



PIC06-220960

Dual Band Omni-Directional Antenna
for 2400-2500/5150-5875 MHz
V1.0

Date : 2023/08/04

Prepared by : Devin

Approved by :

Stage : ☒ Development V1.0 ☐ Pilot Run ☐ Final

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Publishing History				
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1. Specification

Dual-Band Omni-Directional Antenna for 2400 - 2500MHz / 4900 - 5875 MHz

Version 1

PIC06-220960

Electrical Specification

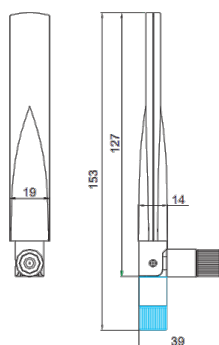
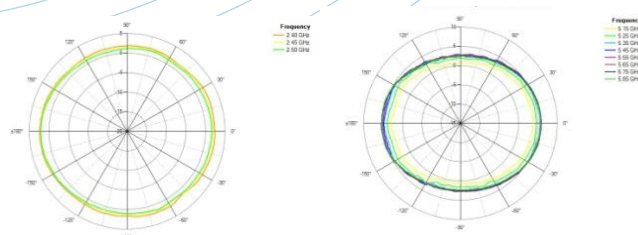
Frequency range	2400 - 2500 MHz	5150 - 5350 MHz	5350 - 5875 MHz
Gain	3 dBi	4~5.5 dBi	5.5~6 dBi
Average Gain	2 dBi	2~3.5 dBi	3.5~4.5 dBi
VSWR	2.0 : 1 (Max)		
Polarization	Linear, vertical		
HPBW/horizontal	360°	360°	360°
HPBW/vertical	50°	25°	25°
Power handling	2 W (cw)		
Impedance	50 Ohms		
Connector	RP SMA Plug		



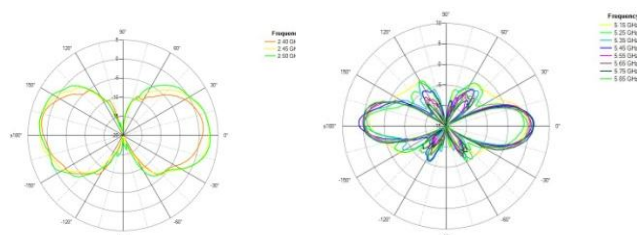
Environmental & Mechanical Characteristics

Temperature	-10°C to +55°C
Humidity	95% @55°C
Radome color	White
Radome material	ABS, UV resistant
Weight	21 g
Dimensions	19 x 39 x 153 mm

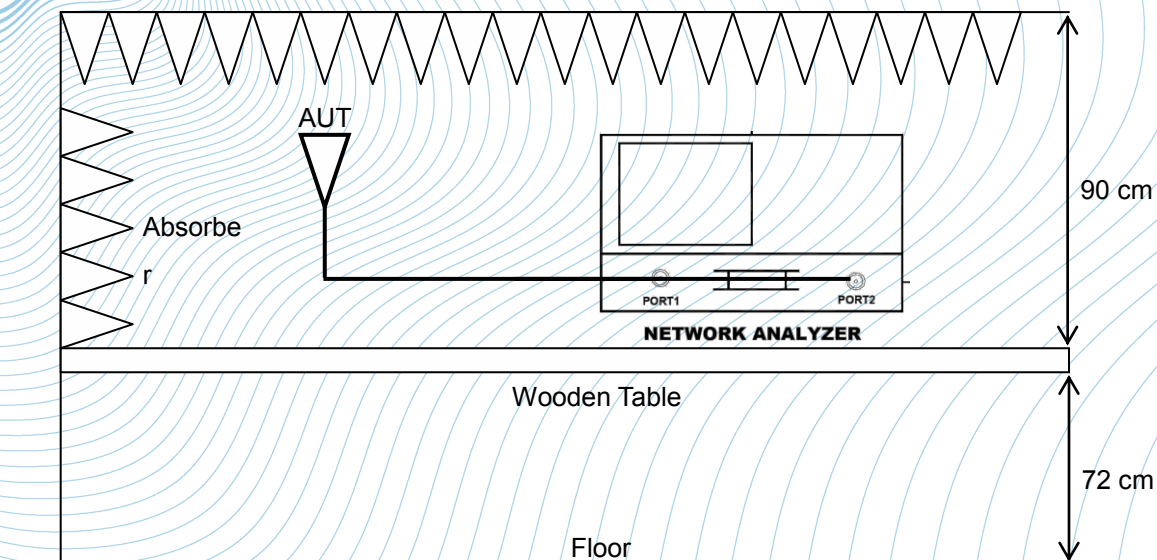
H-plane Co-polarization Pattern



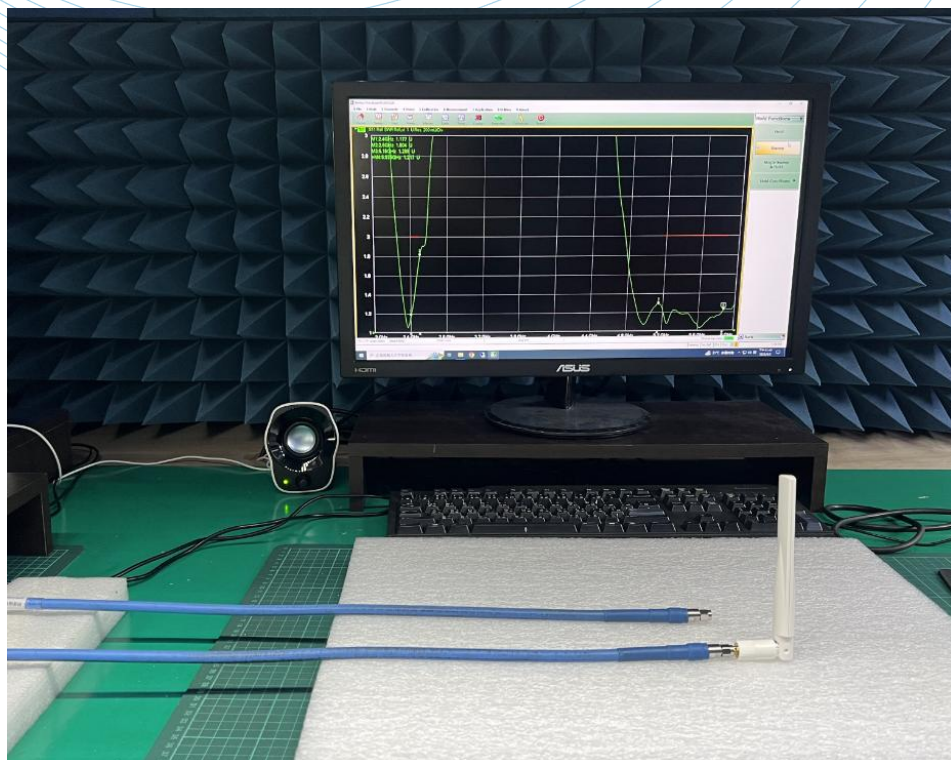
V-plane Co-polarization Pattern



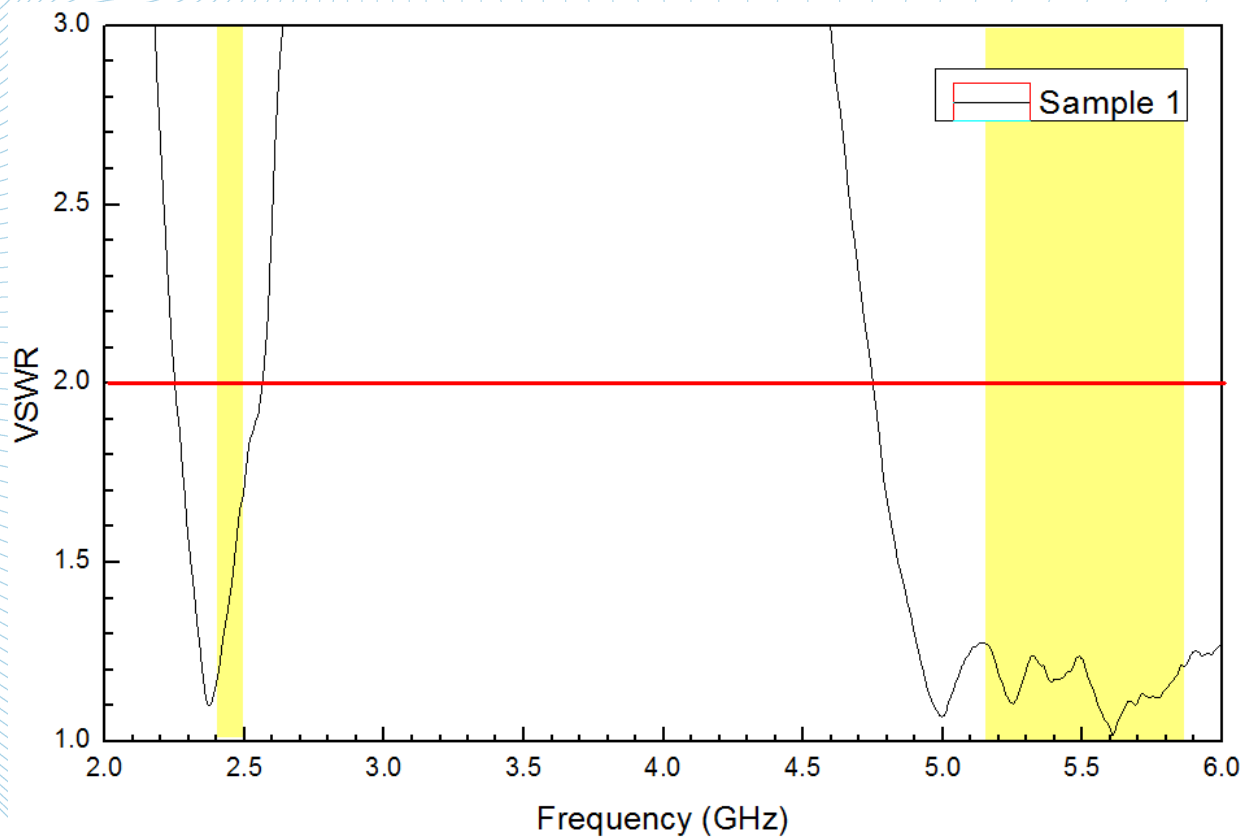
2.1 Test Environment.



Network Analyzer	Calibrated Available Date
■ Anritsu MS46122B 43.5GHz	2024/12/04
□ Anritsu 37369D	2025/01/19
□ Anritsu MS4623B	2025/02/23
□ Keysight E5071C	2026/04/18
□ Anritsu MS46122B 8GHz	2027/06/13



