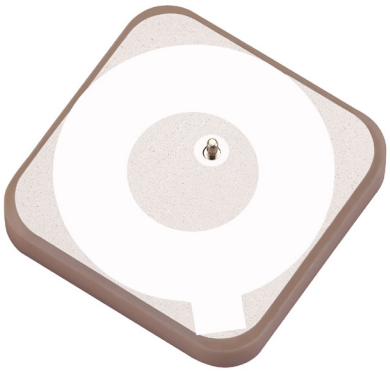
Front



Back

IP.1621.25.4.A.02

Specification

Iridium Certified

Part No.	**IP.1621.25.4.A.02**
Product Name	4mm thick Iridium Patch Antenna, 1621MHz
Feature	25mm*25mm*4mm ROHS Compliant

1. Introduction

This miniaturized ceramic Iridium patch antenna is based on smart XtremeGain™ technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the customer device environment.

Iridium certifies the IP.1621.25.4.A.02 for commercial use in connection with the Iridium Communications systems.

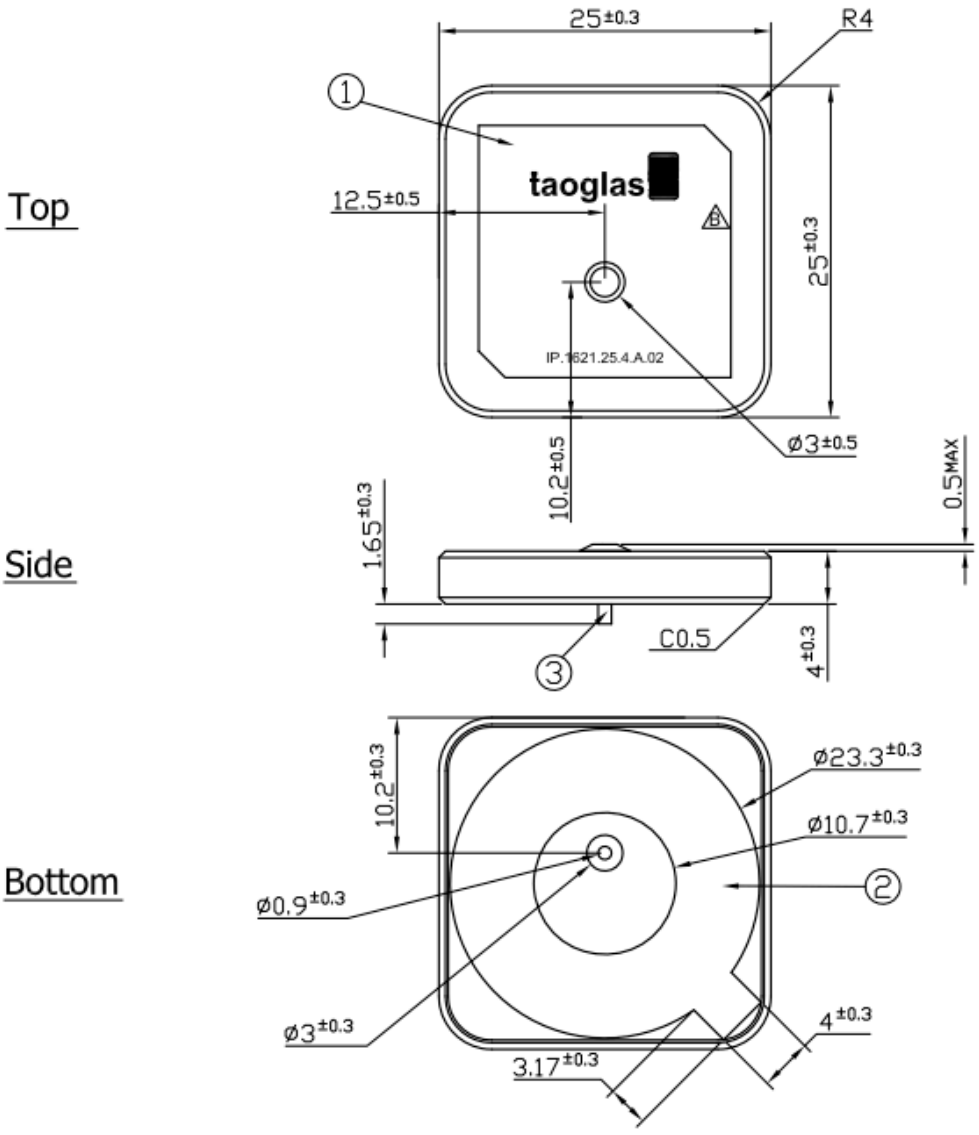
2. Key Antenna Performance Indicators

Original Patch Specification tested on 50*50mm ground plane

Parameter	Specification	Notes
