

Specification for antenna 124.0000.358

Part name: External antenna

Part No: 124.0000358

Data: 2020.08.18

1. Part Appearance



2. Specification

A. Electrical Properties	
Frequency Range	600MHz-960MHz & 1710-2690MHz
Impedance	50Ω Nominal
VSWR	4.0 Max
Gain (Peak)	5 dBi
Out of roundness	3.0dB (max)
Radiation directional type	Omni
Polarization	Linear vertical
B. Physical Properties	
Connector type	SMA
Cable	RG-178 cable
Antenna Radiator	PCB FR-4
Antenna Plastic	Body:ABS Hinge:PC Holder:PC+PBT
C. Environmental	
Storage Temperature	-40°C-+85°C
Operating Temperature	-10°C-+60°C
Storage Humidity	5%-95%
Working Humidity	5%-95%
Length	196±3mm

3. Test Result

Frequency	600MHz	610MHz	620MHz	630MHz	640MHz	650MHz	660MHz	670MHz	680MHz
Efficiency (%)	24.27	25.29	26.61	26.18	26.49	26.12	25.88	29.72	30.41
Gain (dBi)	0.45	0.6	0.79	0.75	0.8	0.68	0.11	0.87	1.16

Frequency	690MHz	700MHz	710MHz	720MHz	730MHz	740MHz	750MHz	760MHz	770MHz	780MHz
Efficiency (%)	30.55	37.76	38.55	40.93	48.19	51.52	50.58	44.36	42.66	58.75
Gain (dBi)	1.43	2.43	2.54	2.76	3.63	4.09	4.11	3.73	3.64	5

Frequency	790MHz	800MHz	810MHz	820MHz	830MHz	840MHz	850MHz	860MHz	870MHz	880MHz
Efficiency (%)	51.4	43.75	46.03	44.06	42.36	39.99	39.81	38.82	34.28	34.04
Gain (dBi)	4.39	3.94	4.27	4.27	4.17	3.95	4.01	4.22	3.93	4.12

Frequency	890MHz	900MHz	910MHz	920MHz	930MHz	940MHz	950MHz	960MHz
Efficiency (%)	31.33	28.64	30.83	29.99	28.05	32.21	34.2	35.4
Gain (dBi)	4.08	3.66	3.93	3.8	3.66	4.28	4.56	4.59

Frequency	1.71GHz	1.72GHz	1.73GHz	1.74GHz	1.75GHz	1.76GHz	1.77GHz	1.78GHz	1.79GHz	1.8GHz
Efficiency (%)	52.12	52.6	51.29	49.89	47.53	47.64	45.08	46.99	49.89	50.47
Gain (dBi)	3.36	3.81	3.99	3.97	3.82	3.59	3.27	3.28	3.38	3.51

Frequency	1.81GHz	1.82GHz	1.83GHz	1.84GHz	1.85GHz	1.86GHz	1.87GHz	1.88GHz	1.89GHz	1.9GHz
Efficiency (%)	51.64	52.24	50.58	51.05	48.98	48.75	46.88	47.97	49.77	46.45
Gain (dBi)	3.67	3.92	3.85	3.77	3.49	3.26	2.84	2.67	2.76	2.19

Frequency	1.91GHz	1.92GHz	1.93GHz	1.94GHz	1.95GHz	1.96GHz	1.97GHz	1.98GHz	1.99GHz	2GHz
Efficiency (%)	44.77	44.46	44.06	47.42	46.03	47.53	52.97	56.23	60.39	60.67
Gain (dBi)	1.57	1.76	2	3.03	3.01	3.13	3.46	3.6	3.76	3.61

Frequency	2.01GHz	2.02GHz	2.03GHz	2.04GHz	2.05GHz	2.06GHz	2.07GHz	2.08GHz	2.09GHz	2.1GHz
Efficiency (%)	62.95	65.01	65.61	66.07	66.37	59.84	62.66	60.67	60.53	66.37
Gain (dBi)	3.65	3.78	3.54	3.33	3.16	2.81	2.82	2.51	2.47	2.86

Frequency	2.11GHz	2.12GHz	2.13GHz	2.14GHz	2.15GHz	2.16GHz	2.17GHz
Efficiency (%)	62.52	60.95	61.38	65.16	66.37	57.94	60.81
Gain (dBi)	2.63	2.49	2.48	2.67	2.71	2.05	2.27

