



Shenzhen Shuodian Electronic Technology Co.,Ltd
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SPECIFICATION

for

CB101 2.4G-5.8G WIFI FPC Antenna

Customer No.

Product No.

LS-CB101 2.4G-5.8G-FPC-60MM

Author: XiaofengZeng Review: Liming

Release Date: 2024.06.01

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Shenzhen Shuodian Electronic Technology Co.,Ltd



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1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

CB101 2.4G-5.8G WIFI antenna

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	CB101 2.4G-5.8G WIFI
2	Operating Frequency Band	2400-2500MHZ 5100-5900MHZ
3	VSWR	≤2.0
4	Gain	2.0dBi
5	Radiation Efficiency	≥50%
6	Impedance	50 Ω
7	Antenna Type	PIFA
8	Antenna composition	FPC+CABLE
9	Entity Picture	



4. Specification Details

4.1 Mechanical Properties

4.11 Product Composition:

No.	Material	Size (MM)
1	FPC	37*12.9 BLACK
2	CABLE	IPEX-1 Ø1.13 60MM BLACK

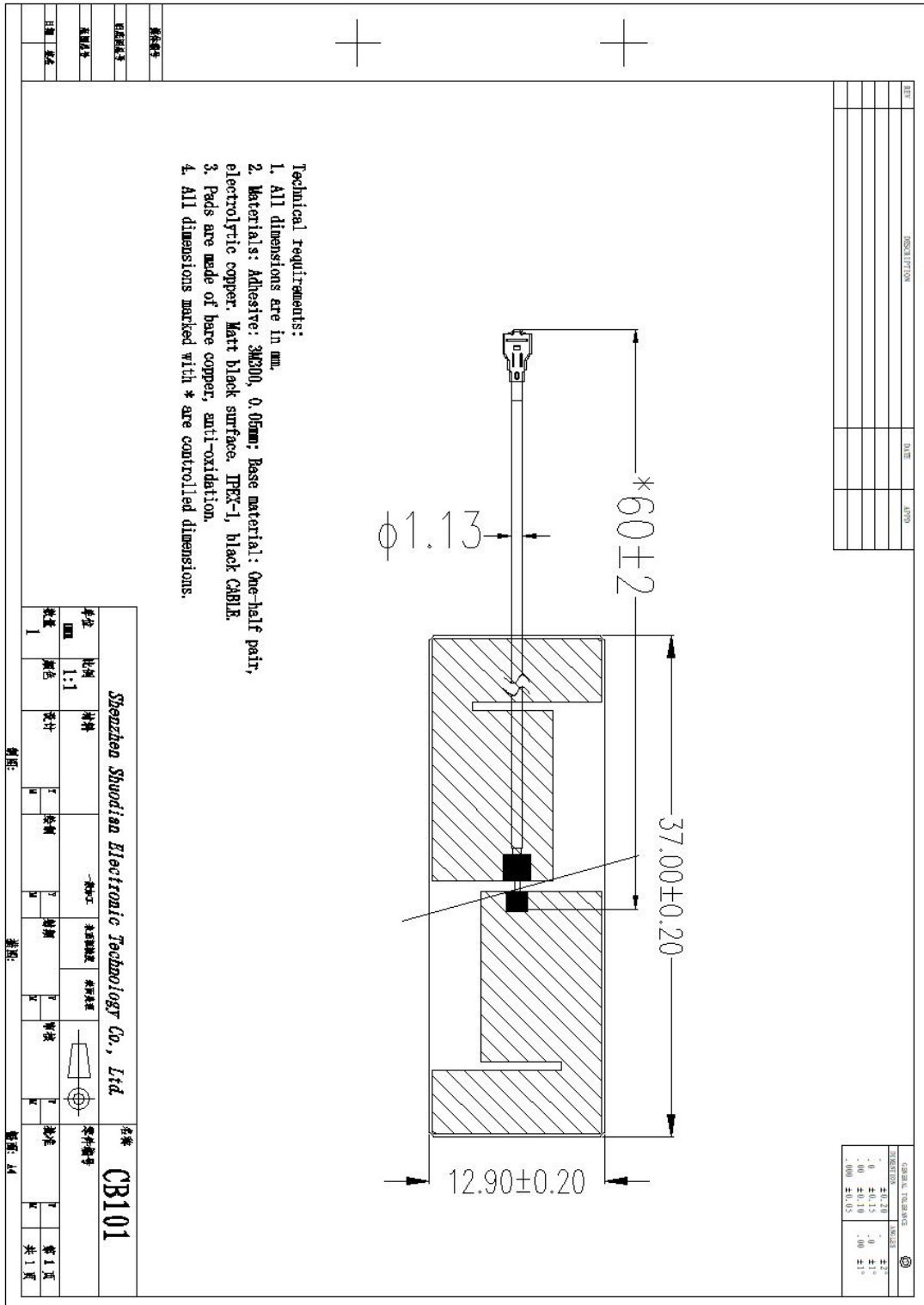
4.12 Apperance

Good appearance without scars 、 dirt、 protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:

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Shenzhen Shuodian Electronic Technology Co., Ltd		名称	零件编号		第 1 页	
单位	比例	材料	一检	二检	三检	共 1 页
数量	1:1	设计	审核	制图	批准	