Range of Receiving Frequency	1616~1626.5Mhz	
Center Frequency	1621MHz ±3MHz	with 50*50mm GND Plane
Bandwidth	16MHz	Return Loss ≤-10dB
VSWR	1.5 max	Center Frequency
Gain at Zenith	+2.0dBi typ.	Center Frequency
Gain at 10° Elevation		Center Frequency
Axial Ratio	3 dB Max	Center Frequency
Polarization	RHCP	
Impedance	50Ω	
Frequency Temp Coefficient (Tf)	0±20ppm/°C	-40°C to +85°C
Operating Temperature	-40°C to +85°C	
Antenna Weight	10g	

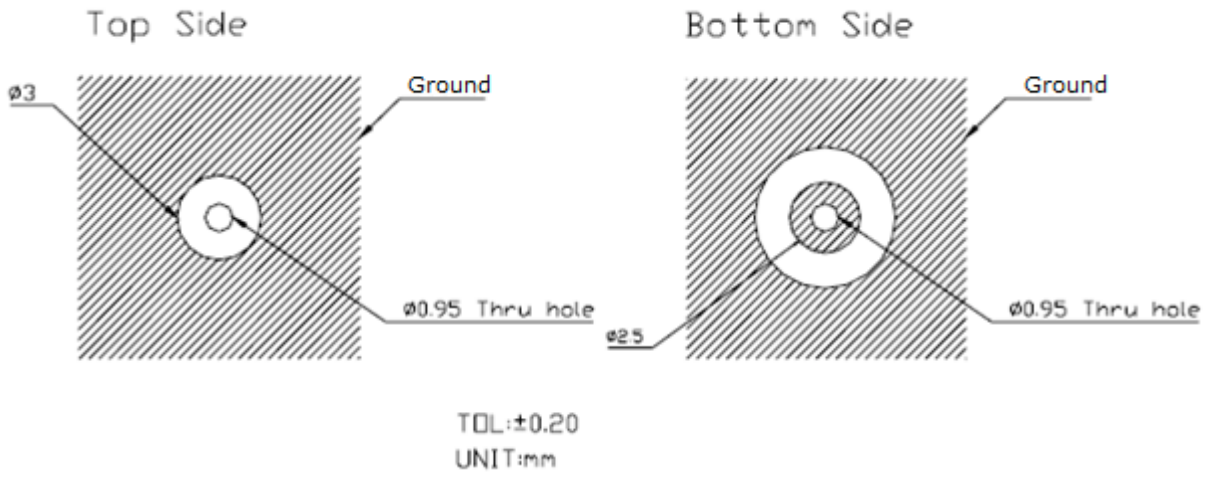
3. Mechanical Specifications

3.1 Shape and Dimension

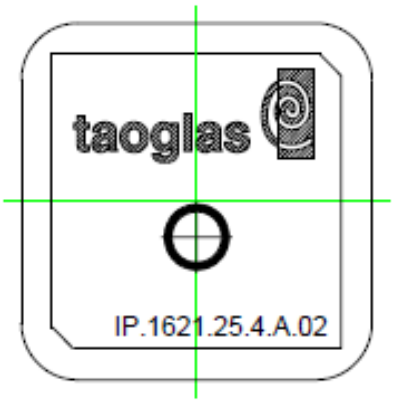


	Name	Material	Finish	QTY
1	IP.25A Iridium Patch (25x25x4mm)	Ceramic	Clear	1
2	Double Sided Adhesive	NITTO 5015	White Liner	1
3	Pin	Brass	Tin Plated	1

