

# LYNwave Technology

Antenna & Thermal solution provider

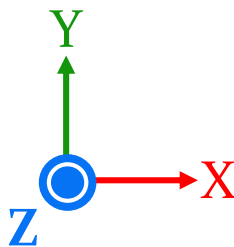
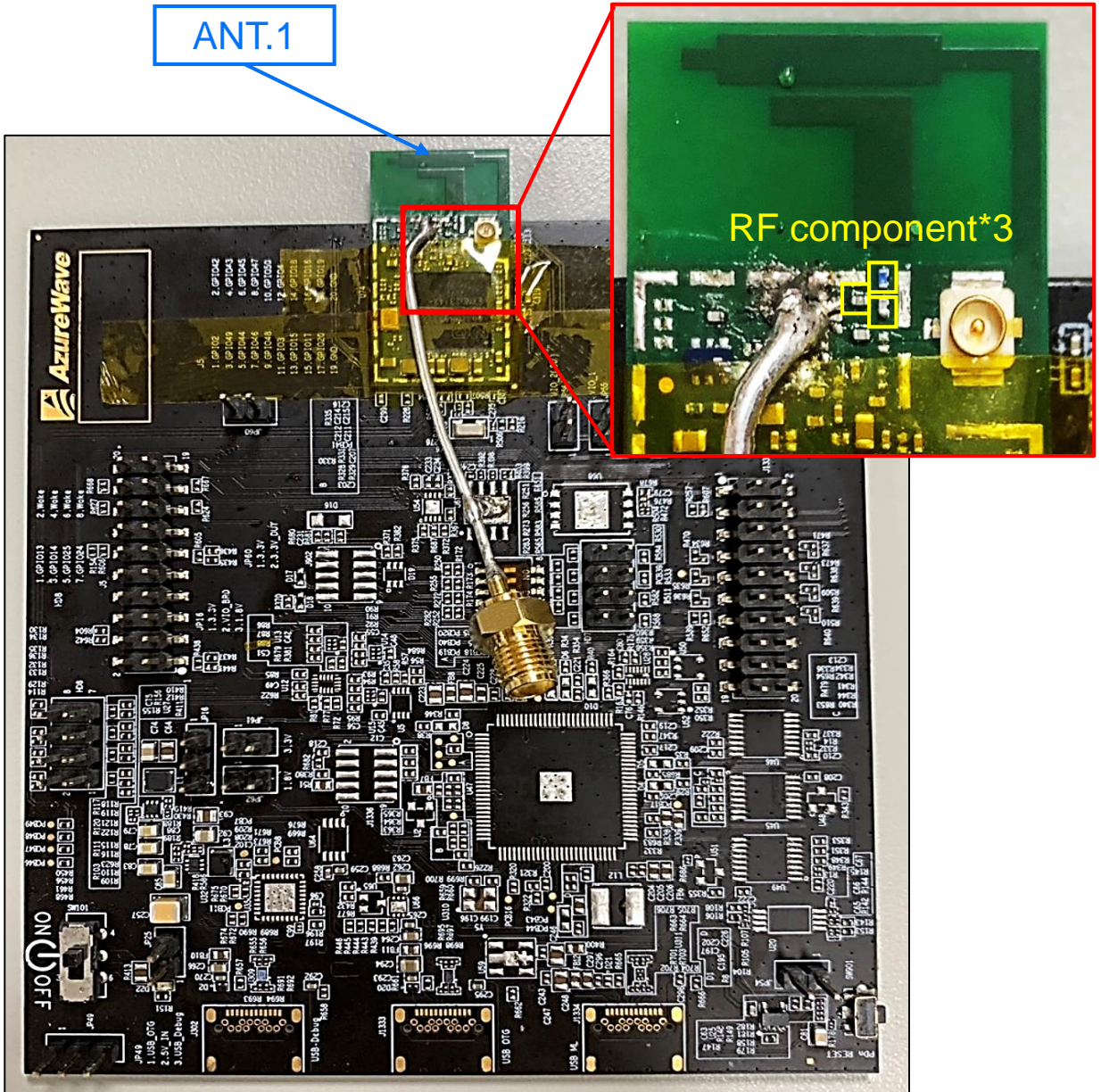


## Table of Contents

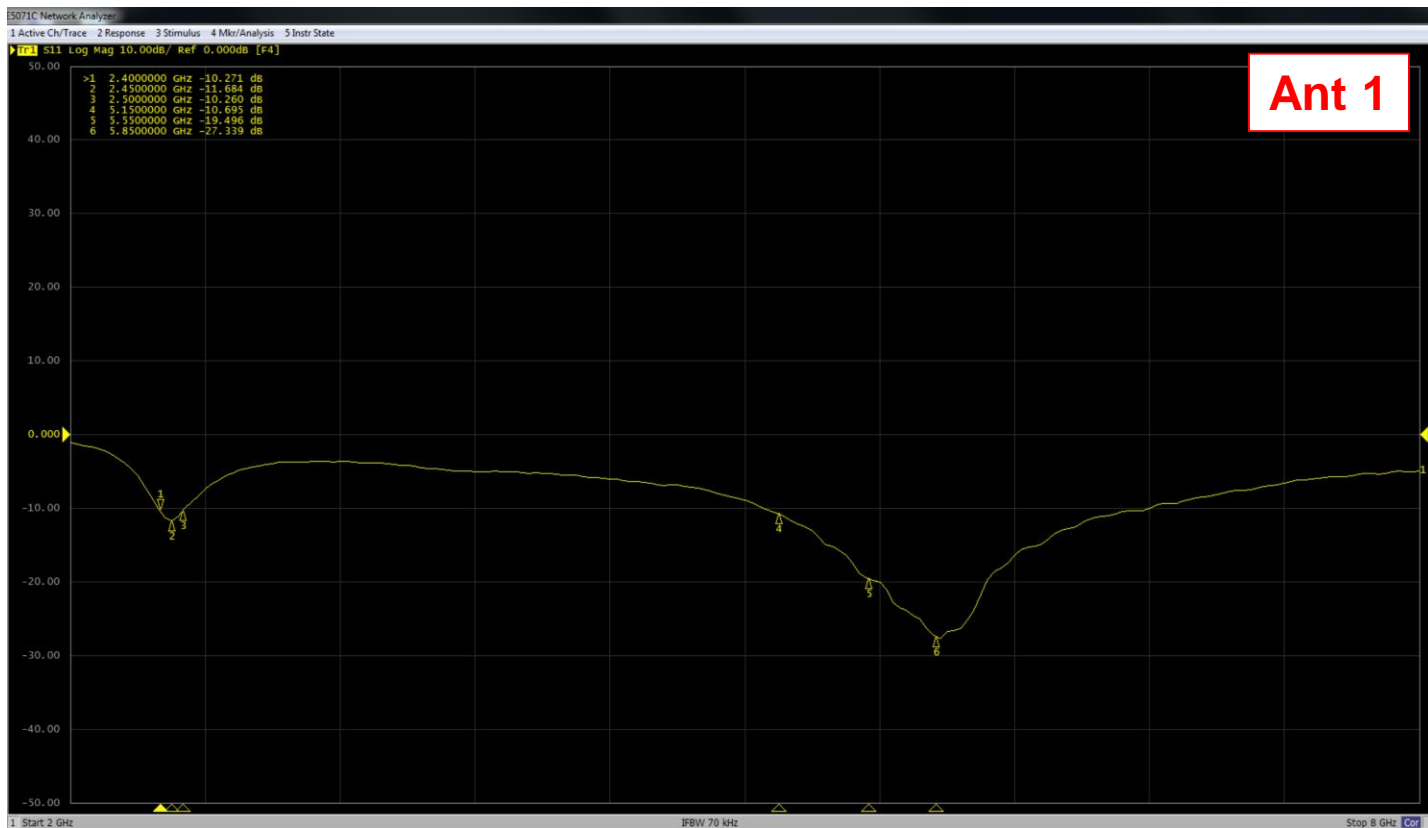
- A. Antenna RF Characteristics
  - 1. Antenna Placement
  - 2. S-Parameters
  - 3. Equipment
  - 4. Gain Table
  - 5. Radiation Pattern
  - 6. Summary

# Antenna Placement

Antenna	Description	Frequency
Ant.1	Dual Band	2400 MHz ~ 2500 MHz / 5150 MHz ~ 5850 MHz



