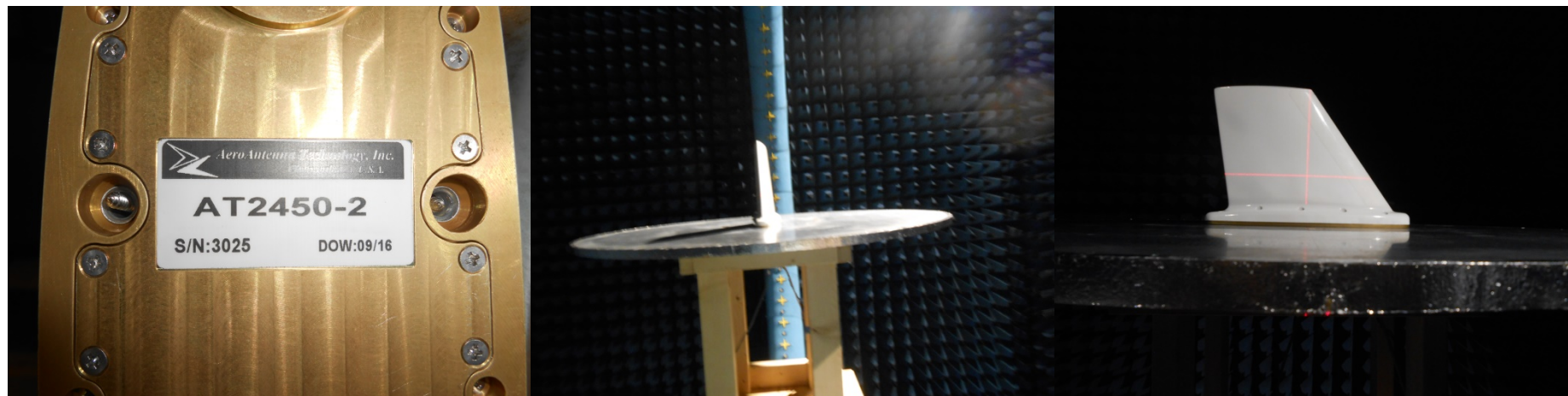


FDQ Pattern Test Results

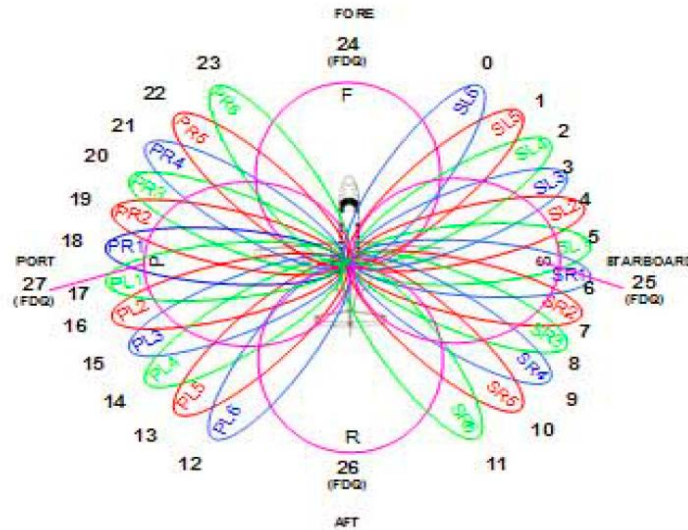
2016-09-26

Test Article and Test setup

- FDQ AT2450-2 S/N 3025
 - Phase 2 Design
- FDQ was mounted and tested on 3'10" diameter circular ground plane
- Tx and Rx Ports were used for all pattern measurements



FDQ Beam Number Definition



- Antenna Test GUI software was used to select FDQ beams
- Patterns were measured for Beams 24-27
 - Beam 24 = Forward
 - Beam 25 = Starboard
 - Beam 26 = Aft
 - Beam 27 = Port

Measured Antenna Peak Gain Summary

TX Beams

		Fore	Starboard	Aft	Port
Channel	Frequency	24	25	26	27
A	2408.3	5.20	4.24	5.30	3.29
	2412.8	5.12	4.05	5.35	3.29
	2417.3	4.94	3.98	5.23	3.18
B	2418.3	4.60	3.29	4.97	2.56
	2422.8	4.67	3.65	5.04	3.03
	2427.3	4.05	2.66	4.49	2.14
C	2428.3	4.53	2.47	4.99	1.97
	2432.8	4.82	2.81	5.35	2.38
	2437.3	4.41	2.39	4.91	2.04

