

Doug Vernier - Telecommunications Consultants
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K219CE Allocations Tabular Study
Nebraska Educational Telecommunications Commission

REFERENCE
40 13 11.0 N.
95 39 55.0 W.

CH# 205D

- 88.9 MHz, Pwr= 0.062 kW, HAAT= 176.3 M, COR= 486.2 M
Average Protected F(50-50)= 12.03 km
Omni-directional

DISPLAY DATES
DATA 09-24-12
SEARCH 09-24-12

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
205D Nebraska City	K205FG	LIC _C_	NE	343.7 163.6	50.94 BLFT20100430ADU	40 39 34.0 95 50 05.0	0.048 96	29.8 404	8.0 My Bridge Radio	0.1
207C2 Tabor	KHLW	LIC DCX	IA	11.1 191.2	40.35 BLED20120301ABG	40 34 33.0 95 34 24.0	50.000 116	2.8 422	29.5 Calvary Chapel Of Omaha	8.7
203C1 Lincoln	KLCV	LIC DCX	NE	316.2 135.7	87.62 BLED20090622AAF	40 47 10.0 96 23 10.0	46.000 383	8.8 731	68.8 Community Broadcasting, Inc.	18.4
205C3 Beatrice	KNBE	LIC DVX	NE	294.2 113.6	90.83 BLED20100602AJP	40 33 03.0 96 38 45.0	7.500 146	76.3 564	25.5 Family Worship Center Church	24.9
06 D Sioux City	K06QG-D	CP _N	IA	350.2 169.8	267.21 BMJADVL20100519AAZ	42 35 12.0 96 13 19.0	0.300 593	0.6 956	70.5 Hispanic Family Christian	139.5R 127.7M
06 D Columbia	1337131	AP _N	MO	115.5 297.6	319.10 BNPDVL20091020AAM	38 56 12.0 92 20 02.0	0.300 58	0.6 236	70.5 Live Sports Radio, Inc.	139.5R 179.6M
06Z2 Hutchinson	616942	AP _HN	KS	222.7 41.0	342.00 BPRM20011009AEG	37 55 43.0 98 18 36.0	0.000	0.6 0	70.5 Sierra Grande Broadcasting	139.5R 202.5M
06 D Sioux Falls	1441870	AP _Y	SD	347.1 166.4	378.99 BNPDVL20100723AQN	43 32 17.0 96 42 50.0	3.000 61	0.6 476	70.5 Dtv America Corporation	139.5R 239.5M
06 D Rolla	1330630	AP _N	MO	125.6 308.0	418.29 BNPDVL20090825BJS	37 57 54.0 91 47 01.0	0.300 214	0.6 470	70.5 Alma Corporation	139.5R 278.8M

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM.
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding
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.

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 "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".

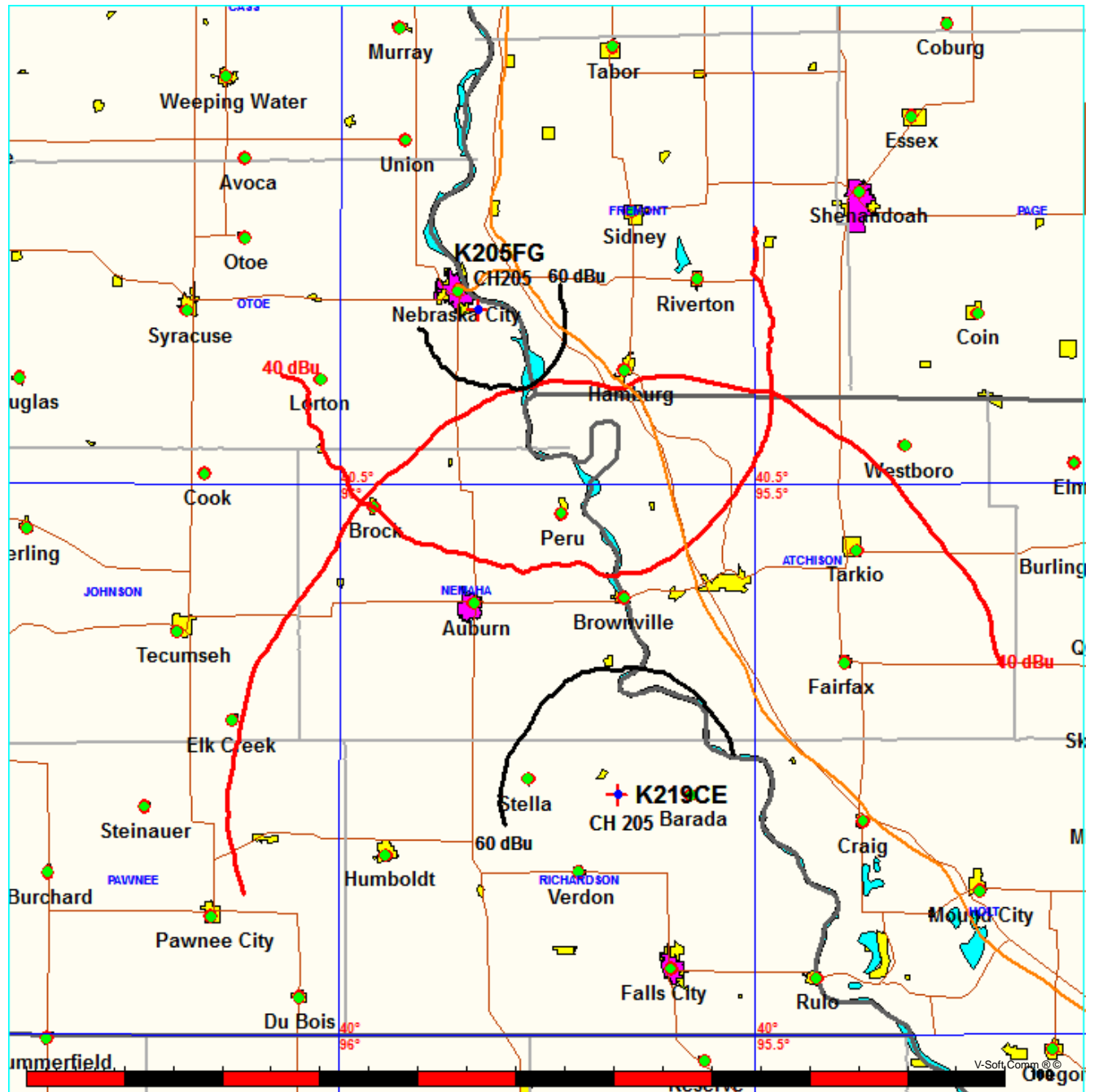
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will 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.

