

Antenna

YZJ002CA Datasheet

Antenna Services

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About the Document

Revision History

Version	Date	Author	Note
-	2021-12-10	Qinming Peng/ Jason Long	Creation of the document
1.0	2021-12-10	Qinming Peng/ Jason Long	First official release

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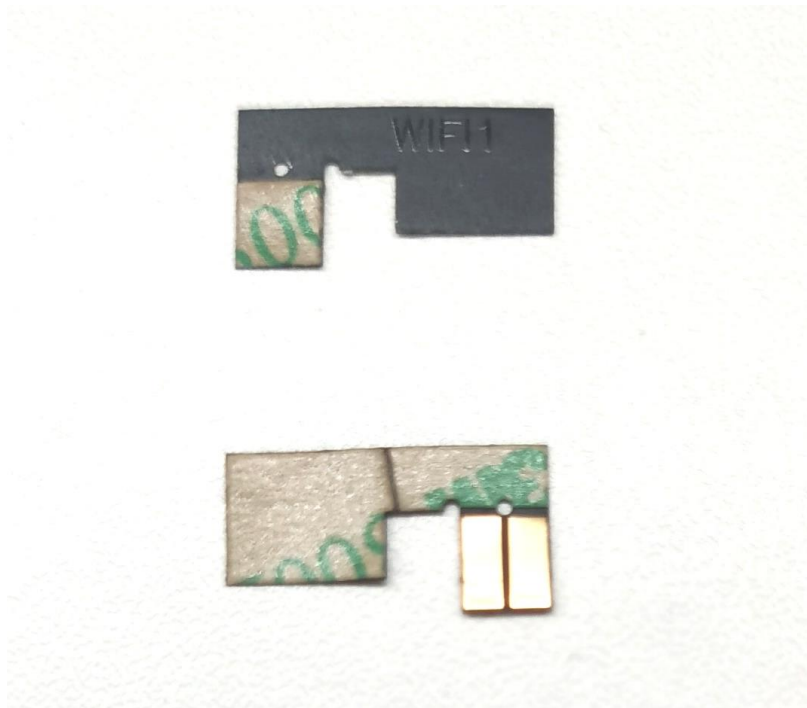
1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Features

- Cellular WIFI
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	2400-2500MHz, 5150-5850MHz
Input Impedence	50 Ω
VSWR	≤ 3.0
Gain	$\leq 2\text{dBi}$
Polarization Type	Linear

Detailed Passive Electrical Specifications

Frequency Range (MHz)	2400-2500	5150-5850
VSWR (Max.)	2.7	2.5
Average Efficiency (%)	41.35	43.04
Max. Peak Gain (dBi)	0.7	1.94

Mechanical Specifications

Antenna Size (mm)	17.7× 7.4
Working Temperature	-20 °C to +85 °C
Radome Color	Black
Mounting Type	Adhesive

