

Antenna Test Report

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Project Name: R4

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Update: 2024-10-12

项目概况

OverView

CUSTOMER NAME		PROJECT NAME	R4
Items	Details		
• FREQUENCY	WIFI (2400-2500MHz,5.1G-5.8G)		
• PROJECT TYPE			
• ANTENNA SPACE			
• FEED & GROUND PAD			
• SENSITIVE ELEMENTS			
• ANTENNA TYPE	PIFA Antenna		
• PCB			
• OTHERS			

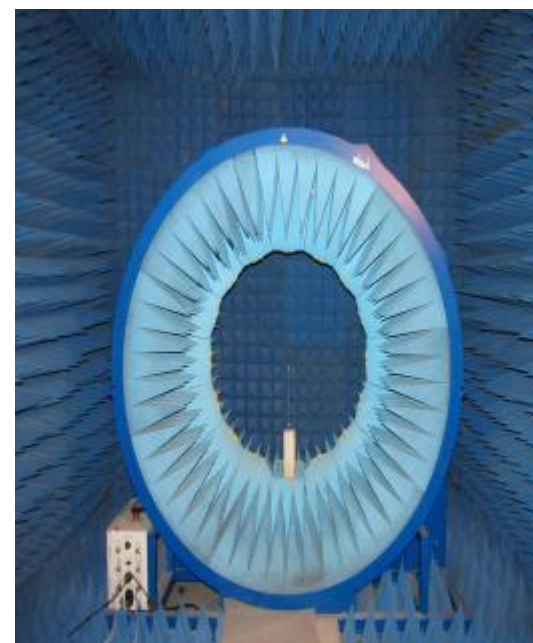
历史报告记录

Revision History

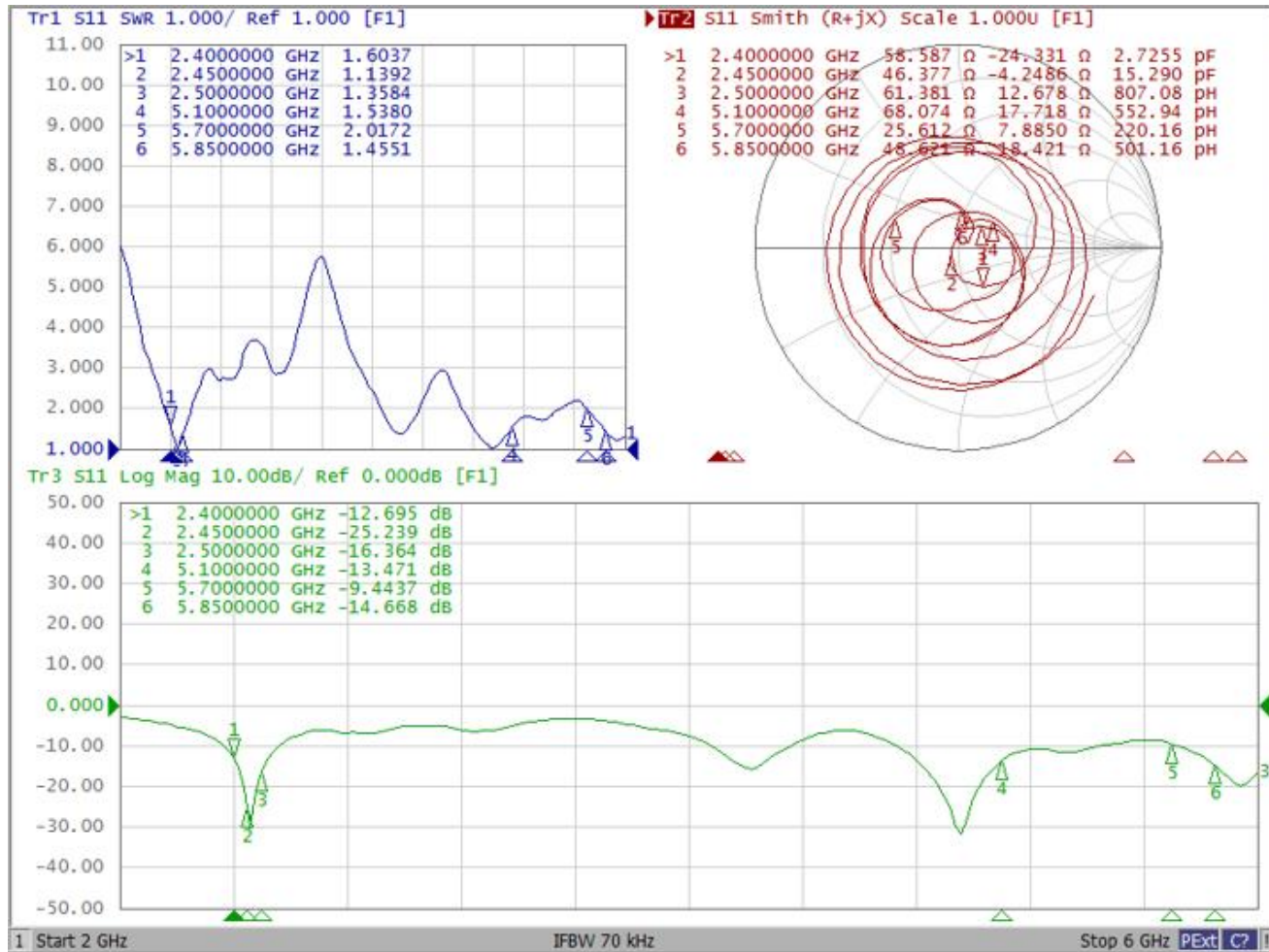
日期(Date)	版本 (Revision)	负责人(Author)	更改原因(Description of changes)
2024-10-12	A	杨永成	无源，有源测试数据报告

