



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

承认书

SPECIFICATION APPROVAL SHEET

客 户 :

CUSTOMER

客 户 料 号 :

CUS PART NO

版次:

REV

X2

品 名 / 规格 :

SPECIFICATION

2.4-2.5/5.15-5.85GHz

WIFI AUX&2.4G Antenna L=400mm(Ø1.13+SMA)

单重:

weight

供 方 料 号 :

SUP PART NO

SLEingB221360400

日 期 :

DATE

2026.06.04

厂 商 核 准 :

SUP APPROVED



核准 APPROVED	结构审核 Structure audit	RF审核 RF CHECKED	品保审核 QA CHECKED	承办 DESIGNED
13502	13502	13502	13502	13502

客 户 核 准 :

CUS APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

广东省东莞市松山湖园区工业东路24号6栋402室

Room 402, Building 6, No. 24, Industrial East Road, Songshan Lake Park,
Dongguan City, Guangdong Province

Tel: +86-076989208968

Fax: +86-0769-89208969

www.sleing.com

正本由承办单位保存



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

变更记录

MODIFICATION RECORD SHEET

版本 (REV.)	更改日期 (Modification date)	更改内容描述 (Summary of modification content)	拟制 (Signature)	批准 (Approval)
X1	2026.05.26	初版发行 (First Issue)	胡赵海 (Jerry)	朱正锐 (Jongrei)
X2	2026.06.04	Cable线出线方式变更，性能报告变更	胡赵海 (Jerry)	朱正锐 (Jongrei)



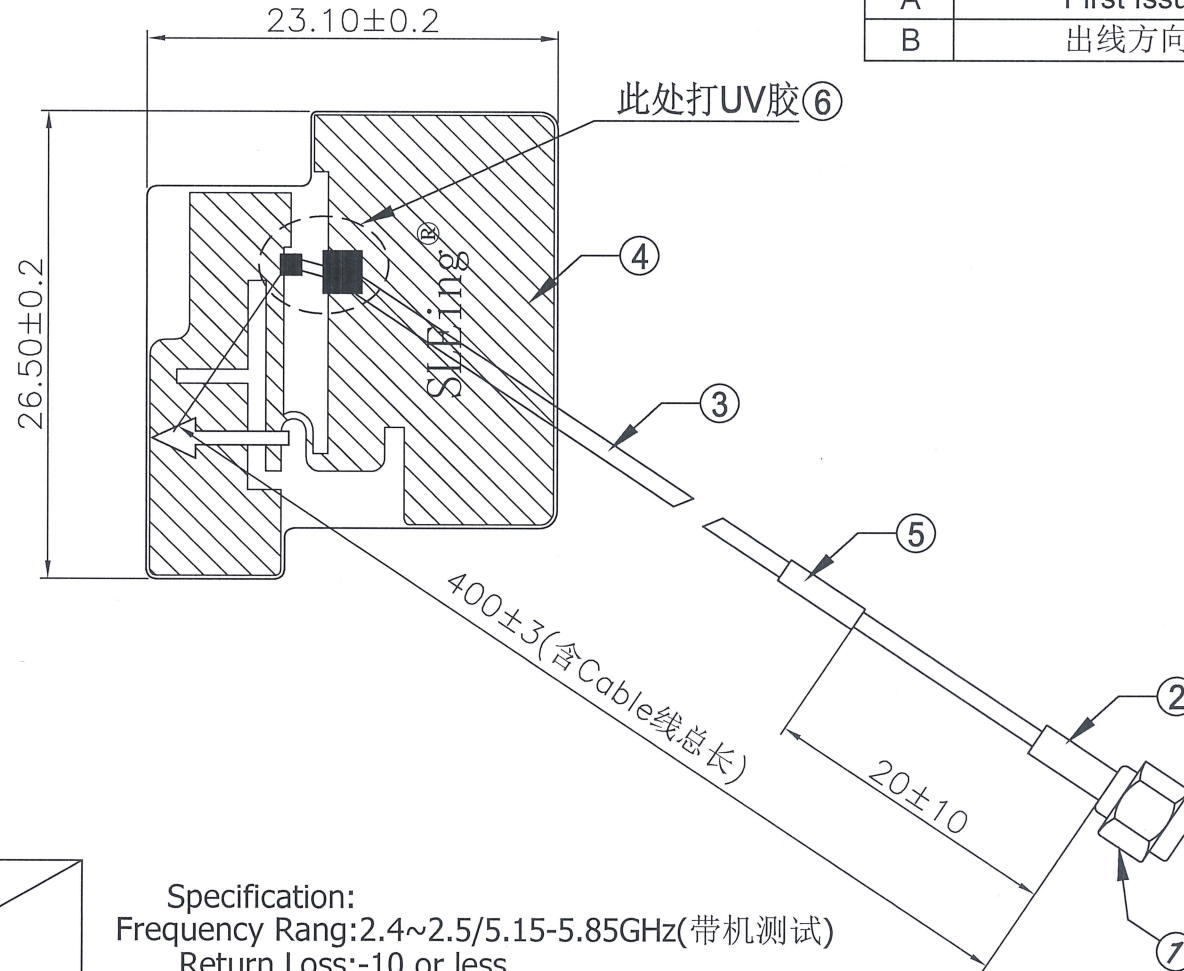
承认书项目表 (Spec Item)

