

Shenzhen Etheta Communicate Ltd.
(Shenzhen R&D)

Customer: TCL Communication Ltd.

Project name: GAIA

Product name: GAIA antenna

Material: FPC

Date: 2023.5.16

Test system introduction:

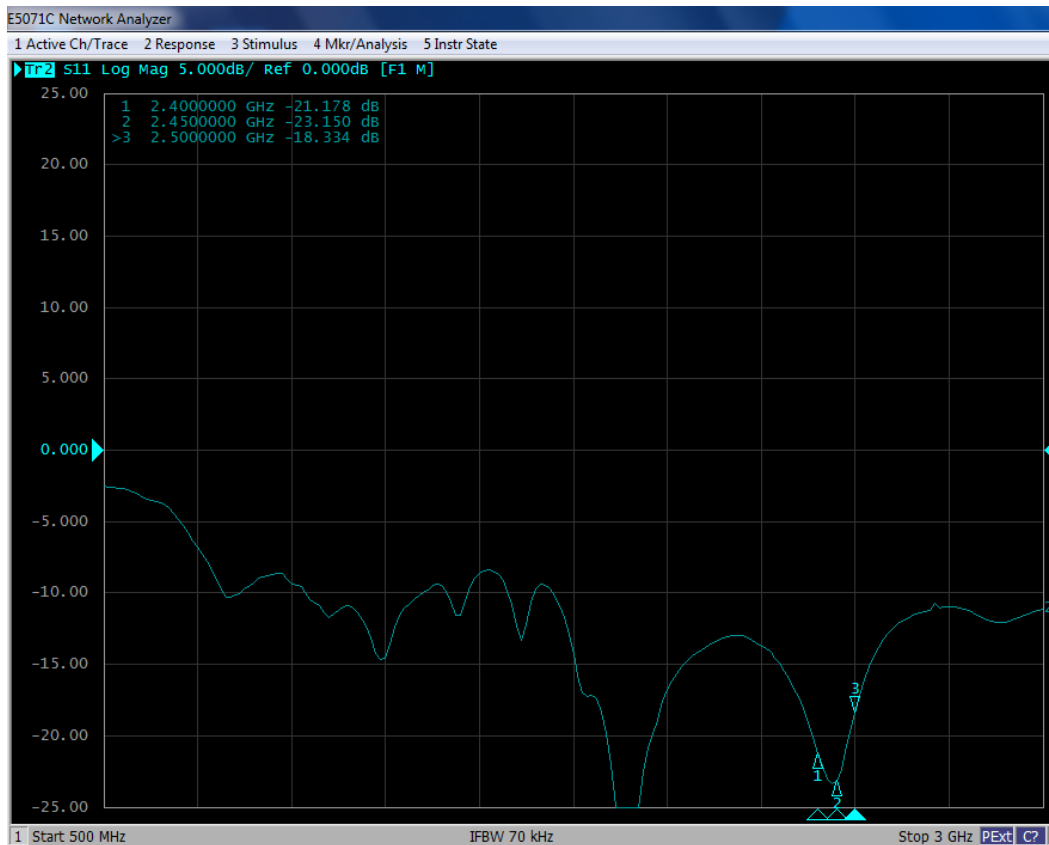
实验室测试环境及设备

测试项目	测试设备
S11、S12、VSWR、LOSS	网络分析仪E5071C
Efficiency、Gain	SATIMO暗室
TRP、TIS	8960、GTS2800
SAR&HAC	SAR 测试系统

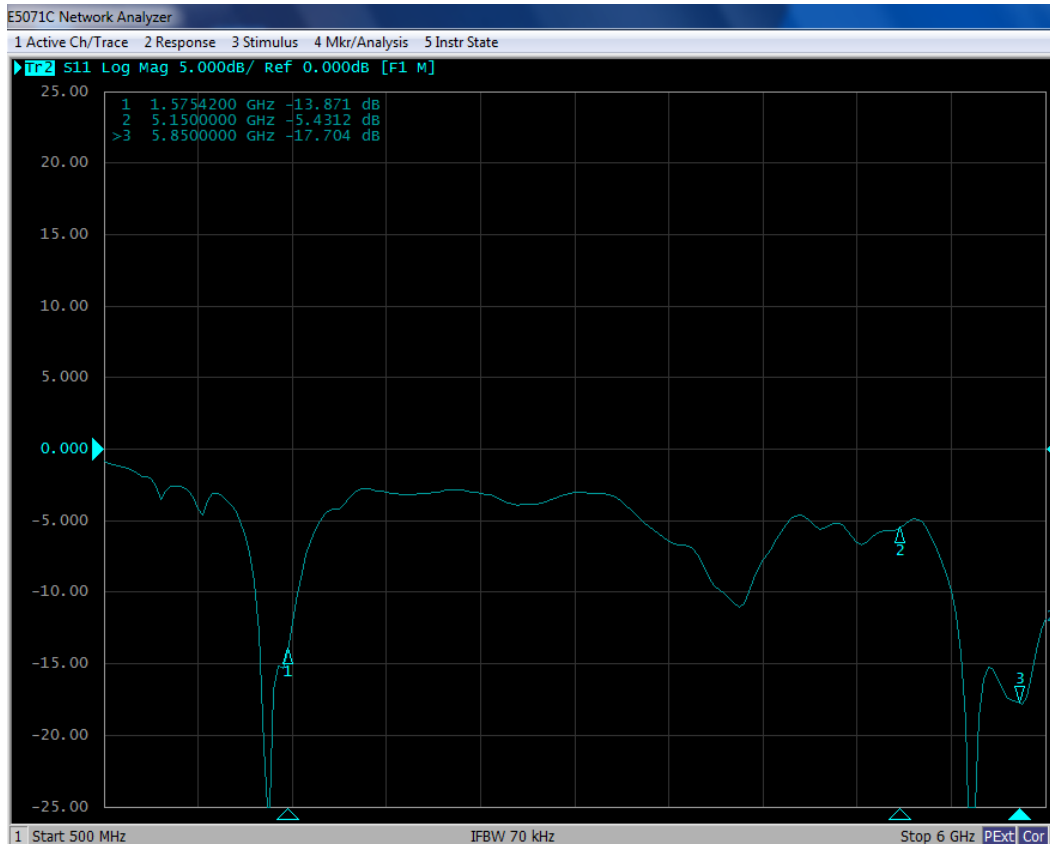


S11:

1、2.4G WIFI



2、WiFi 5G+GPS



Effi, Gain:

1、2.4G WIFI

Fre(MHz)	Effi	Effi(dB)	Peak Gain	AVG Gain
2400	38%	-4.26	-0.26	-2.76
2410	39%	-4.04	-0.14	-2.54
2420	41%	-3.88	0.12	-2.38
2430	41%	-3.83	0.27	-2.33
2440	41%	-3.84	0.4	-2.34
2450	41%	-3.86	0.19	-2.36
2460	41%	-3.92	0.10	-2.42
2470	39%	-4.09	0.06	-2.59
2480	38%	-4.25	-0.25	-2.75
2490	37%	-4.29	-0.29	-2.79
2500	38%	-4.21	-0.21	-2.71

2、WiFi 5G+GPS

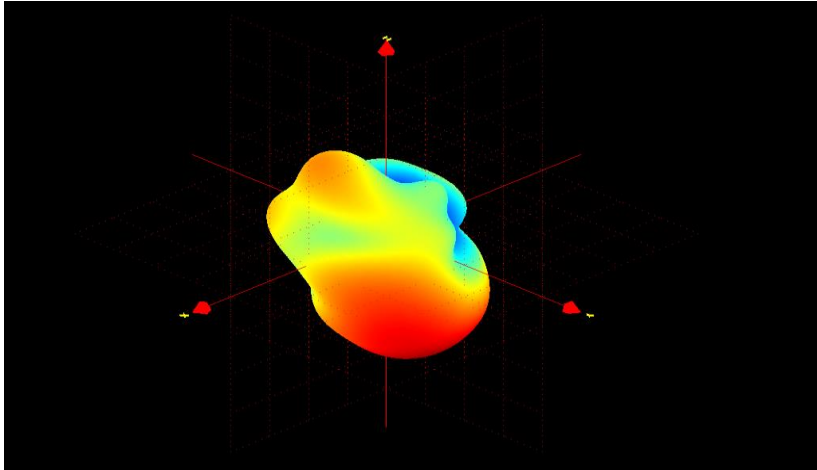
Fre(MHz)	Effi	Effi(dB)	Peak Gain	AVG Gain
1550	15%	-8.18	-0.12	-3.08
1555	15%	-8.27	-0.07	-3.17
1560	15%	-8.28	-0.08	-3.18
1565	16%	-8.02	0.01	-3.10
1570	18%	-7.81	-0.02	-3.07
1575	18%	-7.54	0.05	-3.82
1580	17%	-7.94	-0.01	-3.11
1585	15%	-8.34	-0.14	-3.24
1590	14%	-8.39	-0.19	-3.29
1595	14%	-8.55	-0.22	-3.45
1600	14%	-8.55	-0.24	-3.45
5150	23%	-6.32	-0.62	-4.07
5170	23%	-6.42	-0.46	-4.17
5190	24%	-6.25	-0.35	-4.00
5210	24%	-6.24	-0.24	-3.99
5230	23%	-6.43	0.14	-4.18
5250	22%	-6.53	0.37	-4.28
5270	23%	-6.43	0.20	-4.18
5290	22%	-6.62	0.12	-4.37
5310	20%	-6.94	-0.22	-4.69

5330	21%	-6.85	-1.35	-4.60
5350	21%	-6.73	-1.23	-4.48
5370	22%	-6.55	-1.05	-4.30
5390	23%	-6.46	-0.96	-4.21
5410	23%	-6.42	-0.92	-4.17
5430	23%	-6.43	-0.93	-4.18
5450	22%	-6.57	-1.07	-4.32
5470	23%	-6.47	-0.97	-4.22
5490	23%	-6.38	-0.88	-4.13
5510	24%	-6.21	-0.71	-3.96
5530	23%	-6.34	-0.84	-4.09
5550	23%	-6.34	-0.84	-4.09
5570	24%	-6.18	-0.68	-3.93
5590	25%	-5.99	-0.49	-3.74
5610	25%	-5.94	-0.44	-3.69
5630	25%	-6.00	-0.50	-3.75
5650	25%	-6.02	-0.52	-3.77
5670	25%	-6.07	-0.57	-3.82
5690	24%	-6.17	-0.67	-3.92
5710	24%	-6.19	-0.69	-3.94
5730	24%	-6.25	-0.75	-4.00
5750	23%	-6.45	-0.95	-4.20
5770	22%	-6.65	-1.15	-4.40
5790	20%	-7.06	-1.56	-4.81
5810	19%	-7.17	-1.67	-4.92
5830	18%	-7.42	-1.92	-5.17
5850	17%	-7.70	-1.90	-5.45

3D Pattern:

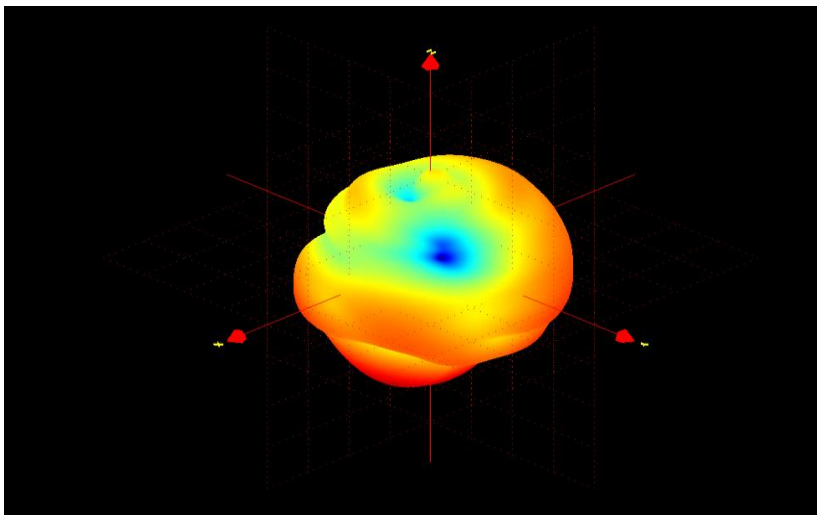
1、 2.4G WIFI

Frequency=2450MHz:



2、 WiFi 5G+GPS

Frequency=1575MHz:



Frequency=5500MH

