

产品规格书

Product Specification

P/N: 81800U678		Title : ANT_IN_WA, USS I L143ø1. 13, BK		
Rev.	ECN	Release and Revision Description	Prepared By/Date:	Approved By/Date:
A	ECN203042	FIRST RELEASE	2021-01-05	2021-01-05

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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	2.4 ~2.5(GHz);5.15~5.85(GHz)	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	2.4 ~2.5(GHz),VSWR \leq 2.5 5.15~5.85(GHz),VSWR \leq 2	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Linear	
Peak Gain/峰值增益	2.4 ~2.5(GHz),P gain=2.34dBi 5.15~5.65(GHz) ,P gain=3.90dBi 5.7~5.85(GHz) ,P gain=3.07dBi	
Test condition/测试条件	passive test (无源测试)	
Total Efficiency/无源效率	2.4 ~2.5(GHz) ,EFF \geq 60% 5.15~5.85(GHz), EFF \geq 60%	
Mechanical Specification/机械指标		
Antenna type/天线类型	汽车天线	
Connector Type/连接器类型	USS RF PLUG 1 代端子	
RF Cable Type/射频线型号	USS RF Coaxial Cable,32AWG D=1.13(S+T)黑色	
Connector Torque Test/连接器扭力	N/A	
Connector Crimp Strength/端子压接强度	\geq 1.0Kgf	
Salt Spray/盐雾测试	48 (H)	
Environmental Specification /环境指标		
Operating temp/工作温度	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C	
Storage temp/存储温度	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C	

2. Antenna Picture/天线图片

P/N:

81800U678

Rev.:

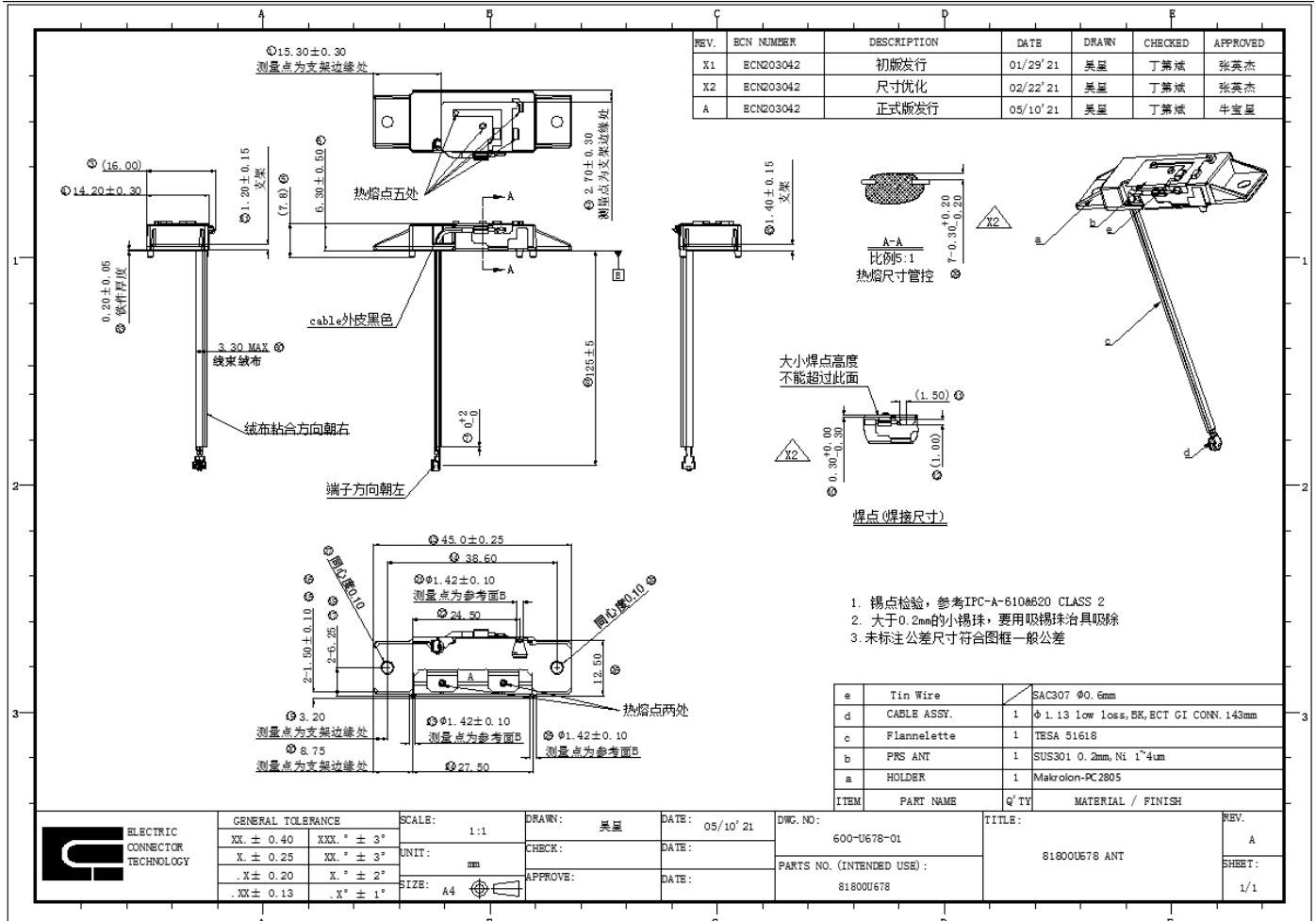
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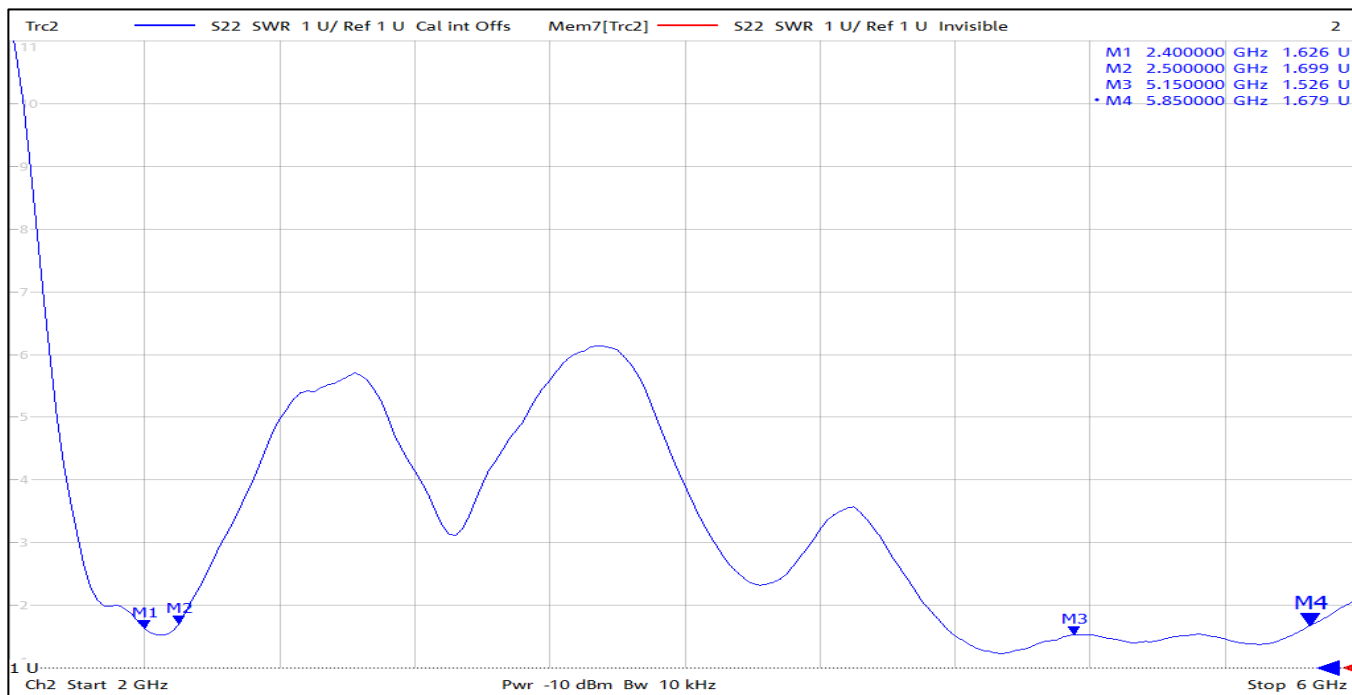


