东莞市思普嘉电子科技有限公司

		文件编号:	
样品承认书			
Specification For Approval			
客户名称: Customer:			
供应商名称: Supplier:	东莞市思普嘉电子科技有限公司		
客户料号:		供应商料号:	HW006
产品描述:		配用机型:	
客户承认(盖章):		供应商承认(盖章):	
日期/Date:		日期/Date:	
联系人/Name:		联系人/Name:	
邮件/E-mail:		邮件/E-mail:	
电话/TEL:		电话/TEL:	
传真/FAX:		传真/FAX:	

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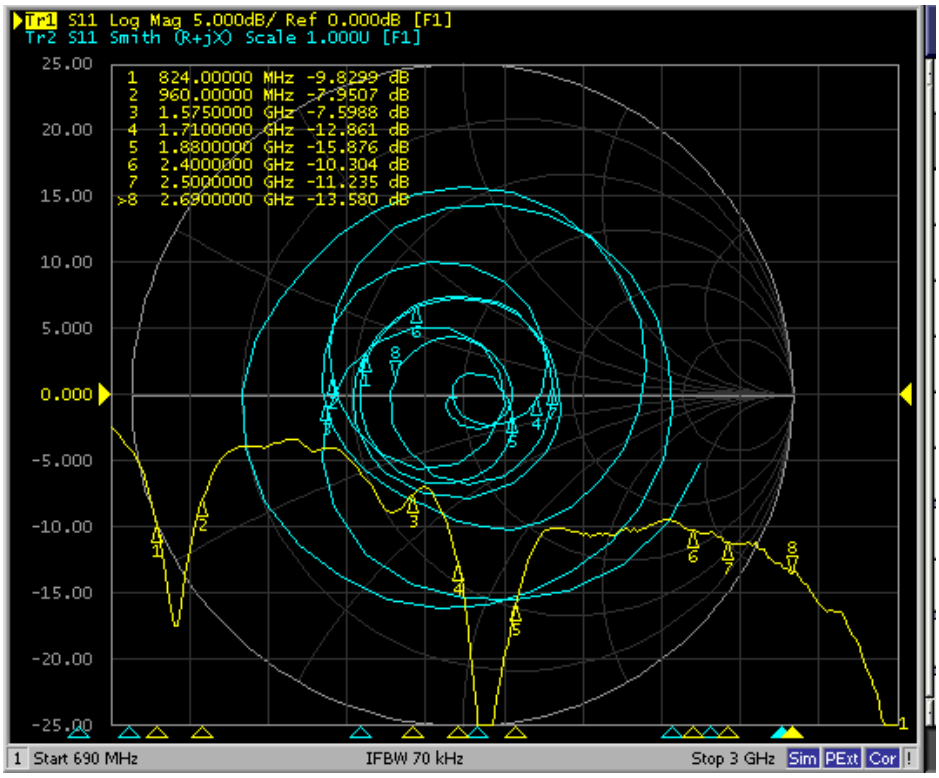
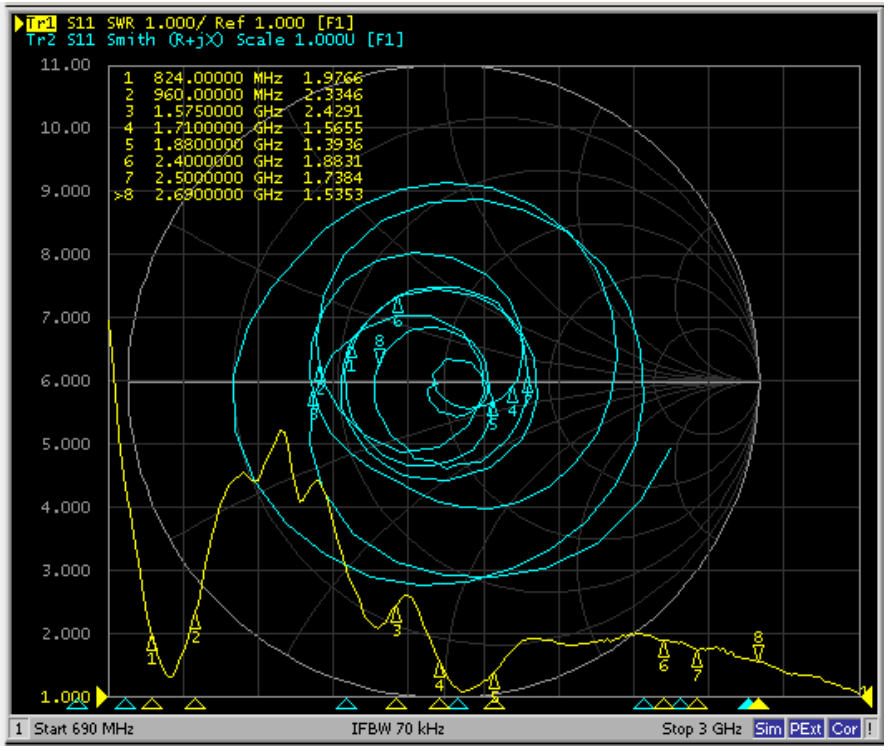
一．天线指标如下：

频带 Frequency	700-960MHz,1710- 2690MHz
天线方向性	类偶极子
增益 MAX（dBi）	4.2（10cm 线缆测试）
效率 Efficiency （%）	≥20，≤85（10cm 线缆测试）
驻波比 S.W.R.	700-960MHz ≤3.5 1710- 2690MHz≤2.5
标准阻抗（Ohm）	50 Ohm
接头类型 Connector type	QFK1 代 Or Other
极化方式 Polarization	线极化 Linear
最大输入功率 Max input power	20W
天线颜色 Antenna color	黑色
电缆线类型 Cable type	低损耗 1.13 线



S11（图 1）



驻波比（图 2）

二．天线实拍图

三．工作条件

温度 Temperature：-40℃～+85℃

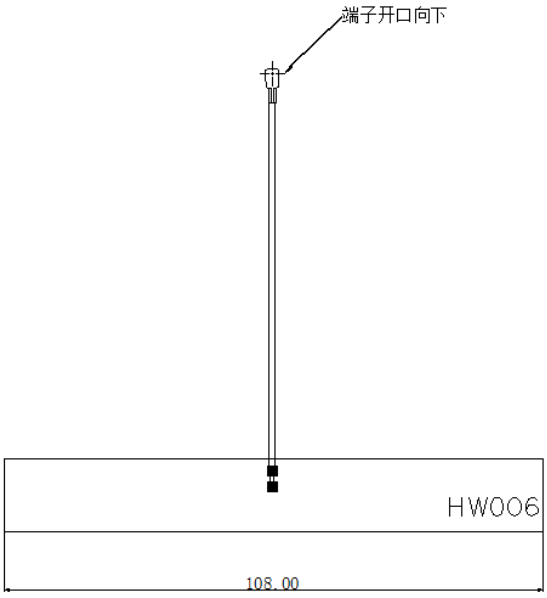
湿度 Humidity：　95％～100％

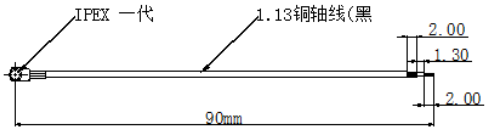
四．储藏条件

温度 Temperature：-45℃～+85℃

湿度 Humidity：　≦75％

五、电缆头及电缆线



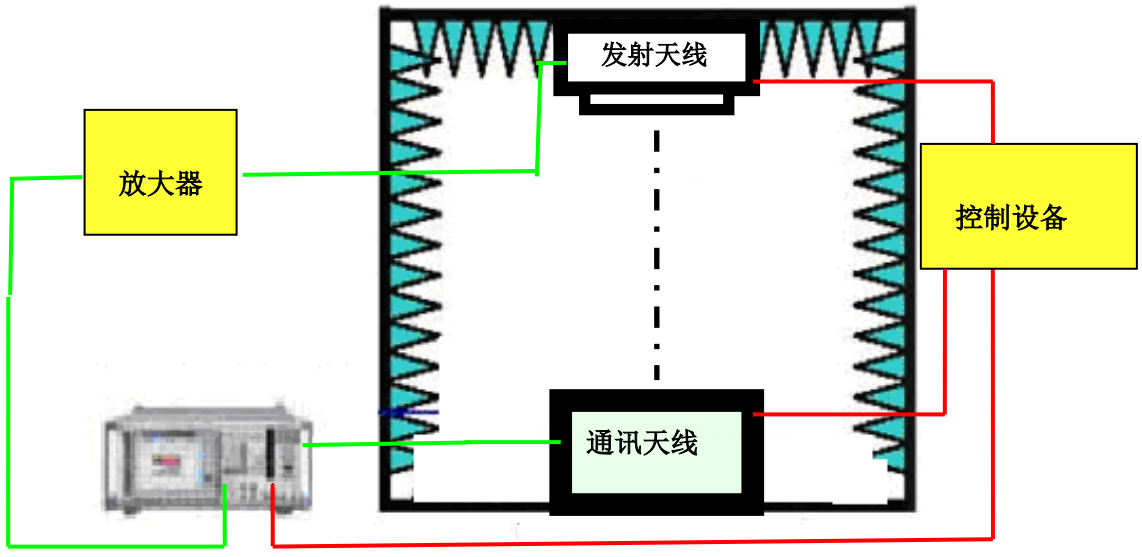


六． 天线增益，效率测试

1、增益效率测试：（采用 10cm 线缆连接测试）

2、⑴测试设备：微波暗室，矢量网络分析仪，放大器，馈电器，控制器，电脑，转台控制器等。

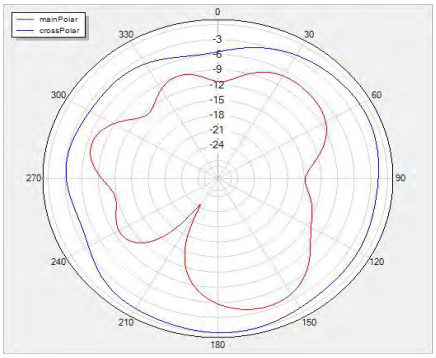
⑵测试示意图：



2、结果如下：

Gain&Efficiency&PhaseCenter 增益、效率和相位中心				
frequency 频率(MHz)	gain 增益(dBi)	directivity 方向性系数	efficiency 效率(dB)	efficiency 效率(%)
700	-2.9	4.46	-7.36	18.38
720	-3.77	4.52	-8.29	14.81
740	-3.7	4.19	-7.9	16.23
760	-3.69	3.99	-7.68	17.05
780	-3.5	3.89	-7.38	18.26
800	-2.67	3.52	-6.19	24.04
820	-1.93	3.58	-5.5	28.16
840	-2.29	3.16	-5.45	28.51
860	-0.37	4.41	-4.78	33.29
880	1.39	4.92	-3.53	44.38
900	3.46	5.95	-2.49	56.37
920	5.07	6.63	-1.56	69.81
940	6.03	6.95	-0.92	80.97
960	6.13	6.78	-0.65	86.01
980	6.35	6.71	-0.35	92.16
1000	6.2	6.54	-0.34	92.45
1420	-11.3	3.92	-15.22	3
1460	-10.15	4.3	-14.45	3.59
1500	-7.49	5.14	-12.62	5.47
1520	-6.18	5.01	-11.19	7.61
1700	0.92	4.77	-3.84	41.26
1710	1.77	4.96	-3.19	48
1750	2.87	5.36	-2.49	56.38
1790	3.7	5.17	-1.47	71.24
1830	4.74	5.85	-1.11	77.51
1870	4.74	5.7	-0.97	80.01
1910	4.22	5.09	-0.87	81.89
1950	3.65	4.55	-0.9	81.22
1990	3.03	4.06	-1.03	78.82
2030	3.49	4.7	-1.21	75.71
2070	4.02	4.64	-0.62	86.64
2110	3.85	4.4	-0.55	88.16
2150	3.38	4.49	-1.11	77.37
2190	3.12	4.62	-1.5	70.77
2230	3.26	5	-1.74	66.98
2270	3.02	4.51	-1.49	71.03
2310	3.08	4.37	-1.29	74.24
2350	3.32	5.05	-1.73	67.18
2390	3.42	5.24	-1.82	65.78
2430	3.28	5.25	-1.97	63.58
2470	3.21	5.34	-2.13	61.17
2510	3.01	5.13	-2.12	61.34
2550	2.78	4.94	-2.16	60.75
2590	3.31	5	-1.69	67.8
2630	3.52	5.27	-1.75	66.83
2670	3.55	5.27	-1.72	67.34
2710	3.42	5.33	-1.91	64.41

Phi=90 freq=700MHz



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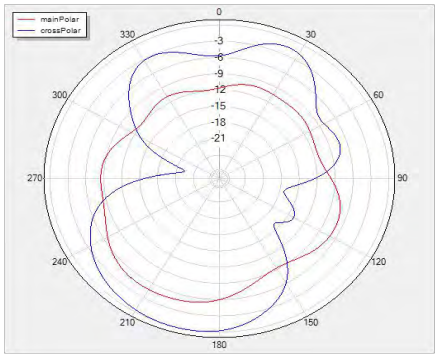

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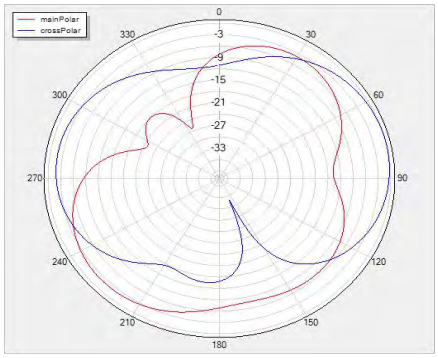

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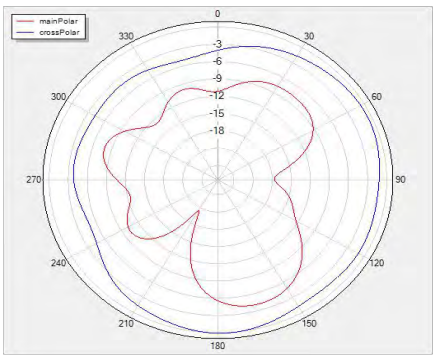

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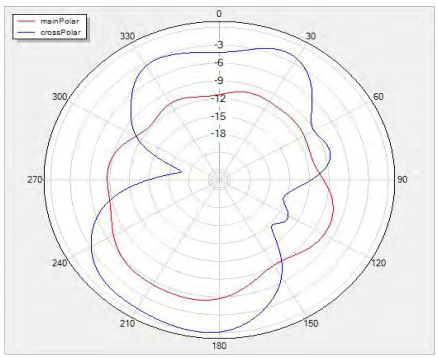

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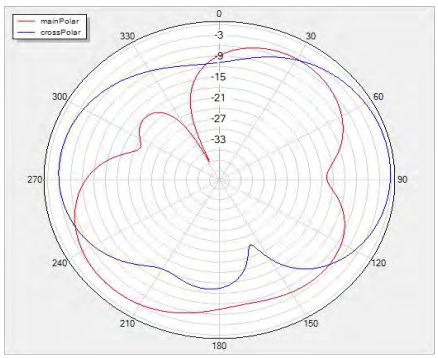

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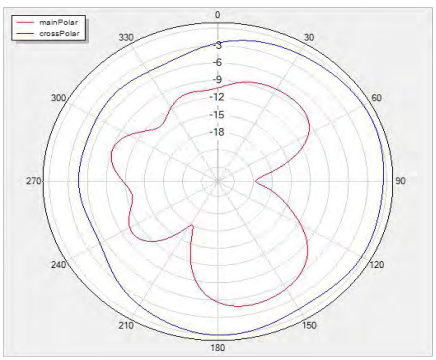

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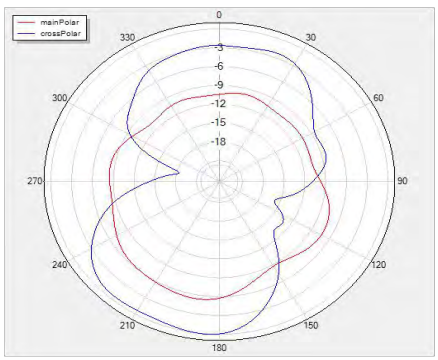

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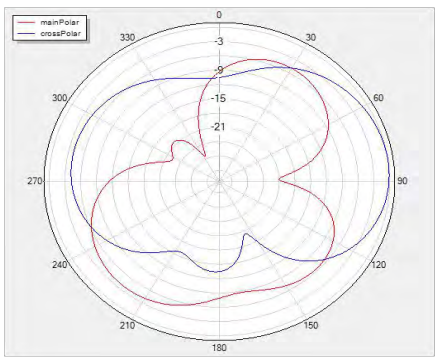

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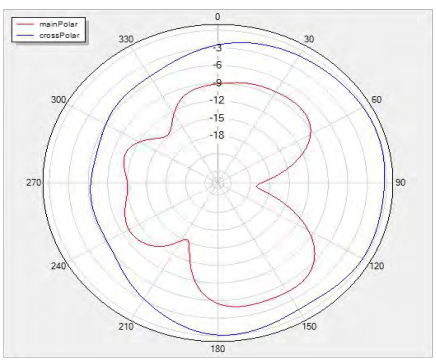

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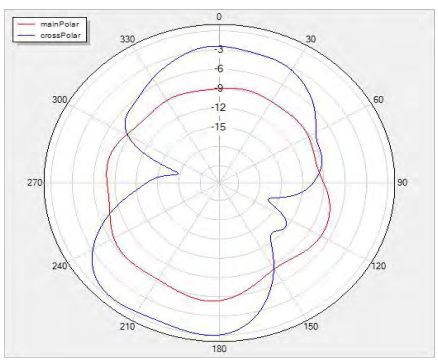

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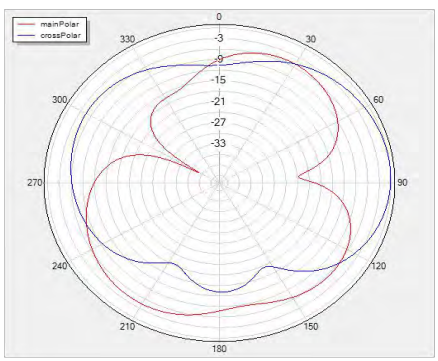

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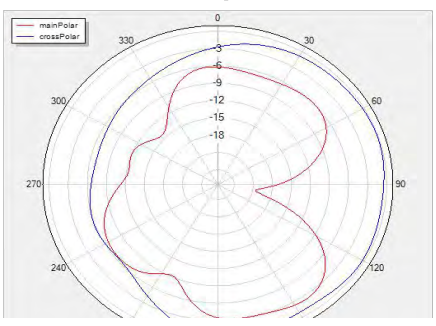

