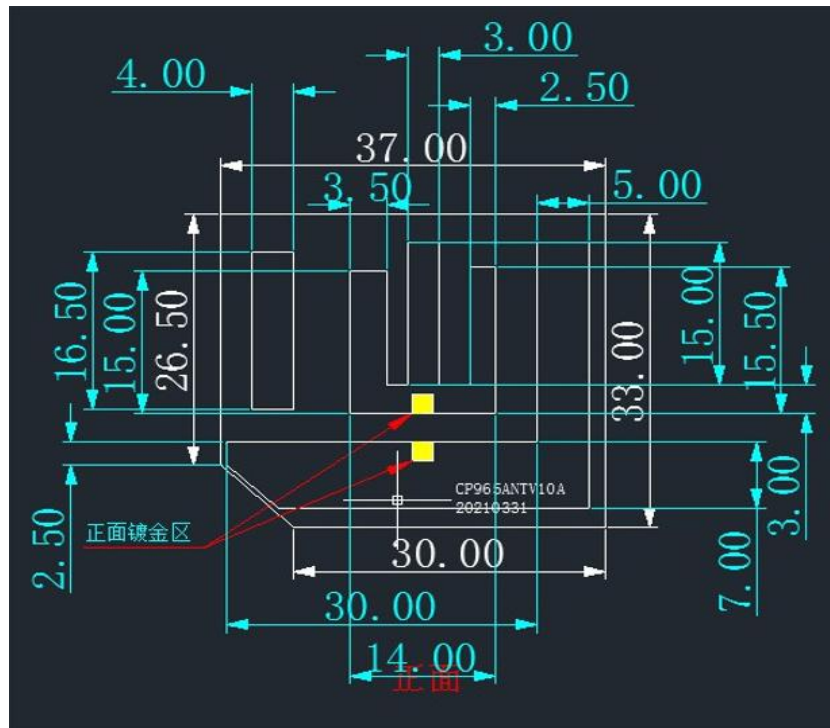


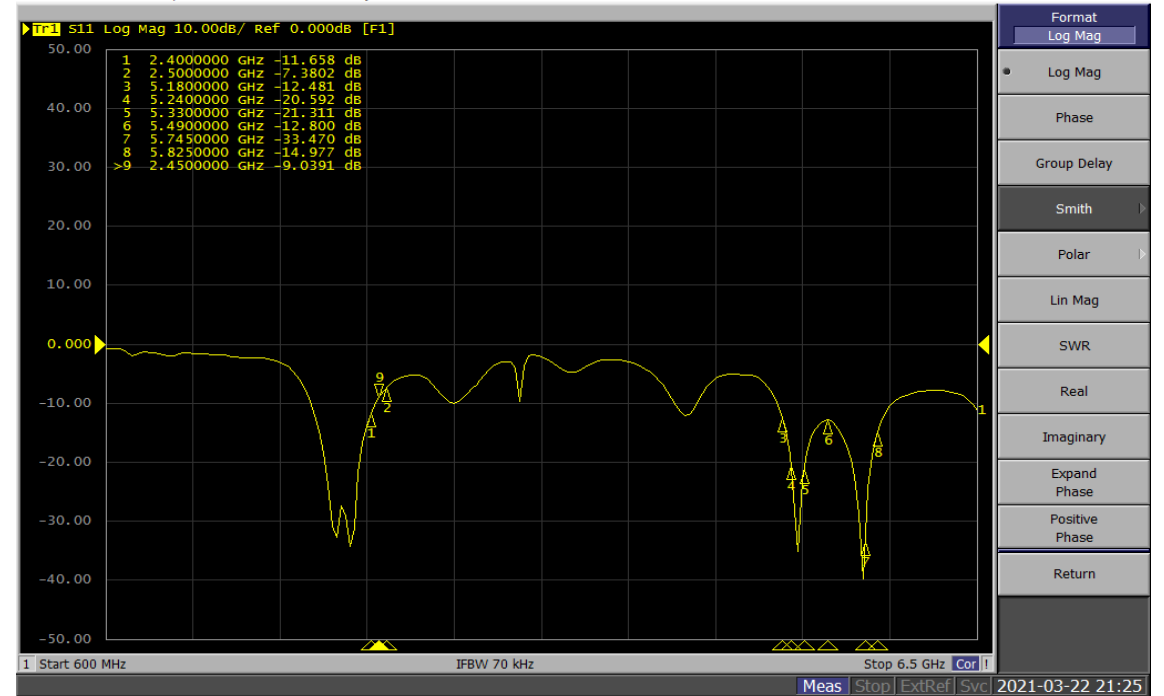
Antenna 1 (FPC) Specifications

1、S11



E5071C Network Analyzer

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

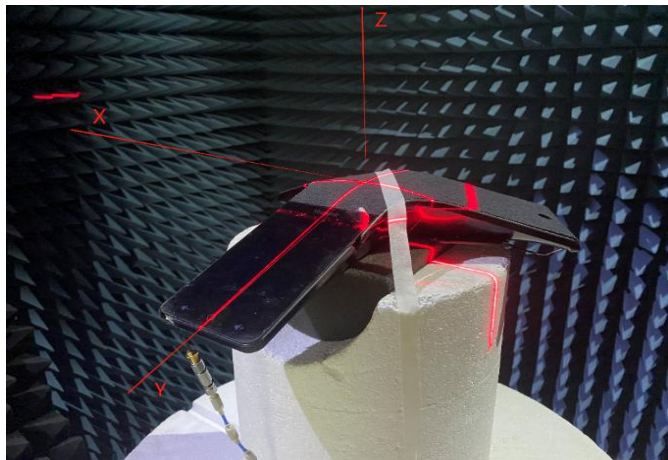


2、OTA

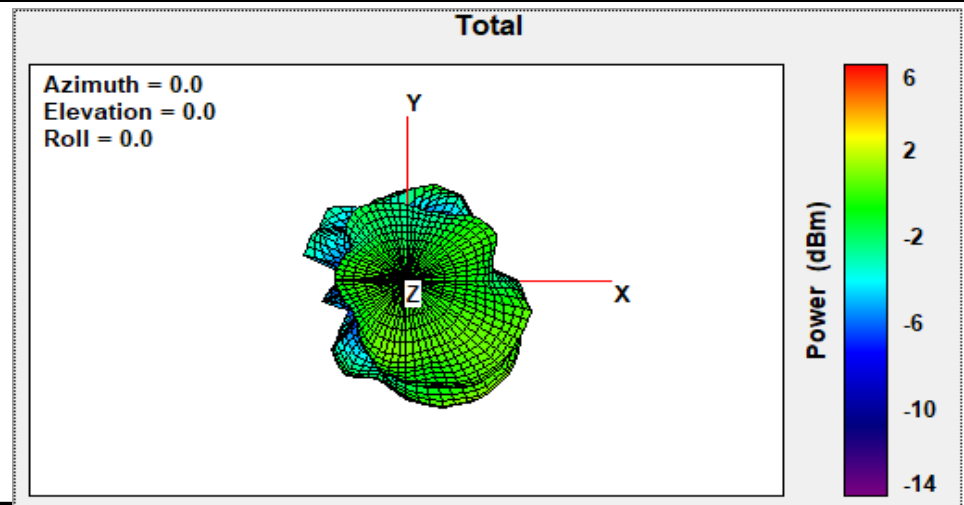
	2.400G	2.405G	2.410G	2.415G	2.420G	2.425G	2.430G	2.435G	2.440G	2.445G	2.450G	2.455G	2.460G	2.465G	2.470G	2.475G	2.480G	Ave
Efficiency	69.71		68.56		69.52		67.29		65.34		61.42		59.17		58.66		58.16	64.20
Max gain	3.09		3.24		3.16		3.30		3.18		2.69		2.53		3.29		2.96	3.05
Ave gain	-1.57		-1.64		-1.58		-1.72		-1.85		-2.12		-2.28		-2.32		-2.35	-1.94

Physical layout (with coordinate axis)

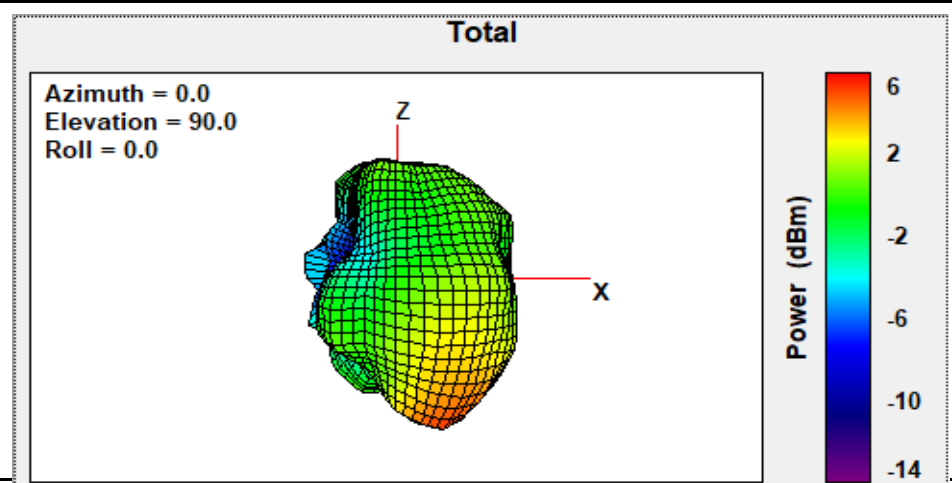
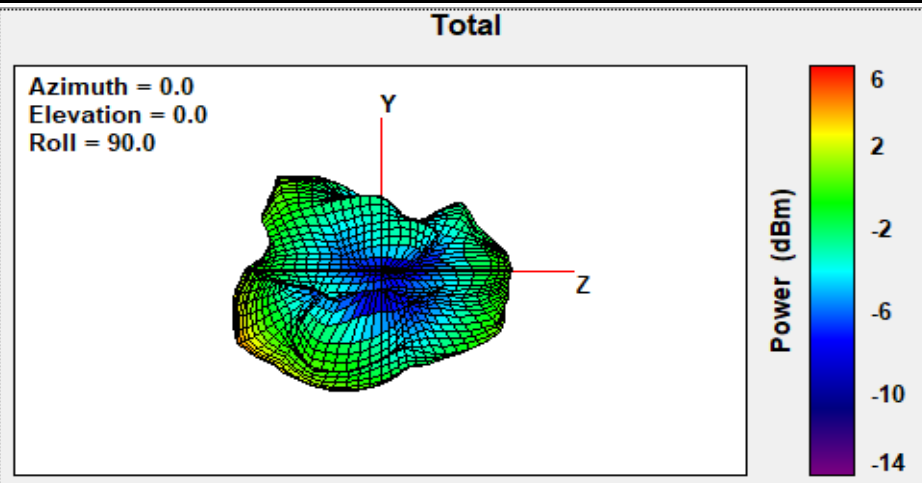
2.44GHz X-Y View

