

BJTEK NAVIGATION , INC.

GSM/GPS/GLONASS/3G/LTE Passive Antenna

MODEL: TH-81K



1.. GENERAL DESCRIPTION

Model No	P/N
TH-81K	TH-81K-RP-SMA(M)

Below is a table summarizing the antenna design specification.

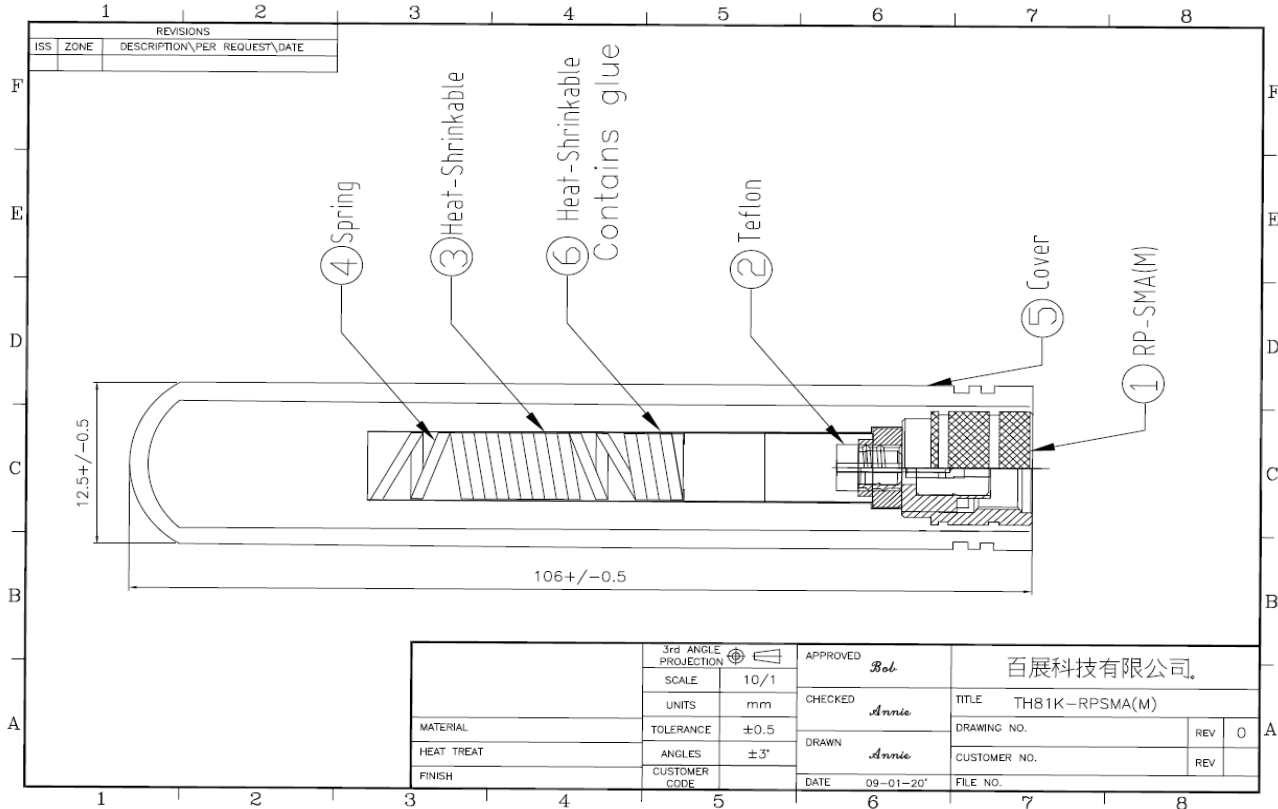
1.1 Electrical Properties

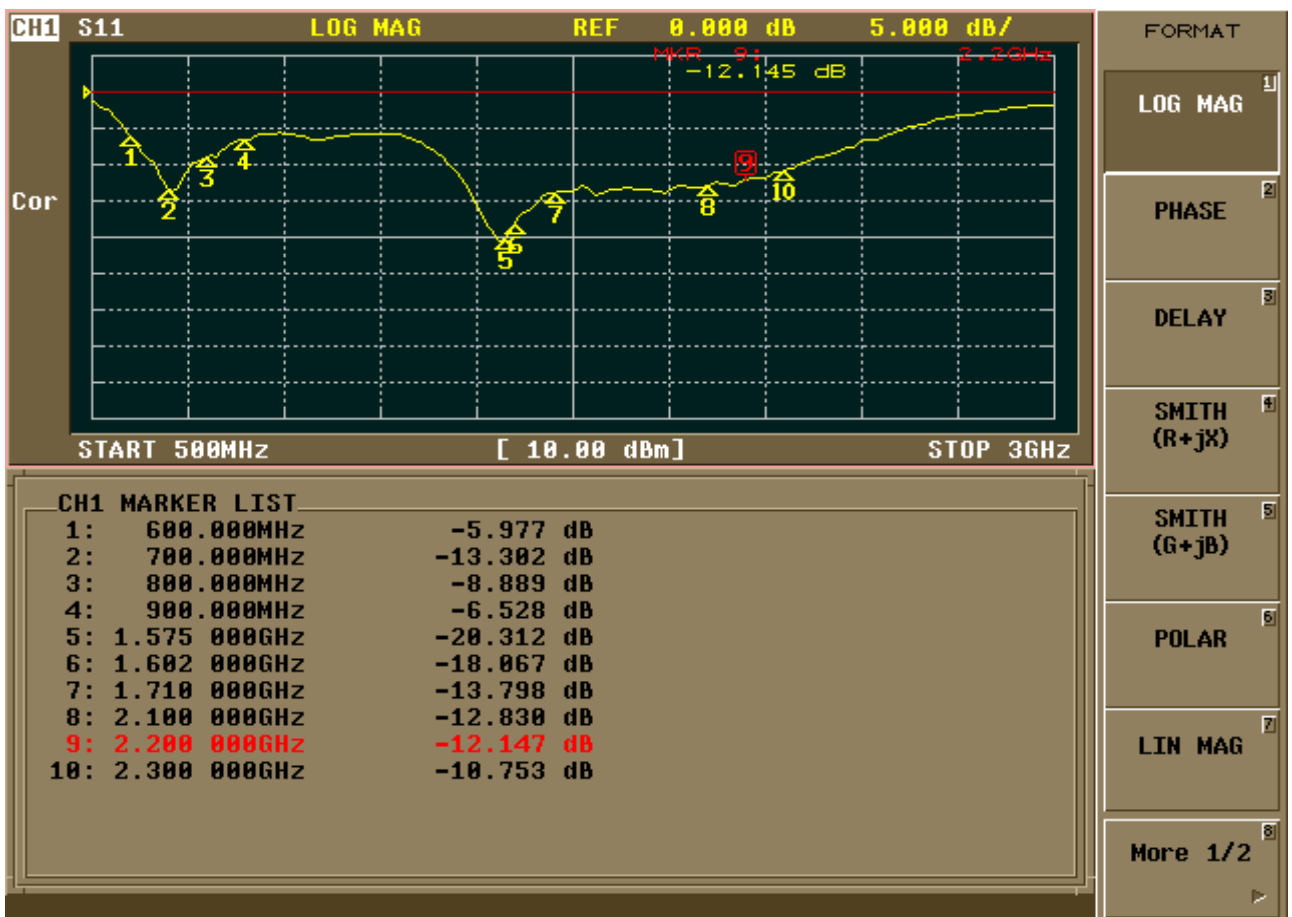
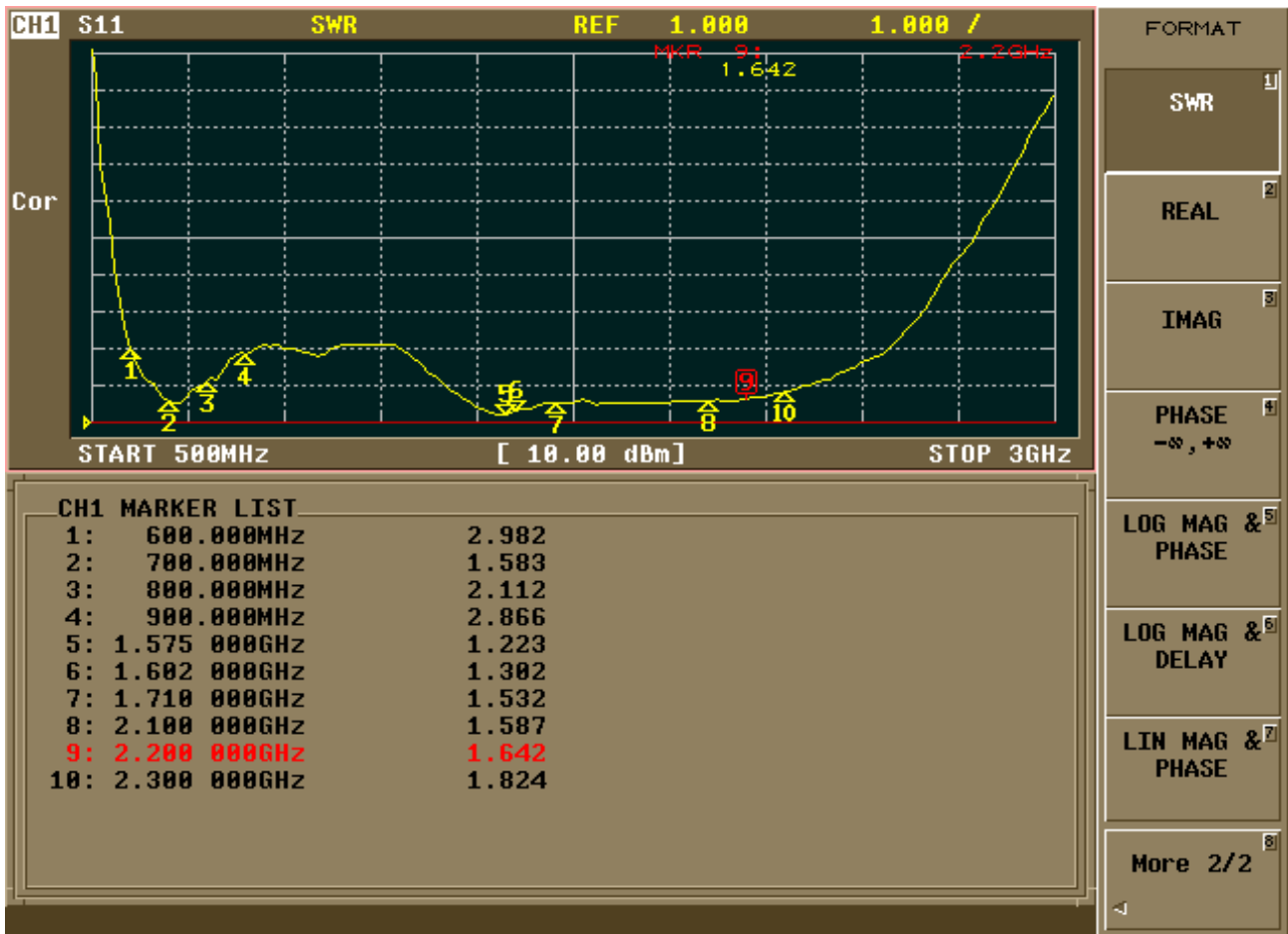
Parameter	Description
Frequency Band	LTE: 600 、 700 、 800 、 900 、 1700 、 2200 、 2300MHz GPS: 1575 ,1602MHz ON Customer Machine GND
Nominal Impedance	50 ohm
Polarization	Vertical
Admitted Power radiation	1W
V.S.W.R	3.5:1
Antenna Peak Gain	0 ~3dB
Note: Gain includes the cable loss	

