

Acknowledgement

SPECIFICATION FOR APPROVAL

CUSTOMER NAME: Guoguang Electric Company Limited

PRODUCT NAME: 2.4/5G WIFI-1 Built-in antenna L=268mm

CUSTOMER P/N: EAN00304

Ren Feng P/N: U00T02S000N02637 REV: B

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Huang Lei	
AUDITOR BY:	Liu Xiaolin	
APPROVED BY:	Yao Dingjun	
DATE:	2023-03-08	

Contents

<i>Item</i>	<i>Description</i>
一、 -----	Change of resume
二、 -----	Specification sheet
三、 -----	Finished drawing
四、 -----	Antenna position diagram
五、 -----	Test report
六、 -----	Raw material list

一、 Change your resume

REV	DATE	Change record
A	2022-12-23	Initial release
B	2023-03-03	Change the board wiring

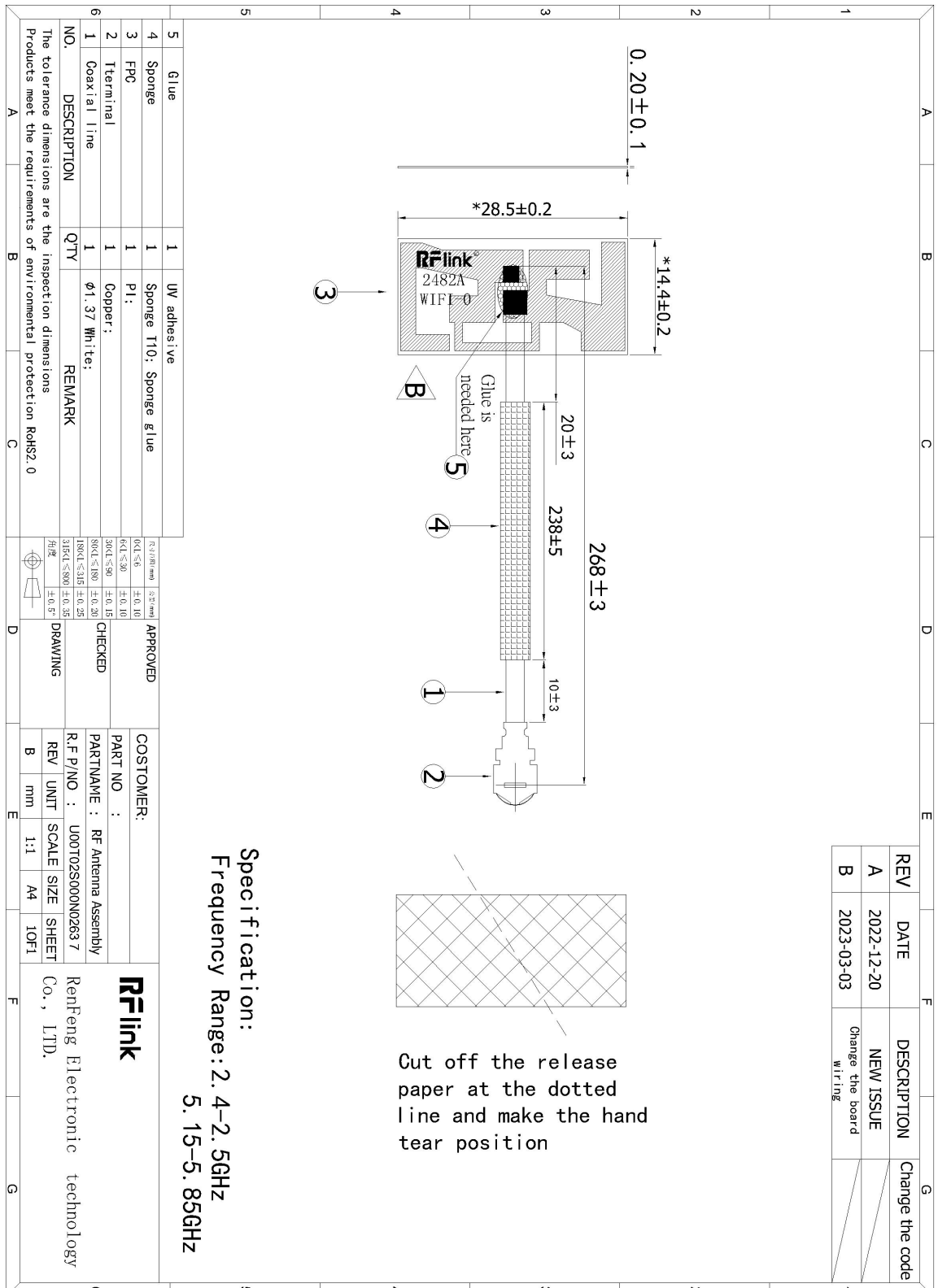
二、 Specification sheet:

Product main technical parameters

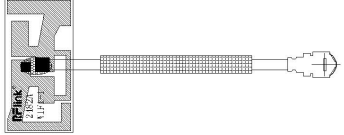
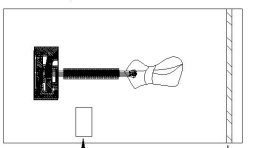
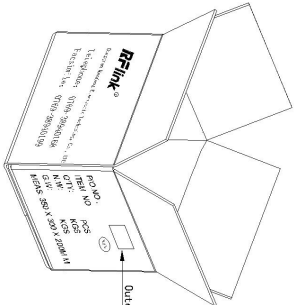
Main technical specifications		Main technical specifications	
Frequency Range (MHZ)	2400-2500 5150-5850	Frequency Range (MHZ)	2400-2500 5150-5850
Impedance(Ω)	50	Impedance(Ω)	50
Peak Gain(dBi)	$2.4G \leq 5.19$ $5G \leq 3.23$	Peak Gain(dBi)	$2.4G \leq 5.19$ $5G \leq 3.23$
VSWR	≤ 2.0	VSWR	≤ 2.0
Radiation	Omni-directional	Radiation	Omni-directional
Connector Type	I-PEX	Connector Type	I-PEX
Physical Properties		Physical Properties	
Antenna cover	FPC	Antenna cover	FPC
Operating Temp	-20℃~+70℃	Operating Temp	-20℃~+70℃
Storage Temp	-20℃~+70℃	Storage Temp	-20℃~+70℃

三、Finished product drawing & packing drawing:

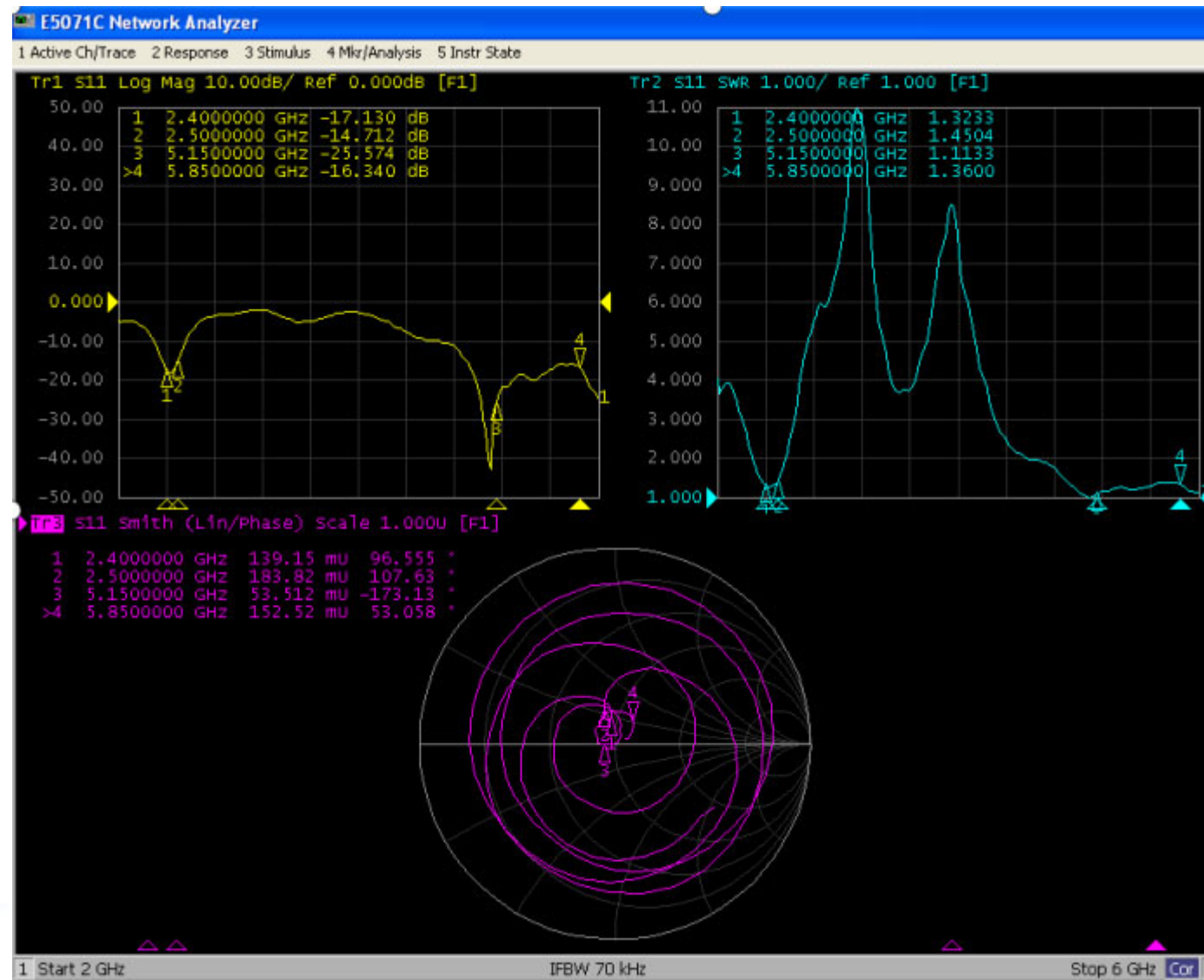
2. 1、Antenna size diagram



2.2、Packing specification

Product packaging		Individual product		Inner bag packing		PE bag		Inner pocket tag		Outer box	
											
Packing instructions of inner bag: 1. Each bag contains 100pcs of products. 2. Use a pearl-cotton bag or rubber band to fix the wire 3. Each bag should be labeled accordingly		Packing instructions for the outer box 1. RoHS label and 1pc label should be affixed to the outer box. 2. Each box contains 40 bags /4000pcs of products.		seal		Inner pocket tag		Outer box label		Outer box label	
Products meet the requirements of environmental protection RoHS2.0		APPROVED		CUSTOMER:		PART NO. :		RF link		RenFeng Electronic technology Co.,LTD.	
CHECKED		PARTNAME :		REV / UNIT		SCALE SIZE		SHEET		10F1	
DRAWING		REV / UNIT		SCALE SIZE		SHEET		SHEET		10F1	
尺寸范围 (mm)		公差 (mm)		尺寸范围 (mm)		公差 (mm)		尺寸范围 (mm)		公差 (mm)	
61.2-50		1.5-10		61.2-50		1.5-10		61.2-50		1.5-10	
201.2-50		1.5-10		201.2-50		1.5-10		201.2-50		1.5-10	
180.1-105		1.5-10		180.1-105		1.5-10		180.1-105		1.5-10	
220.1-100		1.5-10		220.1-100		1.5-10		220.1-100		1.5-10	
1.5-10		1.5-10		1.5-10		1.5-10		1.5-10		1.5-10	

