

东莞市博贤实业有限公司 版本号: V2.0

(DONGGUAN BOXIAN INDUSTRIAL CO.,LTD)

## 规格书

### SPECIFICATION FOR APPROVAL

供应商名称: SUPPLIER:	东莞市博贤实业有限公司 DONGGUAN BOXIAN INDUSTRIAL CO.,LTD
制造商名称名称: MANUFACTURER:	东莞市博贤实业有限公司 DONGGUAN BOXIAN INDUSTRIAL CO.,LTD
客户名称: CUSTOMER:	深圳创维-RGB 电子有限公司 SHENZHEN CHUANGWEI-RGB ELECTRONICS CO., LTD
部品名称: PARTNAME:	天线 antenna
产品型号: SPEC TYPE:	85-S1BP-300-001 85-S1BP-300-001
厂家编码: SUPPLIER'S PART NO:	85-S1BP-300-001 85-S1BP-300-001
创维物料编码: SKYWORTH PART NO:	
规格描述: SPECIFICATION SICES:	8.5H 方型 1.13 线径内置天线黑线线长 300mm 带泡棉垫 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad
制表日期: DATE:	2023/08/26 August 26, 2023

承制方 MANUFACTURER		
拟制 DRAFTER	审核 CHECK	批准 APPROVER
李强 liqiang	杨国海 yangguohai	张会明 zhanghuiming

承制方名称 (盖章): 东莞市博贤实业有限公司

Name of manufacturer (Seal): DONGGUAN BOXIAN INDUSTRIAL CO.,LTD

地址: 广东省东莞市长安镇新民建安路 22 号

Address: No. 22, Xinmin Jian'an Road, Chang'an Town, Dongguan City, Guangdong Province

电话 phone: 0769-81872267

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网址:

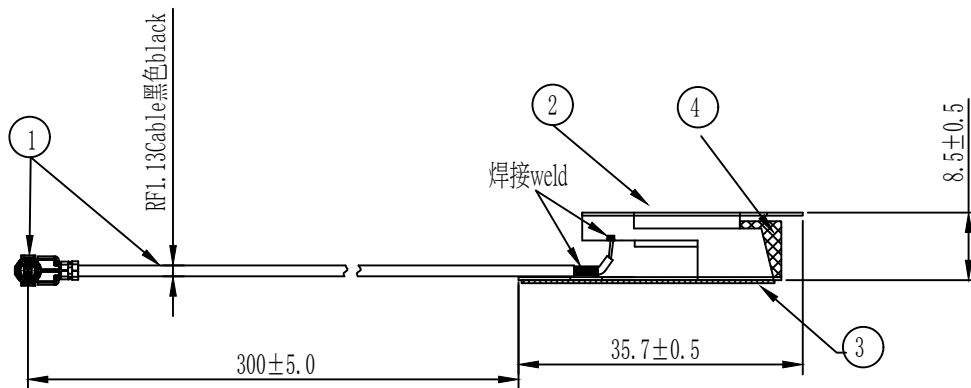
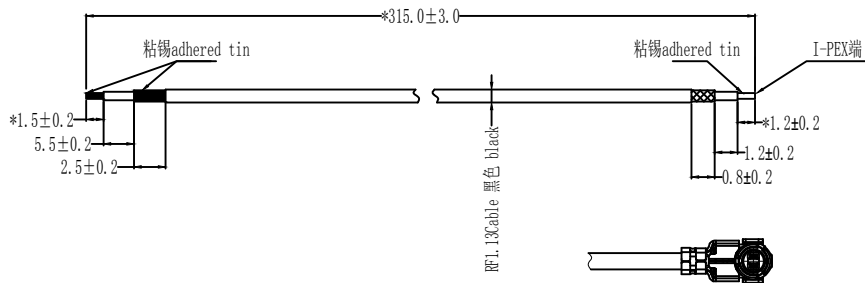
E-MAIL: dgsbxpyl@163.com



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catalogue

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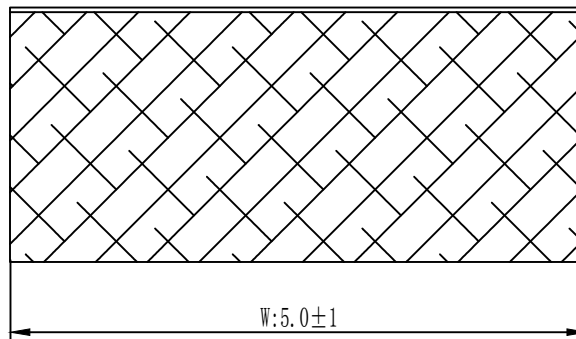
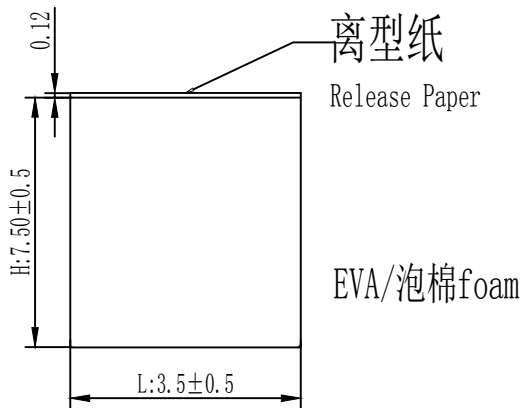


