

Marine GPS & 3G/LTE Antenna

MODEL: GAF-700

Outdoor and ruggedness, demand of vehicle locating and Marine navigation GPS antenna that will sustain harsh environment.



- Low noise figure
- Fully weather proof IPX8 .
- Ultra-high Sensitivity
- Compact construction
- Excellent temperature stability

The antenna system **GAF-700** is the integration of the high performance GPS patch antenna and a low noise amplifier into state-of-the-art low a very low profile/extremely compact/fully waterproof antenna signal enclosure. When connected to a GPS receiver with +2.5~ 5.5V DC antenna powers it provides excellent signal amplification and out-band-rejection for that receiver.

Features:

GPS antenna with double threaded bolts and through holes for cable routing with course & fine treaded pitch locking for wing-nut fastener and lock-nut to prevent vibrations and un-authorized removal.

Specifications:

1. GENERAL DESCRIPTION

Model No
GAF700-1M-SMA(F)x2

1.1 Electrical Properties

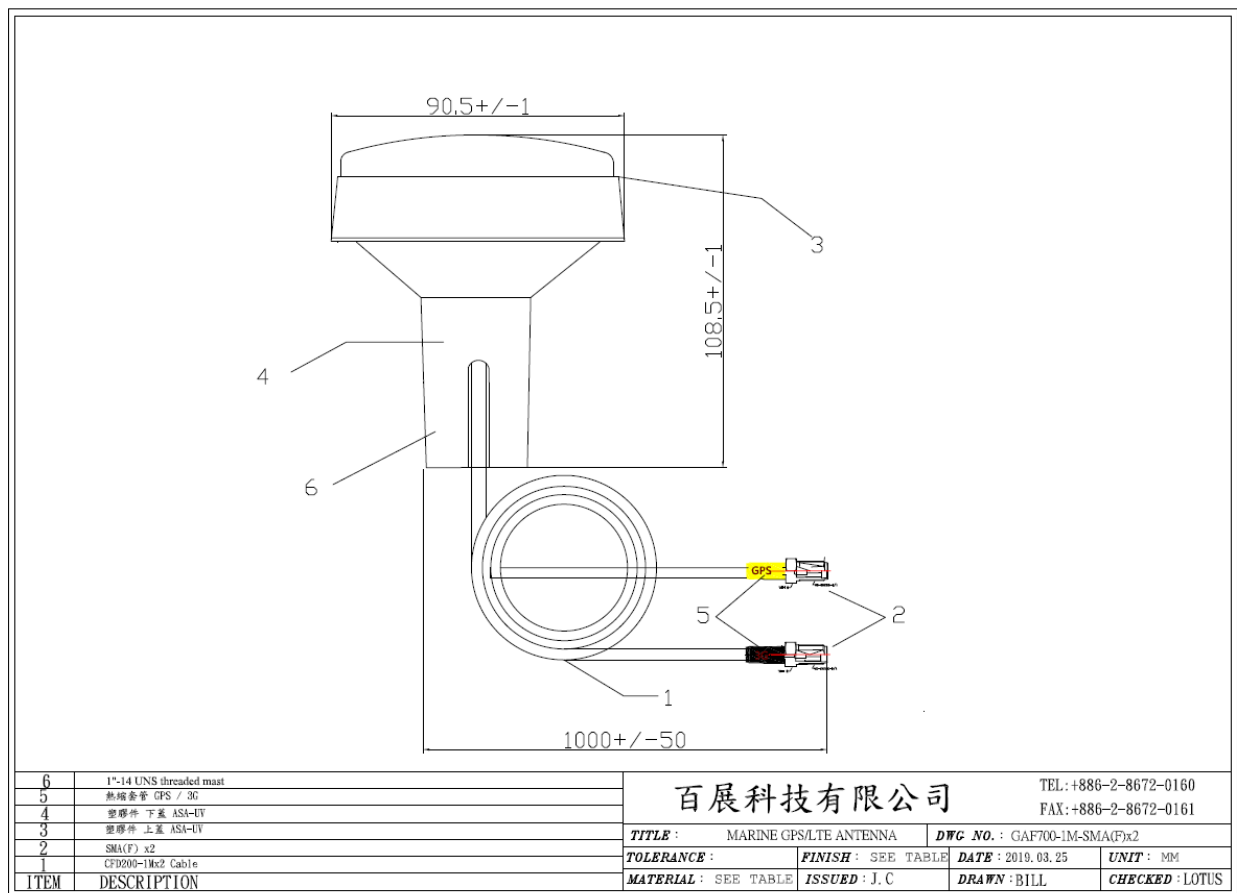
Parameter	Description	
Frequency Band	GPS	LTE
	1575.42Mhz	698~960/1710~2700MHz
Nominal Impedance	50 ohm	50 ohm
VSWR	2.0:1	4.5:1
Antenna Peak Gain	28+/-4db	0db
Voltages	2.5~5.5v	X
Polarization	R.H.C.P	Linear

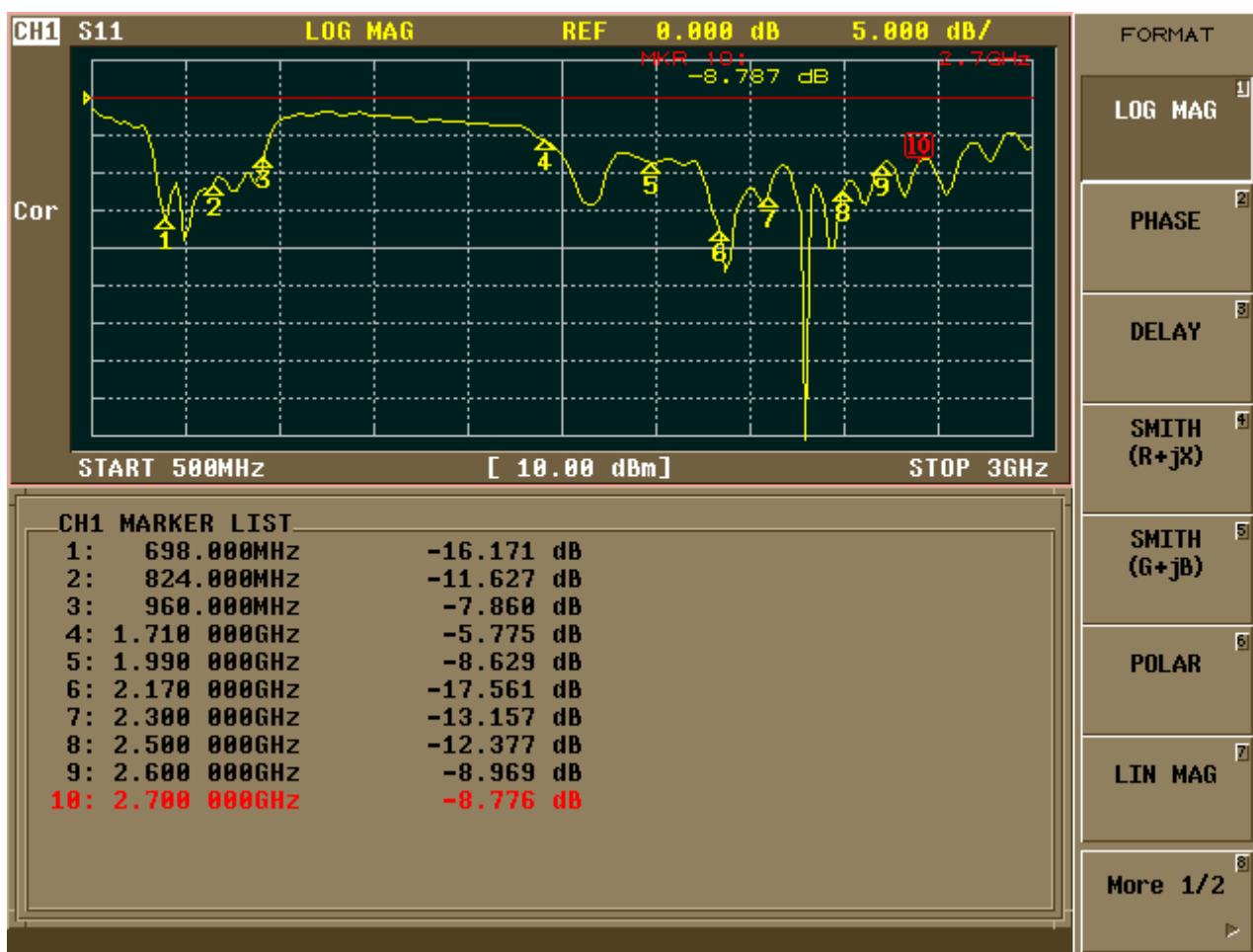
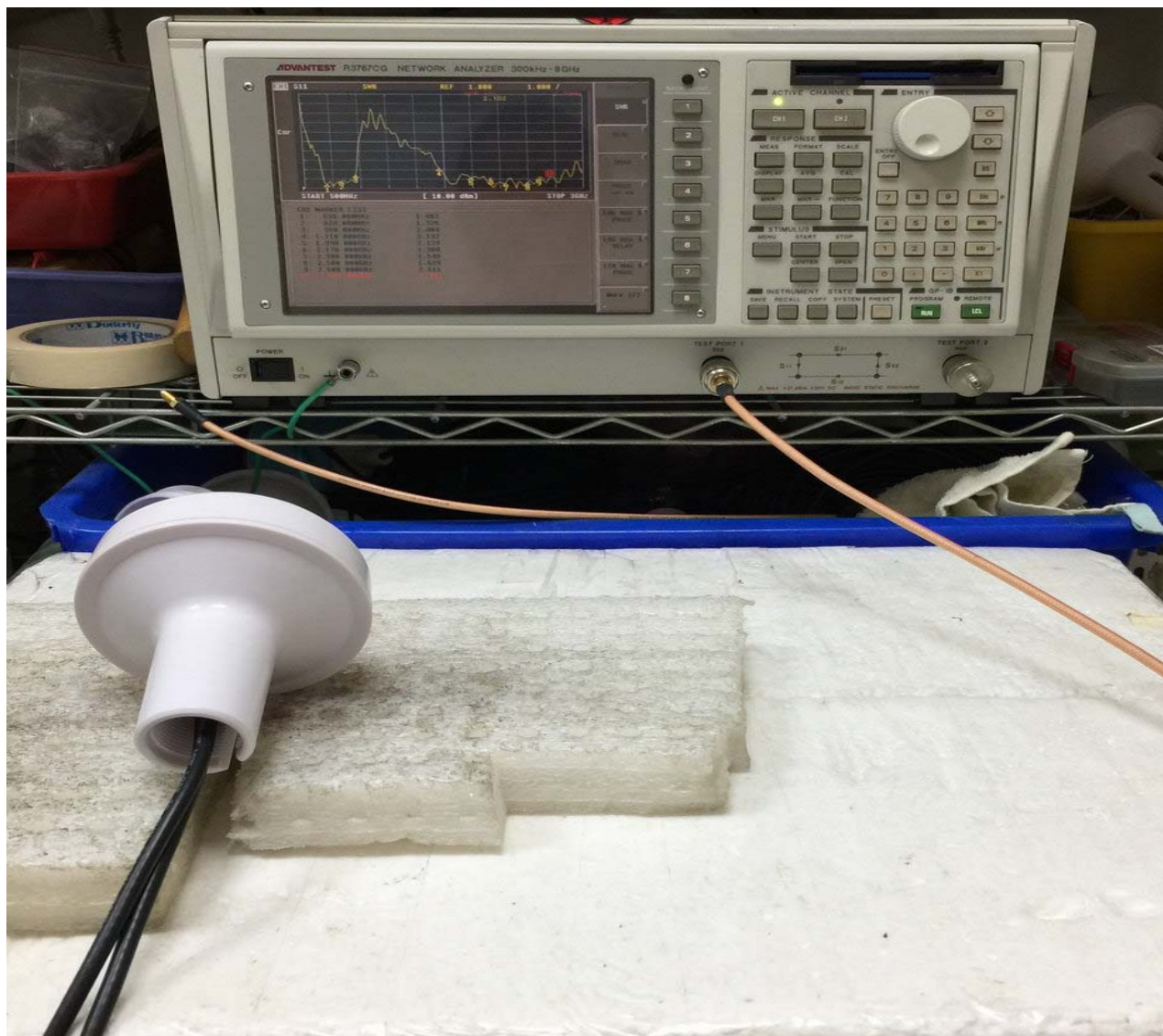
1.2 Mechanical Properties

