



產品承認書

Specification for Approval

客戶 (Customer): 訊舟科技股份有限公司

Customer Part No.: IC-3410SN

Product Description:

Lynwave Part No.: ALX23F-221AA0-00

客戶簽核 (Customer Approval)

客戶承認 Customer Approval	核准 (Authorized)	檢驗 (Approved)
	日期： 年 月 日	

內部簽核 (Signature)

日期： 2023 年 10 月 19 日

Approved by	Checked by	Tested by
<i>YungMing</i>	<i>Lisa Wei</i>	<i>Zero Chen</i>

綠億科技股份有限公司

Lynwave Technology Ltd.

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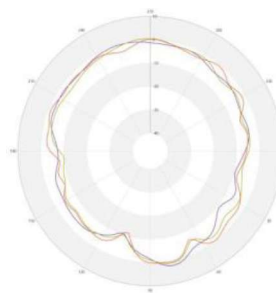
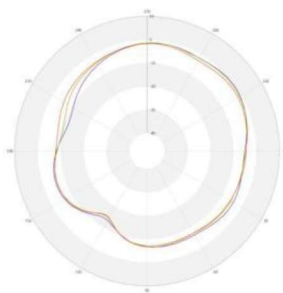
ALX23F-221AA0-00

Features

- Dual band IEEE 802.11 a/b/g/n/ac/ax standard
- 2+5GHz indoor embedded Omni-directional antenna
- High efficiency and quick integration with MHF compatible connector mounting
- Available in customized cable lengths and connectors

Applications

- Door Bell

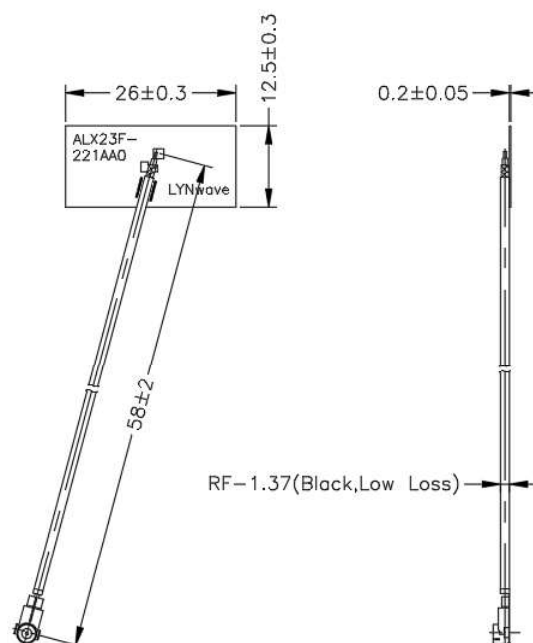


Electrical Specification

Category	Specification	
Frequency (MHz)	2400 - 2500	5150 - 5850
Peak Gain (dBi)	4.5	5.5
VSWR	2.0 : 1	
Polarization	Linear	
Power (Watts)	1	
Impedance (Ohms)	50	
Type	DIPOLE	

Mechanical Specification

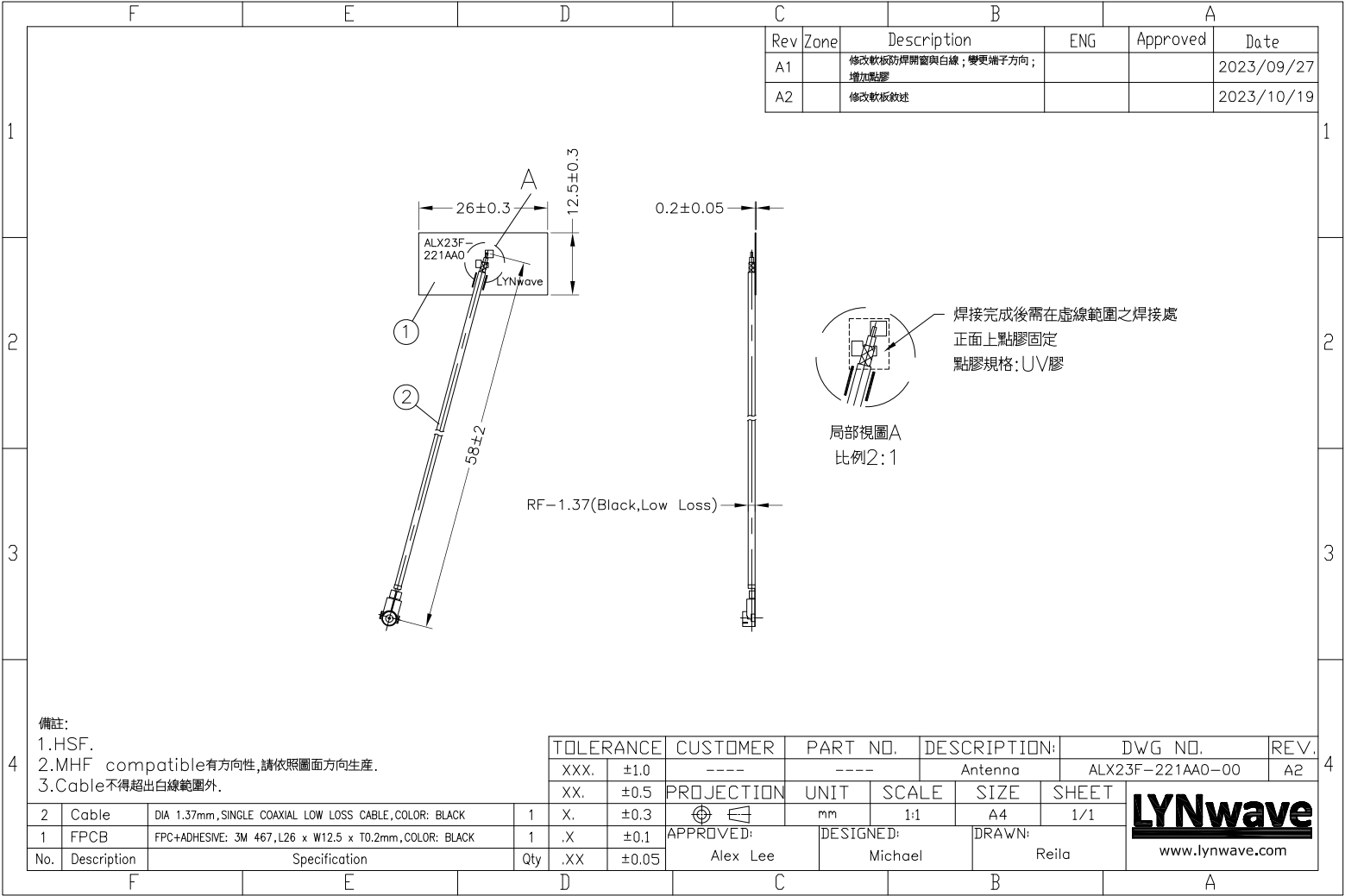
Category	Specification
Dimension (mm)	26 x 12.5
Thickness (mm)	0.2
Weight (g)	0.45
Connector	MHF compatible
Cable	Low Loss RF-1.37
Cable Length (mm)	58
Material	FPCB
Operating Temp (°C)	-40°C ~ +85°C
Storage Temp (°C)	23 ± 5°C
Storage Humidity (%)	30% ~ 70%



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LYNwave Technology

Antenna & Thermal solution provider

Antenna Field Test Report

Company: Edimax
Project Name: IC-3410SN
Application: Doorbell

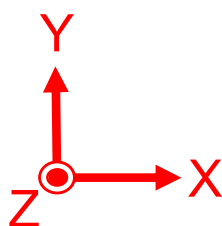
Date	Owner	Revision
2023/04/26	Peter	1. DVT Antenna fine tune and measurement
2023/10/11	Peter	1. DVT-3 Antenna measurement

