

0002W Antenna specification

Customer	IRAY
Device type	Oral probe
Antenna type	Stamping antenna
Working frequency range	2400~2500MHz/5150~5858MHz
Release date	2021.11.03
Version	V0
Author	Hongle Lv
Reviewer	Arvin Xia

1. Summarize

This document is mainly about the information of antenna which is applied on Oral probe made by iRay.

1.1 Antenna status



Figure 1 Antenna photo

1.2 Antenna matching

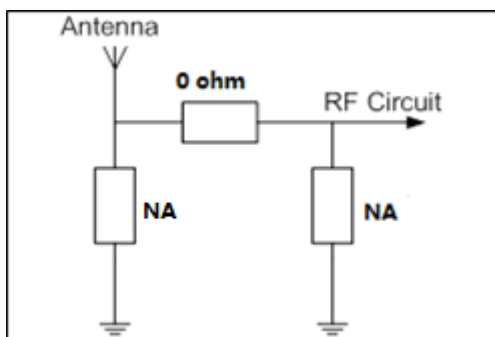


Figure 2 Antenna matching

2. Test environment

Antenna S-parameters are tested by Agilent E5071C network analyzer.

All the radiation parameters are tested by Satimo SG24, SG24 is a nearfield 3D microwave chamber.

The coordinate system is showed below of figure3

SAR is tested by DASY5 system.

