

Antenna Test Report

Projector V1.0

Customer	Baishihulian
Agent	Ganxing
Project name	projector
Model. IC	--
Model. ANT	WAN097030JD251SN03

2024/12/17

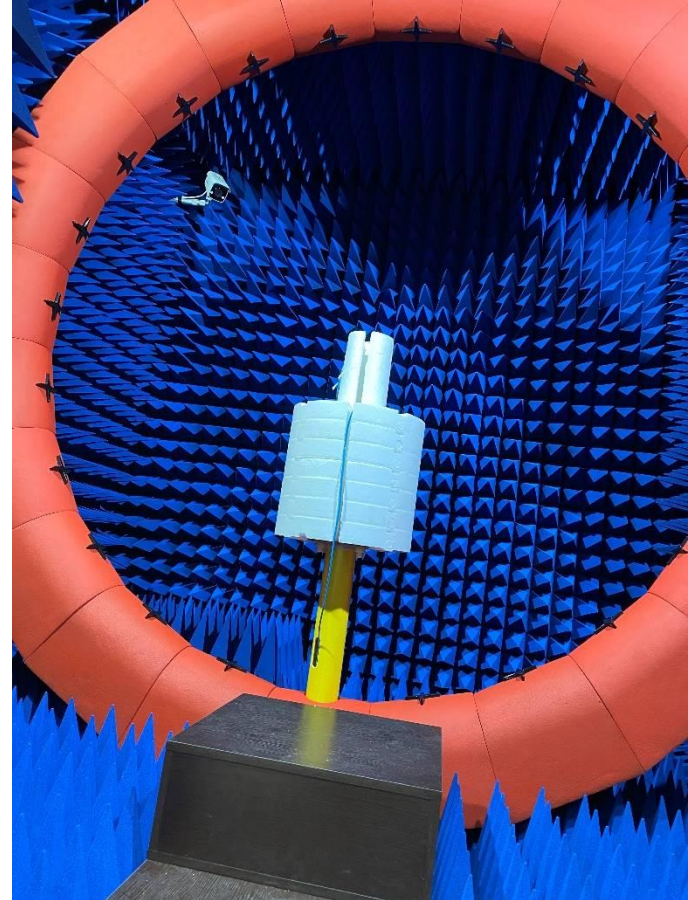
Equipment of OTA test



Network analyzer E5071C



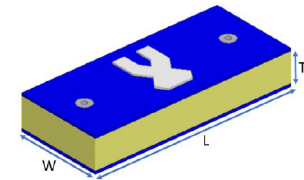
R&S CMW500



Anechoic Chamber

Ant. Matching

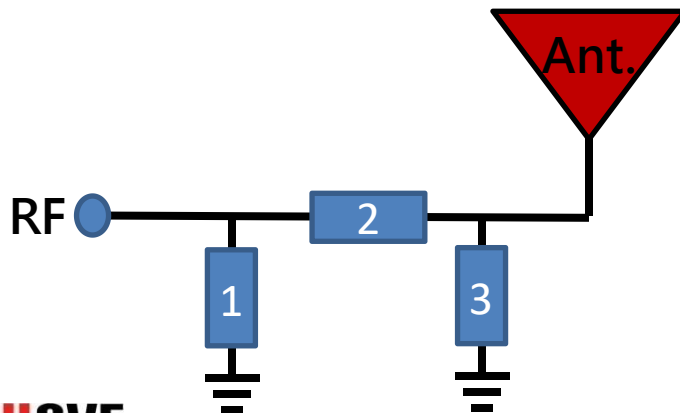
- Antenna Placement



P/N: WAN097030JD251SN03

	Dimension (mm)
L	7.00 ± 0.20
W	3.00 ± 0.20
T	1.15 ± 0.20

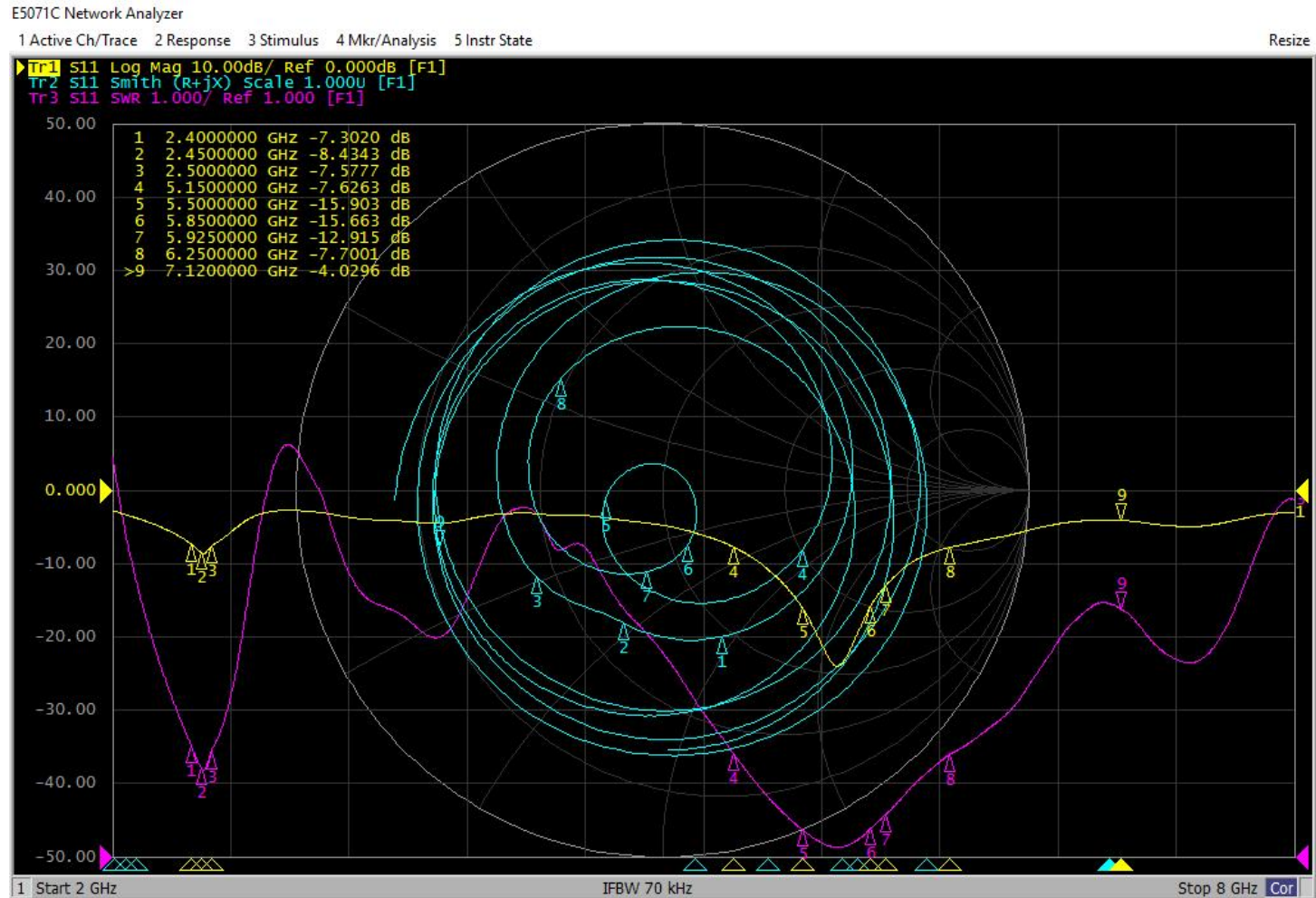
- Matching Circuit



天线净空区 :--mm

	LC	P/N
Ant.	WAN097030JD251SN03	
1	NC	--
2	1.0nH	Murata
3	5.1nH	Murata

Ant-1. S11 Parameter



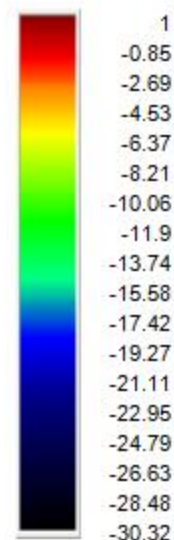
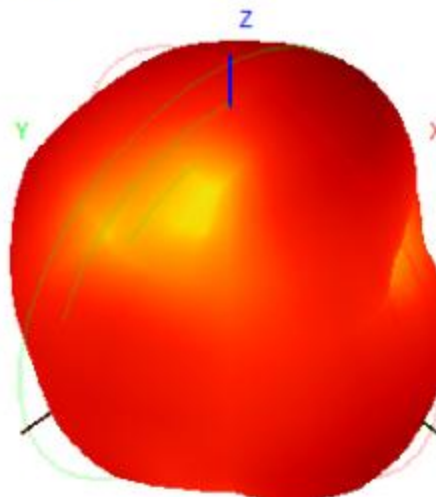
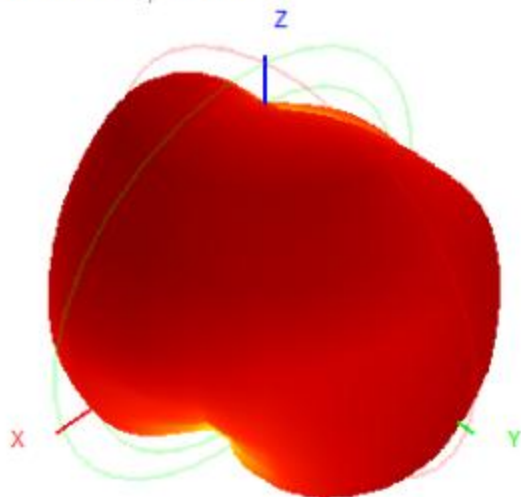
Ant. Gain Pattern @2.4&5GHz

- Passive Test (free space)



2450.0MHz H+V, Eff: 45.1%

Back View



Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	0.03	0.00	0.29	0.62	0.75	1.00	1.02	1.00	0.99	0.97	0.94
Efficiency (%)	40.94	41.67	42.46	43.43	43.94	45.12	45.86	46.41	46.23	45.47	44.07

Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	1.24	1.73	1.67	1.91	1.82	1.87	2.72	1.93	1.88	1.43	1.43	2.51	2.91	2.46	2.27
Efficiency (%)	41.79	42.61	44.63	46.20	43.22	47.10	47.67	42.28	44.38	44.09	42.82	45.78	45.55	44.75	46.81

Ant. Gain Pattern @2.4&5GHz

- Active Test (free space)

2.4G	channel	TRP(dBm)	TIS(dBm)
WiFi b-11M	1	14.85	-72.64
	6	14.14	-72.72
	11	14.86	-73.56

5G	channel	TRP(dBm)	TIS(dBm)
WiFi a-54M	36	9.39	-70.02
	149	10.42	-72.70
	165	9.20	-71.31