

SPECIFICATION

Daxian Communication Technology Limited



Shenzhen Daxian Technology Co., Ltd.

FCC ID:2A0KB-T85D0

Bluetooth+WIFI antenna

Product specification

Guest households	Anker	frequency band	2400MHz~2500MHz
Project name	T85D0	version	V4.0
Material No.	1T-8502X-042	color	Black
R F design	Qun.Jin	structure design	Manyi.Zeng
Quality Manager	Ziyin.Hu	R & D director	Lie Zhang
Date	2022-10-09		

client confirmation:

Whether the assembly meets your requirements: OK NG

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Change resume

version number	Change content	Reason for change	Initiate change Party	date	Modifier
V1.0	create			2022.10.09	

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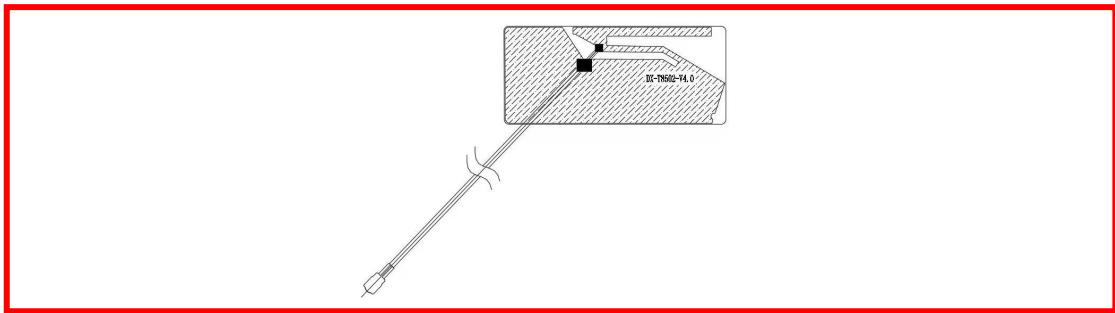
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— **Project description**

Customer name:	Anker
Whole machine type:	WIFI antenna
Antenna band:	2400 ~ 2500MHz
Antenna form:	FPC+Cable
Feed form:	welding
Number of feed feet:	2 left and right ears
Hardware version:	motherboard:

一、**WIFI antenna**

This report provides a variety of measurements of the electrical performance of the T85D2 antenna. Figure 1 shows the antenna designed by the display.



antenna appearing diagram

Figure 1

1.1 Electrical specification standard

The frequency range of the antenna is 2400 ~ 2500 MHz. The following table indicates the electrical performance specifications of the antenna. The antenna is designed and manufactured by a large display.

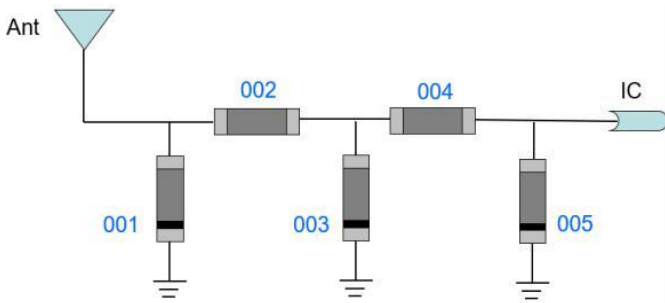
Frequency Range	Frequency (MHz)	VSWR
BT	2400 ~ 2500	≤ 3
WIFI	2400 ~ 2500	≤ 2

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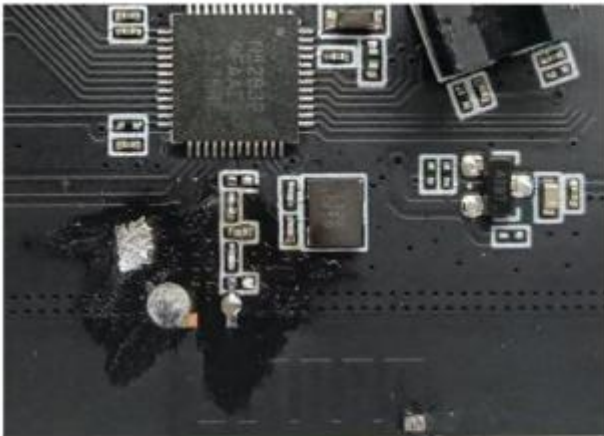
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1.1.1 Antenna matching circuit-BT



料号位	参数值
001	NC
002	1.0 NH
003	1.5 PF
004	0欧姆
005	NC

1.1.2 Picture of antenna position



BT



天线粘贴置以此卡扣位置为参考位，如图

WIFI

1.2 Antenna composition

The antenna is mainly composed of FPC+Cable.

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2、 The Equipment of Active Test

Satimo 3D Chamber 6×4×4(m)

Agilent 8960 E5515c

Network analyzer-R&S ZVL



Figure 2

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3 test

3.1 The Test of standing Wave (VSWR)

3.1.1 The Test of standing Wave (VSWR): In turn, the connection of the VSWR testing device is as follows: RES ZVL Network Analyzer / testing Line / testing tool

Actual measurement (with diagram)

3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS)

3.2.1 Test site:

Large-scale microwave darkroom. The test frequency range is 400MHz / 6GHz, the static range is 50cm circumferential and the reflectivity is less than-50 dB..

3.2.2 Test instrument:

Rs ZVL Network Analyzer, Agilent8960 E5515C, Standard Horn Antenna, French SATIMO-SG24SYSTEM system, Printer, etc.

3.2.3 test data : In microwave anechoic chambers, the power and sensitivity values measured are shown in the following table:

Passive Test: BT

Frequency (MHz)	Efficiency (%)	AVG Gain (dB)	Gain (dBi)
2400	43.79%	-3.59	1.72
2410	44.11%	-3.55	1.66
2420	44.87%	-3.48	1.61
2430	45.95%	-3.38	1.57
2440	44.71%	-3.50	1.52
2450	47.31%	-3.25	1.43
2460	46.79%	-3.30	1.46
2470	46.54%	-3.32	1.62
2480	45.90%	-3.38	1.61
2490	45.13%	-3.46	1.68
2500	44.27%	-3.54	1.73

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Passive Test: WIFI 2.4G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	57.4	-2.41	3.21
2410	59.26	-2.27	3.3
2420	61.27	-2.13	3.35
2430	62.11	-2.07	3.41
2440	61.9	-2.08	3.21
2450	64.12	-1.93	3.36
2460	65.82	-1.82	3.22
2470	66.51	-1.77	3.34
2480	67.6	-1.7	3.19
2490	69.29	-1.59	3.55
2500	66.44	-1.78	3.58

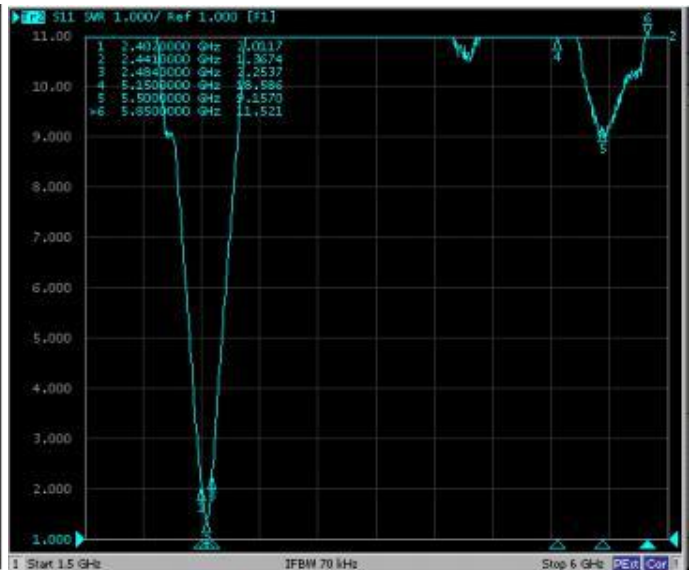
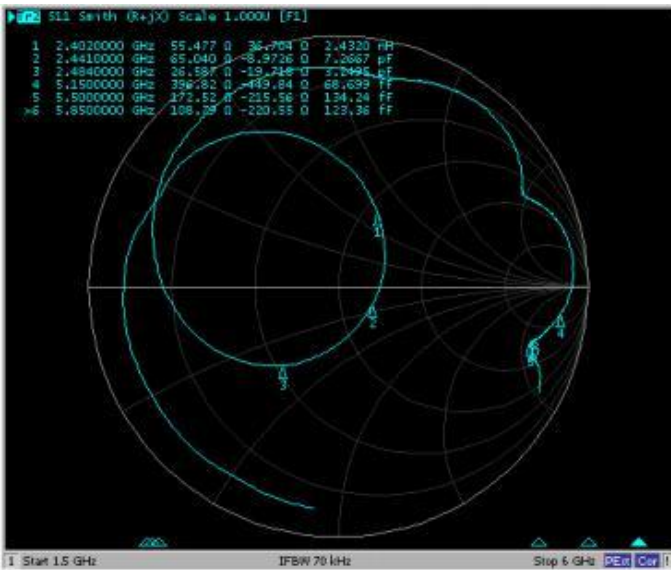
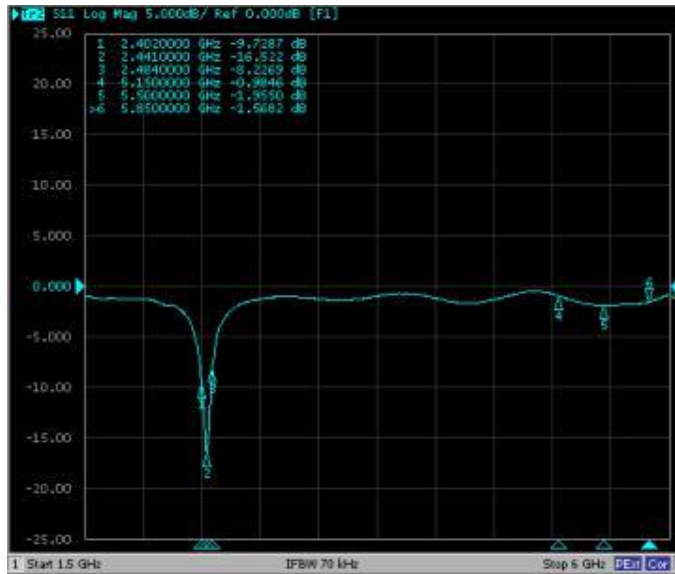
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4、 Attachment chart

4.1 VSWR parameter diagram-BT

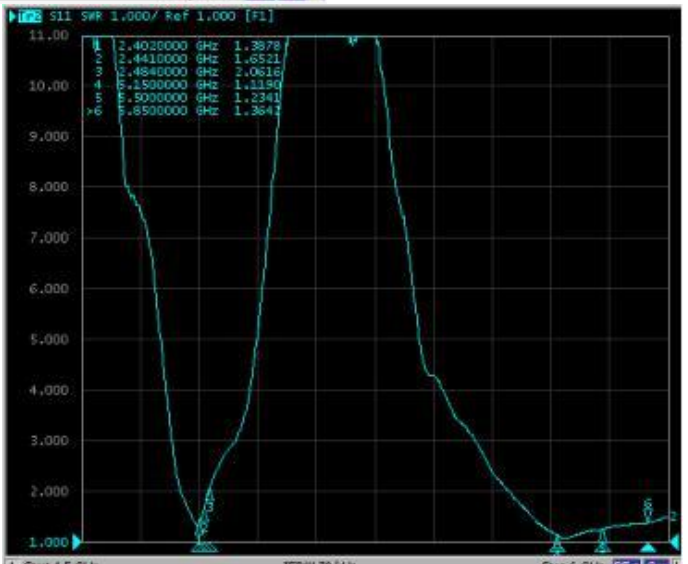
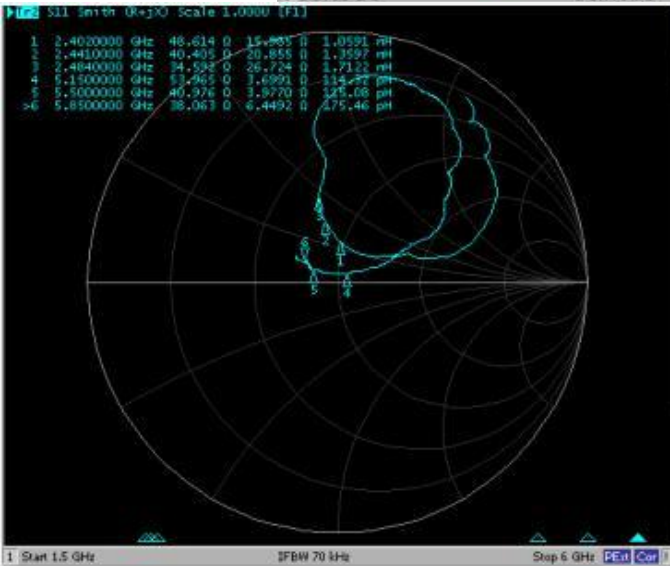
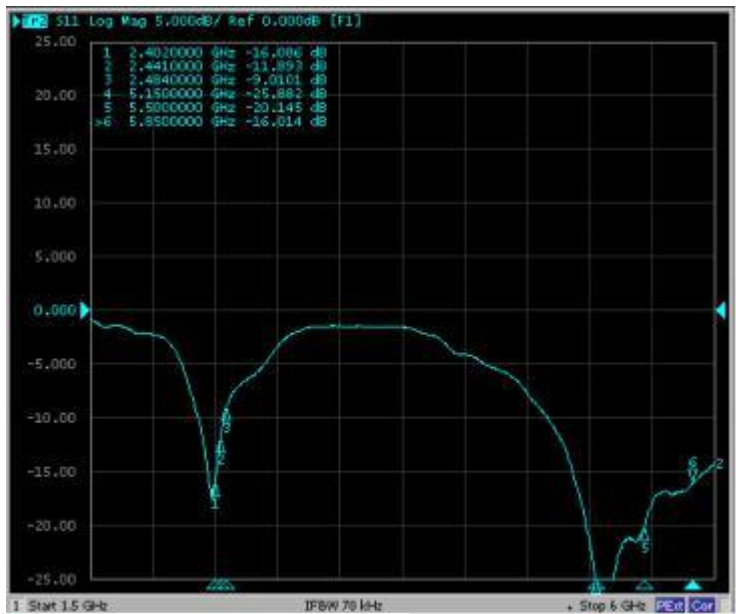


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4.1.1 VSWR parameter diagram-WIFI 2.4G



5、 conclusion:

This antenna is designed on the basis of the prototype provided by the customer, electrical parameters and structural performance have reached the technical requirements, please confirm!

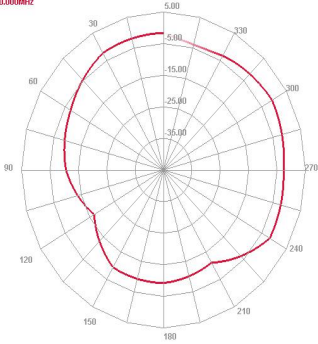
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6、2D&3D Field pattern diagram-BT

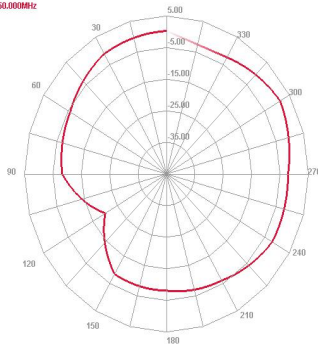
Horizontal

2400.000MHz



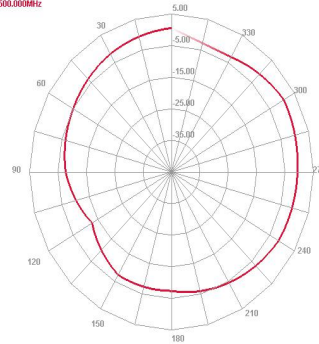
Horizontal

2450.000MHz



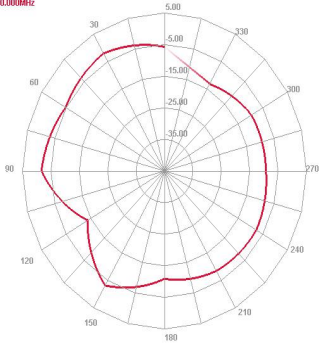
Horizontal

2500.000MHz



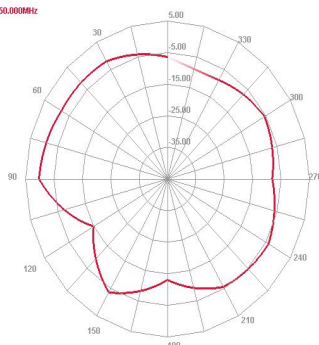
E1 Face

2400.000MHz



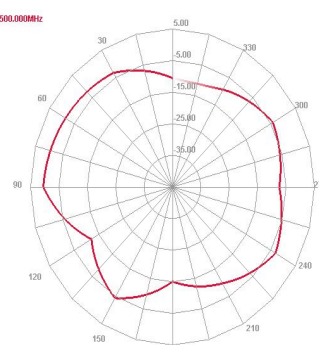
E1 Face

2450.000MHz



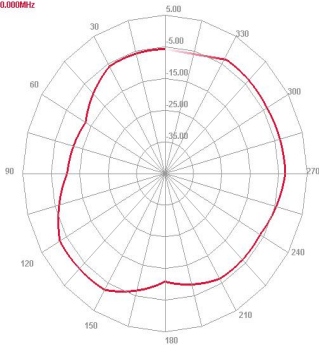
E1 Face

2500.000MHz



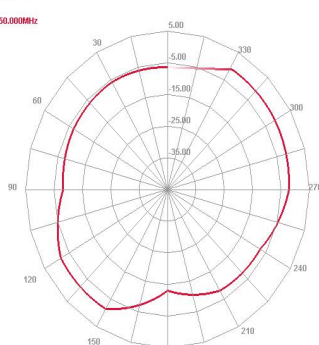
E2 Face

2400.000MHz



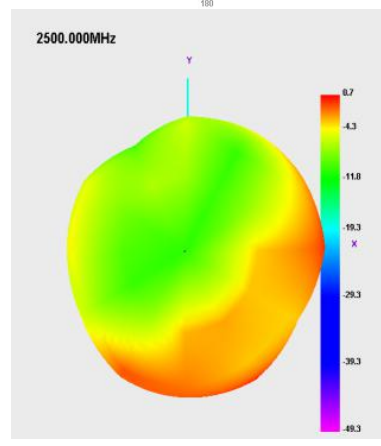
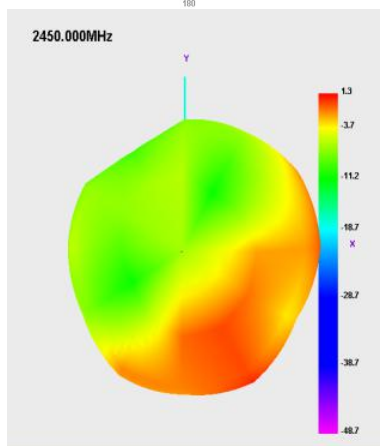
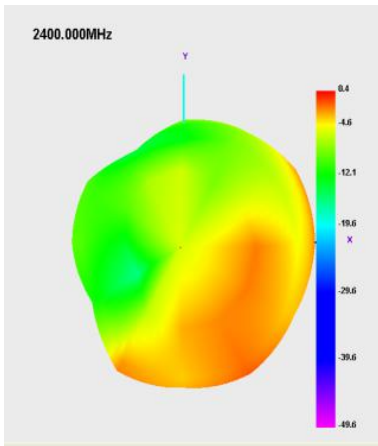
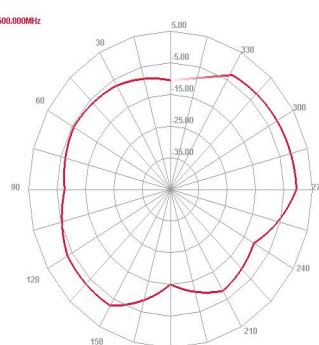
E2 Face

2450.000MHz



E2 Face

2500.000MHz

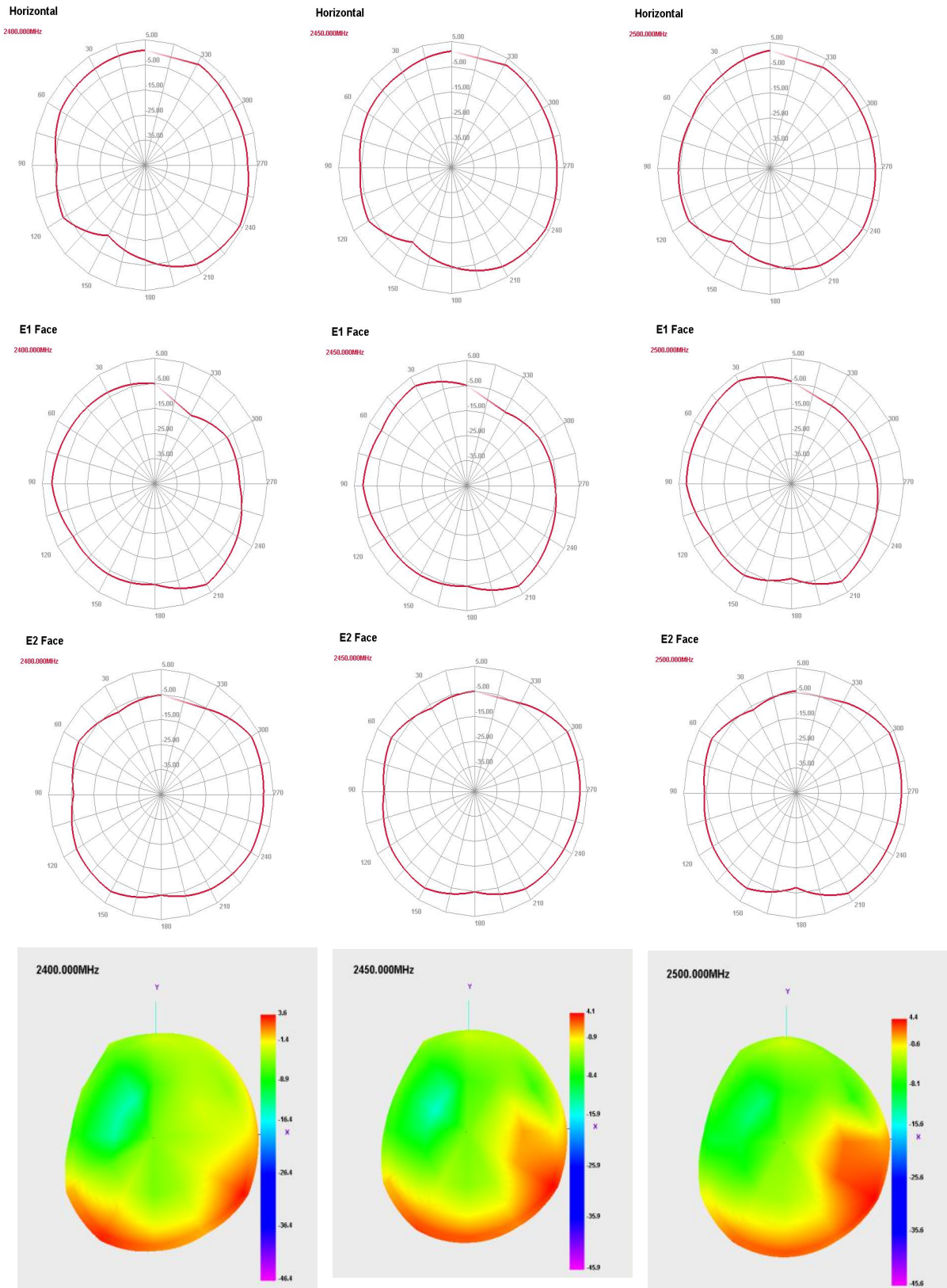


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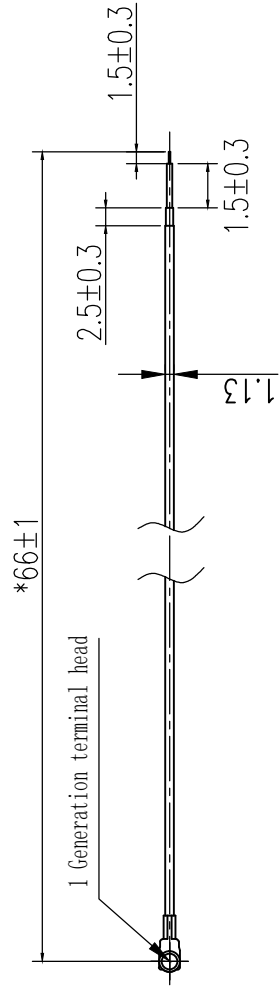
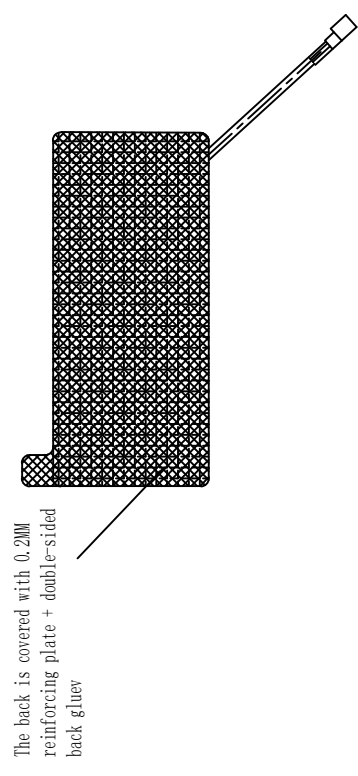
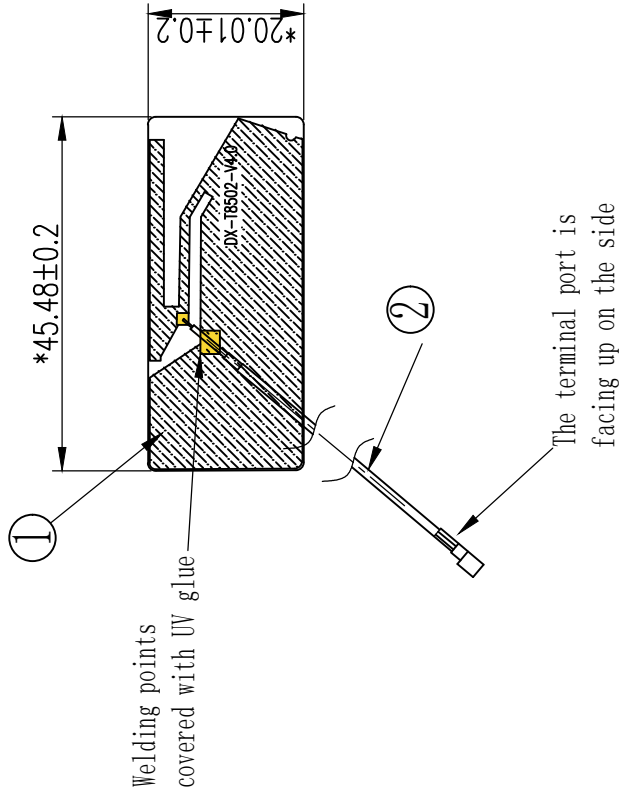
7、 2D&3D Field pattern diagram-WIFI 2.4G



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The third perspective		1		2		3		4		5		6	
Unit	mm	0~10	10~30	30~50	50~	Angle	◎	⊥	⊥	⊥	⊥	⊥	⊥
Proportion	1:1	0.05	0.10	0.15	0.20	1°	0.02	0.03	0.03	0.03	0.03	0.03	0.05



Note:

- "*" for the key size;
- Please follow the drawing is not dimensioned
- Product environmental protection meets ROHS requirements

2	Coaxial line of terminal	Cable	black	Remark
1	FPC Antenna	Electrolytic copper	black	
No.	Part Name	Material	Colour	Remark



Shenzhen Daxian Technology Co., Ltd.

Model	T8502	Product color	black	Date	2022-10-09
Project Coding	CT-8502X-042	MoI dsurfacetreat ment		Structural Design	zengmanyi
Part Name	WiFiAntenna			RF design	chenxitian
Parts coding	1T-8502X-042			Check	zhoukang
Material	FPC+Cable			Approve	zhanglei
Save Path				current version	A

version	1	2	3	4	5	6
Description						
Date						
Remark						