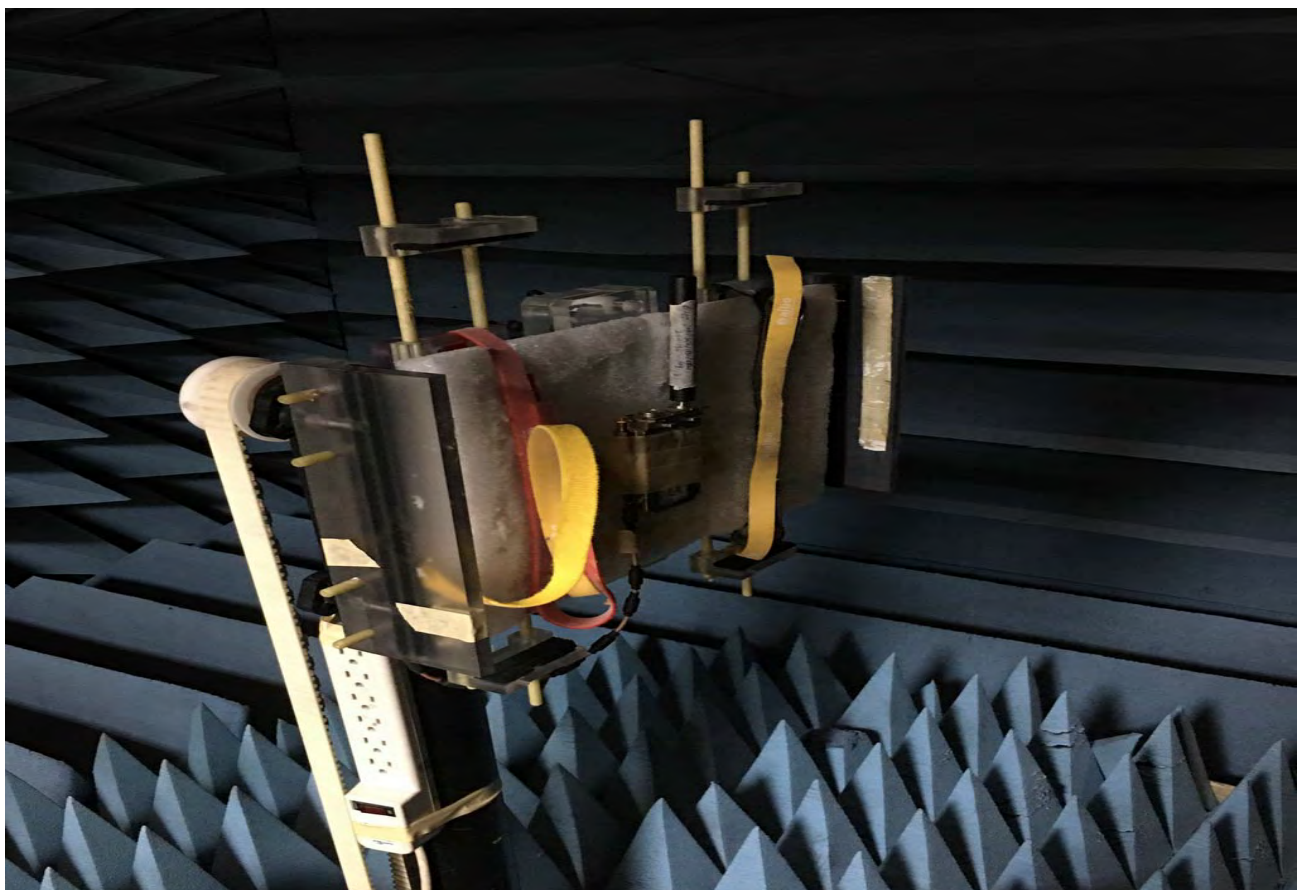
1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Material	TPU50D-10 (& 3403 Glue)
Touch Type	Screw Type
Connector Type	OD8.75-10 SMA (Male) , Center PIN offset +/-0.08mm

Antenna Dimensions	OD12.5 x 106mm±0.5
Antenna Color	Black
Operating Temperature Range	-30°C~+80°C
Storage Temperature Range	-30°C~+80°C





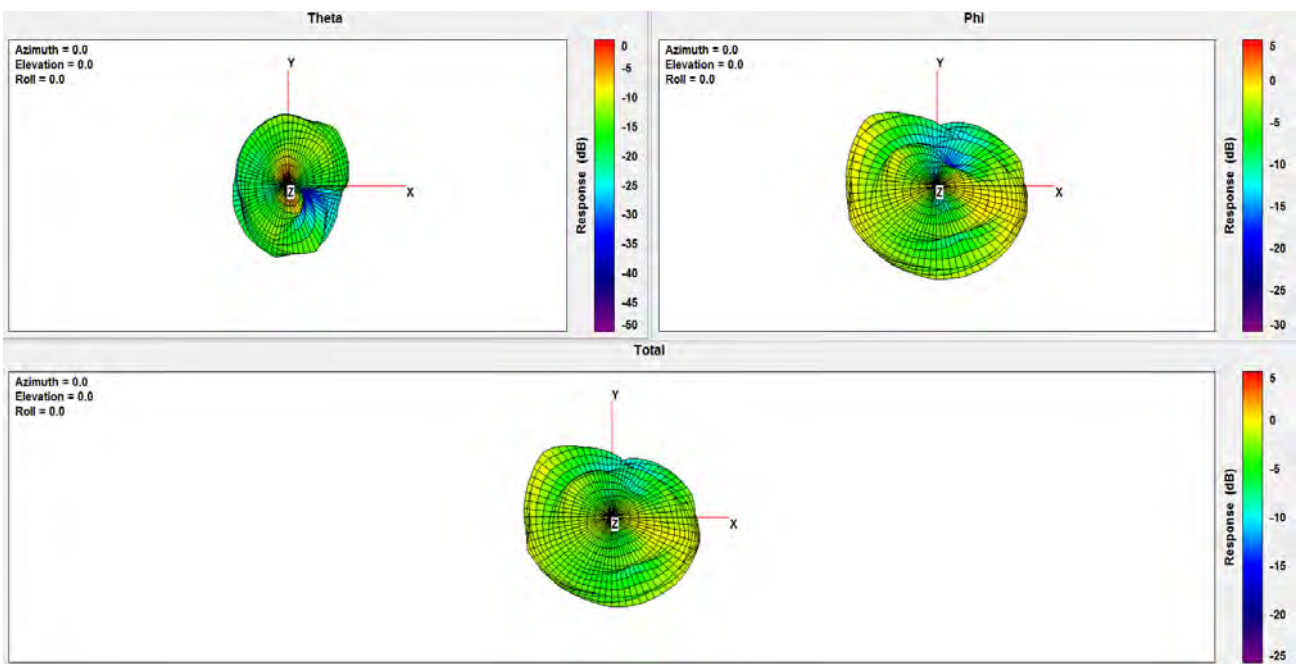


Frequency (MHz)	600	700	710	716	720	725	730	734	740	746
Peak Gain (dBi)	1.14	-0.10	0.05	-0.20	-0.32	-0.54	-0.70	-0.82	-0.90	-0.97
Efficiency (%)	62.55	45.17	44.62	43.65	42.97	42.44	42.04	41.63	40.82	39.78
Frequency (MHz)	756	765	772	777	782	787	800	806	821	824
Peak Gain (dBi)	-0.88	-0.88	-0.88	-0.89	-0.82	-0.86	-0.98	-0.86	-0.94	-0.93
Efficiency (%)	40.00	39.61	38.89	38.23	38.32	38.03	36.85	35.90	36.19	36.30
Frequency (MHz)	836	849	862	869	880	894	900	915	925	940
Peak Gain (dBi)	-0.83	-0.71	-0.77	-0.84	-0.84	-0.76	-0.10	-0.18	-0.20	-0.06
Efficiency (%)	36.64	37.63	36.92	36.09	36.09	34.64	34.40	34.08	33.54	33.84
Frequency (MHz)	960	1561	1575	1602	1750	1770	1785	1805	1840	1850
Peak Gain (dBi)	-0.06	0.78	1.00	1.19	0.75	0.83	0.98	1.09	1.04	1.05
Efficiency (%)	33.45	39.99	40.39	43.16	43.54	43.86	44.15	45.82	47.61	47.86
Frequency (MHz)	1880	1910	1920	1930	1950	1960	1980	1990	2100	2140
Peak Gain (dBi)	1.49	1.98	2.06	2.22	2.42	2.48	2.64	2.77	2.29	1.89
Efficiency (%)	49.29	47.81	47.05	47.24	47.58	47.64	48.39	50.14	53.09	52.31
Frequency (MHz)	2200	2300	2325	2350	2375	2400	2500	2515	2535	2555
Peak Gain (dBi)	1.77	2.17	2.45	2.32	1.86	2.27	2.69	2.73	2.84	3.25
Efficiency (%)	54.43	58.43	61.16	59.58	57.01	56.31	50.40	51.59	54.33	56.46

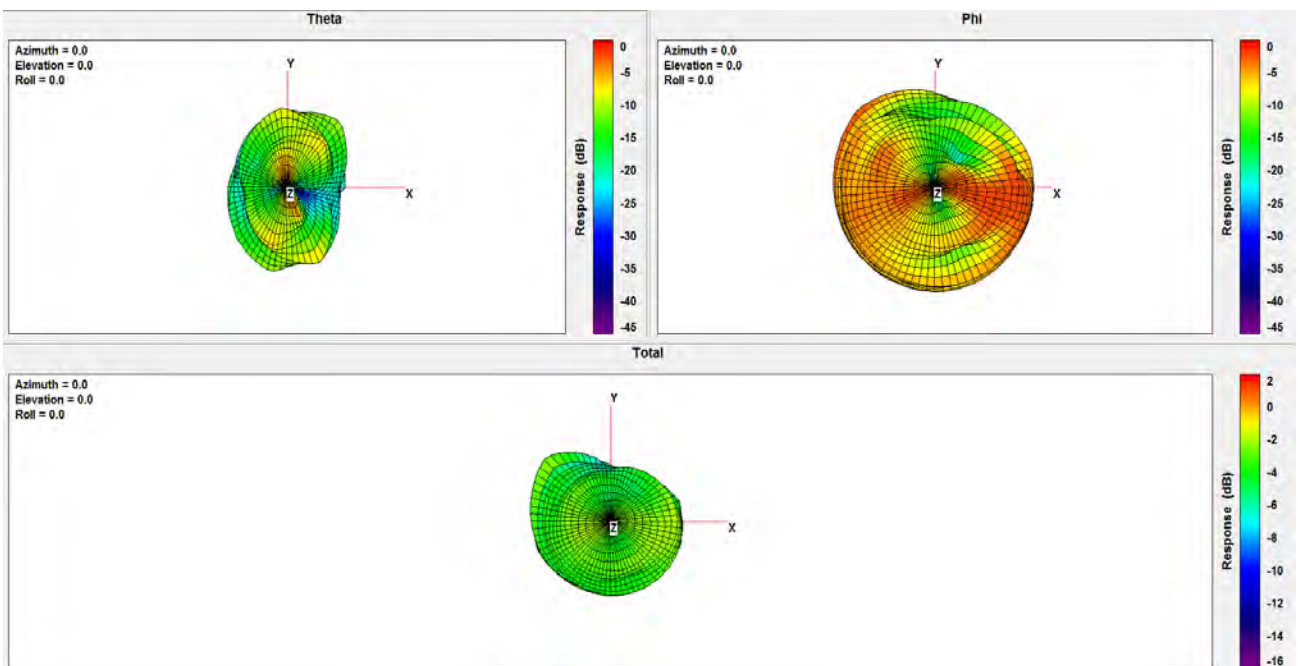
Frequency (MHz)	2570	2600	2620	2630	2655	2680	2700			
Peak Gain (dBi)	3.18	3.06	2.60	2.40	1.77	1.43	1.24			
Efficiency (%)	55.70	53.62	51.58	50.53	46.22	44.17	41.27			

3D Radiation Patterns

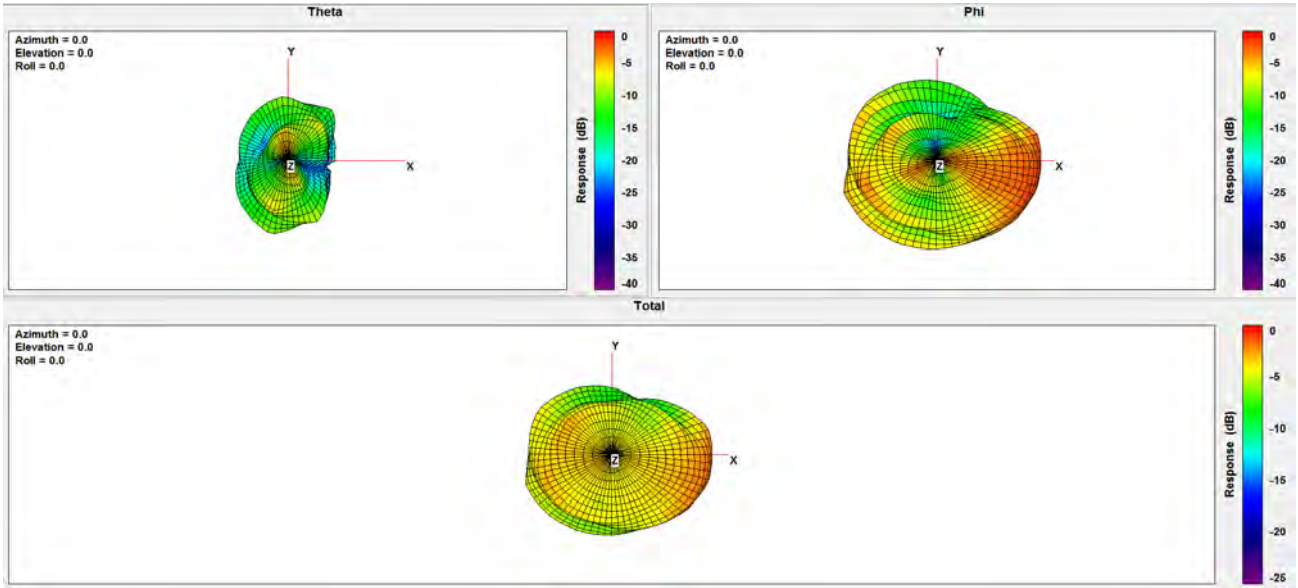
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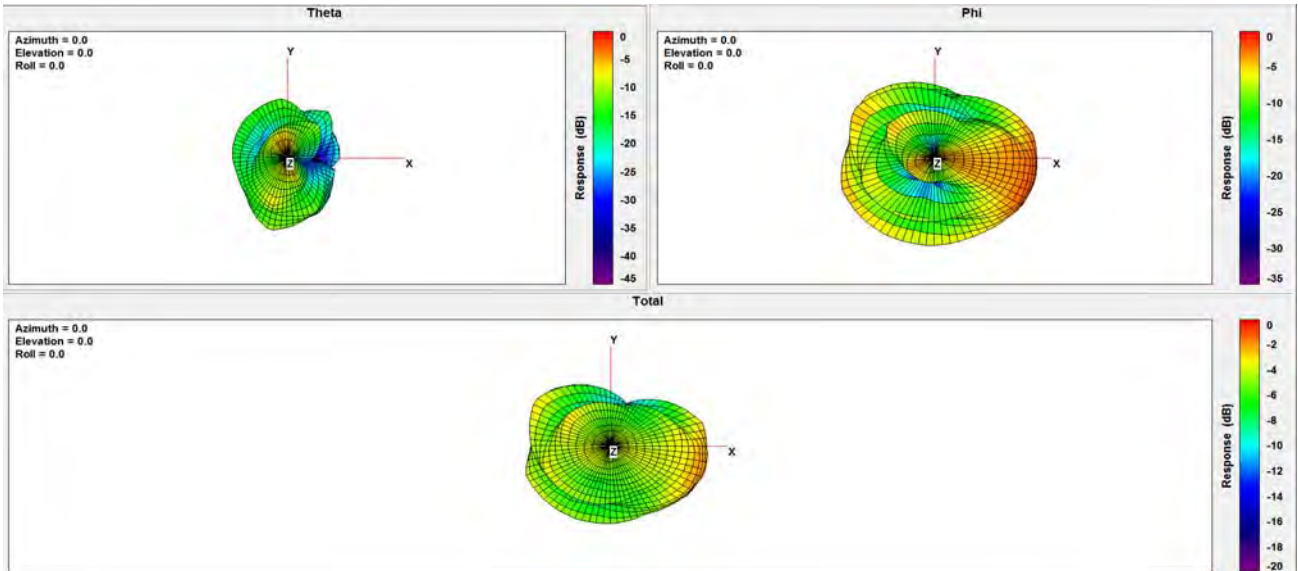
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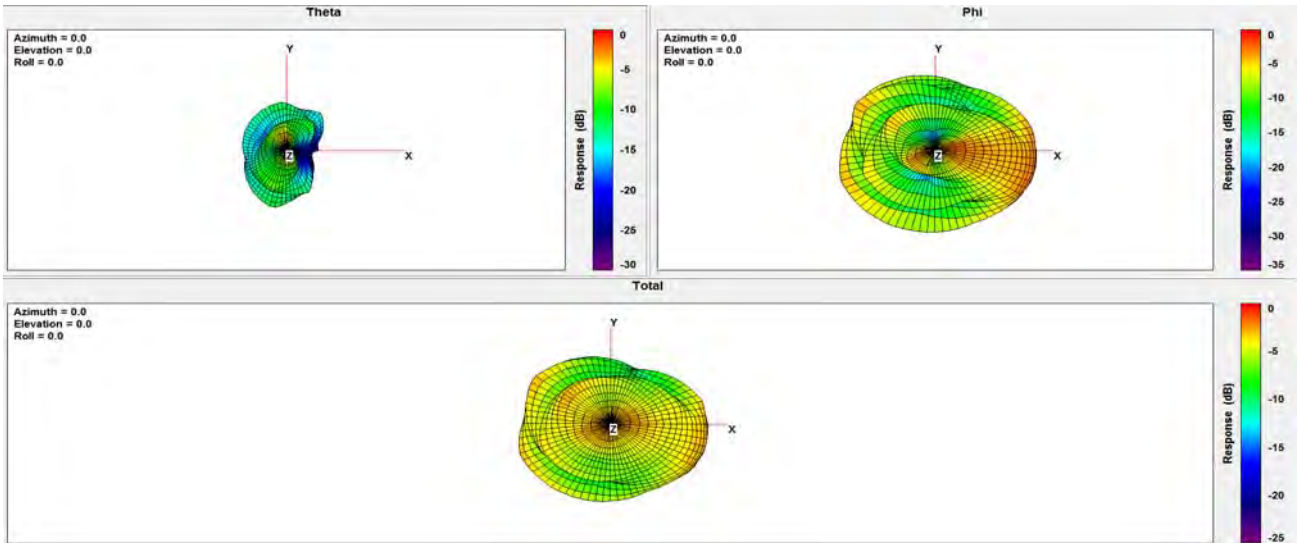
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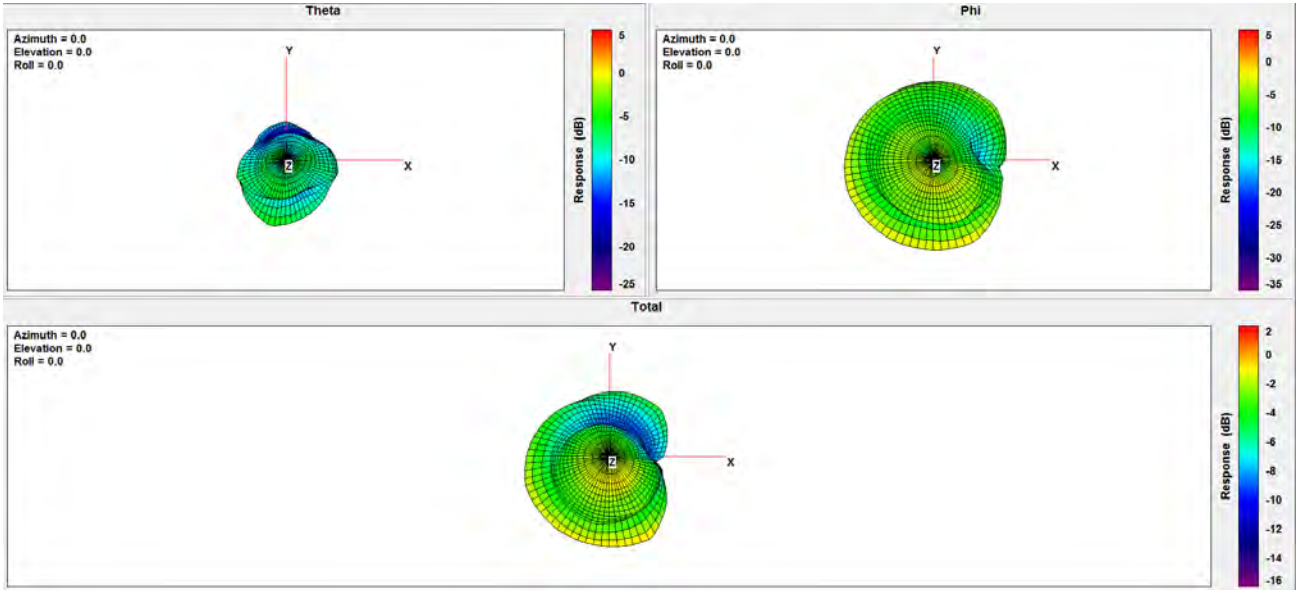
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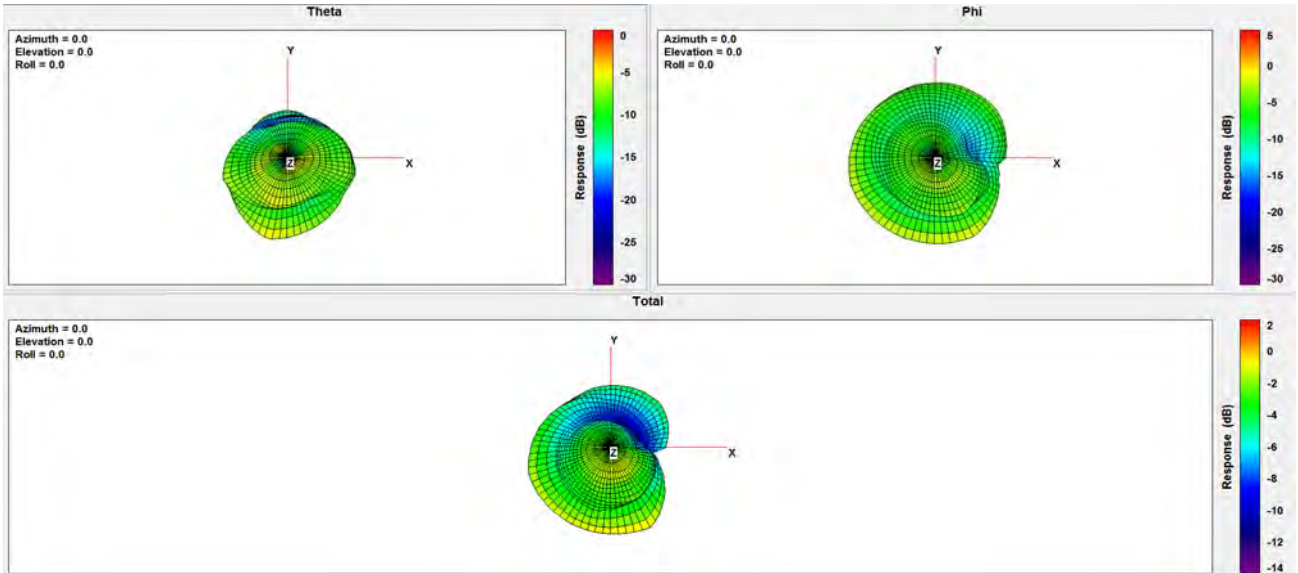
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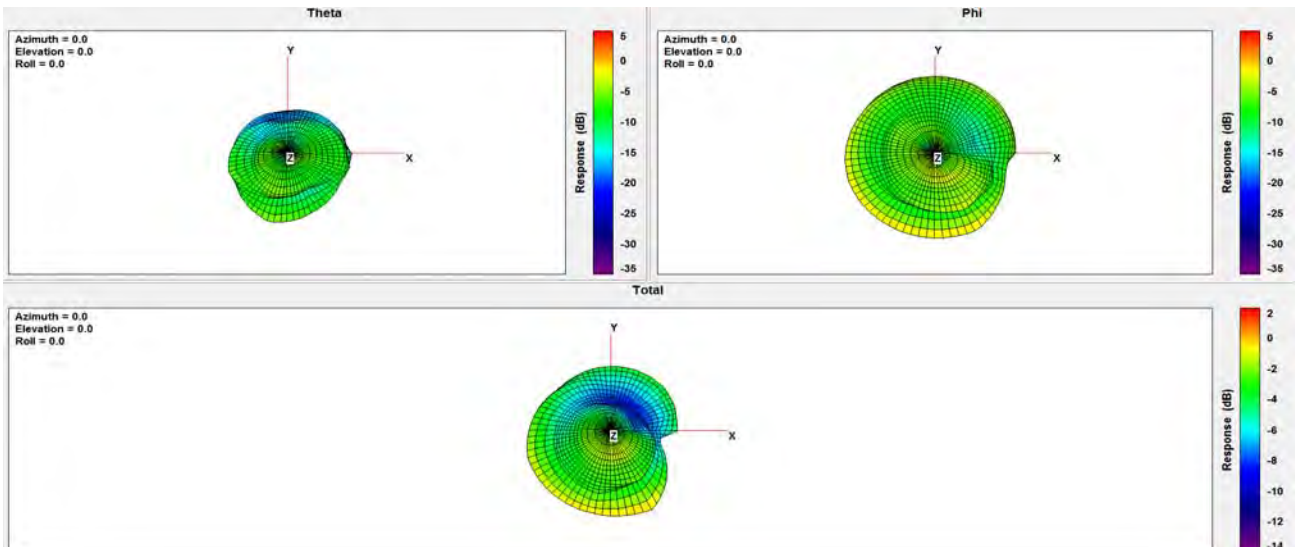
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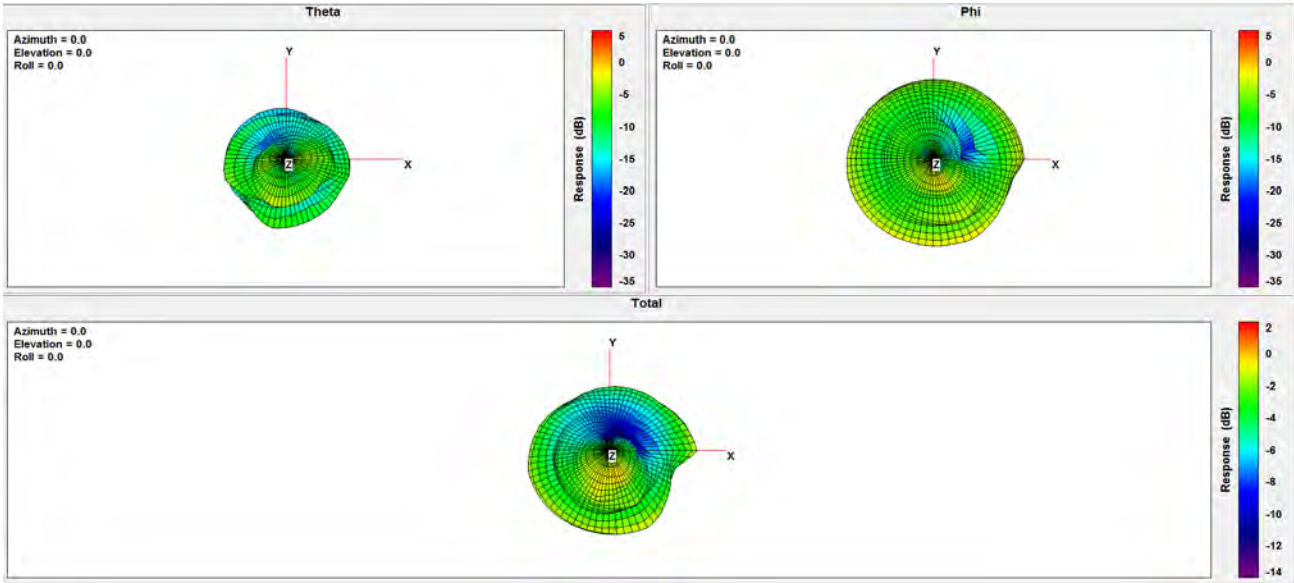
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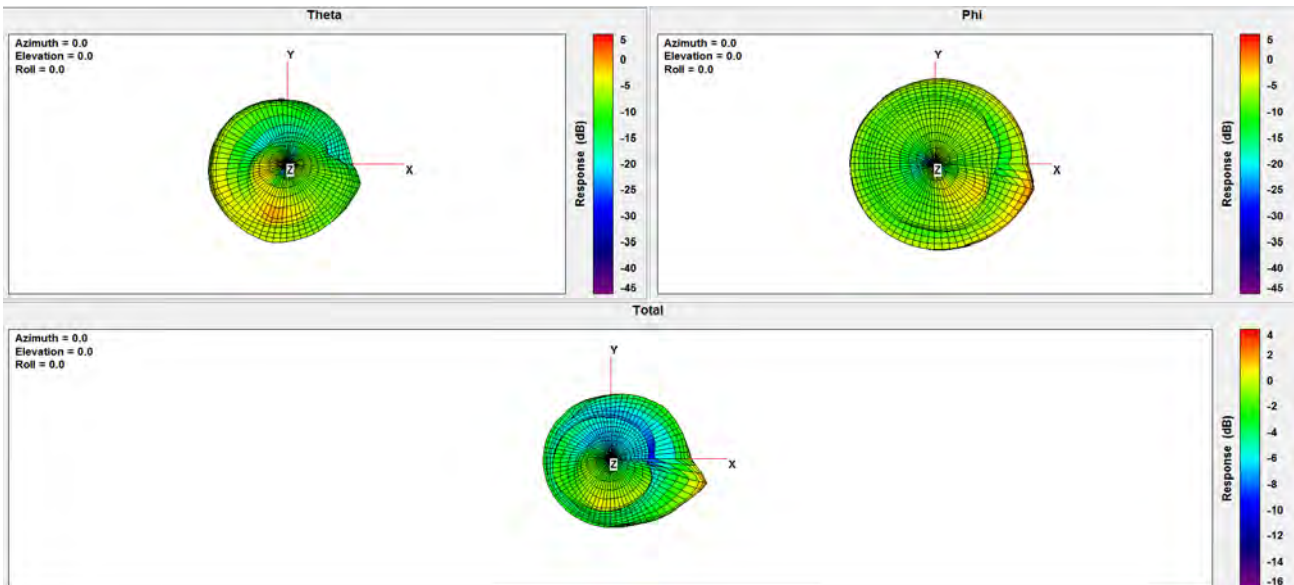
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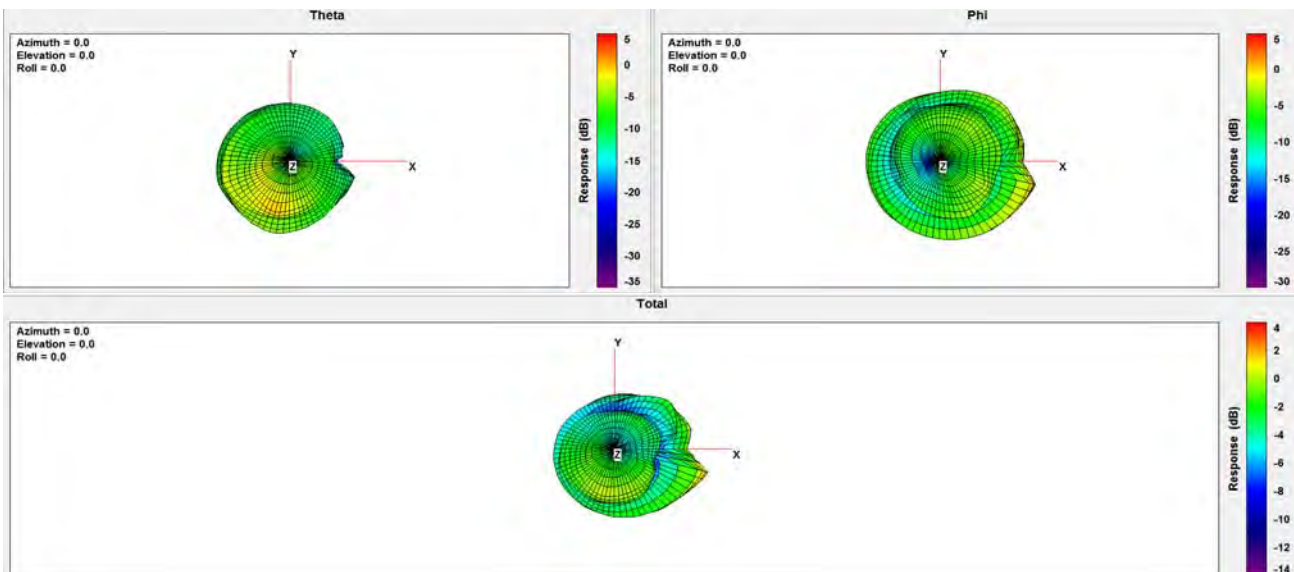
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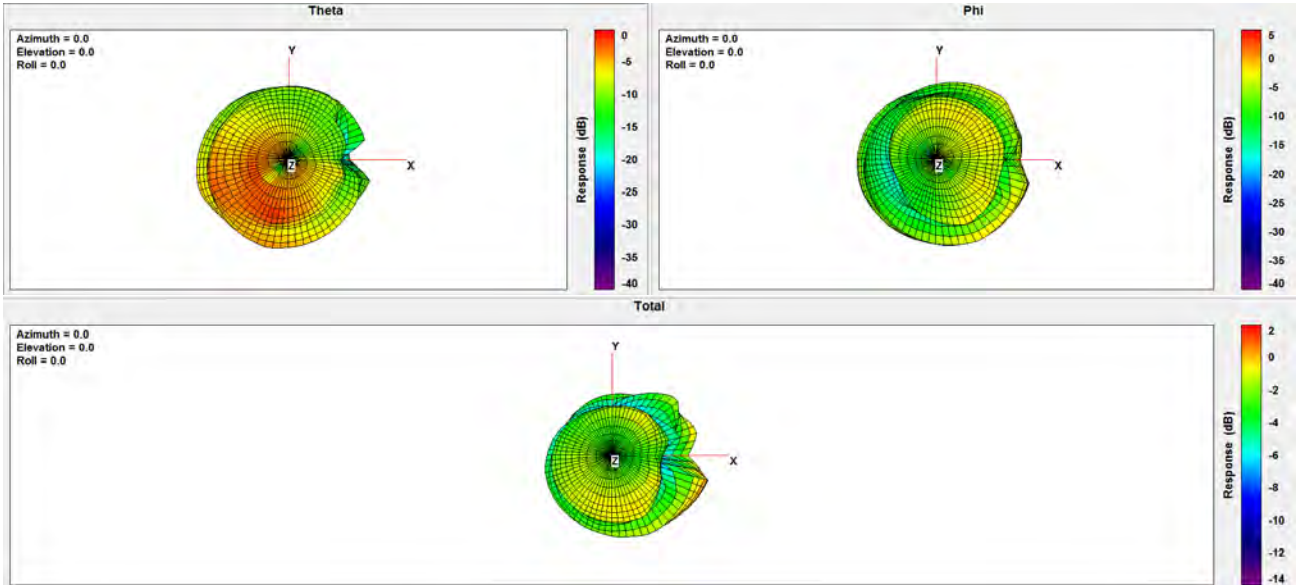
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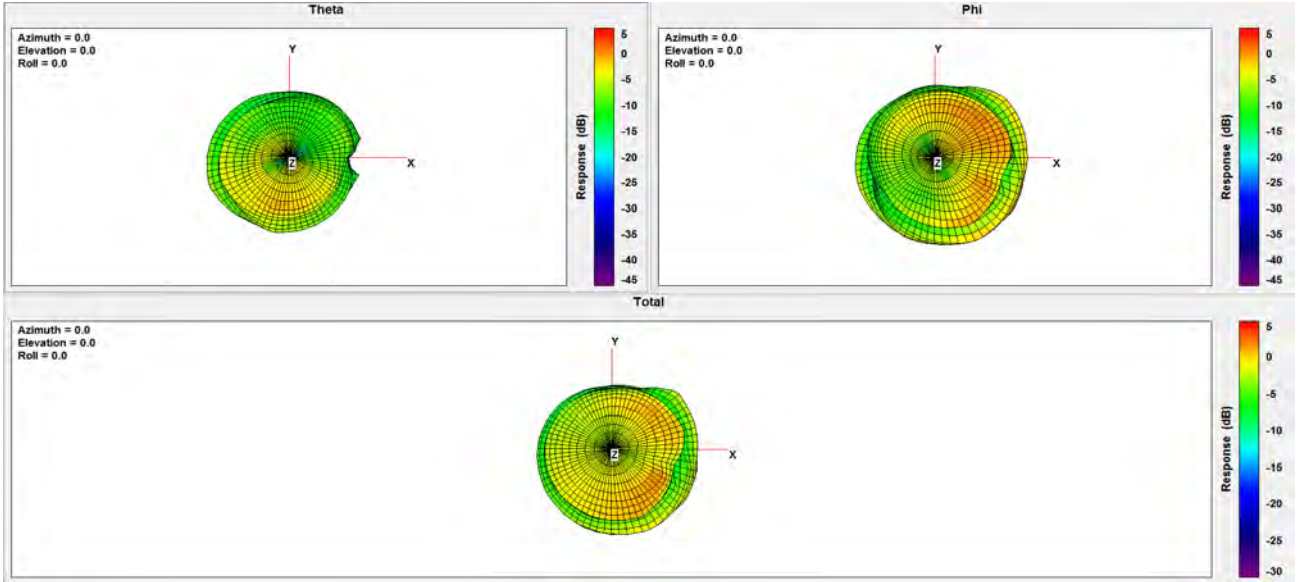
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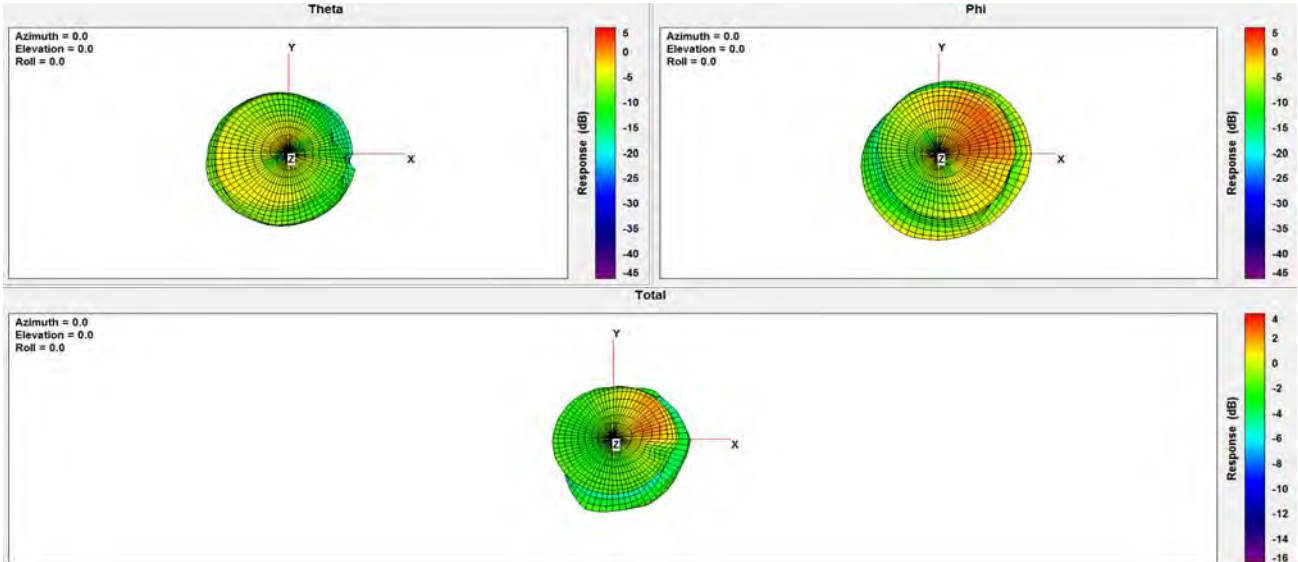
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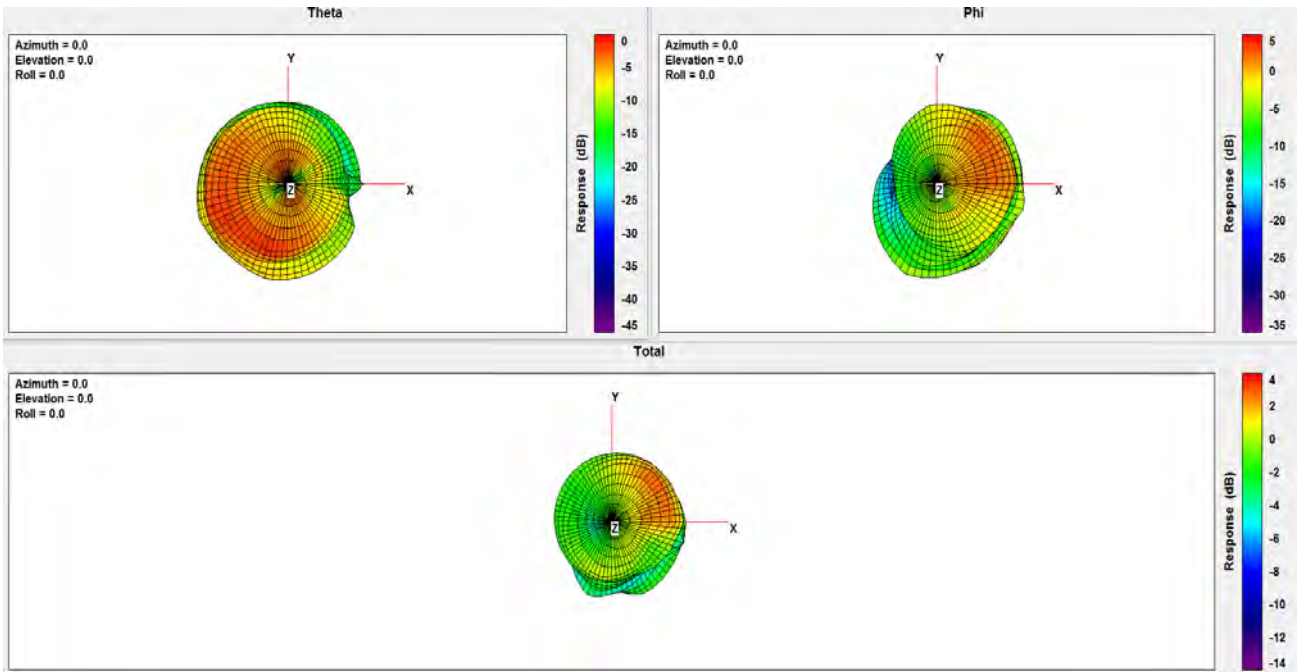
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2500Mhz:

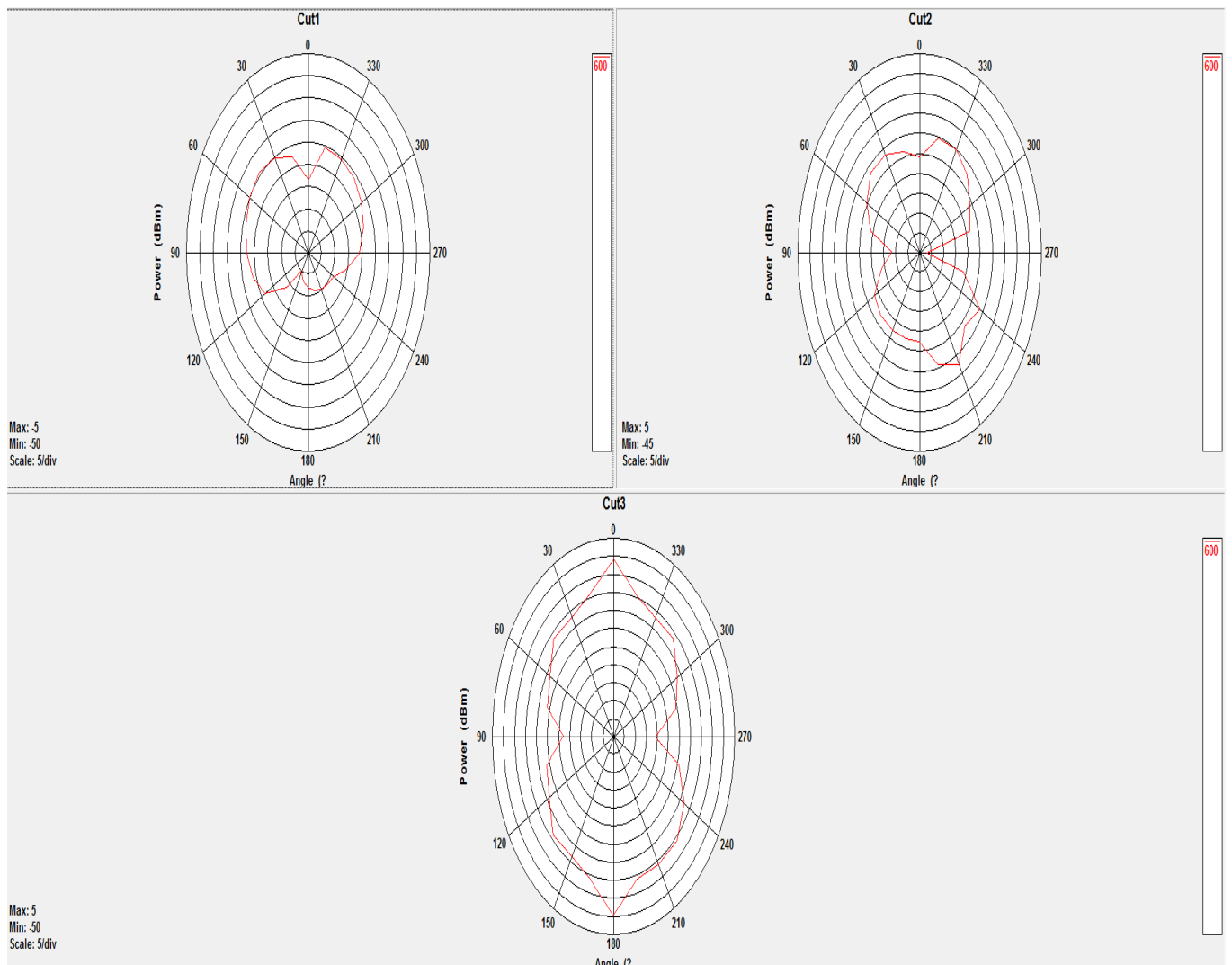


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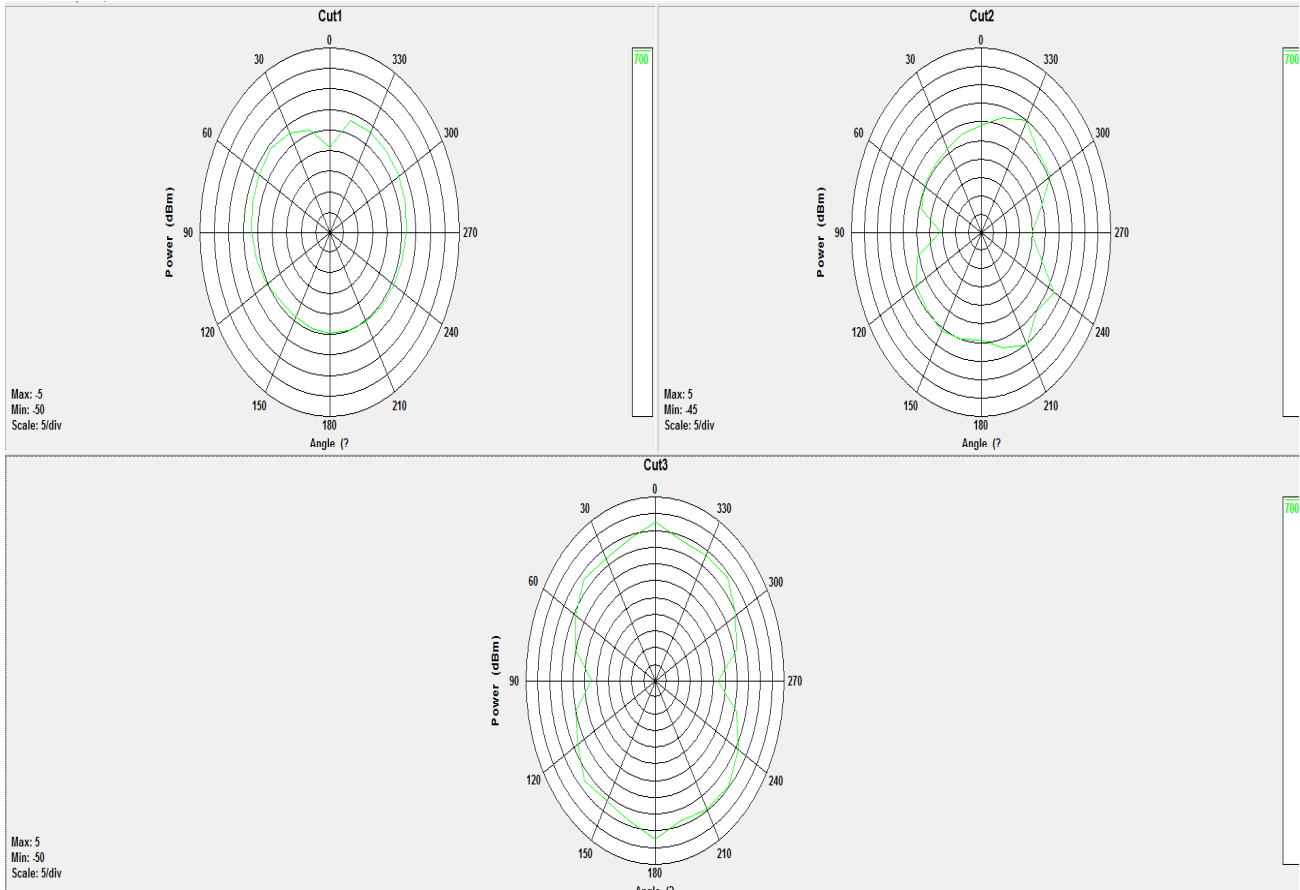


