

FCC Part 15 Antenna Gain Test Report

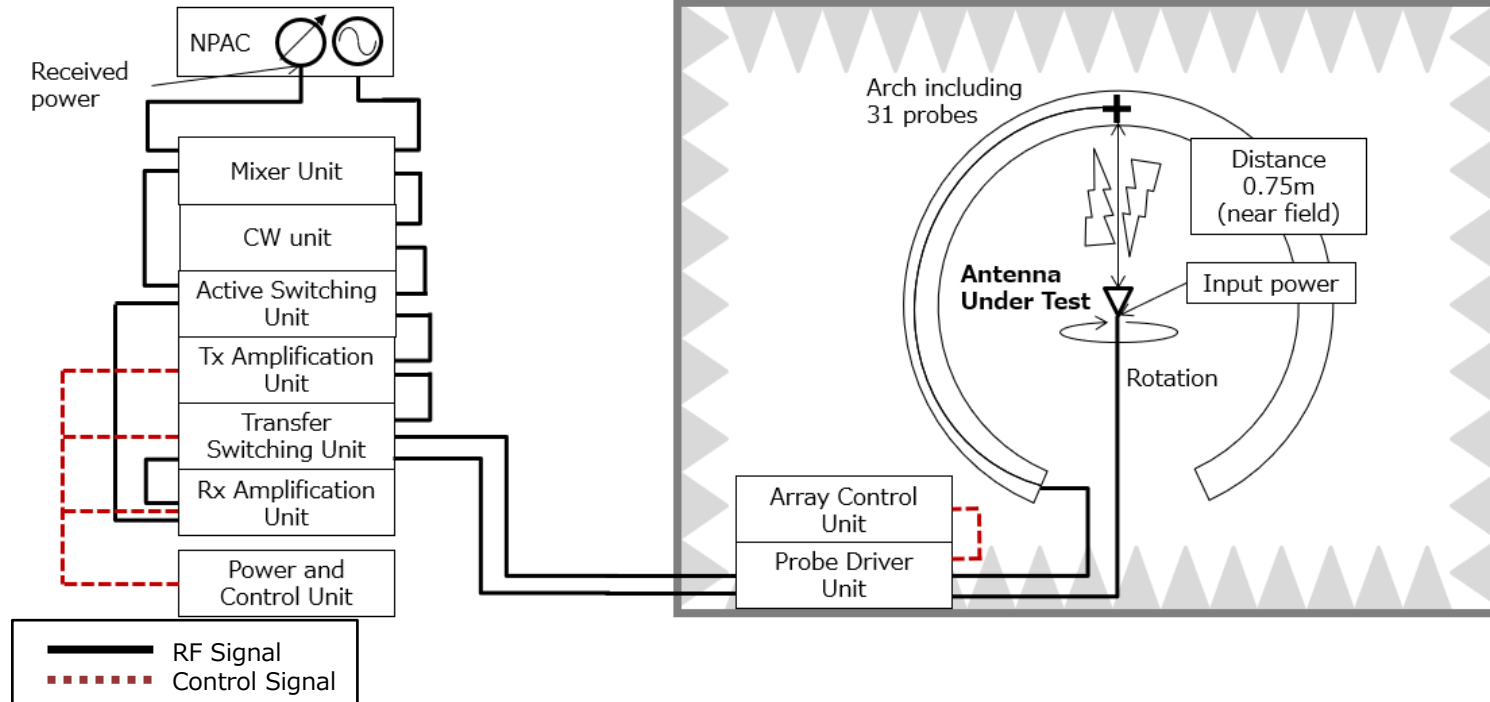
FCC ID:	VPYLBEE5QG2CX
Client:	Murata Manufacturing Co., Ltd.
Type of Equipment:	Communication Module
Model No.:	2CX (* installed in Host Device 2CX002)
Date of Testing:	January 26, 2026 – February 25, 2026
Date of Issue:	March 05, 2026

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: AN-1053
Antenna Type: Monopole
Input Impedance: 50 ohm

