

6.9 Radiated emissions which fall in the restricted bands

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.10.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

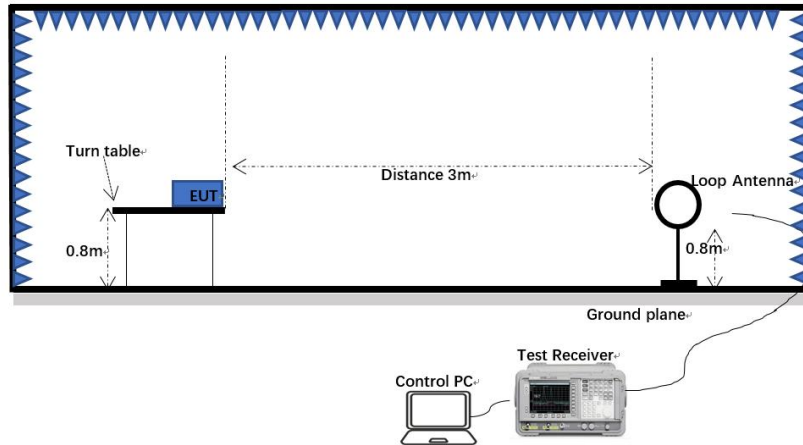
6.9.1 Limit

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

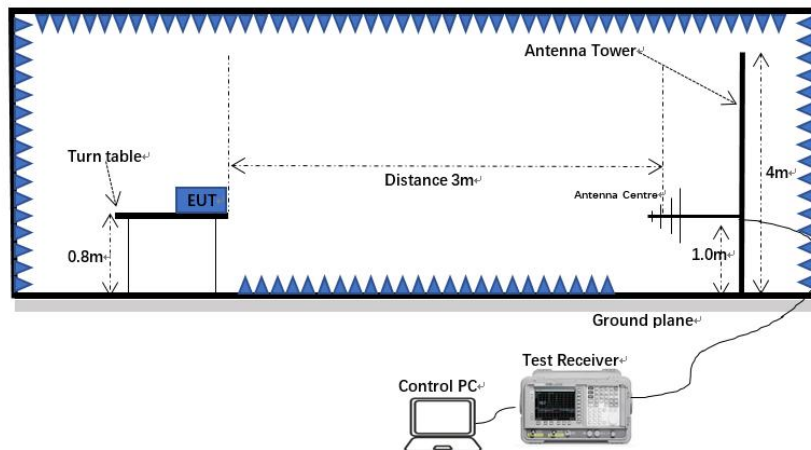
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.9.2 Test setup

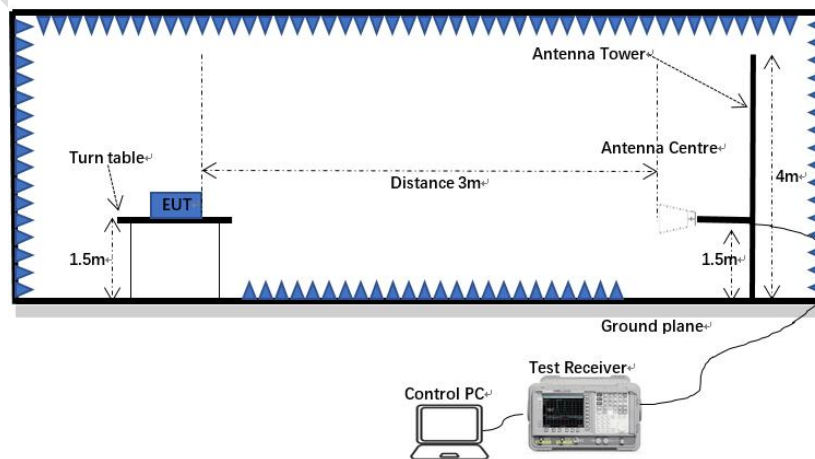
Below 1GHz:



30MHz-1GHz:



Above 1GHz:



6.9.3 Procedure

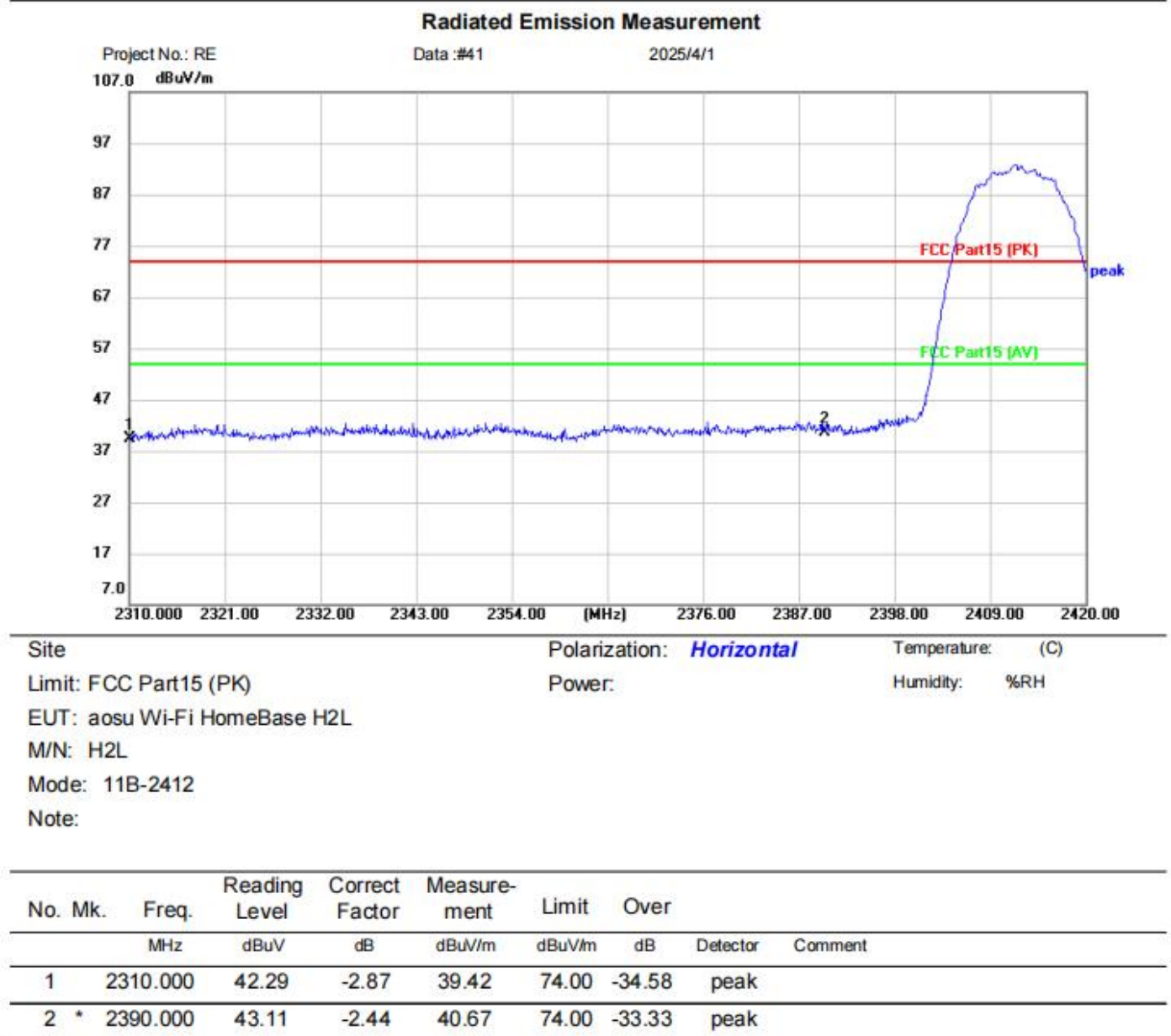
- a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d) The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h) Test the EUT in the lowest channel, the middle channel, the highest channel.
- i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j) Repeat above procedures until all frequencies measured was complete.

Note 1: Level (dBuV) = Reading (dBuV) + Factor (dB/m)

Note 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

6.9.4 Test data

[Test mode: TX B low channel]; [Polarity: Horizontal]



Test Result: Pass

[Test mode:TX B low channel]; [Polarity: Vertical]

