

德威玛通讯设备有限公司
DWM Communication Equipment Co., Ltd.

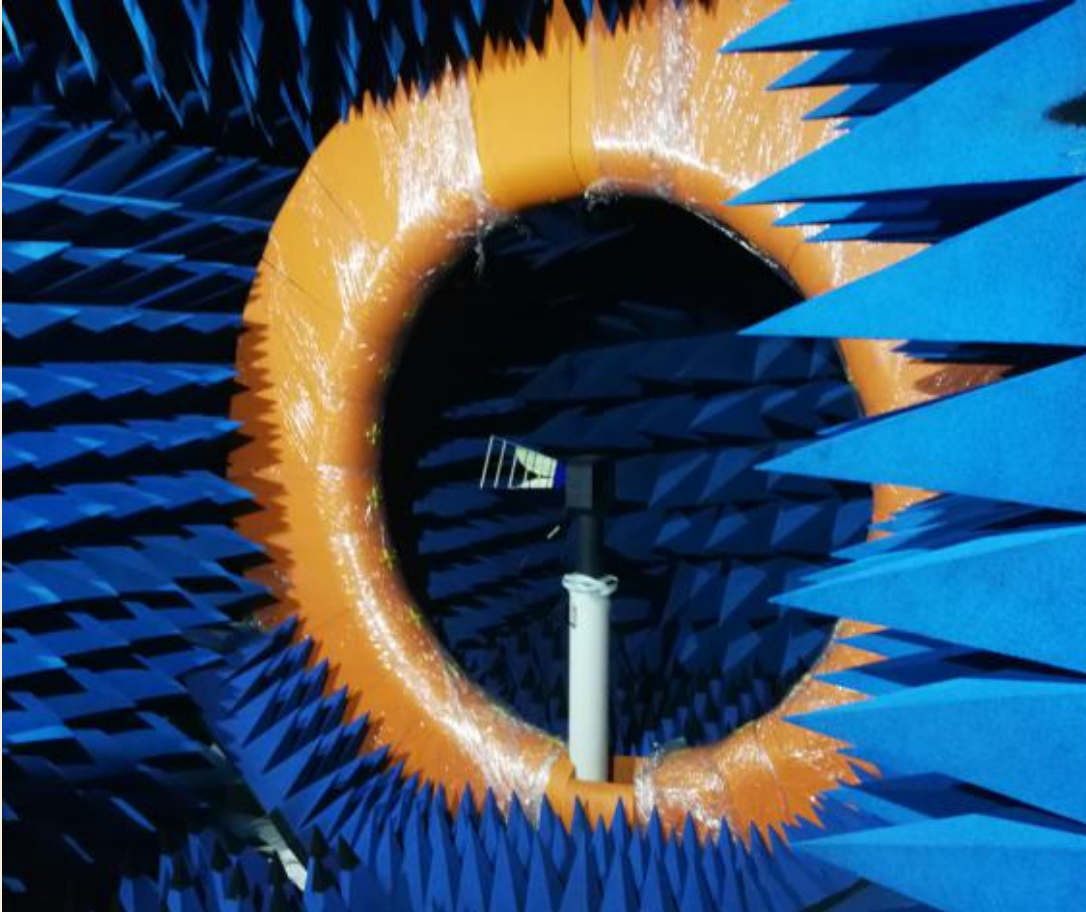
Antenna Test Report
天线测试报告

❖ DATE: 2024-11-08

Manufacturer: Shenzhen Kingwo IoT Co., Ltd.

Address: Room 2403, 24th Floor, 2A, International Innovation Building, 1st Dashi Road, Xili,
Nanshan District, Shenzhen, China 518055

Test Equipment



A 24-probe microwave chamber



5G StarPoint SP9500



R&S CMW500



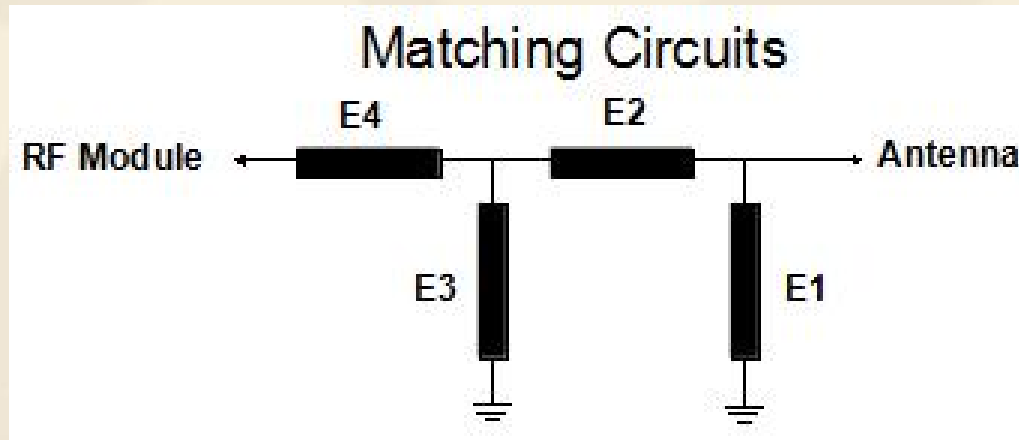
Agilent Technologies E5071C

Customer	VODOFO	Customer Number	NT35E
Antenna Band	LTE-CATM/NB-IOT/GSM: 699~960MHz&1710~2690MHz GPS:1575.42MHz WIFI:2.4~2.5GHz	DWM Number	
Date	2024/11/08	Author	

Specification

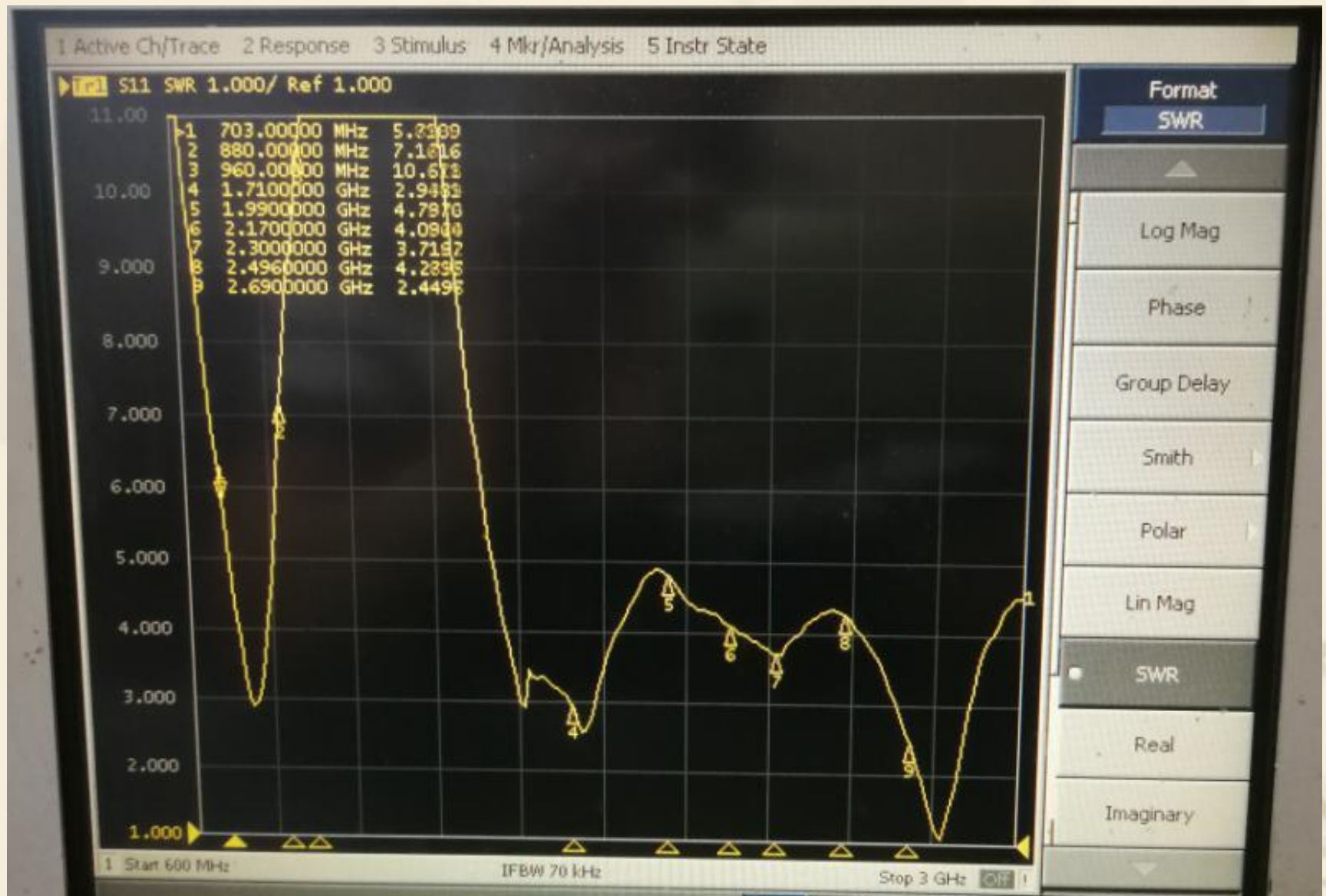
Technology Parameters	
Frequency (MHz)	699~960MHz 1710~2690MHz 1575.42MHz 2400~2500MHz
Peak Gain(dBi)	699~960 MHz:-0.18dBi 1710~2690MHz:2.3dBi 1575.42MHz:2.11dBi 2400~2500MHz:2.65dBi
Efficiency(%)	699~960 MHz>15% 1710~2690MHz>30% 1575.42MHz>50% 2400~2500MHz>35%
VSWR	699~960 MHz<11.0 1710~2690MHz<5.0 1575.42MHz<2.0 2400~2500MHz<2.0
Impedance (Ω)	50 Ω
Antenna Type	LTE-CATM: Monopole GPS: PATCH WIFI: IFA
Polarization	LTE-CATM: Linear GPS: Circular WIFI: Linear

The matching test value

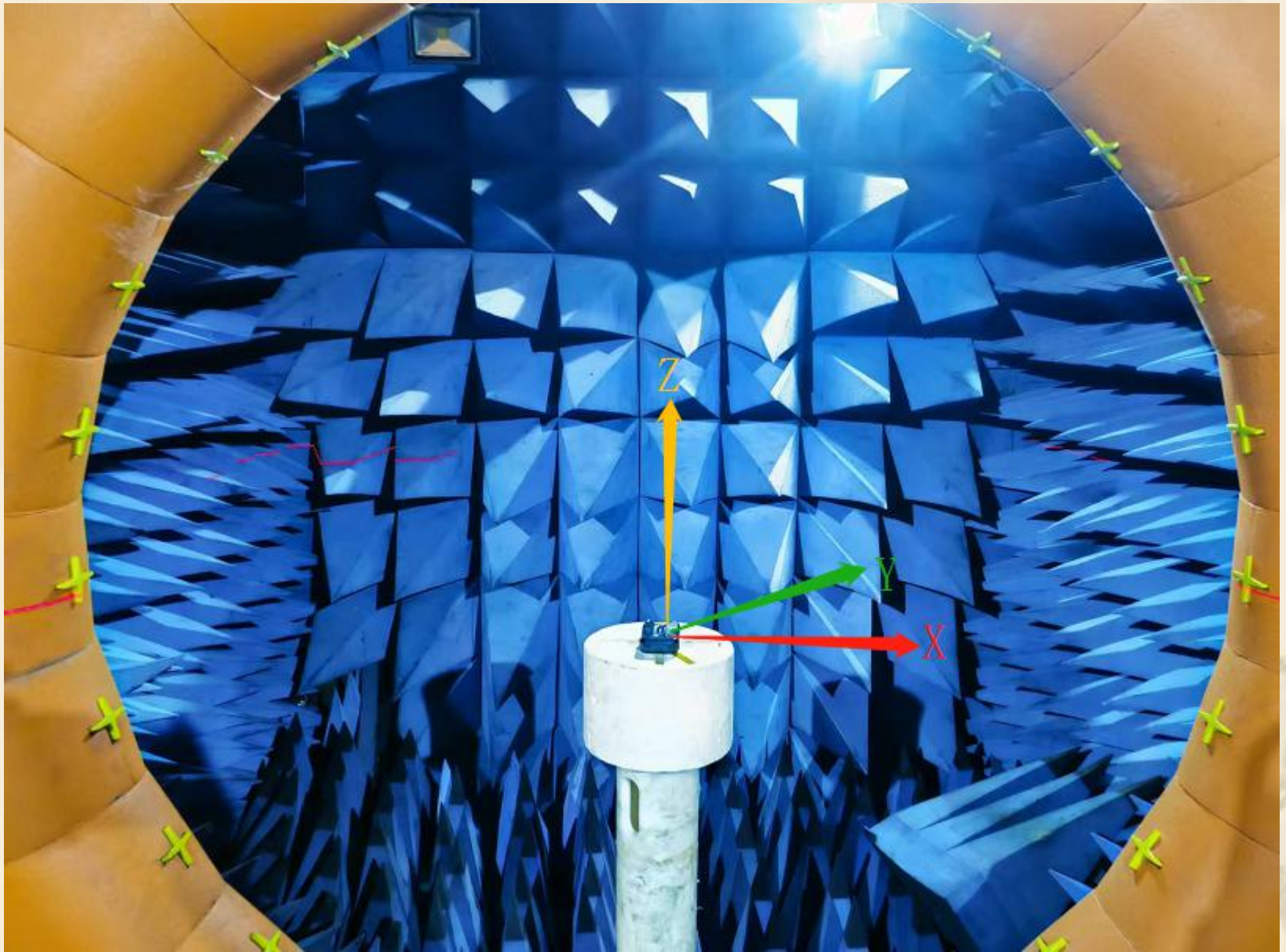


Element	Value
E1(0201)	8.2nH
E2(0201)	0 Ω
E3(0201)	NC
E4(0201)	

Anechoic Chamber Test



Anechoic Chamber Test



LTE-CATM Antenna Product drawing

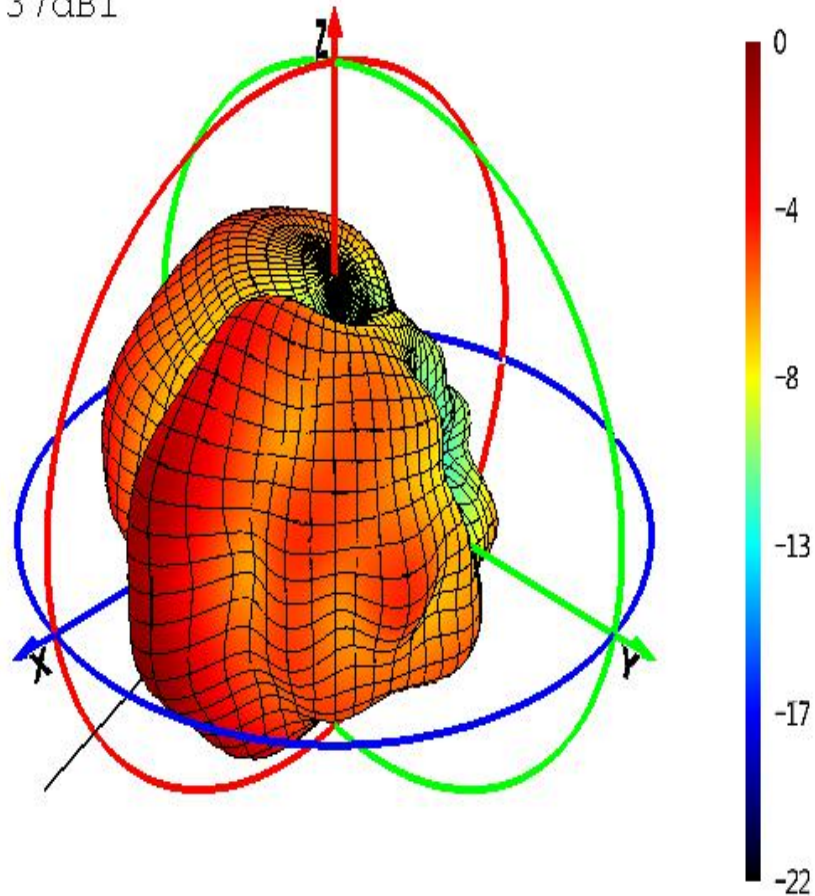


LTE-CATM Antenna Gain And Efficiency;

Gain&Efficiency				
Frequency(MHz)	Gain(dBi)	MinGain(dBi)	Efficiency(dB)	Efficiency(%)
700.00	-2.36	-20.37	-8.05	15.66
720.00	-1.51	-19.48	-7.42	18.12
740.00	-1.19	-20.58	-7.21	19.00
760.00	-0.86	-20.24	-7.08	19.59
780.00	-0.27	-17.04	-6.44	22.70
800.00	-0.18	-21.79	-5.70	26.89
820.00	-0.26	-22.37	-6.30	23.43
840.00	-0.30	-17.85	-6.02	25.01
860.00	-1.33	-19.23	-6.90	20.41
880.00	-1.52	-17.76	-6.64	21.69
900.00	-1.34	-18.75	-6.90	20.43
920.00	-1.63	-19.85	-8.13	15.38
940.00	-1.15	-16.04	-7.90	16.22
960.00	-1.37	-15.46	-6.95	20.18
1700.00	1.43	-15.87	-3.27	47.09
1730.00	1.37	-16.29	-3.51	44.53
1800.00	1.23	-17.76	-3.57	43.96
1900.00	1.76	-18.48	-3.37	45.97
2000.00	2.30	-36.41	-3.35	46.24
2100.00	1.48	-25.19	-5.15	30.58
2200.00	0.20	-17.97	-5.20	30.1
2300.00	0.43	-20.68	-4.95	31.99
2400.00	1.10	-22.08	-4.45	35.93
2500.00	0.98	-25.76	-4.29	37.22
2600.00	0.28	-18.23	-3.89	40.87
2700.00	0.45	-21.27	-4.58	34.83

LTE-CATM Antenna 3D Pattern(800MHz):

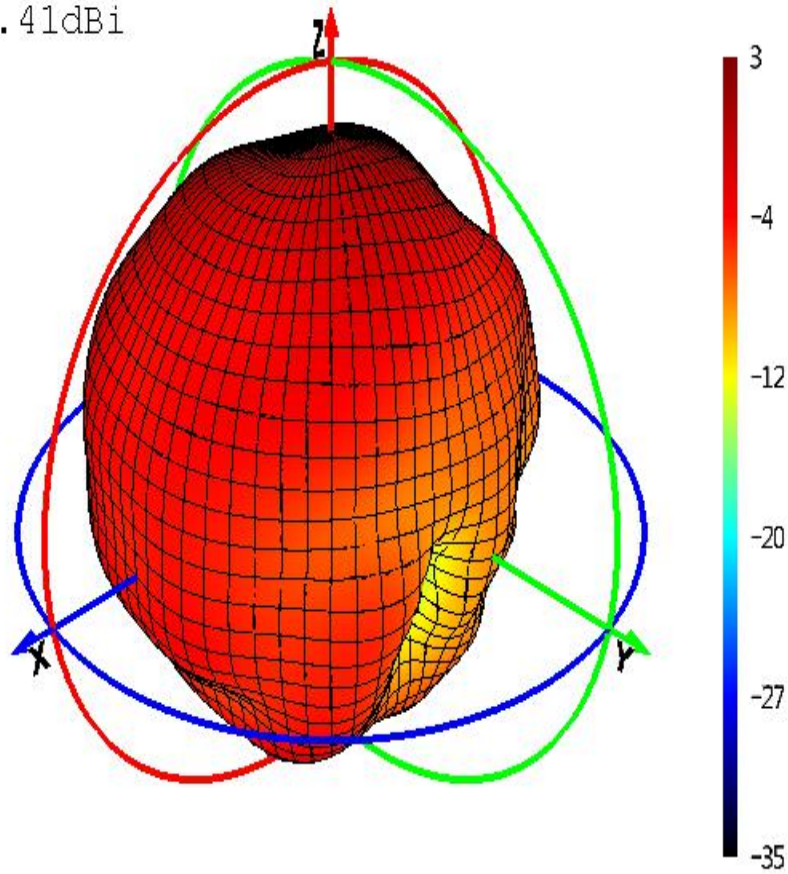
MAX:-0.18dBi
MIN:-22.37dBi



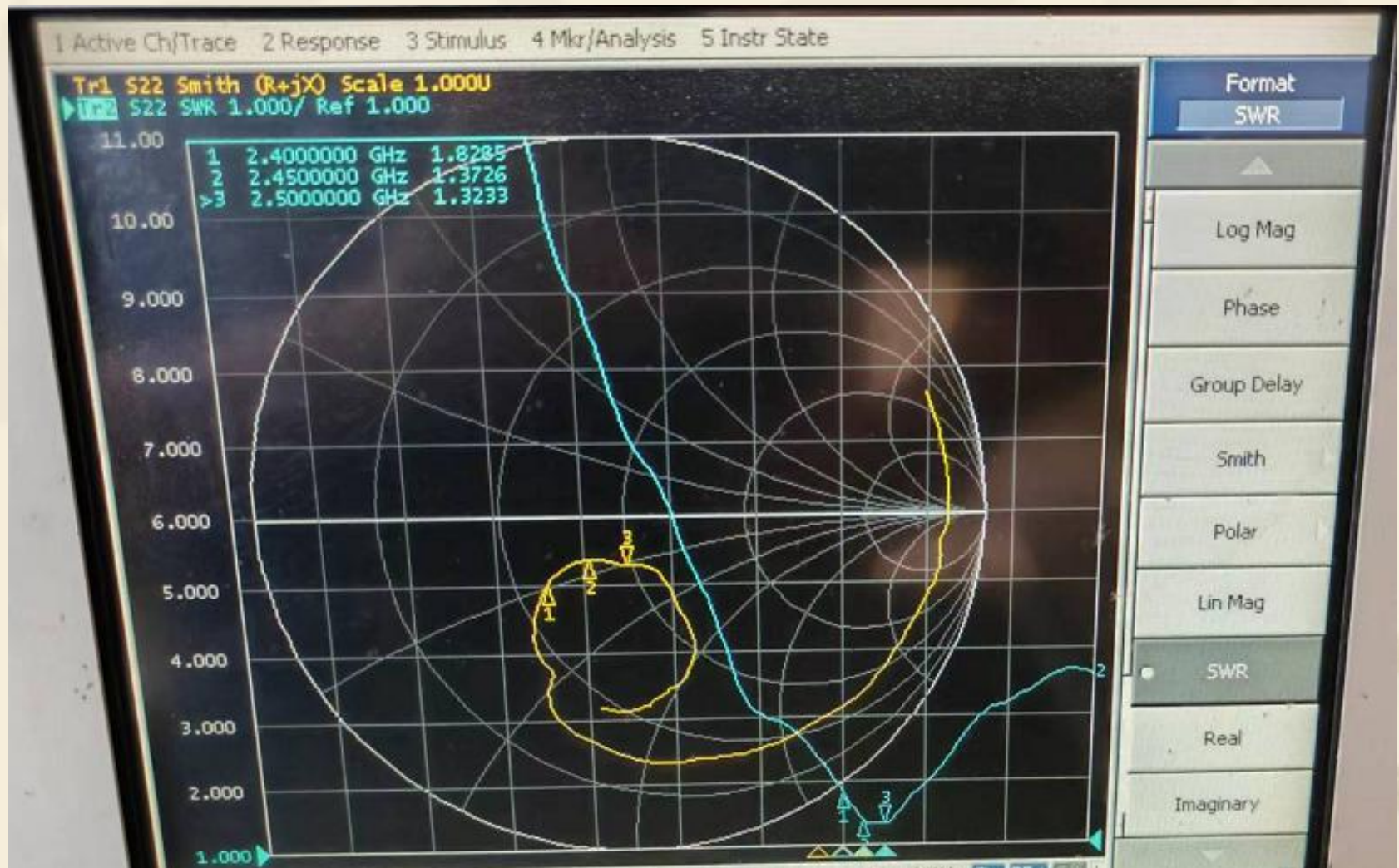
LTE-CATM Antenna 3D Pattern(2000MHz):

MAX:2.3dBi

MIN:-36.41dBi



WIFI Antenna Passive Data(SWR):



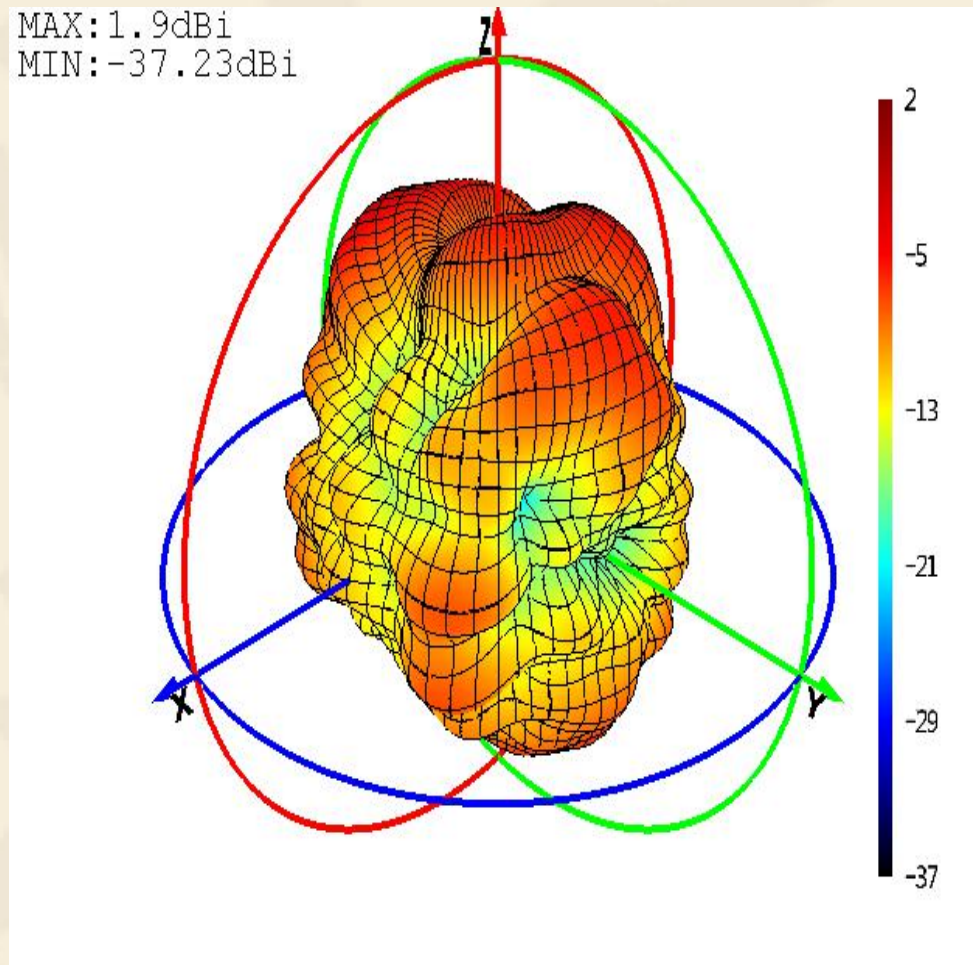
WIFI Antenna Product drawing



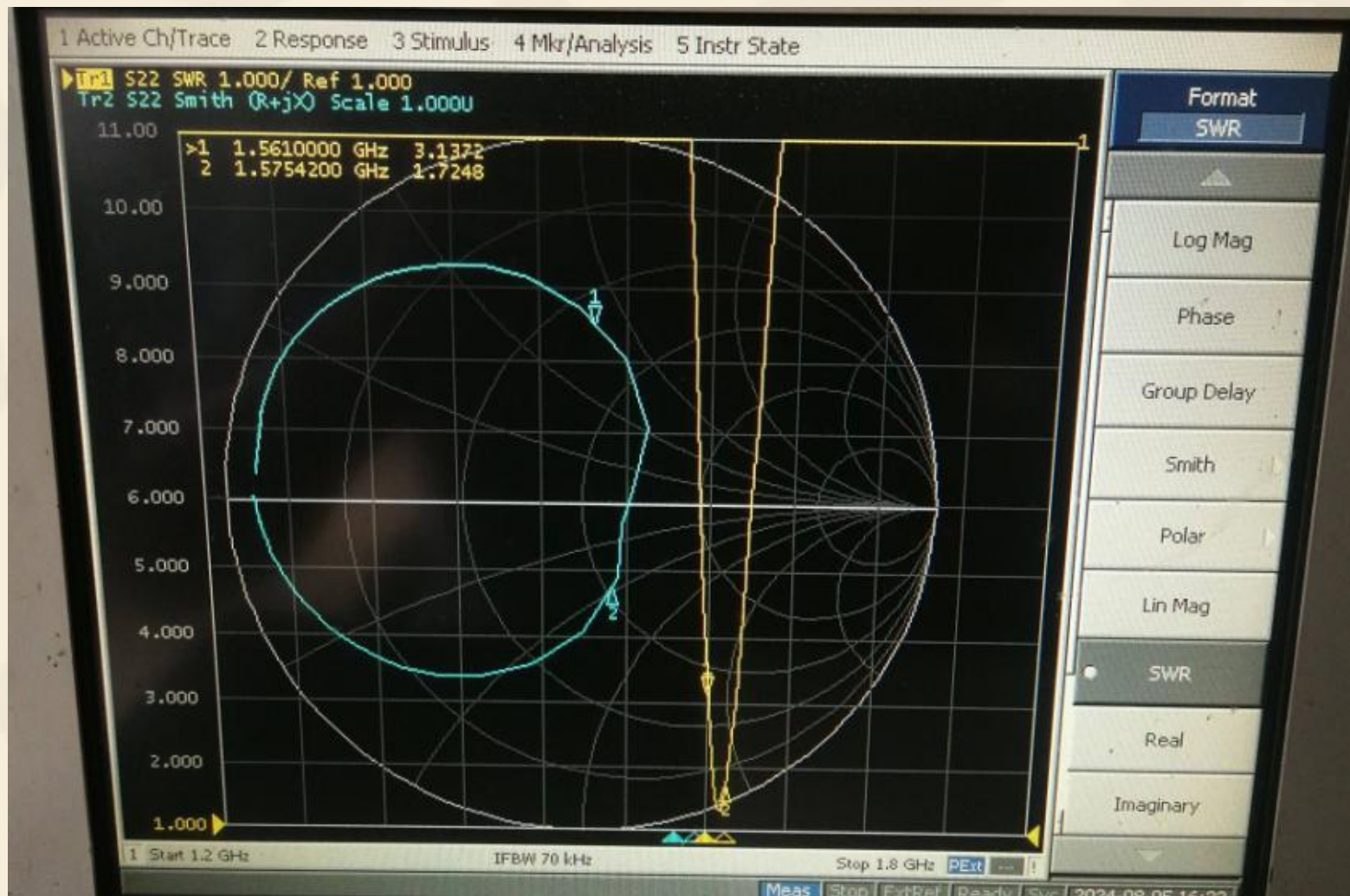
WIFI Antenna Gain And Efficiency;

Gain&Efficiency				
Frequency (MHz)	Gain (dBi)	MinGain (dBi)	Efficiency (dB)	Efficiency (%)
2400.00	2.49	-35.28	-3.85	41.22
2410.00	2.35	-34.79	-3.83	41.42
2420.00	2.65	-33.18	-3.79	41.75
2430.00	2.62	-37.35	-4.36	36.63
2440.00	1.93	-33.45	-4.32	36.99
2450.00	1.90	-37.23	-4.59	35.08
2460.00	1.67	-35.25	-4.53	35.25
2470.00	1.99	-39.87	-4.55	35.15
2480.00	2.03	-33.73	-4.42	36.15
2490.00	2.18	-29.17	-4.16	38.36
2500.00	2.65	-26.84	-4.03	39.53

WIFI Antenna 3D Pattern(2450MHz):



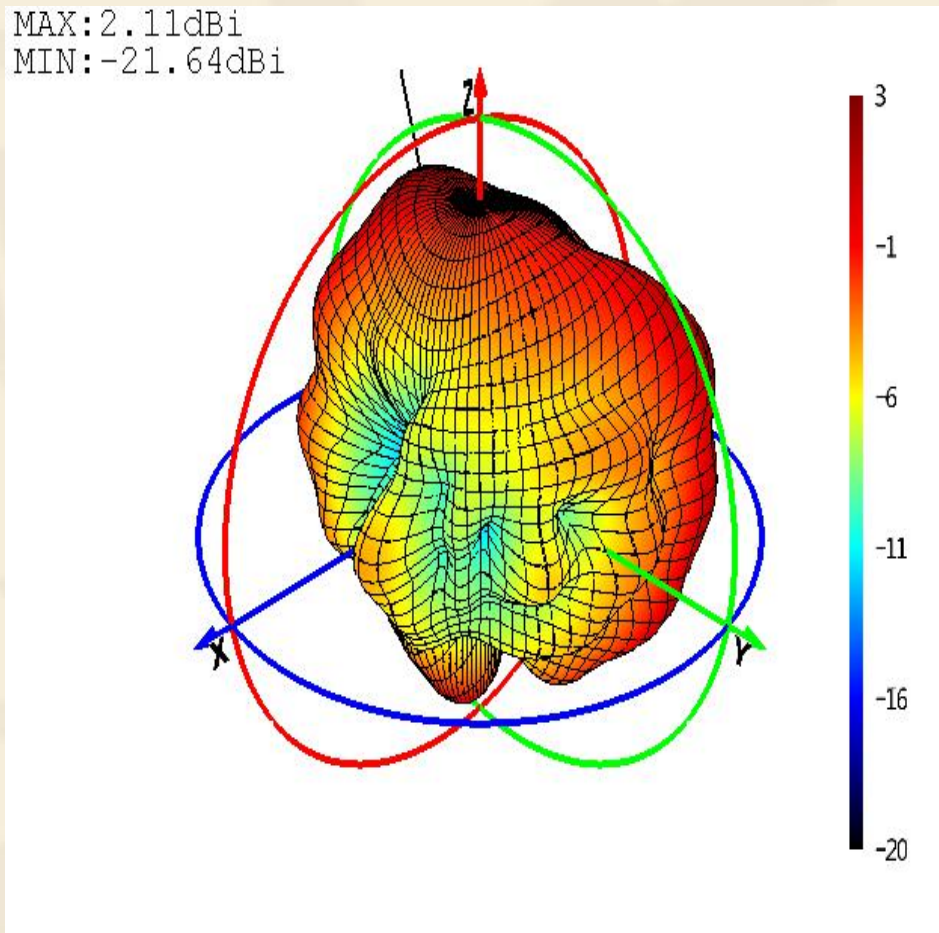
GPS Antenna Passive Data(SWR):



GPS Antenna Gain And Efficiency;

Frequency (MHz)	Gain (dBi)	MinGain (dBi)	Efficiency (dB)	Efficiency (%)
1570.42	2.91	-20.70	-1.84	65.52
1575.42	2.11	-21.64	-2.63	54.61
1580.42	2.24	-21.90	-2.44	57.02

GPS Antenna 3D Pattern(1575.42MHz):





Thanks for your support.

DWM Communication Equipment co.,ltd

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