4	027.0	47.57
027.0	000.5000	0100.7	015.4	269.1	000.2500	0093.4	026.8	47.71
028.0	000.5000	0100.5	015.4	268.8	000.2500	0093.4	026.6	47.86
029.0	000.5000	0100.6	015.4	268.5	000.2500	0093.4	026.3	48.02
030.0	000.5000	0100.8	015.4	268.2	000.2500	0093.8	026.1	48.22
031.0	000.5000	0100.7	015.4	267.9	000.2500	0093.8	025.9	48.37
032.0	000.5000	0100.4	015.4	267.5	000.2500	0093.8	025.7	48.52
033.0	000.5000	0100.2	015.4	267.2	000.2500	0094.2	025.5	48.70
034.0	000.5000	0100.0	015.4	266.8	000.2500	0094.2	025.3	48.84
035.0	000.5000	0100.0	015.3	266.4	000.2500	0094.5	025.1	49.01
036.0	000.5000	0099.9	015.3	266.0	000.2500	0094.5	024.8	49.15
037.0	000.5000	0099.7	015.3	265.5	000.2500	0094.5	024.7	49.29
038.0	000.5000	0099.4	015.3	265.1	000.2500	0094.6	024.5	49.43
039.0	000.5000	0099.5	015.3	264.7	000.2500	0094.6	024.3	49.58
040.0	000.5000	0100.4	015.4	264.3	000.2500	0094.7	024.0	49.76
041.0	000.5000	0101.6	015.5	264.0	000.2500	0094.7	023.8	49.95
042.0	000.5000	0102.7	015.6	263.7	000.2500	0094.7	023.5	50.13
043.0	000.5000	0103.3	015.6	263.3	000.2500	0094.9	023.3	50.32

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
044.0	000.5000	0103.1	015.6	262.7	000.2500	0094.9	023.1	50.44
045.0	000.5000	0102.2	015.5	262.1	000.2500	0095.5	023.0	50.56
046.0	000.5000	0101.0	015.4	261.4	000.2500	0096.1	023.0	50.69
047.0	000.5000	0100.1	015.4	260.7	000.2500	0096.1	022.9	50.75
048.0	000.5000	0099.6	015.3	260.1	000.2500	0096.7	022.8	50.89
049.0	000.5000	0099.8	015.3	259.5	000.2500	0096.7	022.6	51.00
050.0	000.5000	0100.5	015.4	259.0	000.2500	0097.1	022.4	51.18
051.0	000.5000	0101.7	015.5	258.5	000.2500	0097.1	022.2	51.35
052.0	000.5000	0103.3	015.6	258.1	000.2500	0097.2	022.0	51.56
053.0	000.5000	0105.0	015.8	257.6	000.2500	0097.2	021.7	51.75
054.0	000.5000	0106.5	015.9	257.0	000.2500	0097.2	021.5	51.92
055.0	000.5000	0107.5	016.0	256.4	000.2500	0097.1	021.3	52.06
056.0	000.5000	0107.9	016.0	255.7	000.2500	0097.1	021.2	52.16
057.0	000.5000	0107.8	016.0	255.0	000.2500	0097.5	021.1	52.26
058.0	000.5000	0107.1	016.0	254.2	000.2500	0097.8	021.1	52.31
059.0	000.5000	0106.2	015.9	253.5	000.2500	0098.2	021.1	52.34
060.0	000.5000	0105.4	015.8	252.7	000.2500	0098.2	021.1	52.34
061.0	000.5000	0104.8	015.8	251.9	000.2500	0098.3	021.1	52.35
062.0	000.5000	0104.3	015.7	251.1	000.2500	0098.4	021.1	52.36
063.0	000.5000	0103.9	015.7	250.4	000.2500	0098.7	021.1	52.39
064.0	000.5000	0103.6	015.7	249.6	000.2500	0098.7	021.0	52.40
065.0	000.5000	0103.6	015.7	248.9	000.2500	0099.0	021.0	52.45
066.0	000.5000	0103.6	015.7	248.2	000.2500	0099.1	021.0	52.47
067.0	000.5000	0103.6	015.7	247.4	000.2500	0099.1	021.0	52.47
068.0	000.5000	0103.3	015.6	246.7	000.2500	0099.1	021.0	52.45
069.0	000.5000	0102.9	015.6	245.9	000.2500	0099.3	021.1	52.43
070.0	000.5000	0102.3	015.5	245.2	000.2500	0099.8	021.2	52.42
071.0	000.5000	0101.6	015.5	244.5	000.2500	0100.3	021.2	52.40
072.0	000.5000	0101.1	015.4	243.8	000.2500	0100.3	021.3	52.34
073.0	000.5000	0100.7	015.4	243.1	000.2500	0100.6	021.4	52.31
074.0	000.5000	0100.4	015.4	242.4	000.2500	0100.6	021.5	52.25
075.0	000.5000	0100.3	015.4	241.7	000.2500	0100.6	021.5	52.19
076.0	000.5000	0100.4	015.4	241.0	000.2500	0100.5	021.6	52.14
077.0	000.5000	0100.7	015.4	240.3	000.2500	0100.4	021.6	52.09
078.0	000.5000	0100.9	015.4	239.6	000.2500	0100.4	021.7	52.04
079.0	000.5000	0101.0	015.4	238.9	000.2500	0100.3	021.8	51.97
080.0	000.5000	0101.1	015.4	238.2	000.2500	0100.2	021.9	51.89
081.0	000.5000	0101.3	015.5	237.6	000.2500	0100.2	022.0	51.82
082.0	000.5000	0101.7	015.5	236.9	000.2500	0100.1	022.1	51.76
083.0	000.5000	0102.1	015.5	236.2	000.2500	0100.3	022.1	51.71
084.0	000.5000	0102.8	015.6	235.5	000.2500	0100.3	022.2	51.66
085.0	000.5000	0103.7	015.7	234.8	000.2500	0100.7	022.3	51.64
086.0	000.5000	0104.5	015.7	234.1	000.2500	0101.0	022.4	51.61
087.0	000.5000	0105.6	015.8	233.4	000.2500	0101.0	022.4	51.56
088.0	000.5000	0106.4	015.9	232.7	000.2500	0101.0	022.5	51.48
089.0	000.5000	0106.8	015.9	232.1	000.2500	0100.9	022.7	51.37
090.0	000.5000	0107.2	016.0	231.5	000.2500	0100.7	022.8	51.24
091.0	000.5000	0107.5	016.0	230.9	000.2500	0100.7	023.0	51.13
092.0	000.5000	0108.3	016.1	230.2	000.2500	0100.5	023.1	51.01
093.0	000.5000	0109.2	016.2	229.6	000.2500	0100.5	023.2	50.91
094.0	000.5000	0110.0	016.2	229.0	000.2500	0100.6	023.4	50.81

