

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	2400MHz-2500MHz 5150MHz-5850MHz	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	≤ 3.5	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Linear polarization	
Peak gain/峰值增益	2400MHz-2500MHz : 2.51(dBi); 5150MHz-5850MHz : 2.94(dBi);	
Test condition/测试条件	passive test (无源测试)	
Total efficiency/无源效率	2400MHz-2500MHz AVG: 42.90% 5150MHz-5850MHz AVG: 42.26%	

Mechanical Specification/机械指标

Antenna type/天线类型	FPC 天线/ FPC antenna	
Connector type/连接器类型	N/A	
RF cable type/射频线型号	N/A	
Connector torque test/连接器扭力	N/A	
Connector pull test/连接器拉力	N/A	
Salt spray/盐雾测试	48 H	

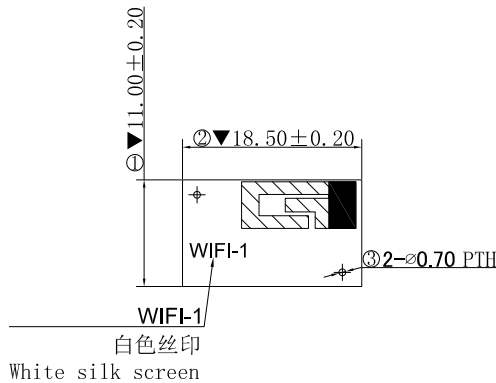
Environmental specification /环境指标

Operating temp/工作温度	-40°C ~ +80°C	
Storage temp/存储温度	+5°C ~ +30°C	

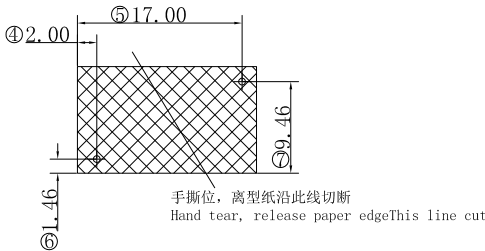
Document password level:
文档密级:
商业秘密
Trade secret

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
A	ECN214420	初版发行/Initial release	12/14' 21	梁兑泉 duiquan.Liang	丁第斌 dibin.Din	牛宝星 baoxing.Niu

Antenna Model Name:818000U739



TOP



BOT

说明:

- 图中 为线路区域, 为镀金区域, 为背胶区域, 外形轮廓为基材区域。
- 天线频率: 2400-2500 MHz/5150-5850 MHz ≤3.5
- 标有“▼”为QC重点检测尺寸, 未注尺寸按照公差表要求。
- 有害物质须符合ECT《QE-Q-19-001-环境有害物质管理基准》管控标准。

NOTES:

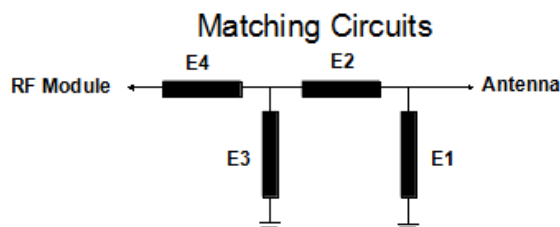
- The diagram As the line area, for gilded area, for back glue area, the outline for the base material.
- The antenna frequency: 2400-2500 MHz/5150-5850 MHz ≤3.5
- Marked with “▼” key size detection for QC, not note size according to the tolerance table.
- HSF shall conform to the standard QE-Q-19-001 Environmental Hazardous Substances Management.

a	FPC	1	TAB05-MT62-WIFI-1_BK_HF_FPC_18.5*11.0
ITEM	PART NAME	Q' TY	MATERIAL / FINISH

	GENERAL TOLERANCE		SCALE:	DRAWN: 梁兑泉 duiquan.Liang	DATE: 12/14' 21	DWG. NO: 600-U739-01	TITLE: ANT_IN_2.4-5.8G_ 18.5*11.0_ VT-TAB05-WIFI1	REV. A
	XX. ± 0.30	XX. ° ± 3°	1:1	CHECK:	DATE:			SHEET:
	X. ± 0.20	X. ° ± 2°	UNIT: mm	APPROVE:	DATE:	PARTS NO. (INTENDED USE): 81800U739		1/1
	. X ± 0.10	. X ° ± 1°	SIZE: A4					