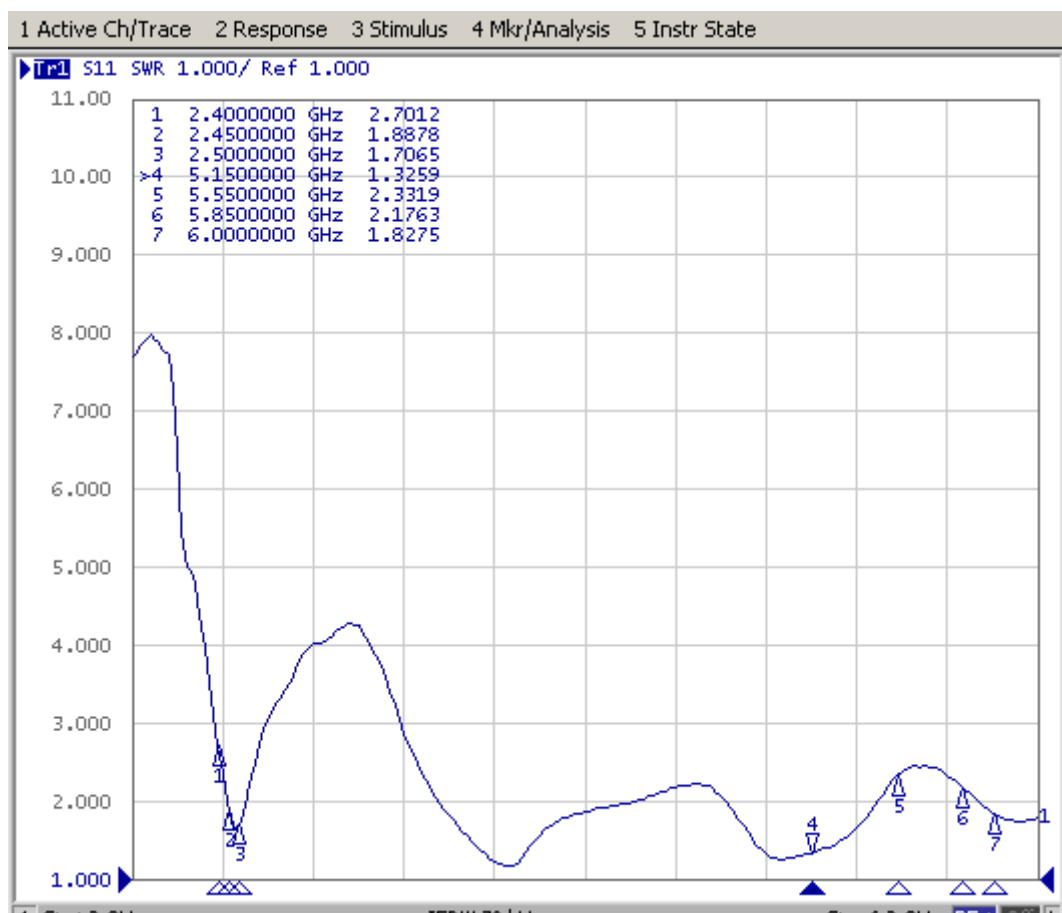
4 Overall Performance

4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz

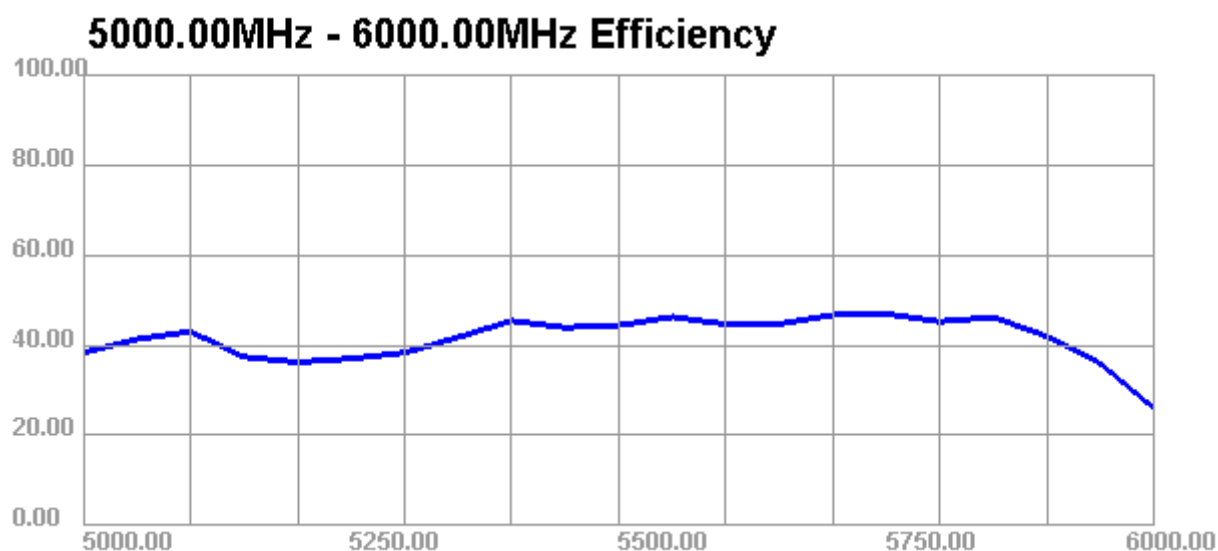
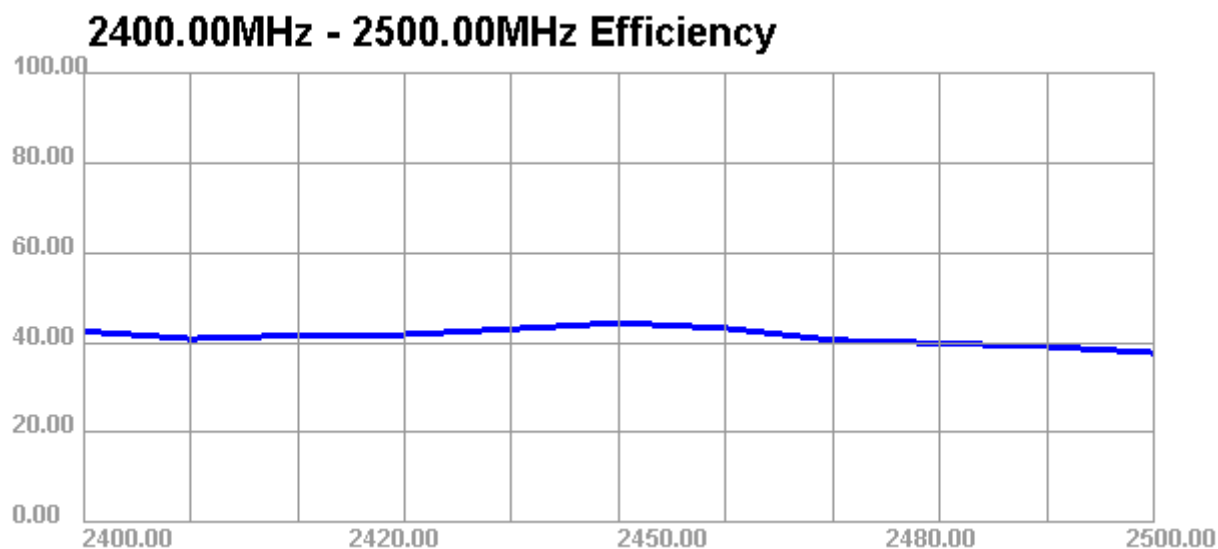