Test Item & Equipment

List	Test Item	Equipment	
1.S Parameter	VSWR, Return Loss	Agilent VNA	
2.Active Test	TRP, TIS	Agilent 8960	RayZone1800
3.Passive Test	Gain, Efficiency, Pattern	Agilent E5071C	



VSWR

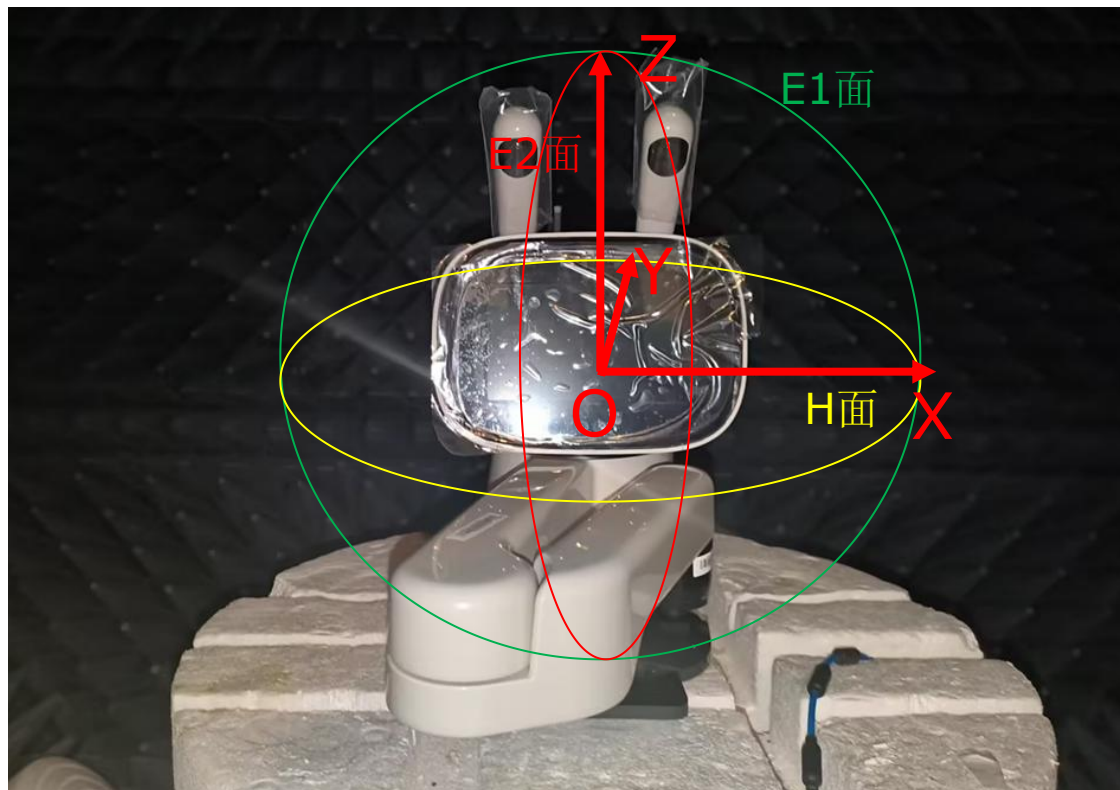


2024-10-14

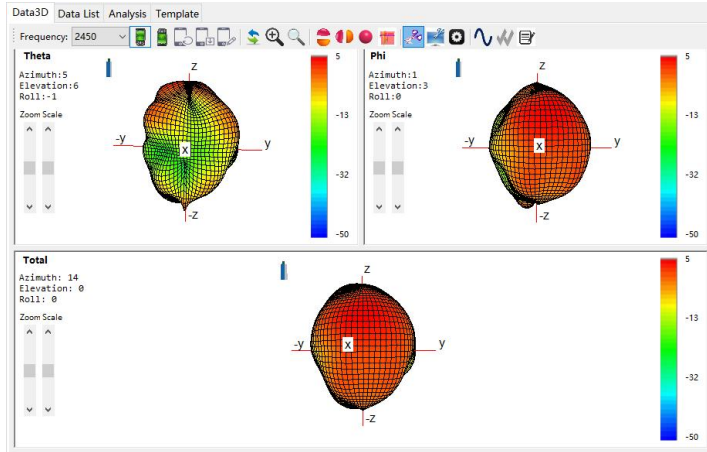
PASSIVE TEST (WIFI天线效率及增益)

Freq(MHz)	Gain (dBi)	Effi (%)	Freq(MHz)	Gain (dBi)	Effi (%)
2400	4.23	50.32	5400	3.01	36.45
2410	4.32	50.29	5420	2.64	38.12
2420	4.51	51.2	5440	3.2	37.11
2430	4.66	52.42	5460	3.1	39.63
2440	4.72	53.7	5480	3	35.72
2450	4.86	56.02	5500	2.21	32.03
2460	4.8	55.82	5520	2.42	29.59
2470	4.81	55.27	5540	1.99	30.02
2480	4.81	55.79	5560	1.67	29.66
2490	4.96	55.64	5580	1.9	30.88
2500	5.12	55.29	5600	1.36	30.67
5100	2.71	39.7	5620	0.17	28.18
5120	2.32	37.94	5640	1.03	30.52
5140	2.47	35.97	5660	0.51	29.6
5160	2.24	36.44	5680	1.11	32.79
5180	2.13	35.17	5700	1.05	33.93
5200	2.16	36.88	5720	2.13	37.49
5220	2.55	37.3	5740	0.92	32.32
5240	1.73	36.91	5760	2.28	31.9
5260	2.33	36.89	5780	1.99	33.95
5280	2.65	38.06	5800	1.99	35.09
5300	2.52	37.65	5820	2.66	36.86
5320	2.38	38.1	5840	2.71	41.06
5340	2.7	36.8	5860	3.15	42.31
5360	2.86	38.54	5880	2.33	41.84
5380	2.55	37.72	5900	2.95	42.7

