

RADIO TEST REPORT

Test Report No. 15860840S-H-R1

Customer	Foster Electric Company, Limited
Description of EUT	Mercedes-Benz Headphones
Model Number of EUT	MB WHP 2
FCC ID	2ASG7649918
Test Regulation	FCC Part 15 Subpart C
Test Result	Complied
Issue Date	October 23, 2025
Remarks	Bluetooth Low Energy part(s)

Representative Test EngineerHiromasa Sato
Engineer**Approved By**Toyokazu Imamura
Engineer

CERTIFICATE 1266.03

- ☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan, Inc.
- ☒ There is no testing item of "Non-accreditation".

Report Cover Page - Form-ULID-003532 (DCS:13-EM-F0429) Issue# 24.0

ANNOUNCEMENT

- This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
- The results in this report apply only to the sample tested. (Laboratory was not involved in sampling.)
- This sample tested is in compliance with the limits of the above regulation.
- The test results in this test report are traceable to the national or international standards.
- This test report must not be used by the customer to claim product certification, approval, or endorsement by the A2LA accreditation body.
- This test report covers Radio technical requirements.
It does not cover administrative issues such as Manual or non-Radio test related Requirements. (if applicable)
- The all test items in this test report are conducted by UL Japan, Inc. Shonan EMC Lab.
- The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan, Inc. has been accredited.
- The information provided by the customer for this report is identified in SECTION 1.
- The laboratory is not responsible for information provided by the customer which can impact the validity of the results.
- For any test report referred in this report, the latest version (including any revisions) is always referred to.
- 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)	15860840S-H	August 8, 2025	-
1	15860840S-H-R1	October 23, 2025	P.6, 3.1 Test Specification Deleted the unnecessary comments.
1	15860840S-H-R1	October 23, 2025	P.9, Change the operating mode for Conducted Spurious Emission
1	15860840S-H-R1	October 23, 2025	P.12, Change the platform of nominal size
1	15860840S-H-R1	October 23, 2025	P.13, $*(\text{Test Distance} + \text{SVSWR Volume} / 2) - r = 3.977 \text{ m}$ was corrected to 3.90 m. $r: 0.023 \text{ m}$ was corrected to 0.1 m.
1	15860840S-H-R1	October 23, 2025	P.13, P.23 to P.31, Distance factor was changed from 2.45 dB to 2.28 dB.
1	15860840S-H-R1	October 23, 2025	P.26, Deleted data of 4804 MHz, 7206 MHz, 9608 MHz
1	15860840S-H-R1	October 23, 2025	P.33, Distance factor was changed from 2.45 dB to 2.28 dB, and the plot data was replaced.
1	15860840S-H-R1	October 23, 2025	P.34, Change the Conducted Spurious Emission data(Tx BT LE 1M-PHY 2402 MHz)

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	OFDMA	Orthogonal Frequency Division Multiple Access
CISPR	Comite International Special des Perturbations Radioelectriques	P/M	Power meter
CW	Continuous Wave	PCB	Printed Circuit Board
DBPSK	Differential BPSK	PER	Packet Error Rate
DC	Direct Current	PHY	Physical Layer
D-factor	Distance factor	PK	Peak
DFS	Dynamic Frequency Selection	PN	Pseudo random Noise
DQPSK	Differential QPSK	PP	Preamble Puncturing
DSSS	Direct Sequence Spread Spectrum	PRBS	Pseudo-Random Bit Sequence
EDR	Enhanced Data Rate	PSD	Power Spectral Density
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power	QAM	Quadrature Amplitude Modulation
EMC	ElectroMagnetic Compatibility	QP	Quasi-Peak
EMI	ElectroMagnetic Interference	QPSK	Quadri-Phase Shift Keying
EN	European Norm	RBW	Resolution Band Width
ERP, e.r.p.	Effective Radiated Power	RDS	Radio Data System
EU	European Union	RE	Radio Equipment
EUT	Equipment Under Test	RF	Radio Frequency
Fac.	Factor	RMS	Root Mean Square
FCC	Federal Communications Commission	RSS	Radio Standards Specifications
FHSS	Frequency Hopping Spread Spectrum	Rx	Receiving
FM	Frequency Modulation	SA, S/A	Spectrum Analyzer
Freq.	Frequency	SG	Signal Generator
FSK	Frequency Shift Keying	SVSWR	Site-Voltage Standing Wave Ratio
GFSK	Gaussian Frequency-Shift Keying	TR	Test Receiver
GNSS	Global Navigation Satellite System	Tx	Transmitting
GPS	Global Positioning System	VBW	Video BandWidth
Hori.	Horizontal	Vert.	Vertical
ICES	Interference-Causing Equipment Standard	WLAN	Wireless LAN

CONTENTS	PAGE
SECTION 1: Customer Information	5
SECTION 2: Equipment Under Test (EUT).....	5
SECTION 3: Test Summary	6
SECTION 4: Operation of EUT during testing	9
SECTION 5: Conducted Emission.....	11
SECTION 6: Radiated Spurious Emission.....	12
SECTION 7: Antenna Terminal Conducted Tests	14
APPENDIX 1: Test Data	15
Conducted Emission	15
99 % Occupied Bandwidth and 6 dB Bandwidth.....	17
Maximum Peak Output Power	20
Average Output Power.....	21
Radiated Spurious Emission.....	23
Conducted Spurious Emission.....	34
Power Density	35
APPENDIX 2: Test Instruments	37
APPENDIX 3: Photographs of Test Setup	39
Conducted Emission	39
Radiated Spurious Emission.....	40
Pre-check of Worst Case Position	41
Antenna Terminal Conducted Tests	42

SECTION 1: Customer Information

Company Name	Foster Electric Company, Limited
Address	1-1-109, Tsutsujigaoka, Akishima City, Tokyo, 196-8550, Japan
Telephone Number	+81-42-546-2311
Contact Person	Shinsaku Morita

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	Mercedes-Benz Headphones
Model Number	MB WHP 2
Serial Number	Refer to SECTION 4.2
Condition	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab
Receipt Date	June 9, 2025
Test Date	June 12, 2025 to 20, 2025

2.2 Product Description

General Specification

Rating	DC 3.2 V (DC 3.0 V to 3.65 V) (Battery), DC 5.0 V (USB)
--------	---

Radio Specification

This report contains data provided by the customer which can impact the validity of results. UL Japan, Inc. is only responsible for the validity of results after the integration of the data provided by the customer. The data provided by the customer is marked "a)" in the table below.

Bluetooth (BR/EDR / Bluetooth Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	FHSS (GFSK, $\pi/4$ DQPSK, 8 DPSK), GFSK
Antenna Gain ^{a)}	-0.68 dBi

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 47 CFR Part 15 Radio Frequency Device Subpart C Intentional Radiators Section 15.207 Conducted limits Section 15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

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 for ISED
ANSI C63.25.1-2018
KDB 558074 D01 v05r02
RSS-Gen Issue 5/Amendment 1/Amendment 2 for ISED

3.3 Summary of Test Results

Item	Specification	Results	Remarks
Conducted Emission	FCC: Section 15.207 ISED: RSS-Gen 8.8	Complied	-
6 dB Bandwidth	FCC: Section 15.247(a)(2) ISED: RSS-247 5.2(a)	Complied	Conducted
Maximum Peak Output Power	FCC: Section 15.247(b)(3) ISED: RSS-247 5.4(d)	Complied	Conducted
Power Density	FCC: Section 15.247(e) ISED: RSS-247 5.2(b)	Complied	Conducted
Spurious Emission Restricted Band Edges	FCC: Section 15.247(d) ISED: RSS-247 5.5 RSS-Gen 8.9 RSS-Gen 8.10	Complied	Conducted (below 30 MHz) / Radiated (above 30 MHz) *1)
Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.			
*1) Radiated test was selected over 30 MHz based on section 15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05r02 8.5 and 8.6.			

FCC Part 15.31 (e)

The RF part is constantly provided voltage through the regulator regardless of input voltage.
Therefore, this EUT complies with the requirement.

FCC Part 15.203/212 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

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 $k = 2$.

Item	Frequency range	Uncertainty (+/-)
Conducted Emission (AC Mains) LISN	150 kHz to 30 MHz	3.0 dB
Radiated Emission (Measurement distance: 3 m)	9 kHz to 30 MHz	3.3 dB
	30 MHz to 200 MHz	4.8 dB
	200 MHz to 1 GHz	6.1 dB
	1 GHz to 6 GHz	4.7 dB
	6 GHz to 18 GHz	5.3 dB
	18 GHz to 40 GHz	5.5 dB
Radiated Emission (Measurement distance: 1 m)	1 GHz to 18 GHz	5.6 dB
	18 GHz to 40 GHz	5.8 dB

Antenna terminal test	Uncertainty (+/-)
Power Measurement above 1 GHz (Average Detector)	1.3 dB
Power Measurement above 1 GHz (Peak Detector)	1.5 dB
Spurious Emission (Conducted) below 1 GHz	0.93 dB
Conducted Emissions Power Density Measurement 1 GHz to 3 GHz	0.93 dB
Conducted Emissions Power Density Measurement 3 GHz to 18 GHz	3.0 dB
Spurious Emission (Conducted) 18 GHz to 26.5 GHz	2.8 dB
Spurious Emission (Conducted) 26.5 GHz to 40 GHz	2.3 dB
Bandwidth Measurement	0.012 %
Duty Cycle and Time Measurement	0.27 %
Temperature	2.2 deg.C.
Humidity	3.4 %
Voltage	0.92 %

3.6 Test Location

UL Japan, Inc. Shonan EMC Lab.

1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 Japan

Telephone: +81-463-50-6400

A2LA Certificate Number: 1266.03

(FCC test firm registration number: 626366, ISED lab company number: 2973D / CAB identifier: JP0001)

Test room	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
No.1 Semi-anechoic chamber (SAC1)	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.2 Semi-anechoic chamber (SAC2)	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.3 Semi-anechoic chamber (SAC3)	12.7 x 7.7 x 5.35	12.7 x 7.7	5 m
No.4 Semi-anechoic chamber (SAC4)	8.1 x 5.1 x 3.55	8.1 x 5.1	-
Wireless anechoic chamber 1 (WAC1)	9.5 x 6.0 x 5.4	9.5 x 6.0	3 m
Wireless anechoic chamber 2 (WAC2)	9.5 x 6.0 x 5.4	9.5 x 6.0	3 m
No.1 Shielded room (SR1)	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.2 Shielded room (SR2)	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.3 Shielded room (SR3)	6.3 x 4.7 x 2.7	6.3 x 4.7	-
No.4 Shielded room (SR4)	4.4 x 4.7 x 2.7	4.4 x 4.7	-
No.5 Shielded room (SR5)	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.6 Shielded room (SR6)	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.8 Shielded room (SR8)	3.45 x 5.5 x 2.4	3.45 x 5.5	-
No.1 Measurement room (MR1)	2.55 x 4.1 x 2.5	-	-
No.2 Measurement room (MR2)	4.5 x 3.5 x 2.5	-	-
Wireless shielded room 1 (WSR1)	3.0 x 4.5 x 2.7	3.0 x 4.5	-
Wireless shielded room 2 (WSR2)	3.0 x 4.5 x 2.7	3.0 x 4.5	-

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)

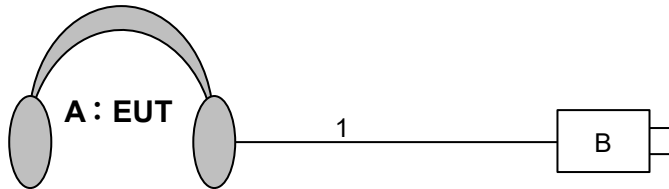
Mode	Remarks*
Bluetooth Low Energy (BT LE)	Uncoded 1M-PHY (1M), Maximum Packet Size, PRBS9
Bluetooth Low Energy (BT LE)	Uncoded 2M-PHY (2M), Maximum Packet Size, PRBS9
*Power of the EUT was set by the software as follows; Power Setting: 4 (Setting value) Software: CSR BlueSuite, BlueTest3, Ver 3.3.18 (Date: 2025.06 12, Storage location: Driven by connected PC) *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.	

*The Details of Operating Mode(s)

Test Item	Operating Mode	Tested Frequency
Conducted Emission, Radiated Spurious Emission (Below 1 GHz) Conducted Spurious Emission	Tx BT LE 1M *1)	2402 MHz
Radiated Spurious Emission (Above 1 GHz), Maximum Peak Output Power, Power Density, 6 dB Bandwidth, 99% Occupied Bandwidth,	Tx BT LE 1M Tx BT LE 2M	2402 MHz 2440 MHz 2480 MHz
*1) Conducted emissions and Spurious emissions for frequencies below 1 GHz were limited to the channel that had the highest power during the antenna terminal test, as preliminary testing indicated that changing the operating frequency had no significant impact on the emissions in those frequency bands.		

4.2 Configuration and Peripherals

< Radiated Emission and Conducted Emission test >



AC 120 V / 60 Hz
AC 240 V / 60 Hz (Conducted Emission Only)

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

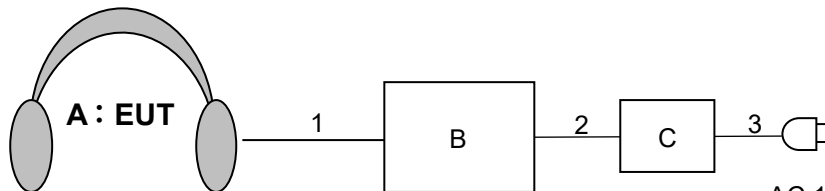
Description of EUT and Support Equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Mercedes-Benz Headphones	MB WHP 2	5P515A000006	Foster Electric Company, Limited	EUT
B	AC Adapter	A1720	FNT948333A4L9J9A0	Apple	-

List of Cables Used

No.	Cable	Length (m)	Shield-Cable	Shield-Connector	Remarks
1	USB	1.3	Shielded	Shielded	-

< Antenna Terminal Conducted test >



AC 100 V / 50 Hz

Description of EUT and Support Equipment

No.	Item	Model Number	Serial Number	Manufacturer	Remarks
A	Mercedes-Benz Headphones	MB WHP 2	5P516A00006F	Foster Electric	EUT
B	Laptop PC	Latitude 5490	5GV9HR2	DELL	-
C	AC Adapter	HSTNN-DA14	WAWQL0AARZE35R	DELL	-

List of Cables Used

No.	Cable	Length (m)	Shield-Cable	Shield-Connector	Remarks
1	USB	1.3	Shielded	Shielded	-
2	DC	1.1	Unshielded	Unshielded	
3	AC	1.8	Unshielded	Unshielded	

SECTION 5: Conducted Emission

Test Procedure and Conditions

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 rear of tabletop was located 40 cm to the vertical conducting plane. The rear of EUT, including peripherals was aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80 cm from a Line Impedance Stabilization Network (LISN) / Artificial mains Network (AMN) and excess AC cable was bundled in center.

For the tests on EUT with other peripherals (as a whole system)

I/O cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30 cm to 40 cm long and were hanged at a 40 cm height to the ground plane. All unused 50ohm connectors of the LISN (AMN) were resistivity terminated in 50 ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT via AC adapter in a Shielded room.

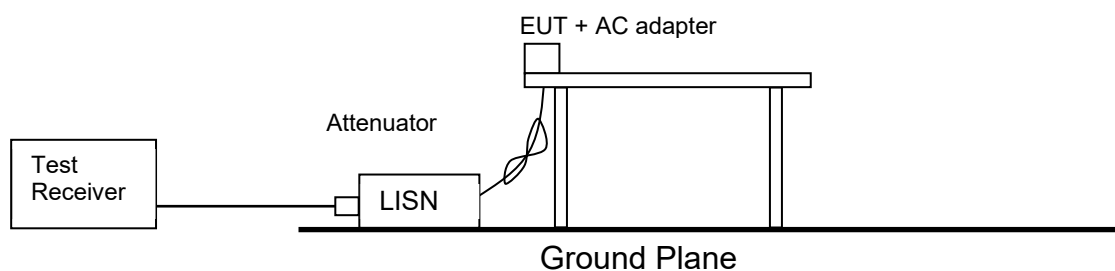
The EUT via AC adapter was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

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

Detector	: QP and CISPR AV
Measurement Range	: 0.15 MHz to 30 MHz
Test Data	: APPENDIX
Test Result	: Pass

Figure 1: Test Setup



SECTION 6: Radiated Spurious Emission

Test Procedure

It was measured based on "8.5 and 8.6 of KDB 558074 D01 15.247 Meas Guidance v05r02".

[For below 1 GHz]

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.

[For above 1 GHz]

EUT was placed on the platform of nominal size, 0.5 m by 0.5 m, raised 1.5 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with absorbent materials lined on a ground plane. Test antenna was aimed at the EUT for receiving the maximum signal and always kept within the illumination area of the 3 dB beamwidth of the antenna.

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

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

The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).

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.

Test Antennas are used as below;

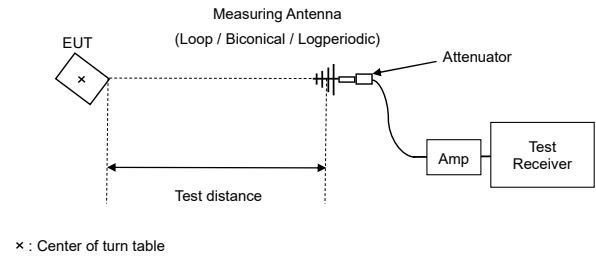
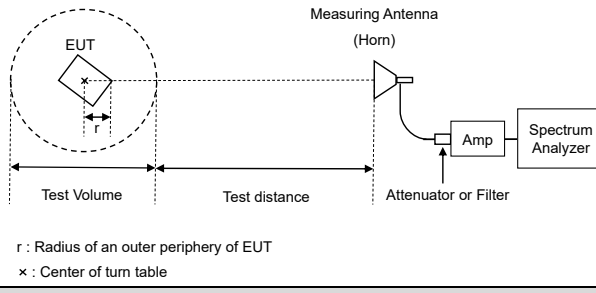
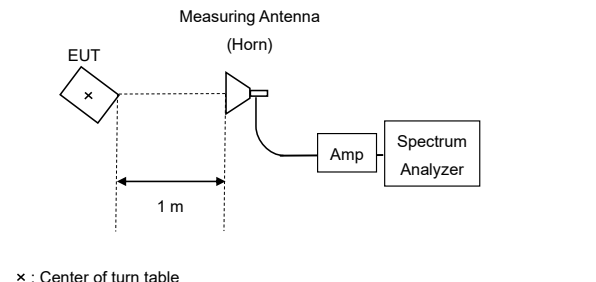
Frequency	30 MHz to 200 MHz	200 MHz to 1 GHz	Above 1 GHz
Antenna Type	Biconical	Logperiodic	Horn

In any 100 kHz bandwidth outside the restricted band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

20 dBc was applied to the frequency over the limit of FCC 15.209 / Table 4 of RSS-Gen 8.9(ISED) and outside the restricted band of FCC15.205 / Table 6 of RSS-Gen 8.10 (ISED).

Frequency	Below 1 GHz	Above 1 GHz		20 dBc
Instrument Used	Test Receiver	Spectrum Analyzer		Spectrum Analyzer
Detector	QP	PK	AV	PK
IF Bandwidth	BW 120 kHz	RBW: 1 MHz VBW: 3 MHz	11.12.2.5.1 RBW: 1 MHz VBW: 3 MHz Detector: Power Averaging (RMS) Trace: 100 traces 11.12.2.5.2 The duty cycle was less than 98% for detected noise, a duty factor was added to the 11.12.2.5.1 results.	RBW: 100 kHz VBW: 300 kHz

Figure 2: Test Setup

Below 1 GHz	
 × : Center of turn table	Test Distance: 3 m
1 GHz to 10 GHz	
 r : Radius of an outer periphery of EUT × : Center of turn table	Distance Factor: $20 \times \log (3.90 \text{ m}^* / 3.0 \text{ m}) = 2.28 \text{ dB}$ *(Test Distance + SVSWR Volume / 2) - r = 3.90 m Test Distance: 3 m SVSWR Volume: 2 m (SVSWR Volume has been calibrated based on CISPR 16-1-4.) r: 0.10 m
10 GHz to 26.5 GHz	
 × : Center of turn table	Distance Factor: $20 \times \log (1.0 \text{ m} / 3.0 \text{ m}) = -9.54 \text{ dB}$ *Test Distance: 1 m

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.

Polarization	Below 1 GHz	1 GHz to 2.8 GHz	2.8 GHz to 10 GHz	Above 10 GHz
Horizontal	Axis-Z	Axis-X	Axis-X	Axis-X
Vertical	Axis-X	Axis-Z	Axis-Z	Axis-X

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

Measurement Range : 30 MHz to 26.5 GHz
Test Data : APPENDIX
Test Result : Pass

SECTION 7: Antenna Terminal Conducted Tests

Test Procedure

The tests were made with below setting connected to the antenna port.

Test	Span	RBW	VBW	Sweep time	Detector	Trace	Instrument Used
6 dB Bandwidth	20 MHz	100 kHz	300 kHz	Auto	Peak	Max Hold	Spectrum Analyzer
99 % Occupied Bandwidth *1)	Enough width to display emission skirts	1 to 5 % of OBW	Three times of RBW	Auto	Peak	Max Hold	Spectrum Analyzer
Maximum Peak Output Power	-	-	-	Auto	Peak/ Average *2)	-	Power Meter (Sensor: 160 MHz BW)
Peak Power Density	1.5 times the 6 dB Bandwidth	3 kHz	10 kHz	Auto	Peak	Max Hold	Spectrum Analyzer *3)
Conducted Spurious Emission *4) *5)	9 kHz to 150 kHz	200 Hz	620 Hz	Auto	Peak	Max Hold	Spectrum Analyzer
	150 kHz to 30 MHz	10 kHz	30 kHz				

*1) Peak hold was applied as Worst-case measurement.

*2) Reference data

*3) Section 11.10.2 Method PKPSD (peak PSD) of "ANSI C63.10-2020".

*4) In the frequency range below 30MHz, RBW was narrowed to separate the noise contents.

Then, wide-band noise near the limit was checked separately, however the noise was not detected as shown in the chart.

