



东莞市一佳电子通讯科技有限公司

Dongguan YiJia Electronics Communication Technology Co.,Ltd.

规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2024/01/22
编号 File No	24012201
版本 Revision	1.0

客户
CUSTOMER:

QINGDAO HISTONE INTELLIGENT COMMERCIAL SYSTEM CO., LTD.

客户料号
CUSTOMER NO:

20002331

品名
PART NAME:

WIFI MAIN Antenna L=270mm MHF

供方料号
SUPPLIER NO:

YJQ01.225.016.301A

送样日期Date:

送样数量Q'TY:

客户确认CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

供方确认 SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A

add: 东莞市长安镇沙头社区木鱼路59号元富工业区 Tel:0769-82586086 Fax:0769-82586086

RoHS
Compatible

CUSTOMER
PART NO

REV.

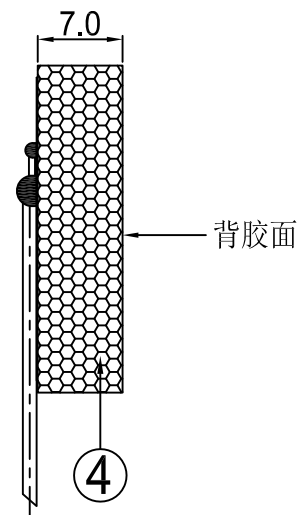
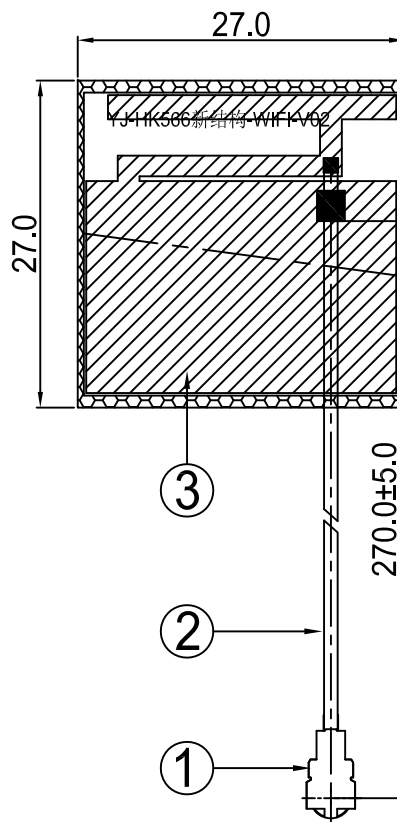
DESCRIPTION

DATE



首次发行

2023-12-18



4	EVA+Paster	27.0*27.0*T7.0mm	EVA+Paster	EVA100XXA.P01	1
3	FPC	26.0*25.0mm	FPC	FPC11XXA.P01	1
2	Coaxial Cable	O.D.1.13 Black Low loss	O.D.1.13	COA100XXA.P01	1
1	Mini Connector	Au Plated 1代	Cu	TER100XXA.P01	1
NO	PART NAME	DESCRIPTION	Material	Part Number	Q.TY



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Dongguan YiJia Electronics Communication Technology Co.,Ltd. Tel :0769-82586086 Fax:0769-82586086

PART NAME: WIFI MAIN Antenna L=270mm MHF

PART NO.: YJQ01.225.016.301A

DATE: 2023-12-18

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

UNITS: mm

SCALE: 1/1

REVISION: A

覃健宇

周颖杰

廖光喜



天线规格

Antenna Specification

Electrical Properties

Frequency	2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max
Gain	4.4 dBi@2.4-2.5GHz 4.8 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear

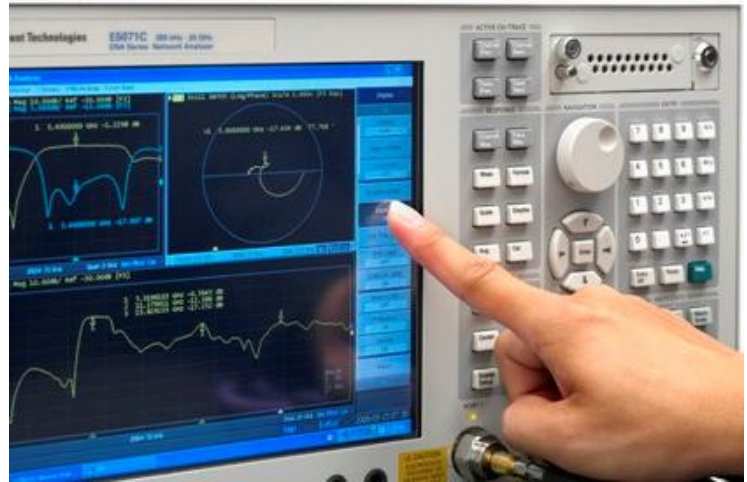
Physical Properties

Connector	1代IPEX
Cable Type	O.D.1.13mm低损耗
Cable Length	270mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%

