



RF MEASUREMENT REPORT

FCC ID: 2ALJ3AP57X
Applicant: HAN Networks Co., Ltd.
Product: HAN Access Point
Model No.: AP571
Product Family: AP571e
Models:
Brand Name: HAN NETWORKS, HANNETWORKS
FCC Classification: Digital Transmission System (DTS)
FCC Rule Part(s): Part 15 Subpart C (Section 15.247)
Result: Complies
Received Date: 2025-06-09
Test Date: 2025-07-18 ~ 2025-08-20

Reviewed By:

Vincent Yu

Vincent Yu

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 and was tested in accordance with the measurement procedures specified in ANSI C63.10-2020. Test results reported herein relate only to the item(s) tested.

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Revision History

Report No.	Version	Description	Issue Date	Note
R25S1073095-U203	V01	Initial Report	2025-12-01	Valid

Note: This report is a copy report based on MRT original report (Report No.: R25S1009065-U203). Only applicant & manufacturer information and product information (name, model and brand name) has changed in this report, others are identical. The test data are all copied from the original report.

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1. General Information

1.1. Applicant

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

1.2. Manufacturer

HAN Networks Co., Ltd.

101, 3rd Floor, Building 3, No.9 Compound, Yongfeng Road, Haidian District, Beijing, P.R. China

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 FCC: CN1166 VCCI: ☐ R-20025 ☐ G-20034 ☐ C-20020 ☐ T-20020 ☐ R-20141 ☐ G-20134 ☐ C-20103 ☐ T-20104
	CNAS: L10551 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
	CNAS: L10551 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	HAN Access Point
Model No.	AP571
Product Family Models	AP571e
Brand Name	HAN NETWORKS, HANNETWORKS
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	Bluetooth-LE only
ZigBee Specification	802.15.4
Antenna Specification	Refer to clause 1.7
Operating Temp.	-40 ~ 70 °C
Power Supply	PoE Input
Accessories	
PoE Injector 1#	Model: POE075U-1BT Input: 100-240 V ~ 2.0 A 50-60 Hz PoE Output 1: 56 V 0.8 A 45 W PIN3, 6+ PIN1, 2 Return PoE Output 2: 56 V 0.8 A 45 W PIN4, 5+ PIN7, 8 Return
PoE Injector 2#	Model: POE60U-1BT-X (ALE P/N: POE60U-1BT-X-R) Input: 100-240 V ~ 1.5 A, 50/60 Hz Output: 56.0 V, 0.535 A, 30 W PIN 3, 6+ PIN 1, 2 Return Output: 56.0 V, 0.535 A, 30 W PIN 4, 5+ PIN 7, 8 Return
Notes: 1. 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. 2. PoE Injectors are not marketed in conjunction with the device. 3. The two models share the same schematic diagram and PCB mainboard, with generally identical structure and enclosure. The differences are as follows: Wi-Fi Antenna difference: AP571 features an internal omnidirectional antenna; AP571e features an external omnidirectional antenna. The BLE/ZigBee antennas are completely identical. Compared to AP571, the AP571e includes external antenna connectors as part of the structural components.	

1.5. Radio Specification under Test

Frequency Range	2400 ~ 2483.5 MHz
Channel Number	40
Type of modulation	GFSK
Data Rate	1 Mbps & 2 Mbps
Antenna Type	Dipole Antenna
Antenna Gain	6.19 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	--	--	--	--

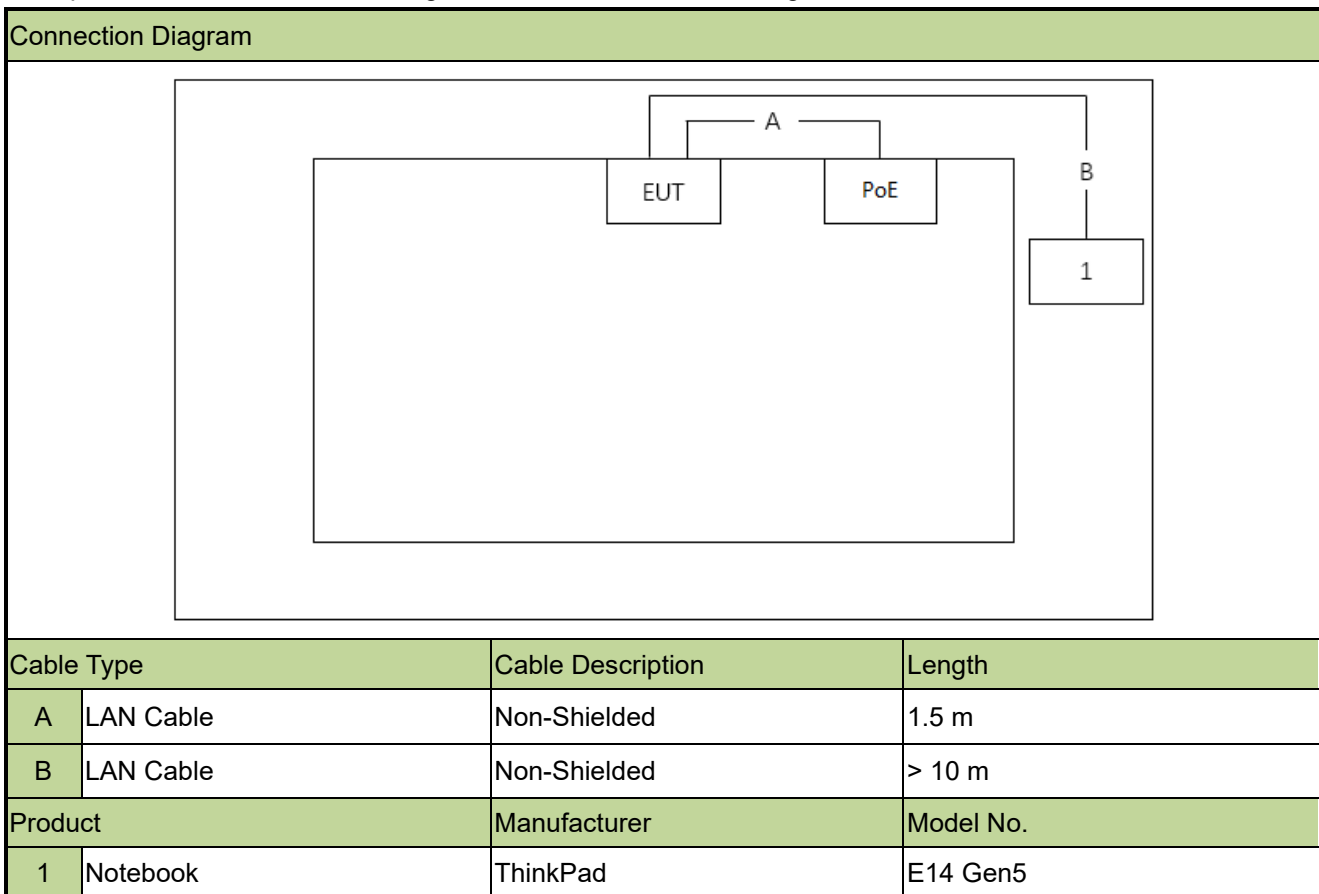
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by BLE-1 Mbps
Mode 2: Transmit by BLE-2 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.



2.3. Test Software

The test utility software used during testing was “IPOP” and commands were provided by the 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 v05 r02
- ANSI C63.10-2020

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.”

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
Anechoic Chamber	RIKEN	SIP-AC1	MRTSUE06554	1 year	2025-12-19	SIP-AC1
Thermohygrometer	testo	608-H1	MRTSUE06616	1 year	2025-10-16	SIP-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06645	1 year	2026-06-26	SIP-AC1
EMI Test Receiver	R&S	ESR3	MRTSUE06185	1 year	2025-12-05	SIP-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06602	1 year	2025-10-08	SIP-AC3
EMI Test Receiver	R&S	ESR3	MRTSUE06613	1 year	2025-10-13	SIP-AC3
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07075	1 year	2025-11-19	SIP-AC3
Signal Analyzer	Keysight	N9010B	MRTSUE07028	1 year	2025-10-13	SIP-AC3
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06599	1 year	2025-09-08	SIP-AC3
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2026-01-21	SIP-AC3
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2026-06-20	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2025-10-16	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2026-01-05	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2025-12-19	SIP-AC3
USB Power Sensor	Keysight	U2021XA	MRTSUE06596	1 year	2025-07-23 2026-07-14	SIP-TR1
Signal Analyzer	Keysight	N9010B	MRTSUE07036	1 year	2026-01-21	SIP-TR1
Thermohygrometer	testo	608-H1	MRTSUE11022	1 year	2025-10-16	SIP-TR1
Cable	HUBER+SUHNER	RG 233/U	MRTSUE06872	1 year	2025-12-23	SIP-SR2
Cable	HUBER+SUHNER	SF106	MRTSUE06873	1 year	2025-12-19	SIP-AC3
Attenuator	MVE	MVE2213	MRTSUE11103	1 year	2026-06-04	SIP-TR1
Attenuator	MVE	MVE2213	MRTSUE11111	1 year	2025-08-01 2026-07-31	SIP-TR1

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:	3.58 dB
150 kHz ~ 30 MHz:	3.20 dB
Radiated Emission Measurement	
The maximum measurement uncertainty is evaluated as:	
Coaxial:	9 kHz ~ 30 MHz: 2.35 dB
Coplanar:	9 kHz ~ 30 MHz: 2.37 dB
Horizontal:	30 MHz ~ 200 MHz: 3.47 dB
	200 MHz ~ 1 GHz: 4.17 dB
	1 GHz ~ 40 GHz: 4.97 dB
Vertical:	30 MHz ~ 200 MHz: 4.07 dB
	200 MHz ~ 1 GHz: 5.28 dB
	1 GHz ~ 40 GHz: 4.84 dB
Spurious Emissions, Conducted	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.5 dB	
Output Power	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 1.5 dB	
Power Spectrum Density	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 2.5 dB	
Occupied Bandwidth	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 3.2%	

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:

- 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.
- 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.
- The BLE/ZigBee antennas of AP571 and AP571e are completely identical, so only model AP571 is chosen for testing.

6.2. 6 dB Bandwidth Measurement

6.2.1. Test Limit

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

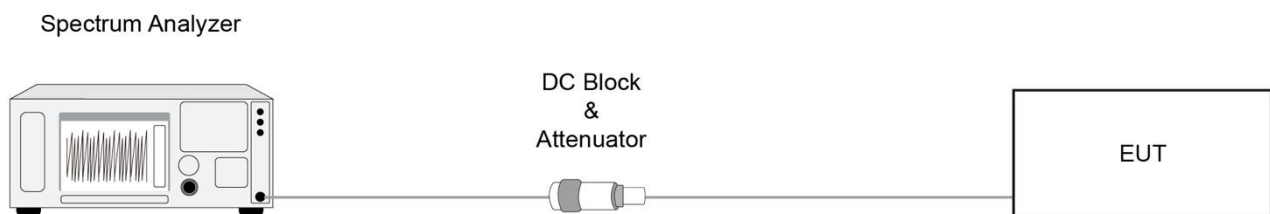
6.2.2. Test Procedure

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. Set RBW = shall be in the range of 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

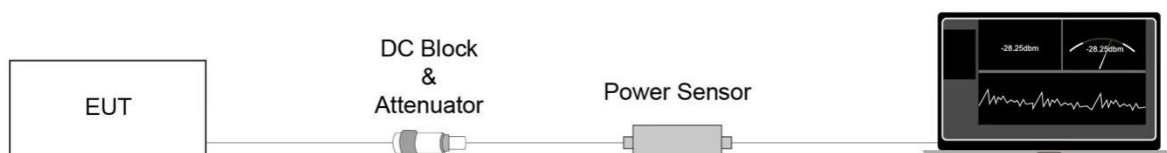
Method PKPM1 (Peak Power Measurement of Signals with DTS BW $\leq$ 50 MHz)

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.

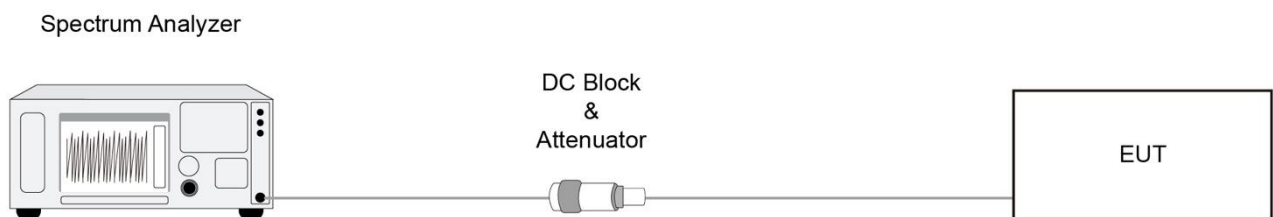
6.4.2. Test Procedure

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

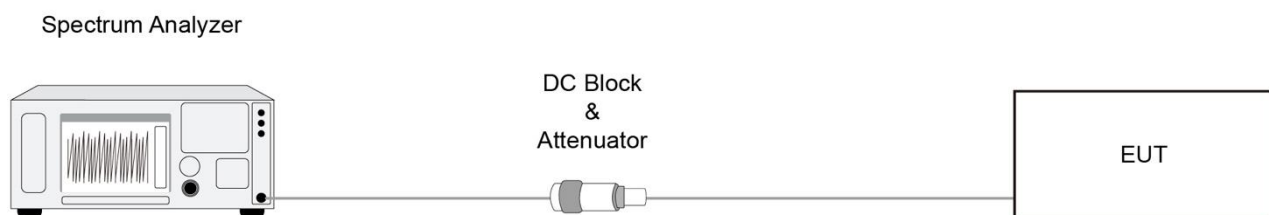
Reference level measurement

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 [μ 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

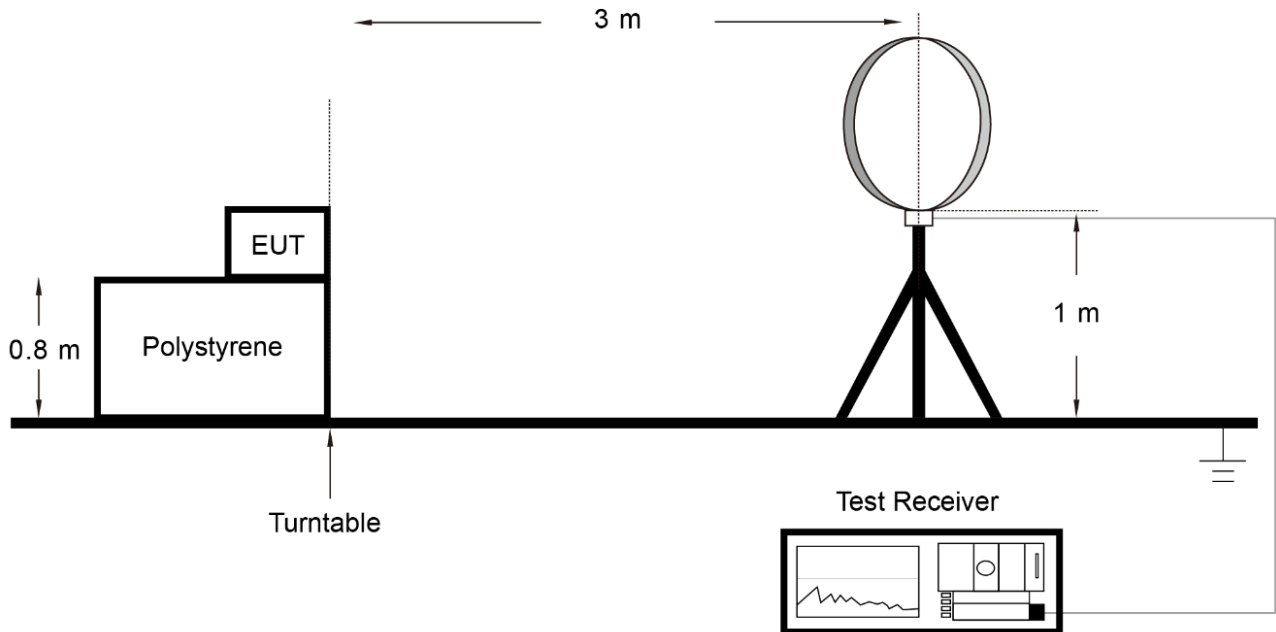
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW = 3 MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1 GHz (Method VB)

