

# RADIATION PATTERN ENVELOPE

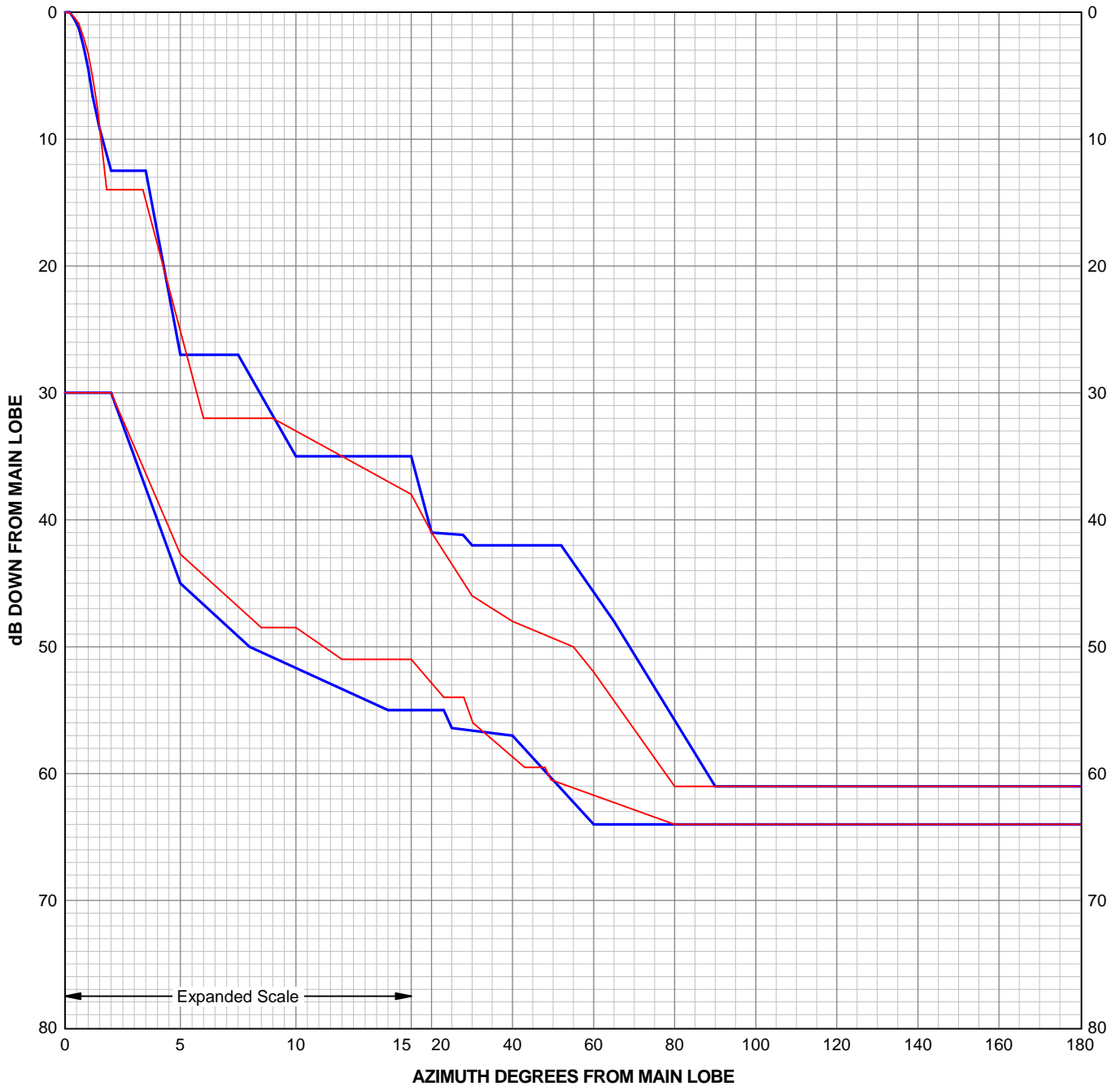
Antenna Type Number: VHLP1-38  
1.00 Foot Antenna 37.000-40.000 GHz Single Polarized  
Gain: 40.10 dBi at 38.500 GHz  
— Envelope for a Horizontally Polarized Antenna (HH, HV)  
— Envelope for a Vertically Polarized Antenna (VV, VH)  
For further information, ask for Andrew Bulletin 1032, "Radiation Pattern Envelopes".



RPE 7030B

Engineering Approved:  
25 May 2016

ANDREW CORPORATION



Antenna Type Number: VHLP1-38  
 1.00 Foot Antenna 37.000-40.000 GHz Single Polarized  
 Gain: 40.10 dBi at 38.500 GHz  
 RPE: 7030B  
 Engineering Approved: 25 May 2016



Angle	H/H dB	Angle	H/V dB	Angle	V/V dB	Angle	V/H dB
0.00	0.00	0.00	-30.00	0.00	0.00	0.00	-30.00
0.20	0.00	2.00	-30.00	0.20	-0.05	2.00	-30.00
0.40	-0.52	5.00	-45.00	0.40	-0.39	5.00	-42.70
0.60	-1.28	8.00	-50.00	0.60	-0.90	8.50	-48.50
0.80	-2.70	14.00	-55.00	0.80	-1.98	10.00	-48.50
1.00	-4.46	23.00	-55.00	1.00	-3.27	12.00	-51.00
1.20	-6.63	25.00	-56.40	1.20	-5.15	15.00	-51.00
1.50	-9.20	40.00	-57.00	1.40	-7.46	23.00	-54.00
2.00	-12.50	60.00	-64.00	1.60	-10.71	28.00	-54.00
3.50	-12.50	180.00	-64.00	1.80	-14.00	30.20	-56.00
5.00	-27.00			3.37	-14.00	43.00	-59.50
7.50	-27.00			6.00	-32.00	48.00	-59.50
10.00	-35.00			9.00	-32.00	49.50	-60.50
15.00	-35.00			15.00	-38.00	80.00	-64.00
20.00	-41.00			20.00	-41.00	180.00	-64.00
27.80	-41.20			30.00	-46.00		
30.00	-42.00			40.00	-48.00		
52.00	-42.00			55.00	-50.00		
65.00	-48.00			60.00	-52.00		
90.00	-61.00			80.00	-61.00		
180.00	-61.00			180.00	-61.00		

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