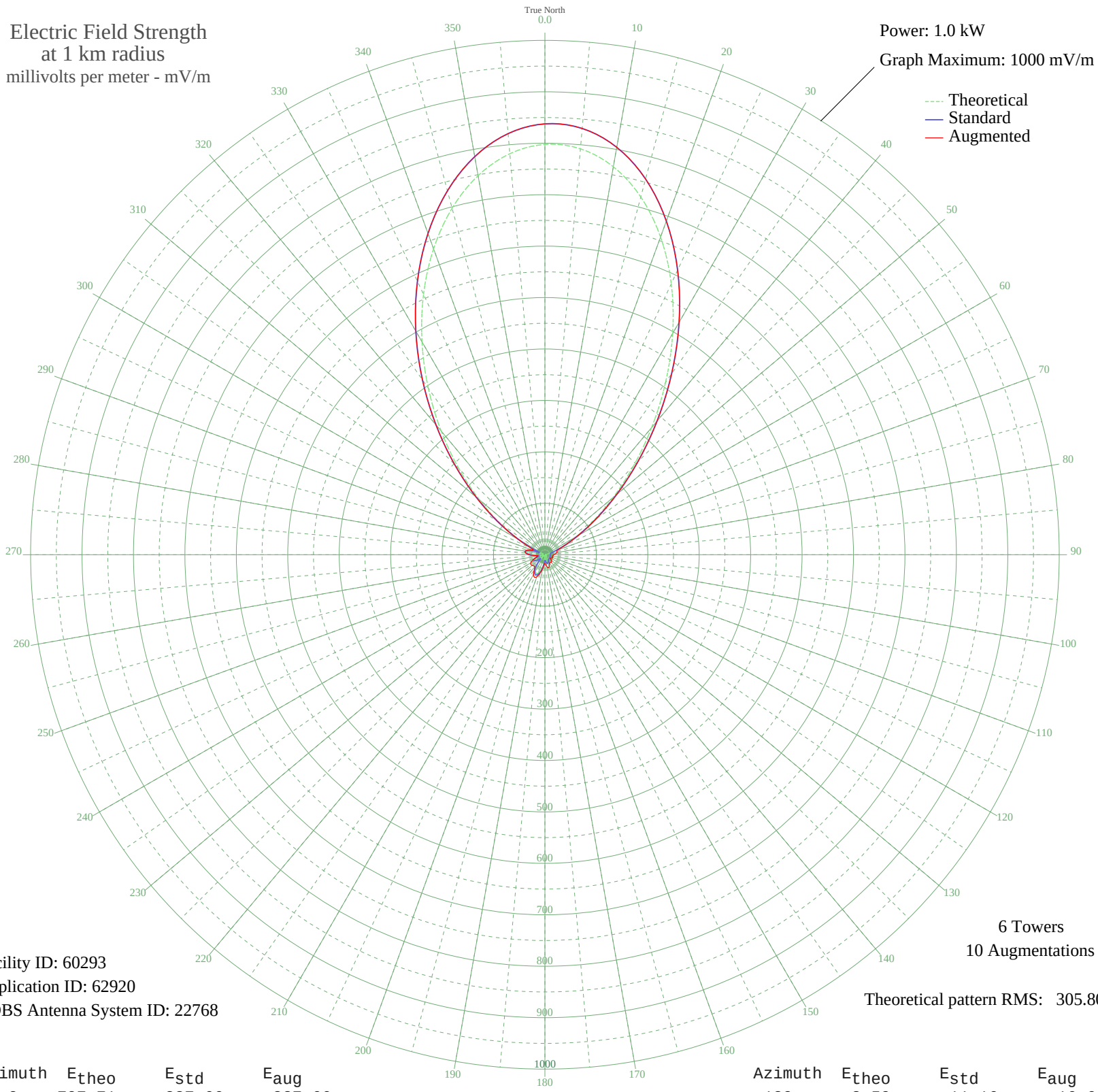
# WMLM ST. LOUIS, MI BL-19831109AH 1520 kHz

