

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 MHz -2500MHz/5150 MHz -5850MHz	
Impedance/阻抗	50 (Ω)	
Directional/辐射方向	Omni Directional	
Polarization/极化形式	Vertical	
VSWR/驻波比	≤ 2.6 / ≤ 2.2	
Peak Gain/峰值增益	3.92dBi / 4.97dBi	
Total Efficiency/无源效率	$\geq 40\%$ / $\geq 35\%$	
Test condition/测试条件	passive test (无源测试)	
Power/功率	10W	
Mechanical Specification/机械指标		
Antenna type/天线类型	Automobile antenna	
Connector Type/连接器类型	FAKRA	
RF Cable Type/射频线型号	1.37 黑色低损线/1.37 low loss(Black)	
Dimension/尺寸	35*15mm	
Salt Spray/盐雾测试	N/A	
Environmental Specification /环境指标		
Operating temp/工作温度	-40°C ~ +85°C	
Storage temp/存储温度	-40°C ~ +85°C	

2. Antenna Picture/天线图片



文档密级：
商业秘密

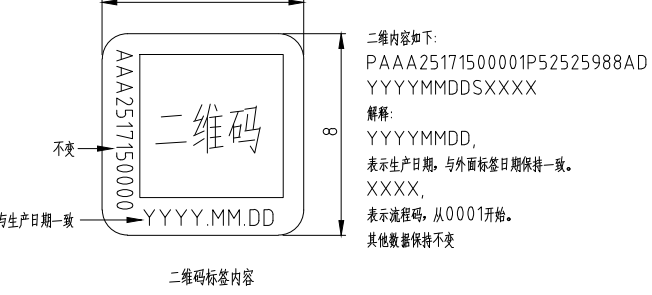
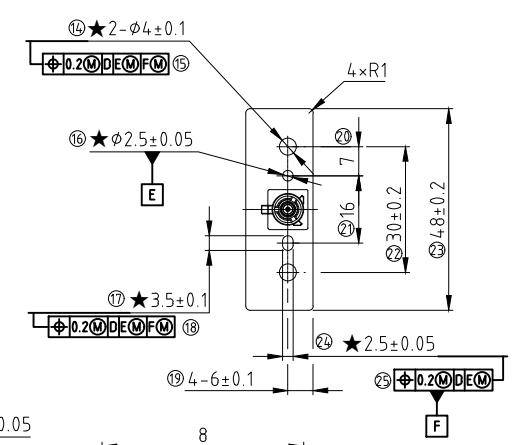
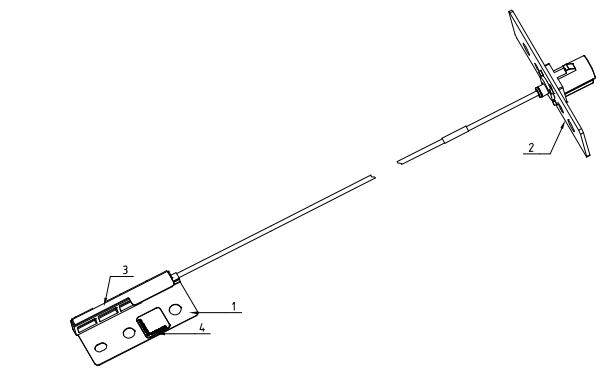
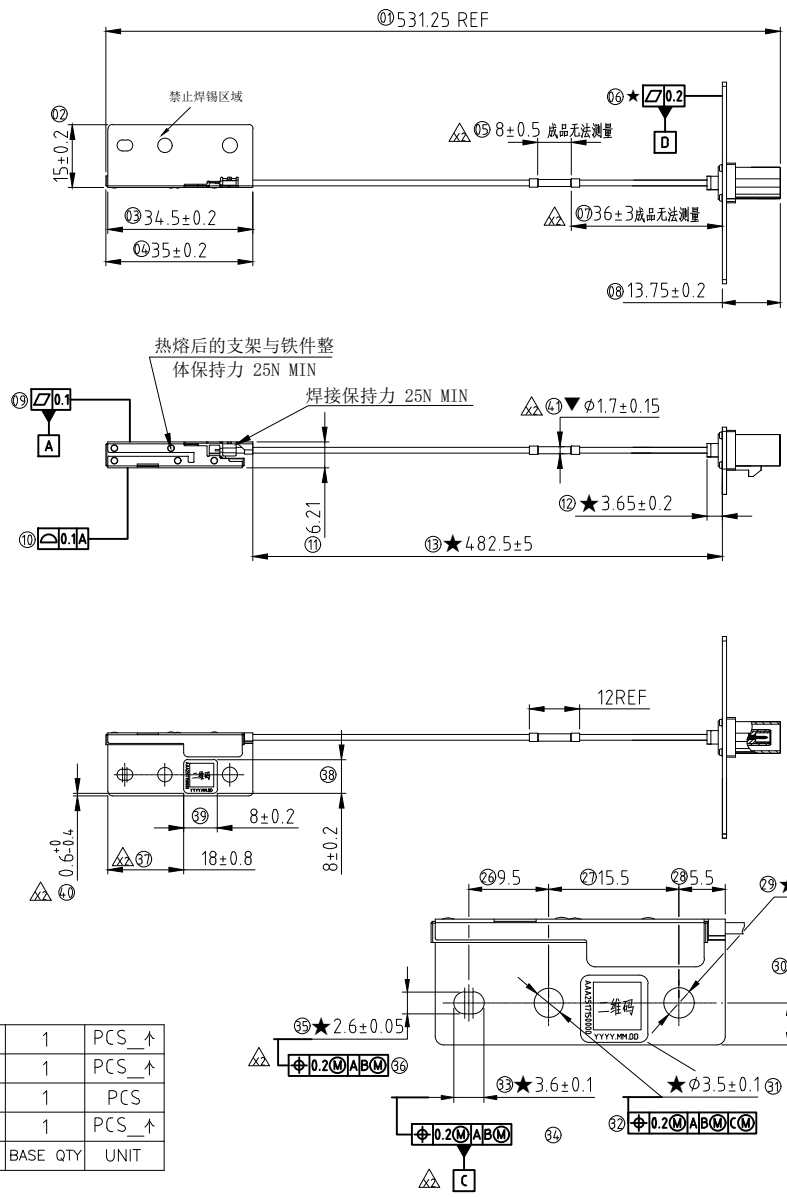
REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN
X1	ECN251318	First Issue	03/19'25	丁策斌
X2	ECN251318	△×7 更新尺寸	07/15'25	丁策斌

