



Dongguan YiJia Electronics Communication Technology Co.,Ltd.

SPECIFICATION FOR APPROVAL

Date 2023/11/10
File No 23111001
Revision 1.0

CUSTOMER:

Guide Sensmart

CUSTOMER NO:

ZG31A

PART NAME:

WIFI Antenna L=105mm MHF


SUPPLIER NO:

YJT01.220.023.301A

Date:

Q “TY:

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A



Admission book item table

NO	(Contents)	(Number of Page)	(Page Code)
1	(Spec Cover)	1	1
2	(Spec Item)	1	2
3	(Drawing)	1	3
4	(Antenna Specification)	1	4
5	(S Parameter)	1	5
6	(Passive Test)	3	6 ~ 8
7	(Radiation Pattern)	2	9 ~ 10
8	(Antenna Profile)	2	11 ~ 12
9	NA	NA	NA
10	NA	NA	NA
11	N/A	N/A	N/A
12	-	-	-
13	-	-	-

RoHS

Compatible

CUSTOMER

PART NO

REV.

DESCRIPTION

DATE

△A

2023-08-18

△B

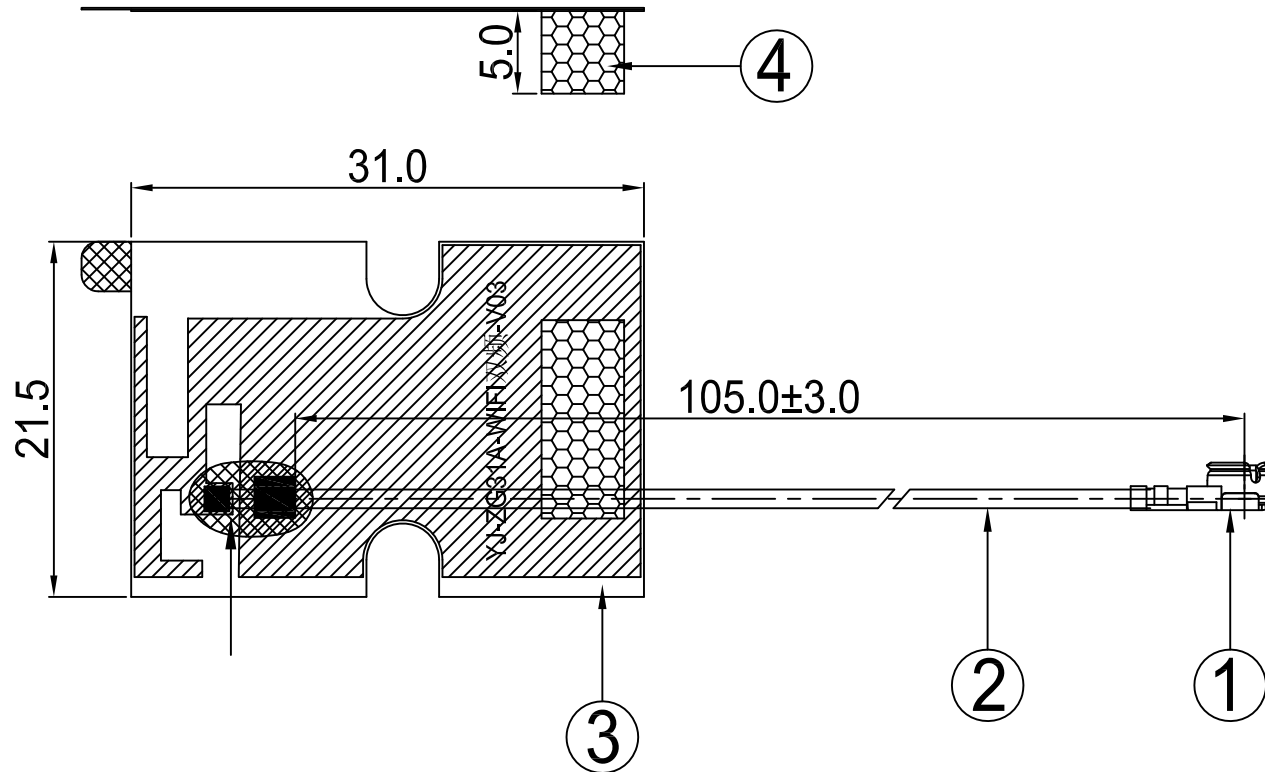
2023-10-16

△C

2023-10-27

△D

2023-11-09



4	EMI Gasket	12.0*5.0*T5.0mm	EMI Gasket	EVA100XXA.P01	1
3	FPC	31.0*21.5mm	FPC	FPC11XXA.P01	1
2	Coaxial Cable	O.D.1.13 Black	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



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

PART NAME: WIFI Antenna L=105mm MHF

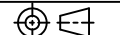
PART NO.: YJT01.220.023.301A

DATE: 2023-11-09

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance

UNITS: mm

X.X ±0.50

SCALE: 1/1

X.XX±0.15

REVISION: D

X° ±3°



Antenna Specification

Electrical Properties

Frequency	2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max@2.4-2.5GHz 5.0 Max@5.15-5.85GHz
Gain	2.2 dBi@2.4-2.5GHz 5.4 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear

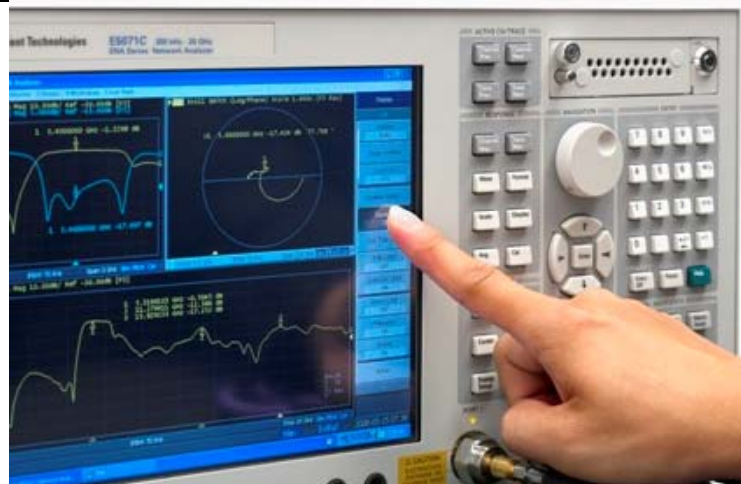
Physical Properties

Connector	Generation 1IPEX
Cable Type	O.D.1.13mm
Cable Length	105mm
Cable Color	Black
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25 ± 5 °C / <70%

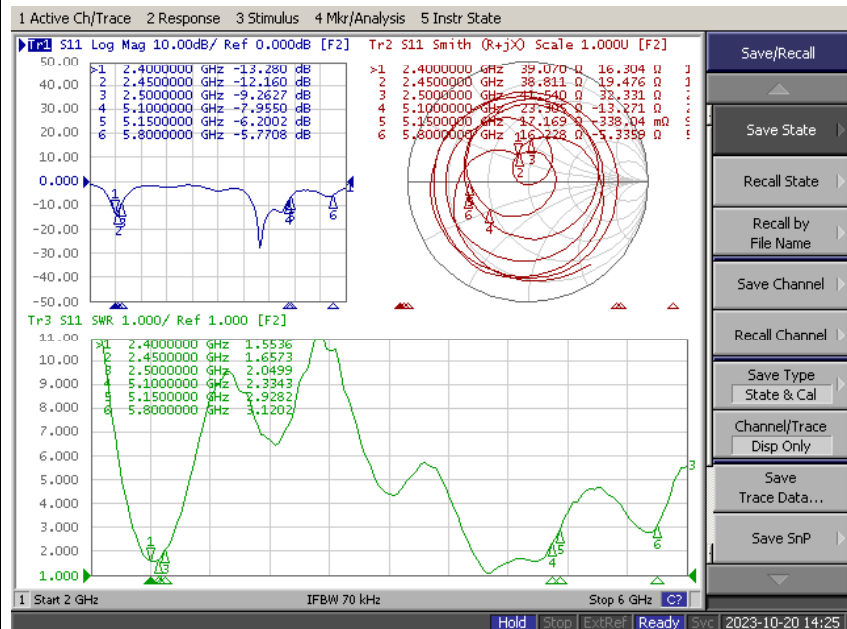


Antenna Performance Test

**Agilent
E5071B**

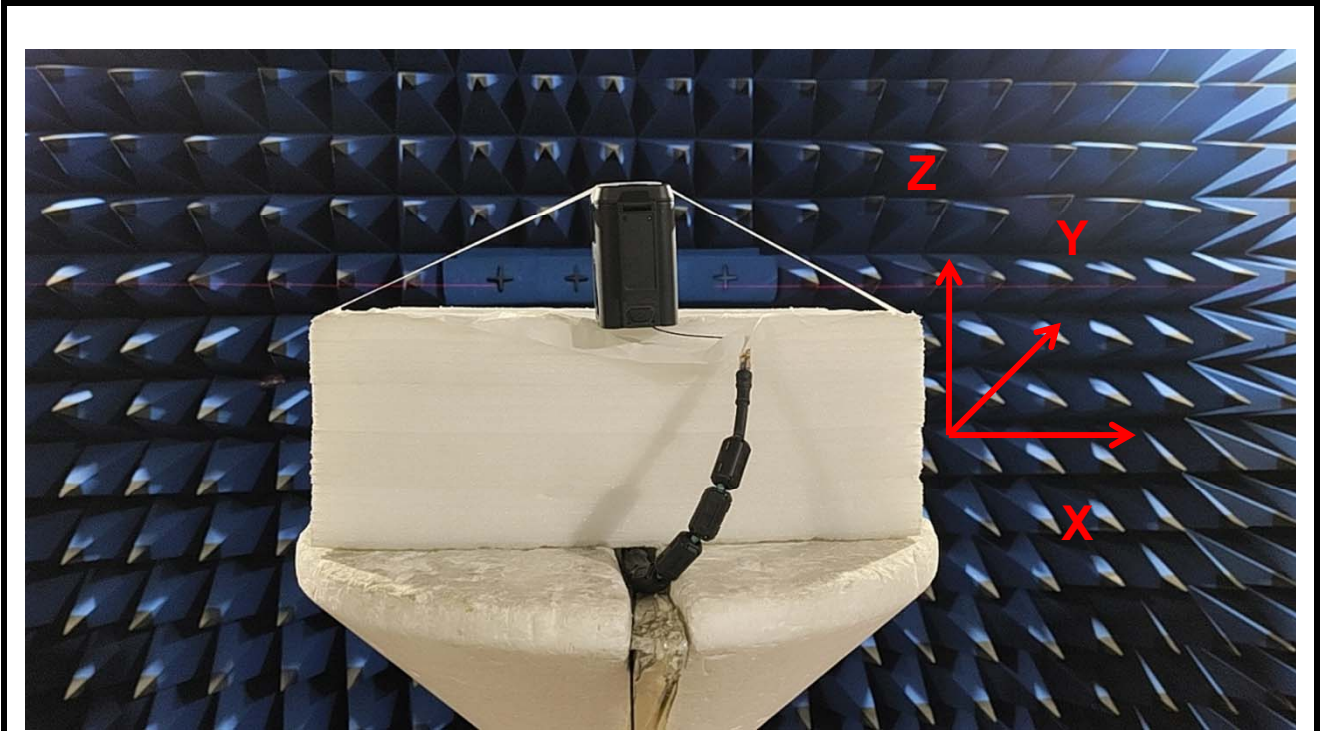


**S
Parameter
Test //
WiFi
Antenna**





Antenna Passive Test





Passive Test For WiFi Antenna(2.4G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	40.7	-3.9	2.2
2410	40.2	-4.0	2.2
2420	44.2	-3.5	2.0
2430	41.8	-3.8	2.0
2440	41.6	-3.8	1.7
2450	40.1	-4.0	2.0
2460	37.2	-4.3	1.4
2470	42.9	-3.7	1.6
2480	43.1	-3.7	1.2
2490	41.5	-3.8	1.3
2500	41.8	-3.8	0.7

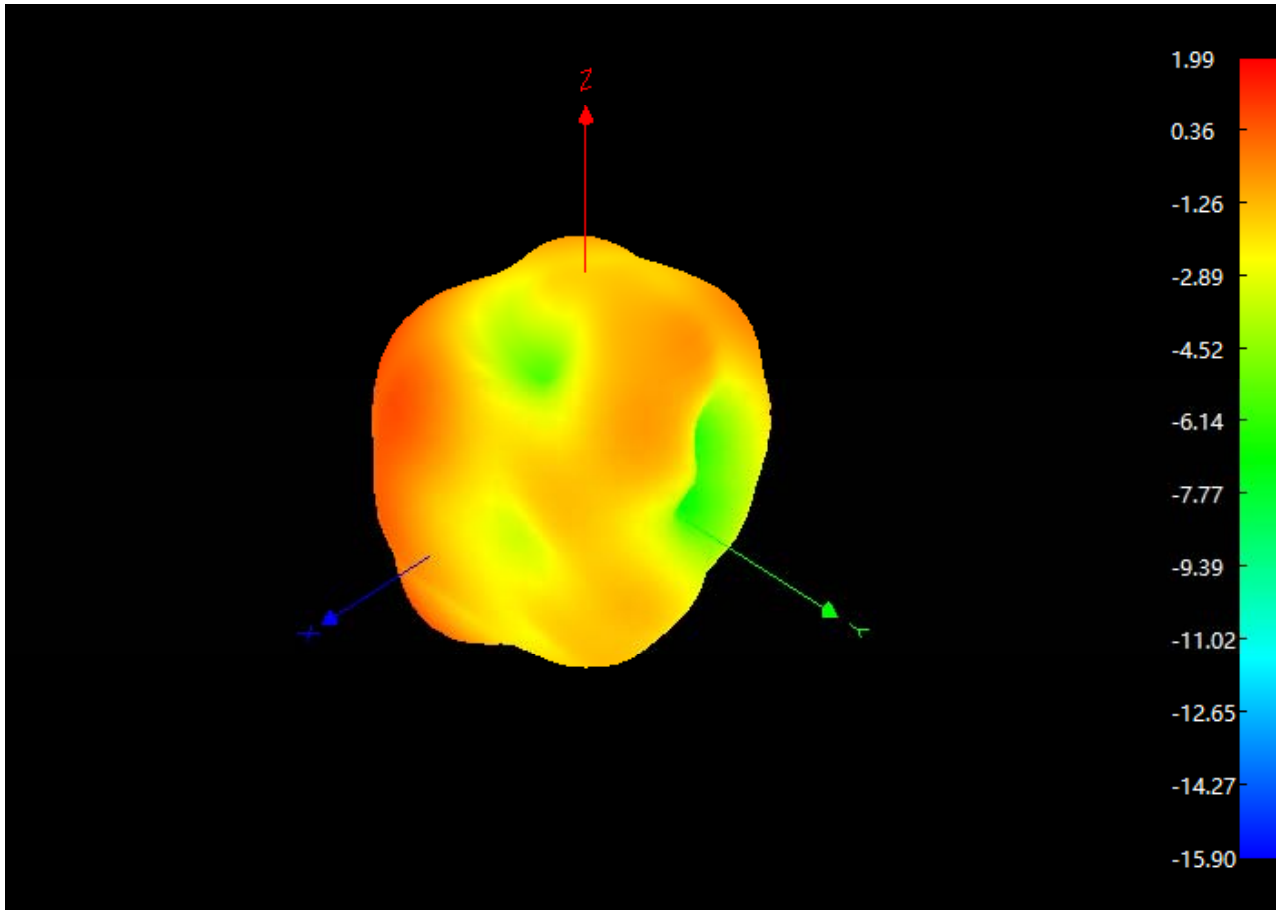


Passive Test For WiFi Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	35.3	-4.5	3.7
5200	38.6	-4.1	3.4
5250	30.8	-5.1	2.7
5300	31.8	-5.0	2.8
5350	33.4	-4.8	2.9
5400	34.2	-4.7	3.2
5450	33.0	-4.8	3.0
5500	31.1	-5.1	3.0
5550	37.9	-4.2	4.2
5600	41.4	-3.8	4.6
5650	33.0	-4.8	3.9
5700	37.6	-4.2	4.5
5750	40.1	-4.0	5.4
5800	33.2	-4.8	4.2
5850	34.1	-4.7	4.2

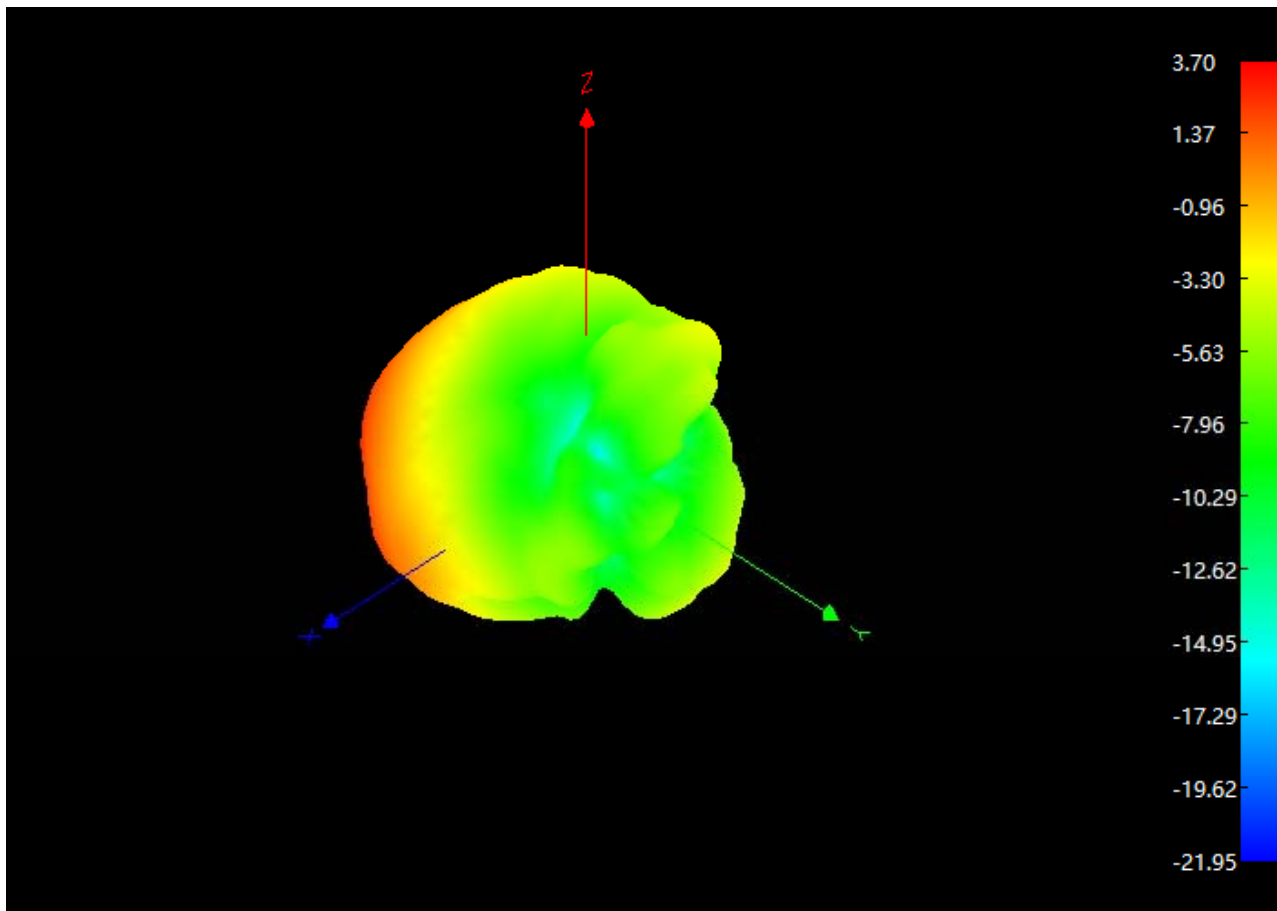


Radiation Pattern For WiFi Antenna(2450MHz)





Radiation Pattern For WiFi Antenna(5150MHz)





Device



*WiFi
Antenna*





WiFi Antenna