

Snap One, LLC

TEST REPORT

Model:

LUM-420-W-FLSB, LUM-420-W-FLSW

REPORT NUMBER

240900192THC-001

ISSUE DATE

Sep. 18, 2025

PAGES

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DOCUMENT CONTROL NUMBER

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Radio Spectrum TEST REPORT

Applicant:	Snap One, LLC 1800 Continental Blvd. Suite 200-300 Charlotte, NC 28273 USA
Product:	Floodlight Camera
Model No.:	LUM-420-W-FLSB, LUM-420-W-FLSW
FCC ID:	2AJAC-LUM420FLS
Test Method/ Standard:	47 CFR FCC Part 15.247 & ANSI C63.10 2013 KDB 558074 D01 v05r02
Test By:	Intertek Testing Services Taiwan Ltd., Hsinchu Laboratory No. 17, Ln. 246, Niupu S. Rd., Xiangshan Dist, Hsinchu City 300075, Taiwan



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TEST REPORT

Revision History

Report No.	Issue Date	Revision Summary
240900192THC-001	Sep. 18, 2025	Original report

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Summary of Test Data

Test Requirement	Applicable Rule (Section 15.247)	Result
Minimum 6 dB Bandwidth	15.247(a)(2)	Pass
Maximum Peak Conducted Output Power	15.247(b)(3)	Pass
Power Spectral Density	15.247(e)	Pass
Emissions In Non-Restricted Frequency Bands	15.247(d)	Pass
Emissions In Restricted Frequency Bands (Radiated emission measurements)	15.247(d), 15.205, 15.209	Pass
Emission On The Band Edge	15.247(d), 15.205	Pass
AC Power Line Conducted Emission	15.207	Pass
Antenna Requirement	15.203	Pass

Note: Please note that the test results with statement of conformity, the decision rules which are based on: Safety Testing: the specification, standard or IEC Guide 115.

Other Testing: the specification, standard and not taking into account the measurement uncertainty.

1. General Information

1.1 Identification of the EUT

Product:	Floodlight Camera
Model No.:	LUM-420-W-FLSW
Operating Frequency:	2412 MHz ~ 2462 MHz
Channel Number:	11 channels
Frequency of Each Channel:	1. 2412+5k, k=0 ~ 10 for 802.11b, 802.11g, 802.11ac(VHT20), 802.11ax(HE20) 2. 2422+5k, k=0 ~ 6 for 802.11ac(VHT40), 802.11ax(HE40)
Rating:	100-240Vac, 50/60Hz
Power Cord:	N/A
Sample receiving date:	2024/09/19
Sample condition:	Workable
Test Date(s):	2025/04/25 ~ 2025/05/06

1.2 Additional information about the EUT

The customer confirmed the models listed are difference between as below:

Model Number	Different
LUM-420-W-FLSB	Color difference, Black
LUM-420-W-FLSW	Color difference, White

1.2 Description of the EUT

Modulation mode	Transmit path
	Chain 0 / Main
802.11b	V
802.11g	V
802.11ac(VHT20)	V
802.11ac(VHT40)	V
802.11ax(HE20)	V
802.11ax(HE40)	V

TEST REPORT

1.3 Antenna description

Antenna Gain : 4.5 dBi
Antenna Type : Dipole Antenna
Connector Type : I-Pex

1.4 Operation mode

EUT connected to Notebook LAN port, executing “tera term” and enter command to select different frequency and modulation.

With individual verifying, the maximum output power were found out 1 Mbps data rate for 802.11b mode, 6 Mbps data rate for 802.11g mode, MCS0 data rate for 802.11n(HT20) 、802.11ac(VHT20) 、802.11ax(HE20) mode , MCS0 data rate for 802.11n(HT40) 、802.11ac(VHT40) 、802.11ax(HE40) mode the final tests were executed under these conditions recorded in this report individually.

Mode	Channel	Frequency (MHz)	Data rate (Mbps)	Signal on time (ms)	Signal on+off time (ms)	Duty cycle	Duty factor (dB)
802.11b	6	2437	1	14.10	14.10	1.00	0.00
802.11g	6	2437	6	71.10	71.10	1.00	0.00
802.11ac(VHT20)	6	2437	MCS0	63.80	63.80	1.00	0.00
802.11ac(VHT40)	6	2437	MCS0	39.20	39.20	1.00	0.00
802.11ax(HE20)	6	2437	MCS0	4.60	4.60	1.00	0.00
802.11ax(HE40)	6	2437	MCS0	66.80	66.80	1.00	0.00

1.5 Peripherals equipment

Peripherals	Brand	Model No.	Serial No.
Notebook PC	HP	HP Probook 440 G3	5CD8021S9H

Peripheral name	Length	Shielded(Y/N)	Brand	Model No.
RJ-45 cable	1m	N	Multicomp	SPC20060

2. Minimum 6 dB Bandwidth

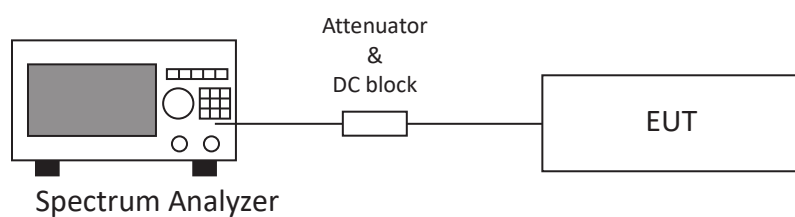
2.1 Instrument Setting

Spectrum Parameter	Setting
Detector	Peak
RBW	100kHz
VBW	$\geq 3 \times \text{RBW}$
Sweep	Auto couple
Trace	Allow the trace to stabilize.
Span	Between two times and five times the occupied bandwidth
Attenuation	Auto

2.2 Test Procedure

Step 1	The transmitter output was connected to the spectrum analyzer.
Step 2	Test was performed accordance with ANSI C63.10.
Step 3	Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

2.3 Test Diagram



2.4 Limit

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

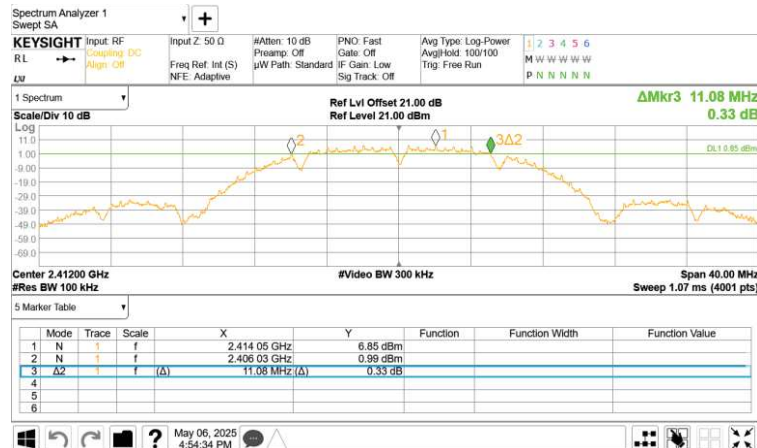
TEST REPORT

2.5 Test Results

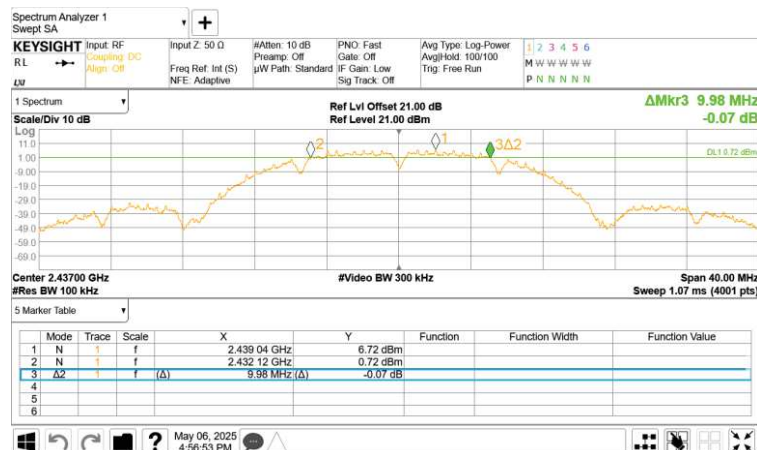
Temperature (°C) :	26
Relative Humidity (%) :	73
Test date :	2025/05/06

Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1	2412	11.08	>0.5	Pass
	6	2437	9.98	>0.5	Pass
	11	2462	11.07	>0.5	Pass
802.11g	1	2412	16.30	>0.5	Pass
	6	2437	16.30	>0.5	Pass
	11	2462	16.29	>0.5	Pass
802.11ac(VHT20)	1	2412	16.91	>0.5	Pass
	6	2437	16.57	>0.5	Pass
	11	2462	16.90	>0.5	Pass
802.11ac(VHT40)	3	2422	36.08	>0.5	Pass
	6	2437	35.69	>0.5	Pass
	9	2452	35.68	>0.5	Pass
802.11ax(HE20)	1	2412	17.99	>0.5	Pass
	6	2437	18.27	>0.5	Pass
	11	2462	18.00	>0.5	Pass
802.11ax(HE40)	3	2422	37.69	>0.5	Pass
	6	2437	37.66	>0.5	Pass
	9	2452	37.68	>0.5	Pass

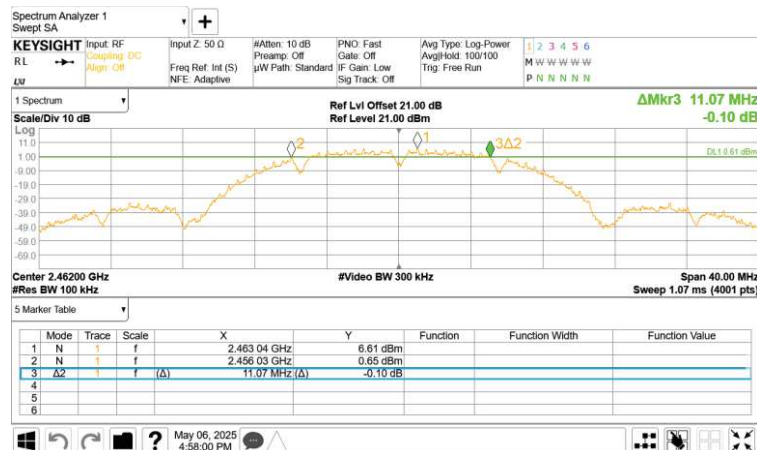
Chain0 : 6dB Bandwidth @ 802.11b Mode Ch 1



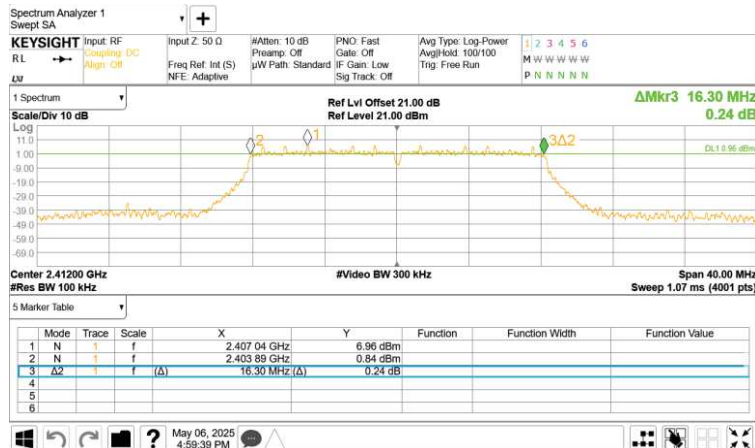
Chain0 : 6dB Bandwidth @ 802.11b Mode Ch 6



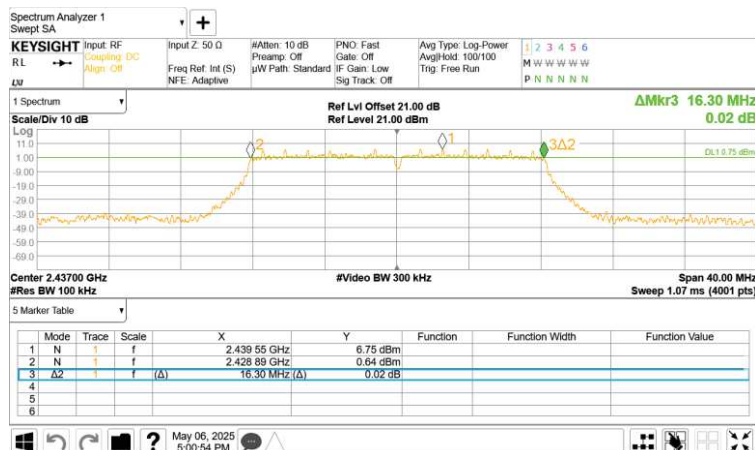
Chain0 : 6dB Bandwidth @ 802.11b Mode Ch11



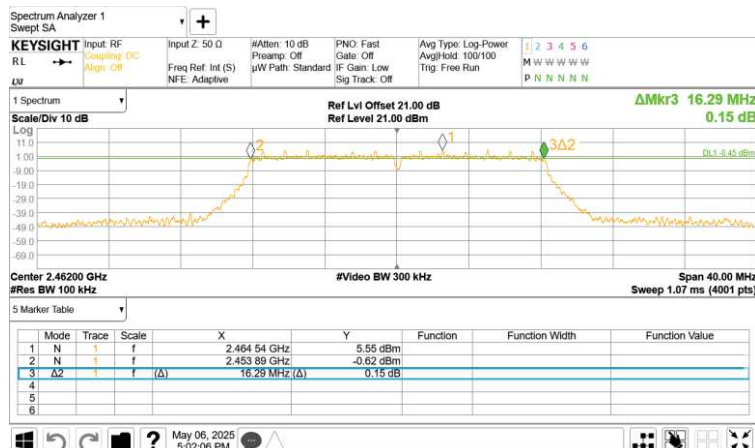
Chain0 : 6dB Bandwidth @ 802.11g Mode Ch 1



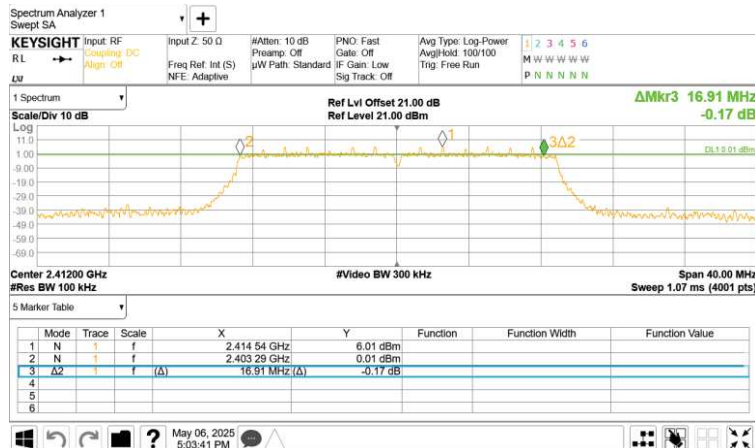
Chain0 : 6dB Bandwidth @ 802.11g Mode Ch 6



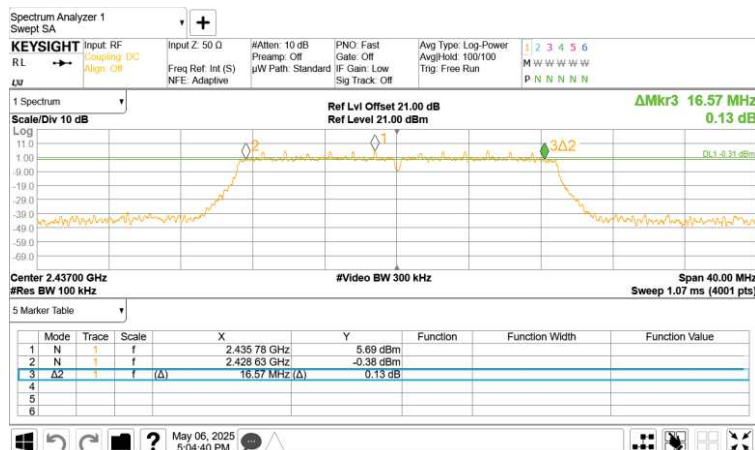
Chain0 : 6dB Bandwidth @ 802.11g Mode Ch11



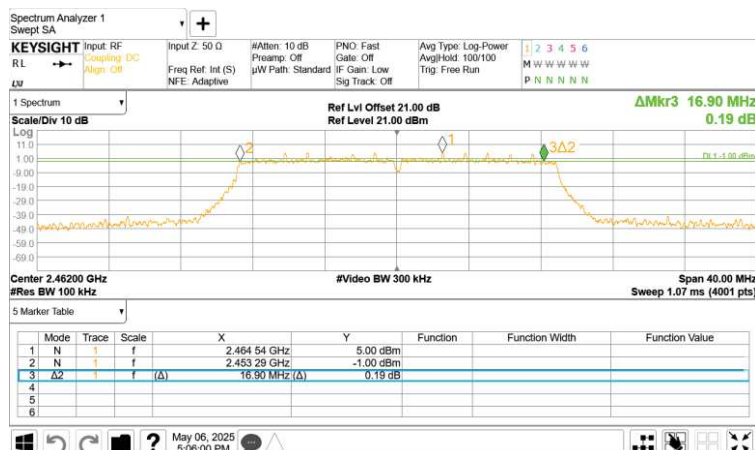
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch 1



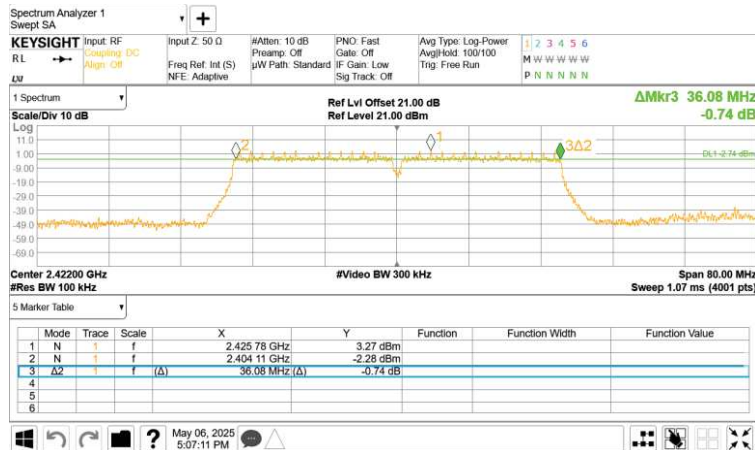
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch 6



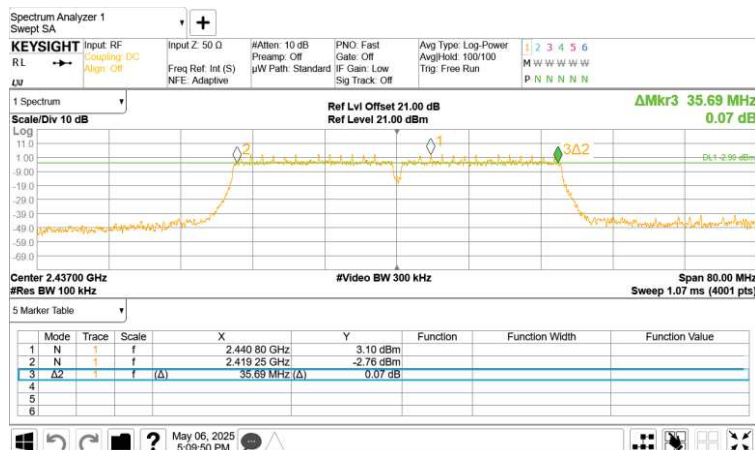
Chain0 : 6dB Bandwidth @ 802.11ac(VHT20) Mode Ch11