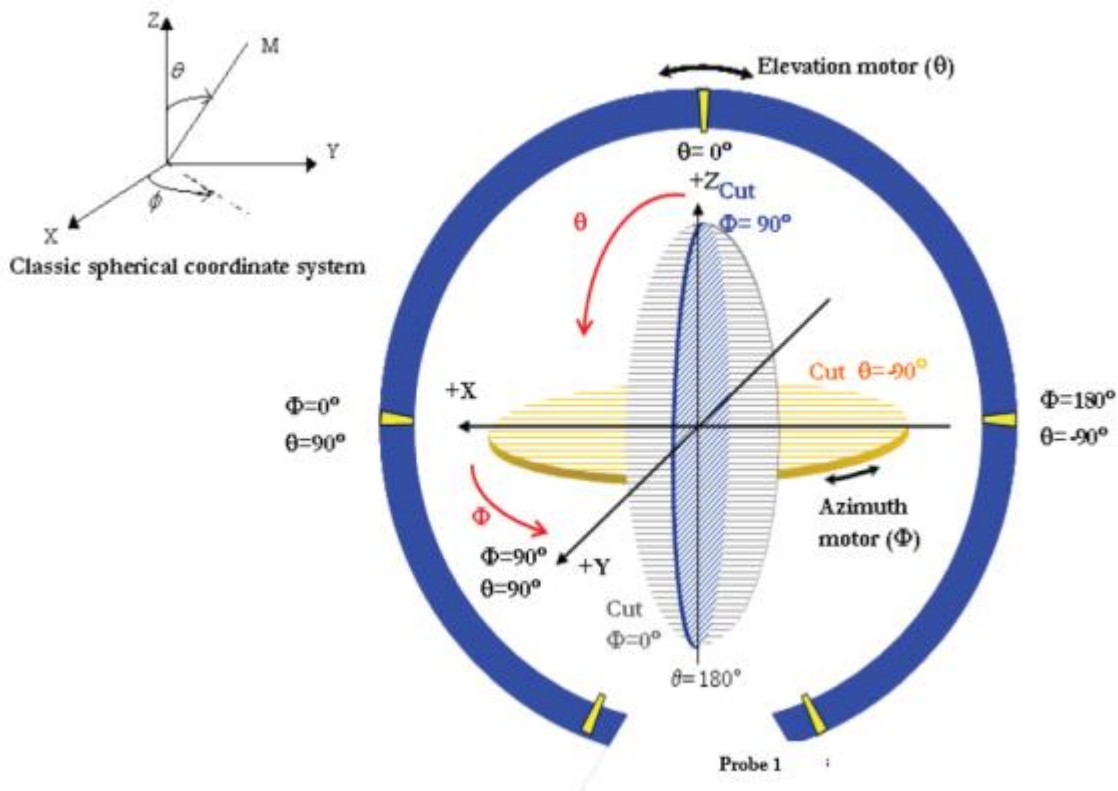


Figure 3 Coordinate system of 3D microwave chamber

3. Test result

3.1 S11

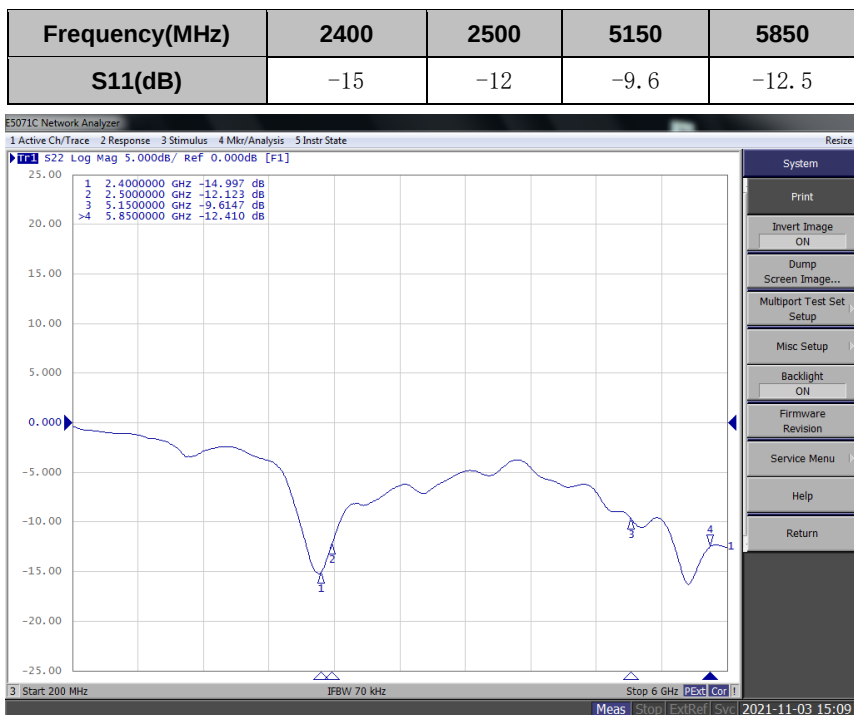


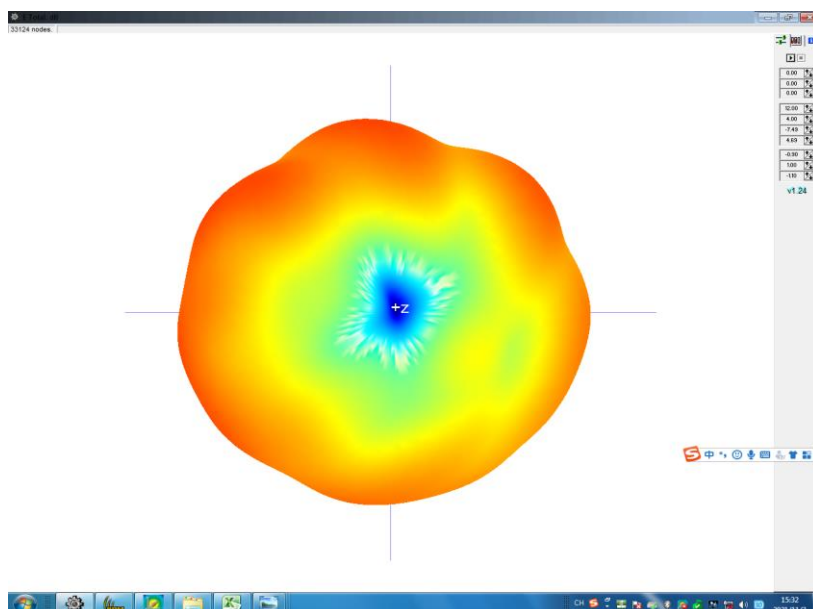
Figure 4 S11

3.2 Antenna efficiency

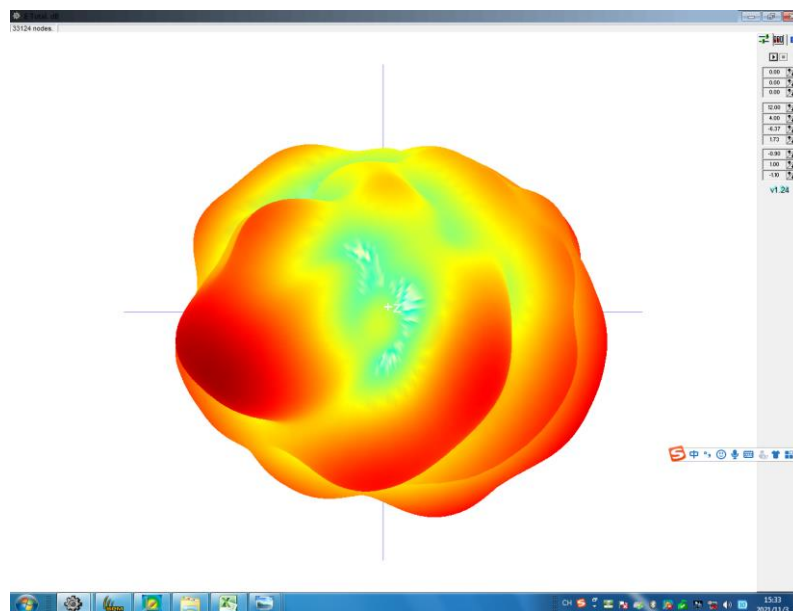
Frequency	Efficiency	Gain. dBi	Frequency	Efficiency	Gain. dBi
2400	76%	4.7	5150	52%	2.1
2410	76%	4.4	5200	53%	1.9
2420	75%	4.4	5250	51%	1.6
2430	77%	4.4	5300	48%	1.4
2440	76%	4.5	5350	54%	1.7
2450	76%	4.7	5400	58%	1.7
2460	77%	4.8	5450	60%	2.0
2470	78%	4.7	5500	61%	2.2
2480	78%	4.7	5550	62%	2.1
2490	79%	4.7	5600	59%	2.5
2500	77%	4.6	5650	57%	2.4
			5700	53%	2.5
			5750	47%	1.8
			5800	46%	2.4
			5850	42%	2.4