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- A. Antenna RF Characteristics
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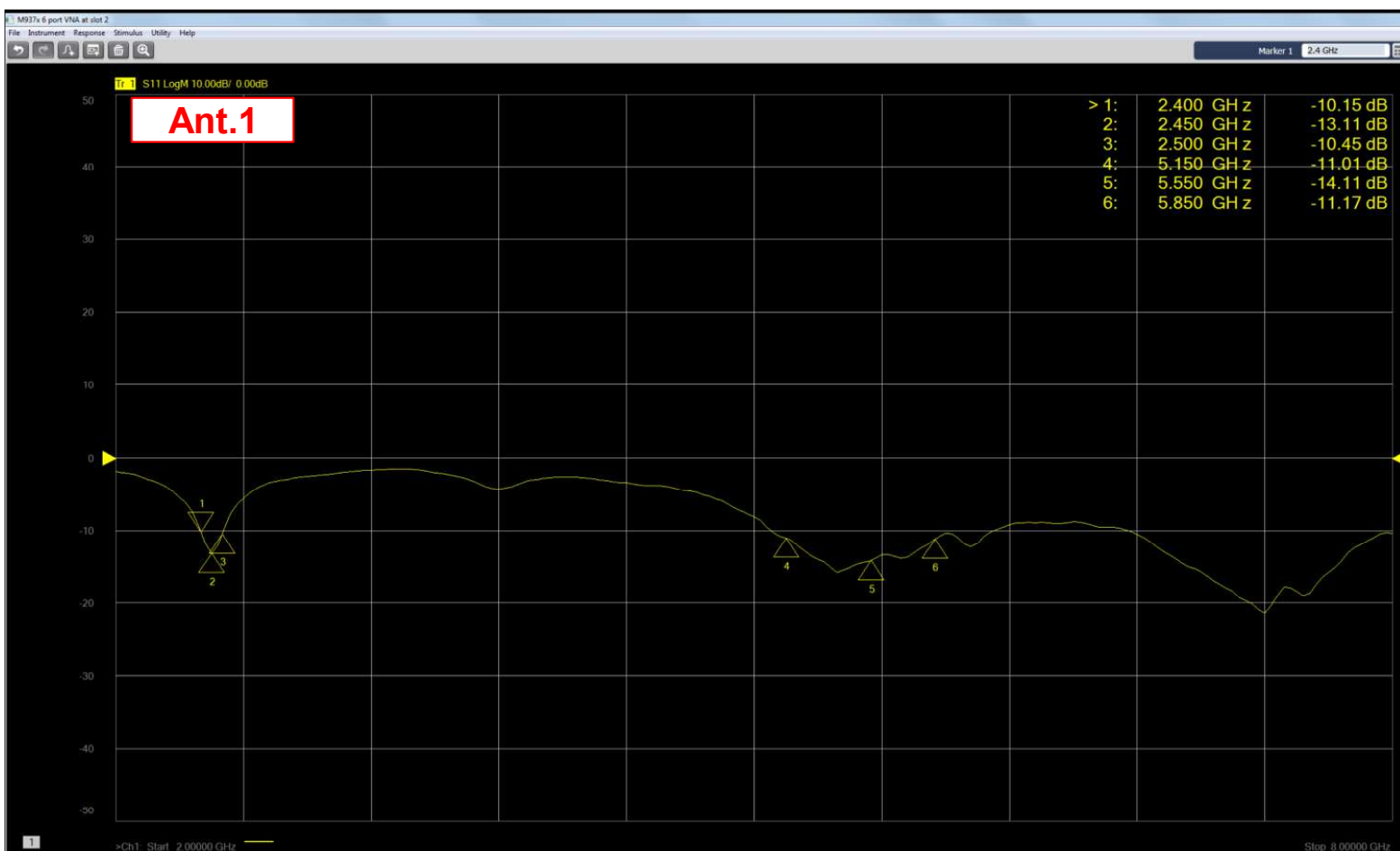
Antenna Placement

Antenna	Description	Frequency(MHz)
Ant.1	2.4GHz / 5GHz	2400~2500 / 5150~5850



Top View

S-parameters



Gain Table

Ant.1						
Frequency(MHz)	2400	2450	2500	5150	5550	5850
Peak Gain(dBi)	4.5	4.5	4.3	5.5	5.5	5.3
Efficiency(%)	63	66	64	73	74	72

The antenna characteristics

- Return loss < -10dB in operating band
- Efficiency
 - 2.4 GHz band $\geq 60\%$
 - 5 GHz band $\geq 60\%$
- Gain
 - 2.4 GHz : 4.3 ~ 4.5dBi
 - 5 GHz : 5.3 ~ 5.5dBi

Equipment : Satimo

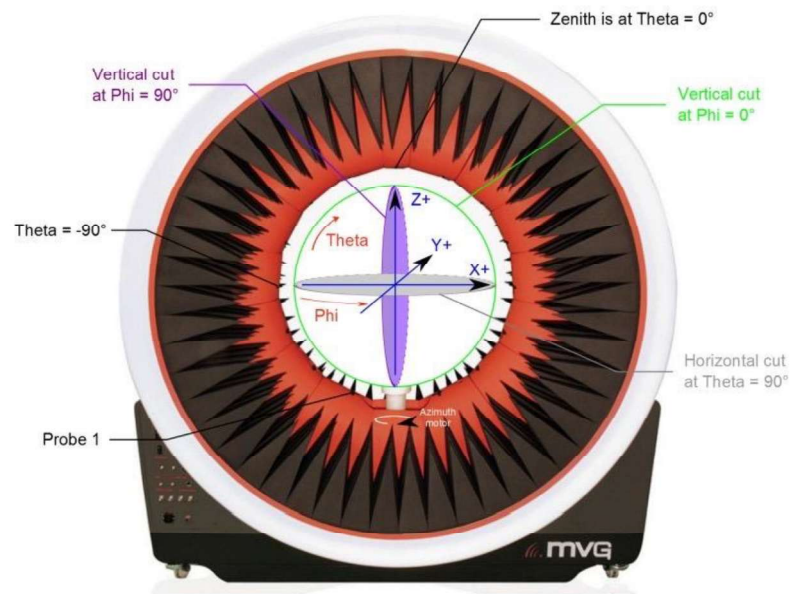
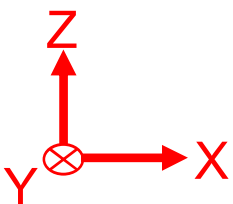


Figure 3.12: StarLab spherical coordinate system

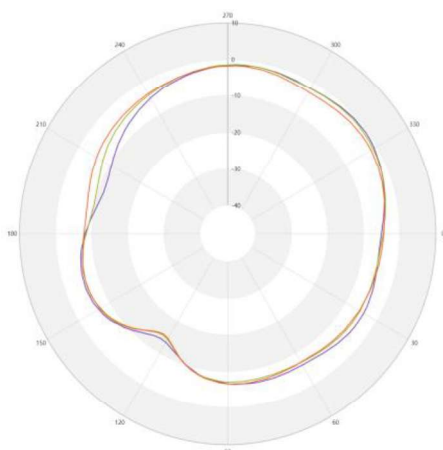


Ant.1_2GHz 2D Radiation Pattern

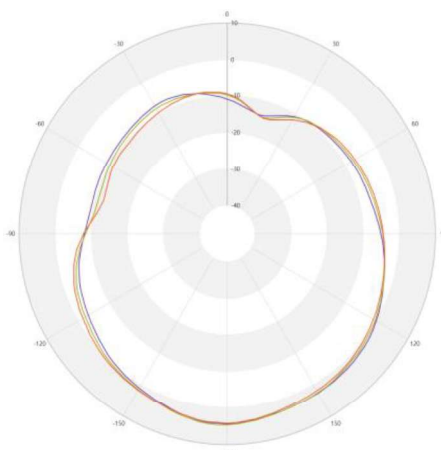
Frequency(MHz) : 2400~2500

Radiation Pattern :

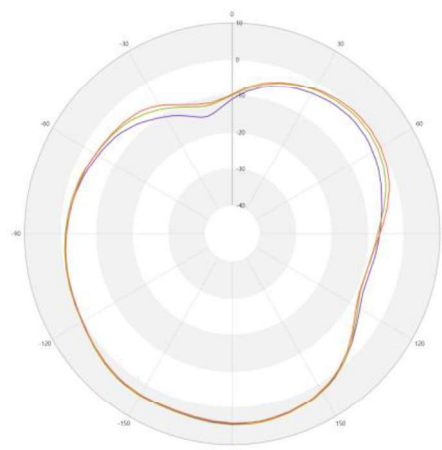
Azimuth Plane
Theta = 90



Elevation Plane
phi = 0

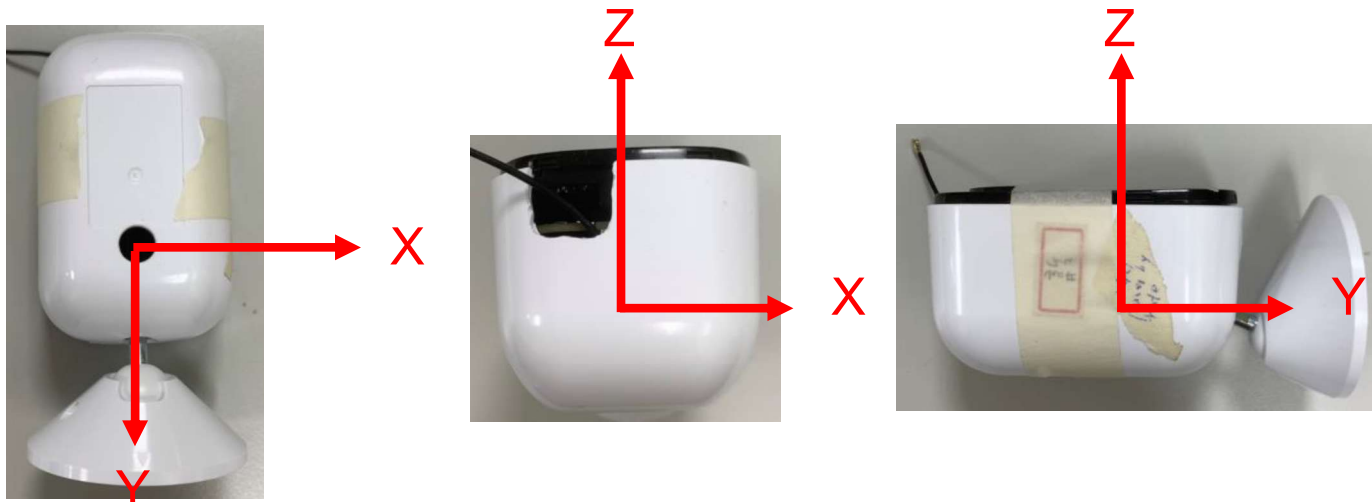


Elevation Plane
phi = 90



— 2400.00 MHz
— 2450.00 MHz
— 2500.00 MHz

Setup :

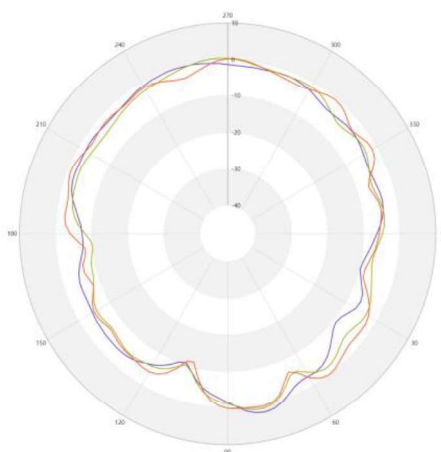


Ant.1_5GHz 2D Radiation Pattern

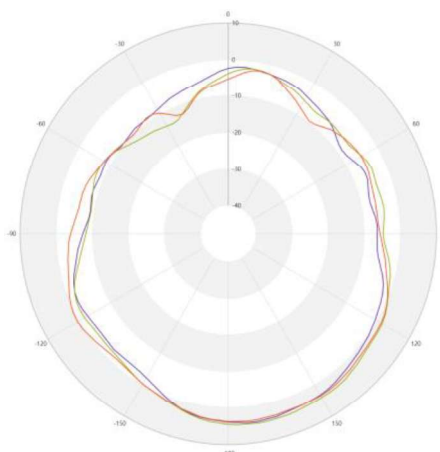
Frequency(MHz) : 5150~5850

Radiation Pattern :

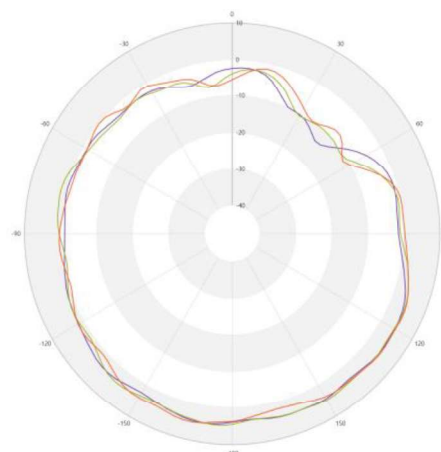
Azimuth Plane
Theta = 90



Elevation Plane
phi = 0

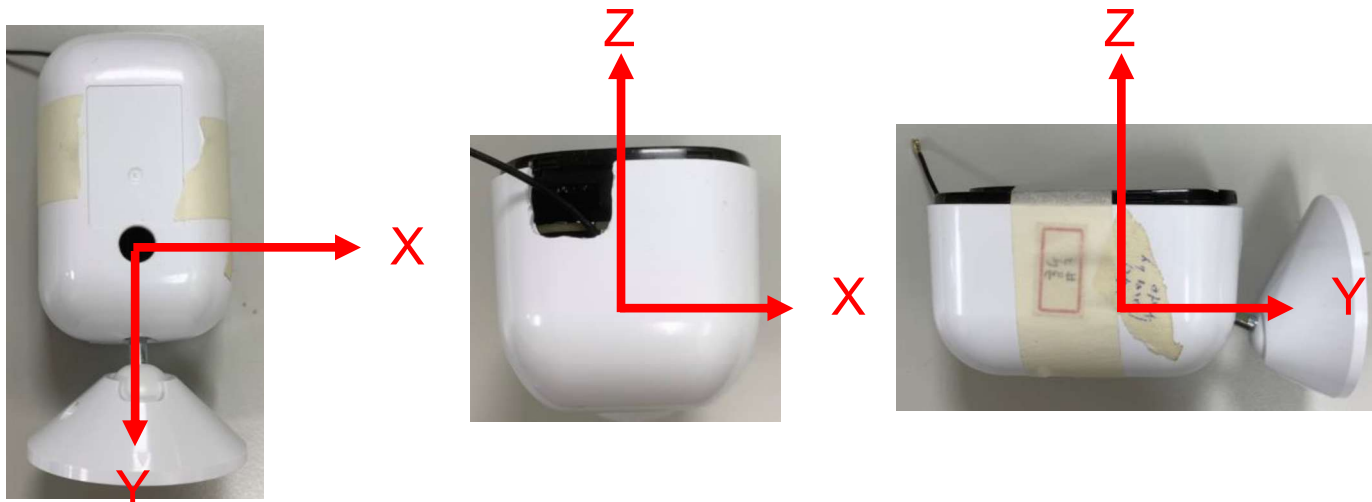


Elevation Plane
phi = 90



— 5150.00 MHz
— 5550.00 MHz
— 5850.00 MHz

Setup :



Summary

The antenna characteristics

- Return loss < -10dB in operating band
- Efficiency
 - 2.4 GHz band $\geq 60\%$
 - 5 GHz band $\geq 60\%$
- Gain
 - 2.4 GHz : 4.3 ~ 4.5dBi
 - 5 GHz : 5.3 ~ 5.5dBi

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