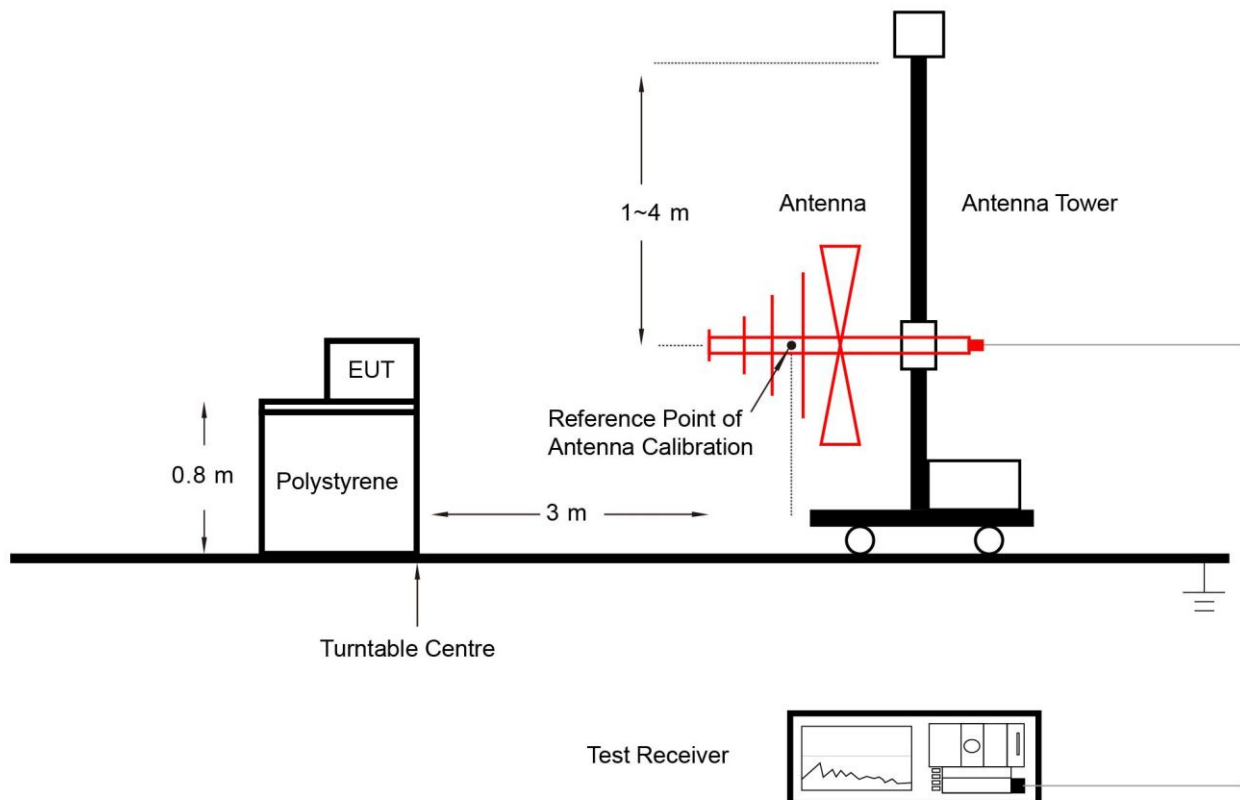
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz
If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$. T is the minimum transmission duration.
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

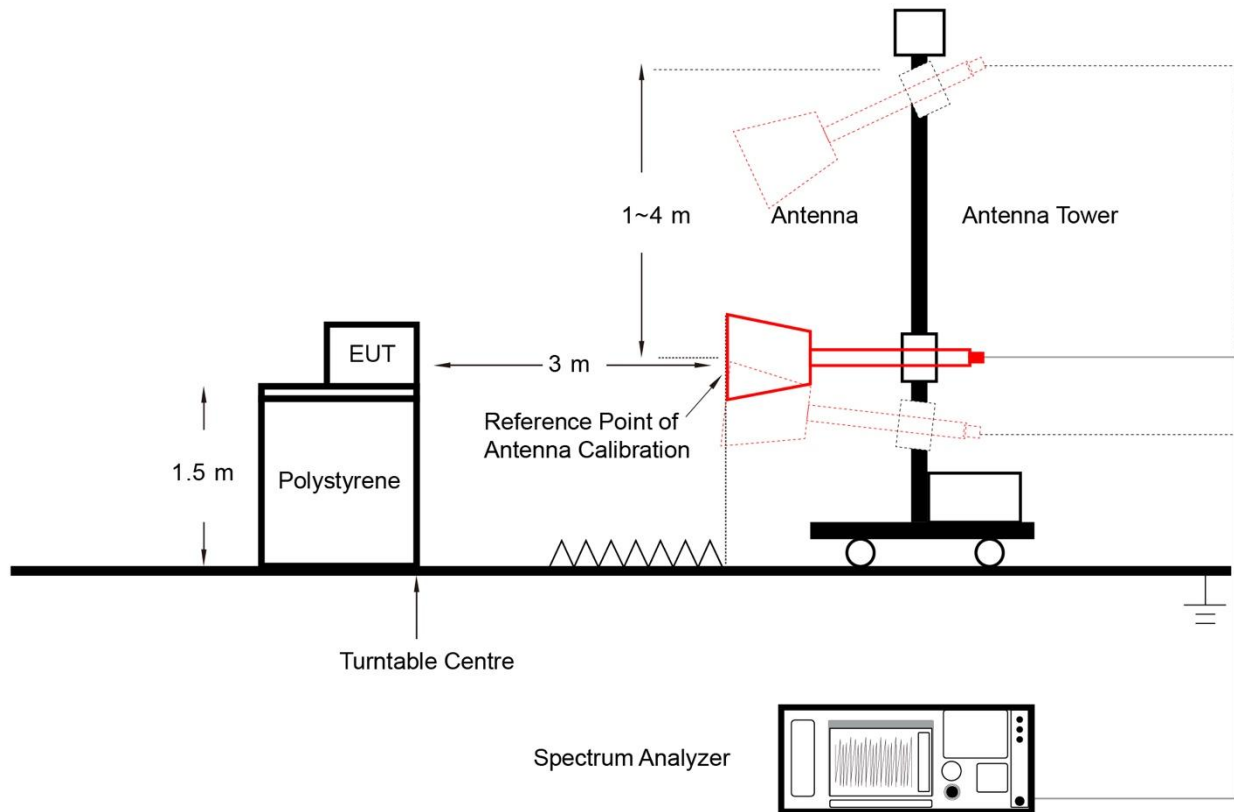
Below 30 MHz Test Setup:



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
¹ 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 [μ 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

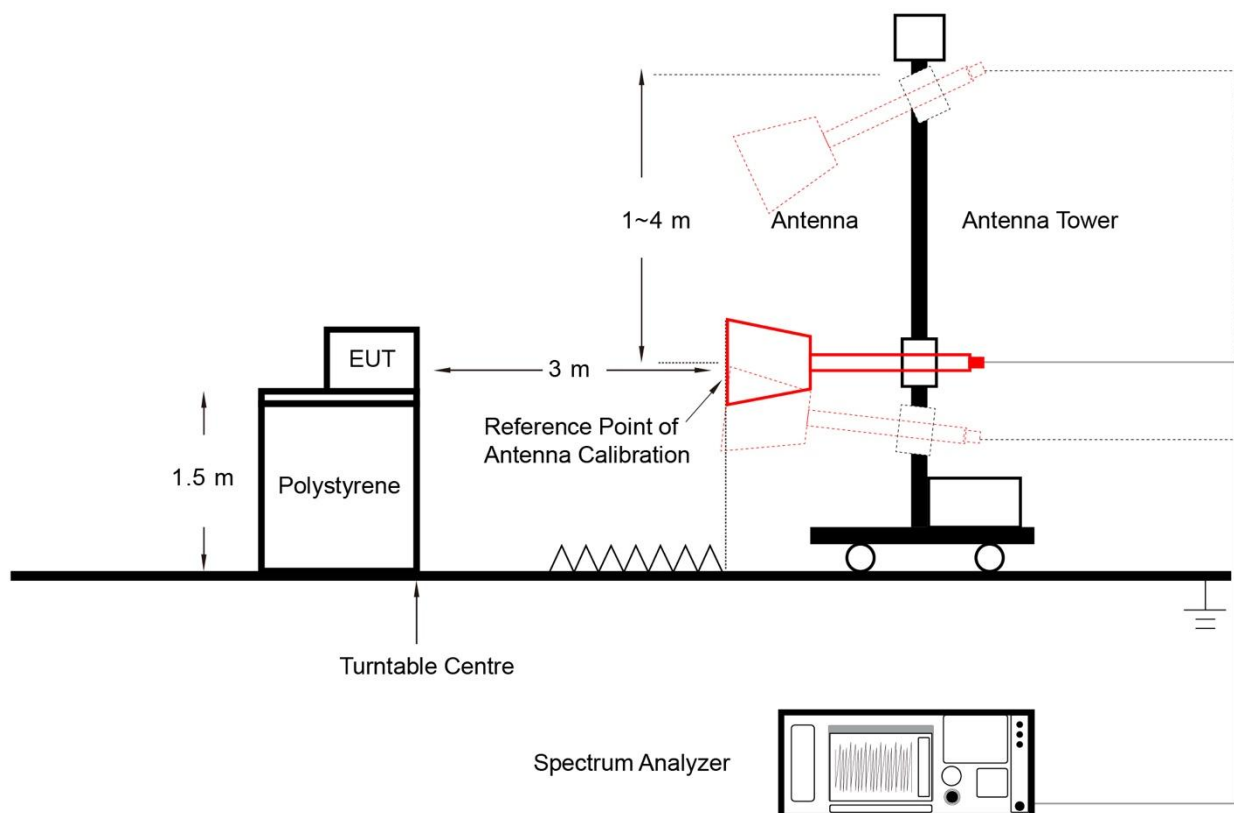
Average Field Strength Measurements

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

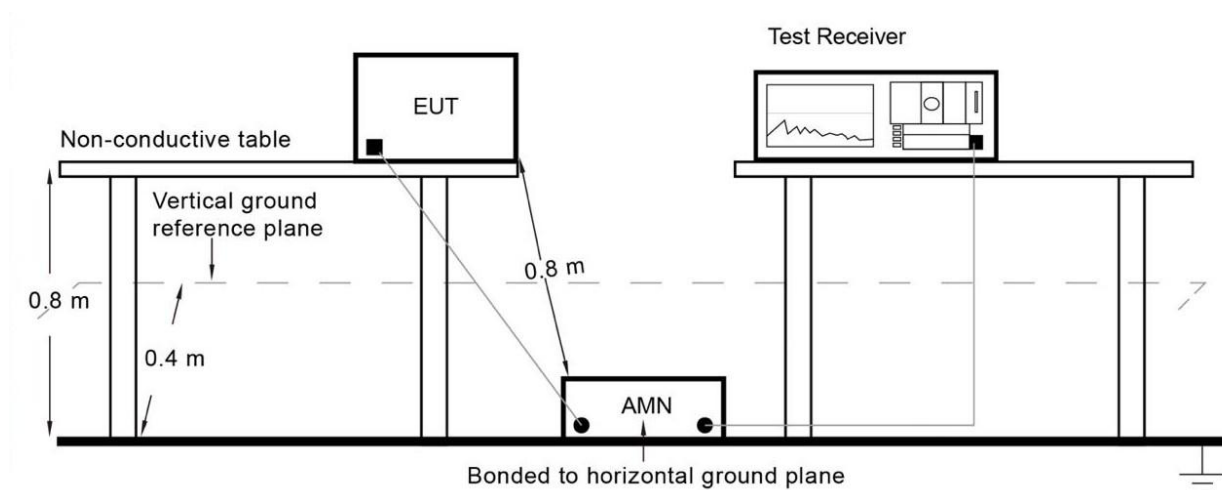
6.8.1. Test Limit

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



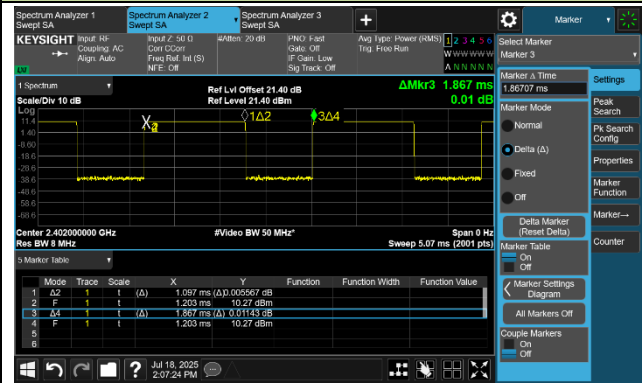
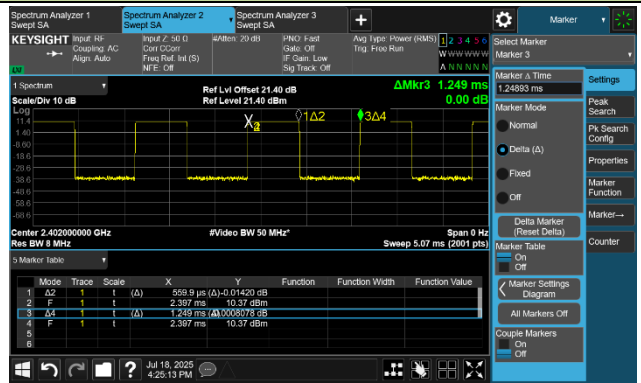
6.8.3. Test Result

Refer to Appendix A.8.

Appendix A - Test Result

A.1 Duty Cycle Test Result

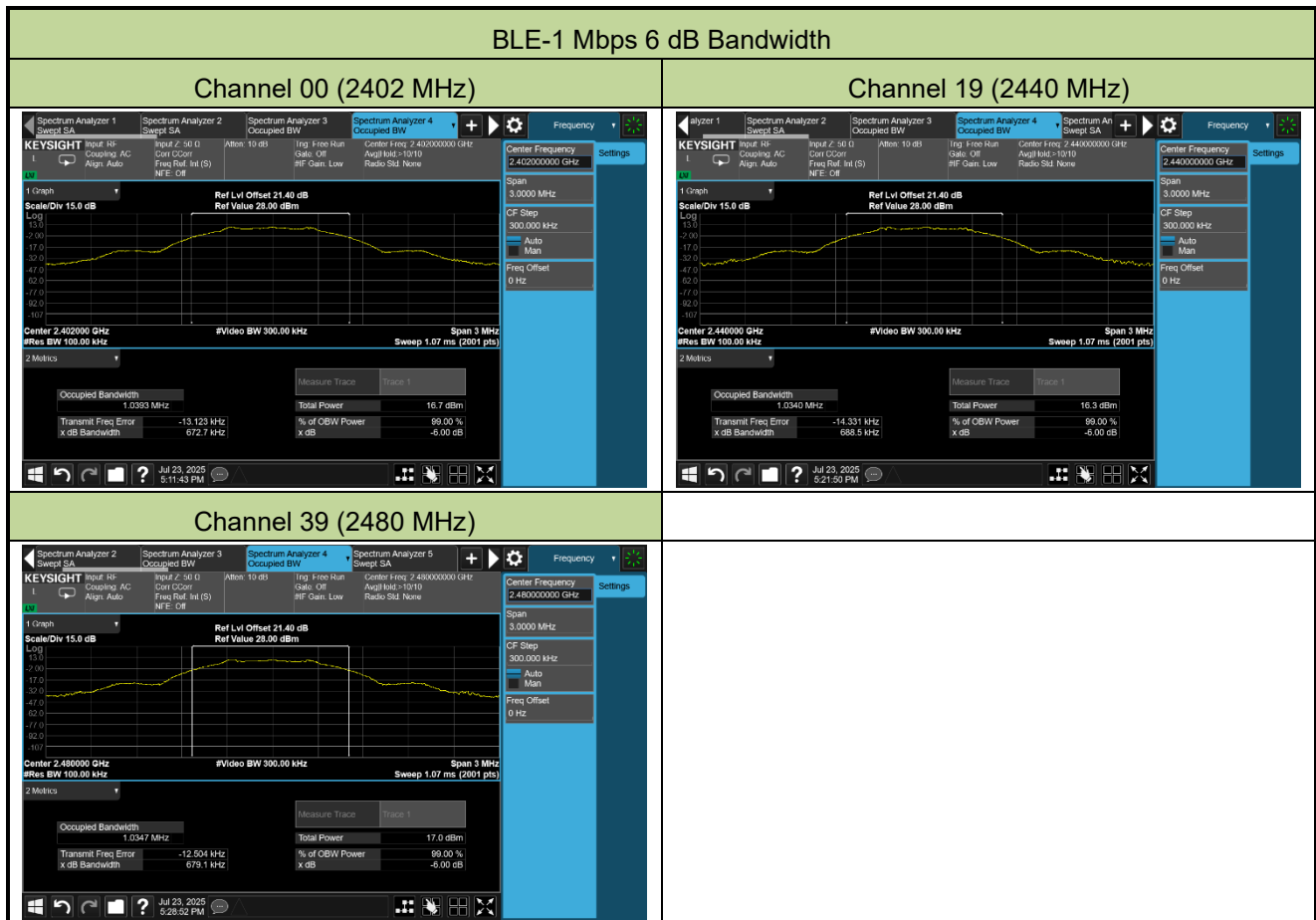
Test Site	SIP-TR1	Test Engineer	Nolan Chen
Test Date	2025-07-18		

