



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=180/280mm+端子 PCB

客 户 料 号

CUSTOMER P/N: 205-2119

仁 丰 料 号:

Ren Feng P/N: 3020202521 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	

Contents

<i>Item</i>	<i>Description</i>
一、-----	封面
二、-----	目录
三、-----	变更履历
四、-----	规格表
五、-----	成品图
六、-----	测试报告



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

三、 变更履历

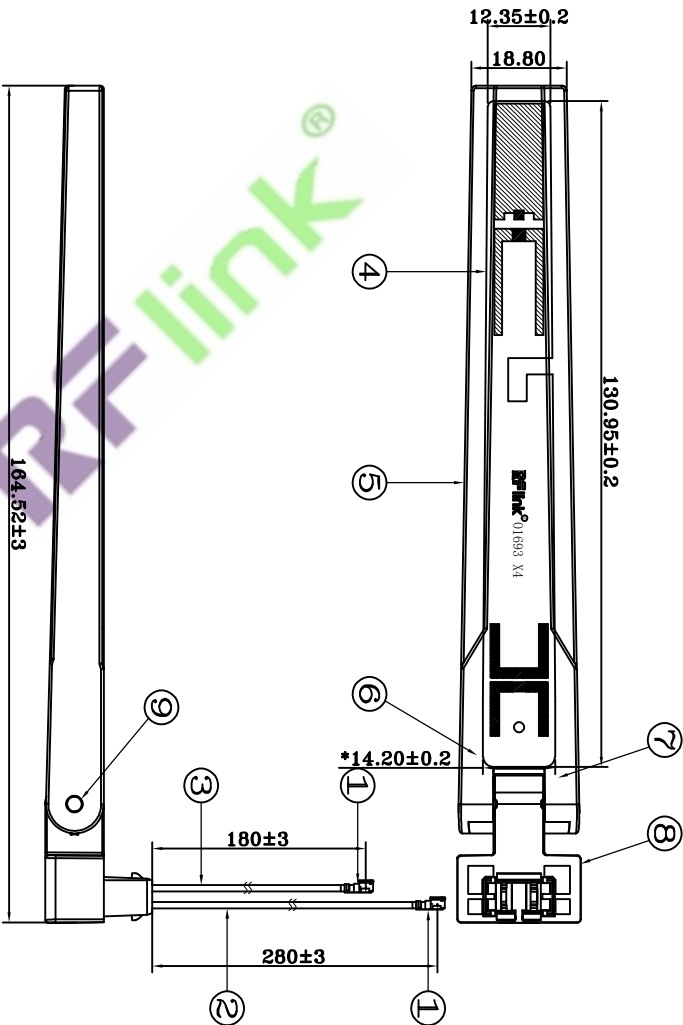
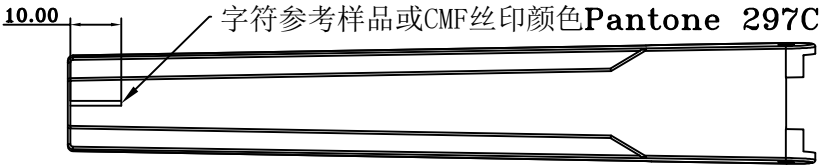
版本	日期	变更记录
A	2025-09-17	初版发行

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℃~+60℃	Operating Temp	-20℃~+60℃
保存温度	-20℃~+70℃	Storage Temp	-20℃~+70℃

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 Green
2	线材	1	φ1.37 Red
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			

尺寸范围 (mm)		公差 (mm)		APPROVED											
0<L≤6		±0.10		CHECKED		COSTOMER									
6<L≤30		±0.10				PART NO :									
30<L≤90		±0.15				PARTNAME : RF Antenna Assembly									
90<L≤180		±0.20		DRAWING		R.F P/NO : 3020202521									
180<L≤315		±0.25				REV									
315<L≤800		±0.35				UNIT		SCALE		SIZE					
角度		±0.5°		DRAWING		mm		1:1		A4		SHEET		10F1	
															
D		E		F		G									



东莞市仁丰电子科技有限公司
RenFeng Electronic technology Co., LTD.

2、天线位置图

◆ 天线位置图

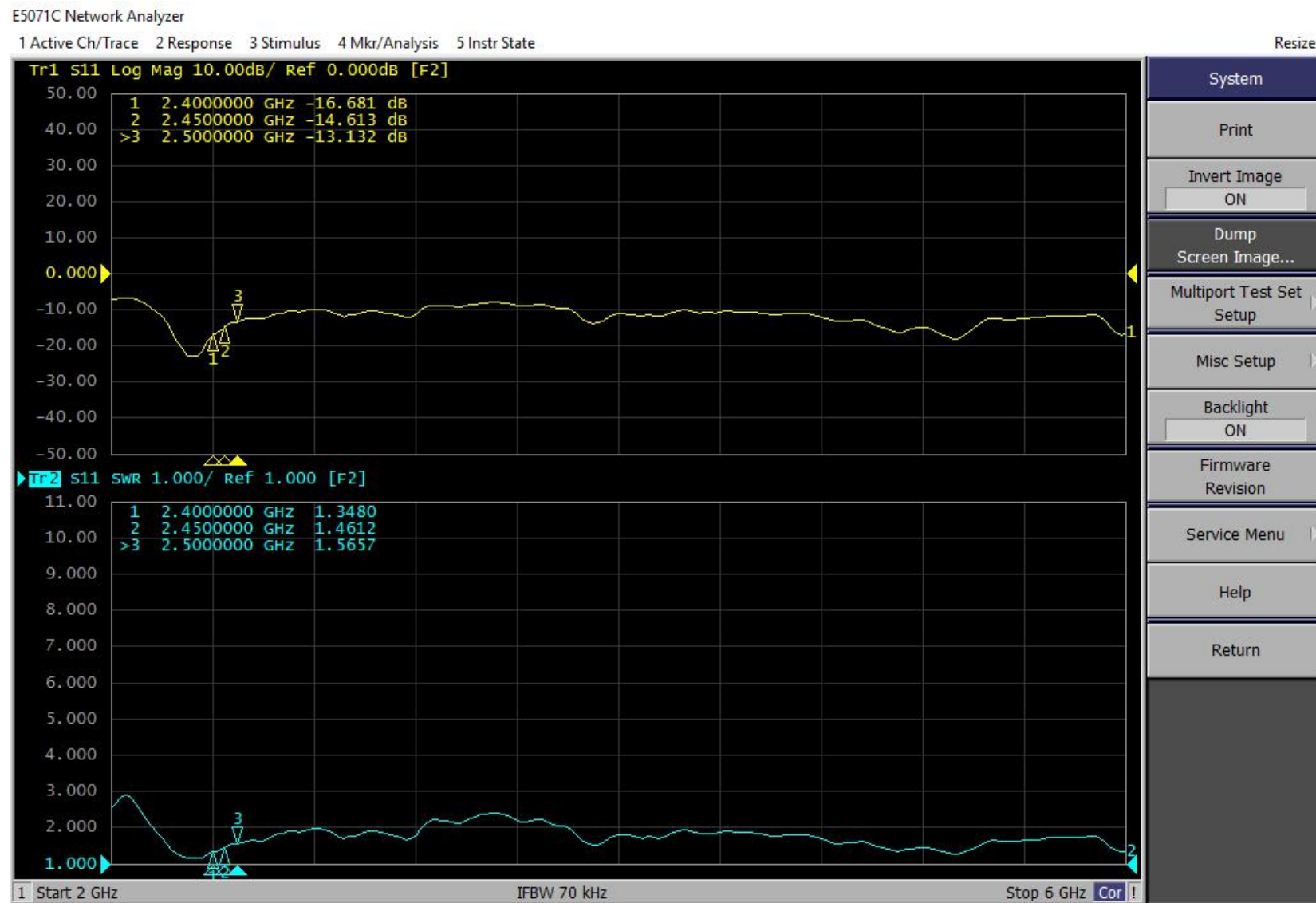


2、无源报告

◆ 反射参数S11

ANT-3

2.4G

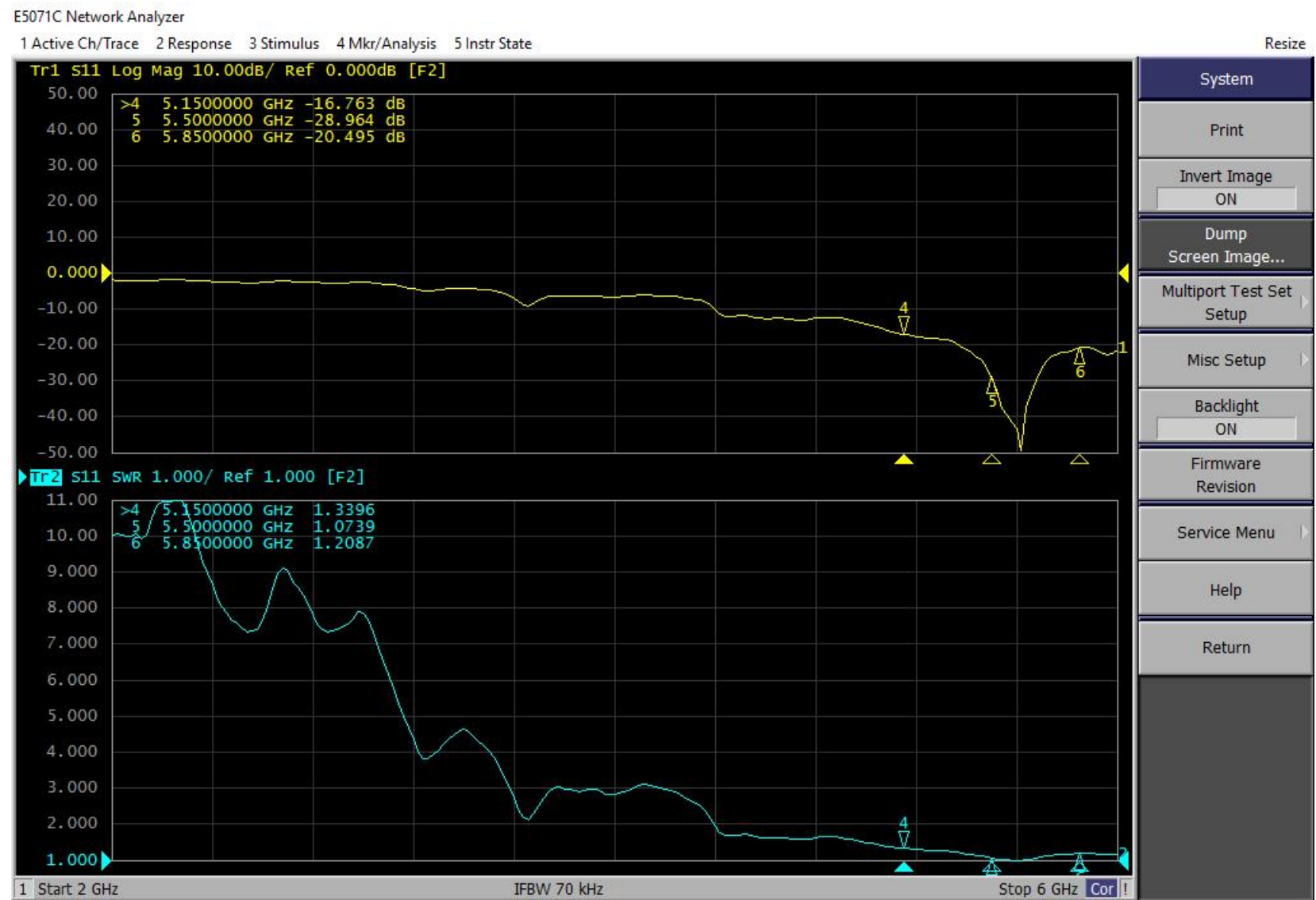


2、无源报告

◆ 反射参数S11

ANT-3

5G



2、无源报告

◆ 辐射参数表

ANT-3

频率 / MHz	效率/ %	增益/ dBi
2400	68.87	2.61
2410	70.86	2.70
2420	68.97	2.77
2430	72.83	2.83
2440	74.07	2.81
2450	69.34	2.75
2460	70.38	2.79
2470	73.25	2.81
2480	71.68	2.84
2490	72.25	2.75
2500	67.02	2.60

2、无源报告

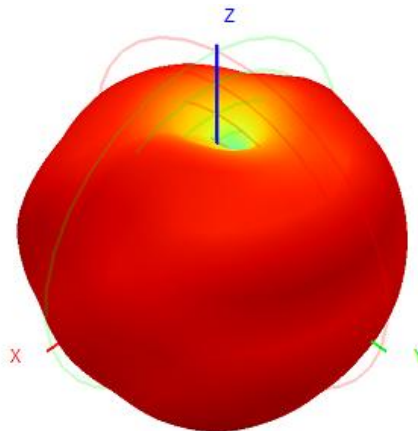
◆ 辐射参数表
ANT-3

频率 / MHz	效率/ %	增益/ dBi
5150	67.80	2.46
5200	68.04	2.58
5250	68.73	2.58
5300	69.22	2.77
5350	68.76	2.69
5400	68.29	2.51
5450	71.26	2.70
5500	71.30	2.76
5550	71.92	2.70
5600	68.69	2.69
5650	66.22	2.48
5700	66.72	2.34
5750	66.23	2.32
5800	67.68	2.39
5850	67.48	2.33