序号 (NO.)	项目 (Project)	备注 (Remark)	页码 (Page)
1	承认书封面 (Spec Cover)		1
2	变更记录 (MODIFICATION RECORD SHEET)		2
3	承认书项目表 (Spec Item)		3
4	工程成品图 (Drawing)		4
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11	产品包装规范 (Product packaging specification)		12

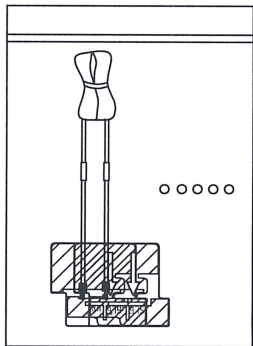
Give clear indication of:

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.

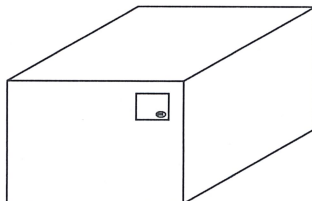
REV.	CONTENT	DATE
A	First Issue	2026.05.26
B	出线方向变更	2026.06.04



Specification:
Frequency Rang:2.4~2.5/5.15-5.85GHz(带机测试)
Return Loss:-10 or less
VSWR:1.92 Max



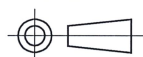
25pcs/Bundle
Packing:50pcs/bag



外箱须贴ROHS标签与物料标签各1PCS

6	UV胶	BEACON UV9056胶 黑色		
5	H.S Tube	Heat Shrink Tube,Red		1
4	FPC	L26.5*W23.1*T0.2mm,Color:Black		1
3	Cable	Ø1.13,Color:Black,50Ω(超低损)		1
2	Tube	Heat Shrink Tube,Black		1
1	Connector	SMA Straight Plug/Standard(公头公针)		1
NO	PART NAME	DESCRIPTION	REMARK	Q'TY

SLEing® 森领
广东森领通信科技有限公司
GUANGDONG SLEING COMM-TECH CO.,LTD



TOLERANCE UNLESS OTHERWISE SPECIFIED

UNIT:mm

ANGLES ±0.5°

SHEET: 1/1

X.XX ±0.2

SCALE: 1/1

X.X ±0.5

CUSTOMER

PART NO

TITLE

WIFI ANTENNA

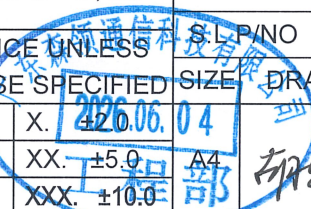
SIZE

SLEingB221360400

DRAWN

CHECKED

APPROVED



2026.06.04

XXX ±10.0

2026.06.04



广东森领通信科技有限公司

GUANGDONG SLEING COMM-TECH CO., LTD

电性测试报告

Test Reports

Electrical Properties	
Frequency	2.4-2.5/5.15-5.85GHz(带机测试)
Impedance	50 Ohm Nominal
V.S.W.R	≤ 1.92
Return Loss	-10dB Max
Radiation	Omni-directional
Gain (Peak)	2.4G Antenna:3.98 dBi
	WIFI AUX Antenna:2.4G:3.94dBi/5.8G:1.96 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	SMA
Physical Properties	
Antenna Material	FPC
Cable Type	$\Phi 1.13\text{mm}$ Black
Operating Temp	-40℃-85℃
Storage Temp.	-40℃-85℃

