



威強電 ABM

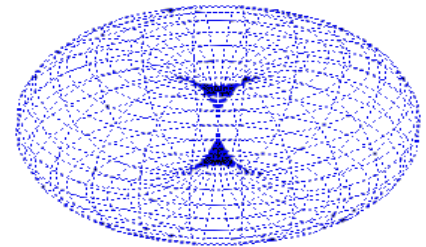
Engineer : Betty

Report date : 2024/08/22 REV.03



Executive Summary

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Revision History

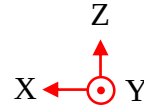
Revision	Date	Engineer	Description
01	2024/06/27	Ben	New Release
02	2024/06/28	Ben	Update
03	2024/08/22	Betty	Change Antenna Feed Position

Antenna Specification

Item	ABM
Operating Frequency (MHz)	2400-2500
Return Loss	8.5 dB
Peak Gain	1.05 dBi(Max.)
Antenna Type	PIFA
Material	FPC
V.S.W.R	2.2 : 1
Efficiency	47 %(Max.)

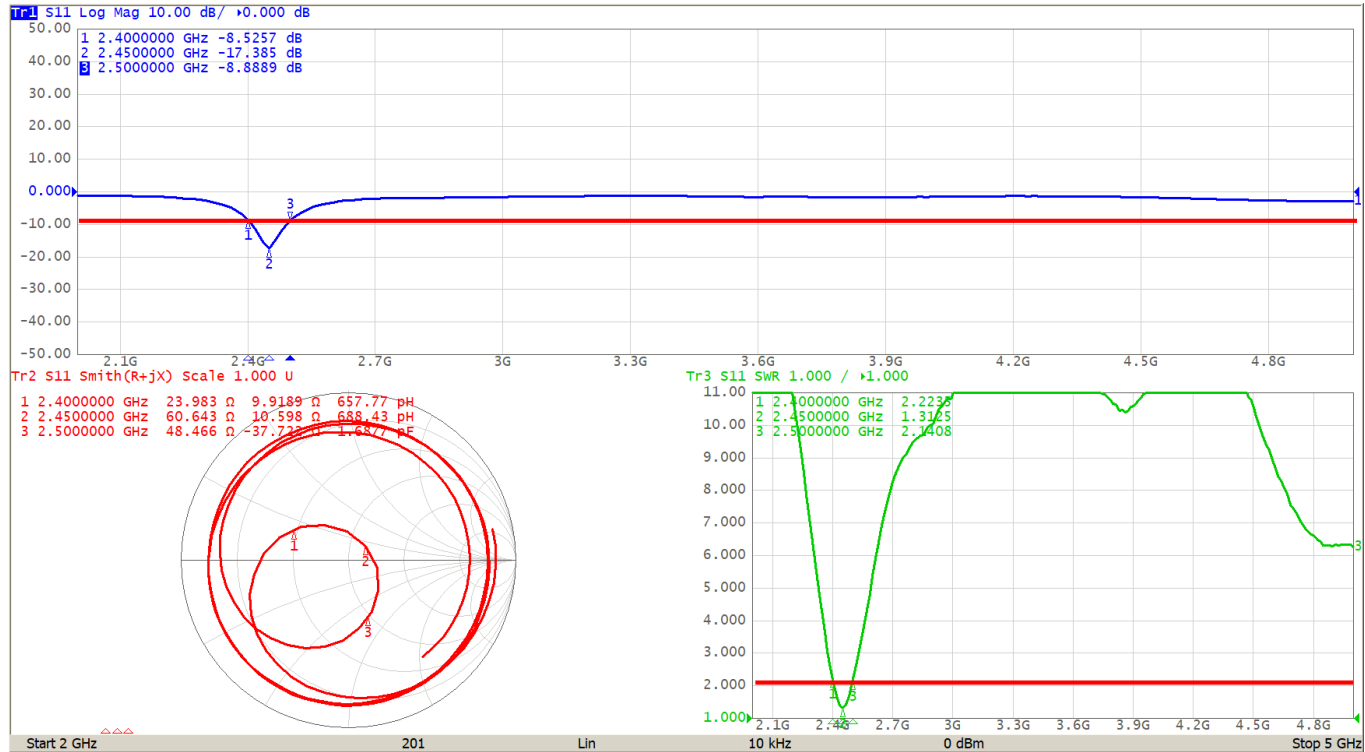
Antenna Photo

Antenna

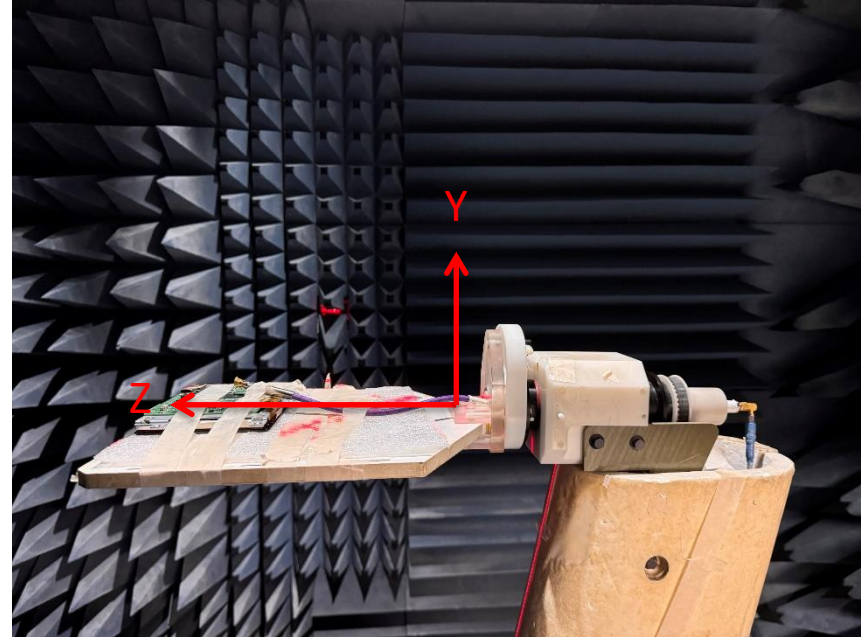
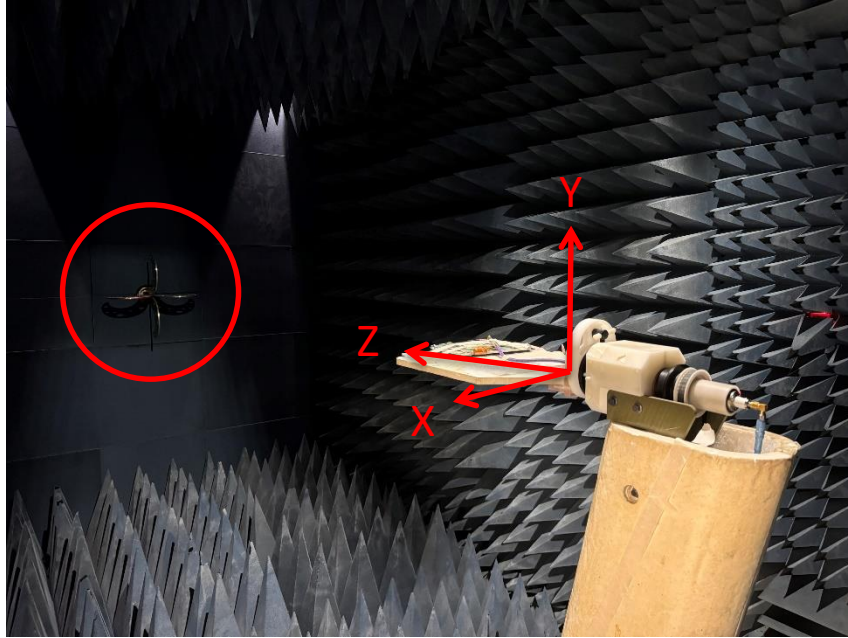


Type	Size(L*W*H)	Cable Type	Connector	Cable Loss(dB)	
				2.4G	5G
PIFA	28x10x4 (mm)	50 mm/1.13 Normal	MHF IV	0.33	0.50

S-Parameter Result



Chamber Measurement Photo



Peak Gain 、 Efficiency Result

1.13 cable

Freq. (GHz)	Peak Gain (dBi)	3D-avgGain (dBi)	Efficiency (%)
2.4	0.21	-3.85	41
2.41	0.21	-3.75	42
2.42	0.19	-3.82	41
2.43	0.19	-3.86	41
2.44	0.63	-3.4	46
2.45	0.62	-3.27	47
2.46	0.55	-3.33	46
2.47	0.72	-3.12	49
2.48	0.37	-3.4	46
2.49	0.38	-3.36	46
2.5	0.04	-3.76	42

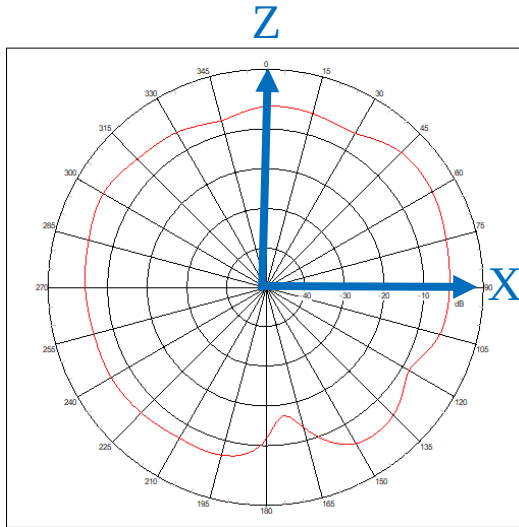
0.81 cable

Freq. (GHz)	Peak Gain (dBi)	3D-avgGain (dBi)	Efficiency (%)
2.4	-0.05	-5.41	29
2.41	0.34	-5.02	31
2.42	0.8	-4.55	35
2.43	0.57	-4.77	33
2.44	0.71	-4.61	35
2.45	0.68	-4.61	35
2.46	0.7	-4.57	35
2.47	0.78	-4.48	36
2.48	0.38	-4.88	33
2.49	0.53	-4.73	34
2.5	0.34	-4.89	32

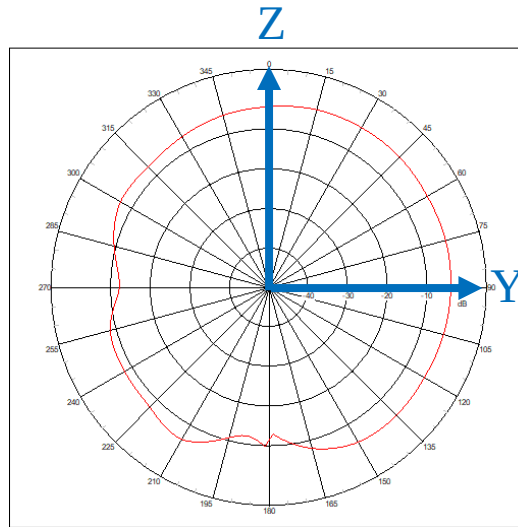
2D Antenna Pattern

Frequency : 2450 MHz

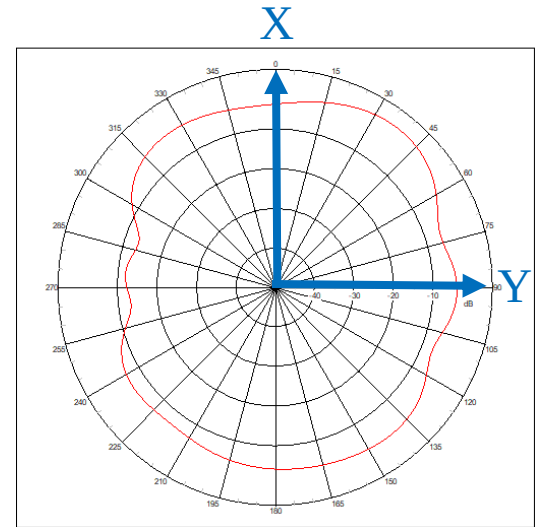
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB



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MAKING THE PERFECT CONNECTION

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