

Data Sheet

Product : Antenna

Date: Nov 11, 2024

Customer Applied model			
Customer	BAODE INTERNATIONAL LIMITED		
Customer Part No.	218118D88TX1600		
Product Description	Antenna		
Supplier	saixun		
Supplier Part No.	SX-005-1318		
Customer	By designed	By Checked	By Approval

Catalogue

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 Electrical Properties

 Mechanical Properties

 Environment Properties

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Revision History

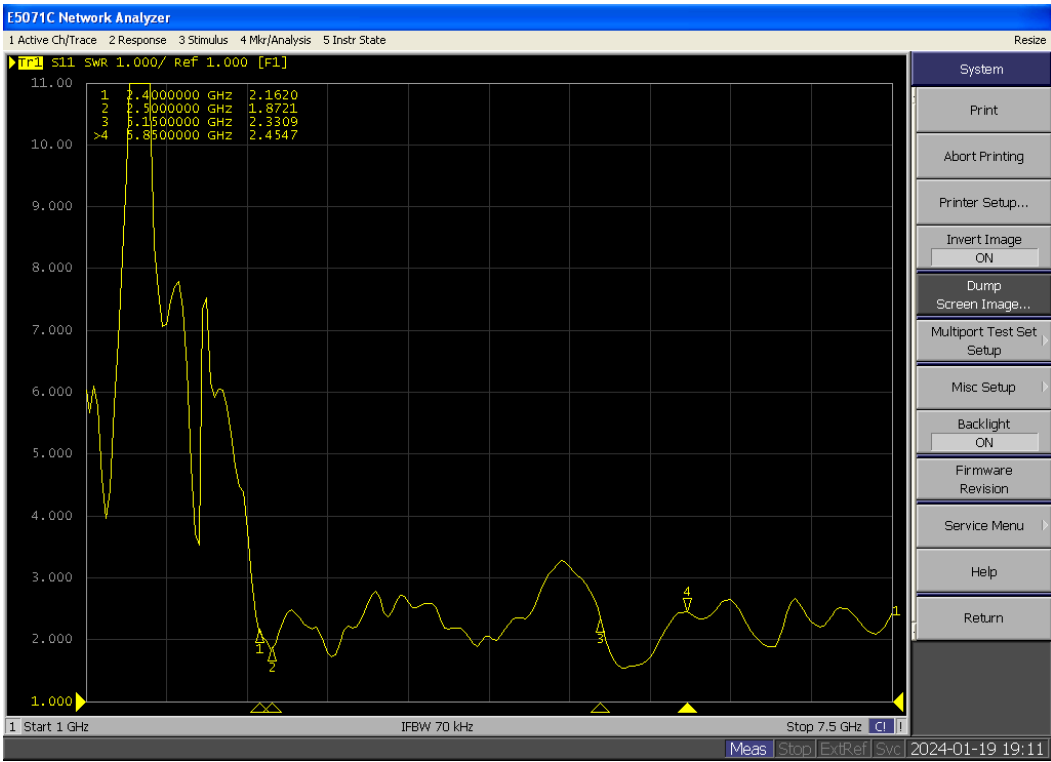
Revision No.	Originator	Description of changes	Date of changes
1	Yanhu Tuo	First document	Nov 11, 2024
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

1 General

Electrical Properties	
Frequency Band	2.4+5G
Test Frequency	2400-2500/5150-5850MHz
VSWR	≤ 2.5
Efficiency	$\cong 73\%$
Gain	$\cong 5.0$ dBi
Radiation Pattern	Omni-Directional
Polarization	V/H
Antenna Type	Dipole
Mechanical Properties	
Antenna Dimension	126 mm
Cable Type	RF 1.13
Cable Color	Gray
Cable Length	160 mm
Installation site	Machine inside
Environment Properties	
Operational Temperature	-40°C ~ +85°C
Storage temperature	-30°C ~ +60°C

