



Comprehensive Engineering Statement – June 6, 2023

McNeese University

Lake Charles, Louisiana

This proposal is for a minor change to the KBYS license to change of antenna site and a power increase using a directional antenna.

Geographic Coordinates: N. Lat. 30-13-45.4 W. Long. 93-12-19.1 W (NAD 83)

Channel number: 202, 88.3 Mhz., Class C3, ERP: 15 kW, circularly polarized, directional antenna

Proposed Antenna C.O.R: 90.2 m AMSL, 85.8 m A.G., HAAT: 85.8 m (8 cardinal radials.)

ERI Rototiller (LP-4E-DA), full-wave, circularly polarized, EPA type 3, Opposed U

Base elevation at the site: 3.3 m

Total structure height above ground: 108.2m, FAA 2022-ASW-15-OE, FCC Tower ID # 1322650

Page #3 is a contour-to-contour **tabular channel study** using our FMCommander. This study uses GLOBE 30 arc-second terrain data to show that, per section 73.509 of the Commission's rules, the proposed facility will neither cause nor receive contour overlap with any station in the Commission's FM database.

Pages 4-24 compose a **detailed map and tabular FMOVER study** that shows that the proposed facility will protect all stations that have a frequency and distance relationship and are shown on page #3.

Page #25 is a **coverage map** of the 60 dBu city service contour. As shown on the map, the proposed city of license, Lake Charles, Louisiana is covered 100 percent by the principal city contour.

Page #26 is **distance to contour** and HAAT table for the 36 cardinal radials.

Page #27 is the **directional antenna pattern** azimuth graph and table. This pattern meets the 2-dB per 10-degree rule and the 15-dB front-to-back ratio requirement. The directionality will be obtained by traditional means by ERI at their laboratory. The factory test facility will use the tower members and resonators, if required, to achieve the pattern. There will be no beam-tilt.

Page #28 through #30 is an **RF hazard graph and table** that shows that the proposed, full-wave, 4-bay ERI, antenna produces a power density well below the Commission's 200 $\mu\text{W}/\text{cm}^2$ maximum for this uncontrolled area. Using the OET 65 formulas with the proposed, EPA type #3 antenna, at the tower base and at head height, a total 4.12 $\mu\text{W}/\text{cm}^2$ is predicted, that is 0.412 percent of the controlled maximum. The maximum power density of 11.87 $\mu\text{W}/\text{cm}^2$. This is 1.19% of the maximum is located at

a horizontal distance of 12 meters from the tower base. There are no other controlled emitters on the tower at the time of this application.

The applicant proposes to use an existing registered tower that has not been the target of environmental objections. This tower replaces another tower at the site that collapsed last year. There will be no changes to the tower height or other changes that may call for a detailed environmental analysis. The tower base is gated and locked with appropriate signage. The applicant has an agreement with the owner of the tower to mutually reduce power or terminate all transmissions as necessary to protect workers on the tower.

Page #31 is an exhibit stating the **qualifications** of the preparer.

Doug Vernier

A handwritten signature in blue ink, appearing to read "Doug Vernier". The signature is stylized with a large, looping initial "D" and a long, horizontal stroke extending to the right.

Doug Vernier, Telecommunications Consultants LLC
Study Using FMCommander Software

KBYS contour-to-contour table
McNeese State University
CH# 202C3 - 88.3 MHz, Pwr= 15 kW DA, HAAT= 85.8 M, COR= 90.2 M
Average Protected F(50-50)= 32.51 km
Standard Directional

REFERENCE
30 13 45.40 N.
93 12 19.10 W.

DISPLAY DATES
DATA 06-08-23
SEARCH 06-08-23

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
202A	KBYS	STA DCN		276.3	1.01	30 13 49.00	4.000		---Reference---		
Lake Charles		LA		96.3	0000199512	93 12 57.00	122	125	Mcneese State University		
202A	KBYS	LIC DCN		276.3	1.01	30 13 49.00	4.000		---Reference---		
Lake Charles		LA		96.3	BLED20180615ABD	93 12 57.00	122	125	Mcneese State University		
203C3	KGHY	LIC _VN		274.1	72.31	30 16 23.80	13.500	53.3	34.6	0.1	10.4
Beaumont		TX		93.7	BLED20090601AUP	93 57 23.60	105	112	Ccs Radio, Inc.		
202C2	KIEE	LIC DCN		106.4	155.03	29 49 31.70	25.000	122.3	46.2	0.5	9.0
St. Martinville		LA		287.2	BLED20110808AAB	91 39 49.40	152	153	Southern Consumers Educati		
204C0	KRVS	LIC DEN		82.4	80.11	30 19 20.70	100.000	10.2	72.8	37.6	3.7
Lafayette		LA		262.8	BLED20040105AAF	92 22 40.50	379	388	The University Of Louisian		
201C2	KLBT	LIC DEN		251.7	109.63	29 54 52.80	30.000	70.1	46.7	16.0	30.8
Beaumont		TX		71.1	BLED20160511ABH	94 17 06.70	145	148	The King's Musi ci an Educat		
201C1	KAYT	LIC _EN		22.7	161.16	31 33 55.60	70.000	102.0	70.2	26.7	39.7
Jena		LA		203.0	BLED20001219ABM	92 33 00.50	307	355	Black Medi a Works, Inc.		
205A	768210	CP DCN		244.5	73.80	29 56 28.30	6.000	1.1	7.8	47.9	62.8
Central Gardens		TX		64.1	0000167104	93 53 47.20	40	42	Vida Ministry Inc.		
202C1	KAJR	LIC _VN		277.3	222.26	30 27 52.70	100.000	150.5	55.0	51.5	105.7
Willis		TX		96.2	BLED20171107ACF	95 30 20.80	135	216	Ameri can Family Associatio		
205C3	768966	APP DCN		245.8	79.60	29 56 03.00	16.740	1.6	12.9	53.4	63.2
Beaumont		TX		65.5	0000167747	93 57 33.00	71	71	Call Communications Group,		
205C3	766799	APP DVN		229.7	86.11	29 43 35.50	5.000	1.3	19.3	56.0	62.0
Port Arthur		TX		49.4	0000166698	93 53 08.00	151	152	Ccs Radio, Inc.		
205C1	762635	APP DCN		245.2	85.59	29 54 13.20	60.000	2.1	18.8	58.7	62.4
Port Arthur		TX		64.8	0000166728	94 00 40.90	41	41	Christi an Mini stries Of Th		

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= - ZN2, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"***"affixed to 'IN' or 'OUT' values = site inside restricted contour.
« = Station meets FCC minimum distance spacing for its class.

KBSY vs KRVS-FM Contour-to-Contour Map McNeese State University

FMCommander Single Allocation Study - 06-08-2023 - GLOBE 30 Sec
KBSY's Overlaps (In= 0.07 km, Out= 10.4 km)

KBYS CH 202 C3 DA

Lat= 30 13 45.40, Lng= 93 12 19.10

15.0 kW 85.8 m HAAT, 90.2 m COR

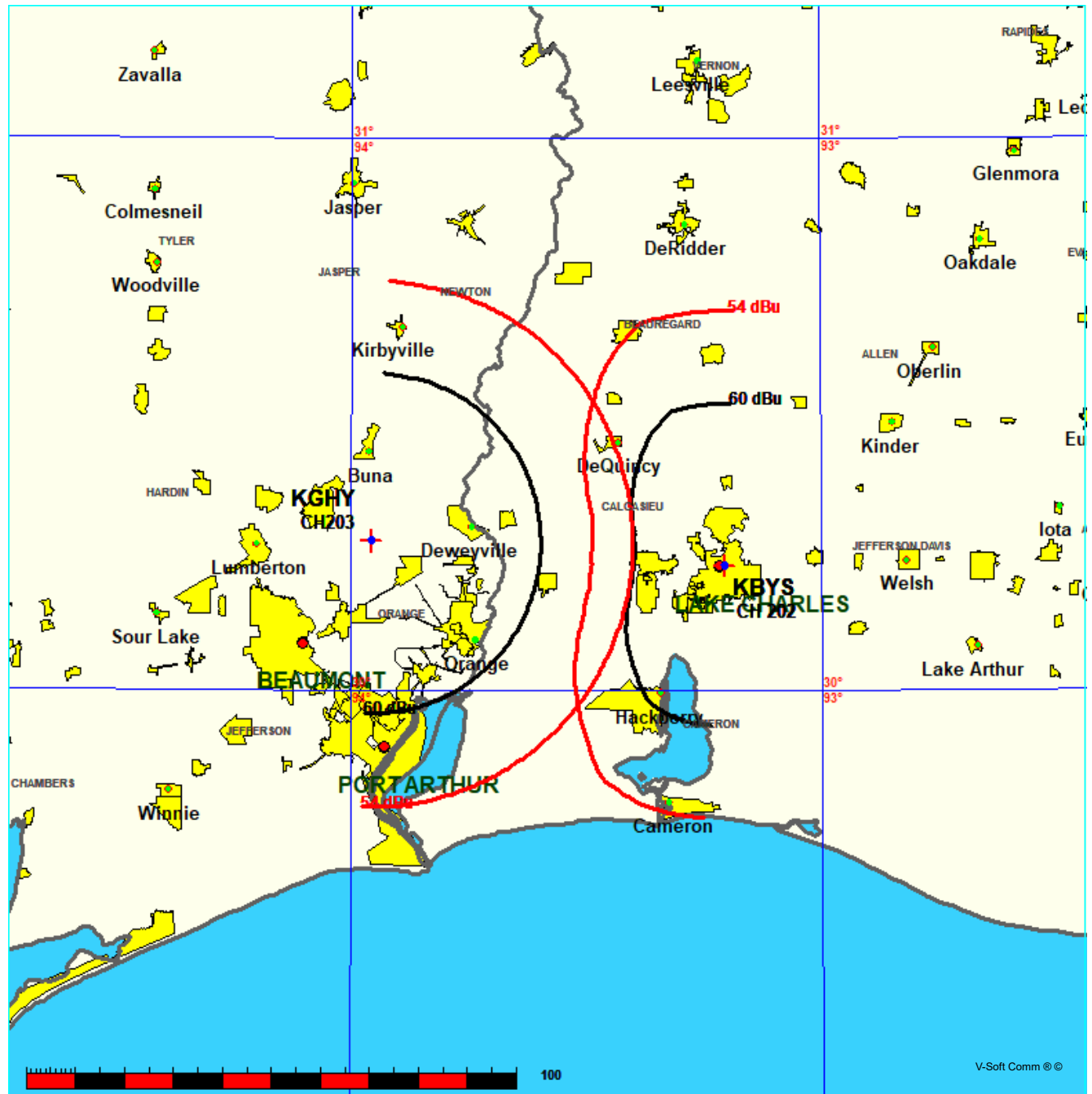
Prot.= 60 dBu, Intef.= 54 dBu

KGHY CH 203 C3 BLED20090601AUP

Lat= 30 16 23.80, Lng= 93 57 23.60

13.5 kW 105 m HAAT, 112 m COR

Prot.= 60 dBu, Intef.= 54 dBu



06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KBYS

KGYH BLED20090601AUP

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Protected

60 dBu

Channel = 203C3

Max ERP = 13.5 kW

RCAMSL = 112 m

N. Lat. 30 16 23.80

W. Lng. 93 57 23.60

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
214.0	011.3014	0086.3	030.5	118.5	013.5000	0104.1	062.9	50.65	
215.0	010.8120	0086.3	030.1	118.2	013.5000	0104.1	062.4	50.81	
216.0	010.3086	0086.3	029.8	117.8	013.5000	0104.1	061.9	50.97	
217.0	009.8172	0086.2	029.5	117.4	013.5000	0104.0	061.5	51.13	
218.0	009.3615	0086.2	029.2	117.0	013.5000	0104.0	061.0	51.28	
219.0	008.9166	0086.2	028.8	116.7	013.5000	0104.0	060.6	51.43	
220.0	008.4600	0086.2	028.5	116.2	013.5000	0103.9	060.2	51.57	
221.0	008.1254	0086.2	028.2	115.9	013.5000	0103.9	059.8	51.72	
222.0	007.7760	0086.2	028.0	115.5	013.5000	0103.9	059.4	51.86	
223.0	007.4554	0086.3	027.7	115.1	013.5000	0103.8	059.0	52.00	
224.0	007.1208	0086.4	027.4	114.7	013.5000	0103.8	058.6	52.13	
225.0	006.8141	0086.6	027.2	114.3	013.5000	0103.7	058.2	52.26	
226.0	006.5142	0086.7	026.9	113.9	013.5000	0103.7	057.9	52.39	
227.0	006.2017	0086.8	026.7	113.5	013.5000	0103.7	057.6	52.50	
228.0	005.9158	0087.0	026.4	113.1	013.5000	0103.6	057.2	52.62	
229.0	005.6182	0087.2	026.1	112.6	013.5000	0103.6	056.9	52.73	
230.0	005.3461	0087.4	025.9	112.2	013.5000	0103.6	056.7	52.84	
231.0	005.1334	0087.6	025.7	111.8	013.5000	0103.6	056.4	52.95	
232.0	004.9078	0087.8	025.4	111.4	013.5000	0103.5	056.1	53.05	
233.0	004.7040	0087.9	025.2	110.9	013.5000	0103.5	055.8	53.15	
234.0	004.5046	0087.8	025.0	110.5	013.5000	0103.5	055.6	53.23	
235.0	004.2934	0087.8	024.7	110.0	013.5000	0103.4	055.4	53.31	
236.0	004.1029	0087.7	024.4	109.5	013.5000	0103.4	055.2	53.38	
237.0	003.9168	0087.6	024.1	109.0	013.5000	0103.4	055.0	53.45	
238.0	003.7350	0087.4	023.9	108.5	013.5000	0103.4	054.9	53.51	
239.0	003.5429	0087.3	023.6	108.0	013.5000	0103.3	054.7	53.55	
240.0	003.3701	0087.2	023.3	107.5	013.5000	0103.3	054.6	53.59	
241.0	003.2294	0087.1	023.0	107.0	013.5000	0103.3	054.5	53.64	
242.0	003.1054	0087.0	022.8	106.6	013.5000	0103.3	054.3	53.69	
243.0	002.9704	0086.9	022.6	106.1	013.5000	0103.2	054.2	53.73	
244.0	002.8384	0086.8	022.3	105.6	013.5000	0103.2	054.2	53.76	
245.0	002.7221	0086.8	022.1	105.1	013.5000	0103.2	054.1	53.79	
246.0	002.5958	0086.7	021.9	104.7	013.5000	0103.2	054.0	53.81	
247.0	002.4725	0086.7	021.6	104.2	013.5000	0103.1	054.0	53.82	
248.0	002.3522	0086.7	021.4	103.7	013.5000	0103.1	054.0	53.83	
249.0	002.2465	0086.9	021.1	103.2	013.5000	0103.1	053.9	53.84	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
250.0	002.1319	0087.0	020.9	102.8	013.5000	0103.1	053.9	53.84
251.0	002.0646	0087.2	020.7	102.4	013.5000	0103.1	053.8	53.87
252.0	001.9984	0087.4	020.6	102.0	013.5000	0103.0	053.8	53.89
253.0	001.9440	0087.5	020.5	101.6	013.5000	0103.0	053.7	53.92
254.0	001.8797	0087.5	020.3	101.2	013.5000	0103.0	053.7	53.93
255.0	001.8166	0087.5	020.1	100.7	013.5000	0103.0	053.7	53.93
256.0	001.7545	0087.4	020.0	100.3	013.5000	0102.9	053.7	53.92
257.0	001.6934	0087.3	019.8	099.9	013.5000	0102.9	053.7	53.91
258.0	001.6434	0087.1	019.6	099.5	013.5000	0102.9	053.8	53.90
259.0	001.5844	0087.0	019.4	099.1	013.5000	0102.9	053.8	53.87
260.0	001.5264	0086.8	019.2	098.7	013.5000	0102.9	053.9	53.84
261.0	001.5073	0086.6	019.1	098.3	013.5000	0102.8	053.9	53.85
262.0	001.4884	0086.4	019.0	097.9	013.5000	0102.8	053.8	53.85
263.0	001.4695	0086.3	019.0	097.6	013.5000	0102.8	053.8	53.86
264.0	001.4508	0086.2	018.9	097.2	013.5000	0102.8	053.8	53.86
265.0	001.4415	0086.1	018.8	096.9	013.5000	0102.7	053.8	53.87
266.0	001.4230	0086.0	018.8	096.5	013.5000	0102.7	053.8	53.87
267.0	001.4045	0086.0	018.7	096.1	013.5000	0102.7	053.8	53.86
268.0	001.3862	0086.0	018.6	095.8	013.5000	0102.7	053.8	53.85
269.0	001.3681	0085.9	018.6	095.4	013.5000	0102.7	053.8	53.84
270.0	001.3500	0085.9	018.5	095.1	013.5000	0102.6	053.9	53.83
271.0	001.3590	0085.9	018.5	094.7	013.5000	0102.6	053.8	53.85
272.0	001.3590	0085.9	018.5	094.4	013.5000	0102.6	053.8	53.85
273.0	001.3681	0085.9	018.6	094.1	013.5000	0102.6	053.8	53.87
274.0	001.3681	0085.9	018.6	093.7	013.5000	0102.5	053.8	53.87
275.0	001.3771	0085.8	018.6	093.4	013.5000	0102.5	053.7	53.88
276.0	001.3771	0085.8	018.6	093.0	013.5000	0102.5	053.7	53.87
277.0	001.3771	0085.8	018.6	092.7	013.5000	0102.4	053.8	53.86
278.0	001.3862	0085.8	018.6	092.3	013.5000	0102.4	053.8	53.86
279.0	001.3954	0085.7	018.6	092.0	013.5000	0102.4	053.8	53.85
280.0	001.3954	0085.7	018.6	091.6	013.5000	0102.4	053.8	53.83
281.0	001.4230	0085.7	018.7	091.3	013.5000	0102.3	053.8	53.85
282.0	001.4602	0085.7	018.9	090.9	013.5000	0102.3	053.7	53.87
283.0	001.4884	0085.7	018.9	090.5	013.5000	0102.3	053.7	53.88
284.0	001.5169	0085.6	019.0	090.2	013.5000	0102.2	053.7	53.88
285.0	001.5553	0085.6	019.2	089.8	013.5000	0102.2	053.6	53.89
286.0	001.5844	0085.6	019.2	089.4	013.5000	0102.2	053.6	53.89
287.0	001.6138	0085.6	019.3	089.1	013.5000	0102.1	053.7	53.88
288.0	001.6434	0085.5	019.4	088.7	013.5000	0102.1	053.7	53.87
289.0	001.6834	0085.5	019.5	088.3	013.5000	0102.0	053.7	53.86
290.0	001.7137	0085.5	019.6	087.9	013.5000	0102.0	053.7	53.84
291.0	001.8061	0085.5	019.9	087.5	013.5000	0102.0	053.6	53.88
292.0	001.9010	0085.5	020.1	087.0	013.5000	0101.9	053.5	53.92
293.0	001.9874	0085.6	020.4	086.6	013.5000	0101.9	053.5	53.93
294.0	002.0869	0085.7	020.6	086.1	013.5000	0101.8	053.4	53.96
295.0	002.1889	0085.7	020.9	085.7	013.5000	0101.8	053.4	53.97
296.0	002.2932	0085.6	021.1	085.2	013.5000	0101.7	053.3	53.97
297.0	002.4000	0085.6	021.3	084.7	013.5000	0101.7	053.3	53.97
298.0	002.4970	0085.5	021.5	084.3	013.5000	0101.7	053.4	53.95
299.0	002.6083	0085.5	021.7	083.8	013.5000	0101.6	053.4	53.94
300.0	002.7221	0085.6	022.0	083.3	013.5000	0101.6	053.4	53.92

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
301.0	002.8645	0085.6	022.2	082.8	013.5000	0101.6	053.5	53.91
302.0	003.0106	0085.6	022.5	082.3	013.5000	0101.6	053.5	53.90
303.0	003.1602	0085.6	022.7	081.8	013.5000	0101.6	053.6	53.87
304.0	003.3135	0085.6	023.0	081.3	013.5000	0101.5	053.6	53.84
305.0	003.4704	0085.5	023.2	080.9	013.5000	0101.5	053.7	53.81
306.0	003.6310	0085.5	023.5	080.4	013.5000	0101.5	053.9	53.76
307.0	003.7951	0085.5	023.7	079.9	013.5000	0101.5	054.0	53.71
308.0	003.9629	0085.4	023.9	079.4	013.5000	0101.5	054.1	53.65
309.0	004.1344	0085.4	024.2	078.9	013.5000	0101.5	054.3	53.59
310.0	004.3094	0085.4	024.4	078.5	013.5000	0101.5	054.5	53.51
311.0	004.5375	0085.3	024.7	078.0	013.5000	0101.4	054.7	53.45
312.0	004.7714	0085.3	024.9	077.5	013.5000	0101.4	054.8	53.38
313.0	004.9939	0085.3	025.2	077.0	013.5000	0101.3	055.0	53.30
314.0	005.2392	0085.3	025.5	076.5	013.5000	0101.3	055.3	53.21
315.0	005.4904	0085.4	025.7	076.0	013.5000	0101.2	055.5	53.12
316.0	005.7474	0085.4	026.0	075.5	013.5000	0101.2	055.7	53.02
317.0	006.0103	0085.5	026.3	075.0	013.5000	0101.1	056.0	52.92
318.0	006.2597	0085.6	026.5	074.6	013.5000	0101.1	056.3	52.80
319.0	006.5340	0085.7	026.8	074.1	013.5000	0101.0	056.6	52.69
320.0	006.8141	0085.8	027.1	073.7	013.5000	0101.0	056.9	52.57
321.0	007.1830	0085.8	027.4	073.2	013.5000	0101.0	057.2	52.46
322.0	007.5402	0085.8	027.7	072.7	013.5000	0101.0	057.6	52.33
323.0	007.9279	0085.8	028.0	072.3	013.5000	0101.0	057.9	52.21
324.0	008.3030	0085.8	028.3	071.9	013.5000	0101.0	058.3	52.07
325.0	008.7097	0085.7	028.6	071.4	013.5000	0101.0	058.7	51.93
326.0	009.1026	0085.6	028.9	071.0	013.5000	0101.0	059.1	51.79
327.0	009.5042	0085.6	029.2	070.7	013.5000	0101.0	059.5	51.64
328.0	009.9389	0085.6	029.5	070.3	013.5000	0101.1	059.9	51.49
329.0	010.3584	0085.7	029.7	069.9	013.5000	0101.1	060.4	51.33
330.0	010.8120	0085.7	030.0	069.5	013.5000	0101.1	060.8	51.17
331.0	011.1974	0085.7	030.3	069.2	013.5000	0101.1	061.3	51.01
332.0	011.5896	0085.7	030.5	068.9	013.5000	0101.1	061.8	50.84
333.0	011.9885	0085.7	030.8	068.6	013.5000	0101.1	062.3	50.67

06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KGYH BLED20090601AUP

KBYS

Channel = 203C3

Max ERP = 13.5 kW

RCAMSL = 112 m

N. Lat. 30 16 23.80

W. Lng. 93 57 23.60

Protected

60 dBu

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Interfering

54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
034.0	013.5000	0099.0	034.0	302.1	003.0301	0085.6	062.5	43.11	
035.0	013.5000	0099.2	034.1	302.1	003.0298	0085.6	061.9	43.29	
036.0	013.5000	0099.3	034.1	302.1	003.0283	0085.6	061.3	43.48	
037.0	013.5000	0099.5	034.1	302.1	003.0245	0085.6	060.7	43.67	
038.0	013.5000	0099.6	034.1	302.1	003.0184	0085.6	060.1	43.86	
039.0	013.5000	0099.6	034.2	302.0	003.0101	0085.6	059.5	44.05	
040.0	013.5000	0099.7	034.2	301.9	002.9994	0085.6	058.9	44.23	
041.0	013.5000	0099.7	034.2	301.8	002.9868	0085.6	058.3	44.42	
042.0	013.5000	0099.8	034.2	301.7	002.9726	0085.6	057.7	44.60	
043.0	013.5000	0099.9	034.2	301.6	002.9575	0085.6	057.1	44.79	
044.0	013.5000	0100.0	034.2	301.5	002.9411	0085.6	056.6	44.97	
045.0	013.5000	0100.0	034.2	301.4	002.9225	0085.6	056.0	45.15	
046.0	013.5000	0100.1	034.2	301.3	002.9010	0085.6	055.4	45.33	
047.0	013.5000	0100.1	034.2	301.1	002.8772	0085.6	054.8	45.50	
048.0	013.5000	0100.1	034.2	300.9	002.8521	0085.6	054.2	45.67	
049.0	013.5000	0100.3	034.3	300.7	002.8265	0085.6	053.7	45.84	
050.0	013.5000	0100.4	034.3	300.5	002.7997	0085.6	053.1	46.00	
051.0	013.5000	0100.5	034.3	300.3	002.7707	0085.6	052.5	46.16	
052.0	013.5000	0100.6	034.3	300.1	002.7384	0085.6	052.0	46.32	
053.0	013.5000	0100.7	034.3	299.9	002.7063	0085.6	051.4	46.47	
054.0	013.5000	0100.7	034.3	299.6	002.6750	0085.6	050.9	46.61	
055.0	013.5000	0100.7	034.3	299.3	002.6420	0085.5	050.3	46.76	
056.0	013.5000	0100.7	034.3	299.0	002.6078	0085.5	049.8	46.89	
057.0	013.5000	0100.8	034.3	298.7	002.5725	0085.5	049.3	47.02	
058.0	013.5000	0100.9	034.4	298.4	002.5360	0085.5	048.7	47.15	
059.0	013.5000	0101.0	034.4	298.0	002.4977	0085.5	048.2	47.27	
060.0	013.5000	0101.0	034.4	297.6	002.4613	0085.5	047.7	47.39	
061.0	013.5000	0101.0	034.4	297.2	002.4231	0085.5	047.2	47.50	
062.0	013.5000	0101.1	034.4	296.8	002.3812	0085.6	046.7	47.61	
063.0	013.5000	0101.1	034.4	296.4	002.3350	0085.6	046.2	47.71	
064.0	013.5000	0101.1	034.4	295.9	002.2870	0085.6	045.7	47.79	
065.0	013.5000	0101.1	034.4	295.5	002.2370	0085.6	045.3	47.87	
066.0	013.5000	0101.1	034.4	295.0	002.1852	0085.7	044.8	47.95	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
067.0	013.5000	0101.1	034.4	294.4	002.1321	0085.7	044.4	48.01
068.0	013.5000	0101.1	034.4	293.9	002.0778	0085.7	043.9	48.06
069.0	013.5000	0101.1	034.4	293.3	002.0218	0085.6	043.5	48.10
070.0	013.5000	0101.1	034.4	292.8	001.9669	0085.6	043.1	48.13
071.0	013.5000	0101.0	034.4	292.2	001.9146	0085.5	042.7	48.17
072.0	013.5000	0101.0	034.4	291.5	001.8566	0085.5	042.3	48.18
073.0	013.5000	0101.0	034.4	290.9	001.7963	0085.5	042.0	48.18
074.0	013.5000	0101.0	034.4	290.2	001.7355	0085.5	041.6	48.18
075.0	013.5000	0101.1	034.4	289.6	001.7006	0085.5	041.2	48.23
076.0	013.5000	0101.2	034.4	288.9	001.6787	0085.5	040.9	48.32
077.0	013.5000	0101.3	034.4	288.2	001.6505	0085.5	040.6	48.38
078.0	013.5000	0101.4	034.4	287.4	001.6271	0085.5	040.2	48.45
079.0	013.5000	0101.5	034.5	286.7	001.6048	0085.6	040.0	48.51
080.0	013.5000	0101.5	034.5	285.9	001.5822	0085.6	039.7	48.56
081.0	013.5000	0101.5	034.5	285.1	001.5592	0085.6	039.4	48.61
082.0	013.5000	0101.6	034.5	284.3	001.5295	0085.6	039.2	48.62
083.0	013.5000	0101.6	034.5	283.5	001.5029	0085.7	039.0	48.64
084.0	013.5000	0101.6	034.5	282.7	001.4792	0085.7	038.8	48.66
085.0	013.5000	0101.7	034.5	281.8	001.4539	0085.7	038.6	48.67
086.0	013.5000	0101.8	034.5	281.0	001.4223	0085.7	038.4	48.65
087.0	013.5000	0101.9	034.5	280.1	001.3982	0085.7	038.2	48.64
088.0	013.5000	0102.0	034.5	279.2	001.3954	0085.7	038.1	48.69
089.0	013.5000	0102.1	034.6	278.3	001.3893	0085.7	038.0	48.73
090.0	013.5000	0102.2	034.6	277.4	001.3811	0085.8	037.9	48.75
091.0	013.5000	0102.3	034.6	276.5	001.3771	0085.8	037.8	48.77
092.0	013.5000	0102.4	034.6	275.6	001.3771	0085.8	037.7	48.80
093.0	013.5000	0102.5	034.6	274.7	001.3744	0085.9	037.7	48.81
094.0	013.5000	0102.6	034.6	273.8	001.3681	0085.9	037.7	48.80
095.0	013.5000	0102.6	034.6	272.9	001.3668	0085.9	037.7	48.79
096.0	013.5000	0102.7	034.6	271.9	001.3590	0085.9	037.7	48.76
097.0	013.5000	0102.8	034.7	271.0	001.3590	0085.9	037.8	48.74
098.0	013.5000	0102.8	034.7	270.1	001.3511	0085.9	037.8	48.68
099.0	013.5000	0102.9	034.7	269.2	001.3642	0085.9	037.9	48.69
100.0	013.5000	0102.9	034.7	268.3	001.3805	0086.0	038.0	48.70
101.0	013.5000	0103.0	034.7	267.4	001.3967	0086.0	038.2	48.70
102.0	013.5000	0103.0	034.7	266.5	001.4129	0086.0	038.3	48.69
103.0	013.5000	0103.1	034.7	265.7	001.4289	0086.1	038.5	48.67
104.0	013.5000	0103.1	034.7	264.8	001.4432	0086.1	038.7	48.64
105.0	013.5000	0103.2	034.7	264.0	001.4512	0086.2	038.9	48.59
106.0	013.5000	0103.2	034.7	263.1	001.4667	0086.3	039.1	48.55
107.0	013.5000	0103.3	034.7	262.3	001.4820	0086.4	039.3	48.50
108.0	013.5000	0103.3	034.7	261.5	001.4971	0086.5	039.6	48.45
109.0	013.5000	0103.4	034.8	260.8	001.5119	0086.6	039.9	48.39
110.0	013.5000	0103.4	034.8	260.0	001.5266	0086.8	040.2	48.33
111.0	013.5000	0103.5	034.8	259.3	001.5697	0086.9	040.5	48.34
112.0	013.5000	0103.6	034.8	258.5	001.6121	0087.0	040.8	48.33
113.0	013.5000	0103.6	034.8	257.8	001.6523	0087.2	041.1	48.32
114.0	013.5000	0103.7	034.8	257.1	001.6868	0087.3	041.5	48.28
115.0	013.5000	0103.8	034.8	256.5	001.7262	0087.4	041.8	48.24
116.0	013.5000	0103.9	034.8	255.8	001.7662	0087.5	042.2	48.20
117.0	013.5000	0104.0	034.8	255.2	001.8052	0087.5	042.6	48.14