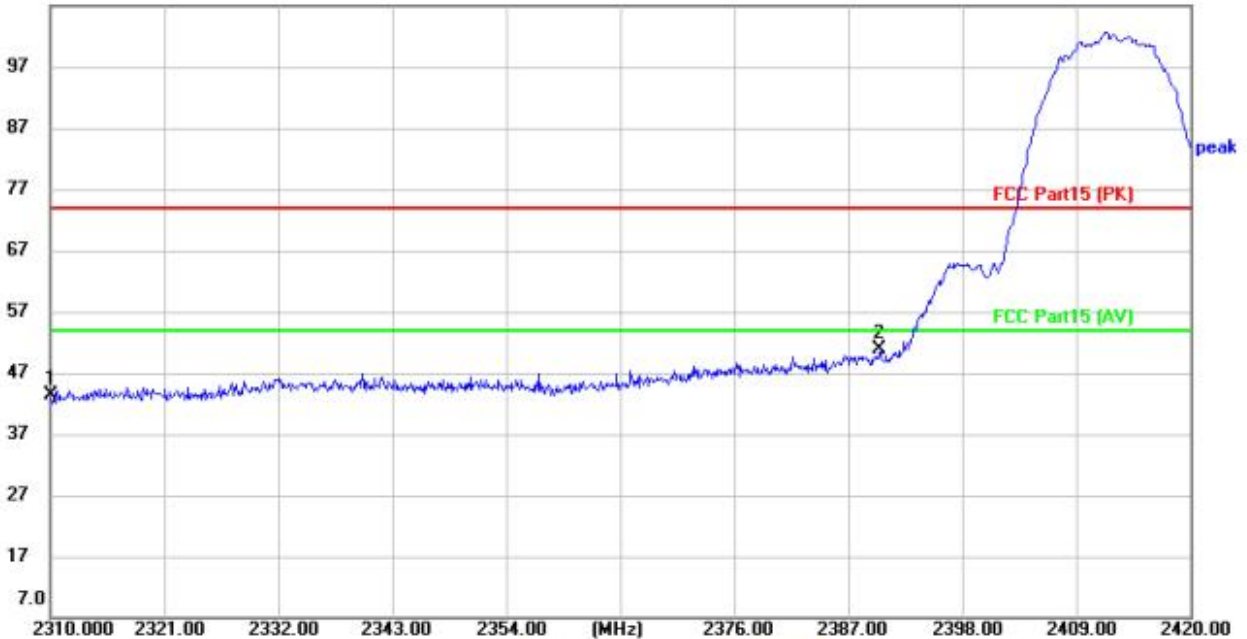
Radiated Emission Measurement

Project No.: RE

Data :#42

2025/4/1

107.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11B-2412

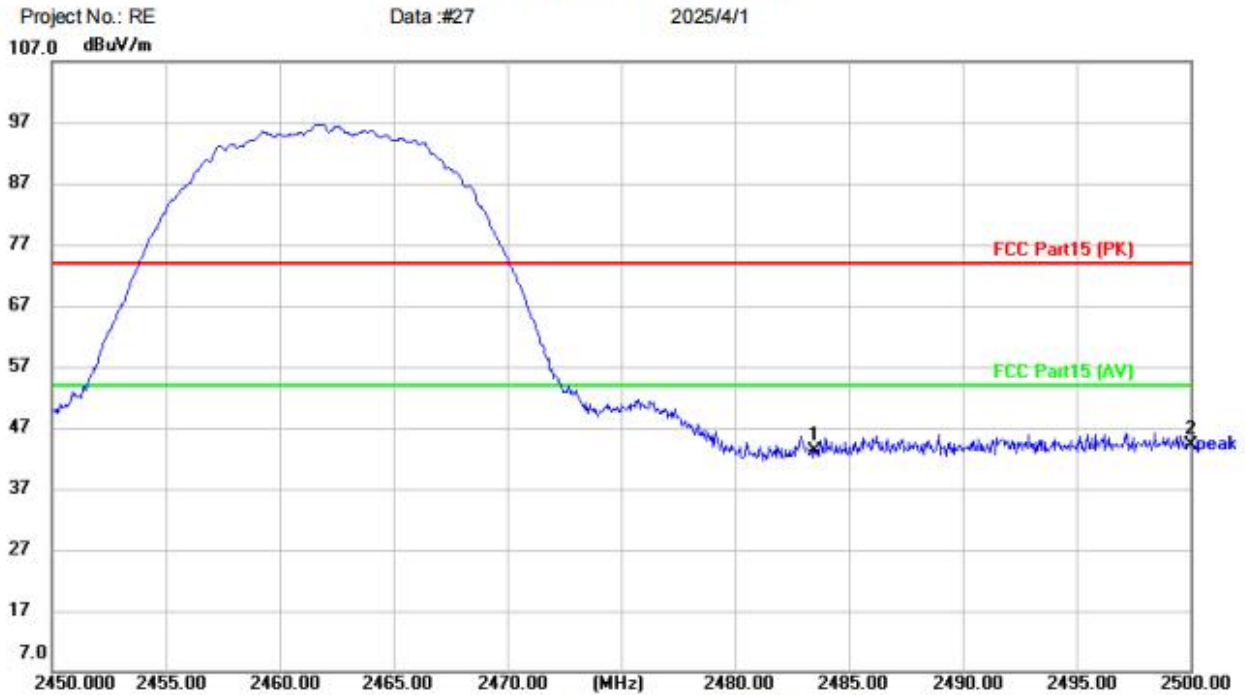
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2310.000	46.29	-2.87	43.42	74.00	-30.58	peak	
2	*	2390.000	53.28	-2.44	50.84	74.00	-23.16	peak	

Test Result: Pass

[Test mode: TX B High channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11B-2462

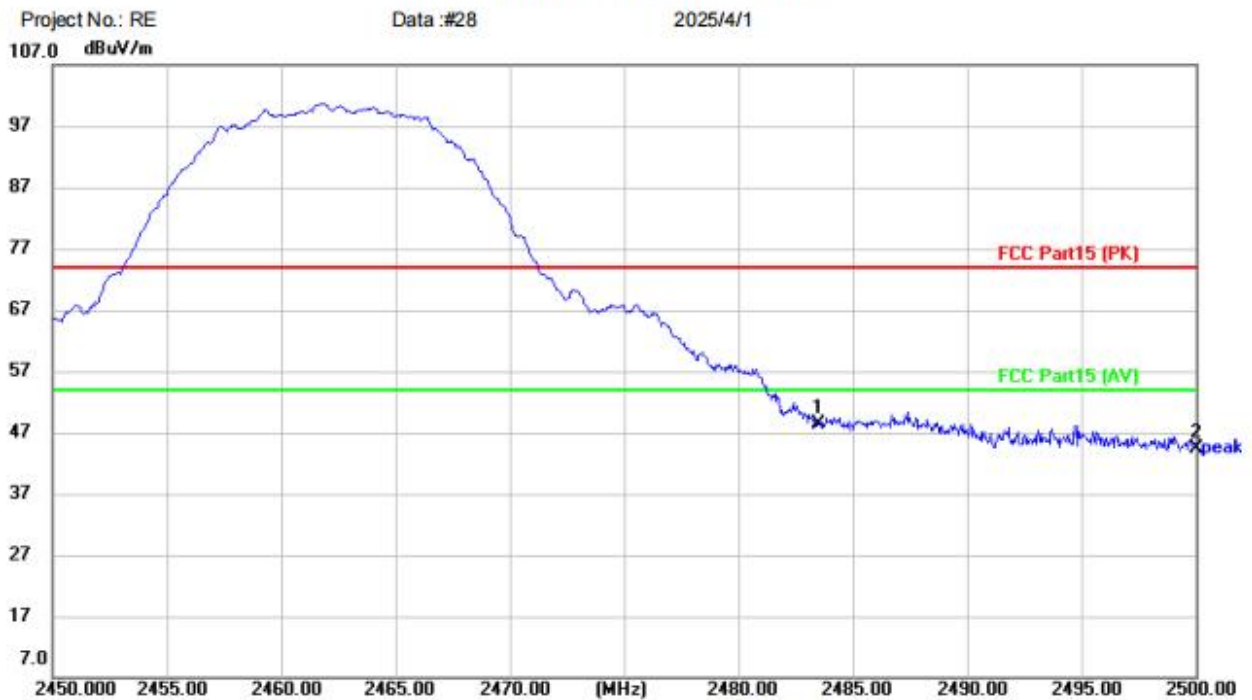
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	46.00	-2.91	43.09	74.00	-30.91	peak	
2	*	2500.000	47.04	-3.00	44.04	74.00	-29.96	peak	

Test Result: Pass

[Test mode:TX B High channel]; [Polarity: Vertical]

Radiated Emission Measurement



Site Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11B-2462

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2483.500	51.32	-2.91	48.41	74.00	-25.59	peak	
2		2500.000	47.33	-3.00	44.33	74.00	-29.67	peak	