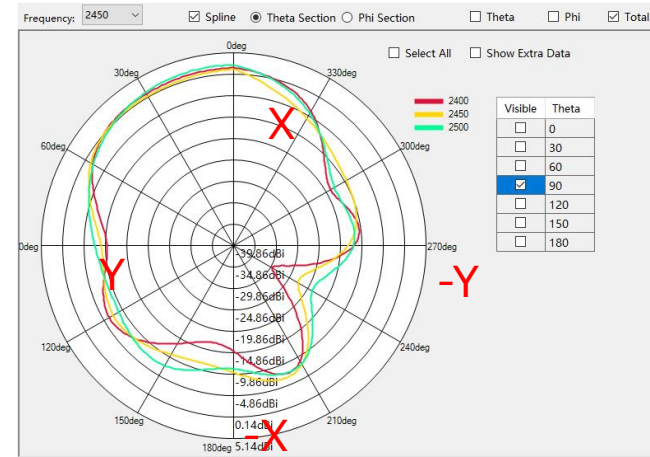
暗室测试坐标示意图



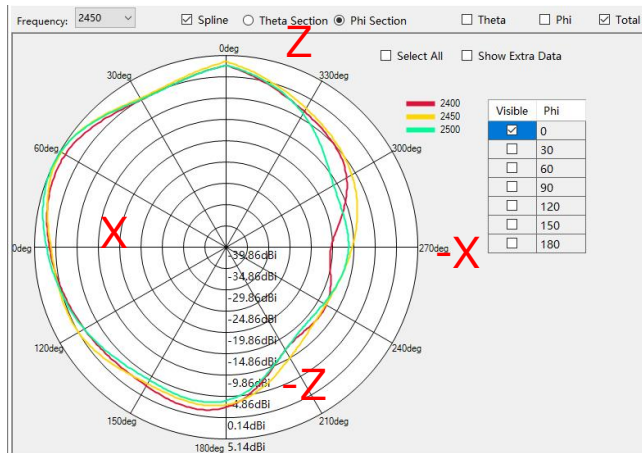
天线2D/3D方向图 (2450MHz)