Test Mode	Duty Cycle
BLE-1 Mbps	58.76%
BLE-2 Mbps	44.83%
Duty Cycle (T = Transmission Duration)	
BLE-1 Mbps (T = 1.097 ms)	BLE-2 Mbps (T = 559.9 μ s)
	

A.2 6 dB Bandwidth Test Result

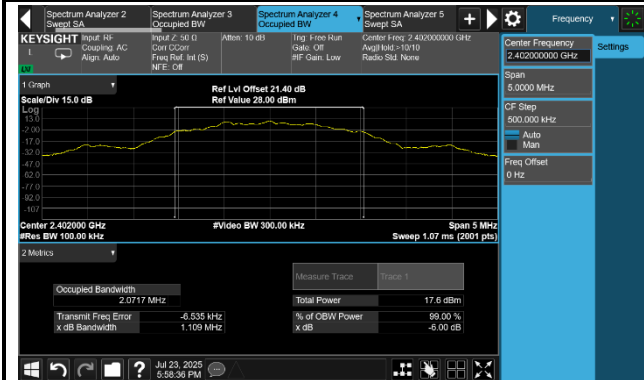
Test Site	SIP-TR1	Test Engineer	Nolan Chen
Test Date	2025-07-23		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
BLE	1 Mbps	00	2402	0.6727	≥ 0.5
BLE	1 Mbps	19	2440	0.6885	≥ 0.5
BLE	1 Mbps	39	2480	0.6791	≥ 0.5
BLE	2 Mbps	00	2402	1.109	≥ 0.5
BLE	2 Mbps	19	2440	1.107	≥ 0.5
BLE	2 Mbps	39	2480	1.104	≥ 0.5

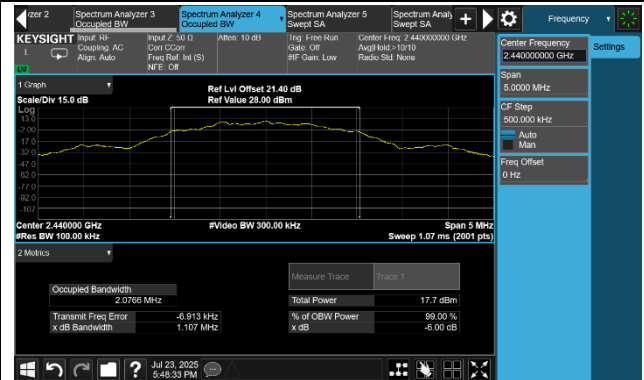


BLE-2 Mbps 6 dB Bandwidth

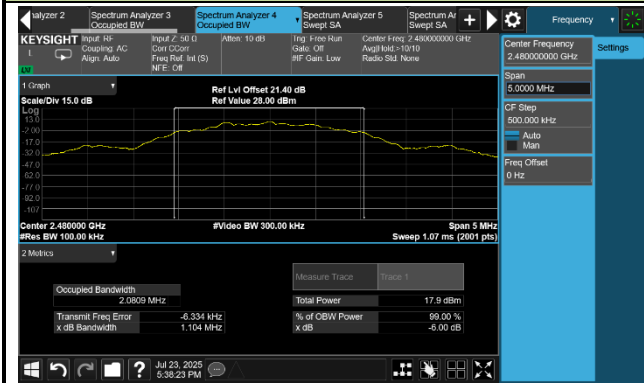
Channel 00 (2402 MHz)



Channel 19 (2440 MHz)



Channel 39 (2480 MHz)



A.3 Output Power Test Result

Test Site	SIP-TR1	Test Engineer	Nolan Chen
Test Date	2025-07-18		

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	4.53	≤ 30.00	Pass
BLE	1 Mbps	19	2440	3.71	≤ 30.00	Pass
BLE	1 Mbps	39	2480	1.33	≤ 30.00	Pass
BLE	2 Mbps	00	2402	8.19	≤ 30.00	Pass
BLE	2 Mbps	19	2440	6.32	≤ 30.00	Pass
BLE	2 Mbps	39	2480	3.42	≤ 30.00	Pass

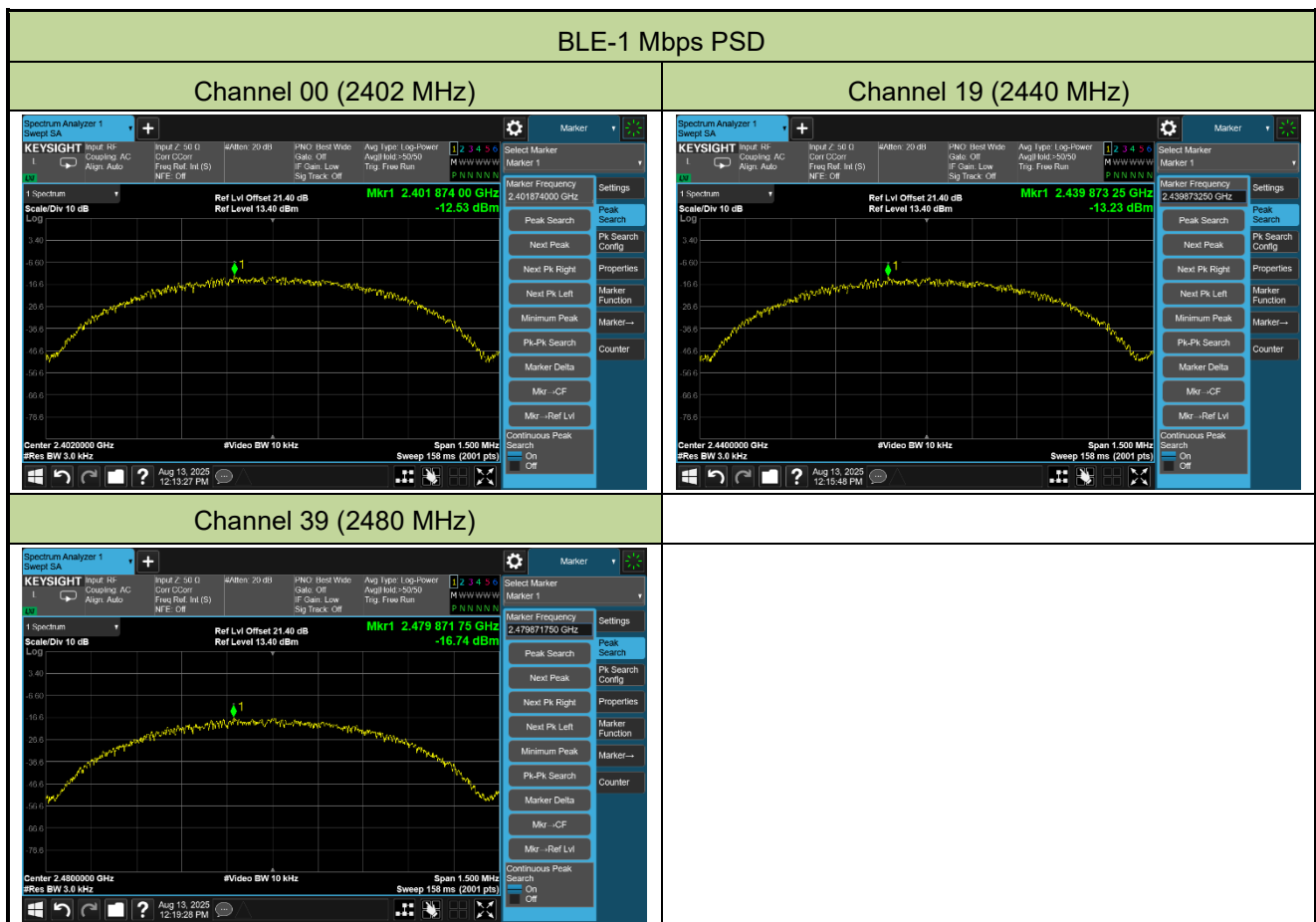
Test Result of Average Output Power (Reporting Only)

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Average Power (dBm)	Limit (dBm)	Result
BLE	1 Mbps	00	2402	3.62	≤ 30.00	Pass
BLE	1 Mbps	19	2440	2.66	≤ 30.00	Pass
BLE	1 Mbps	39	2480	-0.61	≤ 30.00	Pass
BLE	2 Mbps	00	2402	7.79	≤ 30.00	Pass
BLE	2 Mbps	19	2440	5.75	≤ 30.00	Pass
BLE	2 Mbps	39	2480	2.41	≤ 30.00	Pass

A.4 Power Spectral Density Test Result

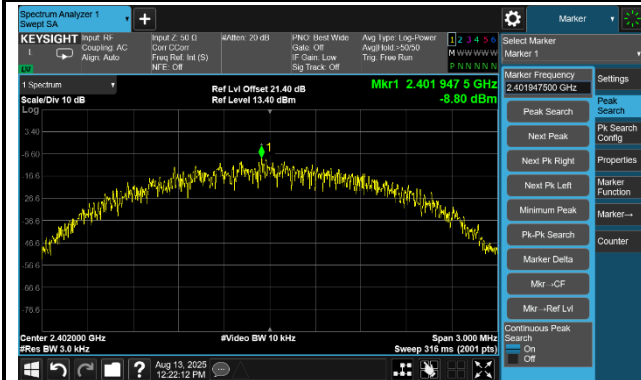
Test Site	SIP-TR1	Test Engineer	Nolan Chen
Test Date	2025-08-13		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	PSD Result (dBm / 3 kHz)	Limit (dBm / 3 kHz)	Result
BLE	1 Mbps	00	2402	-12.53	≤ 8.00	Pass
BLE	1 Mbps	19	2440	-13.23	≤ 8.00	Pass
BLE	1 Mbps	39	2480	-16.74	≤ 8.00	Pass
BLE	2 Mbps	00	2402	-8.80	≤ 8.00	Pass
BLE	2 Mbps	19	2440	-10.81	≤ 8.00	Pass
BLE	2 Mbps	39	2480	-14.06	≤ 8.00	Pass

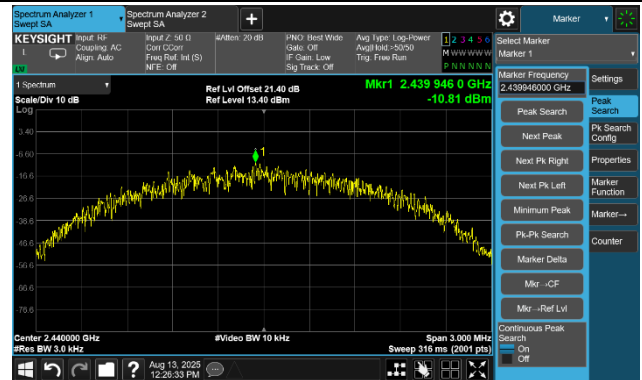


BLE-2 Mbps PSD

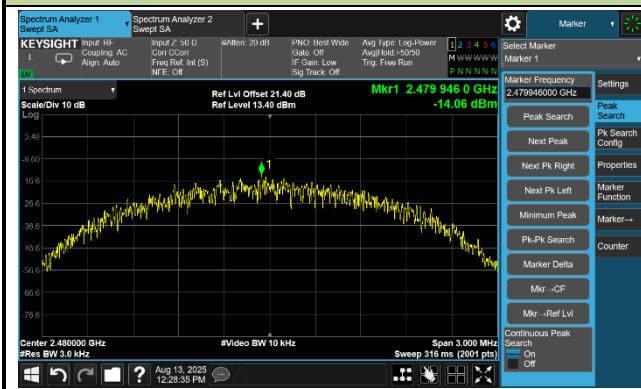
Channel 00 (2402 MHz)



Channel 19 (2440 MHz)



Channel 39 (2480 MHz)



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

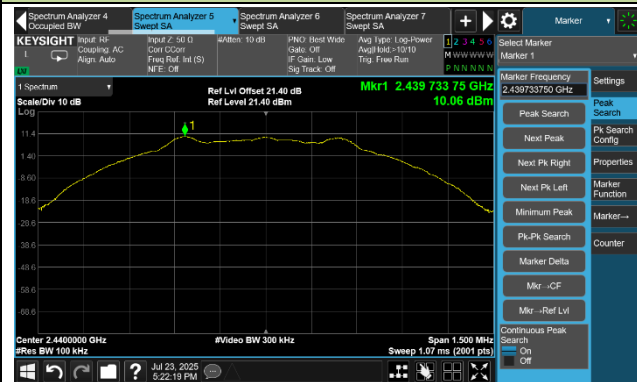
Test Site	SIP-TR1	Test Engineer	Nolan Chen
Test Date	2025-07-23		

Test Mode	Data Rate / Mbps	Channel No.	Frequency (MHz)	Limit (dBc)	Result
BLE	1	00	2402	20	Pass
BLE	1	19	2440	20	Pass
BLE	1	39	2480	20	Pass
BLE	2	00	2402	20	Pass
BLE	2	19	2440	20	Pass
BLE	2	39	2480	20	Pass

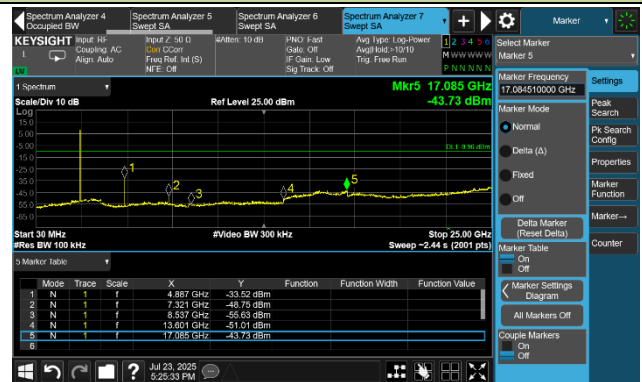


Channel 19 (2440 MHz)

100 kHz PSD Reference Level

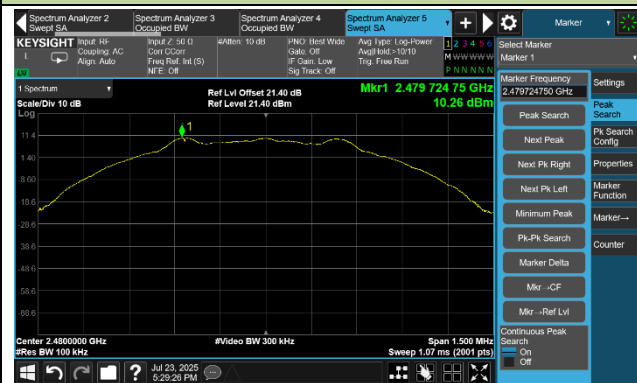


Spurious Emission 30 MHz ~ 25 GHz

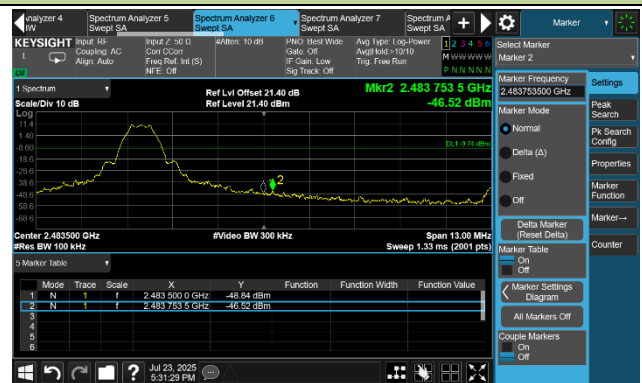


Channel 39 (2480 MHz)