4.2 Electric Performance

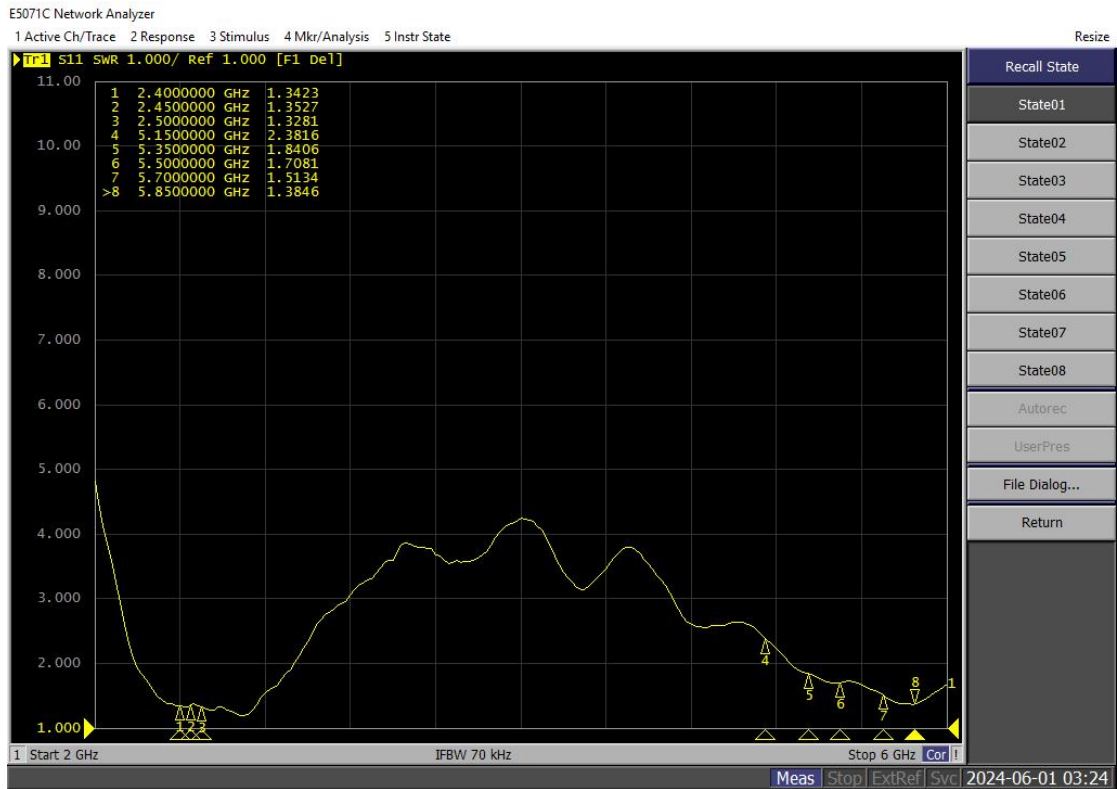