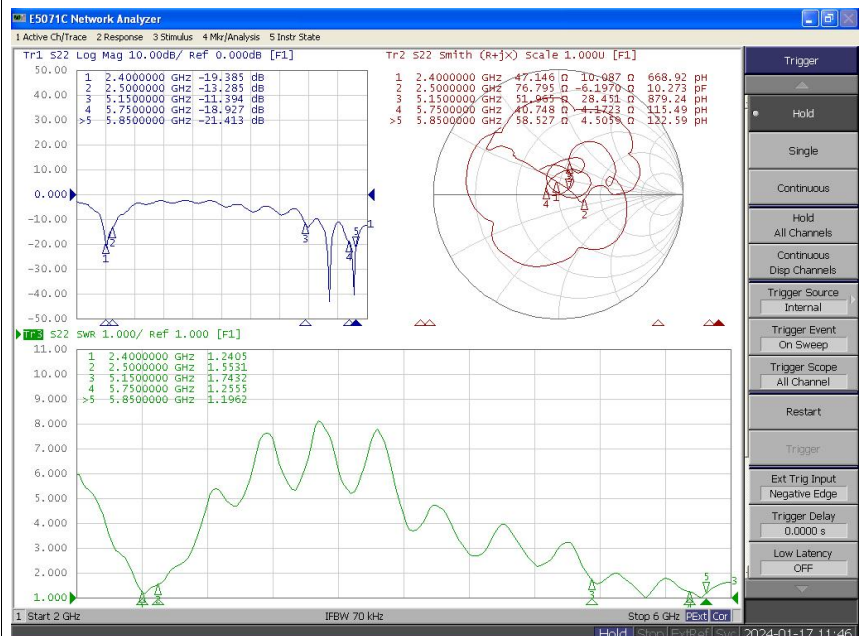


Antenna Performance Test

**Agilent
E5071B**

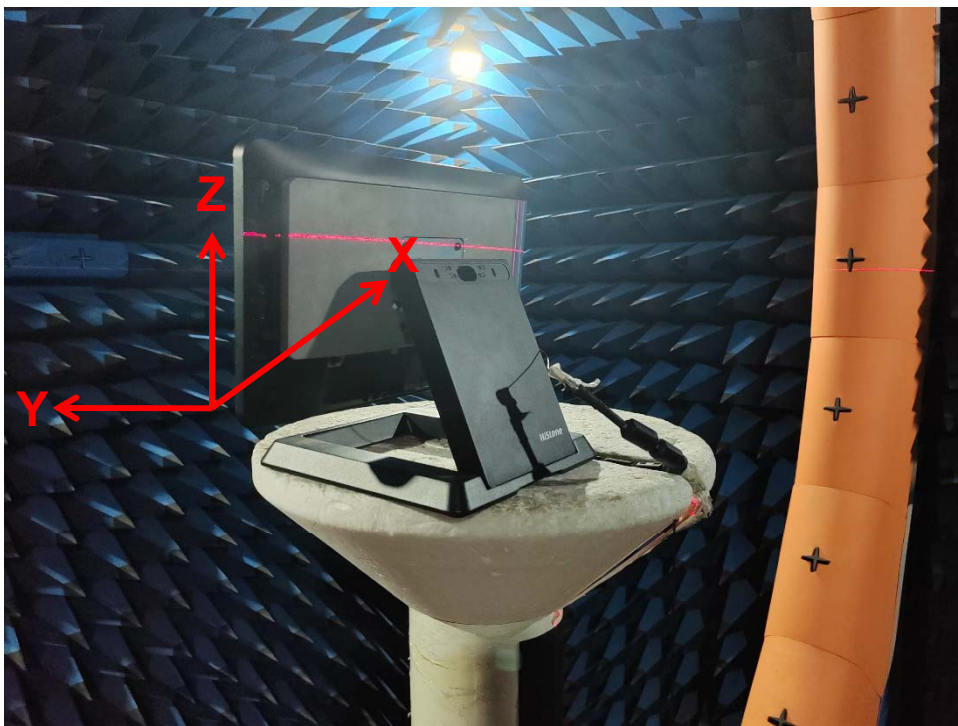
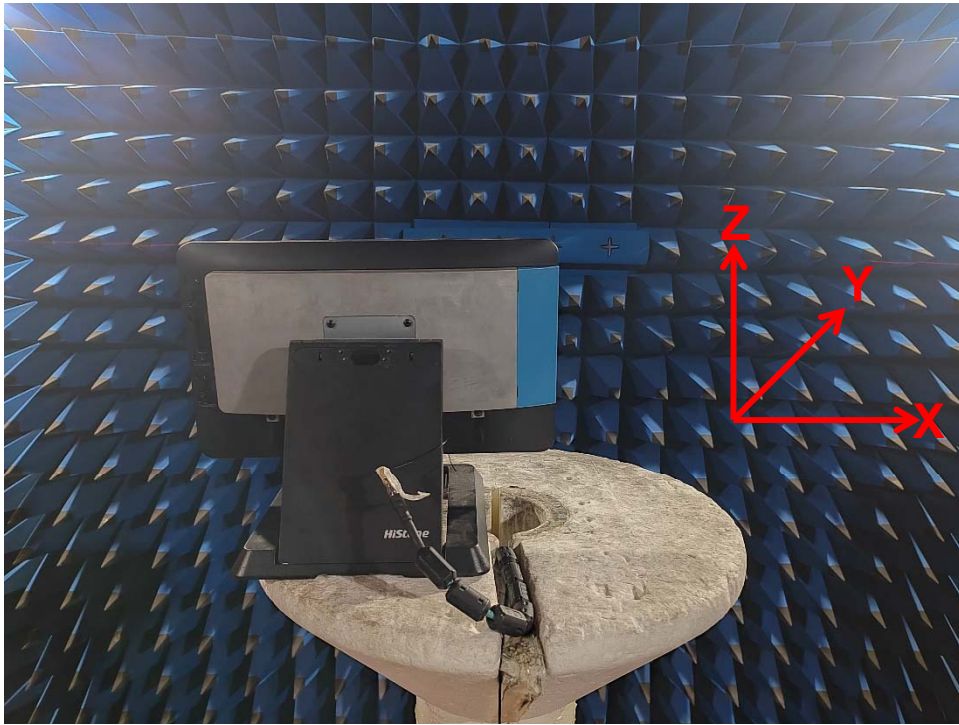


**S
Parameter
Test //
WiFi main
Antenna**





Antenna Passive Test





Passive Test For WiFi main Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	47.6	-3.2	4.4
2410	47.1	-3.3	4.2
2420	45.2	-3.5	3.9
2430	44.1	-3.6	3.8
2440	43.3	-3.6	3.5
2450	44.7	-3.5	3.7
2460	42.8	-3.7	3.4
2470	44.6	-3.5	3.7
2480	43.8	-3.6	3.7
2490	44.9	-3.5	3.7
2500	42.6	-3.7	3.3