备注notes:

1. 标注“\*”重点管控尺寸。Mark “\*” to focus on controlling dimensions.
2. 未标注公差范围请参照标准公差。Please refer to standard tolerances for unmarked tolerance ranges.
3. 无虚焊，假焊。锡尖不良。No false welding, no false welding. Poor tin tip.
4. 天线固定片无模痕、压伤、刮伤、破损、变形等现象。The antenna fixing plate has no mold marks, pressure marks, scratches, damages, deformations, or other phenomena.
5. 拉力测试要求：端子铆压后拉力需达到 $\geq 1.2\text{kg}$ 。Tensile testing requirements: The tensile strength of the terminal after riveting should reach $\geq 1.2\text{kg}$ .
6. 产品单重：3.0克(参考值) Product unit weight: 3.0 grams(Reference value)

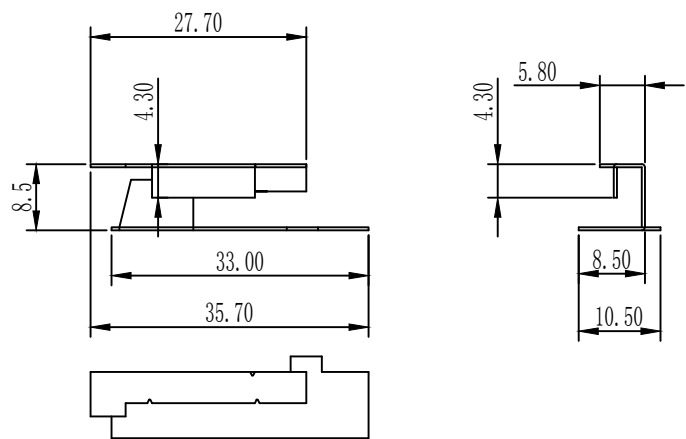
4	EVA\泡棉foam	3.5*5.0*7.5mm泡棉+单面背胶	1	
3	3M背胶adhesive	3M背胶厚度0.4mm	1	
2	固定片Fixed pieceH	不锈钢SUS stainless steel	1	
1	端子+线材Terminal+wire	PEX1代+RF1.13黑色双锡线Black double tin wire	1	
序号No.	组装部件components	材料规格描述specification description	用量	
X. ± 0.35	APPD:	TITLE: 8.5H方型内置天线1.13线 径黑线L=300mm带泡棉垫 8.5H square 1.13 wire diameter built-in antenna black wire length 300mm with foam pad	东莞博贤实业 DONGGUAN BOXIAN INDUSTRIAL	
.X ± 0.25	CHKD:			
.XX ± 0.15	林云武Lin Yunwu			
.XXX ± 0.10	DR:			
X' ± 2'	李强liqiang			
.X ± 1.5'	UNITS: mm	SCALE: 1:1	DWG NO: 85-S1BP-300-001	SHEET:1 OF 2
		REV: A0		

A.0	李强liqiang	新版发行 New Version Release	2023.2.12
版本	负责人person responsible	内容描述 description	日期date



备注notes:

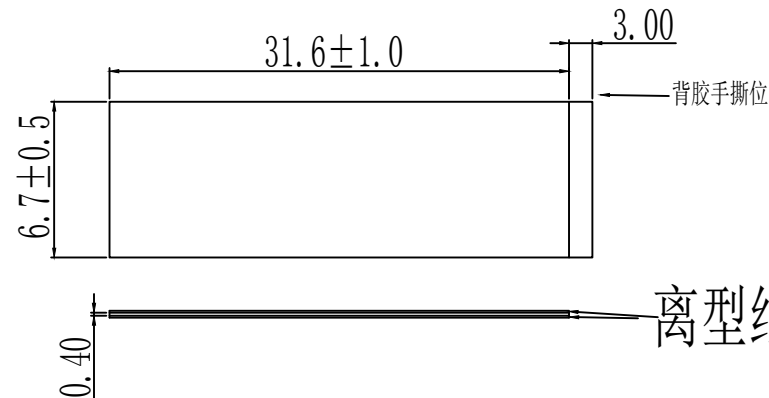
1. 泡棉外形尺寸请按2D图纸，表面不能有脏污  
Please follow the 2D drawing for the dimensions of the foam, and there should be no dirt or dirt on the surface
2. 单面带背胶 Single sided with adhesive backing
3. 未标公差尺寸按照±0.5mm，标重点的孔公差为±0.1  
The unmarked tolerance size is ± 0.5mm, and the tolerance of the marked hole is ± 0.1
4. 包装方式：整版塑胶袋包装  
Packaging method: Full page plastic bag packaging