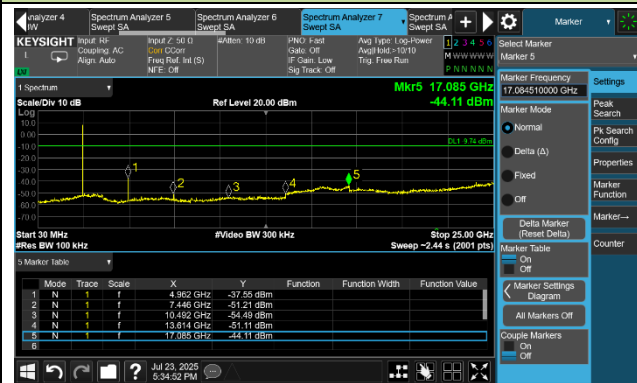
100 kHz PSD Reference Level



High Band Edge



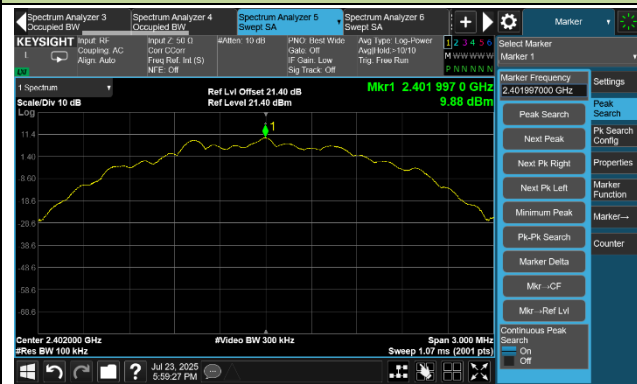
Spurious Emission 30 MHz ~ 25 GHz



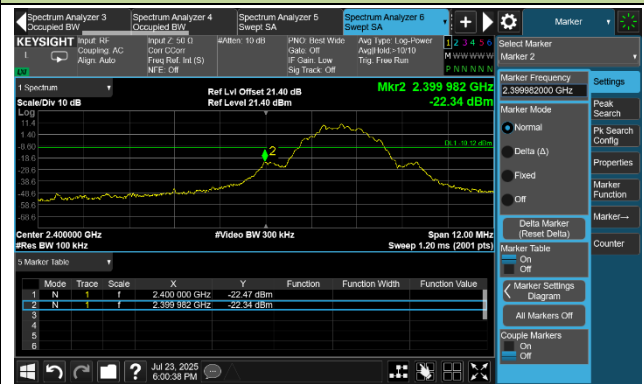
BLE-2 Mbps Out-of-Band Emissions

Channel 00 (2402 MHz)

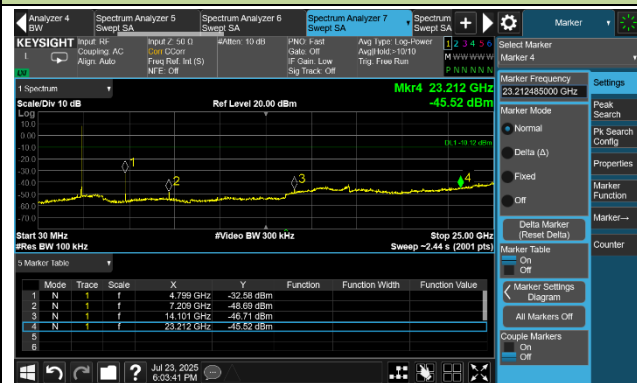
100 kHz PSD Reference Level



Low Band Edge



Spurious Emission 30 MHz ~ 25 GHz



Channel 19 (2440 MHz)

100 kHz PSD Reference Level

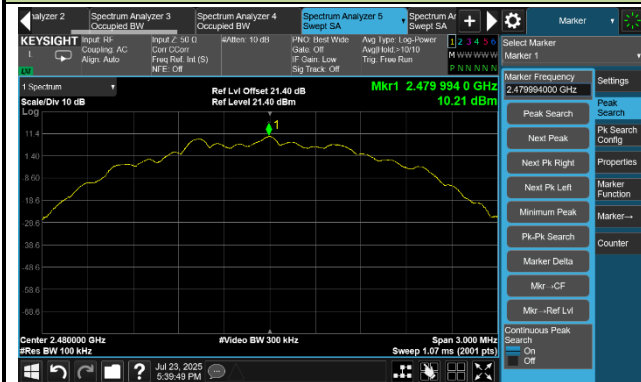


Spurious Emission 30 MHz ~ 25 GHz



Channel 39 (2480 MHz)

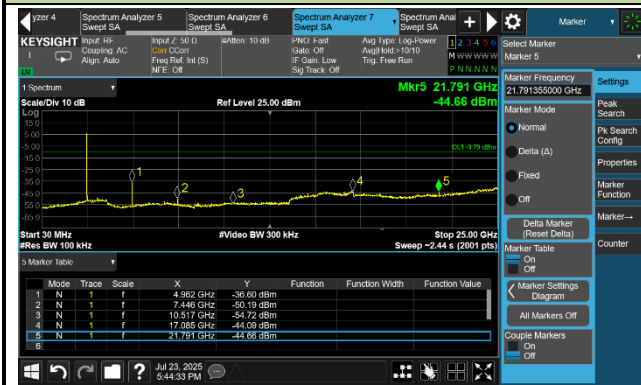
100 kHz PSD Reference Level



High Band Edge



Spurious Emission 30 MHz ~ 25 GHz



A.6 Radiated Spurious Emission Test Result

Test Site	SIP-AC3	Test Engineer	Fusco Pan
Test Date	2025-08-13	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	4802.90	56.79	-3.63	53.16	54.00	-0.84	Average	Horizontal
	4802.90	60.14	-3.63	56.51	74.00	-17.49	Peak	Horizontal
	7541.60	47.66	-2.62	45.04	74.00	-28.96	Peak	Horizontal
	12442.70	45.28	1.62	46.90	74.00	-27.10	Peak	Horizontal
	4802.90	51.09	-3.63	47.46	54.00	-6.54	Average	Vertical
	4802.90	52.28	-3.63	48.65	74.00	-25.35	Peak	Vertical
	7606.20	48.19	-2.35	45.84	74.00	-28.16	Peak	Vertical
	11691.30	47.01	0.50	47.51	74.00	-26.49	Peak	Vertical
19	4879.40	57.04	-3.57	53.47	54.00	-0.53	Average	Horizontal
	4879.40	61.64	-3.57	58.07	74.00	-15.93	Peak	Horizontal
	7541.60	47.82	-2.62	45.20	74.00	-28.80	Peak	Horizontal
	12553.20	45.17	1.92	47.09	74.00	-26.91	Peak	Horizontal
	4879.40	53.09	-3.57	49.52	54.00	-4.48	Average	Vertical
	4879.40	53.86	-3.57	50.29	74.00	-23.71	Peak	Vertical
	8342.30	46.68	-1.54	45.14	74.00	-28.86	Peak	Vertical
	11123.50	46.97	0.23	47.20	74.00	-26.80	Peak	Vertical
39	4959.30	57.17	-3.72	53.45	54.00	-0.55	Average	Horizontal
	4959.30	60.66	-3.72	56.94	74.00	-17.06	Peak	Horizontal
	7397.10	47.85	-3.01	44.84	74.00	-29.16	Peak	Horizontal
	12293.10	46.32	0.87	47.19	74.00	-26.81	Peak	Horizontal
	4959.30	53.62	-3.72	49.90	54.00	-4.10	Average	Vertical
	4959.30	54.93	-3.72	51.21	74.00	-22.79	Peak	Vertical
	7487.20	47.67	-2.73	44.94	74.00	-29.06	Peak	Vertical
	12560.00	46.04	1.90	47.94	74.00	-26.06	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)

Test Site	SIP-AC3	Test Engineer	Fusco Pan
Test Date	2025-08-13	Test Mode	BLE-2 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.		

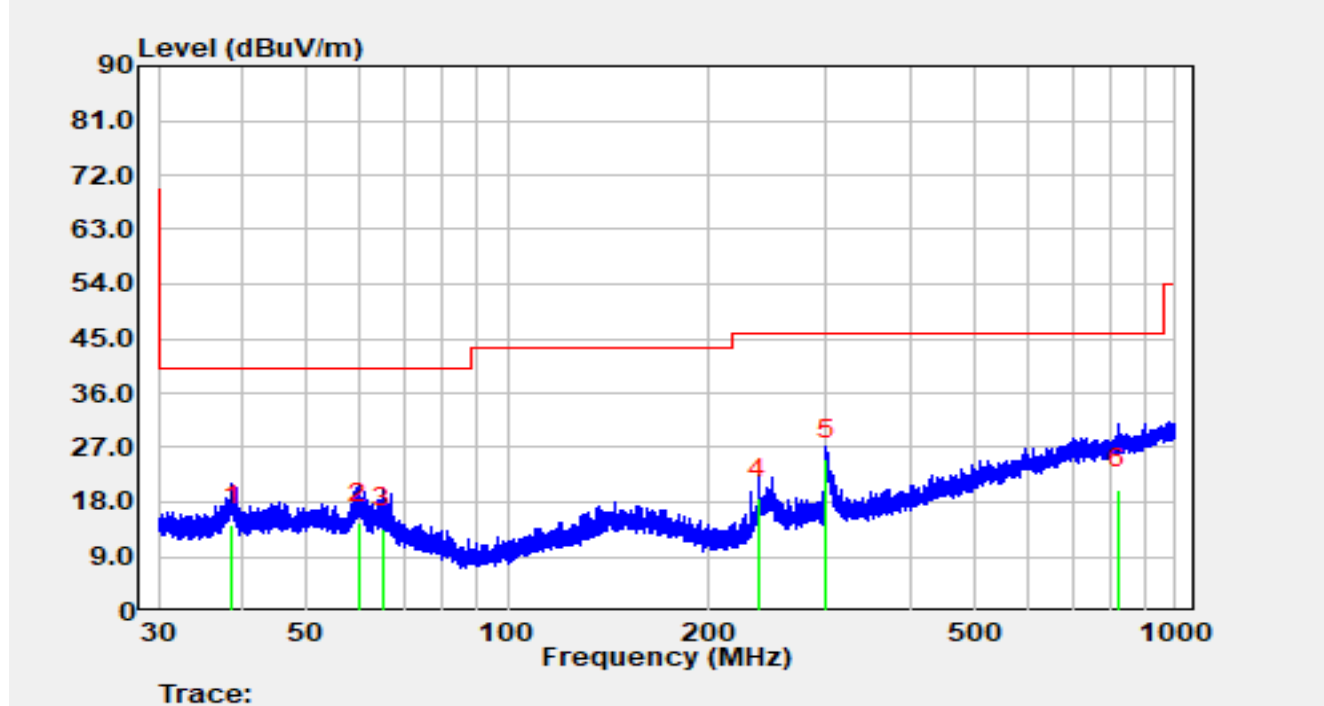
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4804.60	56.95	-3.62	53.33	54.00	-0.67	Average	Horizontal
	4804.60	62.75	-3.62	59.13	74.00	-14.87	Peak	Horizontal
	7573.90	47.53	-2.44	45.09	74.00	-28.91	Peak	Horizontal
	12430.80	45.90	1.62	47.52	74.00	-26.48	Peak	Horizontal
	4802.90	52.94	-3.63	49.31	54.00	-4.69	Average	Vertical
	4802.90	54.13	-3.63	50.50	74.00	-23.50	Peak	Vertical
	7505.90	47.65	-2.68	44.97	74.00	-29.03	Peak	Vertical
	12116.30	45.69	0.72	46.41	74.00	-27.59	Peak	Vertical
19	4879.40	57.11	-3.57	53.54	54.00	-0.46	Average	Horizontal
	4879.40	63.21	-3.57	59.64	74.00	-14.36	Peak	Horizontal
	7602.80	46.87	-2.34	44.53	74.00	-29.47	Peak	Horizontal
	11256.10	47.84	0.32	48.16	74.00	-25.84	Peak	Horizontal
	4879.40	53.27	-3.57	49.70	54.00	-4.30	Average	Vertical
	4879.40	55.94	-3.57	52.37	74.00	-21.63	Peak	Vertical
	7607.90	47.38	-2.36	45.02	74.00	-28.98	Peak	Vertical
	11920.80	47.57	-0.30	47.27	74.00	-26.73	Peak	Vertical
39	4959.30	56.80	-3.72	53.08	54.00	-0.92	Average	Horizontal
	4959.30	63.86	-3.72	60.14	74.00	-13.86	Peak	Horizontal
	7677.60	47.51	-2.09	45.42	74.00	-28.58	Peak	Horizontal
	12391.70	46.69	1.40	48.09	74.00	-25.91	Peak	Horizontal
	4959.30	53.08	-3.72	49.36	54.00	-4.64	Average	Vertical
	4959.30	54.60	-3.72	50.88	74.00	-23.12	Peak	Vertical
	7519.50	48.27	-2.69	45.58	74.00	-28.42	Peak	Vertical
	12451.20	45.16	1.62	46.78	74.00	-27.22	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 Result of Radiated Emission below 1 GHz:

Site	SIP-AC1	Test Date	2025-08-11
Temperature	24.3 °C	Humidity	64.9 %
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Mero Zhou
Factor	VULB 9168_00998	Polarity	Horizontal
Test Mode	Transmit by BLE 2M at 2480 MHz	Test Voltage	By PoE

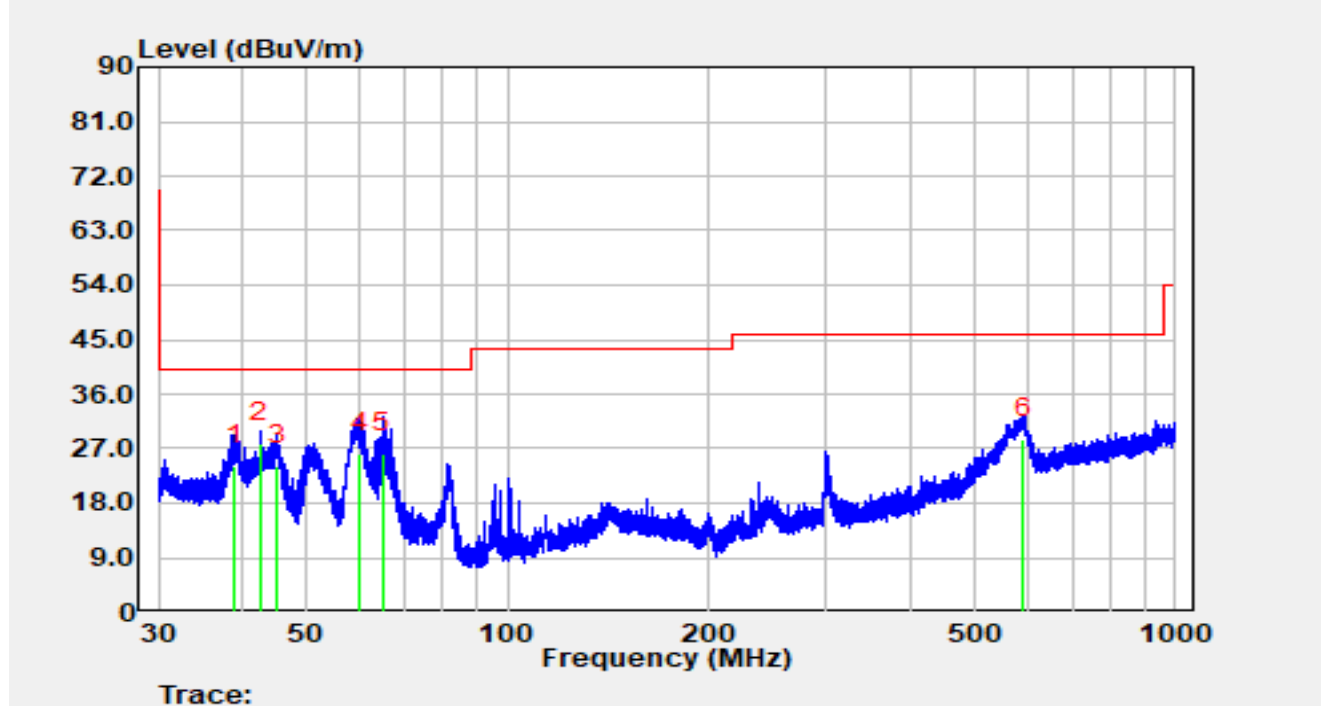


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		38.616	-3.30	17.52	14.22	-25.78	40.00	QP
2		59.796	-3.20	17.74	14.54	-25.46	40.00	QP
3		65.000	-3.30	16.97	13.67	-26.33	40.00	QP
4		237.476	2.10	16.48	18.58	-27.42	46.00	QP
5	*	300.157	6.00	19.01	25.01	-20.99	46.00	QP
6		819.983	-10.40	30.52	20.12	-25.88	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 amplitude of radiated emissions (frequency range from 9 kHz to 30 MHz and 18 GHz to 25 GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site	SIP-AC1	Test Date	2025-08-11
Temperature	24.3 °C	Humidity	64.9 %
Limit	FCC_Part15.209_RSE(3 m)	Test Engineer	Mero Zhou
Factor	VULB 9168_00998	Polarity	Vertical
Test Mode	Transmit by BLE 2M at 2480 MHz	Test Voltage	By PoE



