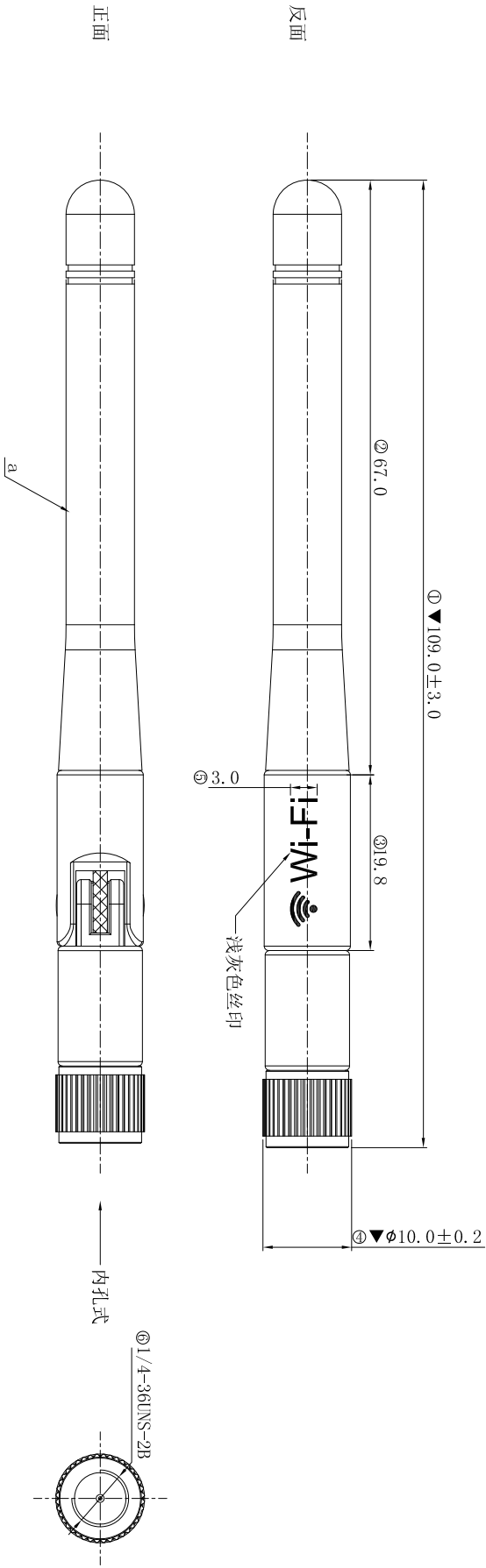


 ELECTRIC CONNECTOR TECHNOLOGY	Product Specification		
	P/N: 81800U330	Rev.: B	Page: 1 / 7

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	2400~2500MHz 5150~5850MHz	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	2400-2500 MHz<2.0 5150-5850 MHz<2.0	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak Gain/峰值增益	4.03(dBi)	
Test condition/测试条件	passive test (无源测试)	
Total Efficiency/无源效率	2400MHz~2500MHz≥65% 5150MHz~5850MHz>55%	
Mechanical Specification/机械指标		
Antenna type/天线类型	胶棒天线	
Connector Type/连接器类型	RP-SMA-J	
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	≥3.0Kgf	
Salt Spray/盐雾测试	48 (H)	
Environmental Specification /环境指标		
Operating temp/工作温度	-40℃ ~ +75℃	
Storage temp/存储温度	-40℃ ~ +75℃	

2. Antenna Picture/天线图片

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN192067	正式发行	03/30' 20	梁兑泉	丁第斌	张英杰
△A	ECN214691	△B*2内部结构和供应商变更	12/28' 21	梁兑泉	丁第斌	牛宝星



- 说明:
- 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.
 - 丝印要求: 字体Arial、H=3.00mm; 丝印颜色: PMS Cool Gray 4C/浅灰色.
 - 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.
 - 频率范围: 2400~2500 MHz & 5150~5850 MHz, ≤2.0;
 - 测试要求: VSWR测试全检, 矩阵测试.
 - 有害物质须符合ECT《QE-Q-19-001-环境有害物质管理基准》管控标准.
- NOTES:
- After the assembly of different parts can not have had appearance of greasy dirt, scratches, deformation, etc.
 - The assembly after the completion of the various components without clear of color.
 - The printing requirement: Arial font, H = 3.00mm;
 - Screen printing color: PMS Cool Gray 4 c/light grey.
 - The ontology and the connecting shaft assembly after retention: 3KG MIN;
 - Connector torque is: 0.2 ~ 0.6 Kg - cm.
 - Marked with “▼” key size detection for QC.
 - Frequency range: 2400~2500 MHz & 5150~5850 MHz, 2.0 or less.
 - Pattern test requirements: the VSWR test all inspection, test matrix
 - HSP shall conform to the standard QE-Q-19-001 Environmental Hazardous Substances Management.

7. NSF SHALL CONFORM TO THE STANDARD QZ-Q-19-001 ENVIRONMENTAL HAZARDOUS SUBSTANCES MANAGEMENT.

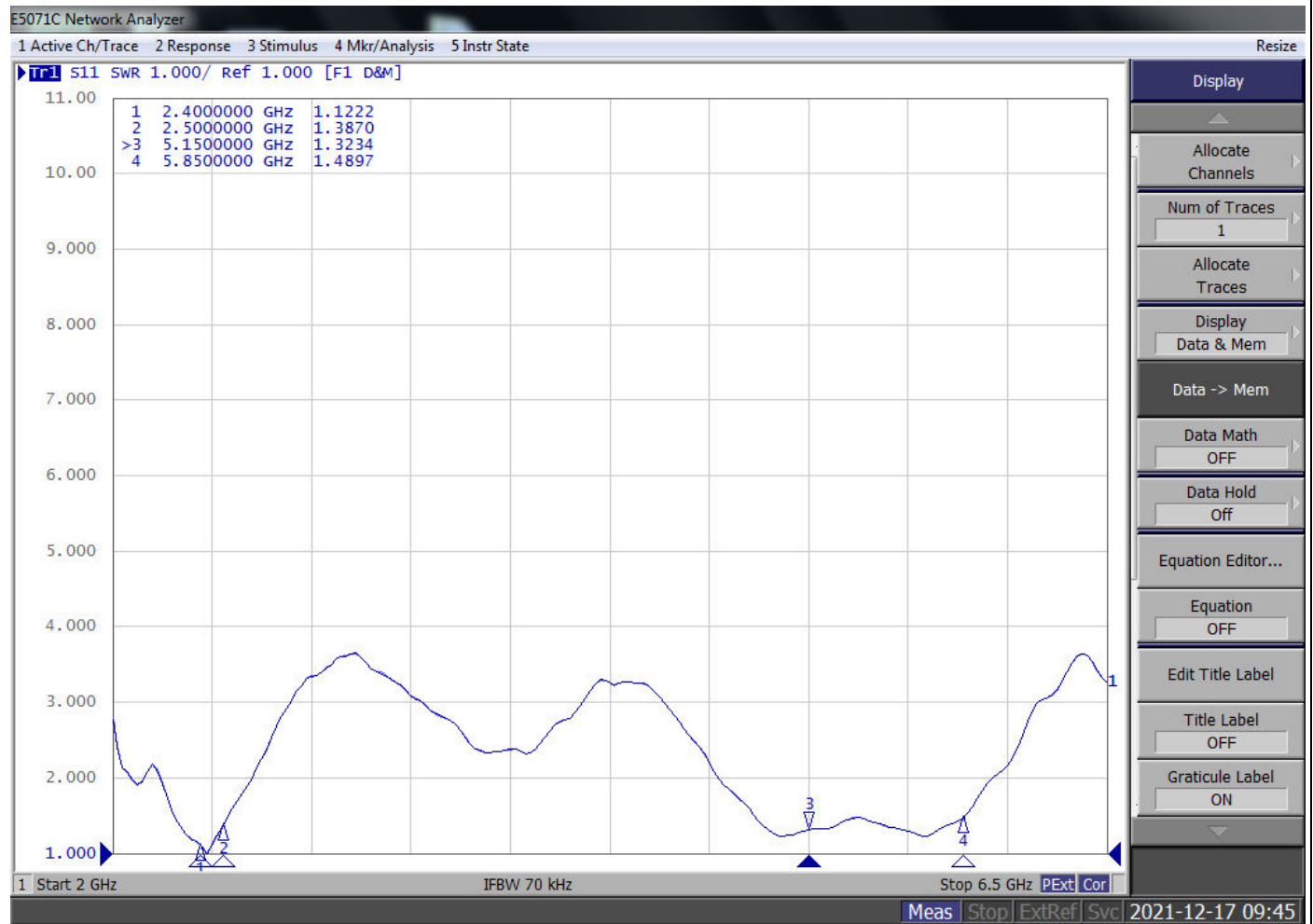
	GENERAL TOLERANCE		SCALE:		DRAWN:	DATE:	DWG. NO:	TITLE:		REV.
	XX. ± 2.00	XY. ° ± 3°	1:1					梁兑泉		
	X. ± 1.00	X. ° ± 2°	UNIT:		CHECK:	DATE:	PARTS NO. (INTENDED USE):		ANT EX 2. 4/5. 8G. 110 *10_BK PR RP SMA-J	
	. X± 0.50	. X° ± 1°	mm							
			SIZE: A4							