Test Result: Pass

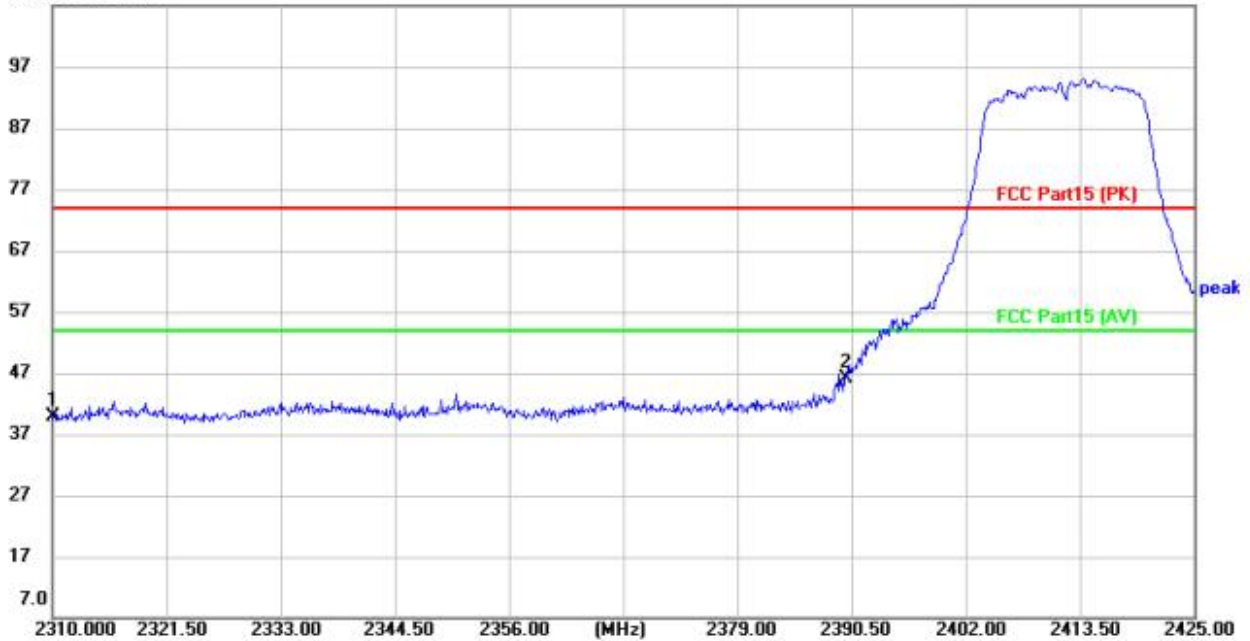
[Test mode: TX G low channel]; [Polarity: Horizontal]

Radiated Emission Measurement

Project No.: RE
107.0 dBuV/m

Data :#29

2025/4/1



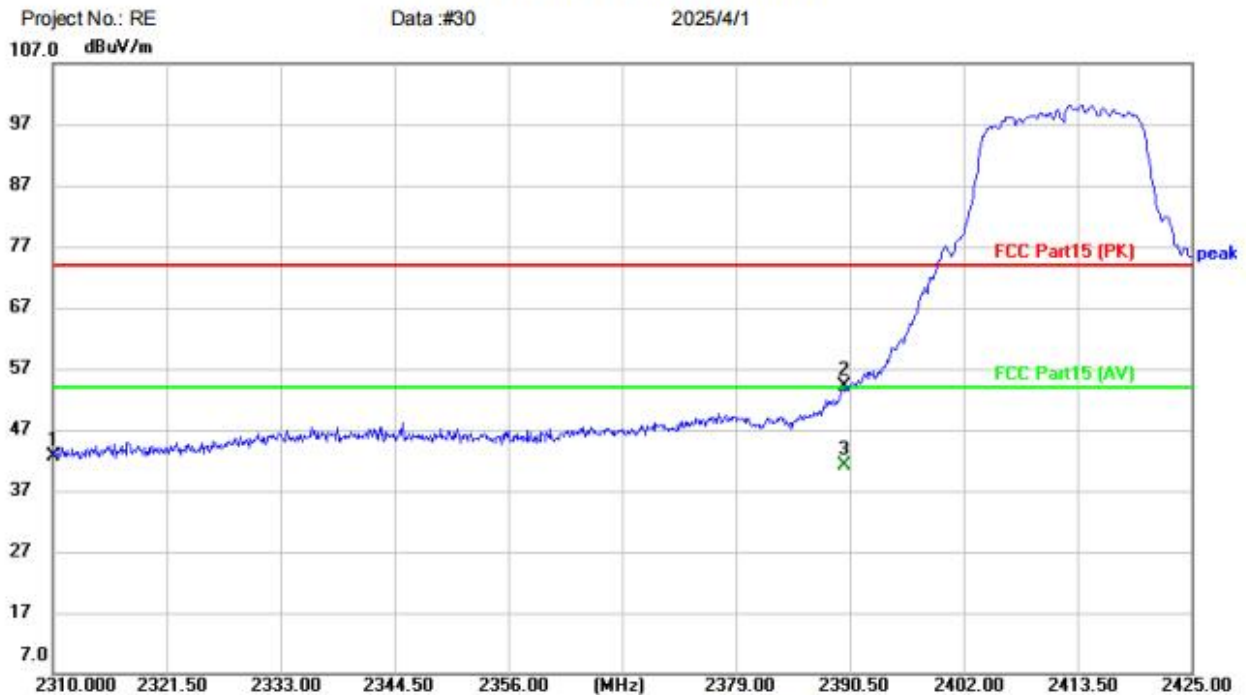
Site Polarization: **Horizontal** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: aosu Wi-Fi HomeBase H2L
M/N: H2L
Mode: 11G-2412
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	42.68	-2.87	39.81	74.00	-34.19	peak	
2	*	2390.000	48.50	-2.44	46.06	74.00	-27.94	peak	

Test Result: Pass

[Test mode:TX G low channel]; [Polarity: Vertical]

Radiated Emission Measurement



Site Polarization: **Vertical** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11G-2412

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2310.000	45.61	-2.87	42.74	74.00	-31.26	peak	
2		2390.000	56.53	-2.44	54.09	74.00	-19.91	peak	
3	*	2390.000	43.50	-2.44	41.06	54.00	-12.94	AVG	

Test Result: Pass

[Test mode: TX G High channel]; [Polarity: Horizontal]

Radiated Emission Measurement

Project No.: RE

Data :#31

2025/4/1

107.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11G-2462

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2483.500	50.01	-2.91	47.10	74.00	-26.90	peak	
2		2500.000	46.14	-3.00	43.14	74.00	-30.86	peak	

Test Result: Pass

[Test mode:TX G High channel]; [Polarity: Vertical]

Radiated Emission Measurement



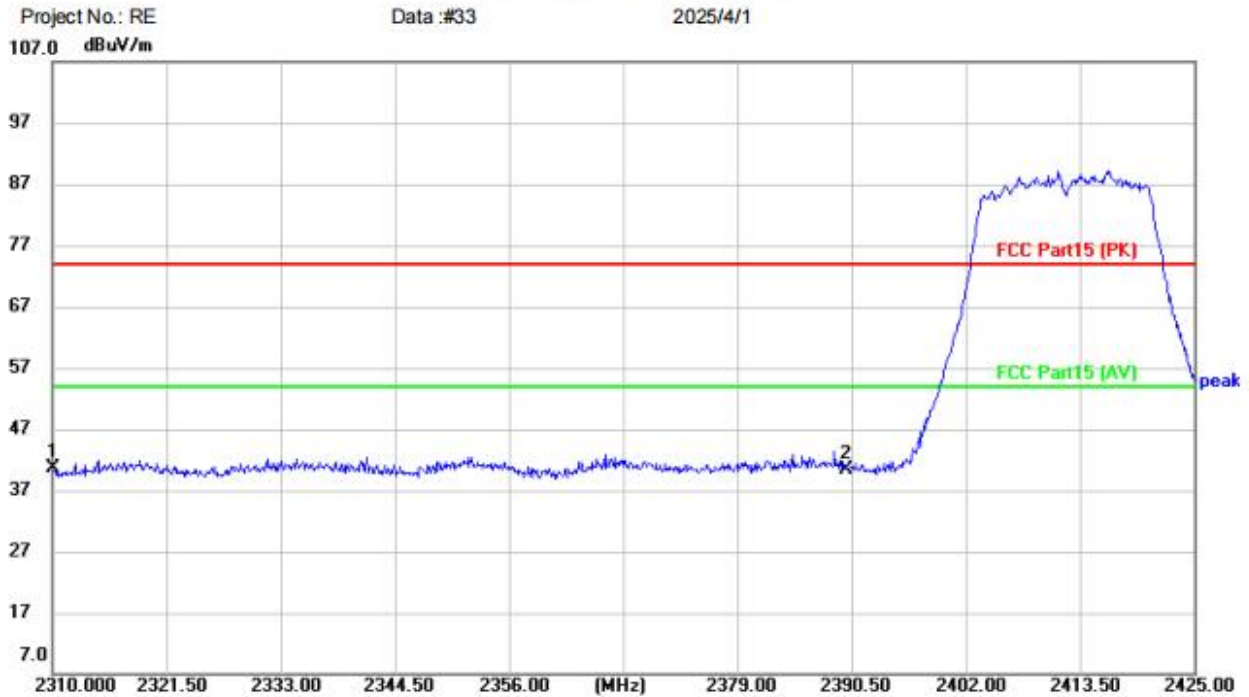
Site Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: aosu Wi-Fi HomeBase H2L
 M/N: H2L
 Mode: 11G-2462
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	64.80	-2.91	61.89	74.00	-12.11	peak	
2	*	2483.500	46.43	-2.91	43.52	54.00	-10.48	AVG	
3		2500.000	47.91	-3.00	44.91	74.00	-29.09	peak	

Test Result: Pass

[Test mode: TX N20 low channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11N20-2412

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2310.000	43.48	-2.87	40.61	74.00	-33.39	peak	
2		2390.000	42.85	-2.44	40.41	74.00	-33.59	peak	

Test Result: Pass

[Test mode:TX N20 low channel]; [Polarity: Vertical]

Radiated Emission Measurement

Project No.: RE
107.0 dBuV/m

Data :#34

2025/4/1



Site

Polarization: **Vertical**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11N20-2412

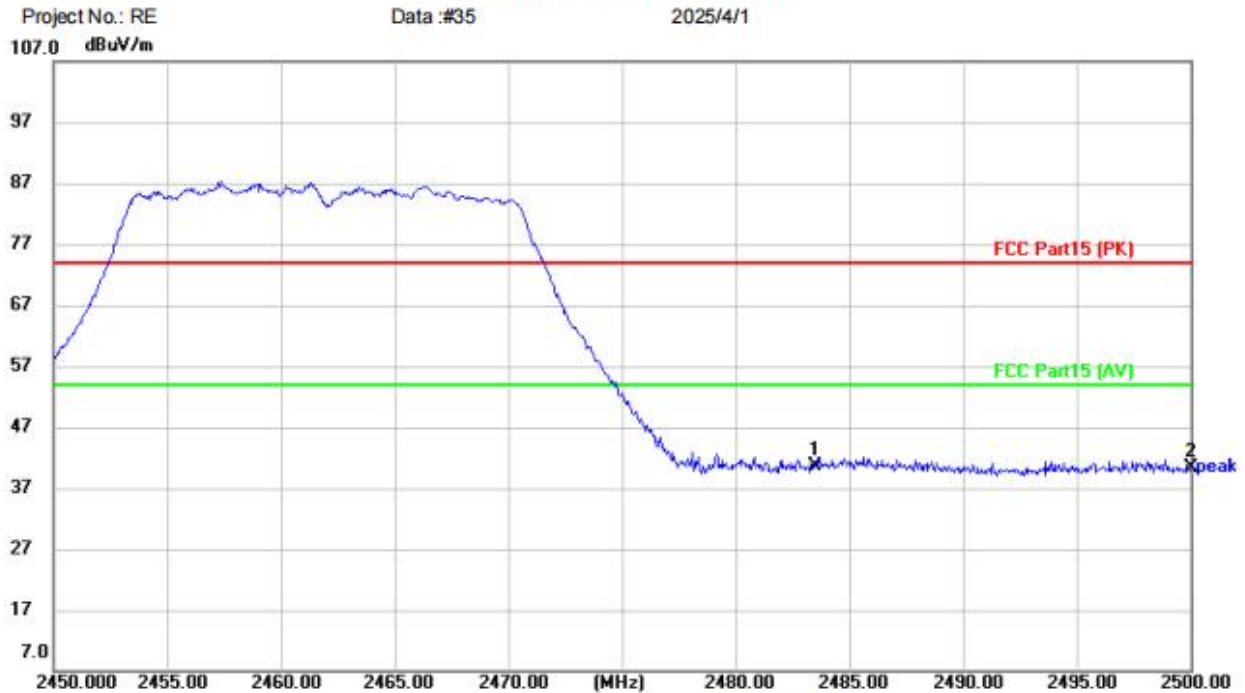
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	44.42	-2.87	41.55	74.00	-32.45	peak	
2		2390.000	57.50	-2.44	55.06	74.00	-18.94	peak	
3	*	2390.000	46.63	-2.44	44.19	54.00	-9.81	AVG	

