



RF MEASUREMENT REPORT

FCC ID: P27-ES1B
Applicant: Sercomm Corporation
Product: ES1 (B)
Model No.: COESST11BEI
Brand Name: XUMO
FCC Classification: Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s): Part 15 Subpart E (Section 15.407)
Result: Complies
Received Date: 2026-01-13
Test Date: 2026-01-29 ~ 2026-02-10

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. 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
R26S1011013-U202	V01	Initial Report	2026-04-10	Valid

Note: The purpose of this test report is to evaluate Diplexer (FL1600, FL1601) 2nd source: RFDIP1607LB71T and add absorber Pad: ESA-015VH1_3.5T 10*5mm.

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1. General Information

1.1. Applicant

Sercomm Corporation

8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.

1.2. Manufacturer

Sercomm Corporation

8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.

1.3. Testing Facility

☒	Test Site - MRT Suzhou Laboratory
	Laboratory Location (Suzhou Wuzhong - WZ) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
	Laboratory Location (Suzhou Industrial Park - SIP) 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China
	Laboratory Location (Suzhou Wujiang - WJ) Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China
	Laboratory Accreditations
	A2LA: 3628.01 FCC: CN1166
	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 Name	ES1 (B)
Model No.	COESST11BEI
Serial No.	ES12SC525510AD70 (Conducted) ES12SC525510AD65 (Radiated)
Brand Name	XUMO
Wi-Fi Specification	802.11a/b/g/n/ac/ax
Operating Temp.	0-40 °C
Hardware Version	DVT + Component Change
Software Version	COESST11BEI_VBN_25Q4_sprint_20251110123047sdy
Working Frequency Range	2.4 GHz Band: 2412 ~ 2462 MHz 5 GHz Band: 5180 ~ 5825 MHz
Power Supply	5 VDC 1.5 A, By Adapter
Accessory	
AC-DC PSU	Brand: LEADER Model: ML08-8050150-A1 Input: 120 V ~ 60 Hz 0.25 A Output: 5.0 V=1.5 A Serial No.: EPS-1U.11002718142445003631
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. For more detailed features description, please refer to the manufacturer's specifications or User's Manual.	

1.5. Radio Specification under Test

Frequency Range	UNII-1: 5150 ~ 5250 MHz UNII-2A: 5250 ~ 5350 MHz UNII-2C: 5470 ~ 5725 MHz UNII-3: 5725 ~ 5850 MHz
Type of Modulation	802.11a/n/ac: OFDM 802.11ax: OFDMA
Data Rate	802.11a: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 300 Mbps 802.11ac: up to 866.7 Mbps 802.11ax: up to 1201 Mbps
Channel Puncturing Function	☐ Supported ☒ Unsupported
Support RU	☒ Full RU ☐ Partial RU

1.6. Working Frequencies

802.11a/n-HT20/ac-VHT20/ax-HE20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	144	5720 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	--	--	--	--

802.11n-HT40/ac-VHT40/ax-HE40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550 MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
142	5710 MHz	151	5755 MHz	159	5795 MHz

802.11ac-VHT80/ax-HE80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	138	5690 MHz	155	5775 MHz

1.7. Antenna Details

Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)		Directional Gain (dBi)	
		Ant 0	Ant 1	For Power	For PSD
Wi-Fi Antennas					
PIFA	2400 ~ 2500	4.90	2.94	4.90	3.97
	5150 ~ 5250	3.26	2.92	3.26	5.83
	5250 ~ 5350	3.80	3.54	3.80	5.83
	5470 ~ 5725	4.18	3.23	4.18	5.43
	5725 ~ 5850	3.94	3.95	3.95	4.65

Note:

1. The antenna gain and directional gain refer to manufacturer's antenna specification.
2. For power measurements: Array Gain = 0 dB for $N_{ANT} \leq 4$, the directional gain = max antenna gain + array gain.

For power spectral density (PSD) measurements: the max directional gain (each angle) = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$.

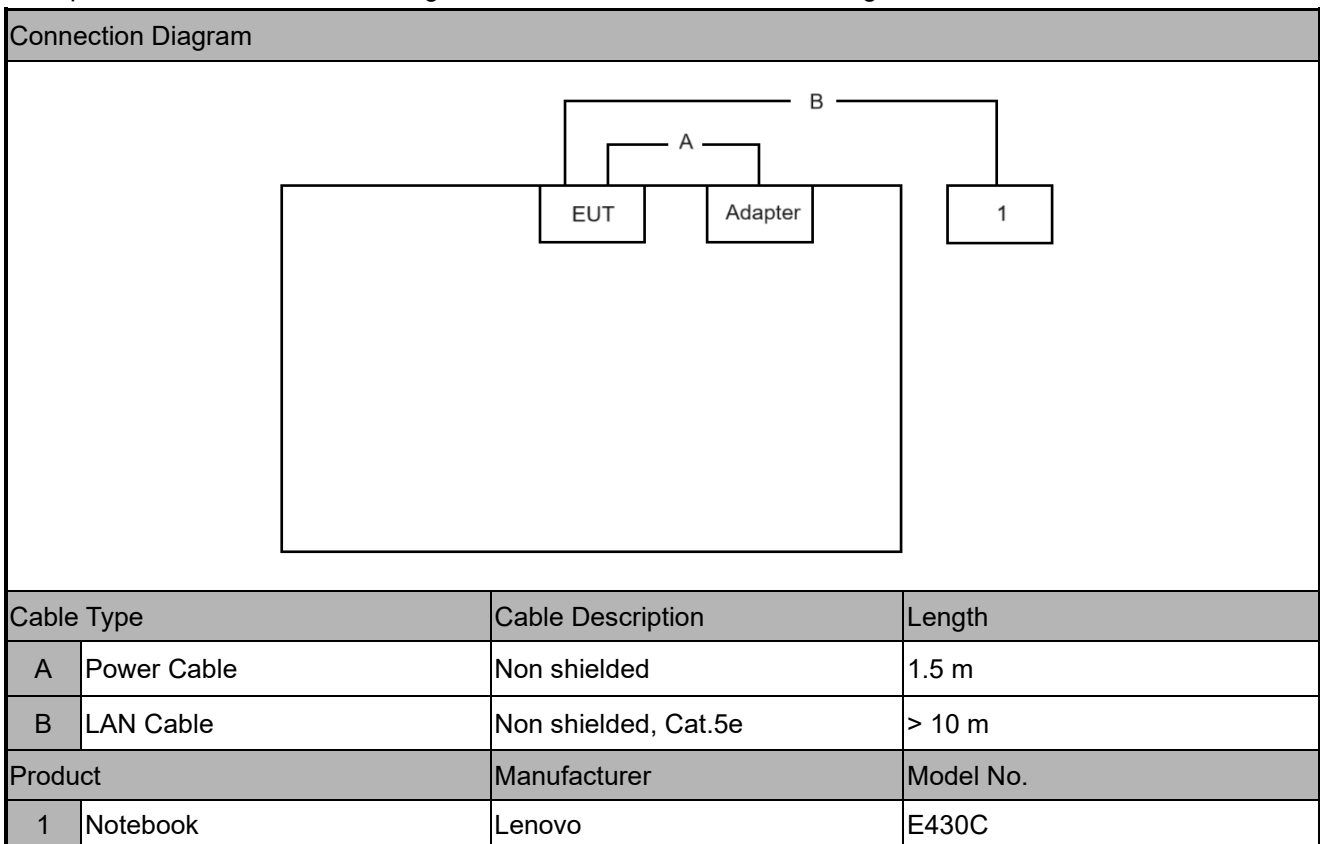
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by 802.11a_Nss=1 (6 Mbps)
Mode 2: Transmit by 802.11ac-VHT20_Nss=1 (MCS0)
Note: All modes of operation and data rates were investigated, so all RF test requirements shall be executed at the worst data rate.

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 conducted emissions testing.



2.3. Test Software

The test utility software used during testing was “STBaccessMTool” and the version was 3_2_1_7.

2.4. Applied Standards

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

- FCC Part 15.407
- KDB 789033 D02 v02r01
- KDB 662911 D01 v02r01
- 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 **inbuilt antenna**.
- 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	Schwarzbeck	BBHA 9170	MRTSUE06598	1 year	2026-11-02	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	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
Signal Analyzer	Keysight	N9010B	MRTSUE07028	1 year	2026-09-28	SIP-AC3
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07075	1 year	2026-11-18	SIP-AC3
Preamplifier	EMCI	EMC051845SE	MRTSUE06601	1 year	2026-10-30	SIP-AC2
Signal Analyzer	Keysight	N9010B	MRTSUE06603	1 year	2026-08-31	SIP-AC2
Thermohygrometer	testo	608-H1	MRTSUE06622	1 year	2026-10-08	SIP-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06648	1 year	2026-10-17	SIP-AC2
Anechoic Chamber	RIKEN	SIP-AC2	MRTSUE06781	1 year	2026-12-15	SIP-AC2
USB Power Sensor	Keysight	U2021XA	MRTSUE06581	1 year	2026-06-12	SIP-TR1
Thermohygrometer	testo	608-H1	MRTSUE11022	1 year	2026-10-16	SIP-TR1

Software	Version	Function
e3	230711	EMI Test Software
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 $k = 2$.

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
Output Power	
Measuring Uncertainty for a Level of Confidence of 95% ($U=2 U_c(y)$): 1.4 dB	

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)(1)(ii), (2), (3)(i)	Maximum Conducted Output Power	Conducted	Pass
15.407(b)(1), (2), (3), (4)(i)	Undesirable Emissions	Radiated	Pass
15.205, 15.209	General Field Strength		Pass
15.407(b)(8), (9), (10)	(Restricted Bands and Radiated Emissions)		

Note: 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.

Test item	5 GHz Band (Part 15.407)
Output Power	Each NII Band (UNII-1, UNII-2A, UNII-2C, UNII-3) is tested one channel with the worst margin.
Radiated Spurious Emission	Only the one channel with the worst margin is tested.
Radiated Band-edge	Only the one channel with the worst margin is tested.

6.2. Output Power Measurement

6.2.1. Test Limit

For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30 dBm).

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2.2. Test Procedure

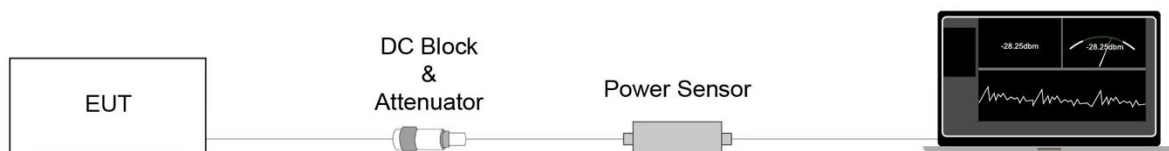
KDB 789033 D02 v02r01 - Section II - E.3.b (Method PM-G)

6.2.3. Test Setting

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.

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.1.

6.3. Radiated Spurious Emissions Measurement

6.3.1. 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 [μV/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

6.3.2. Test Procedure

KDB 789033 D02 v02r01 - Section II - G

6.3.3. 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. $VBW \geq 3 \times RBW$
5. Detector = CISPR quasi-peak
6. Sweep time = Auto couple
7. Trace was allowed to stabilize

Peak Measurements above 1 GHz

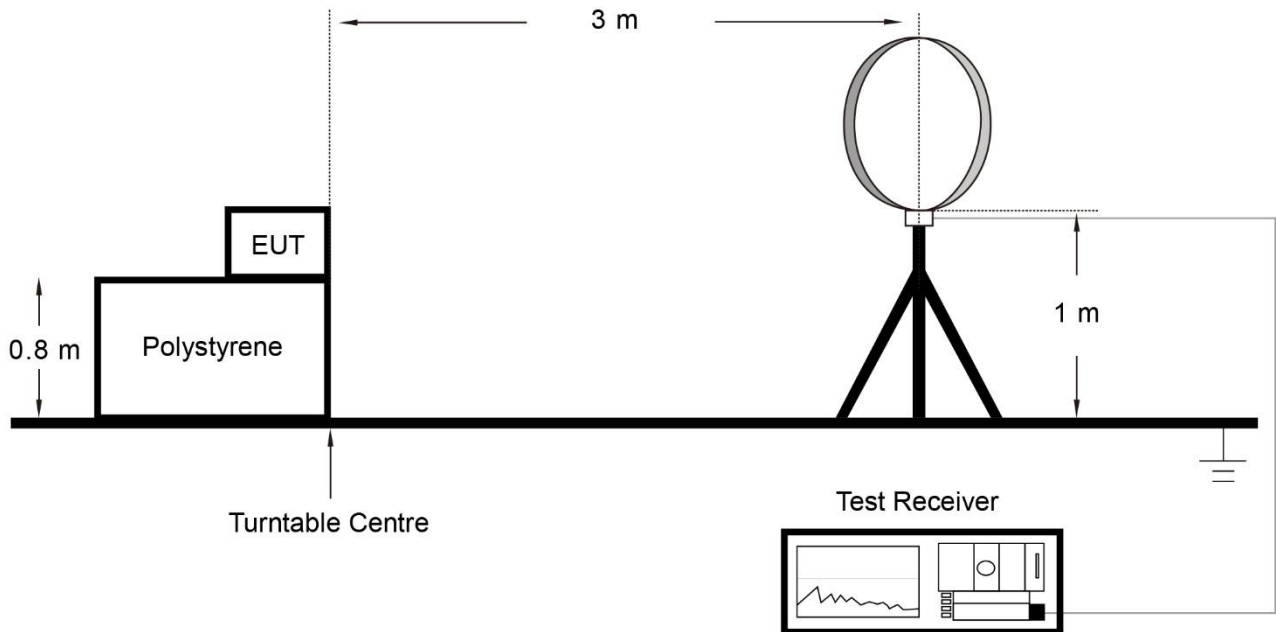
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1 GHz (Method VB)

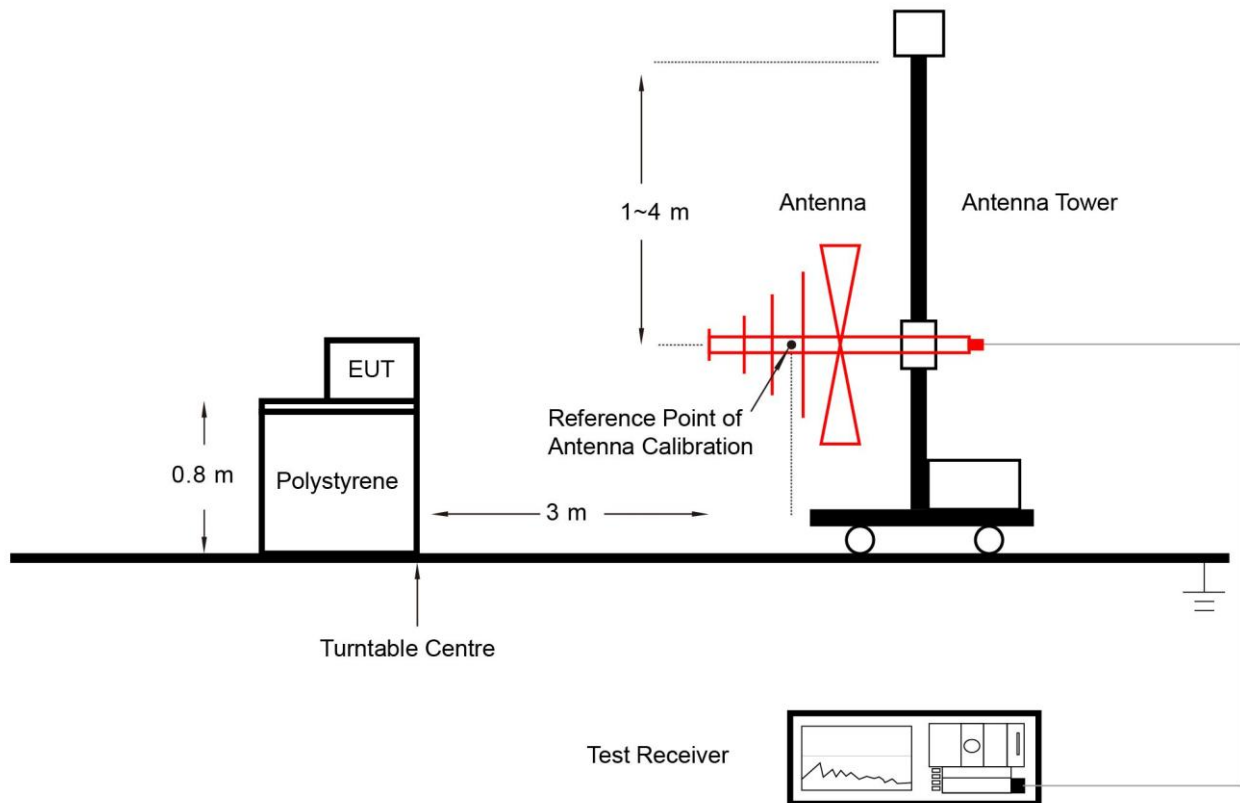
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1 MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz
If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.
4. 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

6.3.4. Test Setup

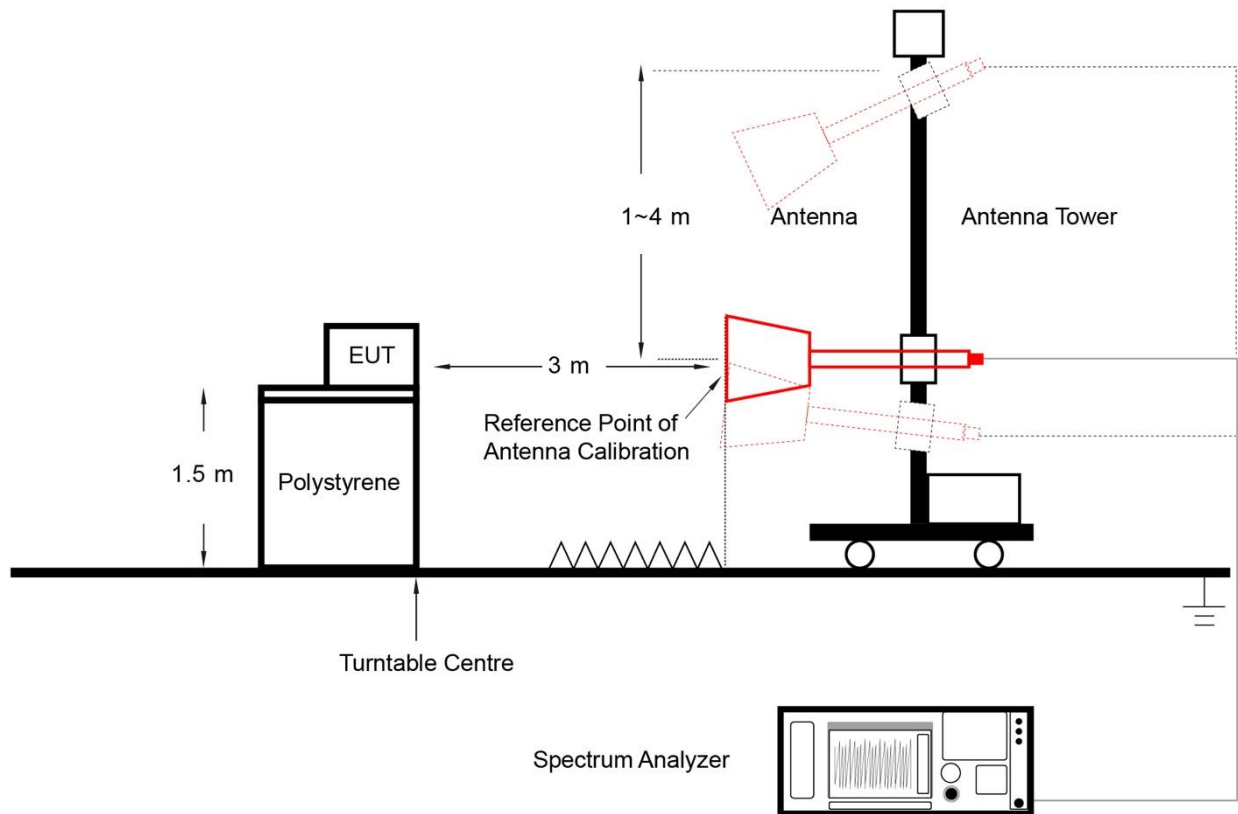
Below 30 MHz Test Setup:



Below 1 GHz Test Setup:



Above 1 GHz Test Setup:



6.3.5. Test Result

Refer to Appendix A.2.

6.4. Radiated Restricted Band Edge Measurement

6.4.1. 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	--	--	--

For 15.407(b) requirement:

For transmitters operating in the band 5150-5250 MHz:

All emissions outside of the band 5150-5350 MHz shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the band 5250-5350 MHz:

All emissions outside of the band 5150-5350 MHz shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the band 5470-5725 MHz:

All emissions outside of the band 5470-5725 MHz shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the band 5725-5850 MHz:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Refer to KDB 789033 D02 v02r01 - Section II - G.2.c, as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission 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 [μV/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

6.4.2. Test Procedure

KDB 789033 D02 v02r01 - Section II - G

6.4.3. 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 $\geq 3 \times$ RBW
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

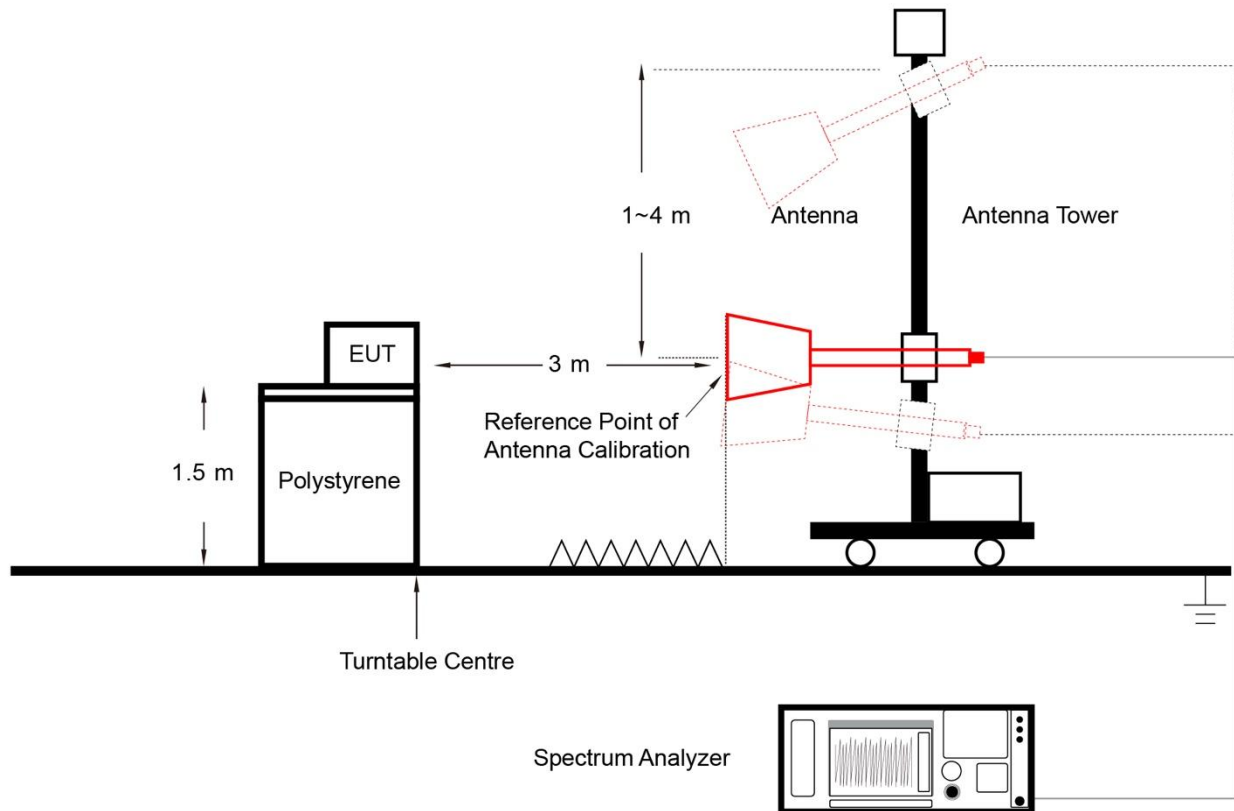
Average Field Strength Measurements

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

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.3.

Appendix A - Test Result

A.1 Output Power Test Result

Test Site	SIP-TR1	Test Engineer	Ryan Wang
Test Date	2026-01-29		

Test Mode	Data Rate / MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Power Limit (dBm)
				Ant 0	Ant 1		
11a	6 Mbps	44	5220	18.69	17.98	21.36	≤ 30.00
11a	6 Mbps	165	5825	18.87	18.85	21.87	≤ 30.00
11ac-VHT20	MCS0	52	5260	18.32	18.17	21.26	≤ 23.98
11ac-VHT20	MCS0	116	5580	18.33	18.15	21.25	≤ 23.98

Note: Total Average Power (dBm) = $10 \times \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\}$.

A.2 Radiated Spurious Emissions Test Result

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2026-01-29	Test Mode	802.11a - Channel 36
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.		

