



东莞市仁丰电子科技有限公司

Dongguan RF Electronic Technology Co., Ltd

公司地址：东莞市塘厦镇清湖头三坑工业区1号 电话：0769-38940168 传真：0769-39010966 网址：http://rflink.net.cn
No. 1, Sankeng Road, Qing Hutou, Tangxia Town, Dongguan City, Guangdong Province, China

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME: 广联GL

产 品 名 称

PRODUCT NAME: 2.4/5G 外置天线 L=120/290mm+端子 PCB

客 户 料 号

CUSTOMER P/N: 205-2118

仁 丰 料 号:

Ren Feng P/N: 3020202519 REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	李嘉兴	
AUDITOR BY:	吴乐清	
APPROVED BY:	姚定军	
DATE:	2025-09-11	



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三、 变更履历

版本	日期	变更记录
A	2025-09-17	初版发行



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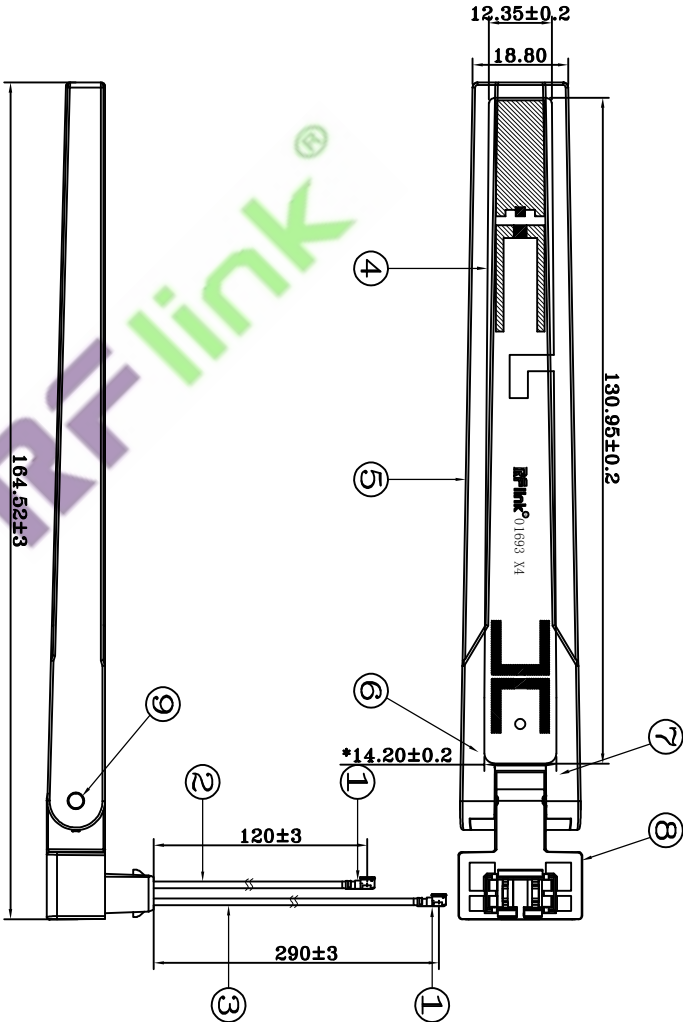
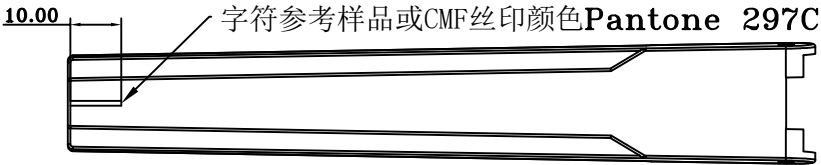
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四、规格表：

产品主要技术参数

主要技术指标		Main technical specifications	
频率范围 (MHZ)	2400-2500 5150-5850	Frequency Range (MHZ)	2400-2500 5150-5850
中心频率 特性阻抗(Ω)	50	Impedance(Ω)	50
增益(dBi)	3 ± 0.5	Gain(dBi)	3 ± 0.5
反射损耗	-9.5	Return Loss(dB)	-9.5
输出电压 驻波比	≤ 2.0	VSWR	≤ 2.0
极化方式	垂直极化	Polarization	Vertical
方向性	全向性	Radiation	Omni-directional
连接方式	端子	Connector Type	Copper
物理性能		Physical Properties	
天线本体材料	ABS	Antenna Base	ABS
工作温度	$-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$	Operating Temp	$-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$
保存温度	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$	Storage Temp	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$

