

Product P/N HLD2458HV1405

Product Description: 2.4/5.8G CPE Antenna, dual-polarized antenna
1.78

Low-loss brown wire, 5 wires

2*2.4G Bus length 150mm / 3*5.8G bus length 150mm, soldering

Client: _____

Client P/N: _____

Catalogue

[illegible]

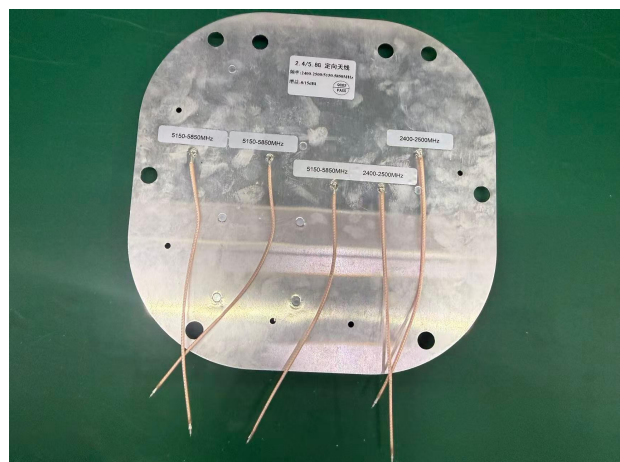
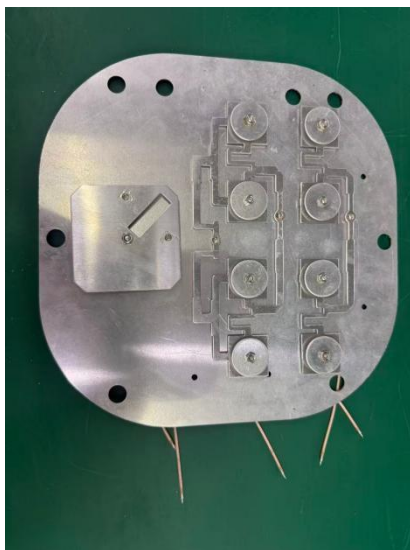