天线固定片  
Antenna fixing plate

备注 notes:

1. 材质不锈钢 Material: stainless steel , T=0.4MM
2. 镀镍30U", 盐雾24小时  
Nickel plating 30U, salt spray for 24 hours



备注notes:

1. 胶纸外形尺寸请按2D图纸，表面不能有脏污。Please refer to the 2D drawing for the external dimensions of the adhesive paper, and the surface should not be dirty.
2. 3M背胶3M adhesive backing.
3. 未标公差尺寸按照±0.5mm，标重点的公差为±0.1mm。  
The tolerance for unmarked dimensions is ± 0.5mm according to the photo, and the tolerance for marked points is ± 0.1mm.
4. 包装方式：整版塑胶袋包装。 Packaging method: Full page plastic bag packaging.

A.0	李强 liqiang	新版发行 New Version Release	2023.2.12
版本	负责人 person responsible	内容描述 description	日期 date

X. ± 0.30	APPD:	TITLE: 8.5H方型内置天线1.13线 径黑线L=300mm带泡棉垫	东莞博贤实业 DONGGUAN BOXIAN INDUSTRIAL
.X ± 0.25	CHKD: 林云武Lin Yunwu	8.5H square 1.13 wire diameter built-in antenna black wire length 300mm with foam pad	
.XX ± 0.20	DR: 李强liqiang	PART NO: 85-SIBP-300-001	
.XXX ± 0.10	Angle ± 3°	DWG NO: 85-SIBP-300-001	
UNITS: mm		SCALE: 1:1	SHEET: 20F2 REV: A.0

● 原材料清单 Raw material list

东莞市博贤实业有限公司

Dongguan Boxian Industrial Co., Ltd

成品原材料组成清单

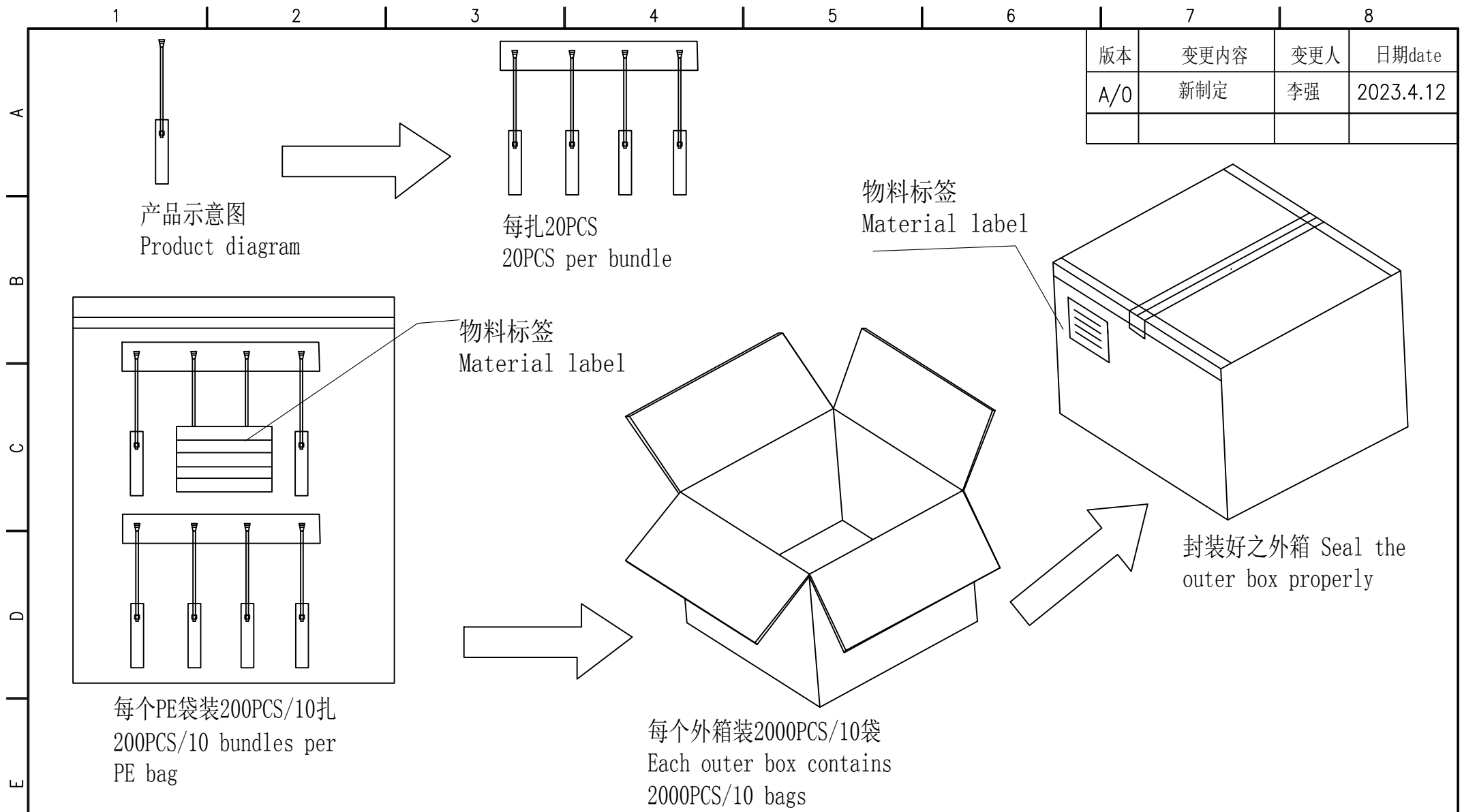
List of Composition of Finished Raw Materials

品名规格 Product name and specifications	料号 Part number	单重：克 Single weight: grams	组成部件 Components	用量 Dosage	原材料型号 Raw material model	备注 notes
8.5H 方型 1.13 线径内 置 天线 黑 线 线 长 300mm 带泡棉垫 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad	85-S1BP-300-001	3.0	固定片 Fixed piece	1PCS	不锈钢 stainless steel	镀镍 nickeling
			一代端子 First generation terminals	1PCS	铜+塑胶 Copper+plastic	镀金、PBT Gold plating, PBT
			3M 胶 3M adhesive	1PCS	3M 背胶 3M adhesive backing	
			EVA 泡棉 EVA foam	1PCS	泡棉 foam	
			线材 wire rod	1PCS	FEP+镀锡铜线 FEP+tinned copper wire	黑色线材 Black wire

● 尺寸测试报告

Dimensional test report

东莞市博贤实业有限公司 Dongguan Boxian Industrial Co., Ltd								
尺寸检测报告 Dimensional inspection report								
品名规格 Product name and specifications	8.5H 方型 1.13 线径内置天线黑线线长 300mm 带泡棉垫 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad				料号 Part number	85-S1BP-300-001	检验数量 Inspection Quantity	5PCS
检测日期 Test date	2023.08.25 August 25, 2023							
序号 Serial Number	测试结果 test result (单位: mm)						判定 determine	
	尺寸标准 Dimensional standards	样品 Sample 1	样品 Sample 2	样品 Sample 3	样品 Sample 4	样品 Sample 5		
1	300±5.0	300.3	300.5	301.2	300.7	302.1	OK	
2	35.7±0.5	35.73	35.71	35.72	35.73	35.70	OK	
3	8.5±0.5	8.58	8.56	8.60	8.56	8.62	OK	
最终判定 Final judgment: <input checked="" type="checkbox"/> 合格 qualified <input type="checkbox"/> 不合格 unqualified								
审核 check: 刘富月 Liu Fuyue				检测 test: 何文静 He Wenjing				



版本	变更内容	变更人	日期date
A/0	新制定	李强	2023.4.12

**包装说明Packing:**

- 每20PCS一扎One bundle per 20PCS
- 每10扎/200PCS装入一个PE袋，并在每袋上贴上物料标签  
Pack every 10 bundles/200PCS into a PE bag and label each bag with a material label
- 每10袋/2000PCS装入一个外箱内，然后封箱，并在外箱上贴上物料标签  
Pack every 10 bags/2000 PCS into an outer box, then seal the box and attach a material label to the outer box

DIMENSION IN mm		东莞市博贤实业有限公司			
TOLERANCE UNLESS OTHERWISE SPECIFIED		DONGGUAN BOXIAN INDUSTRIAL CO.,LTD			
.X±0.38	X.*±5°	APPD.	TITLE:8.5H方型1.13内置天线黑线长300mm带泡棉垫包装图 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad		
.XX±0.25	.X.*±3°	CHKD.	PART NO. 85-S1BP-300-001		
.XXX±0.15	.XX.*±1°	DR. 李强	PROJ.	SIZE A4	SCALE 1:1
			SHEET 1/1	REV. A/0	



东莞市博贤实业有限公司  
Dongguan Boxian Industrial Co., Ltd

产品规格书

SPECIFICATION

<b>Customer Name</b>	创维 skyworth
<b>Product name</b>	2.4G/5.8G 内置天线 2.4G/5.8G built-in antenna
<b>Product number</b>	85-S1BP-300-001
<b>Customer P/N :</b>	
<b>Prepared By</b>	刘金全 Liu Jinqun
<b>Date</b>	2023 年 08 月 23 日 August 23, 2023

频率范围 Frequency range	2400~2500 (MHz) ,5200~5800 (MHz)
驻波比系数 VSWR	<3.0
输入阻抗 Input Impedance	50±5 (Ω)
极化方式 Polarization	垂直极化 Vertical Polarization
半功率波束 (3dB) HPW	180° H-plane 120° E-plane

RF by	李强 liqiang	Checked by	杨国海 yangguohai
ME by	陈兆强 chenzhaoqiang	Date	2023-8-23
Customer Confirm			

## Revision History

Date	Revision	Description of Changes
2023/08/23	RA	Measured with Antenna sample.