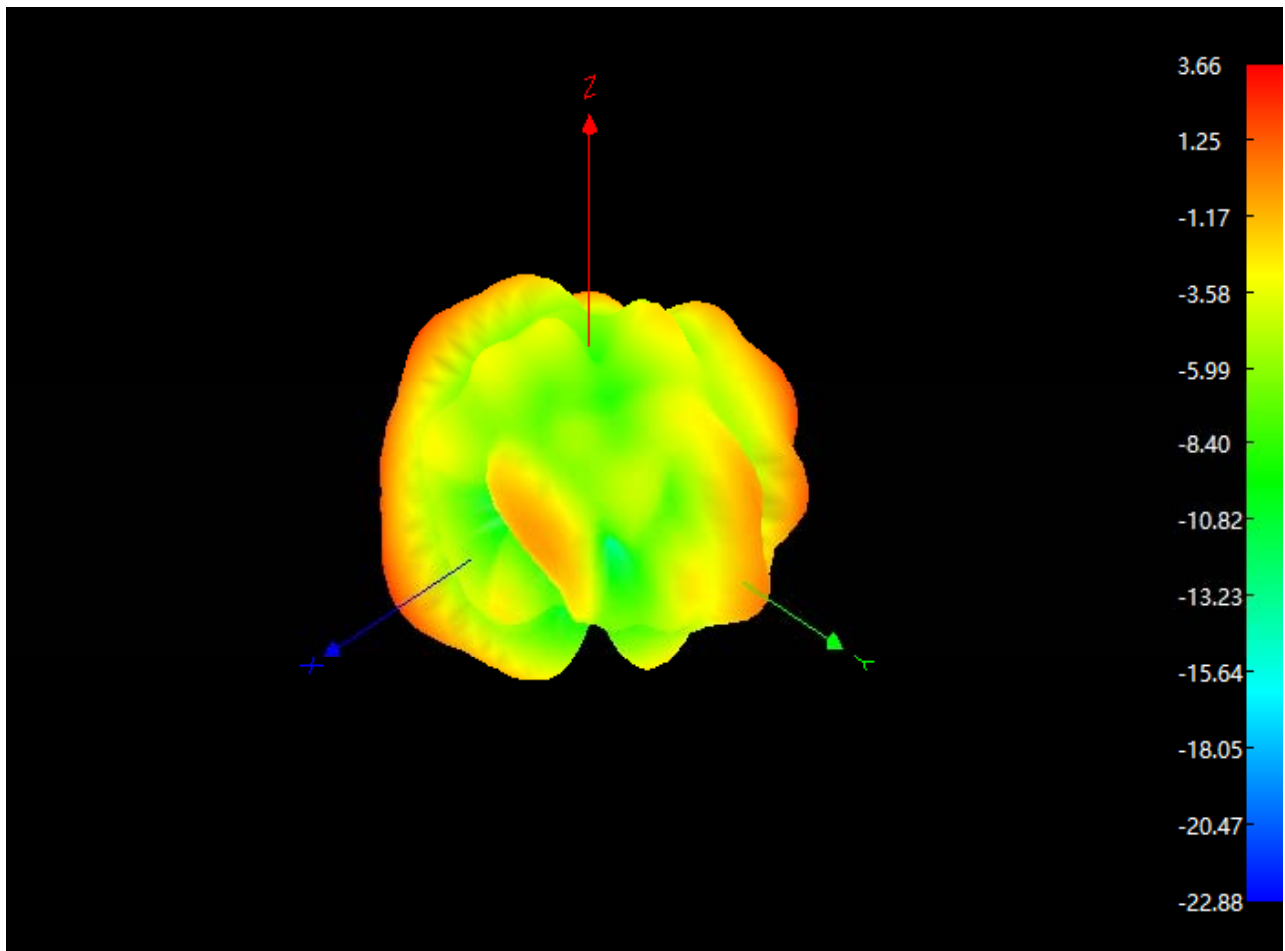


Passive Test For WiFi main Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	40.8	-3.9	4.1
5200	45.3	-3.4	4.1
5250	44.7	-3.5	4.0
5300	42.2	-3.8	3.5
5350	42.0	-3.8	3.5
5400	48.5	-3.1	4.0
5450	49.3	-3.1	3.7
5500	48.2	-3.2	3.5
5550	52.4	-2.8	3.8
5600	45.6	-3.4	3.0
5650	44.5	-3.5	3.6
5700	46.2	-3.4	4.1
5750	50.1	-3.0	4.8
5800	49.2	-3.1	4.4
5850	50.6	-3.0	3.8

