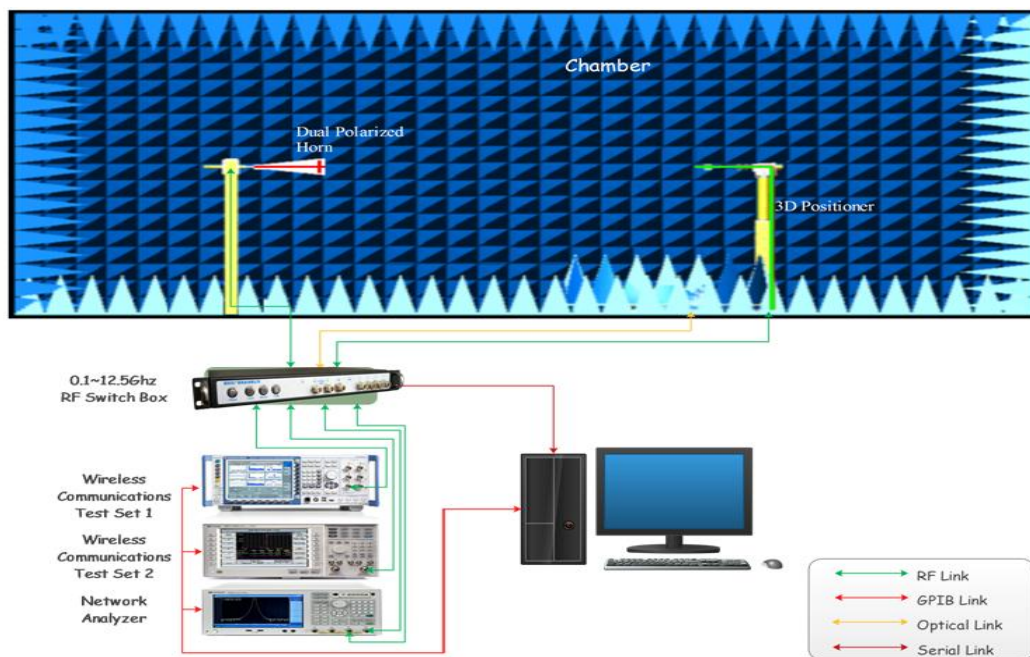


antenna report

Test Date	April 24(th), 2023
TestInstrument	vector network analyzer -Agilent Technologies E5071B

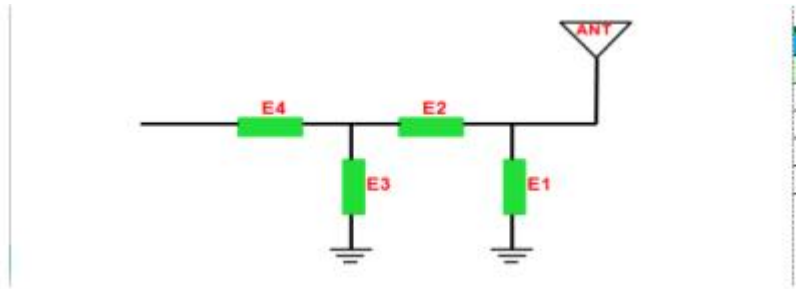
Facility description Measurement procedure



