
863 MHz – 870 MHz Dipole 2 dBi Antenna for RP SMA, IP67



ORDERING INFORMATION

Order Number	Description
001-0029	868 MHz Dipole Antenna for Reverse Polarity SMA Connector, IP67
080-0013	U.FL to Reverse Polarity SMA Cable, 105mm, O-Ring Seal
080-0014	U.FL to Reverse Polarity SMA Cable, 210mm, O-Ring Seal

Table 1 Orderable Part Numbers

SPECIFICATIONS

Specification	Value
Gain	+2 dBi
Impedance	50 ohms
Type	Dipole
Polarization	Linear Vertical
VSWR	$\leq 2.0 : 1$
Frequency	863 - 870 MHz
Weight	28.5g
Size	204 mm x 13 mm
Antenna Color	Black
Operating Temp	-40°C to +85°C

Table 2 Specifications

PHYSICAL DIMENSIONS (MM)

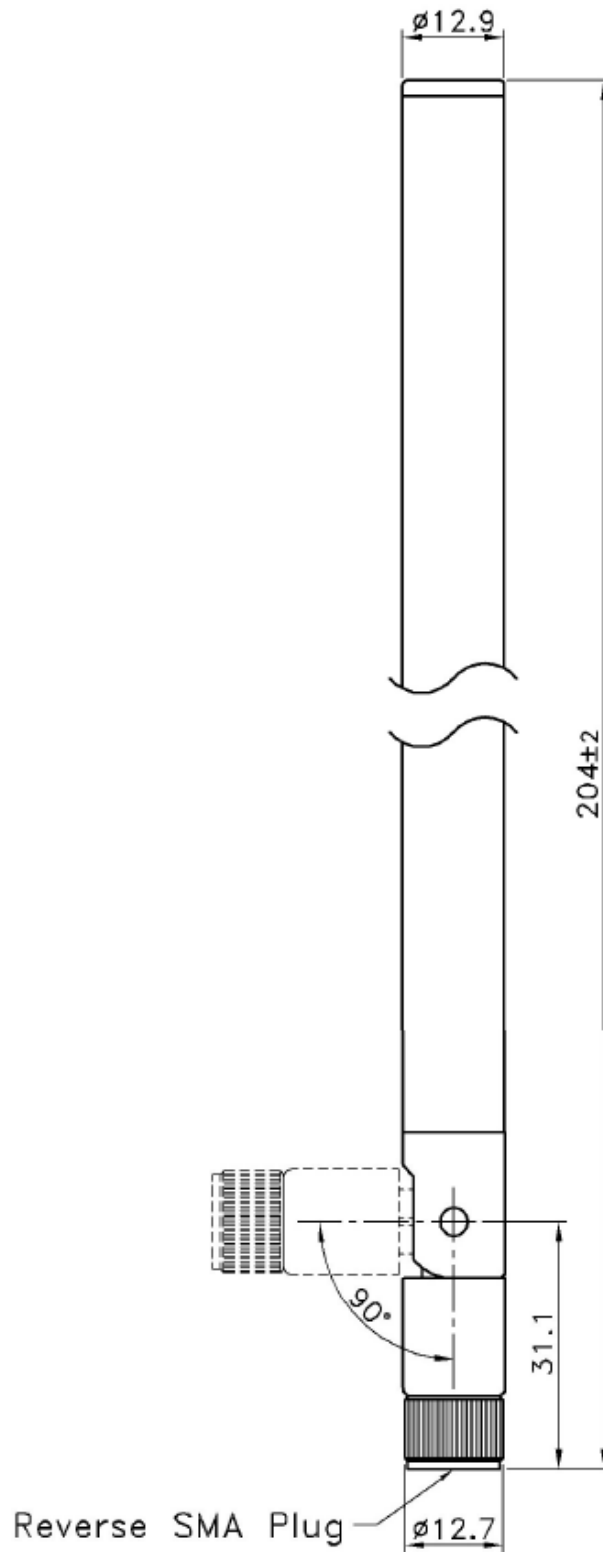


Figure 1 Physical Dimensions

The information in this document is subject to change without notice.

