

TEST REPORT



Test Report File No. : S25063-1 (2)

Date of Issue : 19 March, 2026

Type : Commercial Microwave Oven

Model No. : NE-1266

Applicant : Panasonic Corporation of North America

Address : Two Riverfront Plaza, Newark, New Jersey, United States 07102-5490

Manufacturer : Panasonic Corporation Living Appliance and Solutions Company

Address : 2-3-1-3, Nojihigashi, Kusatsu City, Shiga, 525-0058, Japan

Test Result Accord : ☒ **Positive** ☐ **Negative** to the standards at page 4

Approved by:

Reviewed by:

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Laboratory Director,
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Technical Manager,
EMC Test Laboratory

The test laboratory is not responsible for the data and information provided by the applicant, which may affect the validity of the results.

The results in this report apply only to the tested sample.

This test report shall not be reproduced in full or partial, without the written approval of the test laboratory.

This test report must not be used by the customer to claim product certification, approval, or endorsement by any agency of the U.S. Government.

This test report replaces already issued S25063-1 (1) (10 March, 2026).

Revision History

Revision	Test Report No.	Date	Description
-	S25063-1	19 January, 2026	Original Issue
(1)	S25063-1 (1)	10 March, 2026	Page 1: The applicant and manufacturer have been corrected. Page 6: Added "Test Firm Registration Number" and "Designation Number" to the "Test Site Description". Page 8: The applicant have been corrected. Added EUT Categorized to the identification of EUT A.
(2)	S25063-1 (2)	19 March, 2026	Page 33: Added "Appendix B External Photographs".

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(*) Data and information are provided by the applicant.
The information on the cover and data is also provided by the customer.

Definitions for Symbols used in this Test Report

Black box indicates (■) that the listed condition, standard, or equipment was applicable for this Report.

Blank box indicates (□) that the listed condition, standard, or equipment was not applicable for this Report.

Test Standards

The tests were performed according to the following standards:

- FCC Part 18 Subpart C Industrial, Scientific, and Medical Equipment
- FCC / OST MP-5 : 1986 - Test Procedure.

Deviation From The Standards

Deviations from or additions to the test method: No deviation or addition

Purpose

The purpose of this report is to show compliance of the Commercial Microwave Oven / Model NE-1266 to the requirement of Part 18 of the FCC Rules and Regulations (47 CFR, PART 18, Subpart C).

Requirement

The test requirements are as follows.

Field strength limits (FCC Part 18, 18.305)

The measured output power was found to be more than 500 W (see 6.3). Therefore, in accordance with Section 18.305 of Subpart C, the measured out-of-band emissions were compared with the limit calculated as following:

$$\text{LFS} = 25 * \text{SQRT} (\text{RF Power Output [W]}/500)$$

$$\text{LFS} = 25 * \text{SQRT} (1666.1 / 500)$$

$$\text{LFS} \approx 45.636 \mu\text{V/m}$$

Where: LFS is the maximum allowable field strength for out-of-band emissions in $\mu\text{V/m}$ at a 300 m measurement distance. Power Output is the measure output power in watts.

1st Limit

Limit at 300 m [$\mu\text{V/m}$]	Limit at 300 m [$\text{dB}\mu\text{V/m}$]	Limit at 3 m [$\text{dB}\mu\text{V/m}$]
45.636	33.186	73.186

2nd Limit

Limit at 1600 m [$\mu\text{V/m}$]	Limit at 1600 m [$\text{dB}\mu\text{V/m}$]	Limit at 3 m [$\text{dB}\mu\text{V/m}$]
10.000	20.000	74.540

Frequency measurements (OST MP-5, Sec. 4.5)

Measurements are made of:

(a) The variation of frequency with time, using the load specified in Section 4.1 (OST MP-5), starting with the EUT and load at room temperature and continuing until the load quantity has been reduced by evaporation to approximately 20% of the original quantity.

This test is made with nominal rated AC supply voltage.

(b) The variation of frequency for line voltage variation from 80 % to 125 % of nominal rated voltage, starting with the EUT warm from at least 10 minutes use, with a load as specified in Section 4.1 (OST MP-5), and with this load at room temperature at the beginning of the test.

Summary

◆ General Remarks:

-The tests were all good result.

◆ The Equipment Under Test:

- Fulfill the general approval requirements cited on page 4.
- Not fulfill the general approval requirements cited on page 4.

EUT received date : 12 December, 2025

Testing Start Date : 17 December, 2025

Testing End Date : 24 December, 2025

◆ Final Judgment:

The requirements according to the technical regulations and tested operation modes are

- MET.
- NOT MET.

	Frequency Range (MHz)	Minimum Margin (μ V/m)	Detector
Radiated Emission	0.009 - 30	45.080	AV
	30 - 1000	45.596	AV
	1000 - 25000	29.040	AV
Remark: Port applicable to test : Refer to "Operation of the EUT during Testing " .			

◆ Test Site Description:

This testing was performed at following site:

Name of the Test Site : Panasonic Holdings Corporation, Product Analysis Center, EMC Test Laboratory
Sasayama EMC Site

Address : 231-1 Yashiro, Tamba Sasayama City, Hyogo, 669-2356 Japan

TEL : +81(79) 552-5681

FAX : +81(79) 552-5682

Sasayama EMC Site is accredited by The Japan Accreditation Board for Conformity Assessment (JAB)
for the specific scope of accreditation under Lab. Certificate No. : RTL02730

Test Firm Registration Number:536635

Designation Number: JP5177

Environmental Conditions

See each Test Data.

Measurement Uncertainty

The data and results referenced in this document are true and accurate. The test results are traceable to the National or International Standards.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%.

- Measurement instrumentation uncertainty was “not” taken into account in the determination of compliance.
- Measurement instrumentation uncertainty was taken into account in the determination of compliance.

Our laboratory quotes measurement uncertainty as follows.

Radiated Emission (Electric Field) :

0.009 MHz - 30 MHz (0.6 m Loop antenna)	3 m distance	± 3.8 dB
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Radiated Emissions (Below 1 GHz : Electric Field) : 10 m Anechoic Chamber

30 MHz - 200 MHz (Biconical Antenna)	3 m distance	Horizontal	± 3.3 dB
		Vertical	± 3.3 dB
200 MHz - 1000 MHz (Logperiodic Antenna)	3 m distance	Horizontal	± 3.1 dB
		Vertical	± 3.2 dB

Radiated Emissions (Above 1 GHz : Electric Field) :

1 GHz - 6 GHz (Horn Antenna)	3 m distance	± 5.2 dB
6 GHz - 18 GHz (Horn Antenna)	3 m distance	± 5.1 dB
18 GHz - 40 GHz (Horn Antenna)	3 m distance	± 5.1 dB

Equipment under Test*

◆ Applicant

Company Name : Panasonic Corporation of North America

Address : Two Riverfront Plaza, Newark, New Jersey, United States 07102-5490

◆ Identification of EUT A

Type	: Commercial Microwave Oven	Rated Voltage	: AC 120 V / 60 Hz
Model	: NE-1266	Rated Power	: 1890 W
Serial No	: FES003	Protection class	: Class I
Operating Frequency	: 2450 MHz $\pm$ 50 MHz	Dimensions	: 422 x 508 x 337
Firmware Version	: FES	W x D x H (mm)	
Software Version	: -	EUT Categorized	: non-consumer equipment

Equipment authorization : Supplier's Declaration of Conformity FCC ID : ACLAP3L61

◆ Source of Interference & Internal Frequencies : Highest Frequency 2450 $\pm$ 50 MHz

Clock Source	Frequency (MHz)	Clock Source	Frequency (MHz)
Oscillator	8	Magnetron	2450 $\pm$ 50
Microcomputer AU	8	SMPS (24V)	0.025 - 0.095
Inverter	0.02 - 0.05	SMPS (12V)	0.132

◆ Noise Suppression Components

Inside

X-Capacitor: 2.2 μ F x 3

Y-Capacitor: 3300 pF x 2

Common mode choke: 0.9 mH + 4 mH

Ferrite: Power supply cord is inserted in to the core

Outside

-

◆ Measures for Electromagnetic Shielding

Enclosure

Operation of the EUT during Testing*

◆ Modification of the EUT

The test laboratory did not modify the EUT during the test.

◆ Power Supply System Utilized

Power supply system : AC 120 V / 60 Hz (1φ)

◆ Operation mode of the EUT

The equipment under test was operated during the measurement under the following conditions.
Refer to “ Details of Ports “ and “ Block diagram of the equipment under test (EUT) “ for all relevant ports.

