GUANGDONG SLEING COMM-TECH CO.,LTD

SPECIFICATION APPROVAL SHEET

客　　户：
CUSTOMER

CUS PART NO　　REV X1

SPECIFICATION 2.4~2.5/5.15~7.15GHz WIFI AUX Antenna L=505mm(Ø0.81+MHF)　weight

SUP PART NO SLEingB250220505

DATE 2024.11.26

SUP APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED
JONGREI	HZH	LSY	XIANG

CUS APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED

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GUANGDONG SLEING COMM-TECH CO.,LTD

MODIFICATION RECORD SHEET

REV.	Modification date	Summary of modification content	Signature	Approval
X1	2024.11.26	First Issue	Jerry	Jongrei

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承认书项目表（Spec Item ）

NO.	Project	Remark	Page
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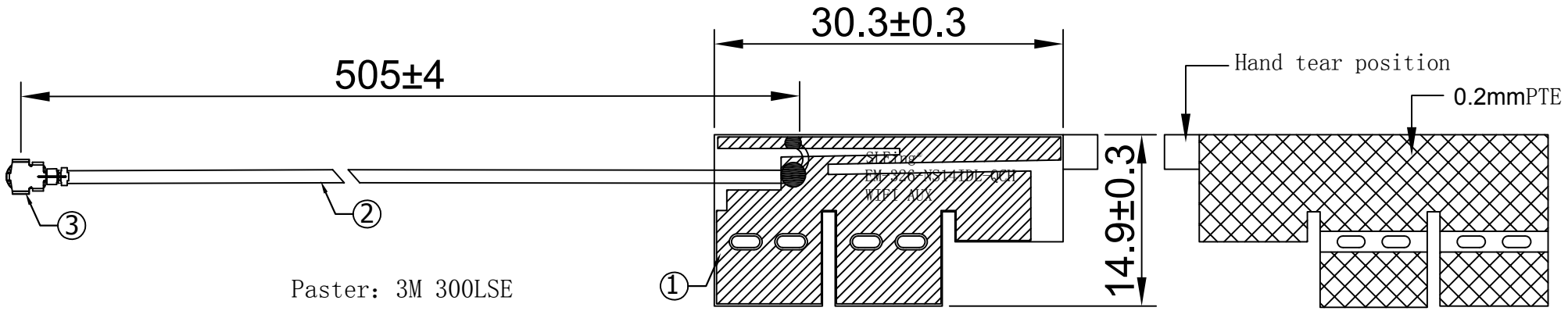
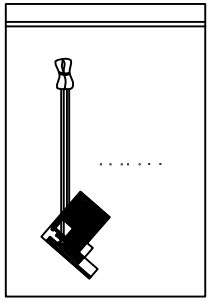
Give clear indication of:
1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
3. All materials shall be confirmed by the customer. Any material/process/changes that may affect product quality and environmental quality must be re-sent to the customer for confirmation before import.
4. SGS report is valid for one year.
5. According to the contents attached to the actual acknowledgement, check the check form: "Yes" is provided, "no" is provided according to customer requirements.

REV.	CONTENT	DATE
X1	First Sample	2024.11.26

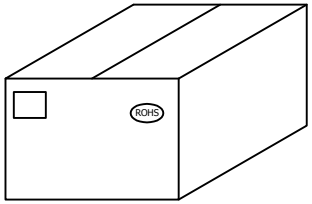


Paster: 3M 300LSE

Specification:
Frequency Rang:2.4~2.5/5.15~7.15GHz
Return Loss:-10dB or less
VSWR:1.92 Max



50pcs/Bundle
Packing:100pcs/bag



The outer box must be attached with 1 ROHS label and 1 material label

NO	PART NAME	DESCRIPTION	REMARK	Q'TY
3	Connector	MHF Plug for Φ0.81 Cable		1
2	Cable	Φ0.81mm Coaxial Cable White,50Ω		1
1	FPCB	FPCB,L30.3*W14.9*T0.4mm,Color:Black	300LSE Adhesive	1

SLEing®
GUANGDONG SLEING COMM-TECH CO.,LTD

UNIT:mm
SHEET: 1/1
SCALE: 1/1

TOLERANCE UNLESS OTHERWISE SPECIFIED
ANGLES ±0.5°
0.XX ±0.05
X. ±0.3
XX. ±0.5
XXX. ±2.0

CUSTOMER	
PART NO	
TITLE	WIFI AUX ANTENNA
S.L P/NO	SLEingB250220505

SIZE	DRAWED	CHECKED	APPROVED
A4			

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Test Reports

Electrical Properties	
Frequency	2.4~2.5　5.15~7.15GHz
Impedance	50 0hm Nominal
V.S.W.R	≤1.92
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	2±0.5 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	FPCB
Cable Type	Φ0.81mm White
Operating Temp	-40℃-+85℃
Storage Temp.	-5-+30℃