REV	DATE	DESCRIPTION	Change the code
A	2025-09-13	NEW ISSUE	



规格Specification:
频率Frequency Range: 2.4~2.5GHz
5.15~5.85GHz

9	铆钉	2	POM;
8	转轴	1	ABS;
7	小塞子	1	ABS;
6	大塞子	1	ABS;
5	杆套	1	ABS;
4	PCB	1	FR-4;
3	线材	1	φ1.37 Blue
2	线材	1	φ1.37 White
1	端子	2	Copper;
NO.	DESCRIPTION	QTY	REMARK
带公差尺寸为检验尺寸			
产品符合环保RoHS2.0之要求			
A B C			

尺寸范围 (mm)		公差 (mm)		APPROVED		COSTOMER				RF link 东莞市仁丰电子科技有限公司 RenFeng Electronic technology Co., LTD.					
0<L≤6		±0.10		CHECKED		PART NO :									
6<L≤30		±0.10				PARTNAME : RF Antenna Assembly									
30<L≤90		±0.15				R.F P/NO : 3020202519									
90<L≤180		±0.20		DRAWING		REV		UNIT	SCALE	SIZE	SHEET	F	G		
180<L≤315		±0.25				mm		1:1	A4	10F1					
315<L≤800		±0.35		D		E		F		G					
角度		±0.5°													

