

**W285ER
Facility #86302**

Minor Changes in Site, Antenna Height and Pattern

This Technical Report and associated exhibits are provided in support of minor changes in site, antenna height and antenna pattern for translator W285ER (#86302), The translator will continue to rebroadcast AM station WAKY (# 30798).

V-Soft's USGS 3 Second Terrain Utilized:

Commission rules permit the use of any recognized terrain database. In this case, the V-Soft Communications provided USGS 3 second database is utilized¹.

Allocations Analysis:

An overlap study included as exhibit E1 and a contour plot and FMOVER to WGHL on 286A as E1A demonstrate clearance to all facilities with the exception of 3rd

¹ Section 73.212 permits the use of a computerized terrain database "except in cases of dispute," but does not prescribe a specific database, thereby permitting an applicant to use any recognized computerized terrain database. Furthermore, in a Public Notice issued July 13, 1984 (#3476-FCC 84-341) the Commission stated:

Computer-generated Terrain Data. Applicants will be allowed to use any data file with equal or greater accuracy as the 30-second, point file of the National Geophysical Data Center (formally the National Geophysical and Solar-Terrestrial Data Center). When submitting their applications, applicants should indicate the file used. Topographic maps, however, will be the standard in cases of questioned accuracy. (emphasis added).

§ 73.312 Topographic data.

(d) In lieu of maps, **the average terrain elevation may be computer generated except in cases of dispute, using elevations from a 30 second, point or better topographic data file.** The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques. The height above mean sea level of the antenna site must be obtained manually using appropriate topographic maps. (emphasis added)

adjacent station WAYI on 282A. Exhibits E1B and E1C demonstrate clearance to this facility per *Living Way Ministries, Inc. (FCC 08-242)*. Exhibit E1C (using the latest 2025 Google Earth aerial view) shows that there are only two one story buildings within the W285ER application's 105.6 dBu (50:10) interference contour. Exhibits E1B1 and E1B2 calculate the interference contour to be at least 86.6 meters above ground at building #1 and 110.4 meters above ground at building #2.

Exhibit E2 shows that the proposed 60 dBu is contained within the 25 mile radius of WAKY(AM), overlaps the licensed 60 dBu and does not exceed the 50% overlap limit to the two other WAKY(AM) translators' 60 dBu contours (W261CO and W292FS).

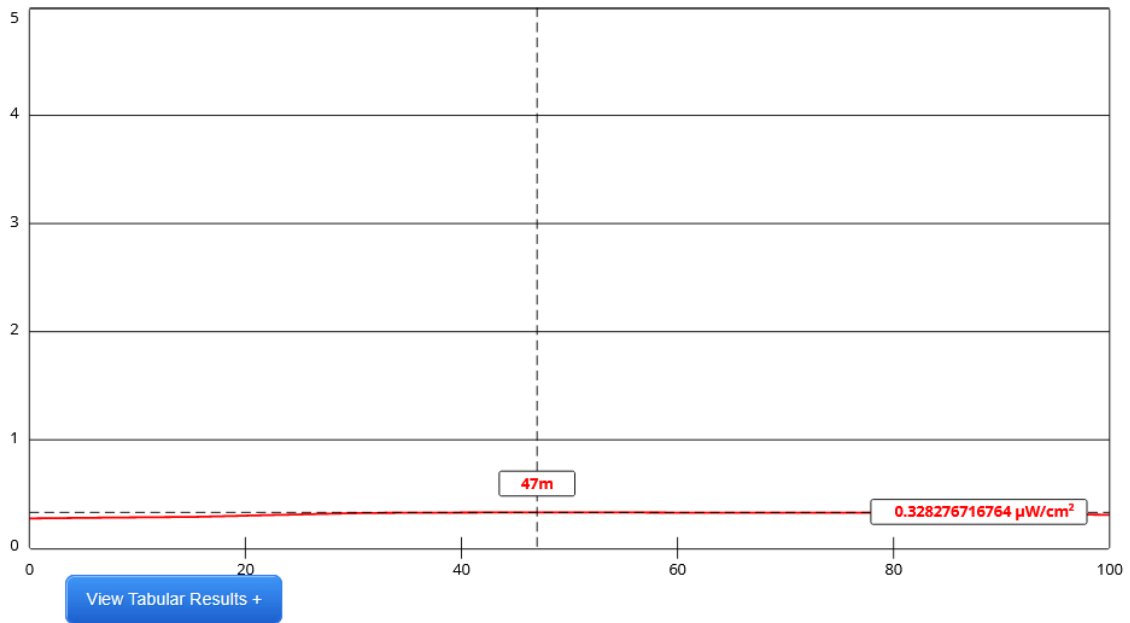
Antenna System:

Three PSI 4 element yagi antennas are configured in a single level antenna to provide the proposed pattern. The horizontal and elevation patterns are provided as exhibit E1D.

RF Exposure Calculation:

The RF for the proposed facility was calculated using the Commission's FMMODEL program to be $0.328\mu\text{Watts}/\text{cm}^2$ or 0.164% of the $200\mu\text{Watts}/\text{cm}^2$ maximum for general public exposure and less than the 5% threshold for consideration..

FMMODEL Output:



Channel Selection	Channel 285 (104.9 MHz) v		
Antenna Type +	EPA Type 1: Ring-and-Stub or "Other" v		
Height (m)	177	Distance (m)	100
ERP-H (W)	250	ERP-V (W)	250
Num of Elements	1	λ	1
Num of Points	500	Apply	

Conclusion:

It is concluded that the proposed minor modifications of the W285ER licensed facility are in full compliance with the Commission rules and policies.

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E1 W285ER Overlap Study

REFERENCE CH# 285D - 104.9 MHz, Pwr= 0.25 kW DA, HAAT= 209.5 M, COR= 423 M DISPLAY DATES
 38 27 23.00 N. Average Protected F(50-50)= 18.96 km DATA 01-27-26
 85 25 28.00 W. Standard Directional SEARCH 01-28-26

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*
285D Prospect	W285ER	LIC_DCN KY		245.0 64.9	15.74 0000188968	38 23 47.00 85 35 17.30	0.250 56	269	---Reference--- Wakyana LLC		
285A Frankfort	WFKY	LIC_CN KY		120.3 300.6	51.52 BLH20100122AAB	38 13 18.30 84 54 53.80	3.400 86	69.7 312	20.2 Southern Belle, LLC	-27.4*	5.6
285A Columbus	WINN	LIC_CN IN		330.4 150.1	93.44 BLH19910501KA	39 11 09.10 85 57 36.90	6.000 91	89.1 297	30.1 White River Broadcasting C	-15.2	2.7
282A Charlestown	WAYI	LIC_CN IN		279.3 99.2	17.75 BLH19980217KF	38 28 55.20 85 37 32.90	3.000 100	2.3 277	24.3 Hope Media Group	-4.4*	-7.6*
286A Shepherdsville	WGHL	LIC_ZCN KY		217.2 37.0	52.18 BLH20080326AEW	38 04 55.20 85 47 05.90	1.900 180	36.0 342	23.5 Alpha Media Licensee LLC	-2.6	0.1
284D Louisville	W284AD	LIC_CN KY		234.2 54.0	42.81 0000246870	38 13 50.30 85 49 19.90	0.099 115	18.6 276	12.5 New Albany Broadcasting Co	5.0	1.8
287A Scottsburg	WPPI	LIC_CN IN		321.4 141.2	36.44 BLH19940411KE	38 42 44.20 85 41 11.80	2.200 156	2.3 346	26.7 D. R. Rice Broadcasting, In	15.0	8.8
286B Cincinnati	WUBE-FM	LIC_CN OH		46.9 227.5	109.36 BLH20170320AAM	39 07 30.20 84 29 55.80	14.500 280	77.7 491	65.0 Cincinnati FCC License Sub	22.0	27.5
284B Jasper	WITZ-FM	LIC_CN IN		265.4 84.4	132.61 BLH6255	38 21 02.20 86 56 26.00	50.000 119	69.5 273	56.7 Jasper On The Air, Inc.	43.9	35.5
285A Leitchfield	WKHG	LIC_CN KY		216.0 35.5	129.47 BMLH19921214KC	37 30 40.10 86 17 14.90	3.500 83	74.5 279	22.6 Heritage Media Of Kentucky	36.1	49.0

