



深圳市云顶通讯电子有限公司
Shenzhen Yunding Communication Electronics Co., Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail: wht0809@163.com

承認書 APPROVAL

客 户 : 亿 驰

品 名 规 格 : H6-MINI-2-WIFI-FPC-1.13 黑-L150-IPEX
DESCRIPTION:

料 号 :
PART NO.:

天 线 类 型 : FPC
Antenna type:

日 期 : 2023. 7. 17
D A T E:

云顶呈样签章

工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	业 务 SALES DEPARTMENT
吴淑仪	刘丽	王洪涛

客户承认签章

工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	采 购 PURCHASING DEPARTMENT

联系电话: 0755 23073599 150 1794 1162

※ 承认书一式三份, 惠蒙贵司承认签章

※ Approval in duplicate, please signed by your company.



深圳市云顶通讯电子有限公司

Shenzhen Yunding Communication Electronics Co., Ltd.

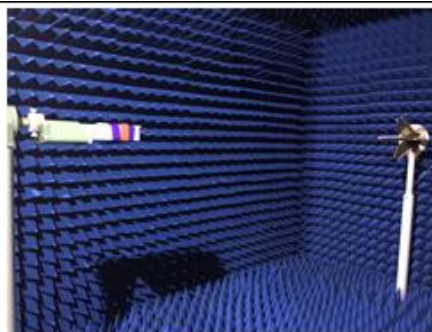
TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail: wht0809@163.com

1. 测试项目与设备

	测试项目	设备
1. S11 参数 (S-parameter)	1. 回波损耗 (Return Loss) 2. 电压驻波比 (VSWR)	网络分析仪: Agilent E5071B HP 8753D
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 综合测试仪: Agilent 8960 E5515B ×2 StarPoint SP6011
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 网络分析仪: Agilent E5071B HP 8753D





深圳市云顶通讯电子有限公司

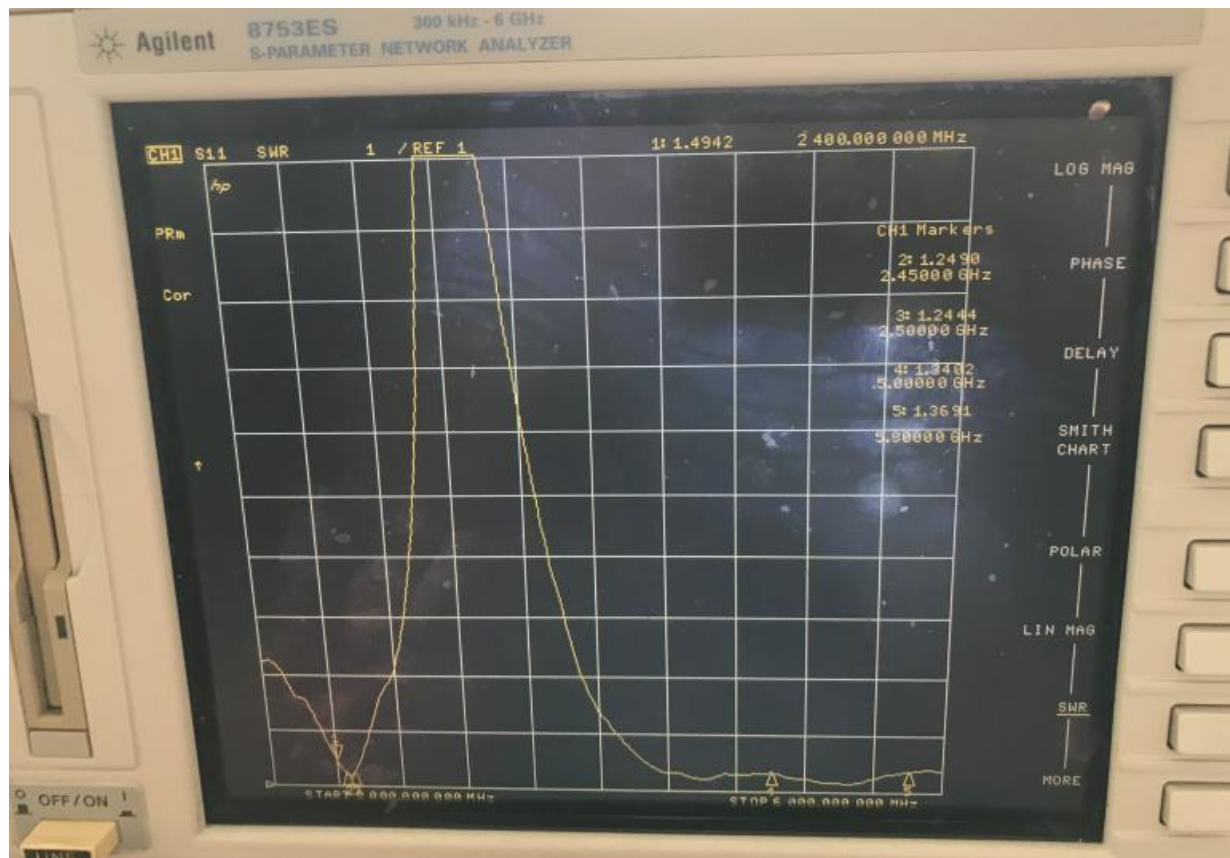
Shenzhen Yunding Communication Electronics Co., Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail: wht0809@163.com

2. WiFi 天线性能



3. WiFi 天线效率与增益

Passive Test For WIFI										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	52.05	-2.84	2.18	0.03	26.995	25.058	2.18	-12.52	48.09	47.94
2410	51.56	-2.88	2.23	0.08	26.887	24.675	2.23	-12.9	48.07	47.87
2420	54.4	-2.64	2.5	0.35	28.426	25.977	2.5	-12.13	48.18	48
2430	53.26	-2.74	2.41	0.26	27.87	25.393	2.41	-11.33	48.17	47.99
2440	54.89	-2.61	2.48	0.33	28.785	26.105	2.48	-10.95	48.33	48.11
2450	58.81	-2.31	2.74	0.59	31.052	27.761	2.74	-10.56	48.44	48.14
2460	60.52	-2.18	2.76	0.61	32.26	28.264	2.76	-10.74	48.41	48.06
2470	61.75	-2.09	2.81	0.66	33.205	28.54	2.81	-11.6	48.49	48.11
2480	63.2	-1.99	2.95	0.8	34.124	29.075	2.95	-12.59	48.63	48.18
2490	64.05	-1.93	3.04	0.89	34.558	29.494	3.04	-12.51	48.76	48.29
2500	63.07	-2	3.06	0.91	33.841	29.228	3.06	-11.61	48.69	48.16



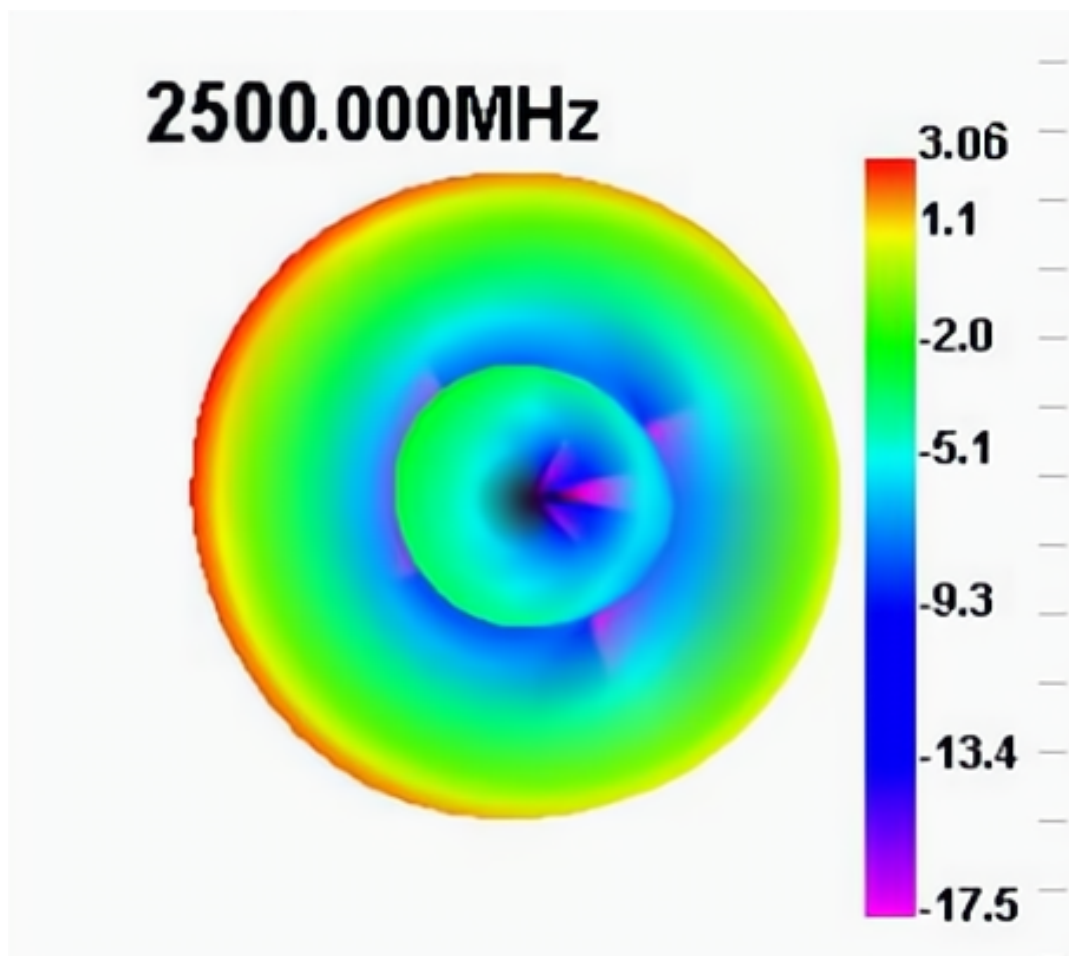
深圳市云顶通讯电子有限公司

Shenzhen Yunding Communication Electronics Co., Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail: wht0809@163.com





深圳市云顶通讯电子有限公司

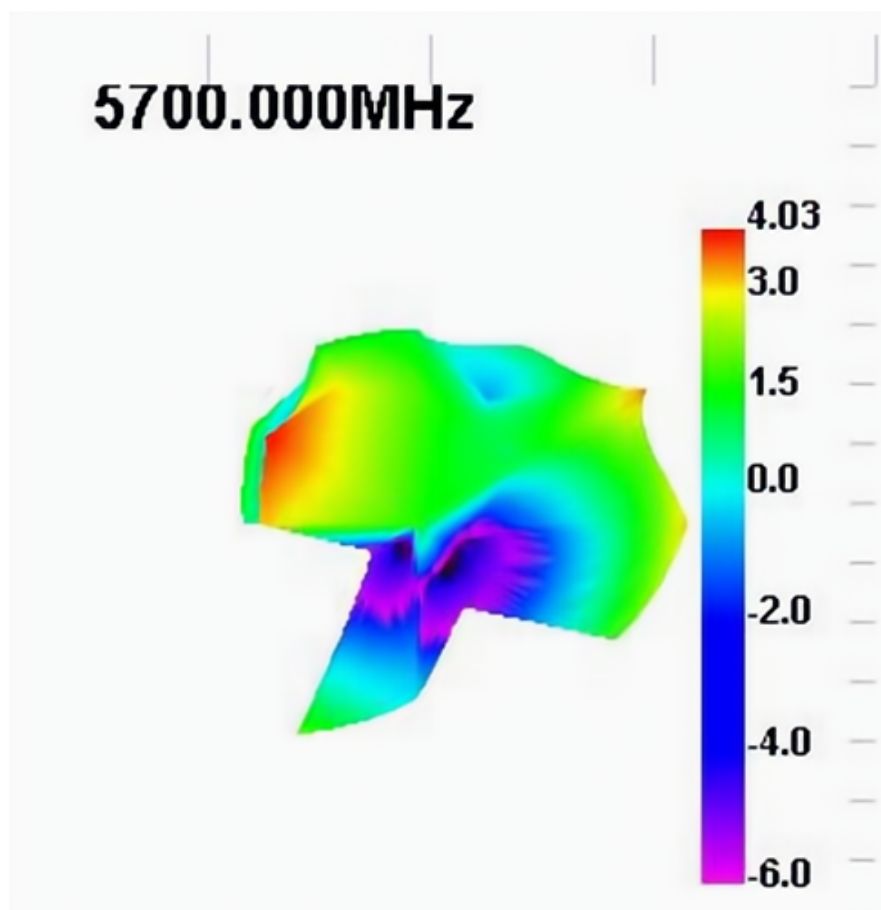
Shenzhen Yunding Communication Electronics Co.,Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail:wht0809@163.com

Passive Test For D5										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
5100	58.78	-2.31	3.56	1.41	29.514	29.267	3.56	-12.14	57.95	57.06
5150	57.4	-2.41	3.33	1.18	28.84	28.562	3.33	-13.21	57.91	57.19
5200	58.34	-2.34	3	0.85	28.705	29.637	3	-13.5	57.55	56.83
5250	66.37	-1.78	3.3	1.15	32.315	34.054	3.3	-16.53	57.72	56.91
5300	62.1	-2.07	2.8	0.65	29.853	32.252	2.8	-16.97	57.16	56.32
5350	66	-1.8	2.61	0.46	31.193	34.807	2.61	-13.58	57.61	56.81
5400	62.43	-1.4	2.4	0.25	33.881	38.553	2.4	-10.95	58.32	57.48
5450	67.63	-1.7	2.27	0.12	31.467	36.162	2.27	-10.38	58.49	57.41
5500	58.69	-2.31	2.01	-0.14	27.064	31.628	2.01	-10.44	58.91	57.66
5550	61.45	-2.12	2.8	0.65	28.718	32.727	2.8	-10.14	59.82	58.58
5600	64.35	-1.91	3.12	0.97	31.234	33.119	3.12	-10.29	59.51	58.82
5650	62.16	-1.42	3.87	1.72	35.974	36.184	3.87	-10.44	60.1	59.5
5700	59.74	-0.98	4.03	1.88	40.089	39.653	4.03	-9.38	60.54	59.93
5750	64.03	-0.76	3.77	1.62	41.682	42.35	3.77	-9.8	60.86	60.31
5800	64.41	-0.74	3.82	1.67	41.05	43.364	3.82	-13.19	61.14	60.57





深圳市云顶通讯电子有限公司

Shenzhen Yunding Communication Electronics Co., Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail: wht0809@163.com

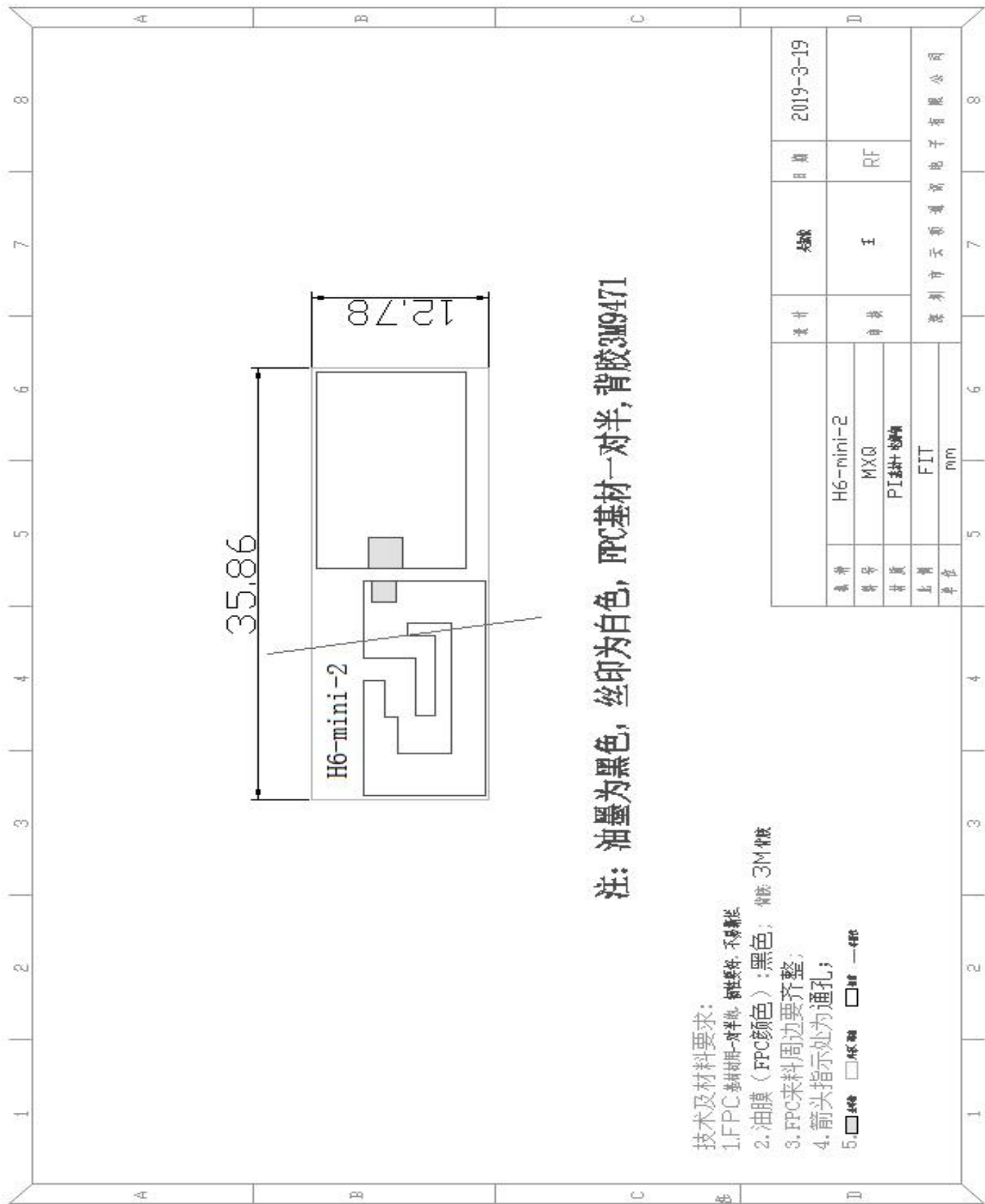
4. 天线 3D 测试数据:

Test Result	Wifi 2G TRP
	12
Frequency (MHz)	2467
Txp Ave (dBm)	15.05
NHPRP (dBm)	NULL
MAX (dBm)	18.19
Min (dBm)	8.61
Attenuation Horiz	15.36
Attenuation Vertic	14.99

Test Result	Wifi 2G TIS
	12
Frequency (MHz)	2467
Sens Ave (dBm)	-84.85
NHPIS (dBm)	NULL
RSSIAve	18.12
MaxPosRSSI	21.06
MaxPosSens	-88.79
MAX (dBm)	21.53
Min (dBm)	8.98
Attenuation Horiz	15.69
Attenuation Vertic	15.38



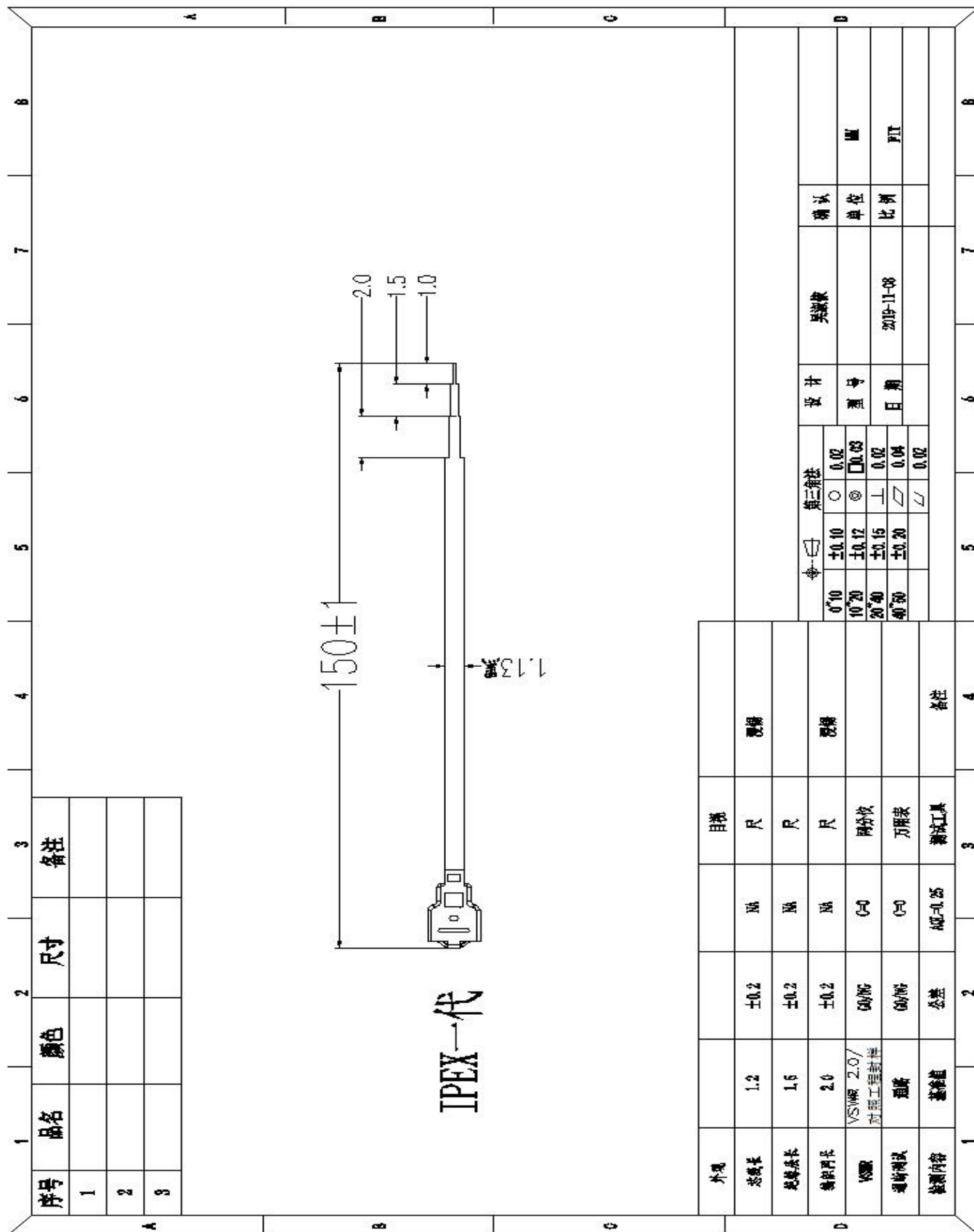
5. 天线结构图:





E-mail:wht0809@163.com

6. 同轴线结构图:





深圳市云顶通讯电子有限公司

Shenzhen Yunding Communication Electronics Co.,Ltd.

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail:wht0809@163.com

RF113 规格

1. 适用范围

本规格书制定了电线的结构和电气特性

I. Scope

This specification covers the construction and the electrical properties of wire.

2. 结构/Construction

单位/Unit: mm

项目/Item		单位/Unit	详细资料/Details
Conductor 导体	材料/Material	-	Silverplated copper(镀银铜)
	构成/Composition	(No./mm)	7/0.08±0.003
	外径/OD.	mm	0.24
	绞向/Orientation	-	S
Insulation 绝缘层	材料/Material	-	FEP
	绝缘颜色/Insulation color	-	Clarity(透明本色)
	标称绝缘厚度/ Nom. Thickness	mm	0.22
	绝缘线径/OD.	mm	0.68±0.02
Braid 遮蔽	材料/Material	-	Tinned copper(镀锡铜)
	Construction(结构)	(No./mm)	16/4/0.05±0.005
	覆盖率Coverage ratio	%	90±5
	外径/OD.	mm	0.92±0.05
Jacket 外被	材料/Material	-	FEP
	颜色/Color	-	Client requirement
	标称外径/NOM.O.D	mm	1.13±0.05

3. Electrical Properties (at 20℃) / 电气特性(20℃时)

项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω/km	588.85 OHM
耐压强度(AC)/Dielectric Strength(AC)	V/ 1 Min	1000
特性阻抗/Impedance	ohm	50±2(at 1ns@TDR)
驻波比Standing wave ratio	/	≦1.3@0-6GHz
衰减 Attenuation	频率Frequency	标准值Standard vaalue 单位Unit: dB/m
	1GHz	≦1.7
	2GHz	≦2.5
	3GHz	≦2.9
	4GHz	≦3.2
	5GHz	≦4.2
	6GHz	≦4.9

4. 结构图Structure drawing

