



LA52H2450-A36 Antenna Radiation Pattern Test Report

Brand Name : JIAXING GLEAD ELECTRONICS CO.,LTD
Model Name : LA52H2450-A36A
Test Date : June 3, 2024
Test Engineer : Guangjun Li

JUNE 3, 2024

JIAXING GLEAD ELECTRONICS CO.,LTD
NO.66 Zhengyuan Road, Jiaxing City, Zhejiang Province, China

LA52H2450-A36 Antenna Radiation Pattern Test Report

1. Test Information

Equipment	Satimo
Brand Name	JIAXING GLEAD ELECTRONICS CO.,LTD
Model Name	LA52H2450-A36A
Applicant	JIAXING GLEAD ELECTRONICS CO.,LTD
Manufacturer	JIAXING GLEAD ELECTRONICS CO.,LTD

2. Testing Location

Testing Location	
JIAXING GLEAD ELECTRONICS CO.,LTD	ADD: NO.66 Zhengyuan Road,Jiaxing City,Zhejiang Province,China

Test Condition	Test Engineer	Test Environment (°C / %)	Test Date
Radiated	Guangjun Li	20-30 / 55-75	06.03.2024~06.03.2024

3. Test Frequency

Band (MHz)	Test Frequency (MHz)
2400-2500	2400/2500

4. Antenna Information

Ant. Position	Brand Name	Model name	Ant. Type	Connector
BT Antenna	JIAXING GLEAD ELECTRONICS CO.,LTD	LA52H2450-A36A	Ceramic	Microstrip line

5. Test Configuration



6. Test Equipment List and Calibration

Equipment Name	Manufacturer	Model	SW Version	Cal. Due Date
OTA test filed	Satimo	SATIMO 24G	SPM1.3.1Dev, SatEnv	2024/12/31
ENA Series Network Analyzer	Agilent Technologies	E5071C	NA	2025/03/10

7. Test Method

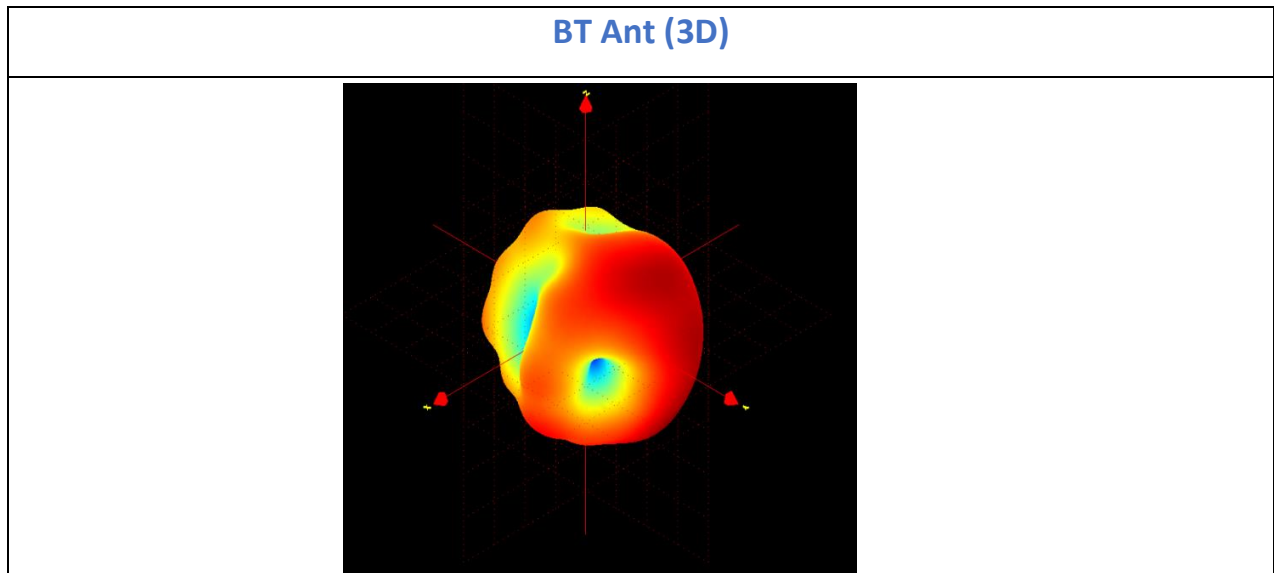
The “great circle” cut method, whereby the Measurement Antenna remains fixed and the EUT is rotated about two axes in sequential order. The radiated RF performance of the Equipment Under Test (EUT) is measured by sampling the radiated transmit power of the mobile at various locations surrounding the device. A three-dimensional characterization of the 'transmit' performance of the EUT is pieced together by analyzing the data from the spatially distributed measurements.