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
095.0	000.5000	0110.6	016.3	228.4	000.2500	0101.1	023.5	50.73
096.0	000.5000	0111.8	016.4	227.8	000.2500	0101.1	023.7	50.63
097.0	000.5000	0113.3	016.5	227.1	000.2500	0101.8	023.8	50.59
098.0	000.5000	0114.5	016.6	226.5	000.2500	0102.3	024.0	50.52
099.0	000.5000	0115.8	016.7	225.8	000.2500	0102.3	024.1	50.40
100.0	000.5000	0117.4	016.8	225.2	000.2500	0102.3	024.3	50.29
101.0	000.5000	0118.9	016.9	224.6	000.2500	0102.3	024.5	50.16
102.0	000.5000	0120.3	017.1	224.0	000.2500	0101.9	024.7	49.99
103.0	000.5000	0122.0	017.2	223.4	000.2500	0101.6	024.9	49.82
104.0	000.5000	0124.3	017.3	222.7	000.2500	0101.6	025.0	49.69
105.0	000.5000	0126.6	017.5	222.1	000.2500	0101.4	025.2	49.54
106.0	000.5000	0129.3	017.7	221.4	000.2500	0101.3	025.4	49.40
107.0	000.5000	0132.3	017.9	220.6	000.2500	0101.3	025.6	49.27
108.0	000.5000	0135.7	018.2	219.9	000.2500	0101.4	025.8	49.14
109.0	000.5000	0139.3	018.4	219.1	000.2500	0101.4	026.0	49.00
110.0	000.5000	0142.6	018.6	218.4	000.2500	0101.3	026.3	48.84
111.0	000.5000	0145.2	018.8	217.8	000.2500	0101.3	026.5	48.67
112.0	000.5000	0147.1	019.0	217.3	000.2500	0101.2	026.8	48.47
113.0	000.5000	0147.9	019.0	217.1	000.2500	0101.2	027.1	48.27
114.0	000.5000	0148.1	019.0	216.9	000.2500	0101.2	027.4	48.07
115.0	000.5000	0147.9	019.0	216.7	000.2500	0101.2	027.8	47.86
116.0	000.5000	0147.4	019.0	216.7	000.2500	0101.2	028.1	47.65
117.0	000.5000	0146.6	018.9	216.7	000.2500	0101.2	028.4	47.45
118.0	000.5000	0145.4	018.8	216.7	000.2500	0101.2	028.8	47.24
119.0	000.5000	0143.6	018.7	216.9	000.2500	0101.2	029.1	47.04
120.0	000.5000	0140.8	018.5	217.2	000.2500	0101.2	029.4	46.84
121.0	000.5000	0136.9	018.3	217.6	000.2500	0101.3	029.8	46.65
122.0	000.5000	0132.7	018.0	218.1	000.2500	0101.3	030.1	46.45
123.0	000.5000	0128.5	017.7	218.6	000.2500	0101.4	030.5	46.27
124.0	000.5000	0125.2	017.4	219.0	000.2500	0101.4	030.8	46.09
125.0	000.5000	0122.7	017.2	219.3	000.2500	0101.4	031.1	45.93
126.0	000.5000	0120.9	017.1	219.5	000.2500	0101.4	031.4	45.77
127.0	000.5000	0119.6	017.0	219.7	000.2500	0101.4	031.7	45.61

08-01-2005 30 Sec. Terrain Data

970321 BPED19970321MB
Channel = 201A
Max ERP = 0.25 kW
RCAMSL = 326 M
N. Lat = 41 05 21
W. Lng = 91 58 05
Protected
   60 dBu

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Interfering
   54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
187.0	000.2500	0097.2	012.7	087.0	000.5000	0105.6	032.4	48.69
188.0	000.2500	0097.4	012.7	087.0	000.5000	0105.6	032.1	48.80
189.0	000.2500	0096.9	012.7	086.9	000.5000	0105.6	031.9	48.90
190.0	000.2500	0096.8	012.7	086.7	000.5000	0105.6	031.7	49.01
191.0	000.2500	0097.0	012.7	086.7	000.5000	0105.6	031.5	49.12
192.0	000.2500	0096.9	012.7	086.6	000.5000	0105.6	031.3	49.23
193.0	000.2500	0096.1	012.6	086.4	000.5000	0104.5	031.1	49.24
194.0	000.2500	0095.8	012.6	086.2	000.5000	0104.5	030.9	49.35
195.0	000.2500	0096.0	012.6	086.1	000.5000	0104.5	030.7	49.46
196.0	000.2500	0096.4	012.6	086.0	000.5000	0104.5	030.4	49.58
197.0	000.2500	0096.8	012.7	085.9	000.5000	0104.5	030.2	49.70
198.0	000.2500	0097.1	012.7	085.8	000.5000	0104.5	030.0	49.82
199.0	000.2500	0097.1	012.7	085.6	000.5000	0104.5	029.8	49.93
200.0	000.2500	0096.9	012.7	085.4	000.5000	0103.7	029.6	49.97
201.0	000.2500	0097.1	012.7	085.3	000.5000	0103.7	029.4	50.09
202.0	000.2500	0097.6	012.7	085.1	000.5000	0103.7	029.2	50.21
203.0	000.2500	0098.0	012.7	085.0	000.5000	0103.7	029.0	50.34
204.0	000.2500	0098.2	012.8	084.8	000.5000	0103.7	028.8	50.46
205.0	000.2500	0098.2	012.8	084.6	000.5000	0103.7	028.6	50.57
206.0	000.2500	0098.1	012.7	084.3	000.5000	0102.8	028.4	50.61
207.0	000.2500	0098.1	012.7	084.1	000.5000	0102.8	028.2	50.73
208.0	000.2500	0098.3	012.8	083.9	000.5000	0102.8	028.0	50.85
209.0	000.2500	0098.9	012.8	083.7	000.5000	0102.8	027.8	50.98
210.0	000.2500	0099.4	012.8	083.5	000.5000	0102.1	027.6	51.03
211.0	000.2500	0099.7	012.8	083.2	000.5000	0102.1	027.4	51.15
212.0	000.2500	0099.6	012.8	082.9	000.5000	0102.1	027.2	51.27
213.0	000.2500	0099.7	012.8	082.6	000.5000	0102.1	027.1	51.38
214.0	000.2500	0100.1	012.9	082.3	000.5000	0101.7	026.9	51.46
215.0	000.2500	0100.6	012.9	082.1	000.5000	0101.7	026.7	51.59
216.0	000.2500	0101.0	012.9	081.8	000.5000	0101.7	026.5	51.71
217.0	000.2500	0101.2	012.9	081.4	000.5000	0101.3	026.4	51.78
218.0	000.2500	0101.3	012.9	081.1	000.5000	0101.3	026.2	51.89
219.0	000.2500	0101.4	012.9	080.7	000.5000	0101.3	026.0	52.00
220.0	000.2500	0101.4	012.9	080.4	000.5000	0101.1	025.9	52.08