Antenna information

Customer	Boat of wealth
Antenna Model	FPC
Antenna Type	PIFA

Matching circuits

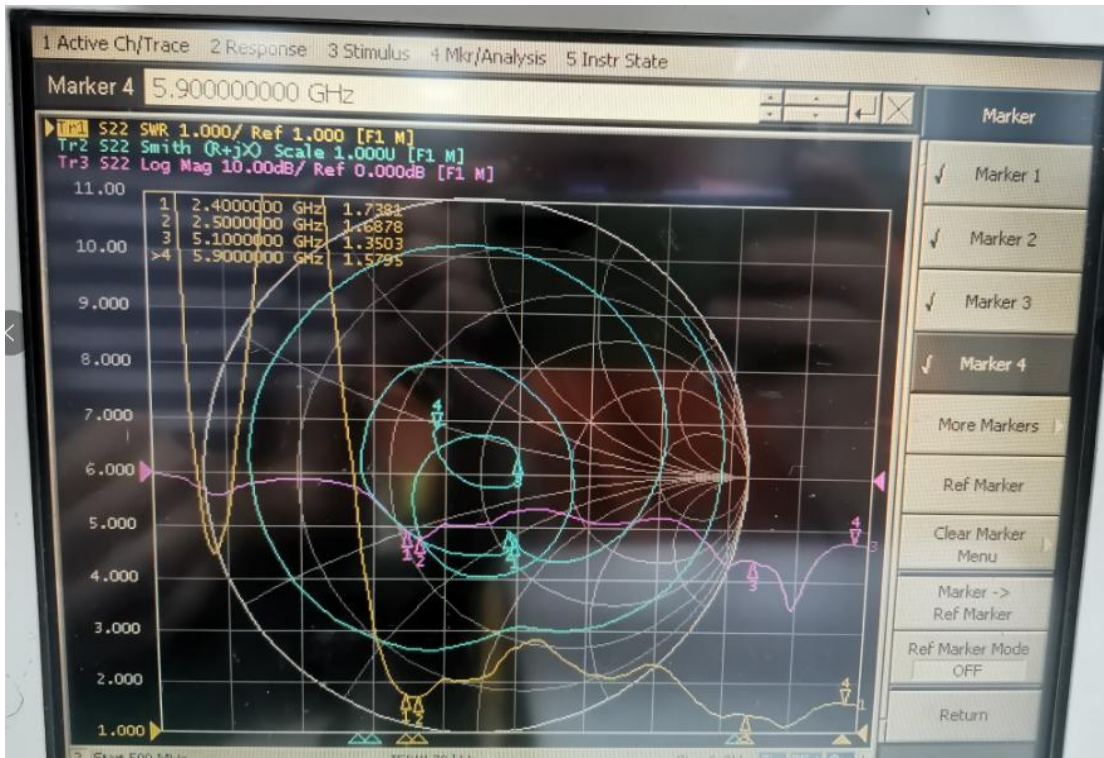


Passive performance figure

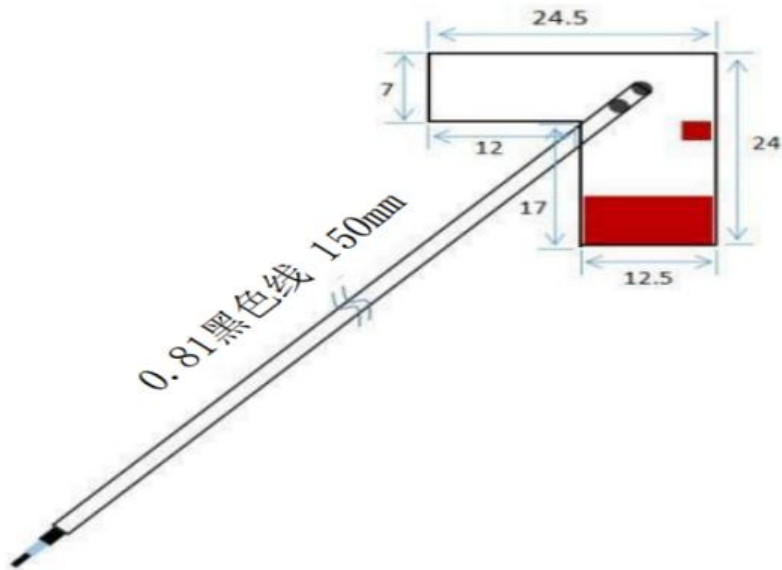
Frequency(MHZ)	2400~2500	5150~5850
VSWR	<3.5	<3.5

VSWR Test

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



Antenna position picture



Antenna Max. Peak Gain

WIFI-2.4G:1.88dBi

WIFI-5.8G:3.58dBi

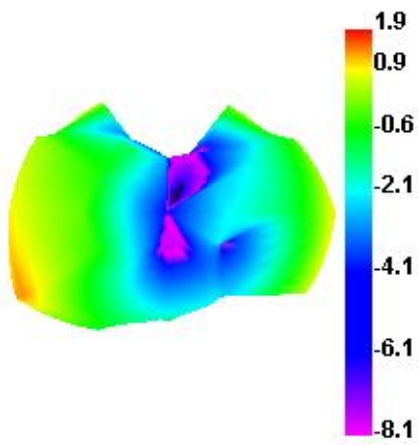
Passive Test For WIFI2.4										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)
2400	56.22	-2.5	1.88	-0.27	25.636	30.579	1.88	-12.9	4.38	0
2410	57.69	-2.39	1.78	-0.37	26.927	30.763	1.78	-12.66	4.17	0
2420	57.62	-2.39	1.56	-0.59	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)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (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°

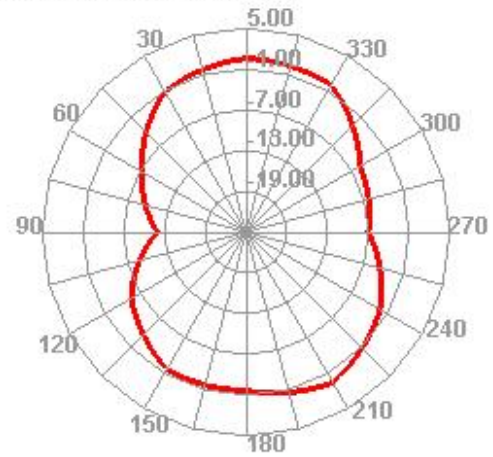
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5570	63.44	-1.98	4.41	2.26	50.681	12.759	4.41	-19.29	6.39	30
5580	64.29	-1.92	4.4	2.25	51.214	13.08	4.4	-20.87	6.32	30
5590	64.82	-1.88	4.52	2.37	51.583	13.238	4.52	-20.79	6.41	30
5600	65.68	-1.83	4.68	2.53	52.218	13.46	4.68	-23.2	6.5	30
5610	64.57	-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

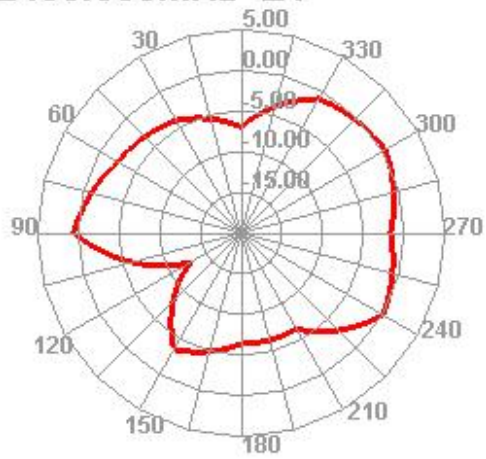
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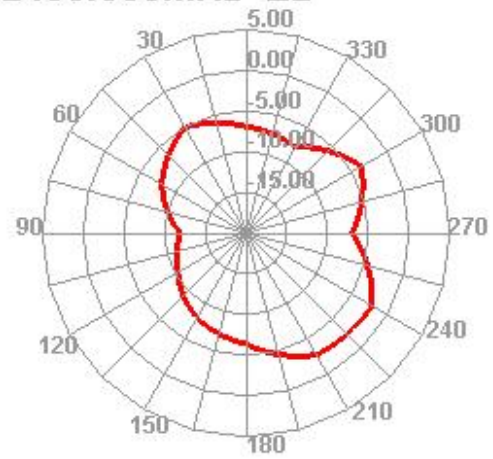
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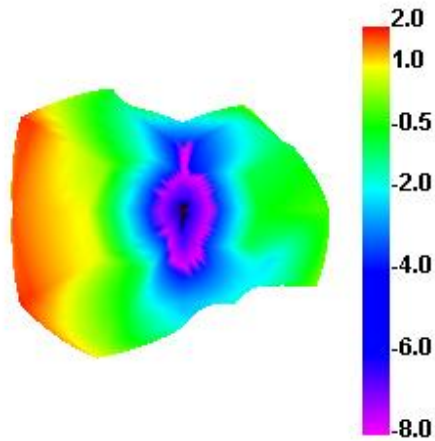
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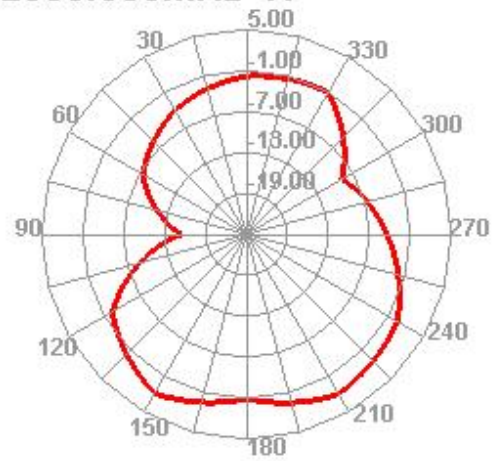
2400.000MHz E2



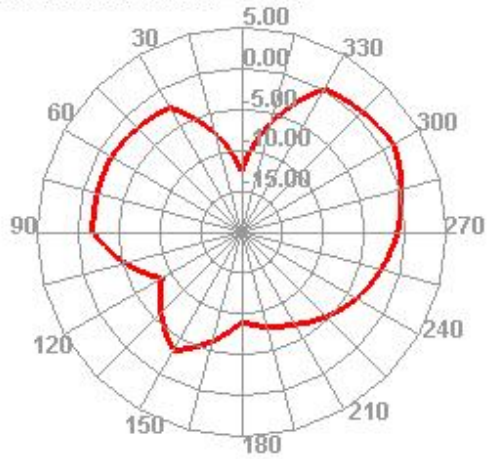
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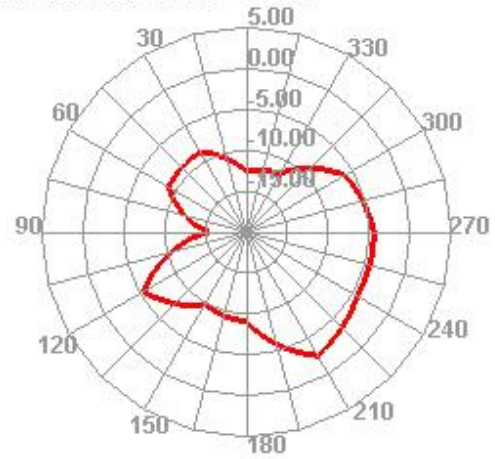
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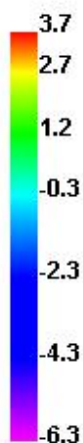
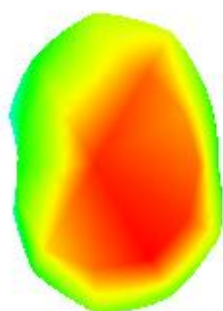
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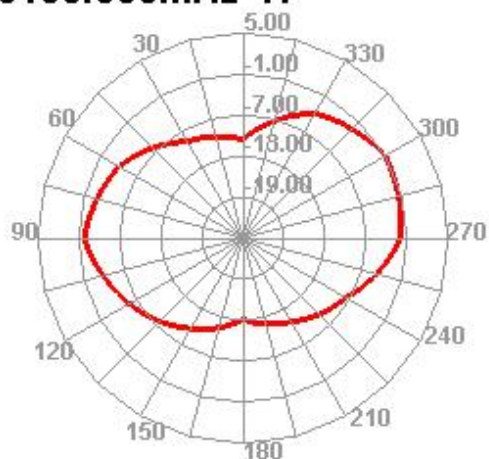
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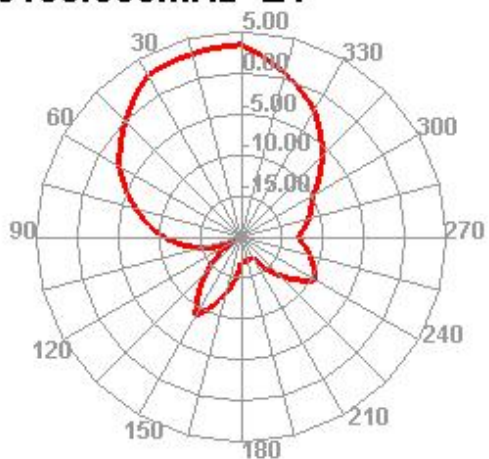
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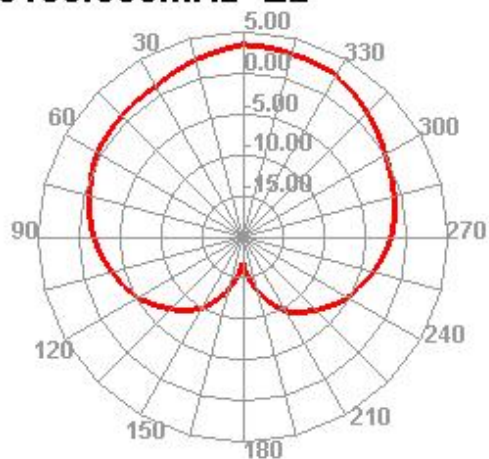
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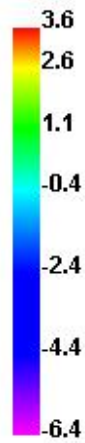
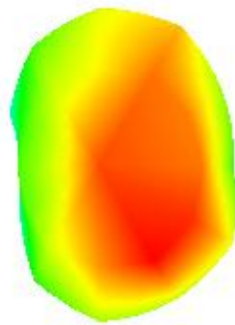
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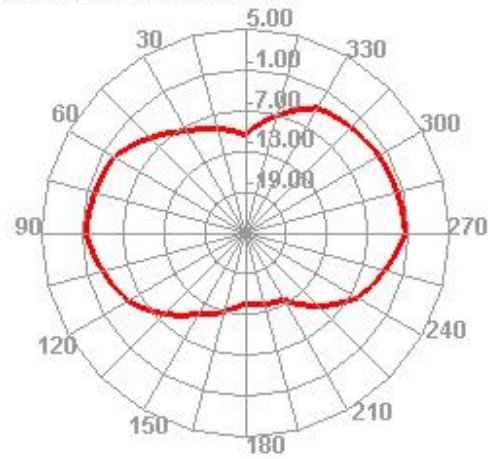
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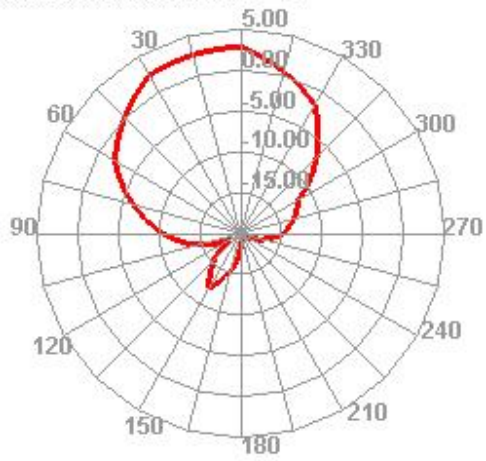
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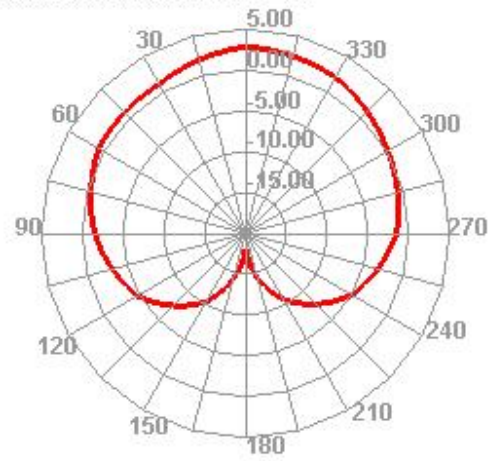
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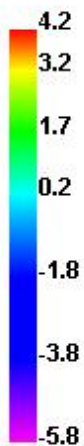
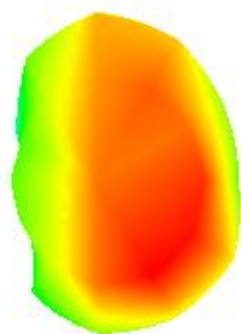
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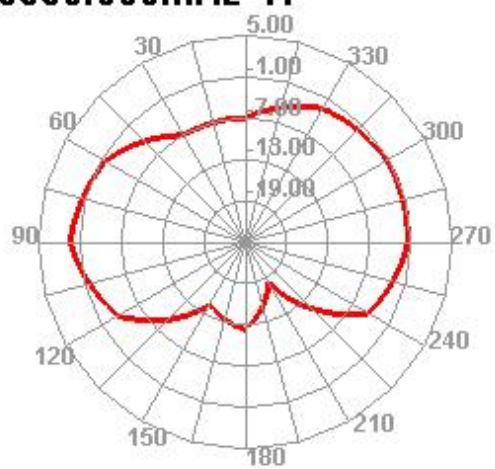
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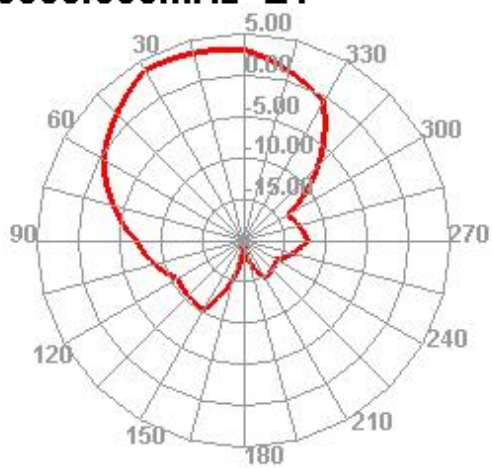
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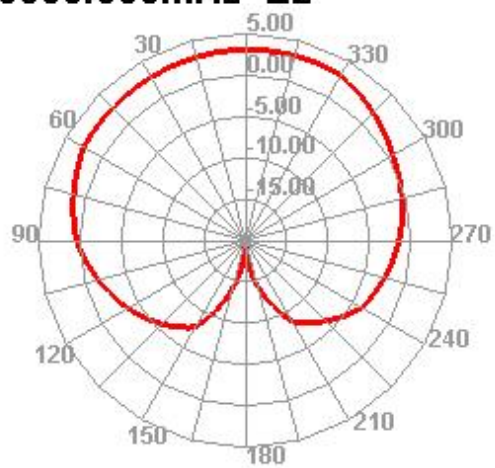
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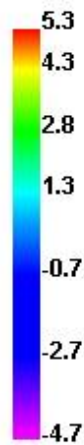
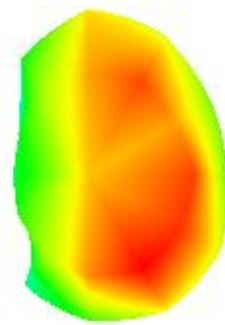
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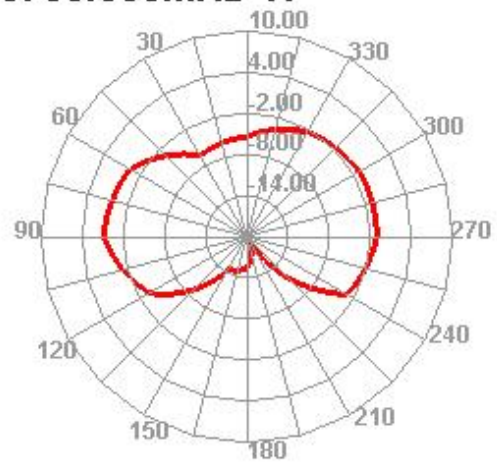
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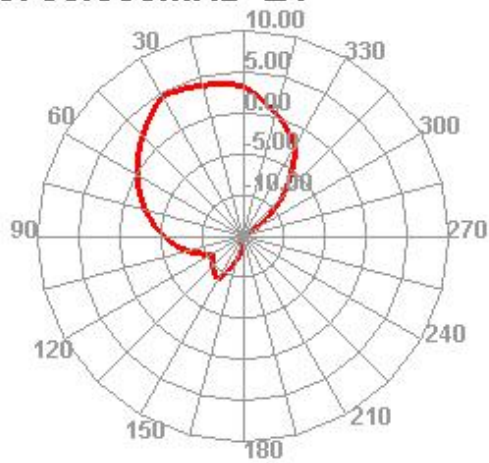
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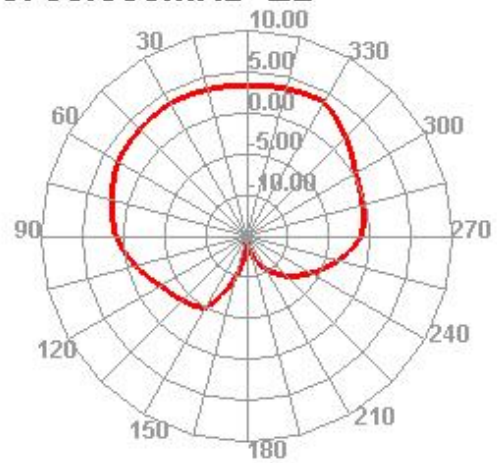
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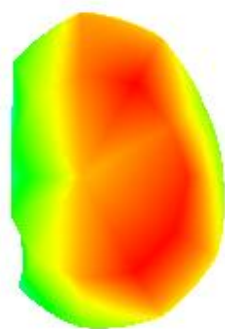
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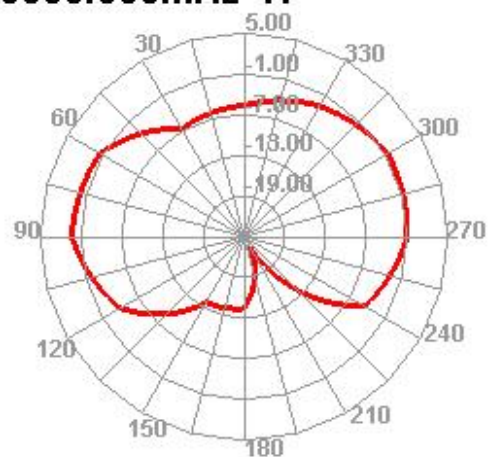
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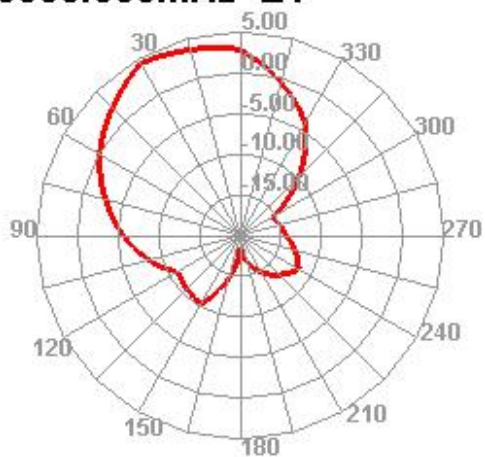
5850.000MHz



5850.000MHz H



5850.000MHz E1



5850.000MHz E2