3.3 3D radiation pattern

2450MHz

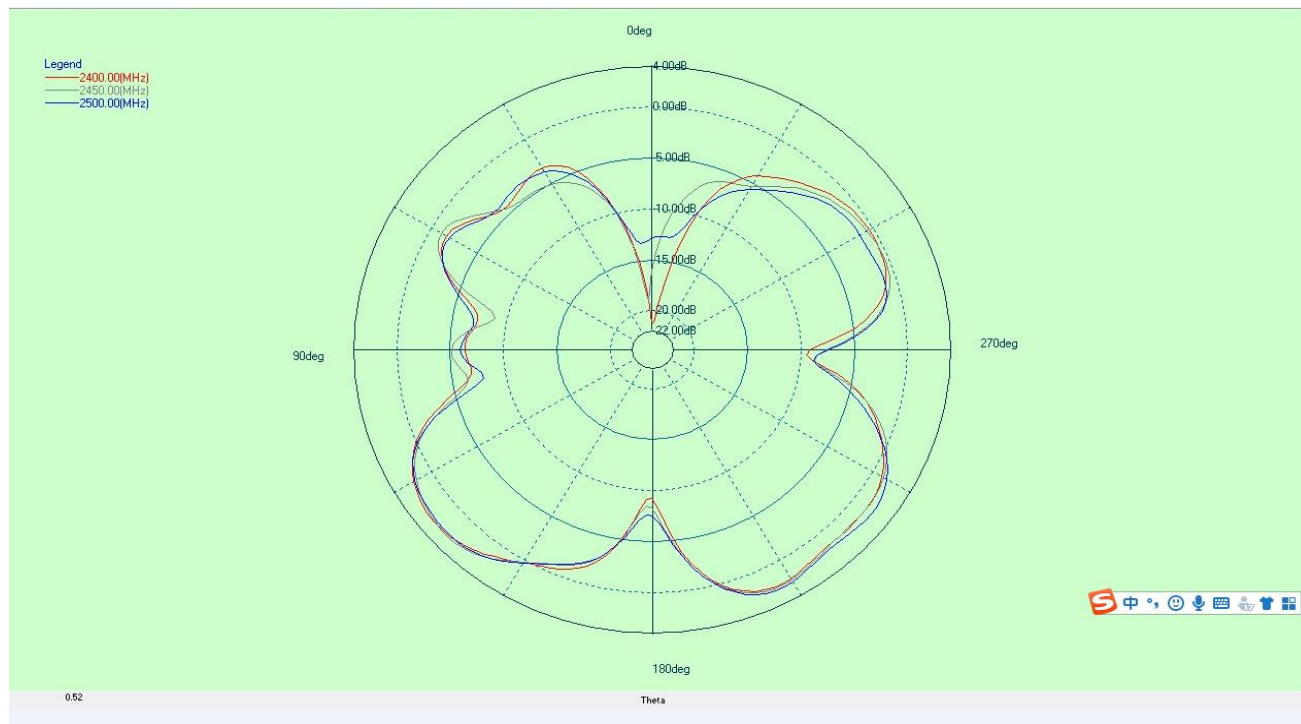


5500MHz

