



# 產品承認書

## Specification for Approval

客戶 (Customer): 正文科技股份有限公司

Customer Part No.:

Product Description: WRTM-373AX

Lynwave Part No.: AEX22M-222AA4-00

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 03 月 28 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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5F., No.655, Xuecheng Rd., Shulin Dist., New Taipei City 238701,  
Taiwan Tel: 02-35018700 Fax: 02-35019833  
E-mail: service@lynwave.com

# Contents

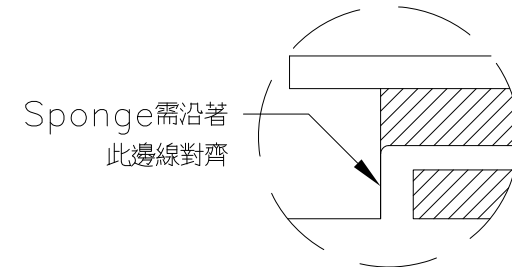
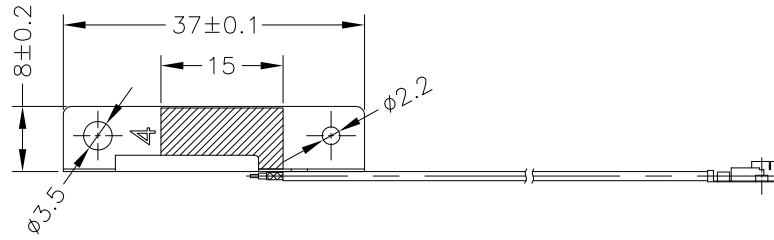
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# Specification

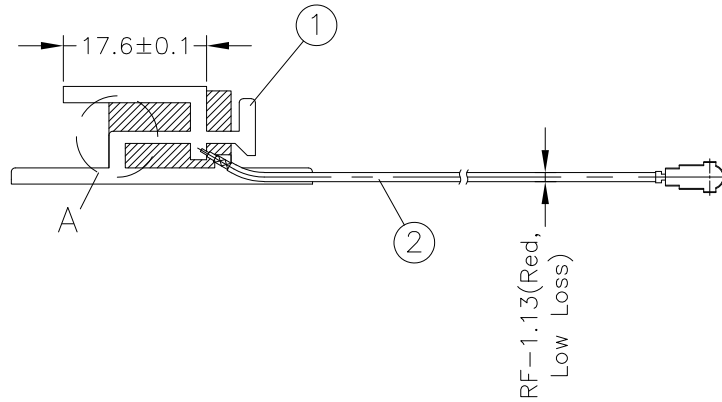
## Physical Properties :

1. Operation temperature :  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
2. Storage temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
3. Storage period: 2years
4. Weight: TBD

Rev	Zone	Description	ENG	Approved	Date
A1		修改線長, 由205mm改為230mm			2022/07/28
A2		修改鐵件長度			2022/08/15
A3		修改鐵件造型; 增加備註3			2022/09/28
A4		鐵件增加字模			2022/12/13
A5		修改鐵件材質, 由馬口鐵改為SUS430 鍍鎳			2023/03/27



局部視圖A  
比例2:1



備註:

- MHF compatible有方向性, 請依照圖面方向生產.
- Sponge需沿鐵件邊線貼齊且不得超出鐵件外.
- Cable走線與焊點不得低於鐵件底面.

TOLERANCE	CUSTOMER	PART NO.	DESCRIPTION:	DWG NO.	REV.
XXX, ±1.0	----	----	Antenna	AEX22M-222AA4-00	A5

No.	Description	Specification	Qty	.XX	±0.05	APPROVED:	DESIGNED:	DRAWN:
3	Sponge	EVA, SINGLE SIDE ADHESIVE: 3M 9888T, L15 x W7.5 x T11mm	1	XX.	±0.5	ALEX LEE	YUNG-MING	ANNA
2	Cable	DIA 1.13mm, SINGLE COAXIAL LOW LOSS CABLE, COLOR: RED, L=230±3	1	X.	±0.3			
1	Metal	L37 x W8 x H12 x T0.3mm, SUS430 鍍鎳	1	.X	±0.1			
						Alex Lee	Yungming	Anna