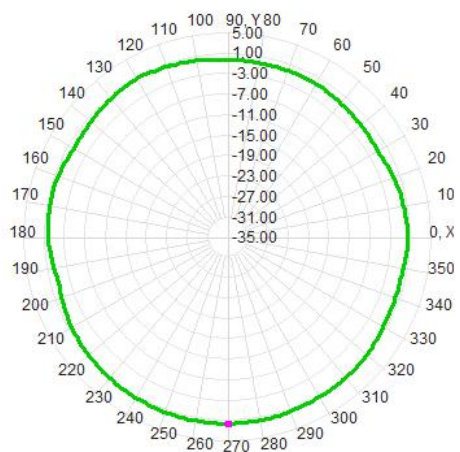
2、无源报告

◆ 辐射方向图 ANT-3 2400MHz

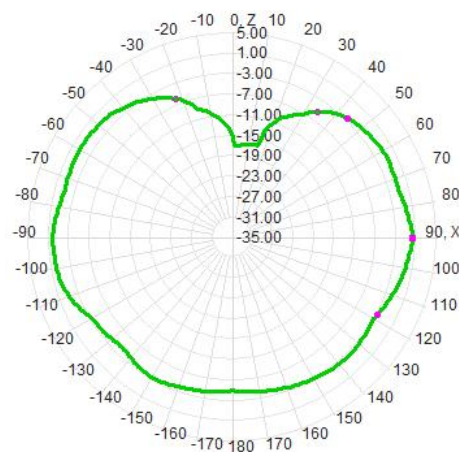
3D方向图



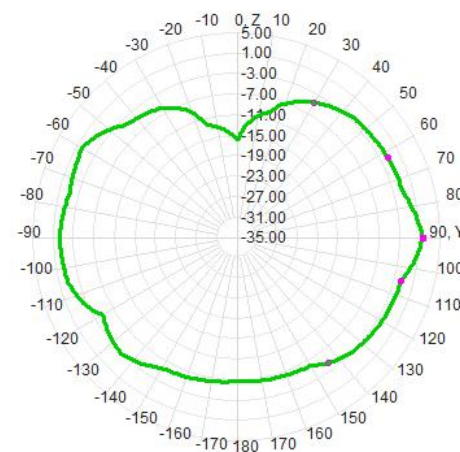
H面-THET=90



E1面-PHI=0



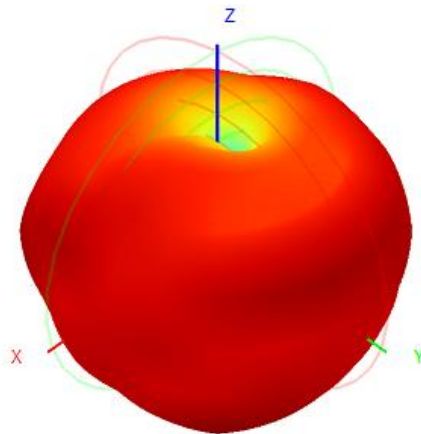
E2面-PHI=90



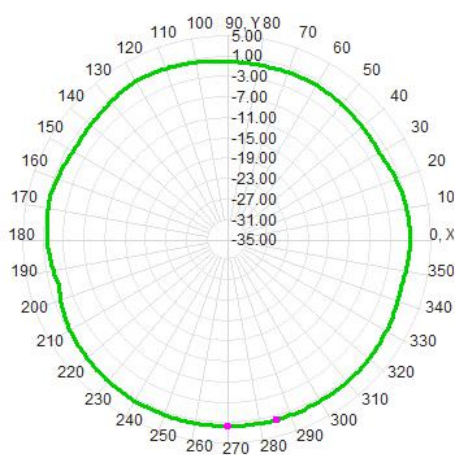
2、无源报告