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
221.0	000.2500	0101.3	012.9	080.0	000.5000	0101.1	025.7	52.18
222.0	000.2500	0101.4	012.9	079.6	000.5000	0101.1	025.6	52.27
223.0	000.2500	0101.6	013.0	079.2	000.5000	0101.0	025.5	52.37
224.0	000.2500	0101.9	013.0	078.8	000.5000	0101.0	025.3	52.48
225.0	000.2500	0102.3	013.0	078.4	000.5000	0100.9	025.2	52.56
226.0	000.2500	0102.3	013.0	078.0	000.5000	0100.9	025.0	52.65
227.0	000.2500	0101.8	013.0	077.5	000.5000	0100.7	024.9	52.70
228.0	000.2500	0101.1	012.9	077.0	000.5000	0100.7	024.9	52.75
229.0	000.2500	0100.6	012.9	076.5	000.5000	0100.4	024.8	52.78
230.0	000.2500	0100.5	012.9	076.0	000.5000	0100.4	024.7	52.85
231.0	000.2500	0100.7	012.9	075.6	000.5000	0100.4	024.6	52.93
232.0	000.2500	0100.9	012.9	075.1	000.5000	0100.3	024.5	52.99
233.0	000.2500	0101.0	012.9	074.6	000.5000	0100.3	024.4	53.05
234.0	000.2500	0101.0	012.9	074.1	000.5000	0100.4	024.3	53.12
235.0	000.2500	0100.7	012.9	073.6	000.5000	0100.4	024.2	53.17
236.0	000.2500	0100.3	012.9	073.1	000.5000	0100.7	024.2	53.23
237.0	000.2500	0100.1	012.9	072.5	000.5000	0100.7	024.1	53.27
238.0	000.2500	0100.2	012.9	072.0	000.5000	0101.1	024.1	53.35
239.0	000.2500	0100.3	012.9	071.5	000.5000	0101.1	024.0	53.39
240.0	000.2500	0100.4	012.9	071.0	000.5000	0101.6	024.0	53.48
241.0	000.2500	0100.5	012.9	070.5	000.5000	0102.3	023.9	53.57
242.0	000.2500	0100.6	012.9	069.9	000.5000	0102.3	023.9	53.60
243.0	000.2500	0100.6	012.9	069.4	000.5000	0102.9	023.9	53.67
244.0	000.2500	0100.3	012.9	068.8	000.5000	0102.9	023.8	53.68
245.0	000.2500	0099.8	012.9	068.3	000.5000	0103.3	023.9	53.71
246.0	000.2500	0099.3	012.8	067.8	000.5000	0103.3	023.9	53.69
247.0	000.2500	0099.1	012.8	067.2	000.5000	0103.6	023.9	53.71
248.0	000.2500	0099.1	012.8	066.7	000.5000	0103.6	023.9	53.71
249.0	000.2500	0099.0	012.8	066.1	000.5000	0103.6	023.9	53.70
250.0	000.2500	0098.7	012.8	065.6	000.5000	0103.6	023.9	53.68
251.0	000.2500	0098.4	012.8	065.1	000.5000	0103.6	024.0	53.65
252.0	000.2500	0098.3	012.8	064.6	000.5000	0103.6	024.0	53.63
253.0	000.2500	0098.2	012.8	064.0	000.5000	0103.6	024.0	53.61
254.0	000.2500	0097.8	012.7	063.5	000.5000	0103.6	024.1	53.56
255.0	000.2500	0097.5	012.7	063.0	000.5000	0103.9	024.2	53.54
256.0	000.2500	0097.1	012.7	062.5	000.5000	0103.9	024.2	53.49
257.0	000.2500	0097.2	012.7	062.0	000.5000	0104.3	024.3	53.49
258.0	000.2500	0097.2	012.7	061.5	000.5000	0104.8	024.3	53.49
259.0	000.2500	0097.1	012.7	061.0	000.5000	0104.8	024.4	53.44
260.0	000.2500	0096.7	012.7	060.5	000.5000	0104.8	024.5	53.37
261.0	000.2500	0096.1	012.6	060.1	000.5000	0105.4	024.6	53.34
262.0	000.2500	0095.5	012.6	059.6	000.5000	0105.4	024.7	53.26
263.0	000.2500	0094.9	012.5	059.2	000.5000	0106.2	024.9	53.25
264.0	000.2500	0094.7	012.5	058.7	000.5000	0106.2	025.0	53.18
265.0	000.2500	0094.6	012.5	058.3	000.5000	0107.1	025.1	53.19
266.0	000.2500	0094.5	012.5	057.9	000.5000	0107.1	025.2	53.11
267.0	000.2500	0094.2	012.5	057.4	000.5000	0107.8	025.3	53.09
268.0	000.2500	0093.8	012.5	057.0	000.5000	0107.8	025.4	53.00
269.0	000.2500	0093.4	012.4	056.7	000.5000	0107.8	025.5	52.90
270.0	000.2500	0092.9	012.4	056.3	000.5000	0107.9	025.7	52.82
271.0	000.2500	0092.5	012.4	055.9	000.5000	0107.9	025.8	52.72

