

T21 Antenna Material requirements specification

Customer Name: Shenzhen MSI Yan selection Technology Co., LTD

Customer Product name: T21

Product Name: FPC antenna

Product Specifications: Refer to BOM list

1.summarize

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements of T21 products.

This requirement applies to antenna selection, testing and acceptance of T21 products.

1.2 Project basic information

Antenna Name:	T21
Antenna frequency band:	Main antenna: 2400MHz-2500MHz
Antenna material:	Electrolytic copper +PI/ half and half/nickel plated gold
Antenna version:	V1.0

2. Technical specification requirement

2.1 Active report

2.1.1 Test specification

Test tools: Agilent8960 integrated measuring instrument, R&SCMW500, all-wave far-field ETS darkroom, high-precision positioning system and its controller and computer with automatic test program

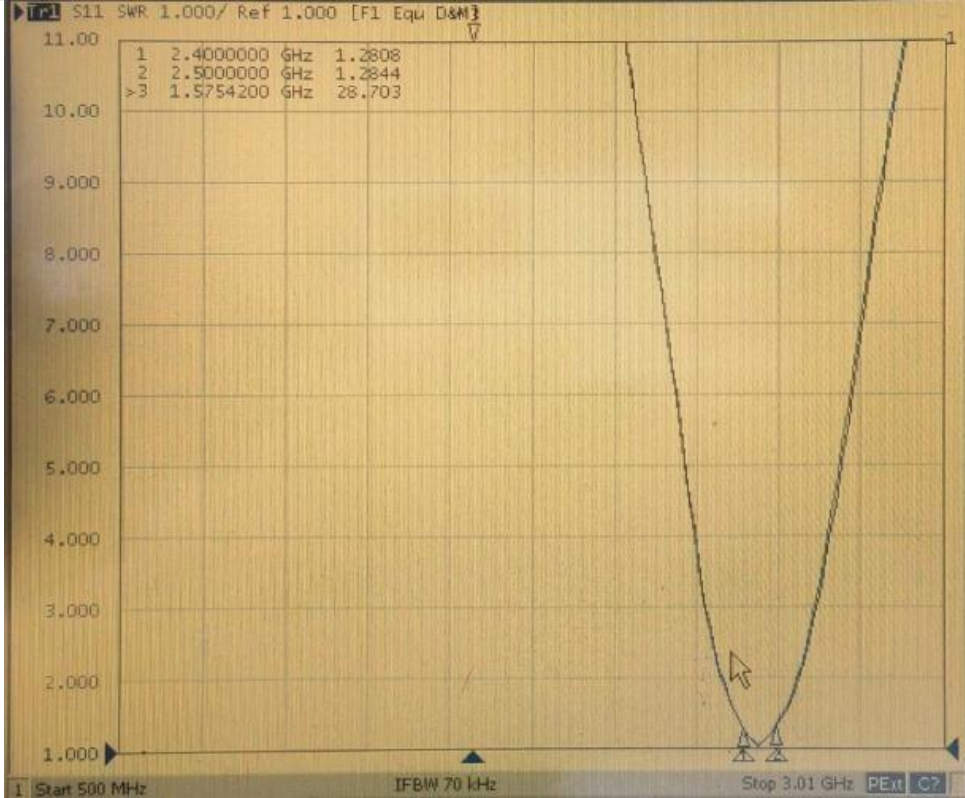
Test environment: Temperature $22^{\circ}\text{C}\pm 3^{\circ}\text{C}$, humidity $50\%\pm 15\%$