2D Radiation Patterns

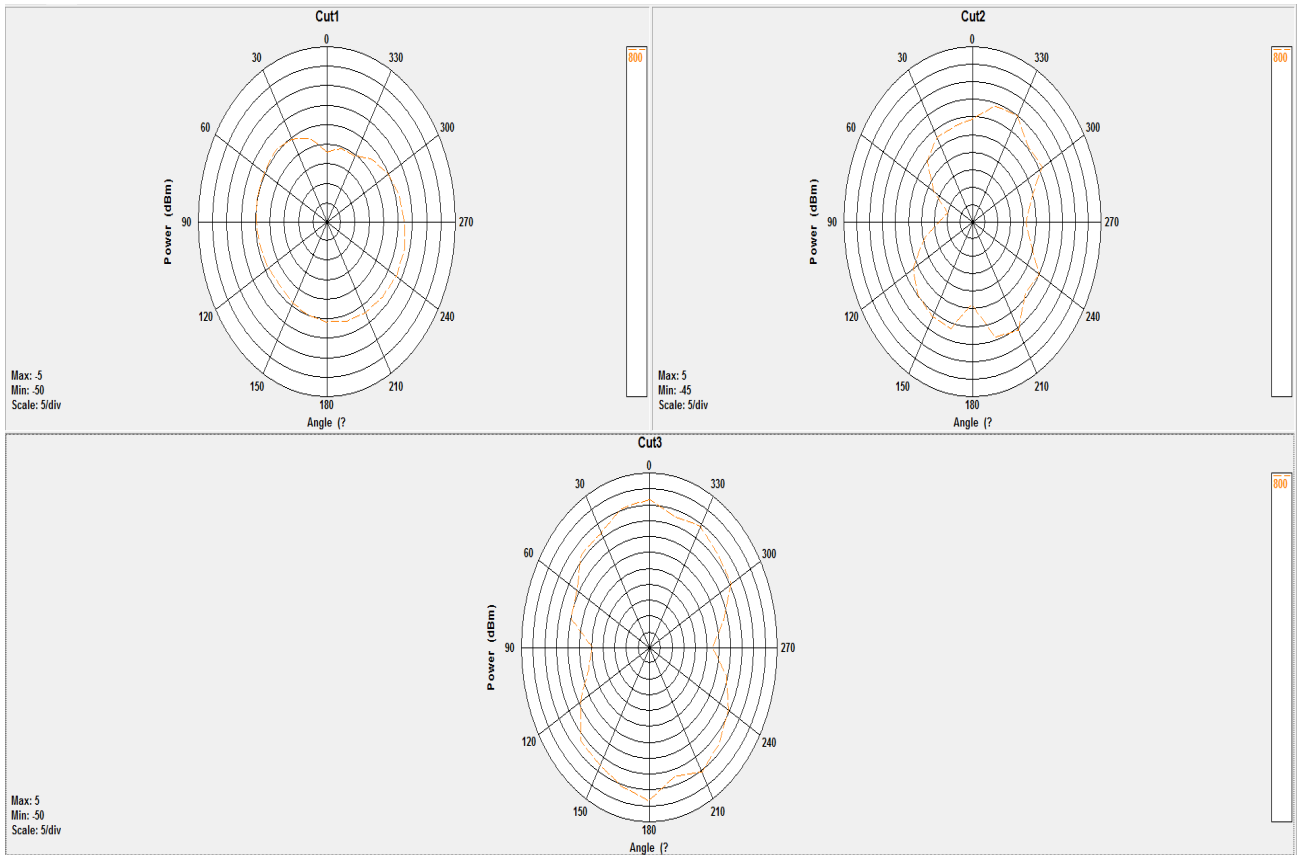
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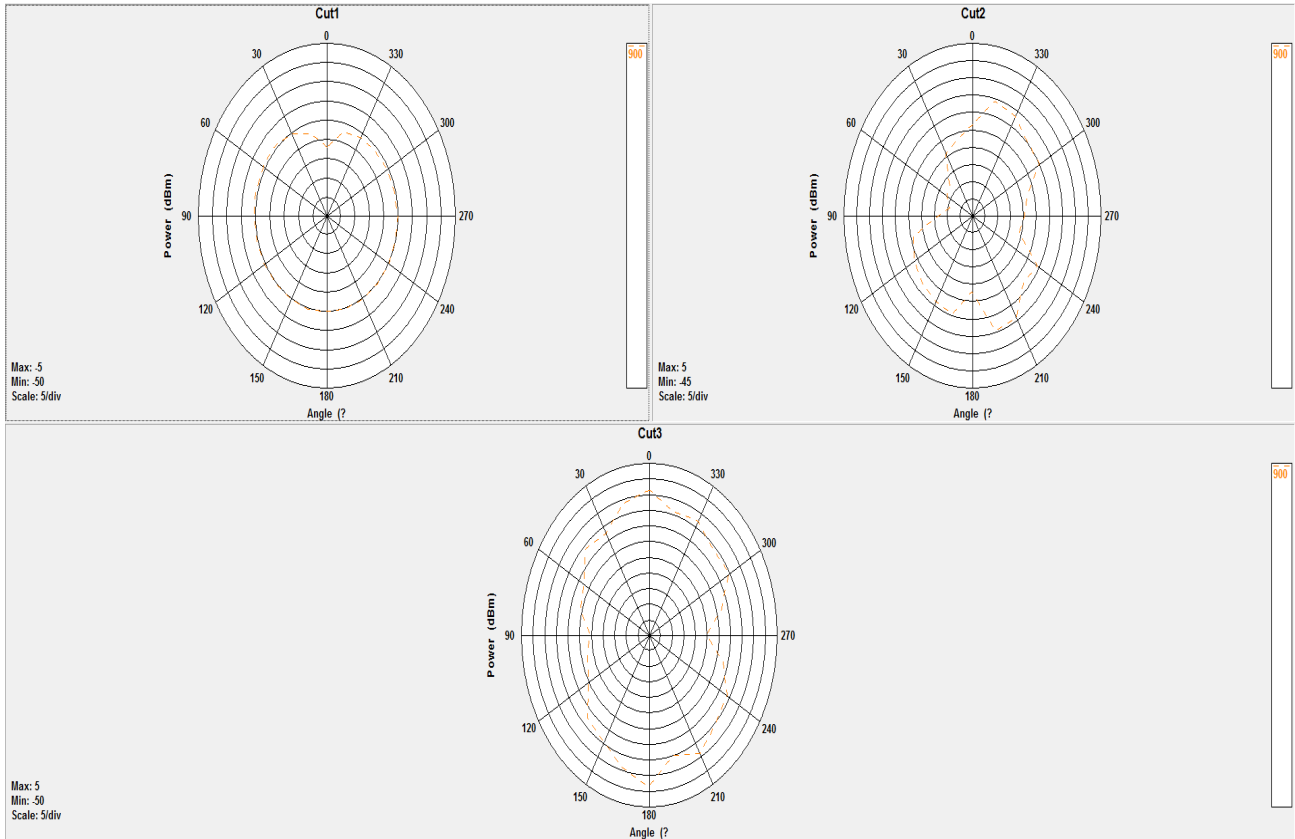
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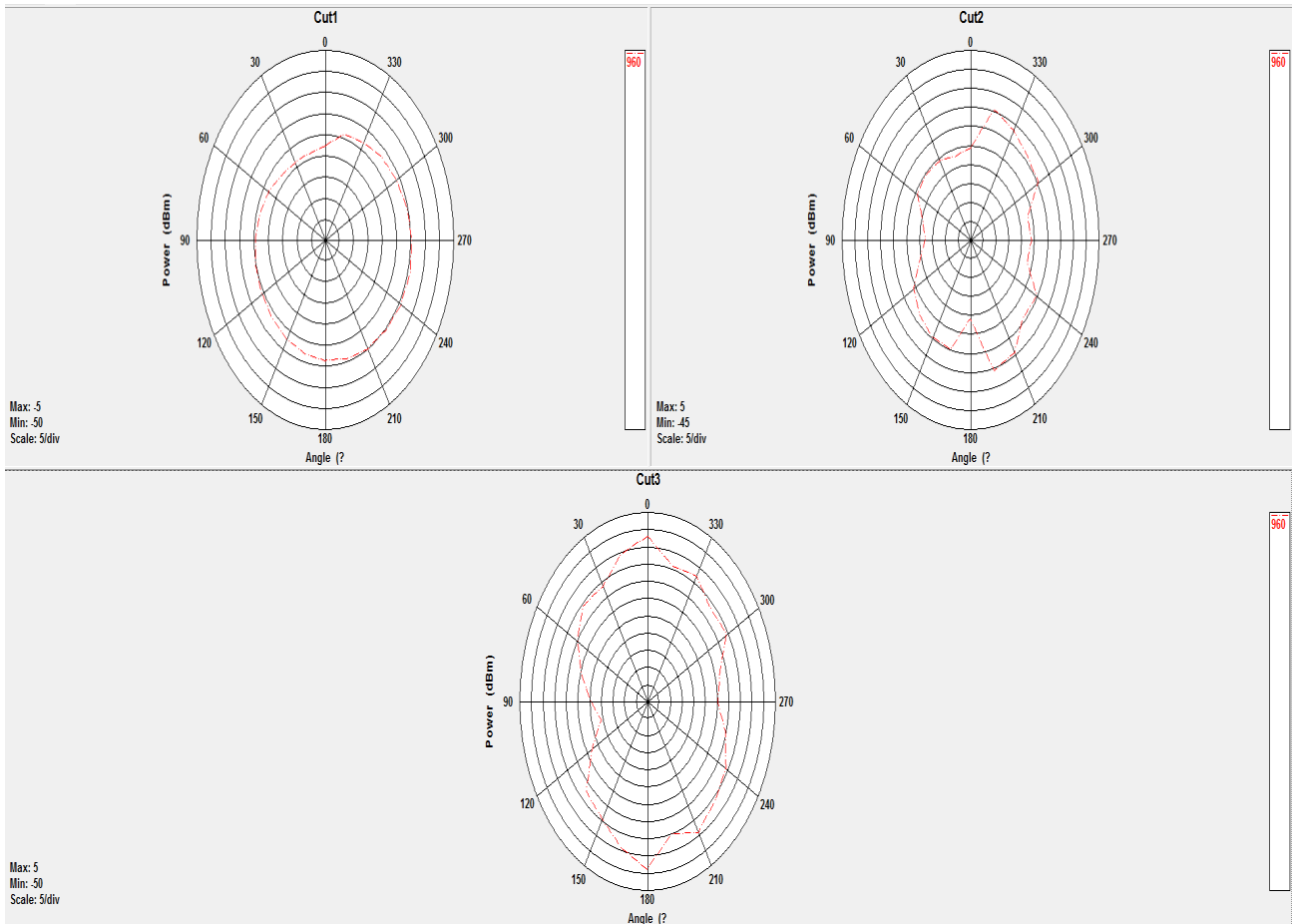
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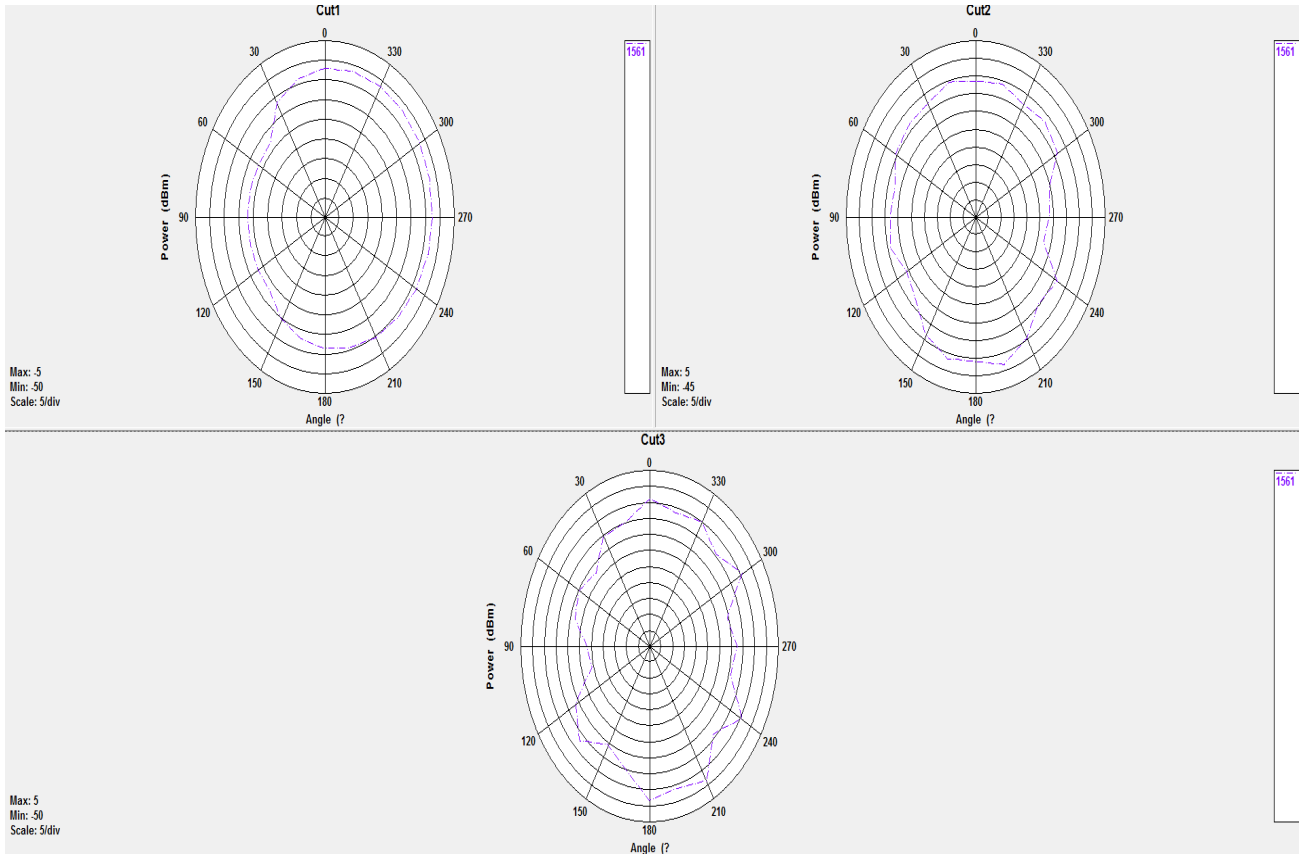
