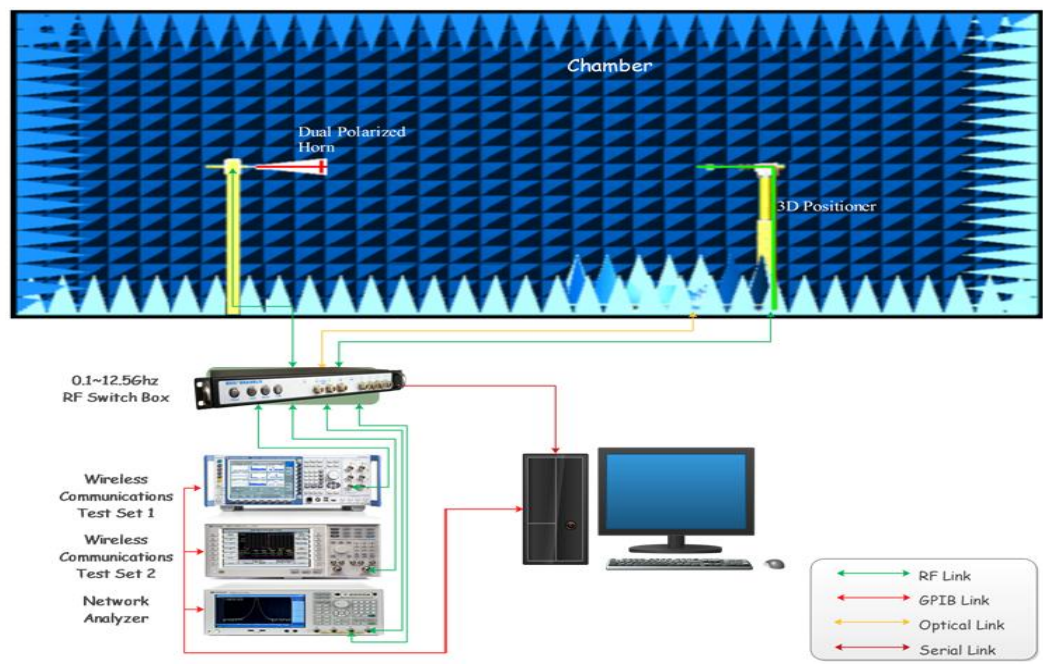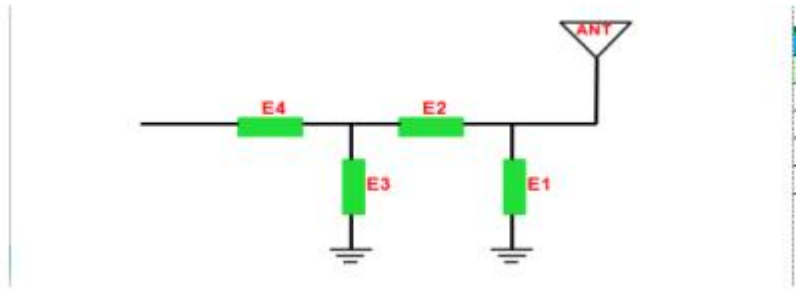|	
Test Date	April 24(th), 2023
Manufacturer	Dongguan Liontek Technology Company CO.,LTD

Facility description Measurement procedure

Antenna information

Customer	Boat of wealth
Model	K19
Antenna Type	PIFA

Matching circuits

Passive performance figure

Frequency(MHZ)	2400~2500	5150~5850
VSWR	<3.5	<3.5

VSWR Test

Test VSWR equipment connection sequence: AgilentE5071B network analyzer→ test connectionline and prototype provided by customer

Antenna position picture
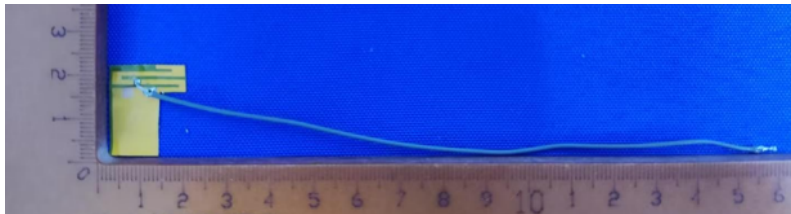

Antenna Max. Peak Gain

Passive Test For WIFI2.4									
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)
2400	56.22	-2.5	1.88	-0.27	25.636	30.579	1.88	-12.9	4.38	0
2410	57.69	-2.39	1.78	-0.37	26.927	30.763	1.78	-12.66	4.17	0
2420	57.62	-2.39	1.56	-0.59	27.578	30.039	1.56	-13.78	3.95	90
2430	58.51	-2.33	1.79	-0.36	28.759	29.747	1.79	-14.54	4.12	90
2440	59.67	-2.24	2.01	-0.14	29.972	29.702	2.01	-15.38	4.25	90
2450	60.98	-2.15	2.17	0.02	31.055	29.921	2.17	-15.66	4.32	60
2460	60.79	-2.16	2.09	-0.06	31.173	29.621	2.09	-15.45	4.25	60
2470	58.56	-2.32	1.96	-0.19	30.075	28.485	1.96	-15.55	4.28	60
2480	58.48	-2.33	1.75	-0.4	30.034	28.442	1.75	-15.52	4.09	60
2490	59.98	-2.22	2.07	-0.08	30.734	29.247	2.07	-15.15	4.29	60
2500	58.37	-2.34	2	-0.15	29.97	28.405	2	-15.44	4.34	60

Passive Test For WIFI5.8									
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)	Beamwidth (3dB)
5150	48.15	-3.17	3.75	1.6	39.084	9.067	3.75	-19.27	6.92	30
5160	48.87	-3.11	3.87	1.72	39.74	9.129	3.87	-19.27	6.98	30
5170	48.23	-3.17	3.77	1.62	39.156	9.078	3.77	-20.17	6.94	30
5180	47.33	-3.25	3.58	1.43	38.528	8.806	3.58	-19.46	6.83	30
5190	45.88	-3.38	3.58	1.43	37.429	8.456	3.58	-21.6	6.96	30
5200	45.99	-3.37	3.59	1.44	37.421	8.567	3.59	-21.49	6.97	30
5210	48.26	-3.16	3.78	1.63	39.338	8.92	3.78	-22.46	6.94	30
5220	49.06	-3.09	3.82	1.67	39.993	9.067	3.82	-22.43	6.91	30
5230	50.28	-2.99	3.99	1.84	41.016	9.265	3.99	-21.96	6.98	30
5240	49.47	-3.06	3.85	1.7	40.364	9.106	3.85	-20.89	6.91	30
5250	47.26	-3.25	3.66	1.51	38.572	8.688	3.66	-21.5	6.92	30
5260	49.03	-3.1	3.83	1.68	40.014	9.019	3.83	-20.83	6.92	30
5270	48.59	-3.13	3.73	1.58	39.539	9.054	3.73	-20.9	6.86	30
5280	48.66	-3.13	3.69	1.54	39.634	9.021	3.69	-21.6	6.82	30
5290	51.17	-2.91	3.85	1.7	41.616	9.556	3.85	-19.95	6.76	30
5300	48.23	-3.17	3.57	1.42	39.251	8.975	3.57	-22.18	6.73	30
5310	47.97	-3.19	3.54	1.39	39.109	8.864	3.54	-20.98	6.73	30
5320	52.05	-2.84	3.88	1.73	42.338	9.711	3.88	-23.04	6.72	30
5330	51.89	-2.85	3.81	1.66	42.312	9.575	3.81	-23.31	6.65	30
5340	54.41	-2.64	3.93	1.78	44.316	10.097	3.93	-24.01	6.58	30
5350	56.94	-2.45	4.11	1.96	46.401	10.535	4.11	-25.14	6.56	30
5360	54.24	-2.66	3.87	1.72	44.13	10.112	3.87	-26.37	6.53	30
5370	54.31	-2.65	3.88	1.73	44.205	10.106	3.88	-24.27	6.53	30
5380	56.1	-2.51	3.98	1.83	45.656	10.447	3.98	-27.26	6.49	30
5390	52.89	-2.77	3.71	1.56	42.986	9.906	3.71	-26.21	6.48	30
5400	62.16	-2.06	4.41	2.26	50.592	11.572	4.41	-25.04	6.47	30
5410	62.78	-2.02	4.37	2.22	51.02	11.756	4.37	-22.51	6.39	30
5420	62.3	-2.06	4.4	2.25	50.56	11.737	4.4	-22.74	6.45	30
5430	61.55	-2.11	4.22	2.07	49.775	11.777	4.22	-24.38	6.33	30
5440	60.99	-2.15	4.13	1.98	49.355	11.636	4.13	-22.6	6.27	30
5450	59.8	-2.23	4.03	1.88	48.289	11.513	4.03	-21.73	6.27	30
5460	60.98	-2.15	4.16	2.01	49.195	11.785	4.16	-20.4	6.31	30
5470	59.7	-2.24	4.07	1.92	48.152	11.544	4.07	-19.79	6.31	30
5480	59.93	-2.22	3.96	1.81	48.241	11.694	3.96	-20.53	6.18	30
5490	60.61	-2.17	4.06	1.91	48.658	11.952	4.06	-20.36	6.24	30
5500	60.7	-2.17	3.94	1.79	48.739	11.957	3.94	-18.96	6.11	30
5510	60.92	-2.15	4.03	1.88	48.746	12.175	4.03	-20.5	6.18	30
5520	61.02	-2.14	4.03	1.88	48.78	12.244	4.03	-20.82	6.17	30
5530	62.79	-2.02	4.15	2	50.279	12.507	4.15	-19.52	6.17	30
5540	63.78	-1.95	4.29	2.14	51.013	12.765	4.29	-19.89	6.24	30
5550	62.09	-2.07	4.21	2.06	49.629	12.466	4.21	-20.36	6.28	30

5560	61.89	−2.08	4.22	2.07	49.329	12.562	4.22	−19.81	6.3	30
5570	63.44	−1.98	4.41	2.26	50.681	12.759	4.41	−19.29	6.39	30
5580	64.29	−1.92	4.4	2.25	51.214	13.08	4.4	−20.87	6.32	30
5590	64.82	−1.88	4.52	2.37	51.583	13.238	4.52	−20.79	6.41	30
5600	65.68	−1.83	4.68	2.53	52.218	13.46	4.68	−23.2	6.5	30
5610	64.57	−1.9	4.63	2.48	51.235	13.337	4.63	−20.97	6.53	30
5620	64.77	−1.89	4.73	2.58	51.494	13.28	4.73	−20.07	6.62	30
5630	64.87	−1.88	4.75	2.6	51.557	13.316	4.75	−19.65	6.63	30
5640	63.33	−1.98	4.62	2.47	50.336	12.998	4.62	−21.18	6.6	30
5650	64.56	−1.9	4.78	2.63	51.252	13.306	4.78	−19.48	6.68	30
5660	65.58	−1.83	4.87	2.72	52.035	13.546	4.87	−18.81	6.71	30
5670	64.35	−1.91	4.83	2.68	50.964	13.383	4.83	−21.04	6.75	30
5680	64.73	−1.89	4.8	2.65	51.423	13.31	4.8	−20.37	6.69	30
5690	66.26	−1.79	4.95	2.8	52.509	13.752	4.95	−20.75	6.73	30
5700	65.58	−1.83	4.92	2.77	51.934	13.643	4.92	−20.52	6.76	30
5710	64.97	−1.87	5	2.85	51.681	13.287	5	−20.28	6.87	30
5720	63.89	−1.95	4.92	2.77	50.763	13.125	4.92	−21.81	6.87	30
5730	64.37	−1.91	4.96	2.81	51.09	13.279	4.96	−20.39	6.87	30
5740	66.69	−1.76	5.13	2.98	53.115	13.575	5.13	−22.55	6.89	30
5750	68.59	−1.64	5.31	3.16	54.622	13.966	5.31	−21.15	6.95	30
5760	66.56	−1.77	4.99	2.84	53.06	13.5	4.99	−20.79	6.75	30
5770	66.71	−1.76	5.04	2.89	52.925	13.79	5.04	−23.22	6.8	30
5780	64.35	−1.91	4.89	2.74	51.199	13.152	4.89	−21.95	6.81	30
5790	63.72	−1.96	4.78	2.63	50.694	13.022	4.78	−25.38	6.73	30
5800	63.12	−2	4.76	2.61	50.122	13	4.76	−22.37	6.76	30
5810	63.73	−1.96	4.73	2.58	50.699	13.035	4.73	−25.54	6.68	30
5820	65.32	−1.85	4.78	2.63	51.928	13.391	4.78	−25.43	6.63	30
5830	64.3	−1.92	4.77	2.62	51.117	13.18	4.77	−23.91	6.68	30
5840	64.1	−1.93	4.68	2.53	50.979	13.12	4.68	−23.25	6.61	30
5850	65.64	−1.83	4.83	2.68	52.244	13.401	4.83	−23.13	6.66	30

3-D Patten Plots

2400.000MHz
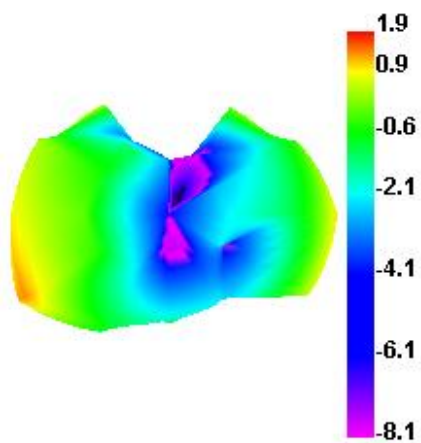
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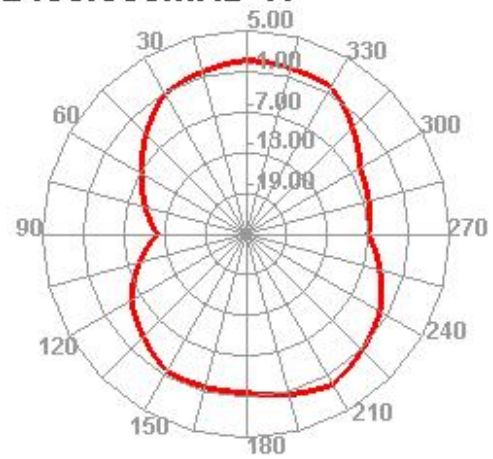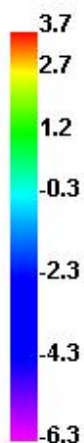

2400.000MHz E1
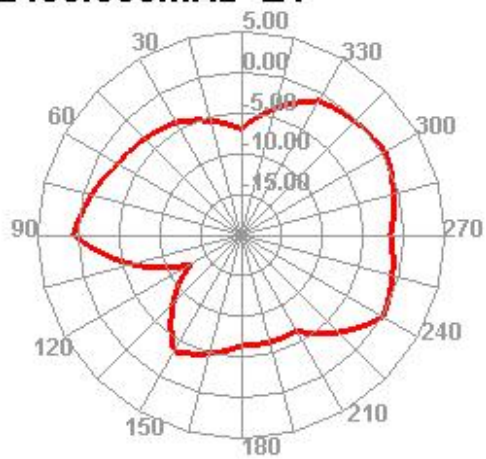
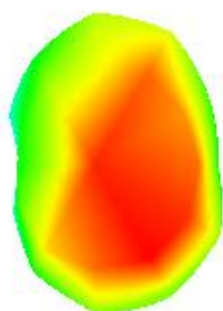# 2400.000MHz E2
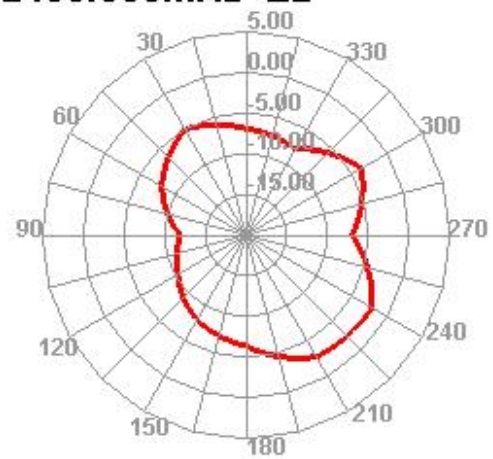
2500.000MHz
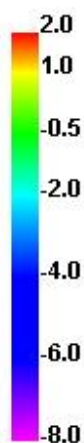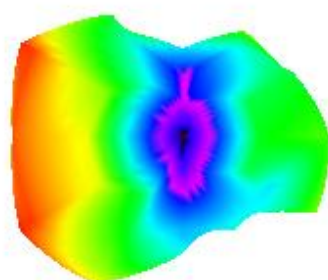
2500.000MHz H
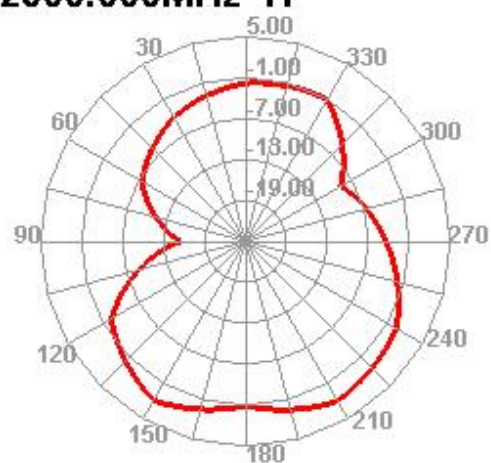
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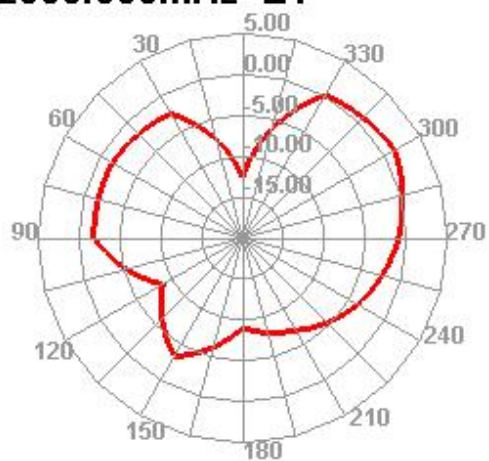
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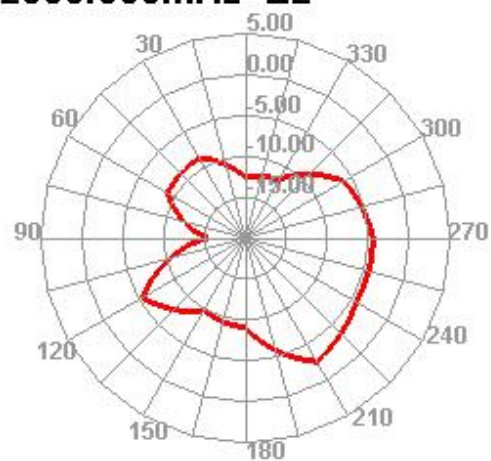
5150.000MHz

5150.000MHz H

5150.000MHz E1

5150.000MHz E2

5300.000MHz

5300.000MHz H

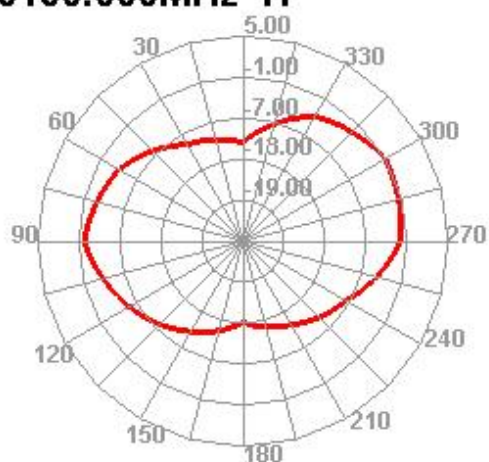
5300.000MHz E1

5300.000MHz E2
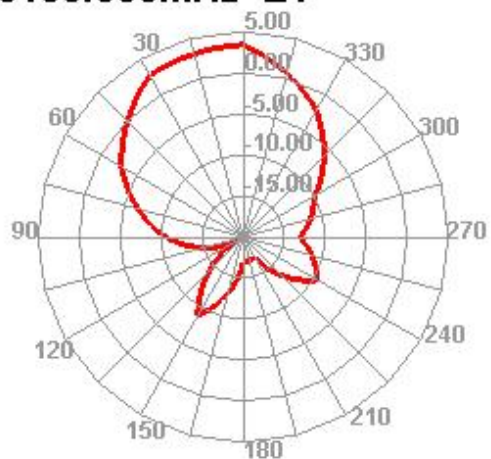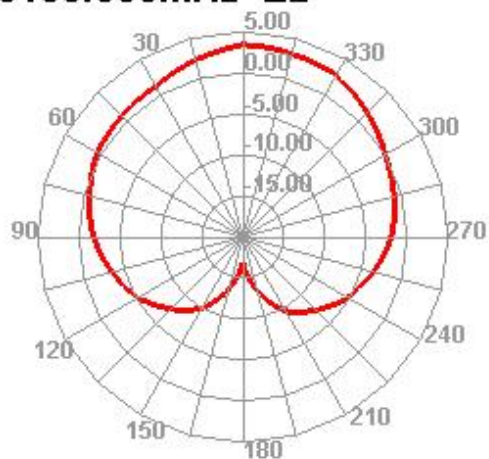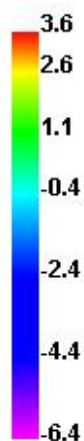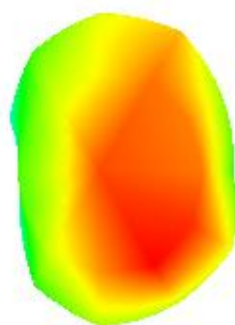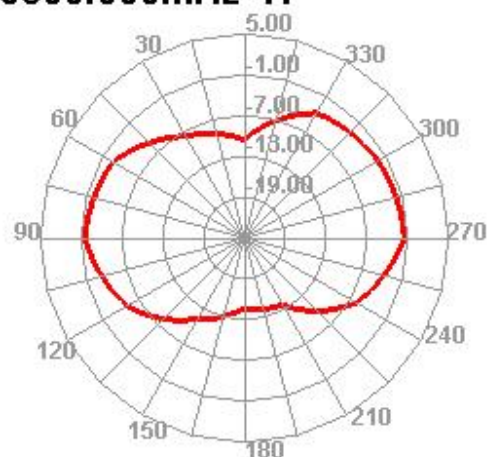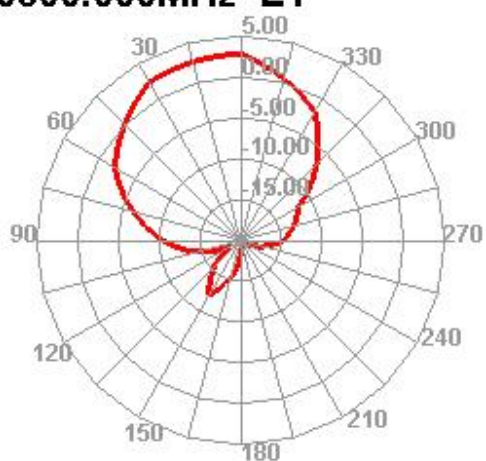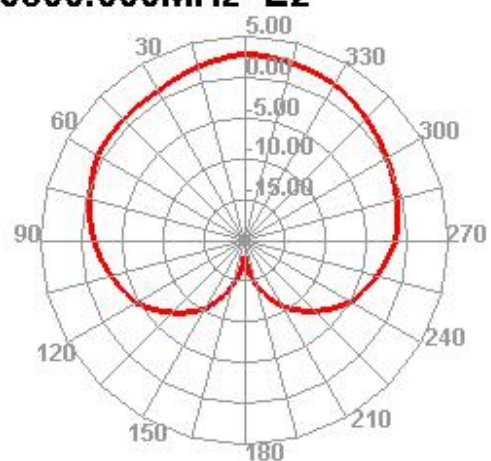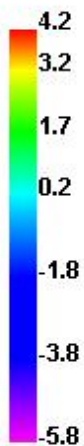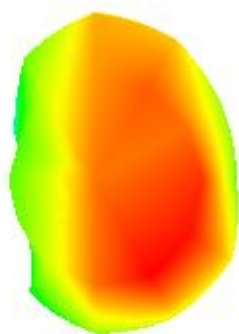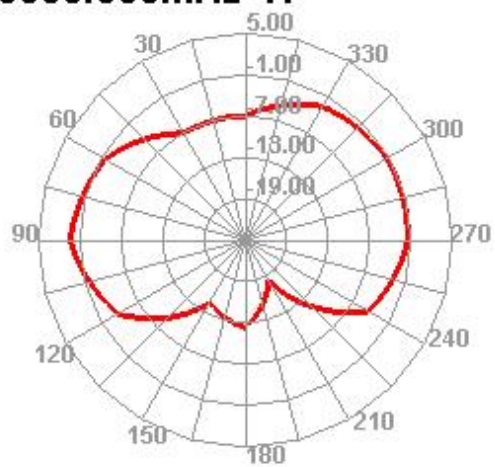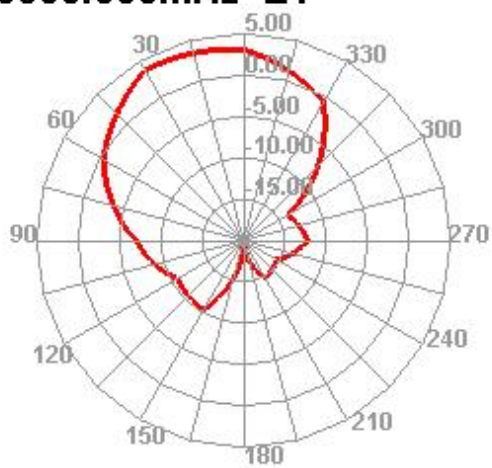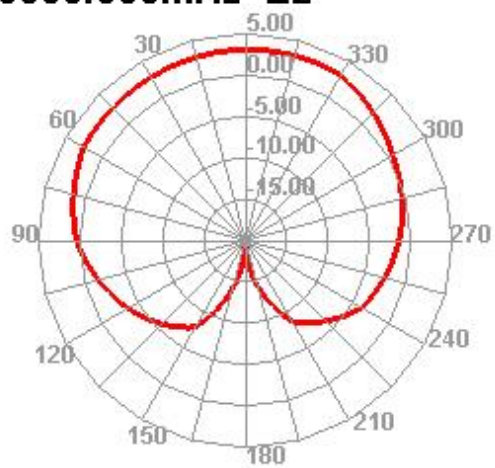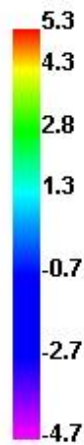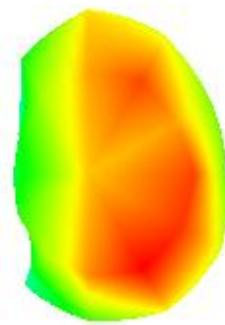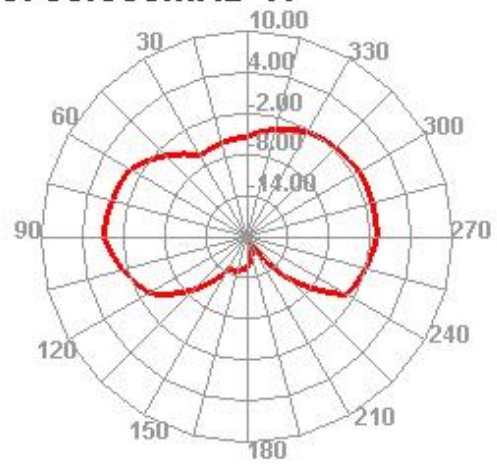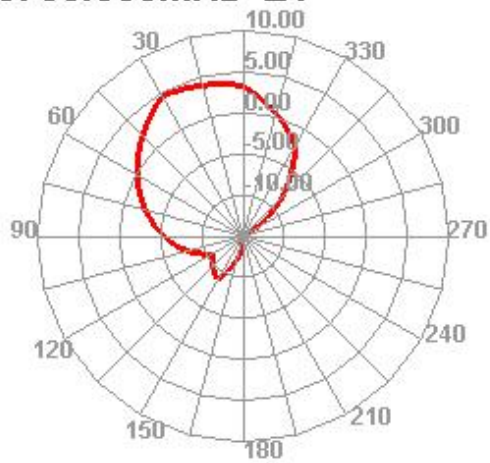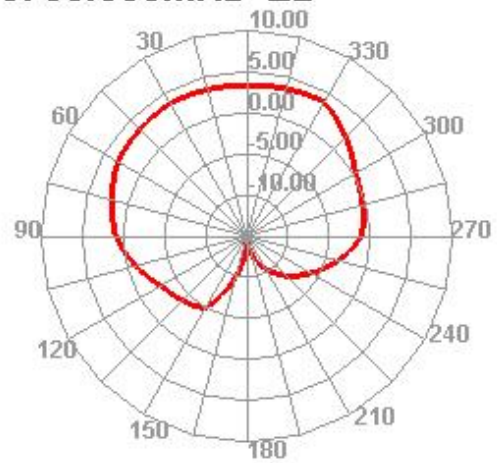
5550.000MHz

5550.000MHz H

5550.000MHz E1

5550.000MHz E2

5750.000MHz

5750.000MHz H

5750.000MHz E1
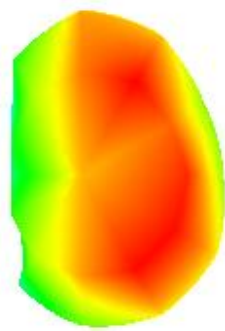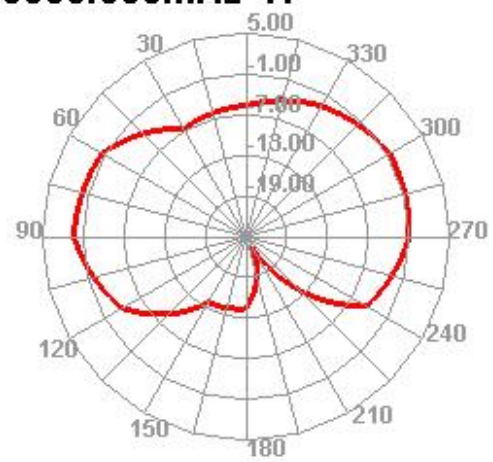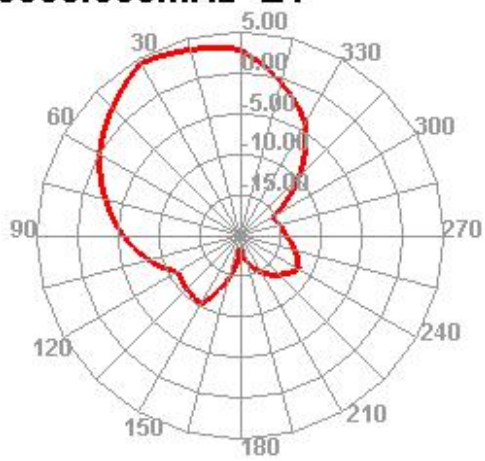
5750.000MHz E2

5850.000MHz

5850.000MHz H

5850.000MHz E1

5850.000MHz E2