

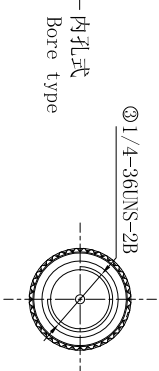
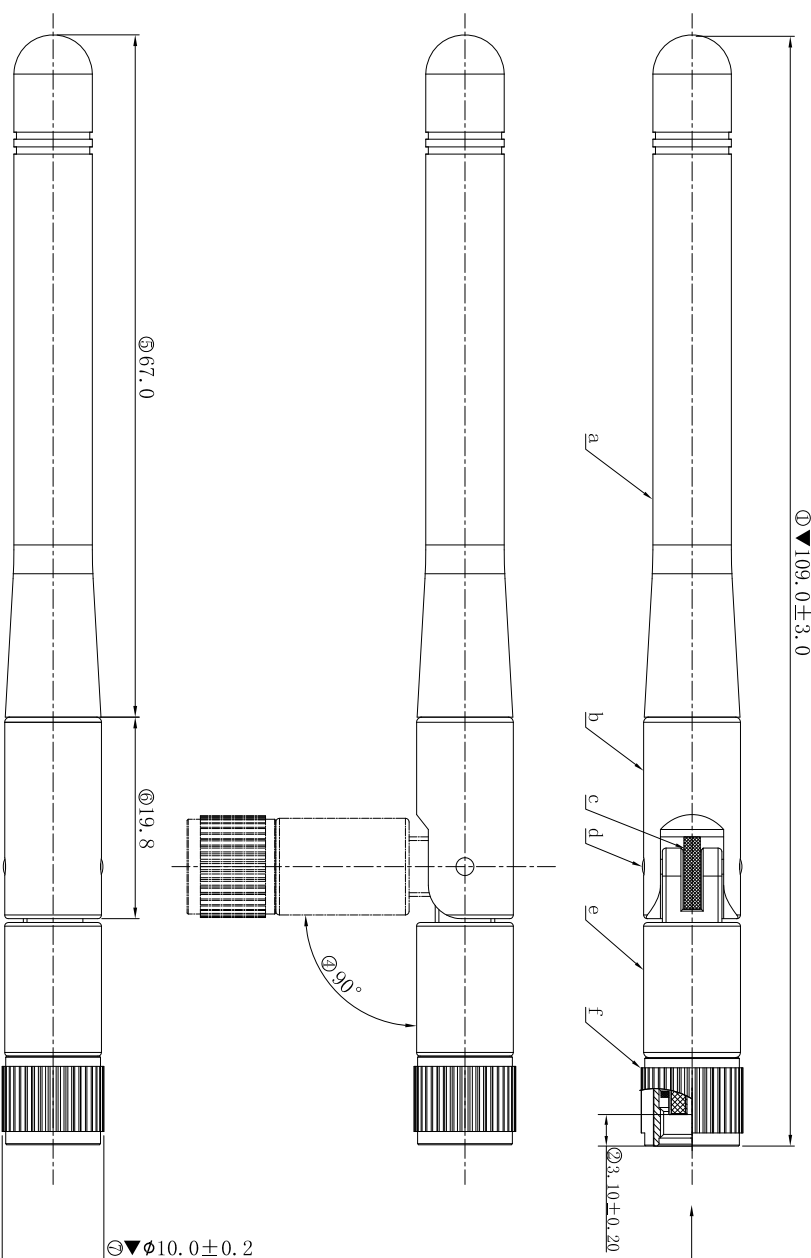
1. Antenna Specification/天线标准

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(MHz)	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	>70%	>65%	
Mechanical Specification/机械指标			
Antenna type/天线类型	胶棒天线/ Glue stick antenna		
Connector Type/连接器类型	RP-SMA-J(公头母针)		
RF Cable Type/射频线型号	RG178		
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	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$		
Storage temp/存储温度	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$		

2. Antenna Picture/天线图片

2/12

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN23*	初版发行/Initial release	10/09/23	梁克泉 liangkequan, Liang	丁菊斌 dingju, Din	牛宝星 niubaoxing, Ni



- 说明:
1. 各部件装配完后不得有油污、划痕、变形等外观不良。
 2. 各部件装配完成后无明显色差。
 3. 本体与连接轴的装配后保持力: 3KG MIN;
 4. 连接器扭力为: 0.2~0.6 Kg-cm;
 5. 测试要求: VSWR测试全检, 网分测试。
 6. 有有害物质须符合ECT
- 频率范围: 2400-2500&5150-5850 Mhz, VSWR: ≤2.0;

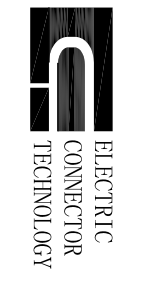
- NOTES:
1. After the assembly of different parts can not have bad appearance
 2. The assembly after the completion of the various components without clear off color.
 3. The ontology and the connecting shaft assembly after retention: 3KG MIN;
 4. Connector torque is: 0.2~0.6 Kg - cm.
 5. Pattern test requirements: the VSWR test all inspection, Mesh points test Frequency range: 2400-2500&5150-5850 Mhz, VSWR: ≤2.0;
 6. HSP shall conform to the standard QF-Q-19-001 Environmental Hazardous Substances Management.

