

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	863MHz-873MHz	
Impedance/阻抗	50 (Ω)	
Directional/辐射方向	Omni Directional	
Polarization/极化形式	Vertical	
VSWR/驻波比	≤ 2.5	
Gain/增益	0.9dBi	
Total Efficiency/无源效率	43%	
Power/功率	10W	

Mechanical Specification/机械指标

Antenna type/天线类型	Omni antenna	
Connector Type/连接器类型	SMA-J	
RF Cable Type/射频线型号	RG58U L=1.5M	
Dimension/尺寸	OD20*250 mm	
Salt Spray/盐雾测试	48(H)	

Environmental Specification /环境指标

Operating temp/工作温度	-40°C ~ +80°C	
Storage temp/存储温度	-40°C ~ +85°C	

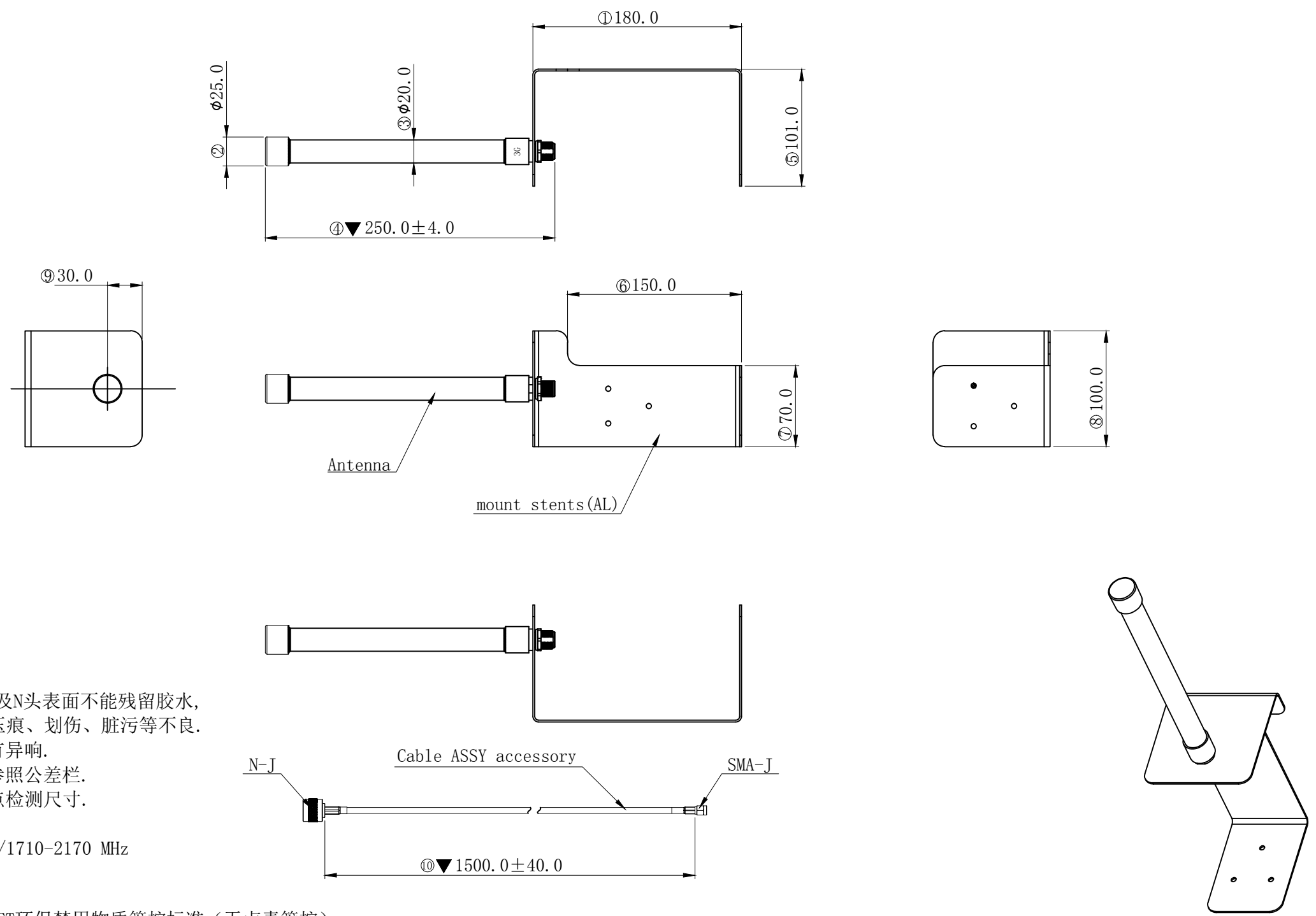
Antenna Picture/天线图片



此处插入天线图片



REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN201496	FIRST RELEASE	06/15' 20	丁第斌	张英杰	牛宝星



NOTE:

- 外观要求:帽子以及N头表面不能残留胶水, 无明显压痕、划伤、脏污等不良.
- 玻璃钢天线不能有异响.
- 未标注尺寸公差参照公差栏.
- 标有"▼"为重点检测尺寸.
- 技术要求:
 频率: 820-960/1710-2170 MHz
 增益: 2.5dBi
 VSWR: 2.5 Max
- 有害物质须符合ECT环保禁用物质管控标准(无卤素管控).
- 产品需过72H中性盐雾测试.



GENERAL TOLERANCE	
XX. ± 0.80	XX. ° ± 2°
X. ± 0.40	X. ° ± 1°
.X ± 0.20	.X° ± 0.5°

SCALE:	1:1
UNIT:	mm
SIZE:	A4

DRAWN:	丁第斌
CHECK:	
APPROVE:	

DATE:	06/15' 20
DATE:	
DATE:	

