SPECIFICATION FOR APPROVAL

CUSTOMER :	**yuanchuan**
PART NAME :	**External dual band wifi antenna L=194mm**
PART NO. :	
DZZ NO. :	**N12-7417-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 Frequecy 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℃ ~ +75℃

2.2 Storage Temperature.....-30℃ ~ +75℃

Antenna Design for External dual band wifi antenna L=194mm

V1.0

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

Revised History

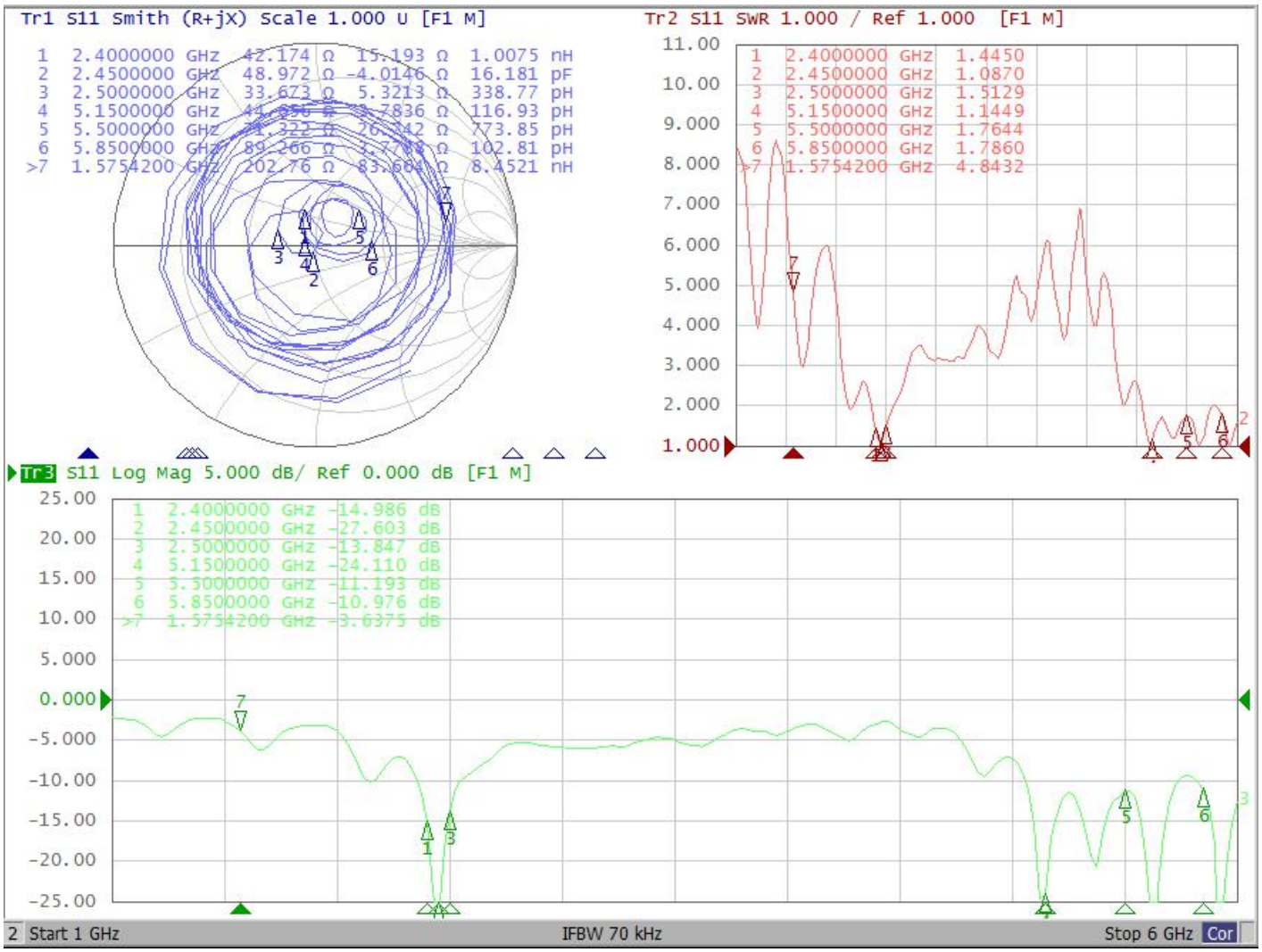
Date	Version	Revised Recored

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	**grey L=194mm**
Isolation	**None**

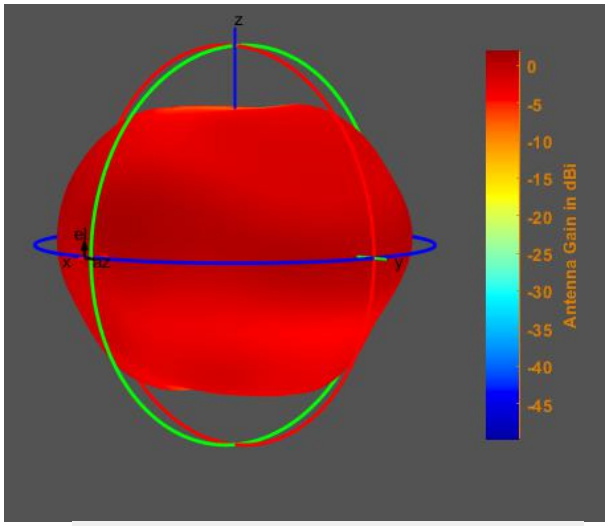
1. Passive

1.1 S11 VSWR Smith test results

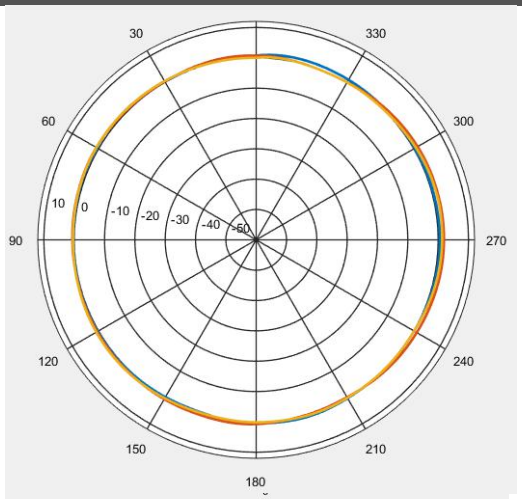


1.2 2.4G radiation pattern

2.45GHz



X-Y



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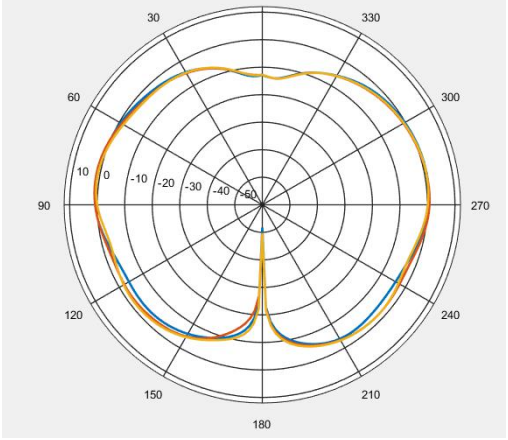

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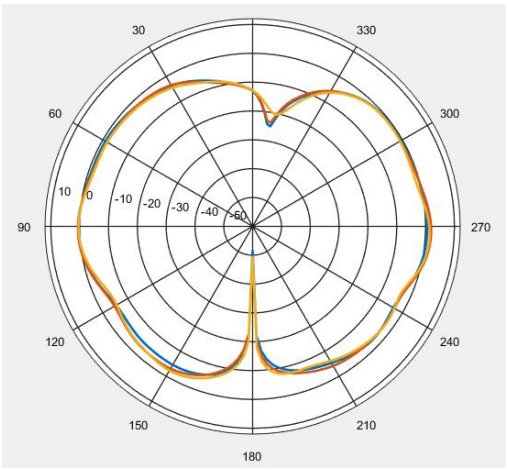
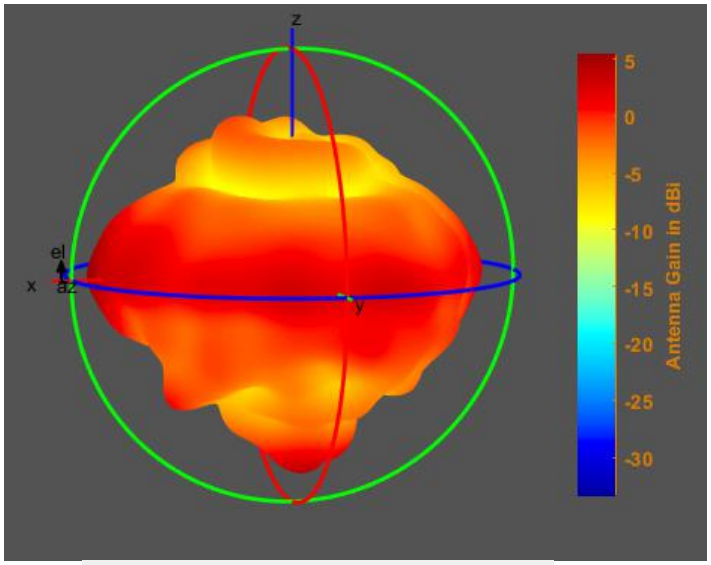


