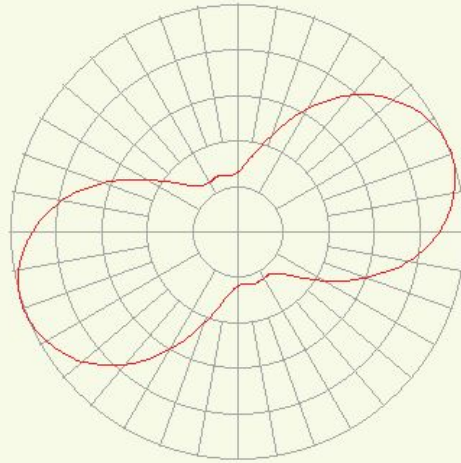


Antenna Data for Antenna Id: 90263  
 WQMY DT File: BLCDT-20090223ABU  
 Electronics Research Inc. - ALP16L2-HSH-29  
 Service: DT

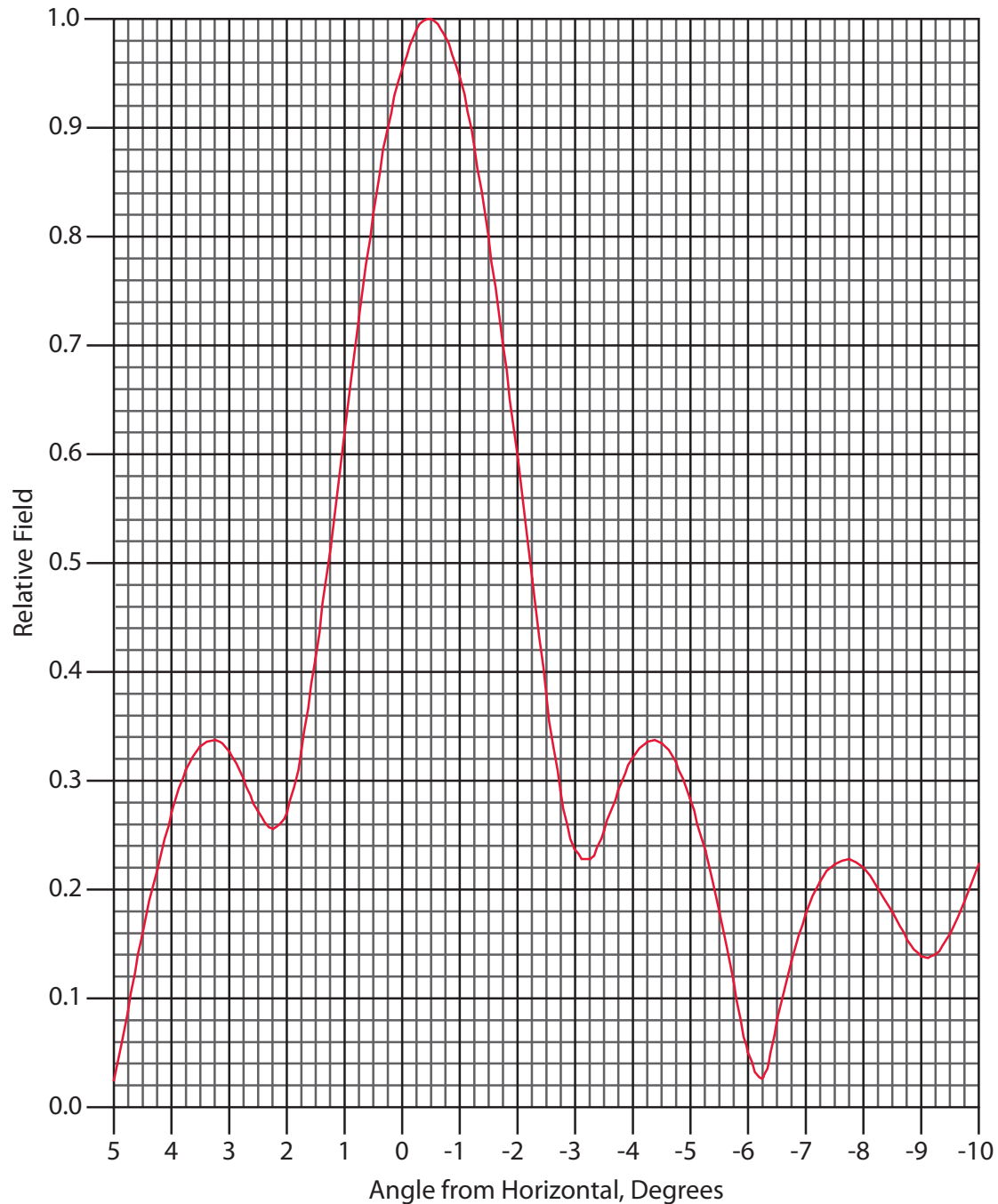


| Azimuth | Ratio | Azimuth | Ratio        | Azimuth | Ratio | Azimuth | Ratio        |
|---------|-------|---------|--------------|---------|-------|---------|--------------|
| 0       | 0.258 | 10      | 0.324        | 20      | 0.451 | 30      | 0.622        |
| 40      | 0.781 | 50      | 0.897        | 60      | 0.974 | 70      | <b>1.000</b> |
| 80      | 0.967 | 90      | 0.889        | 100     | 0.764 | 110     | 0.600        |
| 120     | 0.432 | 130     | 0.302        | 140     | 0.242 | 150     | 0.237        |
| 160     | 0.242 | 170     | 0.237        | 180     | 0.242 | 190     | 0.302        |
| 200     | 0.432 | 210     | 0.600        | 220     | 0.764 | 230     | 0.889        |
| 240     | 0.967 | 250     | <b>1.000</b> | 260     | 0.974 | 270     | 0.897        |
| 280     | 0.781 | 290     | 0.622        | 300     | 0.451 | 310     | 0.324        |
| 320     | 0.258 | 330     | 0.248        | 340     | 0.256 | 350     | 0.248        |

Directional Antenna Horizontal Plane  
 Radiation Pattern and Tabulation  
 WQMY(DT), Ch. 29, 200 kW ERP, 243 m HAAT  
 November, 2017

## Elevation Pattern

|               |            |         |
|---------------|------------|---------|
| Type:         | ALP16L2    |         |
| Directivity   | Numeric    | dBd     |
| Main Lobe:    | 16.59      | (12.20) |
| Horizontal:   | 15.13      | (11.80) |
| Beam Tilt     | -0.50 °    |         |
| Polarization: | Horizontal |         |
| Frequency:    |            |         |
| Location:     |            |         |



**Tabulated Data for Elevation Pattern****Type: ALP16L2**-5 to 10 degrees in 0.25 degree increments  
10 to 90 degrees in 0.50 degree increments

| Angle | Field | dB     | Angle  | Field | dB     | Angle  | Field | dB     | Angle  | Field | dB     | Angle  | Field | dB     |
|-------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|--------|-------|--------|
| 5.00  | 0.025 | -32.04 | -6.25  | 0.027 | -31.37 | -25.00 | 0.149 | -16.54 | -47.50 | 0.031 | -30.17 | -70.00 | 0.054 | -25.35 |
| 4.75  | 0.088 | -21.11 | -6.50  | 0.082 | -21.72 | -25.50 | 0.102 | -19.83 | -48.00 | 0.026 | -31.70 | -70.50 | 0.056 | -25.04 |
| 4.50  | 0.157 | -16.08 | -6.75  | 0.134 | -17.46 | -26.00 | 0.061 | -24.29 | -48.50 | 0.025 | -32.04 | -71.00 | 0.062 | -24.15 |
| 4.25  | 0.219 | -13.19 | -7.00  | 0.177 | -15.04 | -26.50 | 0.044 | -27.13 | -49.00 | 0.029 | -30.75 | -71.50 | 0.071 | -22.97 |
| 4.00  | 0.271 | -11.34 | -7.25  | 0.207 | -13.68 | -27.00 | 0.049 | -26.20 | -49.50 | 0.033 | -29.63 | -72.00 | 0.080 | -21.94 |
| 3.75  | 0.310 | -10.17 | -7.50  | 0.224 | -13.00 | -27.50 | 0.055 | -25.19 | -50.00 | 0.034 | -29.37 | -72.50 | 0.091 | -20.82 |
| 3.50  | 0.332 | -9.58  | -7.75  | 0.228 | -12.84 | -28.00 | 0.052 | -25.68 | -50.50 | 0.031 | -30.17 | -73.00 | 0.101 | -19.91 |
| 3.25  | 0.337 | -9.45  | -8.00  | 0.220 | -13.15 | -28.50 | 0.041 | -27.74 | -51.00 | 0.024 | -32.40 | -73.50 | 0.110 | -19.17 |
| 3.00  | 0.326 | -9.74  | -8.25  | 0.202 | -13.89 | -29.00 | 0.025 | -32.04 | -51.50 | 0.015 | -36.48 | -74.00 | 0.119 | -18.49 |
| 2.75  | 0.302 | -10.40 | -8.50  | 0.178 | -14.99 | -29.50 | 0.010 | -40.00 | -52.00 | 0.003 | -50.46 | -74.50 | 0.126 | -17.99 |
| 2.50  | 0.273 | -11.28 | -8.75  | 0.154 | -16.25 | -30.00 | 0.002 | -53.98 | -52.50 | 0.009 | -40.92 | -75.00 | 0.132 | -17.59 |
| 2.25  | 0.256 | -11.84 | -9.00  | 0.138 | -17.20 | -30.50 | 0.008 | -41.94 | -53.00 | 0.020 | -33.98 | -75.50 | 0.137 | -17.27 |
| 2.00  | 0.271 | -11.34 | -9.25  | 0.140 | -17.08 | -31.00 | 0.008 | -41.94 | -53.50 | 0.029 | -30.75 | -76.00 | 0.140 | -17.08 |
| 1.75  | 0.326 | -9.74  | -9.50  | 0.160 | -15.92 | -31.50 | 0.003 | -50.46 | -54.00 | 0.035 | -29.12 | -76.50 | 0.142 | -16.95 |
| 1.50  | 0.412 | -7.70  | -9.75  | 0.190 | -14.42 | -32.00 | 0.003 | -50.46 | -54.50 | 0.038 | -28.40 | -77.00 | 0.142 | -16.95 |
| 1.25  | 0.514 | -5.78  | -10.00 | 0.224 | -13.00 | -32.50 | 0.009 | -40.92 | -55.00 | 0.037 | -28.64 | -77.50 | 0.142 | -16.95 |
| 1.00  | 0.622 | -4.12  | -10.50 | 0.281 | -11.03 | -33.00 | 0.012 | -38.42 | -55.50 | 0.033 | -29.63 | -78.00 | 0.140 | -17.08 |
| 0.75  | 0.726 | -2.78  | -11.00 | 0.306 | -10.29 | -33.50 | 0.017 | -35.39 | -56.00 | 0.028 | -31.06 | -78.50 | 0.137 | -17.27 |
| 0.50  | 0.819 | -1.73  | -11.50 | 0.295 | -10.60 | -34.00 | 0.029 | -30.75 | -56.50 | 0.025 | -32.04 | -79.00 | 0.133 | -17.52 |
| 0.25  | 0.897 | -0.94  | -12.00 | 0.253 | -11.94 | -34.50 | 0.050 | -26.02 | -57.00 | 0.026 | -31.70 | -79.50 | 0.129 | -17.79 |
| 0.00  | 0.955 | -0.40  | -12.50 | 0.192 | -14.33 | -35.00 | 0.075 | -22.50 | -57.50 | 0.033 | -29.63 | -80.00 | 0.124 | -18.13 |
| -0.25 | 0.990 | -0.09  | -13.00 | 0.126 | -17.99 | -35.50 | 0.101 | -19.91 | -58.00 | 0.041 | -27.74 | -80.50 | 0.118 | -18.56 |
| -0.50 | 1.000 | 0.00   | -13.50 | 0.069 | -23.22 | -36.00 | 0.123 | -18.20 | -58.50 | 0.049 | -26.20 | -81.00 | 0.112 | -19.02 |
| -0.75 | 0.985 | -0.13  | -14.00 | 0.030 | -30.46 | -36.50 | 0.138 | -17.20 | -59.00 | 0.055 | -25.19 | -81.50 | 0.106 | -19.49 |
| -1.00 | 0.945 | -0.49  | -14.50 | 0.013 | -37.72 | -37.00 | 0.144 | -16.83 | -59.50 | 0.058 | -24.73 | -82.00 | 0.100 | -20.00 |
| -1.25 | 0.882 | -1.09  | -15.00 | 0.005 | -46.02 | -37.50 | 0.138 | -17.20 | -60.00 | 0.057 | -24.88 | -82.50 | 0.093 | -20.63 |
| -1.50 | 0.800 | -1.94  | -15.50 | 0.006 | -44.44 | -38.00 | 0.123 | -18.20 | -60.50 | 0.054 | -25.35 | -83.00 | 0.086 | -21.31 |
| -1.75 | 0.703 | -3.06  | -16.00 | 0.018 | -34.89 | -38.50 | 0.099 | -20.09 | -61.00 | 0.046 | -26.74 | -83.50 | 0.080 | -21.94 |
| -2.00 | 0.595 | -4.51  | -16.50 | 0.025 | -32.04 | -39.00 | 0.073 | -22.73 | -61.50 | 0.036 | -28.87 | -84.00 | 0.073 | -22.73 |
| -2.25 | 0.485 | -6.29  | -17.00 | 0.022 | -33.15 | -39.50 | 0.050 | -26.02 | -62.00 | 0.024 | -32.40 | -84.50 | 0.066 | -23.61 |
| -2.50 | 0.379 | -8.43  | -17.50 | 0.007 | -43.10 | -40.00 | 0.044 | -27.13 | -62.50 | 0.011 | -39.17 | -85.00 | 0.060 | -24.44 |
| -2.75 | 0.291 | -10.72 | -18.00 | 0.018 | -34.89 | -40.50 | 0.054 | -25.35 | -63.00 | 0.007 | -43.10 | -85.50 | 0.053 | -25.51 |
| -3.00 | 0.237 | -12.51 | -18.50 | 0.044 | -27.13 | -41.00 | 0.066 | -23.61 | -63.50 | 0.021 | -33.56 | -86.00 | 0.047 | -26.56 |
| -3.25 | 0.228 | -12.84 | -19.00 | 0.065 | -23.74 | -41.50 | 0.071 | -22.97 | -64.00 | 0.035 | -29.12 | -86.50 | 0.041 | -27.74 |
| -3.50 | 0.254 | -11.90 | -19.50 | 0.074 | -22.62 | -42.00 | 0.068 | -23.35 | -64.50 | 0.047 | -26.56 | -87.00 | 0.035 | -29.12 |
| -3.75 | 0.291 | -10.72 | -20.00 | 0.071 | -22.97 | -42.50 | 0.057 | -24.88 | -65.00 | 0.058 | -24.73 | -87.50 | 0.029 | -30.75 |
| -4.00 | 0.320 | -9.90  | -20.50 | 0.061 | -24.29 | -43.00 | 0.040 | -27.96 | -65.50 | 0.066 | -23.61 | -88.00 | 0.023 | -32.77 |
| -4.25 | 0.336 | -9.47  | -21.00 | 0.071 | -22.97 | -43.50 | 0.020 | -33.98 | -66.00 | 0.072 | -22.85 | -88.50 | 0.017 | -35.39 |
| -4.50 | 0.335 | -9.50  | -21.50 | 0.109 | -19.25 | -44.00 | 0.005 | -46.02 | -66.50 | 0.075 | -22.50 | -89.00 | 0.011 | -39.17 |
| -4.75 | 0.317 | -9.98  | -22.00 | 0.158 | -16.03 | -44.50 | 0.021 | -33.56 | -67.00 | 0.075 | -22.50 | -89.50 | 0.006 | -44.44 |
| -5.00 | 0.283 | -10.96 | -22.50 | 0.201 | -13.94 | -45.00 | 0.036 | -28.87 | -67.50 | 0.073 | -22.73 | -90.00 | 0.000 | ---    |
| -5.25 | 0.236 | -12.54 | -23.00 | 0.230 | -12.77 | -45.50 | 0.045 | -26.94 | -68.00 | 0.069 | -23.22 |        |       |        |
| -5.50 | 0.179 | -14.94 | -23.50 | 0.238 | -12.47 | -46.00 | 0.048 | -26.38 | -68.50 | 0.064 | -23.88 |        |       |        |
| -5.75 | 0.115 | -18.79 | -24.00 | 0.225 | -12.96 | -46.50 | 0.046 | -26.74 | -69.00 | 0.059 | -24.58 |        |       |        |
| -6.00 | 0.051 | -25.85 | -24.50 | 0.193 | -14.29 | -47.00 | 0.039 | -28.18 | -69.50 | 0.055 | -25.19 |        |       |        |

