WAKY
FCC Facility # 30798
620 kHz - 0.35 kW-Day/ 0.300 kW Night
Louisville, KY

Minor Modificatons

This technical report is provided in support of an application proposing minor modifications to the WAKY Day and Night powers and patterns using two of the existing 5 towers. The remaining 3 towers will be dismantled. The facility will retain class B status.

Site	**N 38-18-59.9 W 85-42-02.6 (NAD 83)**
Day Power	**0.35 kW-DA - 173.5 mV/m/km Theoretical RMS (E13F)**
Night power	**0.300 kW-DA - 161.6 mV/m/km RMS (see E18B)**

Exhibits:

E13A	Vertical sketch
E13B	Site plat
E13C	Site topographic map
E13D	25 mV/m and 1000 mV/m day contours
E13E	Aerial photographic view of day 1000 mV/m contour
E13F	Day directional pattern plot and tabulation
E14A	Day 5 mV/m
E14B	Night NIF contour
E17A	M-3 allocation plot
E17A1	Licensed overlaps
E17A2	Application overlaps
E17B	Licensed and proposed Day service contours
E17C	Day allocation listing
E18	Night Interference calculations
E18A	NIF Calculation
E18B	Night DA plot and tabulations (0-60° elevations)

Day Allocation analysis:

A vertical sketch is provided as E13A, a site plat as E13B, a site topographic map as E13C and an aerial photograph showing the day and night 1000 mV/m contour as E13E. The day and night 1,000 mV/m meter contour contains a population of 182 based on the AMPRO 2 calculation and comply with §73.24(g). The day directional antenna pattern plot and tabulation is provided as E13F. The day theoretical RMS is 173.5 mV/m/km and the standard RMS is 182.2 mV/m/km with a Q of 10.0.

E14A shows 100% coverage of Louisville with the day 5 mV/m complying with §73.24(i). E14B shows the night interference free 7.35 mV/m covers 68.4% of the Louisville 2020 population.

All analyses were conducted using V-Soft's AMPRO 2 software. An M3 allocations map is provided as E17A and detailed overlap analyses E17A1 and E17A2. It is evident that existing overlaps are decreased in all cases.

The existing and proposed service contours are provided as E17B.

Night Allocation Analysis:

A night operating power of 0.300 kW is proposed. Again, AMPRO 2 was utilized to establish the required clearances as demonstrated in exhibit E18. The night NIF is calculated to be 7.35 mV/m (E18A). The night directional pattern theoretical RMS is 161.6 mV/m/km (E18B) and the standard RMS is 169.7 mV/m/km with a Q of 10.

RF analysis:

The RF in the maximum lobe of either directional facility will not exceed the equivalent of 1 kW, therefore the 3 meter tower required by Table 1 will satisfy the FCC fencing requirement.

AM FENCE DISTANCE TABLES

TABLE 1. Predicted Distances for Compliance with FCC Limits: 0.1-0.2 Wavelength

Frequency (kHz)	Transmitter Power (kW)			
	50	10	5	1
	Predicted Distance for Compliance with FCC Limits (meters)			
535-740	1	7	6	3
750-940	12	7	5	3
950-1140	1	6	5	3
1150-1340	10	6	5	3
1350-1540	10	6	5	3
1550-1705	10	6	5	3

Conclusion:

It is concluded that the proposed WAKY facility complies with FCC rules and allocation and policies.

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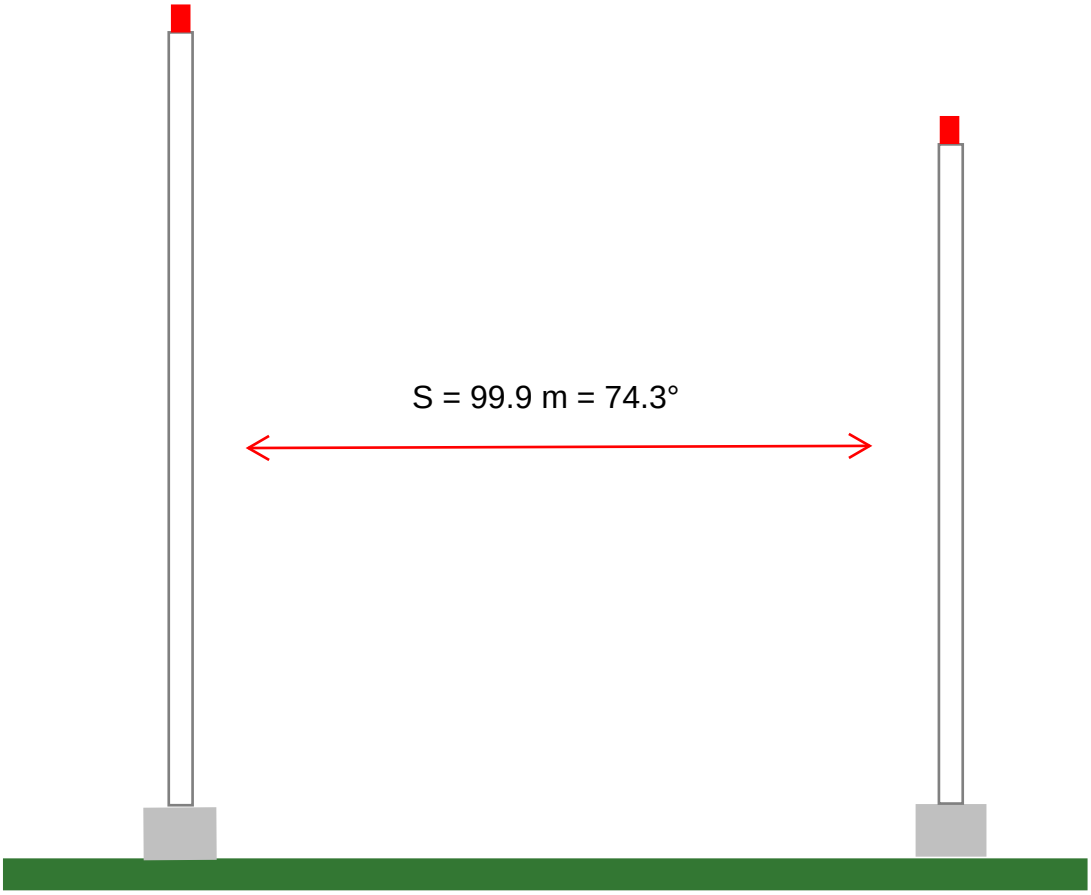
E13A VERTICAL SKETCH

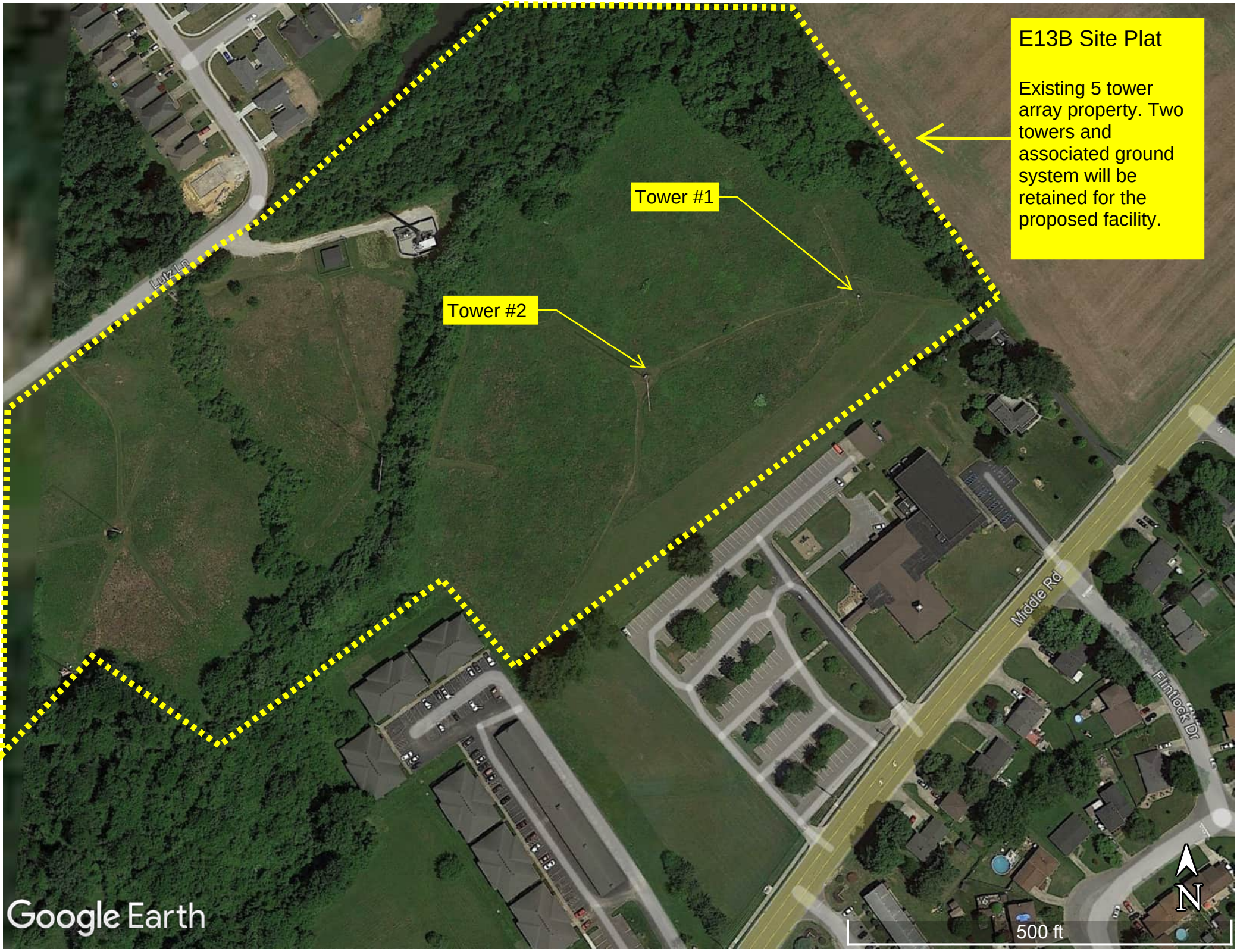
E13A Vertical Sketch

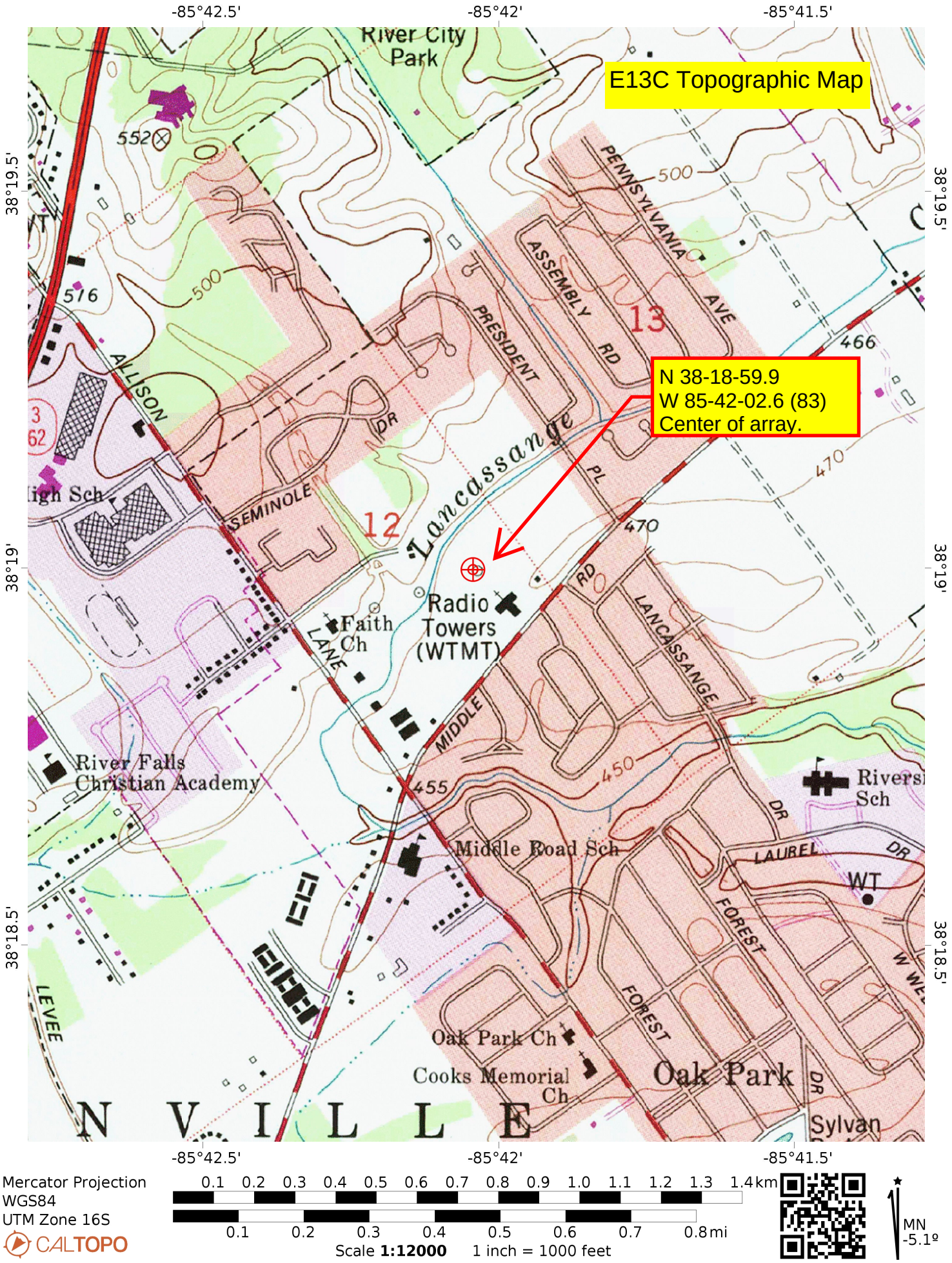
Tower #2
ASR #1053260
93.0 m overall
91.4 m radiator
68.0°

Tower #1
ASR #1053262
70.1 m overall
67.3 m radiator
50.1



Two existing guyed towers in the WAKY 5 tower array will be utilized for the new 2 tower day and night patterns. The existing ground system will be preserved equivalent to a 90 degree system at 620 kHz.


E13B Site Plat
Existing 5 tower array property. Two towers and associated ground system will be retained for the proposed facility.
Tower #1
Tower #2
Luiz Ln
Middle Rd
Flintlock Dr
N
500 ft
Google Earth



