

ETHETA

ANTennas

From WIRELESS to INFINITY

SHENZHEN ETHETA COMMUNICATIONTECHNOLOGY., LTD

SKY FOR ANTENNAS

WISDOM FOR VIRTUES

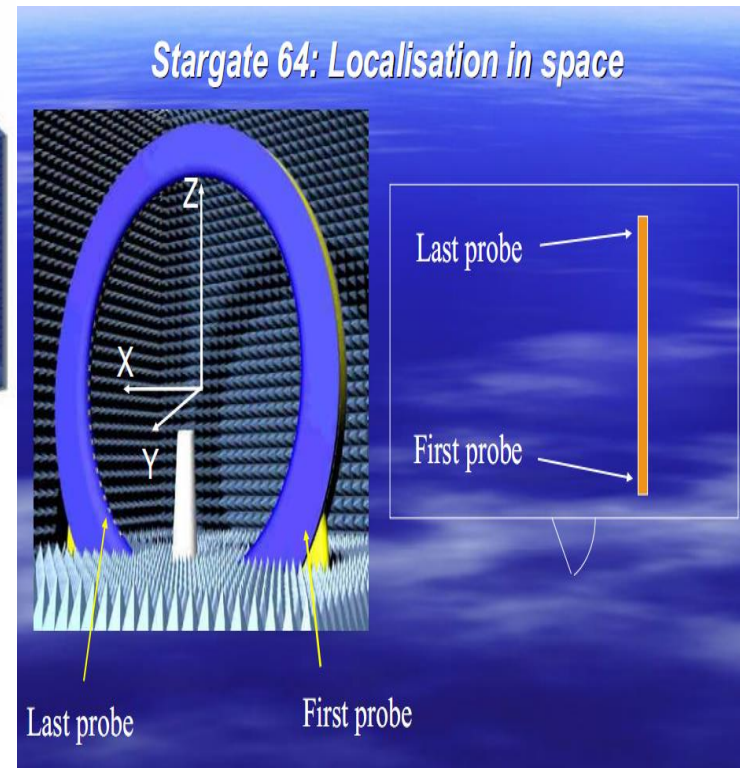
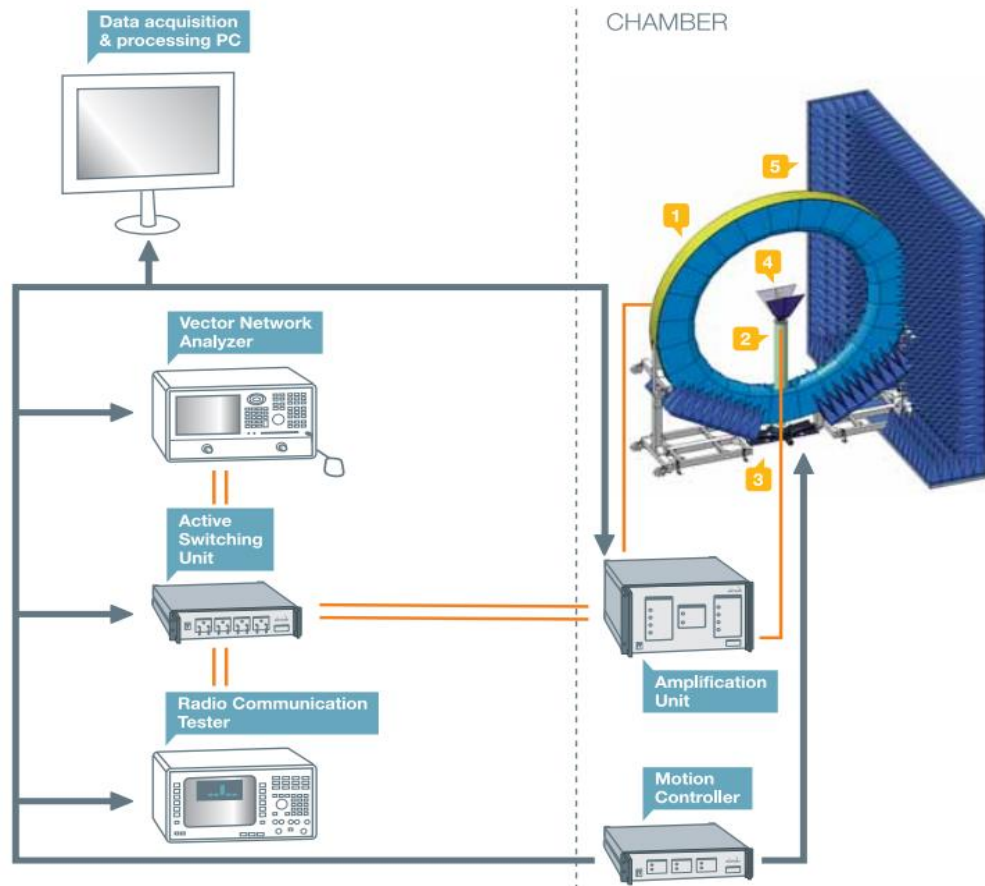
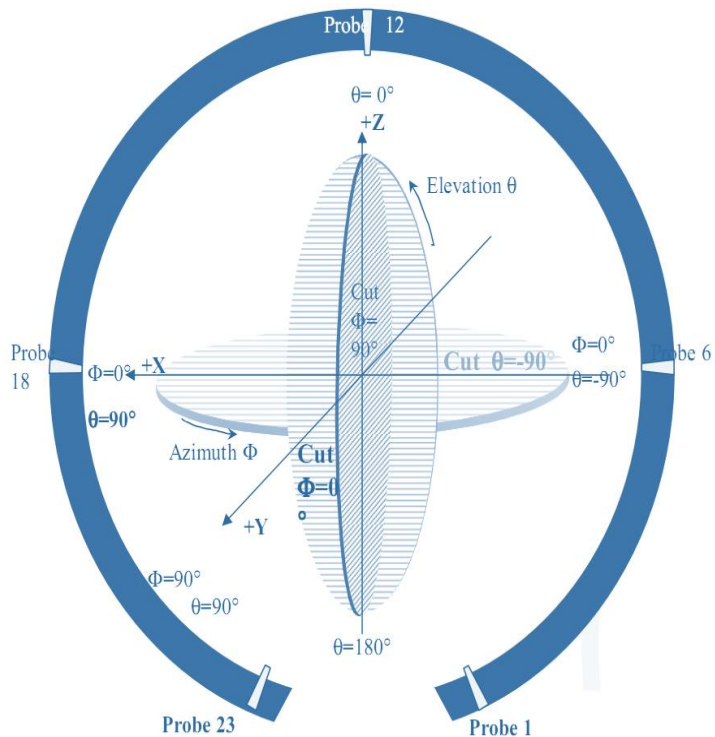
D195S WIFI&BT antenna test report

