

LYNwave Technology

Antenna & Thermal solution provider

Antenna Test Report

Project Name: Realtek Monopole FPCB

Model Name:

Antenna Part ALX22F-120AA0-00

Number:

Feature: 2.4G+5G+6G

Application:

Date	Owner	Revision
2022/07/28	Alon	1. S-Parameter Measurement 2. Antenna Passive Measurement
2022/07/29	Taiga	1. Check and revise

Table of Contents

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

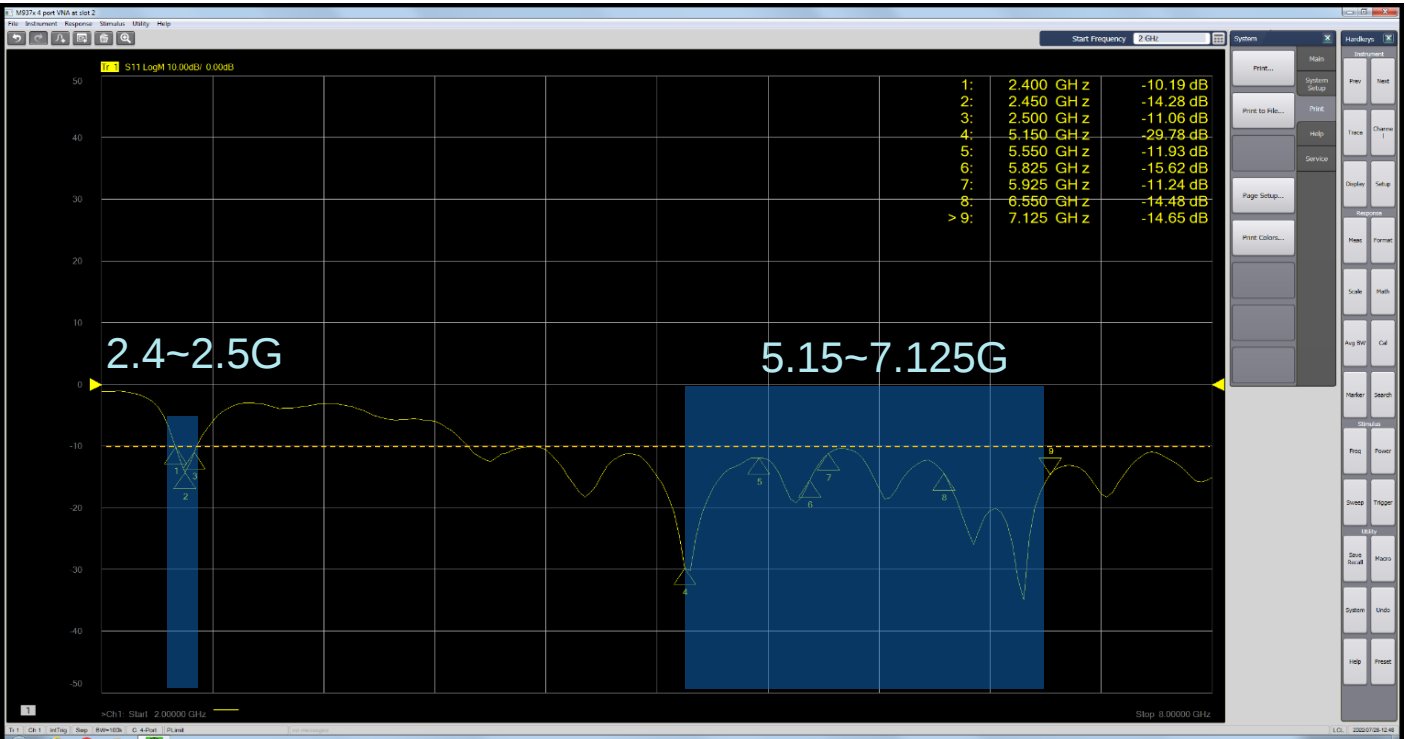
Antenna Placement

Antenna	Description	Frequency
Ant.1	Triple Band	2400 ~ 2500 MHz ; 5150 ~ 5895 MHz ; 5925 ~ 7125 MHz

