

# RADIATION PATTERN ENVELOPE

Antenna Type Number: VHLPX1-32

1.00 Foot Antenna 31.000-33.400 GHz Dual Polarized

Gain: 38.90 dBi at 32.200 GHz

— Envelope for a Horizontally Polarized Antenna (HH, HV)

— Envelope for a Vertically Polarized Antenna (VV, VH)

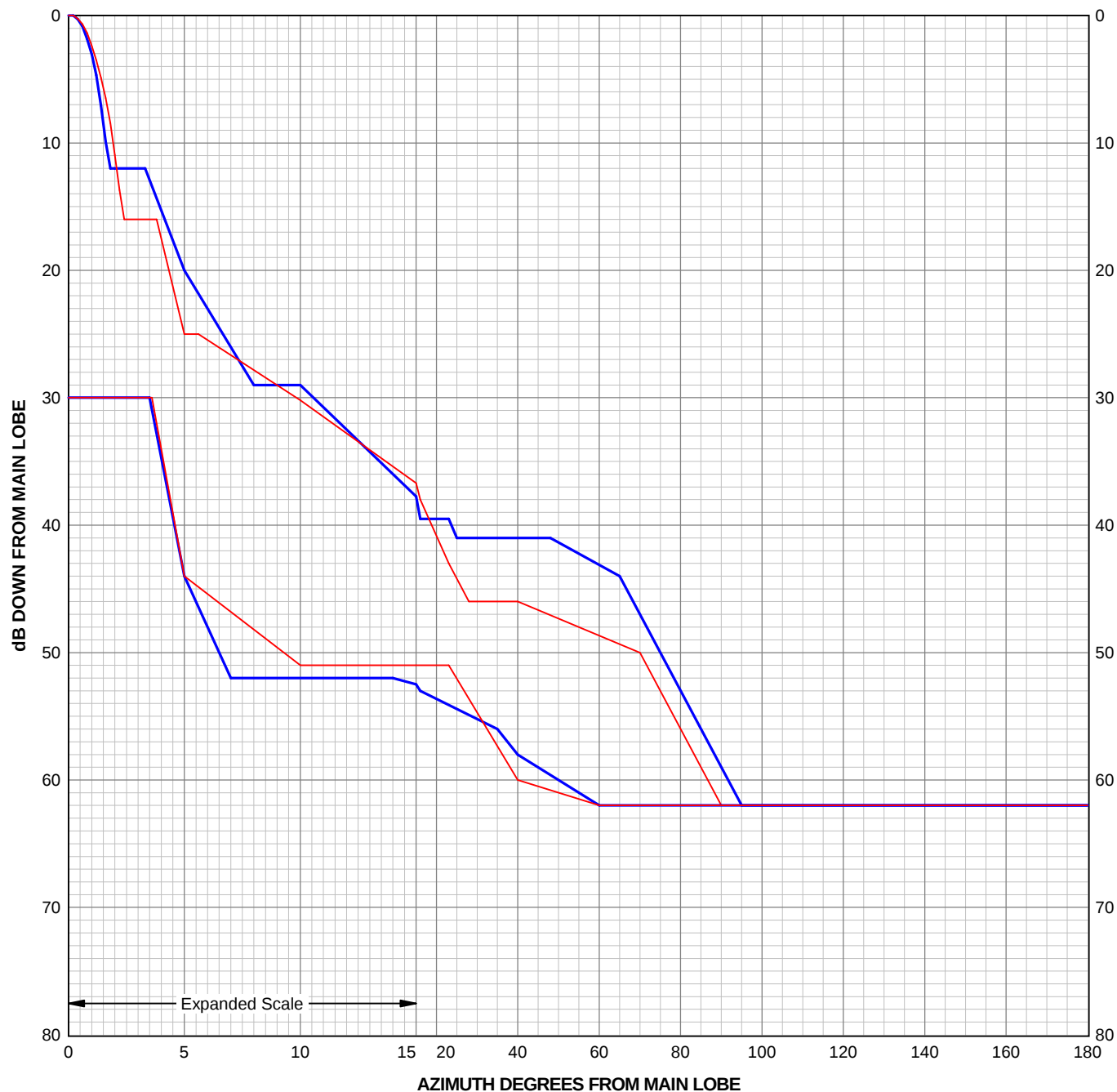
For further information, ask for Andrew Bulletin 1032, "Radiation Pattern Envelopes".



RPE 7027C

Engineering Approved:  
2 June 2025

ANDREW CORPORATION



Antenna Type Number: VHLPX1-32  
 1.00 Foot Antenna 31.000-33.400 GHz Dual Polarized  
 Gain: 38.90 dBi at 32.200 GHz  
 RPE: 7027C  
 Engineering Approved: 2 June 2025



| Angle  | H/H<br>dB | Angle  | H/V<br>dB | Angle  | V/V<br>dB | Angle  | V/H<br>dB |
|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| 0.00   | 0.00      | 0.00   | -30.00    | 0.00   | 0.00      | 0.00   | -30.00    |
| 0.20   | -0.01     | 3.50   | -30.00    | 0.20   | 0.00      | 3.60   | -30.00    |
| 0.40   | -0.29     | 5.00   | -44.00    | 0.40   | -0.25     | 5.00   | -44.00    |
| 0.60   | -0.85     | 7.00   | -52.00    | 0.60   | -0.68     | 10.00  | -51.00    |
| 0.80   | -1.84     | 14.00  | -52.00    | 0.80   | -1.37     | 23.00  | -51.00    |
| 1.00   | -3.06     | 16.00  | -53.00    | 1.00   | -2.41     | 40.00  | -60.00    |
| 1.20   | -4.67     | 35.00  | -56.00    | 1.20   | -3.51     | 60.00  | -62.00    |
| 1.40   | -7.08     | 40.00  | -58.00    | 1.40   | -4.88     | 180.00 | -62.00    |
| 1.60   | -9.91     | 60.00  | -62.00    | 1.60   | -6.48     |        |           |
| 1.80   | -12.00    | 180.00 | -62.00    | 1.80   | -8.45     |        |           |
| 2.00   | -12.00    |        |           | 2.00   | -10.95    |        |           |
| 3.30   | -12.00    |        |           | 2.20   | -13.70    |        |           |
| 5.00   | -20.00    |        |           | 2.40   | -16.00    |        |           |
| 8.00   | -29.00    |        |           | 3.80   | -16.00    |        |           |
| 10.00  | -29.00    |        |           | 5.00   | -25.00    |        |           |
| 16.00  | -39.50    |        |           | 5.60   | -25.00    |        |           |
| 23.00  | -39.50    |        |           | 10.00  | -30.20    |        |           |
| 25.00  | -41.00    |        |           | 16.00  | -38.00    |        |           |
| 48.00  | -41.00    |        |           | 23.00  | -43.00    |        |           |
| 65.00  | -44.00    |        |           | 28.00  | -46.00    |        |           |
| 95.00  | -62.00    |        |           | 40.00  | -46.00    |        |           |
| 180.00 | -62.00    |        |           | 70.00  | -50.00    |        |           |
|        |           |        |           | 90.00  | -62.00    |        |           |
|        |           |        |           | 180.00 | -62.00    |        |           |

The RPE is defined by connecting these points with straight lines.  
 PARALLEL POLARIZATION  
 HH - Horizontal port response to a horizontal signal  
 VV - Vertical port response to a vertical signal  
 CROSS POLARIZATION  
 HV - Horizontal port response to a vertical signal  
 VH - Vertical port response to a horizontal signal