Regulatory WLAN Antenna Information

Platform information					
Brand	**ODM**	******End product model name**	**platform** (ex: Yes, No or NA)	**Platform type** (ex: regular NB, convertible PC, AIO…etc)	***SAR minimum separation (mm)**
GETAC		S410, S410G5			
********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**	421GB74C0001	421GB74C0002

Antenna manufacturer: Pulse Electronics (Singapore) Pte Ltd

Address: 3F., No. 2, Aly. 1, Ln. 235, Baoqiao Rd., Xindian Dist., New Taipei City, Taiwan (R.O.C.)

2.4G Mode Main Antenna Gain Table

Frequency	2400	2410	2430	2442	2450	2470	2500
Tot. Rad. Pwr. (dB)	-3.46	-3.26	-2.91	-2.71	-2.63	-2.52	-2.86
Peak EIRP (dB)	1.16	1.56	2.29	2.69	2.91	3.30	3.45
Efficiency (%)	45.13	47.22	51.20	53.62	54.61	55.93	51.76
Gain (dBi)	1.16	1.56	2.29	2.69	2.91	3.30	3.45

2.4G Mode AUX Antenna Gain Table

Frequency	2400	2410	2430	2442	2450	2470	2500
Tot. Rad. Pwr. (dB)	-4.89	-4.63	-4.12	-3.80	-3.65	-3.30	-3.09
Peak EIRP (dB)	1.80	2.08	2.58	2.90	3.03	3.47	3.48
Efficiency (%)	32.43	34.41	38.75	41.72	43.20	46.78	49.09
Gain (dBi)	1.80	2.08	2.58	2.90	3.03	3.47	3.48

5G Mode Main Antenna Gain Table

Frequency	5150	5180	5190	5240	5250
Tot. Rad. Pwr. (dB)	-3.61	-3.84	-4.03	-3.99	-4.00
Peak EIRP (dB)	1.78	1.73	1.54	1.83	1.92
Efficiency (%)	43.52	41.28	39.56	39.90	39.77
Gain (dBi)	1.78	1.73	1.54	1.83	1.92

Frequency	5250	5260	5290	5320	5340	5350
Tot. Rad. Pwr. (dB)	-4.00	-3.99	-4.12	-4.48	-4.55	-4.58
Peak EIRP (dB)	1.92	1.94	1.78	1.41	1.29	1.18
Efficiency (%)	39.77	39.88	38.70	35.69	35.11	34.85
Gain (dBi)	1.92	1.94	1.78	1.41	1.29	1.18

Frequency	5470	5490	5537	5540	5590	5600	5690	5725
Tot. Rad. Pwr. (dB)	-3.45	-3.37	-2.85	-2.81	-2.53	-2.51	-2.55	-2.64
Peak EIRP (dB)	1.59	1.83	2.40	2.57	2.79	2.76	3.70	3.85
Efficiency (%)	45.19	46.07	51.89	52.40	55.85	56.13	55.59	54.49
Gain (dBi)	1.59	1.83	2.40	2.57	2.79	2.76	3.70	3.85

Frequency	5725	5740	5745	5750	5800	5805	5850
Tot. Rad. Pwr. (dB)	-2.64	-2.75	-2.73	-2.73	-3.13	-3.13	-3.39
Peak EIRP (dB)	3.85	3.71	3.68	3.67	3.34	3.05	2.58
Efficiency (%)	54.49	53.07	53.30	53.31	48.64	48.62	45.79
Gain (dBi)	3.85	3.71	3.68	3.67	3.34	3.05	2.58

5G Mode AUX Antenna Gain Table

Frequency	5150	5180	5190	5240	5250
Tot. Rad. Pwr. (dB)	-2.14	-2.28	-2.36	-2.23	-2.21
Peak EIRP (dB)	4.27	4.07	3.85	3.24	3.26
Efficiency (%)	61.07	59.20	58.03	59.84	60.18
Gain (dBi)	4.27	4.07	3.85	3.24	3.26

Frequency	5250	5260	5290	5320	5340	5350
Tot. Rad. Pwr. (dB)	-2.21	-2.19	-2.23	-2.51	-2.55	-2.60
Peak EIRP (dB)	3.26	3.28	3.63	3.66	3.66	3.61
Efficiency (%)	60.18	60.43	59.79	56.15	55.62	54.94
Gain (dBi)	3.26	3.28	3.63	3.66	3.66	3.61