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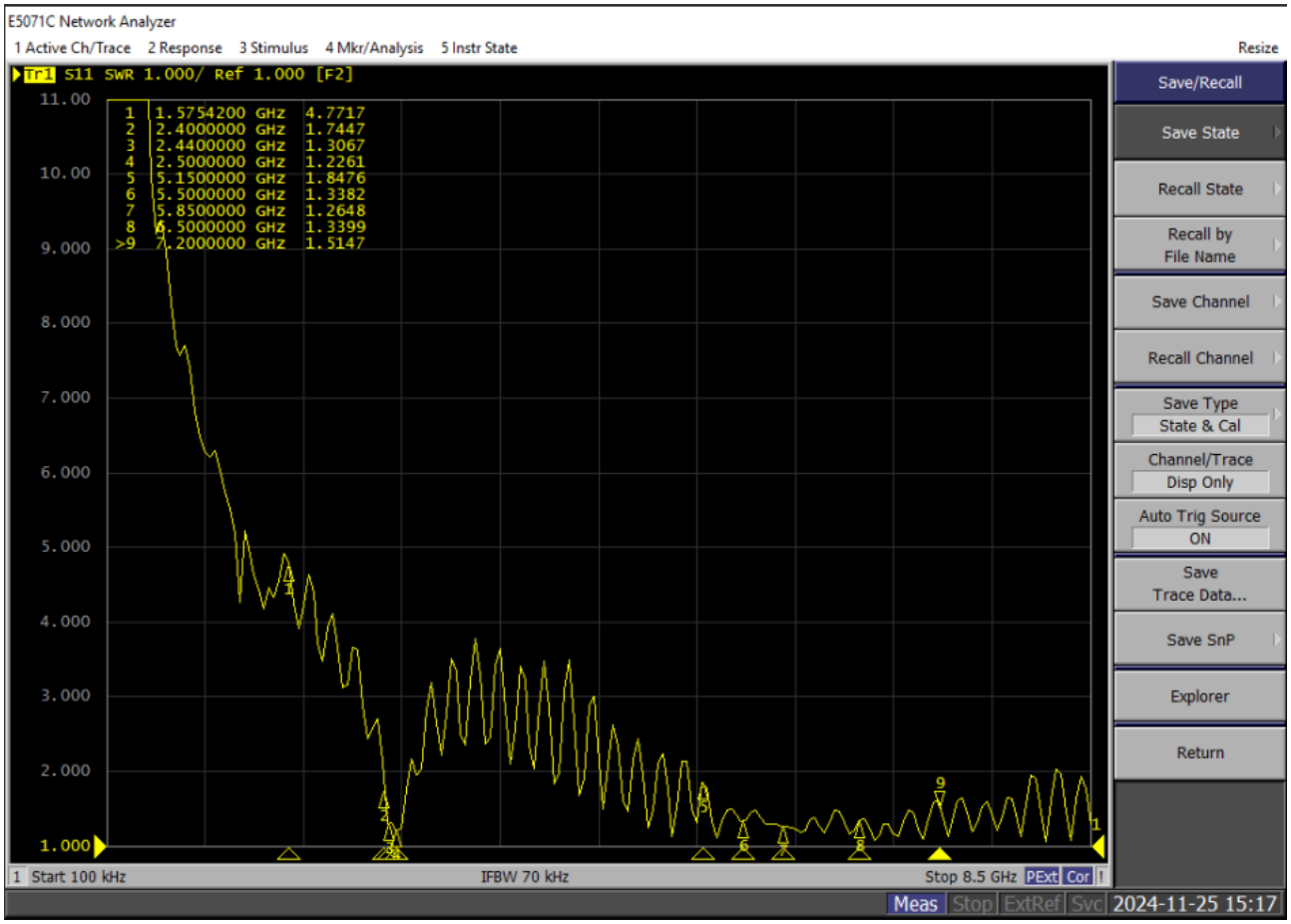
S Parameter Test

