



深圳市鑫尔盛科技有限公司

Shenzhen xinersheng Technology Co., Ltd

Passive Antenna Test Report

: Engineering: Fang Zhili
Date: 2024-05-27

3rd Floor, No.96, Lingxia Road, Fenghuang Community, Fuyong Street, Bao'an District ,SZ, CN



1. Multi-probe RF antenna test system



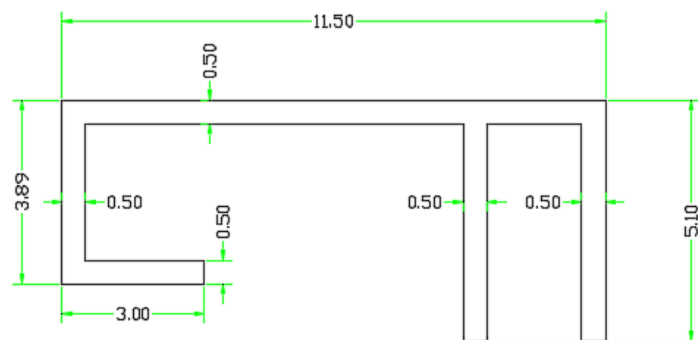
2. Antenna location



2. Antenna size

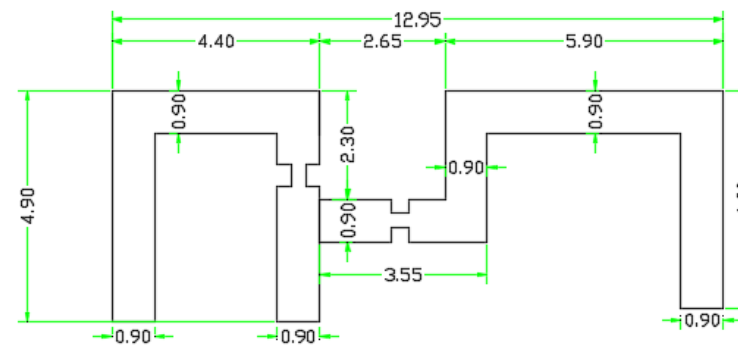
天线2尺寸图:

单位: mm

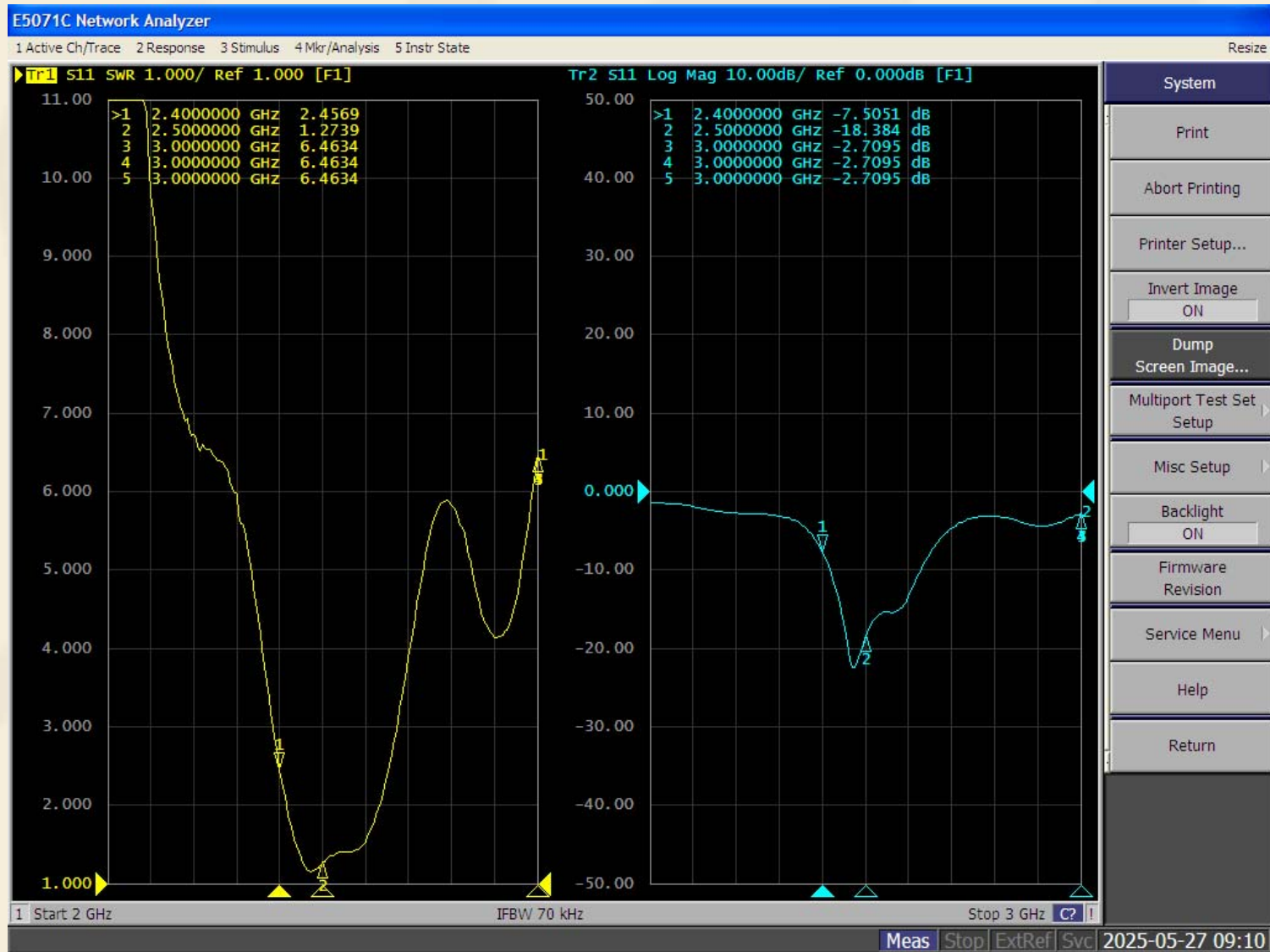


天线3尺寸图:

单位: mm



3. Antenna 3 S11:

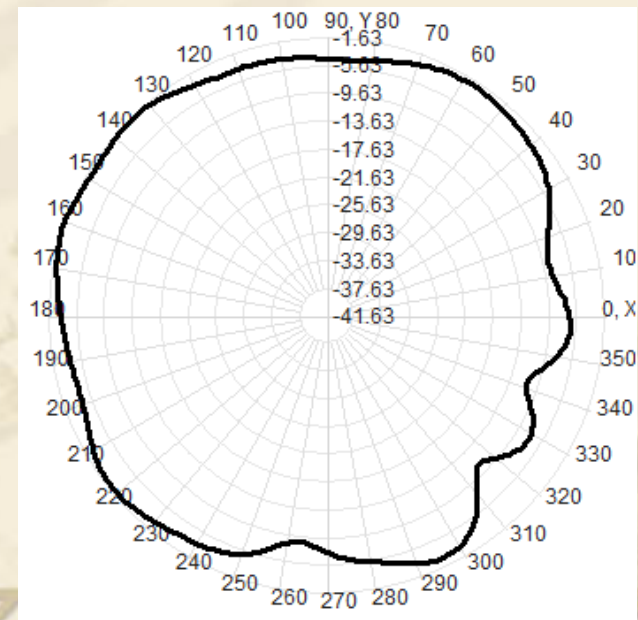
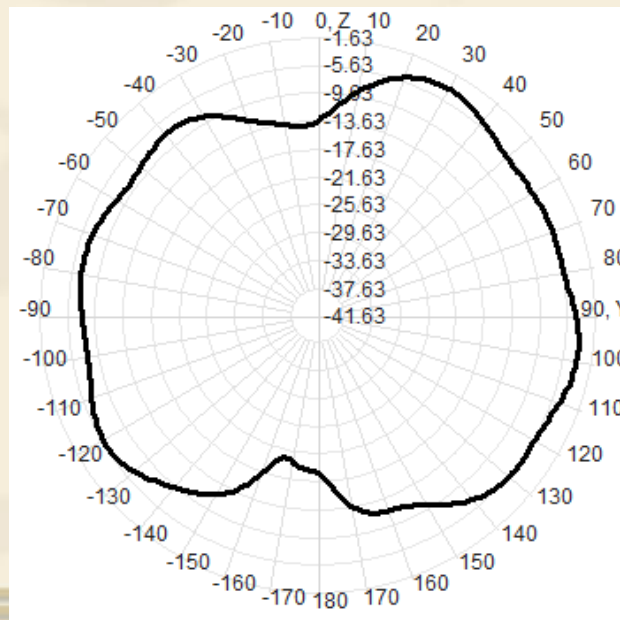
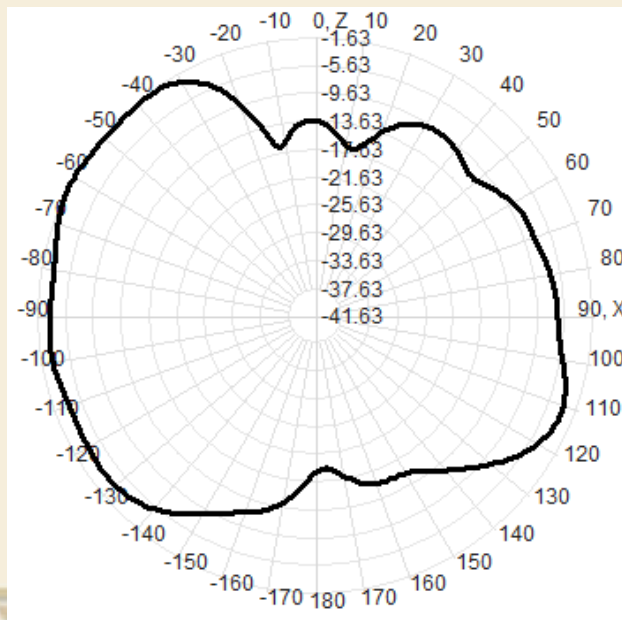
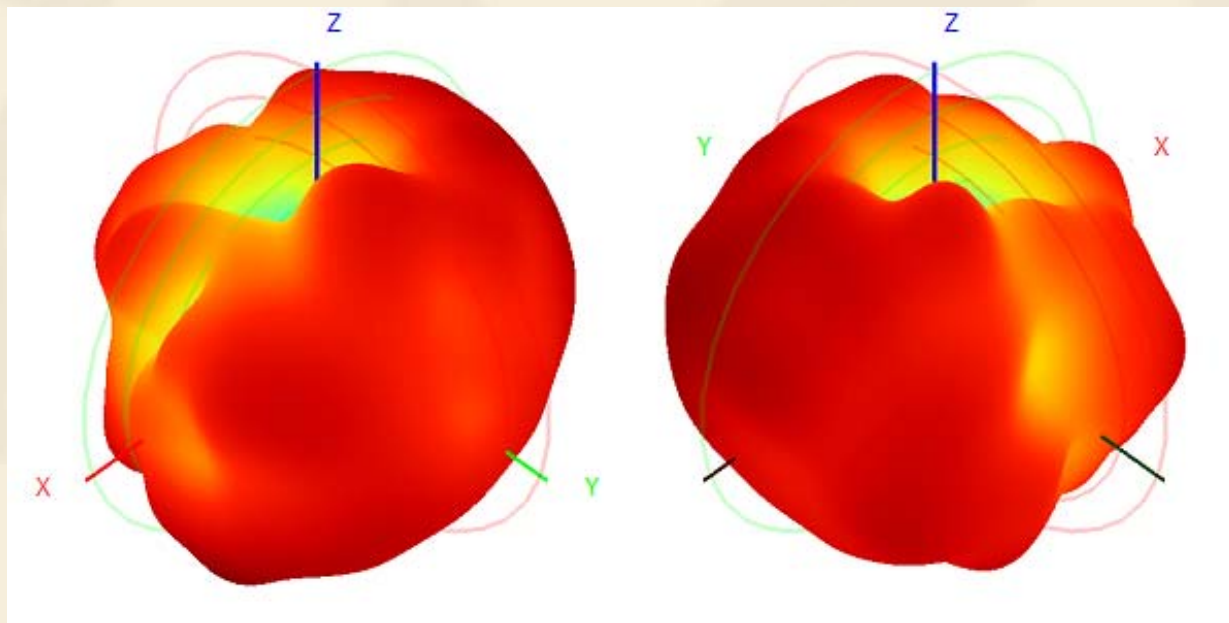