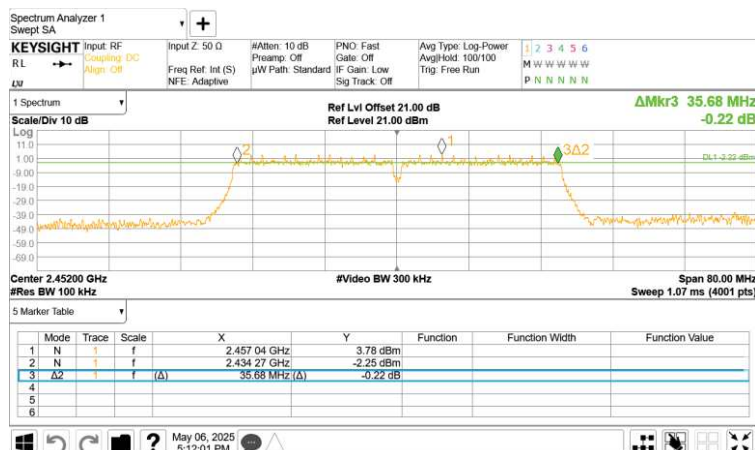
Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch 3



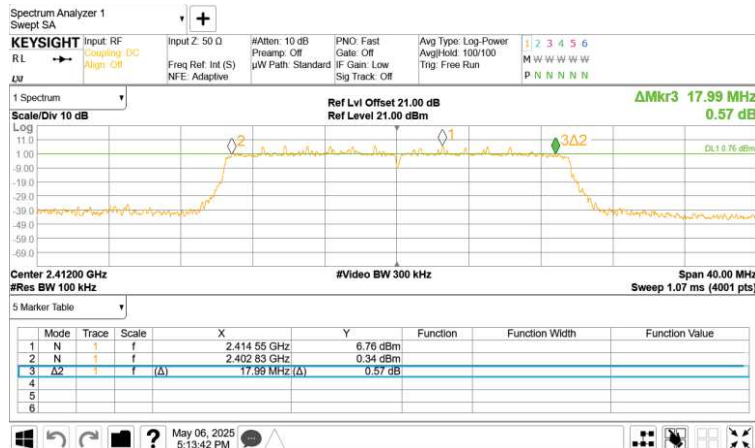
Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch 6



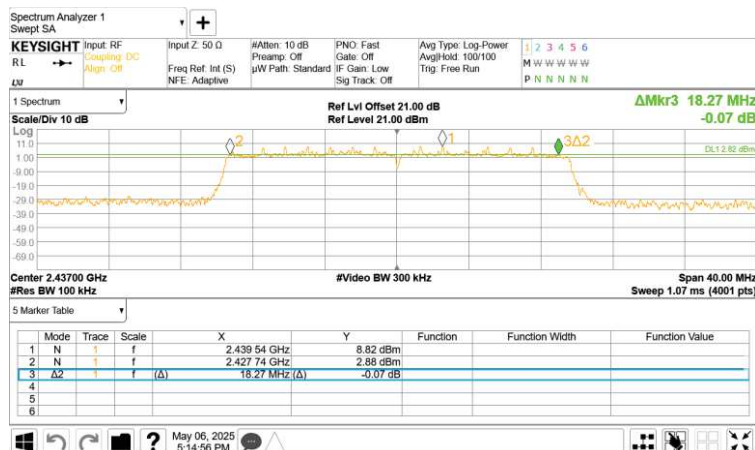
Chain0 : 6dB Bandwidth @ 802.11ac(VHT40) Mode Ch 9



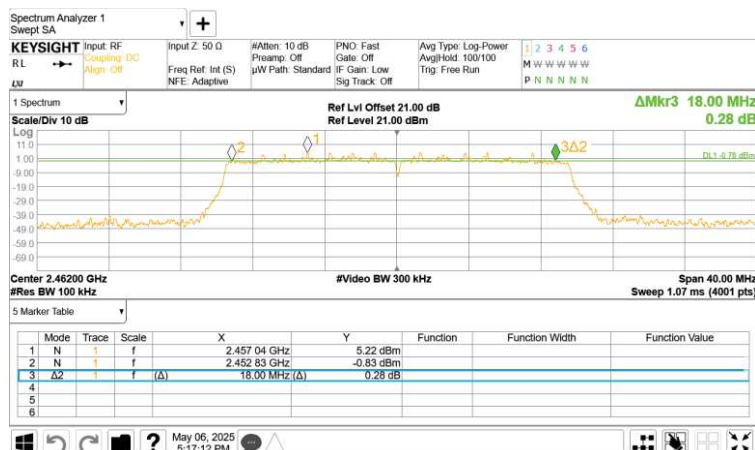
Chain0 : 6dB Bandwidth @ 802.11ax(HE20) Mode Ch 1



Chain0 : 6dB Bandwidth @ 802.11ax(HE20) Mode Ch 6



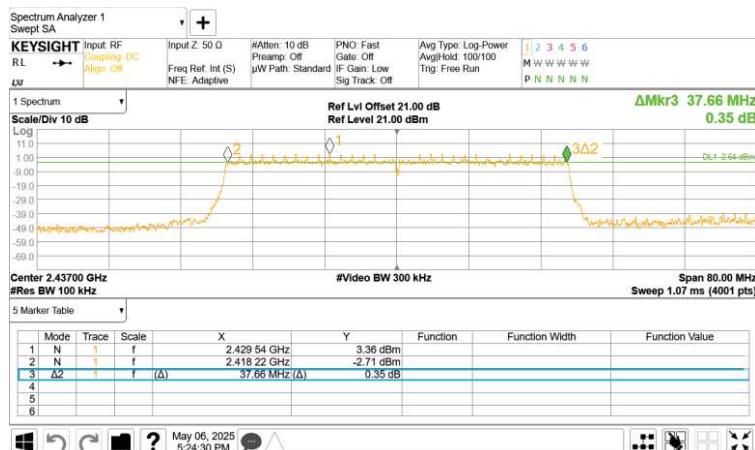
Chain0 : 6dB Bandwidth @ 802.11ax(HE20) Mode Ch11



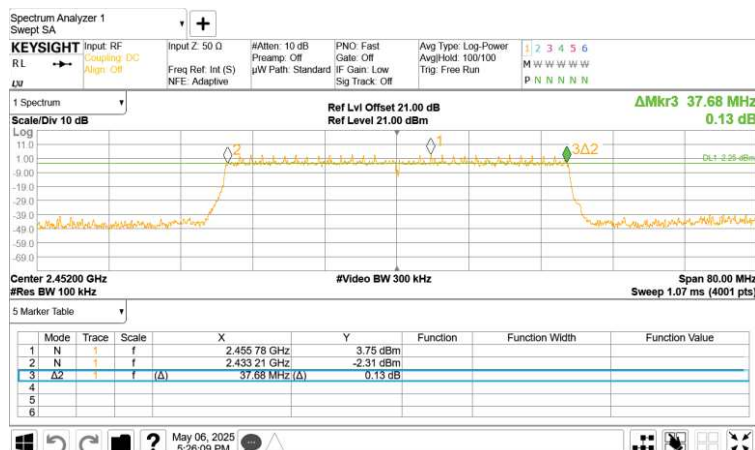
Chain0 : 6dB Bandwidth @ 802.11ax(HE40) Mode Ch 3



Chain0 : 6dB Bandwidth @ 802.11ax(HE40) Mode Ch 6



Chain0 : 6dB Bandwidth @ 802.11ax(HE40) Mode Ch 9



3. Maximum Peak Conducted Output Power

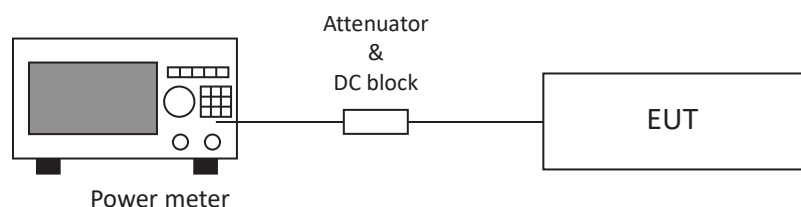
3.1 Instrument Setting

Power Meter Parameter	Setting
Bandwidth	65MHz bandwidth is greater than the EUT emission bandwidth
Detector	Peak & Average

3.2 Test Procedure

The preferred methodology is to use integrated average power measurements, as described in 11.9.2 and 11.13.3 of ANSI C63.10. The peak integrated band power methods of 11.9.1.2 and 11.13.3.2 of ANSI C63.10 are not applicable for FCC compliance testing purposes.

3.3 Test Diagram



3.4 Limit

For systems using digital modulation in the 2400-2483.5 MHz: 1 Watt (30dBm)

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3.5 Test Results

Temperature (°C) :	26
Relative Humidity (%) :	73
Test date :	2025/05/06

Mode	Channel	Frequency (MHz)	Data Rate (Mbps)	Output Power [AV] (dBm)	Total Power [AV] (mW)	Maximum power [PK] (dBm)	Maximum power [PK] (mW)	Limit (dBm)	Margin (dB)
802.11b	1	2412	1	18.64	73.11	20.47	111.43	30	-9.53
	6	2437		18.49	70.63	20.22	105.20	30	-9.78
	11	2462		18.07	64.12	19.91	97.95	30	-10.09
802.11g	1	2412	6	19.49	88.92	26.40	436.52	30	-3.60
	6	2437		19.15	82.22	26.93	493.17	30	-3.07
	11	2462		18.03	63.53	25.60	363.08	30	-4.40
802.11ac (VHT20)	1	2412	MCS0	18.37	68.71	26.39	435.51	30	-3.61
	6	2437		18.06	63.97	26.25	421.70	30	-3.75
	11	2462		17.28	53.46	25.68	369.83	30	-4.32
802.11ac (VHT40)	3	2422	MCS0	18.50	70.79	24.89	308.32	30	-5.11
	6	2437		18.39	69.02	24.94	311.89	30	-5.06
	9	2452		19.19	82.99	25.56	359.75	30	-4.44
802.11ax (HE20)	1	2412	MCS0	19.26	84.33	26.53	449.78	30	-3.47
	6	2437		18.91	77.80	26.81	479.73	30	-3.19
	11	2462		17.84	60.81	25.08	322.11	30	-4.92
802.11ax (HE40)	3	2422	MCS0	19.01	79.62	25.73	374.11	30	-4.27
	6	2437		18.79	75.68	25.49	354.00	30	-4.51
	9	2452		19.12	81.66	25.52	356.45	30	-4.48

4. Power Spectral Density

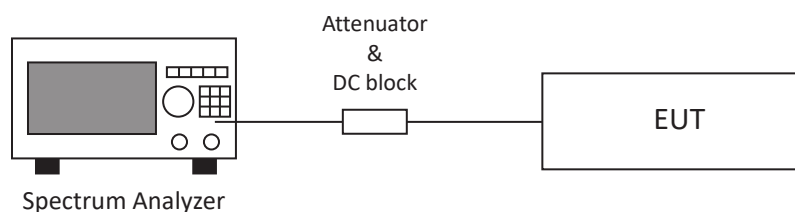
4.1 Instrument Setting

Spectrum Function	Setting
Detector	Peak
RBW	≥ 3 kHz
VBW	$\geq 3 \times$ RBW
Sweep	Auto couple
Trace	Max hold
Span	1.5 times $\times$ 6dB bandwidth
Attenuation	Auto

4.2 Test Procedure

Step 1	Test procedure refer to subclause 11.10 of ANSI C63.10.
Step 2	Using the maximum conducted output power in the fundamental emission demonstrates compliance. The EUT must be configured to transmit continuously at full power over the measurement duration.
Step 3	Use the peak marker function to determine the maximum amplitude level within the RBW.

4.3 Test Diagram



4.4 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 10 kHz band during any time interval of continuous transmission

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4.5 Test Results

Temperature (°C) :	26
Relative Humidity (%) :	73
Test date :	2025/05/06

Mode	Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
802.11b	1	2412	-1.82	8	-9.82
	6	2437	-2.08	8	-10.08
	11	2462	-2.28	8	-10.28
802.11g	1	2412	-2.44	8	-10.44
	6	2437	-3.14	8	-11.14
	11	2462	-3.81	8	-11.81
802.11ac(VHT20)	1	2412	-3.09	8	-11.09
	6	2437	-3.40	8	-11.40
	11	2462	-4.15	8	-12.15
802.11ac(VHT40)	3	2422	-5.24	8	-13.24
	6	2437	-5.44	8	-13.44
	9	2452	-4.63	8	-12.63
802.11ax(HE20)	1	2412	-2.06	8	-10.06
	6	2437	0.15	8	-7.85
	11	2462	-3.44	8	-11.44
802.11ax(HE40)	3	2422	-4.84	8	-12.84
	6	2437	-4.82	8	-12.82
	9	2452	-4.49	8	-12.49

Note: Because using KDB 662911 v02r01 D01 E) 2) c), we found the peak PSD and add $10 \log(\text{NANT})$ dB, where NANT is the number of outputs. Before adding $10 \log(\text{NANT})$.

Chain0 : Power Spectral Density @ 802.11b Mode Ch 1



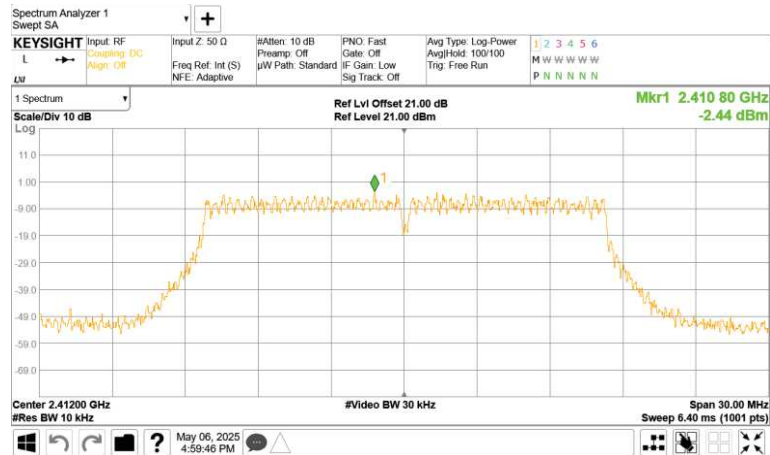
Chain0 : Power Spectral Density @ 802.11b Mode Ch 6



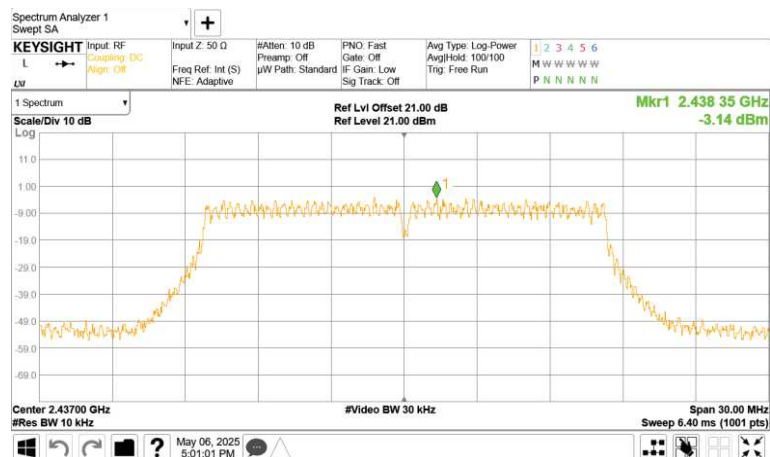
Chain0 : Power Spectral Density @ 802.11b Mode Ch11



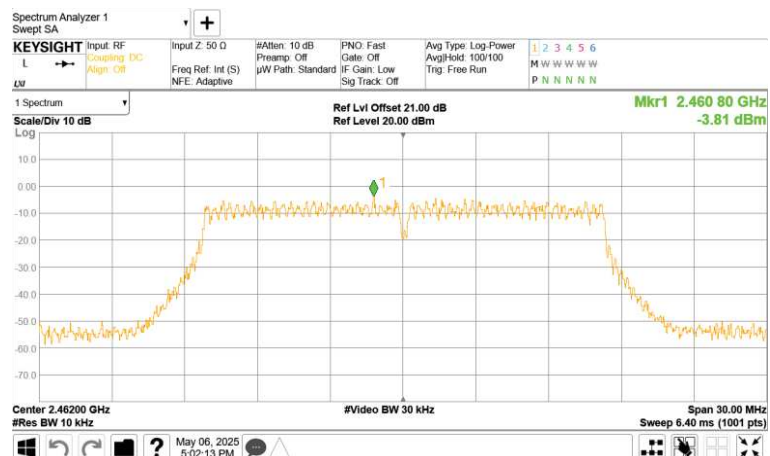
Chain0 : Power Spectral Density @ 802.11g Mode Ch 1



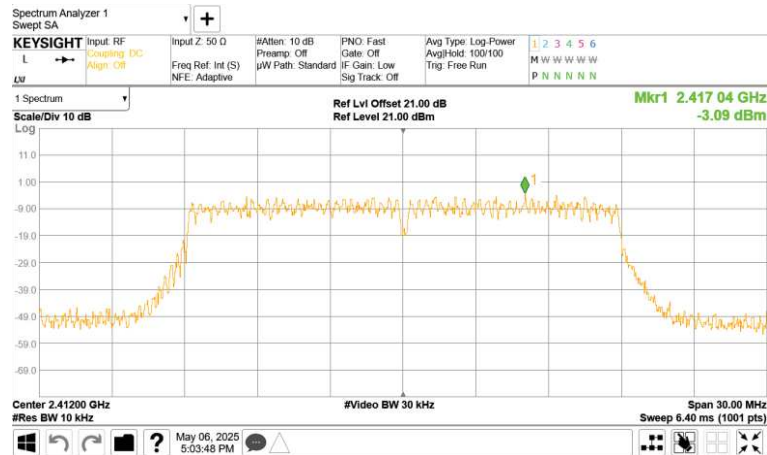
Chain0 : Power Spectral Density @ 802.11g Mode Ch 6



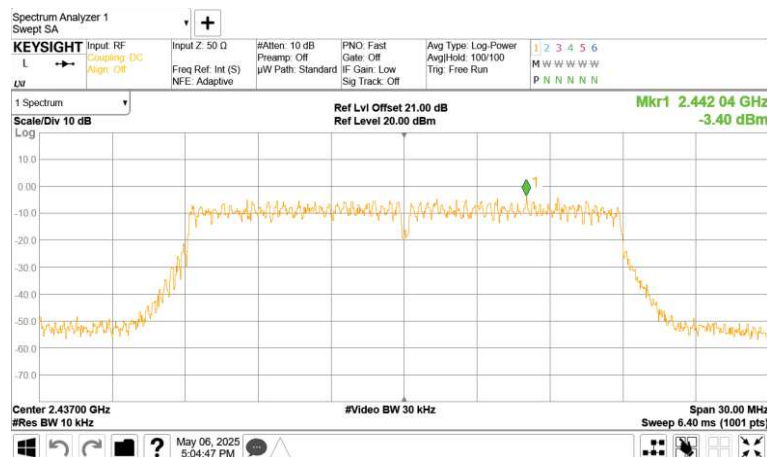
Chain0 : Power Spectral Density @ 802.11g Mode Ch11



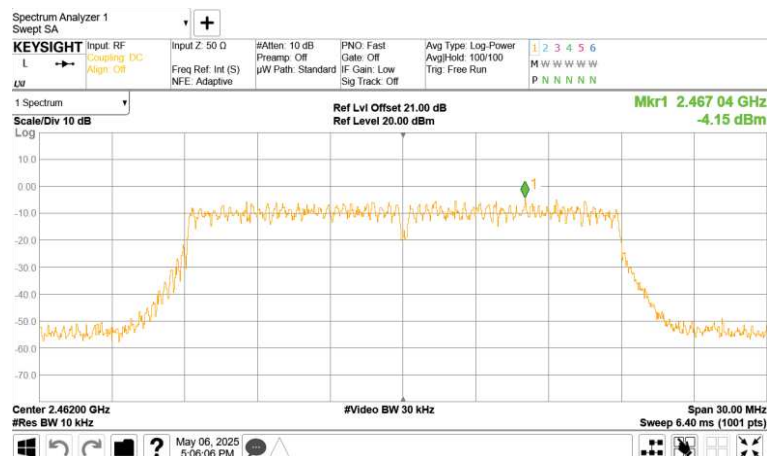
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch 1