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
272.0	000.2500	0092.2	012.4	055.6	000.5000	0107.9	026.0	52.62
273.0	000.2500	0092.1	012.4	055.2	000.5000	0107.5	026.1	52.49
274.0	000.2500	0092.0	012.4	054.8	000.5000	0107.5	026.2	52.40
275.0	000.2500	0091.9	012.3	054.5	000.5000	0106.5	026.4	52.22
276.0	000.2500	0091.3	012.3	054.2	000.5000	0106.5	026.6	52.11
277.0	000.2500	0090.5	012.3	053.9	000.5000	0106.5	026.7	51.99
278.0	000.2500	0089.8	012.2	053.6	000.5000	0106.5	026.9	51.87
279.0	000.2500	0088.9	012.2	053.4	000.5000	0105.0	027.1	51.62
280.0	000.2500	0088.1	012.1	053.2	000.5000	0105.0	027.3	51.50
281.0	000.2500	0087.5	012.1	052.9	000.5000	0105.0	027.5	51.39
282.0	000.2500	0086.9	012.0	052.7	000.5000	0105.0	027.7	51.27
283.0	000.2500	0086.3	012.0	052.5	000.5000	0103.3	027.9	51.00
284.0	000.2500	0085.7	011.9	052.3	000.5000	0103.3	028.0	50.88
285.0	000.2500	0085.1	011.9	052.1	000.5000	0103.3	028.2	50.77
286.0	000.2500	0084.5	011.9	051.9	000.5000	0103.3	028.4	50.65
287.0	000.2500	0083.7	011.8	051.7	000.5000	0103.3	028.6	50.53
288.0	000.2500	0082.8	011.8	051.6	000.5000	0103.3	028.8	50.41
289.0	000.2500	0082.0	011.7	051.5	000.5000	0101.7	029.0	50.14
290.0	000.2500	0081.1	011.6	051.3	000.5000	0101.7	029.2	50.02
291.0	000.2500	0080.3	011.6	051.2	000.5000	0101.7	029.4	49.91
292.0	000.2500	0079.6	011.5	051.1	000.5000	0101.7	029.6	49.79
293.0	000.2500	0078.9	011.5	051.0	000.5000	0101.7	029.8	49.68
294.0	000.2500	0078.3	011.5	050.9	000.5000	0101.7	030.0	49.57
295.0	000.2500	0077.9	011.4	050.8	000.5000	0101.7	030.2	49.46
296.0	000.2500	0077.7	011.4	050.6	000.5000	0101.7	030.4	49.36
297.0	000.2500	0077.7	011.4	050.5	000.5000	0100.5	030.6	49.15
298.0	000.2500	0078.1	011.4	050.3	000.5000	0100.5	030.7	49.06
299.0	000.2500	0078.6	011.5	050.1	000.5000	0100.5	030.9	48.97
300.0	000.2500	0079.2	011.5	049.9	000.5000	0100.5	031.1	48.88
301.0	000.2500	0079.5	011.5	049.7	000.5000	0100.5	031.3	48.78
302.0	000.2500	0079.6	011.5	049.6	000.5000	0100.5	031.5	48.68
303.0	000.2500	0079.6	011.5	049.5	000.5000	0099.8	031.6	48.52
304.0	000.2500	0080.0	011.6	049.3	000.5000	0099.8	031.8	48.43
305.0	000.2500	0080.6	011.6	049.2	000.5000	0099.8	032.0	48.34
306.0	000.2500	0081.2	011.6	049.0	000.5000	0099.8	032.2	48.25
307.0	000.2500	0081.7	011.7	048.9	000.5000	0099.8	032.4	48.16

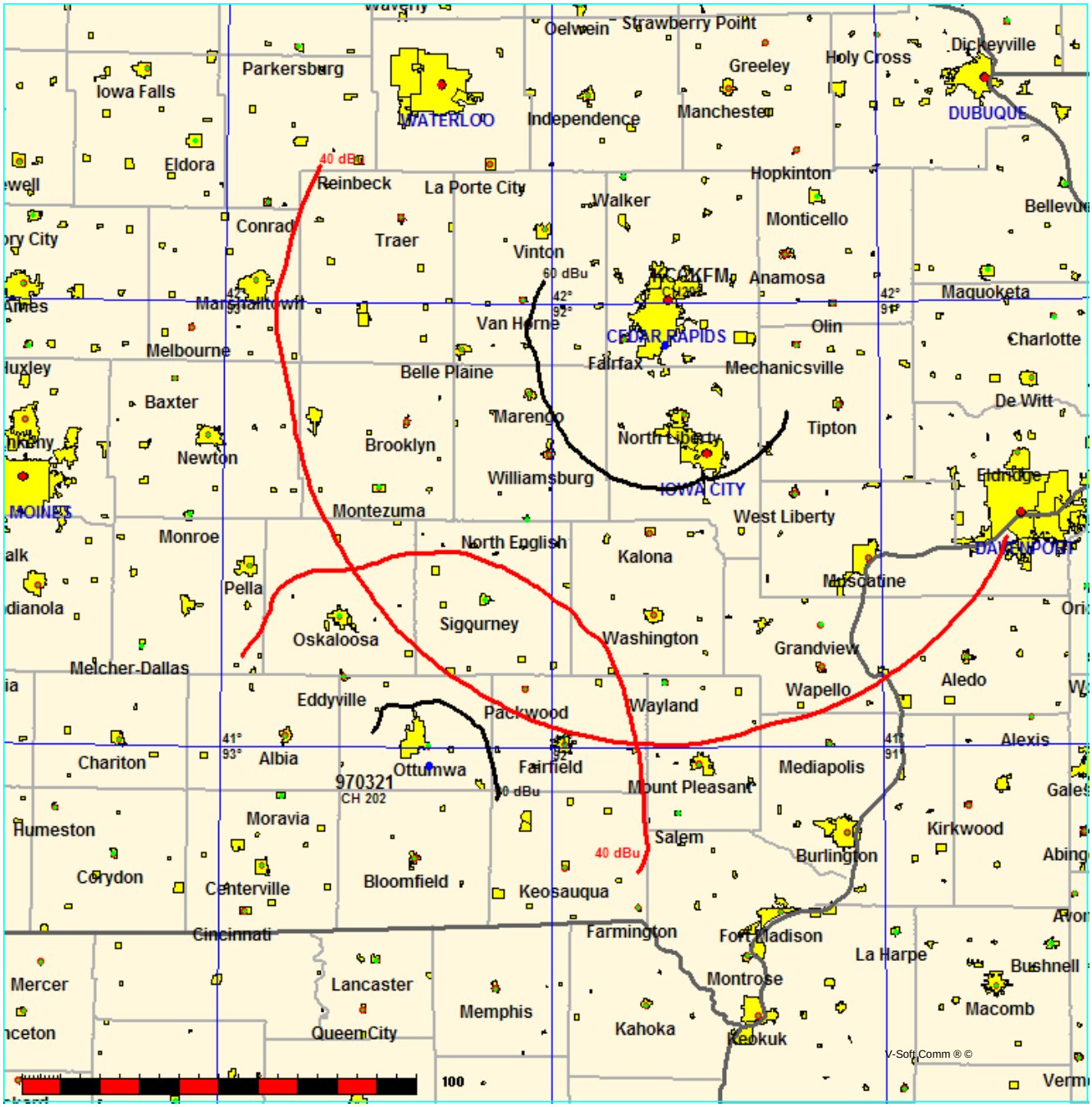
University of Northern Iowa
KCCK, Cedar Rapids VS UNI Proposed