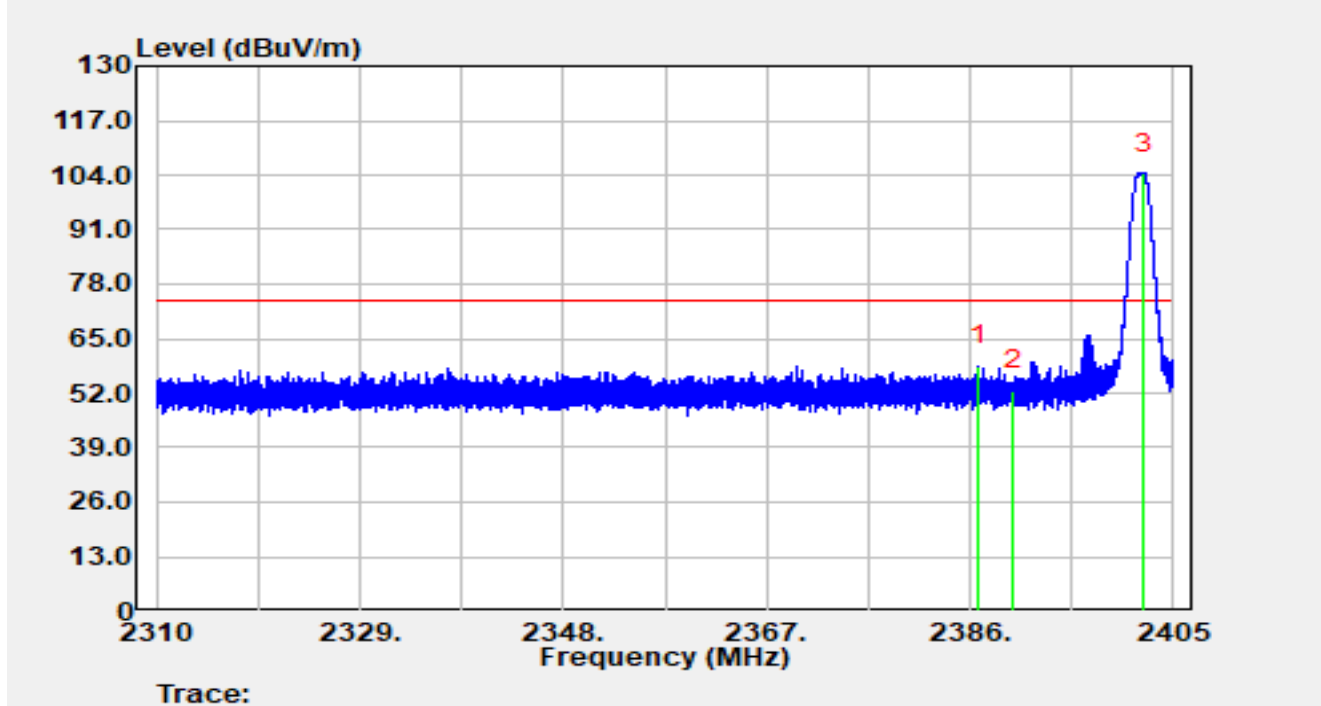
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		39.038	6.70	17.57	24.27	-15.73	40.00	QP
2	*	42.540	10.10	17.88	27.98	-12.02	40.00	QP
3		45.264	6.20	18.05	24.25	-15.75	40.00	QP
4		60.069	8.60	17.71	26.31	-13.69	40.00	QP
5		64.978	9.30	16.98	26.28	-13.72	40.00	QP
6		590.767	2.30	26.33	28.63	-17.37	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 amplitude of radiated emissions (frequency range from 9 kHz to 30 MHz and 18 GHz to 25 GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

A.7 Radiated Restricted Band Edge Test Result

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402 MHz	Test Voltage	By PoE

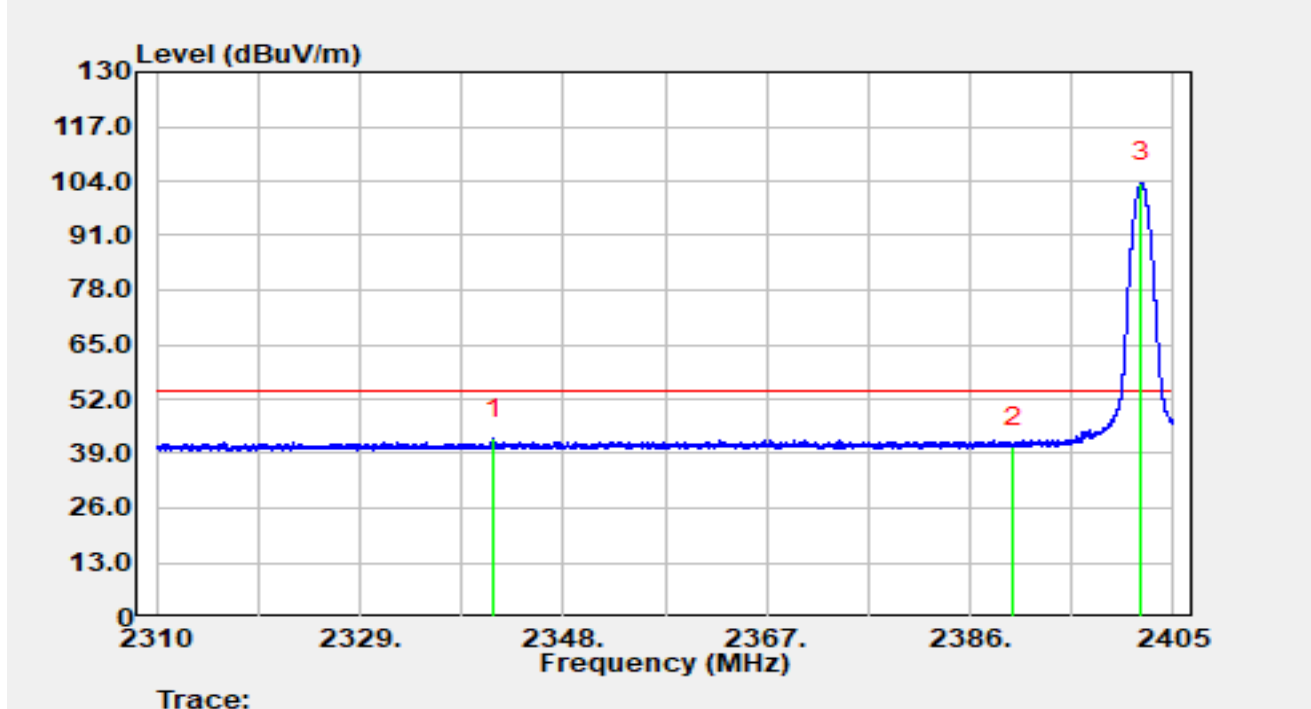


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2386.770	24.50	34.05	58.55	-15.45	74.00	Peak
2		2390.000	18.66	34.07	52.73	-21.27	74.00	Peak
3		2402.236	70.32	34.12	104.44	N/A	N/A	Peak

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	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2402 MHz	Test Voltage	By PoE

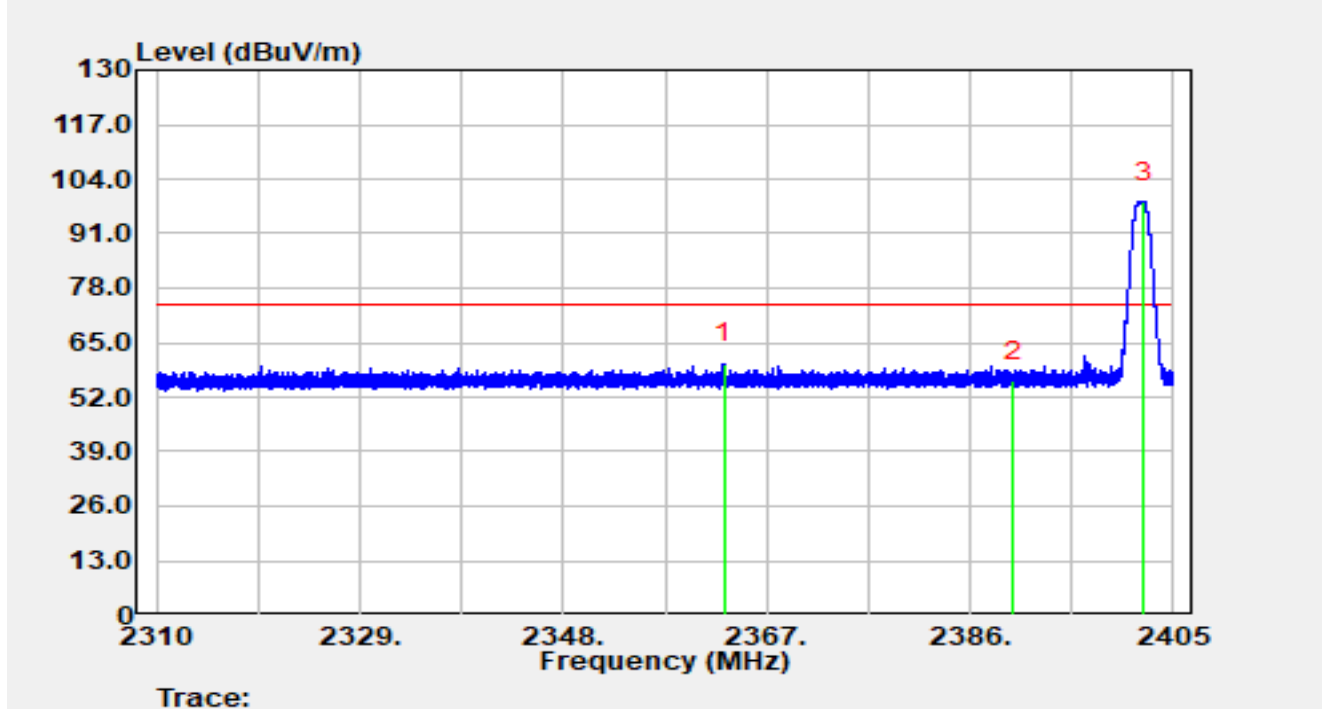


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2341.550	8.62	33.91	42.53	-11.47	54.00	Average
2		2390.000	6.53	34.07	40.60	-13.40	54.00	Average
3		2402.008	69.47	34.12	103.59	N/A	N/A	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2402 MHz	Test Voltage	By PoE

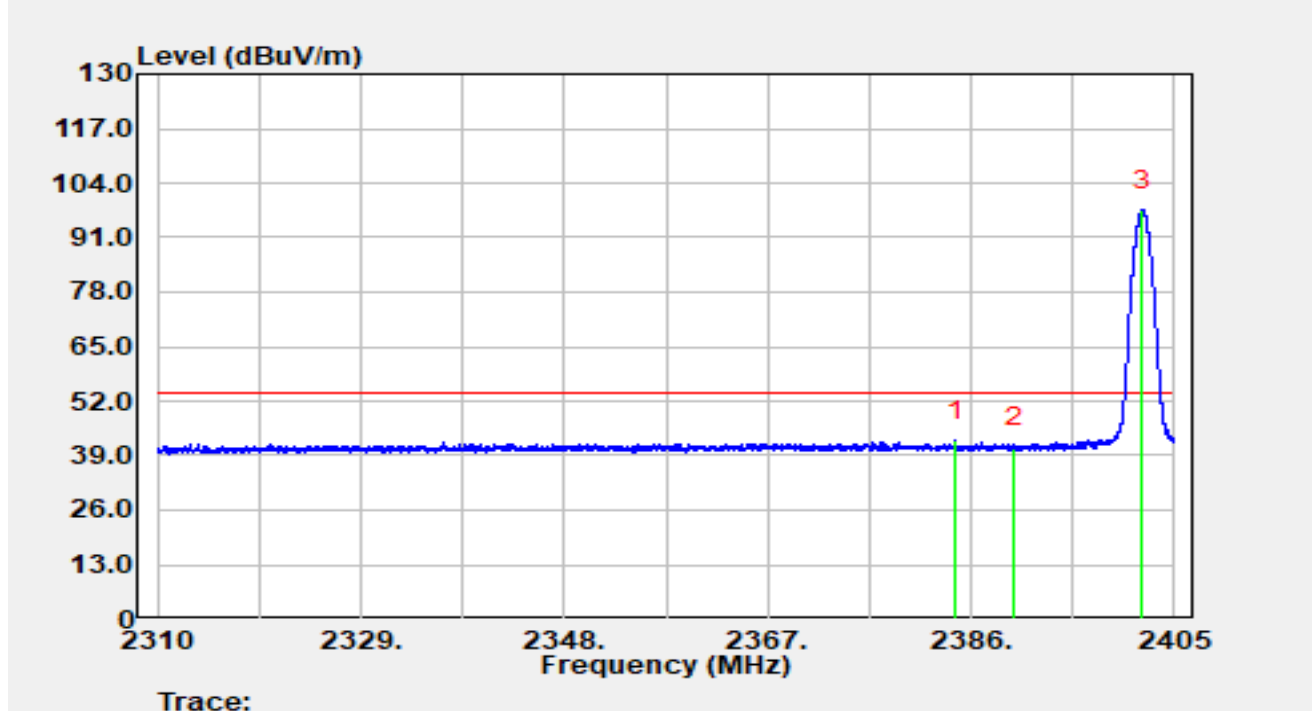


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2363.048	25.87	34.11	59.98	-14.02	74.00	Peak
2		2390.000	21.56	34.23	55.79	-18.21	74.00	Peak
3		2402.273	64.23	34.30	98.53	N/A	N/A	Peak

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2402 MHz	Test Voltage	By PoE

