

Test Report for Antenna Specifications

Model: B85V52

Frequency range and operation

Antenna: 2400MHz ~ 2483.5MHz

Antenna type

Antenna: FPC Antenna

Test Lab name: Shenzhen BALUN Technology Co., Ltd

Test date: 2025.01.15

Tested by: Mai Jintian

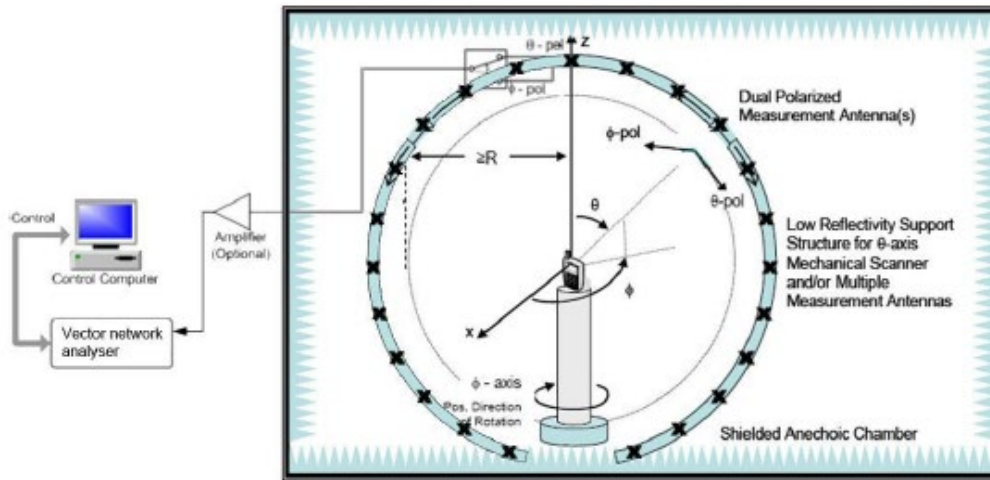


Lab address: Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China

Test Equipment used

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855- 0001	2024.11.11	2027.11.10
Vector Network Analyzer	Agilent	E5071B	MY42404001	2025.01.13	2026.01.12
Description	Manufacturer	Name		Version	
Test Software	MVG	SPM		V 1.8	

Test set up and block diagram of test setup



Antenna Gain

1# (Free Space):

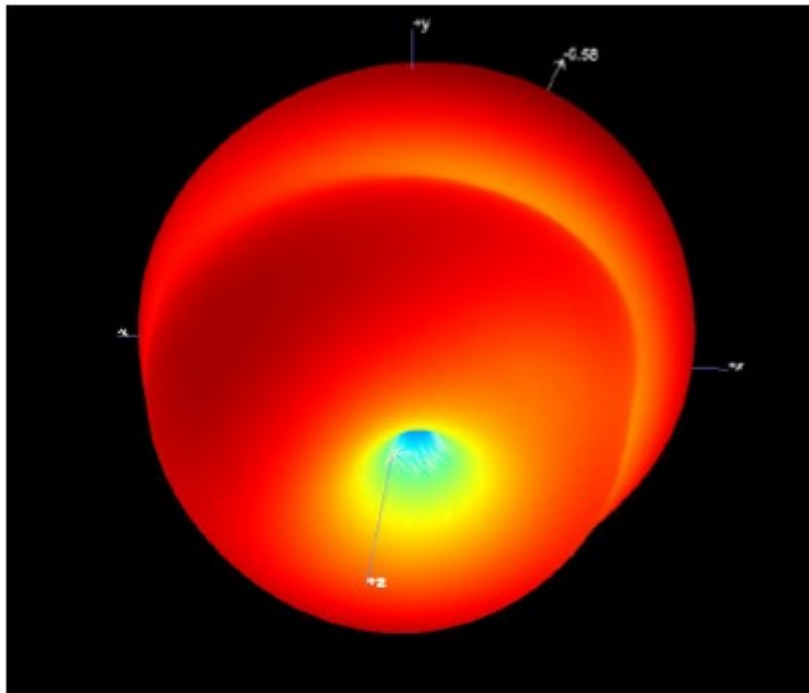
Frequency	Gain (dBi)	Efficiency (%)
2400MHz	-0.58	36
2402MHz	-0.59	36
2404MHz	-0.61	36
2406MHz	-0.69	36
2408MHz	-0.69	36
2410MHz	-0.71	36
2412MHz	-0.75	36
2414MHz	-0.81	36
2416MHz	-0.82	36
2418MHz	-0.90	36
2420MHz	-0.99	36
2422MHz	-1.07	36
2424MHz	-1.13	35
2426MHz	-1.12	36
2428MHz	-1.14	36
2430MHz	-1.18	36
2432MHz	-1.20	35
2434MHz	-1.18	35
2436MHz	-1.19	35
2438MHz	-1.17	35
2440MHz	-1.12	35
2442MHz	-1.07	35
2444MHz	-1.02	35
2446MHz	-1.08	35
2448MHz	-1.02	35
2450MHz	-0.94	35
2452MHz	-0.88	36
2454MHz	-0.84	36
2456MHz	-0.86	36
2458MHz	-0.84	36
2460MHz	-0.84	36
2462MHz	-0.86	36
2464MHz	-0.88	36
2466MHz	-0.80	37
2468MHz	-0.78	37
2470MHz	-0.80	37
2472MHz	-0.82	37