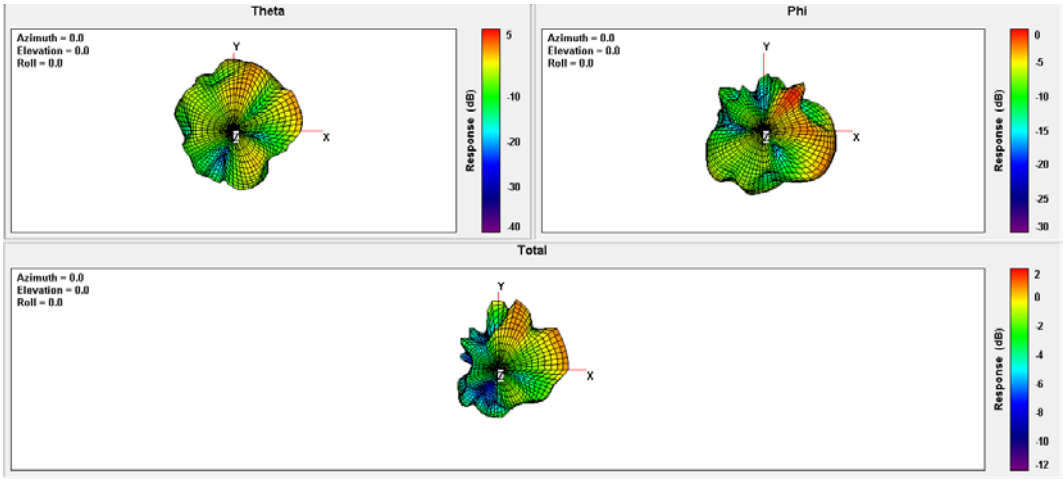
Frequency	5470	5490	5537	5540	5590	5600	5690	5725
Tot. Rad. Pwr. (dB)	-2.15	-2.24	-2.15	-2.13	-2.20	-2.27	-2.69	-2.71
Peak EIRP (dB)	4.24	4.24	4.20	4.19	4.09	4.03	3.82	4.30
Efficiency (%)	61.02	59.68	61.00	61.18	60.24	59.35	53.81	53.64
Gain (dBi)	4.24	4.24	4.20	4.19	4.09	4.03	3.82	4.30

Frequency	5725	5740	5745	5750	5800	5805	5850
Tot. Rad. Pwr. (dB)	-2.71	-2.77	-2.72	-2.72	-2.70	-2.69	-2.45
Peak EIRP (dB)	4.30	4.26	4.21	4.12	3.75	3.64	3.57
Efficiency (%)	53.64	52.84	53.44	53.41	53.66	53.84	56.95
Gain (dBi)	4.30	4.26	4.21	4.12	3.75	3.64	3.57