3. DWG/工程图纸



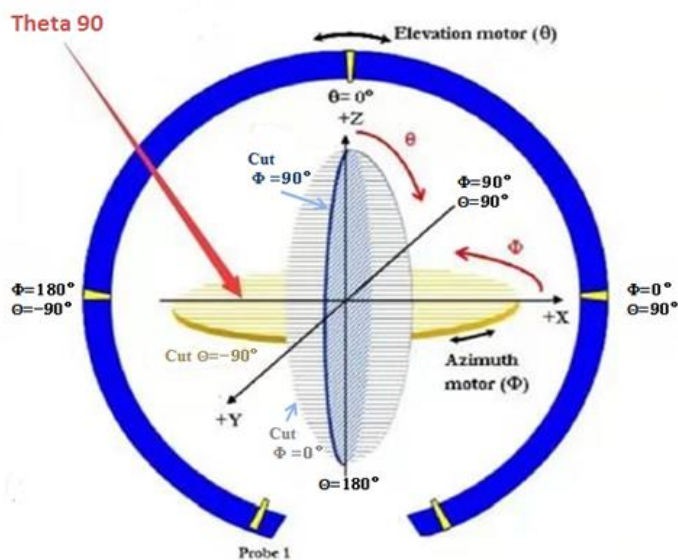
4. Antenna test result/测试结果

4.1 VSWR/驻波比

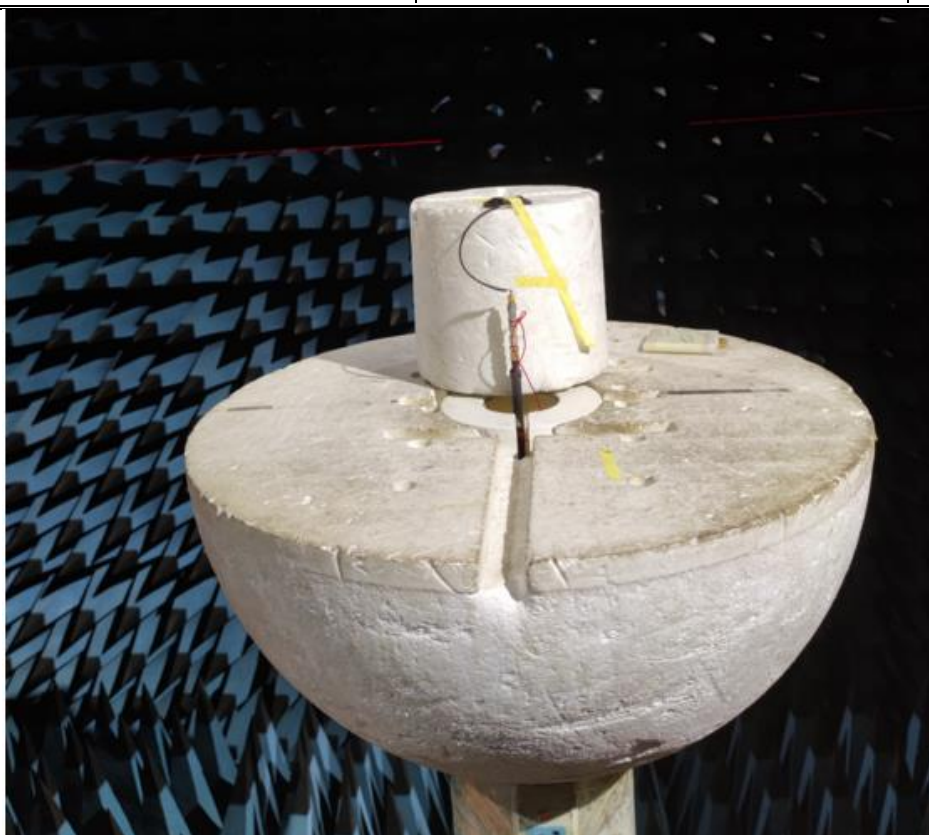


4.2 The gain and total efficiency test/增益和效率测试

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

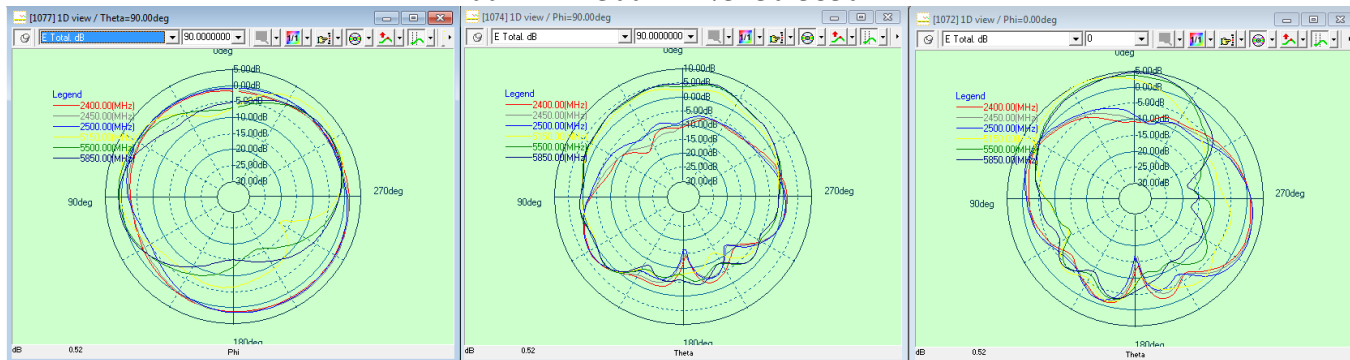
4.2.2 The test result of total efficiency and total gain/天线效率及增益测试结果