(9 kHz - 150 kHz: RBW = 200 Hz, 150 kHz - 30 MHz: RBW = 10 kHz)

*5) 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.

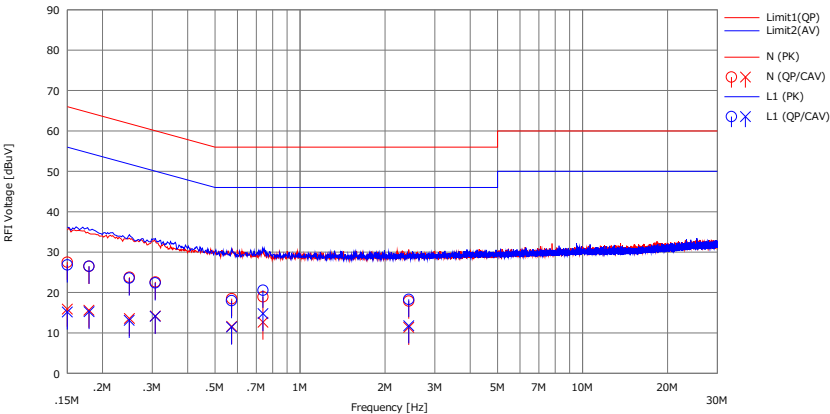
Test results are rounded off and limit are rounded down, so some differences might be observed.
The equipment and cables were not used for factor 0 dB of the data sheets.

Test Data : APPENDIX
Test Result : Pass

APPENDIX 1: Test Data

Conducted Emission

Mode	Tx, BT LE 1M-PHY 2402 MHz (AC 120 V/60 Hz)			
Date	Test site	Temperature	Humidity	Engineer
June 20, 2025	SR3	26 deg. C	53 % RH	Hiromasa Sato



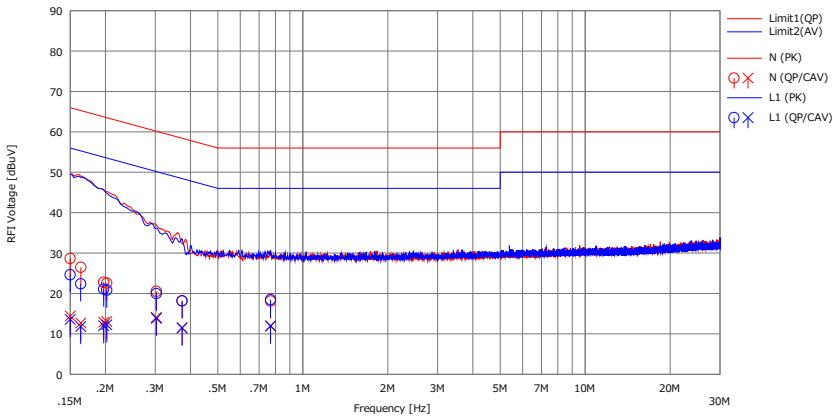
No.	Freq. [MHz]	Reading		C.Fac	Results		Limit		Margin		Phase	Comment
		(QP) [dBuV]	(CAV) [dBuV]		(QP) [dBuV]	(CAV) [dBuV]	(QP) [dBuV]	(AV) [dBuV]	(QP) [dB]	(AV) [dB]		
1	0.15000	12.27	0.67	15.22	27.49	15.89	66.00	56.00	38.5	40.1	N	
2	0.17900	11.25	0.39	15.23	26.48	15.62	64.53	54.53	38.0	38.9	N	
3	0.24895	8.53	-1.68	15.25	23.78	13.57	61.79	51.79	38.0	38.2	N	
4	0.30743	7.37	-1.05	15.23	22.60	14.18	60.04	50.04	37.4	35.8	N	
5	0.57283	3.20	-3.66	15.27	18.47	11.61	56.00	46.00	37.5	34.3	N	
6	0.73928	3.64	-2.62	15.28	18.92	12.66	56.00	46.00	37.0	33.3	N	
7	2.42408	2.45	-4.06	15.44	17.89	11.38	56.00	46.00	38.1	34.6	N	
8	0.15000	11.61	-0.02	15.21	26.82	15.19	66.00	56.00	39.1	40.8	L1	
9	0.17912	11.29	0.04	15.22	26.51	15.26	64.53	54.53	38.0	39.2	L1	
10	0.24840	8.34	-2.12	15.23	23.57	13.11	61.81	51.81	38.2	38.7	L1	
11	0.30711	7.17	-1.13	15.22	22.39	14.09	60.05	50.05	37.6	35.9	L1	
12	0.57222	2.74	-3.80	15.26	18.00	11.46	56.00	46.00	38.0	34.5	L1	
13	0.73931	5.28	-0.51	15.27	20.55	14.76	56.00	46.00	35.4	31.2	L1	
14	2.42415	2.89	-3.65	15.41	18.30	11.76	56.00	46.00	37.7	34.2	L1	

Calculation:Result[dBuV]=Reading[dBuV]+C.Fac(LISN(AMN)+Cable+ATT)[dB]
LISN(AMN):LIMS ID 145539

CHART: WITH FACTOR Peak hold data. CALCULATION : RESULT = READING + LISN + LOSS (CABLE + ATT)
Except for the above table: adequate margin data below the limits.

Conducted Emission

Mode	Tx, BT LE 1M-PHY 2402 MHz (AC 240 V/60 Hz)			
Date	Test site	Temperature	Humidity	Engineer
June 20, 2025	SR3	26 deg. C	53 % RH	Hiromasa Sato



No.	Freq. [MHz]	Reading		C.Fac	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<CAV> [dBuV]		<QP> [dBuV]	<CAV> [dBuV]	<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]		
1	0.15000	13.44	-0.82	15.22	28.66	14.40	66.00	56.00	37.3	41.6	N	
2	0.16360	11.24	-2.52	15.23	26.47	12.71	65.28	55.28	38.8	42.5	N	
3	0.19723	7.58	-2.32	15.22	22.80	12.90	63.73	53.73	40.9	40.8	N	
4	0.20217	7.33	-2.14	15.22	22.55	13.08	63.52	53.52	40.9	40.4	N	
5	0.30279	5.29	-1.13	15.23	20.52	14.10	60.17	50.17	39.6	36.0	N	
6	0.37365	2.90	-3.81	15.25	18.15	11.44	58.42	48.42	40.2	36.9	N	
7	0.76853	2.83	-3.38	15.29	18.12	11.91	56.00	46.00	37.8	34.0	N	
8	0.15000	9.42	-1.64	15.21	24.63	13.57	66.00	56.00	41.3	42.4	L1	
9	0.16343	7.17	-3.38	15.22	22.39	11.84	65.29	55.29	42.9	43.4	L1	
10	0.19721	5.84	-3.21	15.23	21.07	12.02	63.73	53.73	42.6	41.7	L1	
11	0.20219	5.59	-2.98	15.23	20.82	12.25	63.52	53.52	42.7	41.2	L1	
12	0.30282	4.74	-1.37	15.22	19.96	13.85	60.17	50.17	40.2	36.3	L1	
13	0.37354	2.94	-3.74	15.24	18.18	11.50	58.42	48.42	40.2	36.9	L1	
14	0.76851	3.22	-3.29	15.28	18.50	11.99	56.00	46.00	37.5	34.0	L1	

Calculation: Result[dBuV]=Reading[dBuV]+C.Fac(LISN(AMN)+Cable+ATT)[dB]
LISN(AMN): LIMS ID 145539

CHART: WITH FACTOR Peak hold data. CALCULATION : RESULT = READING + LISN + LOSS (CABLE + ATT)
Except for the above table: adequate margin data below the limits.

99 % Occupied Bandwidth and 6 dB Bandwidth

Mode	Tx, BT LE			
Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada

BT LE 1M-PHY

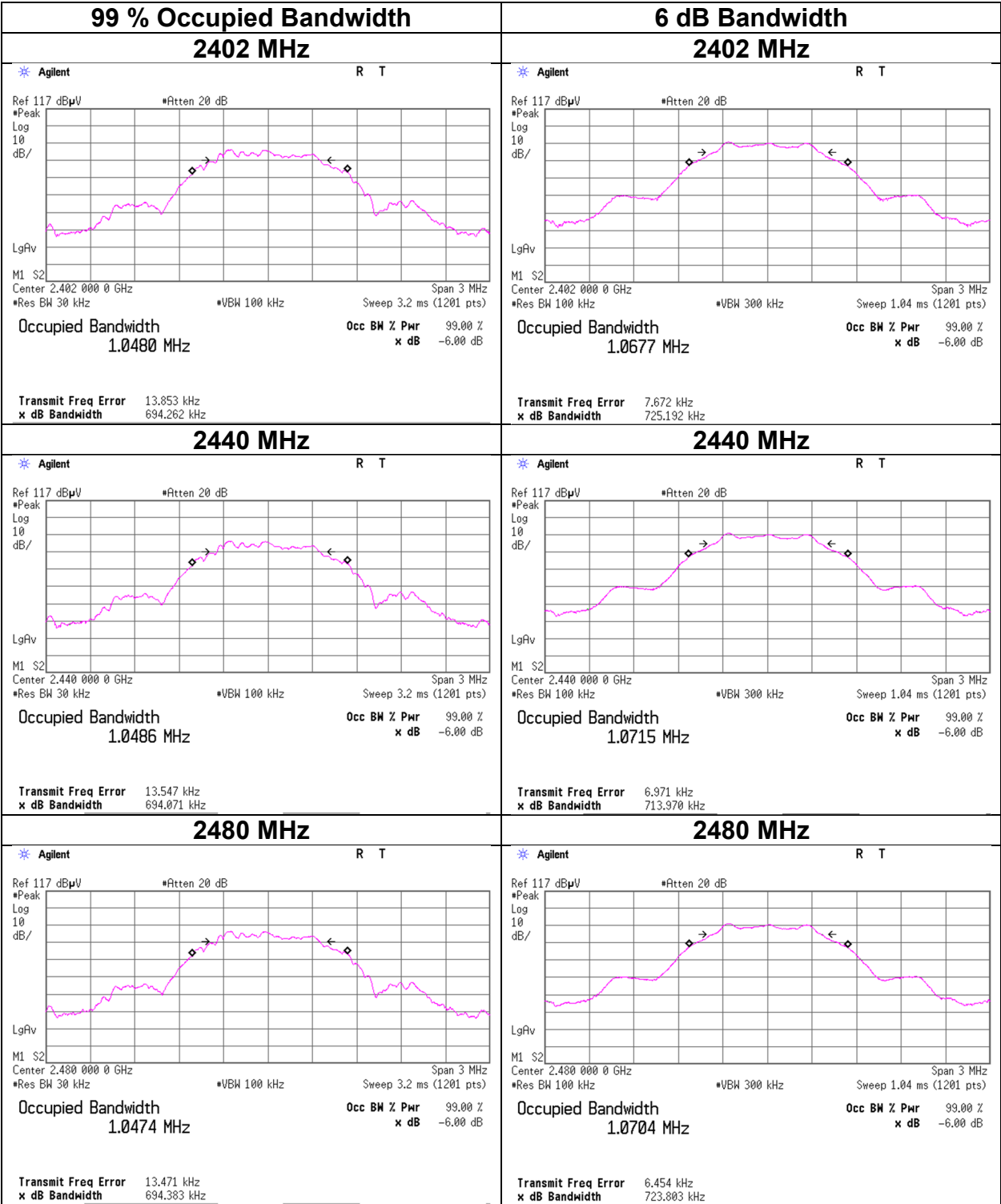
Frequency [MHz]	99 % Occupied Bandwidth [kHz]	6 dB Bandwidth [MHz]	Limit for 6 dB Bandwidth [MHz]
2402	1048.0	0.725	> 0.5000
2440	1048.6	0.714	> 0.5000
2480	1047.4	0.724	> 0.5000