2、天线位置图

◆ 天线位置图

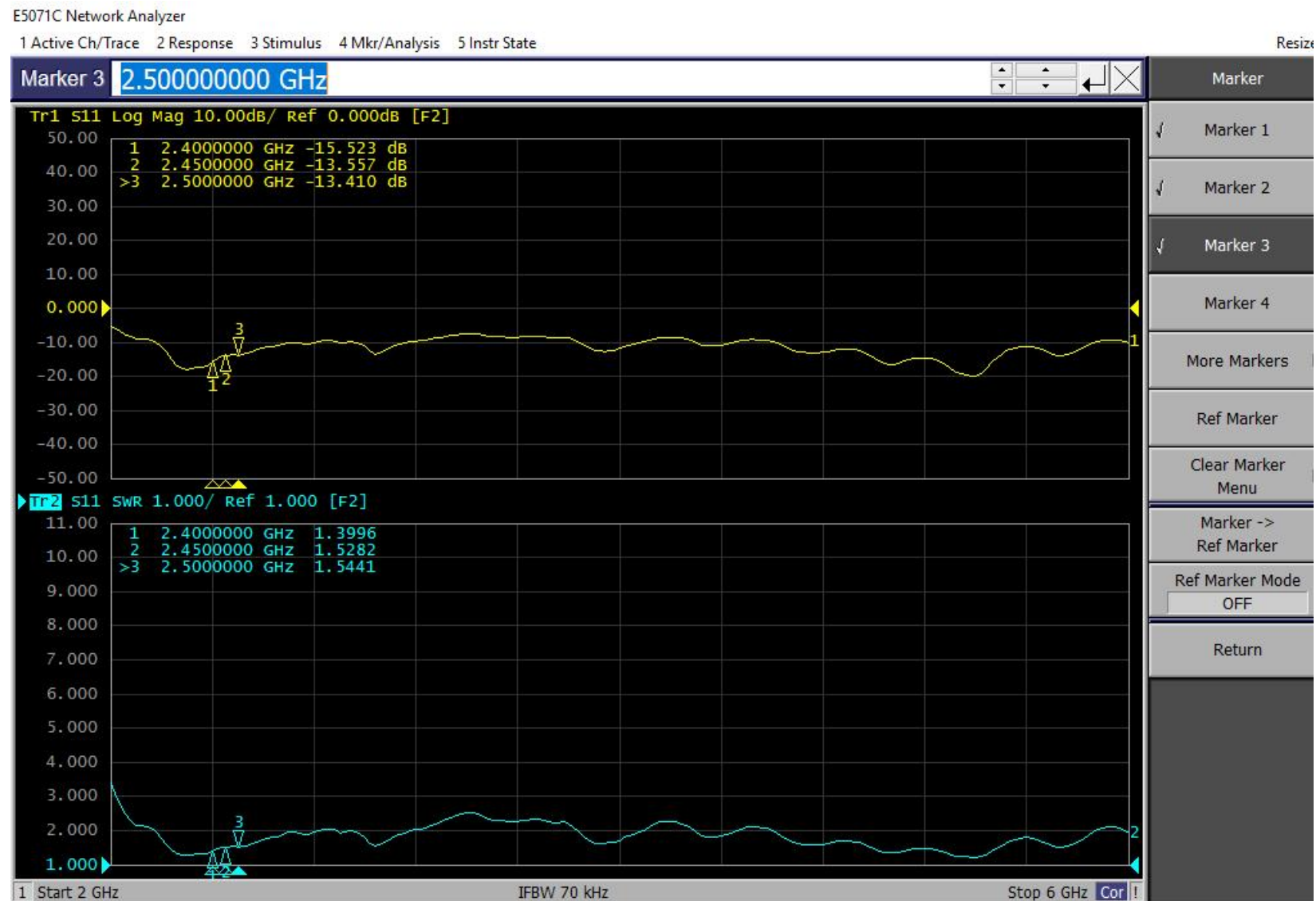


2、无源报告

◆ 反射参数S11

ANT-1

2.4G

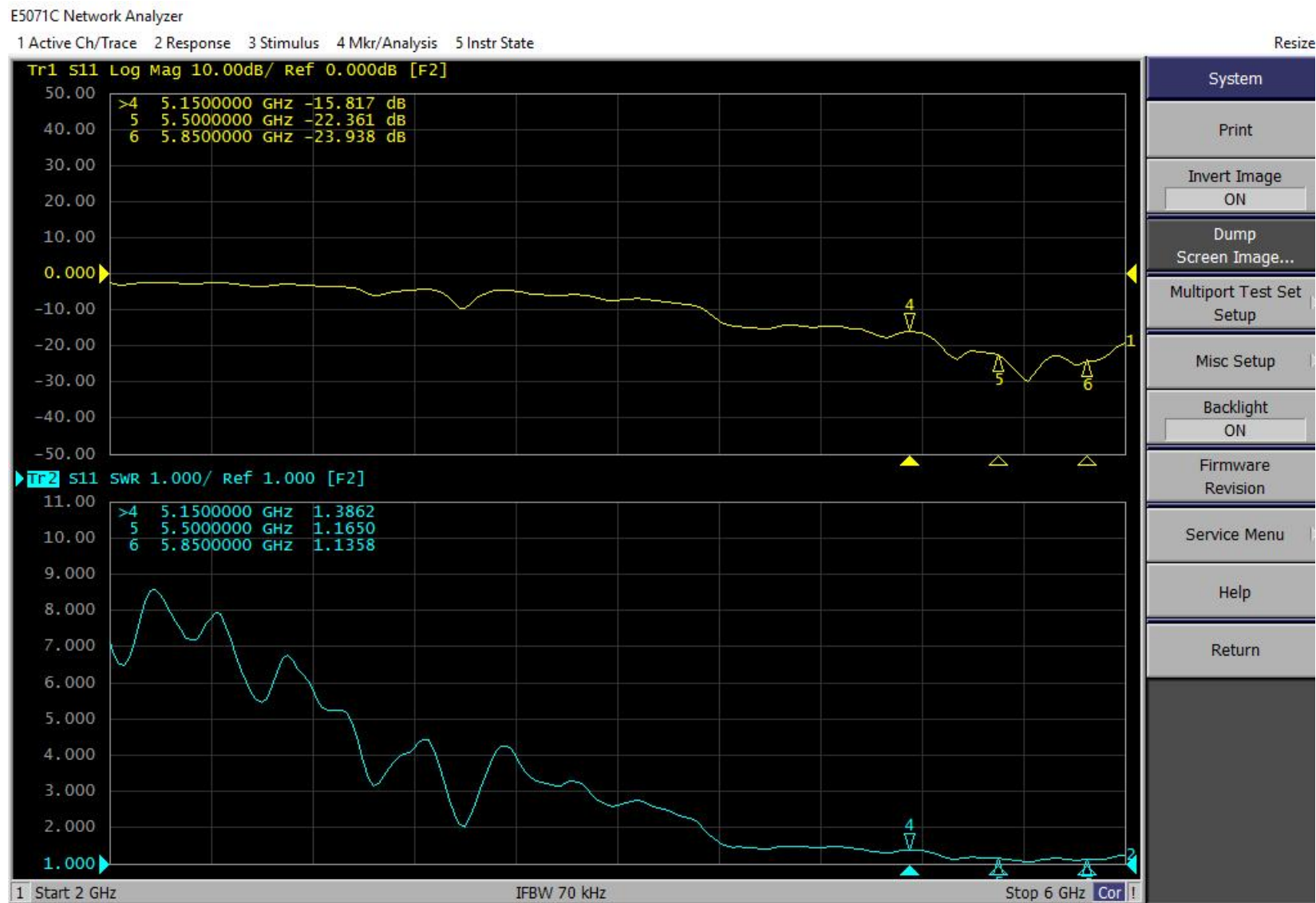


2、无源报告

◆ 反射参数S11

ANT-1

5G



2、无源报告

◆ 辐射参数表

ANT-1

频率 / MHz	效率/ %	增益/ dBi
2400	72.20	2.76
2410	70.74	2.92
2420	72.18	2.87
2430	68.65	2.88
2440	68.38	3.84
2450	70.70	2.63
2460	71.93	2.79
2470	70.17	2.80
2480	71.70	2.71
2490	73.30	2.72
2500	69.61	2.81

2、无源报告

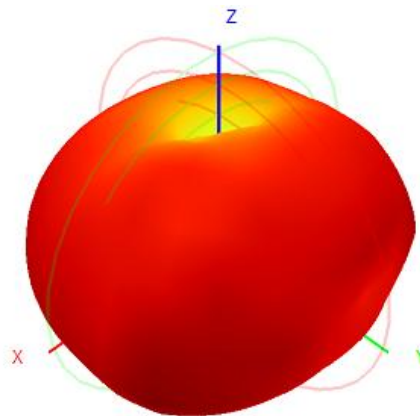
◆ 辐射参数表
ANT-1

频率 / MHz	效率/ %	增益/ dBi
