



RF MEASUREMENT REPORT

FCC ID: 2BH7FEAP653URV2
Applicant: TP-Link Systems Inc.
Product: AX3000 Ceiling Mount Wi-Fi 6 Access Point
Model No.: EAP653 UR
Brand Name: tp-link
FCC Classification: Digital Transmission System (DTS)
FCC Rule Part(s): Part 15 Subpart C (Section 15.247)
Result: Complies
Received Date: 2025-12-17
Test Date: 2025-12-19 ~ 2026-04-24

Reviewed By:

Yuri Li

Yuri Li

Approved By:

Robin Wu

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Testing was performed in accordance with the applicable measurement procedures. The test results reported herein apply only to the specific item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
R25S1037125-U201	V01	Initial Report	2026-05-29	Valid

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1. General Information

1.1. Applicant

TP-Link Systems Inc.

10 Mauchly, Irvine, CA 92618

1.2. Manufacturer

TP-Link Systems Inc.

10 Mauchly, Irvine, CA 92618

1.3. Testing Facility

☒	Test Site - MRT Suzhou Laboratory	
	Laboratory Location (Suzhou - Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	Laboratory Location (Suzhou - SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	Laboratory Location (Suzhou - Wujiang)	
	Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China	
☐	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
	Test Site - MRT Shenzhen Laboratory	
	Laboratory Location (Shenzhen)	
☐	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	
	FCC: CN1284	ISED: CN0105
	Test Site - MRT Taiwan Laboratory	
☐	Laboratory Location (Taiwan)	
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
	Laboratory Accreditations	
	TAF: 3261	
	FCC: 291082, TW3261	ISED: TW3261

1.4. Product Information

Product Name	AX3000 Ceiling Mount Wi-Fi 6 Access Point
Model No.	EAP653 UR
EUT Identification No.	20251217Sample#03 (Conducted) 20251217Sample#04 (Radiated)
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Bluetooth Specification	BLE 1 Mbps
Antenna Information	Refer to section 1.5
Working Voltage	By Adapter
Operating Environment	Indoor Use
Accessory(ies)	
Adapter	Model: T120150-2B1 Input: 100 - 240 V ~ 50/60 Hz 0.6 A Output: 12 V=1.5 A
Note: The information of the EUT (Equipment Under Test) was provided by the manufacturer. The accuracy, completeness, and validity of the information are solely the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Frequency Range	2400 ~ 2483.5 MHz
Channel Number	40
Type of Modulation	GFSK
Data Rate	1 Mbps
Antenna Type	Dipole Antenna
Antenna Gain	3.78 dBi

1.6. Working Frequencies

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz
03	2408 MHz	04	2410 MHz	05	2412 MHz
06	2414 MHz	07	2416 MHz	08	2418 MHz
09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz
15	2432 MHz	16	2434 MHz	17	2436 MHz
18	2438 MHz	19	2440 MHz	20	2442 MHz
21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz
27	2456 MHz	28	2458 MHz	29	2460 MHz
30	2462 MHz	31	2464 MHz	32	2466 MHz
33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz
39	2480 MHz	--	--	--	--

2. Test Configuration

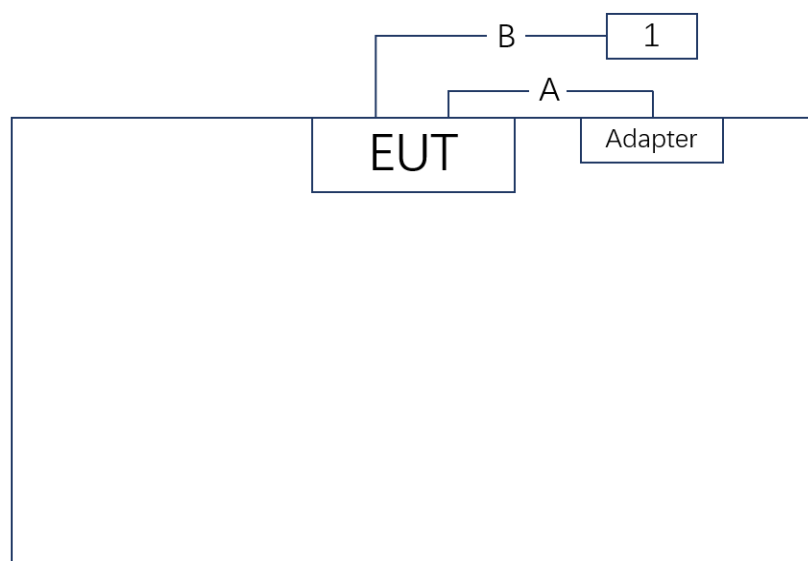
2.1. Test Mode

Mode 1: Transmit by BLE-1 Mbps

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10-2020 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.

Connection Diagram – Radiated Emissions Testing & AC Conducted Emissions Testing



Cable Type		Cable Description	Length
A	Power Cable	Non shielded	> 1 m
B	LAN Cable	Non shielded	> 10 m
Product		Manufacturer	Model No.
1	Notebook	ThinkPad	Gen 5 E14

2.3. Test Software

The test utility software used during testing was “IPOP”, and commands were provided by manufacturer.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.247
- KDB 558074 D01 v05r02
- ANSI C63.10-2020

- ANSI C63.10-2020/Cor1-2023
- ANSI C63.10a-2024

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35 °C
Relative Humidity	20 ~75%RH

3. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the device is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2026-12-03	SIP-AC3
Signal Analyzer	Keysight	N9010B	MRTSUE06559	1 year	2026-04-26	SIP-AC3
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2026-09-29	SIP-AC3
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2026-06-20	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2026-10-16	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2026-01-04 2027-01-03	SIP-AC3
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06646	1 year	2026-07-03	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2026-12-15	SIP-AC3
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07075	1 year	2026-11-18	SIP-AC3
USB Power Sensor	Keysight	U2021XA	MRTSUE06596	1 year	2026-07-14	SIP-TR1
Signal Generator	Keysight	N5182B	MRTSUE06605	1 year	2026-08-31	SIP-TR1
Signal Analyzer	Keysight	N9010B	MRTSUE07036	1 year	2026-01-20 2027-01-17	SIP-TR1
Thermohygrometer	testo	608-H1	MRTSUE11022	1 year	2026-10-16	SIP-TR1
RF Cable	UCwave	UCE500	MRTSUE07403	1 year	2026-09-14	SIP-TR1
Attenuator	MVE	MVE2213	MRTSUE11111	1 year	2026-07-31	SIP-TR1
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2026-04-29	SIP-SR2
EMI Test Receiver	R&S	ESR3	MRTSUE06612	1 year	2026-04-29	SIP-SR2
Four-Line V-Network	R&S	ENV432	MRTSUE06614	1 year	2026-09-28	SIP-SR2
Thermohygrometer	testo	608-H1	MRTSUE06621	1 year	2026-10-08	SIP-SR2
Shielding Room	MIX-BEP	SIP-SR2	MRTSUE06949	5 years	2029-10-13	SIP-SR2

Software	Version	Function
e3	230711	RE & CE
Controller_MF 7802BS	1.02	RE Antenna & Turntable
Agilent Power Analyzer/Agilent Power Panel	V R03.09.00	Power

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2.

(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement	
The maximum measurement uncertainty is evaluated as:	
9 kHz ~ 150 kHz: 3.59 dB	
150 kHz ~ 30 MHz: 3.20 dB	
Radiated Emission Measurement	
The maximum measurement uncertainty is evaluated as:	
Coaxial:	9 kHz ~ 30 MHz: 2.56 dB
Coplanar:	9 kHz ~ 30 MHz: 2.55 dB
Horizontal:	30 MHz ~ 200 MHz: 3.48 dB
	200 MHz ~ 1 GHz: 4.17 dB
	1 GHz ~ 40 GHz: 5.01 dB
Vertical:	30 MHz ~ 200 MHz: 4.09 dB
	200 MHz ~ 1 GHz: 5.30 dB
	1 GHz ~ 40 GHz: 4.85 dB
Spurious Emissions, Conducted	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.9 dB	
Output Power	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 1.4 dB	
Power Spectrum Density	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.9 dB	
Occupied Bandwidth	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.6%	

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.247(a)(2)	6 dB Bandwidth	Conducted	Pass
15.247(b)(3)	Output Power		Pass
15.247(e)	Power Spectral Density		Pass
15.247(d)	Band Edge / Out-of-Band Emissions		Pass
15.205 15.209	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150 kHz - 30 MHz	Line Conducted	Pass

Notes:

1. The analyzer plots shown in this section were captured using a correction table to account for cable and attenuator losses in the system connecting the EUT to the analyzer across relevant frequencies.
2. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

6.2. 6 dB Bandwidth Measurement

6.2.1. Test Limit

The minimum 6 dB bandwidth shall be at least 500 kHz.

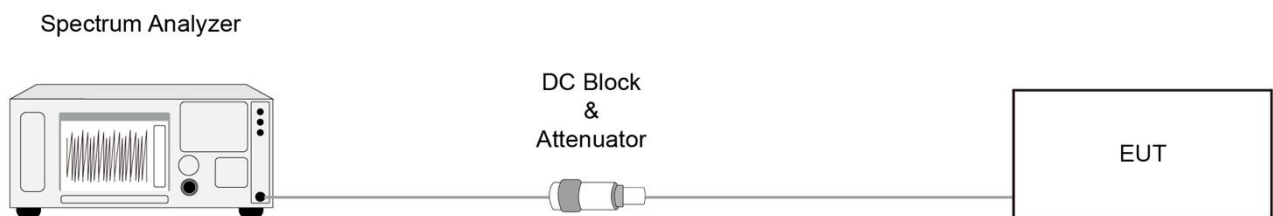
6.2.2. Test Procedure

ANSI C63.10-2020 - Section 11.8

6.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6 dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 6$. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1% to 5% of the OBW, but not less than 100 kHz
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Output Power Measurement

6.3.1. Test Limit

The maximum output power shall be less 1 Watt (30 dBm).

The conducted output power limit specified in paragraph FCC Part 15.247(b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs FCC Part 15.247(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.3.2. Test Procedure

ANSI C63.10-2020 - Section 11.9.1.2

ANSI C63.10-2020 - Section 11.9.2.3.2

6.3.3. Test Setting

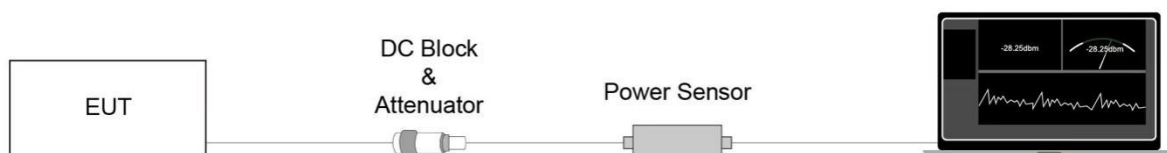
Method PKPM1 (Peak Power Measurement of Signals with DTS BW $\leq$ 50 MHz)

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50 MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50 MHz.

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Power Spectral Density Measurement

6.4.1. Test Limit

The maximum permissible power spectral density is 8 dBm in any 3 kHz band.

The same method of determining the conducted output power shall be used to determine the power spectral density.

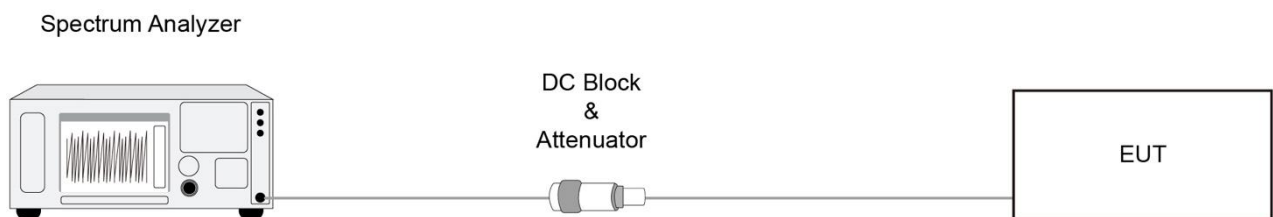
6.4.2. Test Procedure

ANSI C63.10-2020 Section 11.10.2

6.4.3. Test Setting

1. Analyzer was set to the center frequency of the DTS channel under investigation
2. Span = 1.5 times the DTS channel bandwidth
3. RBW = 3 kHz
4. VBW = 10 kHz
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Trace was allowed to stabilize

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. Conducted Band Edge and Out-of-Band Emissions Measurement

6.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20 dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

6.5.2. Test Procedure

ANSI C63.10-2020 - Section 11.11

6.5.3. Test Setting

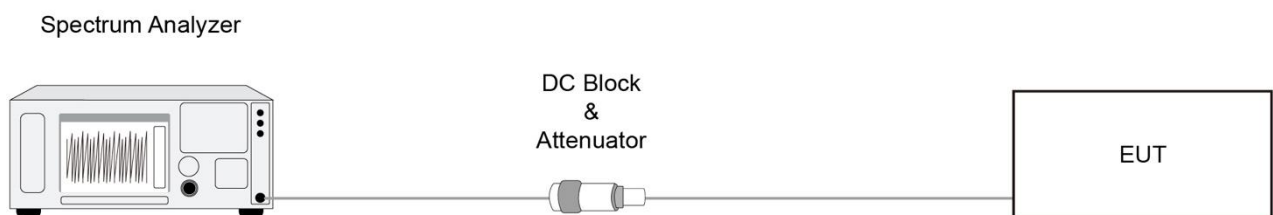
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW $\geq 3 \times$ RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100 kHz
3. VBW = 300 kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

6.5.4. Test Setup



6.5.5. Test Result

Refer to Appendix A.5.

6.6. Radiated Spurious Emission Measurement

6.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.6.2. Test Procedure

ANSI C63.10-2020 - Section 11.11 & 11.12

ANSI C63.10-2020 - Section 6.3 (General Requirements)

ANSI C63.10-2020 - Section 6.4 (Standard test method below 30 MHz)

ANSI C63.10-2020 - Section 6.5 (Standard test method above 30 MHz to 1 GHz)

ANSI C63.10-2020 - Section 6.6 (Standard test method above 1 GHz)

6.6.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Quasi-Peak Measurements below 1 GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1 MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1 GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW = 3 MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

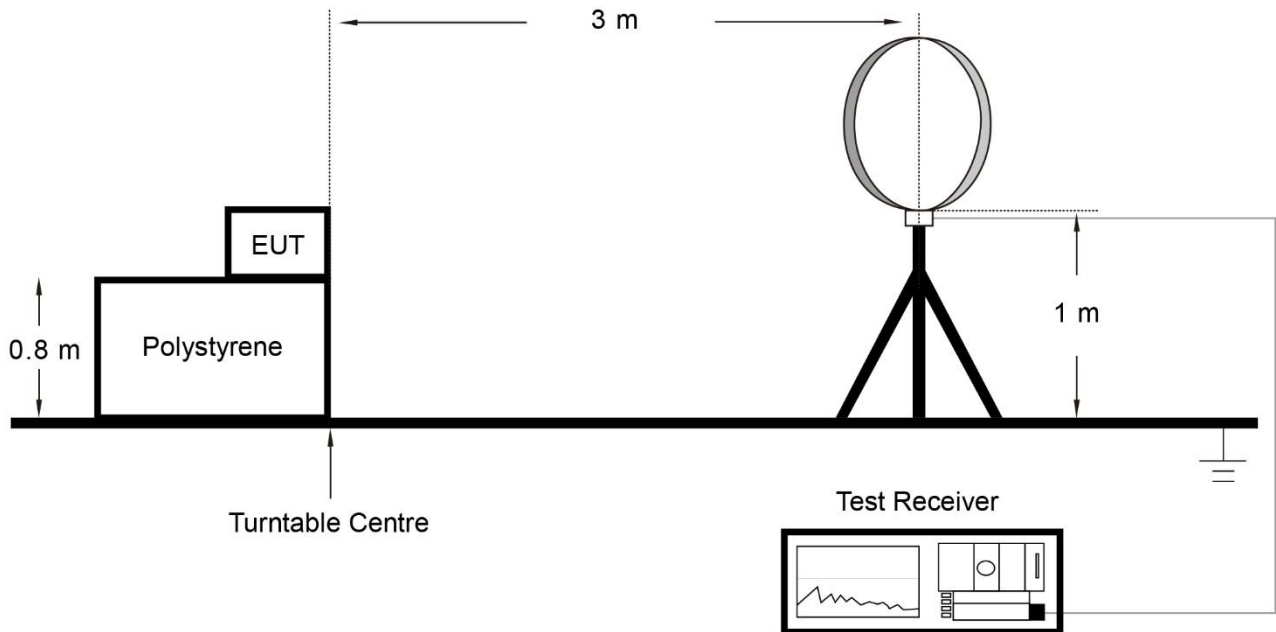
Average Measurements above 1 GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz

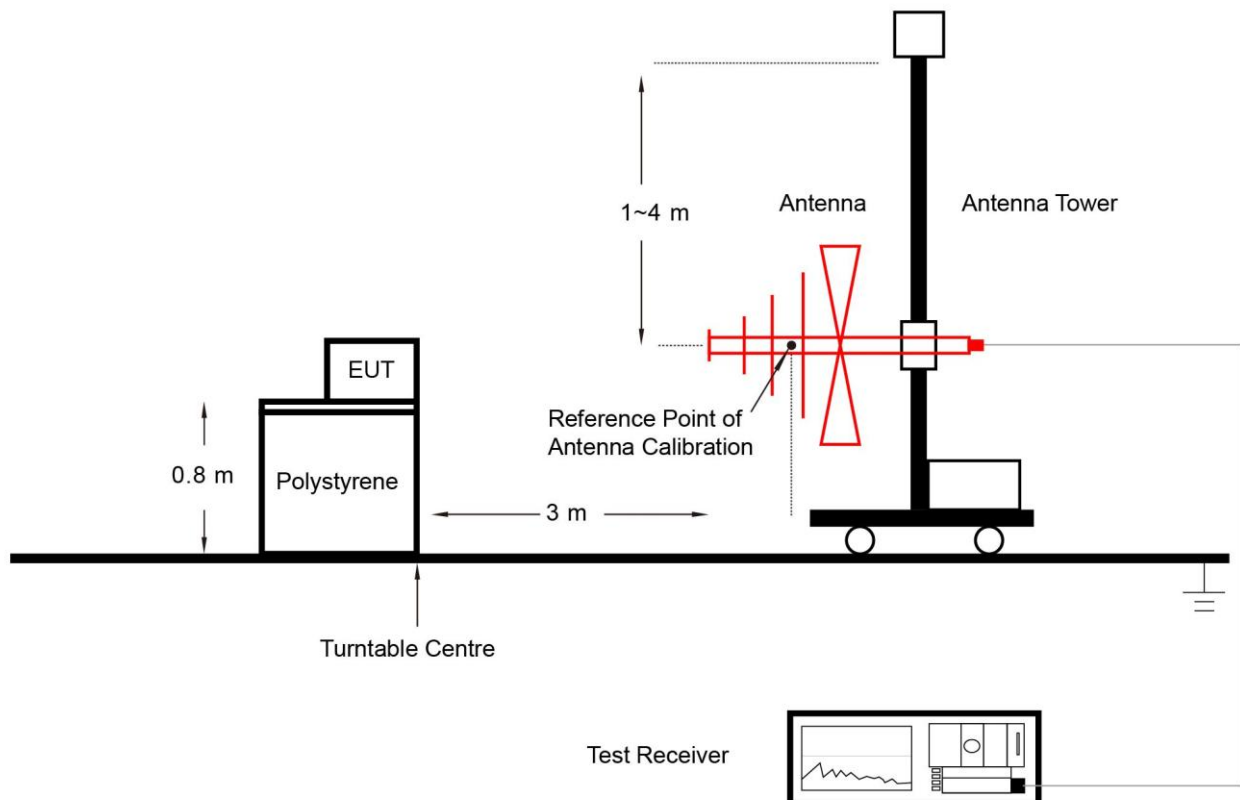
If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

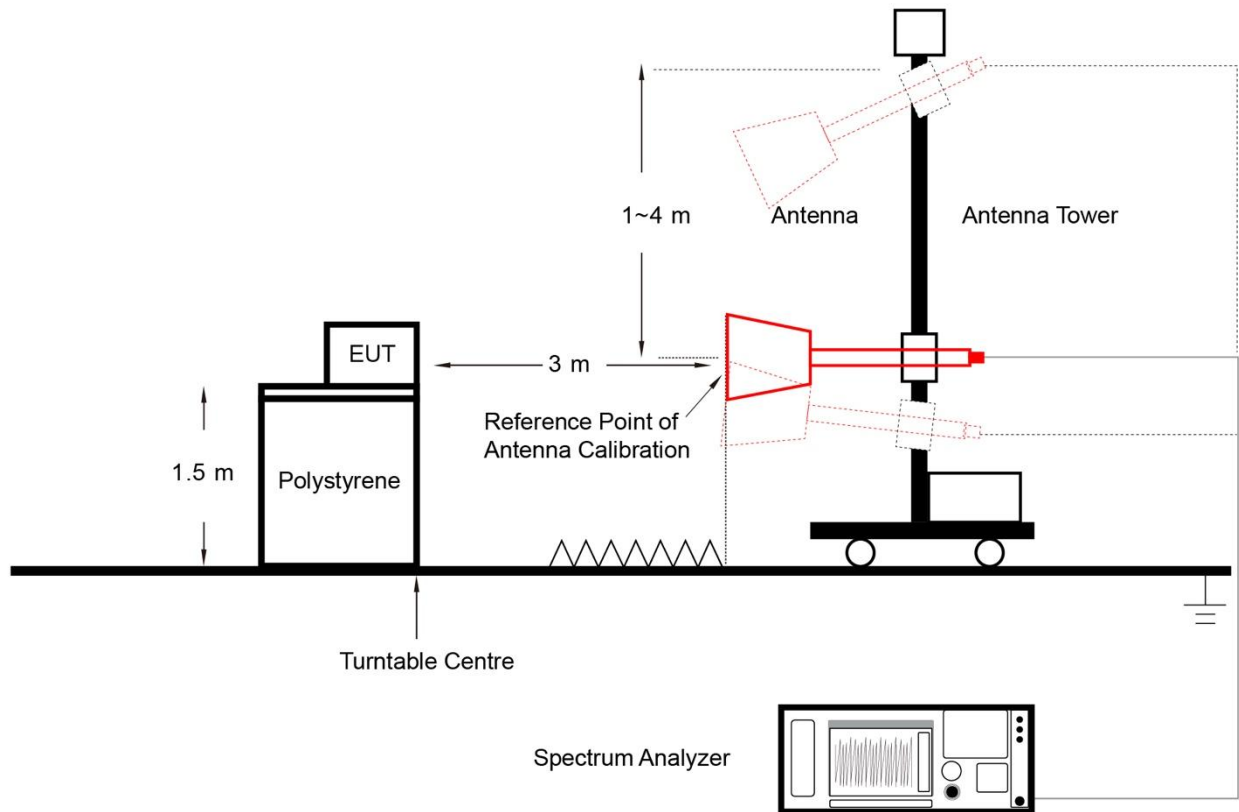
6.6.4. Test Setup

Below 30 MHz Test Setup:



Below 1 GHz Test Setup:



Above 1 GHz Test Setup:**6.6.5. Test Result**

Refer to Appendix A.6.

6.7. Radiated Restricted Band Edge Measurement

6.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure

ANSI C63.10-2020 - Section 6.3 & 6.6 & 11.12

6.7.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW = 3 MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

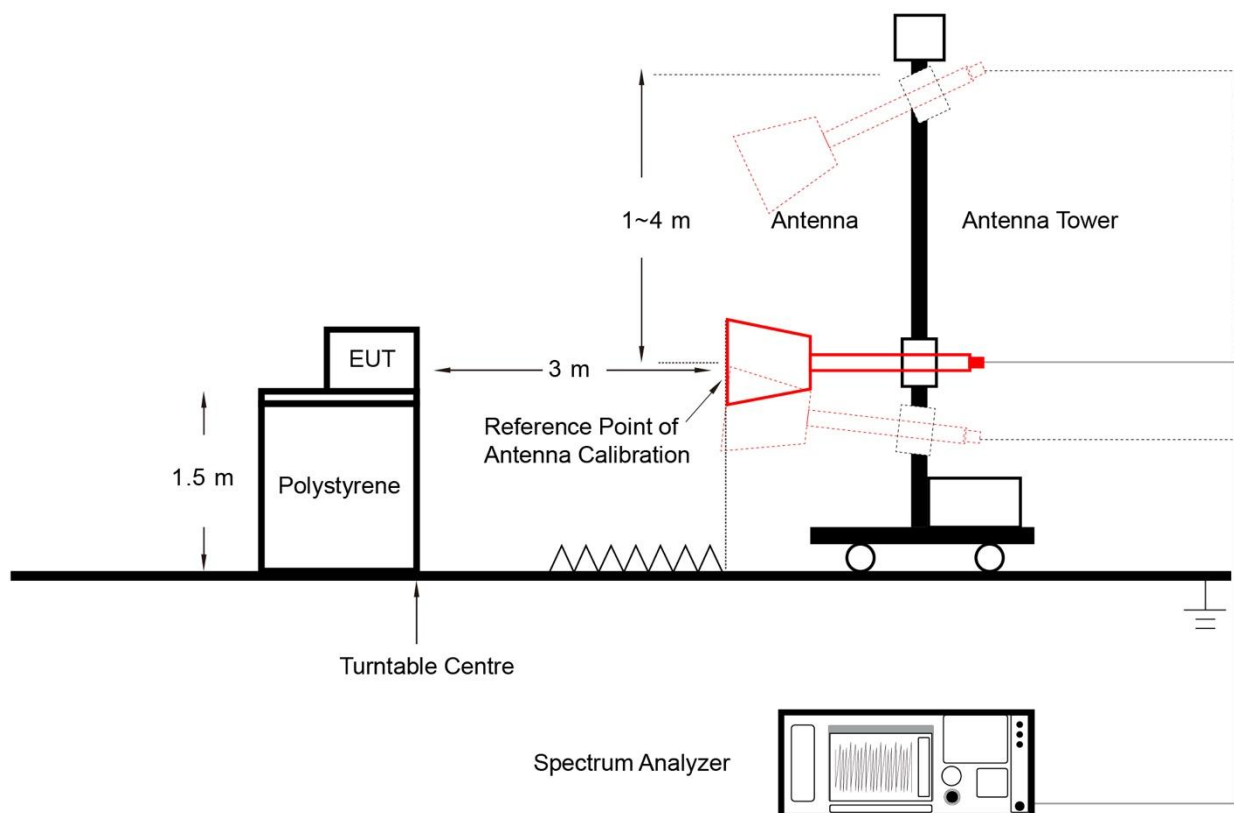
Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.

If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.

4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.7.4. Test Setup



6.7.5. Test Result

Refer to Appendix A.7.

