



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

DONGGUAN AEON TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 和碩

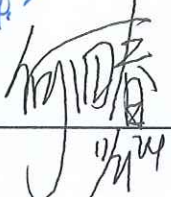
PART NAME: RF Antenna Assembly

PART NO.:

REVISION:

W. Y. P/NO.: C1335-510520-A(SR20242041)

REV.: X1

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :	 Stone	
DATE :		

WHA YU GROUP

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RF Antenna Assembly

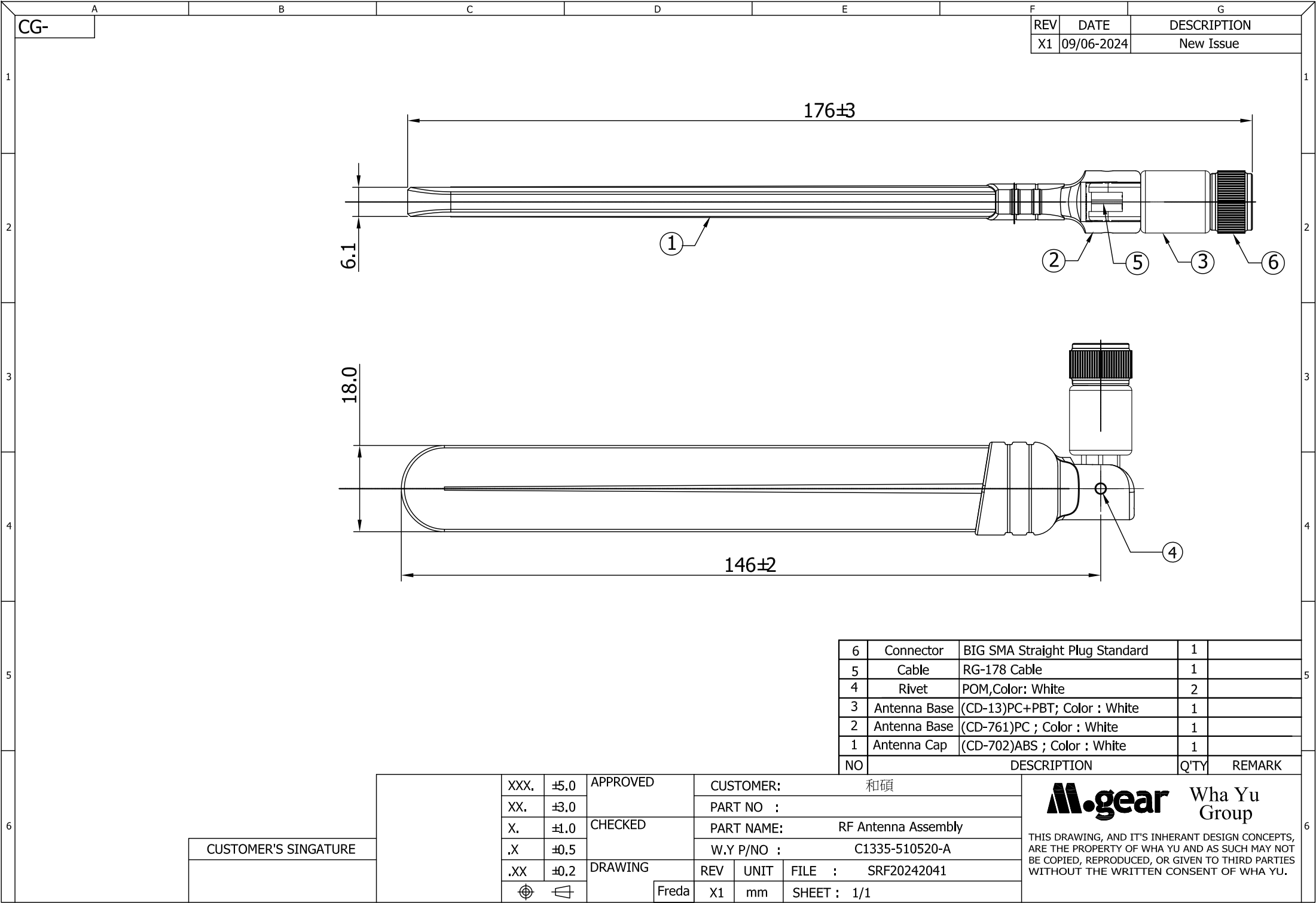
Specification

1. Electrical Properties :

- 1.0 antenna type.....dipole
- 1.1 Frequency Range..... 3.4~3.8GHz
- 1.2 Impedance 50Ω Nominal
- 1.3 VSWR2.1:1 Max.
- 1.4 Return Loss.....7.99 dB Min.
- 1.5 RadiationOmni-directional
- 1.6 Peak Gain.....4.33 dBi Max.
- 1.7 Polarization.....Linear
- 1.8 Admitted Power..... 1W
- 1.9 Cable..... RG-178 Cable
- 1.10 Connector.....BIG SMA Straight Plug Standard

