



深圳自由行通信技术有限公司
Shenzhen Free Walk Communication Technology Co. LTD

ADD: 深圳市宝安西乡鹤洲西区工业园 2 栋 3 楼
3rd Floor, Building 2, Hezhou West Industrial Park,
Xixiang, Baoan, Shenzhen
Email: zyx_sz@yeah.net
TEL: 86-0755-29955983 **FAX:** 86-0755-29955983

承认书

APPROVAL SHEET

客户 (Customer) : 惠州迈腾伟业科技发展有限公司
Huizhou Maiteng Weiye Technology Development Co., LTD
产品 (Product) : 5G 外置天线(L=81mm)
5G external antenna (L=81mm)
型号 (Model) : MT-WR3006
客户料号 (Customer Part Number) : 12.N3.5004Y81BW
料号 (Part Number) : Z02-50446-R01
制作人 (Written By) : 胡 涛 Mr Hu
签发时间 (Issued Date) : 2024-07-02

客户 CUSTOMER

工程部 ENGINEER R&D DEPT	品质部 QUALITY DEPT	批准 APPROVED

Free Walk

射频 R&D DEPT	工程部 ENGINEER R&D DEPT	批准 APPROVED
胡 涛	卿创辉	邓凯





Document change history

Form number: QR-ZYX-084 Version: A0

[illegible]

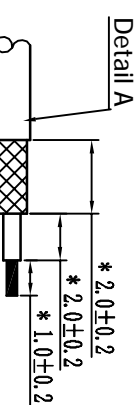
目 录

Index


一、 封面 (Cover)	1
二、 文件变更履历表 (Document Change Resume)	2
三、 目录 (Index)	3
四、 基本参数 (The basic parameters)	4
五、 工程图纸 (Product Drawing)	5
六、 测试设备 (Test Equipment & Conditions)	6
七、 性能测试报告 (Test Report)	7-10
八、 天线图片 (Antenna Picture)	11
九、 RoHS 报告清单 (RoHS report list)	12
十、 包装方式 (TEE PACKING WAY)	13

The basic parameters

A. Electrical Characteristics	
Frequency	5150 MHz ~5850MHz
VSWR	≤ 2
Efficiency	>60%
Impedance	50 Ohm
Polarization	Linear
Gain	5dBi \pm 1
B. Material & Mechanical Characteristics	
Material of Radiator	
Cable Type	Φ 1.37mm Black
Connector Type	焊接
Dimension	
C. Environmental	
Operation Temperature	- 20 °C ~ + 60 °C
Storage Temperature	- 40 °C ~ + 80 °C



- 1, Standard * is the key dimension, Dimensions not marked with tolerance shall be tested according to ± 0.15
- 2, Refer to drawing without dimension; Other dimensions are subject to actual matching;
- 2, Refer to drawing without dimension; Other dimensions are subject to actual matching;
- 4, accord with ROHS

深圳自由行通信技术有限公司											
Shenzhen Free Walk Technology Co. LTD											
	Third angle system			机种/Project	WT-WR3006	Date		2024-07-02			
	0~10	±0.10	○	0.02	品名/Part Name	5G-Antenna	Checked by				
	10~20	±0.15	◎	0.03							
	20~40	±0.20	⊥	0.02	料号/Part NO	Z02-50446-R01	RF	Li wen ke			
	40~	±0.25	∠	0.04							
			∠	0.02	客户料号						
Do not measure the drawings				Location	N/A	unit	mm	Scale	1:1	Rea	A
D											

Test Equipment & Conditions

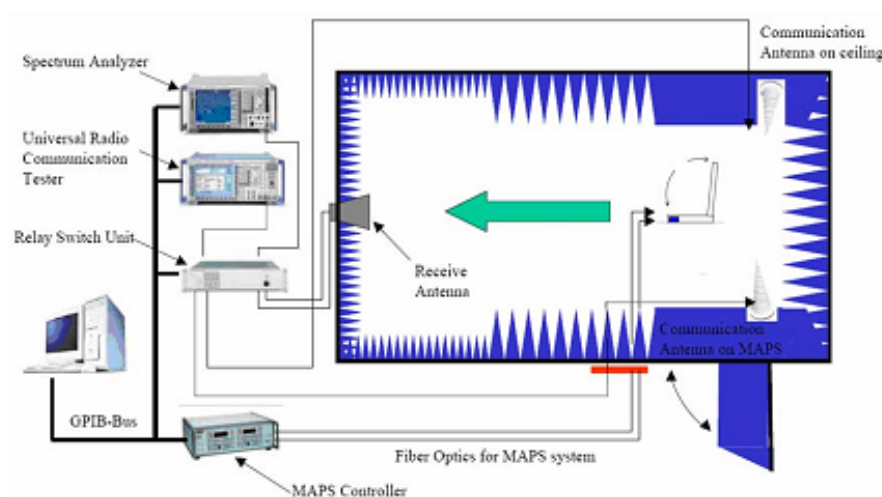
1. Network Analyzers :

Agilent 8753D 5071C

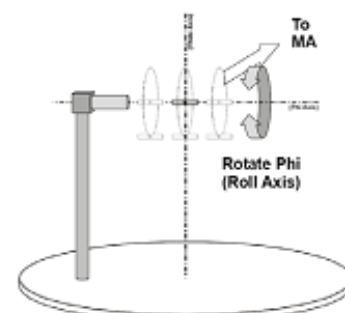
2. Communications Test Set:

Agilent 8960 CMW500

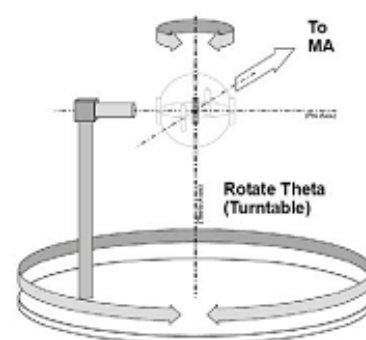
3. 3D Chamber Test System



(Testing by 3D anechoic chamber)



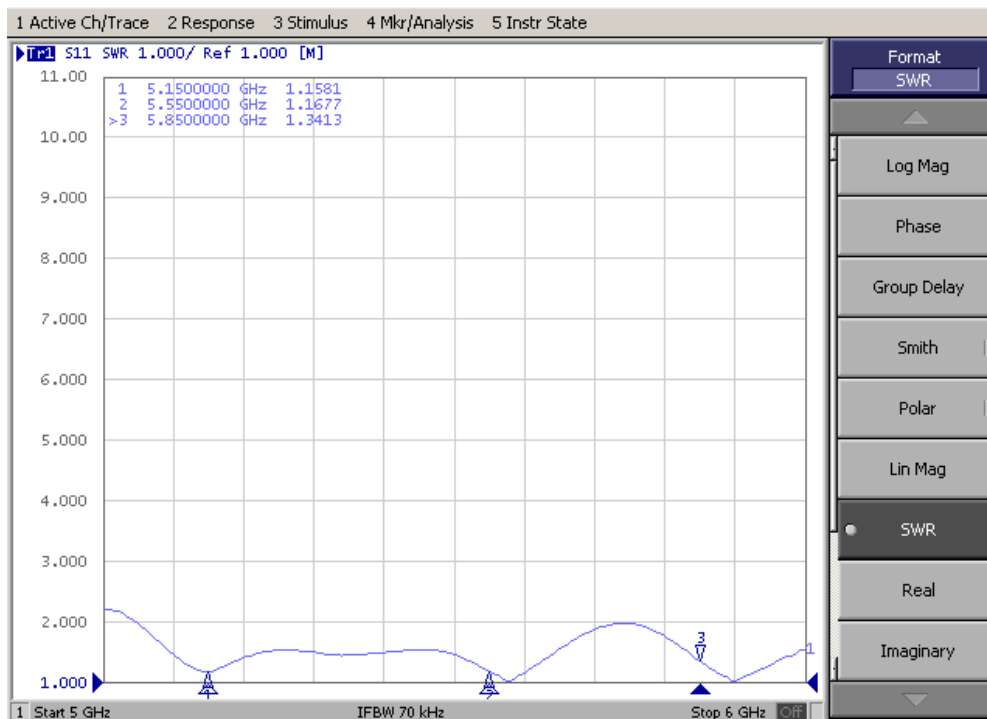
Phi axis test



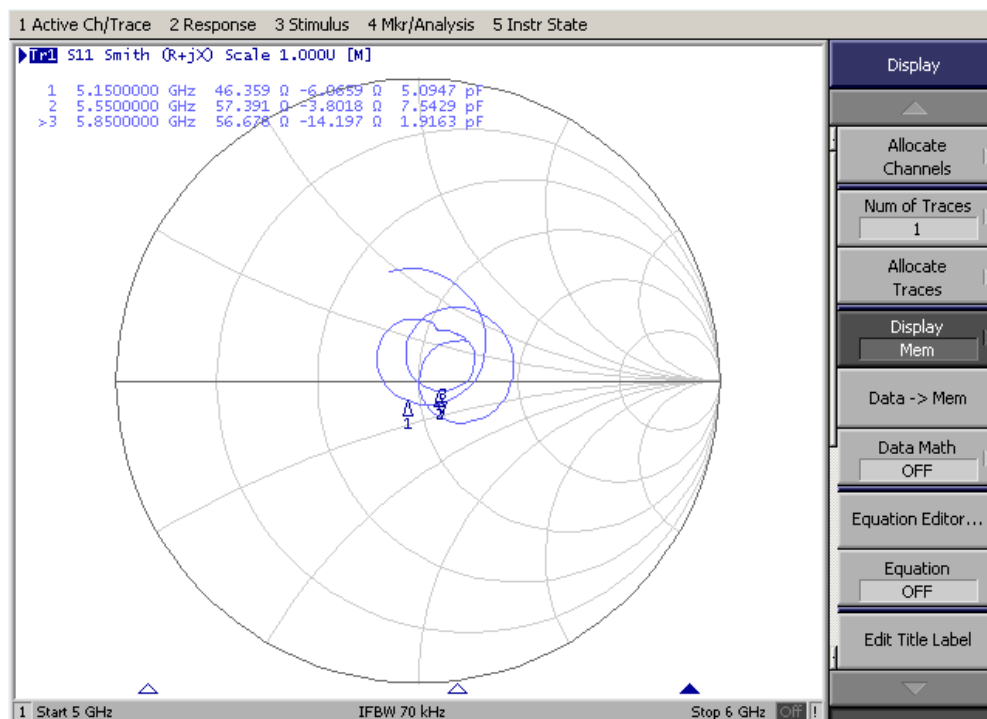
Theta axis test

测试数据

SWR



Smith



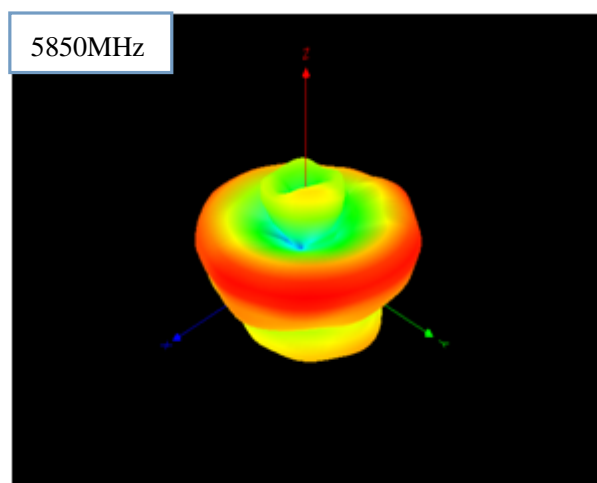
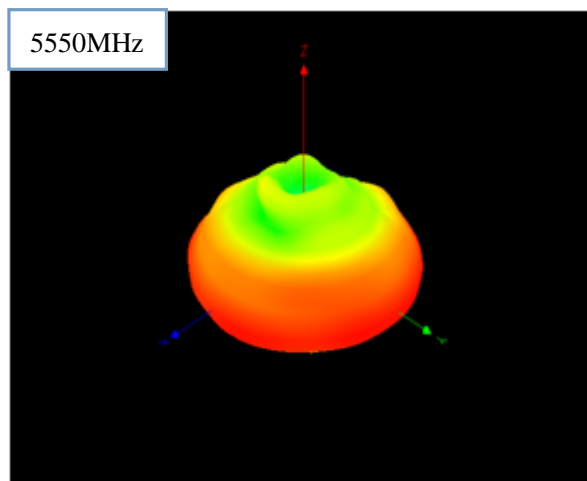
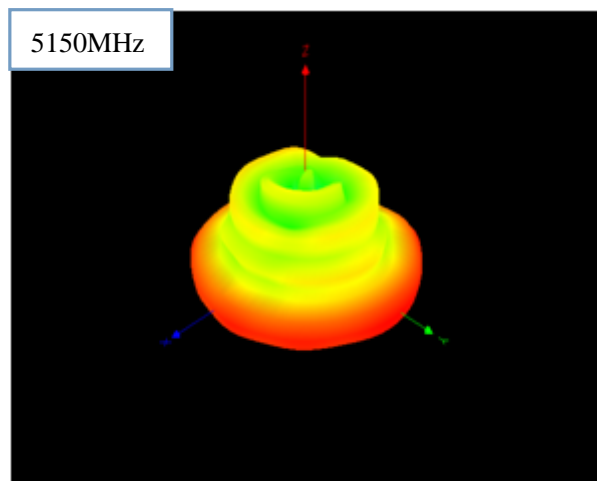


效率&增益:
Efficiency&Gain

Freq (MHz)	Effi (%)	Gain(dBi)
5150	66.53	5.20
5200	67.61	5.27
5250	63.53	5.19
5300	72.11	5.31
5350	71.45	5.20
5400	76.91	5.18
5450	79.62	5.38
5500	69.82	4.92
5550	68.71	4.69
5600	73.79	4.81
5650	70.47	4.78
5700	66.53	4.87
5750	65.31	4.66
5800	65.08	4.77
5850	66.24	4.68

方向图(3D图)

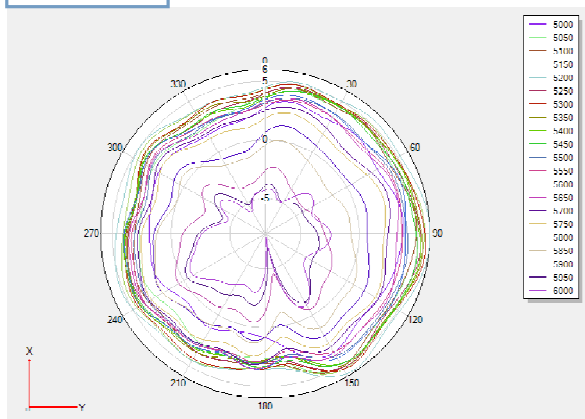
Patten



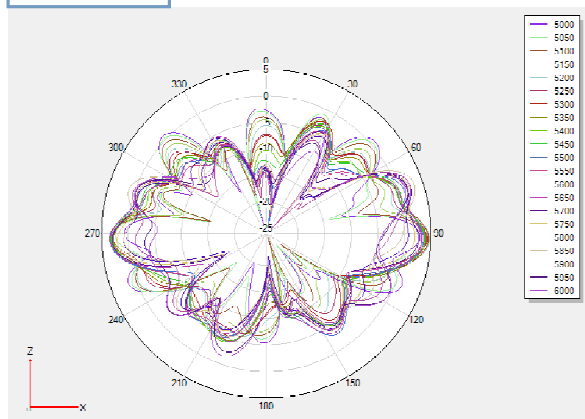
方向图(2D图)

Patten

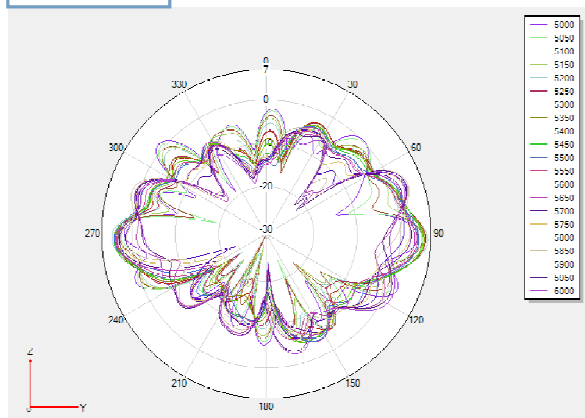
XOY 面



ZOX 面



ZOY 面



天线图片



深圳自由行通信技术有限公司 WIFI天线 物料部件ROHS报告清单

序号	原材料名称	原材料供应商 (生产厂家)	测试机构	报告编号	检测日期	检测到期日期
1	锡线	深圳泰源	SGS	CANEC2302684508	2024.03.10	2025.03.10
2	弹簧/碳素钢	通杰	SGS	SZXEC2203022517	2023.09.14	2024.09.14
3	端子/CU	通华实业	SGS	SZXEC2104021523	2023.09.01	2024.09.01
4	PCB FR-4.0	金安国纪	SGS	CANEC2221844528	2023.10.24	2024.10.24
5	套杆/TPE	宇邦	SGS	CANEC2222870715	2023.10.31	2024.10.31
6	线材	天迈	SGS	SZXEC2202766625	2023.08.18	2024.08.18
7	上下/固ABS	乐金	SGS	CANPC23001082435	2024.03.10	2025.03.10
8	铆钉/POM	台塑工业	SGS	EKR22B00859M01	2023.9.14	2024.09.14

要求:

- 1. 说送元器件材料报告必须是按照欧盟落实要求拆分到不可拆分护理方法和名字材料的检测报告，其他的环保法规案，其他的要求测试
- 2. 所送元器件材料，若是检测报告，必须包括构成原件件，所有材料按部门所有包装材料，社交金属等材质不接受任何形式的控制报告，幽默接受三种以内含三种混测报告，超过三中不接受
- 3. 本公司认可如下九家检测机构提供的报告，SGS, CTI , ITS, 赛宝, 诺尼, CCIC, bv, STS, set
- 4. 所有若是检测报告首页需盖章本公司公章侧面加盖骑缝章是各一份报告，不得涂改伪造提供价报告，供货商提供报告，必须先自行审核，确保所送报告有效正确完整，内容清晰可辨

提供报告要求电子档：报告可以清单一起扫描；也可以分开扫描，但要对应编号，以便查询



Product packaging specification

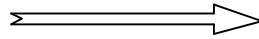
page: 1 of 1

Product Name: antenna

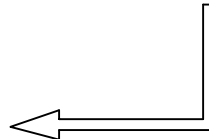
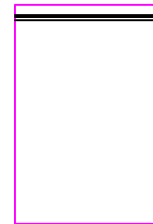
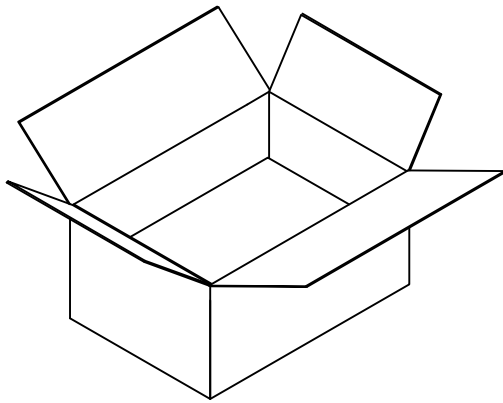
Rea : A00

Except for others

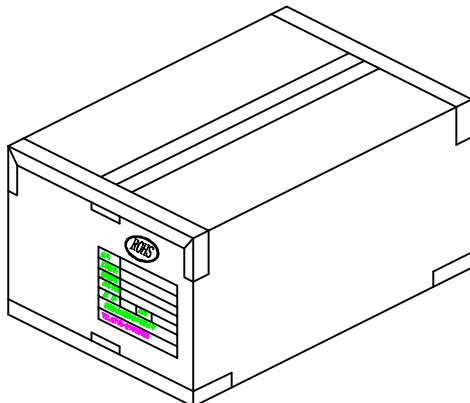
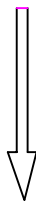
一: Antenna



二: Put them in PE bags, quantity
is packed in (50 100pcs)
Subject to the actual situation



三: Put the antenna in the carton



四: Seal the box and paste the
production label and RoHS
label on the outer box(actual
situation shall prevail)