4.2. VSWR



Frequency (MHz)	2400	2450	2500	5150	5550	5850	6000
VSWR	2.7	1.88	1.71	1.32	2.33	2.17	1.83

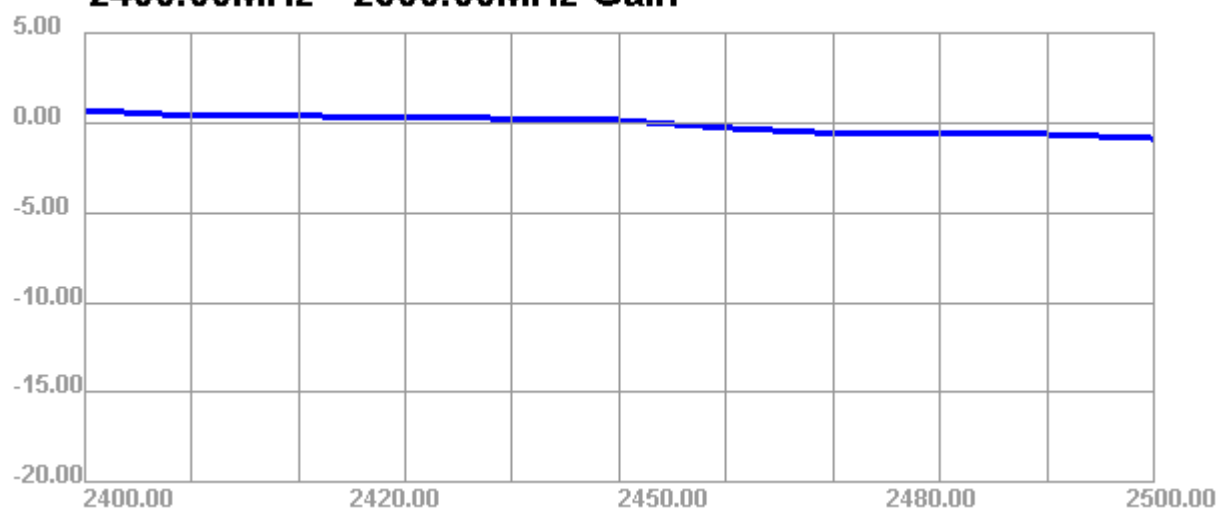
4.3. Efficiency



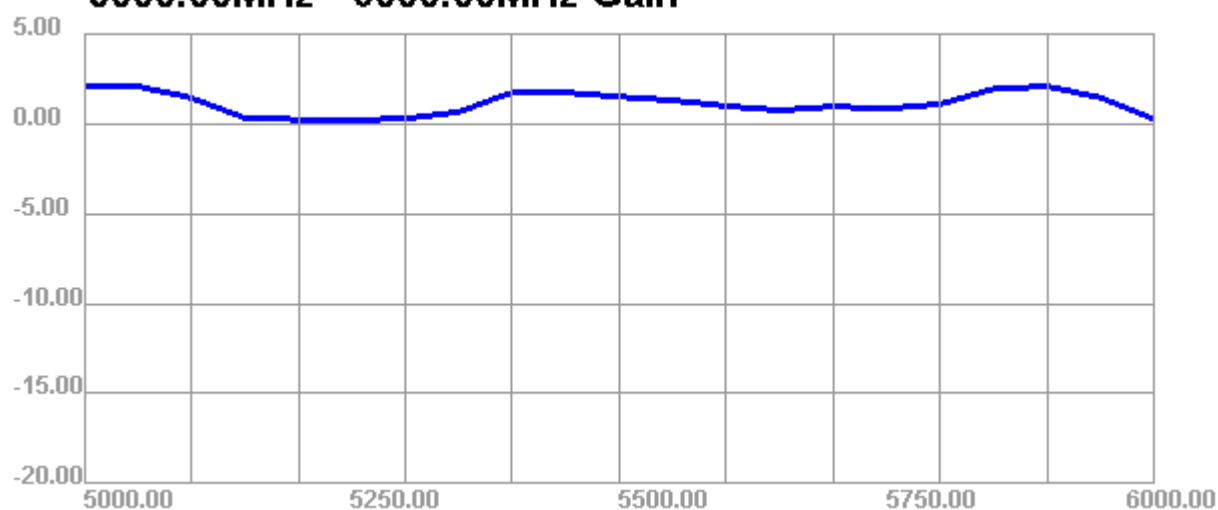
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Efficiency (%)	42.54	44.4	37.76	37.43	46.29	46.24

