



福州市瀚宇正达电子有限公司

Word Easy Electronics Co.,Ltd.

规格承认书

SPECIFICATION FOR APPROVAL

日期 Date	2024/03/19
编号 File No	24031901
版本 Revision	1.0

客 户

CUSTOMER:

AKUVOX(XIAMEN) NETWORKS CO LTD
(睿云联(厦门)网络通讯技术有限公司)

客户料号

PH81

CUSTOMER NO:

品 名

PART NAME:

WIFI+Zigbee Antenna

供方料号

SUPPLIER NO:

WE007N.F0148.V01

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

工程专用章
Hunter

Luo

Liu

WE-RD-F01-A



NO.	内 容 (Contents)	页 数 (Number of Page)	页 码 (Page Code)
1	承认书封面 (Spec Cover)	1	1
2	承认书项目表 (Spec Item)	1	2
3	工程成品图 (Drawing)	1	3
4	天线规格 (Antenna Specification)	2	4 ~ 5
5	S参数测试 (S Parameter)	2	6 ~ 7
6	无源测试 (Passive Test)	4	8 ~ 11
7	天线辐射场型 (Antenna Radiation Pattern)	8	12 ~ 19
8	天线装配图 (Antenna Profile)	2	20 ~ 21
9	RoHS报告 (RoHS Test Report)	**	**
10	N/A	N/A	N/A
11	-	-	-
12	-	-	-



天线规格

Antenna Specification

WIFI

Electrical Properties

Frequency	2400~2500MHz 5150~5850MHz
Impedance	50 Ohm Nominal
V.S.W.R	≤3.7
Return Loss	≤-4.7
Radiation	Omni-directional
Gain (Peak)	1.4dBi (Max)
Polarization	Linear
Connector	1I-PEX

Physical Properties

Antenna Material	FPC
Cable Type	O.D.1.13//L=52mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	Gray



天线规格

Antenna Specification

Zigbee

Electrical Properties

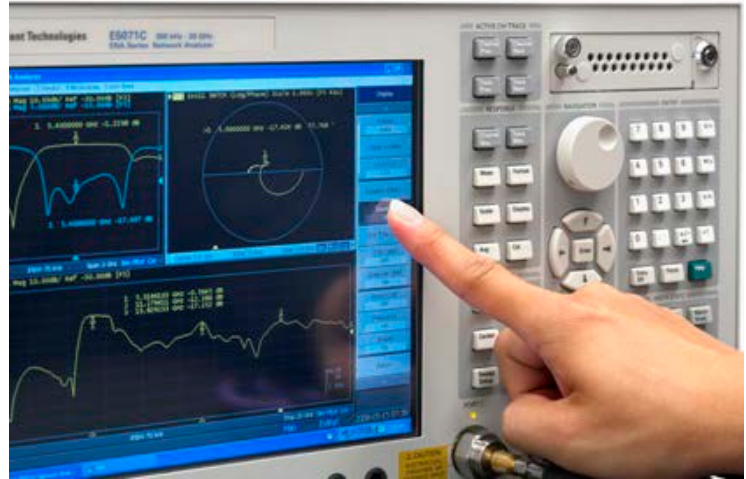
Frequency	2400~2500MHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.8
Return Loss	≤-11
Radiation	Omni-directional
Gain (Peak)	-2.4dBi (Max)
Polarization	Linear
Connector	1I-PEX

Physical Properties

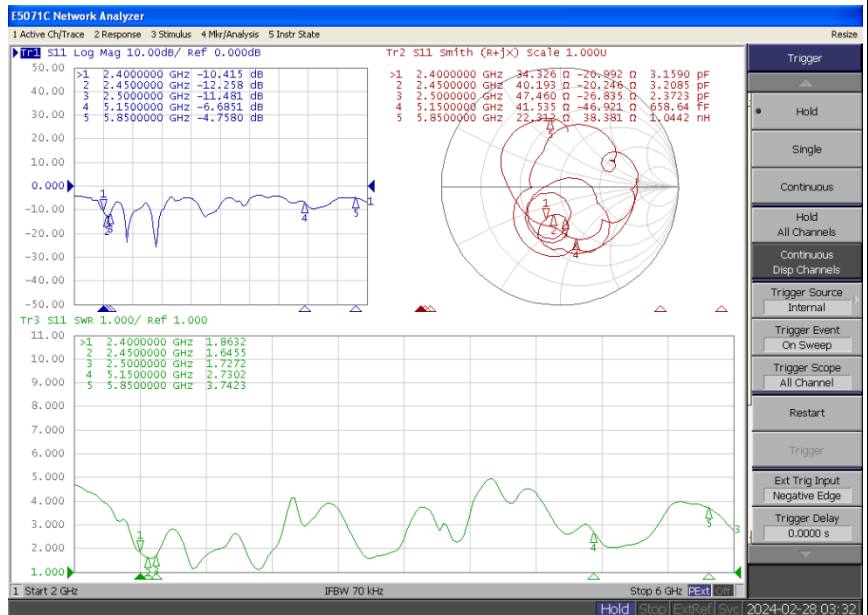
Antenna Material	FPC
Cable Type	O.D.1.13//L=236mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	Gray



Agilent E5071C



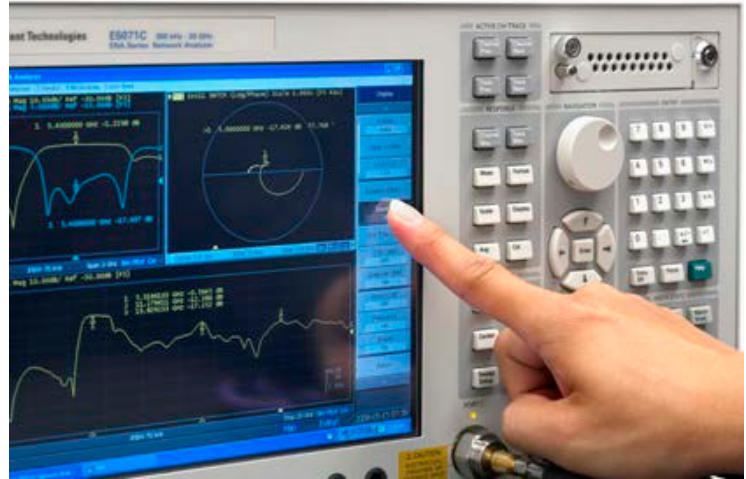
S Parameter Test // WIFI



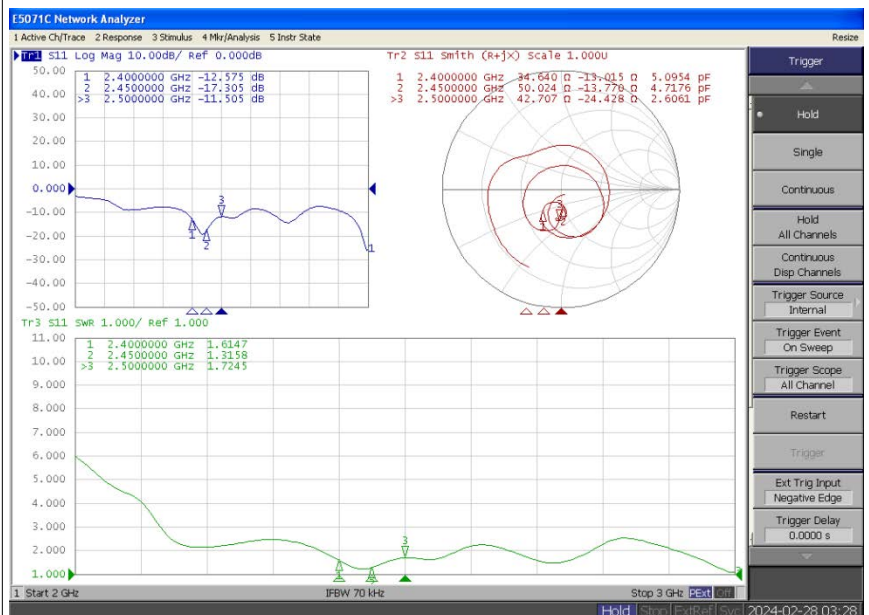


Antenna Performance Test

**Agilent
E5071C**

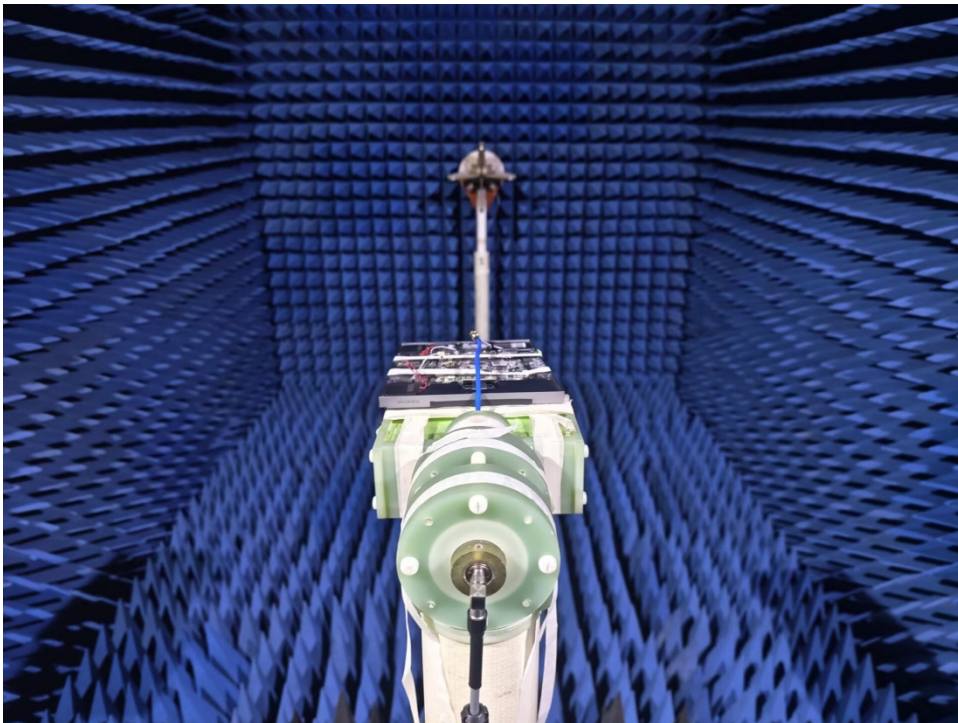
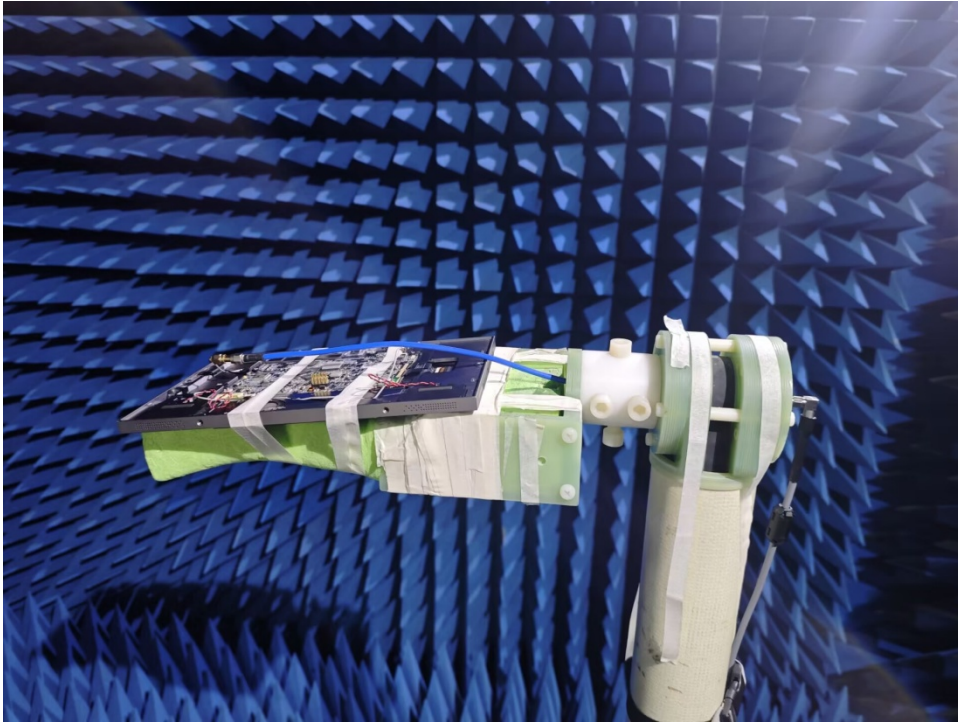


