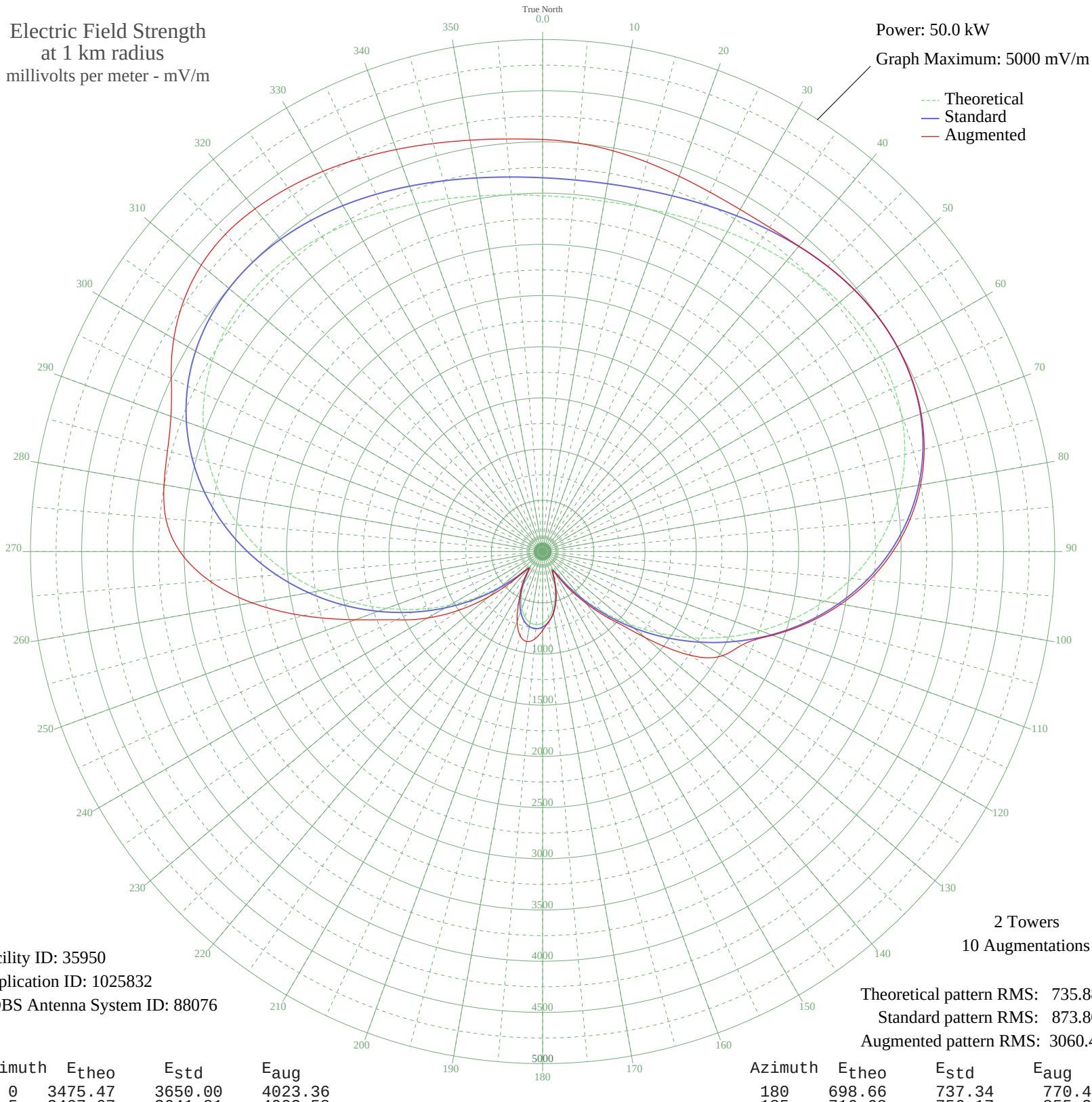
KXEL WATERLOO, IA BL-20041026AHG 1540 kHz

Nighttime

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



Power: 50.0 kW

Graph Maximum: 5000 mV/m

Theoretical
Standard
Augmented

2 Towers
10 Augmentations

Facility ID: 35950
Application ID: 1025832
CDBS Antenna System ID: 88076

Theoretical pattern RMS: 735.88
Standard pattern RMS: 873.80
Augmented pattern RMS: 3060.44

Azimuth	E_{theo}	E_{std}	E_{aug}
0	3475.47	3650.00	4023.36
5	3467.67	3641.81	4003.58
10	3472.88	3647.28	3973.06
15	3490.79	3666.08	3936.26
20	3520.26	3697.02	3899.68
25	3559.38	3738.09	3870.86
30	3605.48	3786.48	3857.04
35	3655.22	3838.70	3863.62
40	3704.67	3890.61	3892.67
45	3749.43	3937.60	3937.60
50	3784.79	3974.73	3974.73
55	3805.93	3996.92	3996.92
60	3808.13	3999.23	3999.54
65	3787.02	3977.06	3979.80
70	3738.80	3926.44	3933.56
75	3660.52	3844.26	3856.88
80	3550.24	3728.49	3746.68
85	3407.23	3578.36	3601.13
90	3232.00	3394.41	3419.86
95	3026.38	3178.57	3204.18
100	2793.42	2934.03	2957.11
105	2537.26	2665.15	2683.32
110	2262.93	2377.24	2388.98
115	1976.12	2076.25	2153.12
120	1682.90	1768.60	2031.74
125	1389.51	1460.87	1769.65
130	1102.19	1159.68	1307.05
135	827.26	871.79	927.99
140	571.86	605.03	657.18
145	347.94	372.80	431.60
150	196.02	218.80	232.68
155	219.17	241.81	241.81
160	344.38	369.15	369.15
165	469.99	499.05	499.05
170	573.97	607.22	607.22
175	650.84	687.40	687.40

Azimuth	E_{theo}	E_{std}	E_{aug}
180	698.66	737.34	770.40
185	716.68	756.17	855.30
190	704.67	743.61	891.81
195	662.76	699.85	849.60
200	591.60	625.60	726.88
205	492.79	522.73	555.27
210	370.67	396.22	418.00
215	241.35	264.07	291.19
220	184.34	207.31	208.76
225	309.25	333.09	382.49
230	523.98	555.17	686.36
235	774.36	816.46	999.37
240	1046.01	1100.82	1298.07
245	1331.36	1399.90	1577.16
250	1624.04	1706.86	1946.90
255	1917.79	2015.05	2419.46
260	2206.38	2317.89	2881.60
265	2483.67	2608.91	3266.08
270	2743.90	2882.05	3540.56
275	2981.86	3131.83	3692.41
280	3193.23	3353.71	3753.34
285	3374.72	3544.23	3791.61
290	3524.26	3701.22	3861.74
295	3641.07	3823.84	4000.06
300	3725.63	3912.61	4158.04
305	3779.65	3969.33	4276.50
310	3805.91	3996.89	4351.33
315	3808.03	3999.13	4380.96
320	3790.31	3980.52	4368.40
325	3757.41	3945.98	4334.29
330	3714.15	3900.56	4287.67
335	3665.27	3849.25	4233.76
340	3615.26	3796.74	4177.79
345	3568.14	3747.28	4124.72
350	3527.39	3704.50	4079.02
355	3495.81	3671.35	4044.34

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 0.62137 of the values listed here. Measured pattern values may vary from values shown here.

Plot is best printed on 11" by 17" or larger paper.

10 Nov 2011

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Federal Communications Commission