6.8. AC Conducted Emissions Measurement

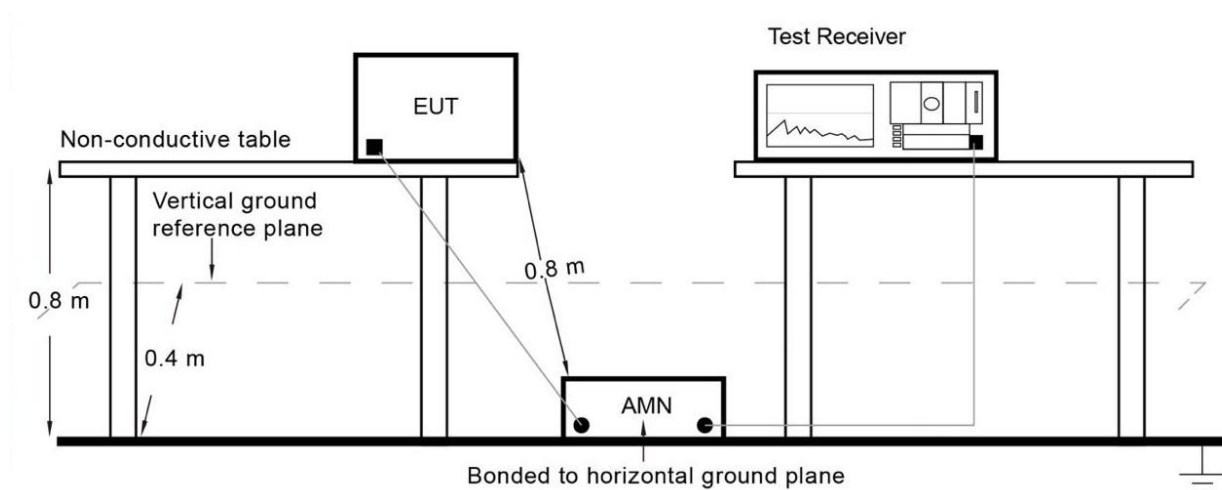
6.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

6.8.2. Test Setup



6.8.3. Test Result

Refer to Appendix A.8.

Appendix A - Test Result

A.1 Duty Cycle Test Result

Test Site	SIP-TR1	Test Engineer	Sean Ouyang
Test Date	2025-12-25		

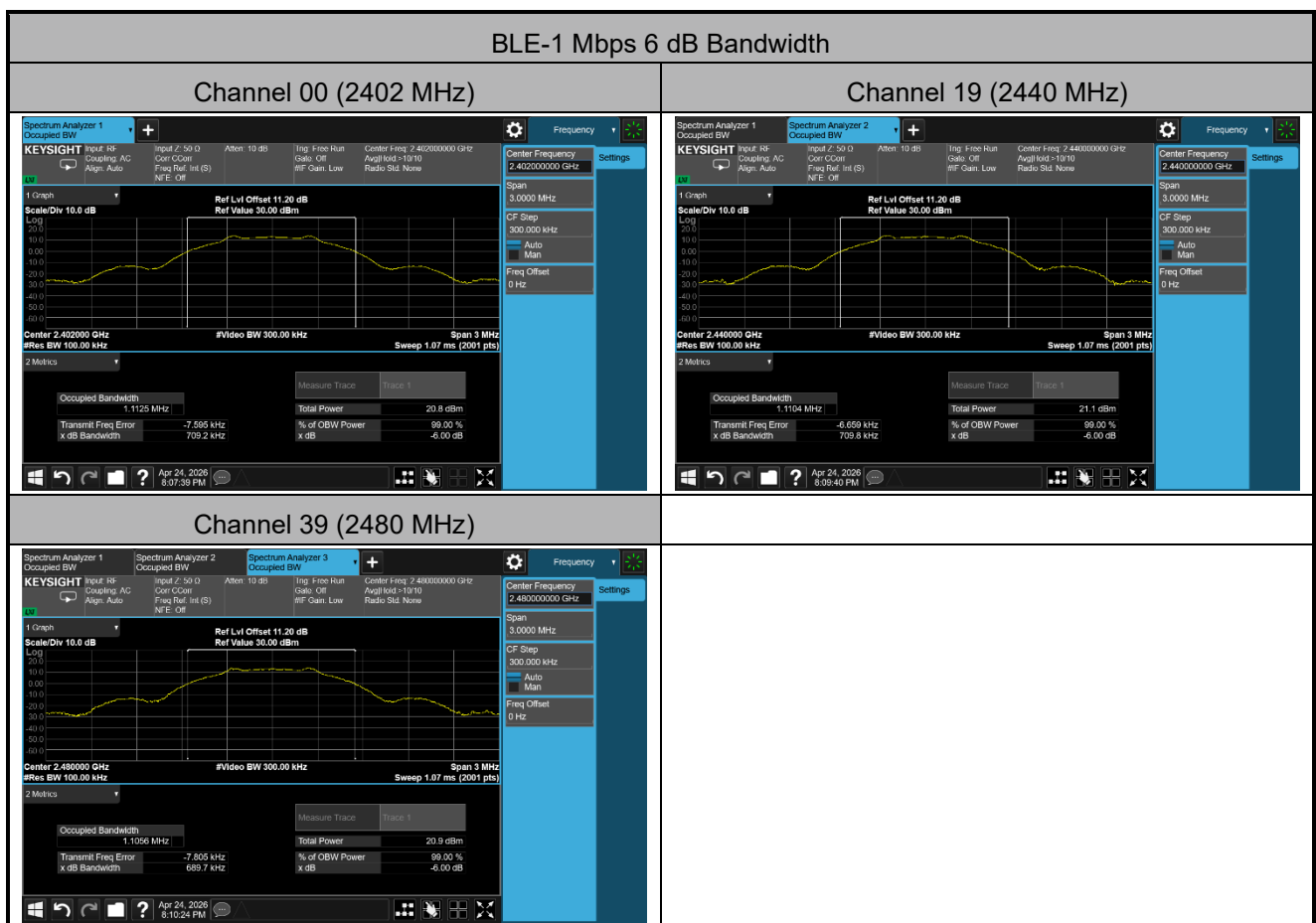
Test Mode	Duty Cycle
BLE-1 Mbps	100%
Duty Cycle (T = Transmission Duration)	
BLE-1 Mbps	



A.2 6 dB Bandwidth Test Result

Test Site	SIP-TR1	Test Engineer	Sean Ouyang
Test Date	2026-04-24		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
BLE	1 Mbps	00	2402	0.7092	≥ 0.5
BLE	1 Mbps	19	2440	0.7098	≥ 0.5
BLE	1 Mbps	39	2480	0.6897	≥ 0.5



A.3 Output Power Test Result

Test Site	SIP-TR1	Test Engineer	Sean Ouyang
Test Date	2025-12-25		

Test Result of Peak Output Power

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Result
BLE	1 Mbps	00	2402	22.42	≤ 30.00	Pass
BLE	1 Mbps	19	2440	22.64	≤ 30.00	Pass
BLE	1 Mbps	39	2480	22.51	≤ 30.00	Pass

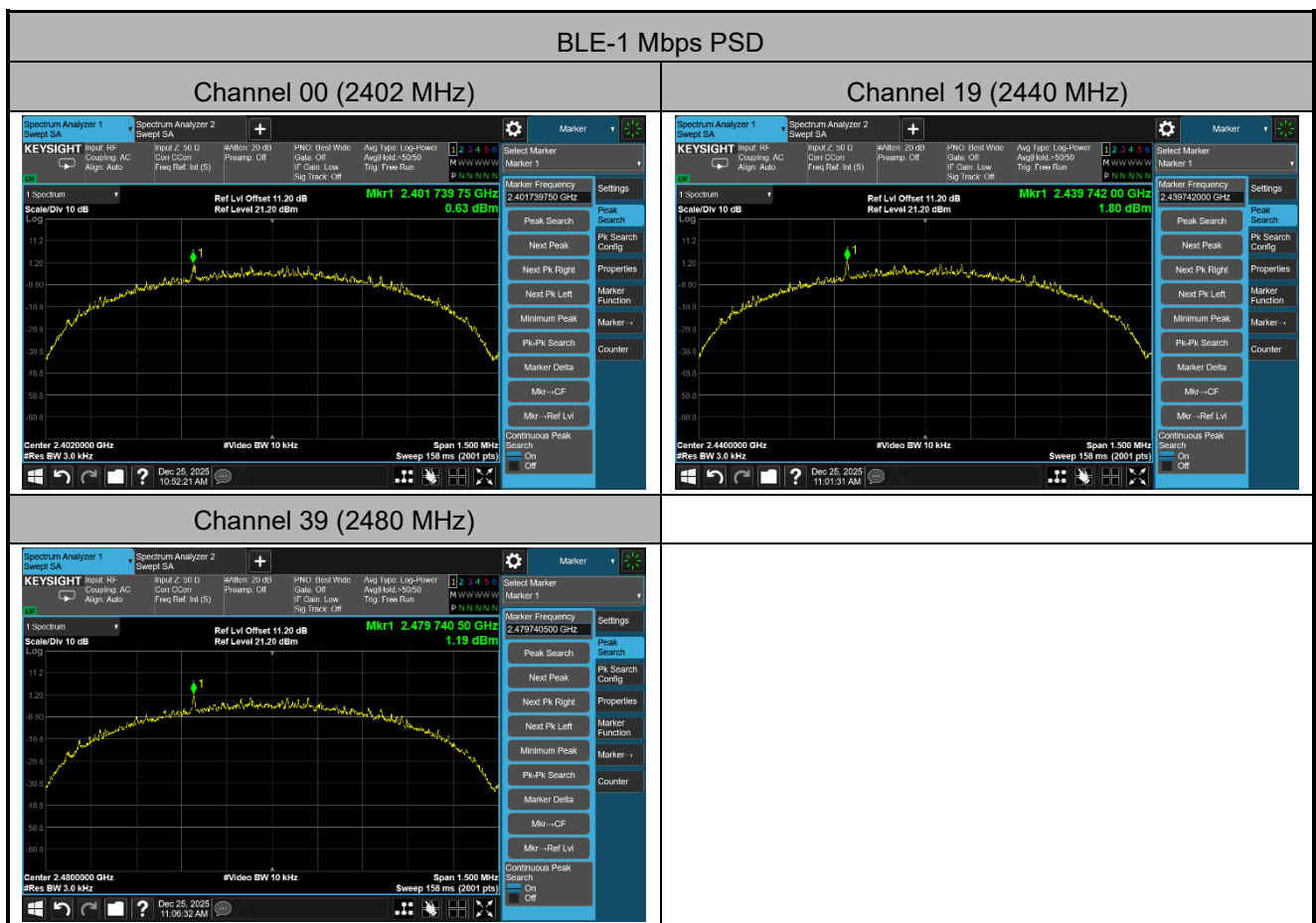
Test Result of Average Output Power (Reporting Only)

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Average Power (dBm)	Limit (dBm)	Result
BLE	1 Mbps	00	2402	17.45	≤ 30.00	Pass
BLE	1 Mbps	19	2440	17.65	≤ 30.00	Pass
BLE	1 Mbps	39	2480	17.46	≤ 30.00	Pass

A.4 Power Spectral Density Test Result

Test Site	SIP-TR1	Test Engineer	Sean Ouyang
Test Date	2025-12-25		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	PSD Result (dBm/3 kHz)	Limit (dBm/3 kHz)	Result
BLE	1 Mbps	00	2402	0.63	≤ 8.00	Pass
BLE	1 Mbps	19	2440	1.80	≤ 8.00	Pass
BLE	1 Mbps	39	2480	1.19	≤ 8.00	Pass



A.5 Conducted Band Edge and Out-of-Band Emissions Test Result

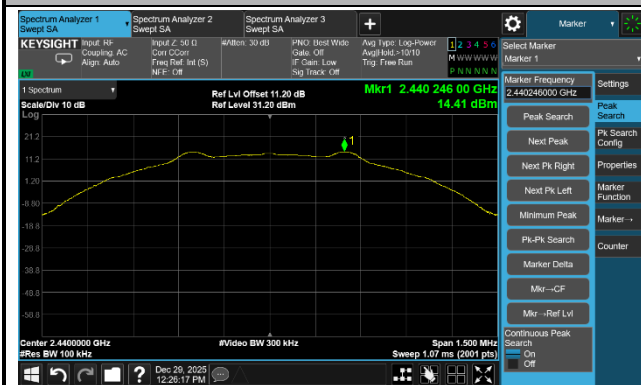
Test Site	SIP-TR1	Test Engineer	Sean Ouyang
Test Date	2025-12-29		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Limit (dBc)	Result
BLE	1 Mbps	00	2402	20	Pass
BLE	1 Mbps	19	2440	20	Pass
BLE	1 Mbps	39	2480	20	Pass

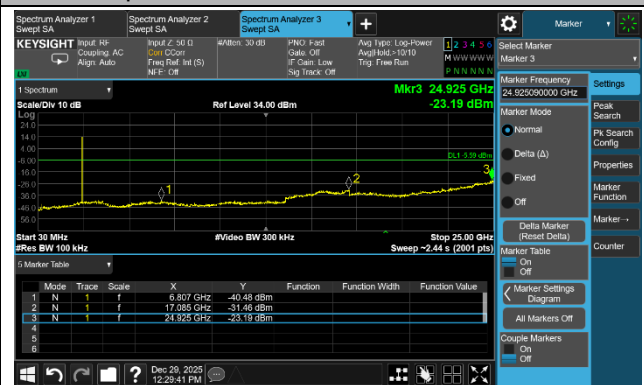


Channel 19 (2440 MHz)