- High Power Mode: 1200 W

◆ Description of EUT:

Symbol	Type	Model	Serial No.	Manufacturer	EUT condition
A	Commercial Microwave Oven	NE-1266	FES003	Panasonic	Pre-Production

EUT A :

Operating frequency : 2450 MHz
Type of Magnetron : 2M261
Door Seal Type : Choke
Employed mode : Stirre

◆Information for the Similar Model

NE-1266* (*suffix: 1APH, 3APH)

The following interface cables and the peripheral devices were connected during the measurement:

◆Power Cables

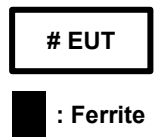
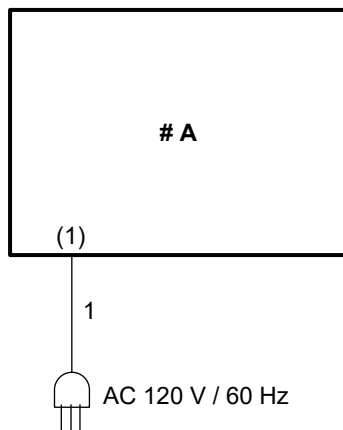
No.	Name of Cable	Pin	Length (m)	Shield	Ferrite Quantity	Ground Line
	Model / Manufacturer					
1	AC Power Cord for EUT A SJT / WELL SHIN	3	1.5	Unshielded	None	Yes

◆Details of ports

Port No.	Name of port	Remarks
(1)	AC IN	EUT/AC

◆ Block diagram of the EUT

·High Power Mode: 1200 W



Test Results and Conditions

Radiated Emission (9 kHz - 30 MHz : Electric Field)

The measurement of the Radiated Emission (9 kHz - 30 MHz : Electric Field) in the frequency range 9 kHz - 30 MHz was performed in horizontal and vertical antenna position according to FCC Part 18 at:

Test Location:

- 10 m anechoic chamber

Test Distance:

- 3 m (with a 0.6 m loop antenna)

Test Volume:

- $\varnothing$ 0.66 m

Data of Test Environmental Conditions: Refer to Test Data
Lists of the Test Equipment: Refer to Appendix A

The requirements are

■ MET

□ NOT MET

Min. limit margin 45.080 $\mu\text{V/m}$ at 0.0450 MHz
(AV detector receiver with 0 deg antenna polarization)

Description of calculation

9 kHz to 30 MHz

Calculation Formula to get field strength at 300 m from the measured at 3 m.

Calculation Formula:

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= 10^{\{(\text{Result at 3 m } [\text{dB}\mu\text{V/m}] / 20 \} * (3/300)^2} \end{aligned}$$

Example: Frequency 0.0450 MHz,
Result at 3 m 55.3 dB $\mu\text{V/m}$

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= 10^{(55.3 / 20) * (3/300)^2} \\ &= 0.556 \mu\text{V/m} \end{aligned}$$

Remarks: Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Test Data

Test Condition of Instrument

Resolution Bandwidth : 200 Hz (9 kHz to 150 kHz)
9 kHz (150 MHz to 30 MHz)

EUT Warm-up Time: 10 minutes

Date: 23 December, 2025

Environment: 18 deg.C / 29 % / 1002 hPa

Detector Function : Average
Test Mode : High Power Mode: 1200 W

Test Voltage : AC 120 V / 60Hz
Load : 1050 ml Center

Freq. [MHz]	Pol.	Reading at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 300 m [dBμV/m]	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
0.0310	0	46.4	19.7	66.1	-13.9	0.202	45.636	45.434	200	173
0.0450	0	55.3	19.6	74.9	-5.1	0.556	45.636	45.080	200	109
0.0910	0	37.6	19.5	57.1	-22.9	0.072	45.636	45.564	200	109
0.1810	0	31.1	19.5	50.6	-29.4	0.034	45.636	45.602	200	121
0.0310	45	45.2	19.7	64.9	-15.1	0.176	45.636	45.460	200	152
0.0450	45	53.5	19.6	73.1	-6.9	0.452	45.636	45.184	200	83
0.0920	45	37.5	19.5	57	-23.0	0.071	45.636	45.565	200	83
0.1820	45	29.3	19.5	48.8	-31.2	0.028	45.636	45.608	200	94
0.0310	90	42.8	19.7	62.5	-17.5	0.133	45.636	45.503	200	93
0.0460	90	53.1	19.6	72.7	-7.3	0.432	45.636	45.204	200	178
0.0910	90	36.8	19.5	56.3	-23.7	0.065	45.636	45.571	200	178
0.1800	90	28.1	19.5	47.6	-32.4	0.024	45.636	45.612	200	197
0.0310	135	43.9	19.7	63.6	-16.4	0.151	45.636	45.485	200	221
0.0450	135	53.5	19.6	73.1	-6.9	0.452	45.636	45.184	200	159
0.0920	135	38.7	19.5	58.2	-21.8	0.081	45.636	45.555	200	135
0.1820	135	29.6	19.5	49.1	-30.9	0.029	45.636	45.607	200	156
0.0310	Z	43.5	19.7	63.2	-16.8	0.145	45.636	45.491	200	181
0.0450	Z	53.0	19.6	72.6	-7.4	0.427	45.636	45.209	200	108
0.0910	Z	34.8	19.5	54.3	-25.7	0.052	45.636	45.584	200	108
0.1820	Z	28.6	19.5	48.1	-31.9	0.025	45.636	45.611	200	115

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]

Result at 3 m [dBμV/m] = Reading at 3 m [dBμV] + Factor [dB(1/m)]

Result at 300 m [dBμV/m] = Result at 3 m [dBμV/m] + 40log(3/300) [dB]

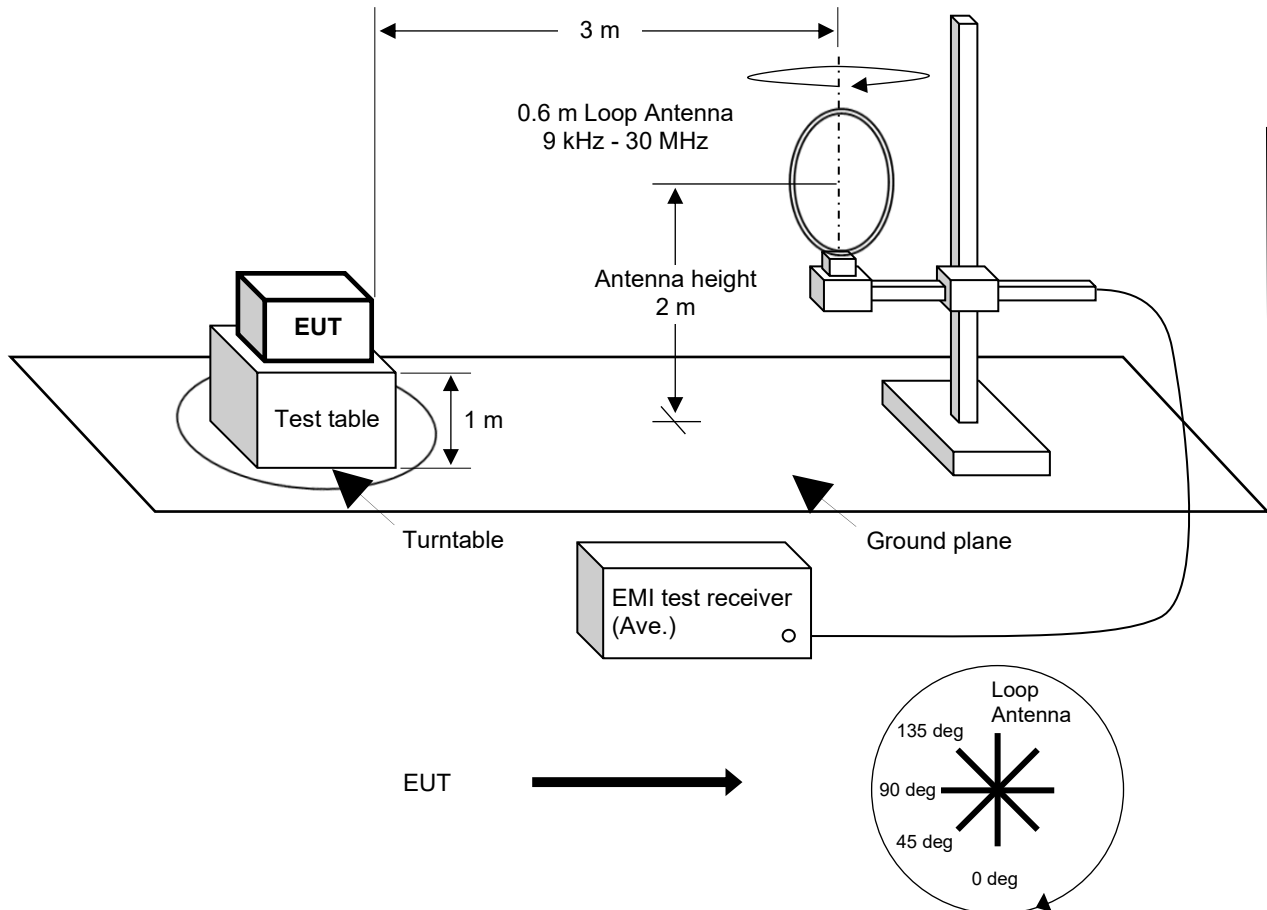
Photo of the Test Set-up

Pre-check : A loop antenna was set at a height of 2 m and a level with a small margin of Vertical axis (0° , 45° , 90° , 135°) and Horizontal Axis was measured using a spectrum analyzer.