2. Physical Properties :

- 2.1 Operating Temp. -10°C ~ +60°C
- 2.2 Storage Temp. -10°C ~ +70°C



REV	DATE	DESCRIPTION
X1	09/06-2024	New Issue

6	Connector	BIG SMA Straight Plug Standard	1	
5	Cable	RG-178 Cable	1	
4	Rivet	POM,Color: White	2	
3	Antenna Base	(CD-13)PC+PBT; Color : White	1	
2	Antenna Base	(CD-761)PC ; Color : White	1	
1	Antenna Cap	(CD-702)ABS ; Color : White	1	
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE	XXX.	±5.0	APPROVED	CUSTOMER: 和碩		
	XX.	±3.0		PART NO :		
	X.	±1.0		PART NAME: RF Antenna Assembly		
	.X	±0.5	DRAWING	W.Y P/NO : C1335-510520-A		
	.XX	±0.2		REV	UNIT	FILE : SRF20242041
	⊕	≡	Freda	X1	mm	SHEET : 1/1



Wha Yu Group

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SRF20242091

Antenna Test Report

Version: V 1.0

Released Date: 2024/11/29

Prepared By: Leo

Reviewed By: Stone

Contents

- Revised History
- Specification
- Antenna Placement & Solution
- Test Setup for S-parameter Measurement
- Return Loss Results
- Test Setup for Radiation Pattern Measurement
- 2D Radiation Pattern Results
- Results Summary (return loss, peak gain, efficiency)

Revision History

Released Date	Version	Record
2024/11/29	1.0	Antenna Testing Report

Specification

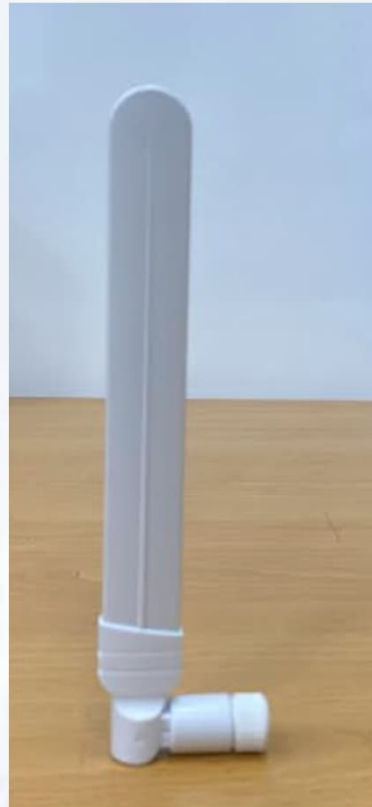
Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
N78	ANT	3300~3800 MHz	