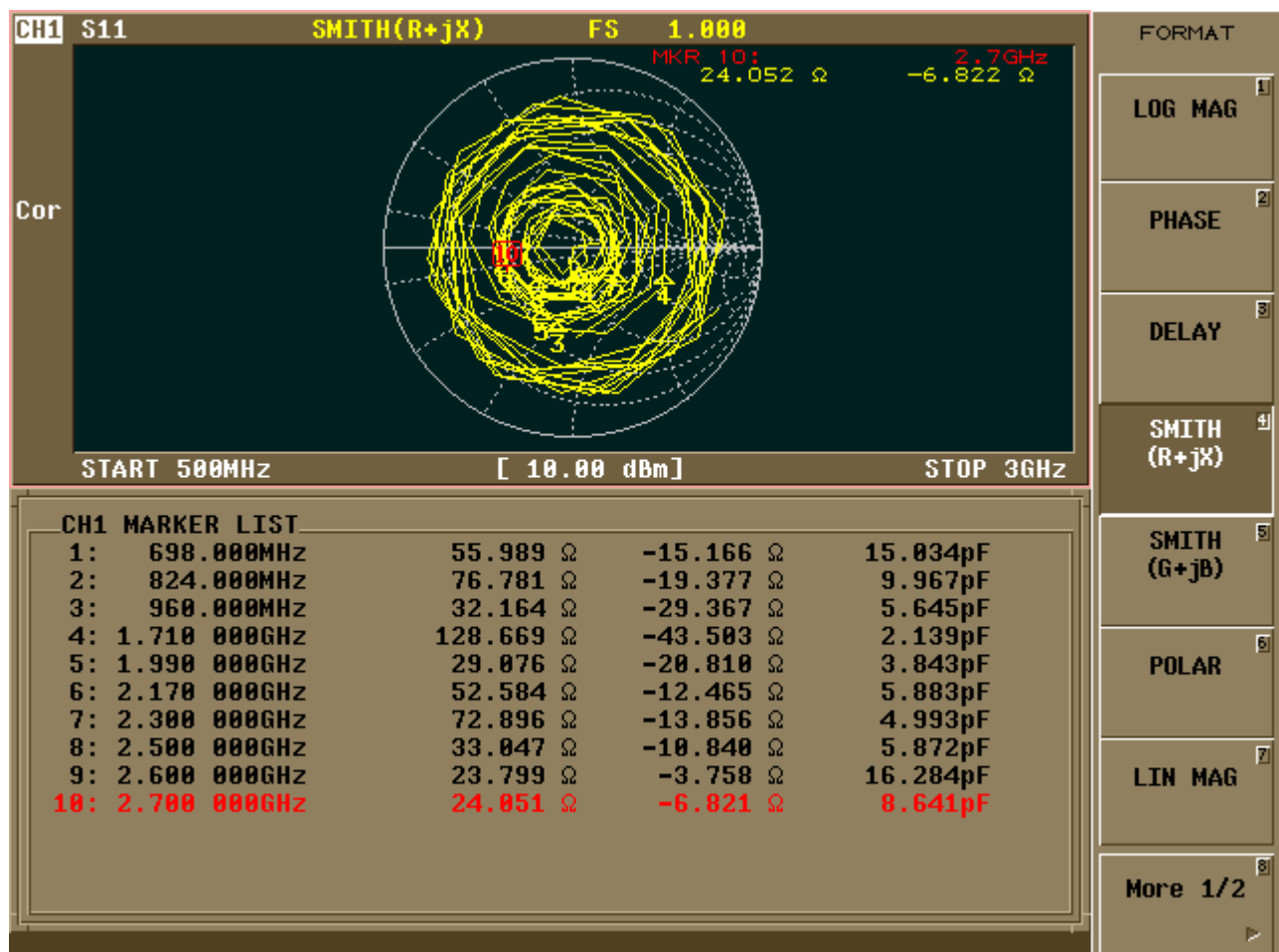
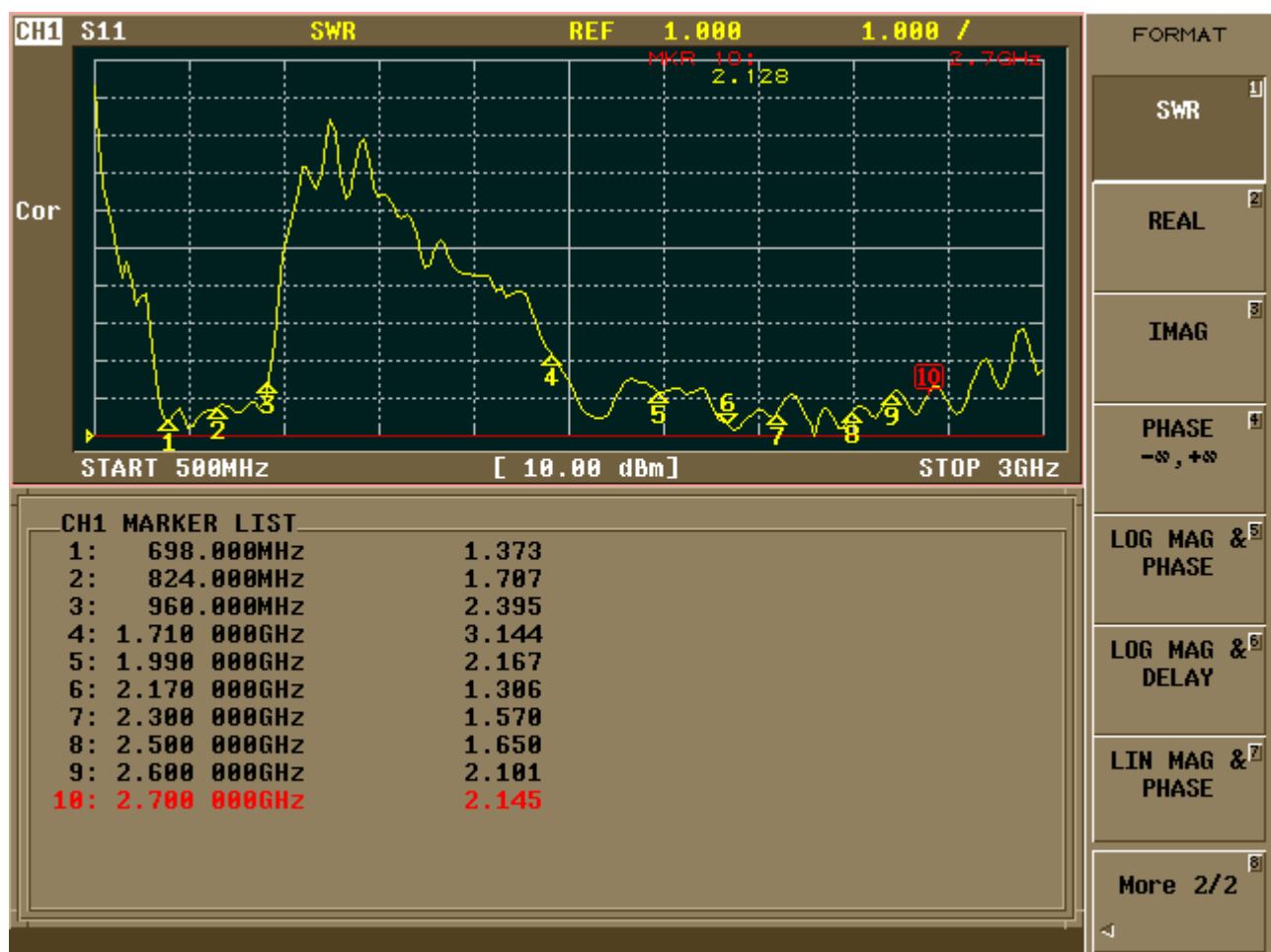
Parameter	Description
Connector Type	SMA180 ° (Fe-male) x 2
Antenna Dimensions	90.5mm(Dia.) × 108.5mm(H)
Antenna Cable Total Length	CFD200 -1000mm ± 50 x 2
Antenna Material & Color	ASA-UV / White (UL94-HB)
Operating Temperature Range	-40°C~+80°C
Storage Temperature Range	-40°C~+80°C
Waterproof	IPX8
Fixed way	1"-14 UNS threaded mast

* This specification is subject to change without prior notice

Data Updated: Mar.25, 2019



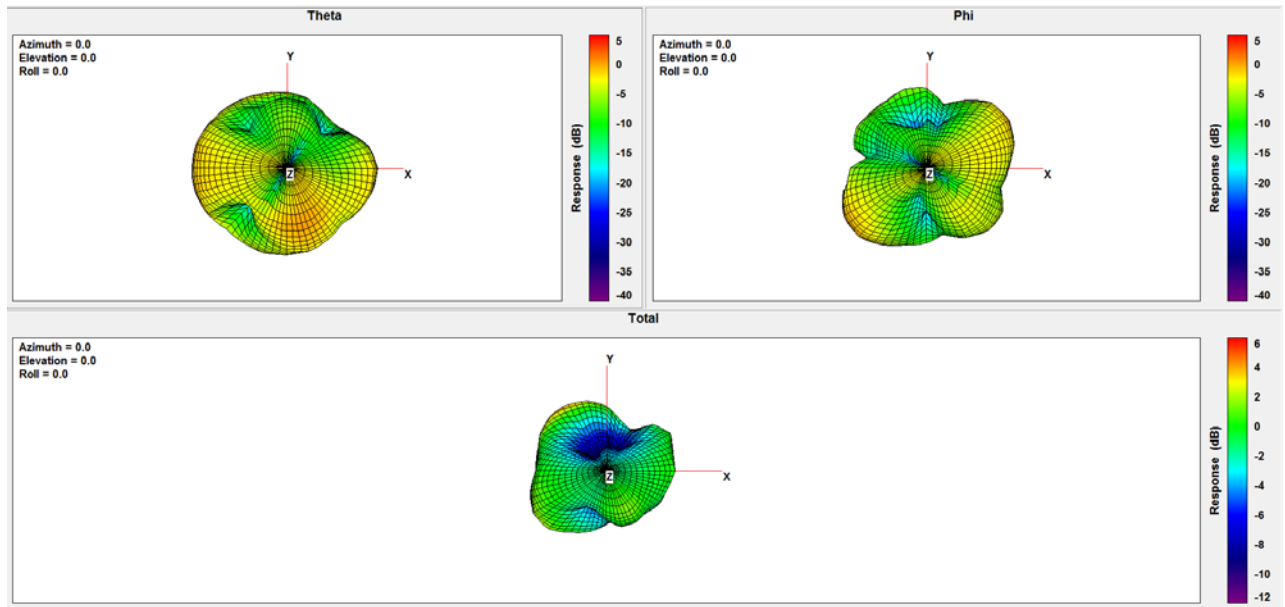




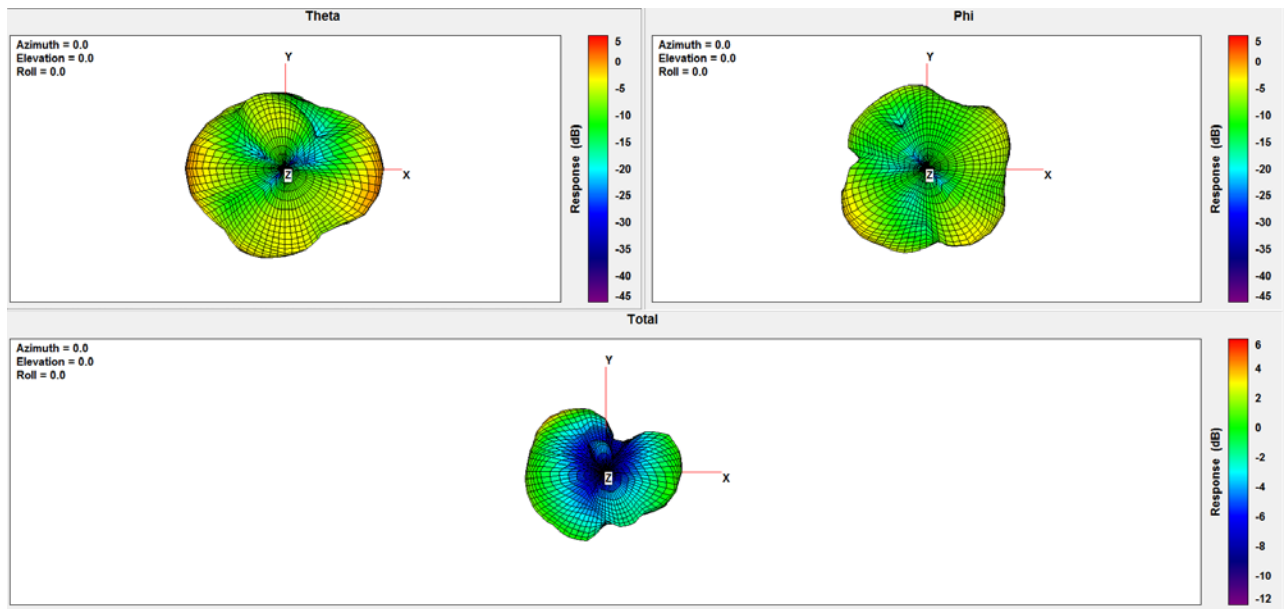
Test result:

Frequency (MHz)	698	704	710	716	720	725	730	734	740	746	756	765	772	777
Peak Gain (dBi)	3.88	3.81	3.57	3.44	3.33	3.24	3.19	3.21	3.37	3.61	3.97	3.19	3.22	4.19
Efficiency (%)	71.32	78.23	72.42	78.84	76.18	73.76	72.12	72.33	74.14	76.21	79.02	80.45	79.48	78.06
Frequency (MHz)	782	787	791	806	821	824	836	849	862	869	880	894	900	915
Peak Gain (dBi)	4.03	4.90	4.79	4.55	4.39	4.29	3.92	3.66	4.43	4.25	3.67	2.86	2.68	2.51
Efficiency (%)	75.34	73.20	71.57	79.94	84.55	84.07	81.84	84.04	72.36	66.94	57.21	47.44	45.47	43.47
Frequency (MHz)	925	940	960	1710	1730	1750	1770	1785	1805	1840	1850	1880	1910	1920
Peak Gain (dBi)	2.44	2.70	3.83	2.51	3.14	3.70	3.94	3.95	4.06	4.44	4.51	4.64	4.48	4.45
Efficiency (%)	43.86	49.55	55.67	40.83	47.99	53.22	54.78	53.96	53.65	52.55	51.58	48.82	44.14	42.44
Frequency (MHz)	1930	1950	1960	1980	1995	2110	2140	2170	2300	2325	2350	2375	2400	2500
Peak Gain (dBi)	4.48	4.66	4.79	4.88	4.76	3.33	3.47	3.97	3.71	3.00	3.01	3.00	2.72	2.70
Efficiency (%)	42.02	42.52	43.76	45.24	44.80	49.85	46.80	48.66	46.11	38.96	38.36	38.19	37.27	38.00
Frequency (MHz)	2515	2535	2555	2570	2595	2620	2630	2655	2680	2690	2700			
Peak Gain (dBi)	2.37	2.95	2.69	2.60	2.11	2.76	2.85	2.86	2.29	2.21	2.13			
Efficiency (%)	35.86	33.53	32.33	32.45	31.36	37.94	36.93	35.43	36.76	36.80	36.69			