Agilent E5071C Network Analyzer	
WIFI Antenna	



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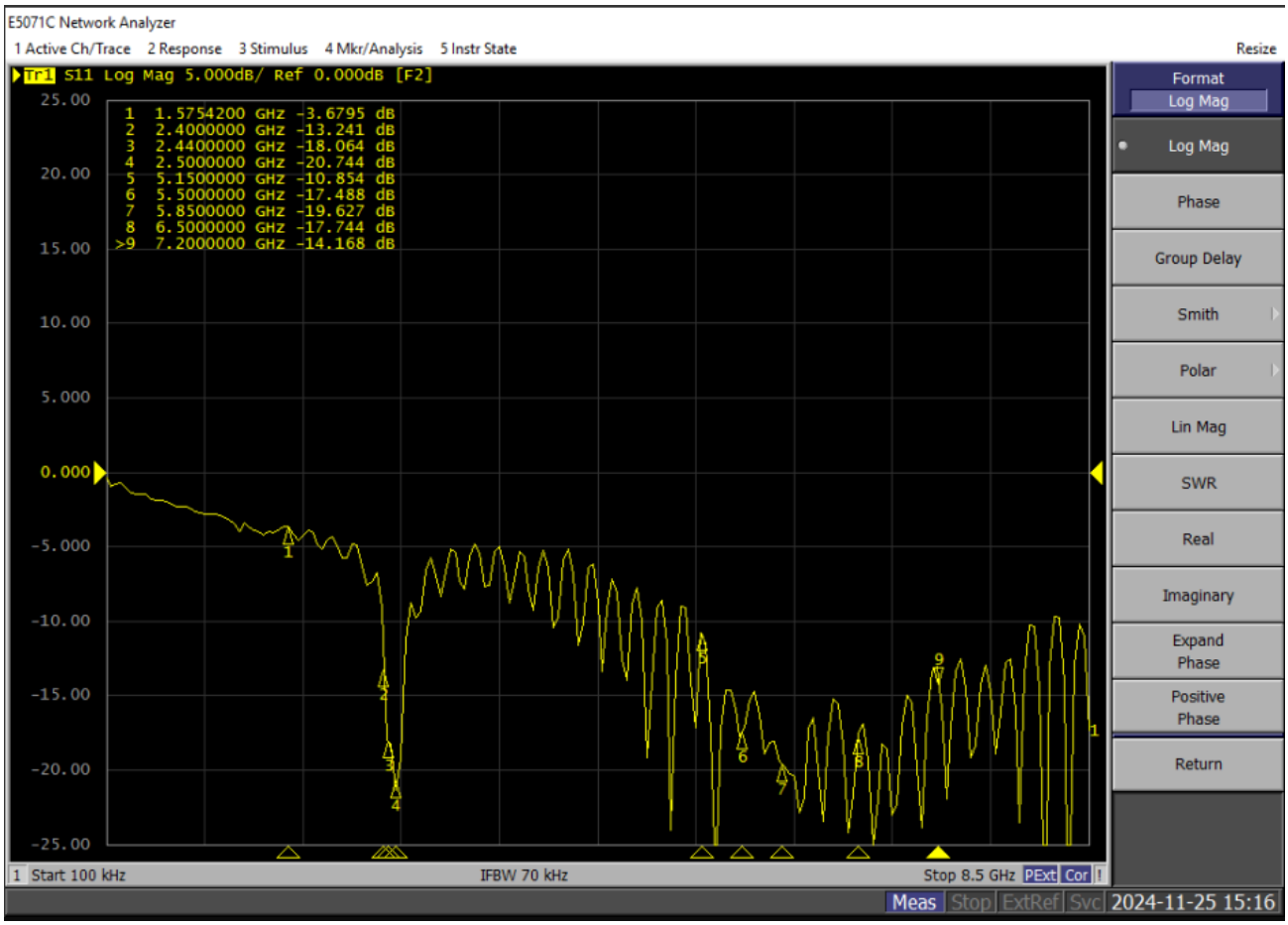
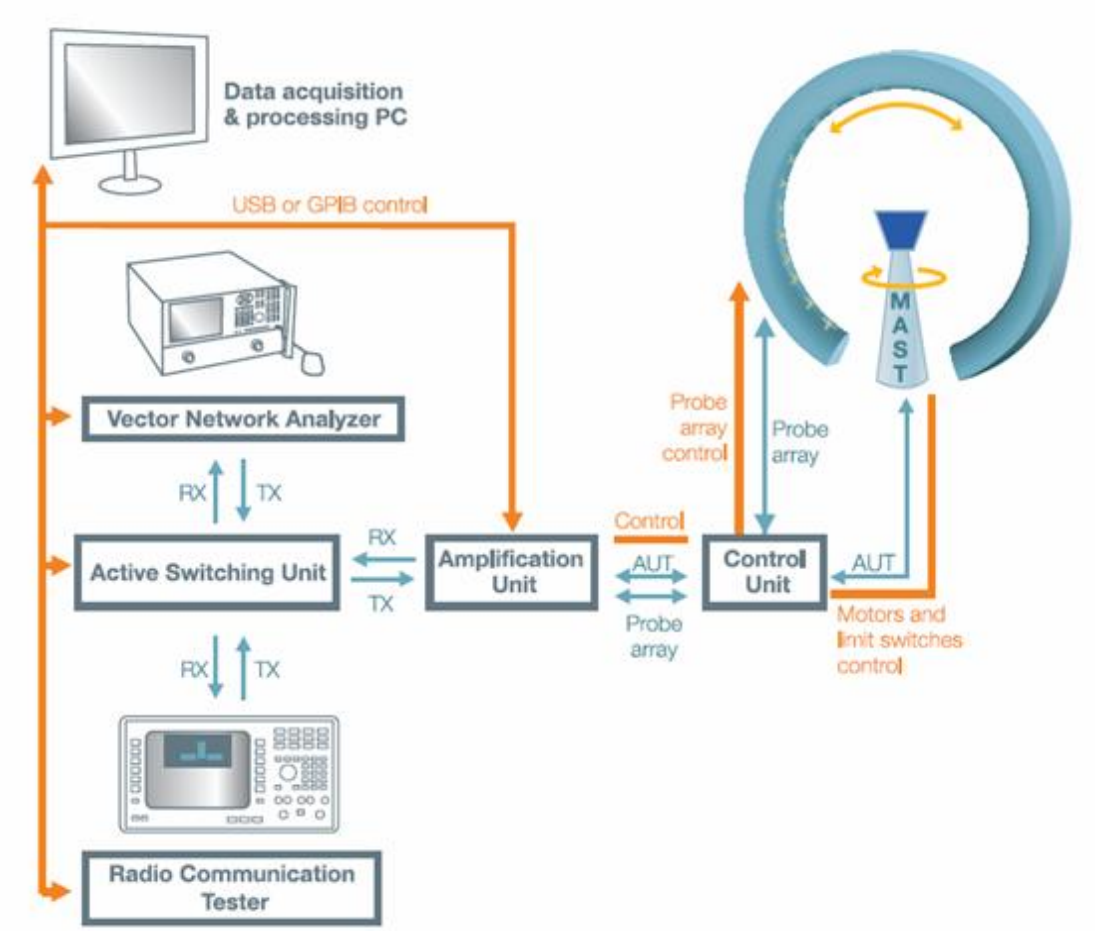
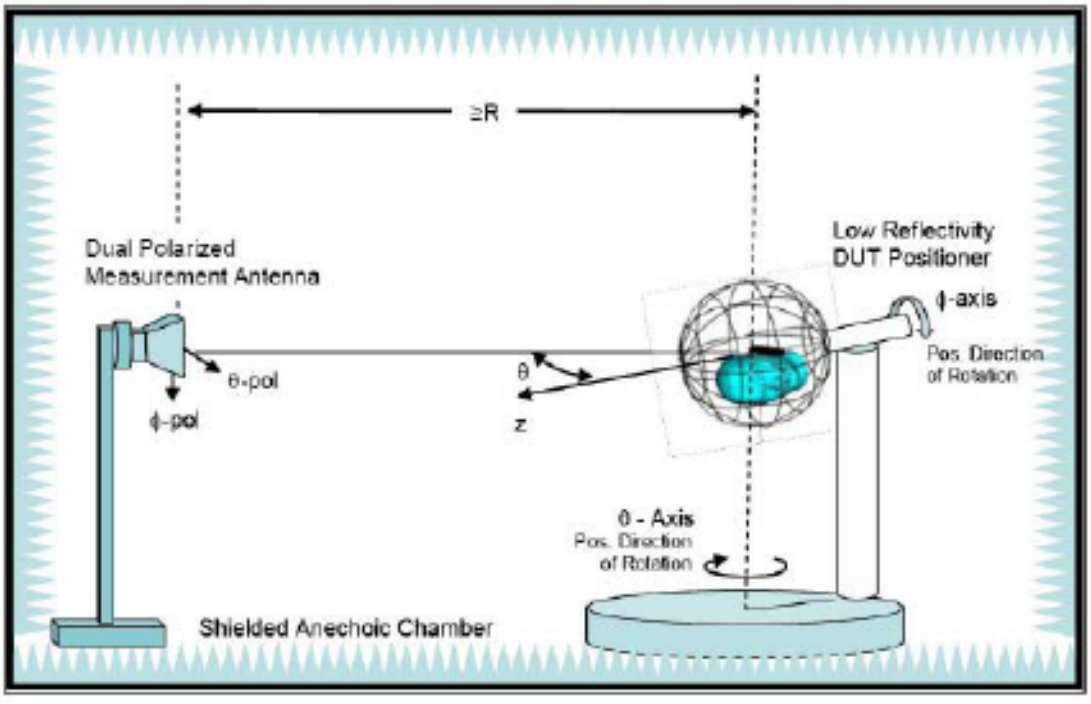
S Parameter Test

