

Specification for antenna 124.0000.361

Part name: External antenna

Part No: 124.0000361

Data: 2020.08.18

1.Part Appearance



2.Part Specification

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

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

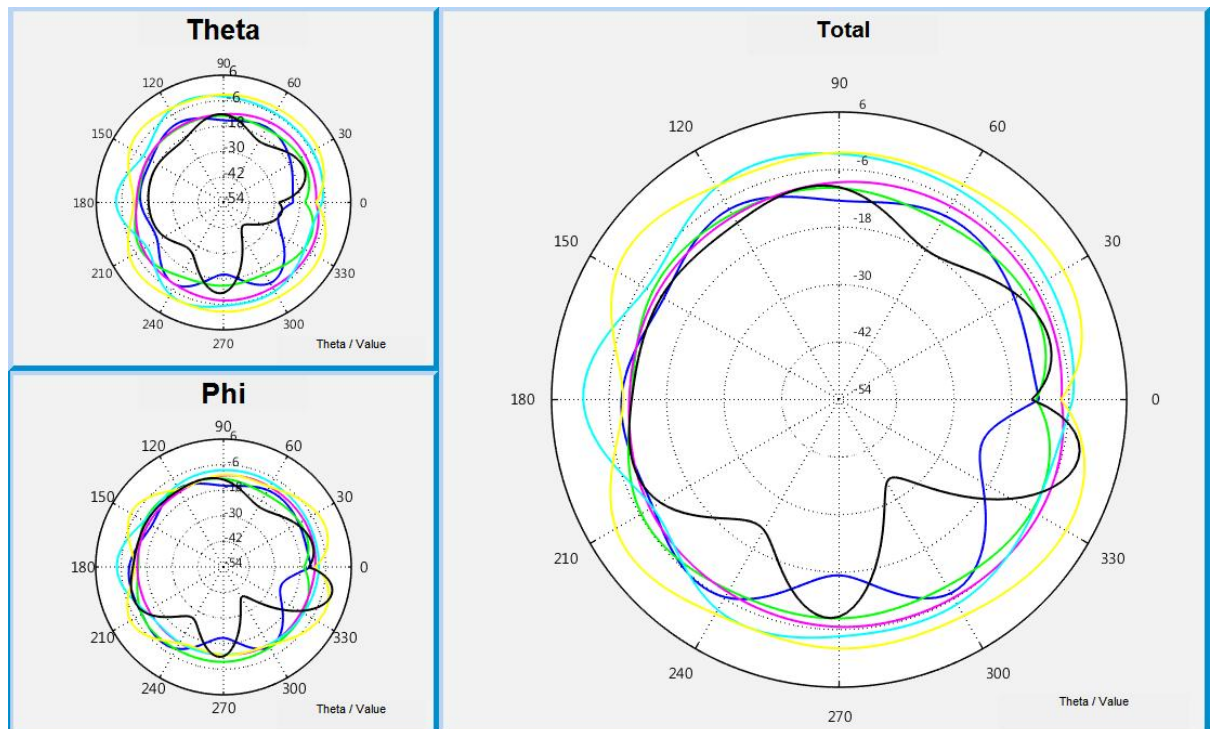
Frequency	2.4GHz	2.41GHz	2.42GHz	2.43GHz	2.44GHz	2.45GHz	2.46GHz	2.47GHz	2.48GHz	2.49GHz
Efficiency (%)	56.62	64.27	68.23	62.37	63.24	67.14	67.92	67.14	61.94	63.83
Gain (dBi)	2.65	3.08	3.45	3.16	3.28	3.54	3.72	5	3.77	4.18

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

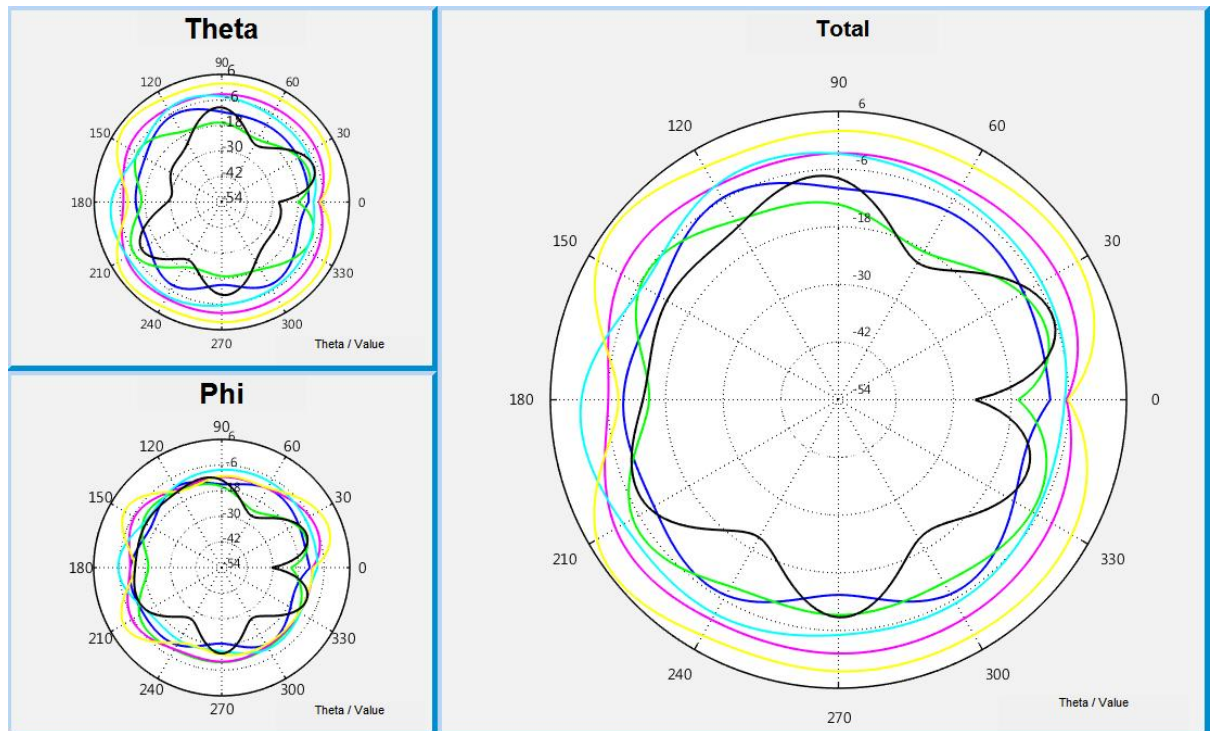
Frequency	2.6GHz	2.61GHz	2.62GHz	2.63GHz	2.64GHz	2.65GHz	2.66GHz	2.67GHz	2.68GHz	2.69GHz
Efficiency (%)	73.11	71.12	69.34	68.39	62.37	62.37	58.88	53.95	51.29	47.21
Gain (dBi)	5	4.61	4.6	4.55	4.15	4.09	3.68	3.16	2.96	2.48

4. Radiation Pattern

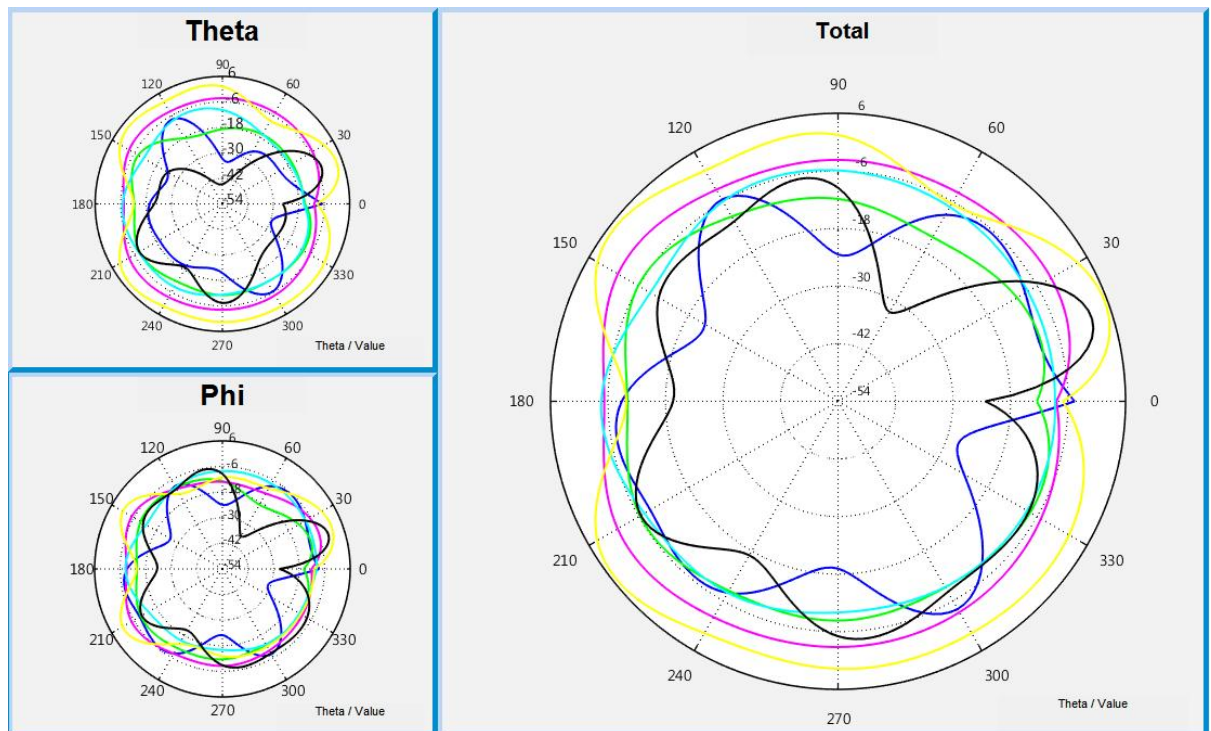
650M



