

1. Antenna Specification/天线标准

Antenna Specification/天线技术参数		
Electrical Specification/电气特性		
Item/目录	Specification/规格	Comment/备注
Freq. Range/频段范围	2400-2500&5150-5850(MHz)	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	≤ 2.0	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak Gain/峰值增益	3.0(dBi)	
Test condition/测试条件	passive test (无源测试)	
Total Efficiency/无源效率	> 60%	
Mechanical Specification/机械指标		
Antenna type/天线类型	胶棒天线	
Connector Type/连接器类型	SMA-J	
RF Cable Type/射频线型号	N/A	
Connector Torque Test/连接器扭力	N/A	
Connector Pull Test/连接器拉力	$\geq 3.0\text{Kgf}$	
Salt Spray/盐雾测试	48(H)	
Environmental Specification /环境指标		
Operating temp/工作温度	-40°C ~ +75°C	
Storage temp/存储温度	-40°C ~ +75°C	

2. Antenna Picture/天线图片

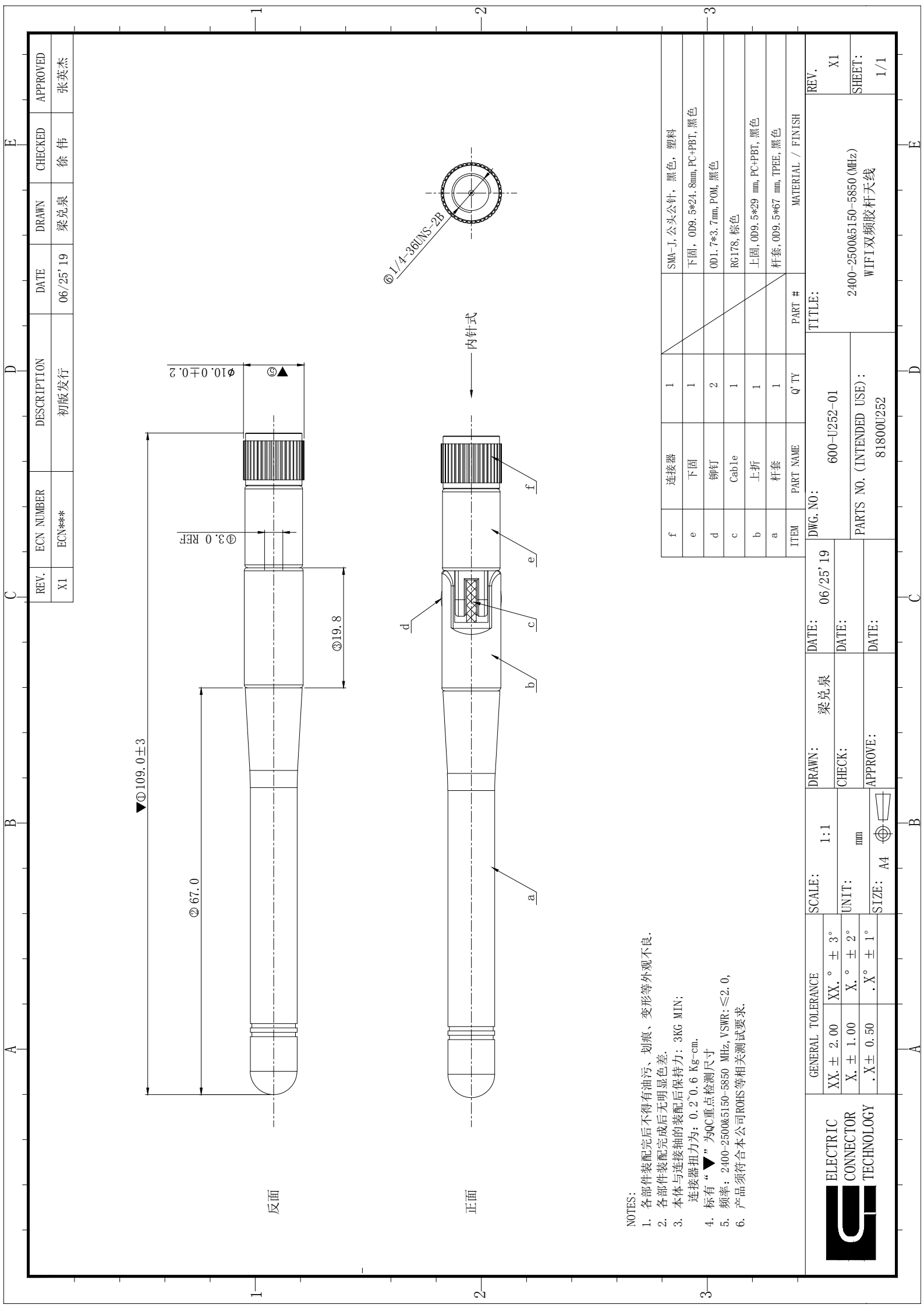


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插入天线图片



3. DWG/工程图纸



REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN***	初版发行	06/25'19	梁兑泉	徐伟	张英杰

ITEM	PART NAME	Q'TY	PART #	MATERIAL / FINISH
f	连接器	1		SMA-J, 公头公针, 黑色, 塑料
e	下固	1		下固, OD9. 5*24. 8mm, PC+PBT, 黑色
d	铆钉	2		OD1. 7*3. 7mm, POM, 黑色
c	Cable	1		RG178, 棕色
b	上折	1		上固, OD9. 5*29 mm, PC+PBT, 黑色
a	杆套	1		杆套, OD9. 5*67 mm, TPEE, 黑色

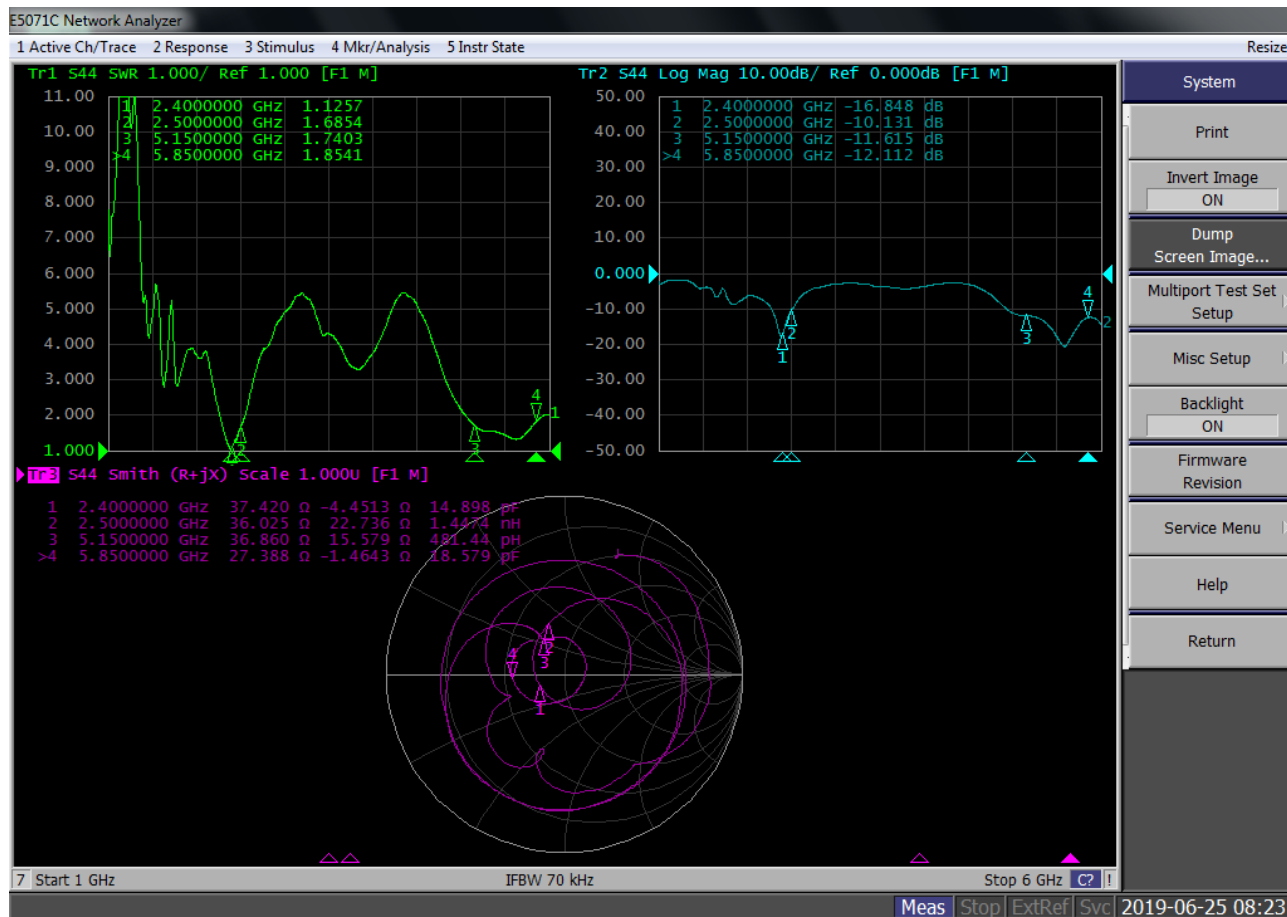
 ELECTRIC CONNECTOR TECHNOLOGY	GENERAL TOLERANCE		SCALE:	1:1	DRAWN:	梁兑泉	DATE:	06/25' 19	DWG. NO:	600-U252-01	TITLE: 2400-2500&5150-5850 (MHz) WIFI双频胶杆天线	REV. X1
	XX. ± 2.00	XX. ° ± 3°	UNIT:	mm	CHECK:		DATE:					
	X. ± 1.00	X. ° ± 2°							PARTS NO. (INTENDED USE): 81800U252			
	.X ± 0.50	.X ° ± 1°	SIZE:	A4	APPROVE:		DATE:					

NOTES:

- 各部件装配完后不得有油污、划痕、变形等外观不良.
- 各部件装配完成后无明显色差.
- 本体与连接轴的装配后保持力: 3KG MIN;
- 连接器扭力为: 0.2~0.6 Kg-cm.
- 标有“▼”为QC重点检测尺寸
- 频率: 2400-2500&5150-5850 MHz, VSWR: ≤2.0,
- 产品须符合本公司ROHS等相关测试要求.

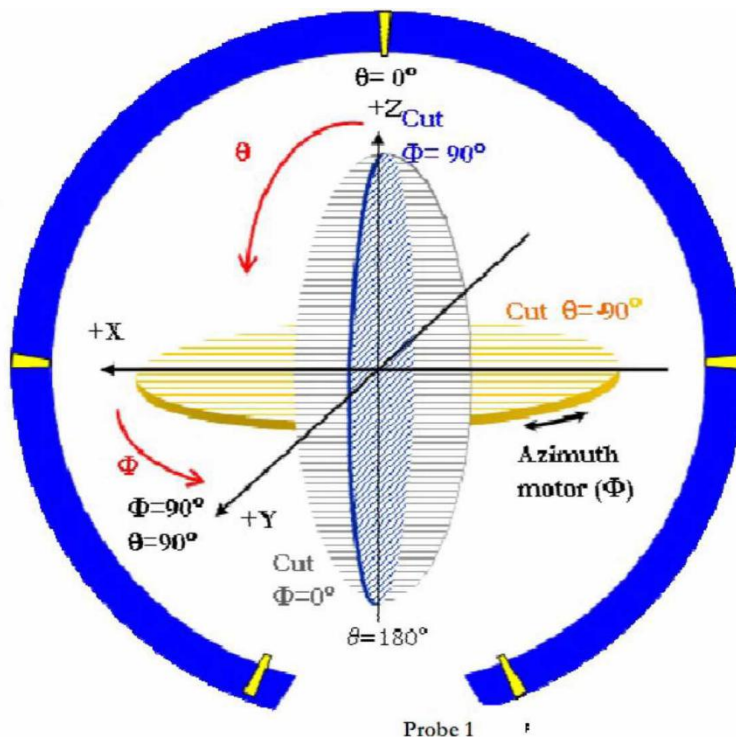
4. Antenna test result/测试结果

4.1 Return loss/Smith chart/VSWR/回波损耗/史密斯图/驻波比

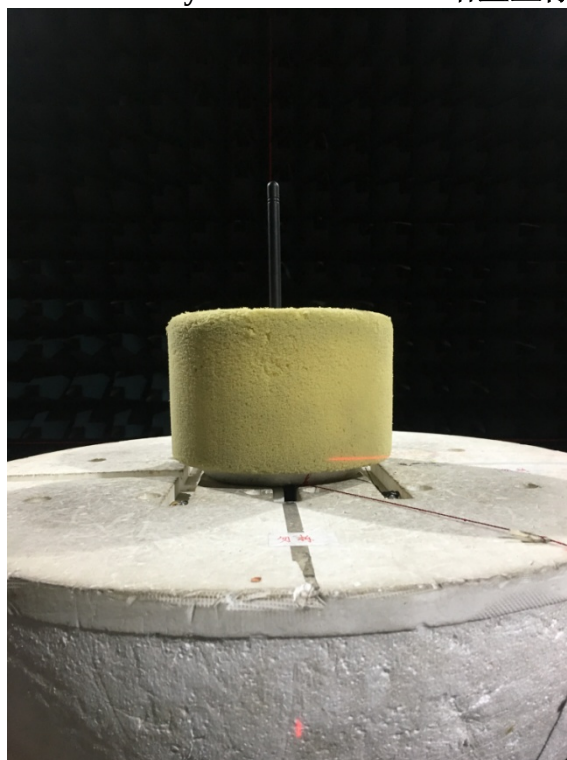


4.2 The gain and total efficiency test/增益和效率测试

4.2.1 The definition of coordinate system/坐标系定义-Satimo SG24



The coordinate system of Chamber/暗室坐标系



The production test position/天线测试放置位置

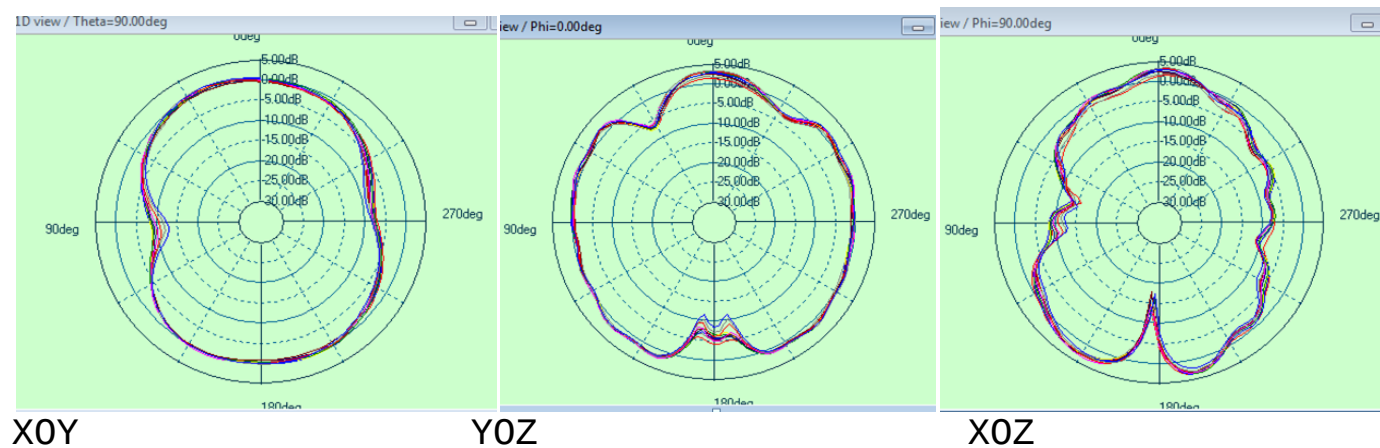