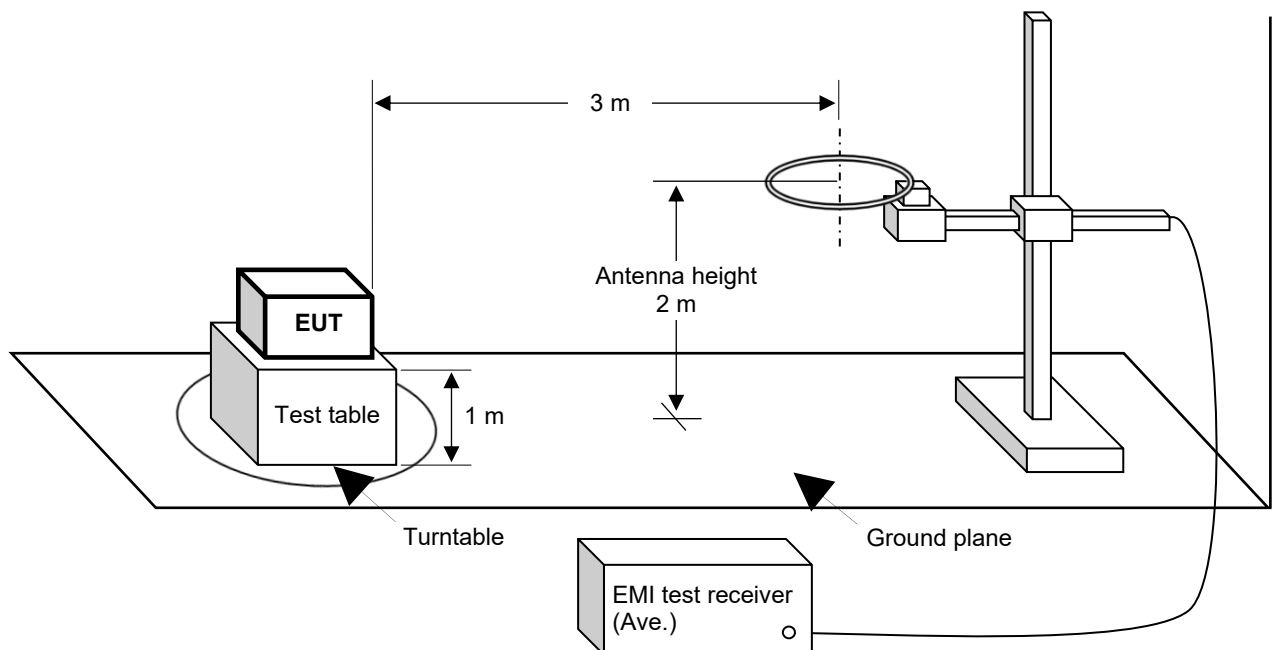
Final measurement : Emission levels (Ave. value) were measured by means of the test receiver referring the result of Pre-check.

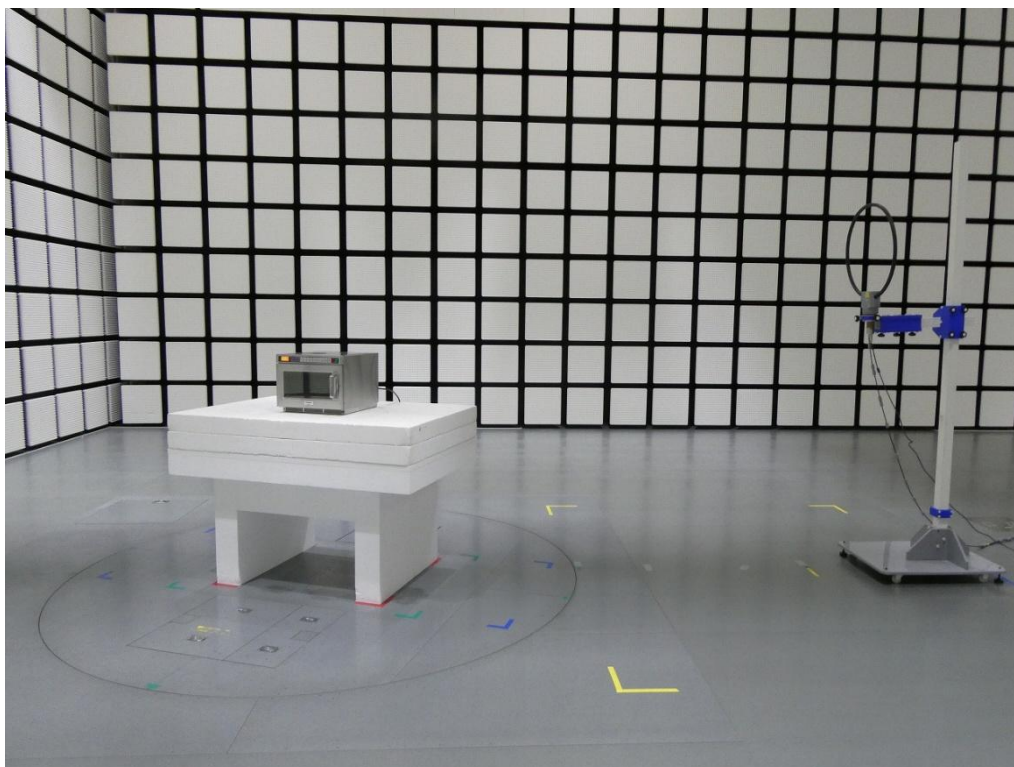
Drawing:

Vertical axis

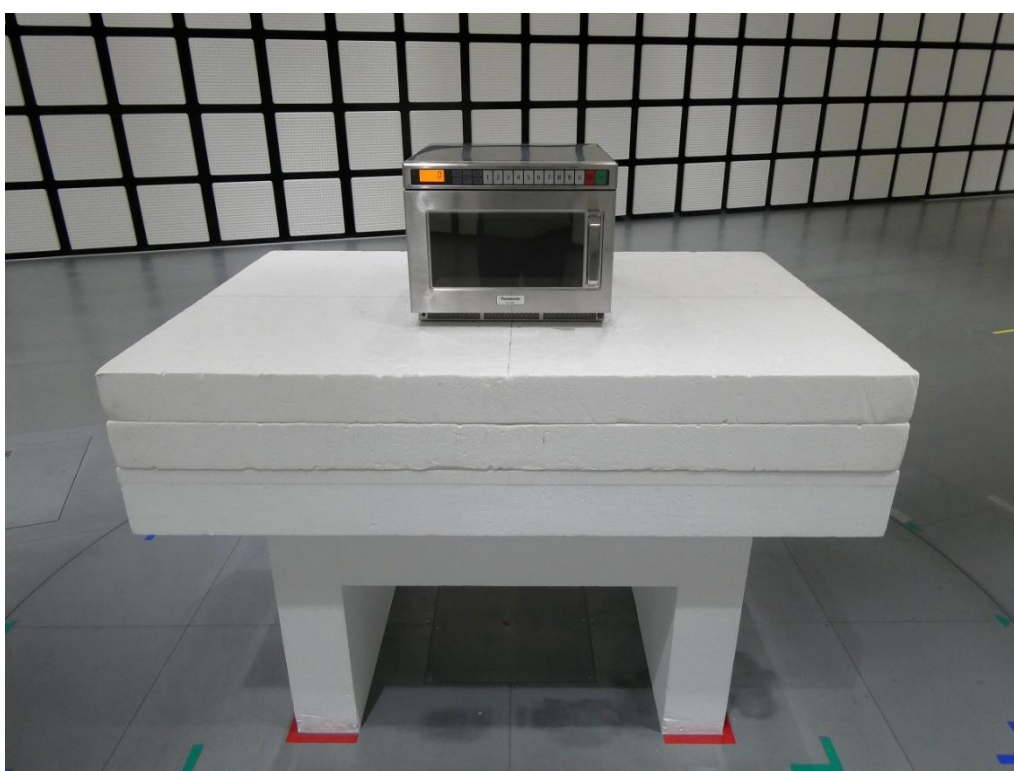


Horizontal Axis

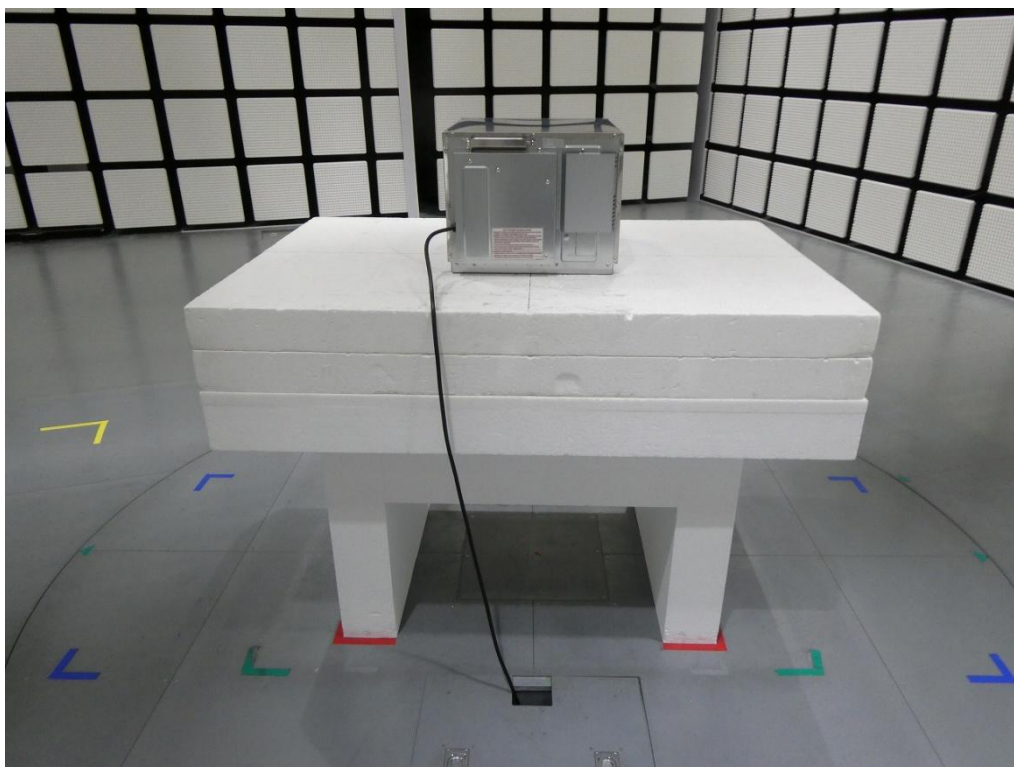




Worst angle



Front View



Rear View

Radiated Emission (Below 1 GHz : Electric Field)

The measurement of the Radiated Emission (Below 1 GHz : Electric Field) in the frequency range 30 MHz - 1000 MHz was performed in horizontal and vertical antenna position according to FCC Part 18 at:

Test Location:

- 10 m anechoic chamber

Test Distance:

- 3 m

Test Volume:

- $\varnothing$ 0.66 m

Data of Test Environmental Conditions: Refer to Test Data
Lists of the Test Equipment: Refer to Appendix A

The requirements are

■ MET

□ NOT MET

Min. limit margin 45.596 $\mu\text{V/m}$ at 30.119 MHz
(AV detector receiver with Vertical antenna polarization)

Description of calculation

30 MHz to 1 GHz

Calculation Formula to get field strength at 300 m from the measured at 3 m.

Calculation Formula:

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= 10^{\{(\text{Result at 3 m } [\text{dB}\mu\text{V/m}]) / 20\}} * (3/300) \end{aligned}$$

Example: Frequency 30.119 MHz,
Result at 3 m 18.9 dB $\mu\text{V/m}$

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= 10^{(18.9 / 20)} * (3/300) \\ &= 0.040 \mu\text{V/m} \end{aligned}$$

Remarks: Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Test Data

Test Condition of Instrument
 Resolution Bandwidth : 120 kHz (30 MHz to 1 GHz)
 Detector Function : Average
 Test Mode : High Power Mode: 1200 W
 Test Voltage : AC 120 V / 60Hz
 Load : 1050 ml Center

EUT Warm-up Time: 10 minutes
 Date: 17 December, 2025
 Environment: 21 deg.C / 28 % / 994 hPa

Freq. [MHz]	Pol.	Read- ing at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 300 m [dBμV/m]	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
75.778	H	25.7	-18.0	7.7	-32.3	0.024	45.636	45.612	236	228
238.220	H	23.3	-17.5	5.8	-34.2	0.019	45.636	45.617	100	263
789.757	H	13.9	-4.4	9.5	-30.5	0.030	45.636	45.606	139	231
30.119	V	18.9	-6.8	12.1	-27.9	0.040	45.636	45.596	108	145
158.213	V	17.7	-8.3	9.4	-30.6	0.030	45.636	45.606	102	208
235.003	V	22.5	-17.7	4.8	-35.2	0.017	45.636	45.619	164	156
977.147	V	10.7	-0.5	10.2	-29.8	0.032	45.636	45.604	206	314

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]

Result at 3 m [dBμV/m] = Reading at 3 m [dBμV] + Factor [dB(1/m)]

Result at 300 m [dBμV/m] = Result at 3 m [dBμV/m] + 20log(3/300) [dB]

Photographs of the Test Set-up

The EUT (with the peripherals) was placed on a 1.0 m high nonconductive turntable along.

The turntable was separated from the antenna by a distance of 3 m.

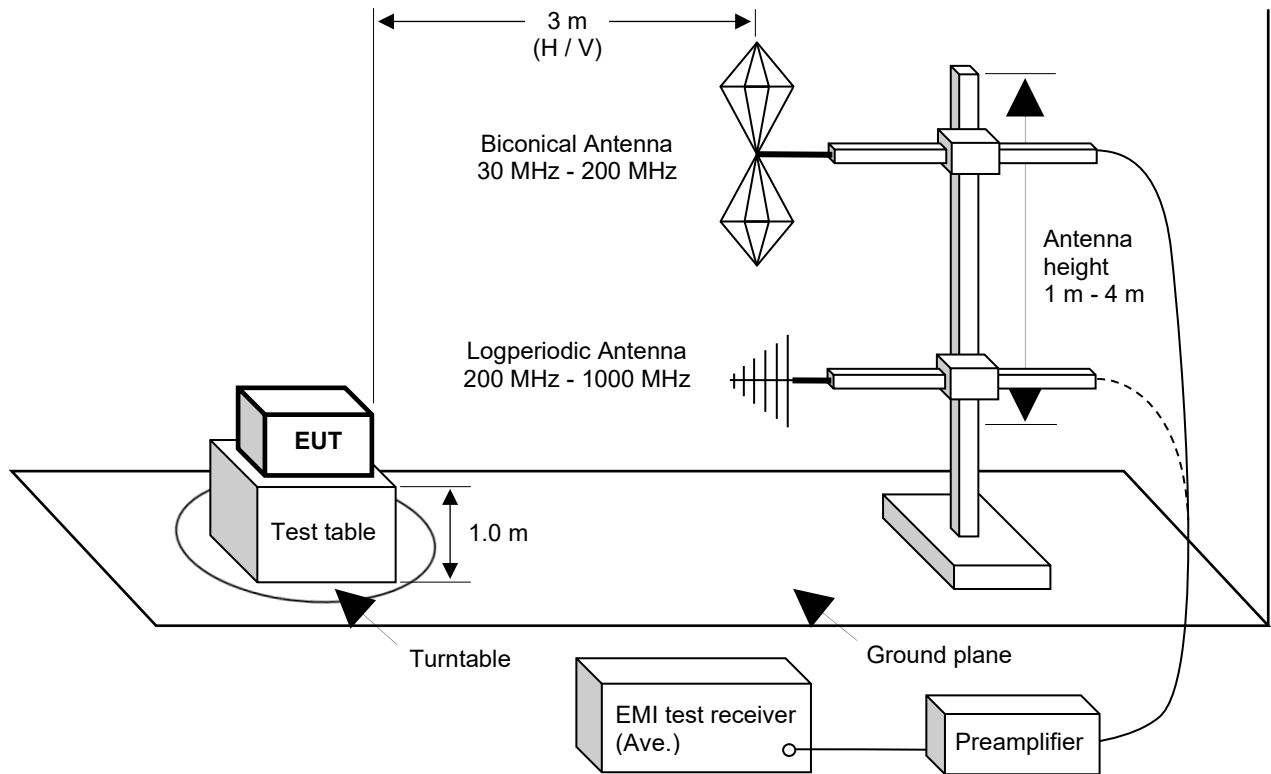
Cables for peripherals were placed in a position to produce maximum emissions as determined by experimentation, and the operation mode was selected for maximum emission.

Pre-check: Radiated emission levels (PEAK value) which have small margin for the regulation were measured by means of spectrum analyzer changing antenna movement (1 m - 4 m) and table rotation (0 degree - 360 degree).

Final measurement: Emission levels (Ave. value) were measured by means of the test receiver referring the result of Pre-check.

