

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

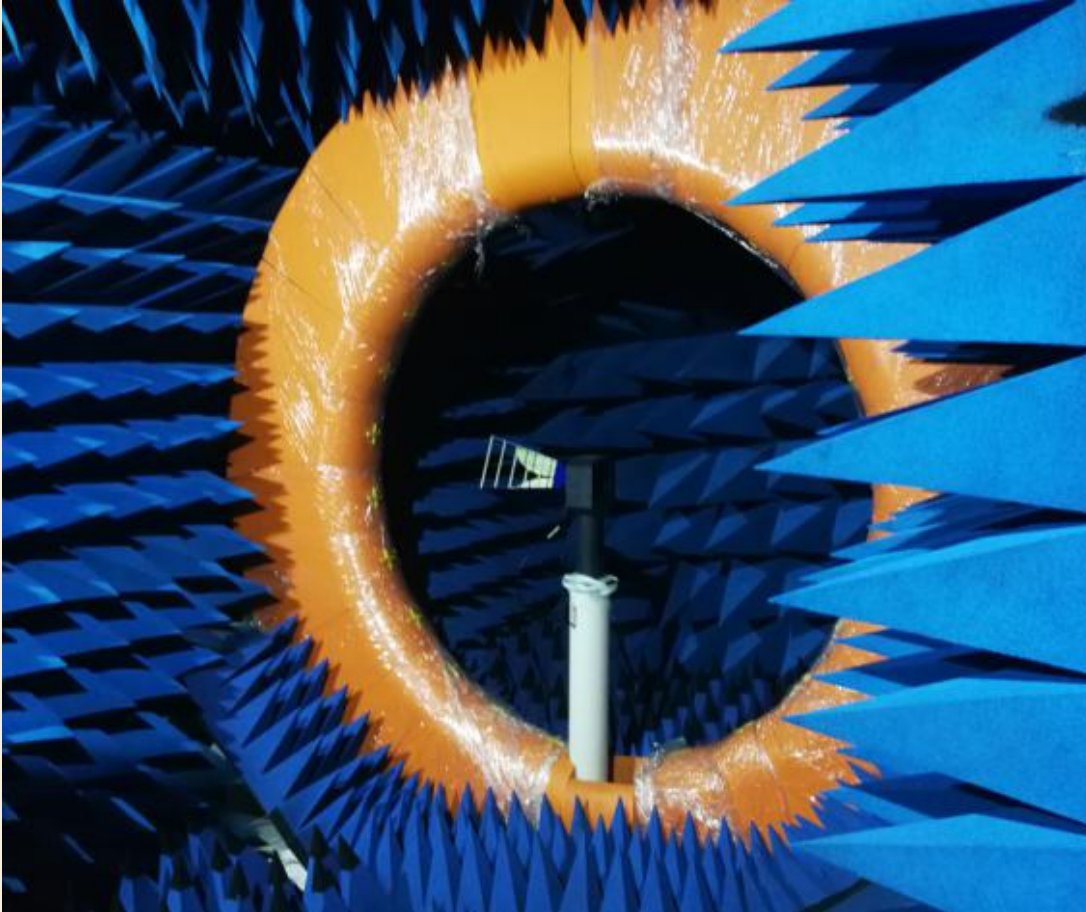
Antenna Test Report
天线测试报告

❖ 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



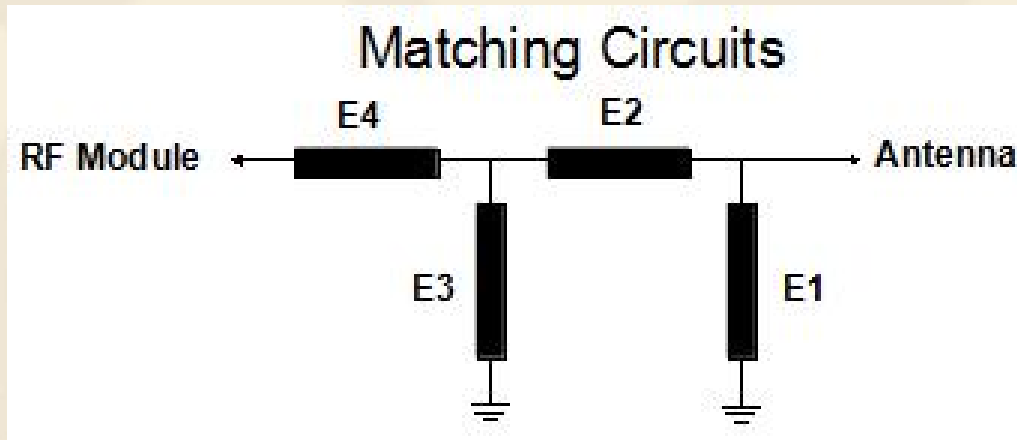
Agilent Technologies E5071C

Customer	VODOFO	Customer Number	NT68E
Antenna Band	LTE-CATM/NB-IOT/GSM: 699~960MHz&1710~2690MHz GPS:1575.42MHz BT/WIFI:2.4~2.5GHz	DWM Number	
Date	2024/11/08	Author	

Specification

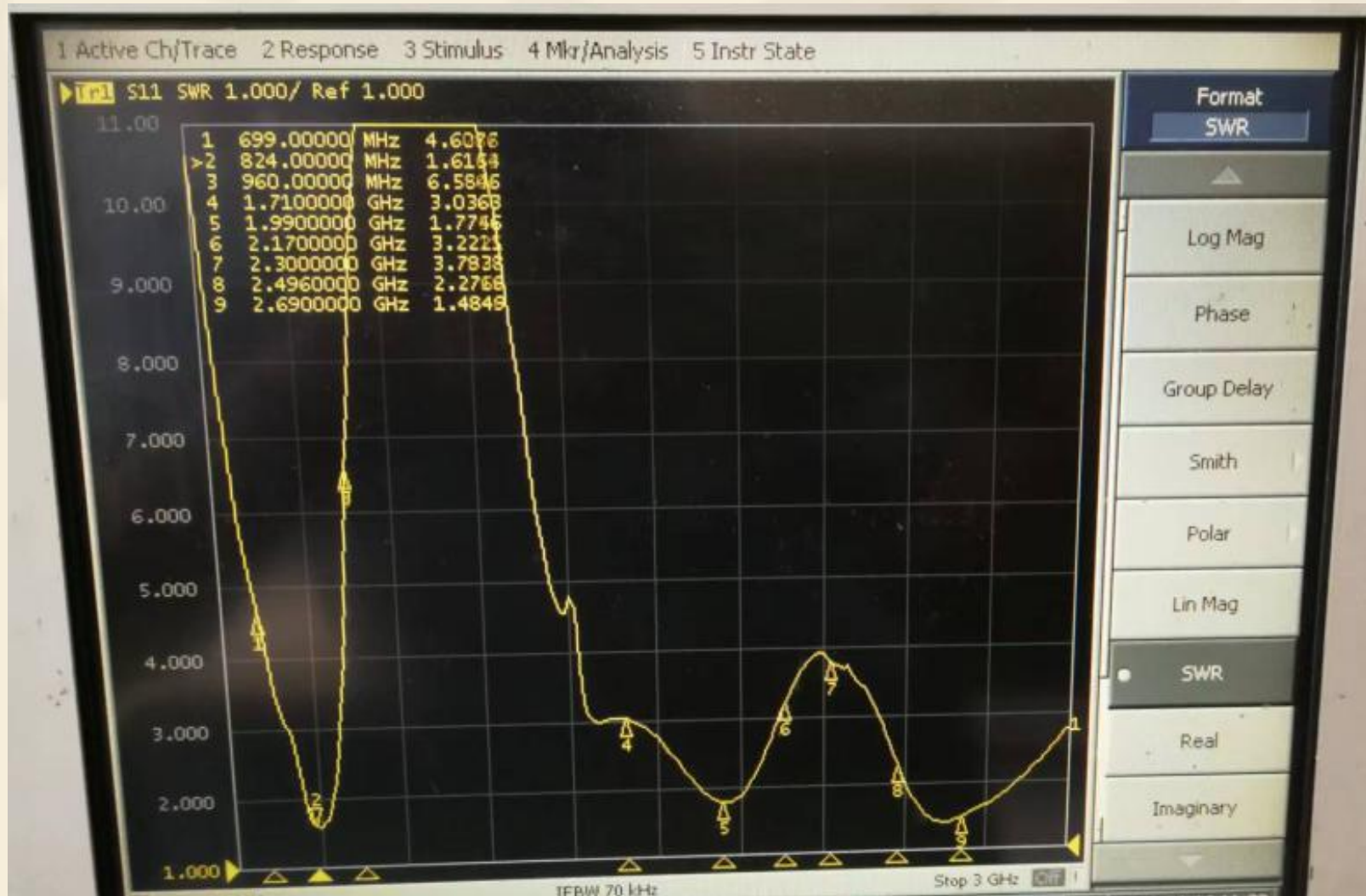
Technology Parameters	
Frequency (MHz)	699~960MHz 1710~2690MHz 1575.42MHz 2400~2500MHz
Peak Gain(dBi)	699~960 MHz:0.69dBi 1710~2690MHz:3.59dBi 1575.42MHz:3.76dBi 2400~2500MHz:2.81dBi
Efficiency(%)	699~960 MHz>30% 1710~2690MHz>35% 1575.42MHz>50% 2400~2500MHz>40%
VSWR	699~960 MHz<6.5 1710~2690MHz<4.0 1575.42MHz<2.0 2400~2500MHz<2.0
Impedance (Ω)	50 Ω
Antenna Type	LTE-CATM: Monopole GPS: PATCH WIFI/BT: IFA
Polarization	LTE-CATM: Linear GPS: Circular WIFI/BT: Linear

The matching test value



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

LTE-CATM Antenna Passive Data(SWR):



Anechoic Chamber Test



LTE-CATM Antenna Gain Product drawing

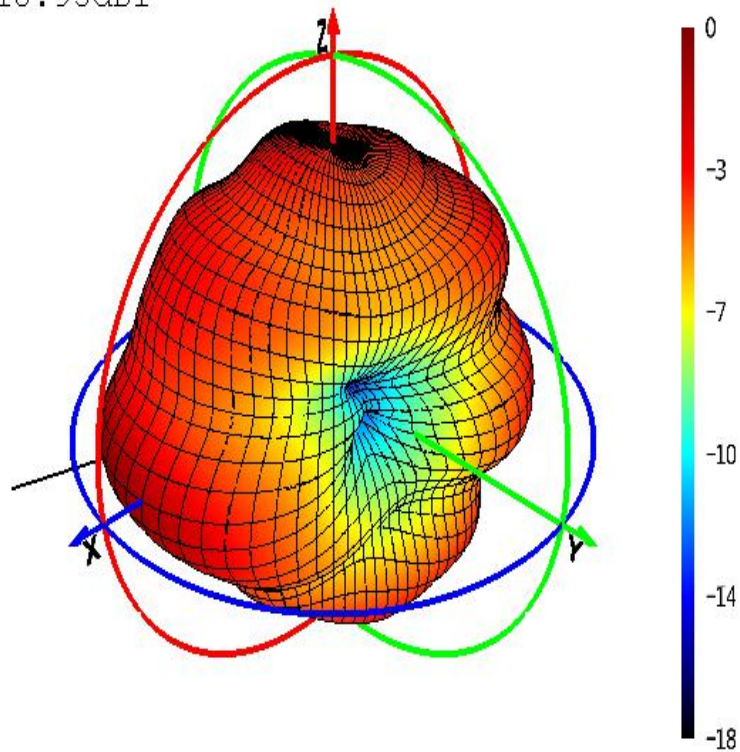


LTE-CATM Antenna Gain And Efficiency;

Gain&Efficiency				
Frequency(MHz)	Gain(dBi)	MinGain(dBi)	Efficiency(dB)	Efficiency(%)
700.00	-1.16	-21.67	-5.10	30.91
720.00	-0.81	-19.36	-5.09	31.00
740.00	-0.43	-20.68	-4.95	31.99
760.00	-0.15	-18.41	-4.62	34.53
780.00	-0.44	-21.15	-4.66	34.20
800.00	-0.65	-20.57	-4.50	35.47
820.00	0.26	-19.78	-4.02	39.65
840.00	0.58	-20.07	-4.35	36.73
860.00	0.69	-19.96	-4.39	36.38
880.00	0.06	-18.28	-3.83	41.45
900.00	-0.28	-19.66	-4.29	37.28
920.00	-0.31	-22.03	-4.40	36.29
940.00	-0.05	-23.58	-4.31	37.09
960.00	-0.79	-21.21	-5.21	30.10
1700.00	0.98	-25.76	-4.29	37.22
1730.00	1.55	-22.19	-3.97	40.09
1800.00	2.67	-20.83	-3.89	40.86
1900.00	3.35	-22.67	-3.28	46.94
2000.00	3.59	-20.00	-3.32	46.56
2100.00	1.76	-17.18	-3.24	47.44
2200.00	1.22	-14.63	-3.62	43.44
2300.00	1.19	-12.56	-3.73	42.32
2400.00	0.72	-14.30	-4.41	36.19
2500.00	0.64	-15.69	-3.83	41.37
2600.00	0.43	-15.34	-2.12	61.33
2700.00	0.24	-17.92	-3.82	41.45

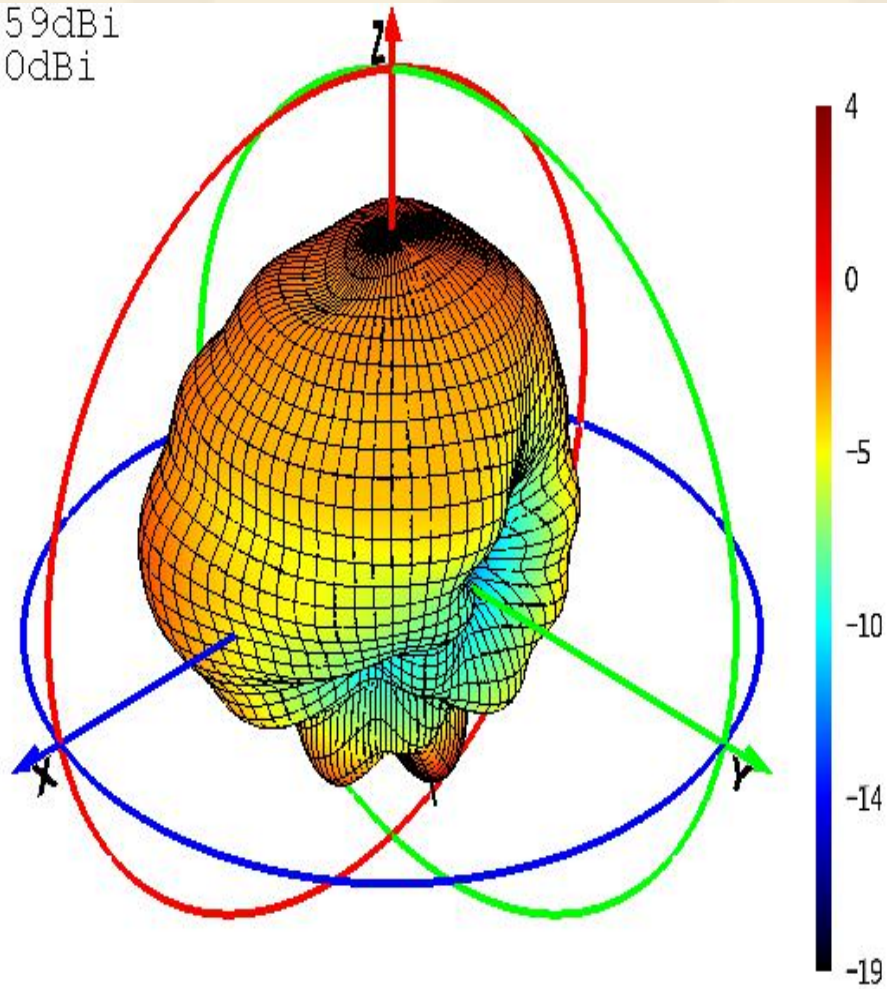
LTE-CATM Antenna 3D Pattern(800MHz):

MAX:-0.65dBi
MIN:-18.95dBi

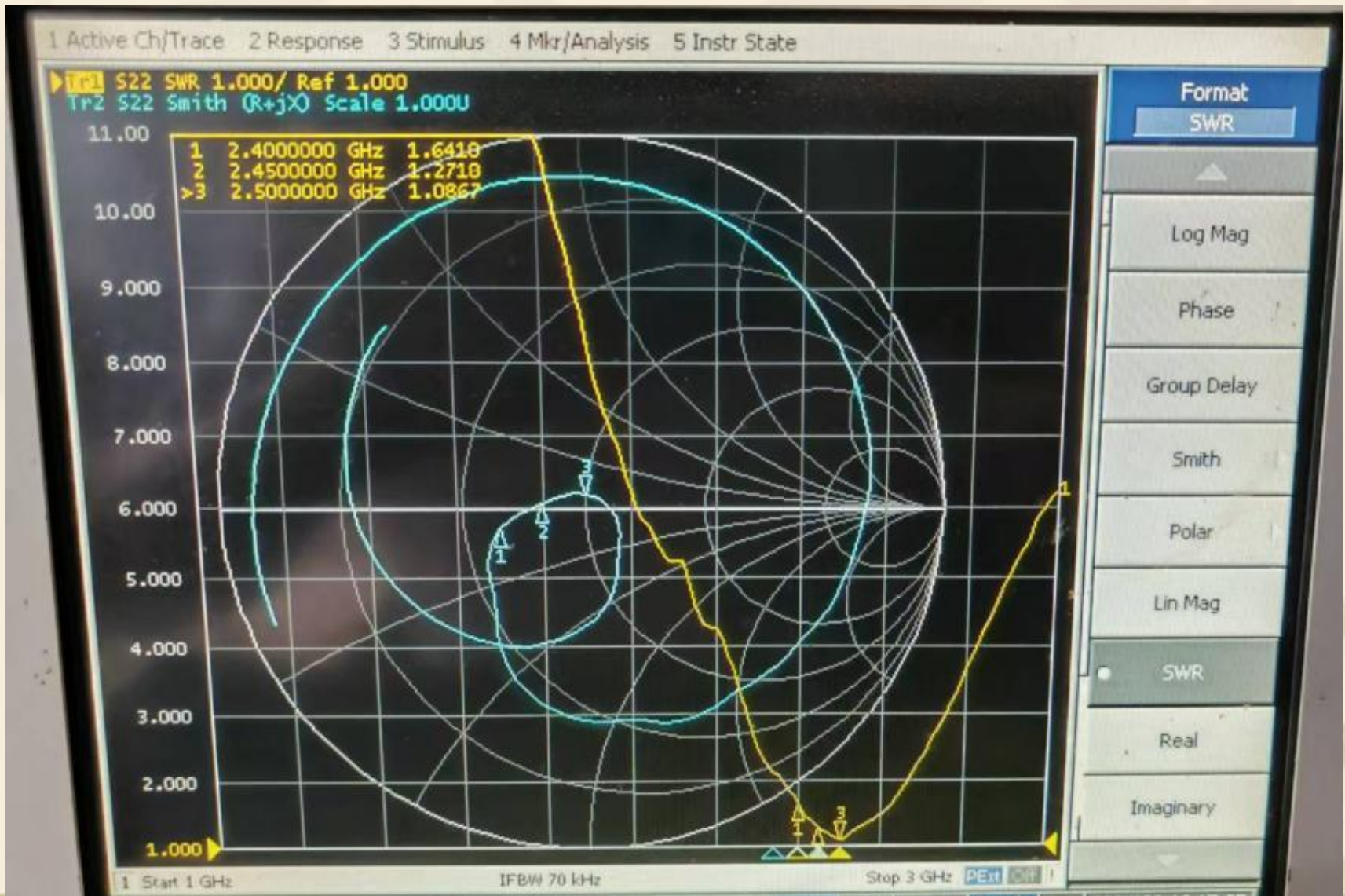


LTE-CATM Antenna 3D Pattern(2000MHz):

MAX:3.59dBi
MIN:-20dBi



BT/WIFI Antenna Passive Data(SWR):



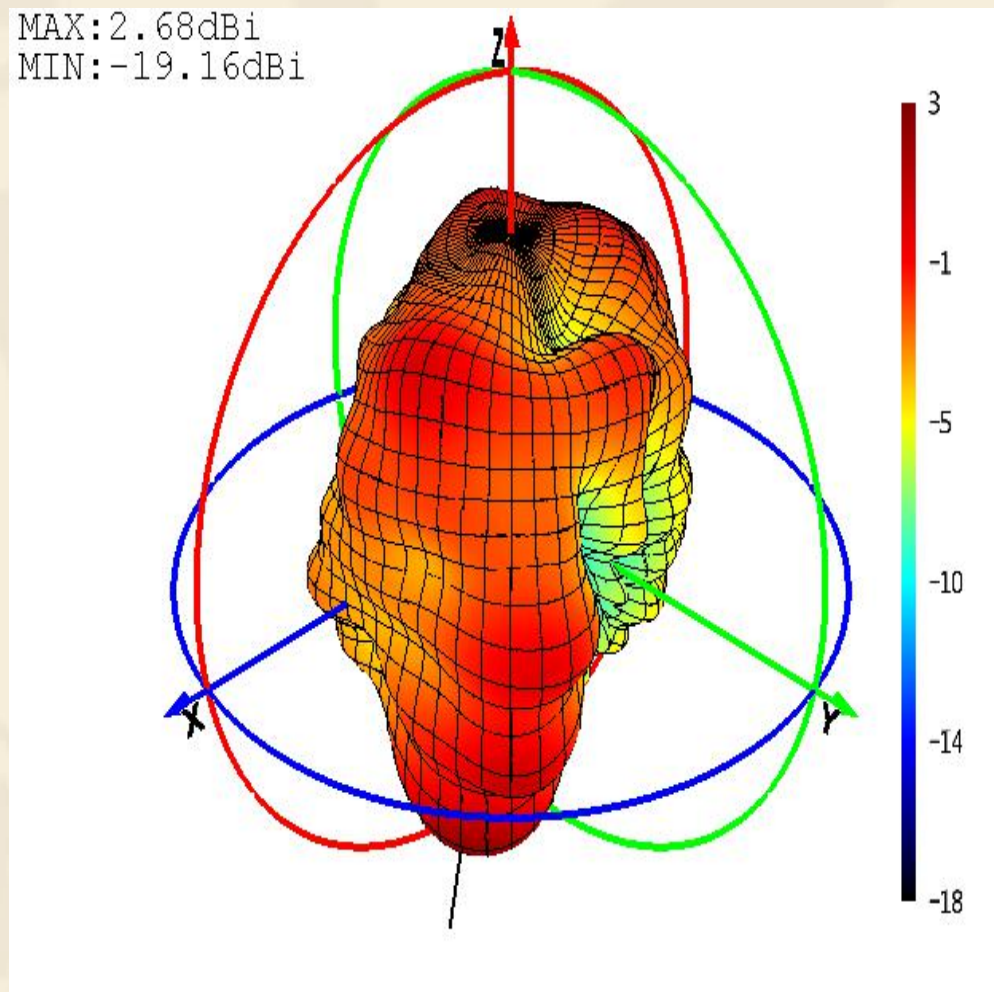
BT/WIFI Antenna Product drawing



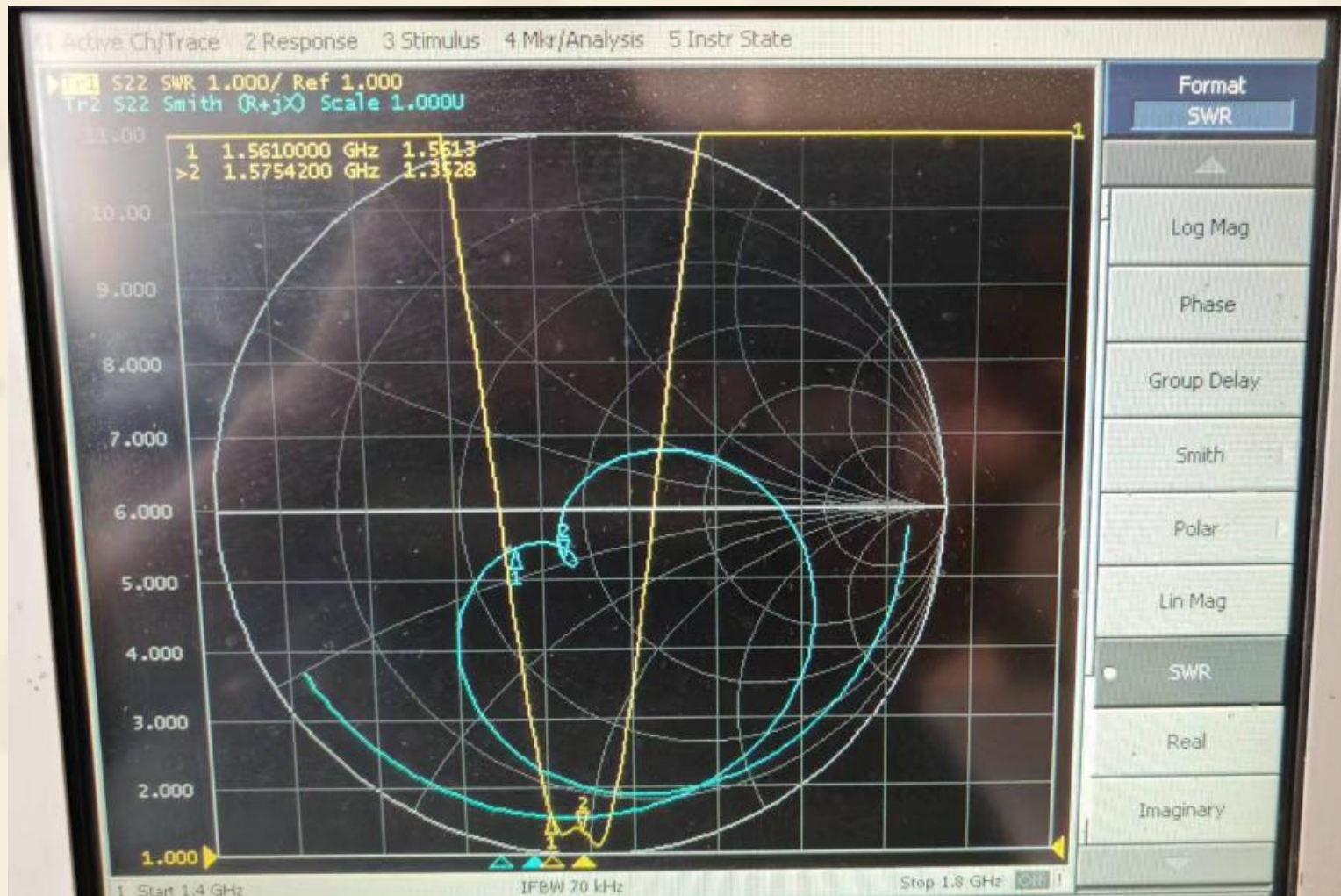
BT/WIFI Antenna Gain And Efficiency;

Gain&Efficiency				
Frequency (MHz)	Gain (dBi)	MinGain (dBi)	Efficiency (dB)	Efficiency (%)
2400.00	1.89	-16.19	-3.40	45.69
2410.00	1.93	-16.15	-3.34	46.36
2420.00	2.07	-17.23	-3.30	46.77
2430.00	2.24	-19.11	-3.51	44.53
2440.00	2.52	-19.11	-3.30	46.78
2450.00	2.68	-19.16	-3.26	47.23
2460.00	2.71	-19.44	-3.26	47.19
2470.00	2.81	-18.83	-3.22	47.67
2480.00	2.56	-18.31	-3.35	46.26
2490.00	2.30	-17.38	-3.43	45.36
2500.00	2.17	-16.27	-3.51	44.54

BT/WIFI Antenna 3D Pattern(2450MHz):



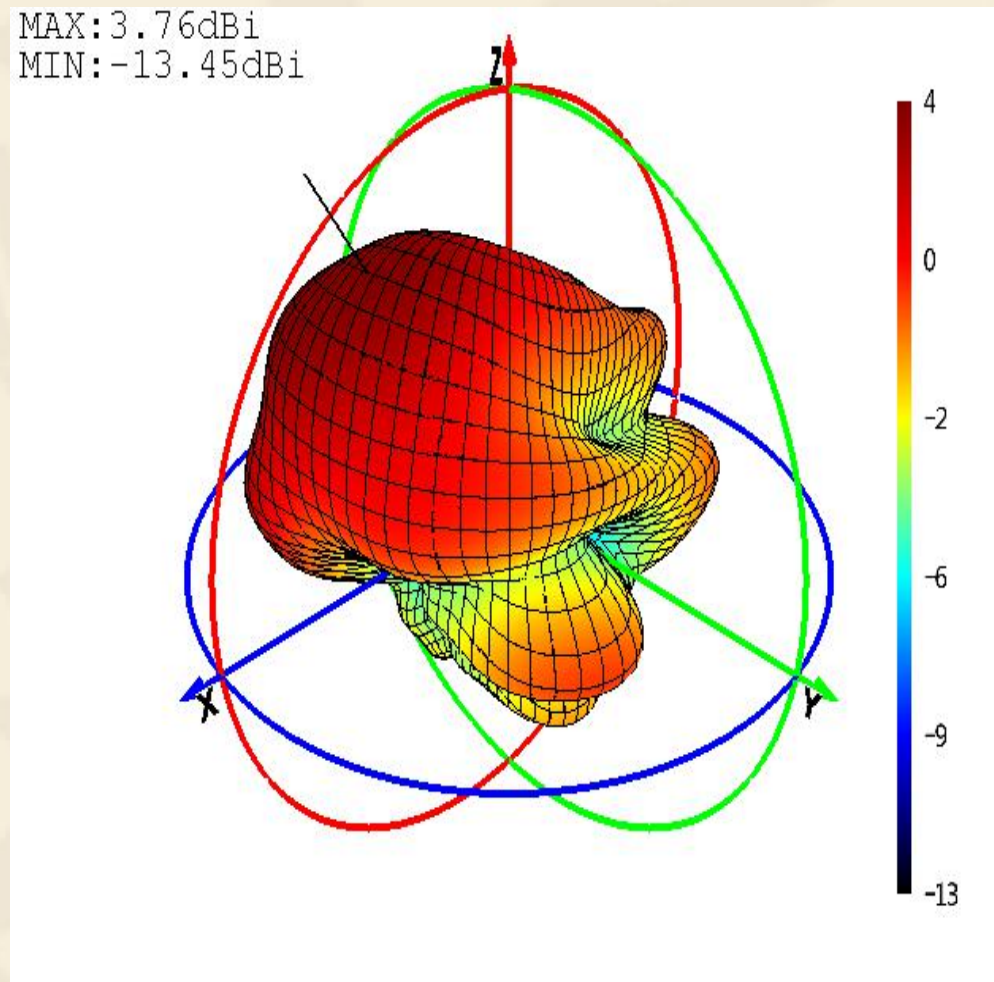
GPS Antenna Passive Data(SWR):



GPS Antenna Gain And Efficiency;

Frequency (MHz)	Gain (dBi)	MinGain (dBi)	Efficiency (dB)	Efficiency (%)
1570.42	4.28	-14.14	-1.10	77.59
1575.42	3.76	-13.45	-1.35	73.34
1580.42	3.40	-12.09	-1.56	69.80

GPS Antenna 3D Pattern(1575.42MHz):





Thanks for your support.

DWM Communication Equipment co.,ltd

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