

EUT: Order No. 15786299
Model : X5M00 2025/5/15, UL Japan,Inc. Shonan EMC Lab.
S/N : 12000500000384 No.2 Semi-Anechoic Chamber, 21 deg.C, 61 %RH, Yuta Shiba.
Reference antenna measurement

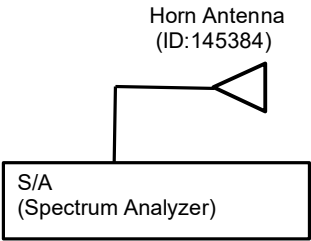
Freq. [MHz]	Pol.	S/A Reading Er [dBuV]	cable loss ID:179109 [dB]	Attenuator loss ATT [dB]	ID:145501 Gain Gr [dBi]	SG output SG [dBm]
2402	Hor	70.92	1.99	-	10.39	0.00
2440	Hor	70.98	2.00	-	10.41	0.00
2480	Hor	71.07	2.02	-	10.42	0.00
2402	Ver	70.81	1.99	-	10.39	0.00
2440	Ver	70.99	2.00	-	10.41	0.00
2480	Ver	71.17	2.02	-	10.42	0.00

EUT antenna measurement EUT's antenna

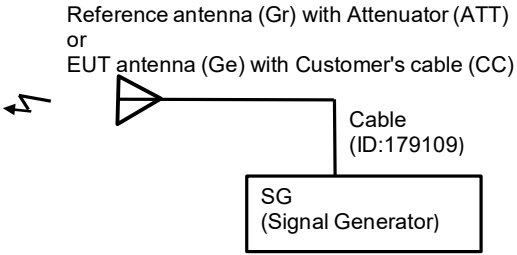
Freq. [MHz]	Pol.	S/A Reading Ee [dBuV]	(cable) ID:179109 [dB]	Customer's cable loss CC [dB]	EUT-ant. gain Ge [dBi]	SG level SG [dBm]
2402	Hor	60.65	1.99	0.50	0.62	0.00
2440	Hor	61.43	2.00	0.50	1.36	0.00
2480	Hor	60.58	2.02	0.50	0.43	0.00
2402	Ver	60.83	1.99	0.50	0.91	0.00
2440	Ver	61.46	2.00	0.50	1.38	0.00
2480	Ver	60.64	2.02	0.50	0.39	0.00

Calculation : $Ge = Gr - (Er - Ee) - (ATT - CC)$

[Receiving side]



[Transmitting side]



X

Horizontal

(2402 MHz)

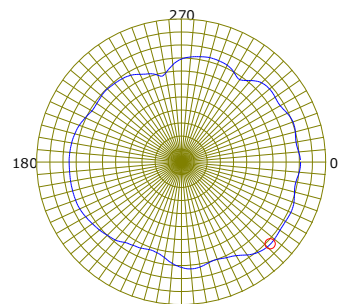
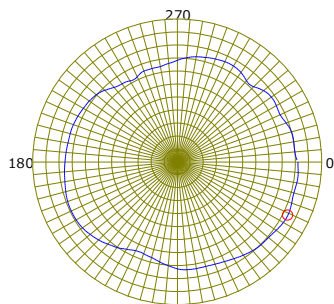
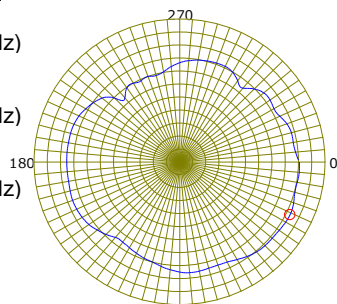
0.62

(2440 MHz)

1.36

(2480 MHz)

0.43



X

Vertical

(2402 MHz)

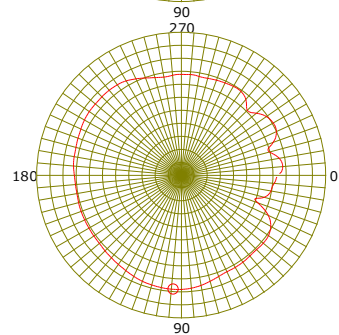
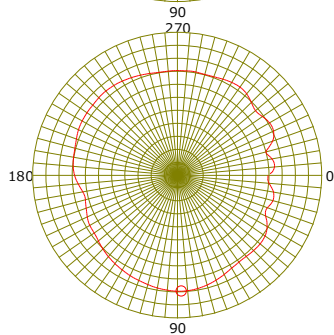
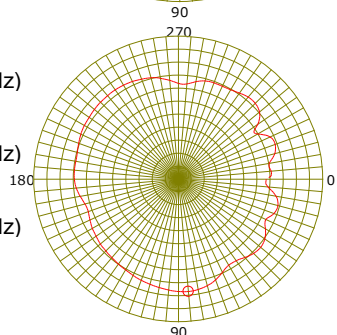
-5.20

(2440 MHz)

-2.86

(2480 MHz)

-0.45



Y

Horizontal

(2402 MHz)

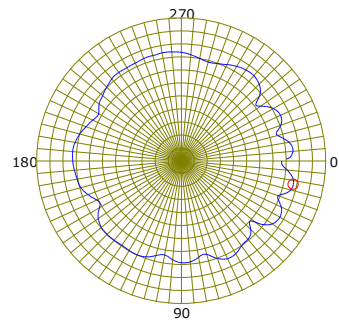
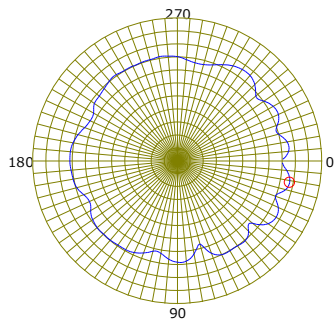
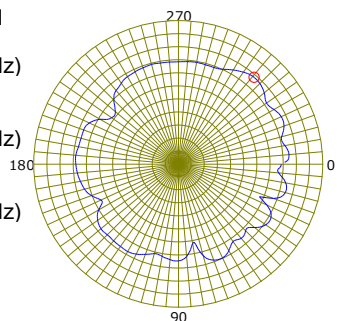
-4.06