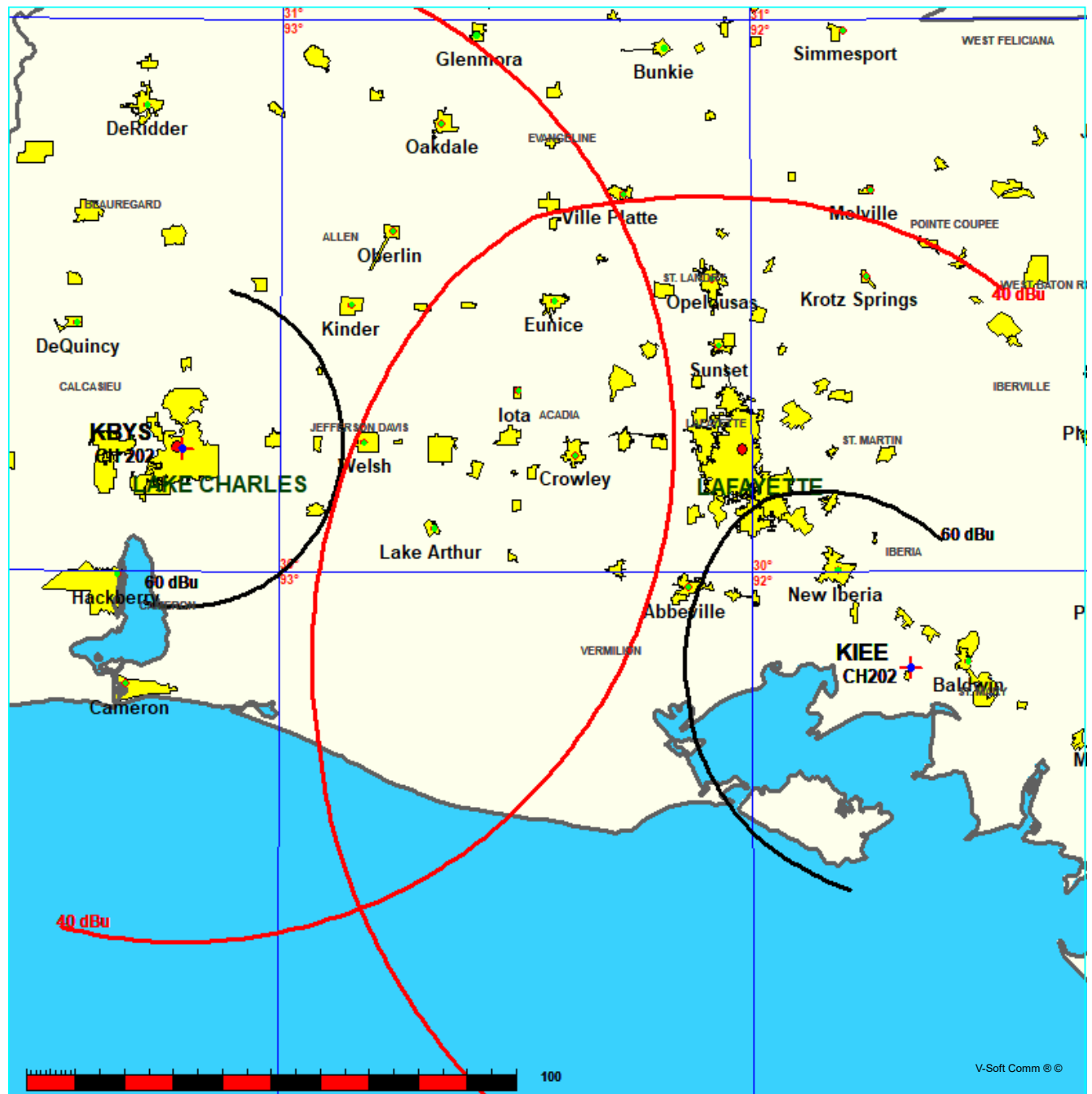
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
118.0	013.5000	0104.1	034.9	254.6	001.8432	0087.5	043.0	48.07
119.0	013.5000	0104.1	034.9	254.0	001.8800	0087.5	043.4	47.99
120.0	013.5000	0104.2	034.9	253.4	001.9158	0087.5	043.9	47.90
121.0	013.5000	0104.2	034.9	252.9	001.9495	0087.5	044.3	47.80
122.0	013.5000	0104.2	034.9	252.4	001.9777	0087.4	044.8	47.69
123.0	013.5000	0104.4	034.9	251.9	002.0069	0087.3	045.2	47.57
124.0	013.5000	0104.5	034.9	251.4	002.0394	0087.2	045.7	47.46
125.0	013.5000	0104.6	034.9	250.9	002.0708	0087.2	046.2	47.34
126.0	013.5000	0104.7	035.0	250.5	002.1007	0087.1	046.7	47.21
127.0	013.5000	0104.8	035.0	250.0	002.1290	0087.0	047.2	47.08
128.0	013.5000	0104.8	035.0	249.6	002.1718	0086.9	047.7	46.97
129.0	013.5000	0104.8	035.0	249.3	002.2142	0086.9	048.2	46.86
130.0	013.5000	0104.8	035.0	248.9	002.2540	0086.8	048.8	46.74
131.0	013.5000	0104.8	035.0	248.6	002.2889	0086.8	049.3	46.61
132.0	013.5000	0104.8	035.0	248.3	002.3226	0086.8	049.8	46.48
133.0	013.5000	0104.8	035.0	248.0	002.3550	0086.7	050.4	46.34
134.0	013.5000	0104.9	035.0	247.7	002.3890	0086.7	050.9	46.20
135.0	013.5000	0104.9	035.0	247.4	002.4208	0086.7	051.5	46.05
136.0	013.5000	0104.9	035.0	247.2	002.4506	0086.7	052.1	45.89
137.0	013.5000	0104.8	035.0	247.0	002.4782	0086.7	052.6	45.73
138.0	013.5000	0104.8	035.0	246.7	002.5040	0086.7	053.2	45.56
139.0	013.5000	0104.8	035.0	246.5	002.5283	0086.7	053.8	45.39
140.0	013.5000	0104.8	035.0	246.4	002.5511	0086.7	054.4	45.22
141.0	013.5000	0104.8	035.0	246.2	002.5726	0086.7	055.0	45.04
142.0	013.5000	0104.9	035.0	246.0	002.5928	0086.7	055.6	44.86
143.0	013.5000	0104.9	035.0	245.9	002.6113	0086.7	056.2	44.68
144.0	013.5000	0104.9	035.0	245.7	002.6274	0086.7	056.8	44.50
145.0	013.5000	0104.9	035.0	245.6	002.6412	0086.7	057.4	44.31
146.0	013.5000	0104.8	035.0	245.5	002.6533	0086.7	058.0	44.11
147.0	013.5000	0104.8	035.0	245.5	002.6639	0086.7	058.6	43.92
148.0	013.5000	0104.8	035.0	245.4	002.6728	0086.7	059.2	43.73
149.0	013.5000	0104.7	035.0	245.3	002.6803	0086.7	059.8	43.53
150.0	013.5000	0104.7	035.0	245.3	002.6868	0086.7	060.4	43.34
151.0	013.5000	0104.7	035.0	245.2	002.6926	0086.7	061.0	43.15
152.0	013.5000	0104.7	035.0	245.2	002.6977	0086.7	061.6	42.96
153.0	013.5000	0104.8	035.0	245.2	002.7018	0086.7	062.2	42.77

KBSY vs KIEE Contour-to-Contour Map
McNeese State University

FMCommander Single Allocation Study - 06-08-2023 - GLOBE 30 Sec
KBYS's Overlaps (In= 0.48 km, Out= 9.03 km)

KBYS CH 202 C3 DA
Lat= 30 13 45.40, Lng= 93 12 19.10
15.0 kW 85.8 m HAAT, 90.2 m COR
Prot.= 60 dBu, Intef.= 40 dBu

KIEE CH 202 C2 DA BLED20110808AAB
Lat= 29 49 31.70, Lng= 91 39 49.40
25.0 kW 152 m HAAT, 153 m COR
Prot.= 60 dBu, Intef.= 40 dBu



06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KBYS

KIEE BLED20110808AAB

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Protected

60 dBu

Channel = 202C2

Max ERP = 25 kW

RCAMSL = 153 m

N. Lat. 29 49 31.70

W. Lng. 91 39 49.40

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
046.0	015.0000	0087.1	032.8	298.8	025.0000	0151.2	141.8	36.24	
047.0	015.0000	0087.0	032.7	298.7	025.0000	0151.2	141.2	36.34	
048.0	015.0000	0087.0	032.7	298.7	025.0000	0151.2	140.7	36.44	
049.0	015.0000	0087.0	032.7	298.6	025.0000	0151.2	140.2	36.55	
050.0	015.0000	0087.0	032.7	298.5	025.0000	0151.2	139.6	36.65	
051.0	015.0000	0087.0	032.7	298.4	025.0000	0151.2	139.1	36.75	
052.0	015.0000	0087.0	032.7	298.3	025.0000	0151.2	138.6	36.85	
053.0	015.0000	0087.0	032.7	298.2	025.0000	0151.2	138.1	36.95	
054.0	015.0000	0087.0	032.7	298.1	025.0000	0151.2	137.6	37.05	
055.0	015.0000	0086.9	032.7	298.0	025.0000	0151.2	137.0	37.15	
056.0	015.0000	0086.8	032.7	297.9	025.0000	0151.2	136.6	37.25	
057.0	015.0000	0086.7	032.7	297.7	025.0000	0151.2	136.1	37.34	
058.0	015.0000	0086.6	032.7	297.6	025.0000	0151.2	135.6	37.44	
059.0	015.0000	0086.5	032.6	297.5	025.0000	0151.1	135.1	37.53	
060.0	015.0000	0086.4	032.6	297.3	025.0000	0151.1	134.6	37.62	
061.0	015.0000	0086.2	032.6	297.2	025.0000	0151.1	134.2	37.71	
062.0	015.0000	0086.1	032.6	297.0	025.0000	0151.1	133.7	37.80	
063.0	015.0000	0086.0	032.6	296.9	025.0000	0151.1	133.3	37.89	
064.0	015.0000	0086.0	032.5	296.7	025.0000	0151.1	132.8	37.98	
065.0	015.0000	0085.9	032.5	296.6	025.0000	0151.1	132.4	38.06	
066.0	015.0000	0085.9	032.5	296.4	025.0000	0151.1	132.0	38.15	
067.0	015.0000	0085.8	032.5	296.3	025.0000	0151.1	131.6	38.23	
068.0	015.0000	0085.9	032.5	296.1	025.0000	0151.1	131.1	38.32	
069.0	015.0000	0085.9	032.5	295.9	025.0000	0151.1	130.7	38.40	
070.0	015.0000	0085.8	032.5	295.7	025.0000	0151.1	130.3	38.47	
071.0	015.0000	0085.8	032.5	295.6	025.0000	0151.1	129.9	38.55	
072.0	015.0000	0085.7	032.5	295.4	025.0000	0151.1	129.6	38.62	
073.0	015.0000	0085.6	032.5	295.2	025.0000	0151.1	129.2	38.69	
074.0	015.0000	0085.5	032.4	295.0	025.0000	0151.1	128.8	38.76	
075.0	015.0000	0085.4	032.4	294.8	025.0000	0151.1	128.5	38.83	
076.0	015.0000	0085.4	032.4	294.6	025.0000	0151.1	128.1	38.90	
077.0	015.0000	0085.4	032.4	294.4	025.0000	0151.1	127.8	38.96	
078.0	015.0000	0085.4	032.4	294.2	025.0000	0151.1	127.5	39.02	
079.0	015.0000	0085.4	032.4	294.0	025.0000	0151.2	127.1	39.09	
080.0	015.0000	0085.4	032.4	293.8	025.0000	0151.2	126.8	39.14	
081.0	015.0000	0085.4	032.4	293.5	025.0000	0151.2	126.5	39.20	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
082.0	015.0000	0085.4	032.4	293.3	025.0000	0151.2	126.2	39.26
083.0	015.0000	0085.5	032.5	293.1	025.0000	0151.2	125.9	39.32
084.0	015.0000	0085.6	032.5	292.9	025.0000	0151.2	125.6	39.37
085.0	015.0000	0085.7	032.5	292.7	025.0000	0151.2	125.4	39.42
086.0	015.0000	0085.7	032.5	292.4	025.0000	0151.2	125.1	39.47
087.0	015.0000	0085.7	032.5	292.2	025.0000	0151.2	124.9	39.52
088.0	015.0000	0085.7	032.5	292.0	025.0000	0151.2	124.6	39.56
089.0	015.0000	0085.7	032.5	291.7	025.0000	0151.2	124.4	39.60
090.0	015.0000	0085.7	032.5	291.5	025.0000	0151.2	124.2	39.64
091.0	015.0000	0085.6	032.5	291.2	025.0000	0151.2	124.0	39.67
092.0	015.0000	0085.4	032.4	291.0	025.0000	0151.2	123.9	39.70
093.0	015.0000	0085.3	032.4	290.7	025.0000	0151.2	123.7	39.73
094.0	015.0000	0085.1	032.4	290.5	025.0000	0151.2	123.6	39.75
095.0	015.0000	0085.0	032.4	290.2	025.0000	0151.2	123.5	39.78
096.0	015.0000	0085.0	032.3	289.9	025.0000	0151.2	123.4	39.80
097.0	015.0000	0084.9	032.3	289.7	025.0000	0151.3	123.3	39.82
098.0	015.0000	0084.9	032.3	289.4	025.0000	0151.3	123.1	39.84
099.0	015.0000	0084.9	032.3	289.2	025.0000	0151.3	123.0	39.86
100.0	015.0000	0084.9	032.3	288.9	025.0000	0151.3	123.0	39.88
101.0	015.0000	0084.9	032.3	288.6	025.0000	0151.3	122.9	39.89
102.0	015.0000	0084.9	032.3	288.4	025.0000	0151.3	122.8	39.90
103.0	015.0000	0084.7	032.3	288.1	025.0000	0151.3	122.8	39.91
104.0	015.0000	0084.6	032.3	287.9	025.0000	0151.3	122.8	39.91
105.0	015.0000	0084.5	032.3	287.6	025.0000	0151.3	122.8	39.91
106.0	015.0000	0084.5	032.2	287.3	025.0000	0151.3	122.8	39.91
107.0	015.0000	0084.4	032.2	287.1	025.0000	0151.3	122.8	39.91
108.0	015.0000	0084.3	032.2	286.8	025.0000	0151.3	122.8	39.90
109.0	015.0000	0084.3	032.2	286.5	025.0000	0151.4	122.9	39.90
110.0	015.0000	0084.3	032.2	286.3	025.0000	0151.4	122.9	39.89
111.0	015.0000	0084.3	032.2	286.0	025.0000	0151.4	122.9	39.88
112.0	015.0000	0084.3	032.2	285.8	025.0000	0151.4	123.0	39.87
113.0	015.0000	0084.4	032.2	285.5	025.0000	0151.4	123.1	39.86
114.0	015.0000	0084.5	032.3	285.2	025.0000	0151.4	123.1	39.85
115.0	015.0000	0084.6	032.3	285.0	025.0000	0151.4	123.2	39.83
116.0	015.0000	0084.7	032.3	284.7	025.0000	0151.4	123.3	39.82
117.0	015.0000	0084.8	032.3	284.5	025.0000	0151.5	123.4	39.80
118.0	015.0000	0084.8	032.3	284.2	025.0000	0151.5	123.5	39.77
119.0	015.0000	0084.8	032.3	284.0	025.0000	0151.5	123.7	39.74
120.0	015.0000	0084.7	032.3	283.7	025.0000	0151.5	123.9	39.71
121.0	015.0000	0084.6	032.3	283.5	025.0000	0151.5	124.1	39.68
122.0	015.0000	0084.6	032.3	283.2	025.0000	0151.5	124.2	39.64
123.0	015.0000	0084.5	032.3	283.0	025.0000	0151.5	124.4	39.60
124.0	015.0000	0084.5	032.3	282.7	025.0000	0151.5	124.7	39.56
125.0	015.0000	0084.5	032.2	282.5	025.0000	0151.5	124.9	39.52
126.0	015.0000	0084.4	032.2	282.3	025.0000	0151.5	125.1	39.48
127.0	015.0000	0084.4	032.2	282.0	025.0000	0151.5	125.4	39.43
128.0	015.0000	0084.3	032.2	281.8	025.0000	0151.5	125.6	39.38
129.0	015.0000	0084.3	032.2	281.6	025.0000	0151.5	125.9	39.33
130.0	015.0000	0084.4	032.2	281.4	025.0000	0151.5	126.1	39.28
131.0	015.0000	0084.5	032.2	281.1	025.0000	0151.5	126.4	39.23
132.0	015.0000	0084.6	032.3	280.9	025.0000	0151.5	126.7	39.18

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
133.0	015.0000	0084.6	032.3	280.7	025.0000	0151.5	127.0	39.13
134.0	015.0000	0084.7	032.3	280.5	025.0000	0151.5	127.3	39.07
135.0	015.0000	0084.8	032.3	280.3	025.0000	0151.5	127.6	39.01
136.0	015.0000	0084.9	032.3	280.1	025.0000	0151.5	127.9	38.95
137.0	015.0000	0085.1	032.4	279.8	025.0000	0151.5	128.2	38.89
138.0	015.0000	0085.2	032.4	279.6	025.0000	0151.5	128.6	38.83
139.0	015.0000	0085.3	032.4	279.4	025.0000	0151.5	128.9	38.76
140.0	015.0000	0085.5	032.4	279.2	025.0000	0151.5	129.2	38.69
141.0	015.0000	0085.6	032.5	279.0	025.0000	0151.5	129.6	38.62
142.0	015.0000	0085.7	032.5	278.9	025.0000	0151.5	130.0	38.55
143.0	015.0000	0085.7	032.5	278.7	025.0000	0151.5	130.4	38.47
144.0	015.0000	0085.8	032.5	278.5	025.0000	0151.5	130.8	38.40
145.0	015.0000	0085.8	032.5	278.3	025.0000	0151.5	131.2	38.32
146.0	015.0000	0085.8	032.5	278.2	025.0000	0151.5	131.6	38.23
147.0	015.0000	0085.8	032.5	278.0	025.0000	0151.5	132.0	38.15
148.0	015.0000	0085.9	032.5	277.8	025.0000	0151.5	132.5	38.06
149.0	015.0000	0085.9	032.5	277.7	025.0000	0151.5	132.9	37.98
150.0	015.0000	0085.9	032.5	277.5	025.0000	0151.5	133.4	37.89
151.0	015.0000	0085.9	032.5	277.4	025.0000	0151.5	133.8	37.80
152.0	015.0000	0085.9	032.5	277.3	025.0000	0151.5	134.3	37.71
153.0	015.0000	0085.9	032.5	277.1	025.0000	0151.5	134.7	37.61
154.0	015.0000	0086.0	032.5	277.0	025.0000	0151.5	135.2	37.52
155.0	015.0000	0086.0	032.5	276.9	025.0000	0151.5	135.7	37.43
156.0	015.0000	0086.0	032.5	276.7	025.0000	0151.5	136.2	37.33
157.0	015.0000	0086.0	032.5	276.6	025.0000	0151.5	136.7	37.23
158.0	015.0000	0086.0	032.5	276.5	025.0000	0151.5	137.2	37.13
159.0	015.0000	0085.9	032.5	276.4	025.0000	0151.5	137.7	37.03
160.0	015.0000	0085.9	032.5	276.3	025.0000	0151.5	138.2	36.93
161.0	015.0000	0085.9	032.5	276.2	025.0000	0151.5	138.7	36.83
162.0	015.0000	0085.8	032.5	276.1	025.0000	0151.5	139.2	36.73
163.0	015.0000	0085.8	032.5	276.0	025.0000	0151.5	139.8	36.63
164.0	015.0000	0085.8	032.5	275.9	025.0000	0151.5	140.3	36.53
165.0	015.0000	0085.8	032.5	275.9	025.0000	0151.5	140.8	36.42

06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KIEE BLED20110808AAB

KBYS

Channel = 202C2

Max ERP = 25 kW

RCAMSL = 153 m

N. Lat. 29 49 31.70

W. Lng. 91 39 49.40

Protected

60 dBu

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
227.0	025.0000	0151.6	046.2	123.3	015.0000	0084.5	138.0	32.84	
228.0	025.0000	0151.5	046.2	123.3	015.0000	0084.5	137.3	32.99	
229.0	025.0000	0151.5	046.2	123.2	015.0000	0084.5	136.5	33.14	
230.0	025.0000	0151.4	046.2	123.1	015.0000	0084.5	135.7	33.29	
231.0	025.0000	0151.4	046.2	123.0	015.0000	0084.5	134.9	33.44	
232.0	025.0000	0151.4	046.2	122.9	015.0000	0084.5	134.2	33.58	
233.0	025.0000	0151.4	046.2	122.8	015.0000	0084.5	133.4	33.73	
234.0	025.0000	0151.3	046.2	122.6	015.0000	0084.5	132.6	33.88	
235.0	025.0000	0151.3	046.2	122.5	015.0000	0084.6	131.9	34.02	
236.0	025.0000	0151.2	046.2	122.4	015.0000	0084.6	131.2	34.16	
237.0	025.0000	0151.2	046.2	122.2	015.0000	0084.6	130.4	34.30	
238.0	025.0000	0151.2	046.1	122.1	015.0000	0084.6	129.7	34.44	
239.0	025.0000	0151.2	046.1	121.9	015.0000	0084.6	129.0	34.57	
240.0	025.0000	0151.1	046.1	121.8	015.0000	0084.6	128.2	34.70	
241.0	025.0000	0151.2	046.1	121.6	015.0000	0084.6	127.5	34.84	
242.0	025.0000	0151.2	046.1	121.4	015.0000	0084.6	126.8	34.96	
243.0	025.0000	0151.2	046.1	121.2	015.0000	0084.6	126.1	35.09	
244.0	025.0000	0151.2	046.2	121.0	015.0000	0084.6	125.4	35.21	
245.0	025.0000	0151.2	046.2	120.8	015.0000	0084.7	124.8	35.33	
246.0	025.0000	0151.2	046.2	120.6	015.0000	0084.7	124.1	35.45	
247.0	025.0000	0151.2	046.2	120.4	015.0000	0084.7	123.4	35.57	
248.0	025.0000	0151.3	046.2	120.2	015.0000	0084.7	122.8	35.68	
249.0	025.0000	0151.3	046.2	120.0	015.0000	0084.7	122.1	35.79	
250.0	025.0000	0151.3	046.2	119.7	015.0000	0084.7	121.5	35.90	
251.0	025.0000	0151.4	046.2	119.5	015.0000	0084.8	120.9	36.01	
252.0	025.0000	0151.4	046.2	119.2	015.0000	0084.8	120.3	36.12	
253.0	025.0000	0151.3	046.2	119.0	015.0000	0084.8	119.7	36.22	
254.0	025.0000	0151.2	046.2	118.7	015.0000	0084.8	119.1	36.32	
255.0	025.0000	0151.0	046.1	118.4	015.0000	0084.8	118.6	36.41	
256.0	025.0000	0150.8	046.1	118.1	015.0000	0084.8	118.0	36.51	
257.0	025.0000	0150.4	046.1	117.8	015.0000	0084.8	117.5	36.59	
258.0	025.0000	0149.8	046.0	117.5	015.0000	0084.8	117.1	36.67	
259.0	025.0000	0149.0	045.9	117.2	015.0000	0084.8	116.6	36.75	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
260.0	025.0000	0148.4	045.8	116.8	015.0000	0084.8	116.2	36.83
261.0	025.0000	0148.4	045.8	116.5	015.0000	0084.7	115.7	36.91
262.0	025.0000	0148.4	045.8	116.2	015.0000	0084.7	115.3	36.99
263.0	025.0000	0148.5	045.8	115.9	015.0000	0084.7	114.8	37.07
264.0	025.0000	0148.7	045.8	115.5	015.0000	0084.7	114.4	37.15
265.0	025.0000	0149.3	045.9	115.2	015.0000	0084.6	113.9	37.24
266.0	025.0000	0150.0	046.0	114.9	015.0000	0084.6	113.4	37.32
267.0	025.0000	0150.7	046.1	114.6	015.0000	0084.6	112.9	37.41
268.0	025.0000	0151.3	046.2	114.2	015.0000	0084.5	112.5	37.49
269.0	025.0000	0151.3	046.2	113.8	015.0000	0084.5	112.1	37.55
270.0	025.0000	0151.3	046.2	113.5	015.0000	0084.4	111.8	37.61
271.0	025.0000	0151.3	046.2	113.1	015.0000	0084.4	111.4	37.67
272.0	025.0000	0151.4	046.2	112.7	015.0000	0084.4	111.1	37.73
273.0	025.0000	0151.4	046.2	112.3	015.0000	0084.3	110.9	37.78
274.0	025.0000	0151.4	046.2	111.9	015.0000	0084.3	110.6	37.83
275.0	025.0000	0151.4	046.2	111.5	015.0000	0084.3	110.3	37.88
276.0	025.0000	0151.5	046.2	111.1	015.0000	0084.3	110.1	37.92
277.0	025.0000	0151.5	046.2	110.7	015.0000	0084.3	109.9	37.96
278.0	025.0000	0151.5	046.2	110.3	015.0000	0084.3	109.7	38.00
279.0	025.0000	0151.5	046.2	109.9	015.0000	0084.3	109.5	38.03
280.0	025.0000	0151.5	046.2	109.5	015.0000	0084.3	109.4	38.06
281.0	025.0000	0151.5	046.2	109.1	015.0000	0084.3	109.2	38.08
282.0	025.0000	0151.5	046.2	108.7	015.0000	0084.3	109.1	38.11
283.0	025.0000	0151.5	046.2	108.2	015.0000	0084.3	109.0	38.12
284.0	025.0000	0151.5	046.2	107.8	015.0000	0084.3	108.9	38.14
285.0	025.0000	0151.4	046.2	107.4	015.0000	0084.4	108.9	38.15
286.0	025.0000	0151.4	046.2	107.0	015.0000	0084.4	108.9	38.15
287.0	025.0000	0151.3	046.2	106.5	015.0000	0084.4	108.9	38.16
288.0	025.0000	0151.3	046.2	106.1	015.0000	0084.5	108.9	38.16
289.0	025.0000	0151.3	046.2	105.7	015.0000	0084.5	108.9	38.15
290.0	025.0000	0151.2	046.2	105.3	015.0000	0084.5	108.9	38.14
291.0	025.0000	0151.2	046.2	104.8	015.0000	0084.5	109.0	38.13
292.0	025.0000	0151.2	046.2	104.4	015.0000	0084.6	109.1	38.12
293.0	025.0000	0151.2	046.2	104.0	015.0000	0084.6	109.2	38.10
294.0	025.0000	0151.2	046.1	103.6	015.0000	0084.7	109.3	38.07
295.0	025.0000	0151.1	046.1	103.2	015.0000	0084.7	109.5	38.05
296.0	025.0000	0151.1	046.1	102.8	015.0000	0084.8	109.7	38.02
297.0	025.0000	0151.1	046.1	102.4	015.0000	0084.8	109.8	37.99
298.0	025.0000	0151.2	046.1	101.9	015.0000	0084.9	110.0	37.95
299.0	025.0000	0151.2	046.2	101.5	015.0000	0084.9	110.3	37.91
300.0	025.0000	0151.2	046.2	101.1	015.0000	0084.9	110.5	37.87
301.0	025.0000	0151.2	046.2	100.7	015.0000	0084.9	110.8	37.82
302.0	025.0000	0151.2	046.2	100.4	015.0000	0084.9	111.0	37.76
303.0	025.0000	0151.1	046.1	100.0	015.0000	0084.9	111.3	37.71
304.0	025.0000	0151.1	046.1	099.6	015.0000	0084.9	111.7	37.65
305.0	025.0000	0151.0	046.1	099.2	015.0000	0084.9	112.0	37.59
306.0	025.0000	0151.0	046.1	098.9	015.0000	0084.9	112.3	37.52
307.0	025.0000	0150.9	046.1	098.5	015.0000	0084.9	112.7	37.45
308.0	025.0000	0150.9	046.1	098.1	015.0000	0084.9	113.1	37.38
309.0	025.0000	0150.9	046.1	097.8	015.0000	0084.9	113.5	37.31
310.0	025.0000	0150.9	046.1	097.4	015.0000	0084.9	113.9	37.24

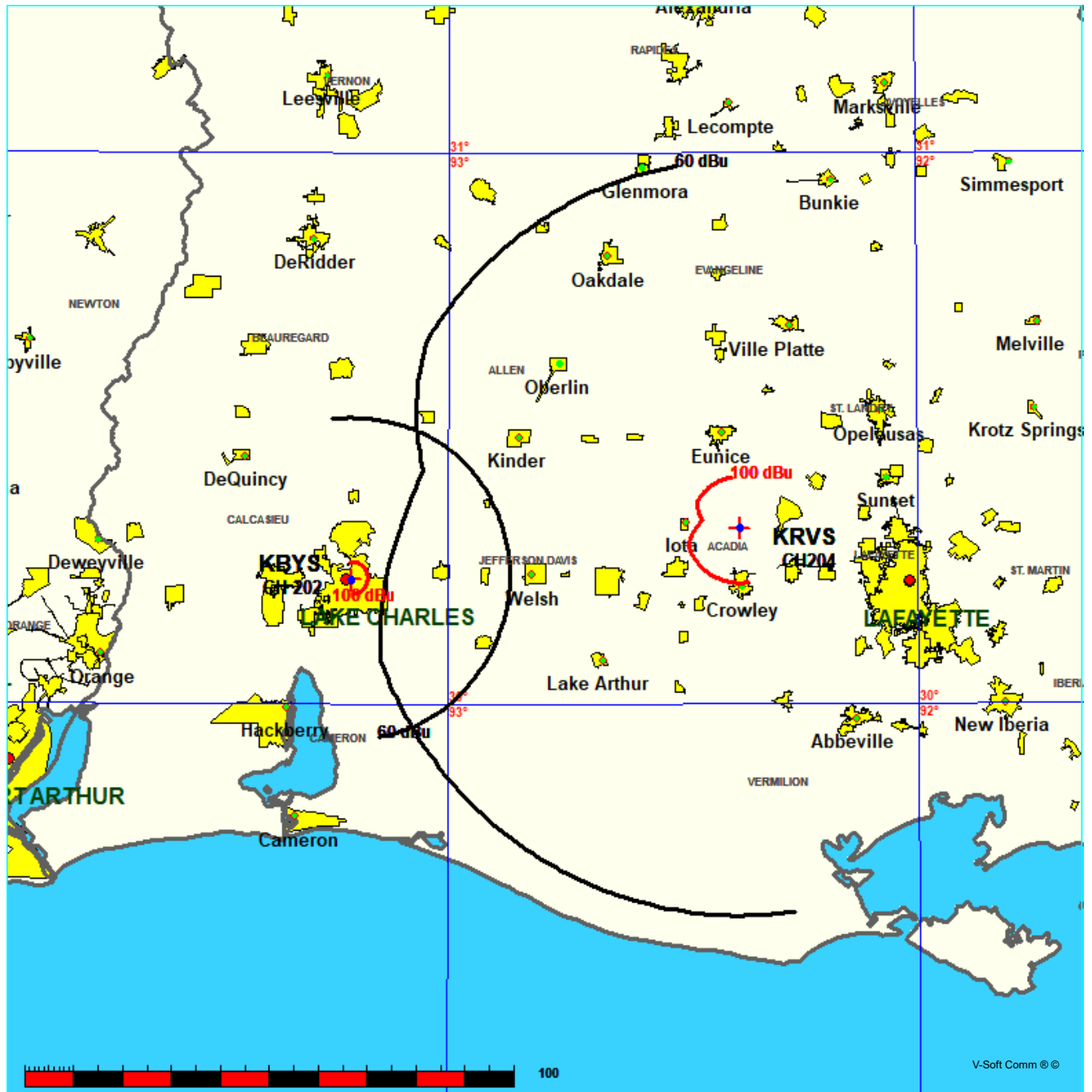
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
311.0	024.6661	0150.8	046.0	097.1	015.0000	0084.9	114.5	37.14
312.0	024.3345	0150.8	045.9	096.8	015.0000	0084.9	115.0	37.04
313.0	024.0051	0150.8	045.7	096.5	015.0000	0084.9	115.6	36.94
314.0	023.6780	0150.7	045.6	096.3	015.0000	0084.9	116.1	36.84
315.0	023.3531	0150.7	045.5	096.0	015.0000	0085.0	116.7	36.74
316.0	023.0304	0150.6	045.4	095.7	015.0000	0085.0	117.3	36.64
317.0	022.7100	0150.6	045.2	095.5	015.0000	0085.0	117.9	36.53
318.0	022.3918	0150.5	045.1	095.2	015.0000	0085.0	118.6	36.43
319.0	022.0759	0150.5	045.0	095.0	015.0000	0085.0	119.2	36.32
320.0	021.7622	0150.4	044.8	094.8	015.0000	0085.0	119.8	36.21
321.0	020.9169	0150.3	044.5	094.6	015.0000	0085.0	120.6	36.07
322.0	020.0883	0150.2	044.1	094.5	015.0000	0085.1	121.4	35.93
323.0	019.2765	0150.0	043.7	094.4	015.0000	0085.1	122.2	35.79
324.0	018.4814	0149.8	043.4	094.3	015.0000	0085.1	123.1	35.64
325.0	017.7031	0149.7	043.0	094.2	015.0000	0085.1	123.9	35.50
326.0	016.9415	0149.6	042.6	094.1	015.0000	0085.1	124.7	35.36
327.0	016.1966	0149.6	042.2	094.0	015.0000	0085.1	125.5	35.21
328.0	015.4685	0149.6	041.8	094.0	015.0000	0085.1	126.4	35.07
329.0	014.7571	0149.6	041.4	093.9	015.0000	0085.1	127.2	34.92
330.0	014.0625	0149.7	041.0	093.9	015.0000	0085.1	128.0	34.77
331.0	013.5167	0149.8	040.7	093.8	015.0000	0085.1	128.8	34.63
332.0	012.9816	0149.9	040.4	093.8	015.0000	0085.1	129.5	34.49
333.0	012.4574	0149.9	040.1	093.7	015.0000	0085.2	130.3	34.34
334.0	011.9439	0149.8	039.7	093.7	015.0000	0085.2	131.1	34.19
335.0	011.4413	0149.7	039.3	093.7	015.0000	0085.2	131.9	34.04
336.0	010.9495	0149.6	039.0	093.7	015.0000	0085.2	132.6	33.90
337.0	010.4685	0149.6	038.6	093.7	015.0000	0085.2	133.4	33.75
338.0	009.9982	0149.6	038.2	093.7	015.0000	0085.2	134.2	33.60
339.0	009.5388	0149.5	037.8	093.7	015.0000	0085.2	135.0	33.45
340.0	009.0902	0149.4	037.4	093.8	015.0000	0085.1	135.7	33.30
341.0	008.7350	0149.4	037.1	093.8	015.0000	0085.1	136.4	33.16
342.0	008.3868	0149.5	036.7	093.8	015.0000	0085.1	137.2	33.02
343.0	008.0457	0149.6	036.4	093.8	015.0000	0085.1	137.9	32.89
344.0	007.7117	0149.7	036.1	093.9	015.0000	0085.1	138.6	32.75
345.0	007.3848	0149.7	035.7	093.9	015.0000	0085.1	139.3	32.61
346.0	007.0650	0149.7	035.4	094.0	015.0000	0085.1	140.0	32.48

KBYS vs KRVS Contour-to-Contour Map
McNeese State University

FMCommander Single Allocation Study - 06-08-2023 - GLOBE 30 Sec
KBYS's Overlaps (In= 37.65 km, Out= 3.72 km)

KBYS CH 202 C3 DA
Lat= 30 13 45.40, Lng= 93 12 19.10
15.0 kW 85.8 m HAAT, 90.2 m COR
Prot.= 60 dBu, Intef.= 100 dBu

KRVS CH 204 C0 DA BLED20040105AAF
Lat= 30 19 20.70, Lng= 92 22 40.50
100.0 kW 379 m HAAT, 388 m COR
Prot.= 60 dBu, Intef.= 100 dBu



06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KBYS

KRVS BLED20040105AAF

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Protected

60 dBu

Channel = 204C0

Max ERP = 100 kW

RCAMSL = 388 m

N. Lat. 30 19 20.70

W. Lng. 92 22 40.50

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
022.0	015.0000	0085.8	032.5	286.6	040.3460	0378.9	070.0	64.01	
023.0	015.0000	0085.9	032.5	286.5	040.2768	0378.9	069.4	64.21	
024.0	015.0000	0085.9	032.5	286.5	040.1874	0378.9	068.9	64.40	
025.0	015.0000	0086.0	032.5	286.4	040.0786	0378.9	068.3	64.58	
026.0	015.0000	0086.0	032.6	286.4	039.9556	0378.9	067.7	64.77	
027.0	015.0000	0086.1	032.6	286.3	039.8190	0378.9	067.2	64.95	
028.0	015.0000	0086.2	032.6	286.2	039.6690	0378.9	066.6	65.13	
029.0	015.0000	0086.3	032.6	286.1	039.5019	0378.9	066.1	65.31	
030.0	015.0000	0086.4	032.6	286.0	039.3176	0378.9	065.5	65.49	
031.0	015.0000	0086.4	032.6	285.9	039.1150	0379.0	065.0	65.66	
032.0	015.0000	0086.5	032.6	285.8	038.8933	0379.0	064.4	65.84	
033.0	015.0000	0086.6	032.7	285.6	038.6529	0379.0	063.9	66.00	
034.0	015.0000	0086.7	032.7	285.5	038.3952	0379.0	063.3	66.17	
035.0	015.0000	0086.8	032.7	285.3	038.1179	0379.0	062.8	66.34	
036.0	015.0000	0086.8	032.7	285.1	037.8196	0379.1	062.2	66.50	
037.0	015.0000	0086.9	032.7	285.0	037.4999	0379.1	061.7	66.66	
038.0	015.0000	0087.0	032.7	284.8	037.1590	0379.1	061.2	66.81	
039.0	015.0000	0087.0	032.7	284.5	036.7966	0379.1	060.6	66.96	
040.0	015.0000	0087.0	032.7	284.3	036.4122	0379.2	060.1	67.11	
041.0	015.0000	0087.1	032.8	284.1	036.0079	0379.2	059.6	67.25	
042.0	015.0000	0087.1	032.8	283.8	035.5861	0379.2	059.1	67.39	
043.0	015.0000	0087.2	032.8	283.6	035.1432	0379.3	058.6	67.52	
044.0	015.0000	0087.2	032.8	283.3	034.6750	0379.3	058.1	67.65	
045.0	015.0000	0087.2	032.8	283.0	034.1792	0379.3	057.6	67.76	
046.0	015.0000	0087.1	032.8	282.7	033.6575	0379.3	057.1	67.87	
047.0	015.0000	0087.0	032.7	282.3	033.1160	0379.3	056.7	67.98	
048.0	015.0000	0087.0	032.7	282.0	032.5626	0379.3	056.2	68.08	
049.0	015.0000	0087.0	032.7	281.6	032.0014	0379.4	055.8	68.17	
050.0	015.0000	0087.0	032.7	281.3	031.4287	0379.4	055.3	68.27	
051.0	015.0000	0087.0	032.7	280.9	030.8367	0379.4	054.9	68.35	
052.0	015.0000	0087.0	032.7	280.5	030.2250	0379.4	054.4	68.43	
053.0	015.0000	0087.0	032.7	280.1	029.5936	0379.4	054.0	68.49	
054.0	015.0000	0087.0	032.7	279.6	029.8876	0379.4	053.6	68.69	
055.0	015.0000	0086.9	032.7	279.2	030.3941	0379.5	053.2	68.91	
056.0	015.0000	0086.8	032.7	278.7	030.9231	0379.5	052.9	69.13	
057.0	015.0000	0086.7	032.7	278.3	031.4723	0379.5	052.5	69.34	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
058.0	015.0000	0086.6	032.7	277.8	032.0427	0379.5	052.1	69.55
059.0	015.0000	0086.5	032.6	277.3	032.6358	0379.5	051.8	69.76
060.0	015.0000	0086.4	032.6	276.7	033.2523	0379.5	051.5	69.97
061.0	015.0000	0086.2	032.6	276.2	033.8880	0379.5	051.2	70.17
062.0	015.0000	0086.1	032.6	275.7	034.5412	0379.6	050.9	70.37
063.0	015.0000	0086.0	032.6	275.1	035.2120	0379.6	050.6	70.56
064.0	015.0000	0086.0	032.5	274.5	035.9027	0379.7	050.3	70.75
065.0	015.0000	0085.9	032.5	274.0	036.6133	0379.8	050.0	70.94
066.0	015.0000	0085.9	032.5	273.4	037.3411	0379.8	049.8	71.13
067.0	015.0000	0085.8	032.5	272.8	038.0861	0379.9	049.5	71.31
068.0	015.0000	0085.9	032.5	272.2	038.8481	0379.9	049.3	71.49
069.0	015.0000	0085.9	032.5	271.6	039.6337	0380.0	049.1	71.66
070.0	015.0000	0085.8	032.5	271.0	040.4432	0380.1	048.9	71.83
071.0	015.0000	0085.8	032.5	270.3	041.2763	0380.2	048.7	71.99
072.0	015.0000	0085.7	032.5	269.7	042.3781	0380.3	048.5	72.16
073.0	015.0000	0085.6	032.5	269.1	043.7937	0380.3	048.4	72.36
074.0	015.0000	0085.5	032.4	268.4	045.2412	0380.3	048.2	72.55
075.0	015.0000	0085.4	032.4	267.7	046.7221	0380.2	048.1	72.73
076.0	015.0000	0085.4	032.4	267.1	048.2364	0380.2	048.0	72.91
077.0	015.0000	0085.4	032.4	266.4	049.7854	0380.1	047.9	73.08
078.0	015.0000	0085.4	032.4	265.7	051.3688	0380.1	047.8	73.25
079.0	015.0000	0085.4	032.4	265.1	052.9856	0380.1	047.8	73.41
080.0	015.0000	0085.4	032.4	264.4	054.6340	0380.1	047.7	73.56
081.0	015.0000	0085.4	032.4	263.7	056.3115	0380.1	047.7	73.70
082.0	015.0000	0085.4	032.4	263.0	058.0176	0380.1	047.7	73.84
083.0	015.0000	0085.5	032.5	262.3	059.7517	0380.0	047.7	73.97
084.0	015.0000	0085.6	032.5	261.7	061.5131	0379.9	047.7	74.09
085.0	015.0000	0085.7	032.5	261.0	063.2989	0379.8	047.7	74.21
086.0	015.0000	0085.7	032.5	260.3	065.1055	0379.6	047.7	74.31
087.0	015.0000	0085.7	032.5	259.6	067.0590	0379.3	047.8	74.40
088.0	015.0000	0085.7	032.5	259.0	069.1424	0379.1	047.9	74.50
089.0	015.0000	0085.7	032.5	258.3	071.2434	0379.0	048.0	74.58
090.0	015.0000	0085.7	032.5	257.6	073.3587	0378.9	048.1	74.66
091.0	015.0000	0085.6	032.5	257.0	075.4571	0378.9	048.3	74.73
092.0	015.0000	0085.4	032.4	256.3	077.5558	0378.9	048.4	74.78
093.0	015.0000	0085.3	032.4	255.7	079.6521	0379.0	048.6	74.82
094.0	015.0000	0085.1	032.4	255.1	081.7405	0379.1	048.8	74.86
095.0	015.0000	0085.0	032.4	254.5	083.8393	0379.2	049.1	74.89
096.0	015.0000	0085.0	032.3	253.9	085.9394	0379.3	049.3	74.92
097.0	015.0000	0084.9	032.3	253.3	088.0291	0379.4	049.5	74.94
098.0	015.0000	0084.9	032.3	252.7	090.1276	0379.5	049.7	74.95
099.0	015.0000	0084.9	032.3	252.1	092.2209	0379.5	050.0	74.96
100.0	015.0000	0084.9	032.3	251.5	094.2855	0379.6	050.3	74.96
101.0	015.0000	0084.9	032.3	251.0	096.3248	0379.7	050.5	74.94
102.0	015.0000	0084.9	032.3	250.4	098.3291	0379.8	050.8	74.92
103.0	015.0000	0084.7	032.3	249.9	100.0000	0379.9	051.2	74.87
104.0	015.0000	0084.6	032.3	249.4	100.0000	0380.0	051.5	74.75
105.0	015.0000	0084.5	032.3	248.9	100.0000	0380.1	051.8	74.62
106.0	015.0000	0084.5	032.2	248.4	100.0000	0380.2	052.2	74.49
107.0	015.0000	0084.4	032.2	248.0	100.0000	0380.4	052.6	74.36
108.0	015.0000	0084.3	032.2	247.5	100.0000	0380.5	052.9	74.22

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
109.0	015.0000	0084.3	032.2	247.1	100.0000	0380.6	053.3	74.08
110.0	015.0000	0084.3	032.2	246.6	100.0000	0380.7	053.7	73.94
111.0	015.0000	0084.3	032.2	246.2	100.0000	0380.7	054.1	73.79
112.0	015.0000	0084.3	032.2	245.8	100.0000	0380.7	054.5	73.64
113.0	015.0000	0084.4	032.2	245.4	100.0000	0380.7	054.9	73.49
114.0	015.0000	0084.5	032.3	245.0	100.0000	0380.6	055.3	73.33
115.0	015.0000	0084.6	032.3	244.6	100.0000	0380.6	055.7	73.17
116.0	015.0000	0084.7	032.3	244.2	100.0000	0380.6	056.2	73.01
117.0	015.0000	0084.8	032.3	243.9	100.0000	0380.6	056.6	72.84
118.0	015.0000	0084.8	032.3	243.5	100.0000	0380.6	057.0	72.67
119.0	015.0000	0084.8	032.3	243.2	100.0000	0380.6	057.5	72.50
120.0	015.0000	0084.7	032.3	242.9	100.0000	0380.6	058.0	72.32
121.0	015.0000	0084.6	032.3	242.6	100.0000	0380.6	058.5	72.14
122.0	015.0000	0084.6	032.3	242.4	100.0000	0380.7	059.0	71.96
123.0	015.0000	0084.5	032.3	242.1	100.0000	0380.7	059.5	71.77
124.0	015.0000	0084.5	032.3	241.8	100.0000	0380.7	060.0	71.59
125.0	015.0000	0084.5	032.2	241.6	100.0000	0380.8	060.5	71.40
126.0	015.0000	0084.4	032.2	241.4	100.0000	0380.8	061.0	71.22
127.0	015.0000	0084.4	032.2	241.2	100.0000	0380.8	061.5	71.03
128.0	015.0000	0084.3	032.2	241.0	100.0000	0380.8	062.0	70.84
129.0	015.0000	0084.3	032.2	240.8	100.0000	0380.8	062.5	70.65
130.0	015.0000	0084.4	032.2	240.6	100.0000	0380.9	063.1	70.46
131.0	015.0000	0084.5	032.2	240.4	100.0000	0380.9	063.6	70.28
132.0	015.0000	0084.6	032.3	240.2	100.0000	0380.9	064.1	70.09
133.0	015.0000	0084.6	032.3	240.1	100.0000	0380.9	064.7	69.90
134.0	015.0000	0084.7	032.3	239.9	100.0000	0380.9	065.2	69.71
135.0	015.0000	0084.8	032.3	239.8	100.0000	0380.9	065.7	69.52
136.0	015.0000	0084.9	032.3	239.6	100.0000	0380.9	066.3	69.33
137.0	015.0000	0085.1	032.4	239.5	100.0000	0380.9	066.8	69.13
138.0	015.0000	0085.2	032.4	239.4	100.0000	0380.9	067.4	68.94
139.0	015.0000	0085.3	032.4	239.3	100.0000	0380.9	067.9	68.74
140.0	015.0000	0085.5	032.4	239.2	100.0000	0380.9	068.5	68.55
141.0	015.0000	0085.6	032.5	239.1	100.0000	0380.9	069.0	68.35

06-08-2023

Terrain Data: GLOBE 30 Sec

FMOver Analysis

KRVS BLED20040105AAF

KBYS

Channel = 204C0

Max ERP = 100 kW

RCAMSL = 388 m

N. Lat. 30 19 20.70

W. Lng. 92 22 40.50

Protected

60 dBu

Channel = 202C3

Max ERP = 15 kW

RCAMSL = 90.21 m

N. Lat. 30 13 45.40

W. Lng. 93 12 19.10

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
203.0	100.0000	0382.4	078.5	141.4	015.0000	0085.6	079.0	45.36	
204.0	100.0000	0382.3	078.5	141.9	015.0000	0085.7	077.8	45.69	
205.0	100.0000	0382.3	078.4	142.4	015.0000	0085.7	076.6	46.03	
206.0	100.0000	0382.2	078.4	142.9	015.0000	0085.7	075.4	46.36	
207.0	100.0000	0382.0	078.4	143.3	015.0000	0085.8	074.2	46.70	
208.0	100.0000	0382.0	078.4	143.8	015.0000	0085.8	073.0	47.04	
209.0	100.0000	0381.9	078.4	144.3	015.0000	0085.8	071.7	47.39	
210.0	100.0000	0381.9	078.4	144.7	015.0000	0085.8	070.5	47.74	
211.0	100.0000	0382.0	078.4	145.2	015.0000	0085.8	069.2	48.09	
212.0	100.0000	0382.0	078.4	145.7	015.0000	0085.8	068.0	48.45	
213.0	100.0000	0382.1	078.4	146.2	015.0000	0085.8	066.7	48.80	
214.0	100.0000	0382.1	078.4	146.6	015.0000	0085.8	065.5	49.17	
215.0	100.0000	0382.0	078.4	147.1	015.0000	0085.8	064.2	49.54	
216.0	100.0000	0381.9	078.4	147.6	015.0000	0085.8	063.0	49.92	
217.0	100.0000	0381.9	078.4	148.0	015.0000	0085.9	061.7	50.32	
218.0	100.0000	0381.8	078.4	148.5	015.0000	0085.9	060.4	50.74	
219.0	100.0000	0381.8	078.4	148.9	015.0000	0085.9	059.1	51.17	
220.0	100.0000	0381.8	078.4	149.4	015.0000	0085.9	057.8	51.62	
221.0	100.0000	0381.8	078.4	149.9	015.0000	0085.9	056.6	52.08	
222.0	100.0000	0381.8	078.4	150.3	015.0000	0085.9	055.3	52.54	
223.0	100.0000	0381.8	078.4	150.8	015.0000	0085.9	054.0	53.01	
224.0	100.0000	0381.8	078.4	151.2	015.0000	0085.9	052.7	53.48	
225.0	100.0000	0381.8	078.4	151.7	015.0000	0085.9	051.4	53.96	
226.0	100.0000	0381.7	078.4	152.1	015.0000	0085.9	050.0	54.43	
227.0	100.0000	0381.7	078.4	152.6	015.0000	0085.9	048.7	54.90	
228.0	100.0000	0381.6	078.4	153.0	015.0000	0085.9	047.4	55.38	
229.0	100.0000	0381.6	078.4	153.4	015.0000	0085.9	046.1	55.86	
230.0	100.0000	0381.4	078.4	153.9	015.0000	0086.0	044.8	56.36	
231.0	100.0000	0381.3	078.4	154.3	015.0000	0086.0	043.4	56.87	
232.0	100.0000	0381.2	078.4	154.7	015.0000	0086.0	042.1	57.39	
233.0	100.0000	0381.1	078.4	155.1	015.0000	0086.0	040.8	57.93	
234.0	100.0000	0381.0	078.4	155.5	015.0000	0086.0	039.4	58.48	
235.0	100.0000	0381.0	078.4	155.9	015.0000	0086.0	038.1	59.04	

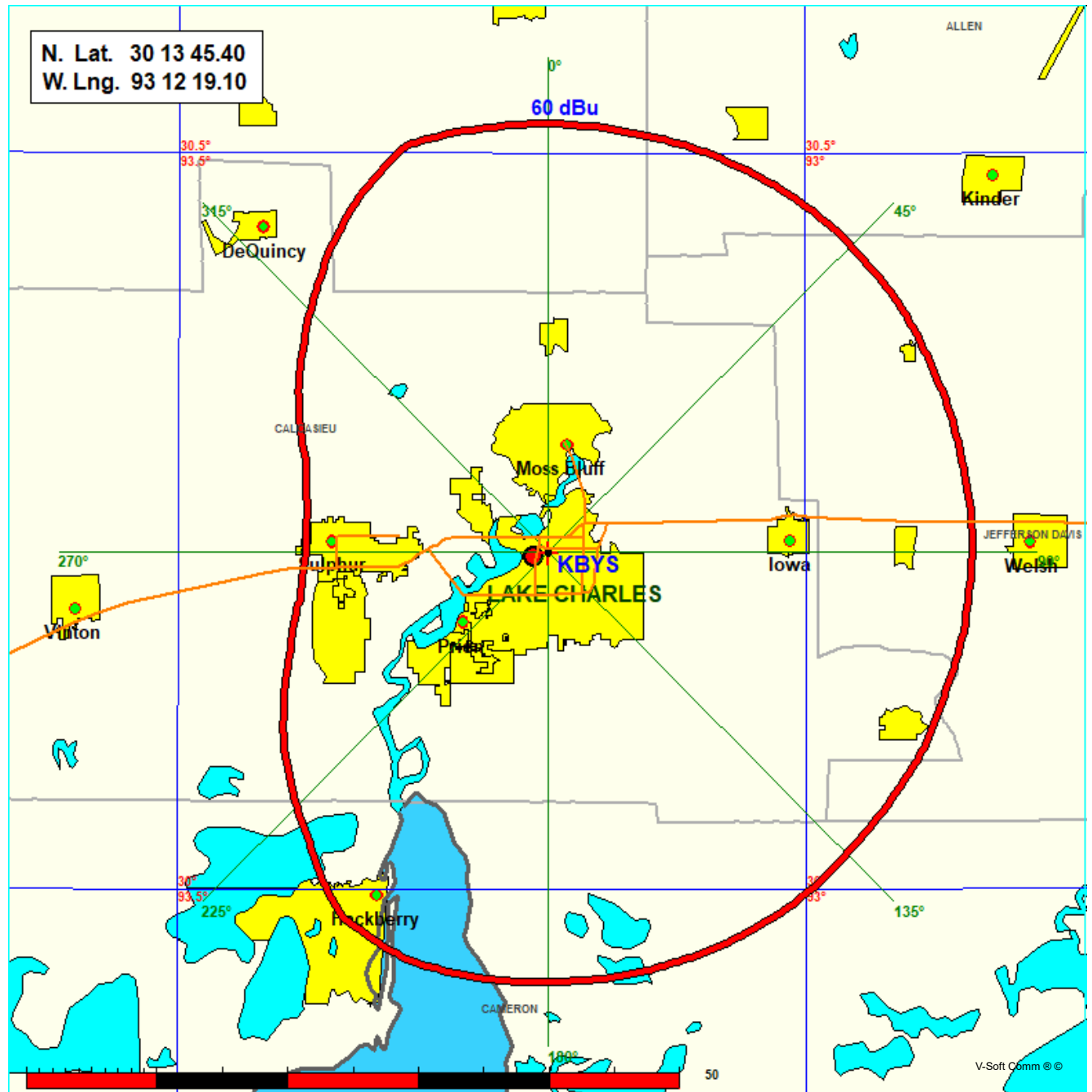
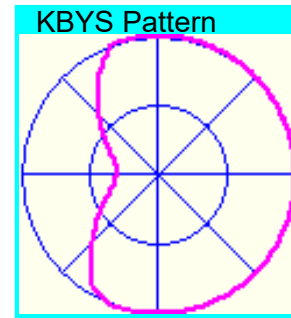
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
236.0	100.0000	0380.9	078.4	156.3	015.0000	0086.0	036.7	59.62
237.0	100.0000	0380.9	078.3	156.7	015.0000	0086.0	035.4	60.21
238.0	100.0000	0380.9	078.3	157.1	015.0000	0086.0	034.0	60.82
239.0	100.0000	0380.9	078.3	157.4	015.0000	0086.0	032.7	61.43
240.0	100.0000	0380.9	078.3	157.8	015.0000	0086.0	031.3	62.08
241.0	100.0000	0380.8	078.3	158.1	015.0000	0085.9	030.0	62.79
242.0	100.0000	0380.7	078.3	158.5	015.0000	0085.9	028.6	63.57
243.0	100.0000	0380.6	078.3	158.8	015.0000	0085.9	027.3	64.41
244.0	100.0000	0380.6	078.3	159.1	015.0000	0085.9	025.9	65.31
245.0	100.0000	0380.7	078.3	159.4	015.0000	0085.9	024.6	66.26
246.0	100.0000	0380.7	078.3	159.6	015.0000	0085.9	023.2	67.25
247.0	100.0000	0380.6	078.3	159.8	015.0000	0085.9	021.8	68.29
248.0	100.0000	0380.4	078.3	160.0	015.0000	0085.9	020.5	69.37
249.0	100.0000	0380.1	078.3	160.0	015.0000	0085.9	019.1	70.48
250.0	100.0000	0379.8	078.3	160.0	015.0000	0085.9	017.7	71.61
251.0	096.2753	0379.7	077.9	158.6	015.0000	0085.9	016.4	72.76
252.0	092.6214	0379.6	077.5	156.9	015.0000	0086.0	015.0	73.92
253.0	089.0381	0379.4	077.0	154.6	015.0000	0086.0	013.7	75.28
254.0	085.5255	0379.2	076.6	151.8	015.0000	0085.9	012.5	76.98
255.0	082.0836	0379.1	076.2	148.2	015.0000	0085.9	011.3	78.80
256.0	078.7124	0379.0	075.7	143.7	015.0000	0085.8	010.2	80.65
257.0	075.4119	0378.9	075.3	138.0	015.0000	0085.2	009.2	82.39
258.0	072.1820	0379.0	074.9	130.9	015.0000	0084.5	008.3	83.95
259.0	069.0229	0379.1	074.4	122.3	015.0000	0084.6	007.7	85.35
260.0	065.9344	0379.5	074.0	112.3	015.0000	0084.3	007.2	86.40
261.0	063.2661	0379.8	073.6	101.5	015.0000	0084.9	007.0	87.02
262.0	060.6529	0380.0	073.1	090.5	015.0000	0085.7	007.1	86.90
263.0	058.0949	0380.1	072.7	080.2	015.0000	0085.4	007.4	85.96
264.0	055.5919	0380.1	072.2	071.4	015.0000	0085.7	008.0	84.66
265.0	053.1441	0380.1	071.8	064.1	015.0000	0086.0	008.8	83.12
266.0	050.7514	0380.1	071.3	058.2	015.0000	0086.6	009.8	81.45
267.0	048.4138	0380.2	070.8	053.6	015.0000	0087.0	010.8	79.69
268.0	046.1313	0380.2	070.3	050.0	015.0000	0087.0	011.9	77.92
269.0	043.9039	0380.3	069.8	047.2	015.0000	0087.0	013.1	76.22
270.0	041.7316	0380.2	069.3	045.0	015.0000	0087.2	014.3	74.67
271.0	040.4115	0380.1	068.9	042.7	015.0000	0087.2	015.4	73.69
272.0	039.1125	0380.0	068.6	040.8	015.0000	0087.1	016.6	72.71
273.0	037.8348	0379.8	068.2	039.3	015.0000	0087.0	017.7	71.72
274.0	036.5783	0379.8	067.9	038.0	015.0000	0087.0	018.9	70.74
275.0	035.3430	0379.7	067.5	037.0	015.0000	0086.9	020.1	69.77
276.0	034.1290	0379.6	067.2	036.2	015.0000	0086.8	021.3	68.82
277.0	032.9361	0379.5	066.8	035.5	015.0000	0086.8	022.5	67.89
278.0	031.7645	0379.5	066.4	034.9	015.0000	0086.8	023.7	66.98
279.0	030.6141	0379.5	066.1	034.5	015.0000	0086.7	024.9	66.11
280.0	029.4849	0379.4	065.7	034.2	015.0000	0086.7	026.1	65.28
281.0	031.0249	0379.4	066.2	032.2	015.0000	0086.5	026.9	64.69
282.0	032.6041	0379.3	066.7	030.4	015.0000	0086.4	027.9	64.09
283.0	034.2225	0379.3	067.2	028.7	015.0000	0086.2	028.8	63.49
284.0	035.8801	0379.2	067.7	027.2	015.0000	0086.1	029.8	62.90
285.0	037.5769	0379.1	068.1	025.9	015.0000	0086.0	030.9	62.32
286.0	039.3129	0378.9	068.6	024.7	015.0000	0086.0	032.0	61.77

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
287.0	041.0881	0378.9	069.0	023.6	015.0000	0085.9	033.1	61.23
288.0	042.9025	0378.9	069.5	022.6	015.0000	0085.8	034.3	60.70
289.0	044.7561	0378.8	069.9	021.8	015.0000	0085.7	035.4	60.16
290.0	046.6489	0378.7	070.3	021.0	015.0000	0085.7	036.7	59.62
291.0	048.5391	0378.7	070.7	020.4	015.0000	0085.6	037.9	59.09
292.0	050.4668	0378.7	071.1	019.8	015.0000	0085.5	039.1	58.56
293.0	052.4321	0378.7	071.5	019.3	015.0000	0085.5	040.4	58.03
294.0	054.4349	0378.6	071.9	018.9	015.0000	0085.4	041.7	57.51
295.0	056.4752	0378.4	072.3	018.6	015.0000	0085.4	042.9	57.00
296.0	058.5531	0378.4	072.7	018.3	015.0000	0085.3	044.2	56.49
297.0	060.6685	0378.6	073.0	018.0	015.0000	0085.3	045.6	56.00
298.0	062.8215	0378.8	073.4	017.8	015.0000	0085.3	046.9	55.51
299.0	065.0120	0378.8	073.8	017.7	015.0000	0085.3	048.2	55.03
300.0	067.2400	0378.8	074.1	017.6	015.0000	0085.3	049.5	54.56
301.0	067.2400	0378.8	074.1	017.9	015.0000	0085.3	050.8	54.10
302.0	067.2400	0378.8	074.1	018.2	015.0000	0085.3	052.1	53.65
303.0	067.2400	0378.7	074.1	018.5	015.0000	0085.4	053.3	53.20
304.0	067.2400	0378.6	074.1	018.9	015.0000	0085.4	054.6	52.75
305.0	067.2400	0378.3	074.1	019.3	015.0000	0085.5	055.8	52.31
306.0	067.2400	0378.1	074.1	019.6	015.0000	0085.5	057.1	51.87
307.0	067.2400	0378.0	074.1	020.0	015.0000	0085.6	058.3	51.44
308.0	067.2400	0377.8	074.0	020.4	015.0000	0085.6	059.5	51.02
309.0	067.2400	0377.7	074.0	020.8	015.0000	0085.6	060.8	50.61
310.0	067.2400	0377.7	074.0	021.1	015.0000	0085.7	062.0	50.22
311.0	067.2400	0377.6	074.0	021.5	015.0000	0085.7	063.2	49.84
312.0	067.2400	0377.7	074.0	021.9	015.0000	0085.8	064.4	49.47
313.0	067.2400	0377.7	074.0	022.3	015.0000	0085.8	065.6	49.12
314.0	067.2400	0377.7	074.0	022.7	015.0000	0085.8	066.9	48.78
315.0	067.2400	0377.6	074.0	023.1	015.0000	0085.9	068.1	48.43
316.0	067.2400	0377.5	074.0	023.5	015.0000	0085.9	069.2	48.09
317.0	067.2400	0377.4	074.0	023.9	015.0000	0085.9	070.4	47.76
318.0	067.2400	0377.3	074.0	024.3	015.0000	0085.9	071.6	47.42
319.0	067.2400	0377.4	074.0	024.7	015.0000	0086.0	072.8	47.09
320.0	067.2400	0377.5	074.0	025.1	015.0000	0086.0	074.0	46.77
321.0	067.2400	0377.6	074.0	025.5	015.0000	0086.0	075.2	46.44
322.0	067.2400	0377.5	074.0	026.0	015.0000	0086.0	076.3	46.12

KBYS 60 dBu Coverage Map
McNeese State University

Coverage Study - GLOBE 30 Sec
06-08-2023

KBYS CH202 C3, 15.0 kW, 85.8m HAAT, 90.2m COR AMSL
Service Contour = 60 dBu.



N. Lat. = 30 13 45.4 W. Lng. = 93 12 19.1
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - GLOBE 30 SEC

Distance-to-Contour 60 dBu Table

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	5.4	84.8	15.0000	11.76	1.000	32.31
045	3.1	87.2	15.0000	11.76	1.000	32.77
090	4.5	85.7	15.0000	11.76	1.000	32.49
135	5.4	84.8	15.0000	11.76	1.000	32.32
180	4.2	86.0	15.0000	11.76	1.000	32.55
225	3.7	86.6	6.8141	8.33	0.674	27.19
270	4.3	85.9	1.3500	1.30	0.300	18.50
315	4.8	85.4	5.4904	7.40	0.605	25.74

Ave El= 4.41 M HAAT= 85.80 M AMSL= 90.21

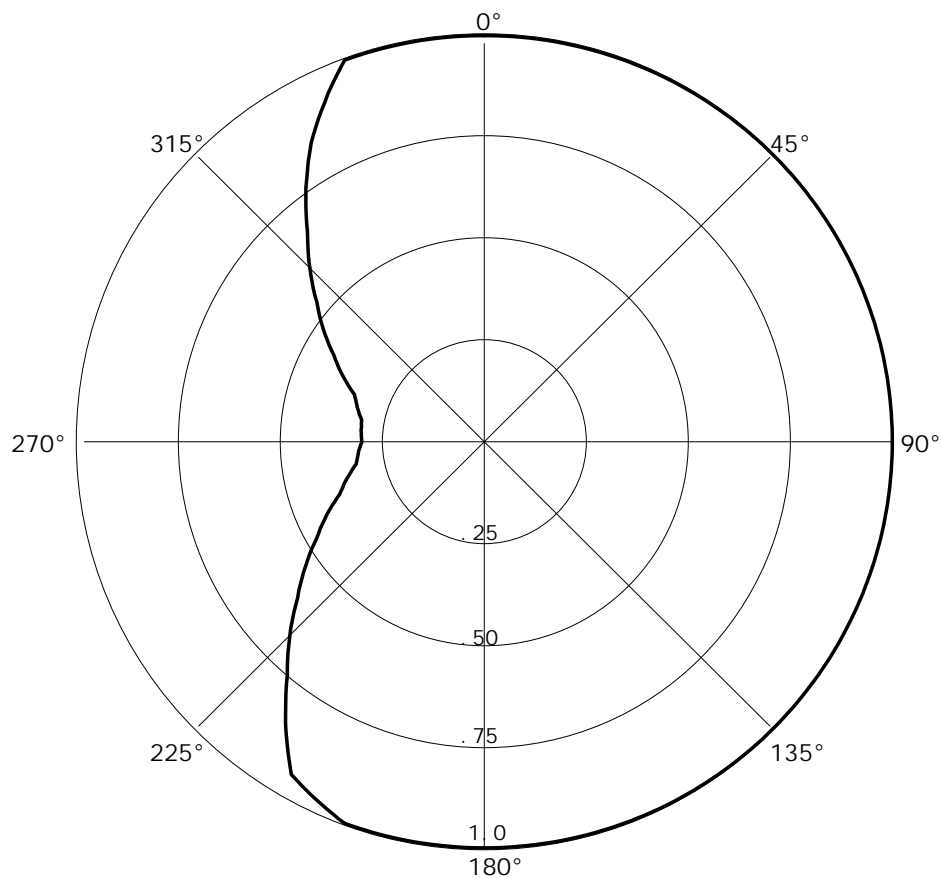
KBYS

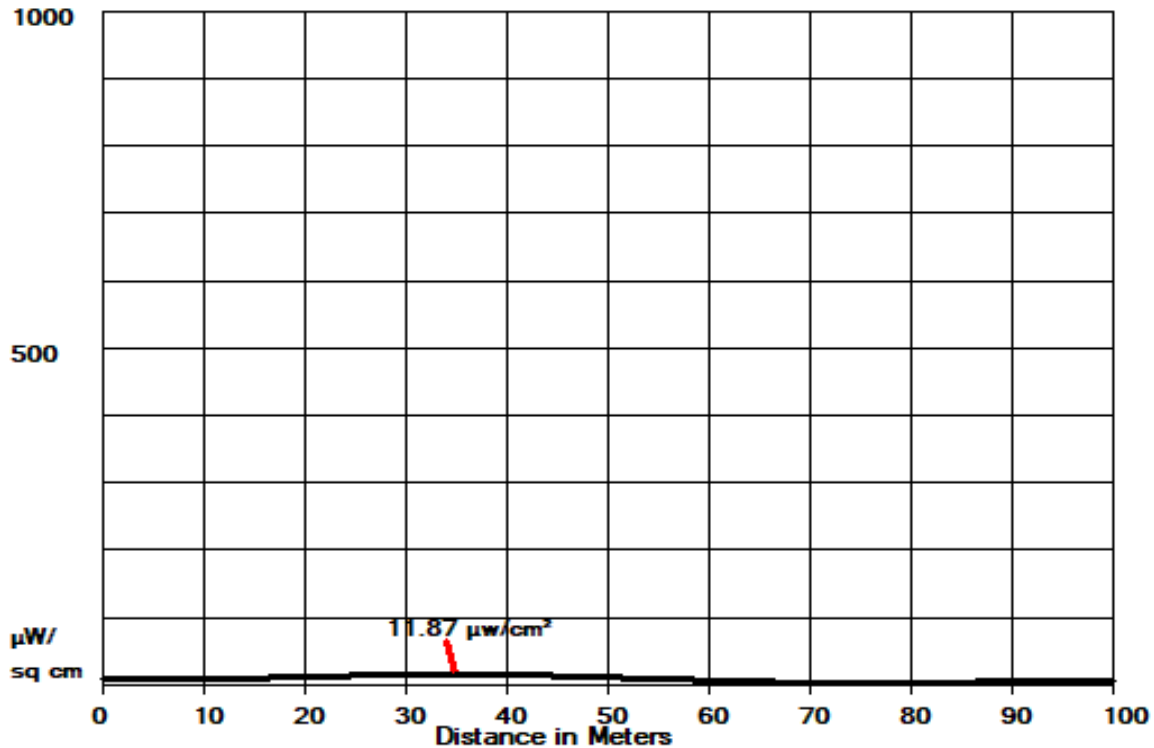
06-08-2023

RMS(V) = .869

Graph is Relative Field

Azi	Field	dBk	kW
000	1.000	11.761	15.000
010	1.000	11.761	15.000
020	1.000	11.761	15.000
030	1.000	11.761	15.000
040	1.000	11.761	15.000
050	1.000	11.761	15.000
060	1.000	11.761	15.000
070	1.000	11.761	15.000
080	1.000	11.761	15.000
090	1.000	11.761	15.000
100	1.000	11.761	15.000
110	1.000	11.761	15.000
120	1.000	11.761	15.000
130	1.000	11.761	15.000
140	1.000	11.761	15.000
150	1.000	11.761	15.000
160	1.000	11.761	15.000
170	1.000	11.761	15.000
180	1.000	11.761	15.000
190	1.000	11.761	15.000
200	1.000	11.761	15.000
210	0.946	11.279	13.424
220	0.751	09.274	8.460
230	0.597	07.280	5.346
240	0.474	05.276	3.370
250	0.377	03.288	2.132
260	0.319	01.837	1.526
270	0.300	01.303	1.350
280	0.305	01.447	1.395
290	0.338	02.339	1.714
300	0.426	04.349	2.722
310	0.536	06.344	4.309
320	0.674	08.334	6.814
330	0.849	10.339	10.812
340	1.000	11.761	15.000
350	1.000	11.761	15.000



EPA Type 3: Opposed "U" dipole, 4 Bays, Spac= 1, H=15 kW, V=15 kW, 87.6 M AG

HORZ. DISTANCE FROM FM RADIATOR VS POWER DENSITY (Microwatt/Square cm)
 Dist(Meters) PD (H) PD (V) Total (uW/cm2) Percent Max. (1000)

Dist(Meters)	PD (H)	PD (V)	Total (uW/cm2)	Percent Max. (1000)
0	2.06	2.06	4.12	0.4
1	2.06	2.06	4.12	0.4
2	2.06	2.06	4.12	0.4
3	2.06	2.06	4.11	0.4
4	2.06	2.06	4.11	0.4
5	2.05	2.05	4.10	0.4
6	2.05	2.05	4.10	0.4
7	2.04	2.04	4.09	0.4
8	2.12	2.12	4.24	0.4
9	2.28	2.28	4.56	0.5
10	2.44	2.44	4.88	0.5
11	2.60	2.60	5.20	0.5
12	2.77	2.77	5.54	0.6
13	2.94	2.94	5.87	0.6
14	3.11	3.11	6.21	0.6
15	3.27	3.27	6.55	0.7
16	3.54	3.41	6.95	0.7
17	3.81	3.54	7.35	0.7
18	4.09	3.67	7.76	0.8
19	4.37	3.79	8.16	0.8
20	4.64	3.91	8.56	0.9
21	4.92	4.03	8.94	0.9
22	5.19	4.13	9.32	0.9
23	5.44	4.24	9.69	1.0
24	5.56	4.44	10.00	1.0
25	5.67	4.63	10.30	1.0

Dist (Meters)	PD (H)	PD (V)	Total (uW/cm2)	Percent Max.
26	5.77	4.81	10.58	1.1
27	5.85	4.98	10.83	1.1
28	5.92	5.14	11.06	1.1
29	5.98	5.28	11.26	1.1
30	6.02	5.41	11.43	1.1
31	6.04	5.52	11.56	1.2
32	6.07	5.62	11.69	1.2
33	6.09	5.70	11.79	1.2
34	6.09	5.76	11.85	1.2
35	6.07	5.80	11.87	1.2
36	6.03	5.82	11.85	1.2
37	5.97	5.82	11.79	1.2
38	5.89	5.80	11.69	1.2
39	5.79	5.75	11.54	1.2
40	5.68	5.68	11.36	1.1
41	5.63	5.56	11.19	1.1
42	5.55	5.42	10.98	1.1
43	5.45	5.27	10.72	1.1
44	5.33	5.10	10.43	1.0
45	5.18	4.92	10.10	1.0
46	5.02	4.72	9.74	1.0
47	4.84	4.51	9.35	0.9
48	4.64	4.29	8.93	0.9
49	4.43	4.06	8.49	0.8
50	4.22	3.84	8.06	0.8
51	3.99	3.62	7.61	0.8
52	3.76	3.39	7.15	0.7
53	3.52	3.16	6.68	0.7
54	3.27	2.93	6.20	0.6
55	3.02	2.69	5.72	0.6
56	2.77	2.46	5.24	0.5
57	2.53	2.23	4.76	0.5
58	2.28	2.01	4.29	0.4
59	2.04	1.79	3.84	0.4
60	1.81	1.58	3.40	0.3
61	1.58	1.38	2.96	0.3
62	1.36	1.19	2.55	0.3
63	1.16	1.01	2.17	0.2
64	0.97	0.84	1.81	0.2
65	0.80	0.69	1.49	0.1
66	0.65	0.56	1.21	0.1
67	0.51	0.44	0.95	0.1
68	0.39	0.33	0.73	0.1
69	0.29	0.25	0.53	0.1
70	0.20	0.17	0.37	0.0
71	0.13	0.11	0.24	0.0
72	0.08	0.07	0.14	0.0
73	0.04	0.03	0.07	0.0
74	0.01	0.01	0.03	0.0
75	0.00	0.00	0.01	0.0
76	0.01	0.00	0.01	0.0
77	0.02	0.02	0.03	0.0

Dist (Meters)	PD (H)	PD (V)	Total (uW/cm2)	Percent Max.
78	0.04	0.03	0.08	0.0
79	0.08	0.06	0.14	0.0
80	0.12	0.10	0.21	0.0
81	0.17	0.13	0.30	0.0
82	0.22	0.18	0.40	0.0
83	0.28	0.22	0.51	0.1
84	0.35	0.27	0.62	0.1
85	0.42	0.33	0.74	0.1
86	0.49	0.38	0.87	0.1
87	0.55	0.44	0.99	0.1
88	0.62	0.49	1.11	0.1
89	0.68	0.55	1.23	0.1
90	0.75	0.60	1.35	0.1
91	0.81	0.65	1.46	0.1
92	0.86	0.70	1.56	0.2
93	0.92	0.75	1.66	0.2
94	0.96	0.79	1.76	0.2
95	1.01	0.83	1.84	0.2
96	1.05	0.87	1.92	0.2
97	1.08	0.90	1.98	0.2
98	1.11	0.93	2.04	0.2
99	1.13	0.95	2.09	0.2
100	1.15	0.97	2.12	0.2

**Declaration and
Statement of Qualifications**

I, Douglas L. Vernier, declare that I have received training as an engineer from the University of Michigan School of Engineering. That, I have received degrees from the University in the field of Broadcast Telecommunications. That, I have been active in broadcast consulting for over 40 years.

That, I have held a Federal Communications Commission First Class Radiotelephone License continually since 1964. In 1985, this license was reissued by the Commission as a lifetime General Radiotelephone license no. PG-16-16464.

That, I am certified as a Professional Broadcast Engineer (#50258) by the Society of Broadcast Engineers, Indianapolis, Indiana. (Life-time Certification received in 2010).

That, my qualifications are a matter of record with the Federal Communications Commission.

That, I have been retained by McNeese University to prepare the engineering showing appended hereto.

That, I have prepared this broadcast engineering showing, the technical information contained in same and the facts stated within are true of my knowledge.

That, under penalty of perjury, I declare that the foregoing is correct.

Douglas L. Vernier

A handwritten signature in blue ink, appearing to read "Doug Vernier", with a large, stylized initial "D" and a horizontal line extending to the right.

Executed on June 8, 2023