

Antenna Test Report

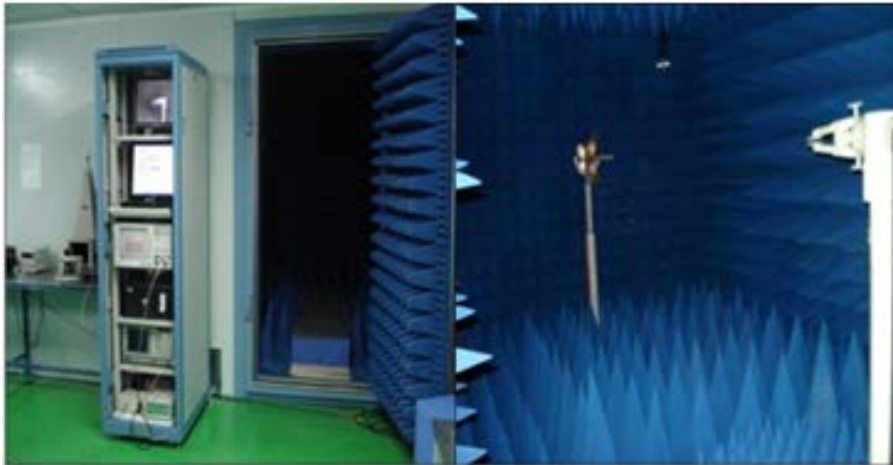
Model/ Customer M3539

Date: 2023-05-20

PM: huangwen bo (15981667202)

Testing Environment

- The antenna test uses an ETS test system in a microwave anechoic chamber , The dimensions of The dimensions of the darkroom :7m x 4m x 3m , Frequency range 700MHz---6GHz.
- S11 Test use Agilent E5071B network analyzer



microwave anechoic chambe



Agilent E5071B network analyzer

Project Description

- **Model:M3539**
- **BAND:**
 - **2.4G/5.8GWiFi+BT**

Photo:



Antenna Solutions



深圳勤新科技有限公司



VSWR:



Antenna Solutions

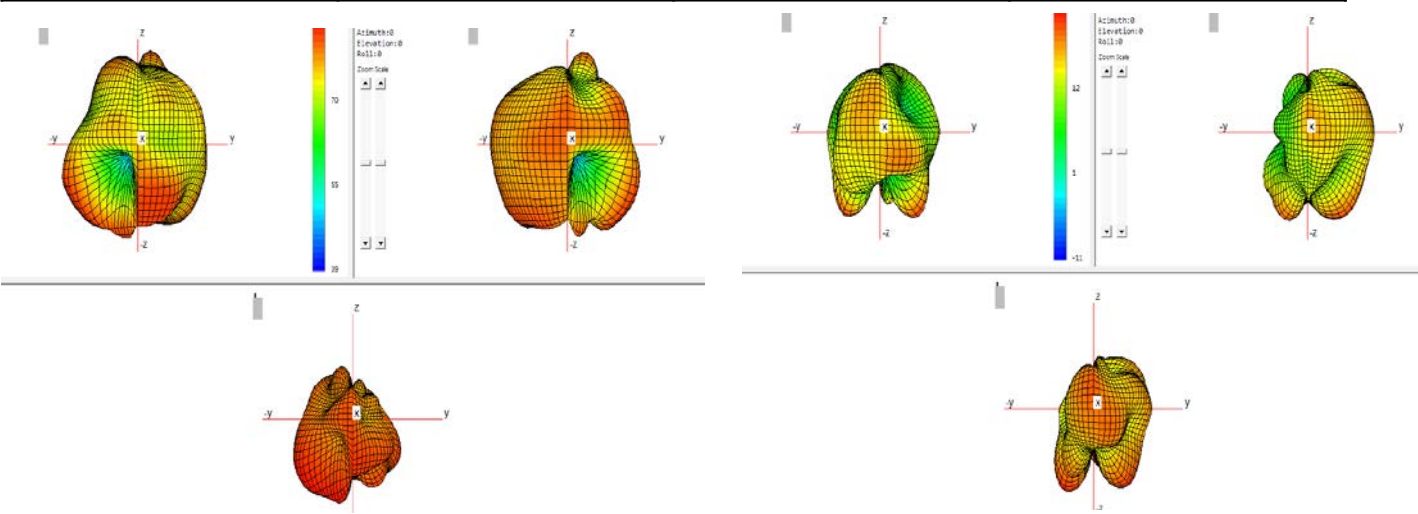


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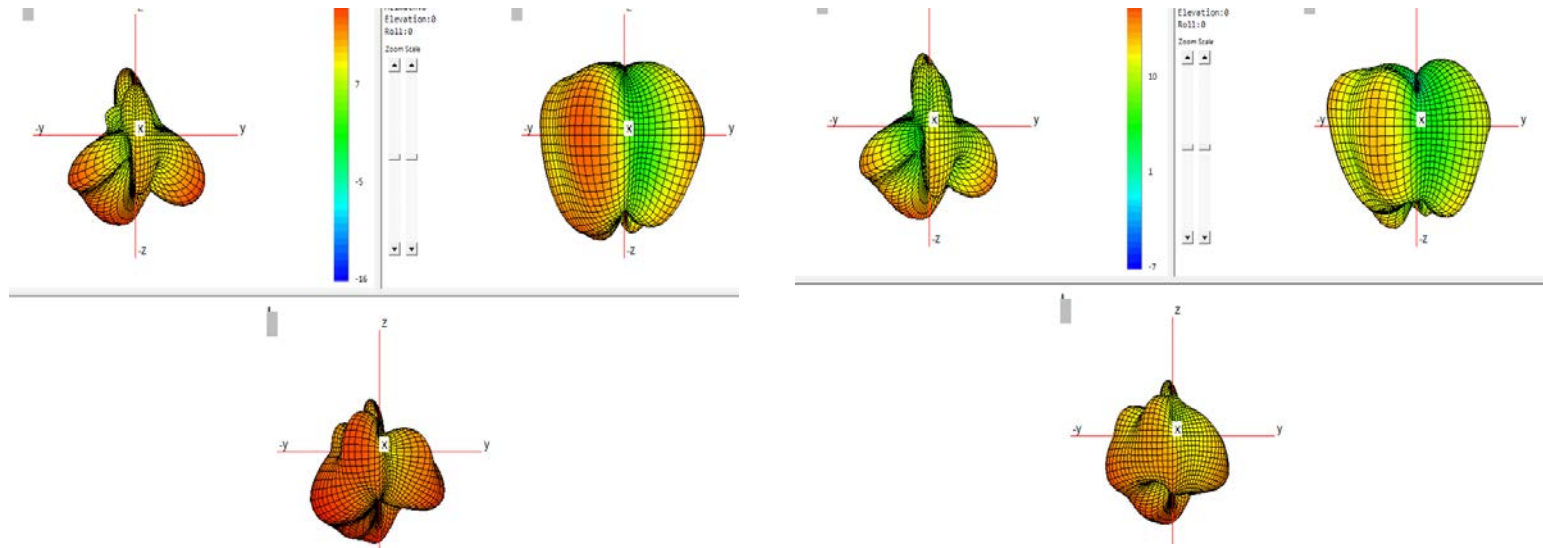
Free Space Test Report:

	CHannel	TRP	TIS
2.4G 802.11B- 11Mbps	1	14.54	-80.1
	7	15.33	-79.3
	13	15.17	-80.9
5G 802.11A- 54Mbps	36	15.34	-71.3
	149	14.24	-70.5
	165	15.74	-71.6



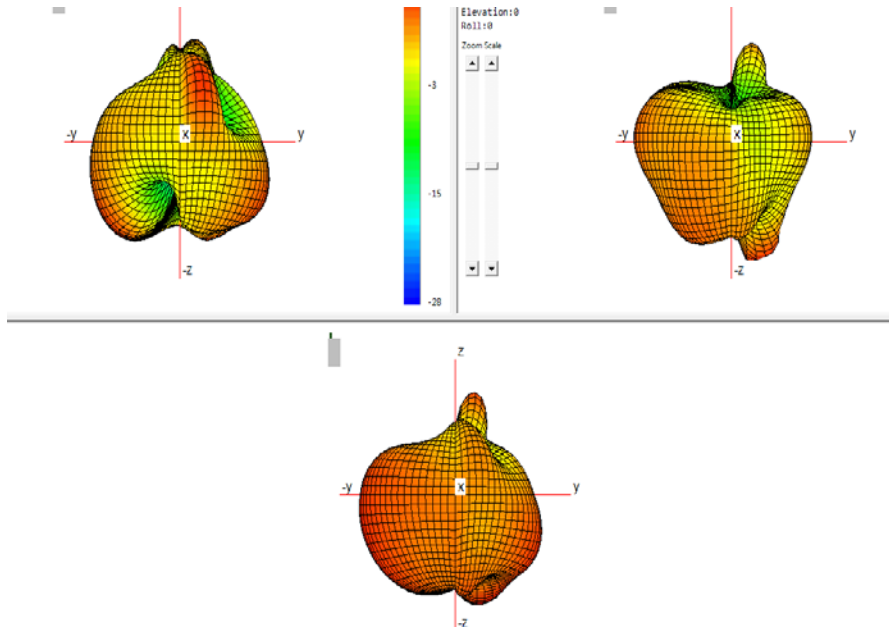
Free Space Test Report:

	CHannel	TRP	TIS
2.4G 802.11G- 54Mbps	1	13.26	-66.6
	7	12.54	-67.5
	13	13.51	-67.5
2.4G 802.11N- MCS7	1	12.74	-64.4
	7	13.44	-64.3
	13	13.65	-64.2



Free Space Test Report:

	CHannel	TRP	TIS
BT	0	6.92	-87.4
	39	7.05	-88.4
	78	7.31	-88.3



Free Space Test Report

BT

Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	40.24	1.36
2410	40.8	1.42
2420	40.14	1.57
2430	41.62	1.56
2440	42.31	1.63
2450	41.51	1.44
2460	40.01	1.46
2470	41.18	1.69
2480	39	1.62
2490	39.21	1.72
2500	38.08	1.52

Free Space Test Report

WiFi1			WiFi2		
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	41.88	0.99	2400	38.62	0.54
2410	41.38	0.75	2410	38.82	0.61
2420	42.56	0.95	2420	39.12	0.76
2430	43.42	0.89	2430	39.64	0.86
2440	43.45	0.96	2440	40.78	0.91
2450	45.23	1.17	2450	40.67	1.05
2460	43.89	0.95	2460	40.64	0.98
2470	41.47	0.75	2470	40.47	0.96
2480	42.81	0.58	2480	39.24	0.54
2490	43.54	0.76	2490	39.04	0.61
2500	44.17	0.67	2500	38.41	0.57



Free Space Test Report

5.8GWiFi1

Freq (MHz)	Effi (%)	Gain (dBi)	5410	34.42	1.18	5660	39.75	1.73
			5420	40.75	1.52	5670	37.59	1.93
5180	39.35	1.45	5430	38.55	1.35	5680	43.27	2.36
5190	35.73	0.95	5440	36.58	1.33	5690	37.08	1.87
5200	34.25	0.84	5450	34.53	1.31	5700	32.81	1.42
5210	35.29	0.61	5460	37.97	1.77	5710	35.31	1.52
5220	40.79	1.52	5470	40.83	2.15	5720	37.59	1.73
5230	36.73	1.12	5480	42.44	2.33	5730	40.6	1.93
5240	36.93	1.24	5490	40.06	2.33	5740	35.64	1.57
5250	35.4	1.18	5500	31.44	1.76	5750	32.7	1.38
5260	33.45	1.08	5510	37.43	2.27	5760	34.4	1.53
5270	44.53	1.93	5520	39.4	2.43	5770	37.68	1.86
5280	40.56	1.68	5530	38.54	2.38	5780	42.06	2.15
5290	42.68	1.83	5540	35.76	2.25	5790	42.43	2.31
5300	32.45	1.06	5550	31.66	1.35	5800	38.55	1.92
5310	35.81	1.32	5560	36.98	1.74	5810	36.93	1.82
5320	40.35	1.69	5570	37.6	1.72			
5330	44.36	2.05	5580	45.17	2.29			
5340	39.86	1.76	5590	40.25	1.96			
5350	38.59	1.82	5600	33.69	1.35			
5360	36.58	1.68	5610	35.64	1.49			
5370	45.94	2.37	5620	45.44	2.24			
5380	45.99	2.34	5630	48.63	2.47			
5390	36.56	1.62	5640	42.47	2.06			
5400	34.58	1.05	5650	36.77	1.54			



Free Space Test Report

5.8GWiFi2

Freq (MHz)	Effi (%)	Gain (dBi)	5400	46.13	2.77	5640	43.31	2.08
			5410	46.23	2.68	5650	45.54	2.81
5180	37.59	0.23	5420	49.11	3.27	5660	44.05	2.4
5190	40.9	1.17	5430	47.55	2.78	5670	45.57	2.89
5200	42.07	1.64	5440	48.31	2.93	5680	44.17	2.75
5210	41.49	1.29	5450	47.24	2.67	5690	43.02	2.51
5220	41.13	1.22	5460	46.02	2.46	5700	44.27	3.04
5230	39.38	0.51	5470	48.05	2.81	5710	43.5	2.84
5240	42.19	1.22	5480	47.16	2.57	5720	45.48	3.31
5250	43.45	1.63	5490	48.52	2.77	5730	45.4	3.44
5260	44	1.7	5500	47.53	2.46	5740	44.62	3.2
5270	45.16	2.02	5510	45.96	2.13	5750	44.08	3.36
5280	40.4	0.95	5520	47.63	2.37	5760	43.71	3.38
5290	38.26	1.76	5530	46.67	2.27	5770	44.66	3.56
5300	39.4	2.05	5540	48.13	2.52	5780	43.93	3.45
5310	40.23	2.26	5550	48.79	2.44	5790	44	3.35
5320	43.98	3.18	5560	46.74	1.94	5800	42.53	3.19
5330	39.73	2.39	5570	47.43	2.15	5810	42.68	3.35
5340	40.81	2.56	5580	45.14	1.74			
5350	42.01	2.71	5590	45.64	1.8			
5360	42.7	3	5600	47.52	2.41			
5370	46.15	3.63	5610	44.46	1.71			
5380	43.99	3.16	5620	46.36	2.48			
5390	42.86	2.98	5630	44.08	2.14			



Antenna shape:

