



SHUN DA CHENG TECHNOLOGY CO., LTD

SPECIFICATION FOR APPROVAL

Customer Name	Xi Yang		
Customer Project Name	Small pepper word cover external antenna	SDC Project Name	Small pepper word cover external antenna
Customer P/N	3. 03. 99. 99. 0001	SDC P/N	SMA-1131-150 (Exposed) (black)
Band	WIFI2. 4G/5. 8G/BT		
Version	A0		
Designer Information			
RF Engineer	Yong-hui Yang	R&D Director	FuXueRong
ME Engineer	Huang Zongbao		

Approval			Customer Approval		
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Huang Zongbao	Yong-hui Yang	FuXueRong		
Date	2024. 03. 21	2024. 03. 21	2024. 03. 21		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date



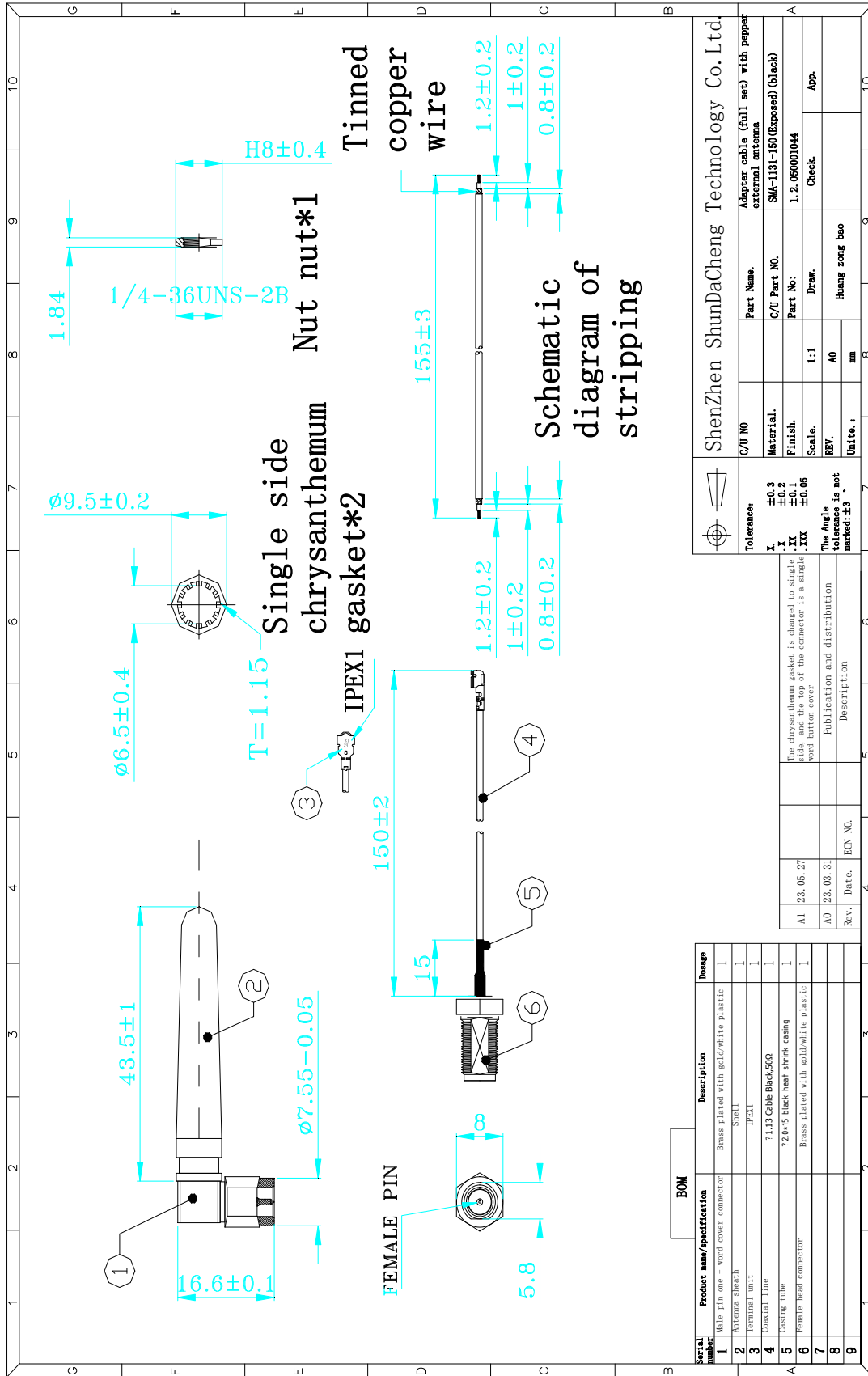
Catalogue

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Drawing or Product Image