## S-Parameters



Equipment :  
Satimo

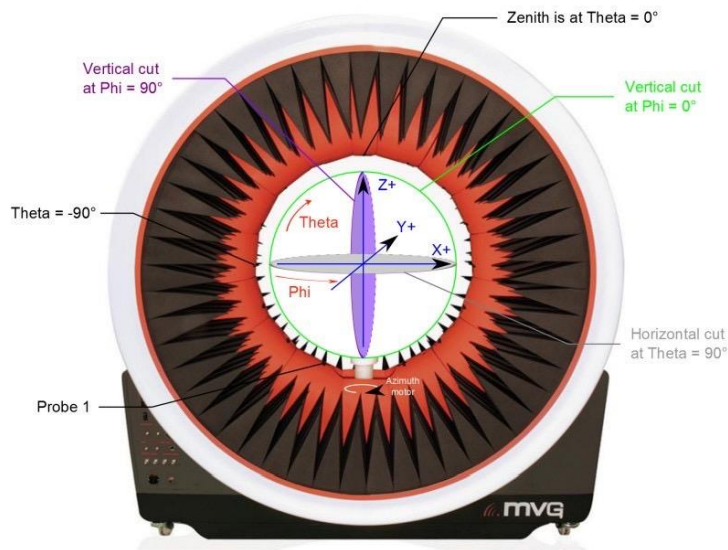
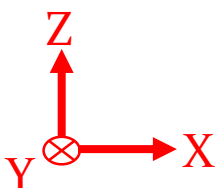
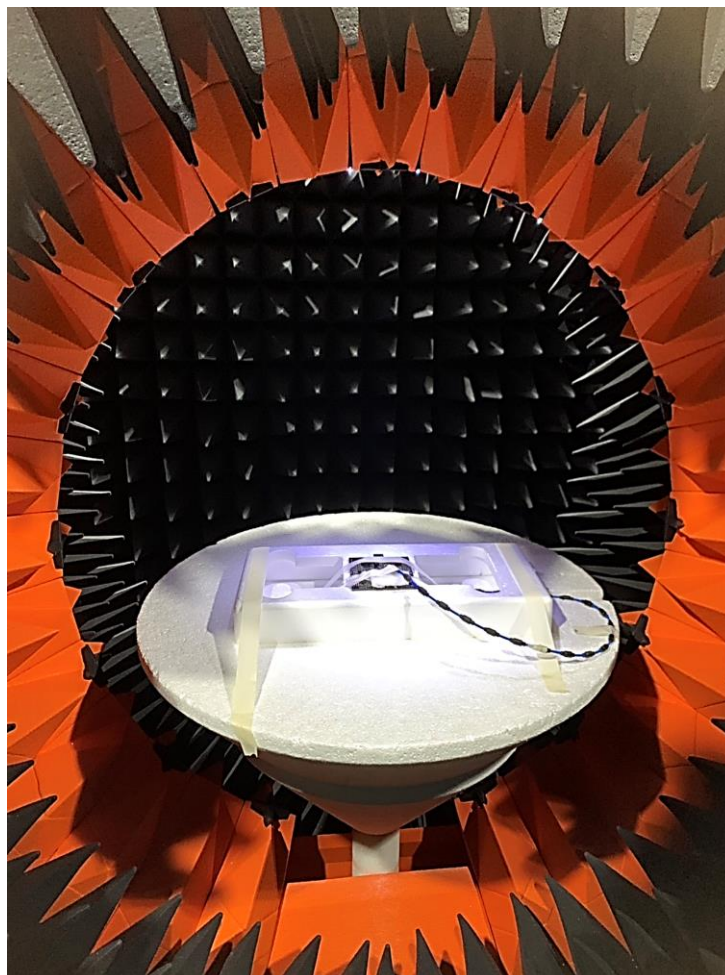


Figure 3.12: StarLab spherical coordinate system



## Gain Table

Ant.1						
Frequency (MHz)	2400	2450	2500	5150	5550	5850
Peak Gain(dBi)	2.0	2.2	2.2	4.0	4.4	4.1
Efficiency(%)	65	67	66	72	74	73

## The antenna characteristics

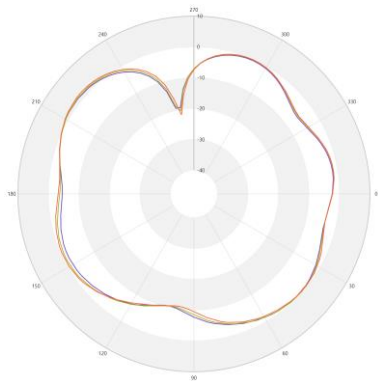
- Return loss < -10dB in operating band
- Efficiency
  - 2.4 GHz band  $\geq$  60%
  - 5 GHz band  $\geq$  70%
- Gain
  - 2.4 GHz : 2.0 ~ 2.2dBi
  - 5 GHz : 4.0 ~ 4.4dBi