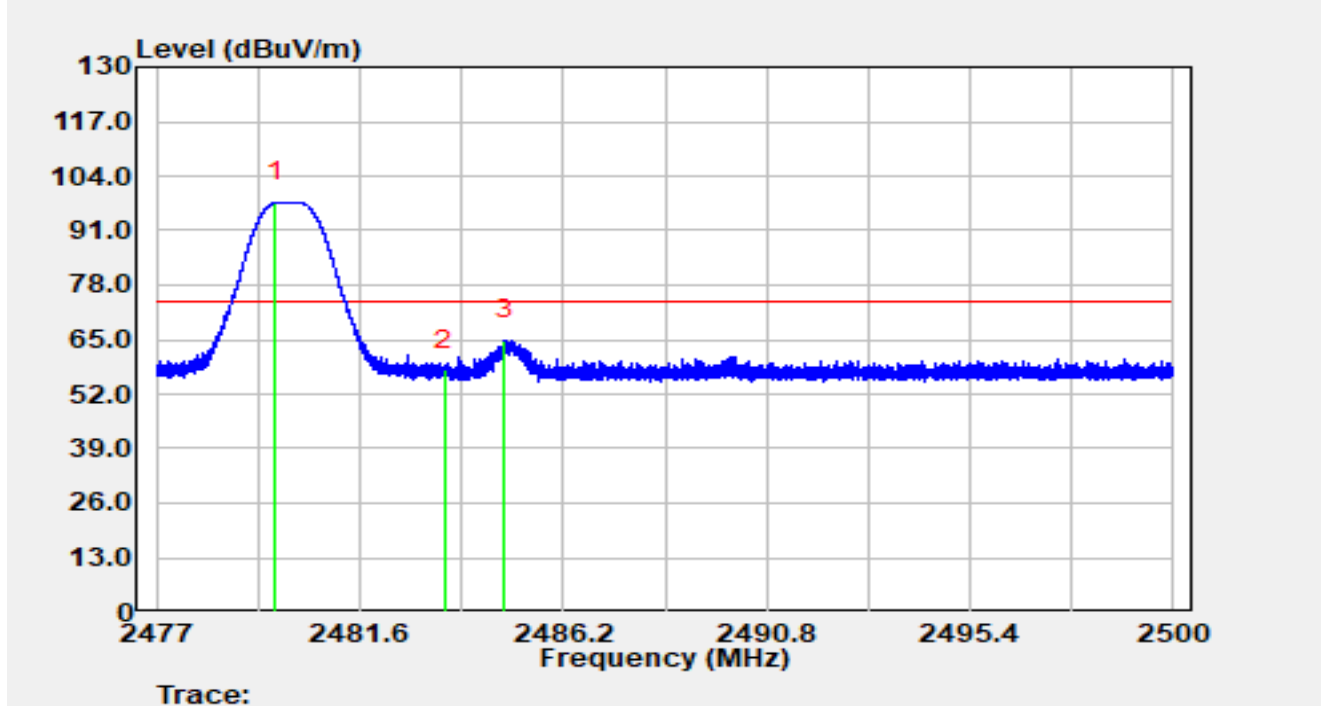


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2384.546	8.43	34.19	42.62	-11.38	54.00	Average
2		2390.000	6.56	34.23	40.79	-13.21	54.00	Average
3		2402.017	63.27	34.30	97.57	N/A	N/A	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz	Test Voltage	By PoE

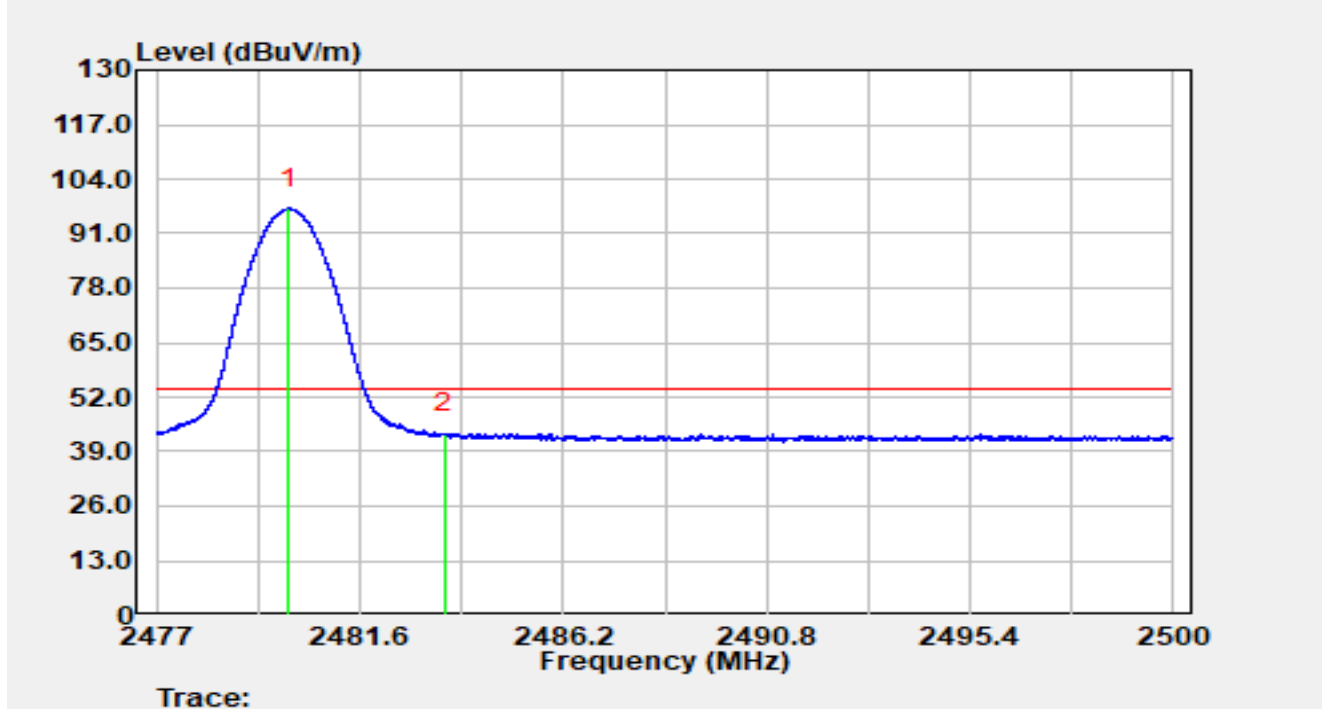


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.684	63.14	34.64	97.79	N/A	N/A	Peak
2		2483.500	23.18	34.67	57.85	-16.15	74.00	Peak
3	*	2484.877	30.12	34.68	64.80	-9.20	74.00	Peak

Notes:

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

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_1M at 2480 MHz	Test Voltage	By PoE

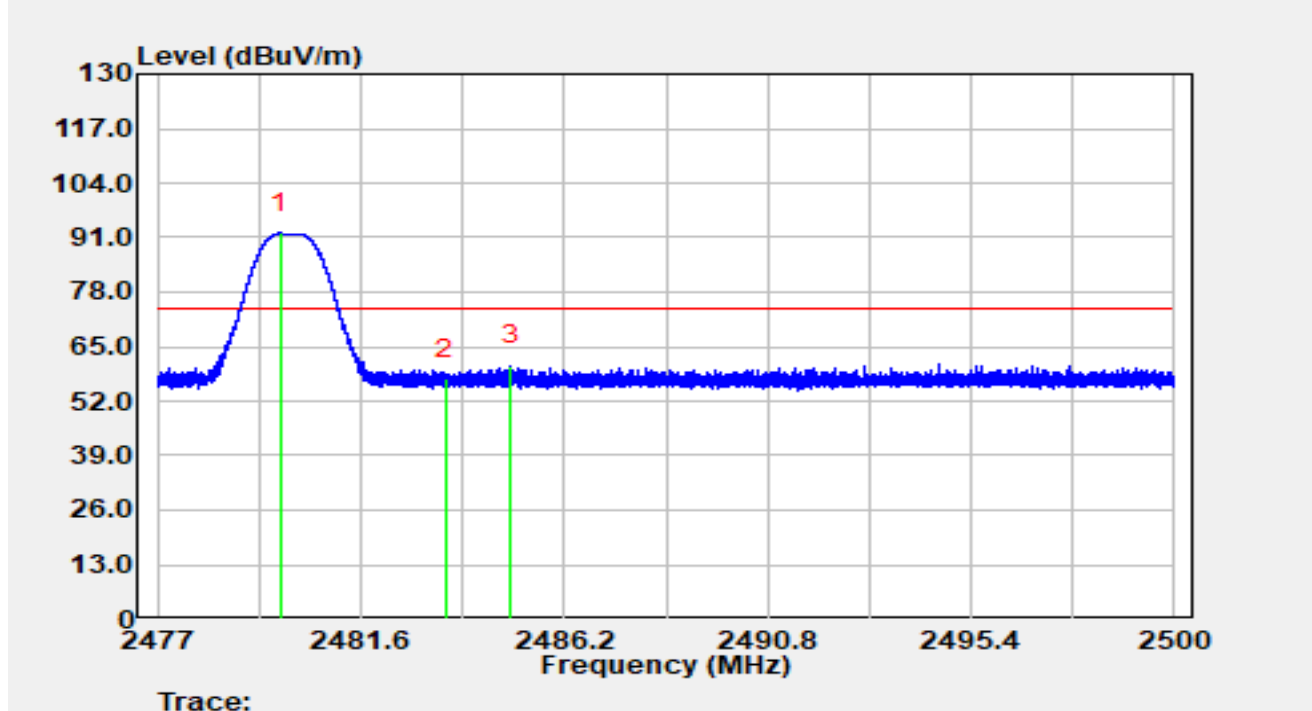


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.999	62.25	34.65	96.89	N/A	N/A	Average
2	*	2483.500	8.54	34.67	43.21	-10.79	54.00	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz	Test Voltage	By PoE

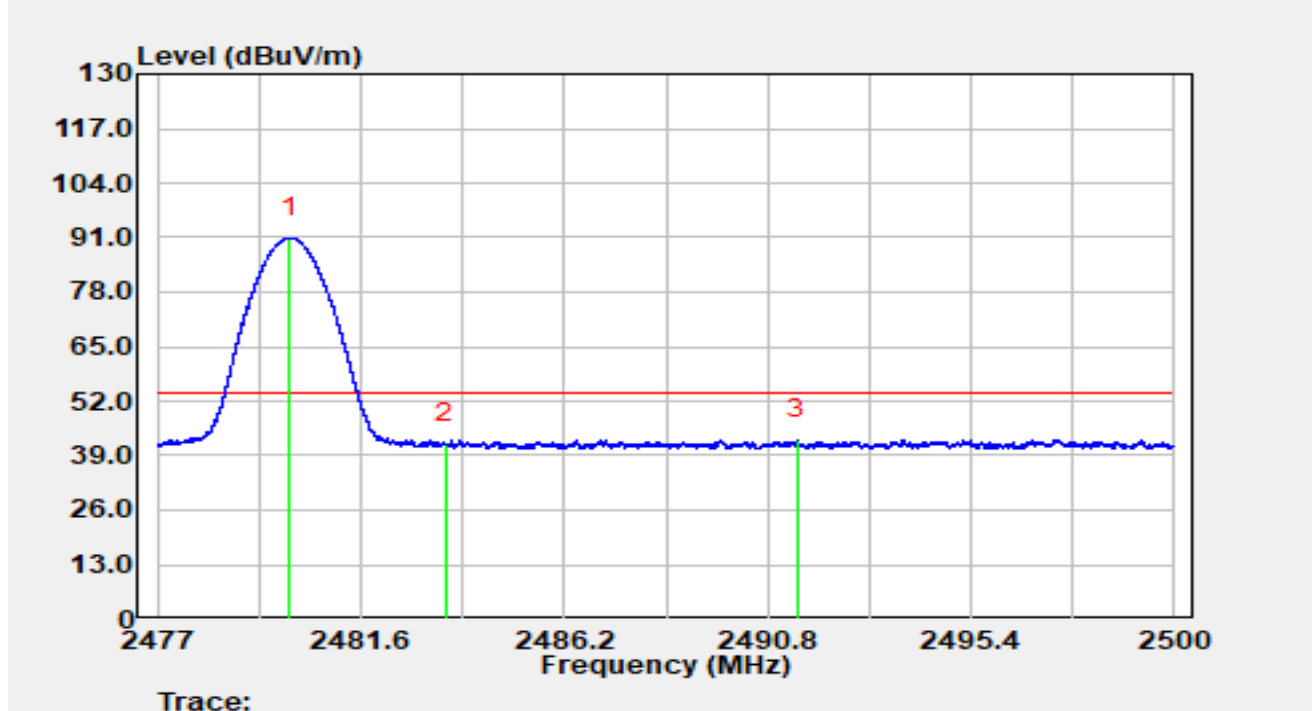


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.765	57.36	34.64	92.00	N/A	N/A	Peak
2		2483.500	22.52	34.67	57.19	-16.81	74.00	Peak
3	*	2485.004	25.77	34.68	60.45	-13.55	74.00	Peak

Notes:

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

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_1M at 2480 MHz	Test Voltage	By PoE

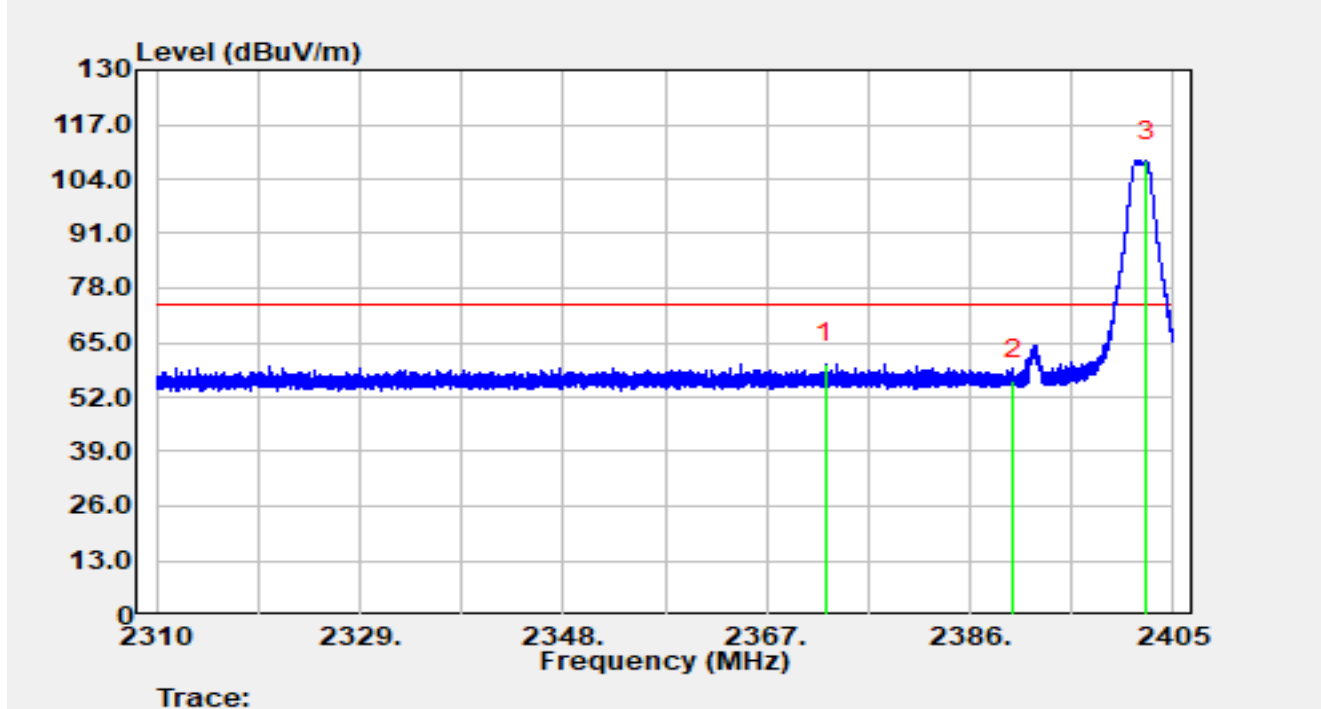


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2479.995	56.23	34.65	90.88	N/A	N/A	Average
2		2483.500	7.07	34.67	41.74	-12.26	54.00	Average
3	*	2491.469	7.97	34.72	42.69	-11.31	54.00	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_2M at 2402 MHz	Test Voltage	By PoE