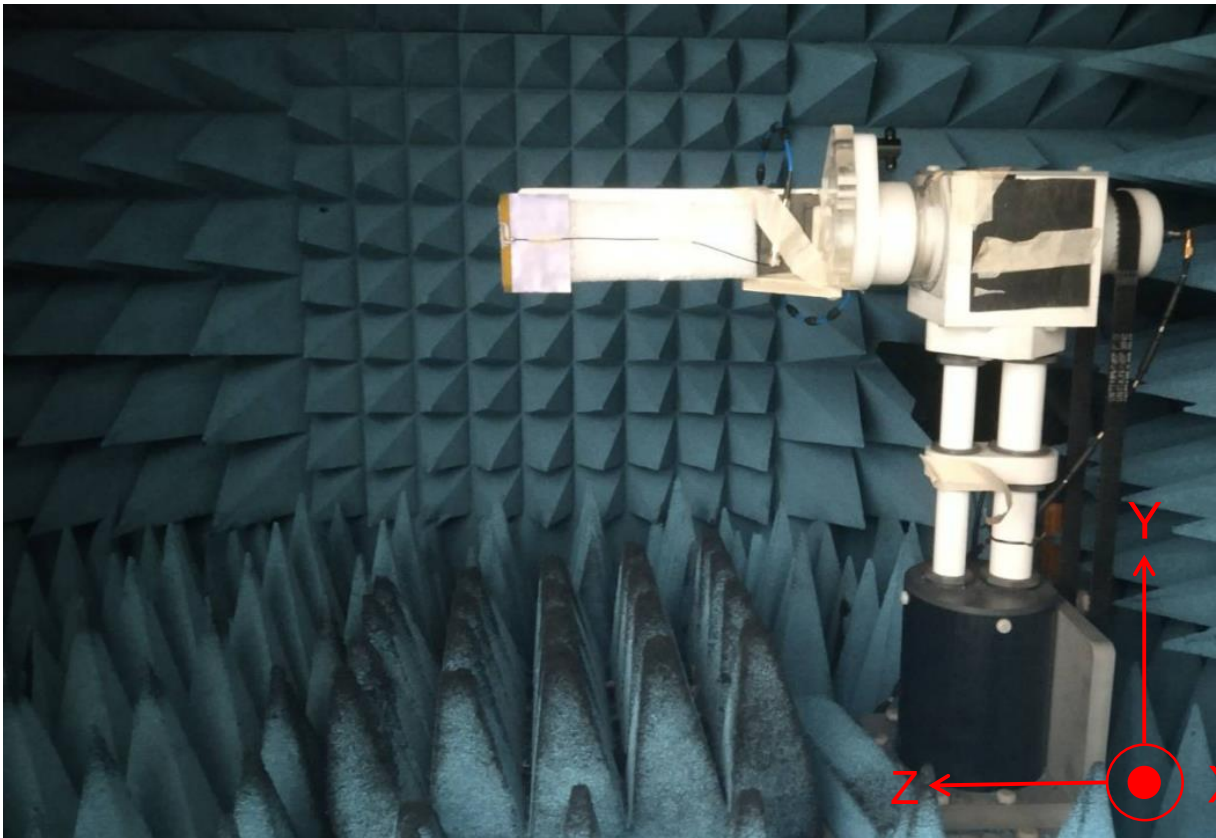
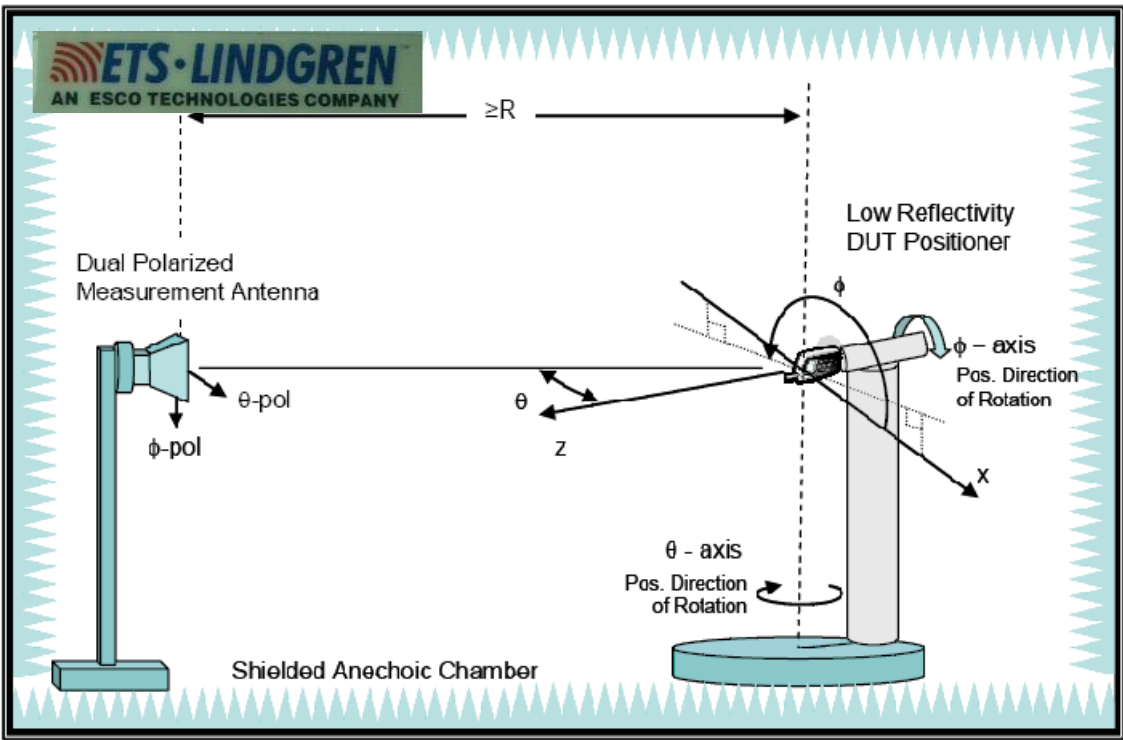
Mechanical Specification

Category	Specification
Dimension (mm)	70 x 50
Thickness (mm)	0.2
Weight (g)	TBD
Connector	IPEX4L
Cable	RF-1.13
Cable Length (mm)	200

S-Parameters



Equipment :
ETS Chamber



Gain Table

2.4G			
Frequency (MHz)	2400	2450	2500
Efficiency(%)	68	78	72
Peak Gain(dBi)	2.6	3.2	3
5G			
Frequency (MHz)	5150	5550	5895
Efficiency(%)	71	77	66
Peak Gain(dBi)	4	3.8	3.5
6G			
Frequency (MHz)	5925	6550	7125
Efficiency(%)	70	58	57
Peak Gain(dBi)	4.5	3.5	3.4

The antenna characteristics

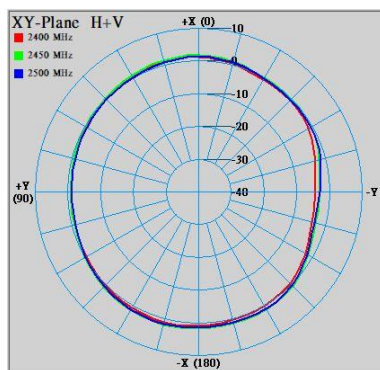
- Peak Gain
 - 2.4GHz : 2.6~3.2dBi
 - 5GHz : 3.5~4dBi
 - 6GHz : 3.4~4.5dBi
- Efficiency
 - 2.4GHz Band > 60%
 - 5GHz Band > 60%
 - 6GHz Band > 55%

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

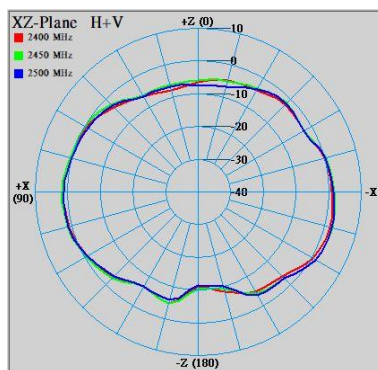
Frequency(MHz) : 2D. 2400~2500
3D. 2450

Radiation Pattern :

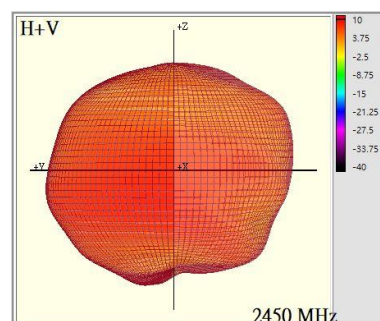
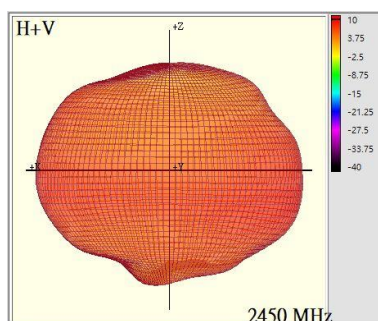
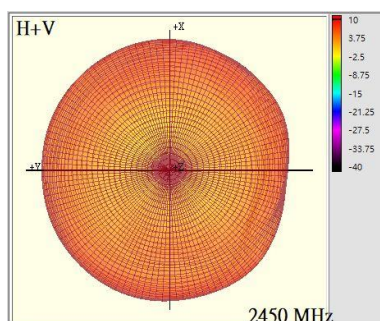
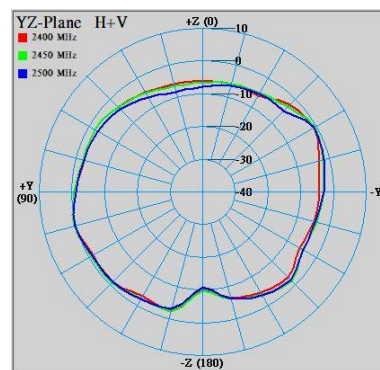
Azimuth Plane



Elevation Plane
phi = 0



Elevation Plane
phi = 90



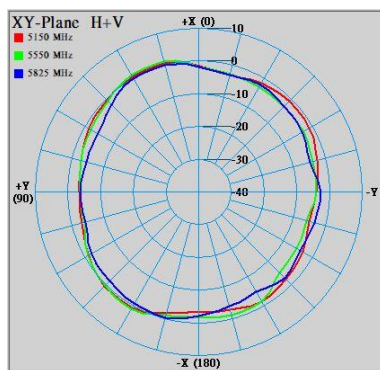
Setup :

Ant.1_5GHz 2D.3D Radiation Pattern

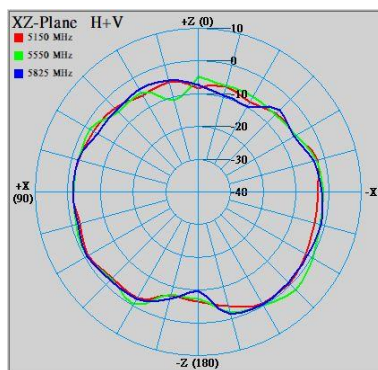
Frequency(MHz) : 2D. 5150~5895
3D. 5550

Radiation Pattern :

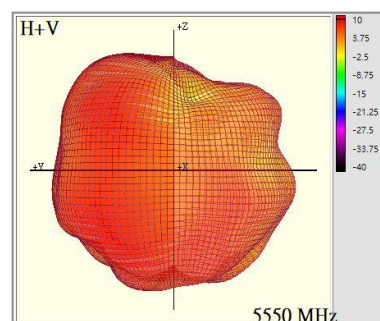
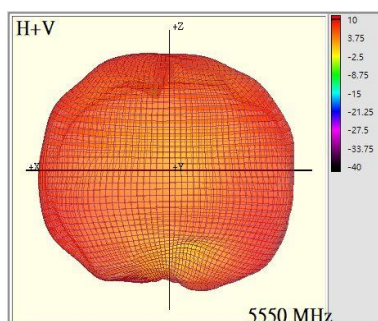
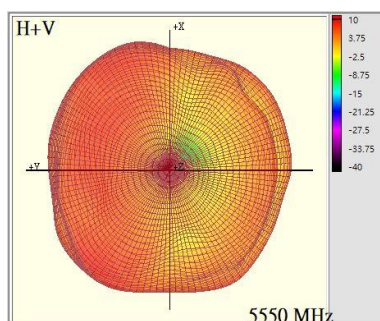
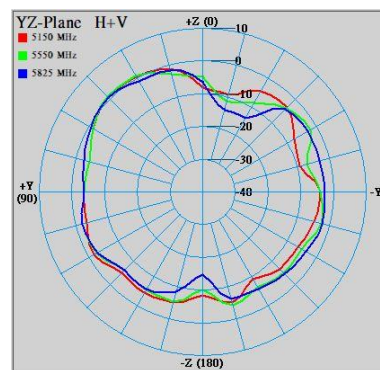
Azimuth Plane



