

EMI TEST REPORT

Test Report No. 16029320H-D

Customer	DENSO TEN Limited
Description of EUT	Car Navigation
Model Number of EUT	TN0051A
FCC ID	BABTN0051A
Test Regulation	FCC Part 15 Subpart B
Test Result	Complied
Issue Date	December 19, 2025
Remarks	Non-diversity

Representative test engineerTakeshi Hiyaji
Engineer**Approved by**Ryota Yamanaka
Engineer

CERTIFICATE 5107.02

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- If the latest version is a revision, it replaces the previous version. See the table below for revisions and versions.

REVISION HISTORY

Revision	Test Report No.	Date	Page Revised Contents
- (Original)	16029320H-D	December 19, 2025	-

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation	Hori.	Horizontal
AAN	Asymmetric Artificial Network	ICES	Interference-Causing Equipment Standard
AC	Alternating Current	I/O	Input/Output
AE	Auxiliary equipment	IEC	International Electrotechnical Commission
AM	Amplitude Modulation	IEEE	Institute of Electrical and Electronics Engineers
AMN	Artificial Mains Network	IF	Intermediate Frequency
Amp, AMP	Amplifier	ILAC	International Laboratory Accreditation Conference
ANSI	American National Standards Institute	ISED	Innovation, Science and Economic Development Canada
Ant, ANT	Antenna	ISN	Impedance Stabilization Network
AP	Access Point	ISO	International Organization for Standardization
ASK	Amplitude Shift Keying	JAB	Japan Accreditation Board
Atten., ATT	Attenuator	LAN	Local Area Network
AV	Average	LCL	Longitudinal Conversion Loss
BPSK	Binary Phase-Shift Keying	LIMS	Laboratory Information Management System
BR	Bluetooth Basic Rate	LISN	Line Impedance Stabilization Network
BT	Bluetooth	MRA	Mutual Recognition Arrangement
BT LE	Bluetooth Low Energy	N/A	Not Applicable
BW	BandWidth	NIST	National Institute of Standards and Technology
C.F	Correction Factor	NS	No signal detect.
Cal Int	Calibration Interval	NSA	Normalized Site Attenuation
CAV	CISPR AV	OBW	Occupied BandWidth
CCK	Complementary Code Keying	OFDM	Orthogonal Frequency Division Multiplexing
CDN	Coupling Decoupling Network	PER	Packet Error Rate
Ch., CH	Channel	PK	Peak
CISPR	Comite International Special des Perturbations Radioelectriques	P _{LT}	long-term flicker severity
Corr.	Correction	POHC(A)	Partial Odd Harmonic Current
CPE	Customer premise equipment	Pol., Pola.	Polarization
CW	Continuous Wave	PR-ASK	Phase Reversal ASK
DBPSK	Differential BPSK	P _{ST}	short-term flicker severity
DC	Direct Current	QAM	Quadrature Amplitude Modulation
DET	Detector	QP	Quasi-Peak
D-factor, D.fac.	Distance factor	QPSK	Quadrature Phase Shift Keying
Dmax	maximum absolute voltage change during an observation period	r.m.s., RMS	Root Mean Square
DQPSK	Differential QPSK	RBW	Resolution BandWidth
DSSS	Direct Sequence Spread Spectrum	RE	Radio Equipment
DUT	Device Under Test	REV	Reverse
EDR	Enhanced Data Rate	RF	Radio Frequency
e.i.r.p., EIRP	Equivalent Isotropically Radiated Power	RFID	Radio Frequency Identifier
EM clamp	Electromagnetic clamp	RNSS	Radio Navigation Satellite Service
EMC	ElectroMagnetic Compatibility	RSS	Radio Standards Specifications
EMI	ElectroMagnetic Interference	Rx	Receiving
EMS	ElectroMagnetic Susceptibility	S.fac.	Site factor
EN	European Norm	SINAD	Ratio of (Signal + Noise + Distortion) to (Noise + Distortion)
e.r.p., ERP	Effective Radiated Power	S/N	Signal to Noise ratio
ETSI	European Telecommunications Standards Institute	SA, S/A	Spectrum Analyzer
EU	European Union	SABS	South African Bureau of Standards
EUT	Equipment Under Test	SANS	South African National Standards
Fac.	Factor	SG	Signal Generator
FCC	Federal Communications Commission	SVSWR	Site-Voltage Standing Wave Ratio
FHSS	Frequency Hopping Spread Spectrum	THC(A)	Total Harmonic Current
FM	Frequency Modulation	THD(%)	Total Harmonic Distortion
Freq.	Frequency	TR, T/R	Test Receiver
FSK	Frequency Shift Keying	Tx	Transmitting
Fund	Fundamental	UFA	Uniform field area
FWD	Forward	VBW	Video BandWidth
GFSK	Gaussian Frequency-Shift Keying	Vert.	Vertical
GNSS	Global Navigation Satellite System	WLAN	Wireless LAN
GPS	Global Positioning System	xDSL	Generic term for all types of DSL technology (DSL: Digital Subscriber Line)

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SECTION 1: Customer information

Company Name	DENSO TEN Limited
Address	2-28, Goshō-Dori 1-Chome, Hyogo-ku, Kobe, 652-8510, Japan
Telephone Number	+81-78-682-2159
Contact Person	Kaoru Abe

The information provided by the customer is as follows;

- Customer, Description of EUT, Model Number of EUT, FCC ID on the cover and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 1: Customer Information
- SECTION 2: Equipment Under Test (EUT) other than the Receipt Date and Test Date
- SECTION 4: Operation of EUT during testing

SECTION 2: Equipment under test (EUT)

2.1 Identification of EUT

Description	Car Navigation
Model Number	TN0051A
Serial Number	Refer to SECTION 4.2
Condition	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab
Receipt Date	October 6 and 21, 2025
Test Date	November 5 and 7, 2025

2.2 Product Description

General Specification

Rating	DC 12 V
Clock frequency (ies) in the system	32.768 kHz, 8 MHz, 19.2 MHz, 20 MHz, 25 MHz, 26 MHz, 32 MHz, 38.4 MHz, 55.46667 MHz

Radio Specification

WLAN (IEEE802.11b/11g/11n-20/11ax-20)

Equipment Type	Transceiver	
Frequency of Operation	2412 MHz to 2462 MHz	
Type of Modulation	DSSS, OFDM	
	OFDMA (IEEE802.11ax Only)	26/52/106/242-tone RU
Antenna Gain	1.01 dBi	

Bluetooth (BR/EDR/Low Energy)

Equipment Type	Transceiver	
Frequency of Operation	2402 MHz to 2480 MHz	
Type of Modulation	FHSS (GFSK, π/4 DQPSK, 8 DPSK) GFSK	
Antenna Gain	0.92 dBi	

WLAN (IEEE802.11a/11n-20/11ac-20/11ax-20/11n-40/11ac-40/11ax-40/11ac-80/11ax-80)

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band	5180 MHz to 5240 MHz 5745 MHz to 5805 MHz
	40 MHz Band	5190 MHz to 5230 MHz 5755 MHz to 5795 MHz
	80 MHz Band	5210 MHz 5775 MHz
Type of Modulation	OFDM	
	OFDMA (IEEE802.11ax Only)	20 MHz: 26/52/106/242-tone RU
		40 MHz: 26/52/106/242/484-tone RU 80 MHz: 26/52/106/242/484/996-tone RU
Antenna Type	Inverted F Antenna	
Antenna Gain: G _{ANT}	Antenna 1: 1.57 dBi	
	Antenna 2: 2.14 dBi	
Directional Antenna Gain *1)	4.87 dBi	

*1) Directional antenna gain = $10 \log \left(\left(10^{\frac{Gain(Ant1)}{20}} + 10^{\frac{Gain(Ant2 \text{ or } Ant3)}{20}} \right)^2 / 2 \right)$

AM/FM

Equipment Type	Receiver	
Frequency of Operation	AM: 530 kHz to 1710 kHz FM: Band II: 87.75 MHz to 107.9 MHz	
Type of Modulation	AM FM	
Antenna Connector Type	HFC IV	
Impedance	75 ohm	

SECTION 3: Test Summary

3.1 Test Specification

Test Specification	FCC Part 15 Subpart B The latest version on the first day of the testing period
Title	FCC 47CFR Part15 Radio Frequency Device Subpart B Unintentional Radiators

3.2 Reference Standards

ANSI/USEMCSC C63.2-2023
ANSI C63.4-2014+C63.4a-2017
ANSI C63.5-2017
ANSI C63.25.1-2018
IEEE 187:2003

3.3 Summary of Test Results

Item	Limits	Result	Remarks
Conducted emission	Part 15 Subpart B 15.107(a)	N/A	*1)
Radiated emission	Part 15 Subpart B 15.109(a)	Complied	-
Antenna Terminal	Part 15 Subpart B 15.111(a)	Complied	-
* Note: UL Japan, Inc.'s EMI Work Procedure: Work Instructions-ULID-003591.			
*1) The test is not applicable since the EUT is not the device that is designed to be connected to the public utility (AC) power line.			

3.4 Addition to standard

No addition, exclusion nor deviation has been made from the standard.

3.5 Uncertainty

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.
Note: When margins obtained from test results are less than the measurement uncertainty, the test results may exceed the limit.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor $k = 2$.

Radiated emission

Measurement distance	Frequency range		Unit	Calculated Uncertainty (+/-)
3 m	9 kHz to 30 MHz		dB	3.3
10 m			dB	3.1
3 m	30 MHz to 200 MHz	Horizontal	dB	5.0
		Vertical	dB	5.0
	200 MHz to 1000 MHz	Horizontal	dB	5.2
		Vertical	dB	6.2
10 m	30 MHz to 200 MHz	Horizontal	dB	5.5
		Vertical	dB	5.4
	200 MHz to 1000 MHz	Horizontal	dB	5.5
		Vertical	dB	5.5
3 m	1 GHz to 6 GHz		dB	5.1
	6 GHz to 18 GHz		dB	5.4
1 m	10 GHz to 18 GHz		dB	5.4
	18 GHz to 26.5 GHz		dB	5.3
	26.5 GHz to 40 GHz		dB	4.8
0.5 m	26.5 GHz to 40 GHz		dB	5.0

Antenna Terminal test

Item	Unit	Calculated Uncertainty (+/-)
Antenna terminal conducted emission	dB	3.1

3.6 Test Location

UL Japan, Inc. Ise EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 Japan

Telephone: +81-596-24-8999

A2LA Certificate Number: 5107.02 / FCC Test Firm Registration Number: 884919

ISED Lab Company Number: 2973C / CAB identifier: JP0002

Test site	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms	Maximum measurement distance
No.1 semi-anechoic chamber (SAC1)	19.2 x 11.2 x 7.7	7.0 x 6.0	No.1 Power source room	10 m
No.2 semi-anechoic chamber (SAC2)	7.5 x 5.8 x 5.2	4.0 x 4.0	-	3 m
No.3 semi-anechoic chamber (SAC3)	12.0 x 8.5 x 5.9	6.8 x 5.75	No.3 Preparation room (PR3)	3 m
No.3 shielded room (SR3)	4.0 x 6.0 x 2.7	N/A	-	-
No.4 semi-anechoic chamber (SAC4)	12.0 x 8.5 x 5.9	6.8 x 5.75	No.4 Preparation room (PR4)	3 m
No.4 shielded room (SR4)	4.0 x 6.0 x 2.7	N/A	-	-
No.5 semi-anechoic chamber (SAC5)	6.0 x 6.0 x 3.9	6.0 x 6.0	-	-
No.5 measurement room (MR5)	6.4 x 6.4 x 3.0	6.4 x 6.4	-	-
No.6 shielded room (SR6)	4.0 x 4.5 x 2.7	4.0 x 4.5	-	-
No.6 measurement room (MR6)	4.75 x 5.4 x 3.0	4.75 x 4.15	-	-
No.7 shielded room (SR7)	4.7 x 7.5 x 2.7	4.7 x 7.5	-	-
No.8 measurement room (MR8)	3.1 x 5.0 x 2.7	3.1 x 5.0	-	-
No.9 measurement room (MR9)	8.8 x 4.6 x 2.8	2.4 x 2.4	-	-
No.10 shielded room (SR10)	3.8 x 2.8 x 2.8	3.8 x 2.8	-	-
No.11 measurement room (MR11)	4.0 x 3.4 x 2.5	N/A	-	-
No.12 measurement room (MR12)	2.6 x 3.4 x 2.5	N/A	-	-
Large Chamber	16.9 x 22.1 x 10.17	16.9 x 22.1	-	10 m
Small Chamber	5.3 x 6.69 x 3.59	5.3 x 6.69	-	-

3.7 Test data, Test instruments, and Test set up

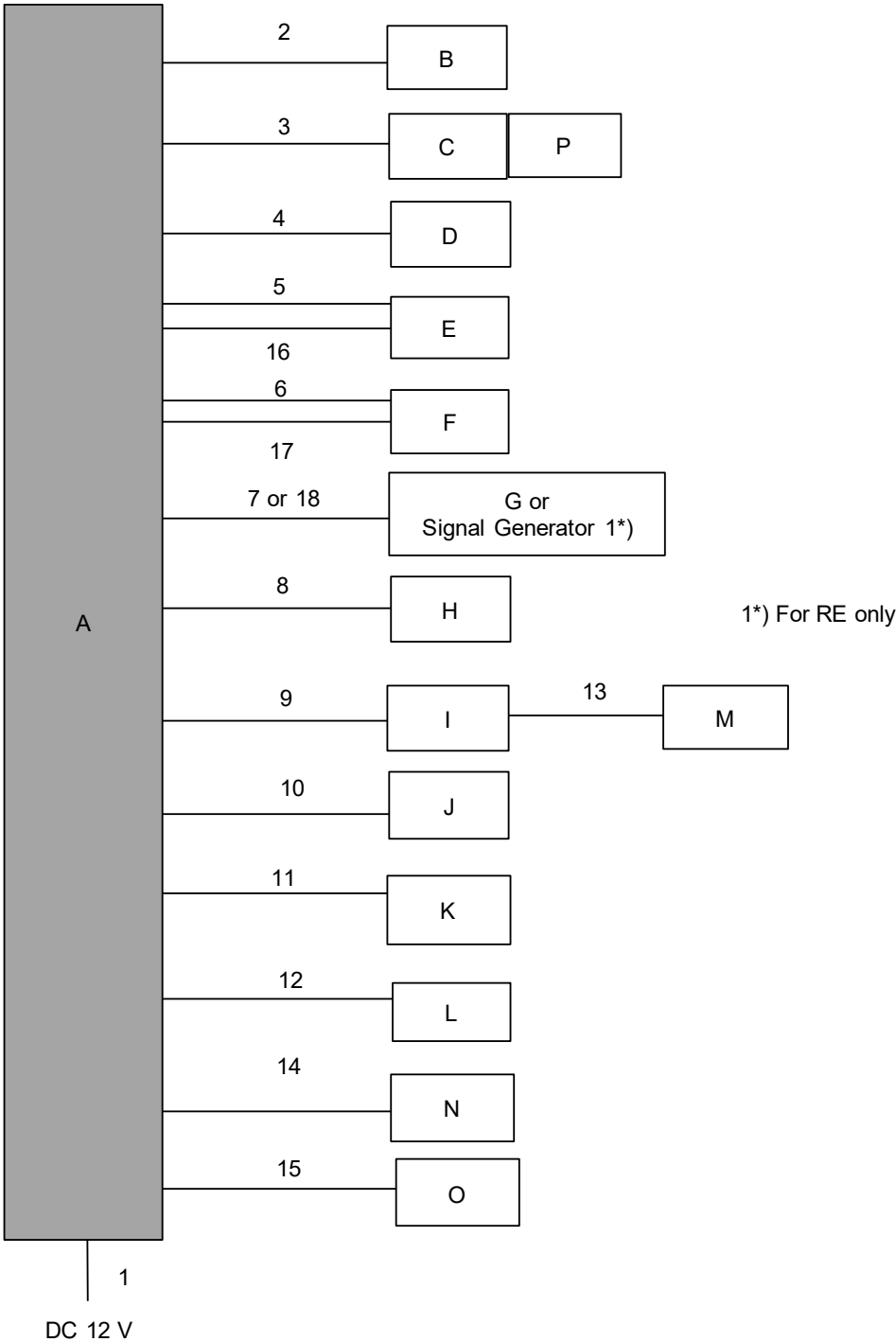
Refer to APPENDIX.