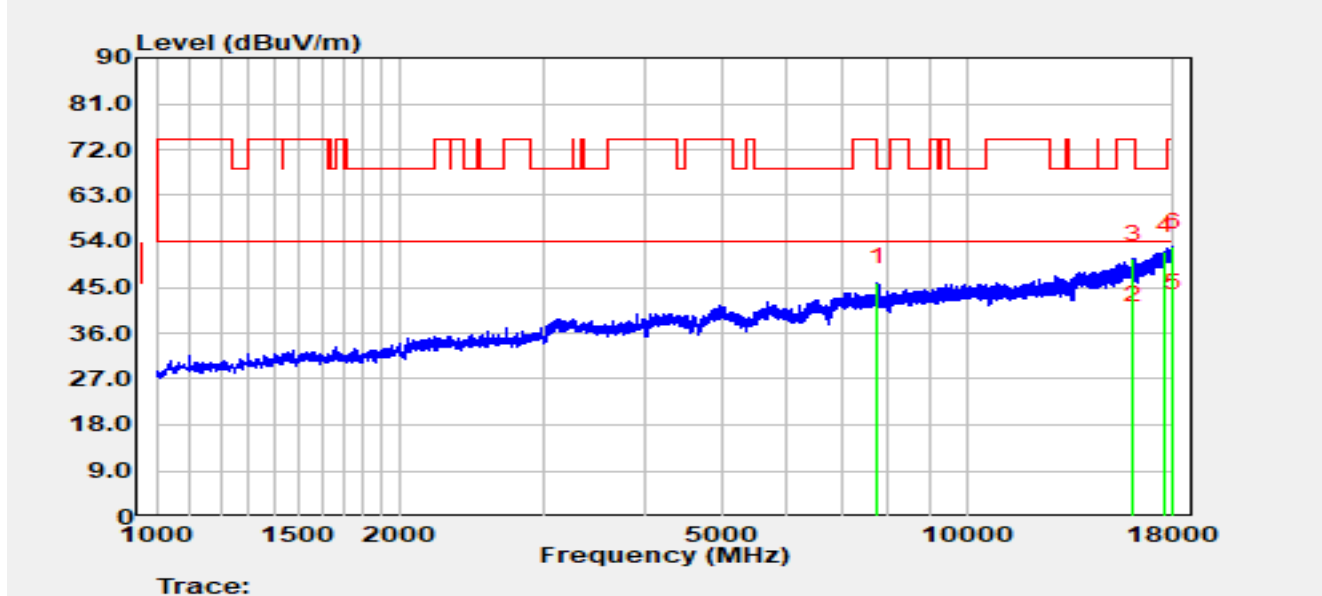
Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	7769.40	49.92	-4.02	45.90	68.20	-22.30	Peak	Horizontal
	16075.60	44.21	6.35	50.56	74.00	-23.44	Peak	Horizontal
	16075.60	32.06	6.35	38.41	54.00	-15.59	Average	Horizontal
*	17588.60	43.91	8.06	51.96	68.20	-16.24	Peak	Horizontal
	17984.70	43.21	9.68	52.89	74.00	-21.11	Peak	Horizontal
	17984.70	31.40	9.68	41.08	54.00	-12.92	Average	Horizontal
*	7769.40	51.85	-4.02	47.83	68.20	-20.37	Peak	Vertical
	15351.40	44.69	5.46	50.15	74.00	-23.85	Peak	Vertical
	15351.40	31.54	5.46	37.00	54.00	-17.00	Average	Vertical
*	17459.40	44.01	8.64	52.65	68.20	-15.55	Peak	Vertical
	17896.30	42.68	10.83	53.51	74.00	-20.49	Peak	Vertical
	17896.30	30.25	10.83	41.08	54.00	-12.92	Average	Vertical

Note 1: "*" is not in restricted band, its limit is -27 dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

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

Site	SIP-AC3	Test Date	2026-01-29
Temperature	16.5 °C	Humidity	39.4%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Justin Guo
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by 802.11a at 5180 MHz		

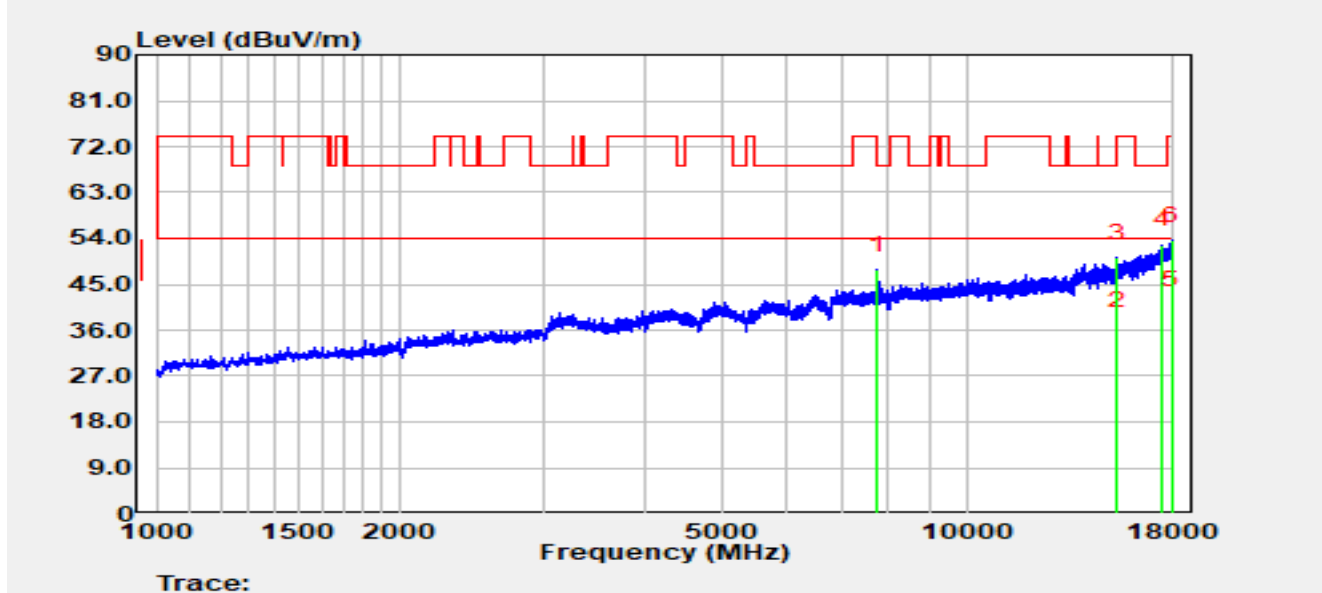


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		7769.400	49.92	-4.02	45.90	-22.30	68.20	Peak
2		16075.600	32.06	6.35	38.41	-15.59	54.00	Average
3		16075.600	44.21	6.35	50.56	-23.44	74.00	Peak
4		17588.600	43.91	8.06	51.96	-16.24	68.20	Peak
5	*	17984.700	31.40	9.68	41.08	-12.92	54.00	Average
6		17984.700	43.21	9.68	52.89	-21.11	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).

Site	SIP-AC3	Test Date	2026-01-29
Temperature	16.5 °C	Humidity	39.4%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Justin Guo
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by 802.11a at 5180 MHz		



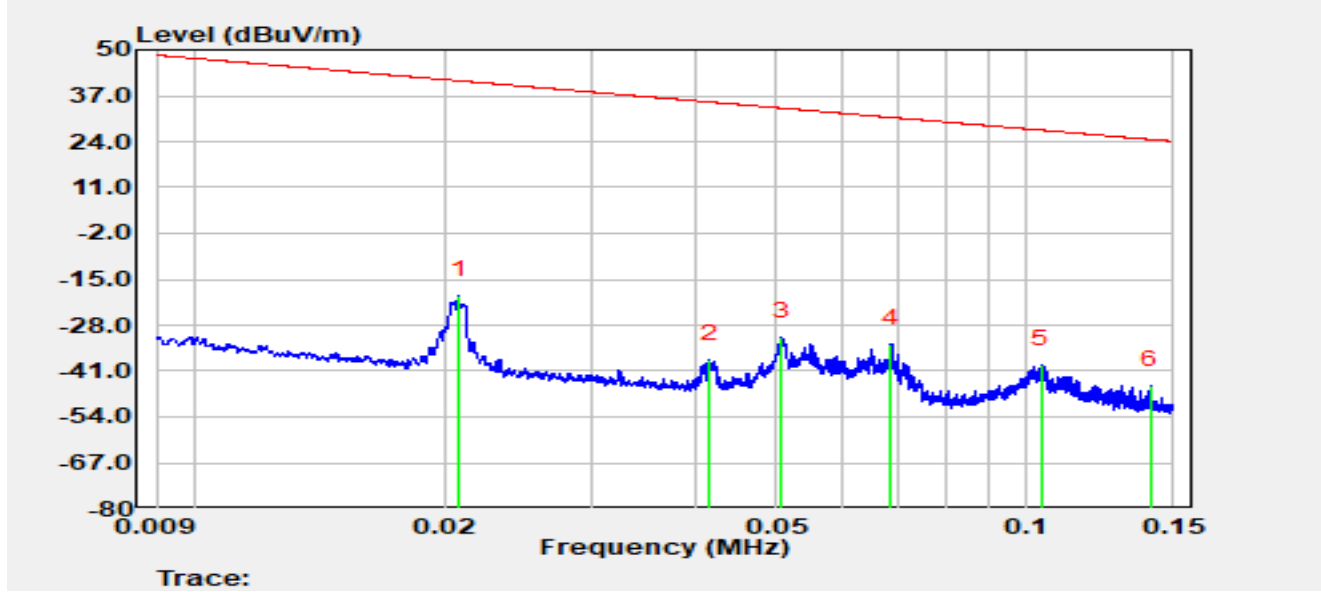
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		7769.400	51.85	-4.02	47.83	-20.37	68.20	Peak
2		15351.400	31.54	5.46	37.00	-17.00	54.00	Average
3		15351.400	44.69	5.46	50.15	-23.85	74.00	Peak
4		17459.400	44.01	8.64	52.65	-15.55	68.20	Peak
5	*	17896.300	30.25	10.83	41.08	-12.92	54.00	Average
6		17896.300	42.68	10.83	53.51	-20.49	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 Result of Radiated Emission 9 kHz ~ 30 MHz:

Site	SIP-AC3	Test Date	2026-02-10
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coaxial
Test Mode	Transmit by 802.11a at 5180 MHz		

