

Regulatory WWAN Antenna Information (Template)

Platform information					
Brand	ODM	****End product model name	Intel platform (ex: Yes, No or NA)	Platform type (ex: regular NB, convertible PC, AIO...etc)	*SAR minimum separation (mm)
GETAC		(F110, F110G7)			
*****Please fill in exact product model name and make sure the model name is visible on product cover or any parts for end users recognize for authority inspection.					
Antenna information					
Vendor	Type	Antenna Part number (Main)		Antenna Part number (Aux)	
PULSE	PIFA	422GA4500002		422GA4500003	

WWAN Main Antenna Gain Table

Frequency	617	634.5	652	663	680.5	696	698	704
Gain (dBi)	0.20	1.30	1.81	2.05	2.49	2.99	3.07	3.26

710	716	720	725	730	734	740	746	756	765
3.17	2.89	2.72	2.62	2.52	2.55	2.49	2.66	3.01	3.06

772	777	782	787	791	806	821	824	836	849
2.80	2.49	2.17	1.79	1.50	0.54	0.40	0.53	0.56	0.76

862	869	880	894	900	915	925	940	960	1159
0.76	0.79	0.53	0.25	0.02	-0.26	-0.61	-1.27	-0.68	-2.29

1164	1176	1189	1194	1560	1565	1575	1585	1595	1602
-2.91	-3.05	-2.55	-2.46	-1.71	-1.38	-1.16	-0.75	-0.28	-0.03

1610	1695	1710	1730	1750	1770	1785	1805	1840	1850
0.19	2.29	2.52	2.85	2.86	3.00	2.95	2.93	2.77	2.62

1880	1910	1920	1930	1950	1960	1980	1995	2110	2140
2.82	2.74	2.59	2.45	2.36	2.64	3.32	3.66	5.10	5.47

2170	2300	2325	2350	2375	2400	2500	2515	2535	2555
6.07	6.06	4.94	3.56	2.42	2.13	3.50	3.51	3.12	2.38

2570	2595	2620	2630	2655	2680	2690	3300	3320	3340
2.06	1.81	2.40	2.57	2.63	2.31	1.96	4.84	4.55	4.22

3360	3380	3400	3550	3600	3700	3800	4300	4350	4400
3.93	3.72	3.46	-1.98	-2.18	-2.32	-2.34	3.70	3.79	3.73

4450	4500	4550	4600	4650	4700	4750	4800	4850	4900
3.29	2.95	2.95	2.45	2.58	2.84	3.35	3.68	3.40	3.02

4950	5000	5050	5100	5150	5250	5725	5850	5925	6000
3.52	3.64	3.26	3.28	2.92	2.47	3.32	3.11	3.35	3.50

WWAN Aux Antenna Gain Table

Frequency	617	634.5	652	663	680.5	696	698	704
Gain (dBi)	-7.70	-6.57	-5.52	-4.79	-3.34	-1.87	-1.68	-1.33

710	716	720	725	730	734	740	746	756	765
-1.28	-1.10	-1.20	-1.20	-1.15	-1.04	-0.86	-0.81	-0.48	-0.29

772	777	782	787	791	806	821	824	836	849
-0.16	0.07	0.12	0.19	0.13	0.01	0.56	0.65	1.03	1.21

862	869	880	894	900	915	925	940	960	1159
1.19	1.12	1.20	1.01	1.03	1.00	1.24	1.56	1.77	-2.71

1164	1176	1189	1194	1560	1565	1575	1585	1595	1602
-2.40	-2.65	-2.63	-2.87	2.38	2.43	2.10	1.94	1.83	1.72

1610	1695	1710	1730	1750	1770	1785	1805	1840	1850
1.60	2.61	2.76	3.28	3.58	3.57	3.34	3.07	2.62	2.62

1880	1910	1920	1930	1950	1960	1980	1995	2110	2140
2.97	3.41	3.52	3.57	3.42	3.42	3.51	3.34	3.31	3.26

2170	2300	2325	2350	2375	2400	2500	2515	2535	2555
3.70	3.70	3.55	3.45	3.68	3.51	3.48	3.50	3.31	2.78

2570	2595	2620	2630	2655	2680	2690	3300	3320	3340
2.50	2.05	1.54	1.29	1.53	1.64	1.58	2.57	2.66	2.63

3360	3380	3400	3550	3600	3700	3800	4300	4350	4400
2.66	2.83	2.96	2.93	3.11	2.94	2.65	3.46	2.49	2.27

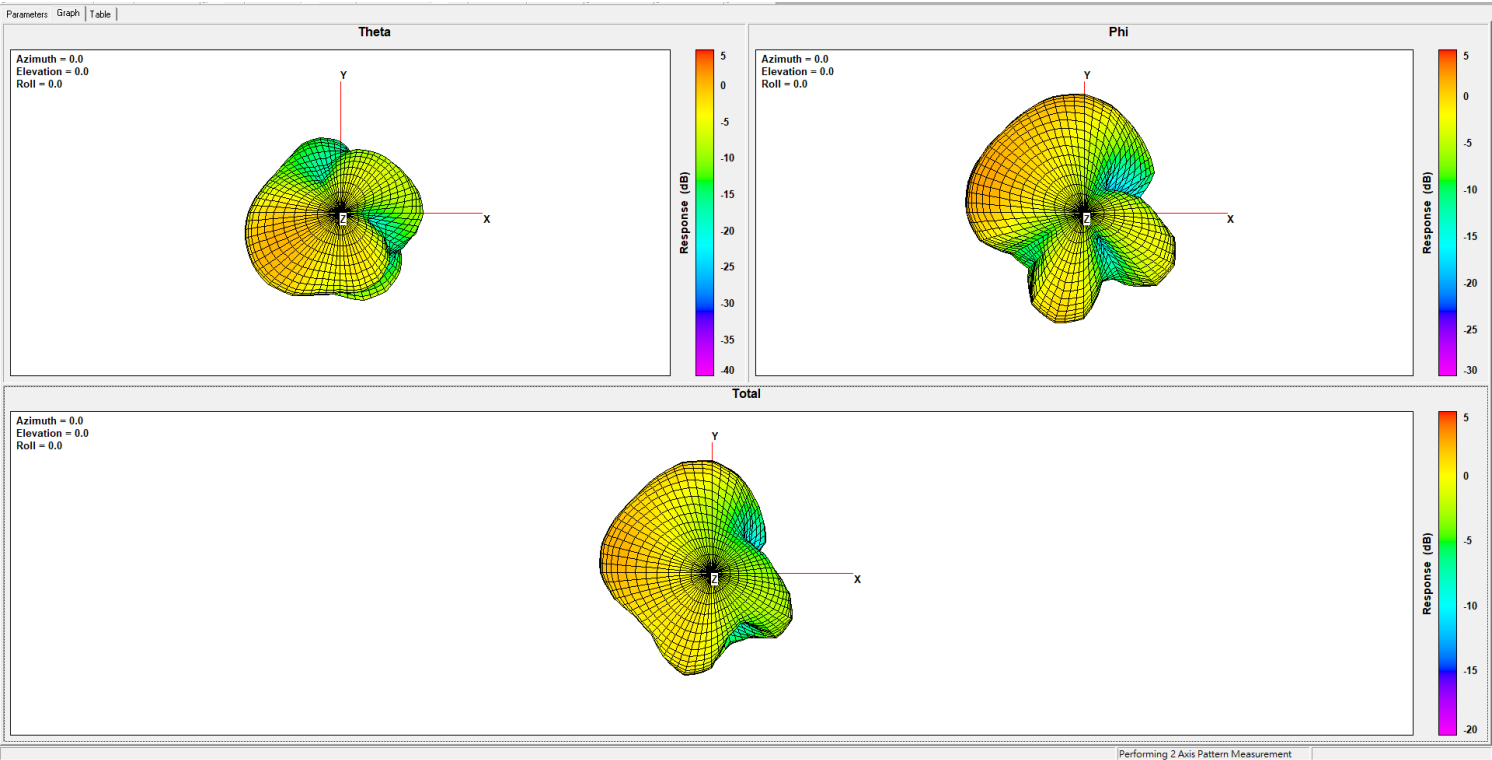
4450	4500	4550	4600	4650	4700	4750	4800	4850	4900
2.17	1.75	1.56	1.43	2.07	2.65	2.92	3.25	2.79	2.61

4950	5000	5050	5100	5150	5250	5725	5850	5925	6000
2.31	2.05	2.72	2.66	2.32	2.92	3.12	3.64	3.85	3.61

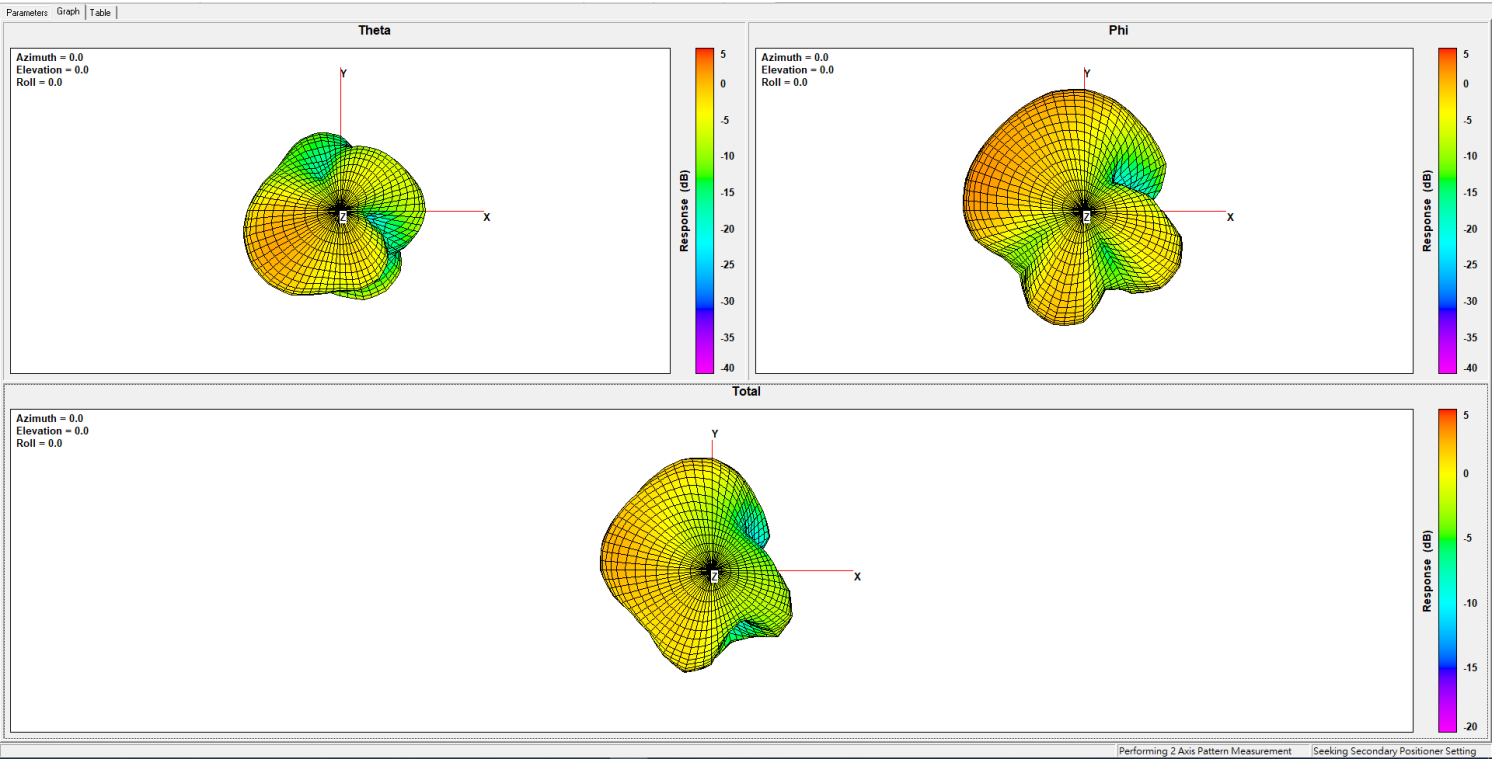
Section 3. Radiation characteristics of antenna loaded in Host Platform

Main Antenna

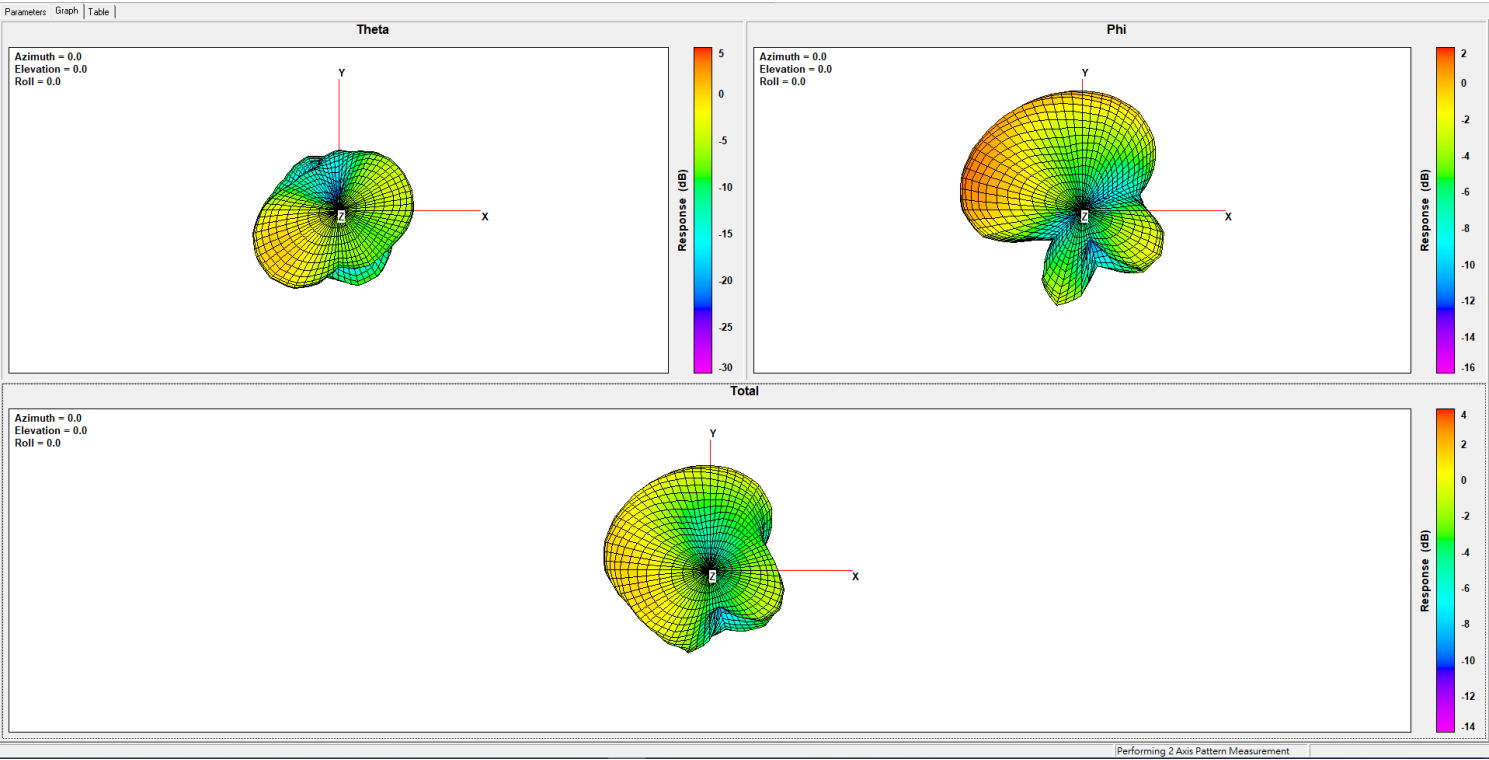
698MHz



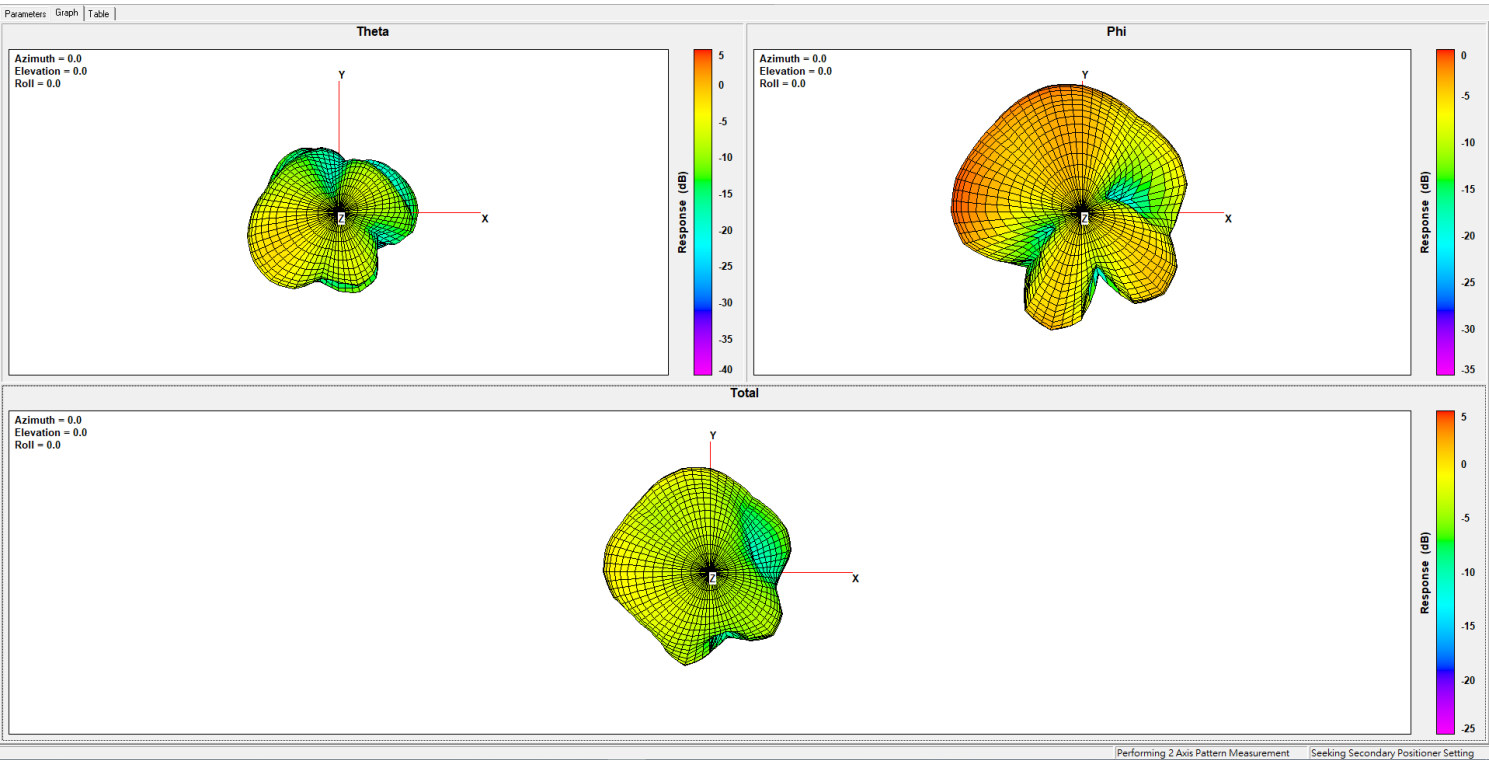
704 MHz



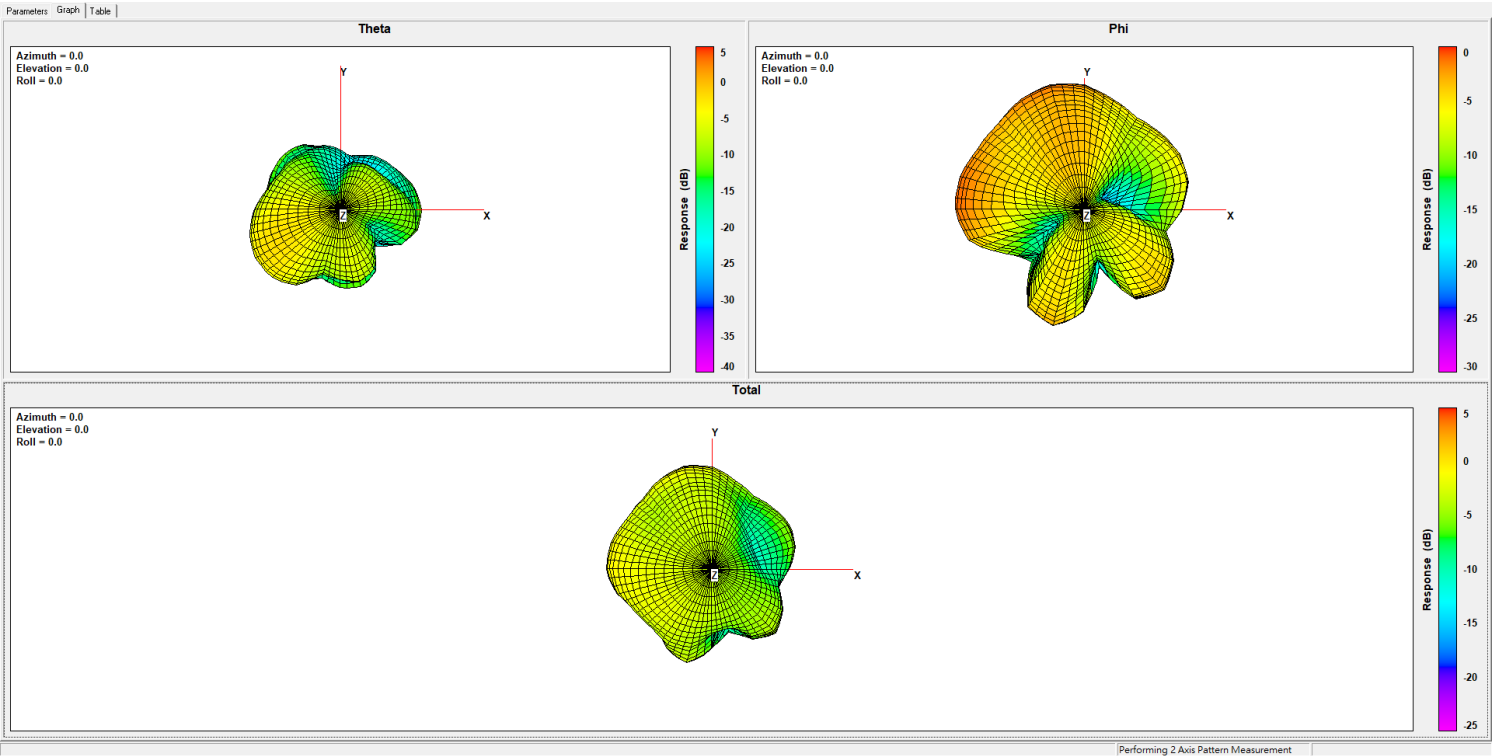
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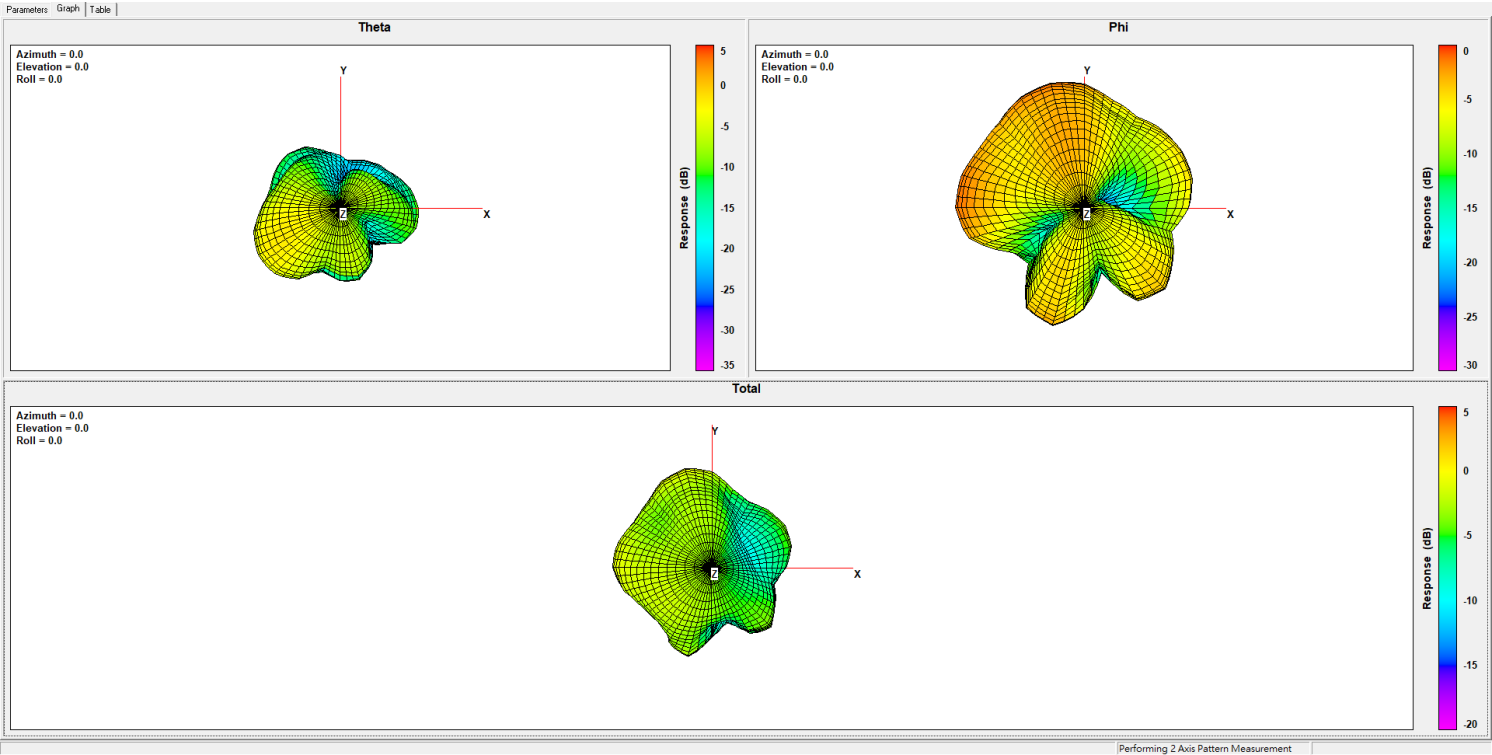
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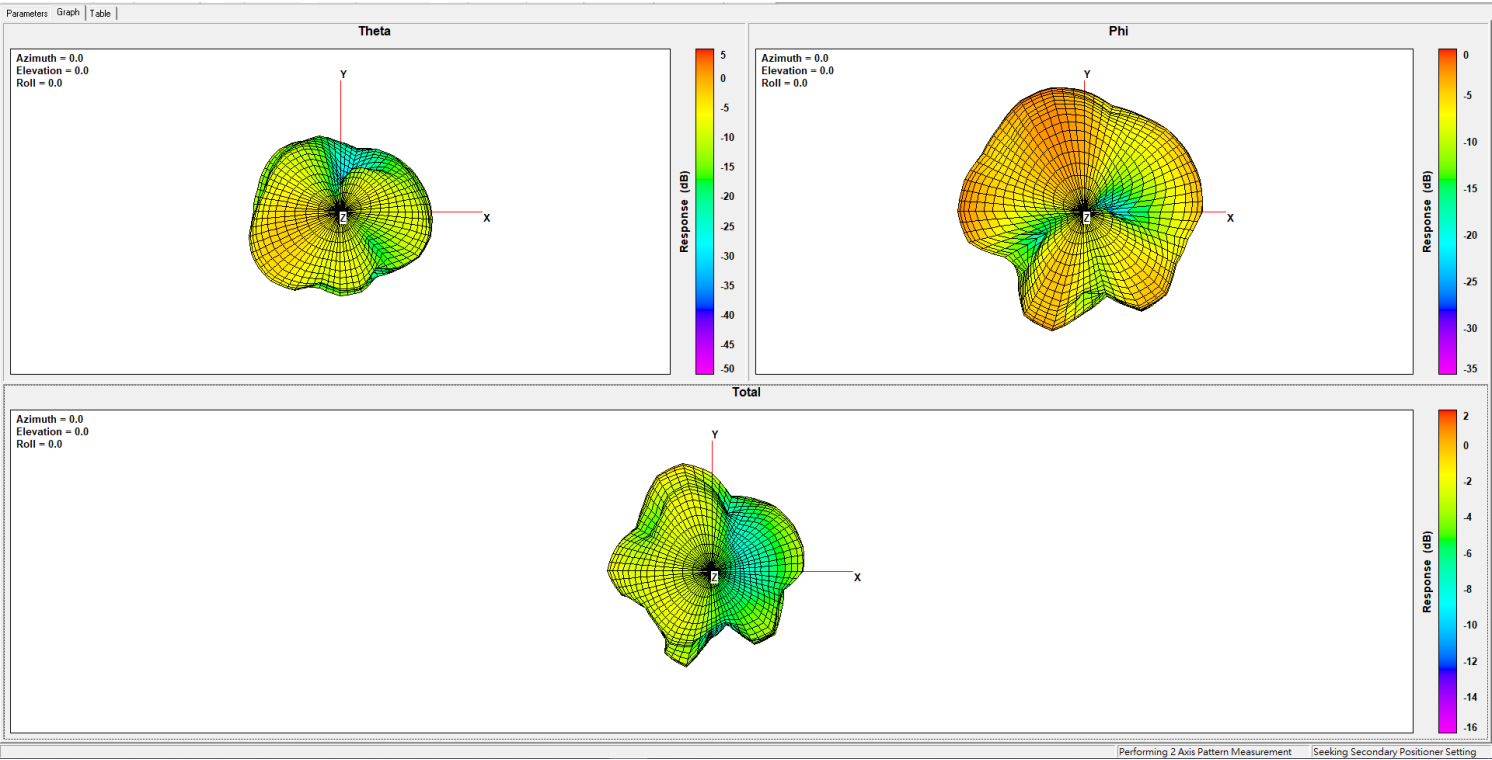
836 MHz



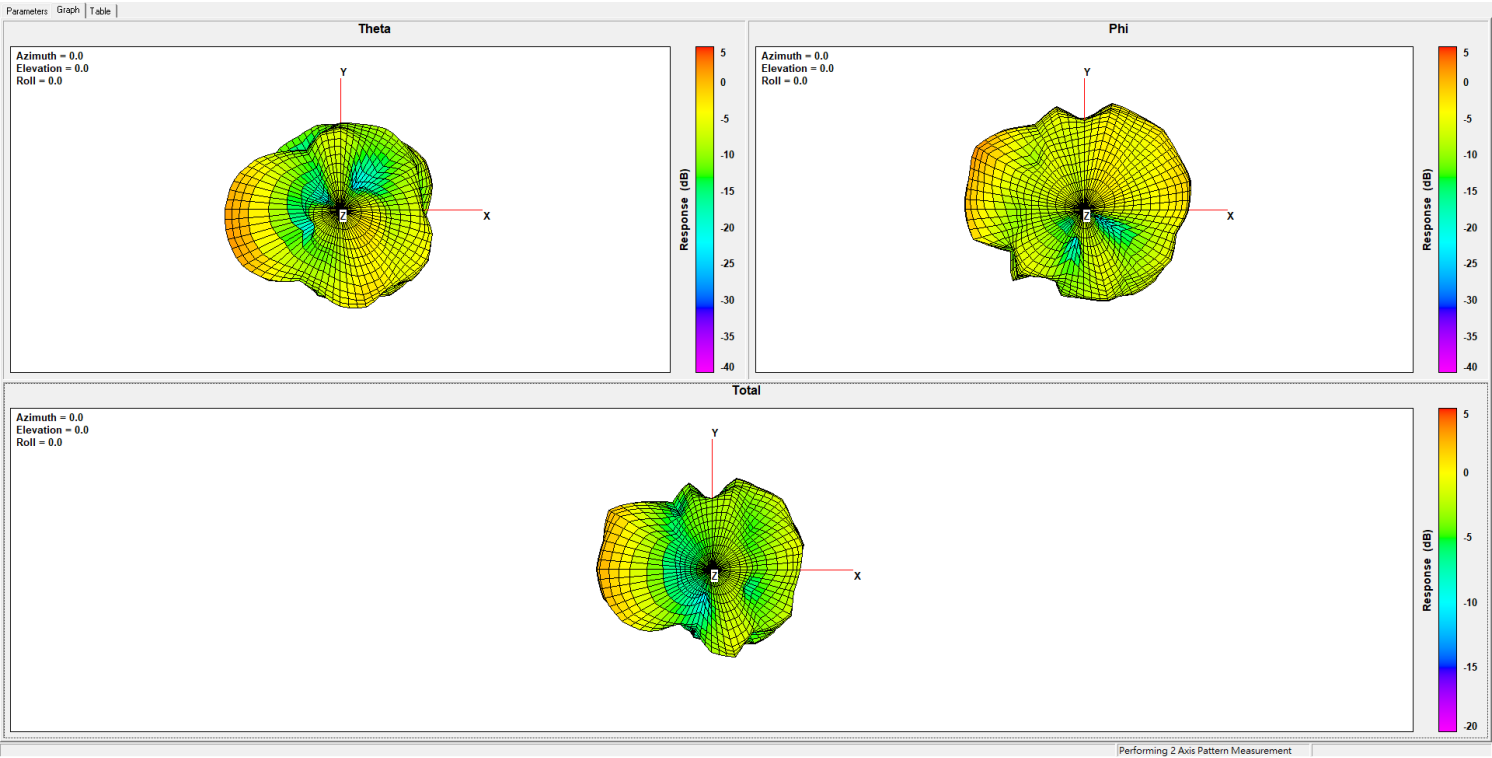
849MHz



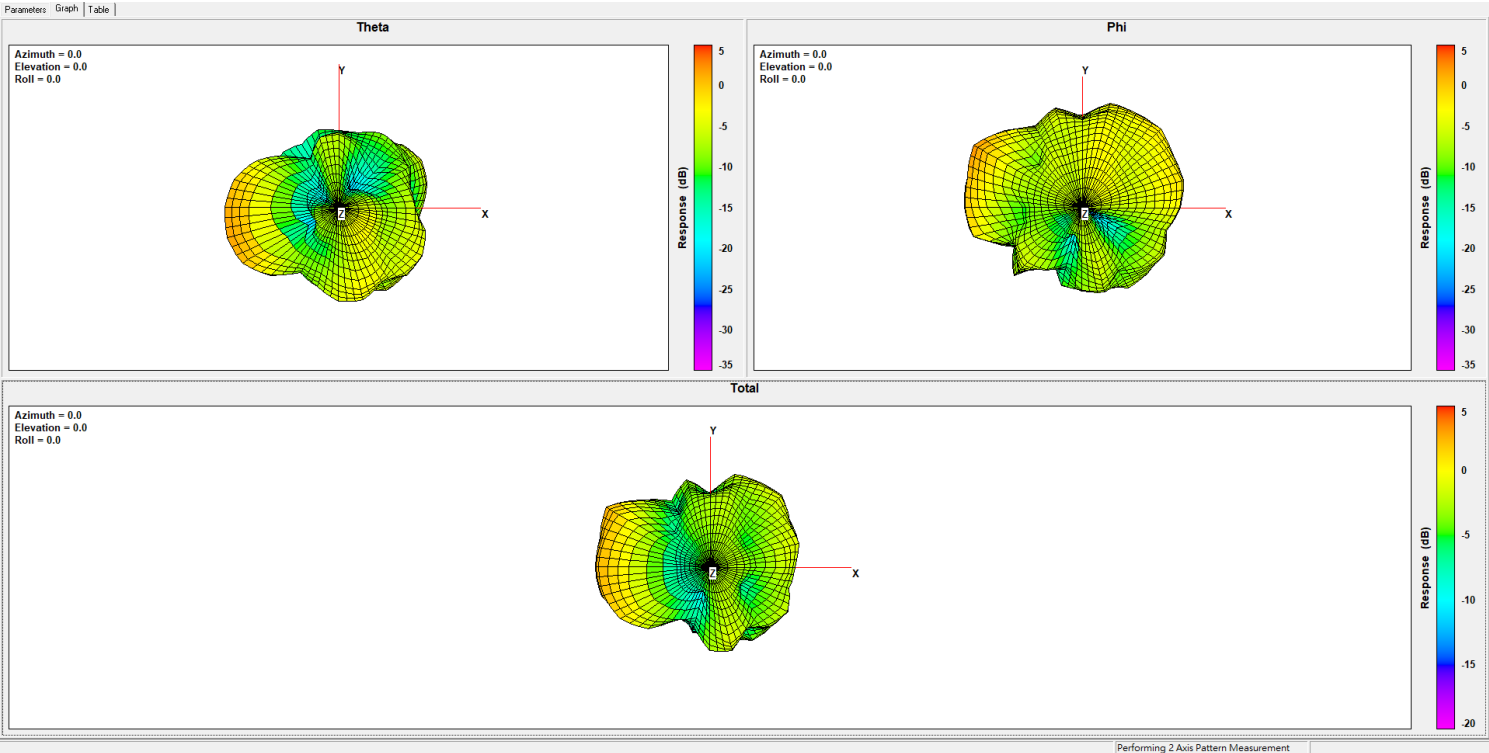
880 MHz



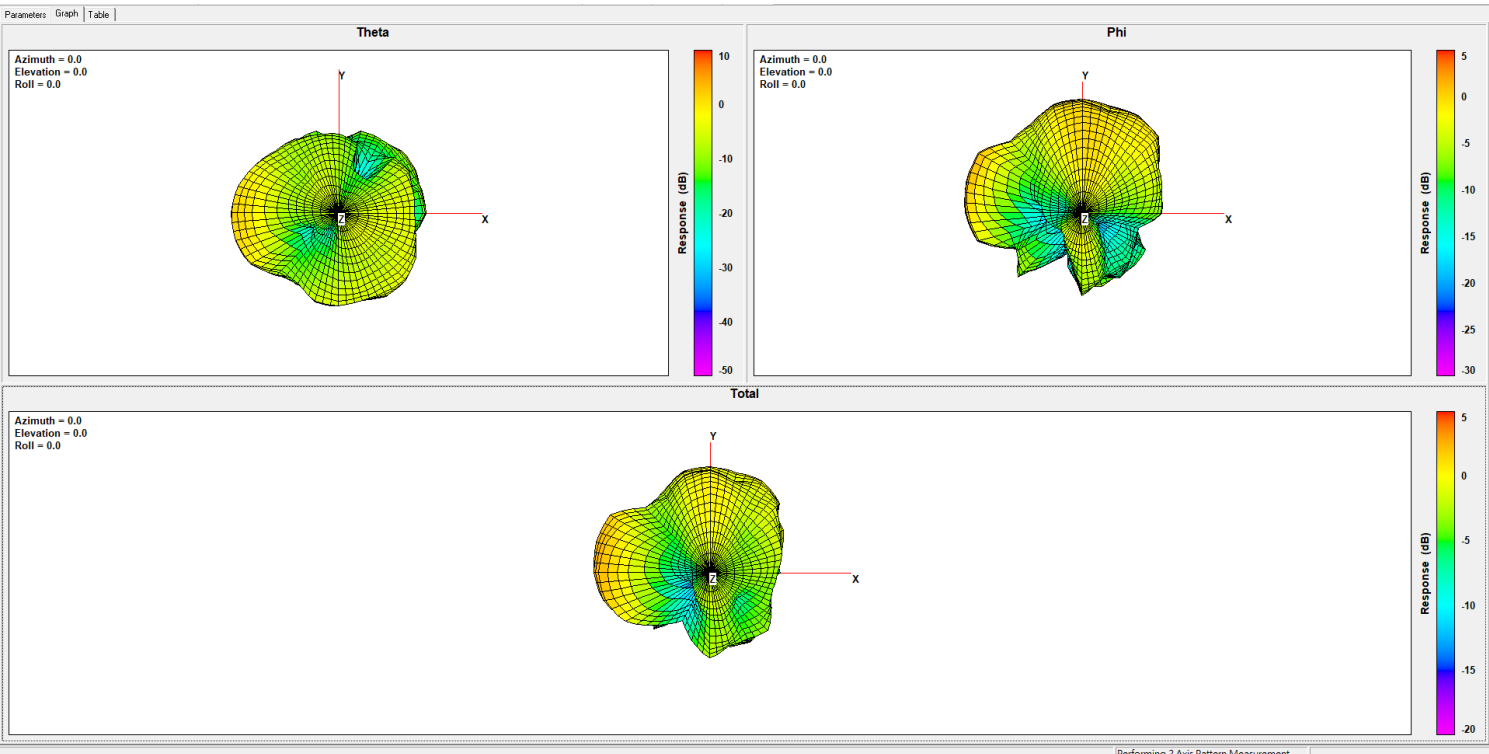
1750 MHz



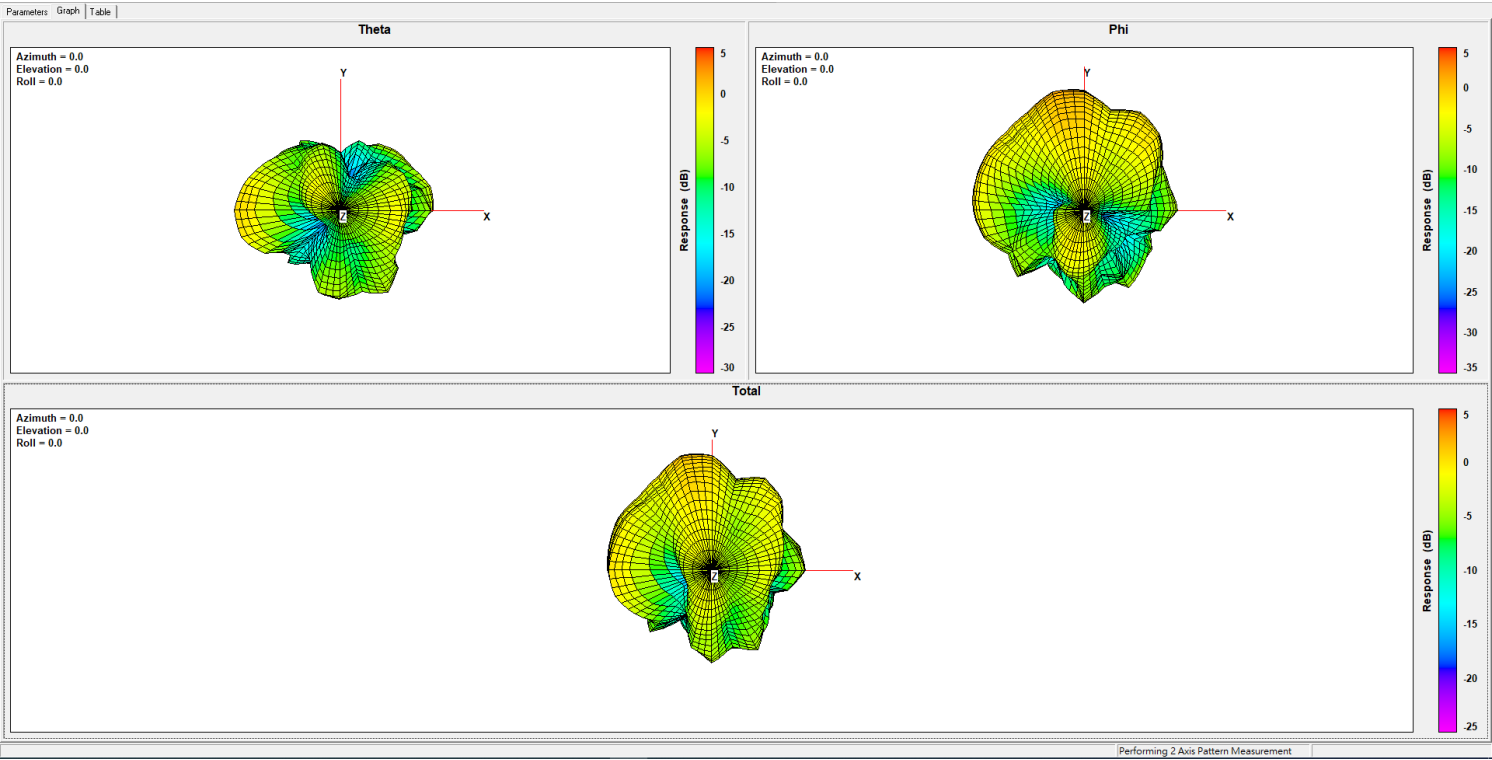
1770 MHz



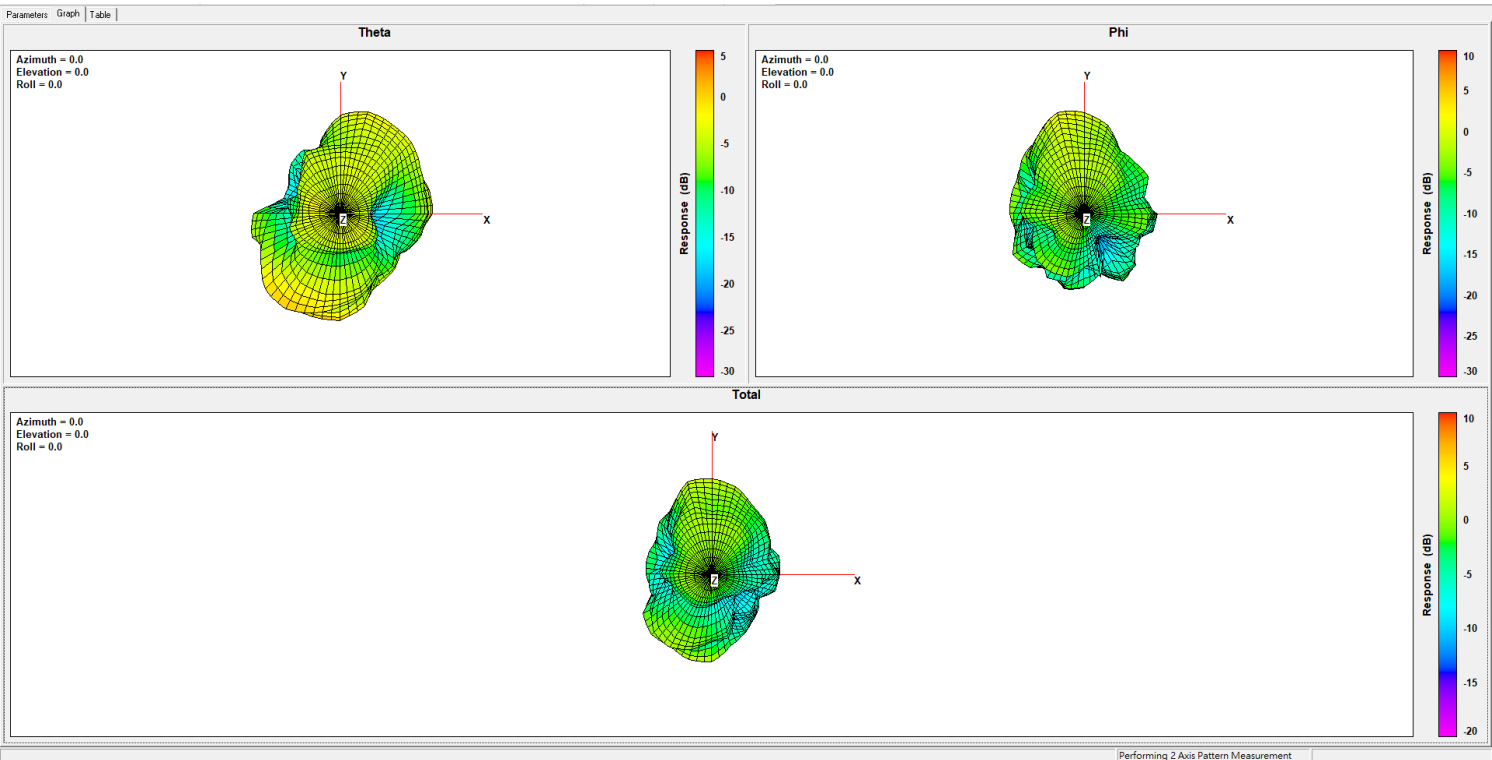
1880 MHz



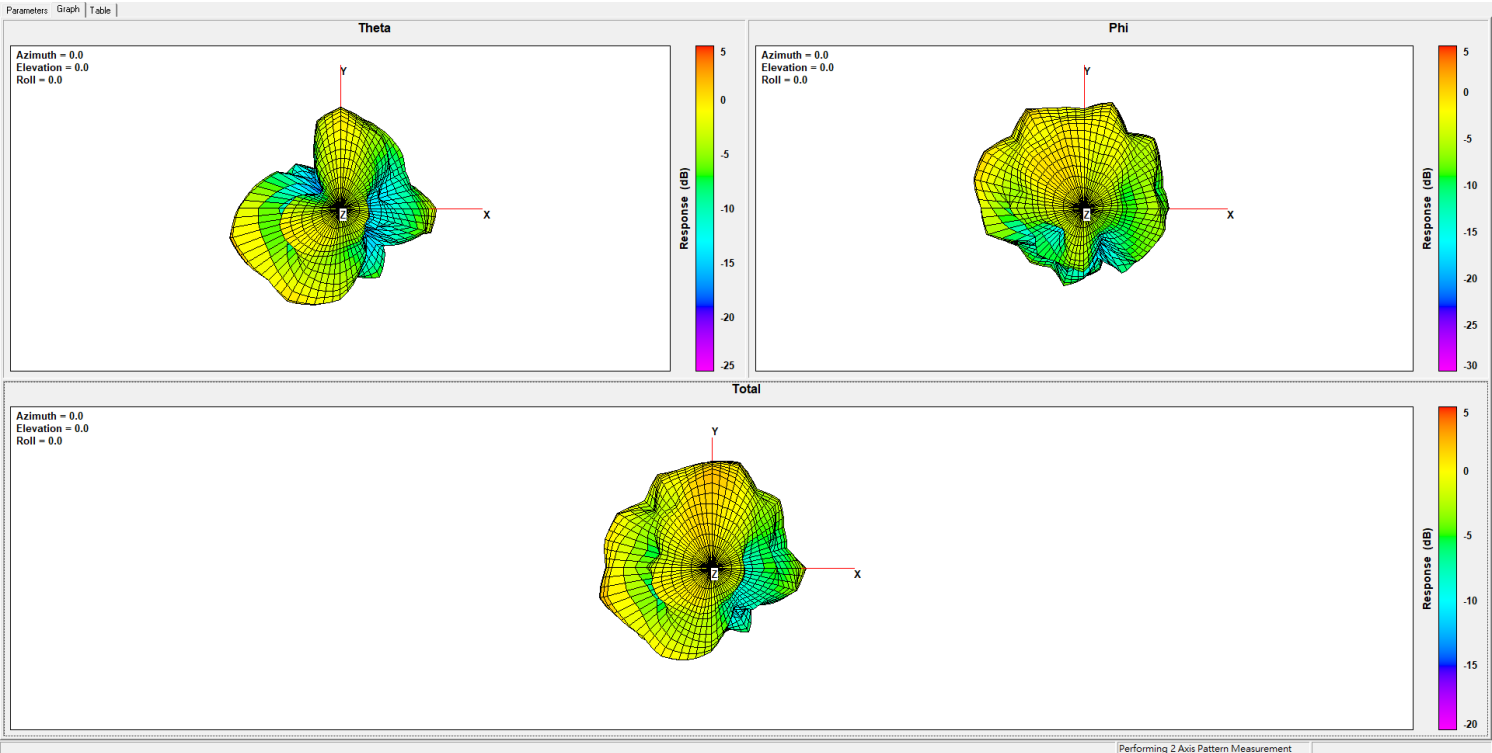
1980 MHz



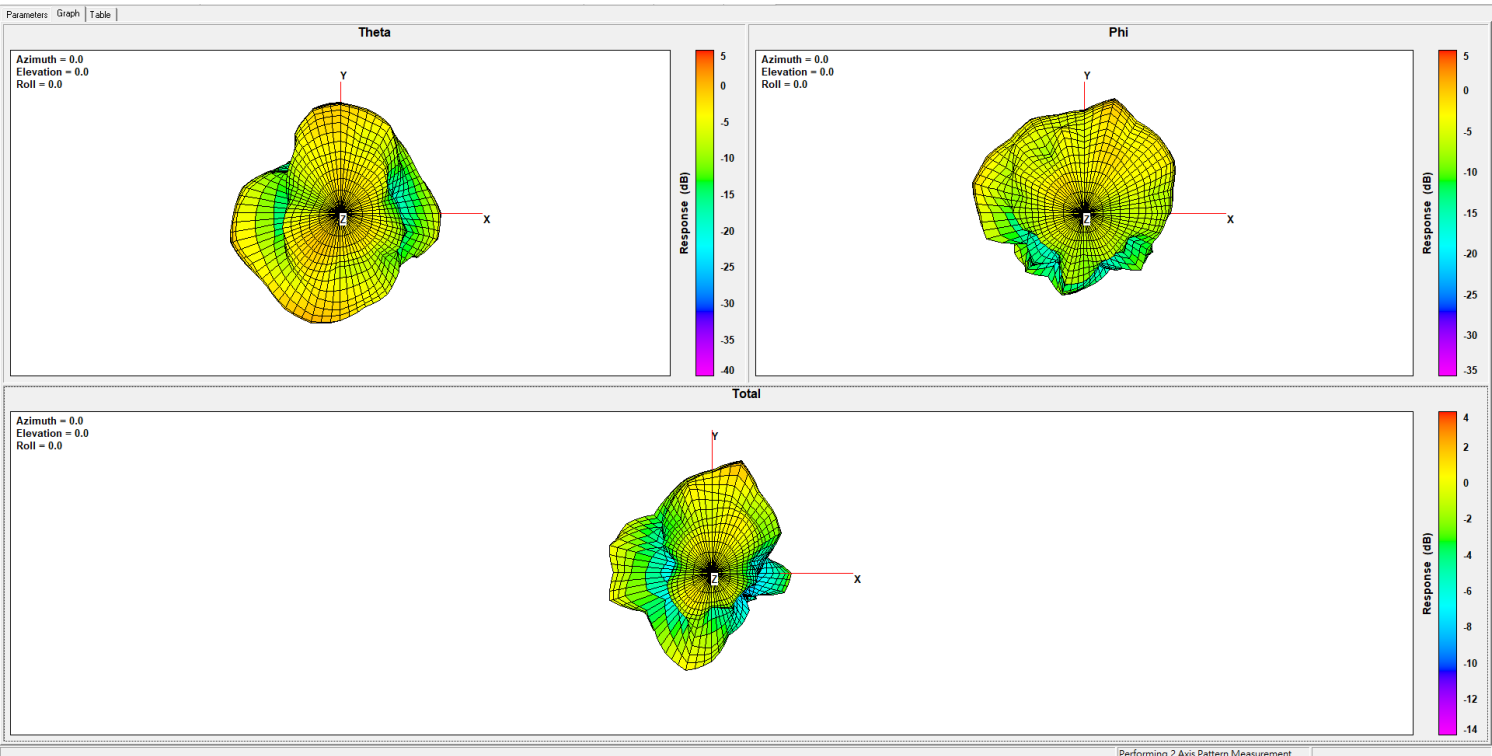
2300 MHz



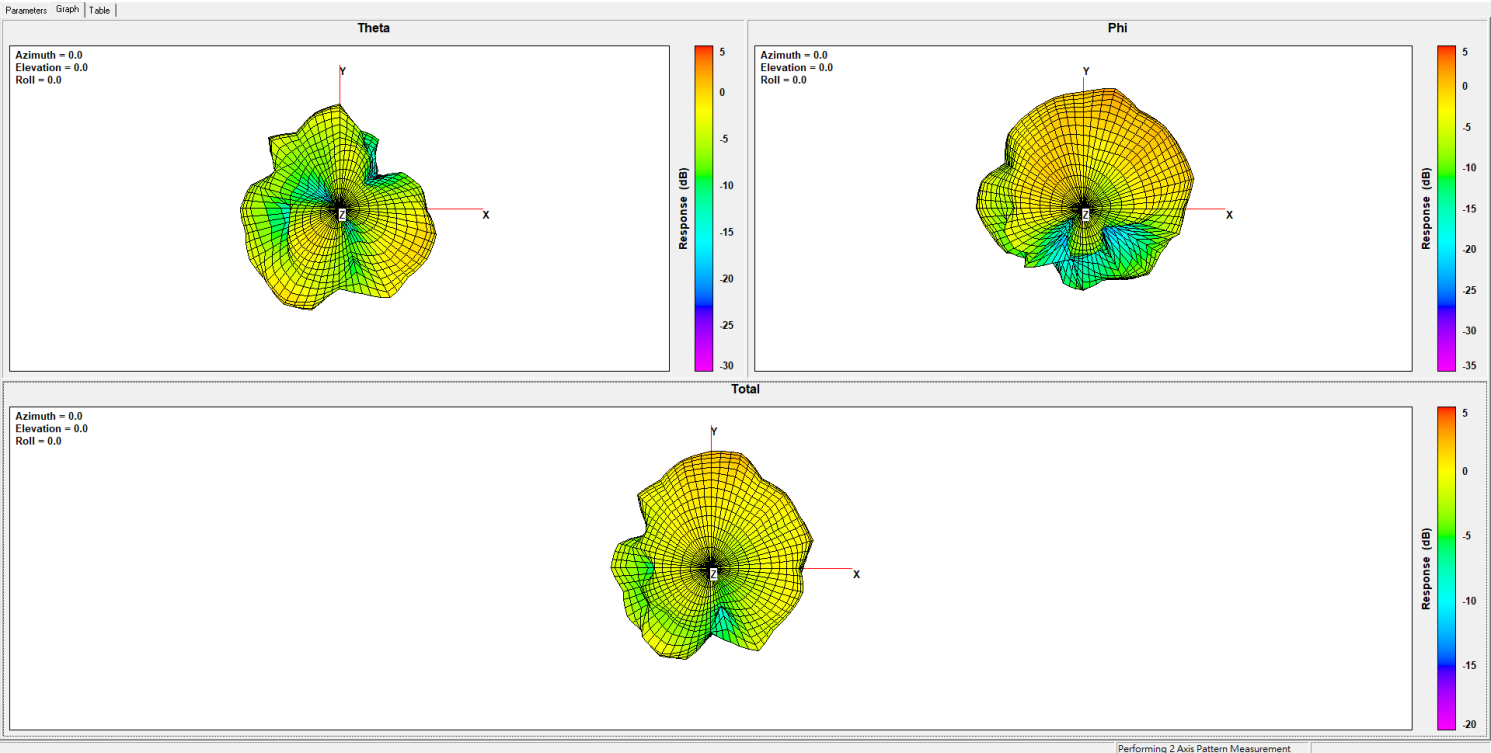
2515 MHz



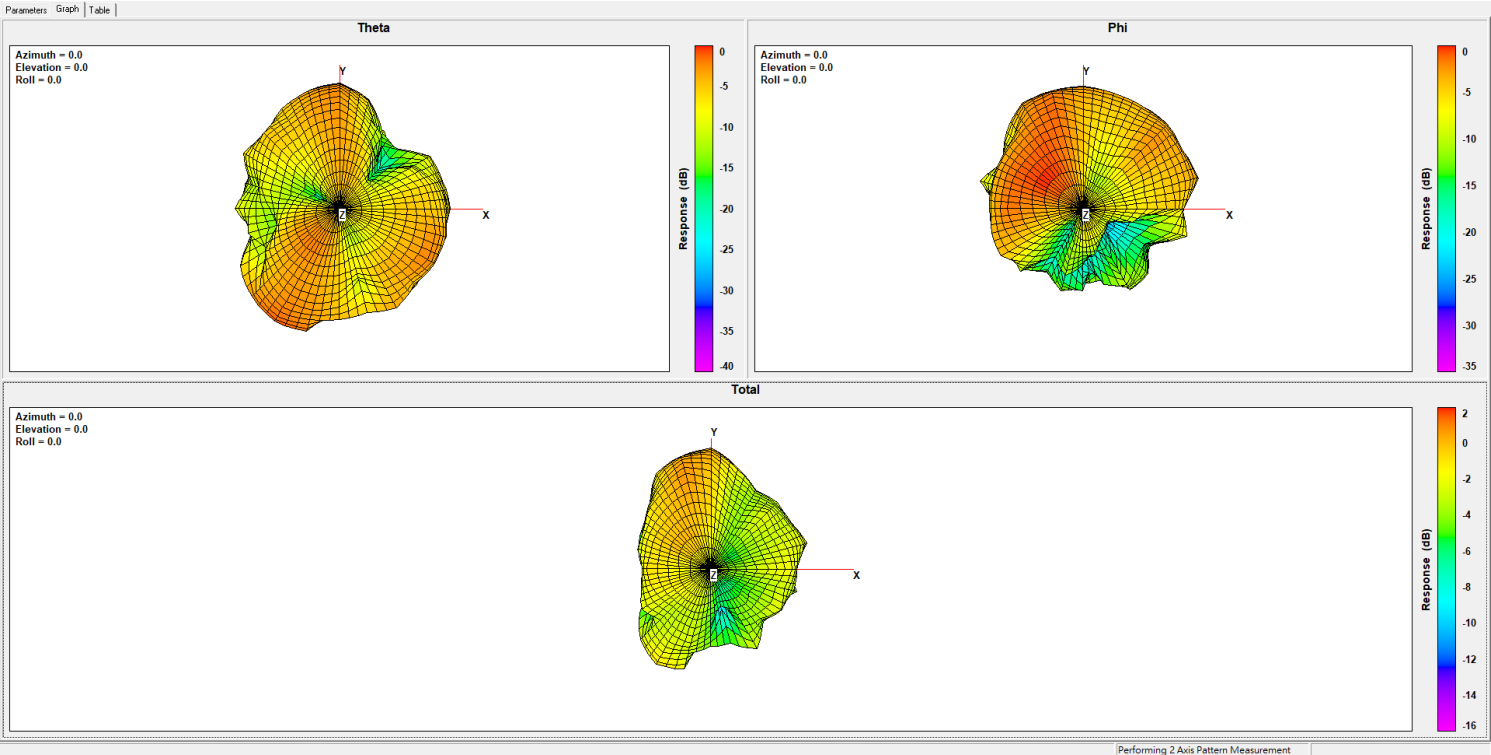
2620 MHz



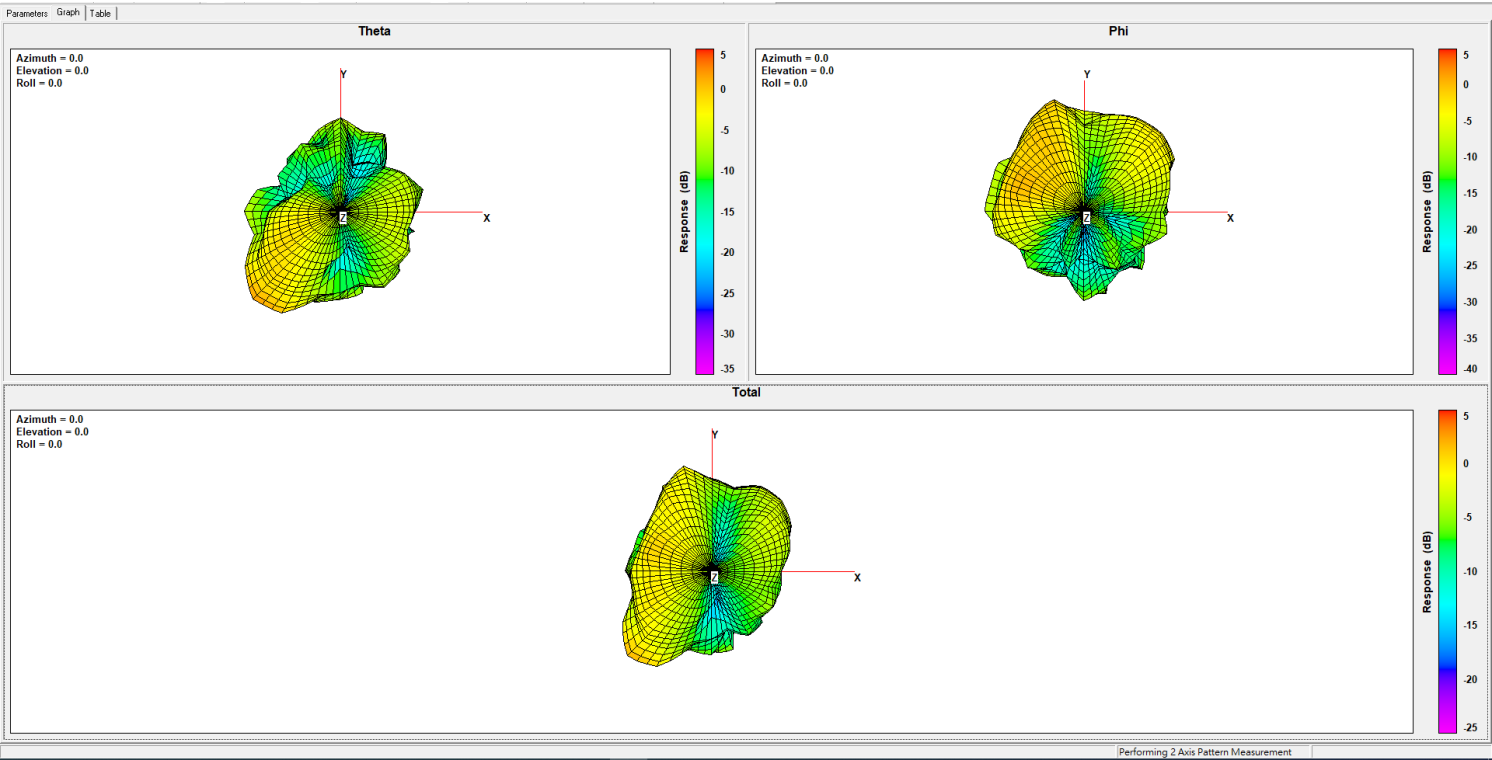
3300 MHz



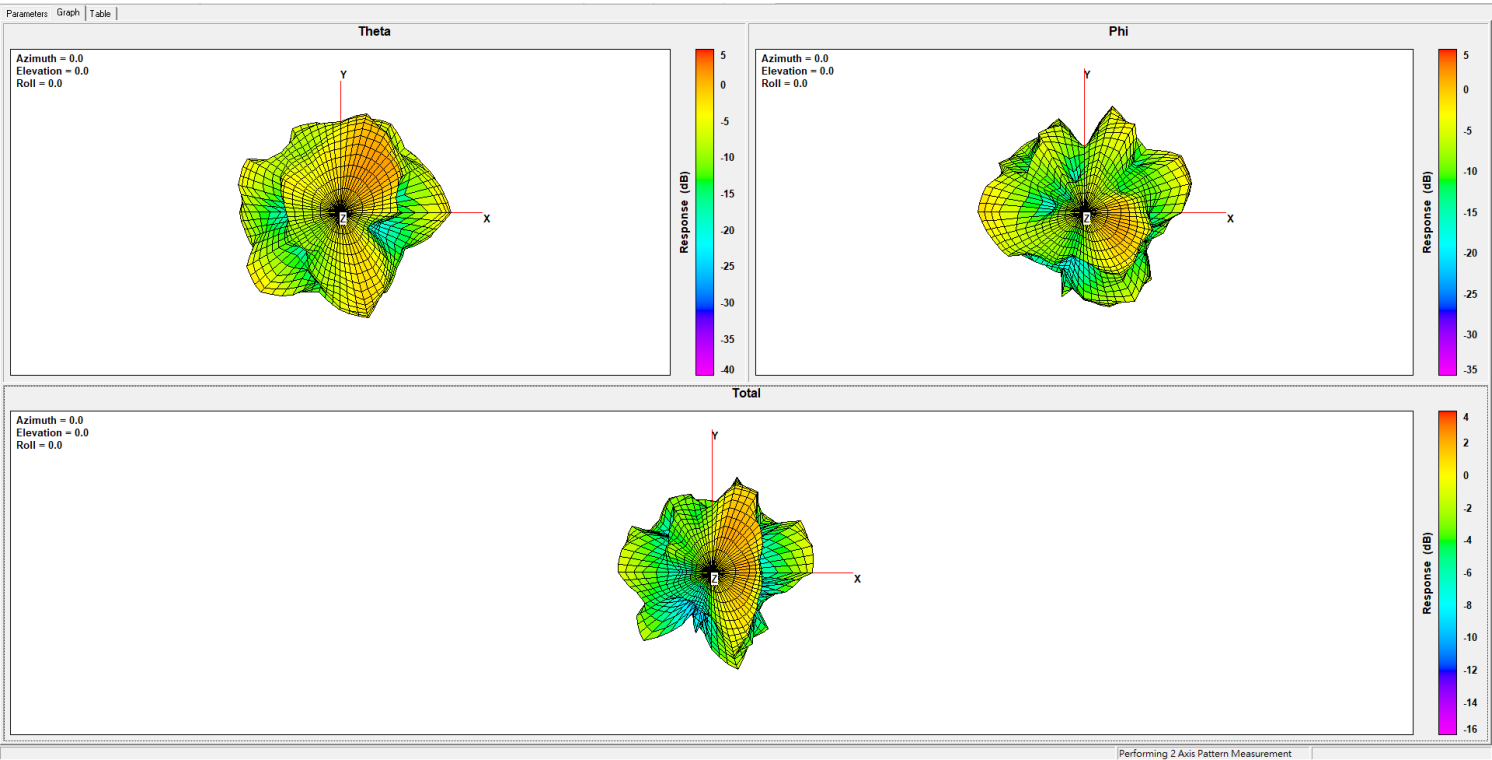
3400 MHz



3550 MHz



3880 MHz

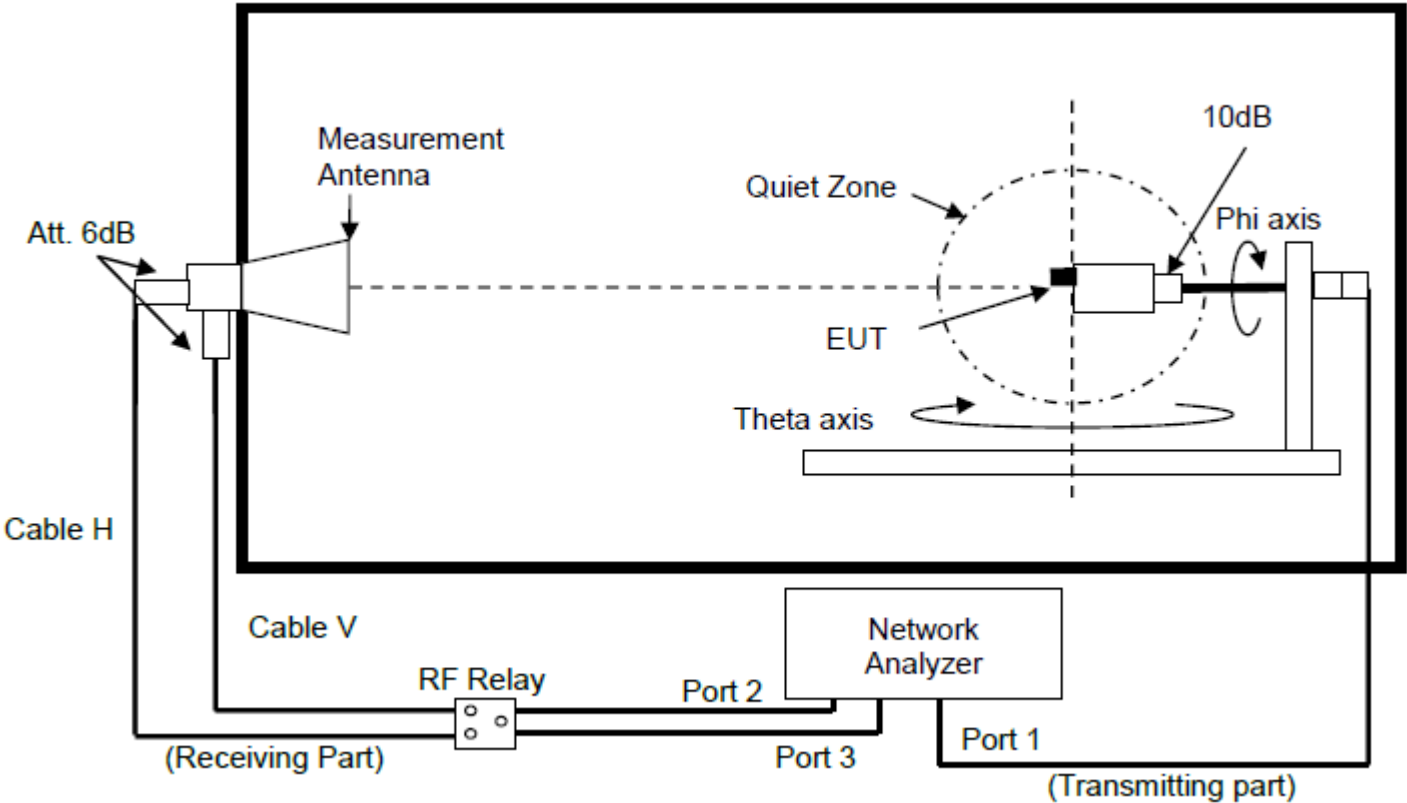


1. Applicable test methods

This test report is prepared for F110 antenna testing under a Full Anechoic Chamber.

2. Test & System Description

a. Test setup



b. Equipment list

Name	Manufacturer	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
ENA Series Network Analyzer	Keysight	E5071C	MY46100746	2023/07/18	2024/07/17
RF Switch	Keysight	3499A	00155745	NCR	NCR
Multi-Axis Positioner Controller	ETS-Lindgren	2090	N/A	NCR	NCR
Medium-Duty Positioner	ETS-Lindgren	2015	N/A	NCR	NCR
Measurement Horn Antenna	EMCO	3164-08	00102092	NCR	NCR