

LYNwave Technology

Antenna & Thermal solution provider

Antenna Test Report

Company Xavi
Project Name: H200W
Model Name:
Feature: WIFI Dual Band * 2

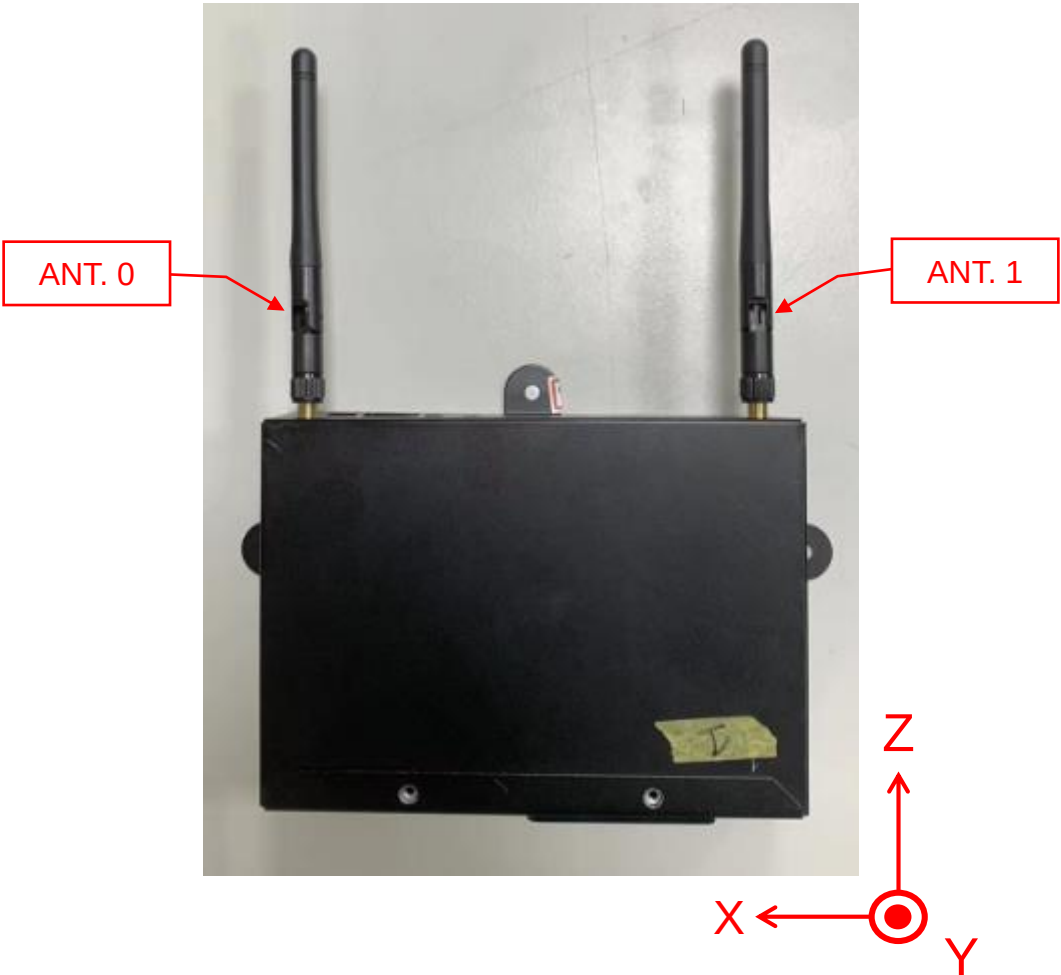
Date	Owner	Revision
0520	Zino	1. V1 , Field Test
0604	Zino	1. S2-1 , Field Test

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Antenna Placement

Antenna	Description	Frequency
Ant.0	WIFI Dual Band	2400~2500MHz 5150~5850MHz
Ant.1	WIFI Dual Band	2400~2500MHz 5150~5850MHz



Equipment :
Satimo

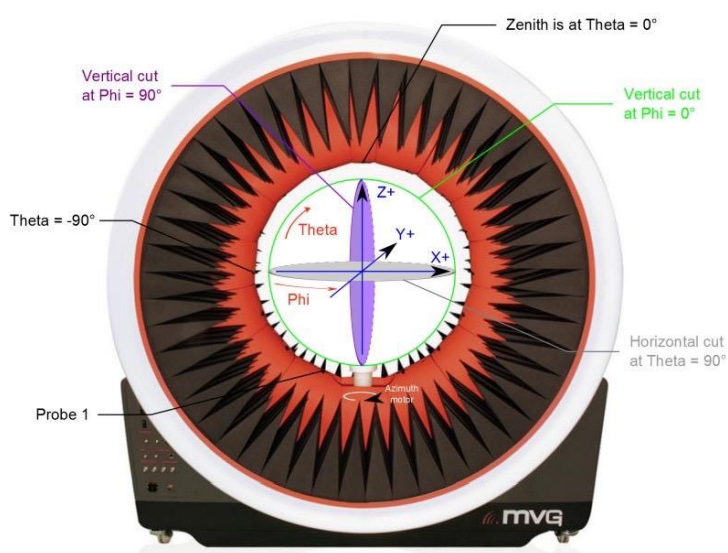
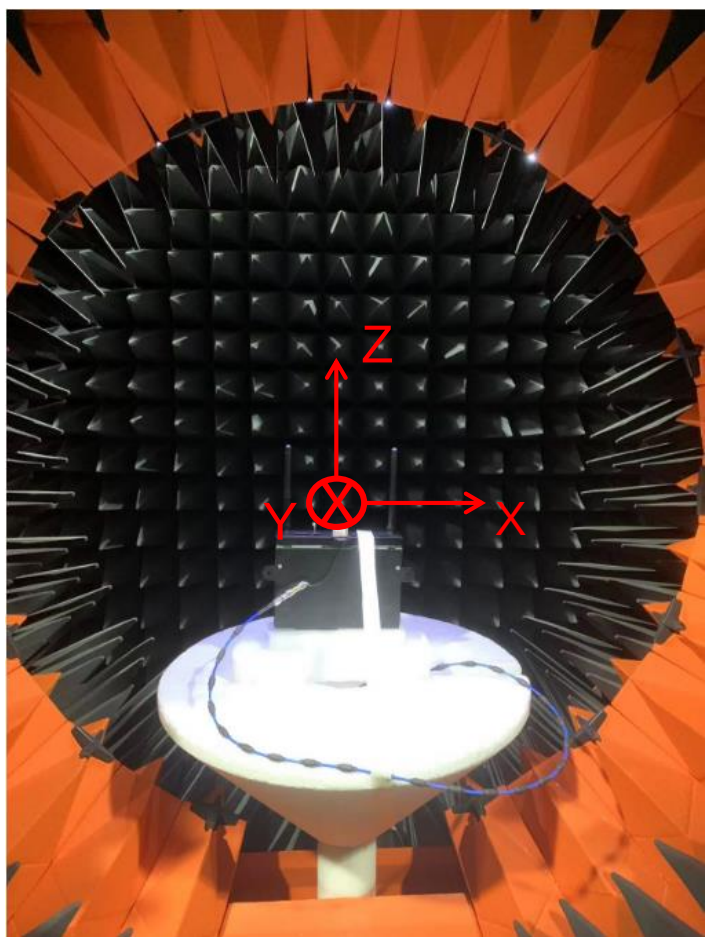


Figure 3.12: StarLab spherical coordinate system



S-Parameters



Gain Table

2.4G	Frequency(MHz)	2400	2450	2500		
Ant.0	Peak Gain(dBi)	3.0	2.9	2.8		
	Efficiency(%)	74	72	71		
Ant.1	Peak Gain(dBi)	2.9	3.1	3.3		
	Efficiency(%)	75	74	73		
5G	Frequency(MHz)	5150	5350	5550	5750	5850
Ant.0	Peak Gain(dBi)	3.1	3.2	3.4	3.0	2.7
	Efficiency(%)	61	63	66	63	62
Ant.1	Peak Gain(dBi)	2.8	3.2	3.4	3.0	2.9
	Efficiency(%)	64	65	69	64	64

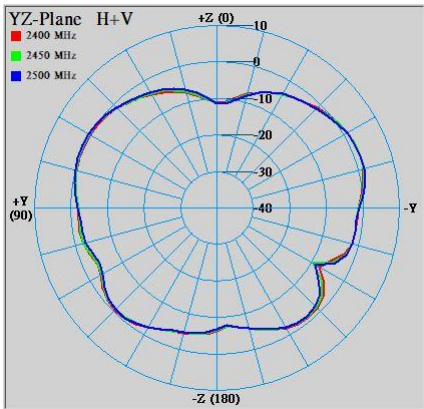
The antenna characteristics

- Return loss < -10dB in operating band
- Efficiency
 - 2G Band > 70%
 - 5G Band > 60%
- Gain
 - 2.4G Band 2.8~3.3dBi
 - 5G Band 2.7~3.4dBi
- Isolation
 - 2.4G Band > 20 dB
 - 5G Band > 25 dB

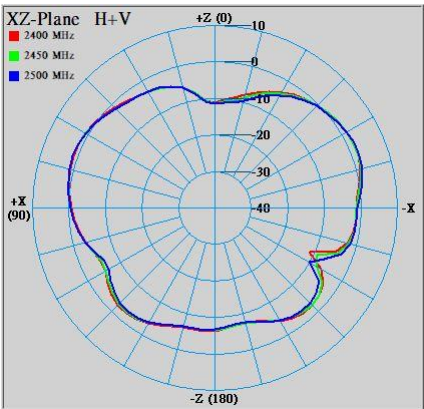
Ant.0 Radiation Pattern
Frequency(MHz) : 2400~2500

Radiation Pattern :

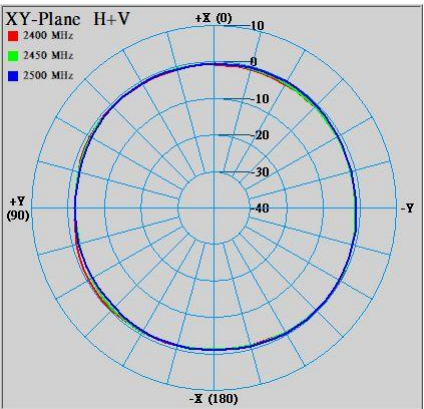
Elevation Plane
 $\phi = 90$



Elevation Plane
 $\phi = 0$



Azimuth Plane
 $\theta = 90$



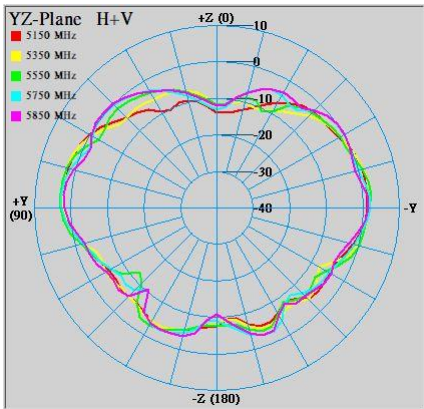
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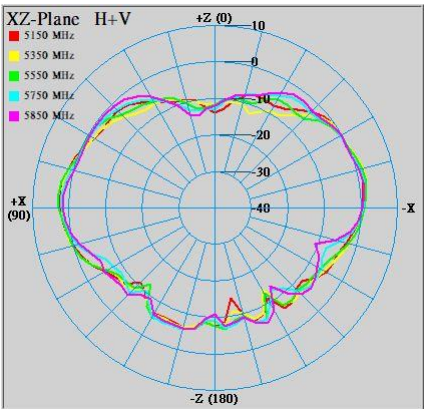
Ant.0 Radiation Pattern
Frequency(MHz) : 5150~5850