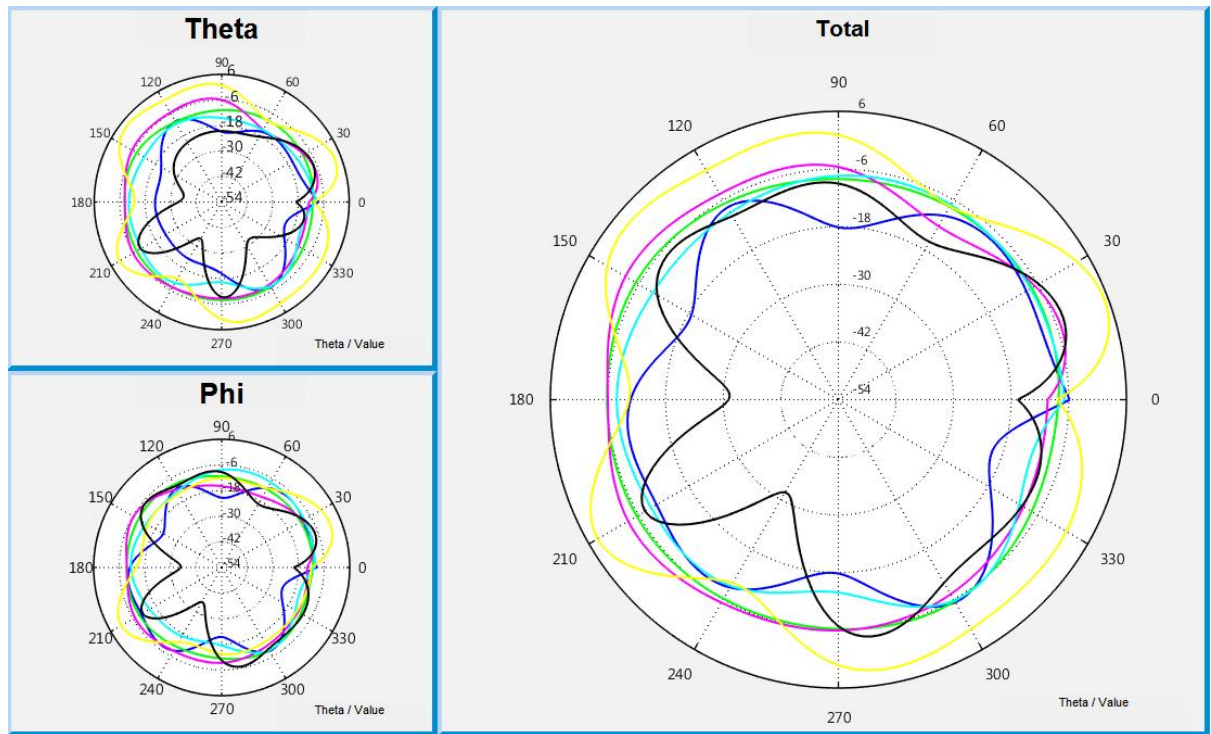
750M



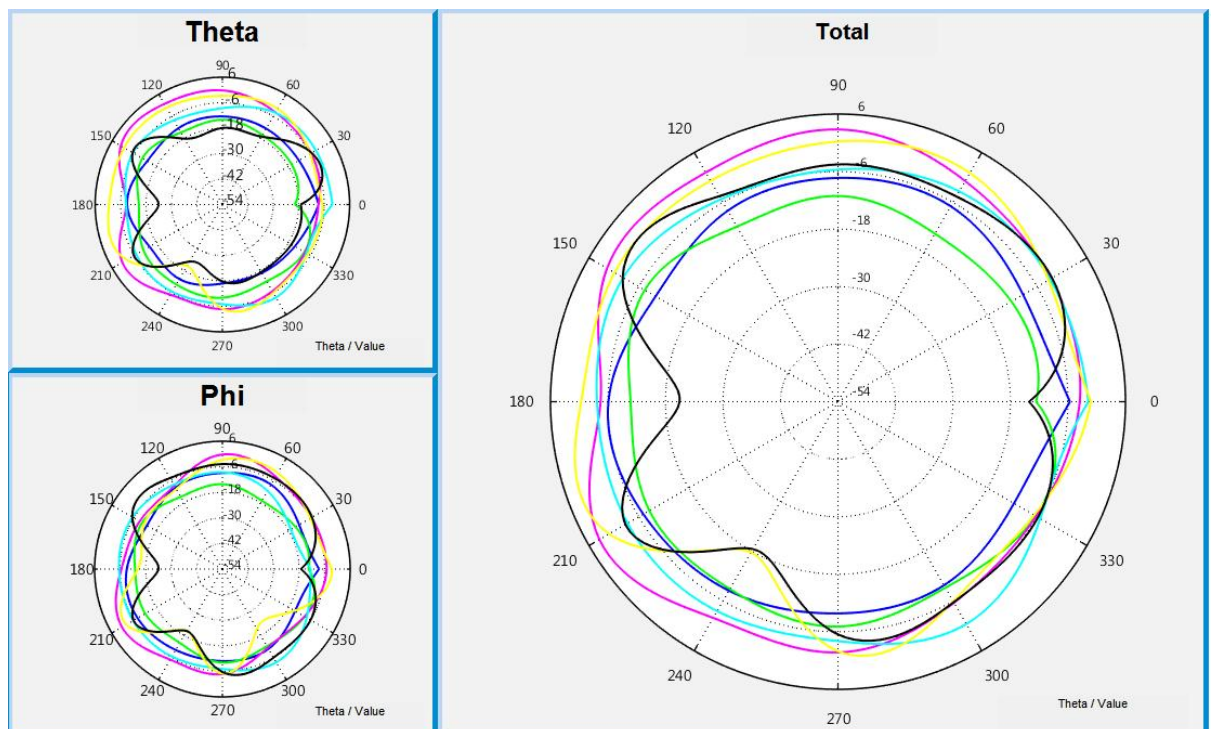
850M



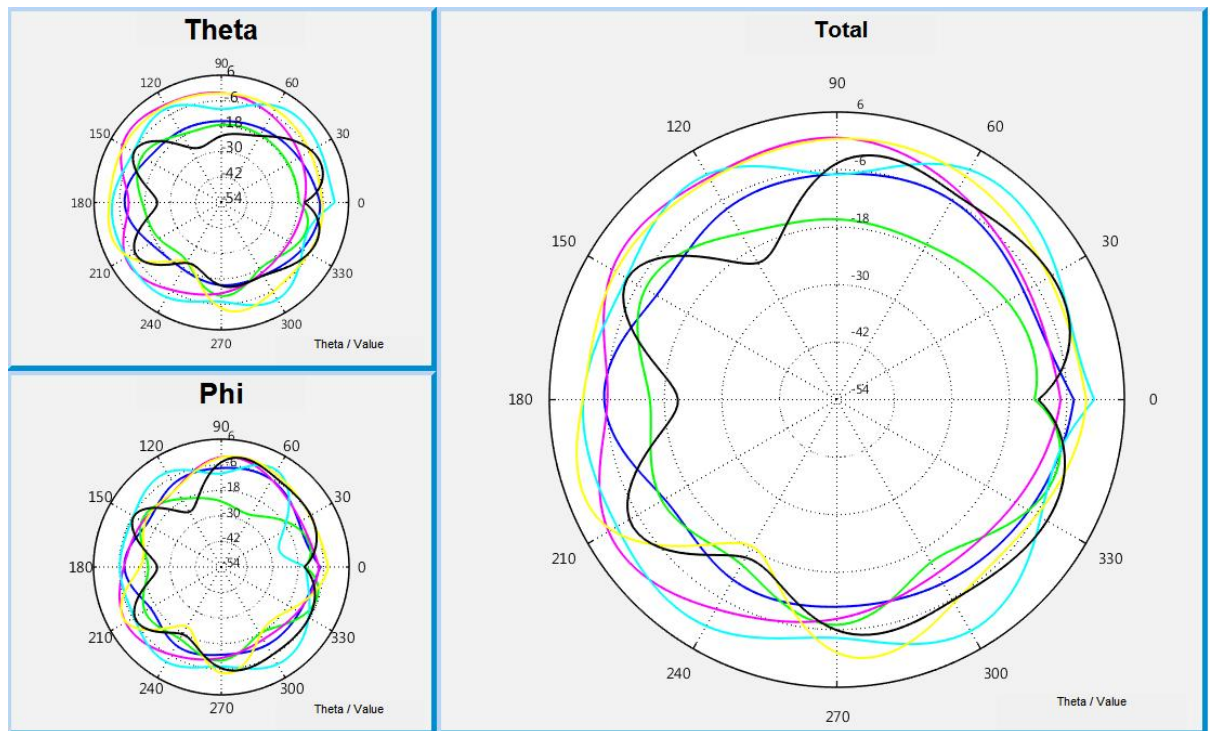
910M



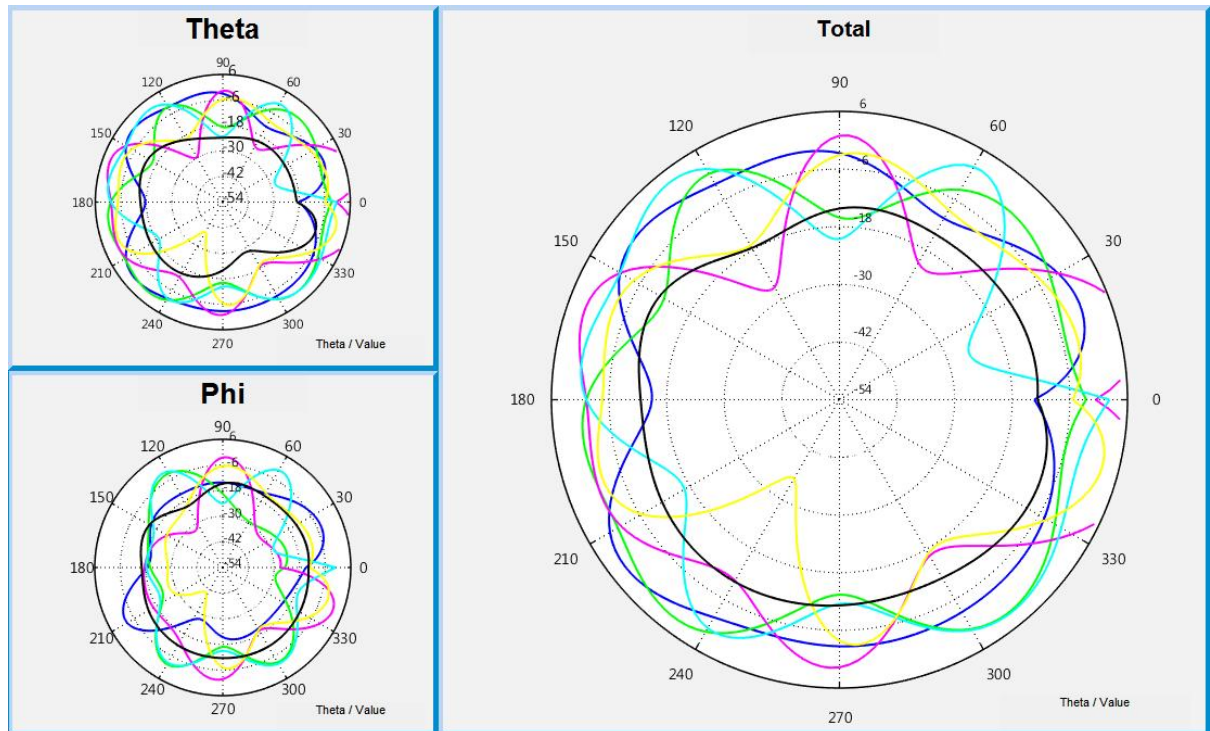
1850M



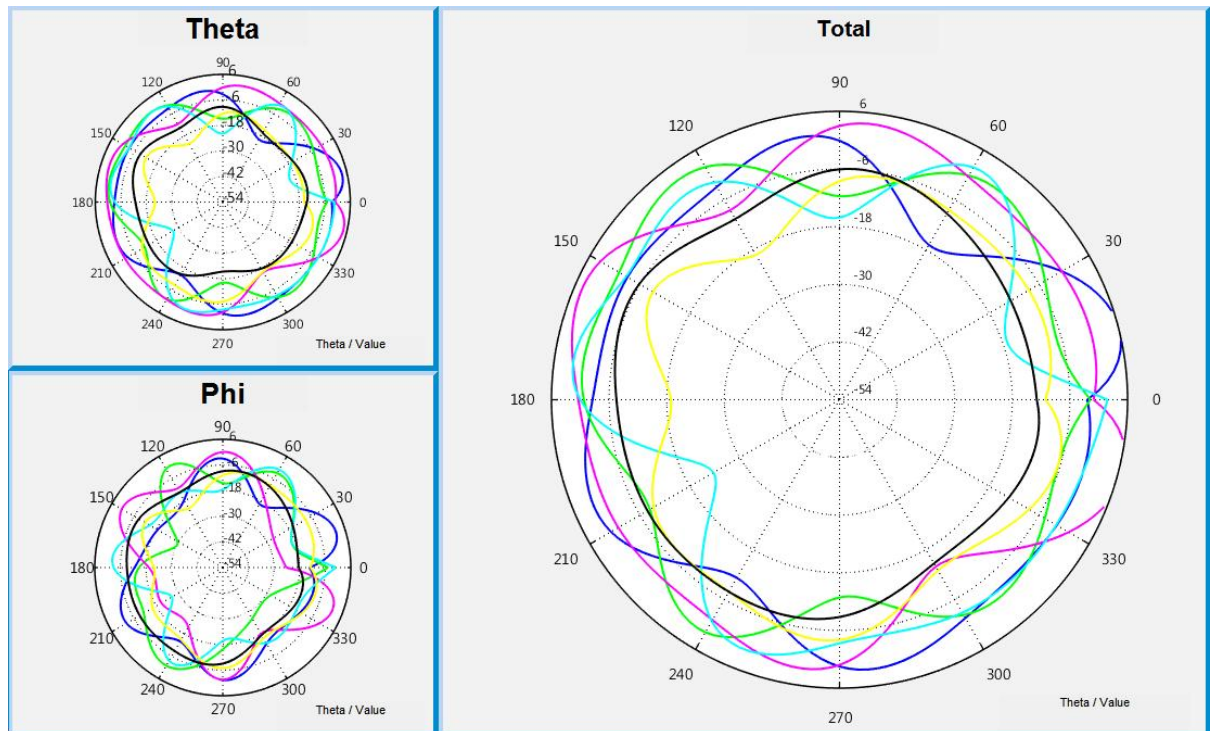
1920M



2170M



2450M



2690M

