

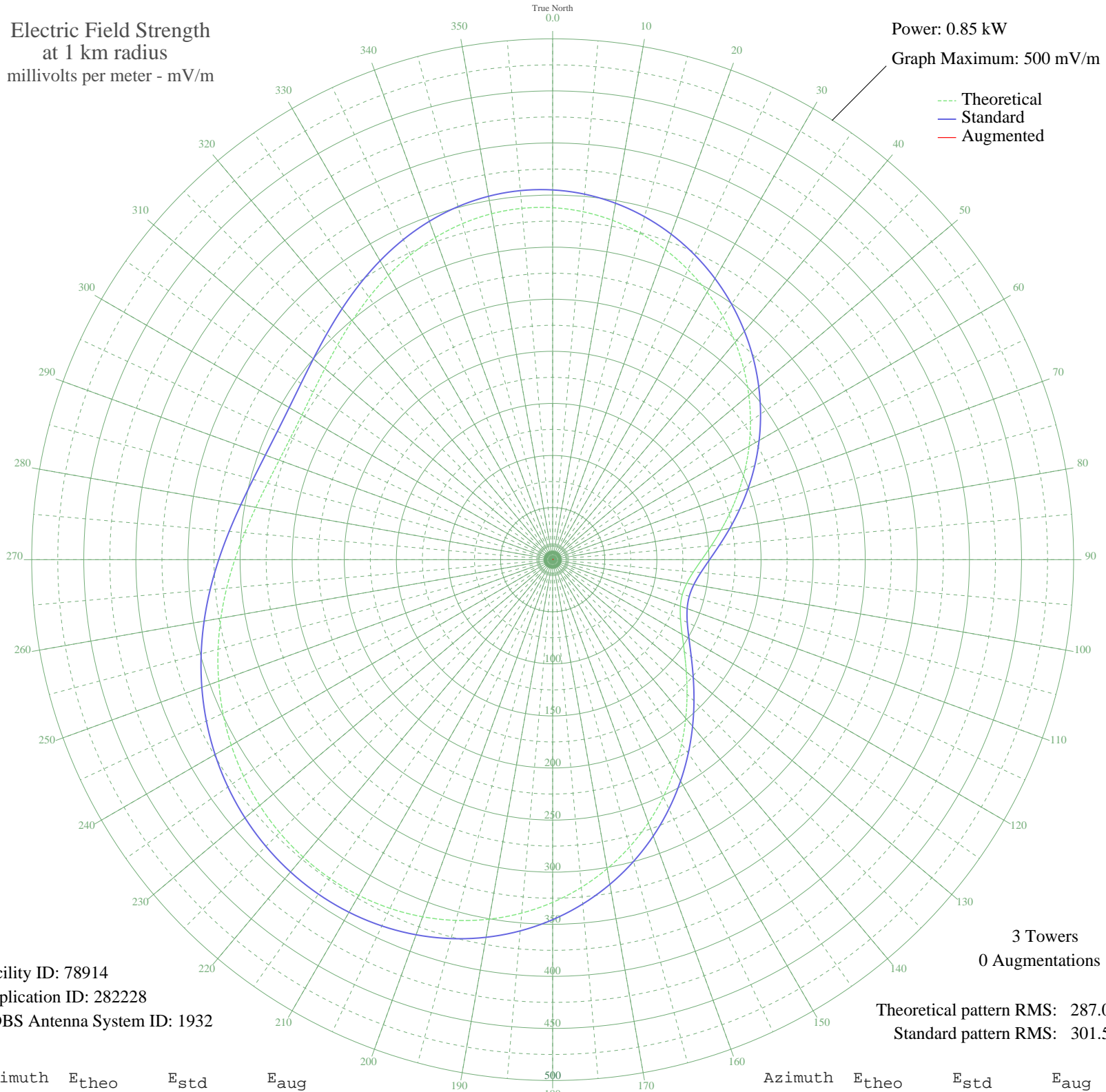
WVAL SAUK RAPIDS, MN BL-19990224DC 800 kHz

Nighttime

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

Power: 0.85 kW  
Graph Maximum: 500 mV/m

--- Theoretical  
— Standard  
— Augmented



Facility ID: 78914  
Application ID: 282228  
CDBS Antenna System ID: 1932

3 Towers  
0 Augmentations

Theoretical pattern RMS: 287.00  
Standard pattern RMS: 301.53

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
0	337.89	354.94	
5	335.27	352.19	
10	330.76	347.45	
15	324.46	340.84	
20	316.54	332.54	
25	307.19	322.72	
30	296.60	311.61	
35	284.97	299.41	
40	272.49	286.31	
45	259.35	272.52	
50	245.72	258.22	
55	231.77	243.59	
60	217.68	228.81	
65	203.63	214.07	
70	189.83	199.60	
75	176.53	185.66	
80	164.05	172.57	
85	152.75	160.74	
90	143.09	150.61	
95	135.57	142.73	
100	130.69	137.63	
105	128.91	135.76	
110	130.47	137.40	
115	135.41	142.56	
120	143.49	151.03	
125	154.33	162.39	
130	167.47	176.16	
135	182.42	191.83	
140	198.71	208.91	
145	215.90	226.93	
150	233.55	245.45	
155	251.27	264.04	
160	268.68	282.31	
165	285.44	299.90	
170	301.25	316.48	
175	315.83	331.79	

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
180	328.99	345.60	
185	340.56	357.74	
190	350.42	368.09	
195	358.52	376.59	
200	364.82	383.20	
205	369.33	387.94	
210	372.10	390.84	
215	373.17	391.97	
220	372.62	391.39	
225	370.55	389.21	
230	367.04	385.53	
235	362.21	380.46	
240	356.18	374.13	
245	349.09	366.70	
250	341.11	358.32	
255	332.45	349.23	
260	323.35	339.68	
265	314.10	329.98	
270	305.07	320.49	
275	296.63	311.64	
280	289.24	303.89	
285	283.33	297.68	
290	279.30	293.45	
295	277.43	291.49	
300	277.89	291.97	
305	280.62	294.84	
310	285.39	299.85	
315	291.80	306.57	
320	299.32	314.46	
325	307.37	322.91	
330	315.36	331.30	
335	322.76	339.06	
340	329.11	345.72	
345	334.02	350.87	
350	337.22	354.24	
355	338.54	355.62	

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