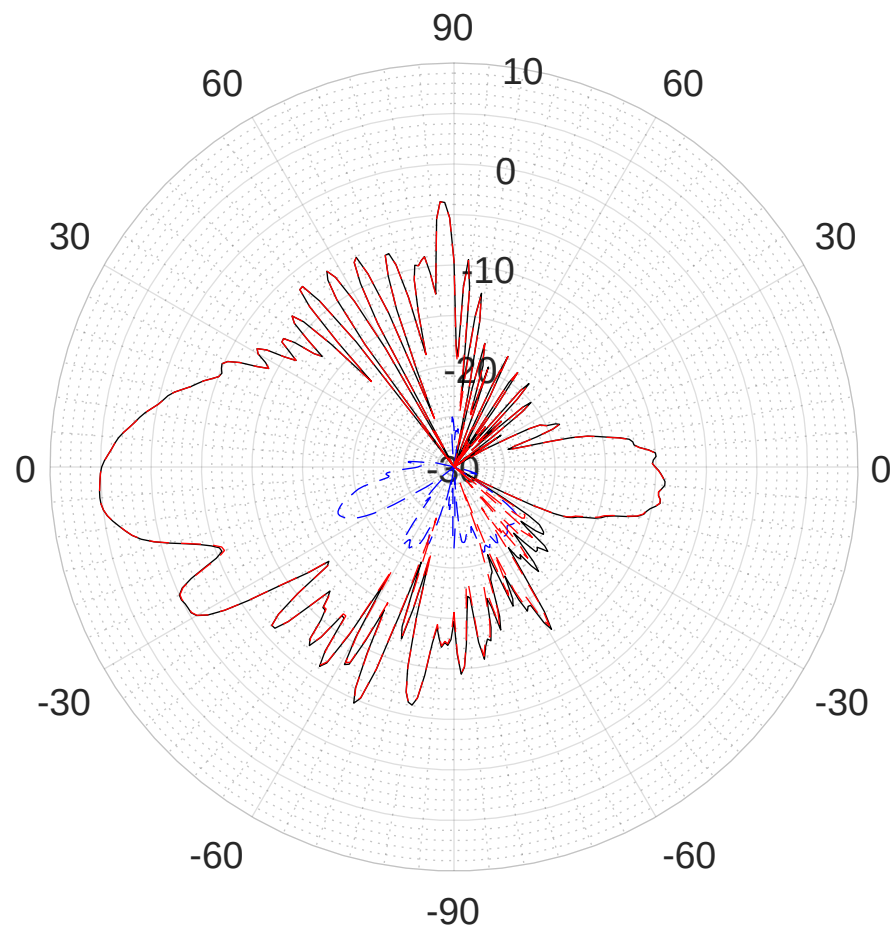
RX Beams

		Fore	Starboard	Aft	Port
Channel	Frequency	24	25	26	27
A	2446.2	25.50	24.00	25.84	23.80
	2450.7	25.61	24.53	25.96	24.40
	2455.2	24.76	23.76	25.15	23.80
B	2456.2	25.95	24.73	26.33	24.62
	2460.7	27.19	26.64	27.57	26.52
	2465.2	27.69	26.92	28.19	27.01
C	2466.2	25.70	23.83	26.20	23.92
	2470.7	26.21	24.69	26.71	24.79
	2475.2	26.59	25.24	27.08	25.34