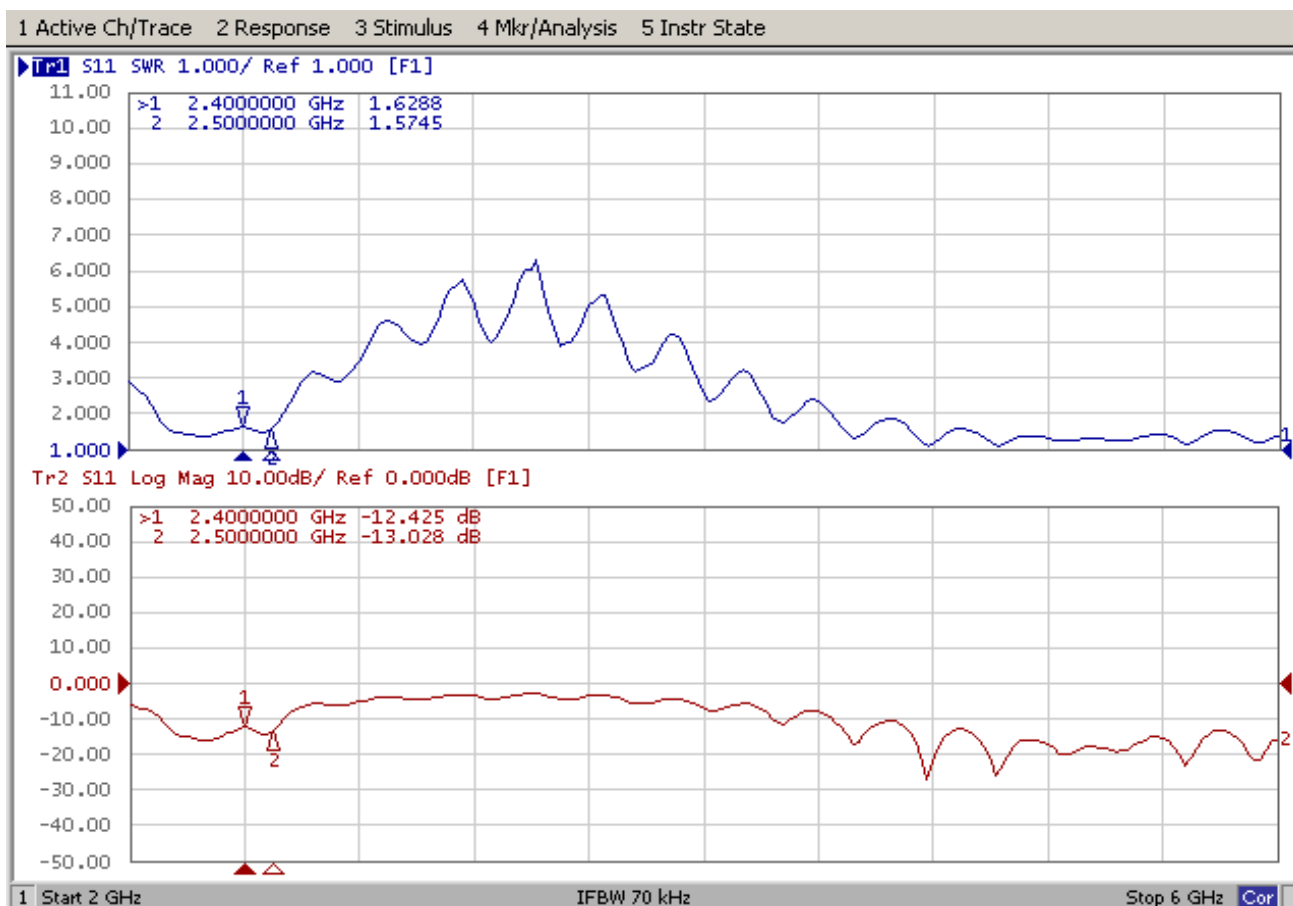
S参数测试

S Parameter Test

Agilent E5071C Network Analyzer



RF Antenna (Return Loss/VSWR) sbus-2.4G



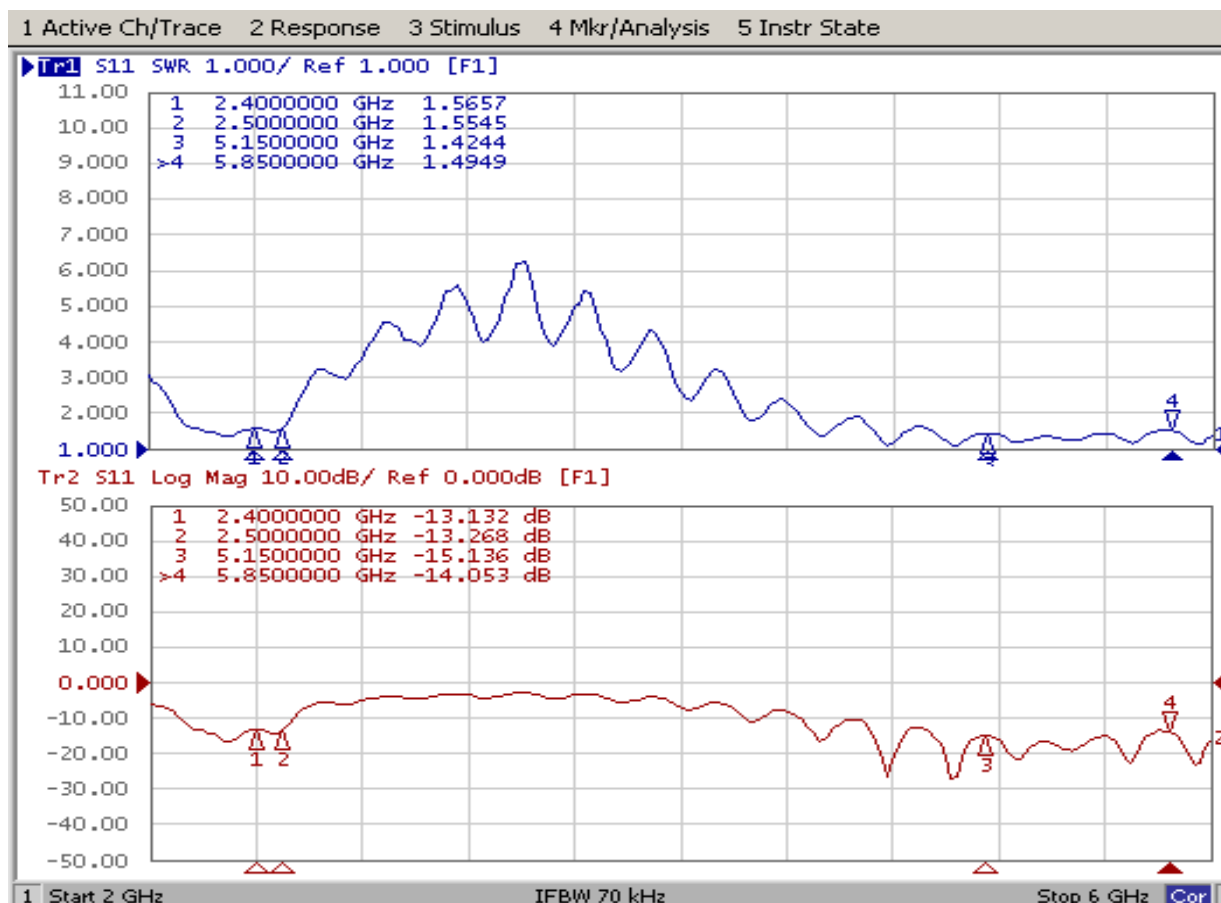
S参数测试

S Parameter Test

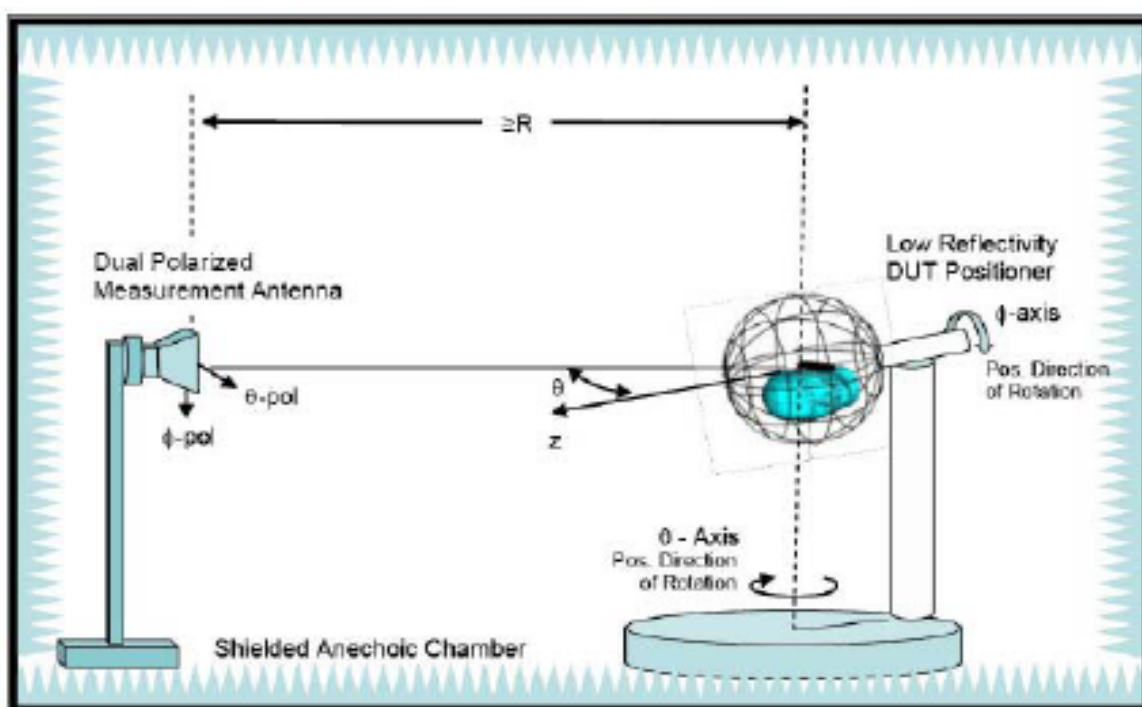
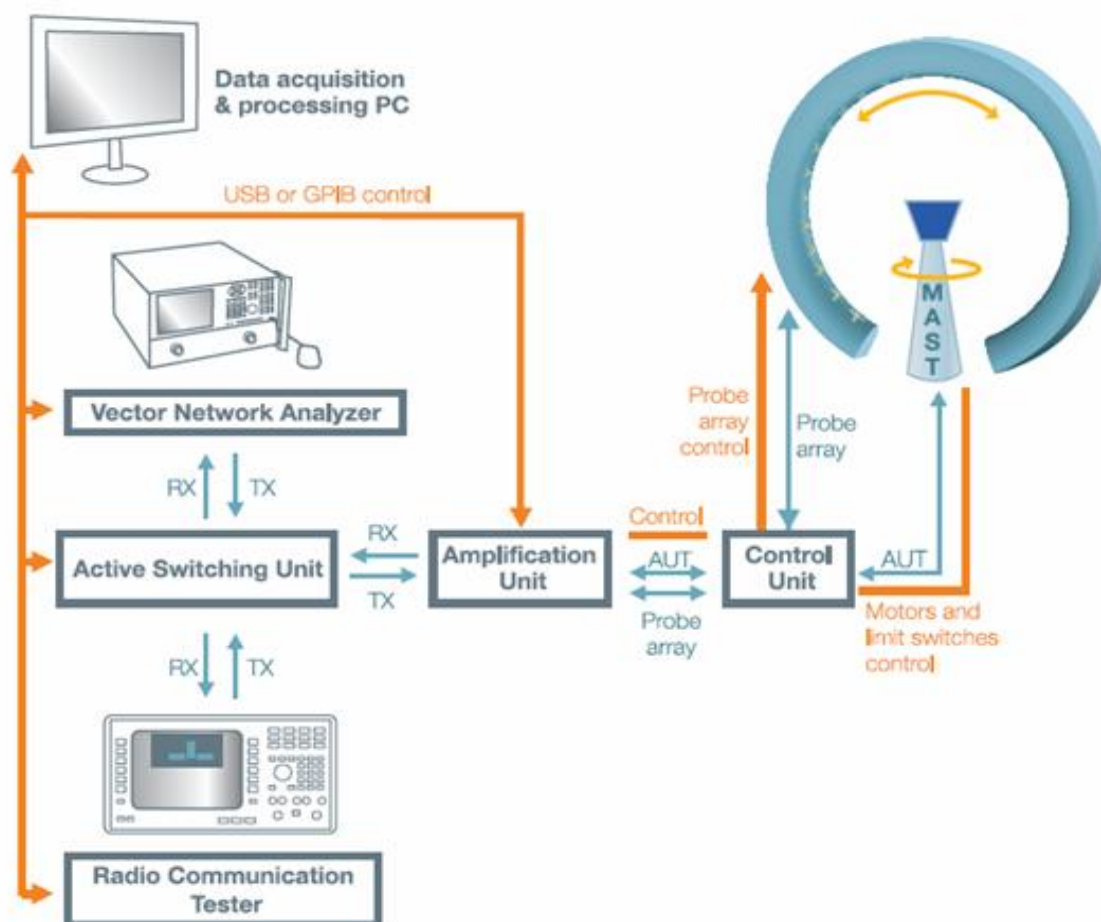
Agilent E5071C Network Analyzer