SECTION 4: Operation of EUT during testing

4.1 Operating Mode(s)

Mode	1. USB play
	2. FM Receiving (Main / Sub)
Software(s)	Version: 07.31.01.F

4.2 Configuration and peripherals



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

* RE: Radiated Emission

Description of EUT and Support Equipment

No.	Item	Model number	Serial Number	Manufacturer	Remarks
A	Car Navigation	TN0051A	MY800012	DENSO TEN Limited	EUT
B	Jig Board	-	-	-	-
C	USB Adapter	DEP37-10169	No.31	KP	-
D	Switch	-	-	-	-
E	Meter	83800-4AL70	457410-0021	DENSO	-
F	DCM	892K0-310DD	No.6	LGE	-
G	FM/AM Antenna	DQV32-10065	No.14	MinebeaMitsumi	-
H	Speaker Dummy	-	-	-	-
I	I/F Conversion Box	867B1-42010_3986	No.20	TOKAI RIKA	-
J	EXPANSION Body ECU	892K0-310DD6	No.5	Sumitomo Electric Industries, Ltd	-
K	Remote SW Module	84010-33170	No.4	TOKAI RIKA	-
L	Steering SW	84250-42780	No.23	TOKAI RIKA	-
M	BGM Camera	8679B-42010	No.5	KYOCERA	-
N	MIC	86730-42130	No.86	KP	-
O	MIC	86730-42130	No.87	KP	-
P	USB Memory	-	-	Sony corporation	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	DC Cable	4.0	Unshielded	Unshielded	-
2	Flat Cable	0.1	Unshielded	Unshielded	-
3	Signal Cable	2.5	Shielded	Shielded	-
4	Signal Cable	2.5	Unshielded	Unshielded	-
5	Signal Cable	2.5	Unshielded	Unshielded	-
6	Signal Cable	2.5	Unshielded	Unshielded	-
7	FM/AM Antenna Cable	6.0	Shielded	Unshielded	-
8	Speaker Cable	3.0	Unshielded	Unshielded	-
9	Signal Cable	1.0	Shielded	Shielded	-
10	Signal Cable	2.5	Unshielded	Unshielded	-
11	Signal Cable	2.5	Unshielded	Unshielded	-
12	Signal Cable	2.5	Unshielded	Unshielded	-
13	Camera Cable	1.5	Shielded	Shielded	-
14	MIC Cable	2.5	Unshielded	Unshielded	-
15	MIC Cable	2.5	Unshielded	Unshielded	-
16	Signal Cable	2.5	Shielded	Shielded	-
17	Signal Cable	2.5	Shielded	Unshielded	-
18	FM/AM Antenna Cable	2.0	Unshielded	Unshielded	-

SECTION 5: Radiated Emission

5.1 Operating environment

Date	Test site	Temperature	Humidity	Engineer	Mode
See data	See data	See data	See data	See data	See data

5.2 Test configuration

EUT was placed on the platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane.

The EUT was set on the edge of the platform.

Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.

Photographs of the set up are shown in APPENDIX.

5.3 Test conditions

Frequency range	:	30 MHz to 200 MHz (Biconical antenna) 200 MHz to 1000 MHz (Logperiodic antenna) 1000 MHz to 40000 MHz (Horn antenna)
Test distance	:	See Figure 2
EUT position	:	Table top
EUT operation mode	:	See Clause 4.1

5.4 Test procedure

The height of the measuring antenna varied between 1 and 4 m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer.

The radiated emission measurements were made with the following detector function of the Test Receiver and the Spectrum Analyzer.

The test of Local oscillator spurious has been measured up to appropriate frequency based on the result of the antenna terminal test.

Test antenna was aimed at the emission source for receiving the maximum signal and always kept. (Above 1 GHz)

Frequency	Below 1 GHz	1 GHz to 6 GHz	6 GHz to 40 GHz
Instrument used	Test Receiver	Test Receiver	Spectrum Analyzer
IF Bandwidth	QP: BW 120 kHz	PK: BW 1 MHz, CAV: BW 1 MHz	PK: RBW: 1 MHz / VBW: 3 MHz AV *1): RBW: 1 MHz / VBW: 10 Hz

*1) When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

Figure 1: Test Setup

Below 1 GHz	
× : Center of turn table	Test Distance: 3 m
1 GHz to 10 GHz	
× : Center of turn table	Test Distance: 3 m
10 GHz to 40 GHz	
× : Center of turn table	Distance Factor: $20 \times \log (1.0 \text{ m} / 3.0 \text{ m}) = -9.5 \text{ dB}$ *Test Distance: 1 m

The test was made on EUT at the normal use position.

5.5 Test result

Summary of the test results: Pass

Test results are rounded off and limit are rounded down, so some differences might be observed.

SECTION 6: Antenna Terminal

6.1 Operating environment

Date	Test site	Temperature	Humidity	Engineer	Mode
See data	See data	See data	See data	See data	See data

6.2 Test configuration

EUT was placed on the platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m from the ground. Photographs of the set up are shown in APPENDIX.

6.3 Test conditions

Frequency range : 30 MHz to 1000 MHz / 1000 MHz to 40000 MHz
Test distance : N/A
EUT position : Table top
EUT operation mode : See Clause 4.1

6.4 Test procedure

The Antenna Terminal was measured with a spectrum analyzer connected to the antenna port.

Frequency	Below 1 GHz	Above 1 GHz
Instrument used	Spectrum Analyzer	Spectrum Analyzer *1)
IF Bandwidth	PK: RBW: 100 kHz / VBW: 100 kHz	PK: RBW: 1 MHz / VBW: 3 MHz

*1) The Spectrum Analyzer was used in 3 dB resolution bandwidth.

6.5 Test result

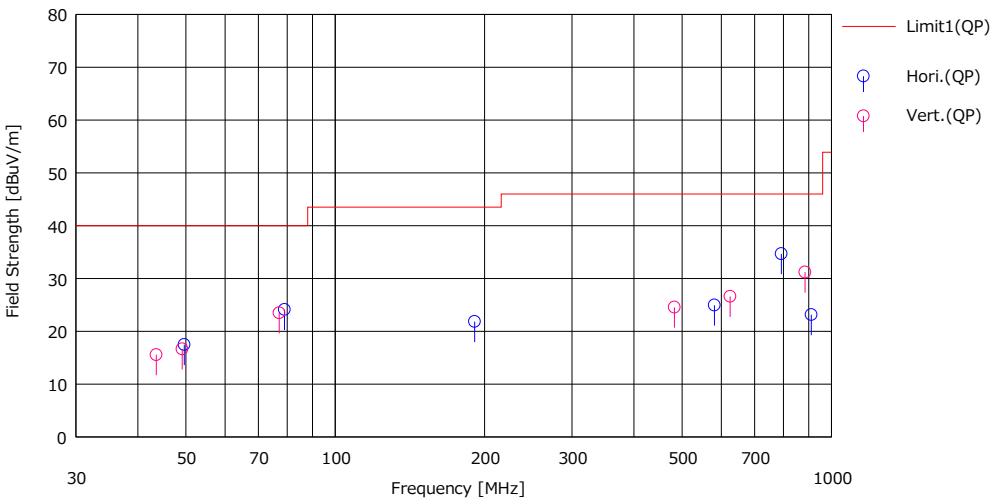
Summary of the test results: Pass

APPENDIX 1: Test data

Radiated Emission

Mode	Mode 1				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Hiroki Numata	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B