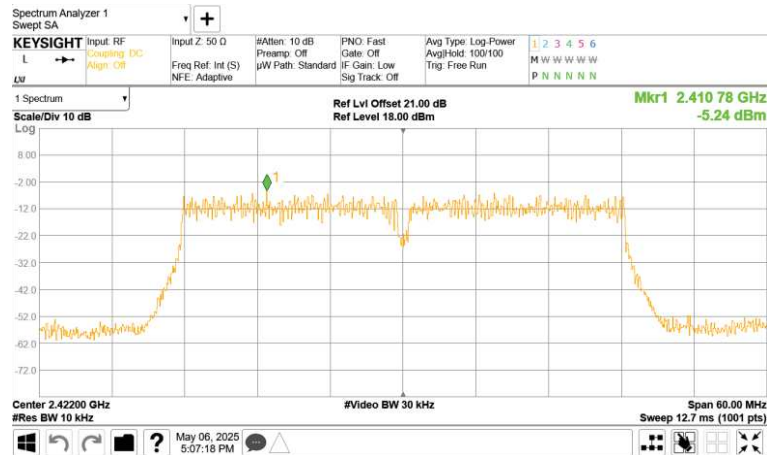
Chain0 : Power Spectral Density @ 802.11ac(VHT20) Mode Ch 6



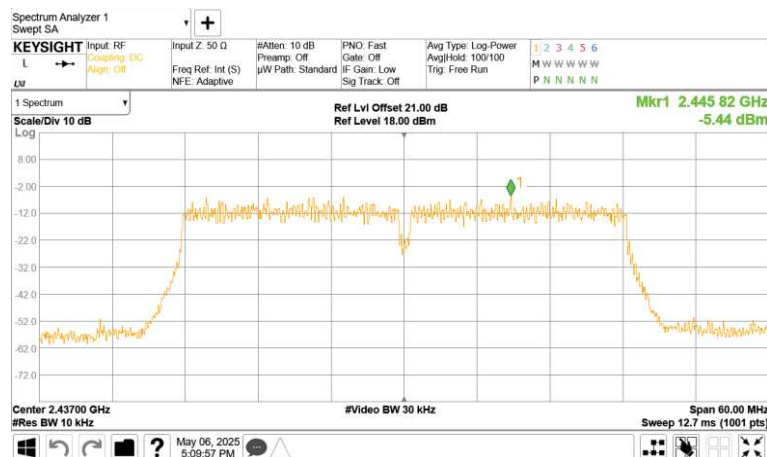
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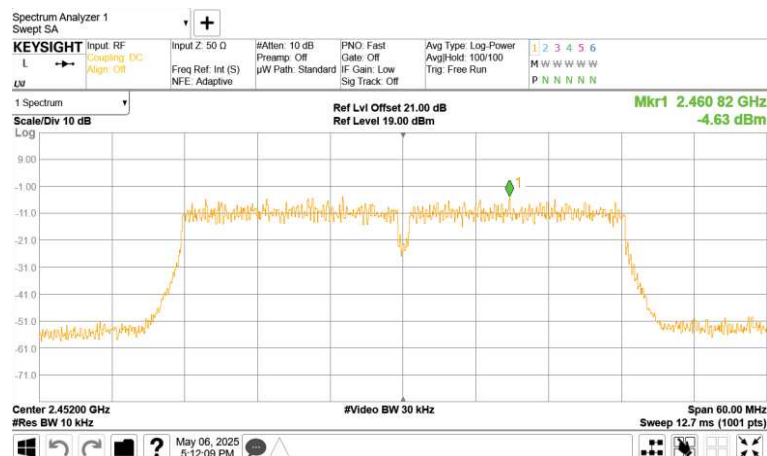
Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch 3



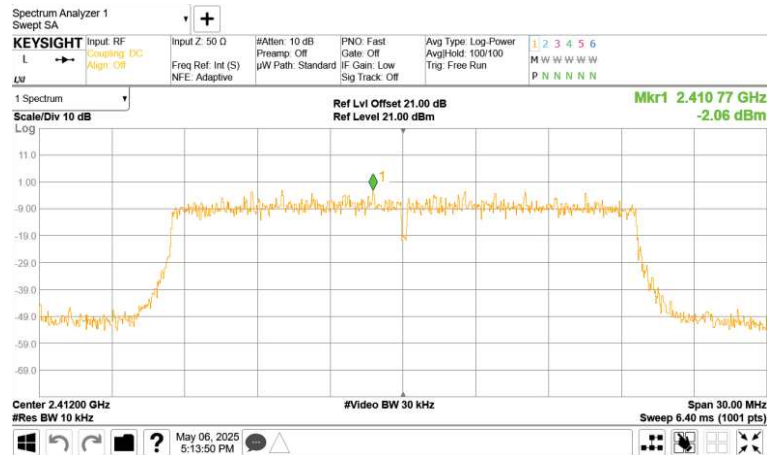
Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch 6



Chain0 : Power Spectral Density @ 802.11ac(VHT40) Mode Ch 9



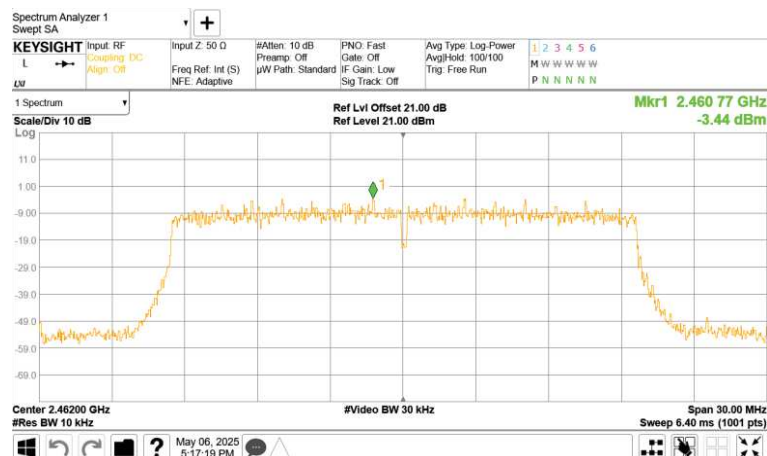
Chain0 : Power Spectral Density @ 802.11ax(HE20) Mode Ch 1



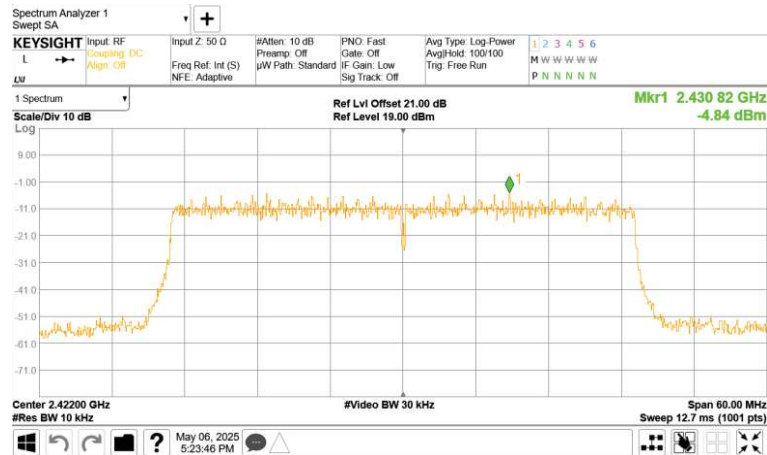
Chain0 : Power Spectral Density @ 802.11ax(HE20) Mode Ch 6



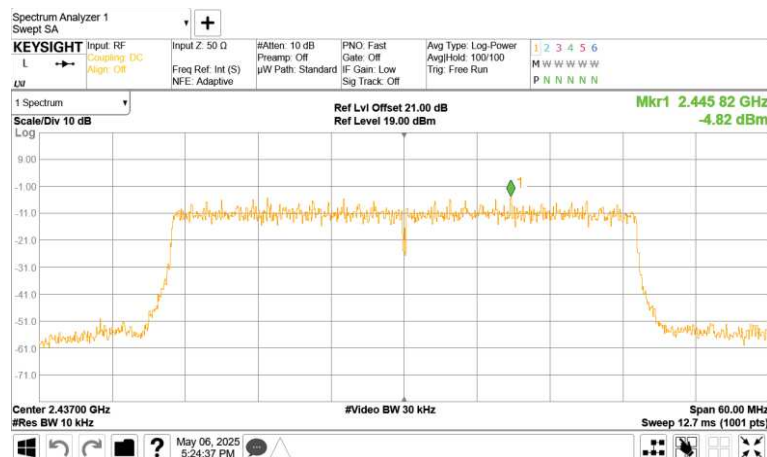
Chain0 : Power Spectral Density @ 802.11ax(HE20) Mode Ch11



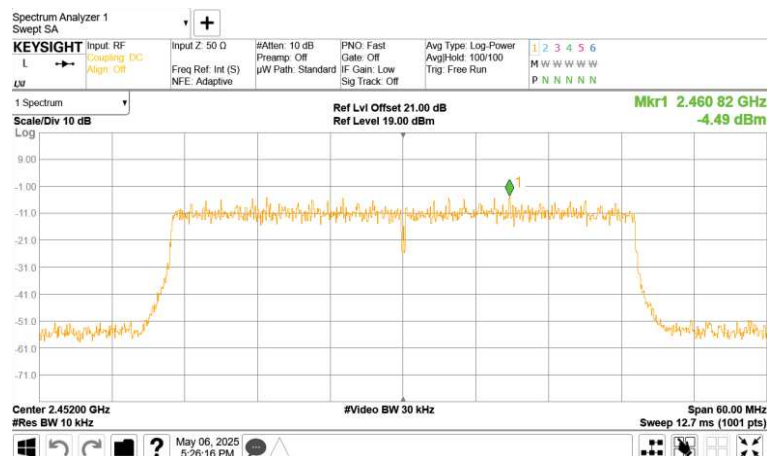
Chain0 : Power Spectral Density @ 802.11ax(HE40) Mode Ch 3



Chain0 : Power Spectral Density @ 802.11ax(HE40) Mode Ch 6



Chain0 : Power Spectral Density @ 802.11ax(HE40) Mode Ch 9



5. Emissions in Non-Restricted Frequency Bands

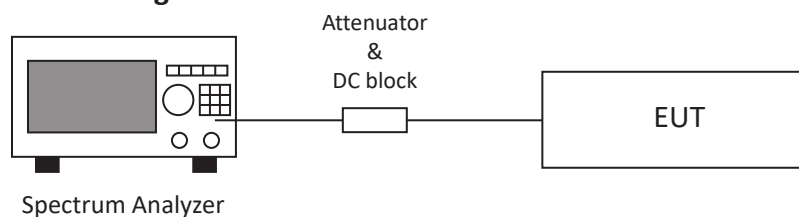
5.1 Instruments Setting

Spectrum Function	Setting (Reference Level)	Setting (Emission Level)
Detector	Peak	Peak
RBW	≥ 100 kHz	≥ 100 kHz
VBW	$\geq 3 \times$ RBW	$\geq 3 \times$ RBW
Sweep	Auto couple	Auto couple
Trace	Max hold	Max hold
Span	≥ 1.5 time 6dB bandwidth	
Attenuation	Auto	Auto

5.2 Test Procedure

- Step 1 The procedure was used in antenna-port conducted and connected to the spectrum analyzer.
- Step 2 Set instrument center frequency to center frequency.
- Step 3 Use the parameter configured in subclause 11.11 of ANSI C63.10 to measure.
- Step 4 Use the peak marker function to determine the maximum amplitude level.

5.3 Test Diagram



5.4 Limit

The peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz

TEST REPORT

5.5 Test Results

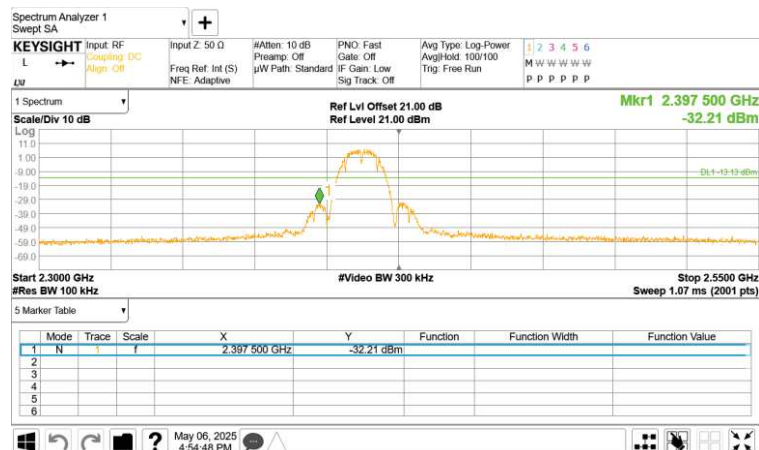
Temperature (°C) :	26
Relative Humidity (%) :	73
Test date :	2025/05/06

Mode	Channel	Frequency (MHz)	Delta (dBc)	Limit (dBc)
802.11b	1	2412	39.09	>20
	6	2437	57.77	>20
	11	2462	56.58	>20
802.11g	1	2412	43.59	>20
	6	2437	58.21	>20
	11	2462	50.80	>20
802.11ac(VHT20)	1	2412	40.69	>20
	6	2437	57.59	>20
	11	2462	48.99	>20
802.11ac(VHT40)	3	2422	46.56	>20
	6	2437	44.78	>20
	9	2452	40.06	>20
802.11ax(HE20)	1	2412	41.32	>20
	6	2437	51.38	>20
	11	2462	48.52	>20
802.11ax(HE40)	3	2422	45.46	>20
	6	2437	44.78	>20
	9	2452	41.13	>20

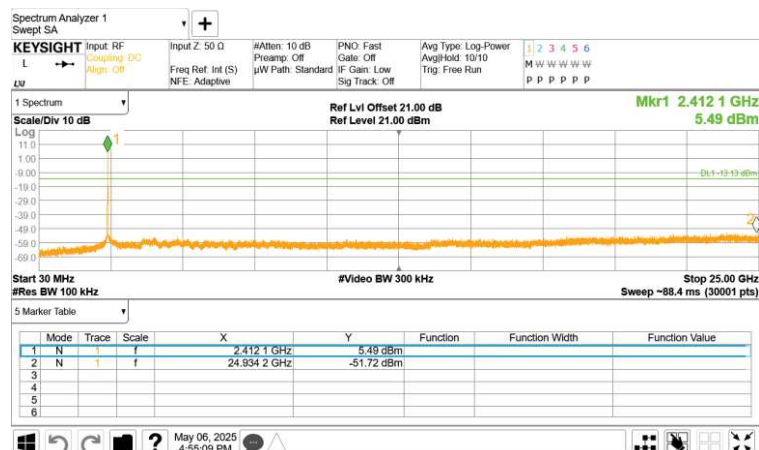
Chain0 : Conducted Spurious @ 802.11b Mode Ch 1



Chain0 : Conducted Spurious @ 802.11b Mode Ch 1



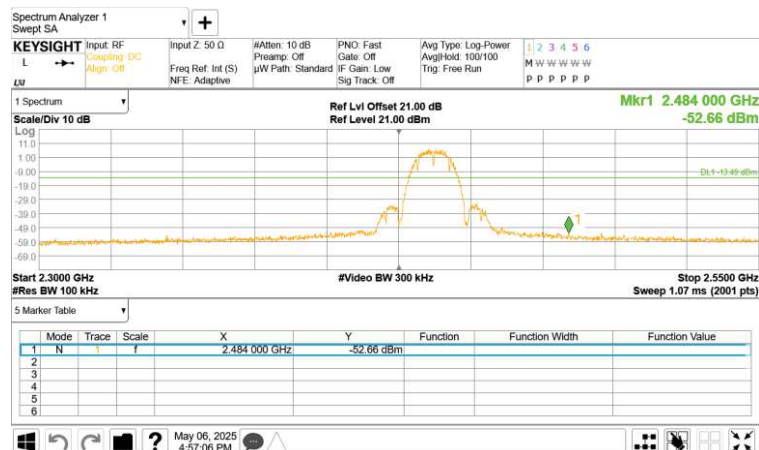
Chain0 : Conducted Spurious @ 802.11b Mode Ch 1



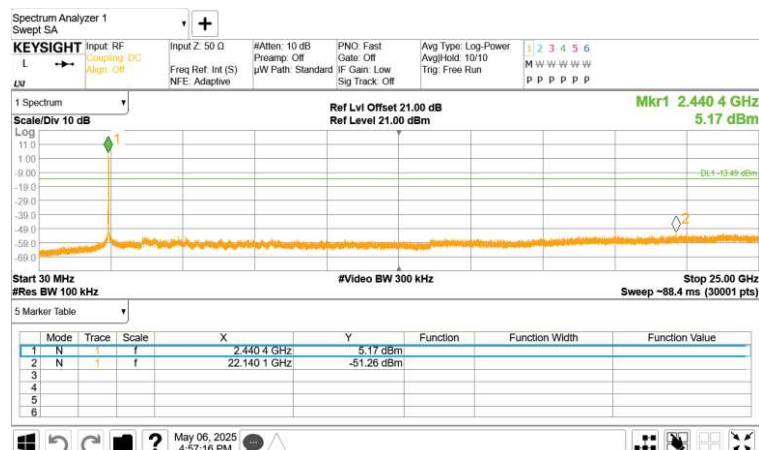
Chain0 : Conducted Spurious @ 802.11b Mode Ch 6



Chain0 : Conducted Spurious @ 802.11b Mode Ch 6



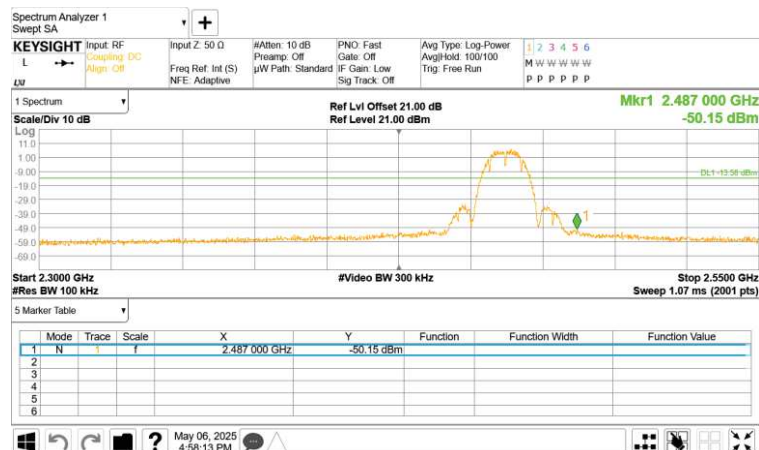
Chain0 : Conducted Spurious @ 802.11b Mode Ch 6



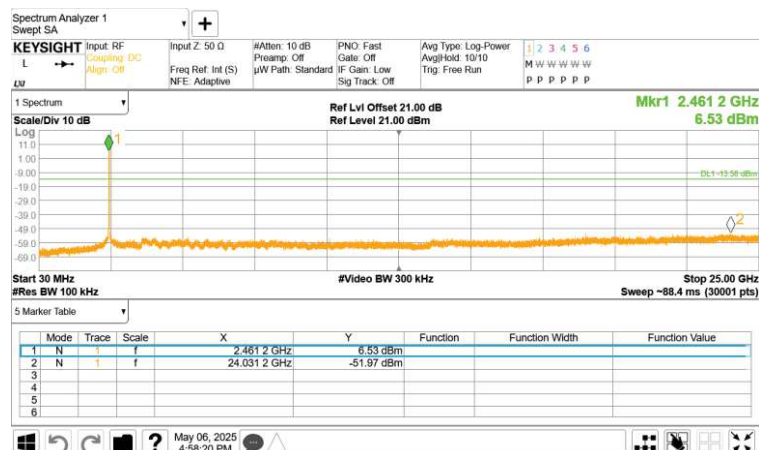
Chain0 : Conducted Spurious @ 802.11b Mode Ch11