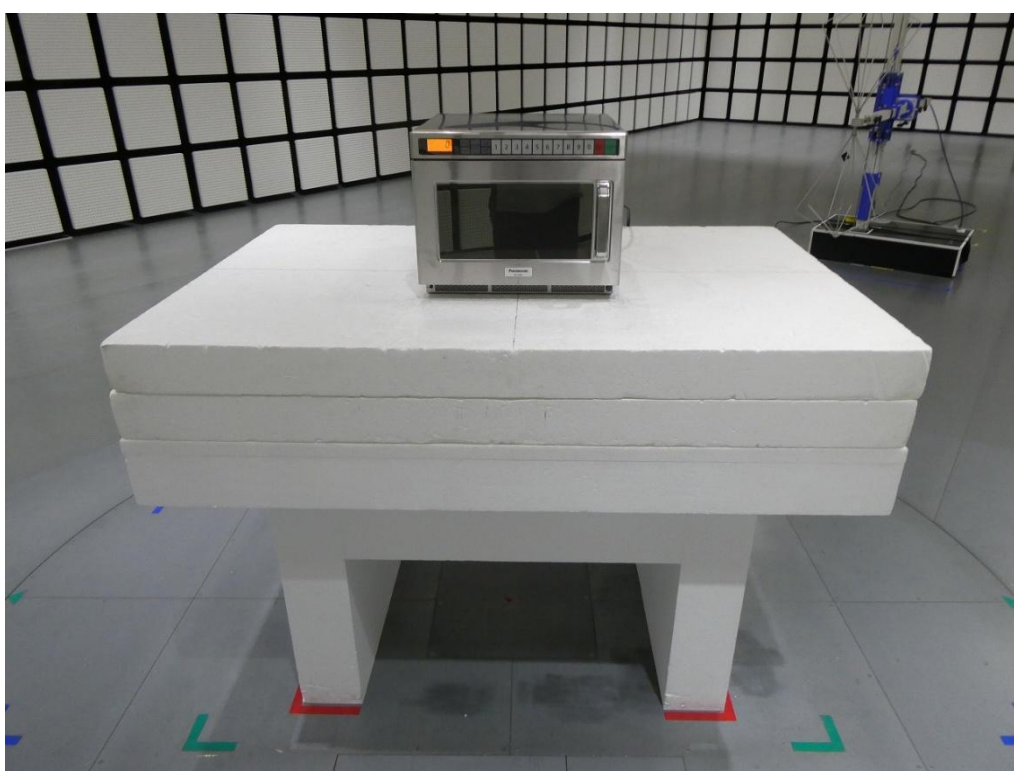
The emission levels from the EUT were maximized changing conditions; Turntable rotation, Antenna height and arrangement of the EUT.

Drawing :

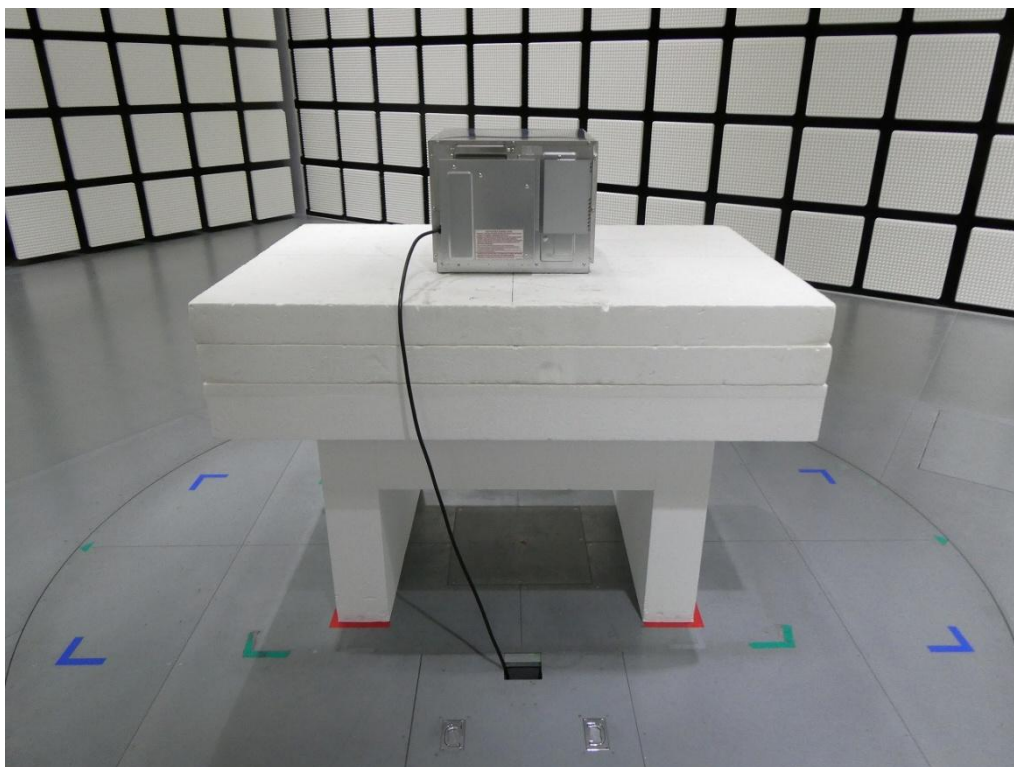




Worst angle



Front View



Rear View

Radiated Emission (Above 1 GHz : Electric Field)

The measurement of the Radiated Emission (Above 1 GHz : Electric Field) in the frequency range 1 GHz - 25 GHz was performed in horizontal and vertical antenna position according to FCC Part 18 at:

Test Location:

- 3 m anechoic chamber

Test Distance:

- 3 m

Test Volume:

- $\varnothing$ 0.66 m

Data of Test Environmental Conditions: Refer to Test Data

Lists of the Test Equipment: Refer to Appendix A

The requirements are

■ **MET**

□ **NOT MET**

Min. limit margin 29.040 $\mu\text{V/m}$ at 4915.32 MHz
(AV detector signal analyzer with Vertical antenna polarization at 450 ml Right Front Corner)

1 GHz - 6 GHz

Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]	Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]
1	87.7	61.2	61.2	3.55	4	32.1	52.5	32.1	1.73
2	48.6	38.5	38.5	2.10	5	54.6	44.3	44.3	2.44
3	37.4	51.6	37.4	2.03	6	48.4	38.1	38.1	2.07

$\theta_{3\text{dB}}$: The minimum 3 dB beam width of receive antenna.

W : The dimension of the line tangent to the EUT formed by $\theta_{3\text{dB}}$ at 3 m.

$$W = 2 \times 3 [\text{m}] \times \tan(0.5 \times \theta_{3\text{dB}}) \approx 1.73 \text{ m}$$

6 GHz - 18 GHz

Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]	Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]
6	37	44	37	2.01	13	25	23	23	1.22
7	38	39	38	2.07	14	30	23	23	1.22
8	30	33	30	1.61	15	32	19	19	1.00
9	28	29	28	1.50	16	29	19	19	1.00
10	27	27	27	1.44	17	28	18	18	0.95
11	29	24	24	1.28	18	29	17	17	0.90
12	33	26	26	1.39					

$\theta_{3\text{dB}}$: The minimum 3 dB beam width of receive antenna.

W : The dimension of the line tangent to the EUT formed by $\theta_{3\text{dB}}$ at 3 m.

$$W = 2 \times 3 [\text{m}] \times \tan(0.5 \times \theta_{3\text{dB}}) \approx 0.90 \text{ m}$$

18 GHz - 25 GHz

Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]	Frequency [GHz]	$\theta_{3\text{dB}}$ E Plane [°]	$\theta_{3\text{dB}}$ H Plane [°]	$\theta_{3\text{dB}}$ min [°]	W min [m]
18	52	40	40	2.18	22	50	38	38	2.07
19	48	38	38	2.07	23	50	38	38	2.07
20	51	39	39	2.12	24	48	37	37	2.01
21	50	38	38	2.07	25	50	38	38	2.07

$\theta_{3\text{dB}}$: The minimum 3 dB beam width of receive antenna.

W : The dimension of the line tangent to the EUT formed by $\theta_{3\text{dB}}$ at 3 m.

$$W = 2 \times 3 [\text{m}] \times \tan(0.5 \times \theta_{3\text{dB}}) \approx 2.01 \text{ m}$$

Description of calculation

1 GHz to 25 GHz

Calculation Formula to get field strength at 300 m from the measured at 3 m.