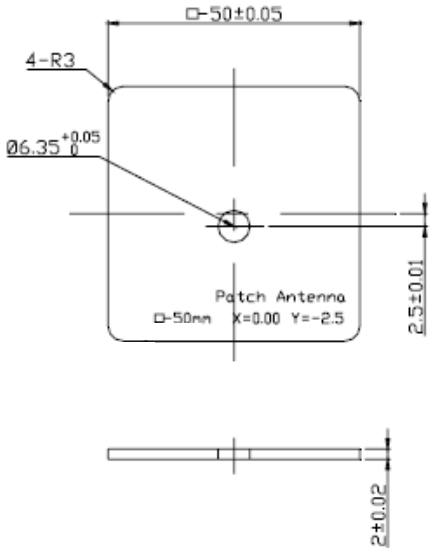
3.2 Layout



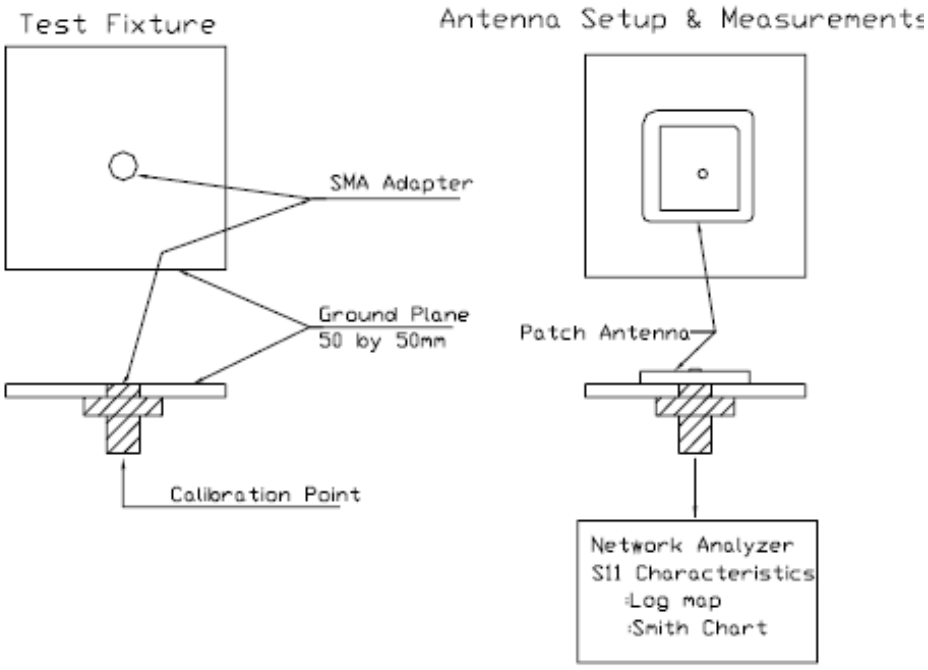
3.3 Mark