100 kHz PSD Reference Level

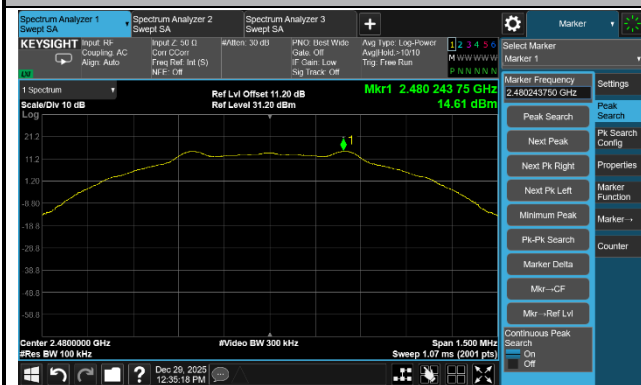


Spurious Emission 30 MHz ~ 25 GHz

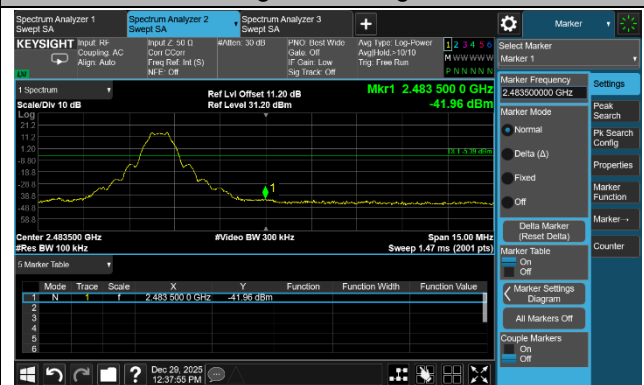


Channel 39 (2480 MHz)

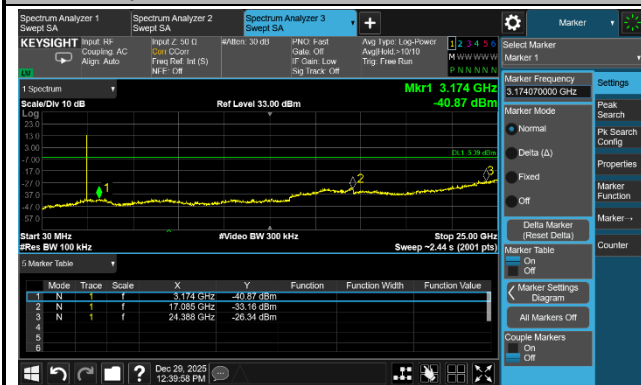
100 kHz PSD Reference Level



High Band Edge



Spurious Emission 30 MHz ~ 25 GHz



A.6 Radiated Spurious Emission Test Result

Test Site	SIP-AC3	Test Engineer	Yuuki Qiu
Test Date	2025-12-26	Test Mode	BLE-1 Mbps
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20 dB below limit line within 1-18 GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4804.60	57.43	-3.62	53.81	54.00	-0.19	Average	Horizontal
	4804.60	63.17	-3.62	59.54	74.00	-14.46	Peak	Horizontal
	15936.20	32.93	8.62	41.55	54.00	-12.45	Average	Horizontal
	15936.20	44.94	8.62	53.56	74.00	-20.44	Peak	Horizontal
	17957.50	32.49	11.66	44.15	54.00	-9.85	Average	Horizontal
	17957.50	44.51	11.66	56.17	74.00	-17.83	Peak	Horizontal
	4804.60	52.97	-3.62	49.35	54.00	-4.65	Average	Vertical
	4804.60	58.94	-3.62	55.32	74.00	-18.68	Peak	Vertical
	15956.60	34.19	7.79	41.98	54.00	-12.02	Average	Vertical
	15956.60	46.25	7.79	54.04	74.00	-19.96	Peak	Vertical
	17938.80	30.14	12.32	42.46	54.00	-11.54	Average	Vertical
	17938.80	42.16	12.32	54.48	74.00	-19.52	Peak	Vertical
19	4879.4	60.53	-6.73	53.8	54	-0.20	Average	Horizontal
	4879.4	65.68	-6.73	58.96	74	-15.04	Peak	Horizontal
	15837.6	33.4	5.59	38.99	54	-15.01	Average	Horizontal
	15837.6	45.4	5.59	50.99	74	-23.01	Peak	Horizontal
	18000	31.8	9.47	41.27	54	-12.73	Average	Horizontal
	18000	43.33	9.47	52.8	74	-21.20	Peak	Horizontal
	4879.4	58.1	-6.73	51.37	54	-2.630	Average	Vertical
	4879.4	62.37	-6.73	55.64	74	-18.36	Peak	Vertical
	15684.6	33.69	5.42	39.11	54	-14.89	Average	Vertical
	15684.6	45.6	5.42	51.02	74	-22.98	Peak	Vertical
	17960.9	31.78	9.38	41.16	54	-12.84	Average	Vertical

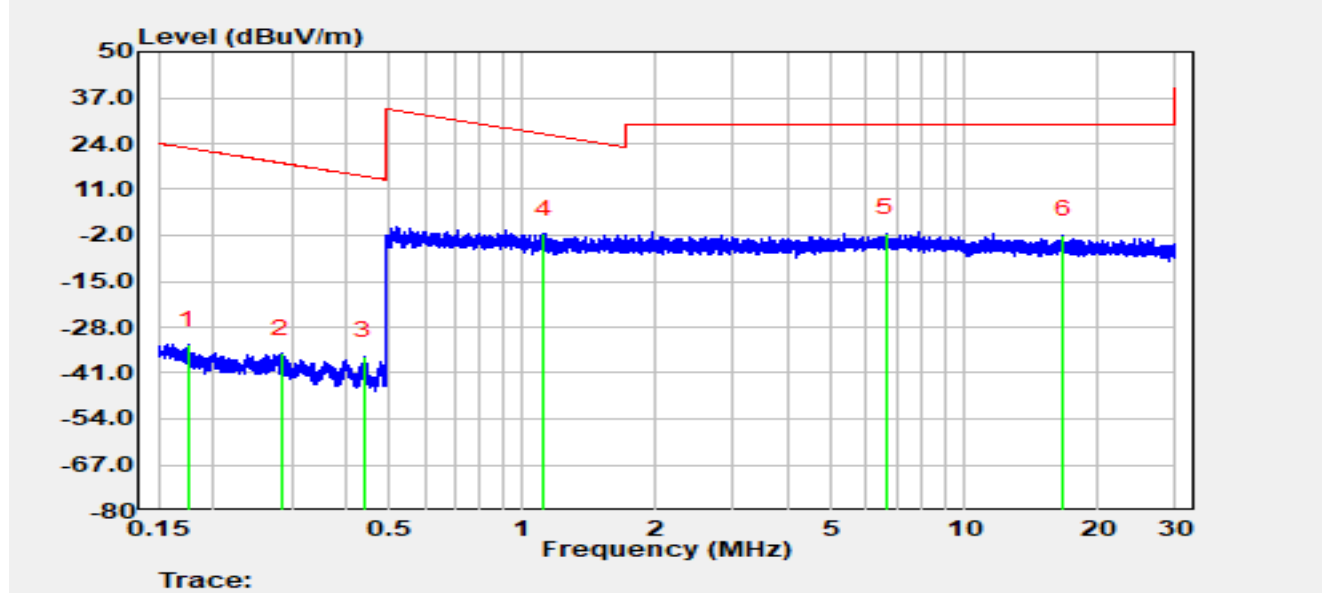
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
39	4959.30	57.14	-3.72	53.42	54.00	-0.58	Average	Horizontal
	4959.30	62.13	-3.72	58.41	74.00	-15.59	Peak	Horizontal
	15929.40	32.67	8.42	41.09	54.00	-12.91	Average	Horizontal
	15929.40	44.61	8.42	53.03	74.00	-20.97	Peak	Horizontal
	17932.00	31.36	12.78	44.14	54.00	-9.86	Average	Horizontal
	17932.00	43.24	12.78	56.02	74.00	-17.98	Peak	Horizontal
	4961.00	54.08	-3.73	50.35	54.00	-3.65	Average	Vertical
	4961.00	59.45	-3.73	55.72	74.00	-18.28	Peak	Vertical
	15934.50	32.76	8.57	41.33	54.00	-12.67	Average	Vertical
	15934.50	44.82	8.57	53.39	74.00	-20.61	Peak	Vertical
	17937.10	30.35	12.44	42.79	54.00	-11.21	Average	Vertical
	17937.10	42.32	12.44	54.76	74.00	-19.24	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The worst-case Result of Radiated Emission for 9 kHz ~ 30 MHz:

Site	SIP-AC3	Test Date	2026-04-24
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coaxial
Test Mode	Transmit by BLE_1M at 2480MHz		

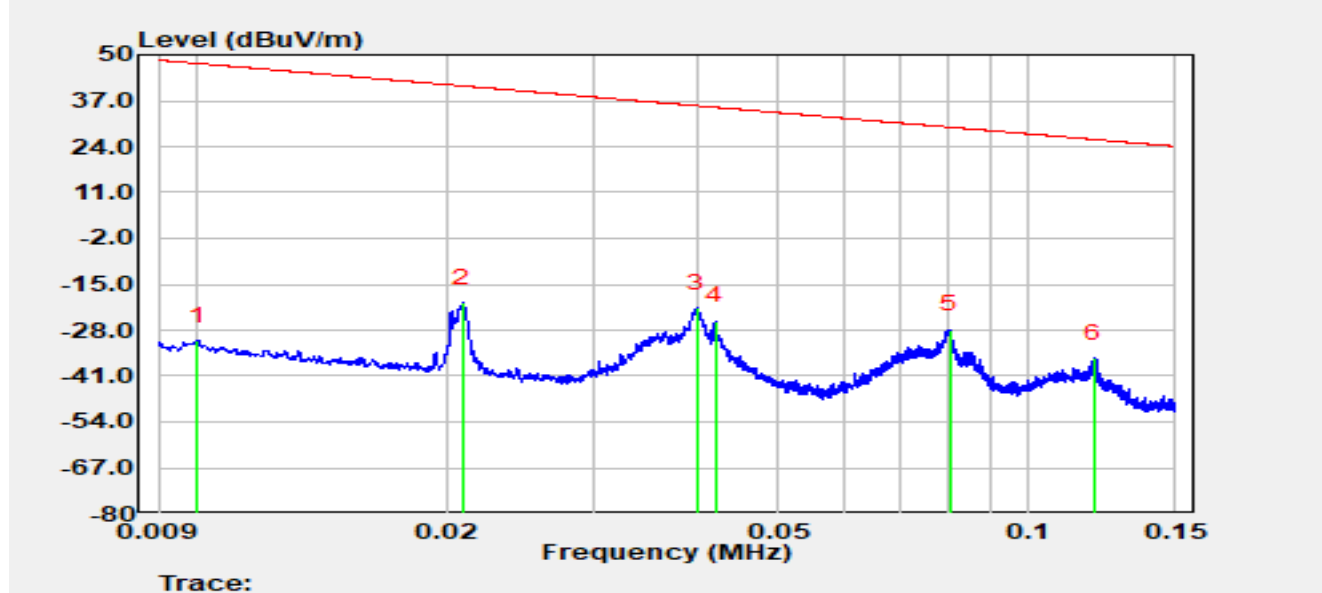


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.175	27.68	-60.62	-32.94	-55.70	22.76	Peak
2		0.285	25.13	-60.67	-35.53	-54.04	18.51	Peak
3		0.439	24.57	-60.68	-36.12	-50.87	14.76	Peak
4	*	1.120	19.05	-20.68	-1.63	-28.27	26.64	Peak
5		6.641	18.98	-20.44	-1.46	-30.96	29.50	Peak
6		16.723	18.14	-20.08	-1.94	-31.44	29.50	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) + 40log(d1/d2) (dB), d1 = 3 m, d2 = 300 m (9 kHz - 490 kHz) or 30 m (490 kHz - 30 MHz).
- Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2026-04-24
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coaxial
Test Mode	Transmit by BLE_1M at 2480MHz		

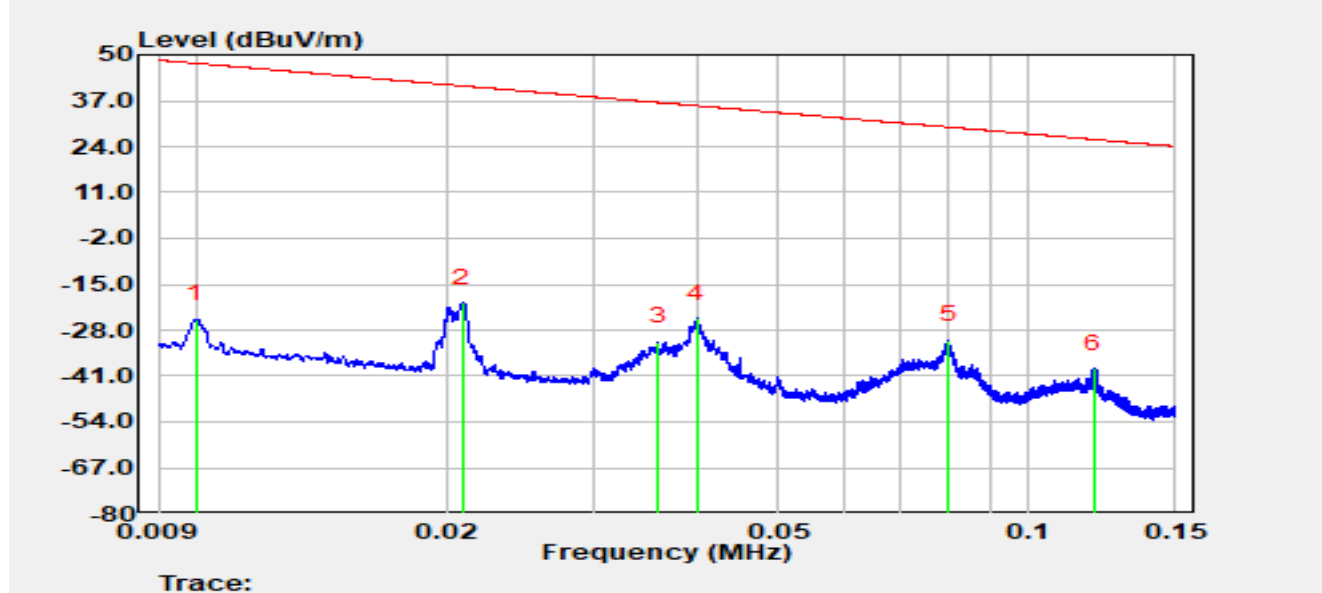


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.010	28.56	-59.57	-31.00	-78.56	47.56	Peak
2		0.021	40.08	-60.28	-20.20	-61.40	41.20	Peak
3		0.040	38.57	-60.36	-21.79	-57.35	35.56	Peak
4		0.042	34.95	-60.39	-25.44	-60.57	35.13	Peak
5	*	0.080	32.80	-60.60	-27.79	-57.30	29.50	Peak
6		0.120	24.68	-60.60	-35.92	-61.95	26.03	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) + 40log(d1/d2) (dB), d1 = 3 m, d2 = 300 m (9 kHz - 490 kHz) or 30 m (490 kHz - 30 MHz).
- Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2026-04-24
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coplanar
Test Mode	Transmit by BLE_1M at 2480MHz		