BT LE 2M-PHY

Frequency [MHz]	99 % Occupied Bandwidth [kHz]	6 dB Bandwidth [MHz]	Limit for 6 dB Bandwidth [MHz]
2402	2061.0	1.218	> 0.5000
2440	2065.8	1.265	> 0.5000
2480	2060.1	1.218	> 0.5000

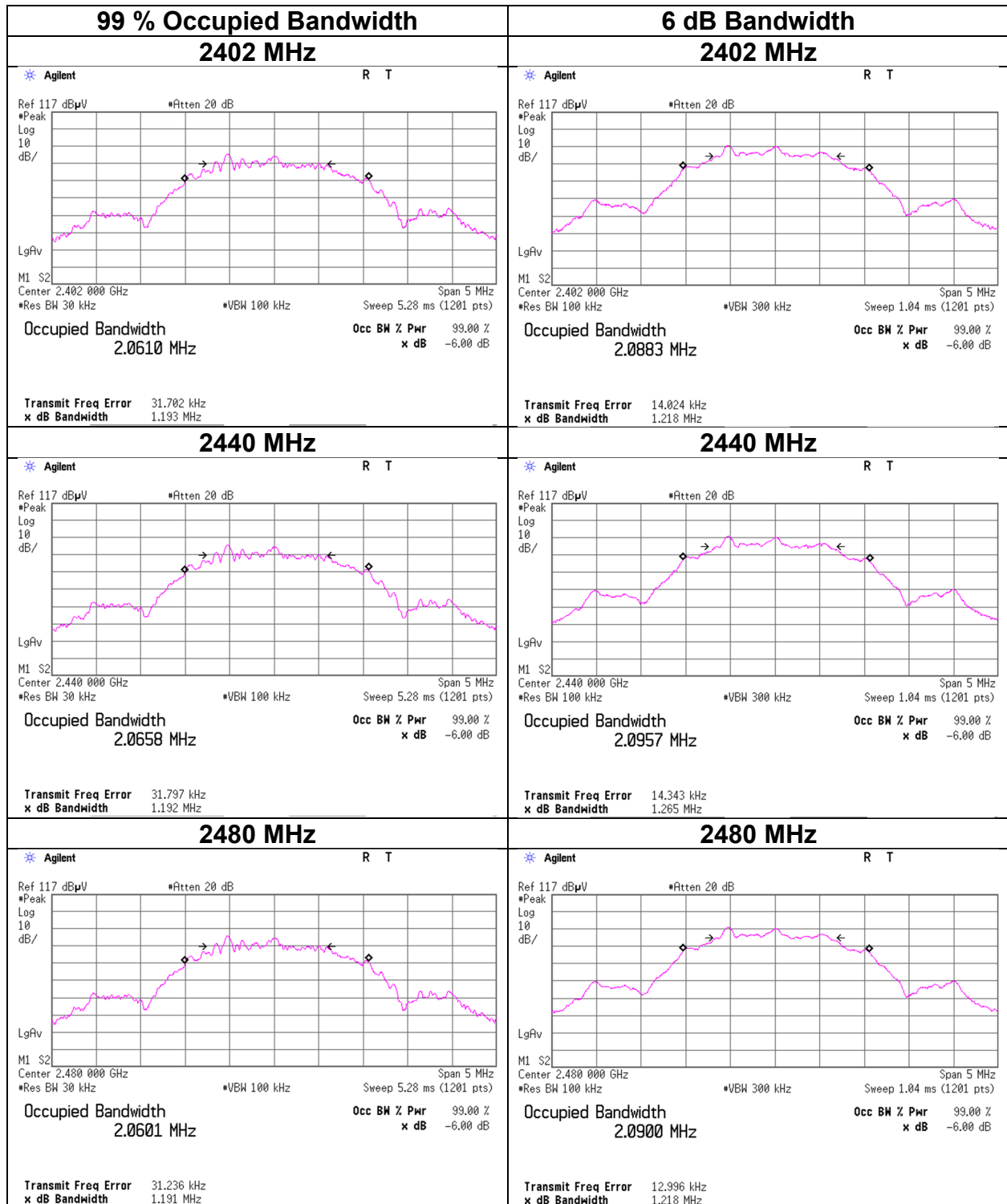
99 % Occupied Bandwidth and 6 dB Bandwidth

BT LE 1M-PHY



99 % Occupied Bandwidth and 6 dB Bandwidth

BT LE 2M-PHY



Maximum Peak Output Power

Mode	Tx, BT LE			
Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada

BT LE 1M-PHY

Maximum peak output power

				Conducted Power					e.i.r.p. for RSS-247					
Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit		Margin	Antenna Gain	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2402	-8.77	1.05	9.94	2.22	1.67	30.00	1000	27.78	-0.68	1.54	1.42	36.02	4000	34.48
2440	-8.89	1.05	9.94	2.10	1.62	30.00	1000	27.90	-0.68	1.42	1.39	36.02	4000	34.60
2480	-8.81	1.06	9.94	2.19	1.66	30.00	1000	27.81	-0.68	1.51	1.42	36.02	4000	34.51

BT LE 2M-PHY

Maximum peak output power

				Conducted Power					e.i.r.p. for RSS-247					
Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit		Margin	Antenna Gain	Result		Limit		Margin
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2402	-8.78	1.05	9.94	2.21	1.66	30.00	1000	27.79	-0.68	1.53	1.42	36.02	4000	34.49
2440	-8.90	1.05	9.94	2.09	1.62	30.00	1000	27.91	-0.68	1.41	1.38	36.02	4000	34.61
2480	-8.83	1.06	9.94	2.17	1.65	30.00	1000	27.83	-0.68	1.49	1.41	36.02	4000	34.53

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

*The equipment and cables were not used for factor 0 dB of the data sheets.

Average Output Power (Reference data for RF Exposure)

Mode	Tx, BT LE			
Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada

BT LE 1M-PHY

Average power

(*1)

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Time average)		Duty factor [dB]	Result (Burst power average)	
				[dBm]	[mW]		[dBm]	[mW]
2402	-9.17	1.05	9.94	1.82	1.52	0.00	1.82	1.52
2440	-9.24	1.05	9.94	1.75	1.50	0.00	1.75	1.50
2480	-9.16	1.06	9.94	1.84	1.53	0.00	1.84	1.53

BT LE 2M-PHY

Average power

(*1)

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Time average)		Duty factor [dB]	Result (Burst power average)	
				[dBm]	[mW]		[dBm]	[mW]
2402	-9.12	1.05	9.94	1.87	1.54	0.00	1.87	1.54
2440	-9.21	1.05	9.94	1.78	1.51	0.00	1.78	1.51
2480	-9.08	1.06	9.94	1.92	1.56	0.00	1.92	1.56

Sample Calculation:

Result (Time average) = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

Result (Burst power average) = Result (Time average) + Duty factor

*The equipment and cables were not used for factor 0 dB of the data sheets.

(*1) Power was measured with using the gate function of power meter.

It was means that the intervals during which the transmitter is off or is transmitting at reduced power level is not included in the average.

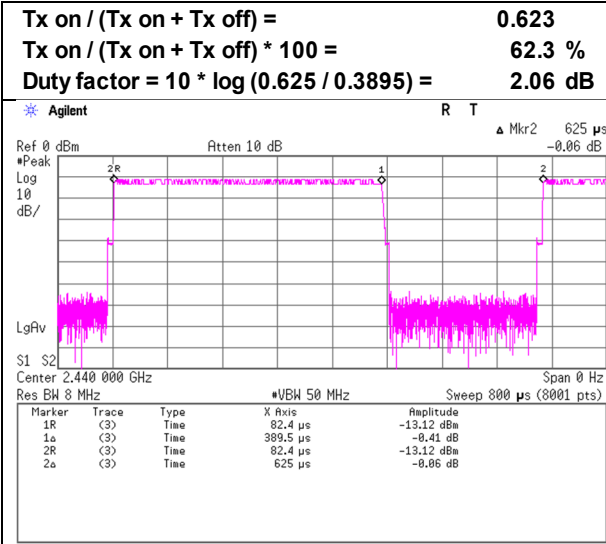
Therefore, there is no need to add duty cycle correction to the result.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

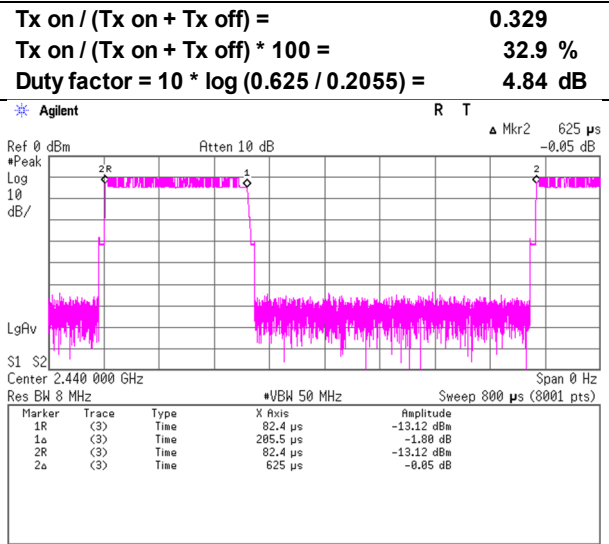
Burst rate confirmation

Mode	Tx, BT LE			
Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada

BT LE 1M-PHY



BT LE 2M-PHY



* Since the burst rate is not different between the channels, the data has been obtained on the representative channel.