5150	72.18	2.67
5200	73.45	2.60
5250	73.11	2.65
5300	75.32	2.72
5350	72.79	2.54
5400	70.20	2.43
5450	71.49	2.54
5500	71.11	2.51
5550	72.76	2.63
5600	76.10	2.72
5650	77.06	2.85
5700	78.29	2.89
5750	75.98	2.73
5800	73.17	2.68
5850	75.60	2.78

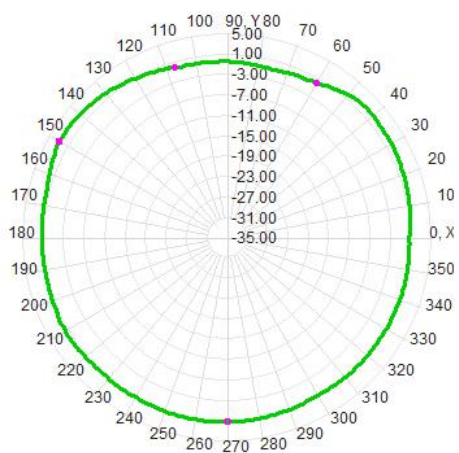
2、无源报告

◆ 辐射方向图 ANT-1 2400MHz

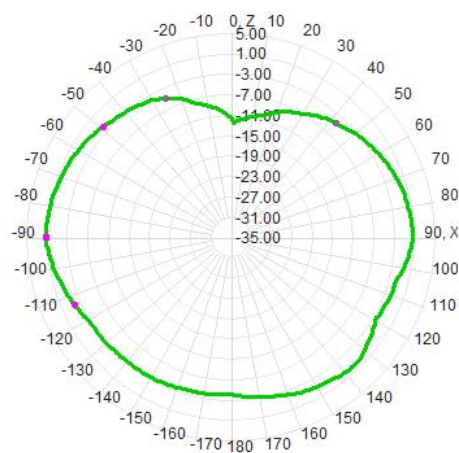
3D方向图



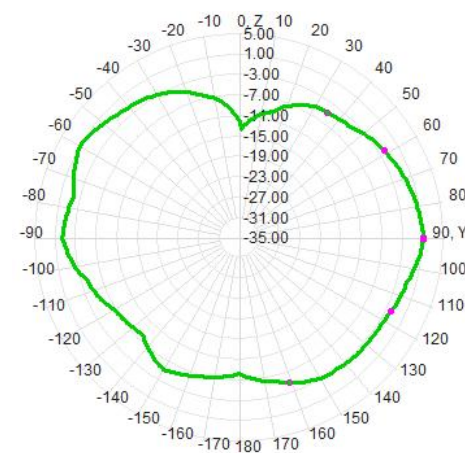
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E1面-PHI=0