Company Address: 4th Floor, Building B5, Xinfu Industrial Park, Chongqing Road, Fuyong Town, Baoan District, Shenzhen Telephone :0755-27211658 Fax :0755-29485750



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Sample Dimensions Test Report

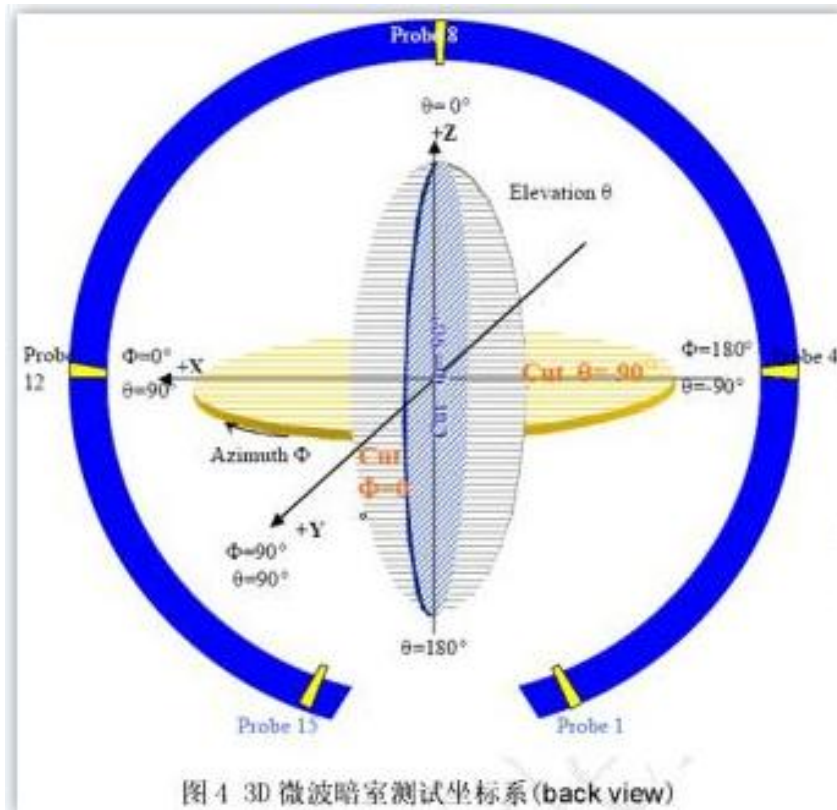
Test Date	2024. 03. 21	Sample Qty.	3	Inspector	Xu Yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①length	43. 5±1mm	43. 5	43. 6	43. 5	Pass
②diameter	7. 55-0. 05mm	7. 55	7. 55	7. 55	Pass
③thickness	16. 6±0. 1mm	16. 6	16. 7	16. 6	Pass
④Length	150±2mm	150	151	151	Pass
Conclusion					PASS
Inspector & Date	Xu Yanfang 2024. 03. 21		Approval & Date		



RF Performance Test Report

Antenna Test Equipment Introduction

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:



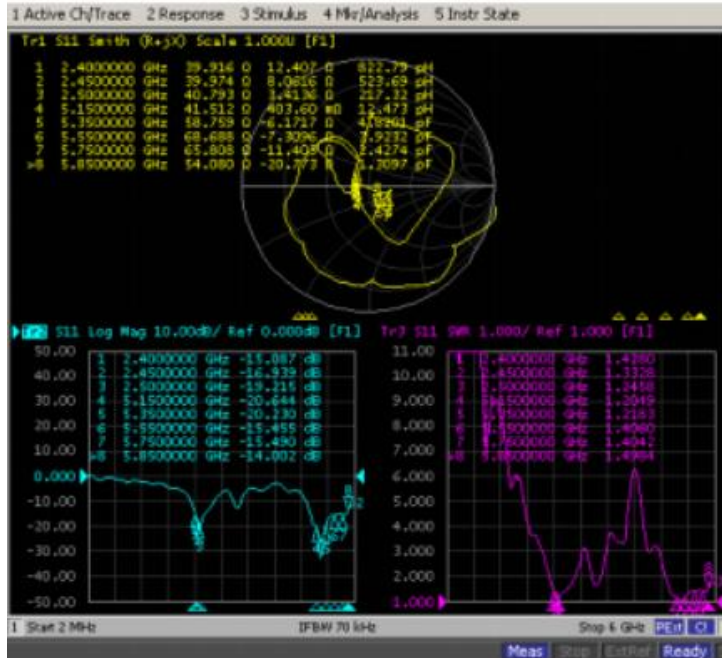
1. **S11 Parameter-VSWR**

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.



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S11 Parameter-VSWR



频率 (MHz)	2400	2450	2500	5150	5200	5500	5700	5850
驻波比	1.42	1.22	1.24	1.2	1.21	1.4	1.4	1.49

频率 (MHz)	2400	2450	2500	5150	5200	5500	5700	5850
损耗	29.1	29.9	40.7	41.5	58.7	68.6	65.3	54

频率 (MHz)	2400	2450	2500	5150	5200	5500	5700	5850
回波	-15	-16.9	-19.2	-20.6	-20.2	-15.4	-15.4	-14

2. Antenna Matching Network

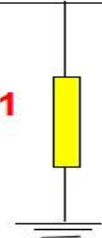
Antenna



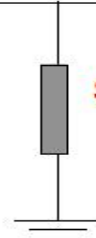
Series
N/A

PA

Shunt 01
N/A



Shunt 02
N/A





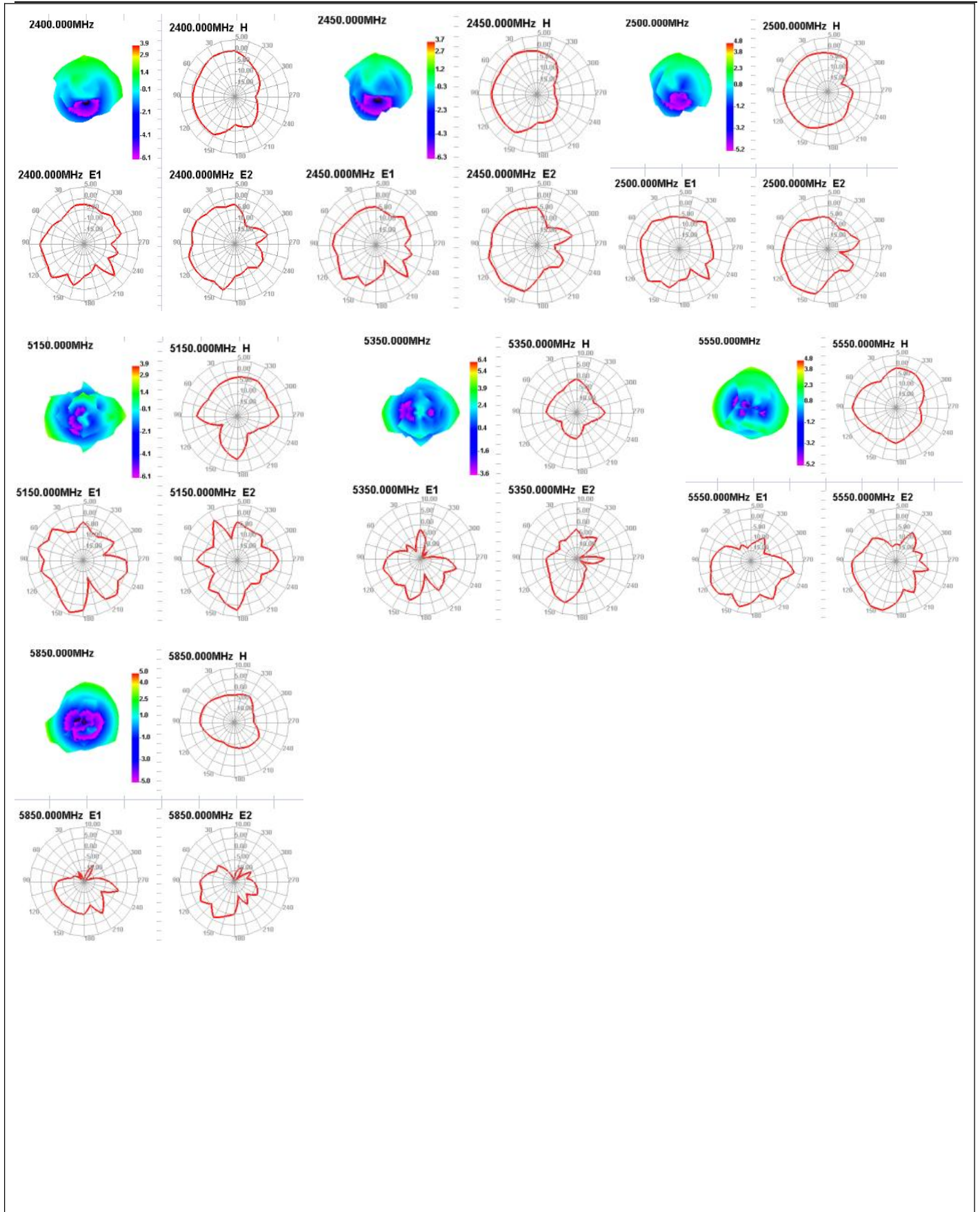
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3. Gain & Efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	56.61	3.9
2450	49.03	3.75
2500	59.12	4.81
5150	50.62	3.86
5350	53.69	6.43
5550	53.38	4.83
5850	54.42	5.01



