



深圳市连兴创电子科技有限公司 (研发部)

Shenzhen Lxc Electronics Technology Co ., Ltd

Customer:

Project Name: X1HR

F Engineer: 温

Testing Date: 2025-11-07

Operating band: WIFI/2.4G/2.5G/5.15G/5.8G

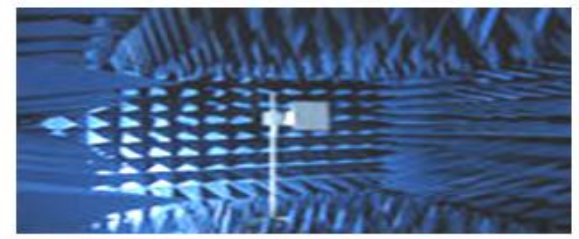
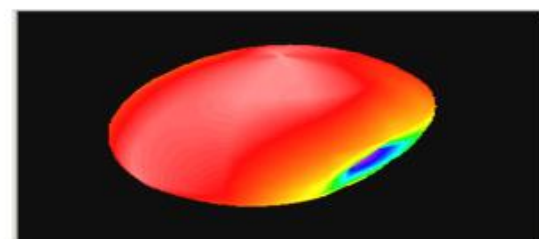
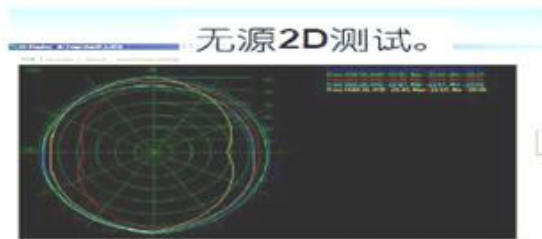
1. Project brief

NO.	ITEMS	DETAILS
1	工作频段 Operating band	WIFI-BT
2	频率范围 Frequency range	2.4G-2.5G/5.15G-5.85G
3	天线类型 Antenna Type	内置-FPC
4	主板版本 The mainboardversion	
5	输入阻抗 Input Impedance	50 (Ω)

RF	温	13048903292
ME	唐红交	137 1359 3032

2. Test system and equipment

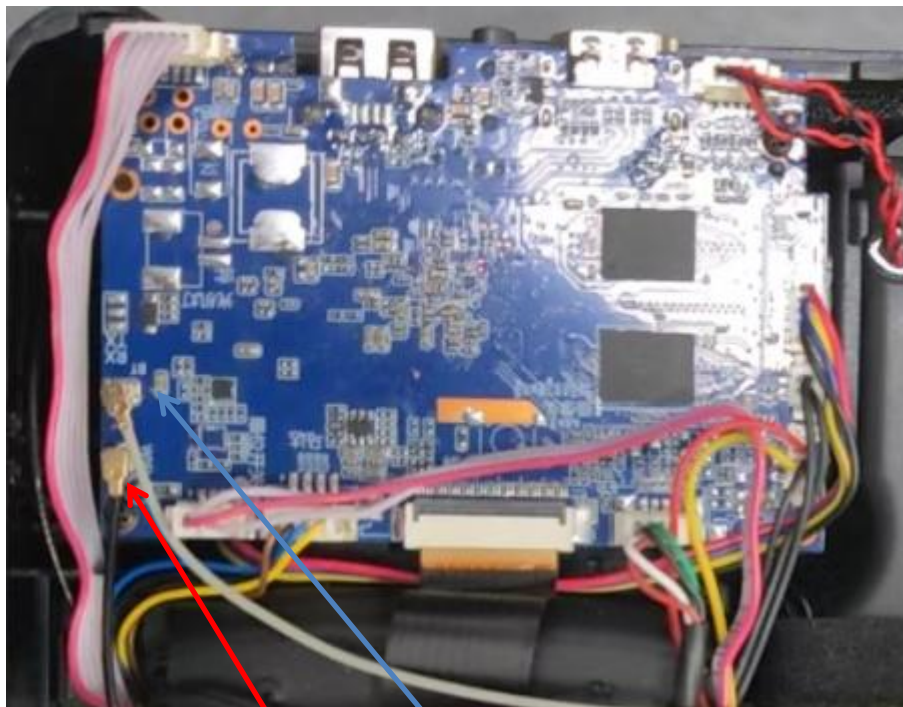
	测试项目	设备
一. 项目图 Project Chart	二. 天线匹配 Antenna Matching	网络分析仪: HP 8753D/E5071C
三. 无源数据 passive data	四. 增益效率 Gain Efficiency	GSM 测试仪: Agilent 8960 E5515C LTE 测试仪: 8820C/CMW500
五. 苹果图方向图 Apple map direction map	六. 有源数据 Active data 七. 环境处理 Environment Processing	1. 暗室: 7x4x3 m (ETS-3D) 2. 网络分析仪: HP 8753D