ITEM	PART NAME	QTY
f	连接器/connector	1
e	下固/Lower solid	1
d	铆钉/Rivet	2
c	线缆/Cable	1
b	上固/Upper solid	1
a	杆套/Rod sleeve	1

MATERIAL / FINISH

DWG. NO.: 600-0000-01

DATE: 10/09/23



GENERAL TOLERANCE	SCALE:
XX. ± 2.00	1:1
X. ± 1.00	UNIT: mm
.X ± 0.50	SIZE: A4
.XX ± 0.30	

DRAWN:	CHECK:	APPROVE:
梁克泉 liangkequan, Liang		

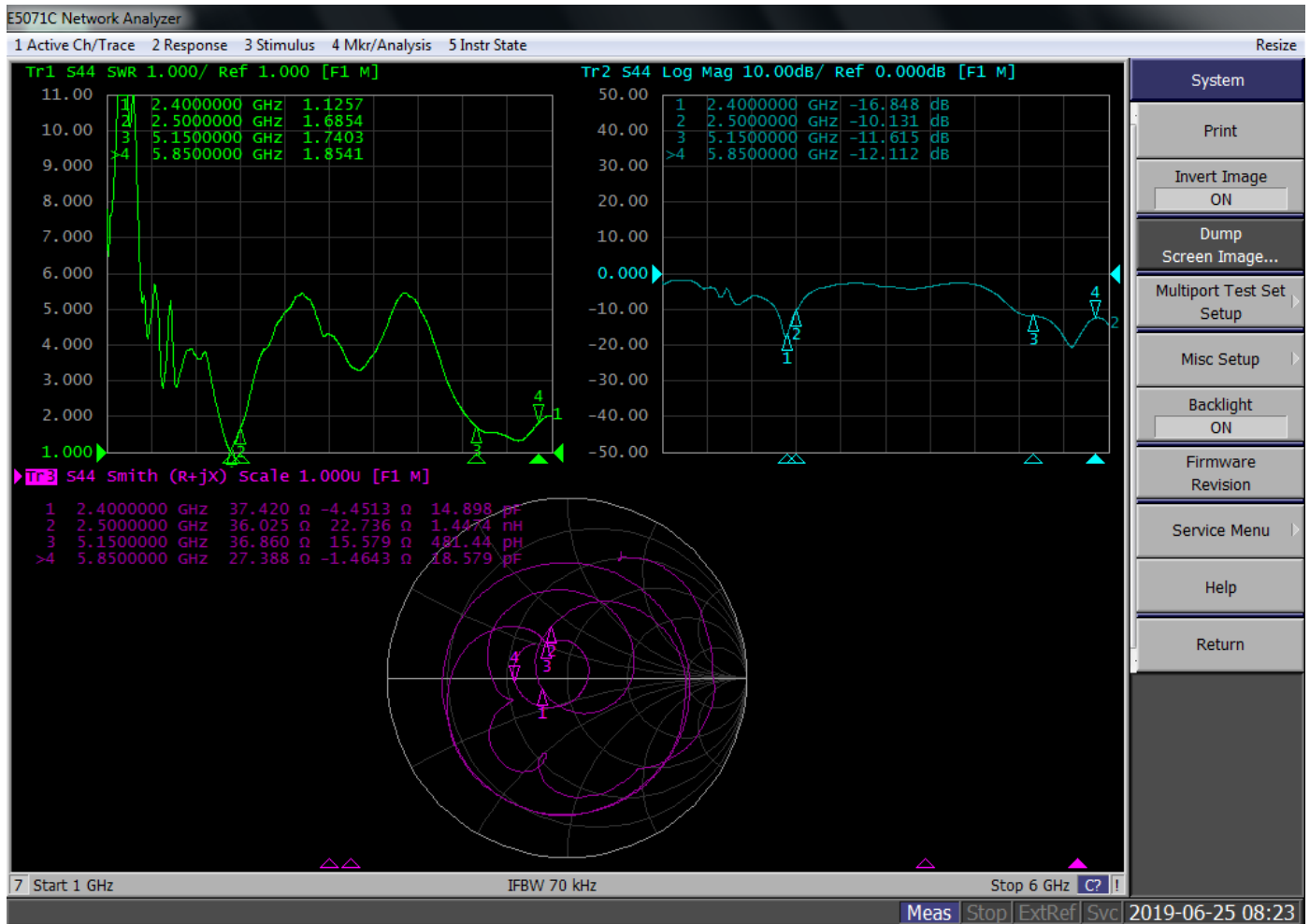
DATE:	DATE:	DATE:
10/09/23		

PARTS NO. (INTENDED USE):
818000000

TITLE:	REV.
ANT_EX_2458_109*9.6_BK-PR_RP-SMA-J	X1
SHEET:	1/1