Radiated Spurious Emission

Mode	Tx, BT LE 1M-PHY, 2402 MHz
------	----------------------------

Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz
June 20, 2025	WAC1	21 deg. C	52 % RH	Hiromasa Sato	Below 1 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	270.336	QP	40.60	12.91	7.43	33.61	0.00	27.33	46.0	18.6	114	96	-
Hori.	319.488	QP	44.22	14.18	7.58	33.54	0.00	32.44	46.0	13.5	100	98	-
Hori.	368.640	QP	44.98	15.07	7.73	33.43	0.00	34.35	46.0	11.6	100	95	-
Hori.	417.792	QP	38.52	16.04	7.87	33.32	0.00	29.11	46.0	16.8	100	165	-
Hori.	2390.000	PK	47.33	27.56	-28.00	-	2.28	49.17	73.9	24.7	123	222	-
Hori.	4804.000	PK	48.82	31.49	-35.33	-	2.28	47.26	73.9	26.6	151	187	-
Hori.	7206.000	PK	48.04	35.86	-34.02	-	2.28	52.16	73.9	21.7	129	226	-
Hori.	9608.000	PK	46.84	37.56	-31.46	-	2.28	55.22	73.9	18.6	199	180	-
Vert.	172.032	QP	36.79	12.72	7.34	33.67	0.00	23.18	43.5	20.3	100	342	-
Vert.	319.488	QP	37.52	14.18	7.58	33.54	0.00	25.74	46.0	20.2	176	90	-
Vert.	368.641	QP	44.93	15.07	7.73	33.43	0.00	34.30	46.0	11.7	146	85	-
Vert.	393.216	QP	38.47	15.58	7.79	33.38	0.00	28.46	46.0	17.5	124	62	-
Vert.	417.792	QP	39.95	16.04	7.87	33.32	0.00	30.54	46.0	15.4	113	175	-
Vert.	466.944	QP	34.44	16.92	8.00	33.17	0.00	26.19	46.0	19.8	103	125	-
Vert.	2390.000	PK	47.69	27.56	-28.00	-	2.28	49.53	73.9	24.3	111	244	-
Vert.	4804.000	PK	49.09	31.49	-35.33	-	2.28	47.53	73.9	26.3	106	285	-
Vert.	7206.000	PK	47.05	35.86	-34.02	-	2.28	51.17	73.9	22.7	100	238	-
Vert.	9608.000	PK	46.34	37.56	-31.46	-	2.28	54.72	73.9	19.1	218	274	-

Result = Reading + Ant.Fac. + Loss (Cable + (Attenu or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90 [m] / 3.0 [m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00 [m] / 3.0 [m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Fac. [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	36.40	27.56	-28.00	-	2.06	2.28	40.30	53.9	13.6	*1)
Hori.	4804.000	AV	38.35	31.49	-35.33	-	2.06	2.28	38.85	53.9	15.0	-
Hori.	7206.000	AV	36.18	35.86	-34.02	-	2.06	2.28	42.36	53.9	11.5	-
Hori.	9608.000	AV	35.71	37.56	-31.46	-	2.06	2.28	46.15	53.9	7.7	-
Vert.	2390.000	AV	36.54	27.56	-28.00	-	2.06	2.28	40.44	53.9	13.4	*1)
Vert.	4804.000	AV	38.73	31.49	-35.33	-	2.06	2.28	39.23	53.9	14.6	-
Vert.	7206.000	AV	35.73	35.86	-34.02	-	2.06	2.28	41.91	53.9	11.9	-
Vert.	9608.000	AV	35.74	37.56	-31.46	-	2.06	2.28	46.18	53.9	7.7	-

Result = Reading + Ant.Fac. + Loss (Cable + (Attenu or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90 [m] / 3.0 [m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00 [m] / 3.0 [m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

20 dBc Data Sheet

(RBW 100 kHz, VBW 300 kHz)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2402.000	PK	94.18	27.57	-27.99	-	2.28	96.04	-	-	Carrier
Hori.	2400.000	PK	44.21	27.57	-27.99	-	2.28	46.07	76.0	29.9	-
Vert.	2402.000	PK	96.36	27.57	-27.99	-	2.28	98.22	-	-	Carrier
Vert.	2400.000	PK	46.53	27.57	-27.99	-	2.28	48.39	78.2	29.8	-

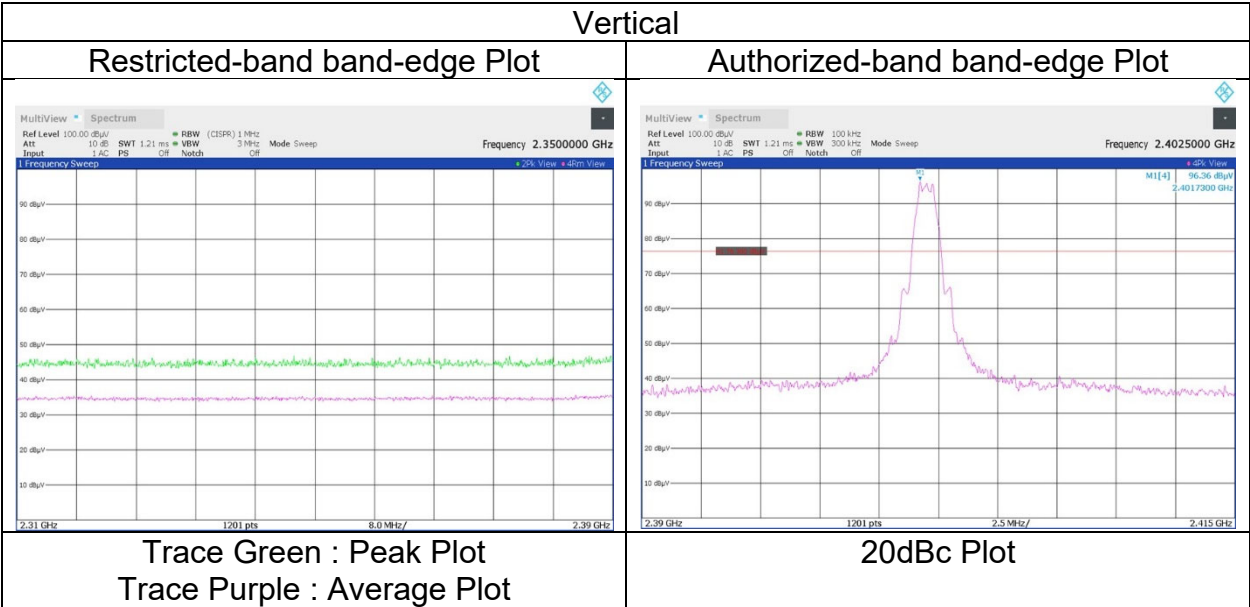
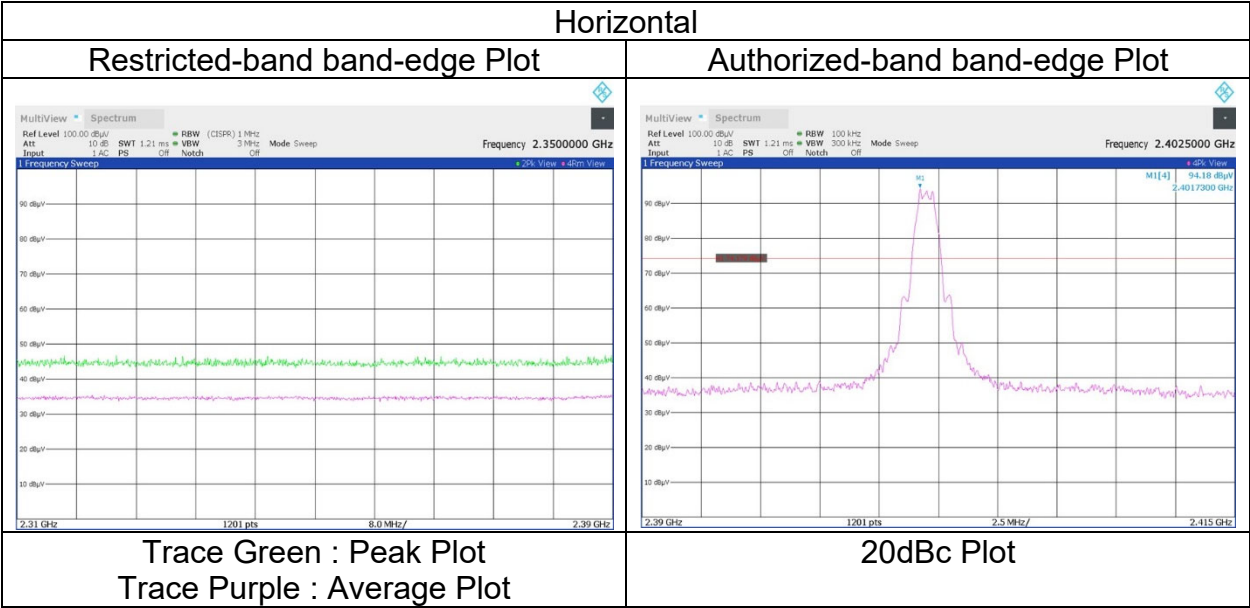
Result = Reading + Ant.Fac. + Loss (Cable + (Attenu or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90 [m] / 3.0 [m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00 [m] / 3.0 [m]) = -9.54 [dB]$

Radiated Spurious Emission
(Reference Plot for band-edge)

Mode	Tx, BT LE 1M-PHY, 2402 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz
June 20, 2025	WAC1	21 deg. C	52 % RH	Hiromasa Sato	Below 1 GHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge and authorized band edge were shown in tabular data.

Radiated Spurious Emission

Mode	Tx, BT LE 1M-PHY, 2440 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	4880.000	PK	49.29	31.91	-35.41	-	2.28	48.07	73.9	25.8	243	205	-
Hori.	7320.000	PK	46.76	36.24	-33.85	-	2.28	51.43	73.9	22.4	100	239	-
Hori.	9760.000	PK	46.56	37.52	-31.33	-	2.28	55.03	73.9	18.8	227	175	-
Vert.	4880.000	PK	49.16	31.91	-35.41	-	2.28	47.94	73.9	25.9	127	282	-
Vert.	7320.000	PK	47.00	36.24	-33.85	-	2.28	51.67	73.9	22.2	100	237	-
Vert.	9760.000	PK	46.56	37.52	-31.33	-	2.28	55.03	73.9	18.8	200	277	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Fac. [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	4880.000	AV	39.18	31.91	-35.41	-	2.06	2.28	40.02	53.9	13.8	-
Hori.	7320.000	AV	36.57	36.24	-33.85	-	2.06	2.28	43.30	53.9	10.6	-
Hori.	9760.000	AV	34.98	37.52	-31.33	-	2.06	2.28	45.51	53.9	8.3	-
Vert.	4880.000	AV	38.63	31.91	-35.41	-	2.06	2.28	39.47	53.9	14.4	-
Vert.	7320.000	AV	36.03	36.24	-33.85	-	2.06	2.28	42.76	53.9	11.1	-
Vert.	9760.000	AV	35.06	37.52	-31.33	-	2.06	2.28	45.59	53.9	8.3	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Mode	Tx, BT LE 1M-PHY, 2480 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	53.34	27.65	-27.94	-	2.28	55.33	73.9	18.5	100	219	-
Hori.	4960.000	PK	48.13	32.16	-35.50	-	2.28	47.07	73.9	26.8	160	180	-
Hori.	7440.000	PK	46.76	36.30	-33.66	-	2.28	51.68	73.9	22.2	125	238	-
Hori.	9920.000	PK	46.16	37.54	-31.18	-	2.28	54.80	73.9	19.1	198	186	-
Vert.	2483.500	PK	53.74	27.65	-27.94	-	2.28	55.73	73.9	18.1	100	256	-
Vert.	4960.000	PK	48.45	32.16	-35.50	-	2.28	47.39	73.9	26.5	152	290	-
Vert.	7440.000	PK	47.10	36.30	-33.66	-	2.28	52.02	73.9	21.8	147	283	-
Vert.	9920.000	PK	46.36	37.54	-31.18	-	2.28	55.00	73.9	18.9	150	280	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Fac. [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	37.87	27.65	-27.94	-	2.06	2.28	41.92	53.9	11.9	*1)
Hori.	4960.000	AV	37.90	32.16	-35.50	-	2.06	2.28	38.90	53.9	15.0	-
Hori.	7440.000	AV	35.95	36.30	-33.66	-	2.06	2.28	42.93	53.9	10.9	-
Hori.	9920.000	AV	35.61	37.54	-31.18	-	2.06	2.28	46.31	53.9	7.5	-
Vert.	2483.500	AV	38.30	27.65	-27.94	-	2.06	2.28	42.35	53.9	11.5	*1)
Vert.	4960.000	AV	37.99	32.16	-35.50	-	2.06	2.28	38.99	53.9	14.9	-
Vert.	7440.000	AV	35.95	36.30	-33.66	-	2.06	2.28	42.93	53.9	10.9	-
Vert.	9920.000	AV	35.32	37.54	-31.18	-	2.06	2.28	46.02	53.9	7.8	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