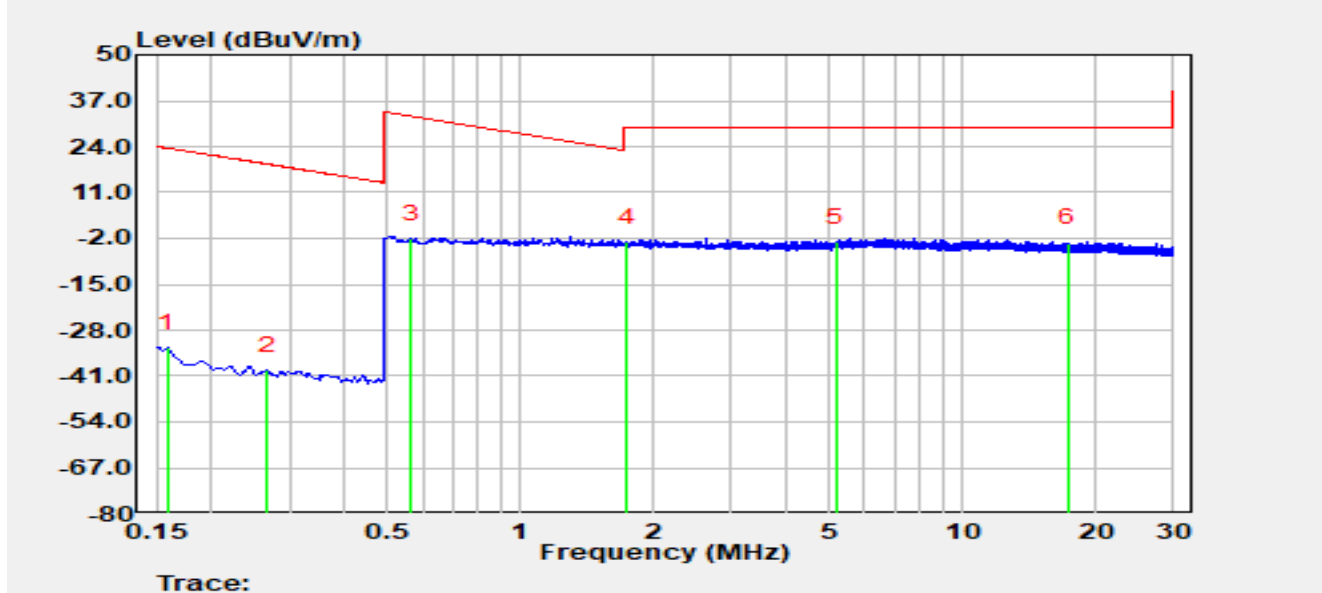


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	0.021	40.63	-60.28	-19.65	-60.90	41.24	Peak
2		0.042	22.79	-60.38	-37.59	-72.81	35.23	Peak
3		0.051	29.27	-60.48	-31.21	-64.70	33.48	Peak
4		0.069	27.39	-60.62	-33.22	-64.09	30.87	Peak
5		0.104	21.53	-60.60	-39.07	-66.31	27.24	Peak
6		0.141	15.53	-60.59	-45.07	-69.69	24.62	Peak

Notes:

- "*" indicates the worst-case emission level observed during the measurement.
- C.F (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) + $40 \times \log(d1/d2)$ (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	2026-02-10
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part 15.209_RSE(3m	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coaxial
Test Mode	Transmit by 802.11a at 5180 MHz		

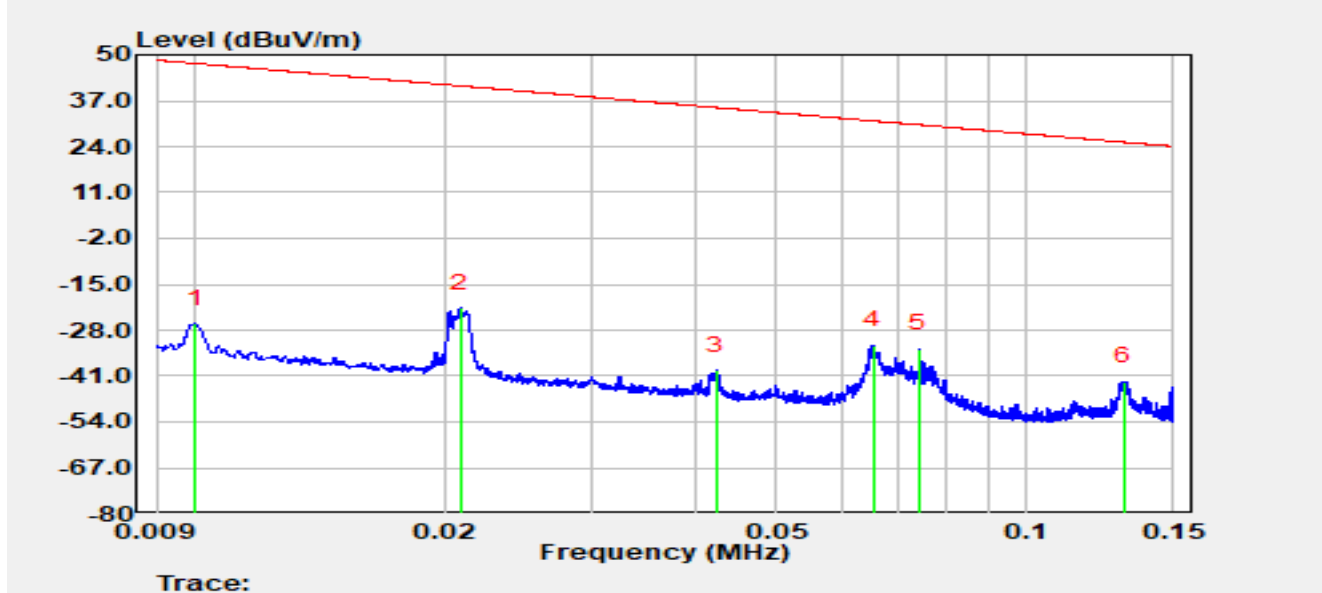


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.159	27.55	-60.61	-33.06	-56.64	23.57	Peak
2		0.266	21.24	-60.66	-39.42	-58.51	19.09	Peak
3		0.565	18.54	-20.69	-2.15	-34.72	32.57	Peak
4		1.735	17.39	-20.62	-3.22	-32.72	29.50	Peak
5	*	5.159	17.16	-20.35	-3.19	-32.69	29.50	Peak
6		17.370	16.61	-20.06	-3.45	-32.95	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) + $40 \times \log(d1/d2)$ (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	2026-02-10
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coplanar
Test Mode	Transmit by 802.11a at 5180 MHz		

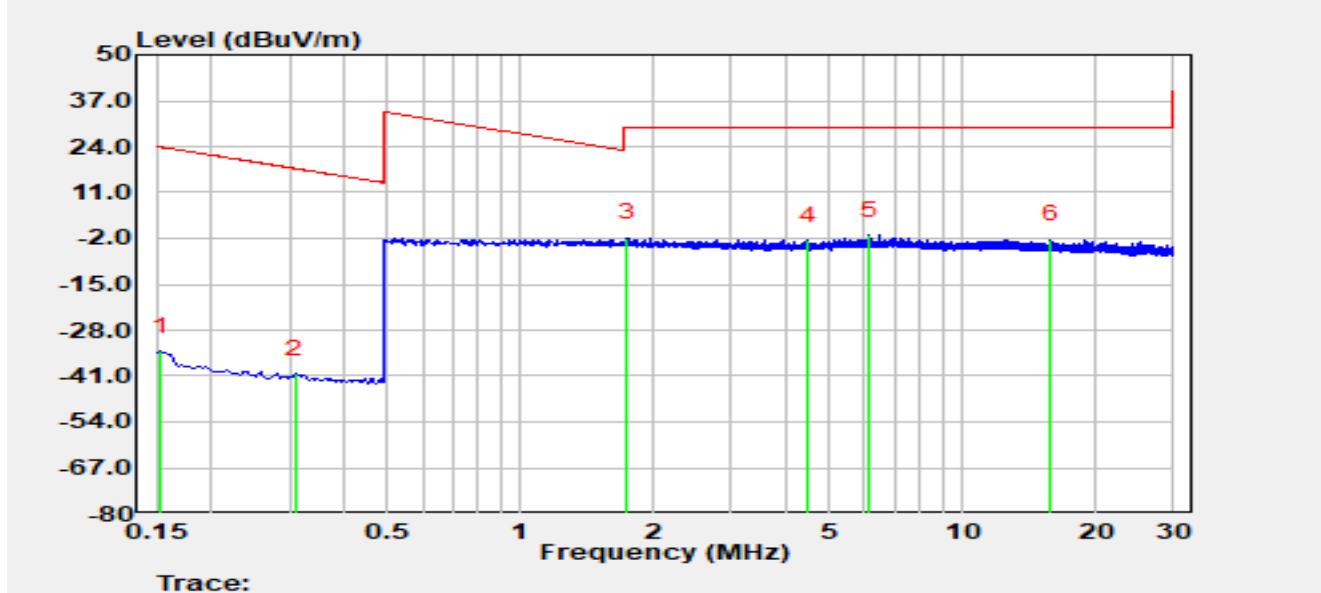


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.010	33.30	-59.57	-26.27	-73.83	47.56	Peak
2	*	0.021	38.45	-60.28	-21.83	-63.02	41.19	Peak
3		0.042	21.09	-60.39	-39.30	-74.36	35.05	Peak
4		0.065	28.19	-60.59	-32.41	-63.70	31.29	Peak
5		0.074	27.33	-60.61	-33.28	-63.47	30.19	Peak
6		0.131	18.01	-60.59	-42.59	-67.87	25.28	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	2026-02-10
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part 15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Coplanar
Test Mode	Transmit by 802.11a at 5180 MHz		



