

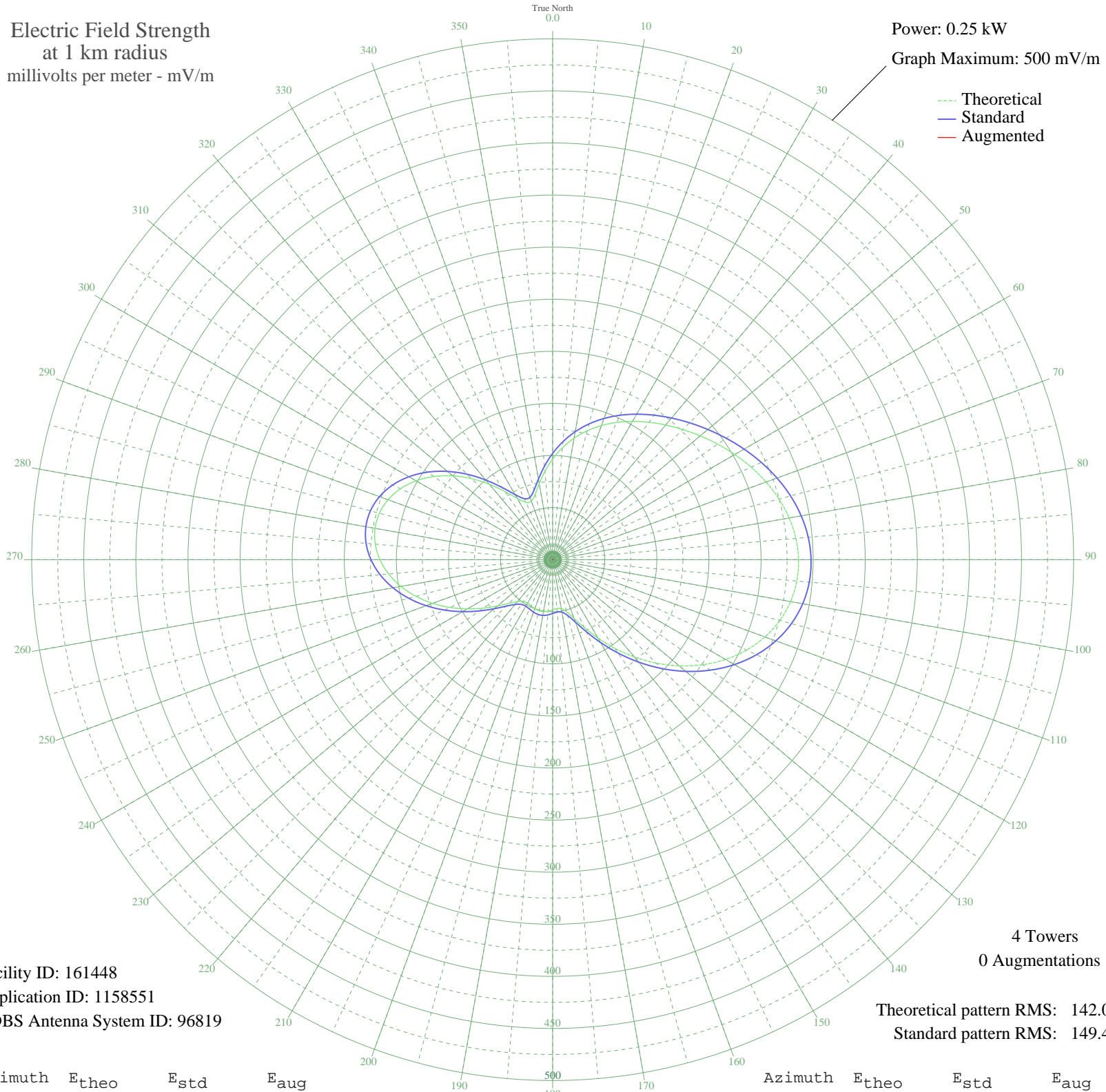
WPPI SAUK RAPIDS, MN BNP-20041029AGL 540 kHz

Daytime

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

Power: 0.25 kW  
Graph Maximum: 500 mV/m

--- Theoretical  
— Standard  
— Augmented



Facility ID: 161448  
Application ID: 1158551  
CDBS Antenna System ID: 96819

4 Towers  
0 Augmentations

Theoretical pattern RMS: 142.02  
Standard pattern RMS: 149.49

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
0	96.64	102.01	
5	107.83	113.71	
10	118.34	124.70	
15	128.05	134.86	
20	137.00	144.23	
25	145.32	152.95	
30	153.23	161.24	
35	160.97	169.34	
40	168.73	177.48	
45	176.68	185.81	
50	184.89	194.42	
55	193.32	203.26	
60	201.84	212.19	
65	210.17	220.93	
70	217.99	229.13	
75	224.90	236.38	
80	230.47	242.22	
85	234.30	246.23	
90	235.99	248.01	
95	235.26	247.24	
100	231.87	243.69	
105	225.73	237.25	
110	216.85	227.94	
115	205.38	215.90	
120	191.57	201.42	
125	175.80	184.89	
130	158.54	166.79	
135	140.34	147.73	
140	121.84	128.36	
145	103.73	109.42	
150	86.78	91.72	
155	71.87	76.19	
160	59.92	63.79	
165	51.79	55.38	
170	47.74	51.22	
175	47.03	50.49	

Azimuth	E <sub>theo</sub>	E <sub>std</sub>	E <sub>aug</sub>
180	48.16	51.65	
185	49.71	53.24	
190	50.74	54.30	
195	50.84	54.40	
200	50.06	53.60	
205	48.86	52.37	
210	48.11	51.59	
215	48.96	52.47	
220	52.53	56.14	
225	59.30	63.15	
230	69.05	73.26	
235	81.05	85.75	
240	94.49	99.77	
245	108.58	114.49	
250	122.59	129.15	
255	135.88	143.06	
260	147.85	155.59	
265	157.96	166.19	
270	165.76	174.37	
275	170.89	179.74	
280	173.07	182.02	
285	172.16	181.07	
290	168.13	176.85	
295	161.10	169.48	
300	151.31	159.22	
305	139.15	146.48	
310	125.13	131.80	
315	109.93	115.91	
320	94.46	99.74	
325	79.92	84.57	
330	67.98	72.15	
335	60.75	64.64	
340	59.85	63.72	
345	64.99	69.04	
350	74.12	78.53	
355	85.14	90.01	

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.

03 Jul 2009

Prepared by Audio Division, Media Bureau  
Federal Communications Commission