说明：
1. 组装后产品无变形、无污渍、热熔柱没裂纹、线缆没有压伤，塑胶支架没有烫伤等不良。
After assembly, The product has NO deformation, NO stains, NO cracks in the hot melt column, The cable is not crushed, and the plastic bracket is not burned.

2. 100%全检VSWR测试。
100% Full inspection VSWR test.

3. 尺寸特性要求DIMENSIONAL CHARACTERISTIC REQUIREMENTS:
3-1: 标有“▲”为产品关键特性; MARKED WHIT“▲”: THE CRITICAL CHARACTERS;
3-2: 标有“★”为产品重要特殊特性, 要求做CPK或者SPC管控;
MARKED WHIT“★”: THE SIGNIFICANT CHARACTERS, REQUIRE CPK OR SPC CONTROL;
3-3: 标有“▼”为产品重点检验尺寸; MARKED WHIT“▼”: THE KEY INSPECTION DIMENSIONS;
3-4: 标有“⊗”为产品FAI全检尺寸; MARKED WHIT“⊗”: THE FAI FULL INSPECTION DIMENSIONS;
3-5: 标有“△”为产品CCD全检尺寸; MARKED WHIT“△”: THE CCD FULL INSPECTION DIMENSIONS.

4. 有害物质须符合ECTQE-Q-19-001环境有害物质管理基准》管控标准及最终客户要求。
HSF shall conform to the standard QE-Q-19-001 Environmental Hazardous Substances Management.