Test Result: Pass

[Test mode: TX N20 High channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11N20-2462

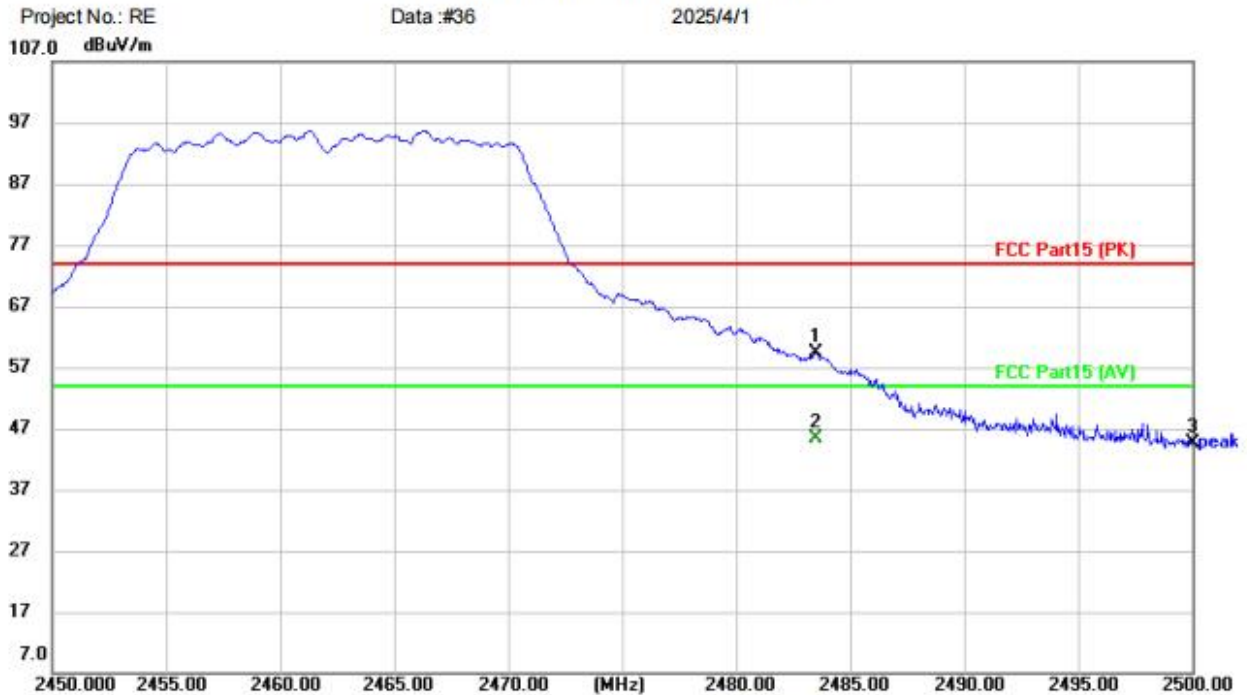
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2483.500	43.46	-2.91	40.55	74.00	-33.45	peak	
2		2500.000	43.37	-3.00	40.37	74.00	-33.63	peak	

Test Result: Pass

[Test mode:TX N20 High channel]; [Polarity: Vertical]