Nighttime

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




Power: 1.0 kW

Graph Maximum: 1000 mV/m

Theoretical
Standard
Augmented

6 Towers
10 Augmentations

Facility ID: 60293
Application ID: 62920
CDBS Antenna System ID: 22768

Theoretical pattern RMS: 305.80

| Azimuth | $E_{theo}$ | $E_{std}$ | $E_{aug}$ |
|---|---|---|---|
| 0 | 797.71 | 837.66 | 837.66 |
| 5 | 792.21 | 831.89 | 831.89 |
| 10 | 765.96 | 804.32 | 804.32 |
| 15 | 720.14 | 756.22 | 756.22 |
| 20 | 657.33 | 690.28 | 690.28 |
| 25 | 581.33 | 610.49 | 610.49 |
| 30 | 496.83 | 521.78 | 521.78 |
| 35 | 408.97 | 429.55 | 429.55 |
| 40 | 322.85 | 339.16 | 339.16 |
| 45 | 243.00 | 255.37 | 255.37 |
| 50 | 172.96 | 181.91 | 181.91 |
| 55 | 115.00 | 121.20 | 121.20 |
| 60 | 70.05 | 74.30 | 74.30 |
| 65 | 37.77 | 41.02 | 41.90 |
| 70 | 16.77 | 20.50 | 26.19 |
| 75 | 5.09 | 11.78 | 23.96 |
| 80 | 1.65 | 10.64 | 23.80 |
| 85 | 1.82 | 10.67 | 20.50 |
| 90 | 0.53 | 10.51 | 17.01 |
| 95 | 1.23 | 10.58 | 16.12 |
| 100 | 2.27 | 10.77 | 15.04 |
| 105 | 2.18 | 10.75 | 15.04 |
| 110 | 0.96 | 10.55 | 16.09 |
| 115 | 1.01 | 10.55 | 14.90 |
| 120 | 3.09 | 10.99 | 12.56 |
| 125 | 4.63 | 11.57 | 13.09 |
| 130 | 5.07 | 11.77 | 16.31 |
| 135 | 4.18 | 11.38 | 18.63 |
| 140 | 2.63 | 10.86 | 19.31 |
| 145 | 3.96 | 11.29 | 18.58 |
| 150 | 7.71 | 13.26 | 17.90 |
| 155 | 11.36 | 15.89 | 20.61 |
| 160 | 13.65 | 17.76 | 24.44 |
| 165 | 13.65 | 17.77 | 26.13 |
| 170 | 10.79 | 15.44 | 24.24 |
| 175 | 4.96 | 11.72 | 19.68 |

| Azimuth | $E_{theo}$ | $E_{std}$ | $E_{aug}$ |
|---|---|---|---|
| 180 | 3.59 | 11.16 | 16.62 |
| 185 | 13.48 | 17.63 | 20.63 |
| 190 | 23.59 | 26.90 | 28.12 |
| 195 | 32.26 | 35.46 | 37.40 |
| 200 | 37.99 | 41.25 | 45.46 |
| 205 | 39.66 | 42.95 | 48.28 |
| 210 | 36.78 | 40.02 | 44.34 |
| 215 | 29.62 | 32.82 | 36.47 |
| 220 | 19.22 | 22.75 | 31.06 |
| 225 | 7.38 | 13.05 | 30.55 |
| 230 | 5.42 | 11.94 | 32.19 |
| 235 | 14.64 | 18.61 | 33.30 |
| 240 | 20.35 | 23.81 | 31.84 |
| 245 | 21.33 | 24.73 | 27.25 |
| 250 | 17.34 | 21.01 | 21.01 |
| 255 | 9.08 | 14.18 | 15.77 |
| 260 | 3.47 | 11.12 | 14.62 |
| 265 | 15.28 | 19.18 | 19.18 |
| 270 | 26.44 | 29.68 | 29.68 |
| 275 | 33.94 | 37.15 | 37.15 |
| 280 | 35.37 | 38.59 | 39.16 |
| 285 | 28.63 | 31.84 | 35.62 |
| 290 | 12.15 | 16.52 | 26.72 |
| 295 | 15.84 | 19.67 | 28.35 |
| 300 | 54.82 | 58.51 | 60.25 |
| 305 | 105.27 | 111.04 | 111.13 |
| 310 | 166.31 | 174.94 | 174.94 |
| 315 | 236.47 | 248.52 | 248.52 |
| 320 | 313.66 | 329.51 | 329.51 |
| 325 | 395.23 | 415.13 | 415.13 |
| 330 | 478.02 | 502.04 | 502.04 |
| 335 | 558.51 | 586.53 | 586.53 |
| 340 | 632.91 | 664.64 | 664.64 |
| 345 | 697.41 | 732.36 | 732.36 |
| 350 | 748.38 | 785.87 | 785.87 |
| 355 | 782.62 | 821.82 | 821.82 |

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.

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Prepared by Audio Division, Media Bureau
Federal Communications Commission