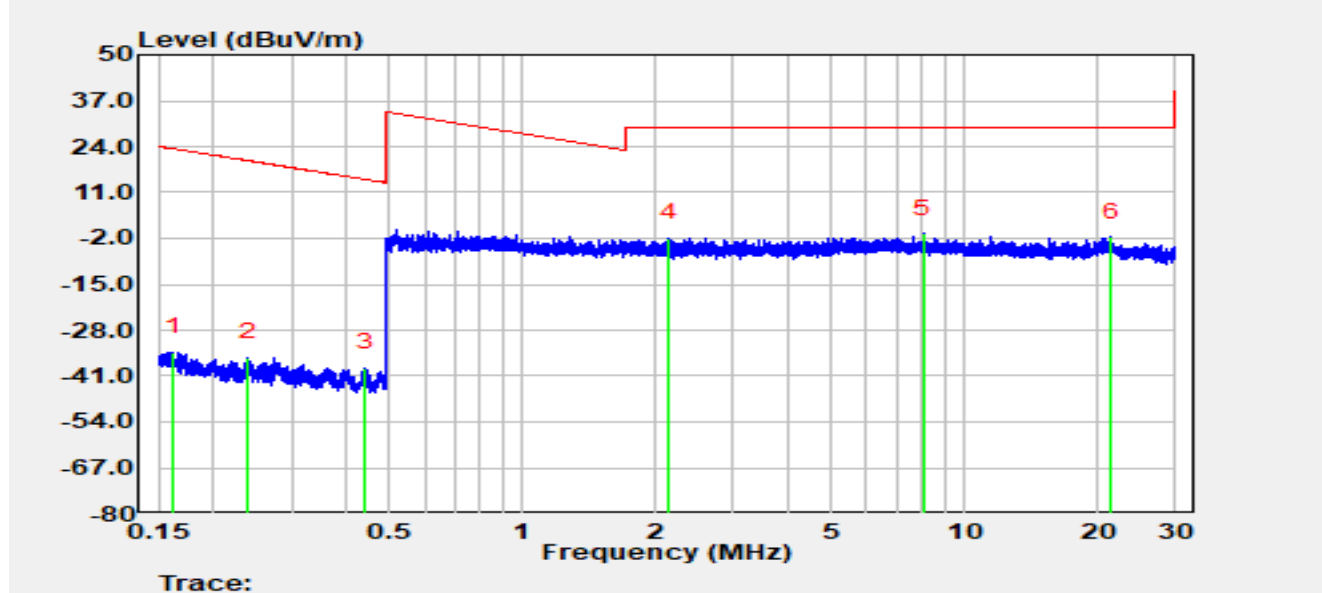


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.010	34.71	-59.57	-24.86	-72.45	47.58	Peak
2		0.021	40.12	-60.28	-20.16	-61.35	41.19	Peak
3		0.036	29.10	-60.36	-31.25	-67.75	36.50	Peak
4	*	0.040	35.59	-60.36	-24.77	-60.34	35.57	Peak
5		0.080	29.72	-60.60	-30.88	-60.41	29.53	Peak
6		0.120	21.64	-60.60	-38.96	-64.99	26.03	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- $C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) + 40\log(d1/d2) (dB)$, $d1 = 3 m$, $d2 = 300 m$ (9 kHz - 490 kHz) or $30 m$ (490 kHz - 30 MHz).
- $Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m)$.

Site	SIP-AC3	Test Date	2026-04-24
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coplanar
Test Mode	Transmit by BLE_1M at 2480MHz		



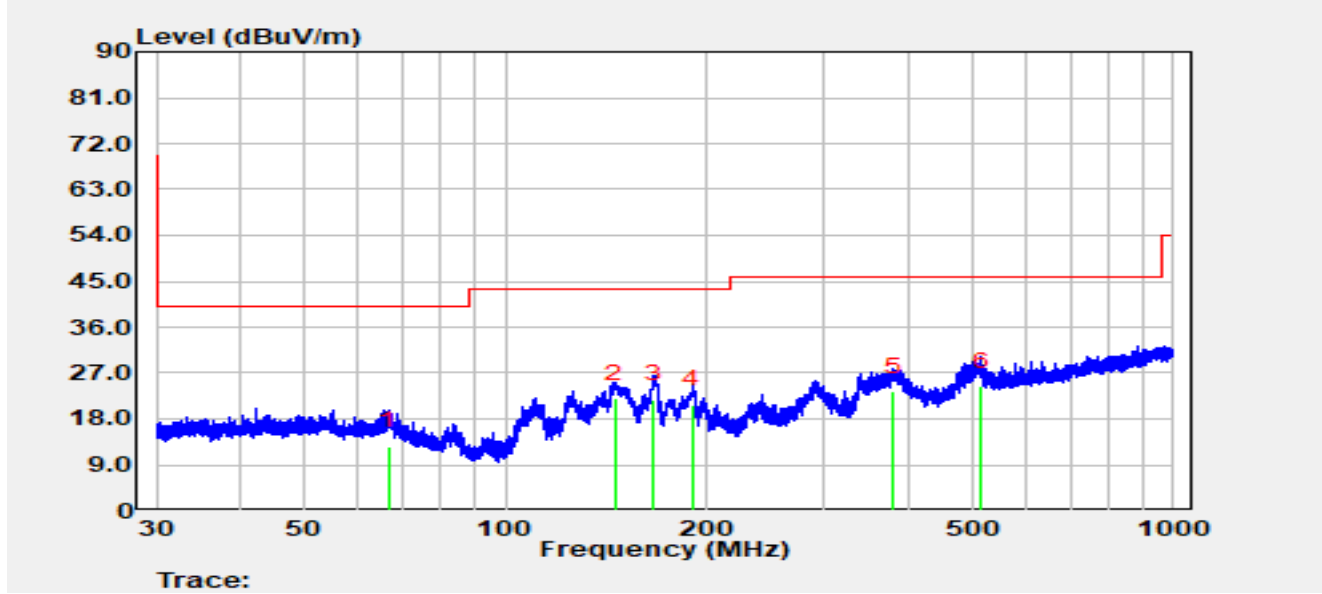
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.162	26.44	-60.61	-34.17	-57.57	23.40	Peak
2		0.240	24.91	-60.66	-35.75	-55.75	20.00	Peak
3		0.441	21.96	-60.68	-38.73	-53.45	14.72	Peak
4		2.144	18.79	-20.59	-1.80	-31.30	29.50	Peak
5	*	8.067	19.57	-20.28	-0.71	-30.21	29.50	Peak
6		21.475	18.44	-20.02	-1.58	-31.08	29.50	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) + 40log(d1/d2) (dB), d1 = 3 m, d2 = 300 m (9 kHz - 490 kHz) or 30 m (490 kHz - 30 MHz).
- Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

The worst-case Result of Radiated Emission for 30 MHz ~ 1 GHz:

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz		

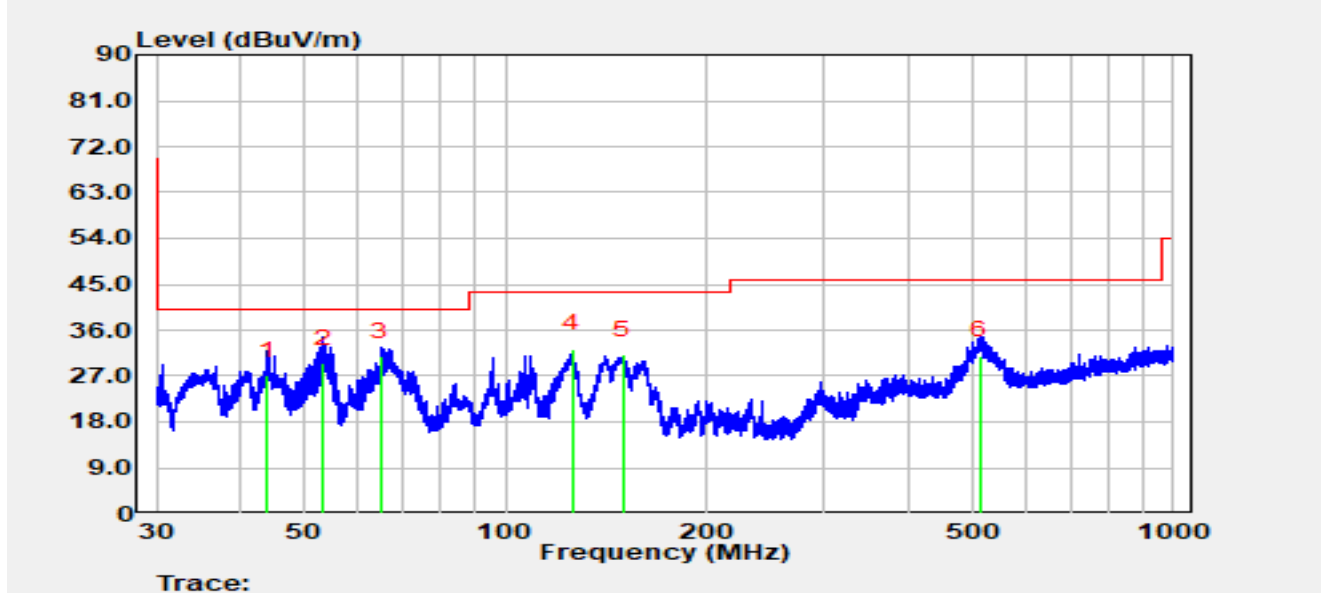


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		66.639	-4.00	16.59	12.59	-27.41	40.00	QP
2	*	145.810	3.90	18.02	21.92	-21.58	43.50	QP
3		166.944	3.90	17.96	21.86	-21.64	43.50	QP
4		190.405	5.40	15.37	20.77	-22.73	43.50	QP
5		380.848	2.60	20.71	23.31	-22.69	46.00	QP
6		514.895	0.30	24.04	24.34	-21.66	46.00	QP

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz		



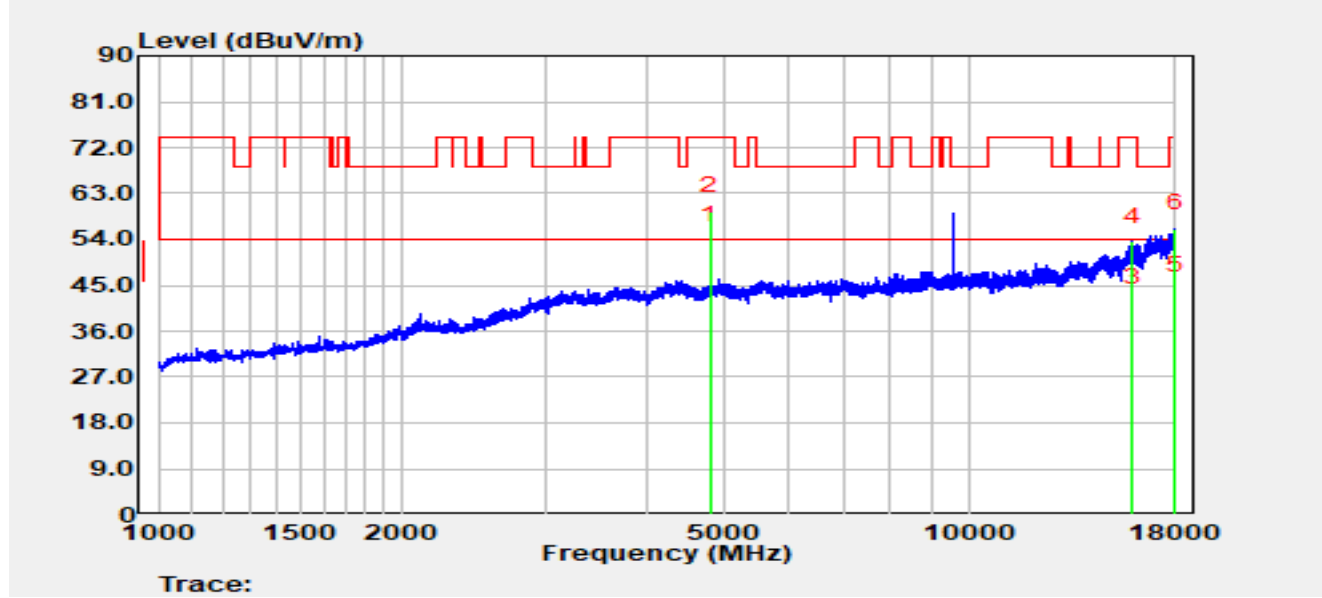
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		44.058	8.90	18.13	27.03	-12.97	40.00	QP
2		53.281	11.30	18.23	29.53	-10.47	40.00	QP
3	*	65.000	13.90	16.89	30.79	-9.21	40.00	QP
4		125.798	15.80	16.61	32.41	-11.09	43.50	QP
5		150.169	13.00	18.19	31.19	-12.31	43.50	QP
6		512.194	7.00	23.97	30.97	-15.03	46.00	QP