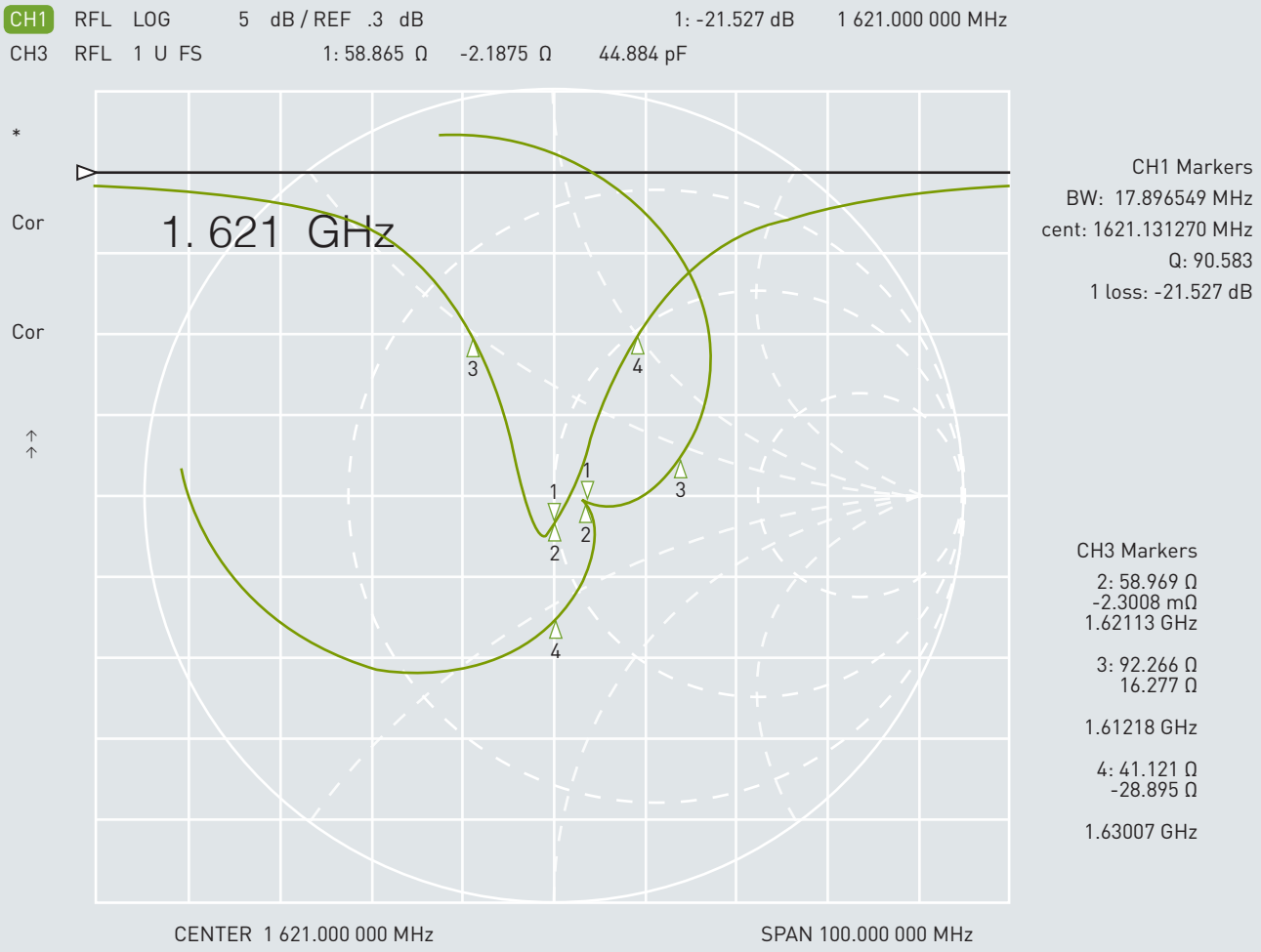
3.4 Test Jig and Dimensions



3.5 Test Fixture Antenna Setup and Measurements

