

Shenzhen Qixin Hongze Technology Co., Ltd.

Product Acknowledgement

Product P/N: KS085-10020-A

Product description: Feeder + antenna integrated 2.4G bendable white shell

1.13 Black wire + IPEX feeder length 350MM (for SP028)
small blade

Client: Shenzhen Sricctv Technology Co., Ltd

Client P/N: 5.06.0053

Product Specifications Overview

●Electrical Performance:

1. Frequency Range: 2.4~2.5GHz
2. Impedance: 50 Ohms nominal
3. VSWR: ≤ 1.92
4. Gain: 1.5~2.0dBi
5. Admitted power radiation: 1W
6. Radiation of Radiation: Toroidal
7. Radiation: Omni
8. Polarization: Vertical
9. Connector Type: I-PEX

●Mechanical properties:

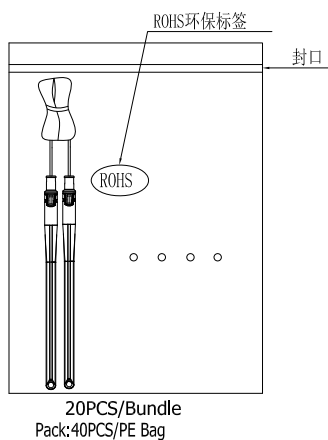
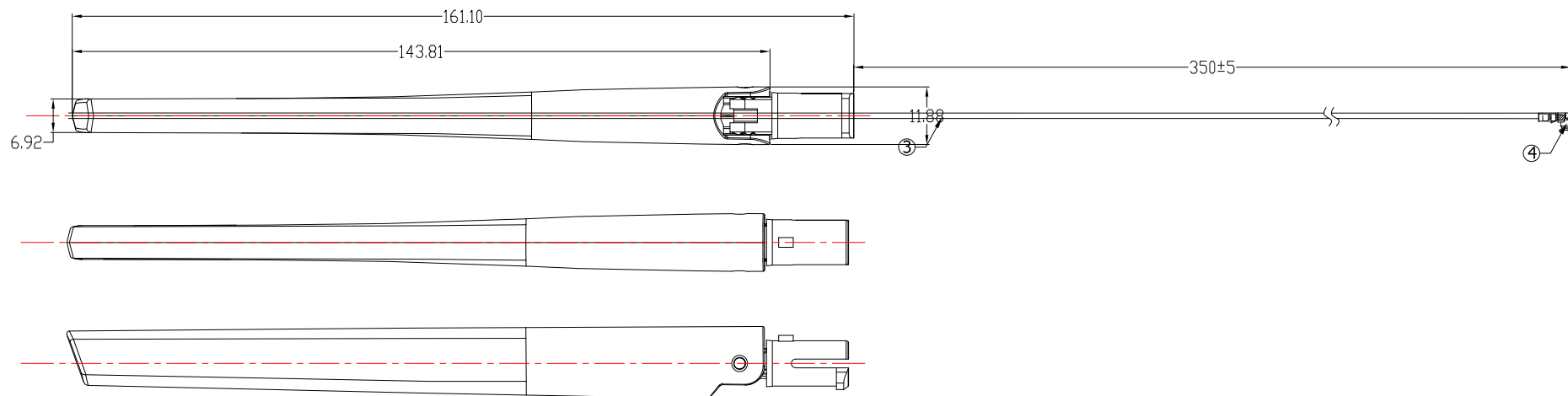
1. Cable: MI1.13 black cable, 50 Ohm
2. Operation temperature range: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
3. Storage temperature range: $-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
4. Color :White



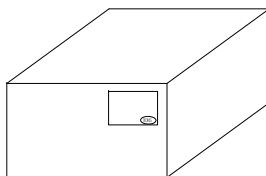
成品图

ROHS

REV.	修 订 内 容	修 订 时 间
A	新 版 发 行	2024.06.14



1. 外箱需贴1PCS/ROHS标签于外箱标签上
2. 外箱需贴1PCS/外箱标签于外箱侧麦右上角



Specification:
Frequency Rang:2.4~2.5GHz
Return Loss:-10dB or less
VSWR:1.92 Max
Gain:1.5~2.0dBi