## 1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the 85-S1Bp-300-001 Antenna program. We test the antenna with the latest version handset. And it seemsto be acceptable.

## 2 General Description

### 2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

## 3 Mechanical Description

## 4 Electrical Performance

### 4.1 Set-up

#### 4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

#### 4.1.2 Gain & Radiation Patterns

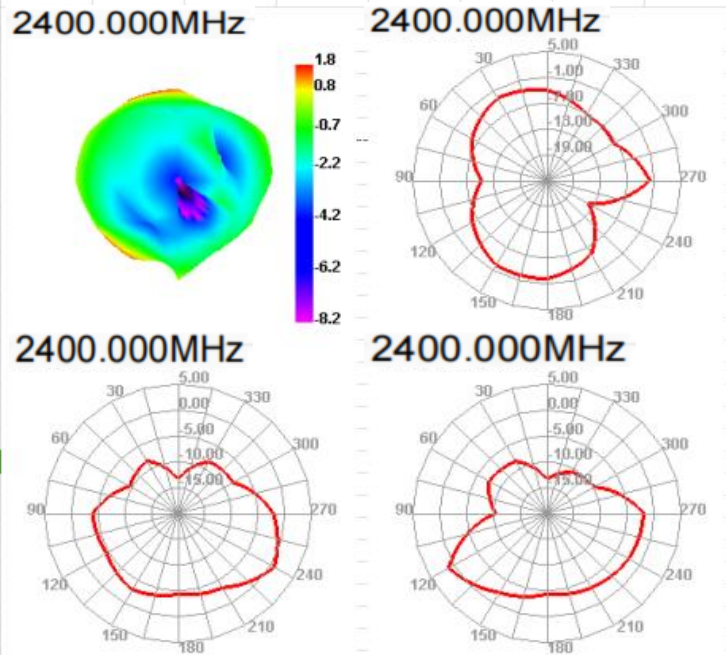
The gain of the antenna was measured in the HT's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

#### 4.1.3 Matching Circuit Description

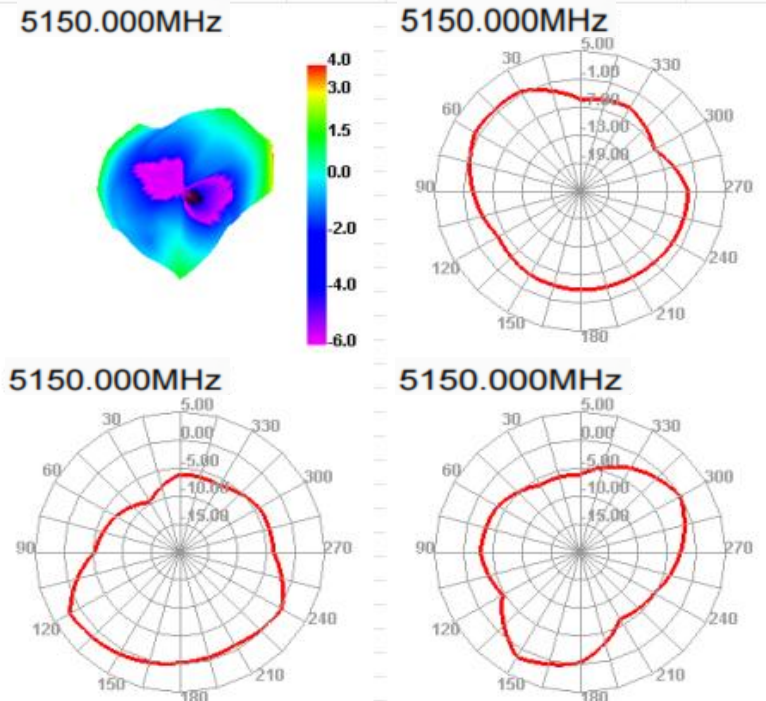
## 4.2 Measurement Data

### 4.2.1 Active result

Freq (MHz)	Effi (%)	Gain (dBi)
2400	40.57	1.83
2410	40.53	1.94
2420	40.8	1.97
2430	40.9	1.99
2440	40.77	1.93
2450	48.61	2.83
2460	51.82	3.21
2470	46.27	2.82
2480	50.6	3.16
2490	53.68	3.35
2500	53.23	3.24

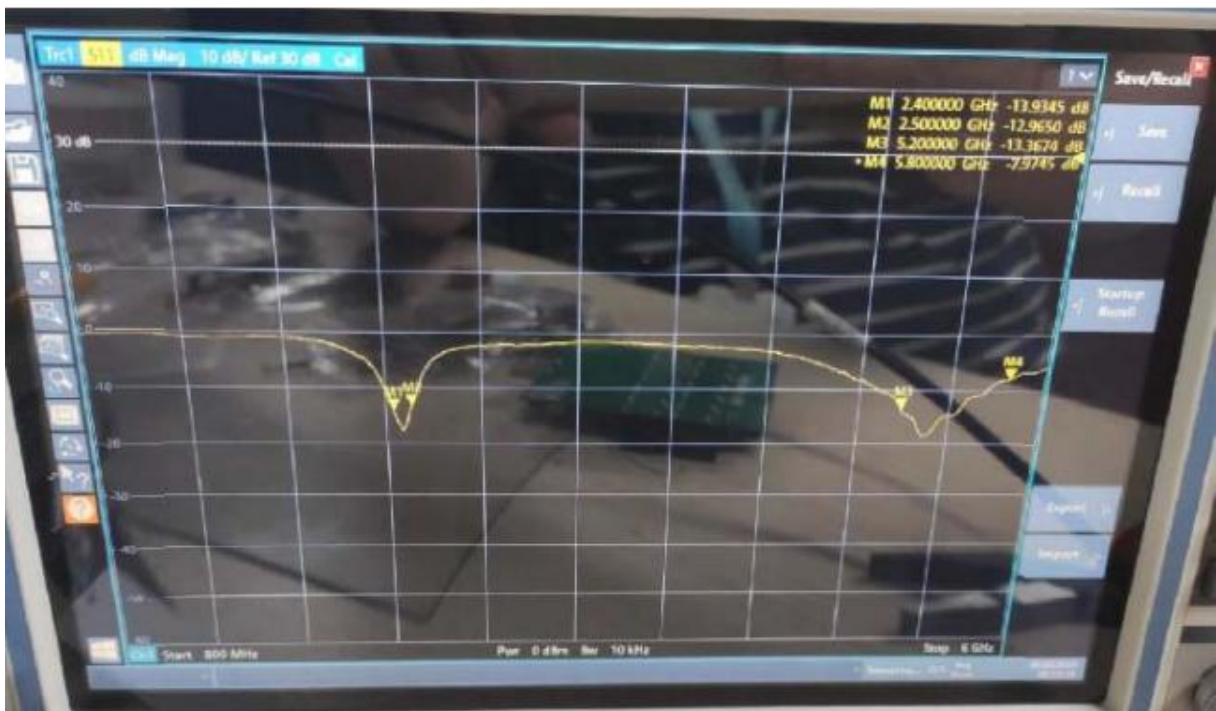
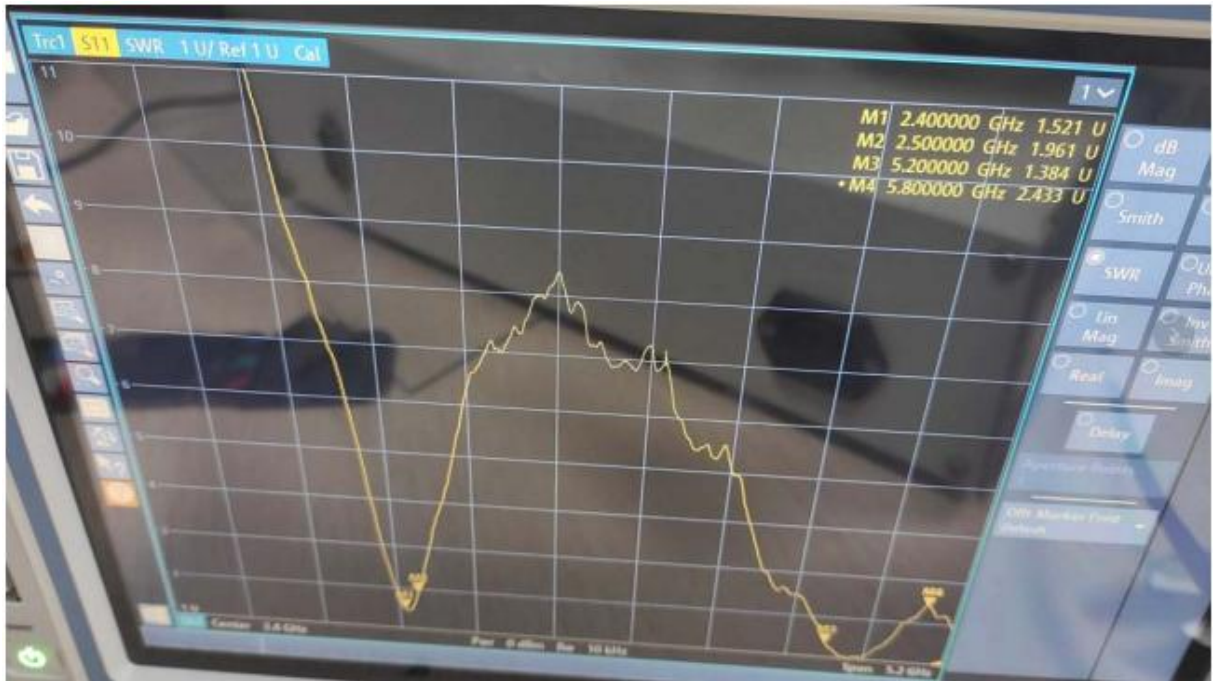


