

RADIO TEST REPORT

Test Report No. 16291252H-A

Customer	Minebea AccessSolutions Inc.
Description of EUT	ECU of 2R Smart System
Model Number of EUT	HLSS-10A
FCC ID	MLBHLSS-10A
Test Regulation	FCC Part 15 Subpart C
Test Result	Complied
Issue Date	June 11, 2026
Remarks	-

Representative test engineer


Shousei Hamaguchi
Engineer

Approved by


Shinichi Miyazono
Leader


CERTIFICATE 5107.02

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- ☒ There is no testing item of "Non-accreditation".

Report Cover Page - Form-ULID-003532 (DCS:13-EM-F0429) Issue# 26.0

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REVISION HISTORY

Revision	Test Report No.	Date	Page Revised Contents
- (Original)	16291252H-A	June 11, 2026	-

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation	IEC	International Electrotechnical Commission
AC	Alternating Current	IEEE	Institute of Electrical and Electronics Engineers
AFH	Adaptive Frequency Hopping	IF	Intermediate Frequency
AM	Amplitude Modulation	ILAC	International Laboratory Accreditation Conference
Amp, AMP	Amplifier	ISED	Innovation, Science and Economic Development Canada
ANSI	American National Standards Institute	ISO	International Organization for Standardization
Ant, ANT	Antenna	JAB	Japan Accreditation Board
AP	Access Point	LAN	Local Area Network
ASK	Amplitude Shift Keying	LIMS	Laboratory Information Management System
Atten., ATT	Attenuator	MCS	Modulation and Coding Scheme
AV	Average	MRA	Mutual Recognition Arrangement
BPSK	Binary Phase-Shift Keying	N/A	Not Applicable
BR	Bluetooth Basic Rate	NIST	National Institute of Standards and Technology
BT	Bluetooth	NS	No signal detect.
BT LE	Bluetooth Low Energy	NSA	Normalized Site Attenuation
BW	BandWidth	NVLAP	National Voluntary Laboratory Accreditation Program
Cal Int	Calibration Interval	OBW	Occupied Band Width
CCK	Complementary Code Keying	OFDM	Orthogonal Frequency Division Multiplexing
Ch., CH	Channel	P/M	Power meter
CISPR	Comite International Special des Perturbations Radioelectriques	PCB	Printed Circuit Board
CW	Continuous Wave	PER	Packet Error Rate
DBPSK	Differential BPSK	PHY	Physical Layer
DC	Direct Current	PK	Peak
D-factor	Distance factor	PN	Pseudo random Noise
DFS	Dynamic Frequency Selection	PRBS	Pseudo-Random Bit Sequence
DQPSK	Differential QPSK	PSD	Power Spectral Density
DSSS	Direct Sequence Spread Spectrum	QAM	Quadrature Amplitude Modulation
EDR	Enhanced Data Rate	QP	Quasi-Peak
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power	QPSK	Quadri-Phase Shift Keying
EMC	ElectroMagnetic Compatibility	RBW	Resolution Band Width
EMI	ElectroMagnetic Interference	RDS	Radio Data System
EN	European Norm	RE	Radio Equipment
ERP, e.r.p.	Effective Radiated Power	RF	Radio Frequency
EU	European Union	RMS	Root Mean Square
EUT	Equipment Under Test	RSS	Radio Standards Specifications
Fac.	Factor	Rx	Receiving
FCC	Federal Communications Commission	SA, S/A	Spectrum Analyzer
FHSS	Frequency Hopping Spread Spectrum	SG	Signal Generator
FM	Frequency Modulation	SVSWR	Site-Voltage Standing Wave Ratio
Freq.	Frequency	TR	Test Receiver
FSK	Frequency Shift Keying	Tx	Transmitting
GFSK	Gaussian Frequency-Shift Keying	VBW	Video BandWidth
GNSS	Global Navigation Satellite System	Vert.	Vertical
GPS	Global Positioning System	WLAN	Wireless LAN
Hori.	Horizontal	WPT	Wireless Power Transfer
ICES	Interference-Causing Equipment Standard	-	-

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SECTION 1: Customer Information

Company Name	Minebea AccessSolutions Inc.
Address	3700 Shimonaka Sadowara-cho Miyazaki-shi Miyazaki 880-0293, Japan
Telephone Number	+81-80-6409-6137
Contact Person	Shinji Kameyama

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	ECU of 2R Smart System
Model Number	HLSS-10A
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	April 19, 2026
Test Date	May 25, 2026

2.2 Product Description

General Specification

Rating	DC 12.0 V
Operating temperature	-20 deg. C to 80 deg. C

Radio Specification

[LF part]

Equipment Type	Transmitter
Frequency of Operation	125 kHz
Type of Modulation	ASK

[UHF part]

Equipment Type	Receiver
Frequency of Operation	433.92 MHz
Crystal Frequency	10 MHz
Local oscillator frequency (f_{LO})	434.194 MHz
Intermediate frequency	0.274 MHz

SECTION 3: Test Summary

3.1 Test Specification

Test Specification	FCC Part 15 Subpart C The latest version on the first day of the testing period
Title	FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators Section 15.207 Conducted limits Section 15.209 Radiated emission limits; general requirements.
*Also the EUT complies with FCC Part 15 Subpart B.	

3.2 Reference Standards

ANSI/USEMCSC C63.2-2023
ANSI C63.4-2014+C63.4a-2017
ANSI C63.5-2017
ANSI C63.10-2020
ANSI/USEMCSC C63.10/Cor 1-2023
ANSI/USEMCSC C63.10a-2024 (incl. Errata) for ISED
ANSI C63.25.1-2018

3.3 Summary of Test Results

Item	Specification	Results	Remarks
Conducted Emission	<FCC> Section 15.207 <ISED> RSS-Gen 8.8	N/A	*1)
Electric Field Strength of Fundamental Emission	<FCC> Section 15.209 <ISED> RSS-210 8.2 RSS-Gen 8.9	Complied	Radiated
Electric Field Strength of Spurious Emission	<FCC> Section 15.209 <ISED> RSS-210 8.3 RSS-Gen 8.9	Complied	Radiated
-20 dB Bandwidth	<FCC> Reference data <ISED> -	Complied	Radiated

Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.

*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.

FCC Part 15.31 (e)

The battery voltage (DC 12 V) is provided to the EUT. Input voltage to RF part does not go through the regulator. So the test was performed with the supply voltage varied between 85 % and 115 % of the nominal rated supply voltage (DC 12 V) and the variation of the input power does not affect the test result. Therefore the EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT.

Therefore, the equipment complies with the antenna requirement of Section 15.203.

3.4 Addition to standard

Item	Specification	Results	Remarks
99 % emission bandwidth	-	-	Radiated
Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.			

Other than above, 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	4.8
10 m			dB	4.7
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

-20 dB Bandwidth and 99% Occupied Bandwidth, Frequency Tolerance

Item	Unit	Calculated Uncertainty (+/-)
Bandwidth (OBW)	%	0.96
Frequency Readout (Frequency counter)	ppm	0.67
Frequency Readout (Spectrum analyzer frequency readout function)	ppm	2.13

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

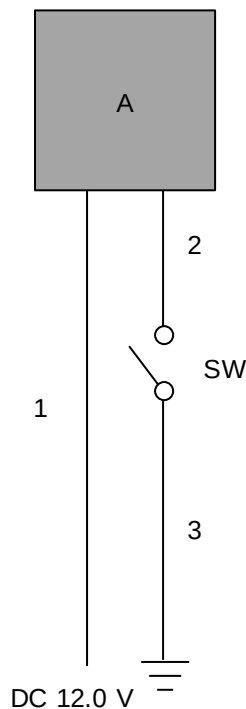
Refer to APPENDIX.

SECTION 4: Operation of EUT during testing

4.1. Operating Mode(s)

Test mode	Remarks
1) Continuous Transmitting mode	-
*Power of the EUT was set by the software as follows; Software: MLZ-8B_ Version: 1.0.2 (Date: 2026.02.02, Storage location: EUT memory) *This setting of software is the worst case. Any conditions under the normal use do not exceed the condition of setting. In addition, end users cannot change the settings of the output power of the product. Justification: The system was configured in typical fashion (as a user would normally use it) for testing.	

4.2 Configuration and Peripherals



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

Description of EUT

No.	Item	Model number	Serial Number	Manufacturer	Remark
A	ECU of 2R Smart System	HLSS-10A	MLZ-F001	Minebea AccessSolutions Inc.	EUT

List of Cables Used

No.	Name	Length (m)	Shield Cable	Connector	Remark
1	DC Cable	4.0	Unshielded	Unshielded	-
2	Signal Cable	0.1	Unshielded	Unshielded	-
3	Signal Cable	3.9	Unshielded	Unshielded	-

SECTION 5: Radiated emission (Fundamental and Spurious Emission)

Test Procedure

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 Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

[Limit conversion]

The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ohms. For example, the measurement at frequency 9 kHz resulted in a level of 45.5 dBuV/m, which is equivalent to $45.5 - 51.5 = -6.0$ dBuA/m, which has the same margin, 3 dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

[Frequency: From 9 kHz to 30 MHz]

The loop antenna is oriented vertically, and its center point is positioned 1 m above ground level.