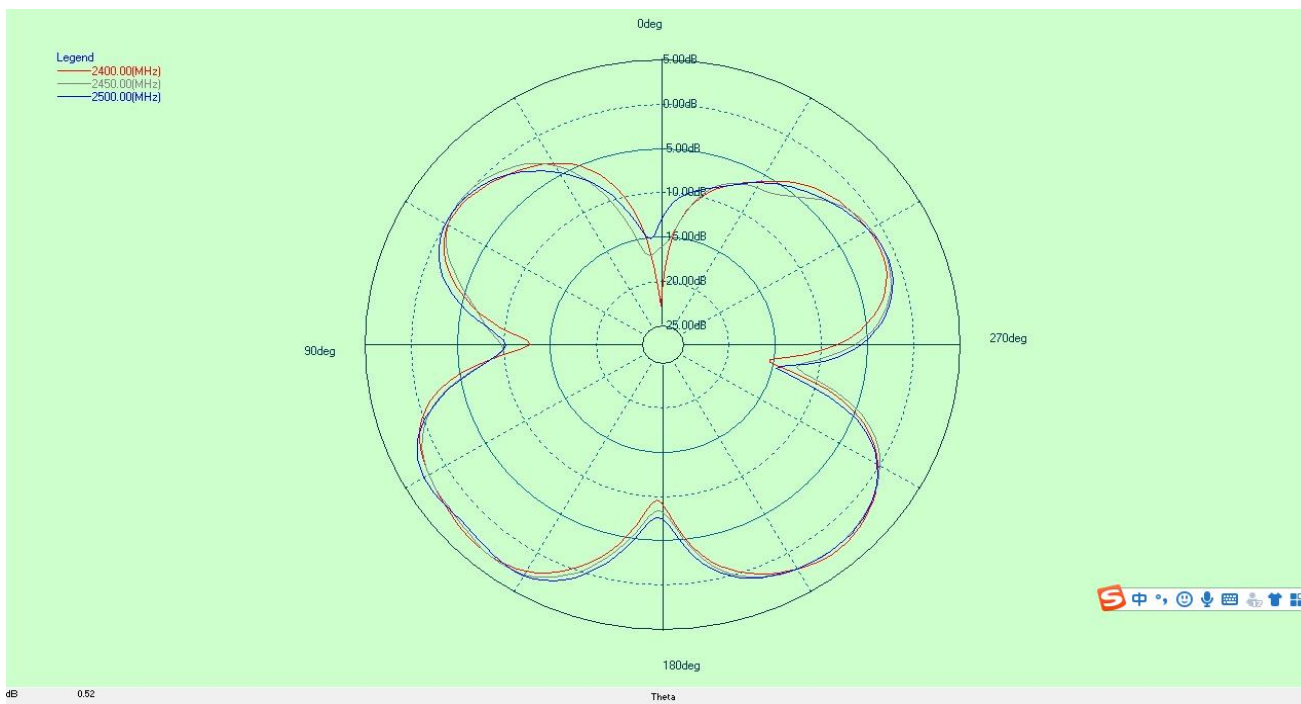


3.4 2D section view of standard cut

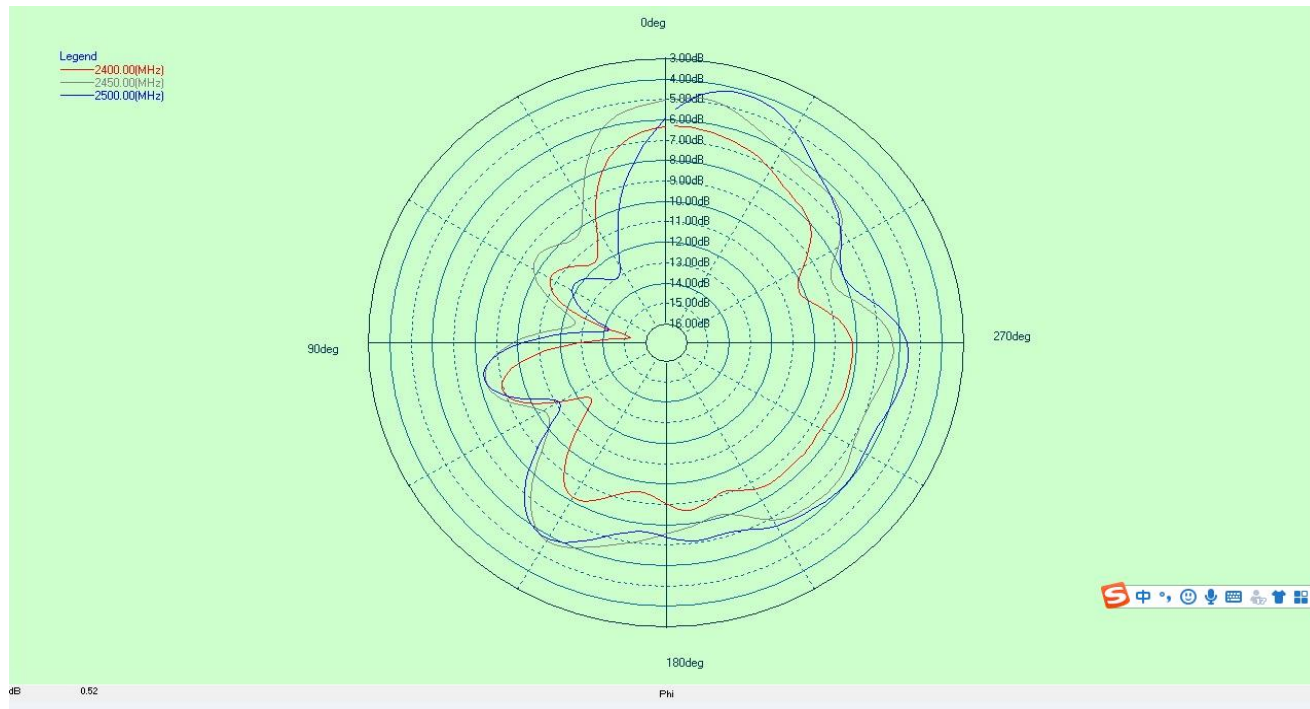
WIFI 2.45G



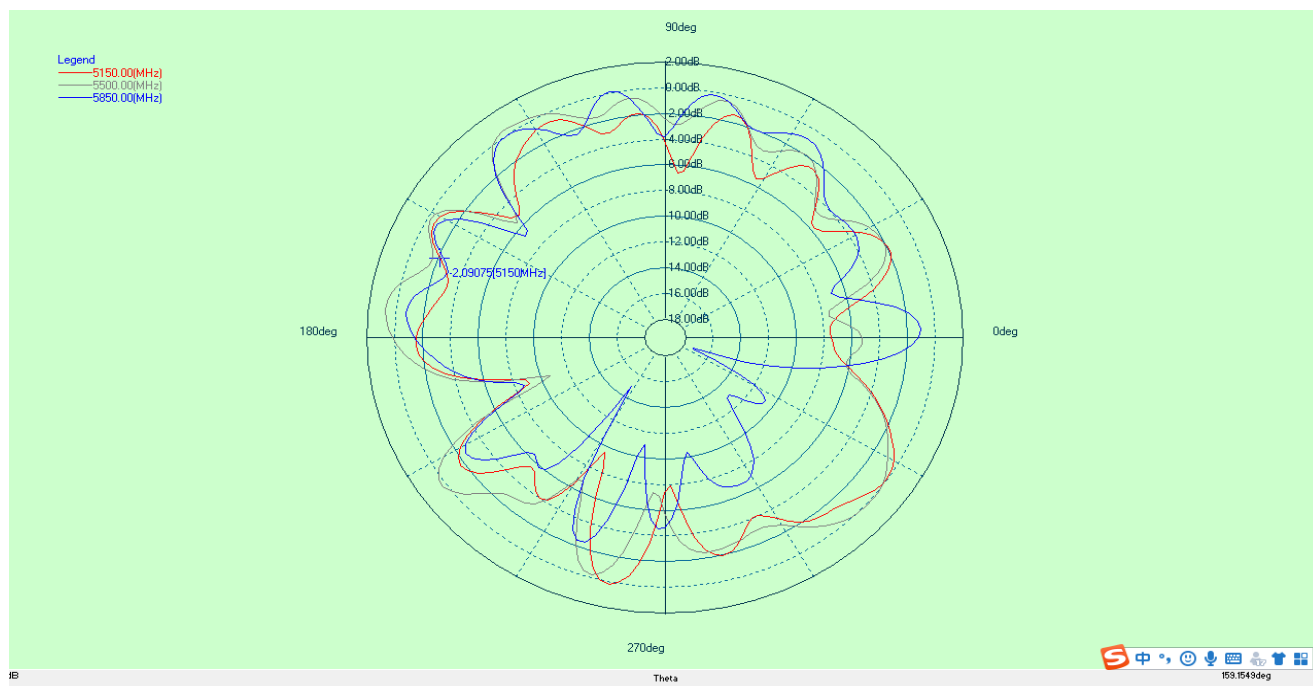