Passive Test For WIFI5.8		
Freq (MHz)	Effi (%)	Gain (dBi)
5150	49.22	3.17
5200	52.1	3.36
5250	66.18	4.6
5300	64.68	4.55
5350	66.37	4.98
5400	78.77	5.78
5450	79.92	5.71
5500	71.16	5.38
5550	73.01	5.56
5600	71.09	5.66
5650	63.48	4.88
5700	52.26	3.71
5750	63.57	4.16
5800	64.74	4.23
5850	48.54	2.53



## 5.Plots

### 5.1VSWR



## 6 Reliability tests

### 6.1 Test content

No:	试验项目 Test items	试验方法 test method	判定基准 defining principle
1	盐水喷雾试验 Salt water spray test	把盐浓度 5%的溶液喷雾 24 小时 Spray the solution with salt concentration of 5% for 24 hours	不能有变色, 歪 (变形) 脱落等的缺点 腐蚀面积不能过大 There should be no defects such as discoloration, deformation, or detachment, and the corrosion area should not be too large

### 6.2 Test results


NO:	样品数 Number	试验期间 During the test	实验结果 experimental result	备注
1	5PCS	24H	OK	技术等级为 9 级 腐蚀<0.4mm The technical level is 9 Corrosion<0.4mm

## 7 Conclusion

以上数据表明此 天线参数均已达标。性能以装机后的实际使用效果为准。

The above data indicates that all antenna parameters have met the standards. The performance is subject to the actual usage effect after installation.

东莞市博贤实业有限公司  
DONGGUAN BOXIAN INDUSTRIAL CO., LTD  
盐雾试验测试报告 Salt spray test report

品名规格 Product name and specifications	8.5H方型1.13线径内置天线黑线线长300mm带泡棉垫 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad		料号 Part number	85-S1BP-300-001	测试数量 Number of samples	5PCS
试验时间 Test time	24小时 24H	试验日期 Test date:	2023年 08月22日9:00~2023年08月23日 9:00 From 9:00 on August 22, 2023 to 9:00 on August 23, 2023			
试验条件 Test conditions					备注 notes	
项目 project			条件 condition			
氯化钠品质 Sodium chloride quality			分析A级 Analyze A-level			
蒸馏水品质 Distilled water quality			纯水 $\leq 5\mu s$ Pure water $\leq 5\mu s$			
喷雾器喷雾量 Spray volume of spray			1.0-2.0mL/80cm <sup>2</sup> /h			
氯化钠浓度 Sodium chloride concentration			盐水浓度5% Salt water concentration 5%			
盐水PH值 Saline pH value			6.5-7.2			
压缩空气压力 Compressed air pressure			1KG/CM <sup>2</sup>			
实验室相对湿度 Laboratory relative humidity			85%以上			
实验室温度 Laboratory temperature			35℃			
压力桶温度 Pressure bucket temperature			47℃			
盐水桶温度 Salt water barrel temperature			35℃			
盐雾测试仪 Salt mist tester						
试验结果描述 Description of experimental results	试验后端子镀金面上及固定片表面无腐蚀氧化生锈现象 After the test, there is no corrosion, oxidation, or rust on the gold-plated surface of the terminal and the surface of the fixing piece					
判定结果 Judgment results	<input checked="" type="checkbox"/> 合格qualified <input type="checkbox"/> 不合格unqualified <input type="checkbox"/> 参考refer					

核准check: 刘富月 Liu Fuyue

测试员tester: 何文静 He Wenjing

● ROHS 有害物质含量表

RoHS2.0 Hazardous Substance Content Table

东莞市博贤实业有限公司 RoHS2.0 有害物质含量表  
Dongguan Boxian Industrial Co., Ltd. RoHS2.0 Hazardous Substance Content Table

产品型号 Model: 85-S1BP-300-001

材料名称 Material Name	有毒有害物质或元素 hazardous substance										备注 notes
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	邻苯二甲酸 二丁基酯 (DBP)	邻苯二甲酸 甲苯基丁 酯 (BBP)	邻苯二甲酸 二(2-乙基己 基)酯 (DEHP)	邻苯二甲酸 二异丁酯 (DIBP)	
一代端子 First generation terminals	○	○	○	○	○	○	○	○	○	○	CANEC2301145810 A2230045004101001ER1 A2230045004101002E ETR22C03352
固定片 Fixed piece	○	○	○	○	○	○	○	○	○	○	CANEC2227955302 A2220415703101001C
3M 背胶 3M adhesive	○	○	○	○	○	○	○	○	○	○	CANEC2300908901 CANEC2300908902
线材 wire rod	○	○	○	○	○	○	○	○	○	○	SHAEC22004639302 A2230222421101001 A2220469900101001C
泡棉 EVA foam	○	○	○	○	○	○	○	○	○	○	CANEC2227574117 CANEC2227574119
拆分部件 n											