Chain0 : Conducted Spurious @ 802.11b Mode Ch11



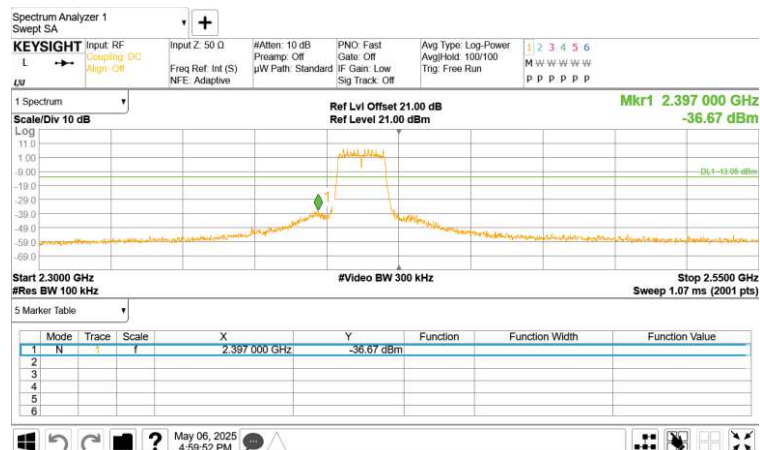
Chain0 : Conducted Spurious @ 802.11b Mode Ch11



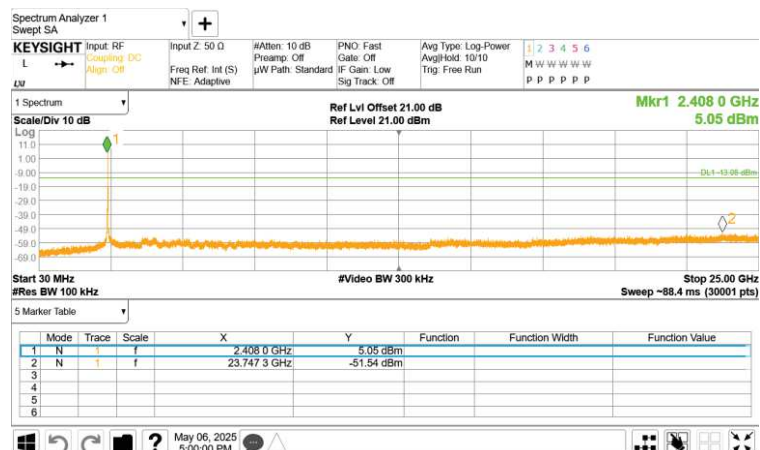
Chain0 : Conducted Spurious @ 802.11g Mode Ch 1



Chain0 : Conducted Spurious @ 802.11g Mode Ch 1



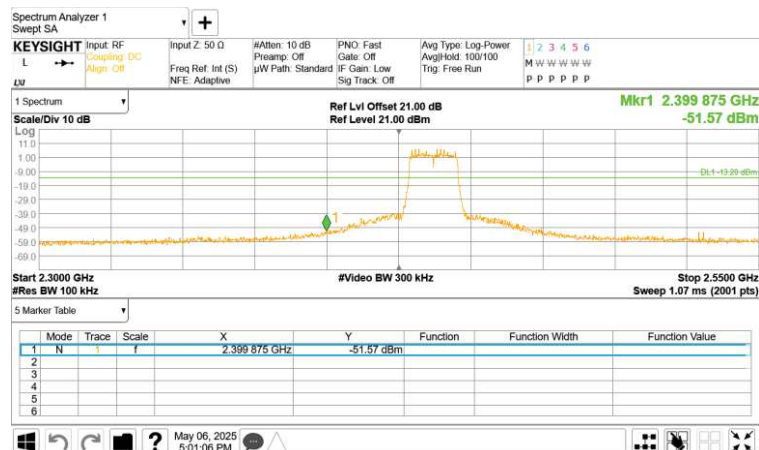
Chain0 : Conducted Spurious @ 802.11g Mode Ch 1



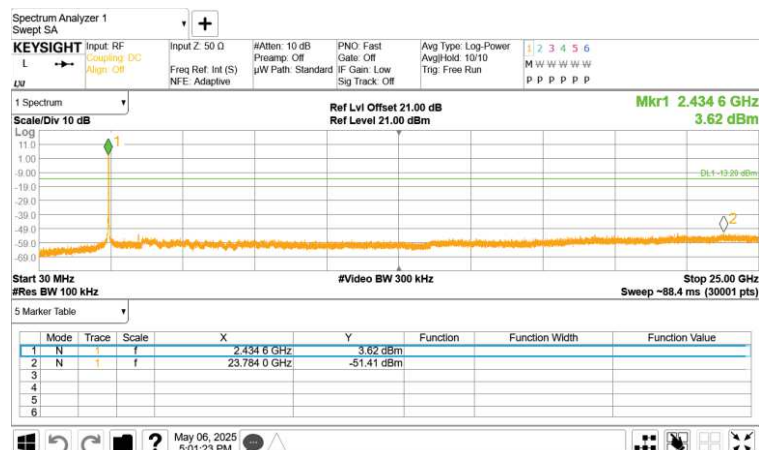
Chain0 : Conducted Spurious @ 802.11g Mode Ch 6



Chain0 : Conducted Spurious @ 802.11g Mode Ch 6



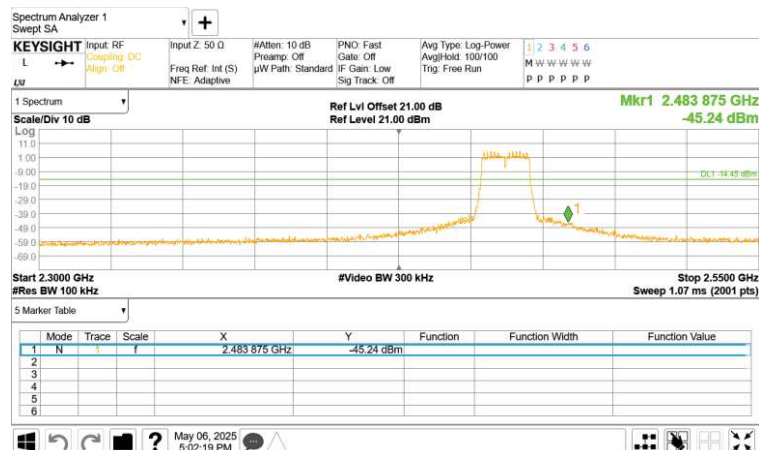
Chain0 : Conducted Spurious @ 802.11g Mode Ch 6



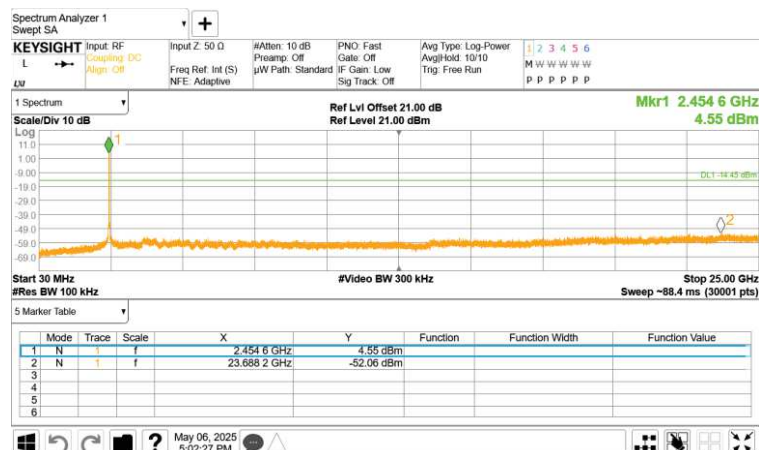
Chain0 : Conducted Spurious @ 802.11g Mode Ch11



Chain0 : Conducted Spurious @ 802.11g Mode Ch11



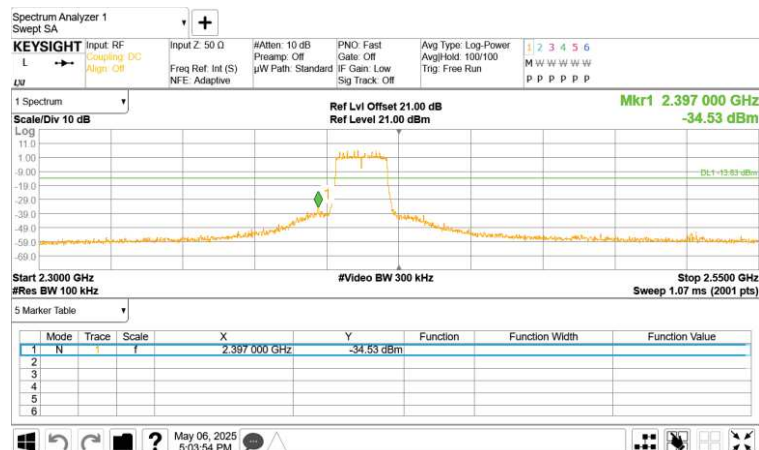
Chain0 : Conducted Spurious @ 802.11g Mode Ch11



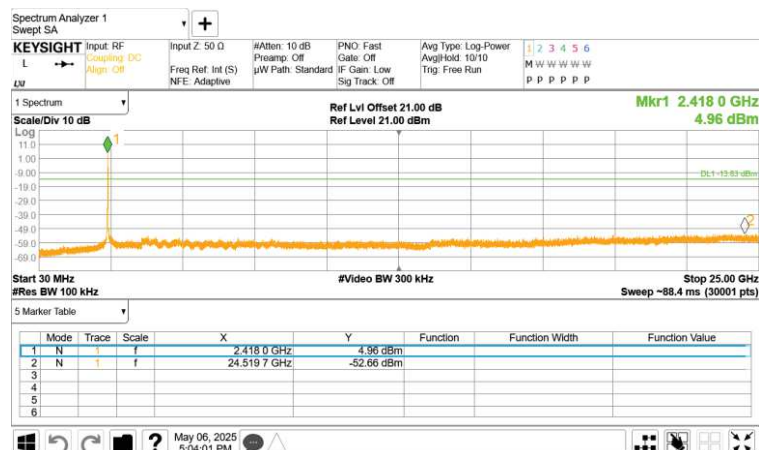
Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 1



Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 1



Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 1



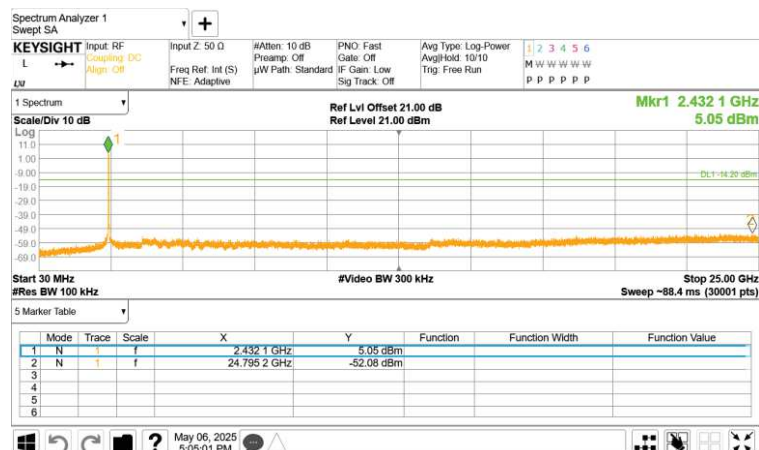
Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 6



Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 6



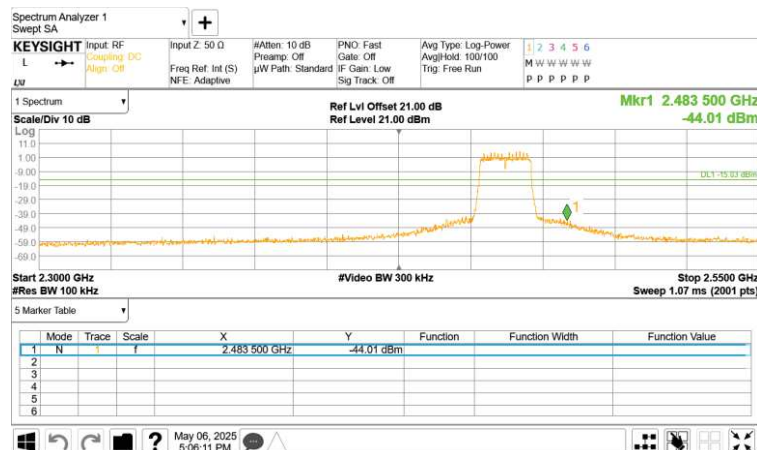
Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch 6



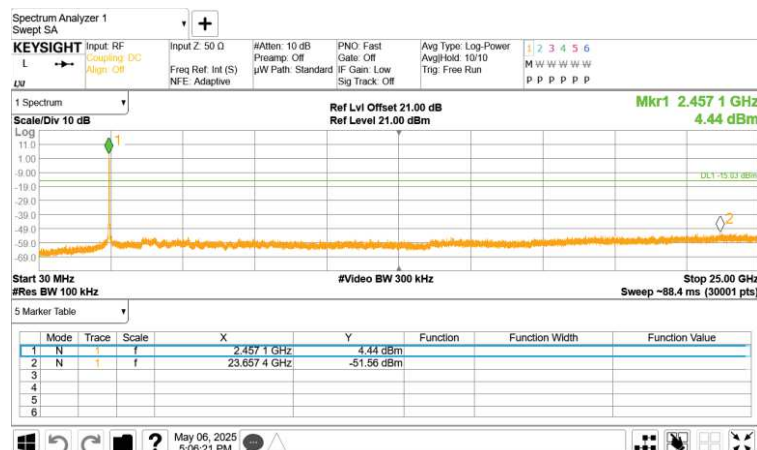
Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch11



Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch11



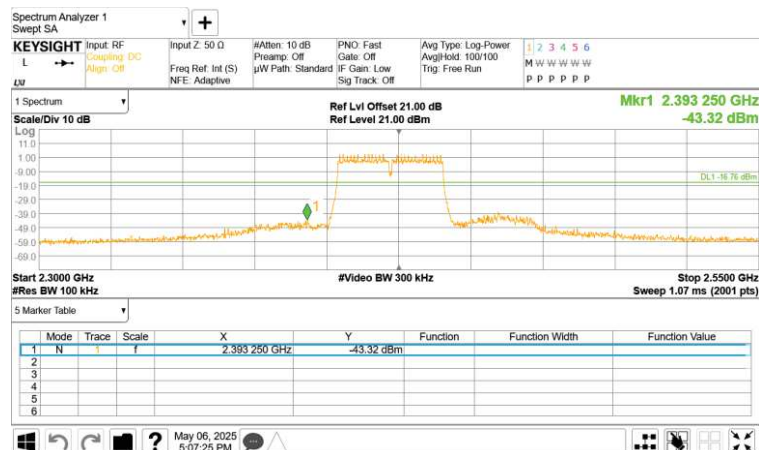
Chain0 : Conducted Spurious @ 802.11ac(VHT20) Mode Ch11



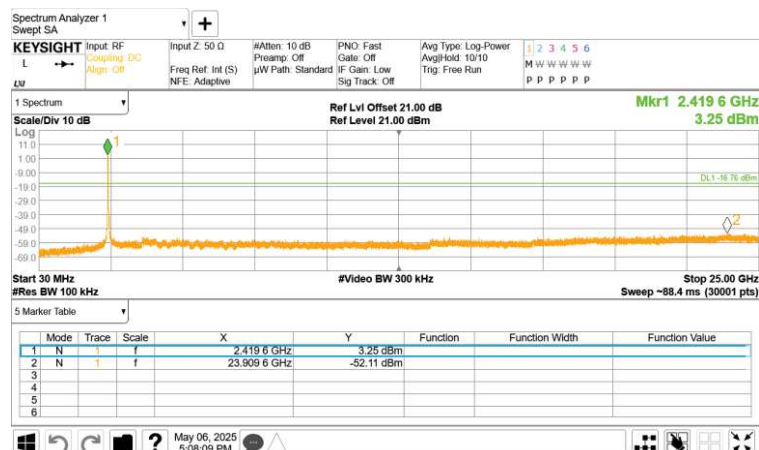
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 3



Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 3



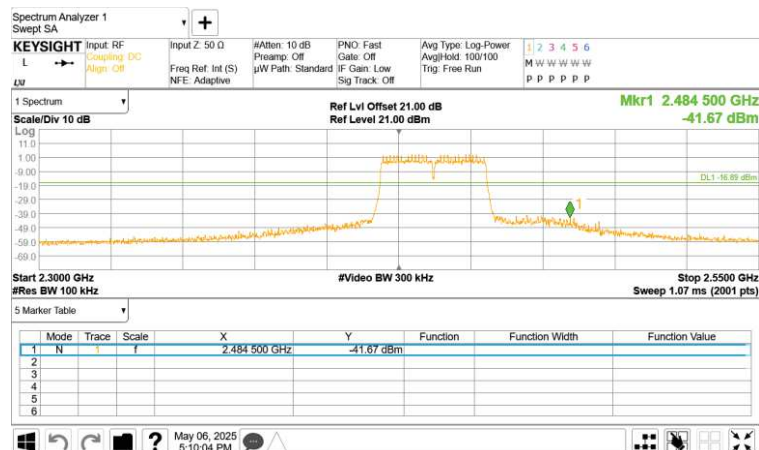
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 3



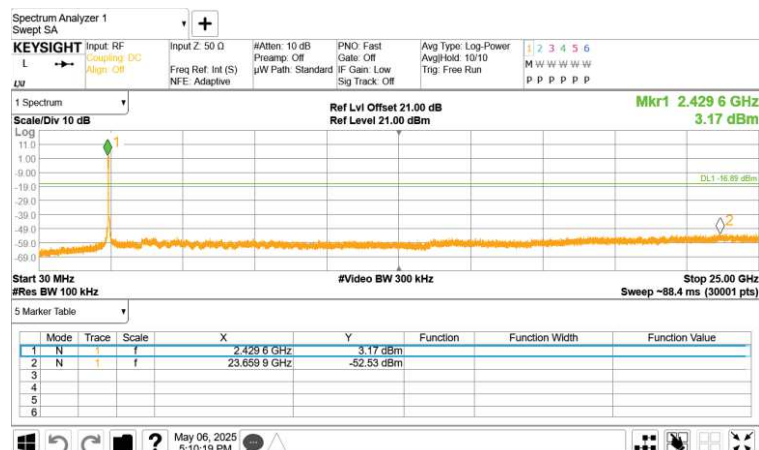
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 6



Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 6



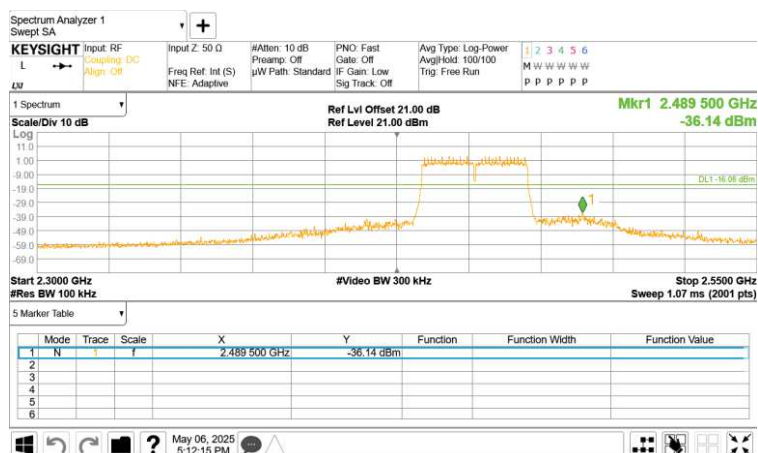
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 6



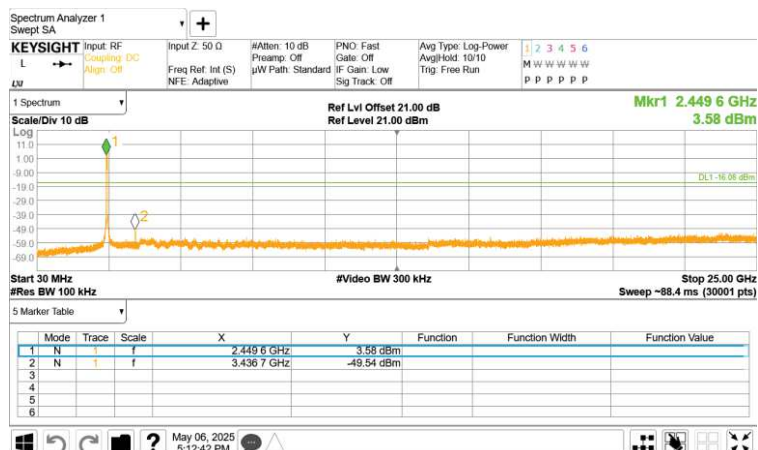
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 9



Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 9



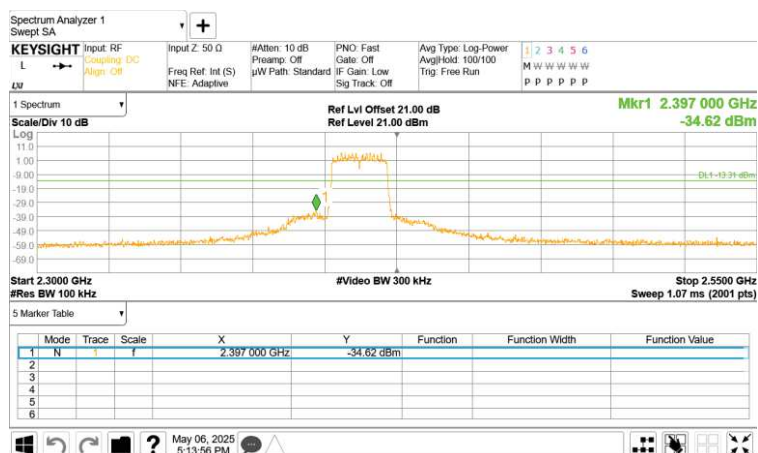
Chain0 : Conducted Spurious @ 802.11ac(VHT40) Mode Ch 9



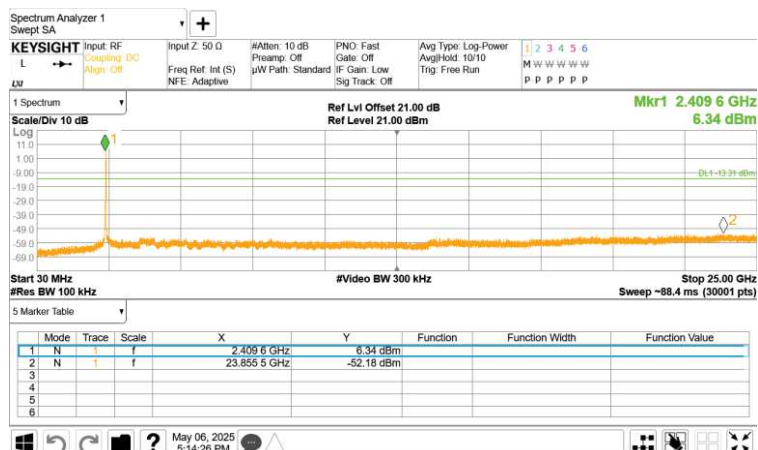
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 1



Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 1



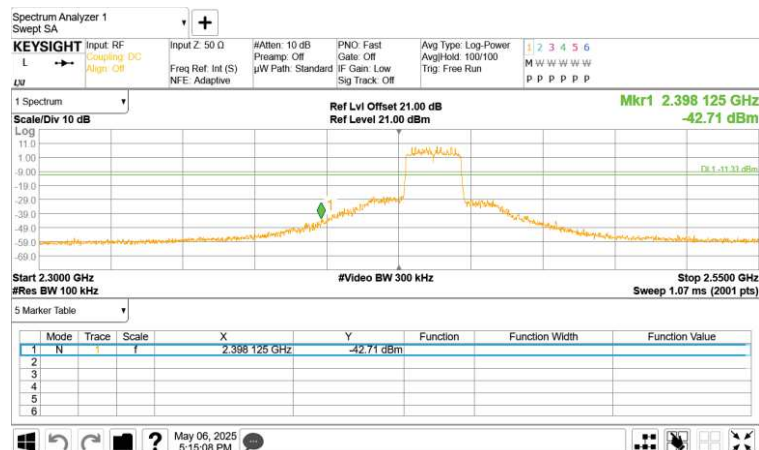
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 1



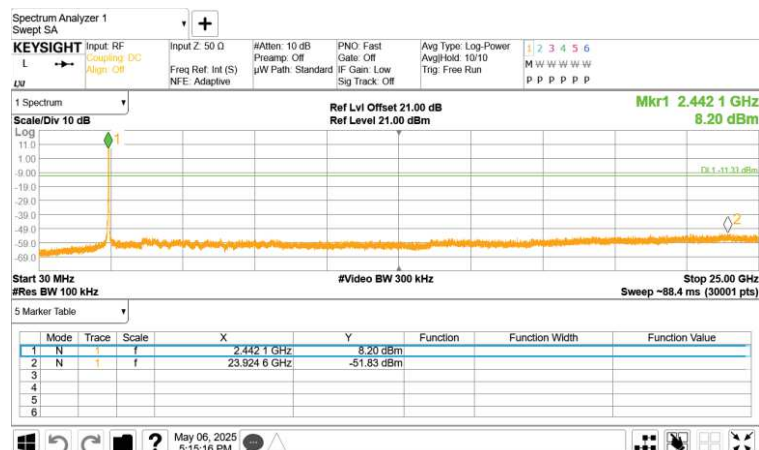
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 6



Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 6



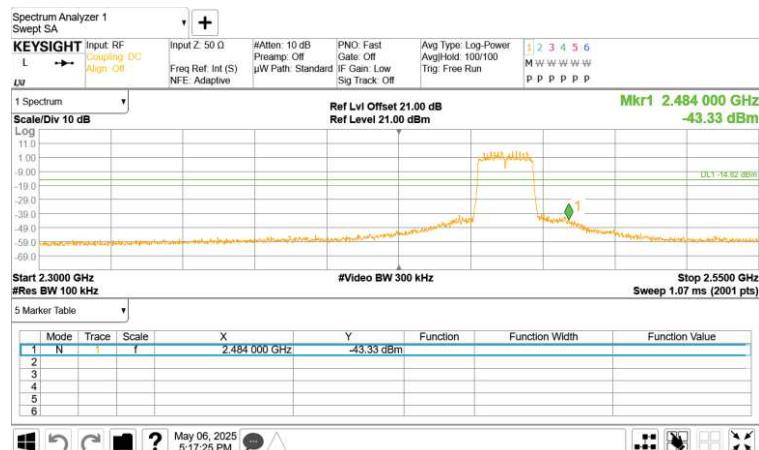
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch 6



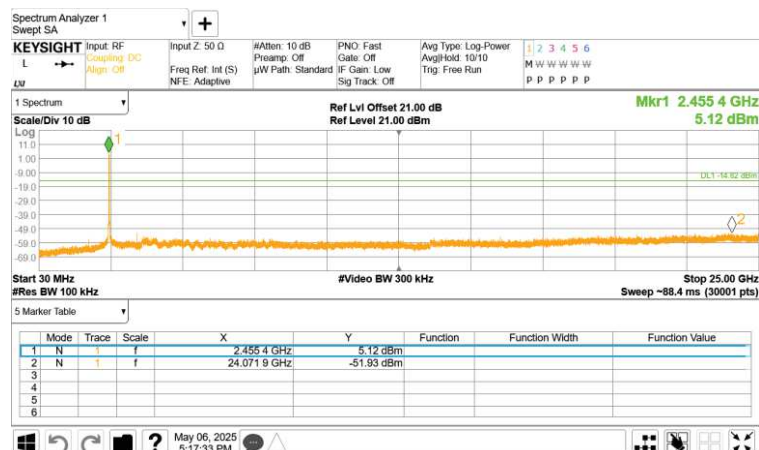
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch11



Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch11



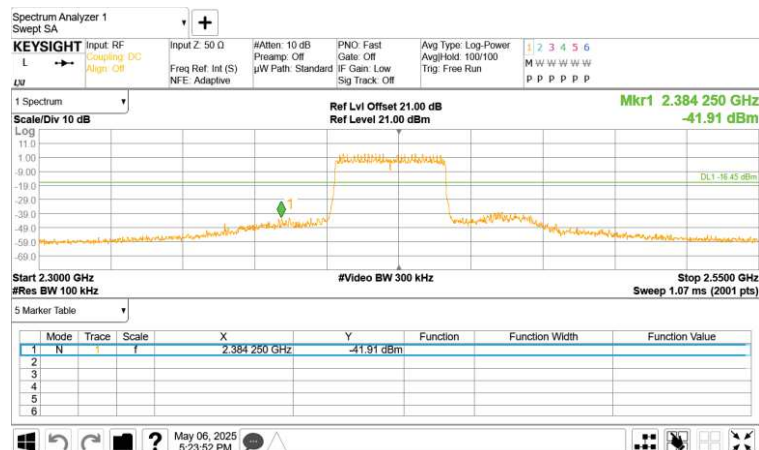
Chain0 : Conducted Spurious @ 802.11ax(HE20) Mode Ch11



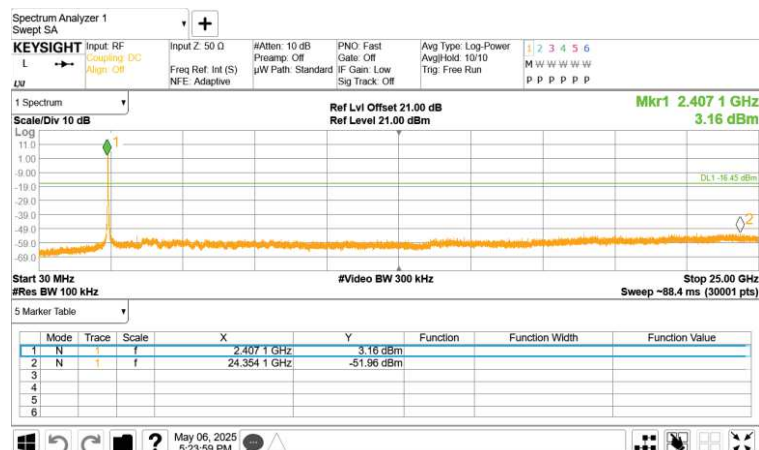
Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 3



Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 3



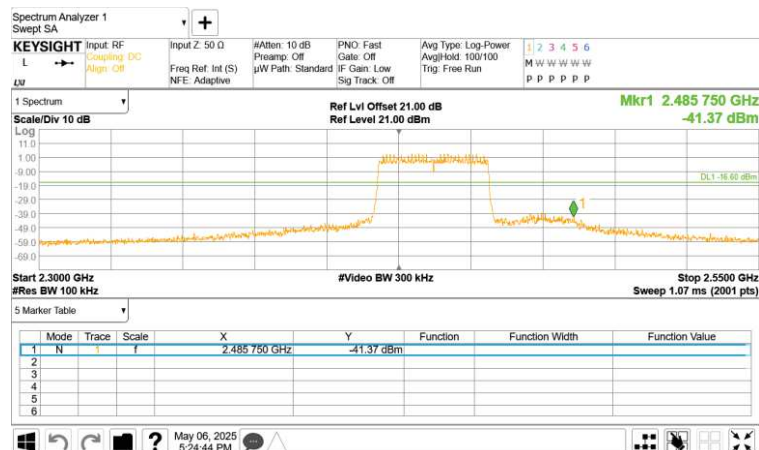
Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 3



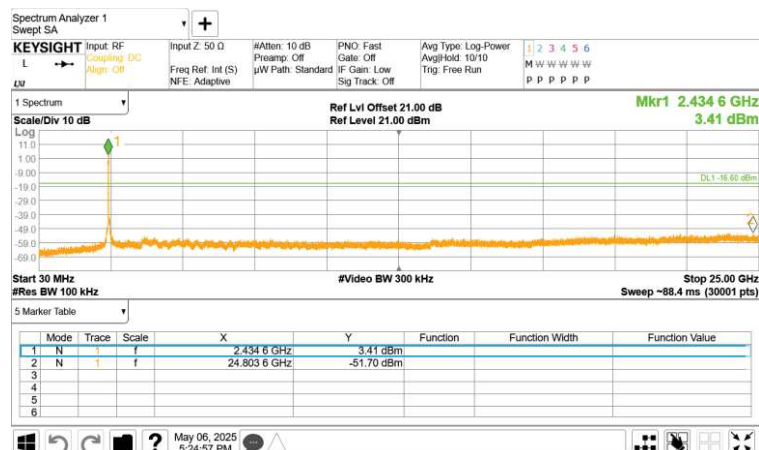
Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 6



Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 6



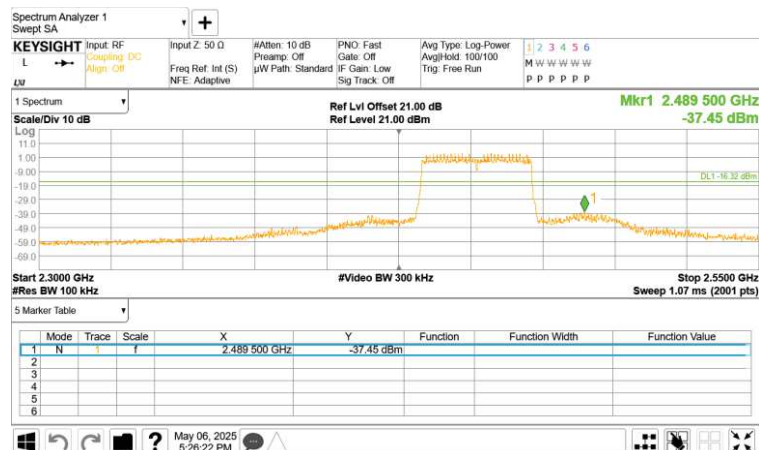
Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 6



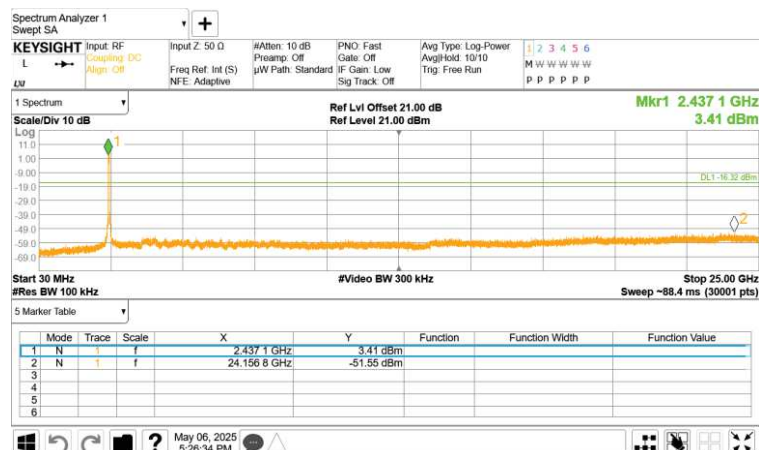
Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 9



Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 9



Chain0 : Conducted Spurious @ 802.11ax(HE40) Mode Ch 9



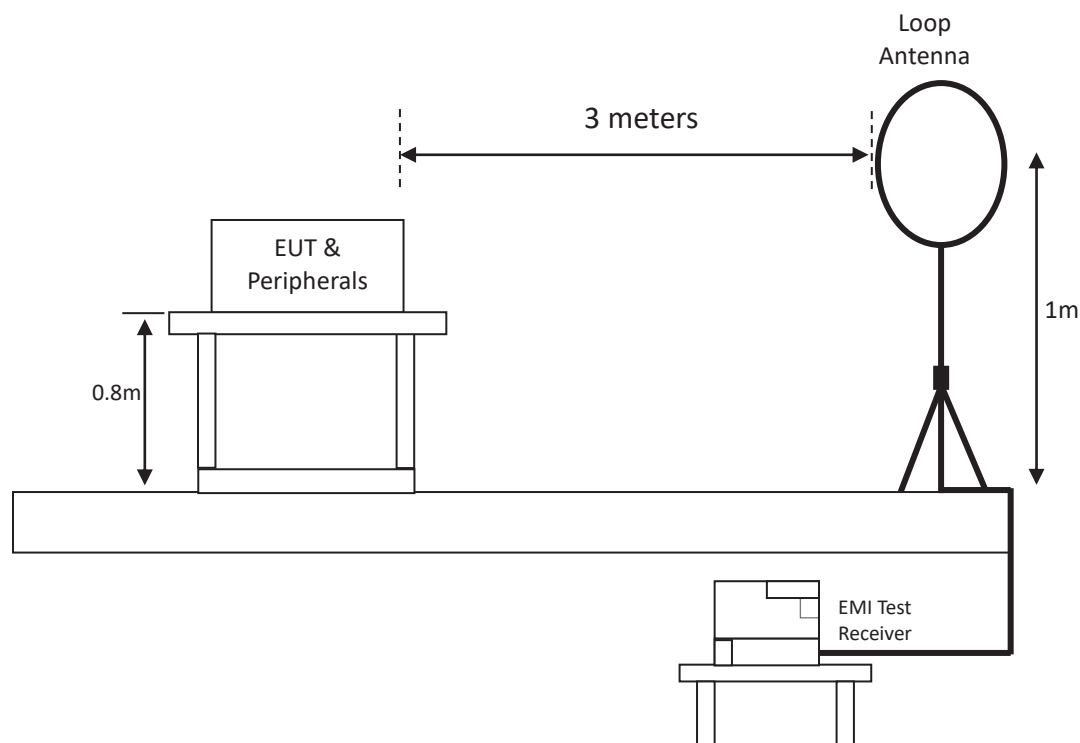
6. Emissions in Restricted Frequency Bands (Radiated emission measurements)

6.1 Instrument Setting

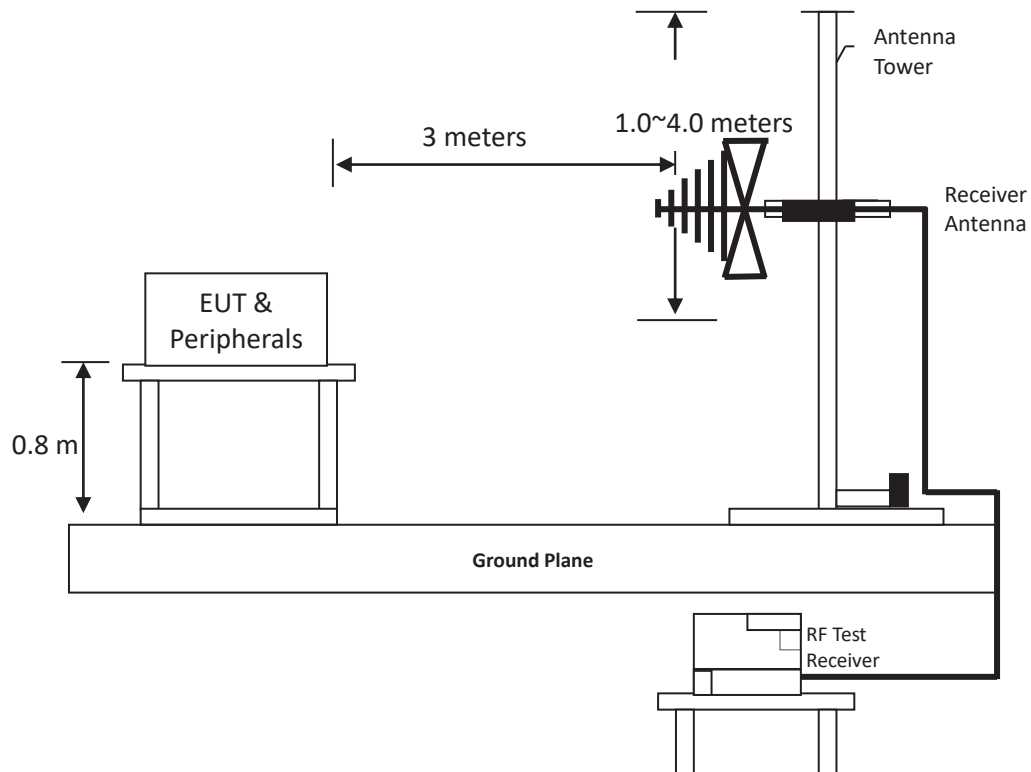
Receiver Function	Setting (Below 1GHz)	Setting (Above 1GHz)
Detector	QP	Peak and Average
RBW	9-150 kHz ; 200-300 Hz 0.15-30 MHz; 9-10 kHz 30-1000 MHz; 100-120 kHz	1MHz
VBW	$\geq 3 \times \text{RBW}$	3MHz & 1/T minimum kHz
Sweep	Auto couple	Auto couple
Start Frequency	9 kHz	1GHz
Stop Frequency	1 GHz	Tenth harmonic
Attenuation	Auto	Auto

6.2 Test setup & procedure

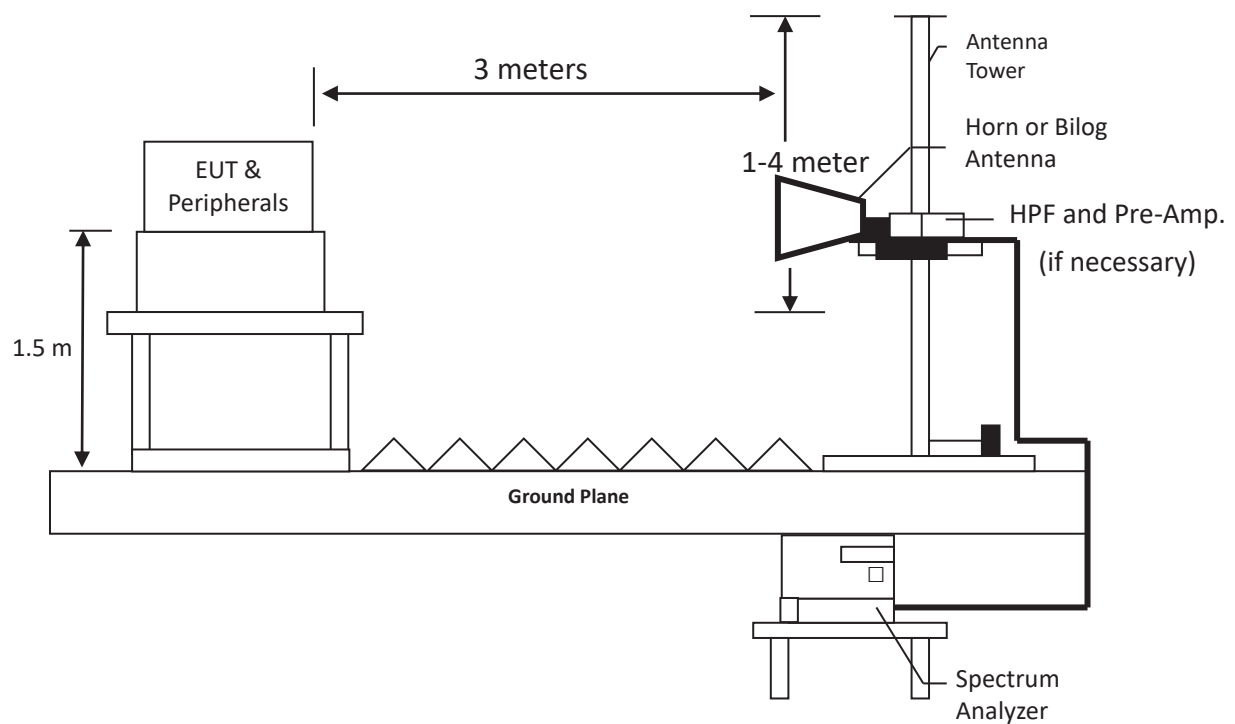
Radiated emission from 9kHz to 30MHz uses Loop Antenna:



Radiated emission below 1GHz using Bilog Antenna



Radiated emission above 1GHz using Horn Antenna



TEST REPORT

Radiated emissions were investigated cover the frequency range from 30MHz to 1000MHz using a receiver RBW of 120kHz record QP reading, and the frequency over 1GHz using a spectrum analyzer RBW of 1MHz and 1/T minimum kHz VBW record Average reading. (15.209 paragraph), the Peak reading (1 MHz RBW/ 3 MHz VBW) recorded also on the report.

The EUT for testing is arranged on a turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter.

The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

6.3 Limit

Frequency(MHz)	Field Strength(uV/m)	Measurement distance(m)
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

Remark:

1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

TEST REPORT

6.4 Test Result

6.4.1 Measurement results: frequencies 9kHz to 30MHz

Temperature (°C) :	26
Relative Humidity (%) :	76
Test date:	2025/05/05

The test was performed on EUT under continuously transmitting mode. The worst case occurred at 802.11g Ch6.

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Perpendicular	0.16	PK	16.69	26.85	43.54	103.58	-60.04
Perpendicular	0.52	PK	17.32	19.03	36.35	73.30	-36.95
Perpendicular	0.82	PK	17.50	13.78	31.28	69.34	-38.06
Perpendicular	1.18	PK	17.38	12.90	30.28	66.17	-35.89
Perpendicular	1.90	PK	17.31	12.28	29.59	69.54	-39.95
Perpendicular	2.44	PK	17.39	11.16	28.55	69.54	-40.99

Remark: Corr. Factor = Antenna Factor + Cable Loss

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Parallel	0.13	PK	16.54	27.95	44.49	105.40	-60.91
Parallel	0.55	PK	17.35	20.03	37.38	72.82	-35.44
Parallel	0.82	PK	17.50	13.96	31.46	69.34	-37.88
Parallel	1.18	PK	17.38	13.02	30.40	66.17	-35.77
Parallel	8.65	PK	19.27	12.76	32.03	69.54	-37.51
Parallel	19.86	PK	20.92	12.01	32.93	69.54	-36.61

Remark: Corr. Factor = Antenna Factor + Cable Loss

TEST REPORT

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Ground-parallel	0.07	PK	16.91	33.24	50.15	110.83	-60.68
Ground-parallel	0.16	PK	16.69	25.44	42.13	103.58	-61.45
Ground-parallel	0.22	PK	16.92	21.98	38.90	100.80	-61.90
Ground-parallel	0.25	PK	16.95	19.19	36.14	99.68	-63.54
Ground-parallel	0.46	PK	17.22	18.65	35.87	94.37	-58.50
Ground-parallel	2.05	PK	17.31	12.84	30.15	69.54	-39.39

Remark: Corr. Factor = Antenna Factor + Cable Loss

TEST REPORT

6.5.2 Measurement results: frequencies below 1 GHz

Temperature (°C) :	25
Relative Humidity (%) :	76
Test date :	2025/05/05

The test was performed on EUT under continuously transmitting mode. The worst case occurred at 802.11g Ch6.

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Horizontal	250.19	PK	19.91	13.79	33.70	46.00	-12.30
Horizontal	296.75	PK	21.04	16.54	37.58	46.00	-8.42
Horizontal	320.03	PK	21.71	21.37	43.08	46.00	-2.92
Horizontal	351.07	PK	22.09	18.78	40.87	46.00	-5.13
Horizontal	513.06	PK	26.11	7.91	34.02	46.00	-11.98
Horizontal	729.37	PK	29.84	6.82	36.66	46.00	-9.34

Remark: Corr. Factor = Antenna Factor + Cable Loss

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
Vertical	33.88	QP	18.75	17.24	35.99	40.00	-4.01
Vertical	49.40	QP	20.49	14.89	35.38	40.00	-4.62
Vertical	125.06	PK	17.90	21.11	39.01	43.50	-4.49
Vertical	320.03	PK	21.71	18.03	39.74	46.00	-6.26
Vertical	405.39	PK	23.48	13.20	36.68	46.00	-9.32
Vertical	513.06	PK	26.11	11.56	37.67	46.00	-8.33

Remark: Corr. Factor = Antenna Factor + Cable Loss

TEST REPORT

6.5.3 Measurement results: frequency above 1GHz to 25GHz

Temperature (°C) :	24
Relative Humidity (%) :	71
Test date :	2025/04/28 - 2025/05/02

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
802.11b_Ch1	4824	PK	H	-7.75	51.09	43.34	74	-30.66
	7236	PK	H	2.02	51.67	53.69	74	-20.31
	7236	AV	H	2.02	47.72	49.74	54	-4.26
	9648	PK	H	7.19	56.19	63.38	74	-10.62
	9648	AV	H	7.19	45.79	52.98	54	-1.02
	4824	PK	V	-7.75	50.96	43.21	74	-30.79
	7236	PK	V	2.02	49.41	51.43	74	-22.57
	9648	PK	V	7.19	54.37	61.56	74	-12.44
	9648	AV	V	7.19	42.76	49.95	54	-4.05
802.11b_Ch6	4874	PK	H	-7.78	45.61	37.83	74	-36.17
	6495	PK	H	-0.05	46.69	46.64	74	-27.36
	4260	PK	V	-10.55	50.57	40.02	74	-33.98
	4874	PK	V	-7.78	45.00	37.22	74	-36.78
	5325	PK	V	-5.71	47.21	41.50	74	-32.50
	6495	PK	V	-0.05	48.25	48.20	74	-25.80
802.11b_Ch11	4924	PK	H	-7.68	54.15	46.47	74	-27.53
	6570	PK	H	0.03	47.52	47.55	74	-26.45
	9848	PK	H	8.01	42.18	50.19	74	-23.81
	4924	PK	V	-7.68	52.21	44.53	74	-29.47
	6570	PK	V	0.03	47.69	47.72	74	-26.28
	7386	PK	V	2.05	44.86	46.91	74	-27.09
	9848	PK	V	8.01	43.50	51.51	74	-22.49

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain
2. The emissions were very low against the limit above 18 GHz.

TEST REPORT

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
802.11g_Ch1	7236	PK	H	2.02	52.10	54.12	74	-19.88
	7236	AV	H	2.02	41.79	43.81	54	-10.19
	9648	PK	H	7.19	48.53	55.72	74	-18.28
	9648	AV	H	7.19	38.05	45.24	54	-8.76
	4260	PK	V	-10.55	51.13	40.58	74	-33.42
	5325	PK	V	-5.71	48.35	42.64	74	-31.36
	6435	PK	V	-0.42	47.99	47.57	74	-26.43
	7236	PK	V	2.02	48.36	50.38	74	-23.62
	9648	PK	V	7.19	46.23	53.42	74	-20.58
	9648	AV	V	7.19	36.10	43.29	54	-10.71
802.11g_Ch6	3195	PK	H	-15.40	59.90	44.50	74	-29.50
	4874	PK	H	-7.78	45.07	37.29	74	-36.71
	6495	PK	H	-0.05	46.76	46.71	74	-27.29
	4260	PK	V	-10.55	51.45	40.90	74	-33.10
	4874	PK	V	-7.78	46.47	38.69	74	-35.31
	5325	PK	V	-5.71	48.79	43.08	74	-30.92
	6495	PK	V	-0.05	47.34	47.29	74	-26.71
802.11g_Ch11	4924	PK	H	-7.68	51.06	43.38	74	-30.62
	6570	PK	H	0.03	47.64	47.67	74	-26.33
	7386	PK	H	2.05	51.08	53.13	74	-20.87
	7386	AV	H	2.05	40.74	42.79	54	-11.21
	9848	PK	H	8.01	47.93	55.94	74	-18.06
	9848	AV	H	8.01	34.21	42.22	54	-11.78
	5340	PK	V	-5.57	48.20	42.63	74	-31.37
	6570	PK	V	0.03	47.40	47.43	74	-26.57
	7386	PK	V	2.05	49.93	51.98	74	-22.02
802.11ac(VHT20) Ch1	9848	PK	V	8.01	43.37	51.38	74	-22.62
	4824	PK	H	-7.75	44.98	37.23	74	-36.77
	6435	PK	H	-0.42	48.21	47.79	74	-26.21
	4260	PK	V	-10.55	50.07	39.52	74	-34.48
	4824	PK	V	-7.75	45.12	37.37	74	-36.63
	5325	PK	V	-5.71	48.08	42.37	74	-31.63
	6435	PK	V	-0.42	48.10	47.68	74	-26.32

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain

2. The emissions were very low against the limit above 18 GHz.

TEST REPORT

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
802.11ac(VHT20) Ch6	6495	PK	H	-0.05	48.62	48.57	74	-25.43
	7311	PK	H	2.00	48.89	50.89	74	-23.11
	9748	PK	H	7.63	45.37	53.00	74	-21.00
	9748	AV	H	7.63	35.76	43.39	54	-10.61
	4260	PK	V	-10.55	50.79	40.24	74	-33.76
	5340	PK	V	-5.57	48.00	42.43	74	-31.57
	6495	PK	V	-0.05	47.06	47.01	74	-26.99
	7311	PK	V	2.00	46.85	48.85	74	-25.15
	9748	PK	V	7.63	44.65	52.28	74	-21.72
	9748	AV	V	7.63	36.15	43.78	54	-10.22
802.11ac(VHT20) Ch11	6570	PK	H	0.03	47.58	47.61	74	-26.39
	7386	PK	H	2.05	49.28	51.33	74	-22.67
	6570	PK	V	0.03	47.78	47.81	74	-26.19
	7386	PK	V	2.05	50.51	52.56	74	-21.44
	9848	PK	V	8.01	42.82	50.83	74	-23.17
802.11ac(VHT40) Ch3	6465	PK	H	-0.24	47.13	46.89	74	-27.11
	7266	PK	H	1.96	45.68	47.64	74	-26.36
	9688	PK	H	7.35	43.30	50.65	74	-23.35
	4260	PK	V	-10.55	50.70	40.15	74	-33.85
	5325	PK	V	-5.71	47.79	42.08	74	-31.92
	6465	PK	V	-0.24	45.04	44.80	74	-29.20
	7266	PK	V	1.96	44.91	46.87	74	-27.13
	9688	PK	V	7.35	41.96	49.31	74	-24.69
802.11ac(VHT40) Ch6	6495	PK	H	-0.05	48.39	48.34	74	-25.66
	7311	PK	H	2.00	45.17	47.17	74	-26.83
	9748	PK	H	7.63	41.74	49.37	74	-24.63
	5325	PK	V	-5.71	48.11	42.40	74	-31.60
	6495	PK	V	-0.05	46.58	46.53	74	-27.47
	7311	PK	V	2.00	46.50	48.50	74	-25.50
	9748	PK	V	7.63	42.19	49.82	74	-24.18

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain

2. The emissions were very low against the limit above 18 GHz.

TEST REPORT

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
802.11ac(VHT40) Ch9	6540	PK	H	0.08	48.29	48.37	74	-25.63
	7356	PK	H	2.09	47.50	49.59	74	-24.41
	9808	PK	H	7.89	42.10	49.99	74	-24.01
	4260	PK	V	-10.55	52.18	41.63	74	-32.37
	5325	PK	V	-5.71	48.34	42.63	74	-31.37
	6540	PK	V	0.08	46.98	47.06	74	-26.94
	7356	PK	V	2.09	48.43	50.52	74	-23.48
	9808	PK	V	7.89	41.69	49.58	74	-24.42
802.11ax(HE20) Ch1	6435	PK	H	-0.42	48.15	47.73	74	-26.27
	7236	PK	H	2.02	48.99	51.01	74	-22.99
	9648	PK	H	7.19	45.71	52.90	74	-21.10
	9648	AV	H	7.19	35.91	43.10	54	-10.90
	4260	PK	V	-10.55	51.01	40.46	74	-33.54
	5325	PK	V	-5.71	49.16	43.45	74	-30.55
	6435	PK	V	-0.42	46.75	46.33	74	-27.67
	7236	PK	V	2.02	48.34	50.36	74	-23.64
	9648	PK	V	7.19	46.04	53.23	74	-20.77
802.11ax(HE20) Ch6	9648	AV	V	7.19	36.11	43.30	54	-10.70
	4874	PK	H	-7.78	53.58	45.80	74	-28.20
	6495	PK	H	-0.05	47.21	47.16	74	-26.84
	7311	PK	H	2.00	49.34	51.34	74	-22.66
	9748	PK	H	7.63	44.72	52.35	74	-21.65
	4874	PK	V	-7.78	52.03	44.25	74	-29.75
	6495	PK	V	-0.05	46.76	46.71	74	-27.29
	7311	PK	V	2.00	49.59	51.59	74	-22.41
802.11ax(HE20) Ch11	9748	PK	V	7.63	44.31	51.94	74	-22.06
	6570	PK	H	0.03	47.61	47.64	74	-26.36
	7386	PK	H	2.05	46.83	48.88	74	-25.12
	9848	PK	H	8.01	42.43	50.44	74	-23.56
	5325	PK	V	-5.71	49.42	43.71	74	-30.29
	6570	PK	V	0.03	47.53	47.56	74	-26.44
	7386	PK	V	2.05	48.54	50.59	74	-23.41

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain
2. The emissions were very low against the limit above 18 GHz.

TEST REPORT

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)
802.11ax(HE40) Ch3	4844	PK	H	-7.72	45.17	37.45	74	-36.55
	6465	PK	H	-0.24	45.31	45.07	74	-28.93
	4260	PK	V	-10.55	50.36	39.81	74	-34.19
	4844	PK	V	-7.72	44.56	36.84	74	-37.16
	5325	PK	V	-5.71	48.17	42.46	74	-31.54
	6465	PK	V	-0.24	45.60	45.36	74	-28.64
802.11ax(HE40) Ch6	6495	PK	H	-0.05	47.82	47.77	74	-26.23
	7311	PK	H	2.00	46.76	48.76	74	-25.24
	9748	PK	H	7.63	43.24	50.87	74	-23.13
	4260	PK	V	-10.55	51.76	41.21	74	-32.79
	5325	PK	V	-5.71	48.58	42.87	74	-31.13
	6495	PK	V	-0.05	47.10	47.05	74	-26.95
	7311	PK	V	2.00	47.73	49.73	74	-24.27
	9748	PK	V	7.63	44.01	51.64	74	-22.36
802.11ax(HE40) Ch9	6540	PK	H	0.08	48.52	48.60	74	-25.40
	7356	PK	H	2.09	49.36	51.45	74	-22.55
	9808	PK	H	7.89	42.56	50.45	74	-23.55
	4260	PK	V	-10.55	51.73	41.18	74	-32.82
	6540	PK	V	0.08	47.44	47.52	74	-26.48
	7356	PK	V	2.09	49.97	52.06	74	-21.94
	9808	PK	V	7.89	44.32	52.21	74	-21.79

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain
2. The emissions were very low against the limit above 18 GHz.

7. Emission on Band Edge

7.1 Instrument Setting

Spectrum Function	Setting
Detector	Peak and Average
RBW	1MHz
VBW	3MHz & 1/T minimum kHz
Sweep	Auto couple
Restrict bands	2310 MHz ~ 2390 MHz 2483.5 MHz ~ 2500 MHz
Attenuation	Auto

7.2 Test Procedure

The test procedure is the same as Emissions in Restricted Frequency Bands (Radiated emission measurements).