# WRTM-373AX Antenna Simulation Report



Antenna Team  
March 28, 2023

Gemtek Confidential  
Distribution Prohibited

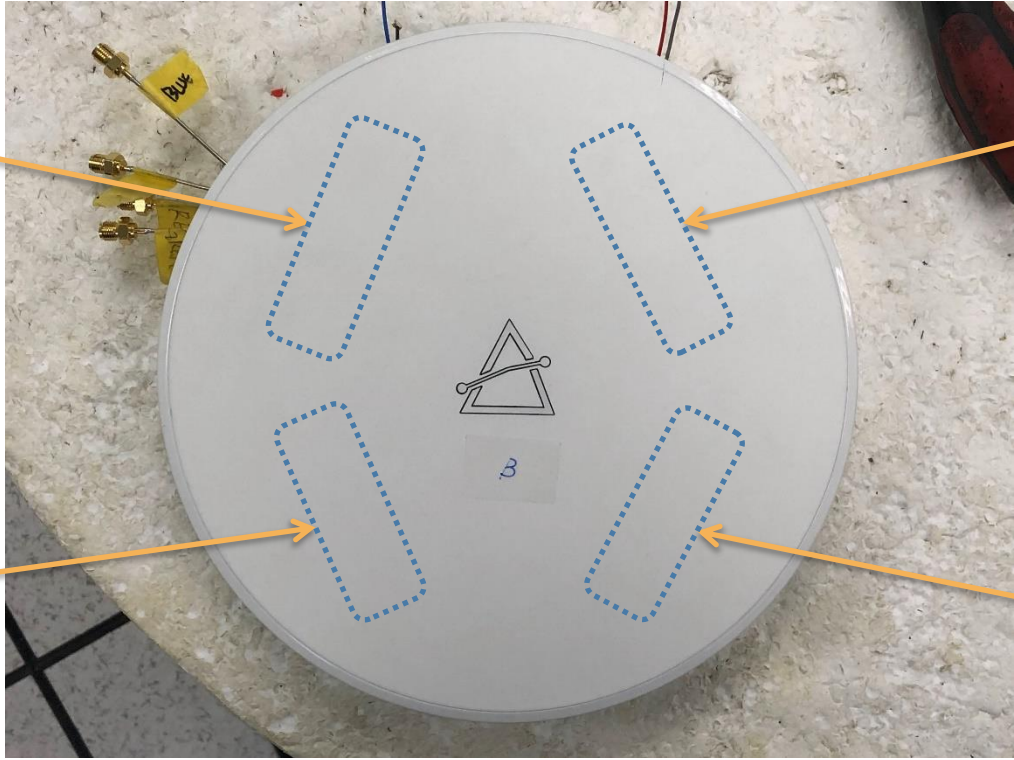
# Antenna Set Definition

Ant1

Ant2

Ant3

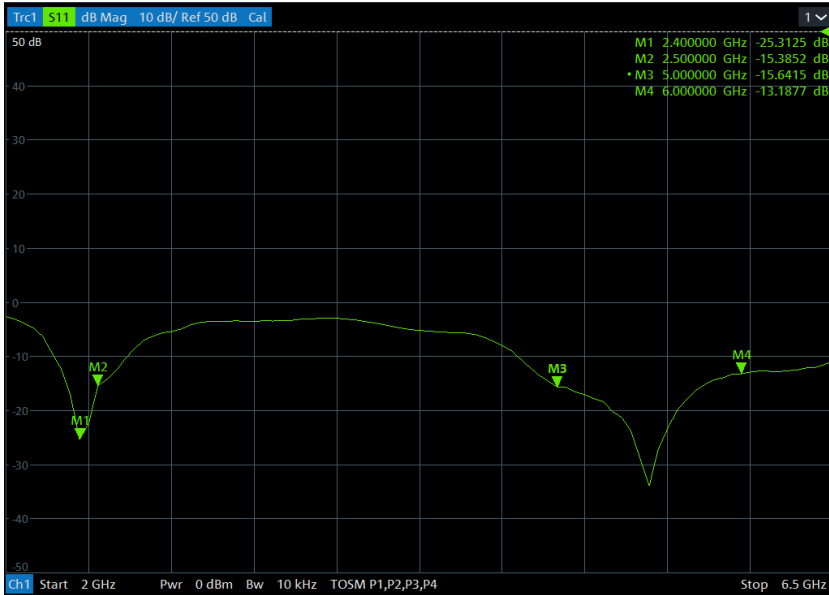
Ant4



# G Band Antenna Return Loss

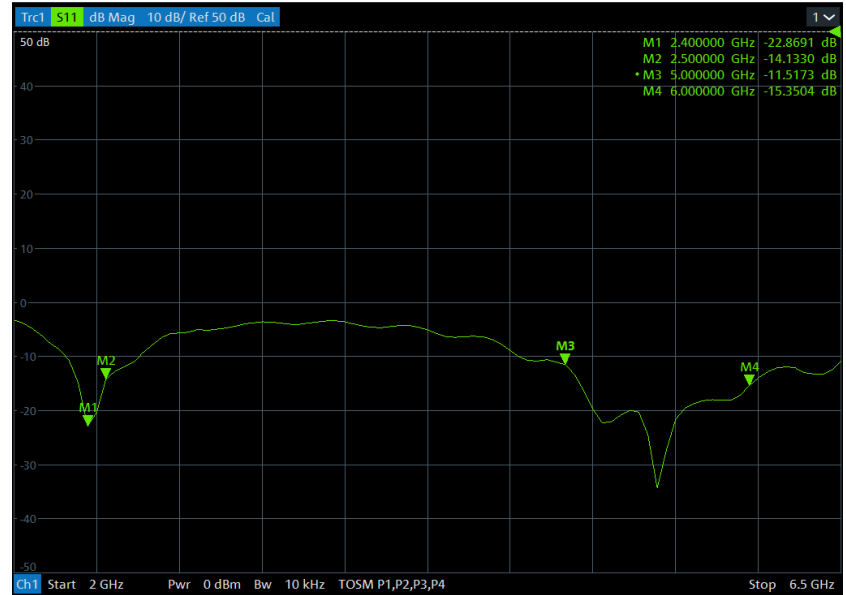
## ANT1

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## ANT2

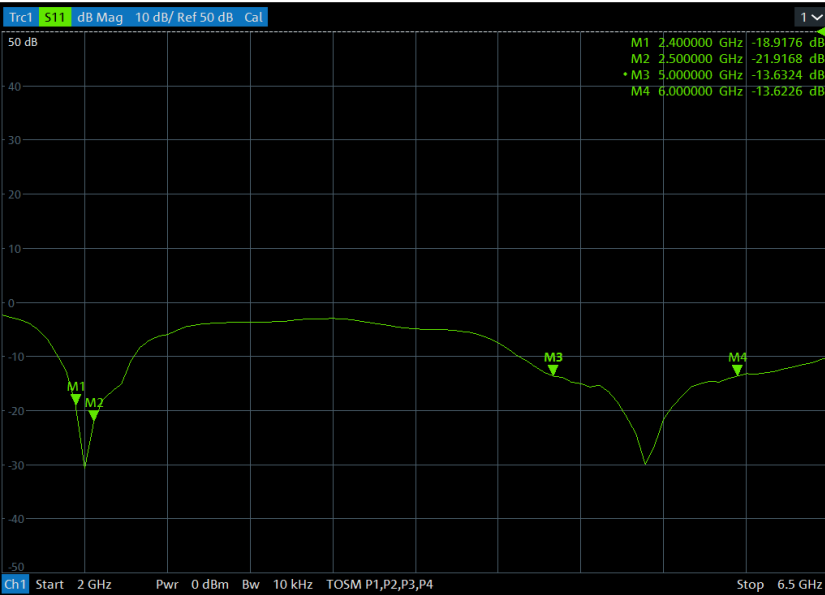
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# G Band Antenna Return Loss