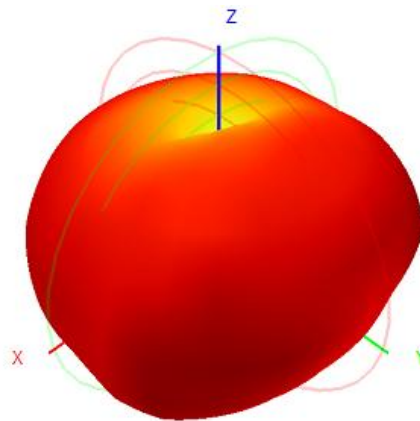
E2面-PHI=90



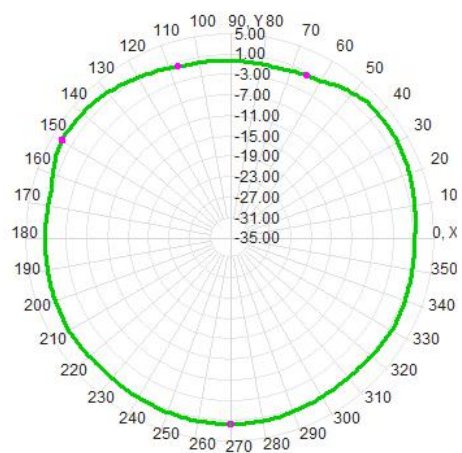
2、无源报告

◆ 辐射方向图 ANT-1 2450MHz

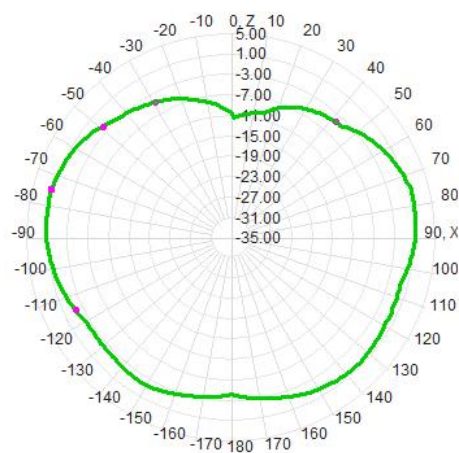
3D方向图



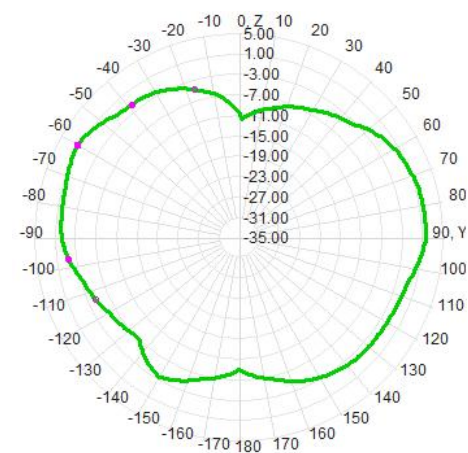
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E1面-PHI=0



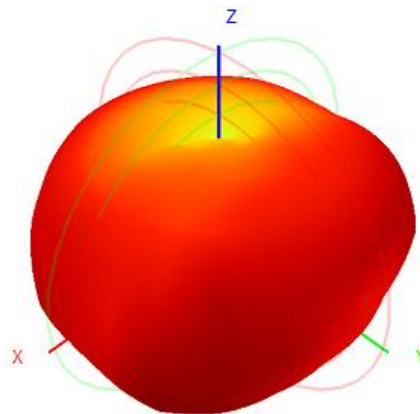
E2面-PHI=90



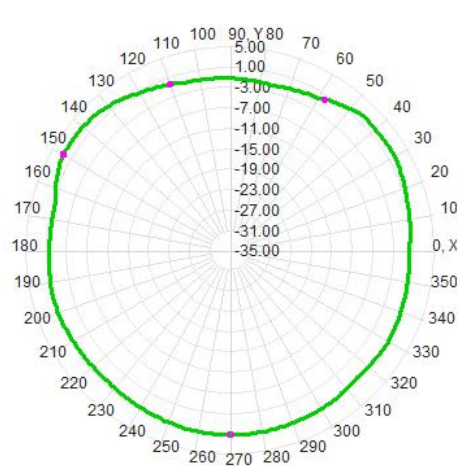
2、无源报告

◆ 辐射方向图 ANT-1 2500MHz

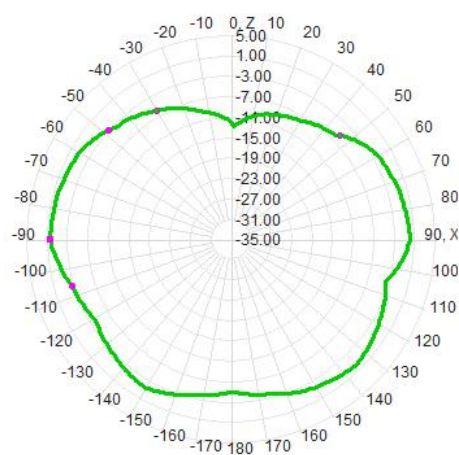
3D方向图



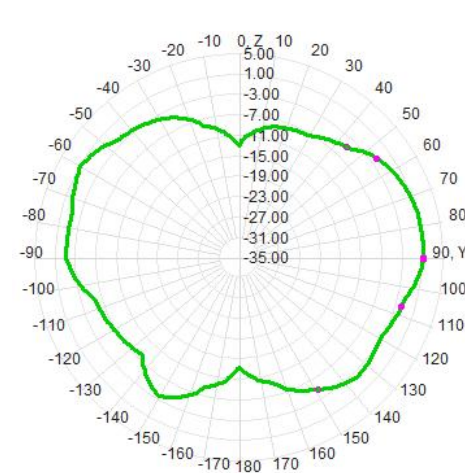
H面-THET=90



E1面-PHI=0



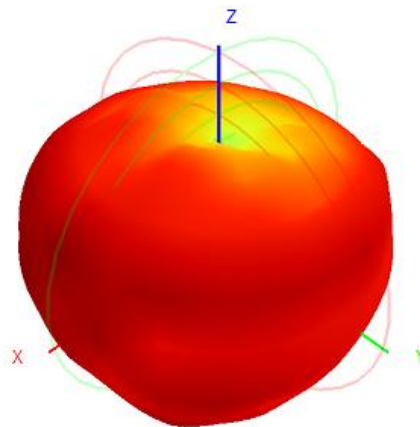
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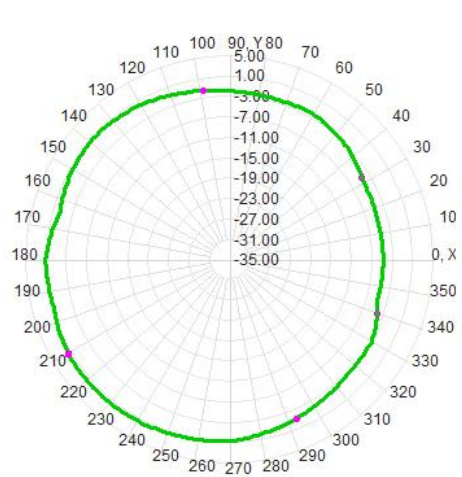
2、无源报告

◆ 辐射方向图 ANT-1 5150MHz

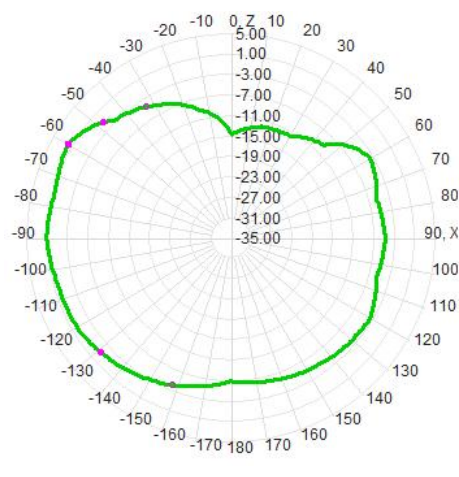
3D方向图



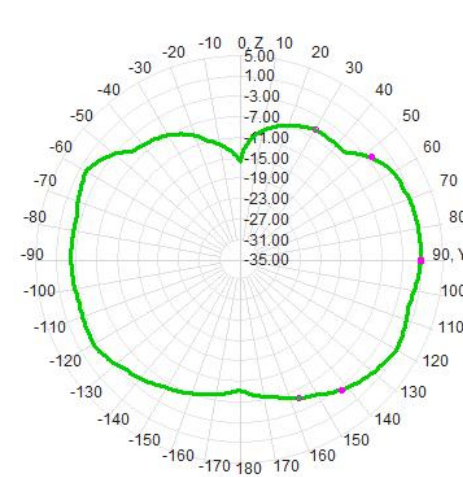
H面-THET=90



E1面-PHI=0



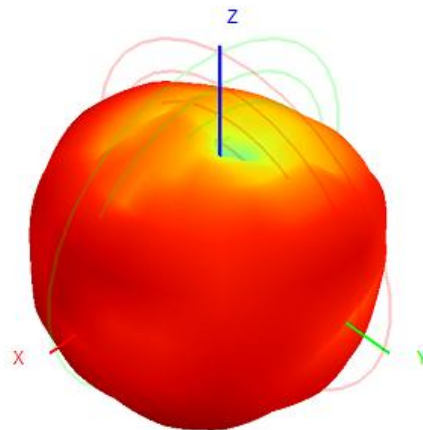
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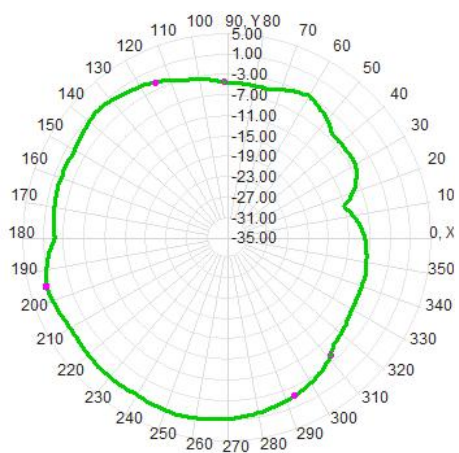
2、无源报告

◆ 辐射方向图 ANT-1 5500MHz

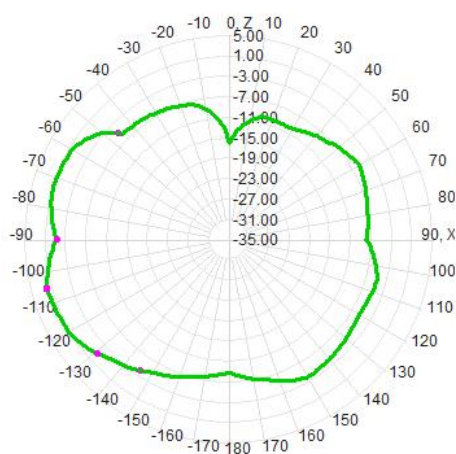
3D方向图



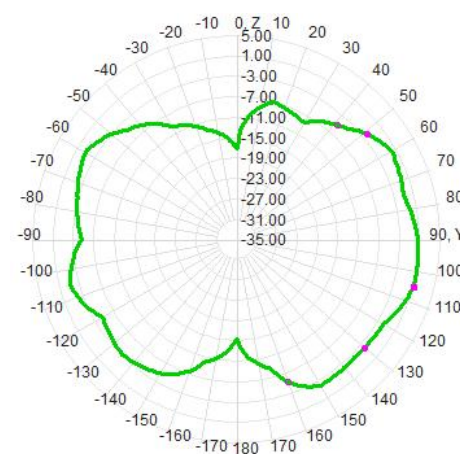
H面-THET=90



E1面-PHI=0



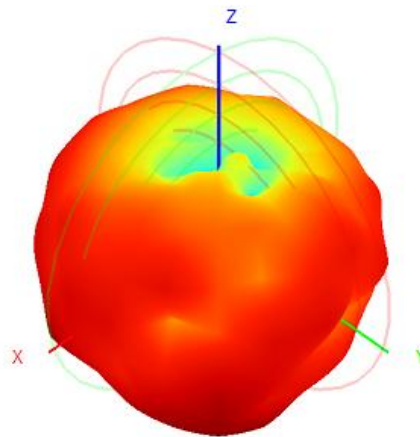
E2面-PHI=90



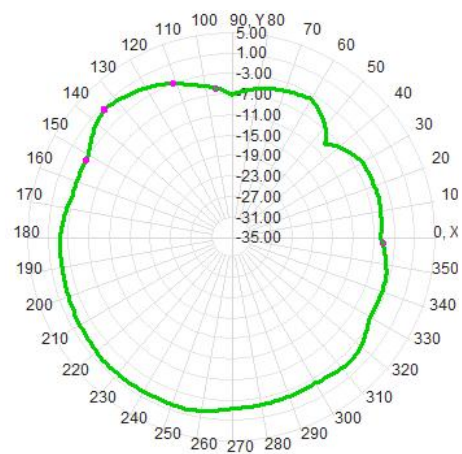
2、无源报告

◆ 辐射方向图 ANT-1 5850MHz

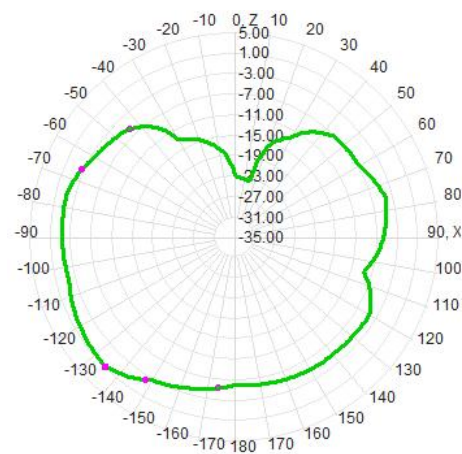
3D方向图



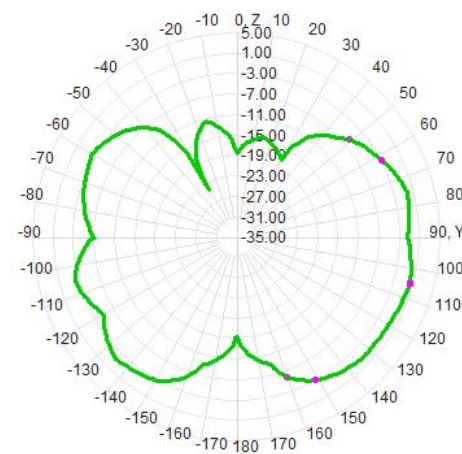
H面-THET=90



E1面-PHI=0



E2面-PHI=90



3、OTA有源报告

◆ OTA有源数据表

Item	Measurement	Azimuths	Elevations	Standard	Band	Channel	Frequency	Total
1	TRP	Every30	Every30	WIFI (Station)	WIFI_A (6M)	36	5180	26.3
2	TRP	Every30	Every30	WIFI (Station)	WIFI_A (6M)	64	5320	26.37
3	TRP	Every30	Every30	WIFI (Station)	WIFI_A (6M)	100	5500	26.19
4	TRP	Every30	Every30	WIFI (Station)	WIFI_A (6M)	132	5660	26.39
5	TRP	Every30	Every30	WIFI (Station)	WIFI_A (6M)	149	5745	26.55
6	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_A (54M)	36	5180	-77.48
7	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_A (54M)	64	5320	-77.23
8	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_A (54M)	100	5500	-78.6
9	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_A (54M)	132	5660	-78.39
10	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_A (54M)	149	5745	-78.06
11	TRP	Every30	Every30	WIFI (Station)	WIFI_G (6M)	1	2412	25.17
12	TRP	Every30	Every30	WIFI (Station)	WIFI_G (6M)	6	2437	25.96
13	TRP	Every30	Every30	WIFI (Station)	WIFI_G (6M)	11	2462	25.2
14	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	1	2412	-77.27
15	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	6	2437	-77.88
16	TIS(EIRP)	Every30	Every30	WIFI (Station)	WIFI_G (54M)	11	2462	-77.16