一.项目图Project Chart

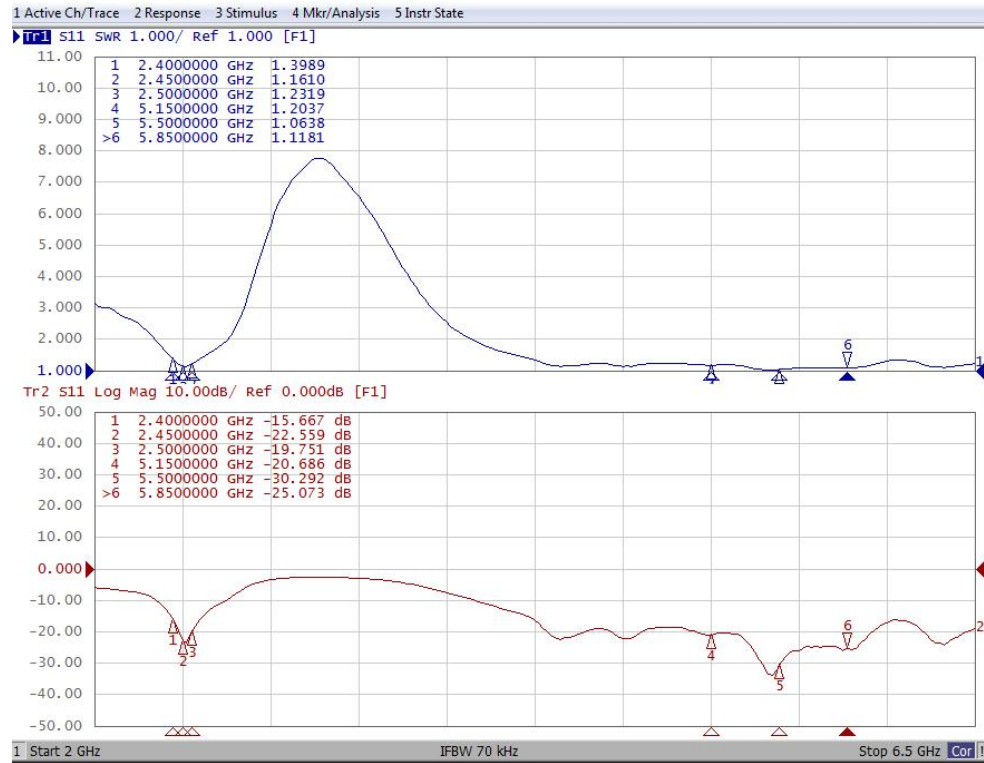


二.天线匹配Antenna Matching

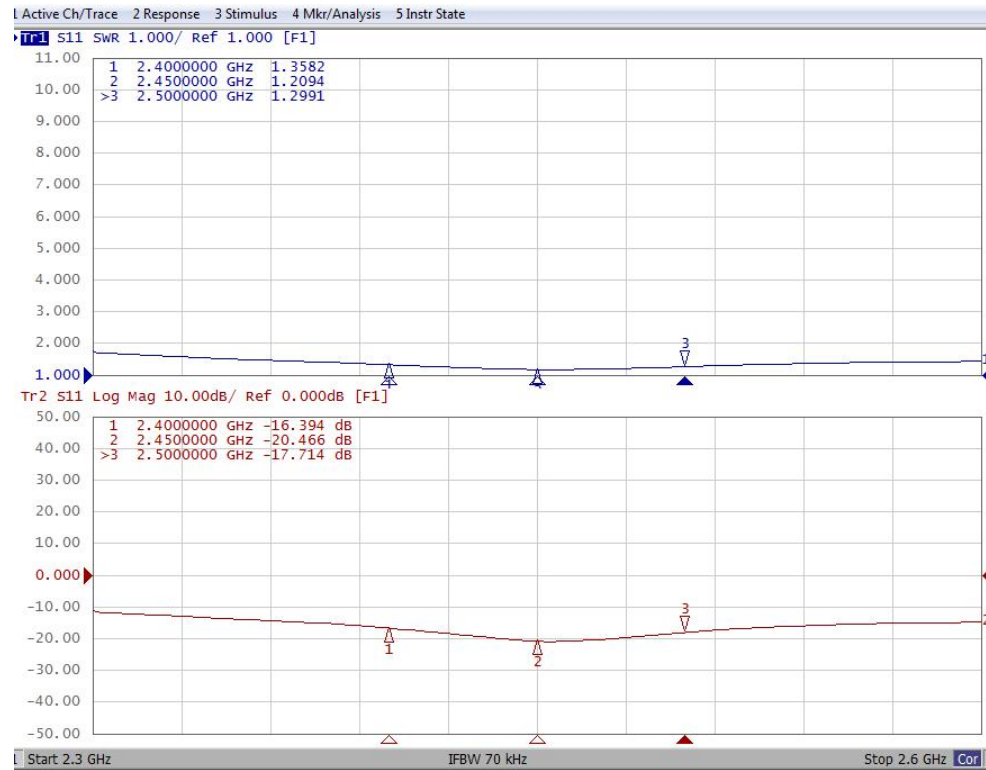


天线匹配未改动

三.无源数据 passive data



SWR-WIFI



SWR-BT

四. 增益效率 Gain Efficiency

WIFI-2.4G

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	45.1	2.4
2410	46.95	2.63
2420	46.3	2.66
2430	46.05	2.61
2440	49.54	2.85
2450	49.27	2.87