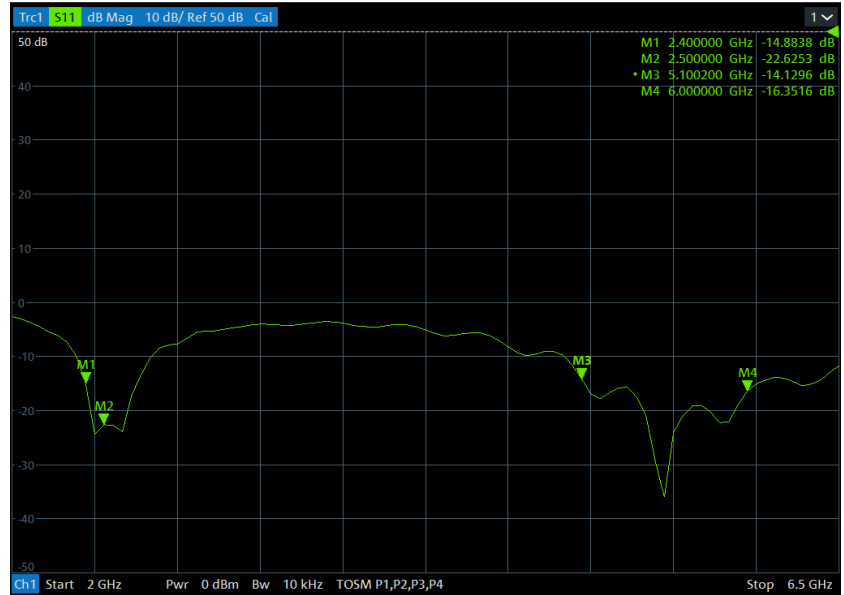
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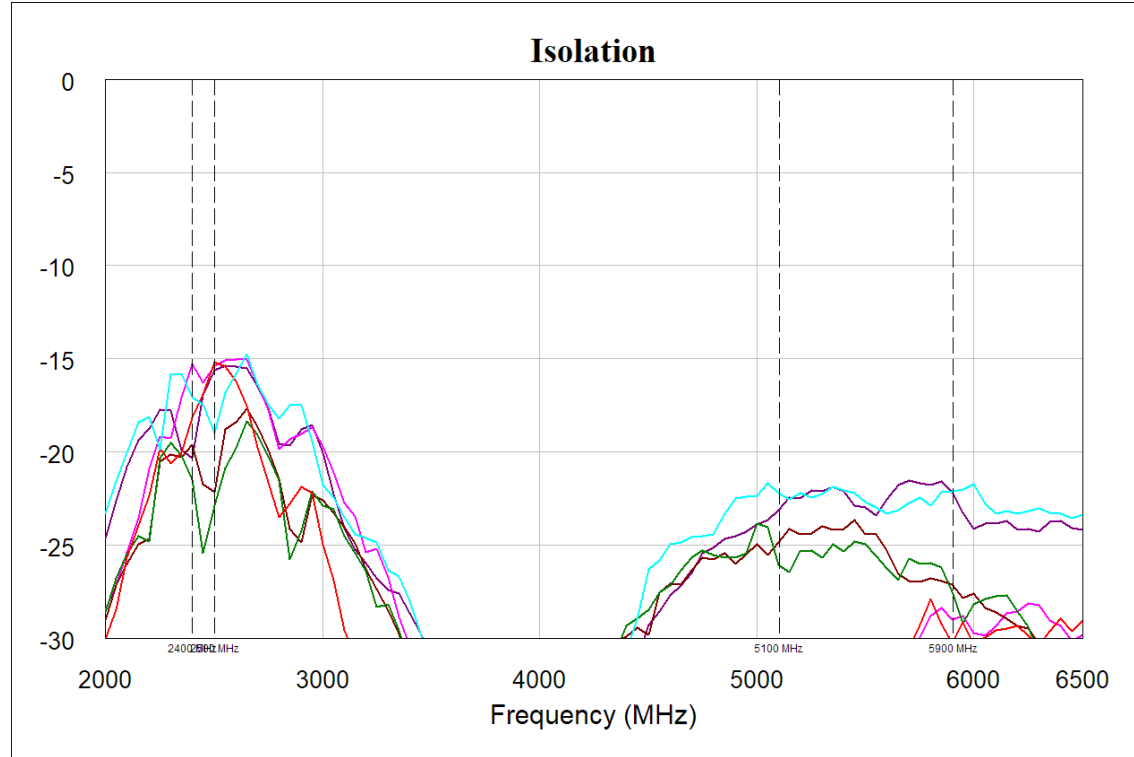
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