4. Antenna test result/测试结果

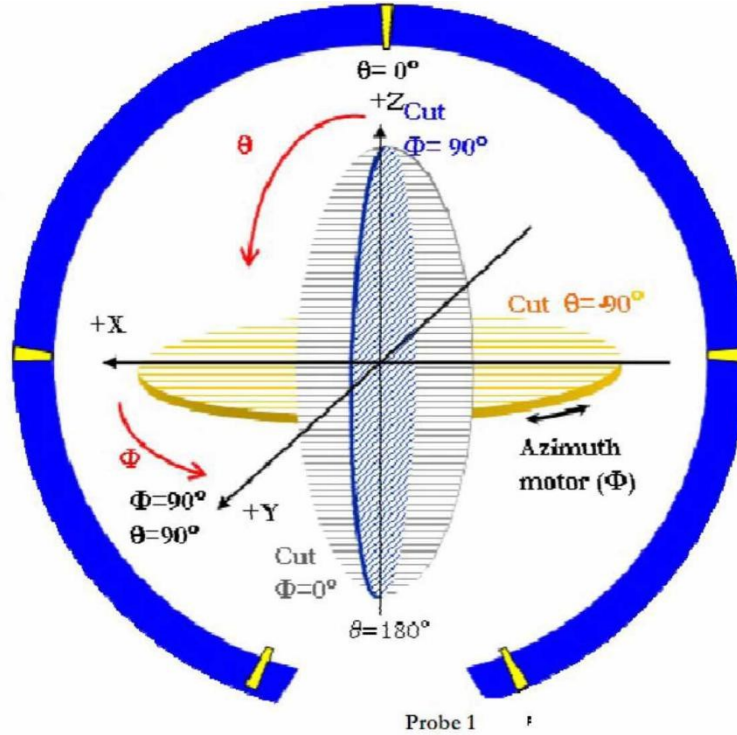
4.1 Return loss/Smith chart/VSWR/回波损耗/史密斯图/驻波比



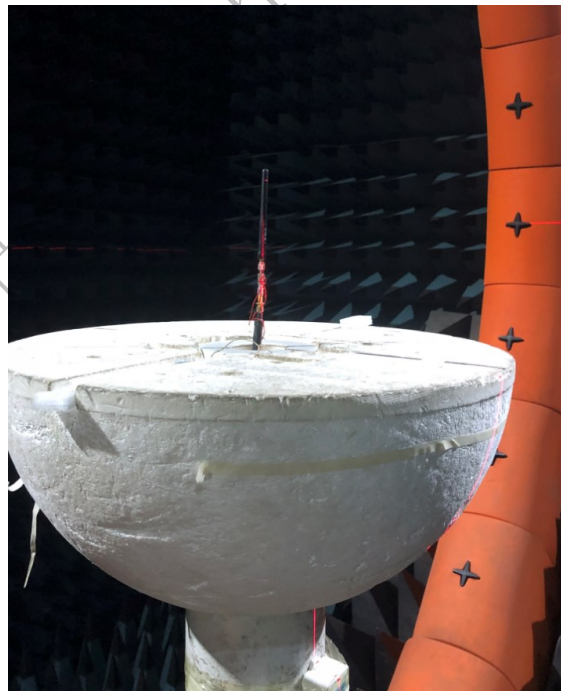
透样规格书

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

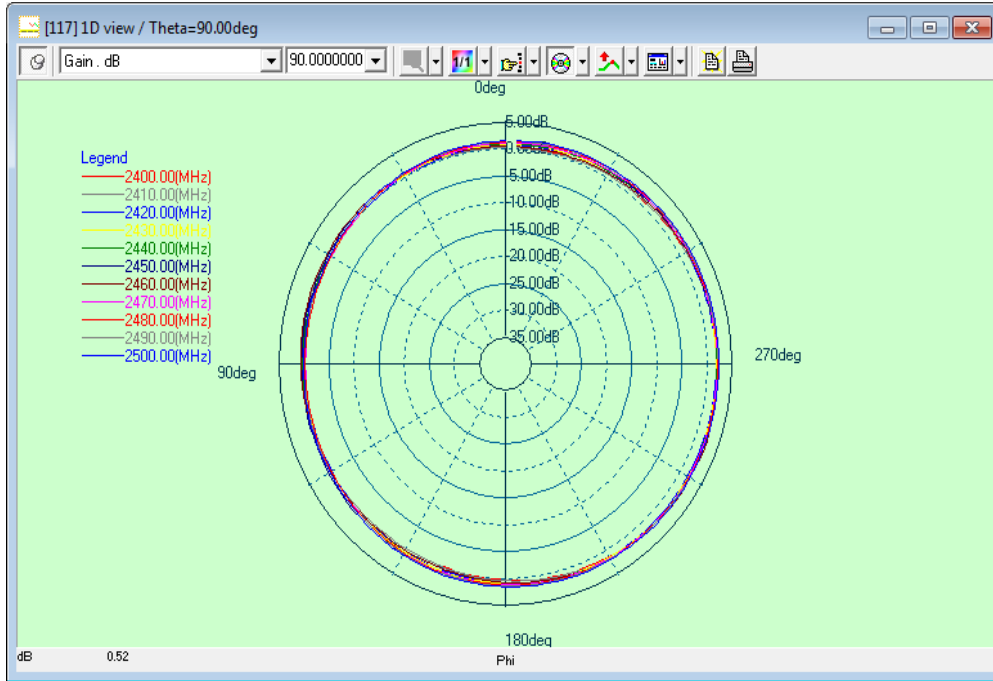
Frequency	Efficiency(%)	Gain (dBi)
2400MHz	72%	2.41
2410MHz	77%	2.66
2420MHz	76%	2.74
2430MHz	74%	2.52
2440MHz	75%	2.62
2450MHz	73%	2.23
2460MHz	72%	2.21
2470MHz	77%	2.75
2480MHz	72%	2.36
2490MHz	74%	2.56
2500MHz	71%	2.15
AVG	74%	2.47

5150MHz-5850MHz

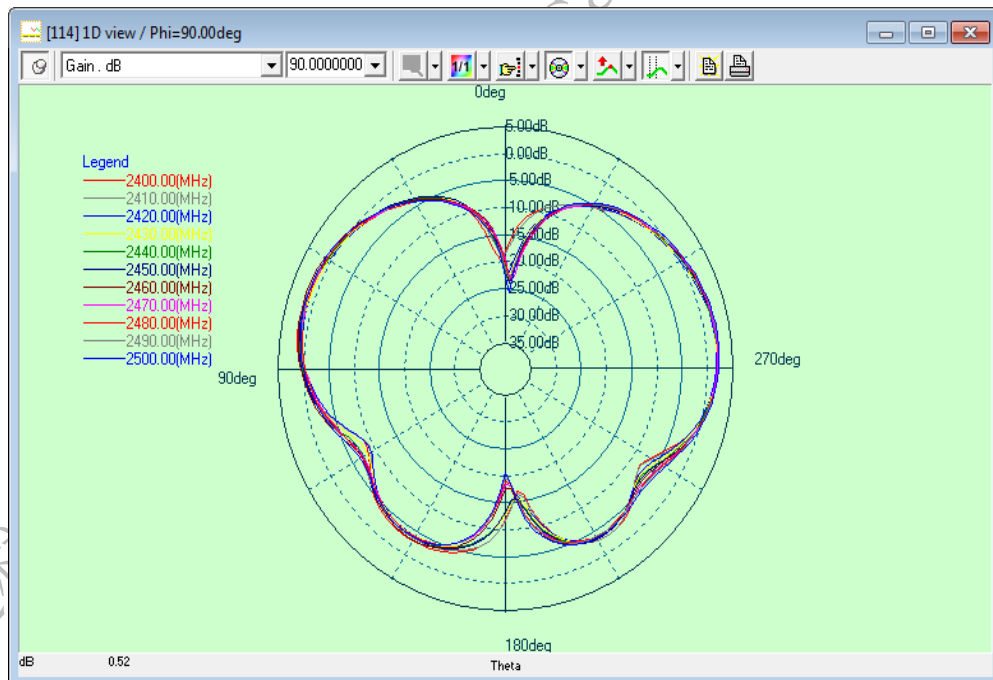
Frequency	Efficiency(%)	Gain (dBi)
5150MHz	72%	2.58
5200MHz	72%	2.60
5250MHz	71%	2.64
5300MHz	69%	2.53
5350MHz	73%	3.05
5400MHz	75%	3.26
5450MHz	73%	3.17
5500MHz	73%	3.12
5550MHz	74%	3.44
5600MHz	72%	3.00
5650MHz	67%	2.56
5700MHz	70%	2.90
5750MHz	71%	2.79
5800MHz	72%	2.61
5850MHz	75%	3.20
AVG	72%	2.90

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

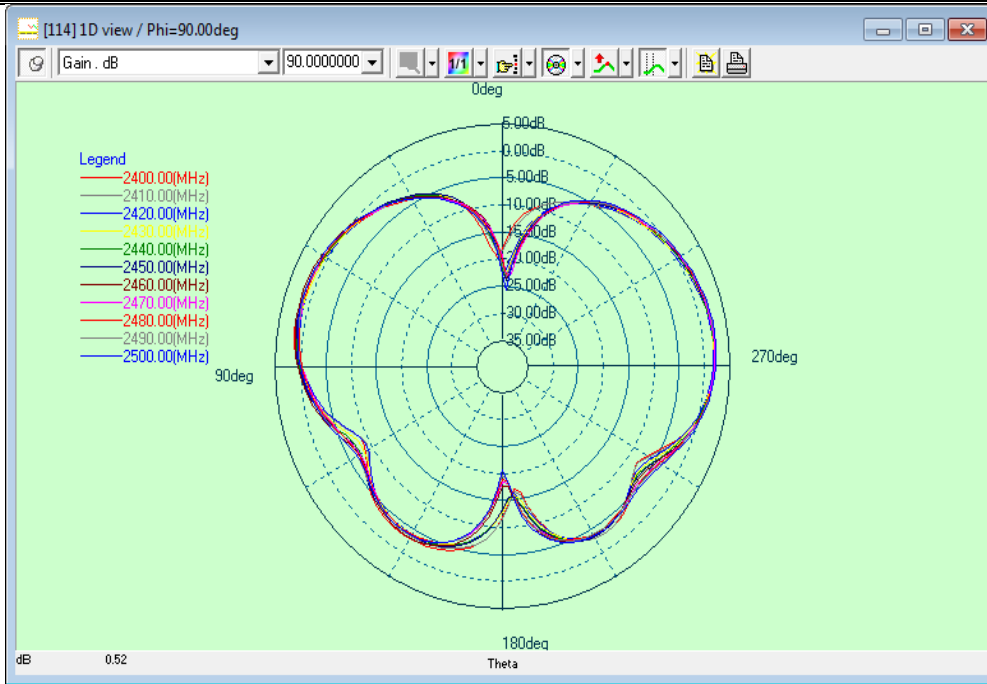
2400-2500MHz



XOY

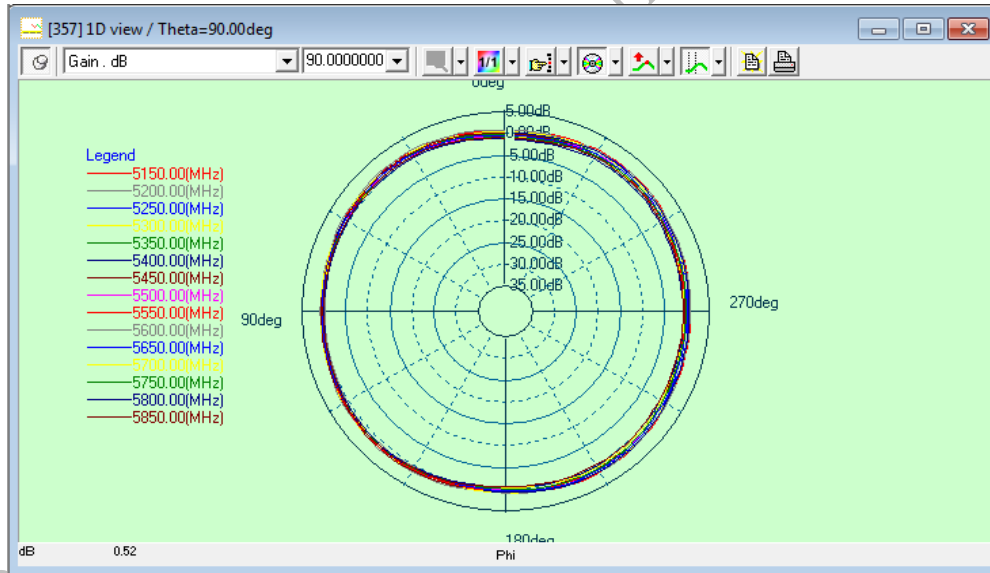


YOZ

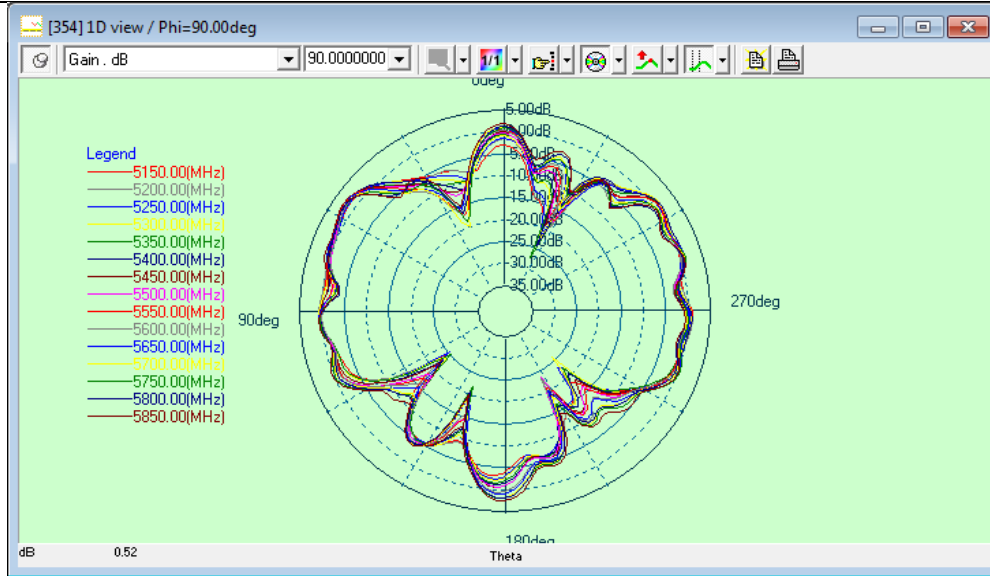


XOZ

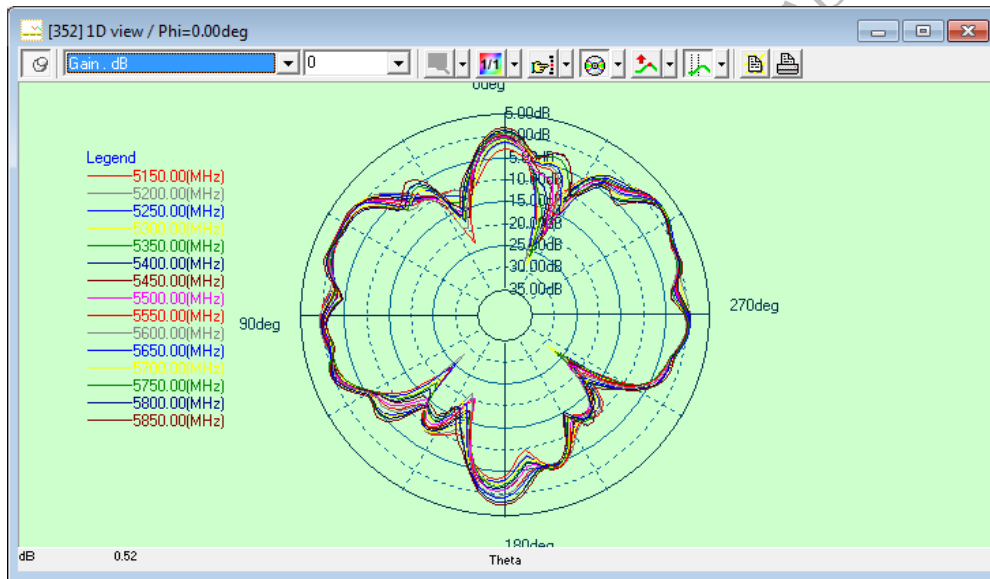
5150-5850MHz



XOY



YOZ

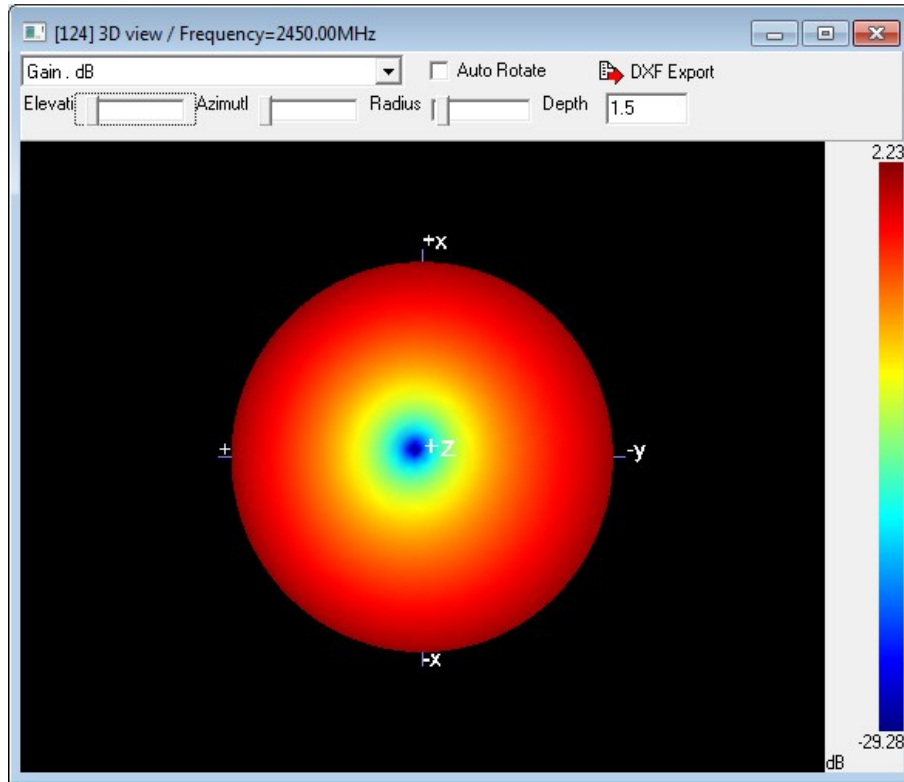


XOZ

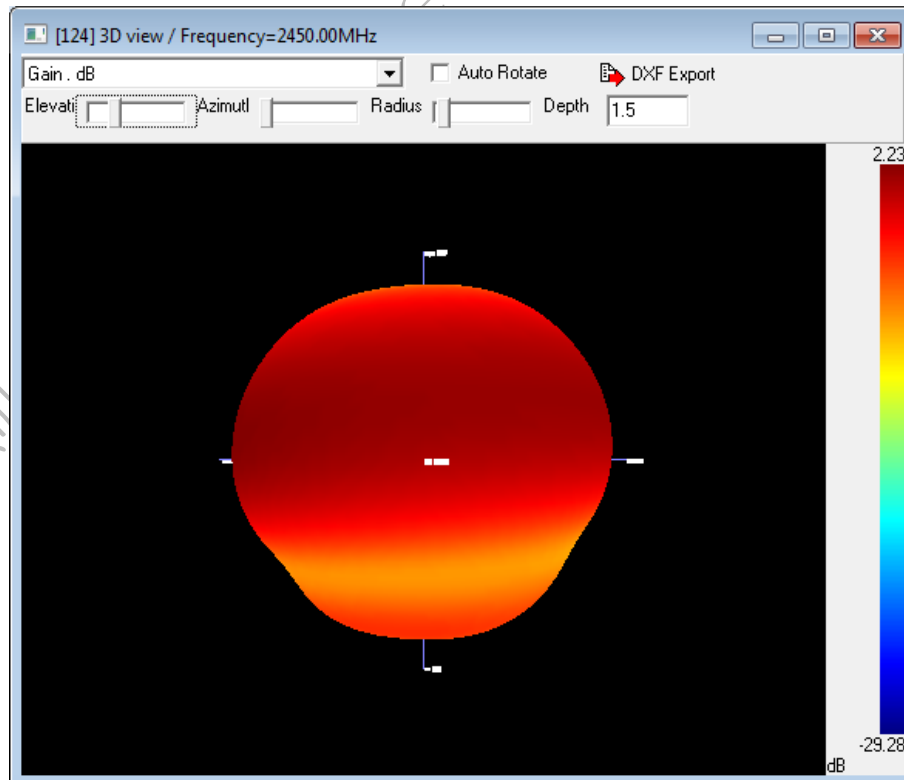
送样规格书

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

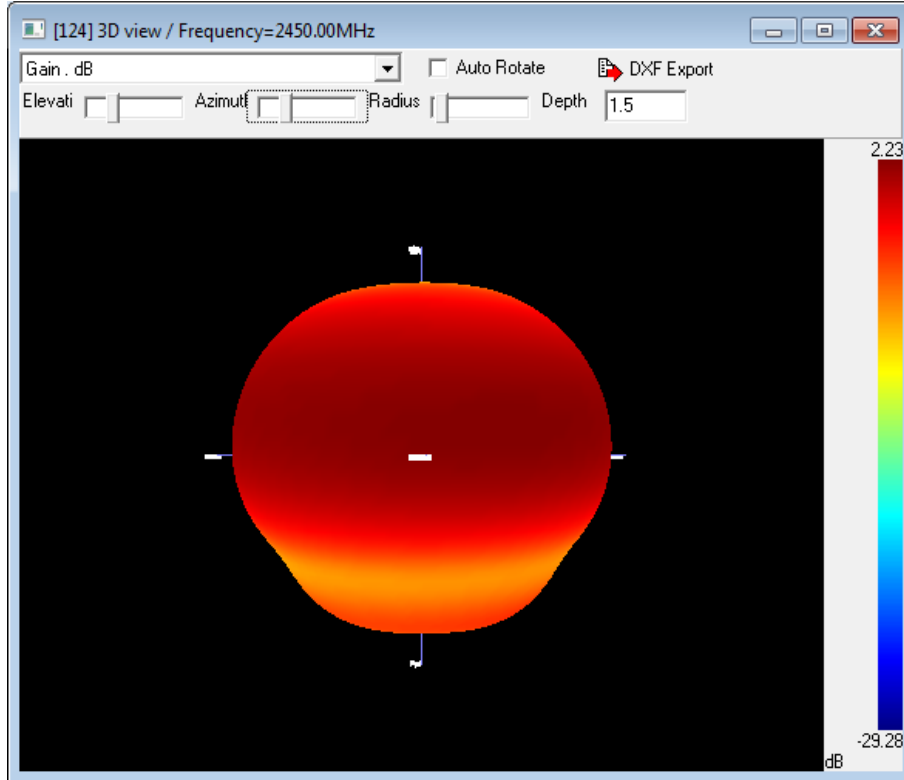
Frequency/频点 2450MHz



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