**S
Parameter
Test //
Zigbee**





Antenna Passive Test





Passive Test For WIFI (2.4G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	12.0	-9.2	-3.5
2410	12.2	-9.1	-3.6
2420	10.7	-9.7	-3.9
2430	11.8	-9.3	-3.5
2440	9.7	-10.2	-4.3
2450	10.6	-9.8	-3.8
2460	8.5	-10.7	-4.7
2470	10.2	-9.9	-3.7
2480	8.3	-10.8	-4.5
2490	9.2	-10.4	-4.0
2500	7.4	-11.3	-4.8



Passive Test For WIFI (5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	16.9	-7.7	0.2
5200	17.6	-7.5	1.4
5250	15.8	-8.0	0.3
5300	13.8	-8.6	-1.0
5350	11.7	-9.3	-2.3
5400	12.0	-9.2	-2.2
5450	11.1	-9.6	-2.5
5500	10.5	-9.8	-2.8
5550	8.8	-10.6	-3.9
5600	7.6	-11.2	-5.0
5650	8.0	-11.0	-4.3
5700	7.6	-11.2	-4.5
5750	7.6	-11.2	-3.6
5800	6.2	-12.1	-4.2
5850	6.7	-11.8	-4.4



Passive Test For Zigbee

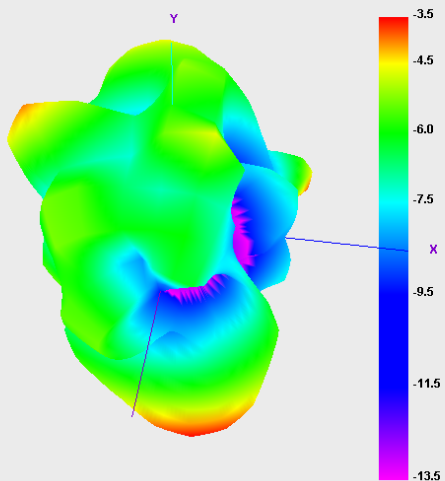
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	15.1	-8.2	-3.2
2410	14.4	-8.4	-3.6
2420	14.6	-8.4	-3.5
2430	14.0	-8.5	-3.6
2440	13.0	-8.9	-3.9
2450	14.1	-8.5	-3.5
2460	13.2	-8.8	-3.7
2470	15.2	-8.2	-3.0
2480	12.8	-9.0	-3.5
2490	15.2	-8.2	-2.4
2500	13.0	-8.9	-2.9



