

产品规格书

Product Specification

P/N:

81800V351

Title :

ANT_EX_860~930MHz_SMA-J_OD8*45mm-FCC

Rev.	ECN	Release and Revision Description	Prepared By/Date:	Approved By/Date:
A	ECN232327	正式发行	刘晓峰 2024.09.03	丁第斌 2024.09.03

1. Antenna Specification/天线标准

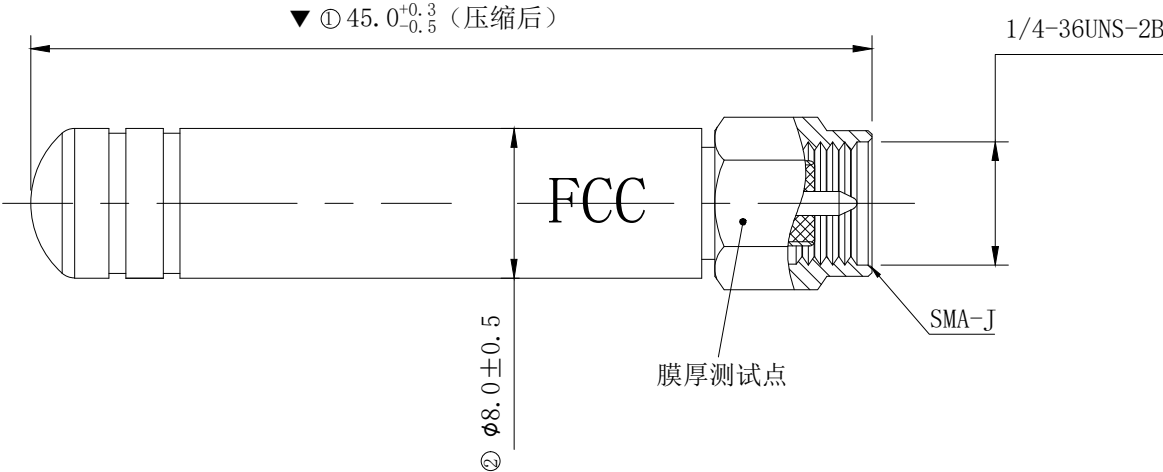
Antenna Specification/天线技术参数		
Electrical Specification/电气特性		
Item/目录	Specification/规格	Comment/备注
Freq. Range/频段范围	860MHz ~ 930MHz	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	<3.0	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak Gain/峰值增益	1.71dBi	
Test condition/测试条件	passive test (无源测试)	
Total Efficiency/无源效率	$\geq 35\%$	
Mechanical Specification/机械指标		
Antenna type/天线类型	胶棒天线	
Connector Type/连接器类型	SMA PLUG(公头公针)	
RF Cable Type/射频线型号	/	
Connector Torque Test/连接器扭力	/	
Connector Pull Test/连接器拉力	/	
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	
Manufacturer/制造商	电连技术股份有限公司	
Address/地址	中国广东省深圳市光明区公明街道西田社区锦绣工业园	

2. Antenna Picture/天线图片



文档密级：
商业秘密

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN232327	初版发行	09/03' 24	刘晓峰	丁第斌	牛宝星



注：
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. 标有“▼”为QC重点检测尺寸
4. 频率：860MHz-930MHz VSWR<3.0
测试仪器：网络分析仪
网分带宽设置：100MHz-1500MHz