Elevation Plane
phi = 0



Elevation Plane
phi = 90



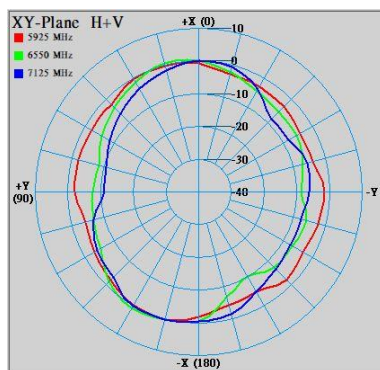
Setup :

Ant.1_6GHz 2D.3D Radiation Pattern

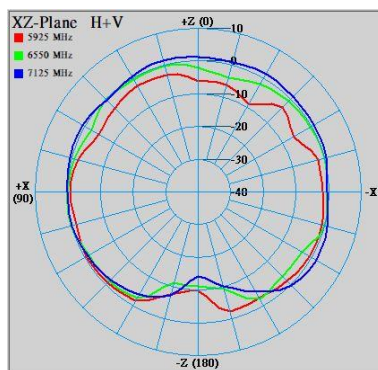
Frequency(MHz) : 2D. 5925~7250
3D. 6550

Radiation Pattern :

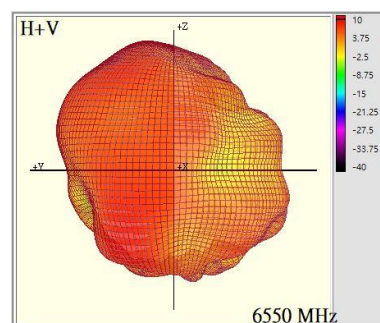
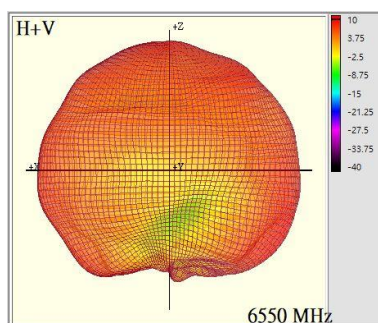
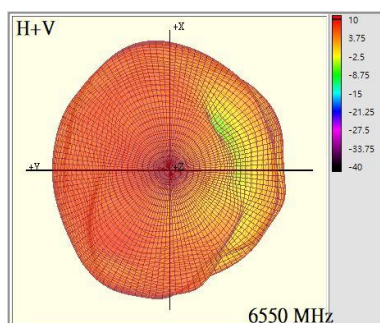
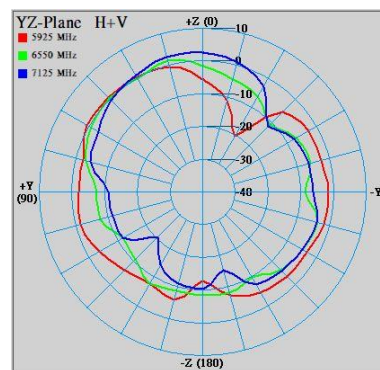
Azimuth Plane



Elevation Plane
phi = 0



Elevation Plane
phi = 90



Setup :

www.lynwave.com



<https://www.facebook.com/LYNwaveTechnology/>



<https://www.linkedin.com/company/lynwave-technology-ltd./>



<https://lynwave.en.alibaba.com/>