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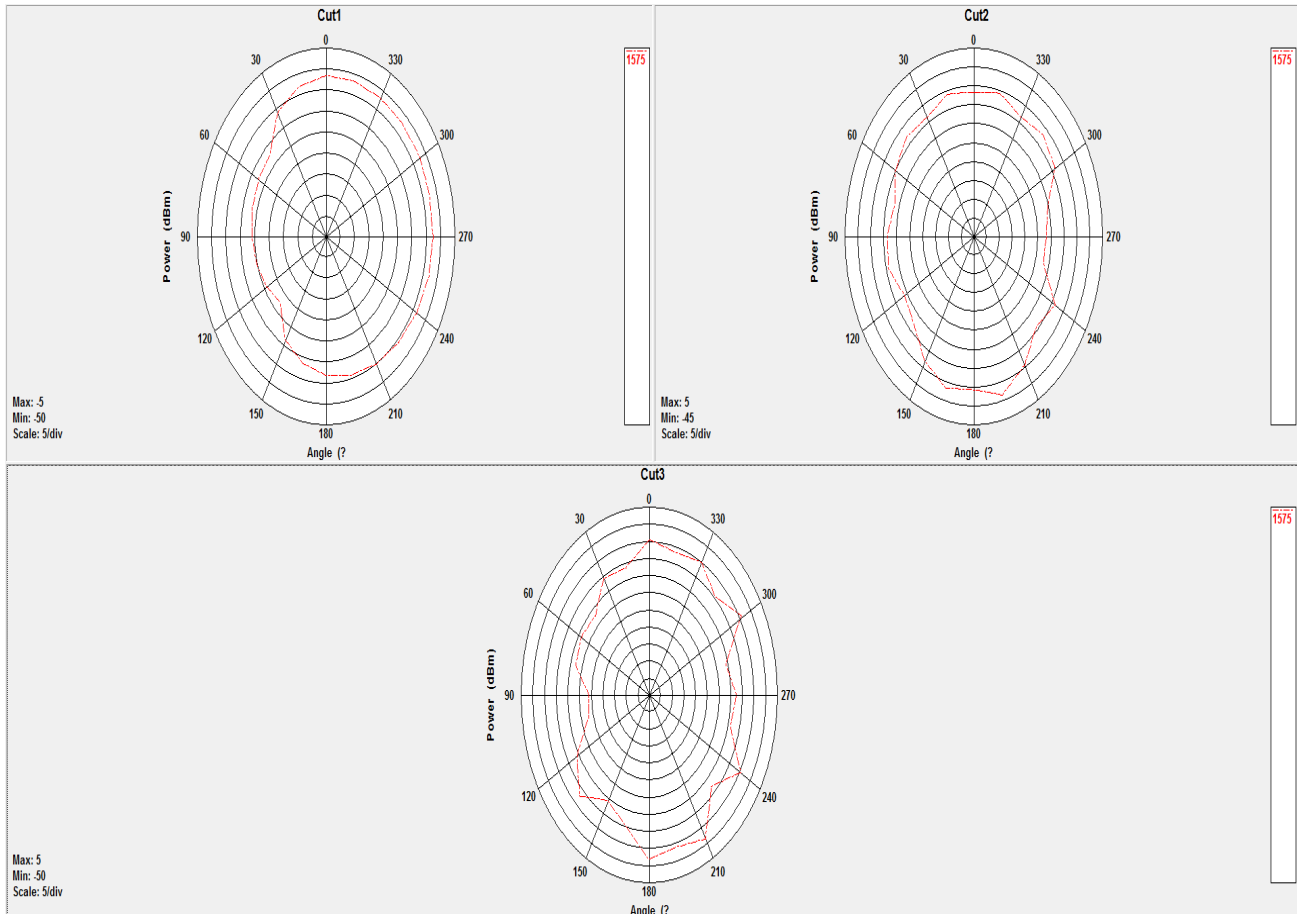
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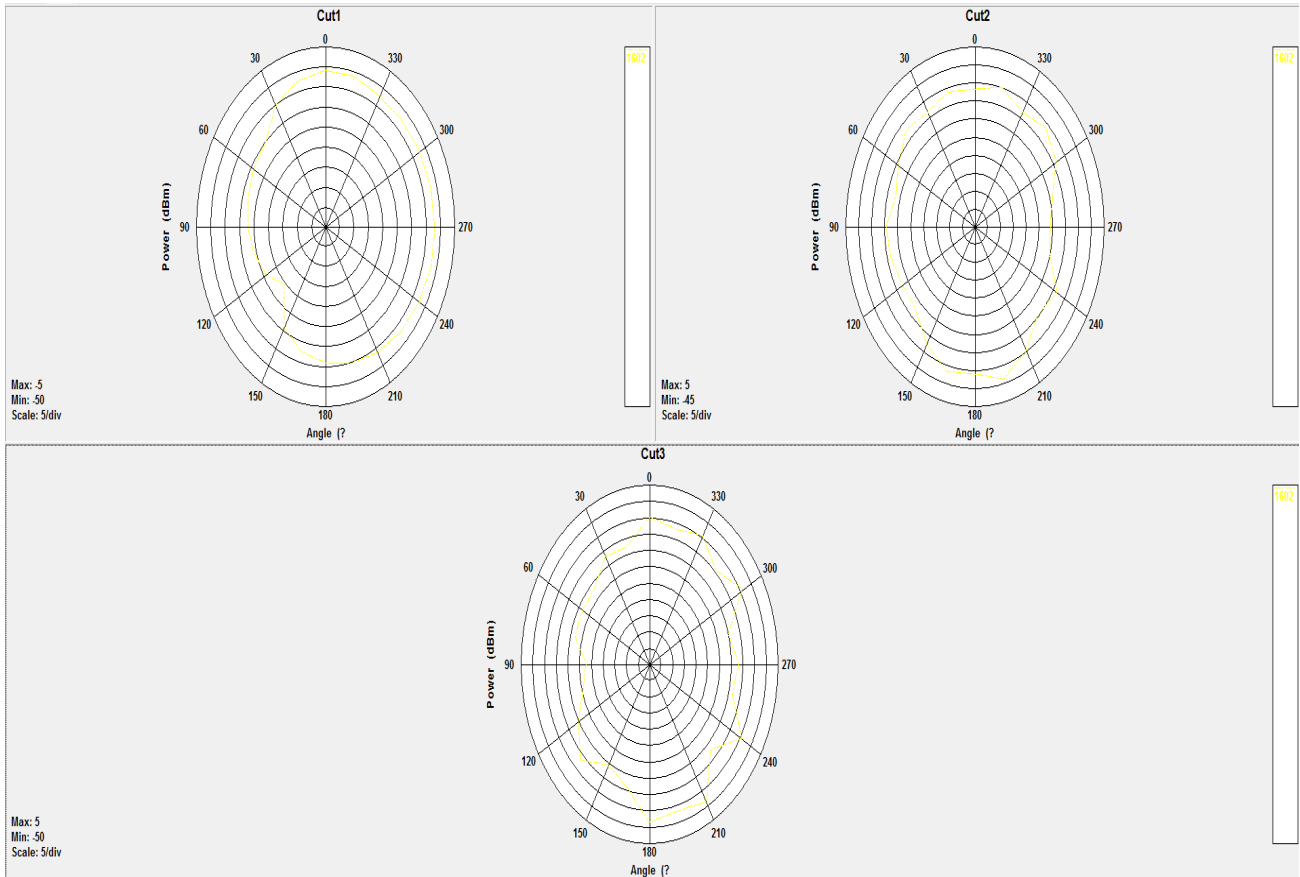
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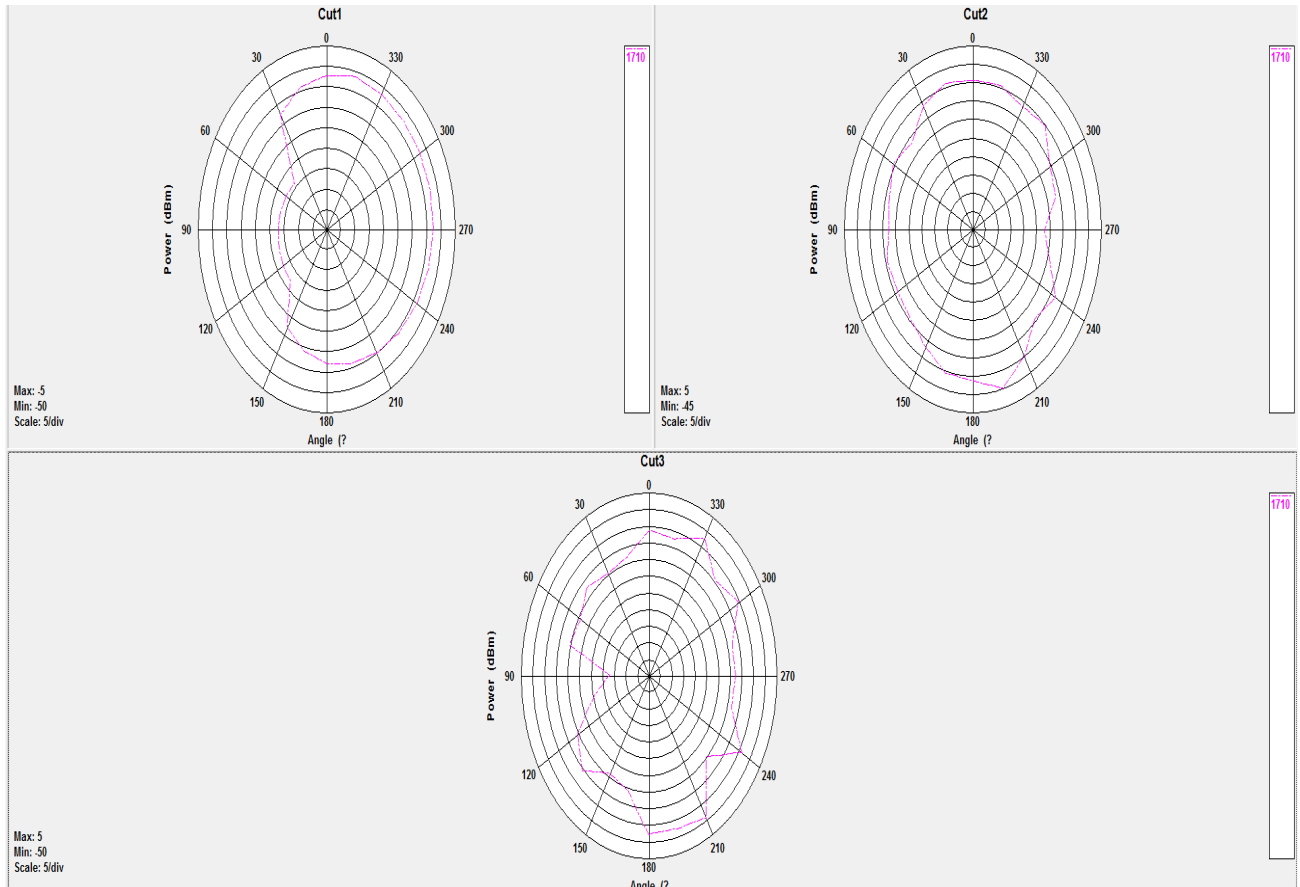
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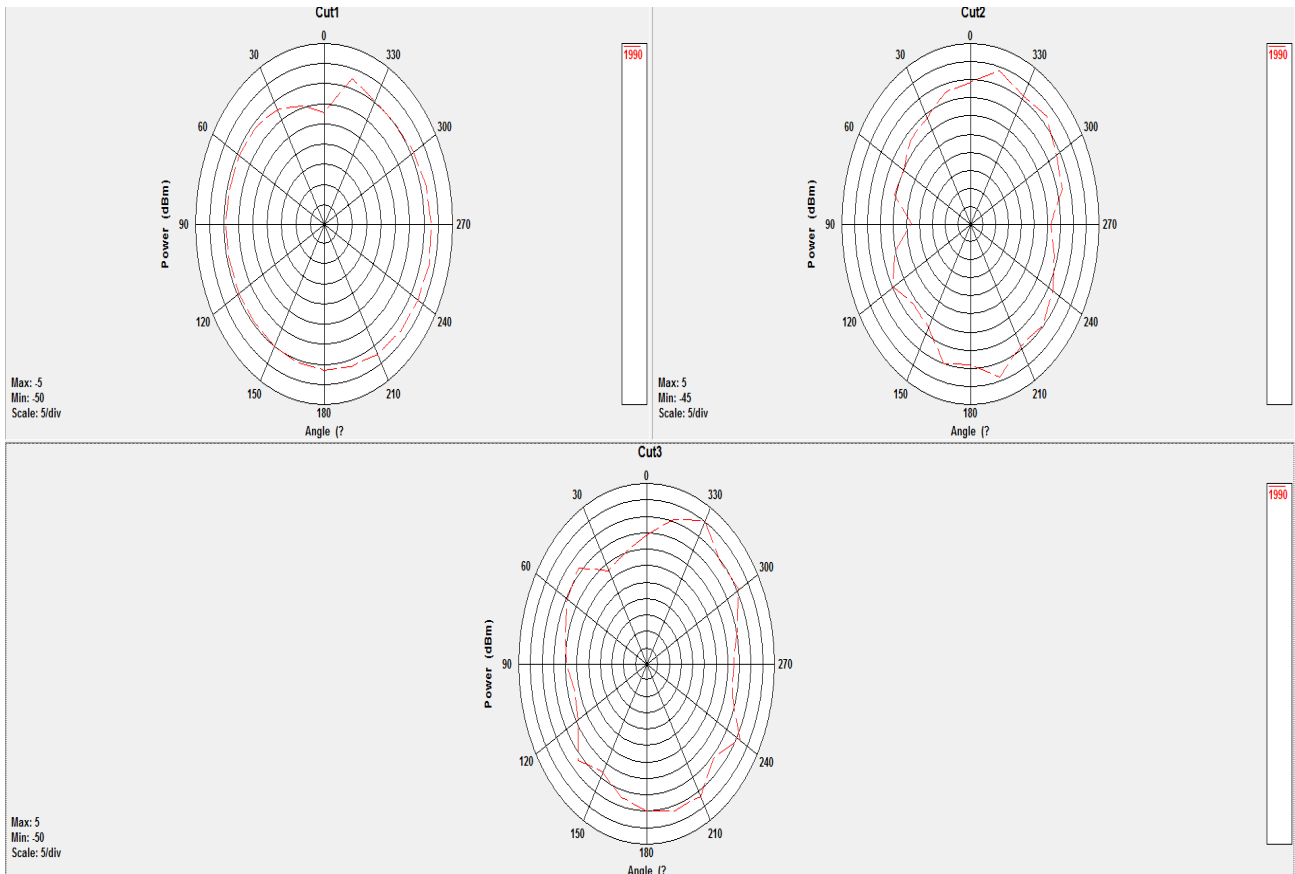