Radiation Pattern :

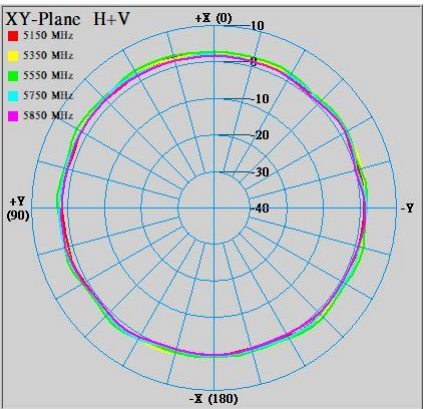
Elevation Plane
 $\phi = 90$



Elevation Plane
 $\phi = 0$



Azimuth Plane
 $\theta = 90$



Setup :

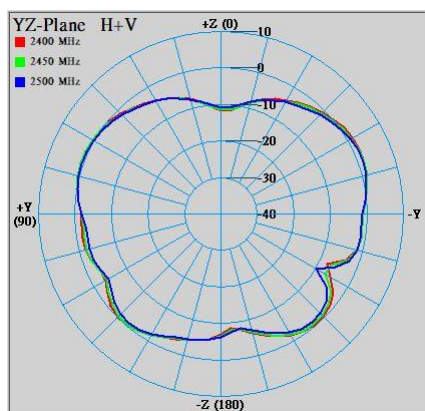


Ant.1 Radiation Pattern

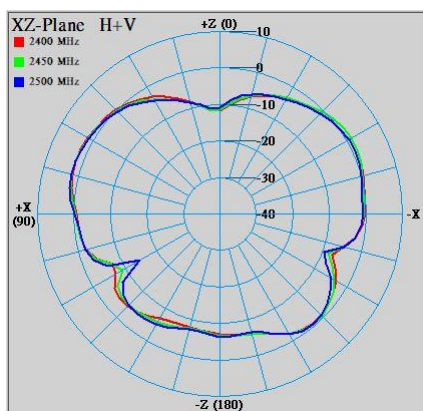
Frequency(MHz) : 2400~2500

Radiation Pattern :

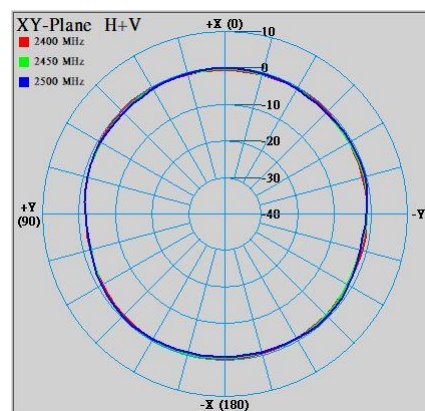
Elevation Plane
phi = 90



Elevation Plane
phi = 0



Azimuth Plane
theta = 90



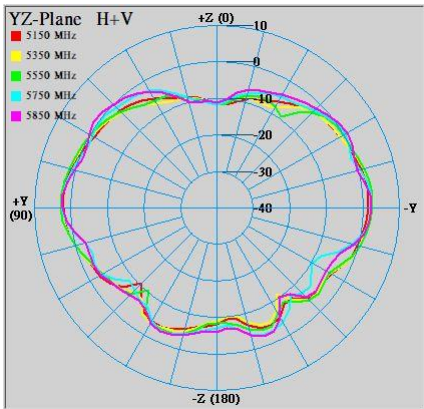
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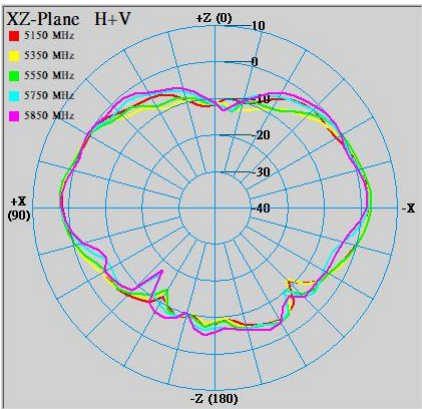
Ant.1 Radiation Pattern
Frequency(MHz) : 5150~5850