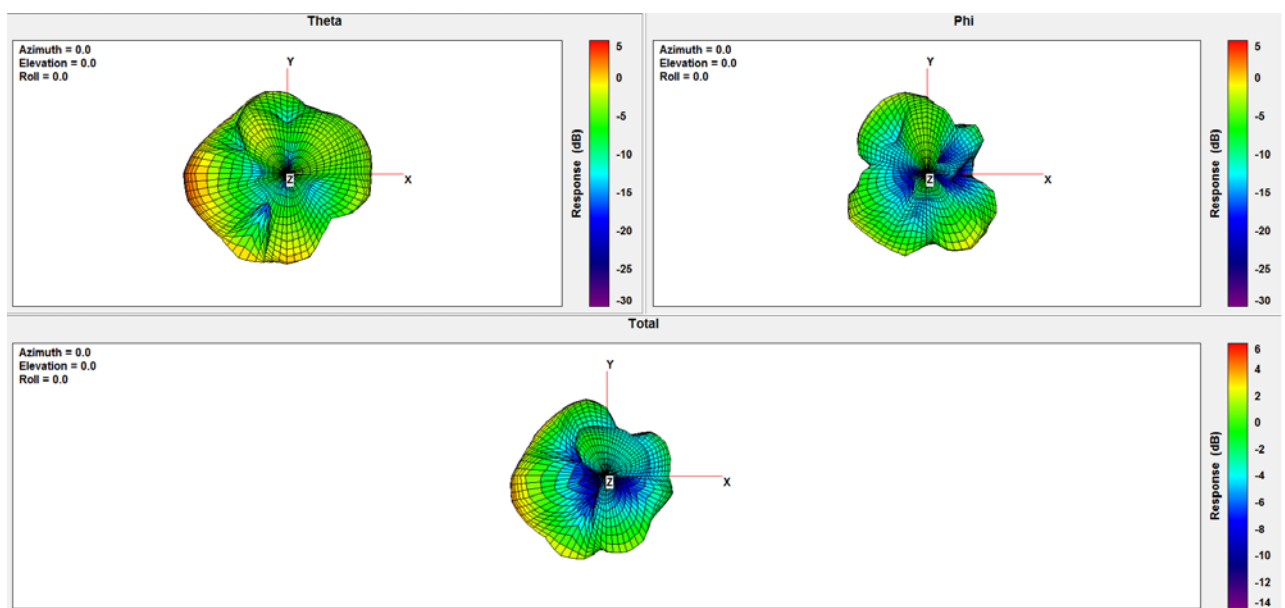
698Mhz:



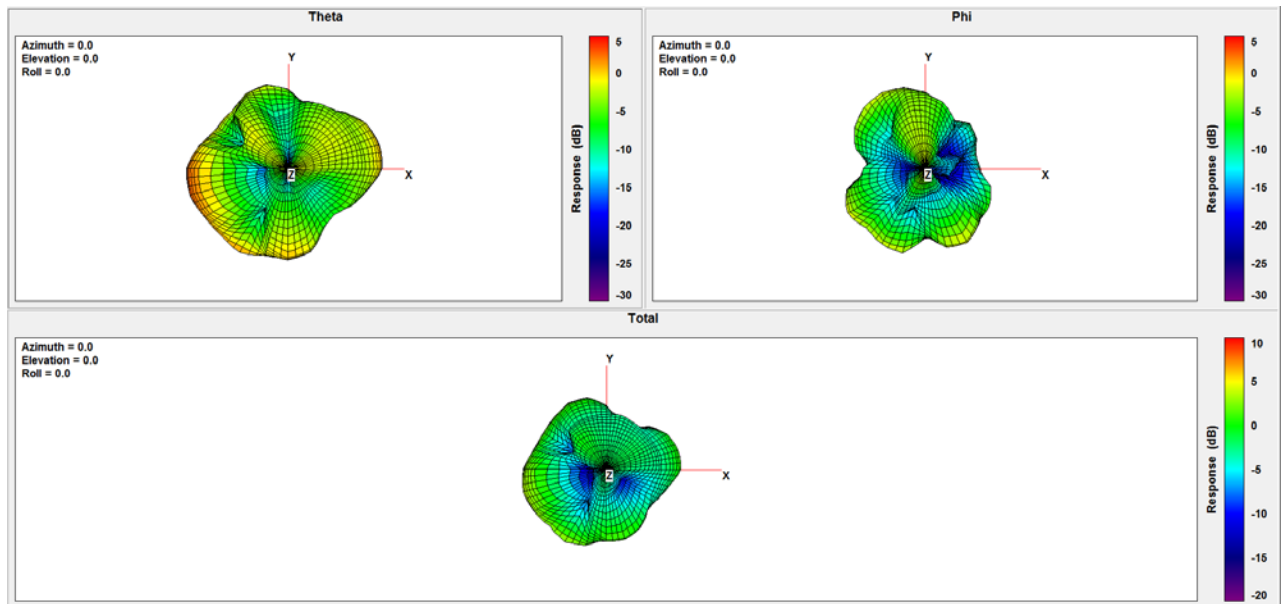
756Mhz :



