

# APPROVAL SHEET

Supplier name: Guangzhou Vision enthalpy Technology Co., LTD


Supplier material name: Coaxial cable antenna

2.4~2.5GHz, 1dBi, 5.15~5.85GHz, 1dBi, 27.67×8.42mm, 360mm, Grey, IPEX 1, FPC, 1COAX, Grey , SHKJ

CVTE Item number: 004.032.0053052

Admission edition: A0

Drawing version number (no drawing): A0

Supplier acknowledgement column		
lay down	examine and verify	ratify
Jack	Lucy	

Supplier Address: Room 202, Building B, No. 238 Spectral East Road, Huangpu District, Guangzhou City

telephone:

portraiture:

Note: Supplier commitment and confirmation, Suppliers to Guangzhou bin electronic technology Co., Ltd., and its affiliated companies (including but not limited to Guangzhou visual source electronic Technology Co., Ltd., Guangzhou electronic Technology Co., Ltd., Guangzhou into information technology Co., Ltd., Guangzhou, medical equipment technology Co., Ltd., Guangzhou yi intelligent electronic technology Co., Ltd., Guangzhou farce ear acoustic technology Co., Ltd., Guangzhou rui xin electronic Technology Co., Ltd., Qingdao source dynamic wisdom sports technology Co., Ltd., Guangzhou radium morning automatic control technology Co., Ltd., Guangzhou Liuhuan Information Technology Co., Ltd.) (known as "CVTE") supply of materials, Are able to meet the standards stipulated in this admission, Without the supplier. The scanned copy, photocopy and faxed copy of this admission letter shall have the same legal effect as the original copy.

---

## Contents Directory

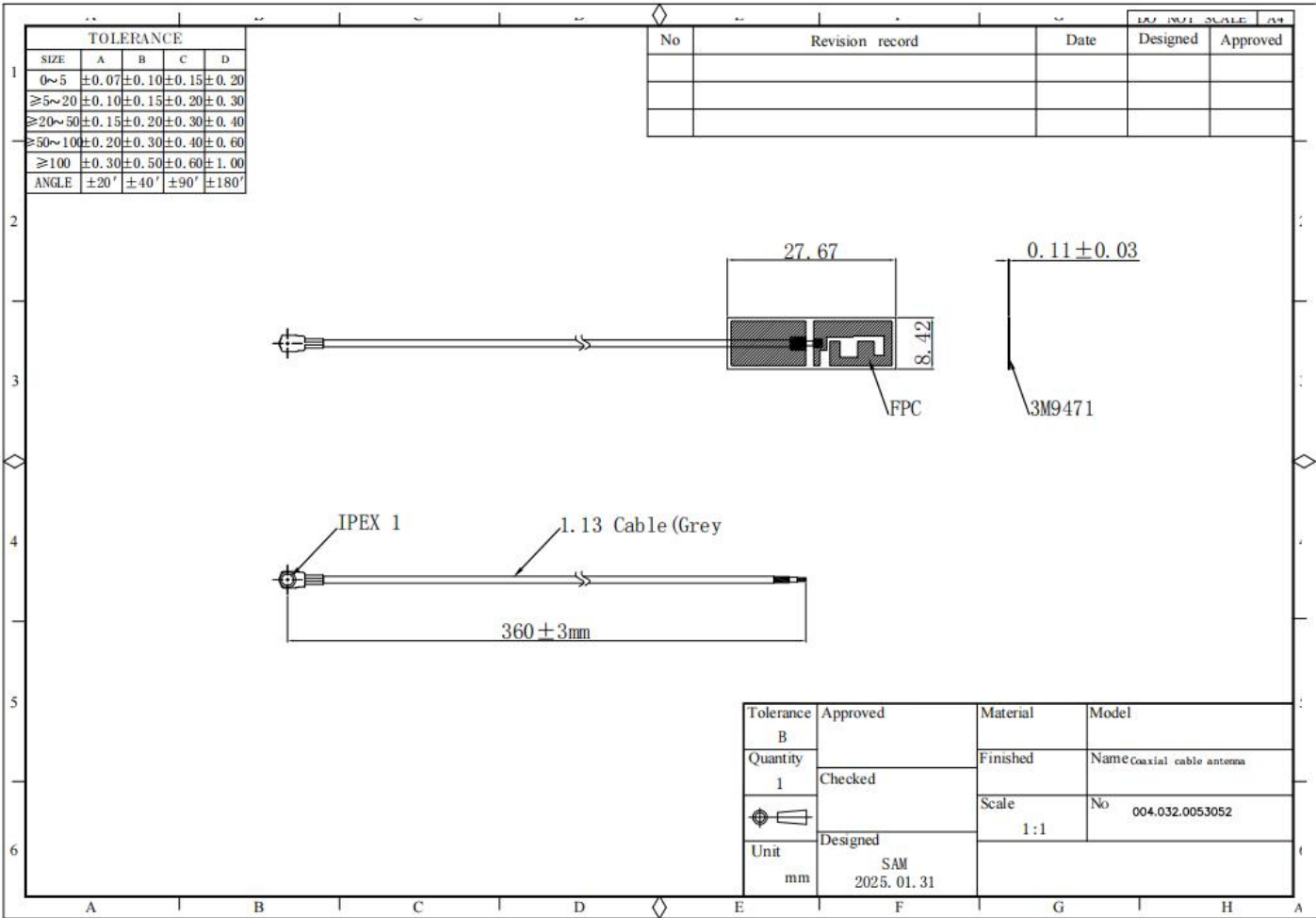
1. Document Revision .....	1
2. Product Photos.....	4
3. Product Drawings And Specifications.....	4
4. Performance Parameters.....	5
5. Packaging Standard:.....	6
6. Reliability Test Report:.....	7
7. Disabled Material Guarantee.....	8
8. Raw Material Test List:.....	9



## 2. Product Photos



## 3. Product Drawings, Specifications



---

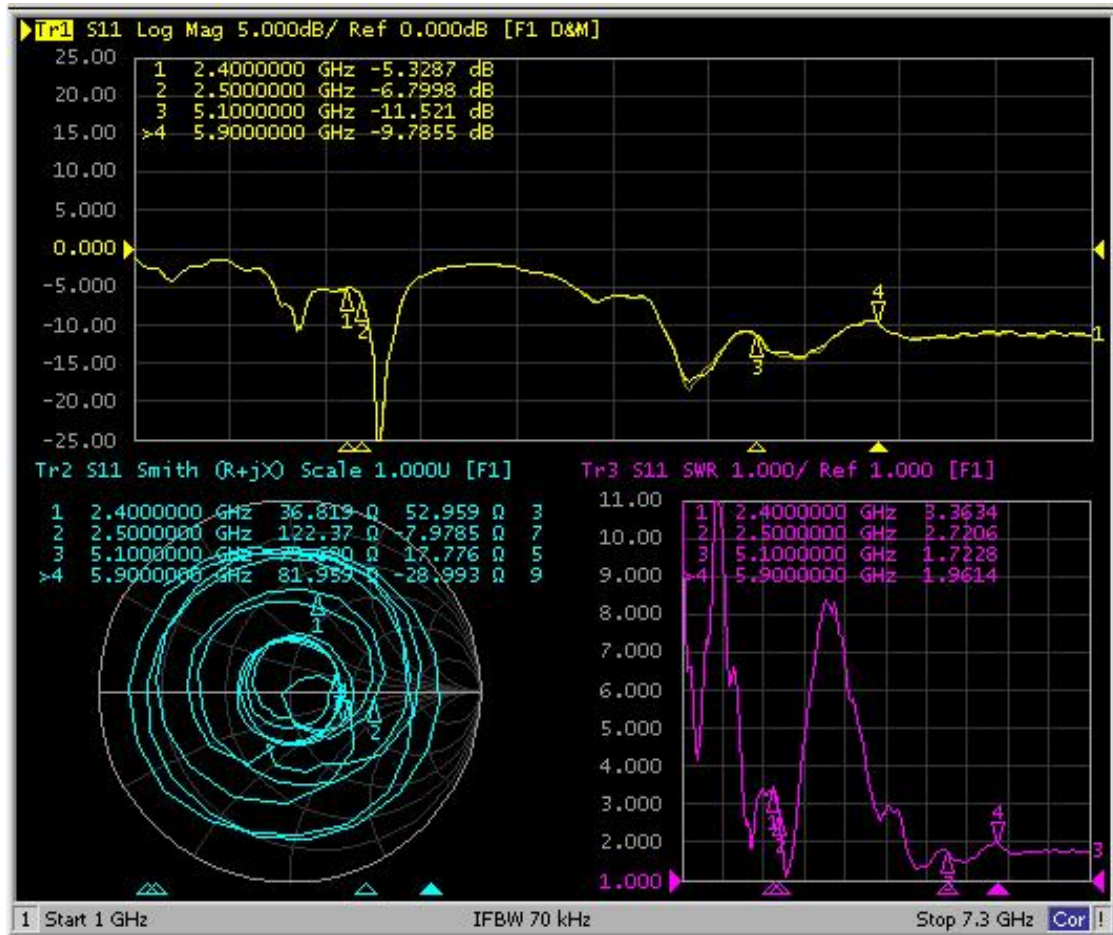
## 4. performance Parameter

### 4-1 Performance Parameters

Electrical Parameters	
Frequency Range	2.4-2.5GHz 5.15-5.85GHz
Input Impedence	50 $\Omega$
Standing-wave Ratio	Refer to samples
Gain	/
Power Capacity	1W
Through The Test	/
Polarization Mode	/
Radiation Direction	/
Connector Model	I-PEX 1
Mechanical Parameters	
Terminal Maintenance Force	/
Antenna Material	FPC
Coax	1.13 Coaxial cable (Grey)
Salt Spray Test	24H
Enviromental Parameter	
Working Temperature	-30 $^{\circ}$ C~65 $^{\circ}$ C

## 4-2 Performance Test

### S11

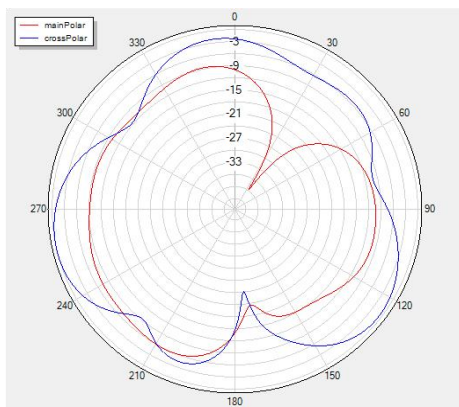


## 4-3 Antenna Efficiency

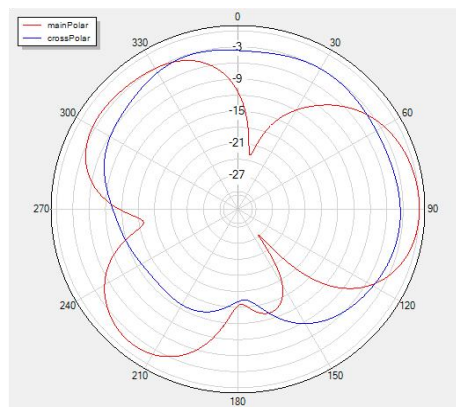
frequency (MHz)	gain (dBi)	efficiency (dB)	efficiency (%)
2400	1.73	-3.91	40.61
2410	1.97	-3.58	43.89
2420	1.9	-3.54	44.25
2430	1.92	-3.33	46.45
2440	2.15	-3.12	48.7
2450	2.27	-2.93	50.97
2460	2.33	-2.84	52
2470	2.56	-2.99	50.26
2480	2.7	-2.92	51.09
2490	2.82	-2.52	56.03
2500	2.9	-2.25	59.52

frequency (MHz)	gain (dBi)	efficiency (dB)	efficiency (%)
5100	2.58	-2.86	51.81
5150	2.51	-2.28	59.12
5200	3.17	-2.41	57.36
5250	3.61	-1.78	66.36
5300	4.35	-1.72	67.27
5350	4.47	-1.6	69.23
5400	4.45	-1.77	66.5
5450	4.35	-1.74	67.06
5500	4.3	-1.88	64.82
5550	4.15	-1.86	65.12
5600	4.09	-1.99	63.25
5650	4.09	-2.05	62.33
5700	3.99	-2.26	59.37
5750	4.37	-2.19	60.41
5800	4.72	-2.15	60.9
5850	4.63	-2.25	59.54
5900	4.74	-2.16	60.77

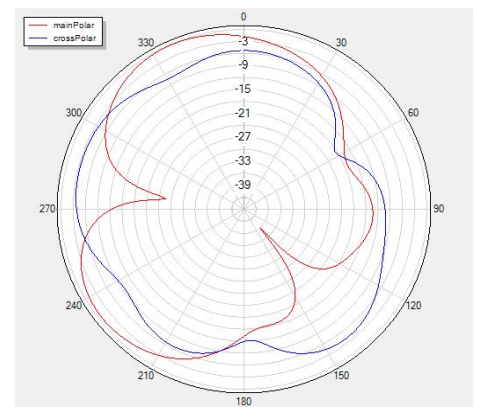
Phi=90 freq=2480MHz



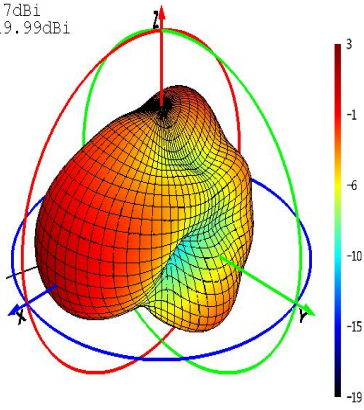
Phi=0 freq=2480MHz



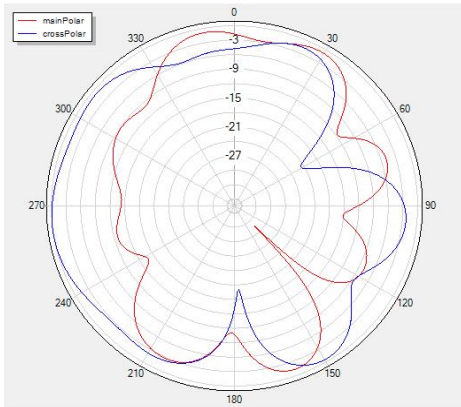
Theta=90 freq=2480MHz



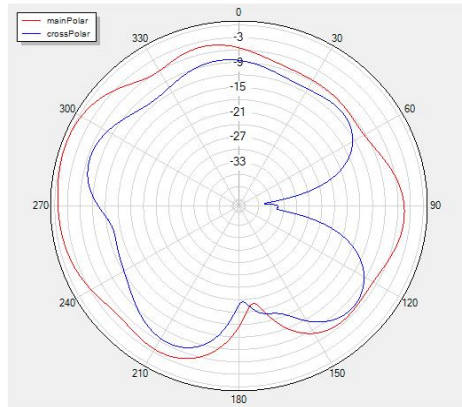
MAX: 2.7dBi  
MIN: -19.99dBi



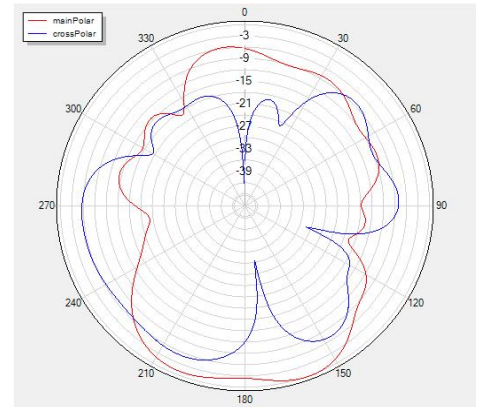
Phi=90 freq=5900MHz



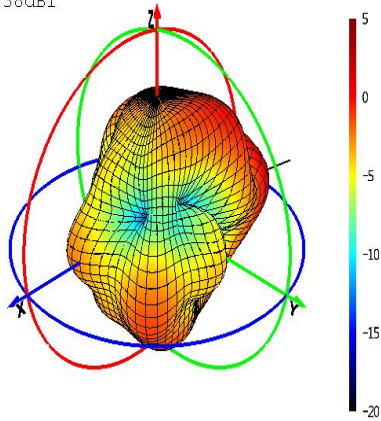
Phi=0 freq=5900MHz



Theta=90 freq=5900MHz



MAX: 4.74dBi  
MIN: -20.38dBi





## 5. Packaging Standard

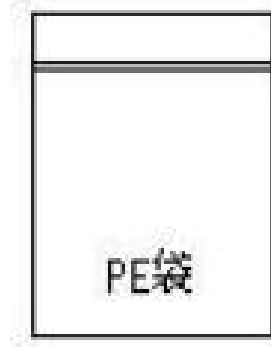
Product Material No. :004.032.0053052

Coaxial cable antenna, 2.4~2.5GHz, 1dBi, 5.15~5.85GHz, 1dBi, 27.67×8.42mm,  
360mm, Grey, IPEX 1, FPC, 1COAX, Grey , SHKJ

li. Packaging requirements and operation instructions:

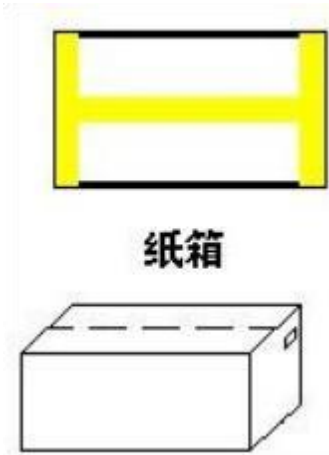
1. Internal packaging:

Product 50 PCS into the small PE bag



2. Packaging:

Quantity / box according to the actual packing



matters need attention:

1. Whether to add a partition board, pearl cotton;
2. Attachment of labels, such as ROHS;

## 6. Reliability test report

### 6-1. Reliability test standards

test item		test method	acceptance standard	Judgment results
1	V.S.W.R	Set the network analyzer parameters for testing	According to the specifications to be tested	<b>PASS</b>
2	Plug in damage	Set the network analyzer parameters for testing	According to the specifications to be tested	<b>PASS</b>
3	salt atmosphere	Temperature 35° C humidity 95% saline concentration 5%; test for 24 hours	After 2H, there was no obvious bad appearance: frequency offset of 5%	<b>PASS</b>
4	constant temperature and humidity	Temperature 80° C test 12H to-40° C Test 12H: Humidity 90%: Test 24 hours	After 2H, there was no obvious bad appearance: frequency offset of 5%	<b>PASS</b>
5	strain relief test	Tometer test product connector and terminal tension greater than; 1 Kgf	Visual inspection / measurement meets SOP requirements, no shedding, poor contact	<b>PASS</b>

# 承认书

## 禁用物质保证 (Certification of Restricted Substance)

我方保证所提供的物料，完全遵守签核的广州视源电子科技股份有限公司/或其子公司的质量和环保协议中的各项条款，物料中禁用物含量，符合最新版《有害物质管理规范》中的各项标准。

We hereby certify that all the Material fully conform to the requirements of the ShiRuan/or its affiliated companies Declaration of Conformity that had been signed, and the maximum concentration value of restricted substance in Materials comply with the latest 《Regulations on the management of hazardous substances.》



## 8. Raw Material Test List

原材料测试清单 Raw Material Test List																	
客户编码 (Customer P/N): 004.032.0052897 004.032.0053052			物料名称 (Part Name) 同轴球天线				供应商 (Vendor)			供应商料号 (Vendor P/N)							
No (序号)	Raw Material Name (原材料名称)	Raw Material description (原材料描述)	Raw Material Supplier (原材料供应商)	Pb (铅)	Cd (镉)	Hg (汞)	Cr+6 (六价铬)	PBBs (聚溴化苯)	PBDEs (聚溴化二噁英)	邻苯二甲酸二(2-乙基己)酯 (DEHP)	邻苯二甲酸丁酯 (DBP)	邻苯二甲酸丁二酯 (BBP)	邻苯二甲酸二异丁酯 (DIBP)	Test Lab 检测机构	Test Report Number (检测报告号)	Test Date (测试日期)	Remark (备注)
		ED: Cu	SUZHOU SERGETTI	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	SHAEC24028809006	2024/12/20	
	FPC-ANT	Solder Mask	UNITES CHEMICAL	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	ETR25501383	2025/5/20	
		9471	3M	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	SHAEC24027480901	2024/12/6	
		C5210	FUJIAN ZHIN	4	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	CANEC24029407215	2025/1/8	
	RF Connector	NI	tonghua	41	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	SZXEC24002471810	2024-08-08	
		AU	tonghua	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	SZXEC24002471802	2024-08-08	
	Coaxial cable	RF1.13	tisan mai	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	SGS	SZXEC24002490603	2024-08-08	

上述均质材料如果属非金属，还需回答三个问题：  
 ① 是否含卤素：  含有YES  不含有NO  
 ② 是否含红磷：  含有YES  不含有NO  
 ③ 是否含三氧化二锑：  含有YES  不含有NO