

TEST REPORT

Issued Date : May 20, 2025

Report Number : KFEI_ModDev_25-025

Product Name : Monopole Antenna

Model Number : AC-001

Test Date : Jan. 29, 2025

1. General information

1.1. Test Facility

Name : KAGA FEI Co., Ltd.

Address : Shin-Yokohama Chuo Bldg., 2-100-45, Shin-Yokohama, Kohoku-Ku,
Yokohama, Kanagawa, 222-8508, Japan

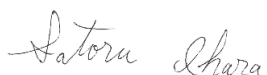
1.2. List of Test Equipment

Description	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Multi-probe systems	Microwave Vision Group	StarLab 6GHz	1103347-0011	Dec. 27, 2024	Dec. 26, 2025

1.3. List of Test Software

Software Name	Manufacturer	Version
Wave Studio	Microwave Vision Group	24.2.9
MV-Sphere	Microwave Vision Group	1.0.11

Tested by



Satoru Ihara

Senior Engineer

Product Development Dept. Module Product Div.

Date : May 20, 2025

Approved by



Hideki Ochi

General Manager

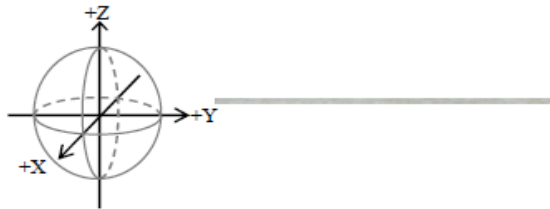
Product Development Dept. Module Product Div.

Date : May 20, 2025

Antenna document_2.4GHz band

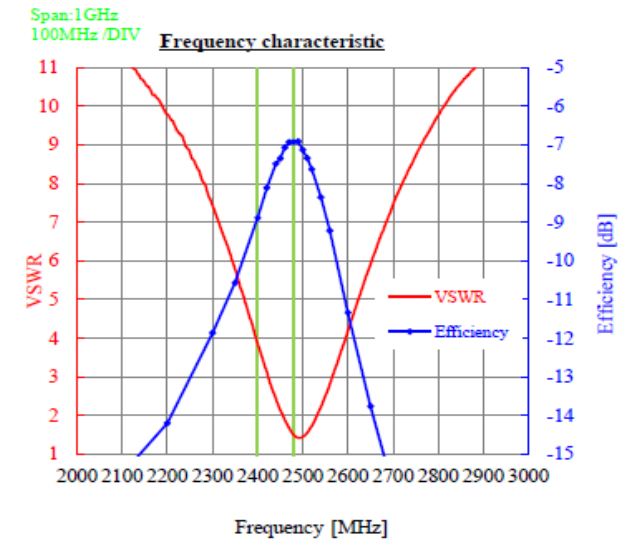
Measured in MVG Star Lab system at KAGA FEI.

Appearance and coordinates definition



Measurement data of antenna

Frequency [MHz]		@2400	@2440	@2480
Peak gain	[dBi]			
3-plane	TX-H	-4.6	-3.4	-2.9
	TX-V	-6.1	-4.9	-4.4
		-4.6	-3.4	-2.9
Average gain	[dBi]			
XY-plane	TX-H	-10.3	-8.8	-8.2
	TX-V	-25.2	-23.9	-23.4
	Plus(H,V)	-10.1	-8.6	-8.0
YZ-plane	TX-H	-21.2	-19.8	-19.3
	TX-V	-8.0	-6.8	-6.3
	Plus(H,V)	-7.8	-6.5	-6.1
XZ-plane	TX-H	-10.0	-8.7	-8.1
	TX-V	-17.6	-15.7	-14.7
	Plus(H,V)	-9.3	-7.9	-7.3
3plane	TX-H	-11.7	-10.3	-9.7
	TX-V	-12.3	-10.9	-10.4
		-9.0	-7.6	-7.1
Efficiency	[dB]	-8.9	-7.5	-6.9
VSWR	[:1]	3.9	2.4	1.5



*Note: The value is average value in 1 round of each inclination direction angle.

Radiation pattern