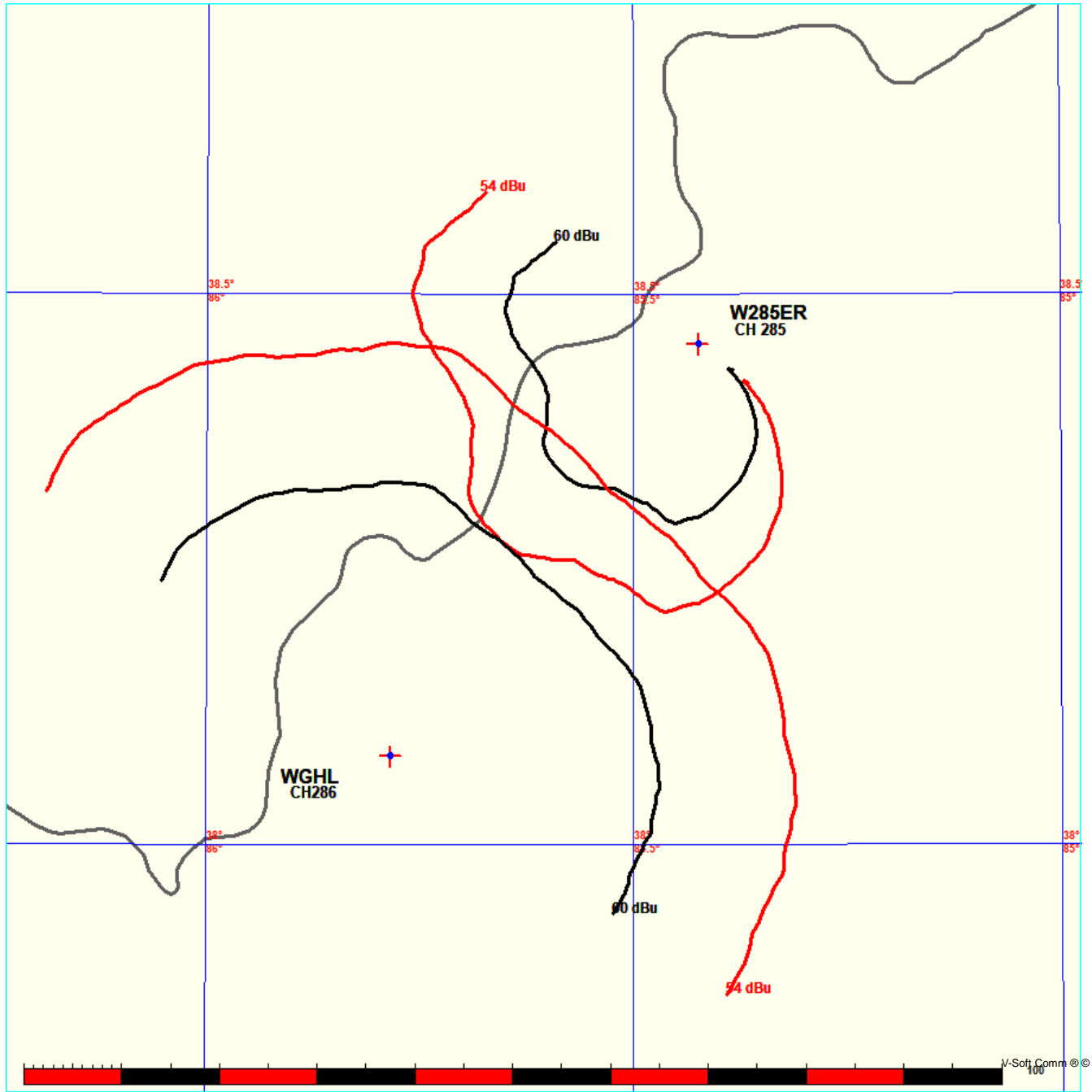
Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
 In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
 All separation margins (if shown) include rounding.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

E1A W285ER - WGHL Plot

FMCommander Single Allocation Study - 01-29-2026 - USGS 03 SEC
W285ER's Overlaps (In= -2.61 km, Out= 0.07 km)

W285ER CH 285 D DA
Lat= 38 27 23.00, Lng= 85 25 28.00
0.25 kW 209.5 m HAAT, 423 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WGHL CH 286 A 73.215 Z BLH20080326AEW
Lat= 38 04 55.20, Lng= 85 47 05.90
1.9 kW 180 m HAAT, 342 m COR
Prot.= 60 dBu, Intef.= 54 dBu



E1A WGHL FMOVER ANALYSIS

01-29-2026 Terrain Data: USGS 03 SEC FMOver Analysis

WGHL BLH20080326AEW

W285ER

Channel = 286A
 Max ERP = 1.9 kW
 RCAMSL = 342 m
 N. Lat. 38 04 55.20
 W. Lng. 85 47 05.90
 Protected
 60 dBu

Channel = 285D
 Max ERP = 0.25 kW
 RCAMSL = 423 m
 N. Lat. 38 27 23.00
 W. Lng. 85 25 28.00
 Interfering
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
010.0	001.2160	0205.4	027.2	241.0	000.1721	0222.9	030.6	51.47	
011.0	001.1798	0204.4	026.9	240.1	000.1749	0225.6	030.4	51.76	
012.0	001.1441	0203.5	026.7	239.1	000.1801	0228.7	030.2	52.11	
013.0	001.1090	0202.9	026.5	238.2	000.1856	0233.0	030.0	52.50	
014.0	001.0745	0202.4	026.2	237.3	000.1911	0235.9	029.8	52.83	
015.0	001.0404	0201.6	026.0	236.3	000.1970	0235.2	029.7	53.01	
016.0	001.0070	0200.8	025.8	235.4	000.2029	0233.7	029.6	53.15	
017.0	000.9740	0200.0	025.5	234.4	000.2090	0232.2	029.5	53.28	
018.0	000.9417	0199.4	025.3	233.4	000.2151	0230.9	029.4	53.40	
019.0	000.9098	0199.1	025.1	232.5	000.2211	0227.5	029.4	53.43	
020.0	000.8786	0198.5	024.9	231.5	000.2274	0224.5	029.3	53.47	
021.0	000.8631	0198.2	024.7	230.7	000.2330	0222.0	029.2	53.55	
022.0	000.8478	0198.3	024.7	229.9	000.2376	0220.4	029.1	53.65	
023.0	000.8327	0198.8	024.6	229.0	000.2374	0219.6	028.9	53.69	
024.0	000.8176	0199.7	024.5	228.2	000.2371	0218.7	028.8	53.73	
025.0	000.8027	0200.5	024.5	227.4	000.2369	0217.8	028.7	53.76	
026.0	000.7880	0201.5	024.4	226.6	000.2367	0219.1	028.6	53.88	
027.0	000.7734	0202.3	024.4	225.7	000.2364	0219.8	028.5	53.96	
028.0	000.7589	0203.1	024.3	224.9	000.2362	0218.7	028.4	53.95	
029.0	000.7446	0203.5	024.2	224.0	000.2359	0217.8	028.4	53.94	
030.0	000.7304	0203.7	024.1	223.1	000.2357	0217.2	028.4	53.91	
031.0	000.7210	0203.8	024.1	222.3	000.2354	0216.2	028.4	53.88	
032.0	000.7116	0203.9	024.0	221.4	000.2352	0216.6	028.4	53.90	
033.0	000.7024	0203.8	023.9	220.6	000.2349	0214.2	028.4	53.79	
034.0	000.6932	0203.6	023.8	219.7	000.2329	0212.4	028.4	53.66	
035.0	000.6840	0203.1	023.7	218.9	000.2276	0210.1	028.5	53.42	
036.0	000.6749	0202.6	023.6	218.0	000.2224	0209.0	028.5	53.22	
037.0	000.6659	0202.1	023.5	217.2	000.2173	0208.6	028.6	53.05	
038.0	000.6569	0201.6	023.4	216.4	000.2124	0207.9	028.7	52.85	
039.0	000.6480	0201.0	023.3	215.6	000.2077	0206.6	028.9	52.62	
040.0	000.6392	0200.7	023.2	214.8	000.2030	0206.9	029.0	52.46	
041.0	000.6525	0200.0	023.3	214.0	000.1983	0206.9	029.0	52.38	
042.0	000.6659	0199.1	023.4	213.2	000.1936	0205.7	029.0	52.22	
043.0	000.6794	0198.0	023.4	212.3	000.1890	0204.3	029.0	52.05	
044.0	000.6932	0197.0	023.5	211.5	000.1844	0203.3	029.0	51.88	
045.0	000.7070	0195.8	023.5	210.7	000.1799	0202.4	029.1	51.70	

E1B1 Analysis of Radial to Building #1

W285ER La Grange, KY, Showing Protection to WAYI, Channel: 282
 Geographic Coordinates: N. 38 27 23.00 W. 85 25 28.00
 74.1204(d) Study - Using USGS 03 SEC Terrain Database
 Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 285
 Translator or LPFM Antenna Height AG = 177 meters
 W285ER Antenna Azimuth Model = W285ER-PSI-3 antenna array.PAT
 Vertical Model Name = PSIFM4Y-1 SINGLE LEVEL

Protected Station's Contour = 65.5983 dBu
 Translator's or LPFM's full Interference contour 105.5983

Review Azimuth = 209.6 Degrees True
 Horizontal Relative Field at Review Azimuth = 0.839
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.176 kW
 Distance between stations = 17.8 km
 Protected Station= WAYI, 3 kW, 277 M meters COR AMSL

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	0.84	0.2097	533.2563	533.2563	177.000
01.00	0.999	0.84	0.2093	532.7230	532.6419	167.703
02.00	0.998	0.84	0.2089	532.1898	531.8656	158.427
03.00	0.997	0.84	0.2085	531.6565	530.9279	149.175
04.00	0.996	0.84	0.2081	531.1233	529.8295	139.951
05.00	0.995	0.84	0.2077	530.5900	528.5709	130.756
06.00	0.991	0.84	0.2060	528.4570	525.5620	121.761
07.00	0.987	0.84	0.2043	526.3239	522.4008	112.857
08.00	0.983	0.84	0.2027	524.1909	519.0895	104.047
09.00	0.979	0.84	0.2010	522.0579	515.6305	095.332
10.00	0.976	0.84	0.1998	520.4581	512.5512	086.623
11.00	0.969	0.84	0.1969	516.7253	507.2316	078.404
12.00	0.963	0.84	0.1945	513.5258	502.3040	070.232
13.00	0.956	0.84	0.1917	509.7930	496.7270	062.322
14.00	0.95	0.84	0.1893	506.5935	491.5455	054.444
15.00	0.943	0.84	0.1865	502.8607	485.7261	046.850
16.00	0.935	0.84	0.1834	498.5946	479.2799	039.569
17.00	0.926	0.84	0.1799	493.7953	472.2188	032.628
18.00	0.917	0.84	0.1764	488.9960	465.0628	025.892
19.00	0.908	0.84	0.1729	484.1967	457.8170	019.361
20.00	0.899	0.84	0.1695	479.3974	450.4862	013.036
21.00	0.888	0.84	0.1654	473.5316	442.0798	007.301
22.00	0.876	0.84	0.1610	467.1325	433.1177	002.009
23.00	0.865	0.84	0.1569	461.2667	424.5982	-003.231
24.00	0.853	0.84	0.1526	454.8676	415.5422	-008.011
25.00	0.841	0.84	0.1484	448.4685	406.4505	-012.531
26.00	0.828	0.84	0.1438	441.5362	396.8501	-016.557
27.00	0.815	0.84	0.1393	434.6039	387.2349	-020.306
28.00	0.801	0.84	0.1346	427.1383	377.1407	-023.529
29.00	0.788	0.84	0.1302	420.2059	367.5204	-026.720
30.00	0.775	0.84	0.1260	413.2736	357.9054	-029.637
31.00	0.76	0.84	0.1212	405.2748	347.3883	-031.732
32.00	0.745	0.84	0.1164	397.2759	336.9091	-033.524
33.00	0.73	0.84	0.1118	389.2771	326.4752	-035.016
34.00	0.715	0.84	0.1072	381.2782	316.0940	-036.208
35.00	0.699	0.84	0.1025	372.7461	305.3358	-036.798
36.00	0.682	0.84	0.0976	363.6808	294.2239	-036.766
37.00	0.665	0.84	0.0928	354.6154	283.2085	-036.413
38.00	0.648	0.84	0.0881	345.5501	272.2972	-035.742
39.00	0.63	0.84	0.0832	335.9515	261.0833	-034.421
40.00	0.613	0.84	0.0788	326.8861	250.4093	-033.118
41.00	0.594	0.84	0.0740	316.7542	239.0574	-030.809
42.00	0.575	0.84	0.0693	306.6224	227.8648	-028.170
43.00	0.556	0.84	0.0648	296.4905	216.8394	-025.206
44.00	0.537	0.84	0.0605	286.3586	205.9892	-021.921
45.00	0.518	0.84	0.0563	276.2268	195.3218	-018.322

< Building #1

< No buildings.