Measurement data--Return Loss -WIFI 1-2.4G&5G

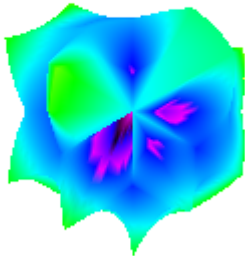


RF link

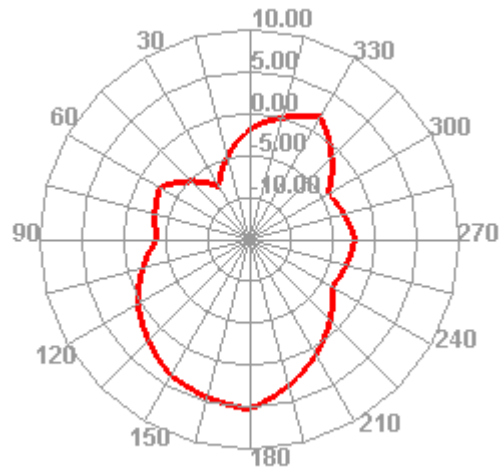
WIFI-1 2.4G 3D Pattern

2430

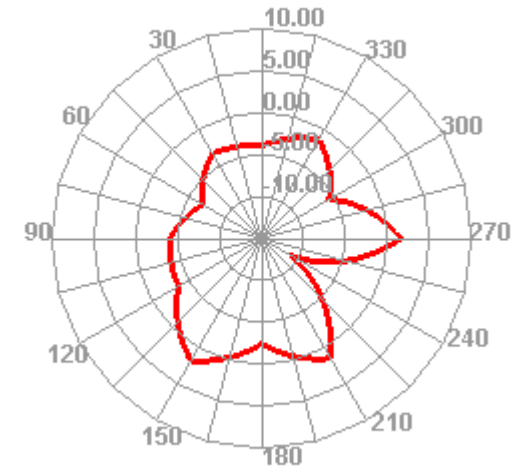
2430.000MHz



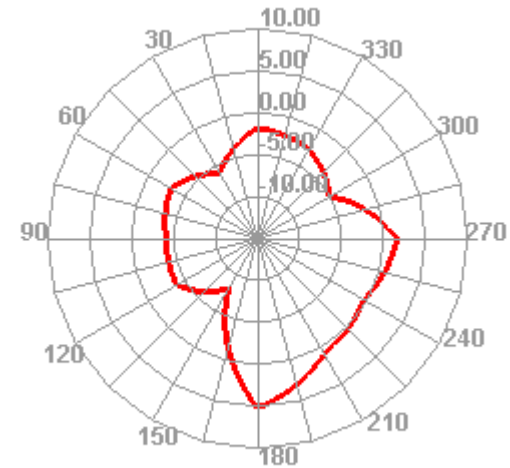
2430.000MHz E1



2430.000MHz H



2430.000MHz E2

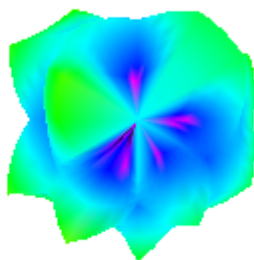


RF link

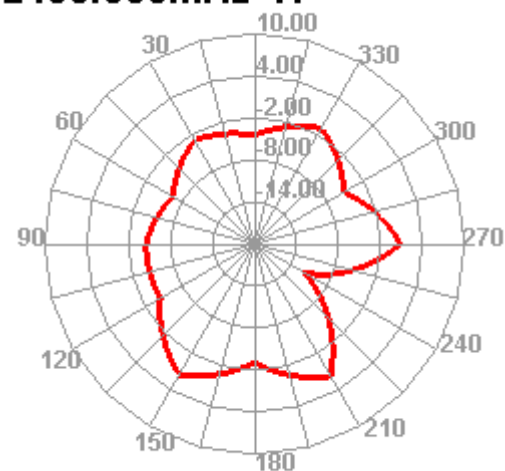
WIFI-1 2.4G 3D Pattern

2450

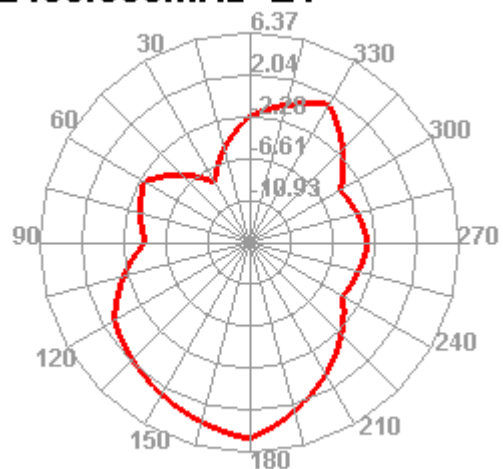
2450.000MHz



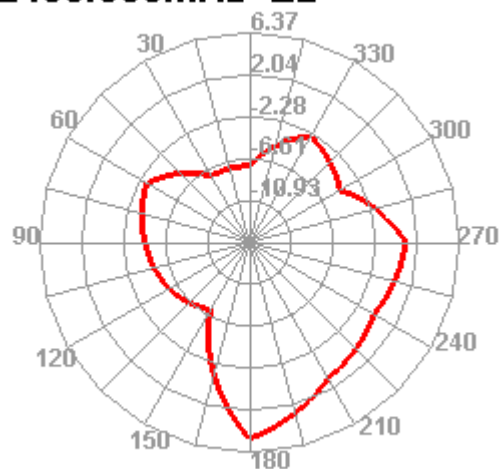
2450.000MHz H



2450.000MHz E1



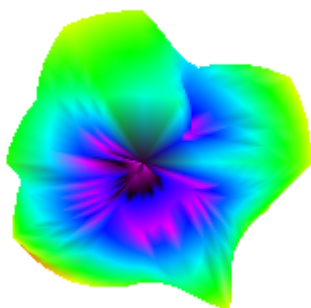