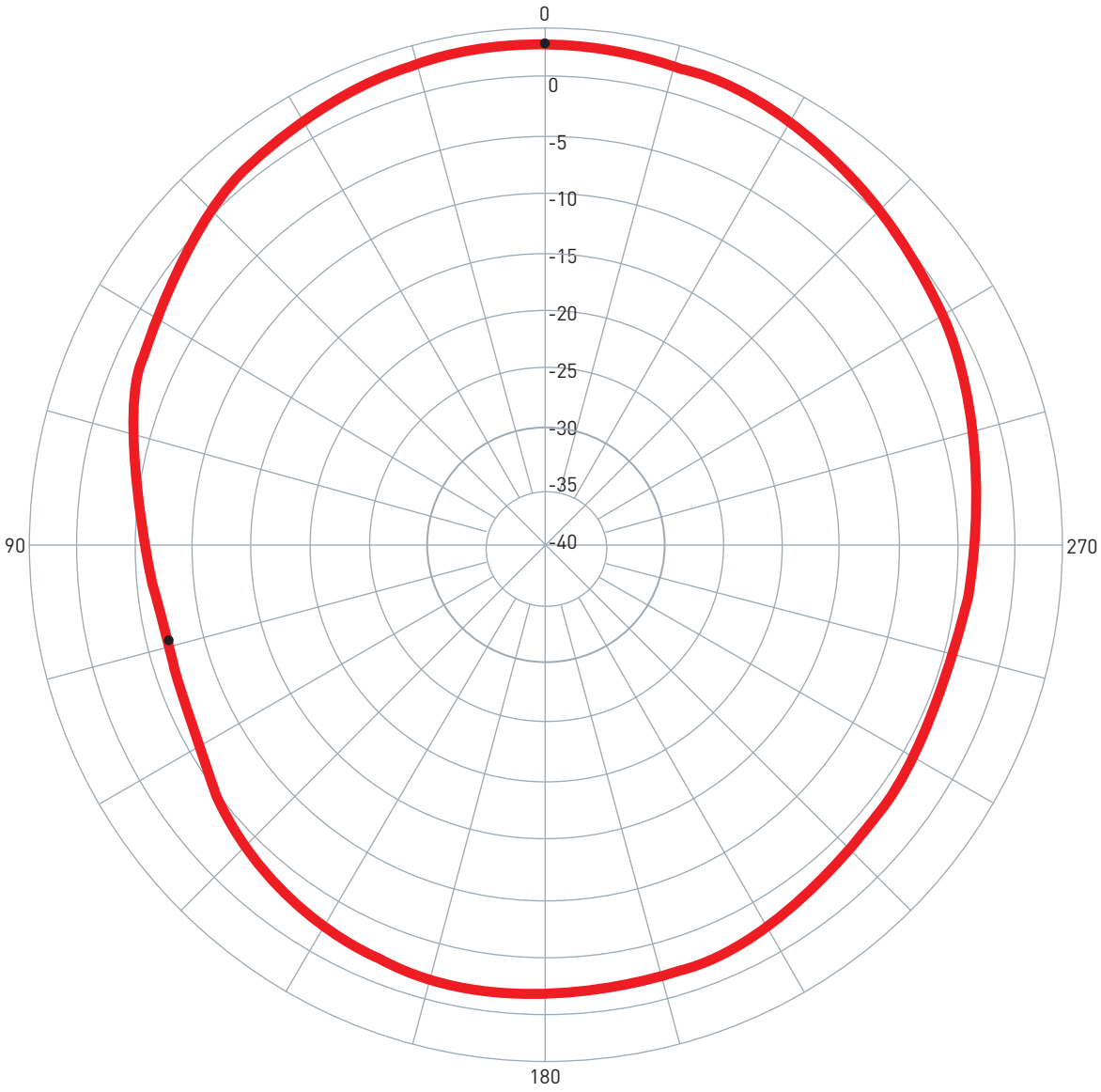


4. Performance testing and results



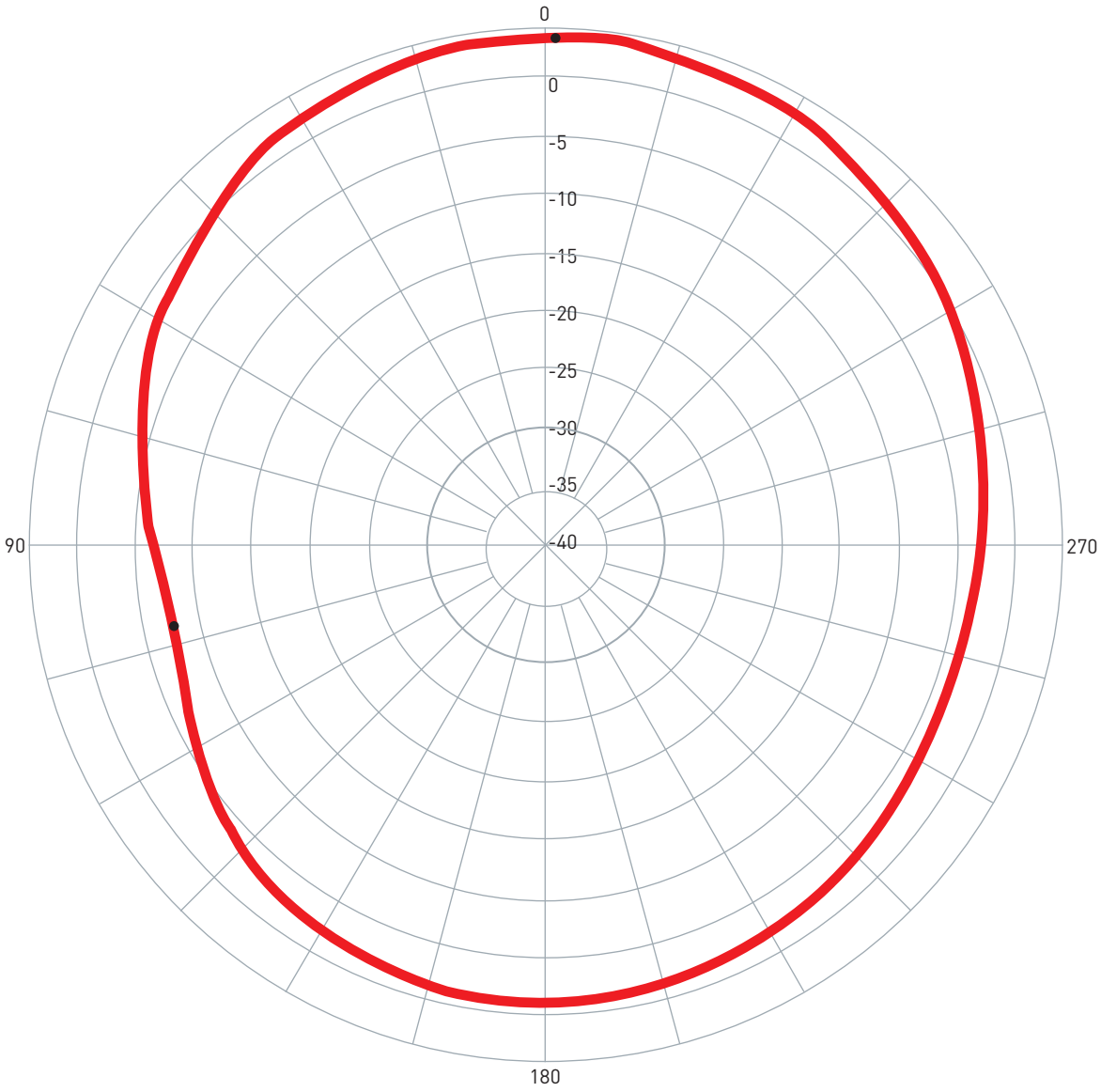