Frequency	2.3GHz	2.31GHz	2.32GHz	2.33GHz	2.34GHz	2.35GHz	2.36GHz	2.37GHz	2.38GHz	2.39GHz
Efficiency (%)	52.6	52.6	53.58	50.7	53.33	49.66	49.2	52	55.08	52.97
Gain (dBi)	2.66	2.74	2.65	2.25	2.56	2.26	1.92	2.1	2.35	2.31

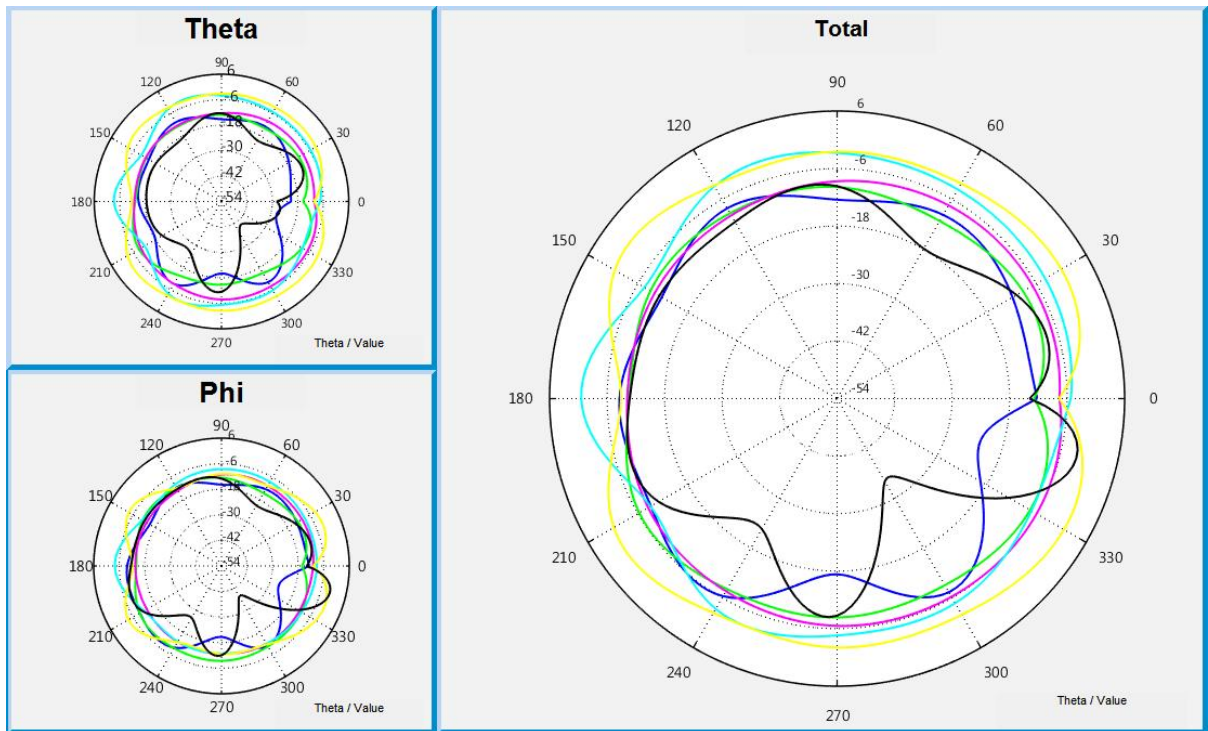
Frequency	2.4GHz	2.41GHz	2.42GHz	2.43GHz	2.44GHz	2.45GHz	2.46GHz	2.47GHz	2.48GHz	2.49GHz
Efficiency (%)	56.62	64.27	68.23	62.37	63.24	67.14	67.92	67.14	61.94	63.83
Gain (dBi)	2.65	3.08	3.45	3.16	3.28	3.54	3.72	5	3.77	4.18

Frequency	2.5GHz	2.51GHz	2.52GHz	2.53GHz	2.54GHz	2.55GHz	2.56GHz	2.57GHz	2.58GHz	2.59GHz
Efficiency (%)	60.26	62.37	68.23	63.39	62.81	70.15	67.92	68.55	74.3	76.91
Gain (dBi)	4.26	4.42	4.88	4.73	4.55	4.97	4.75	4.67	4.9	4.86

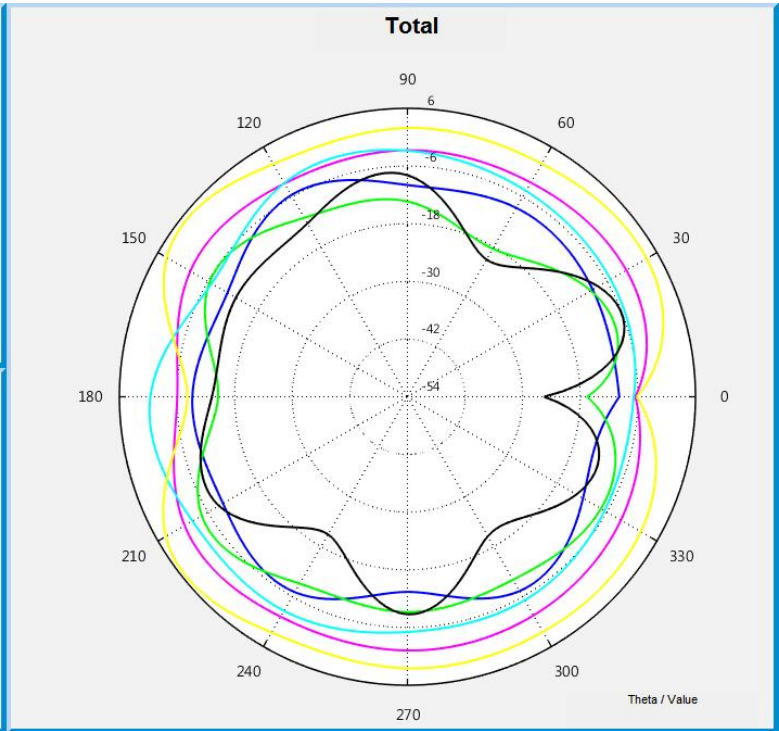
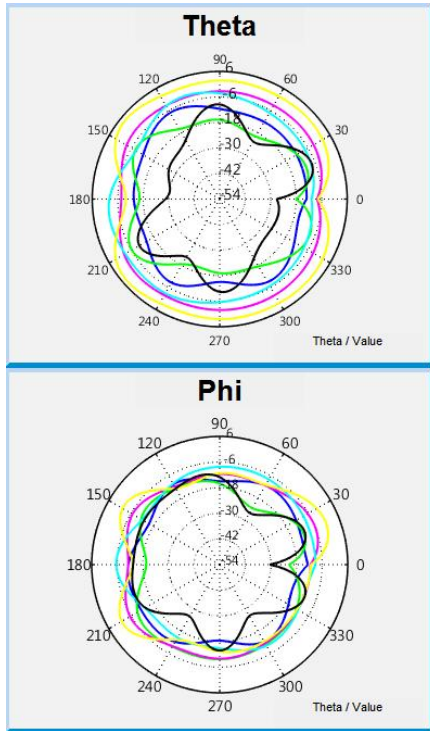
Frequency	2.6GHz	2.61GHz	2.62GHz	2.63GHz	2.64GHz	2.65GHz	2.66GHz	2.67GHz	2.68GHz	2.69GHz
Efficiency (%)	73.11	71.12	69.34	68.39	62.37	62.37	58.88	53.95	51.29	47.21
Gain (dBi)	5	4.61	4.6	4.55	4.15	4.09	3.68	3.16	2.96	2.48

4. Radiation Pattern

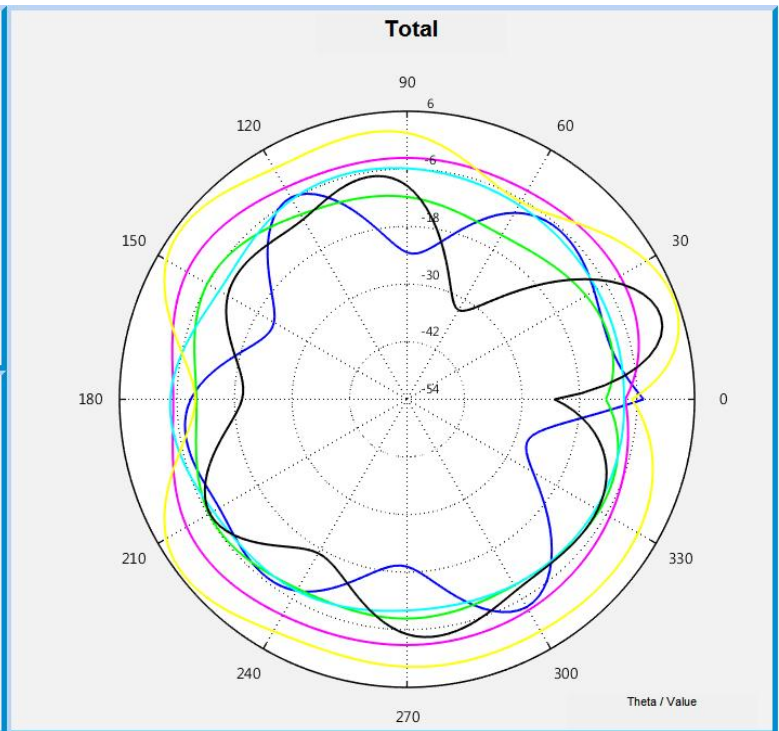
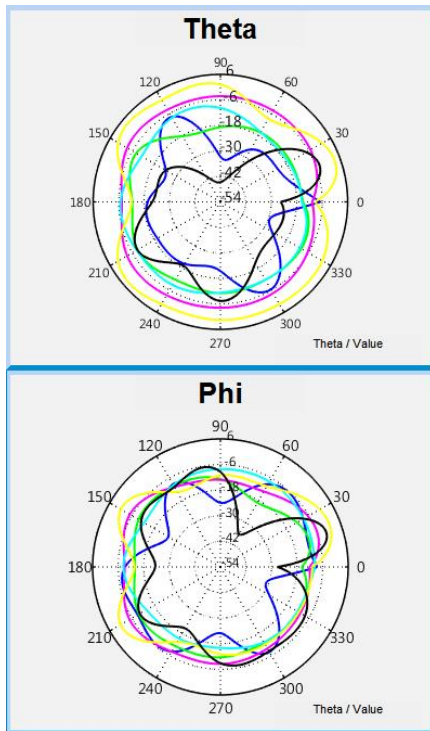
650M



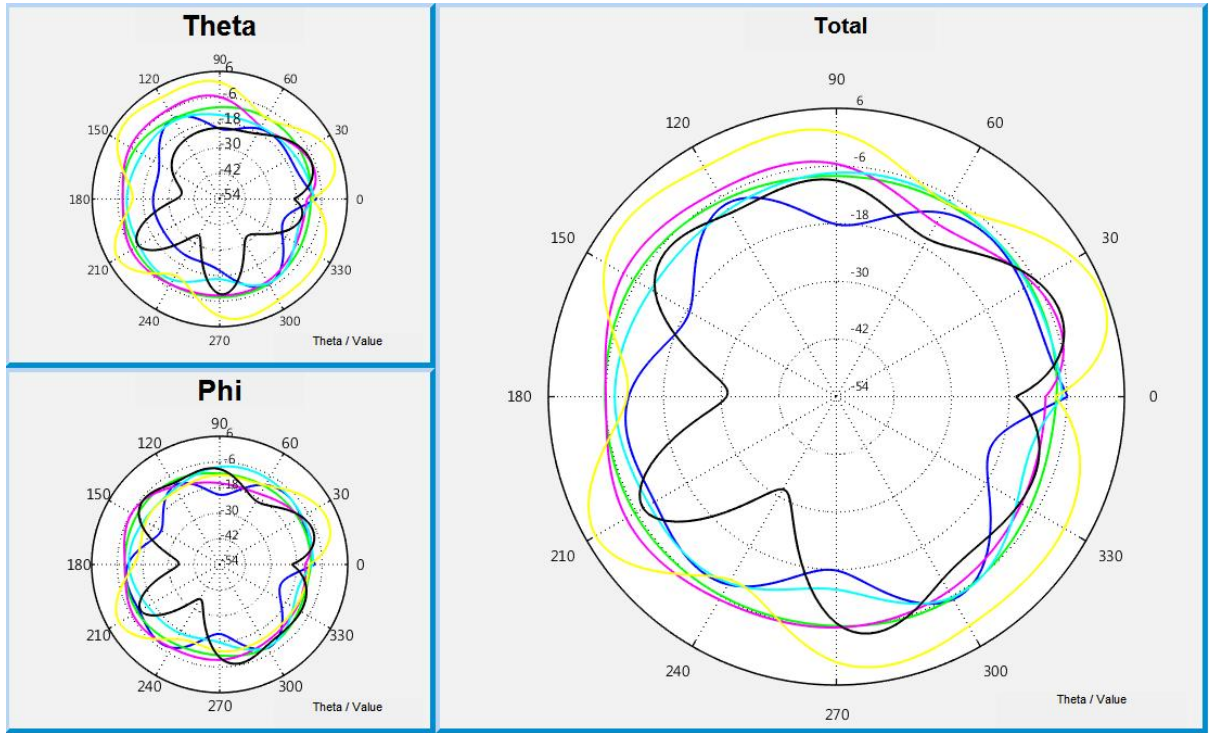
750M



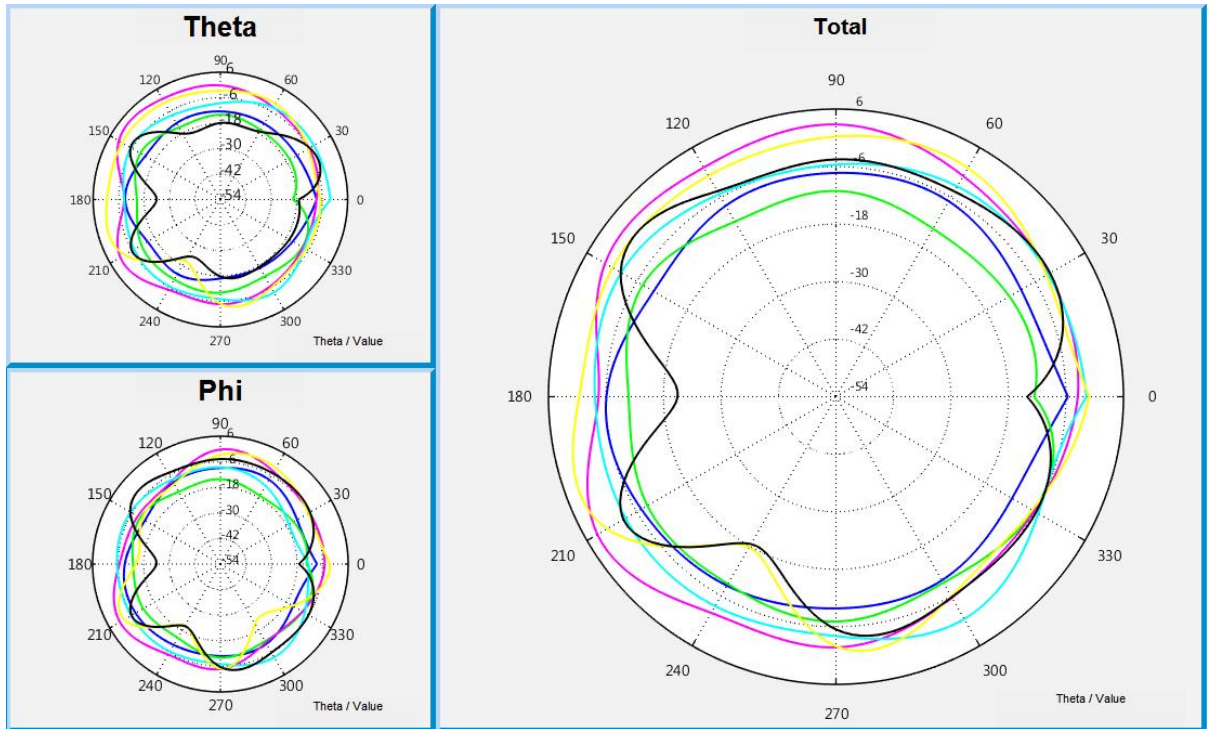
850M



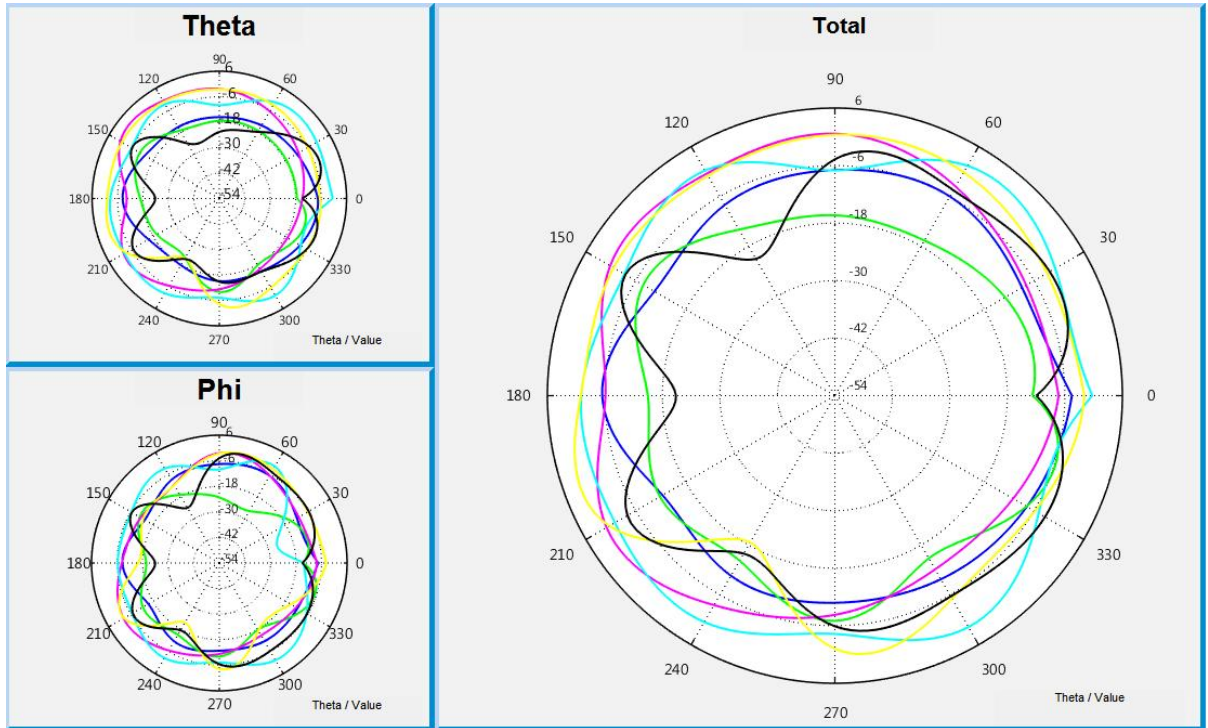
910M



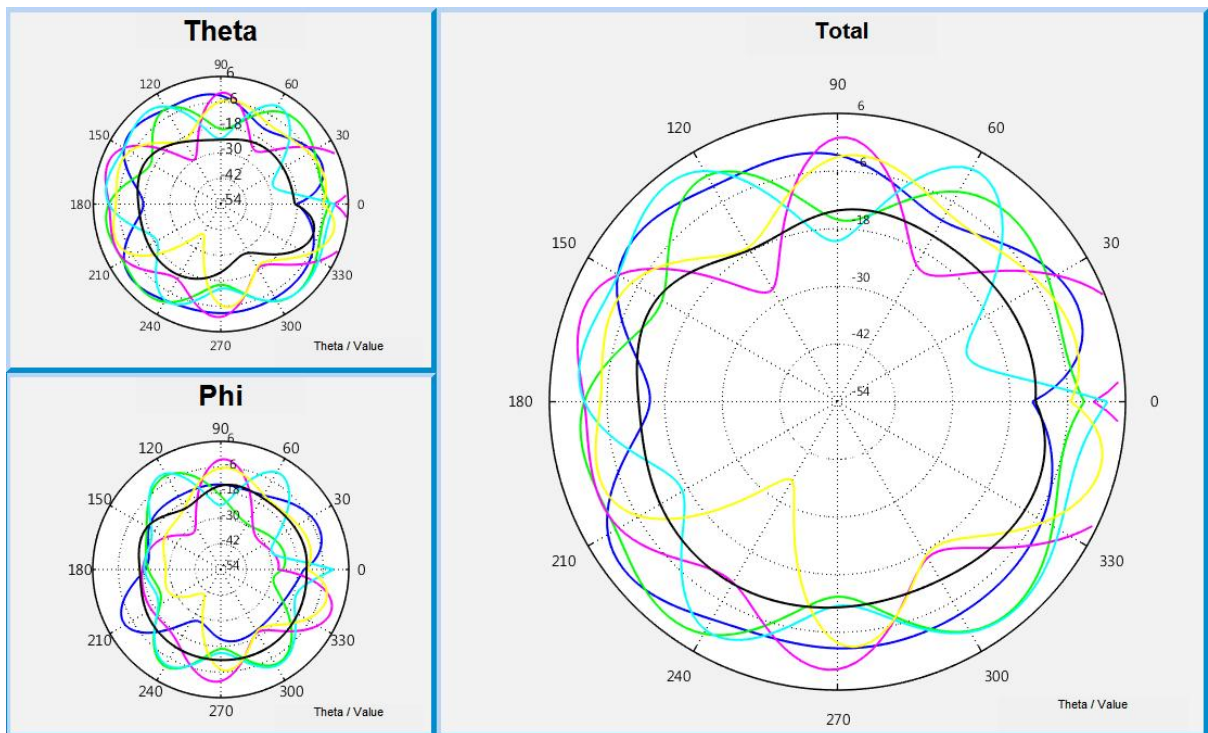
1850M



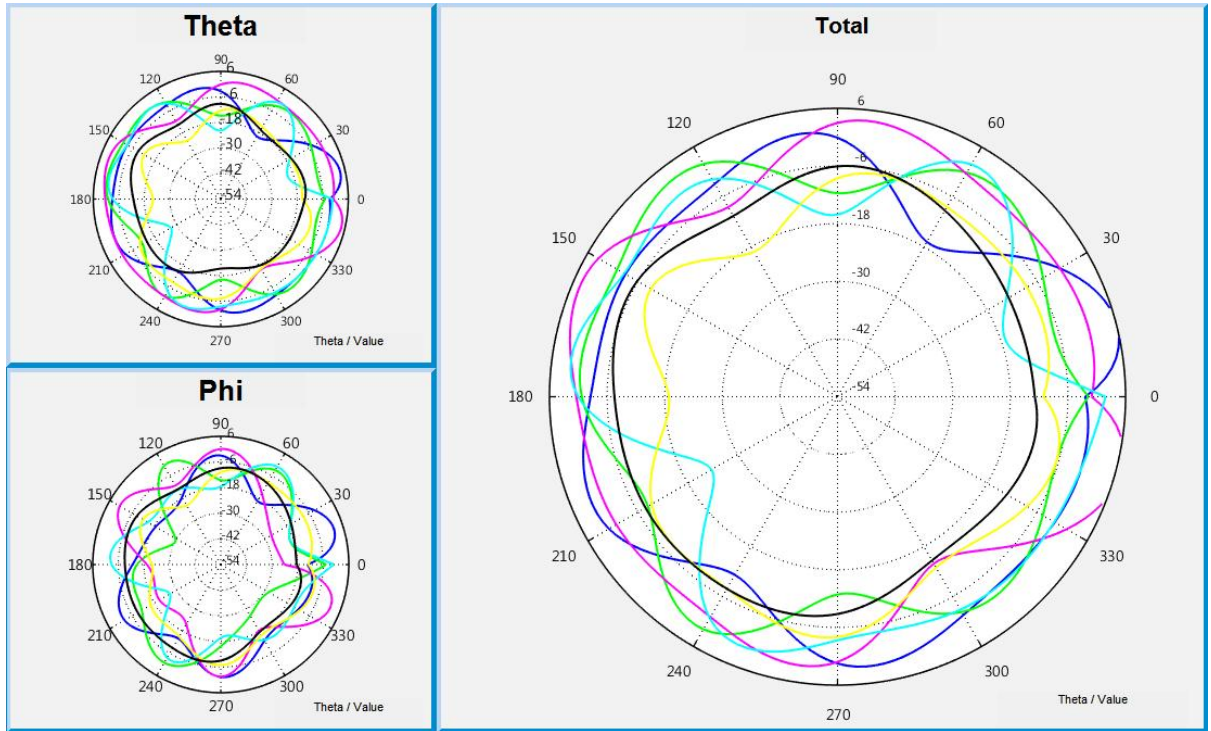
1920M



2170M



2450M



2690M