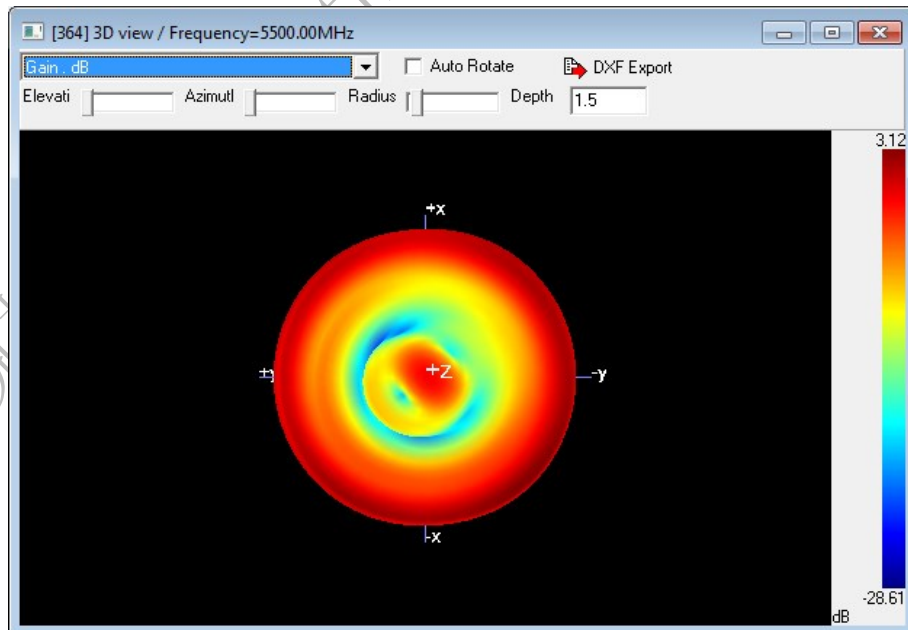


YOZ

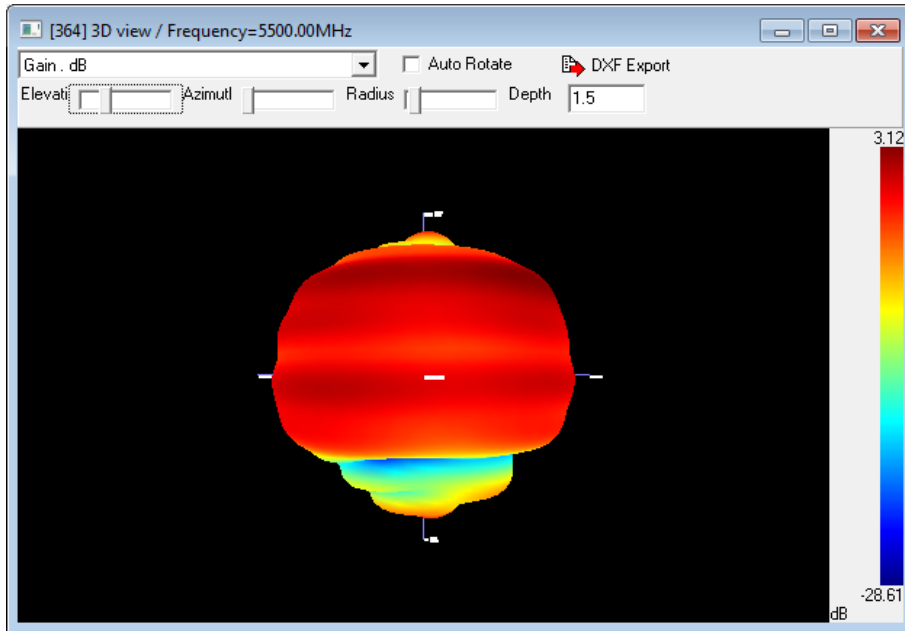


XOZ

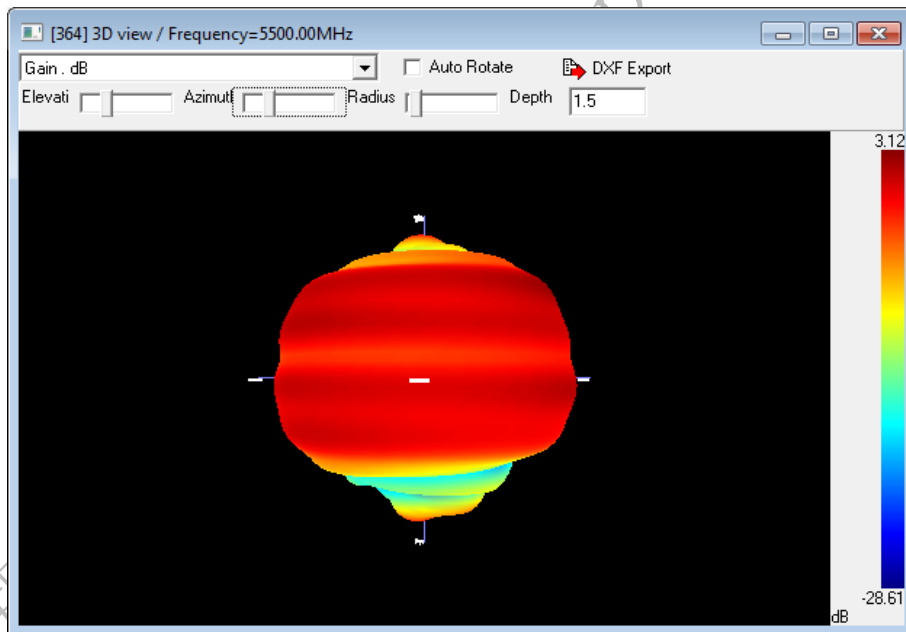
Frequency/频点 5500MHz



XOY



YOZ



XOZ