Requirements of Measurement

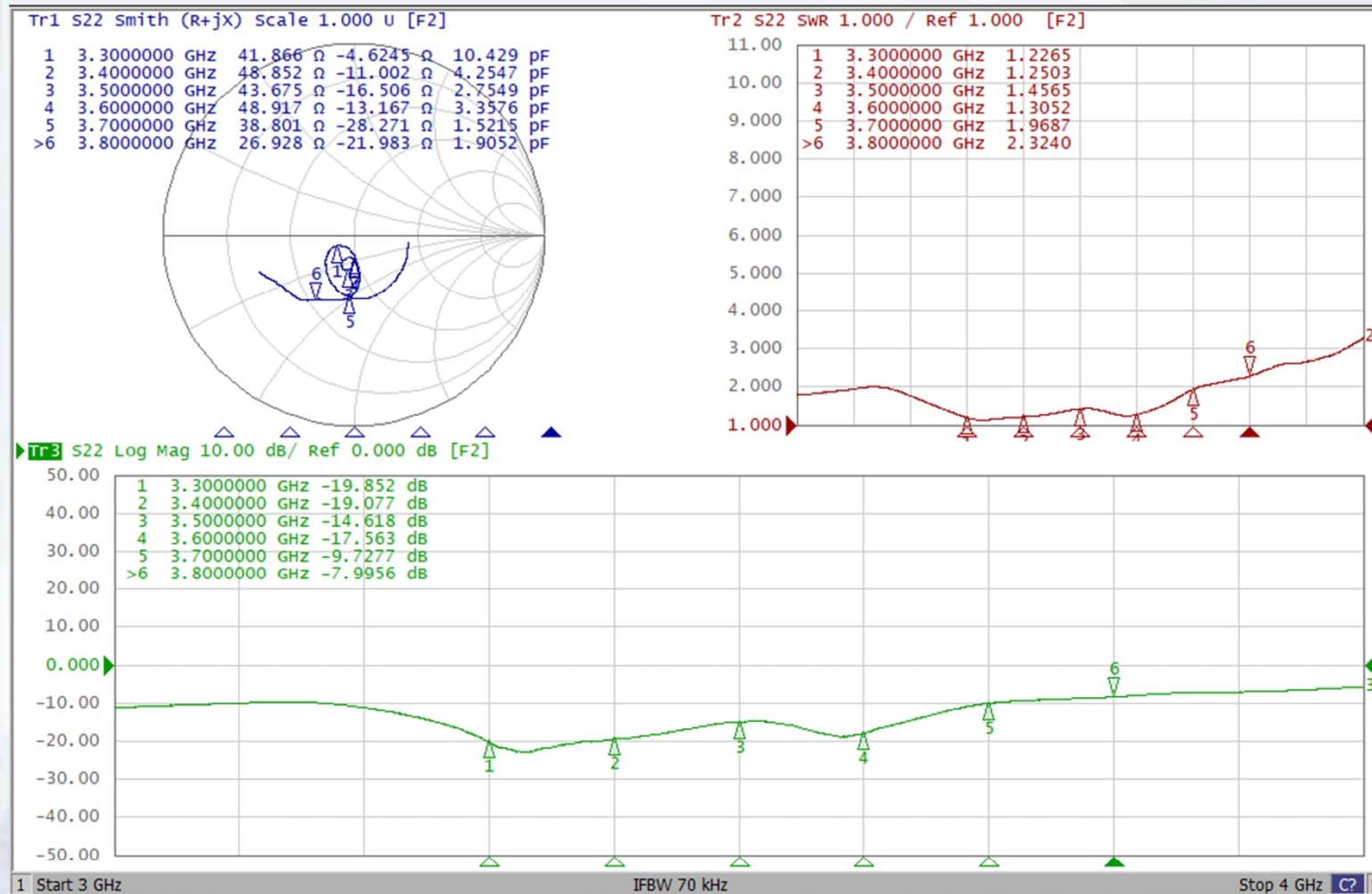
Test Item	Specification	Remark
Return Loss	N/A	
Peak Gain	N/A	
Efficiency	N/A	
Radiation pattern	Scale: +10 ~ -40dBi, Angle step size: 5 degree	