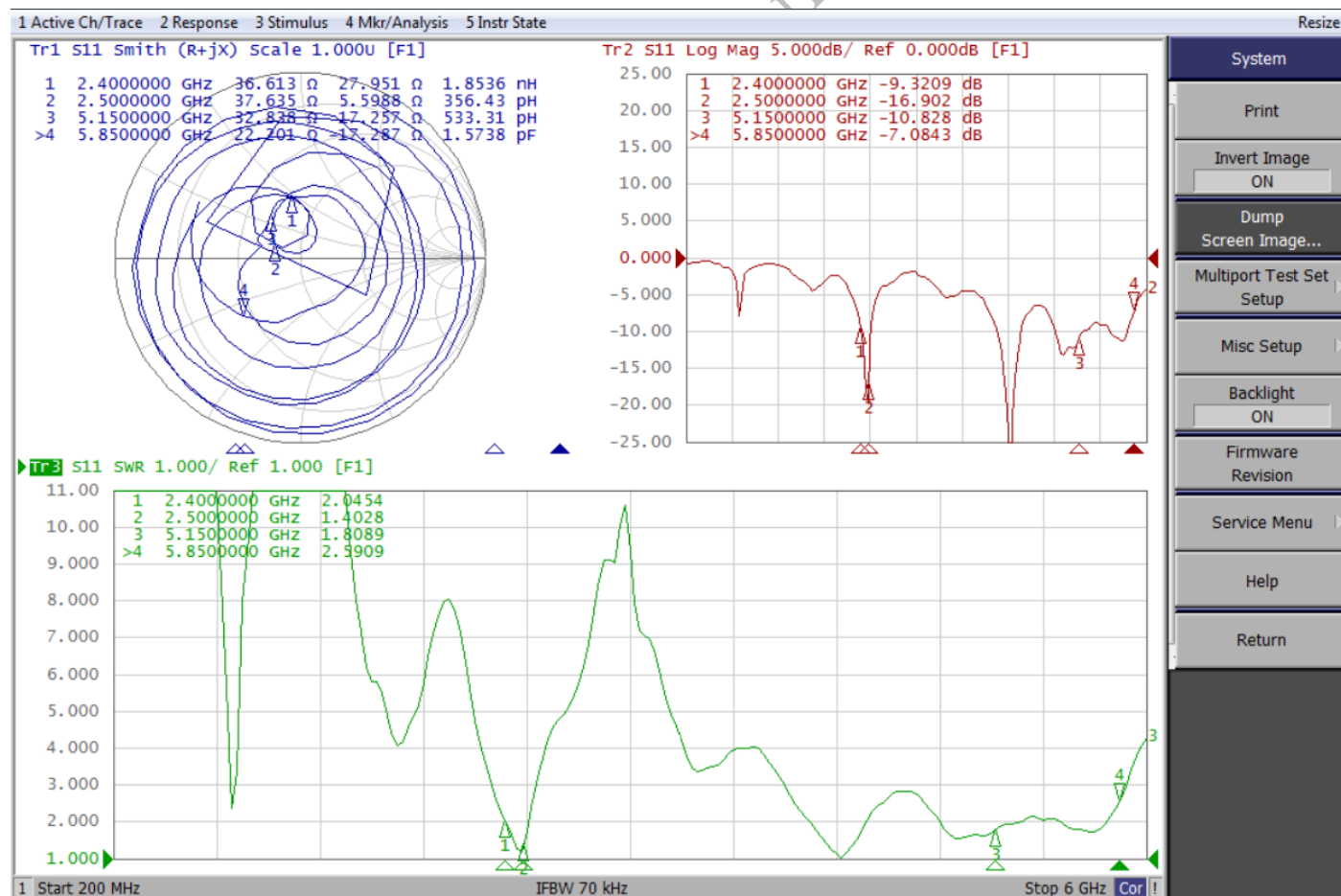
3. Antenna test result/测试结果

3.1 The matching circuits/匹配电路



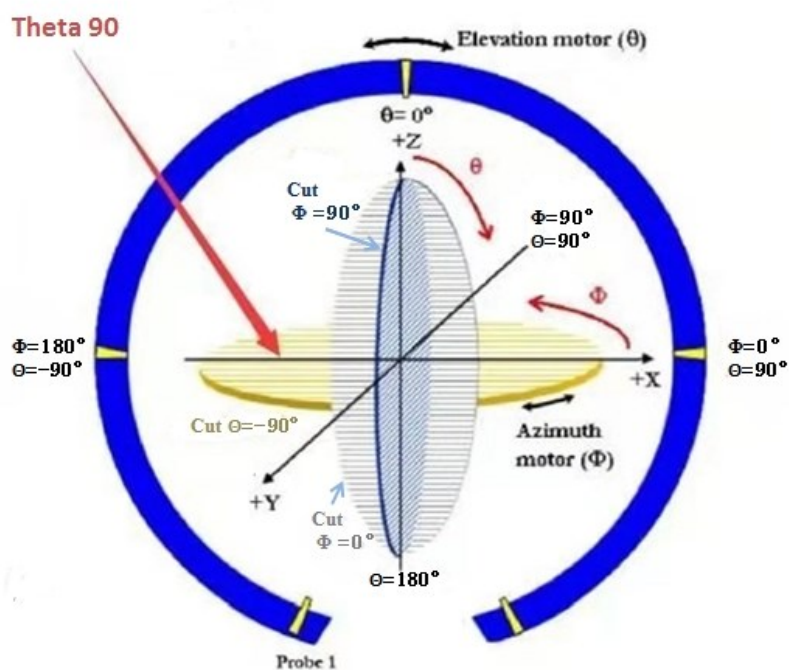
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4(0201)	0 Ω

