

LoRa Edge™ Sensor

IP Rated External Sensor Interface Connectivity Solution

WSE-2262-00

General Specifications

Parameter	Specification
Operating Temperature	-20°C to +60°C
Charging Temperature	0°C to +45°C
Storage Temperature	-20°C to +45°C (1-month) -20°C to +35°C (6-months)
Battery Pack	Li-Ion, 3.7 V @ nnnn 5 AH
Dimensions	136.5 mm (5.38") dia. x 90 mm (3.54") height
Edge Sensor Antenna Gain	2 dBi
Edge Sensor Antenna Dimensions	2.16 in x 1.90 in x 1.51 in (55 mm x 48 mm x 38.5 mm)

Internal Sensor Specifications

Device	Specification
Relative Humidity / Temperature	±3% RH (max) 0-80% RH / ±0.4°C (max) -10°C to +85°C
6-Axis IMU Motion Tracking Device	3-axis Accelerometer: ±2/±4/±8/±16 g linear 3-axis Gyroscope: ±250/±500/±1000/±2000 dps
Environmental Gas / Air Quality Gas (VOC)	20% tolerance; 5% accuracy
Pressure	300 to 1100 hPa (±0.6 hPa)
Humidity	10% to 90% RH (±3%) at 0°C to +65°C
Temperature	-40°C to +85°C (±1°C), 25°C (±0.5°C)
Air Quality Score	0 to 500 (±15%)

External Sensor Interfaces

Type	Specification
Analog	4-20 mA [2-pos.] 0-10 V Ratiometric Input [2-pos.] Dry Contact [2-pos.]*
Digital	I2C [2-pos.]* SPI [4-pos.]* RS-485/RS-232 [2 or 4-pos. shared]*
Power	12 VDC Input - Nominal [2-pos.]
Signal Returns	4-positions

* Can be added based on factory configuration.

CONTACT US

**For more information about
this product contact us at
> pctel.com/contact**

Solving Complex Wireless Challenges

PCTEL is a leading global provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems, and test and measurement products. Trusted by our customers for over 29+ years, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