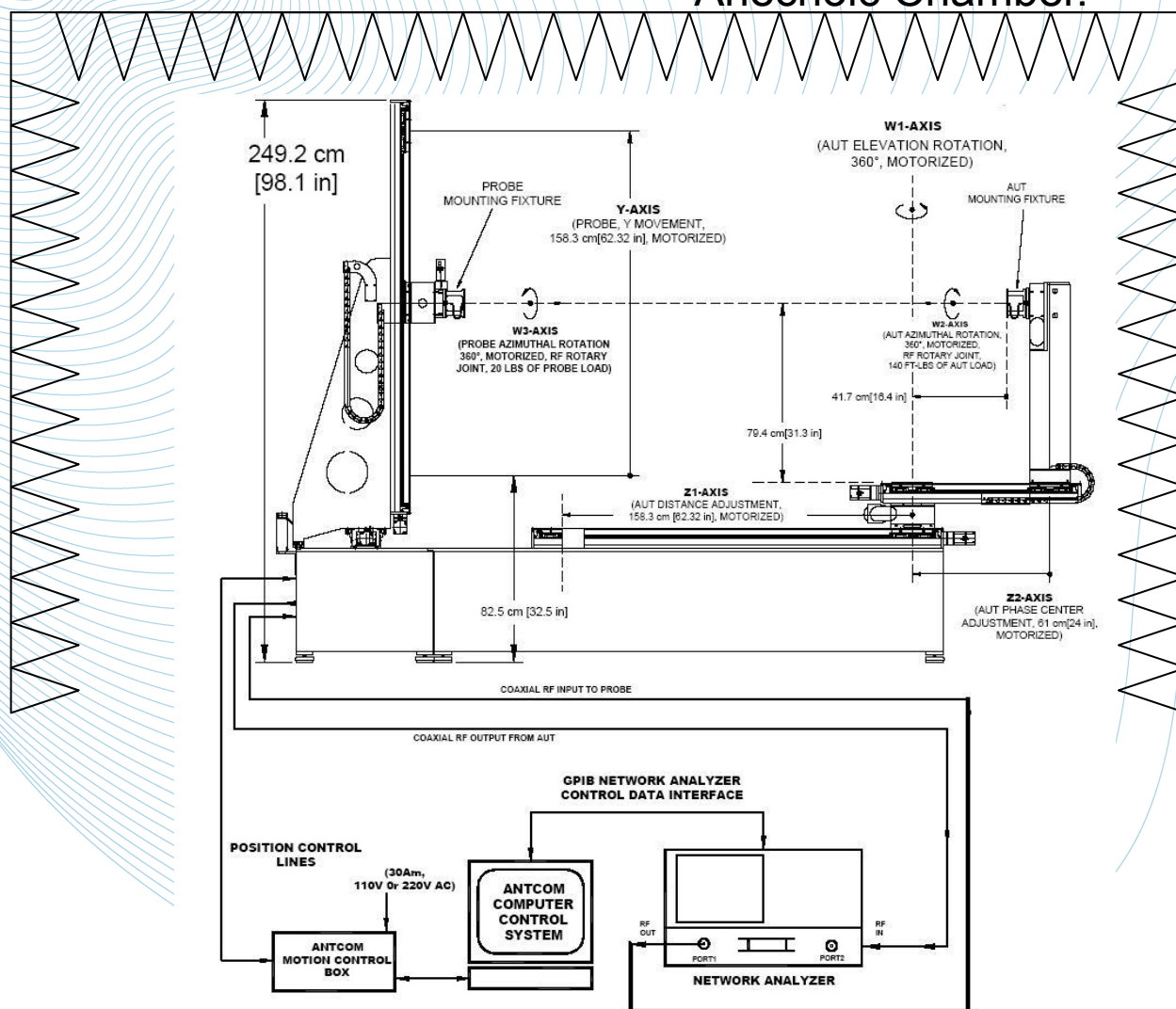
2.2 VSWR Test Data



Frequency (GHz)	2.4	2.45	2.5	Max	5.15	5.30	5.50	5.70	5.875	Max
Sample 1	1.17	1.42	1.72	1.72	1.27	1.20	1.23	1.11	1.22	1.27

3.1 Gain and Radiation Pattern Measure

– Anechoic Chamber.



NetWork Analyzer : Agilent 8722ES + 87405

Standard Gain Horn

☐ H1734 0.5 - 6.0 GHz	☐ 3160-07 8.2 – 12.4 GHz
☒ 3160-03 1.7 - 2.6 GHz	☐ 3160-08 12.4 – 18 GHz
☐ 3160-04 2.6 – 3.95 GHz	☐ 3160-09 18 – 26 GHz
☒ 3160-05 3.95 – 5.85 GHz	☐ 3160-10 26 – 40 GHz
☐ 3160-06 5.85 – 8.2 GHz	

3.2 Gain and Radiation Pattern