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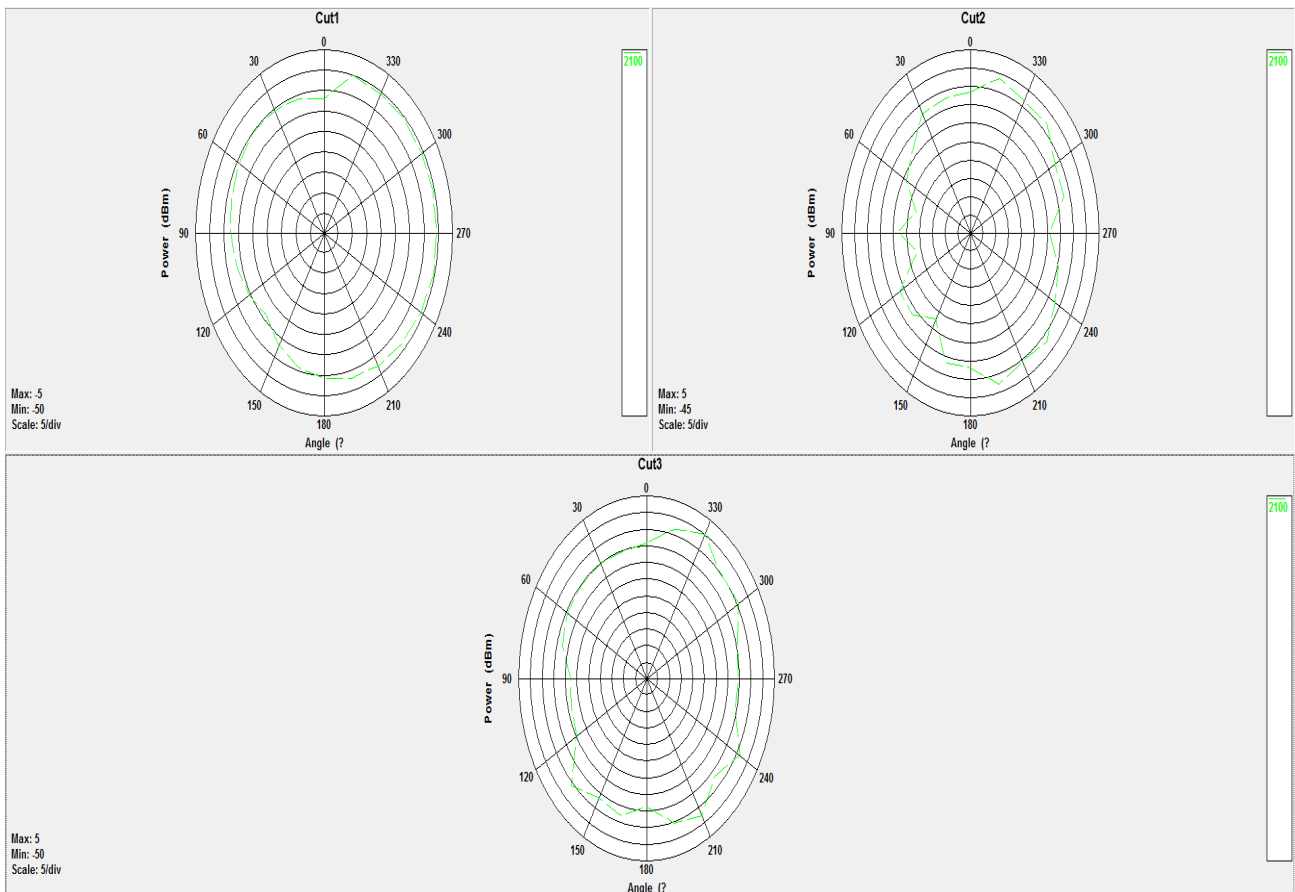
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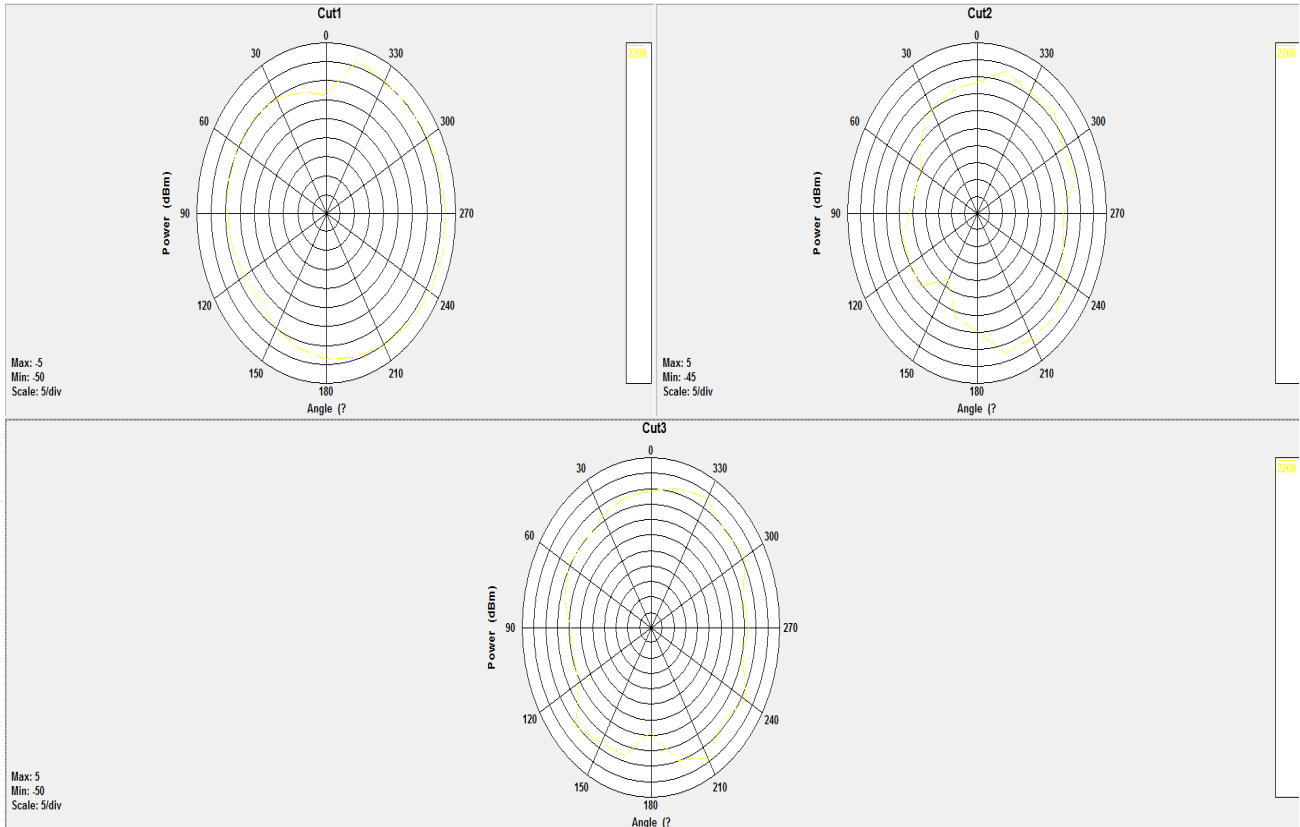
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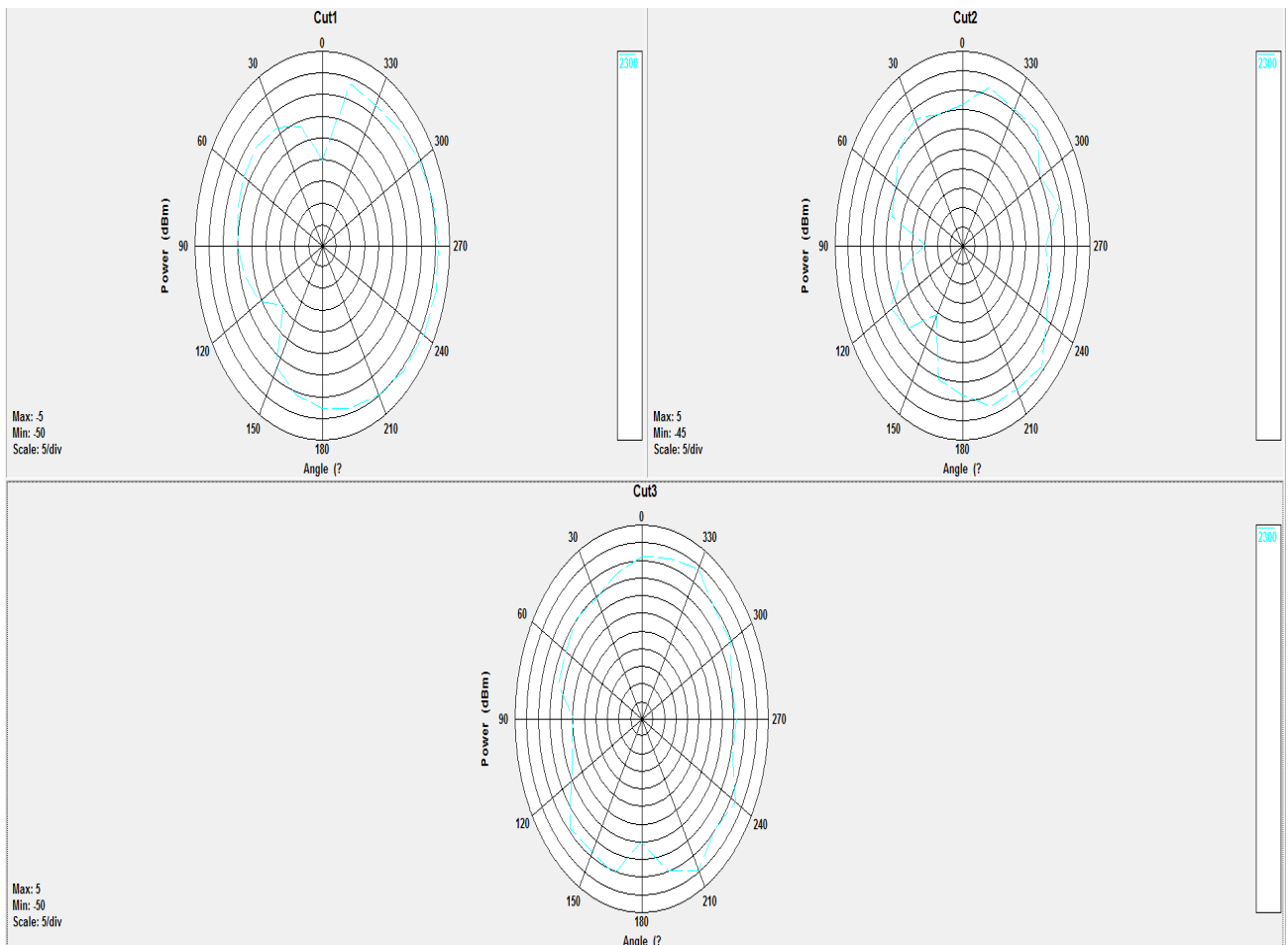
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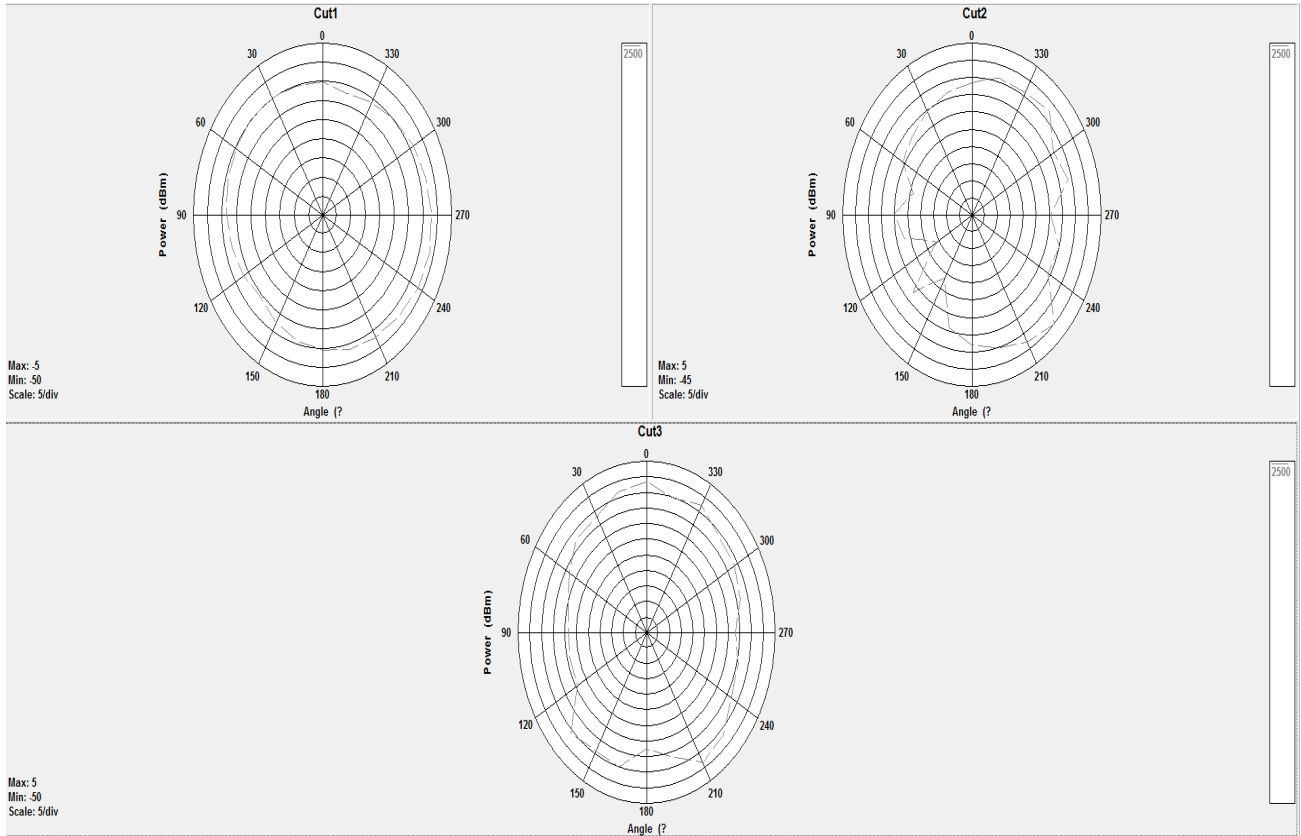
2200Mhz:



2300Mhz:



2500Mhz:



2600Mhz:

