

WTAD QUINCY, IL BL-- 930 kHz

Nighttime

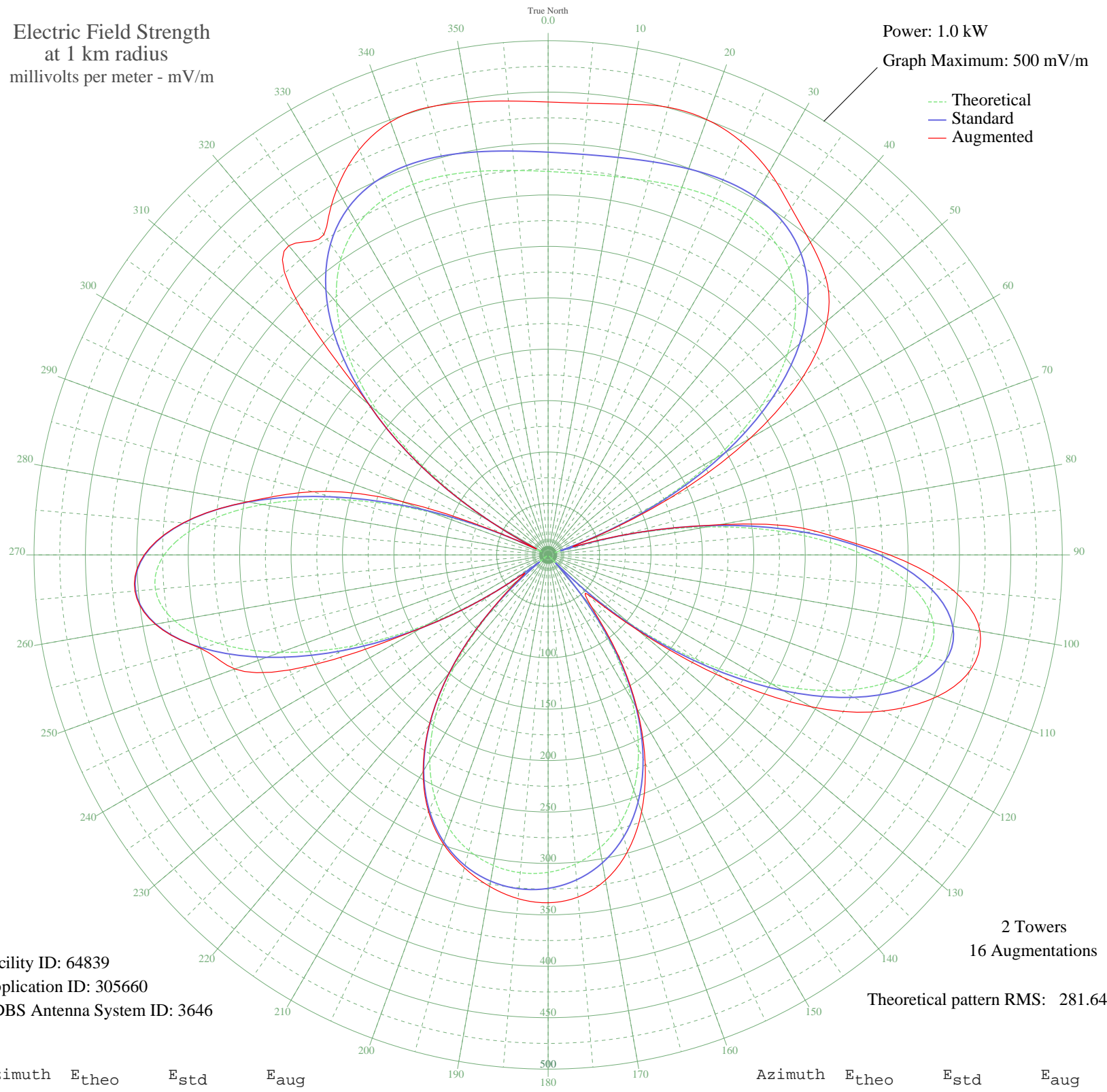
True North
0.0

Power: 1.0 kW

Graph Maximum: 500 mV/m

Electric Field Strength
at 1 km radius
millivolts per meter - mV/m

--- Theoretical
— Standard
— Augmented



2 Towers
16 Augmentations

Theoretical pattern RMS: 281.64

Facility ID: 64839
Application ID: 305660
DBS Antenna System ID: 3646

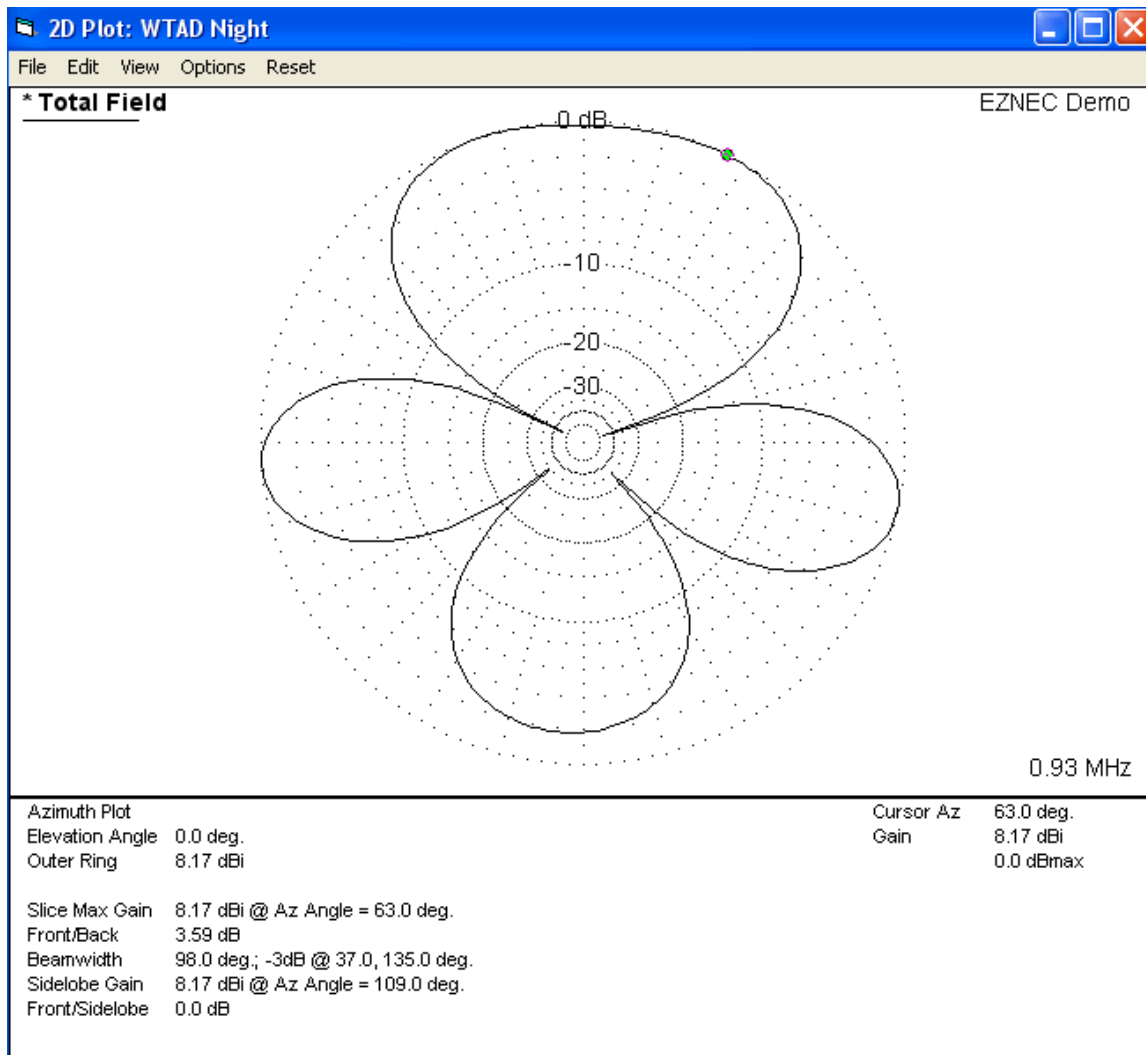
Azimuth	E _{theo}	E _{std}	E _{aug}	Azimuth	E _{theo}	E _{std}	E _{aug}
0	372.82	391.60	440.38	180	308.67	324.28	338.25
5	372.20	390.95	440.83	185	310.20	325.88	335.53
10	373.61	392.43	444.97	190	306.62	322.12	327.34
15	376.64	395.61	450.62	195	297.63	312.69	314.95
20	380.31	399.47	450.56	200	282.57	296.89	298.65
25	383.10	402.40	443.66	205	260.48	273.70	275.29
30	382.99	402.28	430.23	210	230.27	242.01	243.18
35	377.56	396.58	412.02	215	190.97	200.79	201.41
40	364.21	382.56	396.87	220	141.97	149.43	149.56
45	340.36	357.53	381.75	225	83.32	88.11	88.20
50	303.87	319.24	354.20	230	16.04	19.85	36.98
55	253.42	266.30	303.18	235	57.65	61.44	61.44
60	188.89	198.61	227.02	240	134.30	141.41	141.41
65	111.71	117.76	131.13	245	209.28	219.99	254.68
70	25.01	28.28	36.15	250	277.12	291.16	324.22
75	66.46	70.57	72.17	255	332.10	348.86	350.38
80	156.71	164.88	169.15	260	368.91	387.49	387.98
85	239.10	251.27	262.08	265	383.43	402.74	403.38
90	307.17	322.70	332.19	270	373.40	392.21	392.85
95	355.50	373.42	395.52	275	338.82	355.91	356.38
100	380.41	399.57	426.48	280	282.04	296.32	297.18
105	380.49	399.65	426.39	285	207.51	218.14	237.39
110	356.66	374.64	402.68	290	121.18	127.67	152.96
115	295.91	305.82	315.06	295	57.65	61.44	61.44
120	156.71	164.88	169.15	300	16.04	19.85	36.98
125	66.46	70.57	72.17	305	83.32	88.11	88.20
130	25.01	28.28	36.15	310	83.32	88.11	88.20
135	66.46	70.57	72.17	315	190.97	200.79	201.41
140	156.71	164.88	169.15	320	230.27	242.01	243.18
145	253.42	266.30	303.18	325	260.48	273.70	275.29
150	303.87	319.24	354.20	330	282.57	296.89	298.65
155	340.36	357.53	381.75	335	297.63	312.69	314.95
160	372.20	390.95	440.83	340	306.62	322.12	327.34
165	372.82	391.60	440.38	345	310.20	325.88	335.53
170	373.61	392.43	444.97	350	310.20	325.88	335.53

The theoretical pattern is used to create the standard pattern. Augmentations (if any) expand the standard pattern in specified directions. See Sections 73.150 and 73.152 of the FCC's Rules.

AM coverage may not mirror the pattern shown here. Additional factors such as ground conductivity or skywave propagation affect how far the AM signal will travel.

Patterns for stations outside the USA are based on notified parameters.

AM directional patterns created before 1982 used units of 1 mV/m at 1 mile, not one kilometer. The pattern values on such plots at 1 mile will be



Source Data EZNEC Demo ver. 4.0

File Edit Search Format

WTAD Night 3/24/2006 7:43:40 AM

----- SOURCE DATA -----

Frequency = 0.93 MHz

Source 1 Voltage = 36.01 V. at 24.8 deg.
 Current = 1 A. at 0.0 deg.
 Impedance = 32.69 + J 15.11 ohms
 Power = 32.69 watts
 SWR (50 ohm system) = 1.752 (36 ohm system) = 1.564

Source 2 Voltage = 48.65 V. at 68.3 deg.
 Current = 1 A. at 50.0 deg.
 Impedance = 46.19 + J 15.28 ohms
 Power = 46.19 watts
 SWR (50 ohm system) = 1.386 (36 ohm system) = 1.563

Total applied power = 78.88 watts

WTAD Night
7:36:03 AM

3/24/2006

----- FAR FIELD PATTERN DATA -----

NOTE: Azimuths rotate CCW; 0 degrees = 90 degrees CW from true north.

Frequency = 0.93 MHz

Field (mV/m) at 1 km for 1 kW

Azimuth Pattern Elevation angle = 0 deg.

Deg	V Fld	H Fld	Tot Fld
0	358.80	0.00	358.80
5	281.16	0.00	281.16
10	186.63	0.00	186.63
15	82.66	0.00	82.66
20	23.09	0.00	23.09
25	123.63	0.00	123.63
30	213.42	0.00	213.42
35	288.76	0.00	288.76
40	347.92	0.00	347.92
45	390.97	0.00	390.97
50	419.38	0.00	419.38
55	435.61	0.00	435.61
60	442.56	0.00	442.56
65	443.26	0.00	443.26
70	440.48	0.00	440.48
75	436.56	0.00	436.56
80	433.26	0.00	433.26
85	431.71	0.00	431.71
90	432.39	0.00	432.39
95	435.08	0.00	435.08
100	438.93	0.00	438.93
105	442.42	0.00	442.42
110	443.43	0.00	443.43
115	439.33	0.00	439.33
120	427.18	0.00	427.18
125	403.97	0.00	403.97
130	367.02	0.00	367.02
135	314.40	0.00	314.40
140	245.43	0.00	245.43
145	161.09	0.00	161.09
150	64.28	0.00	64.28
155	40.16	0.00	40.16
160	145.74	0.00	145.74
165	244.97	0.00	244.97
170	330.21	0.00	330.21
175	394.63	0.00	394.63
180	433.17	0.00	433.17
185	443.21	0.00	443.21
190	424.86	0.00	424.86

195	380.86	0.00	380.86
200	316.05	0.00	316.05
205	236.63	0.00	236.63
210	149.26	0.00	149.26
215	60.26	0.00	60.26
220	25.07	0.00	25.07
225	102.74	0.00	102.74
230	170.27	0.00	170.27
235	226.56	0.00	226.56
240	271.57	0.00	271.57
245	306.08	0.00	306.08
250	331.25	0.00	331.25
255	348.37	0.00	348.37
260	358.56	0.00	358.56
265	362.62	0.00	362.62
270	360.89	0.00	360.89
275	353.23	0.00	353.23
280	339.00	0.00	339.00
285	317.20	0.00	317.20
290	286.58	0.00	286.58
295	245.89	0.00	245.89
300	194.16	0.00	194.16
305	131.06	0.00	131.06
310	57.22	0.00	57.22
315	25.43	0.00	25.43
320	113.53	0.00	113.53
325	202.27	0.00	202.27
330	285.66	0.00	285.66
335	357.10	0.00	357.10
340	410.10	0.00	410.10
345	439.18	0.00	439.18
350	440.66	0.00	440.66
355	413.35	0.00	413.35
360	358.80	0.00	358.80