

Acknowledgement

SPECIFICATION FOR APPROVAL

CUSTOMER NAME: Guoguang Electric Company Limited

PRODUCT NAME: 2.4/5G WIFI-1 Built-in antenna L=143mm

CUSTOMER P/N: EAN00319

Ren Feng P/N: U00T02S000N02788 REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	Huang Lei	
AUDITOR BY:	Liu Xiaolin	
APPROVED BY:	Yao Dingjun	
DATE:	2023-01-12	

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	2023-01-12	Initial release

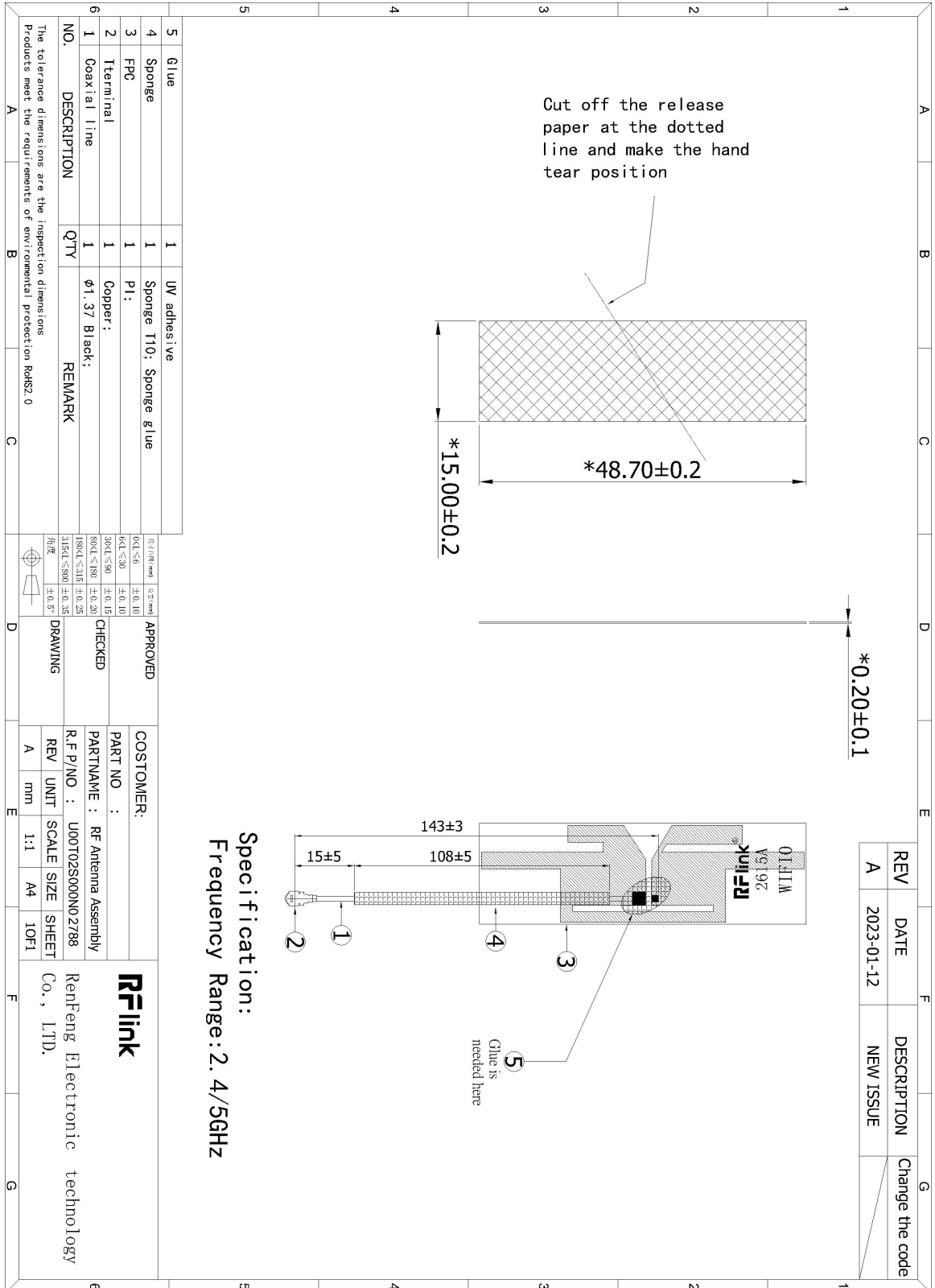
二、 Specification sheet:

Product main technical parameters

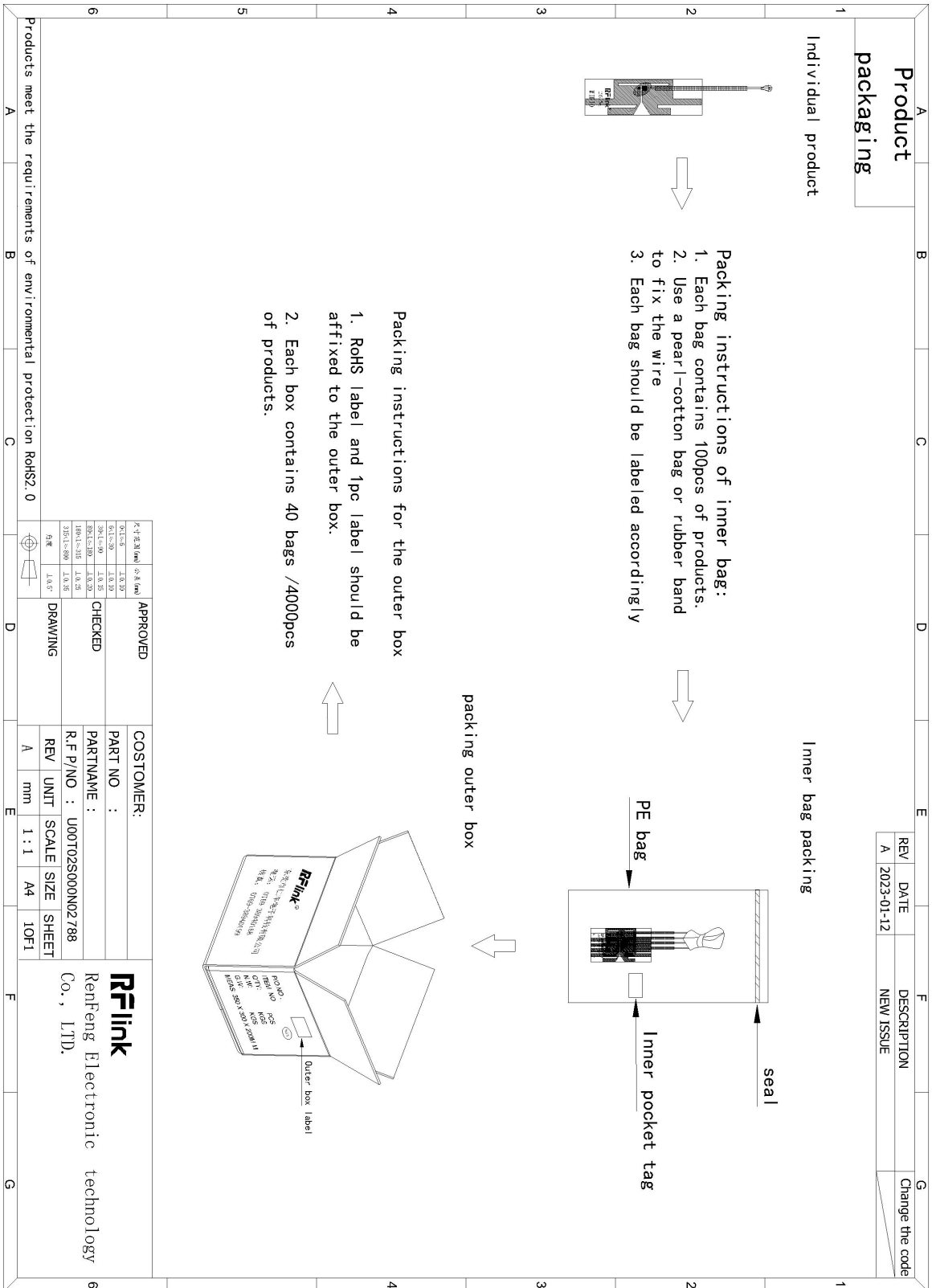
Main technical specifications		Main technical specifications	
Frequency Range (MHZ)	2400-2500 5150-5850	Frequency Range (MHZ)	2400-2500 5150-5850
Impedance(Ω)	50	Impedance(Ω)	50
Peak Gain(dBi)	2.4G \leq 3.8 5G \leq 4.53	Peak Gain(dBi)	2.4G \leq 3.8 5G \leq 4.53
VSWR	\leq 2.0	VSWR	\leq 2.0
Radiation	Omni-directional	Radiation	Omni-directional
Connector Type	I-PEX	Connector Type	I-PEX
Physical Properties		Physical Properties	
Antenna cover	FPC	Antenna cover	FPC
Operating Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C	Operating Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C
Storage Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C	Storage Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C