(2440 MHz)

-4.49

(2480 MHz)

-5.04



Y

Vertical

(2402 MHz)

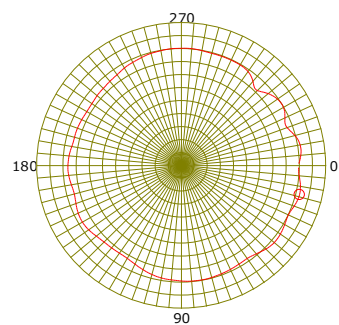
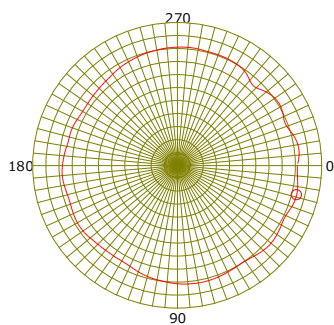
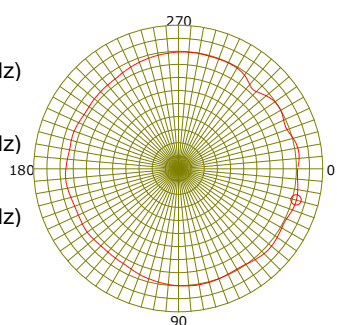
0.91

(2440 MHz)

1.38

(2480 MHz)

0.39



Z

Horizontal

(2402 MHz)

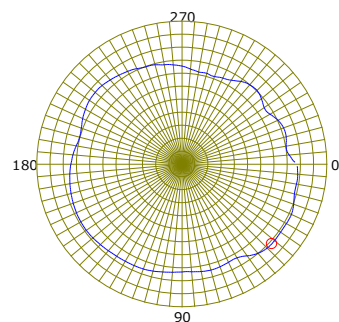
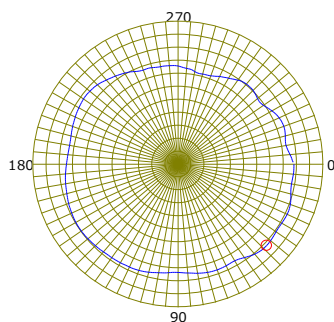
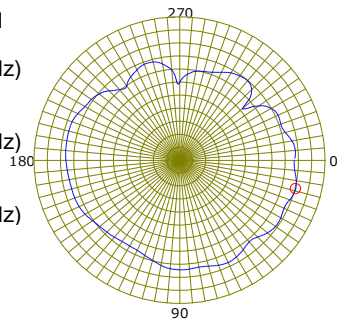
-1.80

(2440 MHz)

-0.31

(2480 MHz)

-0.58



Z

Vertical

(2402 MHz)

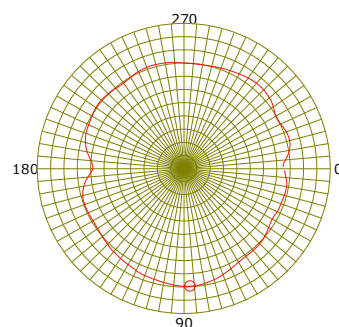
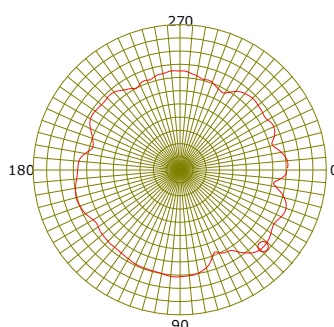
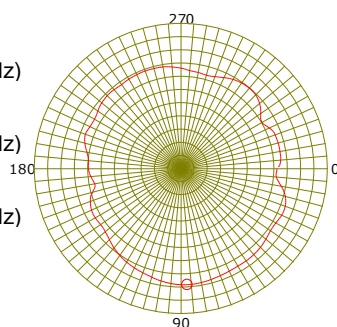
-3.93

(2440 MHz)

-6.57

(2480 MHz)

-1.83



APPENDIX 3
Test Instruments

Radio test equipment

Test Name	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Calibration Interval (Month)
Antenna Gain	179109	Coaxial Cable	Junkosha	MWX241-03000KMSKMS/B	1901Q034-R	2025/04/15	12
Antenna Gain	243215	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-NMS13-9.0m	49306-01-03	2024/06/12	12
Antenna Gain	145793	Digital Hitester	HIOKI E. E. CORPORATION	3805-50	80997819	2024/05/29	12
Antenna Gain	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	Ver 3.1.0546	-	-
Antenna Gain	145384	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-726	2025/03/11	12
Antenna Gain	145501	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-739	2025/03/24	12
Antenna Gain	145563	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	2025/03/05	12
Antenna Gain	146226	Signal Generator	Keysight Technologies Inc	E8257D-540	MY48051404	2025/01/15	12
Antenna Gain	207277	Tape Measure	ASKUL	-	-	-	-
Antenna Gain	150463	Test Receiver	Rohde & Schwarz	ESW44	101581	2024/08/06	12
Antenna Gain	259709	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2025/04/11	12

*Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.
Test Item:

End of Report