RF Antenna(Return Loss/VSWR) WIFI AUX



测试设备 Test Setup





测试效率 Test Efficiency

sbus-2. 4G:

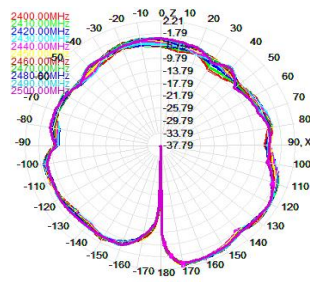
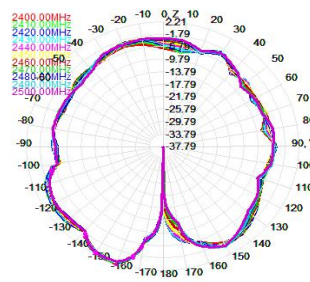
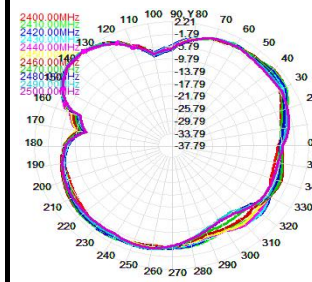
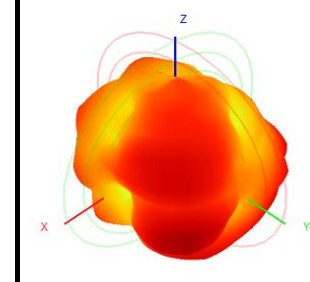
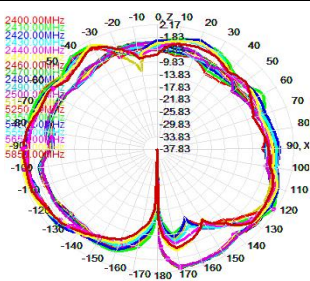
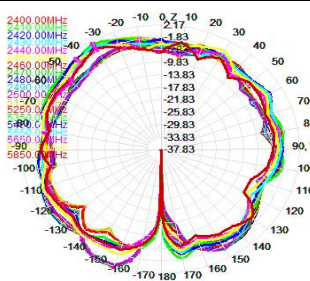
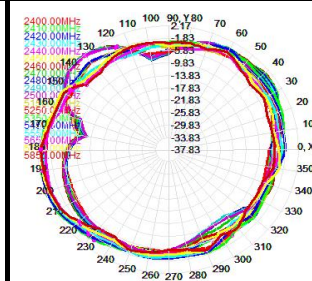
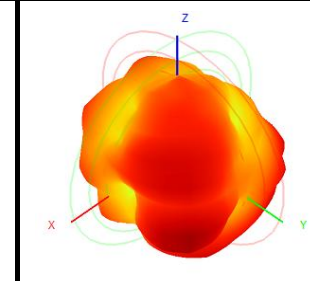
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	3.63	3.81	3.85	3.83	3.91	3.98	3.92	3.68	3.49	3.50	3.45
Efficiency (%)	45.76	47.35	47.32	46.51	46.41	46.85	46.91	46.15	45.68	46.70	45.42

WIFI AUX

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)	3.59	3.77	3.81	3.79	3.87	3.94	3.87	3.63	3.44	3.46	3.40
Efficiency (%)	45.40	46.97	46.94	46.11	45.98	46.39	46.45	45.69	45.21	46.22	44.95

Frequency ID	12	13	14	15	16	17	18	19
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Gain (dBi)	1.06	0.91	1.96	1.87	1.03	0.82	1.47	1.16
Efficiency (%)	50.99	50.33	59.39	53.79	48.29	42.83	49.40	42.43

方向图 Pattern

	XoZ	YoZ	XoY	3D
sbu s				
WIF I AUX				

测试功率灵敏度

Test TRP/ TIS

WIFI AUX

11b-11M

WLAN Whole Band TRP (dBm) **19.42**
WLAN Whole Band TIS (dBm) **-82.36**

		Channel No.	Freq. (MHz)	TRP (dBm)	TIS (dBm)
Phone Tx (Uplink Path)	1	1	--	18.70	--
	2	6	--	19.01	--
	3	11	--	20.37	--
	4	--	--	--	--
	5	--	--	--	--
Phone Rx (Downlink Path)	1	1	--	--	-82.28
	2	6	--	--	-82.06
	3	11	--	--	-82.70
	4	--	--	--	--
	5	--	--	--	--

11a-54M

WLAN Whole Band TRP (dBm) **15.89**
WLAN Whole Band TIS (dBm) **-71.46**

		Channel No.	Freq. (MHz)	TRP (dBm)	TIS (dBm)
Phone Tx (Uplink Path)	1	36	--	13.91	--
	2	149	--	15.14	--
	3	161	--	17.72	--
	4	--	--	--	--
	5	--	--	--	--
Phone Rx (Downlink Path)	1	36	--	--	-69.91
	2	149	--	--	-71.79
	3	161	--	--	-72.34
	4	--	--	--	--
	5	--	--	--	--

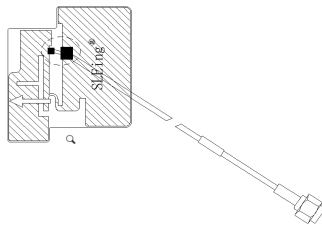
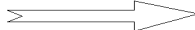
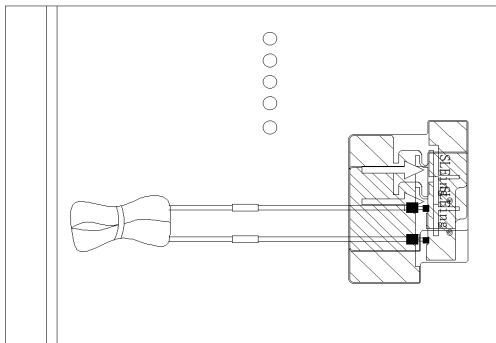
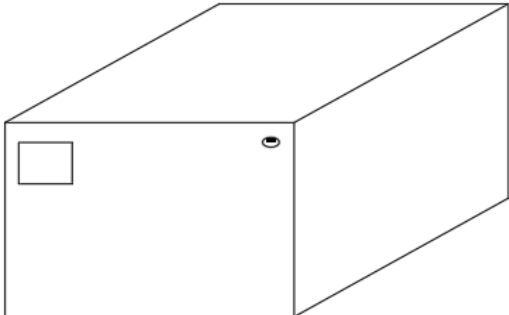
产品包装规范

Product packaging specification

日期/Date: 2026.06.04

page:

1of1

成品名称 Name of finished product	WIFI Antenna	客户 customer			
成品料号 Finished product number	SLEingB221360400	版本 REV.	X2		
 单PCS天线   (3) 装箱：以实际数量为准  (2) 25PCS一扎，2扎（50PCS）装一PE袋，PE袋上需标贴产品标签，以标示产品名称、规格、数量、日期并热封处理。 (4) 外箱均需贴产品标签，以标示产品名称、规格、数量、日期。 (5) 每批次产品均需附上“出厂检验报告”。 (6) 储存条件：温度：-5℃~+30℃，湿度：20%-70%，年限一年。					
承办 DESIGNED	胡赵海（Jreey）	审核 CHECKED	胡赵海（Jreey）	核准 APPROVED	朱正锐（Jongrei）