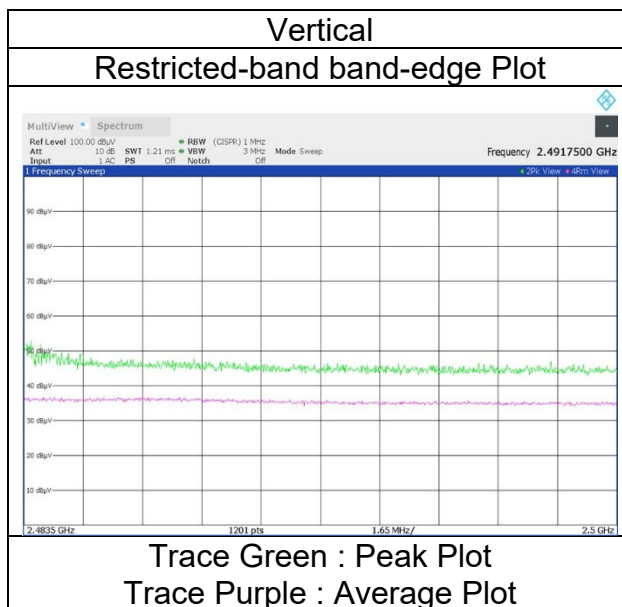
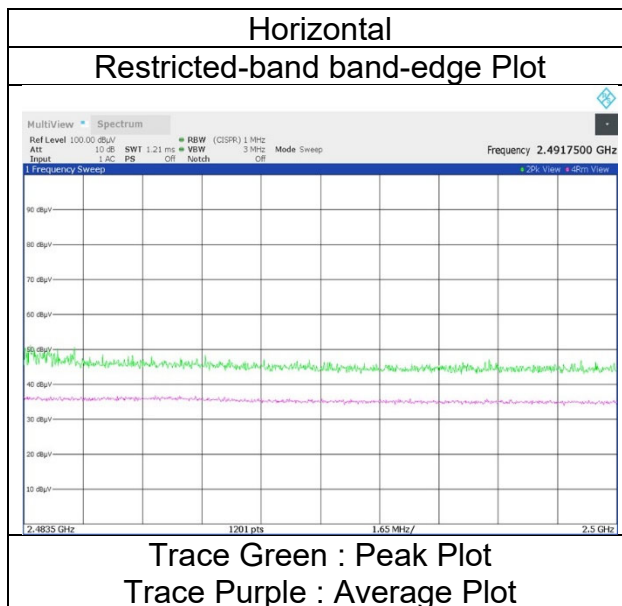
10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission (Reference Plot for band-edge)

Mode	Tx, BT LE 1M-PHY, 2480 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Mode	Tx, BT LE 2M-PHY, 2402 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2390.000	PK	47.47	27.56	-28.00	-	2.28	49.31	73.9	24.5	100	183	-
Hori.	4804.000	PK	48.32	31.49	-35.33	-	2.28	46.76	73.9	27.1	151	187	-
Hori.	7206.000	PK	46.76	35.86	-34.02	-	2.28	50.88	73.9	23.0	129	226	-
Hori.	9608.000	PK	46.57	37.56	-31.46	-	2.28	54.95	73.9	18.9	142	176	-
Vert.	2390.000	PK	47.75	27.56	-28.00	-	2.28	49.59	73.9	24.3	100	257	-
Vert.	4804.000	PK	48.15	31.49	-35.33	-	2.28	46.59	73.9	27.3	100	281	-
Vert.	7206.000	PK	46.91	35.86	-34.02	-	2.28	51.03	73.9	22.8	100	238	-
Vert.	9608.000	PK	45.86	37.56	-31.46	-	2.28	54.24	73.9	19.6	218	266	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m]/3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m]/3.0[m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Fac. [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	37.11	27.56	-28.00	-	4.84	2.28	43.79	53.9	10.1	*1)
Hori.	4804.000	AV	36.89	31.49	-35.33	-	4.84	2.28	40.17	53.9	13.7	-
Hori.	7206.000	AV	35.75	35.86	-34.02	-	4.84	2.28	44.71	53.9	9.1	-
Hori.	9608.000	AV	34.97	37.56	-31.46	-	4.84	2.28	48.19	53.9	5.7	-
Vert.	2390.000	AV	36.70	27.56	-28.00	-	4.84	2.28	43.38	53.9	10.5	*1)
Vert.	4804.000	AV	37.05	31.49	-35.33	-	4.84	2.28	40.33	53.9	13.5	-
Vert.	7206.000	AV	35.78	35.86	-34.02	-	4.84	2.28	44.74	53.9	9.1	-
Vert.	9608.000	AV	34.91	37.56	-31.46	-	4.84	2.28	48.13	53.9	5.7	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m]/3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m]/3.0[m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

20 dBc Data Sheet

(RBW 100 kHz, VBW 300 kHz)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2402.000	PK	95.27	27.57	-27.99	-	2.28	97.13	-	-	Carrier
Hori.	2400.000	PK	64.50	27.57	-27.99	-	2.28	66.36	77.1	10.7	-
Vert.	2402.000	PK	95.27	27.57	-27.99	-	2.28	97.13	-	-	Carrier
Vert.	2400.000	PK	64.58	27.57	-27.99	-	2.28	66.44	77.1	10.6	-

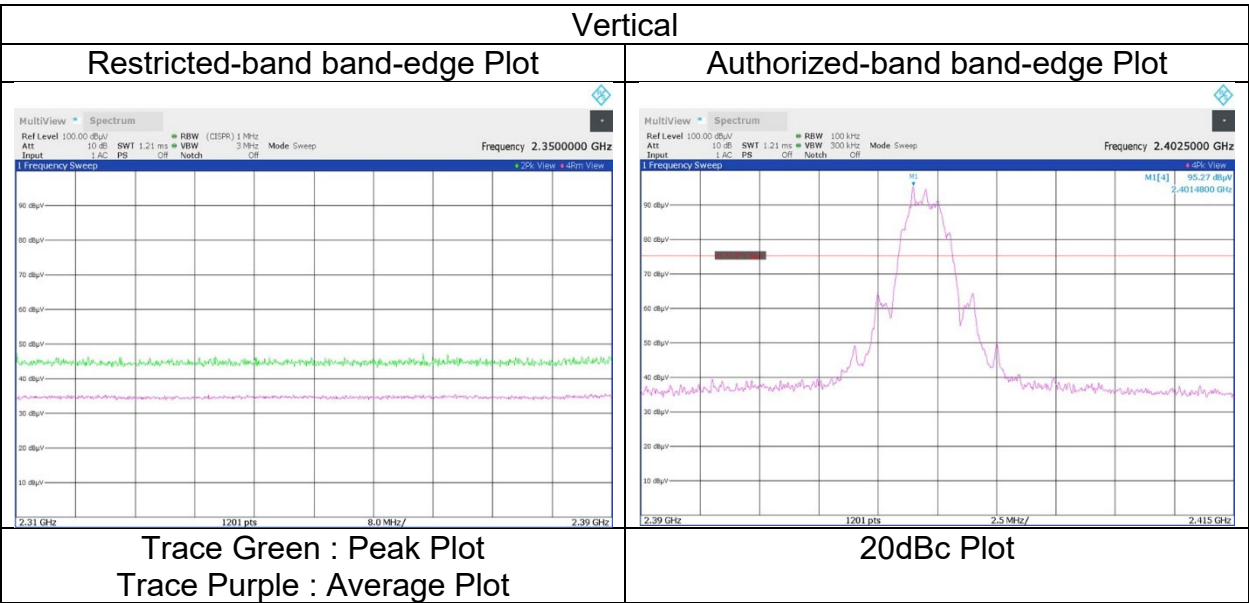
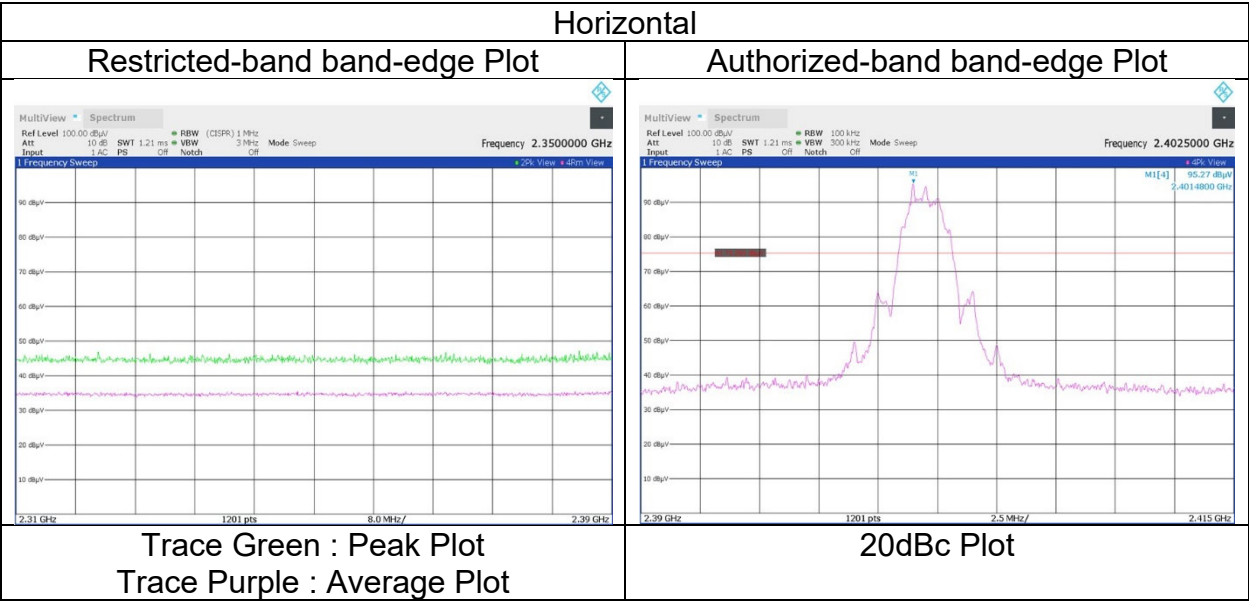
Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m]/3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m]/3.0[m]) = -9.54 [dB]$

Radiated Spurious Emission
(Reference Plot for band-edge)

Mode	Tx, BT LE 2M-PHY, 2402 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge and authorized band edge were shown in tabular data.

