

承认书

SPECIFICATION FOR APPROVAL

客户名称

CUSTOMER NAME: 东威

产品名称

PRODUCT NAME: 内置天线 2.4G L=720MM+端子

客户料号

CUSTOMER P/N:

仁丰料号

RenFeng P/N: U00T02S000N05180 REV:A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:	赵文天	
AUDITOR BY:	姚鑫	
APPROVED BY:	姚定军	
DATE:	2024-05-10	



一、变更履历(Change resume):

版本	日期	变更记录
A	2024-05-10	初版发行



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>

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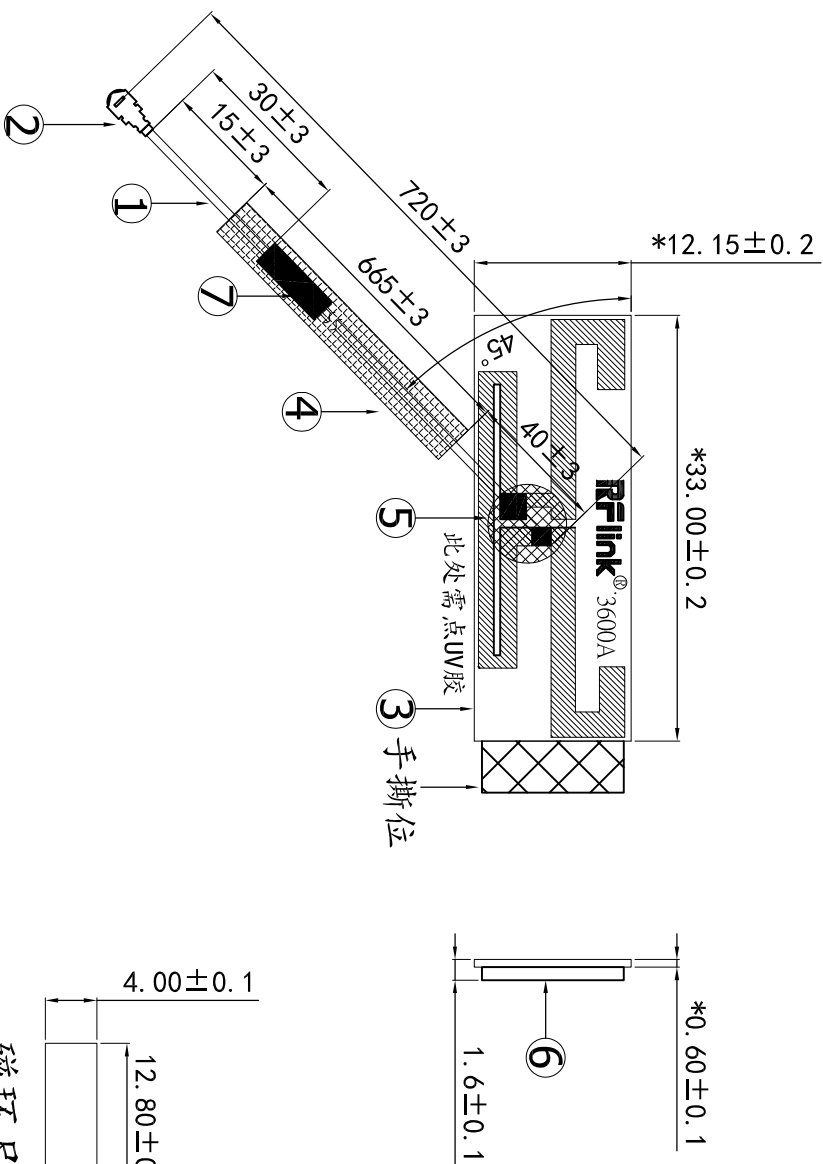
<i>Item</i>	<i>Description</i>
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2、-----	履历表
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5、-----	成品图
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规格表:

RF Cable Assembly Specification

主要技术指标		Main technical specifications	
频率范围 (MHZ)	2400-2500	Frequency Range (MHZ)	2400-2500
特性阻抗(Ω)	50	Impedance(Ω)	50
输出电压 驻波比	≤ 2.0	VSWR	≤ 2.0
天线材料	FR-4	Antenna cover	FR-4
物理性能		Physical Properties	
线材	1.37双锡线	Cable	1.37 Cable
连接头	端子	Connector	MHF Plug
保存温度	-20°C~+70°C	Storage Temp	-20°C~+70°C
工作温度	-20°C~+60°C	Operating Temp	-20°C~+60°C

REV	DATE	DESCRIPTION	Change the code
A	2023-02-23	NEW ISSUE	



磁环尺寸

规格 Specification:
频率 Frequency Range: 2.4-2.5GHz

7	磁环	1	磁环;
6	背胶	1	3M9888T;
5	胶水	1	UV胶;
4	海绵	1	海绵T10 ; 海绵胶;
3	PCB	1	FR-4;
2	端子	1	Copper ; 1.37科信成端子;
1	线材	1	φ1.37 Black ; (线材不含胶)
NO.	DESCRIPTION	QTY	REMARK
带公差尺寸为检验尺寸			
产品符合环保RoHS2.0/HF之要求			

尺寸范围 (mm)	公差 (mm)	APPROVED	CUSTOMER:
0<L≤6	±0.10		PART NO :
6<L≤30	±0.10	CHECKED	PARTNAME : RF Antenna Assembly
30<L≤90	±0.15		R.F P/NO : U00T02S000N05180
90<L≤180	±0.20	DRAWING	REV
180<L≤315	±0.25		UNIT
315<L≤800	±0.35		SCALE
角度	±0.5°		SIZE
			SHEET
			10F1
DRAWING		A4	

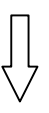
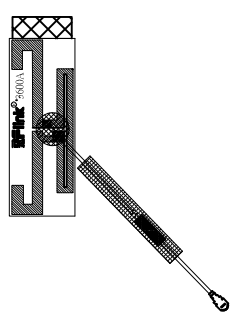
RFlink

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

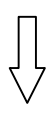
产品包装图

REV	DATE	DESCRIPTION
A	2024-05-10	NEW ISSUE

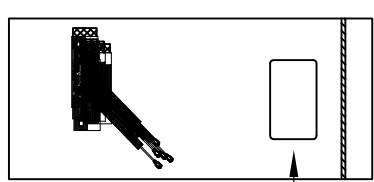
单个产品



内袋包装说明：
1.每袋20pcs,用珍珠泡棉包扎
2.PE袋进行封口。
3.每袋需贴1pc内袋标签



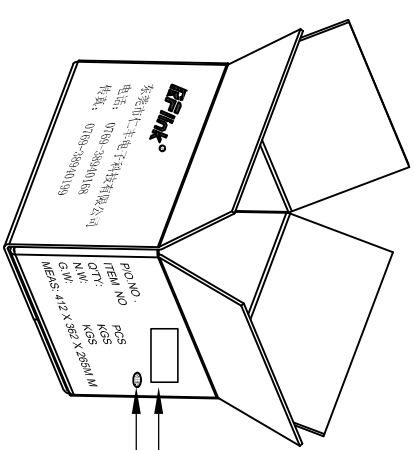
内袋包装



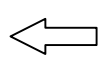
内袋标签

外箱包装

外箱包装说明：
1.外箱需贴1pc外箱标签。
2.RoHS标签需外箱标签右下角外置。
3.每箱装25袋产品，共计装500pcs产品每箱。



外箱标签



NO	DESCRIPTION	QTY	REMARK	
APPROVED				
CHECKED				
DRAWING				
COSTOMER:				
PART NO :		天线包装		
PARTNAME :		天线包装		
R.F P/NO :		L001T02S000N05180		
REV	UNIT	SCALE	SIZE	SHEET
A	mm	1:1	A4	20F2

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

产品符合环保RoHS 2.0之要求

尺寸范围 (mm)	公差 (mm)
0L1 ≤ L ≤ 6	±0.10
6L1 ≤ L ≤ 30	±0.10
30L1 ≤ L ≤ 100	±0.15
100L1 ≤ L ≤ 180	±0.20
180L1 ≤ L ≤ 315	±0.25
315L1 ≤ L ≤ 800	±0.35

角度 ±0.5°

项目信息 (Project information)

◆ 常规要求 (General requirement)

Description	Specification
Antenna VSWR	Typical : 1.5 Limit : 2
Nominal Impedance	50 ohm Typical
Antenna Radiation Efficiency	$> = 40\%$
Return loss free space	$< -10\text{dB}$

目录 (List)

- ◆ 概要 (Summary)
- ◆ 项目信息 (Project information)
- ◆ 常规要求 (General requirement)
- ◆ 测试设备 (Test Equipment)
- ◆ 匹配电路 (Matching circuit)
- ◆ 实际测试图片 (test photo)
- ◆ 无源S11 (Passive S11)
- ◆ 无源效率、增益测试报告 (Passive efficiency and gain test report)
- ◆ 辐射方向图 (Radiation pattern)
- ◆ 总结 (Summarize)

项目信息 (Project information)

◆ 项目信息 (Project information)

CUSTOMER NAME:	东威
PRODUCT NAME:	CG1
Ren Feng P/N:	FPC+cable
WRITED:	Yao Xin
DATE:	2024/03/27

项目信息 (Project information)

◆ 常规要求 (General requirement)

Description	Specification
Antenna VSWR	Typical : 1.5 Limit : 2
Nominal Impedance	50 ohm Typical
Antenna Radiation Efficiency	$> = 40\%$
Return loss free space	$< -10\text{dB}$

测试设备 (Test Equipment)

◆ 测试设备 (Test Equipment)

设备 (Equipment)	型号 (Type)	照片 (photo)
微波暗室 Microwave anechoic chamber	FTMP-24D (4*4*3.5)	
综合测试仪 (Comprehensive tester)	R&S CMW500	
网络分析仪 (Network Analyzer)	KEYSIGHT E5063A	

External ANT location-TX

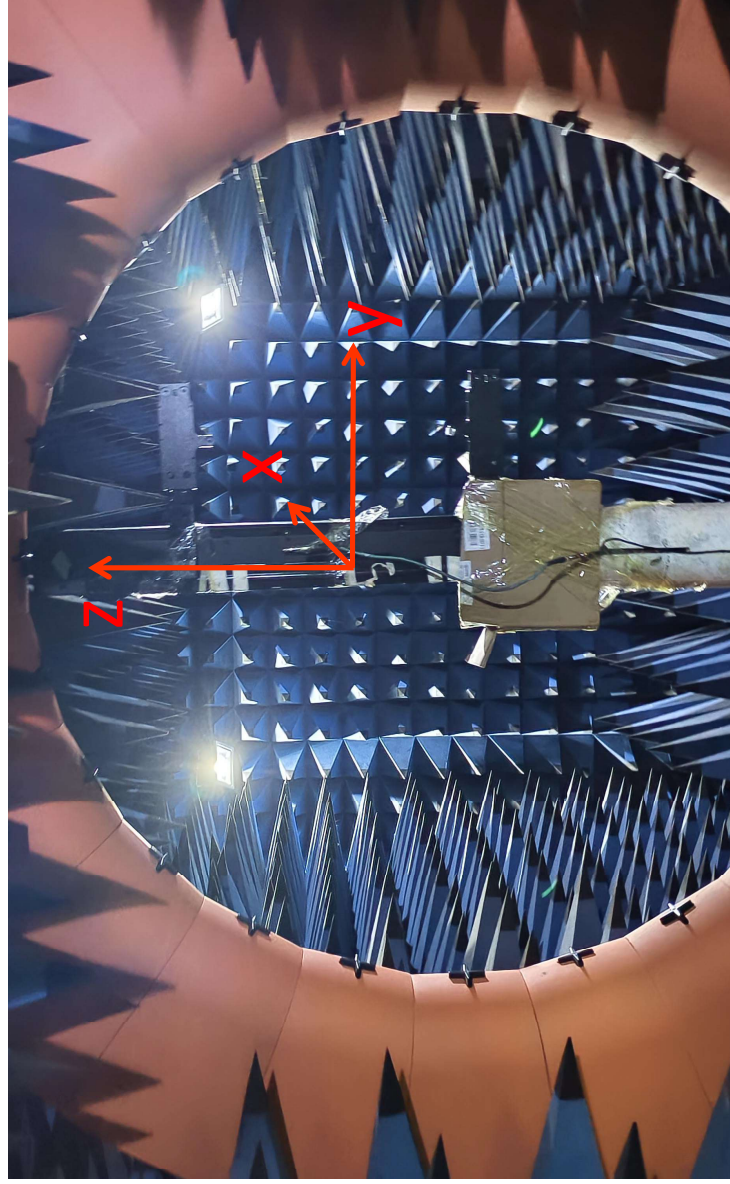


*The **Wireless Connection** Unlimited Wonderful*

实际测试图片 (test photo)

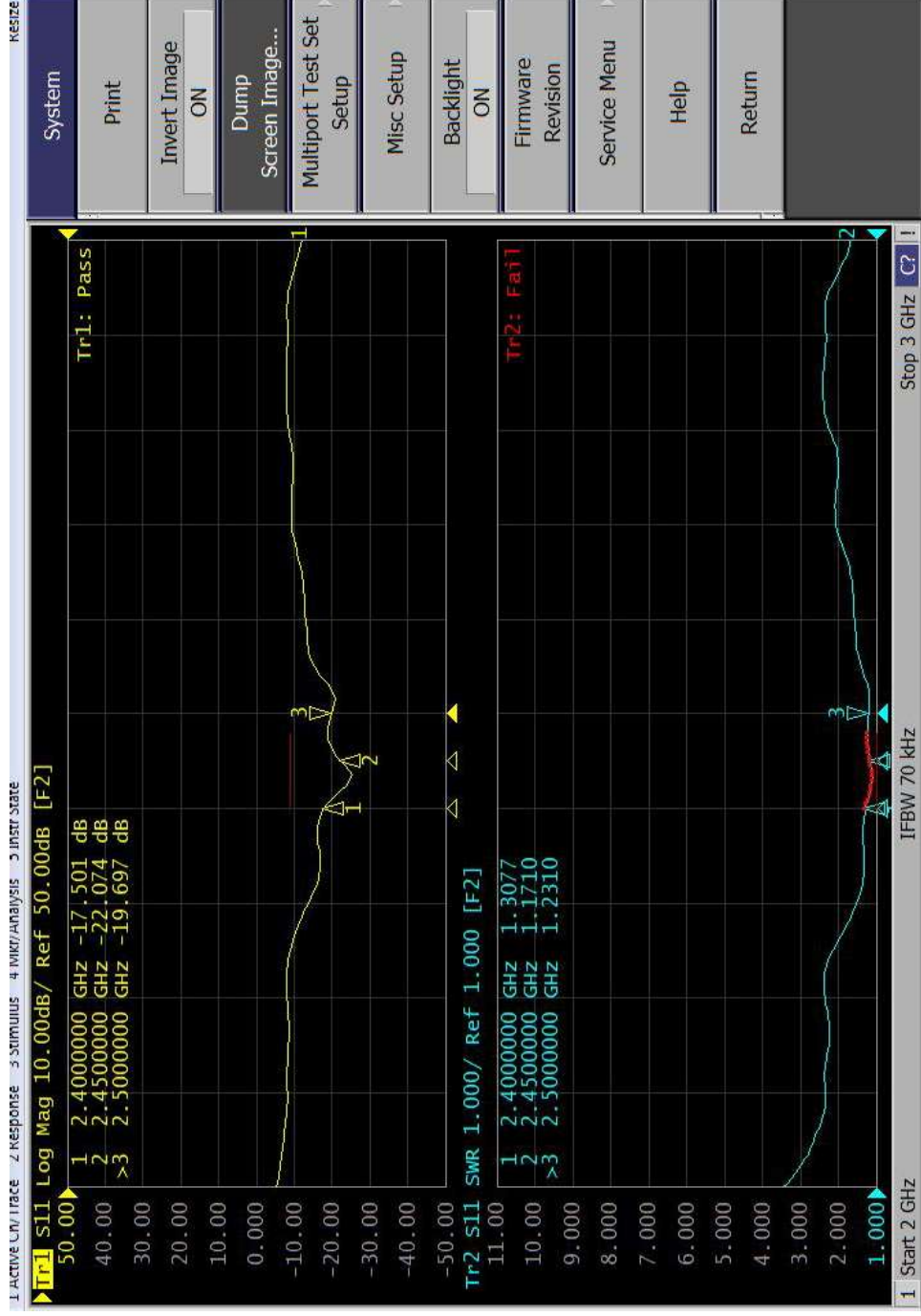
◆ 实际测试图片 (test photo) TX

X轴: 前后
Y轴: 左右
Z轴: 上下



无源S11 (Passive S11)

◆ 无源S11 (Passive S11) TX



无源效率、增益测试报告 (Passive efficiency and gain test report)

◆ 无源效率、增益测试报告 (Passive efficiency and gain test report) TX

Frequency / MHz	Efficiency / %	Gain/ dBi
2400	51.31	3.34
2410	51.17	2.85
2420	52.6	2.9
2430	53.09	2.94
2440	55.34	3.03
2450	55.98	3.2
2460	56.23	3.34
2470	58.08	3.35
2480	58.08	3.18
2490	58.34	3.34
2500	58.88	3.5

驻波比、回波损耗测试报告 (VSWR and Return loss test report)

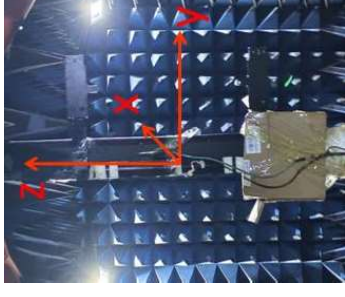
◆ VSWR、Return loss (Passive efficiency and gain test report) TX

Frequency / MHz	Return loss	VSWR
2400	-17.50	1.30
2450	-22.07	1.17
2500	-19.69	1.23

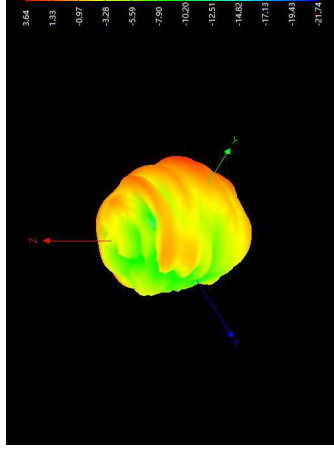
辐射方向图 (Radiation pattern)

◆ 辐射方向图 (Radiation pattern) TX

X轴: 前后
Y轴: 左右
Z轴: 上下

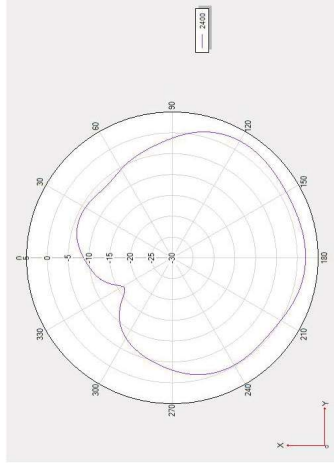


3D

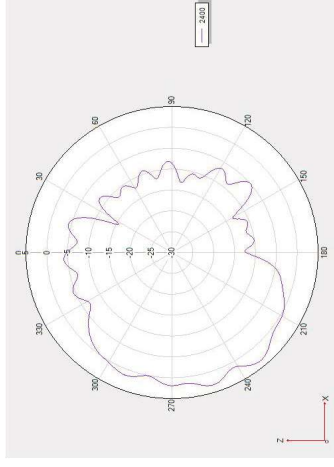


2400MHz

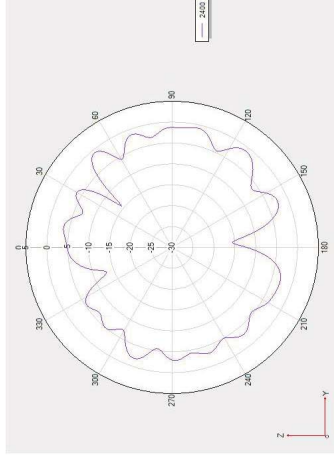
XY面



ZX面



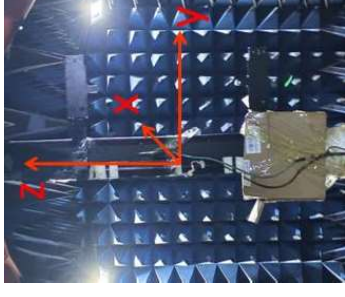
ZY面



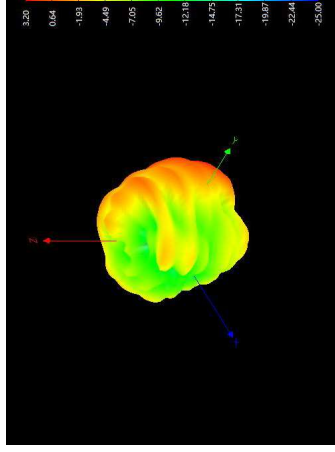
辐射方向图 (Radiation pattern)

◆ 辐射方向图 (Radiation pattern) TX

X轴: 前后
Y轴: 左右
Z轴: 上下

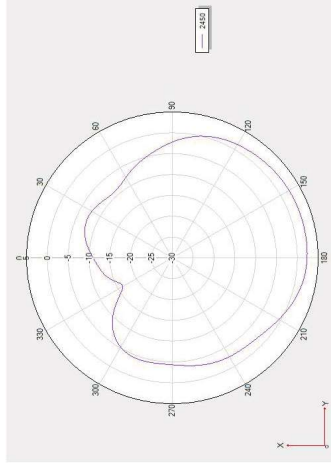


3D

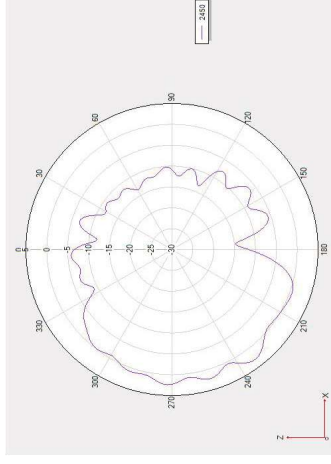


2450MHz

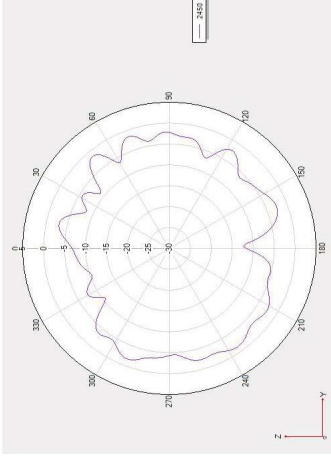
XY面



ZX面



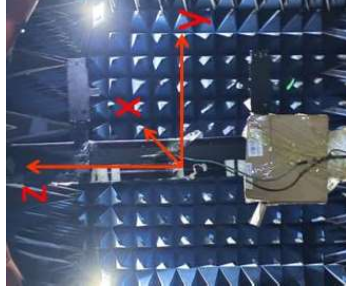
ZY面



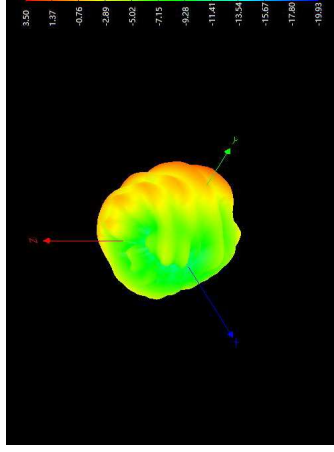
辐射方向图 (Radiation pattern)

◆ 辐射方向图 (Radiation pattern) TX

X轴: 前后
Y轴: 左右
Z轴: 上下

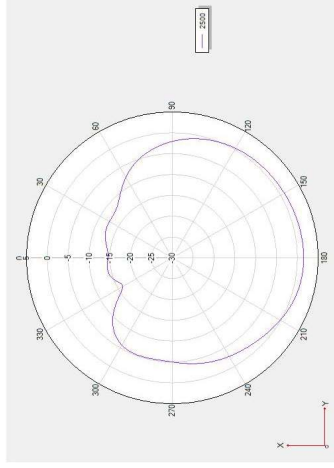


3D

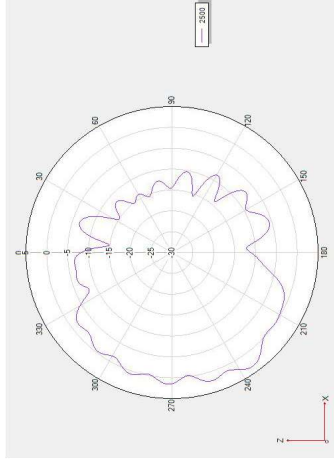


2500MHz

XY面



ZX面



ZY面