2 Test Data

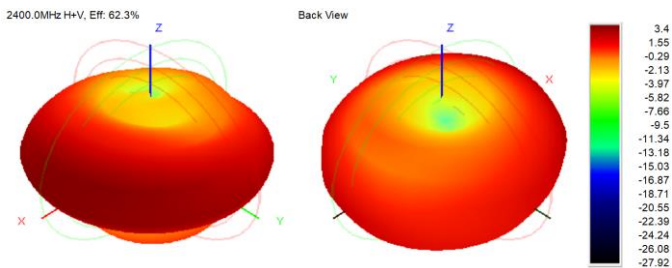
2.1 Network Data (Return loss)

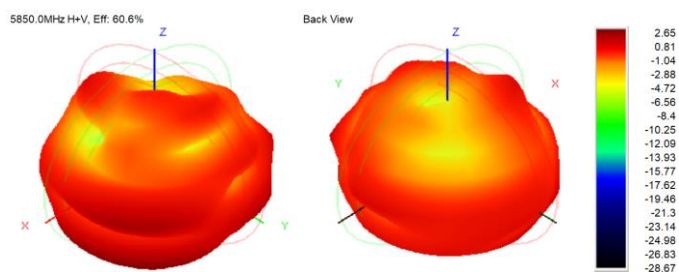
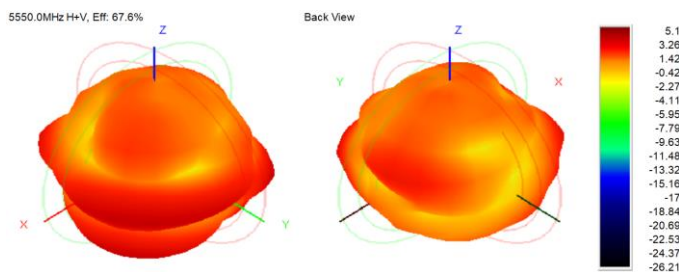
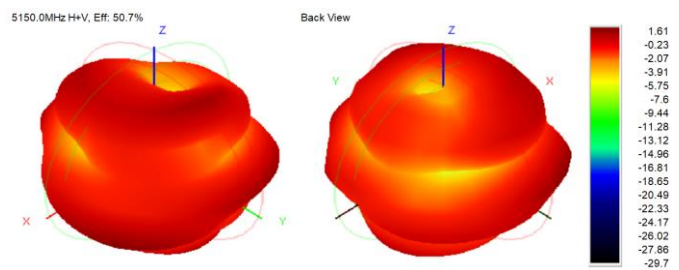
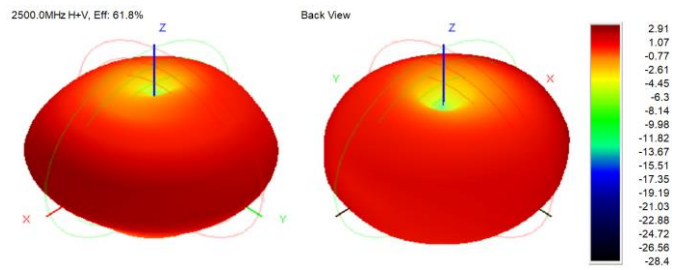
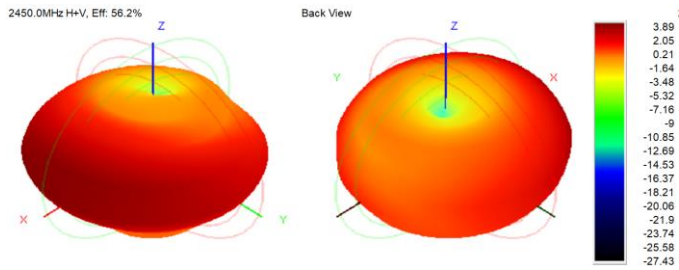