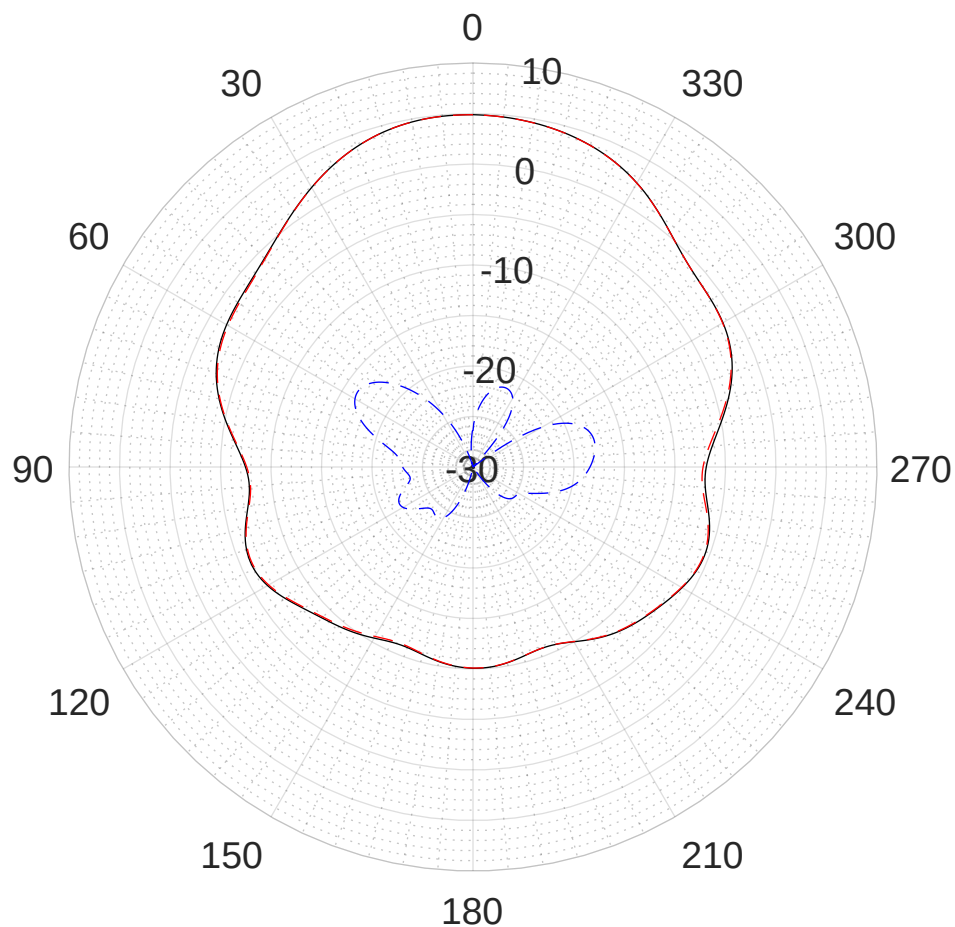
PATTERN SAMPLES

FDQ 3025, Tx, Channel 1, 2408.3 MHz, Beam No 24

Elevation Cut
Phi=0 deg
2408.3 MHz

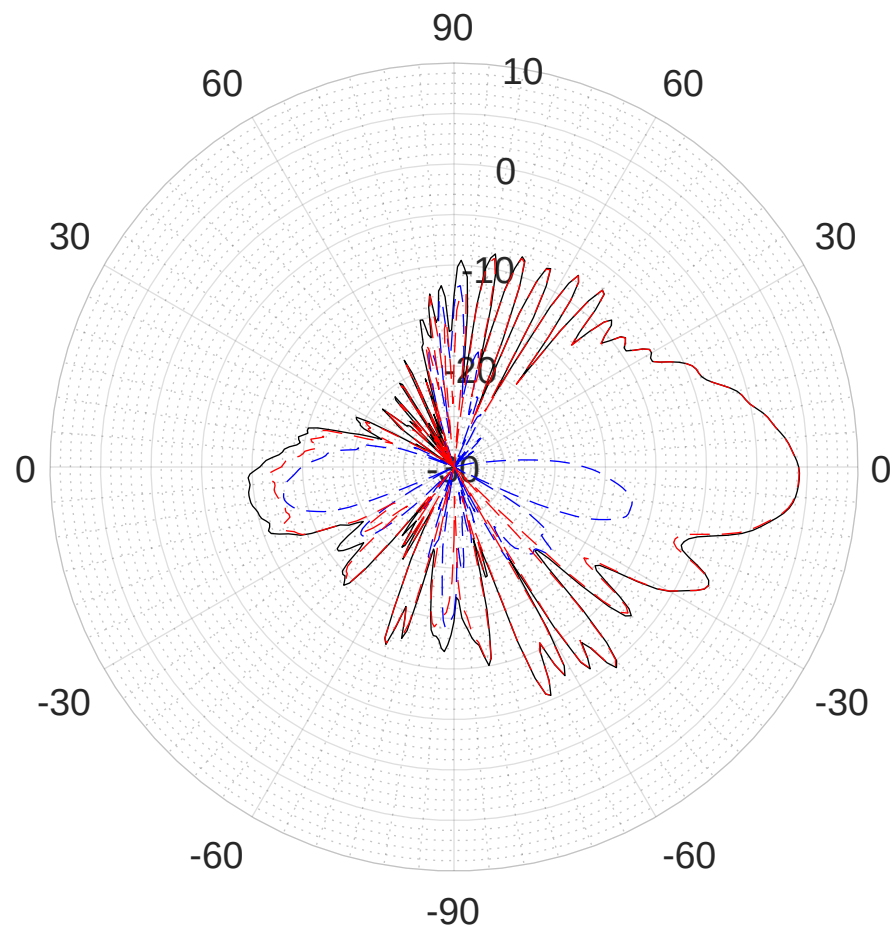


Azimuth Cut
Theta = 90 deg
2408.3 MHz



FDQ 3025, Tx, Channel 1, 2408.3 MHz, Beam No 25

Elevation Cut
Phi=270 deg
2408.3 MHz



Azimuth Cut
Theta = 90 deg
2408.3 MHz