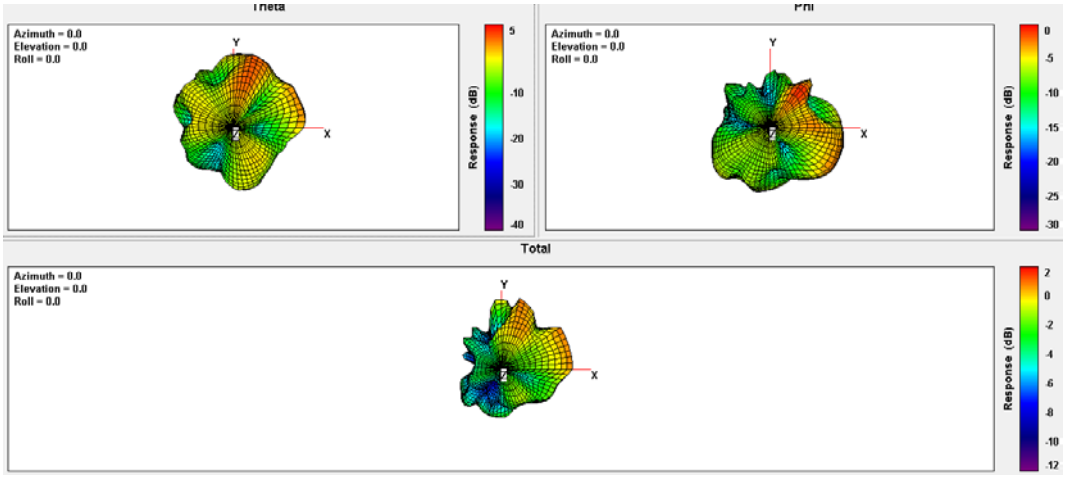
Radiation Pattern

Main Antenna

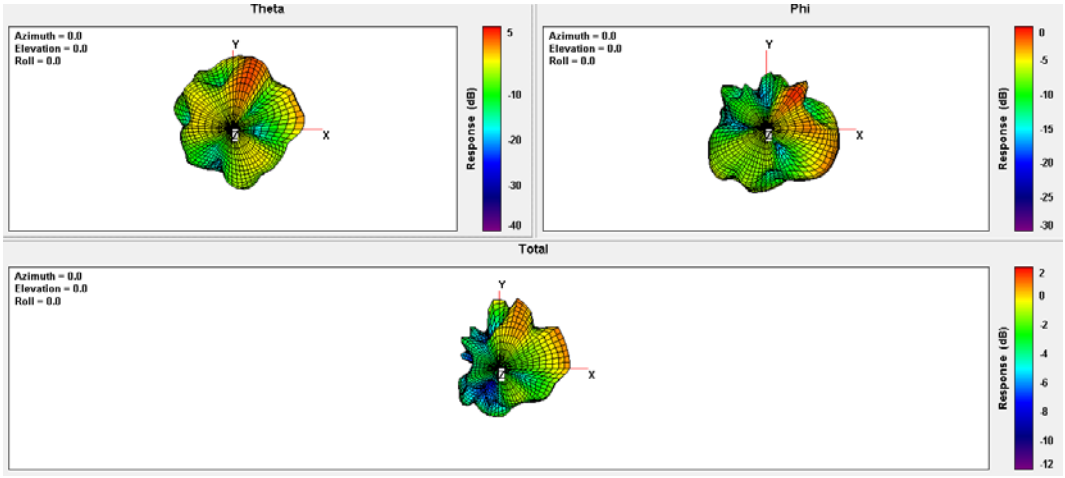
2.4G Mode Main Antenna 2.4GHz



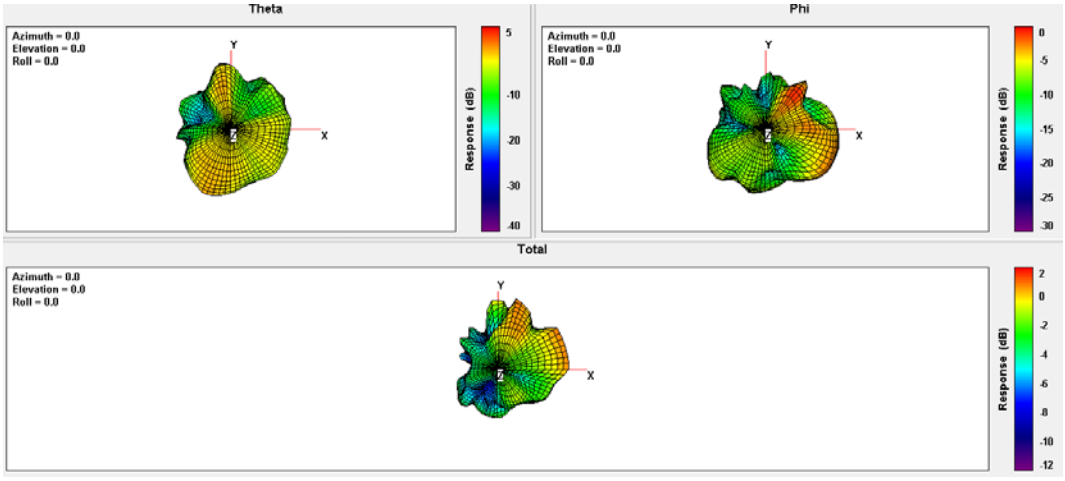
2.4G Mode Main Antenna 2.470GHz



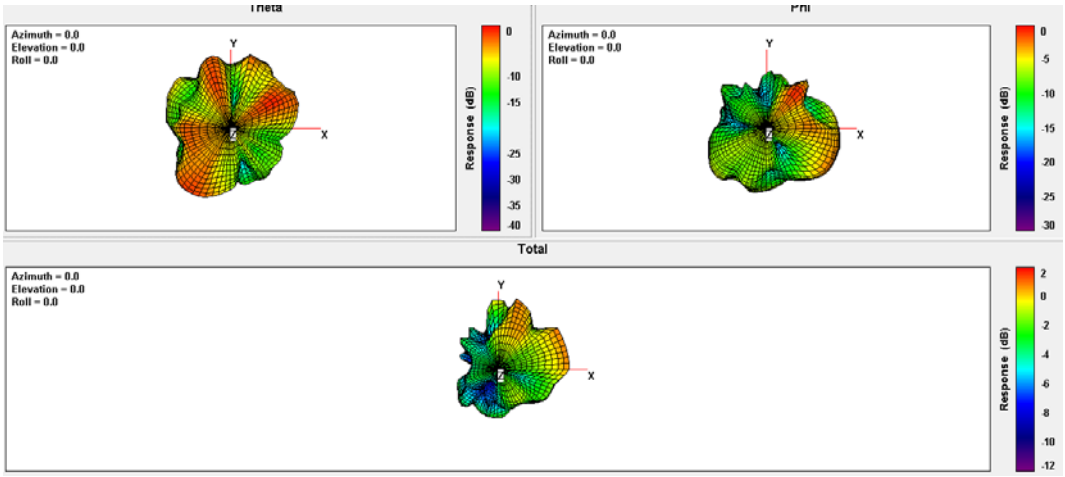
2.4G Mode Main Antenna 2.500GHz



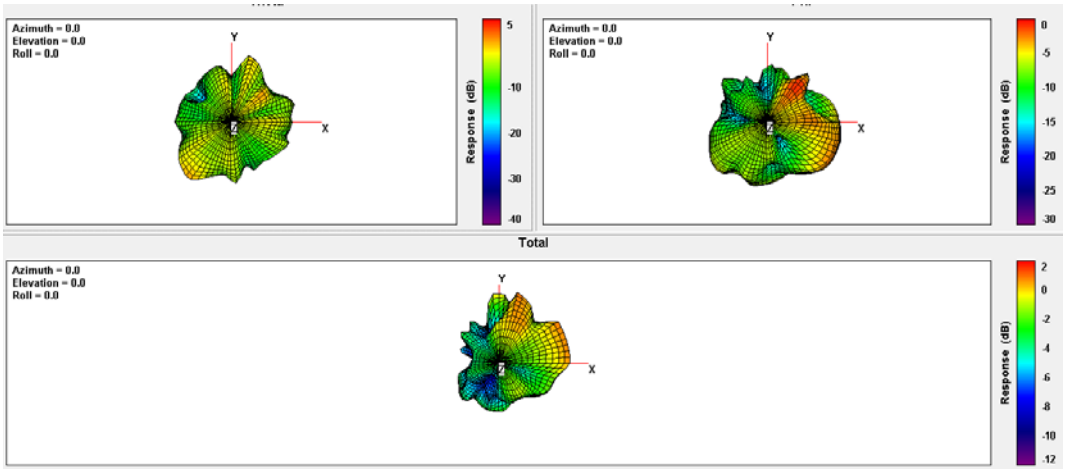
5G Mode Main Antenna 5.150GHz



5G Mode Main Antenna 5.440GHz

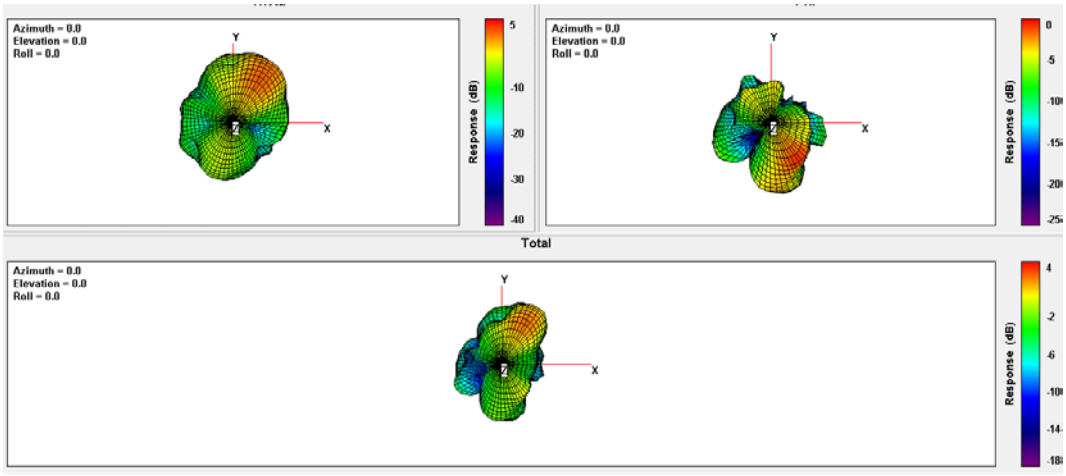


5G Mode Main Antenna 5.875GHz

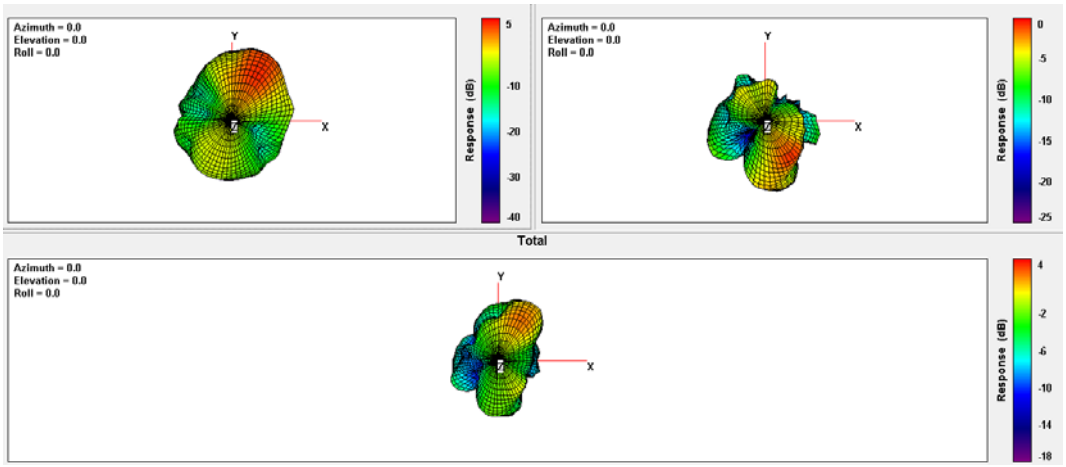


AUX Antenna

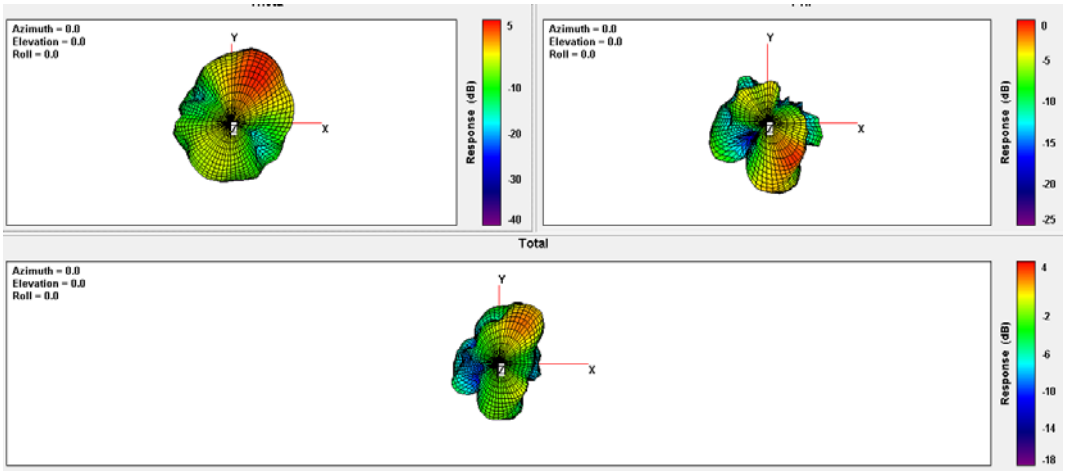
2.4G Mode AUX Antenna 2.4GHz



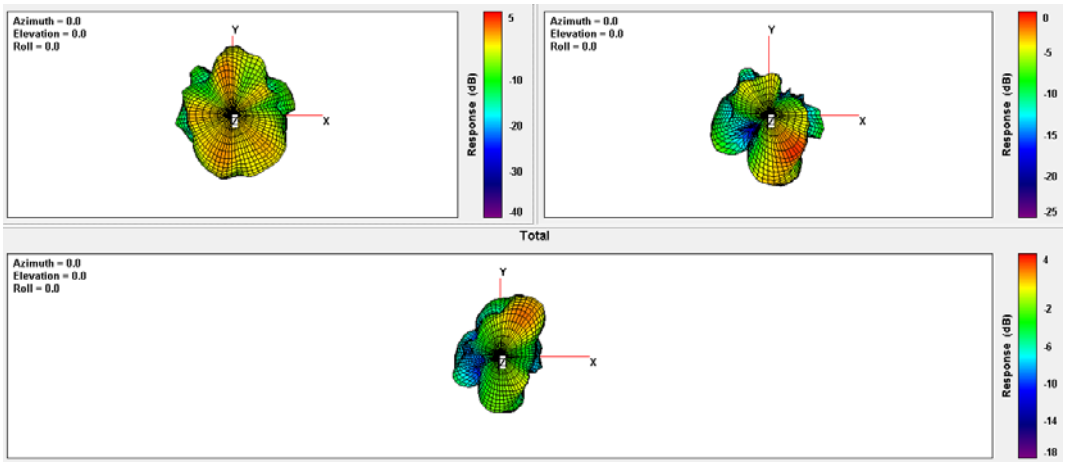
2.4G Mode AUX Antenna 2.470GHz



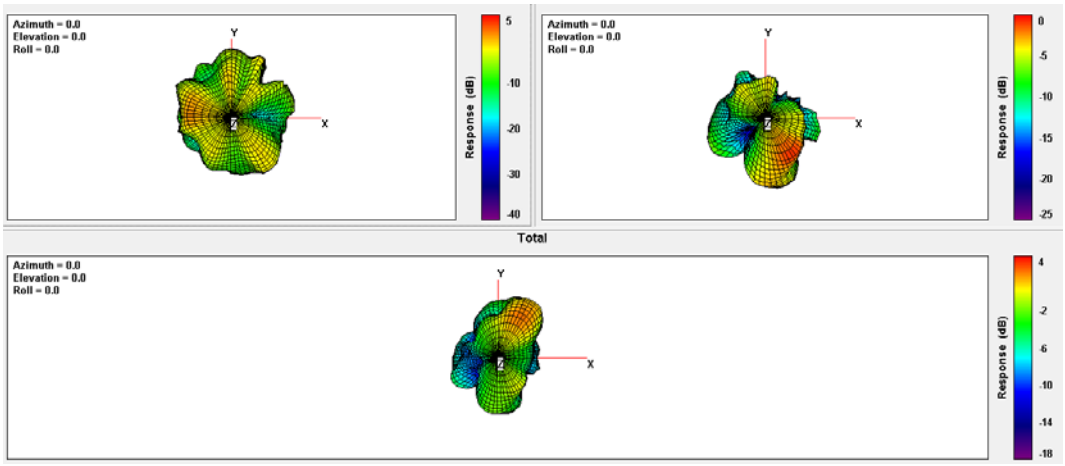
2.4G Mode AUX Antenna 2.500GHz



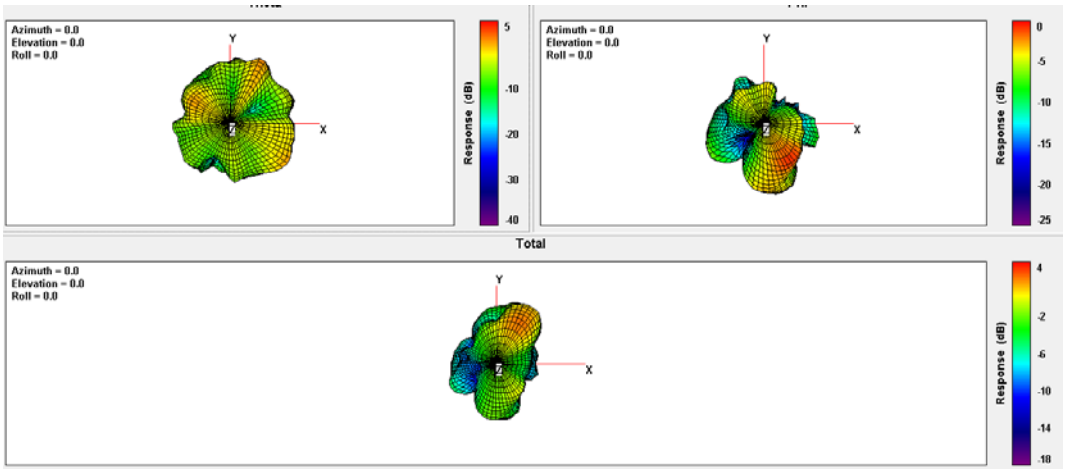
5G Mode Main Antenna 5.150GHz



5G Mode AUX Antenna 5.440GHz

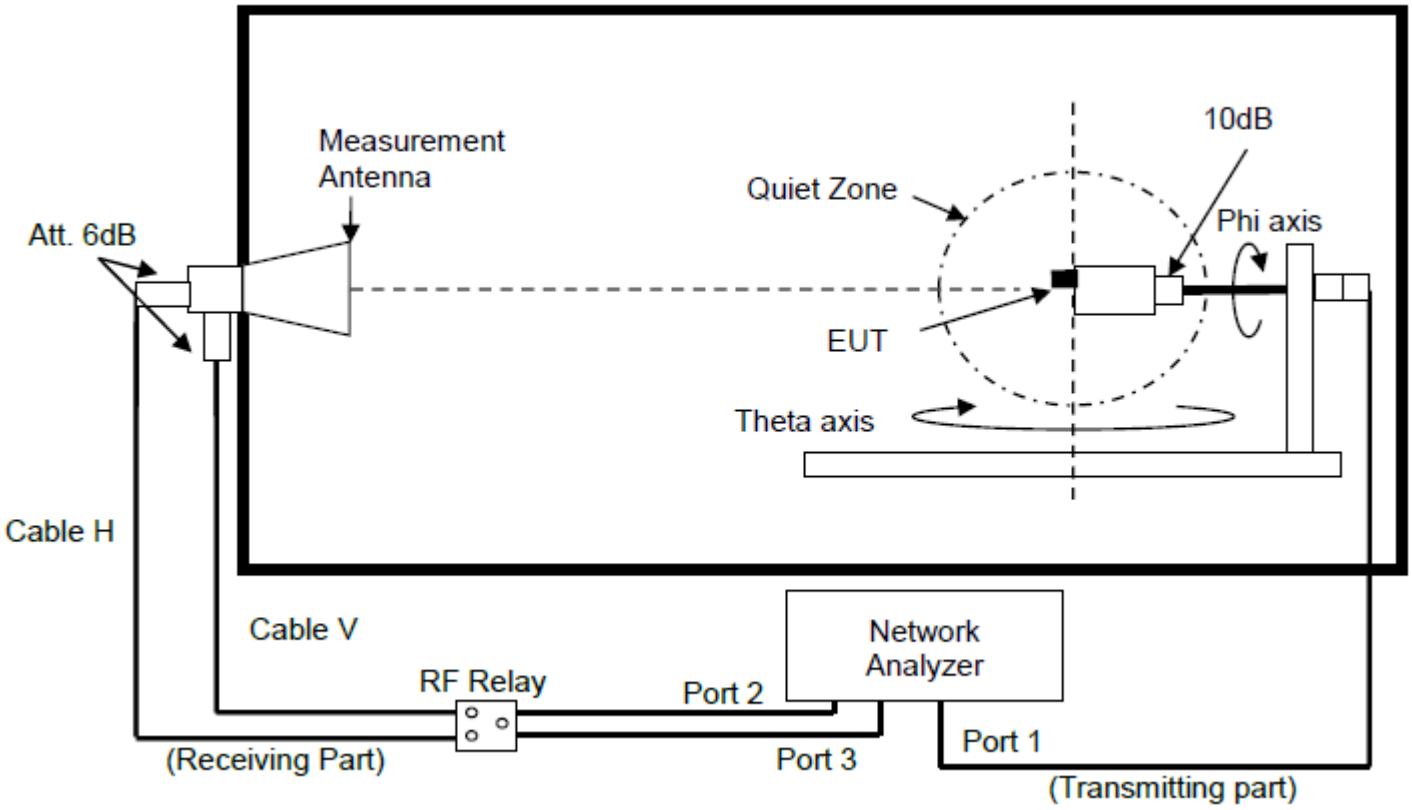


5G Mode AUX Antenna 5.875GHz



1. **Applicable test methods**
This test report is prepared for S410 antenna testing under a Full Anechoic Chamber on 8/25.

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	MY46106276	2022/9/27	2023/9/26
RF Switch	Keysight	3499A	N/A	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	3164-10	00239261	NCR	NCR

3. Setup photo