2.2 Radiation pattern

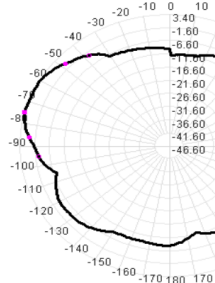
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dBi)	-2.05	-2.07	-1.97	-1.97	-2.07	-2.51	-2.73	-2.63	-2.16	-2.06	-2.09
Gain (dBi)	3.40	3.63	3.88	4.01	4.09	3.89	3.61	3.28	3.32	3.11	2.91
Efficiency (%)	62.32	62.04	63.48	63.47	62.06	56.15	53.28	54.60	60.82	62.20	61.83

Frequency ID	12	13	14	15	16	17	18	19
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Efficiency (dBi)	-2.95	-2.35	-2.26	-1.63	-1.70	-1.90	-1.37	-2.18
Gain (dBi)	1.61	2.60	3.36	4.80	5.10	4.61	4.10	2.65
Efficiency (%)	50.69	58.16	59.38	68.65	67.56	64.51	72.99	60.57

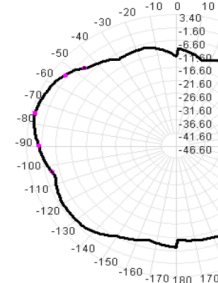




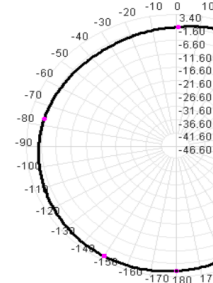
2400.0MHz Total(E1-XZ), Max= 3.40dBi

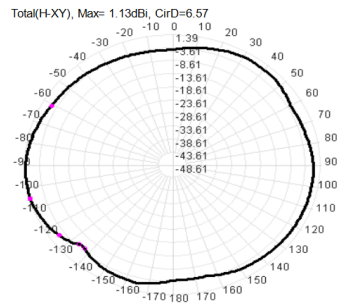
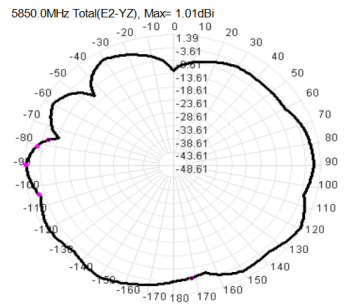
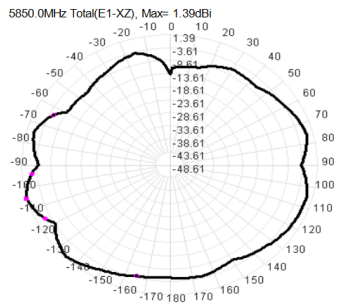
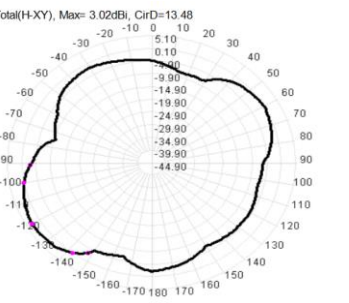
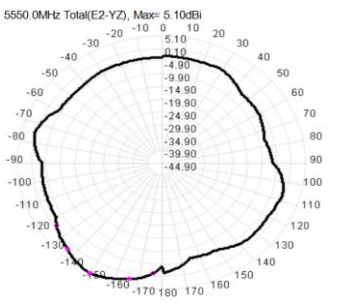
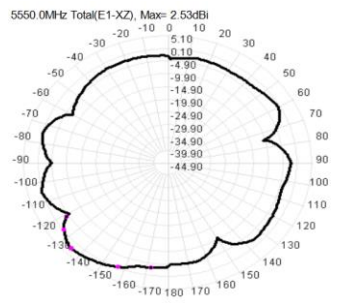
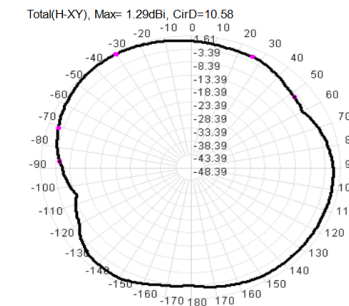
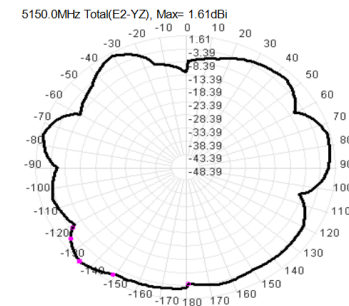