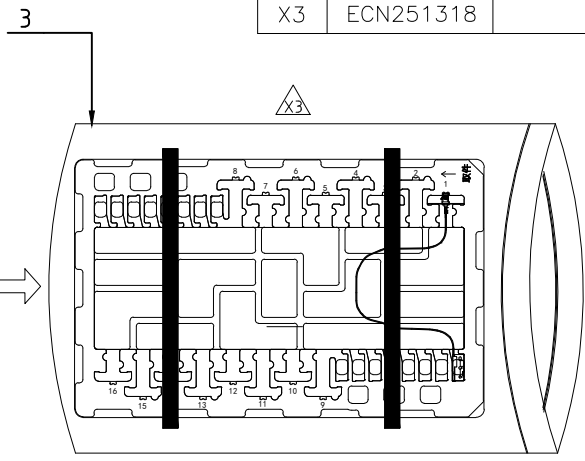
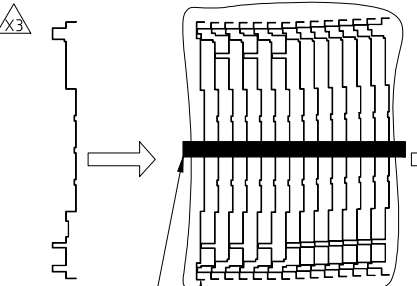
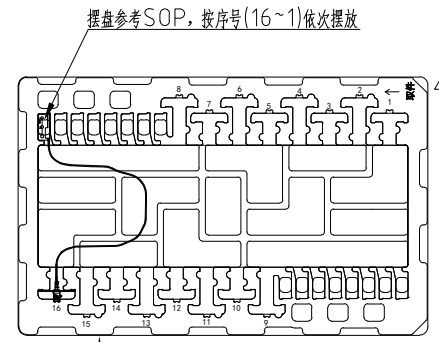


ITEM	DESCRIPTION	QTY	BASE QTY	UNIT
4	标签, 8×8mm, PI防油防断-V777	1	1	PCS ↑
3	Housing_PC,BK,14100000601	1	1	PCS ↑
2	FAKRA TYPE M TO USS RF I PLUG	1	1	PCS
1	Metal plate_ZE_35_120500049101	1	1	PCS ↑

ELECTRIC CONNECTOR TECHNOLOGY	GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG No.:	TITLE	REV.
	XX.± 0.25	ANGLE	1:1			600-V777-01	ANT_IN_ANT-FARKA+CABLE, 15×6.21×100,CAR	X2
	X.± 0.20	XX.°± 2°	UNIT:	CHECK:	DATE:	PARTS No.:	Customer drawings	SHEET:
	.X± 0.10	X.°± 1°	mm	APPROVE:	DATE:	81800V777	1/1	
.XX± 0.08	.X°± 0.5°	SIZE: A4						

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REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN
X1	ECN251318	First Issue	05/22*25	丁策斌
X2	ECN251318	△X2×3 更新装箱数量以及tray形状	07/15*25	丁策斌
X3	ECN251318	△X3×3 添加取料位标识、去掉内箱标签、增加捆扎方式	08/27*25	丁策斌

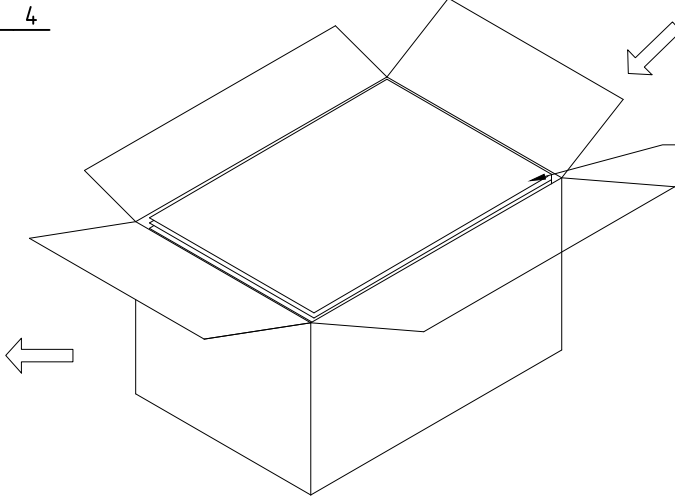
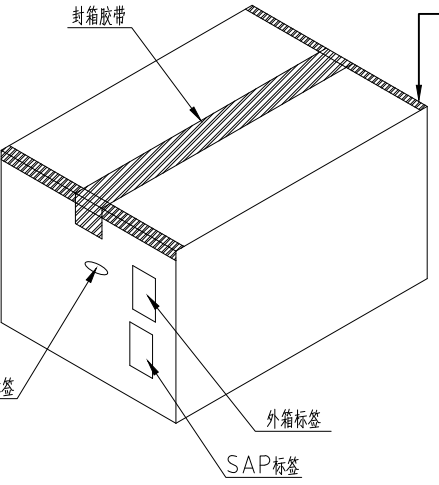