2474MHz	-0.82	37
2476MHz	-0.81	38
2478MHz	-0.84	37
2480MHz	-0.87	37
2482MHz	-0.90	37
2483.5MHz	-0.91	37

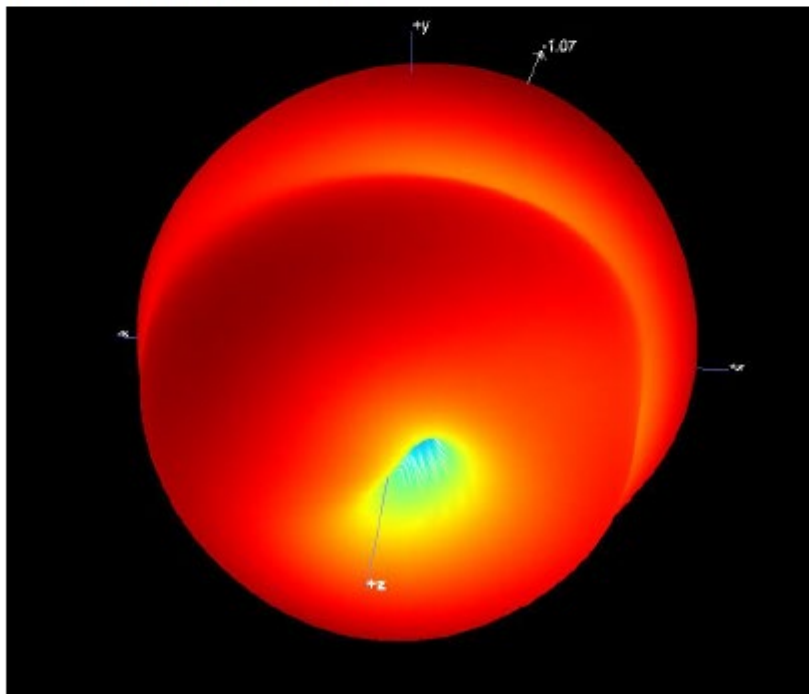
2# (Hand):