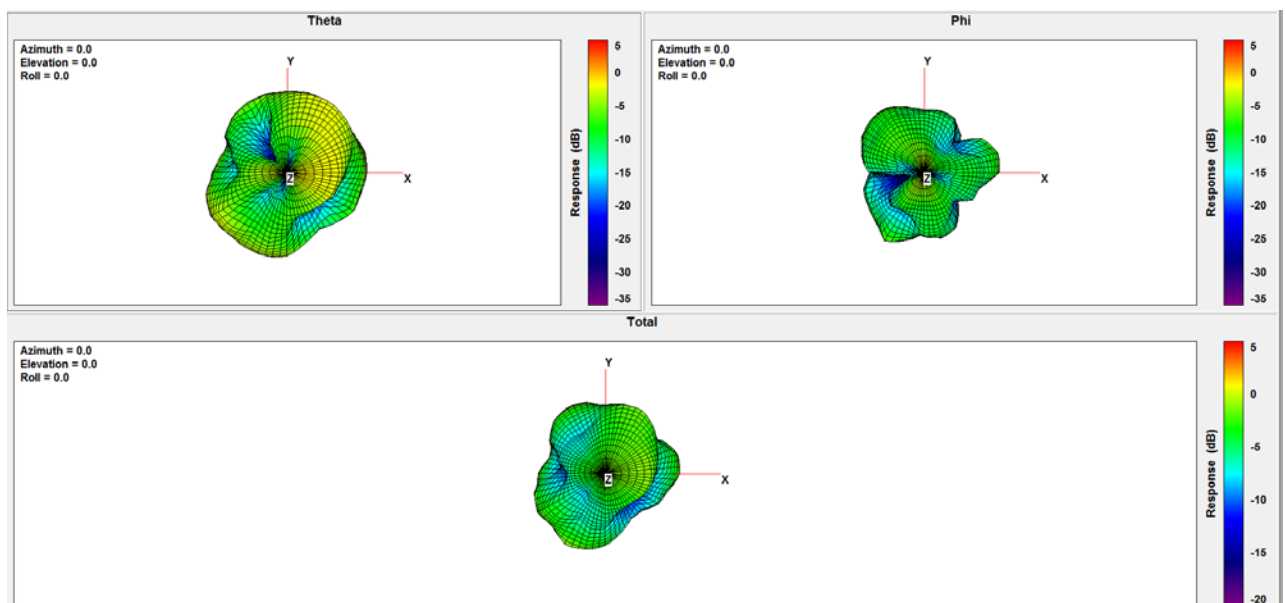
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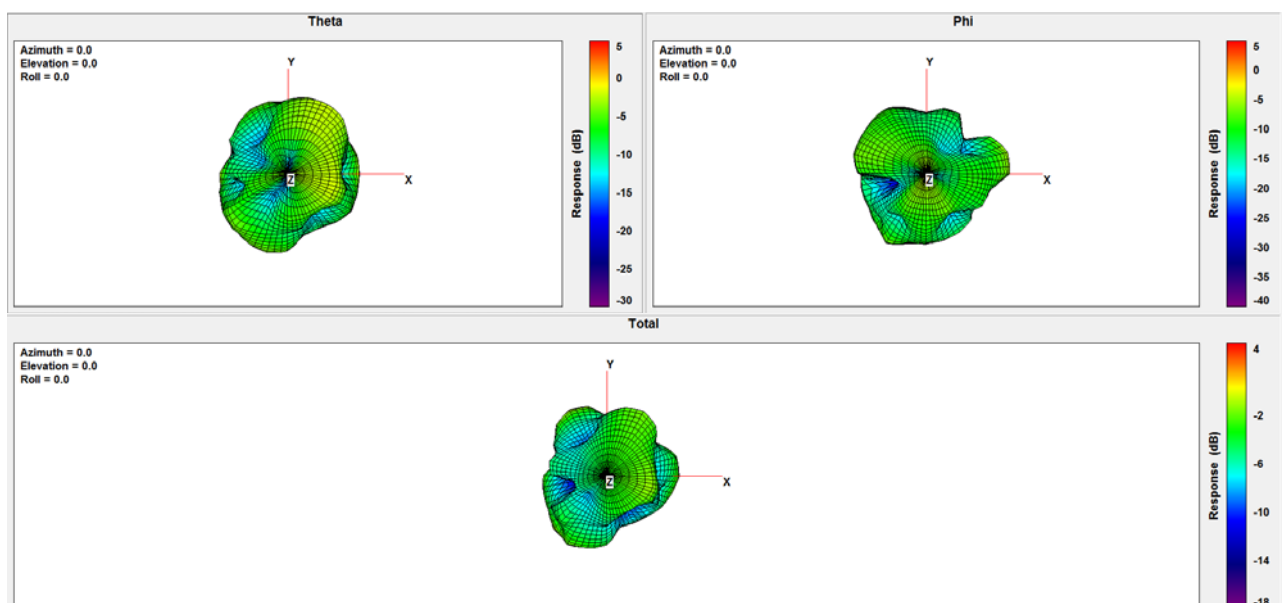
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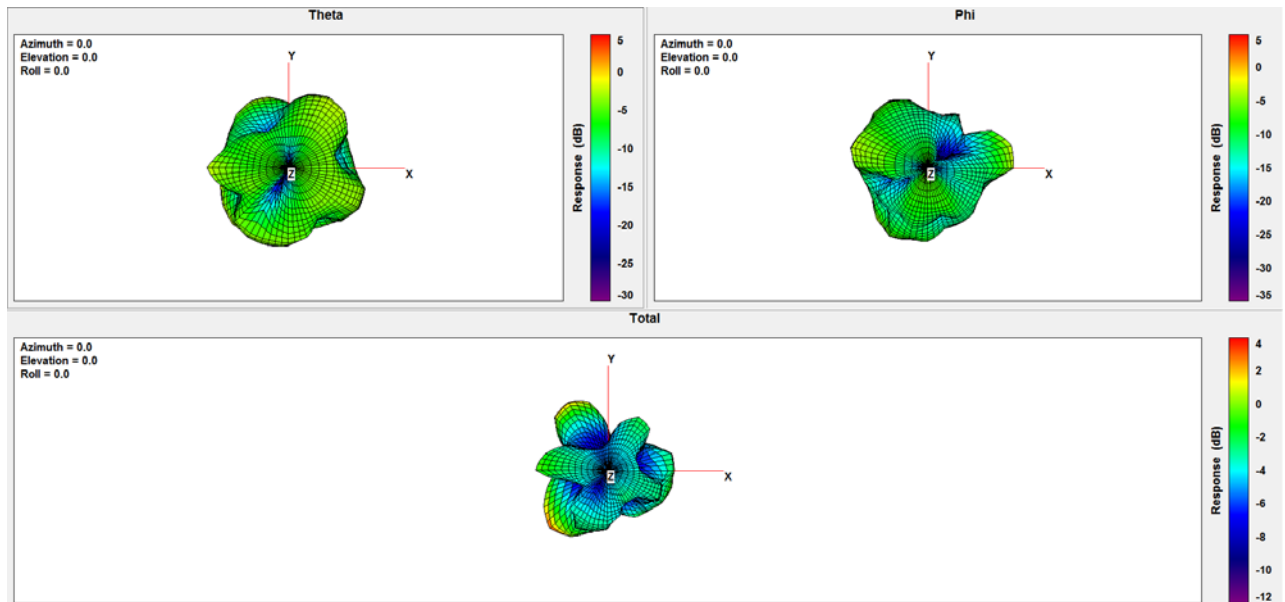
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