

FCC Part 15 Antenna Gain Test Report

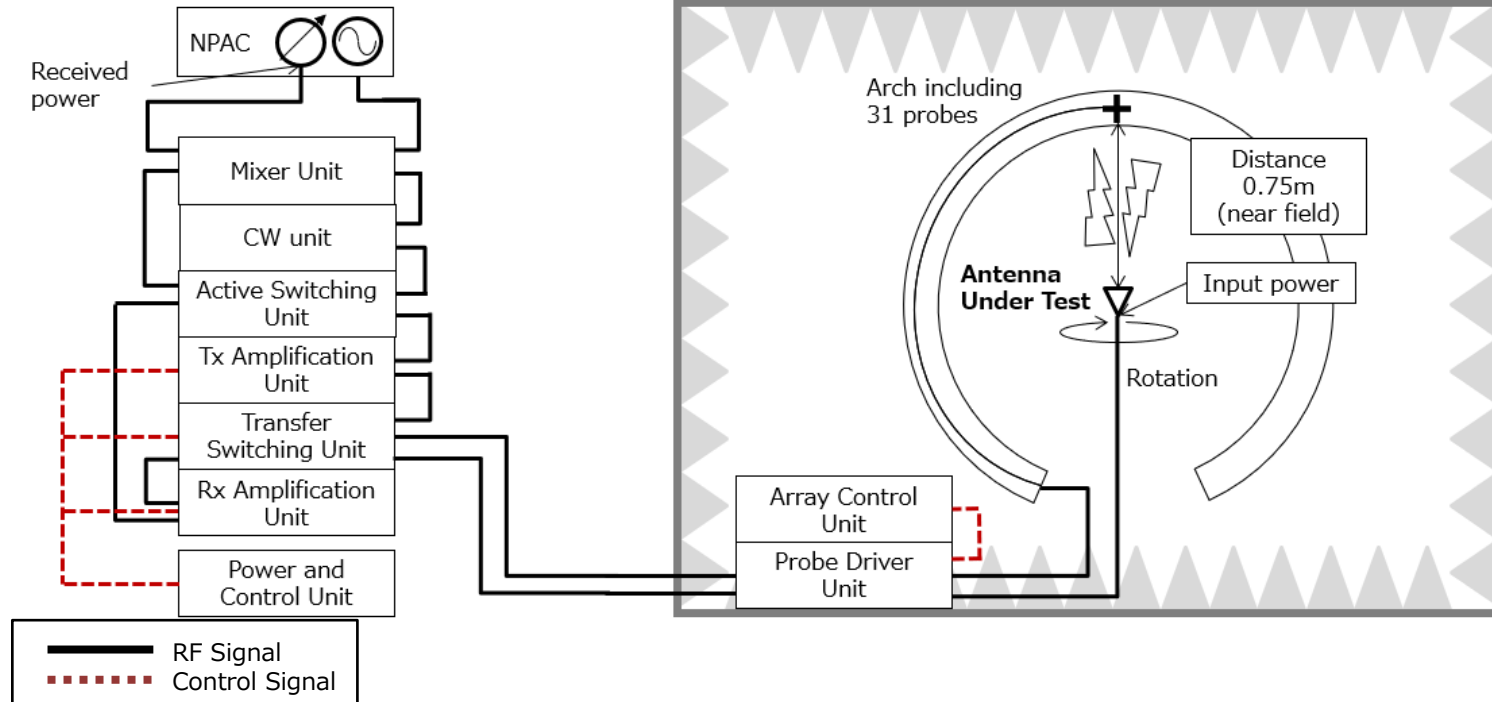
FCC ID:	VPYLBEE5QG2CX
Client:	Murata Manufacturing Co., Ltd.
Type of Equipment:	Communication Module
Model No.:	2CX (* installed in Host Device 2CX003)
Date of Testing:	November 19, 2025 – November 25, 2025
Date of Issue:	December 08, 2025

Sony Corporation

5-1-1 Minatomirai Nishi-ku Yokohama-shi Kanagawa, 220-8750, Japan

1. Measurement Procedure

- The antenna gain is measured in a fully anechoic chamber



2. Test Equipment and Measurement Software

Used	Equipment Description	Model No.	Serial No.	Manufacturer	Cal. Interval	Last Cal.	Remark
Y	Absorber Chamber	B83117-A1421-T161	21061	Albatross Projects	N/A	N/A	
Y	Multi-Probe Measurement System	SG32	1102611-0001	MVG	12 months	2025.09.18	
Y	Active Switching Unit	ASU	1101217-2569	MVG	12 months	2025.09.18	
N	Dual-Ridge Horn Antenna (0.6-6.0 GHz)	SH600	30	MVG	N/A	N/A	Reference Antenna
N	Sleeve-Dipole Antenna (0.69-0.8 GHz)	SD740	32	MVG	N/A	N/A	Reference Antenna
N	Sleeve-Dipole Antenna (0.865-0.93 GHz)	SD900	153	MVG	N/A	N/A	Reference Antenna