No.	Freq. [MHz]	Reading (QP)	Ant Fac [dB/m]	Loss [dB]	Gain [dB]	Result (QP)	Limit (QP)	Margn (QP)	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV/m]	[dBuV/m]	[dB]					
1	49.617	31.10	11.37	7.11	32.10	17.48	40.00	22.52	Hori.	400	347	BA	
2	79.034	41.80	6.94	7.46	32.08	24.12	40.00	15.88	Hori.	400	71	BA	
3	190.966	28.80	16.60	8.47	32.02	21.85	43.50	21.65	Hori.	176	359	BA	
4	581.125	27.80	18.51	10.94	32.30	24.95	46.00	21.05	Hori.	100	1	LA23	
5	792.443	34.20	20.48	11.80	31.80	34.68	46.00	11.32	Hori.	108	85	LA23	
6	911.158	20.10	21.86	12.26	31.08	23.14	46.00	22.86	Hori.	200	242	LA23	
7	43.577	27.00	13.64	7.03	32.10	15.57	40.00	24.43	Vert.	100	69	BA	
8	49.167	30.10	11.54	7.10	32.10	16.64	40.00	23.36	Vert.	100	108	BA	
9	77.102	41.40	6.72	7.44	32.08	23.48	40.00	16.52	Vert.	155	177	BA	
10	482.667	29.20	17.20	10.40	32.24	24.56	46.00	21.44	Vert.	125	335	LA23	
11	624.994	28.50	19.30	11.13	32.32	26.61	46.00	19.39	Vert.	100	341	LA23	
12	884.777	28.60	21.70	12.14	31.24	31.20	46.00	14.80	Vert.	100	3	LA23	

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 87.75 MHz), Main Port				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Hiroki Numata	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

<< QP DATA >>												
No.	Freq.	Reading	Ant.Fac	Loss	Gain	Result	Limit	Margin	Pola.	Height	Angle	Ant. Type
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg]	Comment
1	87.292	31.90	8.29	7.54	32.08	15.65	40.00	24.35	Hori.	241	85	BA
2	174.584	26.10	16.01	8.34	32.03	18.42	43.50	25.08	Hori.	177	335	BA
3	261.876	27.60	12.23	9.09	32.03	16.89	46.00	29.11	Hori.	115	270	LA23
4	349.168	24.10	14.92	9.73	32.09	16.66	46.00	29.34	Hori.	100	156	LA23
5	436.460	23.20	16.17	10.13	32.19	17.31	46.00	28.69	Hori.	100	238	LA23
6	523.752	26.60	17.47	10.62	32.27	22.42	46.00	23.58	Hori.	100	201	LA23
7	611.044	19.70	19.37	11.09	32.31	17.85	46.00	26.15	Hori.	100	282	LA23
8	698.336	20.10	19.60	11.47	32.35	18.82	46.00	27.18	Hori.	177	1	LA23
9	785.628	21.00	20.39	11.77	31.84	21.32	46.00	24.68	Hori.	108	79	LA23
10	872.920	21.20	21.63	12.08	31.31	23.60	46.00	22.40	Hori.	195	148	LA23
11	960.212	18.70	21.90	12.45	30.79	22.26	53.90	31.64	Hori.	100	356	LA23
12	87.292	31.30	8.29	7.54	32.08	15.05	40.00	24.95	Vert.	100	95	BA
13	174.584	22.90	16.01	8.34	32.03	15.22	43.50	28.28	Vert.	100	346	BA
14	261.876	27.50	12.23	9.09	32.03	16.79	46.00	29.21	Vert.	100	23	LA23
15	349.168	23.40	14.92	9.73	32.09	15.96	46.00	30.04	Vert.	184	319	LA23
16	436.460	23.70	16.17	10.13	32.19	17.81	46.00	28.19	Vert.	138	359	LA23
17	523.752	28.80	17.47	10.62	32.27	24.62	46.00	21.38	Vert.	148	149	LA23
18	611.044	21.10	19.37	11.09	32.31	19.25	46.00	26.75	Vert.	100	346	LA23
19	698.336	20.10	19.60	11.47	32.35	18.82	46.00	27.18	Vert.	130	309	LA23
20	785.628	21.70	20.39	11.77	31.84	22.02	46.00	23.98	Vert.	201	52	LA23
21	872.920	19.20	21.63	12.08	31.31	21.60	46.00	24.40	Vert.	100	206	LA23
22	960.212	17.80	21.90	12.45	30.79	21.36	53.90	32.54	Vert.	230	301	LA23

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 98.1 MHz), Main Port				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Hiroki Numata	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

<< QP DATA >>													
No.	Freq. [MHz]	Reading	Ant.Fac	Loss	Gain	Result	Limit	Margn	Pola.	Height	Angle	Ant. Type	Comment
		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg.]		
1	98.547	22.90	9.96	7.66	32.07	8.45	43.50	35.05	Hori.	294	105	BA	
2	197.094	25.80	16.72	8.52	32.02	19.02	43.50	24.48	Hori.	161	0	BA	
3	295.641	24.70	13.52	9.44	32.04	15.62	46.00	30.38	Hori.	100	53	LA23	
4	394.188	24.40	15.51	9.92	32.14	17.69	46.00	28.31	Hori.	100	249	LA23	
5	492.735	26.00	17.45	10.46	32.25	21.66	46.00	24.34	Hori.	191	10	LA23	
6	591.282	26.60	18.90	11.00	32.30	24.20	46.00	21.80	Hori.	100	9	LA23	
7	689.829	21.20	19.49	11.43	32.35	19.77	46.00	26.23	Hori.	174	318	LA23	
8	788.376	23.10	20.43	11.78	31.82	23.49	46.00	22.51	Hori.	100	71	LA23	
9	886.923	19.80	21.70	12.15	31.23	22.42	46.00	23.58	Hori.	190	179	LA23	
10	985.470	19.50	22.04	12.61	30.64	23.51	53.90	30.39	Hori.	100	164	LA23	
11	98.547	22.50	9.96	7.66	32.07	8.05	43.50	35.45	Vert.	100	282	BA	
12	197.094	24.10	16.72	8.52	32.02	17.32	43.50	26.18	Vert.	100	339	BA	
13	295.641	22.90	13.52	9.44	32.04	13.82	46.00	32.18	Vert.	100	313	LA23	
14	394.188	24.90	15.51	9.92	32.14	18.19	46.00	27.81	Vert.	100	19	LA23	
15	492.735	23.70	17.45	10.46	32.25	19.36	46.00	26.64	Vert.	100	187	LA23	
16	591.282	27.70	18.90	11.00	32.30	25.30	46.00	20.70	Vert.	173	345	LA23	
17	689.829	21.60	19.49	11.43	32.35	20.17	46.00	25.83	Vert.	100	238	LA23	
18	788.376	23.60	20.43	11.78	31.82	23.99	46.00	22.01	Vert.	100	145	LA23	
19	886.923	19.60	21.70	12.15	31.23	22.22	46.00	23.78	Vert.	100	355	LA23	
20	985.470	18.40	22.04	12.61	30.64	22.41	53.90	31.49	Vert.	100	151	LA23	

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 107.9 MHz), Main Port				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Hiroki Numata	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

<< QP DATA >>													
No.	Freq. [MHz]	Reading (QP)	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result (QP)	Limit (QP)	Margn (QP)	Pola [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV/m]	[dB]						
1	108.304	25.00	11.35	7.75	32.07	12.03	43.50	31.47	Hori.	287	321	BA	
2	216.608	29.50	11.10	8.68	32.02	17.26	46.00	28.74	Hori.	150	359	LA23	
3	324.912	27.00	14.26	9.60	32.07	18.79	46.00	27.21	Hori.	100	345	LA23	
4	433.216	25.20	16.12	10.11	32.19	19.24	46.00	26.76	Hori.	100	2	LA23	
5	541.520	26.30	17.53	10.71	32.28	22.26	46.00	23.74	Hori.	183	131	LA23	
6	649.824	21.40	18.94	11.22	32.33	19.23	46.00	26.77	Hori.	100	328	LA23	
7	758.128	20.30	20.02	11.63	32.00	19.95	46.00	26.05	Hori.	100	27	LA23	
8	866.432	19.80	21.58	12.05	31.35	22.08	46.00	23.92	Hori.	110	199	LA23	
9	974.736	19.00	21.98	12.54	30.70	22.82	53.90	31.08	Hori.	170	163	LA23	
10	108.304	26.70	11.35	7.75	32.07	13.73	43.50	29.77	Vert.	100	65	BA	
11	216.608	26.90	11.10	8.68	32.02	14.66	46.00	31.34	Vert.	100	117	LA23	
12	324.912	23.10	14.26	9.60	32.07	14.89	46.00	31.11	Vert.	190	199	LA23	
13	433.216	23.80	16.12	10.11	32.19	17.84	46.00	28.16	Vert.	143	4	LA23	
14	541.520	24.70	17.53	10.71	32.28	20.66	46.00	25.34	Vert.	100	40	LA23	
15	649.824	21.20	18.94	11.22	32.33	19.03	46.00	26.97	Vert.	100	43	LA23	
16	758.128	20.80	20.02	11.63	32.00	20.45	46.00	25.55	Vert.	100	359	LA23	
17	866.432	19.60	21.58	12.05	31.35	21.88	46.00	24.12	Vert.	199	358	LA23	
18	974.736	19.10	21.98	12.54	30.70	22.92	53.90	30.98	Vert.	100	248	LA23	

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 87.75 MHz), Sub Port				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Takeshi Hiyaji	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

<< QP DATA >>													
No.	Freq.	Reading	Ant.Fac	Loss	Gain	Result	Limit	Margin	Pola	Height	Angle	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg]		
1	87.292	30.70	8.29	7.54	32.08	14.45	40.00	25.55	Hori.	246	88	BA	
2	174.584	25.70	16.01	8.34	32.03	18.02	43.50	25.48	Hori.	178	336	BA	
3	261.876	27.20	12.23	9.09	32.03	16.49	46.00	29.51	Hori.	122	258	LA23	
4	349.168	25.50	14.92	9.73	32.09	18.06	46.00	27.94	Hori.	100	167	LA23	
5	436.460	25.80	16.17	10.13	32.19	19.91	46.00	26.09	Hori.	100	356	LA23	
6	523.752	23.20	17.47	10.62	32.27	19.02	46.00	26.98	Hori.	100	192	LA23	
7	611.044	20.20	19.37	11.09	32.31	18.35	46.00	27.65	Hori.	100	226	LA23	
8	698.336	20.30	19.60	11.47	32.35	19.02	46.00	26.98	Hori.	158	16	LA23	
9	785.628	21.00	20.39	11.77	31.84	21.32	46.00	24.68	Hori.	115	81	LA23	
10	872.920	20.90	21.63	12.08	31.31	23.30	46.00	22.70	Hori.	202	156	LA23	
11	960.212	20.00	21.90	12.45	30.79	23.56	53.90	30.34	Hori.	100	334	LA23	
12	87.292	30.90	8.29	7.54	32.08	14.65	40.00	25.35	Vert.	100	96	BA	
13	174.584	22.60	16.01	8.34	32.03	14.92	43.50	28.58	Vert.	100	324	BA	
14	261.876	25.50	12.23	9.09	32.03	14.79	46.00	31.21	Vert.	100	26	LA23	
15	349.168	24.20	14.92	9.73	32.09	16.76	46.00	29.24	Vert.	185	284	LA23	
16	436.460	23.90	16.17	10.13	32.19	18.01	46.00	27.99	Vert.	136	354	LA23	
17	523.752	26.60	17.47	10.62	32.27	22.42	46.00	23.58	Vert.	152	146	LA23	
18	611.044	21.80	19.37	11.09	32.31	19.95	46.00	26.05	Vert.	100	332	LA23	
19	698.336	20.40	19.60	11.47	32.35	19.12	46.00	26.88	Vert.	100	289	LA23	
20	785.628	21.40	20.39	11.77	31.84	21.72	46.00	24.28	Vert.	187	56	LA23	
21	872.920	19.50	21.63	12.08	31.31	21.90	46.00	24.10	Vert.	100	223	LA23	
22	960.212	19.20	21.90	12.45	30.79	22.76	53.90	31.14	Vert.	100	352	LA23	

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 98.1 MHz), Sub Port
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Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Takeshi Hiyaji	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

<< QP DATA >>

No.	Freq. [MHz]	Reading [QP] [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [QP] [dBuV/m]	Limit [QP] [dBuV/m]	Margn [QP] [dB]	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
1	98.547	22.80	9.96	7.66	32.07	8.35	43.50	35.15	Hori.	296	112	BA	
2	197.094	25.30	16.72	8.52	32.02	18.52	43.50	24.98	Hori.	158	12	BA	
3	295.641	25.30	13.52	9.44	32.04	16.22	46.00	29.78	Hori.	100	116	LA23	
4	394.188	26.10	15.51	9.92	32.14	19.39	46.00	26.61	Hori.	100	87	LA23	
5	492.735	25.30	17.45	10.46	32.25	20.96	46.00	25.04	Hori.	196	18	LA23	
6	591.282	24.60	18.90	11.00	32.30	22.20	46.00	23.80	Hori.	100	15	LA23	
7	689.829	22.20	19.49	11.43	32.35	20.77	46.00	25.23	Hori.	167	332	LA23	
8	788.376	22.90	20.43	11.78	31.82	23.29	46.00	22.71	Hori.	100	76	LA23	
9	886.923	19.70	21.70	12.15	31.23	22.32	46.00	23.68	Hori.	186	182	LA23	
10	985.470	18.70	22.04	12.61	30.64	22.71	53.90	31.19	Hori.	100	138	LA23	
11	98.547	22.30	9.96	7.66	32.07	7.85	43.50	35.65	Vert.	100	267	BA	
12	197.094	23.80	16.72	8.52	32.02	17.02	43.50	26.48	Vert.	100	306	BA	
13	295.641	22.90	13.52	9.44	32.04	13.82	46.00	32.18	Vert.	100	334	LA23	
14	394.188	24.30	15.51	9.92	32.14	17.59	46.00	28.41	Vert.	100	23	LA23	
15	492.735	23.70	17.45	10.46	32.25	19.36	46.00	26.64	Vert.	100	208	LA23	
16	591.282	25.70	18.90	11.00	32.30	23.30	46.00	22.70	Vert.	163	326	LA23	
17	689.829	21.30	19.49	11.43	32.35	19.87	46.00	26.13	Vert.	100	227	LA23	
18	788.376	24.40	20.43	11.78	31.82	24.79	46.00	21.21	Vert.	100	136	LA23	
19	886.923	19.60	21.70	12.15	31.23	22.22	46.00	23.78	Vert.	100	356	LA23	
20	985.470	18.50	22.04	12.61	30.64	22.51	53.90	31.39	Vert.	100	162	LA23	

CHART: WITH FACTOR

ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN

CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)

Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 2 (Local 107.9 MHz), Sub Port				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Takeshi Hiyaji	Below 1 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B