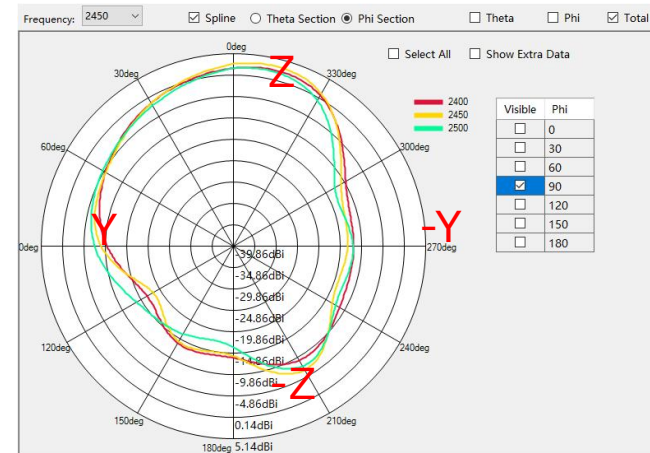
3D



H面

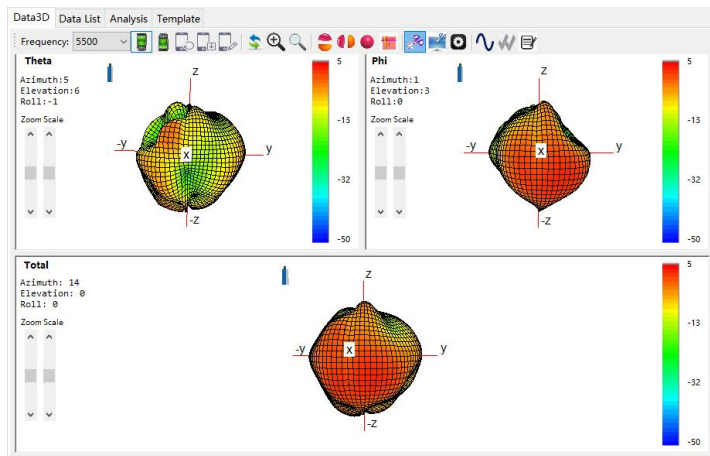


E1面

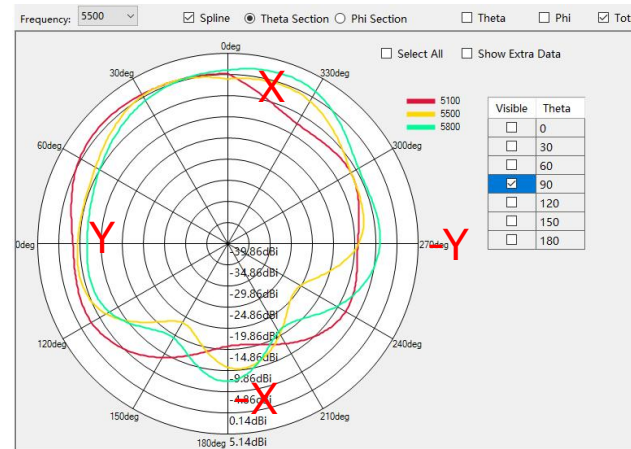


E2面

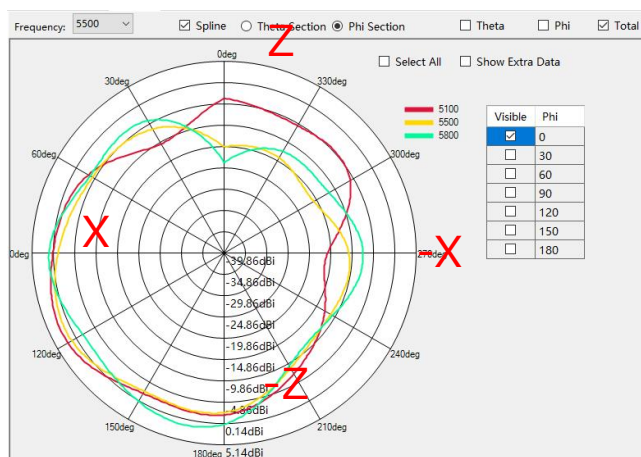
天线2D/3D方向图 (5500MHz)



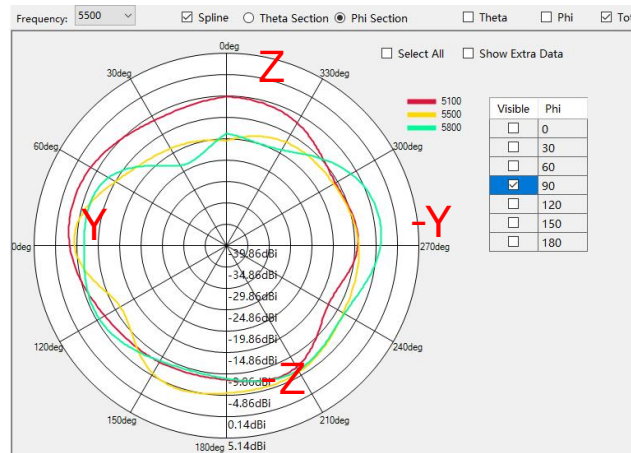
3D



H面



E1面



E2面

Active TEST

DVT #1					DVT #2			
11b/11M					11b/11M			
Ch	Freq (MHz)	TRP	TIS		Ch	Freq (MHz)	TRP	TIS
1	2412	16.74	-85.59		1	2412	15.63	-84.42
7	2442	16.47	-83.79		7	2442	15.09	-84
13	2472	16.86	-84.36		13	2472	15.85	-85.19
11a/6M					11a/6M			
36	5180	16.39	-87.35		36	5180	14.03	-87.57
149	5745	16.19	-87.42		149	5745	13.56	-85.95
165	5825	16.3	-87.36		165	5825	13.8	-86.7
11a/54M					11a/54M			
36	5180	12.94	-71.98		36	5180	10.92	-73.43
149	5745	14.33	-70.08		149	5745	10.25	-70.19
165	5825	13.89	-71.61		165	5825	10.87	-71.22