E1B1 Continued

46.00	0.499	0.84	0.0522	266.0949	184.8450	-014.413
47.00	0.479	0.84	0.0481	255.4298	174.2027	-009.810
48.00	0.459	0.84	0.0442	244.7646	163.7795	-004.896
49.00	0.439	0.84	0.0404	234.0995	153.5831	000.323
50.00	0.419	0.84	0.0368	223.4344	143.6209	005.839
51.00	0.399	0.84	0.0334	212.7693	133.9000	011.647
52.00	0.379	0.84	0.0301	202.1041	124.4277	017.740
53.00	0.359	0.84	0.0270	191.4390	115.2109	024.110
54.00	0.339	0.84	0.0241	180.7739	106.2562	030.751
55.00	0.319	0.84	0.0213	170.1088	097.5704	037.655
56.00	0.3	0.84	0.0189	159.9769	089.4579	044.373
57.00	0.28	0.84	0.0164	149.3118	081.3210	051.777
58.00	0.261	0.84	0.0143	139.1799	073.7541	058.969
59.00	0.241	0.84	0.0122	128.5148	066.1900	066.841
60.00	0.222	0.84	0.0103	118.3829	059.1914	074.477
61.00	0.205	0.84	0.0088	109.3175	052.9982	081.389
62.00	0.188	0.84	0.0074	100.2522	047.0655	088.483
63.00	0.171	0.84	0.0061	091.1868	041.3980	095.752
64.00	0.154	0.84	0.0050	082.1215	035.9997	103.190
65.00	0.137	0.84	0.0039	073.0561	030.8748	110.789
66.00	0.127	0.84	0.0034	067.7236	027.5456	115.131
67.00	0.117	0.84	0.0029	062.3910	024.3781	119.569
68.00	0.107	0.84	0.0024	057.0584	021.3745	124.096
69.00	0.097	0.84	0.0020	051.7259	018.5369	128.710
70.00	0.087	0.84	0.0016	046.3933	015.8674	133.405
71.00	0.09	0.84	0.0017	047.9931	015.6250	131.622
72.00	0.093	0.84	0.0018	049.5928	015.3250	129.834
73.00	0.095	0.84	0.0019	050.6593	014.8114	128.554
74.00	0.098	0.84	0.0020	052.2591	014.4046	126.765
75.00	0.101	0.84	0.0021	053.8589	013.9397	124.976
76.00	0.112	0.84	0.0026	059.7247	014.4487	119.049
77.00	0.122	0.84	0.0031	065.0573	014.6347	113.610
78.00	0.133	0.84	0.0037	070.9231	014.7457	107.627
79.00	0.144	0.84	0.0043	076.7889	014.6520	101.622
80.00	0.155	0.84	0.0050	082.6547	014.3528	095.601
81.00	0.166	0.84	0.0058	088.5205	013.8477	089.569
82.00	0.177	0.84	0.0066	094.3864	013.1360	083.532
83.00	0.188	0.84	0.0074	100.2522	012.2177	077.495
84.00	0.199	0.84	0.0083	106.1180	011.0924	071.463
85.00	0.209	0.84	0.0092	111.4506	009.7136	065.974
86.00	0.218	0.84	0.0100	116.2499	008.1092	061.033
87.00	0.227	0.84	0.0108	121.0492	006.3352	056.117
88.00	0.236	0.84	0.0117	125.8485	004.3920	051.228
89.00	0.244	0.84	0.0125	130.1145	002.2708	046.905
90.00	0.253	0.84	0.0134	134.9138	000.0000	042.086

< No buildings.

E1B2 Analysis of Radial to Building #2

W285ER La Grange, KY, Showing Protection to WAYI, Channel: 282
 Geographic Coordinates: N. 38 27 23.00 W. 85 25 28.00
 74.1204(d) Study - Using USGS 03 SEC Terrain Database
 Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 285
 Translator or LPFM Antenna Height AG = 177 meters
 W285ER Antenna Azimuth Model = W285ER-3 antenna array.PAT
 Vertical Model Name = PSIFM4Y-1 SINGLE LEVEL

Protected Station's Contour = 65.5983 dBu
 Translator's or LPFM's full Interference contour 105.5983

Review Azimuth = 215 Degrees True
 Horizontal Relative Field at Review Azimuth = 0.904
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.204 kW
 Distance between stations = 17.8 km
 Protected Station= WAYI, 3 kW, 277 M meters COR AMSL

Depression Angle From Degree(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	0.9	0.2260	553.5275	553.5275	177.000
01.00	0.999	0.9	0.2255	552.9740	552.8898	167.349
02.00	0.998	0.9	0.2251	552.4205	552.0840	157.721
03.00	0.997	0.9	0.2246	551.8669	551.1106	148.118
04.00	0.996	0.9	0.2242	551.3134	549.9704	138.542
05.00	0.995	0.9	0.2237	550.7599	548.6641	128.998
06.00	0.991	0.9	0.2220	548.5458	545.5408	119.661
07.00	0.987	0.9	0.2202	546.3317	542.2594	110.419
08.00	0.983	0.9	0.2184	544.1175	538.8222	101.273
09.00	0.979	0.9	0.2166	541.9034	535.2317	092.228
10.00	0.976	0.9	0.2153	540.2429	532.0354	083.188
11.00	0.969	0.9	0.2122	536.3682	526.5136	074.656
12.00	0.963	0.9	0.2096	533.0470	521.3986	066.173
13.00	0.956	0.9	0.2065	529.1723	515.6096	057.962
14.00	0.95	0.9	0.2040	525.8511	510.2311	049.785
15.00	0.943	0.9	0.2010	521.9765	504.1905	041.903
16.00	0.935	0.9	0.1976	517.5482	497.4993	034.344
17.00	0.926	0.9	0.1938	512.5665	490.1698	027.140
18.00	0.917	0.9	0.1900	507.5847	482.7418	020.148
19.00	0.908	0.9	0.1863	502.6030	475.2205	013.368
20.00	0.899	0.9	0.1827	497.6212	467.6110	006.804
21.00	0.888	0.9	0.1782	491.5324	458.8851	000.851
22.00	0.876	0.9	0.1734	484.8901	449.5823	-004.643
23.00	0.865	0.9	0.1691	478.8013	440.7389	-010.083
24.00	0.853	0.9	0.1644	472.1590	431.3387	-015.044
25.00	0.841	0.9	0.1598	465.5167	421.9014	-019.736
26.00	0.828	0.9	0.1549	458.3208	411.9360	-023.915
27.00	0.815	0.9	0.1501	451.1249	401.9553	-027.806
28.00	0.801	0.9	0.1450	443.3755	391.4774	-031.152
29.00	0.788	0.9	0.1403	436.1797	381.4913	-034.464
30.00	0.775	0.9	0.1357	428.9838	371.5109	-037.492
31.00	0.76	0.9	0.1305	420.6809	360.5939	-039.667
32.00	0.745	0.9	0.1254	412.3780	349.7164	-041.527
33.00	0.73	0.9	0.1204	404.0751	338.8859	-043.075
34.00	0.715	0.9	0.1155	395.7722	328.1100	-044.313
35.00	0.699	0.9	0.1104	386.9157	316.9428	-044.926
36.00	0.682	0.9	0.1051	377.5058	305.4086	-044.892
37.00	0.665	0.9	0.0999	368.0958	293.9744	-044.526
38.00	0.648	0.9	0.0949	358.6858	282.6483	-043.829
39.00	0.63	0.9	0.0897	348.7223	271.0082	-042.458
40.00	0.613	0.9	0.0849	339.3124	259.9283	-041.106
41.00	0.594	0.9	0.0797	328.7953	248.1450	-038.709

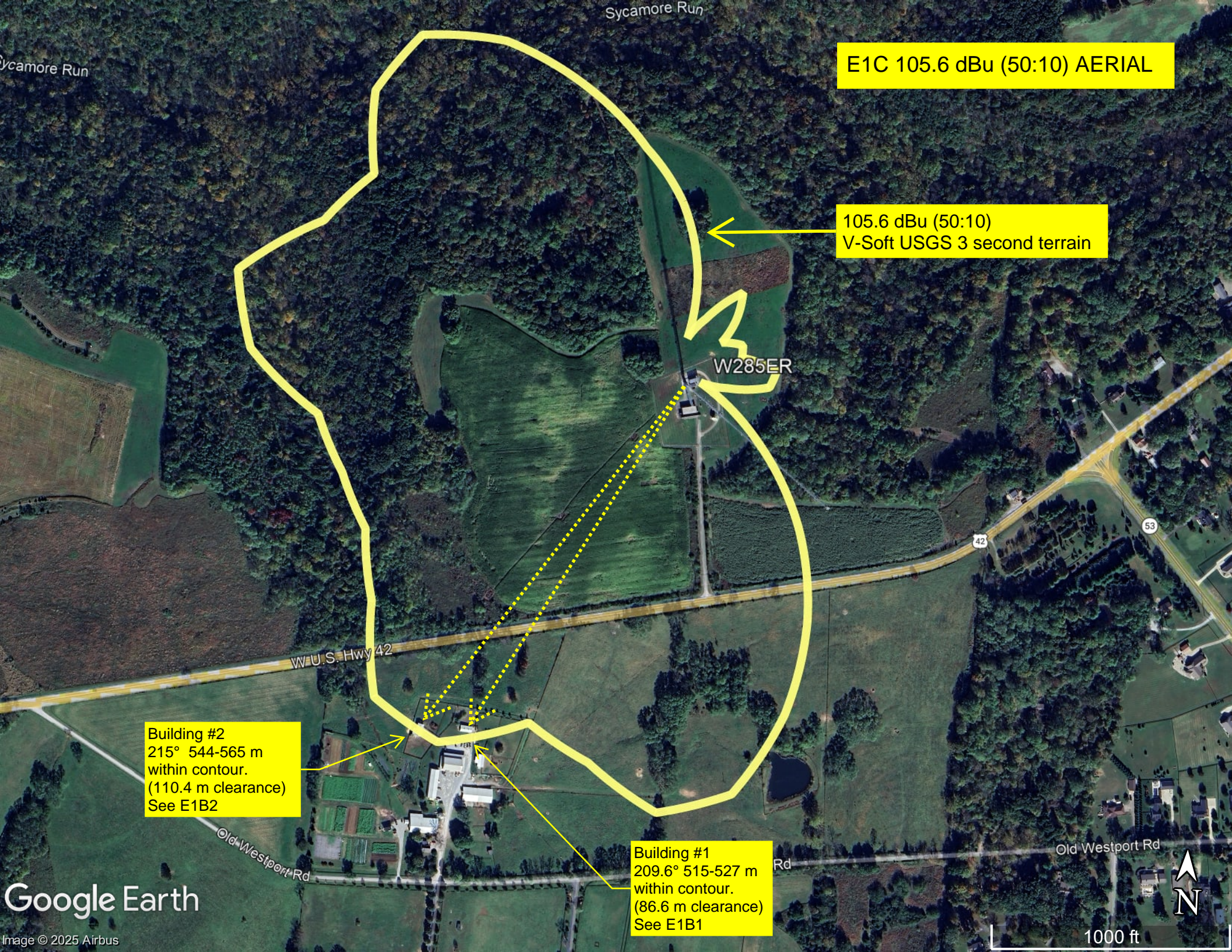
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< No buildings.

E1B2 Continued

42.00	0.575	0.9	0.0747	318.2783	236.5269	-035.970
43.00	0.556	0.9	0.0699	307.7613	225.0824	-032.893
44.00	0.537	0.9	0.0652	297.2443	213.8196	-029.483
45.00	0.518	0.9	0.0606	286.7273	202.7468	-025.747
46.00	0.499	0.9	0.0563	276.2102	191.8718	-021.689
47.00	0.479	0.9	0.0519	265.1397	180.8248	-016.911
48.00	0.459	0.9	0.0476	254.0691	170.0054	-011.810
49.00	0.439	0.9	0.0436	242.9986	159.4214	-006.393
50.00	0.419	0.9	0.0397	231.9280	149.0805	-000.667
51.00	0.399	0.9	0.0360	220.8575	138.9901	005.362
52.00	0.379	0.9	0.0325	209.7869	129.1577	011.686
53.00	0.359	0.9	0.0291	198.7164	119.5905	018.298
54.00	0.339	0.9	0.0260	187.6458	110.2954	025.191
55.00	0.319	0.9	0.0230	176.5753	101.2794	032.358
56.00	0.3	0.9	0.0203	166.0583	092.8586	039.331
57.00	0.28	0.9	0.0177	154.9877	084.4124	047.016
58.00	0.261	0.9	0.0154	144.4707	076.5578	054.482
59.00	0.241	0.9	0.0131	133.4001	068.7061	062.654
60.00	0.222	0.9	0.0111	122.8831	061.4416	070.580
61.00	0.205	0.9	0.0095	113.4731	055.0129	077.754
62.00	0.188	0.9	0.0080	104.0632	048.8547	085.118
63.00	0.171	0.9	0.0066	094.6532	042.9717	092.663
64.00	0.154	0.9	0.0054	085.2432	037.3682	100.384
65.00	0.137	0.9	0.0042	075.8333	032.0485	108.272
66.00	0.127	0.9	0.0036	070.2980	028.5928	112.780
67.00	0.117	0.9	0.0031	064.7627	025.3048	117.386
68.00	0.107	0.9	0.0026	059.2274	022.1870	122.085
69.00	0.097	0.9	0.0021	053.6922	019.2416	126.874
70.00	0.087	0.9	0.0017	048.1569	016.4706	131.747
71.00	0.09	0.9	0.0018	049.8175	016.2190	129.897
72.00	0.093	0.9	0.0020	051.4781	015.9076	128.041
73.00	0.095	0.9	0.0020	052.5851	015.3744	126.713
74.00	0.098	0.9	0.0022	054.2457	014.9521	124.856
75.00	0.101	0.9	0.0023	055.9063	014.4696	122.999
76.00	0.112	0.9	0.0028	061.9951	014.9980	116.846
77.00	0.122	0.9	0.0034	067.5304	015.1910	111.200
78.00	0.133	0.9	0.0040	073.6192	015.3063	104.990
79.00	0.144	0.9	0.0047	079.7080	015.2090	098.757
80.00	0.155	0.9	0.0054	085.7968	014.8985	092.507
81.00	0.166	0.9	0.0062	091.8856	014.3741	086.246
82.00	0.177	0.9	0.0071	097.9744	013.6354	079.979
83.00	0.188	0.9	0.0080	104.0632	012.6821	073.713
84.00	0.199	0.9	0.0089	110.1520	011.5140	067.451
85.00	0.209	0.9	0.0099	115.6873	010.0828	061.753
86.00	0.218	0.9	0.0107	120.6690	008.4174	056.625
87.00	0.227	0.9	0.0116	125.6507	006.5761	051.521
88.00	0.236	0.9	0.0126	130.6325	004.5590	046.447
89.00	0.244	0.9	0.0135	135.0607	002.3571	041.960
90.00	0.253	0.9	0.0145	140.0425	000.0000	036.958

< No buildings.



E1C 105.6 dBu (50:10) AERIAL

105.6 dBu (50:10)
V-Soft USGS 3 second terrain

W285ER

W U.S. Hwy 42

Building #2
215° 544-565 m
within contour.
(110.4 m clearance)
See E1B2

Building #1
209.6° 515-527 m
within contour.
(86.6 m clearance)
See E1B1

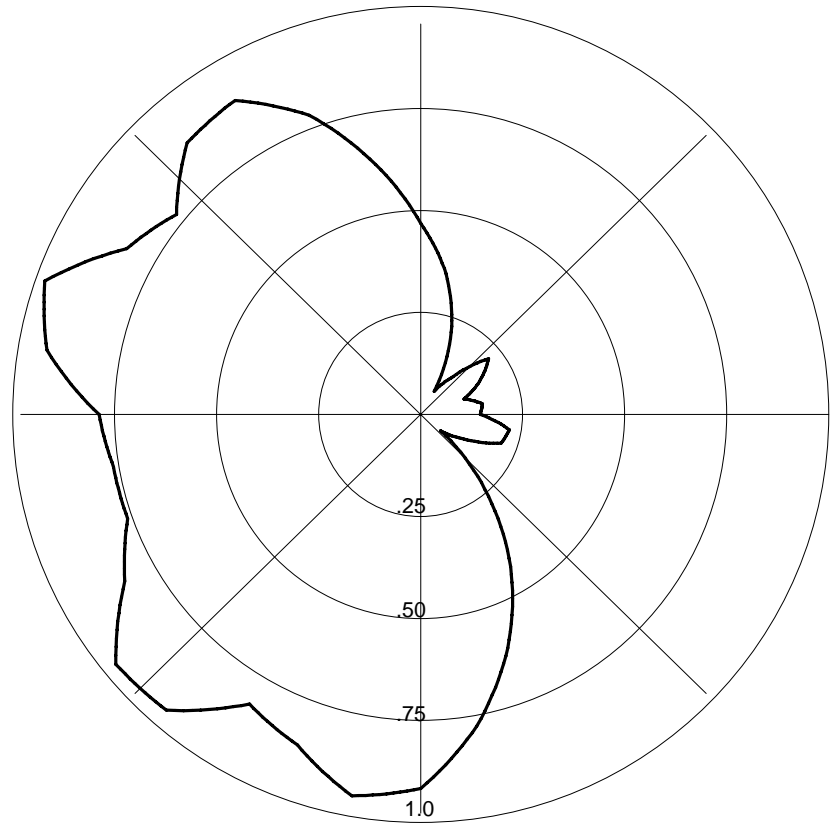
Old Westport Rd

Old Westport Rd



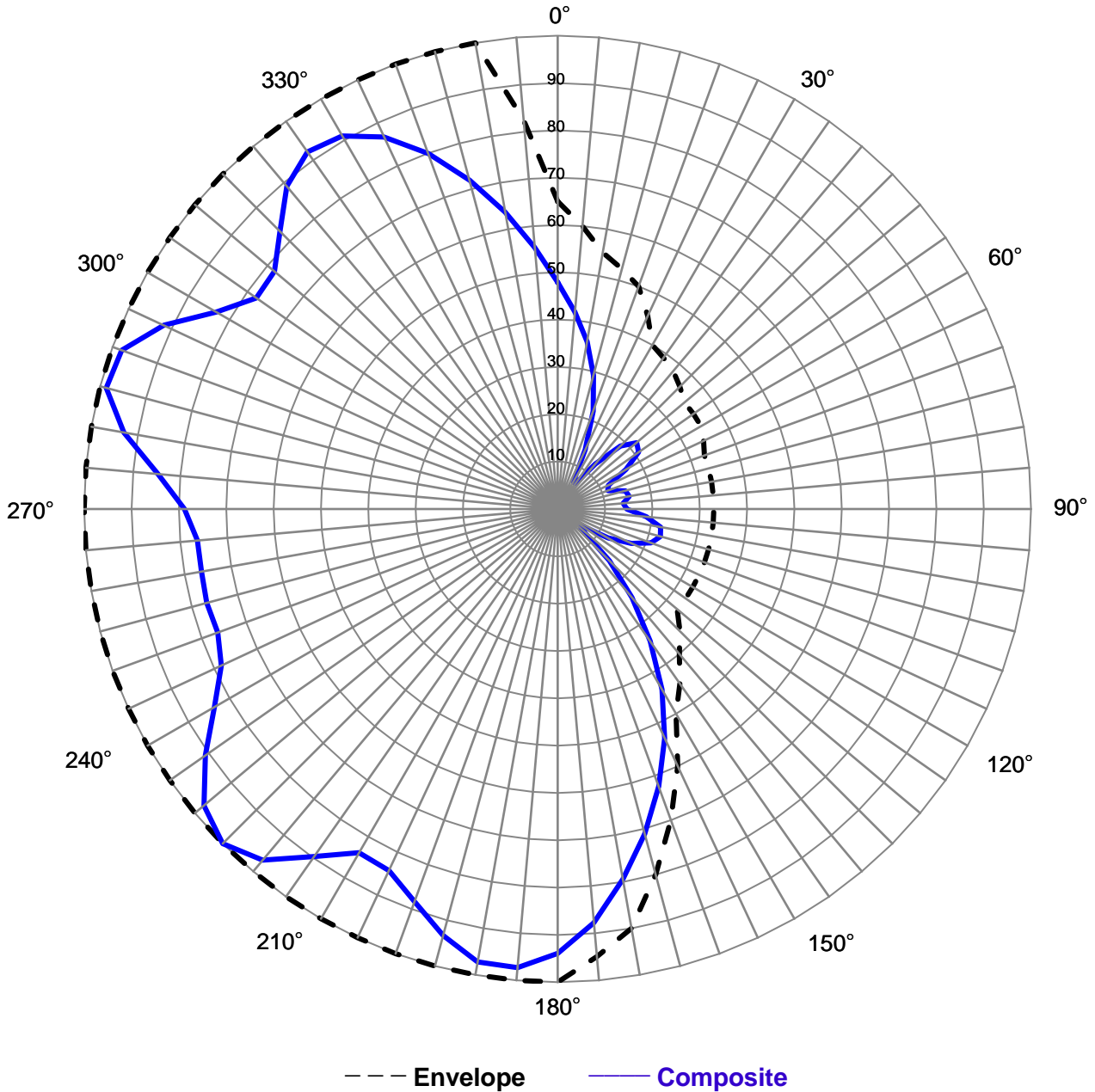
Bearing	Field Value
000	0.479
010	0.359
020	0.220
030	0.067
040	0.124
050	0.218
060	0.167
070	0.113
080	0.154
090	0.146
100	0.221
110	0.210
120	0.123
130	0.064
140	0.245
150	0.441
160	0.624
170	0.794
180	0.939
190	0.972
200	0.883
210	0.839
220	0.969
230	0.975
240	0.837
250	0.764
260	0.764
270	0.788
280	0.930
290	0.980
300	0.832
310	0.781
320	0.890
330	0.910
340	0.799
350	0.637

E1D Proposed Antenna Pattern





Relative Field Azimuth Plane Pattern



Pattern Type:	Relative Field	Type:	Directional Yagi Translator
Antenna Model:	PSIFM4Y-3C-DA	Orientation:	220 Degrees (SW leg)
Polarization:	Slant	Tower:	12 ft. Face (100°,220°, 340°)
Gain (approx):	1.36 (1.35 dB)	Reference:	W285ER New site
Frequency:	104.9 MHz	Date:	1/5/2026

Azimuth Pattern Tabulation

Antenna: PSIFM4Y-2C-75WS-DA Custom

New Site Sample Pattern 1-5-26

Station: W285ER

Frequency: 104.9 MHz

Location: Prospect, KY

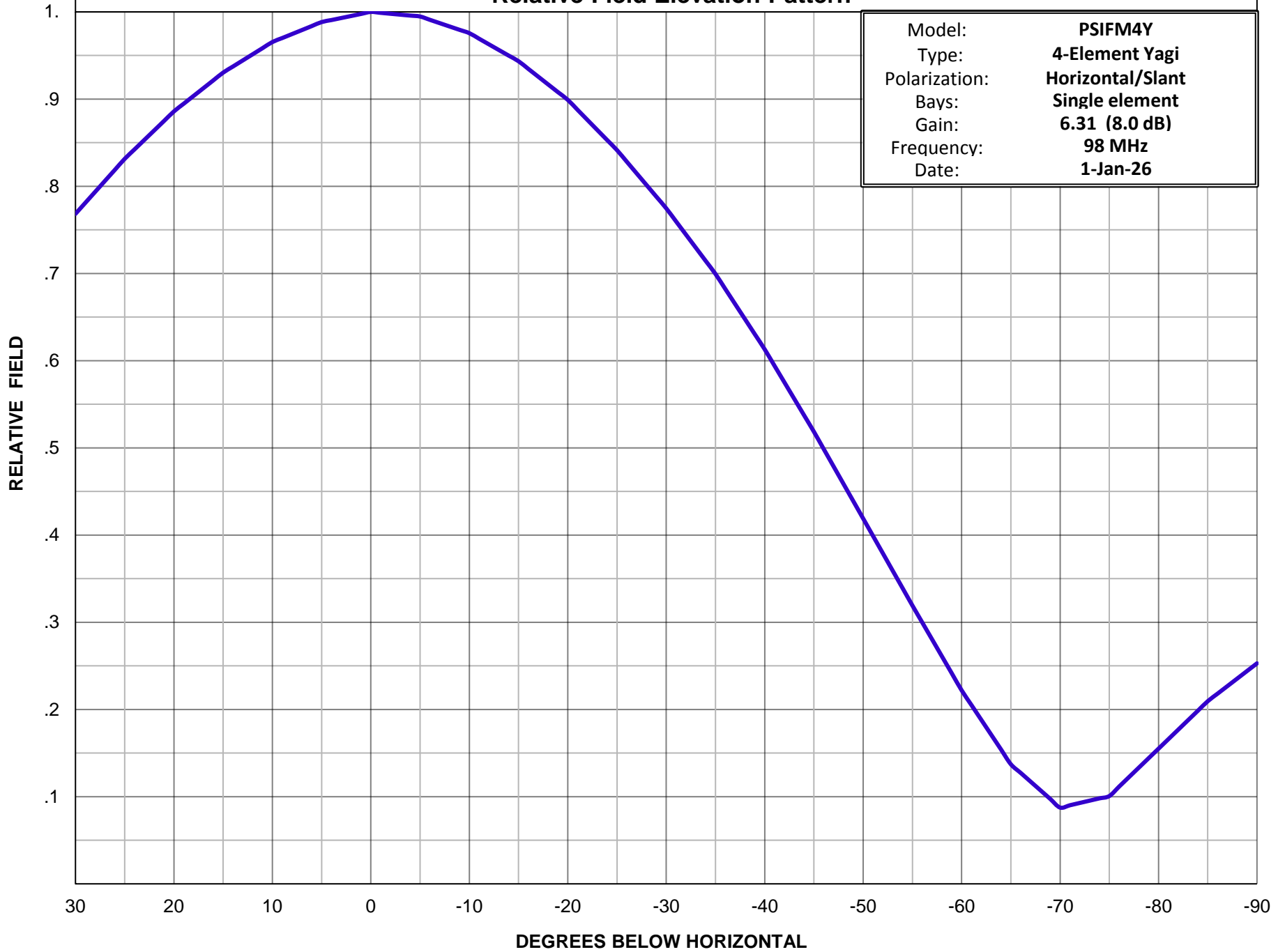
ERP: .220 kW (-6.58 dBK)

Angle	Relative Field	ERP Watts	ERP dBW	Angle	Relative Field	ERP Watts	ERP dBW
0	0.479	0.050	-12.97	180	0.939	0.194	-7.12
5	0.418	0.038	-14.15	185	0.973	0.208	-6.81
10	0.359	0.028	-15.47	190	0.972	0.208	-6.82
15	0.292	0.019	-17.27	195	0.933	0.192	-7.18
20	0.220	0.011	-19.73	200	0.883	0.172	-7.66
25	0.138	0.004	-23.78	205	0.843	0.156	-8.06
30	0.067	0.001	-30.05	210	0.839	0.155	-8.10
35	0.065	0.001	-30.32	215	0.897	0.177	-7.52
40	0.124	0.003	-24.71	220	0.969	0.207	-6.85
45	0.188	0.008	-21.09	225	1.000	0.220	-6.58
50	0.218	0.010	-19.81	230	0.975	0.209	-6.80
55	0.209	0.010	-20.17	235	0.908	0.181	-7.41
60	0.167	0.006	-22.12	240	0.837	0.154	-8.12
65	0.118	0.003	-25.14	245	0.784	0.135	-8.69
70	0.113	0.003	-25.51	250	0.764	0.128	-8.91
75	0.148	0.005	-23.17	255	0.767	0.129	-8.88
80	0.154	0.005	-22.83	260	0.764	0.128	-8.91
85	0.139	0.004	-23.72	265	0.764	0.128	-8.91
90	0.146	0.005	-23.29	270	0.788	0.137	-8.65
95	0.188	0.008	-21.09	275	0.847	0.158	-8.02
100	0.221	0.011	-19.69	280	0.930	0.190	-7.21
105	0.225	0.011	-19.53	285	0.987	0.214	-6.69
110	0.210	0.010	-20.13	290	0.980	0.211	-6.75
115	0.172	0.007	-21.87	295	0.918	0.185	-7.32
120	0.123	0.003	-24.78	300	0.832	0.152	-8.17
125	0.060	0.001	-31.01	305	0.777	0.133	-8.77
130	0.064	0.001	-30.45	310	0.781	0.134	-8.72
135	0.155	0.005	-22.77	315	0.829	0.151	-8.20
140	0.245	0.013	-18.79	320	0.890	0.174	-7.59
145	0.341	0.026	-15.92	325	0.921	0.187	-7.29
150	0.441	0.043	-13.69	330	0.910	0.182	-7.39
155	0.535	0.063	-12.01	335	0.867	0.165	-7.82
160	0.624	0.086	-10.67	340	0.799	0.140	-8.52
165	0.711	0.111	-9.54	345	0.719	0.114	-9.44
170	0.794	0.139	-8.58	350	0.637	0.089	-10.49
175	0.878	0.170	-7.71	355	0.555	0.068	-11.69



Relative Field Elevation Pattern

Model:	PSIFM4Y
Type:	4-Element Yagi
Polarization:	Horizontal/Slant
Bays:	Single element
Gain:	6.31 (8.0 dB)
Frequency:	98 MHz
Date:	1-Jan-26





Propagation Systems Inc.

Elevation Pattern Tabulation

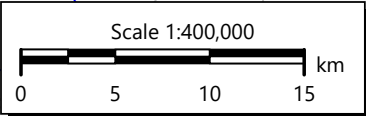
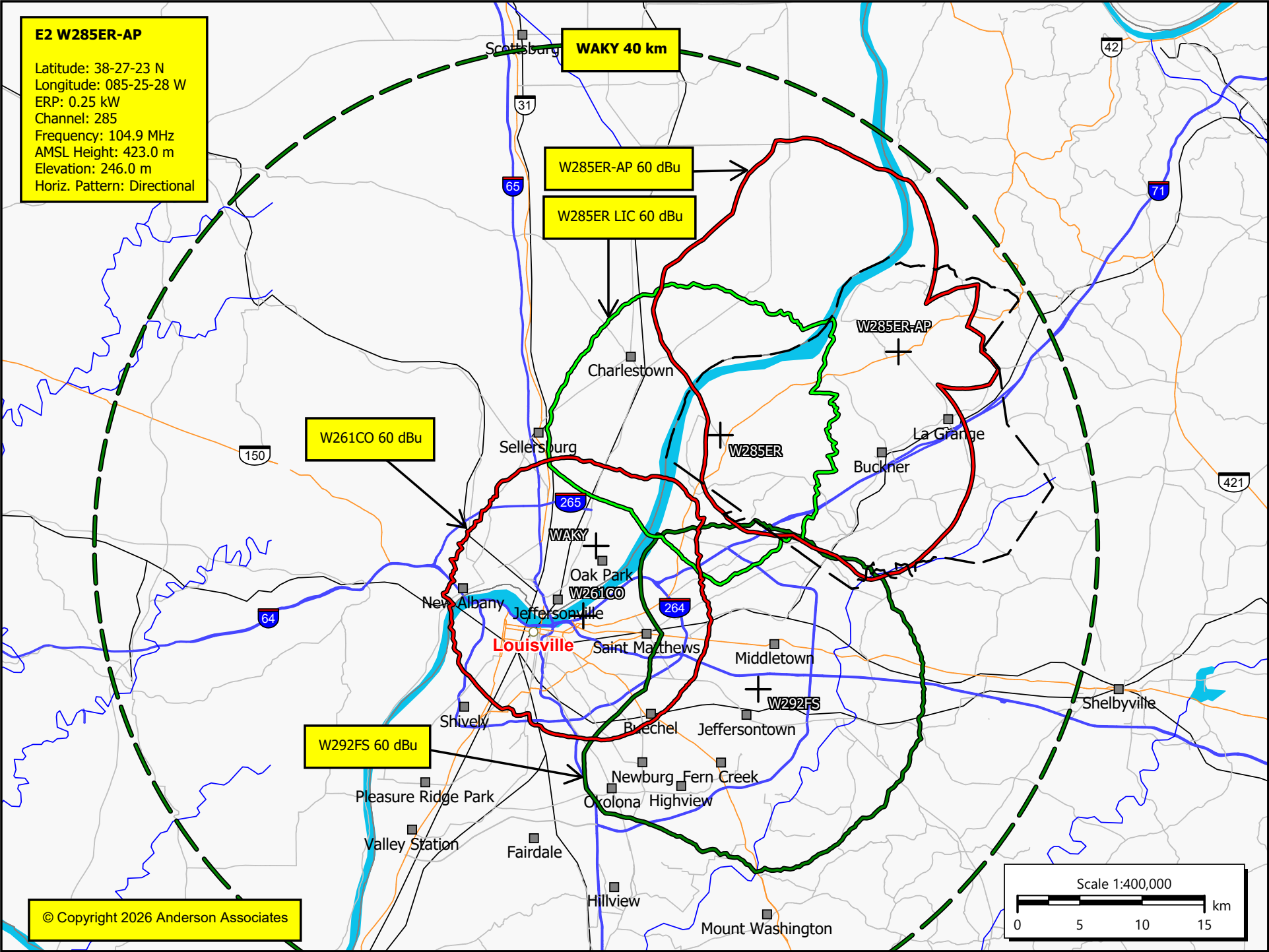
Antenna: PSIFM4Y

Polarization: Horizontal/Slant

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.253	-11.942	-50.0	0.419	-7.556	-10.0	0.976	-0.214
-89.0	0.244	-12.246	-49.0	0.439	-7.153	-9.0	0.979	-0.180
-88.0	0.236	-12.560	-48.0	0.459	-6.768	-8.0	0.983	-0.146
-87.0	0.227	-12.886	-47.0	0.479	-6.399	-7.0	0.987	-0.113
-86.0	0.218	-13.225	-46.0	0.499	-6.045	-6.0	0.991	-0.079
-85.0	0.209	-13.577	-45.0	0.518	-5.705	-5.0	0.995	-0.046
-84.0	0.199	-14.041	-44.0	0.537	-5.394	-4.0	0.996	-0.037
-83.0	0.188	-14.531	-43.0	0.556	-5.094	-3.0	0.997	-0.027
-82.0	0.177	-15.050	-42.0	0.575	-4.804	-2.0	0.998	-0.018
-81.0	0.166	-15.602	-41.0	0.594	-4.523	-1.0	0.999	-0.009
-80.0	0.155	-16.192	-40.0	0.613	-4.251	0.0	1.000	0.000
-79.0	0.144	-16.823	-39.0	0.630	-4.009	1.0	0.998	-0.020
-78.0	0.133	-17.504	-38.0	0.648	-3.774	2.0	0.995	-0.041
-77.0	0.122	-18.243	-37.0	0.665	-3.545	3.0	0.993	-0.061
-76.0	0.112	-19.050	-36.0	0.682	-3.322	4.0	0.991	-0.081
-75.0	0.101	-19.941	-35.0	0.699	-3.104	5.0	0.988	-0.102
-74.0	0.098	-20.171	-34.0	0.715	-2.919	6.0	0.984	-0.142
-73.0	0.095	-20.408	-33.0	0.730	-2.738	7.0	0.979	-0.183
-72.0	0.093	-20.652	-32.0	0.745	-2.561	8.0	0.975	-0.223
-71.0	0.090	-20.903	-31.0	0.760	-2.387	9.0	0.970	-0.264
-70.0	0.087	-21.161	-30.0	0.775	-2.217	10.0	0.965	-0.305
-69.0	0.097	-20.226	-29.0	0.788	-2.069	11.0	0.958	-0.369
-68.0	0.107	-19.383	-28.0	0.801	-1.923	12.0	0.951	-0.432
-67.0	0.117	-18.614	-27.0	0.815	-1.779	13.0	0.944	-0.497
-66.0	0.127	-17.907	-26.0	0.828	-1.638	14.0	0.937	-0.561
-65.0	0.137	-17.254	-25.0	0.841	-1.499	15.0	0.930	-0.627
-64.0	0.154	-16.242	-24.0	0.853	-1.381	16.0	0.921	-0.710
-63.0	0.171	-15.335	-23.0	0.865	-1.264	17.0	0.913	-0.795
-62.0	0.188	-14.514	-22.0	0.876	-1.149	18.0	0.904	-0.880
-61.0	0.205	-13.764	-21.0	0.888	-1.036	19.0	0.895	-0.966
-60.0	0.222	-13.074	-20.0	0.899	-0.923	20.0	0.886	-1.053
-59.0	0.241	-12.344	-19.0	0.908	-0.838	21.0	0.875	-1.160
-58.0	0.261	-11.671	-18.0	0.917	-0.754	22.0	0.864	-1.269
-57.0	0.280	-11.046	-17.0	0.926	-0.670	23.0	0.853	-1.379
-56.0	0.300	-10.463	-16.0	0.935	-0.588	24.0	0.842	-1.490
-55.0	0.319	-9.917	-15.0	0.943	-0.506	25.0	0.831	-1.603
-54.0	0.339	-9.391	-14.0	0.950	-0.447	26.0	0.819	-1.736
-53.0	0.359	-8.894	-13.0	0.956	-0.388	27.0	0.806	-1.871
-52.0	0.379	-8.425	-12.0	0.963	-0.330	28.0	0.794	-2.008
-51.0	0.399	-7.980	-11.0	0.969	-0.272	29.0	0.781	-2.147

E2 W285ER-AP

Latitude: 38-27-23 N
Longitude: 085-25-28 W
ERP: 0.25 kW
Channel: 285
Frequency: 104.9 MHz
AMSL Height: 423.0 m
Elevation: 246.0 m
Horiz. Pattern: Directional



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E3 Registration 1042489



Registration Detail

Reg Number	1042489	Status	Constructed
File Number	A0907300	Constructed	01/21/2014
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type G TOWER - Guyed Structure Used for Communication Purposes

Location (in NAD83 Coordinates)

Lat/Long	38-27-23.0 N 085-25-28.0 W	Address	3701 W HWY 42
City, State	LA GRANGE , KY		
Zip	40031	County	OLDHAM
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	246.0	Overall Height Above Ground (AGL)	530.0
Overall Height Above Mean Sea Level	776.0	Overall Height Above Ground w/o Appurtenances	500.0

Painting and Lightings Specifications

FCC Paragraphs A1, B, F, H, 3, 10, 19, 21, 23

FAA Notification

FAA Study	2013-ASO-6658-OE	FAA Issue Date	09/04/2013
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Owner & Contact Information

FRN	0006629497	Owner Entity Type	Corporation
Assignor FRN	0022627723	Assignor ID	L01782254

Owner

Subcarrier Communications Inc
Attention To: John Paleski
139 White Oak Lane
Old Bridge , NJ 08857

P: (732)607-2828
F:
E: subcom1@subcarrier.com

Contact

Paleski , John
139 White Oak Lane
Old Bridge , NJ 08857

P: (732)607-2828
F:
E: subcom1@subcarrier.com

Last Action Status

Status	Constructed	Received	06/16/2014
Purpose	Change Owner	Entered	06/16/2014
Mode	Interactive		