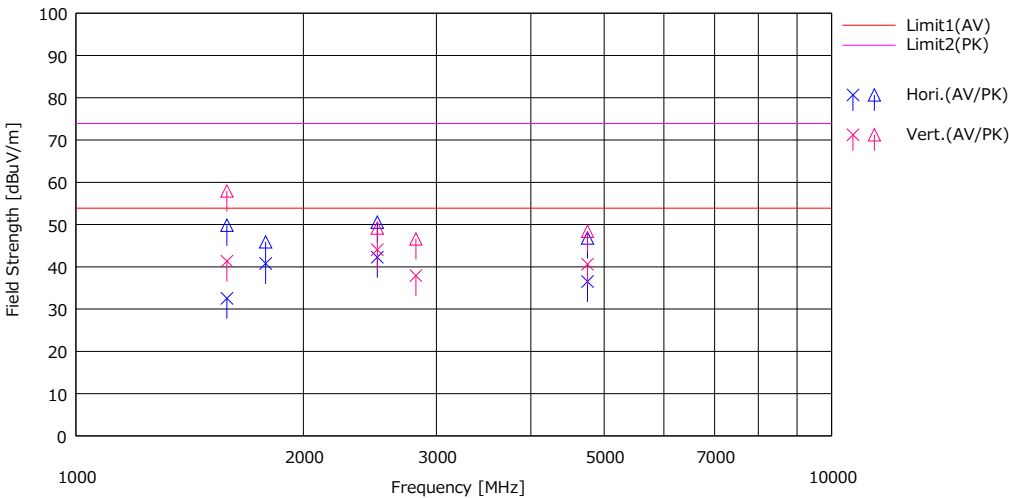
<< QP DATA >>													
No.	Freq. [MHz]	Reading (QP)	Ant.Fac (dB/m)	Loss (dB)	Gain (dB)	Result (QP)	Limit (QP)	Margin (QP)	Pola (H/V)	Height (cm)	Angle (deg)	Ant. Type	Comment
		(dBuV)				(dBuV/m)	(dB)						
1	108.304	24.80	11.56	7.54	28.40	15.50	43.50	28.00	Hori.	285	324	BA	
2	216.608	29.20	11.18	8.30	27.92	20.76	46.00	25.24	Hori.	146	356	LA21	
3	324.912	27.00	14.42	8.95	27.90	22.47	46.00	23.53	Hori.	100	336	LA21	
4	433.216	24.80	16.13	9.61	28.75	21.79	46.00	24.21	Hori.	100	27	LA21	
5	541.520	24.80	17.64	10.10	29.24	23.30	46.00	22.70	Hori.	189	138	LA21	
6	649.824	21.10	19.12	10.43	29.30	21.35	46.00	24.65	Hori.	100	318	LA21	
7	758.128	20.20	20.19	10.81	29.16	22.04	46.00	23.96	Hori.	100	19	LA21	
8	866.432	19.70	21.83	11.19	28.94	23.78	46.00	22.22	Hori.	100	206	LA21	
9	974.736	19.40	22.13	11.56	28.66	24.43	53.90	29.47	Hori.	100	176	LA21	
10	108.304	25.80	11.56	7.54	28.40	16.50	43.50	27.00	Vert.	100	74	BA	
11	216.608	25.70	11.18	8.30	27.92	17.26	46.00	28.74	Vert.	100	126	LA21	
12	324.912	22.30	14.42	8.95	27.90	17.77	46.00	28.23	Vert.	188	194	LA21	
13	433.216	23.40	16.13	9.61	28.75	20.39	46.00	25.61	Vert.	100	6	LA21	
14	541.520	24.10	17.64	10.10	29.24	22.60	46.00	23.40	Vert.	100	46	LA21	
15	649.824	21.40	19.12	10.43	29.30	21.65	46.00	24.35	Vert.	100	66	LA21	
16	758.128	20.80	20.19	10.81	29.16	22.64	46.00	23.36	Vert.	100	359	LA21	
17	866.432	19.60	21.83	11.19	28.94	23.68	46.00	22.32	Vert.	100	2	LA21	
18	974.736	19.00	22.13	11.56	28.66	24.03	53.90	29.87	Vert.	100	252	LA21	

CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE + ATT) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

Radiated Emission

Mode	Mode 1				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
November 5, 2025	SAC4	21 deg. C	49 % RH	Takeshi Hiyaji	1 GHz to 10 GHz
November 7, 2025	SAC4	20 deg. C	50 % RH	Junya Okuno	10 GHz to 40 GHz

Limit : FCC_Part 15 Subpart B(15.109)_Class B



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg.]	Ant. Type	Comment
		(AV)	(PK)				(AV)	(PK)	(AV)	(PK)	(AV)	(PK)					
		[dBuV]	[dBuV]				[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]					
1	1584.882	39.00	56.30	24.93	1.86	33.25	32.54	49.84	53.90	73.90	21.36	24.06	Hori.	114	247	H2.1	
2	1782.992	46.30	51.40	25.24	1.98	32.74	40.78	45.88	53.90	73.90	13.12	28.02	Hori.	122	90	H2.1	
3	2505.652	44.00	52.30	27.75	2.37	31.87	42.25	50.55	53.90	73.90	11.65	23.35	Hori.	125	118	H2.1	
4	4754.661	32.70	43.00	31.39	3.32	30.91	36.50	46.80	53.90	73.90	17.40	27.10	Hori.	162	144	H2.1	
5	1584.882	47.80	64.40	24.93	1.86	33.25	41.34	57.94	53.90	73.90	12.56	15.96	Vert.	100	149	H2.1	
6	2505.652	45.80	50.90	27.75	2.37	31.87	44.05	49.15	53.90	73.90	9.85	24.75	Vert.	106	124	H2.1	
7	2818.637	38.60	47.30	28.46	2.52	31.68	37.90	46.60	53.90	73.90	16.00	27.30	Vert.	100	307	H2.1	
8	4754.661	36.80	44.60	31.39	3.32	30.91	40.60	48.40	53.90	73.90	13.30	25.50	Vert.	100	98	H2.1	

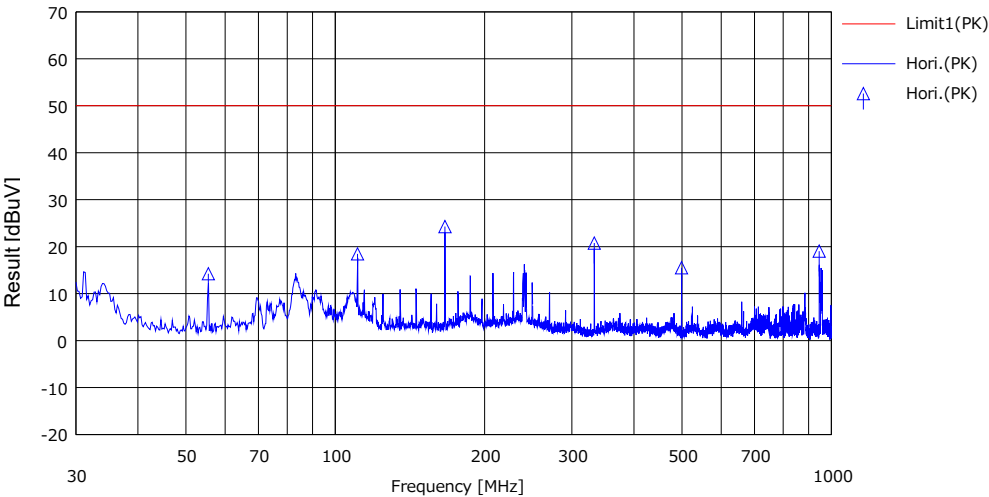
CHART: WITH FACTOR
ANT TYPE: - 30 MHz: LOOP, 30 MHz - 200 MHz: BICONICAL, 200 MHz - 1000 MHz: LOGPERIODIC, 1000 MHz -: HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS(CABLE) - GAIN(AMP)
Except for the above table: adequate margin data below the limits.

* No signal was detected above 10 GHz.

Antenna Terminal Conducted Emission

Mode	Mode 2, Main port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement



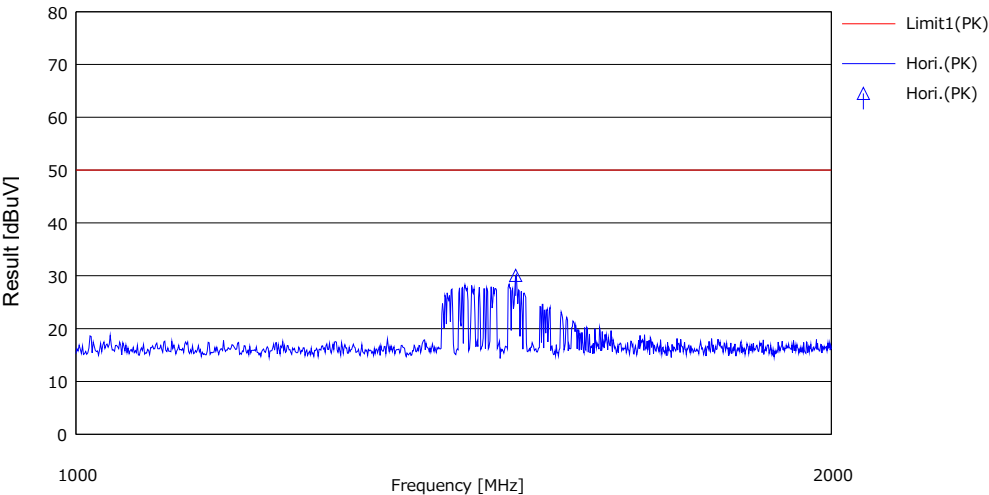
No.	Freq. [MHz]	Reading (PK) [dBuV]	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result (PK) [dBuV]	Limit *1) (PK) [dBuV]	Margn (PK) [dB]	Pola [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
1	55.481	40.36	0.00	6.06	32.18	14.24	50.00	35.76					
2	110.924	44.52	0.00	6.07	32.13	18.46	50.00	31.54					
3	166.400	50.26	0.00	6.10	32.08	24.28	50.00	25.72					
4	332.798	46.63	0.00	6.14	31.99	20.78	50.00	29.22					
5	499.194	41.37	0.00	6.18	32.03	15.52	50.00	34.48					
6	945.749	43.48	0.00	6.25	30.67	19.06	50.00	30.94					

*1) 2 nW = -57 dBm = 50 dBuV
CHART: WITH FACTOR
CALCULATION: RESULT = READING + LOSS (CABLE + Matching Pad) – GAIN (AMP)
Except for the above table: adequate margin data below the limits.

Antenna Terminal Conducted Emission

Mode	Mode 2, Main port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement



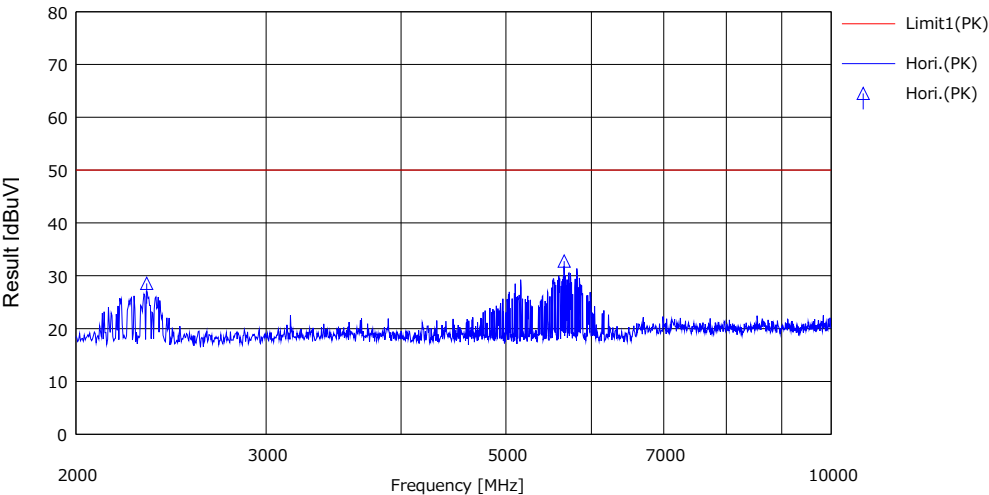
No.	Freq. [MHz]	Reading (PK)	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result (PK)	Limit *1) (PK)	Margin (PK)	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV]	[dBuV]	[dB]					
1	1497.130	57.15	0.00	6.30	33.38	30.07	50.00	19.93					Loc'd 93.1MHz

*1) 2 nW = -57 dBm = 50 dBuV
CHART: WITH FACTOR
CALCULATION: RESULT = READING + LOSS (CABLE + Matching Pad) – GAIN (AMP)
Except for the above table: adequate margin data below the limits.

Antenna Terminal Conducted Emission

Mode	Mode 2, Main port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement



No.	Freq. [MHz]	Reading (PK)	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result (PK)	Limit*1) (PK)	Margin (PK)	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV]	[dBuV]	[dB]					
1	2325.789	52.16	0.00	8.46	32.06	28.56	50.00	21.44					Local 93.1MHz
2	5661.862	54.78	0.00	8.95	30.94	32.79	50.00	17.21					Local 100.7MHz

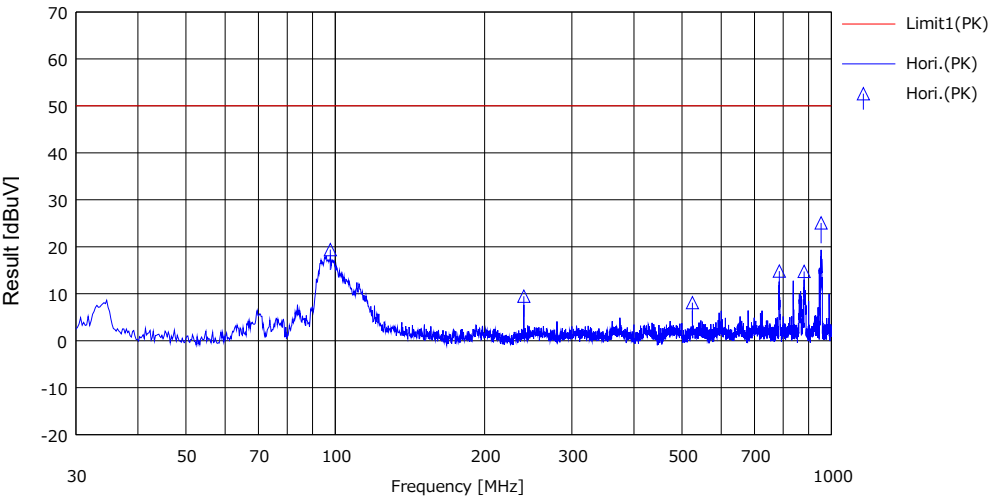
*1) 2 nW = -57 dBm = 50 dBuV
CHART: WITH FACTOR
CALCULATION: RESULT = READING + LOSS (CABLE) – GAIN (AMP)
Except for the above table: adequate margin data below the limits.

*No signal was detected above 10 GHz.

Antenna Terminal Conducted Emission

Mode	Mode 2. Sub port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement



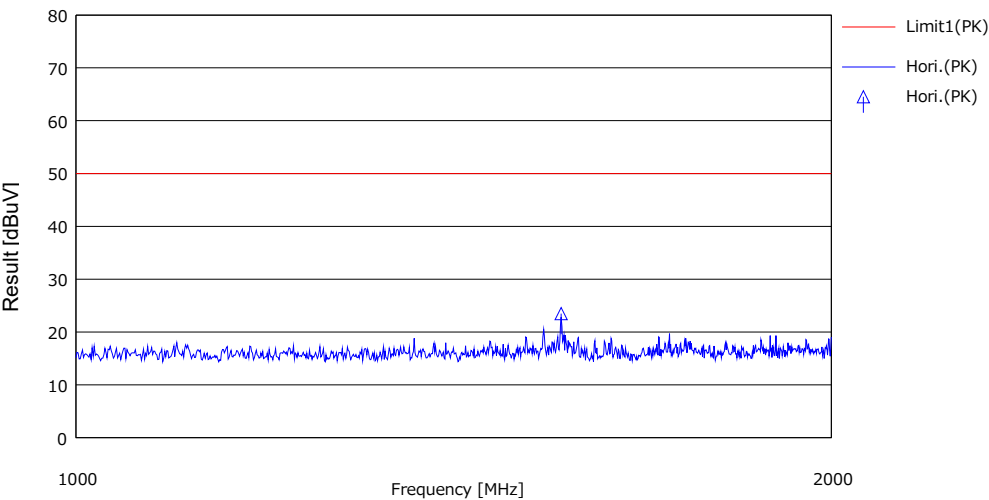
No.	Freq. [MHz]	Reading (PK) [dBuV]	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result	Limit *1)	Margn	Pola	Height [cm]	Angle [deg]	Ant. Type	Comment
						(PK) [dBuV]	(PK) [dBuV]	(PK) [dB]					
1	97.741	45.48	0.00	6.07	32.14	19.41	50.00	30.59					
2	240.017	35.39	0.00	6.11	32.02	9.48	50.00	40.52					
3	525.012	33.95	0.00	6.18	32.03	8.10	50.00	41.90					
4	786.068	40.17	0.00	6.23	31.57	14.83	50.00	35.17					
5	881.393	39.55	0.00	6.24	31.03	14.76	50.00	35.24					
6	953.994	49.45	0.00	6.26	30.63	25.08	50.00	24.92					