Radiated Spurious Emission

Mode	Tx, BT LE 2M-PHY, 2440 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Distance	Result	Limit	Margin	Height	Angle	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	Fac. [dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[deg.]	
Hori.	4880.000	PK	48.84	31.91	-35.41	-	2.28	47.62	73.9	26.2	243	205	-
Hori.	7320.000	PK	46.82	36.24	-33.85	-	2.28	51.49	73.9	22.4	100	239	-
Hori.	9760.000	PK	45.70	37.52	-31.33	-	2.28	54.17	73.9	19.7	227	175	-
Vert.	4880.000	PK	49.01	31.91	-35.41	-	2.28	47.79	73.9	26.1	127	282	-
Vert.	7320.000	PK	46.85	36.24	-33.85	-	2.28	51.52	73.9	22.3	100	237	-
Vert.	9760.000	PK	46.21	37.52	-31.33	-	2.28	54.68	73.9	19.2	191	271	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Duty	Distance	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	Fac. [dB]	Fac. [dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori.	4880.000	AV	37.24	31.91	-35.41	-	4.84	2.28	40.86	53.9	13.0	-
Hori.	7320.000	AV	35.96	36.24	-33.85	-	4.84	2.28	45.47	53.9	8.4	-
Hori.	9760.000	AV	34.85	37.52	-31.33	-	4.84	2.28	48.16	53.9	5.7	-
Vert.	4880.000	AV	37.62	31.91	-35.41	-	4.84	2.28	41.24	53.9	12.6	-
Vert.	7320.000	AV	35.74	36.24	-33.85	-	4.84	2.28	45.25	53.9	8.6	-
Vert.	9760.000	AV	34.90	37.52	-31.33	-	4.84	2.28	48.21	53.9	5.6	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m] / 3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m] / 3.0[m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Mode	Tx, BT LE 2M-PHY, 2480 MHz
------	----------------------------

Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	2483.500	PK	52.46	27.65	-27.94	-	2.28	54.45	73.9	19.4	162	219	-
Hori.	4960.000	PK	48.02	32.16	-35.50	-	2.28	46.96	73.9	26.9	160	180	-
Hori.	7440.000	PK	46.85	36.30	-33.66	-	2.28	51.77	73.9	22.1	125	170	-
Hori.	9920.000	PK	45.84	37.54	-31.18	-	2.28	54.48	73.9	19.4	133	184	-
Vert.	2483.500	PK	53.06	27.65	-27.94	-	2.28	55.05	73.9	18.8	100	245	-
Vert.	4960.000	PK	47.75	32.16	-35.50	-	2.28	46.69	73.9	27.2	152	290	-
Vert.	7440.000	PK	46.99	36.30	-33.66	-	2.28	51.91	73.9	21.9	147	283	-
Vert.	9920.000	PK	45.99	37.54	-31.18	-	2.28	54.63	73.9	19.2	150	280	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Distance Fac.

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

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m]/3.0[m]) = 2.28 [dB]$

10 GHz to 40 GHz : $20\log(1.00[m]/3.0[m]) = -9.54 [dB]$

Average measurement value with Duty Factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Fac. [dB]	Distance Fac. [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	38.61	27.65	-27.94	-	4.84	2.28	45.44	53.9	8.4	*1)
Hori.	4960.000	AV	36.57	32.16	-35.50	-	4.84	2.28	40.35	53.9	13.5	-
Hori.	7440.000	AV	35.66	36.30	-33.66	-	4.84	2.28	45.42	53.9	8.4	-
Hori.	9920.000	AV	34.68	37.54	-31.18	-	4.84	2.28	48.16	53.9	5.7	-
Vert.	2483.500	AV	39.20	27.65	-27.94	-	4.84	2.28	46.03	53.9	7.8	*1)
Vert.	4960.000	AV	36.58	32.16	-35.50	-	4.84	2.28	40.36	53.9	13.5	-
Vert.	7440.000	AV	35.73	36.30	-33.66	-	4.84	2.28	45.49	53.9	8.4	-
Vert.	9920.000	AV	34.69	37.54	-31.18	-	4.84	2.28	48.17	53.9	5.7	-

Result = Reading + Ant.Fac. + Loss (Cable + (Atten or Filter)(below 18 GHz) - Gain(Amp) (1 GHz to 18 GHz)) - Gain(Amp) (only below 1 GHz & above 18 GHz) + Duty Fac. + Distance Fac.

Distance Fac. : 1 GHz to 10 GHz : $20\log(3.90[m]/3.0[m]) = 2.28 [dB]$

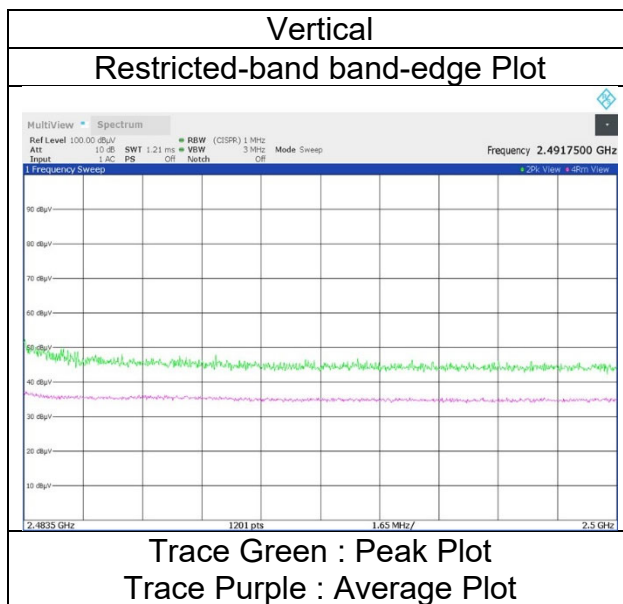
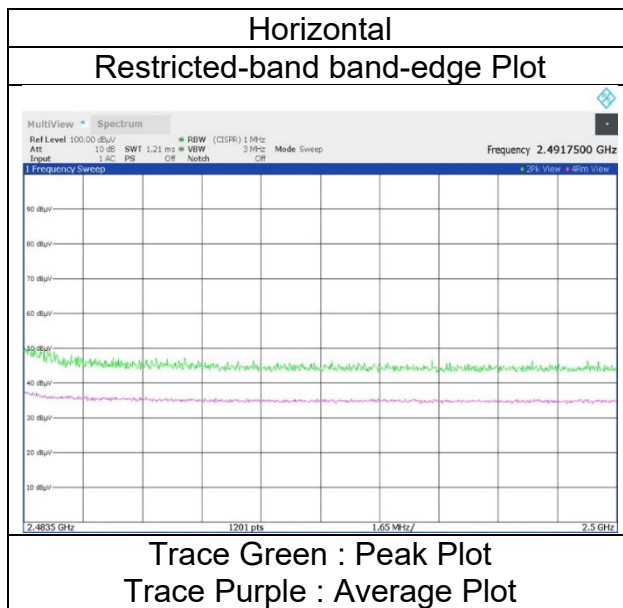
10 GHz to 40 GHz : $20\log(1.00[m]/3.0[m]) = -9.54 [dB]$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission (Reference Plot for band-edge)

Mode	Tx, BT LE 2M-PHY, 2480 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz

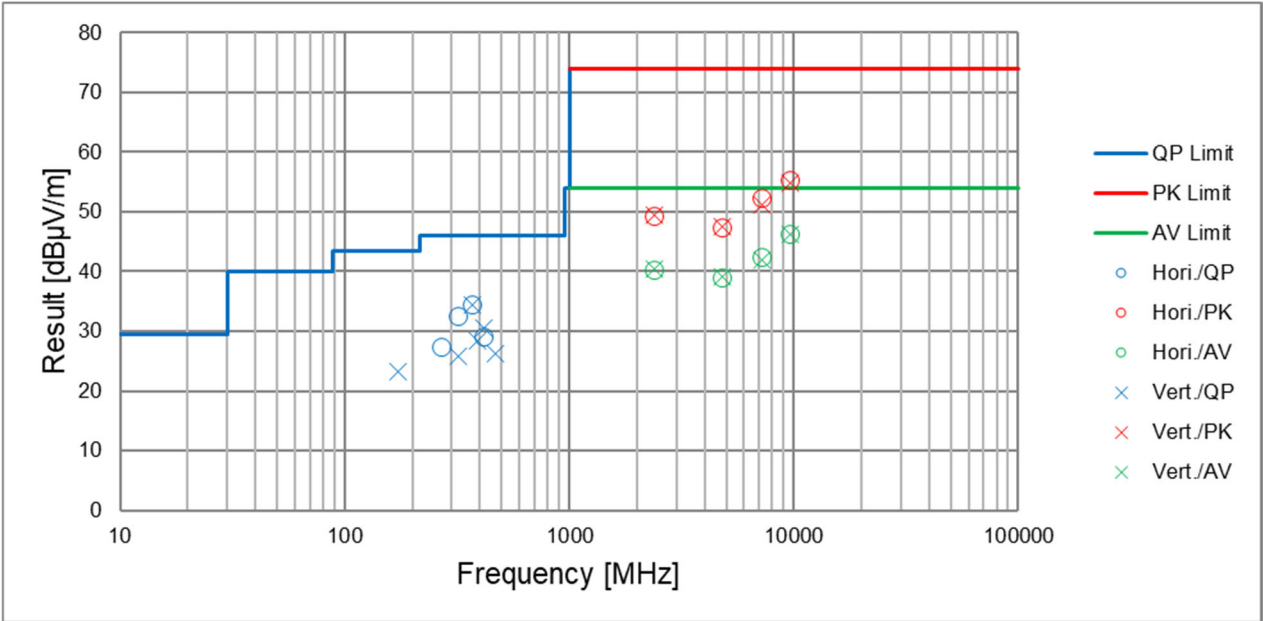


* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

(Plot data, Worst case mode for Maximum Peak Output Power)

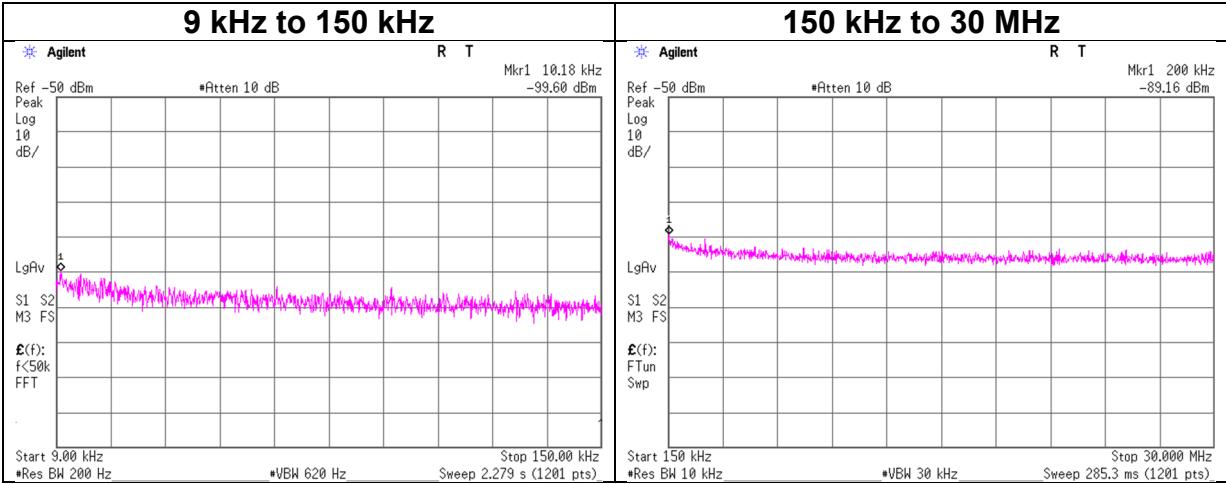
Mode	Tx, BT LE 1M-PHY, 2402 MHz				
Date	Test site	Temperature	Humidity	Engineer	Measurement Range
June 16, 2025	WAC1	23 deg. C	70 % RH	Takahiro Suzuki	1 GHz to 2.8 GHz
June 17, 2025	WAC1	25 deg. C	65 % RH	Makoto Hosaka	2.8 GHz to 10 GHz
June 18, 2025	WAC1	24 deg. C	61 % RH	Kouki Yamada	Above 10 GHz
June 20, 2025	WAC1	21 deg. C	52 % RH	Hiromasa Sato	Below 1 GHz



*These plots data contain sufficient number to show the trend of characteristic features for EUT.

Conducted Spurious Emission

Mode	Tx, BT LE 1M-PHY, 2402 MHz			
Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada



Frequency	Reading	Cable Loss	Attenuator Loss	Antenna Gain *	N	EIRP	Distance	Ground bounce	E	Limit	Margin	Remark
[kHz]	[dBm]	[dB]	[dB]	[dBi]	(Number of Output)	[dBm]	[m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
10.18	-99.6	0.4	9.9	2.0	1.0	-87.3	300	6.0	-26.1	47.4	73.5	-
200.00	-89.2	0.4	9.9	2.0	1.0	-76.9	300	6.0	-15.6	21.5	37.1	-

$E \text{ [dBuV/m]} = \text{EIRP [dBm]} - 20 \log (\text{Distance [m]}) + \text{Ground bounce [dB]} + 104.8 \text{ [dBuV/m]}$

$\text{EIRP [dBm]} = \text{Reading [dBm]} + \text{Cable loss [dB]} + \text{Attenuator Loss [dB]} + \text{Antenna gain [dBi]} + 10 * \log (N)$

N: Number of output

*2.0 dBi was applied to the test result based on ANSI C63.10 since antenna gain was less than 2.0 dBi.

Power Density

Mode	Tx, BT LE			
------	-----------	--	--	--

Date	Test site	Temperature	Humidity	Engineer
June 12, 2025	MR2	25 deg. C	57 % RH	Toshinori Yamada

BT LE 1M-PHY

Frequency [MHz]	Measured Frequency [MHz]	Reading [dBm/3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm/3 kHz]	Limit [dBm/3 kHz]	Margin [dB]
2402	2401.984	-24.67	1.05	9.94	-13.68	8.00	21.68
2440	2439.984	-24.63	1.05	9.94	-13.64	8.00	21.64
2480	2479.968	-24.49	1.06	9.94	-13.49	8.00	21.49

BT LE 2M-PHY

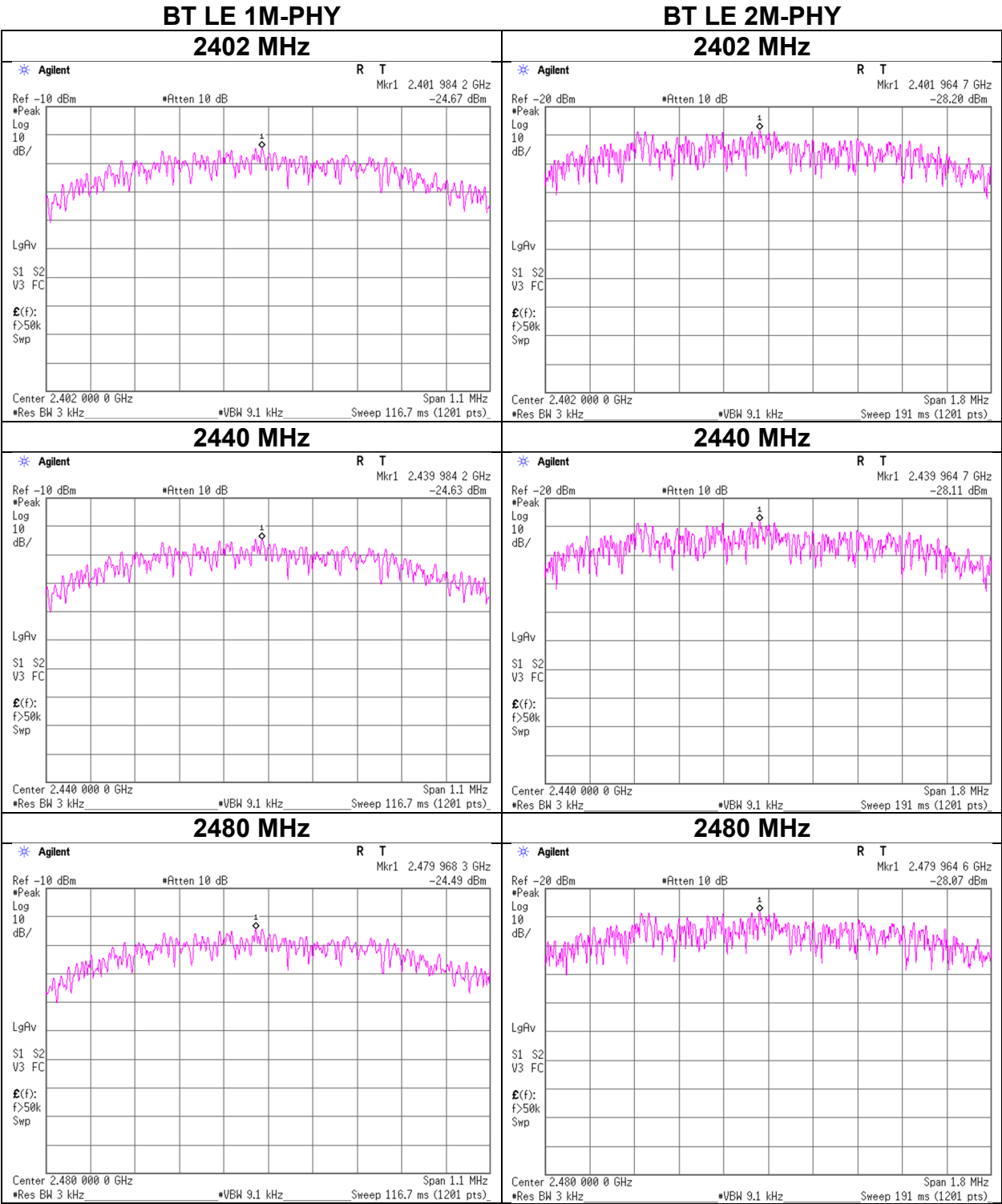
Frequency [MHz]	Measured Frequency [MHz]	Reading [dBm/3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm/3 kHz]	Limit [dBm/3 kHz]	Margin [dB]
2402	2401.965	-28.20	1.05	9.94	-17.21	8.00	25.21
2440	2439.965	-28.11	1.05	9.94	-17.12	8.00	25.12
2480	2479.965	-28.07	1.06	9.94	-17.07	8.00	25.07

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density



APPENDIX 2: Test Instruments

Test Equipment(1/2)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	204928	Attenuator	Weinschel Corp.	54A-10	109973	2025/02/18	12
AT	239653	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	2001221/2	2024/08/20	12
AT	235640	DIGITAL MULTIMETER	HIOKI E. E. CORPORATION	DT4261	230313157	2025/05/22	12
AT	146247	Power Meter	Keysight Technologies Inc	8990B	MY51000272	2025/05/20	12
AT	146310	Power sensor	Keysight Technologies Inc	N1923A	MY5326009	2025/05/20	12
AT	145801	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250152	2024/08/29	12
AT	146362	Thermo-Hygrometer	CUSTOM. Inc	CTH-190	K-07	2024/08/11	12
AT	259715	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2025/04/11	12
CE	248304	Attenuator	JFW	50HFFA-006-2/18N	-	2025/05/14	12
CE	145036	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	2025/04/05	12
CE	146210	Digital Hitester	HIOKI E. E. CORPORATION	3805-50	80997823	2024/09/24	12
CE	145539	LISN	Rohde & Schwarz	ENV216	100512	2025/02/01	12
CE	146432	Tape Measure	TAJIMA	GL19-55	-	-	-
CE	213530	Test Receiver	Rohde & Schwarz	ESW44	103068	2025/02/12	12
CE	259711	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2025/04/11	12
CE,RE	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	Ver 3.1.0546	-	-
RE	199784	Attenuator	JFW	50HF-006N	-	2025/06/04	12
RE	239786	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	VHBB 9124+BBA9106	01895	2024/08/10	12
RE	236708	Coaxial Cable	Hayashi-Repic co., Ltd.	NMS079B-GL310C-SMS117B-2m	47256-02-03	2025/05/27	12
RE	236710	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-7.0m	47256-03-01	2025/05/27	12
RE	236723	Coaxial Cable	Hayashi-Repic co., Ltd.	SF106(HUBER+SUHNER)/LMR400UF/GL310C/GL310C	2000429/47753-1/47256-01-03/47256-01-01	2025/05/12	12
RE	239643	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	2306S021	2024/08/20	12
RE	243209	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-NFS13-1.0m	49190-01-01	2024/12/05	12
RE	243687	Coaxial Cable	Hayashi-Repic co., Ltd.	NMS079B-GL310C-NMS079B-6.0m	49373-01-01	2024/12/05	12
RE	243689	Coaxial Cable	Huber+Suhner	GL310C(Hayashi-Repic)/SF106/SF106	49373-01-01/2000781/2001160	2024/12/17	12

Test Equipment(2/2)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	235639	DIGITAL MULTIMETER	HIOKI E. E. CORPORATION	DT4261	230313156	2025/05/22	12
RE	236585	Horn Antenna	AINFO Inc.	LB-42-25-C2-KF	2020087000103	2025/04/01	12
RE	236686	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	787	2025/04/01	12
RE	236769	Horn Antenna	AINFO Inc.	LB-8180-NF	2030013000111	2025/04/01	12
RE	145527	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	193	2025/03/18	12
RE	144878	Pre Amplifier	Hewlett Packard	8449B	3008A01268	2025/04/01	12
RE	236966	Pre Amplifier	TSJ (Techno Science Japan)	MLA-9K01-L01	23050009	2025/02/19	12
RE	237718	Pre Amplifier	TSJ (Techno Science Japan)	MLA-18265-J03	23060016	2025/06/19	12
RE	237784	RF RELAY MATRIX with preamplifier	TSJ (Techno Science Japan)	RFM-E221261R	07795	2024/11/12	12
RE	236212	Semi-Anechoic Chamber	TDK	SWAC-01(NSA)	1	2025/05/12	12
RE	236616	Semi-Anechoic Chamber	TDK	SWAC-01(SVSWR)	1	2025/06/12	12
RE	207280	Tape Measure	ASKUL	-	-	-	-
RE	235267	Test Receiver	Rohde & Schwarz	ESW44	103018	2025/03/18	12
RE	235735	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2025/04/16	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:

AT: Antenna Terminal Conducted test

CE: Conducted Emission

RE: Radiated Emission