Radiation Pattern :

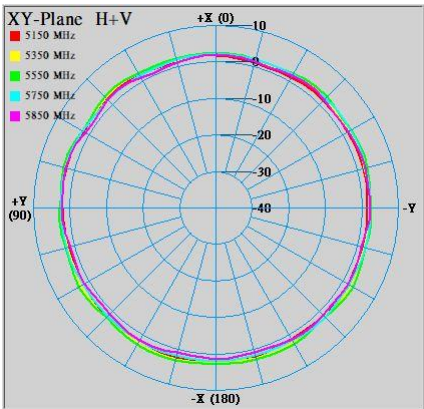
Elevation Plane
 $\phi = 90$



Elevation Plane
 $\phi = 0$



Azimuth Plane
 $\theta = 90$



Setup :

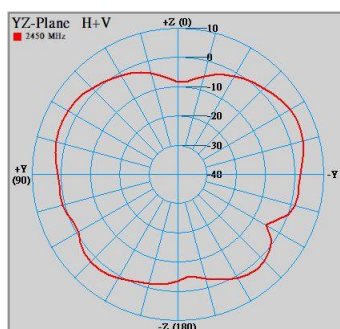


Combine 2D Radiation Pattern

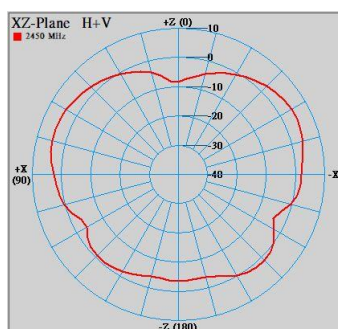
Frequency(MHz) : 2450/5550

Radiation Pattern :

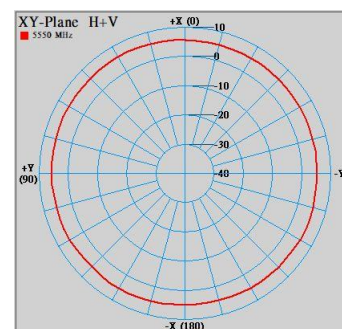
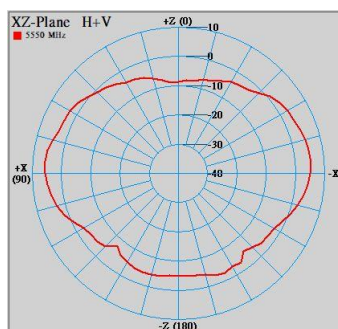
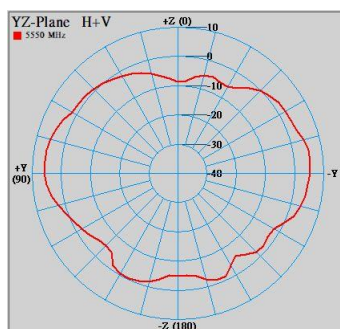
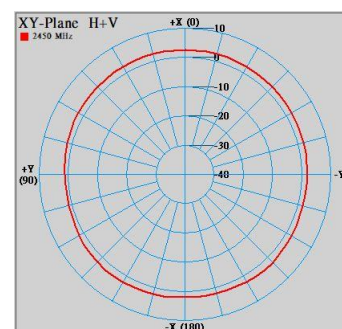
Elevation Plane
phi = 90



Elevation Plane
phi = 0



Azimuth Plane
theta= 90



Z

Y



Z

X



X

Y



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