*1) 2 nW = -57 dBm = 50 dBuV
CHART: WITH FACTOR
CALCULATION: RESULT = READING + LOSS (CABLE + Matching Pad) – GAIN (AMP)
Except for the above table: adequate margin data below the limits.

Antenna Terminal Conducted Emission

Mode	Mode 2. Sub port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement



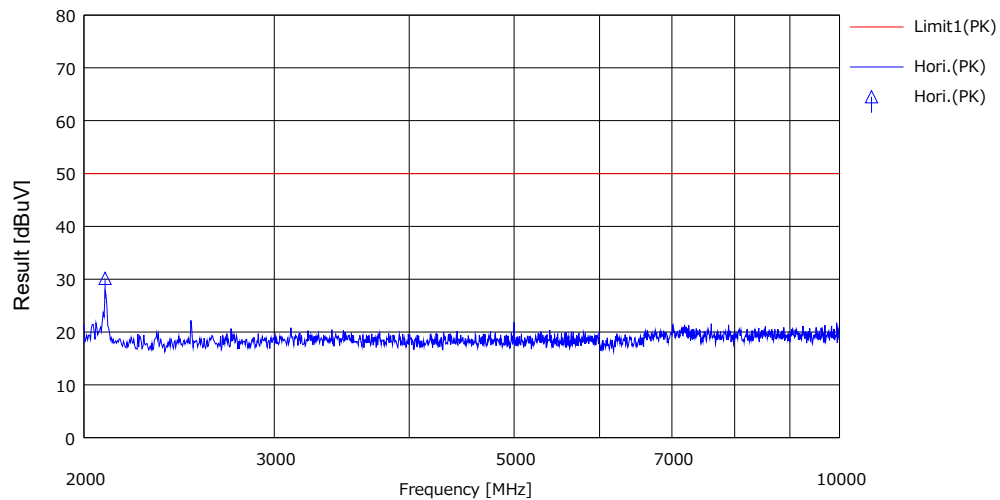
No.	Freq. [MHz]	Reading (PK)	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result (PK)	Limit *1)	Margin (PK)	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]				[dBuV]	[dBuV]						
1	1560.817	50.39	0.00	6.31	33.23	23.47	50.00	26.53					

*1) 2 nW = -57 dBm = 50 dBuV
CHART: WITH FACTOR
CALCULATION: RESULT = READING + LOSS (CABLE + Matching Pad) – GAIN (AMP)
Except for the above table: adequate margin data below the limits.

Antenna Terminal Conducted Emission

Mode	Mode 2, Sub port			
Date	Test site	Temperature	Humidity	Engineer
November 7, 2025	MR8	22 deg. C	51 % RH	Hiroyuki Furutaka

Limit : FCC15.111 Antenna terminal measurement

[illegible]

*1) $2 \text{ nW} = -57 \text{ dBm} = 50 \text{ dBuV}$

CHART: WITH FACTOR

CALCULATION: RESULT = READING + LOSS (CABLE) – GAIN (AMP)

Except for the above table: adequate margin data below the limits.

*No signal was detected above 10 GHz.

APPENDIX 2: Test instruments

Test equipment

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	141267	Logperiodic Antenna (200-1000MHz)	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	9111B-192	09/12/2025	12
RE	141397	Coaxial Cable	UL-ISE EMC	-	-	11/29/2024	12
RE	141425	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	VHA9103+BBA9106	VHA 91031302	08/14/2025	12
RE	141506	Horn Antenna 15-40GHz	Schwarzbeck Mess-Elektronik OHG	BBHA9170	BBHA9170307	08/13/2025	12
RE	141508	Horn Antenna 1-18GHz	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	557	05/20/2025	12
RE	141545	DIGITAL HiTESTER	HIOKI E. E. CORPORATION	3805	51201148	02/25/2025	12
RE	141550	Matching Pad Anritsu	Anritsu Corporation	MB-009	40063	07/03/2025	12
RE	141581	MicroWave System Amplifier	Keysight Technologies Inc	83017A	00650	10/17/2025	12
RE	141583	Pre Amplifier	SONOMA INSTRUMENT	310	260833	04/02/2025	12
RE	141894	Signal Generator	Rohde & Schwarz	SMC100A	103408	10/22/2025	12
RE	141936	Terminator	TME	CT-01BP	-	12/06/2024	12
RE	141951	EMI Test Receiver	Rohde & Schwarz	ESR26	101408	05/07/2025	12
RE	141978	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY46180899	05/14/2025	12
RE	142011	AC4_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	07/10/2025	24
RE	142017	AC4_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-10005	04/17/2025	24
RE	142230	Measure, Tape, Steel	KOMELON	KMC-36	-	-	-
RE	156190	DC Block	EMC Instruments Corporation	N9398C	MY46457635	07/01/2025	12
RE	160324	Coaxial Cable	Huber+Suhner	SUCOFLEX 102A	MY009/2A	10/21/2025	12
RE	178648	EMI measurement program	TSJ (Techno Science Japan)	TEPTO-DV	-	-	-
RE	220646	Attenuator	Huber+Suhner	6806 N-50-1	-	03/06/2025	12
RE	237927	Broadband Amplifier	ERAVANT	SBB-0115033218-2F2F-E3	27554-01	07/02/2025	12
RE	244710	Thermo-Hygrometer	HIOKI E. E. CORPORATION	LR5001	231202104	01/19/2025	12
RE	245788	Double Ridge Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	690	03/11/2025	12
RE	246002	Microwave Cable	Huber+Suhner	SF103/11PC35/11P C35/1000mm / SF126E/5000mm	800674(1m) / 610205(5m)	03/18/2025	12
AT	141172	Attenuator(6dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-106	-	12/02/2024	12
AT	141279	Microwave Cable	Junkosha	MMX221-00500DMSDMS	1502S303	03/03/2025	12
AT	141325	Microwave Cable	Suhner	SUCOFLEX101	2873(1m) / 2876(5m)	03/03/2025	12
AT	141550	Matching Pad Anritsu	Anritsu Corporation	MB-009	40063	07/03/2025	12
AT	141557	DIGITAL HiTESTER	HIOKI E. E. CORPORATION	3805	070900530	01/15/2025	12
AT	141580	MicroWave System Amplifier	Keysight Technologies Inc	83017A	MY39500779	03/24/2025	12
AT	141582	Pre Amplifier	SONOMA INSTRUMENT	310	260834	02/14/2025	12
AT	141855	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46187750	11/14/2024	12
AT	141904	Spectrum Analyzer	Keysight Technologies Inc	N9030A	US51350215	11/18/2024	12
AT	156190	DC Block	EMC Instruments Corporation	N9398C	MY46457635	07/01/2025	12
AT	237927	Broadband Amplifier	ERAVANT	SBB-0115033218-2F2F-E3	27554-01	07/02/2025	12
AT	244711	Thermo-Hygrometer	HIOKI E. E. CORPORATION	LR5001	231202105	01/19/2025	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:

RE: Radiated emission

AT: Antenna Terminal Conducted