Phi=0°

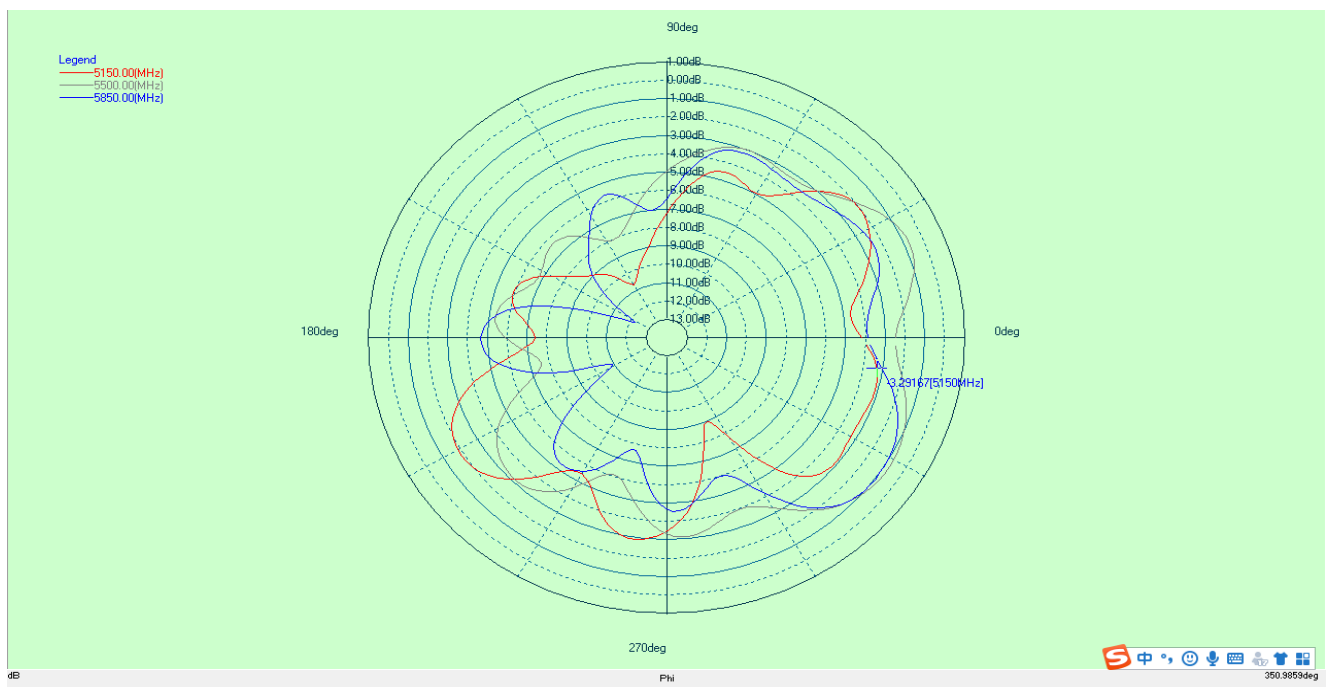
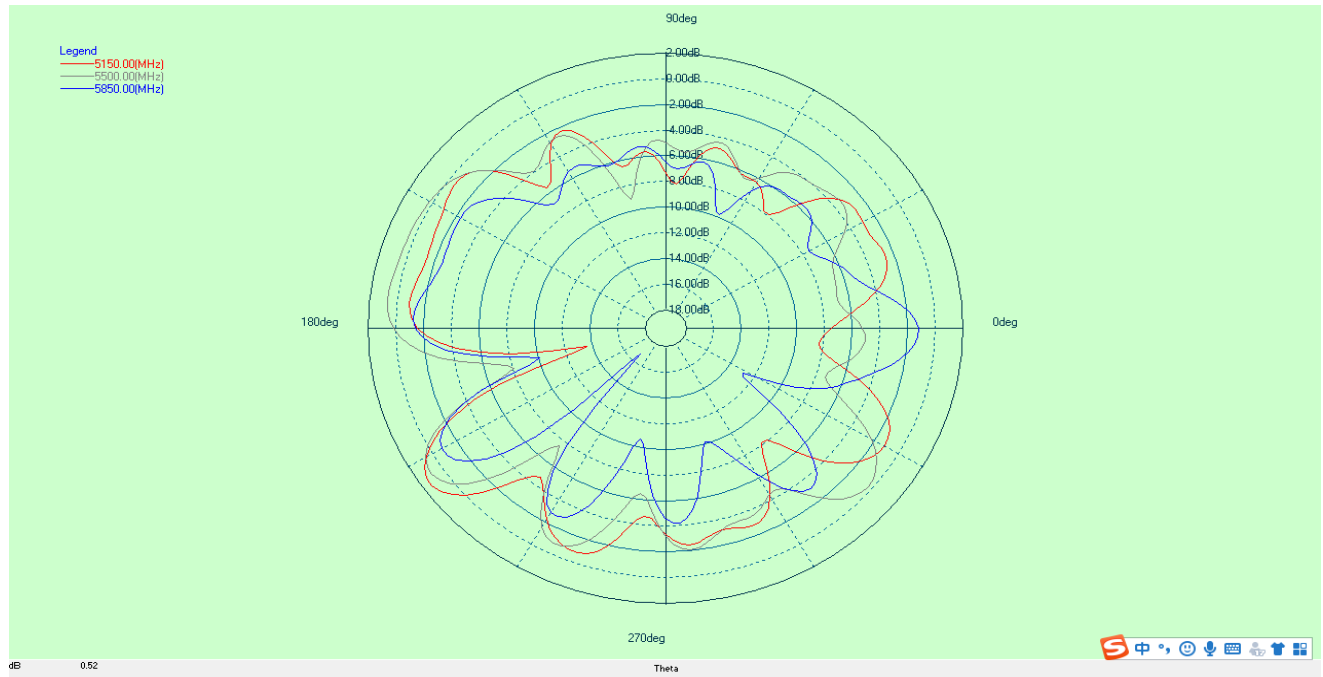


Phi=90°



WIFI 5.5G

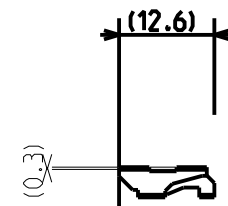
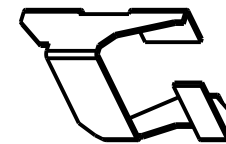
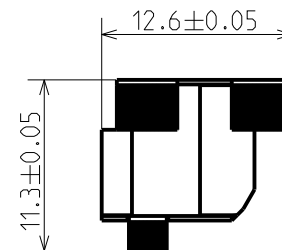
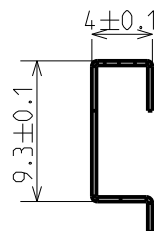
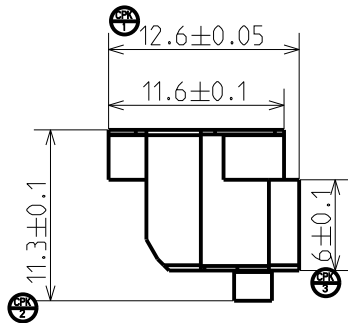
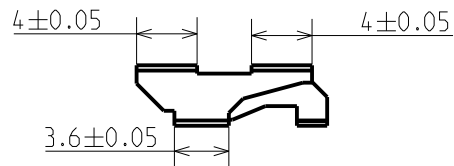




4. Machincal drawing

ROHS/HF

REVISION	ECO#	REVISION NOTE	AUTHOR	DATE
A2				20210713
A3				20210809



比例 1.000

注:

1. 部件应当符合所有3d数据;
2. 材料: 洋白铜, 厚0.3+/-0.013;
3. 电镀: 镀镍
4. 触脚弹性要求: 待定
5. 需通过HAITONG品质部门要求的各项测试;
6. 材料纹路方向与弹脚折弯线允许夹角为45到90度;
7. 毛刺高度不超过0.02 毛刺方向: 参考图档所示;
8. 外观清洁, 无明显折痕, 表面无刮伤等不良;
9. 产品局部外形根据电性能要求可能调整, 模具需考虑微调的方便性, 具体位置参考图档所示;
10. 零件标记: 按指定位置, 线宽0.2, 深0.05;
11. 首批模具样品: 随机挑选5pcs做全尺寸测量, 报告及样品需转递HT品质部;
12. 尺寸要求:
 - 12.1. ST尺寸: 测量最小量为500中选取的任意35个产品的尺寸作cpk分析;
 - 12.2. * 尺寸为重点管控尺寸
13. 任何用料上的修改必须通过HAITONG工程部门的书面同意;
14. 产品必须符合 (RoHS/HF/REACH) 的要求;

GENERAL TOLERANCE TABLE				PART NAME:		NHAI 浙江海通通讯电子有限公司 Zhejiang Haitong Communication Electronics Co., Ltd.					
LINEAR		ANGULAR		UNIT:	PART NUMBER						
DIVISION	TOLERANCE	DIVISION	TOLERANCE		0	TITLE: SH1367_W IFI_MTL 弹片					
0-10	±0.05	0-5°	±0.5°								
10-50	±0.10	5-20°	±1°			SCALE: 1.000 PAGE: 1 of 1 REV: A3					
50-80	±0.15	20-90°	±1.5°								
>80	±0.2										
This document is property of haitong precision technology. It is can not be copied, updated and taken out company,unless be allowed				SIZE: A4	RF CHKD: ME DR: Jimmy						

5. Packing description