Antenna Placement & Solution



Return Loss Results

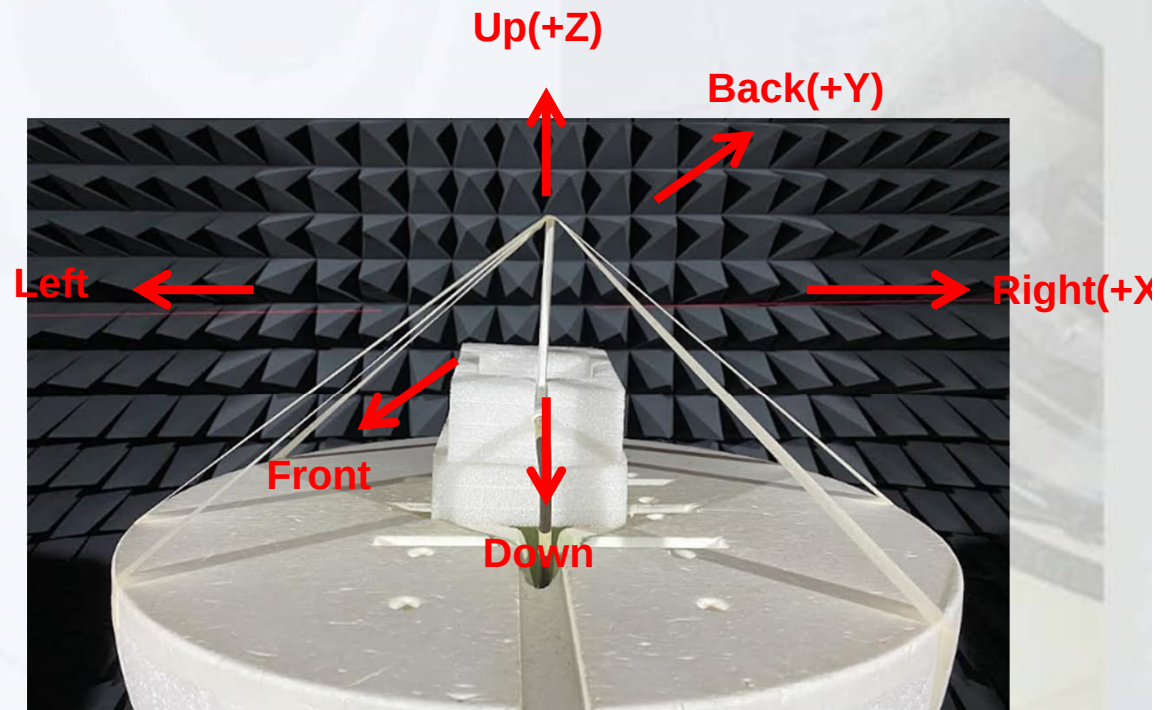
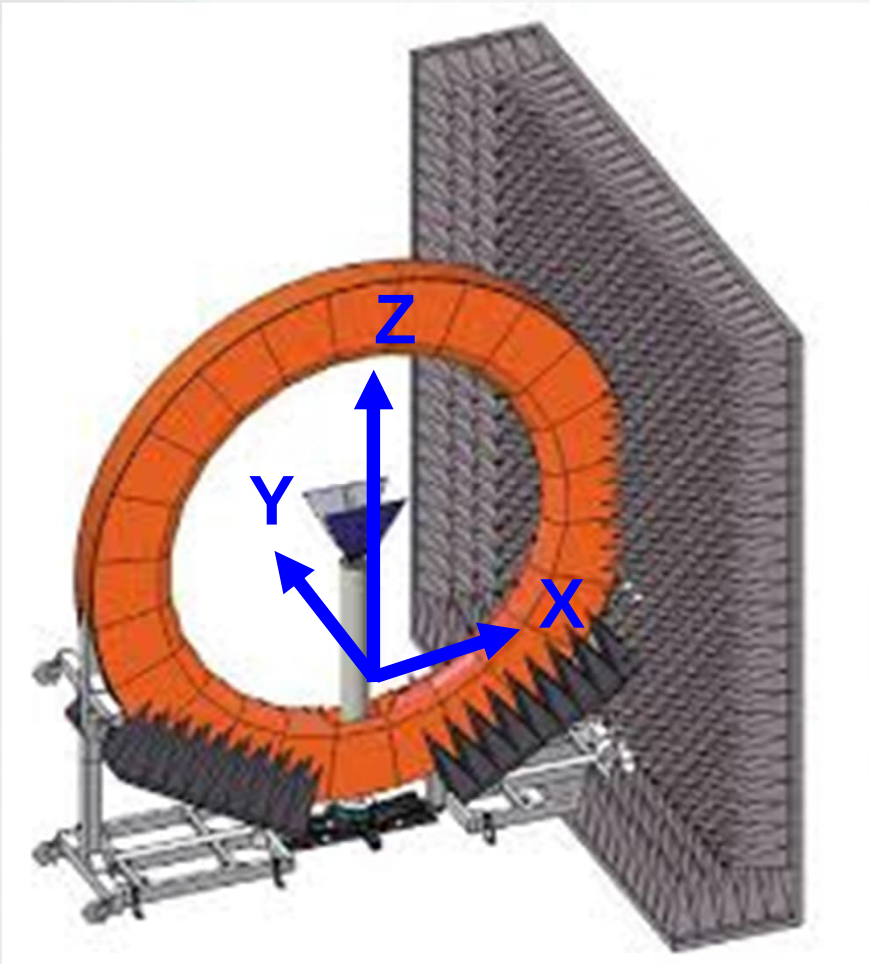
Antenna



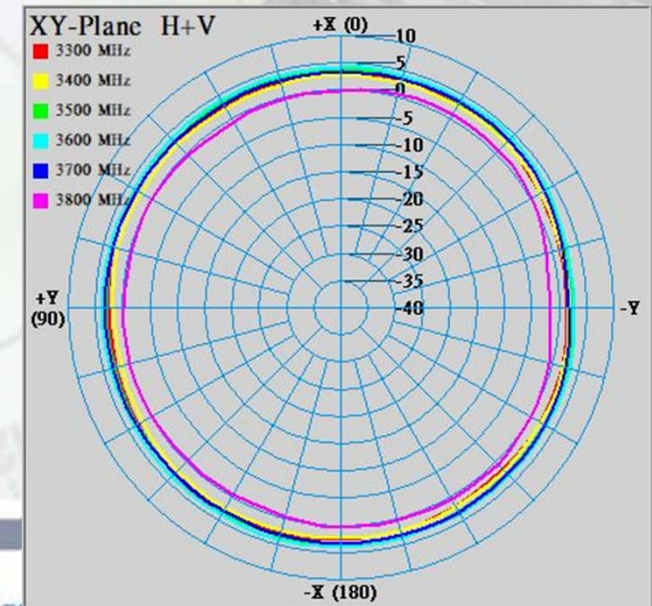
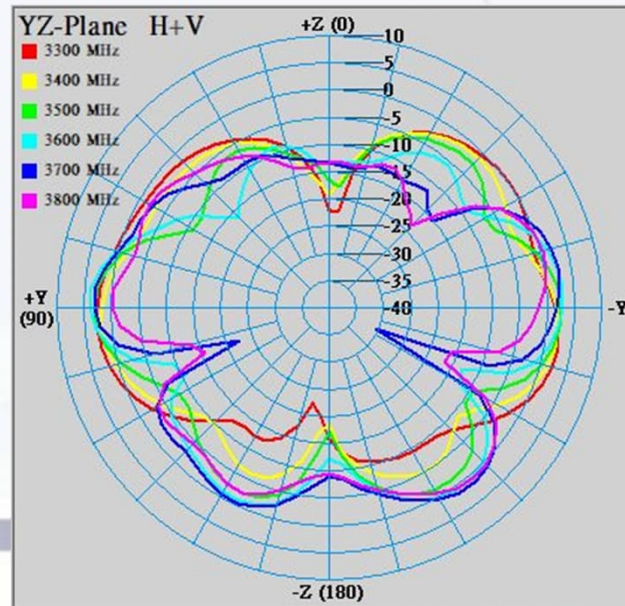
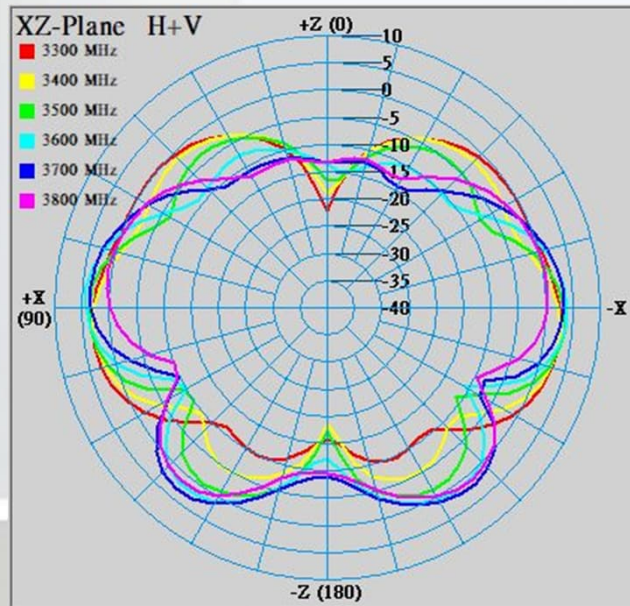
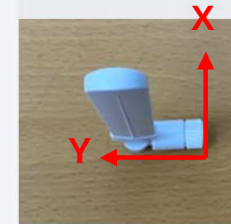
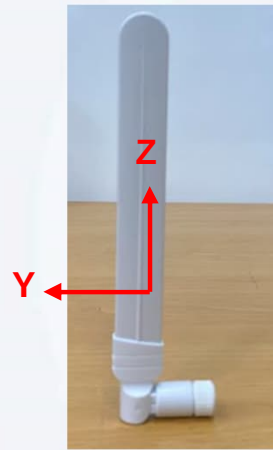
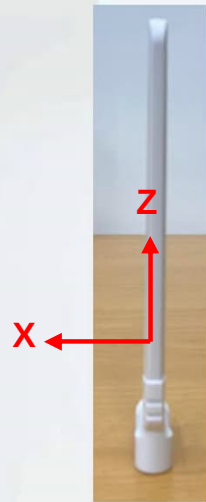
Test Setup for Radiation Pattern Measurement

Chamber Information

- SATIMO SG-24L Multi-Probe Antenna Measurement System
 - Angle between probes: 15°
 - Frequency range: 400 MHz – 8.5 GHz
 - Chamber Room Size: 5m L x 5m W x 5m H



2D Radiation Pattern Results



Results Summary

Return Loss

Frequency (MHz)	Antenna
3300	19
3400	19
3500	14
3600	17
3700	9
3800	9

Results Summary

Peak gain & Efficiency

Frequency (MHz)	Efficiency (%)	3D Peak Gain (dBi)
3300	73	3.55
3400	72	3.19
3500	71	3.78
3600	73	4.33
3700	74	3.97
3800	72	3.35