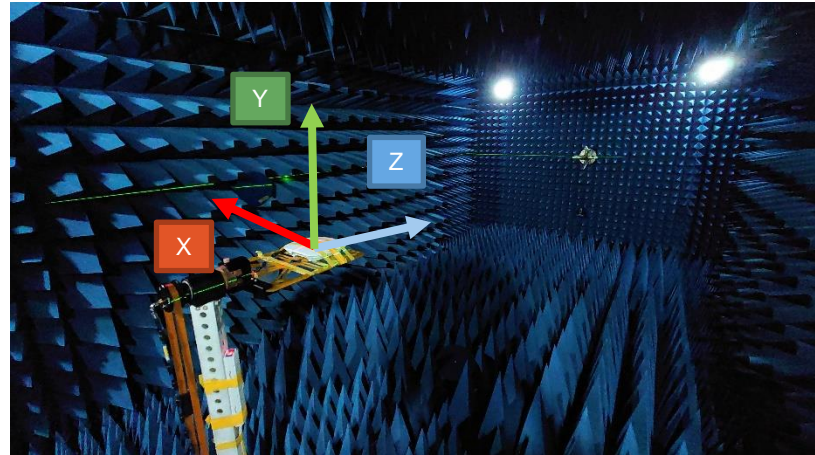
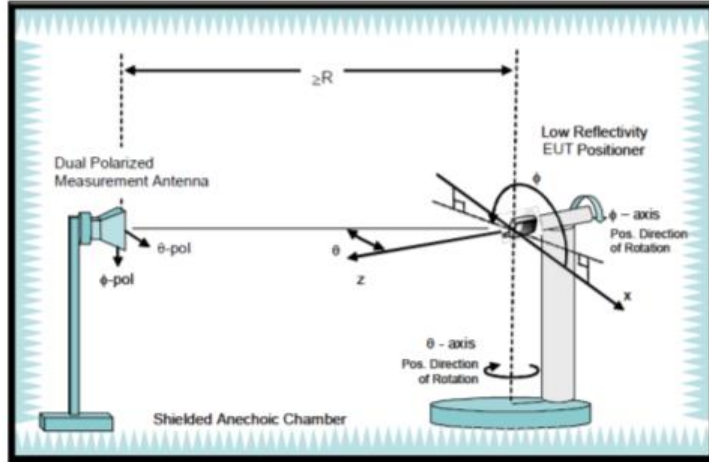


# Antenna Isolation

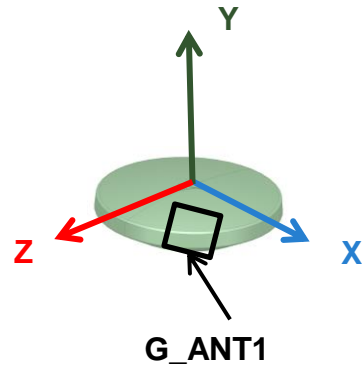
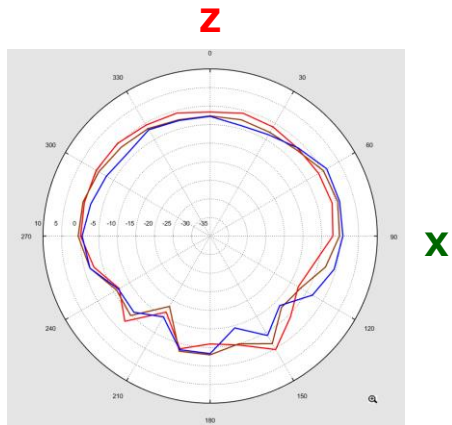


- Ant1 & Ant2
- Ant1 & Ant3
- Ant1 & Ant4
- Ant2 & Ant3
- Ant2 & Ant4
- Ant3 & Ant4

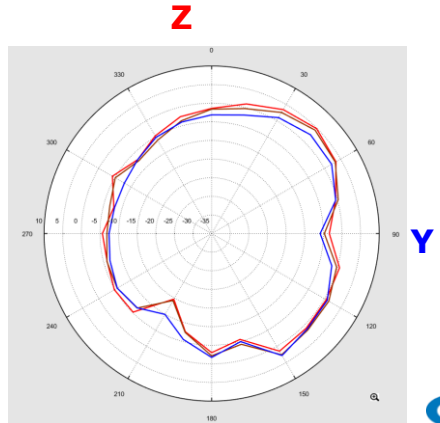
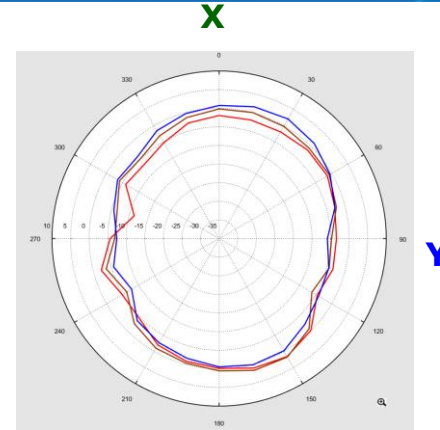
# Antenna Coordinate System Definition



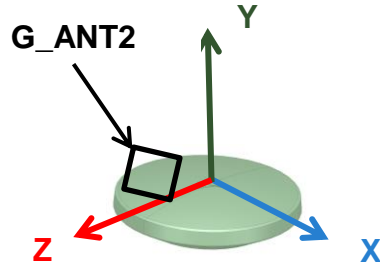
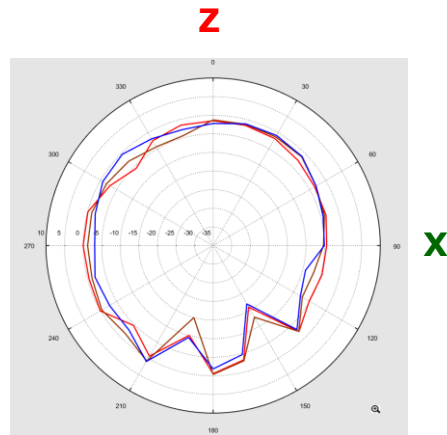
# G\_ANT1 GainTotal (dBi) Pattern



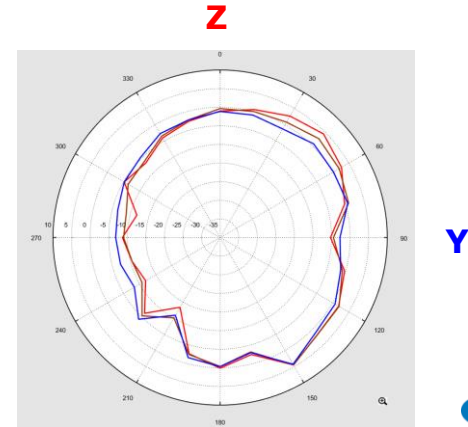
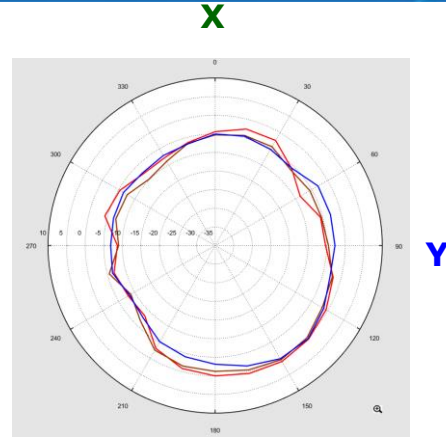
2400MHz ———  
2450MHz ———  
2500MHz ———



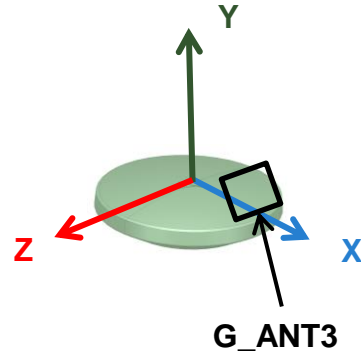
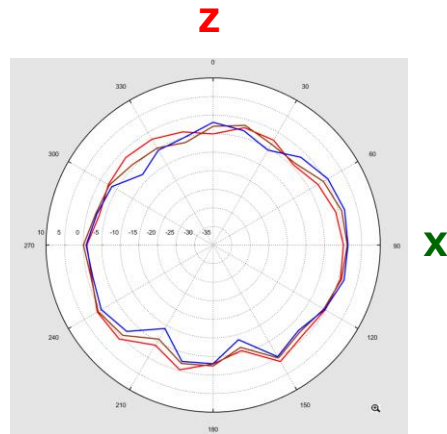
# G\_ANT2 GainTotal (dBi) Pattern



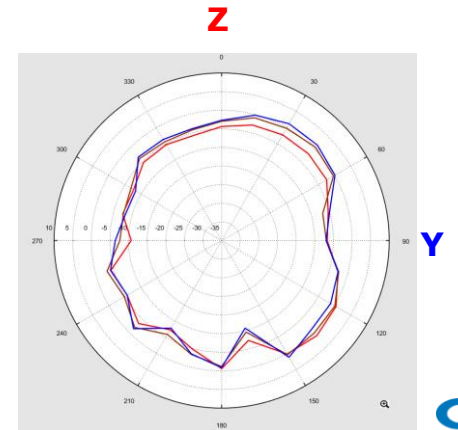
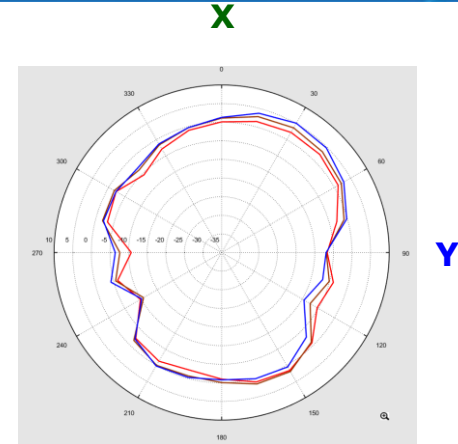
2400MHz ———  
2450MHz ———  
2500MHz ———



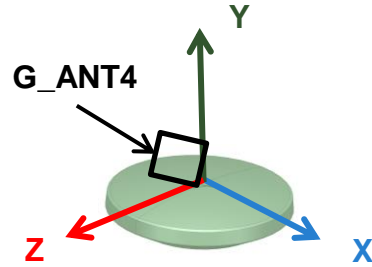
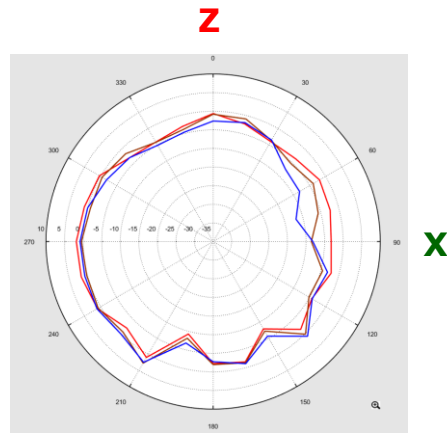
# G\_ANT3 GainTotal (dBi) Pattern



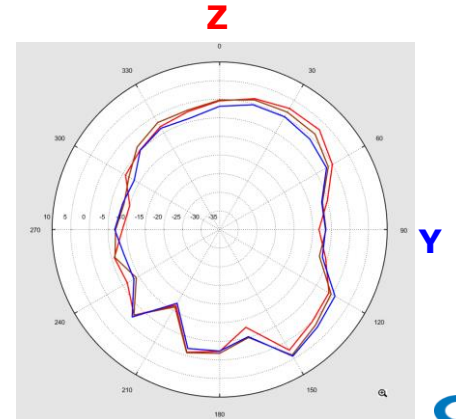
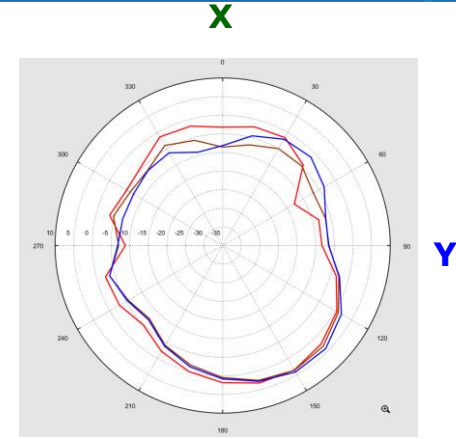
2400MHz ———  
2450MHz ———  
2500MHz ———



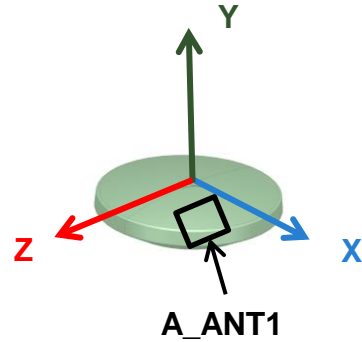
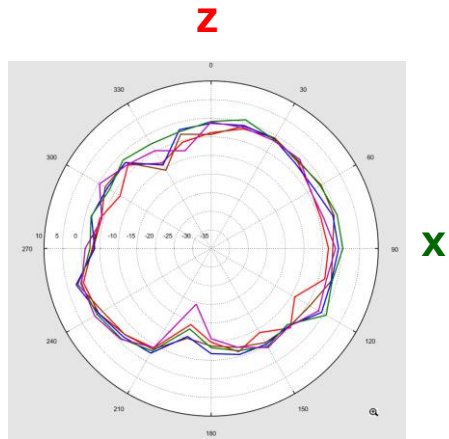
# G\_ANT4 GainTotal (dBi) Pattern