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
- Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

The worst-case Result of Radiated Emission for 1 GHz ~ 18 GHz:

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402MHz		

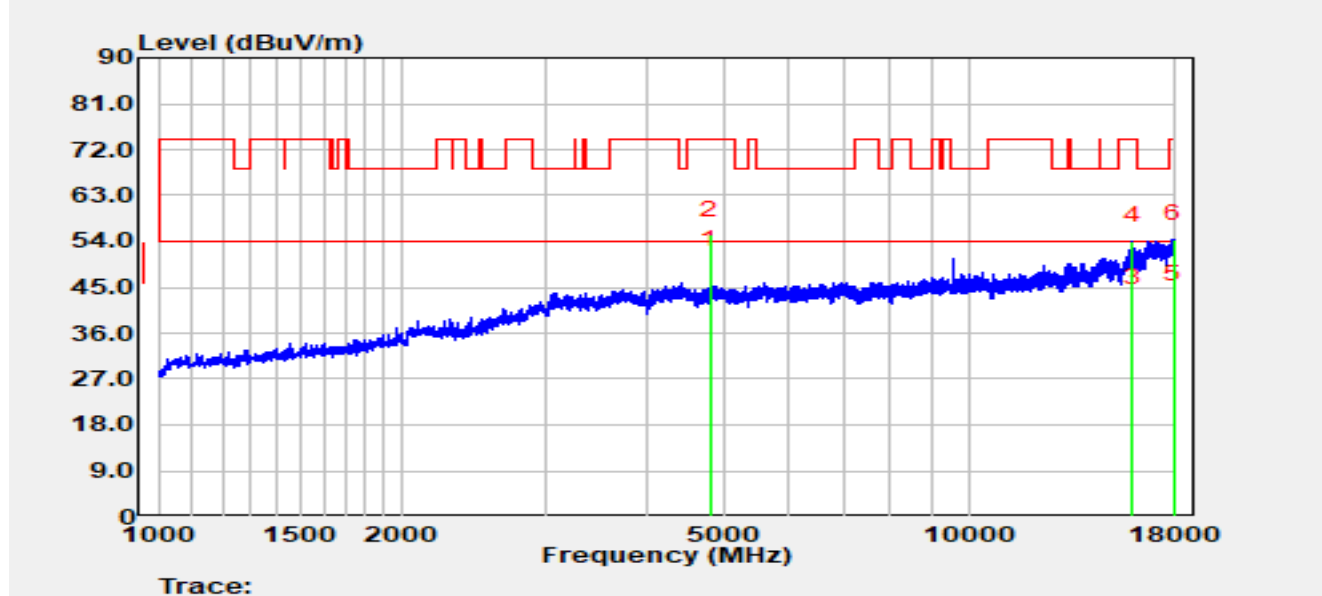


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	4804.600	57.43	-3.62	53.81	-0.19	54.00	Average
2		4804.600	63.17	-3.62	59.54	-14.46	74.00	Peak
3		15936.200	32.93	8.62	41.55	-12.45	54.00	Average
4		15936.200	44.94	8.62	53.56	-20.44	74.00	Peak
5		17957.500	32.49	11.66	44.15	-9.85	54.00	Average
6		17957.500	44.51	11.66	56.17	-17.83	74.00	Peak

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - AMP (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402MHz		



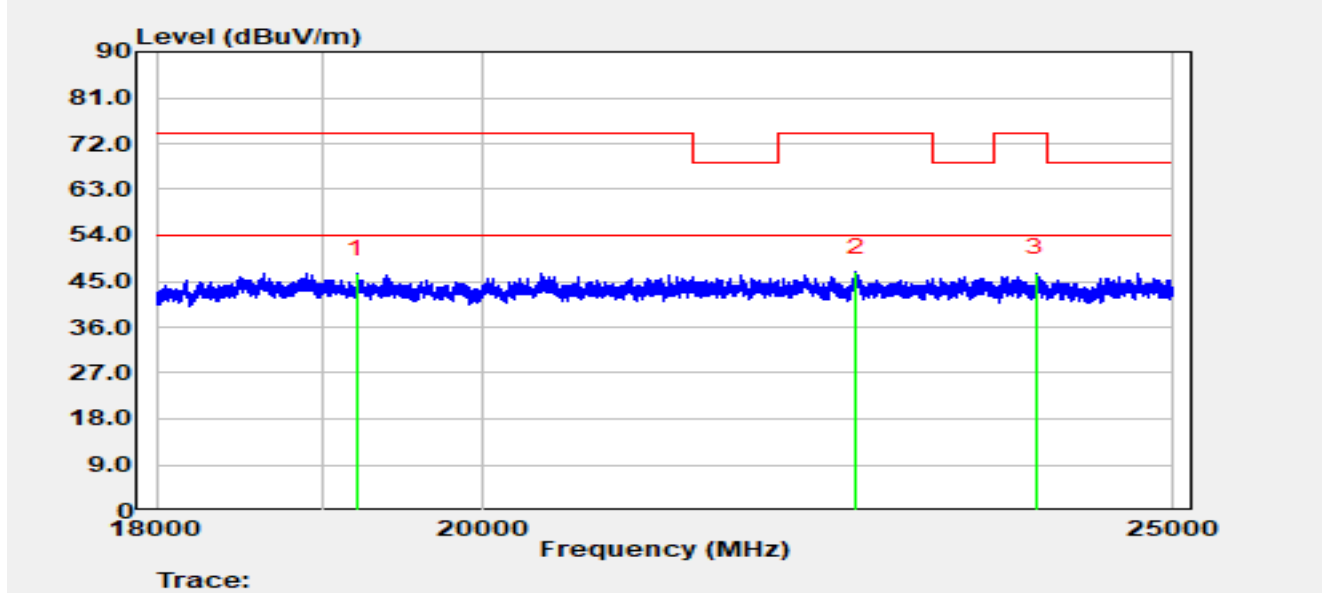
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	4804.600	52.97	-3.62	49.35	-4.65	54.00	Average
2		4804.600	58.94	-3.62	55.32	-18.68	74.00	Peak
3		15956.600	34.19	7.79	41.98	-12.02	54.00	Average
4		15956.600	46.25	7.79	54.04	-19.96	74.00	Peak
5		17938.800	30.14	12.32	42.46	-11.54	54.00	Average
6		17938.800	42.16	12.32	54.48	-19.52	74.00	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - AMP (dB).
- Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

The worst-case Result of Radiated Emission for above 18 GHz:

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz		

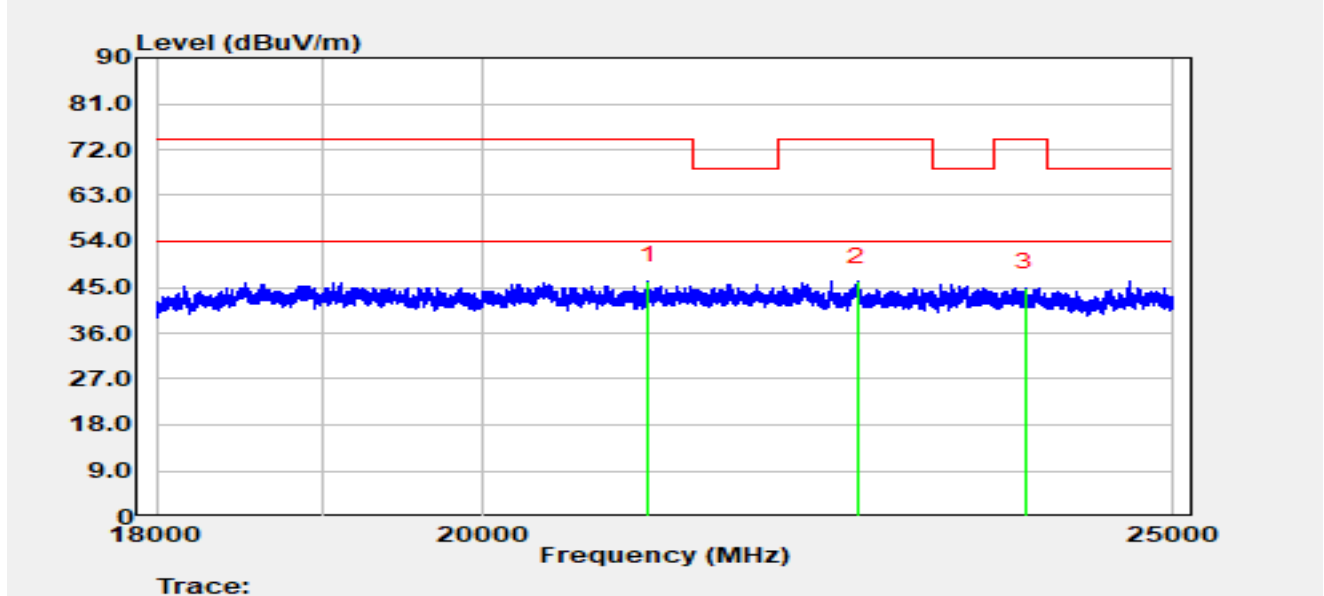


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		19203.300	56.71	-10.20	46.51	-27.49	74.00	Peak
2	*	22564.000	54.32	-7.51	46.81	-27.19	74.00	Peak
3		23915.000	54.57	-7.93	46.64	-27.36	74.00	Peak

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - AMP (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-26
Temperature	16.2 °C	Humidity	55.8%
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz		



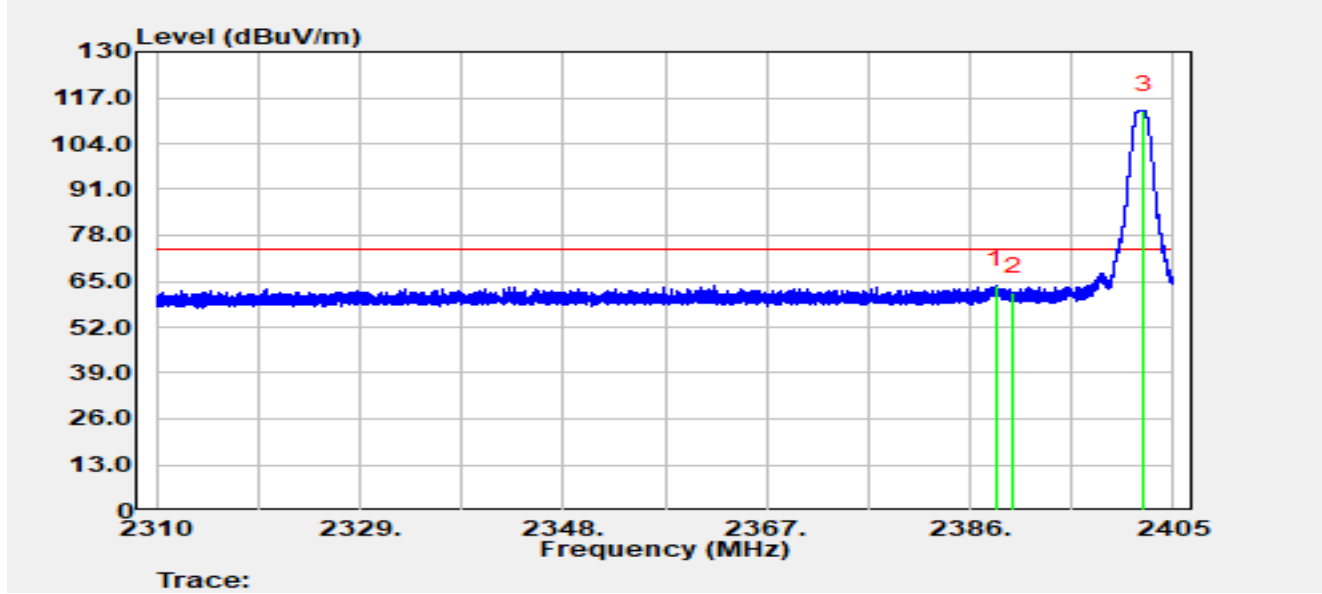
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	21098.200	55.68	-9.40	46.28	-27.72	74.00	Peak
2		22575.200	53.39	-7.22	46.17	-27.83	74.00	Peak
3		23833.800	52.67	-7.83	44.84	-29.16	74.00	Peak

Notes:

1. "*" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - AMP (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