三、 Finished product drawing & packing drawing:

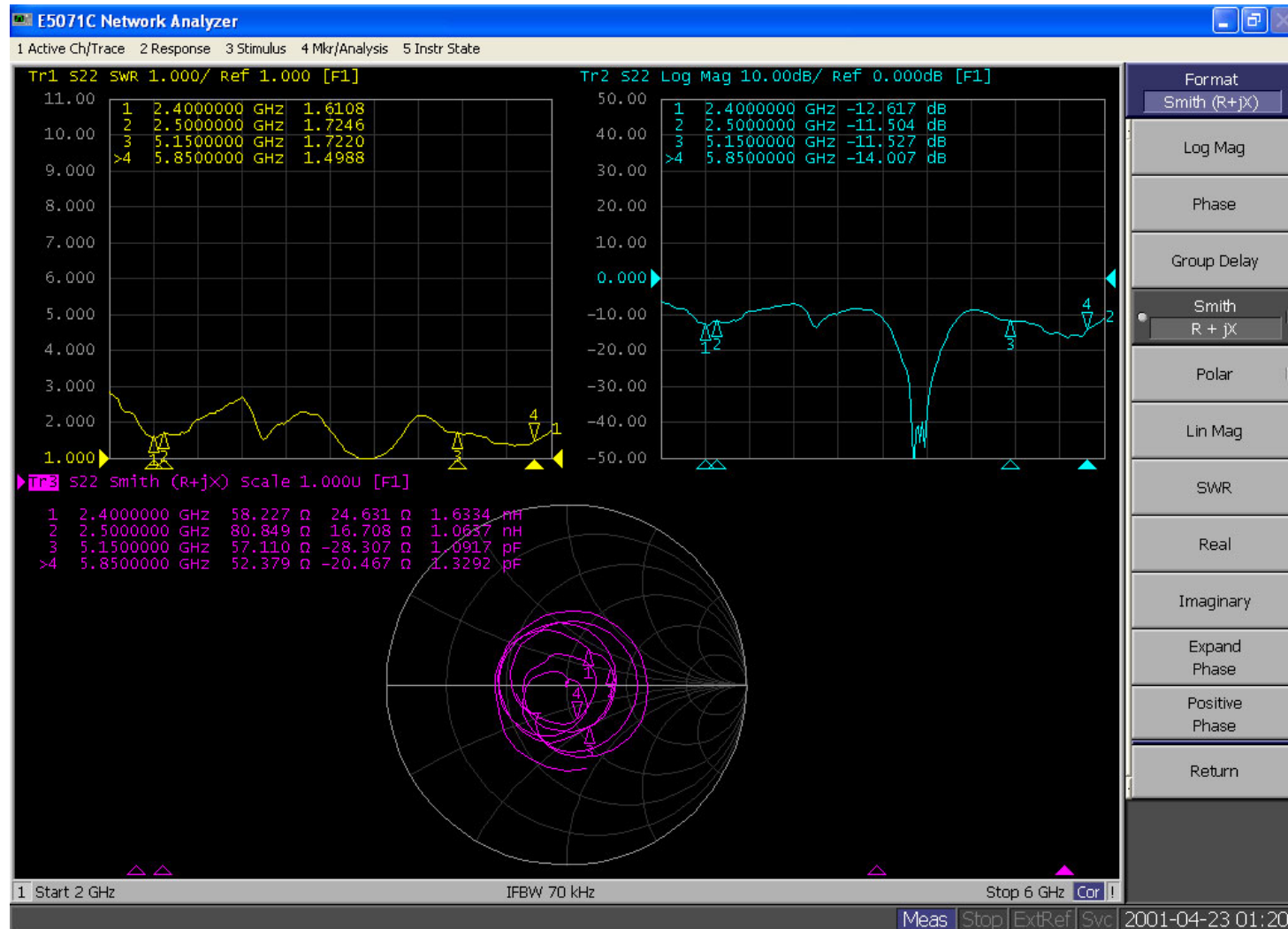
2.1、 Antenna size diagram



2.2、Packing specification



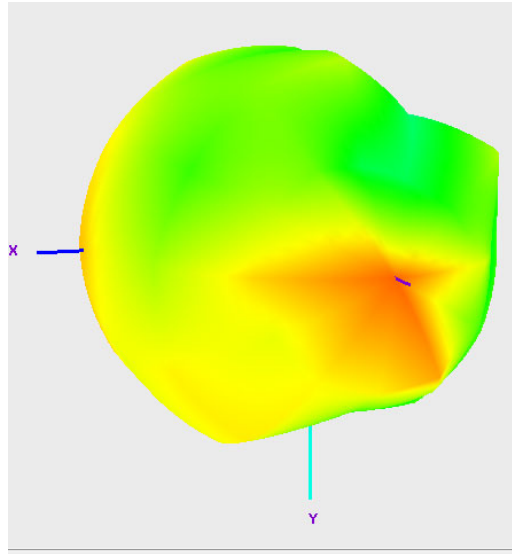
Measurement data--Return Loss -WIFI 1-2.4G&5G