4.4. Gain

2400.00MHz - 2500.00MHz Gain



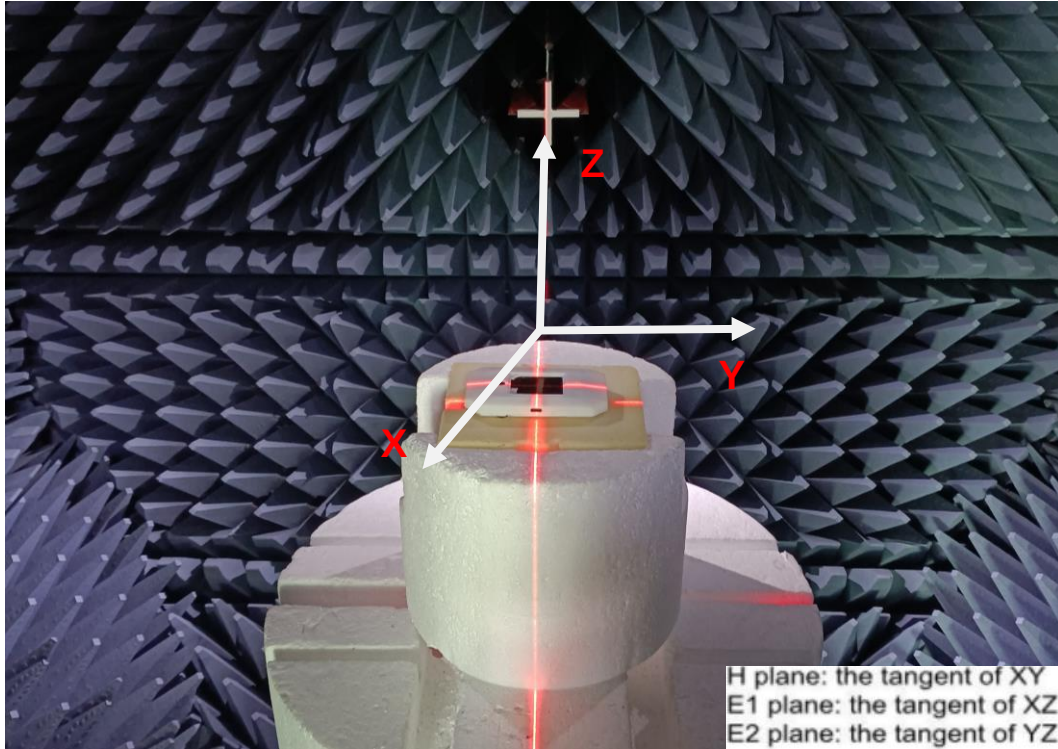
5000.00MHz - 6000.00MHz Gain



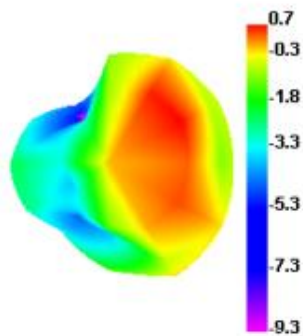
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Gain (dBi)	0.7	0.14	-0.87	0.33	1.3	1.94

