

Shenzhen HaiRuiHong Technology Co.,Ltd.

Antenna specification

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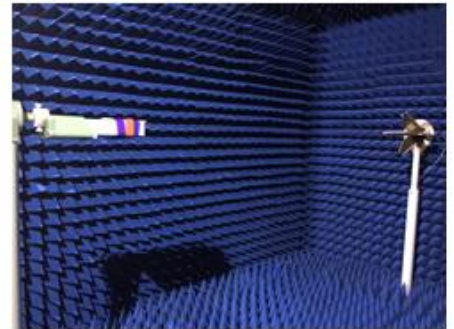
Customer name: Shenzhen yannuoda technology co., ltd

Project name	A7	Antenna frequency band	2. 4GHz-2. 5GHz
Specification description	☐ Support+shrapnel	☐ Single shrapnel	☐ Bracket +FPC+ thimble
	☒ FPC	☐ FM Antenna	☐ GPS Antenna
	☐ 其它		
	☒ coaxial-line	☒ WIFI Antenna : ☒ FPC+Wire: 2nd generation terminal 0.81 with a total length of 50mm. ☒ material code: WF003A-2-50-Z	
Customer confirmation			

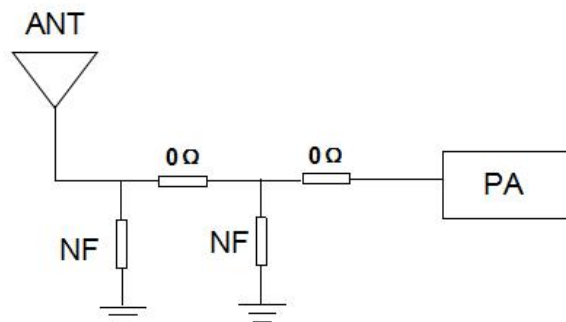
Supplier confirmation	Radio frequency confirmation	Structural confirmation	check
	Mamurui	Chen Cui	Mamurui
contacts	Mamurui	mobile phone	18824399281
telephone	0755-27920805	facsimile	0755-27920806
mailbox	szrf_antenna@163.com		
Address: B703A Fuxin Building, Houting Second Industrial Zone, Shajing Sub-district Office, Bao 'an District, Shenzhen			

1. Test items and equipment

	test item	equipment
1.S11 paramete (S-parameter)	1. return loss (Return Loss) 2. voltage standing wave ratio (VSWR)	network analyzer: Agilent E5071B HP 8753D
2. Active testing (Active)	1. Transmit power (TRP) 2. receiving sensitivity (TIS)	1. darkroom: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2.Comprehensive tester: Agilent 8960 E5515B x2 StarPoint SP6011
3.Passive testing (Passive)	1. Antenna Gain (gain) 2. Antenna Efficiency (Efficiency)	1. darkroom: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. Comprehensive tester: Agilent E5071B HP 8753D



2: matching circuit:

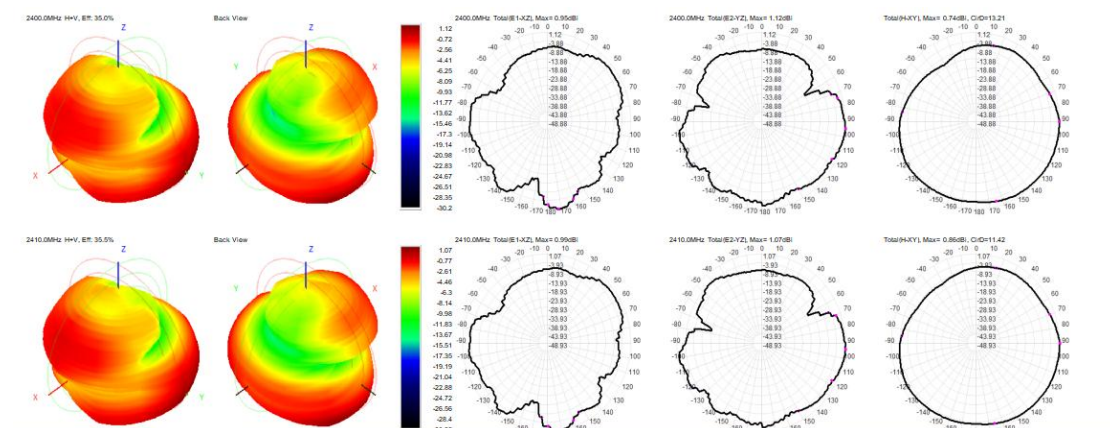


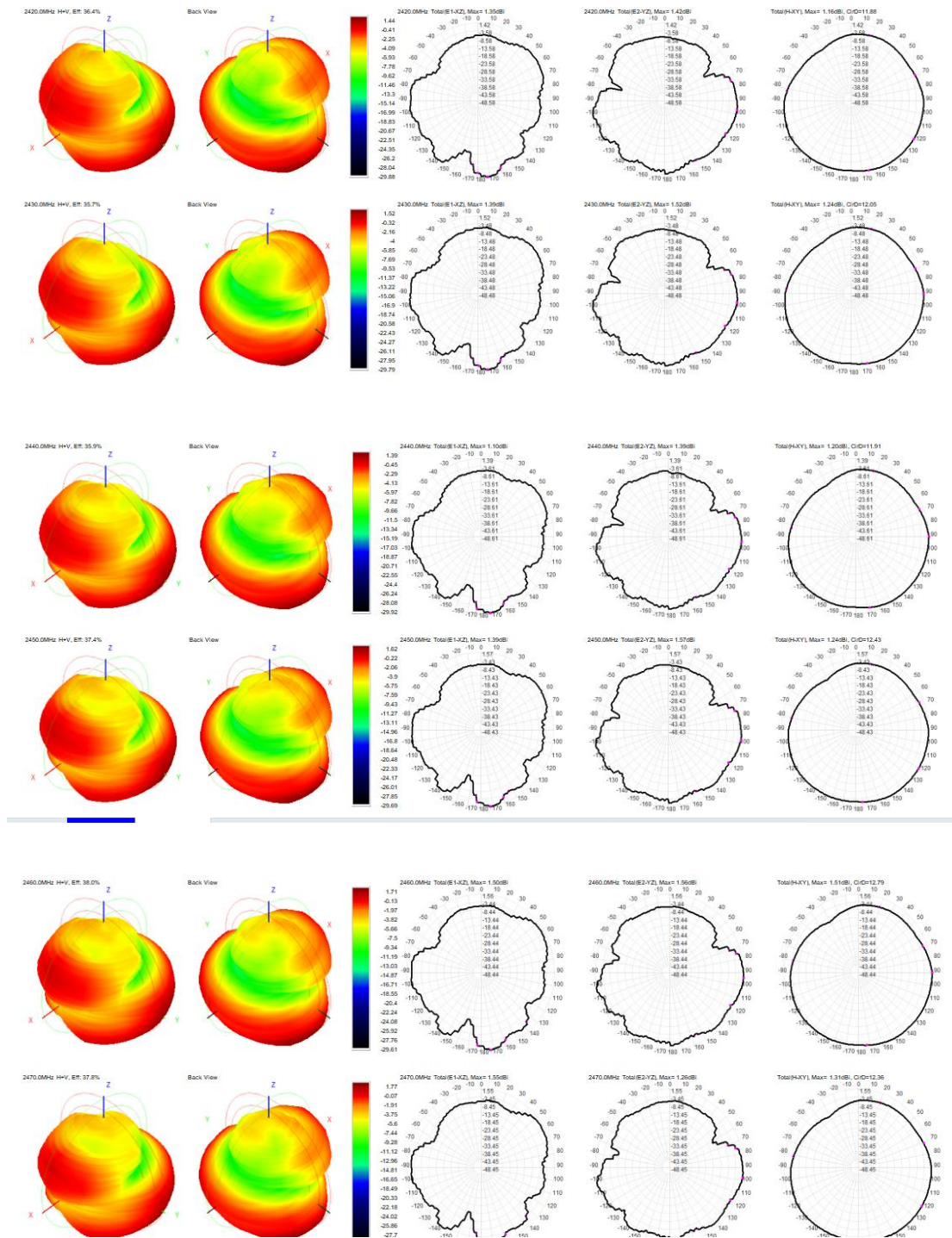
3: VSWR:

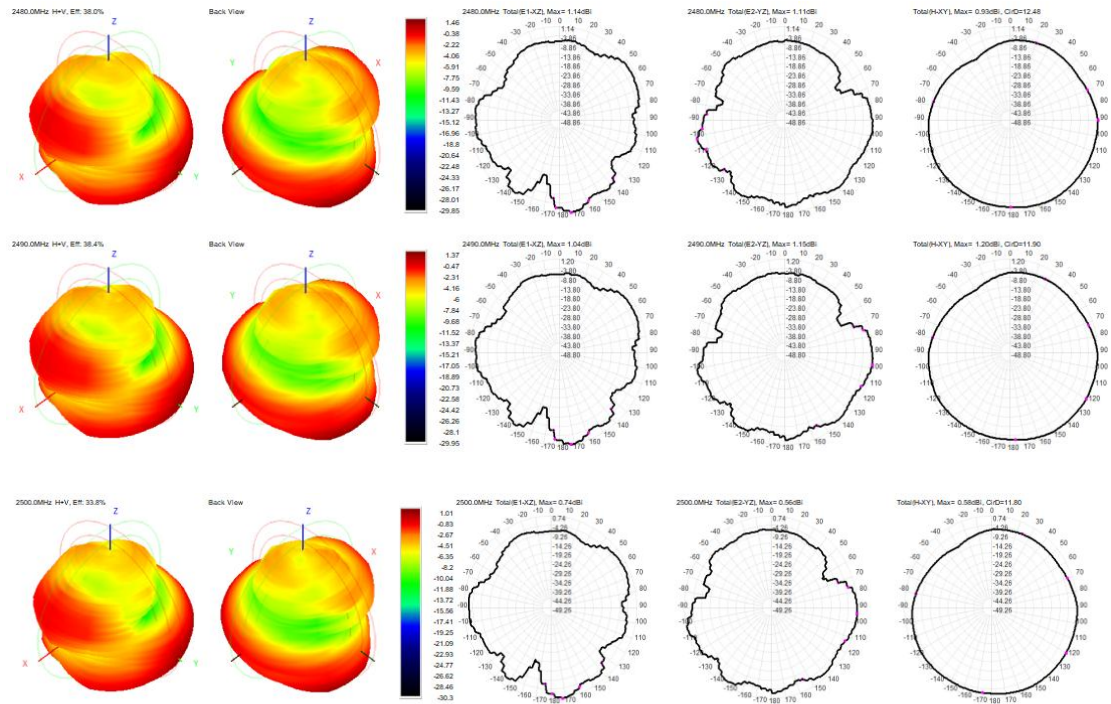


WIFI Efficiency and gain:

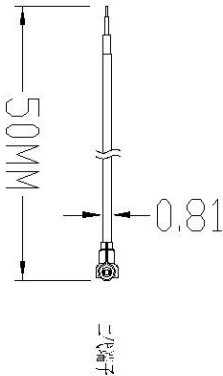
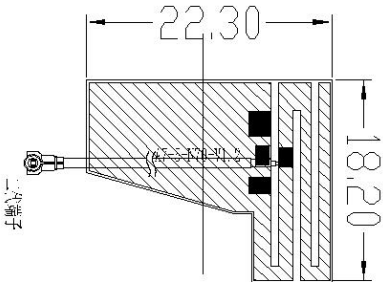
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-4.56	-4.50	-4.38	-4.47	-4.45	-4.27	-4.20	-4.22	-4.21	-4.16	-4.71
Gain (dBi)	1.12	1.07	1.44	1.52	1.39	1.62	1.71	1.77	1.46	1.37	1.01
Efficiency (%)	34.98	35.48	36.44	35.74	35.91	37.43	38.05	37.83	37.97	38.36	33.80
Directivity (dB)	5.68	5.57	5.82	5.99	5.84	5.89	5.91	5.99	5.67	5.53	5.73







序号	颜色	色号	对应颜色号
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二代端子 0.81线径 50MM长 图例 1: 1.5; 2

由 Autodesk 教育版产品制作

1. "x"为重心尺寸孔位以适配为准；
- 2.FPC材料：电解铜，对折；
- 3.反面背胶(3M300LSB)；
- 4.未标公差尺寸，模具尺寸公差为 ± 0.15 ，铜箔线条尺寸公差为 ± 0.05 ，标识点[内孔公差为 ± 0.08 ；
- 5.实心部分为抗氧化，加斜线为铜箔区，画交叉线为背胶区；
- 6.表面黑色油墨(白色)符合
- 7.Fb、Hg、Cr+6、PBBS、PBDS各域小1500PPM，Cd小150PPM。

5. 零件部分为抗氧化，加紫线部分为铜箔区，加交叉线部分为散区；									
6. 表面黑色油墨 白色字符									
7.Pb、Hg、Cr+6、PBBS、PBDEs各须小于500PPM，Cd小于150PPM。									
日期	修改	内容	版本	备注	深圳市海瑞泓科技有限公司				
					版本	AF 3 K20 V1.2 (0003)	日期	2022-01-27	页码
					项目编号		结构设计		1
					零件名称	WTT antenna PCB	结构设计		1
					零件编号		零件号		
					材料	PI	材料		
					表面处理		表面处理		
					备注		备注		