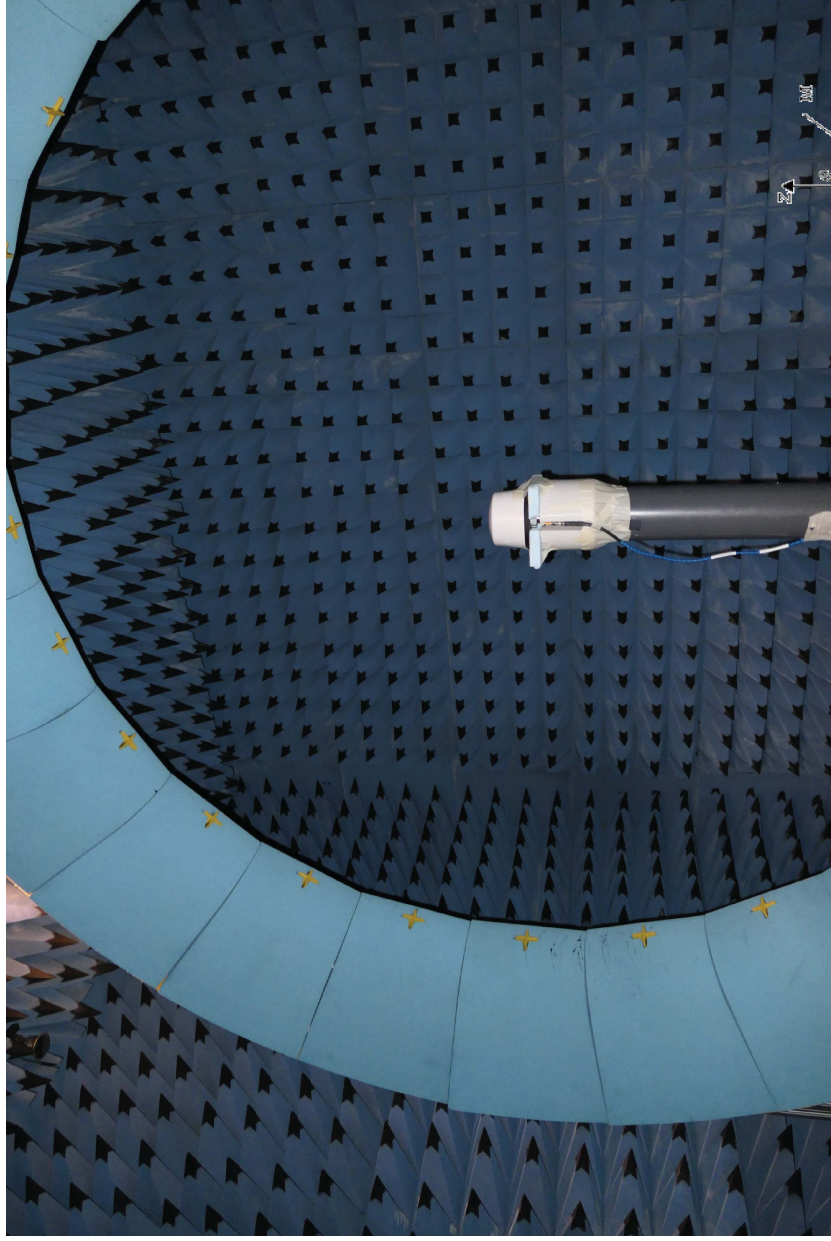
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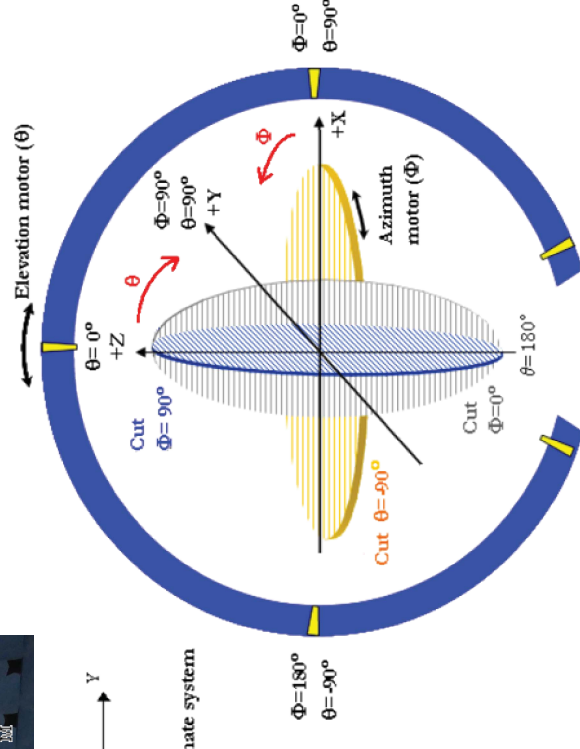
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Antenna Test Setup

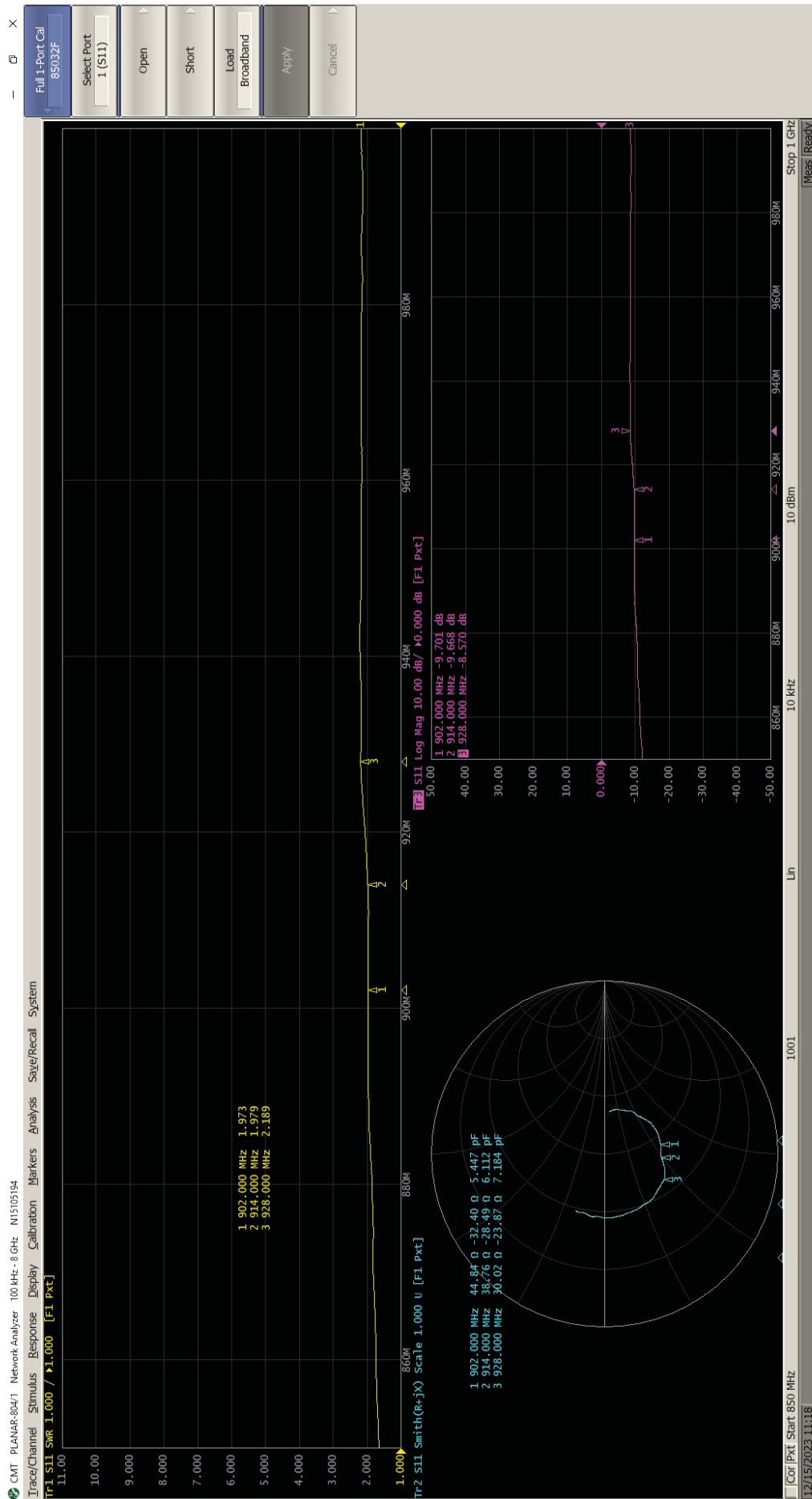


Test Description:

1. Tested in Free space
2. Tested with No GPS

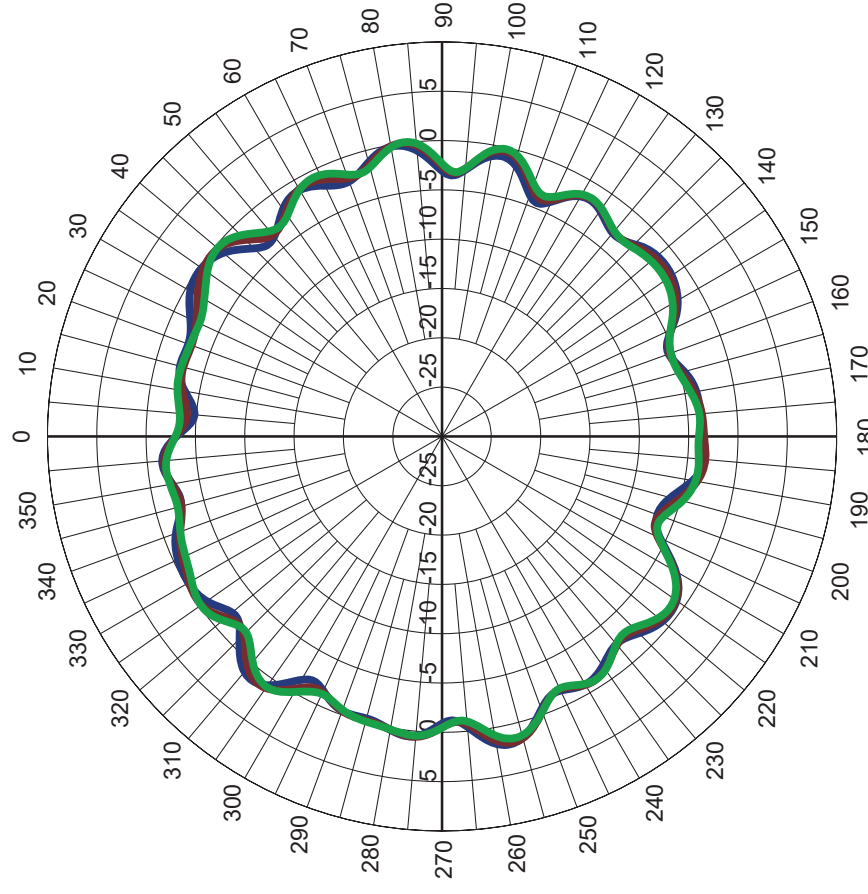


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900 MHz Band

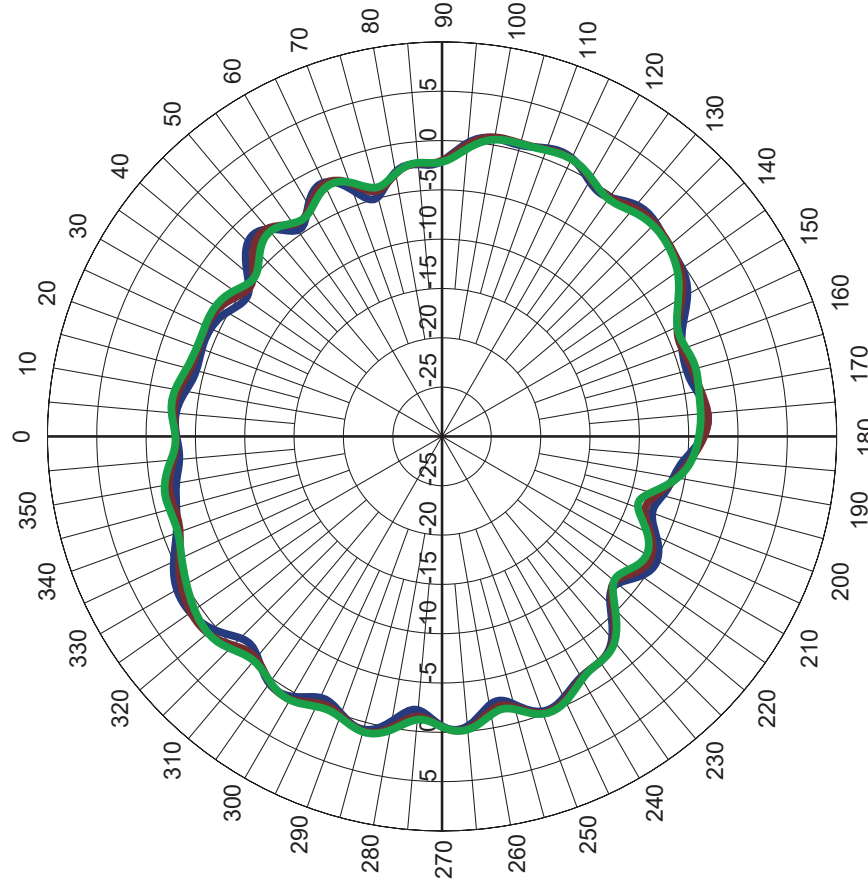
Phi 0 (Z-X plane)