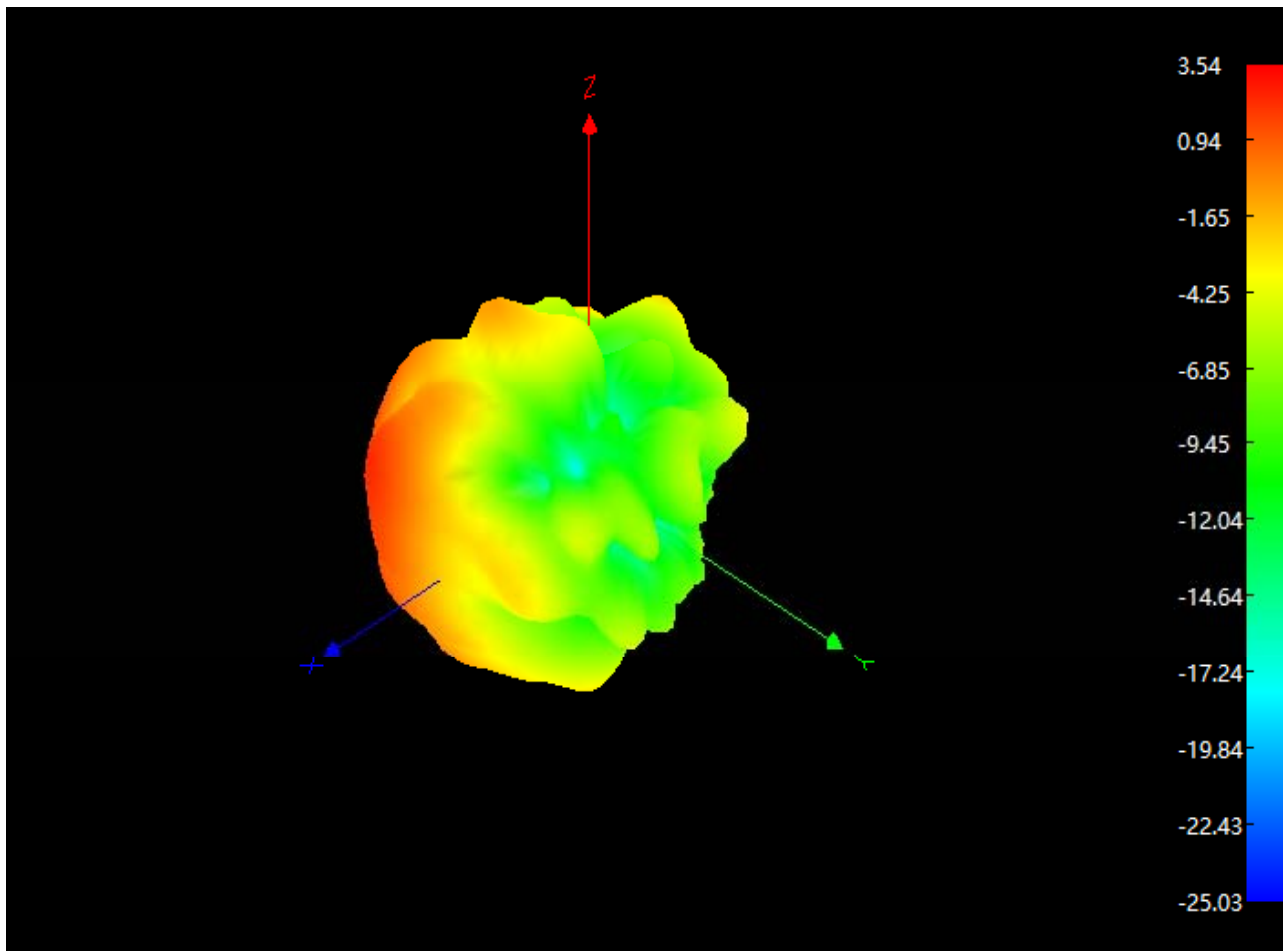


Radiation Pattern For WiFi main Antenna(2450MHz)



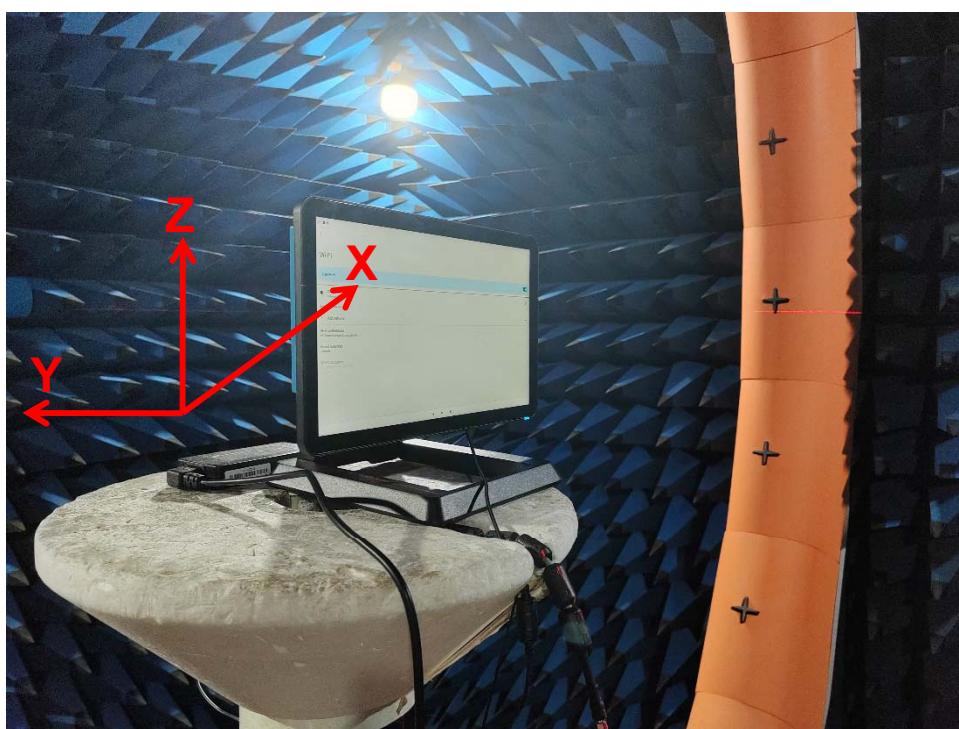


Radiation Pattern For WiFi main Antenna(5500MHz)





Antenna Active Test





Active Test For WIFI Antenna

Band	Channel	Data Rate	TRP	Data Rate	TIS
WIFI 2.4G 802.11b	1	11Mbps	16.7	11Mbps	-81.2
	6		16.7		-81.2
	11		16.4		-81.4
WIFI 2.4G 802.11g	1	54Mbps	15.9	54Mbps	-70.1
	6		15.7		-70.2
	11		15.1		-70.3
WIFI 2.4G 802.11n	1	MCS7	14.5	MCS7	-67.3
	6		15.0		-68.2
	11		14.6		-68.1



Active Test For WIFI Antenna					
Band	Channel	Data Rate	TRP	Data Rate	TIS
WIFI 5G 802.11a	149	54Mbps	15.4	54Mbps	-70.1
	157		15.3		-70.6
	165		15.4		-70.3
WIFI 5G 802.11n	149	MCS7	13.7	MCS7	-70.2
	157		14.0		-70.4
	165		13.6		-70.3



Device



*WIFI
Antenna*