Calculation Formula:

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= K * 10^{\{(\text{Result at 3 m } [\text{dB}\mu\text{V/m}]) / 20 \}} \\ &K: \text{Conversion Factor for 3 m to 300 m} \end{aligned}$$

Example: Frequency 4915.32 MHz,
 Result at 3 m 70.8 dB μ V/m

$$\begin{aligned} &\text{Result at 300 m } [\mu\text{V/m}] \\ &= 0.01 * 10^{(70.8 / 20)} \\ &= 16.596 \mu\text{V/m} \end{aligned}$$

Remarks: Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Test Data

Test Condition of Instrument
 Resolution Bandwidth : 1 MHz (1 GHz to 25 GHz)
 EUT Warm-up Time: 10 minutes
 Date: 24 December, 2025
 Environment: 23 deg.C / 43 % / 987 hPa

Detector Function : Average
 Test Mode : High Power Mode: 1200 W

Test Voltage : AC 120 V / 60Hz
 Load : 1050 ml Center

Freq. [MHz]	Pol.	Read- ing at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 3 m [μV/m]	K	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
2191.317	H	19.1	29.8	48.9	278.6	0.0070	1.950	45.636	43.686	125	44
2401.220	H	20.8	29.3	50.1	319.9	0.0070	2.239	45.636	43.397	100	286
2495.697	H	18.9	29.2	48.1	254.1	0.0070	1.779	45.636	43.857	175	272
4278.380	H	52.1	-7.6	44.5	167.9	0.0100	1.679	45.636	43.957	100	297
4911.540	H	54.7	-6.4	48.3	260.0	0.0100	2.600	45.636	43.036	118	72
7387.630	H	51.0	-9.0	42.0	125.9	0.0100	1.259	45.636	44.377	100	63
14682.010	H	43.1	-3.7	39.4	93.3	0.0100	0.933	45.636	44.703	129	110
19687.577	H	42.1	0.4	42.5	133.4	0.0100	1.334	45.636	44.302	149	341
22098.987	H	38.0	-0.3	37.7	76.7	0.0100	0.767	45.636	44.869	101	61
1925.533	V	15.1	27.4	42.5	133.4	0.0070	0.933	45.636	44.703	129	24
2197.093	V	26.6	29.8	56.4	660.7	0.0070	4.625	45.636	41.011	138	323
2403.550	V	16.5	29.3	45.8	195.0	0.0070	1.365	45.636	44.271	177	327
2699.830	V	16.6	29.7	46.3	206.5	0.0090	1.859	45.636	43.777	137	50
4296.060	V	55.5	-7.5	48.0	251.2	0.0100	2.512	45.636	43.124	139	315
4918.450	V	59.6	-6.4	53.2	457.1	0.0100	4.571	45.636	41.065	150	355
5405.520	V	42.8	-6.1	52.3	412.1	0.0100	4.121	45.636	41.515	101	355
6514.320	V	59.7	-7.4	52.3	412.1	0.0100	4.121	45.636	41.515	100	285
7378.120	V	48.0	-8.9	39.1	90.2	0.0100	0.902	45.636	44.734	139	30
19704.677	V	44.6	0.4	45.0	177.8	0.0100	1.778	45.636	43.858	150	17
22110.077	V	36.7	-0.3	36.4	66.1	0.0100	0.661	45.636	44.975	135	352

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]
 Result at 3 m [dBμV/m] = Reading at 3m [dBμV] + Factor [dB(1/m)]
 Result at 300 m [μV/m] = K * Result at 3m [μV/m]

Load : 1050 ml Right Front Corner

Freq. [MHz]	Pol.	Reading at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 3 m [μV/m]	K	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
4916.83	H	51.6	-6.4	45.2	182.0	0.010	1.820	45.636	43.816	130	75
7403.54	H	52.4	-9.0	43.4	147.9	0.010	1.479	45.636	44.157	104	17
4911.50	V	59.5	-6.4	53.1	451.9	0.010	4.519	45.636	41.117	125	111
7404.36	V	58.6	-9	49.6	302.0	0.010	3.020	45.636	42.616	150	203

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]
 Result at 3 m [dBμV/m] = Reading at 3m [dBμV] + Factor [dB(1/m)]
 Result at 300 m [μV/m] = K * Result at 3m [μV/m]

Load : 450 ml Center

Freq. [MHz]	Pol.	Reading at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 3 m [μV/m]	K	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
4927.08	H	59.7	-6.4	53.3	462.4	0.010	4.624	45.636	41.012	142	64
7394.94	H	49.9	-9.0	40.9	110.9	0.010	1.109	45.636	44.527	111	70
4918.43	V	60.6	-6.4	54.2	512.9	0.010	5.129	45.636	40.507	144	4
7398.85	V	60.8	-9	51.8	389.0	0.010	3.890	45.636	41.746	100	198

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]
 Result at 3 m [dBμV/m] = Reading at 3m [dBμV] + Factor [dB(1/m)]
 Result at 300 m [μV/m] = K * Result at 3m [μV/m]

Load : 450 ml Right Front Corner

Freq. [MHz]	Pol.	Reading at 3 m [dBμV]	Factor [dB(1/m)]	Result at 3 m [dBμV/m]	Result at 3 m [μV/m]	K	Result at 300 m [μV/m]	Limits at 300 m [μV/m]	Margin [μV/m]	Height [cm]	Angle [deg.]
4913.54	H	62	-6.4	55.6	602.6	0.010	6.026	45.636	39.610	123	72
7417.68	H	55.9	-9.0	46.9	221.3	0.010	2.213	45.636	43.423	126	54
4915.32	V	70.8	-6.4	64.4	1659.6	0.010	16.596	45.636	29.040	100	357
7401.59	V	51.5	-9	42.5	133.4	0.010	1.334	45.636	44.302	101	194

Factor [dB(1/m)] = Antenna Factor [dB(1/m)] + Cable Loss [dB] - Amp. Gain [dB]
 Result at 3 m [dBμV/m] = Reading at 3m [dBμV] + Factor [dB(1/m)]
 Result at 300 m [μV/m] = K * Result at 3m [μV/m]

Photographs of the Test Set-up

The EUT(with the peripherals) was placed on a 1.0 m high nonconductive turntable along.

The turntable was separated from the antenna by a distance of 3 m.

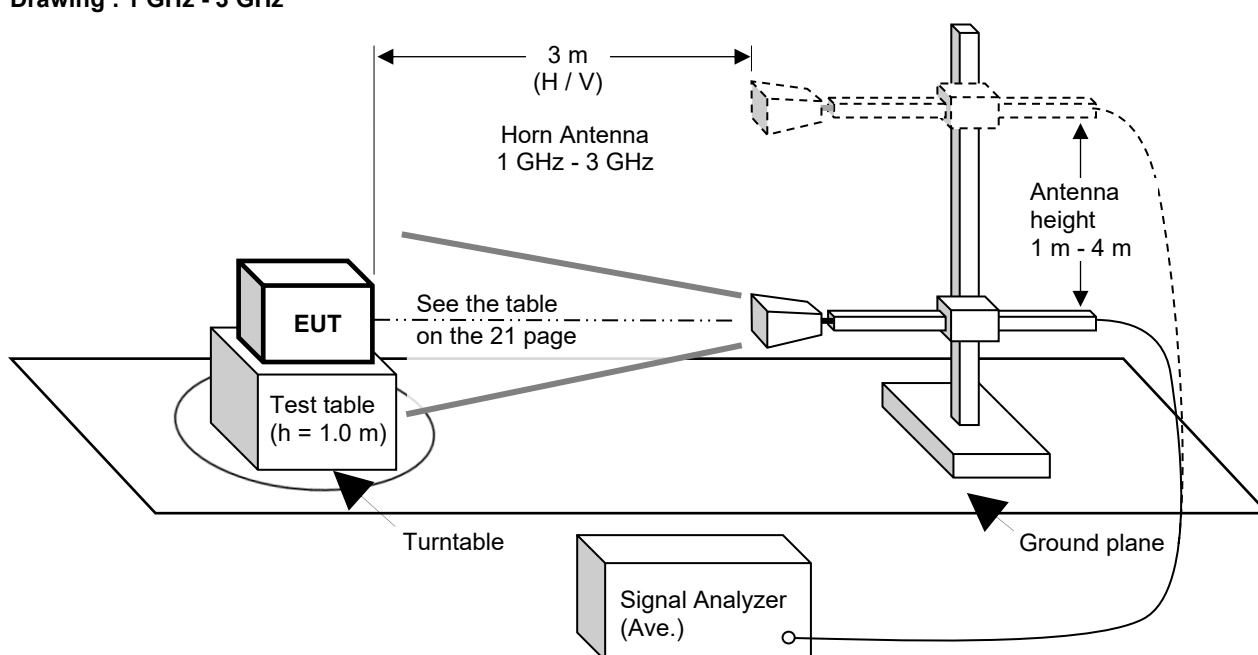
Cables for peripherals were placed in a position to produce maximum emissions as determined by experimentation, and the operation mode was selected for maximum emission.

Pre-check: Radiated emission levels (Ave. value) which have small margin for the regulation were measured by means of spectrum analyzer changing antenna movement (1 m - 4 m) and table rotation (0 degree - 360 degree).
Final measurement: Emission levels (Ave. value) were measured by means of the signal analyzer (1 GHz - 25 GHz) referring

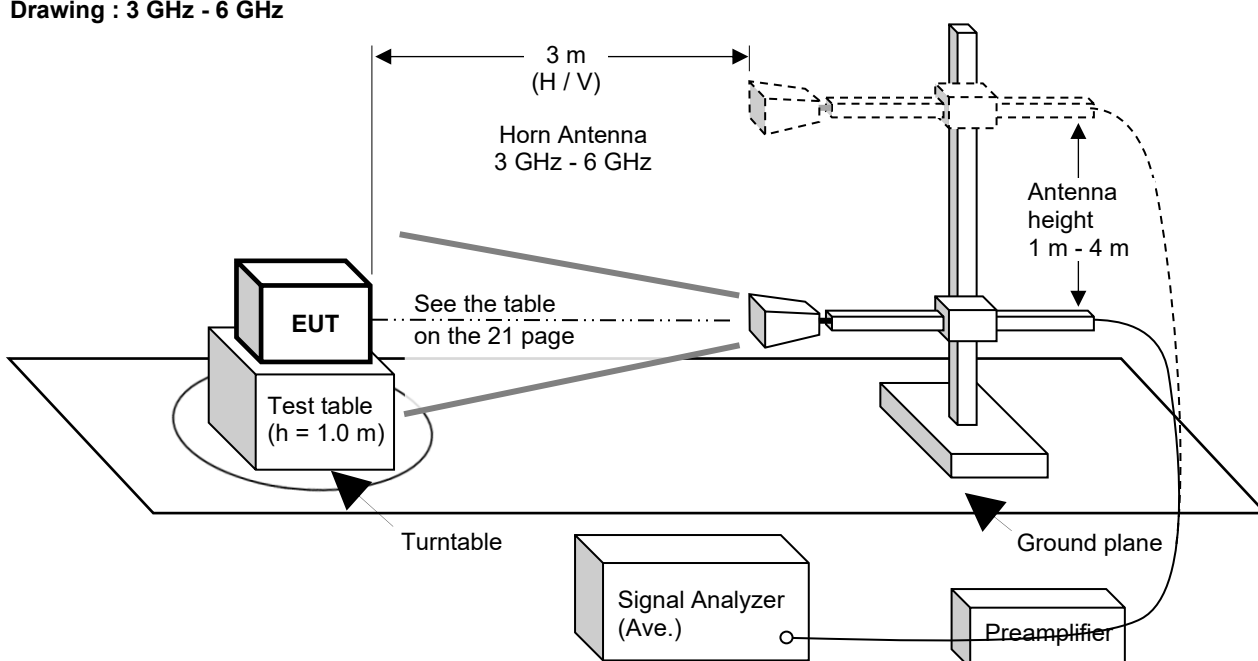
the result of Pre-check.

The emission level from the EUT were maximized changing conditions; Turn table rotation, Antenna height, azimuth and arrangement of the EUT.

