承　　认　　书

SPECIFICATION FOR APPROVAL

客户名称 Customer Name	创族		
客户项目名 Customer Project Name	M078	顺达成项目名 SDC Project Name	M078
客户编码 Customer P/N	CZ.M078.A05	顺达成料号 SDC P/N	WF5837B-0814R-75
频段 Band	WIFI2.4G/5.8G/BT		
版本号 Version	A0		
设计人信息/Designer Information			
射频工程师 RF Engineer	伍文载	研发主管 R&D Diretor	夏承磊
结构工程师 ME Engineer	黄宗宝		

审批/ Approval				客户批准/Customer Approval	
	制作 Prepared By	审核 Checked By	批准 Approval By	审核 Checked By	批准 Approval By
签章 Signature	黄宗宝	夏承磊	陈华明		
日期 Date	2024.12.18	2024.12.18	2024.12.18		

修订履历/Change Log				
版本 Version	修订内容 Change Description	责任人 Person in Charge	核准 Approval By	日期 Date

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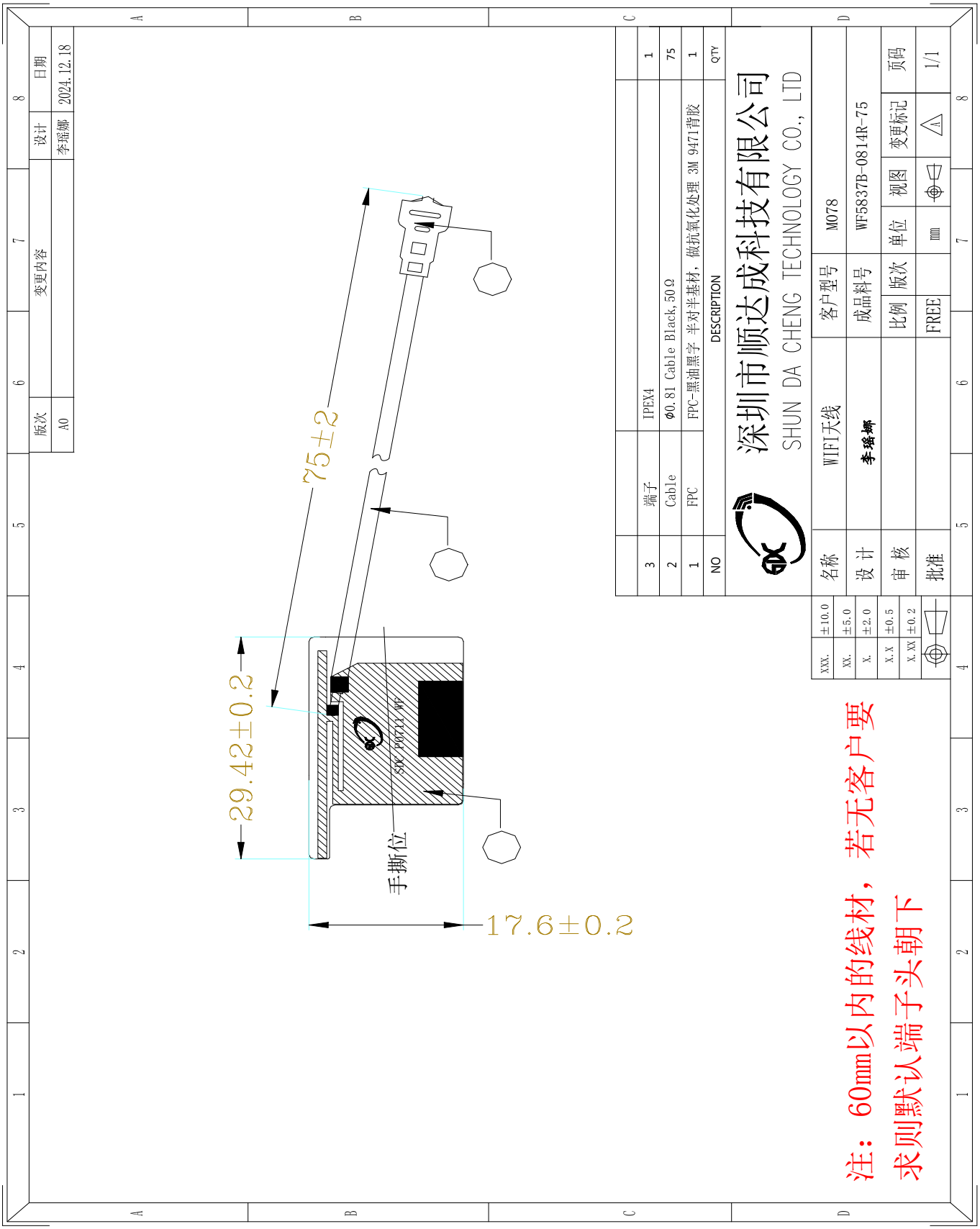
产品图纸或实物图片

Drawing or Product Image



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深圳市顺达成科技有限公司
SHUN DA CHENG TECHNOLOGY CO., LTD

样品尺寸测量报告
Sample Dimensions Test Report

测试日期 Test Date	2024.12.18	样品数量 Sample Qty.	3	测试人 Inspector	许燕芳
尺寸编号 Dimension No.	标准 Standard	样品 1 Sample 1	样品 2 Sample 2	样品 3 Sample 3	Pass/NG
①长度	29.42±0.2mm	29.42	29.5	29.5	Pass
②宽度	17.6±0.2mm	17.6	17.7	17.6	Pass
③厚度	0.1±0.03mm	0.1	0.1	0.1	Pass
④线长	75±2mm	75	76	75	Pass
最终结论 Conclusion					PASS
测试人&日期 Inspector & Date	许燕芳 2024.12.18		批准&日期 Approval &D ate		

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射频性能测量报告

RF Performance Test Report

天线测试设备简介

Antenna Test Equipment Introduction

测试天线输入特性使用 **Agilent E5071C and Agilent 5062A** 矢量网络分析仪；辐射特性利用广屏三维近场暗室进行测试，并分别使用 8960 E5515 和 Agilent E4438C 进行了分析。暗房的测试坐标如下:

Test of antenna input characteristics using **Agilent E5071C and Agilent 5062A** vector network analyzer; The radiation pattern of the antenna are tested using the guangping 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