Antenna 2

Antenna Model Name: AN-1054
Antenna Type: Monopole
Input Impedance: 50 ohm

4. Antenna Gains

Antenna 1

Date of Testing: February 25, 2026

Tested Personnel: Kosei Oikawa

Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 1	2420	-6.48	* 2.4 GHz peak
	5200	-10.90	
	5300	-10.57	
	5600	-9.24	* 5 GHz peak
	5800	-9.55	
	6100	-8.43	
	6500	-9.77	
	6700	-6.23	* 6 GHz peak
	6900	-7.89	

Antenna 2

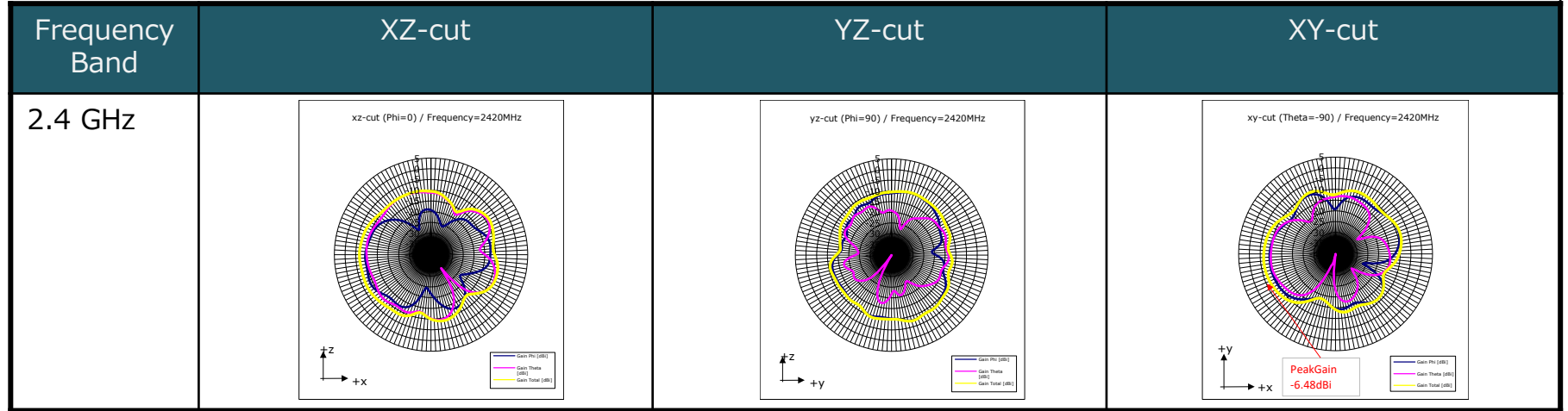
Date of Testing: February 25, 2026

Tested Personnel: Masaomi Takayama

Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 2	2440	-2.92	* 2.4 GHz peak
	5200	-1.96	* 5 GHz peak
	5300	-3.43	
	5700	-3.40	
	5800	-3.59	
	6400	-2.23	* 6 GHz peak
	6500	-2.68	
	6600	-3.41	
	7000	-4.22	

5. Antenna Directivity Plots

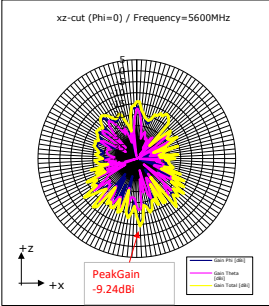
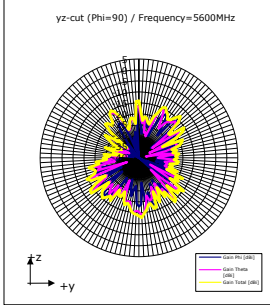
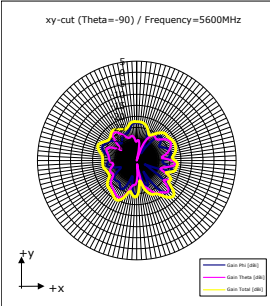
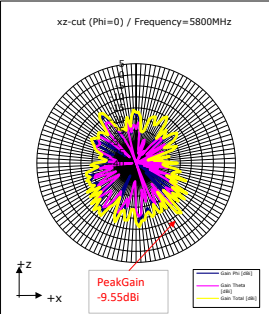
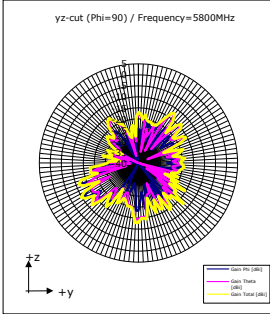
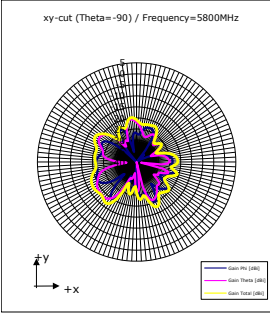
Antenna 1 (1/5)



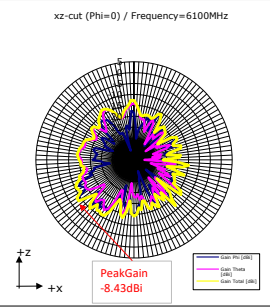
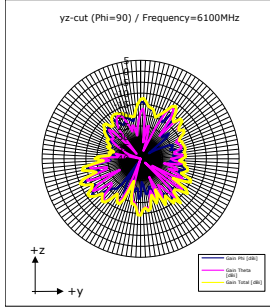
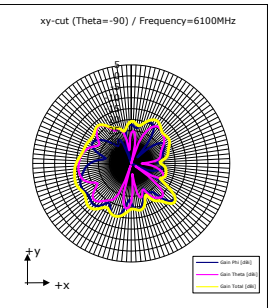
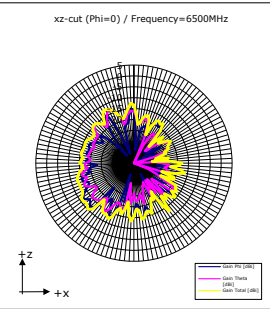
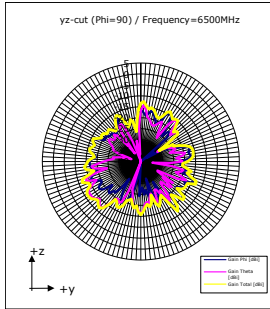
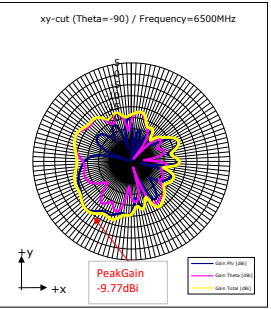
Antenna 1 (2/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)	xz-cut (Phi=0) / Frequency=5200MHz PeakGain -10.90dBi	yz-cut (Phi=90) / Frequency=5200MHz	xy-cut (Theta=-90) / Frequency=5200MHz
W53 (5.3 GHz)	xz-cut (Phi=0) / Frequency=5300MHz PeakGain -10.57dBi	yz-cut (Phi=90) / Frequency=5300MHz	xy-cut (Theta=-90) / Frequency=5300MHz