FMCommander Allocation Study
08-01-2005

970321 CH 202 A
.5 kW 338 M COR
Prot. = 60 dBu
Intef. = 40 dBu

KCCKFM CH 202 C3 BLED1408
10 kW, 366 M COR
Prot. = 60 dBu
Intef. = 40 dBu

Scale = 1:2,500,000



08-01-2005 30 Sec. Terrain Data FMOver Analysis

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Protected
60 dBu

KCCKFM BLED1408
Channel = 202C3
Max ERP = 10 kW
RCAMSL = 366 M
N. Lat = 41 54 33
W. Lng = 91 39 17
Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
329.0	000.5000	0129.1	017.7	217.6	010.0000	0123.3	113.4	36.81
330.0	000.5000	0126.0	017.5	217.4	010.0000	0124.2	113.2	36.87
331.0	000.5000	0121.8	017.2	217.2	010.0000	0124.2	113.0	36.90
332.0	000.5000	0117.4	016.8	217.0	010.0000	0124.2	112.9	36.92
333.0	000.5000	0113.7	016.5	216.8	010.0000	0124.2	112.8	36.95
334.0	000.5000	0110.8	016.3	216.6	010.0000	0124.2	112.6	36.98
335.0	000.5000	0108.7	016.1	216.4	010.0000	0124.5	112.5	37.02
336.0	000.5000	0106.9	016.0	216.3	010.0000	0124.5	112.3	37.05
337.0	000.5000	0105.3	015.8	216.2	010.0000	0124.5	112.1	37.08
338.0	000.5000	0103.8	015.7	216.0	010.0000	0124.5	112.0	37.11
339.0	000.5000	0102.5	015.6	215.9	010.0000	0124.5	111.8	37.14
340.0	000.5000	0101.7	015.5	215.8	010.0000	0124.5	111.6	37.18
341.0	000.5000	0101.3	015.5	215.7	010.0000	0124.5	111.4	37.22
342.0	000.5000	0101.0	015.4	215.6	010.0000	0124.5	111.2	37.26
343.0	000.5000	0100.9	015.4	215.5	010.0000	0124.5	111.0	37.30
344.0	000.5000	0101.1	015.4	215.4	010.0000	0124.7	110.8	37.35
345.0	000.5000	0101.5	015.5	215.4	010.0000	0124.7	110.5	37.39
346.0	000.5000	0102.1	015.5	215.3	010.0000	0124.7	110.3	37.44
347.0	000.5000	0102.8	015.6	215.2	010.0000	0124.7	110.1	37.49
348.0	000.5000	0103.3	015.6	215.1	010.0000	0124.7	109.8	37.54
349.0	000.5000	0103.9	015.7	215.1	010.0000	0124.7	109.6	37.59
350.0	000.5000	0104.3	015.7	215.0	010.0000	0124.7	109.4	37.63
351.0	000.5000	0104.5	015.7	214.9	010.0000	0124.7	109.2	37.67
352.0	000.5000	0105.1	015.8	214.8	010.0000	0124.7	108.9	37.72
353.0	000.5000	0105.6	015.8	214.7	010.0000	0124.7	108.7	37.76
354.0	000.5000	0105.7	015.9	214.6	010.0000	0124.7	108.5	37.80
355.0	000.5000	0105.5	015.8	214.5	010.0000	0124.9	108.4	37.84
356.0	000.5000	0105.2	015.8	214.4	010.0000	0124.9	108.2	37.88
357.0	000.5000	0105.1	015.8	214.2	010.0000	0124.9	108.1	37.91
358.0	000.5000	0105.2	015.8	214.1	010.0000	0124.9	107.9	37.95
359.0	000.5000	0105.4	015.8	214.0	010.0000	0124.9	107.7	37.98
000.0	000.5000	0105.5	015.8	213.9	010.0000	0124.9	107.6	38.02
001.0	000.5000	0105.5	015.8	213.8	010.0000	0124.9	107.4	38.05
002.0	000.5000	0106.0	015.9	213.6	010.0000	0124.9	107.2	38.09
003.0	000.5000	0106.5	015.9	213.5	010.0000	0124.9	107.0	38.13
004.0	000.5000	0107.3	016.0	213.4	010.0000	0125.0	106.8	38.17
005.0	000.5000	0107.8	016.0	213.3	010.0000	0125.0	106.7	38.21