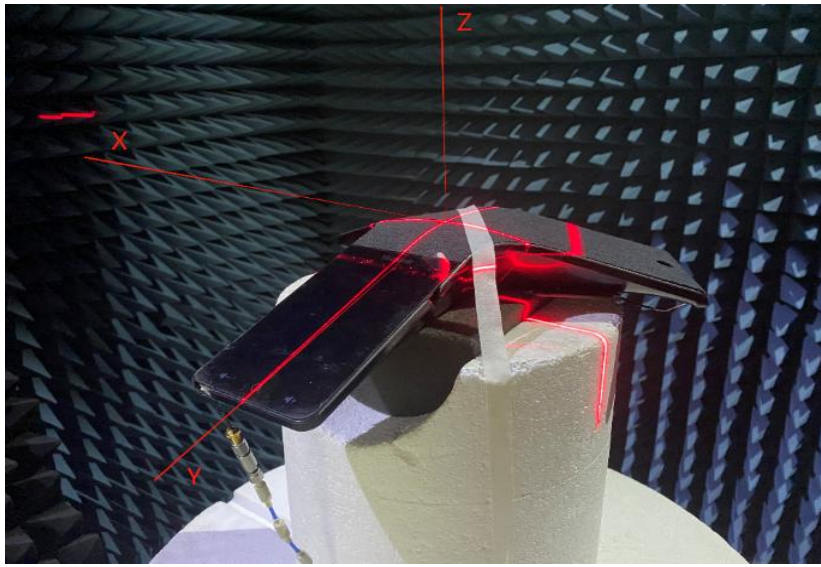


2.44GHz Y-Z View

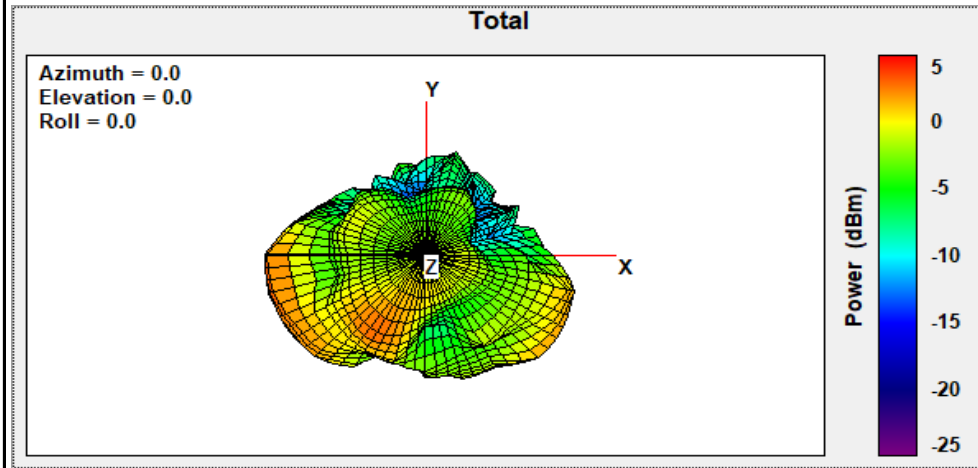


2.44GHz X-Z View

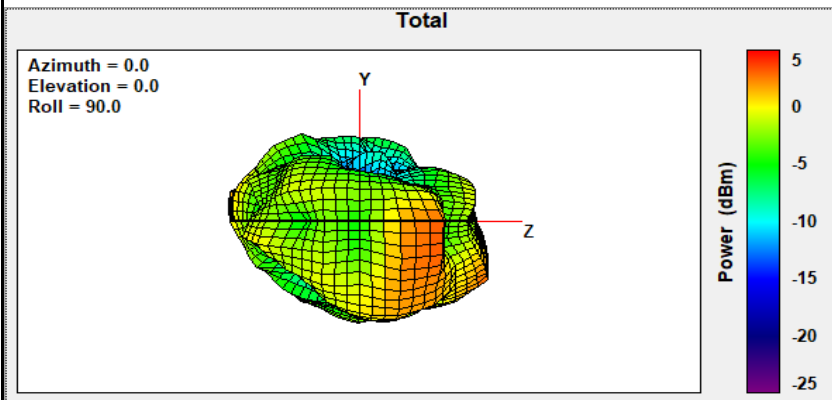




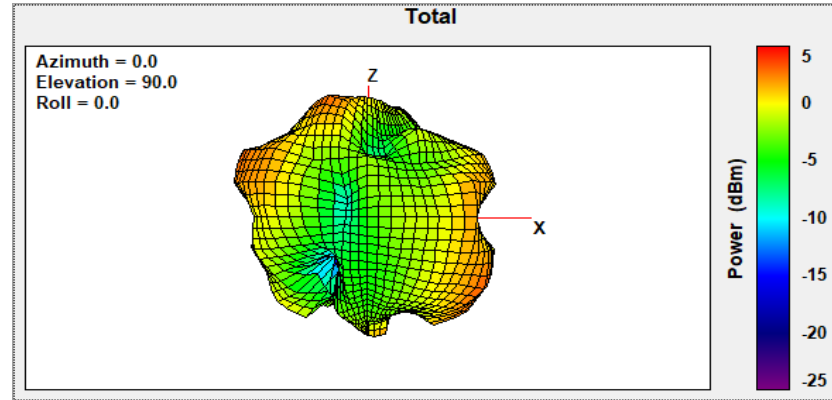
Band1-5.200GHz Y-Z View



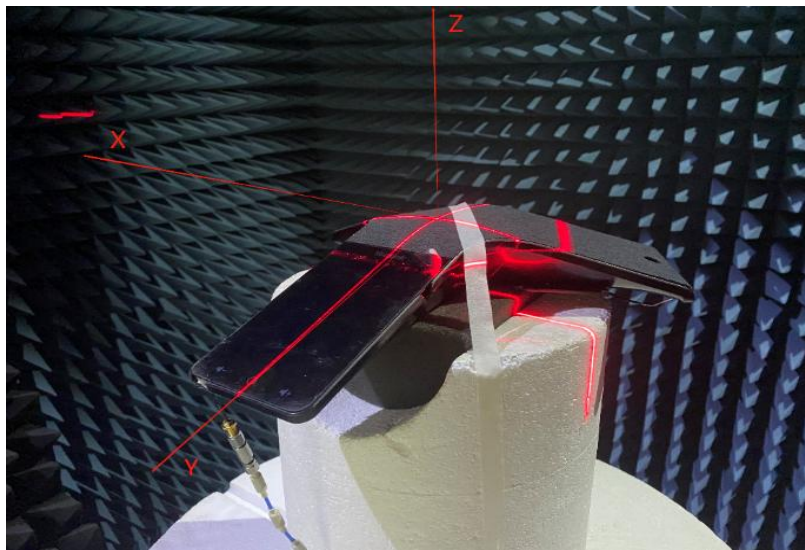
Band1-5.200GHz X-Z View



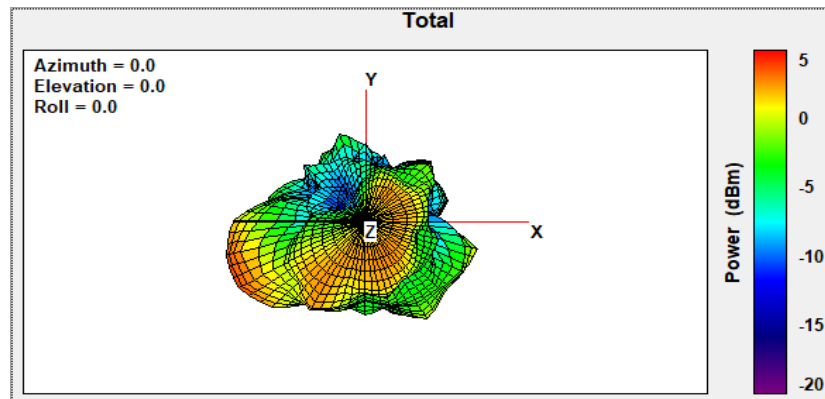
Physical layout (with coordinate axis)



