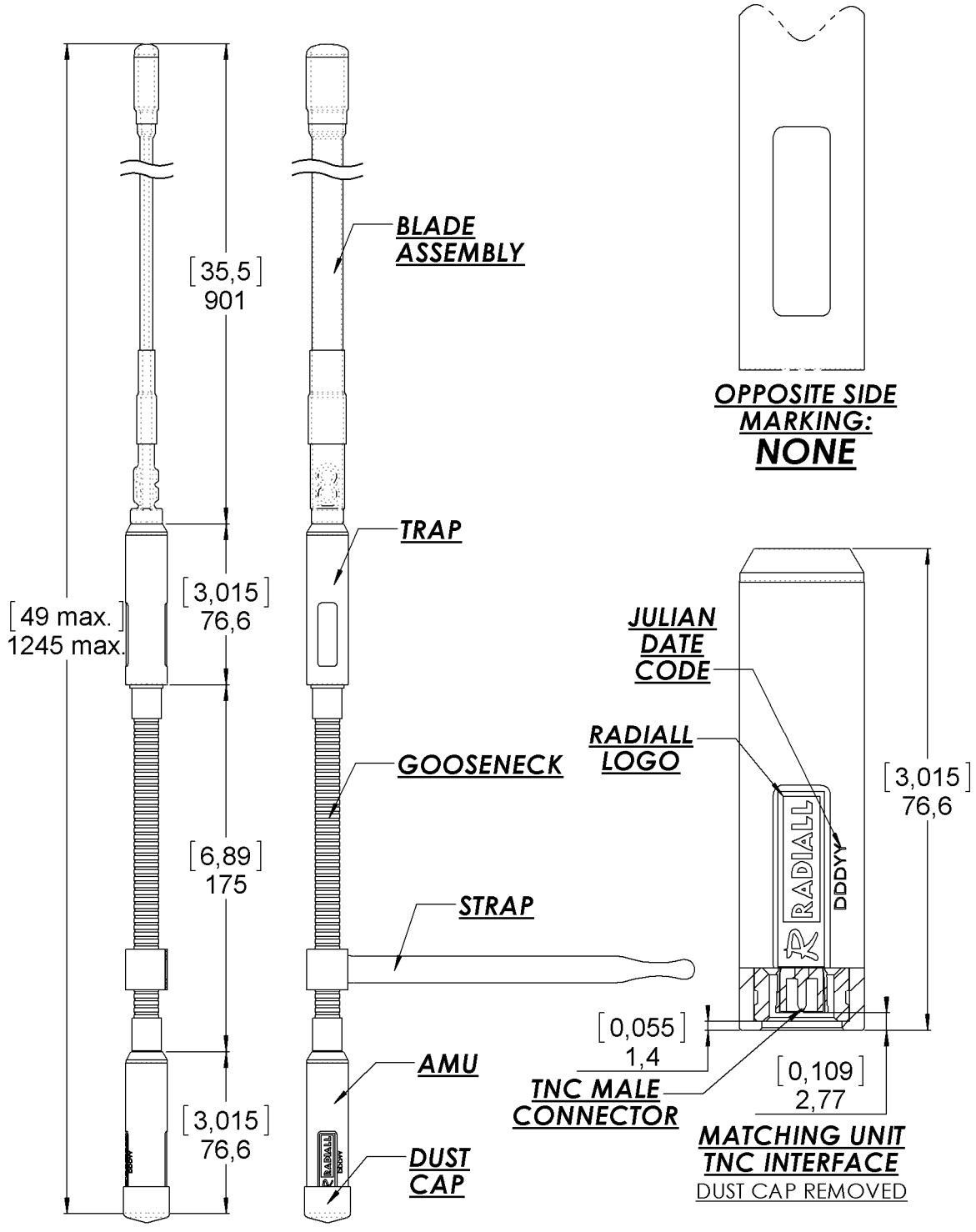
PAGE 1/7	ISSUE 04-05-15C	SERIES ANTENNA	PART NUMBER R380000165

Scale 1 : 3



All dimensions are in mm

ELECTRICAL CHARACTERISTICS

Frequency :	**30-512**	MHz
Nominal Impedance :	**50**	Ω
VSWR (Walkie Talkie) :	**3.5:1**	Max
Typical Gain @ 90°(Horizon) :	**See Plots**	
Radiation Pattern		
Horizontal Plane (Θ=90°) :	**Omnidirectional**	
Vertical Plane (Φ=0°/90°) :	**Dipolar**	
Polarization :	**LINEAR VERTICAL**	
Power Handling :	**20**	W duty cycle (1min on/1 min off)
Connector type :	**TNC**	

MECHANICAL CHARACTERISTICS

Antenna color :	**MATTE BLACK**	
Matching unit material :	**PET 35% GF (Dupont Rynite 935)**	
Matching unit texture :	**Mold-Tech MT 11040**	
Matching unit length :	**76.6**	mm
Blade material :	**Stainless steel**	
Blade flex test :	**500** **0-180°around ø10 mm**	Cycles
Gooseneck Flexibility :	**500** **0-90°around ø150 mm**	Cycles
Gooseneck Stiffness :	**Horizontal, 0.73 (w/o Deflection)** **Horizontal, 0.997 (w/ 45°deflection)** **Bent 90°, 0.54 (w/ 45°deflection)**	kg kg kg
Weight :	**349.10**	g max
Overall length :	**1250**	mm

ENVIRONMENTAL CHARACTERISTICS

Operating temperature :	**-40/+70** **MIL-STD-810F, Methods 501.4 & 502.4, Proc. II**	°C
Storage temperature :	**-40/+85** **MIL-STD-810E, Methods 501.4 & 502.4, Proc. I**	°C
Thermal Shocks :	**Range 1: +25 +65 -40** **Range 2: +25 +65 +85** **MIL-STD-810F, Meth. 503.4, Proc. I Steady State**	°C °C
Humidity (Non-condensing) :	**95%** **Through Op. Temp range** **MIL-STD-810E, Meth 507.3 & 502.3, Proc. III**	Relative Humidity
Salt Fog	**5%** **96** **MIL-STD-810F, Methods 509.4**	Salt Hrs
Shock : (Transit Drops)	**Drop Height 1.2** **MIL-STD-810F, Meth 516.5, Proc. IV,** **26 Drops (Stand Alone)**	m
Immersion :	**2** **30** **MIL-STD-810F, Meth 512.4, Procedure I, (27°C above ambient preconditioning temp.)**	m min
Vibration : (loose cargo)	**MIL-STD-810F, Method 514.5, Procedure II, Category 5, Attached to transceiver & Stand alone,**	
Altitude (Operational) :	**30,000** **MIL-STD-810E, Method 500.3, Procedures I & II**	Ft

ELECTRICAL CURVES

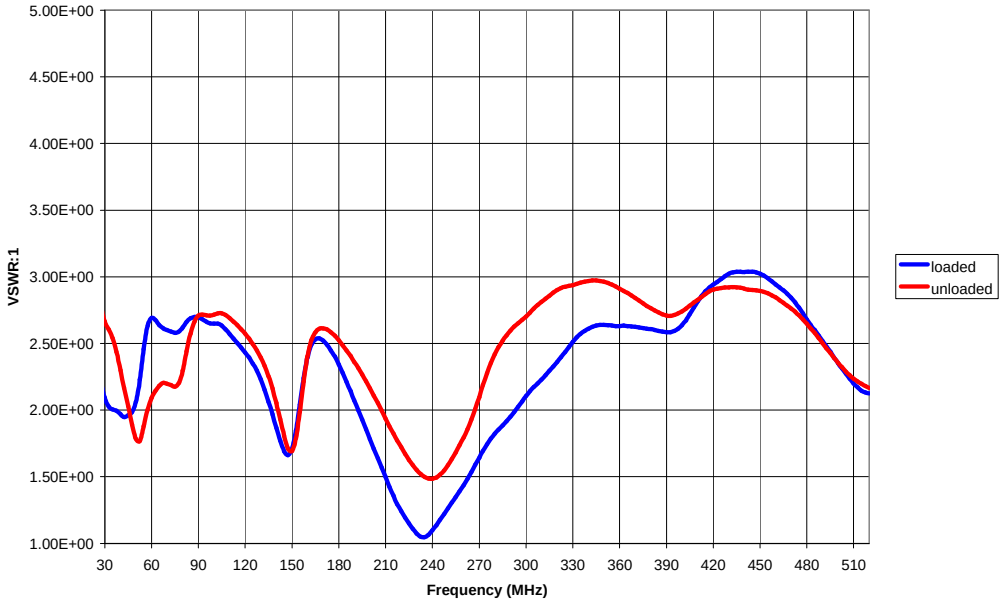


Figure 1: Typical VSWR with Antenna mounted on a transceiver, 1m above ground.

Elevation Pattern Data with Antenna measured on a simulated Radio Chassis

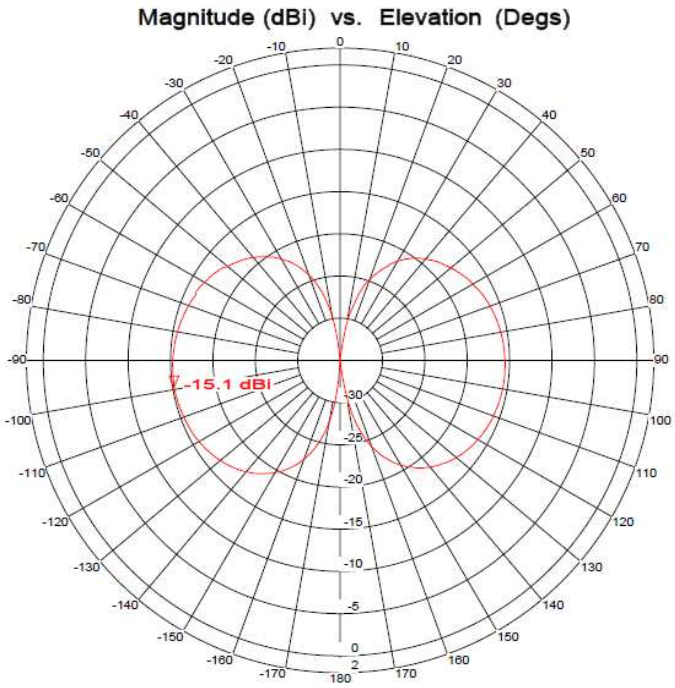


Figure 2: Typical Elevation Pattern Data @ 45MHz

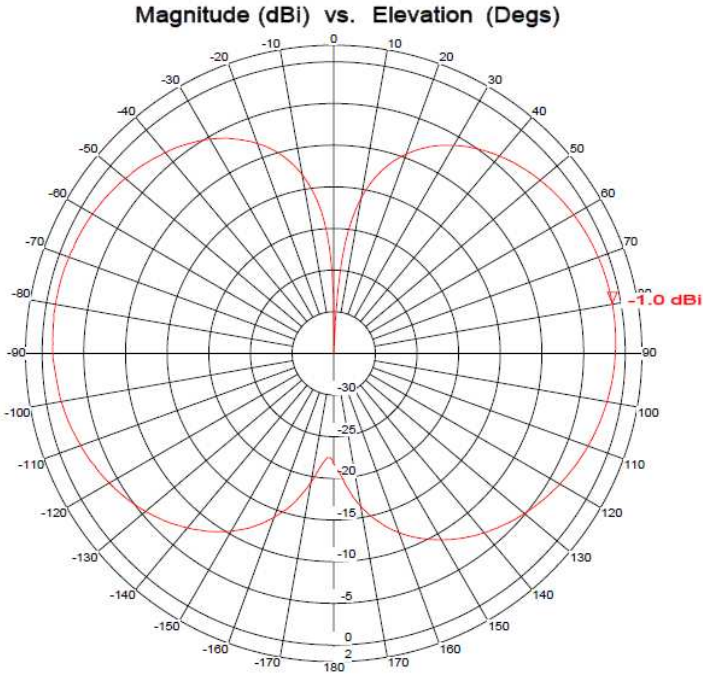


Figure 3: Typical Elevation Pattern Data @75MHz

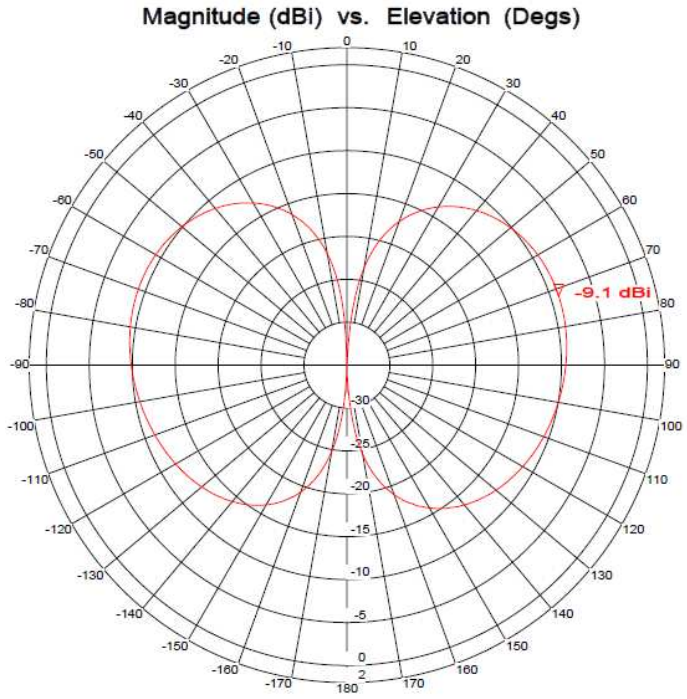


Figure 4: Typical Elevation Pattern Data @ 100MHz

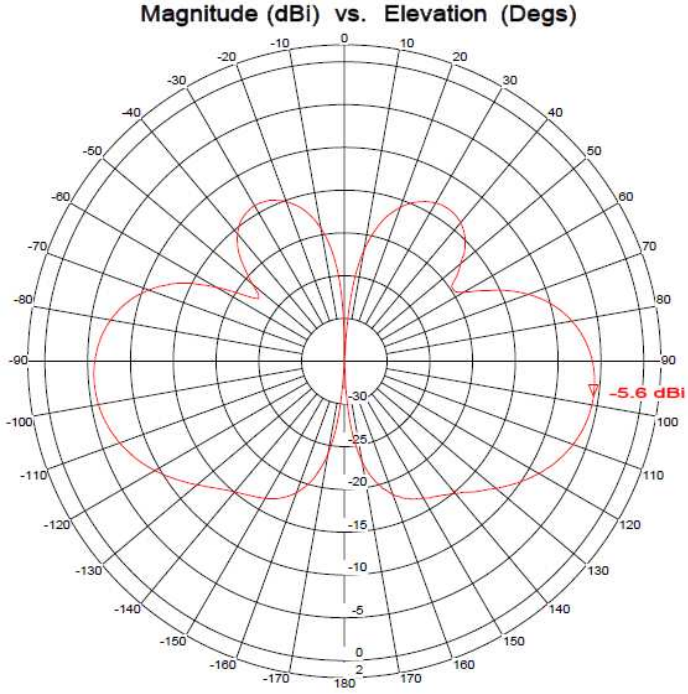


Figure 5: Typical Elevation Pattern Data @200MHz

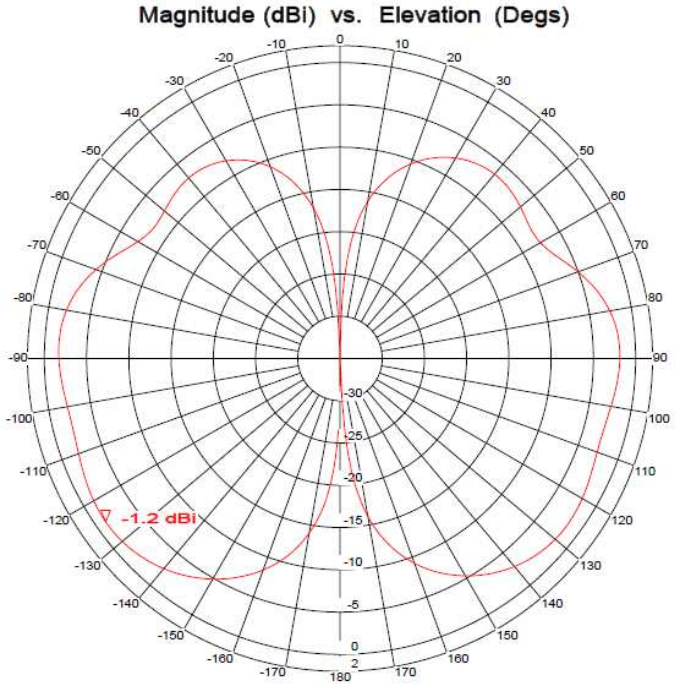


Figure 6: Typical Elevation Pattern Data @ 300MHz

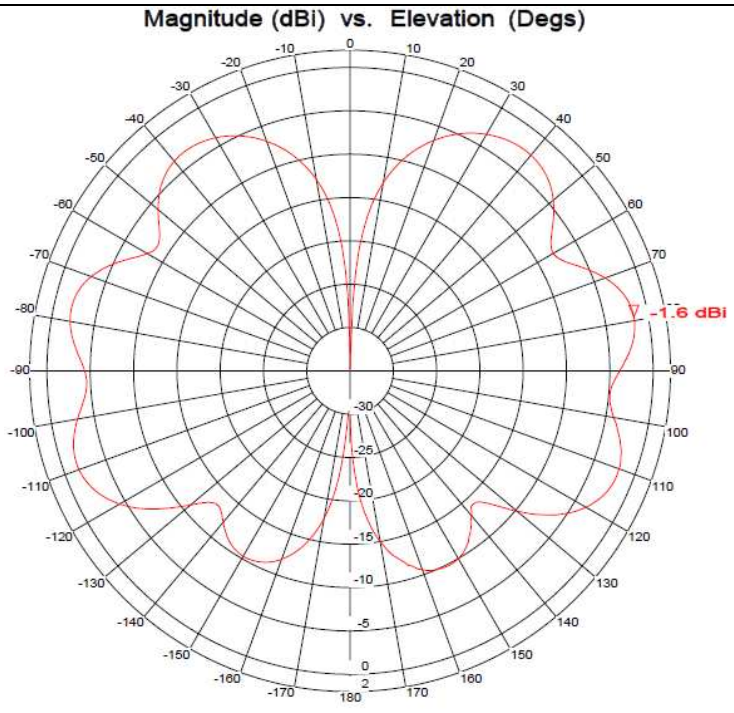


Figure 7: Typical Elevation Pattern Data @400MHz

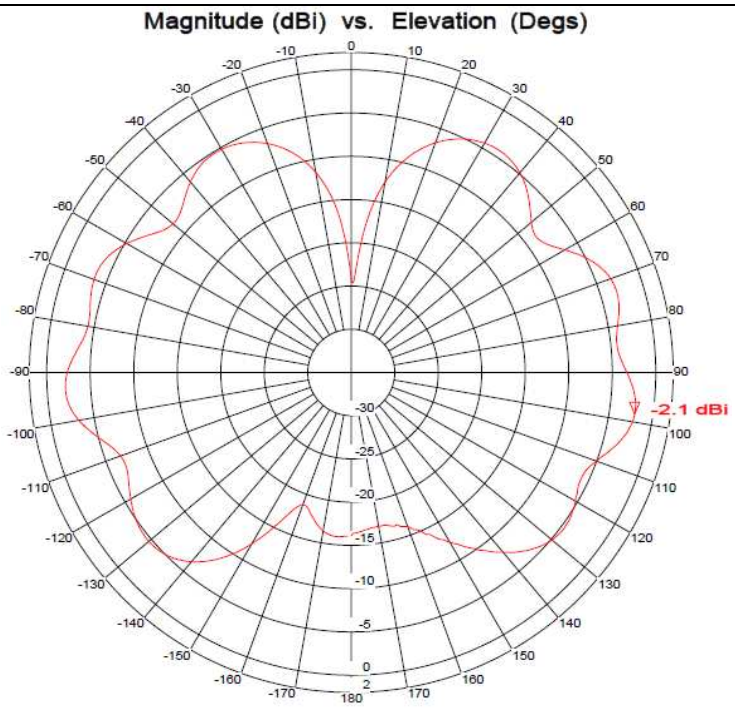


Figure 8: Typical Elevation Pattern Data @ 500MHz