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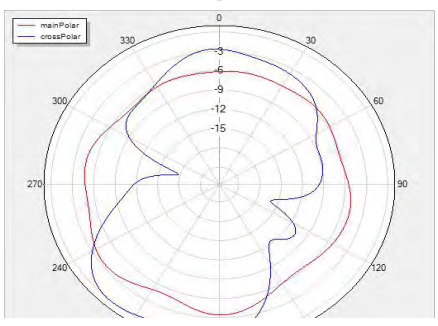

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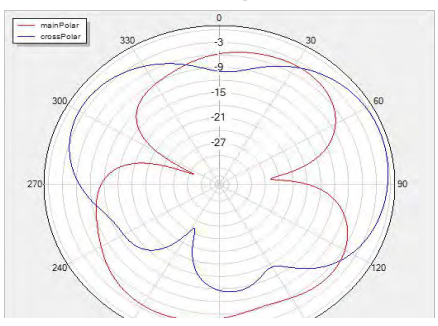

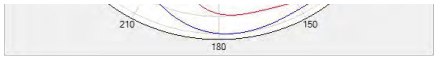
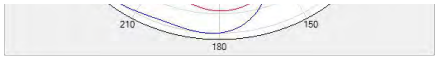
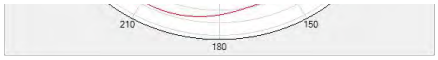

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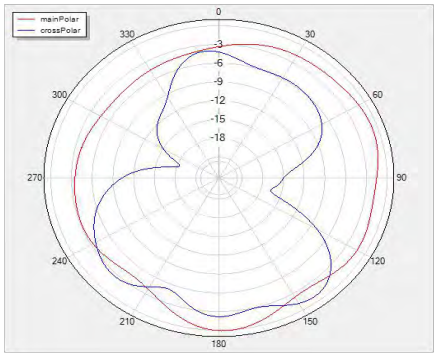

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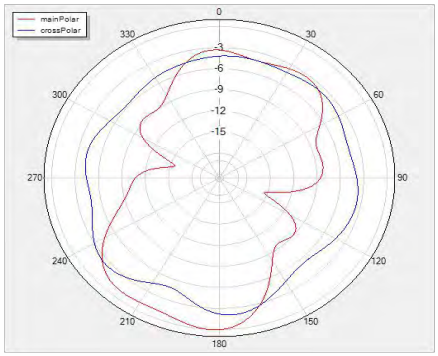

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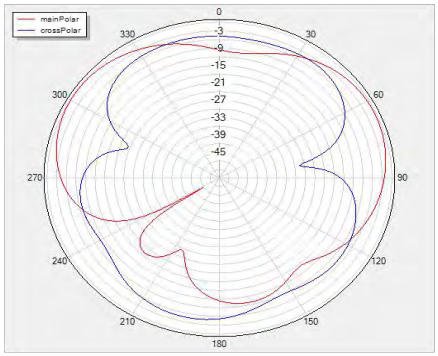

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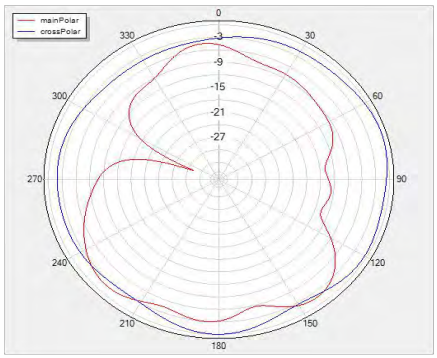

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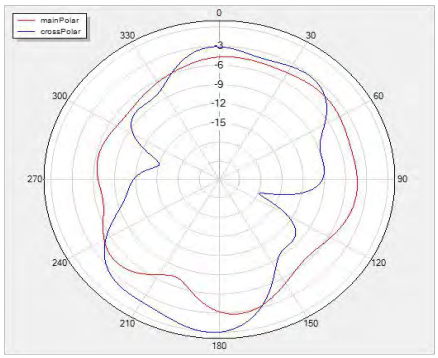

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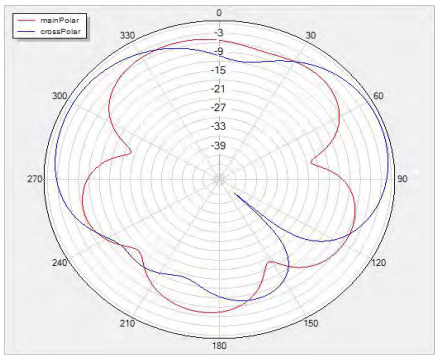

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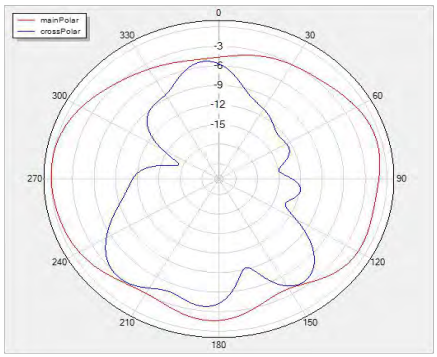

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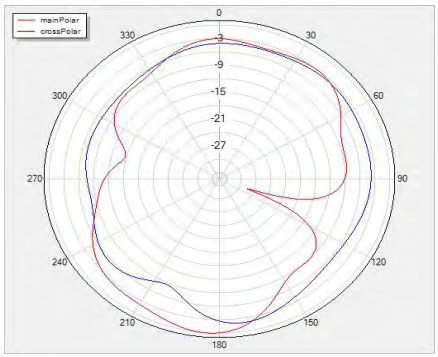

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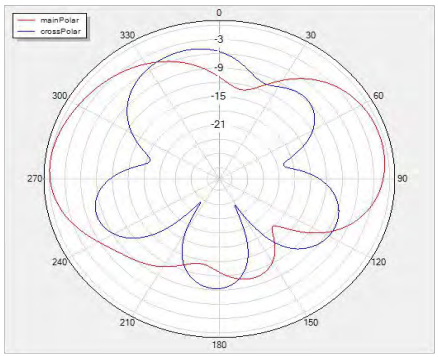

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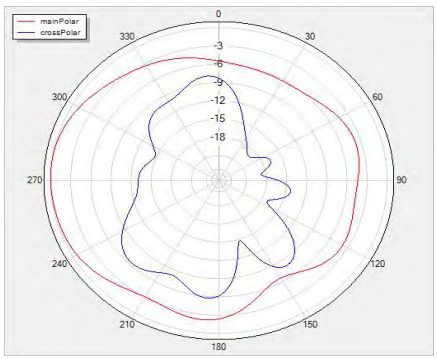

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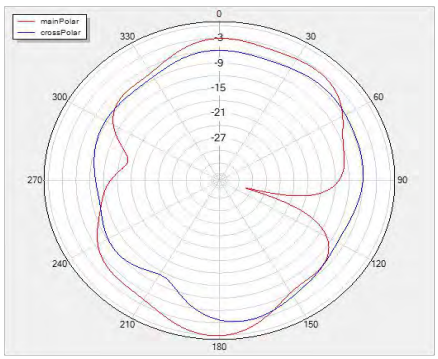

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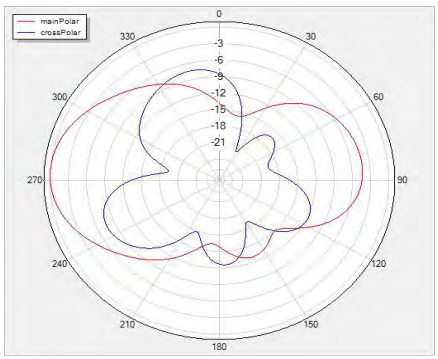

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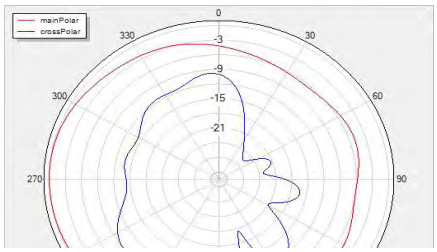

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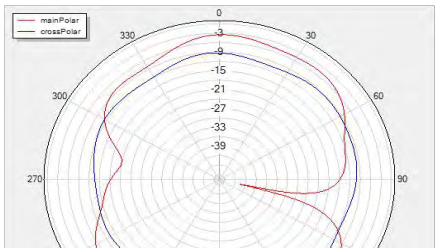

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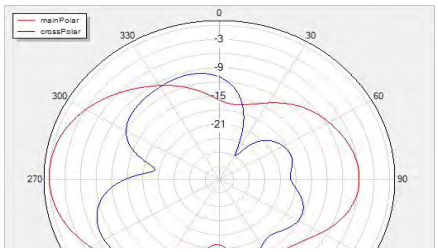

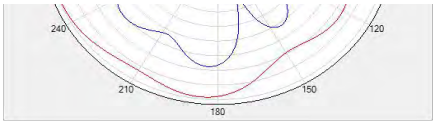

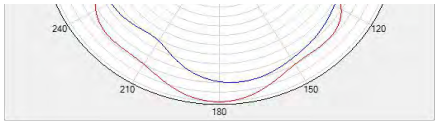

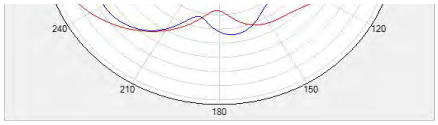

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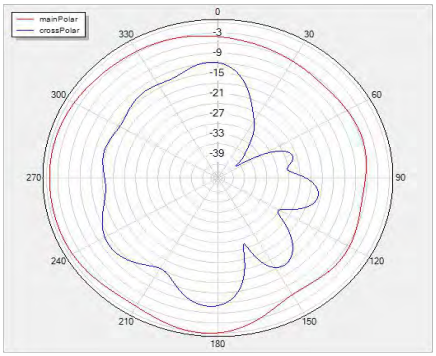
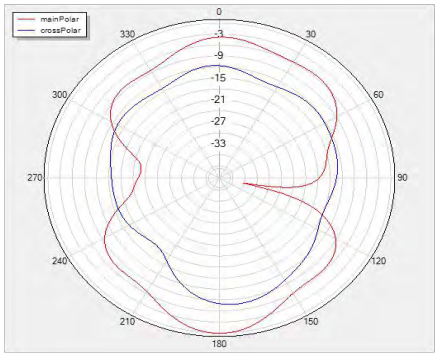
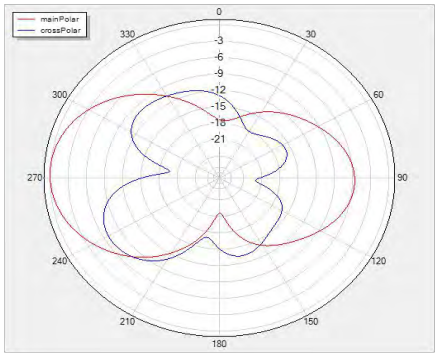


Phi=0 freq=900MHz



Theta=90 freq=900MHz



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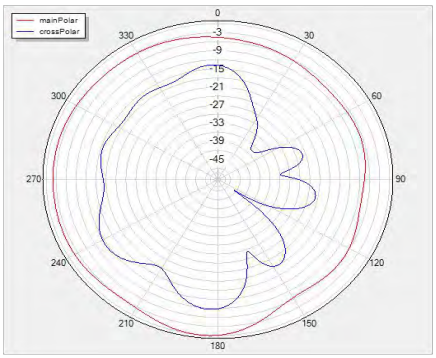

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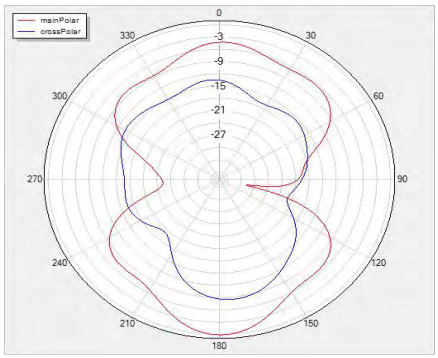
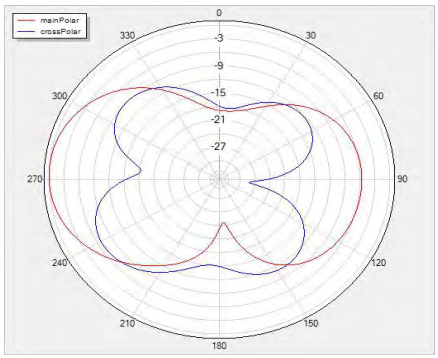
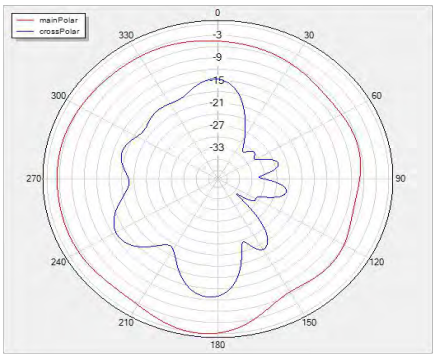


