

Shenzhen Anwei Wireless Technology Co., Ltd

SPECIFICATION

Customer	Enabot (FuZhi)	Specs	EBO-X-2.4/5GWIFI-AW-V0.4
Part Number	AW006-EBO-X-022-A0	Frequency Band	2400~5825MHz
Color	Balck	Edition	REV:A
Salesperson	JingHui LV	Design	Zhong Zhi Hui
Structure	Qin Yun Lin	Confirm	Song
Date	2023/02/07	Signing Date	

Customer confirmation:

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1、Product specification

The report mainly provides parameter test of EBO-X-2.4/5GWIFI-AW-V0.4 antenna performance.

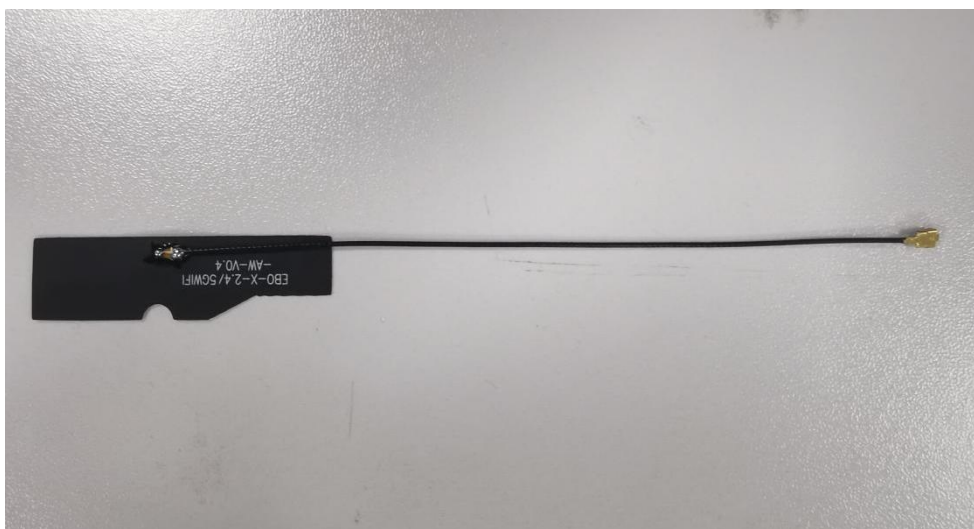
Silk screen model	Frequency+Range	Impedence	Antenna Gain	V. S. W. R
EBO-X-2.4G/5G WIFI-AW-V0.4	2400~5825MHz	50 Ω	2.4G:4.22dBi U-NII-1:4.21dBi U-NII-2A:4.24dBi U-NII-2C:6.08dBi U-NII-3:6.20dBi	1.8 (2.4G) 1.7 (U-NII)

2、Electrical performance

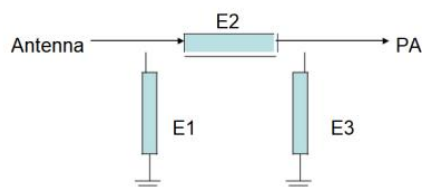
2.1 Specifications and standards

EBO-X-2.4/5GWIFI-AW-V0.4 antenna operates at 2400~5825MHZ, and resonance occurs at this frequency band.

2.2Product Photograph



2.3 Antenna matching circuit



Element	Value
E1	N/A
E2	0欧
E3	N/A

Antenna structure: FPC+2 generation terminal 120mm copper axis

3、Test of passive parameters

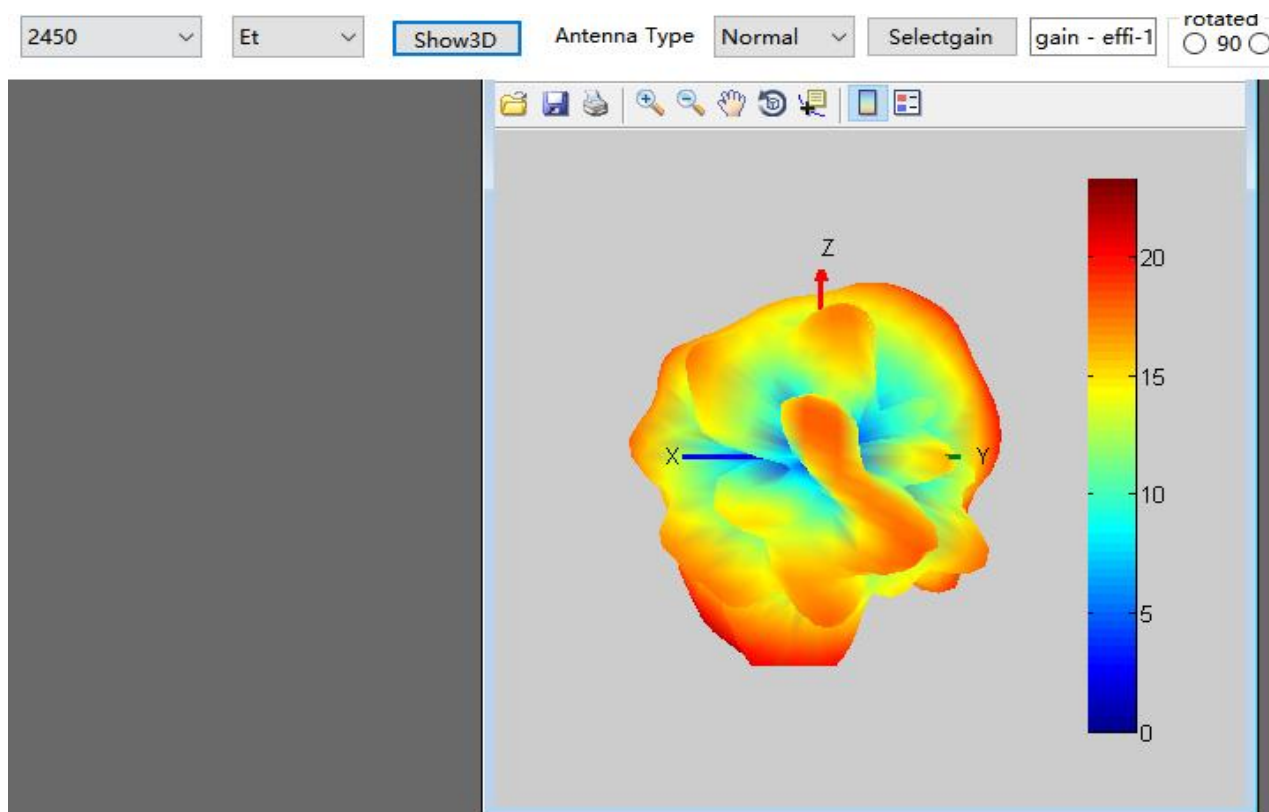
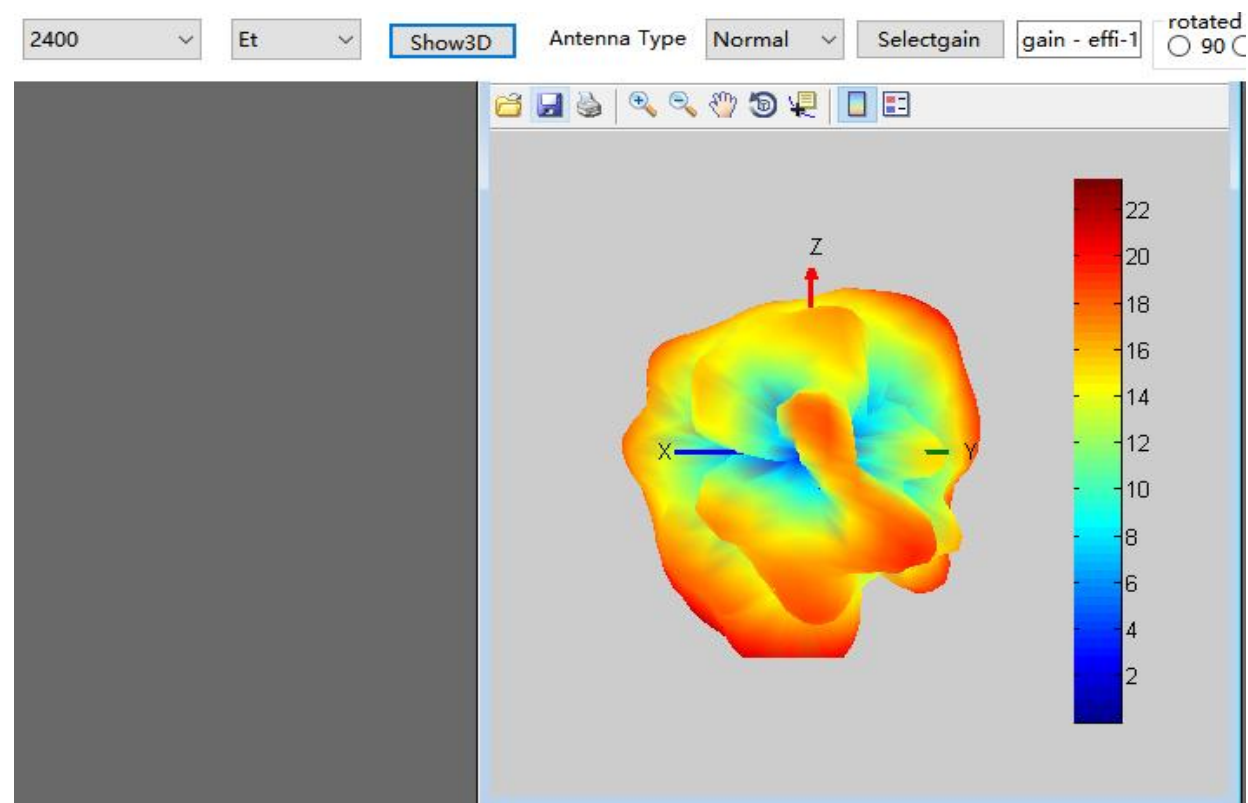
3.1 Test result

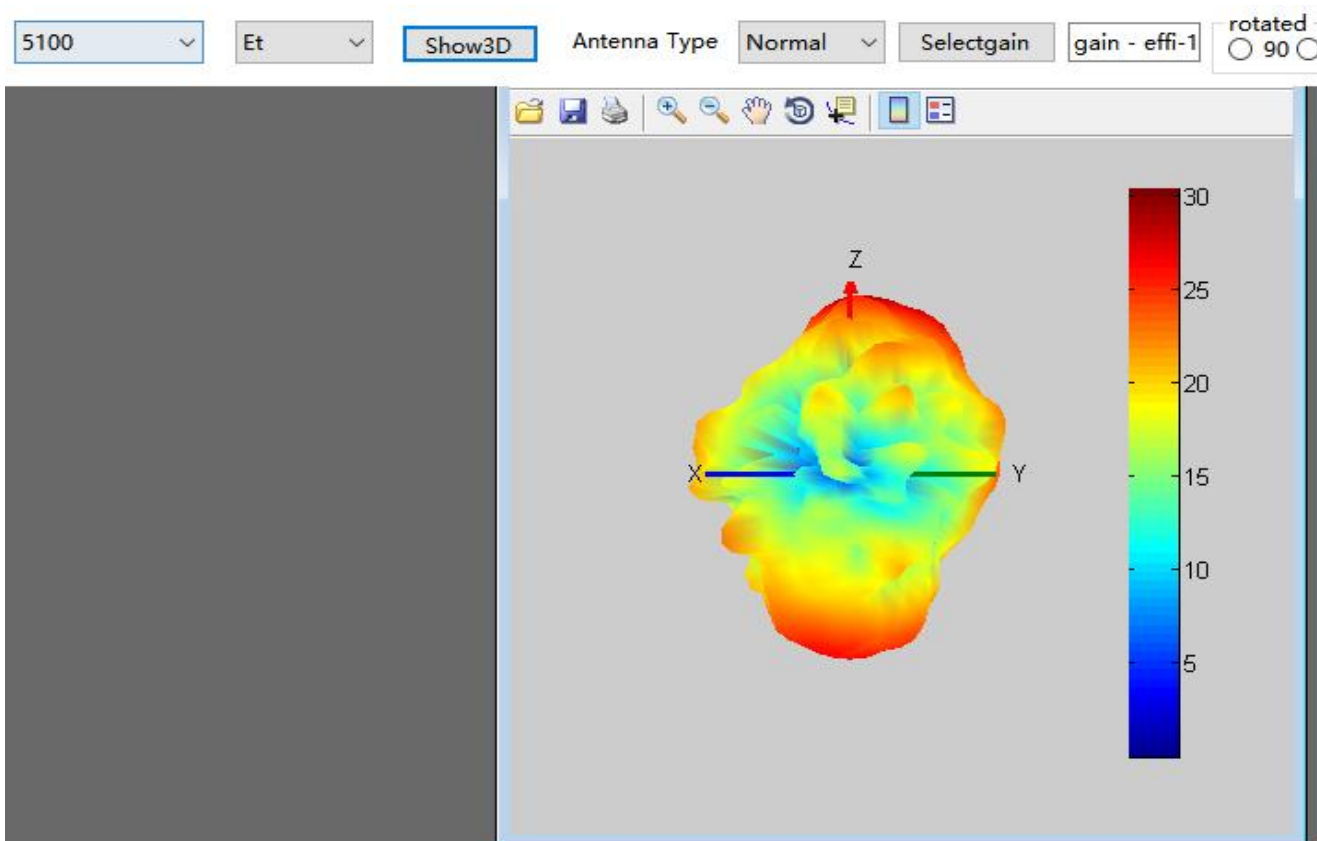
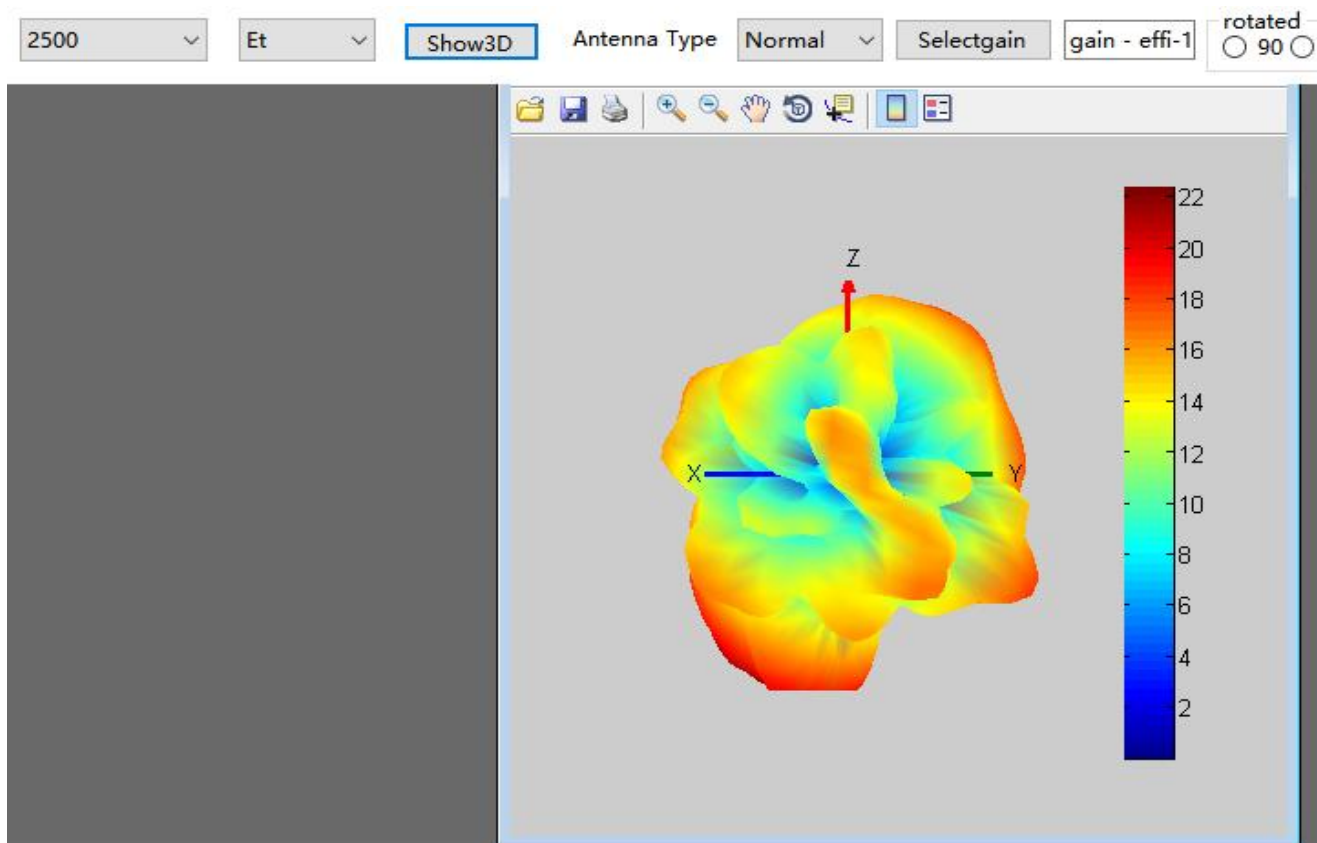
The following are antenna passive parameter data:

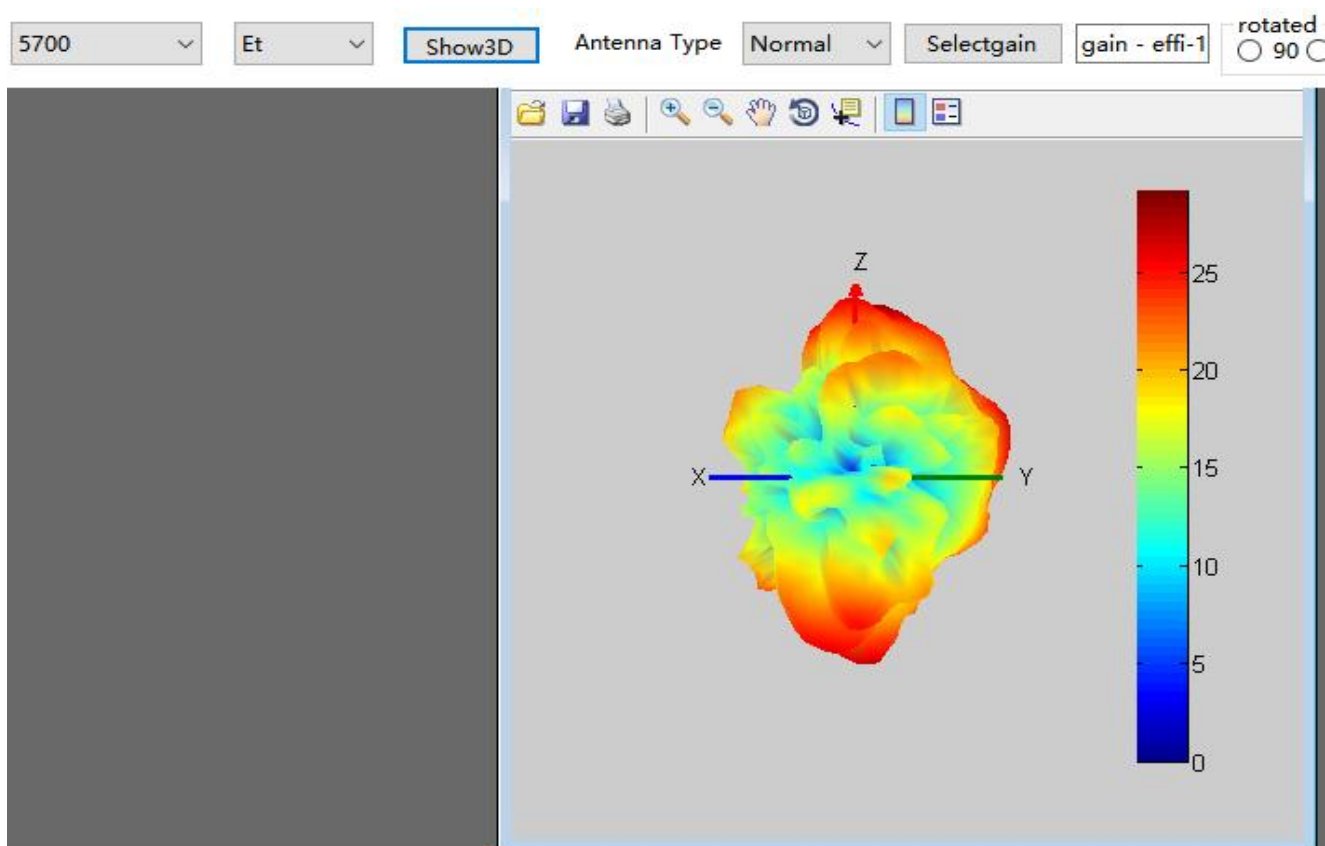
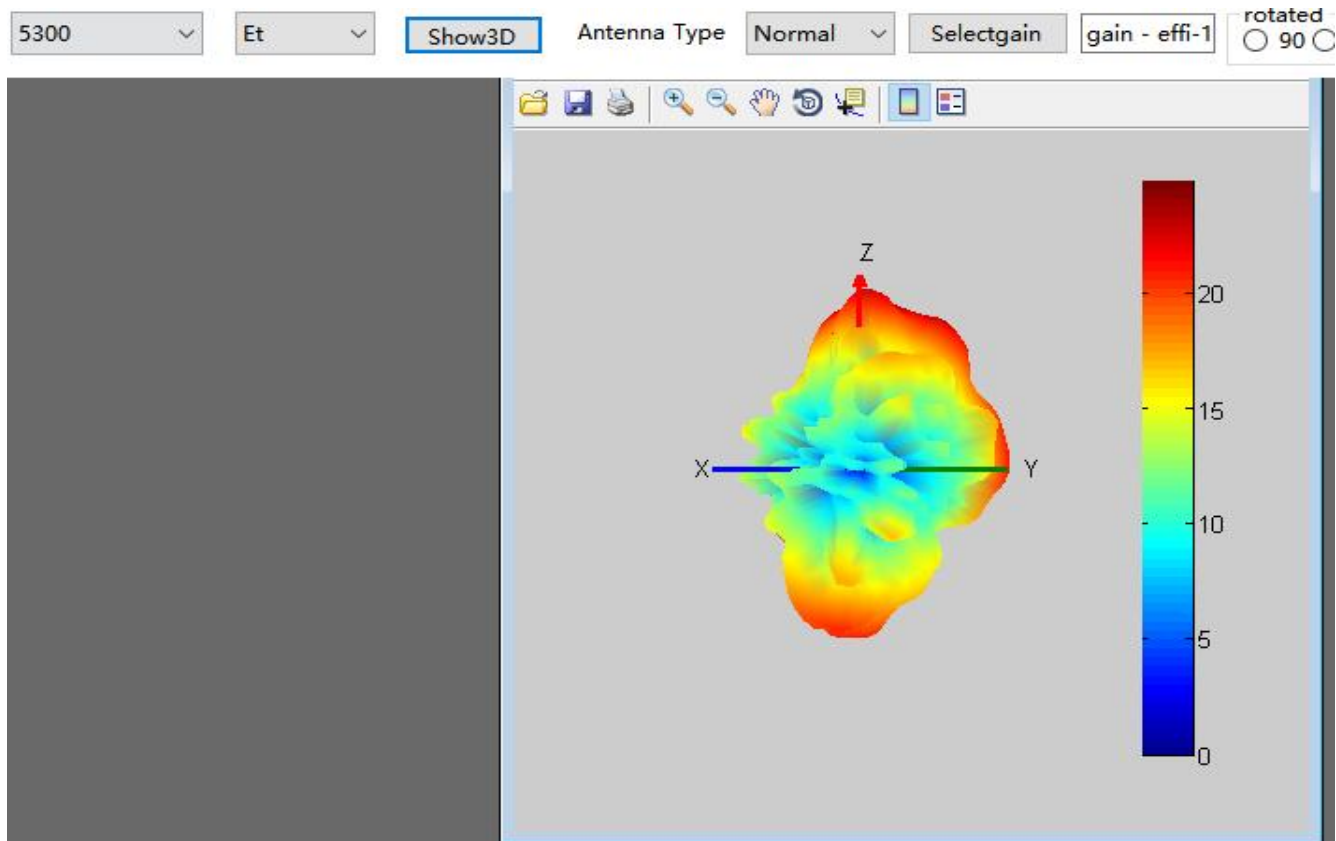


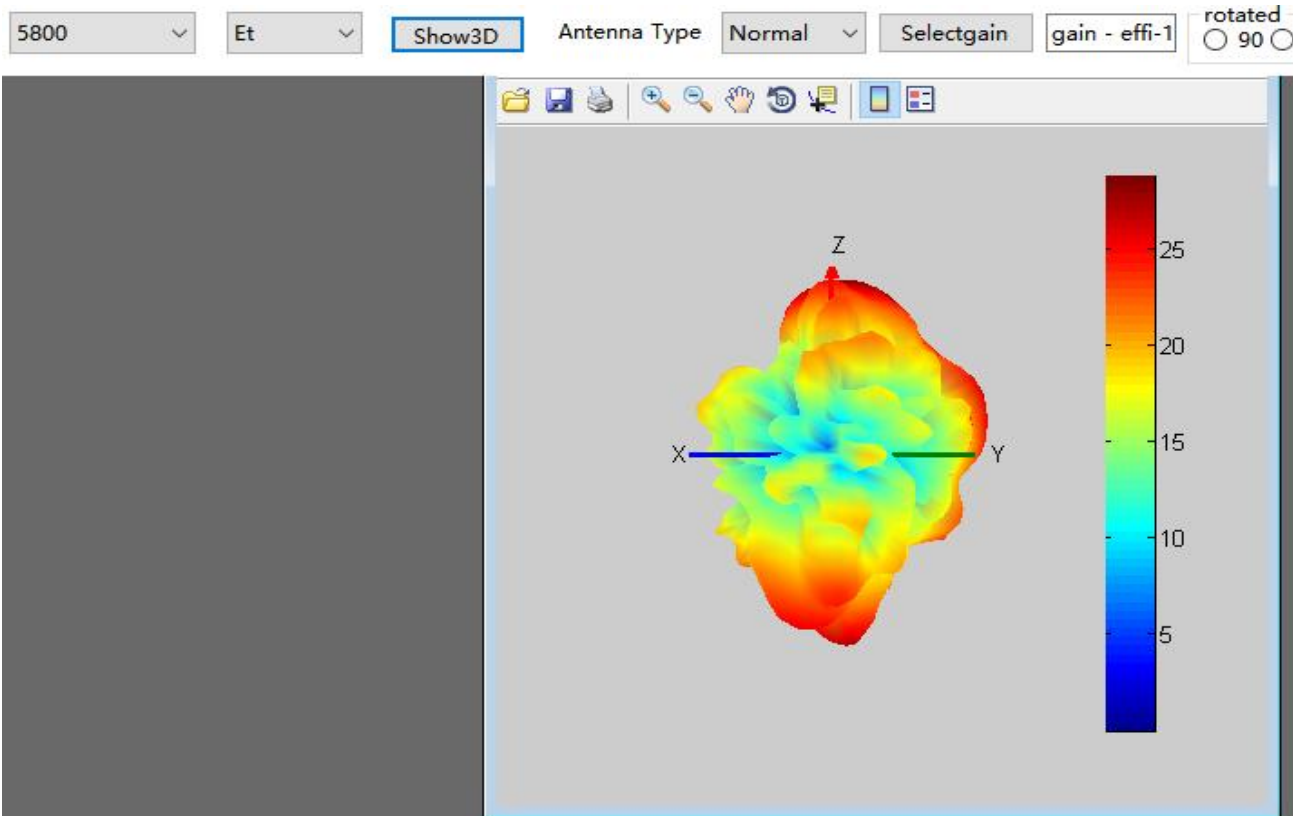
Efficiency and gain

Gain&Efficiency		
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(%)
2400	3.62	54.26
2450	3.73	54.73
2500	4.22	51.09
5100	4.89	45.32
5200	4.21	36.76
5300	4.24	40.99
5400	4.76	44.88
5500	5.45	49.38
5600	6.08	58.09
5700	5.95	56.71
5800	6.2	61.68

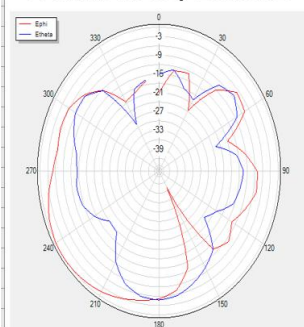




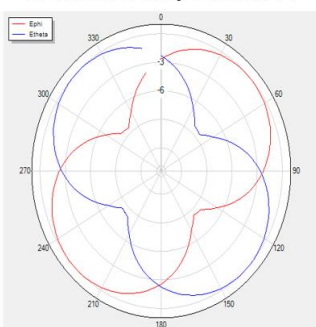




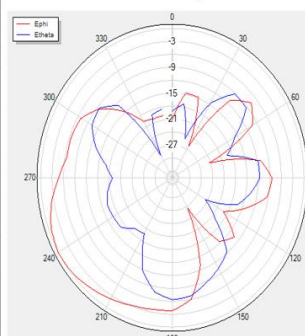
H Theta=90 freq=2400MHz



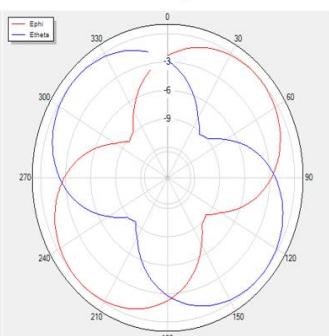
H Theta=0 freq=2400MHz



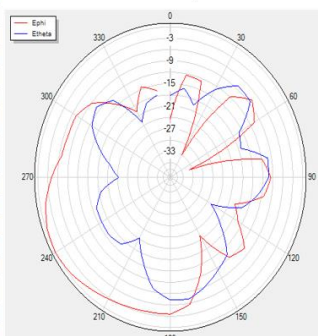
H Theta=90 freq=2450MHz



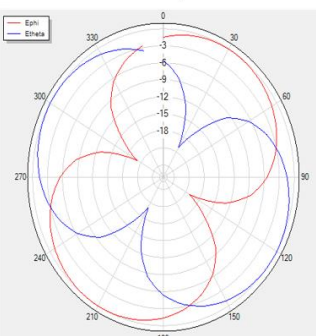
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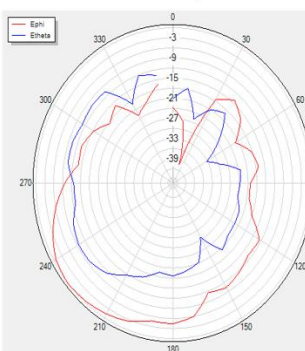
H Theta=90 freq=2500MHz



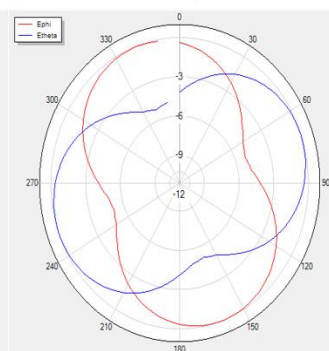
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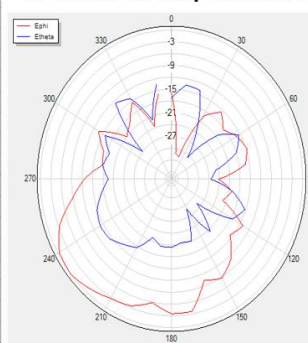
H Theta=90 freq=5100MHz



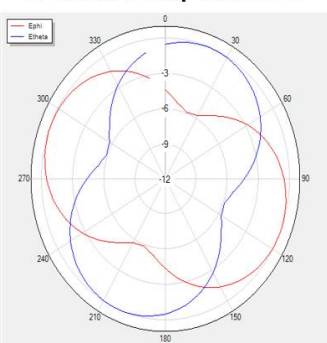
H Theta=0 freq=5100MHz



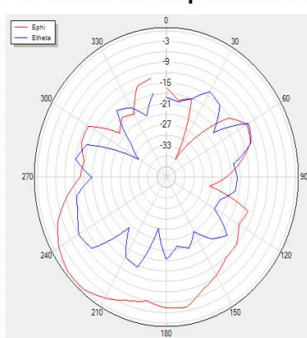
H Theta=90 freq=5300MHz



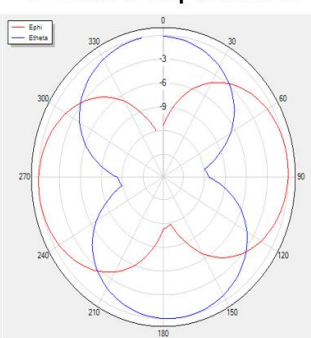
H Theta=0 freq=5300MHz



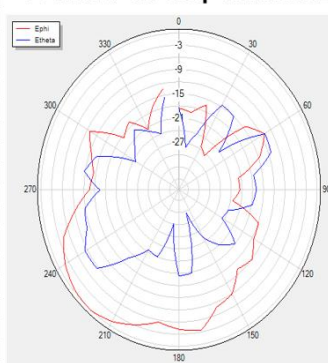
H Theta=90 freq=5700MHz



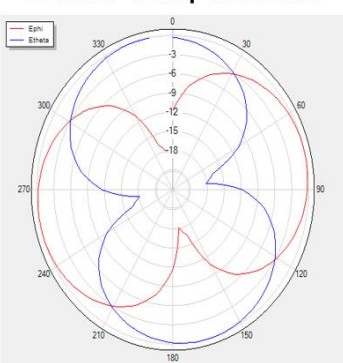
H Theta=0 freq=5700MHz



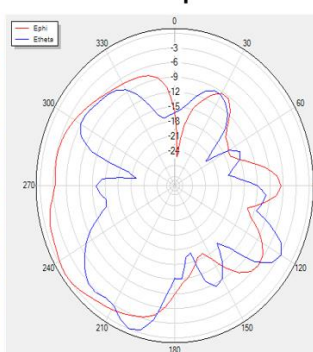
H Theta=90 freq=5800MHz



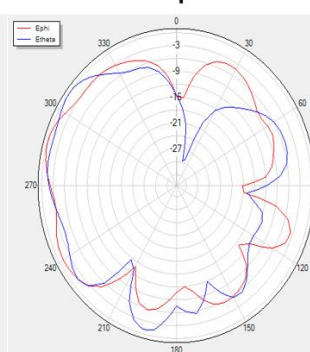
H Theta=0 freq=5800MHz



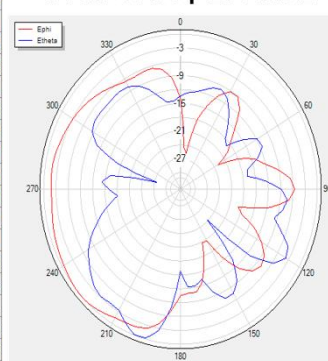
V Phi=90 freq=2400MHz



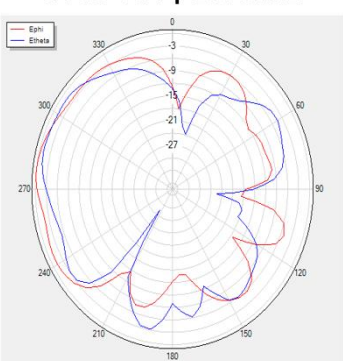
V Phi=0 freq=2400MHz



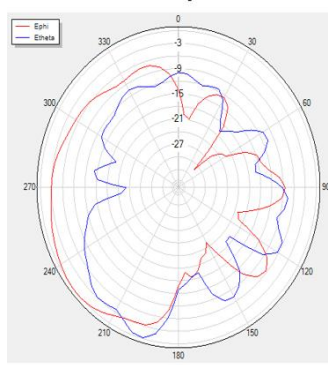
V Phi=90 freq=2450MHz



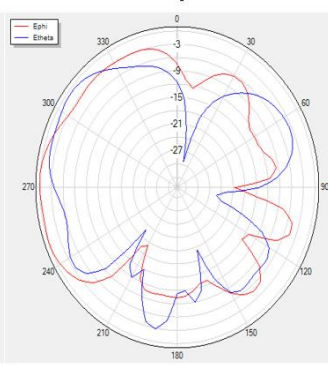
V Phi=0 freq=2450MHz



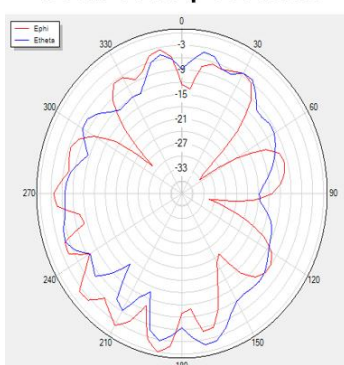
V Phi=90 freq=2500MHz



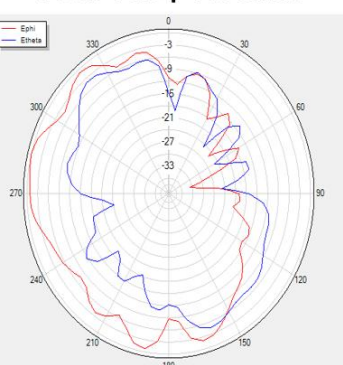
V Phi=0 freq=2500MHz



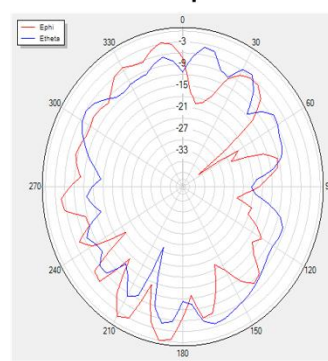
V Phi=90 freq=5100MHz



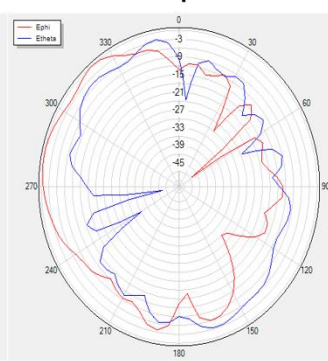
V Phi=0 freq=5100MHz

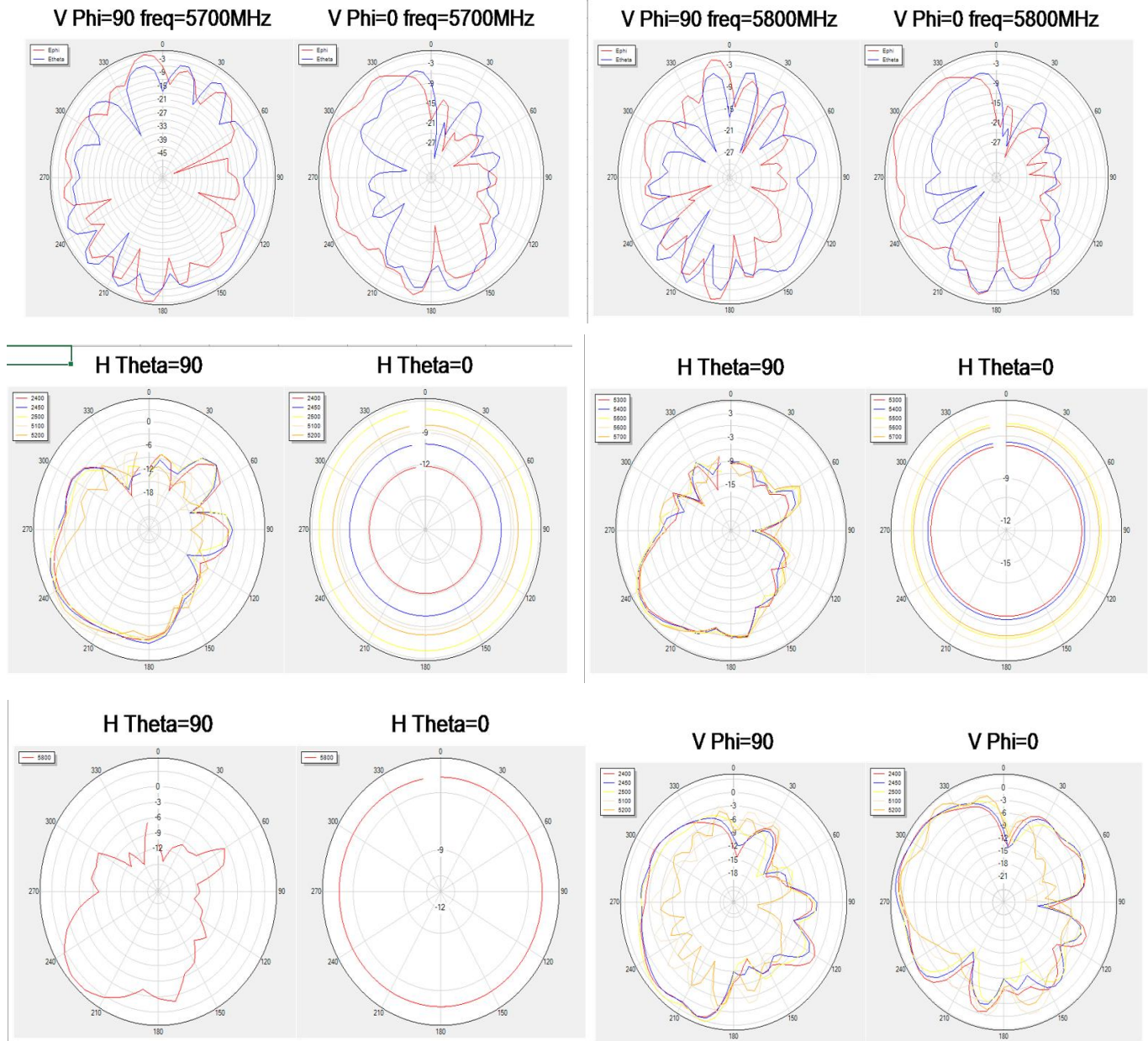


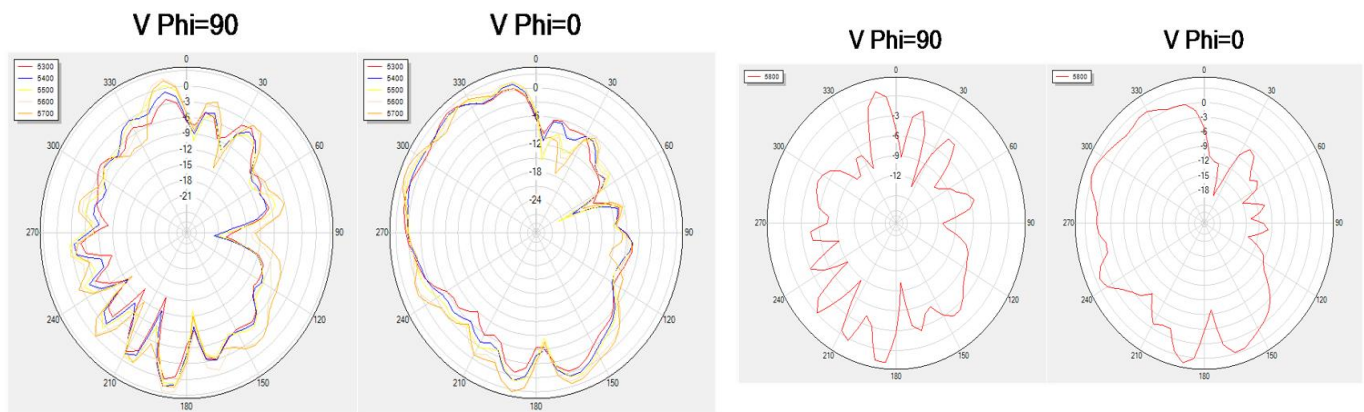
V Phi=90 freq=5300MHz



V Phi=0 freq=5300MHz







4、 Setting of OTA active test

4.1 Test result

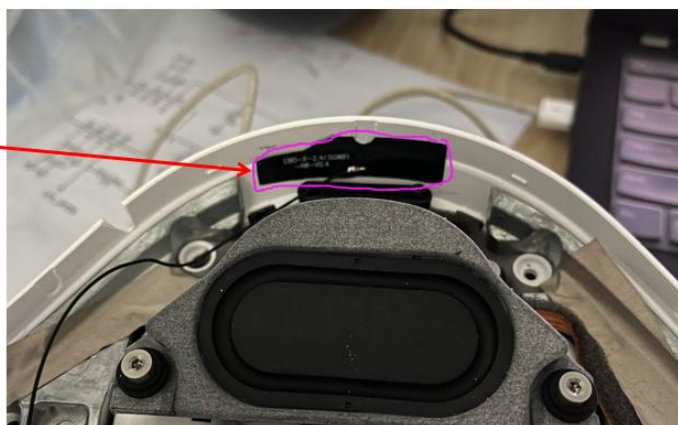
The maximum radiation power and maximum reception sensitivity reflect the maximum power radiation value and the best reception performance of the antenna in the whole radiation space. TRP and TIS reflect the average radiation power and average reception sensitivity of the antenna, that is, the overall reception performance of the antenna.

The following is the active test results of the bright screen of BEO-X 2.4G/5G dual-band WIFI antenna:

WIFI	Channel	TRP (dBm)	TIS (dBm)
2.4G B模 (11M)	1	15.22	-81.04
	6	14.72	-81.61
	11	14.41	-80.50
2.4G G模 (54M)	1	13.77	-69.28
	6	13.26	-69.60
	11	12.91	-69.48
2.4G N模 (65M)	1	15.59	-64.94
	6	15.03	-63.41
	11	14.44	-65.21
5G A模 (54M)	36	13.18	-73.48
	64	12.46	-72.58
	165	13.88	-73.56

Assembly

Assembly position of
2.4G/5G WIFI



5.Recommendations and conclusions

This report is based on the antenna electrical performance measured by the product provided by the customer. Please check it carefully.

6. Antenna structure drawing

