

东莞市群创通信技术有限公司

Dongguan Qunchuang Communication Technology Co., Ltd
Room 303, Building 1, No.1 Puxin Road, Shangjiao, Chang'an Town, Dongguan City,
Guangdong Province, P.R.China

承认书

Customer:

客户名称

Customer P/N:

客户料号

QC P/N:

群创料号

QC2450-FPC150BX

Description :

规格描述

2.4G/5.8G FPC天线

QC Checked By:

Customer Approved By:



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Product Number:QC2450-FPC150BX
Product Name: Antenna

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- 2. Characteristics and Reliability Test (产品特性和可靠性测试标准)
- 3. Antenna - S Parameter Test Data (样品测试数据)
- 4. Antenna - Radiation Pattern Test Data (辐射模式测试数据)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.6.7	初版	

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1. Specification

Sample Photo	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz/5150-5850MHz
S.W.R. 驻波比	<= 2.0
Antenna Gain 增益	1.81dBi / 3.43dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	OD1.13mm ,Black
Connector Type 连接器规格	I-PEX
C. Environmental	
Storage Temperature 存储温度	- 40°C ~ +80 °C
Operation Temperature 工作温度	- 40°C ~ +80 °C

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2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4	Solderability 可焊性	GB / T2423.28-2005 Temp: 260±5° C;Duration: 5 seconds 温度 260±5° C;持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
5	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal .单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol.≤5% 符合待测物规范;频率偏移≤5%	PASS
6	Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
7	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 24H 温度 35°C; 湿度≥95%;盐水浓度≥5%; 测试 24H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2015/863/EU 符合 RoHS 2015/863/EU 标准	PASS

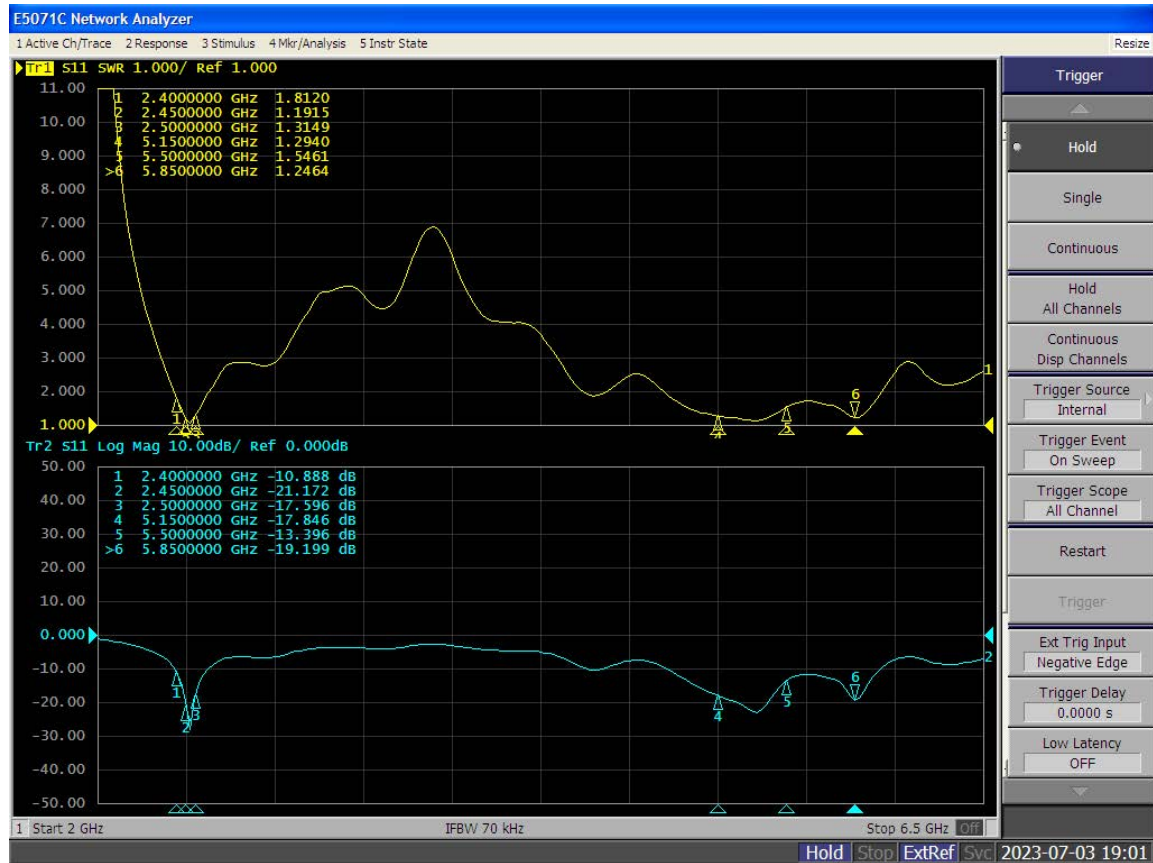
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3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dB)	-4.36	-4.06	-3.86	-3.90	-3.64	-3.35	-3.53	-3.30	-3.51	-3.39	-3.45
Gian (dBi)	-0.19	1.30	1.66	1.81	1.04	1.15	1.25	1.14	1.06	1.26	1.29
Efficiency (%)	50.61	51.25	51.13	50.74	53.24	56.22	54.37	56.75	54.55	55.77	55.20

Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency (dB)	-2.35	-2.17	-2.10	-2.49	-2.06	-2.03	-1.95	-2.48	-1.88	-1.88	-1.83	-2.57	-2.01	-1.95	-2.15
Gian (dBi)	1.92	2.50	2.52	2.08	2.47	2.34	2.34	2.67	2.41	3.27	3.19	3.41	3.08	3.18	3.43
Efficiency (%)	58.25	60.64	61.62	56.39	62.24	62.69	63.88	56.43	64.79	64.85	65.66	55.39	63.02	63.76	60.96

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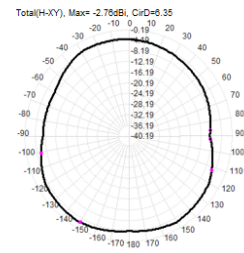
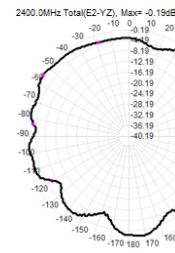
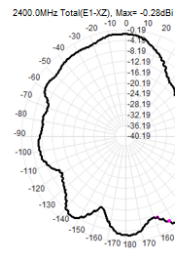
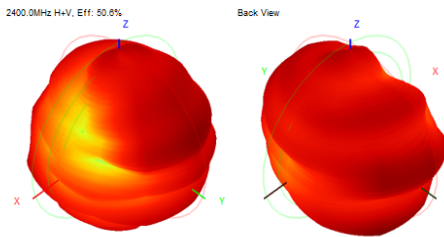
Product Name: Antenna

XZ

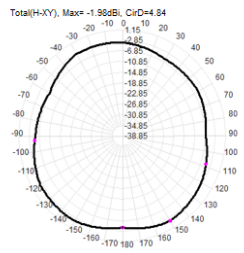
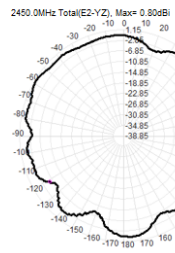
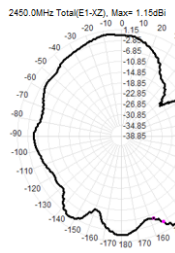
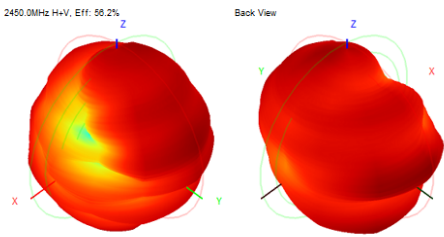
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XY

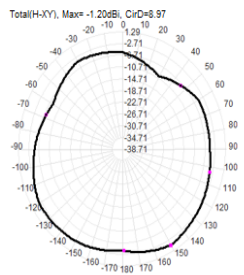
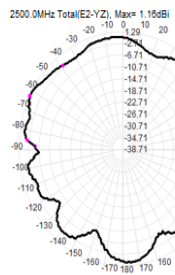
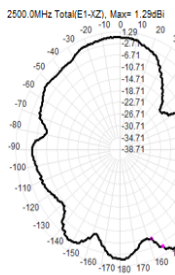
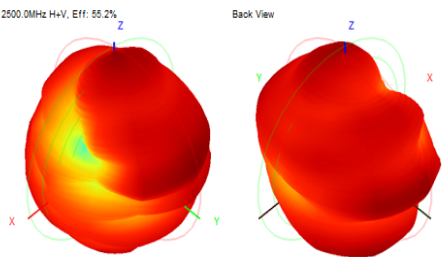
2400MHz



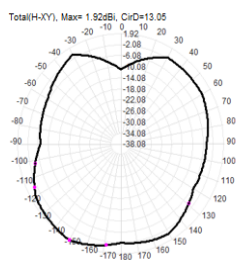
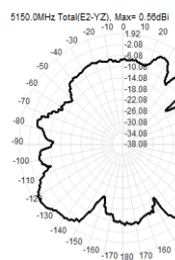
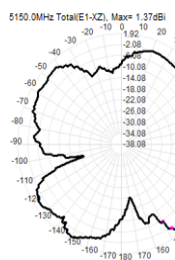
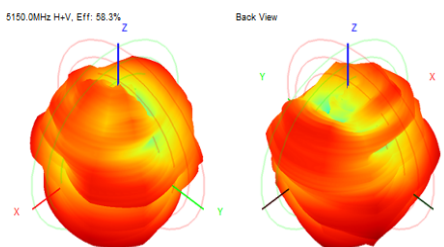
2450MHz



2500MHz



5150MHz



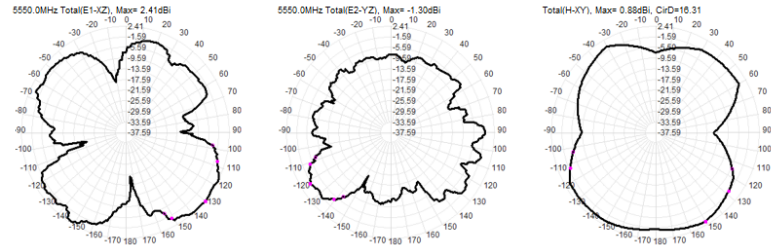
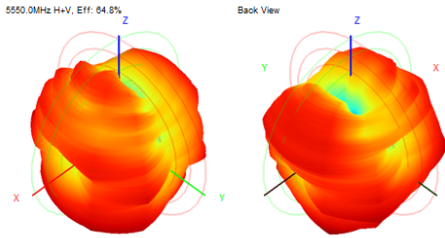
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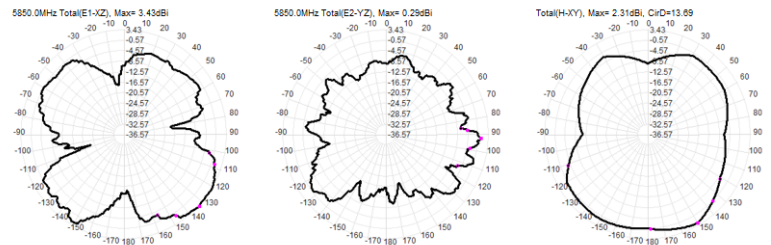
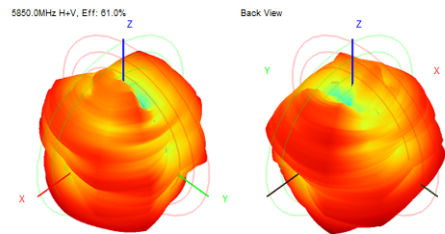
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5550MHz



5850MHz



5. Mechanical Drawing See attached files