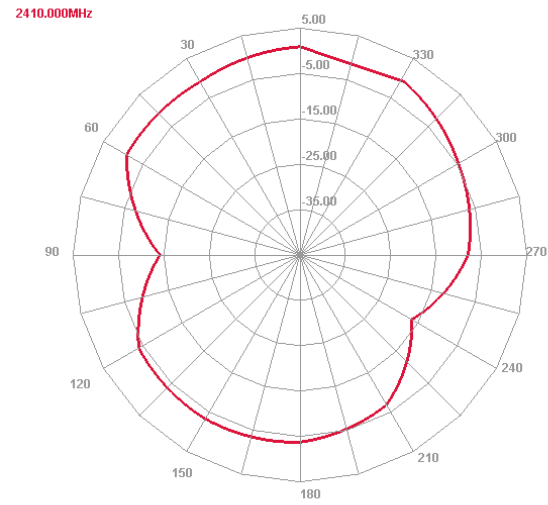
RF link

WIFI-1 2.4G 3D Pattern

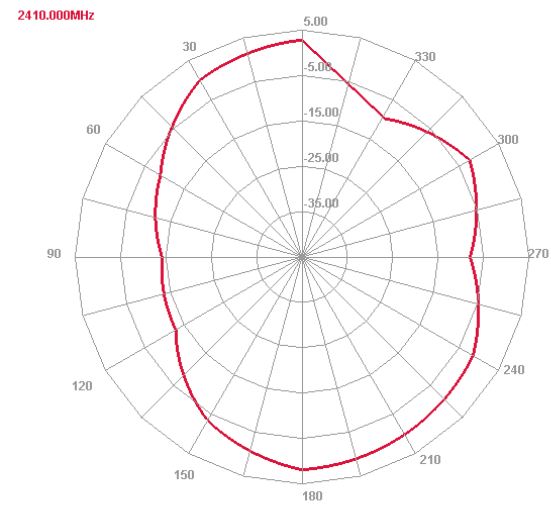
2410



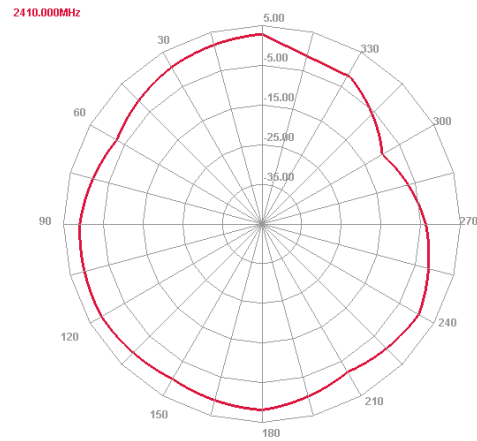
Horizontal



E2 Face



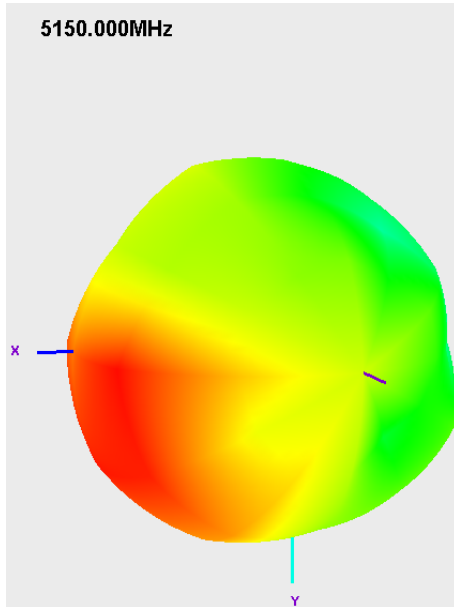
E1 Face



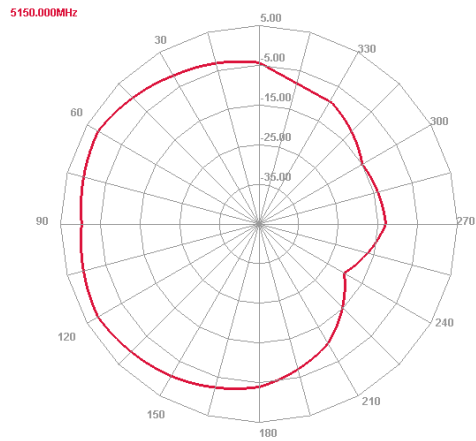
RF link

WIFI-1 5G 3D Pattern

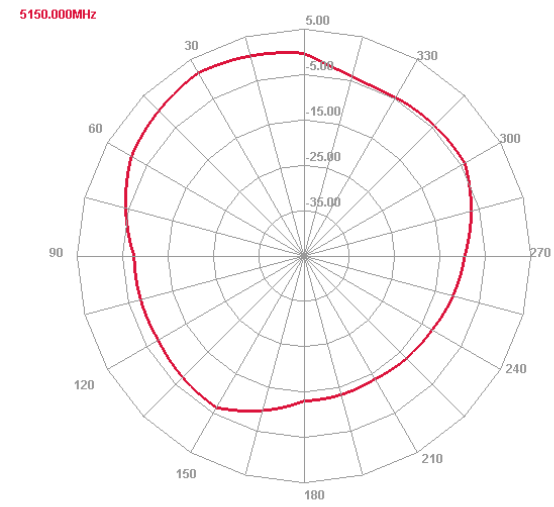
5150



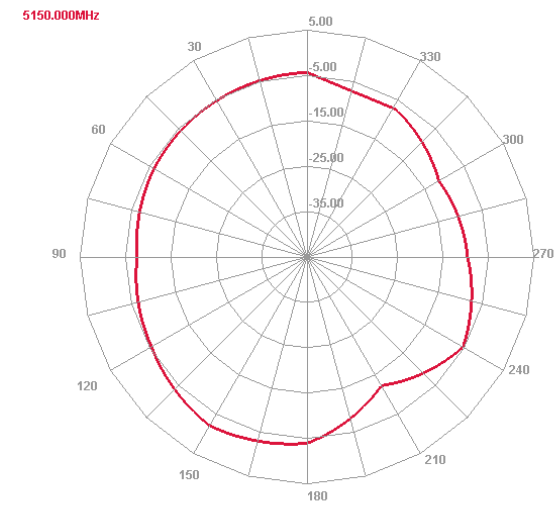
E1 Face



Horizontal



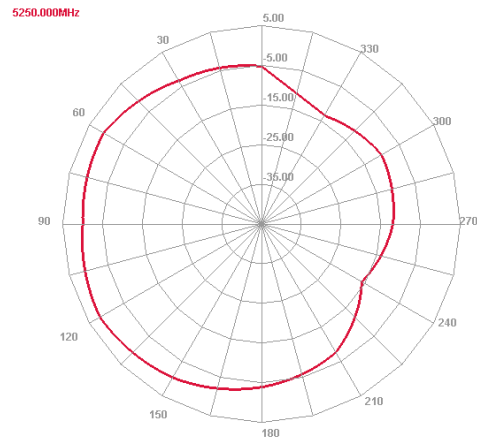
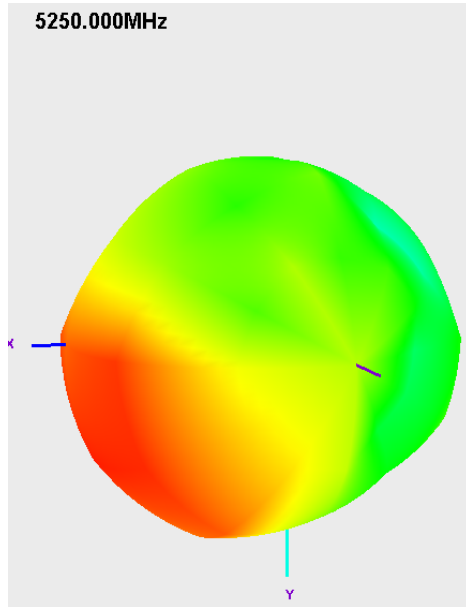
E2 Face



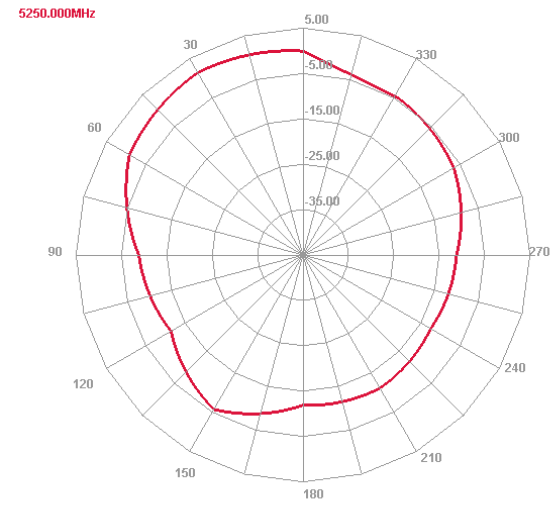
RF link

WIFI-1 5G 3D Pattern

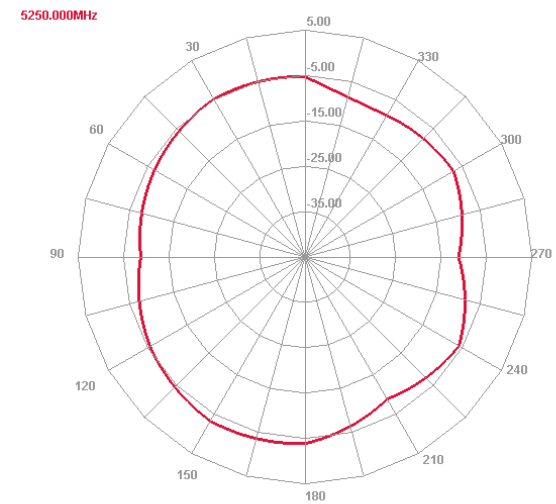
5250



Horizontal



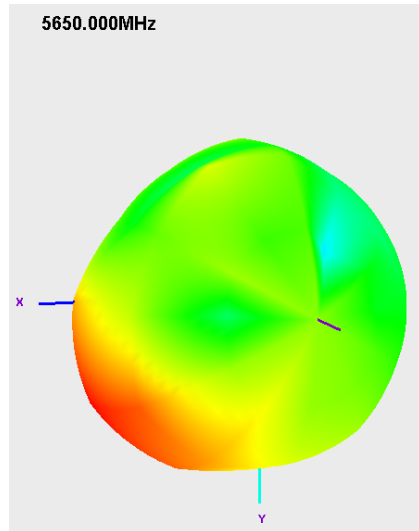
E2 Face



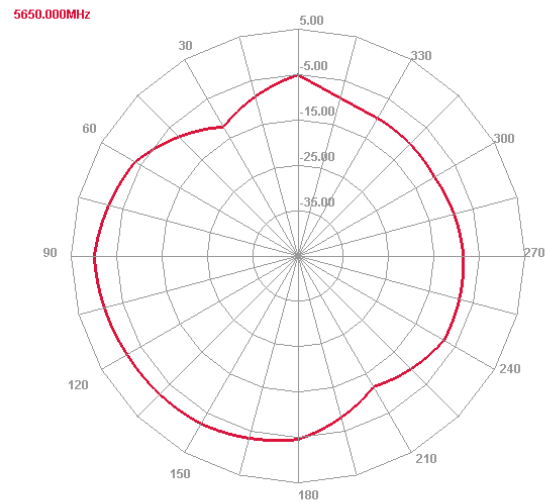
RF link

WIFI-1 5G 3D Pattern

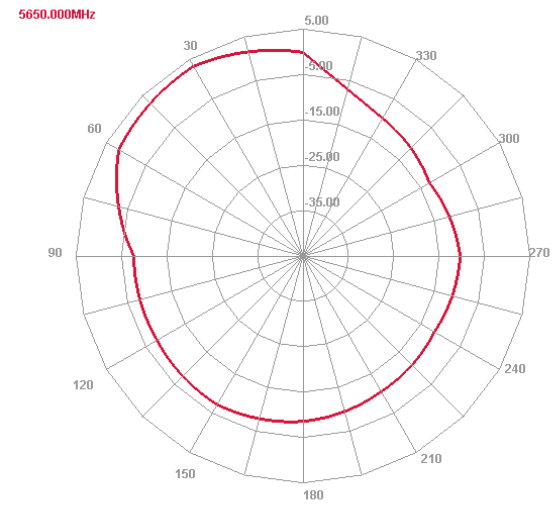
5650



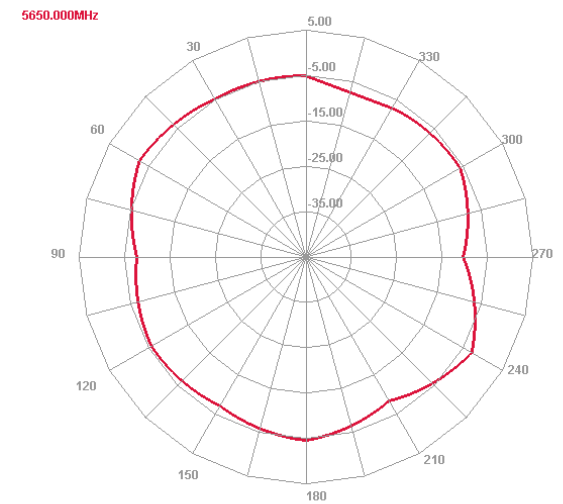
E1 Face



Horizontal



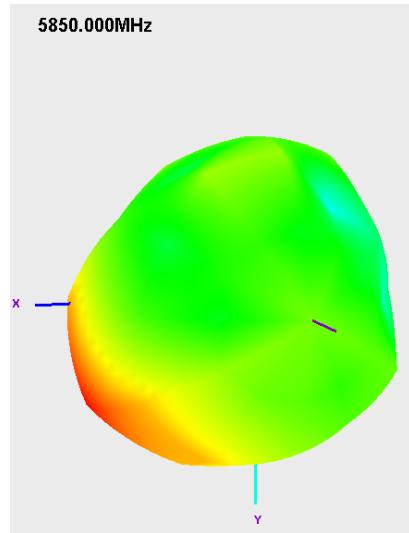
E2 Face



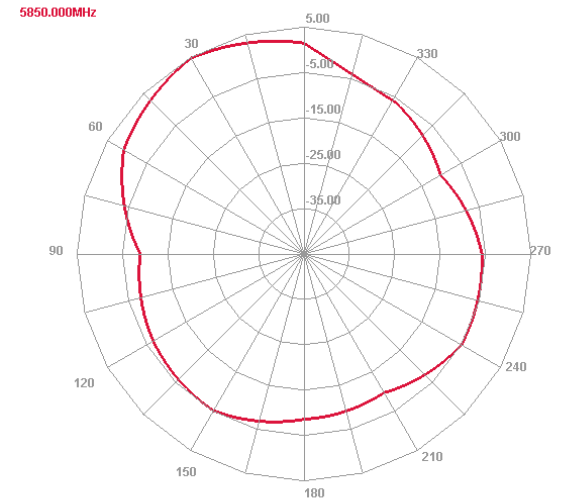
RF link

WIFI-1 5G 3D Pattern

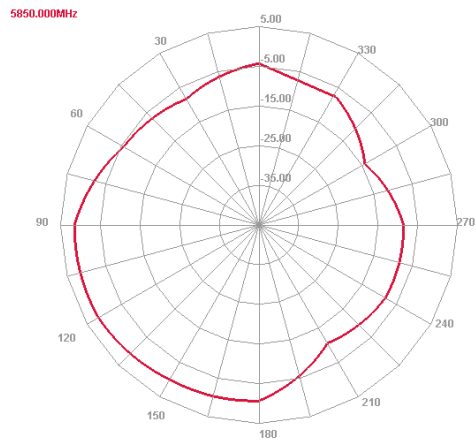
5850



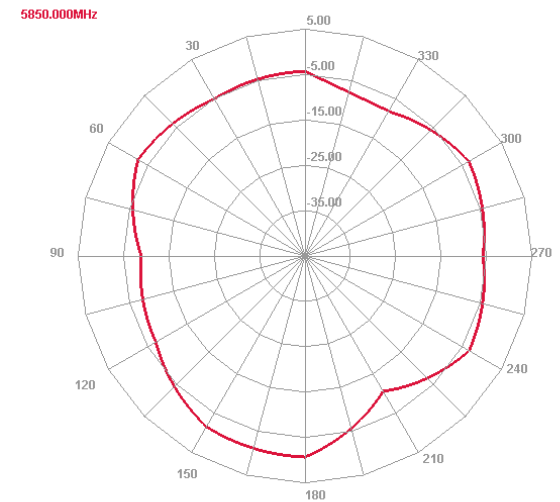
Horizontal



E1 Face



E2 Face





WIFI 1-2.4G &5G

Freq (MHz)	Effi (%)	Gain (dBi)
2400	56.63	3.4
2410	63.58	3.8
2420	63.56	3.66
2430	68.32	3.73
2440	68.46	3.51
2450	66.9	3.21
2460	63.96	2.91
2470	63.21	2.75
2480	59.64	2.43
2490	61.9	2.75
2500	56.94	2.52

Freq (MHz)	Effi (%)	Gain (dBi)
5150	55.65	2.01
5200	54.53	1.69
5250	54.06	1.92
5300	52.32	1.61
5350	51.39	1.51
5400	54.12	0
5450	53.95	0.05
5500	53.1	0.53
5550	55.81	1.6
5600	50.41	2.23
5650	56.42	3.28
5700	55.47	3.25
5750	62.28	3.62
5800	60.38	4.32
5850	56.25	4.53

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	/