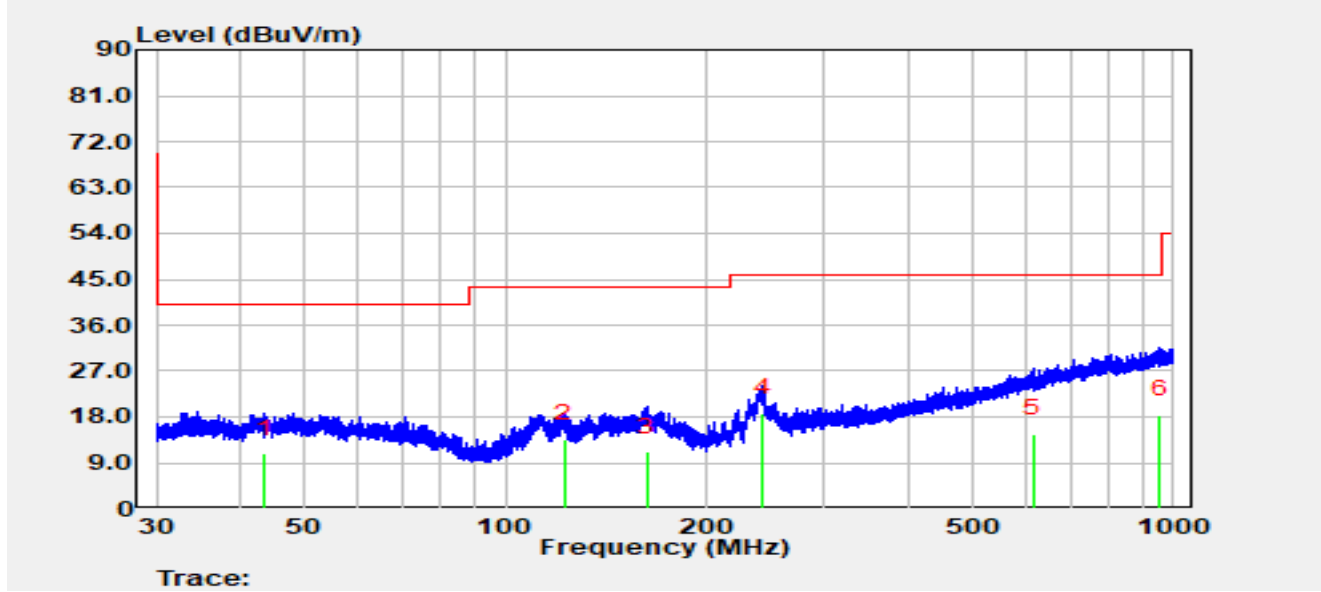
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		0.153	26.47	-60.61	-34.13	-58.04	23.91	Peak
2		0.308	20.25	-60.67	-40.43	-58.25	17.82	Peak
3		1.744	18.70	-20.62	-1.91	-31.41	29.50	Peak
4		4.466	18.16	-20.70	-2.54	-32.04	29.50	Peak
5	*	6.159	19.43	-20.46	-1.03	-30.53	29.50	Peak
6		15.863	17.83	-20.12	-2.29	-31.79	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) + $40 \times \log(d1/d2)$ (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).

The Result of Radiated Emission 30 MHz ~ 1 GHz:

Site	SIP-AC3	Test Date	2026-01-30
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by 802.11a at 5180 MHz		

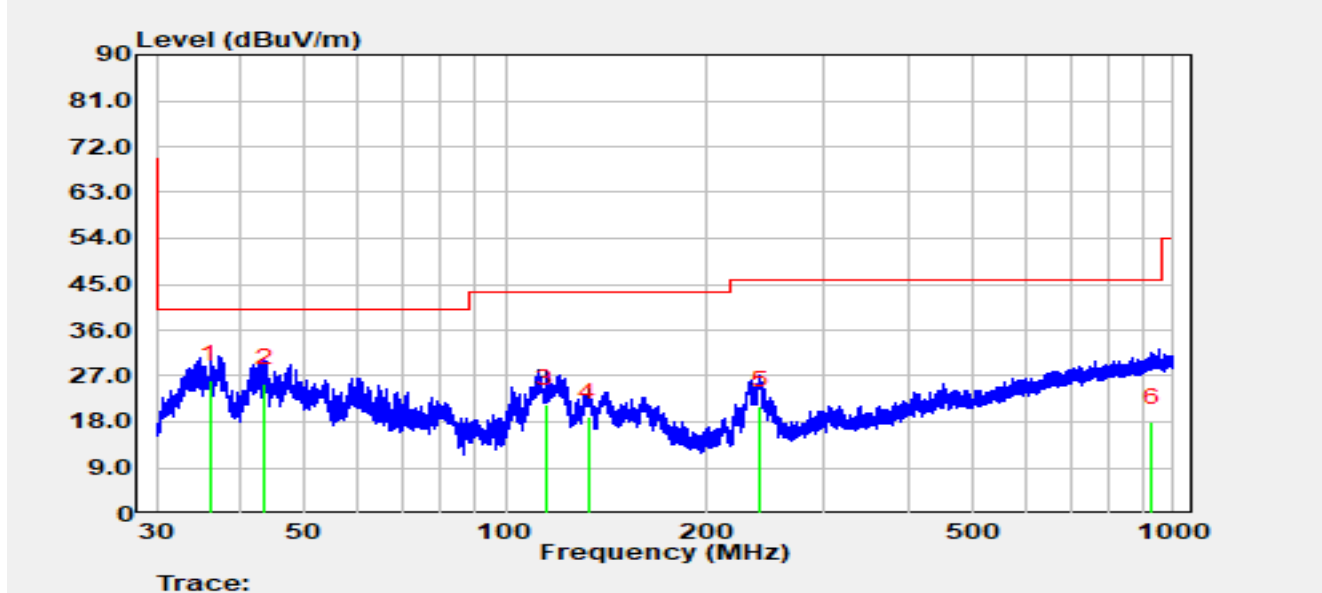


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		43.521	-7.40	18.10	10.70	-29.30	40.00	QP
2		122.318	-2.70	16.37	13.67	-29.83	43.50	QP
3		162.497	-7.10	18.16	11.06	-32.44	43.50	QP
4	*	242.781	2.10	16.60	18.70	-27.30	46.00	QP
5		617.237	-11.50	26.15	14.65	-31.35	46.00	QP
6		953.765	-12.10	30.56	18.46	-27.54	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).

Site	SIP-AC3	Test Date	2026-01-30
Temperature	16.7°C	Humidity	48.2%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Yuuki Qiu
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by 802.11a at 5180 MHz		



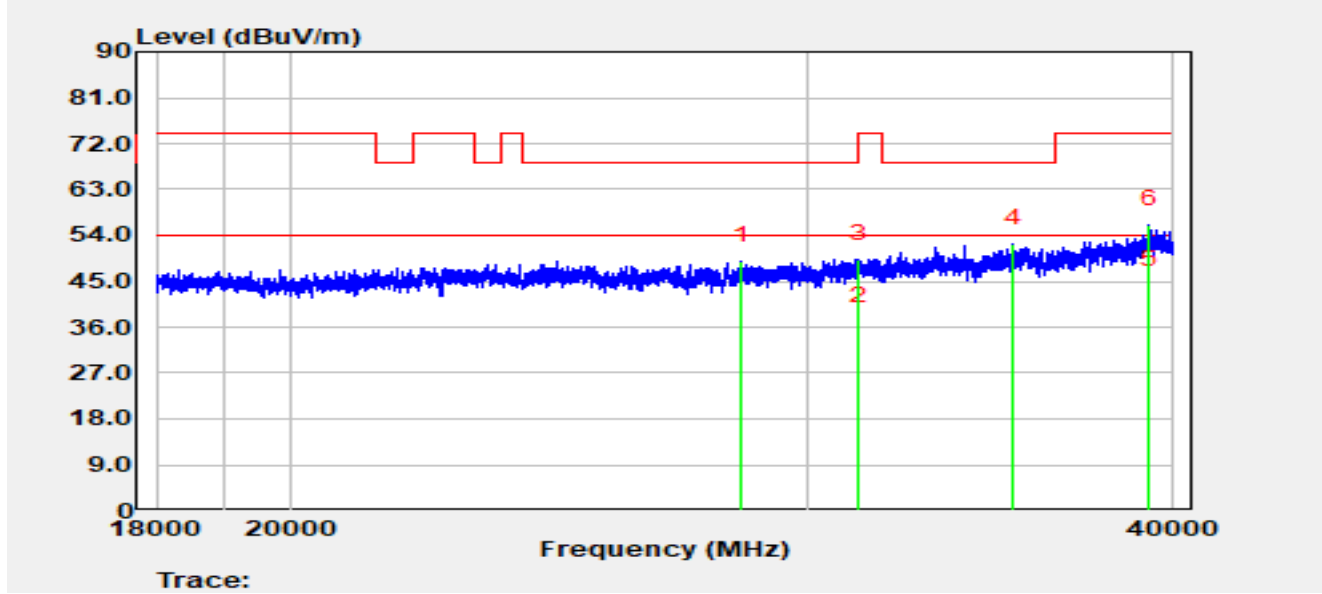
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	36.127	8.90	17.29	26.19	-13.81	40.00	QP
2		43.490	7.40	18.10	25.50	-14.50	40.00	QP
3		114.675	5.80	15.74	21.54	-21.96	43.50	QP
4		133.198	1.80	17.19	18.99	-24.51	43.50	QP
5		240.072	4.60	16.46	21.06	-24.94	46.00	QP
6		927.706	-12.60	30.50	17.90	-28.10	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 Result of Radiated Emission above 18 GHz:

Site	SIP-AC3	Test Date	2026-01-29
Temperature	16.5°C	Humidity	39.4%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Justin Guo
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by 802.11a at 5180 MHz		

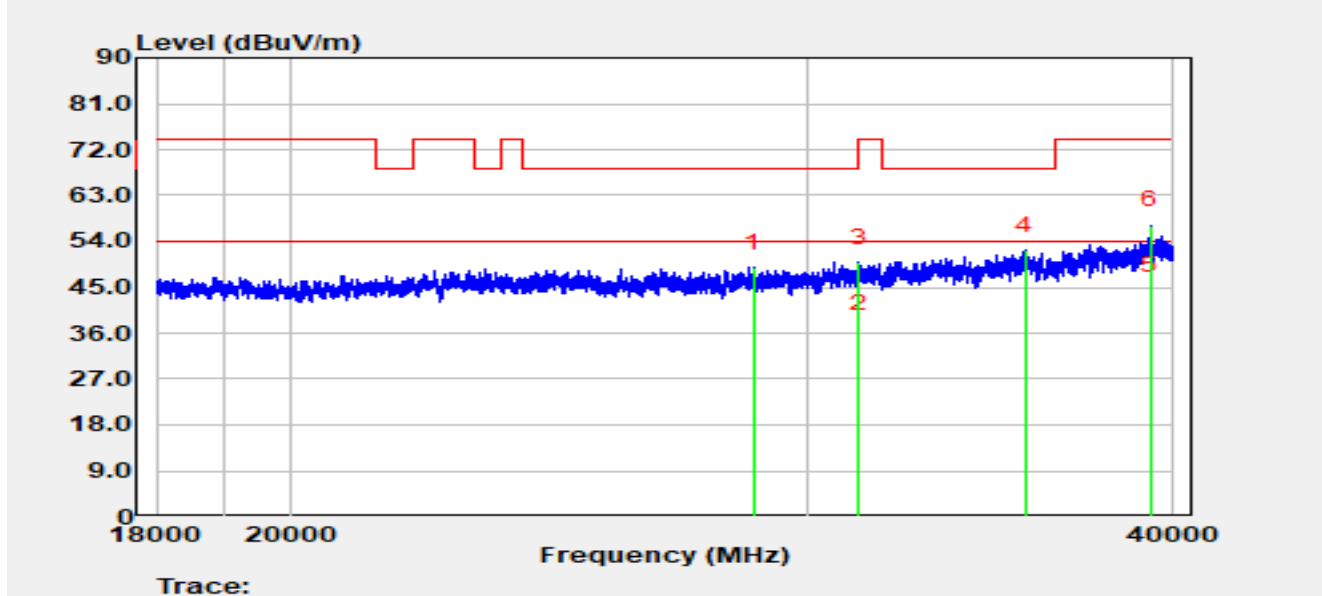


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		28509.400	56.69	-7.69	48.99	-19.21	68.20	Peak
2		31250.600	45.81	-8.65	37.16	-16.84	54.00	Average
3		31250.600	57.99	-8.65	49.34	-24.66	74.00	Peak
4		35283.200	57.31	-4.86	52.44	-15.76	68.20	Peak
5	*	39249.800	40.70	3.46	44.16	-9.84	54.00	Average
6		39249.800	52.74	3.46	56.20	-17.80	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).

Site	SIP-AC3	Test Date	2026-01-29
Temperature	16.5°C	Humidity	39.4%
Limit	FCC_Part15.209_RSE(3m)	Test Engineer	Justin Guo
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by 802.11a at 5180 MHz		



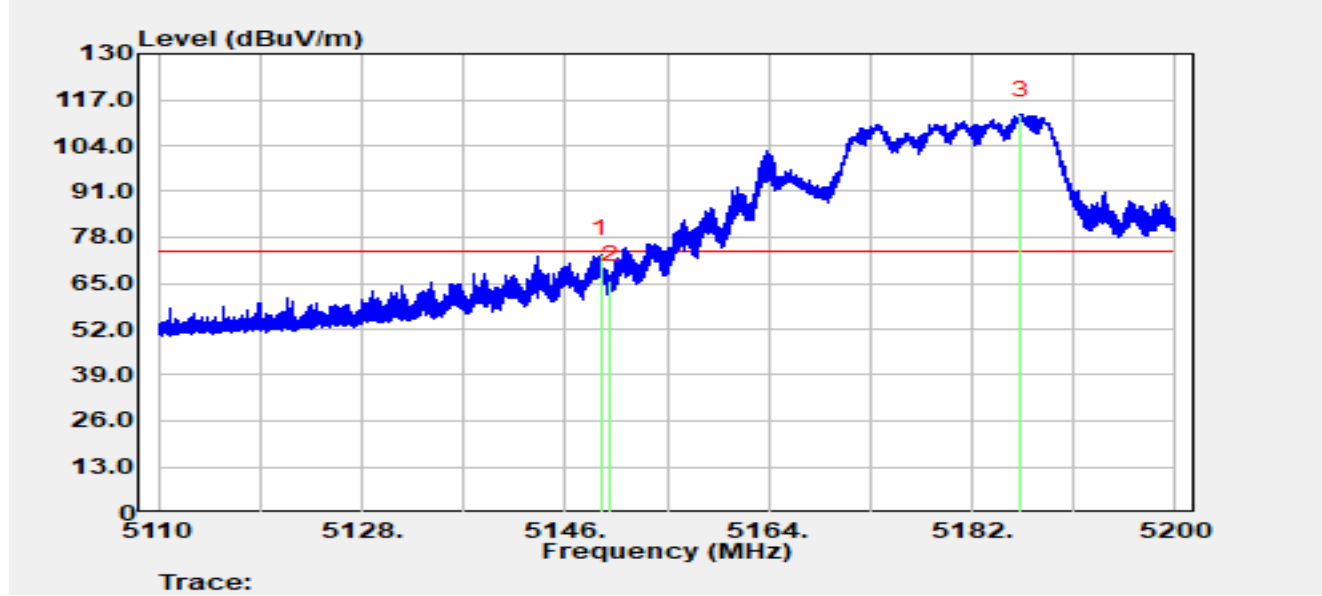
No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1		28758.000	56.03	-7.24	48.79	-19.41	68.20	Peak
2		31246.200	45.78	-8.95	36.83	-17.17	54.00	Average
3		31246.200	58.72	-8.95	49.77	-24.23	74.00	Peak
4		35613.200	56.60	-4.45	52.15	-16.05	68.20	Peak
5	*	39300.400	41.02	3.38	44.40	-9.60	54.00	Average
6		39300.400	53.73	3.38	57.11	-16.89	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).

A.3 Radiated Restricted Band Edge Test Result

Site	SIP-AC2	Test Date	2026-02-06
Temperature	17.6°C	Humidity	49.8%
Limit	FCC_Part 15_Band Edge(3m)	Test Engineer	Fusco Pan
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by 802.11ac-VHT20 at 5180 MHz		