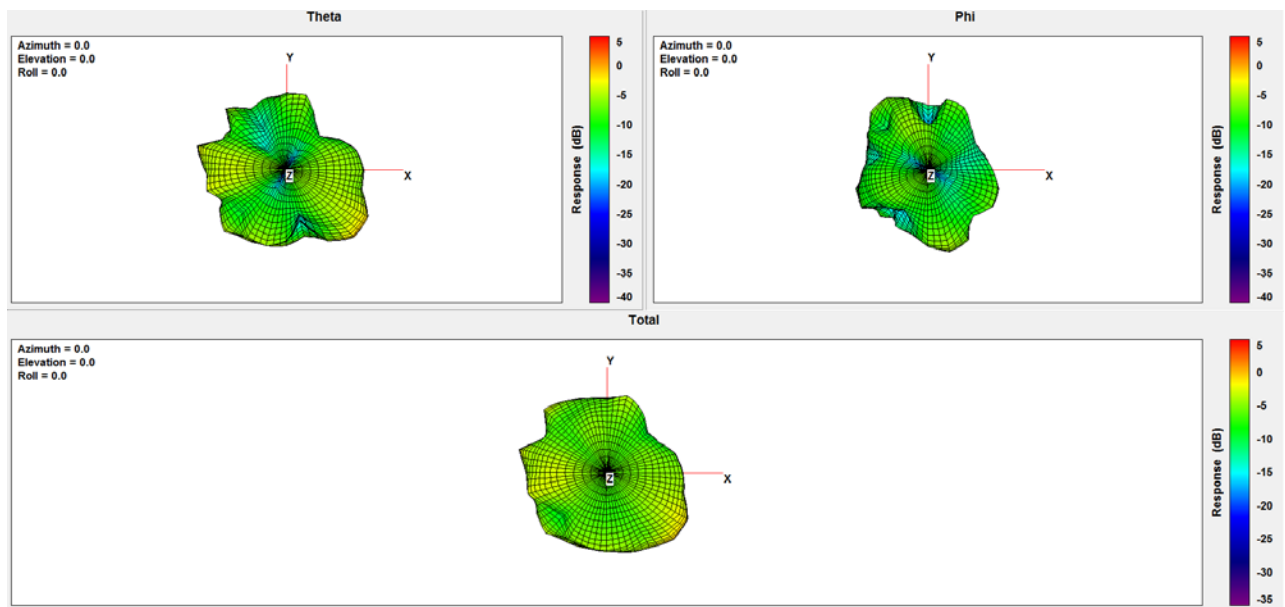
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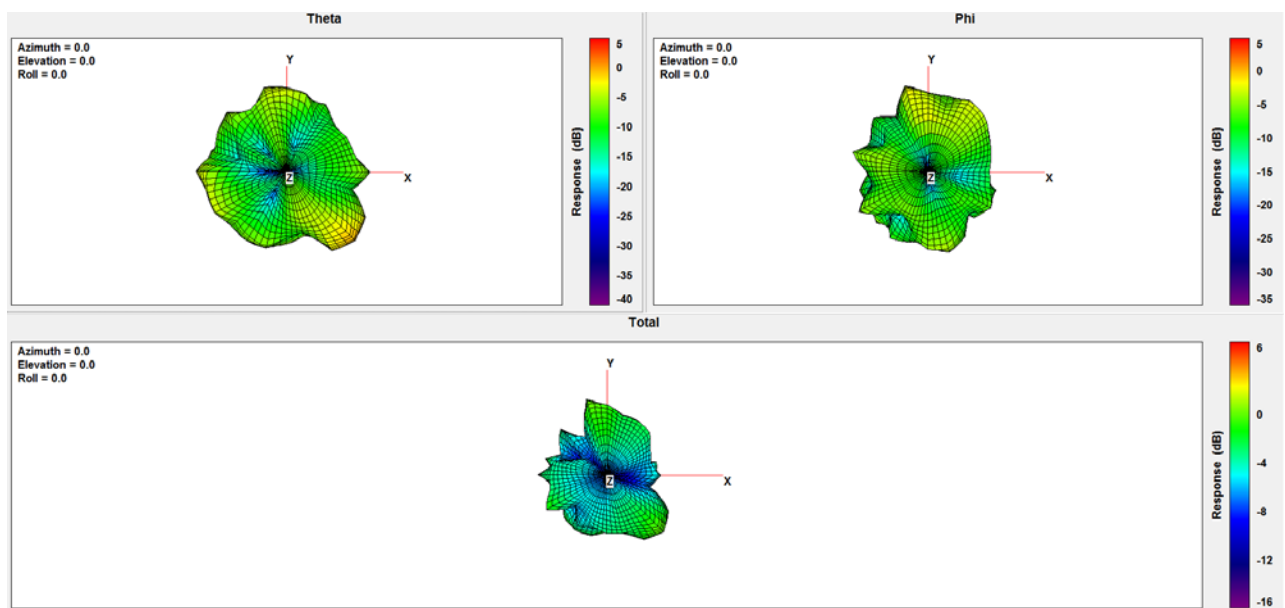
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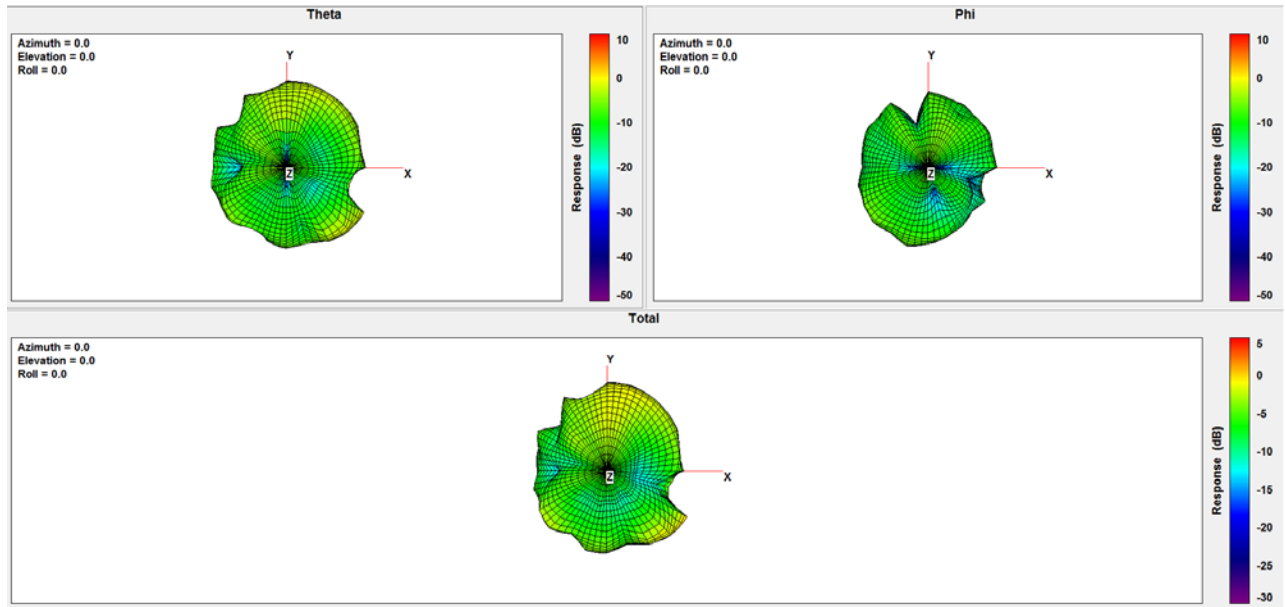
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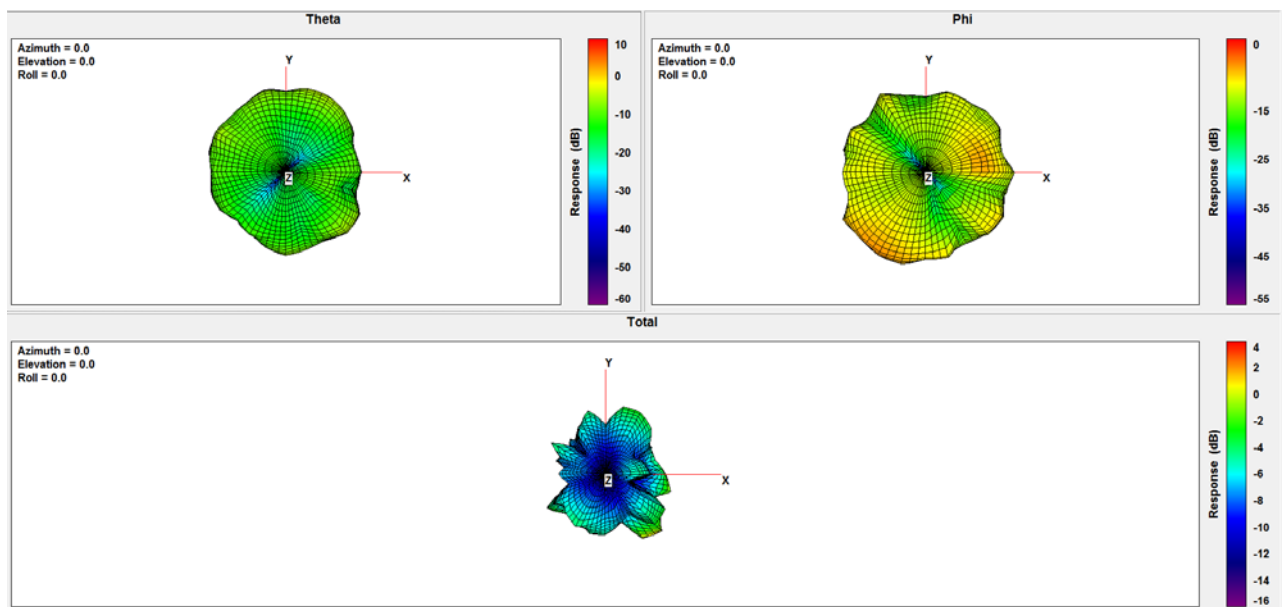
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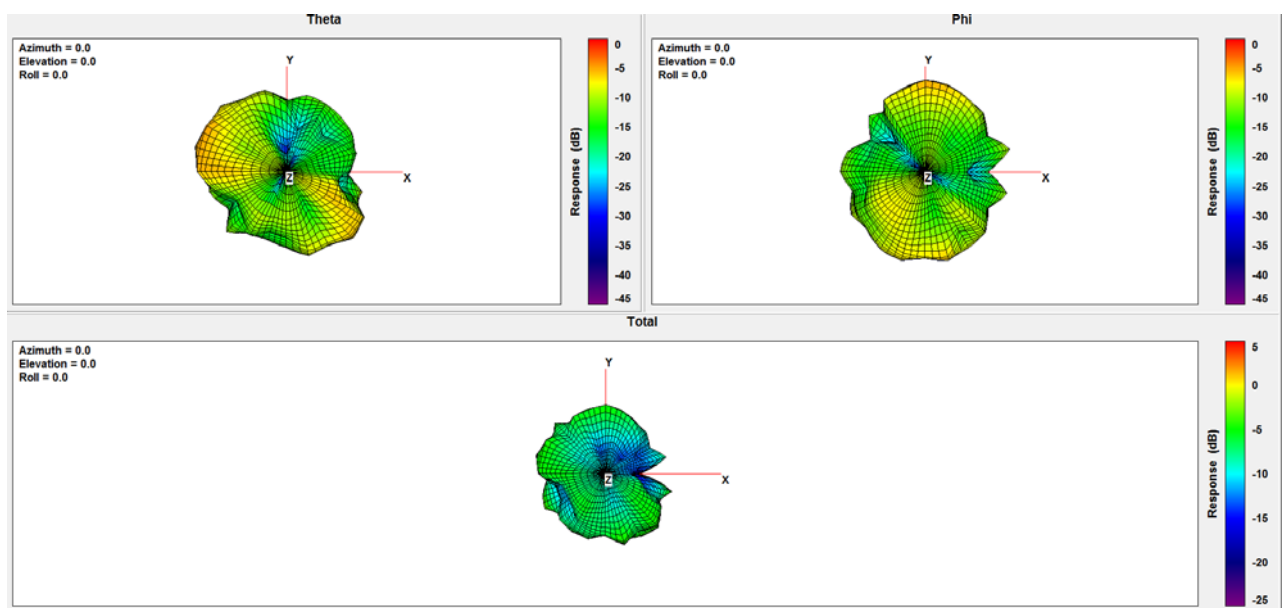
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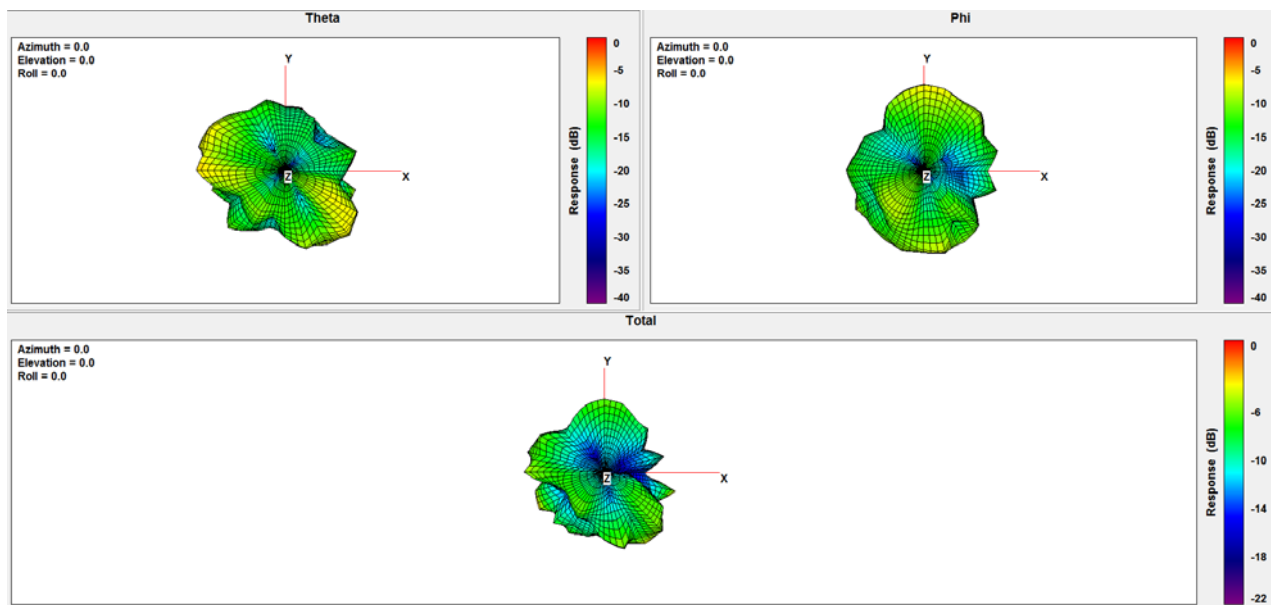
2350Mhz:



2595Mhz:



2665Mhz:



2690Mhz:

