



Material name T50

Sample color black

Sample type FPC:WIFI/BT

Customer model

R. A

Prepared	structure	character	ratify	Sample sending date
				2021. 5. 14



1. Customer antenna debugging design demand frequency band

frequency	frequency range
	2.4/5.8G WIFI

2. Antenna diagram



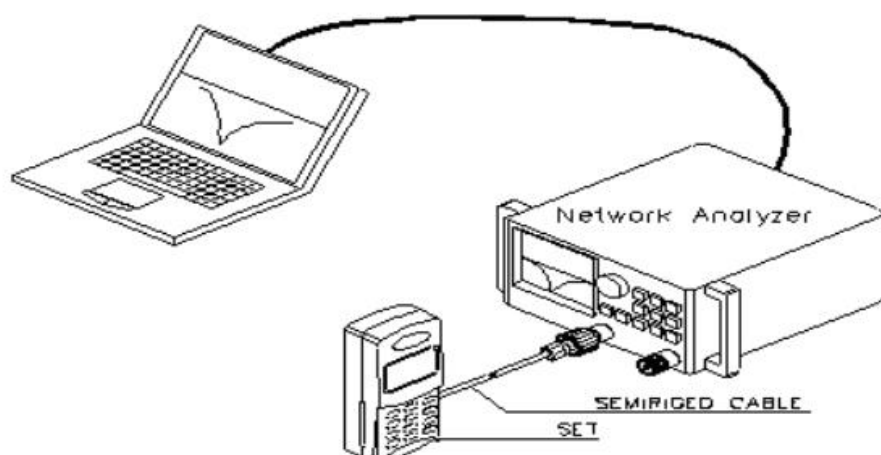
WIFI

3. Electrical performance

3.1 Test method description and data

Name	
Vector Network Analyzer	S11/Impedance/ Passive Test
Agilent 8960 SP6010 R&S CMU200	GSM、 GPRS、 EDGE、 CDMA2000、 1xEV-DO、 TD-SCDMA、 WCDMA、 HSDPA
R&S CMW500 MT8820C	TD-SCDMA、 WCDMA、 HSDPA、 LTE、 WIFI、 GPS
Agilent E4438C	GPS
MVG Chamber	Passive Test / OTA active Test / Efficiency/Gain

3.2 Passive Test Report

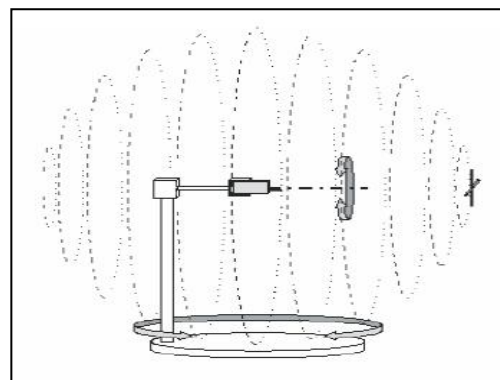
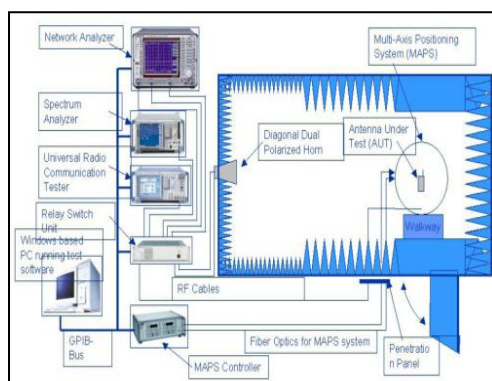
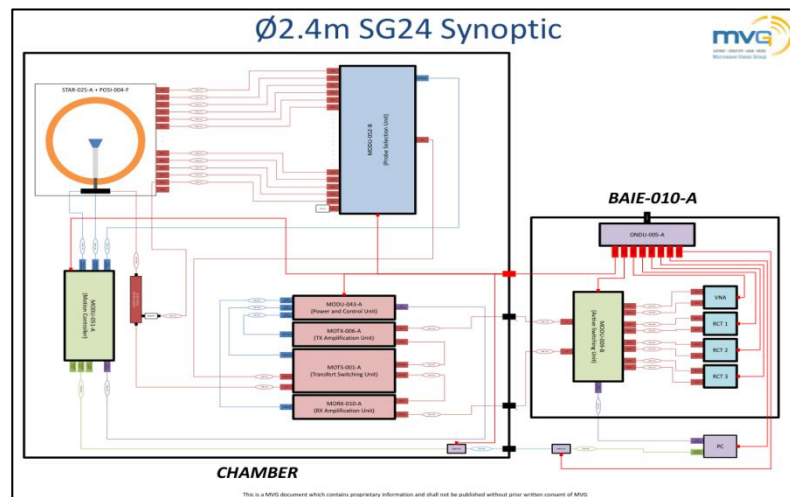


3.3 Active Test Report

TRP/TIS

$$TRP \cong \frac{\pi}{2NM} \sum_{i=1}^{N-1} \sum_{j=0}^{M-1} [EiRP_{\theta}(\theta_i, \phi_j) + EiRP(\theta_i, \phi_j)] \sin(\theta_i)$$

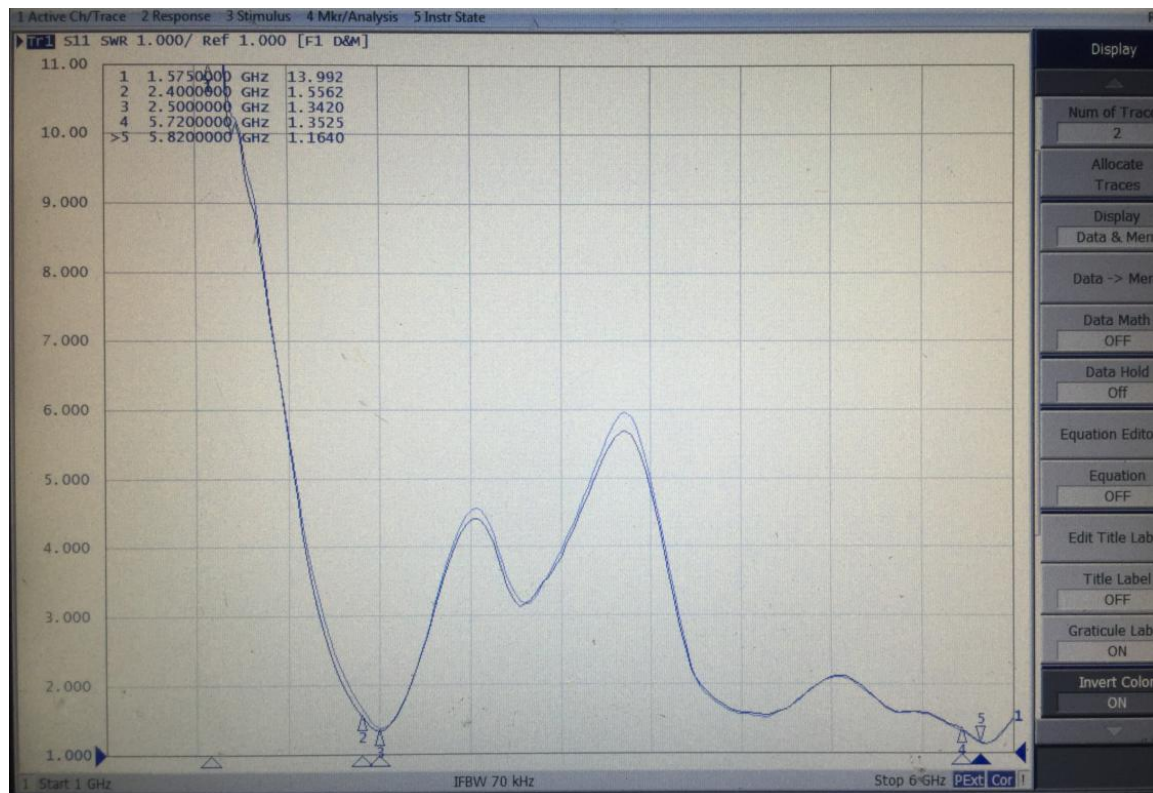
$$TIS \cong \frac{2NM}{\pi \sum_{i=1}^{N-1} \sum_{j=0}^{M-1} \left[\frac{1}{EIS_{\theta}(\theta_i, \phi_j)} + \frac{1}{EIS_{\phi}(\theta_i, \phi_j)} \right]} \sin(\theta_i)$$

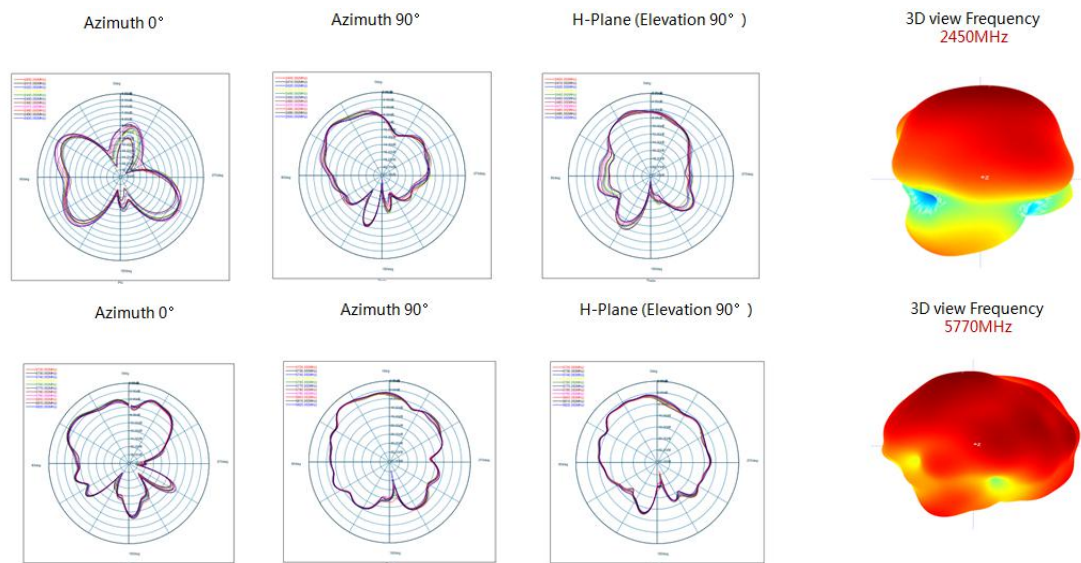


3.4 Passive Test

Frequency (Hz)	Efficiency	Gain . dBi
2400000000	21.69%	-1.06386
2410000000	21.53%	-1.09834
2420000000	21.50%	-1.26807
2430000000	22.05%	-1.25323
2440000000	22.19%	-1.26349
2450000000	22.10%	-1.42953
2460000000	22.18%	-1.53884
2470000000	22.77%	-1.34301
2480000000	22.89%	-1.18944
2490000000	22.97%	-1.22502
2500000000	23.30%	-1.25478

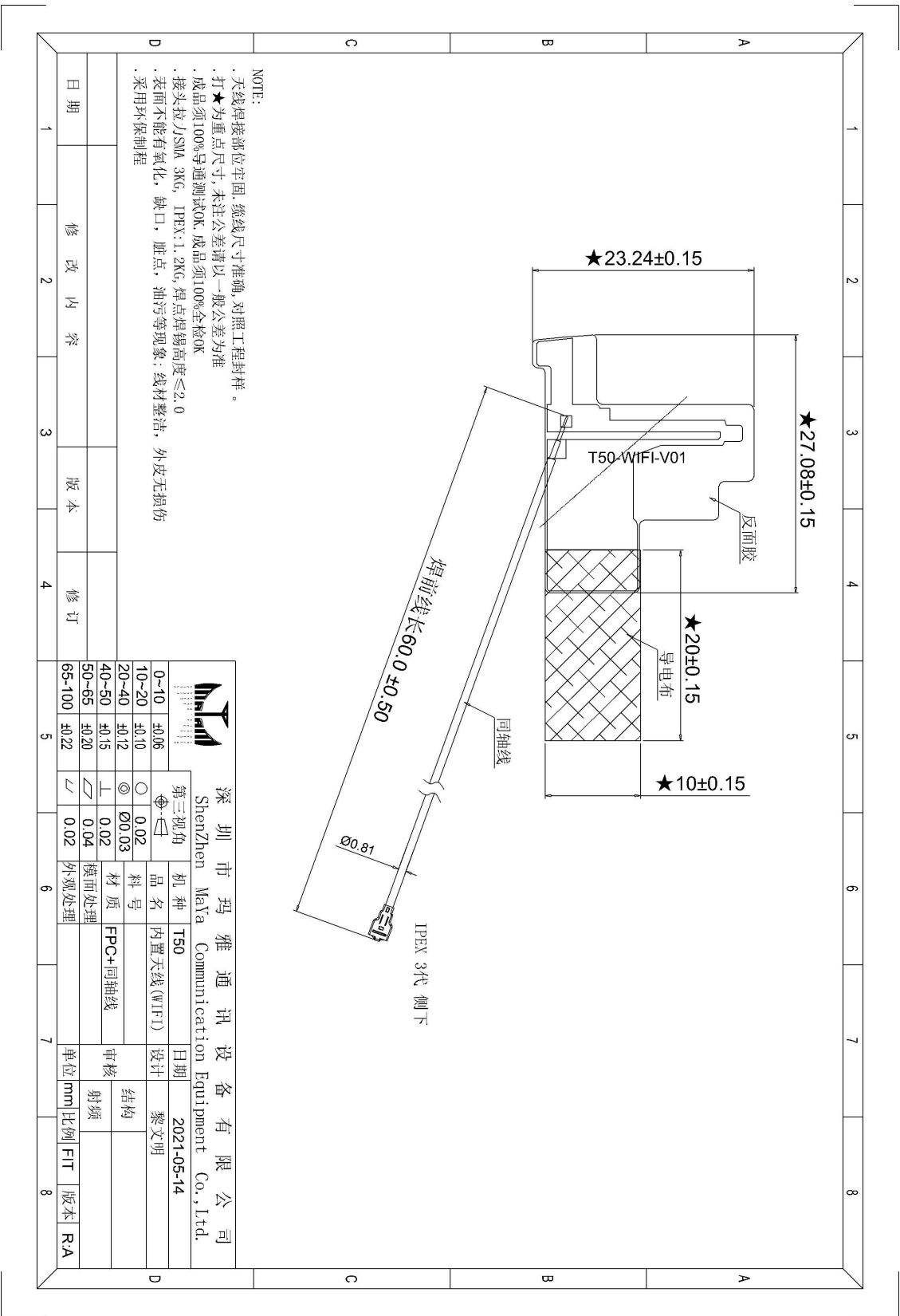
Frequency (Hz)	Efficiency	Gain . dBi
5720000000	32.66%	0.468704
5730000000	32.39%	0.564411
5740000000	32.97%	0.708767
5750000000	32.72%	0.502227
5760000000	33.69%	0.661059
5770000000	33.97%	0.809554
5780000000	33.92%	0.779654
5790000000	32.21%	0.390648
5800000000	31.84%	0.215442
5810000000	34.10%	0.664922
5820000000	33.33%	0.637817





3.5 OTA TRP/TIS

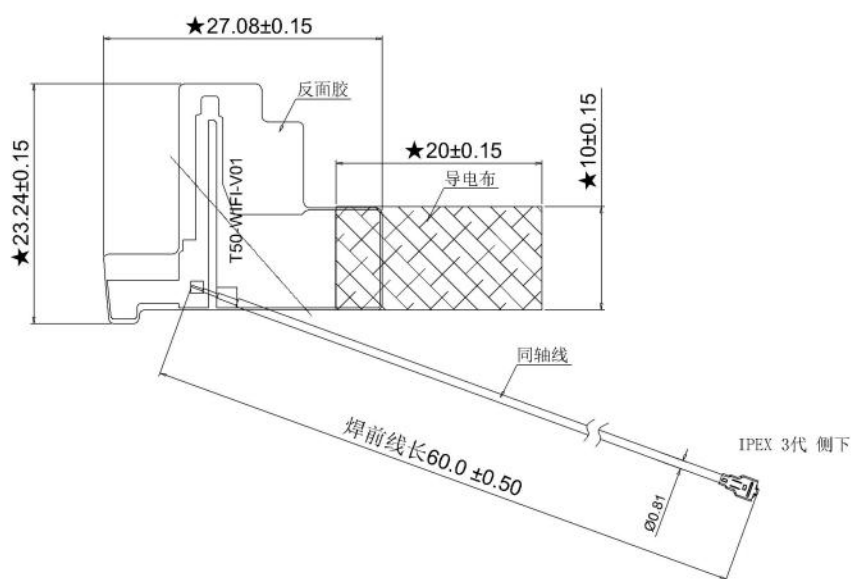
WIFI	BAND	2.4G-WIFI-B			2.4G-WIFI-G		
	CHANNAL	1	6	11	1	6	11
	TRP	11.1	11.2	11.5	10.6	10.7	10.8
	TIS			-81.3	--	--	-69.1
	BAND	2.4G-WIFI-N			5.8G-WIFI-A		
	CHANNAL	1	6	11	36	100	165
	TRP	10.1	10.2	10.2	9.2	8.4	6.8
	TIS	--	--	-67.4			-64.7



5. Dimensional inspection report

material FPC

Project name T50



	Base value (mm)	public errand + (mm)	public errand - (mm)	1	2	3	4	5	
1	27.08	0.15	0.15	27.18	27.20	27.08	26.98	27.00	OK
2	23.24	0.15	0.15	23.34	23.35	23.24	23.14	23.15	OK
3	20.00	0.15	0.15	22.10	22.11	19.90	19.92	20.00	OK
4	10.00	0.15	0.15	10.10	10.12	10.00	9.90	9.92	OK
5	60.00	0.5	0.5	60.25	60.30	30.00	59.80	59.85	OK
6									
7									
8									
9									
10									