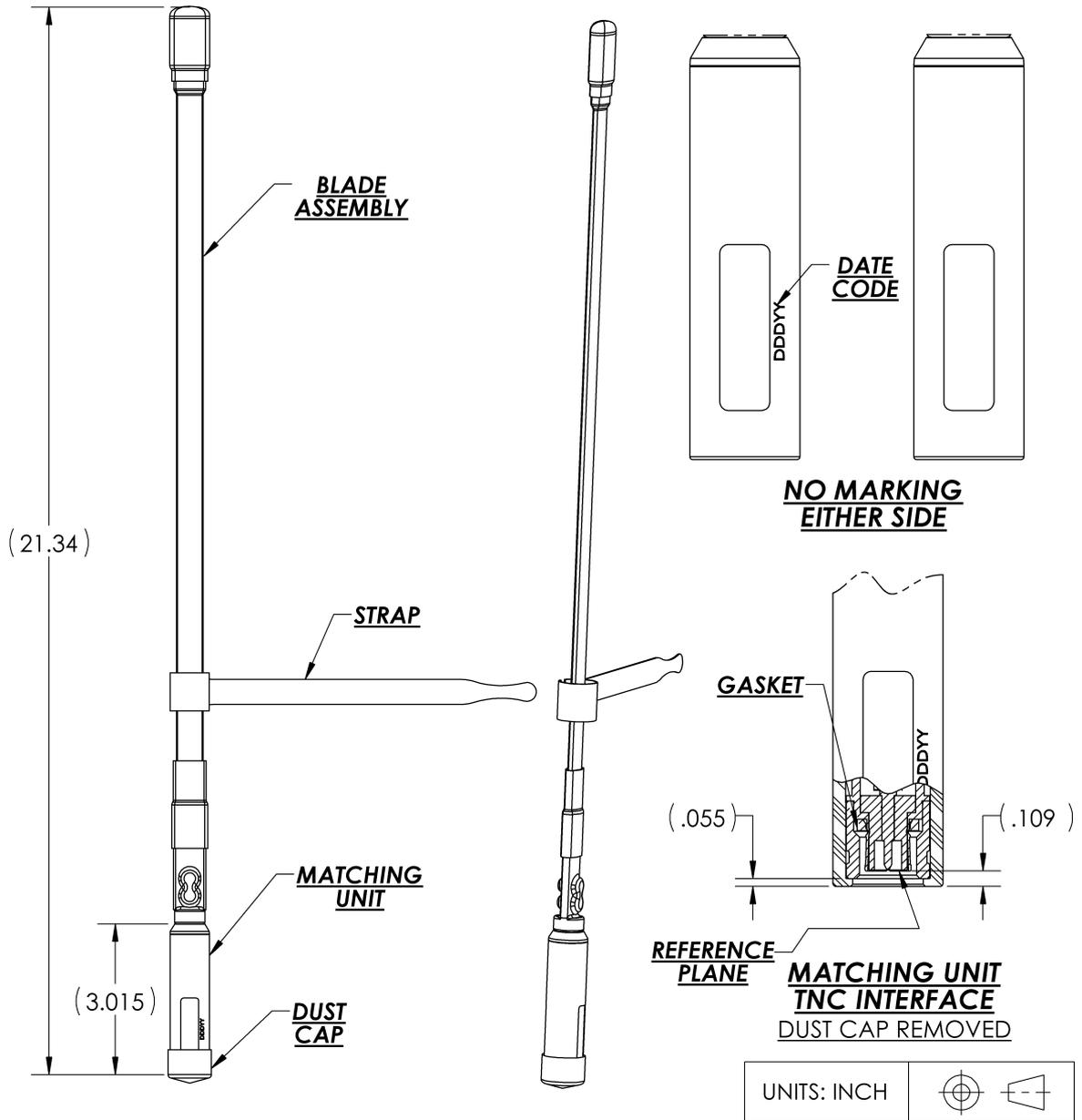


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All dimensions are in inches. Tolerances according ISO 2768 m-H

