

SCALA

2 Bay Model HDCA5-CP RM Circularly Polarized FM Antenna 0.87 Spacing



Frequency = 102.7 MHz
Interfering Contour 106 dBu (50,10)

ERP= 150 watts
Height = 80 m AGL

| Depression Angle | Relative Field (o) | Effective Power (w) | Distance to Contour (m) | Distance from Antenna to Ground (m) | Clearance (m) |
|------------------|--------------------|---------------------|-------------------------|-------------------------------------|---------------|
| 1 | 0.996 | 148.8 | 428.85 | 4,583.90 | 4155 |
| 2 | 0.996 | 148.8 | 428.85 | 2,292.30 | 1863 |
| 3 | 0.981 | 144.4 | 422.39 | 1,528.59 | 1106 |
| 4 | 0.971 | 141.4 | 418.09 | 1,146.85 | 729 |
| 5 | 0.958 | 137.7 | 412.49 | 917.90 | 505 |
| 6 | 0.942 | 133.1 | 405.60 | 765.34 | 360 |
| 7 | 0.924 | 128.1 | 397.85 | 656.44 | 259 |
| 8 | 0.904 | 122.6 | 389.24 | 574.82 | 186 |
| 9 | 0.882 | 116.7 | 379.76 | 511.40 | 132 |
| 10 | 0.859 | 110.7 | 369.86 | 460.70 | 91 |
| 11 | 0.931 | 130.0 | 400.86 | 419.27 | 18 |
| 12 | 0.801 | 96.2 | 344.89 | 384.78 | 40 |
| 13 | 0.770 | 88.9 | 331.54 | 355.63 | 24 |
| 14 | 0.738 | 81.7 | 317.76 | 330.69 | 13 |
| 15 | 0.705 | 74.6 | 303.55 | 309.10 | 6 |
| 16 | 0.668 | 66.9 | 287.62 | 290.24 | 3 |
| 17 | 0.631 | 59.7 | 271.69 | 273.62 | 2 |
| 18 | 0.593 | 52.7 | 255.33 | 258.89 | 4 |
| 19 | 0.555 | 46.2 | 238.97 | 245.72 | 7 |
| 20 | 0.517 | 40.1 | 222.61 | 233.90 | 11 |
| 21 | 0.478 | 34.3 | 205.81 | 223.23 | 17 |
| 22 | 0.439 | 28.9 | 189.02 | 213.56 | 25 |
| 23 | 0.400 | 24.0 | 172.23 | 204.74 | 33 |
| 24 | 0.362 | 19.7 | 155.87 | 196.69 | 41 |
| 25 | 0.324 | 15.7 | 139.51 | 189.30 | 50 |
| 26 | 0.287 | 12.4 | 123.57 | 182.49 | 59 |
| 27 | 0.250 | 9.4 | 107.64 | 176.22 | 69 |
| 28 | 0.215 | 6.9 | 92.57 | 170.40 | 78 |
| 29 | 0.181 | 4.9 | 77.93 | 165.01 | 87 |
| 30 | 0.147 | 3.2 | 63.29 | 160.00 | 97 |
| 31 | 0.115 | 2.0 | 49.52 | 155.33 | 106 |
| 32 | 0.085 | 1.1 | 36.60 | 150.97 | 114 |
| 33 | 0.056 | 0.5 | 24.11 | 146.89 | 123 |
| 34 | 0.028 | 0.1 | 12.06 | 143.06 | 131 |
| 35 | 0.010 | 0.0 | 4.31 | 139.48 | 135 |
| 36 | 0.022 | 0.1 | 9.47 | 136.10 | 127 |
| 37 | 0.045 | 0.3 | 19.38 | 132.93 | 114 |
| 38 | 0.066 | 0.7 | 28.42 | 129.94 | 102 |
| 39 | 0.085 | 1.1 | 36.60 | 127.12 | 91 |
| 40 | 0.102 | 1.6 | 43.92 | 124.46 | 81 |
| 41 | 0.118 | 2.1 | 50.81 | 121.94 | 71 |
| 42 | 0.131 | 2.6 | 56.40 | 119.56 | 63 |
| 43 | 0.143 | 3.1 | 61.57 | 117.30 | 56 |
| 44 | 0.154 | 3.6 | 66.31 | 115.16 | 49 |
| 45 | 0.162 | 3.9 | 69.75 | 113.14 | 43 |

| Depression Angle | Relative Field | Effective Power (w) | Distance to Contour (m) | Distance from Antenna to Ground (m) | Clearance (m) |
|------------------|----------------|---------------------|-------------------------|-------------------------------------|---------------|
| 46 | 0.169 | 4.3 | 72.77 | 111.21 | 38 |
| 47 | 0.174 | 4.5 | 74.92 | 109.39 | 34 |
| 48 | 0.178 | 4.8 | 76.64 | 107.65 | 31 |
| 49 | 0.181 | 4.9 | 77.93 | 106.00 | 28 |
| 50 | 0.181 | 4.9 | 77.93 | 104.43 | 26 |
| 51 | 0.182 | 5.0 | 78.36 | 102.94 | 25 |
| 52 | 0.181 | 4.9 | 77.93 | 101.52 | 24 |
| 53 | 0.179 | 4.8 | 77.07 | 100.17 | 23 |
| 54 | 0.176 | 4.6 | 75.78 | 98.89 | 23 |
| 55 | 0.172 | 4.4 | 74.06 | 97.66 | 24 |
| 56 | 0.169 | 4.3 | 72.77 | 96.50 | 24 |
| 57 | 0.164 | 4.0 | 70.61 | 95.39 | 25 |
| 58 | 0.159 | 3.8 | 68.46 | 94.33 | 26 |
| 59 | 0.152 | 3.5 | 65.45 | 93.33 | 28 |
| 60 | 0.145 | 3.2 | 62.43 | 92.38 | 30 |
| 61 | 0.141 | 3.0 | 60.71 | 91.47 | 31 |
| 62 | 0.136 | 2.8 | 58.56 | 90.61 | 32 |
| 63 | 0.130 | 2.5 | 55.97 | 89.79 | 34 |
| 64 | 0.124 | 2.3 | 53.39 | 89.01 | 36 |
| 65 | 0.118 | 2.1 | 50.81 | 88.27 | 37 |
| 66 | 0.118 | 2.1 | 50.81 | 87.57 | 37 |
| 67 | 0.118 | 2.1 | 50.81 | 86.91 | 36 |
| 68 | 0.117 | 2.1 | 50.38 | 86.28 | 36 |
| 69 | 0.117 | 2.1 | 50.38 | 85.69 | 35 |
| 70 | 0.116 | 2.0 | 49.95 | 85.13 | 35 |
| 71 | 0.117 | 2.1 | 50.38 | 84.61 | 34 |
| 72 | 0.117 | 2.1 | 50.38 | 84.12 | 34 |
| 73 | 0.117 | 2.1 | 50.38 | 83.66 | 33 |
| 74 | 0.118 | 2.1 | 50.81 | 83.22 | 32 |
| 75 | 0.118 | 2.1 | 50.81 | 82.82 | 32 |
| 76 | 0.120 | 2.2 | 51.67 | 82.45 | 31 |
| 77 | 0.122 | 2.2 | 52.53 | 82.10 | 30 |
| 78 | 0.124 | 2.3 | 53.39 | 81.79 | 28 |
| 79 | 0.125 | 2.3 | 53.82 | 81.50 | 28 |
| 80 | 0.127 | 2.4 | 54.68 | 81.23 | 27 |
| 81 | 0.130 | 2.5 | 55.97 | 81.00 | 25 |
| 82 | 0.132 | 2.6 | 56.84 | 80.79 | 24 |
| 83 | 0.135 | 2.7 | 58.13 | 80.60 | 22 |
| 84 | 0.137 | 2.8 | 58.99 | 80.44 | 21 |
| 85 | 0.139 | 2.9 | 59.85 | 80.31 | 20 |
| 86 | 0.140 | 2.9 | 60.28 | 80.20 | 20 |
| 87 | 0.141 | 3.0 | 60.71 | 80.11 | 19 |
| 88 | 0.142 | 3.0 | 61.14 | 80.05 | 19 |
| 89 | 0.143 | 3.1 | 61.57 | 80.01 | 18 |
| 90 | 0.144 | 3.1 | 0.00 | 80.00 | 80 |

NOTES:

- HEIGHT HAS BEEN REDUCED BY 2 METERS TO ALLOW FOR HUMAN EXPOSURE
- DISTANCE FROM ANTENNA TO GROUND IS ACTUALLY TO A POINT 2 METERS ABOVE GROUND