The field strength radiated from the EUT is measured using a loop antenna connected to a measurement receiver as below procedures.

- 1) With the loop antenna set at vertical-axis angles of 0 deg., 45 deg., 90 deg., 135 deg., and the horizontal position, the EUT is rotated through 360 deg. to detect the maximum noise level. (The horizontal position has no rotation angle; therefore, the result obtained in Procedure 1 is used as the final data.)
- 2) The EUT is rotated through 360 deg. at two antenna angles: the angle that produced the maximum noise level in Procedure 1, and the angle that is reversed by 180 deg. from that angle. The noise levels from these two patterns are compared.
- 3) The EUT is rotated through 360 deg. at three antenna angles: the angle that produced the maximum noise level in Procedure 2, and the angles shifted by +15 deg. and -15 deg. from that angle. The noise levels from these three patterns are compared.
- 4) The EUT and antenna are set to the worst angle identified in Procedure 3, and point data is recorded. This data constitutes the final test result.

Refer to Figure 2 for the definition of the loop antenna angles.

The measurement bandwidth and detector type of the receiver are configured as shown in the table below.

Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open field test site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

These tests were performed in semi anechoic chamber. Therefore, the measured level of emissions may be higher than if measurements were made without a ground plane. However, test results were confirmed to pass against standard limit.

[Frequency: From 30 MHz to 1 GHz]
The measuring antenna height 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.

[Test instruments and test settings]

Frequency	Below 30 MHz	30 MHz to 200 MHz	200 MHz to 1 GHz
Antenna Type	Loop	Biconical	Logperiodic

The test was made with the detector (RBW/VBW) in the following table.
When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

Frequency	From 9 kHz to 90 kHz and From 110 kHz to 150 kHz	From 90 kHz to 110 kHz	From 150 kHz to 490 kHz	From 490 kHz to 30 MHz	From 30 MHz to 1 GHz
Instrument used	Test Receiver				
Detector	PK / AV	QP	PK / AV	QP	QP
IF Bandwidth	200 Hz	200 Hz	9 kHz	9 kHz	120 kHz
Test Distance	3 m *1)	3 m *1)	3 m *1)	3 m *2)	3 m

*1) Distance Factor: $40 \times \log (3 \text{ m} / 300 \text{ m}) = -80 \text{ dB}$
*2) Distance Factor: $40 \times \log (3 \text{ m} / 30 \text{ m}) = -40 \text{ dB}$

Figure 1: Test Setup

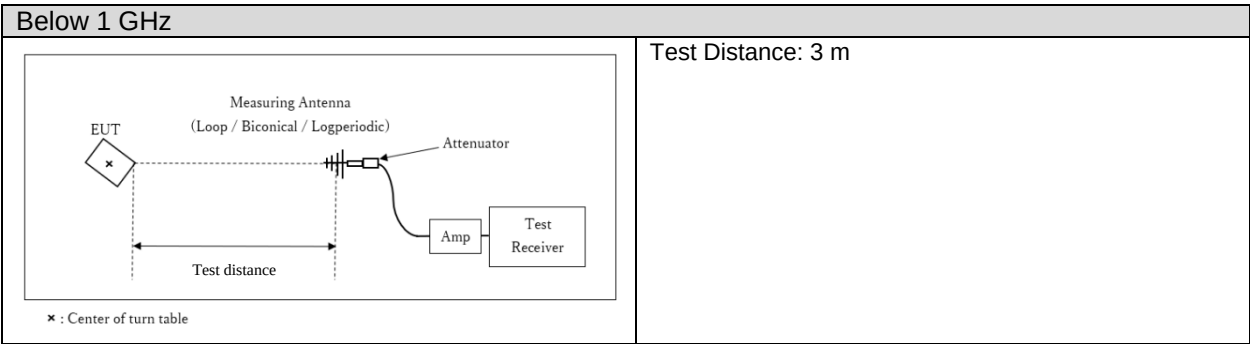
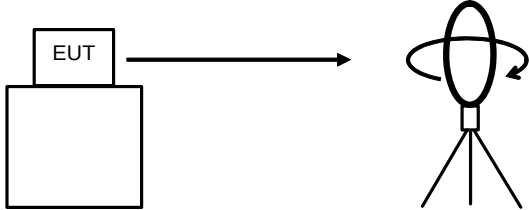
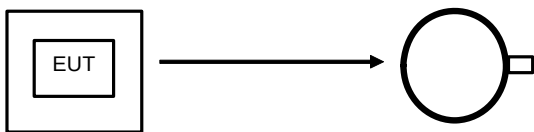