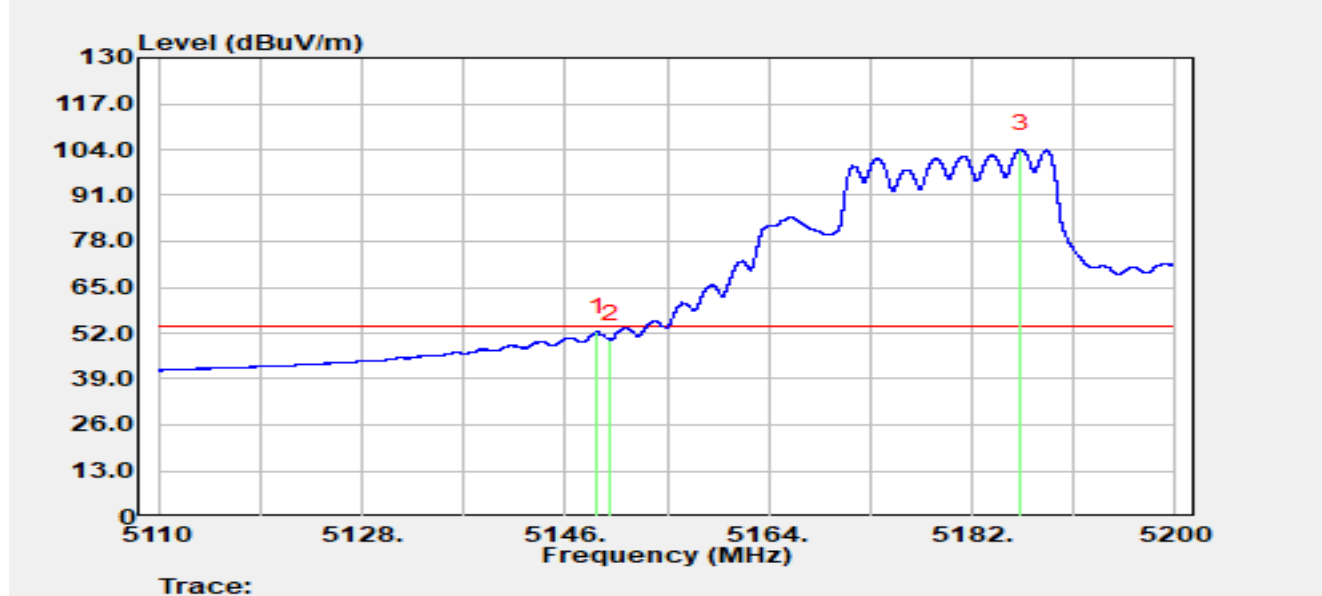


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	5149.204	73.52	-0.37	73.15	-0.85	74.00	Peak
2		5150.000	66.18	-0.21	65.96	-8.04	74.00	Peak
3		5186.311	74.64	38.19	112.82	N/A	N/A	Peak

Notes:

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

Site	SIP-AC2	Test Date	2026-02-06
Temperature	17.6°C	Humidity	49.8%
Limit	FCC_Part 15_Band Edge(3m)	Test Engineer	Fusco Pan
Test Voltage	AC 120 V/60 Hz	Polarity	Horizontal
Test Mode	Transmit by 802.11ac-VHT20 at 5180 MHz		

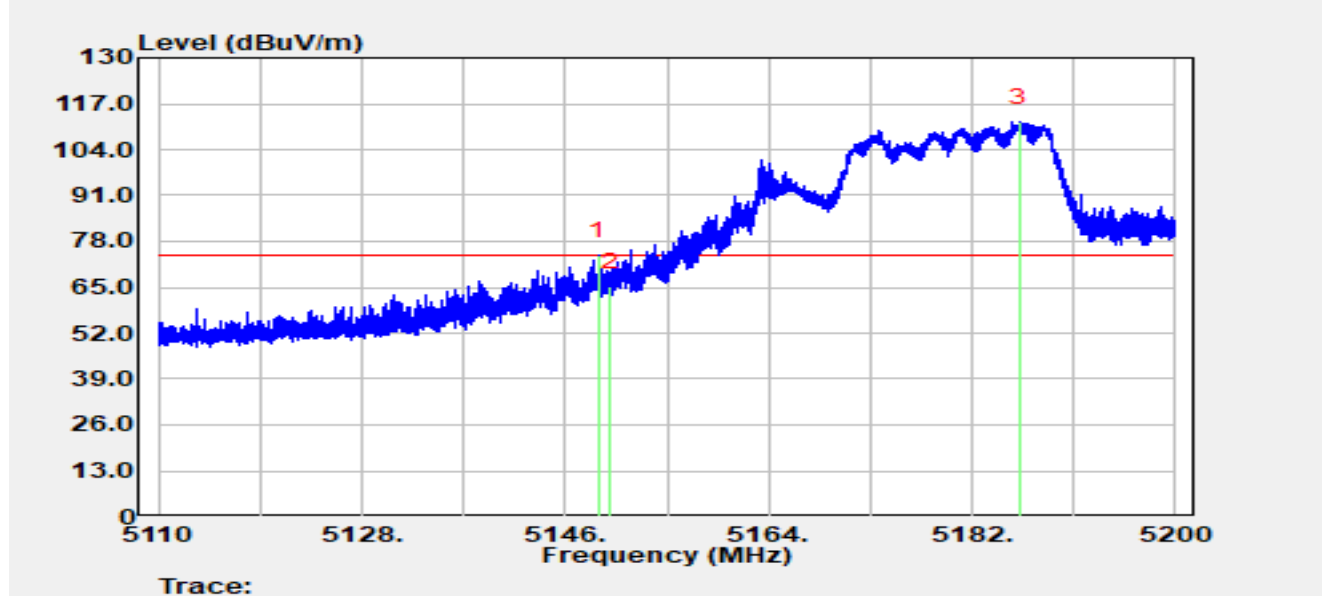


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	5148.835	52.81	-0.44	52.37	-1.63	54.00	Average
2		5149.996	50.37	-0.21	50.15	-3.85	54.00	Average
3		5186.320	65.87	38.19	104.06	N/A	N/A	Average

Notes:

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

Site	SIP-AC2	Test Date	2026-02-06
Temperature	17.6°C	Humidity	49.8%
Limit	FCC_Part 15_Band Edge(3m)	Test Engineer	Fusco Pan
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by 802.11ac-VHT20 at 5180 MHz		

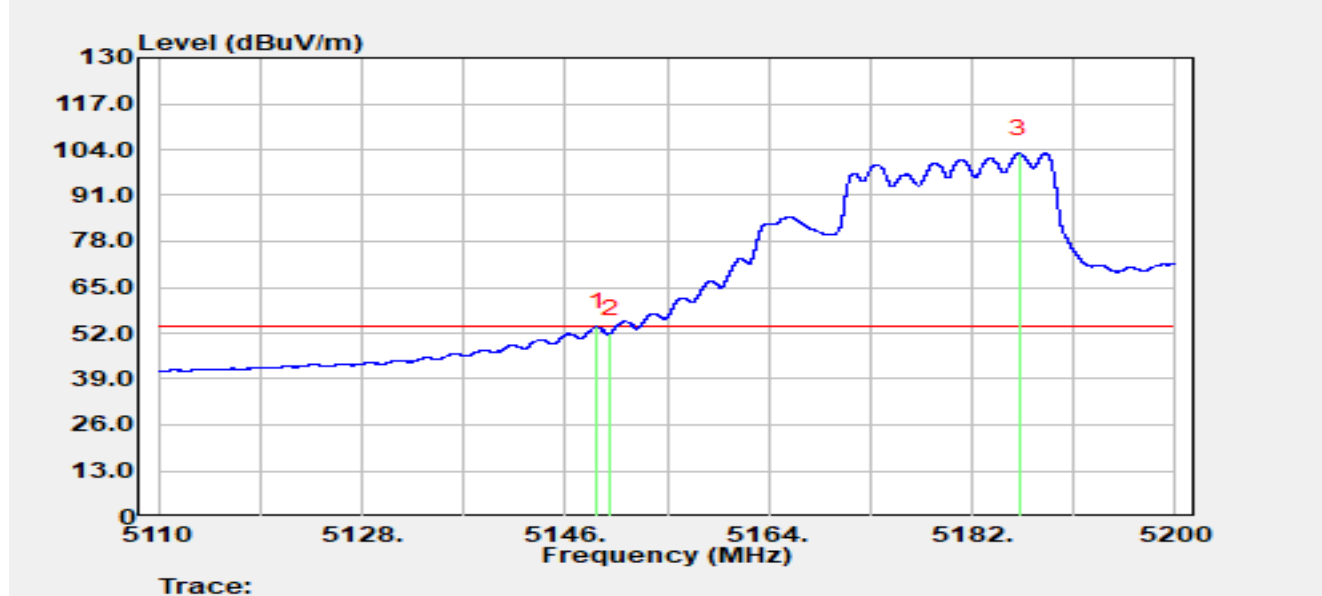


No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	5148.898	74.30	-0.43	73.87	-0.13	74.00	Peak
2		5150.000	65.22	-0.21	65.01	-8.99	74.00	Peak
3		5186.176	73.57	38.09	111.65	N/A	N/A	Peak

Notes:

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

Site	SIP-AC2	Test Date	2026-02-06
Temperature	17.6°C	Humidity	49.8%
Limit	FCC_Part 15_Band Edge(3m)	Test Engineer	Fusco Pan
Test Voltage	AC 120 V/60 Hz	Polarity	Vertical
Test Mode	Transmit by 802.11ac-VHT20 at 5180 MHz		



No	Mark	Frequency (MHz)	Reading (dBμV)	C.F (dB/m)	Measurement (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector
1	*	5148.808	54.23	-0.45	53.78	-0.22	54.00	Average
2		5150.000	52.17	-0.21	51.96	-2.04	54.00	Average
3		5186.185	64.71	38.09	102.80	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) + Attenuation (dB) - AMP (dB).
3. Measurement (dBμV/m) = Reading (dBμV) + C.F (dB/m).

Appendix B - Test Setup Photograph

Refer to "R26S1011013-UT" file.

Appendix C - EUT Photograph

Refer to "R26S1011013-UE" file.

_____ The End _____