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ELECTRICAL CHARACTERISTICS

Frequency :	30-512	MHz
Nominal Impedance :	50	Ω
VSWR :	3.5:1	Max
Typical Gain @ 90° (Horizon) :	See Radiation Plots	
	>-30 dBi	30-90 MHz
	>-10 dBi	90-150 MHz
	>-6 dBi	150-200 MHz
	>-6 dBi	200-420 MHz
	>-10dBi	420-512 MHz
Typical Peak Gain :	>-30 dBi	30-90 MHz
	>-10 dBi	90-150 MHz
	>-6 dBi	150-200 MHz
	>-3 dBi	200-420 MHz
	>-2.5dBi	420-512 MHz
Radiation Pattern		
Horizontal Plane ($\Theta=90^\circ$):	Omni-directional	
Vertical Plane ($\Phi=0^\circ/90^\circ$):	Dipolar	
Polarization :	LINEAR VERTICAL	
Power withstanding :	20	W duty cycle (1min on/1 min off)
Connector type :	TNC Male	

MECHANICAL CHARACTERISTICS

Antenna Color :	BLACK	
Matching Unit Material :	PET 35% GF, Black	
Matching Unit Texture :	Mold-Tech MT 11040	
Matching unit length:	3.05	in
Blade Material:	Stainless Steel	
Blade flexibility	500	cycles
	0-90° Around Ø5.0"	
Weight (antenna):	3.9	Oz
Overall Length :	21.37 ± 0.25	Inch

ENVIRONMENTAL CHARACTERISTICS

Operating temperature :	-40/+70	$^\circ\text{C}$
	MIL-STD-810F, Methods 501.4 & 502.4, Proc. II	
Storage temperature :	-40/+85	$^\circ\text{C}$
	MIL-STD-810F, Methods 501.4 & 502.4, Proc. I	
Thermal Shocks :	Range 1: +25 +65 -40	$^\circ\text{C}$
	Range 2: +25 +65 +85	$^\circ\text{C}$
	MIL-STD-810F, Methods 503.4, Procedure I, Steady State	
Humidity (Non-condensing) :	95%	Relative Humidity
	Through Op. Temp range MIL-STD-810E, Meth 507.3 & 502.3, Proc. III	
Salt Fog	5%	Salt Hrs
	96	
	MIL-STD-810F, Methods 509.4	
Shock : (Transit Drops)	Drop Height 1.2	m
	MIL-STD-810F, Meth 516.5, Proc. IV, 26 Drops (Stand Alone)	
Immersion :	2	m min
	30	
	MIL-STD-810F, Meth 512.4, Procedure I, (27°C above ambient preconditioning temp.)	

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Vibration : (loose cargo)	MIL-STD-810F, Method 514.5, Procedure II, Category 5, Attached to transceiver & Stand alone, 30,000	
Altitude (Operational) :	MIL-STD-810E, Method 500.3, Procedures I & II	Ft
Icing / Freezing:	Encapsulate Antenna in Ice Ice Thickness 13	mm min
Sand & Dust:	MIL-STD-810F, Method 510.4, Procedure I & Procedure II	
Fungus	US Standard Set Of Test Fungi Duration 28	days
Solar Radiation	MIL-STD-810F, Method 508.5	
	Test Category A1, Curve W MIL-STD-810F, Methods 505.4, Procedure I	

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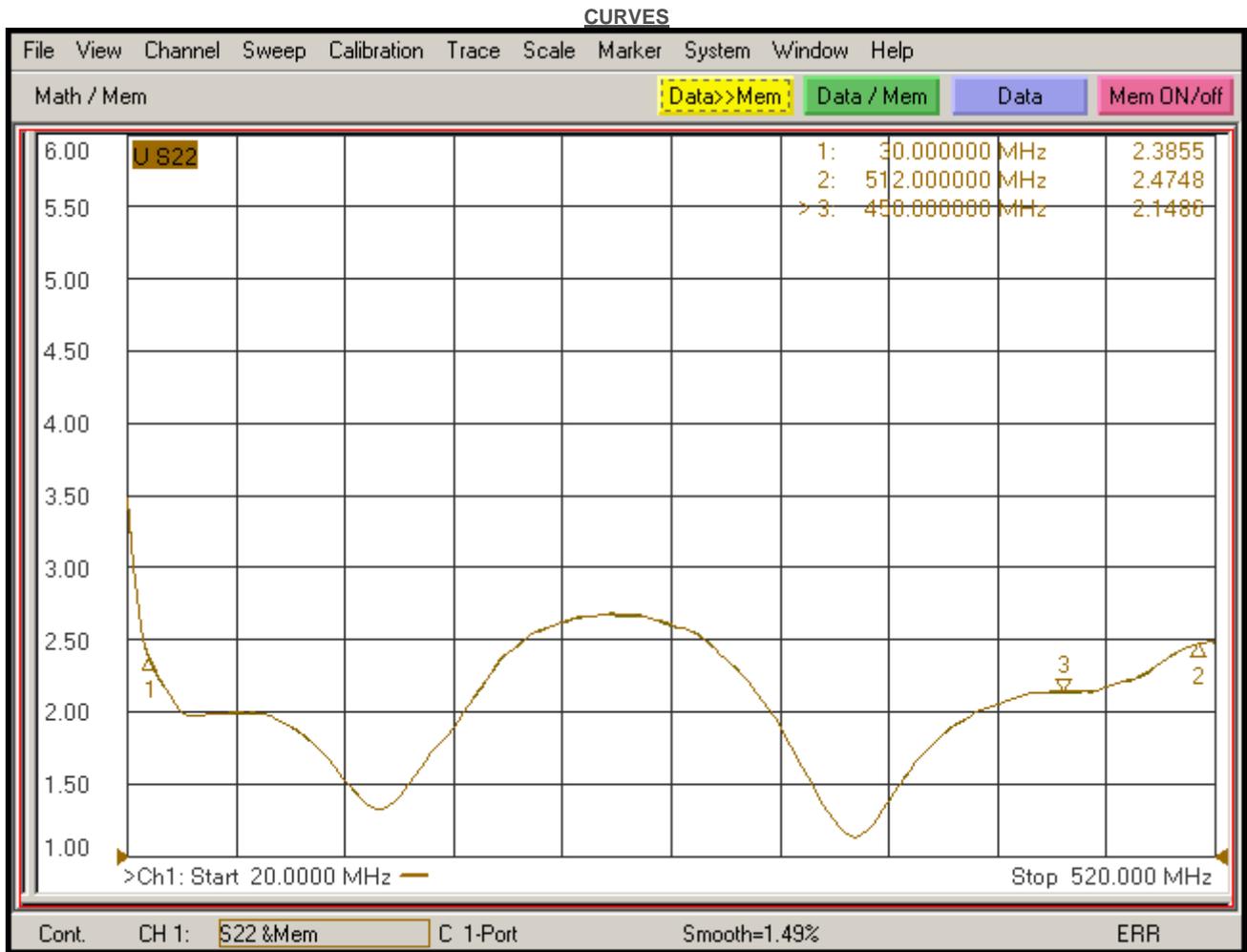


Figure 1: Typical VSWR plot: Antenna mounted on a HandHeld, 1m above ground

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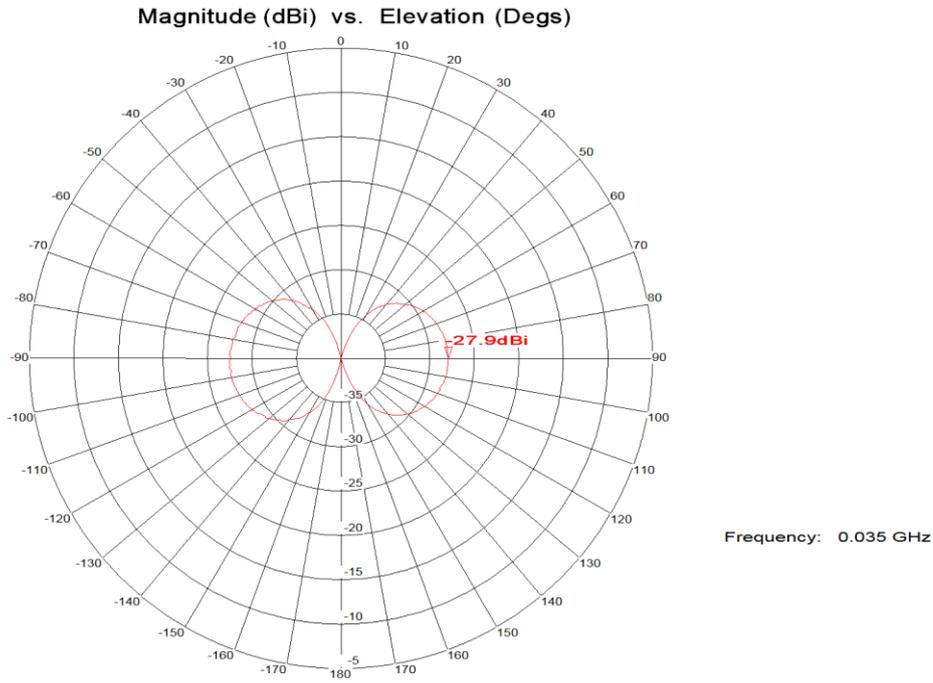