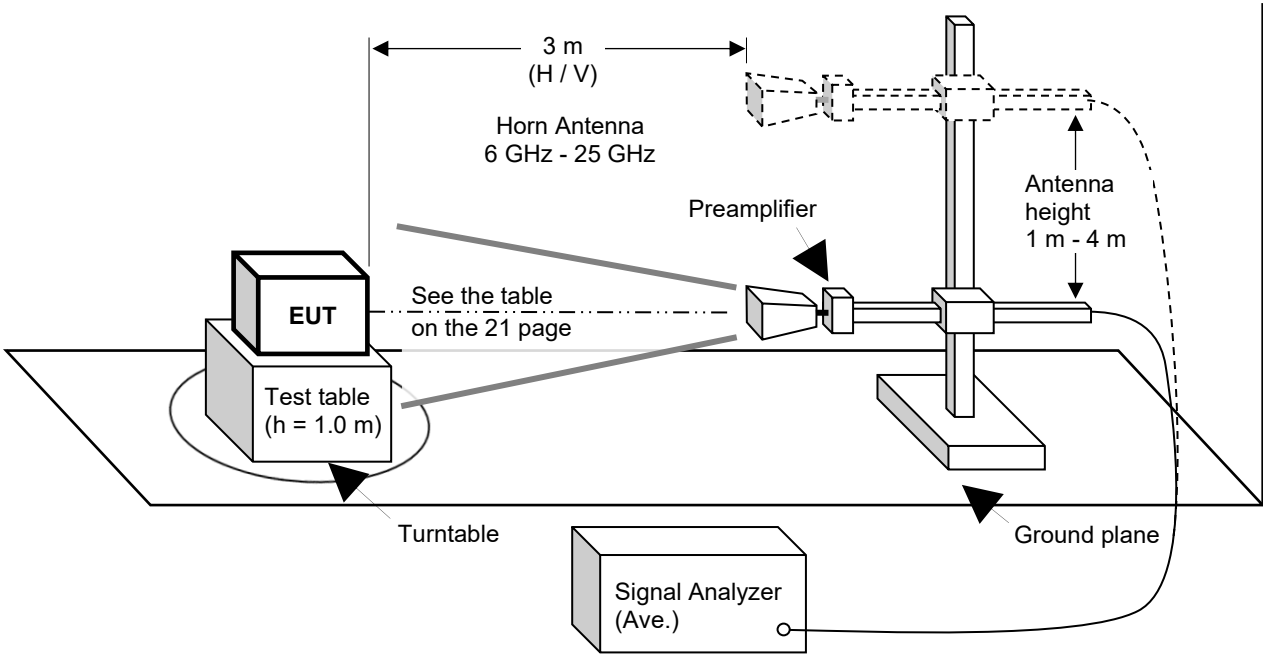
Drawing : 1 GHz - 3 GHz



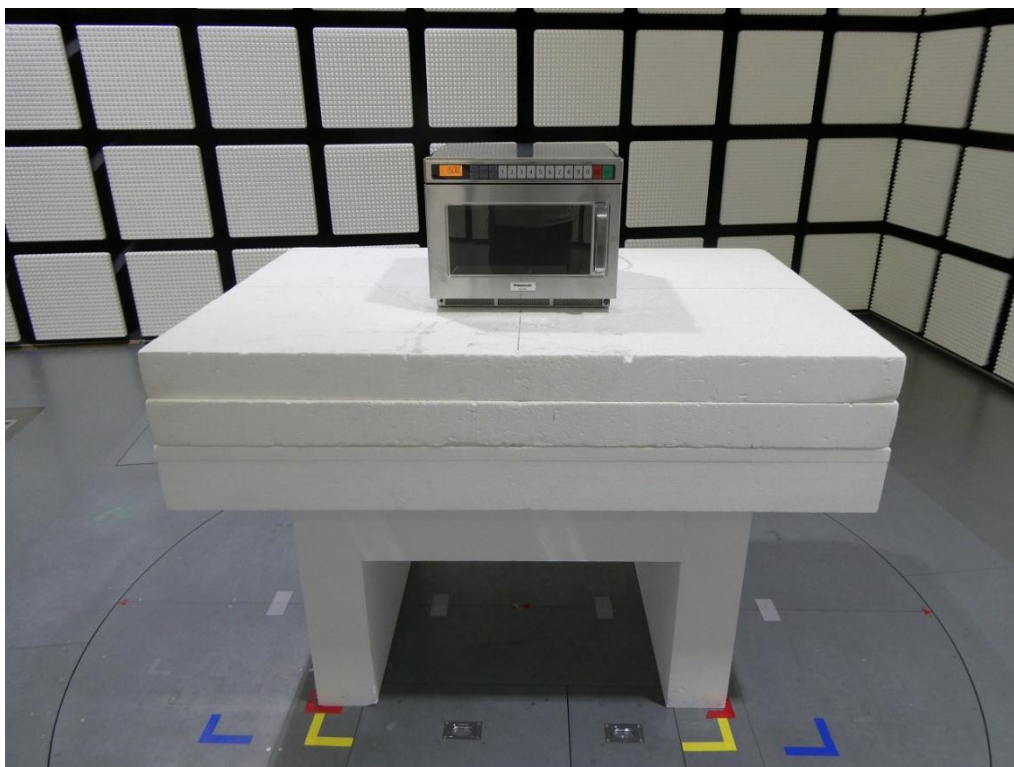
Drawing : 3 GHz - 6 GHz



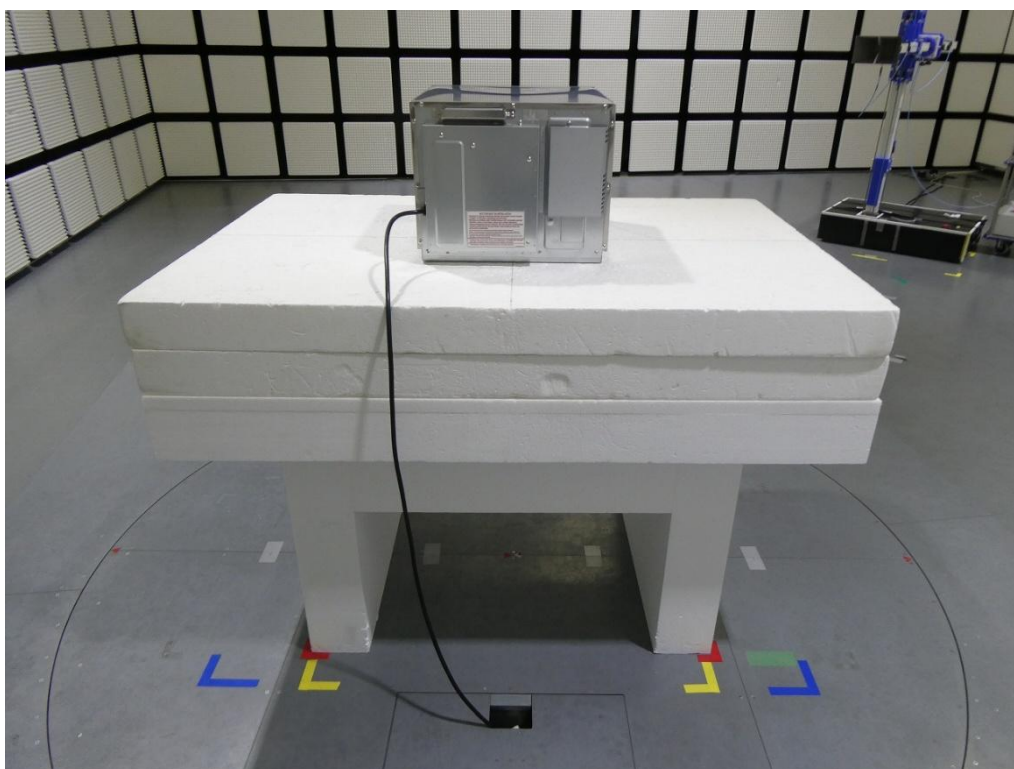
Drawing : 6 GHz - 25 GHz



Worst angle



Front View



Rear View

Operating Frequency measurements (OST MP-5, 4.5)

The operating frequency was measured using a spectrum analyzer. Starting with the EUT at room temperature, a 1500 ml water load was placed in the center of the oven was operated at maximum output power. The fundamental operating frequency was monitored until the water load was reduced to 20 % of the original load.

Test Location:

- 3 m anechoic chamber

Lists of the Test Equipment:

Refer to Appendix A

Maximum frequency variation

Variation of frequency with time, using the Load

2.44850 GHz – 2.47016 GHz (1500 ml ~ 300 ml / Load)

Date: 24 December, 2025

Environment: 23 deg.C / 43 % / 987 hPa

	Time (minutes)	Frequency (GHz)
100%	0	2.46512
	2	2.46232
	4	2.46396
	6	2.46444
	8	2.46444
	10	2.46258
	12	2.47006
	14	2.46652
	16	2.46900
	18	2.46570
	20	2.47016
	22	2.46332
	24	2.46362
	26	2.46172
	28	2.46250
	30	2.45900
	32	2.45044
	34	2.46354
	36	2.45980
	38	2.46062
	40	2.46114
	42	2.46724
	44	2.46948
	46	2.46708
	48	2.44864
	50	2.45948
	52	2.45972
	54	2.46514
	56	2.46510
	58	2.46390
	60	2.45866
20%	62	2.44850

Variation in Operating Frequency with Line Voltage (OST MP-5, 4.5)

The EUT was operated / warmed by at least 10 minutes of use with a 1500 ml water load at room temperature at the beginning of the test. Then the operating frequency was monitored as the input voltage was varied between 80 % and 125 % of the nominal rating.

Test Location:

- 3 m anechoic chamber

Lists of the Test Equipment:

Refer to Appendix A

Variation of frequency for Line Voltage variation

2.45222 GHz – 2.46510 GHz (96.0 V - 150.0 V / 1500 ml Load)

EUT Warm-up Time: 10 minutes

Date: 24 December, 2025

Environment: 23 deg.C / 43 % / 987 hPa

input voltage (%)	Voltage (V)	Frequency (GHz)
80	96.0	2.45392
85	102.0	2.46346
90	108.0	2.46320
95	114.0	2.45222
100	120.0	2.45472
105	126.0	2.45688
110	132.0	2.46510
115	138.0	2.46458
120	144.0	2.46200
125	150.0	2.45350

Appendix A Lists of the Test Equipment

Radiated Emission (9 kHz - 30 MHz : Electric Field)

Frequency range: 0.009 MHz - 30 MHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
EMI Test Receiver	ESW8	Rohde & Schwarz	103297	RCV0297	9 kHz - 8 GHz	12 February, 2025	28 February, 2026
Loop antenna	HFH2-Z2	Rohde & Schwarz	100014	ANT5063	9 kHz - 30 MHz	6 June, 2025	30 June, 2026

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW048-1

Radiated Emission (Below 1 GHz : Electric Field)

Frequency range: 30 MHz - 1000 MHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
EMI Test Receiver	ESW8	Rohde & Schwarz	103297	RCV0297	9 kHz - 8 GHz	12 February, 2025	28 February, 2026
Biconical Antenna	VHA 9103 & BBA 9106	Schwarzbeck	VHA9103 2397	ANT1004	30 MHz - 300 MHz	7 August, 2025	31 August, 2026
Logperiodic Antenna	VULP9118B	Schwarzbeck	00952	ANT0952	160 MHz - 1 GHz	7 August, 2025	31 August, 2026
Preamplifier	310N	SONOMA	394510	AMP0510	30 MHz - 1 GHz	27 June, 2024	30 June, 2026

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW048-1

Radiated Emission (Above 1 GHz : Electric Field)

Frequency range: 1 GHz - 3 GHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY590704 39	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	BBHA 9120D	Schwarzbeck	1632	ANT1632	1 GHz - 18 GHz	4 April, 2025	30 April, 2026

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW049-1

Frequency range: 3 GHz - 6 GHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY590704 39	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	BBHA 9120D	Schwarzbeck	1632	ANT1632	1 GHz - 18 GHz	4 April, 2025	30 April, 2026
Preamplifier	TPA0108-40	Toyo Corporation	0452	AMP0722	1 GHz - 8 GHz	5 June, 2025	30 June, 2027
Highpass Filter	WHKX 10-2700-3000-18000-40SS	Wainwright	SN 101	FIL0105	3 GHz - 18 GHz	5 June, 2025	30 June, 2027

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW049-1

Frequency range: 6 GHz - 18 GHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY590704 39	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	HAP06-18A	Schwarzbeck	-	ANT5059	6 GHz - 18 GHz	12 August, 2025	31 August, 2026
Preamplifier	HAP06-18A (Preamplifier)	TOYO Corporation	-	AMP5032	6 GHz - 18 GHz	12 August, 2025	31 August, 2026

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW049-1

Frequency range: 18 GHz – 25.0 GHz

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY590704 39	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	HAP18-26A	Schwarzbeck	-	ANT5060	18 GHz - 26.5 GHz	12 August, 2025	31 August, 2026
Preamplifier	HAP18-26A (Preamplifier)	TOYO Corporation	-	AMP5033	18 GHz - 26.5 GHz	12 August, 2025	31 August, 2026

Device	Model No.	Manufacturer	Version	Reg. No.
Software	ES10/RE	TOYO Corporation	2025.10.000	S-SW049-1

Operating Frequency measurements (OST MP-5, 4.5)

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY590704 39	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	BBHA 9120D	Schwarzbeck	1632	ANT1632	1 GHz - 18 GHz	4 April, 2025	30 April, 2026

Variation in Operating Frequency with Line Voltage (OST MP-5, 4.5)

Device	Model No.	Manufacturer	Serial No.	Reg. No.	Freq. range	Last Cal.	Next Cal.
Signal Analyzer	N9010B	Keysight Technologies	MY59070439	SPA0439	9 kHz - 40 GHz	19 December, 2025	31 December, 2026
Horn antenna	BBHA 9120D	Schwarzbeck	1632	ANT1632	1 GHz - 18 GHz	4 April, 2025	30 April, 2026

Thermo-hygrometer

Test Room	Device	Model No.	Manufacturer	Serial. No.	Reg. No.	Last Cal.	Next Cal.
10 m anechoic chamber	Thermo-hygrometer	TR-73U	T&D Corporation	F8066D71	MTR0824	4 April, 2024	30 April, 2026
3 m anechoic chamber	Thermo-hygrometer	TR-73U	T&D Corporation	F8066BC1	MTR0819	5 April, 2024	30 April, 2026

Appendix B – External Photographs



Front View



Rear View



Left View



Right View



Top View



Bottom View



Front View with Door Open