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 2011/65/EU 规定的限量要求以下。  
×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 2011/65/EU 规定的限量要求。  
(供应商应将其原材料按要求进行拆分, 并按照此表格进行详细标注, 对不能满足标准要求的零部件进行具体的原因描述)

● REACH 符合性自我声明表 REACH Compliance Self Declaration Form

东莞市博贤实业有限公司 REACH 符合性自我声明表

Dongguan Boxian Industrial Co., Ltd. REACH Compliance Self Declaration Form

产品型号 Model: 85-S1BP-300-001

整体部件 Product name and specifications	8.5H 方型 1.13 线径内置天线黑线线长 300mm 带泡棉垫 8.5H square 1.13 wire diameter built-in antenna, black wire length 300mm with foam pad		是否符合 (EC) No 1907/2006 标准要求 Does it meet the requirements of the (EC) No 1907/2006 standard
	SVHC (高关注物质) SVHC (Substances of High Concern)		是 OK
	禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”		是 OK
原材料部件			是否符合 (EC) No 1907/2006 标准要求 Does it meet the requirements of the (EC) No 1907/2006 standard
	一代端子 First generation terminals	SVHC (高关注物质) SVHC (Substances of High Concern)	是 OK
		禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”	是 OK
	固定片 Fixed piece	SVHC (高关注物质) SVHC (Substances of High Concern)	是 OK
		禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”	是 OK
	3M 背胶 3M adhesive	SVHC (高关注物质) SVHC (Substances of High Concern)	是 OK
		禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”	是 OK
	线材 wire rod	SVHC (高关注物质) SVHC (Substances of High Concern)	是 OK
		禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”	是 OK
	泡棉 EVA foam	SVHC (高关注物质) SVHC (Substances of High Concern)	是 OK
		禁止和限制物质 “附件 17” Prohibited and Restricted Substances “Annex 17”	是 OK
	.....		

注：1、根据 (EC) No 1907/2006 标准要求进行管控 SVHC (高关注物质) 及禁止和限制物质。

如果在标准值以内填写是，反之则填写否。

2、请在页面加盖公司印章。





进出口料报关信息表（供应商填写）注：此表在填写的时候可以调整列宽和行高，但不能更改此表的结构，具体填写参数请参照《报关信息要素》。  
 Import and Export Material Customs Declaration Information Form (to be filled out by the supplier) Note: When filling out this form, the column width and row height can be adjusted, but the structure of this form cannot be changed. Please refer to the "Customs Declaration Information Elements" for specific filling parameters.

电源、WIFI、主板类物料需维护内容														原材料物料需维护内容（红色填充代表必填）																											
物料编码 material code	商品中文名称（按规范填写） Chinese product name (filled in according to specifications)	品牌 brand	型号 model	适用机型 Application	价格 price	电视机用 For television	直流电源 DC POWER SUPPLY	功率 power	精度 accuracy	功能 function	适用网络种类 Applicable network types	用途 use to	原理 principle	尺寸 size	配置 configuration	创维物料编号（由客户填写） Skyworth material number (to be filled in by the customer)	供应商代码（由供应商填写） Supplier code (to be filled in by the supplier)	商品中文名称（按规范填写） Chinese product name (filled in according to specifications)	规格型号 Specification and model	品牌 brand	品牌类型 Brand Type	生产厂家 Manufacturer	净重 Net weight (g)	净重单位 Net weight unit (PC/tube, drum roll, etc.)	最小包装数量 Minimum Packaging Quantity (MPQ)	最小包装毛重 Minimum gross weight of packaging (g)	最小包装毛重单位 （盘、卷、袋、盒等） Minimum packaging gross weight unit (disc, roll, bag, box, etc.)	原产地 country of origin	功/频率 Power/frequency	电压（耐压） Voltage (with stand voltage)	容量 capacity	材质 material	结构类型 structure type	主要参数 Parameters	单层/多层 Single layer/multi-layer	用途 use to	功能描述 Function Description	制造商编码 Manufacturer code	工作原理 Working principle	加密/无加密 Encrypted/Unencrypted	备注 Note
																2055448	WIFI 天线： WiFi antenna	85-S1BP-300-001	无 No	无 No	东莞市博贤实业有限公司 DONGGUAN BOXIAN INDUSTRIAL CO., LTD	3.0	PC	200	600	袋 bag	广东省东莞市长安镇 Chang'an Town, Dongguan City, Guangdong Province					不锈钢固定片+泡棉+3M胶带+端子（铜+PBT）+线材（FEP+镀锡铜线） Stainless steel fixing plate+foam+3M tape+terminal (copper+PBT)+wire (FEP+tinned copper wire)	焊接加工 welding machining		WIFI信号接收、发射 WIFI signal reception and transmission			无 No			
填写单位 Fill in the unit:														东莞市博贤实业有限公司 DONGGUAN BOXIAN INDUSTRIAL CO., LTD														填写人 Filled by		李强 Li Qiang											