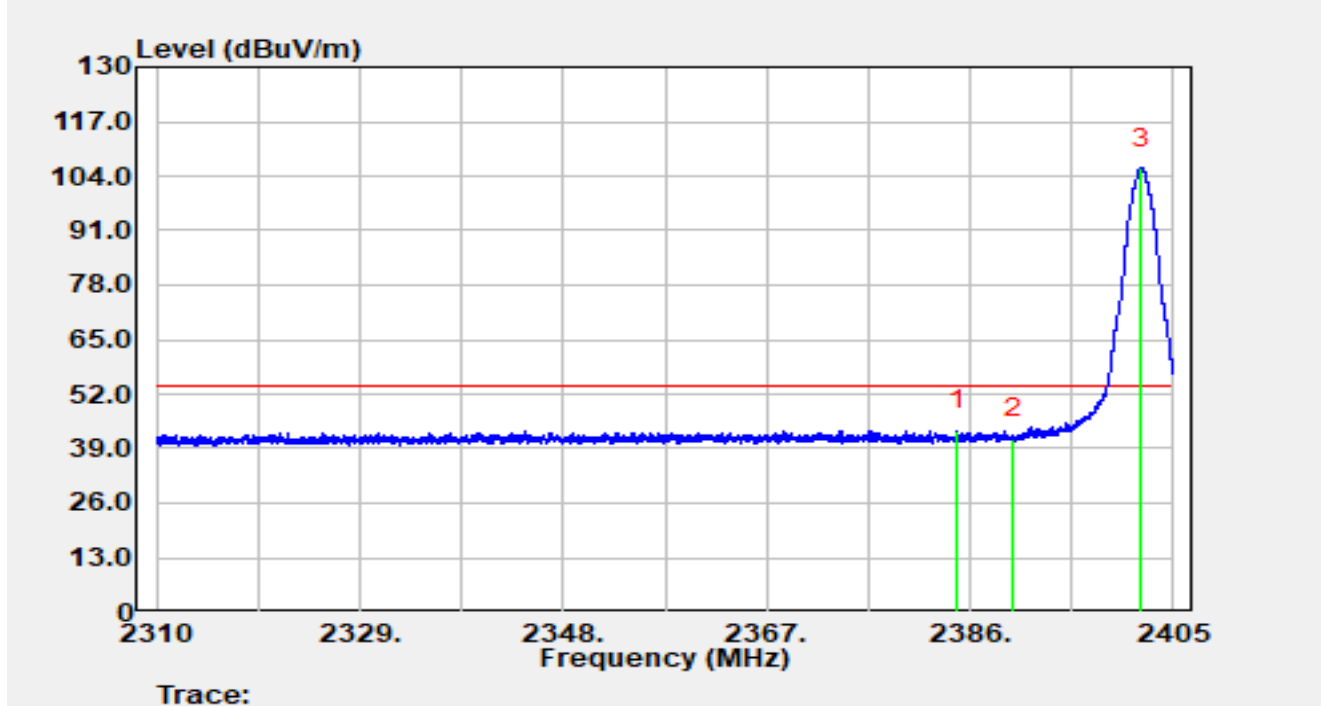


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2372.462	25.90	34.13	60.03	-13.97	74.00	Peak
2		2390.000	21.76	34.23	55.99	-18.01	74.00	Peak
3	*\	2402.445	74.01	34.30	108.32	N/A	N/A	Peak

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_2M at 2402 MHz	Test Voltage	By PoE

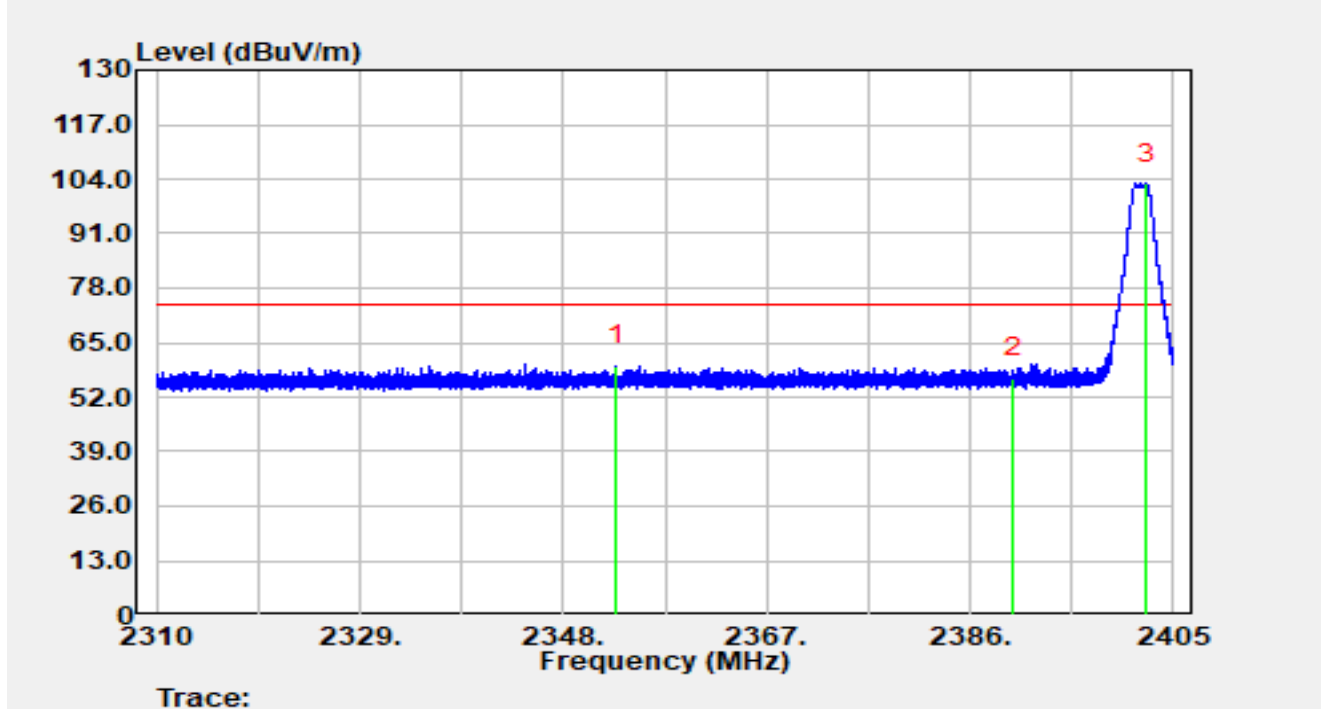


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2384.803	9.06	34.19	43.25	-10.75	54.00	Average
2		2390.000	7.18	34.23	41.41	-12.59	54.00	Average
3		2402.027	71.64	34.30	105.95	N/A	N/A	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_2M at 2402 MHz	Test Voltage	By PoE

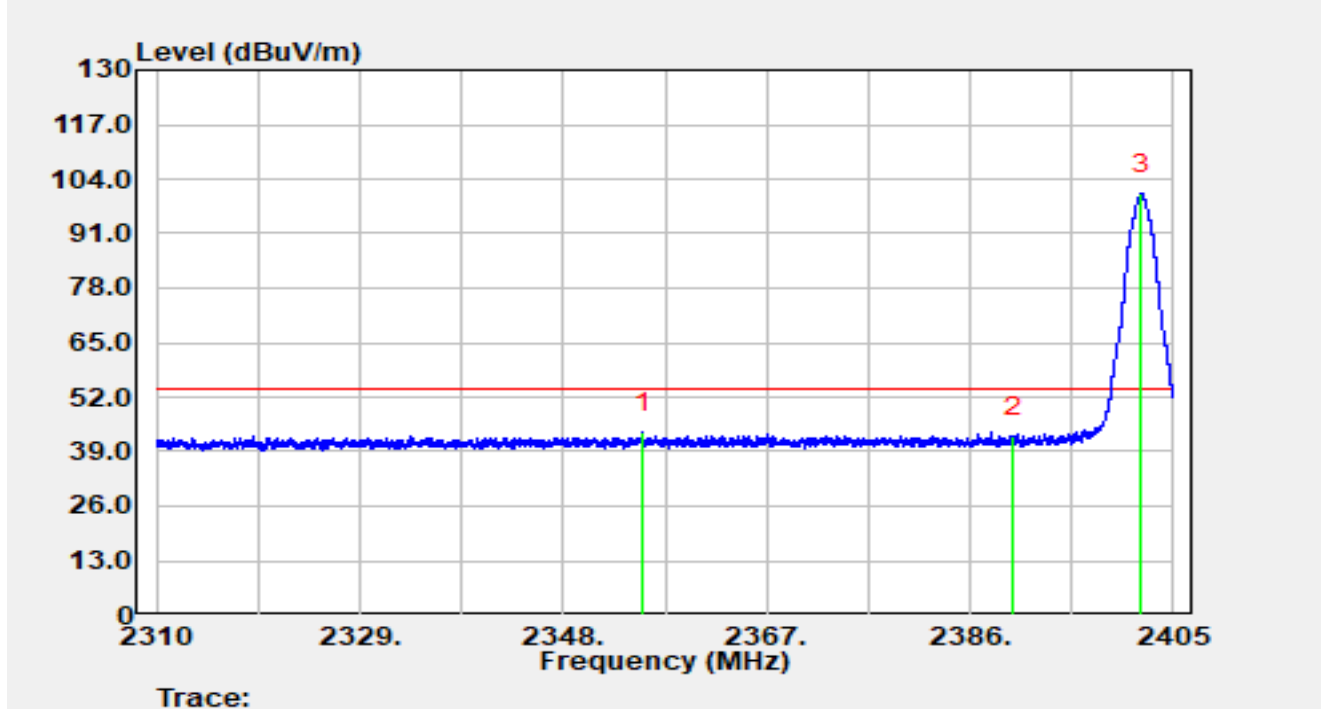


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2352.988	25.42	34.11	59.53	-14.47	74.00	Peak
2		2390.000	22.35	34.23	56.58	-17.42	74.00	Peak
3		2402.454	68.60	34.30	102.91	N/A	N/A	Peak

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_2M at 2402 MHz	Test Voltage	By PoE

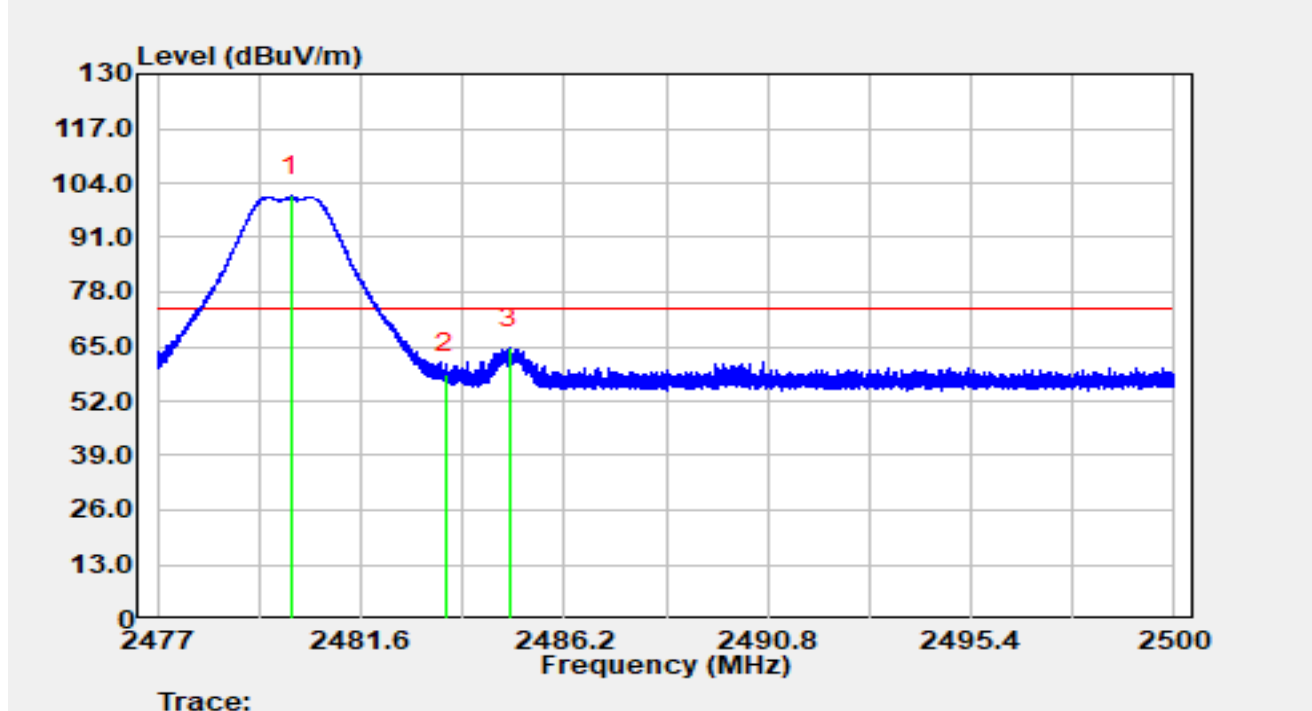


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	2355.419	9.41	34.11	43.52	-10.48	54.00	Average
2		2390.000	8.30	34.23	42.53	-11.47	54.00	Average
3		2402.017	66.05	34.30	100.35	N/A	N/A	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_2M at 2480 MHz	Test Voltage	By PoE

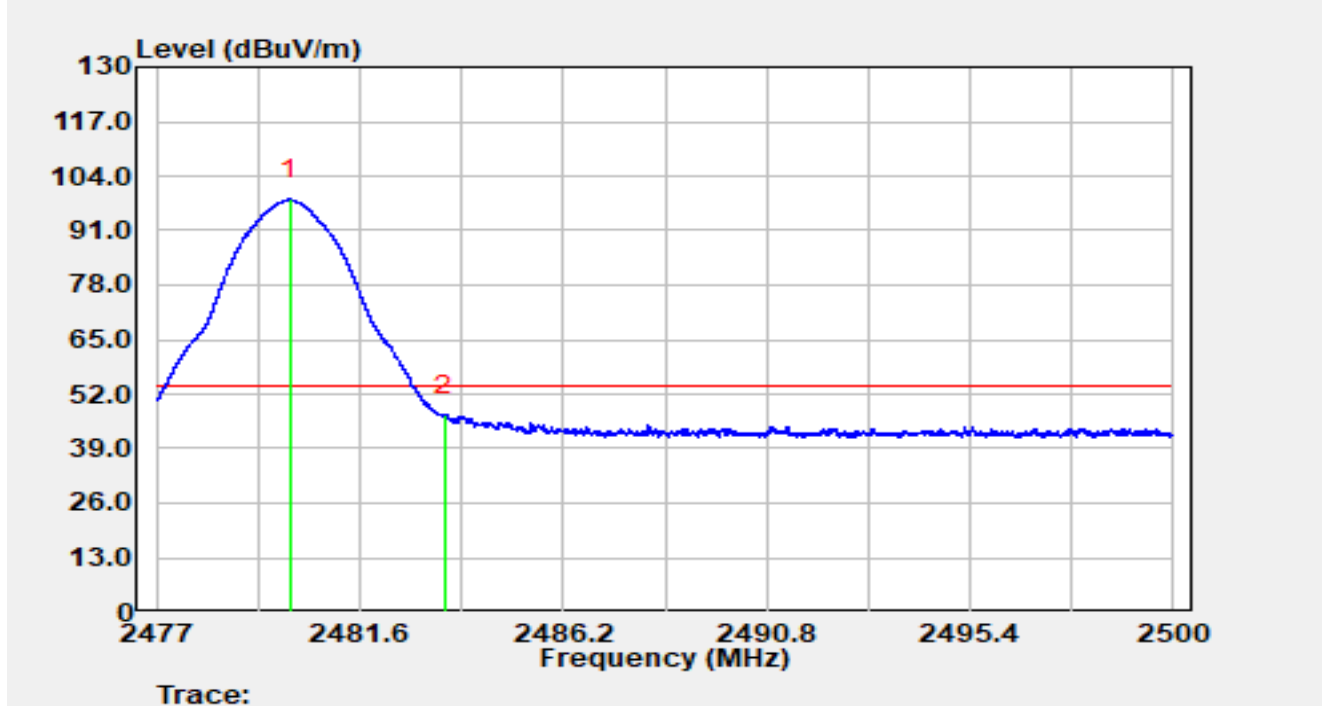


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.027	66.21	34.65	100.86	N/A	N/A	Peak
2		2483.500	23.73	34.67	58.40	-15.60	74.00	Peak
3	*	2484.963	29.95	34.68	64.63	-9.37	74.00	Peak