1.3 5G radiation pattern

5.5GHz



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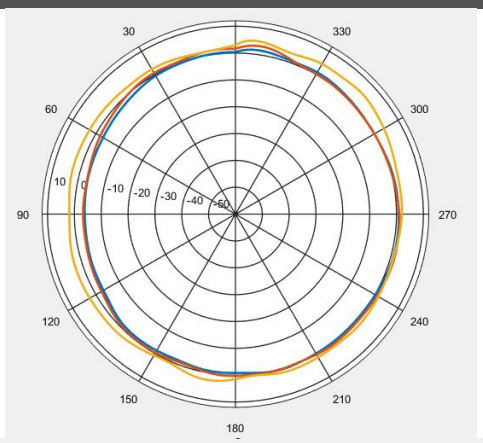

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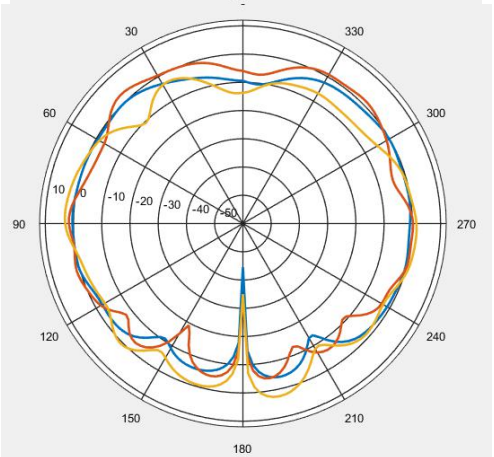

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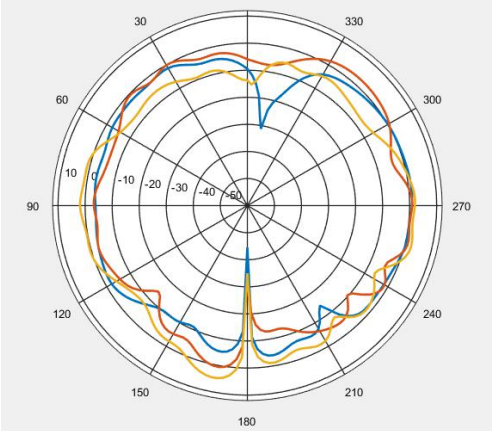
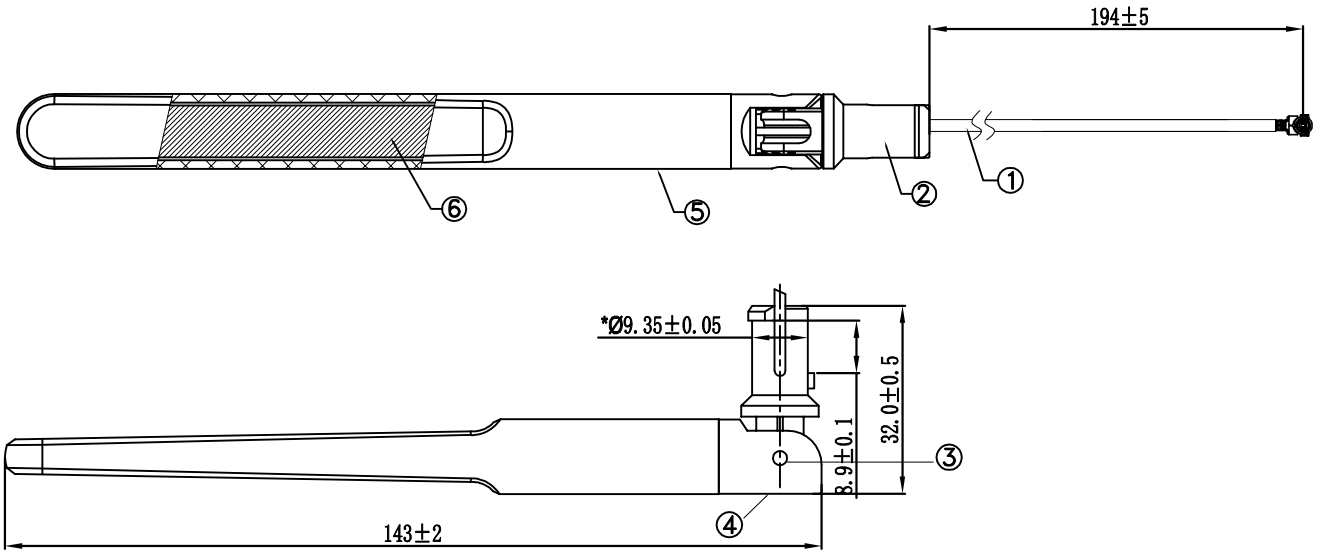


1.4 2.4G 5G Effi

Freq (MHz)	Effi (%%)	Gain (dBi)	Freq (MHz)	Effi (%%)	Gain (dBi)
2400	72.8	2.89	5100	68.29	2.57
2410	72.91	2.76	5200	69.35	2.91
2420	73.11	2.98	5300	71.58	2.94
2430	73.26	3.03	5400	72.15	2.99
2440	74.75	3.05	5500	71.65	3.12
2450	75.29	3.14	5600	70.21	3.25
2460	74.77	3.12	5700	69.12	3.40
2470	73.98	3.13	5800	68.08	3.61
2480	73.59	3.00	5900	68.50	3.71
2490	72.55	2.98			
2500	71.29	2.99			

RoHS
Compliant
G P



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	Gray		1	

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

Rev	Description	Date	Remark
A	New drawing		

Shenzhen free technology Co., LTD

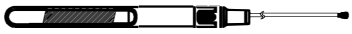
Third Angle			Project	Dual frequency	Date	2023.9.11	
0～10	±0.2	○	PartName	external antennal	Designed by		
10～18	±0.5	◎	Part No.	N12-7417-R0A	Checked by	MD	tianjin
18～30	±0.8	⊥	Material	N/A		RF	fenghuiping
30～40	±1.0	▱	dwg No.		Approved by		
40～	±2.0	Angle ±0.5°			Unit	mm	Scale 1:1 Rev A
Location	N/A						

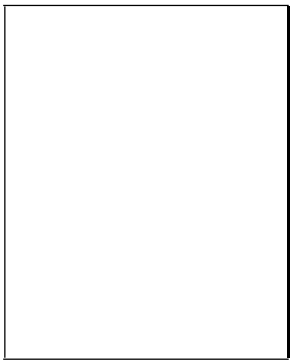
Product packaging specification

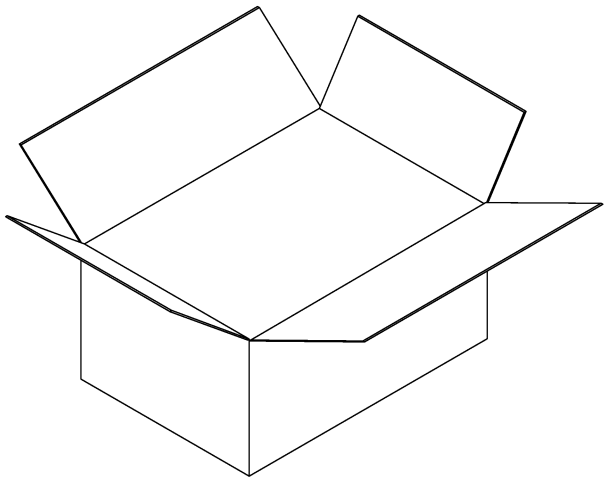
date: 2023.9.11

Product name: External antenna	

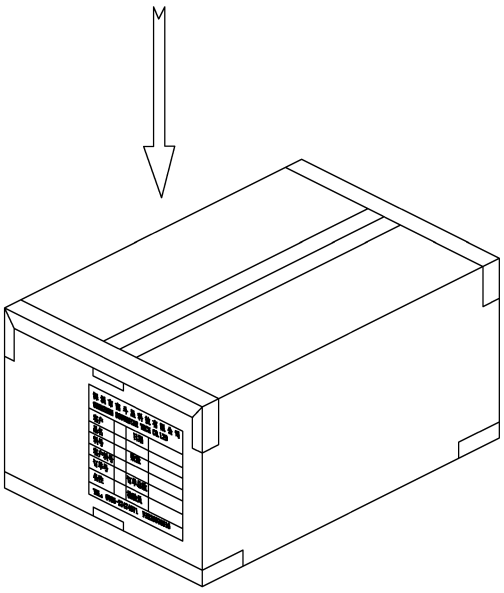
一: Finished antenna ⟹ Two: Put it in a PE bag







4. The actual packing shall prevail



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