Figure 2: Radiation Pattern – Elevation cut plane – Freq = 35 MHz

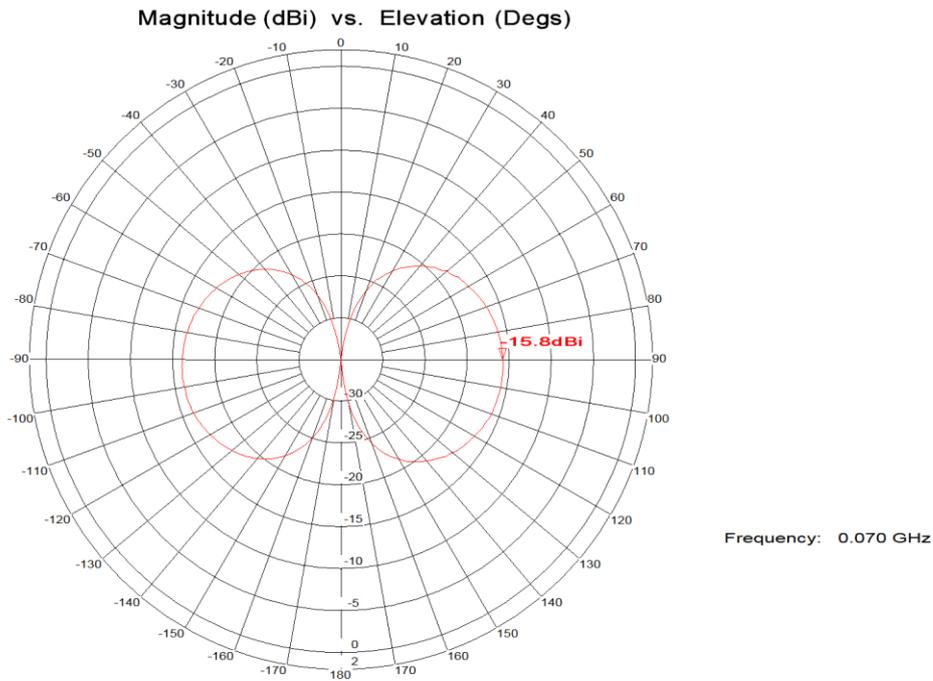


Figure 3: Radiation Pattern – Elevation cut plane – Freq = 70MHz

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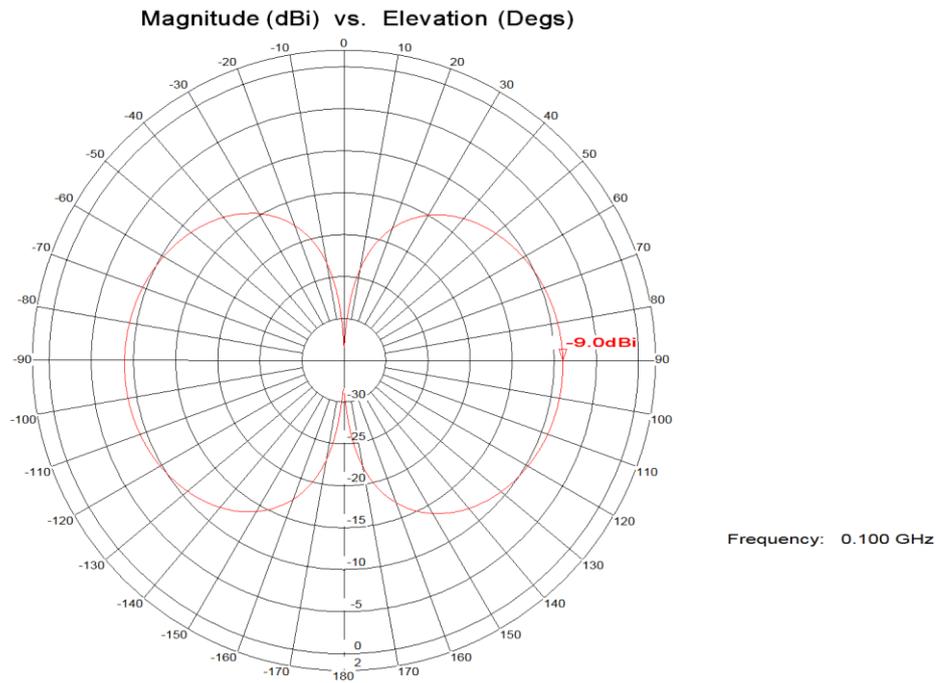