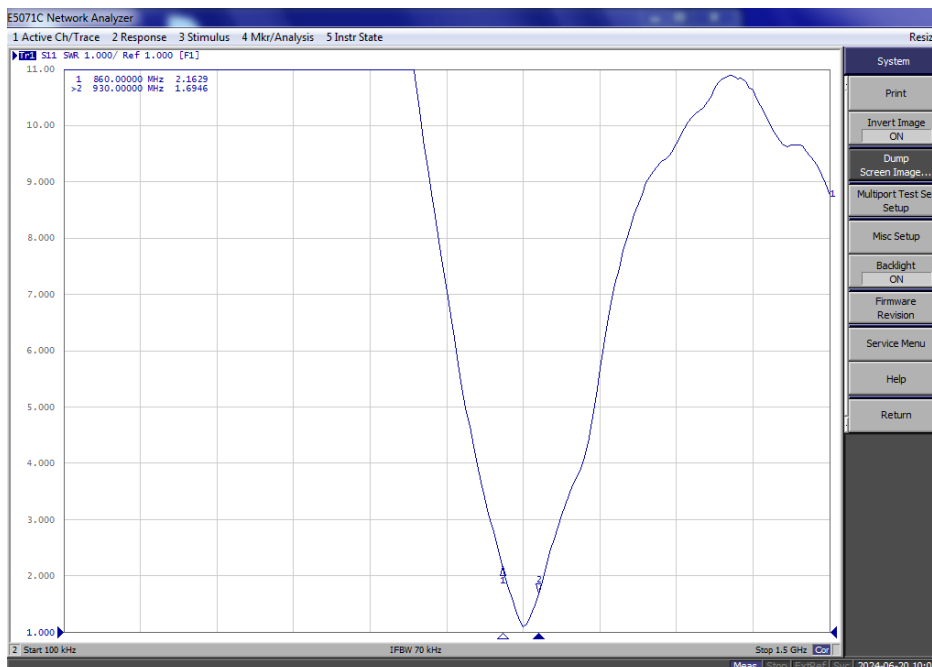
5. 须符合ROHS指令。
NOTE:
1. AFTER THE ASSEMBLY OF DIFFERENT PARTS CAN NOT HAVE BAD APPEARANCE OF GREASY DIRT, SCRATCHES, DEFORMATION, ETC.
2. THE ASSEMBLY AFTER THE COMPLETION OF THE VARIOUS COMPONENTS WITHOUT CLEAR OFF COLOR.
3. MARKED WITH "▼" KEY SIZE DETECTION FOR QC
4. FREQUENCY: 860MHz-930MHz VSWR<3.0
TESTING INSTRUMENT: NETWORK ANALYZER
NETWORK BANDWIDTH IS SET: 100MHz-1500MHz
5. SHOULD MEET THE ROHS DIRECTIVE.

a	胶杆天线	1	FCC_860~930MHz_SMA-J_OD8*45mm_镀金, 盐雾48H
ITEM	PART NAME	Q'TY	MATERIAL / FINISH

	GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG. NO:	TITLE:	REV.
	XX. ± 2.00	XX. ° ± 3°	1:1	刘晓峰	09/03' 24			
	X. ± 1.00	X. ° ± 2°	UNIT:	CHECK:	DATE:	PARTS NO. (INTENDED USE):	ANT_EX_860~930MHz_SMA-J_OD8*45mm-FCC CUSTOMER DRAWING	SHEET:
	. X ± 0.50	. X° ± 1°	mm	APPROVE:	DATE:			
			SIZE: A4			600-V351-01	81800V351	1/1

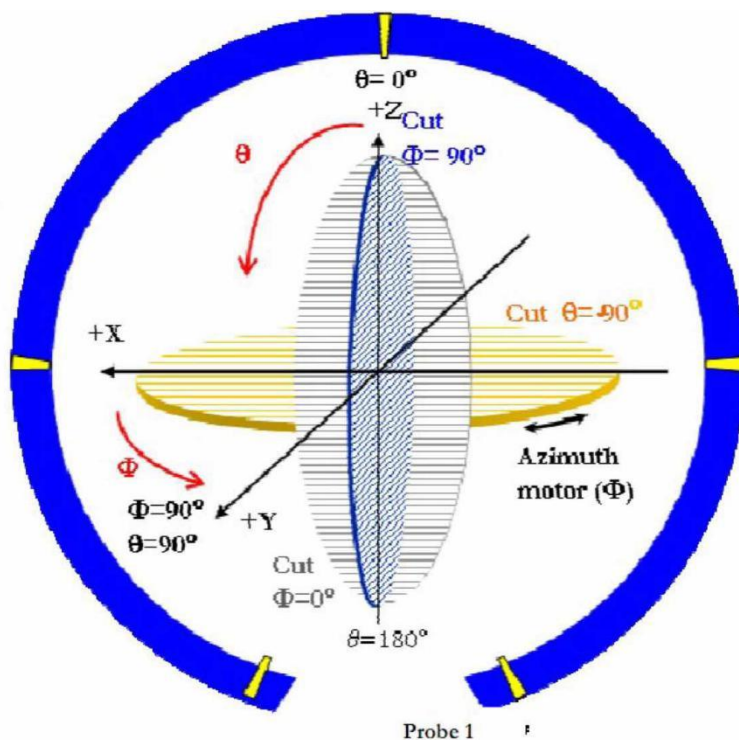
4. Antenna test result/测试结果

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

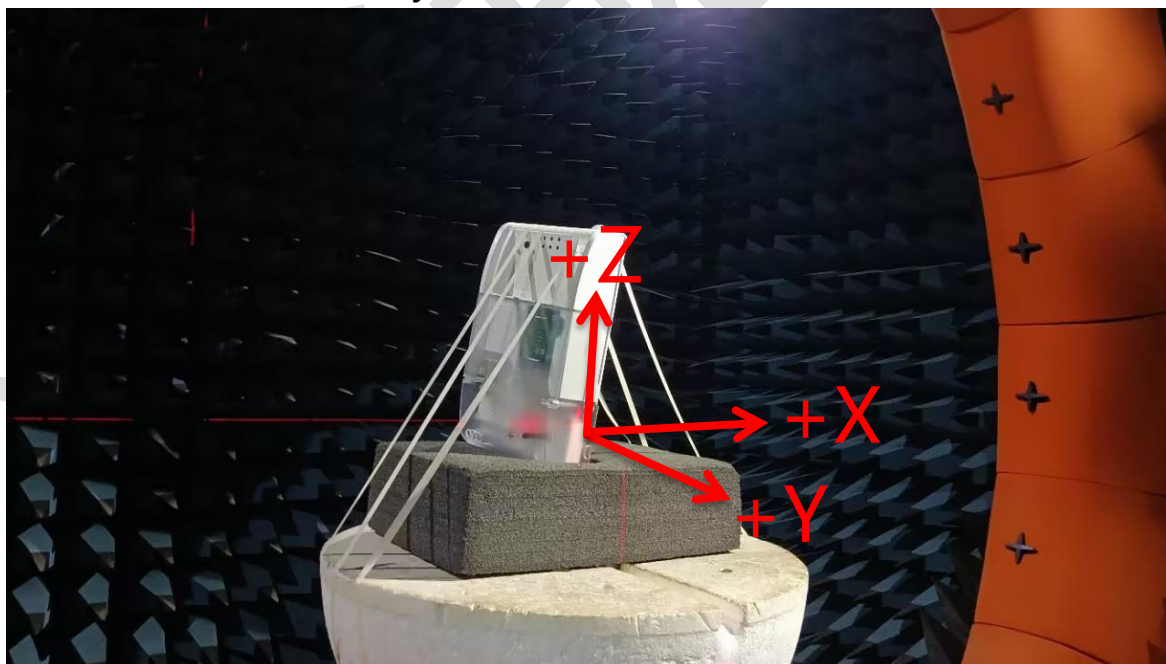


4.2 The gain and total efficiency test/增益和效率测试

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

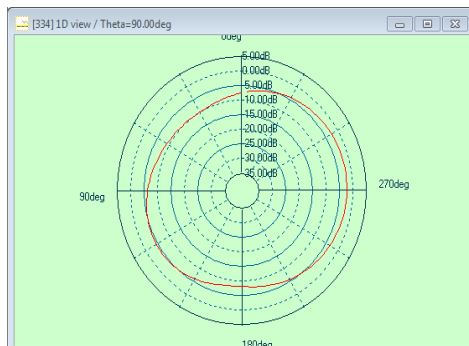
4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果

860MHz-930MHz

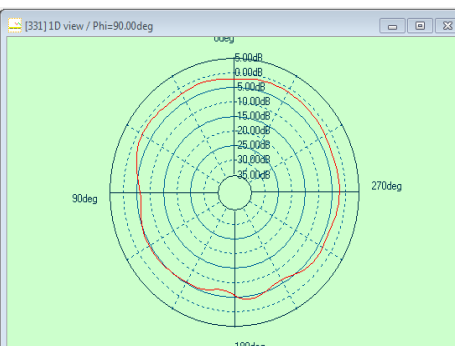
Frequency	Efficiency(%)	Gain (dBi)	Frequency	Efficiency(%)	Gain (dBi)
860MHz	35%	0.05	898MHz	45%	1.30
862MHz	36%	0.20	900MHz	44%	1.21
864MHz	36%	0.31	902MHz	45%	1.34
866MHz	37%	0.42	904MHz	46%	1.49
868MHz	37%	0.50	906MHz	47%	1.62
870MHz	38%	0.58	908MHz	47%	1.70
872MHz	39%	0.78	910MHz	47%	1.70
874MHz	40%	0.99	912MHz	46%	1.71
876MHz	41%	1.16	914MHz	46%	1.70
878MHz	41%	1.17	916MHz	45%	1.66
880MHz	40%	1.14	918MHz	44%	1.59
882MHz	41%	1.18	920MHz	42%	1.43
884MHz	43%	1.27	922MHz	42%	1.36
886MHz	44%	1.32	924MHz	42%	1.27
888MHz	43%	1.28	926MHz	41%	1.15
890MHz	42%	1.13	928MHz	40%	0.96
892MHz	43%	1.19	930MHz	39%	0.80
894MHz	44%	1.29	AVG	42%	1.16
896MHz	45%	1.35			

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

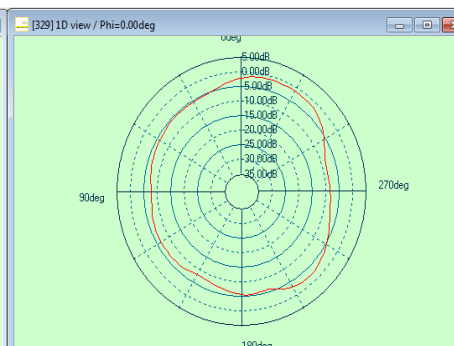
868MHz



XOY

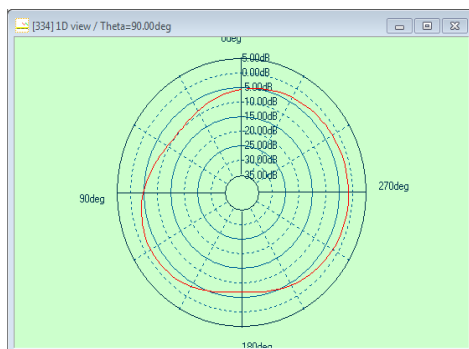


YOZ

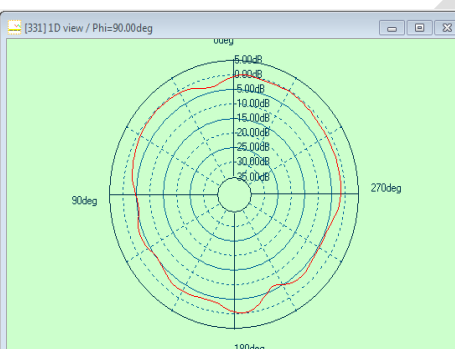


XOZ

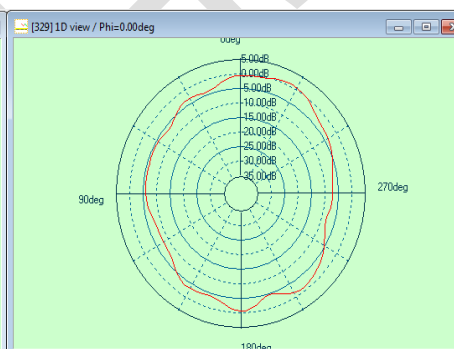
915MHz



XOY



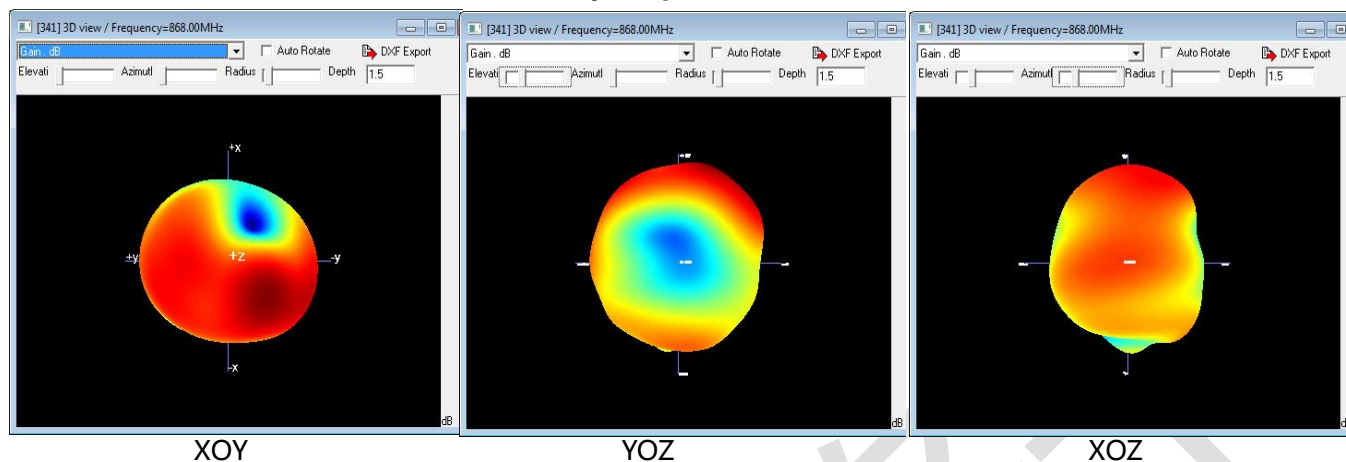
YOZ



XOZ

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

Frequency/频点 868MHz



Frequency/频点 915MHz