Material: 52525988 QTY:208
Description:FAKRA线束+天线
Production Date:30052025
Unit:PC
Vendor Batch:25225
Del. Note:20250530001
Vendor No.:20704704
Serial No.:ECT000001
供应商: 电连技术股份有限公司

二维码关联内容:
Ndel.note#Pmaterial
#QQTY#Vvendor
#Serialnumber#Hvendor
batch
扫码内容如下:
N20250530001#P52525988
#Q208#V20704704
#SECT000001#H25225

Material: 客户料号: 不变
Description:料号名称: 不变
Production Date: 生产日期: 实际生产日期为准,以“日/月/年”格式填写
Unit:单位: 不变
Vendor Batch:批次号: 年/周/星期几填写(与生产日期相对应,注:星期一为1,以此类推)
Del. Note:送货单号: 20250530代表日期 001为流水码
Vendor No.:ECT在客户处代码: 不变
Serial No.:货物流水码: ECT固定,000001为流水码,同一-PO的不能有重复码

16PCS / 盘



1袋/箱(208PCS/箱)

管制重点KEY POINTS OF CONTROL:

- 1.包装时产品轻拿轻放,避免产品变形。
WHEN PACKING,THE PRODUCT SHOULD BE HANDLED WITH CARE TO AVOID DISTORTION.
- 2.整箱封好后,检查标签是否贴好,干净,字迹清晰,标签内容是否正确,完善。
AFTER THE PACKING IS SEALED,CHECK WHETHER THE LABELS ARE PASTED WELL,CLEAN,LEGIBLE,CORRECT AND PERFECT.
3. 内袋标签与外箱标签尺寸和格式一样。
The internal label has the same size and format as the external label.
4. 多余PE袋不可随意处置,需按包规SOP整齐叠放。
Excess PE bags cannot be disposed of at will and must be neatly stacked according to the packaging standard SOP

ITEM	PART No.	DESCRIPTION	QTY	BASE QTY	UNIT
4	604010593	外尺寸L570×W370×H300mm,K=K,加强芯-空白箱,禁止打钉	1	208	PCS_↑
3	604020198	PE袋,开口650×950×T0.06mm,PE,粉色,防静电	1	208	PCS_↑
2	604060384	T0.8×L540×W34.0mm,防静电PET透明,顶盖-V777	1	208	PCS_↑
1	604A00V777	T0.8×L540×W34.0mm,防静电PET透明,16PCS/盘-V777	1	16	PCS_↑

产品包装重量 PACKING WEIGHT		
单重 SINGLE WEIGHT(G)	净重 NET WEIGHT(KG)	毛重 GROSS WEIGHT(KG)
115	-	6.55

	GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG No.:	TITLE	REV.
	XX.± 0.20	ANGLE	1:1	CHECK:	DATE:	551-V777-01	ANT_IN_ANT-FARKA+CABLE, 15x6.21x100,CAR	X3
	X.± 0.15	XX.°± 2°	UNIT:	APPROVE:	DATE:	PARTS No.:		SHEET:
	.X± 0.10	X.°± 1°	mm			P81800V777	1/1	
.XX± 0.08	.X°± 0.5°	SIZE: A4						