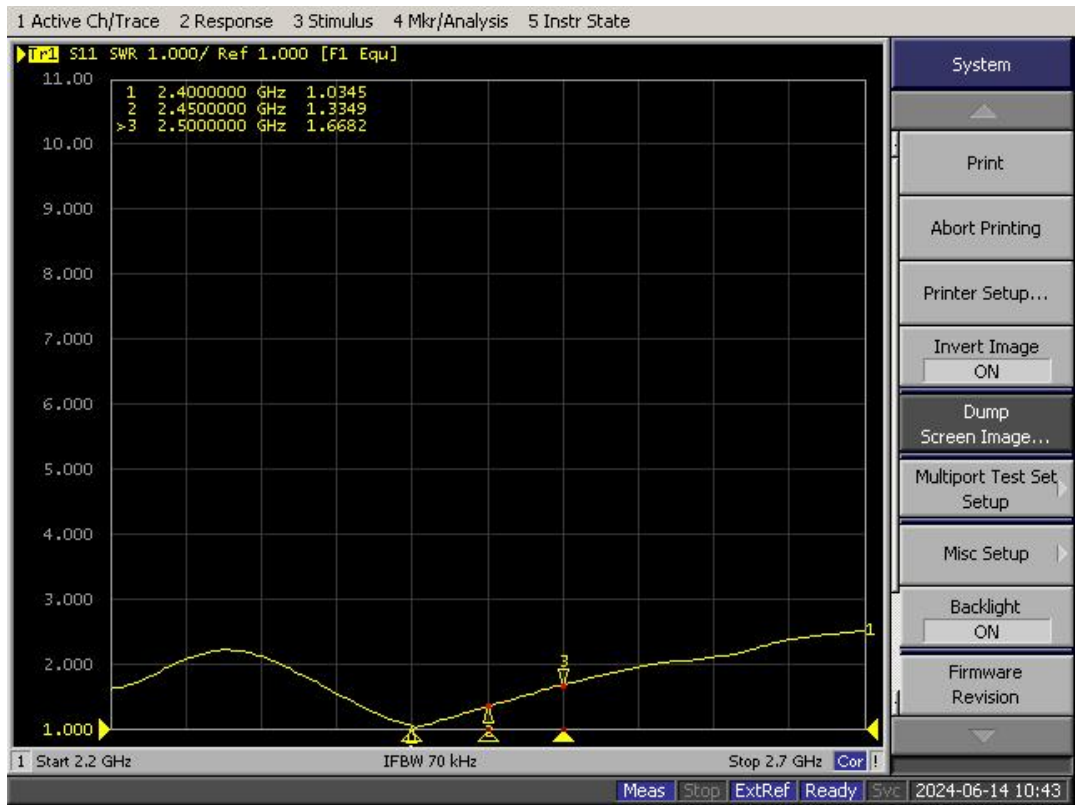
5	Connector	MHF Plug for $\Phi 1.13$ Cable	1	
4	Rivet	PC+PBT,Color:White	2	
3	Cable	$\Phi 1.13$ mm Cable,Black,50 Ω	1	
2	Bottom Base	PC+PBT,Color:White	1	
1	Antenna Cap	ABS,Color:White	1	
NO	DESCRIPTION		Q'TY	REMARK

TITLE:	2.4G Antanna			 KEESUN Shenzhen keesn technology Co.,Ltd.					
P/N:	5.06.0053								
CUSTOMER:	KS085								
DRAW NO.:	KS085-10020-A								
DIMENSIONS TOLERANCES UNLESS OTHERWISE NOTED						APPROVED			
一般公差 TOLERANCE		.XXX	±0.05			XX.	±1.0	SHEET: 1/1	SCALE: 1:1
		.XX	±0.1			UNIT: mm	REV.X1		
		.X	±0.2						
		X.	±0.5						

Shenzhen Qixin Hongze Technology Co., Ltd.

Network analyzer test diagram

Part number: KS085-10020-A
Product name and specification: 2.4G outdoor open cable
Test value: Return Loss/VSWR

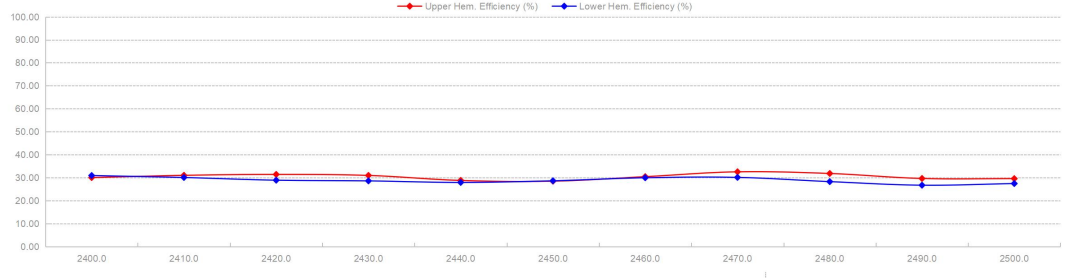
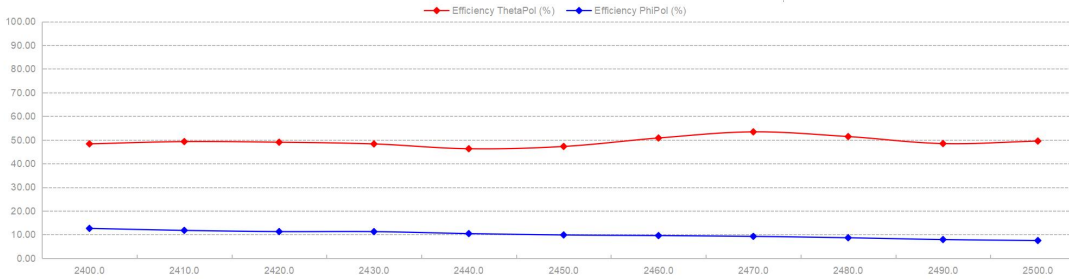
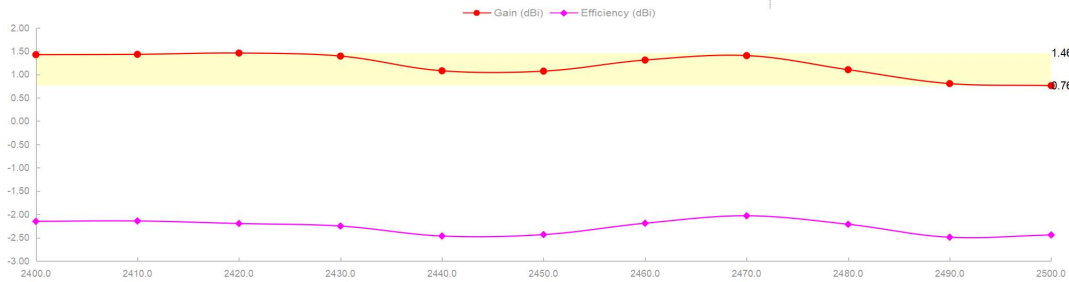
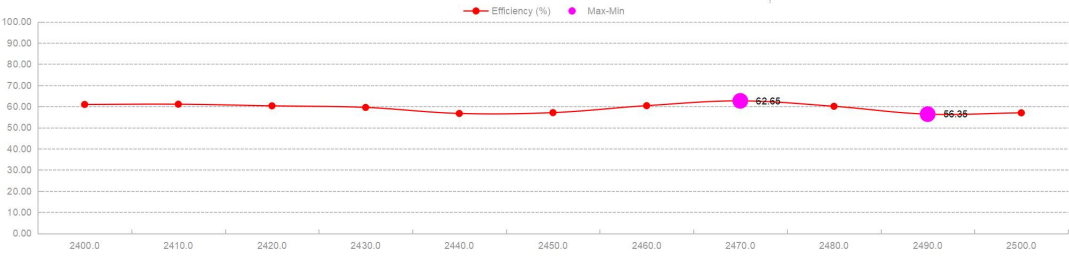


2024年6月14日 09:07

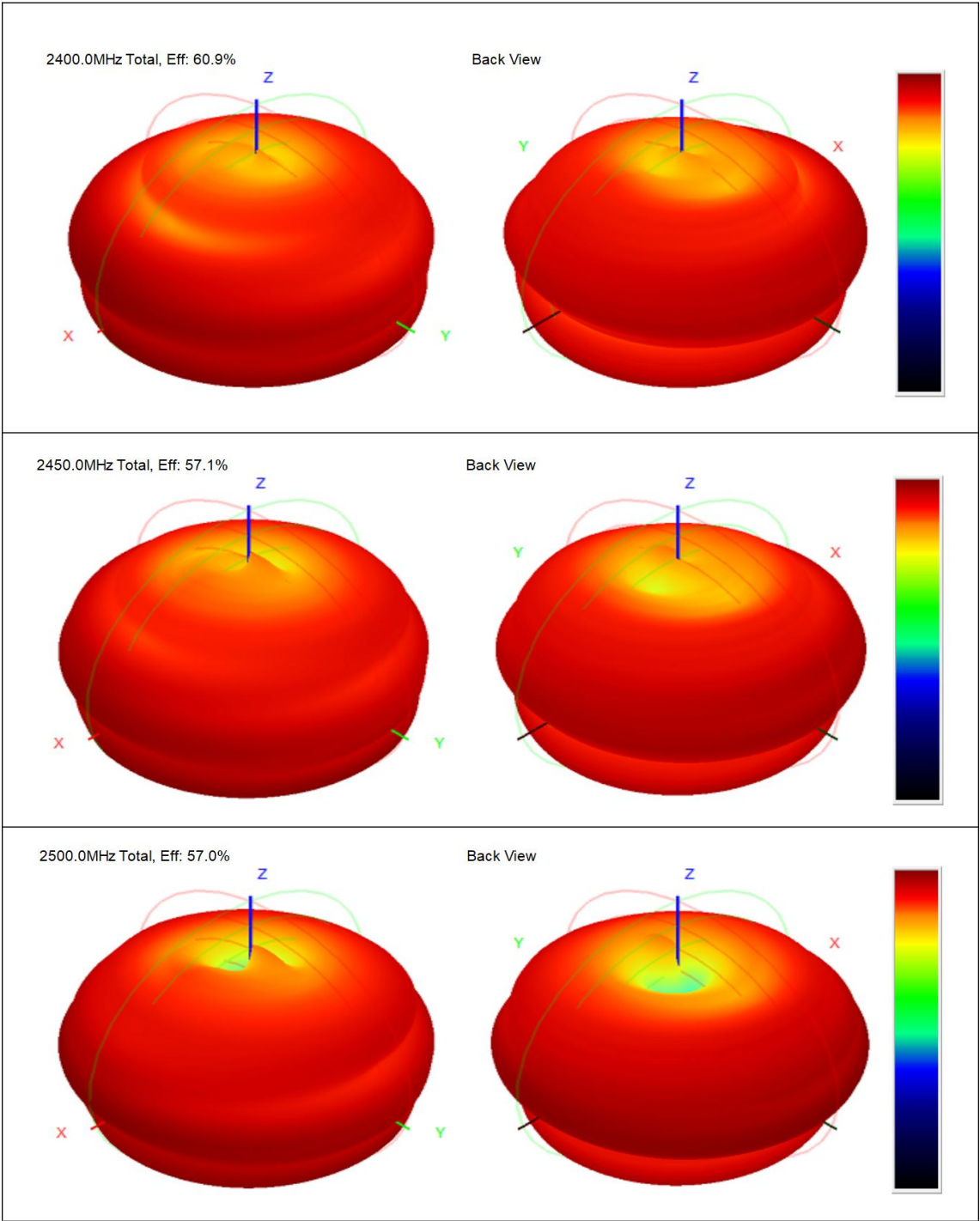


深圳市麒麟弘泽科技有限公司

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.15	-2.14	-2.20	-2.25	-2.46	-2.43	-2.19	-2.03	-2.21	-2.49	-2.44
Gain (dBi)	1.42	1.43	1.46	1.39	1.08	1.07	1.31	1.40	1.10	0.80	0.76
Efficiency (%)	60.95	61.07	60.30	59.55	56.69	57.09	60.38	62.65	60.08	56.35	57.00
Directivity (dB)	3.57	3.57	3.66	3.64	3.54	3.50	3.50	3.43	3.31	3.29	3.20
Peak Gain Position (Theta)	93.00	99.00	99.00	98.00	100.00	101.00	101.00	101.00	78.00	79.00	79.00
Peak Gain Position (Phi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Efficiency ThetaPol (%)	48.33	49.29	49.03	48.30	46.28	47.24	50.81	53.40	51.42	48.45	49.51
Efficiency PhiPol (%)	12.62	11.78	11.27	11.25	10.42	9.85	9.57	9.25	8.66	7.90	7.48
Upper Hem. Efficiency (%)	30.03	31.01	31.41	30.97	28.78	28.46	30.43	32.54	31.81	29.64	29.56
Lower Hem. Efficiency (%)	30.92	30.06	28.89	28.58	27.91	28.63	29.95	30.11	28.26	26.71	27.43
T90(H) 圆度	7.20	7.35	7.86	8.09	6.99	5.69	4.88	4.70	4.61	3.99	3.07
Gain 15deg (dBi)											
E1(XZ) 波瓣宽度	49.17	48.76	48.25	47.92	48.05	47.90	47.69	47.59	48.24	48.60	49.27
E1(XZ) 前后比	5.23	5.56	6.00	6.06	5.73	5.61	5.84	6.11	6.09	5.80	5.45
E2(YZ) 波瓣宽度	44.95	45.39	44.25	43.81	36.11	35.20	35.60	38.88	43.27	43.85	44.16
E2(YZ) 前后比	5.66	5.85	5.54	5.17	5.32	5.53	5.59	5.44	5.20	4.88	4.99
最大增益处轴比(P)	5.06	11.54	12.09	10.84	11.65	12.09	12.96	13.87	23.61	31.00	28.36
顶点(Theta=0)处轴比(P)	8.56	7.76	7.83	8.05	7.51	7.02	7.94	9.55	12.80	17.71	23.65
仰角10度最差(大)轴比(P)	54.39	66.33	55.36	46.97	58.00	54.99	46.49	61.67	50.13	58.23	59.97
Hc(XY) 波瓣宽度	161.42	173.20	168.50	161.88	178.40	220.97	259.10	271.11	274.85	303.22	355.73
Hc(XY) 前后比	2.94	2.56	2.55	2.71	2.42	1.78	1.25	1.02	0.96	0.69	0.30
左旋圆极化效率(%)	31.05	31.27	30.55	29.54	27.85	28.12	29.79	30.62	29.18	27.41	27.77
右旋圆极化效率(%)	29.90	29.80	29.75	30.01	28.84	28.97	30.59	32.02	30.89	28.94	29.23
最大增益处交极比(+/-45极化)	3.23	5.98	6.70	7.01	6.76	6.09	6.05	6.22	9.04	9.69	8.95
最大增益处交极比(水平垂直极化)	3.53	6.46	6.03	5.03	5.75	6.64	7.11	7.31	6.21	5.87	6.42
T60度Phi 一圈最差交极比(+/-4	0.00	0.00	0.01	0.02	0.02	0.03	0.00	0.01	0.00	0.04	0.01
T60度Phi 一圈最差交极比(水平	0.06	0.06	0.07	0.12	0.02	0.06	0.02	0.15	0.09	0.04	0.03
T90度(H)Phi 一圈最差交极比(+	0.00	0.00	0.01	0.00	0.02	0.00	0.03	0.05	0.01	0.04	0.01
T90度(H)Phi 一圈最差交极比(水	0.06	0.02	0.07	0.02	0.02	0.06	0.02	0.15	0.09	0.04	0.03
轴对称天线主瓣下倾角度(平均值)	-7.97	-3.93	0.59	-3.80	-5.89	-2.90	1.55	3.99	4.66	4.91	4.93
轴向(Z+)水平垂直极化隔离度	3.25	1.50	0.56	0.20	0.54	1.61	3.27	4.54	5.73	6.06	5.80
Theta85.0 一周最大增益	1.42	1.43	1.46	1.39	1.08	1.07	1.31	1.40	1.01	0.49	0.44
Theta85.0 一周圆度(为最大最小	20.50	18.63	16.76	15.58	15.02	15.79	16.53	16.61	16.28	15.91	16.16

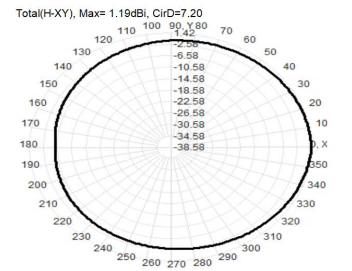
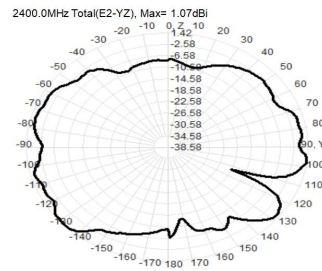
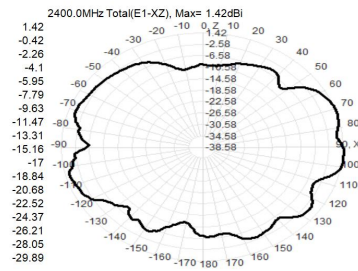


3D 报告

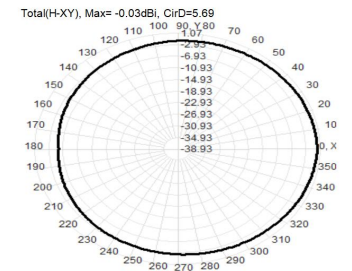
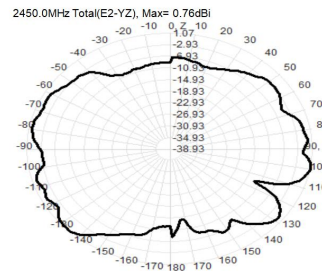
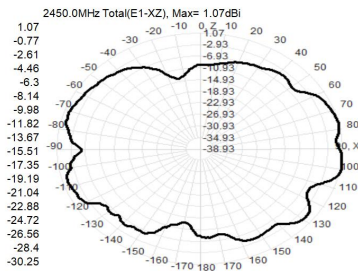


2D Report

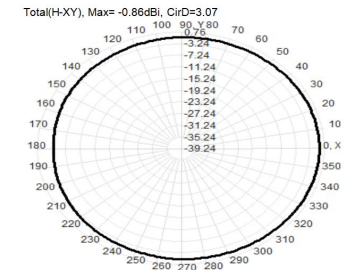
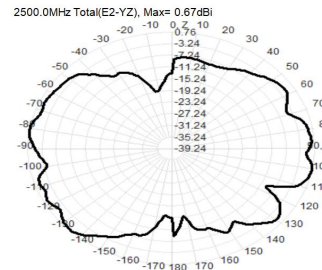
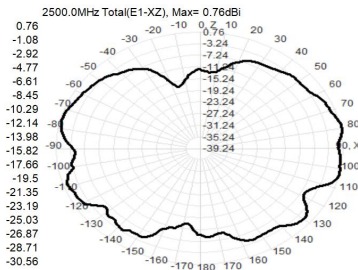
2.4G



2.45G



2.5G



Standard parameters

1. Technical Specifications

Operating frequency range	2.4~2.5GHz
S.W.R	≤1.92
Antenna gain	1.5~2.0dBi
Transfer method	I-PEX
Impedance	

2. Reliability Test

project	Test Conditions	Specification
Storage environment	The test temperature, humidity and air pressure are as follows when no specification is given: 1. Temperature is -30℃~+80℃ 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Cycle between 70℃ and 40℃ for 5 times, then check the appearance quality under normal conditions for 1-2 hours.	The dimensions should meet the requirements and should satisfy the mechanical and electrical properties.
Constant humidity and heat resistance test	Relative humidity: 95±3%, test temperature: 40℃. After 2 hours of continuous action, measure the electrical performance within 5 minutes after the test sample is taken out. Check the appearance quality of the test sample under normal conditions for 1-2 hours.	The dimensions should meet the requirements and should satisfy the mechanical and electrical properties.
Vibration test	Frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep cycle number: 30 times	Electrical and mechanical performance is normal
Withstand voltage	1. Insulation spark voltage 1.5KV 2. Sheath spark voltage 1.5KV 3. Insulation to sheath withstand voltage 0.5KV	Electrical and mechanical performance is normal
Attenuation	2.0(nominal) 1.0GHz 2.9(nominal) 2.0GHz 3.2(nominal) 2.4GHz 3.7(nominal) 3.0GHz 4.3(nominal) 4.0GHz 4.8(nominal) 5.0GHz 5.3(nominal) 6.0GHz	3.3dB/m (at20℃)