4.1 Antenna Gain Chart

4.1.1 XZ Plane



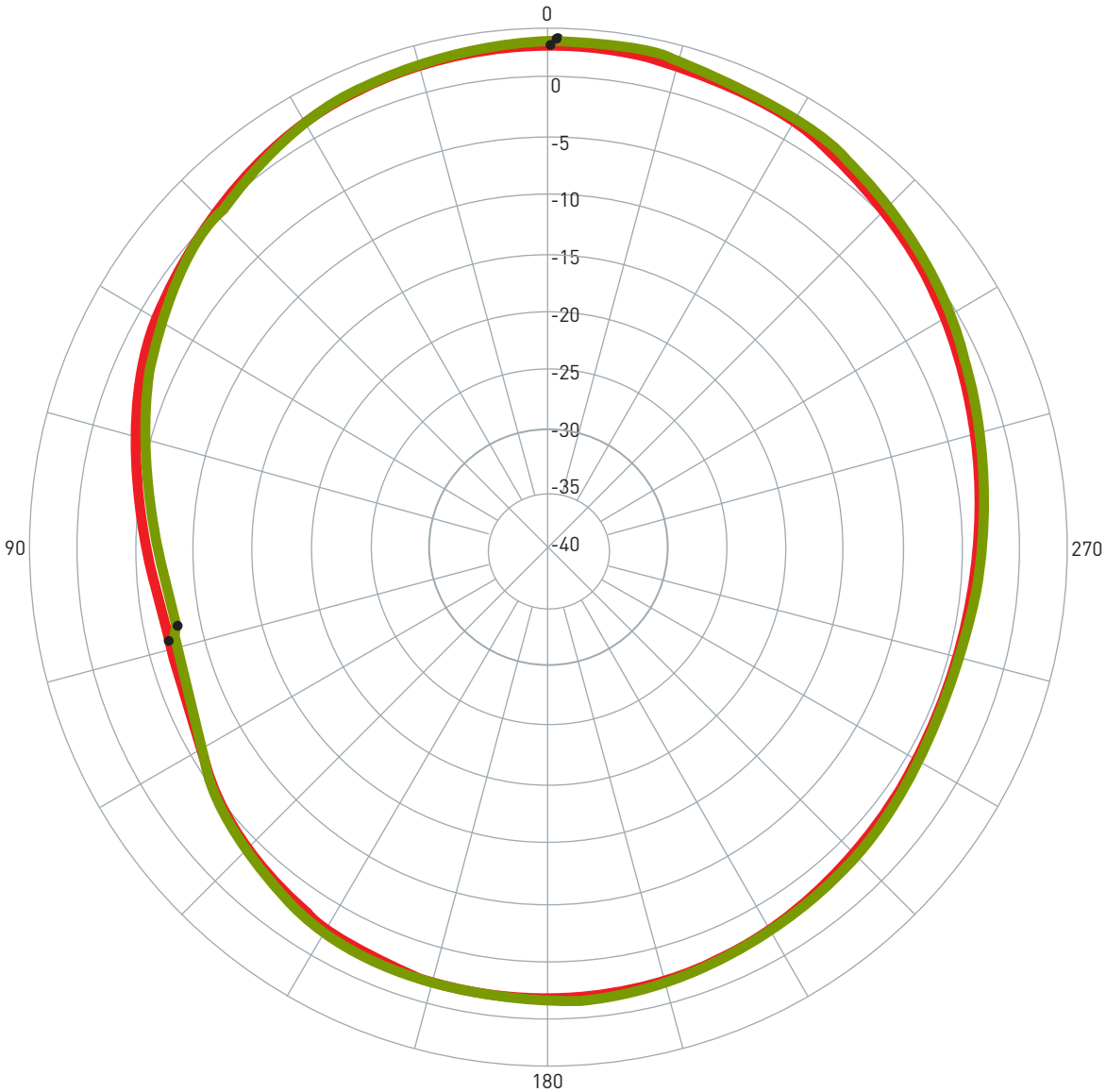
Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1	IP.1621.25.4.A.02	XZ	1621.00	2.72 / 0.00	-6.84 / 104.00	-1.05	V+H