2460	52.61	3.05
2470	54.3	3.22
2480	55.74	3.22
2490	56.97	3.15
2500	57.68	2.91

BT-2.4G

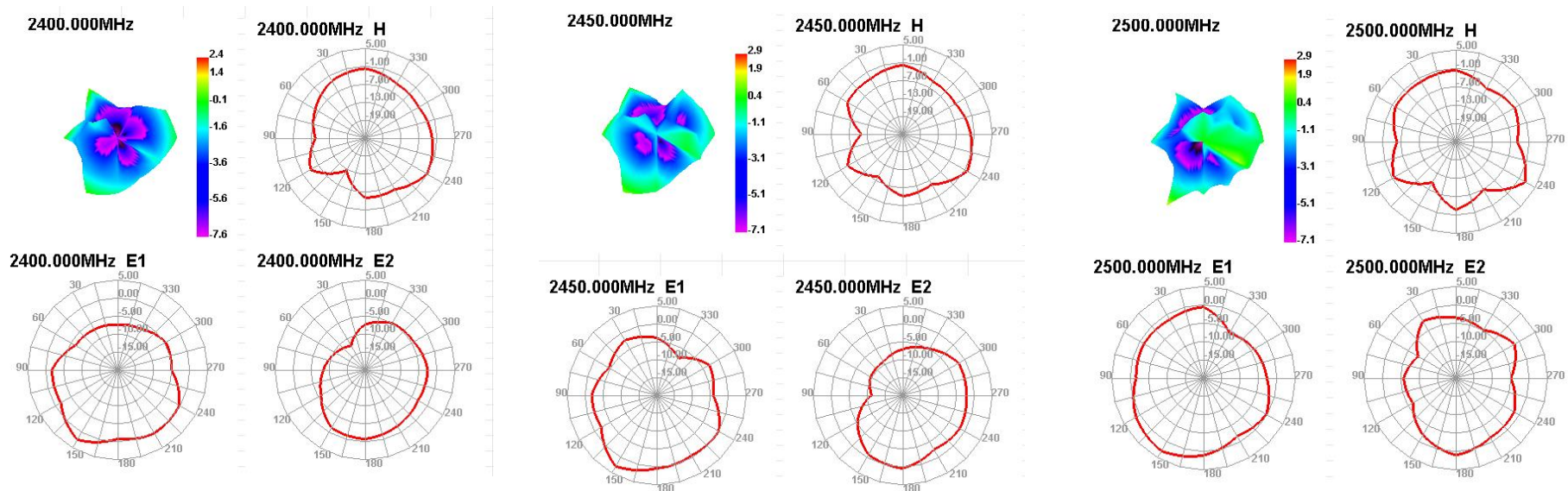
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	40.23	0.91
2410	41.81	1.34
2420	40.33	0.78
2430	40.12	0.84
2440	42.69	1.18
2450	44.02	1.21
2460	48.58	1.59
2470	45	1.21
2480	45.93	1.29
2490	51.85	1.7
2500	51.8	1.61