TEST SETUP

Antenna measurements such as VSWR were measured with an Agilent E5071C Vector Network Analyzer. Radiation patterns were measured with a CMT Planar 804/1 Vector Network Analyzer in a Howland Company 3100 Chamber equivalent. Phase Center is 9 inches above the Phi positioner.



Figure 2 Antenna Chamber

TYPICAL ANTENNA REFLECTION PERFORMANCE

Straight Position

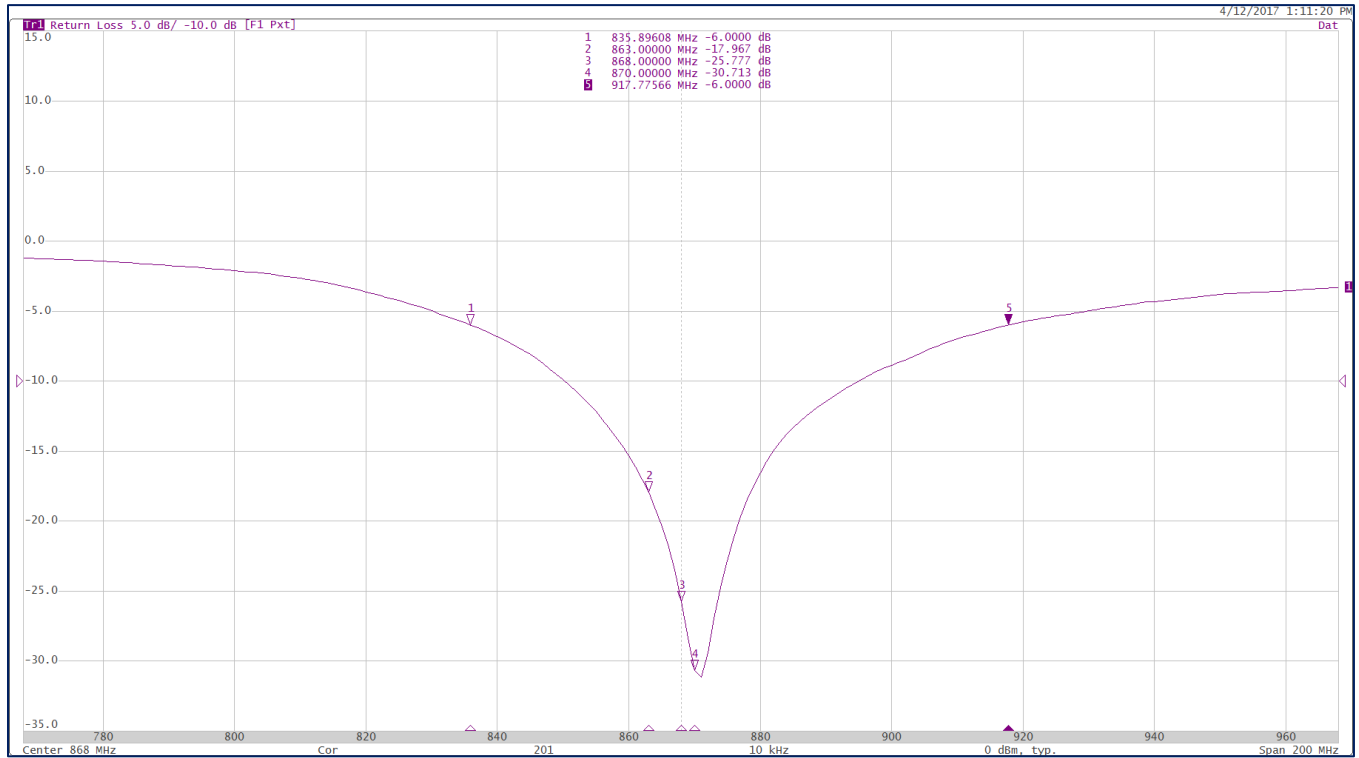


Figure 3 Typical Antenna Reflection Performance

