APPROVAL SHEET

Supplier name: Guangzhou Vision enthalpy Technology Co., LTD

Supplier material name: Coaxial antenna

Supplier specifications and model: 24~2.5GHZ417dBi5.15-5,85GH417dBi130x15mm195mm. PEX-generation terminal CB3COAX3 root coaxial line length 150mm, 170mm, 135mm, 3M glue SH

CVTE Item number: 004.032.0052700

Admission edition: A0

Drawing version number (no drawing): A0

Supplier acknowledgement column		
lay down	examine and verify	ratify
Jack	Lucy	

Supplier Address:

telephone: portraiture:

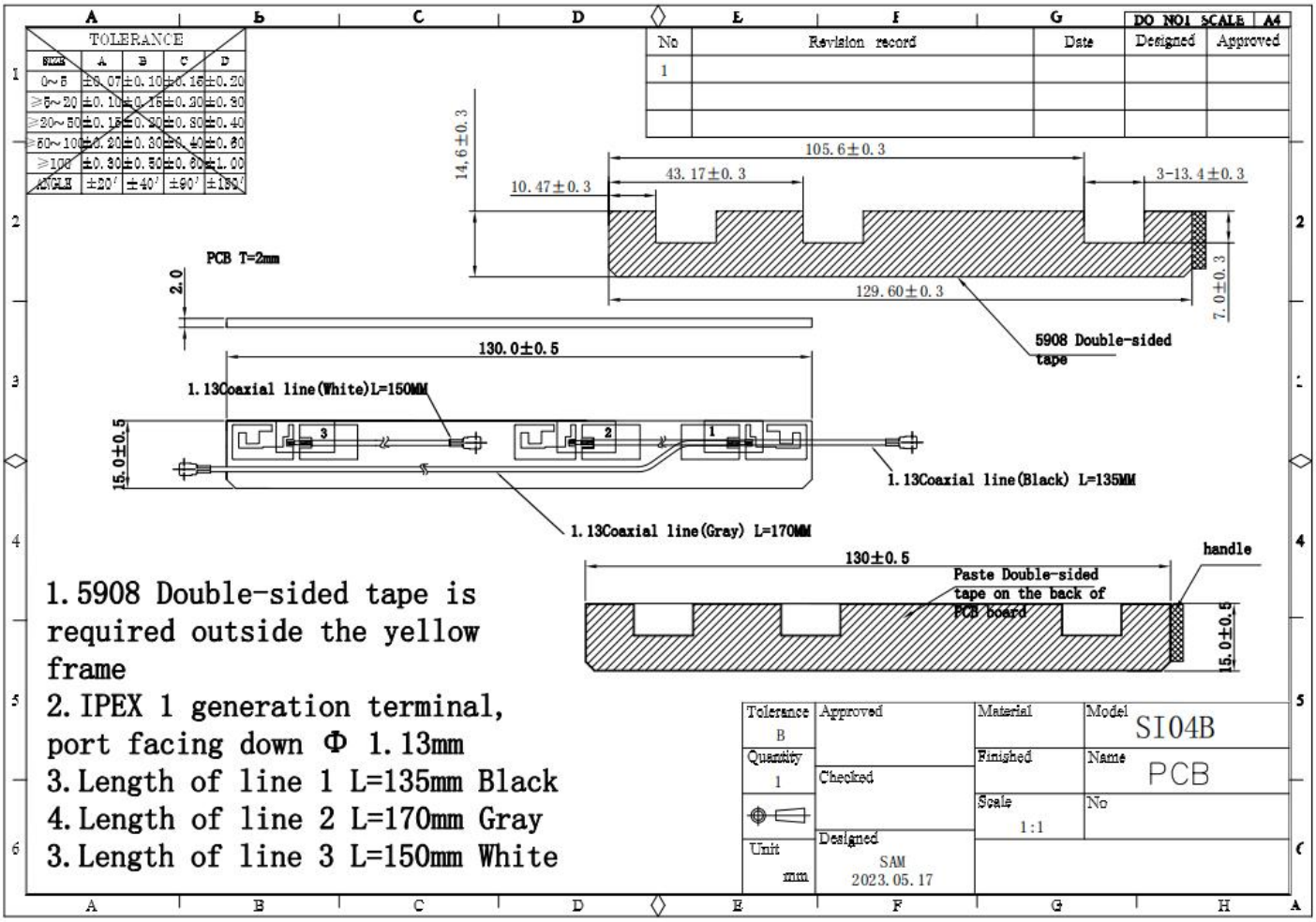
Note: Supplier commitment and confirmation, Suppliers to Guangzhou bin electronic technology Co., Ltd., and its affiliated companies (including but not limited to Guangzhou visual source electronic Technology Co., Ltd., Guangzhou electronic Technology Co., Ltd., Guangzhou into information technology 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

Document revision resume form				
Edition	Date	Develop / Modify / Repeal content	Lay Down	Approval
A/0	2023-06-21	New Edition	Yue Ting	Feng Xianqiang

2. Product Photos

3. Product Drawings, Specifications



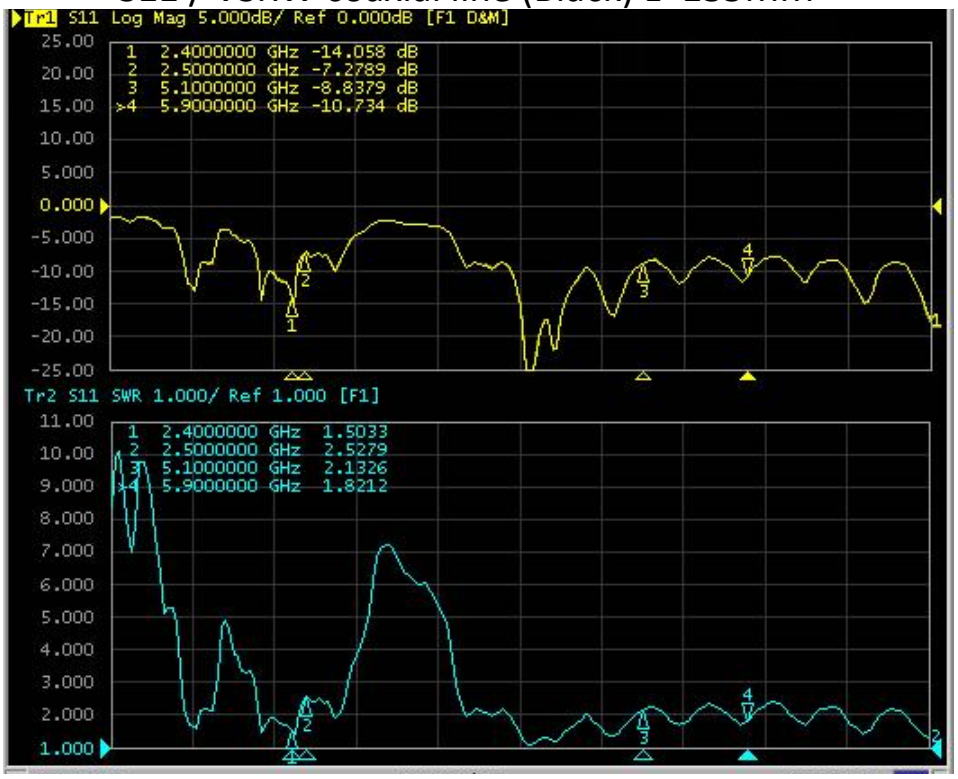
4. performance Parameter

4-1 Performance Parameters

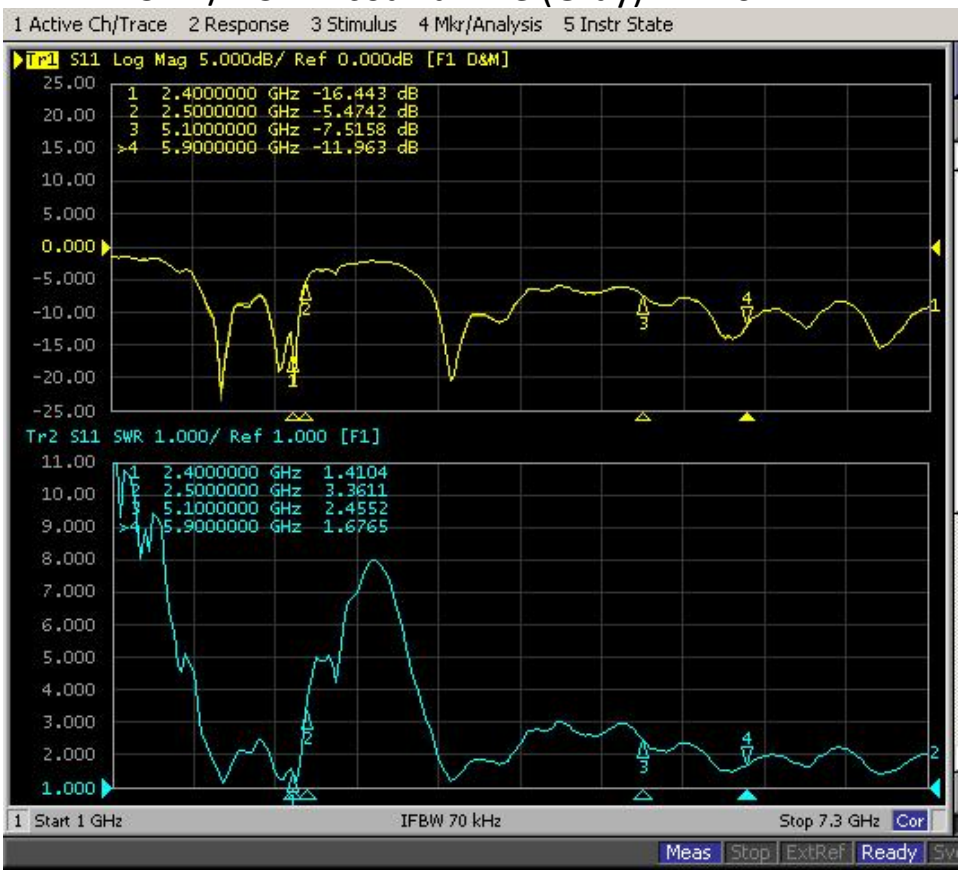
Electrical Parameters	
Frequency Range	2.4-2.5GHz 5.15-5.85GHz
Input Impedence	50Ω
Standing-wave Ratio	sample for reference
Gain	/
Power Capacity	/
Through The Test	Thoroughfare
Polarization Mode	Linear
Radiation Direction	/
Connector Model	I-PEX terminal 1 generation * 3
Mechanical Parameters	
Terminal Maintenance Force	/
Antenna Material	PCB
Coax	White-Grey-Black 1. 13 line
Salt Spray Test	24H
Enviromental Parameter	
Working Temperature	-30℃~65℃

4-2 Performance Test(Local parts of the entire machine)

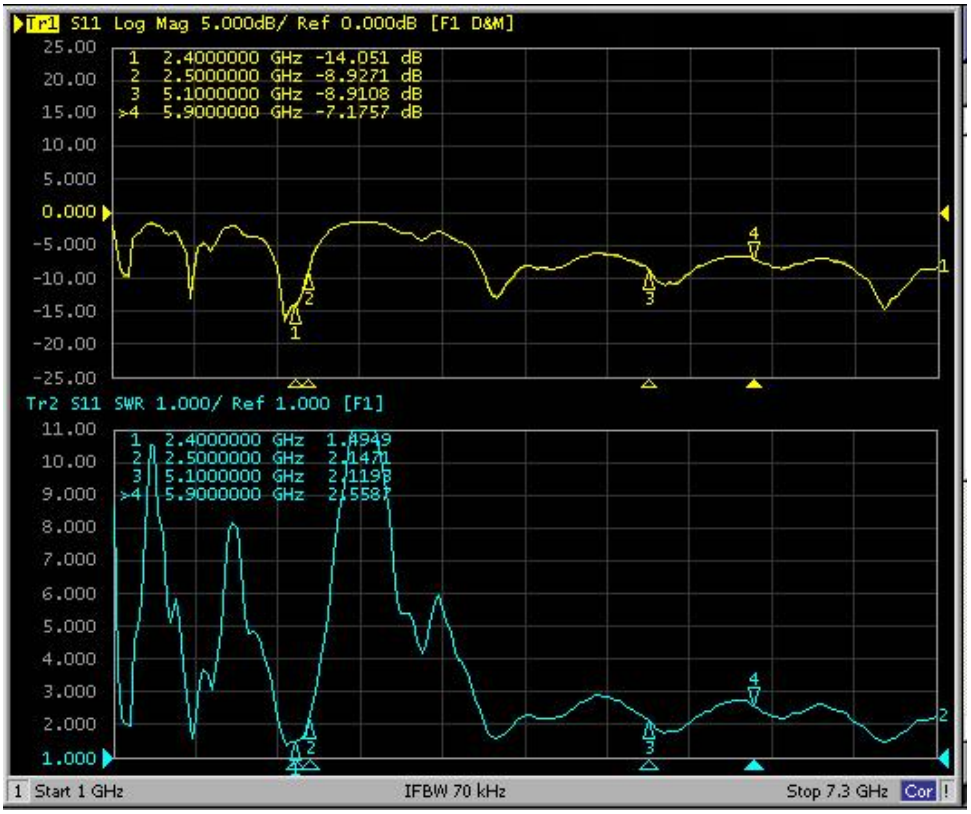
S11 / VSRW coaxial line (Black) L=135MM



S11 / VSRW coaxial line (Gray) L=170MM



S11 / VSRW coaxial line (White) L=150MM



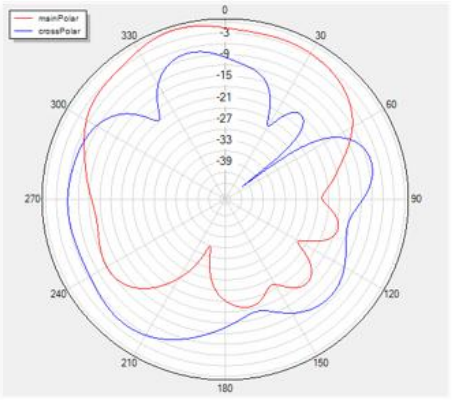
4-3 Antenna 2 Efficiency (Local parts of the entire machine)

coaxial line (Black) L=135MM

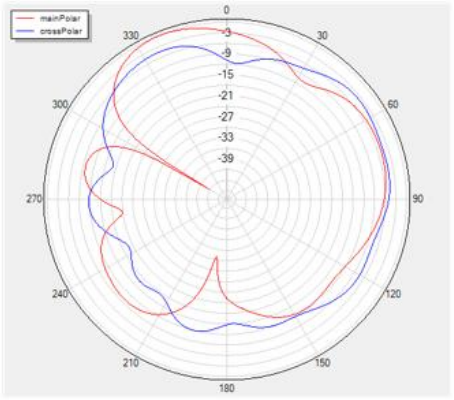
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	2.47	-3.95	40.25
2410	2.94	-3.72	42.5
2420	3.2	-3.72	42.46
2430	3.44	-3.69	42.8
2440	3.66	-3.73	42.32
2450	3.55	-3.86	41.1
2460	3.43	-4.04	39.45
2470	3.22	-4.2	38.03
2480	2.97	-4.34	36.83
2490	2.72	-4.47	35.73
2500	2.69	-4.33	36.91

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
5100	3.52	-3.73	42.33
5150	3.69	-3.86	41.1
5200	4.05	-3.94	40.34
5250	4.38	-3.86	41.09
5300	4.95	-3.82	41.49
5350	4.31	-3.69	42.73
5400	4.19	-3.7	42.68
5450	3.86	-3.85	41.18
5500	3.55	-4.11	38.78
5550	3.34	-4.22	37.88
5600	3.33	-4.22	37.89
5650	3.29	-4.14	38.54
5700	3.26	-4.09	38.98
5750	3.23	-4.05	39.33
5800	3.23	-4.09	38.99
5850	3.17	-4.31	37.1
5900	3.24	-4.31	37.07

