SLEing® GUANGDONG SLEING COMM-TECH CO.,LTD

SPECIFICATION APPROVAL SHEET

CUSTOMER			
CUS PART NO		REV	X1
SPECIFICATION	2.4-2.5GHz BT Antenna L=43mm(Ø0.81+MHF)	weight	
SUP PART NO	SLEingA248970045		
DATE	2025.03.31		

SUP APPROVED

APPROVED	Structure audit	RF CHECKED	QA CHECKED	DESIGNED

CUS APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED

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GUANGDONG SLEING COMM-TECH CO.,LTD

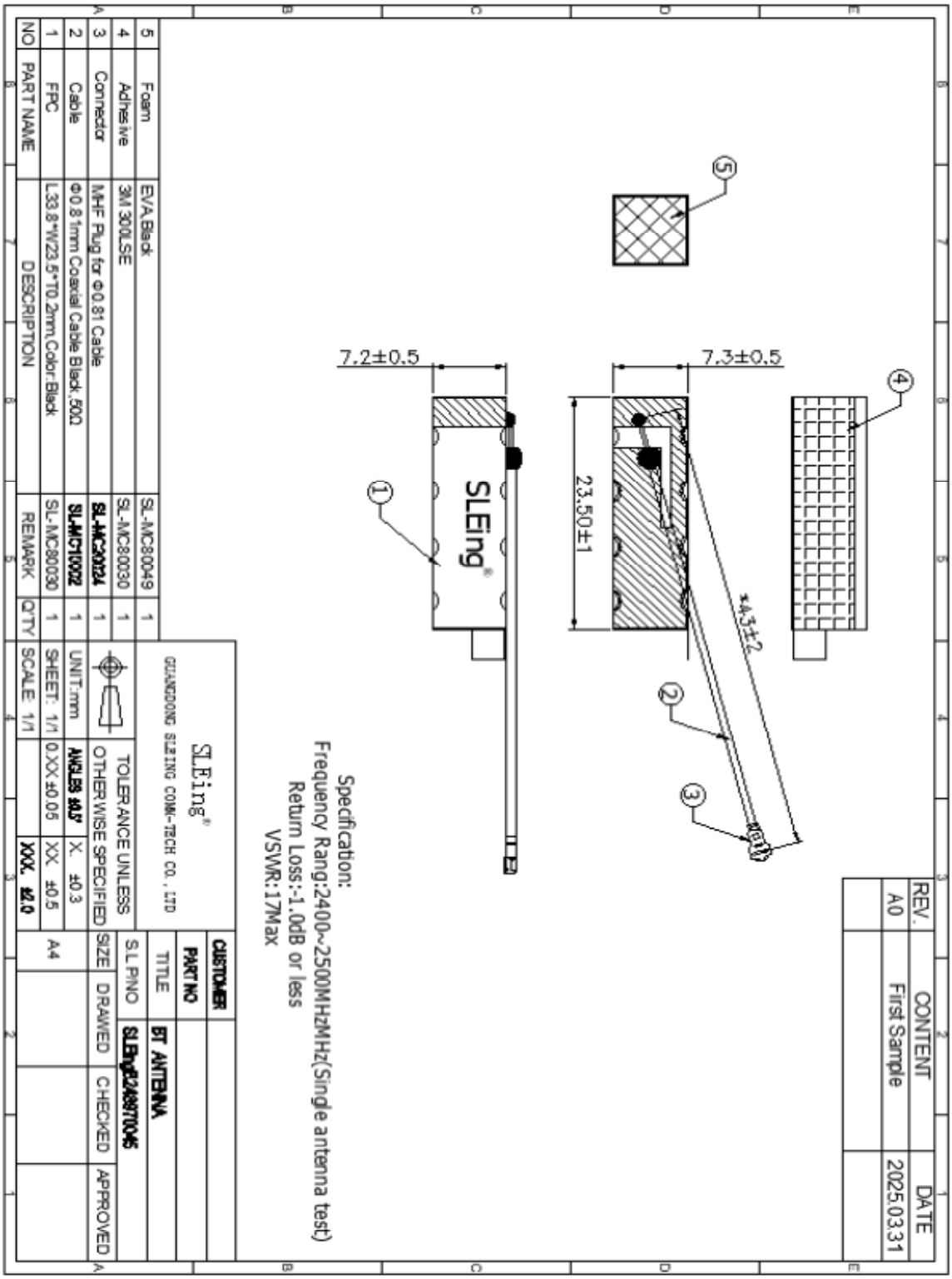
MODIFICATION RECORD SHEET

REV.	Modification date	Summary of modification content	Signature	Approval
X1	2025.03.31	First Issue	Jerry	Jongrei

Spec Item

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.

Drawing:


REV.
A0
CONTENT
First Sample
DATE
2025.03.31
7.2±0.5
7.3±0.5
23.50±1
43±2
SLEing
Specification:
Frequency Rang:2400~2500MHzMHz(Single antenna test)
Return Loss:-1.0dB or less
VSWR:1.7Max
SLEing
GUANGDONG SLEING COMM-TECH CO.,LTD
CUSTOMER
PART NO
TITLE
BT ANTENNA
SL P/NO
SLEngf2408170045
SIZE
A4
DRAWED
CHECKED
APPROVED
TOLERANCE UNLESS OTHERWISE SPECIFIED
ANGLES ±0.5°
X. ±0.3
XX. ±0.5
XXX. ±0.2
0.XX ±0.05
UNIT:mm
SHEET: 1/1
SCALE: 1/1
NO
PART NAME
DESCRIPTION
REMARK
Q'TY
5 Foam EVA,Black SL-MC80049 1
4 Adhesive 3M 300LSE SL-MC80030 1
3 Connector MHF Plug for Φ0.81 Cable SL-MC20124 1
2 Cable Φ0.81mm Coaxial Cable Black,50Ω SL-MC10022
1 FPC L33.8*W23.5*T0.2mm,Color Black SL-MC80030 1