# Ant.1\_2.4GHz 2D.3D Radiation Pattern

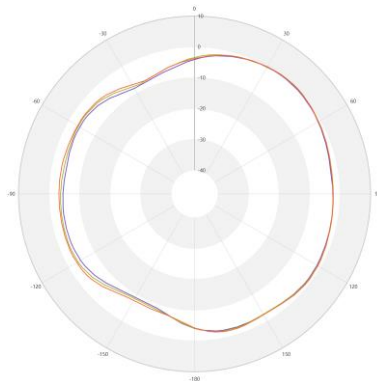
Frequency(MHz) : 2400~2500

Radiation Pattern :

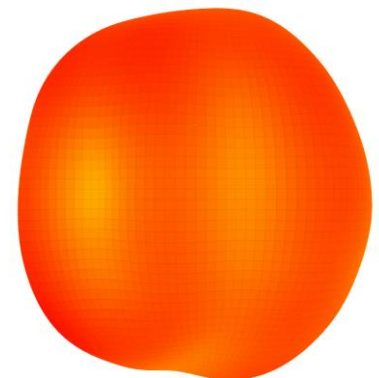
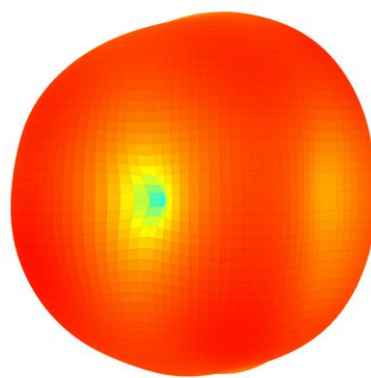
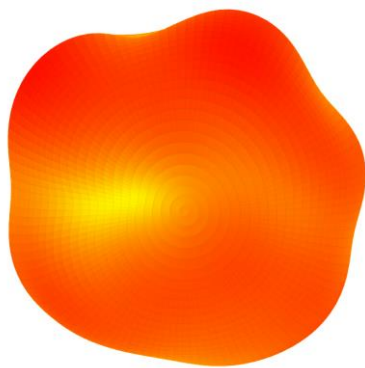
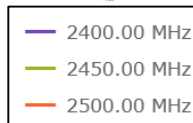
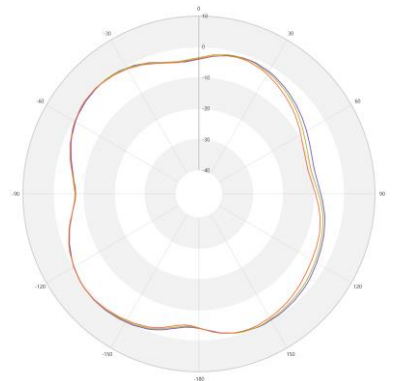
Azimuth Plane  
Theta = 90



Elevation Plane  
phi = 0

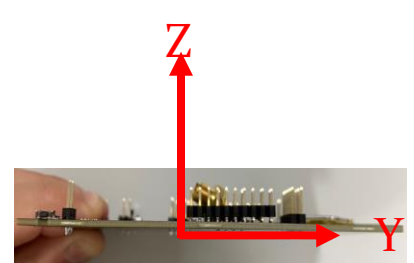
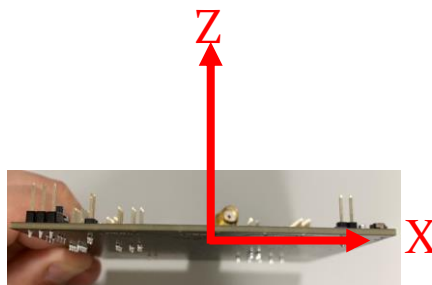
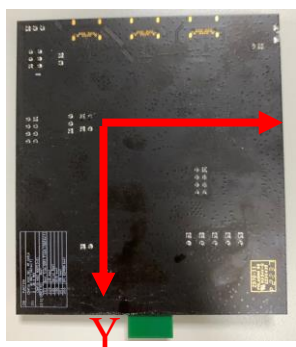


Elevation Plane  
phi = 90



3D Frequency(MHz) : 2450  
Peak gain : 2.2 dBi

Setup :