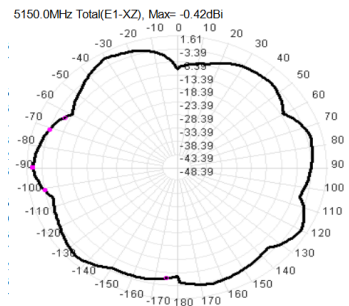
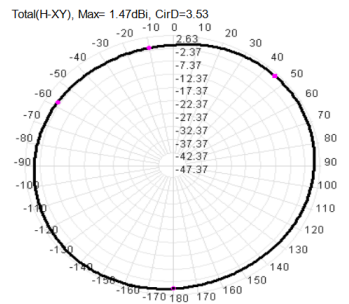
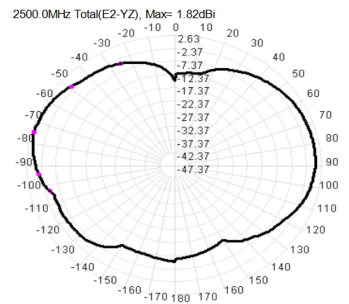
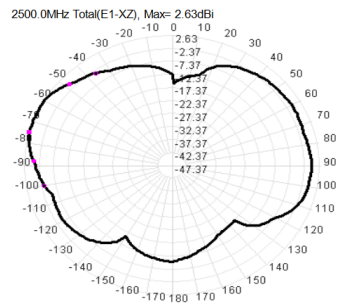
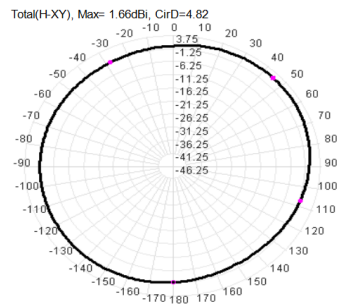
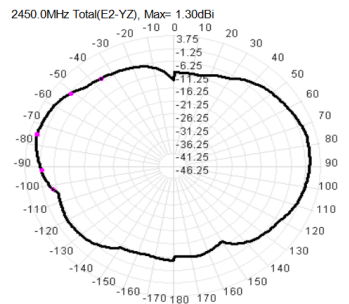
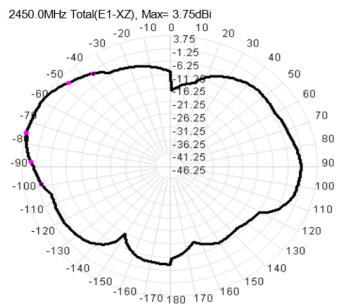


2400.0MHz Total(E2-YZ), Max= 2.21dBi



Total(H-XY), Max= 1.56dBi, CirD=4.51





3 Mechanical Drawings

Engineering Design Change Record			
DATE	REV	ECR	Change Content and Description
Nov 11, 2024	A		NEW Issuance

NOTE:
1. Dimensions Marked with * are Key Size.
2. Impedance : 50 Ω
Frequency Range : 2.4-2.5G, 15-5.85GHz
VSWR ≤2.5
3. Smooth folding of antenna.
4. Protect the lined part of the coaxial Cable.
5. The product and process comply with RoHS.

GENERAL TOLERANCE TABLE			
LINEAR		ANGULAR	
DIVISION	TOLERANCE	DIVISION	TOLERANCE
0-10	±0.1	0-5°	±0.5°
10-50	±0.3	5-20°	±1°
50-90	±0.5	20-90°	±1.5°
>90	±1.0	THIRD ANGLE PROJECTION	

UNIT	MM	PART NAME
SCALE	1 : 1	VEDNER PNO.
DRAWING		SAKUN PNO.
CHECKED		SX-005-1318
APPROVED		

苏州赛讯通讯科技有限公司
SUZHOU SAKUN Communication Technology Co., Ltd