◆ 辐射方向图 ANT-3 2450MHz

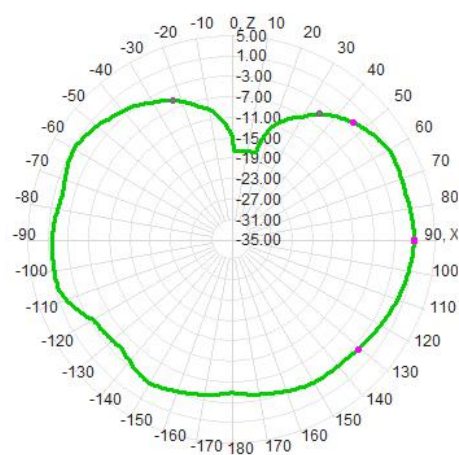
3D方向图



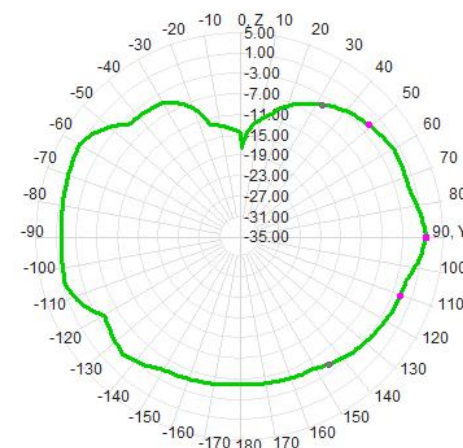
H面-THET=90



E1面-PHI=0



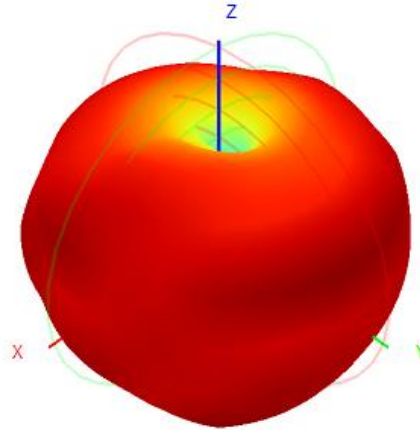
E2面-PHI=90



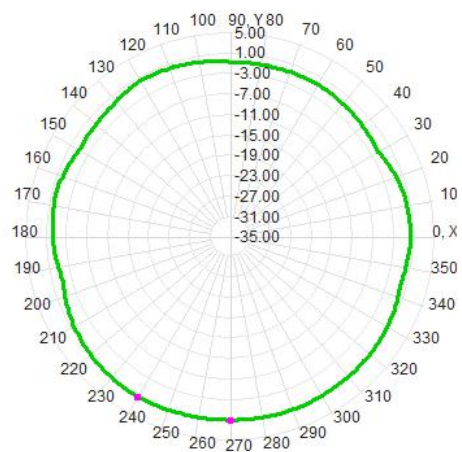
2、无源报告

◆ 辐射方向图 ANT-3 2500MHz

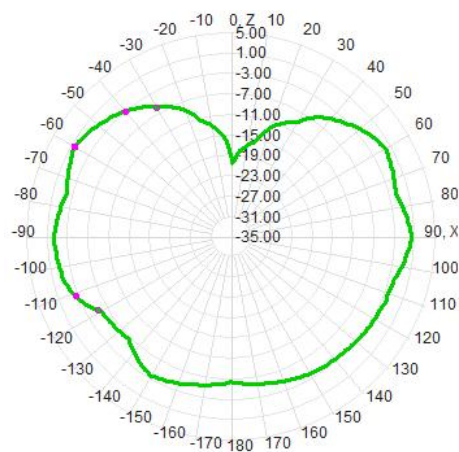
3D方向图



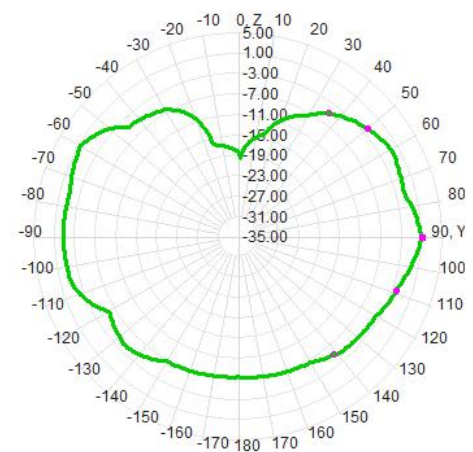
H面-THET=90



E1面-PHI=0



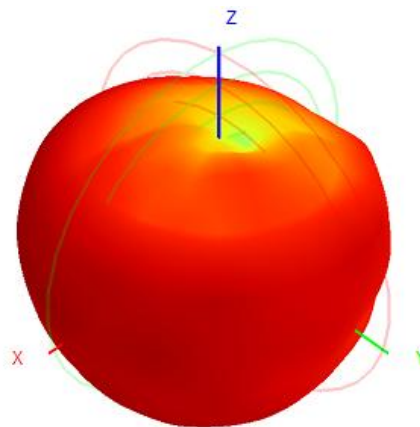
E2面-PHI=90



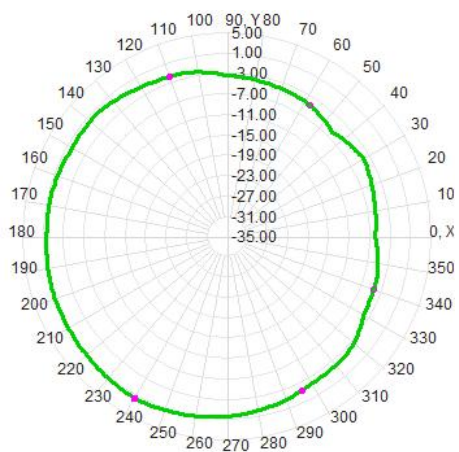
2、无源报告

◆ 辐射方向图 ANT-3 5150MHz

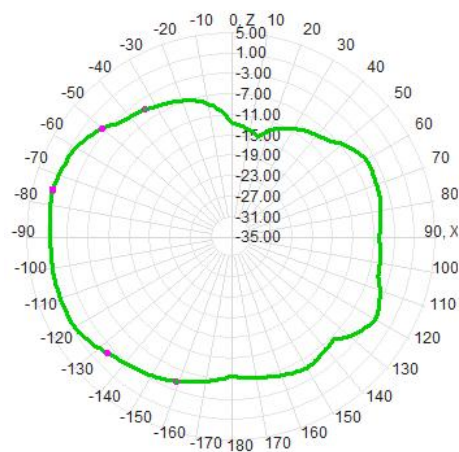
3D方向图