Figure 2: Direction of the Loop Antenna

Side View (Vertical)

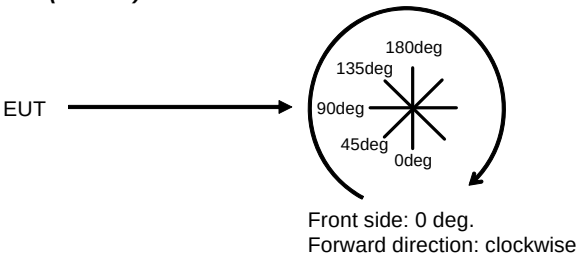


Top View (Horizontal)



Antenna was not rotated.

Top View (Vertical)



- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Measurement range : 9 kHz to 1 GHz
Test data : APPENDIX
Test result : Pass

SECTION 6: -20 dB Bandwidth

Test Procedure

The test was measured with a spectrum analyzer.

Test	Span	RBW	VBW	Sweep	Detector	Trace	Instrument used
-20 dB Bandwidth	Between two times and five times the OBW	1 to 5 % of OBW	Three times of RBW	Auto	Peak	Max Hold	Spectrum Analyzer

Test data : APPENDIX

Test result : Pass

SECTION 7: 99 % emission bandwidth

Test Procedure

The test was measured with a spectrum analyzer.

Test	Span	RBW	VBW	Sweep	Detector	Trace	Instrument used
99 % emission bandwidth	Between two times and five times the OBW	1 to 5 % of OBW	Three times of RBW	Auto	Peak	Max Hold	Spectrum Analyzer

Peak hold was applied as Worst-case measurement.

Test data : APPENDIX

Test result : Pass

APPENDIX 1: Test data

Radiated Emission (Fundamental and Spurious Emission)

Mode	Mode 1				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
May 25, 2026	SAC3	22 deg. C	62 % RH	Shousei Hamaguchi	Below 30 MHz, Above 30 MHz

PK or QP

Ant Deg [deg] or Polarity [Hori/Vert]	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
180 deg	0.12500	PK	98.6	19.7	-74.0	32.2	-	12.1	45.6	33.5	Fundamental (DC 12.0V)
180 deg	0.12500	PK	96.7	19.7	-74.0	32.2	-	10.2	45.6	35.4	Fundamental (DC 10.2V)
180 deg	0.12500	PK	99.7	19.7	-74.0	32.2	-	13.2	45.6	32.4	Fundamental (DC 13.8V)
180 deg	0.25000	PK	55.0	19.8	-64.3	32.2	-	-21.7	39.6	61.3	
180 deg	0.37500	PK	57.6	19.8	-64.3	32.2	-	-19.1	36.1	55.2	
180 deg	0.50000	QP	45.1	19.9	-24.3	32.2	-	8.5	33.6	25.1	
180 deg	0.62500	QP	46.8	19.9	-24.3	32.2	-	10.2	31.7	21.5	
180 deg	0.75000	QP	40.7	19.9	-24.3	32.2	-	4.1	30.1	26.0	
180 deg	0.87500	QP	39.2	19.8	-24.3	32.2	-	2.5	28.7	26.2	
180 deg	1.00000	QP	37.4	19.8	-24.3	32.2	-	0.7	27.6	26.9	
180 deg	1.12500	QP	33.3	19.8	-24.3	32.2	-	-3.4	26.5	29.9	
180 deg	1.25000	QP	34.8	19.8	-24.3	32.2	-	-1.9	25.6	27.5	
Hori.	32.750	QP	27.6	17.5	7.0	32.2	-	19.9	40.0	20.1	Floor Noise
Hori.	42.560	QP	31.0	13.9	7.2	32.2	-	19.9	40.0	20.1	
Hori.	58.969	QP	26.5	8.1	7.4	32.1	-	9.9	40.0	30.1	Floor Noise
Hori.	72.600	QP	22.8	6.4	7.6	32.1	-	4.7	40.0	35.3	Floor Noise
Hori.	335.150	QP	21.5	14.7	9.9	32.0	-	14.1	46.0	31.9	Floor Noise
Hori.	590.970	QP	21.5	19.4	11.5	32.0	-	20.4	46.0	25.6	Floor Noise
Vert.	32.760	QP	27.7	17.5	7.0	32.2	-	20.0	40.0	20.0	Floor Noise
Vert.	42.536	QP	33.4	13.9	7.2	32.2	-	22.3	40.0	17.7	
Vert.	57.664	QP	38.8	8.5	7.4	32.1	-	22.6	40.0	17.4	
Vert.	72.600	QP	33.1	6.4	7.6	32.1	-	15.0	40.0	25.0	
Vert.	380.130	QP	21.4	15.1	10.2	32.0	-	14.7	46.0	31.3	Floor Noise
Vert.	549.000	QP	21.4	18.0	11.3	32.0	-	18.7	46.0	27.3	Floor Noise

Result = Reading + Ant Factor + Loss (Cable + Attenuator + Filter + D.Factor) - Gain(Amplifier)

PK with Duty factor

Ant Deg [deg] or Polarity [Hori/Vert]	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
180 deg	0.12500	PK	98.6	19.7	-74.0	32.2	0.0	12.1	25.6	13.5	Fundamental (DC 12.0V)
180 deg	0.12500	PK	96.7	19.7	-74.0	32.2	0.0	10.2	25.6	15.4	Fundamental (DC 10.2V)
180 deg	0.12500	PK	99.7	19.7	-74.0	32.2	0.0	13.2	25.6	12.4	Fundamental (DC 13.8V)
180 deg	0.25000	PK	55.0	19.8	-64.3	32.2	0.0	-21.7	19.6	41.3	
180 deg	0.37500	PK	57.6	19.8	-64.3	32.2	0.0	-19.1	16.1	35.2	

Result = Reading + Ant Factor + Loss (Cable + Attenuator + Filter + D.Factor) - Gain(Amplifier) + Duty factor *

* Since the peak emission result satisfied the average limit, duty factor was omitted.

Result of the fundamental emission at 3 m without Distance factor

Ant Deg [deg]	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
180 deg	0.12500	PK	99.7	19.7	6.0	32.2	-	93.2	-	-	Fundamental (DC 13.8V)

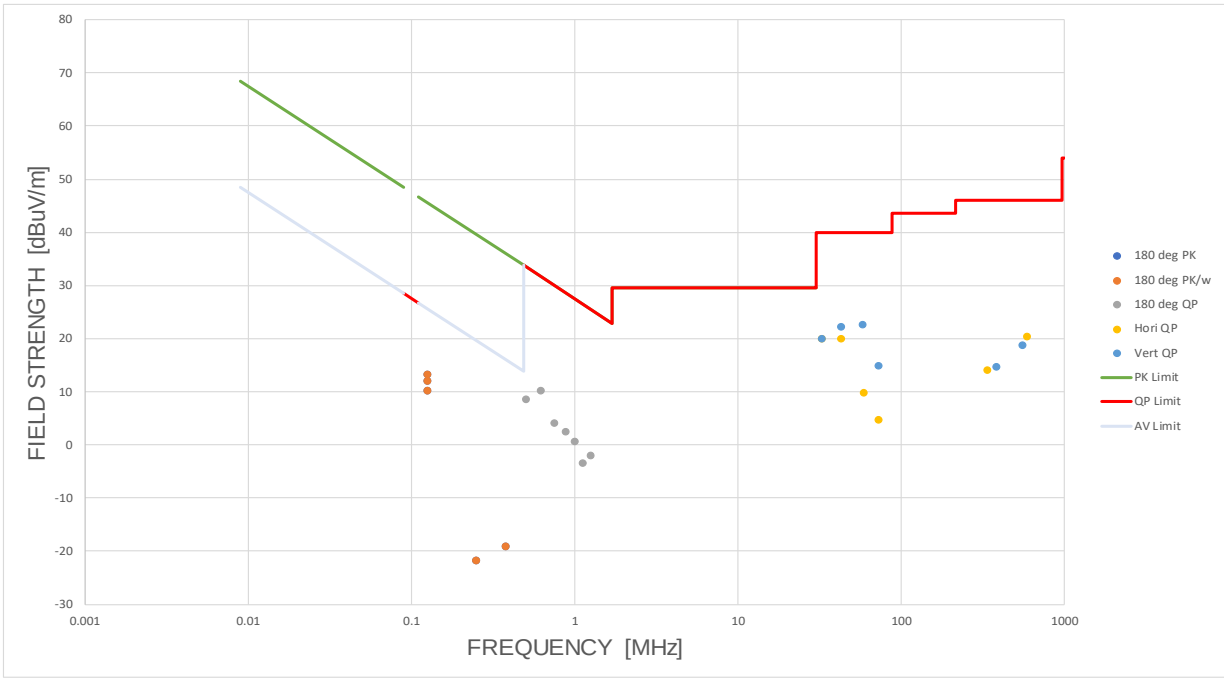
Result = Reading + Ant Factor + Loss (Cable+Attenuator) - Gain(Amplifier)

The pre-amplifier used for carrier frequency measurement was not saturated.
Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Radiated Spurious Emission

(Plot data, Worst case for Fundamental Emission)

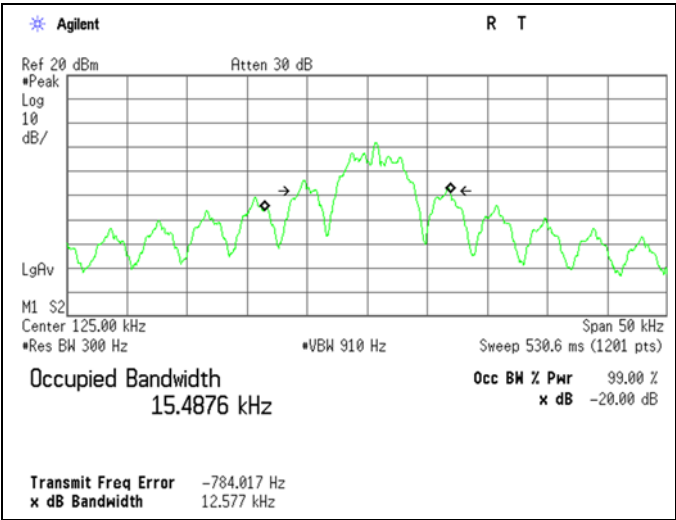
Mode	Mode 1				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
May 25, 2026	SAC3	22 deg. C	62 % RH	Shousei Hamaguchi	Below 30 MHz, Above 30 MHz



-20 dB Bandwidth / 99 % emission bandwidth

Mode	Mode 1			
Date	Test site	Temperature	Humidity	Engineer
May 25, 2026	SAC3	22 deg. C	62 % RH	Shousei Hamaguchi

-20 dB Bandwidth [kHz]	99 % emission bandwidth [kHz]
12.577	15.4876



*It was confirmed that there were no differences in the bandwidth due to the input voltage.

APPENDIX 2: Test instruments

Test Equipment

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	141216	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W/SFM14/ suciform141-PE/ 421-010/ RFM-E321(SW)	-/00640	07/04/2025	12
RE	141266	Logperiodic Antenna (200-1000MHz)	Schwarzbeck Mess- Elektronik OHG	VUSLP9111B	9111B-191	04/22/2026	12
RE	141295	High Pass Filter 0.15-30MHz	Rohde & Schwarz	EZ-25/3	100041	02/09/2026	12
RE	141323	Coaxial cable	UL-ISE	-	-	09/08/2025	12
RE	141424	Biconical Antenna	Schwarzbeck Mess- Elektronik OHG	VHA9103+BBA9106	1915	10/21/2025	12
RE	141532	DIGITAL HiTESTER	HIOKI E. E. CORPORATION	3805	051201197	01/05/2026	12
RE	141582	Pre Amplifier	SONOMA INSTRUMENT	310	260834	02/06/2026	12
RE	141899	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY46180655	04/20/2026	12
RE	141949	Test Receiver	Rohde & Schwarz	ESCI	100767	06/30/2025	12
RE	142008	AC3_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	07/09/2025	24
RE	142314	Attenuator	Pasternack Enterprises	PE7390-6	D/C 1504	06/24/2025	12
RE	178648	EMI measurement program	TSJ (Techno Science Japan)	TEPTO-DV	-	-	-
RE	207745	Coaxial Cable	UL-ISE	-	-	03/17/2026	12
RE	244709	Thermo-Hygrometer	HIOKI E. E. CORPORATION	LR5001	231202103	01/13/2026	12
RE	252514	Active Loop Antenna	Schwarzbeck Mess- Elektronik OHG	FMZB 1519-60 D	1519-60 D-067	10/14/2025	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