Frequency(MHz)	Max Gain(dBi)	Beamwidth(deg)	Front/Back(dB)
904 MHz	1.97	17.8	0.5
915 MHz	1.84	45.6	0.4
925 MHz	1.46	66.5	1.0

900 MHz Band

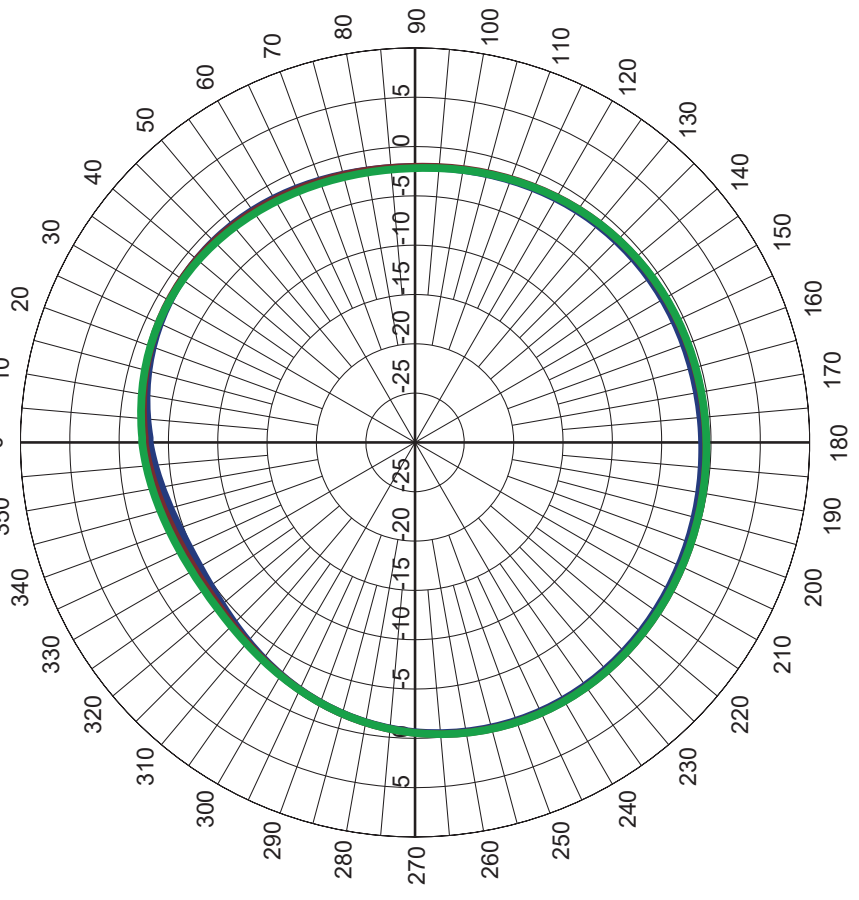
Phi 90 (Z-Y Plane)



Frequency (MHz)	Max Gain (dBi)	Beamwidth (deg)	Front/Back (dB)
904 MHz	1.30	60.1	0.5
915 MHz	1.15	81.6	0.4
925 MHz	1.05	57.6	1.0

