SLEing® 东莞市森岭智能科技有限公司
DONGGUAN SLEing INTEL-TECH CO.,LTD

承 认 书

SPECIFICATION APPROVAL SHEET

客 户：
CUSTOMER

客户料号：
CUS PART NO

版次:
REV X1

品名 / 规格：
SPECIFICATION 2.4~2.5/5.15~5.85GHz WIFI-1 Antenna L=135mm(Ø1.13+MHF)

单重:
weight

供方料号：
SUP PART NO SLEingB244860135

日 期：
DATE 2024.02.26

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
Tonyjm	HZU	TDM	LSY	xany

东莞市森岭智能科技有限公司 2024.02.26 工程部

客户核准：
CUS APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

东莞市森岭智能科技有限公司
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正本由承办单位保存

东莞市森岭智能科技有限公司

DONGGUAN SLEing INTEL-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	2024.02.26	初版发行（First Issue）	胡赵海（Jerry）	朱正锐(Jongrei)

东莞市森岭智能科技有限公司
DONGGUAN SLEing INTEL-TECH CO.,LTD

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
5	电性测试报告（Test Reports ）		5
6	天线组装图（Antenna assembly diagram）		6
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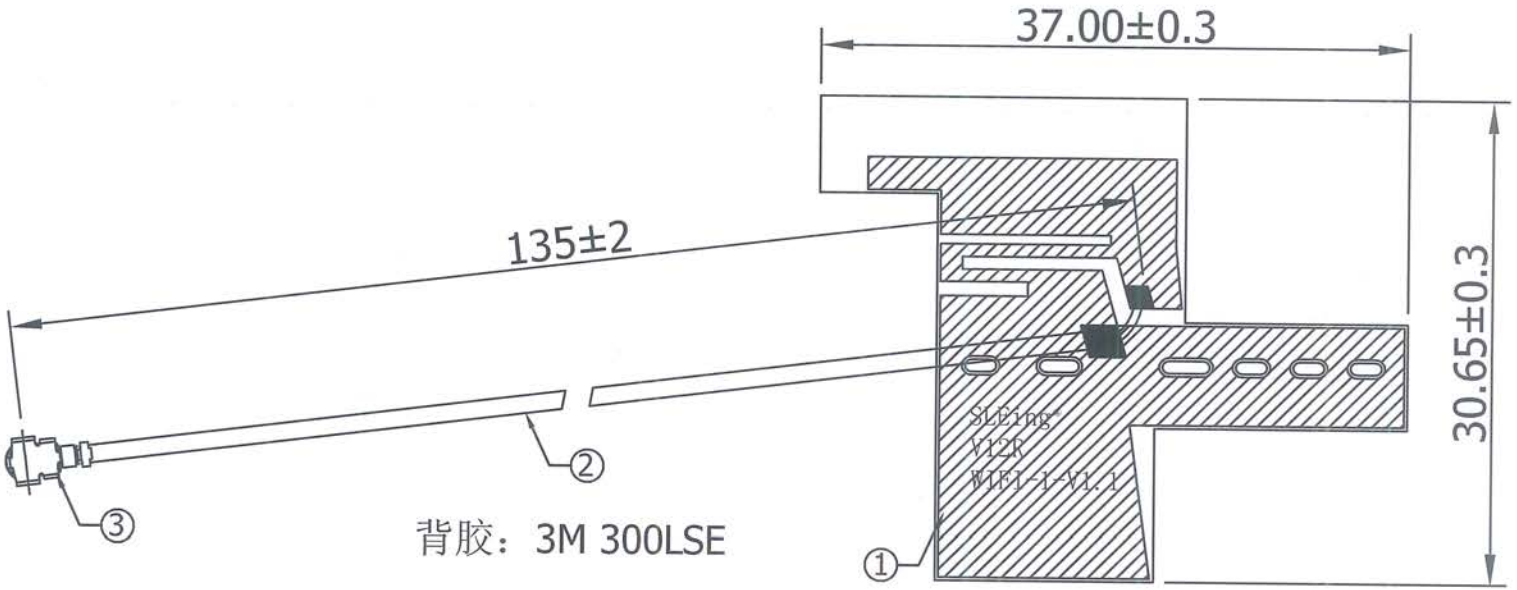
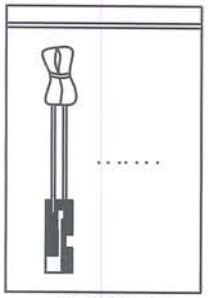
Give clear indication of:
1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
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.

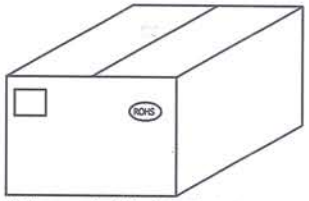
REV.	CONTENT	DATE
X1	First Sample	2024.02.26



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



50pcs/Bundle
Packing:100pcs/bag



外箱须贴ROHS标签与物料标签各1PCS

NO	PART NAME	DESCRIPTION	REMARK	Q'TY
3	Connector	MHF Plug for Φ1.13 Cable	第一代端子	1
2	Cable	Φ1.13mm Cable,Dark Grey,50Ω		1
1	FPCB	FPC,L37.0*W30.65*T0.1mm,Color:Black	300LSE Adhesive	1

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TOLERANCE UNLESS OTHERWISE SPECIFIED		
UNIT:mm	ANGLES ±0.5°	X. ±0.3
SHEET: 1/1	0.XX ±0.05	XX. ±0.5
SCALE: 1/1		XXX. ±2.0

CUSTOMER	
PART NO	
TITLE	WIFI-1 ANTENNA
S.L P/NO	SLEingB244860135

SIZE	DRAWED	CHECKED	APPROVED
A4	Xieny	工程部 2024.02.26	Tonyu

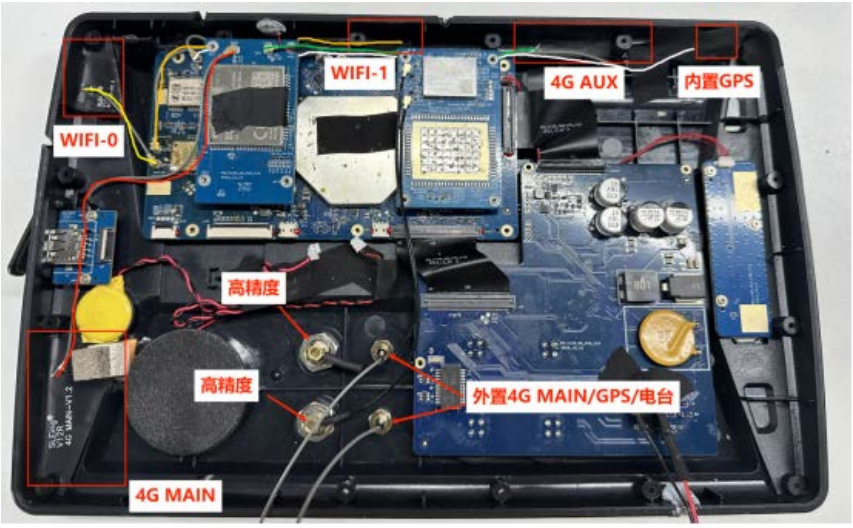
电性测试报告

Test Reports

Electrical Properties	
Frequency	2.4~2.5/5.15~5.85GHz(带机测试)
Impedance	50 0hm Nominal
V.S.W.R	≤1.92
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	4.51dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	FPCB
Cable Type	Φ1.13mm Dark Grey
Operating Temp.	-40~+85 °C
Storage Temp.	-5~+30 °C

天线组装图

Antenna Profile

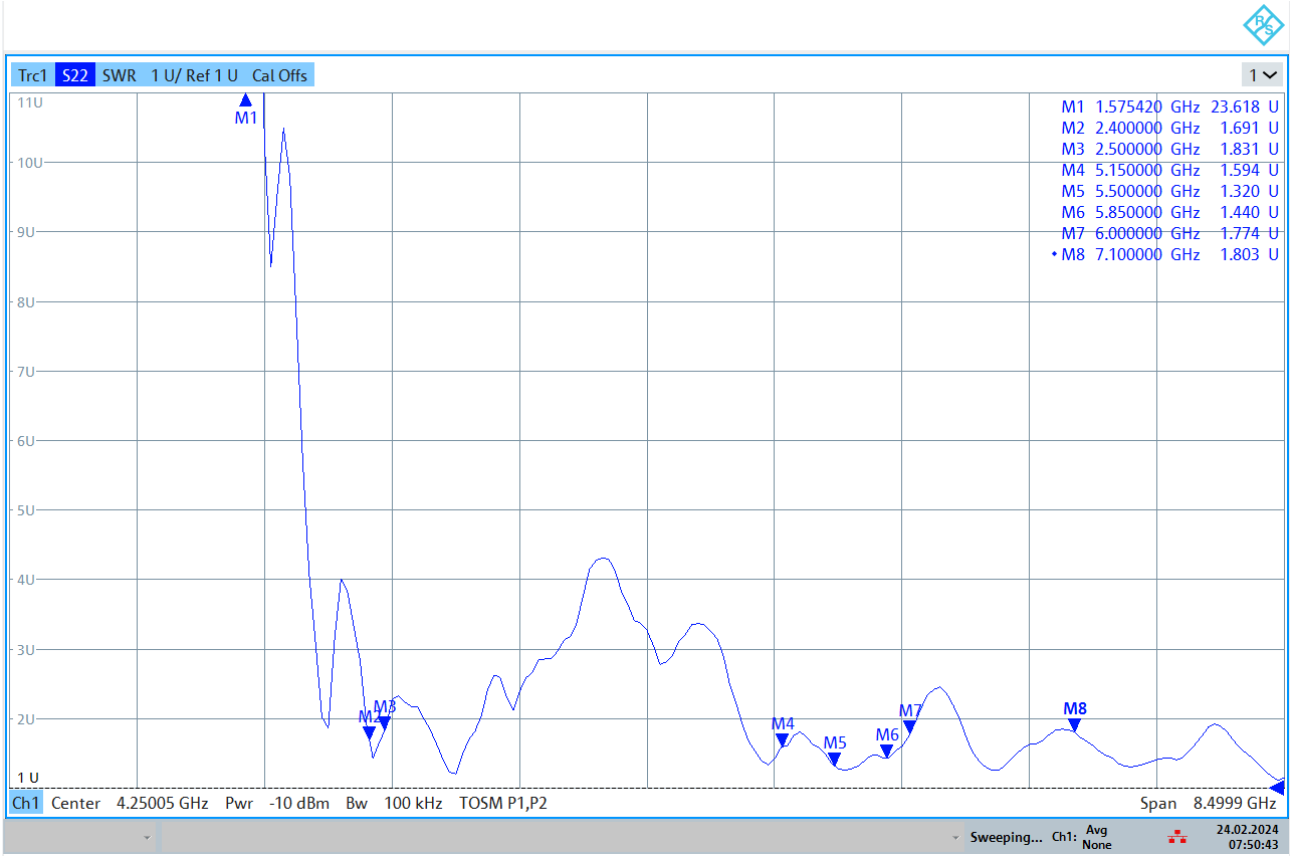
Device	
Antenna	

S 参数测试

S ParameterTest

Agilent E5071C Network Analyzer	

WiFi 驻波 Antenna (NO.1)