date : 2023.07.31



Project	D195S_MC116	
Engineer	songxuemei	
Tel.	15018501160	E-mail: songxuemei@etheta.com.cn
Version and date	V1.0	2023/07/31
Test Equipment	SATIMO SG24/SL16	
test status	Terminal state	proto
	Antenna Type	PCB antenna
	Antenna state	Antenna Sample
Project Resume	1	
	2	
	3	

Test Environment

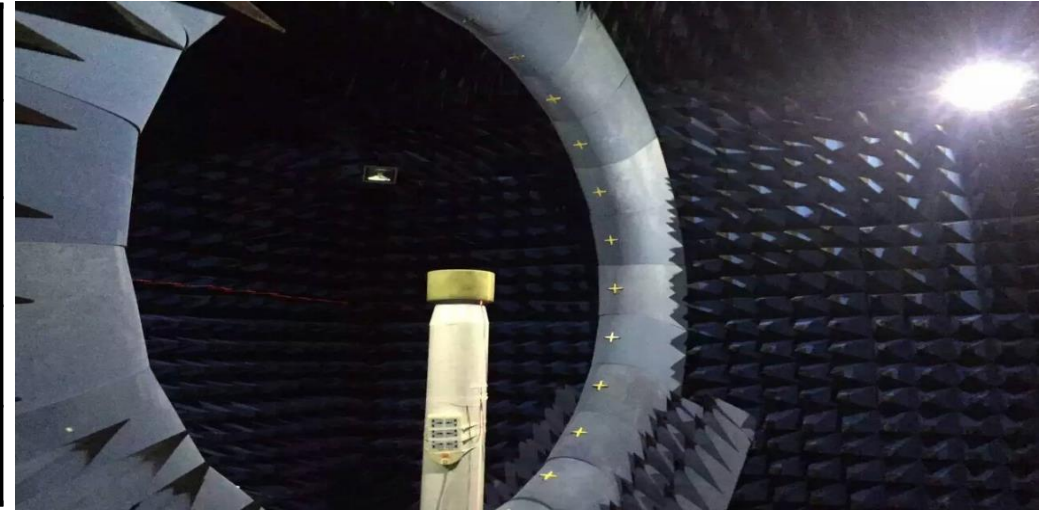




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Test Equipment

Test item	Test Equipment
S11、S12 、 VSWR 、 LOSS	Network Analyzer E5071B
Efficiency、 Gain 3D Radiation Pattern	Satimo SG24 Chamber/GTS2800、 E5071C
TRP、 TIS	Satimo SG24 Chamber/GTS2800、 CMW500 、 SP9500
SAR&HAC	SAR Test System



Antenna Type and Size

Antenna Type : PCB antenna

Antenna size: Please refer to the operation description.

Antenna Test Method & Standard

Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-2021

Equipment & Cal. date

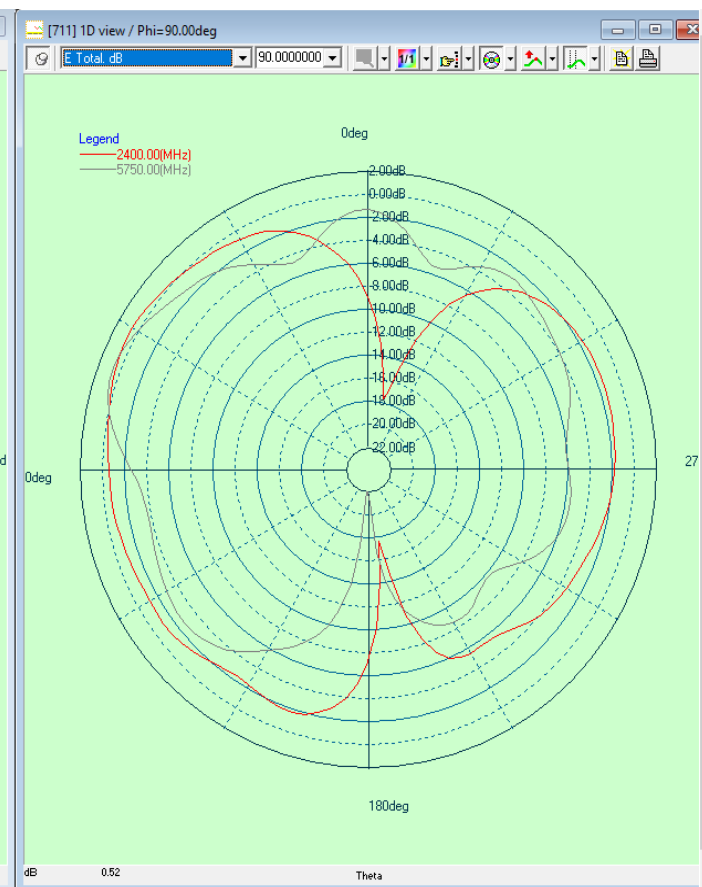
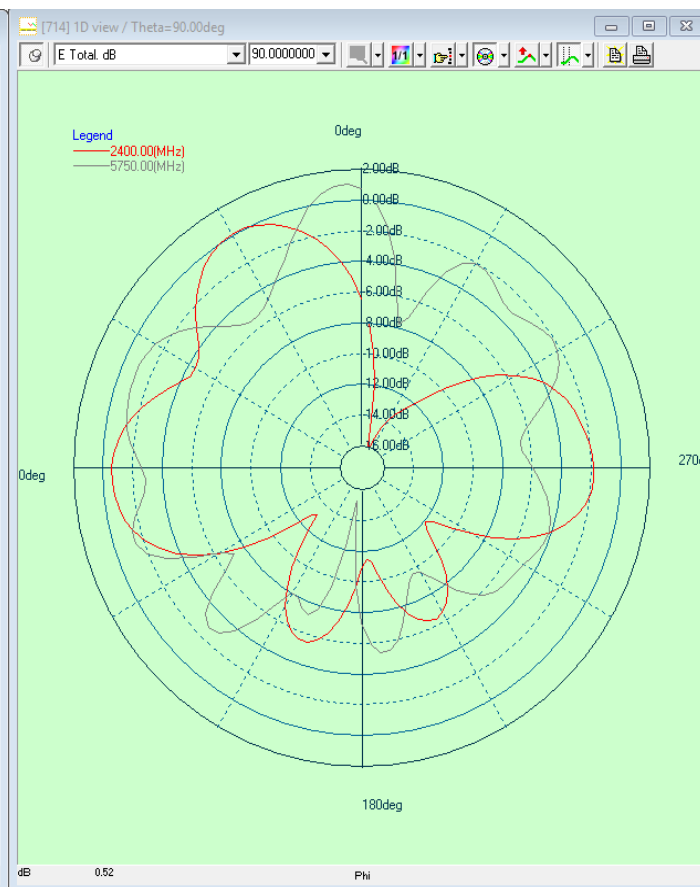
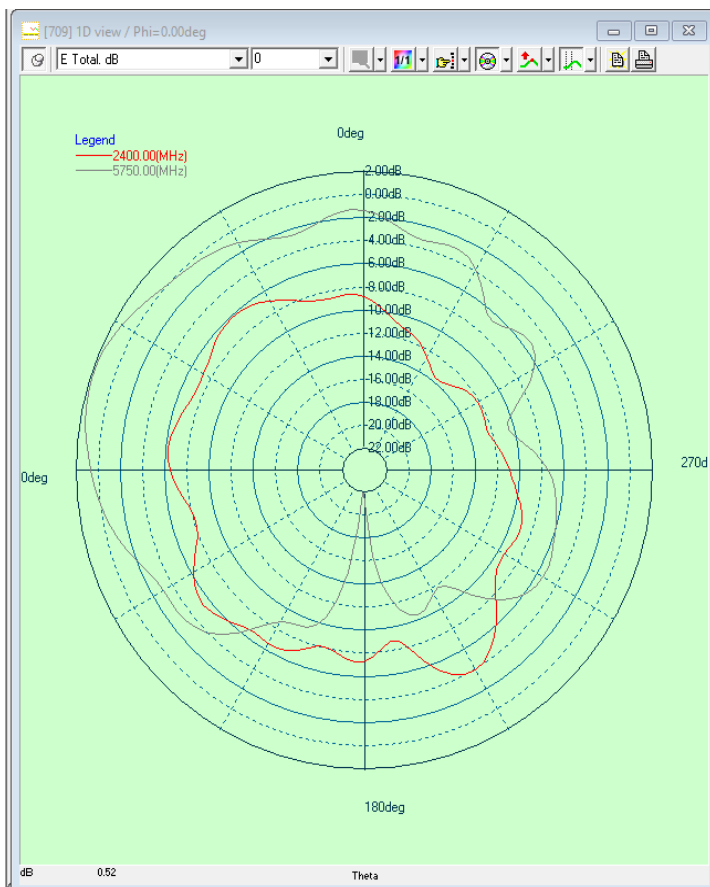
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071B	MY42401650	2023.10.5	2024.10.4
CMW500	R&S	CMW500	P83692298274 36	2023.10.5	2024.10.4



Antenna Gain

Fre(MHz)	Eff(%)	Eff(dB)	Gain(dBi)	Fre(MHz)	Eff(%)	Eff(dB)	Gain(dBi)
2400	35.13%	-4.54	0.63	5150	25.76%	-5.89	-0.24
2410	34.17%	-4.66	0.52	5200	27.48%	-5.61	-0.02
2420	33.08%	-4.80	0.42	5250	28.81%	-5.40	0.16
2430	33.03%	-4.81	0.34	5300	31.37%	-5.03	0.51
2440	32.66%	-4.86	0.14	5350	34.14%	-4.67	0.88
2450	31.59%	-5.00	0.05	5400	35.79%	-4.46	1.16
2460	30.96%	-5.09	0.08	5450	29.30%	-5.33	1.46
2470	29.86%	-5.25	-0.04	5500	30.04%	-5.22	1.69
2480	30.89%	-5.10	-0.07	5550	31.99%	-4.95	1.95
2490	29.46%	-5.31	-0.20	5600	32.44%	-4.89	2.18
2500	28.63%	-5.43	-0.30	5650	32.64%	-4.86	2.26
AVG	32%	-4.99	0.14	5700	31.79%	-4.98	2.22
2.4G wifi&BT MAX Gain			0.63	5750	31.88%	-4.97	2.30
				5800	31.36%	-5.04	2.26
				5850	28.48%	-5.46	2.03
				AVG	30.88%	-5.12	1.39
				5G wifi MAX Gain			2.30

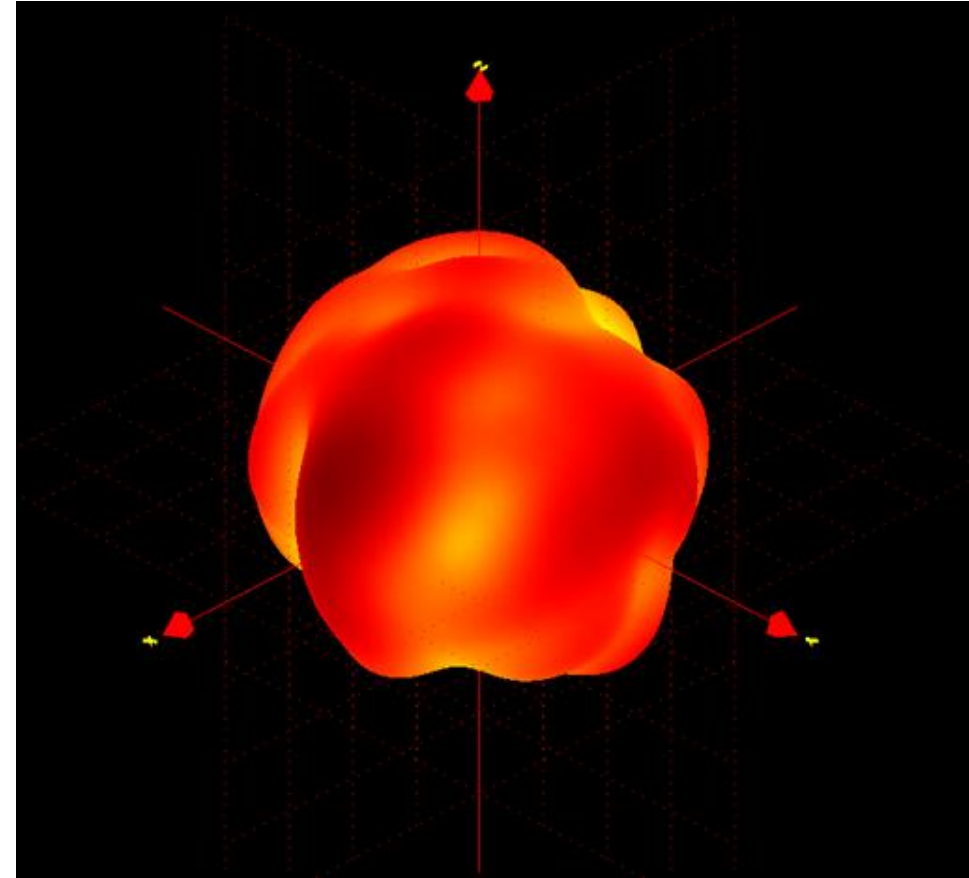
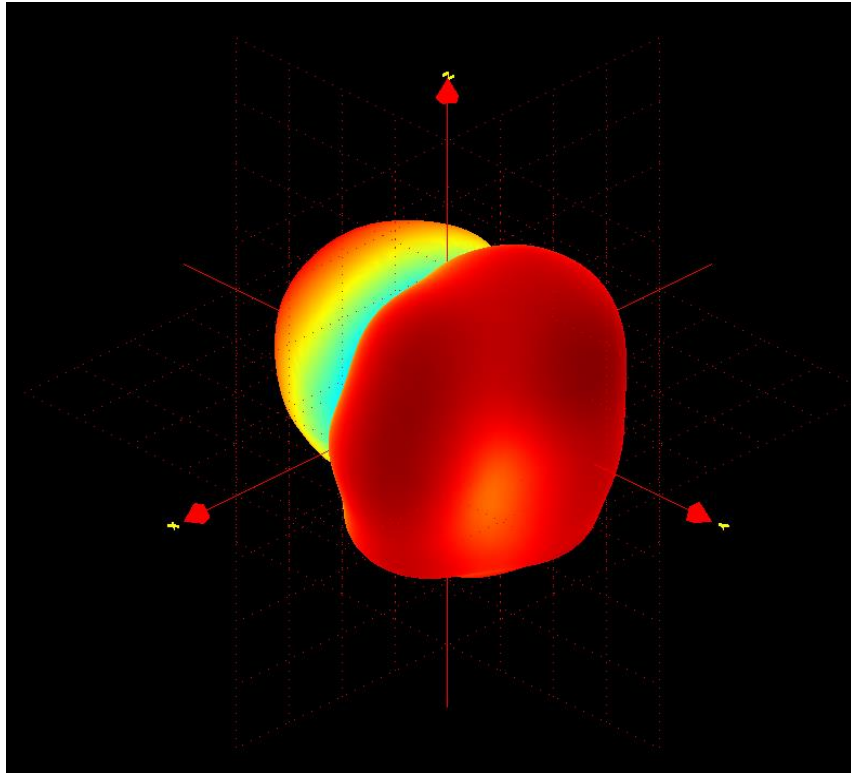
Antenna Polar pattern



Antenna Gain 3D Pattern

2400MHz

5750MHz



Antenna Test software



Thanks!

