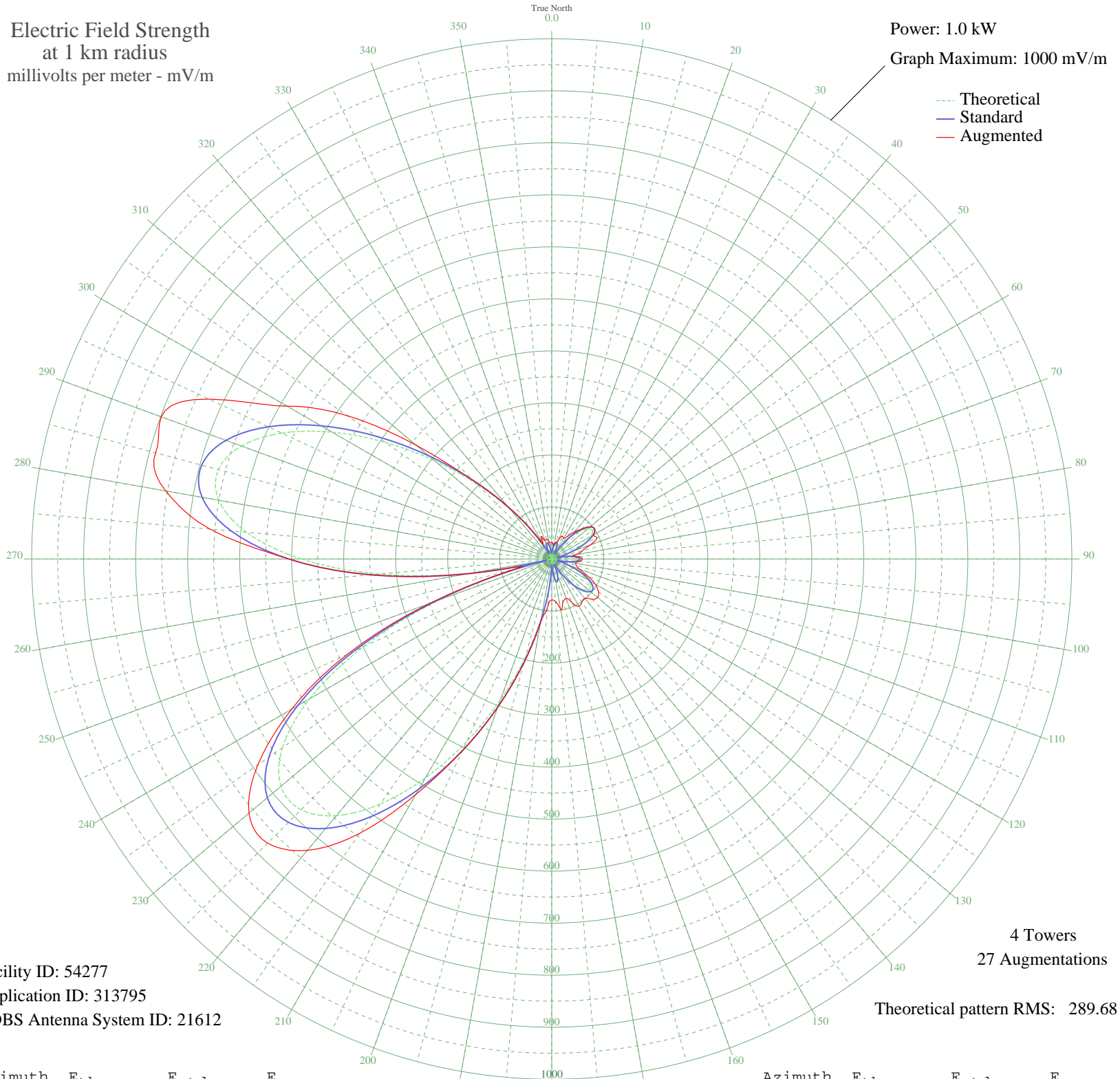


# WGEM QUINCY, IL BL-- 1440 kHz

Nighttime

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

Power: 1.0 kW  
Graph Maximum: 1000 mV/m



Facility ID: 54277  
Application ID: 313795  
CDBS Antenna System ID: 21612

4 Towers  
27 Augmentations  
Theoretical pattern RMS: 289.68

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
0	1.87	10.68	32.19
5	15.43	19.30	28.87
10	25.53	28.78	28.78
15	29.73	32.94	32.94
20	26.38	29.63	41.02
25	14.90	18.84	48.78
30	3.93	11.28	46.15
35	27.84	31.06	53.22
40	53.26	56.90	68.05
45	75.78	80.26	81.26
50	90.93	96.05	96.05
55	95.20	100.51	100.51
60	86.88	91.83	92.83
65	66.76	70.88	95.68
70	38.12	41.38	78.52
75	6.23	12.37	61.16
80	22.76	26.10	45.09
85	43.15	46.51	51.50
90	51.00	54.57	58.85
95	44.98	48.38	53.11
100	26.54	29.78	46.52
105	0.48	10.51	49.27
110	30.84	34.04	56.15
115	59.04	62.88	74.75
120	80.42	85.09	96.56
125	91.87	97.03	109.72
130	92.18	97.36	115.07
135	81.97	86.71	109.44
140	63.31	67.30	98.80
145	39.24	42.52	101.28
150	13.28	17.45	104.78
155	10.95	15.57	92.73
160	29.95	33.15	80.54
165	40.52	43.83	83.69
170	39.80	43.09	97.70
175	25.32	28.58	82.08

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
180	4.85	11.67	78.86
185	51.90	55.50	93.32
190	115.95	122.20	123.44
195	195.67	205.72	205.72
200	287.86	302.44	302.44
205	387.18	406.68	406.68
210	486.10	510.51	522.64
215	575.19	604.04	643.67
220	643.90	676.17	731.07
225	681.73	715.89	772.49
230	679.72	713.78	759.84
235	632.07	663.76	689.84
240	537.50	564.47	577.49
245	400.07	420.20	434.08
250	229.23	240.92	250.91
255	38.95	42.22	69.82
260	154.08	162.13	163.08
265	332.64	349.43	349.43
270	481.46	505.64	505.64
275	589.24	618.79	659.62
280	650.03	682.61	753.75
285	663.60	696.86	788.58
290	634.86	666.69	799.01
295	572.57	601.29	727.17
300	487.61	512.09	587.41
305	391.24	410.94	480.60
310	293.67	308.53	340.43
315	203.04	213.46	213.46
320	125.03	131.70	131.73
325	62.81	66.78	68.53
330	17.41	21.08	32.59
335	11.82	16.26	48.57
340	26.69	29.92	37.64
345	29.72	32.92	38.89
350	23.86	27.17	35.41
355	12.27	16.62	31.55

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

Prepared by Audio Division, Media Bureau  
Federal Communications Commission