Measurement Software

Used	Software Description	Model No.	Version	Manufacturer	Remark
Y	Automated Antenna and OTA Measurement Software Suite	MVG WaveStudio	25.2.0	MVG	
Y	Near-Field to Far-Field Transformation Software	MV-Sphere	4.1.5	MVG	

3. Antenna Under Test

Antenna 1

Antenna Model Name: MODE DIAL LDS ANTENNA TYPE-C
Antenna Type: Monopole
Input Impedance: 50 ohm

Antenna 2

Antenna Model Name: SLA-2005
Antenna Type: Slot
Input Impedance: 50 ohm

4. Antenna Gains

Antenna 1

Date of Testing: November 25, 2025

Tested Personnel: Hiroki Nakashima

Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 1	2440	-3.75	* 2.4 GHz peak
	5200	-2.89	
	5300	-2.76	
	5500	-2.32	
	5800	-2.16	* 5 GHz peak
	6000	-2.46	
	6500	-3.69	
	6800	-2.10	* 6 GHz peak
	6900	-4.66	

Antenna 2

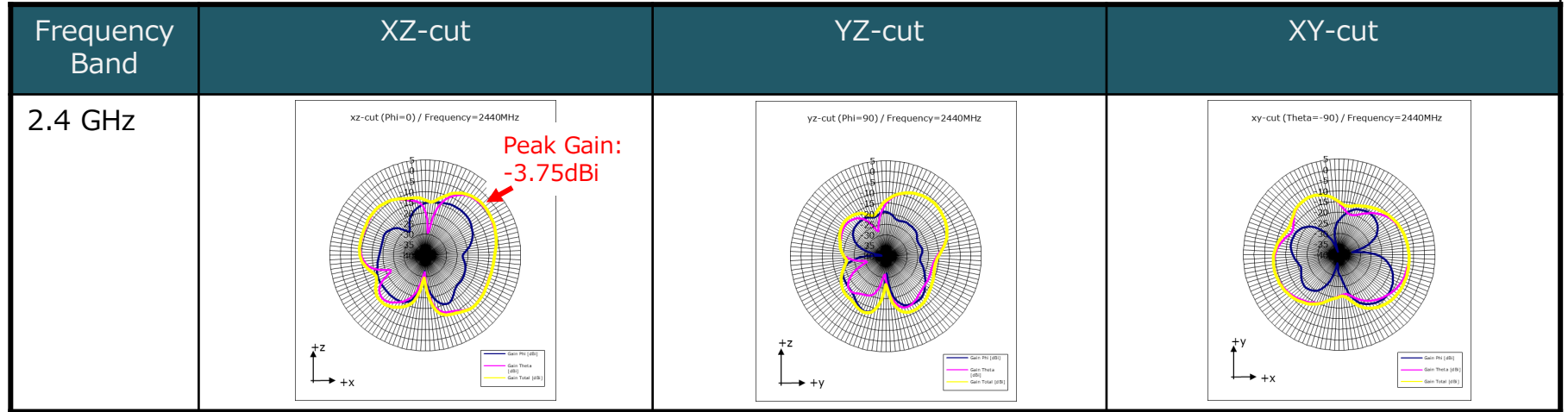
Date of Testing: November 19, 2025

Tested Personnel: Yuki Hamachi

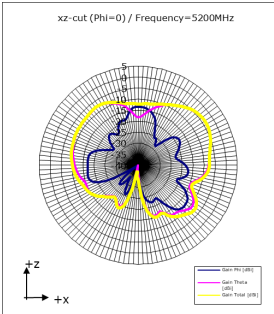
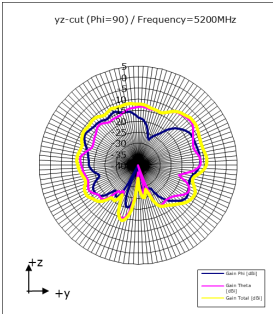
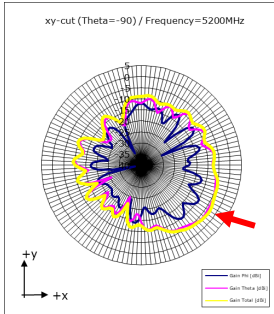
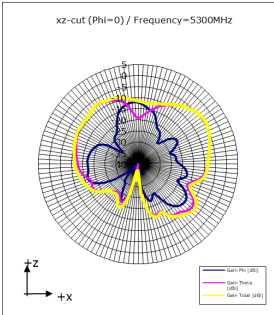