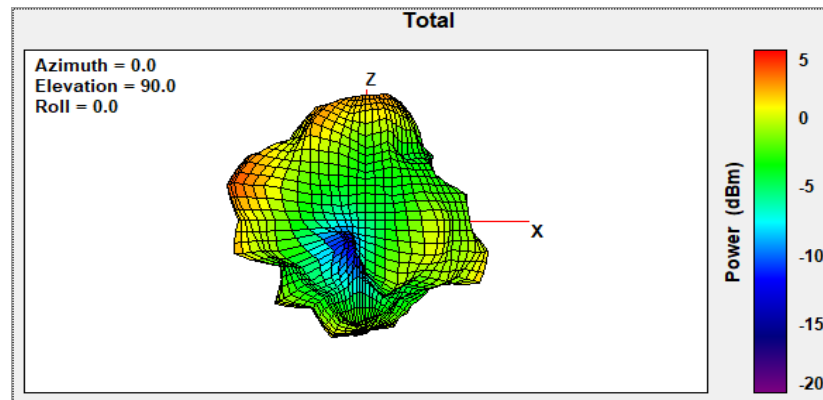
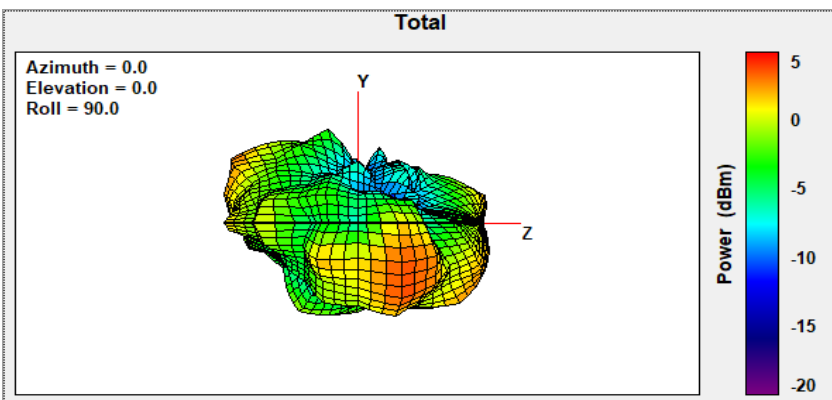
Band4-5.800GHz X-Y View



Band4-5.800GHz Y-Z View



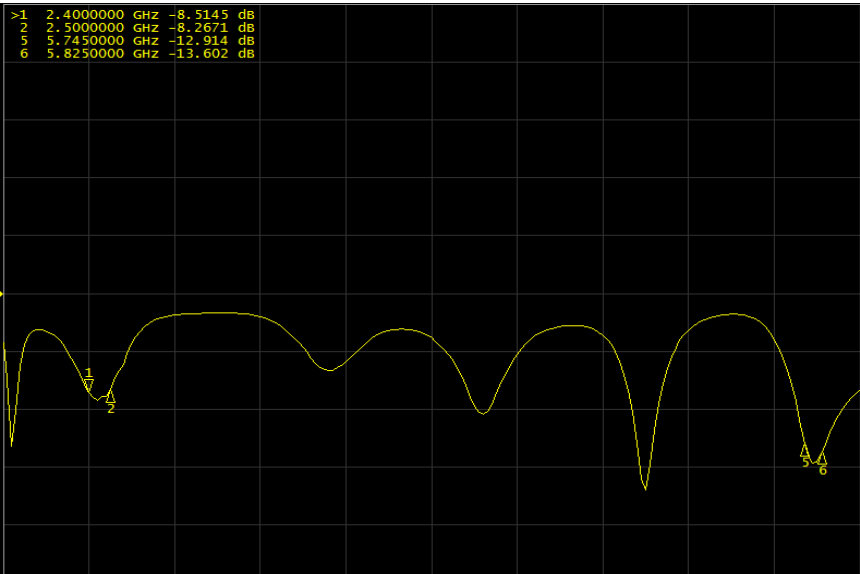
Band4-5.800GHz X-Z View



Antenna 2 (Iron) Specifications

ANT1

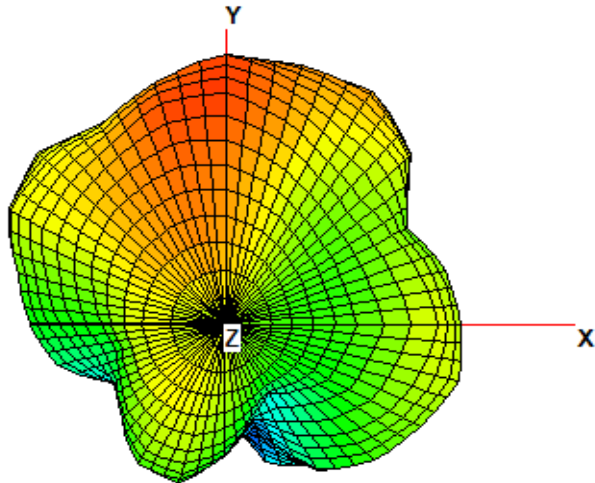
1、S11



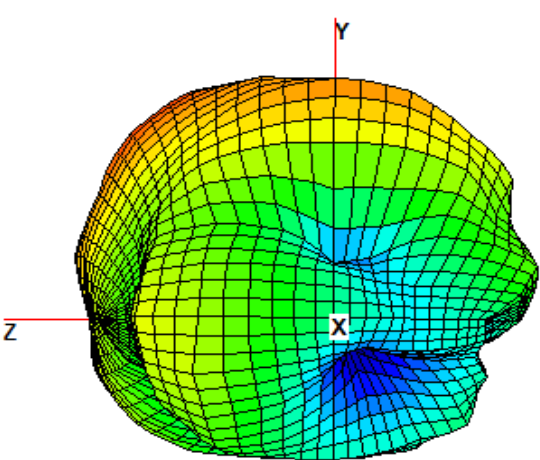
2、OTA

	2.400G	2.405G	2.410G	2.415G	2.420G	2.425G	2.430G	2.435G	2.440G	2.445G	2.450G	2.455G	2.460G	2.465G	2.470G	2.475G	2.480G	Ave
efficiency	57.43	55.66	53.85	53.02	52.21	51.76	49.91	48.22	47.34	45.67	44.31	43.25	42.18	41.57	41.26	41.28	41.51	47.67
Maximum gain	3.32	3.03	2.82	2.74	2.62	2.67	2.37	2.13	2.08	1.86	1.94	1.90	1.82	1.94	1.87	1.98	2.06	2.30
Average Gain	-2.41	-2.54	-2.69	-2.76	-2.82	-2.86	-3.02	-3.17	-3.25	-3.40	-3.53	-3.64	-3.75	-3.81	-3.84	-3.84	-3.82	-3.24

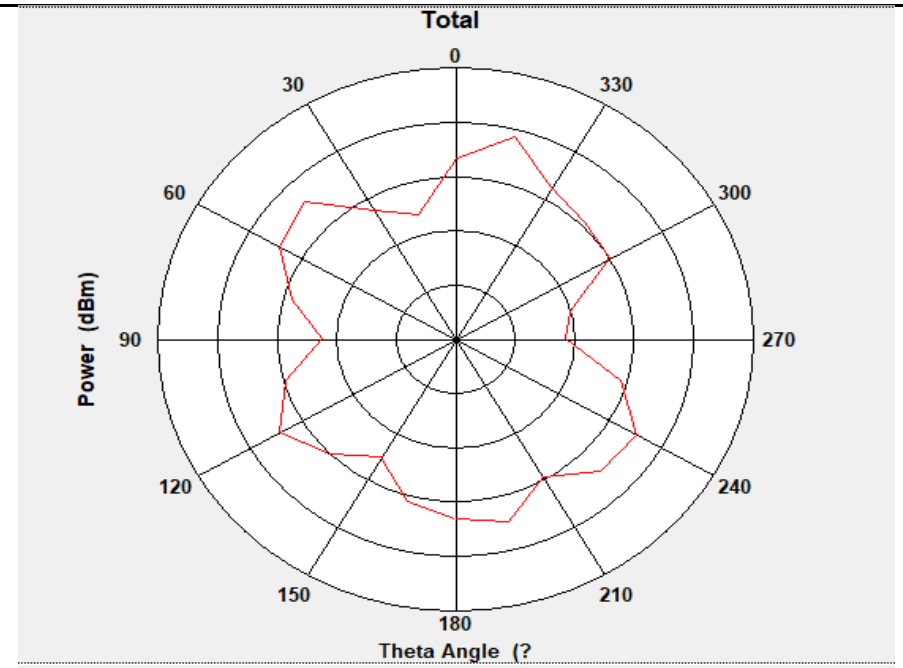
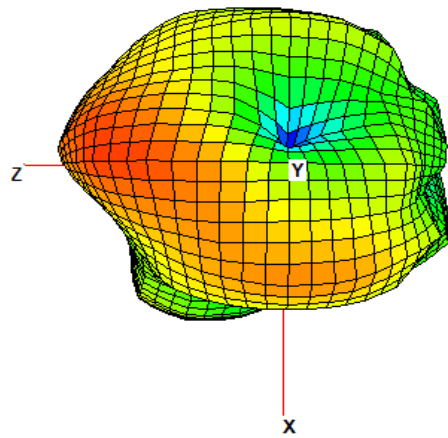
2.44GHz X-Y plane View



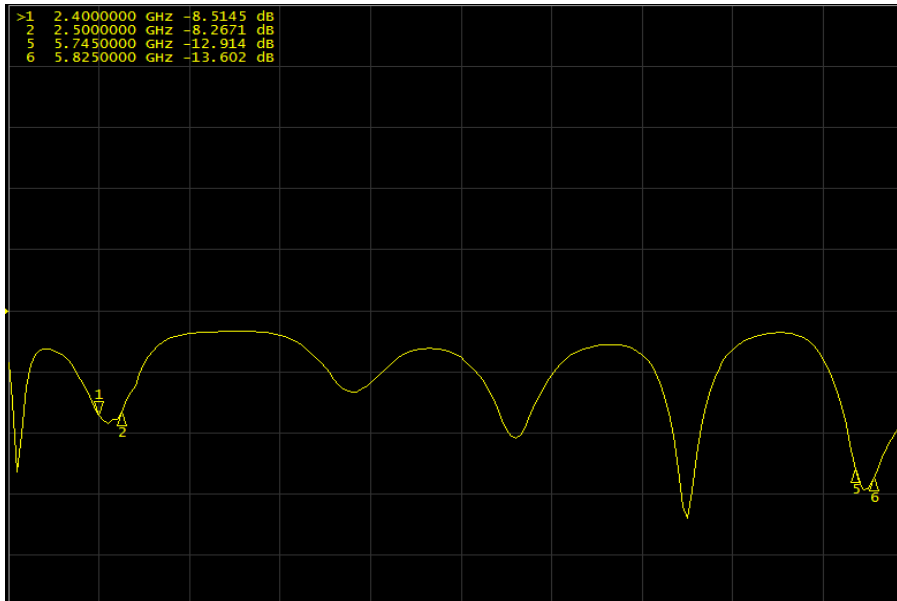
2.44GHz Y-Z plane View



2.44GHz X-Z plane View

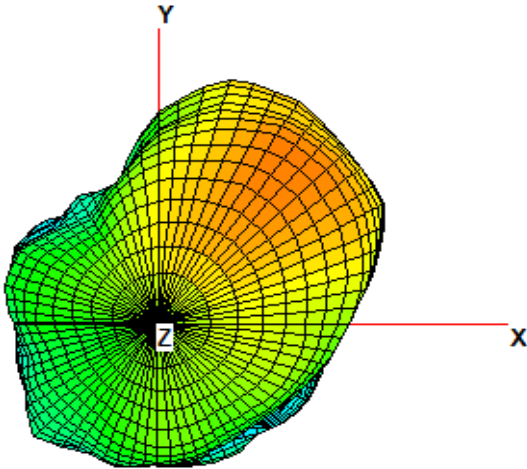


1、S11

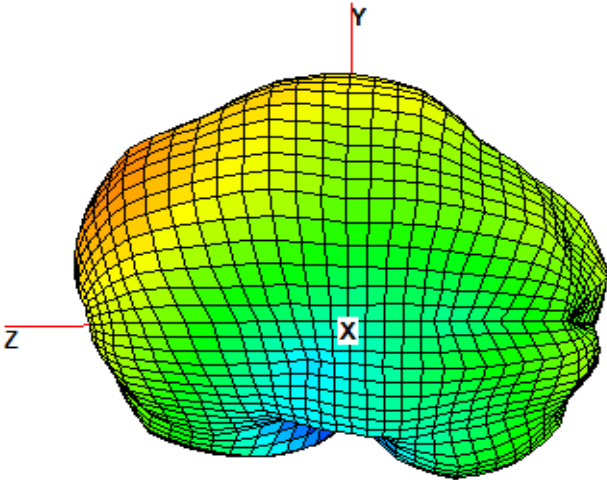


2、OTA																
	5.150G	5.200G	5.250G	5.300G	5.350G	5.400G	5.450G	5.500G	5.550G	5.600G	5.650G	5.700G	5.750G	5.800G	5.850G	Ave
efficiency	46.91	37.64	32.56	28.92	25.33	24.42	23.15	23.01	25.13	28.75	36.13	46.48	54.00	57.43	47.29	35.81
Maximum gain	4.18	3.17	2.57	1.99	1.56	1.26	1.00	1.07	1.41	1.60	2.30	2.41	2.61	3.12	3.05	2.22
Average Gain	-3.29	-4.24	-4.87	-5.39	-5.96	-6.12	-6.35	-6.38	-6.00	-5.41	-4.42	-3.33	-2.68	-2.41	-3.25	-4.67

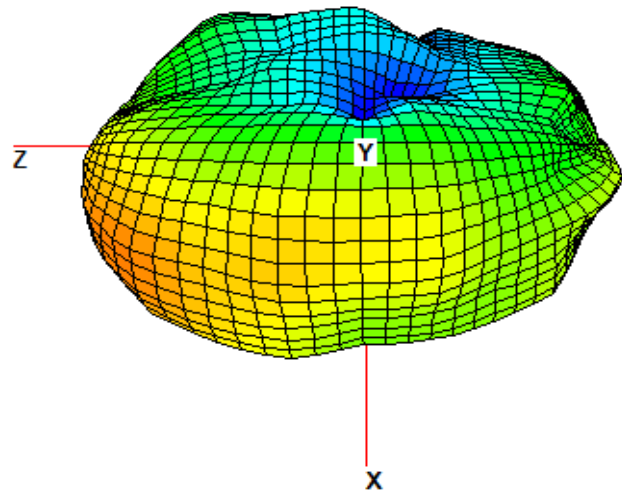
Band1-5.200GHz X-Y plane View



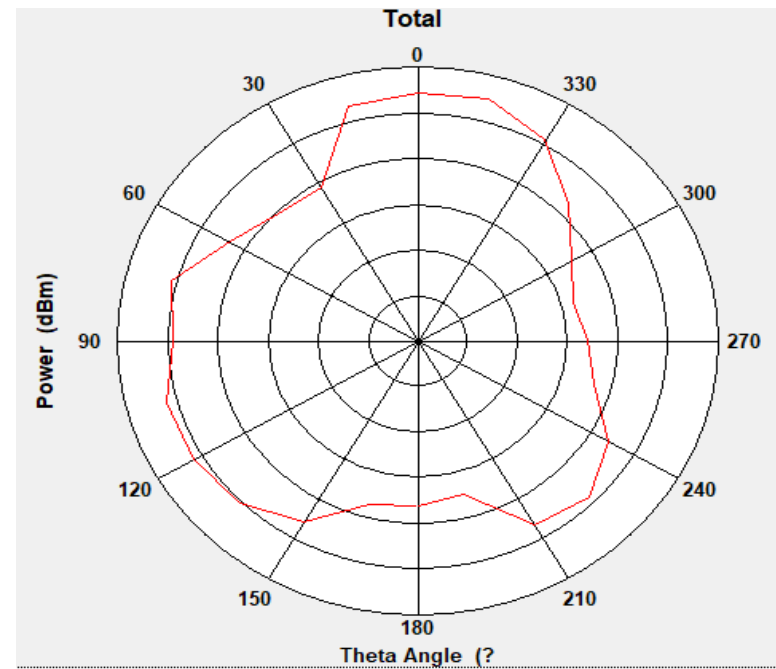
Band1-5.200GHz Y-Z plane View



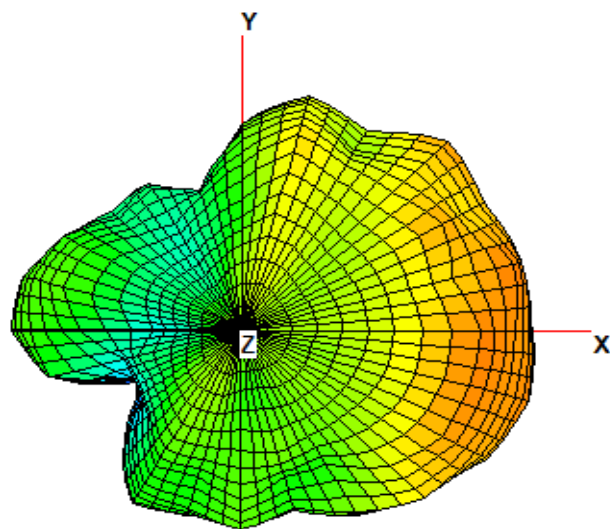
Band1-5.200GHz X-Z plane View



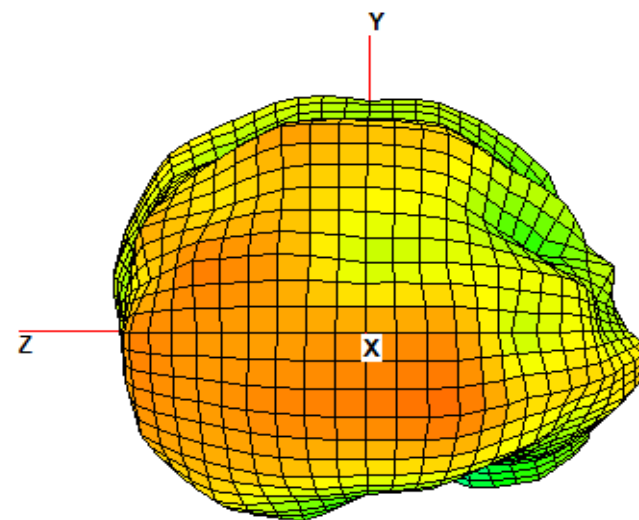
Band4-5.800GHz X-Y plane View

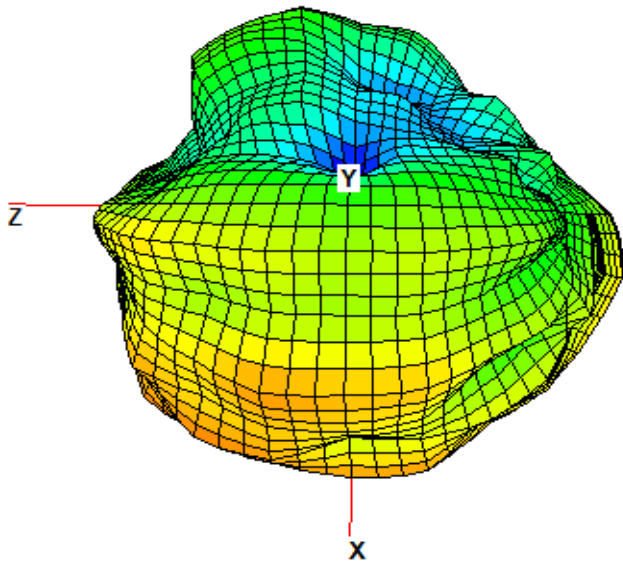


Band4-5.800GHz Y-Z plane View

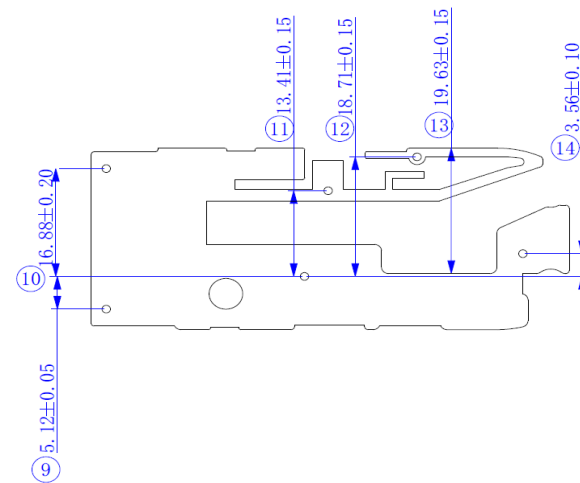
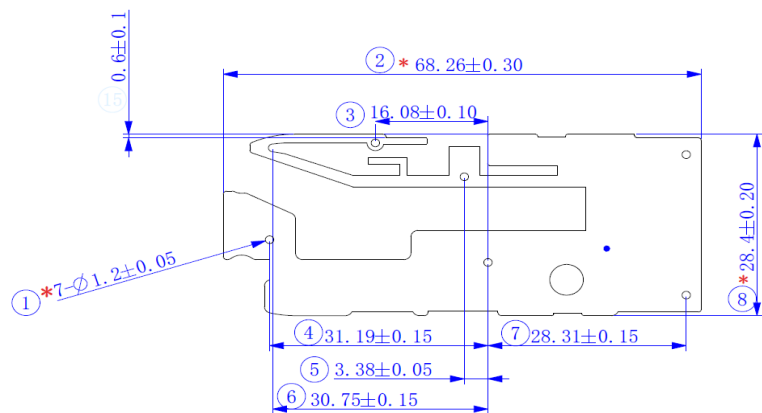


Band4-5.800GHz X-Z plane View



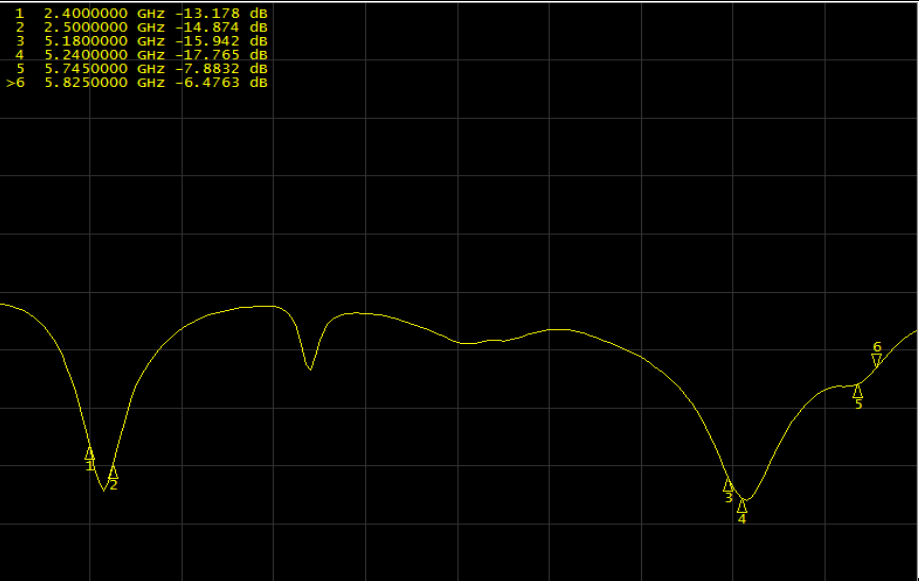


1:2



ANT 2

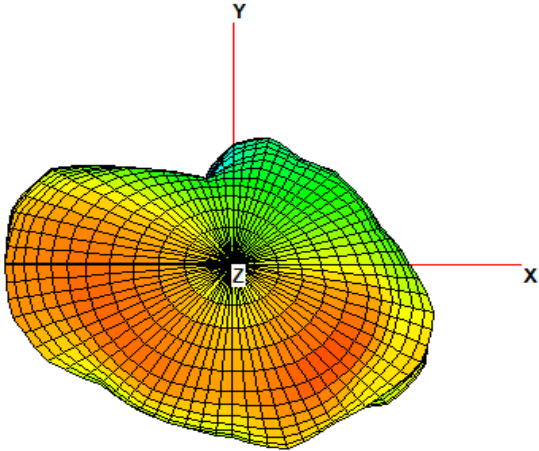
1、S11



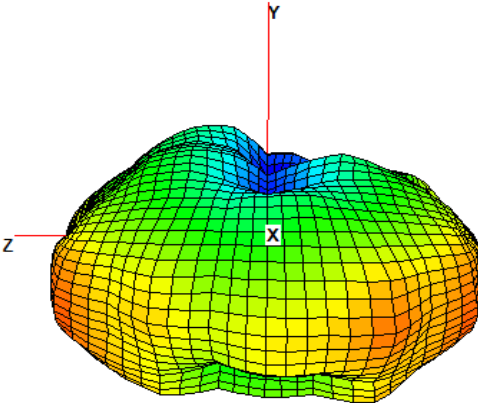
2、OTA

	2.400G	2.405G	2.410G	2.415G	2.420G	2.425G	2.430G	2.435G	2.440G	2.445G	2.450G	2.455G	2.460G	2.465G	2.470G	2.475G	2.480G	Ave
efficiency	55.49	56.50	56.45	58.10	58.94	58.46	59.14	58.53	59.20	59.29	57.58	57.66	57.66	57.94	58.25	57.80	57.80	57.93
Maximum gain	1.06	1.16	1.15	1.25	1.53	1.44	1.53	1.46	1.37	1.48	1.17	1.23	1.18	1.10	1.15	1.10	1.10	1.26
Average Gain	-2.56	-2.67	-2.69	-2.69	-2.68	-2.71	-2.80	-2.82	-2.87	-2.92	-3.01	-3.17	-3.26	-3.34	-3.34	-3.29	-3.28	-2.95

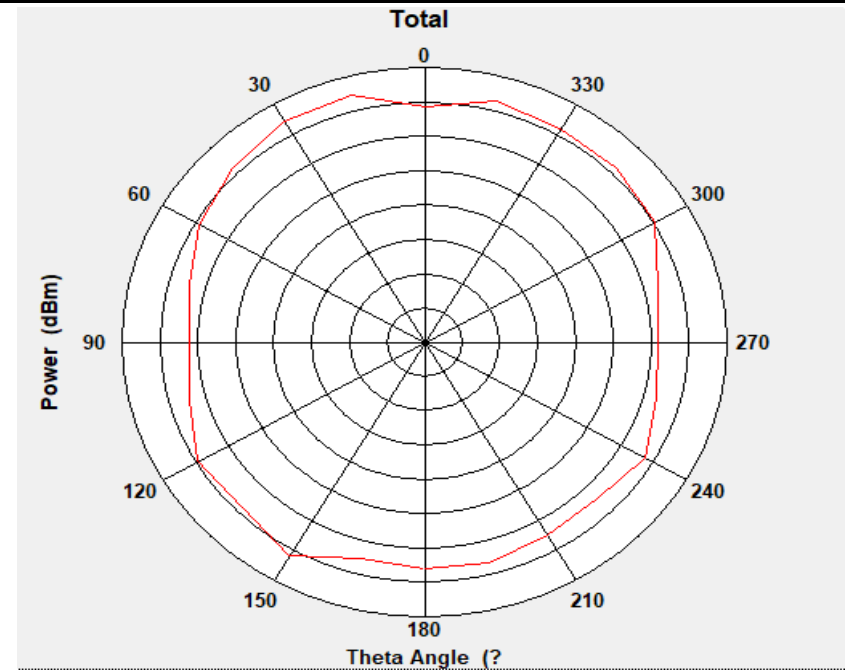
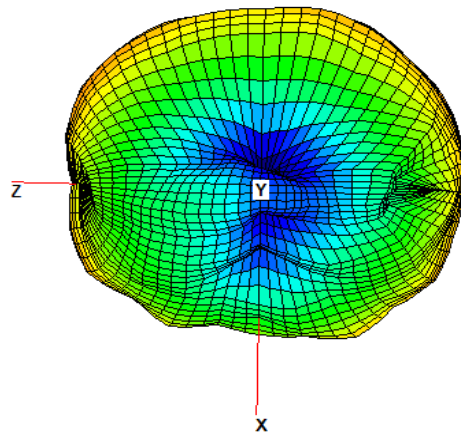
2.44GHz X-Y plane View



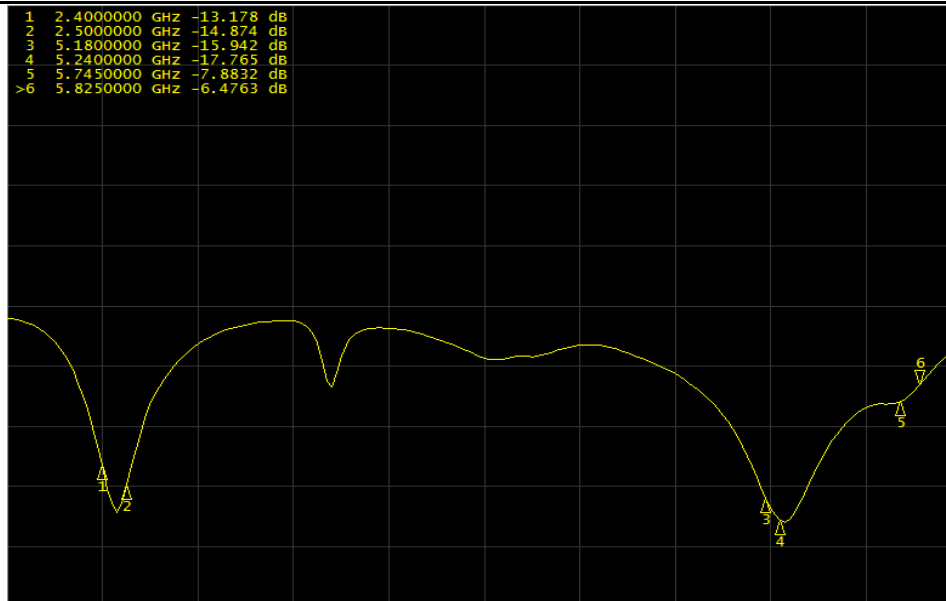
2.44GHz Y-Z plane View



2.44GHz X-Z plane View



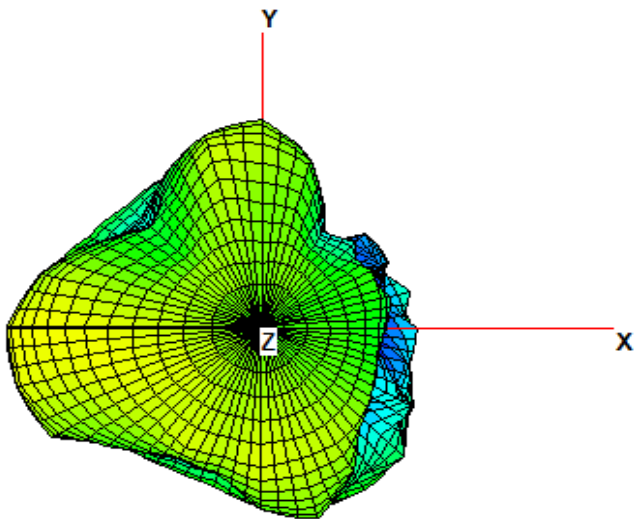
1、S11



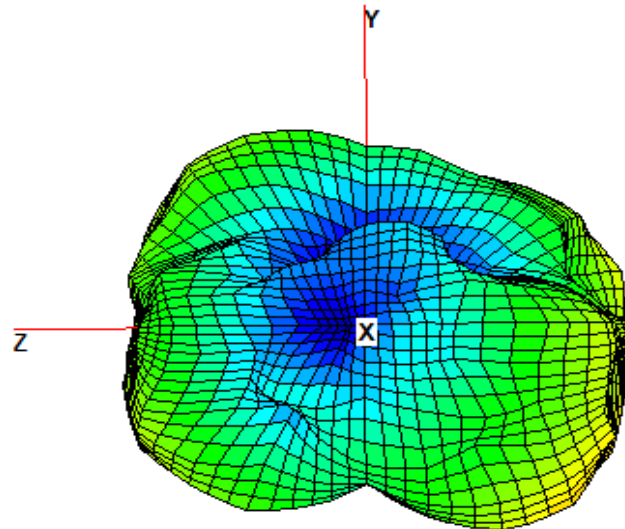
2. OTA

	5.150G	5.200G	5.250G	5.300G	5.350G	5.400G	5.450G	5.500G	5.550G	5.600G	5.650G	5.700G	5.750G	5.800G	5.850G	Ave
efficiency	50.70	49.34	52.17	55.36	55.57	56.78	57.20	55.25	56.76	56.09	58.46	58.52	56.38	56.33	51.05	55.064
Maximum gain	2.50	2.35	2.80	3.03	3.00	2.89	2.51	2.33	2.13	2.23	2.44	2.37	2.12	2.60	2.06	2.49
Average Gain	-2.95	-3.07	-2.83	-2.57	-2.55	-2.46	-2.43	-2.58	-2.46	-2.51	-2.33	-2.33	-2.49	-2.49	-2.92	-2.60

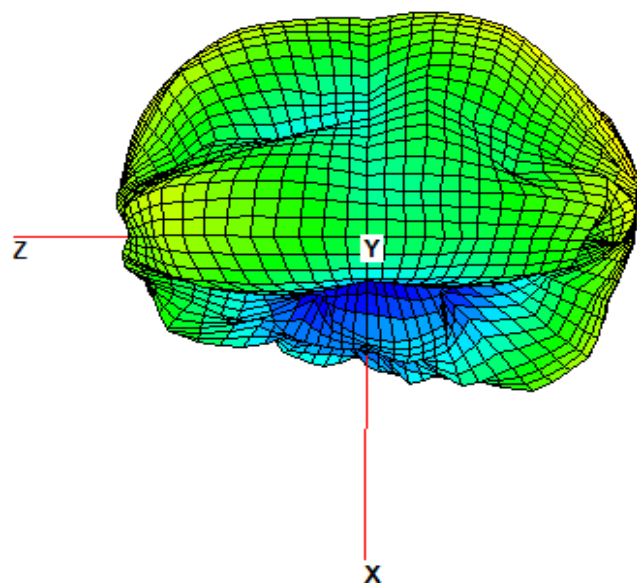
Band1-5.200GHz X-Y plane View



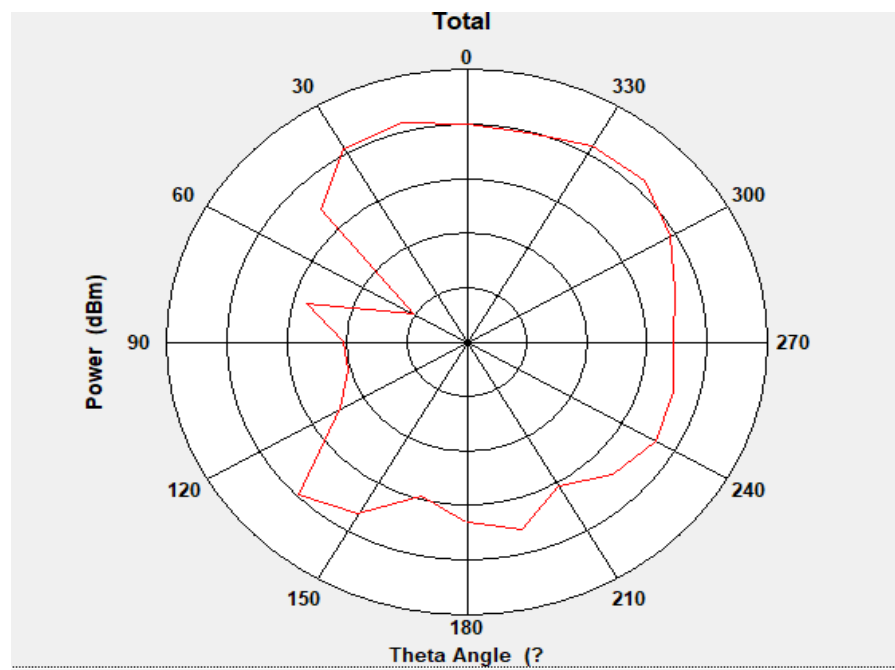
Band1-5.200GHz Y-Z plane View



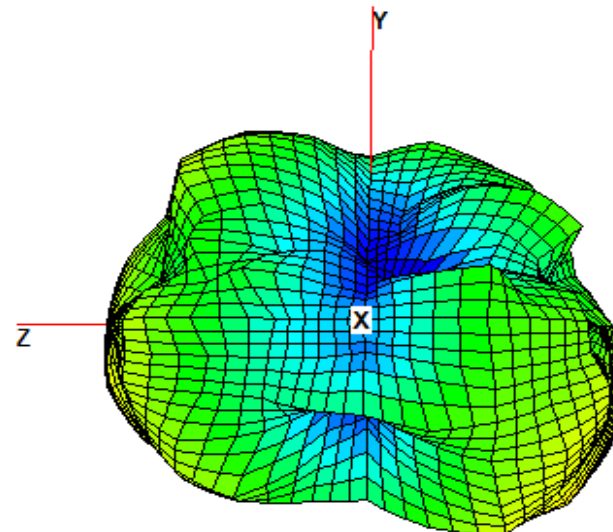
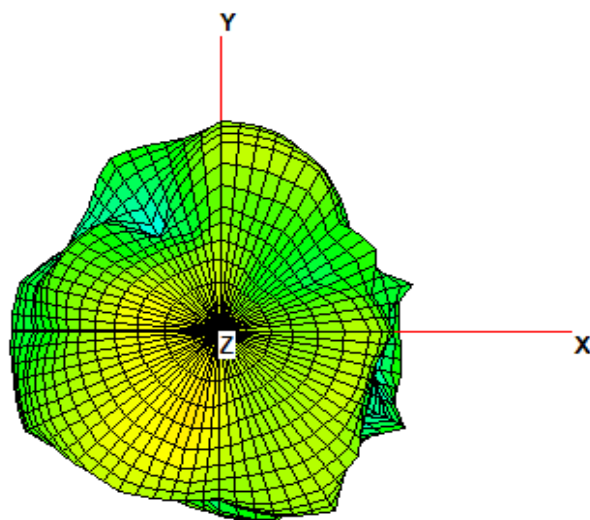
Band1-5.200GHz X-Z plane View



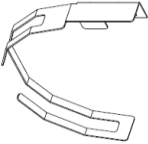
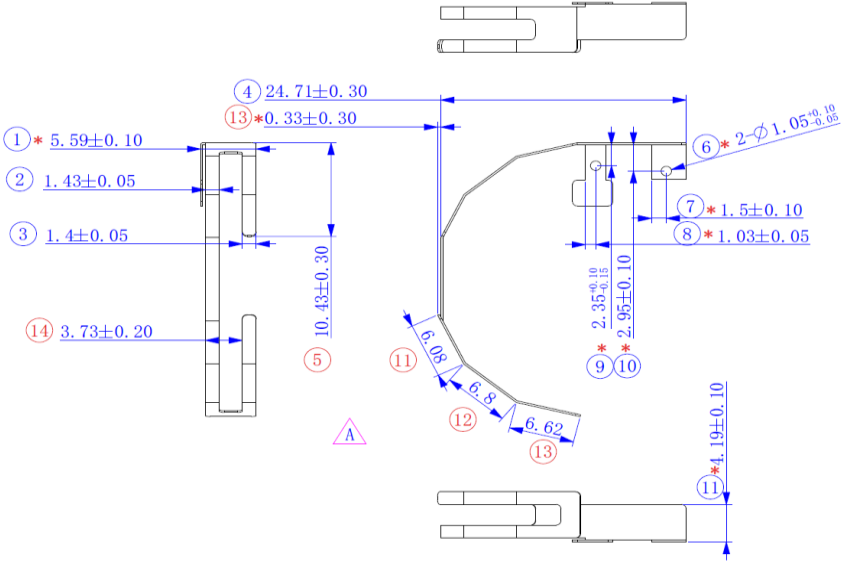
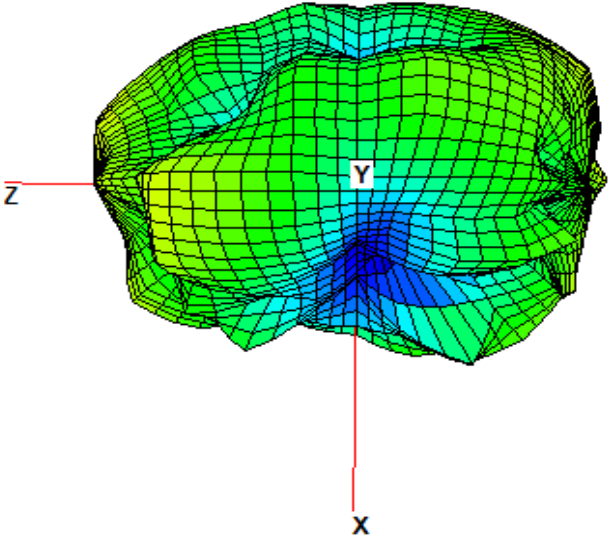
Band4-5.800GHz X-Y plane View



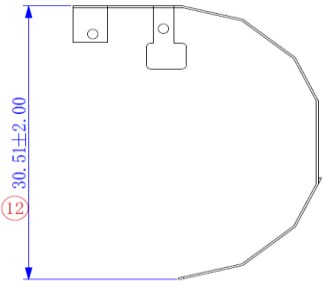
Band4-5.800GHz Y-Z plane View



Band4-5.800GHz X-Z plane View

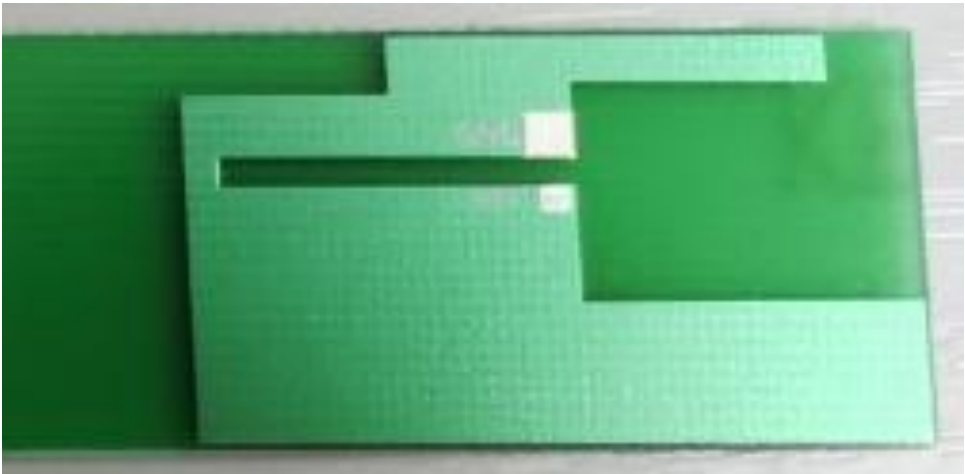


1:1

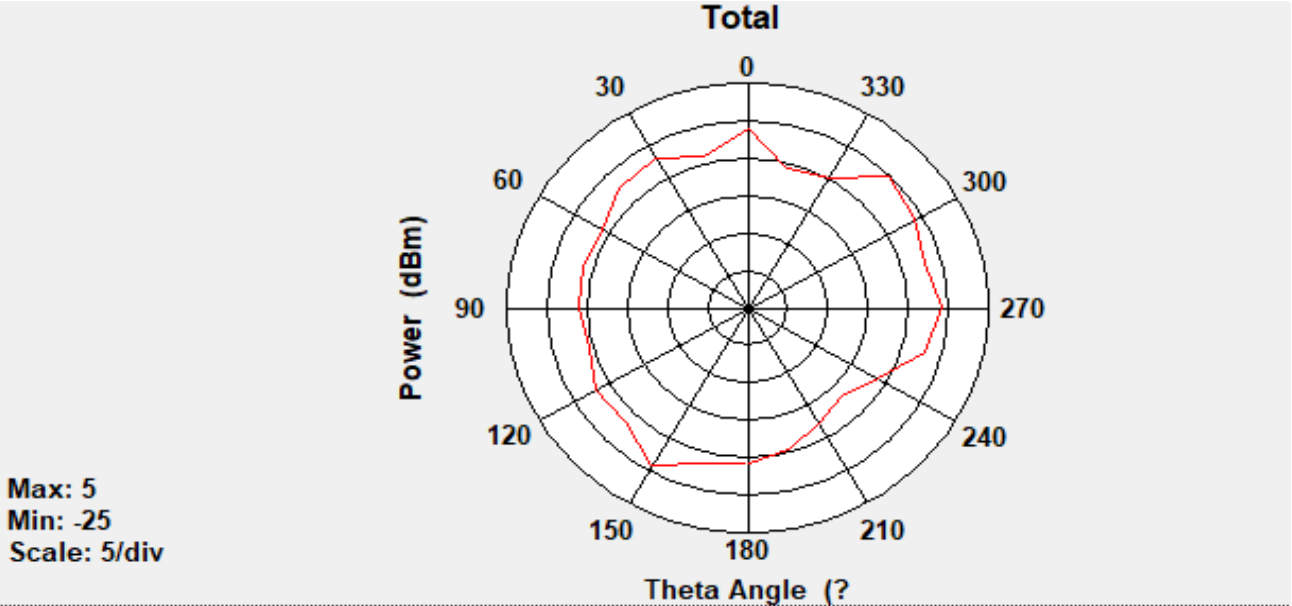


Antenna 3 (PCB) Specifications

ANT 1(BT/BLE/Wi-Fi)



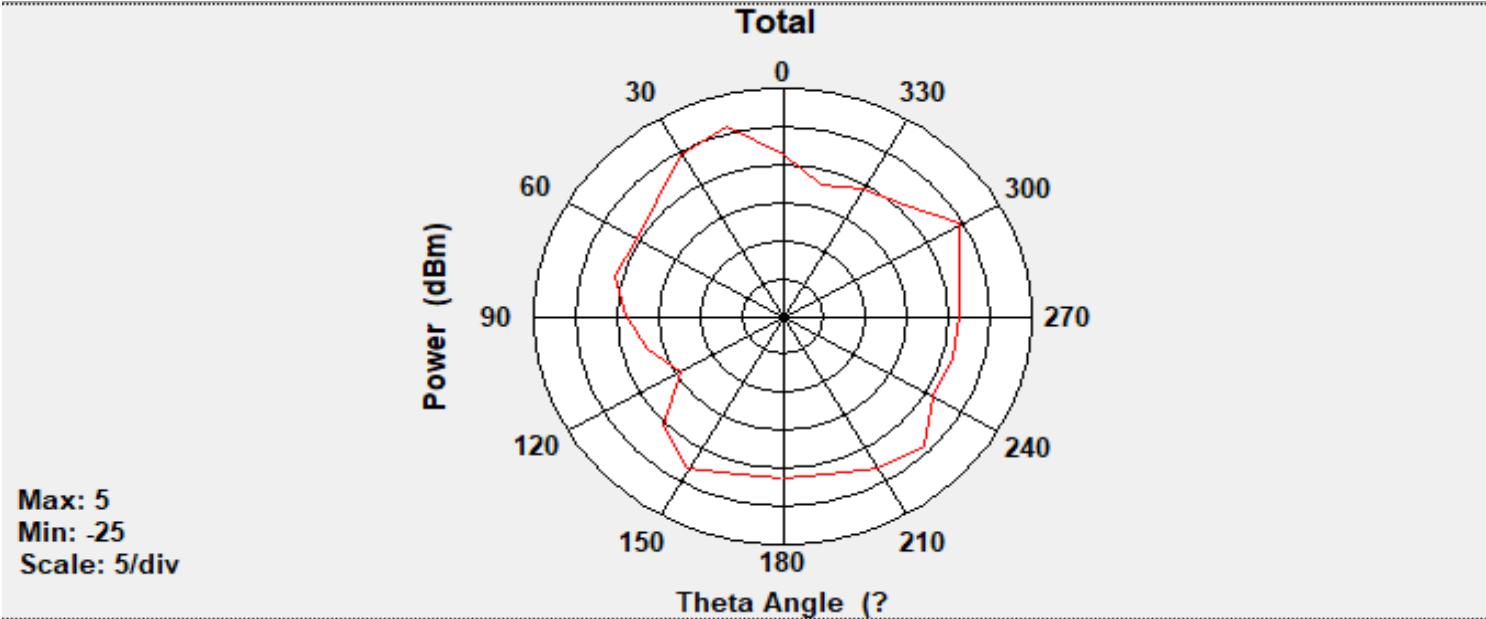
	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485	2490	2495	2500	Ave
efficiency	54.65	55.12	55.40	56.75	57.98	58.62	58.38	57.91	57.89	57.17	56.71	56.29	56.66	57.32	57.73	58.74	59.05	59.72	60.68	60.73	60.97	57.83
Maximum gain	2.41	2.55	2.48	2.45	2.61	2.55	2.59	2.52	2.38	2.46	2.32	2.24	2.25	2.08	2.16	2.22	2.10	2.18	2.14	2.16	2.12	2.33