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Bent Position

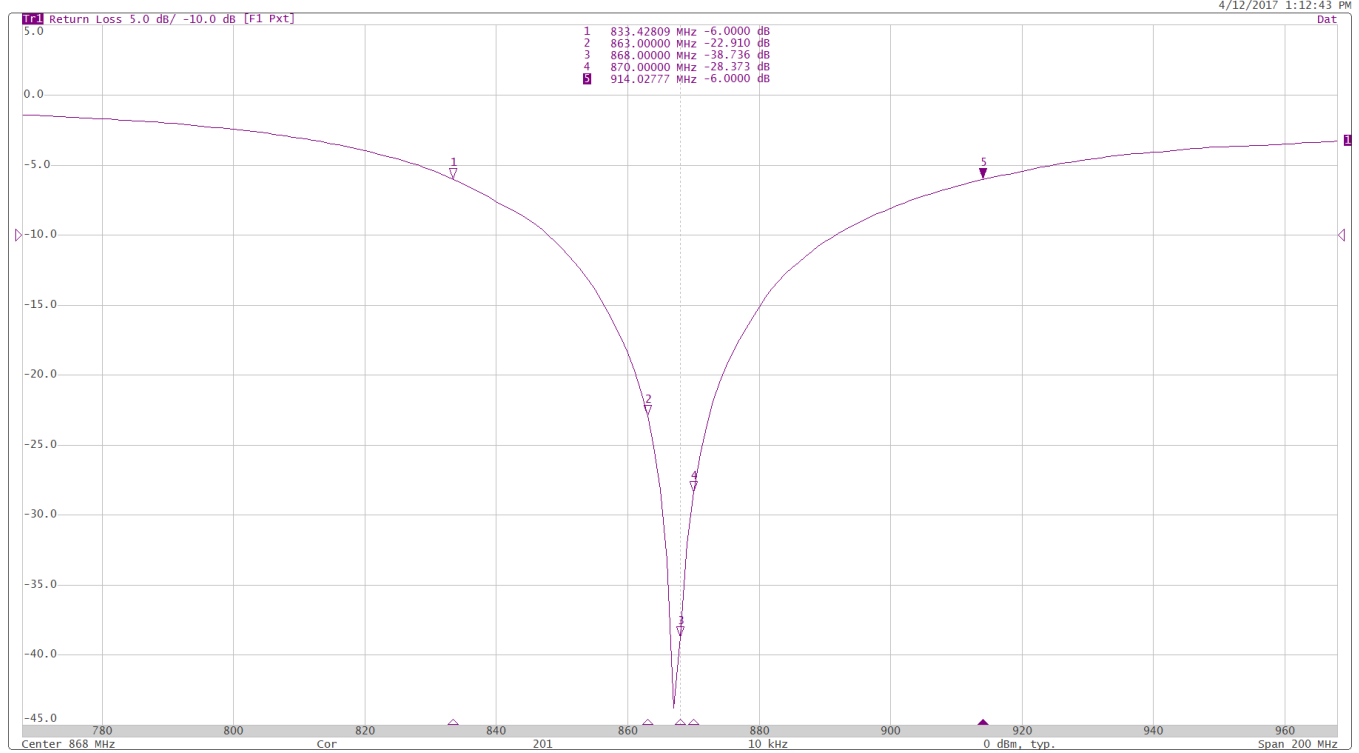


Figure 4 Typical Antenna Reflection Performance

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TYPICAL ANTENNA RADIATION PERFORMANCE

Antenna Measurement Setup:



Figure 5 Straight Position Test Set-Up

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Straight Position

Azimuth Conical Cuts at 868 MHz:

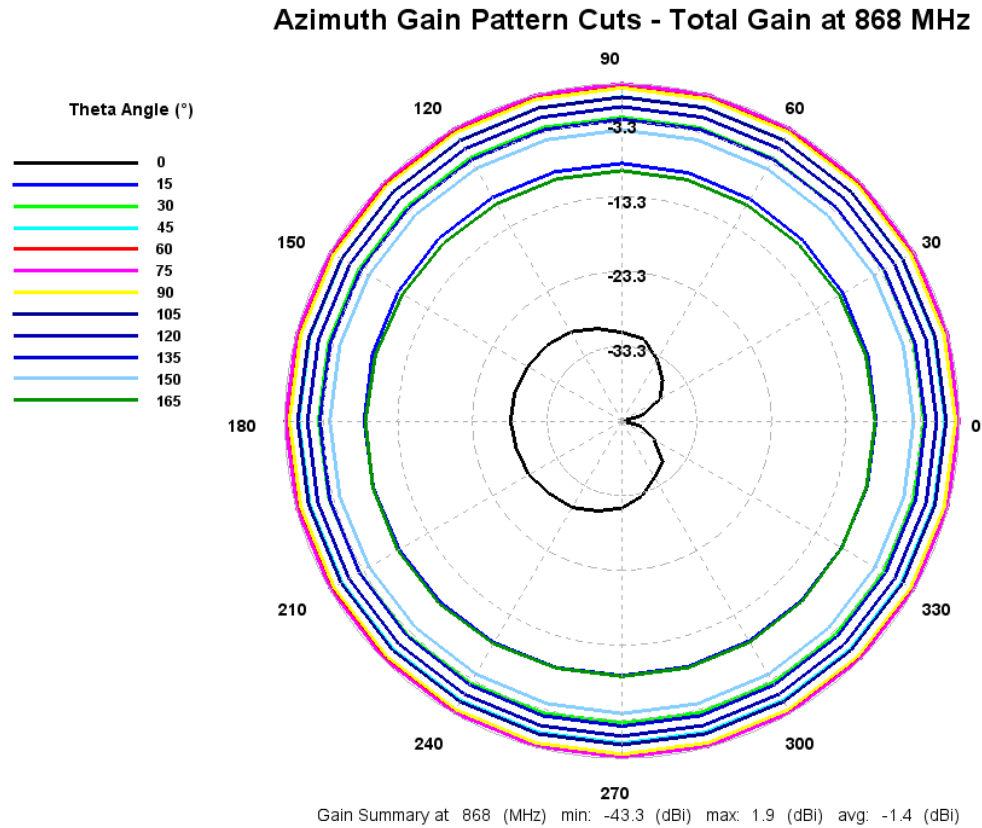


Figure 6 Total Gain Pattern

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3D Plots at 868 MHz:

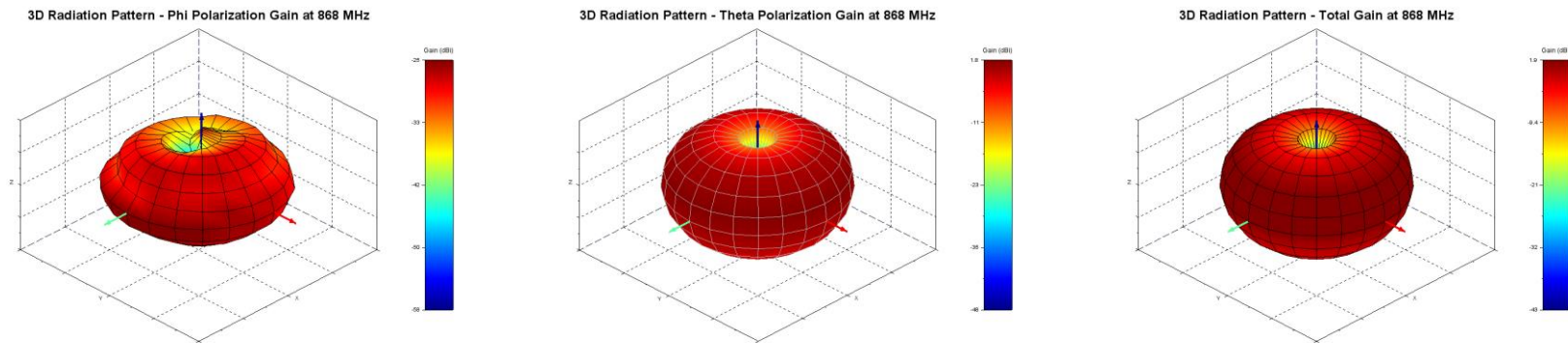


Figure 7 Phi, Theta, and Total Gain Plots

Antenna Measurement Setup:

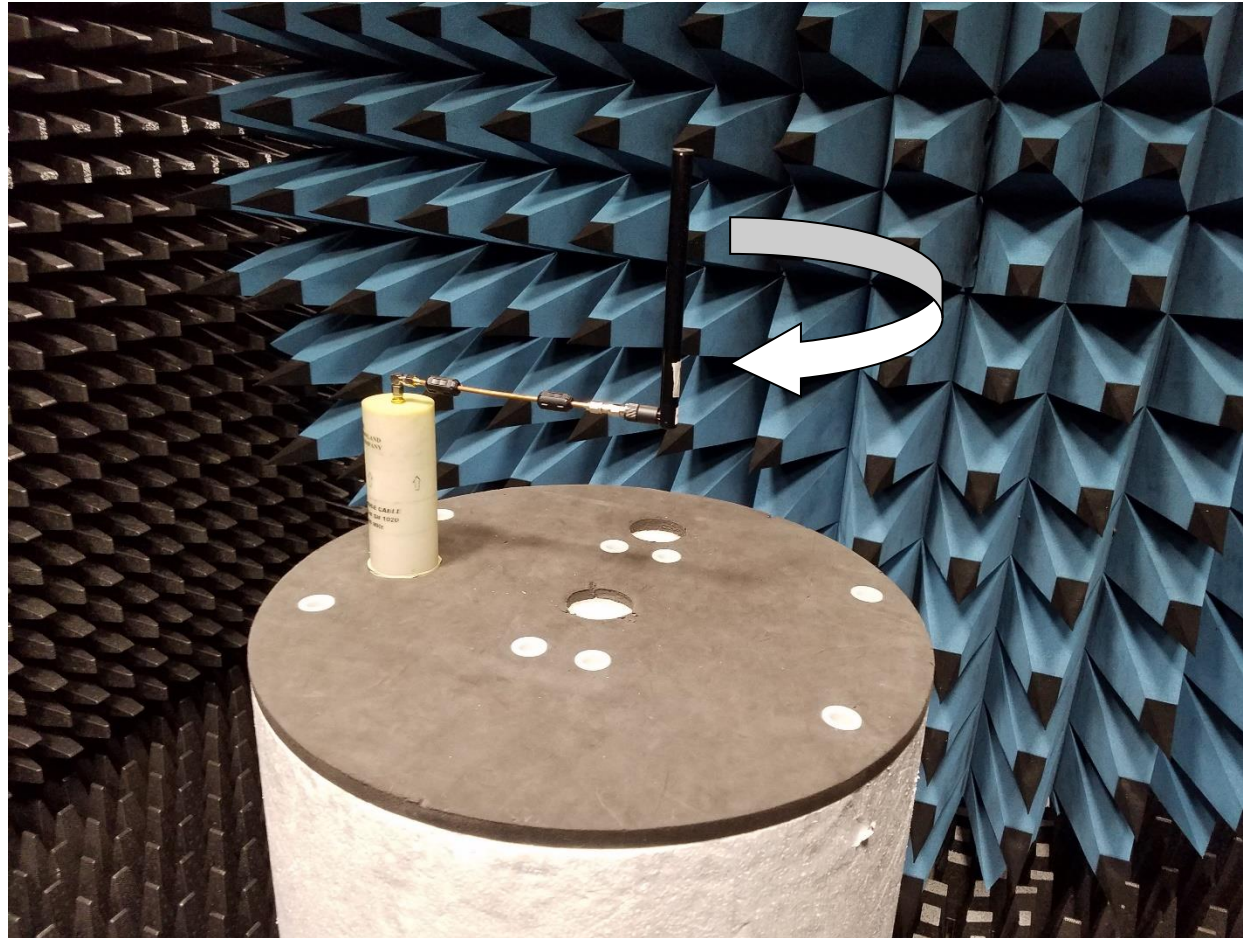


Figure 8 Bent Position Test Set-Up

Bent Position

Azimuth Conical Cuts at 868 MHz:

Azimuth Gain Pattern Cuts - Total Gain at 868 MHz

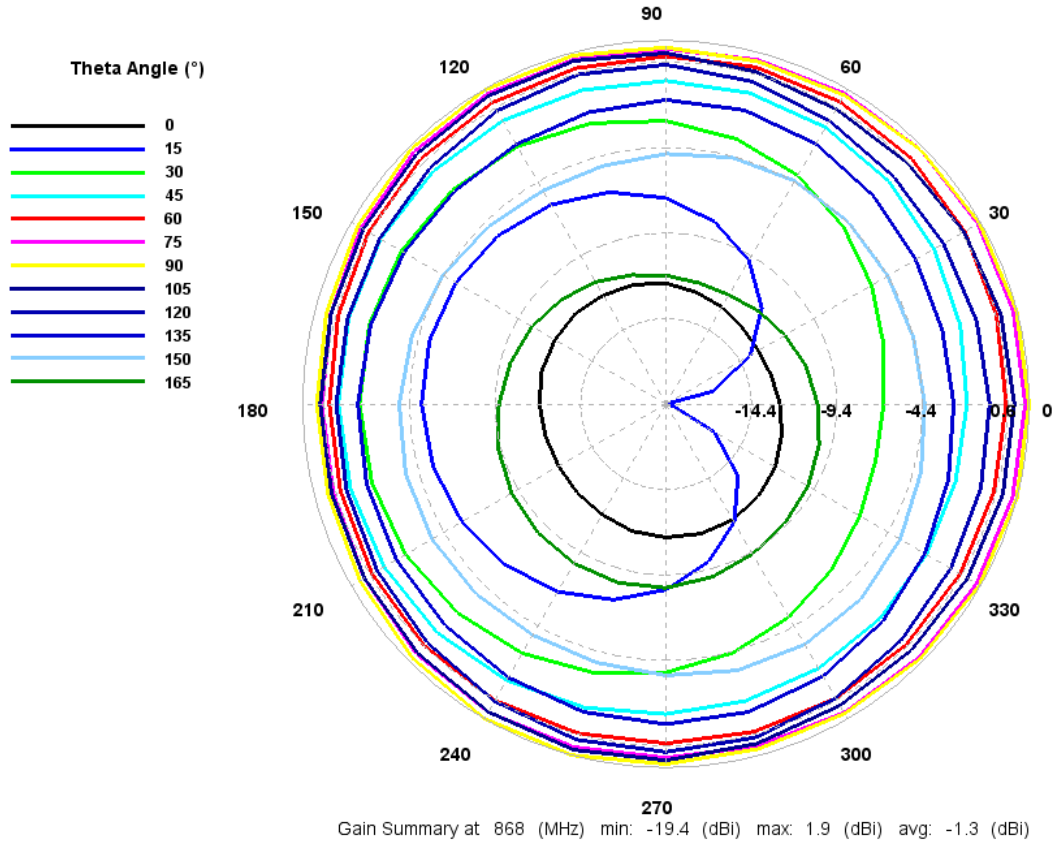


Figure 9 Total Gain Pattern

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3D Plots at 868 MHz:

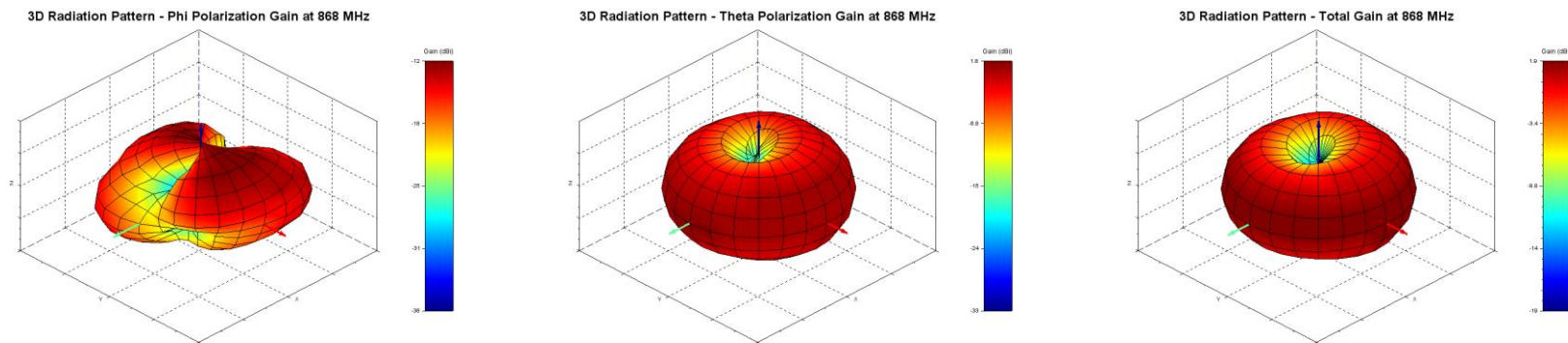


Figure 10 Phi, Theta, and Total Gain Plots

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