Test Reports

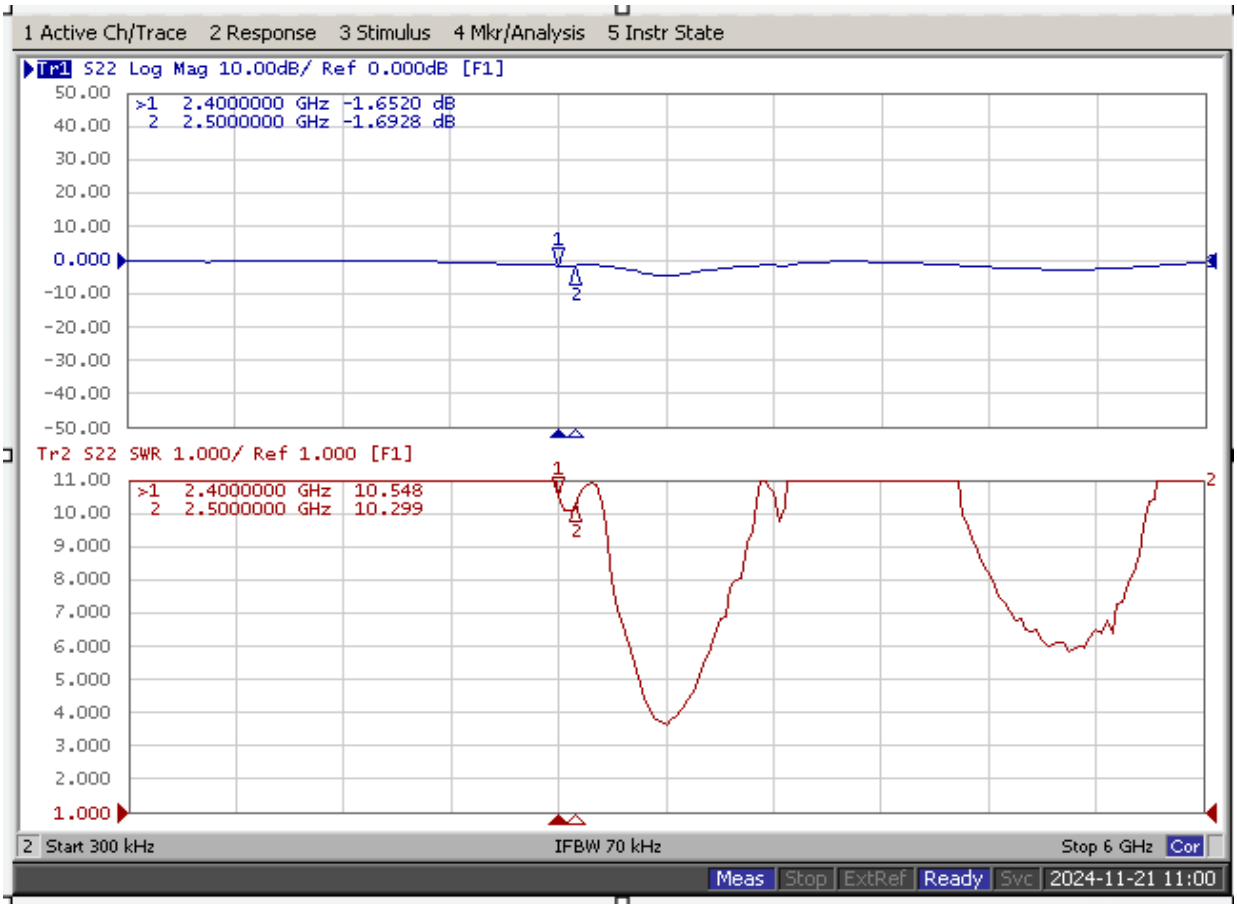
Electrical Properties	
Frequency	2400-2500 MHz（Single antenna test）
Impedance	50 Ohm Nominal
V.S.W.R	≤17
Return Loss	-1.0dB Max
Radiation	Omni-directional
Gain (Peak)	-1±1 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	FPC
Cable Type	Φ0.81mm Black
Operating Temp	-40℃-85℃
Storage Temp.	-40℃-85℃