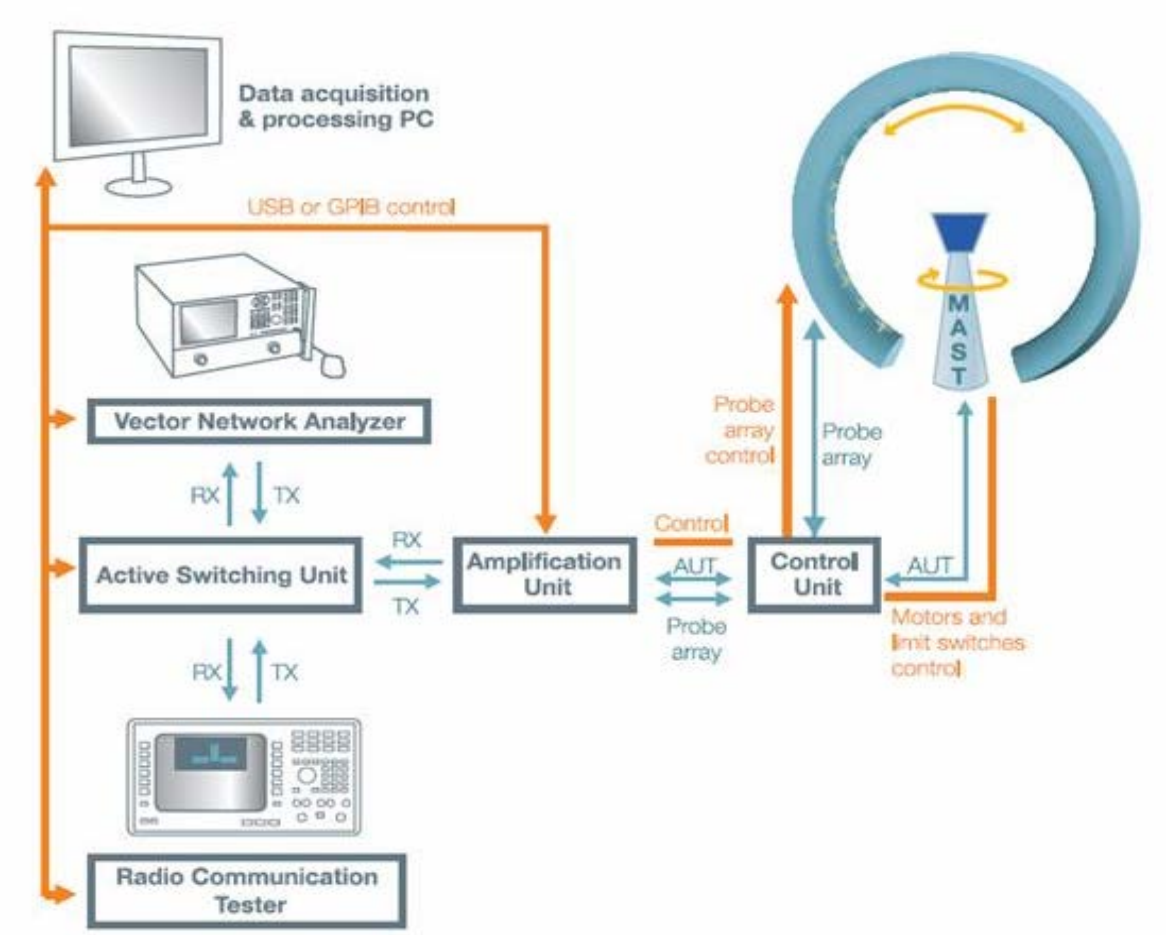
S 参数测试

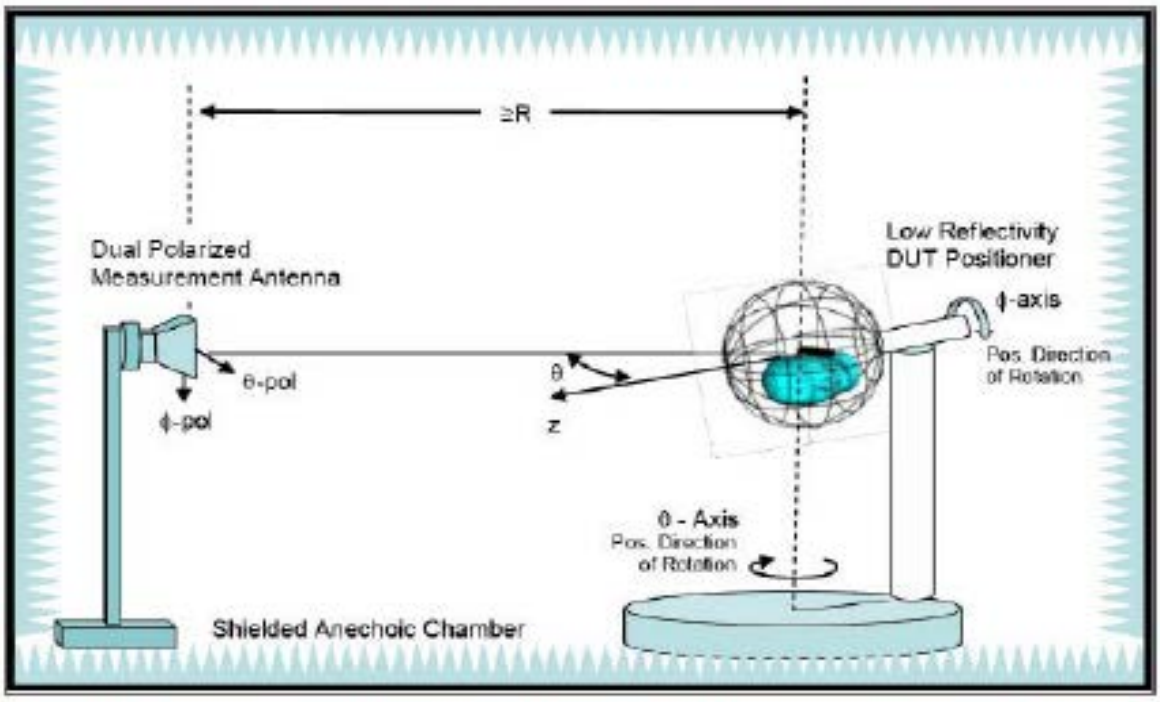
S ParameterTest

Agilent E5071C Network Analyzer	

WiFi 回波损耗 Antenna (NO.1)

测试设备
Test Setup





OTA

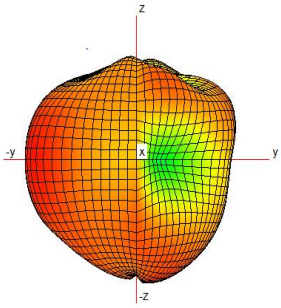
项目： 主+副天线		Performance request（性能要求）	信道	结果	判定	备注
2.4G WiFi_11b_CCK_11M	TRP	≥11±1dbm	1	13.99	PASS	
			7	13.78		
			13	14.32		
	TIS	≤-80dbm	1	-81.57	PASS	
			7	-78.35		
			13	-80.25		
5G WiFi_11a_54M	TRP	≥9dbm	36	7.29	PASS	
			64	10.16		
			157	12.43		
	TIS	≤-64dbm	36	-73.04	PASS	
			64	-73.34		
			157	-68.99		

WIFI漫游	测试环境：EM-public3F；频率：5GHz；协议：802.11ac；信道：AP随机 测试方法：在多个AP之间穿梭，利用软件查看热点的信号值		
	断开当前AP时信号值：	/	
	当前AP信号到达临界值后到切换至下个AP的时间	/	
	断开当前AP后丢包数	/	

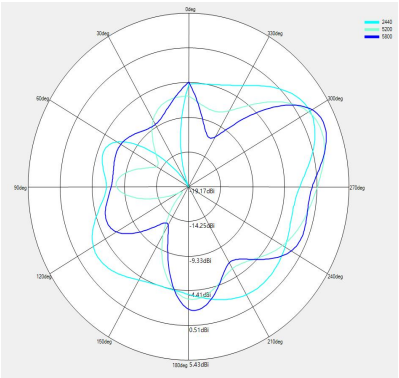
项目： 副天线		Performance request（性能要求）	结果	判定	备注
2.4G WiFi_11b_CCK_11M	TRP	≥11±1dbm	\		
	TIS	≥-80dbm	\		
2.4G WiFi_11g_OFDM_54M	TRP	≥10±1dbm	\		
	-62.78	≥-67dbm	\		
2.4G WiFi_11n_20M_MCS7	TRP	≥9±1dbm	\		
	TIS	≥-63dbm	\		
5G WiFi_11a_54M	TRP	≥10±1dbm	\		
	TIS	≥-65±1dbm	\		
5G WiFi_11n_20M_MCS7	TRP	≥9±1dbm	\		
	TIS	≥-65±1dbm	\		

chNo	Freq (MHz)	Gain
1	2400	1.78
2	2410	1.97
3	2420	2.11
4	2430	2.20
5	2440	2.31
6	2450	2.45
7	2460	2.46
8	2470	2.47
9	2480	2.45
10	2490	2.30
11	2500	2.33
12	5150	3.73
13	5200	3.59
14	5250	3.72
15	5300	4.08
16	5350	3.98
17	5400	4.36
18	5450	4.82
19	5500	4.94
20	5550	4.76
21	5600	4.39
22	5650	4.44
23	5700	4.51
24	5750	4.43
25	5800	4.48
26	5850	4.47

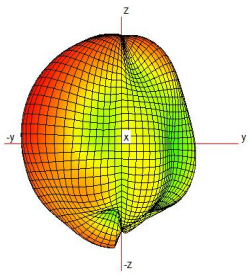
2440MHz



XOY



5200MHz



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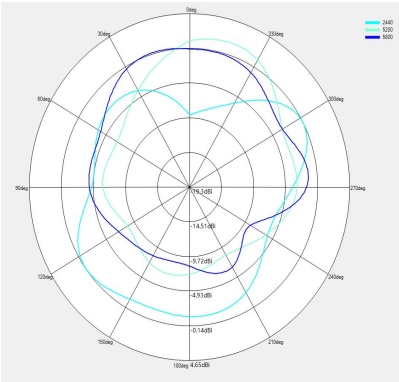
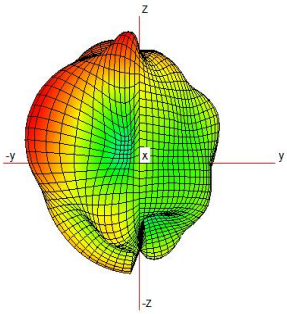
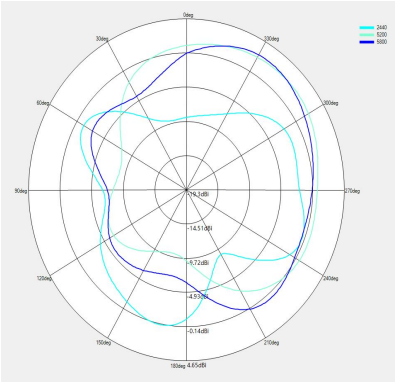


5800MHz



YOZ