



Shenzhen DEWEIMA Communication Equipment Co.Ltd

SPECIFICATION SHEET FOR APPROVAL

CUSTOMER NAME (客户名称)	Gaoju innovation
CUSTOMER P/N (客户料号)	111601-00063
PART NAME (品 名)	F09-5.8+2.4-1.0 PCB antenna
APPROVAL REV. 版次	DWM-V1.0

CONTRACTOR			DATE : 2024-03-22
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED
高春彦	段燕林	陈显叶	余奇

CUSTOMER		DATE :
Approved By	Checked By	Prepared By

	Product Specification		
	P/N:	Rev.: A	Page:

Content

Content	2
1. Product Application/产品应用	3
2. The test environment, equipment/测试环境、设备	3-5
3. Technology Parameters/技术参数	6-9
4. Environmental Performance/环境性能	10
5. Usage Precaution/使用禁忌或注意事项.....	11



Product Specification

P/N:

Rev.:
A

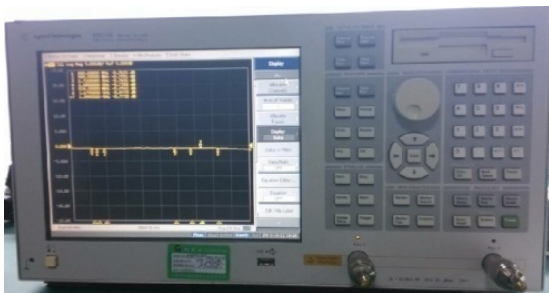
Page:

1. Product Application/产品应用

Terminal of the antenna products can only be used for 2400MHz~2500MHz&5150MHz~5850MHz antenna.

该天线产品用于： 2400MHz~2500MHz&5150MHz~5850MHz 信号的传输。

2. The test environment, equipment/测试环境、设备

Item 项目	Description 项目描述	Test Condition/测试条件	Requirement /规格要求
2.1	Passive testing /无源测试	The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices. (VSWR 测量装置依次连接：网络分析仪测量电缆 agilent5071B→→客户提供终端。)	驻波比： 2400MHz~2500MHz<2.0 5150MHz~5850MHz<4.0 阻抗： 50 oh
		Test equipment/测试设备	
			
Item 项目	Description 项目描述	Test Condition/测试条件	Requirement /规格要求



Product Specification

P/N:

Rev.:

Page:

A

2.2

增益及
效率测试

Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.

(以下图片显示的天线的测量条件被放在测量装置,它是用于所有的测量电性能。)

天线增益:

2400MHz~2500MHz:2dBi±1dBi

5150MHz~5850MHz:2dBi±1dBi

天线效率:

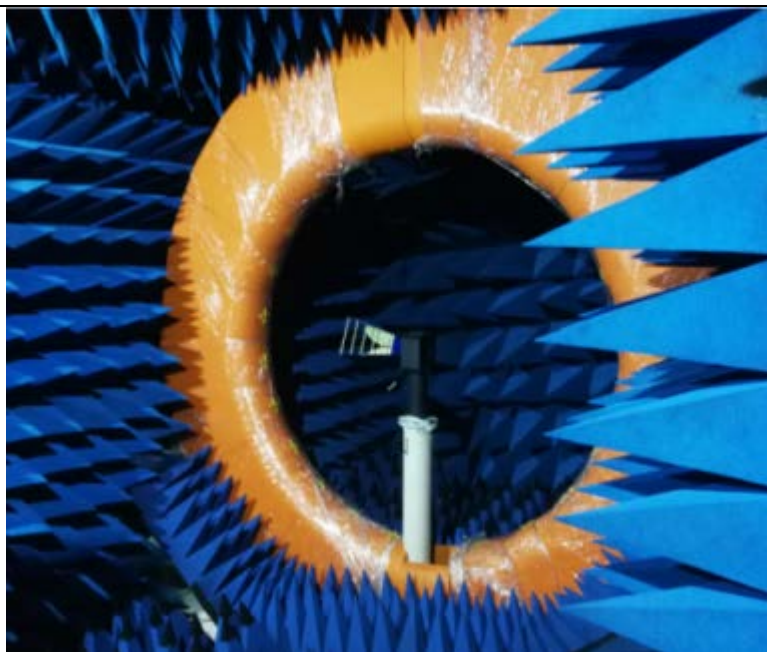
2400MHz~2500MHz>40%

5150MHz~5850MHz>35%

2.3

Microwave
Anechoic
(Satimo&ETS
)
/微波暗室

Test equipment/测试设备





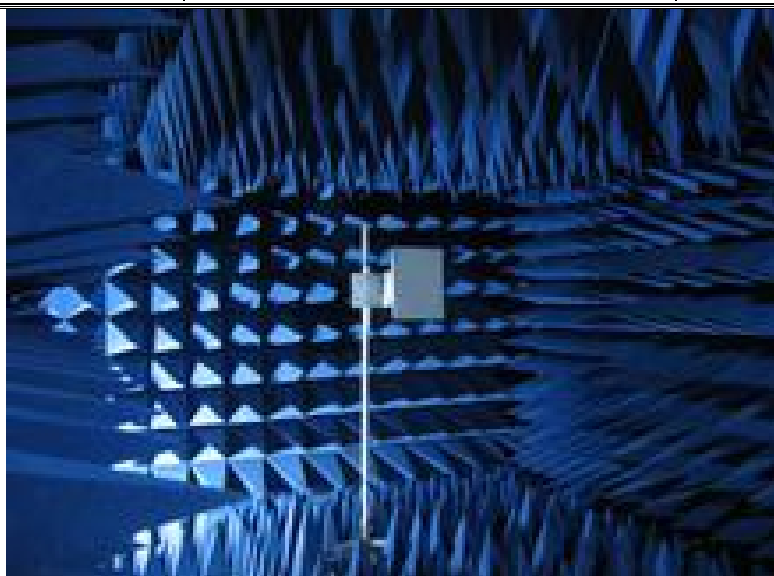
Product Specification

P/N:

Rev.:

Page:

A



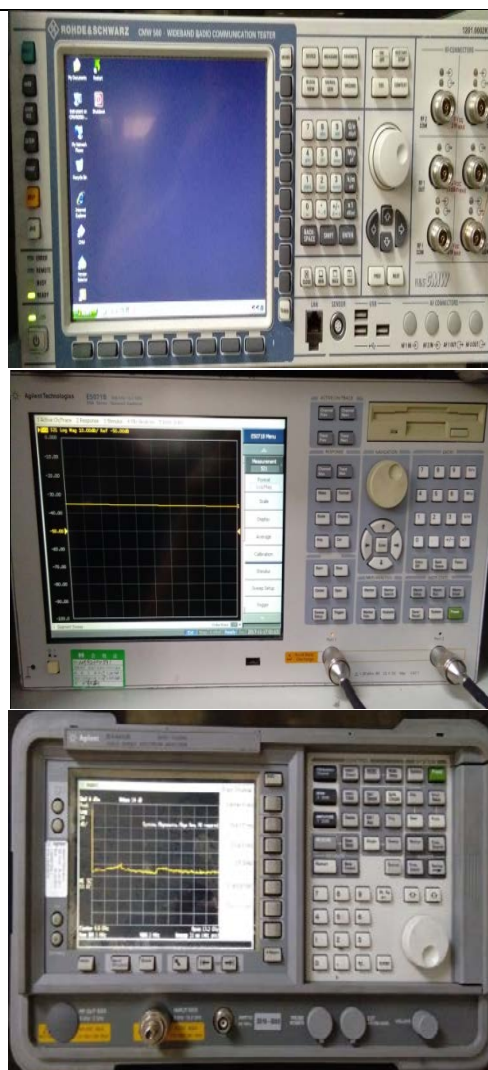
2.4

CMW500

Agilent5071B

AgilentE4405B

Agilent8960





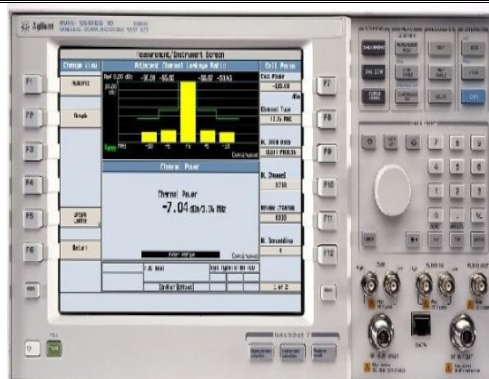
Product Specification

P/N:

Rev.:

Page:

A



3. Technology Parameters/技术参数

Frequency Range/频率范围:

2400MHz~2500MHz&5150MHz~5850MHz

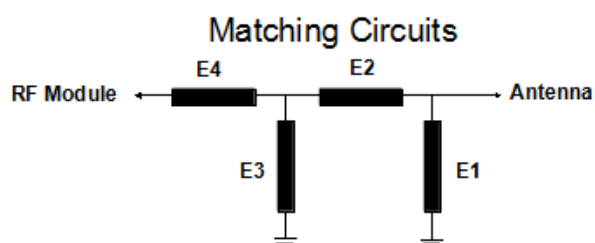
Operating Humidity/工作湿度:

85% R.H.MAX

Temperature Rating/温度范围:

-40°C~+85°C

3.1 The matching test value/调试匹配值





Product Specification

P/N:

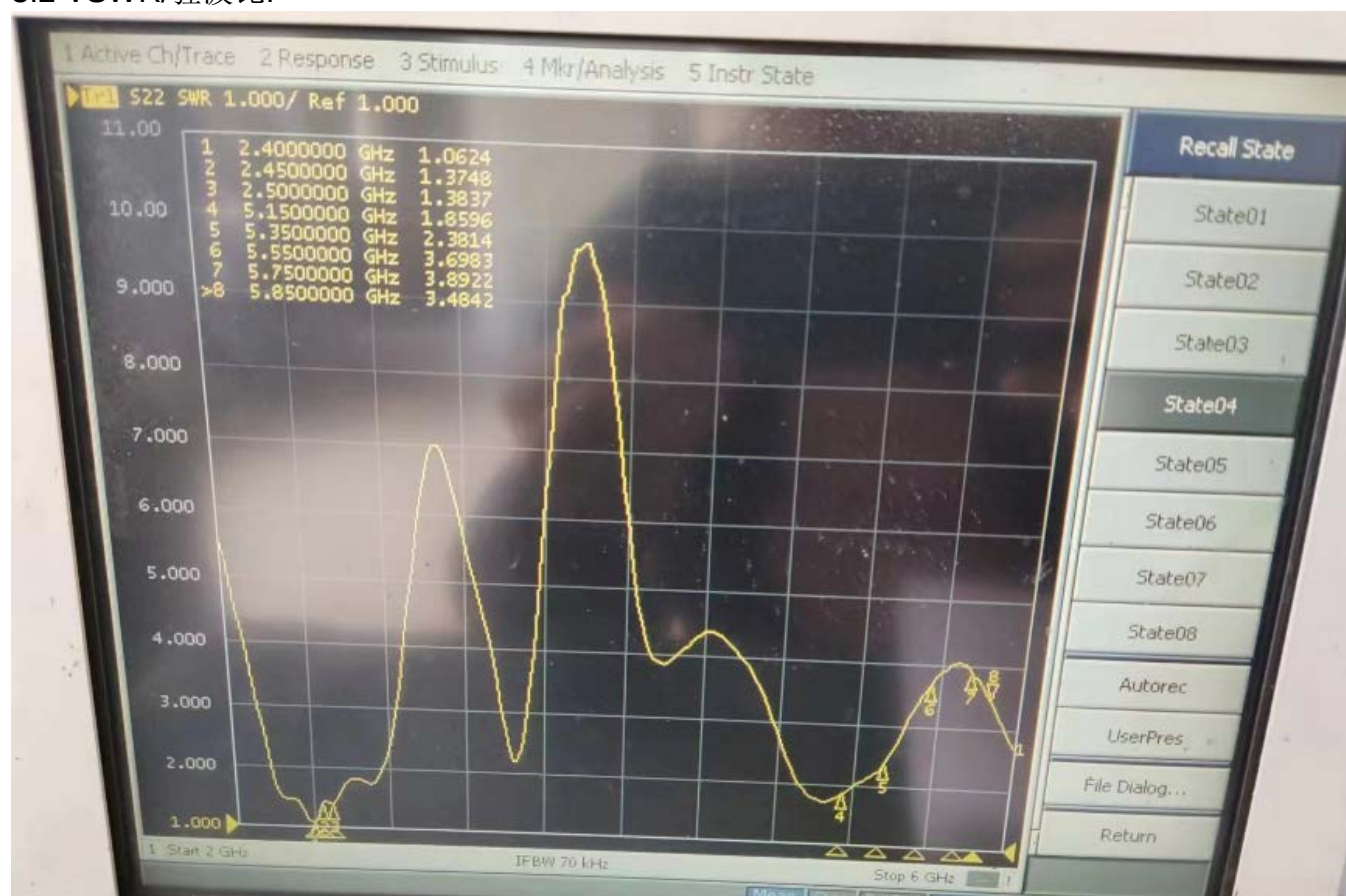
Rev.:

Page:

A

Element	Value
E1(0402)	
E2(0402)	
E3(0402)	
E4(0402)	

3.2 VSWR/驻波比:





Product Specification

P/N:

Rev.:

Page:

A

3.3. Efficiency And Gain/效率和增益

Frequency/Mhz	Efficiency / %	MaxGain/dBi
2400	42.46	2.86
2410	40.74	2.4
2420	42.66	2.91
2430	43.25	3.18
2440	41.98	2.79
2450	42.56	3.05
2460	42.46	3.41
2470	41.02	3.09
2480	41.98	3.25
2490	42.46	3.67
2500	39.81	3.18
5150	40.28	3.18
5200	41.28	3.21
5250	39.31	3.34
5300	40.59	3.15
5350	41.32	2.85
5400	42.96	2.44
5450	41.65	2.23
5500	40.58	2.25
5550	39.98	2.15
5600	41.49	2.03
5650	42.3	2.74
5700	41.99	2.17
5750	42.85	2.03
5800	42.21	2.31
5850	43.27	2.25



Product Specification

P/N:

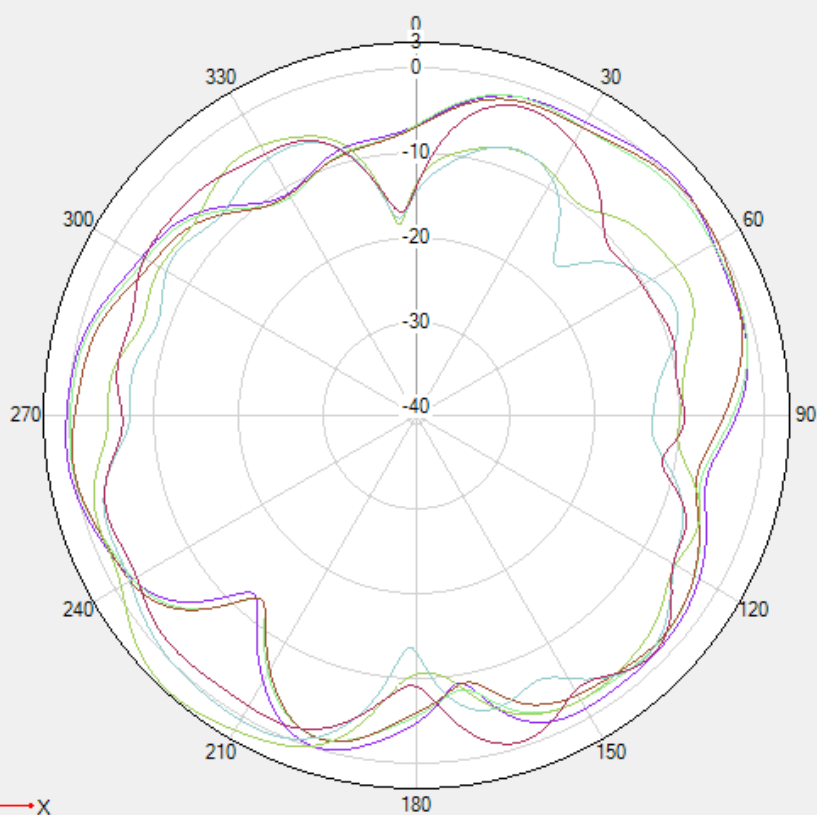
Rev.:

Page:

A

3.4 2D & 3D PHOTO

PHi 0°方向
图





Product Specification

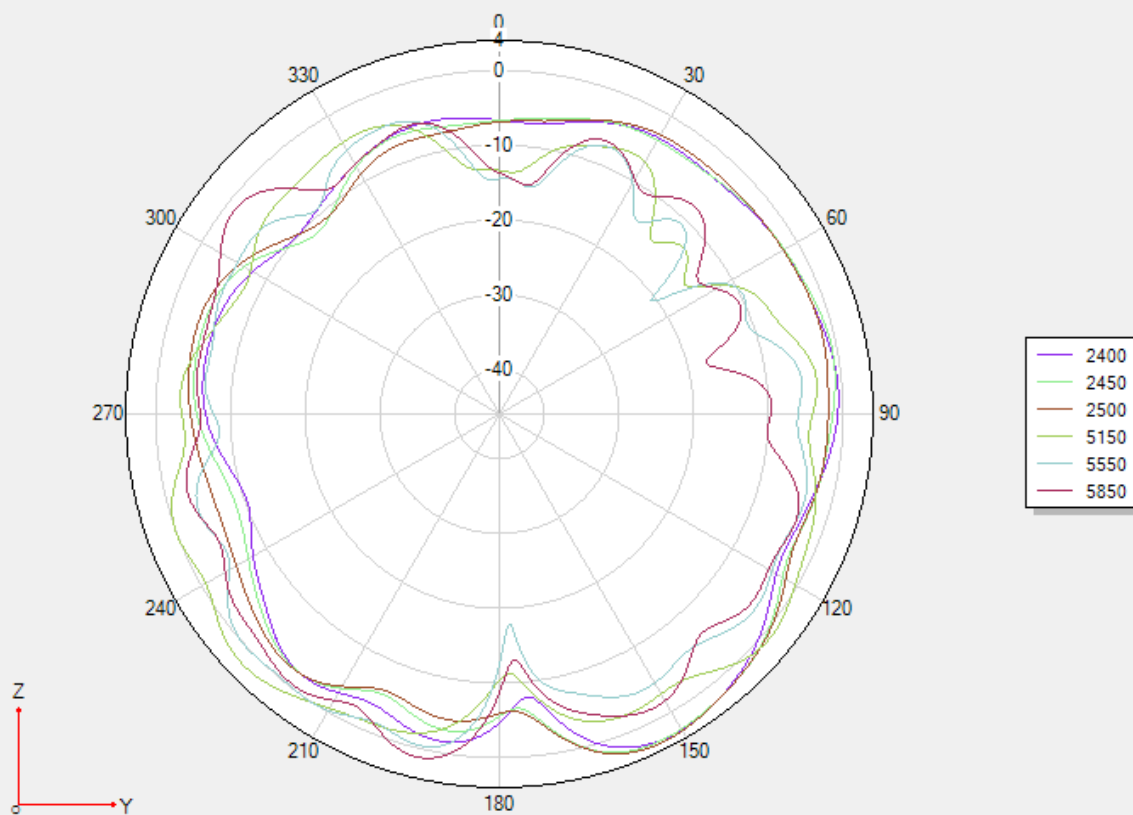
P/N:

Rev.:

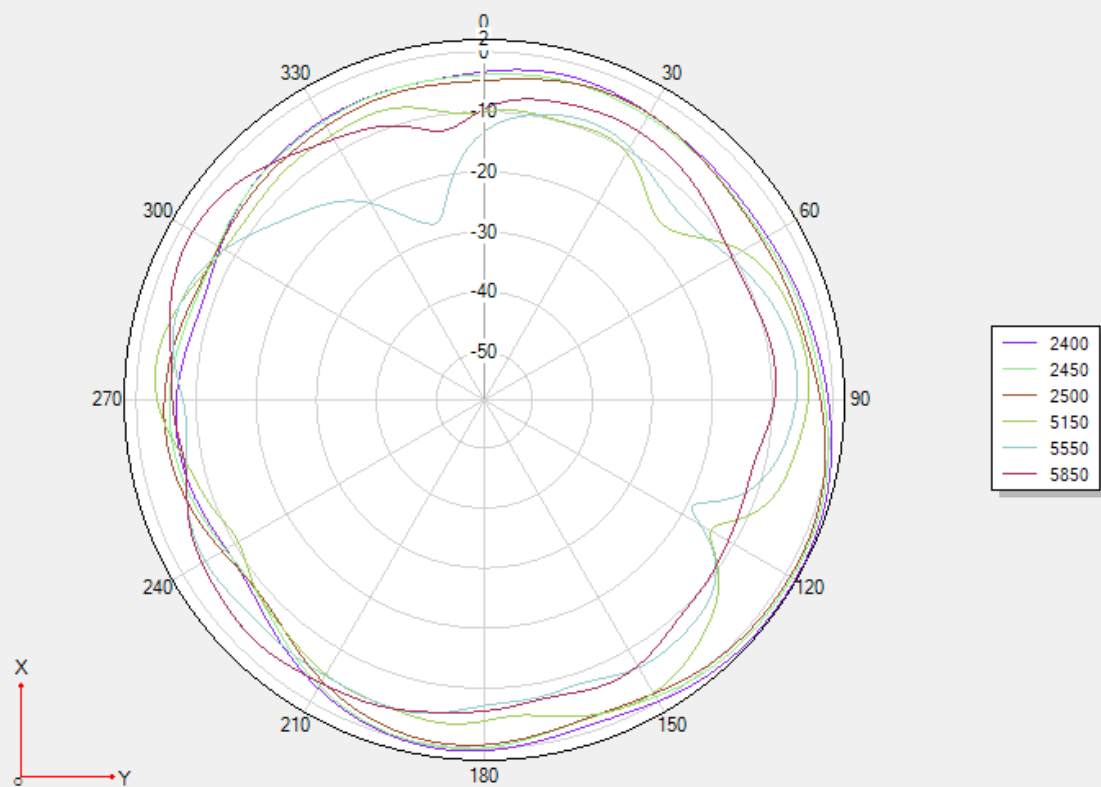
Page:

A

PHi 90°方向图



Theta90°方向图





Product Specification

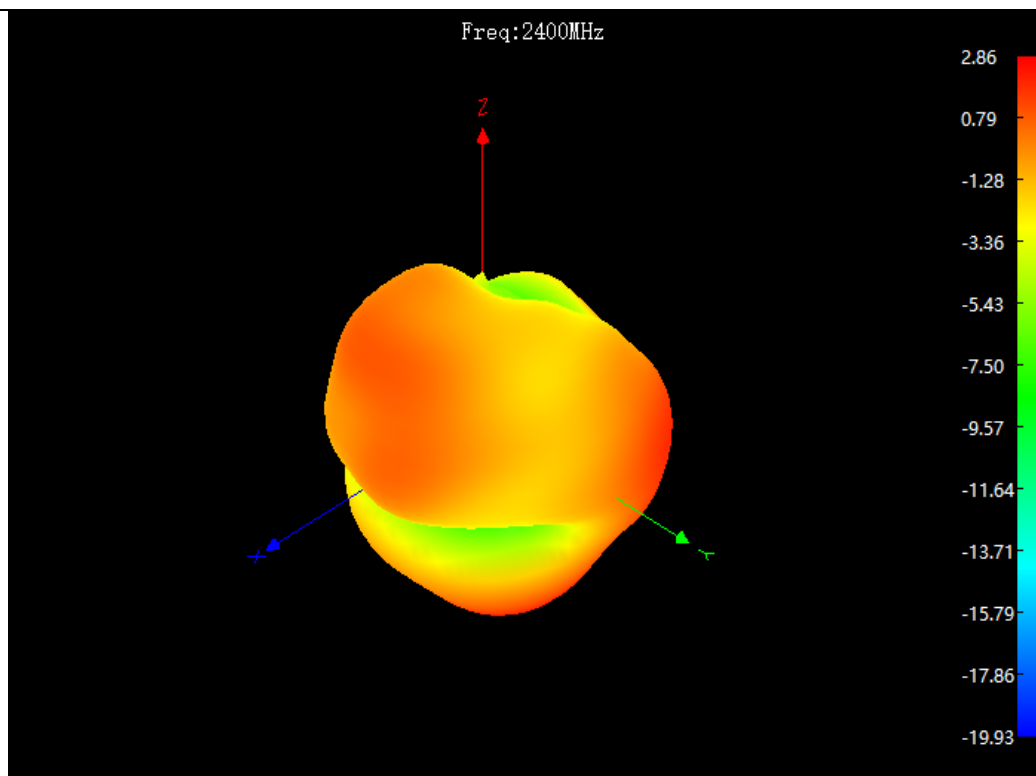
P/N:

Rev.:
A

Page:

2.4G

3D 方向图
(3D
Pattern)





Product Specification

P/N:

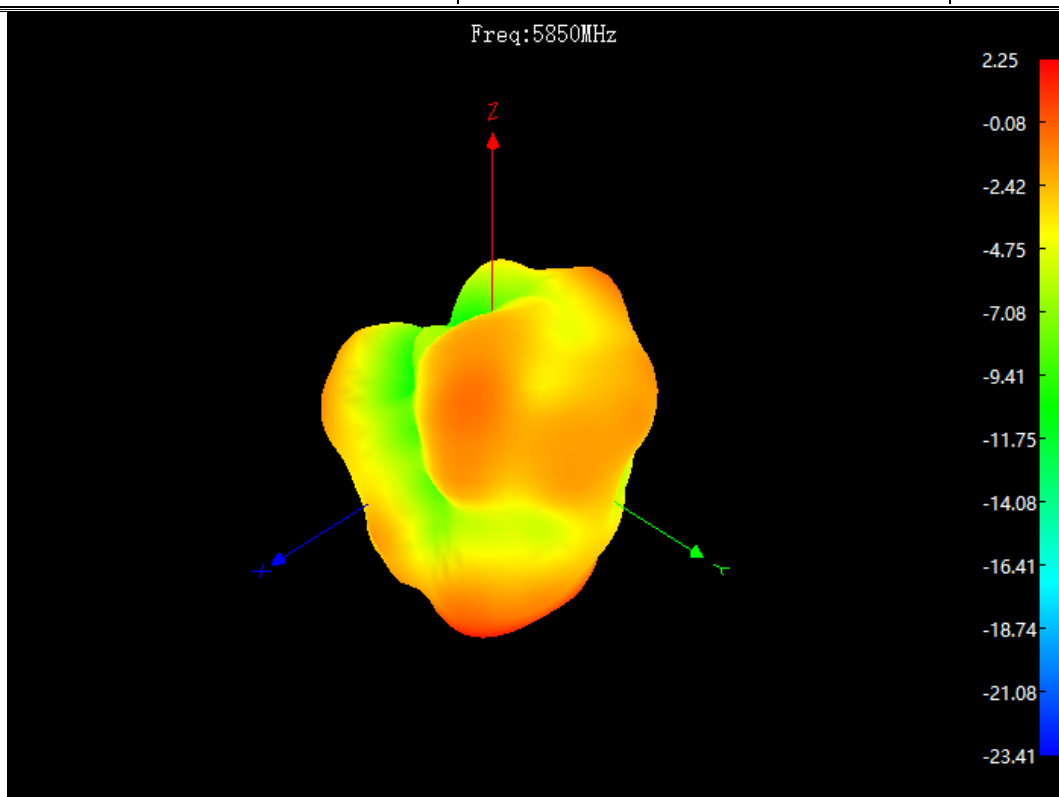
Rev.:

Page:

A

5.8G

3D 方向图
(3D
Pattern)





Product Specification

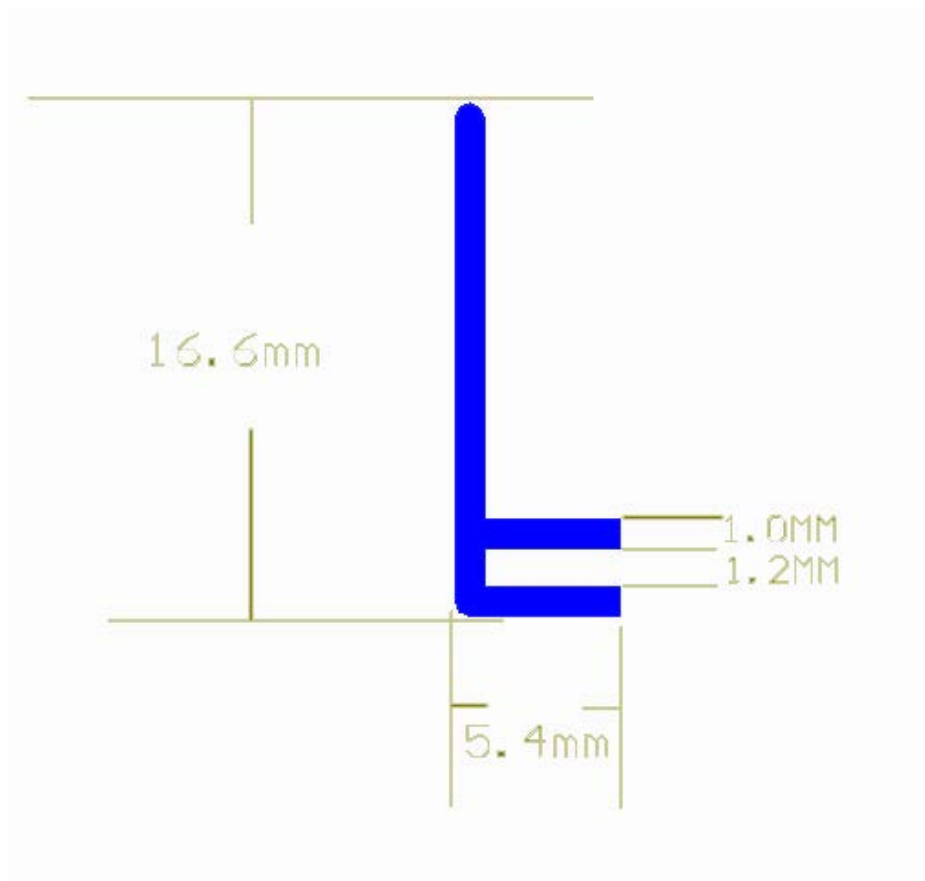
P/N:

Rev.:

A

Page:

5.Product photo/产品结构图片



5.Environmental Performance/环境性能

Item 项目	Description 项目描述	Test Condition 测试条件	Requirement 规格要求
5.1	High and low temperature test 高低温测试	Temp.: -40 °C Time: 48 hours Temp.: 85°C Time: 48 hours	1. No visible damage. (无可见损伤) 2. The electric performances reach the standard. (电气性能达标)
Item 项目	Description 项目描述	Test Condition 测试条件	Requirement 规格要求



Product Specification

P/N:

Rev.:

A

Page:

5.2

Salt Spray
盐雾测试

5±0.1% Nad salt fog
PH Value: 6.5-7.2
Temp: 35±1℃
Time:24 hours

1. No color change.
(无颜色变化)
2. the appearance of the antenna does not flake off.
(天线无外观脱落)

6.Usage Precaution/使用禁忌或注意事项

No	Items 项目	Matter 事项
6.1	Precautions 禁忌	a)Please avoid the cleaning of this product a)请避免清洁此产品
No	Items 项目	Matter 事项
6.2	Stockpile condition 存储条件	Use this product within 6 months after receipt Condition : Temp: 5~30℃ Humidity:≤70% 有效期: 请在产品接收后的 6 个月内使用 存储环境: 温度:5~30℃; 湿度:≤70%