

SPECIFICATION FOR APPROVAL

CUSTOMER :	yuanchuan
PART NAME :	External dual band wifi antenna L=250mm
PART NO. :	
DZZ NO. :	N12-7418-R0A
REV. :	1.0

	MANUFACTURERR SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY:		
DATE:		

Shenzhen be-comfortable technology.co.,LTD

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PCB Antenna Assembly

Specification(With housing)

1.Electrical Properties

- 1.1 Frequency range.....2400~2500MHz&5150~5850MHz
- 1.2 Impedance.....50Ω Norminal
- 1.3 VSWR (Matching Transmit Trace on board) ...≤2
- 1.4 Radiation.....Omni
- 1.5 Gain(Peak).....3dBi
- 1.6 Polarization.....Linear
- 1.7 Admitted Power.....1W
- 1.8 Cable.....Φ1.37 cable
- 1.9 Connector.....CCT-1

2.Physical Properties

- 2.1 Working Temperature.....-30°C ~ +75°C
- 2.2 Storage Temperature.....-30°C ~ +75°C

Antenna Design for External dual band wifi antenna L=250mm V1.0

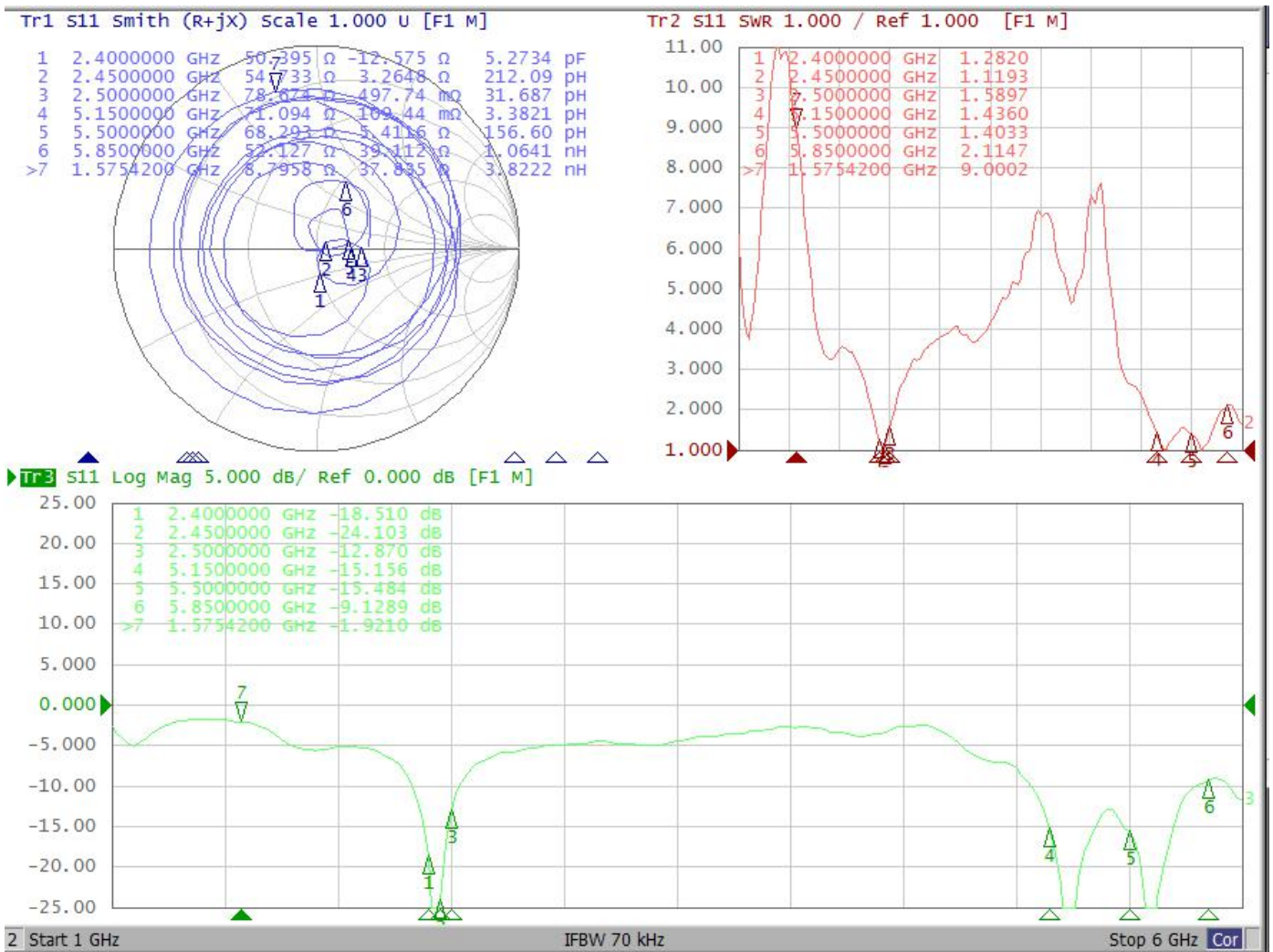
Document Number	DZZ-20230913
1st Released Date	13/09/2023
Author	Huiping Feng
Review By	Huiping Feng

Specification

Rough description	2.4G /5G ANT
Item	Initial Specification
Impedance	50Ω Norminal
Test environment	With housing
Spectrum	None
Frequecy range	2400~2500MHz&5150~5850MHz
Antenna Type	Dipole
VSWR	(Matching Transmit Trace on board)≤2
Gain(Peak)	3dBi
Radiation	Omni
Polarization	Linear
Rad. efficiency	≥60%
Power	1W
Connector Type	CCT
Cable Type	Φ1.37 coaxial cable
Cable Length	Black L=250mm
Isolation	None

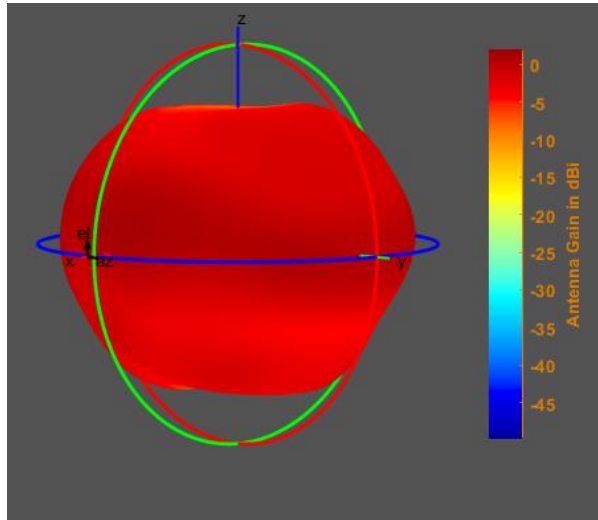
1. Passive

1.1 S11 VSWR Smith test results

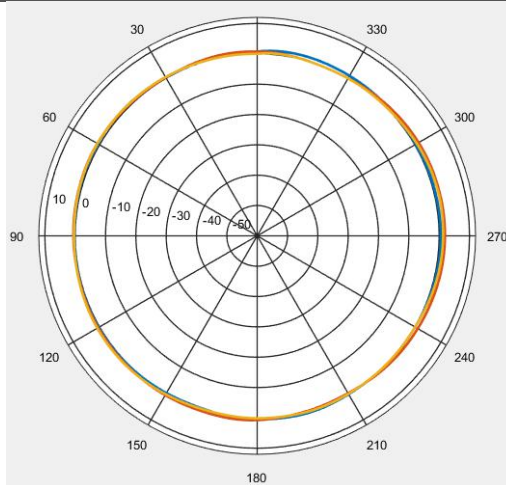


1.2 2.4G radiation pattern

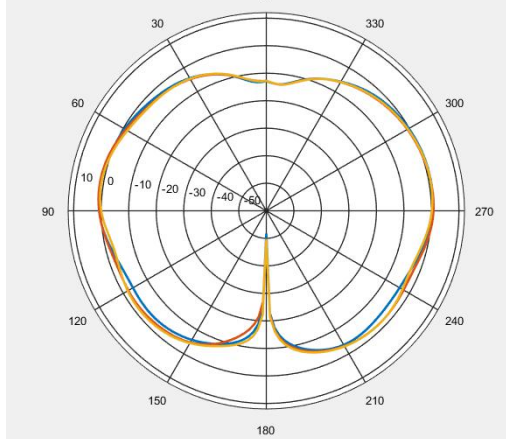
2.45GHz



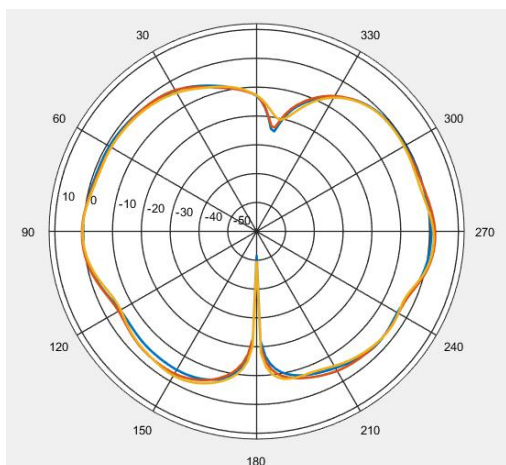
X-Y



X-Z

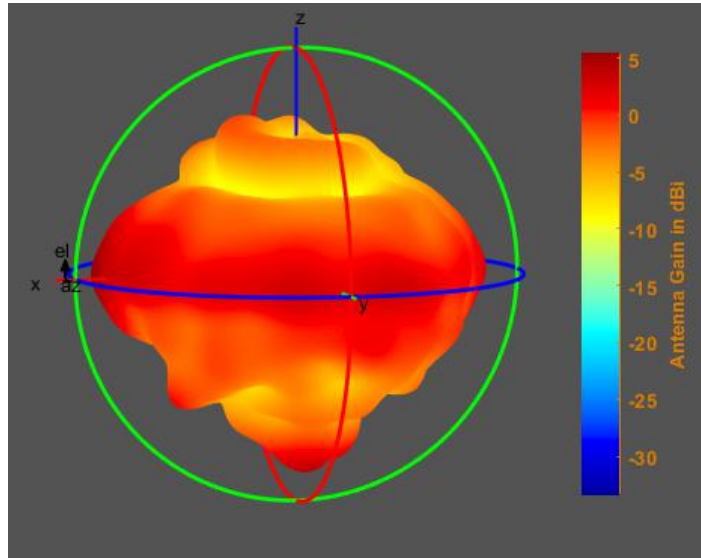


Y-Z

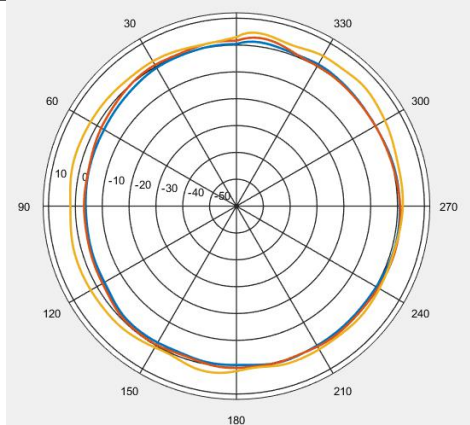


1.3 5G radiation pattern

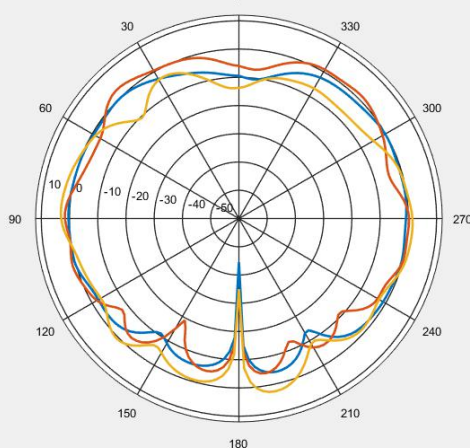
5.5GHz



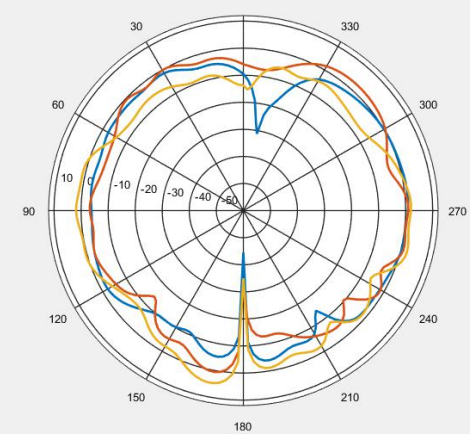
X-Y



X-Z

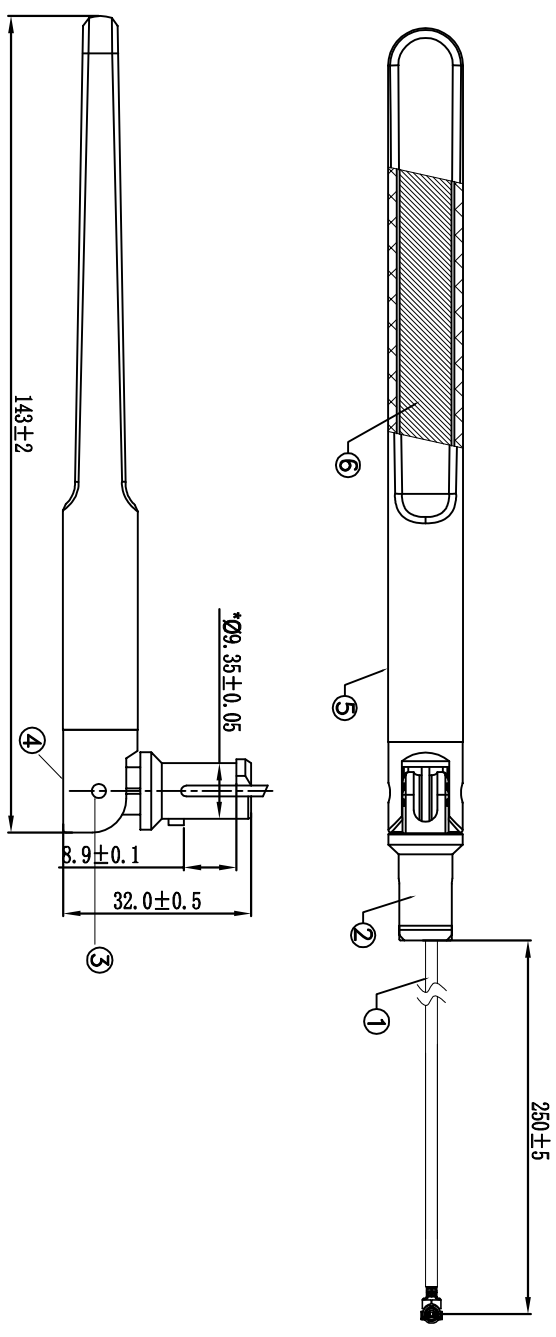
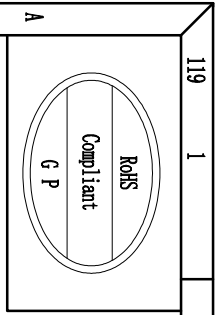


Y-Z



1.4 2.4G/5G Effi

Freq	Effi	Gain	Freq	Effi	Gain
(MHz)	(%%)	(dBi)	(MHz)	(%%)	(dBi)
2400	74.75	2.76	5100	73.6	2.91
2410	75.66	2.88	5200	73.27	3.02
2420	78.02	2.94	5300	73.53	3.25
2430	77.83	2.92	5400	74.95	3.44
2440	76.91	2.95	5500	76.89	3.52
2450	76.53	2.93	5600	76.72	3.72
2460	76.36	2.98	5700	74.51	4.03
2470	75.74	2.89	5800	72.33	4.18
2480	75.54	2.88	5900	72.28	4.11
2490	75.39	2.88			
2500	74.87	2.74			



- Remark: remarks: comment
1. Marked with "*" as the key size, the unmarked tolerance size is tested according to ± 0.15
 2. Please refer to the drawing if the dimensions are not marked.
 3. ROHS compliant
 4. Shipping method: Single shipment

No.	Name	Material	Color	Treatment	Amount	Remark
6	PCB	FR4	green		1	
5	stem casing	For customers	black		1	
4	Upper fixing seat	PC+PBT	black		1	
3	fixed leg	POM	black		2	
2	substrate	PC+PBT	black		1	
1	RF cable	1.37 RF line first-generation terminal	black		1	

Shenzhen free technology Co., LTD

Third Angle	Project	Dual frequency	Date	2023.9.11
0~10	external antenna2		Designed by	
10~18	PartName	N12-7418-ROA	Checked by	MD tianjin
18~30	Part No.	N/A	Checked by	RF fengnuping
30~40	Material		Approved by	
40~	Location	N/A	Unit	mm
			Scale	1:1
			Rev	A

Rev	Description	Date	Remark	5	6	7	8
1	New drawing						
1							

由 Autodesk 教育版产品制作
Product packaging specification

date: 2023.9.11

page: 1 of 1

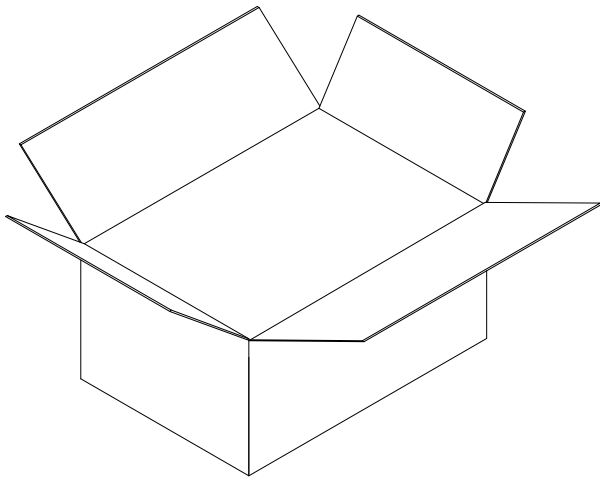
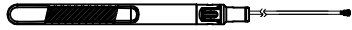
版本: A

Product name: External antenna

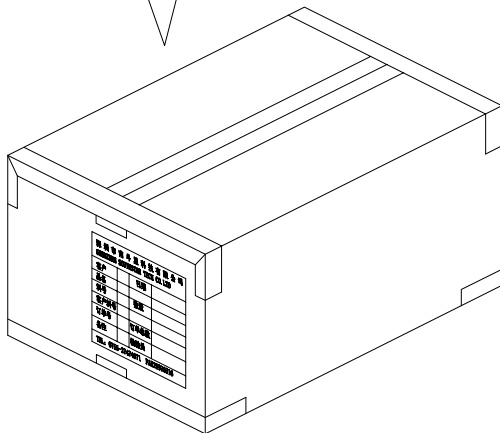
一: Finished antenna



Two: Put it in a PE bag



4. The actual packing shall prevail



Four: The box is sealed, and the outer box is affixed with our production label and ROHS label.

批准: _____

确认: _____

拟制: tianjin

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11:44 2023/09/11 星期三