

Data Sheet

Product : BT Antenna

Date: June 10, 2022

Customer Applied model			
Customer			
Customer Part No.			
Product Description	Dualband WI-FI Antenna		
Supplier	saixun		
Supplier Part No.	SX-001-2208		
Customer	By designed	By Checked	By Approval

Catalogue

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Revision History

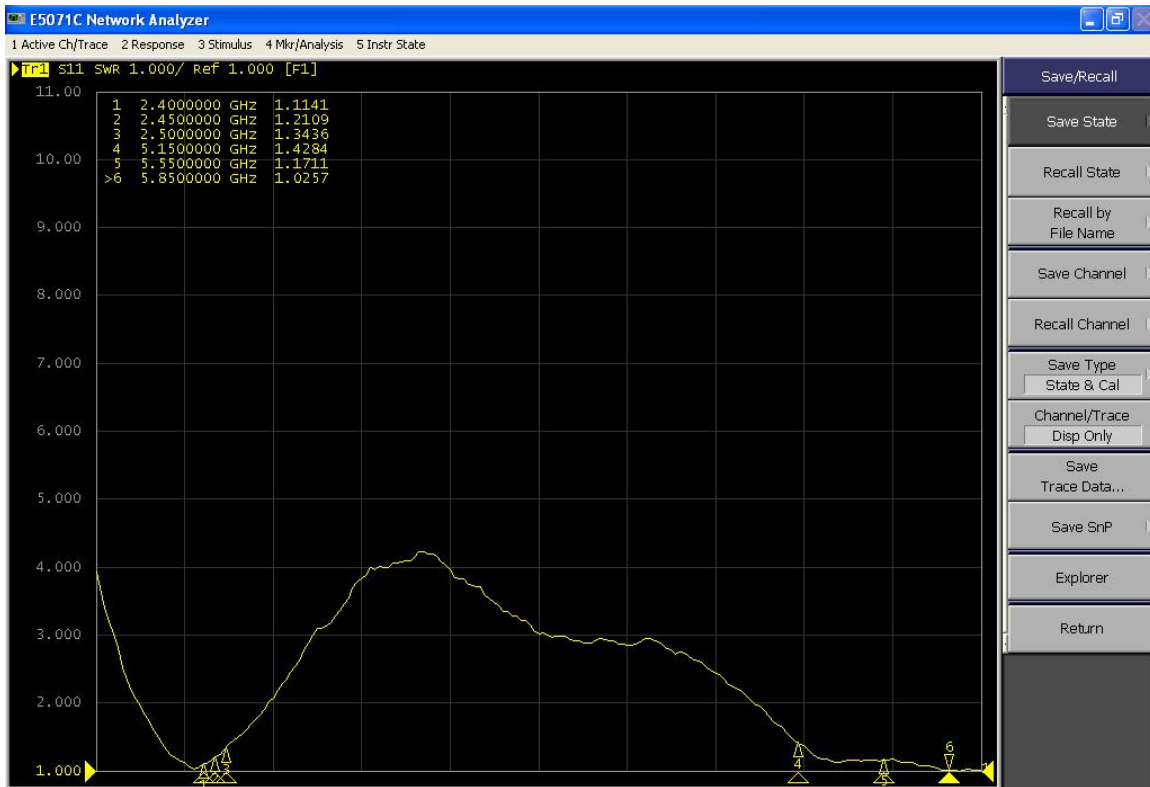
Revision No.	Originator	Description of changes	Date of changes
1	Changmin Wu	First document	June 10, 2022
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

1 General

Electrical Properties	
Frequency Band	2.4/5.8GHz
Impedance	50 ohm
VSWR	≤ 2.0
Gain	$\leq 5.0/3.0$ dBi
Radiation Pattern	Omni-Directional
Polarization	V/H
Antenna Type	Dipole
Mechanical Properties	
Antenna Dimension	94mm
Connector Type	SMA
Connector pull	3 kg min
Connector Torque force	150-450 gf-cm
Cable Type	RG-178
Installation site	Machine outside
Environment Properties	
Operational Temperature	-40°C ~ +85°C
Storage temperature	-30°C ~ +60°C

2 Test Data

2.1 Network Data (Return loss)

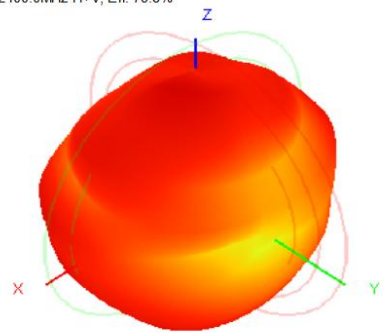


2.2 Radiation pattern

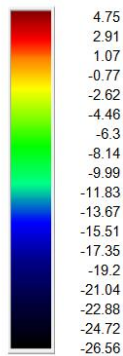
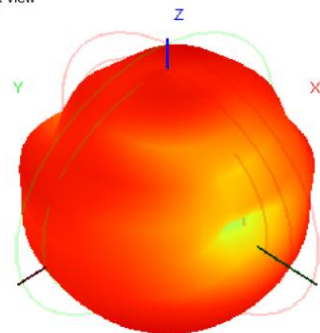
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (GHz)	2.4	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.5
Efficiency (dBi)	-1.00	-1.02	-1.14	-1.22	-1.21	-1.16	-1.22	-1.27	-1.30	-1.30	-1.25
Gain (dBi)	4.75	4.63	4.36	4.07	3.83	3.68	3.52	3.40	3.35	3.31	3.26
Efficiency (%)	79.51	79.02	76.94	75.52	75.71	76.62	75.53	74.67	74.15	74.13	74.92