a	胶杆天线	1	外置天线2. 4/5. 8G 110*10黑色胶杆公头母针
ITEM	PART NAME	Q' TY	MATERIAL / FINISH



4. Antenna test result/测试结果

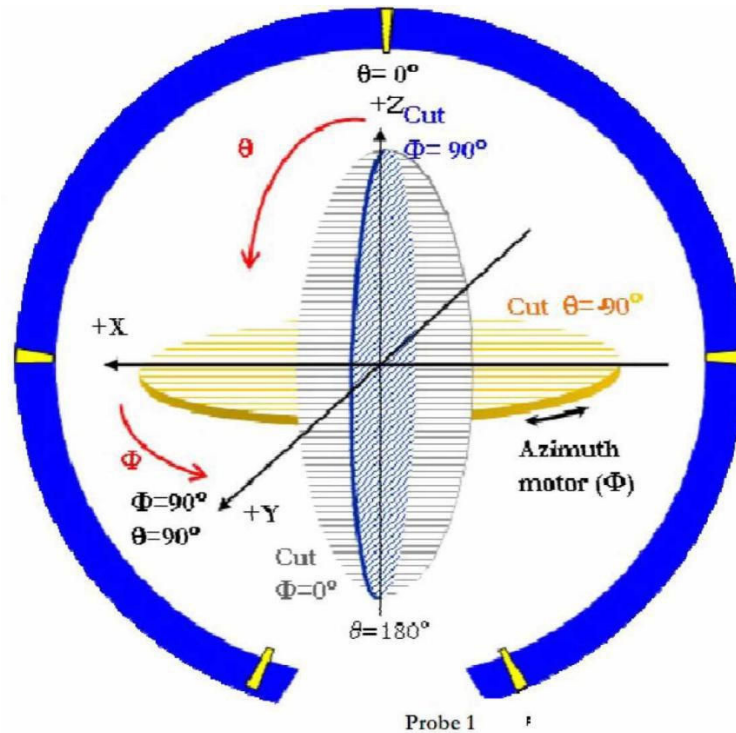
4.1 Return loss/Smith chart/VSWR/回波损耗/史密斯图/驻波比



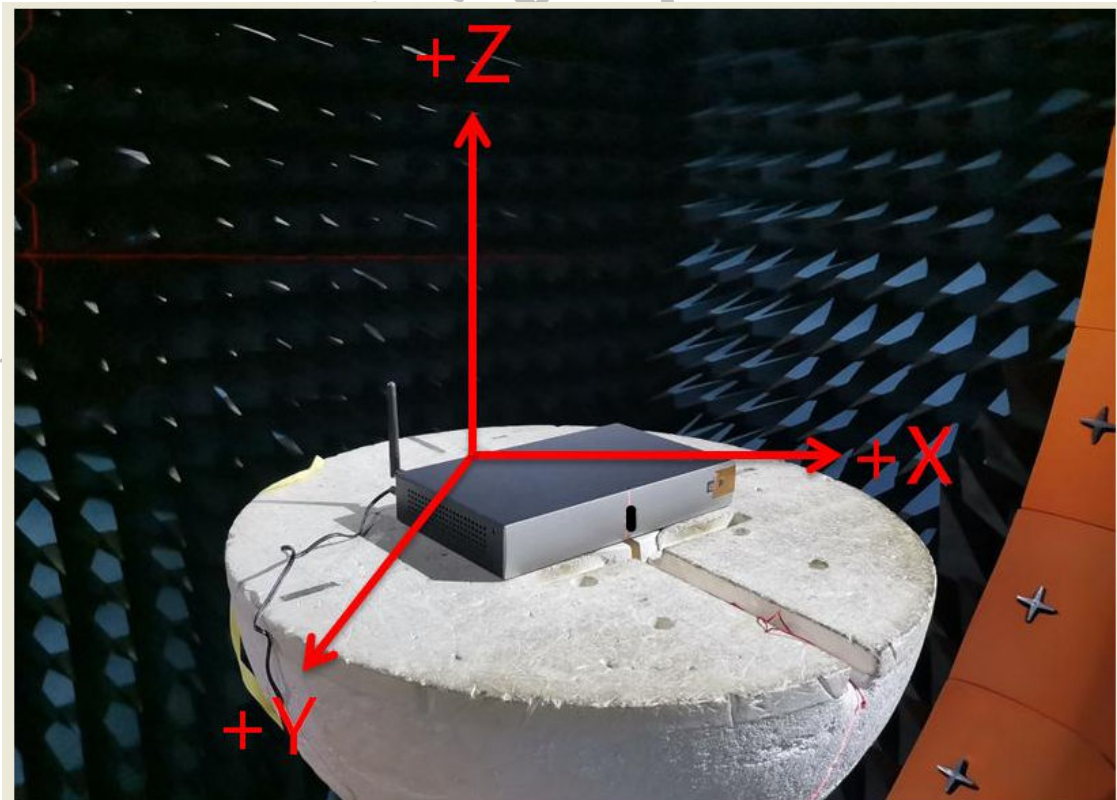
Add: Jinxiu Industrial Park, Xitian Community (No. 49, Xitian Road), Gongming Street, Guangming New District, Shenzhen, Guangdong, China

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



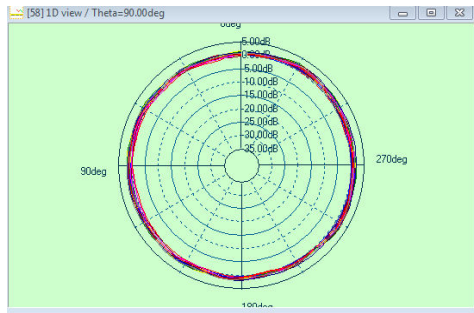
The production test position/天线测试放置位置

 ELECTRIC CONNECTOR TECHNOLOGY	Product Specification		
	P/N: 81800U330	Rev.: B	Page: 6 / 7

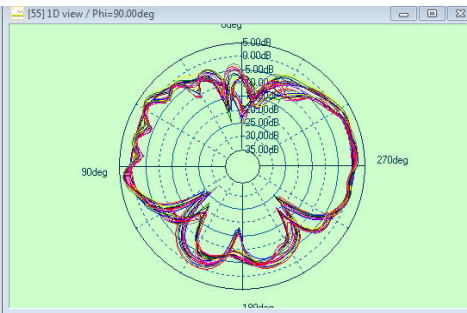
4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果		
2400MHz-2500MHz		
Frequency	Efficiency(%)	Gain (dBi)
2400MHz	66%	0.91
2410MHz	65%	1.07
2420MHz	66%	0.99
2430MHz	68%	1.08
2440MHz	70%	1.31
2450MHz	69%	1.23
2460MHz	70%	1.27
2470MHz	73%	1.57
2480MHz	76%	1.76
2490MHz	75%	1.78
2500MHz	72%	1.59
AVG	70%	1.32
5150MHz-5850MHz		
Frequency	Efficiency(%)	Gain (dBi)
5150MHz	78%	3.12
5200MHz	76%	3.00
5250MHz	73%	2.67
5300MHz	78%	2.96
5350MHz	63%	2.28
5400MHz	57%	1.94
5450MHz	68%	2.67
5500MHz	71%	3.35
5550MHz	72%	3.70
5600MHz	71%	3.86
5650MHz	71%	3.56
5700MHz	63%	2.90
5750MHz	62%	2.72
5800MHz	65%	3.26
5850MHz	75%	4.03
AVG	70%	3.07

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

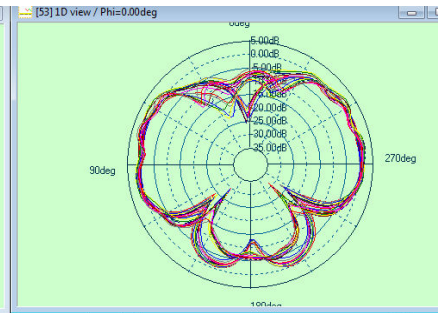
2400-2500MHz/5150-5850MHz



XOY



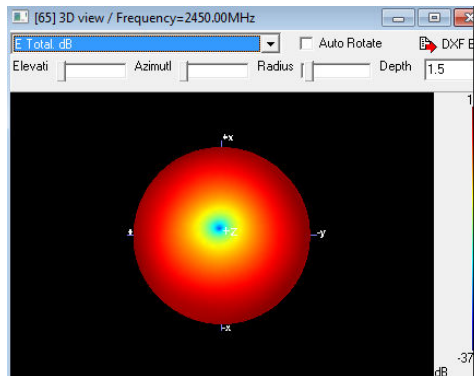
YOZ



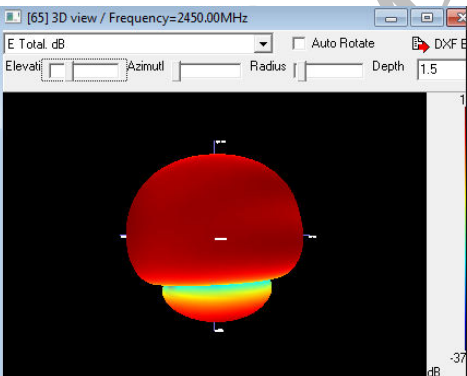
XOZ

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

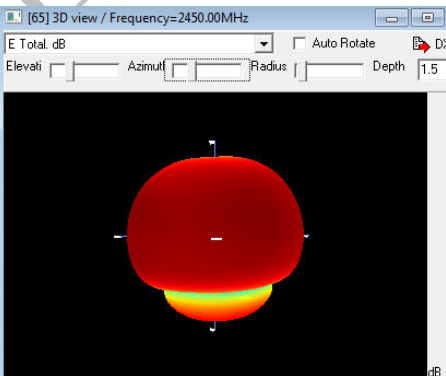
Frequency/频点 2450MHz



XOY

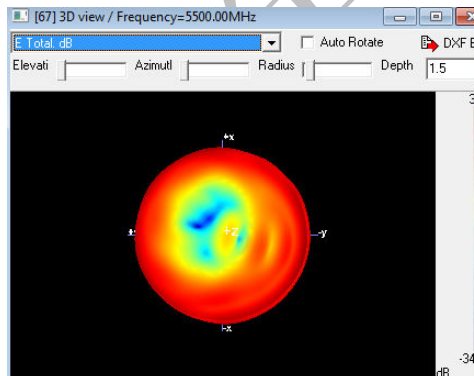


YOZ

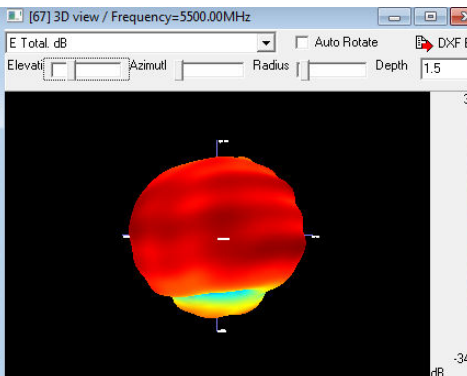


XOZ

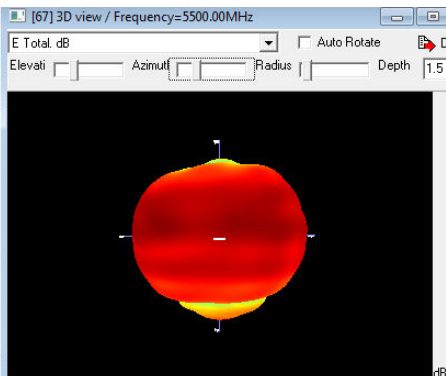
Frequency/频点 5500MHz



XOY



YOZ



XOZ