Product Specification Overview

●Electrical Performance:

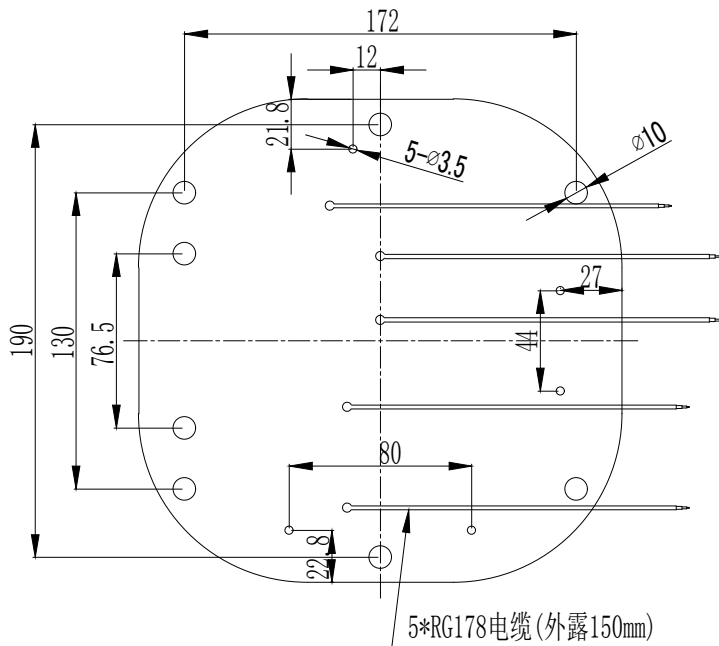
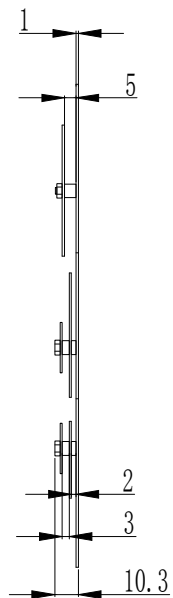
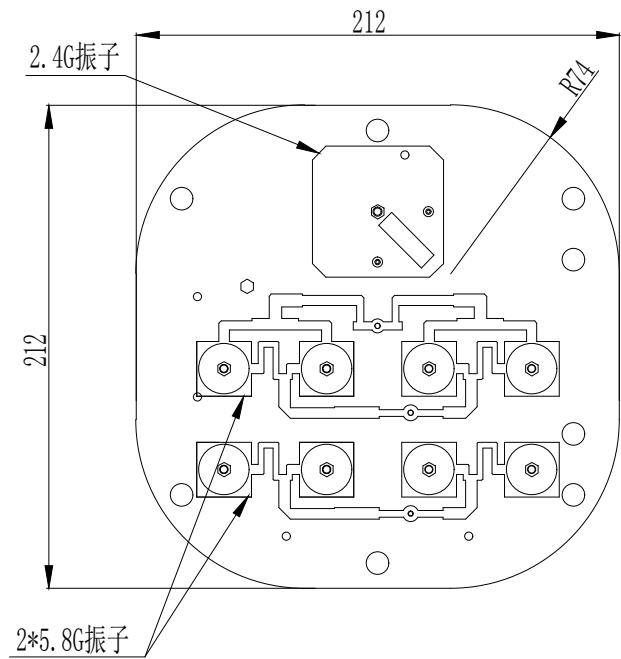
1. Frequency Range: 2.4/5.8G
2. Impedance: 50 Ohms nominal
3. VSWR: ≤ 2.0
4. Gain: 6/13dBi
5. Connector Type:weld