TEST REPORT

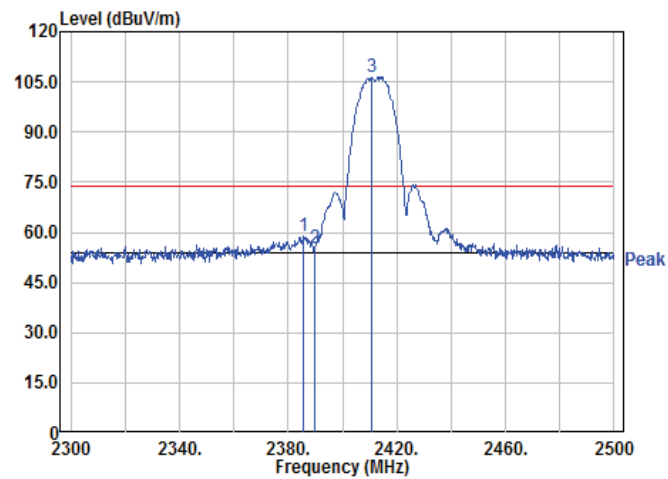
7.3 Test Results

Temperature (°C) :	23 - 24
Relative Humidity (%) :	71 - 78
Test date :	2025/04/25 - 2025/04/28

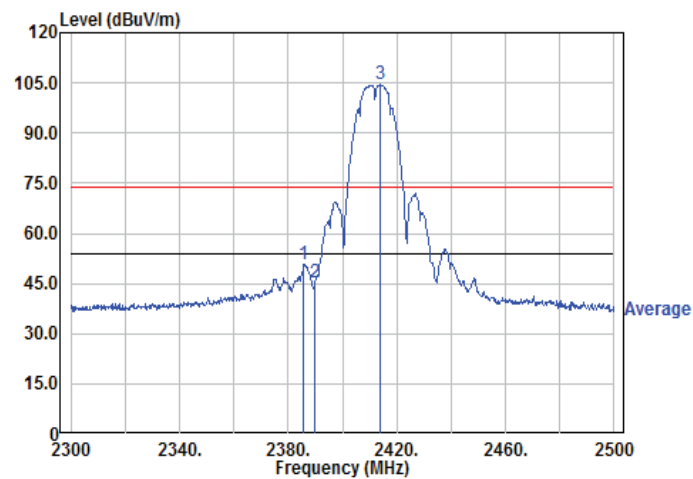
Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBμV)	Corrected Reading (dBμV/m)	Limit @ 3 m (dBμV/m)	Margin (dB)	Restricted band (MHz)
802.11b	2385.80	PK	H	32.31	26.41	58.72	74	-15.28	2310~2390
	2385.80	AV	H	32.31	18.63	50.94	54	-3.06	
	2486.60	PK	H	32.52	24.82	57.34	74	-16.66	2483.5~2500
	2487.80	AV	H	32.53	20.29	52.82	54	-1.18	
802.11g	2390.00	PK	H	32.31	34.48	66.79	74	-7.21	2310~2390
	2390.00	AV	H	32.31	20.20	52.51	54	-1.49	
	2485.80	PK	H	32.52	33.64	66.16	74	-7.84	2483.5~2500
	2483.50	AV	H	32.51	19.47	51.98	54	-2.02	
802.11ac (VHT20)	2387.60	PK	H	32.30	34.65	66.95	74	-7.05	2310~2390
	2390.00	AV	H	32.31	18.90	51.21	54	-2.79	
	2483.50	PK	H	32.51	29.42	61.93	74	-12.07	2483.5~2500
	2483.50	AV	H	32.51	19.27	51.78	54	-2.22	
802.11ac (VHT40)	2385.20	PK	H	32.31	29.78	62.09	74	-11.91	2310~2390
	2389.40	AV	H	32.31	18.86	51.17	54	-2.83	
	2486.20	PK	H	32.52	32.40	64.92	74	-9.08	2483.5~2500
	2489.40	AV	H	32.53	20.44	52.97	54	-1.03	
802.11ax (HE20)	2388.60	PK	H	32.31	33.76	66.07	74	-7.93	2310~2390
	2390.00	AV	H	32.31	20.61	52.92	54	-1.08	
	2485.60	PK	H	32.52	31.87	64.39	74	-9.61	2483.5~2500
	2484.20	AV	H	32.51	19.81	52.32	54	-1.68	
802.11ax (HE40)	2384.80	PK	H	32.31	31.38	63.69	74	-10.31	2310~2390
	2389.60	AV	H	32.31	20.20	52.51	54	-1.49	
	2487.20	PK	H	32.52	31.16	63.68	74	-10.32	2483.5~2500
	2488.60	AV	H	32.53	17.82	50.35	54	-3.65	

Remark: Correction Factor = Antenna Factor + Cable Loss

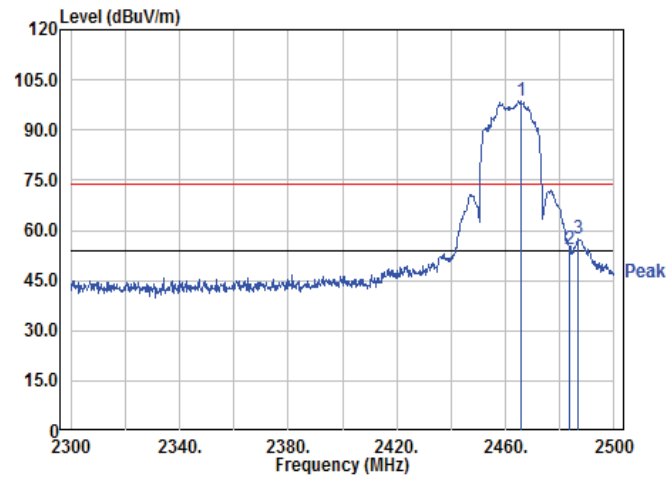
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch1 PK



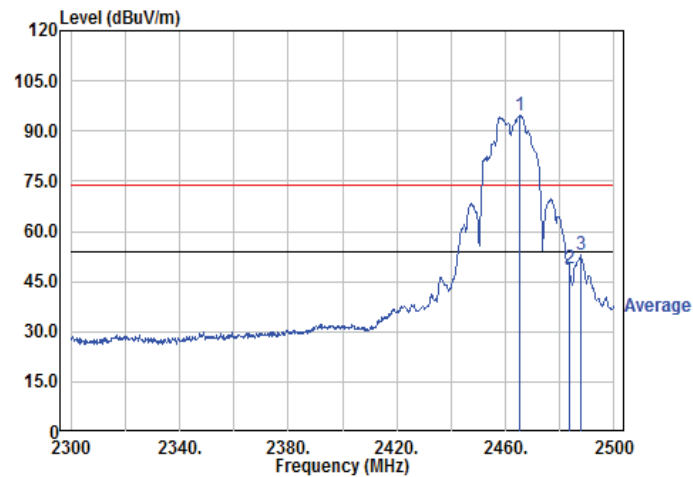
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch1 AV



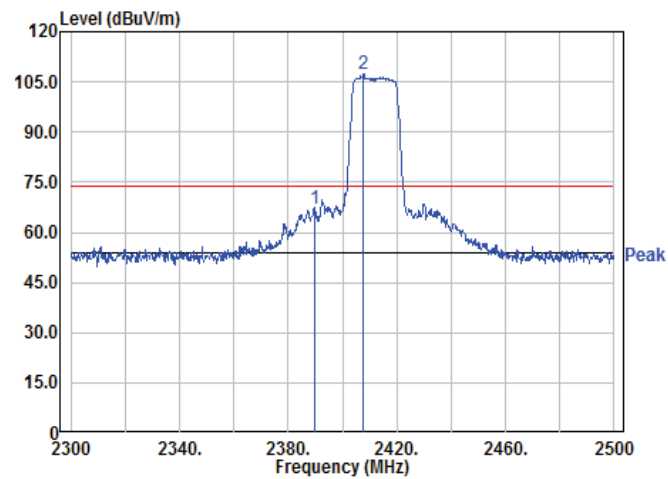
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch11 PK



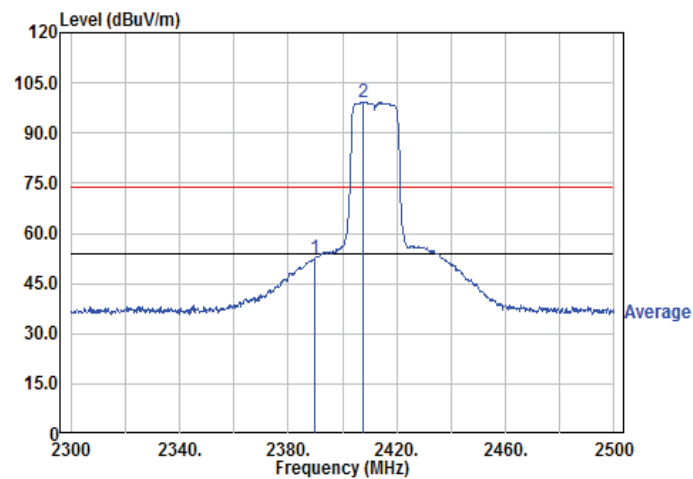
Chain0 : Restricted Band Bandedge @ 802.11b Mode Ch11 AV



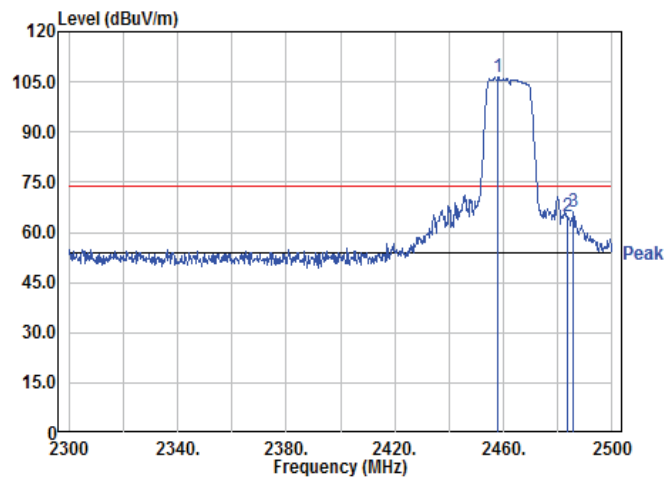
Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch1 PK



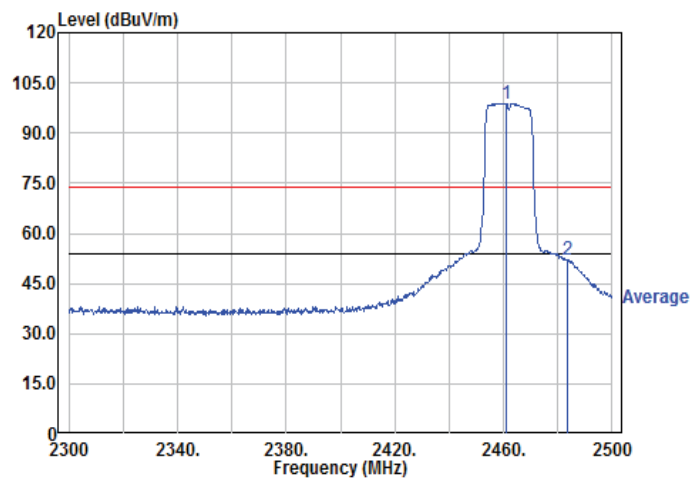
Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch1 AV



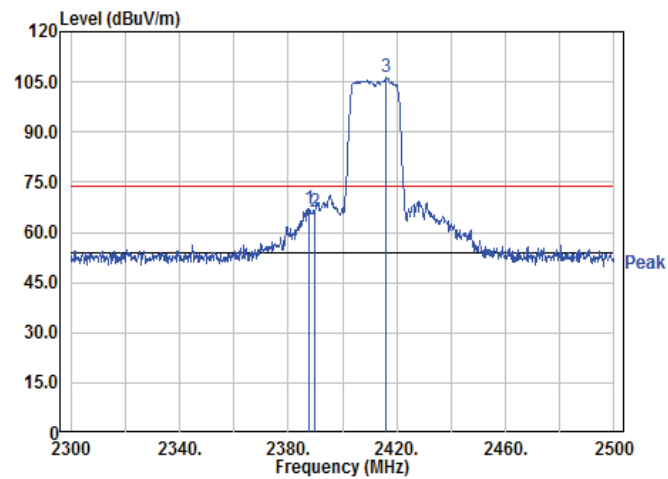
Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch11 PK



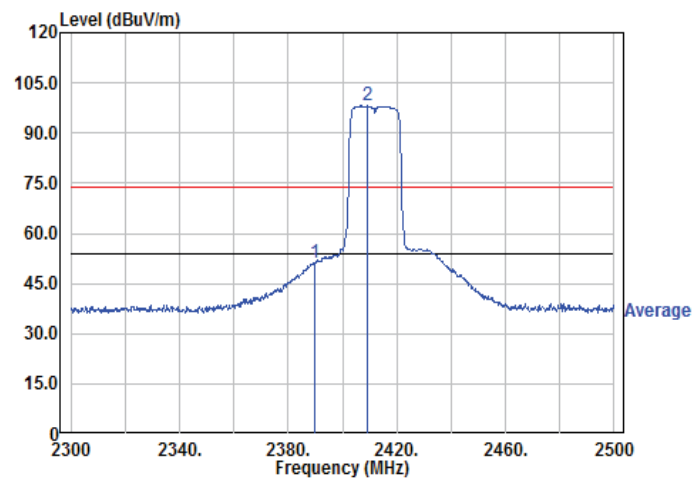
Chain0 : Restricted Band Bandedge @ 802.11g Mode Ch11 AV



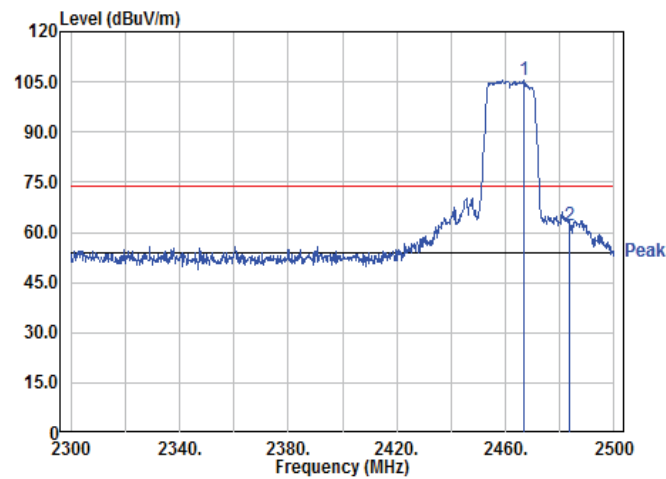
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT20) Mode Ch1 PK



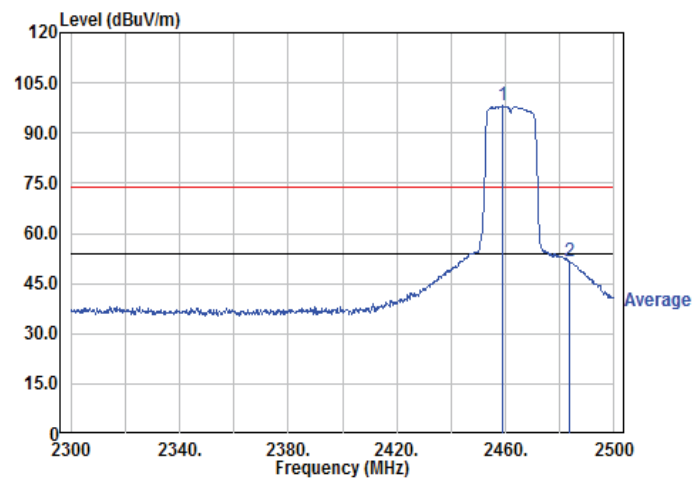
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT20) Mode Ch1 AV



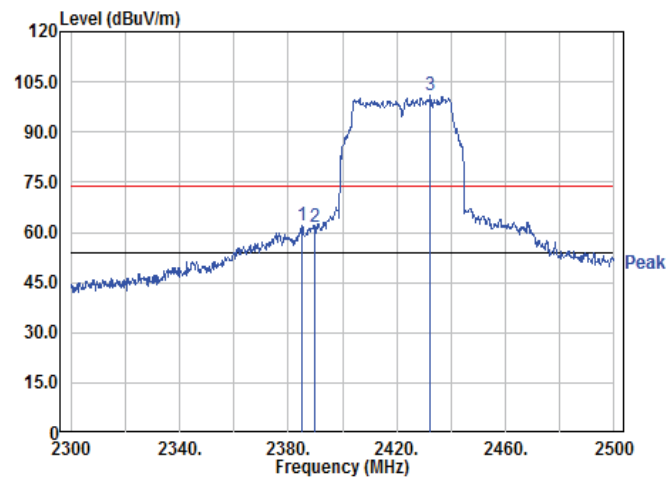
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT20) Mode Ch11 PK



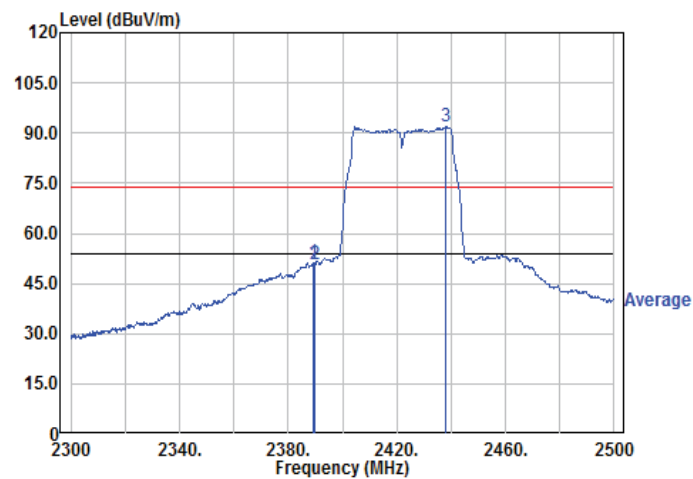
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT20) Mode Ch11 AV



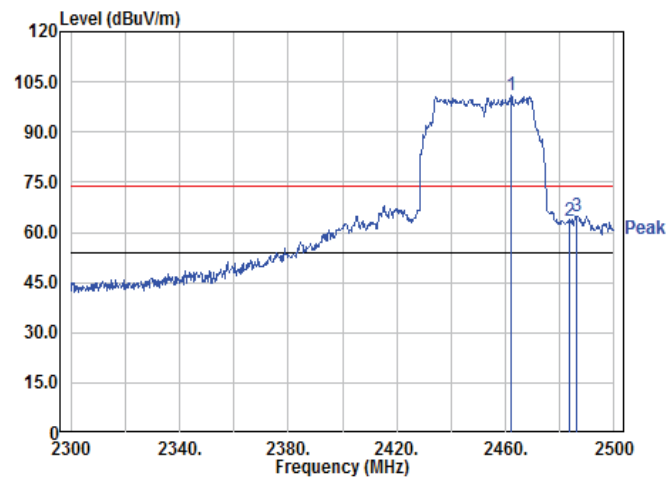
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT40) Mode Ch3 PK



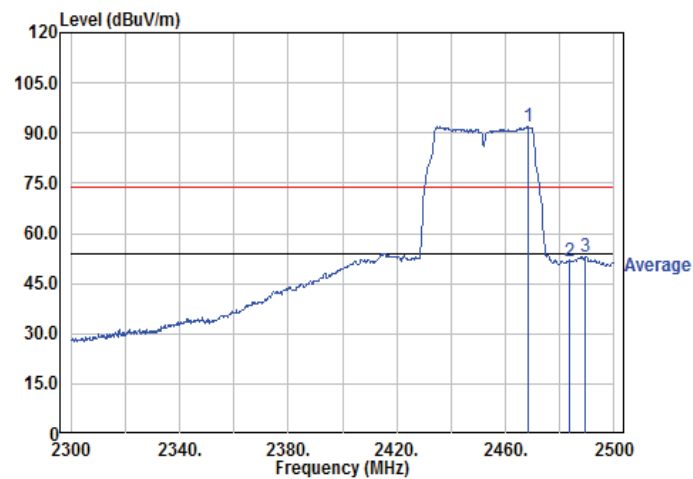
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT40) Mode Ch3 AV



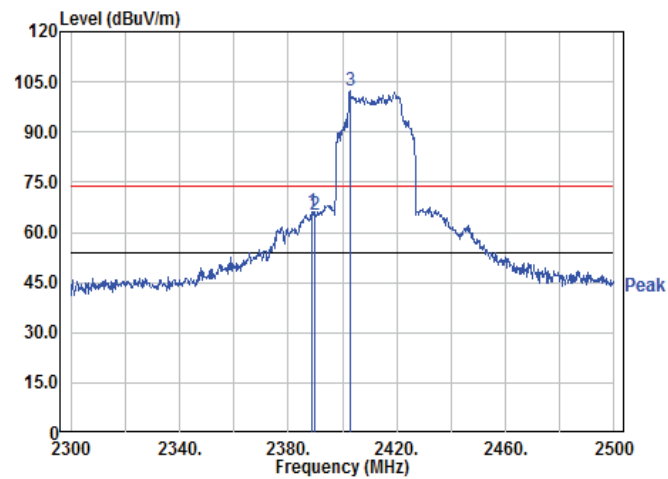
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT40) Mode Ch9 PK



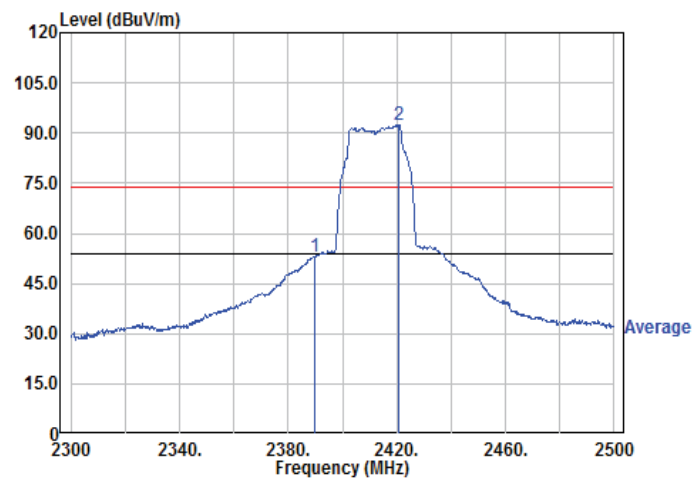
Chain0 : Restricted Band Bandedge @ 802.11ac(VHT40) Mode Ch9 AV



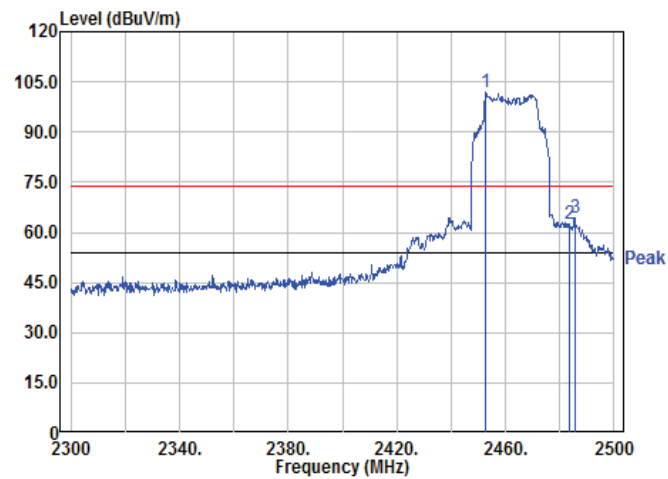
Chain0 : Restricted Band Bandedge @ 802.11ax(HE20) Mode Ch1 PK



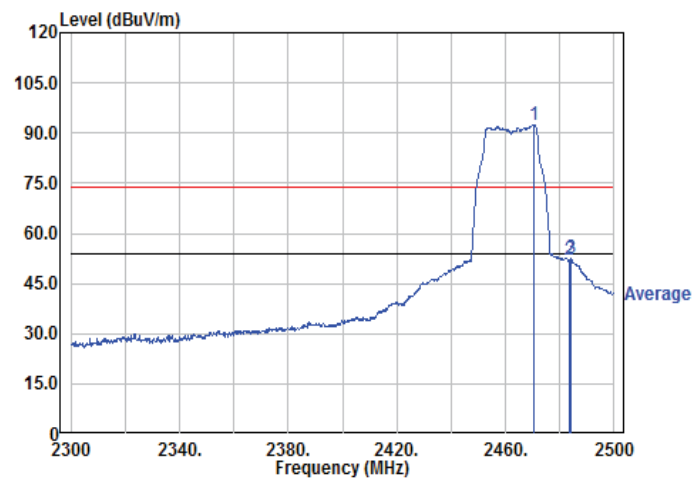
Chain0 : Restricted Band Bandedge @ 802.11ax(HE20) Mode Ch1 AV



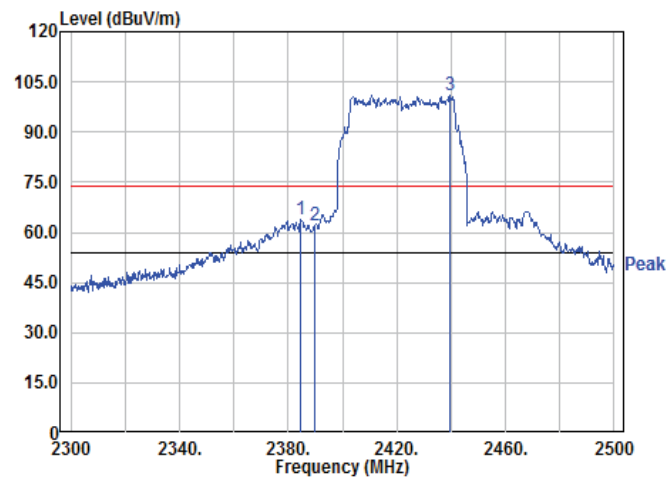
Chain0 : Restricted Band Bandedge @ 802.11ax(HE20) Mode Ch11 PK



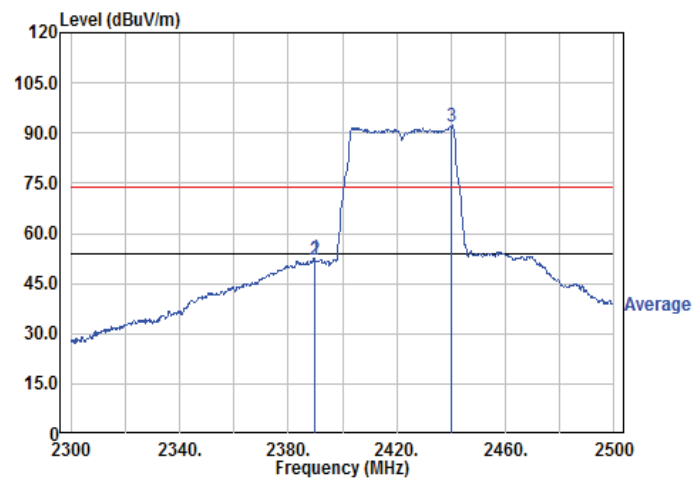
Chain0 : Restricted Band Bandedge @ 802.11ax(HE20) Mode Ch11 AV



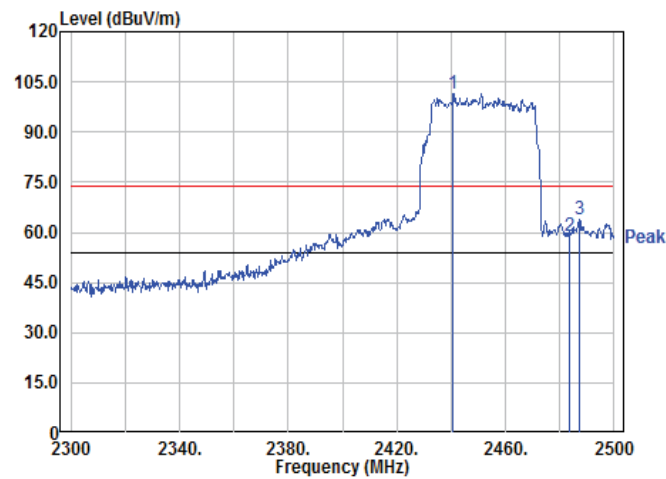
Chain0 : Restricted Band Bandedge @ 802.11ax(HE40) Mode Ch3 PK



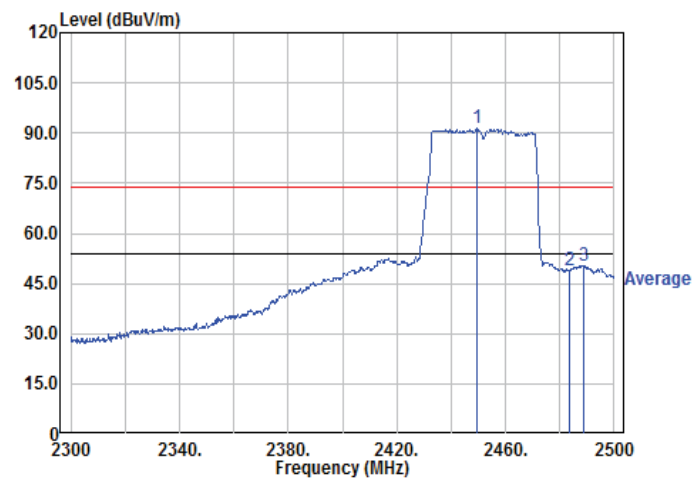
Chain0 : Restricted Band Bandedge @ 802.11ax(HE40) Mode Ch3 AV



Chain0 : Restricted Band Bandedge @ 802.11ax(HE40) Mode Ch9 PK



Chain0 : Restricted Band Bandedge @ 802.11ax(HE40) Mode Ch9 AV



TEST REPORT

8. AC Power Line Conducted Emission

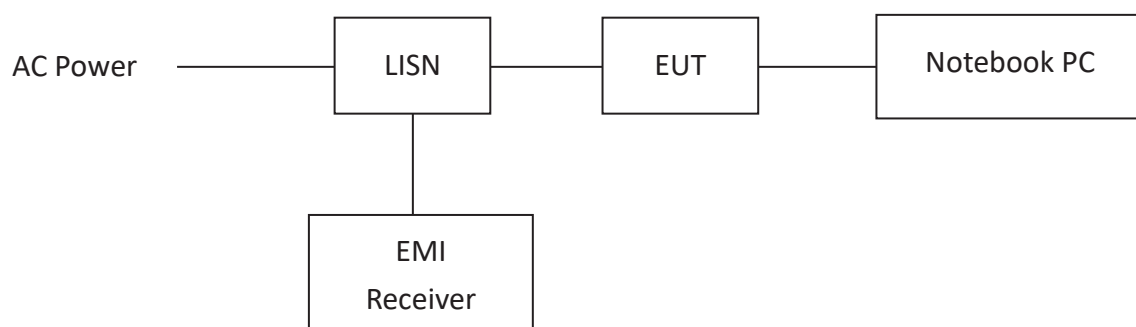
8.1 Measuring instrument setting

Receiver Function	Setting
Detector	QP
Start frequency	0.15MHz
Stop frequency	30MHz
IF bandwidth	9 kHz
Attenuation	10dB

8.2 Test Procedure

Step 1	Configure the EUT according to ANSI C63.10:2013. The EUT or host of EHT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
Step 2	Connect EUT or host of EUT to the power mains through a line impedance stabilization network.
Step 3	All the companion devices are connected to the other LISN. The LISN should provide 50Uh/50ohms coupling impedance.
Step 4	The frequency range from 150 kHz to 30MHz was searched.
Step 5	Set the test-receiver system to peak detector and specified bandwidth with maximum hold mode.
Step 6	The measurement has to be done between each power line and ground at the power terminal.

8.3 Test Diagram

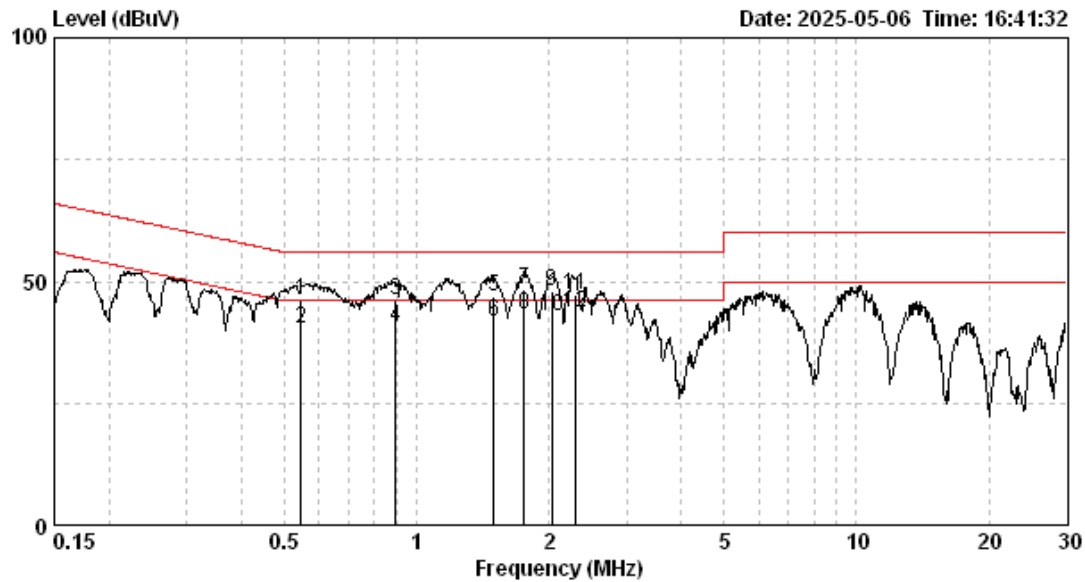


8.4 Limit

Frequency (MHz)	Conducted Limit (dBuV)	
	Q.P.	Ave.
0.15~0.50	66 – 56	56 – 46
0.50~5.00	56	46
5.00~30.0	60	50

TEST REPORT

8.5 Test Results



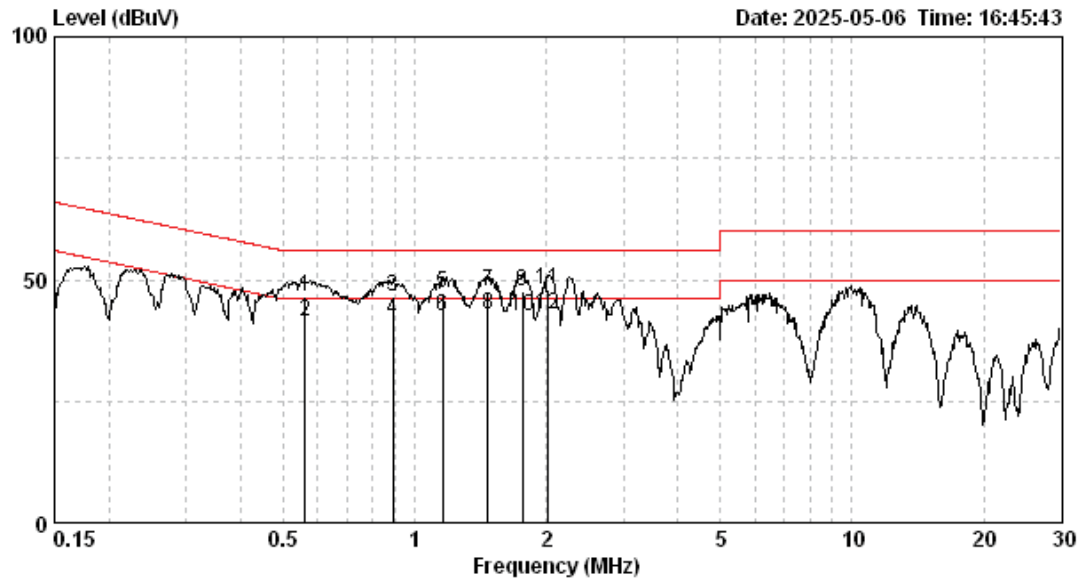
Test voltage : AC 120V / 60Hz
 Temp. / R.H. : 23 °C / 78 %
 Atmospheric pressure : 1008 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
LINE	0.546	9.58	36.49	46.07	56.00	30.79	40.37	46.00	-9.93	-5.63
LINE	0.894	9.59	36.60	46.19	56.00	31.07	40.66	46.00	-9.81	-5.34
LINE	1.495	9.60	37.21	46.80	56.00	32.20	41.79	46.00	-9.20	-4.21
LINE	1.753	9.60	38.73	48.33	56.00	33.65	43.24	46.00	-7.67	-2.76
LINE	2.033	9.60	38.35	47.95	56.00	33.16	42.76	46.00	-8.05	-3.24
LINE	2.297	9.60	37.63	47.24	56.00	33.82	43.42	46.00	-8.76	-2.58

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

TEST REPORT



Test voltage :AC 120V / 60Hz
 Temp. / R.H. :23 °C / 78 %
 Atmospheric pressure :1008 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
NEUTRAL	0.561	9.59	37.00	46.59	56.00	31.84	41.44	46.00	-9.41	-4.56
NEUTRAL	0.890	9.60	36.86	46.45	56.00	32.11	41.71	46.00	-9.55	-4.29
NEUTRAL	1.160	9.60	37.47	47.08	56.00	32.94	42.54	46.00	-8.92	-3.46
NEUTRAL	1.472	9.61	38.03	47.64	56.00	33.08	42.70	46.00	-8.36	-3.30
NEUTRAL	1.762	9.62	38.07	47.69	56.00	32.79	42.41	46.00	-8.31	-3.59
NEUTRAL	2.023	9.62	38.48	48.10	56.00	33.17	42.79	46.00	-7.90	-3.21

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

Appendix A: Test equipment list

Test Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
EMI Test Receiver	KEYSIGHT	N9038B	MY63060107	2025/02/08	2026/02/27
Spectrum analyzer	KEYSIGHT	N9020B	MY63450146	2025/02/14	2026/02/13
Active Loop Antenna	SCHWARZBECK	FMZB1519	1519-067	2024/12/11	2025/12/10
Broadband Antenna	SCHWARZBECK	VULB 9168	9168-172	2024/12/30	2025/12/29
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-456	2024/12/10	2025/12/09
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170159	2024/08/12	2025/08/11
Pre-Amplifier	SGH	SGH118	20220105-1	2025/01/14	2026/01/13
Pre-amplifier	SGH	SGH184	20201124-1	2024/10/08	2025/10/07
Cable	SUHNER	SUCOFLEX 104	295105/4	2025/02/27	2026/02/26
Cable	SUHNER	SUCOFLEX 104P	CB0005	2025/02/27	2026/02/26
Cable	SUHNER	SUCOFLEX 104P	9403 / 4P	2024/11/22	2025/11/21
Hight Pass Filter	Wainwright	WHKX3.0/18G-1 2SS	N/A	2024/05/23	2025/05/23
Power Meter	Anritsu	ML2495A	0844001	2024/12/07	2025/12/06
Power Sensor	Anritsu	MA2491A	031543	2024/12/07	2025/12/06
Attenuator	PE	PE7001-20	N/A	2024/05/23	2025/05/22
966-2_3m Semi-Anechoic Chamber	CHANCE MOST	CEM-966_2	N/A	2024/07/30	2025/07/29
Test software	Audix	e3	V9	NCR	NCR

Note: No Calibration Required (NCR).

TEST REPORT

Test Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
EMI Test Receiver	R&S	ESCI	100059	2024/09/11	2025/09/10
LISN	R&S	ENV216	101160	2024/06/26	2025/06/25
Cable	SUHNER	EMCCFD300-B M-NM-6000	170502	2024/06/25	2025/06/24
Test software	Audix	e3	V4.20040112L	NCR	NCR
Test site	Intertek	Con-2	N/A	NCR	NCR

Note: No Calibration Required (NCR).

Appendix B: Measurement Uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2.0$.

Item	Uncertainty
Radiated disturbances from 9kHz~30MHz in a semi-anechoic chamber at a distance of 3m	2.73 dB
Vertically polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	3.91 dB
Horizontally polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	3.49 dB
Vertically polarized Radiated disturbances from 1GHz~18GHz in a semi-anechoic chamber at a distance of 3m	3.71 dB
Horizontally polarized Radiated disturbances from 1GHz~18GHz in a semi-anechoic chamber at a distance of 3m	3.71 dB
Vertically polarized Radiated disturbances from 18GHz~40GHz in a semi-anechoic chamber at a distance of 3m	3.26 dB
Horizontally polarized Radiated disturbances from 18GHz~40GHz in a semi-anechoic chamber at a distance of 3m	3.26 dB
Conducted Measurement	0.69 dB
AC Power Line Conducted Emission	1.31 dB