Frequency	Gain (dBi)	Efficiency (%)
2400MHz	-1.29	19
2402MHz	-1.29	19
2404MHz	-1.30	19
2406MHz	-1.28	19
2408MHz	-1.27	19
2410MHz	-1.26	19
2412MHz	-1.27	19
2414MHz	-1.27	19
2416MHz	-1.40	19
2418MHz	-1.41	19
2420MHz	-1.43	19
2422MHz	-1.43	19
2424MHz	-1.43	19
2426MHz	-1.46	19
2428MHz	-1.47	19
2430MHz	-1.49	19
2432MHz	-1.51	19
2434MHz	-1.51	19
2436MHz	-1.51	19
2438MHz	-1.53	19
2440MHz	-1.55	19
2442MHz	-1.55	19
2444MHz	-1.55	19
2446MHz	-1.55	19
2448MHz	-1.56	19
2450MHz	-1.54	19
2452MHz	-1.51	19
2454MHz	-1.50	19
2456MHz	-1.53	19
2458MHz	-1.52	19
2460MHz	-1.53	19
2462MHz	-1.53	19
2464MHz	-1.55	19
2466MHz	-1.53	19
2468MHz	-1.52	19
2470MHz	-1.54	19
2472MHz	-1.57	19
2474MHz	-1.58	19
2476MHz	-1.49	20
2478MHz	-1.53	20
2480MHz	-1.57	19
2482MHz	-1.64	19
2483.5MHz	-1.66	19

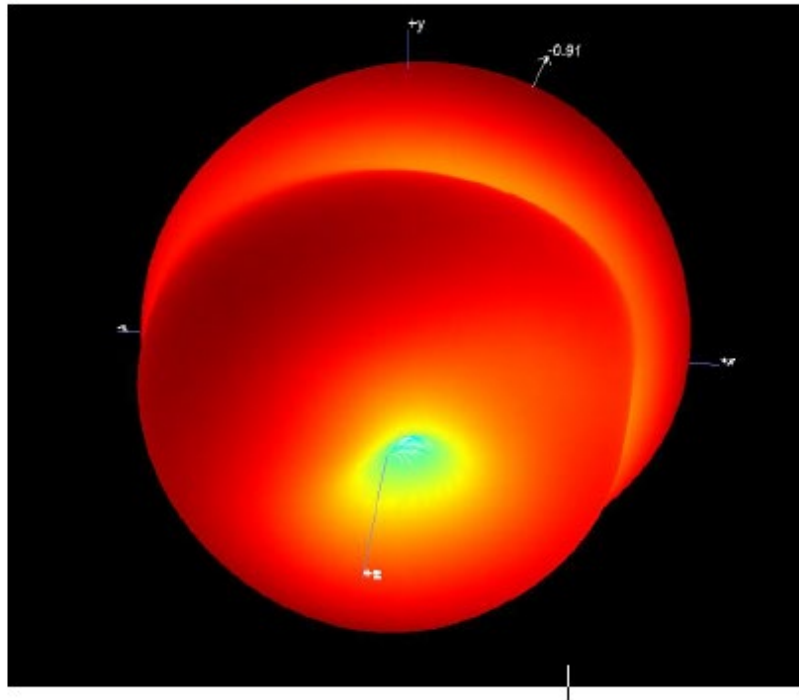
Antenna Radiation Pattern (3D)



B1.2 3D Pattern for 2442MHz

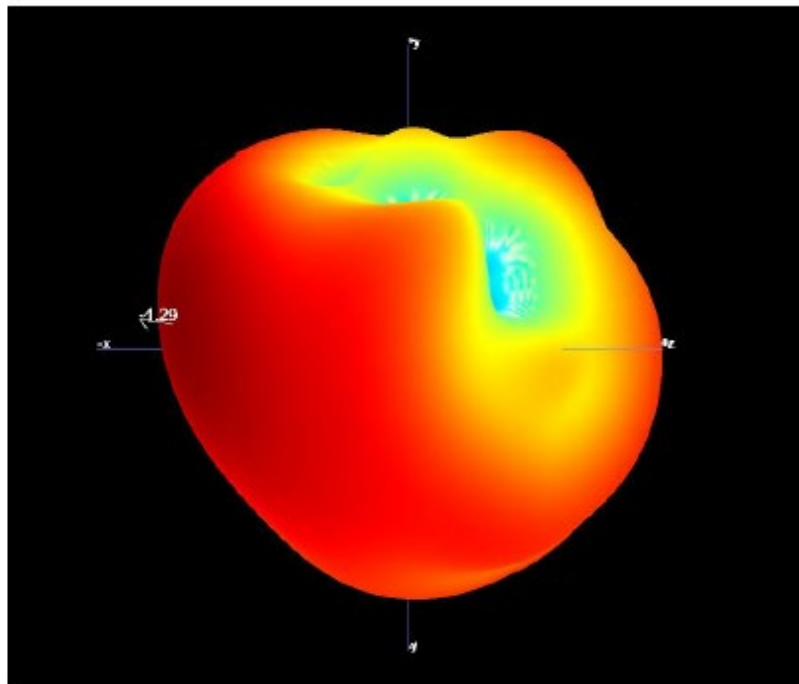


B1.3 3D Pattern for 2483.5MHz

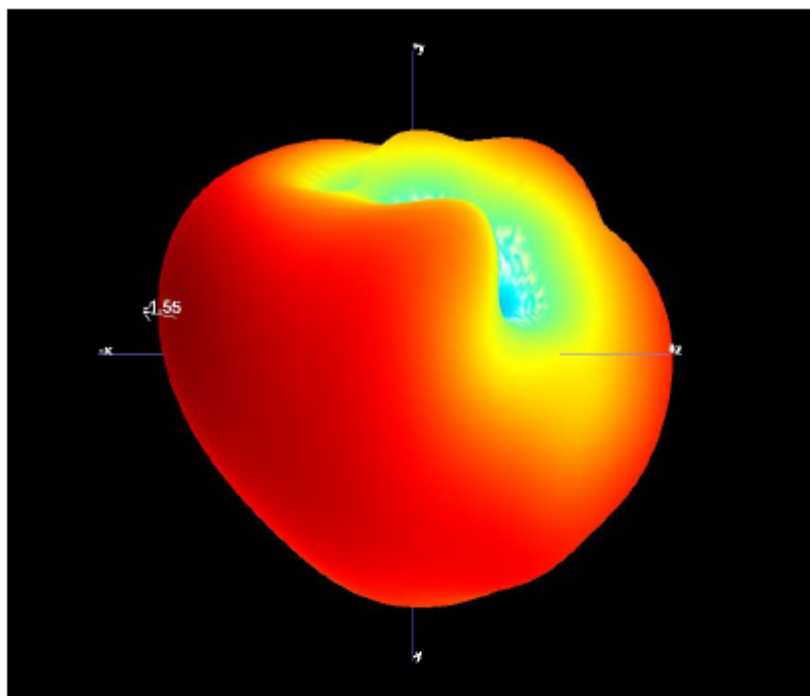


2# (Hand):