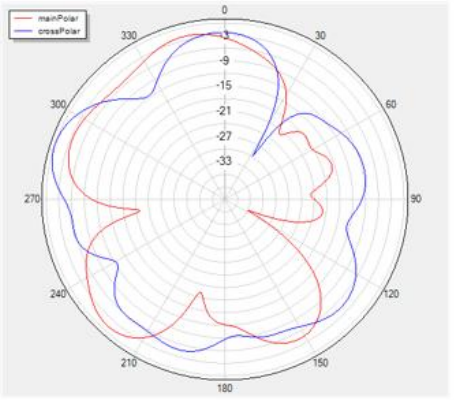
Phi=90 freq=2440MHz



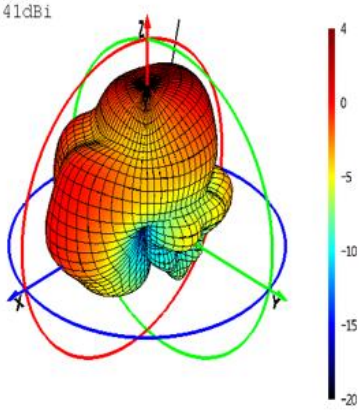
Phi=0 freq=2440MHz



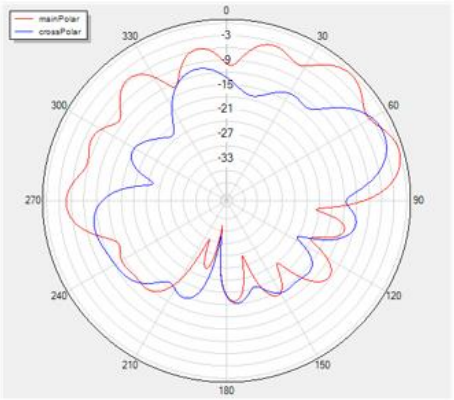
Theta=90 freq=2440MHz



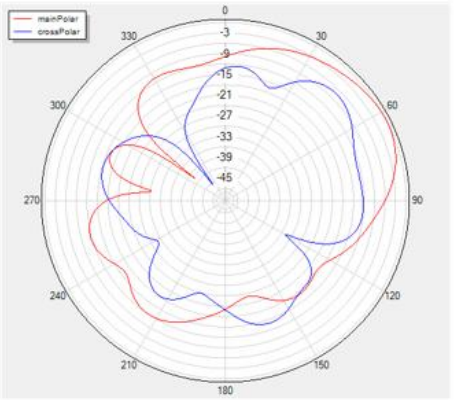
MAX:3.66dBi
MIN:-20.41dBi



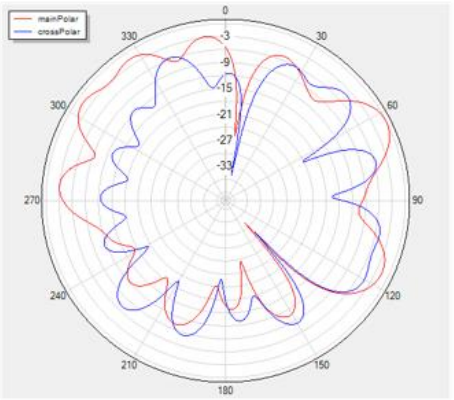
Phi=90 freq=5300MHz



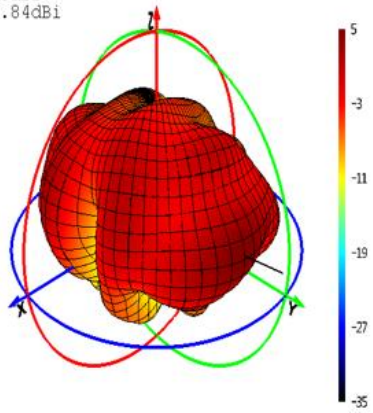
Phi=0 freq=5300MHz



Theta=90 freq=5300MHz



MAX:4.95dBi
MIN:-35.84dBi

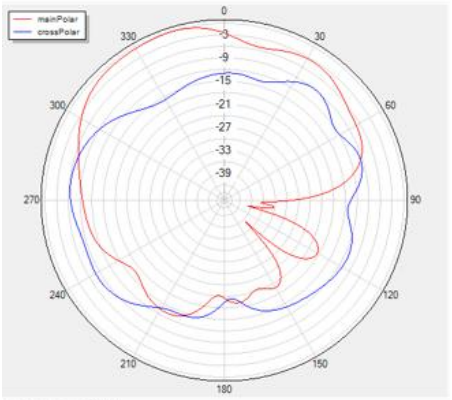


Antenna 3 Efficiency (Local parts of the entire machine)coaxial line (Gray) L=170MM

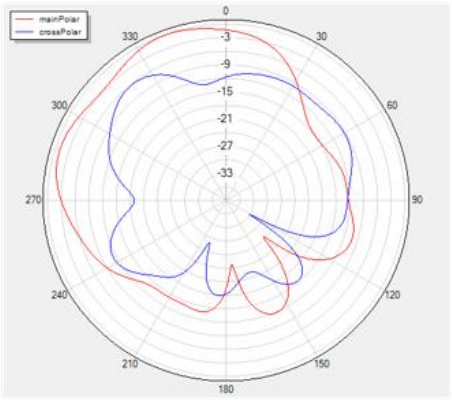
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	1.63	-4.22	37.87
2410	2.01	-4.12	38.73
2420	2.35	-4.23	37.79
2430	2.58	-4.28	37.34
2440	2.93	-4.4	36.34
2450	2.57	-4.54	35.15
2460	2.33	-4.68	34.01
2470	1.98	-4.82	32.94
2480	1.63	-4.98	31.77
2490	1.3	-5.16	30.46
2500	1.19	-5.34	29.23

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
5100	1.05	-5.83	26.1
5150	1.37	-5.7	26.93
5200	1.99	-5.65	27.24
5250	2.73	-5.4	28.86
5300	3.34	-5.31	29.42
5350	3.74	-5.16	30.46
5400	3.85	-5.2	30.18
5450	3.8	-5.16	30.45
5500	3.9	-5.13	30.72
5550	4.23	-4.91	32.3
5600	4.57	-4.79	33.18
5650	4.89	-4.66	34.17
5700	5.45	-4.61	34.6
5750	4.9	-4.56	34.99
5800	4.73	-4.61	34.59
5850	4.31	-4.69	33.93
5900	4.39	-4.54	35.13

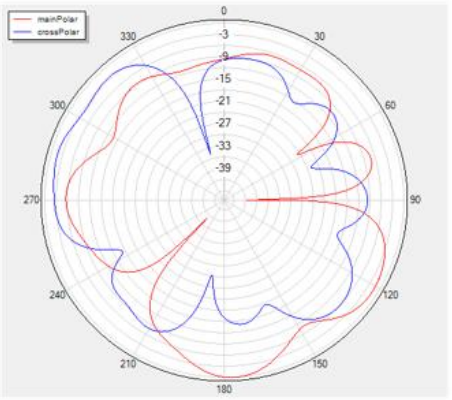
Phi=90 freq=2440MHz



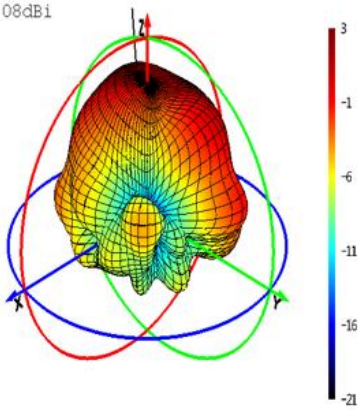
Phi=0 freq=2440MHz



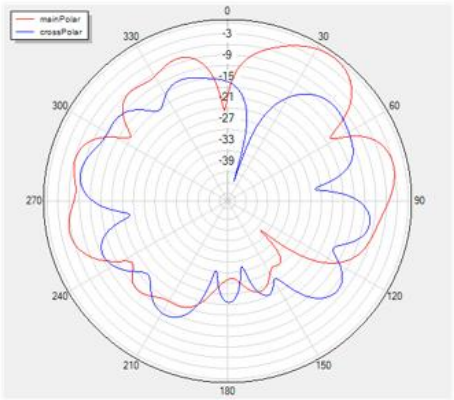
Theta=90 freq=2440MHz



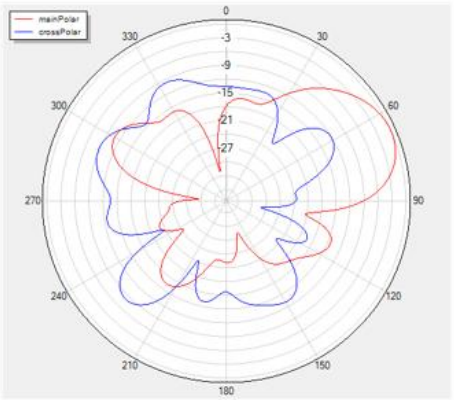
MAX:2.93dBi
MIN:-21.08dBi



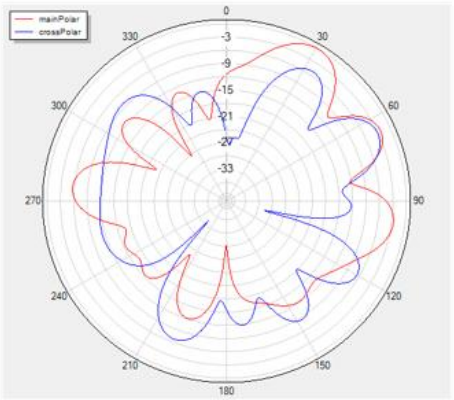
Phi=90 freq=5700MHz



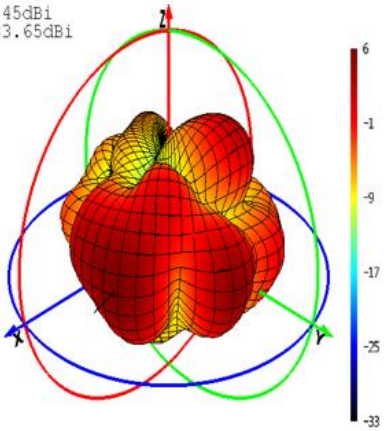
Phi=0 freq=5700MHz



Theta=90 freq=5700MHz



MAX:5.45dBi
MIN:-33.65dBi

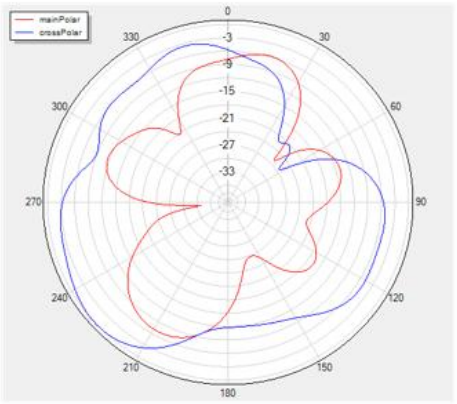


Antenna 1 Efficiency (Local parts of the entire machine)coaxial line (White) L=150MM

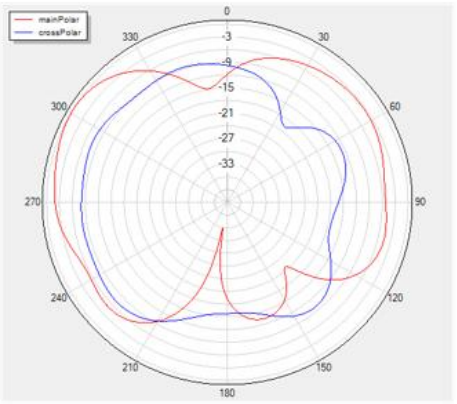
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	2.28	-3.49	44.81
2410	2.46	-3.42	45.52
2420	2.58	-3.58	43.82
2430	2.45	-3.67	42.91
2440	2.39	-3.81	41.55
2450	2.29	-3.99	39.9
2460	2.16	-4.18	38.18
2470	2	-4.35	36.76
2480	1.84	-4.5	35.48
2490	1.66	-4.7	33.9
2500	2.46	-4.42	36.12

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
5100	6.46	-3.14	48.54
5150	6.62	-3.14	48.49
5200	6.51	-3.27	47.13
5250	6.4	-3.28	47.02
5300	6.11	-3.46	45.05
5350	5.75	-3.58	43.88
5400	5.33	-3.87	41.03
5450	4.85	-4.15	38.46
5500	4.49	-4.44	36.01
5550	4.23	-4.62	34.48
5600	4.04	-4.8	33.11
5650	3.92	-4.89	32.42
5700	3.85	-4.95	32
5750	3.71	-5.09	30.98
5800	3.63	-5.32	29.35
5850	3.51	-5.61	27.46
5900	3.45	-6.18	24.12

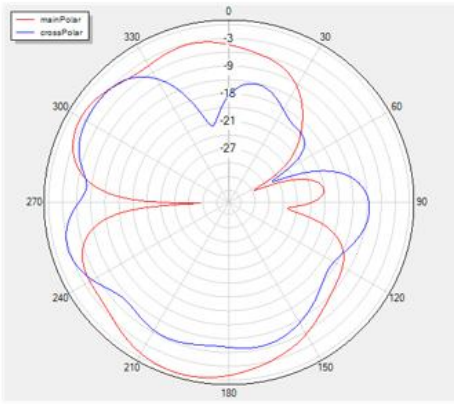
Phi=90 freq=2420MHz



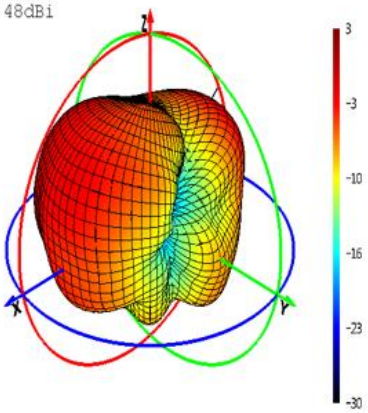
Phi=0 freq=2420MHz



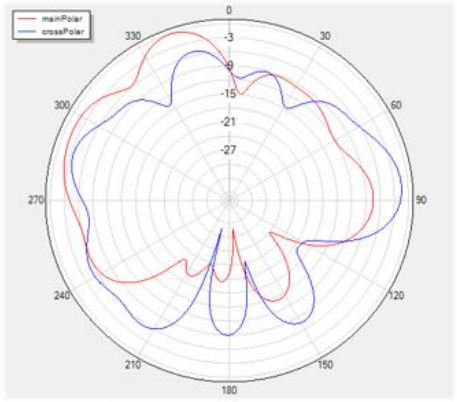
Theta=90 freq=2420MHz



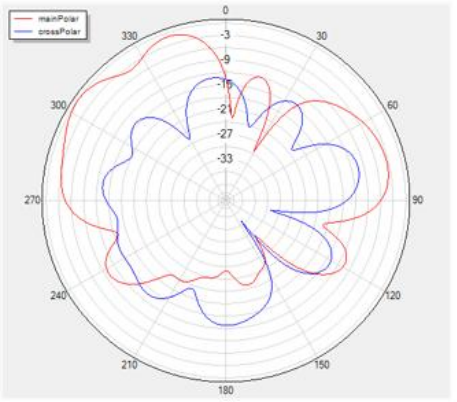
MAX:2.58dBi
MIN:-30.48dBi



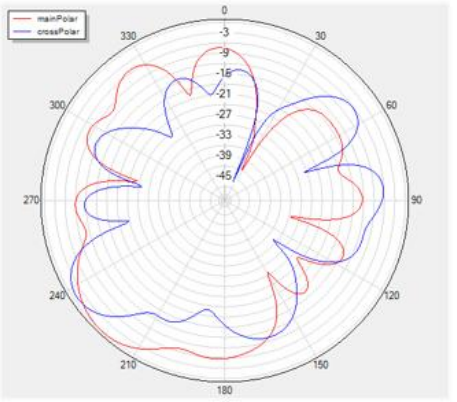
Phi=90 freq=5150MHz



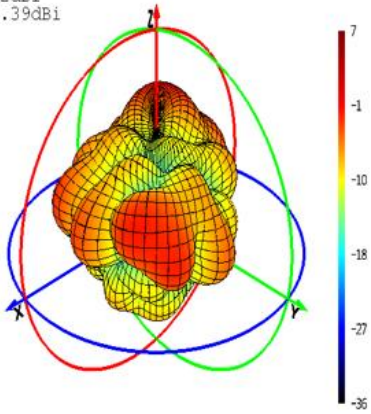
Phi=0 freq=5150MHz



Theta=90 freq=5150MHz



MAX:6.62dBi
MIN:-36.39dBi

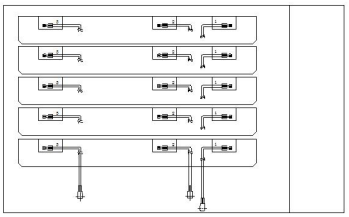


5. Packaging Standard

Product Material No.:004.032.0052700

Product specification: Coaxial antenna 24~2.5GHZ417dBi5.15-5,85GH417dBi130x15mm195mm. PEX-generation terminal CB3COAX3 root coaxial line length 150mm, 170mm, 135mm, 3M SH

Ii. Packaging requirements and operation instructions:



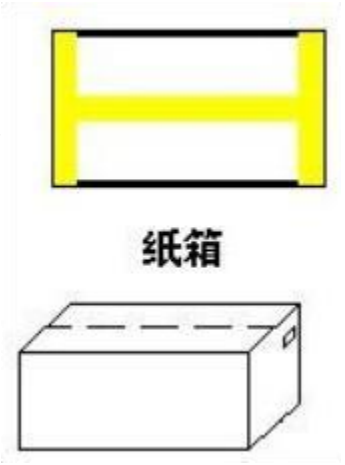
1. Internal packaging:

Product 2 PCS into the small PE bag

Product 25 PCS small Pe bag into the big 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;

7. Reliability test report

7-1. 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	**P ASS**
2	Plug in damage	Set the network analyzer parameters for testing	According to the specifications to be tested	**P ASS**
3	salt atmospher e	Temperature 35° C humidity 95% saline concentration 5%; test for 24 hours	After 2H, there was no obvious bad appearance: frequency offset of 5%	**P ASS**
4	constant temperat ure 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%	**P ASS**
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	**PASS**

9. Disabled Material Guarantee

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.》

公司盖章