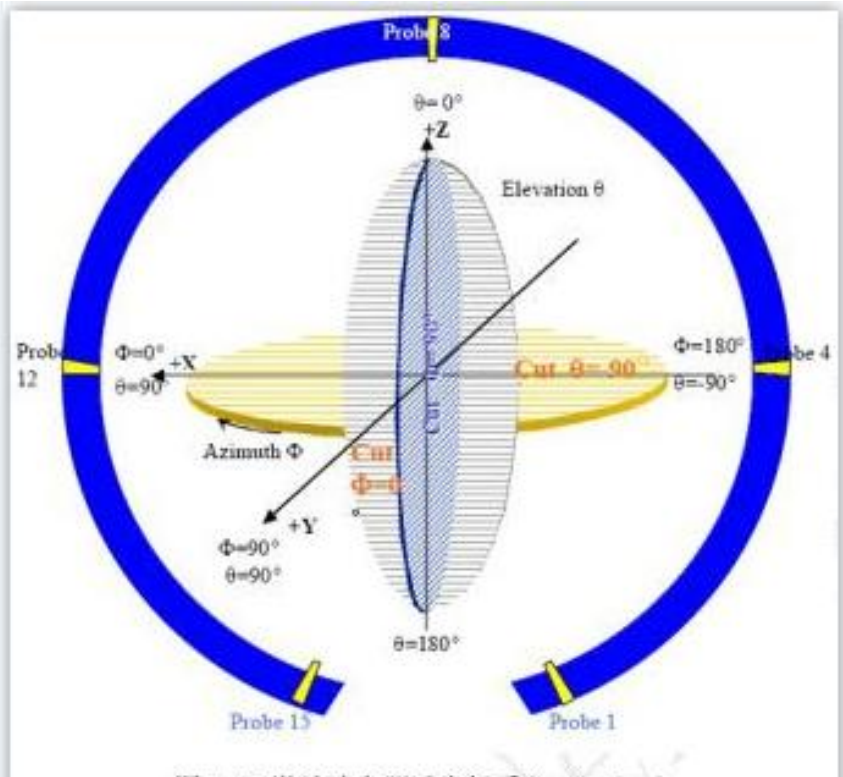


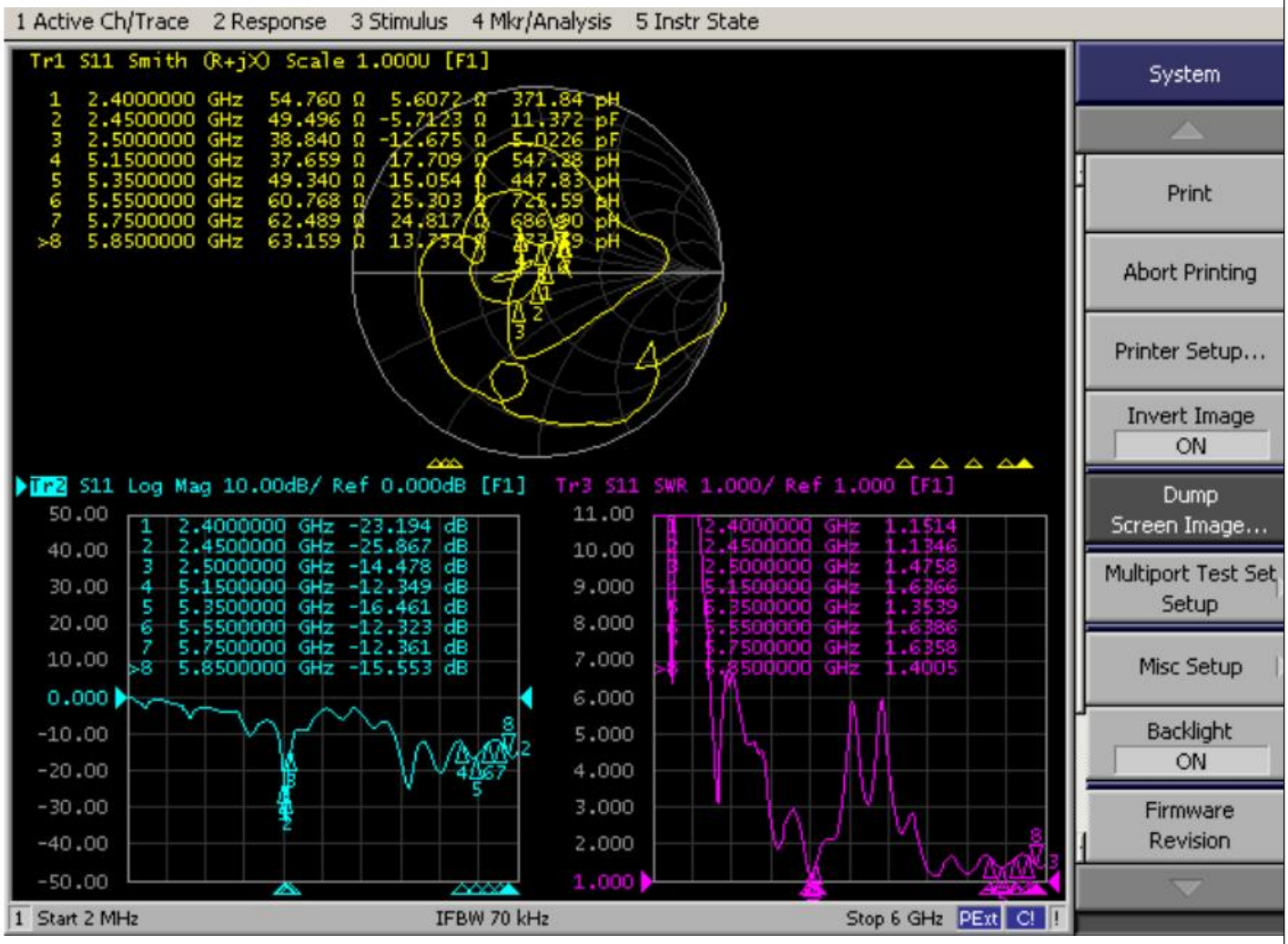
图 4 3D 微波暗室测试坐标系(back view)