Agilent E5071C Network Analyzer	
WIFI Antenna	



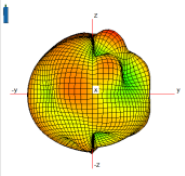
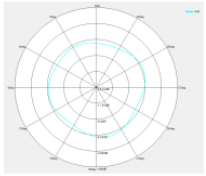
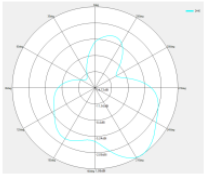
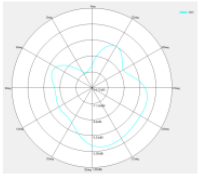
Test Setup

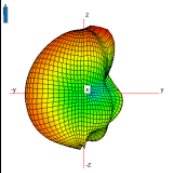
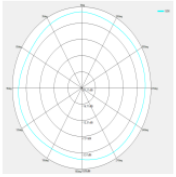
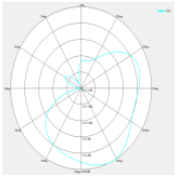
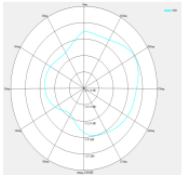

Data acquisition
& processing PC
USB or GPIB control
Vector Network Analyzer
RX
TX
Active Switching Unit
RX
TX
Amplification Unit
Control
AUT
Probe array
Control Unit
AUT
Probe array control
Probe array
MAST
Motors and limit switches control
RX
TX
Radio Communication Tester


≥R
Dual Polarized
Measurement Antenna
θ-pol
ϕ-pol
θ
z
Low Reflectivity
DUT Positioner
ϕ-axis
Pos. Direction
of Rotation
θ - Axis
Pos. Direction
of Rotation
Shielded Anechoic Chamber

Test Efficiency

EM-326-NS14IDL-QCH WIFI-AUX天线无源效率测试报告												
2.4G WiFi	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
	Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
	Gain (dBi)	0.03	0.35	0.43	0.71	0.92	0.88	0.78	0.75	0.57	0.49	0.55
	Efficiency (%)	34.47	35.53	36.45	35.14	36.73	37.58	38.13	38.95	39.14	39.28	39.57
5G WiFi	Frequency ID	1	2	3	4	5	6	7	8	9	10	11
	Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0
	Gain (dBi)	0.21	0.52	0.79	0.73	0.61	0.34	0.74	0.78	0.58	0.07	0.63
	Efficiency (%)	27.23	27.44	29.15	29.25	29.85	27.71	29.29	29.84	28.53	29.14	27.85
	Frequency ID	12	13	14	15	16	17	18	19	20	21	22
	Frequency (MHz)	5700.0	5750.0	5800.0	5850.0							
	Gain (dBi)	0.22	0.24	0.35	0.63							
	Efficiency (%)	29.38	26.46	26.7	27.24							

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OTA

Bandwidth	Free Space Requirements		Channal	Testing Results		Gap	
	TRP	TIS		TRP	TIS (LCD ON)	TRP	TIS (LCD ON)
11b 11Mbps	10	-80	1	11.0	-81.6	1.0	1.6
	10	-80	7	11.2	-81.2	1.2	1.2
	10	-80	13	11.5	-81.3	1.5	1.3
	10.0	-80.0	Avg	11.2	-81.3	1.2	1.3
11a 6Mbps	9	-86	36	10.2	-87.0	1.2	1.0
	9	-86	100	12.6	-88.2	3.6	2.2
	9	-86	157	12.6	-88.0	3.6	2.0
	9.0	-86.0	Avg	11.8	-87.7	2.8	1.7