

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A3)

	CUSTOMER(客户名称)	利利普	
	CS P/N(客户机种)	VT-7A-NA	
	PART NAME(品名)	MAIN	
	FREQUENCY(频率)	600-900MHz, 1700-2700MHz。	
	ZTX NO.(物料编号)	F.00000720	
	DATE(日期)	2024-10-21	

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark(备注):

Sign(客户确认签字盖章):

ZHONG TIAN XUN TECHNOLOGY CO., LTD				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		胡小良	林权	



福州中天迅通信技术有限公司

ZHONGTIAN XUN Communication Technology Co.,Ltd.

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<http://www.chinaztx.com>

ANTENNA SPECIFICATION

CUS P/N : VT-7A-NA MAIN

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Revision history

版本	日期	状态
A1	2023-6-8	初版。
A2	2024-9-7	FPC 外形，线路更新。
A3	2024-10-21	背胶改为 3M55261。



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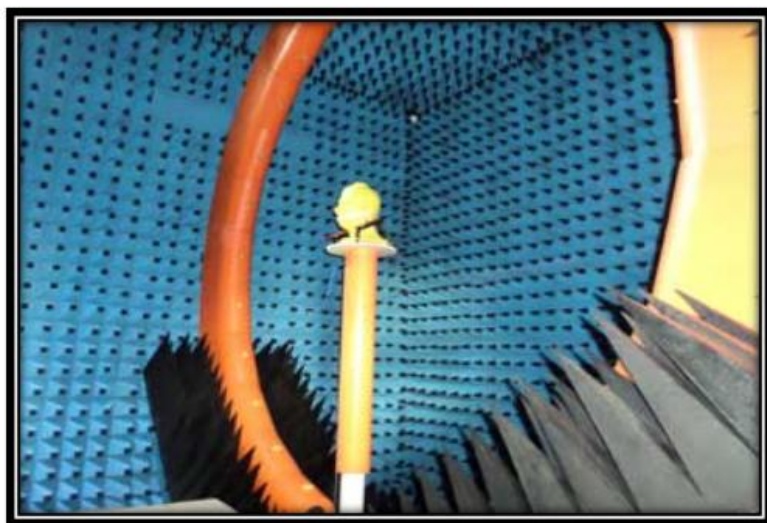
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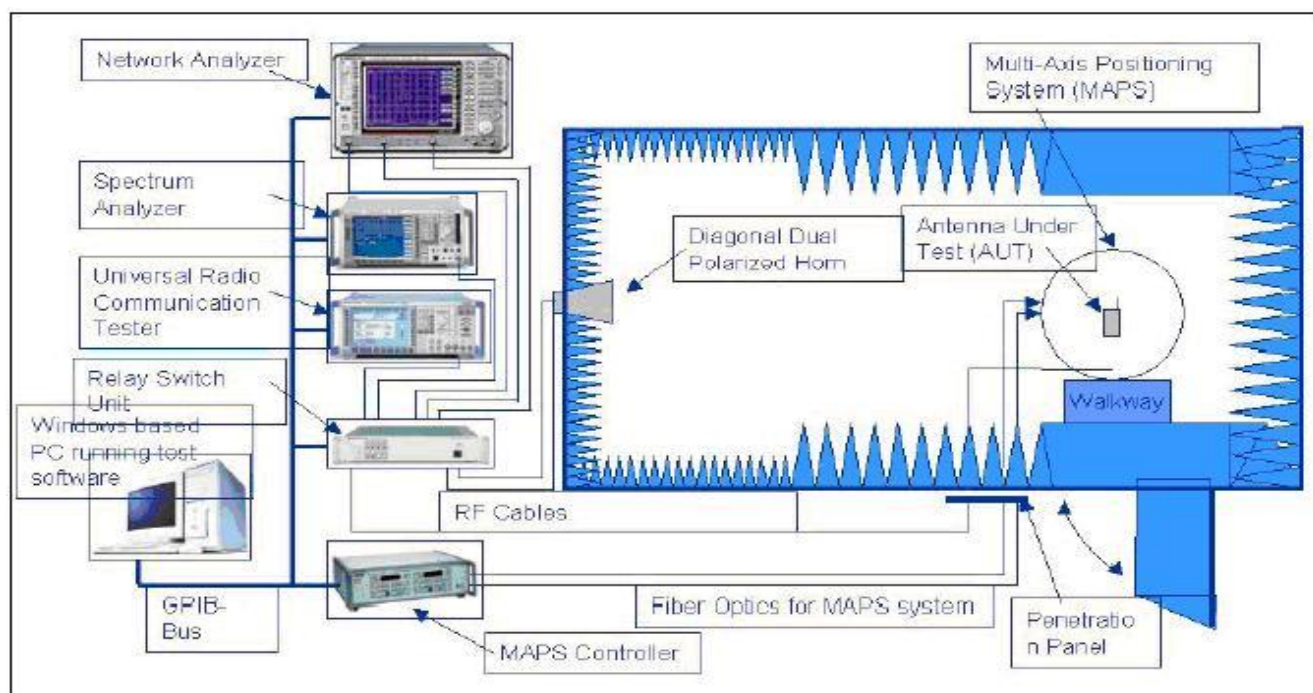
1. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CITA standards.

Testing range:

Support active, passive testing of
GSM/CDMA/WCDMA/TD-
SCDMA/LTE/WIFI/WLAN/WiMax/BT
/GPS/MIMO/UWB within 0.4-6G.



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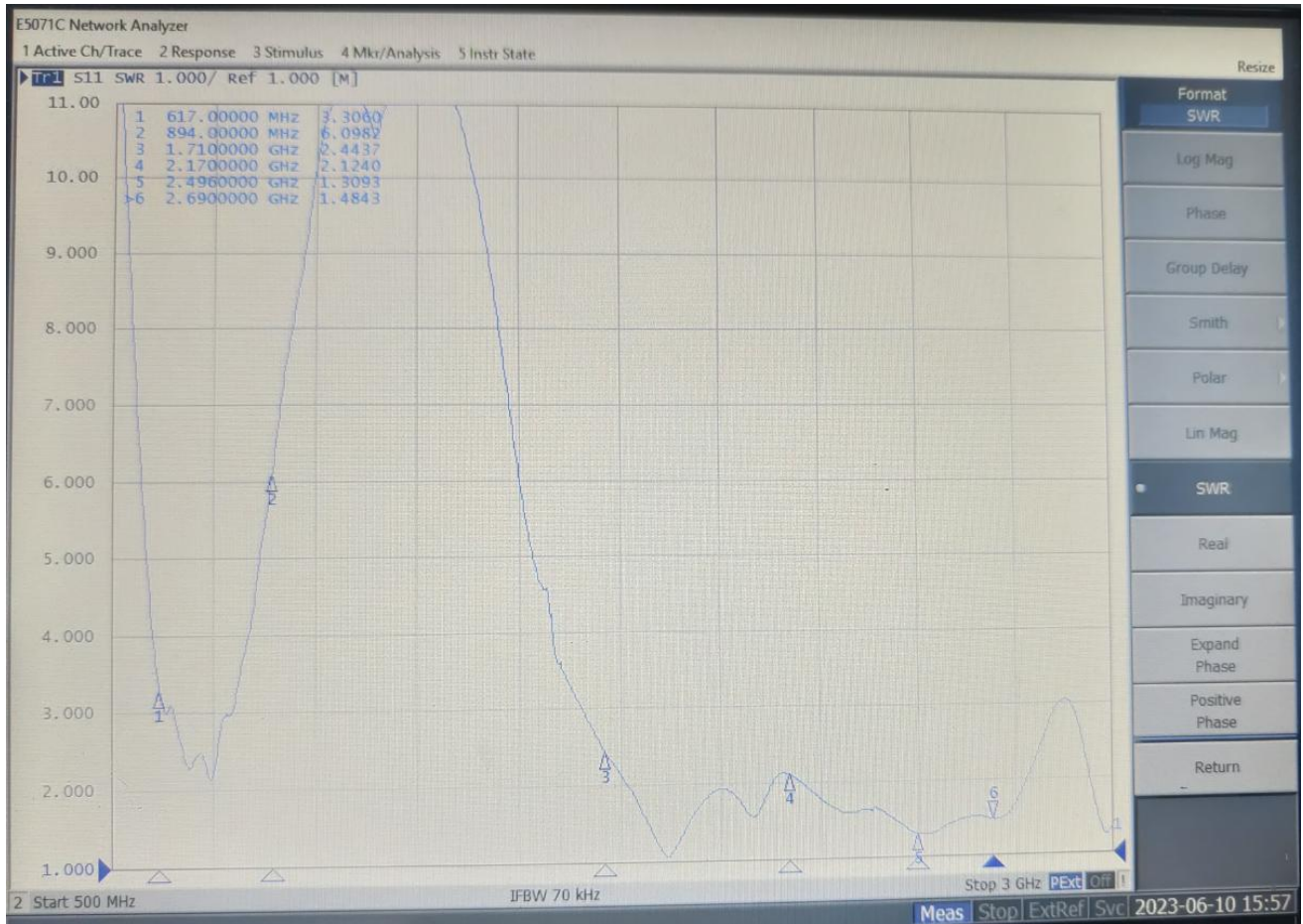
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2. Antenna test data

2-1 VSWR



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2-2 Antenna passive test

Frequency	Efficiency (db)	Efficiency (%)	Gain
600	-5.26	29.81	-2.08
610	-5.17	30.4	-1.76
620	-5.14	30.62	-1.35
630	-5.43	28.67	-1.41
640	-5.94	25.47	-1.96
650	-6.74	21.17	-3.29
660	-6.41	22.86	-3.08
670	-5.87	25.87	-1.88
680	-5.54	27.95	-1.42
690	-5.28	29.67	-1.37
700	-5.34	29.26	-1.63
710	-5.01	31.54	-1.6
720	-5.06	31.22	-1.81
730	-5.03	31.39	-2.05
740	-4.9	32.32	-2.02
750	-4.75	33.52	-1.87
760	-4.9	32.38	-1.89
770	-4.79	33.15	-1.7
780	-4.84	32.8	-1.72
790	-4.94	32.08	-1.95
800	-4.92	32.2	-2.3
810	-5.15	30.53	-1.45
820	-5.39	28.88	-1.32
830	-5.64	27.28	-1.44
840	-5.7	26.92	-1.79
850	-5.82	26.2	-2.12
860	-5.78	26.43	-2.58
870	-5.85	25.97	-2.77
880	-5.88	25.83	-2.9
890	-5.93	25.54	-2.78
900	-6.16	24.21	-2.92
1700	-6.13	24.36	-1.49



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1720	-5.86	25.96	-1.39
1740	-5.56	27.79	0.2
1760	-5.05	31.25	1.34
1780	-4.57	34.92	2.09
1800	-4.24	37.65	2.63
1820	-4.04	39.42	3.07
1840	-3.83	41.42	3.24
1860	-3.89	40.82	3.02
1880	-4.09	39.02	2.59
1900	-4.49	35.56	1.68
1920	-4.67	34.1	0.59
1940	-4.85	32.77	-0.55
1960	-5.1	30.91	-0.89
1980	-5.38	29	-1.19
2000	-5.56	27.8	-1.68
2020	-5.78	26.45	-1.25
2040	-5.82	26.19	-0.94
2060	-5.89	25.75	-0.84
2080	-5.97	25.27	-0.91
2100	-5.98	25.25	-0.94
2120	-5.83	26.12	-0.91
2140	-5.62	27.44	-0.75
2160	-5.59	27.63	-0.76
2180	-5.4	28.83	-0.64
2200	-5.12	30.78	-0.21
2220	-4.74	33.61	0.37
2240	-4.55	35.05	0.98
2260	-4.61	34.56	1.03
2280	-4.7	33.91	0.86
2280	-4.7	33.91	0.86
2300	-4.62	34.5	0.26
2320	-4.47	35.74	-0.37
2340	-4.17	38.27	-0.4
2360	-4	39.85	-0.37
2380	-4.31	37.05	-0.44



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2400	-4.35	36.69	-0.59
2420	-4.55	35.11	-1.05
2440	-4.62	34.49	-0.96
2460	-4.45	35.92	-0.93
2480	-4.25	37.55	-0.58
2500	-4.17	38.31	-0.04
2520	-3.87	41.01	0.42
2540	-3.77	41.98	0.67
2560	-3.46	45.13	0.97
2580	-3.12	48.81	1.21
2600	-3.04	49.67	1.13
2620	-2.87	51.59	1.1
2640	-2.79	52.56	1.04
2660	-2.9	51.24	0.73
2680	-3.02	49.91	0.65
2700	-3.12	48.81	0.88



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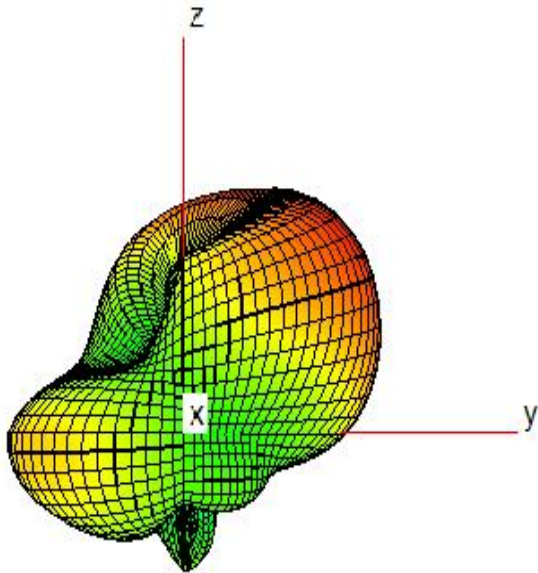
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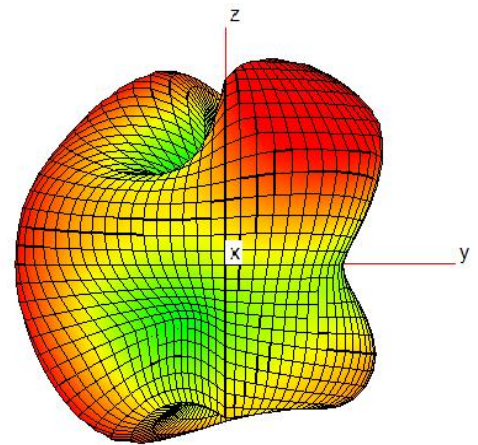
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2-3 3D radiation drawing

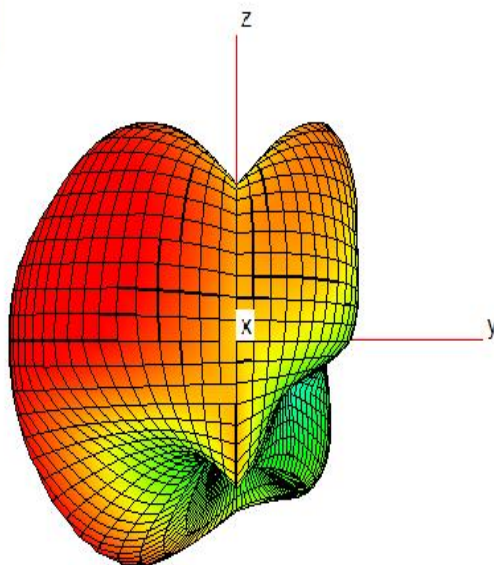
800MHz



1800MHz



2500MHz



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2-4 Active test data

FDD band2	channel	18650	18900	19150
	TRP	20.24	20.19	19.70
	TIS		-99.04	
FDD band4	channel	20000	20175	20350
	TRP	20.30	20.66	20.41
	TIS		-97.41	
FDD band5	channel	20450	20525	20600
	TRP	17.30	16.80	16.61
	TIS		-93.98	
FDD band7	channel	20850	21100	21350
	TRP	18.62	18.08	17.56
	TIS		-95.20	
FDD band12	channel	23035	23095	23155
	TRP	17.75	17.76	17.84
	TIS		-94.84	
FDD band13	channel		23230	
	TRP		18.17	



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	TIS		-92.24	
FDD band14	channel		23330	
	TRP		17.87	
	TIS		-90.29	
FDD band17	channel	23780	23790	23800
	TRP	18.90	18.96	18.78
	TIS		-92.99	
FDD band25	channel	26165	26365	26565
	TRP	20.30	20.00	19.70
	TIS		-99.08	
FDD band26	channel	26765	26865	26965
	TRP	17.54	16.83	16.47
	TIS		-95.13	
FDD band66	channel	132022	132322	132622
	TRP	20.47	20.22	20.49
	TIS		-97.77	
FDD band71	channel	133172	133297	133422
	TRP	18.00	18.60	19.09



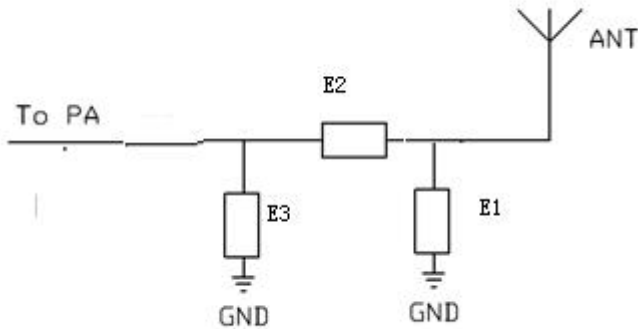
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	TIS		-96.63	
TDD band41	channel	40540	40740	40940
	TRP	17.40	18.01	18.89
	TIS		-91.75	



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2-5 Matching circuit



匹配说明	
E1	NC
E2	0Ω
E3	NC



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2-6 Environment treatment



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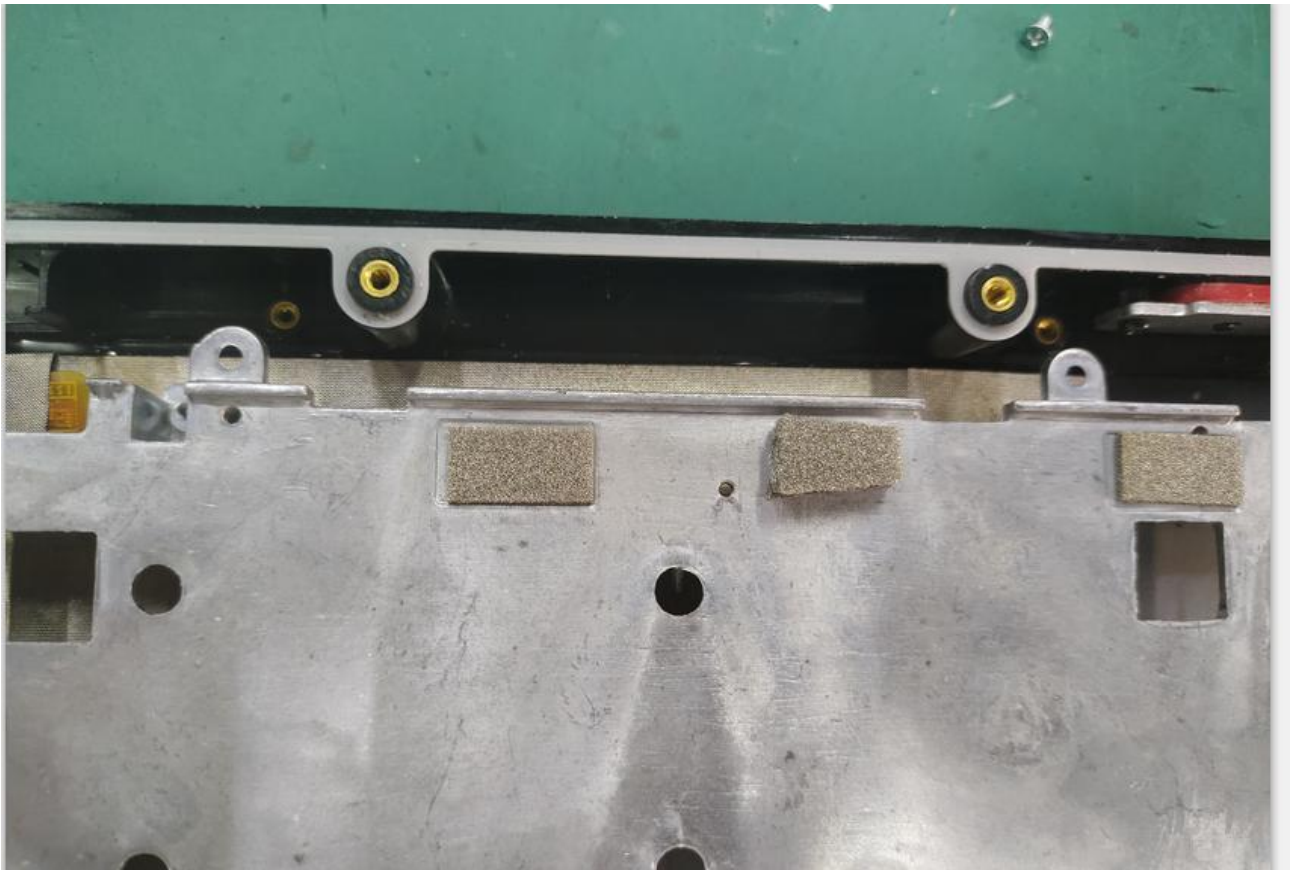
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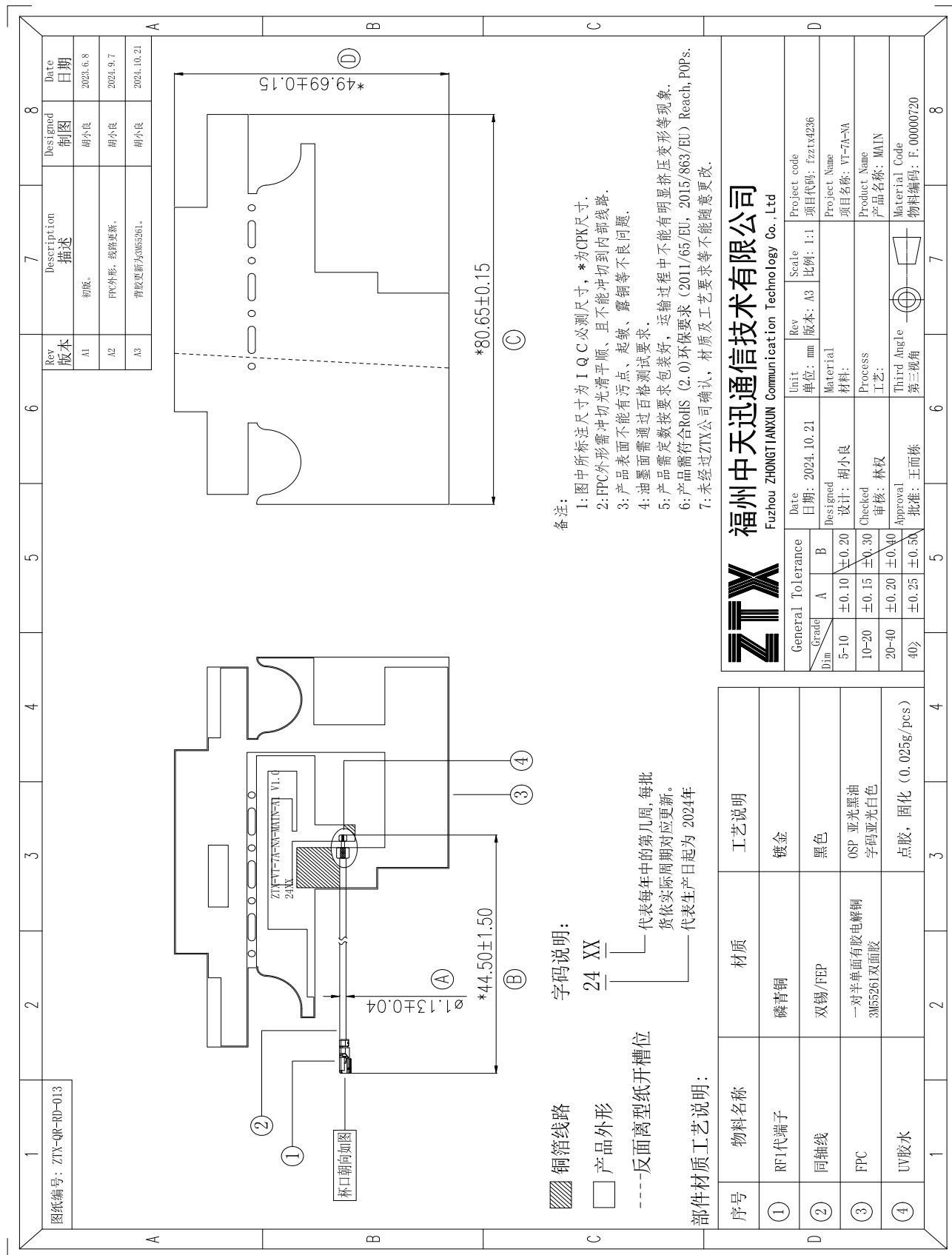
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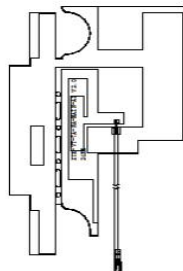
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3. Mechanical Specification