5. Antenna test result/测试结果

5.1 VSWR/驻波比



5.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果
2400-2500MHz

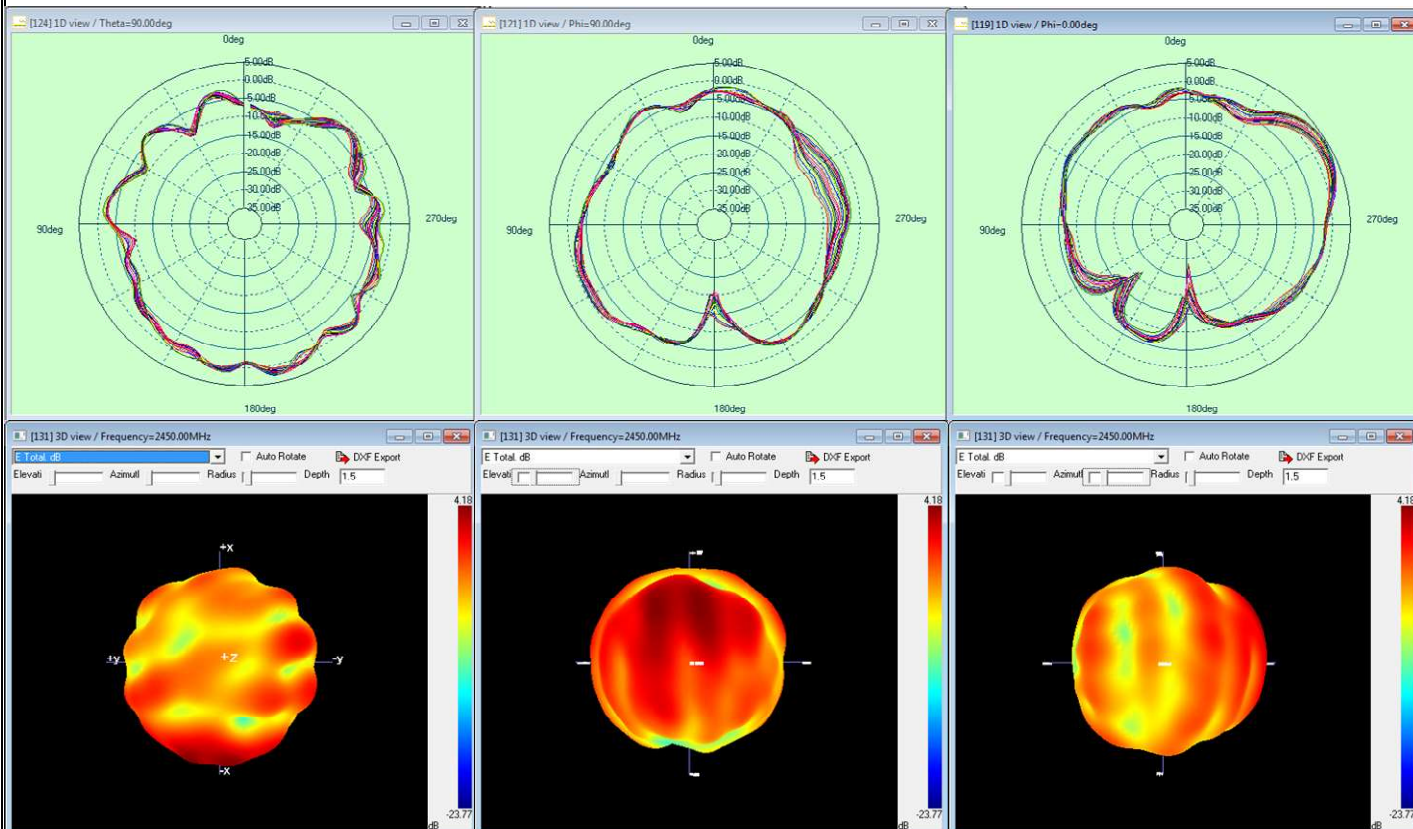
Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400MHz	63%	3.60
2405MHz	42%	2.32
2410MHz	43%	2.41
2415MHz	43%	2.42
2420MHz	43%	2.40
2425MHz	43%	2.51
2430MHz	44%	2.66
2435MHz	45%	2.83
2440MHz	46%	2.96
2445MHz	48%	3.15
2450MHz	50%	3.25
2455MHz	51%	3.29
2460MHz	51%	3.35
2465MHz	51%	3.45
2470MHz	50%	3.48
2475MHz	50%	3.59
2480MHz	50%	3.71
2485MHz	50%	3.81
2490MHz	49%	3.81
2495MHz	48%	3.81
2500MHz	49%	3.92
AVG.	47%	3.11

5150-5850MHz

Frequency (MHz)	Efficiency (%)	Gain (dBi)
5150MHz	35%	1.62
5200MHz	35%	1.63
5250MHz	36%	1.68
5300MHz	37%	2.18
5350MHz	41%	2.46
5400MHz	48%	3.19
5450MHz	44%	3.03
5500MHz	45%	3.10
5550MHz	46%	3.43
5600MHz	46%	3.88
5650MHz	48%	4.12
5700MHz	46%	4.17
5750MHz	45%	4.77
5800MHz	38%	4.39
5850MHz	45%	4.97
AVG.	42%	3.24

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

2400MHz-2500MHz(2450MHz 3D 方向图)

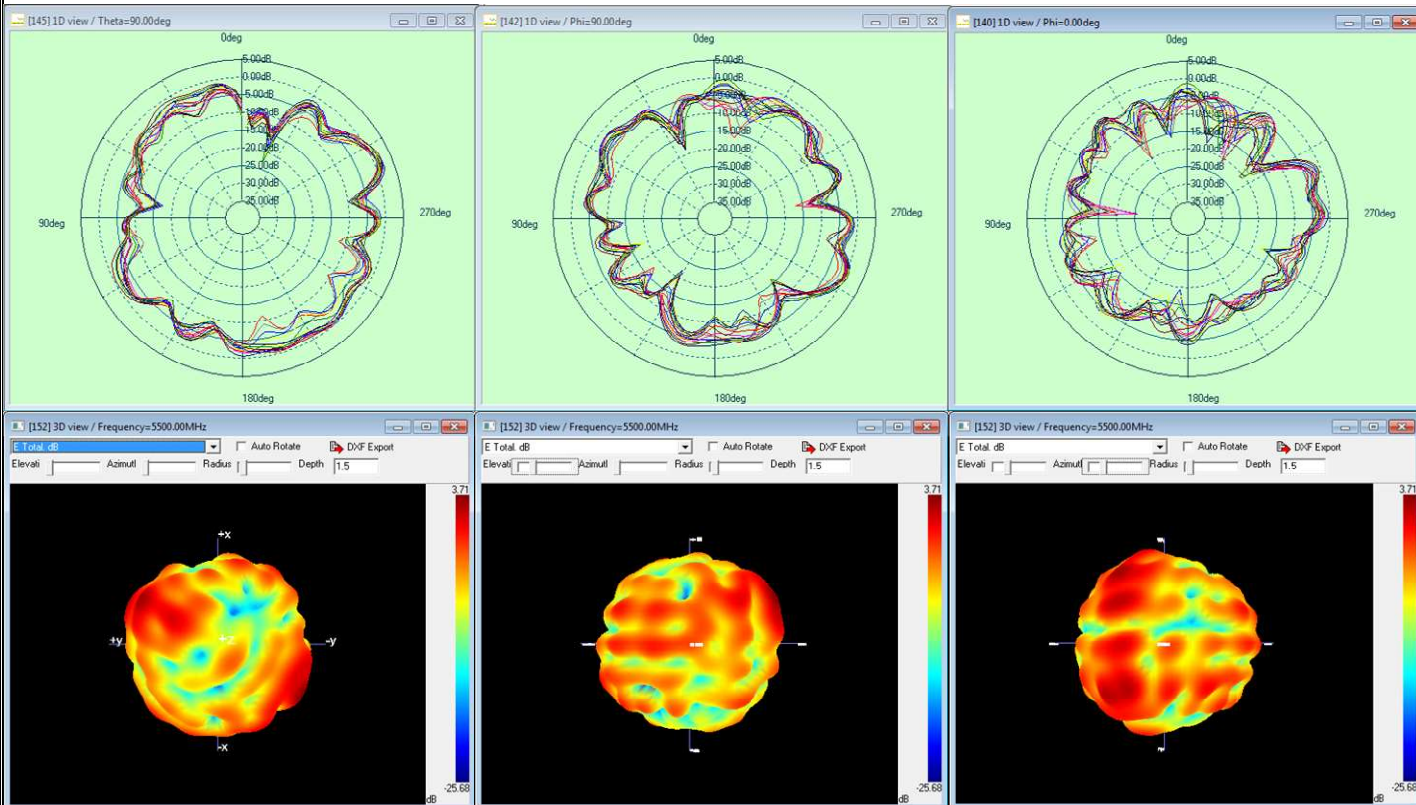


XOY

YOZ

XOZ

5150MHz-5850MHz(5550MHz 3D 方向图)



XOY

YOZ

XOZ