

0.9m (3ft) Low Profile Antennas

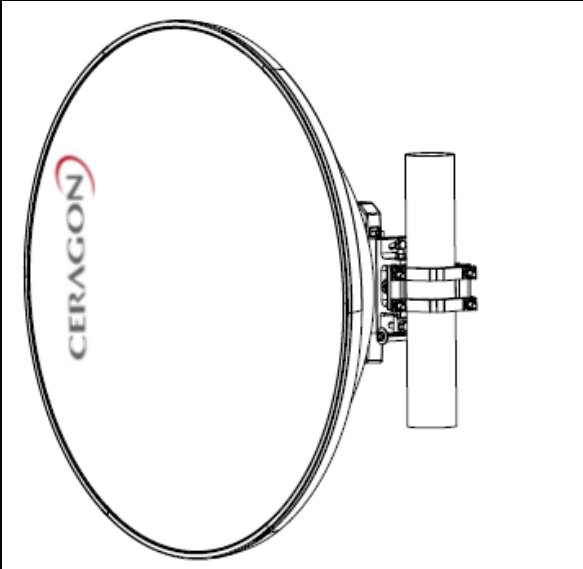
Microwave Antenna Specifications

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Release Date: 03/07/2016

General Specifications

	Nominal diameter	0.9m (3ft)
	Polarization	Dual, Vertical or Horizontal
	Radio interface	Direct Mount for RFU-C type ODU
	Antenna color	NCS S 2502 R Grey
	Radome color	NCS S 2502 R Grey
	Radome type	6 – 8, 13-26 GHz: UV Stabilized PC 10/11, 24 – 38 GHz: ABS/PMMA
	Packing type	Carton
	Gross weight, kg	21,4 – 27,8
	Packed dimensions, mm	L x W x H 395 x 1035 x 1065
	Packing Volume, m ³	0.435

Electrical Specifications

Antenna Marketing Model	Am-3-6-CIRC-CR1	Am-3-7_8-CIRC-CR1	Am-3-11W-CIRC-CR1	Am-3-13-CIRC-CR1	Am-3-15-CIRC-CR1
PN	AN-2565-0	AN-2566-0	AN-2567-0	AN-2568-0	AN-2569-0
Frequency Band (GHz)	5.925 – 7.125	7.100 – 8.500	10.000 - 11.700	12.750 - 13.250	14.400 - 15.350
Waveguide Interface	Ø31.8	Ø26	Ø18	Ø15	Ø13.5
Gain (dBi) Low	32.4	34.5	37.5	39.9	40.5
Gain (dBi) Mid	33.5	35.5	38.5	40.0	40.9
Gain (dBi) High	34.2	36.1	38.3	40.0	41.1
3 dB Beam Width (°)	3.7	3.0	2.0	1.8	1.6
VSWR	1.33	1.35	1.46	1.30	1.30
F/B Ratio (dB)	60	62	64	65	69
XPD (dB)	30	30	30	30	30
ETSI Compliance	R1, C3	R1, C3	R1, C3	R1, C3	R2, C3
FCC Compliance	Cat B2	N/A	Cat A	Cat B	N/A
RPE Number	906-HAE0609	906-HAE0809	906-HAE1109	906-HAE1309	906-HAE1509

Antenna Marketing Model	Am-3-18-CIRC-CR1	Am-3-23-CIRC-CR1	Am-3-26-CIRC-CR1	Am-3-28-CIRC-CR1	Am-3-32-CIRC-CR1
PN	AN-2570-0	AN-2571-0	AN-2572-0	AN-2573-0	AN-2574-0
Frequency Band (GHz)	17.700 – 19.700	21.200 – 23.600	24.000 - 26.500	27.500 - 29.600	31.000 - 33.400
Waveguide Interface	Ø10.5	Ø9	Ø8	Ø7	Ø6.5
Gain (dBi) Low	42.4	44.5	45.4	46.8	46.9
Gain (dBi) Mid	43.5	44.9	45.7	46.9	47.6
Gain (dBi) High	44.1	45.4	45.8	47.0	47.5
3 dB Beam Width (°)	1.3	1.0	0.9	0.8	0.7
VSWR	1.30	1.30	1.30	1.30	1.30
F/B Ratio (dB)	71	69	71	72	70
XPD (dB)	30	30	30	30	30
ETSI Compliance	R4, C3	R4, C3	R4, C3	R5, C3	R5, C3
FCC Compliance	Cat A	Cat A	Cat A	N/A	N/A
RPE Number	906-HAE1809	906-HAE2309	906-HAE2609	906-HAE2809	906-HAE3209

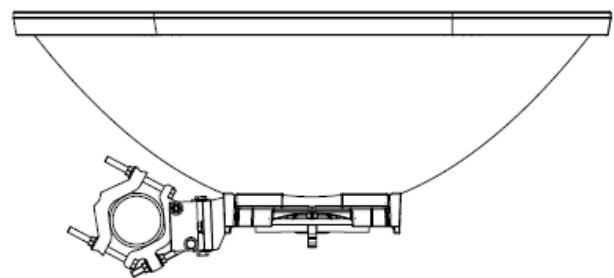
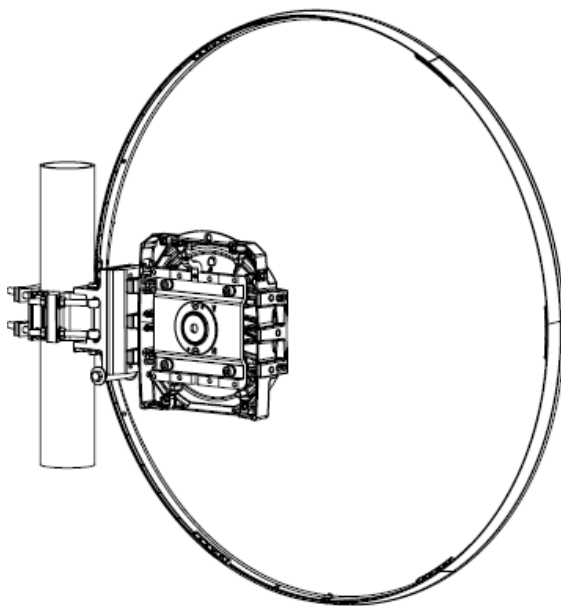
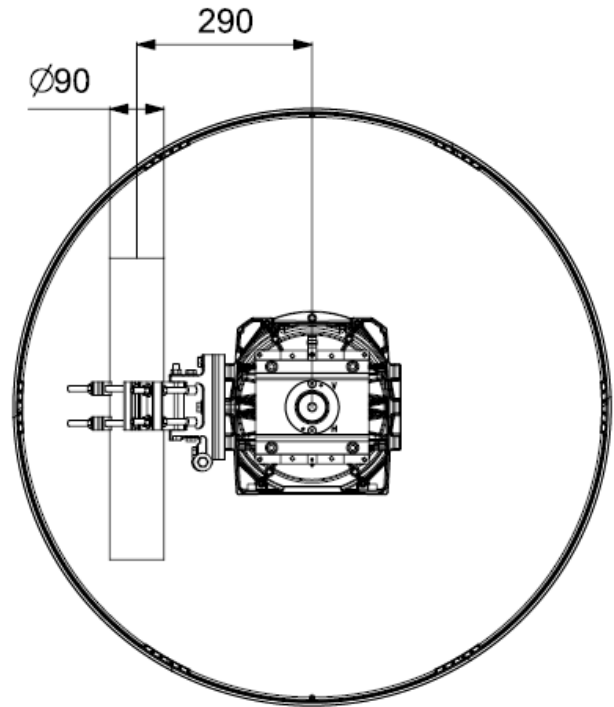
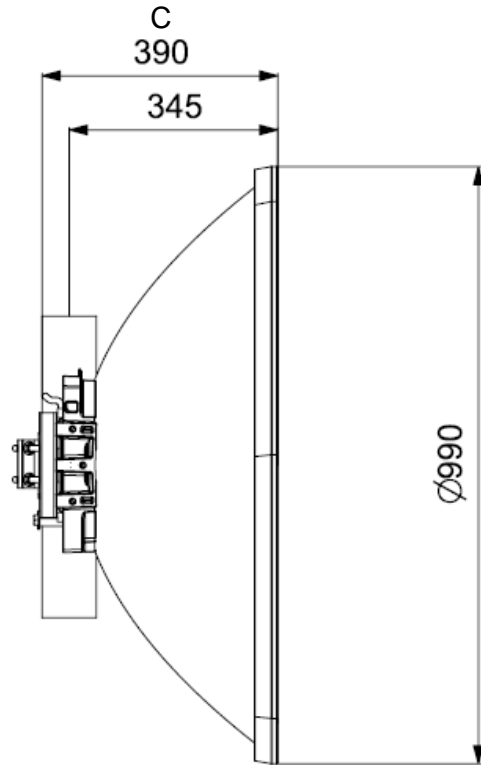
Antenna Marketing Model	Am-3-38-CIRC-CR1
PN	AN-2575-0
Frequency Band (GHz)	37.000 – 40.000
Waveguide Interface	Ø5.5
Gain (dBi) Low	49.2
Gain (dBi) Mid	49.6
Gain (dBi) High	49.1
3 dB Beam Width (°)	0.7
VSWR	1.30
F/B Ratio (dB)	70
XPD (dB)	30
ETSI Compliance	R5, C3
FCC Compliance	Cat A
RPE Number	906-HAE3809

Mechanical Specifications

Wind Velocity Operational, km/h	180
Wind Velocity Survival Rating, km/h	250
Ice Load, mm	25
Azimuth, Adjustment, Degrees	±15
Elevation Adjustment, Degrees	±15
Mounting Pipe Diameter, mm	50 to 120
Net weight, kg	6 GHz: 17,2kg 7/8 GHz: 17,2kg 10/11GHz 22,8kg 13 GHz 16,5kg 15 GHz 16,5kg 18 GHz 16,5kg 23 GHz 16,4kg 24/26 GHz 18,2kg 28 GHz 18,2kg 32 GHz 17,7kg 38 GHz 17,3kg
Feed horn, Operational Pressure, KPa	40
Operational Temperature, °C	-45 to +55
Storage Temperature, °C	-55 to +85
Adjustment Struts	None
Fixed Support Struts	None
Humidity	100%
Rain Intensity, mm/min	15
Solar Radiation, W/m ²	1120
Electrical properties	ETSI EN 302 217-4-2
Vibration	ETSI 300 019-2-4 V2.2.2 (2003-04) T4.1E:4M5
RoHS 2002/95/EC	Compliant

Outline Dimensions (mm)

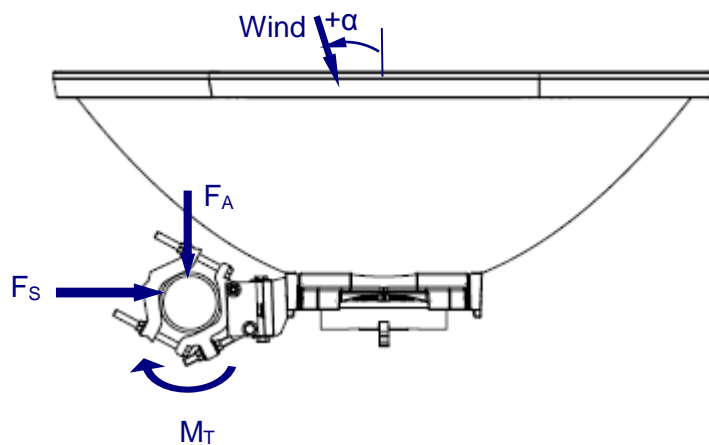
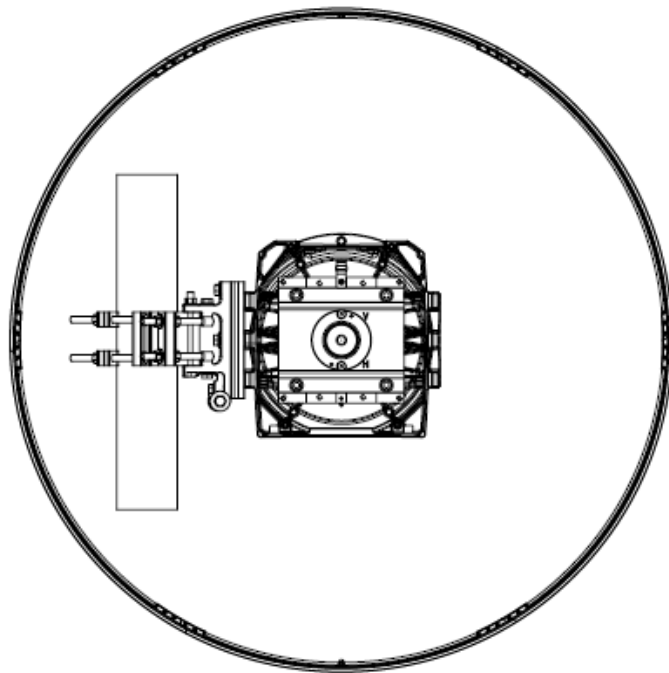
	6-8GHz	10/11GHz	13-23GHz	26-38GHz
A	90 to 120	90 to 120	90 to 120	90 to 120
B	990	982	990	982
C	411	588	384	562
D	290	290	290	290
E	345	523	345	523



Wind Forces

The axial, side and twisting moment forces stated are maximum loads applied to the tower by the antenna at a survival wind speed of 250 km/h (70 m/s). They are, in every case, the result of wind from the most critical direction for each parameter. The individual maximums may not occur simultaneously. All forces are referenced to the antenna mounting pipe.

Axial Force (F_A), N	2043 (convex radome) / 2503 (flat radome)
Side Force (F_S), N	683N / 623N
Twisting Moment (M_T), N•m	774



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

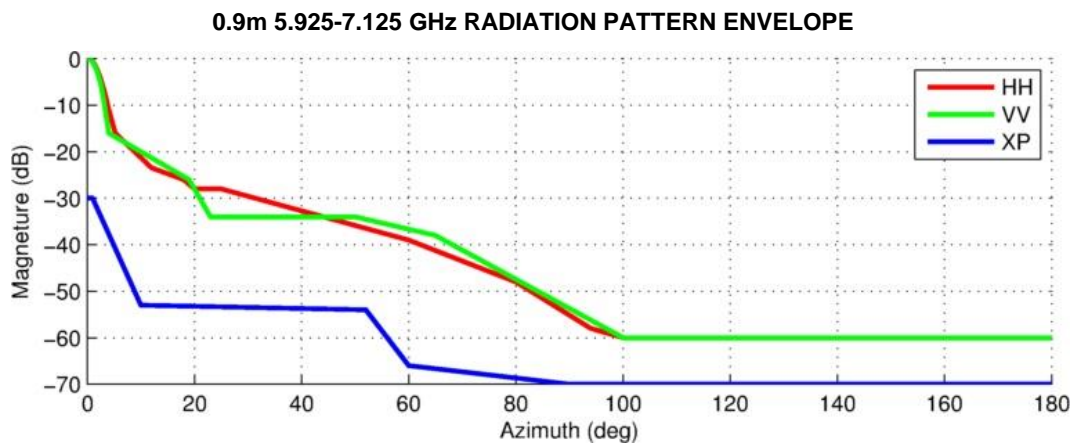
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-06W-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

VV – Response of vertically polarized port to a vertically polarized signal.

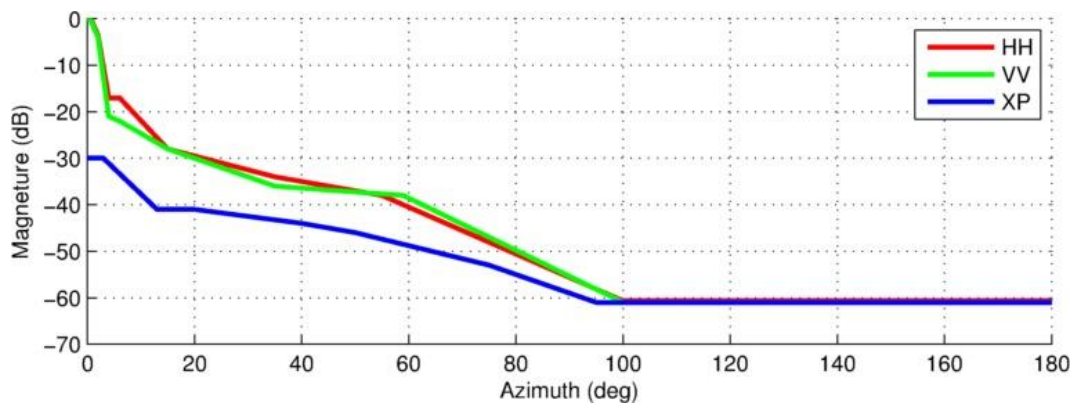
XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-08W-CR

0.9m 7.10-8.50 GHz RADIATION PATTERN ENVELOPE



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

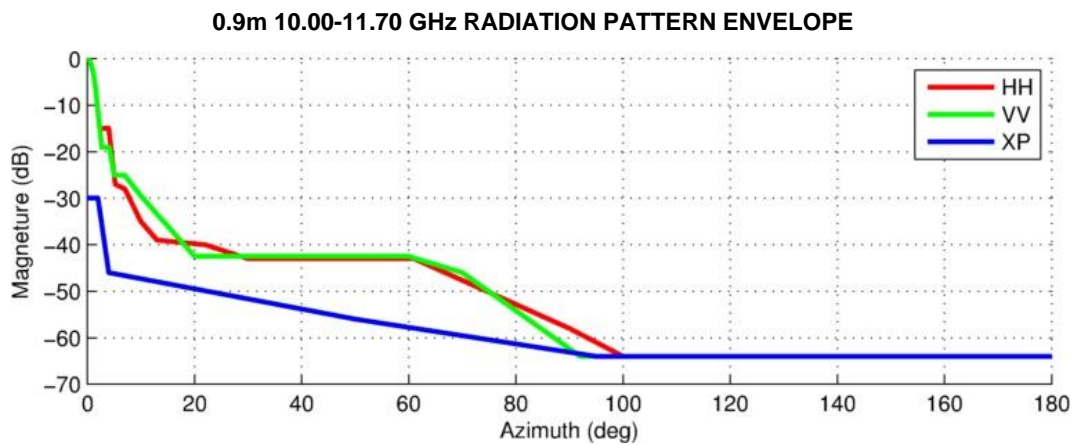
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-11W-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

VV – Response of vertically polarized port to a vertically polarized signal.

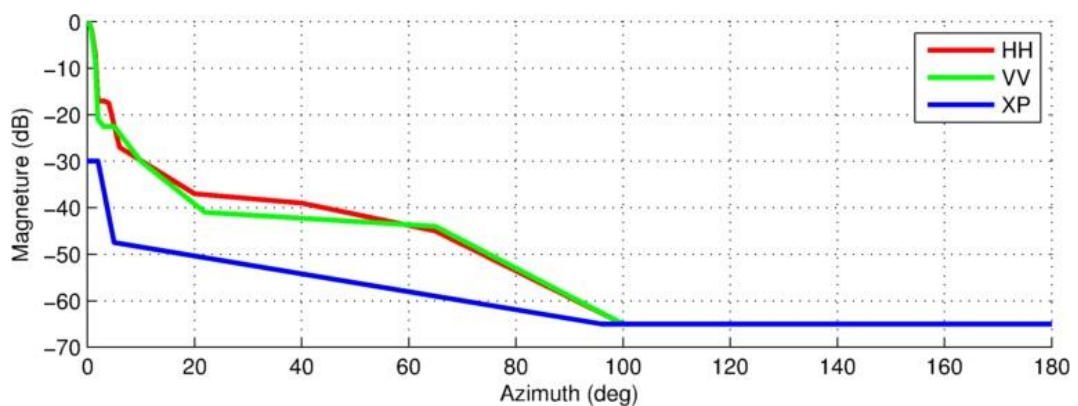
XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-13-CR

0.9m 12.75-13.25 GHz RADIATION PATTERN ENVELOPE



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

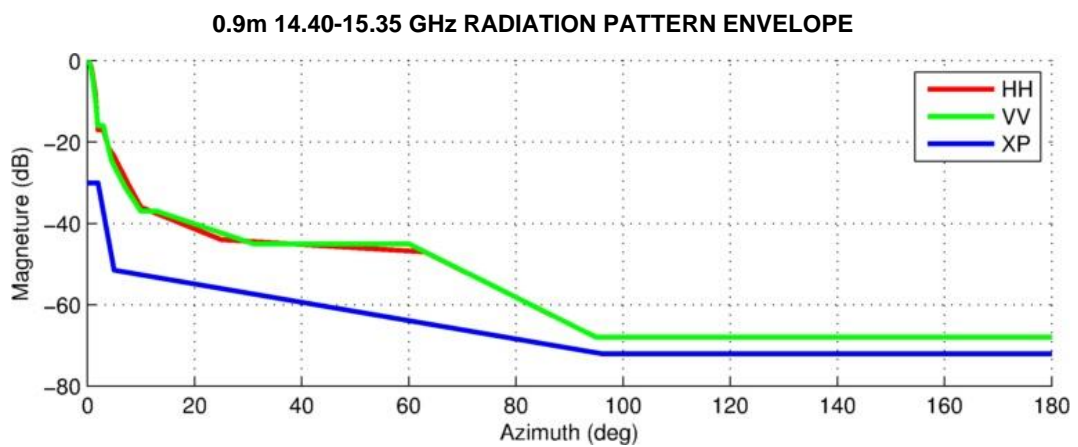
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-15-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

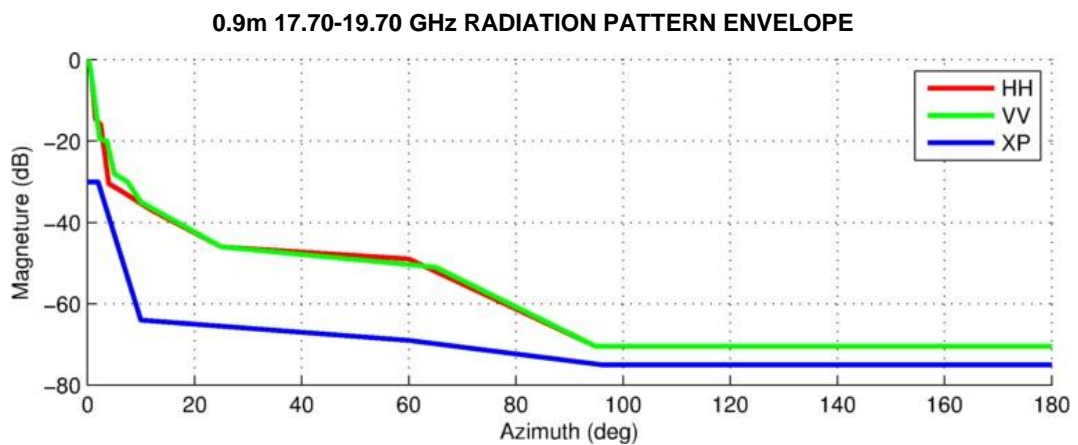
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-18-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

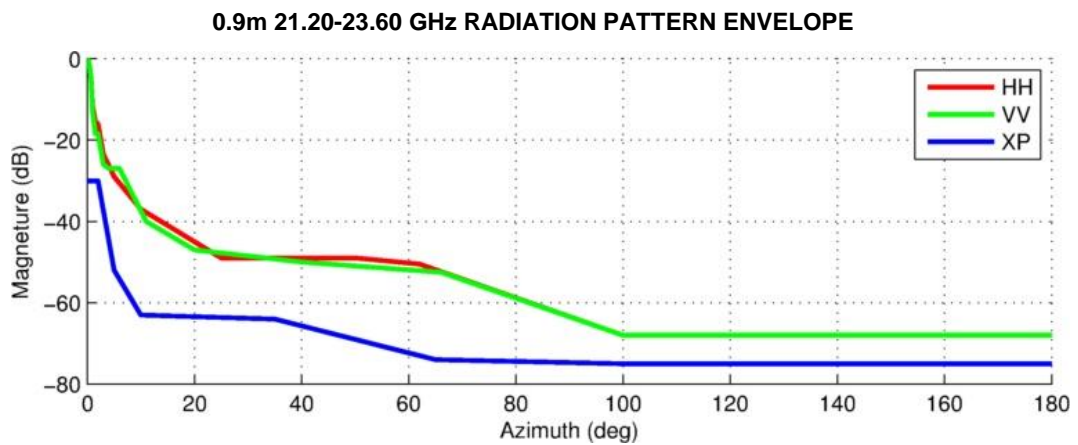
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-23-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

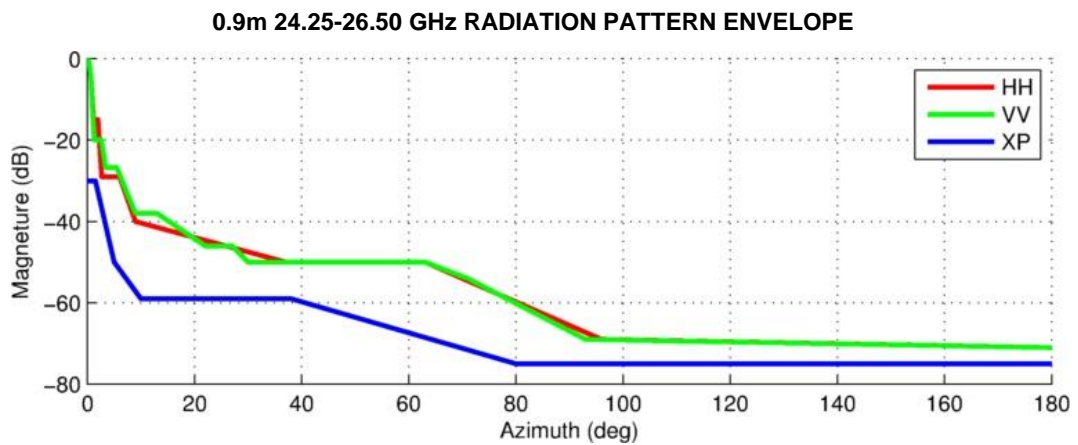
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-26-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

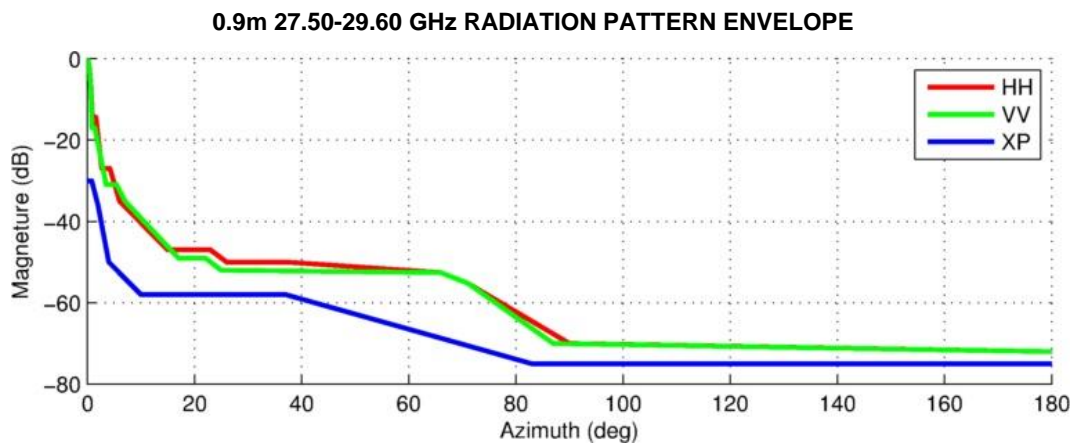
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-28-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

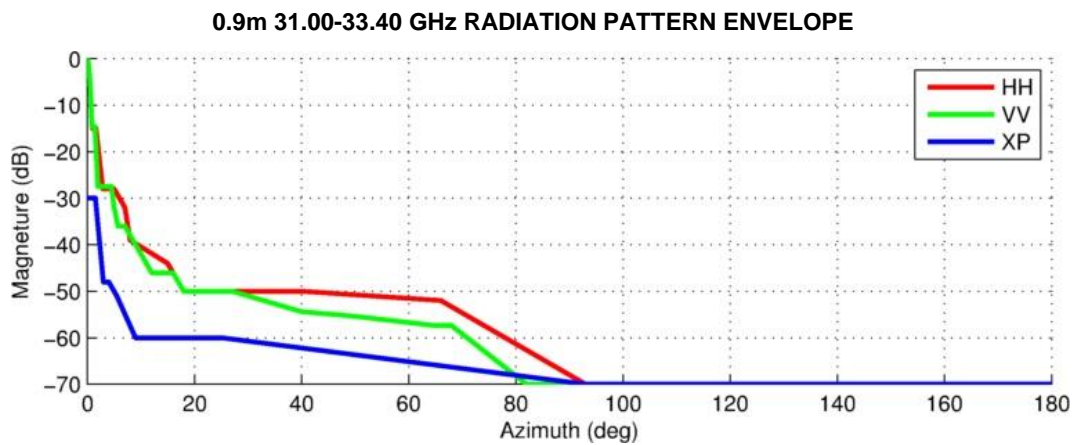
VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-32-CR



Radiation Pattern Envelope

Co-polar and Xp-polar response are represented for both horizontal and vertical polarizations. The curves are identified as follows:

HH – Response of horizontally polarized port to a horizontally polarized signal.

VV – Response of vertically polarized port to a vertically polarized signal.

XP – HV/VH

HV – Response of horizontally polarized port to a vertically polarized signal.

VH – Response of vertically polarized port to a horizontally polarized signal.

Am-3-38-CR

