SONY

FCC Part 15 Antenna Gain Test Report

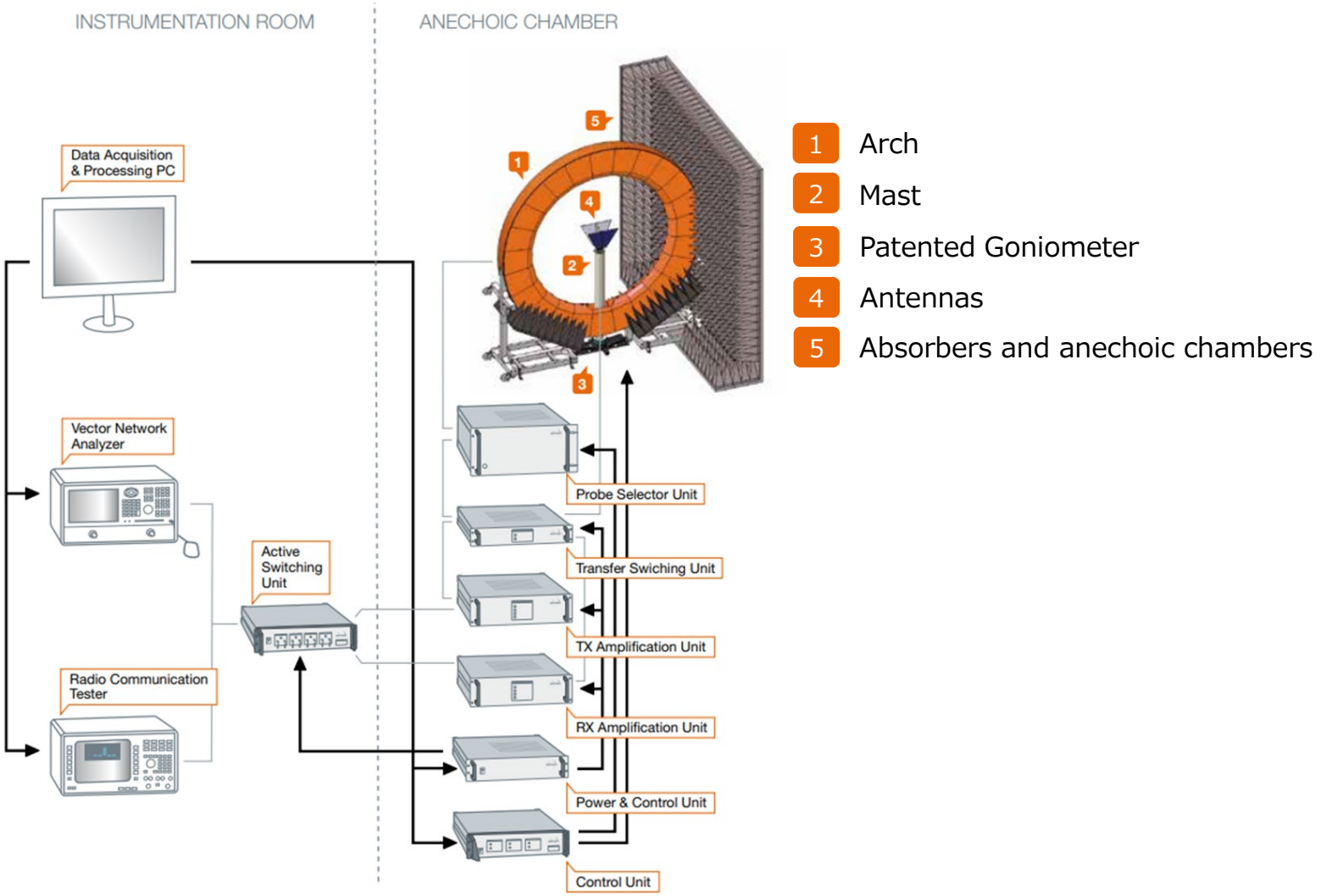
FCC ID:	AK8DWM30
Type of Equipment:	Wireless Microphone
Model No.:	DWM-30
Similar Model(s) to be covered by this report:	N/A
Test Facility:	Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, Main Lab. 8-4 Shiomi Kisarazu-shi Chiba-ken, 292-0834, Japan
Date of Testing:	July 11, 2024
Date of Issue:	Oct. 30, 2024
Reporter	Daisuke Kihara

Sony Global Manufacturing & Operations Corporation

1. Measurement Procedure

- The antenna gain is measured with StarMIMO multi-probe measurement system.

System Overview



(References: MVG, StarMIMO multi-probe measurement system datasheet, 2021)

2. Test Equipment and Measurement Software

Test Equipment

Used	Control No.	Equipment Description	Model No.	Serial No.	Manufacturer	Cal. Interval	Last Cal.	Remark
Y	-	Multi-Probe Measurement System	StarMIMO	1101232-1346	MVG	12 months	2023.09.24	
Y	M1062	ENA Network Analyzer	E5071C	MY46101377	Keysight Technologies	12 months	2024.08.01	
Y	A5062	Dual-Ridge Horn Antenna (0.4-6.0 GHz)	SH400-198	33104416	MVG	12 months	2024.05.10	Reference Antenna

- The calibration is valid until the end of the expiration month.