4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果

2400MHz-2500MHz

Frequency	Efficiency()	E Total. dB(dB)
2400MHz	72%	2.41
2410MHz	77%	2.66
2420MHz	76%	2.74
2430MHz	74%	2.52
2440MHz	75%	2.62
2450MHz	73%	2.39
2460MHz	72%	2.21
2470MHz	77%	2.75
2480MHz	72%	2.36
2490MHz	74%	2.56
2500MHz	71%	2.15
Average	74%	2.47

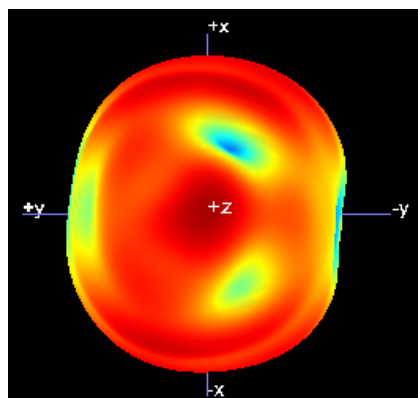
4.2.3 The antenna radiation pattern(2D)/天线辐射方向图 (2D)

2400MHz-2500MHz

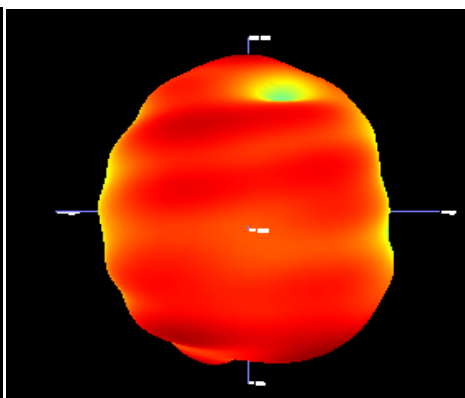


4.2.4 The antenna radiation pattern(3D)/天线辐射方向图 (3D)

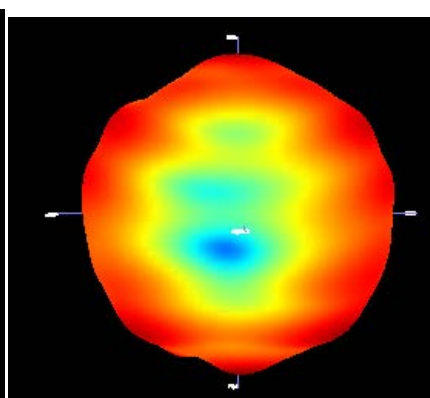
Frequency/频点 2450MHz



XOY



YOZ



XOZ