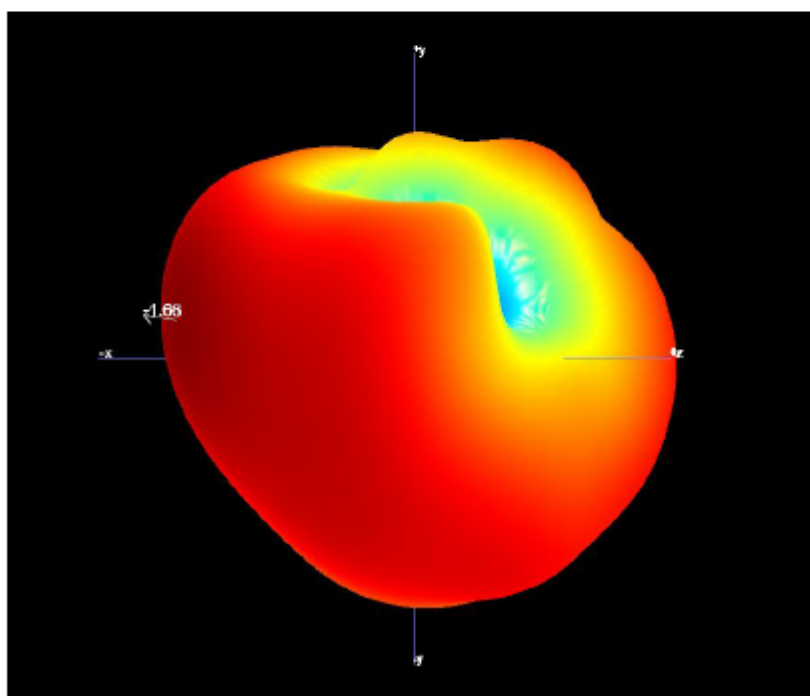
B1.4 3D Pattern for 2400MHz



B1.5 3D Pattern for 2442MHz



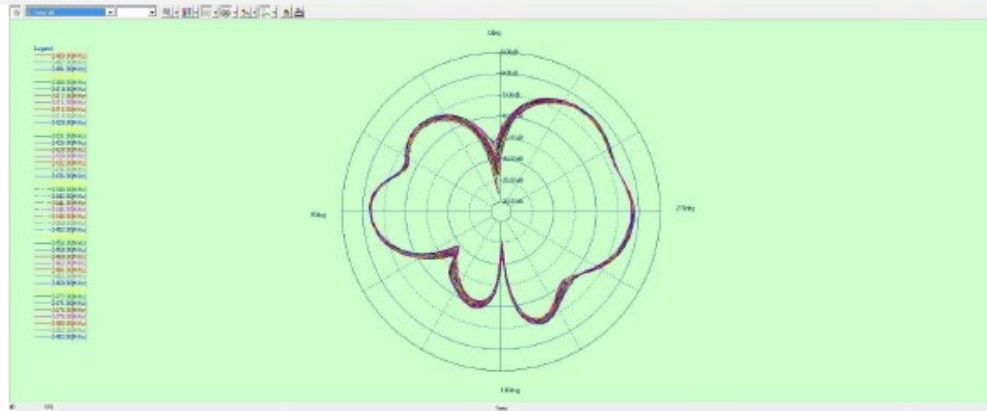
B1.6 3D Pattern for 2483.5MHz



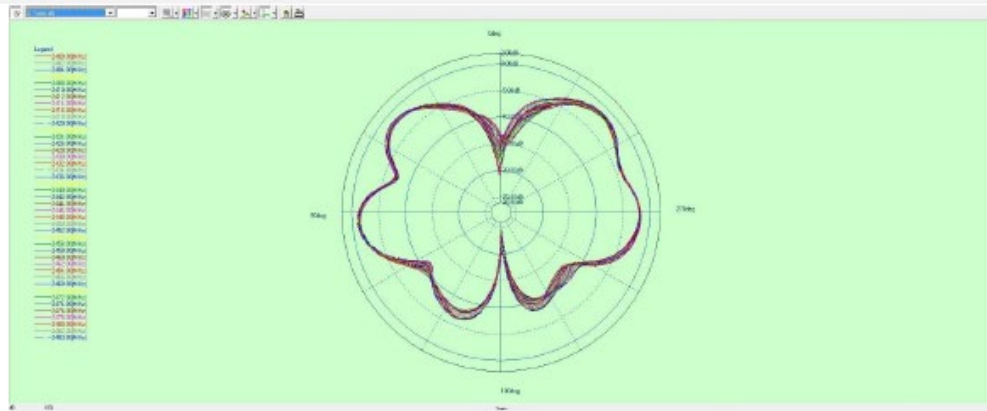
Antenna Radiation Pattern (2D)

1# (Free Space):

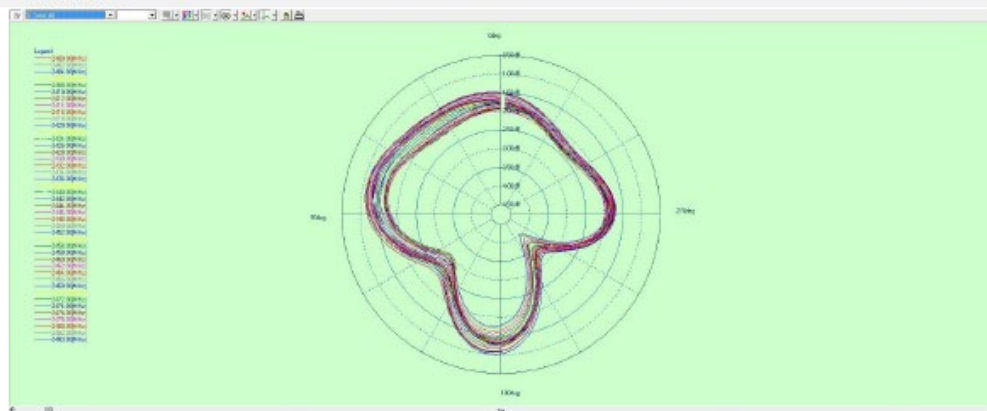
B2.1 PHI=0



B2.2 PHI=90

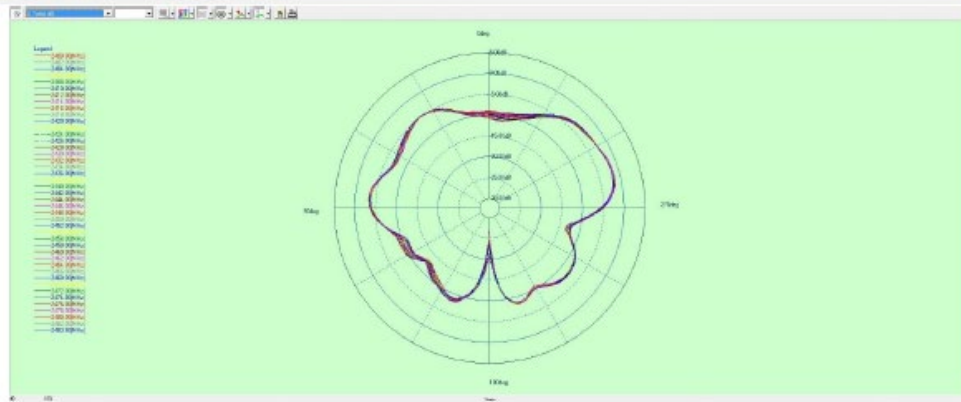


B2.3 THETA=90

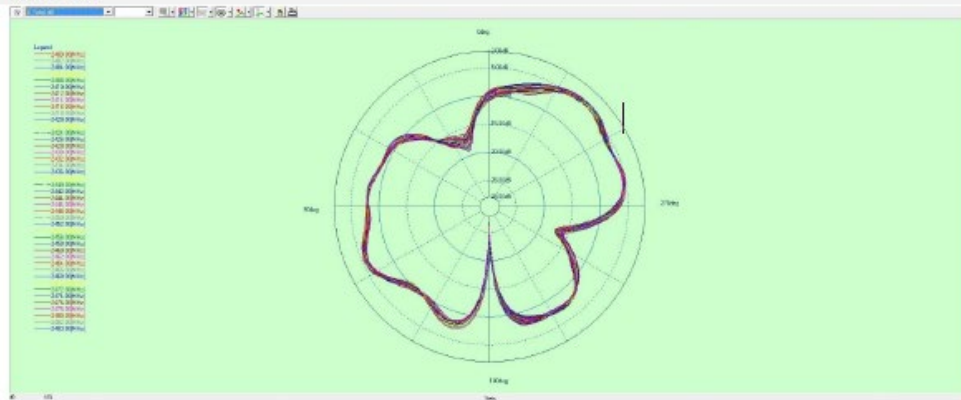


2# (Hand):

B2.4 PHI=0



B2.5 PHI=90



B2.6 THETA=90