Mercator Projection
WGS84
UTM Zone 16S

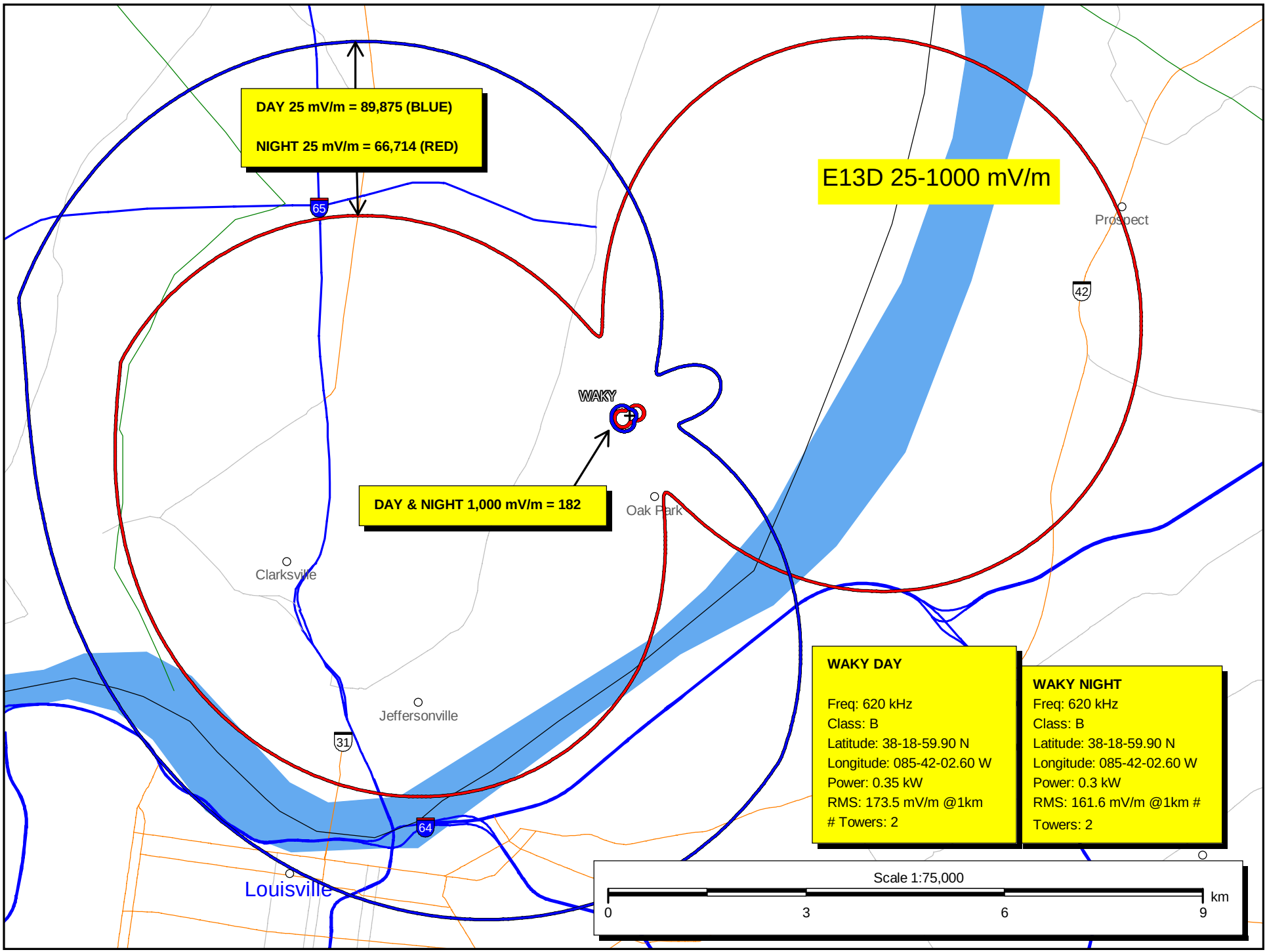
CALTOPO

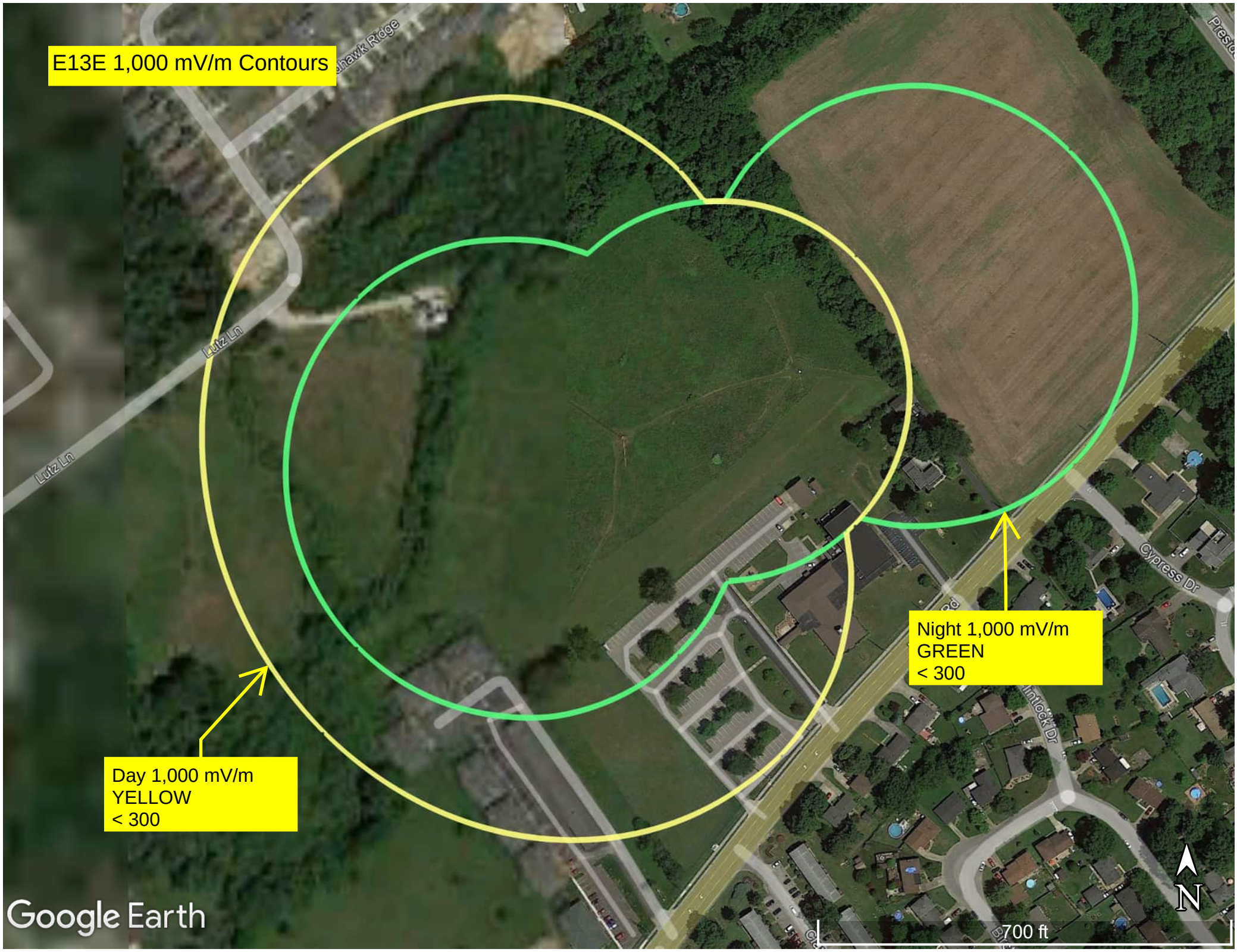
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4km

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8mi

Scale **1:12000** 1 inch = 1000 feet

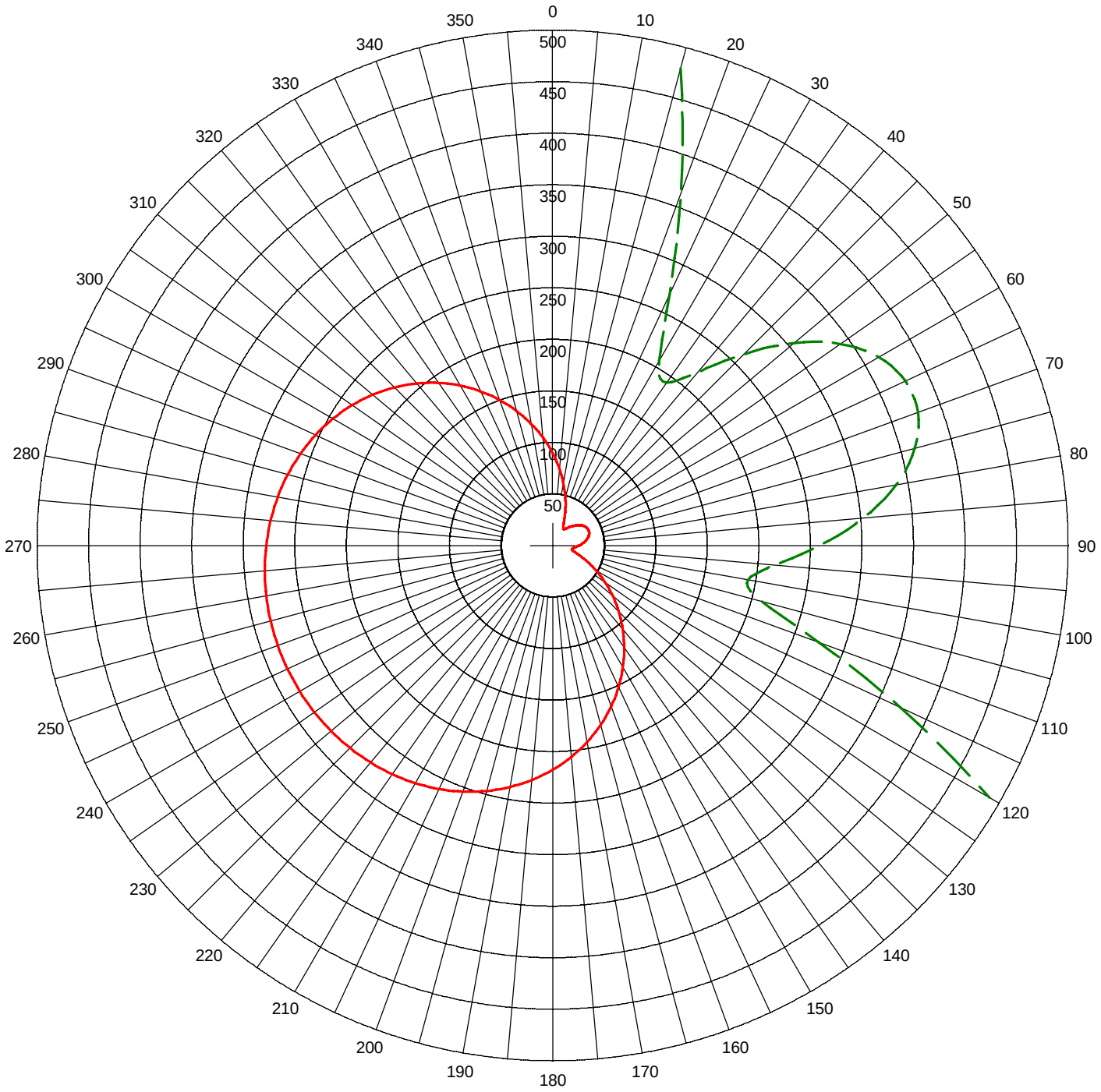
MN
-5.1º


DAY 25 mV/m = 89,875 (BLUE)
NIGHT 25 mV/m = 66,714 (RED)
E13D 25-1000 mV/m
DAY & NIGHT 1,000 mV/m = 182
WAKY
Prospect
Oak Park
Clarksville
Jeffersonville
Louisville
65
42
31
64
WAKY DAY
Freq: 620 kHz
Class: B
Latitude: 38-18-59.90 N
Longitude: 085-42-02.60 W
Power: 0.35 kW
RMS: 173.5 mV/m @1km
Towers: 2
WAKY NIGHT
Freq: 620 kHz
Class: B
Latitude: 38-18-59.90 N
Longitude: 085-42-02.60 W
Power: 0.3 kW
RMS: 161.6 mV/m @1km #
Towers: 2
Scale 1:75,000
0
3
6
9
km


E13E 1,000 mV/m Contours
Lutz Ln
Lutz Ln
Cypress Dr
Night 1,000 mV/m
GREEN
< 300
Day 1,000 mV/m
YELLOW
< 300
Google Earth
N
700 ft

AM Directional Pattern

E13F DA-D



Standard Horizontal Plane Pattern

Pattern (mV/m @ 1km)
Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.900	-118.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: D
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.35 kW
Theo RMS: 173.51 mV/m@1km
@ 0.35 kW

Std. RMS = 182.5 mV/m@ 1 km

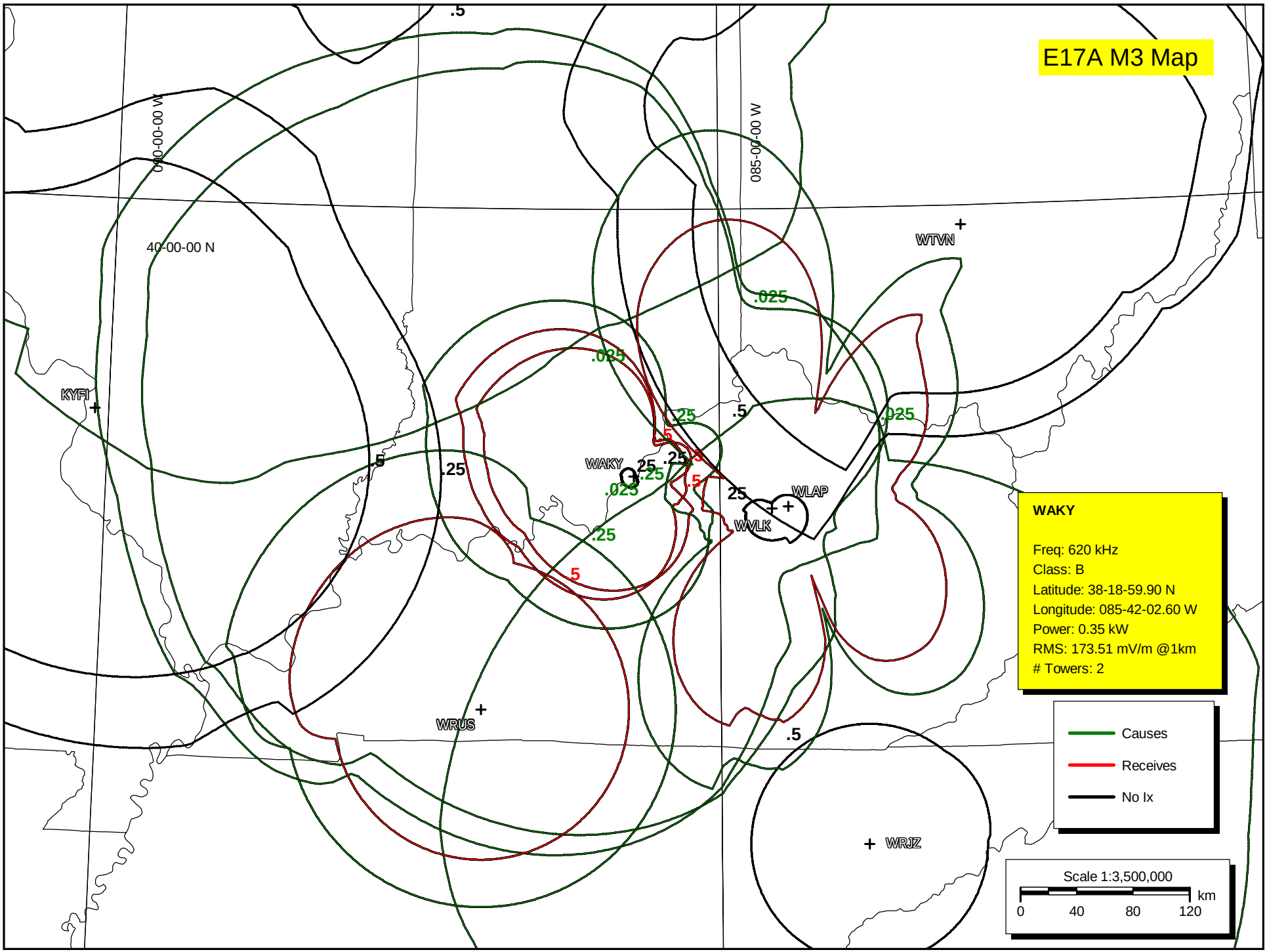
E13F Day Radiation Pattern Tabulation

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: D
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.35 kW
Theo RMS: 173.51 mV/m @ 1km @ 0.35 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.900	-118.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Horizontal Plane Pattern

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	89.54	5.0	74.90	10.0	60.93
15.0	47.94	20.0	36.34	25.0	26.83
30.0	20.69	35.0	19.32	40.0	21.98
45.0	26.27	50.0	30.55	55.0	34.08
60.0	36.53	65.0	37.76	70.0	37.71
75.0	36.38	80.0	33.84	85.0	30.23
90.0	25.92	95.0	21.68	100.0	19.25
105.0	21.02	110.0	27.49	115.0	37.20
120.0	48.94	125.0	62.02	130.0	76.05
135.0	90.73	140.0	105.83	145.0	121.12
150.0	136.39	155.0	151.45	160.0	166.10
165.0	180.20	170.0	193.58	175.0	206.14
180.0	217.77	185.0	228.41	190.0	238.03
195.0	246.61	200.0	254.15	205.0	260.69
210.0	266.28	215.0	270.97	220.0	274.82
225.0	277.91	230.0	280.29	235.0	282.01
240.0	283.13	245.0	283.67	250.0	283.65
255.0	283.06	260.0	281.90	265.0	280.12
270.0	277.69	275.0	274.54	280.0	270.62
285.0	265.87	290.0	260.20	295.0	253.58
300.0	245.96	305.0	237.30	310.0	227.60
315.0	216.88	320.0	205.17	325.0	192.54
330.0	179.09	335.0	164.95	340.0	150.26
345.0	135.18	350.0	119.90	355.0	104.61


E17A M3 Map
085-00-00 W
085-00-00 W
40-00-00 N
WTVN
KYFI
WAKY
WLAP
WVLK
WRUS
WRJZ
.5
.025
.25
.023
25
WAKY
Freq: 620 kHz
Class: B
Latitude: 38-18-59.90 N
Longitude: 085-42-02.60 W
Power: 0.35 kW
RMS: 173.51 mV/m @1km
Towers: 2
Causes
Receives
No Ix
Scale 1:3,500,000
km
0
40
80
120

E17A1 Licensed AM Day Overlaps

Reference Station:
Call: WAKY Freq: 620 kHz LOUISVILLE, KY, US
Lat: 38-18-59 N Power: 0.5 kW
Lng: 085-42-08 W Theo RMS: 212.39 mV/m @ 1km
# of Augmentations: 5

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	90.0	0.0	0.0	68.1	0	0	0.0	0.0	0.0	0.0
2	2.000	0.0	90.0	255.0	68.1	0	0	0.0	0.0	0.0	0.0
3	1.000	-90.0	180.0	255.0	68.1	0	0	0.0	0.0	0.0	0.0

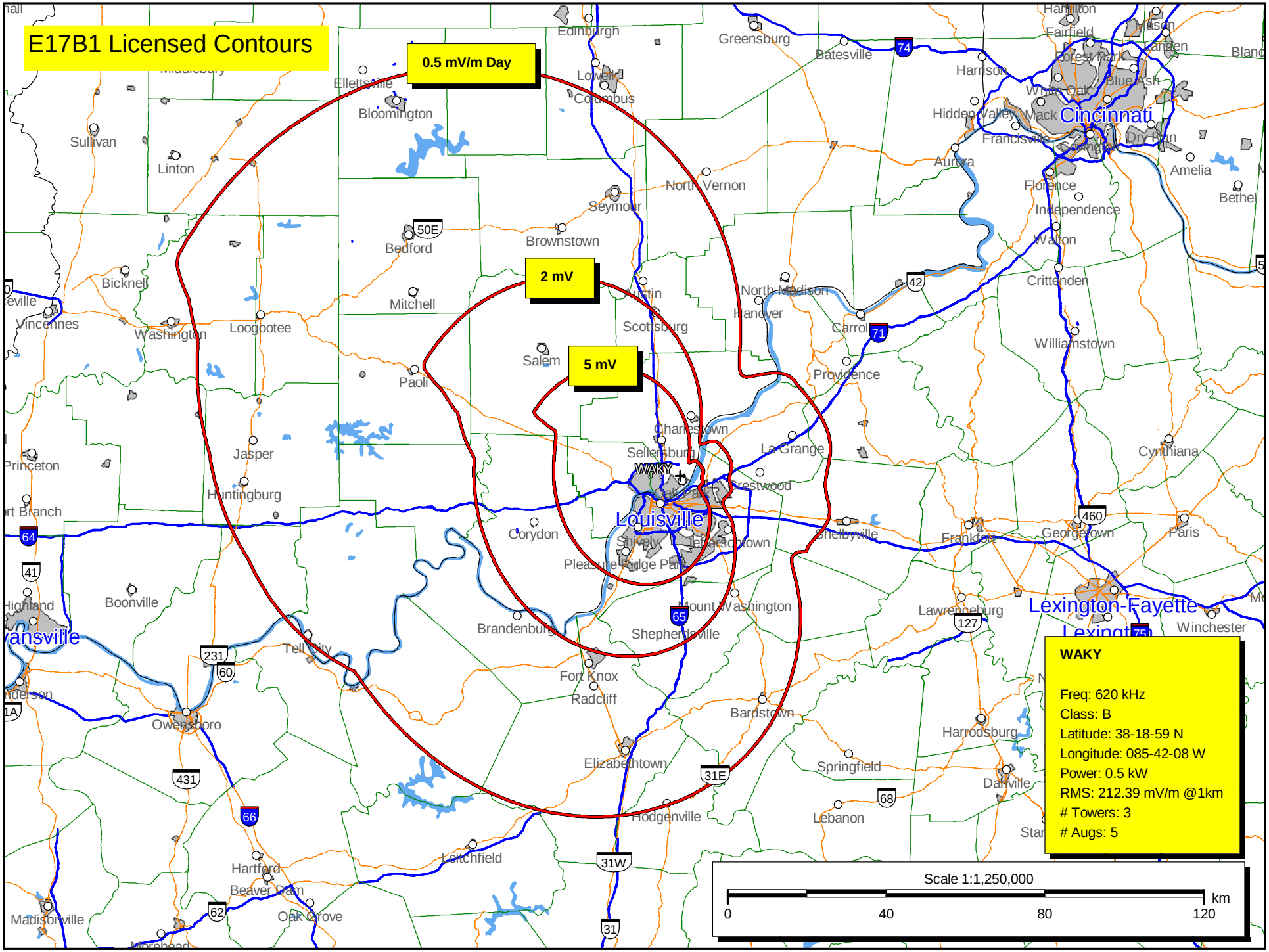
Call	Freq	City	ST	Dist	Azi	In	Out
WRUS	610	RUSSELLVILLE	KY	195.7	213.0	-4280.00	-4360.00
WLAP	630	LEXINGTON	KY	112.1	101.4	-1138.75	-1316.00
WTMJ	620	MILWAUKEE	WI	527.1	336.9	-2142.25	-219.75
KYFI	630	ST LOUIS	MO	386.9	274.5	17.50	24.07
WTVN	610	COLUMBUS	OH	292.3	54.5	10.74	43.43
WRJZ	620	KNOXVILLE	TN	306.7	147.9	-4416.00	45.63
WVLK	590	LEXINGTON	KY	101.1	103.3	83.09	83.09
WWNR	620	BECKLEY	WV	396.9	100.4	75.94	138.66

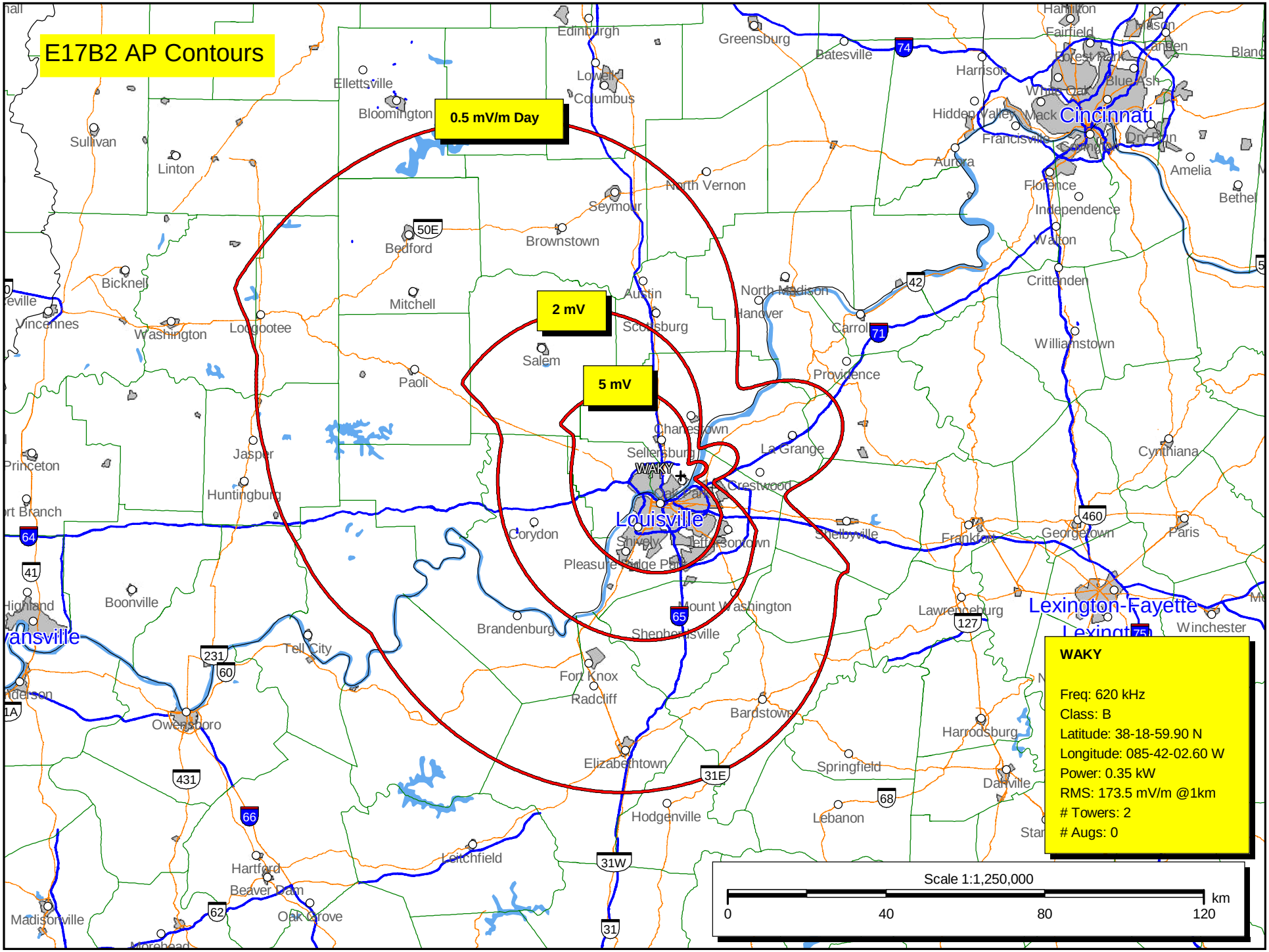
E17A2 Day Application Overlaps

Reference Station:
Call: WAKY Freq: 620 kHz LOUISVILLE, KY, US
Lat: 38-18-59.90 N Power: 0.35 kW
Lng: 085-42-02.60 W Theo RMS: 173.51 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.900	-118.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
~~WAKY~~							
WRUS	620	LOUISVILLE	KY	0.1	258.1	-18724.00	-22464.00
WLAP	610	RUSSELLVILLE	KY	195.8	213.1	-2682.25	-2543.00
WRJZ	630	LEXINGTON	KY	112.0	101.4	-939.00	-1238.50
WTVN	620	KNOXVILLE	TN	306.7	147.9	-4260.00	28.62
KYFI	610	COLUMBUS	OH	292.1	54.5	8.98	41.10
WTMJ	630	ST LOUIS	MO	387.0	274.5	32.14	41.45
WVLK	620	MILWAUKEE	WI	527.1	336.9	-555.25	58.18
WWNR	590	LEXINGTON	KY	101.0	103.4	83.45	83.45
WKYH	620	BECKLEY	WV	396.8	100.4	85.35	165.14
	600	PAINTSVILLE	KY	262.6	103.8	228.55	228.55


E17B1 Licensed Contours
0.5 mV/m Day
2 mV
5 mV
WAKY
Louisville
Cincinnati
Lexington-Fayette
Edinburgh
Greensburg
Batesville
Harrison
Hamilton
Fairfield
Blue Ash
White Oak
Mack
Hidden Valley
Francisville
Dry Run
Amelia
Bethel
Aurora
Florence
Independence
Walton
Crittenden
Williamstown
Cynthiana
Paris
Georgetown
Frankfort
Lawrenceburg
Winchester
Harrodsburg
Danville
Springfield
Lebanon
Bardstown
Elizabethtown
Hodgenville
Shepherdsville
Mount Washington
Brandenburg
Fort Knox
Radcliff
Tell City
Owensboro
Hartford
Beaver Dam
Leitchfield
Madisonville
Oak Grove
Boonville
Corydon
Pleasure Ridge Park
Shively
Jeffersontown
Shelbyville
Westwood
Okolona
Sellersburg
Charlestown
La Grange
Providence
Carroll
Hanover
North Madison
Scottsburg
Austin
North Vernon
Seymour
Brownstown
Bedford
Mitchell
Salem
Paoli
Jasper
Huntingburg
Loogootee
Washington
Vincennes
Bicknell
Linton
Sullivan
Bloomington
Ellettsville
Lowell
Columbus
Princeton
Scale 1:1,250,000
0
40
80
120
km
WAKY
Freq: 620 kHz
Class: B
Latitude: 38-18-59 N
Longitude: 085-42-08 W
Power: 0.5 kW
RMS: 212.39 mV/m @1km
Towers: 3
Augs: 5


E17B2 AP Contours
0.5 mV/m Day
2 mV
5 mV
WAKY
Louisville
Cincinnati
Lexington-Fayette
Edinburgh
Greensburg
Batesville
Harrison
Hidden Valley
Francisville
Aurora
Florence
Independence
Walton
Crittenden
Williamstown
Amelia
Bethel
Dry Run
Blue Ash
White Oak
Mack
Forest Park
Fairfield
Hamilton
Madison
Blanc
Ellettsville
Bloomington
Lowell
Columbus
Sullivan
Linton
North Vernon
Seymour
Brownstown
Bedford
50E
Mitchell
Austin
Scottsburg
Salem
Paoli
Bicknell
Vincennes
Washington
Loogootee
North Madison
Hanover
Carroll
Providence
Charlestown
Sellersburg
La Grange
Cynthiana
Jasper
Huntingburg
Princeton
Crestwood
Corydon
Shelbyville
Frankfort
Georgetown
Paris
460
Pleasure Ridge Park
Shively
Jeffersontown
Mount Washington
Lawrenceburg
Winchester
Brandenburg
Shepherdsville
Boonville
Tell City
Highland
Fort Knox
Radcliff
Bardstown
Harrodsburg
Owensboro
Elizabethtown
Springfield
Danville
Hodgenville
Lebanon
Leitchfield
Hartford
Beaver Dam
Madisonville
Oak Grove
Scale 1:1,250,000
km
0
40
80
120
WAKY
Freq: 620 kHz
Class: B
Latitude: 38-18-59.90 N
Longitude: 085-42-02.60 W
Power: 0.35 kW
RMS: 173.5 mV/m @1km
Towers: 2
Augs: 0

E17C Day Allocation Factors

WAKY- 620 kHz 38-18-59.90 N, 085-42-02.60 W

***** 590 kHz (-3) *****

101.0 km WVLK L 38-06-42 N 084-34-39 W 5.0 kW DA2 - 669.5 mV/m@1km
62.7 mi Azi: 103.4 Class: B Sched: U File #: BML20080206AGV
Location: LEXINGTON, KY, US

***** 600 kHz (-2) *****

262.6 km WKYH L 37-47-21 N 082-47-04 W 5.0 kW ND2 - 281.6 mV/m@1km
163.1 mi Azi: 103.8 Class: D Sched: U File #: BML20110406ADF
Location: PAINTSVILLE, KY, US

***** 610 kHz (-1) *****

195.8 km WRUS L 36-50-40 N 086-55-21 W 1.8 kW ND1 - 334.8 mV/m@1km
121.7 mi Azi: 213.1 Class: D Sched: U File #: BL19971212KB
Location: RUSSELLVILLE, KY, US
292.1 km WTVN L 39-52-34 N 082-58-49 W 5.0 kW DAN - 341.2 mV/m@1km
181.5 mi Azi: 54.5 Class: B Sched: U File #: BL20061017ADR
Location: COLUMBUS, OH, US

***** 620 kHz (CO) *****

0.1 km WAKY L 38-18-59 N 085-42-08 W 0.5 kW DA2 - 212.4 mV/m@1km
0.1 mi Azi: 258.1 Class: B Sched: U File #: BL19870529AF
Location: LOUISVILLE, KY, US
306.7 km WRJZ L 35-59-24 N 083-50-15 W 5.0 kW DAN - 291.3 mV/m@1km
190.6 mi Azi: 147.9 Class: B Sched: U File #: BL19791210AE
Location: KNOXVILLE, TN, US
396.8 km WWNR L 37-45-18 N 081-14-12 W 5.0 kW ND2 - 283.7 mV/m@1km
246.6 mi Azi: 100.4 Class: D Sched: U File #: BL20020225ACM
Location: BECKLEY, WV, US
527.1 km WTMJ L 42-42-28 N 088-03-57 W 50.0 kW DA2 - 2035.2 mV/m@1km
327.5 mi Azi: 336.9 Class: B Sched: U File #: BL19950222AD
Location: MILWAUKEE, WI, US

***** 630 kHz (+1) *****

112.0 km WLAP L 38-07-25 N 084-26-45 W 5.0 kW DA2 - 648.6 mV/m@1km
69.6 mi Azi: 101.4 Class: B Sched: U File #: BL19810109AA
Location: LEXINGTON, KY, US
387.0 km KYFI L 38-40-18 N 090-06-52 W 5.0 kW DA2 - 630.9 mV/m@1km
240.5 mi Azi: 274.5 Class: B Sched: U File #: BML20130725AFO
Location: ST LOUIS, MO, US

E18 Night Allocation Protection Report

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WHEN	US	NY	SYRACUSE	38.95	1.713	219.86	217.05	2.81
50% = 6.301, 25% = 6.851; WRJZ=3.35 WZON=3.22 WTEL=3.09 WTMJ=2.93 WSNR=2.69								
WTMJ	US	WI	MILWAUKEE	102.46	0.754	36.77	32.71	4.06
50% = 2.103, 25% = 3.014; CFCO/ =1.38 YVNO-A=1.25 JBC-A=0.99 XENK/A=0.97 KTAR=0.94 KCSP=0.93 KYFI=0.84 WRJZ=0.80 HJEL-A=0.79								
KTNO	US	TX	PLANO	35.64	1.833	257.16	239.48	17.67
50% = 3.767, 25% = 5.682; XENK/A=3.24 WRJZ=1.92 WAKY=1.83 YVNO-A=1.81 KMNS=1.66 JBC-A=1.54 WJDX=1.49 KTAR=1.48 KYFI=1.39								
WRJZ	US	TN	KNOXVILLE	206.95	3.364	81.28	41.64	39.63
50% = 4.648, 25% = 6.003; WAKY=3.36 YVNO-A=2.29 WDAE=2.24 WJDX=2.17 JBC-A=2.06 KTNO=1.68 WTMJ=1.63								
WZON	US	ME	BANGOR	14.15	0.864	305.44	222.48	82.95
50% = 2.376, 25% = 3.457; YVNO-A=1.25 WRJZ=1.21 WSNR=1.15 WTMJ=1.14 630CHLT/ =1.11 WDAE=1.08 WVMT=1.05 630CFCY/ =0.99 WPRO=0.97 WHEN=0.95								
WLAP	US	KY	LEXINGTON	396.00	1.284	162.15	71.34	90.81
50% = 5.021, 25% = 5.183; KYFI=3.65 WSBN=2.58 CFCO/ =2.29 KSLR=1.28								
WJDX	US	MS	JACKSON	64.91	3.820	294.30	201.91	92.39
50% = 7.618, 25% = 9.576; WRJZ=5.06 KTNO=4.22 WAKY=3.82 WDAE=3.30 KMNS=2.97 XENK/A=2.84 YVNO-A=2.43								
KYFI	US	MO	ST LOUIS	159.28	0.920	288.75	190.97	97.78
50% = 1.982, 25% = 2.736; WRJZ=1.63 OAX1T-A=1.13 WOI=0.95 WAKY=0.92 WCRV=0.83 CFCO/ =0.79 630CFCY/ =0.70								

E18A Night NIF Calculation

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

Standard: FCC Rules (1992 Skywave Propagation Model) [10%]

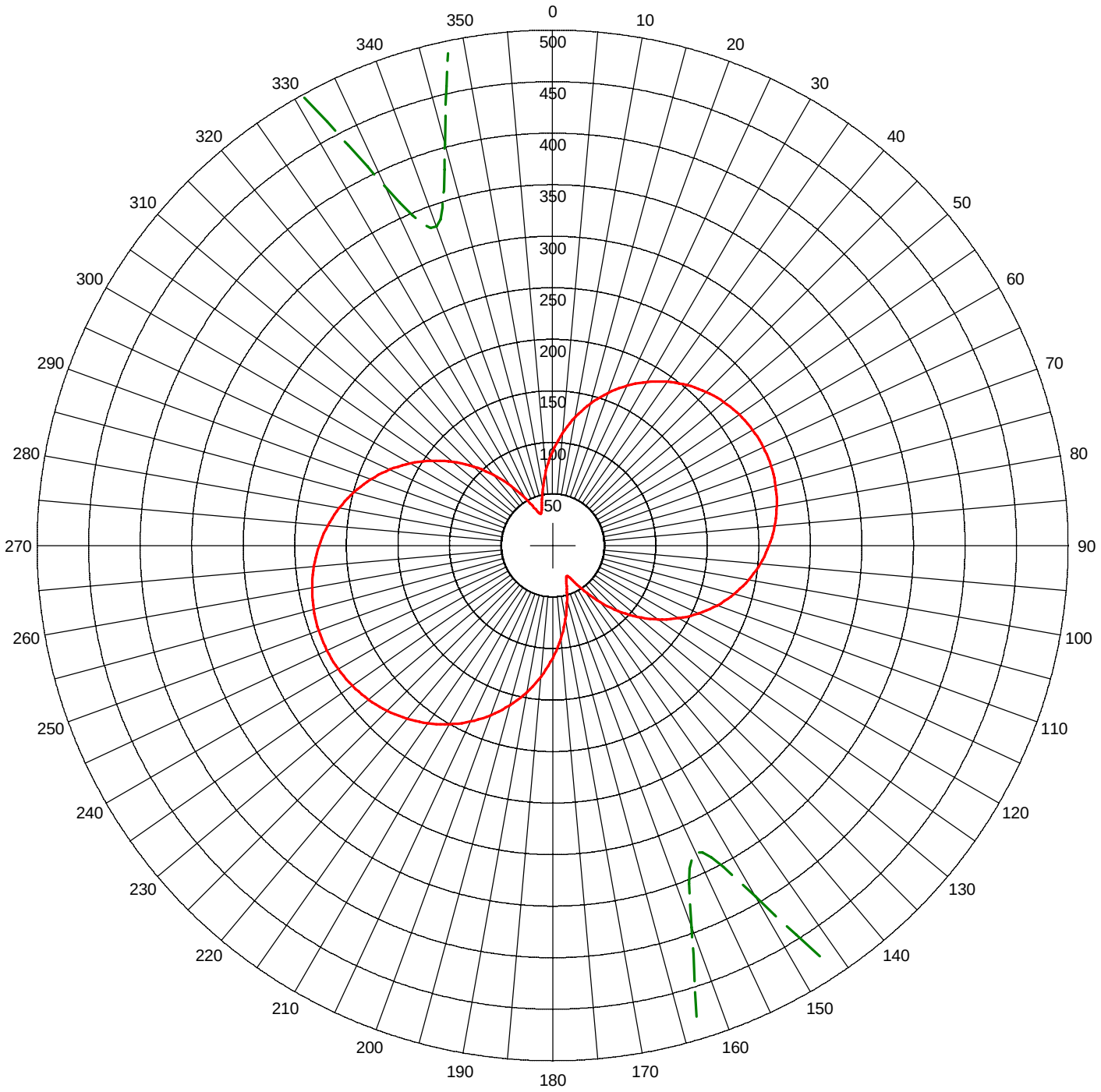
50% Exclusion Level Limit: 7.35 mV/m
25% Exclusion Level Limit: 7.35 mV/m

Contributors:

Call	Freq (kHz)	City	St	Ct	Limit (mV/m)	(%)	RSS Limit (mV/m)
WRJZ	0620	KNOXVILLE	TN	US	6.279	100.0	6.279
WTMJ	0620	MILWAUKEE	WI	US	3.829	60.9	7.354
----------		50% Exclusion Level					----------
----------		25% Exclusion Level					----------

AM Directional Pattern

E18B NIGHT DA PLOT



Standard Horizontal Plane Pattern

Pattern (mV/m @ 1km)
Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m@1km
@ 0.3 kW

Std. RMS = 170 mV/m @ 1 km

E18B Night DA Tabulations

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Horizontal Plane Pattern

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	91.26	5.0	109.20	10.0	126.38
15.0	142.52	20.0	157.45	25.0	171.02
30.0	183.17	35.0	193.82	40.0	202.95
45.0	210.55	50.0	216.60	55.0	221.12
60.0	224.11	65.0	225.57	70.0	225.51
75.0	223.92	80.0	220.81	85.0	216.17
90.0	210.00	95.0	202.28	100.0	193.02
105.0	182.25	110.0	169.99	115.0	156.30
120.0	141.27	125.0	125.04	130.0	107.79
135.0	89.80	140.0	71.56	145.0	53.98
150.0	39.31	155.0	32.89	160.0	39.42
165.0	54.32	170.0	72.26	175.0	91.01
180.0	109.61	185.0	127.59	190.0	144.65
195.0	160.58	200.0	175.24	205.0	188.52
210.0	200.36	215.0	210.71	220.0	219.57
225.0	226.92	230.0	232.76	235.0	237.12
240.0	240.00	245.0	241.40	250.0	241.34
255.0	239.82	260.0	236.83	265.0	232.35
270.0	226.38	275.0	218.92	280.0	209.94
285.0	199.46	290.0	187.51	295.0	174.11
300.0	159.35	305.0	143.33	310.0	126.19
315.0	108.14	320.0	89.50	325.0	70.78
330.0	52.97	335.0	38.49	340.0	32.93
345.0	40.27	350.0	55.32	355.0	73.01

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 5.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	90.55	5.0	108.33	10.0	125.36
15.0	141.37	20.0	156.18	25.0	169.65
30.0	181.70	35.0	192.28	40.0	201.34
45.0	208.88	50.0	214.90	55.0	219.38
60.0	222.35	65.0	223.80	70.0	223.74
75.0	222.17	80.0	219.08	85.0	214.47
90.0	208.34	95.0	200.67	100.0	191.49
105.0	180.79	110.0	168.62	115.0	155.04
120.0	140.13	125.0	124.03	130.0	106.93
135.0	89.10	140.0	71.03	145.0	53.63
150.0	39.13	155.0	32.83	160.0	39.28
165.0	54.02	170.0	71.79	175.0	90.36
180.0	108.81	185.0	126.64	190.0	143.56
195.0	159.36	200.0	173.90	205.0	187.08
210.0	198.83	215.0	209.11	220.0	217.90
225.0	225.20	230.0	231.01	235.0	235.34
240.0	238.19	245.0	239.59	250.0	239.53
255.0	238.02	260.0	235.04	265.0	230.60
270.0	224.67	275.0	217.26	280.0	208.34
285.0	197.94	290.0	186.08	295.0	172.78
300.0	158.14	305.0	142.24	310.0	125.24
315.0	107.35	320.0	88.87	325.0	70.32
330.0	52.69	335.0	38.37	340.0	32.86
345.0	40.09	350.0	54.96	355.0	72.47

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 10.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	88.43	5.0	105.75	10.0	122.35
15.0	137.97	20.0	152.42	25.0	165.58
30.0	177.36	35.0	187.70	40.0	196.57
45.0	203.95	50.0	209.84	55.0	214.23
60.0	217.13	65.0	218.56	70.0	218.50
75.0	216.96	80.0	213.93	85.0	209.42
90.0	203.41	95.0	195.91	100.0	186.92
105.0	176.47	110.0	164.58	115.0	151.31
120.0	136.76	125.0	121.06	130.0	104.38
135.0	87.03	140.0	69.46	145.0	52.59
150.0	38.62	155.0	32.62	160.0	38.88
165.0	53.14	170.0	70.39	175.0	88.46
180.0	106.42	185.0	123.80	190.0	140.30
195.0	155.73	200.0	169.93	205.0	182.81
210.0	194.30	215.0	204.36	220.0	212.97
225.0	220.11	230.0	225.80	235.0	230.04
240.0	232.84	245.0	234.21	250.0	234.16
255.0	232.67	260.0	229.76	265.0	225.40
270.0	219.59	275.0	212.33	280.0	203.61
285.0	193.43	290.0	181.83	295.0	168.84
300.0	154.54	305.0	139.02	310.0	122.44
315.0	105.00	320.0	87.01	325.0	68.97
330.0	51.85	335.0	38.00	340.0	32.66
345.0	39.53	350.0	53.87	355.0	70.85

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 15.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	85.00	5.0	101.56	10.0	117.46
15.0	132.44	20.0	146.31	25.0	158.96
30.0	170.29	35.0	180.24	40.0	188.79
45.0	195.91	50.0	201.59	55.0	205.83
60.0	208.64	65.0	210.01	70.0	209.95
75.0	208.47	80.0	205.54	85.0	201.19
90.0	195.39	95.0	188.16	100.0	179.50
105.0	169.43	110.0	157.99	115.0	145.25
120.0	131.28	125.0	116.22	130.0	100.25
135.0	83.66	140.0	66.91	145.0	50.90
150.0	37.78	155.0	32.28	160.0	38.22
165.0	51.71	170.0	68.12	175.0	85.36
180.0	102.54	185.0	119.19	190.0	135.01
195.0	149.82	200.0	163.47	205.0	175.86
210.0	186.92	215.0	196.61	220.0	204.92
225.0	211.81	230.0	217.31	235.0	221.41
240.0	224.12	245.0	225.44	250.0	225.39
255.0	223.95	260.0	221.13	265.0	216.92
270.0	211.31	275.0	204.30	280.0	195.89
285.0	186.08	290.0	174.91	295.0	162.42
300.0	148.68	305.0	133.78	310.0	117.88
315.0	101.18	320.0	83.98	325.0	66.76
330.0	50.48	335.0	37.38	340.0	32.30
345.0	38.63	350.0	52.12	355.0	68.24

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 20.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	80.39	5.0	95.92	10.0	110.87
15.0	124.98	20.0	138.07	25.0	150.02
30.0	160.74	35.0	170.17	40.0	178.28
45.0	185.04	50.0	190.43	55.0	194.47
60.0	197.14	65.0	198.44	70.0	198.39
75.0	196.97	80.0	194.20	85.0	190.05
90.0	184.55	95.0	177.68	100.0	169.47
105.0	159.93	110.0	149.11	115.0	137.07
120.0	123.89	125.0	109.70	130.0	94.69
135.0	79.13	140.0	63.48	145.0	48.63
150.0	36.63	155.0	31.77	160.0	37.29
165.0	49.77	170.0	65.05	175.0	81.18
180.0	97.31	185.0	112.96	190.0	127.87
195.0	141.84	200.0	154.74	205.0	166.46
210.0	176.94	215.0	186.13	220.0	194.02
225.0	200.58	230.0	205.81	235.0	209.71
240.0	212.29	245.0	213.55	250.0	213.50
255.0	212.13	260.0	209.44	265.0	205.44
270.0	200.10	275.0	193.44	280.0	185.45
285.0	176.15	290.0	165.57	295.0	153.75
300.0	140.76	305.0	126.71	310.0	111.73
315.0	96.03	320.0	79.88	325.0	63.78
330.0	48.63	335.0	36.52	340.0	31.78
345.0	37.39	350.0	49.75	355.0	64.72

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 25.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	74.77	5.0	89.04	10.0	102.83
15.0	115.87	20.0	128.00	25.0	139.09
30.0	149.05	35.0	157.83	40.0	165.39
45.0	171.70	50.0	176.74	55.0	180.51
60.0	183.01	65.0	184.24	70.0	184.18
75.0	182.86	80.0	180.26	85.0	176.38
90.0	171.24	95.0	164.83	100.0	157.18
105.0	148.30	110.0	138.24	115.0	127.07
120.0	114.86	125.0	101.75	130.0	87.91
135.0	73.62	140.0	59.31	145.0	45.86
150.0	35.20	155.0	31.08	160.0	36.09
165.0	47.36	170.0	61.28	175.0	76.06
180.0	90.90	185.0	105.34	190.0	119.13
195.0	132.07	200.0	144.03	205.0	154.93
210.0	164.69	215.0	173.27	220.0	180.63
225.0	186.76	230.0	191.65	235.0	195.31
240.0	197.73	245.0	198.92	250.0	198.87
255.0	197.58	260.0	195.06	265.0	191.31
270.0	186.31	275.0	180.08	280.0	172.62
285.0	163.95	290.0	154.10	295.0	143.11
300.0	131.07	305.0	118.05	310.0	104.21
315.0	89.72	320.0	74.87	325.0	60.12
330.0	46.32	335.0	35.40	340.0	31.07
345.0	35.87	350.0	46.87	355.0	60.44

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 30.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	68.35	5.0	81.18	10.0	93.63
15.0	105.44	20.0	116.45	25.0	126.54
30.0	135.62	35.0	143.64	40.0	150.56
45.0	156.34	50.0	160.96	55.0	164.43
60.0	166.72	65.0	167.85	70.0	167.80
75.0	166.58	80.0	164.19	85.0	160.64
90.0	155.92	95.0	150.05	100.0	143.04
105.0	134.93	110.0	125.77	115.0	115.60
120.0	104.52	125.0	92.65	130.0	80.16
135.0	67.32	140.0	54.55	145.0	42.69
150.0	33.52	155.0	30.18	160.0	34.64
165.0	44.55	170.0	56.93	175.0	70.18
180.0	83.53	185.0	96.58	190.0	109.07
195.0	120.83	200.0	131.72	205.0	141.66
210.0	150.57	215.0	158.42	220.0	165.17
225.0	170.80	230.0	175.31	235.0	178.67
240.0	180.90	245.0	181.99	250.0	181.95
255.0	180.76	260.0	178.44	265.0	174.99
270.0	170.40	275.0	164.67	280.0	157.83
285.0	149.90	290.0	140.90	295.0	130.88
300.0	119.92	305.0	108.10	310.0	95.56
315.0	82.47	320.0	69.11	325.0	55.89
330.0	43.64	335.0	34.03	340.0	30.16
345.0	34.08	350.0	43.58	355.0	55.55

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 35.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	61.36	5.0	72.61	10.0	83.59
15.0	94.04	20.0	103.81	25.0	112.80
30.0	120.90	35.0	128.08	40.0	134.27
45.0	139.46	50.0	143.61	55.0	146.73
60.0	148.80	65.0	149.81	70.0	149.77
75.0	148.67	80.0	146.52	85.0	143.32
90.0	139.08	95.0	133.81	100.0	127.54
105.0	120.29	110.0	112.11	115.0	103.06
120.0	93.23	125.0	82.72	130.0	71.72
135.0	60.46	140.0	49.37	145.0	39.23
150.0	31.61	155.0	29.05	160.0	32.92
165.0	41.41	170.0	52.13	175.0	63.71
180.0	75.46	185.0	86.98	190.0	98.05
195.0	108.49	200.0	118.19	205.0	127.06
210.0	135.04	215.0	142.08	220.0	148.15
225.0	153.21	230.0	157.27	235.0	160.30
240.0	162.32	245.0	163.30	250.0	163.26
255.0	162.19	260.0	160.10	265.0	156.98
270.0	152.84	275.0	147.70	280.0	141.55
285.0	134.44	290.0	126.39	295.0	117.44
300.0	107.68	305.0	97.18	310.0	86.07
315.0	74.52	320.0	62.77	325.0	51.23
330.0	40.63	335.0	32.41	340.0	29.01
345.0	32.07	350.0	39.98	355.0	50.24

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 40.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	54.05	5.0	63.63	10.0	73.05
15.0	82.06	20.0	90.53	25.0	98.33
30.0	105.38	35.0	111.64	40.0	117.06
45.0	121.61	50.0	125.26	55.0	127.99
60.0	129.81	65.0	130.70	70.0	130.67
75.0	129.70	80.0	127.81	85.0	125.00
90.0	121.28	95.0	116.66	100.0	111.17
105.0	104.85	110.0	97.73	115.0	89.87
120.0	81.36	125.0	72.31	130.0	62.87
135.0	53.28	140.0	43.95	145.0	35.58
150.0	29.51	155.0	27.67	160.0	30.95
165.0	38.01	170.0	47.02	175.0	56.87
180.0	66.92	185.0	76.84	190.0	86.40
195.0	95.45	200.0	103.88	205.0	111.62
210.0	118.59	215.0	124.75	220.0	130.07
225.0	134.53	230.0	138.10	235.0	140.78
240.0	142.55	245.0	143.42	250.0	143.38
255.0	142.44	260.0	140.59	265.0	137.85
270.0	134.20	275.0	129.68	280.0	124.29
285.0	118.06	290.0	111.03	295.0	103.23
300.0	94.75	305.0	85.65	310.0	76.05
315.0	66.12	320.0	56.06	325.0	46.26
330.0	37.35	335.0	30.52	340.0	27.62
345.0	29.87	350.0	36.19	355.0	44.67

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 45.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	46.65	5.0	54.54	10.0	62.36
15.0	69.90	20.0	77.01	25.0	83.59
30.0	89.57	35.0	94.88	40.0	99.49
45.0	103.36	50.0	106.47	55.0	108.81
60.0	110.37	65.0	111.13	70.0	111.10
75.0	110.27	80.0	108.66	85.0	106.25
90.0	103.08	95.0	99.14	100.0	94.48
105.0	89.11	110.0	83.09	115.0	76.46
120.0	69.31	125.0	61.75	130.0	53.91
135.0	46.02	140.0	38.45	145.0	31.83
150.0	27.23	155.0	26.02	160.0	28.72
165.0	34.40	170.0	41.73	175.0	49.83
180.0	58.17	185.0	66.46	190.0	74.48
195.0	82.10	200.0	89.23	205.0	95.79
210.0	101.72	215.0	106.97	220.0	111.51
225.0	115.32	230.0	118.38	235.0	120.68
240.0	122.20	245.0	122.95	250.0	122.92
255.0	122.11	260.0	120.52	265.0	118.17
270.0	115.04	275.0	111.17	280.0	106.57
285.0	101.27	290.0	95.29	295.0	88.68
300.0	81.51	305.0	73.85	310.0	65.80
315.0	57.51	320.0	49.17	325.0	41.11
330.0	33.87	335.0	28.38	340.0	25.97
345.0	27.49	350.0	32.30	355.0	39.03

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 50.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	39.38	5.0	45.62	10.0	51.87
15.0	57.95	20.0	63.71	25.0	69.07
30.0	73.95	35.0	78.30	40.0	82.09
45.0	85.28	50.0	87.86	55.0	89.79
60.0	91.08	65.0	91.71	70.0	91.68
75.0	91.00	80.0	89.66	85.0	87.67
90.0	85.05	95.0	81.81	100.0	77.98
105.0	73.58	110.0	68.65	115.0	63.26
120.0	57.47	125.0	51.38	130.0	45.12
135.0	38.89	140.0	33.03	145.0	28.06
150.0	24.78	155.0	24.09	160.0	26.25
165.0	30.64	170.0	36.38	175.0	42.79
180.0	49.47	185.0	56.14	190.0	62.64
195.0	68.85	200.0	74.68	205.0	80.05
210.0	84.93	215.0	89.26	220.0	93.01
225.0	96.17	230.0	98.71	235.0	100.61
240.0	101.88	245.0	102.50	250.0	102.48
255.0	101.80	260.0	100.49	265.0	98.53
270.0	95.94	275.0	92.73	280.0	88.93
285.0	84.56	290.0	79.64	295.0	74.23
300.0	68.37	305.0	62.13	310.0	55.61
315.0	48.93	320.0	42.26	325.0	35.89
330.0	30.23	335.0	25.98	340.0	24.04
345.0	24.96	350.0	28.41	355.0	33.48

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 55.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	32.47	5.0	37.14	10.0	41.89
15.0	46.56	20.0	51.02	25.0	55.19
30.0	59.01	35.0	62.44	40.0	65.42
45.0	67.94	50.0	69.98	55.0	71.51
60.0	72.54	65.0	73.04	70.0	73.02
75.0	72.47	80.0	71.41	85.0	69.83
90.0	67.76	95.0	65.20	100.0	62.18
105.0	58.72	110.0	54.87	115.0	50.67
120.0	46.19	125.0	41.51	130.0	36.76
135.0	32.11	140.0	27.83	145.0	24.34
150.0	22.18	155.0	21.87	160.0	23.54
165.0	26.79	170.0	31.07	175.0	35.92
180.0	41.02	185.0	46.17	190.0	51.21
195.0	56.06	200.0	60.63	205.0	64.86
210.0	68.71	215.0	72.13	220.0	75.12
225.0	77.63	230.0	79.65	235.0	81.17
240.0	82.18	245.0	82.68	250.0	82.66
255.0	82.12	260.0	81.07	265.0	79.51
270.0	77.44	275.0	74.89	280.0	71.88
285.0	68.41	290.0	64.53	295.0	60.27
300.0	55.68	305.0	50.81	310.0	45.76
315.0	40.61	320.0	35.52	325.0	30.70
330.0	26.48	335.0	23.34	340.0	21.82
345.0	22.29	350.0	24.58	355.0	28.15

Call: WAKY
Freq: 620 kHz
LOUISVILLE, KY, US
Hours: N
Lat: 38-18-59.90 N [NAD27]
Lng: 085-42-02.60 W
Power: 0.3 kW
Theo RMS: 161.62 mV/m @ 1km @ 0.3 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	50.1	0	0	0.0	0.0	0.0	0.0
2	0.850	-177.0	74.3	247.3	68.0	0	0	0.0	0.0	0.0	0.0

Standard Pattern
Calculated at 60.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	26.07	5.0	29.32	10.0	32.70
15.0	36.06	20.0	39.31	25.0	42.38
30.0	45.20	35.0	47.75	40.0	49.97
45.0	51.86	50.0	53.39	55.0	54.54
60.0	55.31	65.0	55.69	70.0	55.67
75.0	55.26	80.0	54.46	85.0	53.28
90.0	51.72	95.0	49.81	100.0	47.55
105.0	44.99	110.0	42.14	115.0	39.06
120.0	35.80	125.0	32.43	130.0	29.05
135.0	25.82	140.0	22.94	145.0	20.70
150.0	19.43	155.0	19.38	160.0	20.61
165.0	22.89	170.0	25.90	175.0	29.35
180.0	33.03	185.0	36.78	190.0	40.48
195.0	44.07	200.0	47.46	205.0	50.62
210.0	53.50	215.0	56.08	220.0	58.33
225.0	60.22	230.0	61.76	235.0	62.91
240.0	63.68	245.0	64.06	250.0	64.04
255.0	63.63	260.0	62.83	265.0	61.65
270.0	60.09	275.0	58.16	280.0	55.89
285.0	53.28	290.0	50.38	295.0	47.20
300.0	43.79	305.0	40.19	310.0	36.48
315.0	32.73	320.0	29.06	325.0	25.64
330.0	22.67	335.0	20.47	340.0	19.34
345.0	19.49	350.0	20.85	355.0	23.16