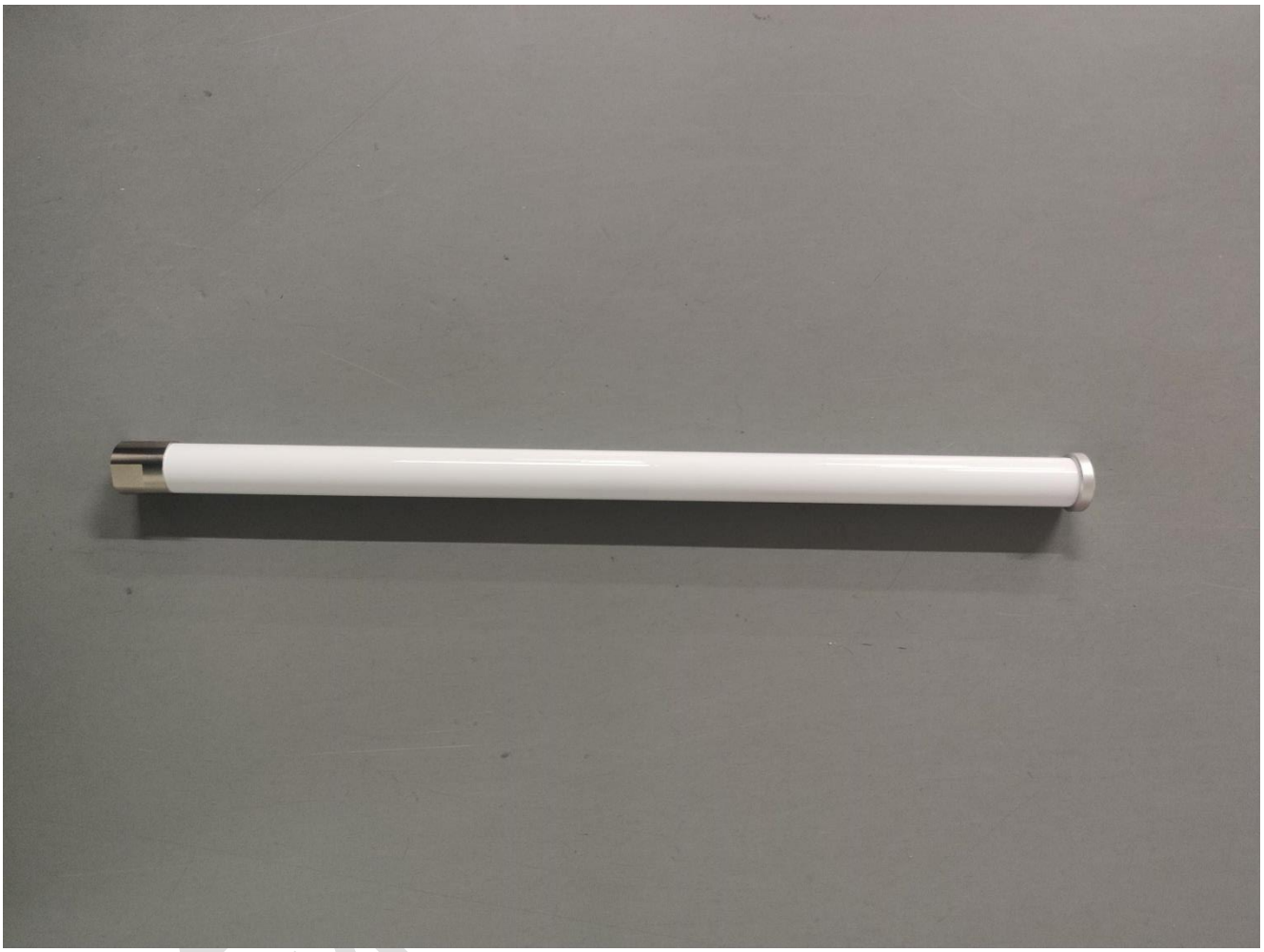
1. Antenna Specification/天线标准

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	902MHz-928MHz	
Impedance/阻抗	50 (Ω)	
Directional/辐射方向	Omni Directional	
Polarization/极化形式	Vertical	
VSWR/驻波比	≤2	
Peak Gain/峰值增益	5.2dBi@916MHz	
Total Efficiency/无源效率	≥70%	
Test condition/测试条件	passive test（无源测试）	
Power/功率	20W	
Mechanical Specification/机械指标		
Antenna type/天线类型	Omni antenna	
Connector Type/连接器类型	N-J	
RF Cable Type/射频线型号	RG316	
Dimension/尺寸	OD27*480mm	
Salt Spray/盐雾测试	48H	
Environmental Specification /环境指标		
Operating temp/工作温度	-40℃ ~ +80℃	
Storage temp/存储温度	-40℃ ~ +85℃	

2. Antenna Picture/天线图片



REV	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN222009	INITIAL RELEASE	05/29'23	张苟彪	丁第斌	牛宝星

NOTES:
1.VSWR TEST:902-928MHz<2.0.
2.WELDING CAN NOT BE FALSE WELDING, WELDING SPOT MUST BE FULL.
3.NO GLUE ON THE OUTSIDE.
4.MARK"⊗"WAS FAI DIMENSIONS.
5.MARK"▼"WAS CRITICAL DIMENSIONS.
6.HSF SHALL CONFORM TO THE STANDARD QE-Q-19-001 ENVIRONMENTAL HAZARDOUS SUBSTANCES MANAGEMENT.

NO	ITEM	Q'TY	MATERIAL / FINISH
G	胶水	1	AB胶,NO.660-4,50ML/支,华麟电子
F	玻璃钢	1	玻璃钢管，白色亮面,长度460mm
E	泡棉	3	泡棉+双面胶，40*10*T1.95mm
D	顶帽	1	顶帽,AL6061,OD29.8*10mm，阳极喷砂
C	N连接器	1	N型连接器，镀三元合金
B	PCB	1	PCB,PTFE,DK3.0,401*19*T0.8mm
A	CABLE	1	RG316/F/50,外皮直径ø2.5mm，棕色

ELECTRIC CONNECTOR TECHNOLOGY

GENERAL TOLERANCE	
XX.± 1	XX.°± 1°
X.± 0.5	X.°± 1°
.X± 0.2	.X°± 1°
.XX± 0.10	

SCALE: 1:3
UNIT: mm
SIZE: A4

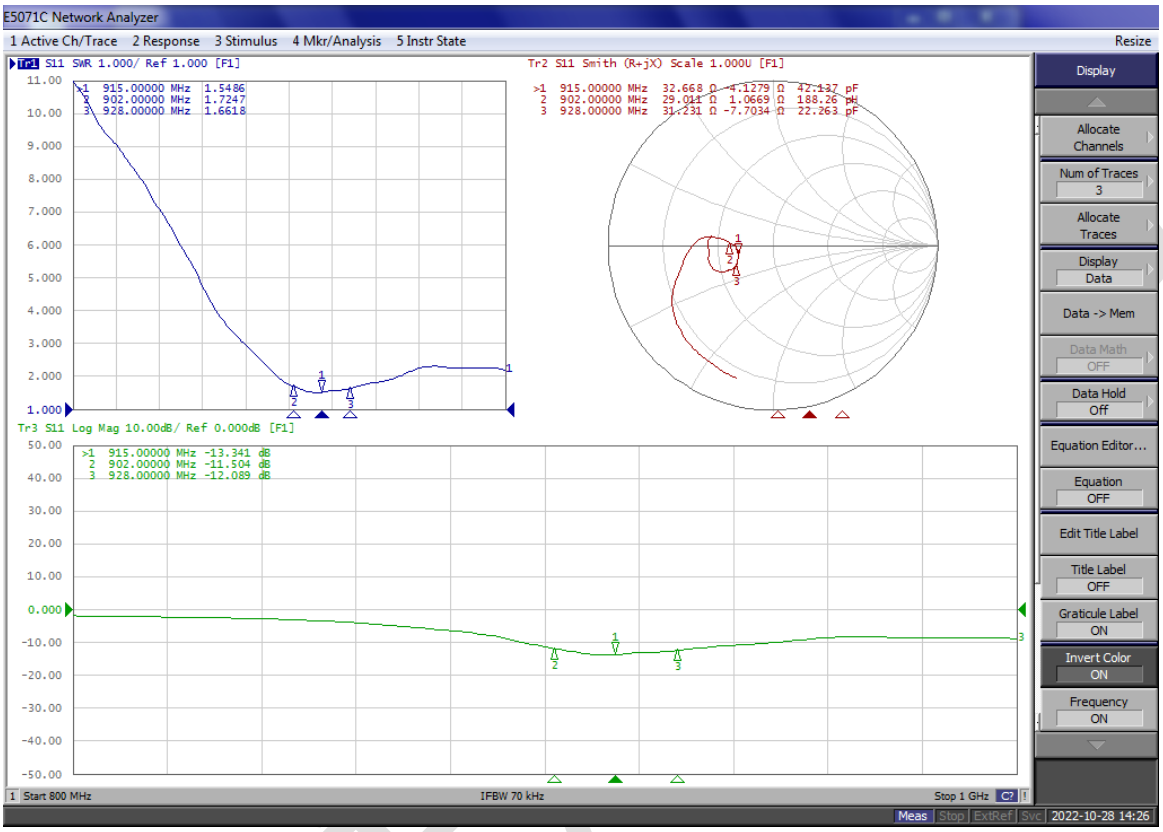
DRAWN: 张苟彪 DATE: 05/29'23
CHECK: DATE:
APPROVE: DATE:

DWG.NO: 600-V501-01
PARTS NO.(INTENDED USE): 81800V501

TITLE: CUSTOMER DRAWING
REV. X1
SHEET: 1/1

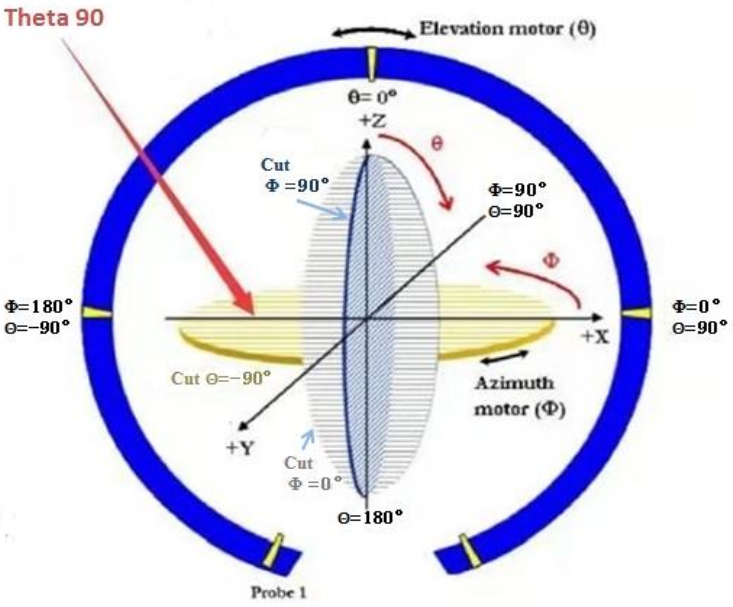
4. Antenna test result/测试结果

4.1 Isolation degree/ VSWR/驻波比

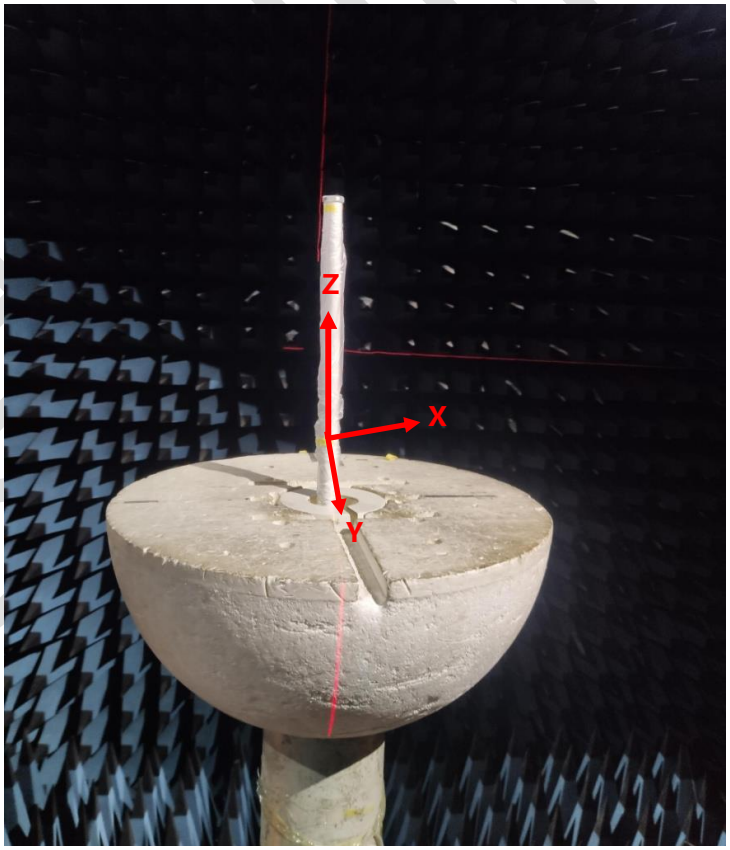


4.2The gain and total efficiency test/增益和效率测试

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

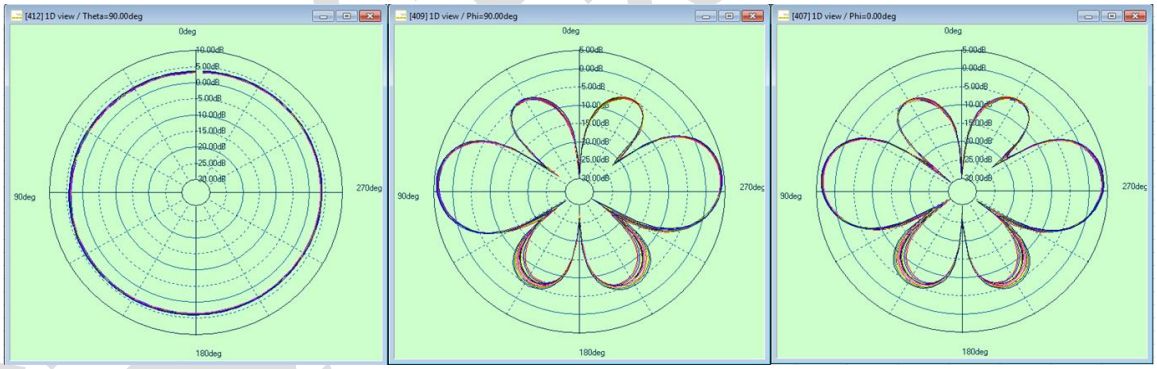
4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果

902MHz-928MHz

Frequency	Gain (dBi)	Efficiency(%)
902MHz	4.7	72%
904MHz	4.8	70%
906MHz	4.9	70%
908MHz	4.9	72%
910MHz	5	74%
912MHz	5	75%
914MHz	5.1	73%
916MHz	5.2	71%
918MHz	5.1	74%
920MHz	5.1	79%
922MHz	5.1	81%
924MHz	5	77%
926MHz	4.9	75%
928MHz	4.9	79%

4.2.3 The antenna radiation pattern(1D View)/天线辐射方向图（1D View）

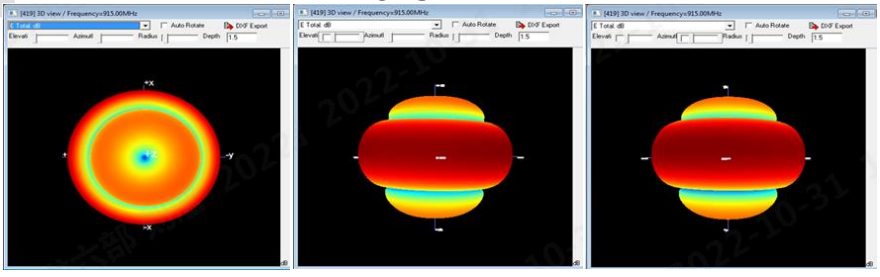
902MHz-928MHz



X0Y **Y0Z** **X0Z**

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

915MHz



X0Y **Y0Z** **X0Z**