Antenna specification sheet

Supplier

Iot-antenna Technology (Kunshan) Co., Ltd

Material code: TP47-BT-C1-L60

Material name: WIFI antenna

Customer Name

Zhejiang Ulirvision Technology Co., Ltd

Prepared by: Wang Li Reviewed by: Xiong baoli

Date: May 27, 2022

Tianfeng Intelligent Technology (Kunshan) Co., Ltd

Address: No.18 Chunxu Road, Development Zone, Kunshan City, Jiangsu Province

Room 406, Liancai Business Building

Email: xzx@iot-antenna.com

Phone: 181 1265 0090

Catalogue

1. Both parties confirm

1.1 Customer Confirmation Signature

Customer: Zhejiang Ulirvision Technology Co., Ltd

Customer department/position	confirmation person signature	confirmation date
Hardware/RF		
Structure		
Business/Procurement		
Review		

Supplier:Iot-antenna Technology (Kunshan) Co., Ltd

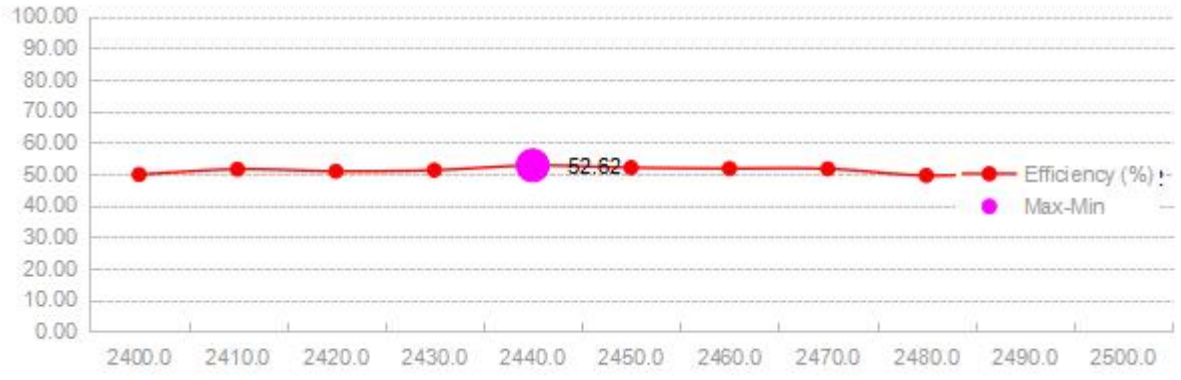
department/position	confirmation person signature	confirmation date
Antenna Engineer		
Structural Engineer		
QA		
Review		

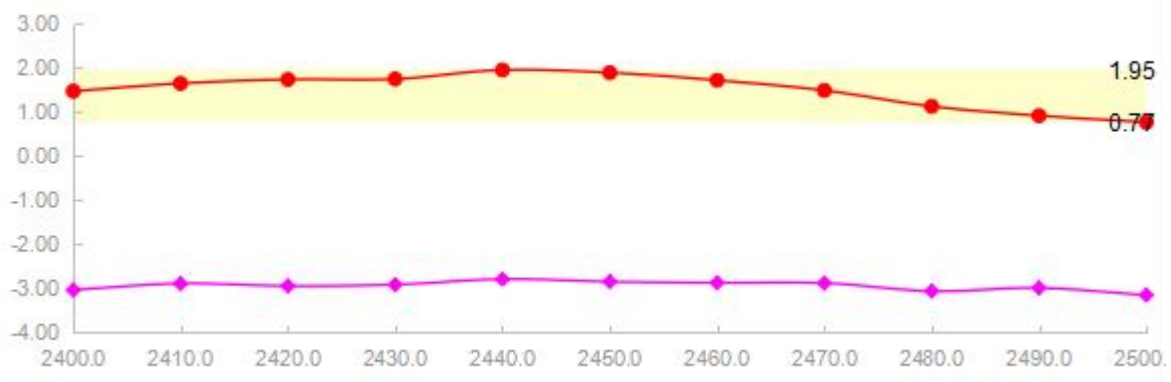
2.General product specifications reference

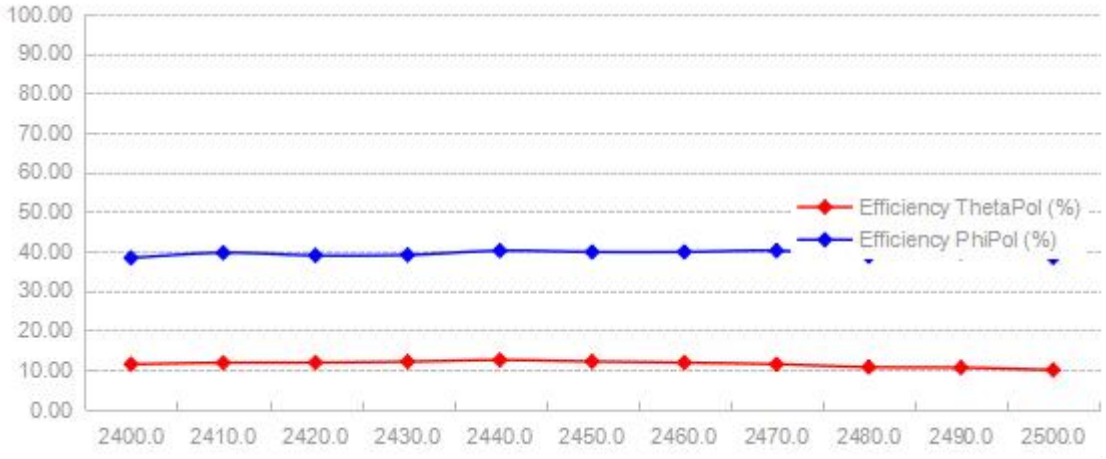
NO.	ITEMS	DETAILS
1	Applicable frequency band	2400---2500MHZ
2	Antenna VSWR	＜ 2:1
3	Antenna impedance	50Ω
4	Antenna polarization	Vertical polarization
5	Antenna gain	1.95dBi
6	Antenna efficiency	＞60%
7	Antenna area	34.5mm*9.5mm*0.25mm
8	Antenna connector	IPEX—MHF1
9	Antenna extension cable	Black 1.1RF wire with a length of 60mm
10	Antenna installation	Comes with adhesive backing
11	Antenna operating temperature	-30--- 80°
12 Physical reference pictures	 	

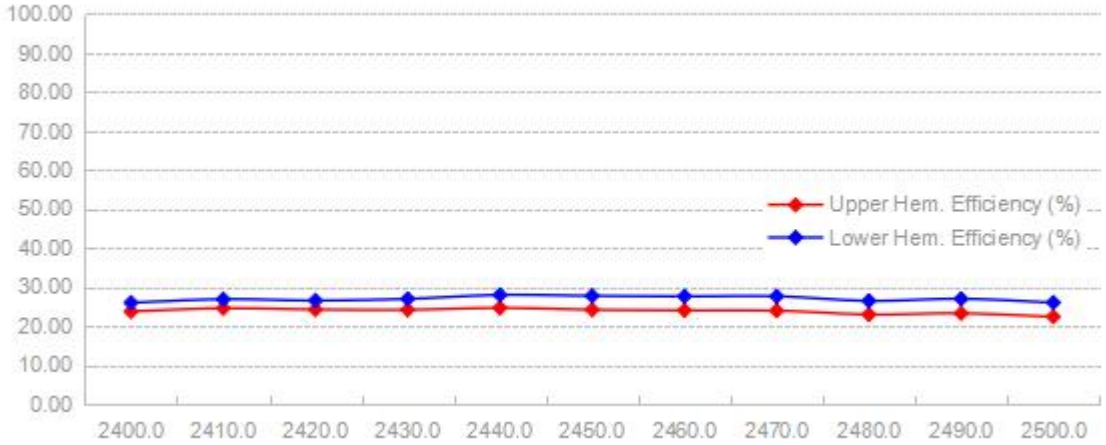
2.1Test data and bar graph

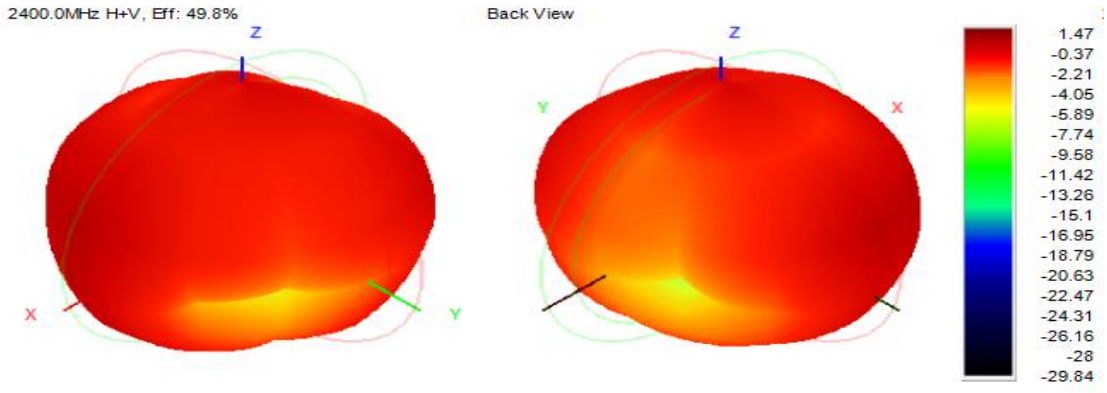
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-3.03	-2.89	-2.94	-2.91	-2.79	-2.85	-2.87	-2.88	-3.06	-2.99	-3.15
Gain (dBi)	1.47	1.65	1.74	1.75	1.95	1.89	1.72	1.49	1.13	0.92	0.77
Efficiency (%)	49.76	51.43	50.78	51.14	52.62	51.94	51.66	51.56	49.44	50.25	48.42
Directivity (dB)	4.51	4.54	4.68	4.66	4.74	4.74	4.59	4.37	4.19	3.91	3.92
Peak Gain Position (Theta)	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00
Peak Gain Position (Phi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Efficiency ThetaPol (%)	11.44	11.82	11.86	12.08	12.49	12.13	11.85	11.44	10.71	10.59	9.99
Efficiency PhiPol (%)	38.32	39.61	38.92	39.06	40.13	39.81	39.81	40.13	38.73	39.65	38.43
Upper Hem. Efficiency (%)	23.76	24.55	24.24	24.17	24.64	24.19	24.04	23.94	22.98	23.26	22.40
Lower Hem. Efficiency (%)	25.99	26.88	26.55	26.97	27.98	27.75	27.62	27.63	26.46	26.99	26.02
T90(H)圆度	17.20	16.56	16.60	16.06	15.91	15.56	15.48	15.58	15.97	15.82	15.92
Gain 15deg (dBi)											
E1(XZ)波瓣宽度	119.00	121.00	119.00	71.00	68.00	69.00	72.00	130.00	137.00	142.00	142.00
E1(XZ)前后比	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E2(YZ)波瓣宽度	124.00	127.00	218.00	211.00	212.00	212.00	199.00	201.00	165.00	161.00	159.00
E2(YZ)前后比	1.67	1.70	1.48	1.04	0.42	0.00	0.00	0.00	0.00	0.00	0.00
最大增益处轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
仰角10度最差(大)轴比(P)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Hc(XY)波瓣宽度	122.00	120.00	119.00	118.00	118.00	118.00	119.00	120.00	120.00	117.00	114.00
Hc(XY)前后比	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.22	0.52
Empty											

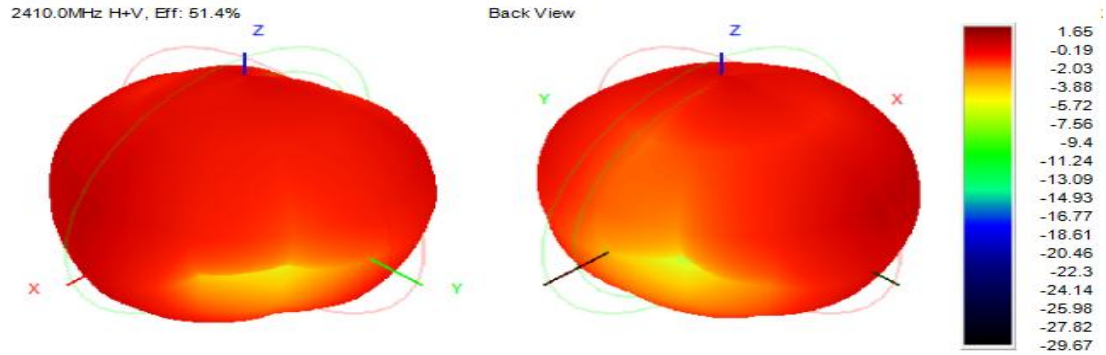




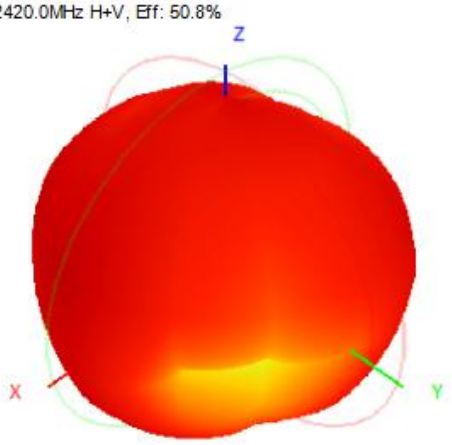

100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
2400.0
2410.0
2420.0
2430.0
2440.0
2450.0
2460.0
2470.0
2480.0
2490.0
2500.0
Efficiency ThetaPol (%)
Efficiency PhiPol (%)


100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
2400.0
2410.0
2420.0
2430.0
2440.0
2450.0
2460.0
2470.0
2480.0
2490.0
2500.0
Upper Hem. Efficiency (%)
Lower Hem. Efficiency (%)


2400.0MHz H+V, Eff: 49.8%
Z
X
Y
Back View
Z
Y
X
1.47
-0.37
-2.21
-4.05
-5.89
-7.74
-9.58
-11.42
-13.26
-15.1
-16.95
-18.79
-20.63
-22.47
-24.31
-26.16
-28
-29.84


2410.0MHz H+V, Eff: 51.4%
Z
X
Y
Back View
Z
Y
X
1.65
-0.19
-2.03
-3.88
-5.72
-7.56
-9.4
-11.24
-13.09
-14.93
-16.77
-18.61
-20.46
-22.3
-24.14
-25.98
-27.82
-29.67

2420.0MHz H+V, Eff: 50.8%



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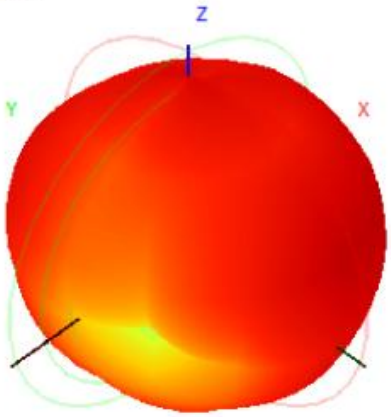
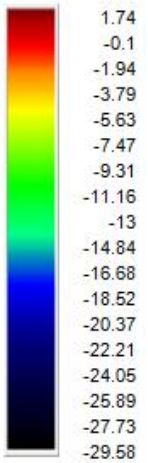
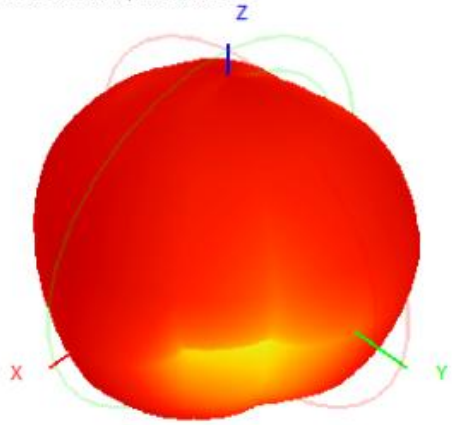




2430.0MHz H+V, Eff: 51.1%



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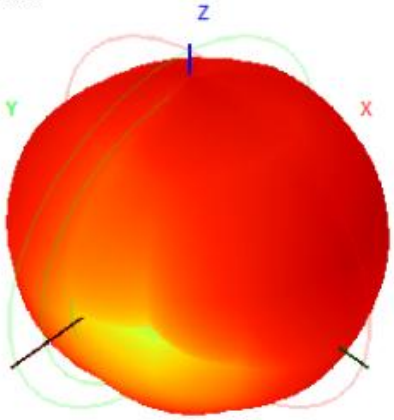
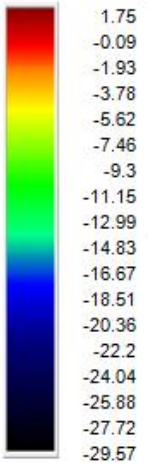
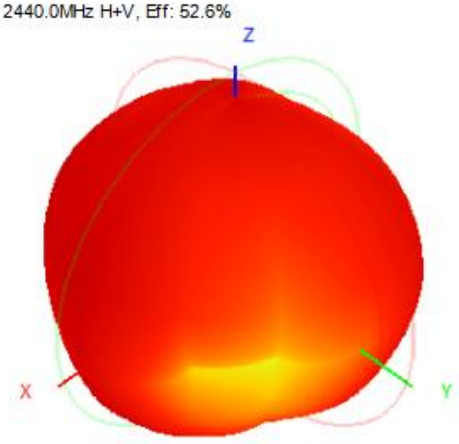




2440.0MHz H+V, Eff: 52.6%



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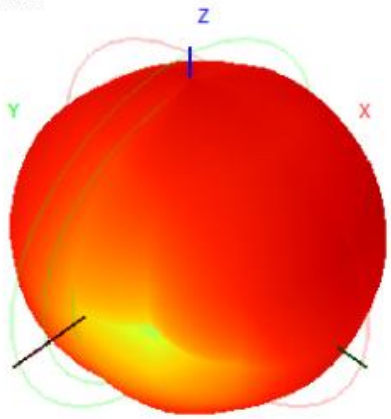
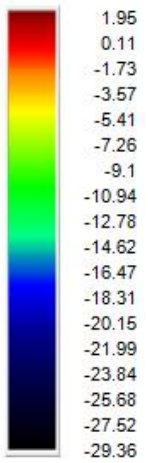
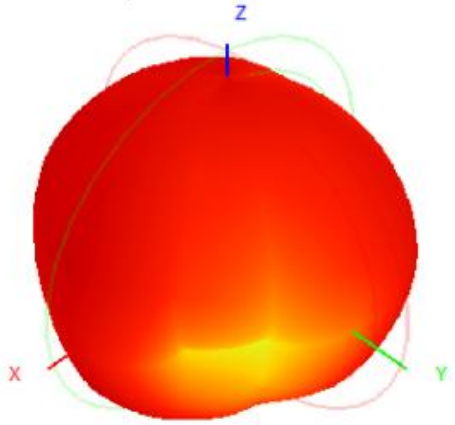




2450.0MHz H+V, Eff: 51.9%



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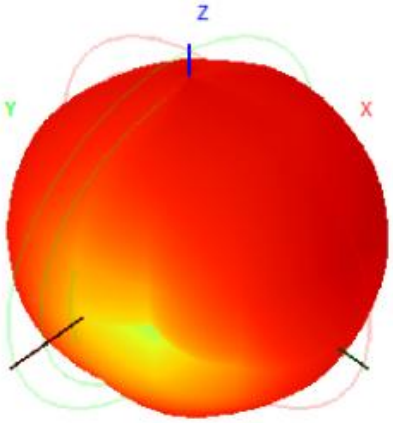
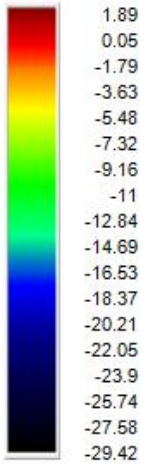
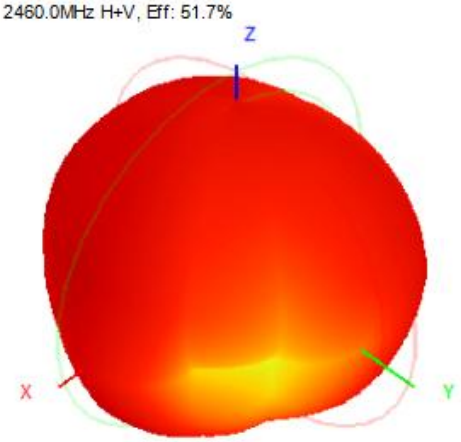




2460.0MHz H+V, Eff: 51.7%



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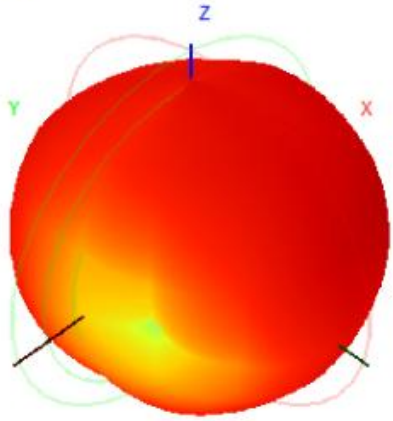
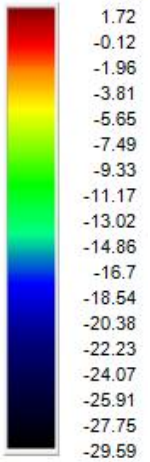
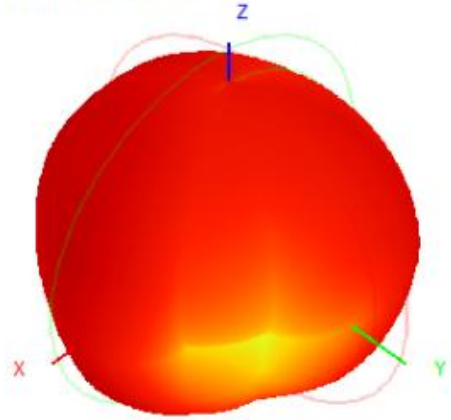




2470.0MHz H+V, Eff: 51.6%



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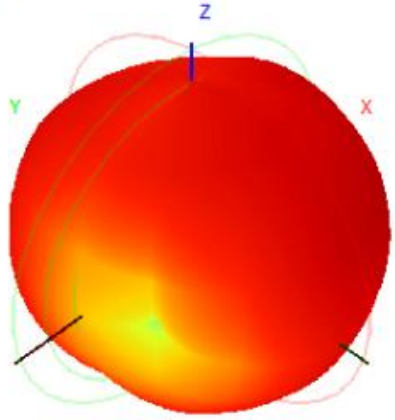
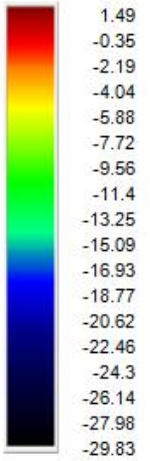
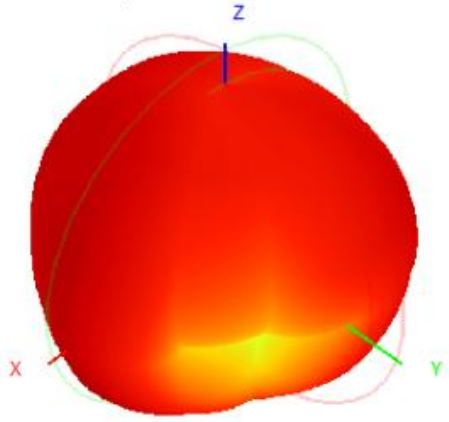




2480.0MHz H+V, Eff: 49.4%



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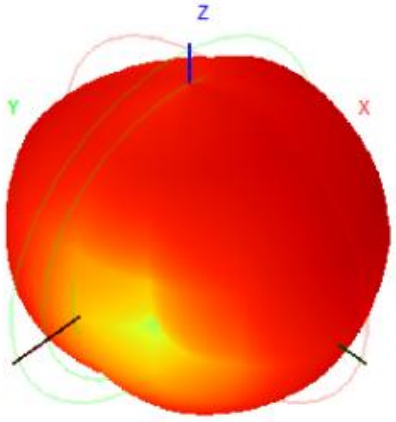
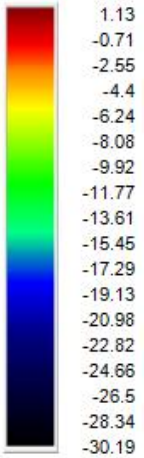
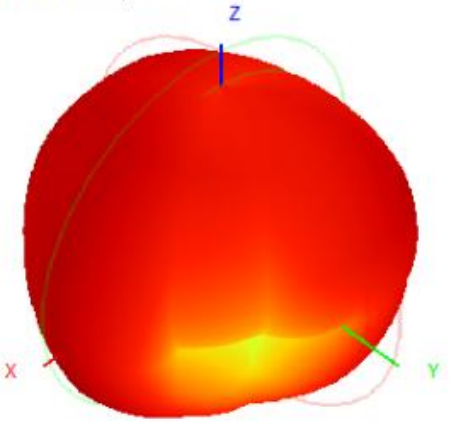




2490.0MHz H+V, Eff: 50.2%



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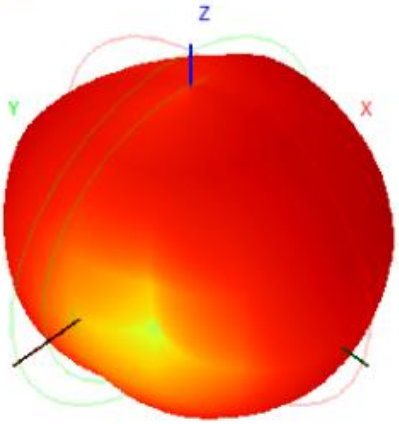
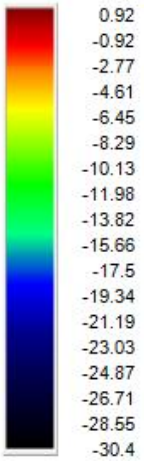
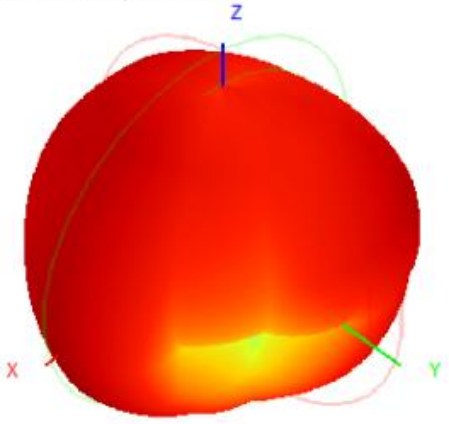
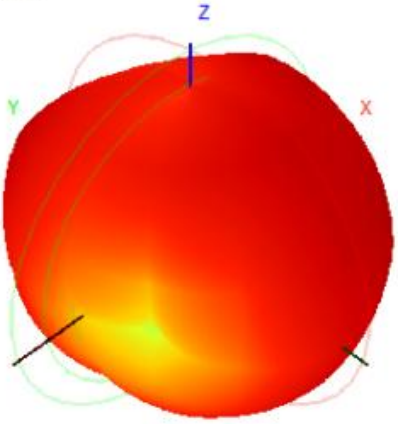


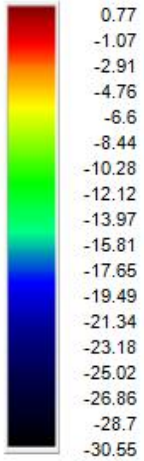


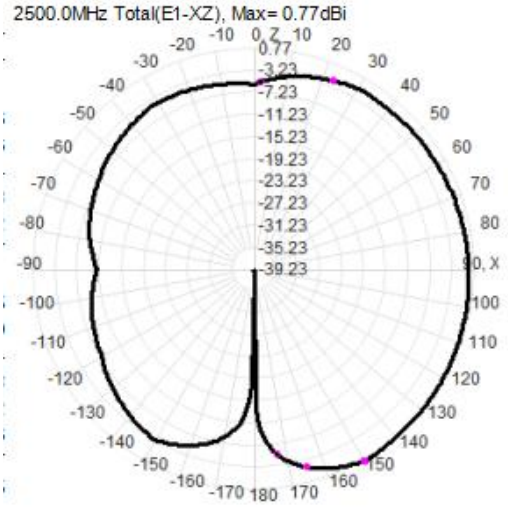
2500.0MHz H+V, Eff: 48.4%

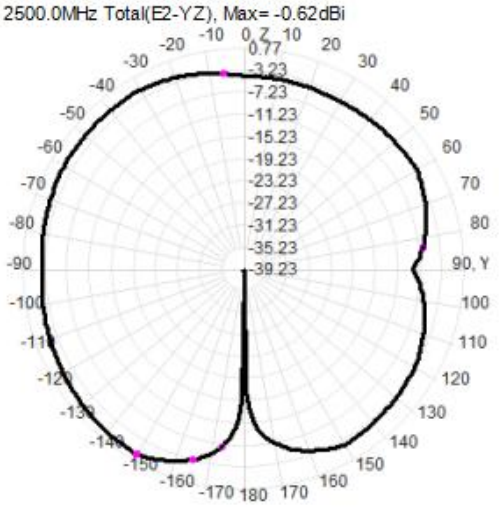


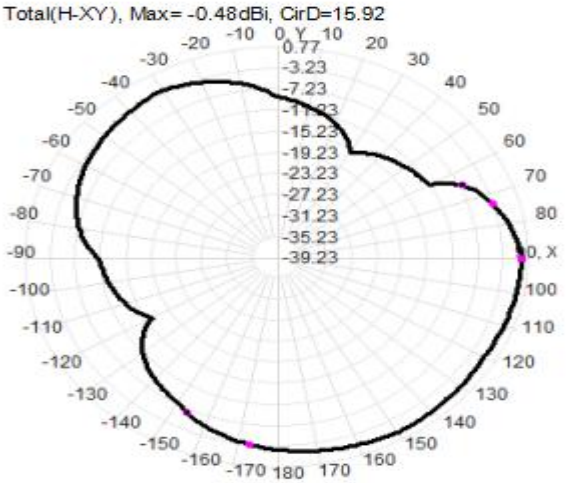
Back View

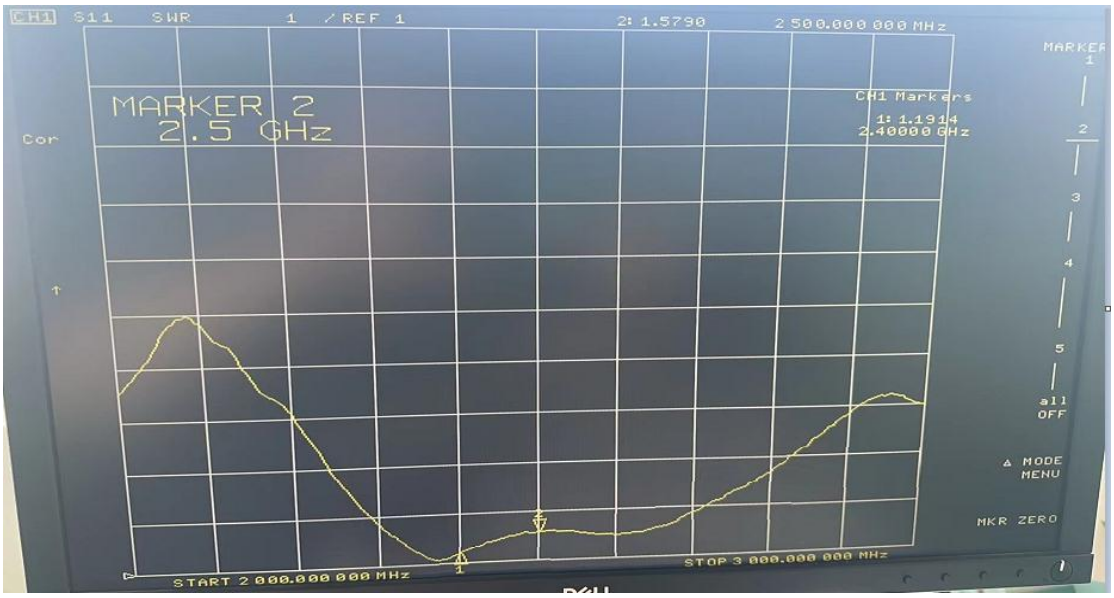




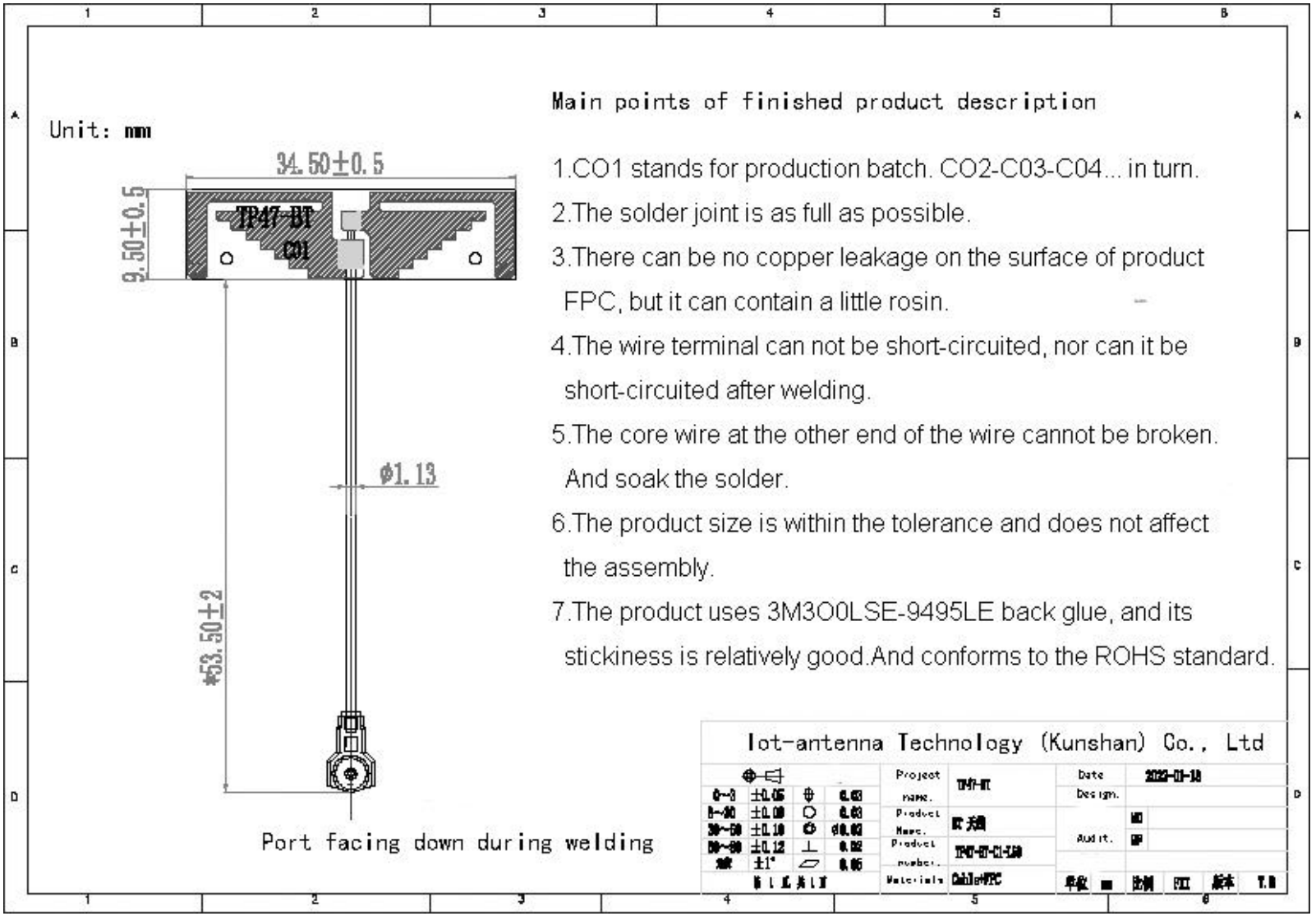

2500.0MHz Total(E1-XZ), Max= 0.77dBi
0.77
-3.23
-7.23
-11.23
-15.23
-19.23
-23.23
-27.23
-31.23
-35.23
-39.23
0, Z
90, X


2500.0MHz Total(E2-YZ), Max= -0.62dBi
0.77
-3.23
-7.23
-11.23
-15.23
-19.23
-23.23
-27.23
-31.23
-35.23
-39.23
0, Z
90, Y


Total(H-XY), Max= -0.48dBi, CirD=15.92
0.77
-3.23
-7.23
-15.23
-19.23
-23.23
-27.23
-31.23
-35.23
-39.23
0, Y
0, X


CH1 S11 SWR 1 / REF 1
2: 1.5790
2 500.000 000 MHz
MARKER 2
2.5 GHz
CH1 Markers
1: 1.1914
2.40000 GHz
MARKER 1
2
3
4
5
all OFF
MODE MENU
MKR ZERO
START 2 000.000 000 MHz
STOP 3 000.000 000 MHz

3.Product drawing specifications



4. Product packaging method

Self sealing bag+cardboard box, all outer boxes are labeled with material information codes. The shipping packaging meets the express transportation needs and arrives at the customer's designated location without any damage or abnormal situations.

5. Environmental Declaration

All materials of the product meet the requirements of ROHs, please refer to the corresponding information for details

6. Document resume

Document No.	**TP-QF-GGS- TP47-BT-C1-L60** **NO： V1.0**
Release Date	**2022/05/27**
Author	**Wang li**
Review	**Xiong baoli**