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
006.0	000.5000	0108.5	016.1	213.2	010.0000	0125.0	106.5	38.25
007.0	000.5000	0109.1	016.1	213.0	010.0000	0125.0	106.3	38.29
008.0	000.5000	0109.5	016.2	212.9	010.0000	0125.0	106.1	38.32
009.0	000.5000	0109.4	016.2	212.8	010.0000	0125.0	106.0	38.34
010.0	000.5000	0108.5	016.1	212.6	010.0000	0125.0	106.0	38.35
011.0	000.5000	0107.5	016.0	212.5	010.0000	0124.9	106.0	38.36
012.0	000.5000	0106.6	015.9	212.3	010.0000	0124.9	106.0	38.36
013.0	000.5000	0106.1	015.9	212.2	010.0000	0124.9	105.9	38.37
014.0	000.5000	0105.7	015.9	212.0	010.0000	0124.9	105.8	38.39
015.0	000.5000	0105.3	015.8	211.9	010.0000	0124.9	105.8	38.40
016.0	000.5000	0104.7	015.8	211.7	010.0000	0124.9	105.8	38.40
017.0	000.5000	0104.0	015.7	211.6	010.0000	0124.9	105.8	38.40
018.0	000.5000	0103.5	015.7	211.4	010.0000	0125.0	105.7	38.41
019.0	000.5000	0103.5	015.7	211.3	010.0000	0125.0	105.7	38.43
020.0	000.5000	0103.5	015.7	211.1	010.0000	0125.0	105.6	38.44
021.0	000.5000	0103.3	015.6	211.0	010.0000	0125.0	105.6	38.44
022.0	000.5000	0102.9	015.6	210.8	010.0000	0125.0	105.6	38.45
023.0	000.5000	0102.6	015.6	210.7	010.0000	0125.0	105.6	38.45
024.0	000.5000	0102.3	015.6	210.5	010.0000	0125.0	105.6	38.45
025.0	000.5000	0101.9	015.5	210.4	010.0000	0125.5	105.6	38.47
026.0	000.5000	0101.2	015.5	210.2	010.0000	0125.5	105.6	38.46
027.0	000.5000	0100.7	015.4	210.1	010.0000	0125.5	105.6	38.45
028.0	000.5000	0100.5	015.4	209.9	010.0000	0125.5	105.7	38.45
029.0	000.5000	0100.6	015.4	209.8	010.0000	0125.5	105.6	38.45
030.0	000.5000	0100.8	015.4	209.6	010.0000	0125.5	105.6	38.46
031.0	000.5000	0100.7	015.4	209.5	010.0000	0126.3	105.6	38.48
032.0	000.5000	0100.4	015.4	209.3	010.0000	0126.3	105.7	38.47
033.0	000.5000	0100.2	015.4	209.2	010.0000	0126.3	105.7	38.46
034.0	000.5000	0100.0	015.4	209.1	010.0000	0126.3	105.7	38.46
035.0	000.5000	0100.0	015.3	208.9	010.0000	0126.3	105.8	38.45
036.0	000.5000	0099.9	015.3	208.8	010.0000	0126.3	105.8	38.44
037.0	000.5000	0099.7	015.3	208.6	010.0000	0126.3	105.9	38.43
038.0	000.5000	0099.4	015.3	208.5	010.0000	0126.8	105.9	38.43
039.0	000.5000	0099.5	015.3	208.3	010.0000	0126.8	106.0	38.43
040.0	000.5000	0100.4	015.4	208.2	010.0000	0126.8	105.9	38.43
041.0	000.5000	0101.6	015.5	208.0	010.0000	0126.8	105.9	38.44
042.0	000.5000	0102.7	015.6	207.9	010.0000	0126.8	105.9	38.45
043.0	000.5000	0103.3	015.6	207.7	010.0000	0126.8	105.9	38.44
044.0	000.5000	0103.1	015.6	207.6	010.0000	0126.8	106.0	38.42
045.0	000.5000	0102.2	015.5	207.5	010.0000	0127.1	106.1	38.40
046.0	000.5000	0101.0	015.4	207.3	010.0000	0127.1	106.3	38.36
047.0	000.5000	0100.1	015.4	207.2	010.0000	0127.1	106.5	38.32
048.0	000.5000	0099.6	015.3	207.1	010.0000	0127.1	106.6	38.29
049.0	000.5000	0099.8	015.3	207.0	010.0000	0127.1	106.7	38.27
050.0	000.5000	0100.5	015.4	206.8	010.0000	0127.1	106.8	38.26
051.0	000.5000	0101.7	015.5	206.7	010.0000	0127.1	106.8	38.26
052.0	000.5000	0103.3	015.6	206.5	010.0000	0127.3	106.8	38.27
053.0	000.5000	0105.0	015.8	206.3	010.0000	0127.3	106.7	38.28
054.0	000.5000	0106.5	015.9	206.2	010.0000	0127.3	106.8	38.27
055.0	000.5000	0107.5	016.0	206.0	010.0000	0127.3	106.8	38.26
056.0	000.5000	0107.9	016.0	205.9	010.0000	0127.3	106.9	38.24

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
057.0	000.5000	0107.8	016.0	205.7	010.0000	0127.3	107.1	38.20
058.0	000.5000	0107.1	016.0	205.6	010.0000	0127.3	107.3	38.16
059.0	000.5000	0106.2	015.9	205.5	010.0000	0127.3	107.5	38.11
060.0	000.5000	0105.4	015.8	205.4	010.0000	0127.7	107.7	38.08
061.0	000.5000	0104.8	015.8	205.3	010.0000	0127.7	107.9	38.04
062.0	000.5000	0104.3	015.7	205.2	010.0000	0127.7	108.1	38.00
063.0	000.5000	0103.9	015.7	205.1	010.0000	0127.7	108.3	37.96
064.0	000.5000	0103.6	015.7	205.0	010.0000	0127.7	108.5	37.92
065.0	000.5000	0103.6	015.7	204.9	010.0000	0127.7	108.7	37.88
066.0	000.5000	0103.6	015.7	204.8	010.0000	0127.7	108.8	37.84
067.0	000.5000	0103.6	015.7	204.7	010.0000	0127.7	109.0	37.80
068.0	000.5000	0103.3	015.6	204.6	010.0000	0127.7	109.2	37.76
069.0	000.5000	0102.9	015.6	204.5	010.0000	0127.7	109.4	37.72
070.0	000.5000	0102.3	015.5	204.4	010.0000	0128.4	109.7	37.69
071.0	000.5000	0101.6	015.5	204.3	010.0000	0128.4	109.9	37.65
072.0	000.5000	0101.1	015.4	204.3	010.0000	0128.4	110.1	37.60
073.0	000.5000	0100.7	015.4	204.2	010.0000	0128.4	110.4	37.55
074.0	000.5000	0100.4	015.4	204.1	010.0000	0128.4	110.6	37.51
075.0	000.5000	0100.3	015.4	204.0	010.0000	0128.4	110.8	37.47
076.0	000.5000	0100.4	015.4	203.9	010.0000	0128.4	111.0	37.43
077.0	000.5000	0100.7	015.4	203.8	010.0000	0128.4	111.2	37.39
078.0	000.5000	0100.9	015.4	203.8	010.0000	0128.4	111.4	37.35
079.0	000.5000	0101.0	015.4	203.7	010.0000	0128.4	111.6	37.31
080.0	000.5000	0101.1	015.4	203.6	010.0000	0128.4	111.9	37.26
081.0	000.5000	0101.3	015.5	203.5	010.0000	0128.4	112.1	37.22
082.0	000.5000	0101.7	015.5	203.4	010.0000	0129.4	112.3	37.21
083.0	000.5000	0102.1	015.5	203.3	010.0000	0129.4	112.5	37.17
084.0	000.5000	0102.8	015.6	203.2	010.0000	0129.4	112.7	37.13
085.0	000.5000	0103.7	015.7	203.1	010.0000	0129.4	112.9	37.09
086.0	000.5000	0104.5	015.7	203.0	010.0000	0129.4	113.1	37.05
087.0	000.5000	0105.6	015.8	202.9	010.0000	0129.4	113.3	37.02
088.0	000.5000	0106.4	015.9	202.8	010.0000	0129.4	113.5	36.97
089.0	000.5000	0106.8	015.9	202.8	010.0000	0129.4	113.8	36.93

