

深圳市天联凌科技有限公司

Shenzhen SKYLink Technology Co.,Ltd

天线规格承认书

编号: SLS0A20240407CS01

客户名称: 鲸视

项目名称: TY06 双频天线

产品描述: 弹片天线

客户料号:

我司料号: TY06

版本: V1.0 (第一次发行)

日期: 2024.04.07

客户

此承认书严禁修改

工程	采购	承认

天联凌

研发	工程	审核

● 规格概述

电特性	
频率	2400MHz ~2500MHz 5150MHz ~5850MHz
回波损耗	<-10dB
效率	>50%
增益	2.3dbi
阻抗	50 欧姆
极化方式	线极化
材料和机械特性	
材料	弹片
线材类型	/
端子类型	/
图纸尺寸	详见图纸
丝印方式	/
环境特性	
储存温度	- 30 °C ~ + 85 °C
FPC 焊接温度	280±5℃ 浸渍时间:10 秒
射频线焊接温度	320±5℃ 2-3 秒

● Test Equipment & Conditions

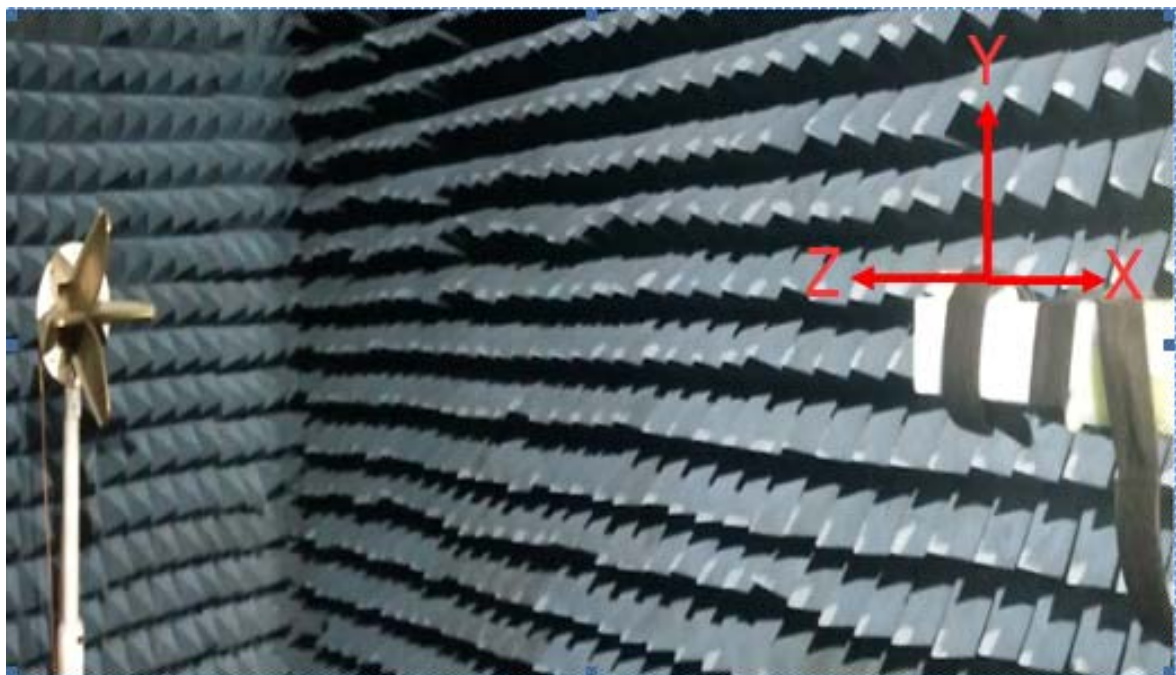
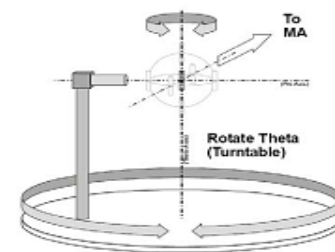
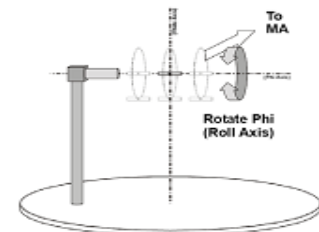
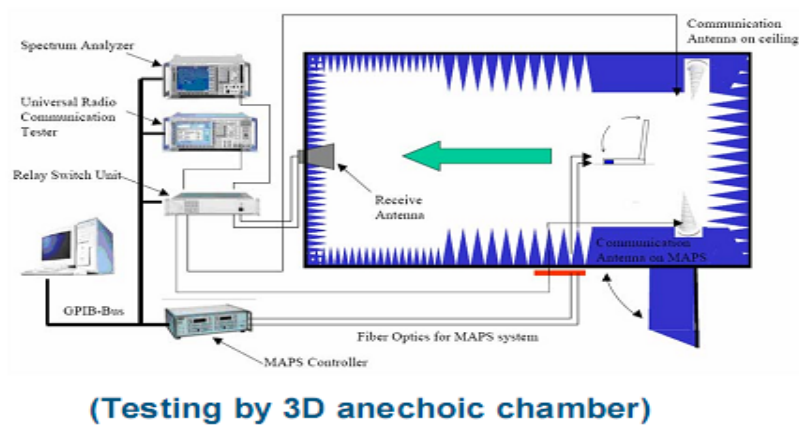
1. Network Analyzers :

Agilent 8753D 5071B

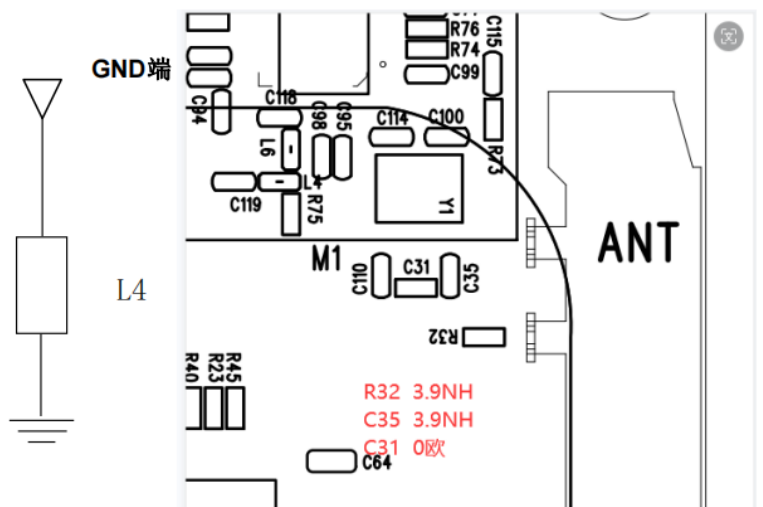
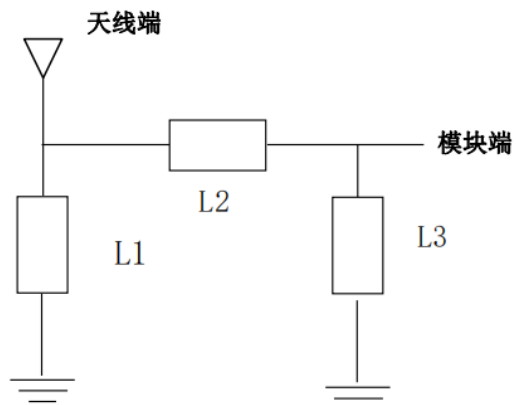
Communications Test Set:

Agilent E5515C CMW500

2. 3D Chamber Test System



● 匹配电路（matching circuit）



	值
L1 (0402)	3.9NH
L2 (0402)	0欧
L3 (0402)	/
L4 (0402)	3.9NH

● TRP & TIS

2.4G 关闭BLE

B模

Test Result	Wifi 2G TRP			Test Result	Wifi 2G TIS		
	1	6	11		1	6	11
Frequency (MHz)	2412	2437	2462	Frequency (MHz)	2412	2437	2462
TRP (dBm)	16.09	16.33	16.38	TIS (dBm)	-79.35	-81.04	-79.66

G模

Test Result	Wifi 2G TRP			Test Result	Wifi 2G TIS		
	1	6	11		1	6	11
Frequency (MHz)	2412	2437	2462	Frequency (MHz)	2412	2437	2462
TRP (dBm)	12.04	12.51	12.47	TIS (dBm)	-64.09	-64.19	-64.16

N模

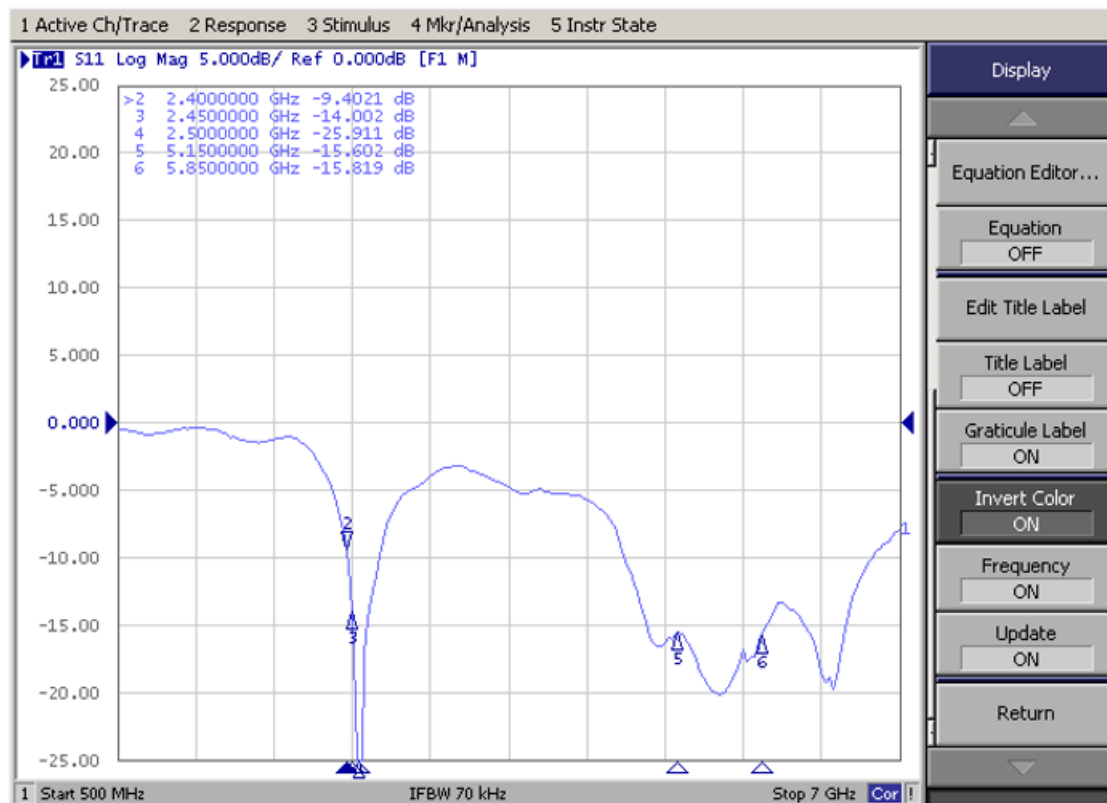
Test Result	Wifi 2G TRP			Test Result	Wifi 2G TIS		
	1	6	11		1	6	11
Frequency (MHz)	2412	2437	2462	Frequency (MHz)	2412	2437	2462
TRP (dBm)	14.45	14.74	14.35	TIS (dBm)	-63.2	-63.28	-63.75

5.8G

N模

Test Result	Wifi 5G TRP			Test Result	Wifi 5G TIS		
	36	149	161		36	149	161
Frequency (MHz)	5180	5745	5805	Frequency (MHz)	5180	5745	5805
TRP (dBm)	13.8	13.71	13.61	TIS (dBm)	-64.29	-64.97	-64.29

◆ Return Loss

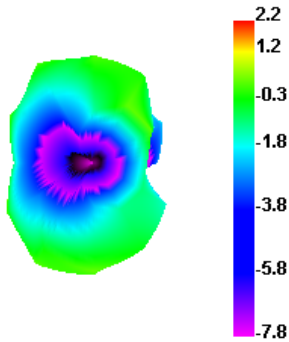


◆ Gain & Efficiency

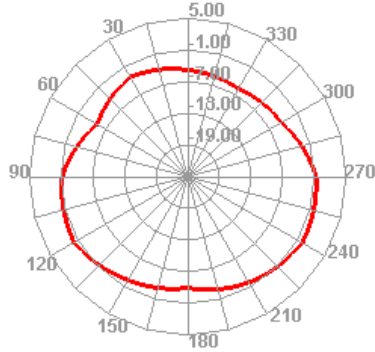
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	55.11	2.23	5000	56.49	1.46
2410	56.47	2.07	5050	57.8	1.85
2420	54.84	1.89	5100	55.15	1.14
2430	55.25	1.51	5150	53.67	0.79
2440	56.05	1.42	5200	53.06	0.18
2450	53.03	0.89	5250	54.03	-0.39
2460	53.37	0.71	5300	55.54	-0.27
2470	54.54	0.12	5350	54.77	-0.11
2480	54.37	0.06	5400	52.92	-0.45
2490	55.25	-0.04	5450	51.42	-1.05
2500	56.8	0.1	5500	51.61	-0.7
			5550	50.56	-0.44
			5600	53.5	-0.05
			5650	53.76	0.11
			5700	54.05	0.2
			5750	55.57	0.59
			5800	55.82	0.63
			5850	54.94	1.28

◆ Radiation Pattern

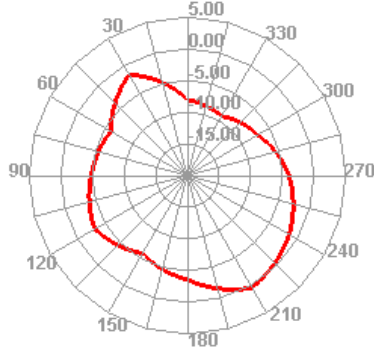
2400.000MHz



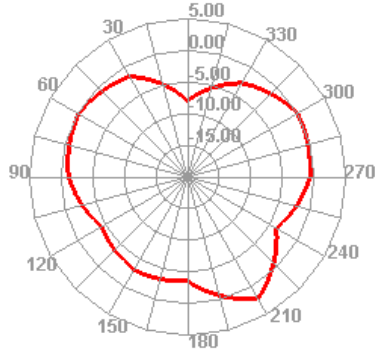
2400.000MHz H



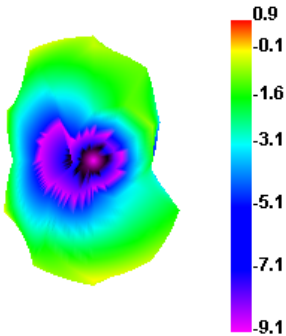
2400.000MHz E1



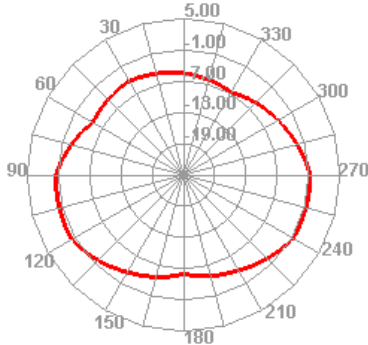
2400.000MHz E2



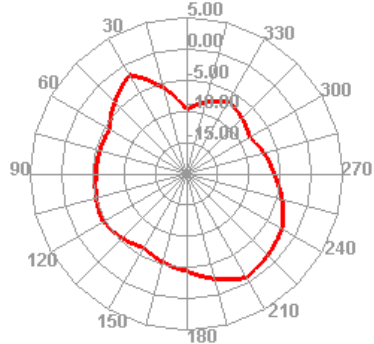
2450.000MHz



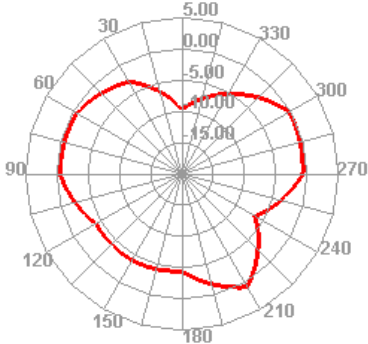
2450.000MHz H



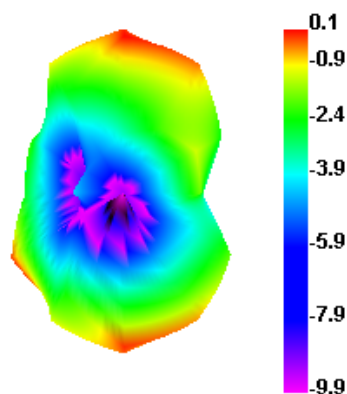
2450.000MHz E1



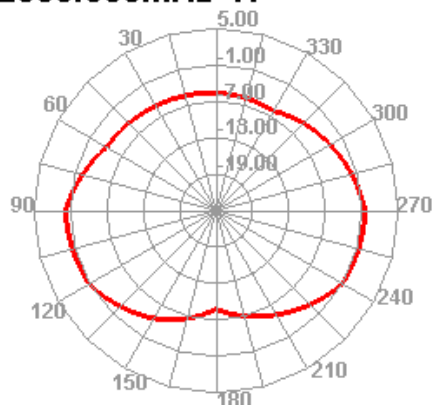
2450.000MHz E2



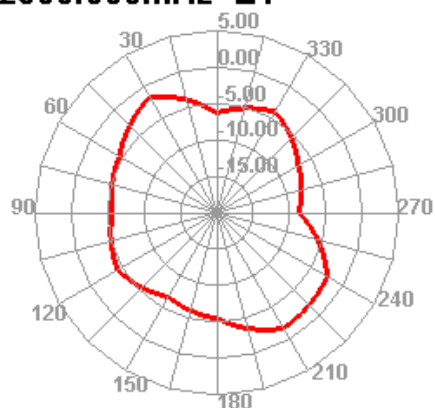
2500.000MHz



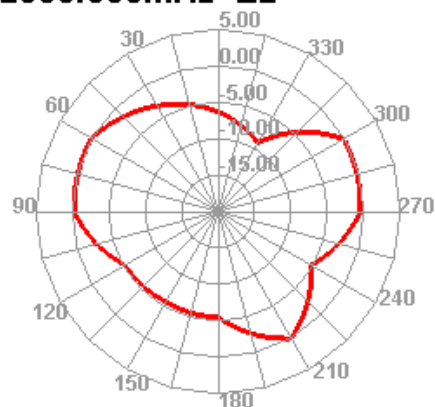
2500.000MHz H



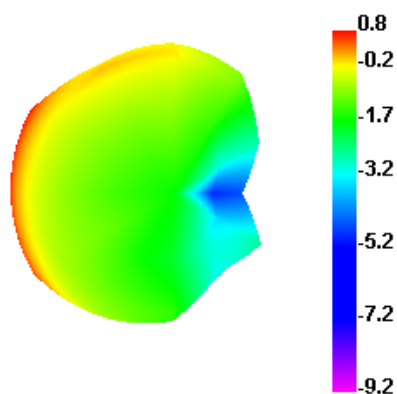
2500.000MHz E1



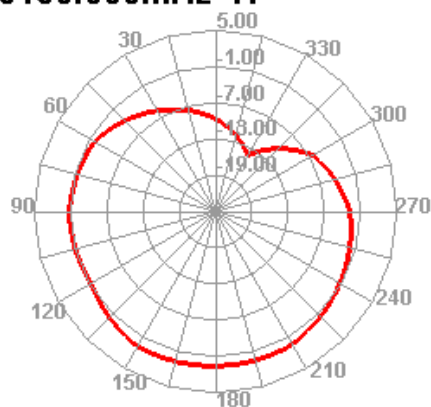
2500.000MHz E2



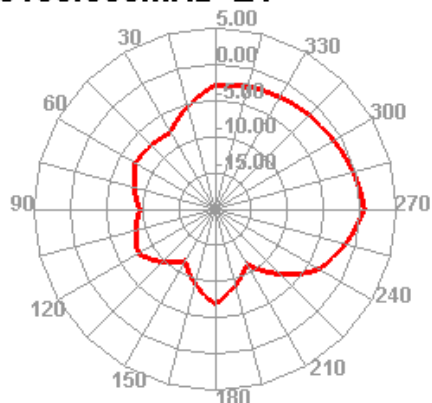
5150.000MHz



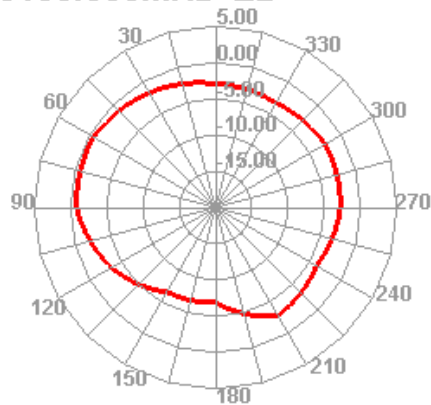
5150.000MHz H



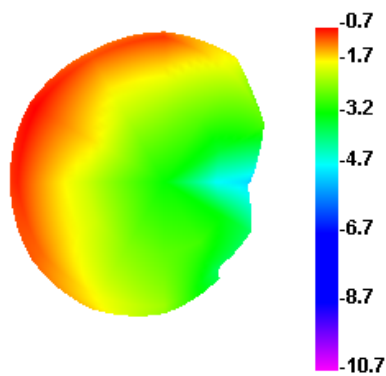
5150.000MHz E1



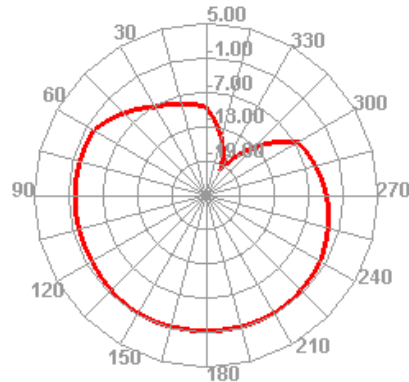
5150.000MHz E2



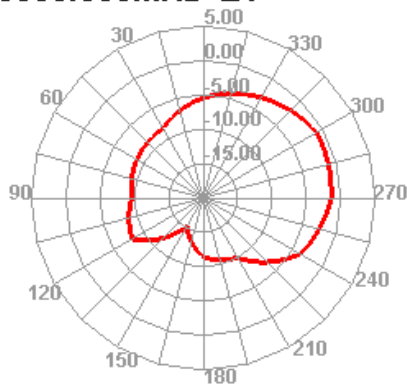
5500.000MHz



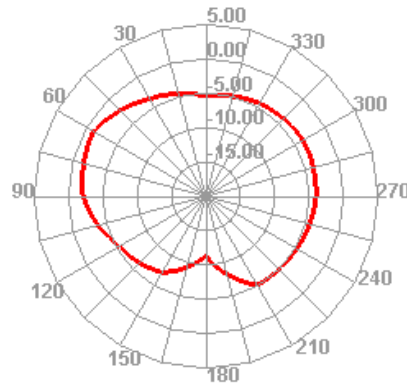
5500.000MHz H



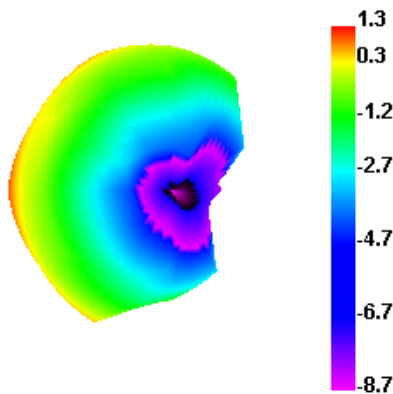
5500.000MHz E1



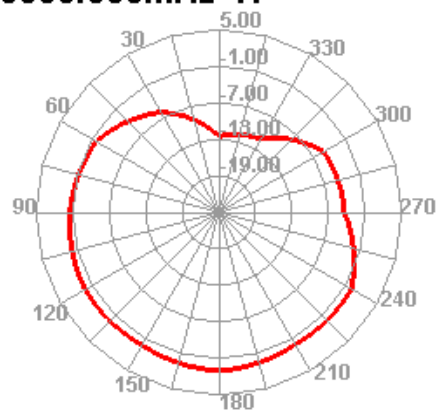
5500.000MHz E2



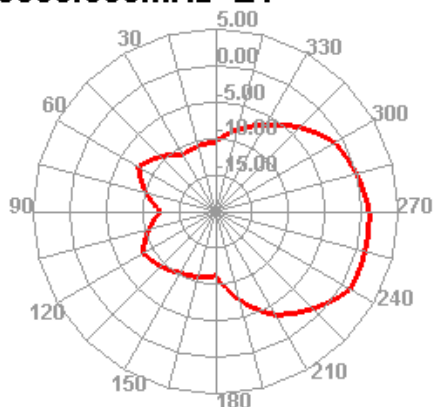
5850.000MHz



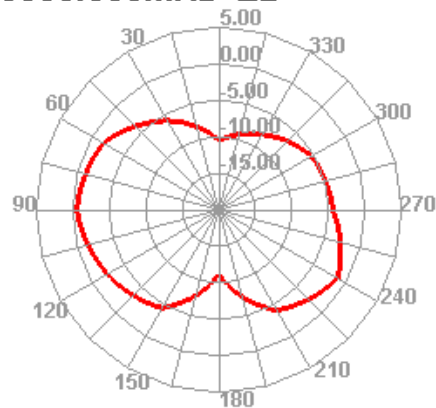
5850.000MHz H



5850.000MHz E1



5850.000MHz E2



◆ 天线装配方式



装配时请注意，天线区域（红色框）
不能有线缆，会影响天线信号

装配时请注意，线缆要捆扰在一起
固定



天线采用SMT贴在主板上

◆ 可靠性测试

测试项目		测试条件	设备	规范	结果
1	低温测试	温度：-30℃，湿度：65%，时间：48小时 测试条件： 把天线放置在高低温测试箱里，温度保持在25℃，湿度保持在65%，时间为1小时，然后在1小时内降低温度到-30℃，保持44小时，再升温到25℃，保持2小时	高低温测试机	不允许材料变形 电子性能好	通过
2	高温测试	温度：85℃，湿度：85%，时间：48小时 测试条件： 把天线放置在高低温测试箱里，温度保持在25℃，湿度保持在65%，时间为1小时，然后在1小时内，把温度升到80℃，湿度为85%，保持44小时，再把温度降到25℃，保持2小时。	高低温测试机	不允许材料变形 电子性能好	通过
3	盐雾测试	盐雾测试： 把天线放置在盐雾测试机内 设置测试环境： 温度 $35 \pm 2^{\circ}\text{C}$ 湿度85% 盐雾喷剂： $5 \pm 1\%$ PH值6.5~7.2 时间：24小时	盐雾测试机	没有颜色变化 没有出现生锈	通过