WIFI-5G

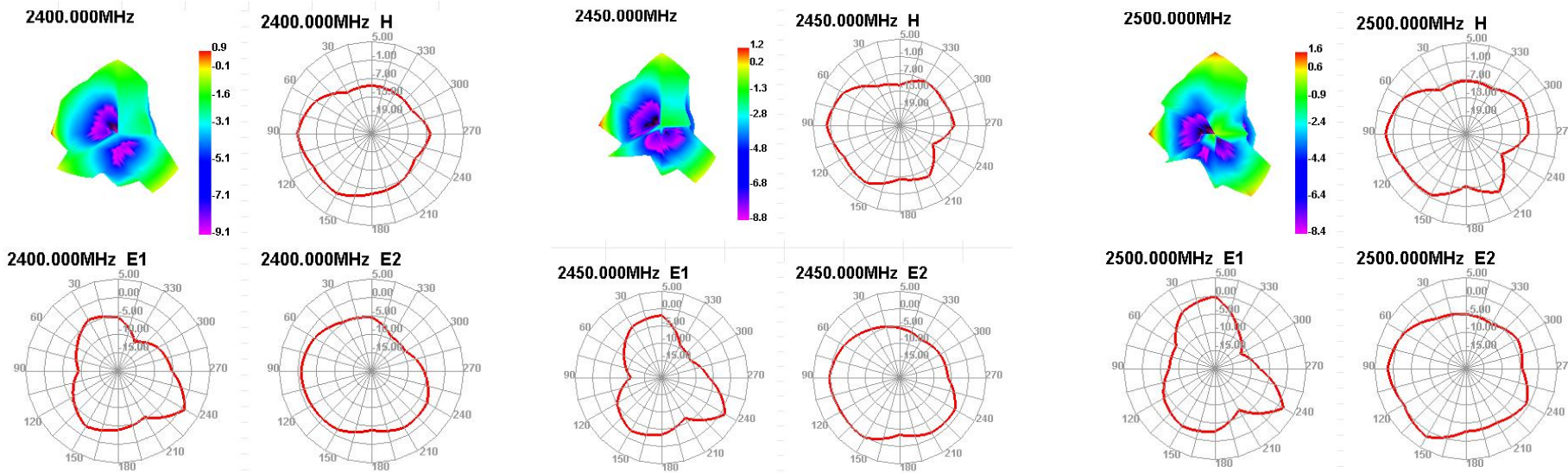
Freq	Effi	Gain
(MHz)	(%)	(dBi)
5150	67.56	4.66
5350	69.07	3.97
5550	73.99	3.44
5650	75.57	3.61
5850	77.15	3.53