A.7 Radiated Restricted Band Edge Test Result

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402 MHz		

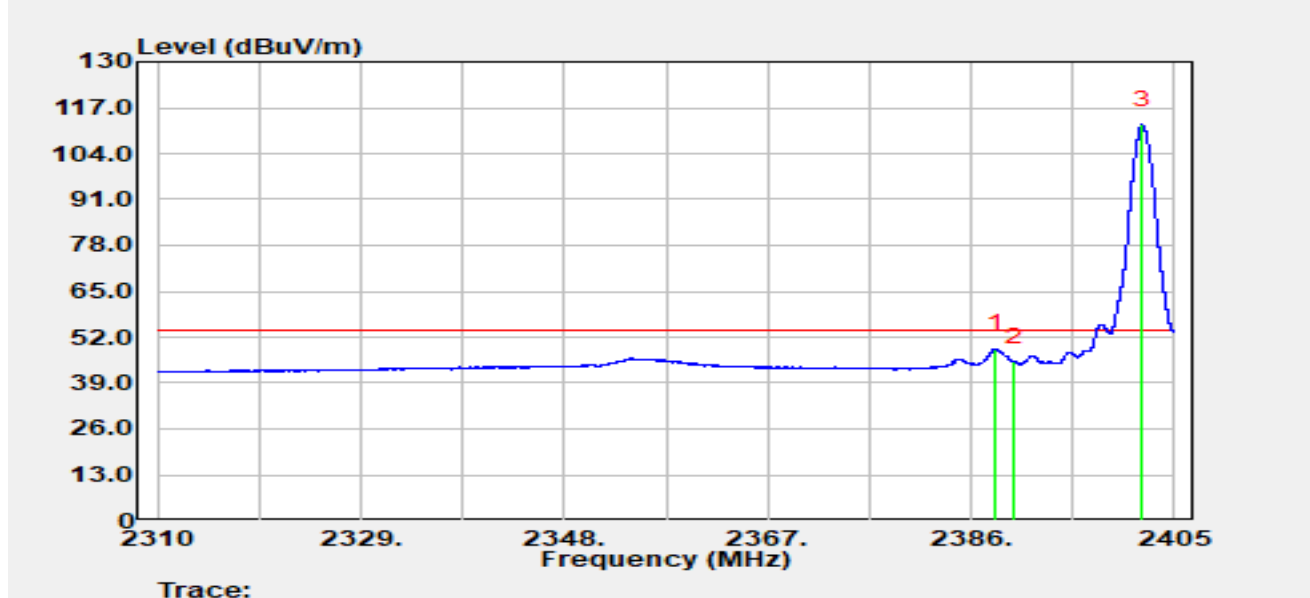


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2388.479	29.64	34.22	63.86	-10.14	74.00	Peak
2		2390.000	27.60	34.23	61.83	-12.17	74.00	Peak
3		2402.236	79.19	34.30	113.50	N/A	N/A	Peak

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402 MHz		

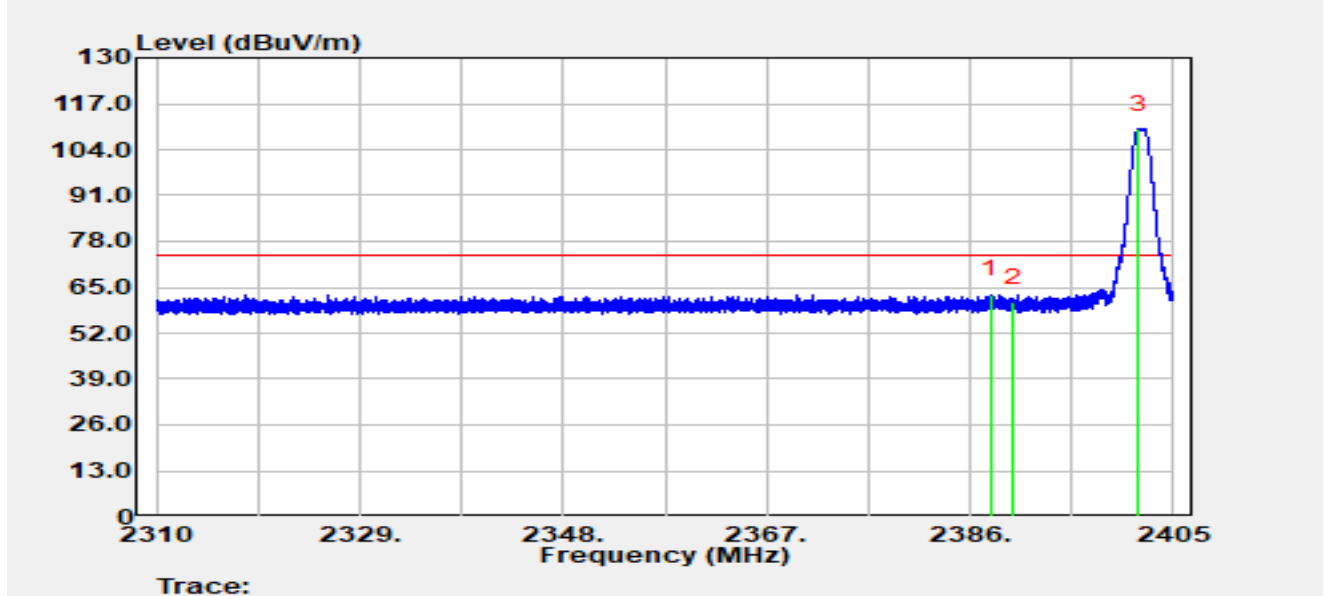


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2388.327	14.49	34.22	48.71	-5.29	54.00	Average
2		2390.000	10.79	34.23	45.02	-8.98	54.00	Average
3		2402.008	77.81	34.30	112.12	N/A	N/A	Average

Notes:

1. "*" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2402 MHz		

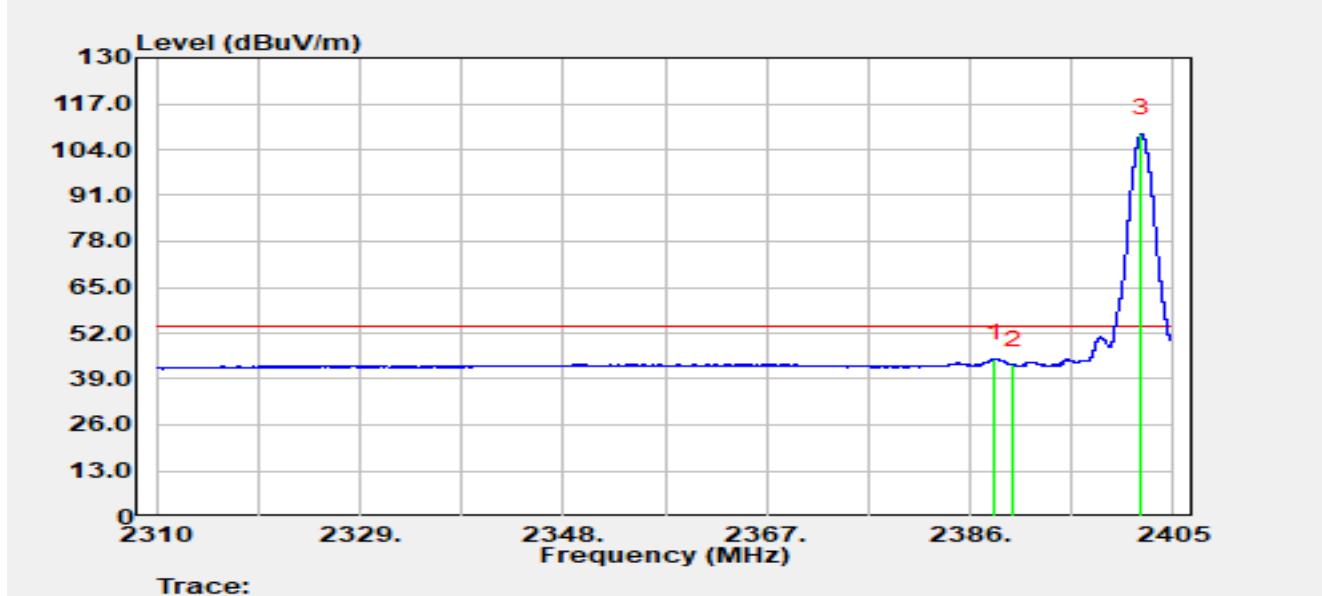


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2387.909	28.74	34.22	62.95	-11.05	74.00	Peak
2		2390.000	26.59	34.23	60.82	-13.18	74.00	Peak
3		2401.751	75.53	34.30	109.83	N/A	N/A	Peak

Notes:

1. "*" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2402 MHz		

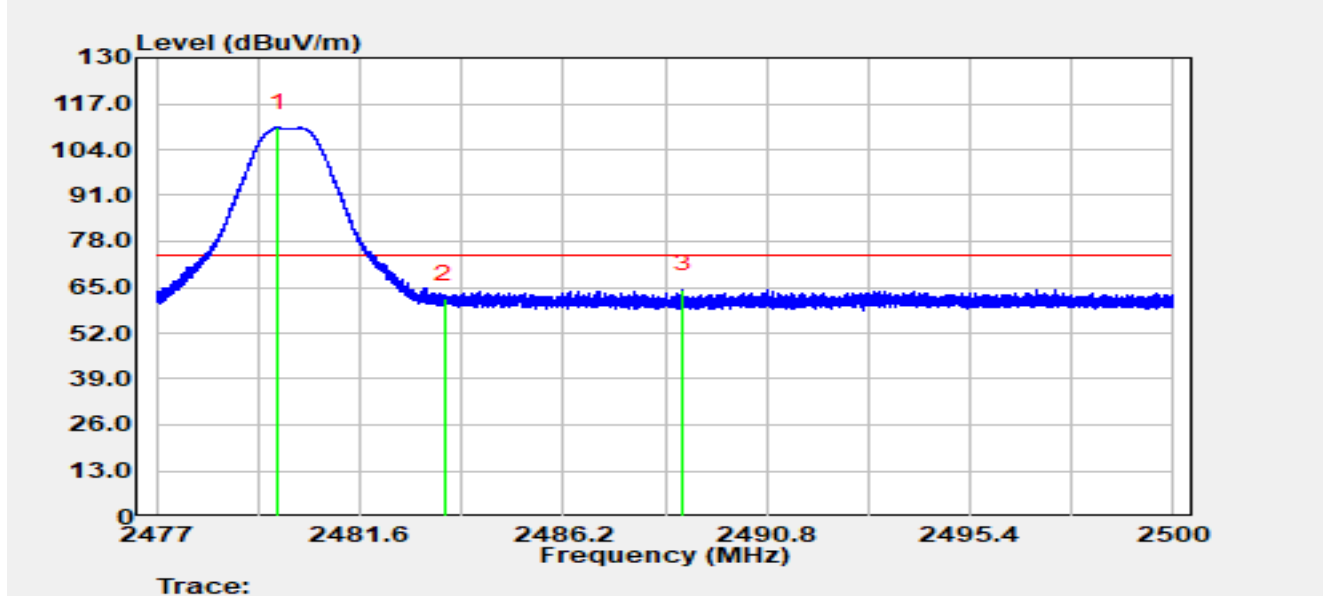


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2388.242	10.60	34.22	44.82	-9.18	54.00	Average
2		2390.000	8.74	34.23	42.97	-11.03	54.00	Average
3		2402.008	74.18	34.30	108.49	N/A	N/A	Average

Notes:

1. "*" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz		

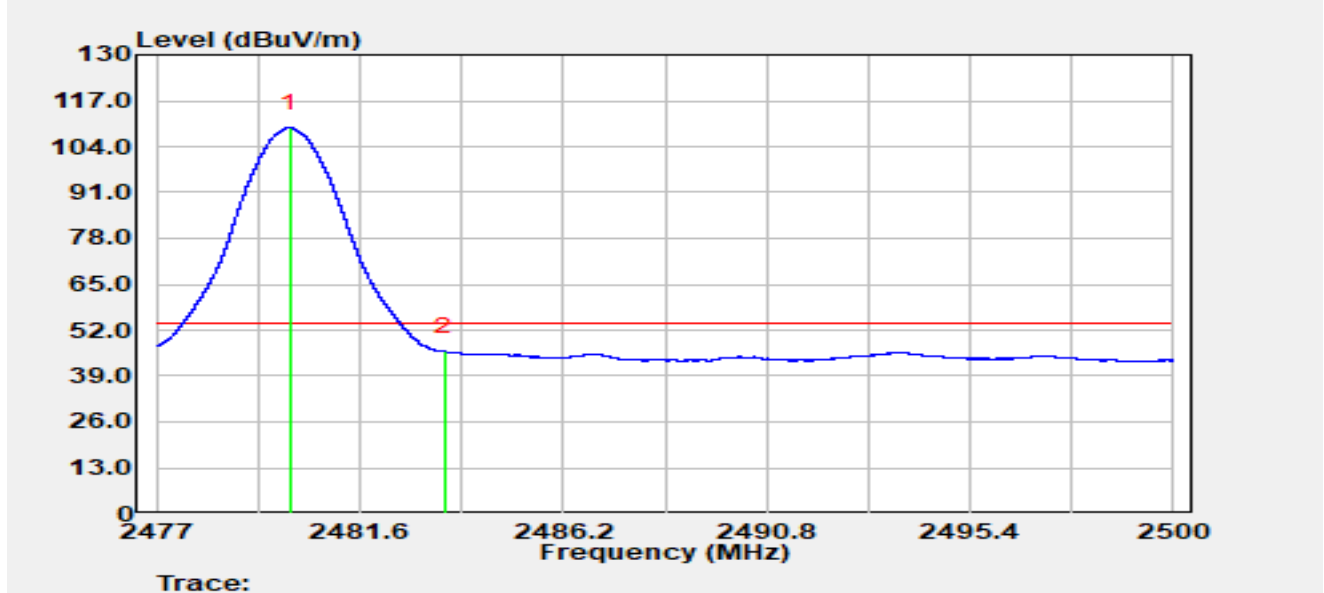


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.749	75.54	34.64	110.18	N/A	N/A	Peak
2		2483.500	27.13	34.67	61.80	-12.20	74.00	Peak
3	*	2488.919	29.61	34.71	64.32	-9.68	74.00	Peak