Figure 4: Radiation Pattern – Elevation cut plane – Freq = 100 MHz

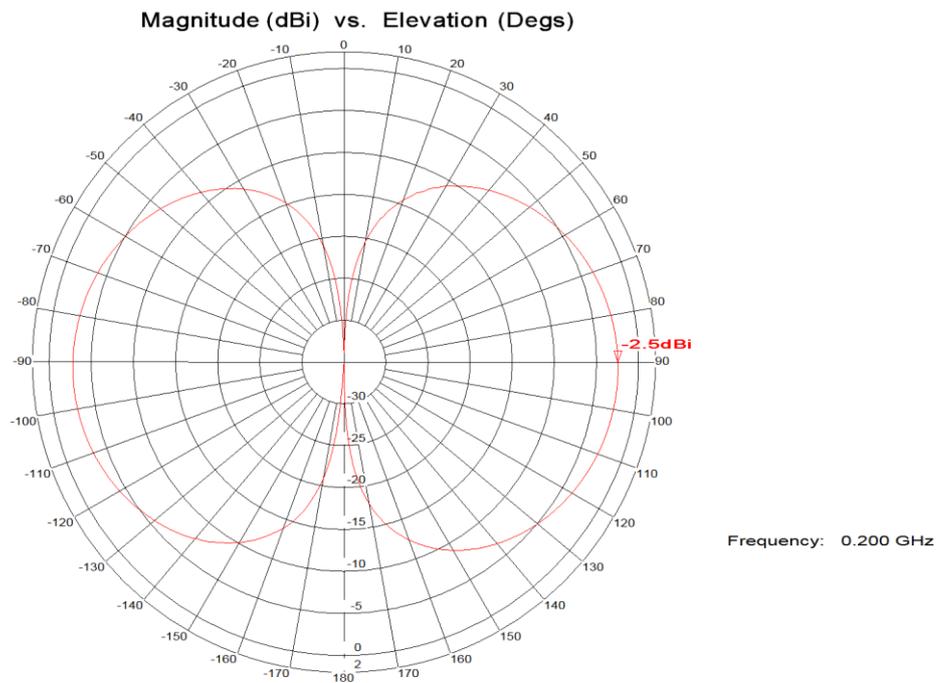


Figure 5: Radiation Pattern – Elevation cut plane – Freq = 200 MHz

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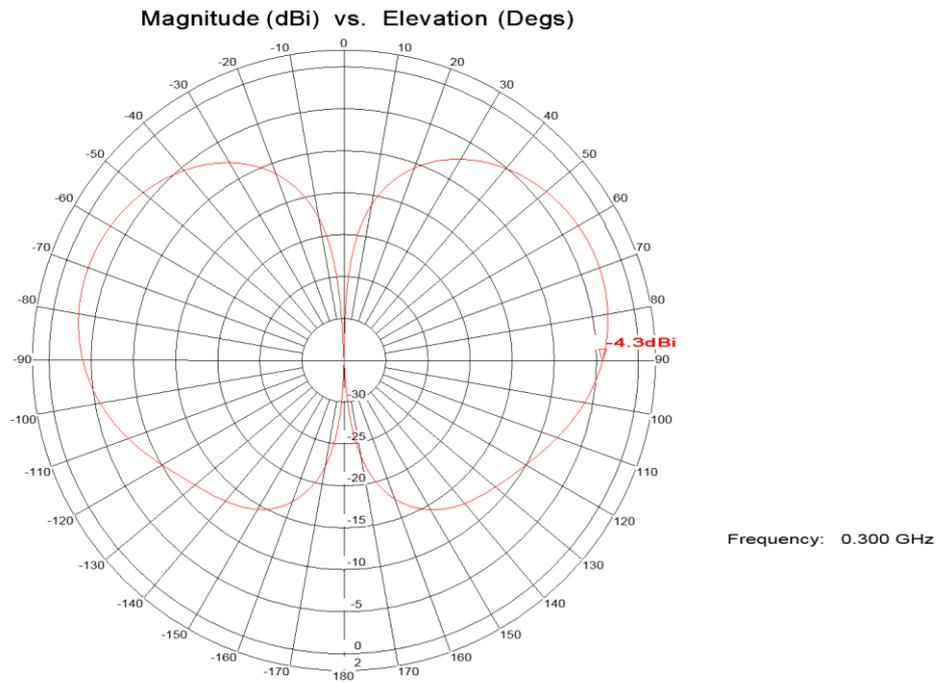