五. 苹果图方向图 Apple map direction map

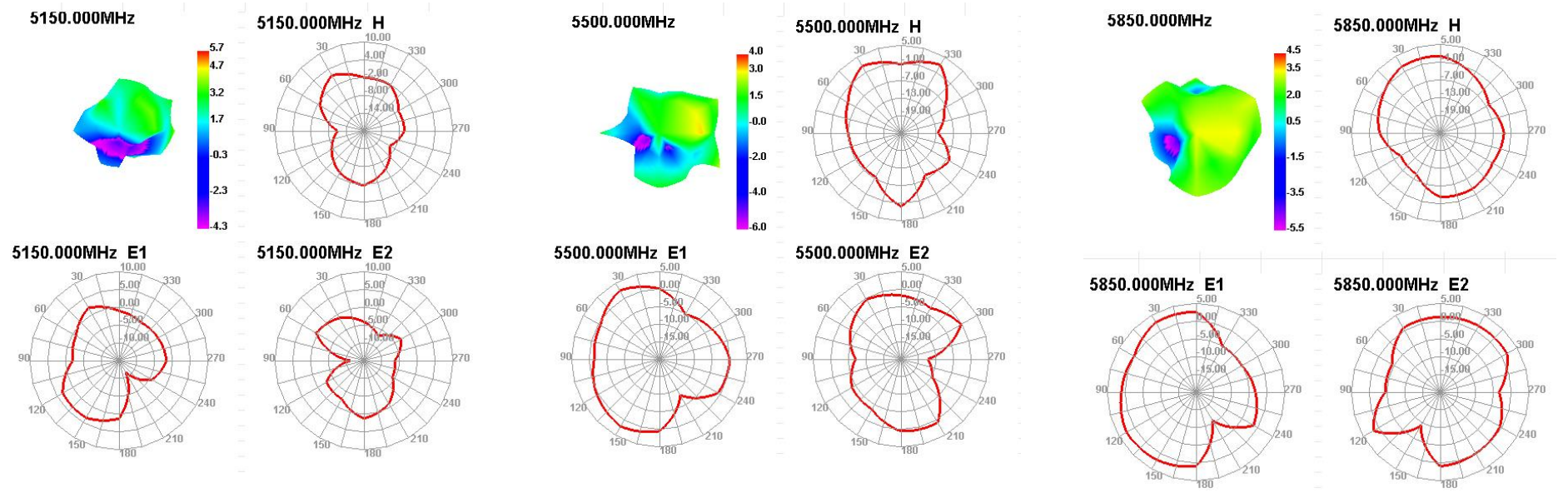
WIFI-2.4G



BT-2.4G



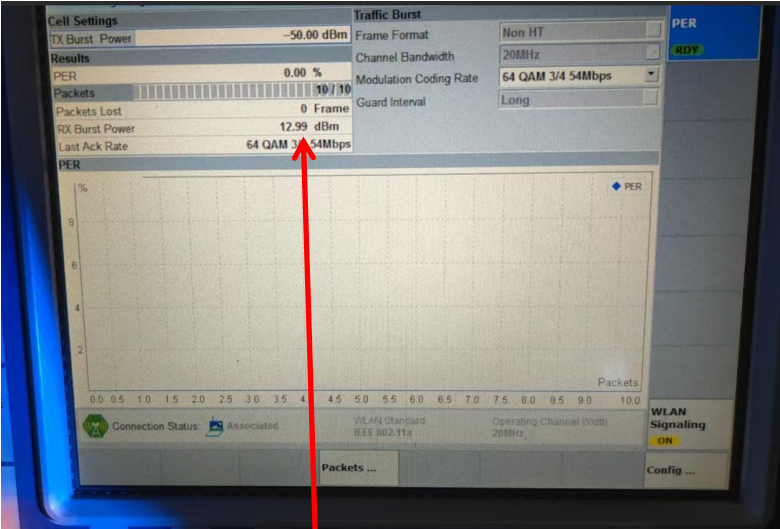
WIFI-5G



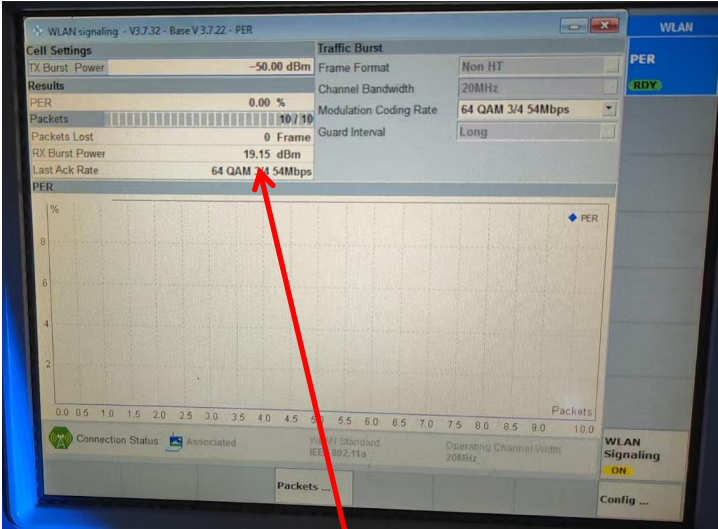
六. 有源数据 Active data

WiFi(2.4G/B)	CH	TRP-(11M)	TIS-(11M)	WiFi(5G/A)	CH	TRP-(54M)	TIS-(54M)
	1	17.1			36	12.5	
	6	17.0			149	17.2	
	11	17.0	-72.3		165	17.5	-72.3

5.8G的36信道传导功率偏低

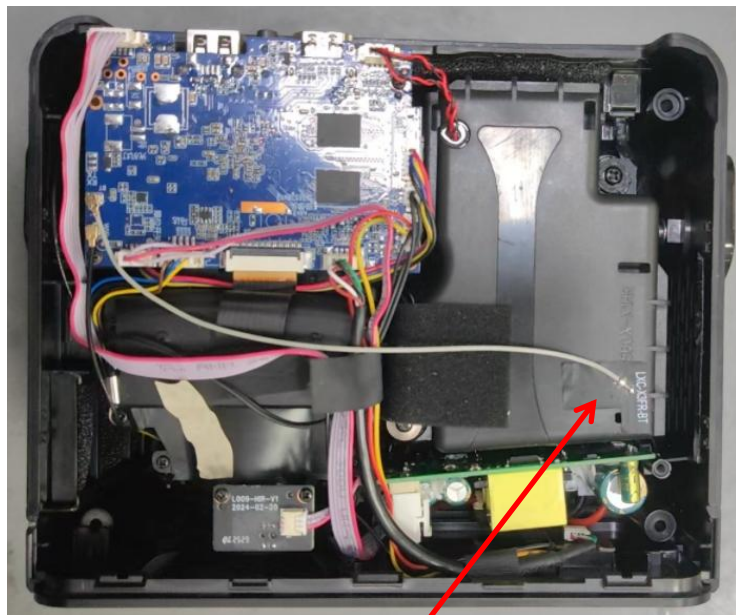


CH36信道传导功率12.99

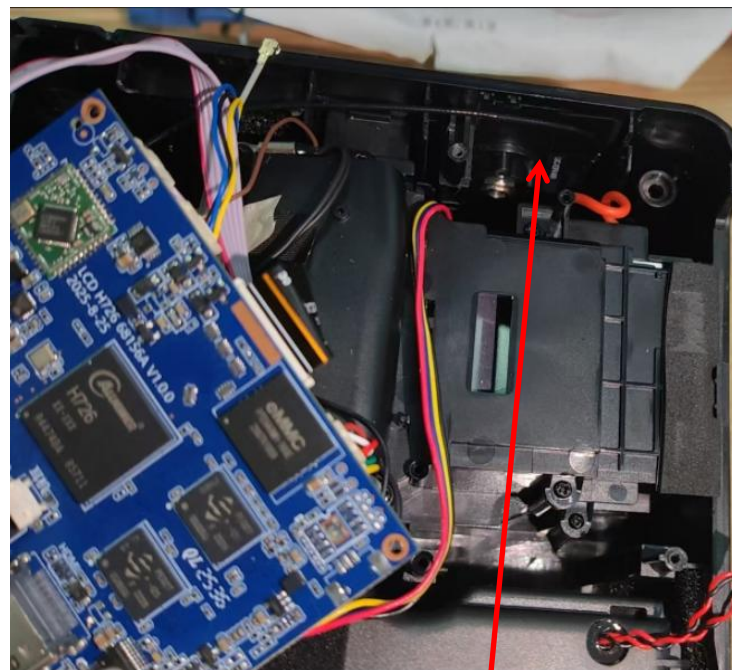


CH165信道传导功率19.15

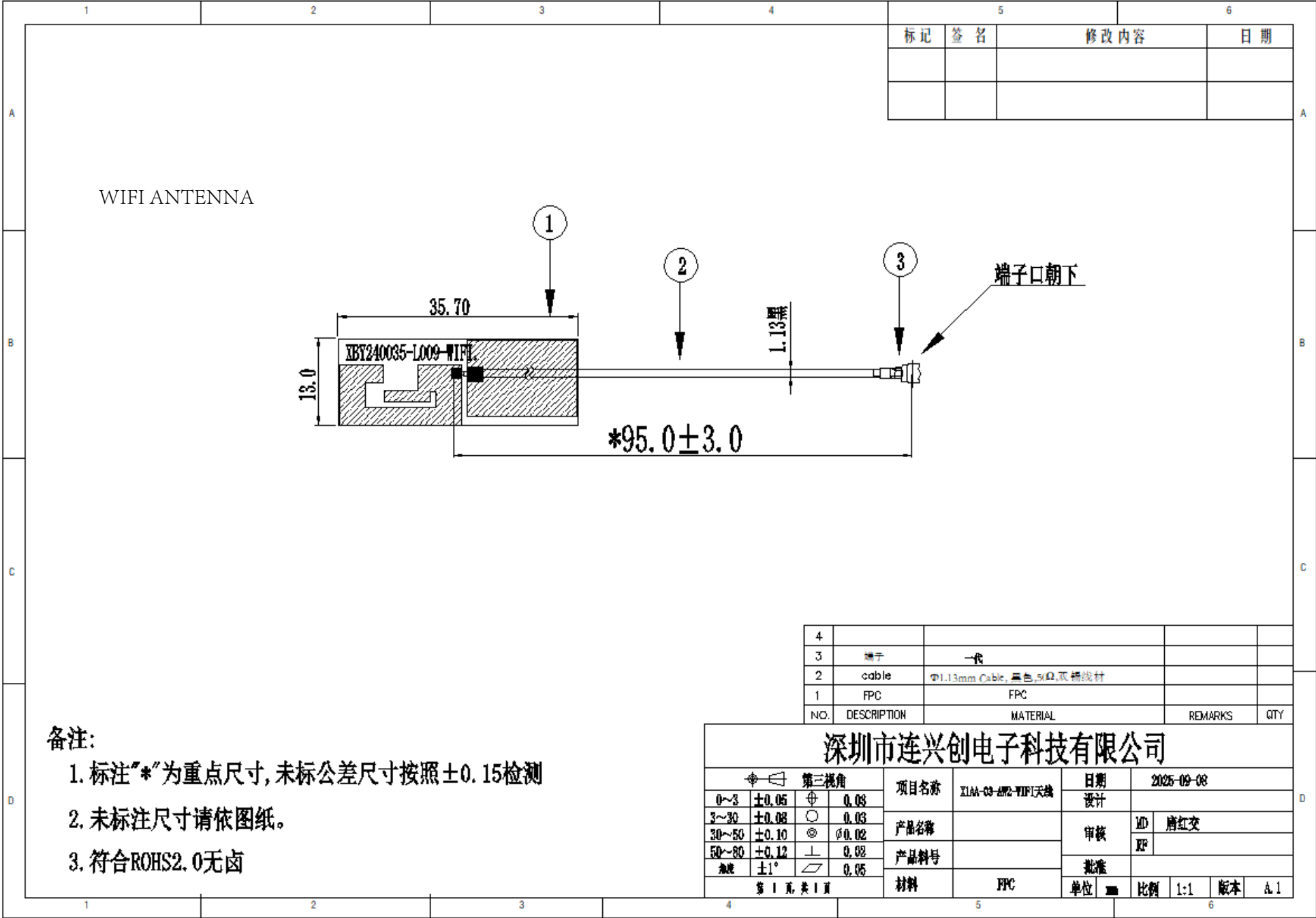
七. 环境处理 Environment Processing



BT

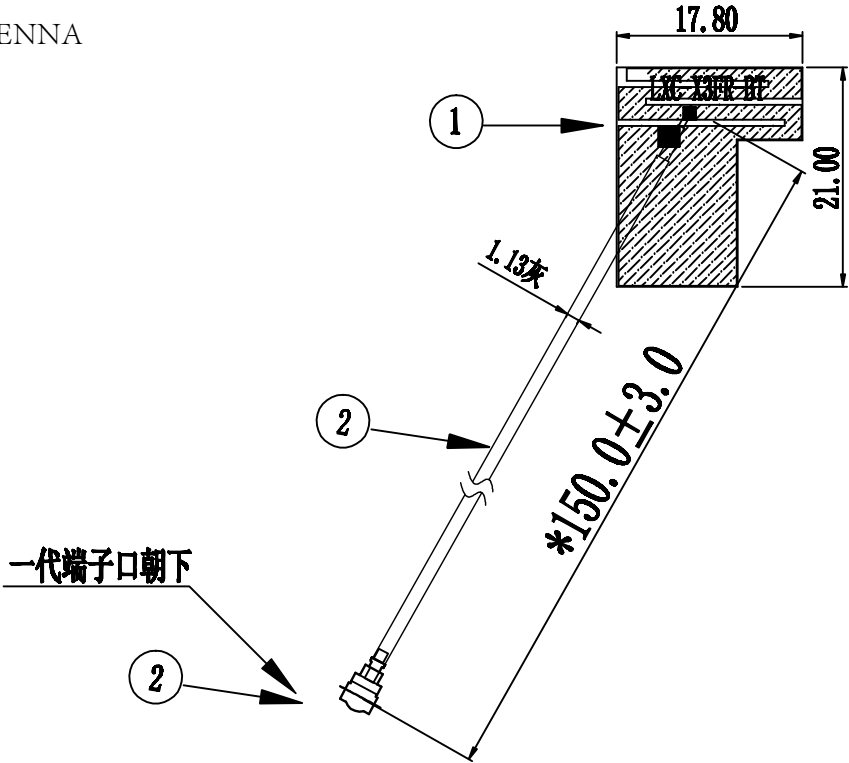


WIFI竖贴



5		6	
标记	签名	修改内容	日期

BT ANTENNA



4				
3	端子	一代-1.13灰		
2	cable	Φ1.13mm Cable, 灰色,50Ω,双绞线材		
1	FPC	FPC		
NO.	DESCRIPTION	MATERIAL	REMARKS	QTY

备注:

- 标注“*”为重点尺寸,未标公差尺寸按照±0.15检测
- 未标注尺寸请依图纸。
- 符合ROHS 2.0无卤

深圳市连兴创电子科技有限公司

 第三视角				项目名称	X3FR-BT天线	日期		2025-08-19			
0~3	±0.05		0.03			设计					
3~30	±0.08		0.03	产品名称		审核	MD	唐红交			
30~50	±0.10		∅0.02				RF				
50~80	±0.12		0.02	产品料号	WZZ010031002	批准					
角度	±1°		0.05				材料	FPC	单位	mm	比例
第 1 页, 共 1 页											



The end , thanks!