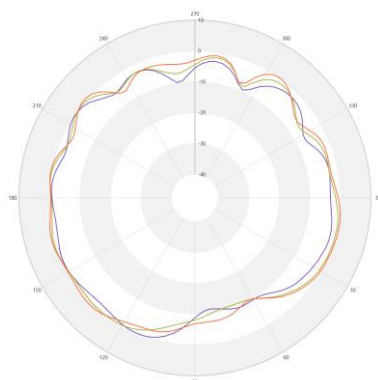


# Ant.1\_2.4GHz 2D.3D Radiation Pattern

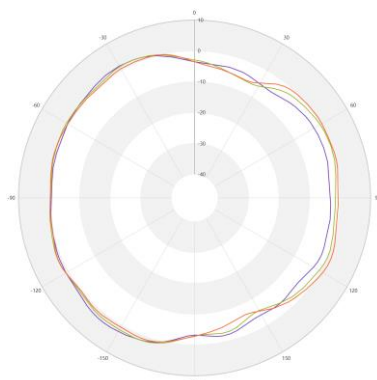
Frequency(MHz) : 5150~5850

Radiation Pattern :

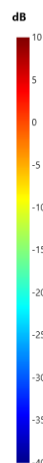
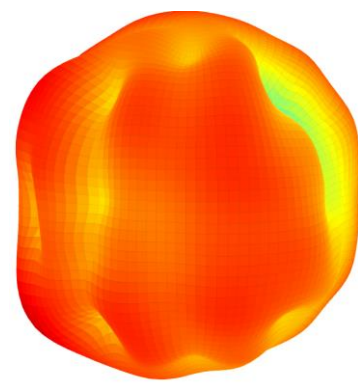
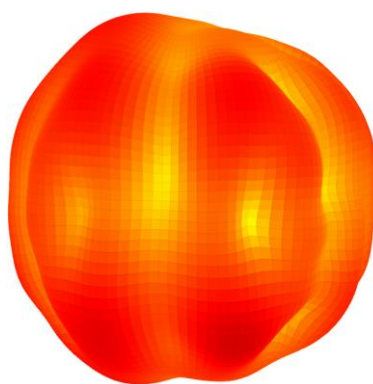
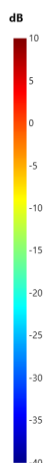
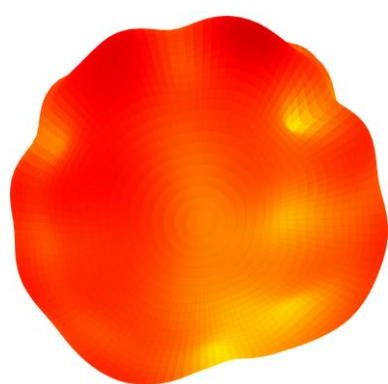
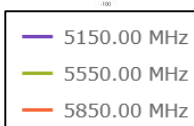
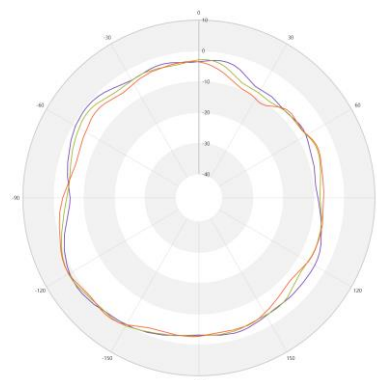
Azimuth Plane  
Theta = 90



Elevation Plane  
phi = 0

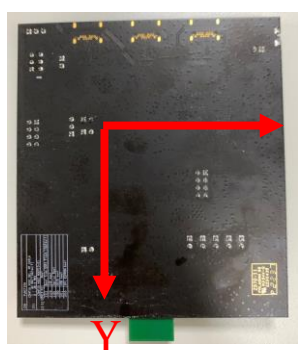


Elevation Plane  
phi = 90



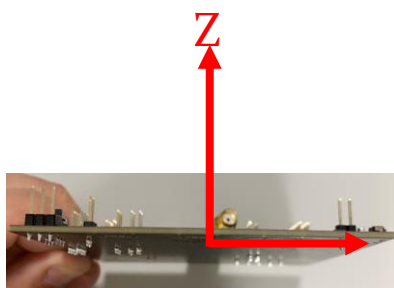
3D Frequency(MHz) : 5550  
Peak gain : 4.4 dBi

Setup :



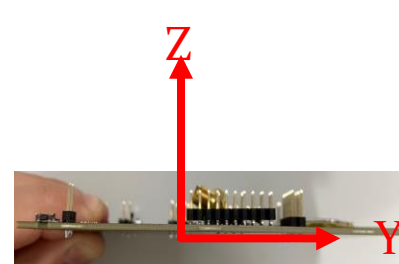
X

Y



X

Z



Y

Z

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