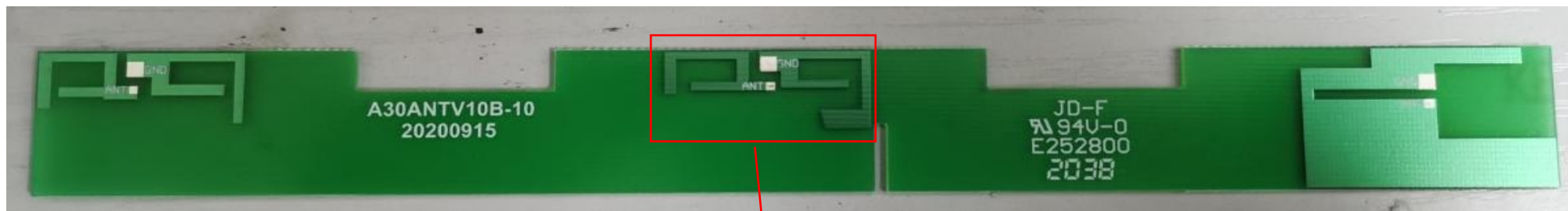


ANT 2(Wi-Fi)



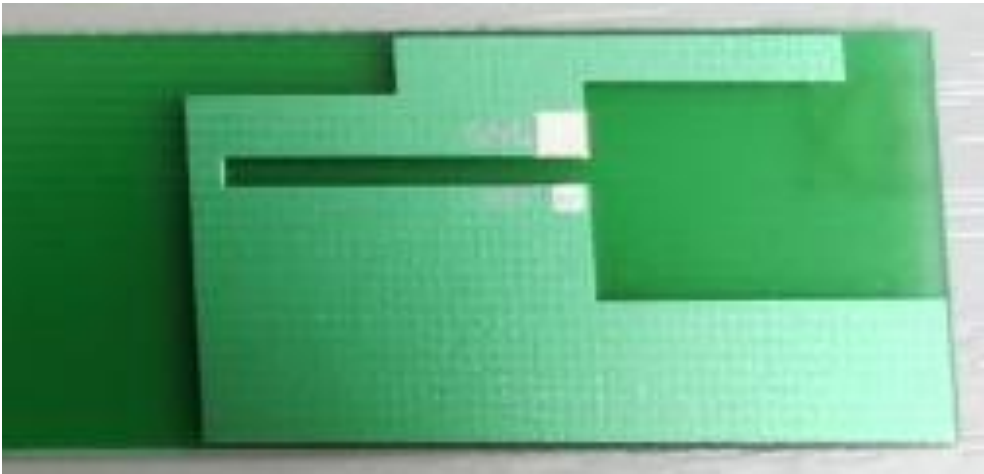
	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485	2490	2495	2500	Ave
efficiency	44.46	44.82	45.38	47.04	48.03	48.72	48.86	48.97	49.55	49.31	49.43	49.37	49.84	51.14	51.89	52.96	53.54	54.66	55.71	56.39	57.32	50.35
Maximum gain	2.32	2.34	2.22	2.20	2.32	2.23	2.15	2.06	1.98	2.08	2.02	1.84	2.00	2.15	2.41	2.78	2.86	3.07	3.01	3.02	3.14	2.39



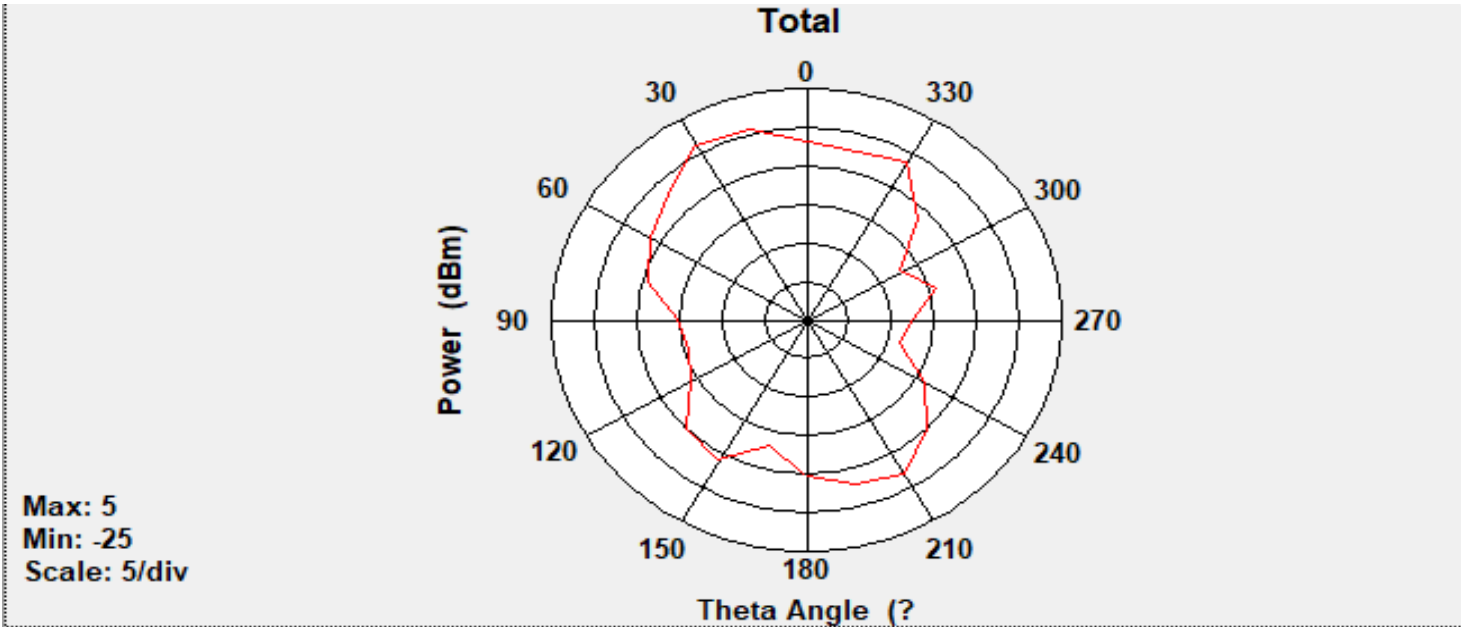


no use

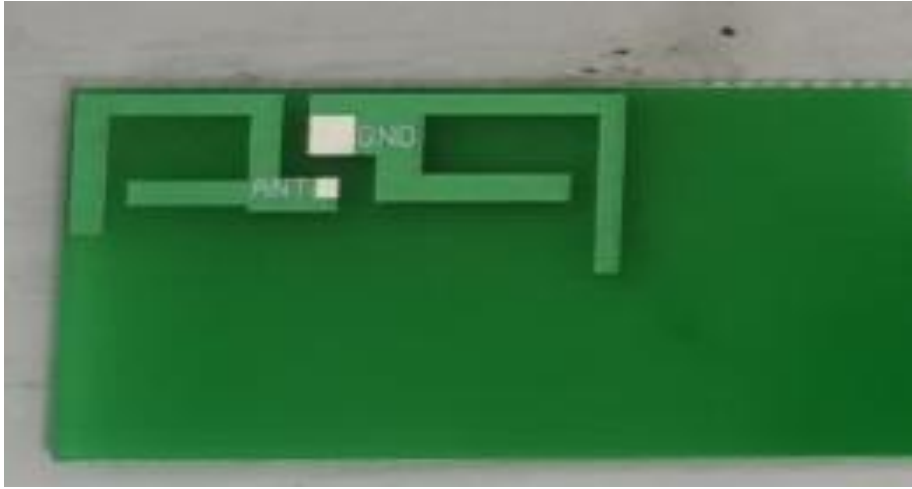
ANT 1(BT/BLE/Wi-Fi)



	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	Ave
efficiency	31.77	34.13	39.00	43.93	48.92	54.96	58.83	60.76	58.91	54.29	53.18	49.93	48.64	48.55	50.50	55.06	58.84	50.01
Maximum gain	0.99	1.95	2.26	3.03	2.49	2.83	2.55	2.67	2.34	2.43	3.08	3.02	2.92	2.50	2.52	3.00	3.29	2.58



ANT 2(Wi-Fi)



	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	Ave
efficiency	71.84	65.66	64.03	61.21	57.71	56.03	53.76	53.89	54.00	54.32	58.82	62.41	64.68	66.11	66.56	68.57	67.92	61.62
Maximum gain	2.44	2.78	3.28	3.04	2.90	3.02	2.30	3.10	2.90	2.91	2.52	3.27	3.16	3.23	3.16	2.59	2.63	2.90