Contour-to-Contour Analysis - K205FG
Nebraska Educational Telecommunications Commission

FMCommander Single Allocation Study - 09-25-2012 - USGS 03 SEC
K219CE's Overlaps (In= 10.67 km, Out= 0.1 km)

K219CE CH 205 D
Lat= 40 13 11.0, Lng= 95 39 55.0
0.062 kW 174.4 M HAAT, 486.2 M COR
Prot.= 60 dBu, Intef.= 40 dBu

K205FG CH 205 D BLFT20100430ADU
Lat= 40 39 34.0, Lng= 95 50 05.0
0.048 kW 96.4 M HAAT, 404 M COR
Prot.= 60 dBu, Intef.= 40 dBu



09-25-2012

Terrain Data: USGS 03 SEC

FMOver Analysis

K205FG BLFT20100430ADU

K219CE

Channel = 205D

Max ERP = 0.048 kW

RCAMSL = 404 M

N. Lat. 40 39 34.0

W. Lng. 95 50 05.0

Protected

60 dBu

Channel = 205D

Max ERP = 0.062 kW

RCAMSL = 486.16 M

N. Lat. 40 13 11.0

W. Lng. 95 39 55.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
104.0	000.0480	0116.5	009.3	353.5	000.0620	0189.7	046.9	37.77	
105.0	000.0480	0117.1	009.3	353.4	000.0620	0189.7	046.8	37.83	
106.0	000.0480	0118.7	009.4	353.4	000.0620	0189.8	046.6	37.90	
107.0	000.0480	0119.3	009.4	353.4	000.0620	0189.8	046.5	37.97	
108.0	000.0480	0121.0	009.4	353.3	000.0620	0189.9	046.3	38.05	
109.0	000.0480	0122.1	009.5	353.3	000.0620	0189.9	046.1	38.12	
110.0	000.0480	0122.8	009.5	353.2	000.0620	0190.0	046.0	38.19	
111.0	000.0480	0124.1	009.6	353.2	000.0620	0190.1	045.8	38.26	
112.0	000.0480	0125.0	009.6	353.1	000.0620	0190.2	045.6	38.33	
113.0	000.0480	0125.4	009.6	353.0	000.0620	0190.3	045.5	38.40	
114.0	000.0480	0125.6	009.6	352.9	000.0620	0190.5	045.3	38.47	
115.0	000.0480	0125.8	009.6	352.8	000.0620	0190.7	045.2	38.54	
116.0	000.0480	0125.9	009.6	352.7	000.0620	0190.9	045.0	38.62	
117.0	000.0480	0125.9	009.6	352.6	000.0620	0191.3	044.9	38.69	
118.0	000.0480	0125.9	009.6	352.5	000.0620	0191.6	044.8	38.77	
119.0	000.0480	0125.9	009.6	352.4	000.0620	0192.0	044.6	38.84	
120.0	000.0480	0125.9	009.6	352.2	000.0620	0192.2	044.5	38.91	
121.0	000.0480	0125.8	009.6	352.1	000.0620	0192.5	044.4	38.98	
122.0	000.0480	0125.7	009.6	351.9	000.0620	0192.8	044.2	39.05	
123.0	000.0480	0125.6	009.6	351.8	000.0620	0193.0	044.1	39.11	
124.0	000.0480	0125.5	009.6	351.7	000.0620	0193.2	044.0	39.18	
125.0	000.0480	0125.5	009.6	351.5	000.0620	0193.3	043.9	39.23	
126.0	000.0480	0125.6	009.6	351.4	000.0620	0193.3	043.7	39.29	
127.0	000.0480	0125.7	009.6	351.2	000.0620	0193.4	043.6	39.34	
128.0	000.0480	0125.7	009.6	351.0	000.0620	0193.5	043.5	39.40	
129.0	000.0480	0125.7	009.6	350.9	000.0620	0193.6	043.4	39.45	
130.0	000.0480	0125.6	009.6	350.7	000.0620	0193.6	043.3	39.50	
131.0	000.0480	0125.5	009.6	350.5	000.0620	0193.6	043.2	39.55	
132.0	000.0480	0125.5	009.6	350.4	000.0620	0193.6	043.1	39.59	
133.0	000.0480	0125.5	009.6	350.2	000.0620	0193.6	043.0	39.64	
134.0	000.0480	0125.4	009.6	350.0	000.0620	0193.5	042.9	39.67	
135.0	000.0480	0125.2	009.6	349.8	000.0620	0193.3	042.8	39.71	
136.0	000.0480	0125.0	009.6	349.6	000.0620	0193.2	042.7	39.74	
137.0	000.0480	0124.9	009.6	349.4	000.0620	0193.1	042.6	39.77	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
138.0	000.0480	0124.5	009.6	349.2	000.0620	0192.9	042.5	39.80
139.0	000.0480	0124.2	009.6	349.0	000.0620	0192.8	042.4	39.83
140.0	000.0480	0123.9	009.5	348.8	000.0620	0192.6	042.4	39.85
141.0	000.0480	0123.7	009.5	348.6	000.0620	0192.5	042.3	39.88
142.0	000.0480	0123.0	009.5	348.4	000.0620	0192.4	042.2	39.90
143.0	000.0480	0121.8	009.5	348.2	000.0620	0192.2	042.2	39.90
144.0	000.0480	0121.1	009.4	348.0	000.0620	0191.9	042.2	39.91
145.0	000.0480	0120.8	009.4	347.8	000.0620	0191.7	042.1	39.92
146.0	000.0480	0120.5	009.4	347.6	000.0620	0191.5	042.1	39.94
147.0	000.0480	0119.8	009.4	347.3	000.0620	0191.5	042.0	39.95
148.0	000.0480	0118.3	009.3	347.1	000.0620	0191.4	042.0	39.95
149.0	000.0480	0116.4	009.3	346.9	000.0620	0191.3	042.0	39.94
150.0	000.0480	0113.6	009.2	346.6	000.0620	0191.2	042.1	39.91
151.0	000.0480	0111.6	009.1	346.4	000.0620	0191.2	042.1	39.90
152.0	000.0480	0111.1	009.1	346.2	000.0620	0191.2	042.1	39.91
153.0	000.0480	0110.3	009.0	345.9	000.0620	0191.3	042.1	39.91
154.0	000.0480	0107.6	008.9	345.7	000.0620	0191.5	042.2	39.89
155.0	000.0480	0103.6	008.8	345.5	000.0620	0191.6	042.3	39.83
156.0	000.0480	0098.0	008.5	345.2	000.0620	0191.8	042.5	39.74
157.0	000.0480	0095.2	008.4	345.0	000.0620	0192.0	042.6	39.70
158.0	000.0480	0093.0	008.3	344.8	000.0620	0192.1	042.7	39.67
159.0	000.0480	0092.2	008.2	344.6	000.0620	0192.2	042.7	39.66
160.0	000.0480	0092.1	008.2	344.4	000.0620	0192.3	042.7	39.67
161.0	000.0480	0091.3	008.2	344.2	000.0620	0192.4	042.8	39.66
162.0	000.0480	0089.1	008.1	344.0	000.0620	0192.4	042.9	39.62
163.0	000.0480	0088.7	008.0	343.8	000.0620	0192.5	042.9	39.61
164.0	000.0480	0088.2	008.0	343.6	000.0620	0192.6	042.9	39.61
165.0	000.0480	0087.7	008.0	343.4	000.0620	0192.7	042.9	39.60
166.0	000.0480	0087.4	008.0	343.2	000.0620	0192.6	043.0	39.59
167.0	000.0480	0087.8	008.0	343.1	000.0620	0192.5	043.0	39.59
168.0	000.0480	0087.7	008.0	342.9	000.0620	0192.2	043.0	39.56
169.0	000.0480	0089.1	008.1	342.7	000.0620	0191.8	042.9	39.57
170.0	000.0480	0089.4	008.1	342.5	000.0620	0191.5	042.9	39.56
171.0	000.0480	0086.7	007.9	342.3	000.0620	0191.2	043.1	39.47
172.0	000.0480	0084.0	007.8	342.2	000.0620	0190.9	043.2	39.39
173.0	000.0480	0083.3	007.8	342.0	000.0620	0190.5	043.3	39.35
174.0	000.0480	0083.6	007.8	341.8	000.0620	0190.2	043.3	39.33
175.0	000.0480	0082.3	007.7	341.7	000.0620	0190.1	043.4	39.28
176.0	000.0480	0081.5	007.7	341.5	000.0620	0190.0	043.5	39.25
177.0	000.0480	0080.7	007.7	341.4	000.0620	0189.8	043.5	39.21
178.0	000.0480	0079.7	007.6	341.2	000.0620	0189.7	043.6	39.16
179.0	000.0480	0079.6	007.6	341.1	000.0620	0189.5	043.7	39.13
180.0	000.0480	0078.3	007.5	340.9	000.0620	0189.3	043.8	39.08
181.0	000.0480	0076.8	007.5	340.8	000.0620	0189.1	043.9	39.02
182.0	000.0480	0076.2	007.4	340.7	000.0620	0188.9	044.0	38.98
183.0	000.0480	0075.4	007.4	340.5	000.0620	0188.7	044.0	38.93
184.0	000.0480	0075.0	007.4	340.4	000.0620	0188.4	044.1	38.89
185.0	000.0480	0074.2	007.3	340.2	000.0620	0188.2	044.2	38.84
186.0	000.0480	0074.7	007.4	340.1	000.0620	0188.0	044.2	38.82
187.0	000.0480	0075.0	007.4	339.9	000.0620	0187.7	044.3	38.79
188.0	000.0480	0074.3	007.3	339.8	000.0620	0187.5	044.4	38.74

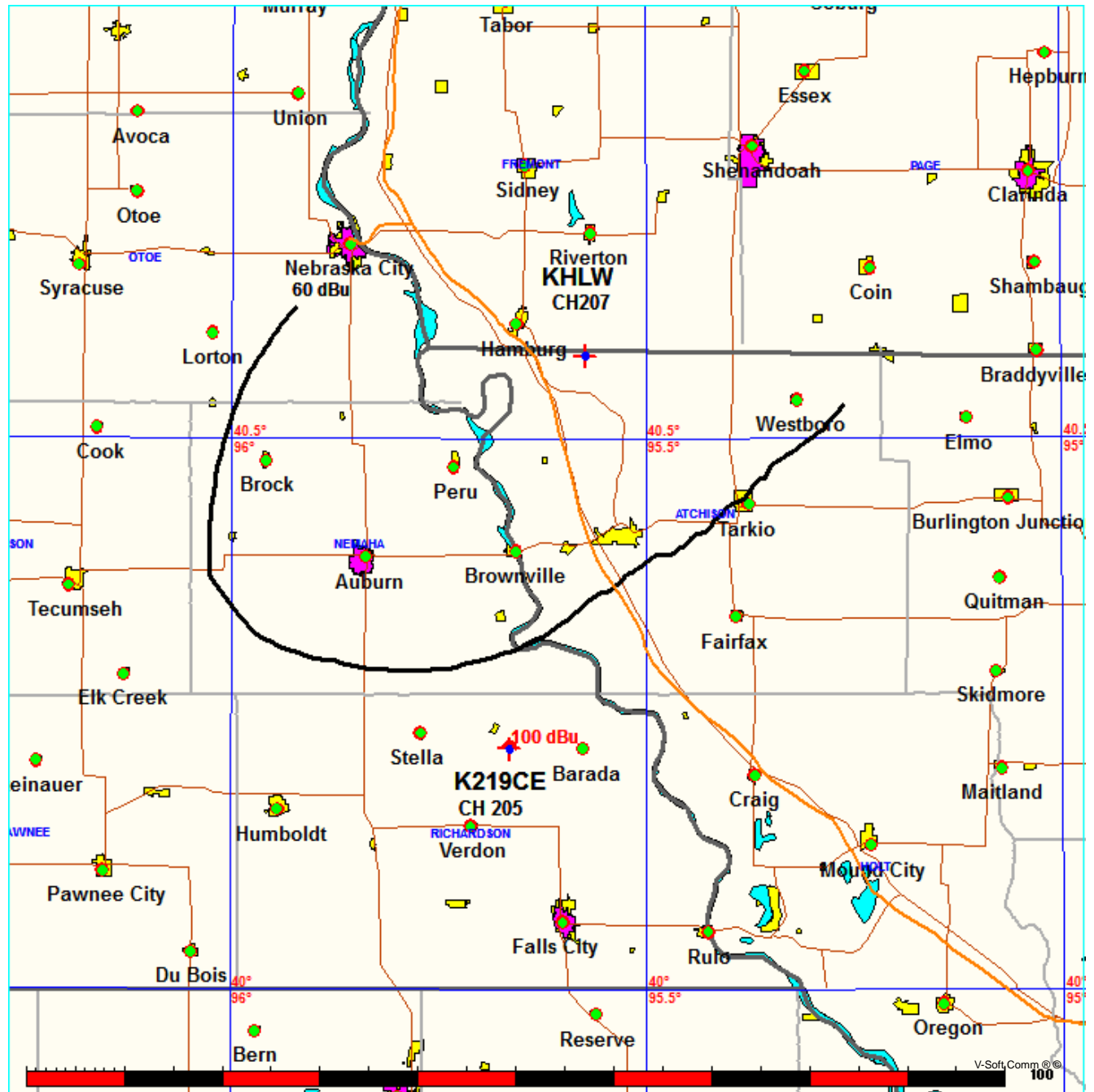
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
189.0	000.0480	0073.3	007.3	339.7	000.0620	0187.4	044.5	38.69
190.0	000.0480	0072.7	007.3	339.6	000.0620	0187.2	044.6	38.64
191.0	000.0480	0071.9	007.2	339.5	000.0620	0187.1	044.7	38.59
192.0	000.0480	0072.3	007.2	339.3	000.0620	0186.9	044.7	38.56
193.0	000.0480	0072.7	007.3	339.2	000.0620	0186.8	044.8	38.54
194.0	000.0480	0072.7	007.3	339.0	000.0620	0186.7	044.8	38.50
195.0	000.0480	0073.1	007.3	338.9	000.0620	0186.6	044.9	38.47
196.0	000.0480	0072.5	007.2	338.8	000.0620	0186.5	045.0	38.42
197.0	000.0480	0072.1	007.2	338.7	000.0620	0186.4	045.1	38.38
198.0	000.0480	0071.9	007.2	338.5	000.0620	0186.2	045.2	38.34
199.0	000.0480	0070.7	007.2	338.5	000.0620	0186.1	045.3	38.28
200.0	000.0480	0069.1	007.1	338.4	000.0620	0186.0	045.4	38.22
201.0	000.0480	0068.1	007.0	338.4	000.0620	0186.0	045.6	38.16
202.0	000.0480	0067.3	007.0	338.3	000.0620	0185.9	045.7	38.11
203.0	000.0480	0066.1	006.9	338.2	000.0620	0185.8	045.8	38.05
204.0	000.0480	0065.0	006.9	338.2	000.0620	0185.7	045.9	38.00
205.0	000.0480	0063.8	006.8	338.1	000.0620	0185.7	046.0	37.95
206.0	000.0480	0063.1	006.8	338.0	000.0620	0185.6	046.2	37.90
207.0	000.0480	0062.8	006.8	338.0	000.0620	0185.6	046.3	37.85
208.0	000.0480	0062.9	006.8	337.9	000.0620	0185.5	046.3	37.82
209.0	000.0480	0062.7	006.8	337.8	000.0620	0185.4	046.4	37.77
210.0	000.0480	0062.9	006.8	337.7	000.0620	0185.4	046.5	37.73
211.0	000.0480	0064.0	006.8	337.5	000.0620	0185.2	046.6	37.70
212.0	000.0480	0064.0	006.8	337.5	000.0620	0185.2	046.7	37.66
213.0	000.0480	0063.1	006.8	337.4	000.0620	0185.2	046.8	37.61
214.0	000.0480	0062.7	006.8	337.4	000.0620	0185.2	046.9	37.57
215.0	000.0480	0062.0	006.7	337.3	000.0620	0185.2	047.0	37.52
216.0	000.0480	0060.3	006.6	337.3	000.0620	0185.2	047.2	37.46
217.0	000.0480	0058.4	006.5	337.4	000.0620	0185.2	047.3	37.40
218.0	000.0480	0057.0	006.5	337.4	000.0620	0185.2	047.5	37.35
219.0	000.0480	0056.1	006.4	337.4	000.0620	0185.2	047.6	37.30
220.0	000.0480	0055.2	006.4	337.4	000.0620	0185.2	047.7	37.25
221.0	000.0480	0054.6	006.3	337.3	000.0620	0185.2	047.8	37.21
222.0	000.0480	0056.0	006.4	337.2	000.0620	0185.2	047.9	37.18
223.0	000.0480	0057.1	006.5	337.1	000.0620	0185.2	048.0	37.15

Contour-to-Contour Analysis - KHLW
Nebraska Educational Telecommunications Commission

FMCommander Single Allocation Study - 09-25-2012 - USGS 03 SEC
K219CE's Overlaps (In= 24.72 km, Out= 8.72 km)

K219CE CH 205 D
Lat= 40 13 11.0, Lng= 95 39 55.0
0.062 kW 174.4 M HAAT, 486.2 M COR
Prot.= 60 dBu, Intef.= 100 dBu

KHLW CH 207 C2 DA BLED20120301ABG
Lat= 40 34 33.0, Lng= 95 34 24.0
50.0 kW 116 M HAAT, 422 M COR
Prot.= 60 dBu, Intef.= 100 dBu



09-25-2012

Terrain Data: USGS 03 SEC

FMOver Analysis

KHLW BLED20120301ABG

K219CE

Channel = 207C2

Max ERP = 50 kW

RCAMSL = 422 M

N. Lat. 40 34 33.0

W. Lng. 95 34 24.0

Protected

60 dBu

Channel = 205D

Max ERP = 0.062 kW

RCAMSL = 486.16 M

N. Lat. 40 13 11.0

W. Lng. 95 39 55.0

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
131.0	001.7993	0102.4	021.8	043.6	000.0620	0193.3	035.0	43.42	
132.0	001.7747	0103.5	021.8	043.7	000.0620	0193.1	034.6	43.61	
133.0	001.7503	0102.5	021.6	043.4	000.0620	0193.7	034.2	43.84	
134.0	001.7261	0101.4	021.5	043.1	000.0620	0194.1	033.9	44.05	
135.0	001.7020	0099.9	021.2	042.7	000.0620	0194.7	033.5	44.26	
136.0	001.6781	0099.9	021.2	042.6	000.0620	0194.9	033.1	44.46	
137.0	001.6544	0100.6	021.2	042.5	000.0620	0194.9	032.8	44.66	
138.0	001.6308	0101.6	021.2	042.6	000.0620	0194.9	032.4	44.85	
139.0	001.6074	0104.0	021.4	042.8	000.0620	0194.6	032.0	45.04	
140.0	001.5842	0104.1	021.3	042.6	000.0620	0194.8	031.6	45.25	
141.0	001.5842	0103.3	021.2	042.4	000.0620	0195.1	031.3	45.46	
142.0	001.5842	0103.7	021.3	042.3	000.0620	0195.1	030.9	45.67	
143.0	001.5842	0105.9	021.5	042.6	000.0620	0194.8	030.5	45.89	
144.0	001.5842	0107.3	021.6	042.8	000.0620	0194.6	030.1	46.11	
145.0	001.5842	0107.9	021.7	042.7	000.0620	0194.7	029.7	46.34	
146.0	001.5842	0107.5	021.6	042.5	000.0620	0195.0	029.4	46.57	
147.0	001.5842	0105.5	021.4	041.9	000.0620	0195.5	029.1	46.79	
148.0	001.5842	0104.4	021.3	041.5	000.0620	0195.8	028.7	47.01	
149.0	001.5842	0104.3	021.3	041.3	000.0620	0196.0	028.4	47.24	
150.0	001.5842	0105.1	021.4	041.2	000.0620	0196.0	028.0	47.48	
151.0	001.5967	0106.7	021.6	041.3	000.0620	0196.0	027.6	47.75	
152.0	001.6092	0108.3	021.8	041.5	000.0620	0195.9	027.1	48.03	
153.0	001.6218	0106.8	021.7	041.0	000.0620	0196.1	026.8	48.25	
154.0	001.6344	0105.6	021.6	040.5	000.0620	0196.1	026.5	48.47	
155.0	001.6471	0107.3	021.8	040.6	000.0620	0196.1	026.1	48.76	
156.0	001.6598	0108.0	021.9	040.4	000.0620	0196.1	025.7	49.03	
157.0	001.6726	0107.4	021.9	040.0	000.0620	0196.0	025.4	49.26	
158.0	001.6854	0105.5	021.8	039.3	000.0620	0196.2	025.1	49.46	
159.0	001.6983	0102.7	021.5	038.4	000.0620	0197.0	024.9	49.64	
160.0	001.7113	0100.7	021.3	037.6	000.0620	0197.4	024.7	49.83	
161.0	001.7485	0101.2	021.5	037.5	000.0620	0197.5	024.3	50.12	
162.0	001.7860	0101.8	021.7	037.3	000.0620	0197.5	023.9	50.42	
163.0	001.8240	0101.1	021.7	036.8	000.0620	0197.6	023.5	50.66	
164.0	001.8625	0101.9	021.9	036.7	000.0620	0197.6	023.1	50.98	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
165.0	001.9012	0102.2	022.0	036.4	000.0620	0197.8	022.7	51.28
166.0	001.9404	0101.9	022.1	035.9	000.0620	0198.0	022.4	51.55
167.0	001.9801	0103.2	022.4	035.7	000.0620	0198.1	021.9	51.90
168.0	002.0201	0103.0	022.4	035.2	000.0620	0198.2	021.6	52.17
169.0	002.0604	0102.0	022.4	034.5	000.0620	0198.0	021.3	52.38
170.0	002.1012	0103.5	022.7	034.2	000.0620	0198.0	020.8	52.74
171.0	002.1715	0105.8	023.1	034.2	000.0620	0198.0	020.3	53.20
172.0	002.2430	0106.4	023.3	033.8	000.0620	0198.1	019.8	53.56
173.0	002.3156	0105.7	023.4	033.1	000.0620	0197.8	019.5	53.82
174.0	002.3893	0108.0	023.9	033.0	000.0620	0197.6	018.9	54.29
175.0	002.4642	0108.0	024.0	032.3	000.0620	0196.9	018.5	54.57
176.0	002.5403	0105.6	023.9	031.1	000.0620	0196.6	018.3	54.70
177.0	002.6175	0105.9	024.1	030.3	000.0620	0196.9	017.9	55.04
178.0	002.6958	0107.4	024.4	029.7	000.0620	0197.4	017.4	55.47
179.0	002.7754	0108.0	024.7	028.9	000.0620	0197.6	017.0	55.82
180.0	002.8560	0109.9	025.0	028.2	000.0620	0198.1	016.5	56.28
181.0	002.9209	0113.3	025.5	027.6	000.0620	0198.9	015.9	56.84
182.0	002.9866	0115.3	025.8	026.6	000.0620	0200.1	015.4	57.30
183.0	003.0529	0118.4	026.2	025.7	000.0620	0200.5	014.8	57.60
184.0	003.1200	0123.1	026.8	024.8	000.0620	0201.9	014.2	58.46
185.0	003.1878	0125.1	027.1	023.4	000.0620	0204.0	013.7	59.12
186.0	003.2564	0126.6	027.3	021.8	000.0620	0205.3	013.3	59.68
187.0	003.3256	0130.8	027.8	020.3	000.0620	0203.2	012.7	60.44
188.0	003.3956	0135.4	028.4	018.6	000.0620	0199.5	012.1	61.21
189.0	003.4663	0138.5	028.8	016.6	000.0620	0198.5	011.6	61.92
190.0	003.5378	0139.9	029.0	014.2	000.0620	0197.7	011.3	62.38
191.0	003.7237	0140.7	029.5	011.6	000.0620	0197.2	010.9	63.07
192.0	003.9144	0141.5	029.9	008.8	000.0620	0197.1	010.4	63.74
193.0	004.1098	0142.2	030.3	005.7	000.0620	0193.9	010.1	64.23
194.0	004.3100	0142.5	030.7	002.3	000.0620	0187.8	009.8	64.45
195.0	004.5150	0142.8	031.0	358.7	000.0620	0181.8	009.6	64.59
196.0	004.7247	0143.0	031.4	355.0	000.0620	0189.2	009.4	65.22
197.0	004.9392	0143.2	031.8	351.0	000.0620	0193.5	009.3	65.61
198.0	005.1585	0143.1	032.1	347.0	000.0620	0191.3	009.3	65.57
199.0	005.3825	0143.1	032.4	343.0	000.0620	0192.3	009.3	65.56
200.0	005.6113	0143.3	032.8	338.9	000.0620	0186.6	009.4	65.17
201.0	005.9065	0143.7	033.2	334.4	000.0620	0184.2	009.4	64.94
202.0	006.2093	0144.1	033.7	330.1	000.0620	0174.7	009.6	64.21
203.0	006.5197	0144.5	034.1	326.0	000.0620	0169.7	009.8	63.54
204.0	006.8376	0144.7	034.5	322.2	000.0620	0169.3	010.1	62.97
205.0	007.1631	0144.6	034.9	318.9	000.0620	0167.1	010.5	62.20
206.0	007.4962	0144.6	035.3	315.9	000.0620	0163.0	010.9	61.23
207.0	007.8368	0144.5	035.6	313.2	000.0620	0159.7	011.4	60.26
208.0	008.1851	0144.4	036.0	310.9	000.0620	0153.9	011.9	59.10
209.0	008.5408	0144.2	036.3	308.8	000.0620	0153.2	012.5	58.24
210.0	008.9042	0144.2	036.6	306.9	000.0620	0151.0	013.1	57.29
211.0	009.3701	0144.0	037.0	305.0	000.0620	0151.1	013.7	56.51
212.0	009.8479	0143.9	037.4	303.3	000.0620	0151.7	014.3	55.77
213.0	010.3376	0143.8	037.8	301.8	000.0620	0152.7	015.0	55.08
214.0	010.8392	0143.8	038.2	300.4	000.0620	0153.2	015.6	54.67
215.0	011.3526	0143.9	038.6	299.2	000.0620	0154.3	016.3	54.15

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
216.0	011.8779	0143.7	038.9	298.4	000.0620	0155.5	017.0	53.63
217.0	012.4151	0143.2	039.2	297.7	000.0620	0156.0	017.8	53.08
218.0	012.9642	0143.0	039.5	297.1	000.0620	0156.2	018.5	52.49
219.0	013.5252	0142.9	039.9	296.5	000.0620	0156.4	019.2	51.90
220.0	014.0981	0142.7	040.2	296.1	000.0620	0156.5	020.0	51.31
221.0	014.8349	0143.1	040.7	295.3	000.0620	0156.5	020.8	50.68
222.0	015.5905	0143.4	041.1	294.7	000.0620	0156.8	021.6	50.06
223.0	016.3649	0143.5	041.5	294.3	000.0620	0157.2	022.4	49.47
224.0	017.1581	0143.5	041.9	293.9	000.0620	0157.7	023.2	48.88
225.0	017.9700	0143.5	042.3	293.7	000.0620	0157.9	024.1	48.30
226.0	018.8007	0143.4	042.7	293.5	000.0620	0158.1	024.9	47.71
227.0	019.6502	0143.1	043.0	293.5	000.0620	0158.2	025.7	47.14
228.0	020.5184	0142.6	043.3	293.6	000.0620	0158.1	026.5	46.58
229.0	021.4054	0142.2	043.6	293.7	000.0620	0158.0	027.3	46.03
230.0	022.3112	0141.9	043.9	293.8	000.0620	0157.8	028.1	45.49
231.0	022.5389	0141.7	044.0	294.4	000.0620	0157.0	028.9	45.00
232.0	022.7678	0141.5	044.1	295.0	000.0620	0156.6	029.6	44.54
233.0	022.9978	0141.4	044.1	295.5	000.0620	0156.5	030.3	44.11
234.0	023.2289	0141.2	044.2	296.1	000.0620	0156.5	031.0	43.71
235.0	023.4613	0140.9	044.2	296.7	000.0620	0156.3	031.7	43.32
236.0	023.6947	0140.6	044.3	297.3	000.0620	0156.2	032.4	42.94
237.0	023.9294	0140.2	044.3	297.9	000.0620	0155.9	033.1	42.56
238.0	024.1652	0140.0	044.4	298.5	000.0620	0155.3	033.8	42.17
239.0	024.4021	0139.7	044.4	299.1	000.0620	0154.5	034.5	41.77
240.0	024.6402	0139.4	044.5	299.6	000.0620	0153.8	035.2	41.38
241.0	023.6397	0139.2	044.1	300.8	000.0620	0153.1	035.6	41.11
242.0	022.6599	0139.2	043.7	301.9	000.0620	0152.6	036.1	40.84
243.0	021.7009	0139.2	043.3	303.0	000.0620	0151.7	036.6	40.56
244.0	020.7626	0139.1	043.0	304.1	000.0620	0151.5	037.1	40.33
245.0	019.8450	0139.0	042.6	305.2	000.0620	0151.0	037.5	40.08
246.0	018.9482	0139.1	042.2	306.3	000.0620	0150.7	038.0	39.84
247.0	018.0721	0139.0	041.8	307.4	000.0620	0151.5	038.4	39.68
248.0	017.2167	0139.0	041.4	308.4	000.0620	0152.9	038.8	39.55
249.0	016.3821	0139.0	041.0	309.5	000.0620	0153.2	039.3	39.36
250.0	015.5682	0139.0	040.6	310.5	000.0620	0153.6	039.7	39.19

09-25-2012

Terrain Data: USGS 03 SEC

FMOver Analysis

KLCV BLED20090622AAF

K219CE

Channel = 203C1

Max ERP = 46 kW

RCAMSL = 730.5 M

N. Lat. 40 47 10.0

W. Lng. 96 23 10.0

Protected

60 dBu

Channel = 205D

Max ERP = 0.062 kW

RCAMSL = 486.16 M

N. Lat. 40 13 11.0

W. Lng. 95 39 55.0

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
076.0	046.0000	0334.4	067.1	002.8	000.0620	0190.5	079.3	26.30	
077.0	046.0000	0334.1	067.0	003.1	000.0620	0191.0	078.2	26.69	
078.0	046.0000	0333.6	067.0	003.3	000.0620	0191.3	077.1	27.07	
079.0	046.0000	0333.4	067.0	003.5	000.0620	0191.5	075.9	27.45	
080.0	046.0000	0333.7	067.0	003.8	000.0620	0191.8	074.8	27.83	
081.0	046.0000	0334.6	067.1	004.0	000.0620	0192.0	073.7	28.20	
082.0	046.0000	0335.4	067.1	004.3	000.0620	0192.2	072.5	28.59	
083.0	046.0000	0335.8	067.2	004.5	000.0620	0192.4	071.4	28.97	
084.0	046.0000	0335.4	067.1	004.6	000.0620	0192.6	070.2	29.36	
085.0	046.0000	0335.6	067.2	004.8	000.0620	0192.8	069.1	29.76	
086.0	046.0000	0336.4	067.2	005.0	000.0620	0193.0	067.9	30.15	
087.0	046.0000	0337.7	067.3	005.2	000.0620	0193.4	066.8	30.55	
088.0	046.0000	0339.4	067.4	005.5	000.0620	0193.7	065.6	30.95	
089.0	046.0000	0341.4	067.6	005.7	000.0620	0194.0	064.5	31.36	
090.0	046.0000	0341.9	067.6	005.9	000.0620	0194.1	063.3	31.76	
091.0	046.0000	0341.7	067.6	005.9	000.0620	0194.2	062.1	32.18	
092.0	046.0000	0341.5	067.6	006.0	000.0620	0194.3	060.9	32.61	
093.0	046.0000	0341.5	067.6	006.1	000.0620	0194.3	059.8	33.04	
094.0	046.0000	0342.2	067.6	006.2	000.0620	0194.4	058.6	33.48	
095.0	046.0000	0343.1	067.7	006.3	000.0620	0194.5	057.4	33.93	
096.0	046.0000	0343.0	067.7	006.3	000.0620	0194.5	056.2	34.38	
097.0	046.0000	0342.8	067.7	006.3	000.0620	0194.5	055.0	34.83	
098.0	046.0000	0343.1	067.7	006.2	000.0620	0194.5	053.9	35.29	
099.0	046.0000	0343.8	067.7	006.3	000.0620	0194.5	052.7	35.75	
100.0	046.0000	0344.6	067.8	006.2	000.0620	0194.5	051.5	36.21	
101.0	046.0000	0344.9	067.8	006.2	000.0620	0194.4	050.3	36.67	
102.0	046.0000	0344.1	067.8	006.0	000.0620	0194.2	049.1	37.12	
103.0	046.0000	0343.9	067.8	005.8	000.0620	0194.0	048.0	37.57	
104.0	046.0000	0344.2	067.8	005.6	000.0620	0193.8	046.8	38.03	
105.0	046.0000	0345.1	067.8	005.4	000.0620	0193.7	045.6	38.51	
106.0	046.0000	0346.8	068.0	005.3	000.0620	0193.5	044.4	39.00	
107.0	046.0000	0348.2	068.1	005.2	000.0620	0193.3	043.2	39.51	
108.0	046.0000	0349.4	068.1	004.9	000.0620	0192.9	042.0	40.01	
109.0	046.0000	0350.4	068.2	004.6	000.0620	0192.6	040.9	40.53	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
110.0	046.0000	0351.6	068.3	004.3	000.0620	0192.2	039.7	41.07
111.0	046.0000	0352.8	068.4	003.9	000.0620	0191.9	038.5	41.61
112.0	046.0000	0353.8	068.5	003.5	000.0620	0191.4	037.4	42.15
113.0	046.0000	0355.3	068.6	003.0	000.0620	0190.7	036.2	42.70
114.0	046.0000	0356.2	068.6	002.4	000.0620	0188.1	035.1	43.16
115.0	046.0000	0358.0	068.7	001.8	000.0620	0184.1	033.9	43.58
116.0	046.0000	0358.9	068.8	001.1	000.0620	0181.6	032.8	44.06
117.0	046.0000	0358.7	068.8	000.1	000.0620	0180.7	031.7	44.59
118.0	046.0000	0358.6	068.8	359.1	000.0620	0181.2	030.6	45.21
119.0	046.0000	0358.7	068.8	357.9	000.0620	0184.1	029.6	45.95
120.0	046.0000	0359.3	068.8	356.8	000.0620	0186.7	028.6	46.71
121.0	046.0000	0359.7	068.9	355.4	000.0620	0188.7	027.5	47.45
122.0	046.0000	0360.6	068.9	354.0	000.0620	0189.7	026.5	48.17
123.0	046.0000	0362.4	069.1	352.5	000.0620	0191.5	025.5	48.95
124.0	046.0000	0364.1	069.2	350.9	000.0620	0193.6	024.6	49.73
125.0	046.0000	0365.8	069.3	349.1	000.0620	0192.8	023.6	50.39
126.0	046.0000	0366.7	069.4	347.0	000.0620	0191.3	022.7	50.97
127.0	046.0000	0366.1	069.3	344.5	000.0620	0192.2	022.0	51.57
128.0	046.0000	0365.9	069.3	341.9	000.0620	0190.2	021.3	52.02
129.0	046.0000	0364.9	069.2	339.0	000.0620	0186.7	020.7	52.31
130.0	046.0000	0363.3	069.1	335.8	000.0620	0185.7	020.3	52.64
131.0	045.5412	0361.7	068.9	332.4	000.0620	0179.0	020.0	52.56
132.0	045.0846	0362.2	068.8	329.1	000.0620	0173.4	019.7	52.54
133.0	044.6304	0362.8	068.8	325.6	000.0620	0169.9	019.4	52.55
134.0	044.1784	0364.4	068.8	322.1	000.0620	0169.3	019.2	52.70
135.0	043.7288	0366.4	068.8	318.6	000.0620	0166.8	019.0	52.68
136.0	043.2814	0368.8	068.9	314.9	000.0620	0161.5	018.9	52.45
137.0	042.8363	0371.7	069.0	311.3	000.0620	0154.6	018.9	52.04
138.0	042.3936	0374.1	069.0	307.6	000.0620	0151.8	019.0	51.78
139.0	041.9531	0376.2	069.1	304.1	000.0620	0151.5	019.3	51.58
140.0	041.5150	0378.3	069.1	300.7	000.0620	0153.1	019.6	51.42
141.0	040.6456	0380.4	069.0	297.5	000.0620	0156.1	020.1	51.20
142.0	039.7854	0382.4	068.9	294.6	000.0620	0156.9	020.7	50.77
143.0	038.9344	0382.9	068.7	292.0	000.0620	0159.6	021.4	50.35
144.0	038.0926	0382.8	068.5	289.7	000.0620	0164.0	022.3	49.97
145.0	037.2600	0382.5	068.3	287.6	000.0620	0165.0	023.2	49.35
146.0	036.4366	0382.9	068.1	285.7	000.0620	0164.6	024.1	48.65
147.0	035.6224	0384.6	067.9	283.8	000.0620	0163.9	025.0	47.98
148.0	034.8174	0385.5	067.8	282.2	000.0620	0164.0	025.9	47.32
149.0	034.0216	0384.8	067.5	280.9	000.0620	0164.5	027.0	46.63
150.0	033.2350	0384.1	067.2	279.8	000.0620	0164.5	028.1	45.93
151.0	032.0340	0383.6	066.8	278.9	000.0620	0164.3	029.2	45.19
152.0	030.8550	0383.3	066.4	278.2	000.0620	0164.3	030.4	44.49
153.0	029.6982	0383.0	066.0	277.6	000.0620	0164.4	031.6	43.83
154.0	028.5634	0382.0	065.5	277.2	000.0620	0164.9	032.8	43.22
155.0	027.4508	0380.6	065.0	276.8	000.0620	0165.4	034.0	42.61
156.0	026.3603	0379.7	064.5	276.5	000.0620	0165.8	035.2	42.01
157.0	025.2918	0379.2	064.1	276.3	000.0620	0166.2	036.4	41.43
158.0	024.2455	0378.5	063.6	276.1	000.0620	0166.4	037.6	40.85
159.0	023.2213	0376.5	063.1	276.1	000.0620	0166.4	038.8	40.25
160.0	022.2191	0374.8	062.5	276.1	000.0620	0166.4	040.1	39.67

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
161.0	020.9650	0372.6	061.8	276.3	000.0620	0166.1	041.3	39.06
162.0	019.7472	0371.0	061.1	276.6	000.0620	0165.8	042.6	38.47
163.0	018.5659	0369.5	060.4	276.9	000.0620	0165.3	043.9	37.90
164.0	017.4210	0368.3	059.7	277.1	000.0620	0164.9	045.1	37.36
165.0	016.3125	0365.7	058.9	277.6	000.0620	0164.4	046.3	36.81
166.0	015.2405	0363.0	058.1	278.0	000.0620	0164.3	047.6	36.30
167.0	014.2049	0361.9	057.4	278.4	000.0620	0164.3	048.8	35.83
168.0	013.2058	0361.2	056.7	278.8	000.0620	0164.3	050.0	35.38
169.0	012.2430	0359.8	055.9	279.3	000.0620	0164.4	051.2	34.92
170.0	011.3167	0359.5	055.1	279.7	000.0620	0164.5	052.3	34.48
171.0	010.8605	0358.3	054.6	279.8	000.0620	0164.5	053.4	34.07
172.0	010.4137	0358.0	054.2	279.9	000.0620	0164.5	054.4	33.68
173.0	009.9763	0358.0	053.8	280.1	000.0620	0164.4	055.4	33.29
174.0	009.5483	0358.9	053.5	280.1	000.0620	0164.4	056.4	32.92
175.0	009.1296	0359.7	053.1	280.3	000.0620	0164.5	057.4	32.55
176.0	008.7204	0360.7	052.7	280.4	000.0620	0164.5	058.4	32.18
177.0	008.3205	0361.3	052.3	280.6	000.0620	0164.5	059.4	31.83
178.0	007.9300	0361.3	051.9	280.8	000.0620	0164.5	060.4	31.47
179.0	007.5489	0361.6	051.4	281.0	000.0620	0164.5	061.3	31.12
180.0	007.1772	0360.3	050.9	281.4	000.0620	0164.4	062.3	30.78
181.0	006.8894	0359.9	050.5	281.6	000.0620	0164.3	063.3	30.45
182.0	006.6075	0359.8	050.1	281.8	000.0620	0164.2	064.2	30.12
183.0	006.3315	0359.0	049.6	282.1	000.0620	0164.1	065.1	29.81
184.0	006.0614	0358.3	049.2	282.3	000.0620	0163.9	066.0	29.50
185.0	005.7972	0357.8	048.7	282.6	000.0620	0163.8	066.9	29.19
186.0	005.5388	0358.8	048.4	282.9	000.0620	0163.8	067.8	28.90
187.0	005.2864	0359.2	048.0	283.1	000.0620	0163.8	068.7	28.61
188.0	005.0398	0357.4	047.4	283.5	000.0620	0163.8	069.6	28.32
189.0	004.7991	0355.3	046.9	283.9	000.0620	0163.9	070.4	28.04
190.0	004.5643	0354.2	046.3	284.3	000.0620	0164.0	071.3	27.76
191.0	004.3836	0353.4	045.9	284.6	000.0620	0164.1	072.1	27.50
192.0	004.2065	0351.9	045.5	284.9	000.0620	0164.3	072.9	27.25
193.0	004.0331	0351.2	045.1	285.2	000.0620	0164.5	073.7	26.99
194.0	003.8633	0350.5	044.7	285.5	000.0620	0164.6	074.5	26.74
195.0	003.6971	0349.0	044.2	285.8	000.0620	0164.6	075.3	26.49