●Mechanical properties:

1. Cable: MI 1.78 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:



序号	修 改 内 容	修改者	日 期	版 本	备 注



技术要求:

- 1、带▲号为重点尺寸；未注尺寸依电子档加工；
- 2、未注线性角度尺寸公差按GB/T 1804-m，未注形位公差按GB/T 1184-K级；
- 3、去除锐边、毛刺、保证毛刺方向；
- 4、保证表面平整、无变形、清洁、无油污、无划伤；
- 5、符合RoHS环保要求。

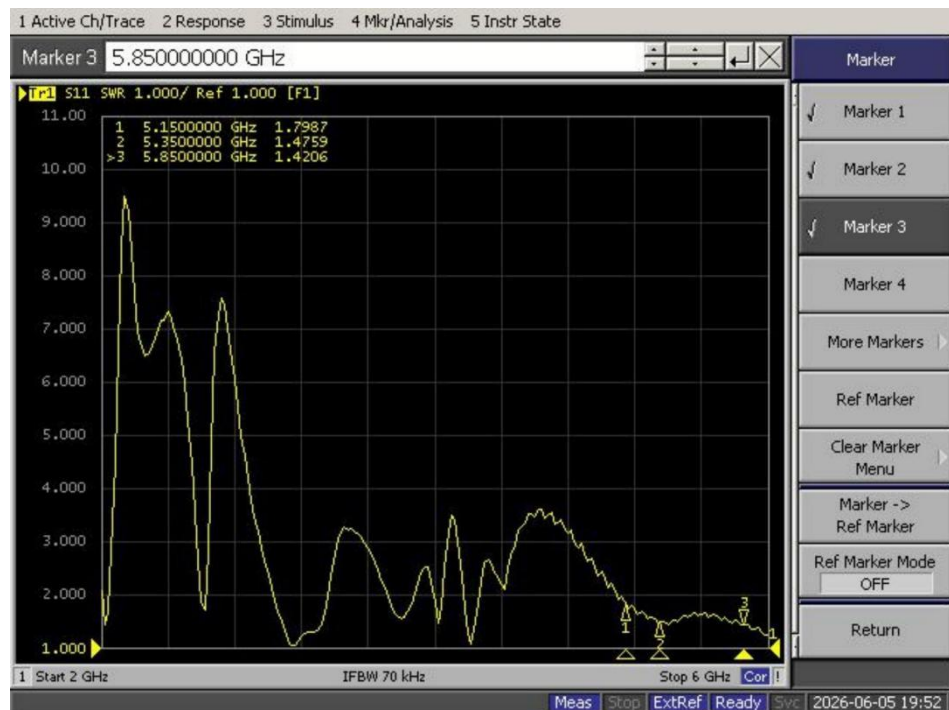
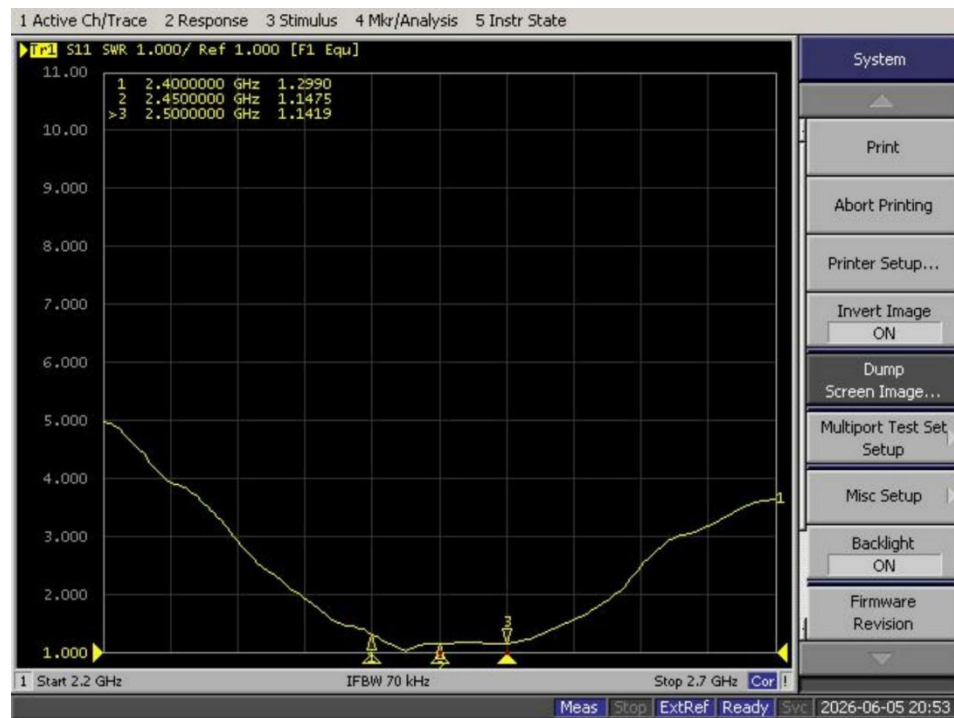
						单 位	
						MM	
第三角法	产品图号		结构设计			2026-7-6	
0~10	±0.10	○	0.02	物料编码		2026-7-6	
10~20	±0.12	◎	0.03	零件名称	2. 4/5. 8G定向天线		
20~40	±0.15	⊥	0.02	材 质	铝		
40~	±0.20	∕	0.04	制造工艺			
		∕	0.02	表面处理			
位 置	共1页,第1页	图 框	A4	绘图比例	1:1	版本	V1.0

Network analyzer test pattern

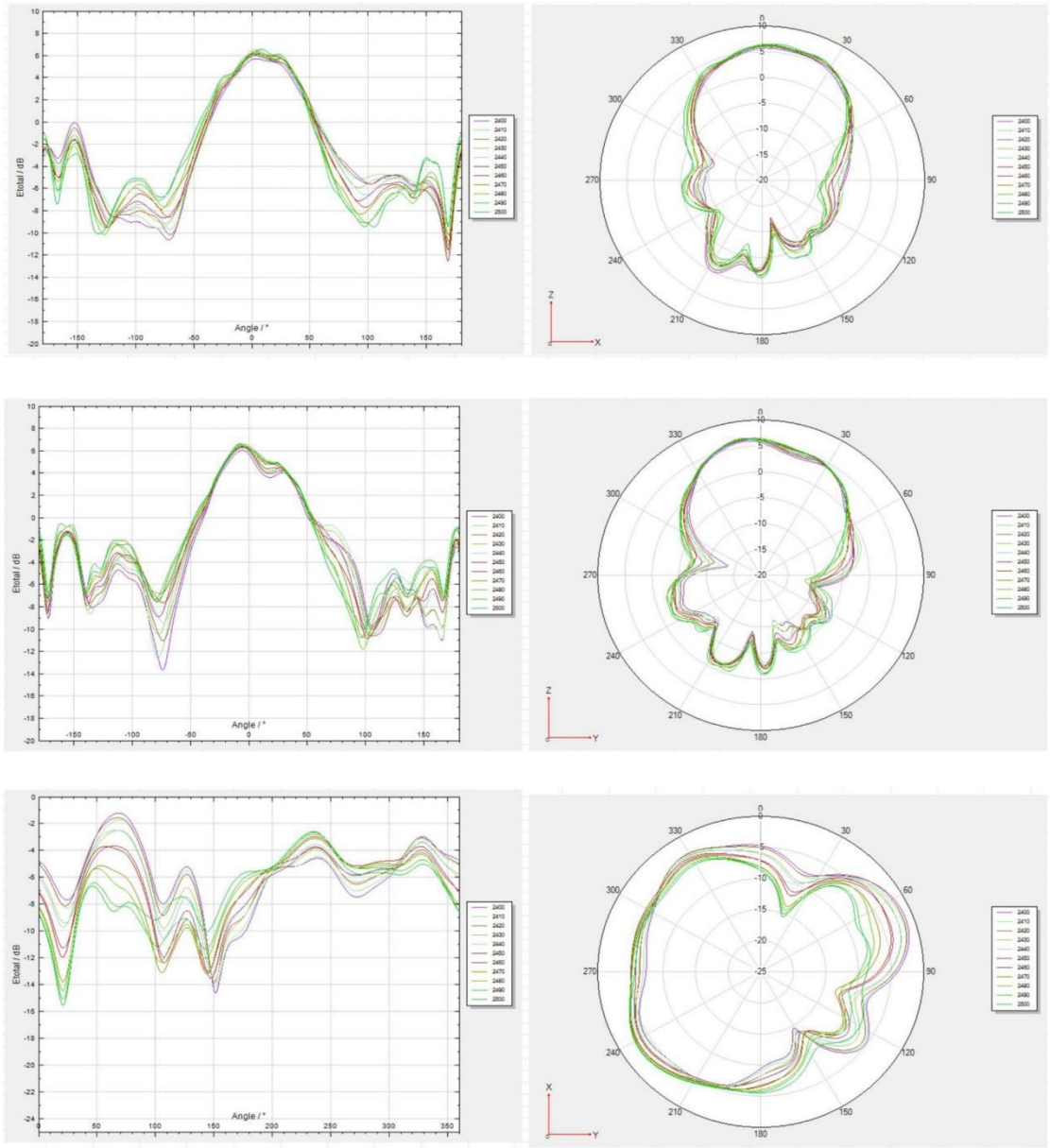
P / N(Part Number):HLD2458HV1405

Title specification: 2.4G/5.8GHz CPE antenna

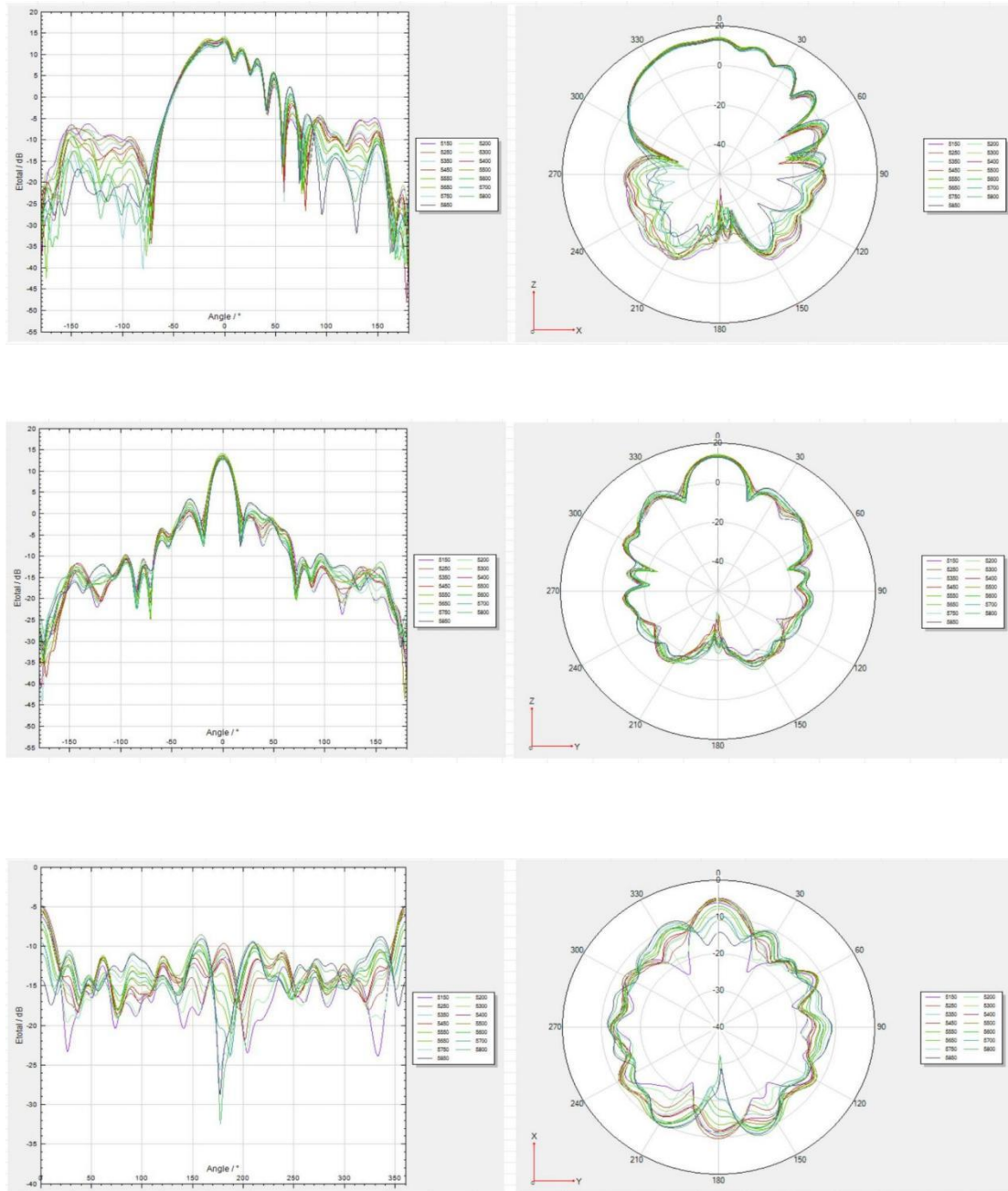
Test value:Return Loss/VSWR



Antenna 2D Report-2.4G



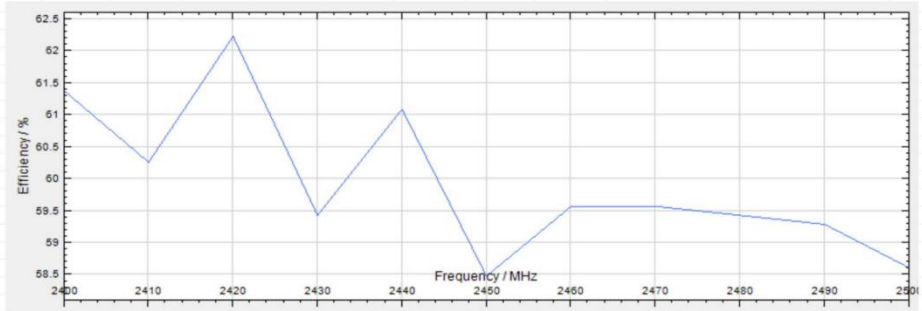
Antenna 2D Report-5.8G



Antenna Efficiency

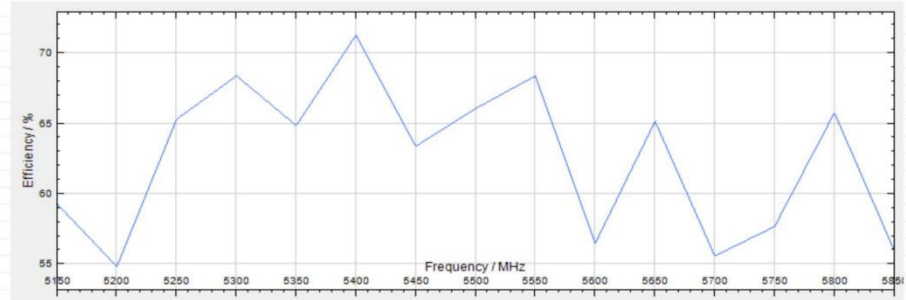
Frequency/ Efficiency / %

2400	61.38
2410	60.26
2420	62.23
2430	59.43
2440	61.09
2450	58.48
2460	59.57
2470	59.57
2480	59.43
2490	59.29
2500	58.61



Frequency/ Efficiency / %

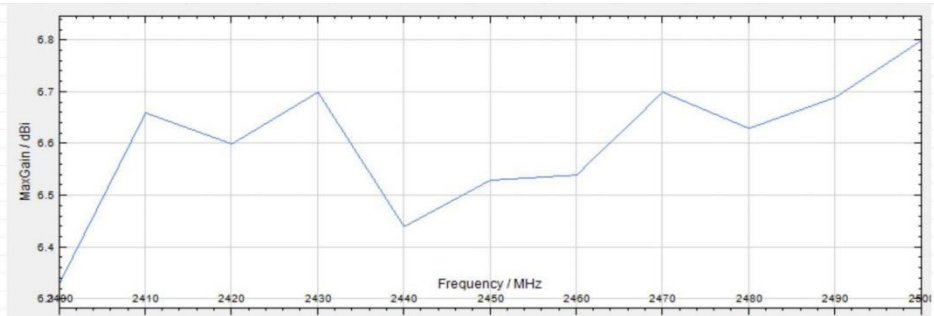
5150	59.29
5200	54.83
5250	65.31
5300	68.39
5350	64.86
5400	71.29
5450	63.39
5500	66.07
5550	68.39
5600	56.49
5650	65.16
5700	55.59
5750	57.68
5800	65.77
5850	55.98



Gain

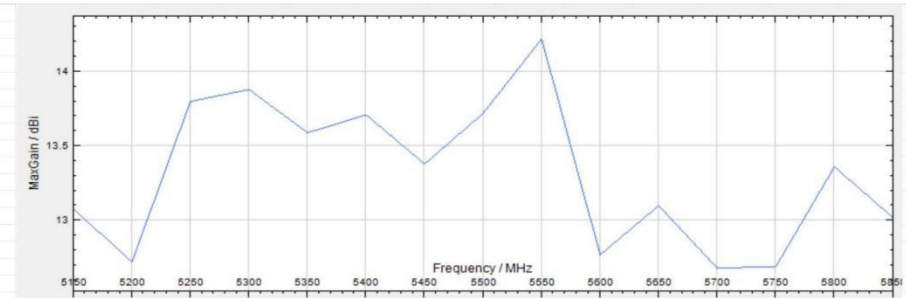
Frequency/ MaxGain/dBi

2400	6.33
2410	6.66
2420	6.6
2430	6.7
2440	6.44
2450	6.53
2460	6.54
2470	6.7
2480	6.63
2490	6.69
2500	6.8



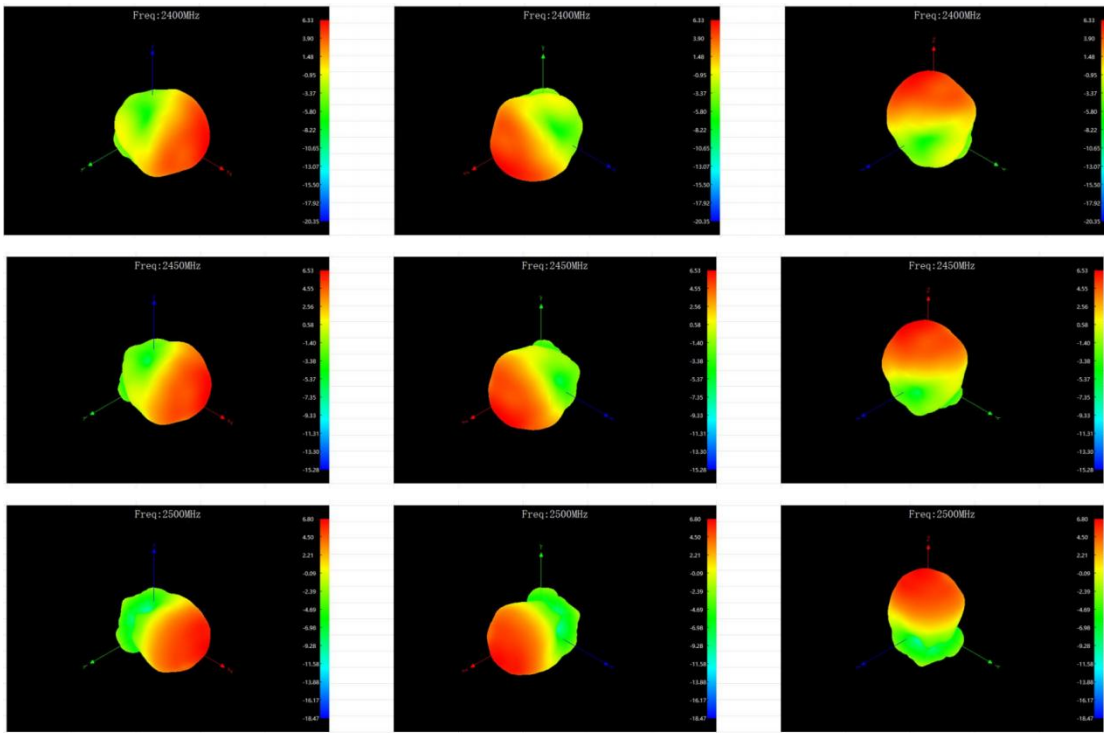
Frequency/ MaxGain/dBi

5150	13.08
5200	12.72
5250	13.8
5300	13.88
5350	13.59
5400	13.71
5450	13.38
5500	13.72
5550	14.22
5600	12.77
5650	13.1
5700	12.68
5750	12.69
5800	13.36
5850	13.02

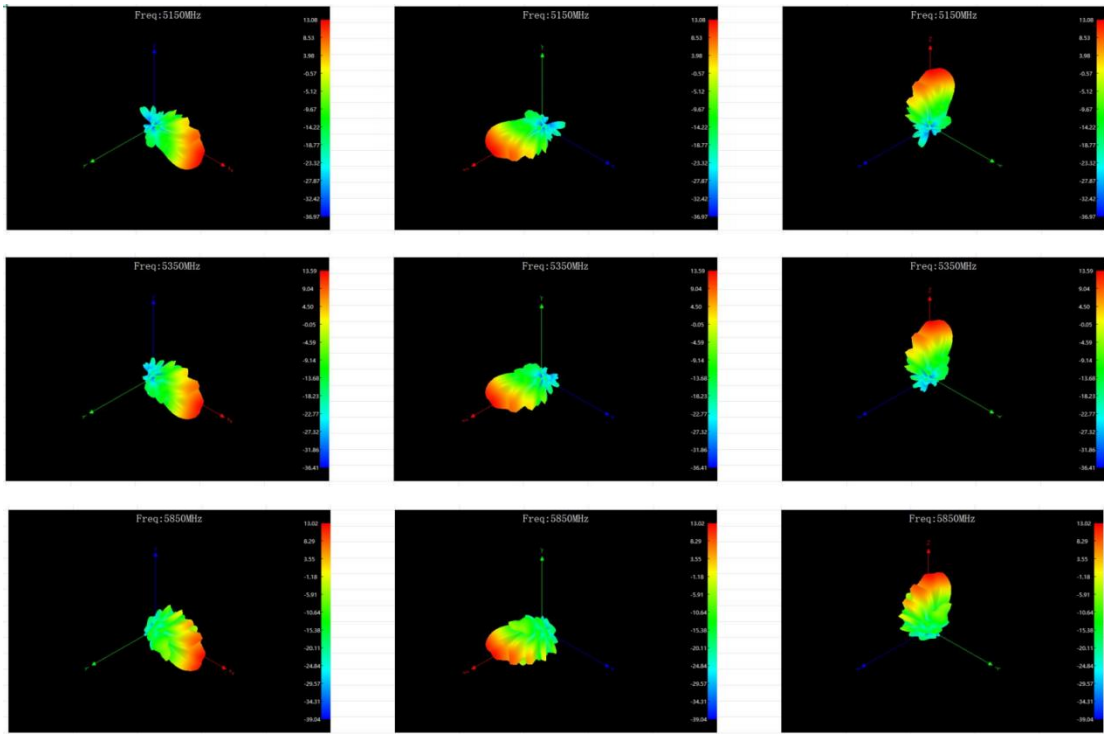


Antenna 3D Report

2.4G



5.8G



Antenna standard parameters

一、Technical specifications

Operating frequency range	2.4G/5.8GHz
S.W.R	≤ 2.0
Antenna gain	6/13dBi
Switching mode	weld
Impedance	50 Ohm

二、Reliability test

Project	Test condition	Specifications														
Storage environment	Temperature, humidity, and air pressure are tested in the absence of specified conditions: 1 temperature is -30 degrees C to +80 2 relative humidity is 45%-85% 3 air pressure is 86kpa-106kpa	Normal electrical and mechanical properties														
High and low temperature test	Between 70 and 40 degrees C for 5 cycles, and then under normal conditions 1-2H, check the appearance quality.	The dimensions shall meet the requirements and shall meet the requirements of the mechanical and electrical properties.														
Resistance to constant damp heat test	Relative humidity 95 + 3%, the test temperature: 40 degrees C, after continuing the 2H effect, the test sample after taking out the electrical performance of 5min, test product under normal conditions 1-2H, check the appearance quality	The dimensions shall meet the requirements and shall meet the requirements of the mechanical and electrical properties.														
Vibration test	Frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep frequency cycle times: 30 times	Normal electrical and mechanical properties														
Drop test	1m high altitude drop	Normal electrical and mechanical properties														
Drawing force test	To test the bearing strength with push pull test instrument: 10N	Normal electrical and mechanical properties														
Voltage resistance	1 insulation spark voltage 1.5KV 2 sheath spark voltage 1.5KV 3 insulation resistance to sheath voltage 0.5KV	Normal electrical and mechanical properties														
Attenuation value	<table><tr><td>Frequency</td><td>Standard value(dB/1m)</td></tr><tr><td>1GHz</td><td>≤2.1</td></tr><tr><td>2GHz</td><td>≤3.0</td></tr><tr><td>3GHz</td><td>≤3.7</td></tr><tr><td>4GHz</td><td>≤4.35</td></tr><tr><td>5GHz</td><td>≤5.0</td></tr><tr><td>6GHz</td><td>≤5.5</td></tr></table>	Frequency	Standard value(dB/1m)	1GHz	≤2.1	2GHz	≤3.0	3GHz	≤3.7	4GHz	≤4.35	5GHz	≤5.0	6GHz	≤5.5	3.3dB/m (at20°C)
Frequency	Standard value(dB/1m)															
1GHz	≤2.1															
2GHz	≤3.0															
3GHz	≤3.7															
4GHz	≤4.35															
5GHz	≤5.0															
6GHz	≤5.5															