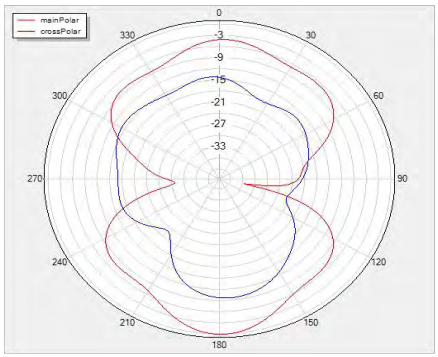
Theta=90 freq=920MHz



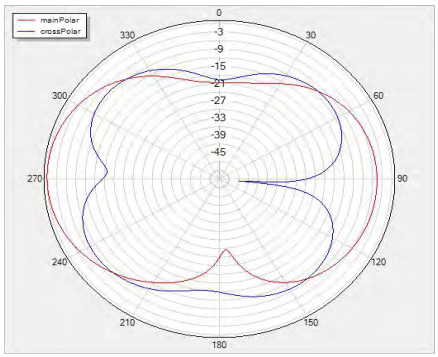
Phi=90 freq=940MHz



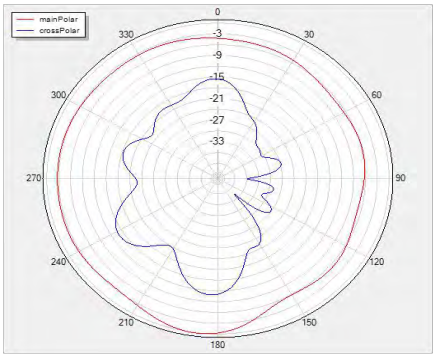
Phi=0 freq=940MHz



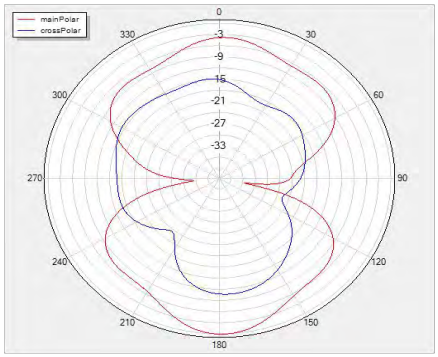
Theta=90 freq=940MHz



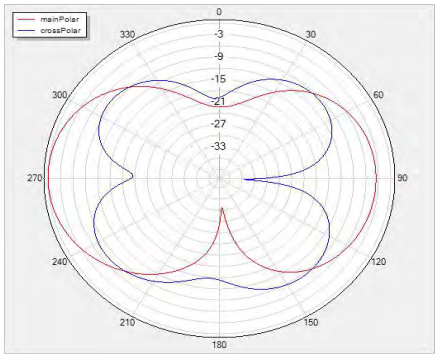
Phi=90 freq=960MHz



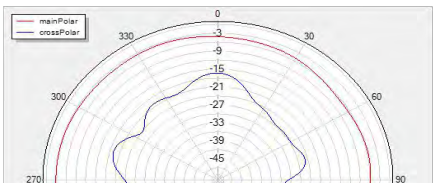
Phi=0 freq=960MHz



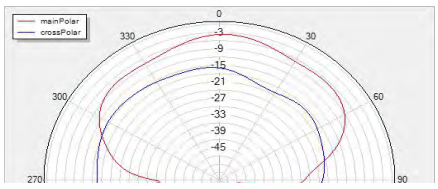
Theta=90 freq=960MHz



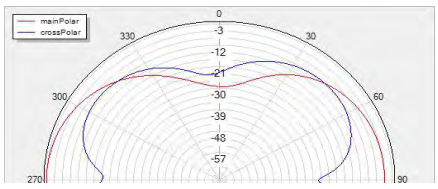
Phi=90 freq=980MHz

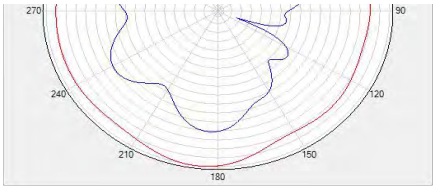


Phi=0 freq=980MHz

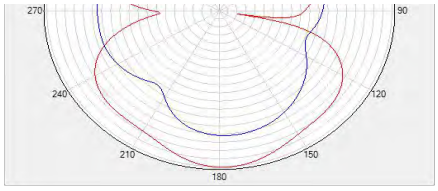


Theta=90 freq=980MHz

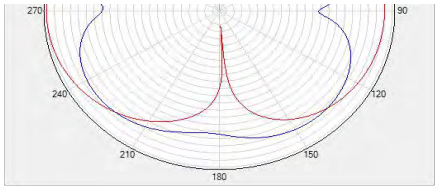




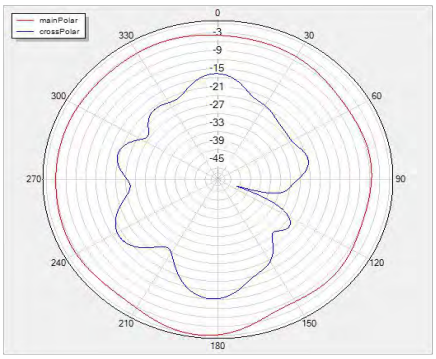
Phi=90 freq=1000MHz



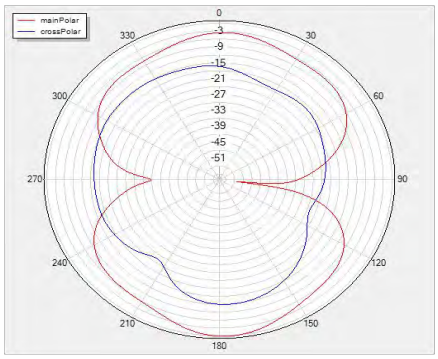
Phi=0 freq=1000MHz



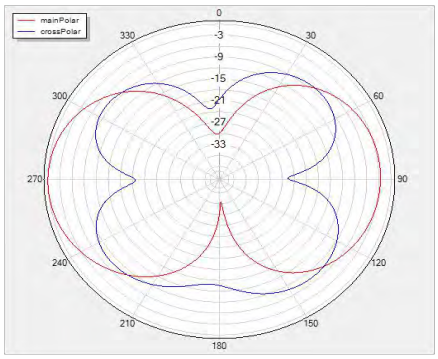
Theta=90 freq=1000MHz



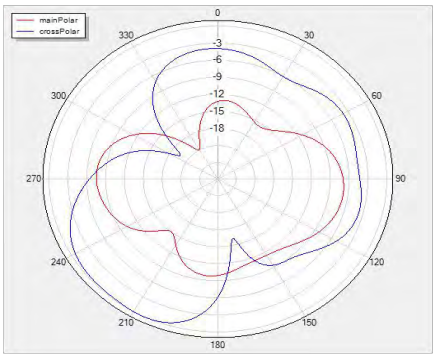
Phi=90 freq=1420MHz



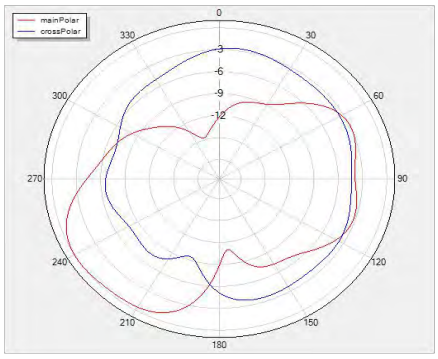
Phi=0 freq=1420MHz



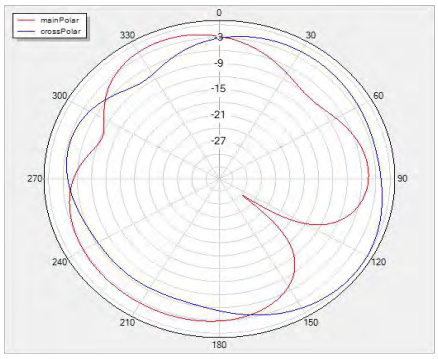
Theta=90 freq=1420MHz



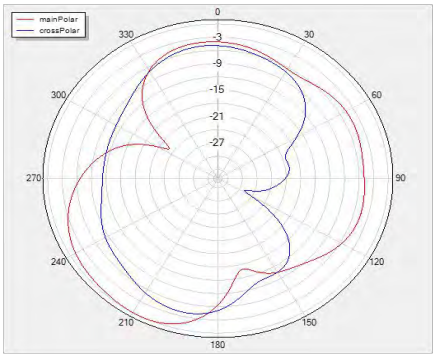
Phi=90 freq=1460MHz



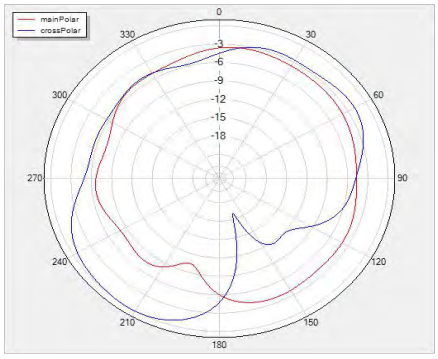
Phi=0 freq=1460MHz



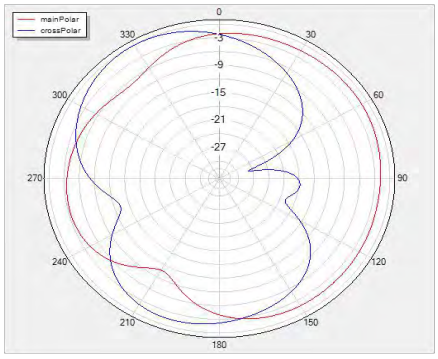
Theta=90 freq=1460MHz



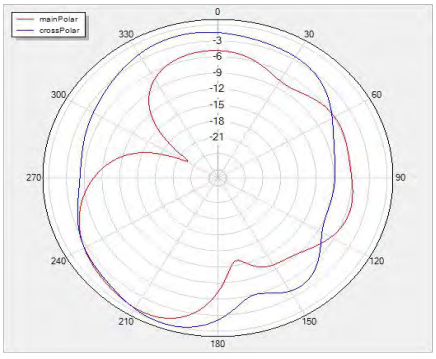
Phi=90 freq=1500MHz



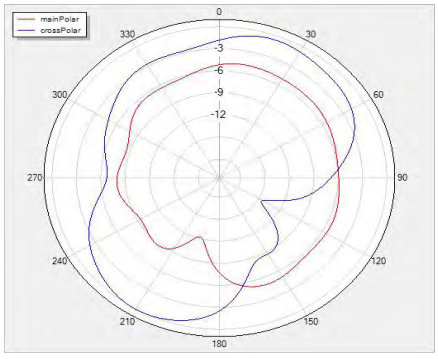
Phi=0 freq=1500MHz



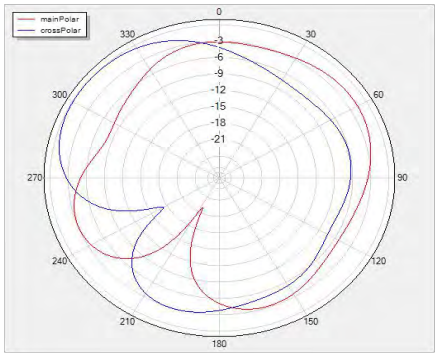
Theta=90 freq=1500MHz



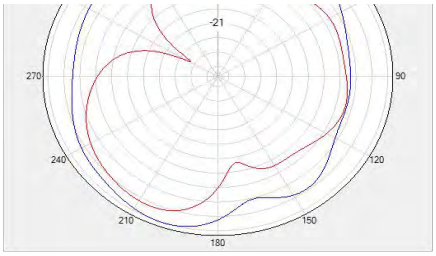
Phi=90 freq=1520MHz



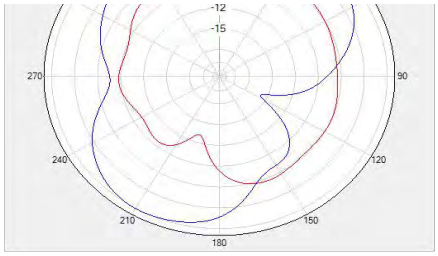
Phi=0 freq=1520MHz



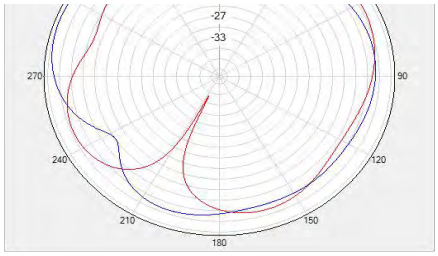
Theta=90 freq=1520MHz



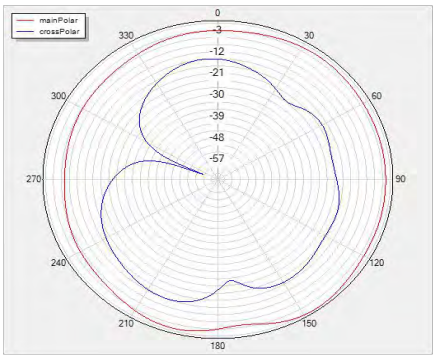
Phi=90 freq=1700MHz



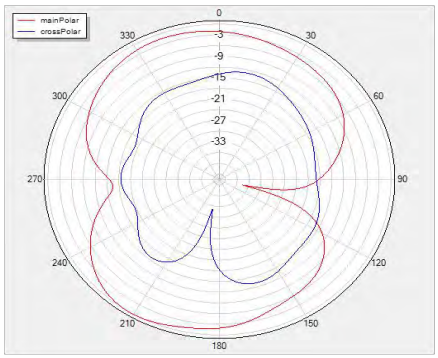
Phi=0 freq=1700MHz



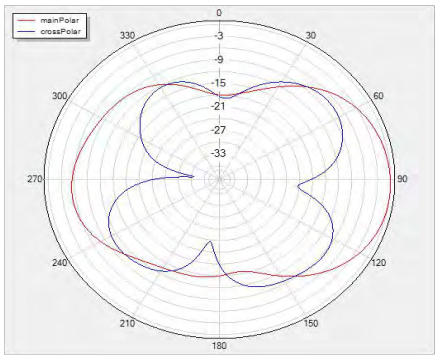
Theta=90 freq=1700MHz



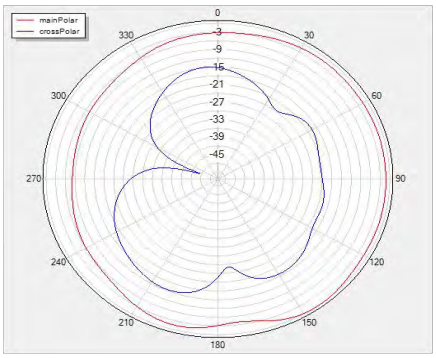
Phi=90 freq=1710MHz



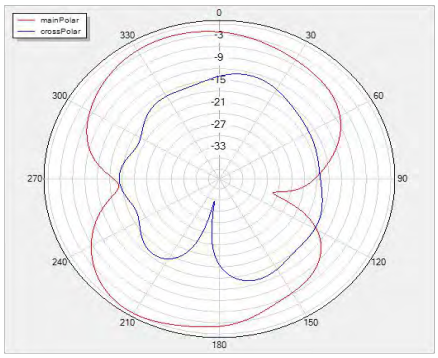
Phi=0 freq=1710MHz



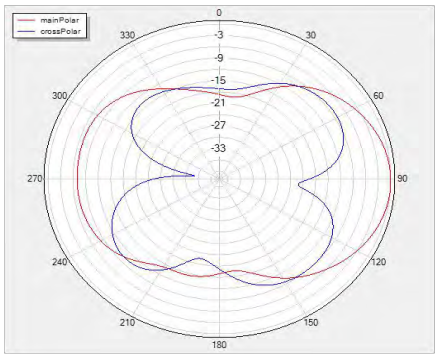
Theta=90 freq=1710MHz



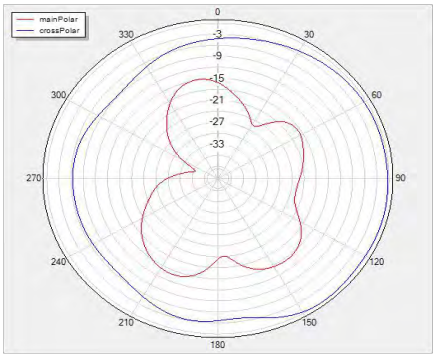
Phi=90 freq=1750MHz



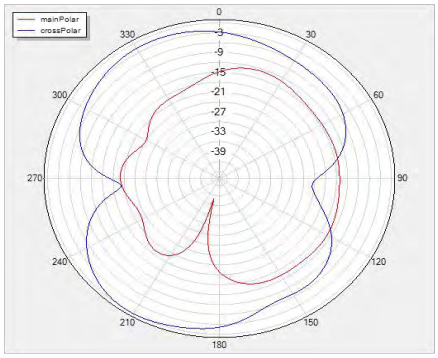
Phi=0 freq=1750MHz



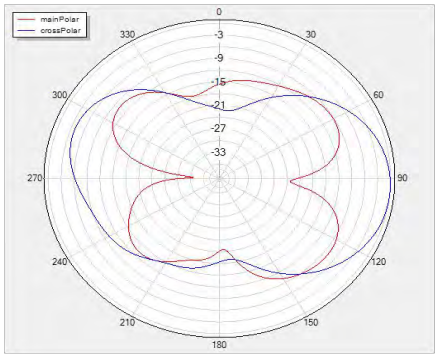
Theta=90 freq=1750MHz



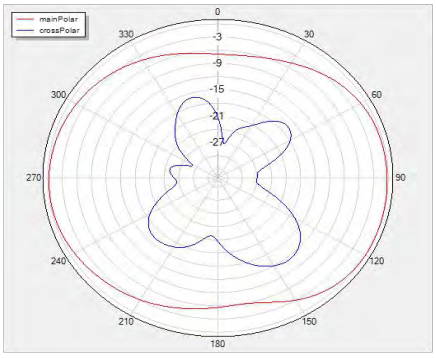
Phi=90 freq=1790MHz



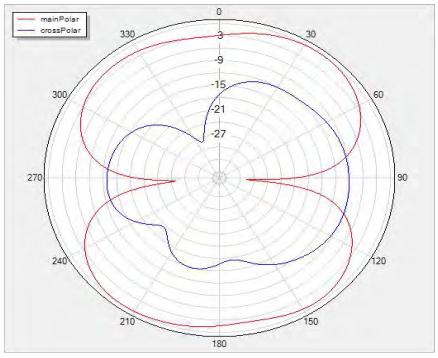
Phi=0 freq=1790MHz



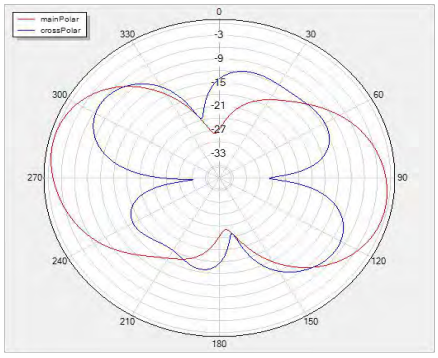
Theta=90 freq=1790MHz



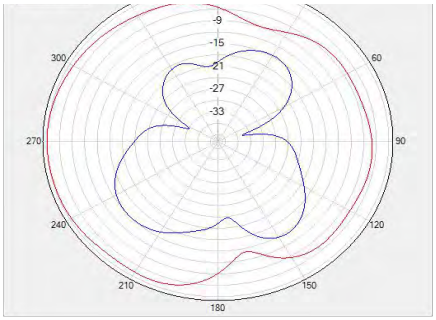
Phi=90 freq=1830MHz



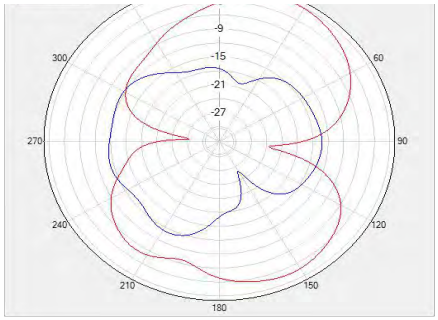
Phi=0 freq=1830MHz



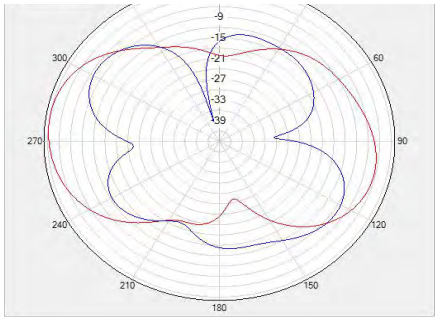
Theta=90 freq=1830MHz



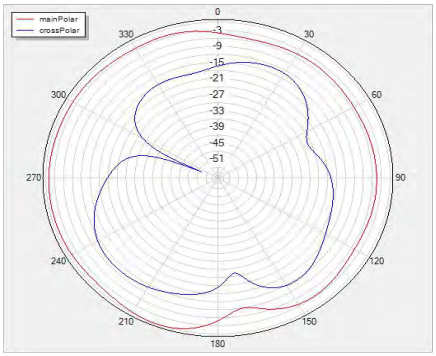
Phi=90 freq=1870MHz



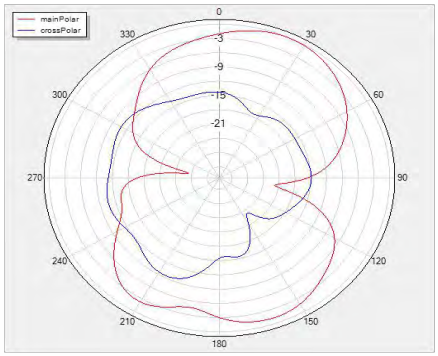
Phi=0 freq=1870MHz



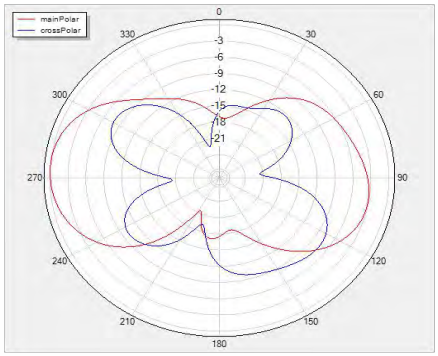
Theta=90 freq=1870MHz



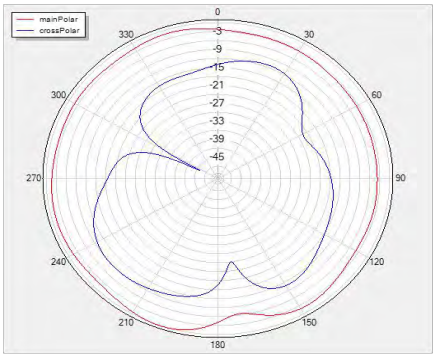
Phi=90 freq=1910MHz



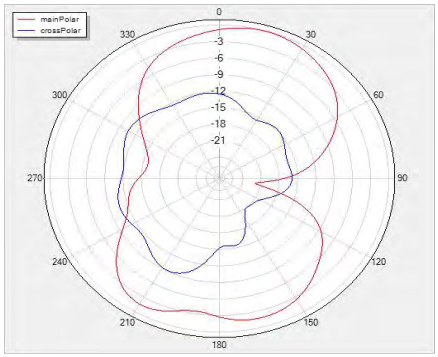
Phi=0 freq=1910MHz



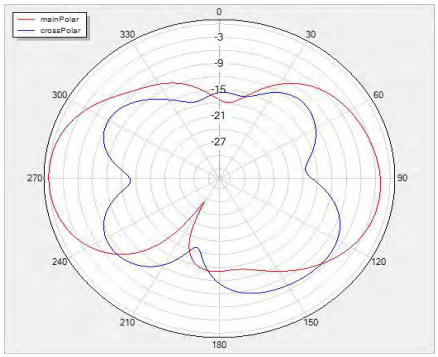
Theta=90 freq=1910MHz



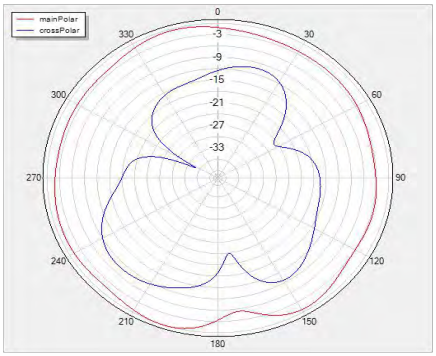
Phi=90 freq=1950MHz



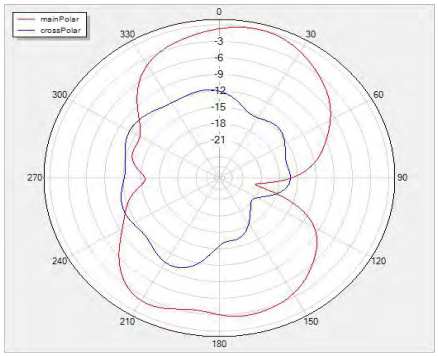
Phi=0 freq=1950MHz



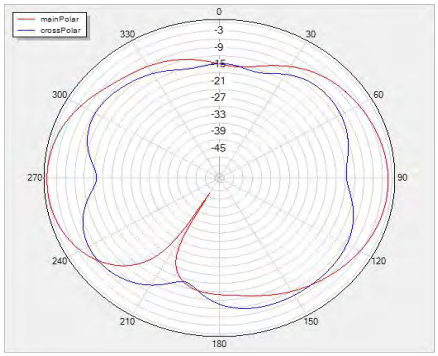
Theta=90 freq=1950MHz



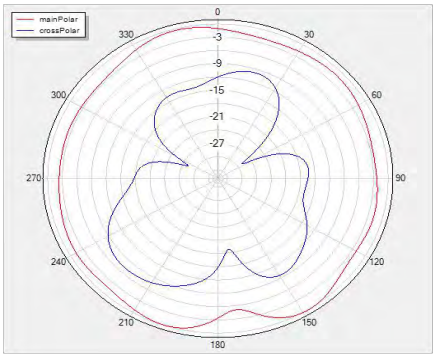
Phi=90 freq=1990MHz



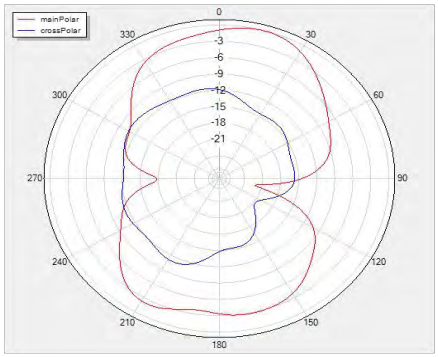
Phi=0 freq=1990MHz



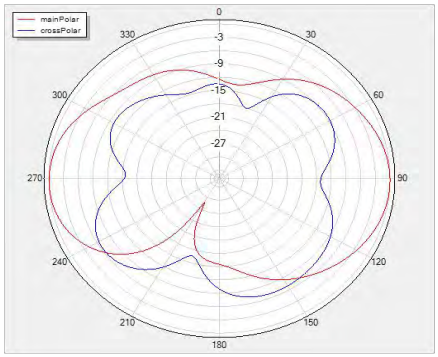
Theta=90 freq=1990MHz



Phi=90 freq=2030MHz

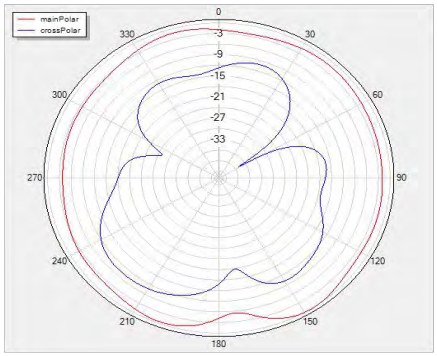


Phi=0 freq=2030MHz

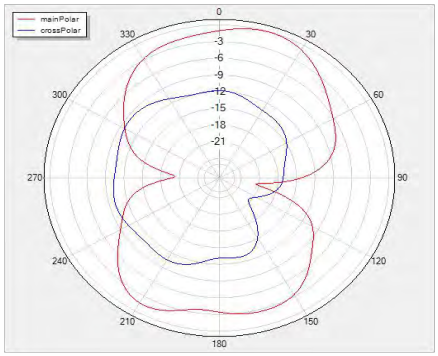


Theta=90 freq=2030MHz

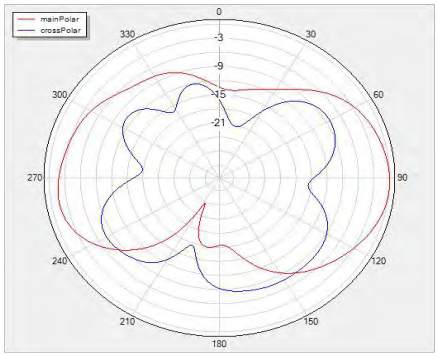
Phi=90 freq=2030MHz



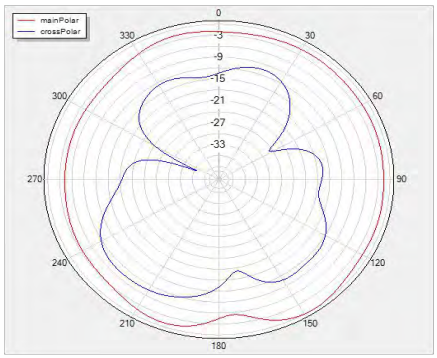
Phi=0 freq=2030MHz



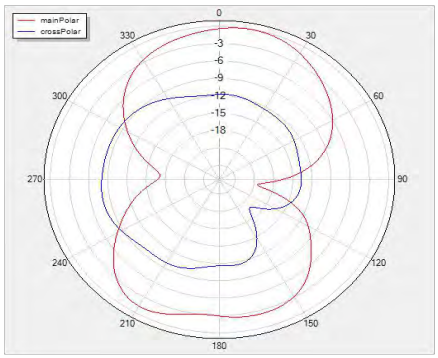
Theta=90 freq=2030MHz



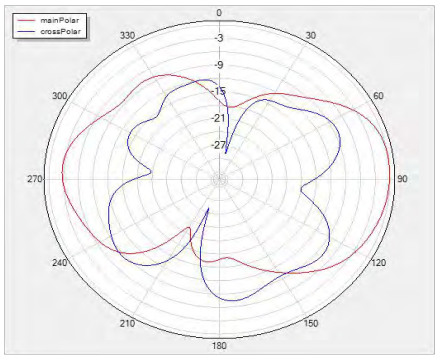
Phi=90 freq=2070MHz



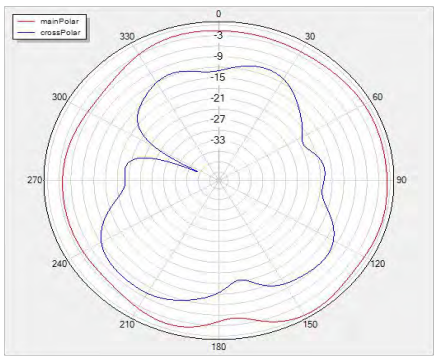
Phi=0 freq=2070MHz



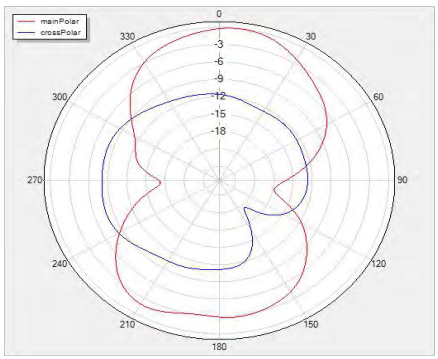
Theta=90 freq=2070MHz



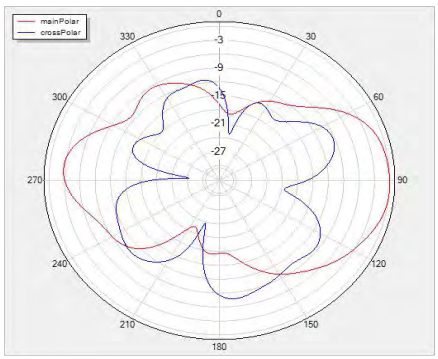
Phi=90 freq=2110MHz



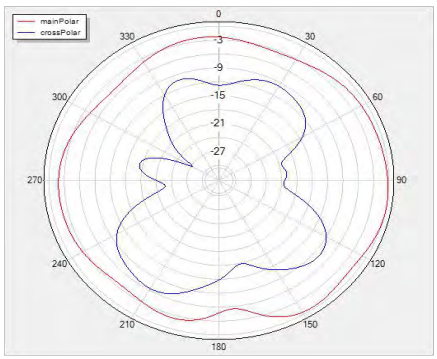
Phi=0 freq=2110MHz



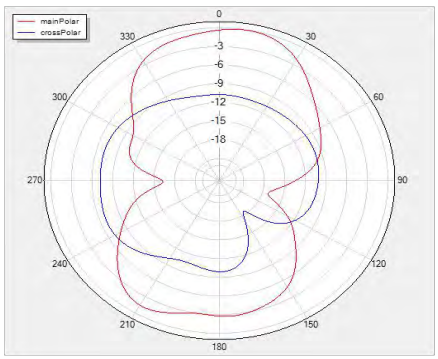
Theta=90 freq=2110MHz



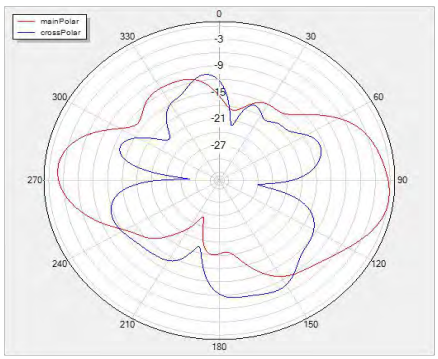
Phi=90 freq=2150MHz



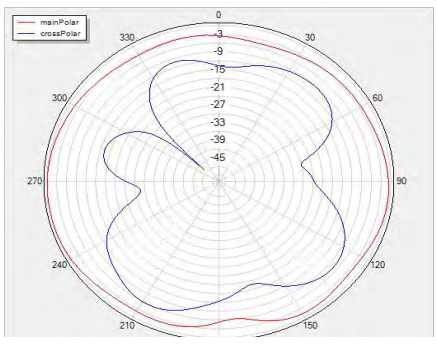
Phi=0 freq=2150MHz



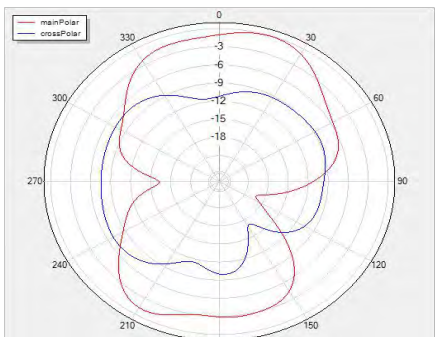
Theta=90 freq=2150MHz



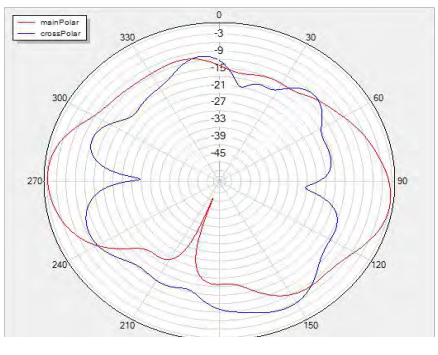
Phi=90 freq=2190MHz



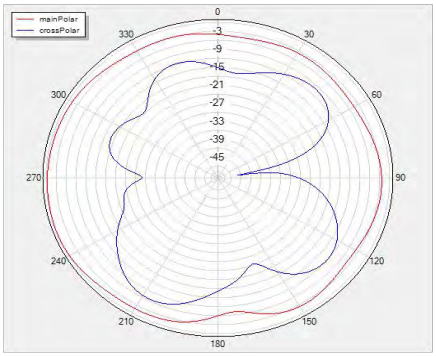
Phi=0 freq=2190MHz



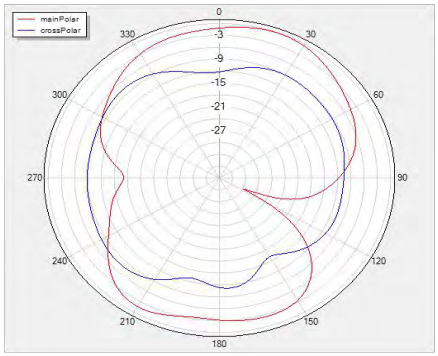
Theta=90 freq=2190MHz



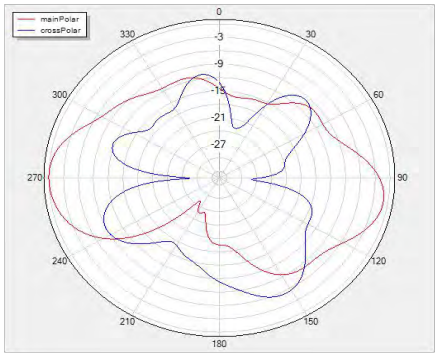
Phi=90 freq=2230MHz



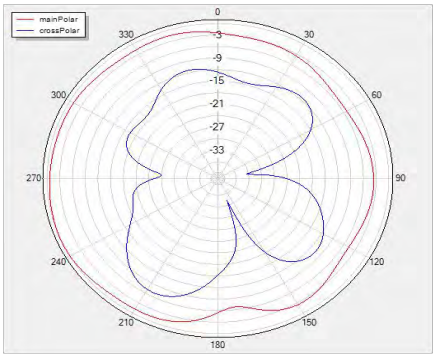
Phi=0 freq=2230MHz



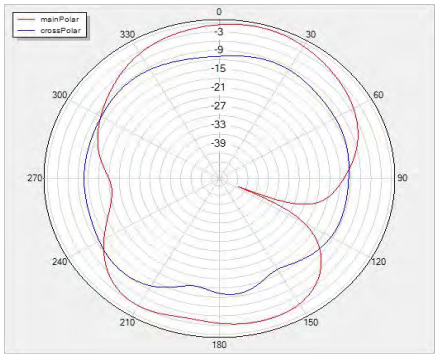
Theta=90 freq=2230MHz



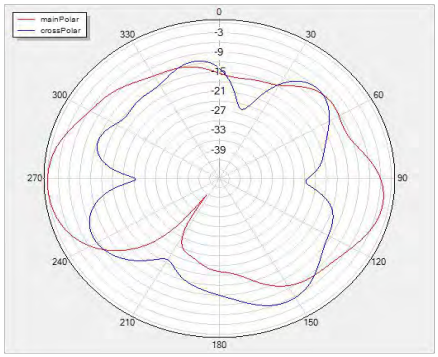
Phi=90 freq=2270MHz



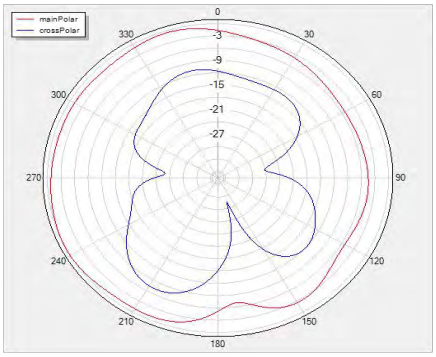
Phi=0 freq=2270MHz



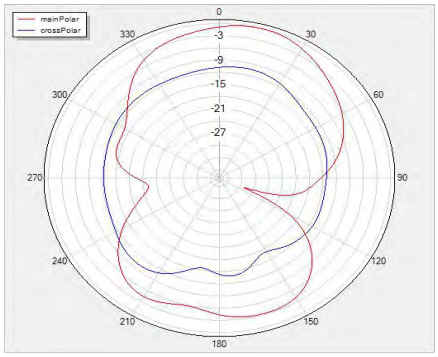
Theta=90 freq=2270MHz



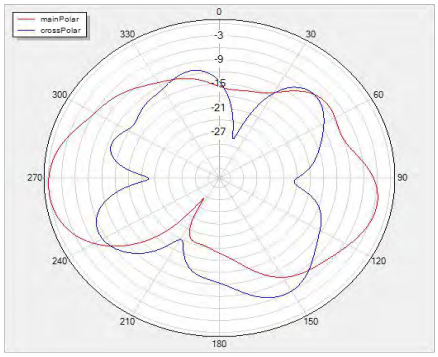
Phi=90 freq=2310MHz



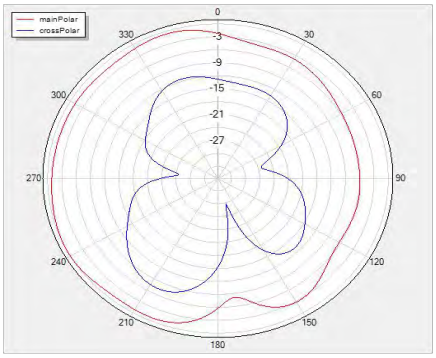
Phi=0 freq=2310MHz



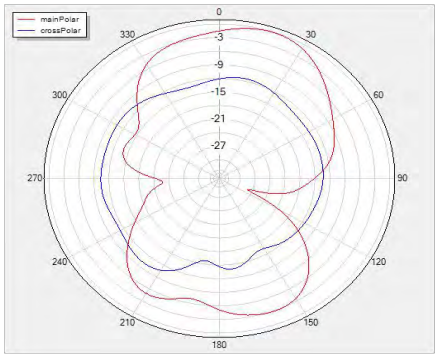
Theta=90 freq=2310MHz



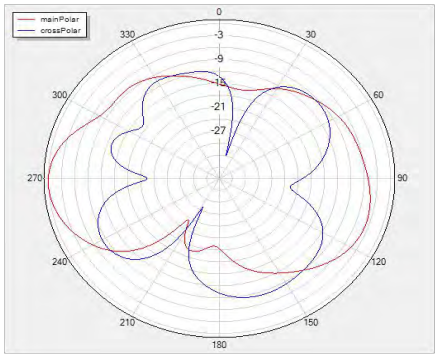
Phi=90 freq=2350MHz



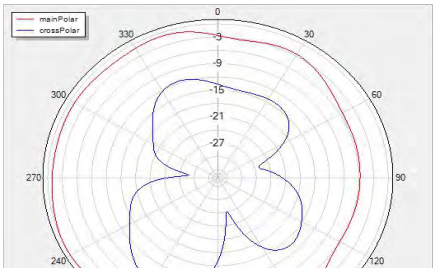
Phi=0 freq=2350MHz



Theta=90 freq=2350MHz

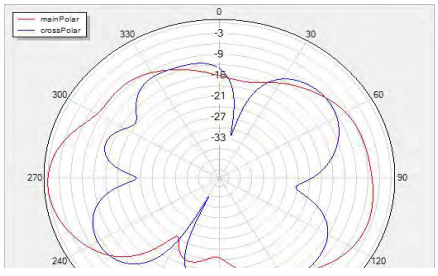


Phi=90 freq=2390MHz

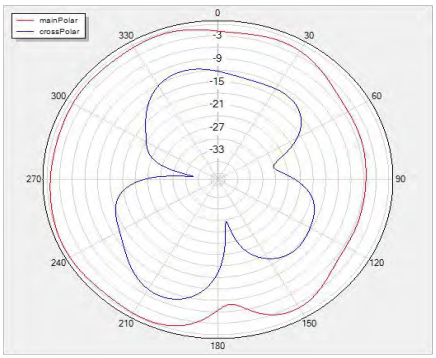


Phi=0 freq=2390MHz

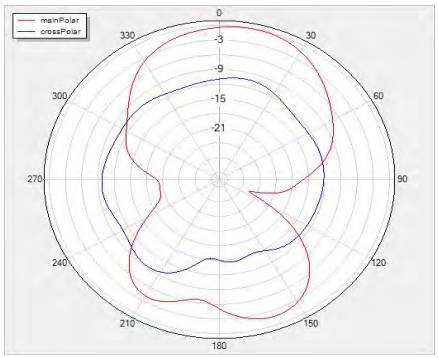
Theta=90 freq=2390MHz



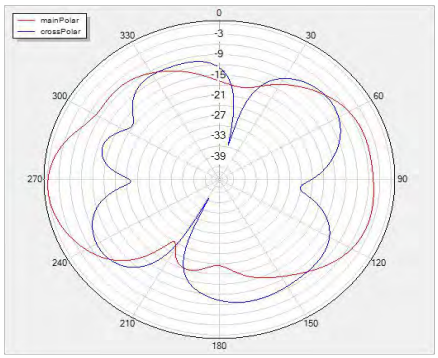
Phi=90 freq=2430MHz



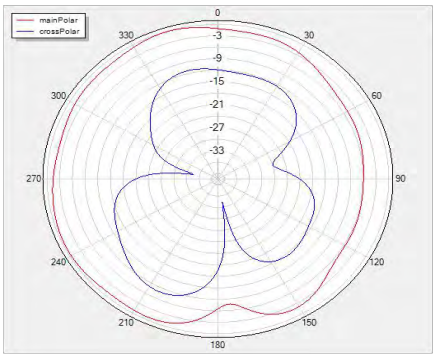
Phi=0 freq=2430MHz



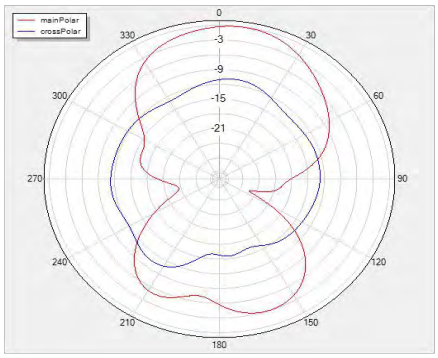
Theta=90 freq=2430MHz



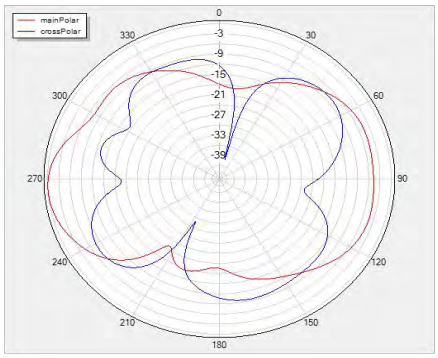
Phi=90 freq=2470MHz



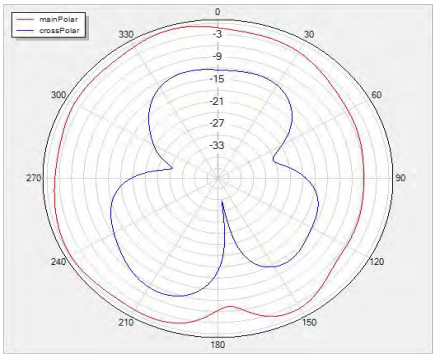
Phi=0 freq=2470MHz



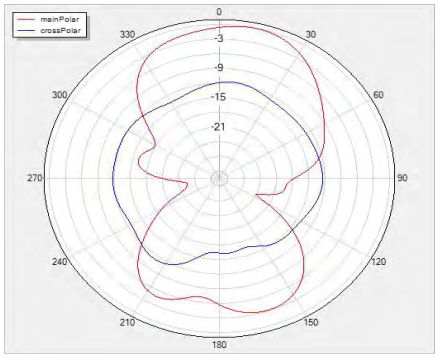
Theta=90 freq=2470MHz



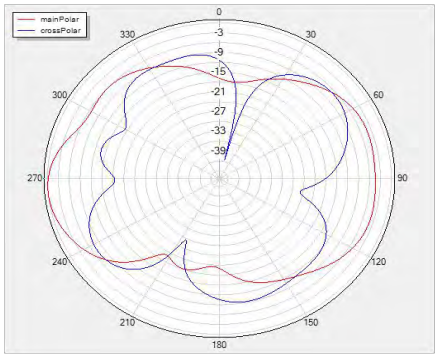
Phi=90 freq=2510MHz



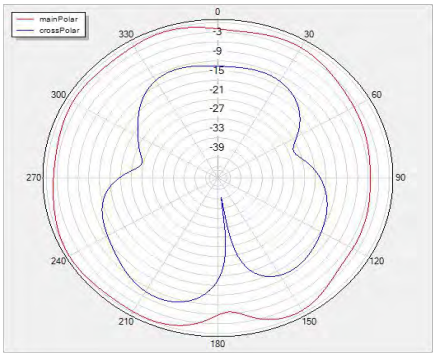
Phi=0 freq=2510MHz



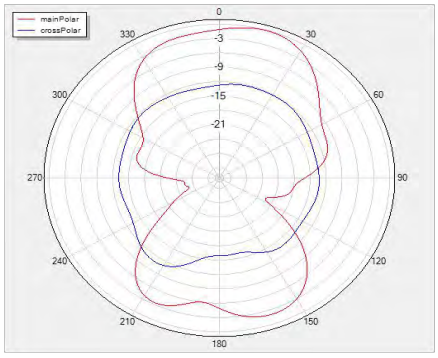
Theta=90 freq=2510MHz



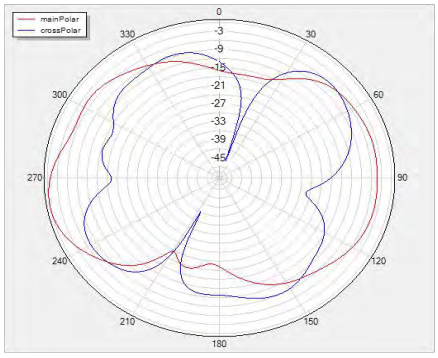
Phi=90 freq=2550MHz



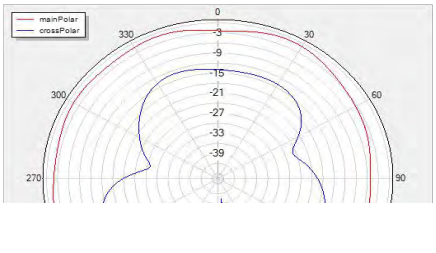
Phi=0 freq=2550MHz



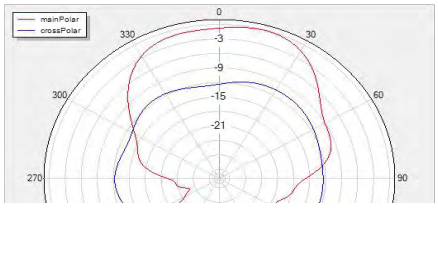
Theta=90 freq=2550MHz



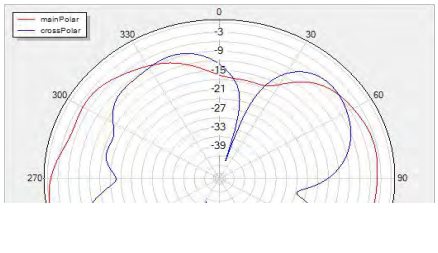
Phi=90 freq=2590MHz

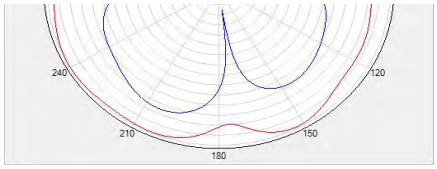


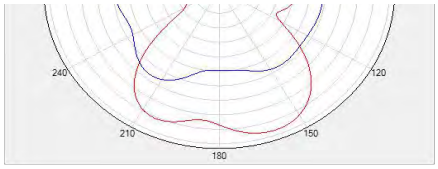
Phi=0 freq=2590MHz

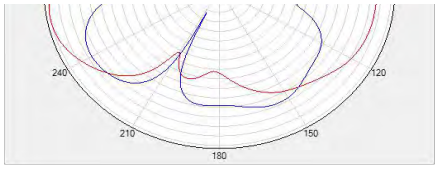


Theta=90 freq=2590MHz

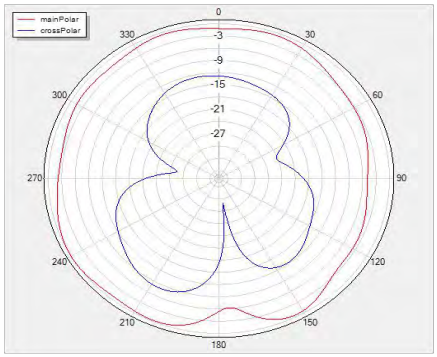




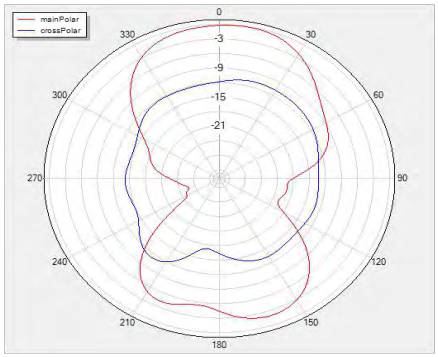




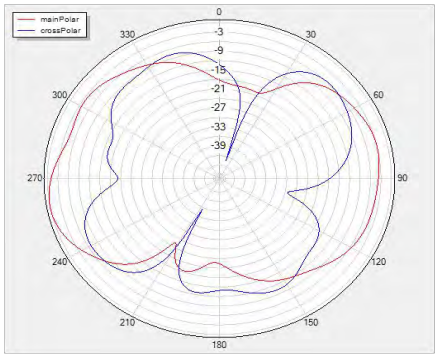
Phi=90 freq=2630MHz



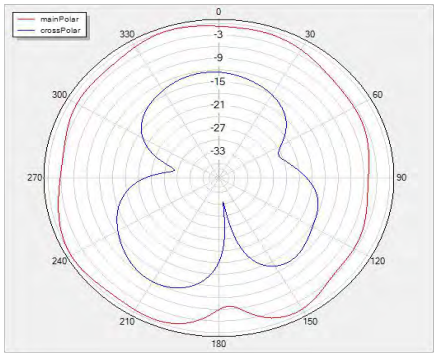
Phi=0 freq=2630MHz



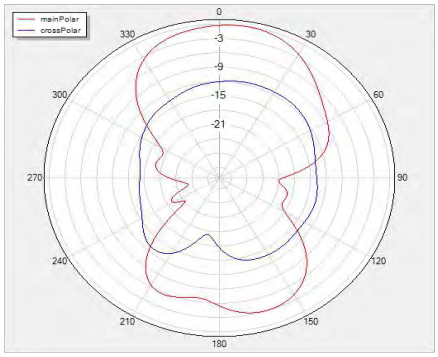
Theta=90 freq=2630MHz



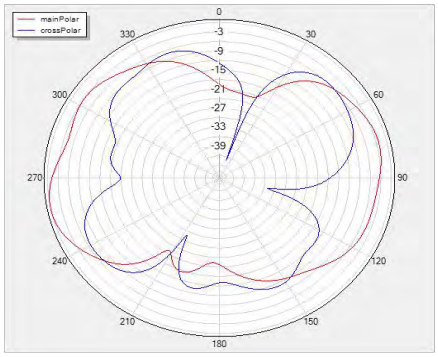
Phi=90 freq=2670MHz



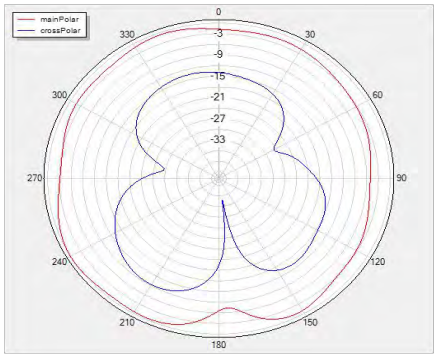
Phi=0 freq=2670MHz



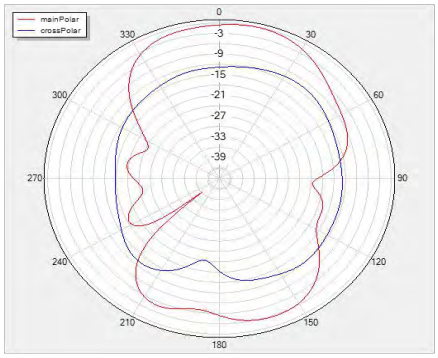
Theta=90 freq=2670MHz



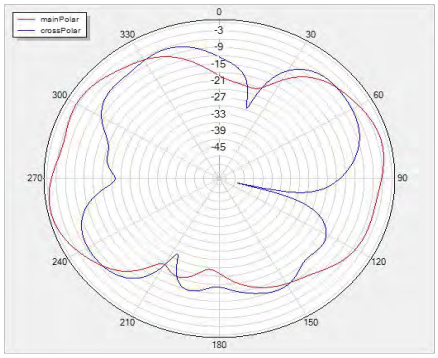
Phi=90 freq=2710MHz



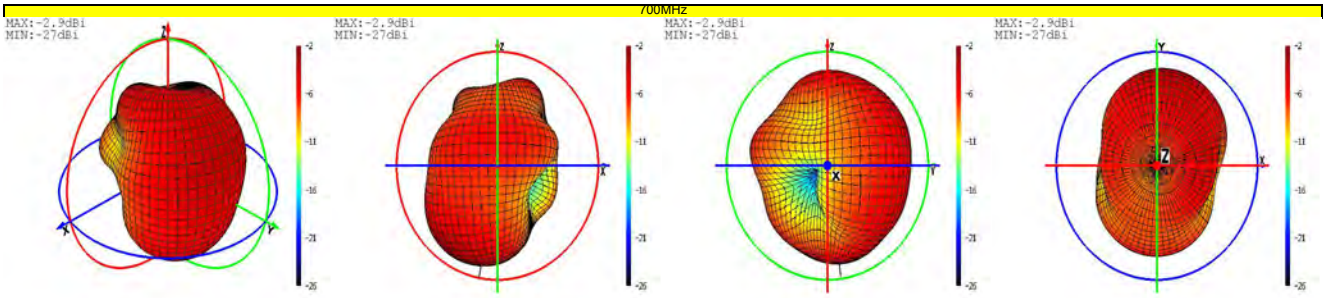
Phi=0 freq=2710MHz



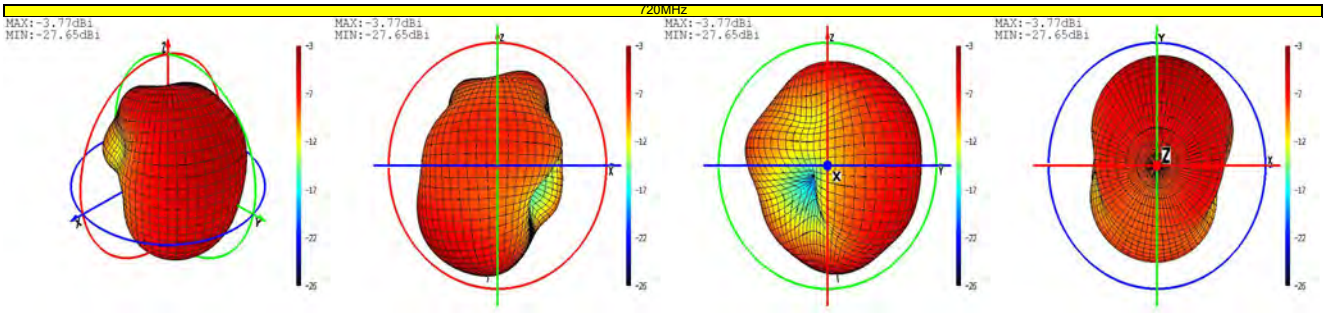
Theta=90 freq=2710MHz



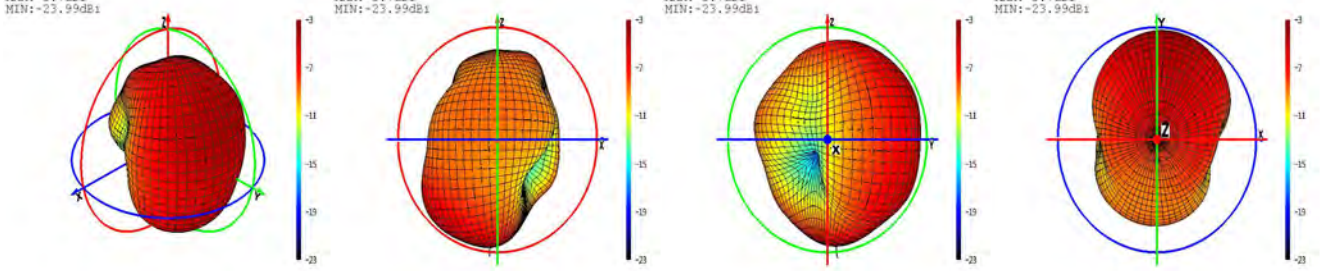
700MHz



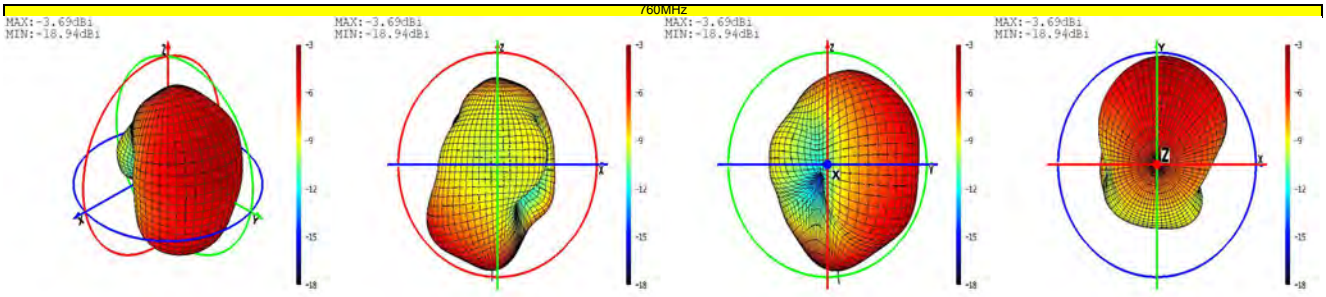
720MHz



740MHz



760MHz



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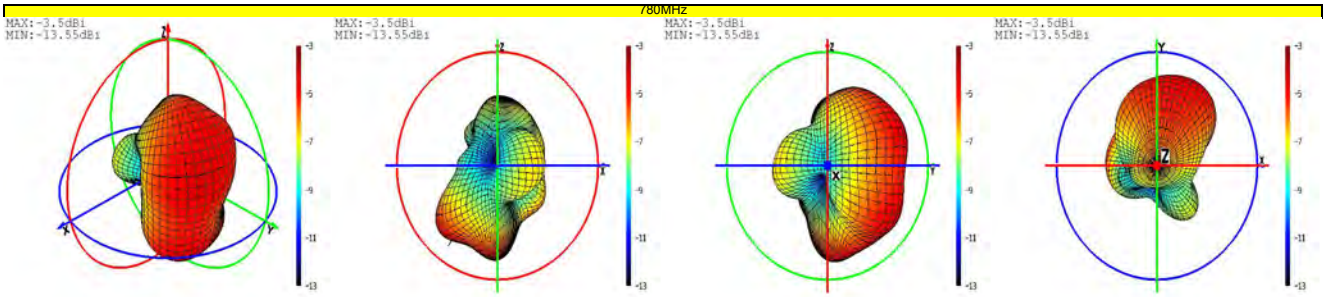

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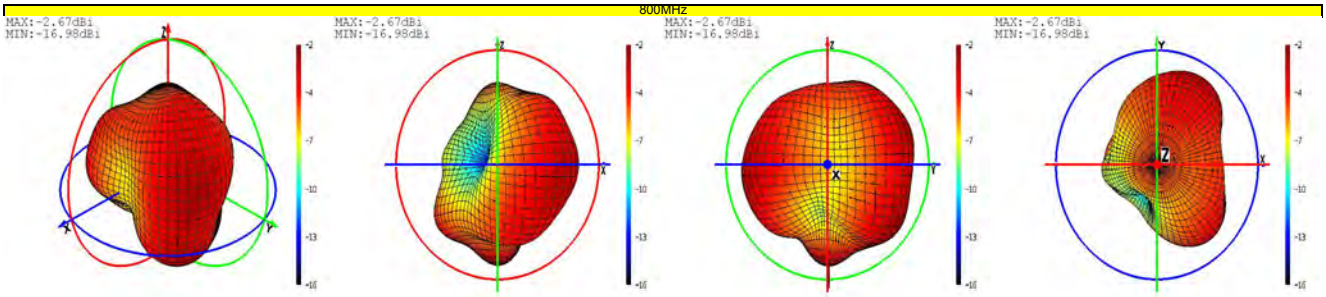

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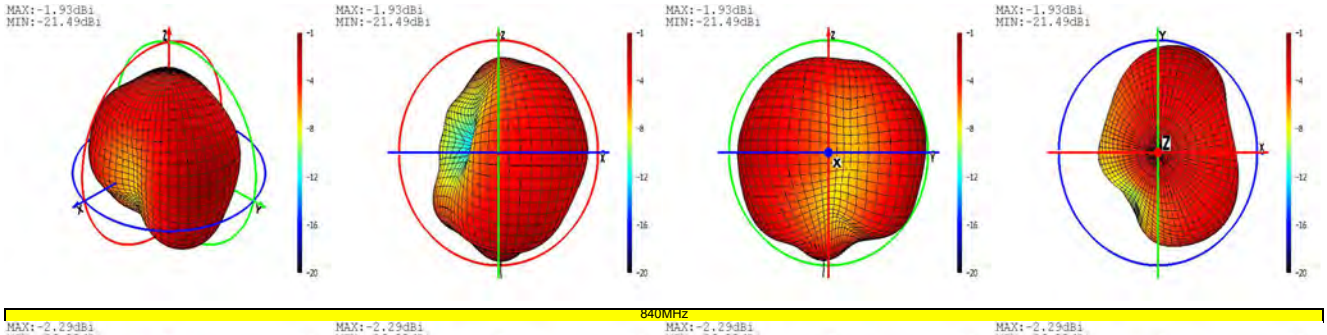

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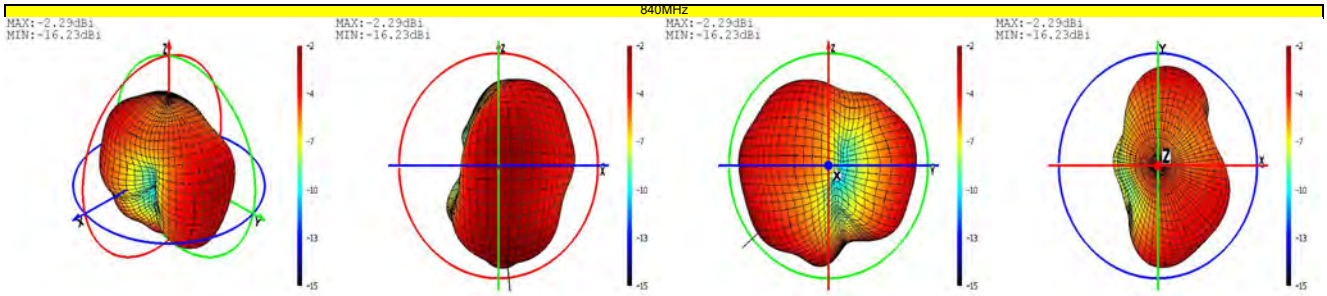

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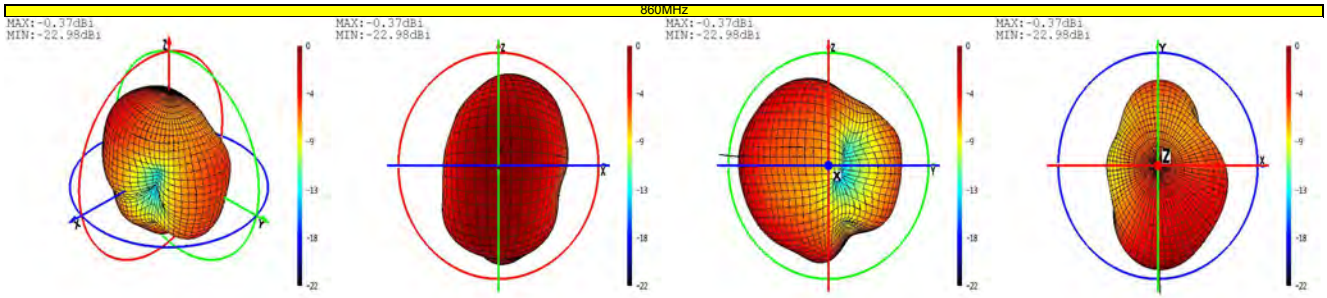

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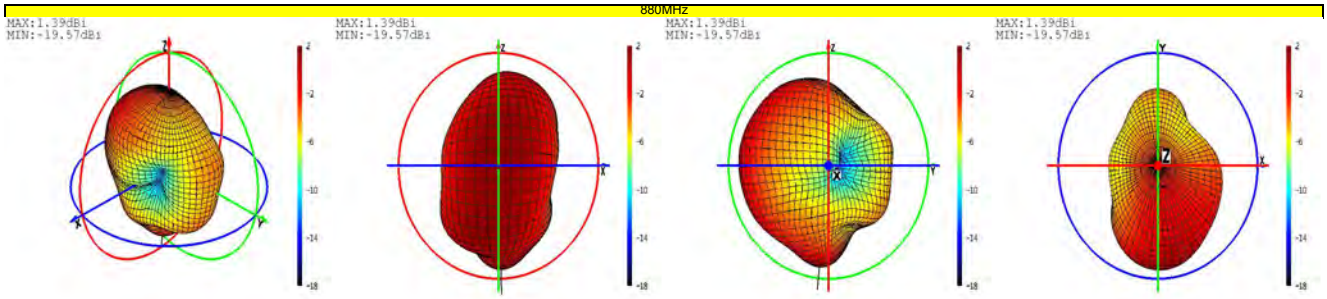

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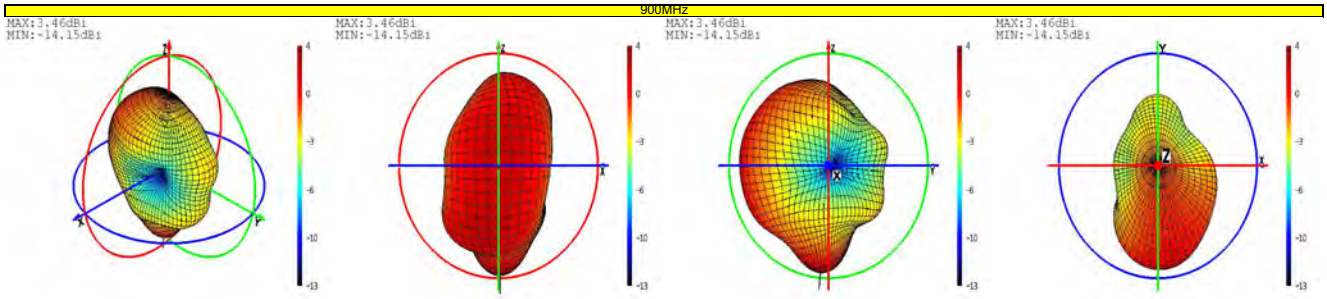

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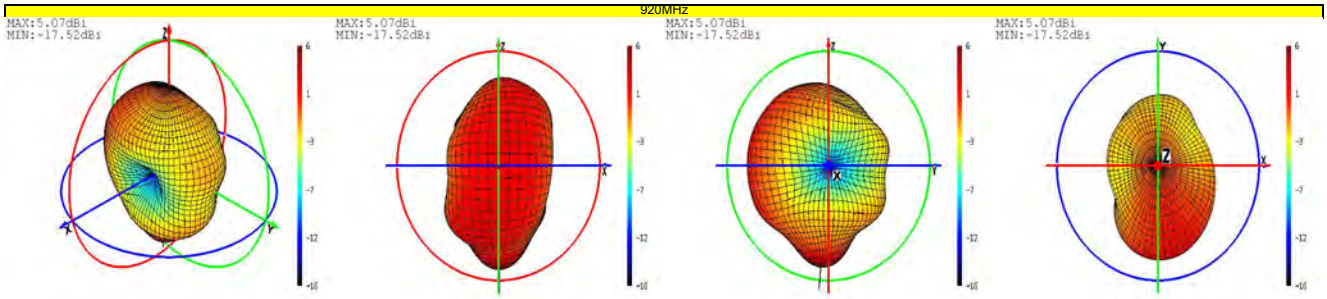

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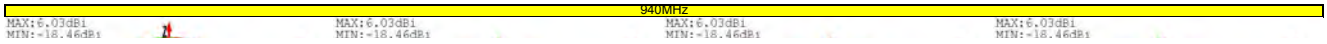

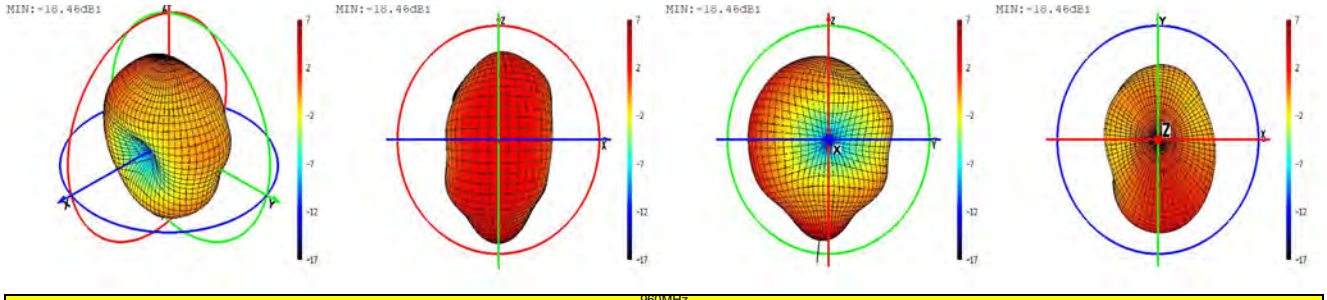

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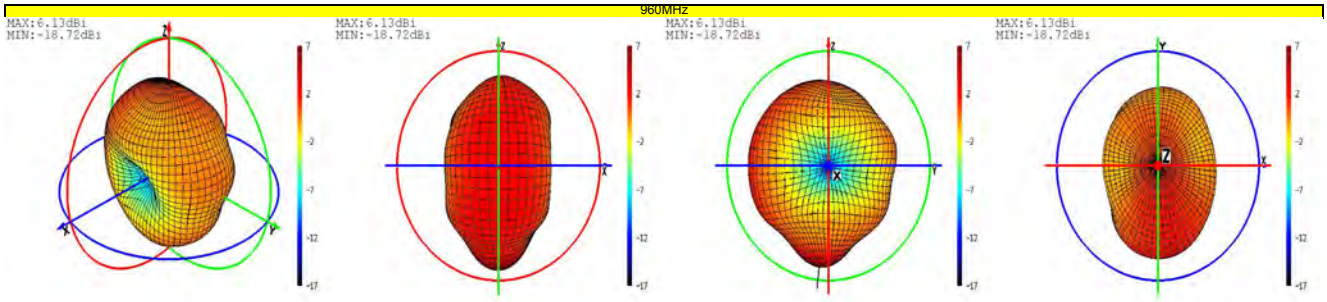

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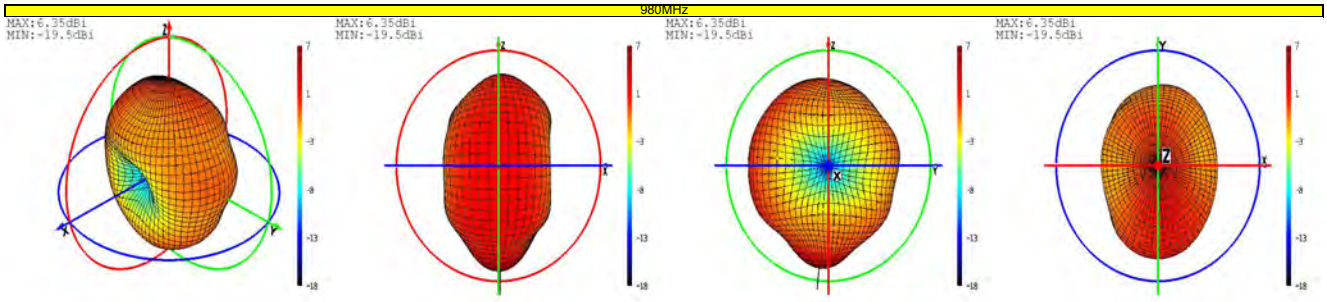

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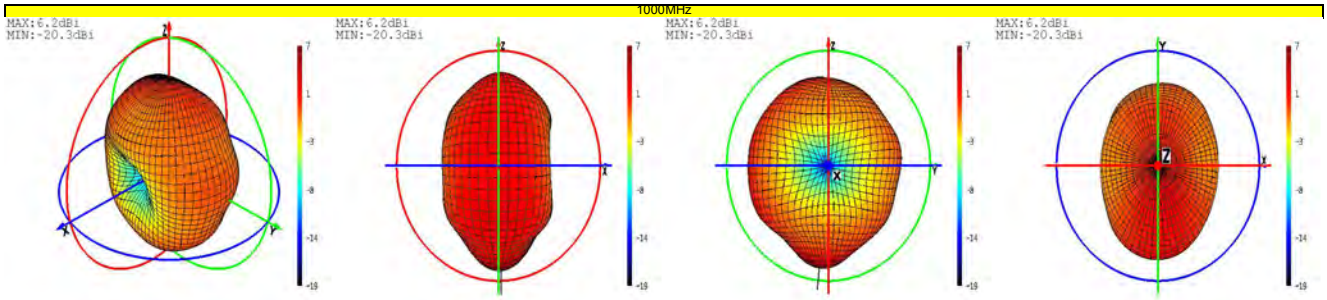

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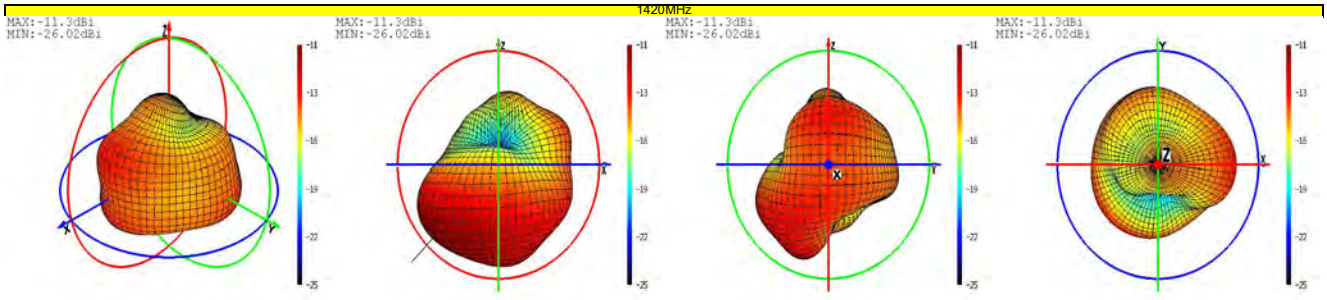

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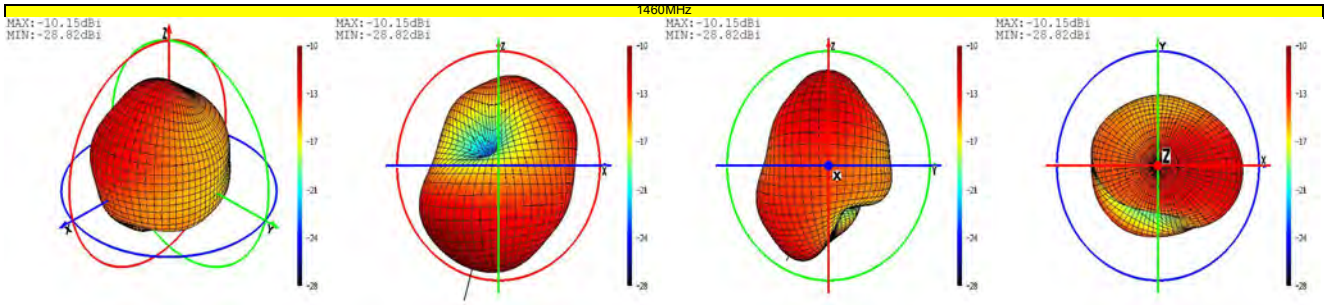

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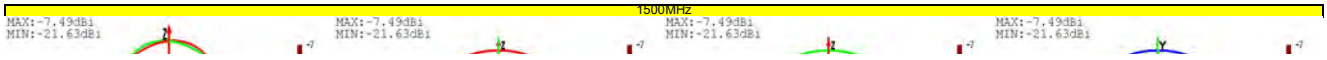

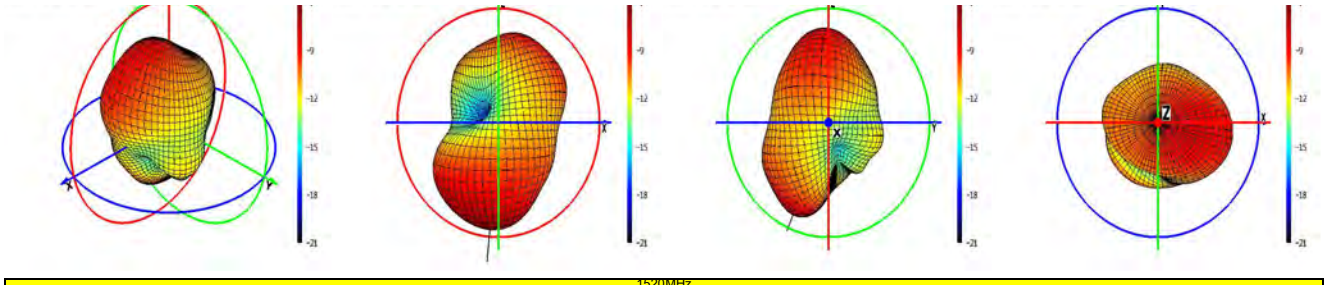

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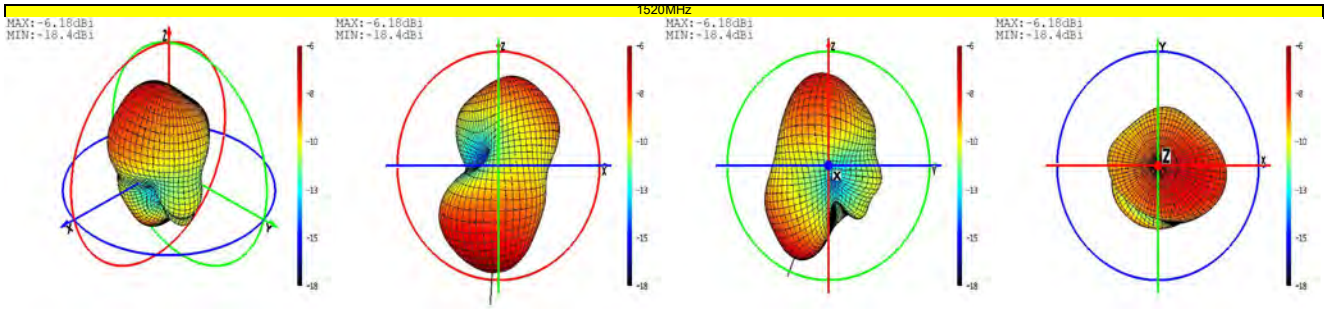

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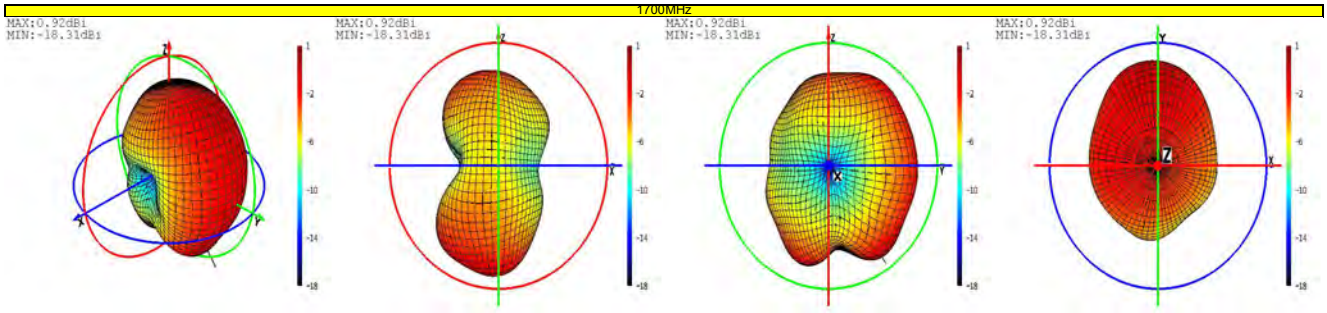

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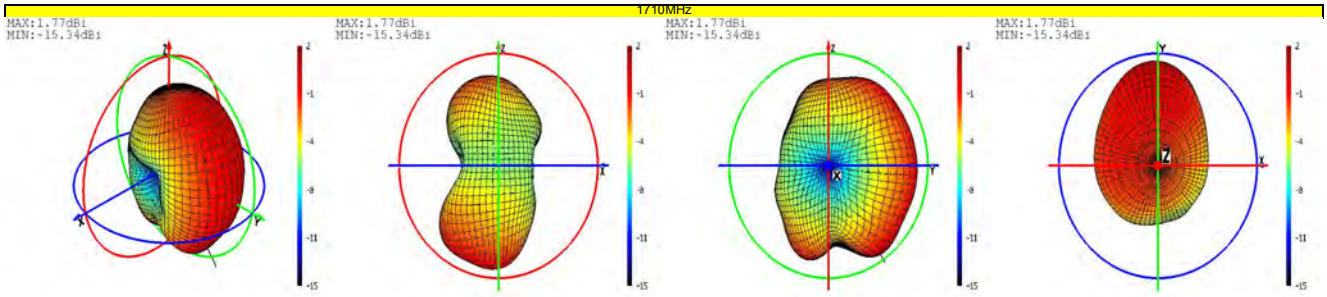

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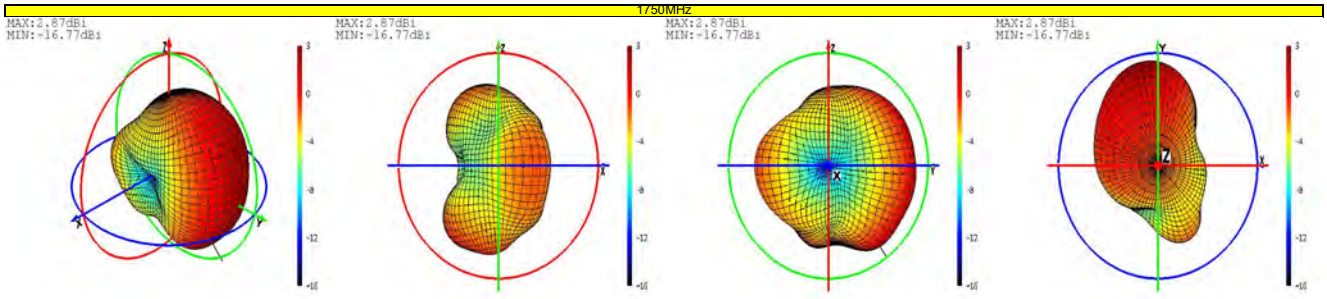

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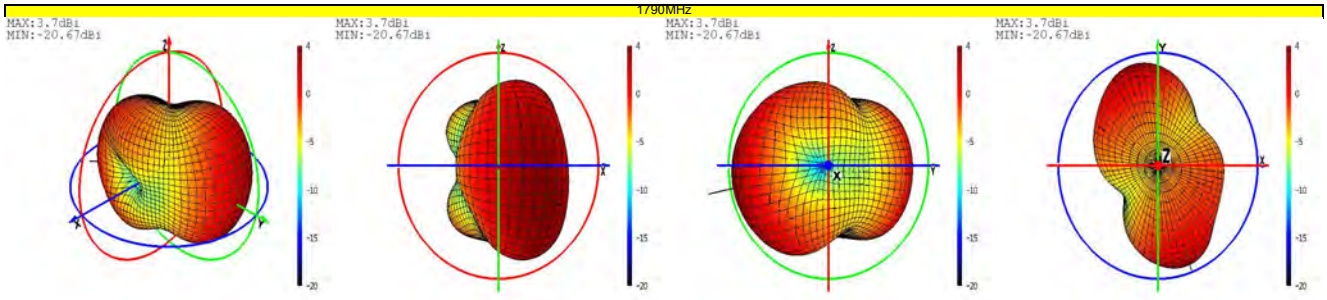

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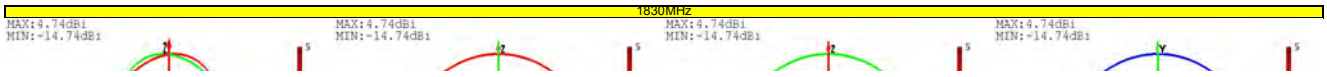

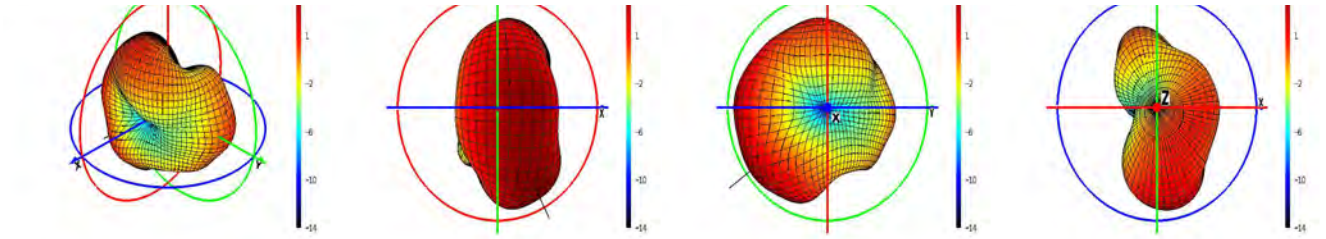

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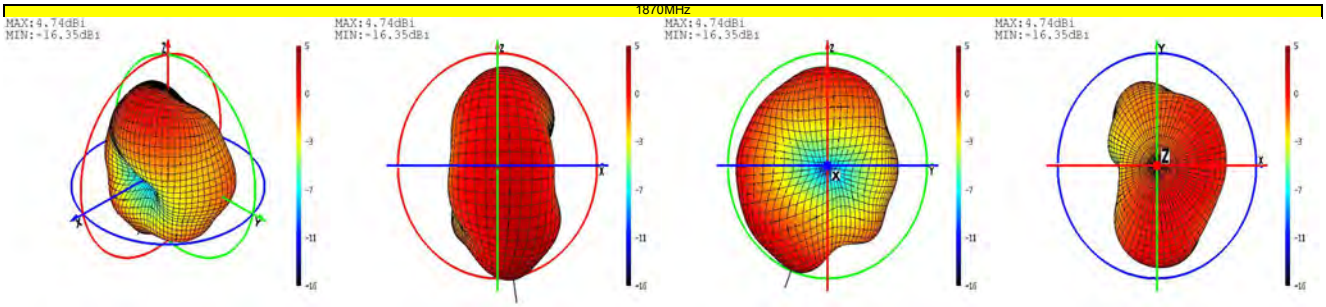

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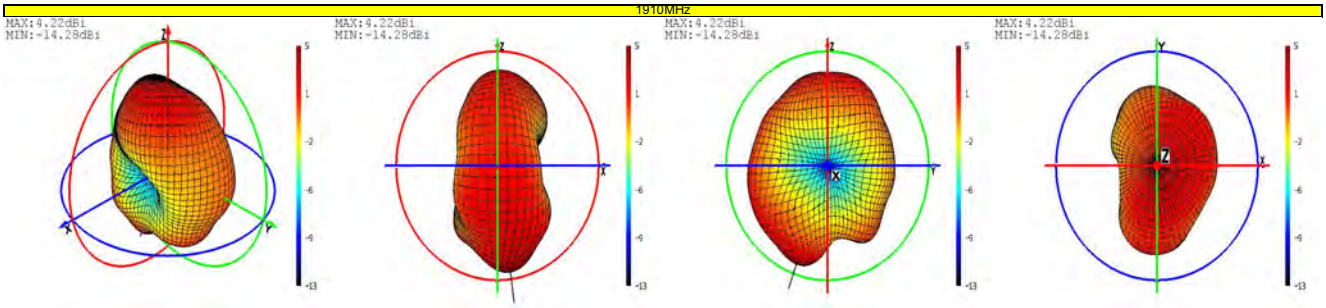

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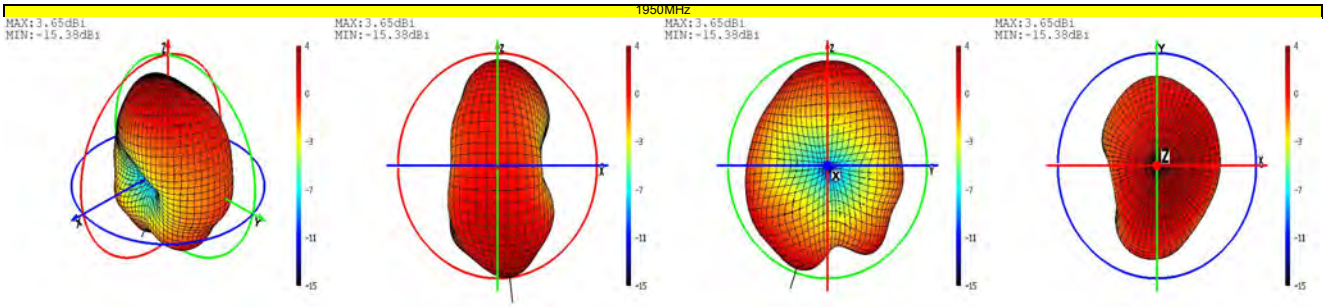

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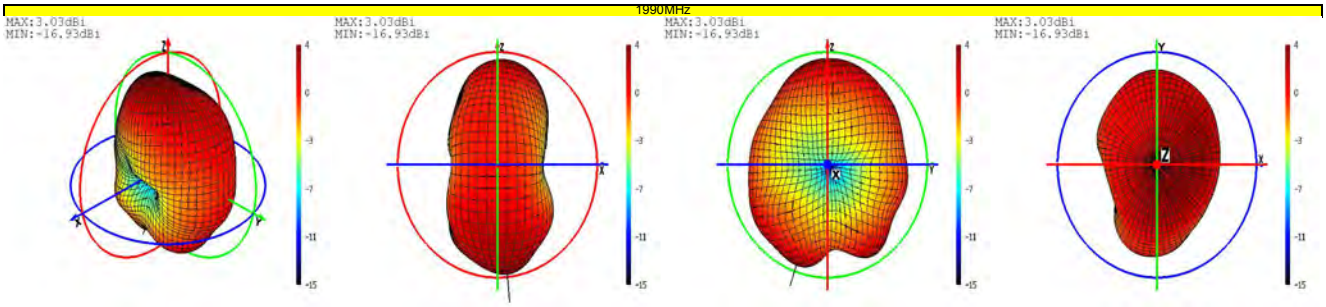

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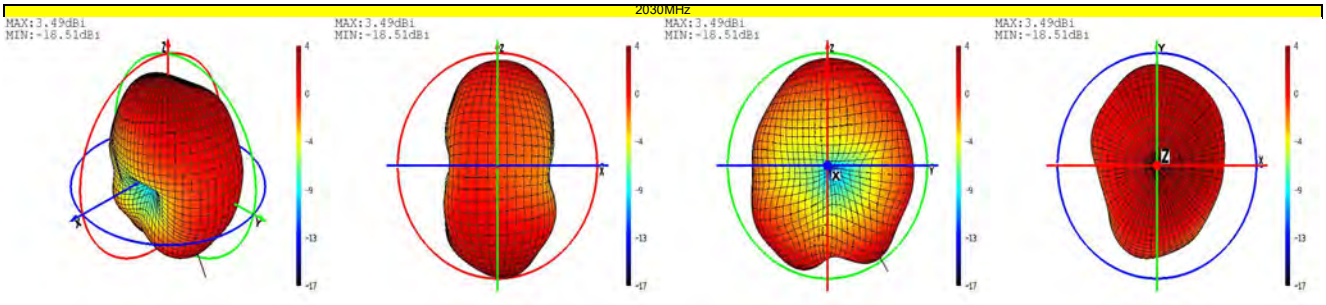

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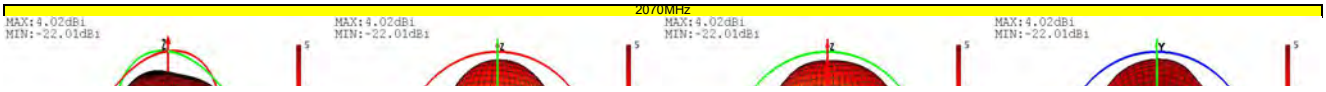

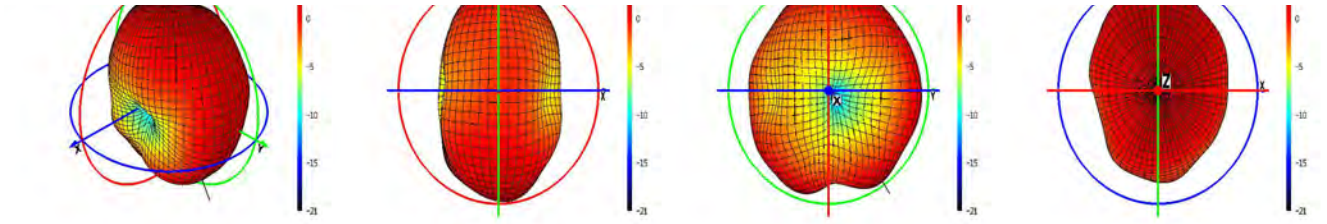

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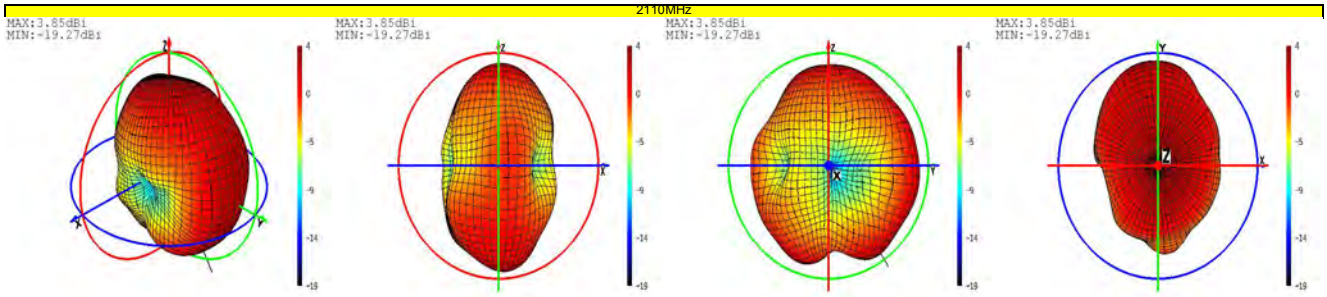

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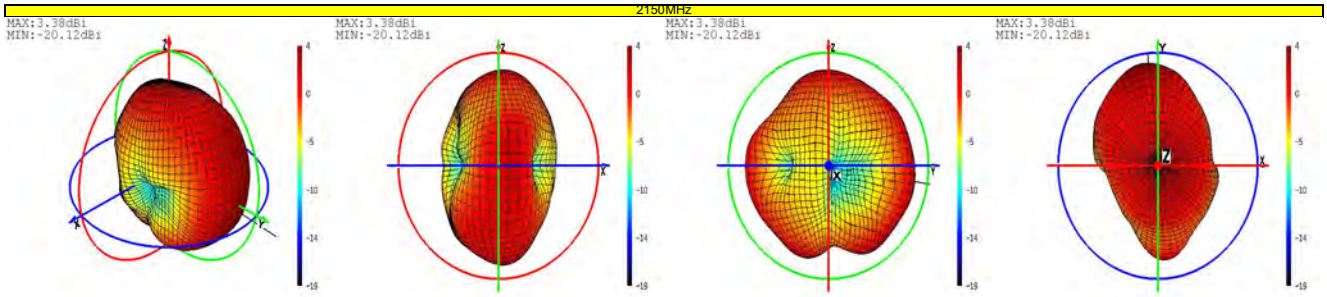

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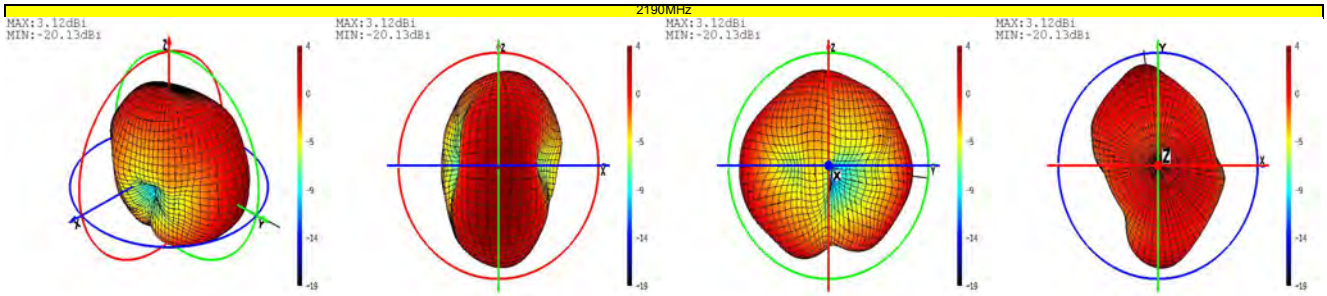

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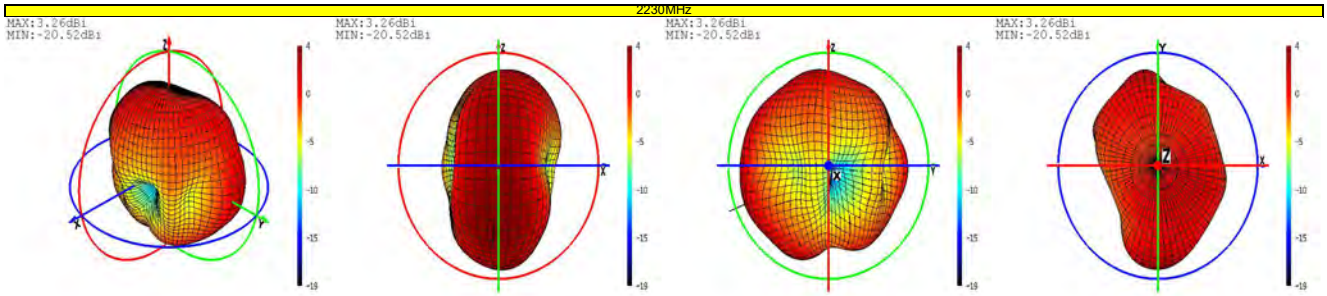

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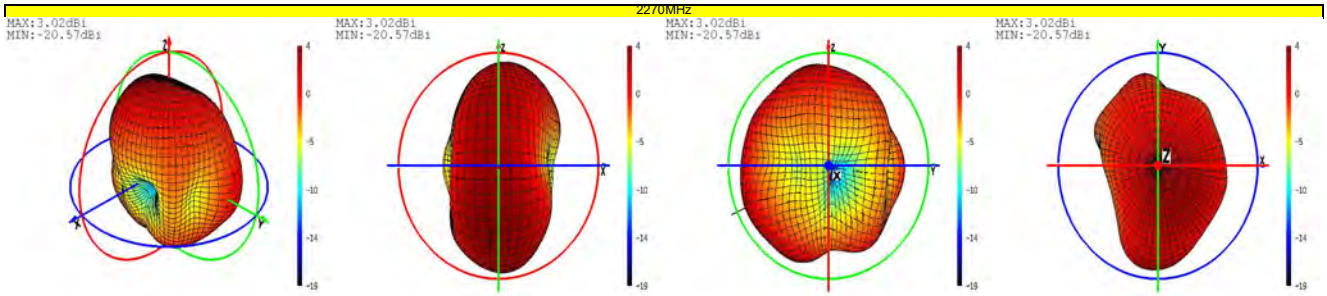

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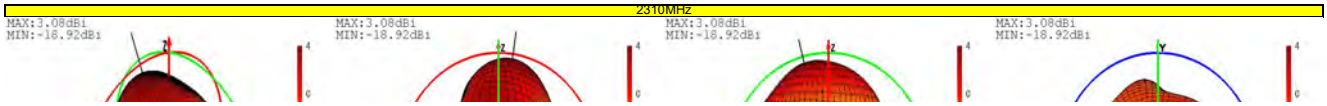

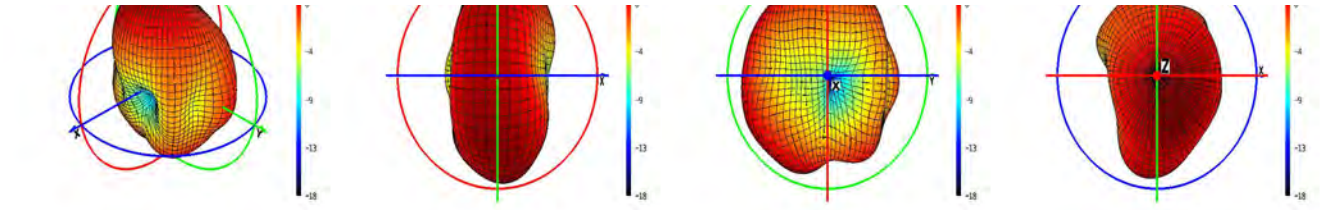

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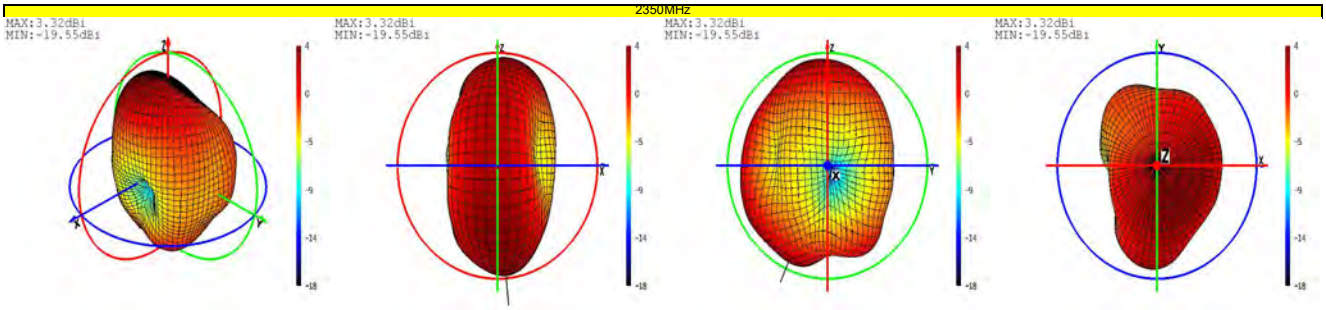

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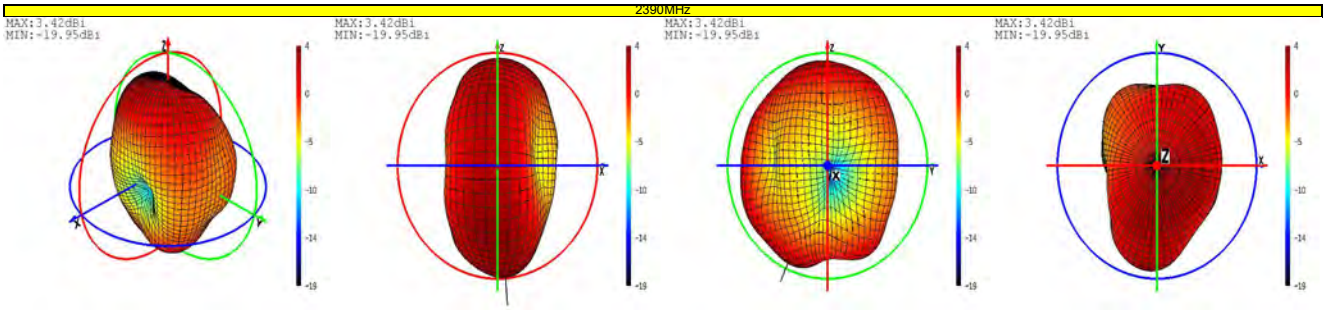

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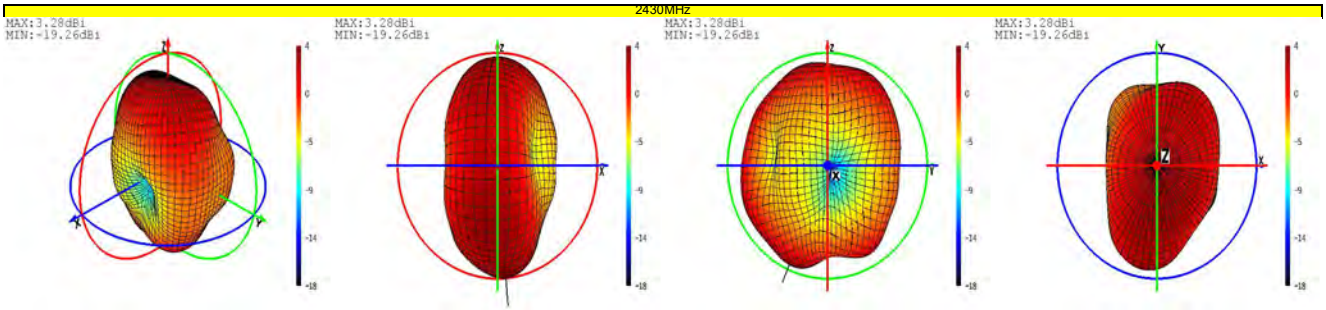

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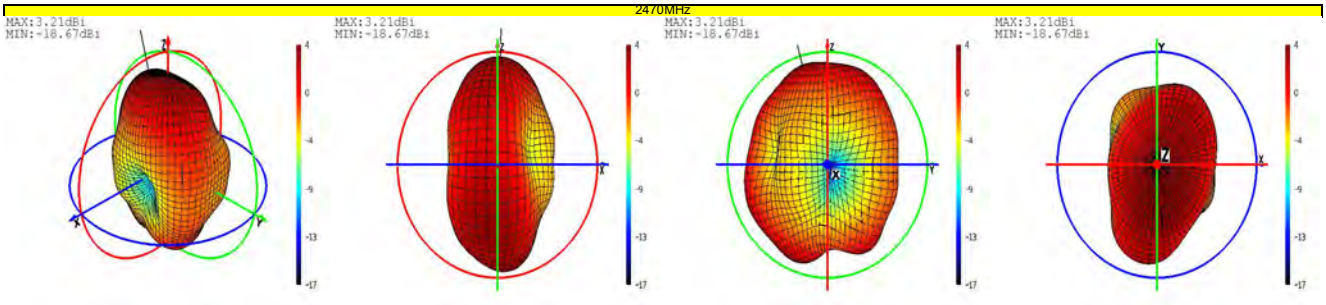

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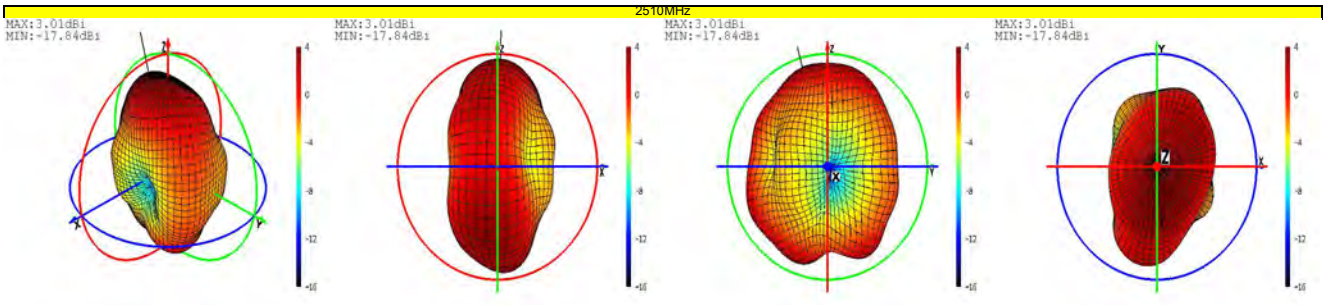

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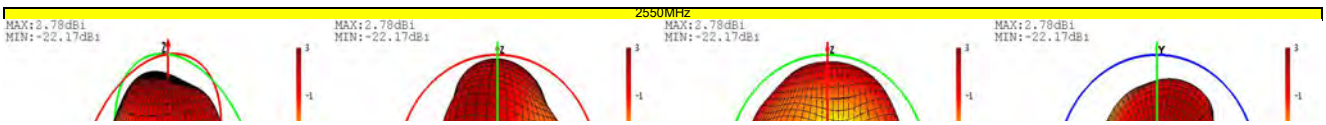

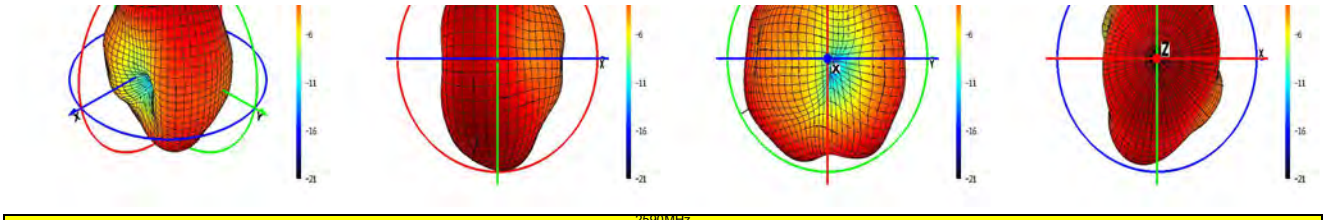

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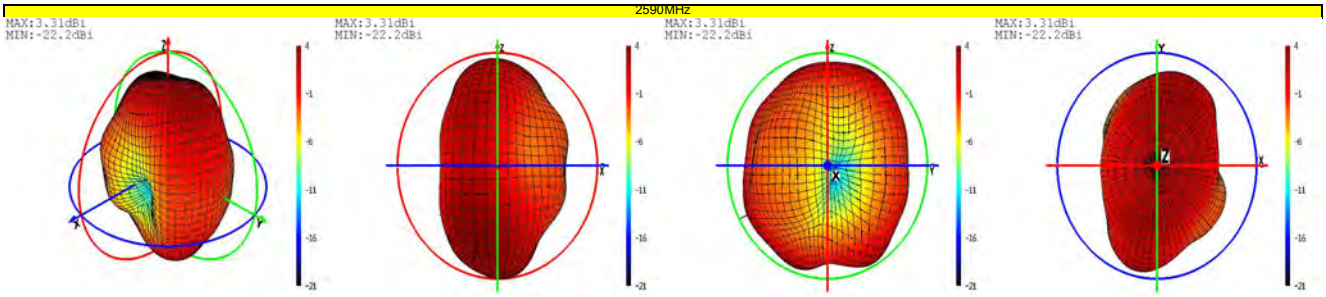

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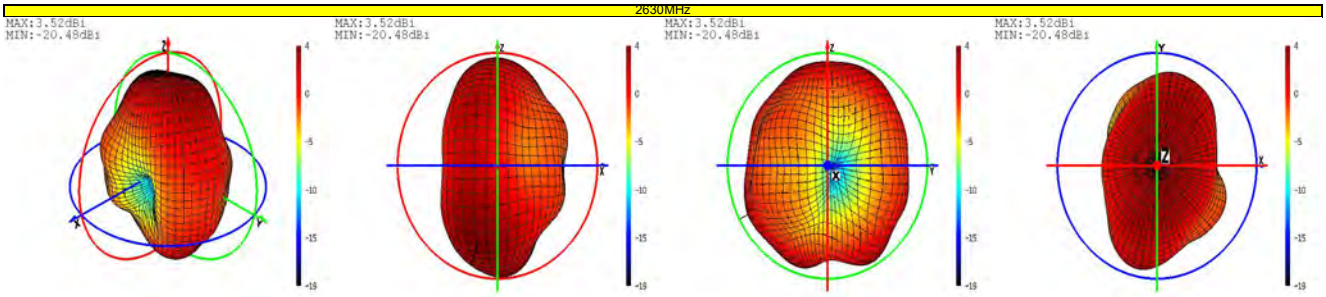

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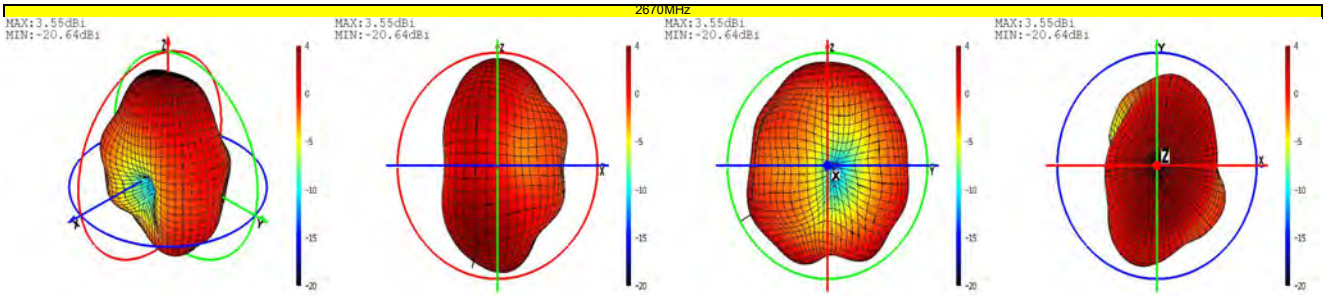

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