3. Antenna 3 passive test data:

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-4.98	-4.56	-4.12	-3.88	-3.97	-3.89	-3.88	-3.84	-3.76	-3.68	-3.64
Gain (dBi)	-0.09	-0.48	-0.01	0.08	-0.19	0.35	0.53	0.79	0.99	1.09	0.37
Efficiency (%)	31.76	34.99	38.69	40.90	40.05	40.80	40.92	41.29	42.08	42.81	43.27
Directivity (dB)	4.89	4.08	4.11	3.96	3.78	4.24	4.41	4.63	4.75	4.77	4.01
Peak Gain Position (Theta)	118.00	63.00	61.00	117.00	58.00	117.00	117.00	116.00	116.00	116.00	117.00
Peak Gain Position (Phi)	25.00	166.00	169.00	21.00	170.00	24.00	23.00	23.00	22.00	22.00	10.00
Efficiency ThetaPol (%)	8.61	10.06	11.15	11.64	11.71	12.54	13.01	13.07	12.74	12.31	12.23
Efficiency PhiPol (%)	23.15	24.93	27.54	29.27	28.34	28.27	27.91	28.23	29.35	30.50	31.03
Upper Hem. Efficiency (%)	16.02	17.43	19.15	20.48	20.14	20.73	21.01	21.37	21.71	21.77	21.56
Lower Hem. Efficiency (%)	15.74	17.55	19.54	20.42	19.91	20.07	19.91	19.92	20.38	21.04	21.70

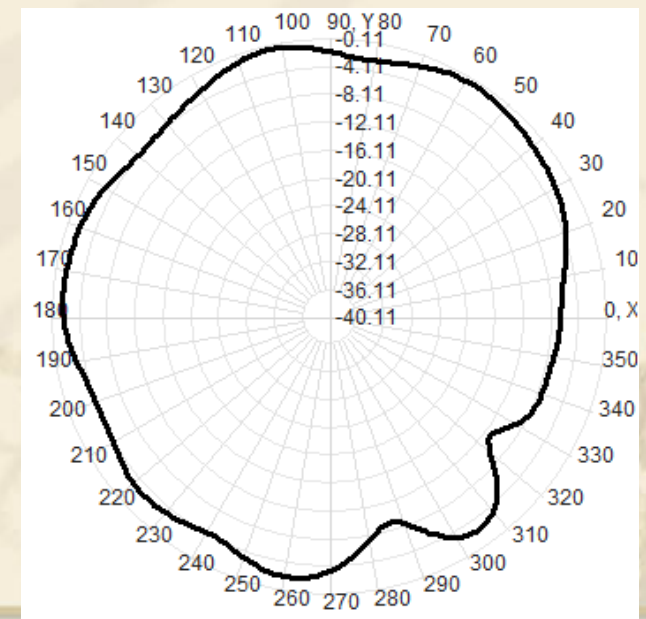
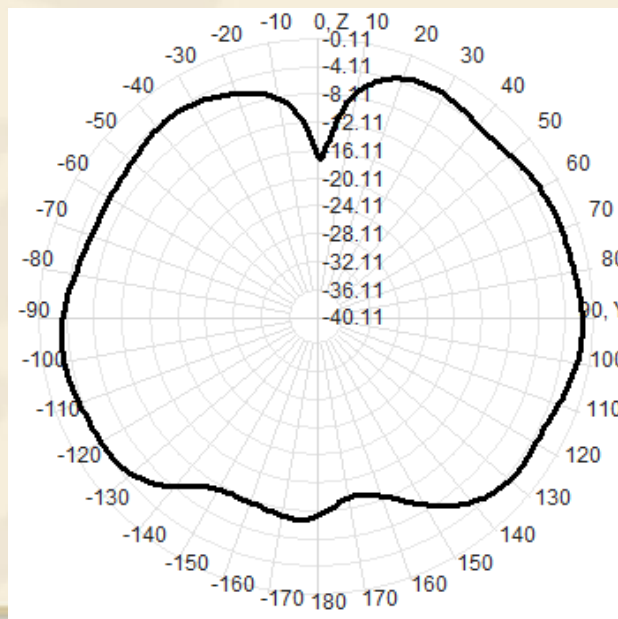
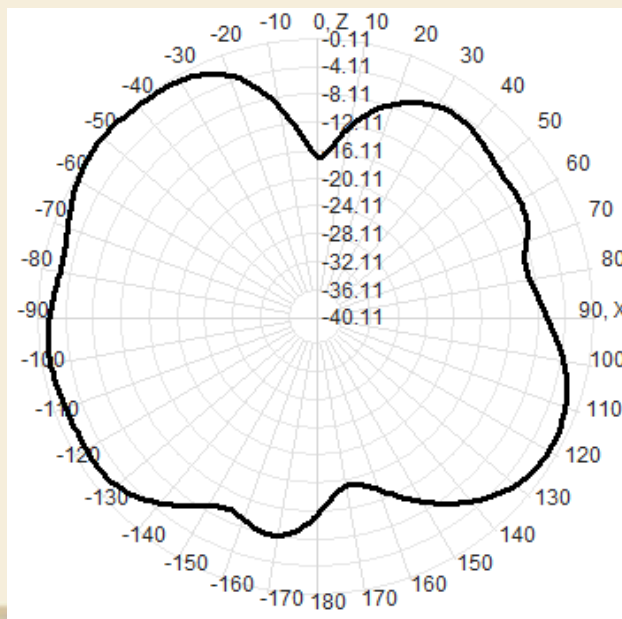
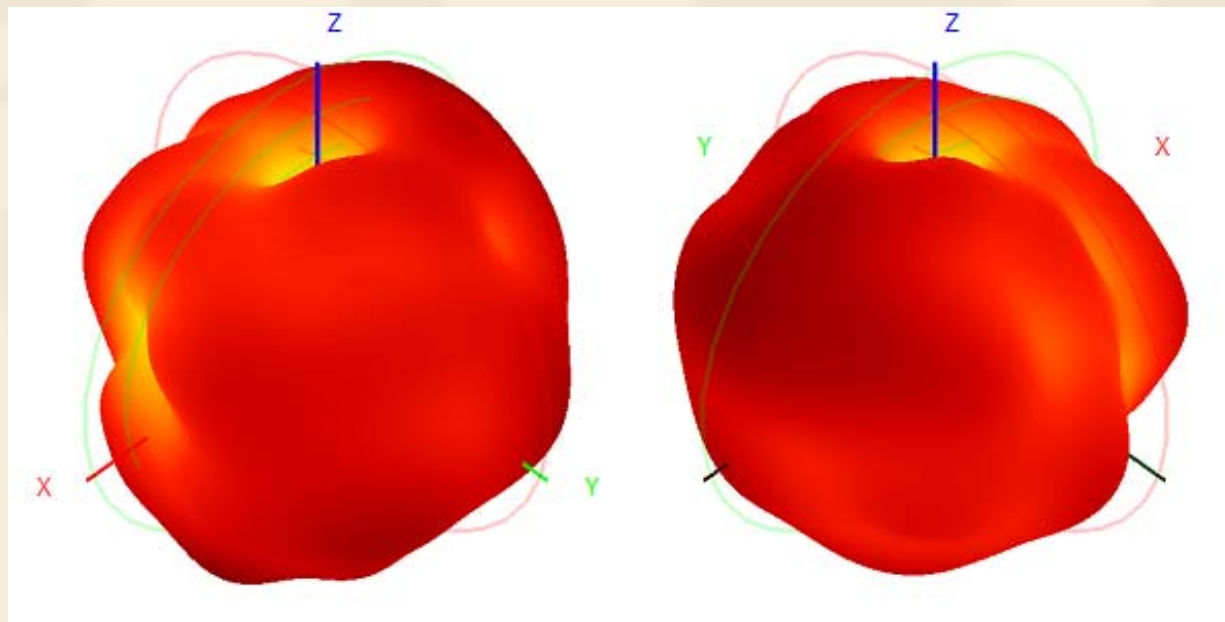
3. Antenna 3 Apple Image:

2400M



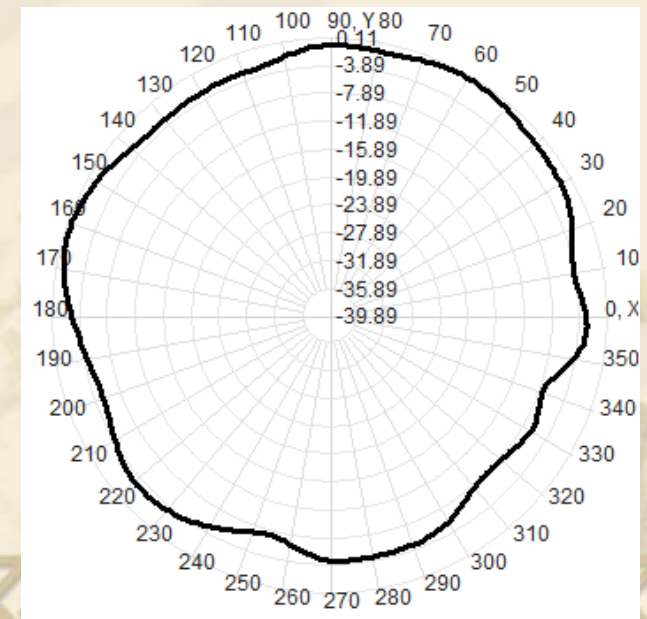
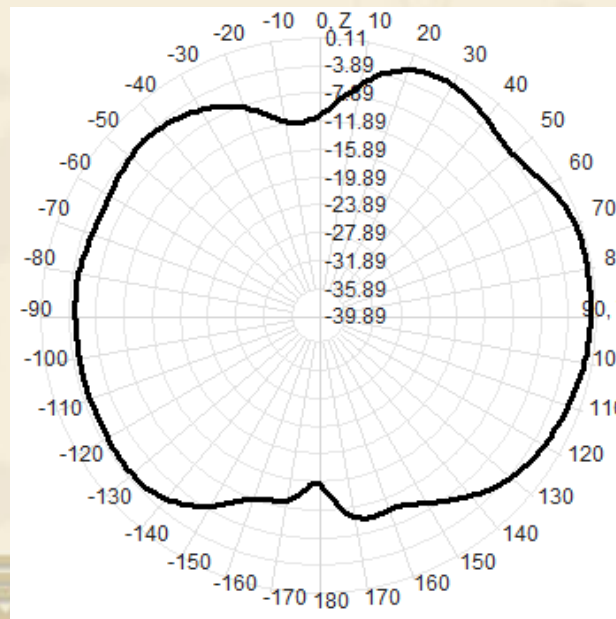
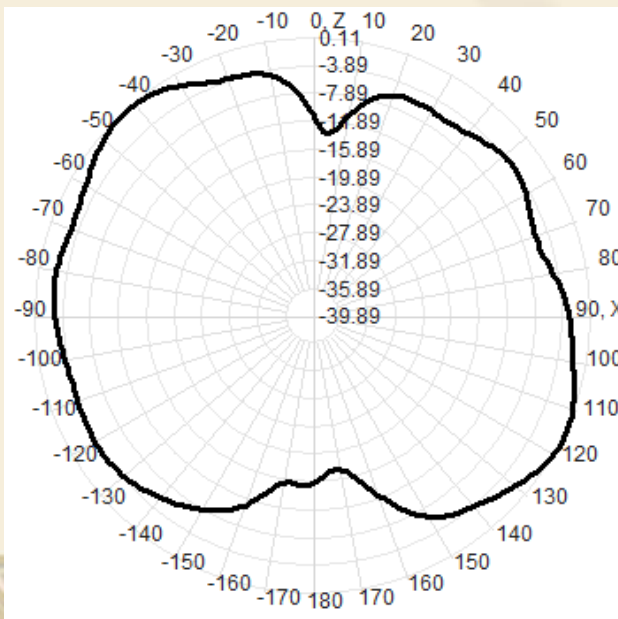
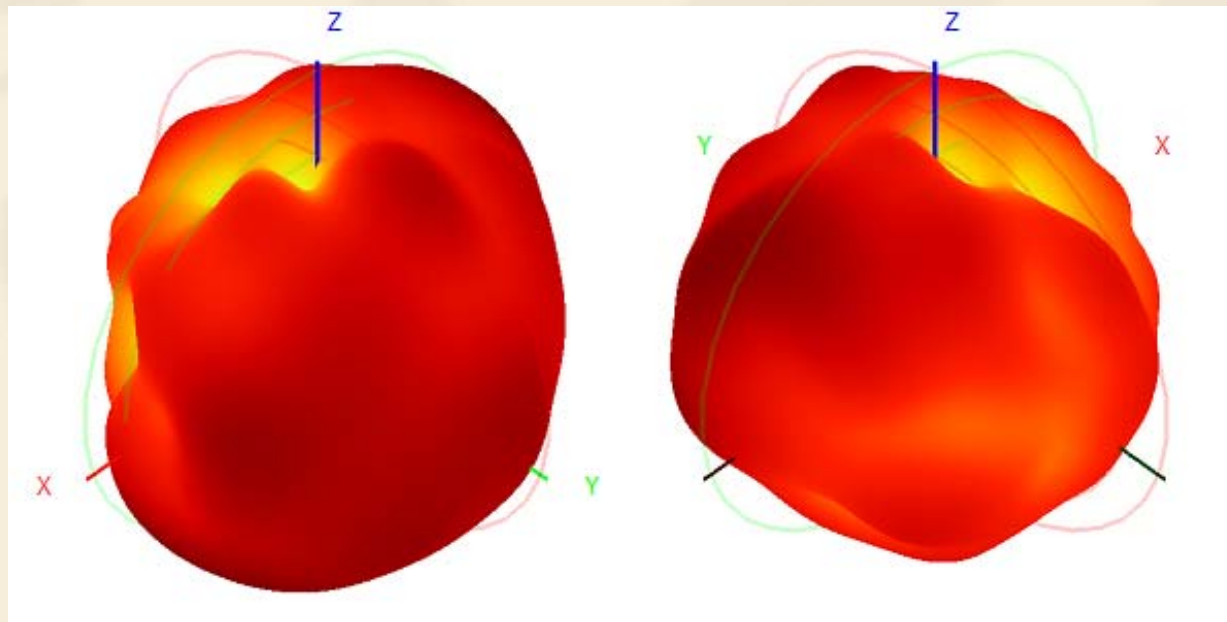
3. Antenna 3 Apple Image:

2450M

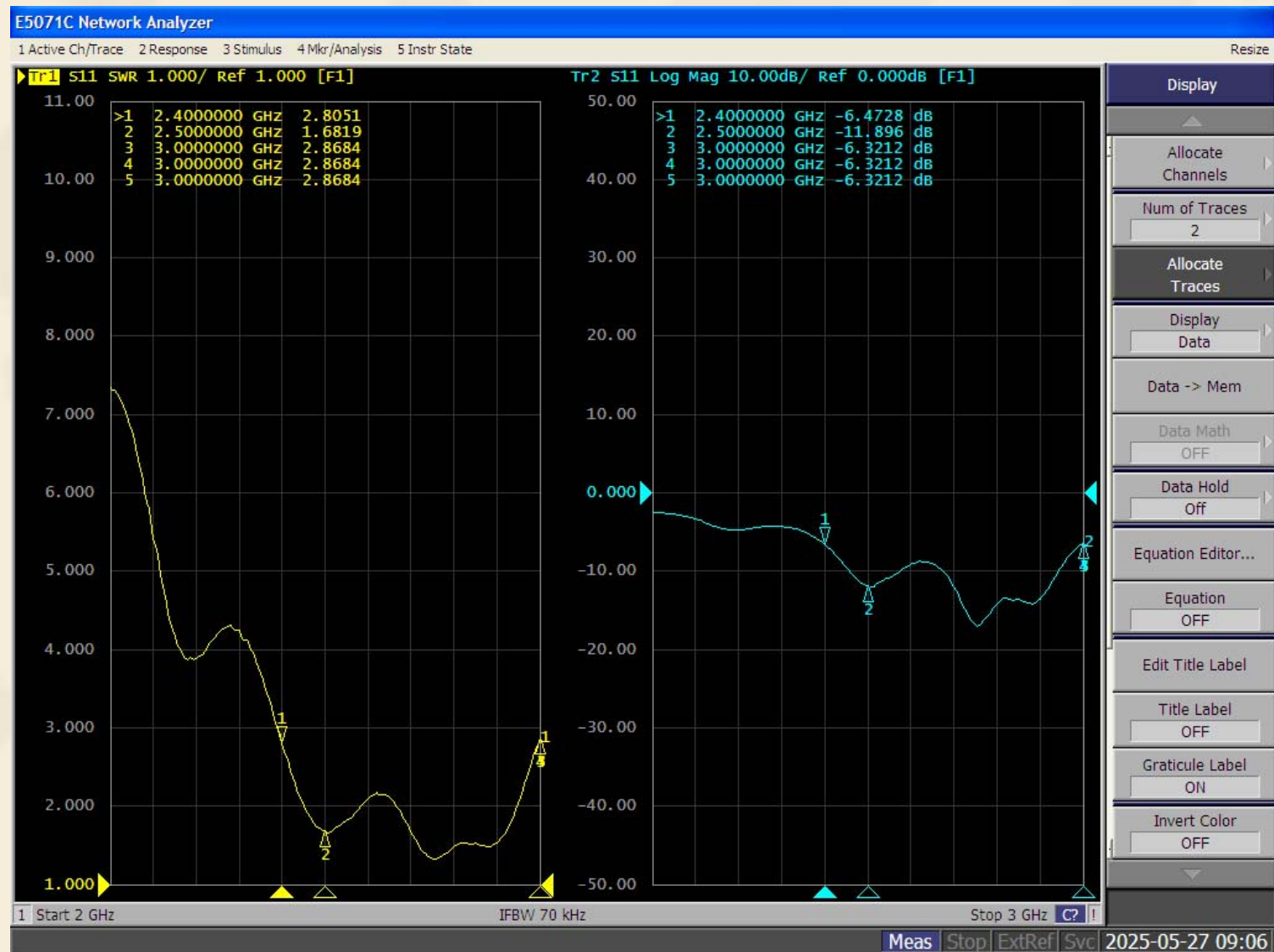


3. Antenna 3 Apple Image:

2500M



3. Antenna 2 S11:

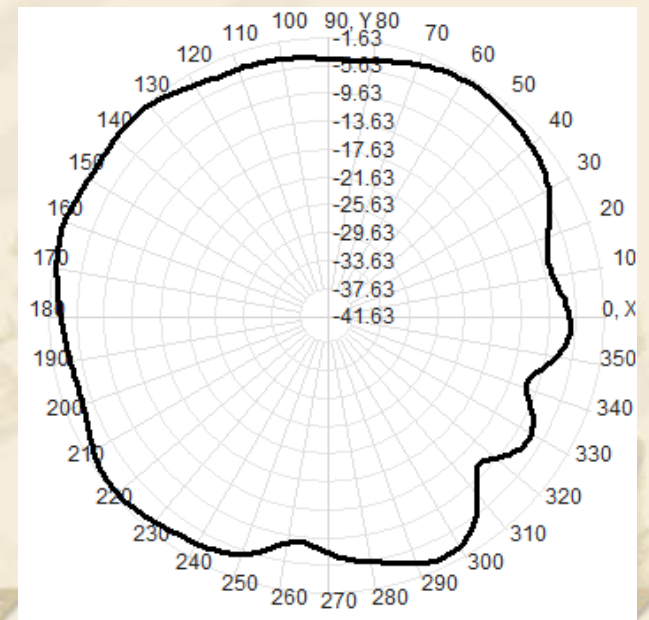
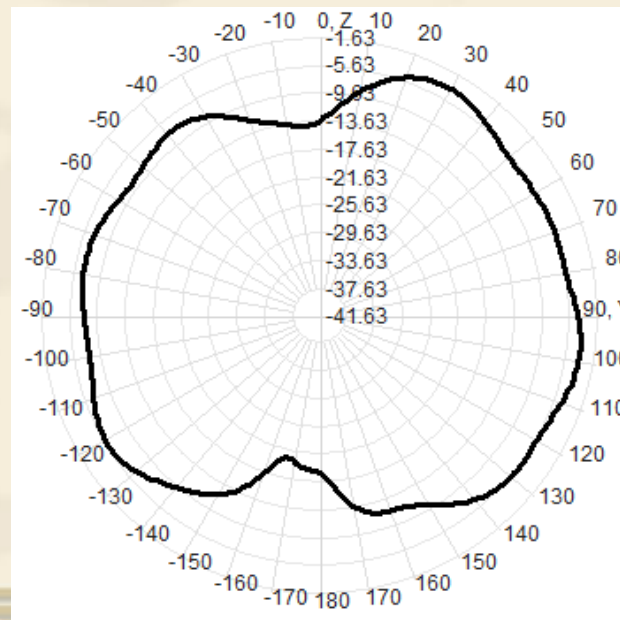
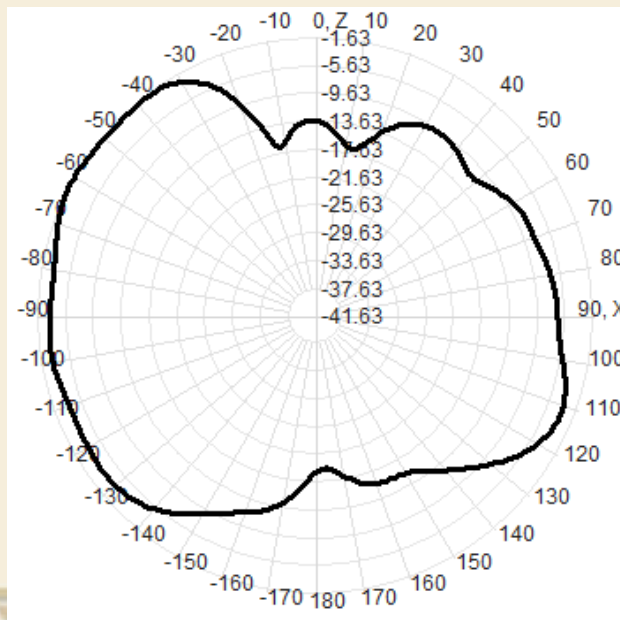
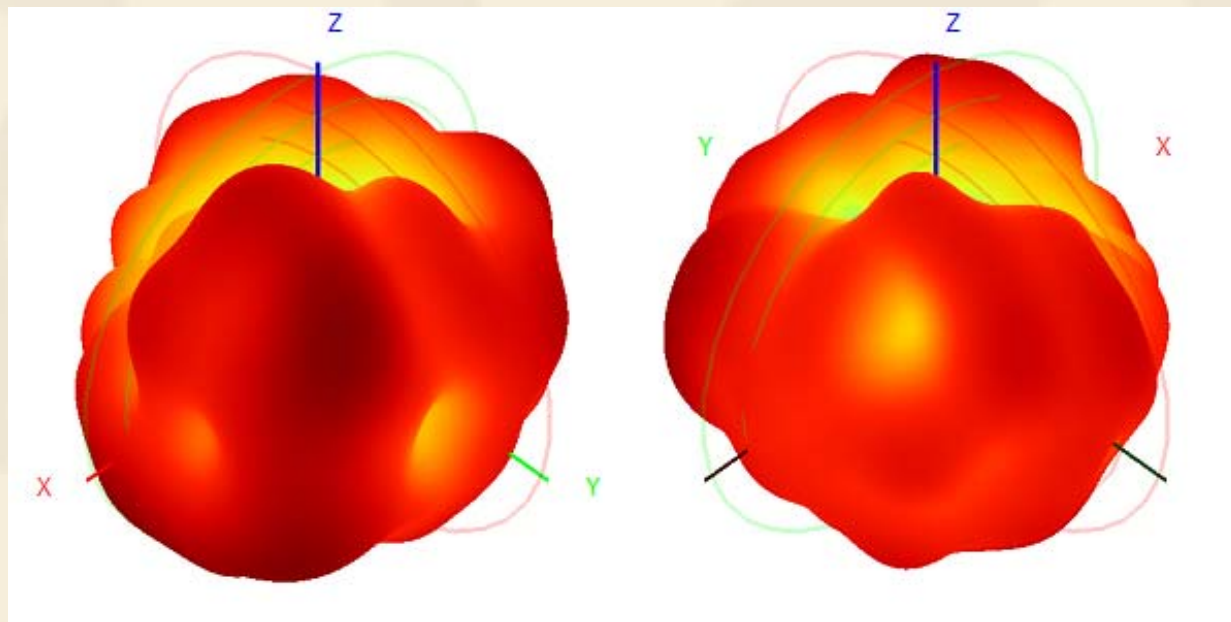


3. Antenna 2 passive test data:

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-11.63	-10.94	-10.30	-9.87	-9.38	-8.84	-8.44	-8.04	-7.81	-7.84	-8.06
Gain (dBi)	-6.87	-5.88	-5.15	-4.85	-4.37	-3.79	-3.46	-3.08	-2.27	-2.37	-2.66
Efficiency (%)	6.87	8.05	9.32	10.31	11.52	13.07	14.32	15.69	16.57	16.43	15.65
Directivity (dB)	4.76	5.06	5.15	5.02	5.02	5.05	4.98	4.97	5.53	5.48	5.40
Peak Gain Position (Theta)	121.00	51.00	52.00	55.00	120.00	119.00	118.00	117.00	99.00	99.00	98.00
Peak Gain Position (Phi)	17.00	48.00	47.00	46.00	18.00	18.00	18.00	19.00	29.00	29.00	30.00
Efficiency ThetaPol (%)	2.54	2.96	3.39	3.73	4.22	4.96	5.60	6.14	6.24	6.05	5.69
Efficiency PhiPol (%)	4.33	5.10	5.93	6.58	7.30	8.11	8.72	9.54	10.33	10.39	9.96
Upper Hem. Efficiency (%)	3.22	3.76	4.35	4.84	5.43	6.16	6.77	7.41	7.82	7.80	7.50
Lower Hem. Efficiency (%)	3.65	4.29	4.97	5.46	6.10	6.91	7.55	8.28	8.75	8.64	8.15

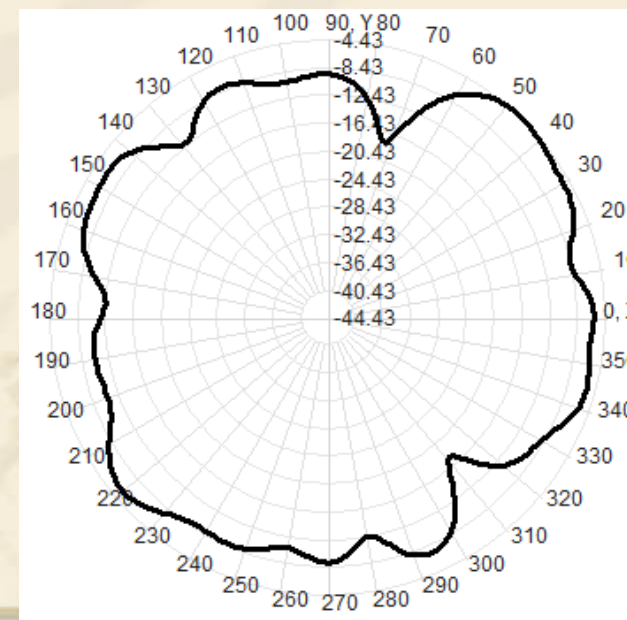
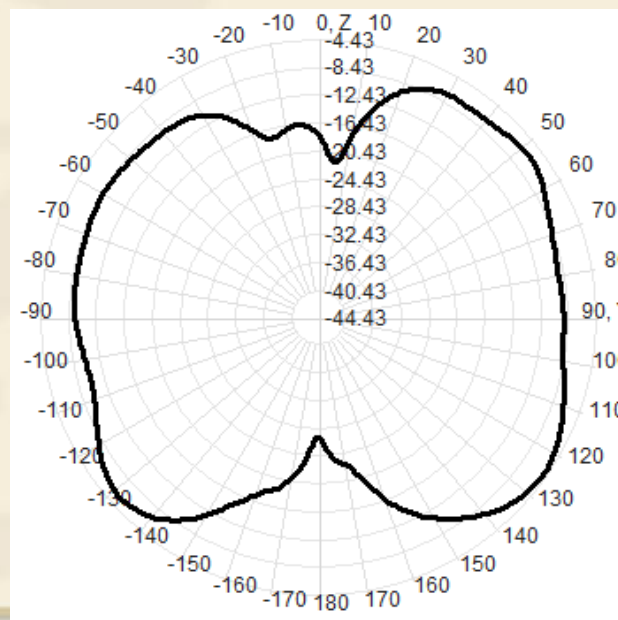
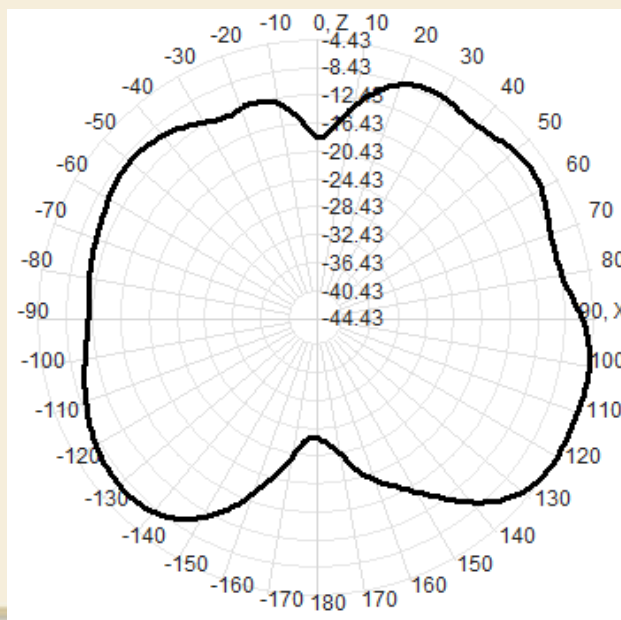
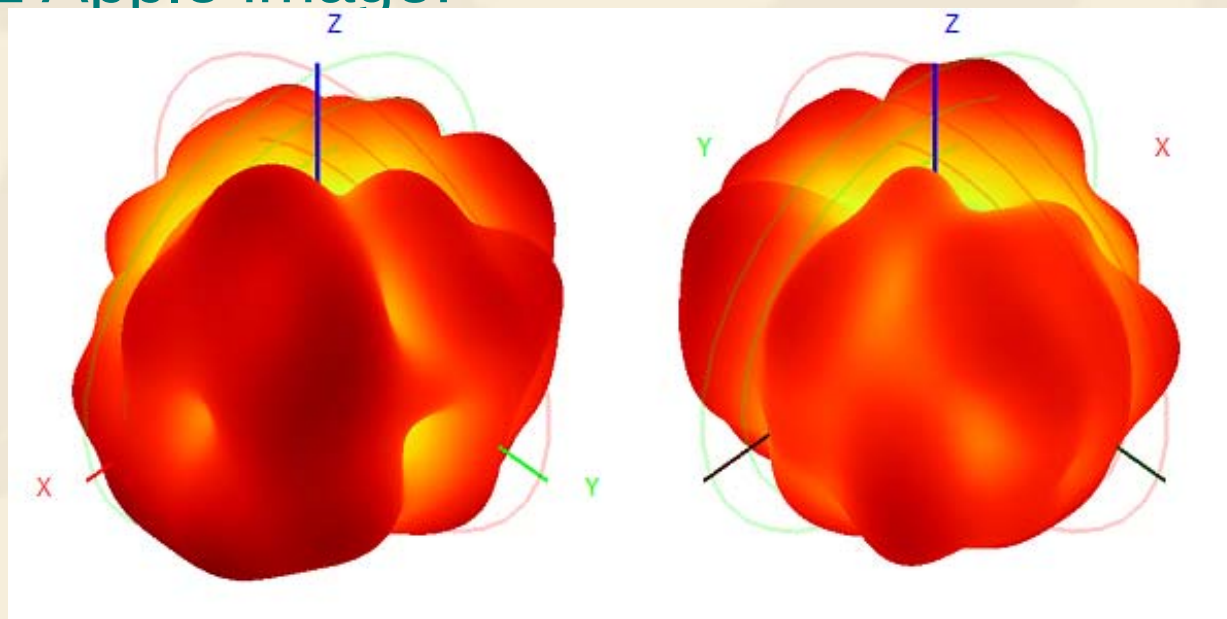
3. Antenna 2 Apple image:

2400M



3. Antenna 2 Apple image:

2450M



3. Antenna 2 Apple image:

2500M