2450.000MHz E2



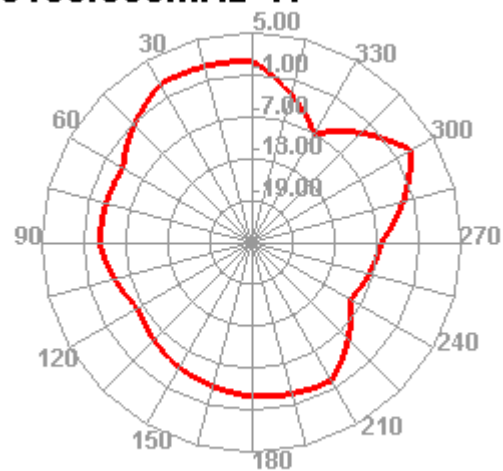
RF link

WIFI-1 5G 3D Pattern
5150

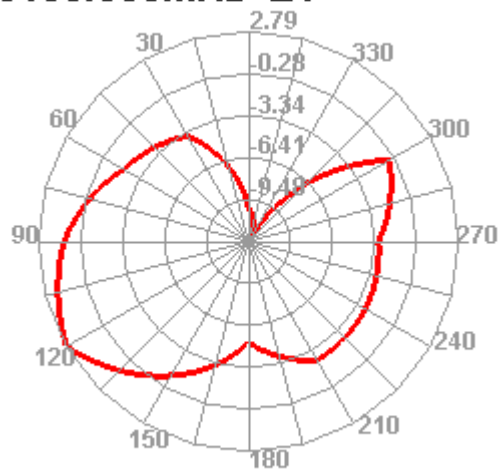
5150.000MHz



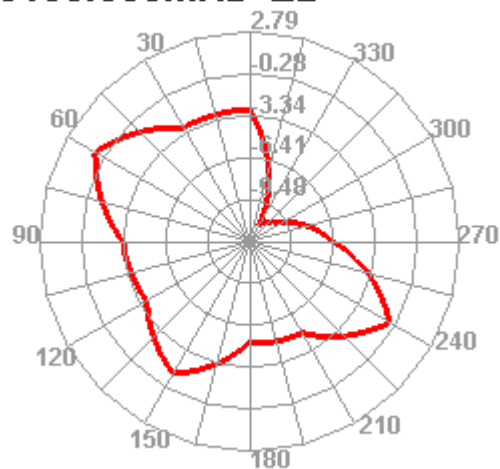
5150.000MHz H



5150.000MHz E1



5150.000MHz E2

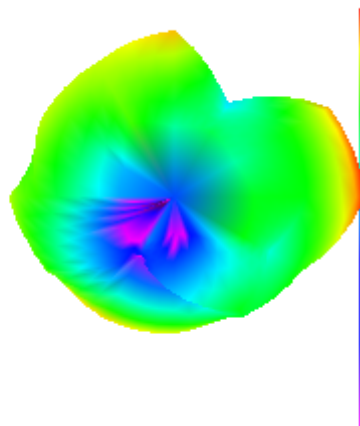


RF link

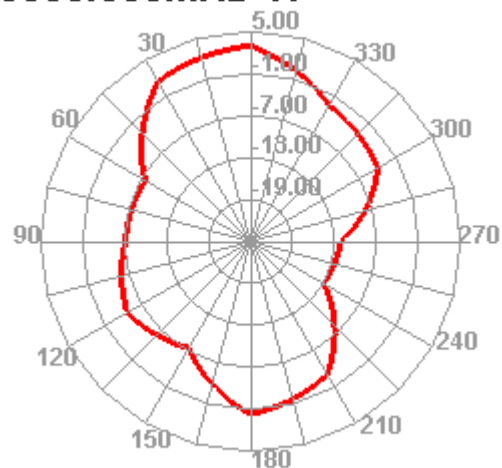
WIFI-1 5G 3D Pattern

5300

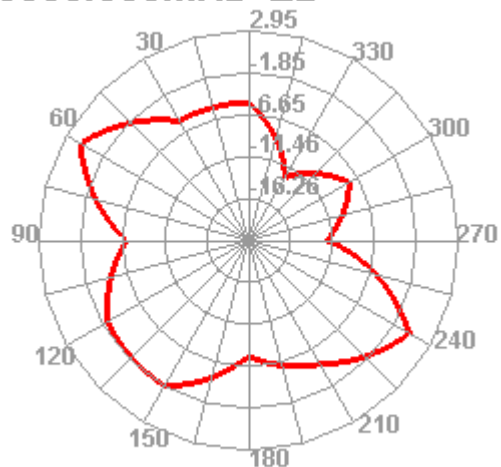
5300.000MHz



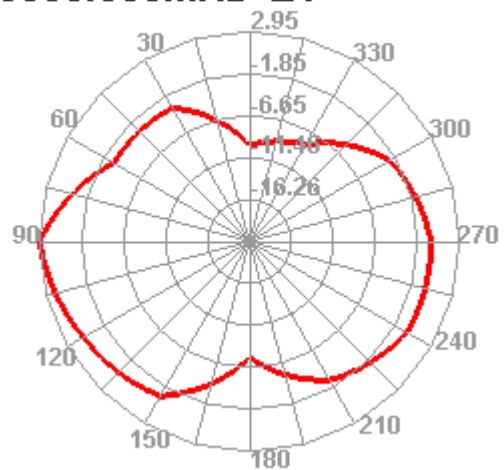
5300.000MHz H



5300.000MHz E2



5300.000MHz E1

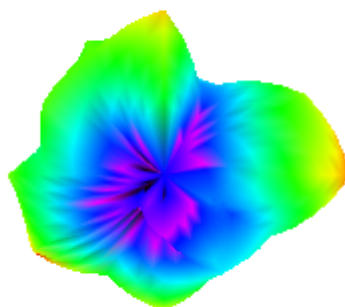


RF link

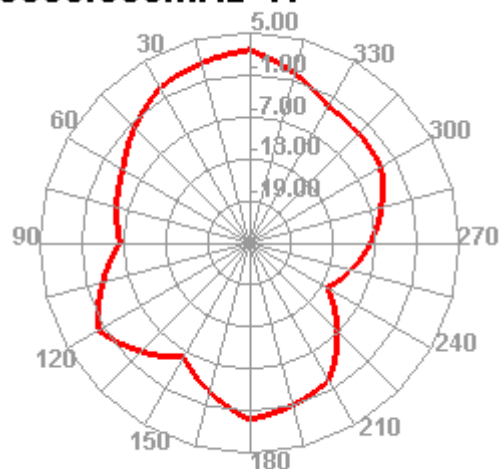