4.5. Radiation Pattern

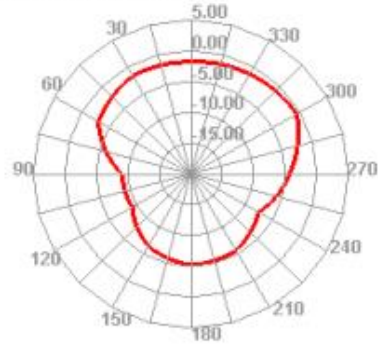
- Test condition: free space



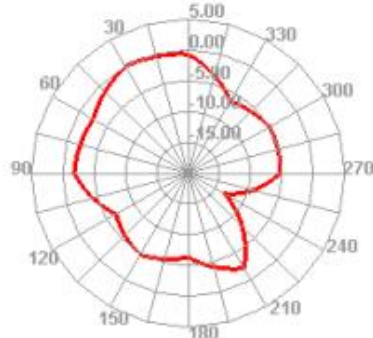
2400.000MHz



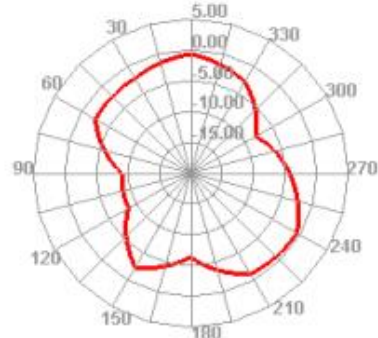
2400.000MHz H



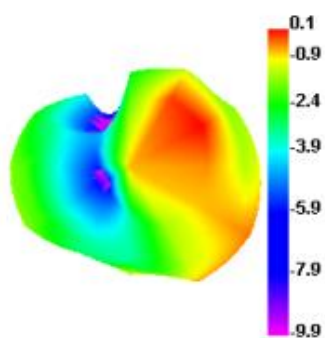
2400.000MHz E1



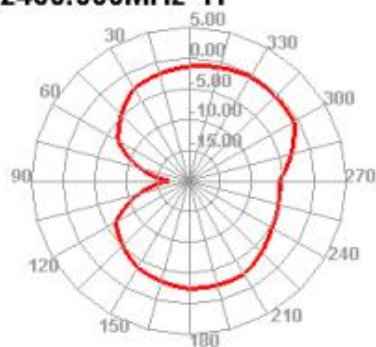
2400.000MHz E2



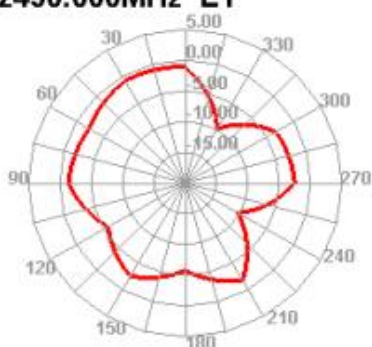
2450.000MHz



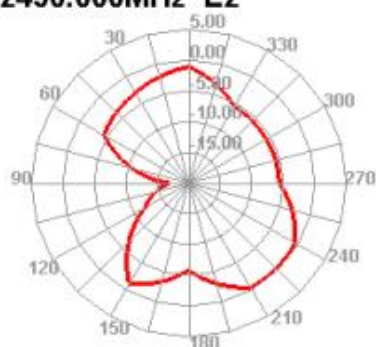
2450.000MHz H



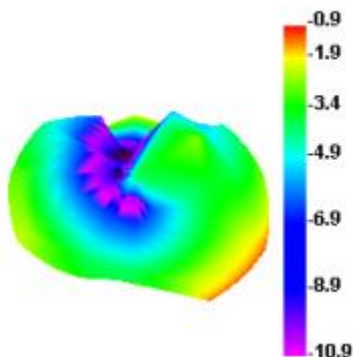
2450.000MHz E1



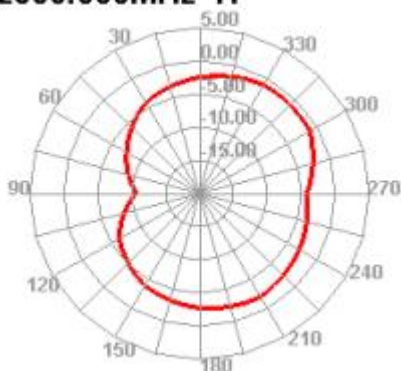
2450.000MHz E2



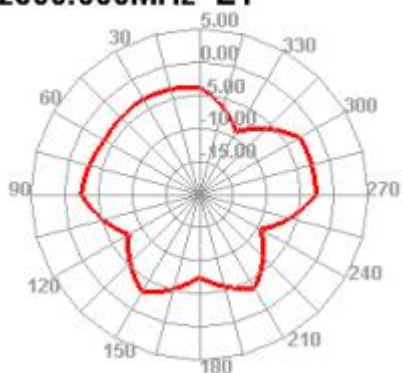
2500.000MHz



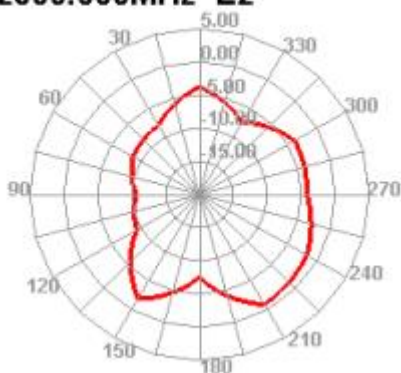
2500.000MHz H



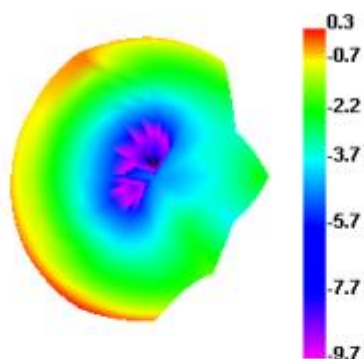
2500.000MHz E1



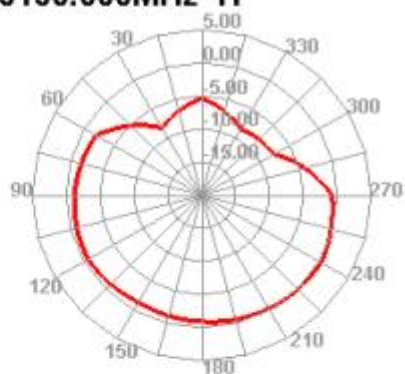
2500.000MHz E2



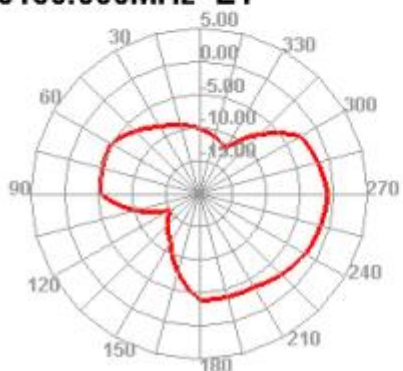
5150.000MHz



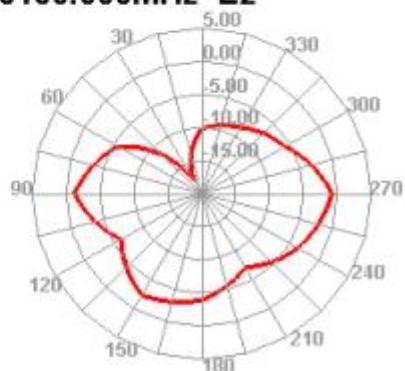
5150.000MHz H



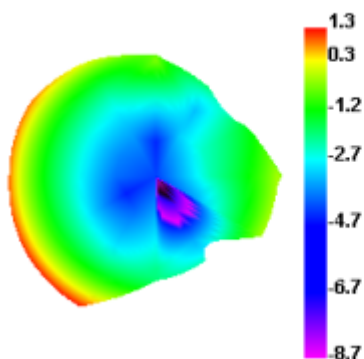
5150.000MHz E1



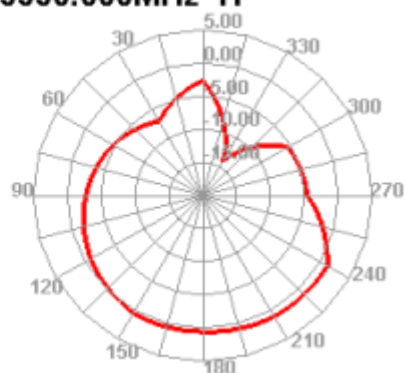
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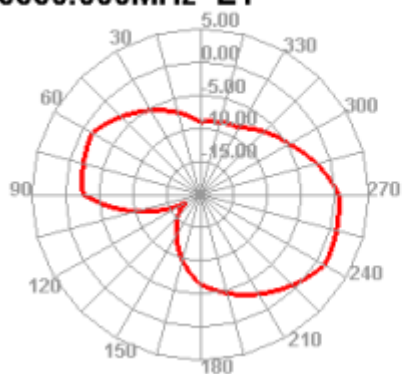
5550.000MHz



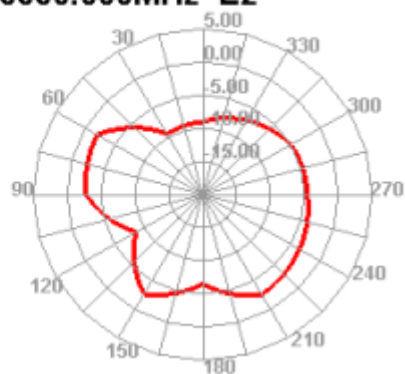
5550.000MHz H



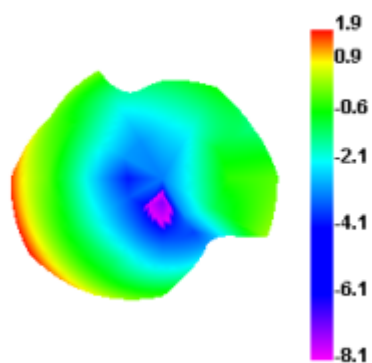
5550.000MHz E1



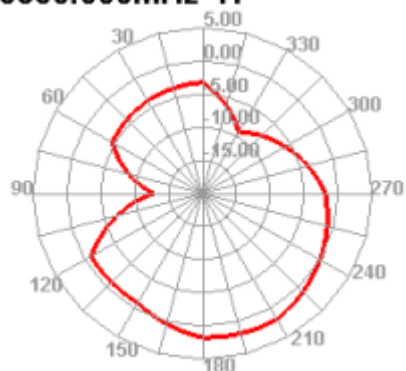
5550.000MHz E2



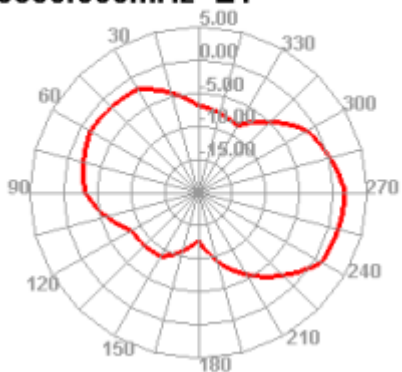
5850.000MHz



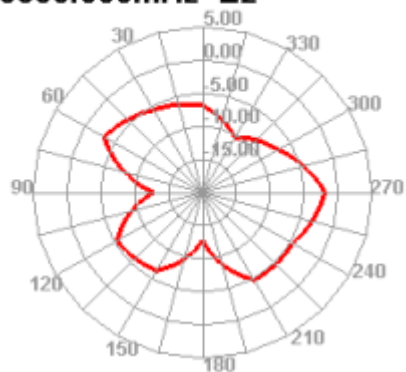
5850.000MHz H



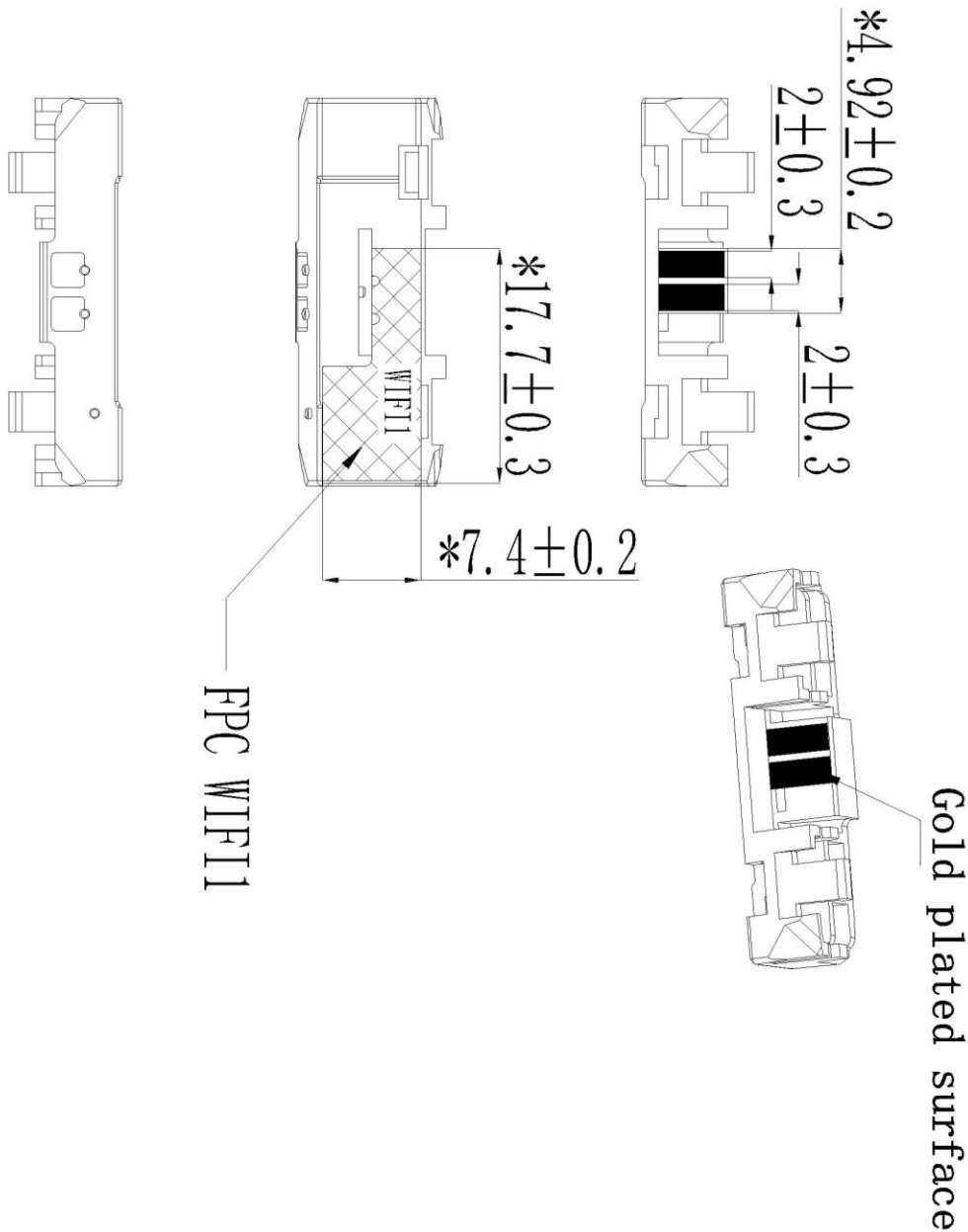
5850.000MHz E1



5850.000MHz E2



5 Product Size



Unit: mm