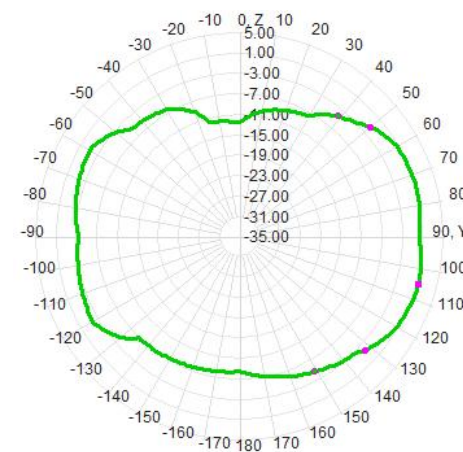
H面-THET=90



E1面-PHI=0



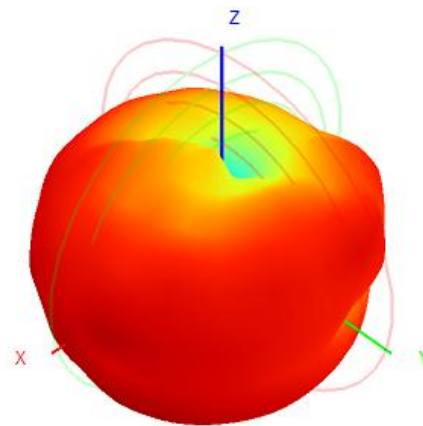
E2面-PHI=90



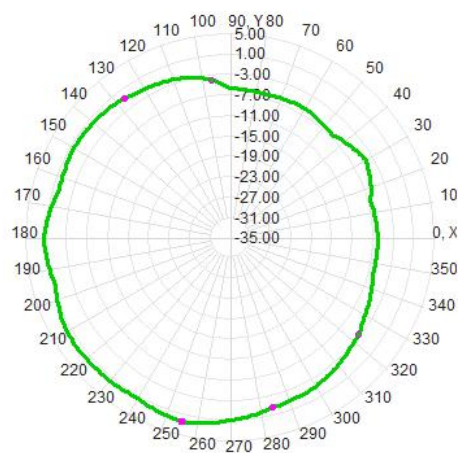
2、无源报告

◆ 辐射方向图 ANT-3 5500MHz

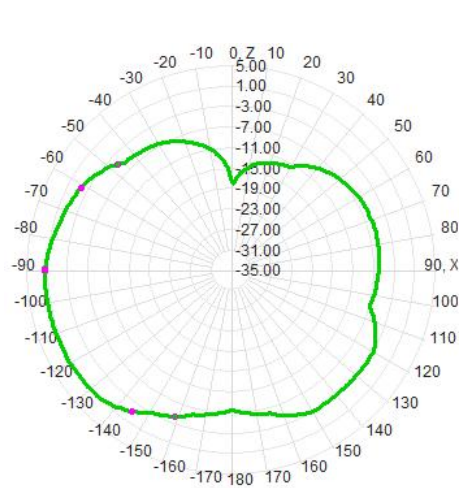
3D方向图



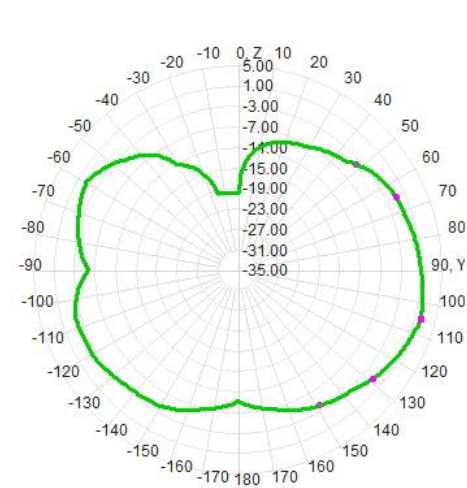
H面-THET=90



E1面-PHI=0



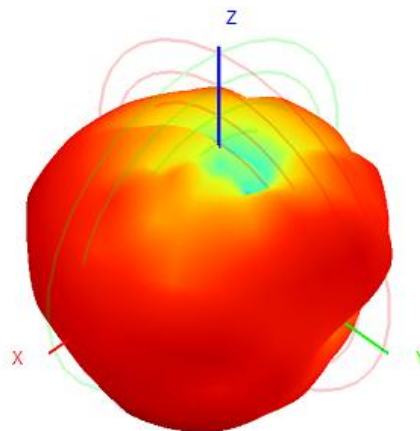
E2面-PHI=90



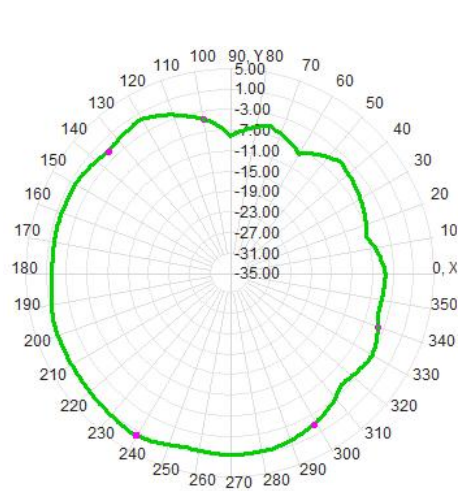
2、无源报告

◆ 辐射方向图 ANT-3 5850MHz

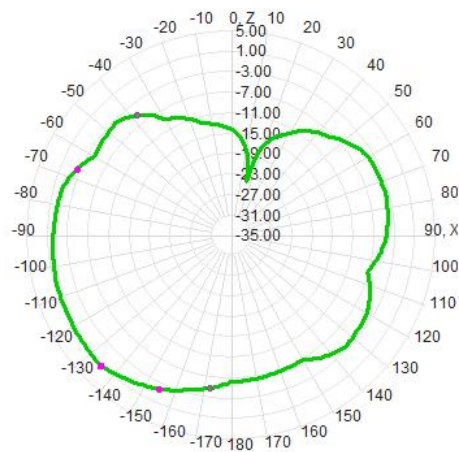
3D方向图



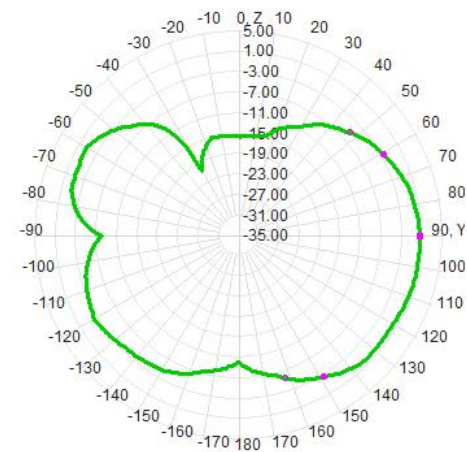
H面-THET=90



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