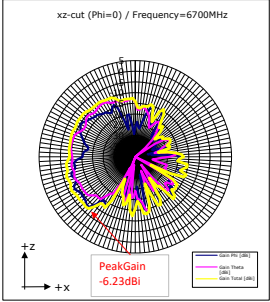
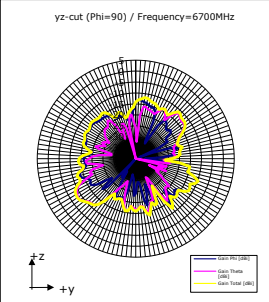
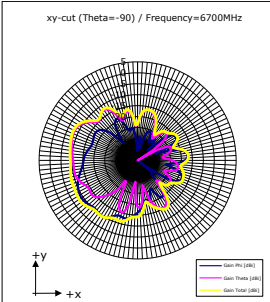
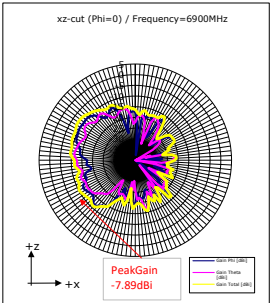
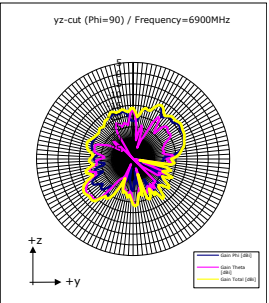
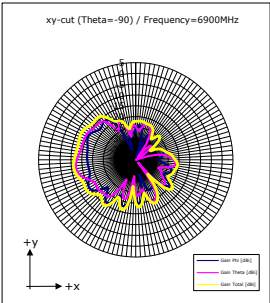
Antenna 1 (3/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.6 GHz)	xz-cut (Phi=0) / Frequency=5600MHz  PeakGain -9.24dBi	yz-cut (Phi=90) / Frequency=5600MHz 	xy-cut (Theta=-90) / Frequency=5600MHz 
W58 (5.8 GHz)	xz-cut (Phi=0) / Frequency=5800MHz  PeakGain -9.55dBi	yz-cut (Phi=90) / Frequency=5800MHz 	xy-cut (Theta=-90) / Frequency=5800MHz 

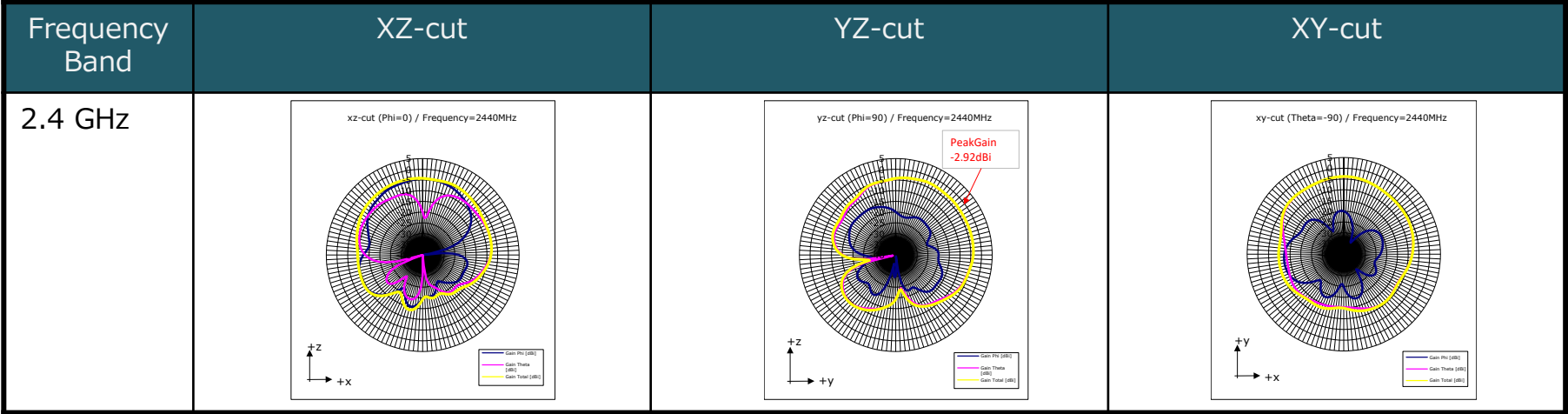
Antenna 1 (4/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 5 (6.1 GHz)	xz-cut (Phi=0) / Frequency=6100MHz  PeakGain -8.43dBi	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 	xy-cut (Theta=-90) / Frequency=6500MHz  PeakGain -9.77dBi

Antenna 1 (5/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 7 (6.7 GHz)	 xz-cut (Phi=0) / Frequency=6700MHz PeakGain -6.23dBi	 yz-cut (Phi=90) / Frequency=6700MHz	 xy-cut (Theta=-90) / Frequency=6700MHz
U-NII 8 (6.9GHz)	 xz-cut (Phi=0) / Frequency=6900MHz PeakGain -7.89dBi	 yz-cut (Phi=90) / Frequency=6900MHz	 xy-cut (Theta=-90) / Frequency=6900MHz

Antenna 2 (1/5)



Antenna 2 (2/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)	xx-cut (Phi=0) / Frequency=5200MHz	yz-cut (Phi=90) / Frequency=5200MHz Peak Gain -1.96dBi	xy-cut (Theta=-90) / Frequency=5200MHz
W53 (5.3 GHz)	xx-cut (Phi=0) / Frequency=5300MHz	yz-cut (Phi=90) / Frequency=5300MHz Peak Gain -3.43dBi	xy-cut (Theta=-90) / Frequency=5300MHz

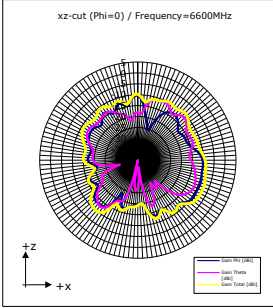
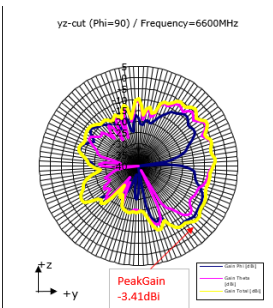
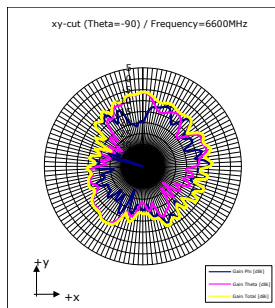
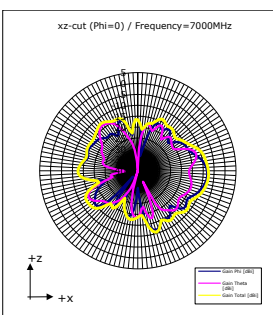
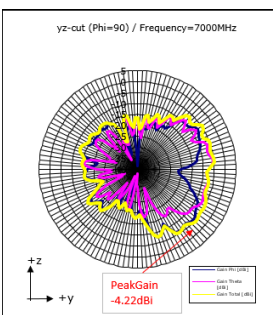
Antenna 2 (3/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.7 GHz)	xz-cut (Phi=0) / Frequency=5700MHz	yz-cut (Phi=90) / Frequency=5700MHz	xy-cut (Theta=-90) / Frequency=5700MHz
W58 (5.8 GHz)	xz-cut (Phi=0) / Frequency=5800MHz	yz-cut (Phi=90) / Frequency=5800MHz	xy-cut (Theta=-90) / Frequency=5800MHz

Antenna 2 (4/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 5 (6.4 GHz)	xz-cut (Phi=0) / Frequency=6400MHz	yz-cut (Phi=90) / Frequency=6400MHz PeakGain -2.23dBi	xy-cut (Theta=-90) / Frequency=6400MHz
U-NII 6 (6.5 GHz)	xz-cut (Phi=0) / Frequency=6500MHz	yz-cut (Phi=90) / Frequency=6500MHz PeakGain -2.68dBi	xy-cut (Theta=-90) / Frequency=6500MHz

Antenna 2 (5/5)

Frequency Band	XZ-cut	YZ-cut	XY-cut
U-NII 7 (6.6 GHz)	xz-cut (Phi=0) / Frequency=6600MHz 	yz-cut (Phi=90) / Frequency=6600MHz 	xy-cut (Theta=-90) / Frequency=6600MHz 
U-NII 8 (7GHz)	xz-cut (Phi=0) / Frequency=7000MHz 	yz-cut (Phi=90) / Frequency=7000MHz 	xy-cut (Theta=-90) / Frequency=7000MHz 