Radiated Emission Measurement



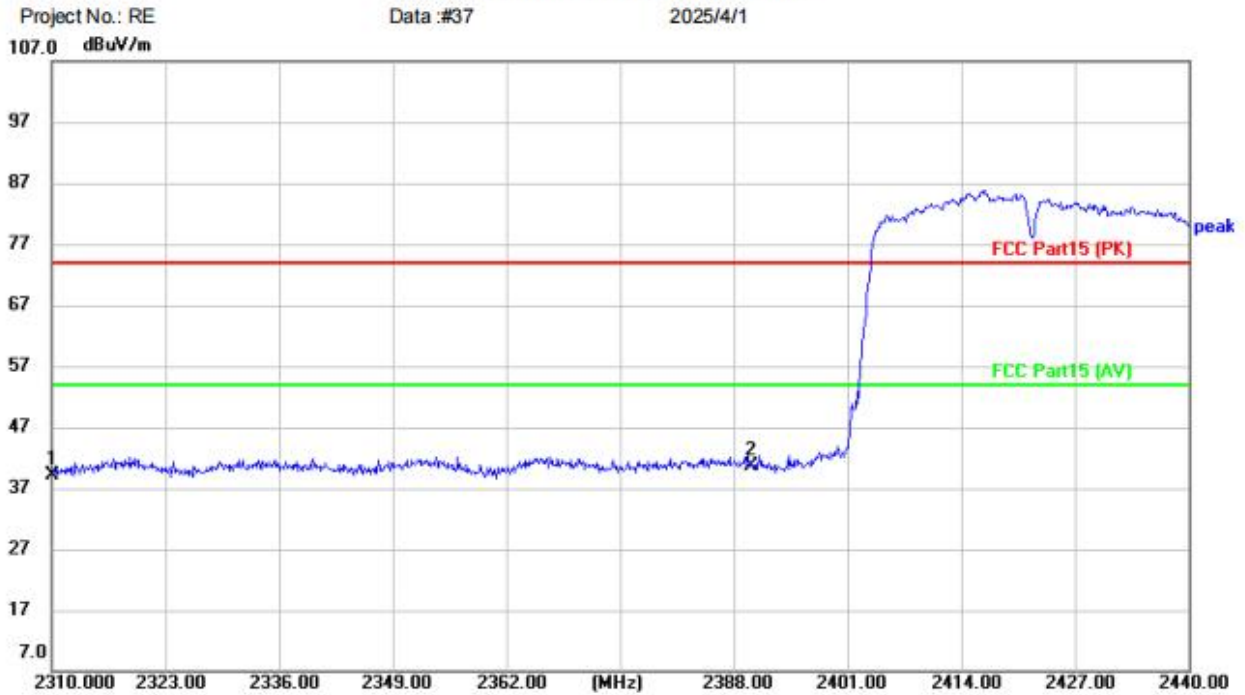
Site Polarization: **Vertical** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: aosu Wi-Fi HomeBase H2L
M/N: H2L
Mode: 11N20-2462
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	62.23	-2.91	59.32	74.00	-14.68	peak	
2	*	2483.500	48.26	-2.91	45.35	54.00	-8.65	AVG	
3		2500.000	47.51	-3.00	44.51	74.00	-29.49	peak	

Test Result: Pass

[Test mode: TX N40 low channel]; [Polarity: Horizontal]

Radiated Emission Measurement

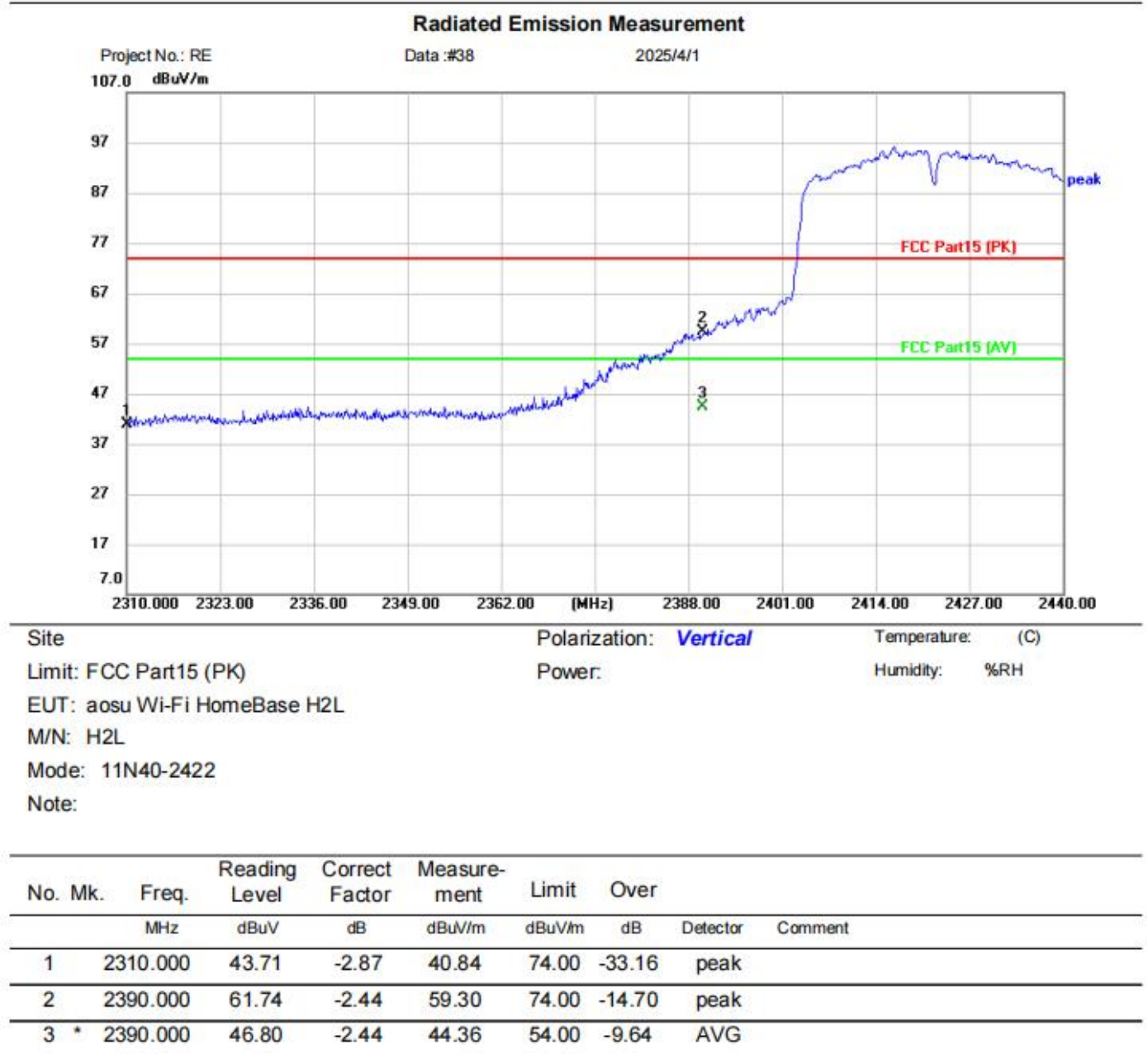


Site Polarization: **Horizontal** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: aosu Wi-Fi HomeBase H2L
M/N: H2L
Mode: 11N40-2422
Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	41.91	-2.87	39.04	74.00	-34.96	peak	
2	*	2390.000	43.03	-2.44	40.59	74.00	-33.41	peak	