WIFI-1 5G 3D Pattern

5500

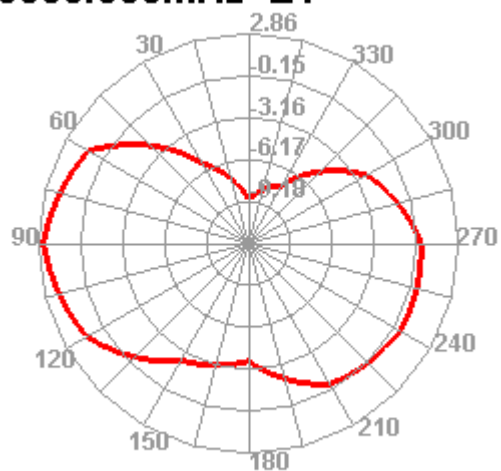
5500.000MHz



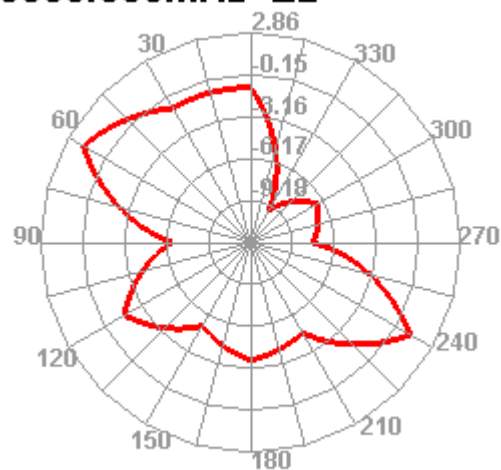
5500.000MHz H



5500.000MHz E1



5500.000MHz E2

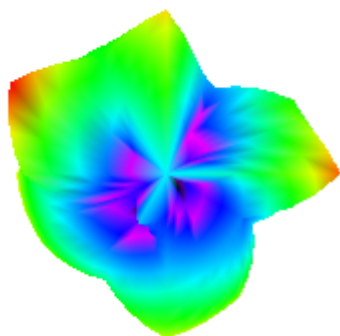


RF link

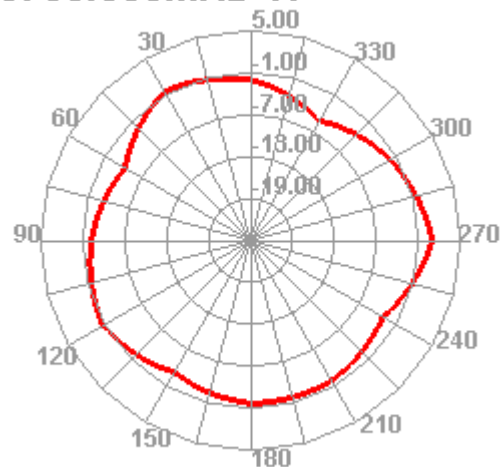
WIFI-1 5G 3D Pattern

5750

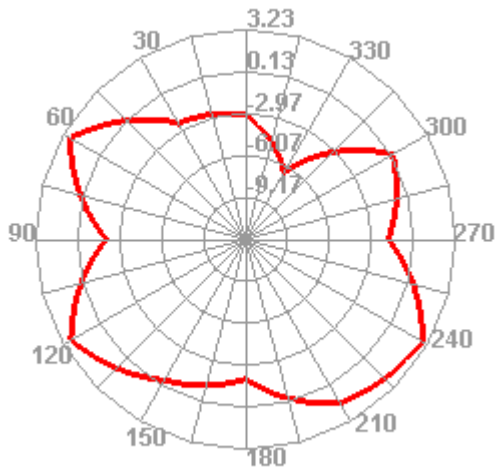
5750.000MHz



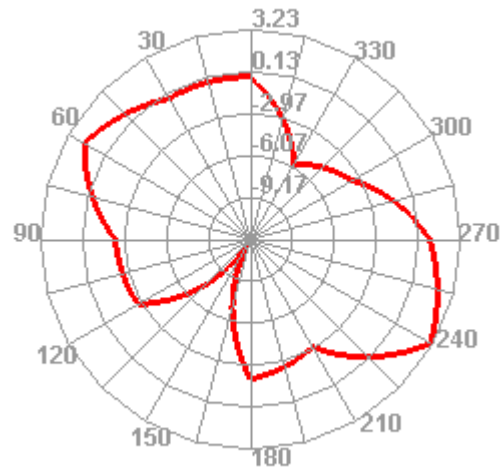
5750.000MHz H



5750.000MHz E1



5750.000MHz E2



RF link

WIFI 1-2.4G &5G

Freq (MHz)	Effi (%)	Gain (dBi)
2400	77.6	5.12
2410	83.06	5.11
2420	83.99	5.11
2430	86.64	5.19
2440	85.87	5.18
2450	83.39	5.07
2460	81.16	4.97
2470	80.56	4.93
2480	78.5	4.8
2490	76.06	4.73
2500	73.04	5.02

Freq (MHz)	Effi (%)	Gain (dBi)
5150	57.28	2.79
5200	56.28	2.36
5250	51.66	2.5
5300	53.19	2.95
5350	57.26	2.64
5400	62.63	2.71
5450	63.25	3.12
5500	59.49	2.86
5550	61.25	2.77
5600	63.68	2.78
5650	60.99	2.42
5700	64.04	2.49
5750	73.94	3.23
5800	73.46	3.1
5850	67.99	2.95

六、ROHS/ Raw material list:

Meet RoHS requirements。

Serial number	Name	Material	QTY	Unit	Supplier	UL certification number
1	FPC	PI	1	pc	Junyi	/
2	1.37 Coaxial line	Tinning/FEP	1	pc	China Ocean Unicom	/
3	Terminal	Phosphor bronze	1	pc	Kexincheng	/
4	Linear sponge	Sponge T10	1	pc	Pengsheng	/