8. Measured Values and Calculation of Correlated Gains

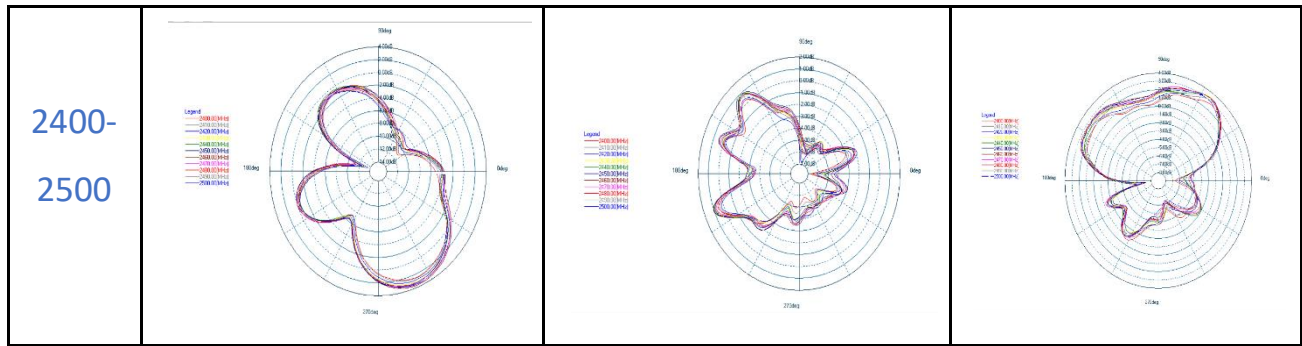
Antenna Peak Gain Table (Ant. Position: BT Antenna)

Freq (MHz)	2460
Max Gain (dBi)	3.62

9. Radiation Pattern



Freq (MHz)	BT Ant (2D)		
	X_Y	X_Z	Y_Z



Appendix _ Radiated Total Gain Result

X-Z Plane								
Frequency / (MHz)	Max Gain/ dB	Position/ deg	Min Gain/ dB	Position/ deg	BeamWidth/ deg	Max/ Min/dB	Avg Gain/ dB	Standard Deviation
2400	0.58	-160.00	-6.68	-2.00	43.96	7.26	-3.32	1.96
2410	0.84	-160.00	-6.45	-2.00	37.02	7.29	-3.19	1.94
2420	0.94	132.00	-6.08	-2.00	57.93	7.02	-3.07	1.94
2430	0.93	132.00	-5.63	-2.00	57.73	6.56	-3.01	1.9
2440	0.98	-160.00	-5.65	72.00	41.56	6.63	-2.93	1.9
2450	1.04	-160.00	-6.01	66.00	45.27	7.05	-2.80	1.95
2460	1.04	-160.00	-6.08	66.00	44.40	7.12	-2.82	1.89
2470	0.76	-160.00	-6.04	66.00	43.87	6.80	-2.86	1.8
2480	0.72	130.00	-6.13	68.00	62.32	6.84	-2.92	1.78
2490	0.72	130.00	-6.60	74.00	58.77	7.32	-2.94	1.81
2500	0.37	130.00	-6.91	76.00	57.36	7.28	-3.11	1.79

Y-Z Plane								
Frequency / (MHz)	Max Gain/ dB	Position/ deg	Min Gain/ dB	Position/ deg	BeamWidth/ deg	Max/ Min/dB	Avg Gain/ dB	Standard Deviation
2400	2.74	50.00	-6.63	0.00	145.31	9.38	-1.14	2.63
2410	3.09	52.00	-6.39	2.00	141.92	9.49	-1.09	2.68
2420	3.35	52.00	-6.06	2.00	140.68	9.42	-1.01	2.81
2430	3.38	54.00	-6.36	-172.00	140.16	9.73	-0.93	2.85
2440	3.27	54.00	-6.83	-172.00	140.63	10.1	-0.89	2.9
2450	3.3	54.00	-7.29	-172.00	142.47	10.58	-0.77	3.09
2460	3.31	54.00	-7.29	-172.00	143.31	10.6	-0.67	3.09

2470	3.26	54.00	-6.93	-174.00	142.37	10.19	-0.74	2.99
2480	3.27	54.00	-6.73	-174.00	142.25	10	-0.86	3.04
2490	3.24	56.00	-6.6	-172.00	142.94	9.84	-0.85	3.09
2500	2.99	56.00	-6.88	-172.00	144.31	9.87	-0.93	3.12

X-Y Plane								
Frequency / (MHz)	Max Gain/ dB	Position/ deg	Min Gain/ dB	Position/ deg	BeamWidth/ deg	Max/ Min/dB	Avg Gain/ dB	Standard Deviation
2400	2.45	294	-11.23	164	61.99	13.68	-3.08	3.85
2410	2.52	294	-12.32	162	61.48	14.84	-3.05	3.84
2420	2.8	294	-13.66	162	60.21	16.46	-2.95	3.91
2430	3.04	292	-13	164	60.54	16.05	-2.78	3.89
2440	3.18	292	-12.58	164	60.89	15.76	-2.65	3.96
2450	3.46	292	-12.34	164	61.25	15.8	-2.46	4.04
2460	3.62	292	-11.27	164	61.57	14.89	-2.32	3.92
2470	3.44	294	-11.37	164	61.46	14.81	-2.43	3.82
2480	3.18	292	-12.96	164	60.54	16.14	-2.7	3.86
2490	3.2	292	-13.11	164	60.09	16.3	-2.74	3.81
2500	3.26	292	-12.52	166	60.7	15.78	-2.74	3.84

Appendix B_Setup Photo