DWG. NO:	600-U551-01
PARTS NO. (INTENDED USE):	81800U551

TITLE:	ANT_EX_3G_OD25*250_Gray FRP_CUSKREPEATER Customer drawing
--------	---

REV.	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



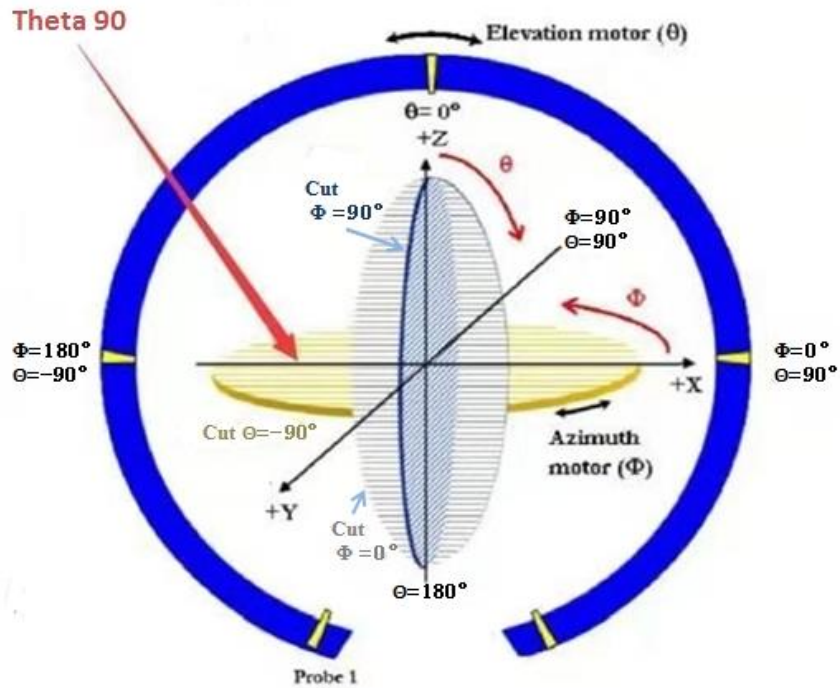
转接 1.5 米同轴线



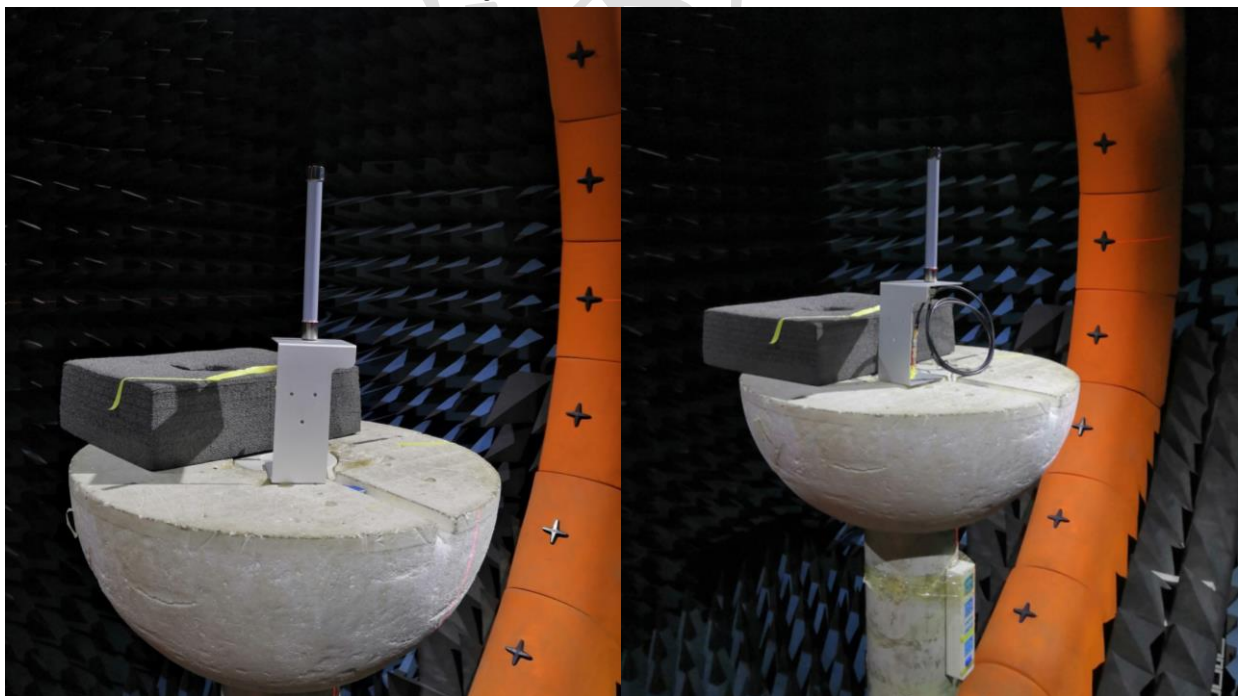
单玻璃钢天线

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



单玻璃钢天线

转接线 1.5米同轴线

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

863MHz-873MHz

(转接 1.5 米同轴电缆)

Frequency	Gain (dBi)	Efficiency(%)
863MHz	0.44	36%
864MHz	0.23	36%
865MHz	0.49	36%
866MHz	0.74	36%
867MHz	0.79	36%
868MHz	0.89	37%
869MHz	0.87	39%
870MHz	0.97	42%
871MHz	0.91	42%
872MHz	0.90	42%
873MHz	0.95	43%
AVG	0.6	38%

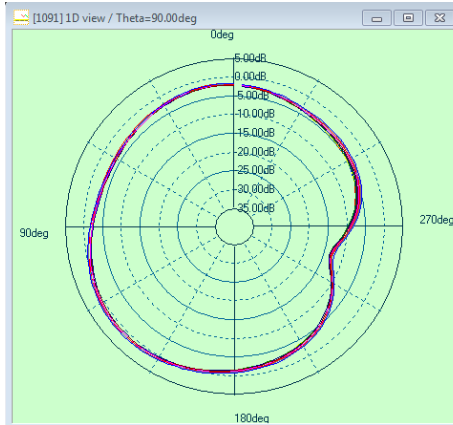
863MHz-873MHz

(单玻璃钢天线)

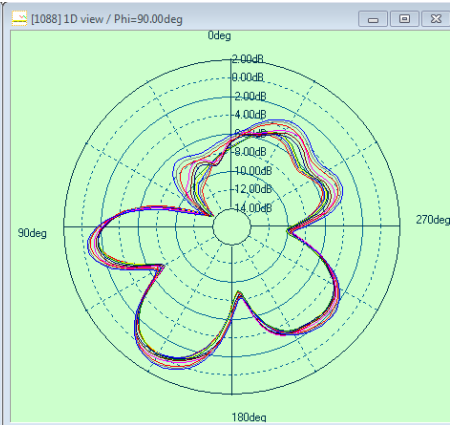
Frequency	Gain (dBi)	Efficiency(%)
863MHz	2.50	65%
864MHz	2.54	63%
865MHz	2.46	62%
866MHz	2.41	61%
867MHz	2.40	60%
868MHz	2.44	60%
869MHz	2.51	61%
870MHz	2.57	61%
871MHz	2.57	61%
872MHz	2.54	61%
873MHz	2.49	61%
AVG	2.50	61%

4.2.3 The antenna radiation pattern(2D/3D)/天线辐射方向图 (2D/3D)

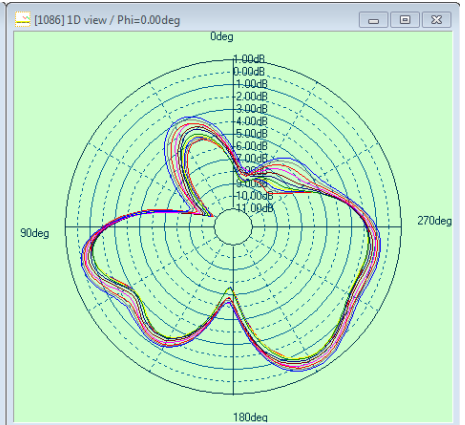
86MHz-873MHz
(转接 1.5 米同轴电缆)



XOY

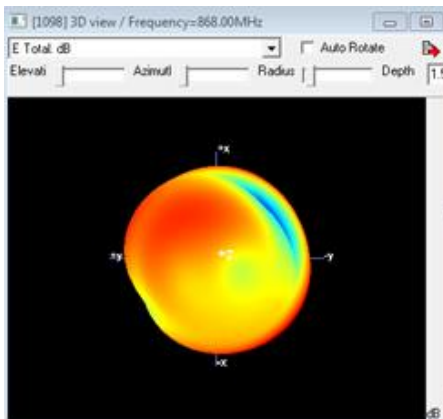


YOZ

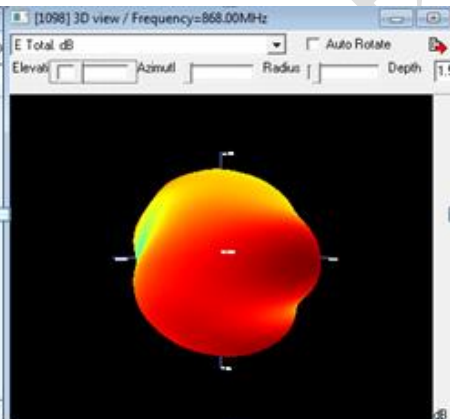


XOZ

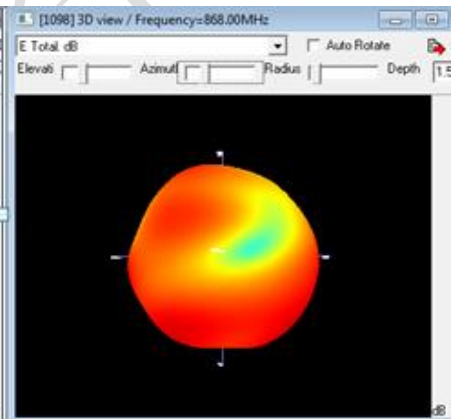
868MHz



XOY

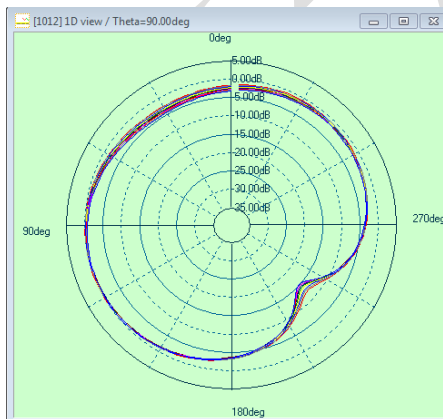


YOZ

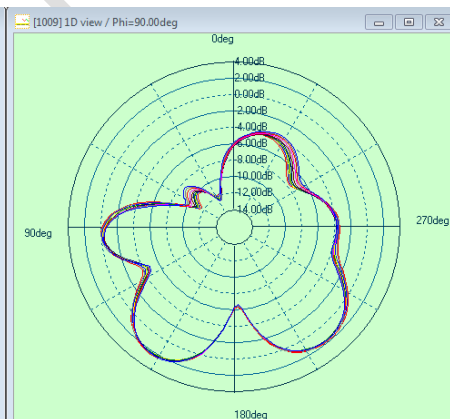


XOZ

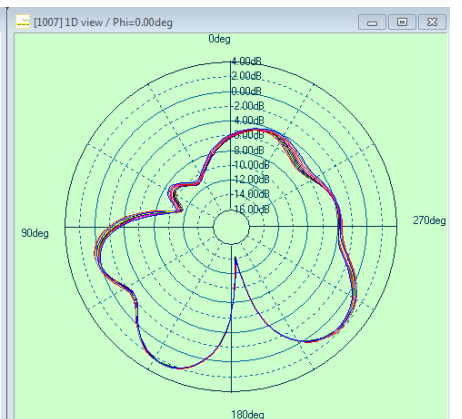
86MHz-873MHz
(单玻璃钢天线)



XOY

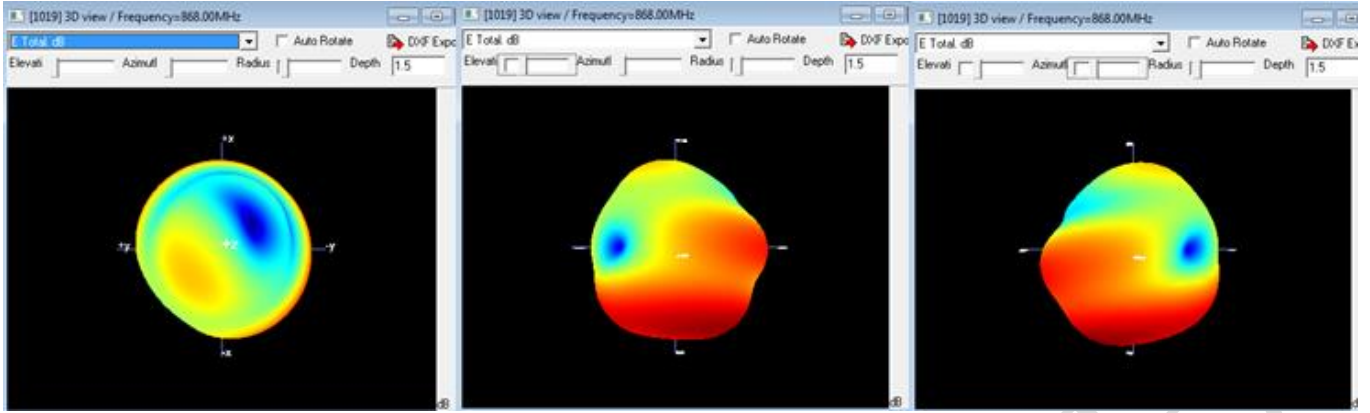


YOZ



XOZ

868MHz



XOY

YOZ

XOZ

海祥规格