Antenna Radiation Pattern

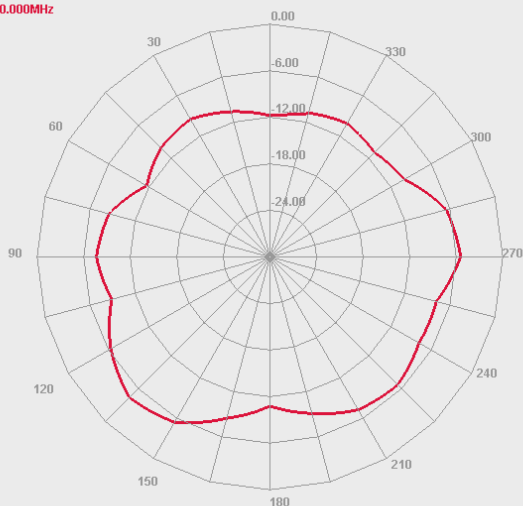
WIFI

2400.000MHz



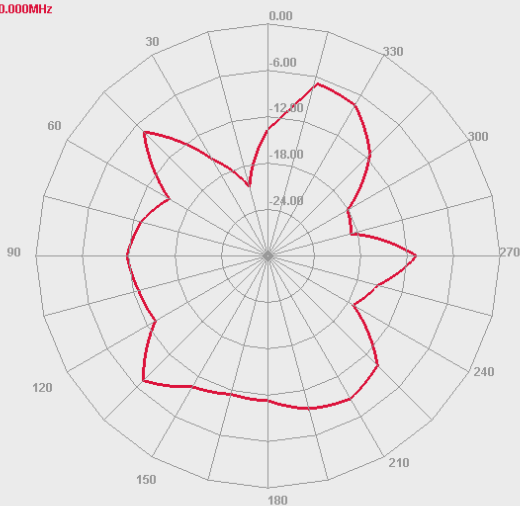
Horizontal

2400.000MHz



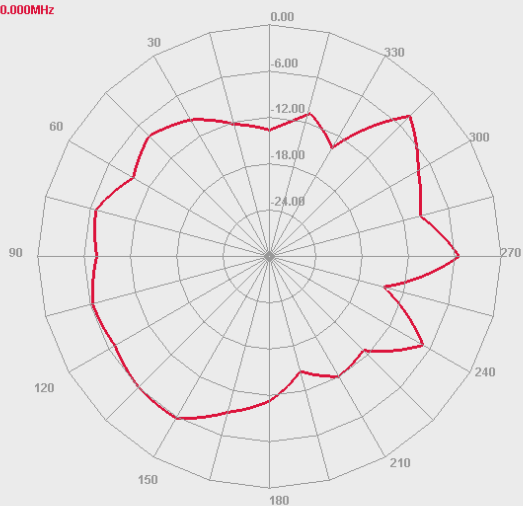
E1 Face

2400.000MHz



E2 Face

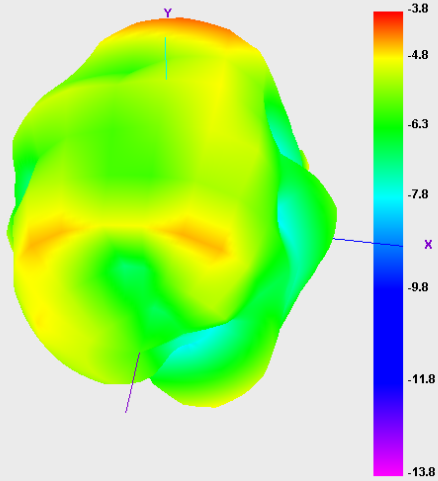
2400.000MHz





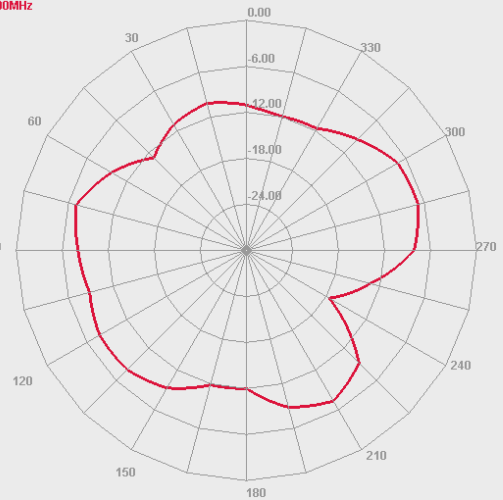
WIFI

2450.000MHz



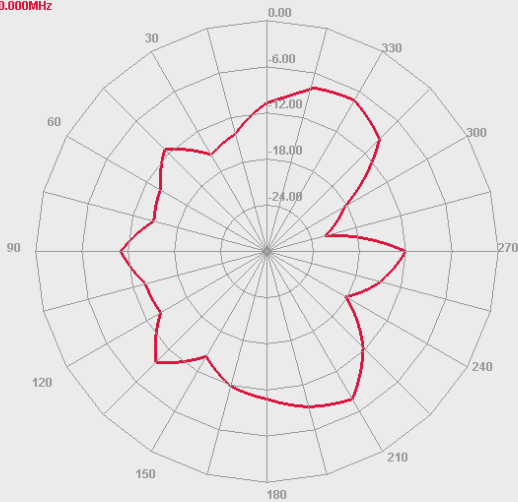
Horizontal

2450.000MHz



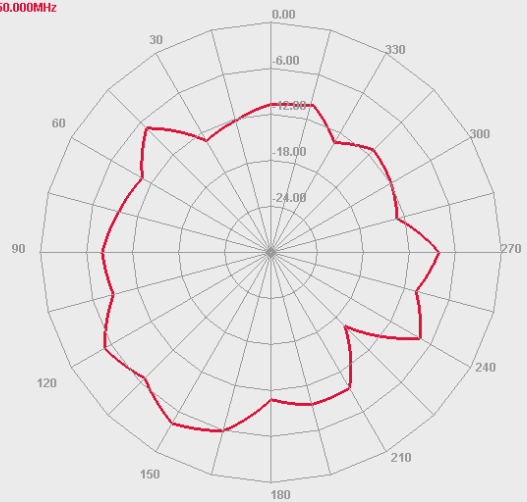
E1 Face

2450.000MHz



E2 Face

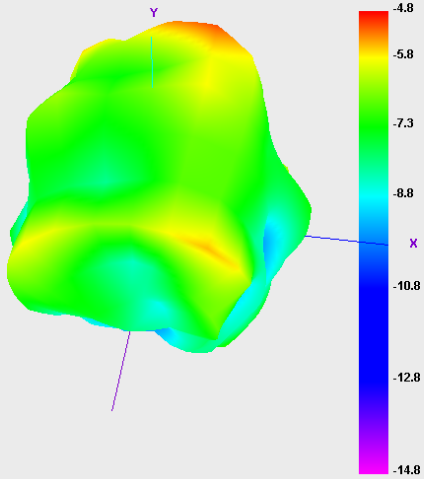
2450.000MHz





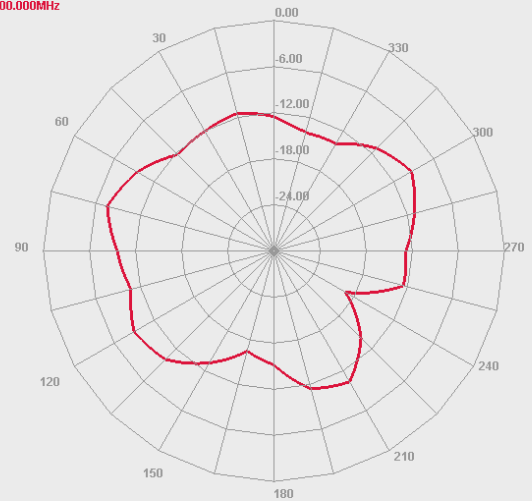
WIFI

2500.000MHz



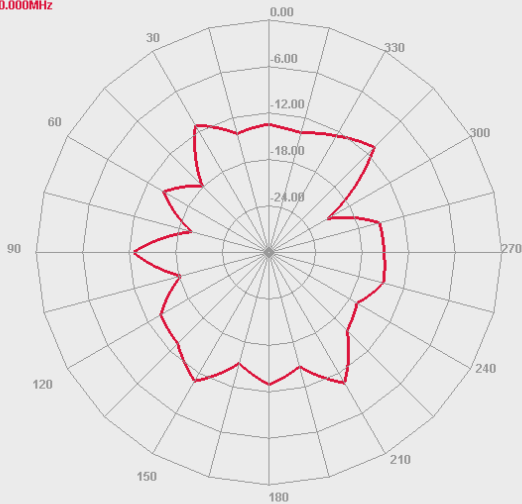
Horizontal

2500.000MHz



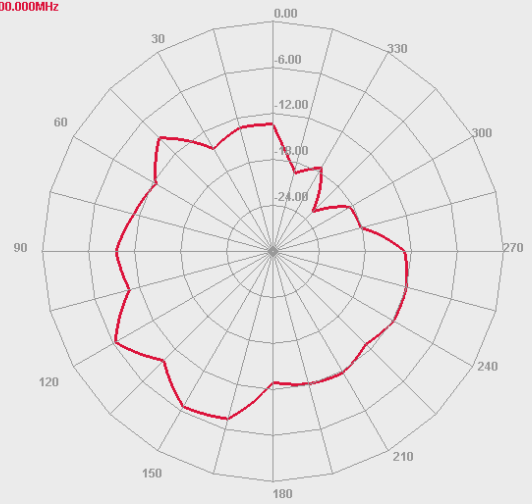
E1 Face

2500.000MHz



E2 Face

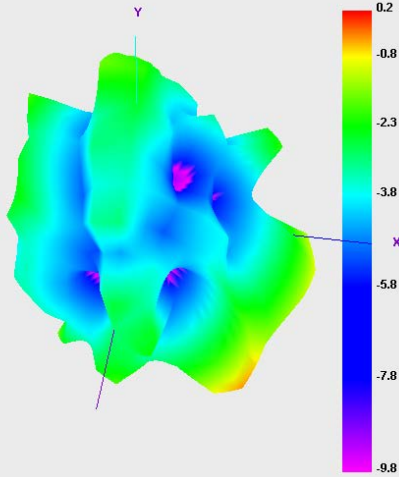
2500.000MHz





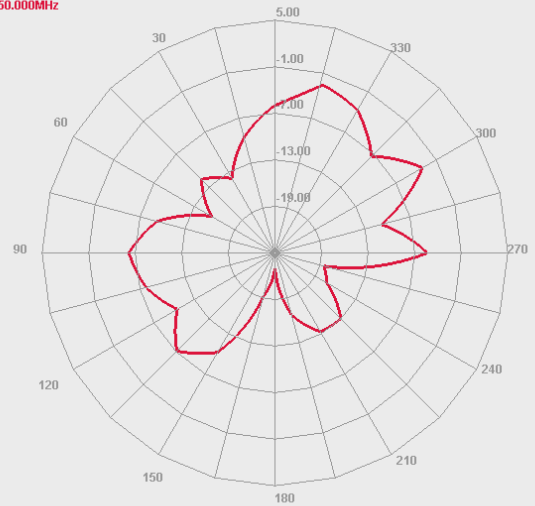
WIFI

5150.000MHz



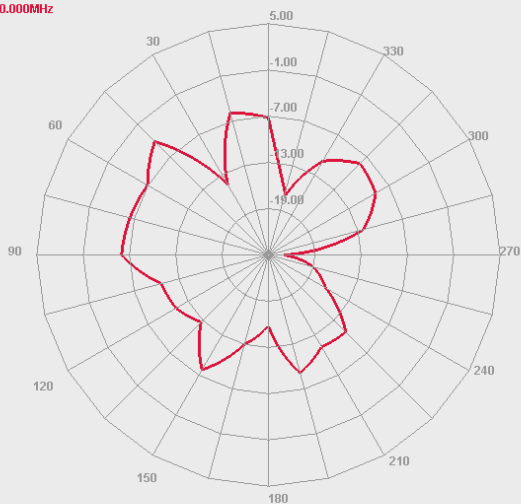
Horizontal

5150.000MHz



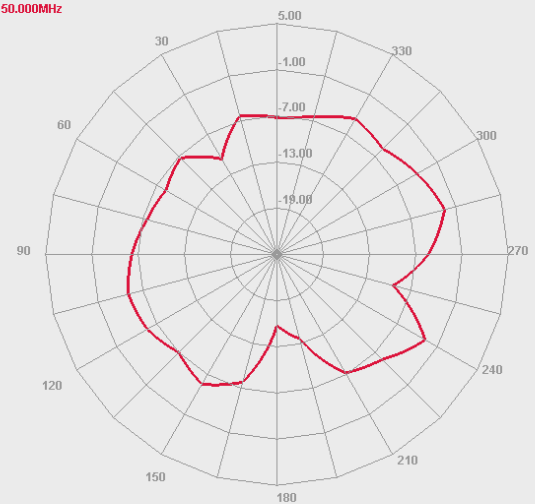
E1 Face

5150.000MHz



E2 Face

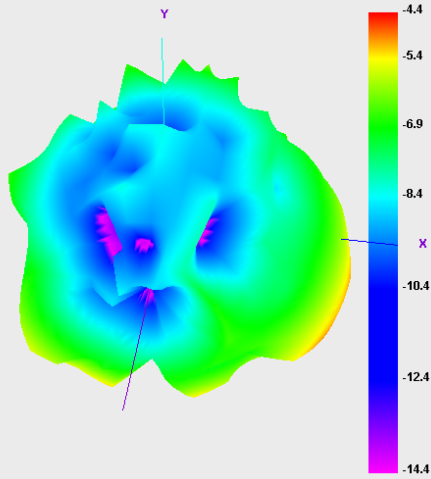
5150.000MHz





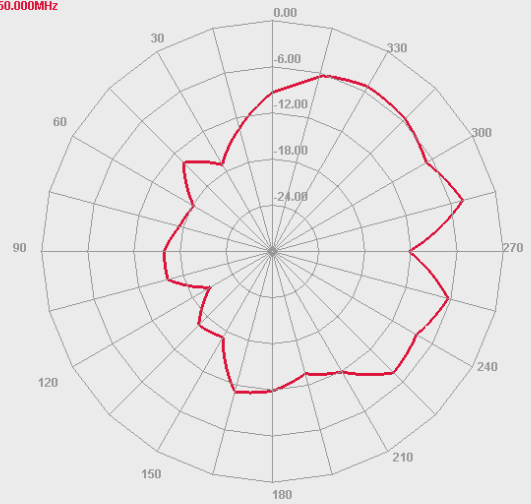
WIFI

5850.000MHz



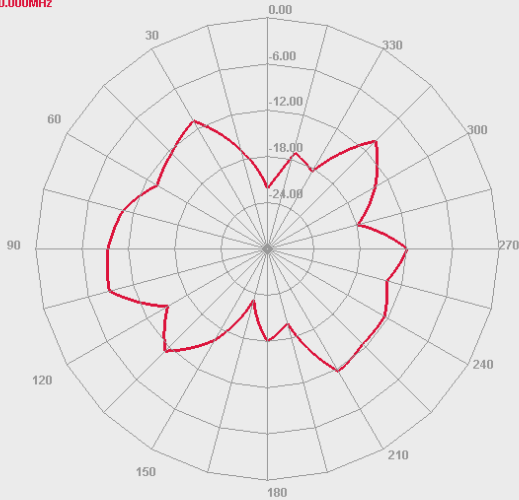
Horizontal

5850.000MHz



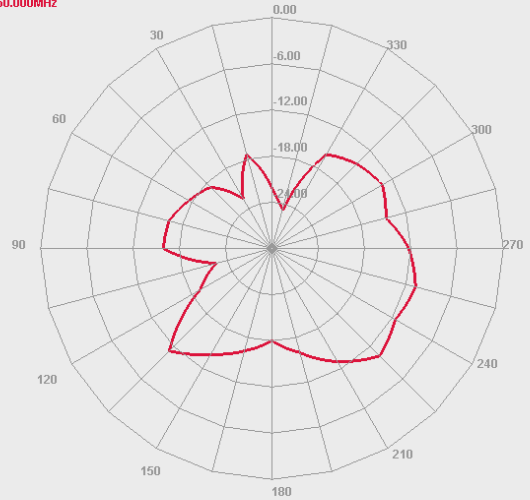
E1 Face

5850.000MHz



E2 Face

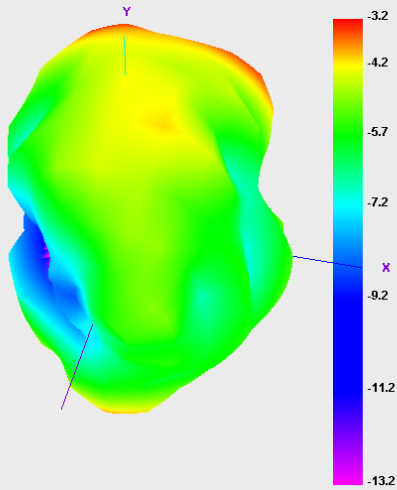
5850.000MHz





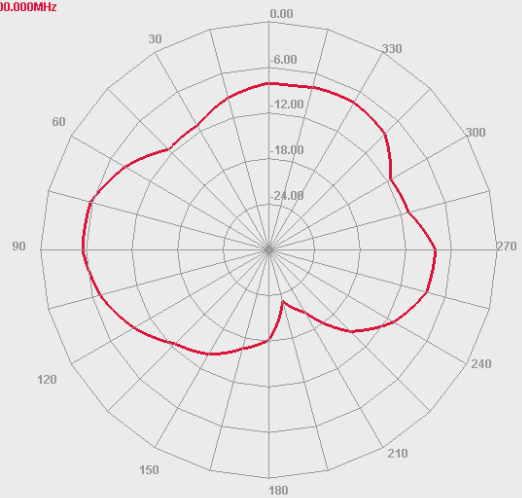
Zigbee

2400.000MHz



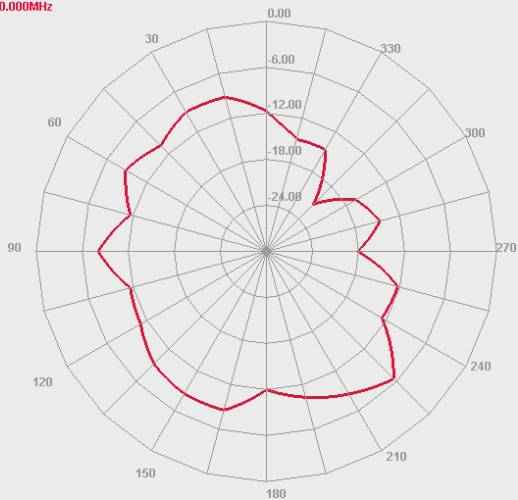
Horizontal

2400.000MHz



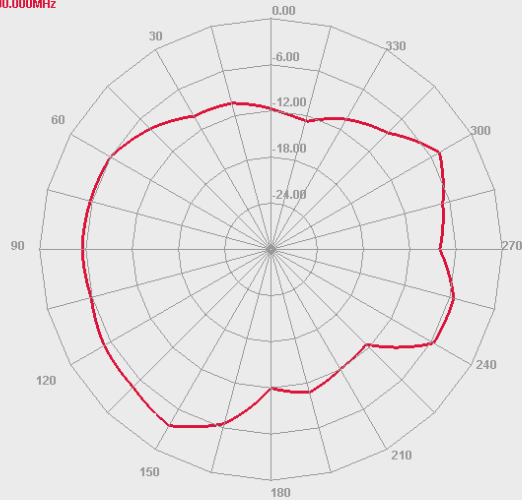
E1 Face

2400.000MHz



E2 Face

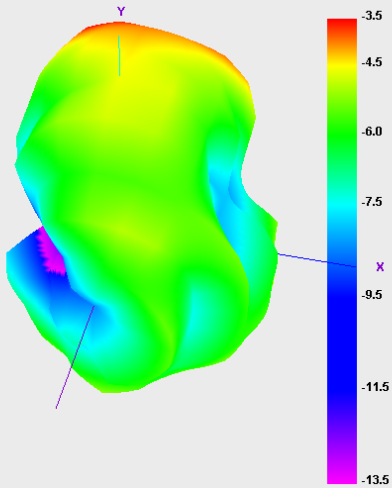
2400.000MHz





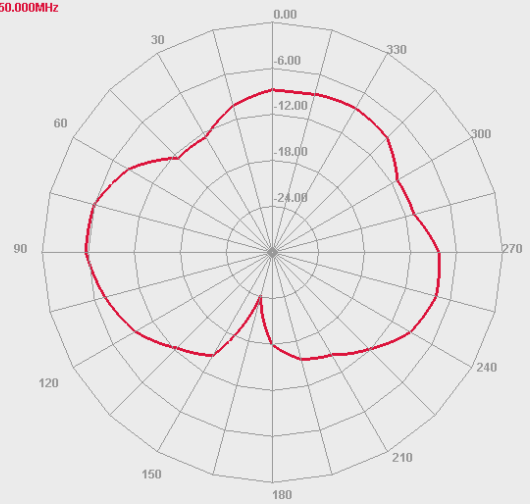
Zigbee

2450.000MHz



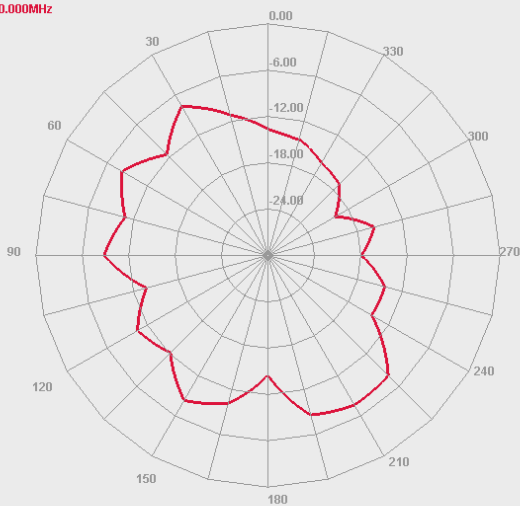
Horizontal

2450.000MHz



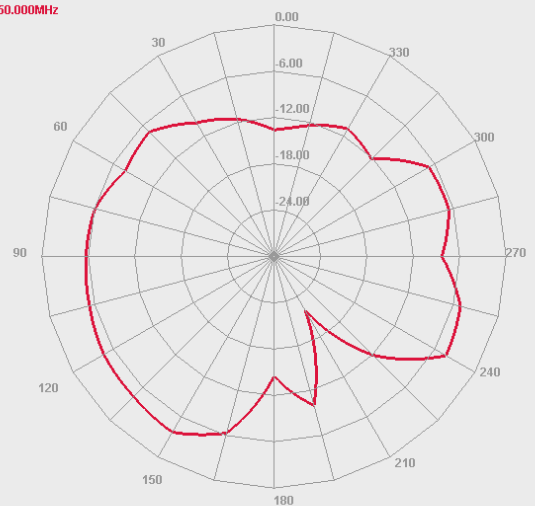
E1 Face

2450.000MHz



E2 Face

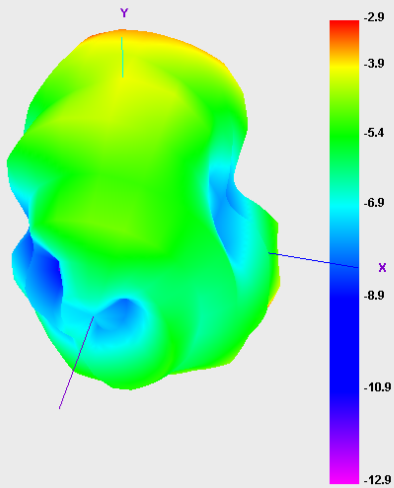
2450.000MHz





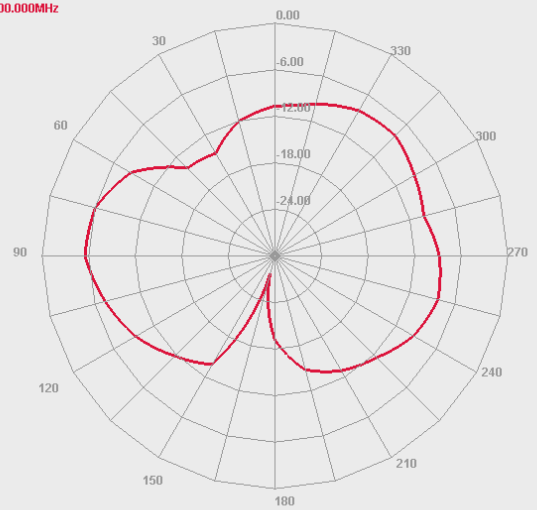
Zigbee

2500.000MHz



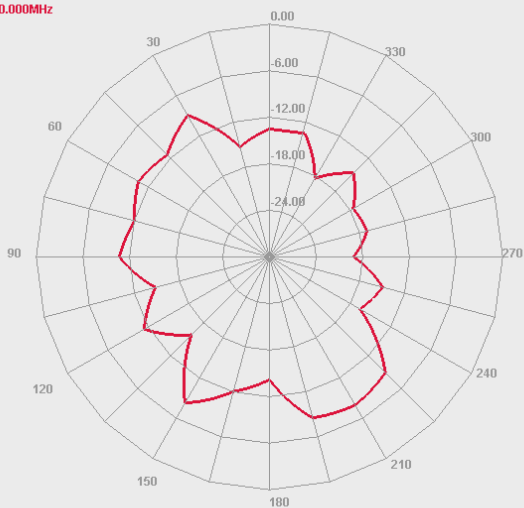
Horizontal

2500.000MHz



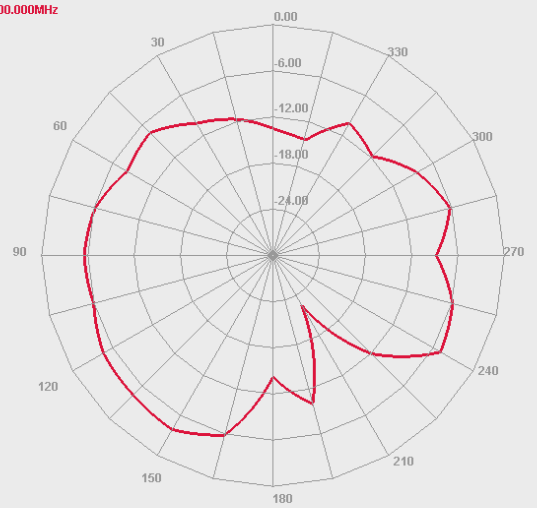
E1 Face

2500.000MHz



E2 Face

2500.000MHz



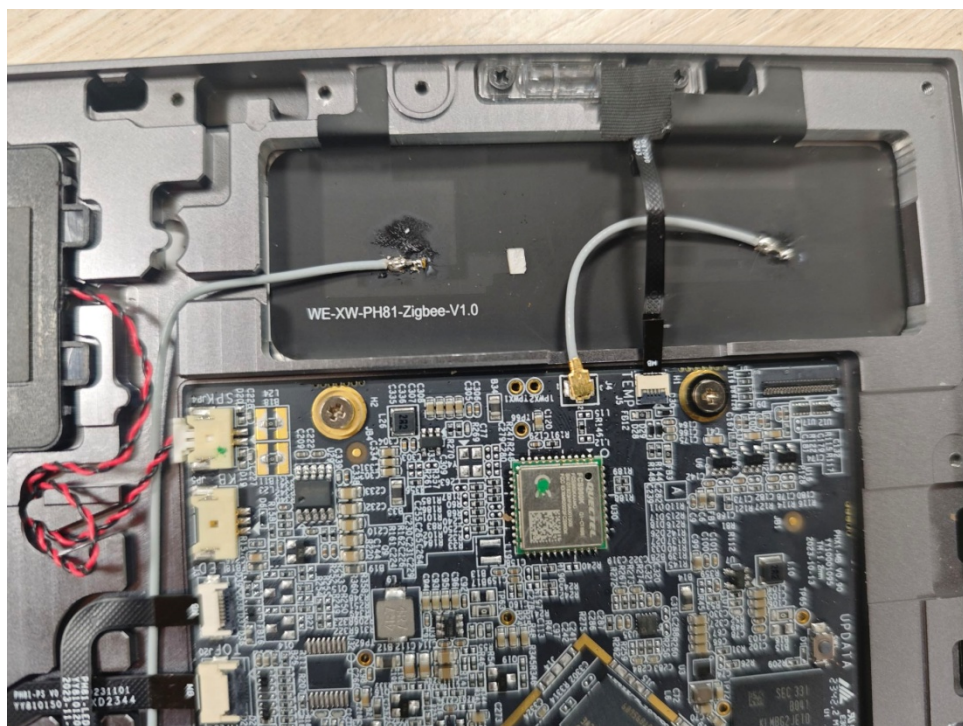


Antenna Profile

Device



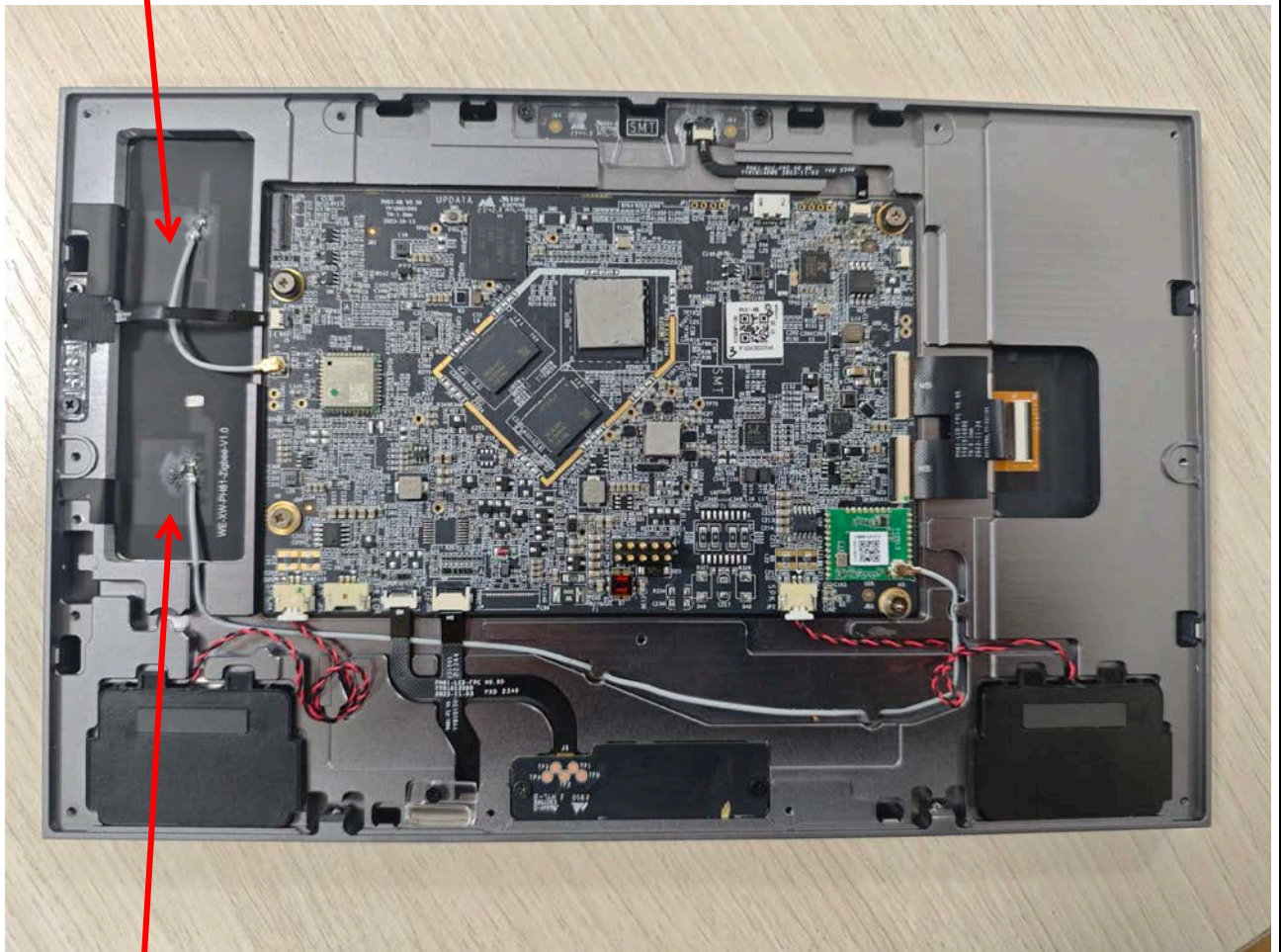
*Antenna
WIFI
Zigbee*





Assembly Drawing

WIFI Antenna



Zigbee Antenna