ANTENNA SPECIFICATION

4.The packing way

福州中天迅通信技术有限公司 Fuzhou ZHONGTIANXUN Communication Technology Co., Ltd				包装规范									
产品名称 MAIN		产品型号 VT-7A-NA		工序序号/名称 包装		版本 A1	文件编号 ZTX-QD-WI-023	仪器校准及要求: 1.测试设备必须接地; 2.重新连接接口后或连接测试不稳定时,需对仪器进行校正; 3.测试产品时保证天线垂直,并远离人体或金属器件30cm以上;					
 图1: 确认数量  图2: 封口PE袋包装/贴标签  图3: 封口PE袋包装/贴标签  图4: 装箱  图5: 贴外箱标签/附出货检验报告  图6: 封箱				作业方法a.作业参数(自检验工序作业合格后,方能流入下一道工序) 取样 包装 ↓ 将50pcs产品装入PE开口袋中,贴小标签,填写产品名称、物料号、数量、周期等信息; ↓ 每10袋(500pcs)用PE封口袋装好,贴小标签,填写产品名称、物料号、数量、周期等信息; ↓ 装箱,每箱装(500pcs)尾数除外,并附手写检验报告一份; ↓ 贴外箱标签,附报告 ↓ 封箱									
				操作防护要求: 1.作业人员需带手套套进行作业,(特殊产品需带手套); 2.检测过程中检测产品做到轻拿轻放; 3.操作测试工具时,严格按照操作规范使用,避免伤手;									
				6S要求: 1.保持检测现场台面整洁,无灰尘、水、油污; 2.物料提前整齐,标识清楚;									
				注意事项: 1.客户物料编码和数量是否正确,标签必须用机打印的 2.内标签、外标签、出货报告、送货单内容需一致。 3.如是试产物料或有变更均需贴相应标识,尾数箱需贴尾数标识,内附检验报告等									
				物料名称		物料代码		规格		用量		备注	
				PE开口袋									
				PE封口袋									
				纸板									
				纸箱									
				标签									
橡皮筋													
版本		修订内容				修订日期		修订人					
制订		胡小良		审核		易爱玲		批准					
								张武民					