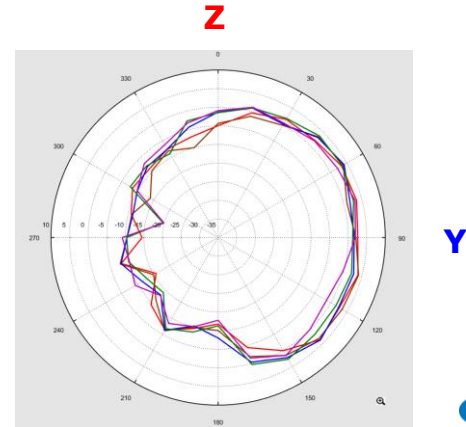
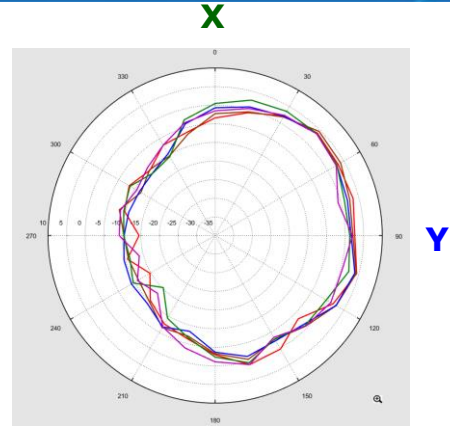
- 2400MHz —
- 2450MHz —
- 2500MHz —



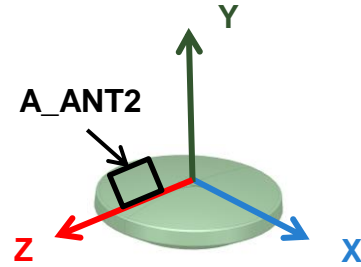
# A\_ANT1 GainTotal (dBi) Pattern



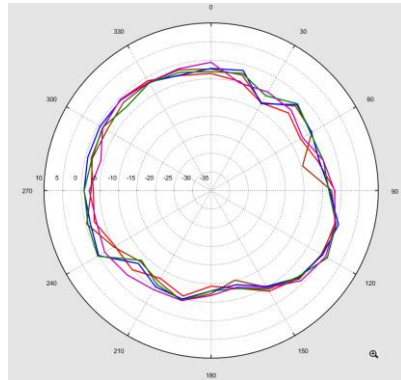
- 5100MHz —
- 5300MHz —
- 5500MHz —
- 5700MHz —
- 5900MHz —



# A\_ANT2 GainTotal (dBi) Pattern



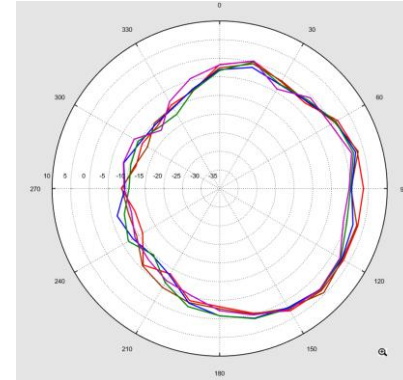
Z



X

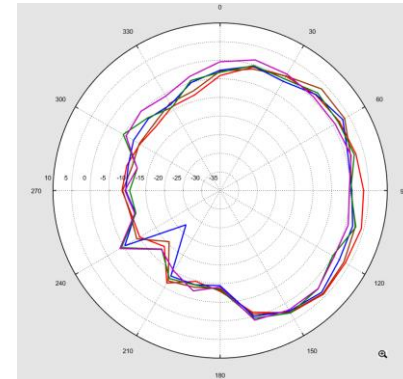
- 5100MHz
- 5300MHz
- 5500MHz
- 5700MHz
- 5900MHz

X



Y

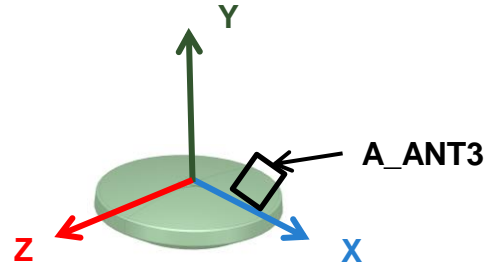
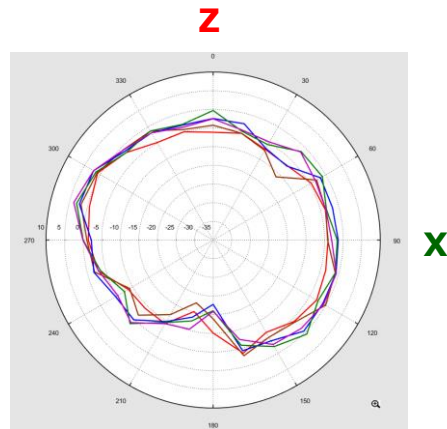
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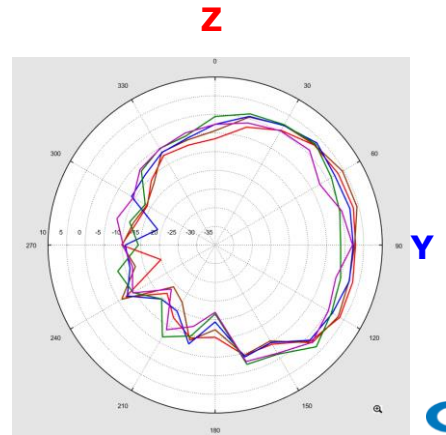
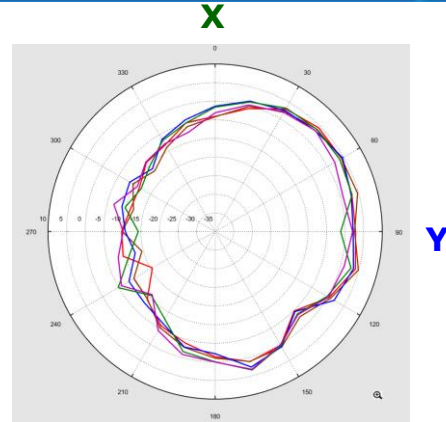
Y



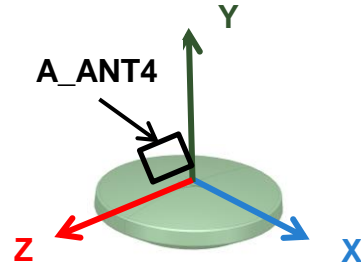
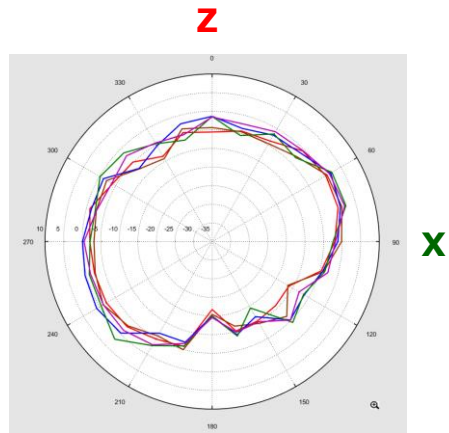
# A\_ANT3 GainTotal (dBi) Pattern



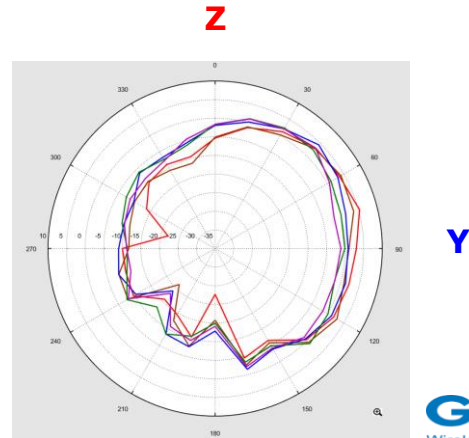
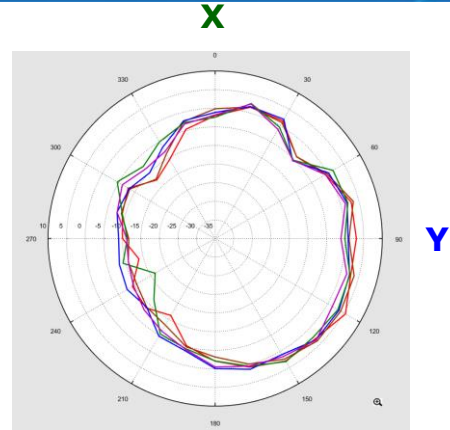
- 5100MHz —
- 5300MHz —
- 5500MHz —
- 5700MHz —
- 5900MHz —



# A\_ANT4 GainTotal (dBi) Pattern



- 5100MHz —
- 5300MHz —
- 5500MHz —
- 5700MHz —
- 5900MHz —



# Antenna Peak Gain

WIFI G Band Antenna Peak Gain (dBi)	
Frequency (MHz)	2400~2485
G Band	2.71

WIFI A Band Antenna Peak Gain(dBi)				
Frequency (MHz)	5150~5250	5250~5350	5470~5725	5725~5850
A Band	2.13	2.17	2.42	2.9

Noted: The antenna gain excludes the cable loss, Cable Loss is refer to D1.13 low loss cable datasheet, the attenuation at 2.4GHz is 3.2dB per meter.(including MHF PLUG)