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Reliability Test Report

Test Date	2024. 03. 21	Sample Qty.	3	Inspector	Xu Yanfang	
Test Item	Requirement	testing equipment	Sample 1	Sample 2	Sample 3	PASS/NG
High temperature storage	The test was carried out after 24H exposure at +85°C and 2H recovery	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature storage	The test was carried out after 24H exposure at -40°C and 2H recovery	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature work	At +60°C for 24H	Constant temperature and humidity box	OK	OK	OK	Pass
Work in low temperature	At -20°C under the condition of power work for 24H	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	The pH value was 6.5 ~ 7.2, and the temperature of the experimental chamber was (35±2)°C <input type="checkbox"/> 24H <input checked="" type="checkbox"/> 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and drawing force	1. 13 线径 ≥10N 0. 81 线径 ≥8N RG174 ≥60N RG178 ≥50N	Push pull meter	≥10N	≥10N	≥10N	Pass
Conclusion						Pass
Inspector & Date	Xu Yanfang 2024. 03. 21		Approval & Date			



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ROHS certificate of the product

Certificate

Certificate Number: UNIB23083106HC-01



Product: 5G/4G/WIFI/GPS/BT antenna

Applicant: ShenZhen ShunDaCheng Technology Co., Ltd.
4th Floor, Building B5, Xinfu Industrial Zone, Fuyong Chongqing Road, Baoan District, Shenzhen

Manufacturer: N/A

Model No.: N/A

Trade Name: N/A

Test Methods: IEC 62321-2:2021, IEC 62321-3-1:2013, IEC 62321-4:2013 +A1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

The laboratory tested the product provided by the applicant according to the above test methods. According to the test results, the product conforms to RoHS Directive [(2011/65/EU and Amendment (EU) 2015/863)] issued by the European Commission. It is possible to use CE marking to demonstrate the compliance with RoHS Directive.

The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production. It is only valid in connection with the test report number: UNIB23083106HR-01.

Note: According to the requirements of the applicant for testing, details are shown in the test report.

RoHS

Sep. 06, 2023
Issue Date

Hoffer Lau
Hoffer Lau



Shenzhen United Testing Technology Co., Ltd.

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Certificate of Compliance