2400-2500MHZ/5150-5850MHZ

Frequency	Efficiency.%	Gain.dBi	Frequency	Efficiency.%	Gain.dBi
2400MHz	47%	1.12	5150MHz	64%	3.39
2410MHz	50%	1.42	5200MHz	65%	3.40
2420MHz	52%	1.86	5250MHz	64%	3.38
2430MHz	53%	2.09	5300MHz	66%	3.57
2440MHz	54%	2.04	5350MHz	66%	3.50
2450MHz	56%	1.88	5400MHz	74%	3.90
2460MHz	58%	1.95	5450MHz	69%	3.63
2470MHz	59%	1.97	5500MHz	67%	3.36
2480MHz	61%	2.21	5550MHz	70%	3.62
2490MHz	64%	2.34	5600MHz	66%	3.38
2500MHz	65%	2.30	5650MHz	67%	3.26
			5700MHz	64%	3.07
			5750MHz	64%	3.00
			5800MHz	63%	3.01
			5850MHz	64%	3.00

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

2400MHz-2500MHz/5150-5850MHz



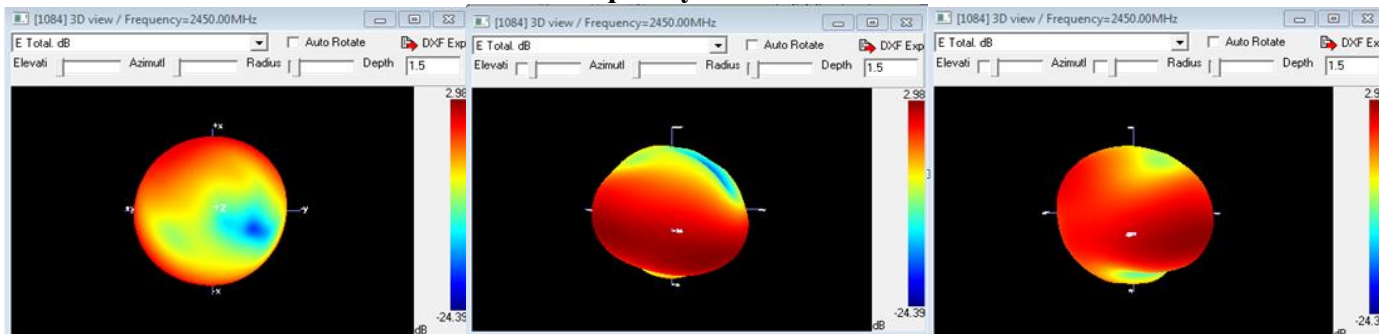
XOY

YOZ

XOZ

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

Frequency/频点 2450MHz

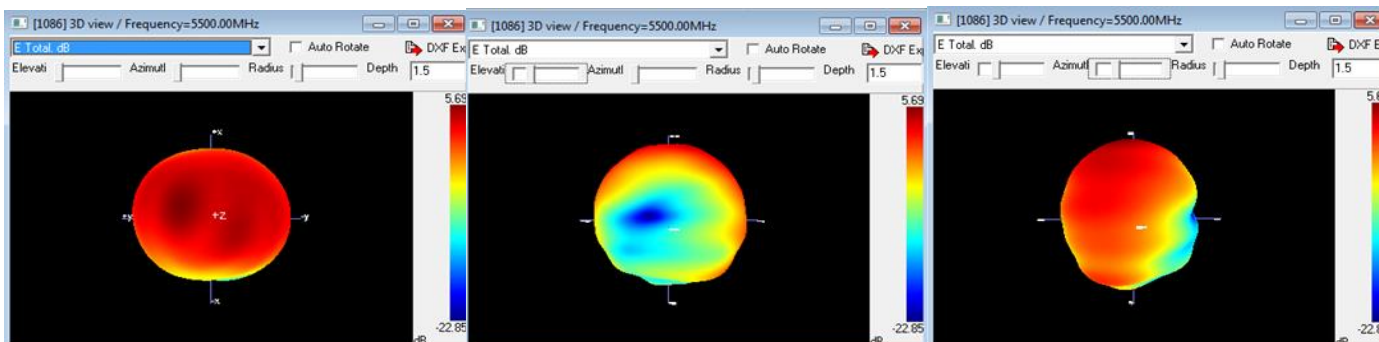


XOY

YOZ

XOZ

Frequency/频点 5500MHz



XOY

YOZ

XOZ

5. DWG/包规图纸