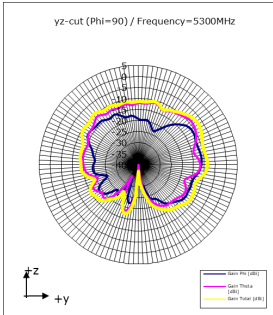
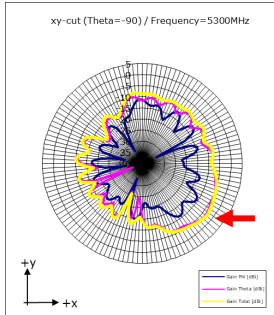
Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 2	2420	-1.55	* 2.4 GHz peak
	5200	-1.70	* 5 GHz peak
	5300	-2.59	
	5500	-1.97	
	5800	-4.50	
	6100	-1.75	* 6 GHz peak
	6500	-3.85	
	6600	-2.86	
	7000	-4.01	

5. Antenna Directivity Plots

Antenna 1 (1/5)



Antenna 1 (2/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)			 Peak Gain: -2.89dBi
W53 (5.3 GHz)			 Peak Gain: -2.76dBi

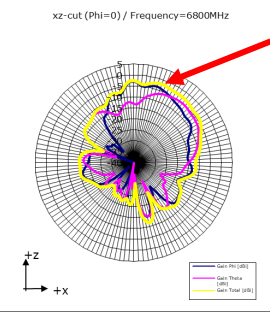
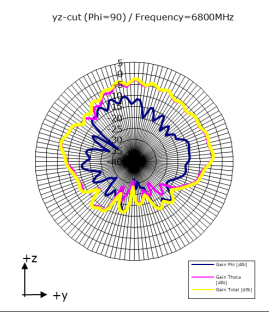
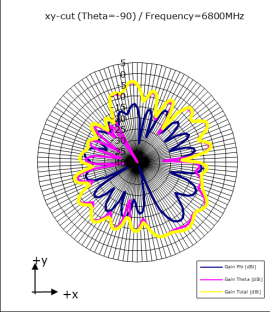
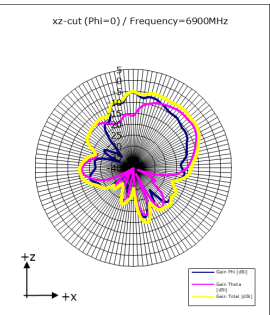
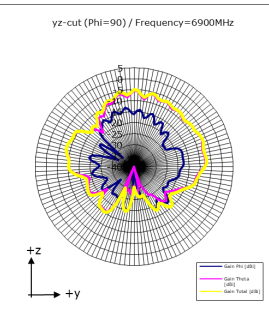
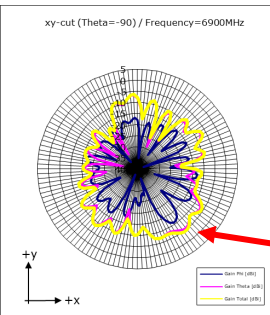
Antenna 1 (3/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.5 GHz)	xz-cut (Phi=0) / Frequency=5500MHz	yz-cut (Phi=90) / Frequency=5500MHz	xy-cut (Theta=-90) / Frequency=5500MHz Peak Gain: -2.32dBi
W58 (5.8 GHz)	xz-cut (Phi=0) / Frequency=5800MHz	yz-cut (Phi=90) / Frequency=5800MHz	xy-cut (Theta=-90) / Frequency=5800MHz Peak Gain: -2.16dBi

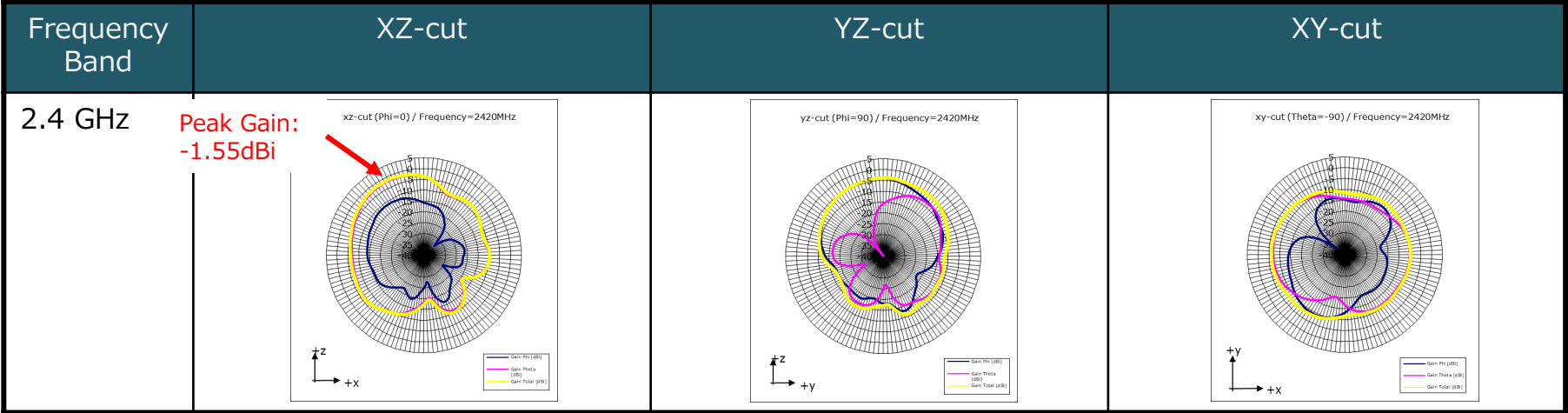
Antenna 1 (4/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 5 (6.0 GHz)	xz-cut (Phi=0) / Frequency=6000MHz	yz-cut (Phi=90) / Frequency=6000MHz	xy-cut (Theta=-90) / Frequency=6000MHz Peak Gain: -2.46dBi
U-NII 6 (6.5 GHz)	xz-cut (Phi=0) / Frequency=6500MHz	yz-cut (Phi=90) / Frequency=6500MHz	xy-cut (Theta=-90) / Frequency=6500MHz Peak Gain: -3.69dBi

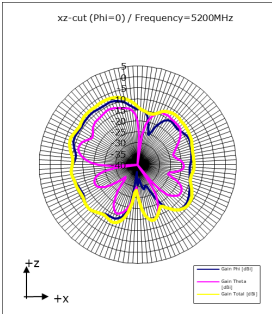
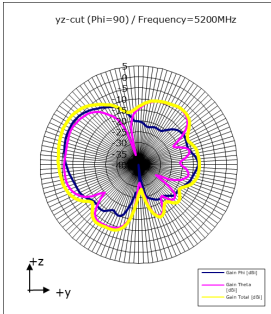
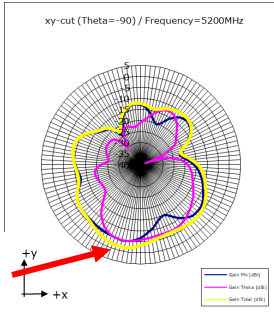
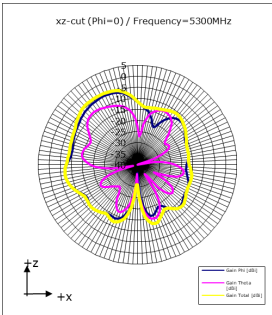
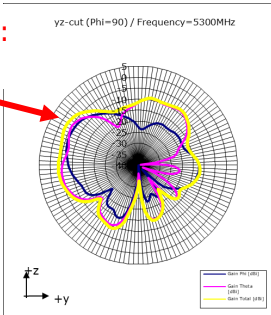
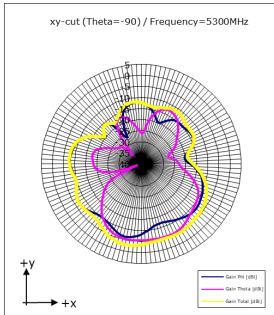
Antenna 1 (5/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 7 (6.8 GHz)	xz-cut (Phi=0) / Frequency=6800MHz  Peak Gain: -2.10dBi	yz-cut (Phi=90) / Frequency=6800MHz 	xy-cut (Theta=-90) / Frequency=6800MHz 
U-NII 8 (6.9GHz)	xz-cut (Phi=0) / Frequency=6900MHz 	yz-cut (Phi=90) / Frequency=6900MHz 	xy-cut (Theta=-90) / Frequency=6900MHz  Peak Gain: -4.66dBi

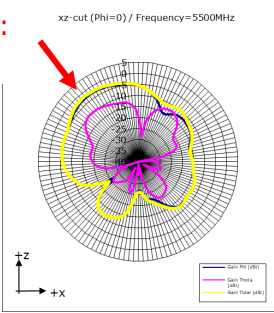
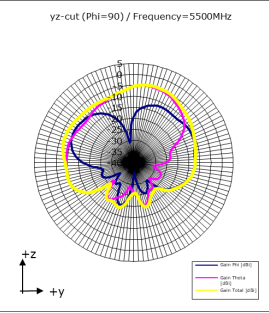
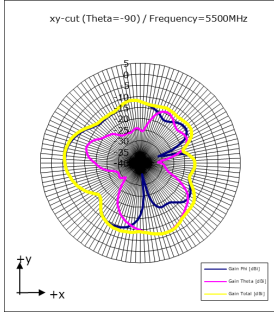
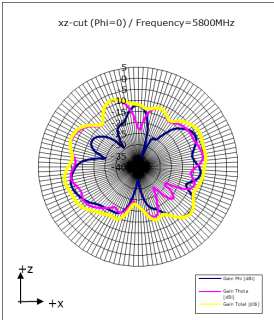
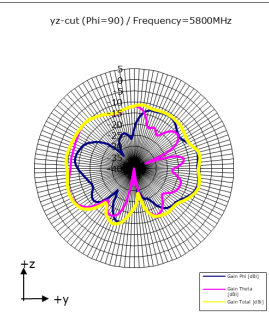
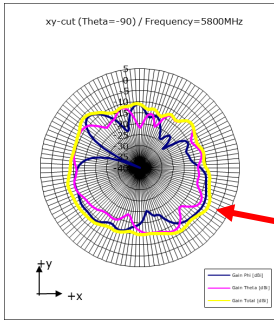
Antenna 2 (1/5)



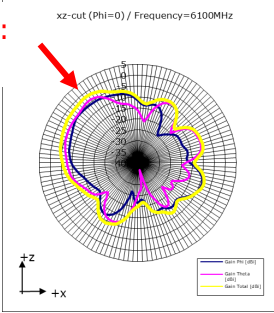
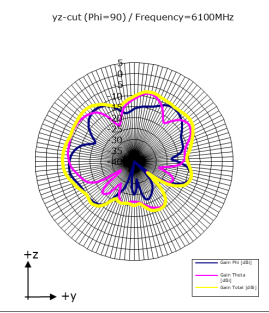
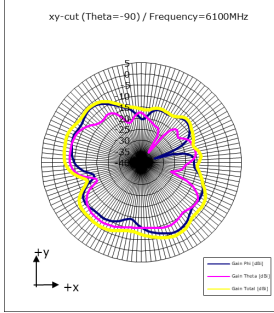
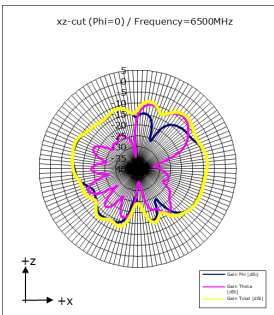
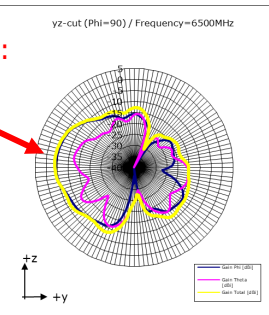
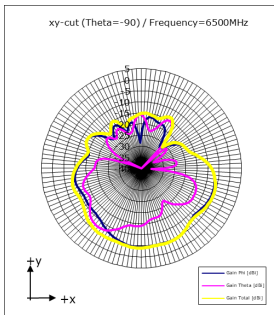
Antenna 2 (2/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)			
W53 (5.3 GHz)			

Antenna 2 (3/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.5 GHz) Peak Gain: -1.97dBi			
W58 (5.8 GHz)			 Peak Gain: -4.50dBi

Antenna 2 (4/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 5 (6.1 GHz)	xz-cut (Phi=0) / Frequency=6100MHz Peak Gain: -1.75dBi 	yz-cut (Phi=90) / Frequency=6100MHz 	xy-cut (Theta=90) / Frequency=6100MHz 
U-NII 6 (6.5 GHz)	xz-cut (Phi=0) / Frequency=6500MHz 	yz-cut (Phi=90) / Frequency=6500MHz Peak Gain: -3.85dBi 	xy-cut (Theta=90) / Frequency=6500MHz 

Antenna 2 (5/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 7 (6.6 GHz)			
U-NII 8 (7GHz)			