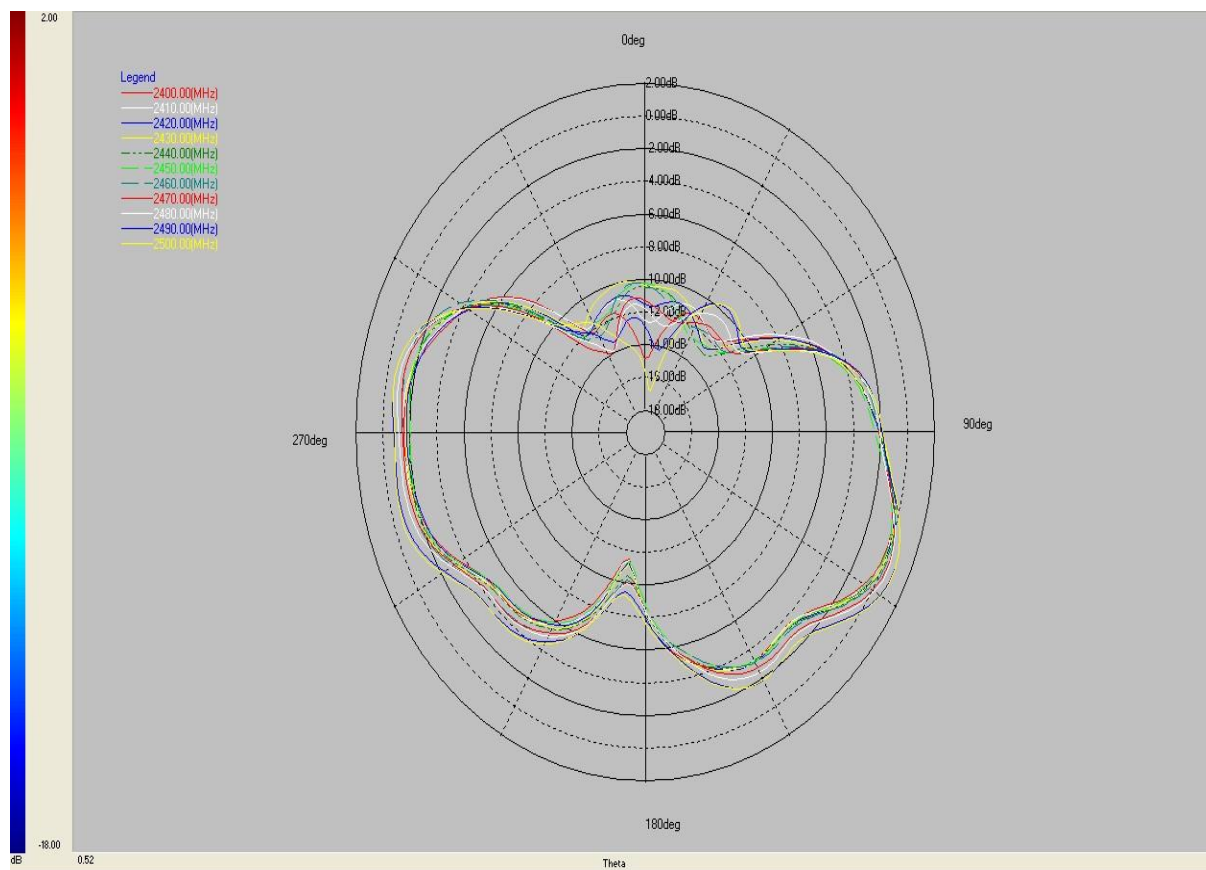
Test method: The DUT is fixed in the center position of the turntable with the H-plane, and the center position of the horn antenna is on the same horizontal line.

The positioning system enables the DUT to rotate throughout the spherical surface to meet the high accuracy of three-dimensional positioning. Each RF instrument, turntable controller and PC with automatic test software communicate through GPIB interface.

2.2.1BT antenna passive data

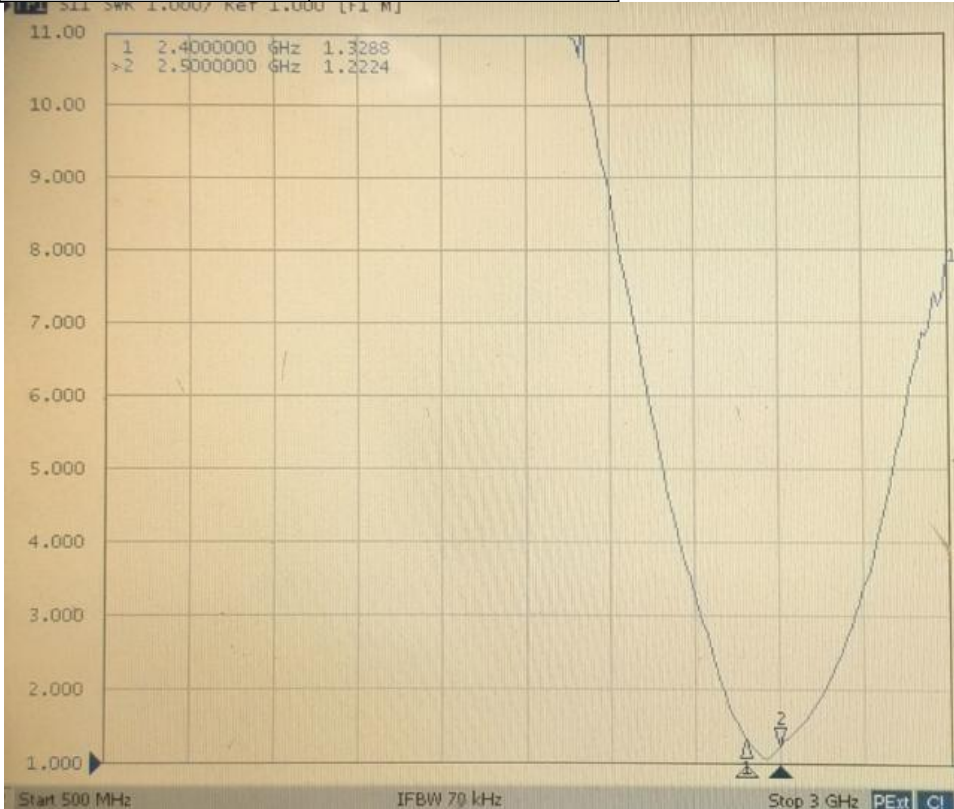
Freq	Gain(dBi)
2400.0	0.0
2410.0	-0.4
2420.0	-0.8
2430.0	-0.5
2440.0	-0.1
2450.0	-0.2
2460.0	-0.7
2470.0	-0.6
2480.0	-0.2
2490.0	-0.5
2500.0	-0.3

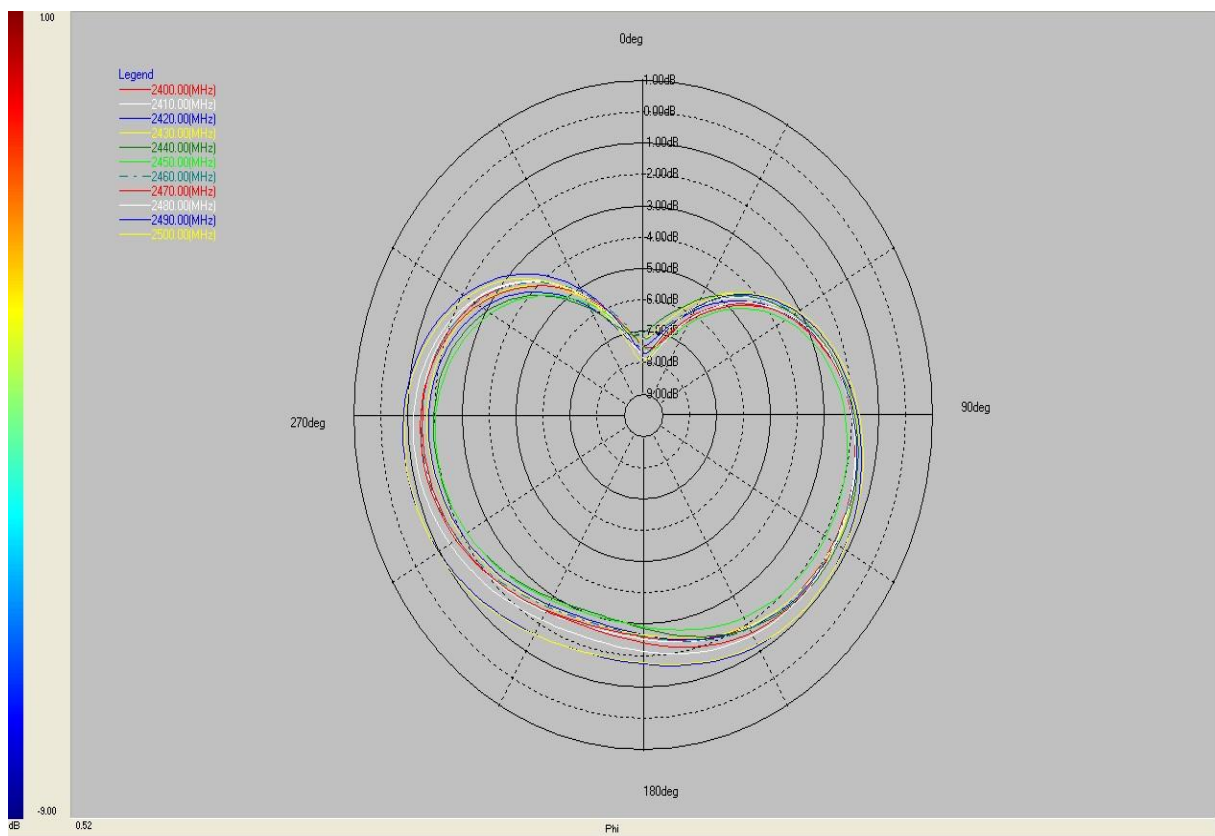




2.2.2 WIFI antenna passive data

Freq	Gain(dBi)
2400.0	0.0
2410.0	-0.7
2420.0	-0.2
2430.0	-0.5
2440.0	-0.6
2450.0	-0.7
2460.0	-0.6
2470.0	-0.7
2480.0	-0.4
2490.0	-0.6
2500.0	-0.3





2.2.3 Antenna active parameter

	802.11	Channel	TRP (db)	TIS (dbm)
WIFI	11B	CH1	13.74	
		CH6	13.35	
		CH11	13.62	-85.46
	11G	CH1	12.39	
		CH6	12.21	
		CH11	12.66	-68.34
	11N	CH1	12.16	
		CH6	12.27	
		CH11	12.34	-67.17

3.Engineering drawing

BT antenna

[illegible]

WIFI antenna

A		1		2		3		4		5		6		7		8	
B		1		2		3		4		5		6		7		8	
技术要求:																	
1. 基材规格:		PI基材:		1.3mm													
2. 电铸规格:		电铸层:		0.50±(D)													
3. 表面油膜要求:		表面油膜厚度:		3.0mm													
4. 可靠性要求:		印刷字体高度:		按图底要求													
5. 公差要求:		外形公差:		±0.15													
6. 重点管控尺寸:		倒角公差:		±0.05													
7. 环保要求:		环保要求:		符合RoHS													
8. 包装要求:		包装要求:		符合客户要求													
9. 其他要求:		其他要求:		符合客户要求													
10. 备注:		备注:		符合客户要求													
11. 日期:		日期:		2024.06.07													
12. 修改内容:		修改内容:		符合客户要求													
13. 版本:		版本:		V1.0													
14. 修订:		修订:		符合客户要求													
15. 位置:		位置:		符合客户要求													
16. 单位:		单位:		mm													
17. 比例:		比例:		1:1													
18. FIT:		FIT:		符合客户要求													
19. 版本:		版本:		V1.0													
20. RA:		RA:		符合客户要求													