Measurement Software

Used	Control No.	Software Description	Model No.	Version	Manufacturer	Remark
Y	-	Automated Antenna and OTA Measurement Software Suite	MVG WaveStudio	22.1.7	MVG	
Y	-	Near-Field to Far-Field Transformation Software	MV-Sphere	2.3.27	MVG	

3. Antenna Under Test

Antenna 1

Antenna Model Name: CABPB0715A

Antenna Type: Patch

Input Impedance: 50ohm

4. Antenna Gains

Antenna 1

Date of Testing: July 11, 2024

Tested Personnel: Kumiko Takahashi

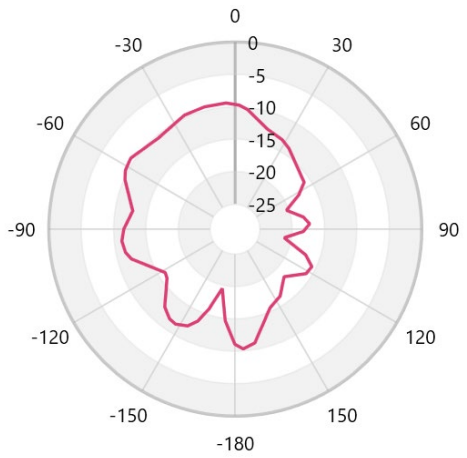
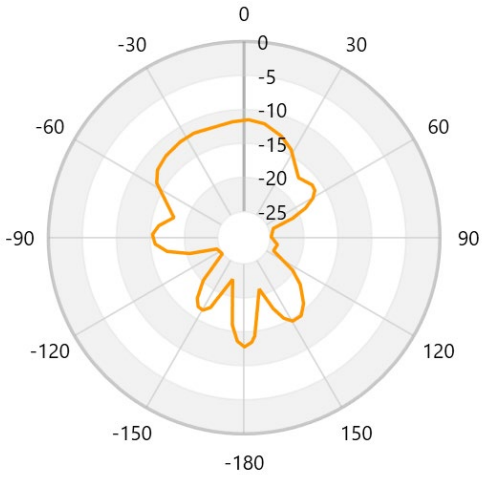
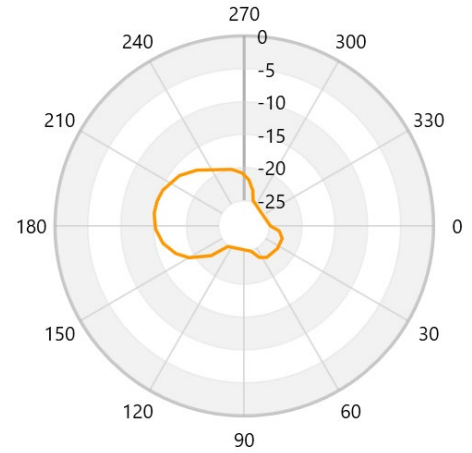
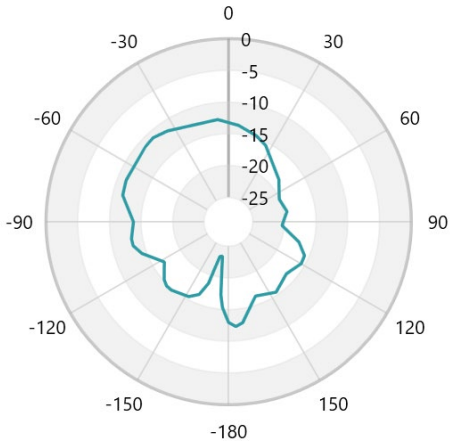
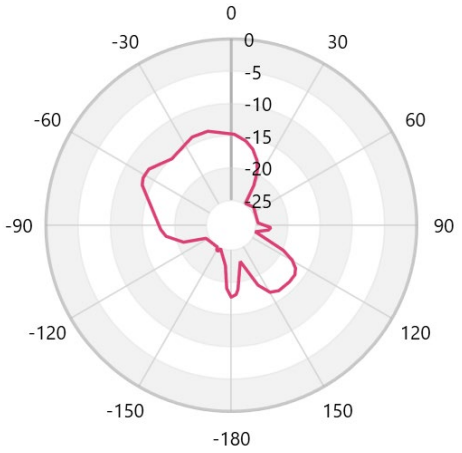
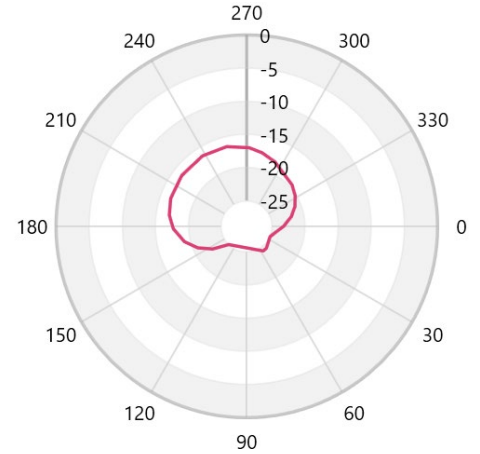
Temperature: 22.4 deg.C

Relative Humidity: 57.4 %

Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 1	2400	-9.15	
	2420	-8.27	*peak
	2440	-9.85	
	2450	-11.06	
	2460	-13.03	
	2480	-14.46	
	2500	-8.83	

5. Antenna Directivity Plots

Antenna 1 (1/2)

Frequency	XZ-cut	YZ-cut	XY-cut
2400 MHz			
2450 MHz			

5. Antenna Directivity Plots

Antenna 1(2/2)

Frequency	XZ-cut	YZ-cut	XY-cut
2500 MHz