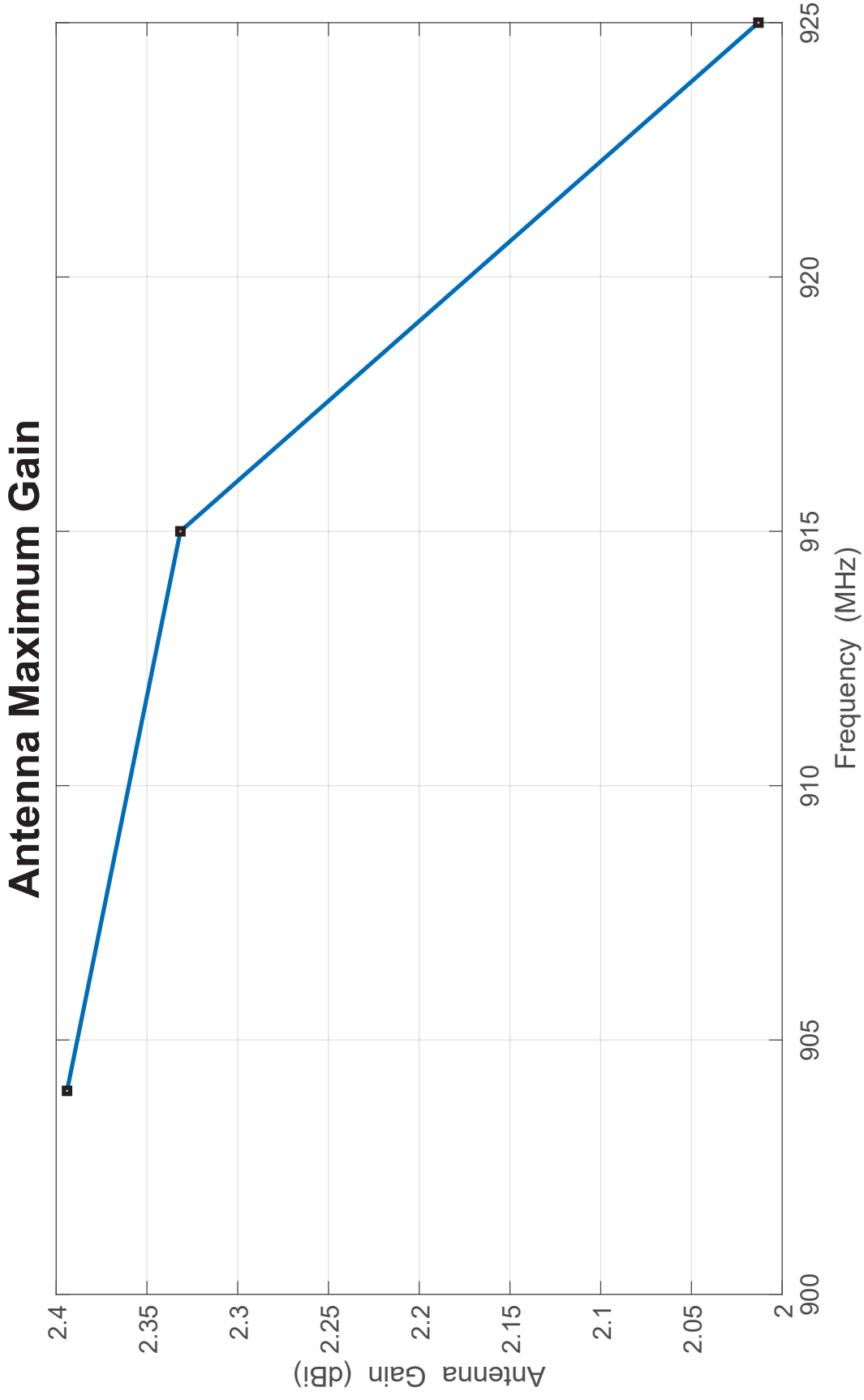
900 MHz Band

Theta 90 (X-Y Plane)



Frequency(MHz)	Max Gain(dBi)	Beamwidth(deg)	Front/Back(dB)
904 MHz	0.09	360.0	-2.2
915 MHz	0.28	360.0	-2.1
925 MHz	0.29	360.0	-1.9

900 MHz Band



900 MHz Band