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5.15	5.20	5.25	5.30	5.35	5.40	5.45	5.50	5.55	5.60	5.65	5.70	5.75	5.80	5.85
-1.4	-1.7	-1.3	-1.3	-1.4	-1.1	-1.8	-1.4	-1.1	-1.2	-0.9	-1.5	-1.6	-1.6	-1.8
9	7	9	6	1	0	1	6	9	3	5	6	4	2	5
3.33	3.11	3.19	3.41	3.16	3.30	3.64	3.91	4.38	4.26	4.45	3.72	3.70	3.36	3.10
70.9	66.5	72.6	73.0	72.3	77.5	65.9	71.4	76.1	75.2	80.3	69.7	68.5	68.8	65.3
4	4	8	5	2	7	9	7	0	7	2	9	7	1	4

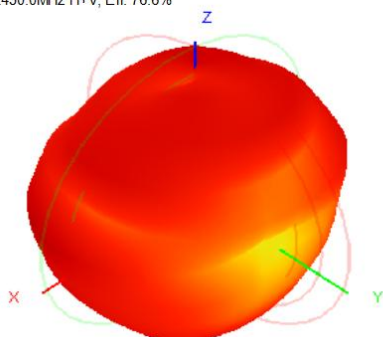
2400.0MHz H+V, Eff. 79.5%



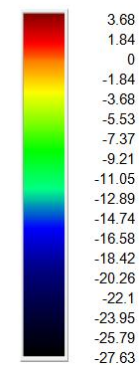
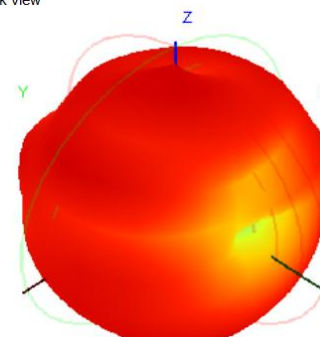
Back View



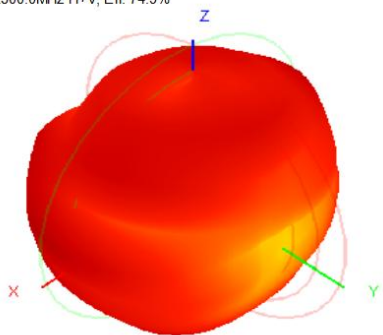
2450.0MHz H+V, Eff. 76.6%



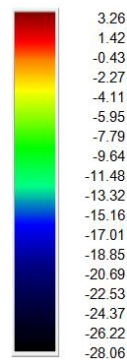
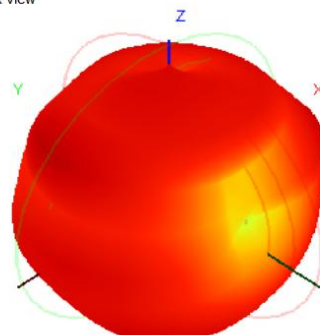
Back View



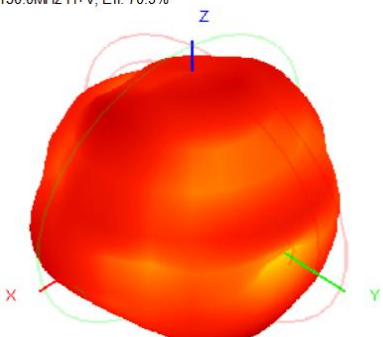
2500.0MHz H+V, Eff. 74.9%



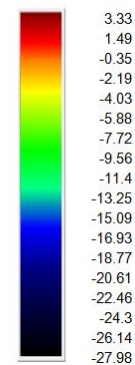
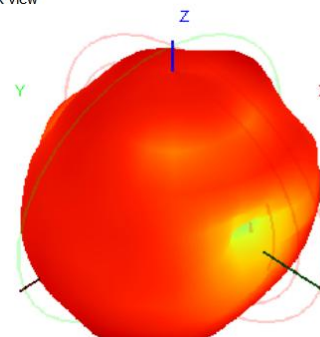
Back View



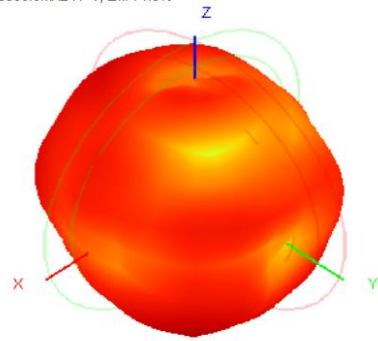
5150.0MHz H+V, Eff. 70.9%



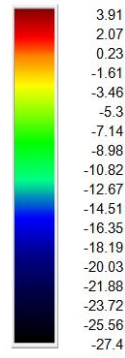
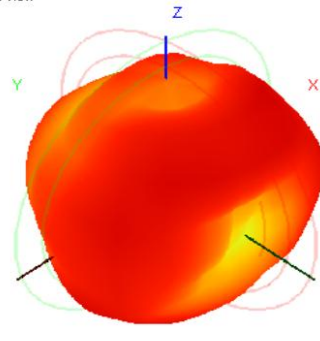
Back View



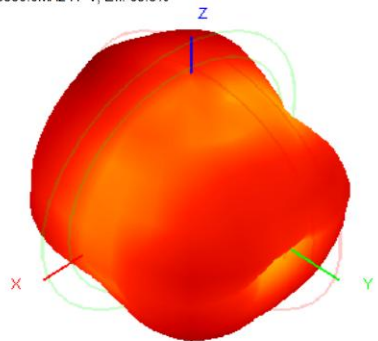
5500.0MHz H+V, Eff. 71.5%



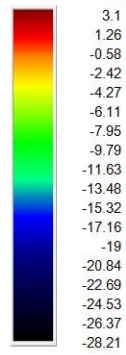
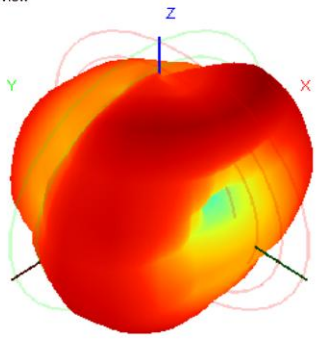
Back View



5850.0MHz H+V, Eff. 65.3%

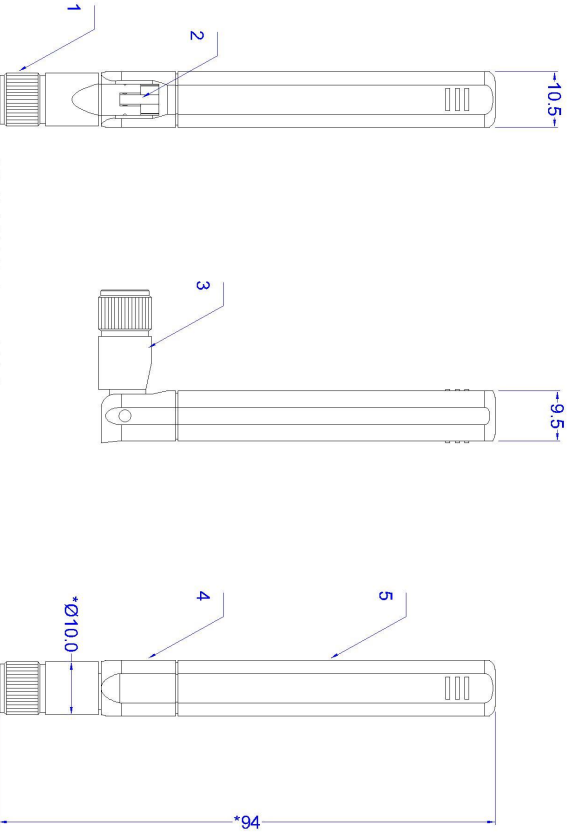


Back View



3 Mechanical Drawings

Engineering Design Change Record			
DATE	REV	ECR	Change Content and Description
June 10, 2022	A		NEW Issuance



NOTE:
 1. Mark Size as Key Size. Unmarked dimensions, measured in 2D.
 2. Impedance : 50 Ω
 Frequency Range : 2.425G, 1S-5.86 GHz
 Frequency Band : 2.425G
 Return Loss : > 20 Max
 Year :
 Gain : 5.0/3.0 dBi Max
 3. All materials and processes conform to RoHS.
 4. All products are 100% qualified factory test.

5. The Heat shrinkable Sleeve evenly baked.
 6. Keep product appearance clean.

NO.	DESCRIPTION	P/N	REMARK	GENERAL TOLERANCE TABLE				UNIT	SCALE	DRAWING CHECKED	APPROVED	PART NAME
				LINEAR	TOLERANCE	ANGULAR	TOLERANCE					
5	Antenna Cap,black,ABS	SL1068-B002	*****					MM	1 : 1			Dual band WiFi Antenna
4	Antenna Upper Base,black,PC+PBT	SLJ023-B002	*****	0-10	±0.06	0-45°	±0.5°					
3	Antenna Bottom Base,black,PC+PBT	SLJ024-B002	*****	10-80	±0.1	5-20°	±1°					
2	COAXIAL CABLE, RG-178, Brown	NA	*****	50-80	±0.15	20-90°	±1.5°					SX-001-2208
1	SMA PLUG, Standard, Black	SC-001-1400	*****	> 80	±0.2							


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