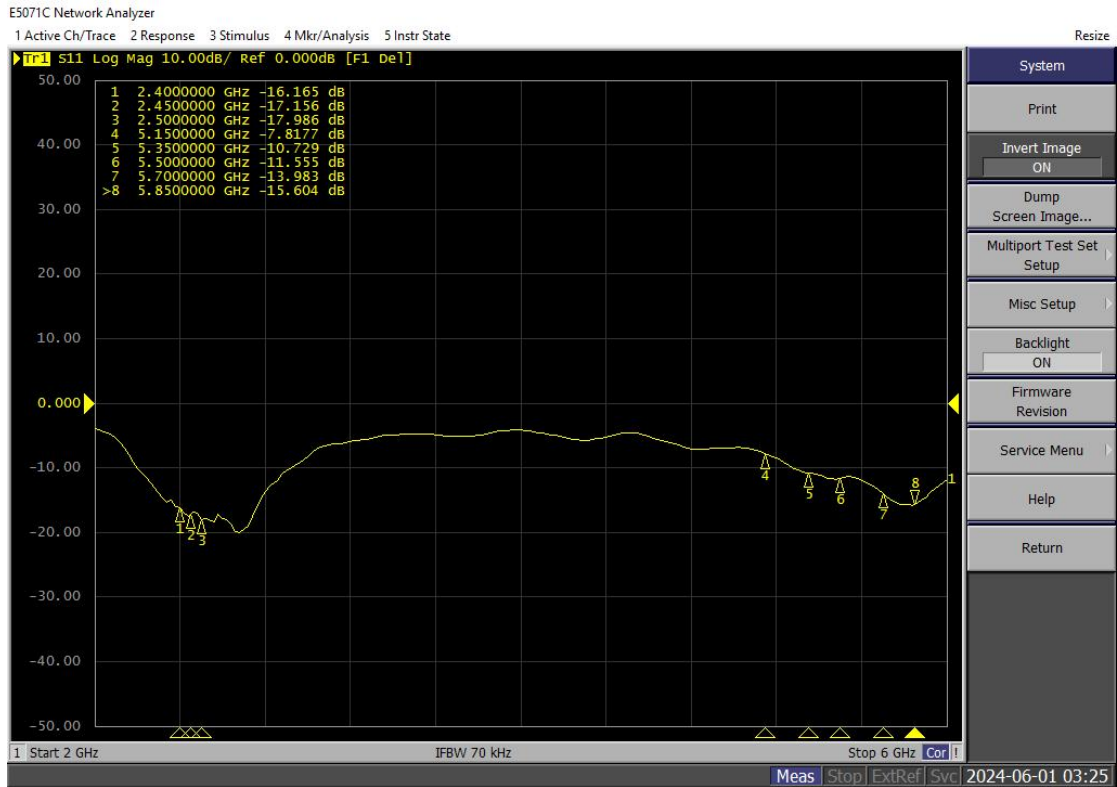
4.21 Test condition

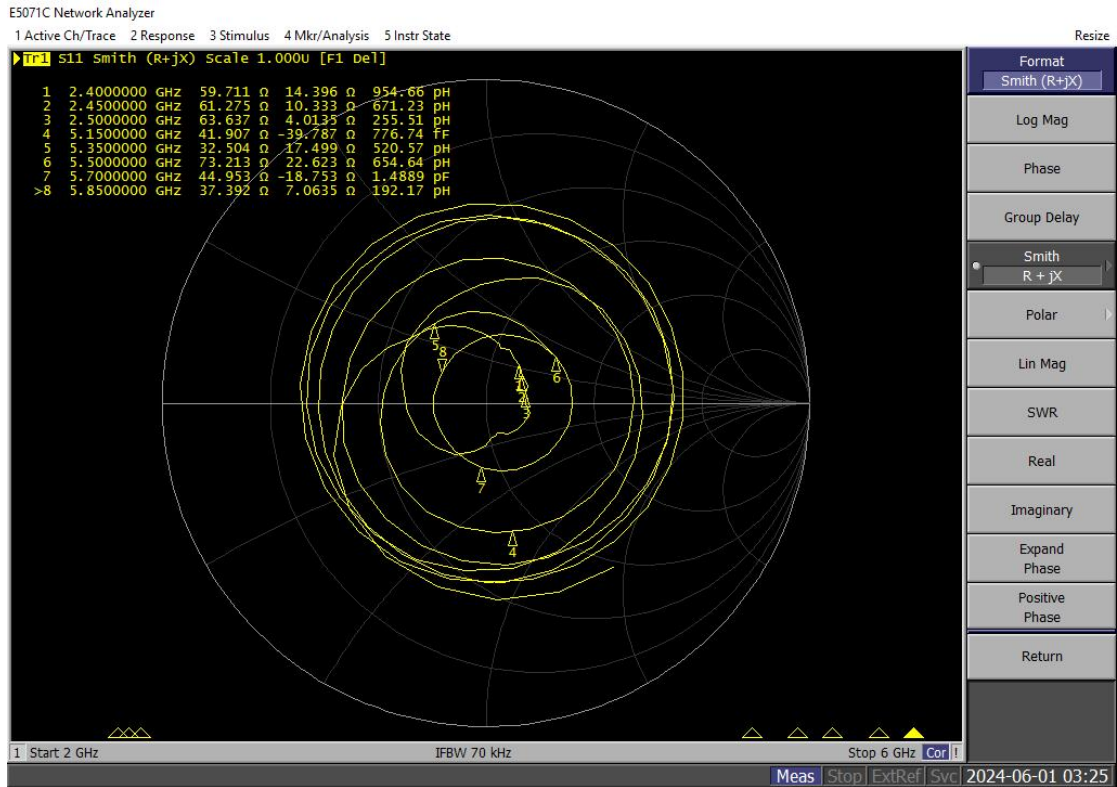
Environment: Temperature: 10℃——+30℃ Humidity: ≤80% (+40℃) Atmospher: 750mmkg±30mmkg	Equipment: Network Analyzer: KEYSIGHT E5071C Anechior Chamber:Multi-probe Microwave Anechoic Chamber
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4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker (MHz)	2400	2450	2500	5150	5350	5500	5700	5850
Returnloss	-16.16	-17.15	-17.98	-7.81	-10.72	-11.55	-13.98	-15.60
VSWR	1.34	1.35	1.32	2.38	1.84	1.70	1.51	1.38





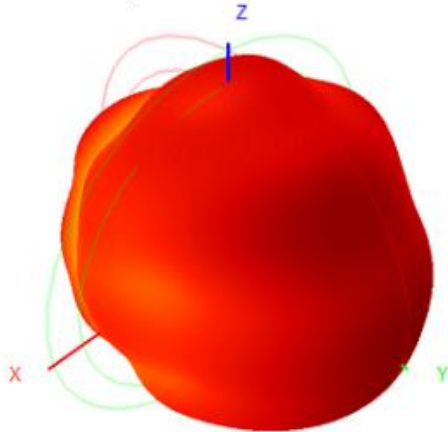
4. 22. 2 Passive gain、 efficiency and Radiation Pattern:

Marker (MHz)	2400	2450	2500	5150	5350	5500	5700	5850
Gain (dBi)	3.16	2.61	3.21	1.79	2.40	2.80	3.47	2.58
Efficiency (%)	57.21	60.24	57.66	38.53	41.00	45.45	51.45	45.06

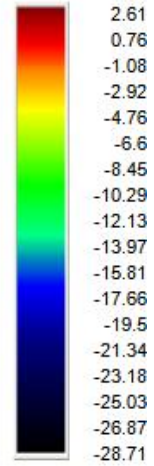
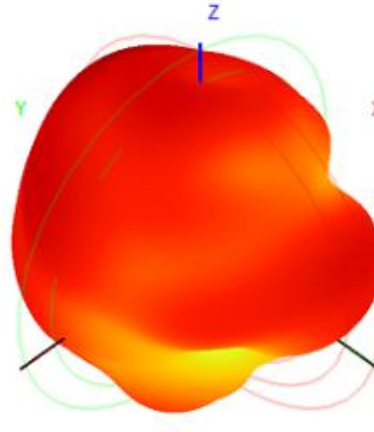


2450 MHz:

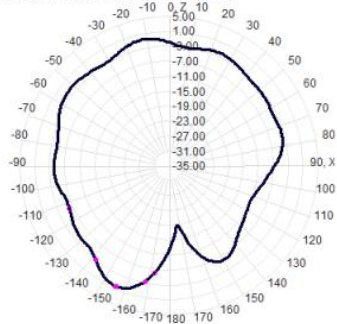
2450.0MHz H+V, Eff: 60.2%



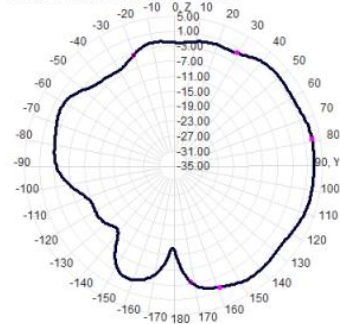
Back View



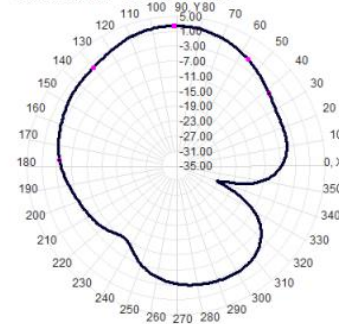
2450.0MHz Total(E1-XZ), Max= 0.03dBi



2450.0MHz Total(E2-YZ), Max= 2.61dBi

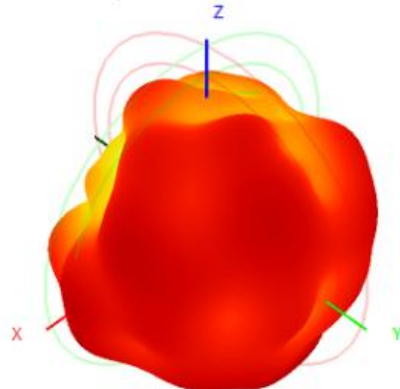


Total(H-XY), Max= 2.40dBi, CirD=25.85

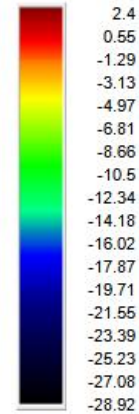
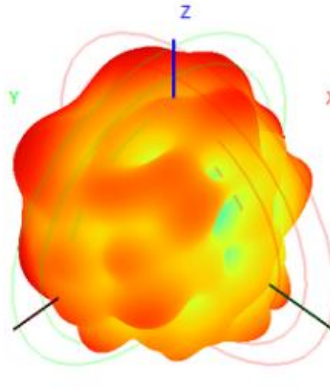


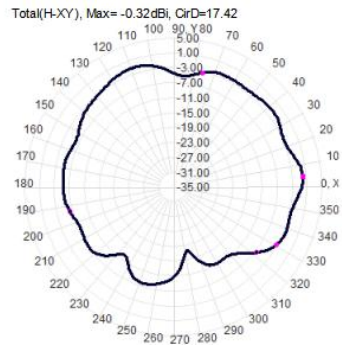
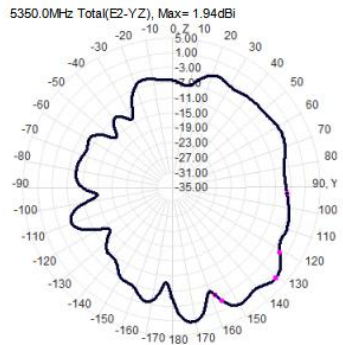
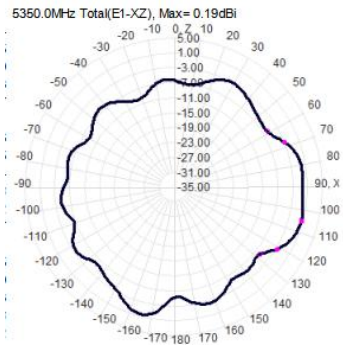
5350 MHz:

5350.0MHz H+V, Eff: 41.0%



Back View

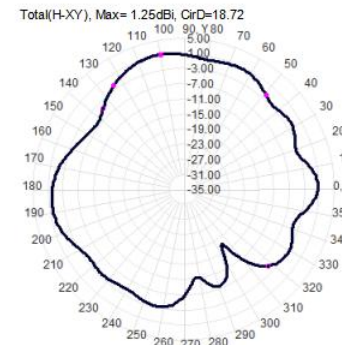
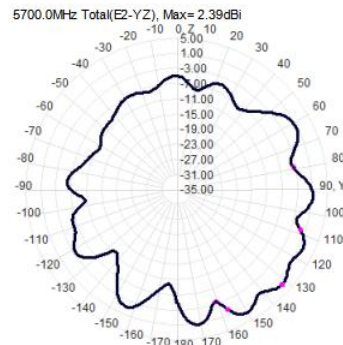
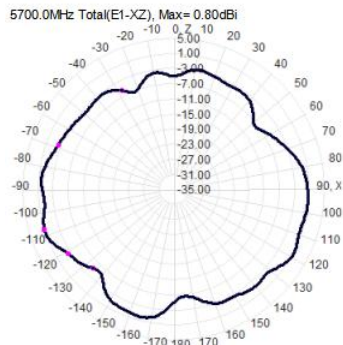
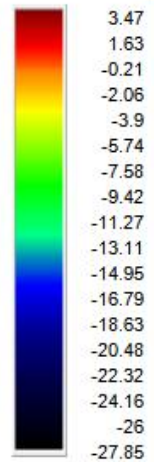
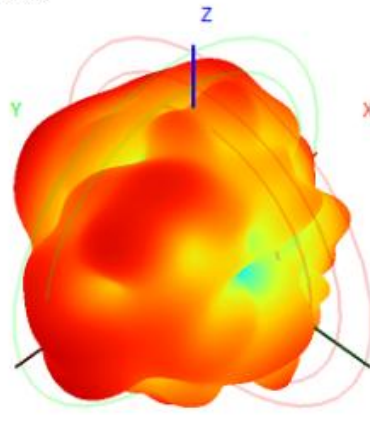
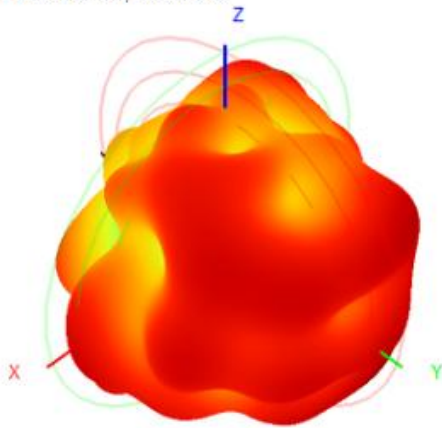




5700 MHz:

5700.0MHz H+V, Eff: 51.5%

Back View





5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

6. Document Resume

Document No.	
Release Date	2024/06/01
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/06/01	1.00	New Project