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz		

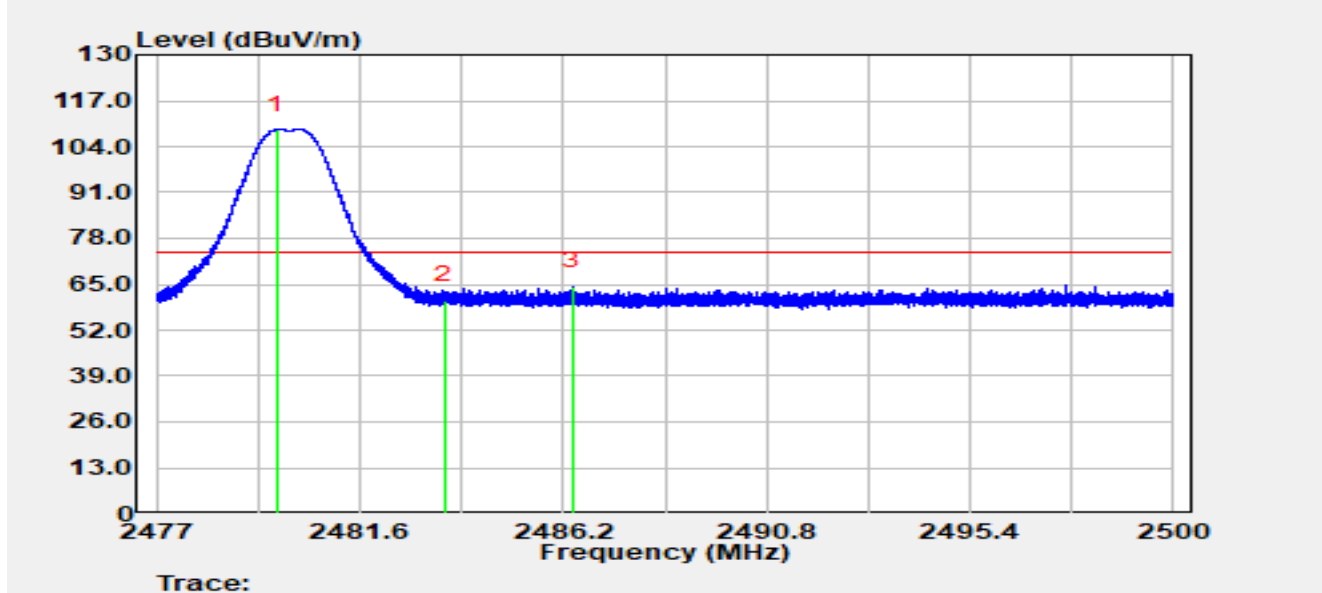


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.006	74.59	34.65	109.24	N/A	N/A	Average
2	*	2483.500	11.26	34.67	45.93	-8.07	54.00	Average

Notes:

1. "*" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz		

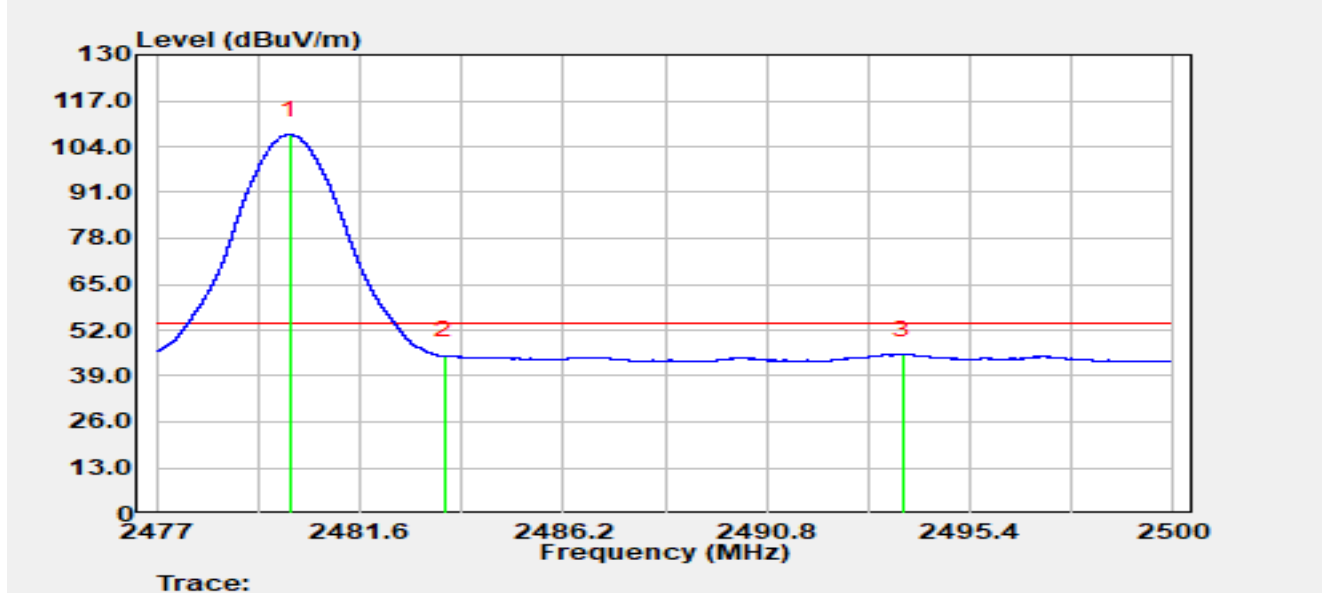


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.732	74.22	34.64	108.87	N/A	N/A	Peak
2		2483.500	25.86	34.67	60.53	-13.47	74.00	Peak
3	*	2486.407	29.68	34.69	64.37	-9.63	74.00	Peak

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Site	SIP-AC3	Test Date	2025-12-19
Temperature	15.7 °C	Humidity	49.8%
Limit	FCC_Part15_Band Edge(3 m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz		



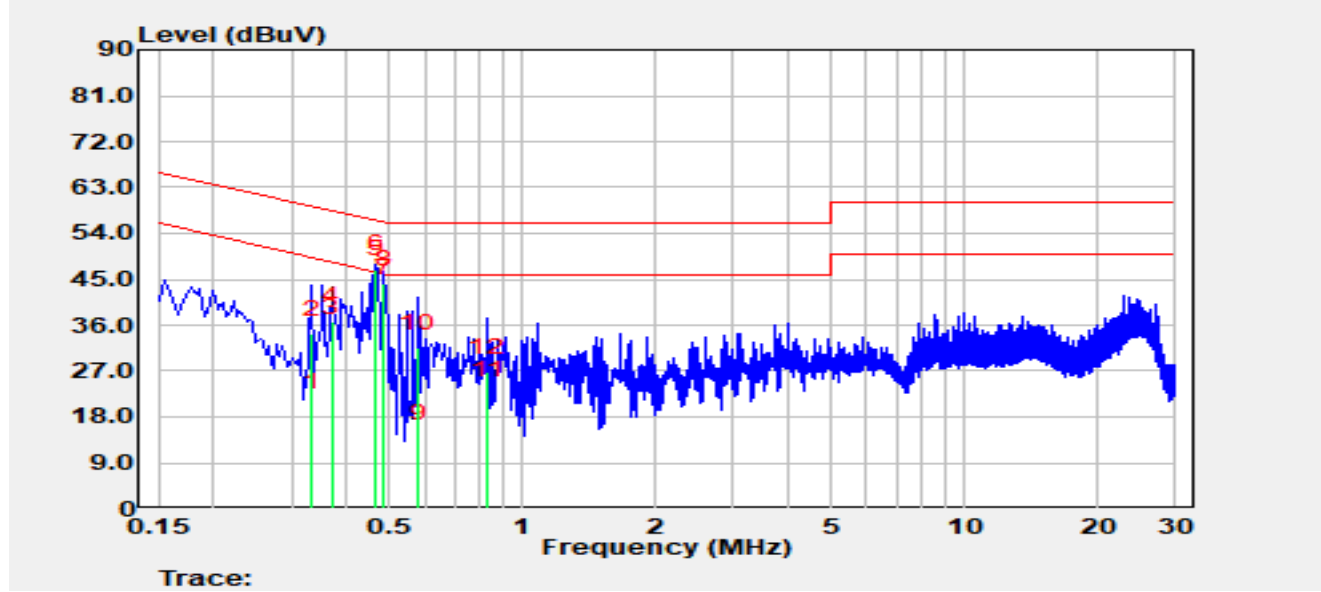
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.015	72.69	34.65	107.34	N/A	N/A	Average
2		2483.500	10.13	34.67	44.80	-9.20	54.00	Average
3	*	2493.875	10.39	34.74	45.13	-8.87	54.00	Average

Notes:

1. " *" indicates the worst-case emission level observed during the measurement.
2. C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

A.8 AC Conducted Emissions Test Result

Site	SIP-SR2	Test Date	2026-01-28
Temperature	20.6 °C	Humidity	30.8%
Limit	FCC Part 15.207_CE_Mains	Test Engineer	Poli Cai
Test Voltage	AC 120 V/60 Hz	Polarity	Line
Test Mode	Transmit by BLE_1M at 2480 MHz		

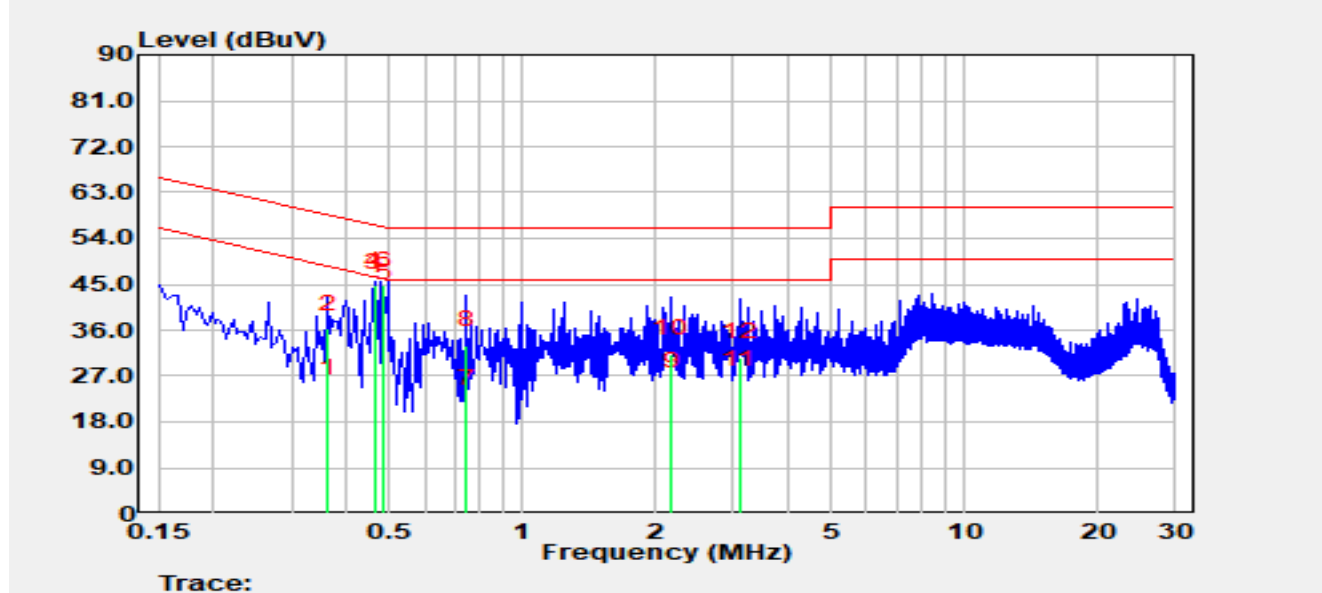


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.334	9.97	9.92	19.89	-29.46	49.35	Average
2		0.334	24.25	9.92	34.17	-25.18	59.35	QP
3		0.370	24.47	9.92	34.39	-14.11	48.50	Average
4		0.370	26.80	9.92	36.72	-21.78	58.50	QP
5	*	0.465	36.02	9.93	45.95	-0.66	46.60	Average
6		0.465	37.07	9.93	47.00	-9.61	56.60	QP
7		0.486	32.28	9.93	42.21	-4.03	46.24	Average
8		0.486	34.19	9.93	44.12	-12.12	56.24	QP
9		0.582	3.76	9.94	13.70	-32.30	46.00	Average
10		0.582	21.56	9.94	31.49	-24.51	56.00	QP
11		0.834	12.36	9.94	22.30	-23.70	46.00	Average
12		0.834	16.84	9.94	26.79	-29.21	56.00	QP

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB) = LISN Factor (dB) + Cable Loss (dB).
- Measurement (dBμV) = Reading (dBμV) + C.F (dB).

Site	SIP-SR2	Test Date	2026-01-28
Temperature	20.6 °C	Humidity	30.8%
Limit	FCC Part 15.207_CE_Mains	Test Engineer	Poli Cai
Test Voltage	AC 120 V/60 Hz	Polarity	Neutral
Test Mode	Transmit by BLE_1M at 2480 MHz		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.362	13.79	9.89	23.69	-25.00	48.69	Average
2		0.362	26.40	9.89	36.29	-22.40	58.69	QP
3	*	0.463	34.37	9.90	44.27	-2.38	46.65	Average
4		0.463	34.93	9.90	44.83	-11.82	56.65	QP
5		0.485	32.28	9.90	42.18	-4.07	46.25	Average
6		0.485	34.76	9.90	44.66	-11.59	56.25	QP
7		0.749	11.56	9.95	21.51	-24.49	46.00	Average
8		0.749	23.07	9.95	33.02	-22.98	56.00	QP
9		2.174	14.87	9.99	24.86	-21.14	46.00	Average
10		2.174	21.31	9.99	31.31	-24.69	56.00	QP
11		3.091	15.01	10.18	25.19	-20.81	46.00	Average
12		3.091	20.47	10.18	30.66	-25.34	56.00	QP

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB) = LISN Factor (dB) + Cable Loss (dB).
- Measurement (dBμV) = Reading (dBμV) + C.F (dB).

Appendix B - Test Setup Photograph

Refer to “R25S1037125-UT” file.

Appendix C - EUT Photograph

Refer to "R25S1037125-UE" file.

_____ The End _____