1. S11 参数测量/*S11 Parameter-VSWR*

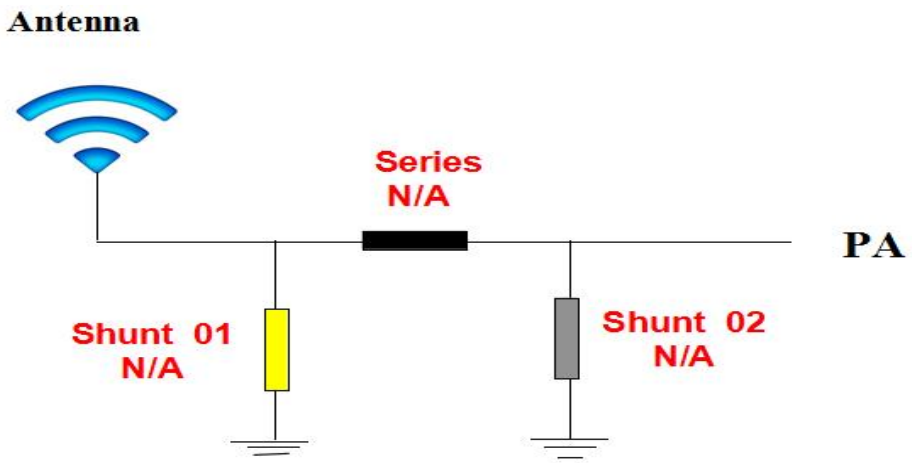
使用一根 50Ω同轴电缆连接到天线，然后该电缆连接到网络分析仪测量 S11 参数，被测量产品远离金属至少 20 厘米。

Measuring Method is a 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

S11 Parameter-VSWR



2. 天线匹配网络/**Antenna Matching Network**



3.Gain & Efficiency

Passive Test For 2.4G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	21.77	-6.62	-3.11	-5.26	8.154	13.613	-3.11	-14.39	3.51	60	47.77	47.82
2425	22.07	-6.56	-3.25	-5.4	7.964	14.104	-3.25	-18.53	3.31	60	48.06	48.12
2450	25.23	-5.98	-2.31	-4.46	8.623	16.605	-2.31	-17.65	3.67	60	48.56	48.53
2475	24.5	-6.11	-2.04	-4.19	8.003	16.496	-2.04	-17.87	4.06	60	48.46	48.26
2500	26.28	-5.8	-1.21	-3.36	8.363	17.921	-1.21	-21.06	4.6	60	48.42	48.12

Passive Test For 5.8G												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5150	23.87	-6.22	-1.7	-3.85	11.709	12.165	-1.7	-21.61	4.52	60	58.6	58.01
5250	27.98	-5.53	-0.91	-3.06	13.946	14.037	-0.91	-21.94	4.62	30	58.53	57.74
5350	27.8	-5.56	-0.58	-2.73	13.681	14.123	-0.58	-15.66	4.98	30	57.99	57.08
5450	30.44	-5.17	0.42	-1.73	14.847	15.596	0.42	-12.79	5.59	60	59.19	57.9
5550	28.45	-5.46	0.13	-2.02	13.871	14.575	0.13	-11.45	5.59	90	60.21	58.81
5650	29.83	-5.25	-0.37	-2.52	14.469	15.366	-0.37	-12.7	4.88	0	60.31	59.42
5750	32.29	-4.91	0.03	-2.12	15.635	16.654	0.03	-13.34	4.94	0	60.88	60.28
5850	31.75	-4.98	0.3	-1.85	14.809	16.944	0.3	-14.43	5.29	90	61.09	60.41

4. WIFI OTA Data

2.4G	802.11b，(2.4G)11M		
Channel	CH1	CH6	CH11
TRP	7.92	8.03	8.24
TIS	-75.86	-74.21	-75.3
5.8G	802.11a，(5.8G)54M		
Channel	CH36	CH60	CH161
TRP	7.39	7.54	7.2
TIS	-65.19	-66.29	-66.57