Test Result: Pass

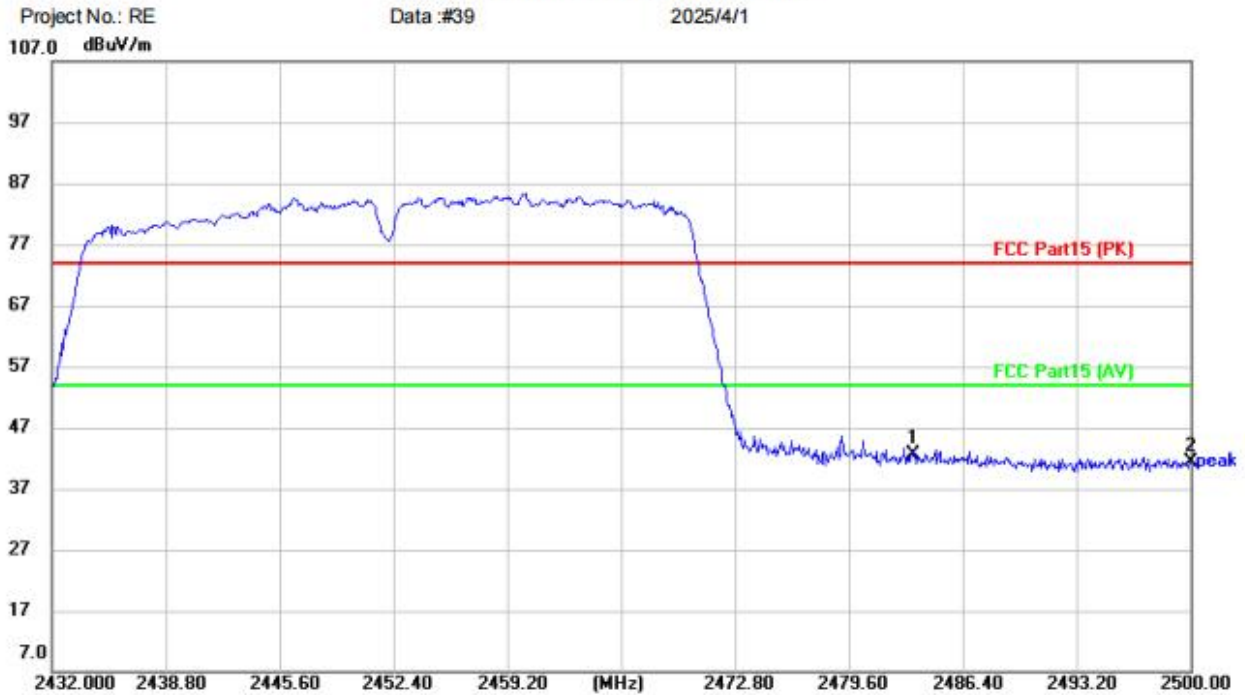
[Test mode:TX N40 low channel]; [Polarity: Vertical]



Test Result: Pass

[Test mode: TX N40 High channel]; [Polarity: Horizontal]

Radiated Emission Measurement



Site Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: aosu Wi-Fi HomeBase H2L

M/N: H2L

Mode: 11N40-2452

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	45.58	-2.91	42.67	74.00	-31.33	peak	
2		2500.000	44.36	-3.00	41.36	74.00	-32.64	peak	

Test Result: Pass

[Test mode:TX N40 High channel]; [Polarity: Vertical]

Radiated Emission Measurement



Site Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: aosu Wi-Fi HomeBase H2L
 M/N: H2L
 Mode: 11N40-2452
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	57.98	-2.91	55.07	74.00	-18.93	peak	
2	*	2483.500	42.49	-2.91	39.58	54.00	-14.42	AVG	
3		2500.000	48.39	-3.00	45.39	74.00	-28.61	peak	

Test Result: Pass

7 Appendix A

7.1 Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.665	30	Pass
NVNT	b	2437	Ant1	15.585	30	Pass
NVNT	b	2462	Ant1	16.437	30	Pass
NVNT	b	2412	Ant2	15.239	30	Pass
NVNT	b	2437	Ant2	16.201	30	Pass
NVNT	b	2462	Ant2	16.282	30	Pass
NVNT	g	2412	Ant1	13.937	30	Pass
NVNT	g	2437	Ant1	15.399	30	Pass
NVNT	g	2462	Ant1	16.833	30	Pass
NVNT	g	2412	Ant2	15.256	30	Pass
NVNT	g	2437	Ant2	16.304	30	Pass
NVNT	g	2462	Ant2	16.264	30	Pass
NVNT	n20	2412	Ant1	11.073	30	Pass
NVNT	n20	2412	Ant2	12.245	30	Pass
NVNT	n20	2412	Sum	14.709	30	Pass
NVNT	n20	2437	Ant1	12.743	30	Pass
NVNT	n20	2437	Ant2	13.215	30	Pass
NVNT	n20	2437	Sum	15.996	30	Pass
NVNT	n20	2462	Ant1	13.703	30	Pass
NVNT	n20	2462	Ant2	13.245	30	Pass
NVNT	n20	2462	Sum	16.49	30	Pass
NVNT	n40	2422	Ant1	11.023	30	Pass
NVNT	n40	2422	Ant2	11.547	30	Pass
NVNT	n40	2422	Sum	14.303	30	Pass
NVNT	n40	2437	Ant1	11.931	30	Pass
NVNT	n40	2437	Ant2	12.088	30	Pass
NVNT	n40	2437	Sum	15.021	30	Pass
NVNT	n40	2452	Ant1	12.415	30	Pass
NVNT	n40	2452	Ant2	12.335	30	Pass
NVNT	n40	2452	Sum	15.385	30	Pass