Figure 6: Radiation Pattern – Elevation cut plane – Freq = 300 MHz

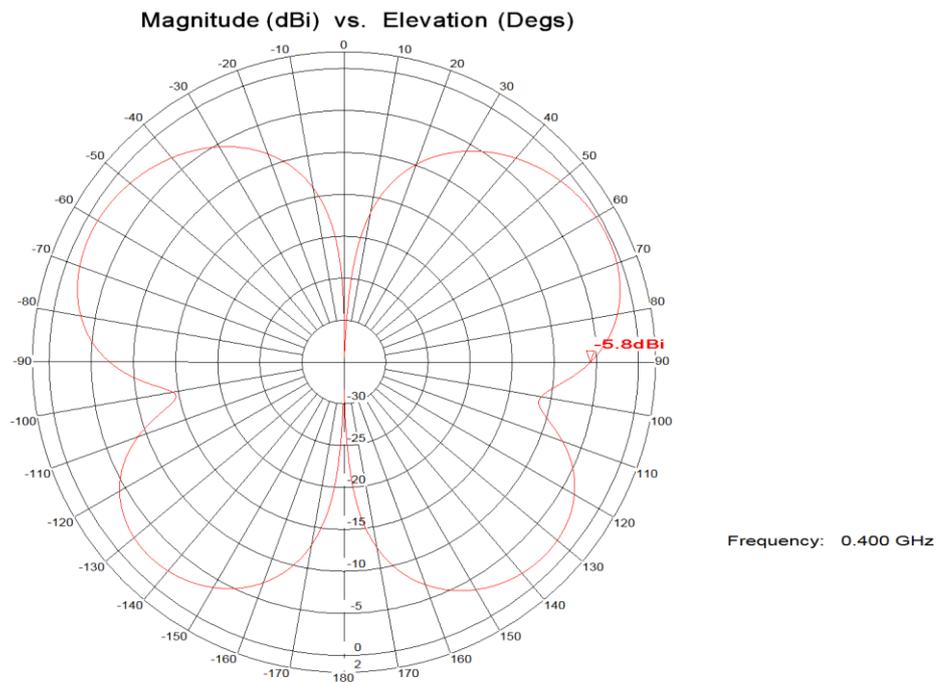


Figure 7: Radiation Pattern – Elevation cut plane – Freq = 400 MHz

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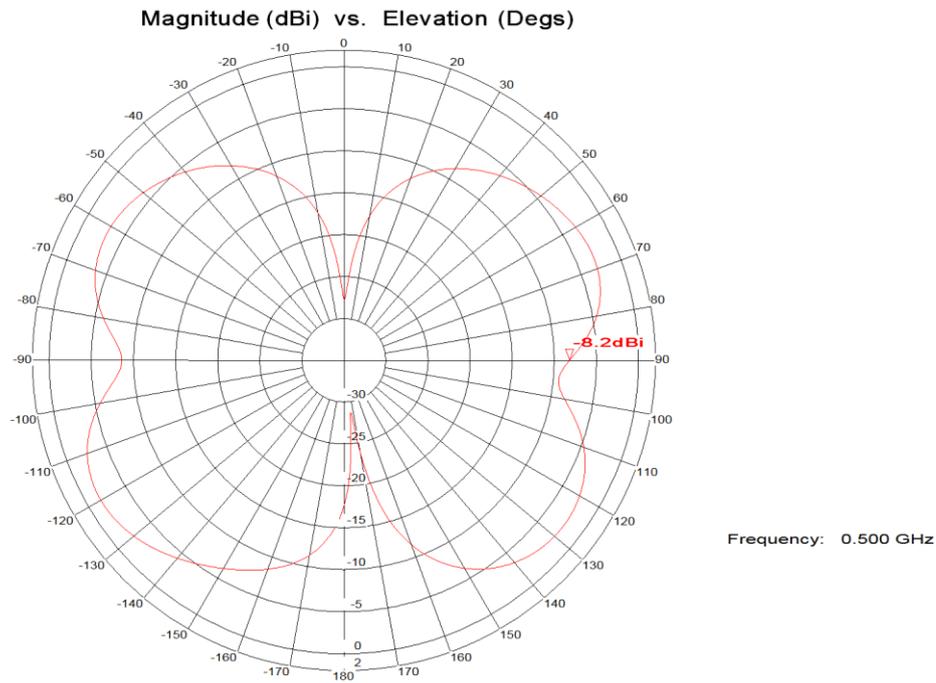


Figure 8: Radiation Pattern – Elevation cut plane – Freq = 500 MHz