08-01-2005 30 Sec. Terrain Data

KCCKFM BLED1408
Channel = 202C3
Max ERP = 10 kW
RCAMSL = 366 M
N. Lat = 41 54 33
W. Lng = 91 39 17
Protected
   60 dBu

970321
Channel = 202A
Max ERP = 0.5 kW
RCAMSL = 338 M
N. Lat = 40 57 41
W. Lng = 92 22 13
Interfering
   40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
150.0	010.0000	0134.7	036.4	046.3	000.5000	0101.0	107.5	24.22
151.0	010.0000	0134.6	036.4	046.2	000.5000	0101.0	106.8	24.35
152.0	010.0000	0134.3	036.4	046.1	000.5000	0101.0	106.2	24.47
153.0	010.0000	0133.7	036.3	045.9	000.5000	0101.0	105.6	24.60
154.0	010.0000	0132.9	036.2	045.8	000.5000	0101.0	105.1	24.72
155.0	010.0000	0132.0	036.1	045.6	000.5000	0101.0	104.5	24.84
156.0	010.0000	0131.3	036.0	045.5	000.5000	0102.2	103.9	25.00
157.0	010.0000	0130.9	036.0	045.3	000.5000	0102.2	103.4	25.12
158.0	010.0000	0130.6	035.9	045.2	000.5000	0102.2	102.8	25.25
159.0	010.0000	0130.3	035.9	045.0	000.5000	0102.2	102.2	25.37
160.0	010.0000	0129.7	035.8	044.8	000.5000	0102.2	101.7	25.49
161.0	010.0000	0128.1	035.6	044.6	000.5000	0102.2	101.2	25.60
162.0	010.0000	0125.8	035.4	044.3	000.5000	0103.1	100.8	25.73
163.0	010.0000	0123.5	035.1	044.0	000.5000	0103.1	100.3	25.83
164.0	010.0000	0123.2	035.1	043.8	000.5000	0103.1	099.8	25.95
165.0	010.0000	0123.9	035.1	043.7	000.5000	0103.1	099.3	26.08
166.0	010.0000	0124.8	035.2	043.6	000.5000	0103.1	098.7	26.22
167.0	010.0000	0125.4	035.3	043.4	000.5000	0103.3	098.1	26.36
168.0	010.0000	0126.6	035.5	043.3	000.5000	0103.3	097.5	26.50
169.0	010.0000	0128.5	035.7	043.2	000.5000	0103.3	096.9	26.66
170.0	010.0000	0129.8	035.8	043.0	000.5000	0103.3	096.3	26.80
171.0	010.0000	0130.5	035.9	042.9	000.5000	0103.3	095.8	26.94
172.0	010.0000	0131.2	036.0	042.7	000.5000	0103.3	095.2	27.08
173.0	010.0000	0131.9	036.1	042.5	000.5000	0102.7	094.7	27.19
174.0	010.0000	0132.4	036.1	042.2	000.5000	0102.7	094.2	27.32
175.0	010.0000	0133.1	036.2	042.0	000.5000	0102.7	093.6	27.46
176.0	010.0000	0133.9	036.3	041.8	000.5000	0102.7	093.1	27.59
177.0	010.0000	0134.4	036.4	041.6	000.5000	0102.7	092.6	27.72
178.0	010.0000	0134.5	036.4	041.3	000.5000	0101.6	092.2	27.80
179.0	010.0000	0134.1	036.4	041.0	000.5000	0101.6	091.8	27.90
180.0	010.0000	0133.7	036.3	040.7	000.5000	0101.6	091.4	28.00
181.0	010.0000	0133.2	036.2	040.3	000.5000	0100.4	091.0	28.05
182.0	010.0000	0133.0	036.2	040.0	000.5000	0100.4	090.6	28.15
183.0	010.0000	0132.8	036.2	039.7	000.5000	0100.4	090.3	28.25