Notes:

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

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Horizontal
Test Mode	Transmit by BLE_2M at 2480 MHz	Test Voltage	By PoE

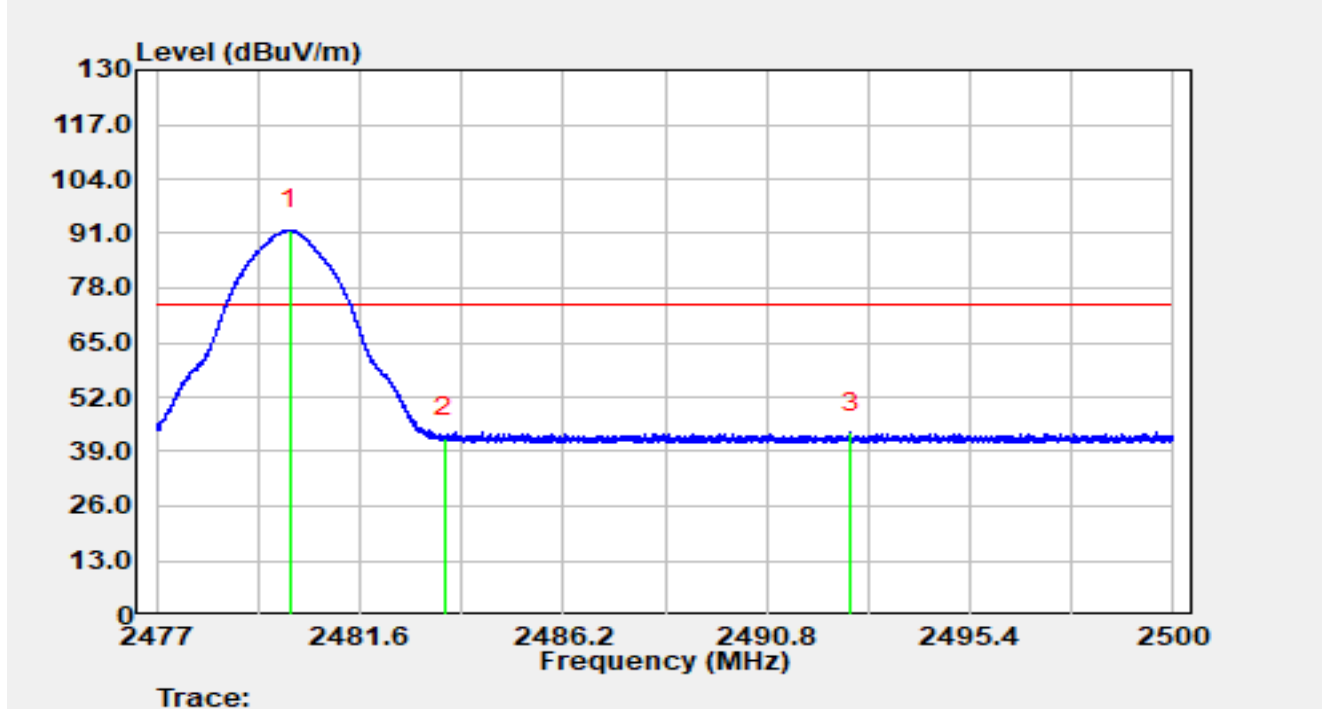


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.011	63.76	34.65	98.41	N/A	N/A	Average
2	*	2483.500	12.35	34.67	47.02	-6.98	54.00	Average

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).

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_2M at 2480 MHz	Test Voltage	By PoE

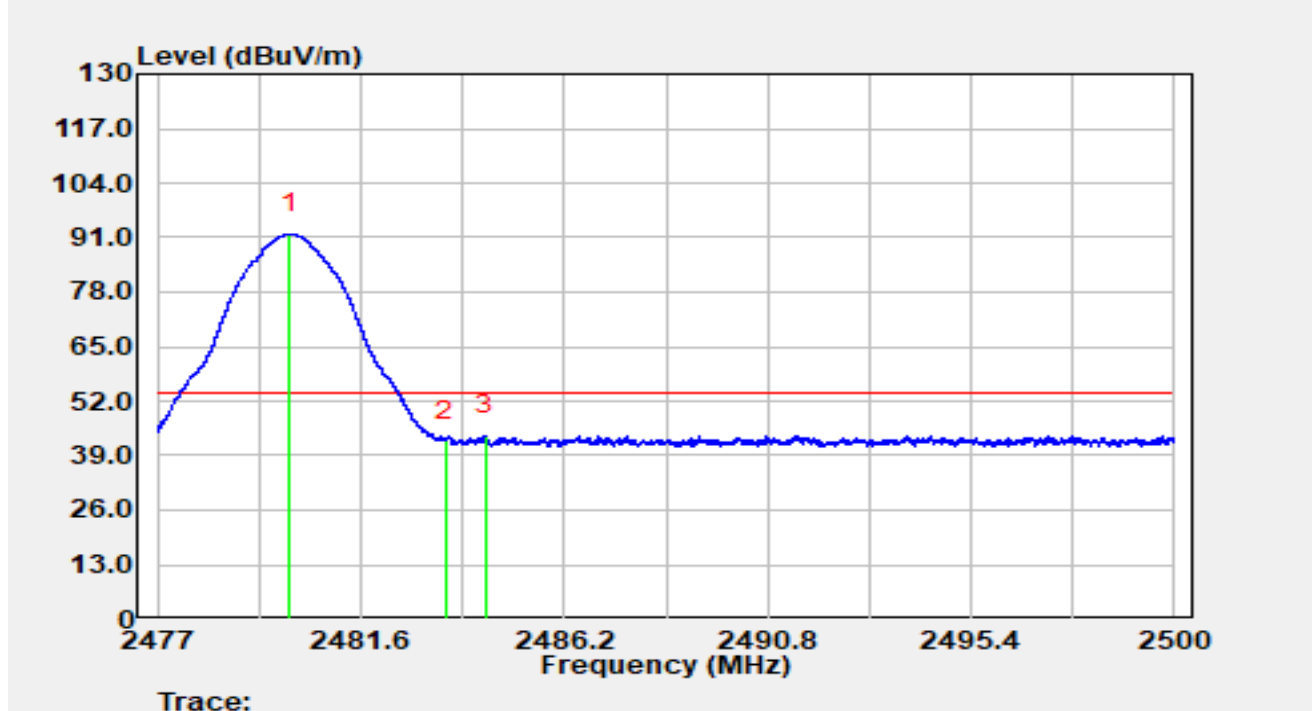


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.015	57.23	34.65	91.87	N/A	N/A	Peak
2		2483.500	7.71	34.67	42.38	-31.62	74.00	Peak
3	*	2492.700	8.81	34.73	43.54	-30.46	74.00	Peak

Notes:

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

Site	SIP-AC3	Test Date	2025-08-13
Temperature	24.8 °C	Humidity	64.8 %
Limit	FCC_Part 15_Band Edge(3 m)	Test Engineer	Mero Zhou
Factor	HF907_102861	Polarity	Vertical
Test Mode	Transmit by BLE_2M at 2480 MHz	Test Voltage	By PoE



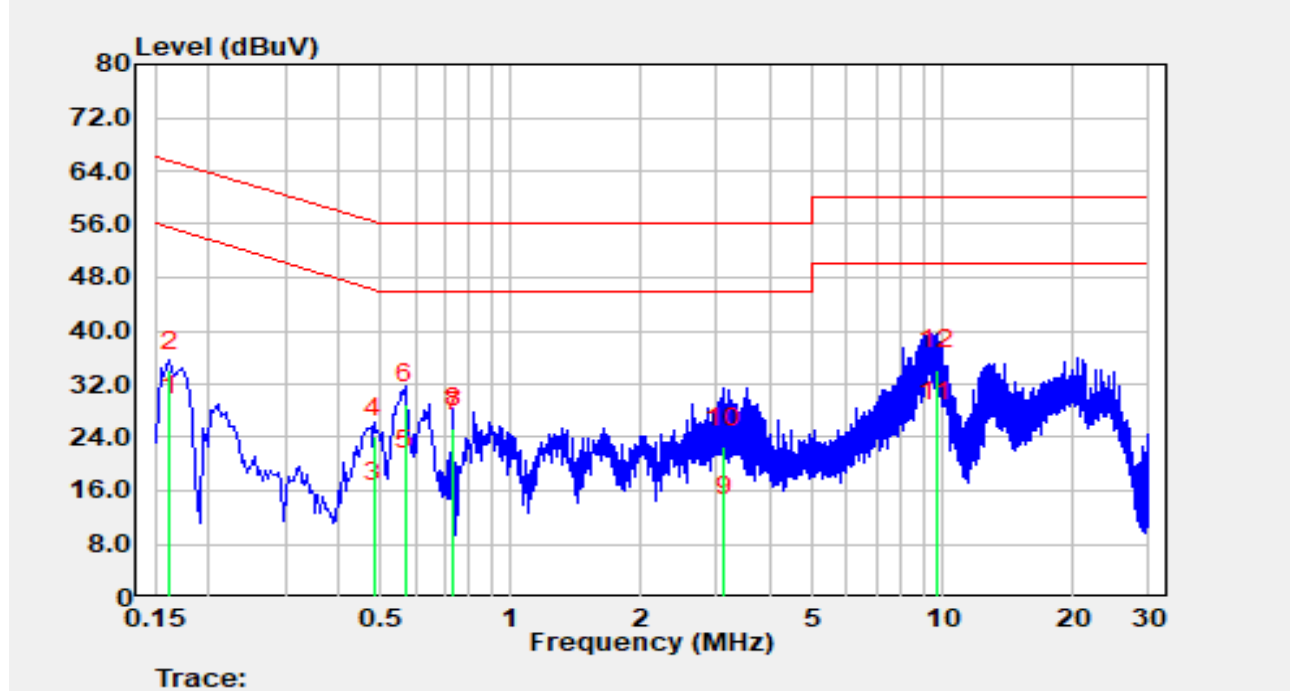
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		2480.001	57.31	34.65	91.96	N/A	N/A	Average
2		2483.500	7.85	34.67	42.52	-11.48	54.00	Average
3	*	2484.413	9.06	34.68	43.73	-10.27	54.00	Average

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).

A.8 AC Conducted Emissions Test Result

Site	SIP-SR2	Test Date	2025-08-20
Temperature	24.9 °C	Humidity	63.6 %
Limit	FCC Part 15.207_CE_Mains	Test Engineer	Poli Cai
Factor	ENV216_101684_C	Polarity	Line
Test Mode	Transmit by BLE 2M at 2480 MHz	Test Voltage	AC 120 V/60 Hz



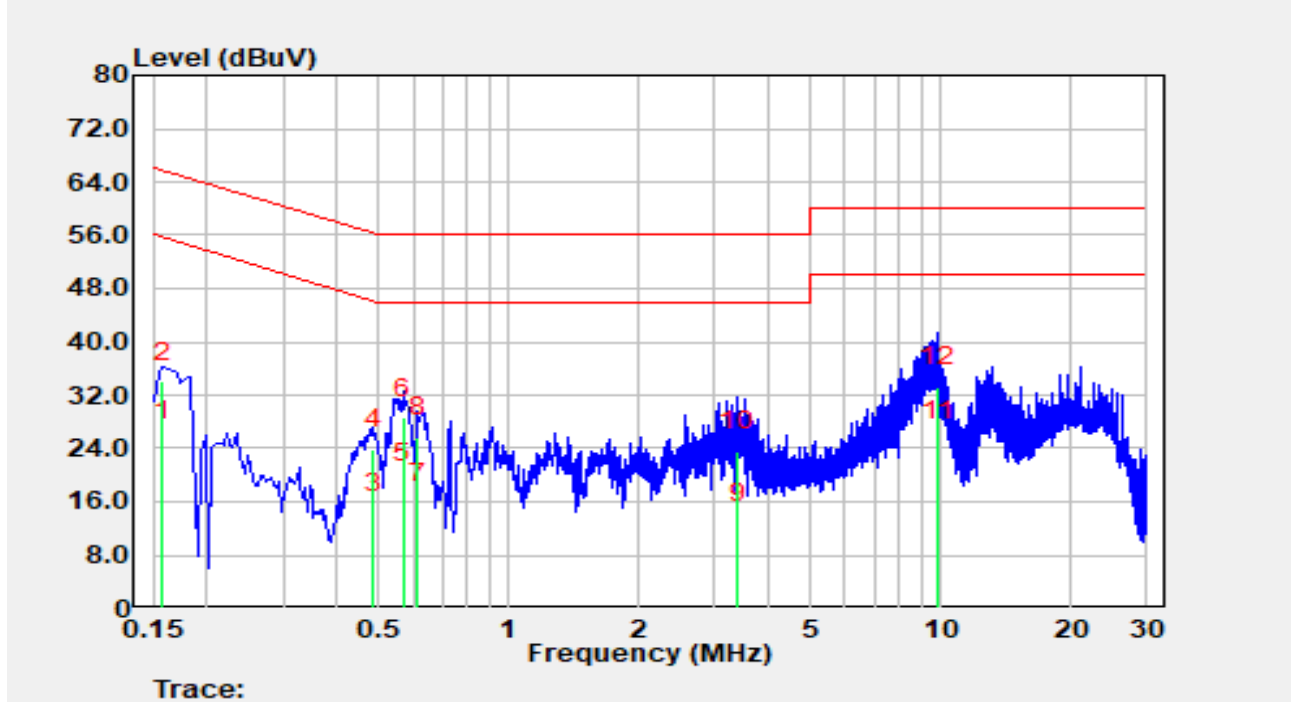
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.162	17.69	9.64	27.33	-28.03	55.36	Average
2		0.162	24.33	9.64	33.97	-31.39	65.36	QP
3		0.482	4.69	9.74	14.43	-31.87	46.30	Average
4		0.482	14.27	9.74	24.01	-32.30	56.30	QP
5		0.570	9.34	9.74	19.08	-26.92	46.00	Average
6		0.570	19.26	9.74	29.00	-27.00	56.00	QP
7	*	0.734	15.06	9.74	24.80	-21.20	46.00	Average
8		0.734	15.76	9.74	25.51	-30.49	56.00	QP
9		3.110	2.34	9.82	12.16	-33.84	46.00	Average
10		3.110	12.72	9.82	22.54	-33.46	56.00	QP
11		9.650	16.21	10.19	26.40	-23.60	50.00	Average
12		9.650	23.93	10.19	34.11	-25.89	60.00	QP

Notes:

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

3. Measurement (dB μ V) = Reading (dB μ V) + C.F (dB).

Site	SIP-SR2	Test Date	2025-08-20
Temperature	24.9 °C	Humidity	63.6 %
Limit	FCC Part 15.207_CE_Mains	Test Engineer	Poli Cai
Factor	ENV216_101684_C	Polarity	Neutral
Test Mode	Transmit by BLE 2M at 2480 MHz	Test Voltage	AC 120 V/60 Hz



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB)	Measurement (dBμV)	Margin (dB)	Limit (dBμV)	Detector
1		0.158	15.48	9.61	25.09	-30.48	55.57	Average
2		0.158	24.36	9.61	33.97	-31.60	65.57	QP
3		0.486	4.73	9.72	14.45	-31.78	46.24	Average
4		0.486	14.23	9.72	23.95	-32.29	56.24	QP
5		0.570	9.12	9.72	18.84	-27.16	46.00	Average
6		0.570	18.89	9.72	28.61	-27.39	56.00	QP
7		0.614	6.18	9.72	15.90	-30.10	46.00	Average
8		0.614	15.95	9.72	25.67	-30.33	56.00	QP
9		3.390	2.99	9.84	12.82	-33.18	46.00	Average
10		3.390	13.74	9.84	23.57	-32.43	56.00	QP
11	*	9.870	14.96	10.17	25.13	-24.87	50.00	Average
12		9.870	23.10	10.17	33.27	-26.73	60.00	QP

Notes:

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

Appendix B - Test Setup Photograph

Refer to "R25S1073095-UT" file.

Appendix C - EUT Photograph

Refer to "R25S1073095-UE" file.

_____ The End _____