4.1.2 YZ Plane Radiation



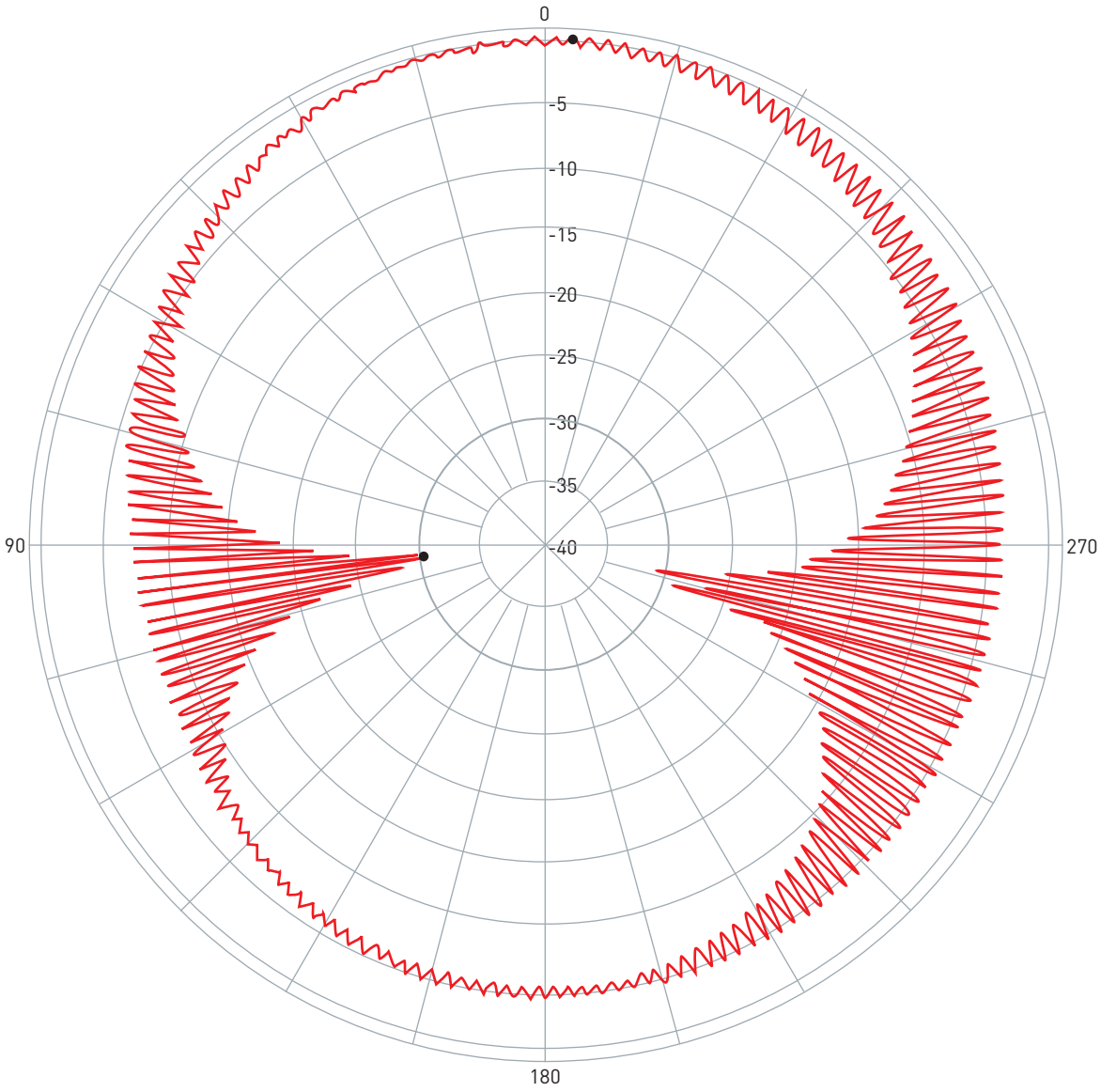
Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1	IP.1621.25.4.A.02	YZ	1621.00	3.00 / 358.99	-7.57 / 101.85	-0.86	V+H

4.1.3 XZ + YZ Plane Radiation



Pattern		Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1		IP.1621.25.4.A.02	XZ	1621.00	2.72 / 1.00	-6.84 / 104	-1.05	V+H
2		IP.1621.25.4.A.02	YZ	1621.00	3.00 / 358.99	-7.57 / 101.85	-0.86	V+H

4.2 Axial Ratio



Pattern	Model No.	Test Mode	Freq (MHz)	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)	Source Polar.
1	IP.1621.25.4.A.02	Axial Ratio	1621.00	0.13 / 356.87	-30.61 / 95.76	-4.00	CP

9. Packaging

Per Tray: 50 pieces

Per Carton (Inside Box) - 4 Trays = 200 pieces

Outer Carton (Outside Box) - 4 Cartons = 800 pieces