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
184.0	010.0000	0132.8	036.2	039.4	000.5000	0099.5	089.9	28.31
185.0	010.0000	0132.9	036.2	039.1	000.5000	0099.5	089.5	28.41
186.0	010.0000	0133.2	036.2	038.7	000.5000	0099.5	089.1	28.51
187.0	010.0000	0133.6	036.3	038.4	000.5000	0099.4	088.8	28.61
188.0	010.0000	0133.7	036.3	038.1	000.5000	0099.4	088.4	28.70
189.0	010.0000	0133.5	036.3	037.7	000.5000	0099.4	088.1	28.78
190.0	010.0000	0132.9	036.2	037.3	000.5000	0099.7	087.9	28.86
191.0	010.0000	0132.3	036.1	036.9	000.5000	0099.7	087.7	28.92
192.0	010.0000	0132.0	036.1	036.6	000.5000	0099.7	087.4	28.98
193.0	010.0000	0131.9	036.1	036.2	000.5000	0099.9	087.2	29.06
194.0	010.0000	0132.2	036.1	035.8	000.5000	0099.9	086.9	29.14
195.0	010.0000	0132.2	036.1	035.4	000.5000	0100.0	086.7	29.20
196.0	010.0000	0131.8	036.1	035.0	000.5000	0100.0	086.5	29.25
197.0	010.0000	0131.4	036.0	034.6	000.5000	0100.0	086.3	29.30
198.0	010.0000	0131.2	036.0	034.2	000.5000	0100.0	086.2	29.34
199.0	010.0000	0131.4	036.0	033.8	000.5000	0100.0	086.0	29.40
200.0	010.0000	0131.6	036.0	033.4	000.5000	0100.2	085.8	29.45
201.0	010.0000	0131.3	036.0	033.0	000.5000	0100.2	085.7	29.48
202.0	010.0000	0130.5	035.9	032.6	000.5000	0100.2	085.7	29.49
203.0	010.0000	0129.4	035.8	032.2	000.5000	0100.4	085.7	29.50
204.0	010.0000	0128.4	035.7	031.7	000.5000	0100.4	085.7	29.49
205.0	010.0000	0127.7	035.6	031.3	000.5000	0100.7	085.7	29.51
206.0	010.0000	0127.3	035.5	030.9	000.5000	0100.7	085.7	29.51
207.0	010.0000	0127.1	035.5	030.5	000.5000	0100.8	085.7	29.52
208.0	010.0000	0126.8	035.5	030.1	000.5000	0100.8	085.7	29.52
209.0	010.0000	0126.3	035.4	029.7	000.5000	0100.8	085.7	29.51
210.0	010.0000	0125.5	035.3	029.3	000.5000	0100.6	085.8	29.48
211.0	010.0000	0125.0	035.3	028.8	000.5000	0100.6	085.9	29.46
212.0	010.0000	0124.9	035.3	028.4	000.5000	0100.5	085.9	29.44
213.0	010.0000	0125.0	035.3	028.0	000.5000	0100.5	085.9	29.43
214.0	010.0000	0124.9	035.3	027.6	000.5000	0100.5	086.0	29.41
215.0	010.0000	0124.7	035.2	027.2	000.5000	0100.7	086.1	29.40
216.0	010.0000	0124.5	035.2	026.8	000.5000	0100.7	086.2	29.37
217.0	010.0000	0124.2	035.2	026.4	000.5000	0101.2	086.3	29.35
218.0	010.0000	0123.3	035.1	026.0	000.5000	0101.2	086.6	29.29
219.0	010.0000	0122.0	034.9	025.7	000.5000	0101.2	086.8	29.22
220.0	010.0000	0121.5	034.9	025.3	000.5000	0101.9	087.0	29.19
221.0	010.0000	0121.9	034.9	024.9	000.5000	0101.9	087.2	29.16
222.0	010.0000	0122.2	035.0	024.5	000.5000	0101.9	087.3	29.12
223.0	010.0000	0122.1	034.9	024.1	000.5000	0102.3	087.5	29.09
224.0	010.0000	0121.6	034.9	023.8	000.5000	0102.3	087.7	29.02
225.0	010.0000	0120.7	034.8	023.4	000.5000	0102.6	088.1	28.94
226.0	010.0000	0119.6	034.6	023.1	000.5000	0102.6	088.4	28.85
227.0	010.0000	0118.4	034.5	022.8	000.5000	0102.6	088.8	28.74
228.0	010.0000	0117.2	034.4	022.5	000.5000	0102.9	089.2	28.65
229.0	010.0000	0116.1	034.2	022.2	000.5000	0102.9	089.6	28.55
230.0	010.0000	0114.8	034.0	021.9	000.5000	0102.9	090.0	28.43
231.0	010.0000	0113.8	033.9	021.6	000.5000	0102.9	090.4	28.33
232.0	010.0000	0113.5	033.9	021.3	000.5000	0103.3	090.7	28.25
233.0	010.0000	0113.5	033.9	021.0	000.5000	0103.3	091.0	28.17
234.0	010.0000	0113.5	033.9	020.6	000.5000	0103.3	091.3	28.09

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
235.0	010.0000	0113.0	033.8	020.4	000.5000	0103.5	091.7	28.00
236.0	010.0000	0112.3	033.7	020.1	000.5000	0103.5	092.1	27.89
237.0	010.0000	0111.5	033.6	019.8	000.5000	0103.5	092.6	27.77
238.0	010.0000	0110.7	033.5	019.6	000.5000	0103.5	093.0	27.66
239.0	010.0000	0110.3	033.4	019.3	000.5000	0103.5	093.4	27.55
240.0	010.0000	0110.0	033.4	019.1	000.5000	0103.5	093.8	27.44
241.0	010.0000	0109.8	033.4	018.8	000.5000	0103.5	094.2	27.34
242.0	010.0000	0109.8	033.3	018.6	000.5000	0103.5	094.6	27.23
243.0	010.0000	0109.9	033.4	018.3	000.5000	0103.5	095.0	27.14
244.0	010.0000	0110.4	033.4	018.0	000.5000	0103.5	095.4	27.04
245.0	010.0000	0110.9	033.5	017.8	000.5000	0103.5	095.8	26.95
246.0	010.0000	0111.3	033.6	017.5	000.5000	0103.5	096.2	26.85
247.0	010.0000	0111.2	033.6	017.3	000.5000	0104.0	096.6	26.76
248.0	010.0000	0110.7	033.5	017.1	000.5000	0104.0	097.1	26.64
249.0	010.0000	0109.8	033.4	016.9	000.5000	0104.0	097.6	26.51
250.0	010.0000	0109.1	033.2	016.8	000.5000	0104.0	098.2	26.38
251.0	010.0000	0108.4	033.2	016.6	000.5000	0104.0	098.7	26.25
252.0	010.0000	0108.0	033.1	016.5	000.5000	0104.7	099.2	26.16
253.0	010.0000	0107.6	033.0	016.3	000.5000	0104.7	099.7	26.04
254.0	010.0000	0107.3	033.0	016.1	000.5000	0104.7	100.2	25.92
255.0	010.0000	0107.0	032.9	016.0	000.5000	0104.7	100.7	25.80
256.0	010.0000	0106.7	032.9	015.8	000.5000	0104.7	101.2	25.69
257.0	010.0000	0106.4	032.9	015.7	000.5000	0104.7	101.7	25.57
258.0	010.0000	0106.0	032.8	015.6	000.5000	0104.7	102.3	25.45
259.0	010.0000	0105.5	032.7	015.5	000.5000	0105.3	102.8	25.35
260.0	010.0000	0105.0	032.6	015.4	000.5000	0105.3	103.4	25.23
261.0	010.0000	0104.8	032.6	015.3	000.5000	0105.3	103.9	25.11
262.0	010.0000	0105.0	032.6	015.1	000.5000	0105.3	104.4	25.00
263.0	010.0000	0105.5	032.7	015.0	000.5000	0105.3	104.9	24.90
264.0	010.0000	0106.3	032.8	014.8	000.5000	0105.3	105.4	24.80
265.0	010.0000	0107.3	033.0	014.6	000.5000	0105.3	105.9	24.69
266.0	010.0000	0108.4	033.2	014.4	000.5000	0105.7	106.4	24.61
267.0	010.0000	0110.4	033.4	014.2	000.5000	0105.7	106.8	24.51
268.0	010.0000	0112.6	033.7	013.9	000.5000	0105.7	107.3	24.41
269.0	010.0000	0114.8	034.0	013.7	000.5000	0105.7	107.8	24.31
270.0	010.0000	0116.9	034.3	013.5	000.5000	0106.1	108.3	24.22