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



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

3.3.1 The definition of coordinate system/坐标系定义-Satimo SG24



The coordinate system of Chamber/暗室坐标系

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

2400MHz-2500MHz

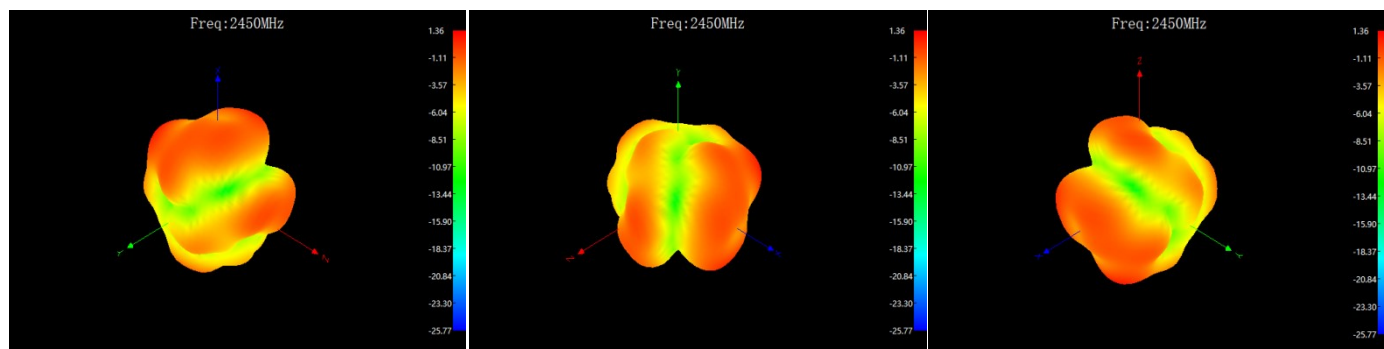
Frequency (MHz)	Efficiency (%)	Gain(dBi)
2400	42.92	1.29
2410	42.12	1.18
2420	43.95	2.31
2430	44.45	2.51
2440	41.88	1.66
2450	43.53	1.36
2460	42.29	1.98
2470	44.92	0.88
2480	42.32	0.99
2490	41.88	2.07
2500	41.64	2.16
AVG	42.90	1.67

5150MHz-5850MHz

Frequency (MHz)	Efficiency (%)	Gain (dBi)
5150	42.27	1.89
5200	42.19	2.22
5250	43.09	2.33
5300	41.33	2.3
5350	43.83	2.7
5400	45.46	2.81
5450	41.09	1.76
5500	41.46	1.78
5550	41.46	1.1
5600	41.59	1.54
5650	42.53	2.04
5700	41.78	2.46
5750	40.92	2.94
5800	41.26	2.18
5850	43.65	2.13
AVG	42.26	2.15

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

Frequency/频点 2450MHz

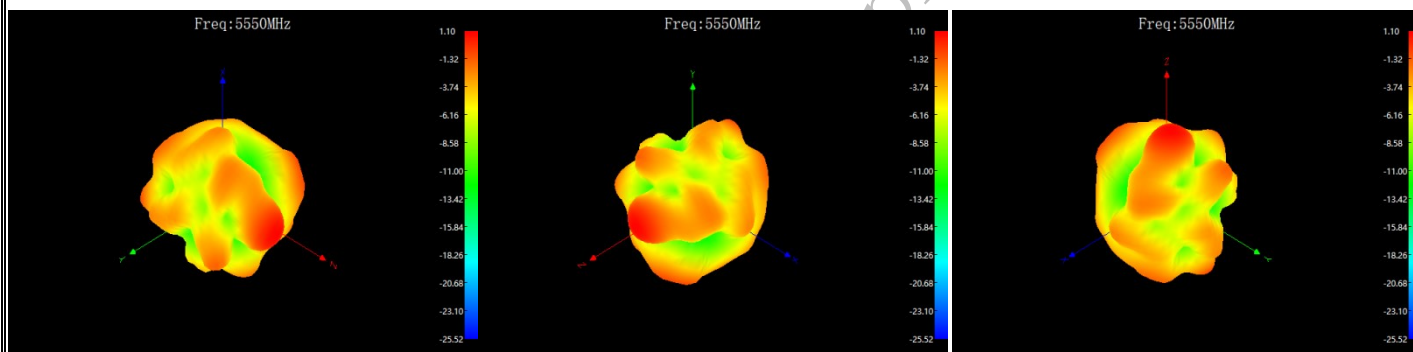


XOY

YOZ

XOZ

Frequency/频点 5550MHz



XOY

YOZ

XOZ