Antenna assembly diagram

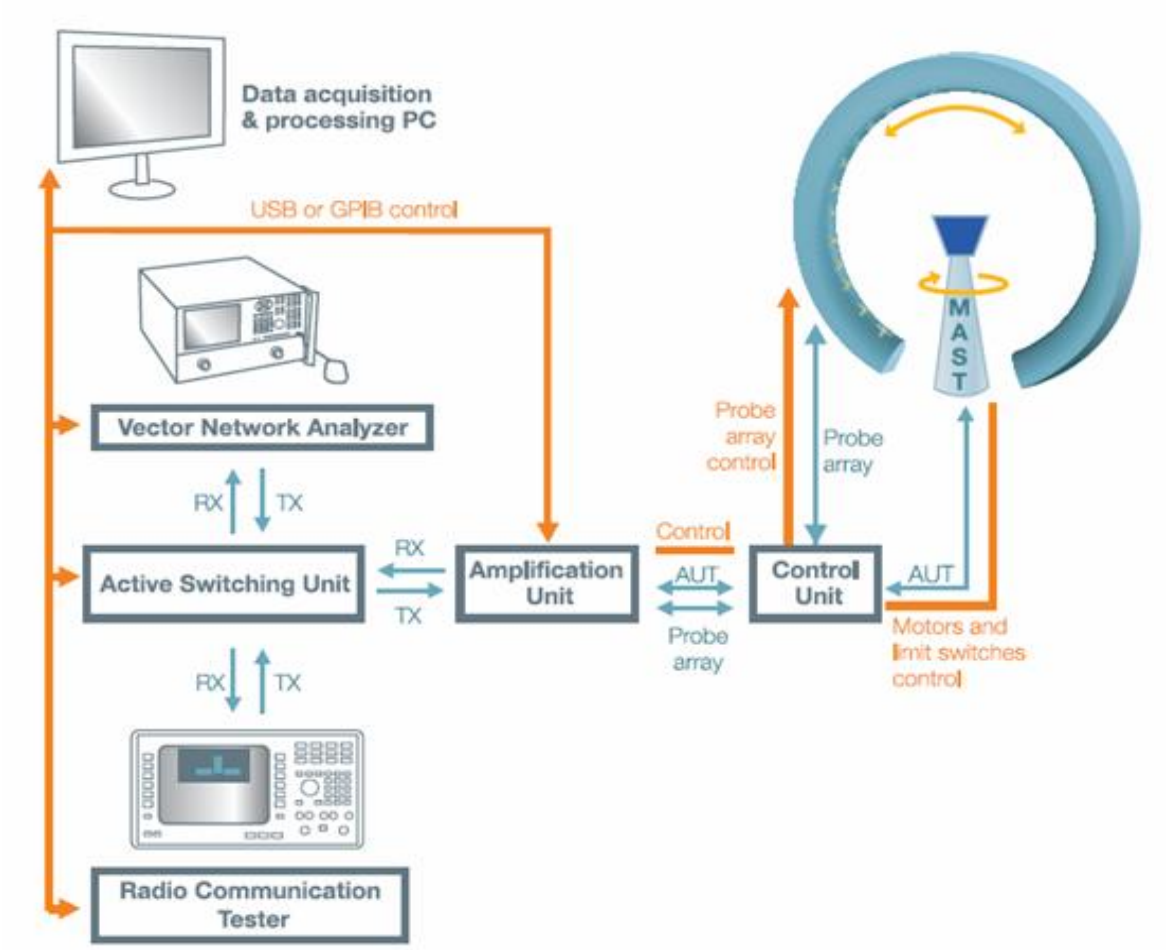
Device	
Antenna	

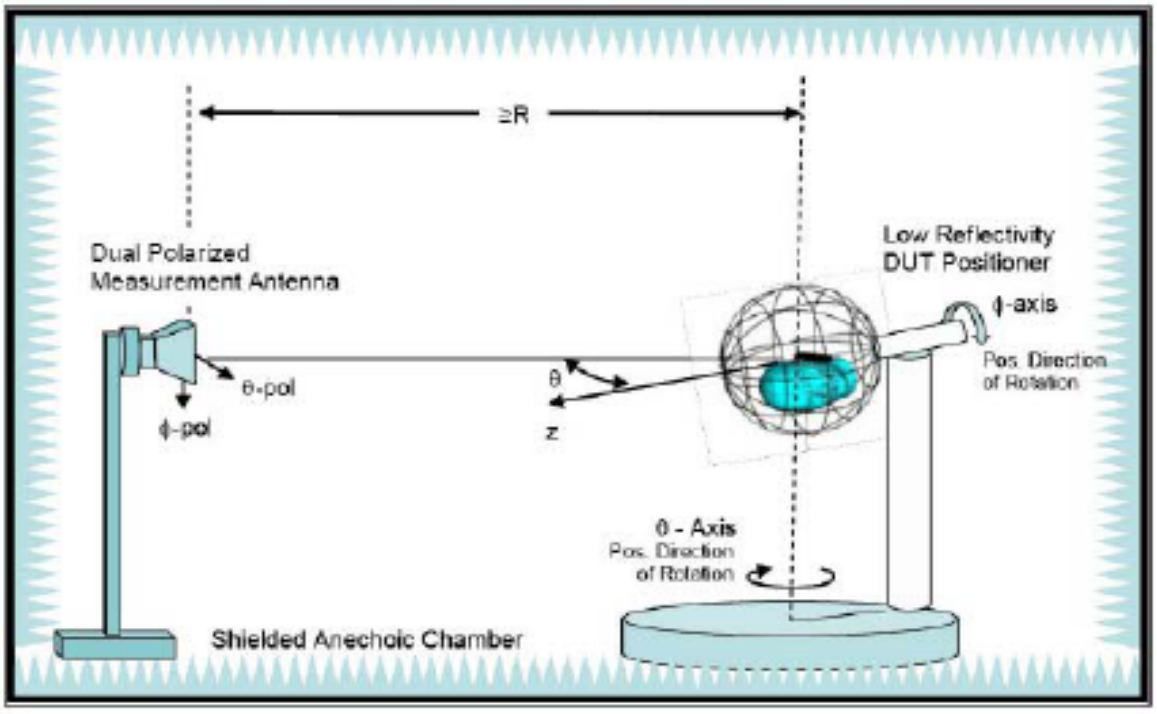
S Parameter Test

Agilent E5071C Network Analyzer	
RF Antenna(VSWR/Return Loss)	



Test Setup

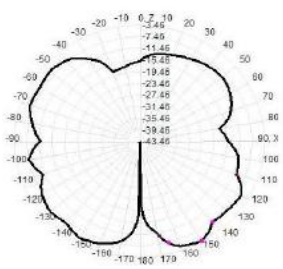
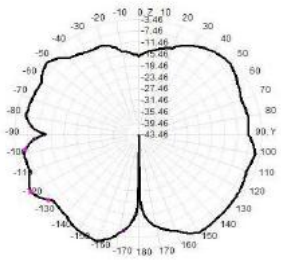
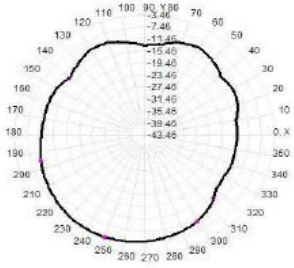
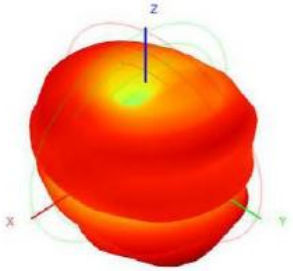
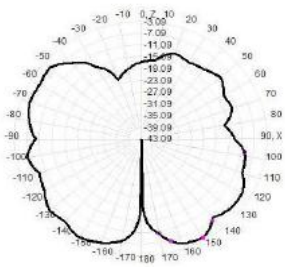
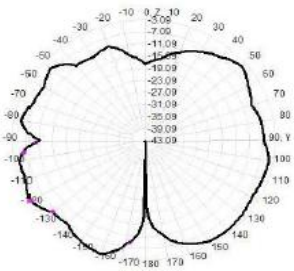
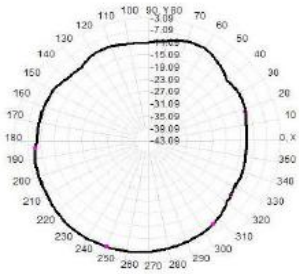
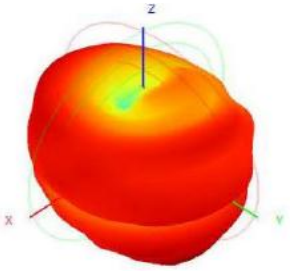

Data acquisition
& processing PC
USB or GPIB control
Vector Network Analyzer
RX
TX
Active Switching Unit
RX
TX
Amplification Unit
Control
AUT
Probe array
Control Unit
Probe array control
Probe array
AUT
MAST
Motors and limit switches control
RX
TX
Radio Communication Tester


≥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

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	-1.67	-1.89	-1.75	-1.48	-1.61	-1.70	-1.85	-1.56	-1.27	-0.83	-0.52
Efficiency (%)	18.71	18.09	18.57	19.52	19.60	20.14	21.02	21.68	21.93	22.96	23.06

Pattern

	XoZ	YoZ	XoY	3D
2400				
2450				
2500