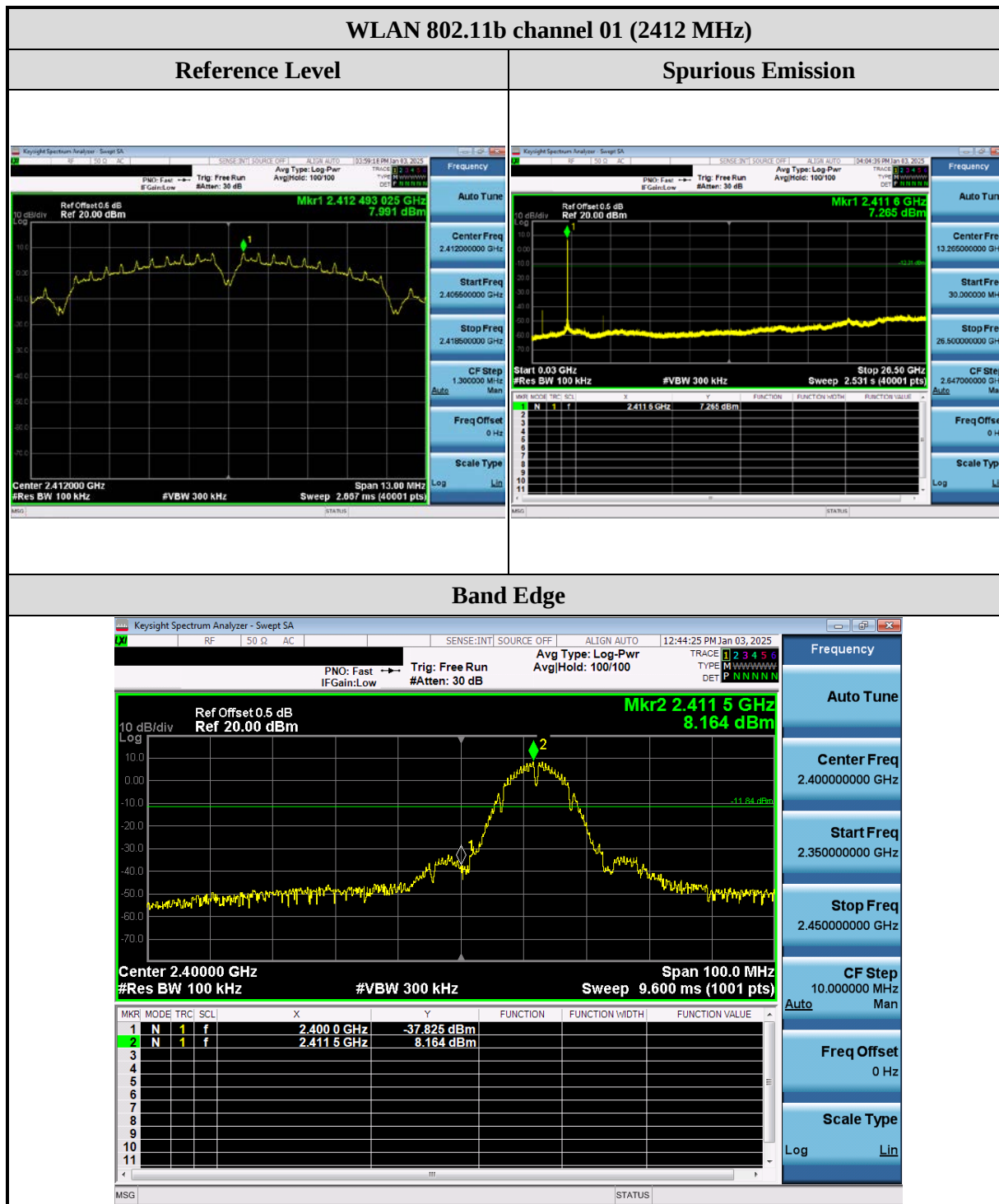
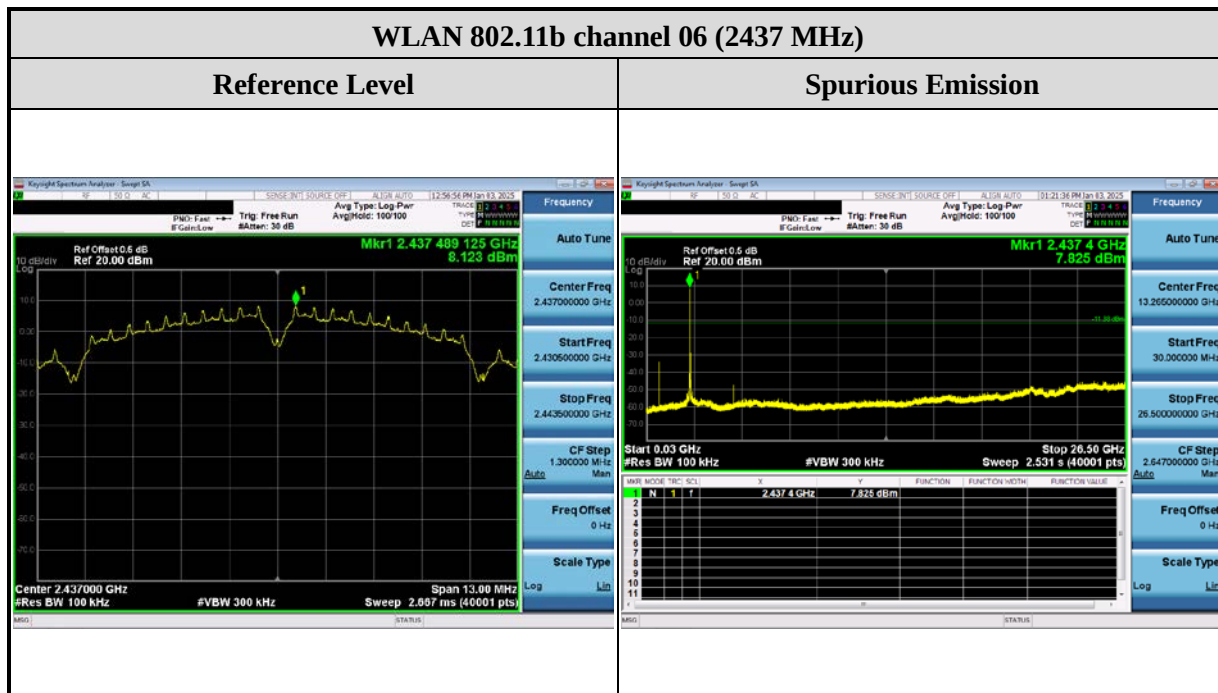


Chain B



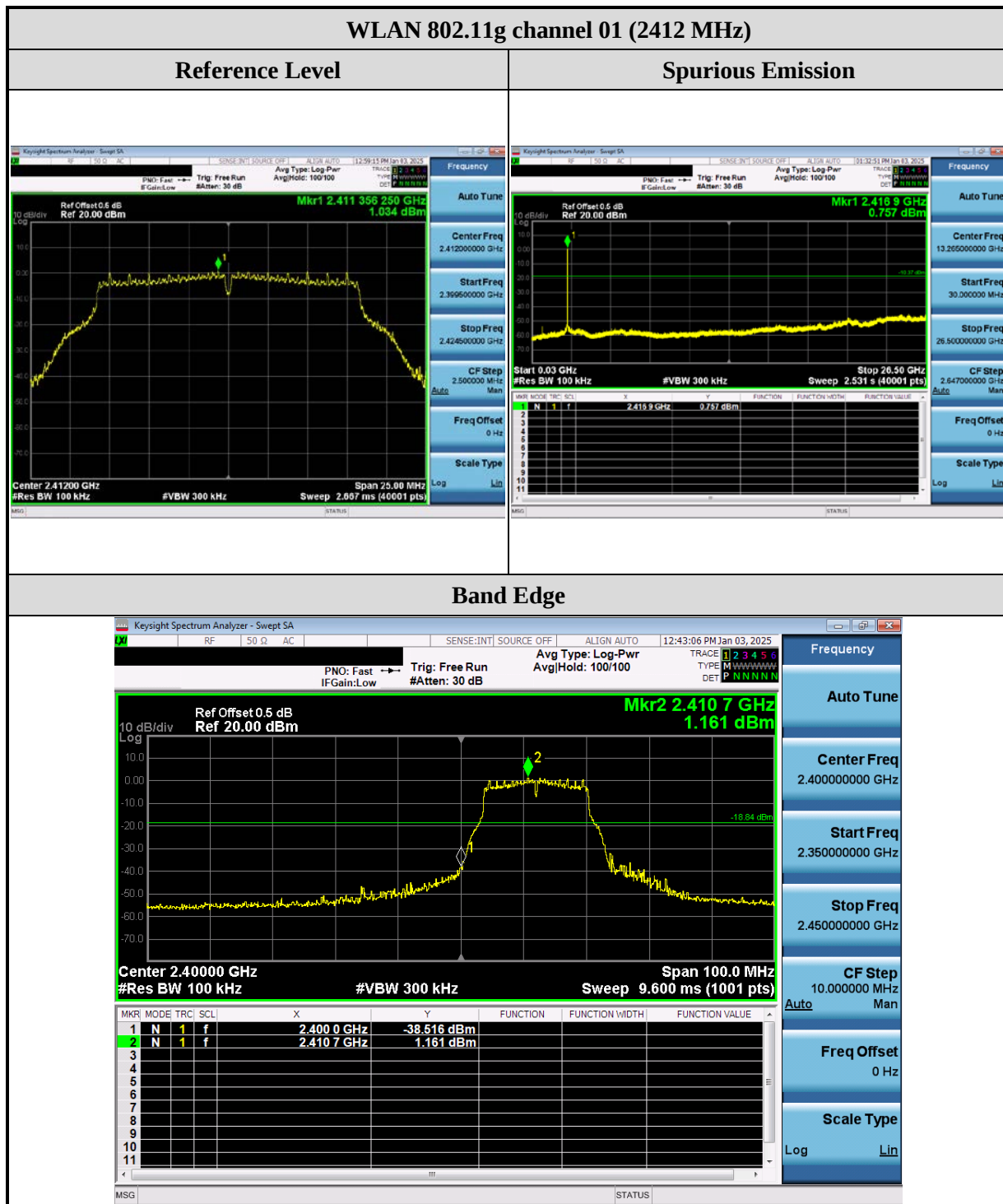
Chain B



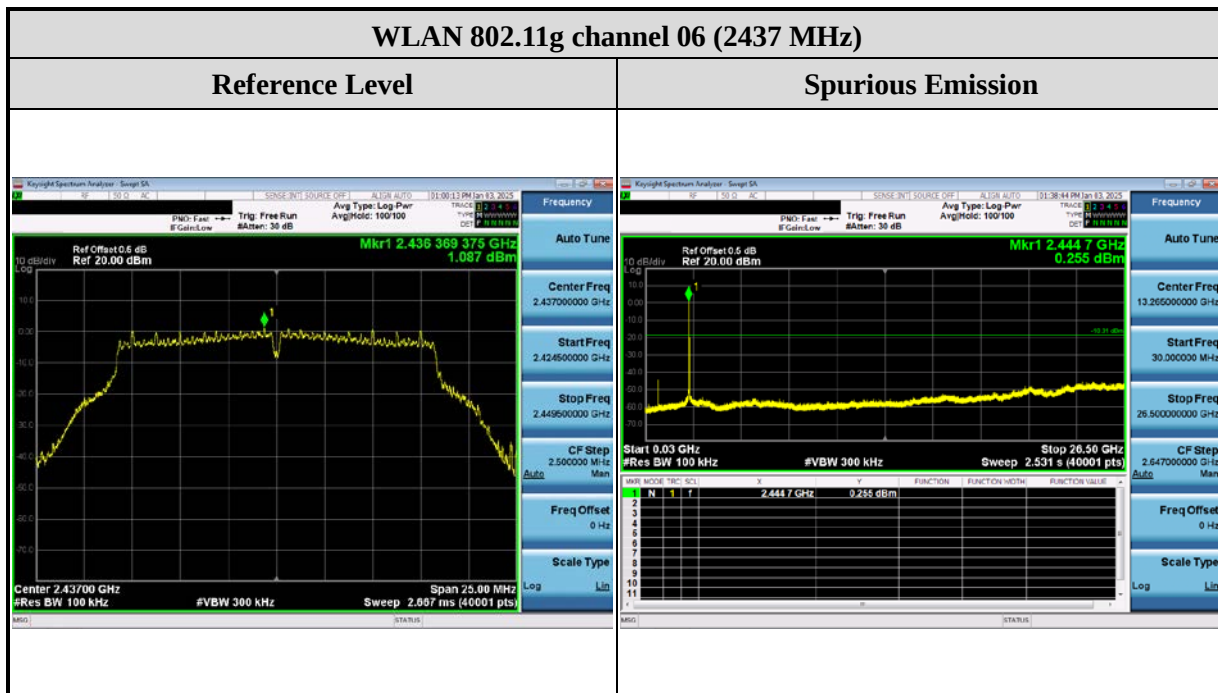
Chain B



Chain B



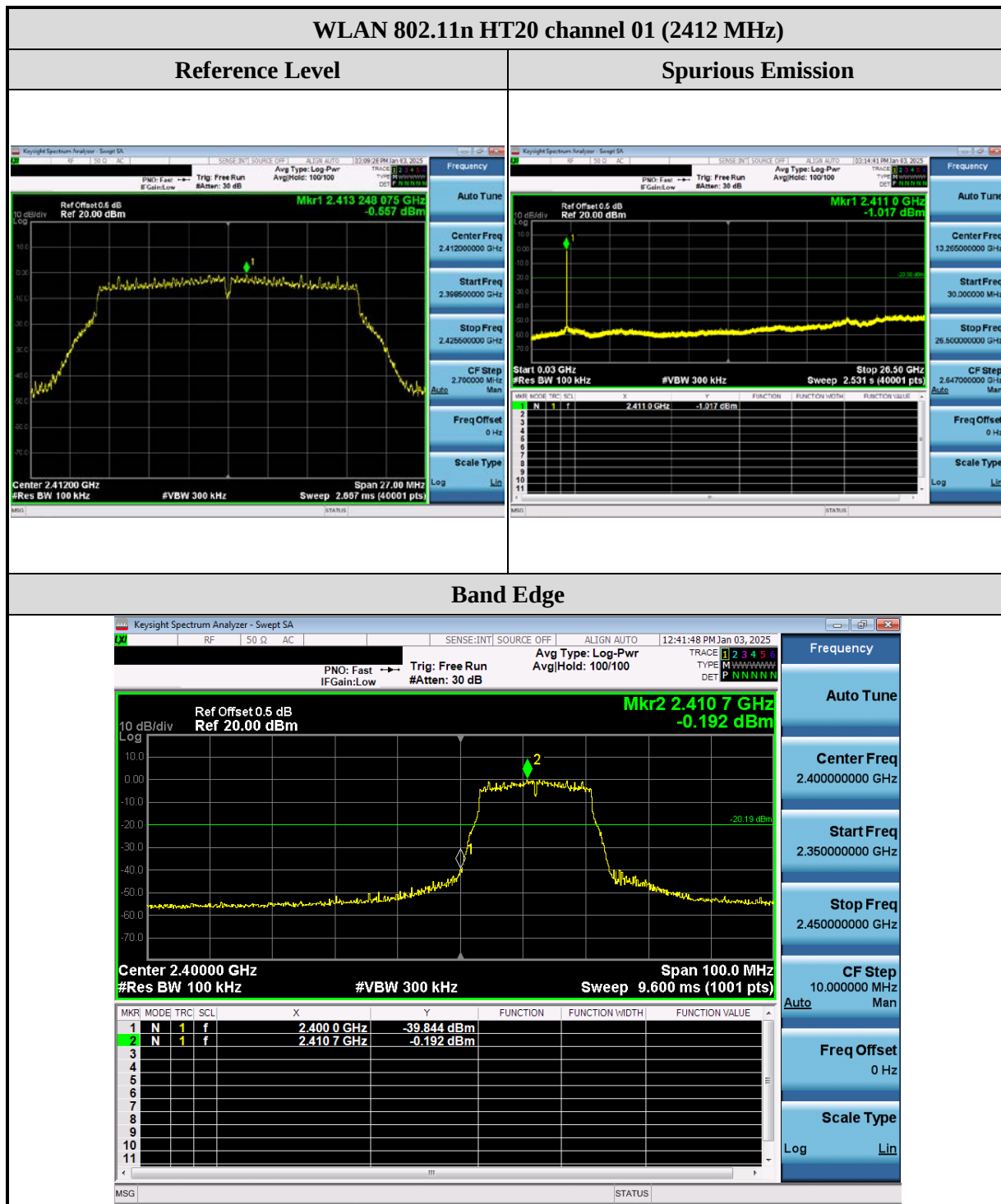
Chain B



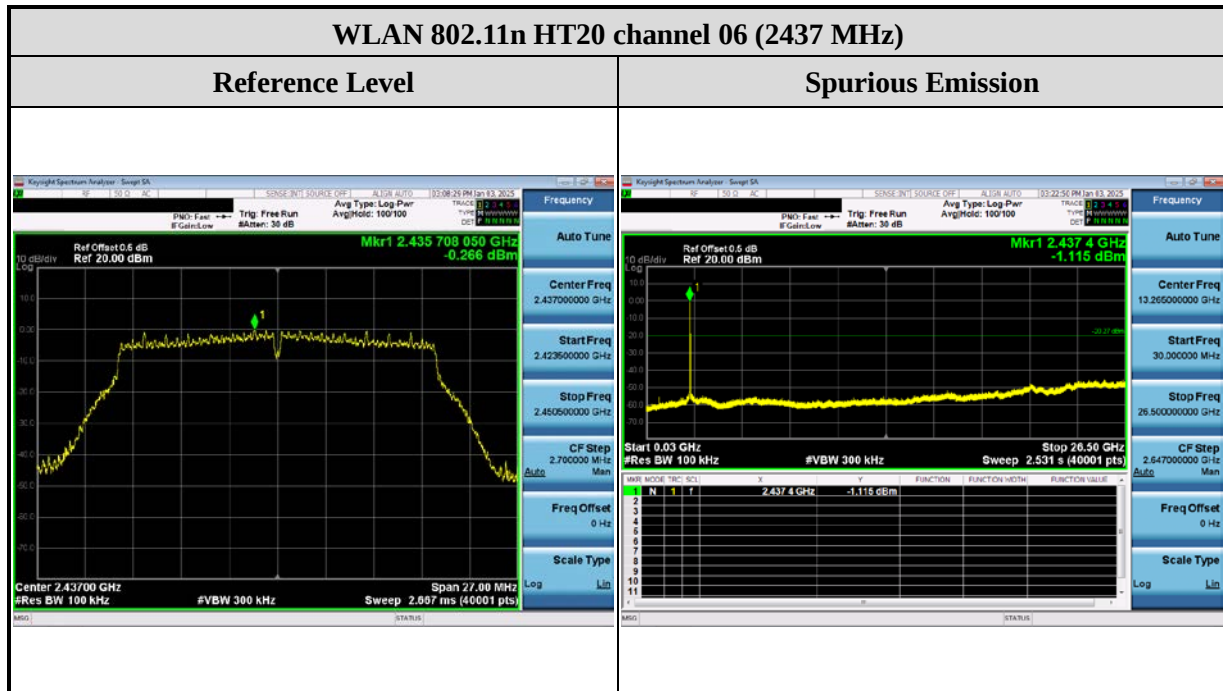
Chain B



Chain B



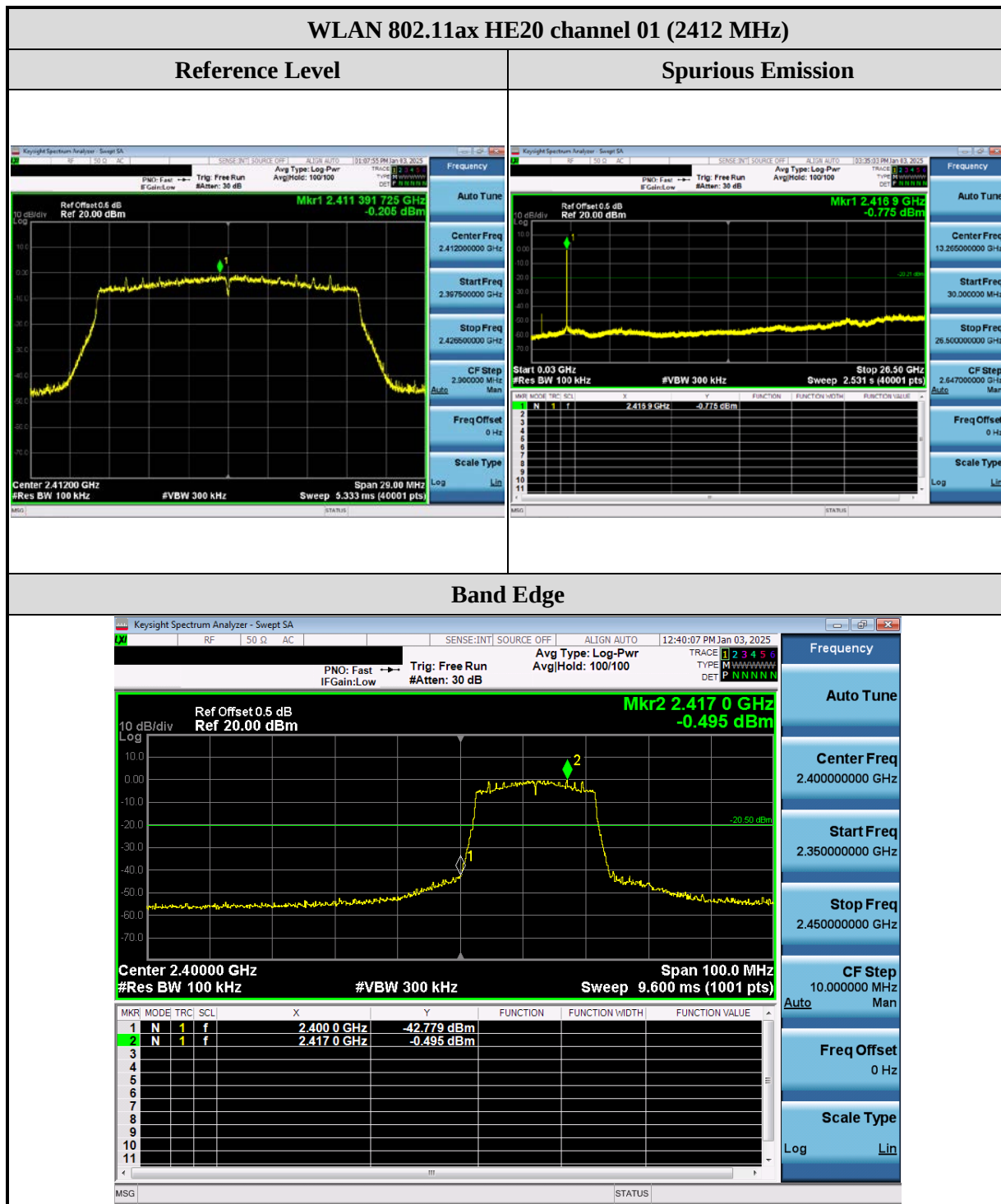
Chain B



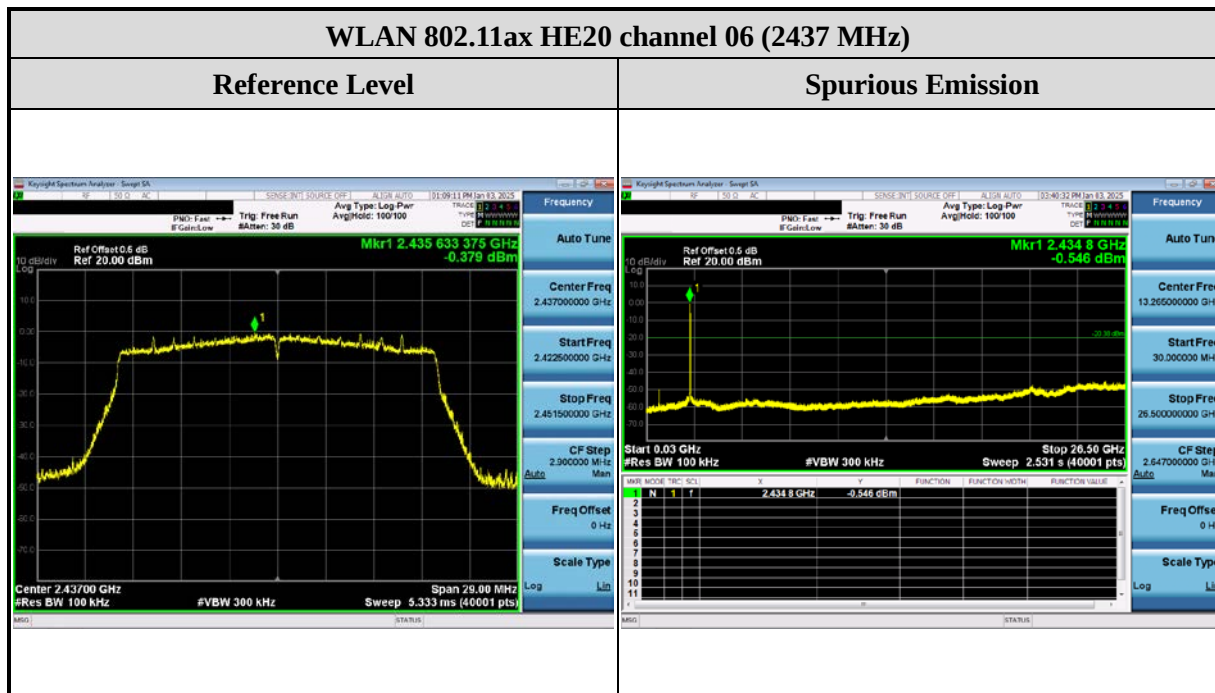
Chain B



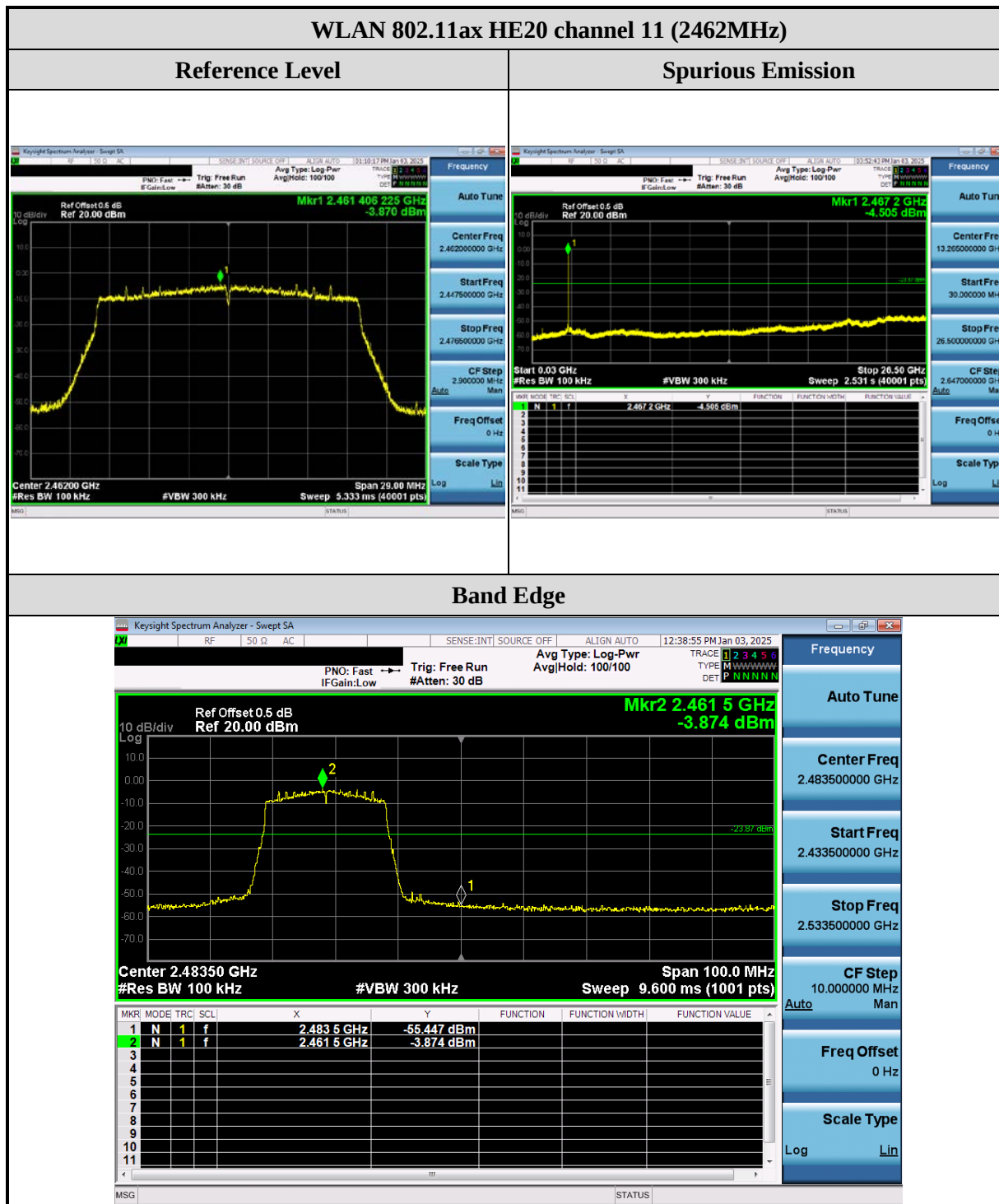
Chain B



Chain B



Chain B



2.6 Radiated Band Edges and Spurious Emission Measurement

2.6.1 Limit

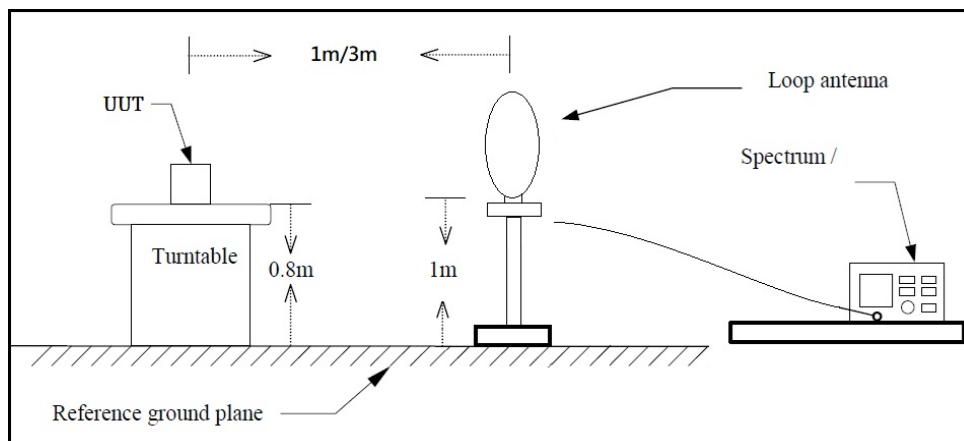
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
0.009 – 0.490	$2400/F(\text{kHz})$	300
0.490 – 1.705	$24000/F(\text{kHz})$	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Remarks:

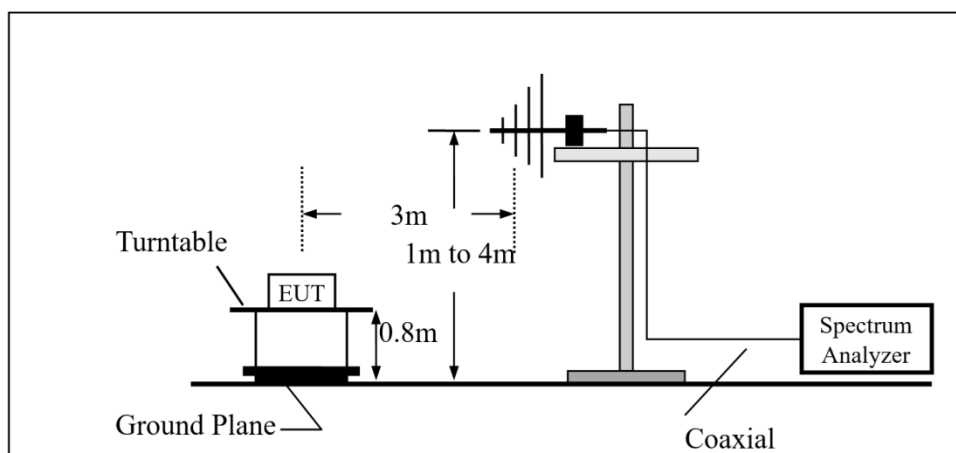
1. RF Voltage (dBuV) = $20 \log \text{RF Voltage}(\mu\text{V})$
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

2.6.2 Test Setup

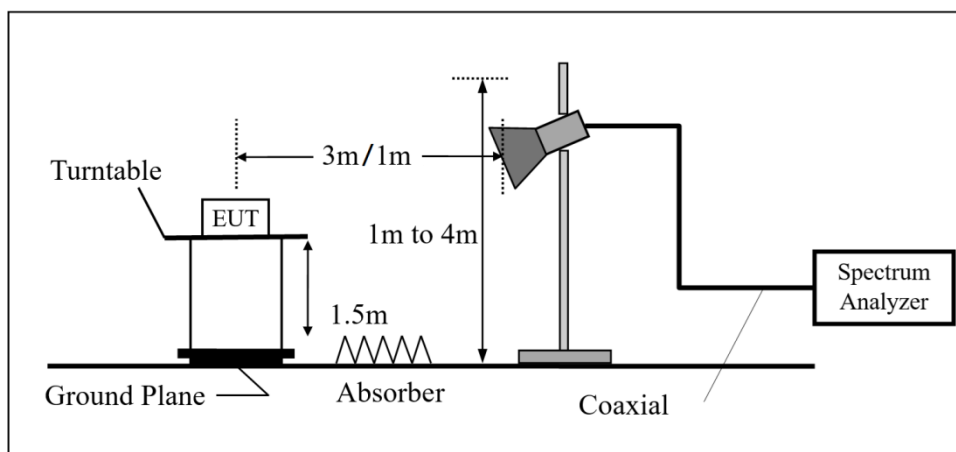
Below 30MHz



30MHz~1GHz



Above 1GHz



2.6.3 Test Procedure

The EUT was setup according to ANSI C63.10 : 2013 chapter 6.4, 6.5, 6.6 and tested according test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

- (1) The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meters chamber room for the test. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The EUT was set 3 meters away from the interference-receiving antenna, the height of the antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength.
- (3) Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- (4) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- (5) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- (6) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets the average limit, measurement with the average detector is unnecessary.

Remarks:

- (a) The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- (b) The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- (c) The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
- (d) All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission below 30MHz

- (1) The EUT was placed on the top of a rotating table 0.8 meters above the ground in a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- (3) Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- (4) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- (5) The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

For Radiated emission Above 30MHz

- (7) The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for the test. The table was rotated 360 degrees to determine the position of the highest radiation.
- (8) The EUT was set 3 meters away from the interference-receiving antenna, the height of the antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength.
- (9) Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- (10) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- (11) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- (12) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets the average limit, measurement with the average detector is unnecessary.

2.6.4 Duty Cycle

Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11b	2412	8.460	8.520	0.993	0.031	0.010
802.11g	2412	1.405	1.495	0.940	0.270	0.712
802.11n HT20	2412	1.325	1.410	0.940	0.270	0.755
802.11ax HE20	2412	1.035	1.120	0.924	0.343	0.966

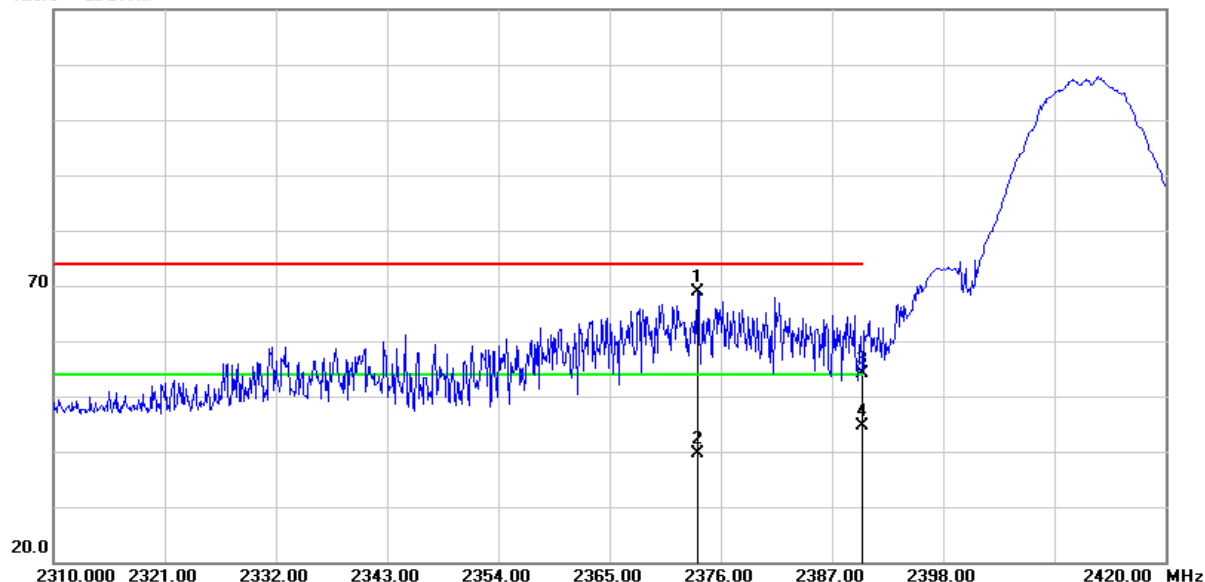
2.6.5 Test Result of Radiated Band Edge Measurement

The following tables for radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X axis) were recorded in this report.

Test Frequency	
RF	802.11b/g/n-HT20/ax-HE20
Tx	CH01 (2412MHz) CH11 (2462MHz)

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/28
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %

120.0 dBuV/m



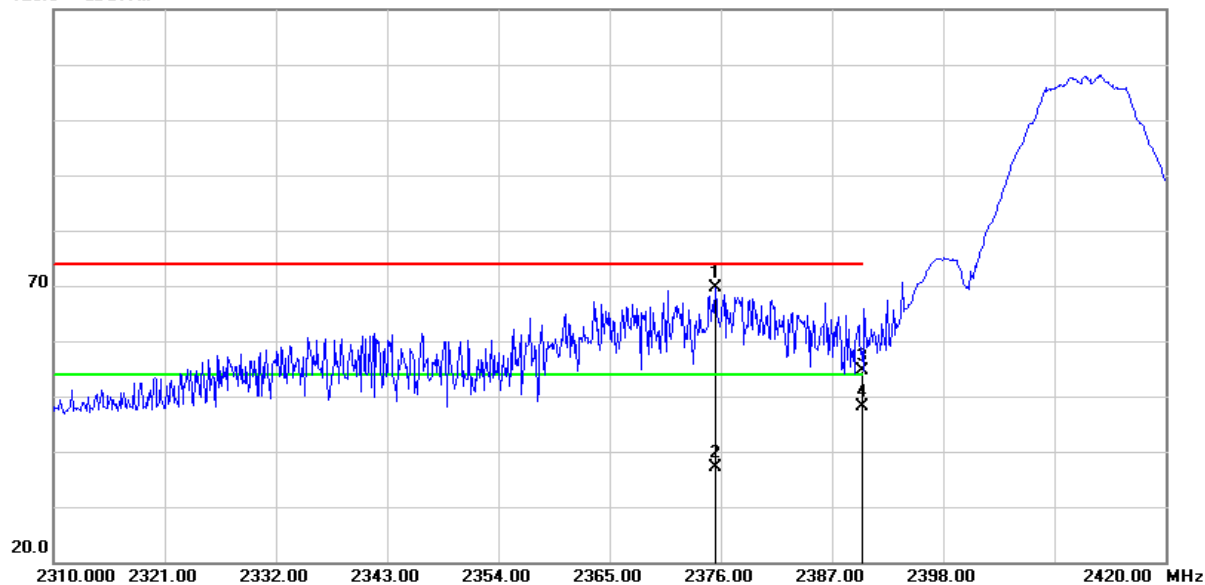
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.690	75.12	-6.24	68.88	74.00	-5.12	peak
2	2373.690	45.82	-6.24	39.58	54.00	-14.42	AVG
3	2390.000	60.45	-6.20	54.25	74.00	-19.75	peak
4	2390.000	50.85	-6.20	44.65	54.00	-9.35	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/28
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

120.0 dBuV/m

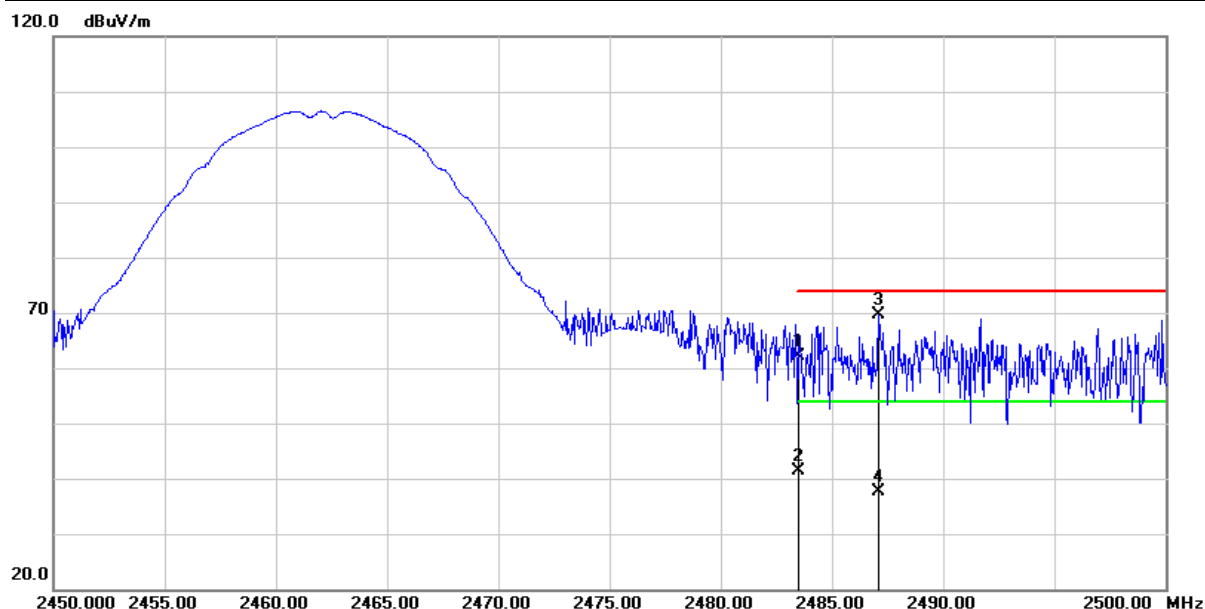


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2375.450	75.82	-6.22	69.60	74.00	-4.40	peak
2	2375.450	43.40	-6.22	37.18	54.00	-16.82	AVG
3	2390.000	60.90	-6.20	54.70	74.00	-19.30	peak
4	2390.000	54.22	-6.20	48.02	54.00	-5.98	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

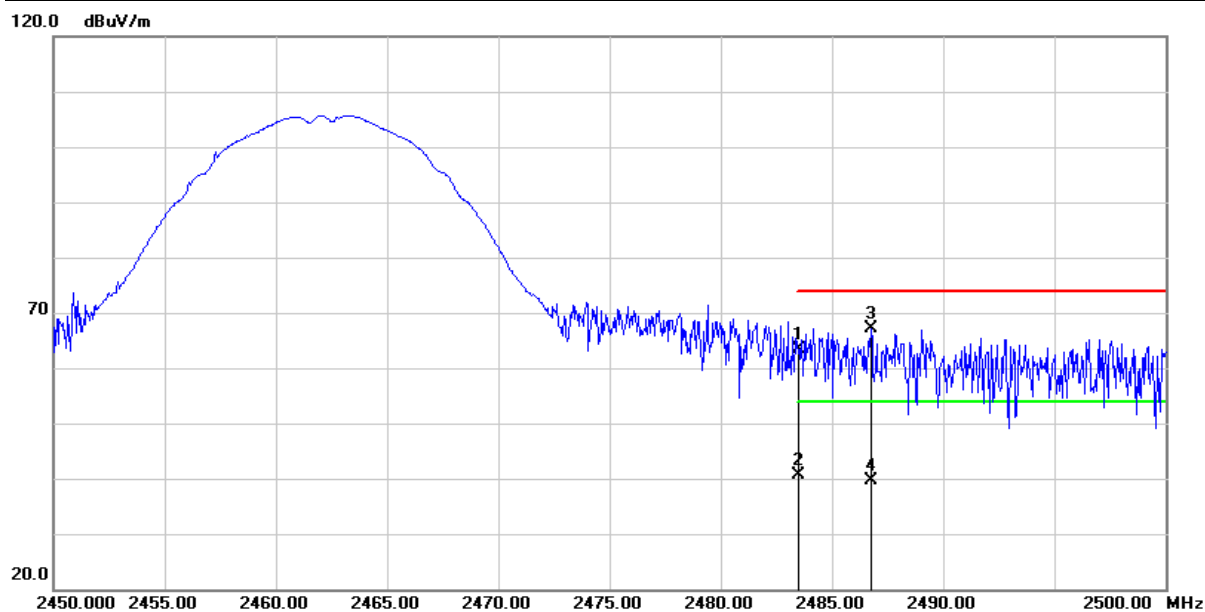


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.42	-6.29	62.13	74.00	-11.87	peak
2	2483.500	47.58	-6.29	41.29	54.00	-12.71	AVG
3	2487.100	75.86	-6.27	69.59	74.00	-4.41	peak
4	2487.100	43.86	-6.27	37.59	54.00	-16.41	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %



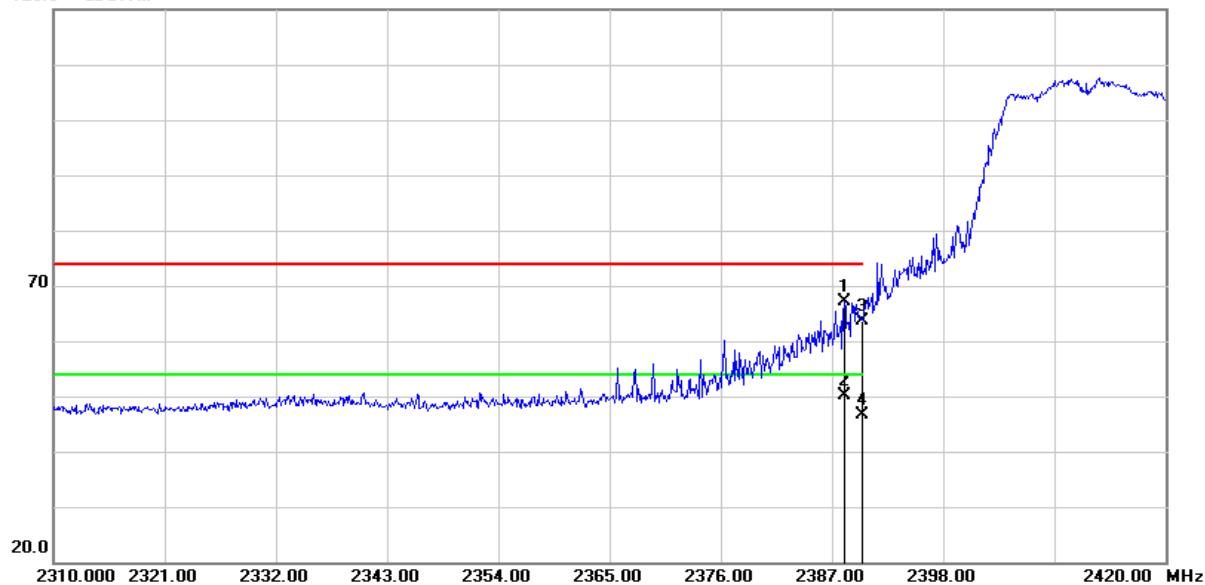
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	69.58	-6.29	63.29	74.00	-10.71	peak
2	2483.500	46.87	-6.29	40.58	54.00	-13.42	AVG
3	2486.750	73.49	-6.27	67.22	74.00	-6.78	peak
4	2486.750	45.81	-6.27	39.54	54.00	-14.46	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %

120.0 dBuV/m

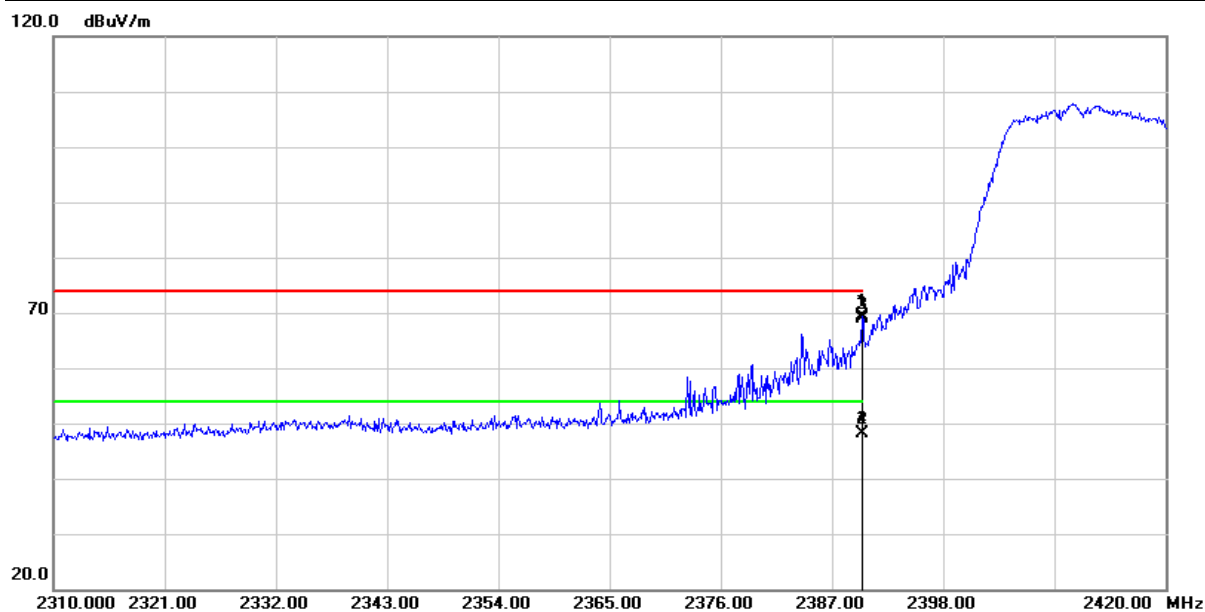


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2388.210	73.25	-6.20	67.05	74.00	-6.95	peak
2	2388.210	56.40	-6.20	50.20	54.00	-3.80	AVG
3	2390.000	69.76	-6.20	63.56	74.00	-10.44	peak
4	2390.000	52.82	-6.20	46.62	54.00	-7.38	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

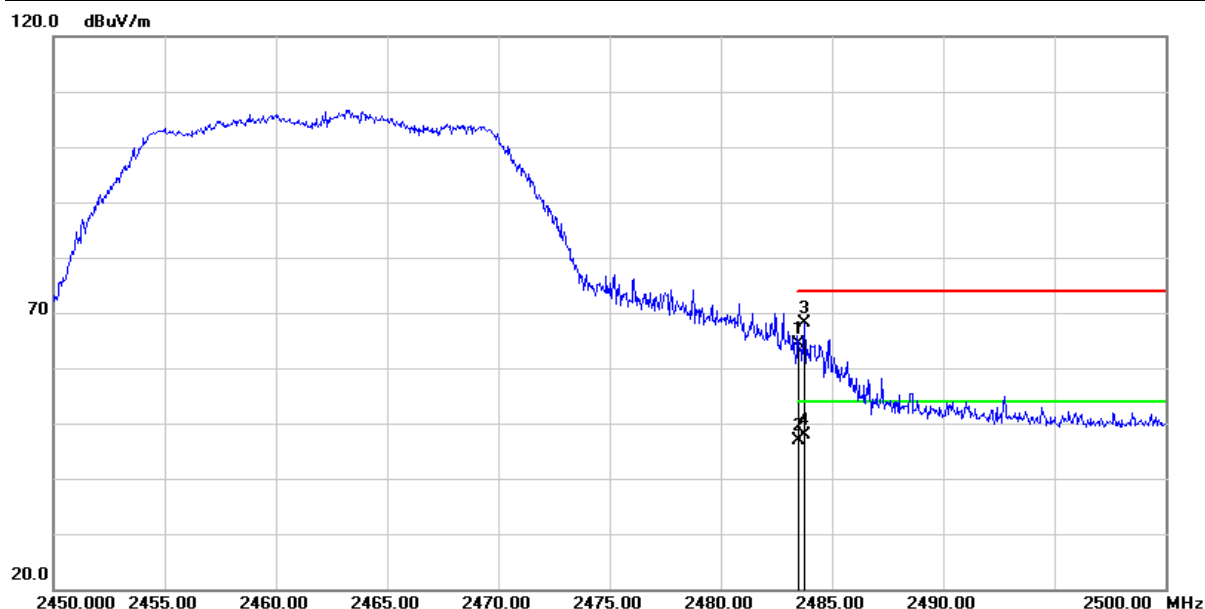


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.970	75.61	-6.20	69.41	74.00	-4.59	peak
2	2389.970	54.43	-6.20	48.23	54.00	-5.77	AVG
3	2390.000	75.06	-6.20	68.86	74.00	-5.14	peak
4	2390.000	54.39	-6.20	48.19	54.00	-5.81	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %

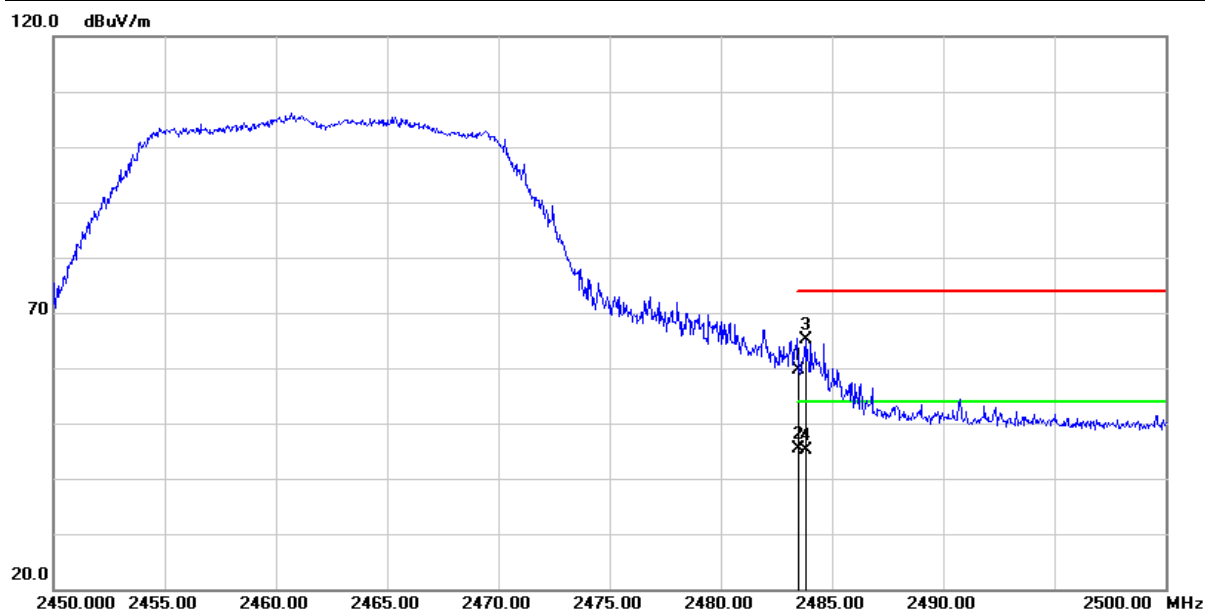


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	70.76	-6.29	64.47	74.00	-9.53	peak
2	2483.500	53.18	-6.29	46.89	54.00	-7.11	AVG
3	2483.750	74.48	-6.28	68.20	74.00	-5.80	peak
4	2483.750	54.04	-6.28	47.76	54.00	-6.24	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %



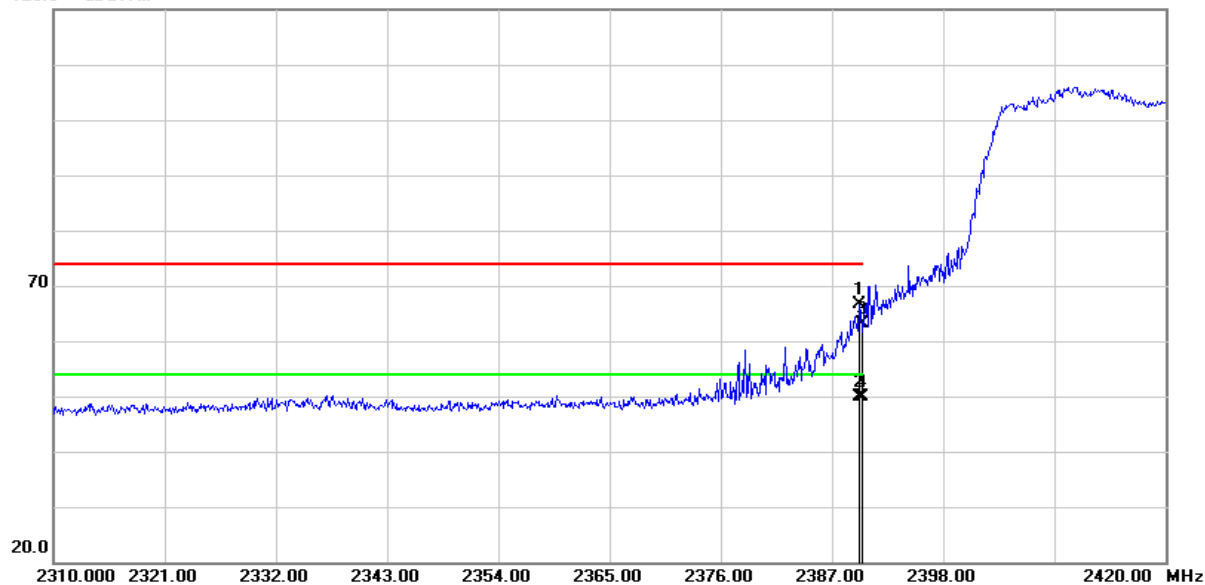
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	65.91	-6.29	59.62	74.00	-14.38	peak
2	2483.500	51.72	-6.29	45.43	54.00	-8.57	AVG
3	2483.800	71.37	-6.28	65.09	74.00	-8.91	peak
4	2483.800	51.46	-6.28	45.18	54.00	-8.82	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %

120.0 dBuV/m

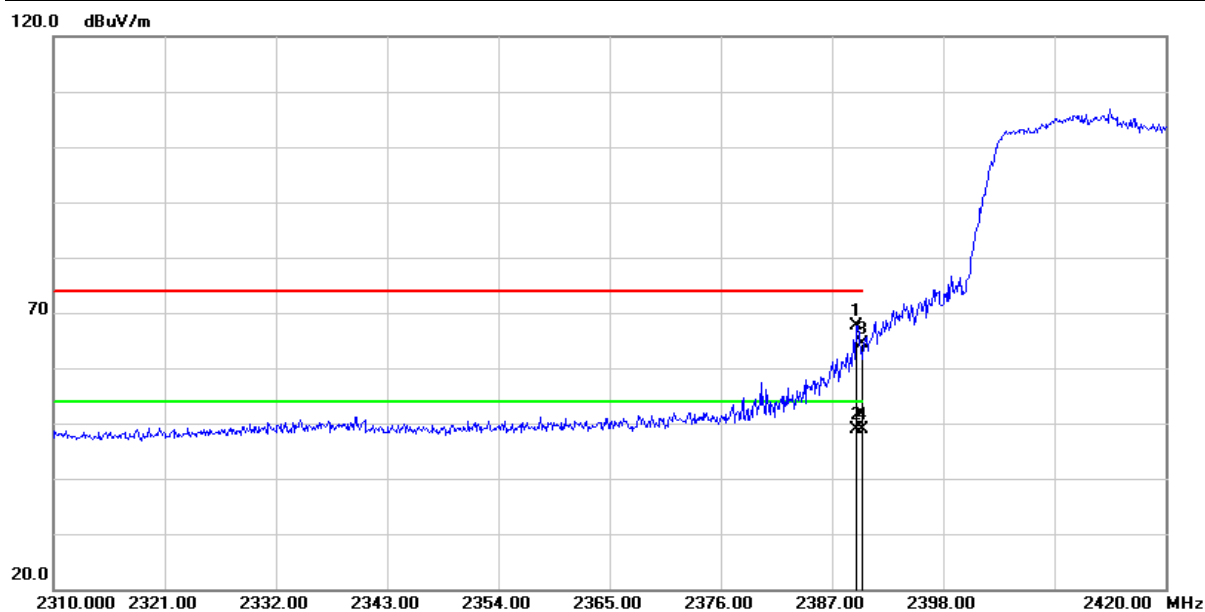


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.640	72.76	-6.20	66.56	74.00	-7.44	peak
2	2389.640	56.07	-6.20	49.87	54.00	-4.13	AVG
3	2390.000	69.40	-6.20	63.20	74.00	-10.80	peak
4	2390.000	56.16	-6.20	49.96	54.00	-4.04	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

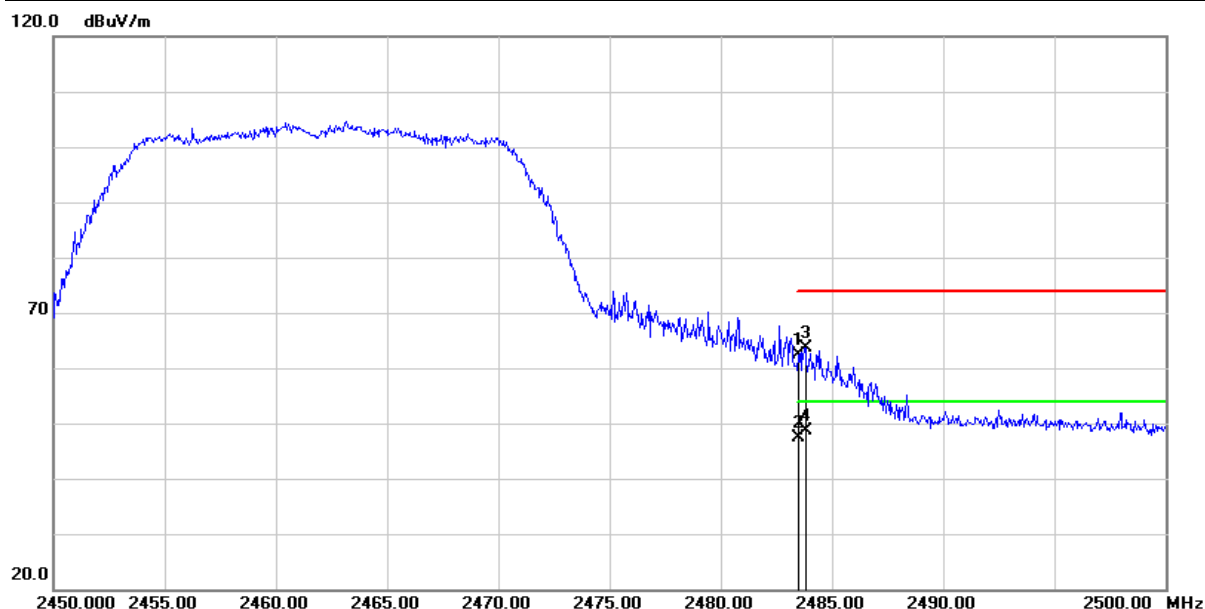


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.420	73.93	-6.20	67.73	74.00	-6.27	peak
2	2389.420	55.13	-6.20	48.93	54.00	-5.07	AVG
3	2390.000	70.62	-6.20	64.42	74.00	-9.58	peak
4	2390.000	54.98	-6.20	48.78	54.00	-5.22	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %



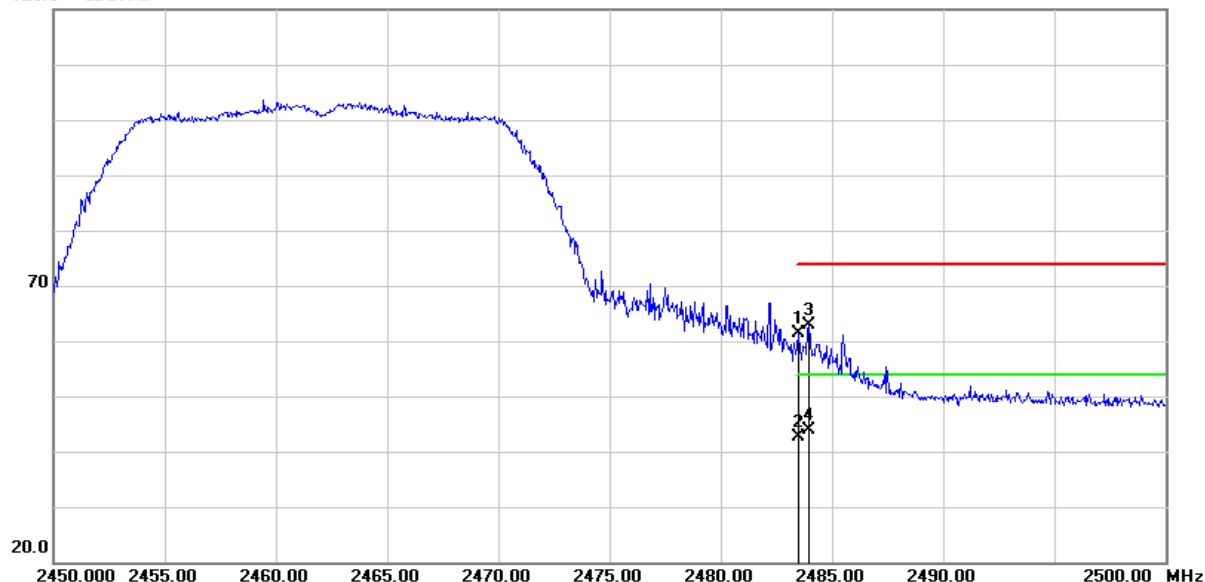
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.72	-6.29	62.43	74.00	-11.57	peak
2	2483.500	53.73	-6.29	47.44	54.00	-6.56	AVG
3	2483.800	69.89	-6.28	63.61	74.00	-10.39	peak
4	2483.800	55.01	-6.28	48.73	54.00	-5.27	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

120.0 dBuV/m

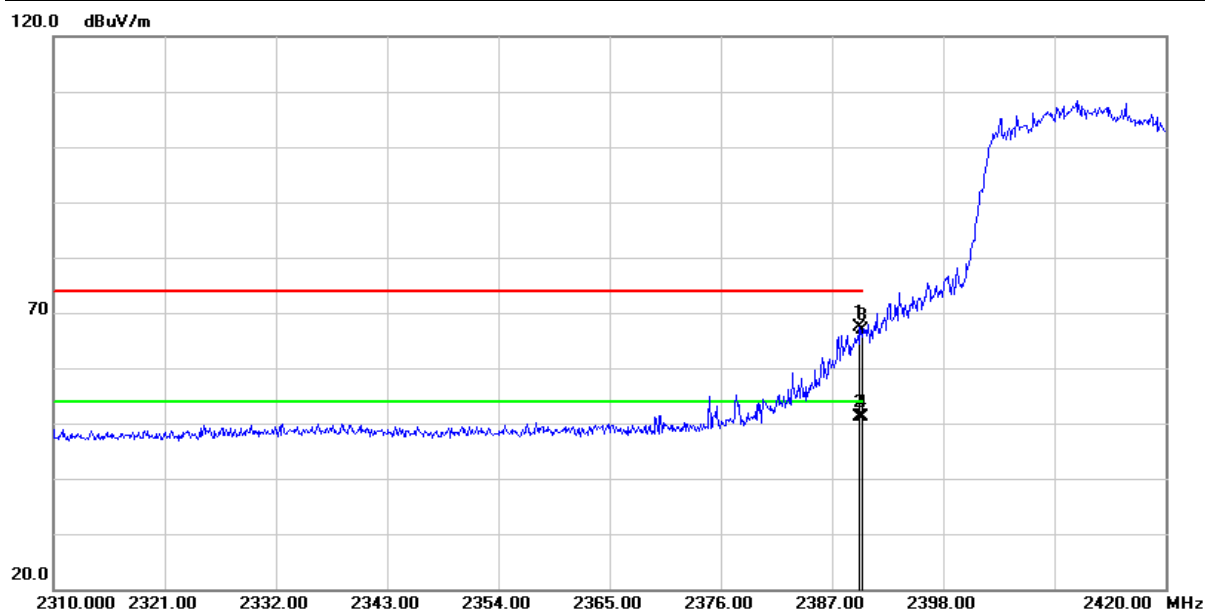


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	67.60	-6.29	61.31	74.00	-12.69	peak
2	2483.500	48.90	-6.29	42.61	54.00	-11.39	AVG
3	2483.950	69.11	-6.28	62.83	74.00	-11.17	peak
4	2483.950	50.11	-6.28	43.83	54.00	-10.17	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.750	73.68	-6.20	67.48	74.00	-6.52	peak
2	2389.750	57.41	-6.20	51.21	54.00	-2.79	AVG
3	2390.000	73.00	-6.20	66.80	74.00	-7.20	peak
4	2390.000	57.22	-6.20	51.02	54.00	-2.98	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

120.0 dBuV/m

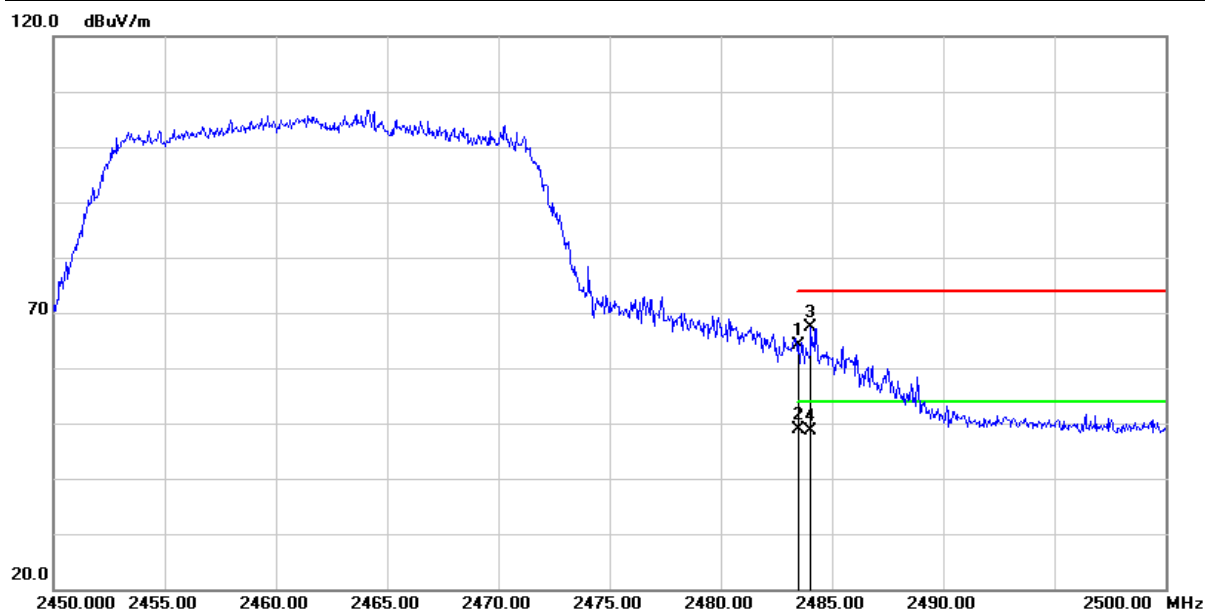


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.530	73.25	-6.20	67.05	74.00	-6.95	peak
2	2389.530	54.95	-6.20	48.75	54.00	-5.25	AVG
3	2390.000	74.91	-6.20	68.71	74.00	-5.29	peak
4	2390.000	56.64	-6.20	50.44	54.00	-3.56	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %

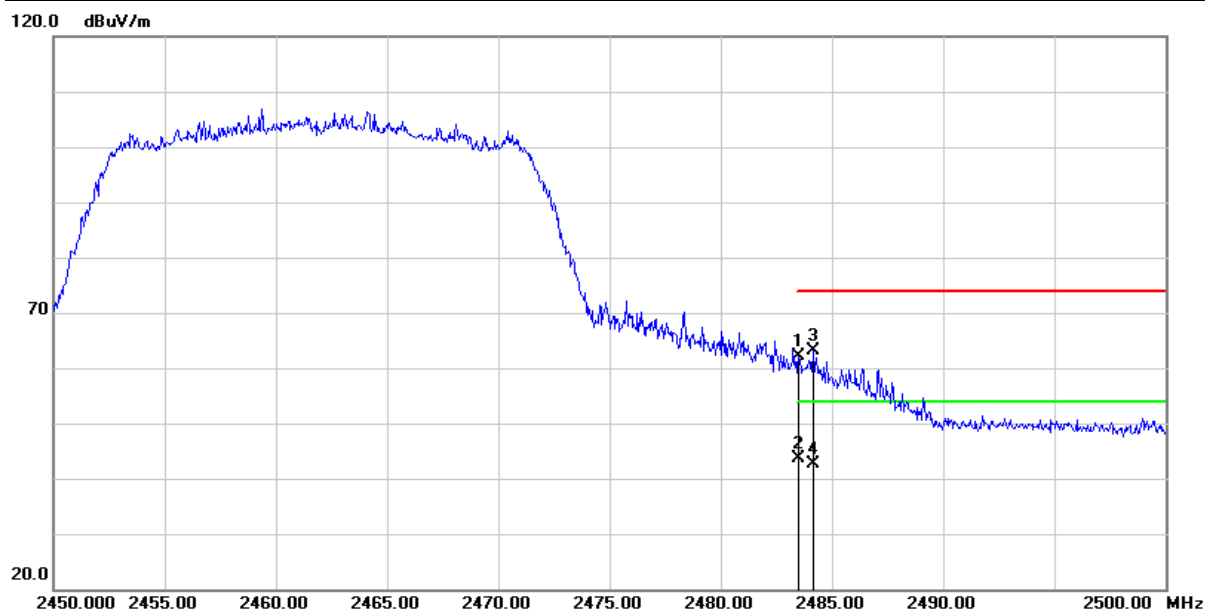


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	70.50	-6.29	64.21	74.00	-9.79	peak
2	2483.500	55.10	-6.29	48.81	54.00	-5.19	AVG
3	2484.050	73.68	-6.28	67.40	74.00	-6.60	peak
4	2484.050	54.81	-6.28	48.53	54.00	-5.47	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/27
Test Channel :	CH11(2462MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	68.40	-6.29	62.11	74.00	-11.89	peak
2	2483.500	50.02	-6.29	43.73	54.00	-10.27	AVG
3	2484.150	69.37	-6.28	63.09	74.00	-10.91	peak
4	2484.150	48.90	-6.28	42.62	54.00	-11.38	AVG

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

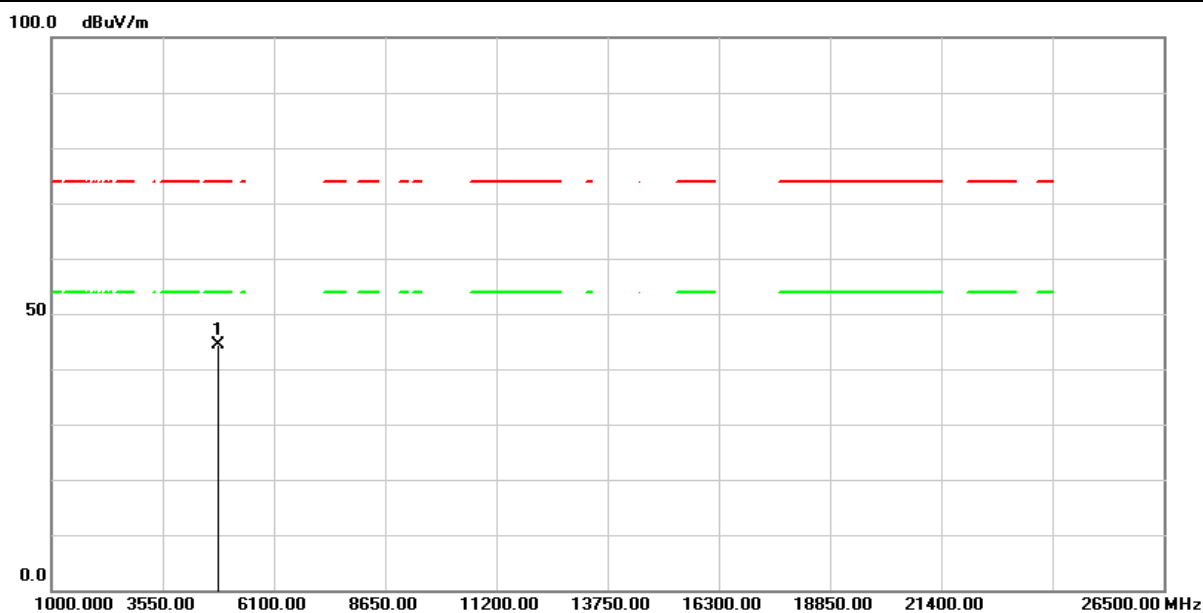
2.6.6 Test Result of Radiated Spurious Emission Measurement

- (1) The radiation measurement frequency is 9kHz ~ 30MHz. The interference value of this frequency range is less than the limit value of 20 dB. It is considered that the background noise value is not recorded.
- (2) The following table shows the radiation measurement frequency from 30MHz to 26.5GHz, pre-scanning in the X, Y and Z axes. The worst case (X-axis) is documented in this report.

Test Frequency	
RF	802.11b/g/n-HT20/ax-HE20
Tx	CH01 (2412MHz) CH06 (2437MHz) CH11 (2462MHz)

Above 1GHz Data

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/28
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Horizontal	Relative Humidity :	51 %



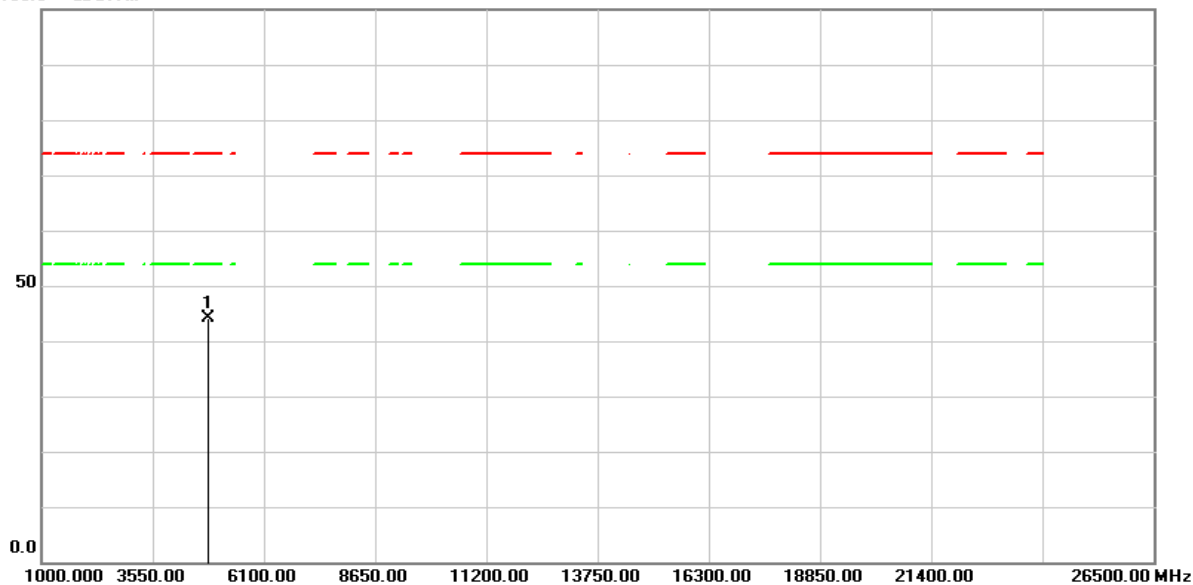
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	64.32	-19.82	44.50	74.00	-29.50	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/28
Test Channel :	CH01(2412MHz)	Temperature :	22.6 °C
Polarization :	Vertical	Relative Humidity :	51 %

100.0 dBuV/m

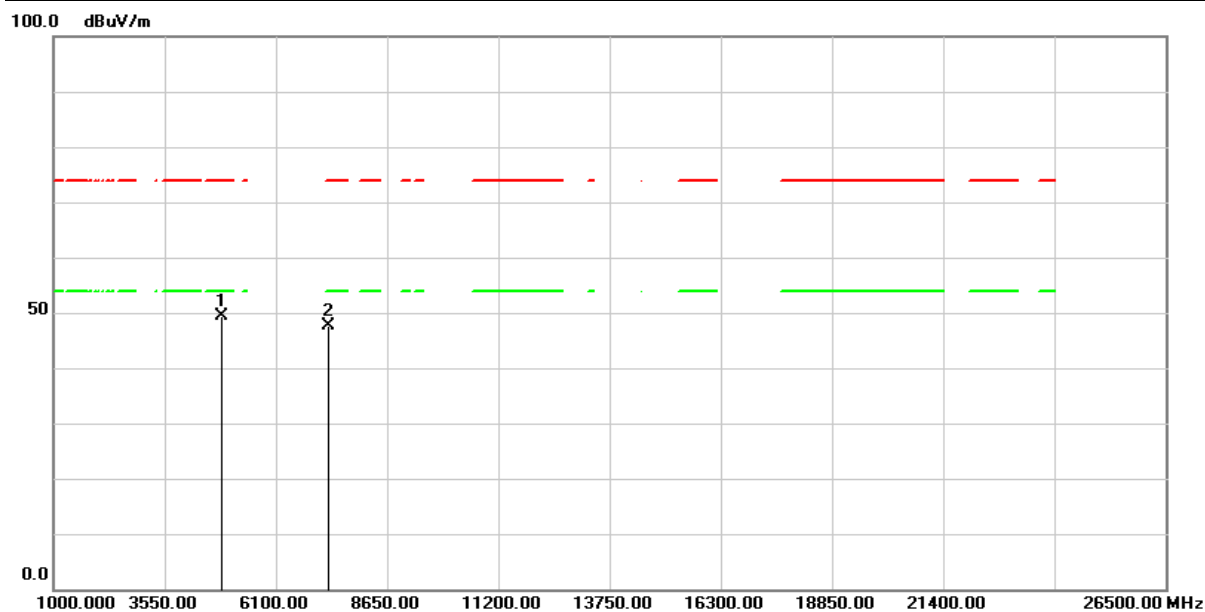


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	64.01	-19.82	44.19	74.00	-29.81	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %



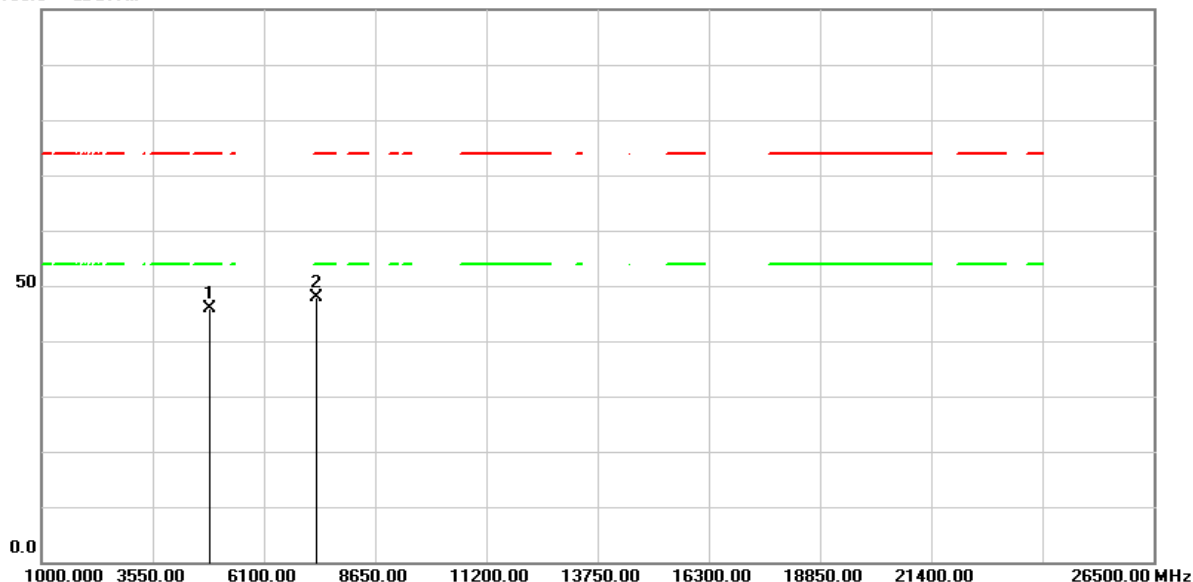
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	69.14	-19.83	49.31	74.00	-24.69	peak
2	7311.000	61.10	-13.54	47.56	74.00	-26.44	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m



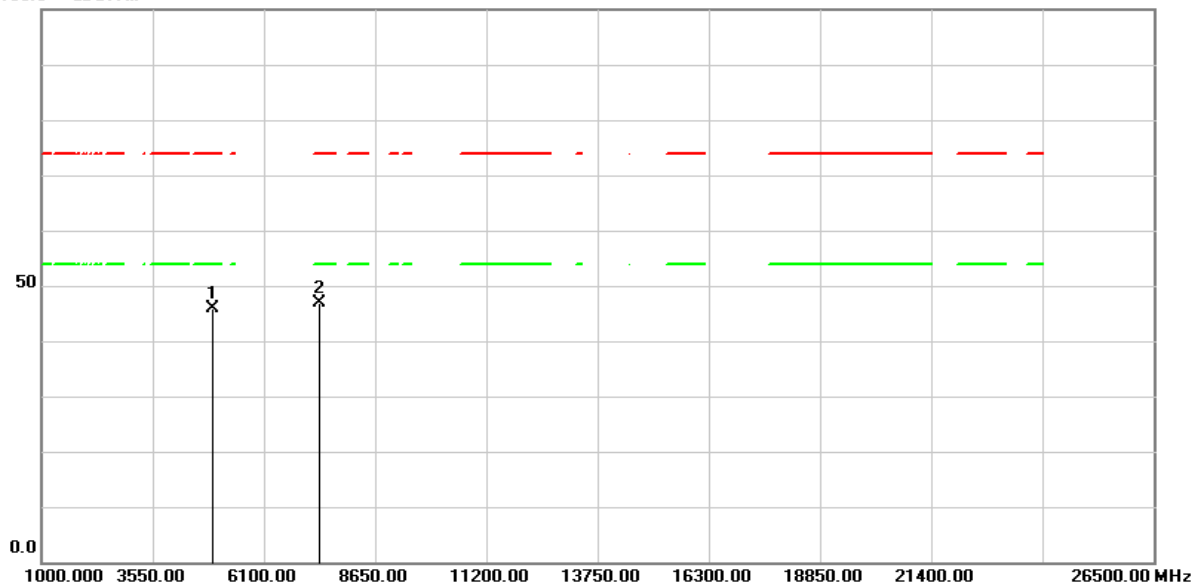
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	65.74	-19.83	45.91	74.00	-28.09	peak
2	7311.000	61.54	-13.54	48.00	74.00	-26.00	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m

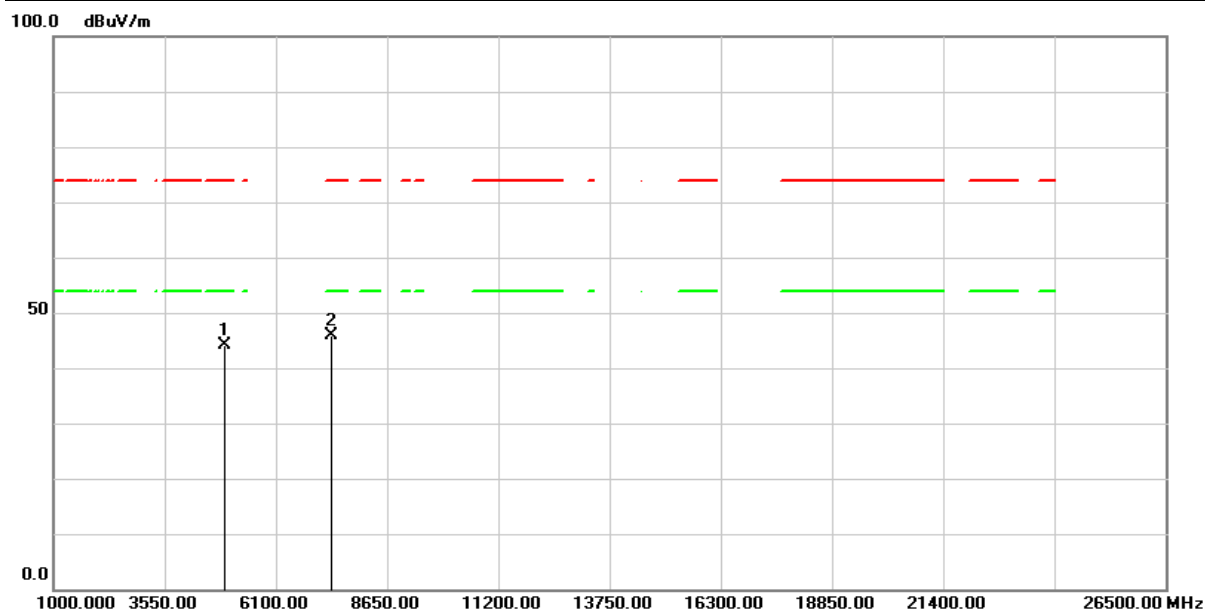


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	65.69	-19.79	45.90	74.00	-28.10	peak
2	7386.000	60.43	-13.50	46.93	74.00	-27.07	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 1 : Transmit (802.11b 1Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %



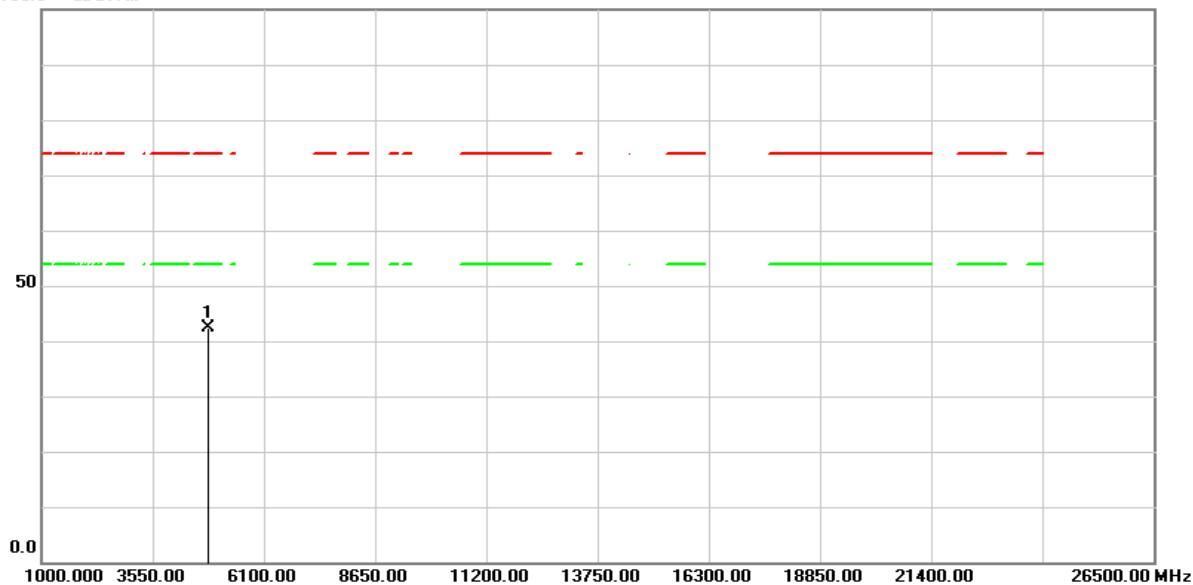
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	63.82	-19.79	44.03	74.00	-29.97	peak
2	7386.000	59.36	-13.50	45.86	74.00	-28.14	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m



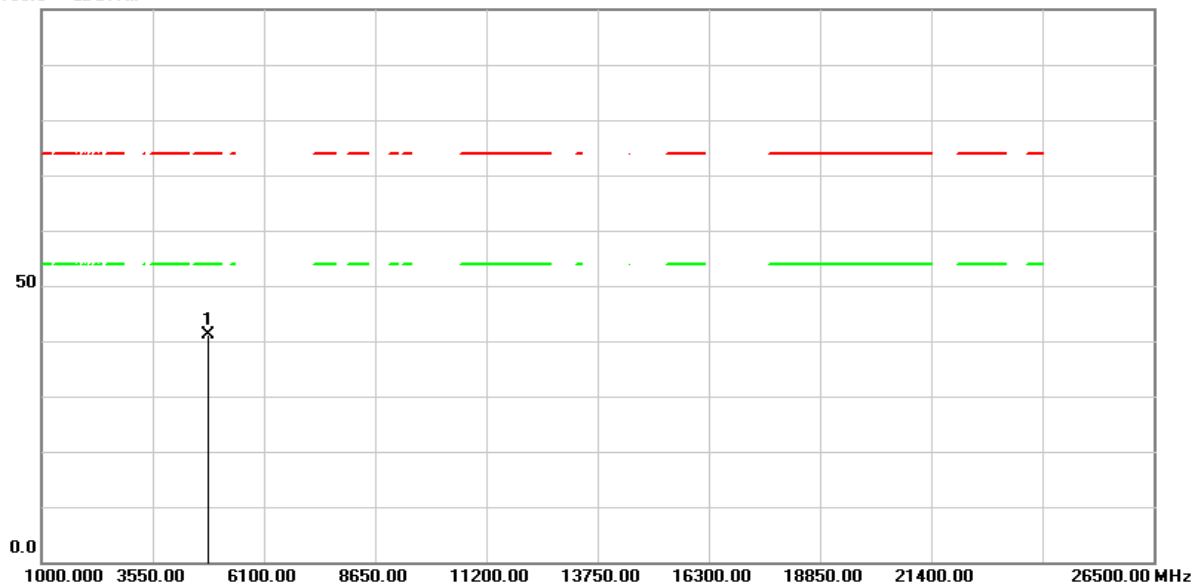
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	62.22	-19.82	42.40	74.00	-31.60	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m



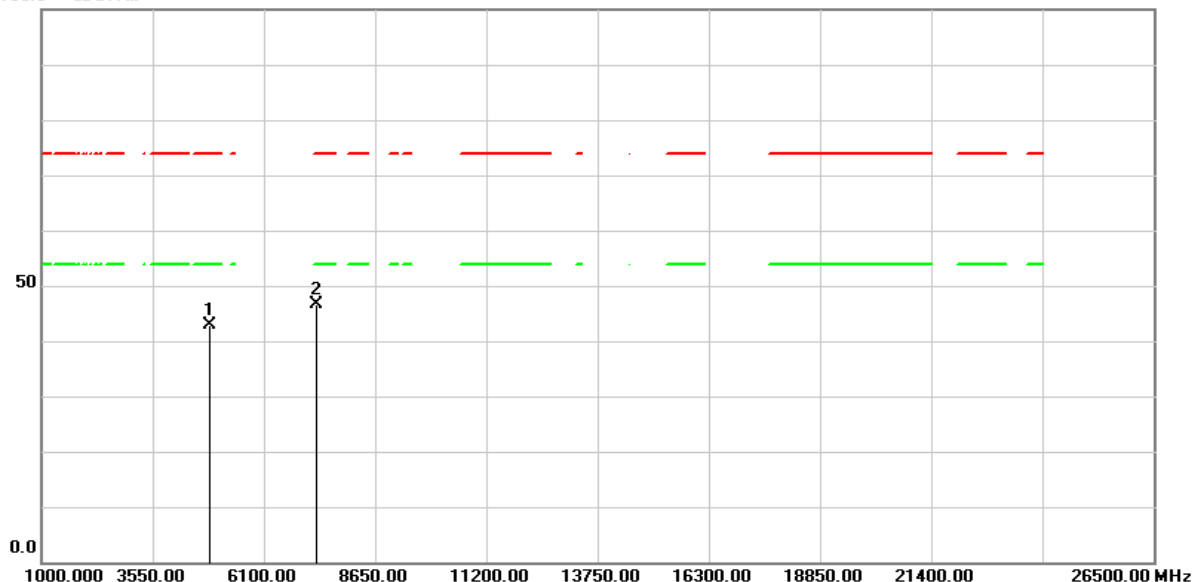
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	61.00	-19.82	41.18	74.00	-32.82	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m

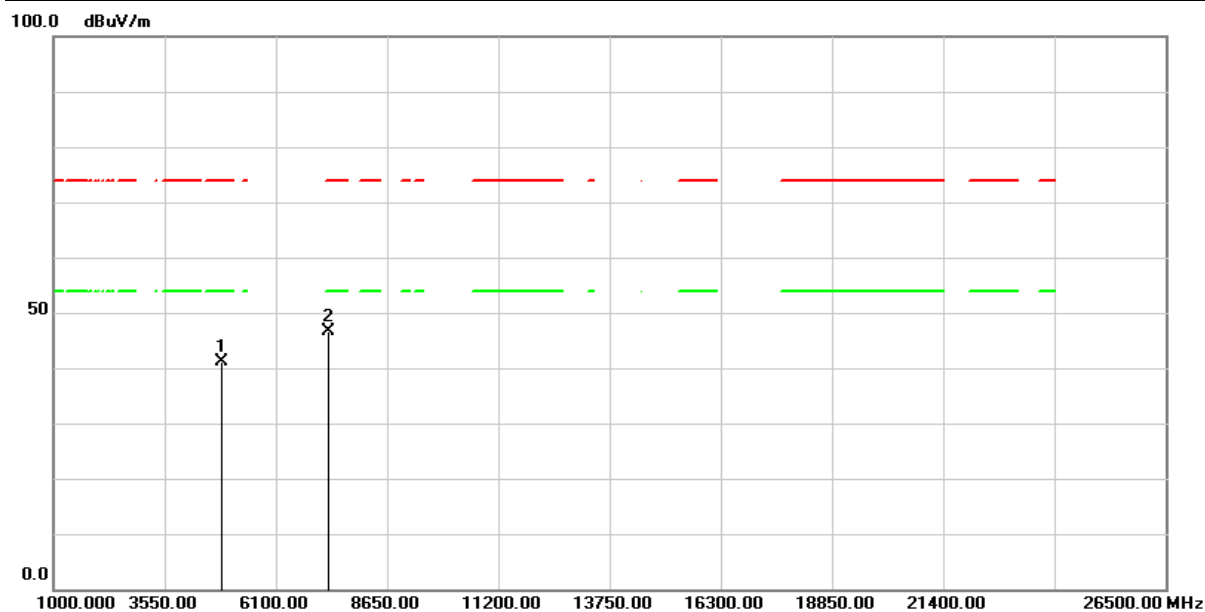


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	62.68	-19.83	42.85	74.00	-31.15	peak
2	7311.000	60.07	-13.54	46.53	74.00	-27.47	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

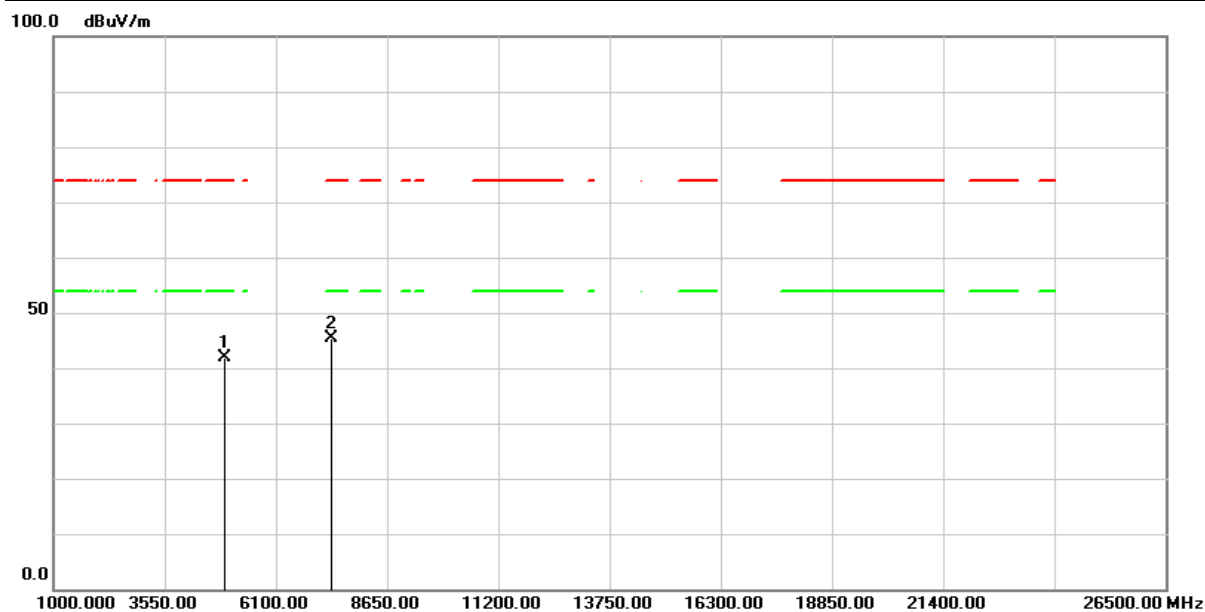


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	61.00	-19.83	41.17	74.00	-32.83	peak
2	7311.000	60.16	-13.54	46.62	74.00	-27.38	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

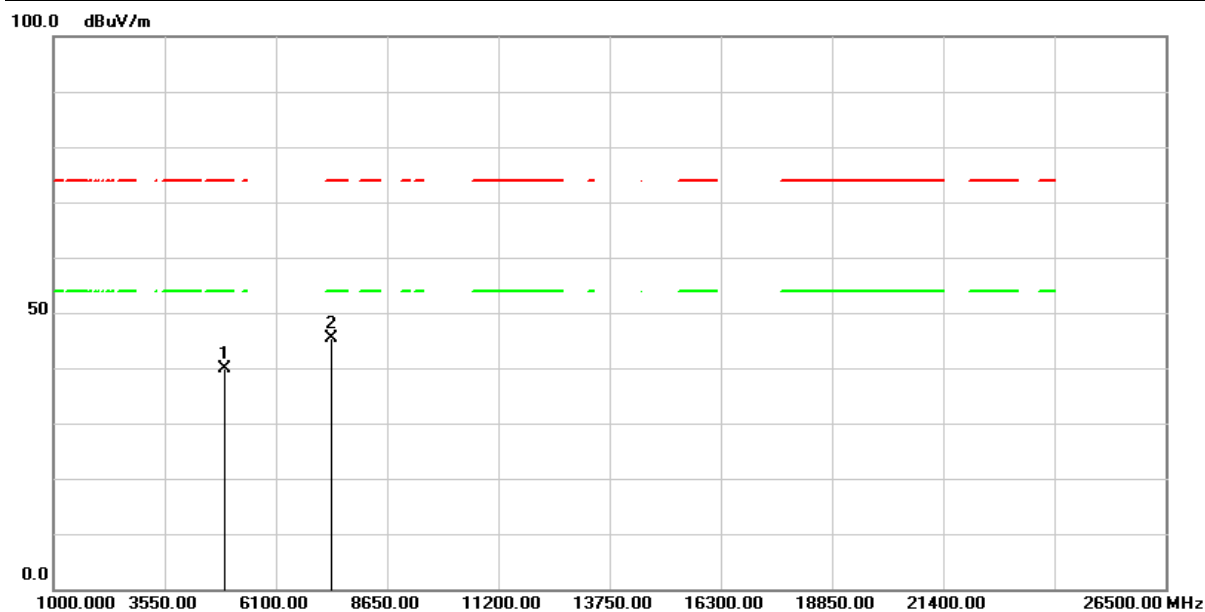


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	61.55	-19.79	41.76	74.00	-32.24	peak
2	7386.000	58.80	-13.50	45.30	74.00	-28.70	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %



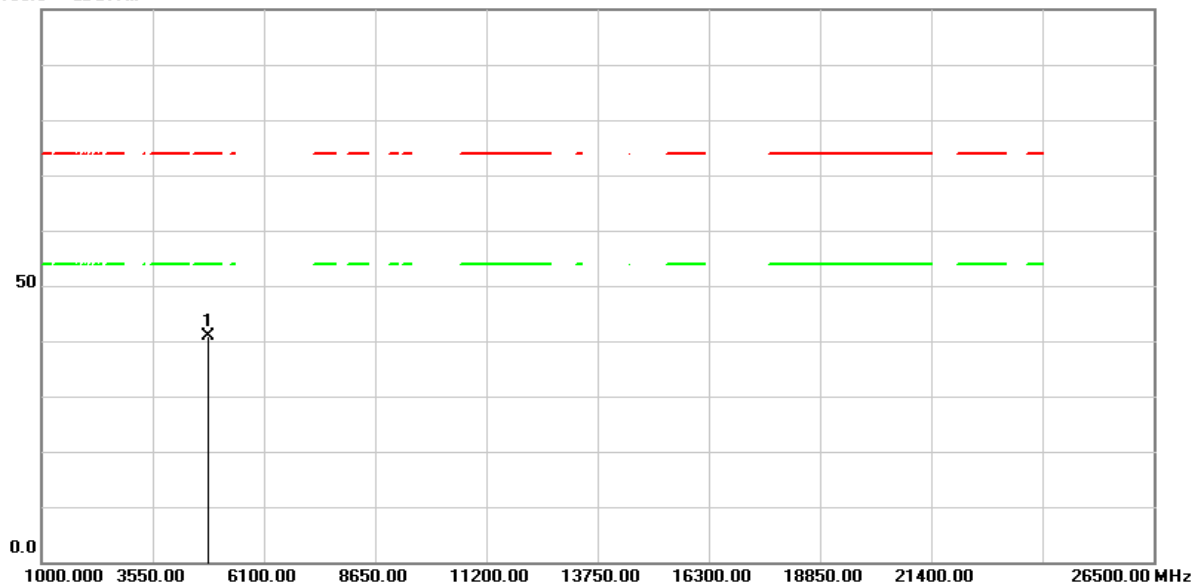
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	59.68	-19.79	39.89	74.00	-34.11	peak
2	7386.000	58.77	-13.50	45.27	74.00	-28.73	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m



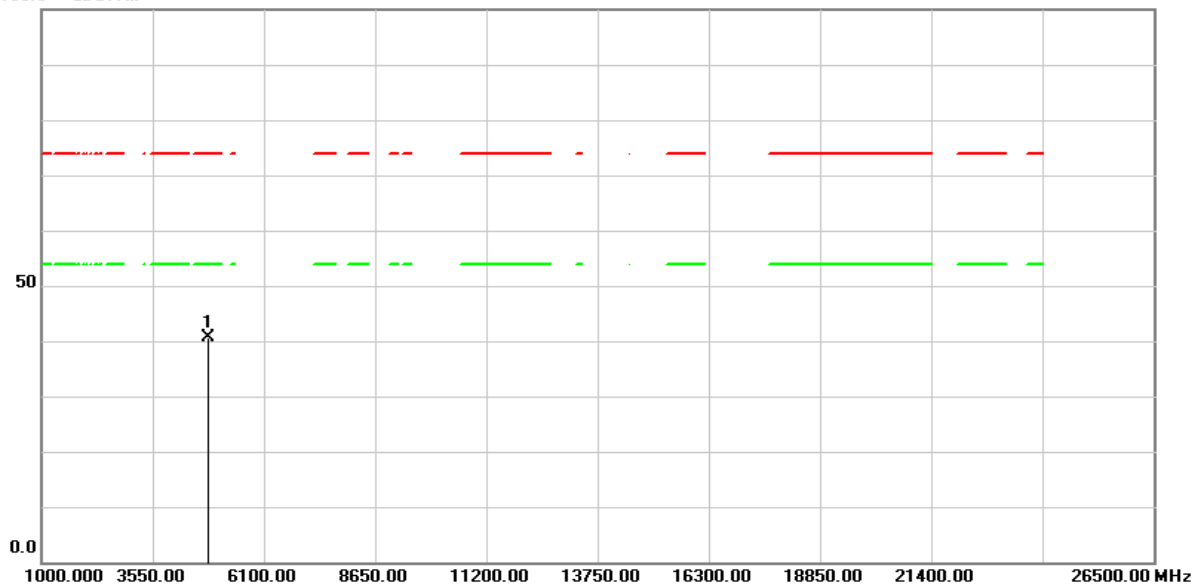
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	60.75	-19.82	40.93	74.00	-33.07	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m



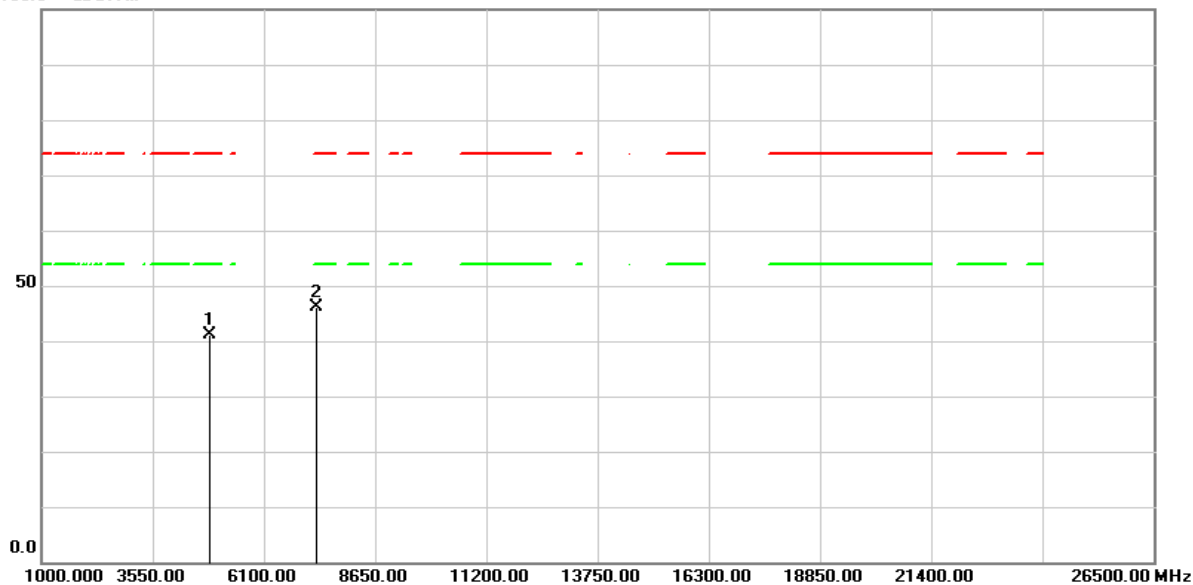
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	60.34	-19.82	40.52	74.00	-33.48	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m

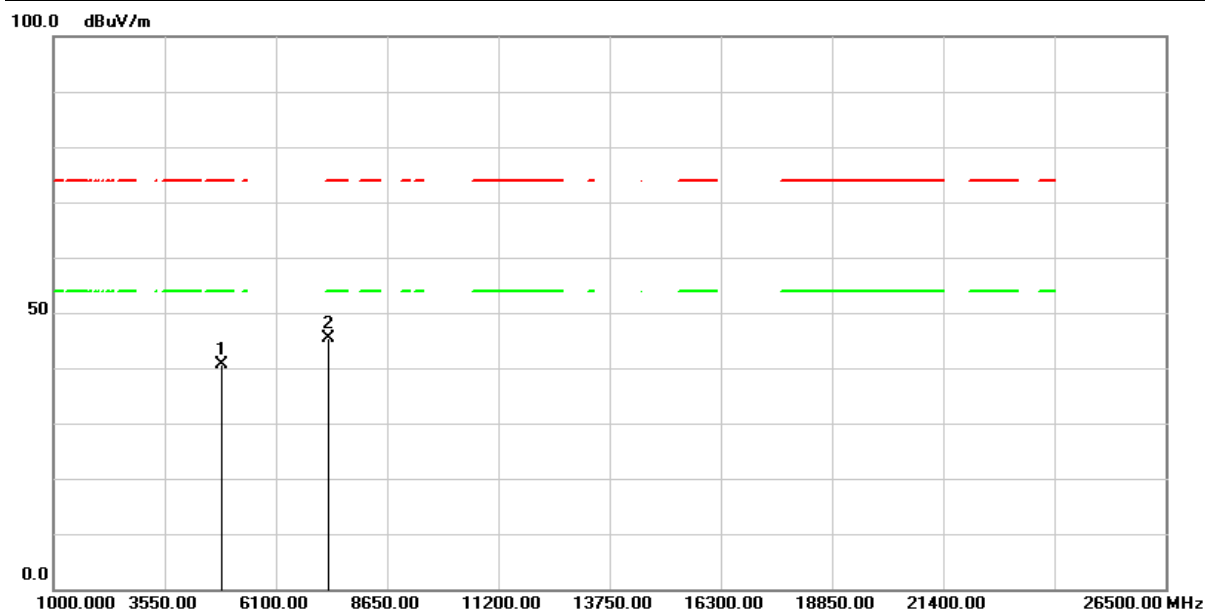


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	61.03	-19.83	41.20	74.00	-32.80	peak
2	7311.000	59.71	-13.54	46.17	74.00	-27.83	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

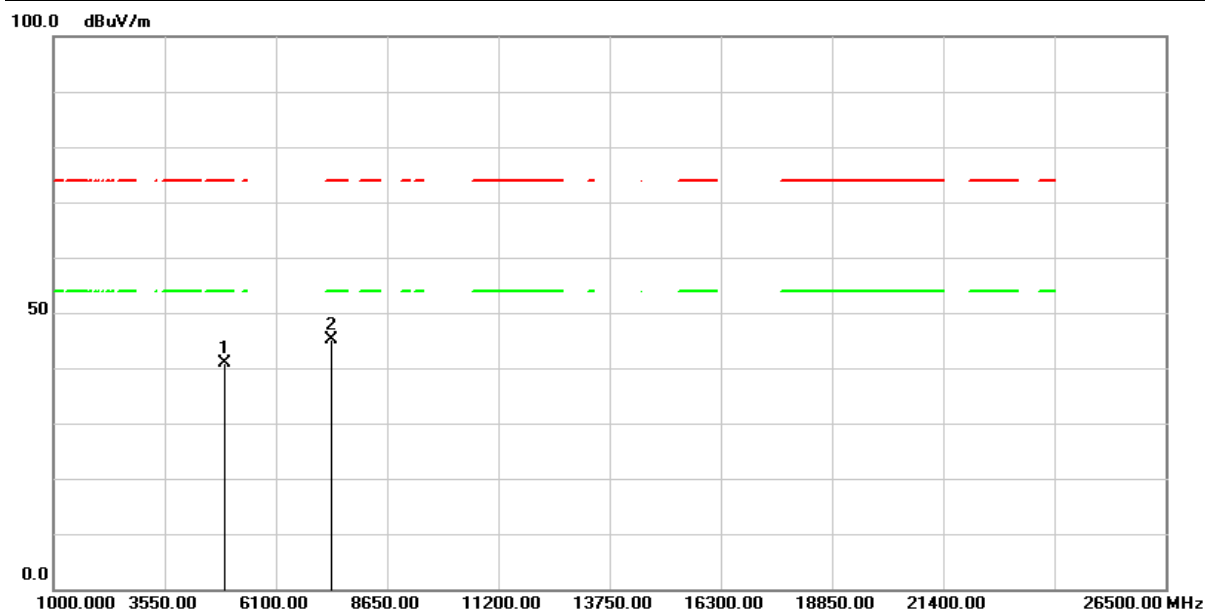


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	60.43	-19.83	40.60	74.00	-33.40	peak
2	7311.000	58.84	-13.54	45.30	74.00	-28.70	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

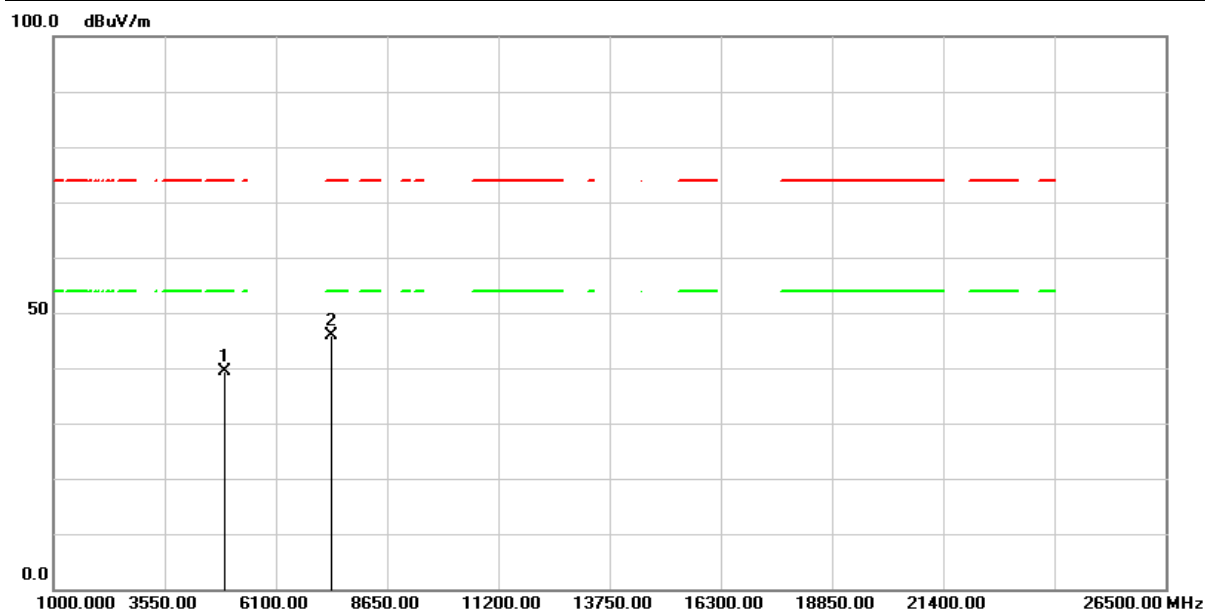


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	60.63	-19.79	40.84	74.00	-33.16	peak
2	7386.000	58.67	-13.50	45.17	74.00	-28.83	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 3 : Transmit (802.11n HT20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %



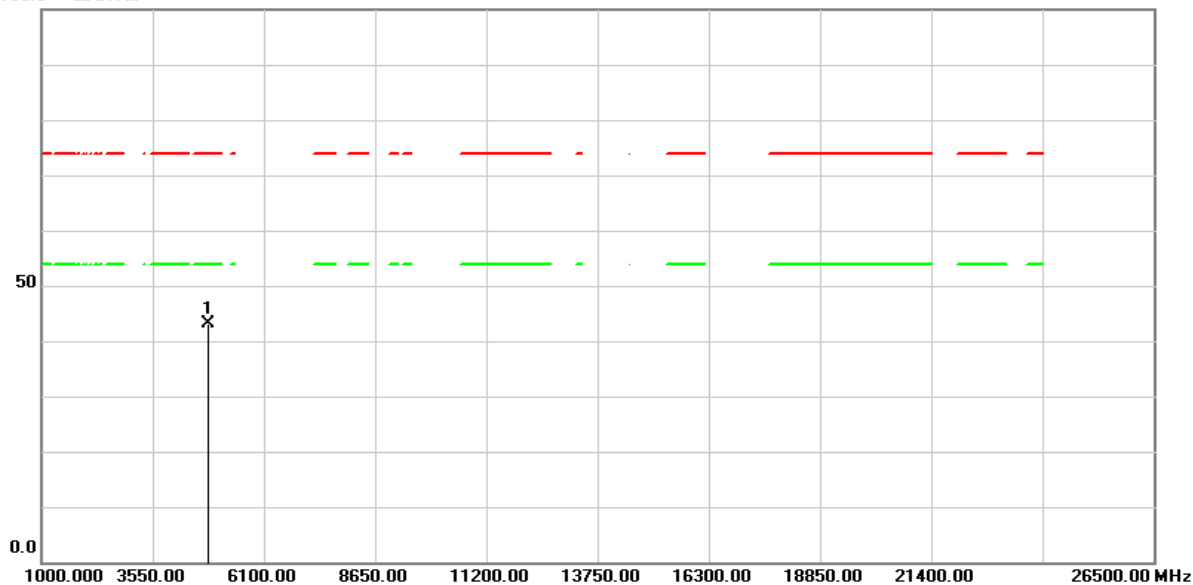
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	59.28	-19.79	39.49	74.00	-34.51	peak
2	7386.000	59.34	-13.50	45.84	74.00	-28.16	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %

100.0 dBuV/m



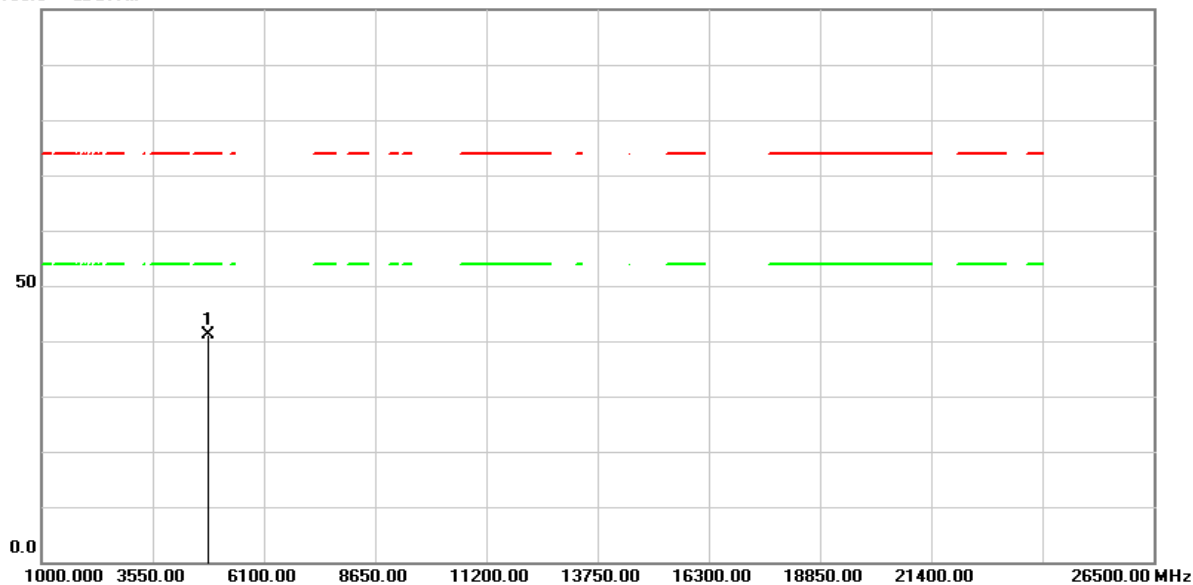
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	62.94	-19.82	43.12	74.00	-30.88	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH01(2412MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m

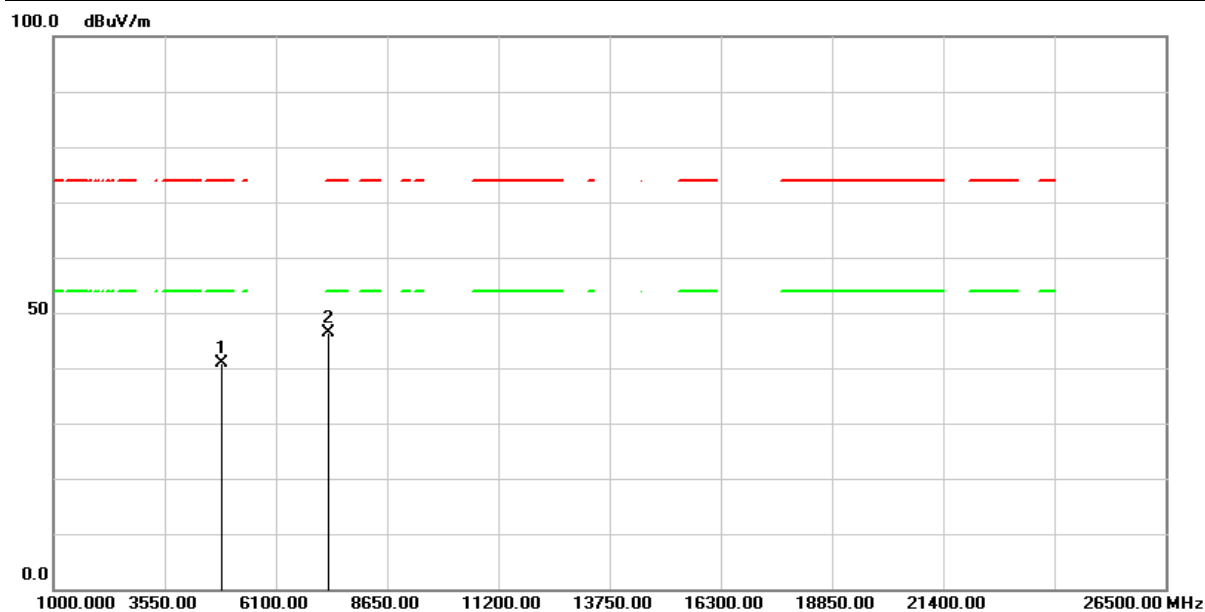


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4824.000	60.87	-19.82	41.05	74.00	-32.95	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %



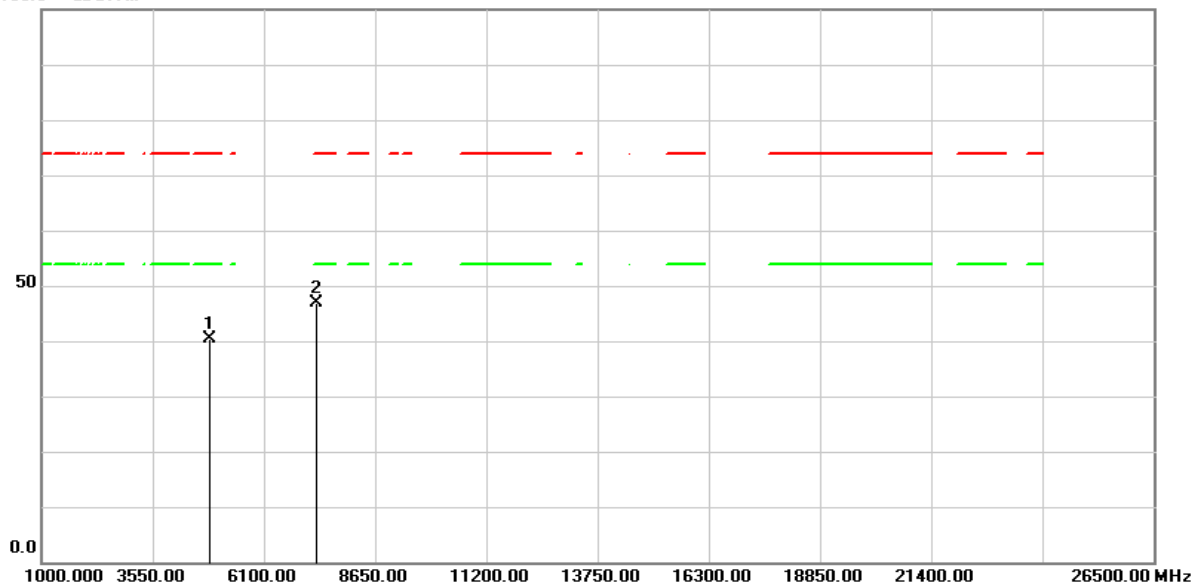
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	60.78	-19.83	40.95	74.00	-33.05	peak
2	7311.000	59.80	-13.54	46.26	74.00	-27.74	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH06(2437MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m

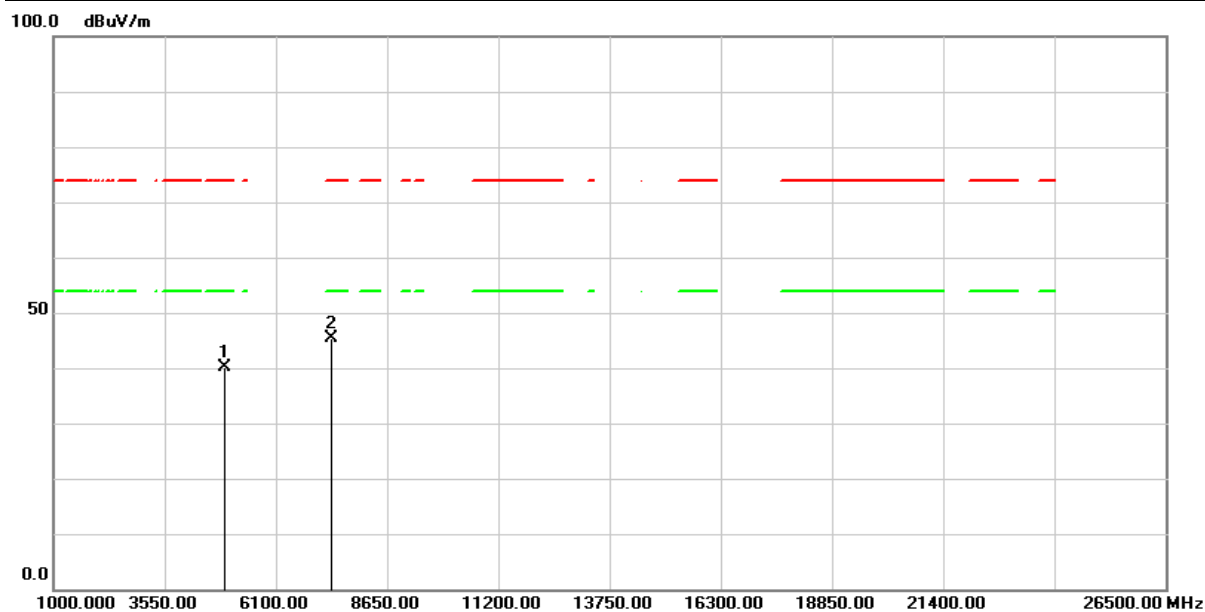


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4874.000	60.21	-19.83	40.38	74.00	-33.62	peak
2	7311.000	60.47	-13.54	46.93	74.00	-27.07	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Horizontal	Relative Humidity :	53 %



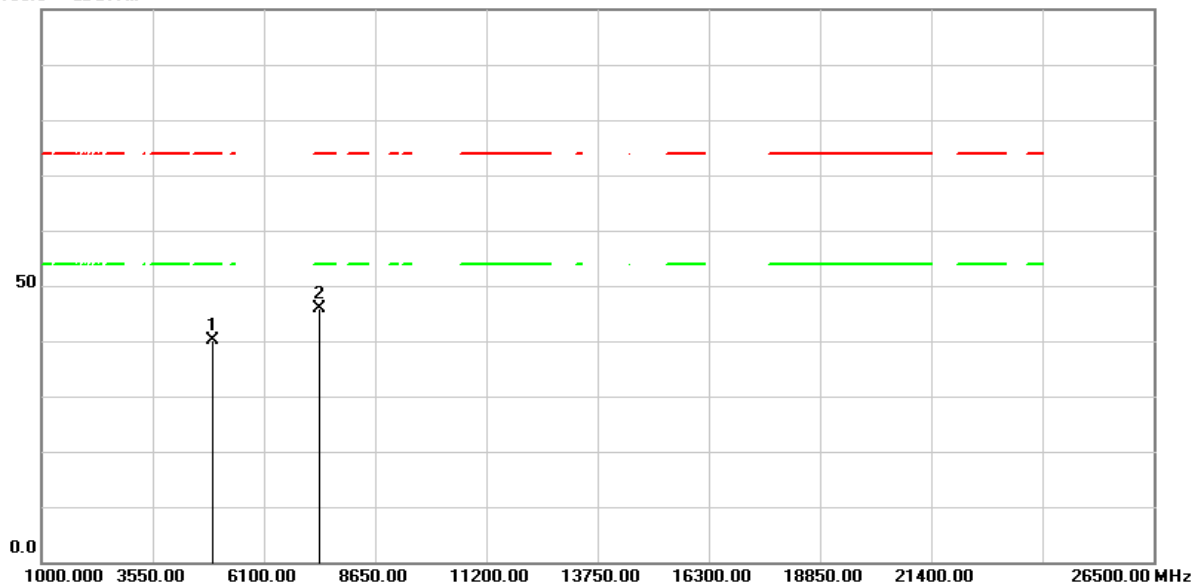
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	59.89	-19.79	40.10	74.00	-33.90	peak
2	7386.000	58.76	-13.50	45.26	74.00	-28.74	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 4 : Transmit (802.11ax HE20 MCS0)	Test Date :	2024/12/30
Test Channel :	CH11(2462MHz)	Temperature :	20.4 °C
Polarization :	Vertical	Relative Humidity :	53 %

100.0 dBuV/m



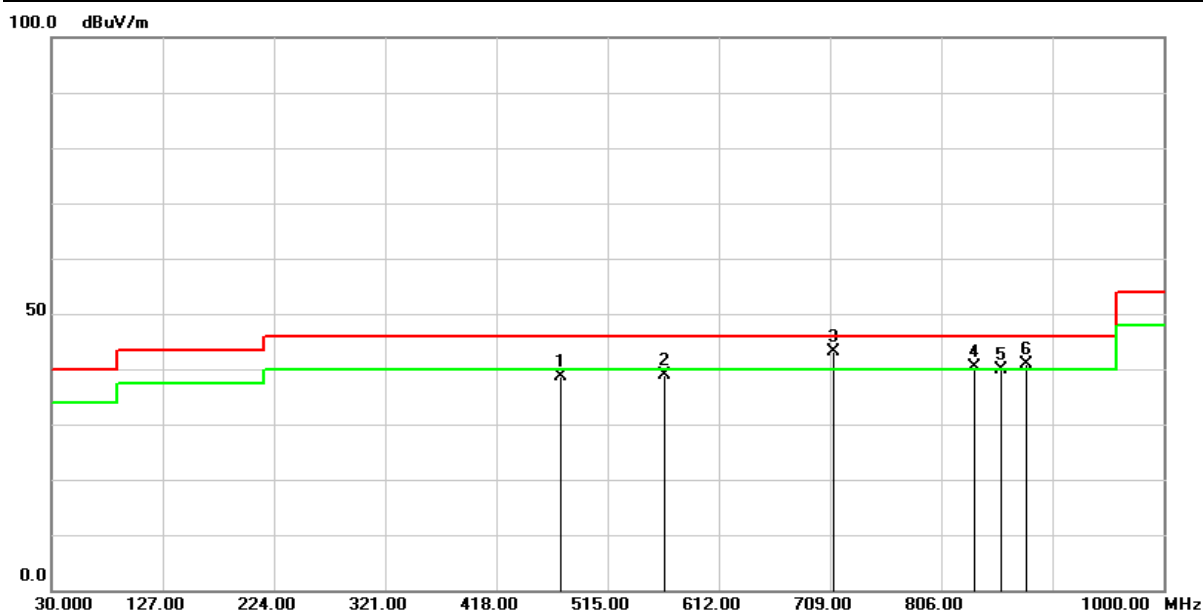
No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4924.000	59.90	-19.79	40.11	74.00	-33.89	peak
2	7386.000	59.41	-13.50	45.91	74.00	-28.09	peak

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Below 1GHz Data

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/25
Test Channel :	CH06(2437MHz)	Temperature :	21.1 °C
Polarization :	Horizontal	Relative Humidity :	53 %

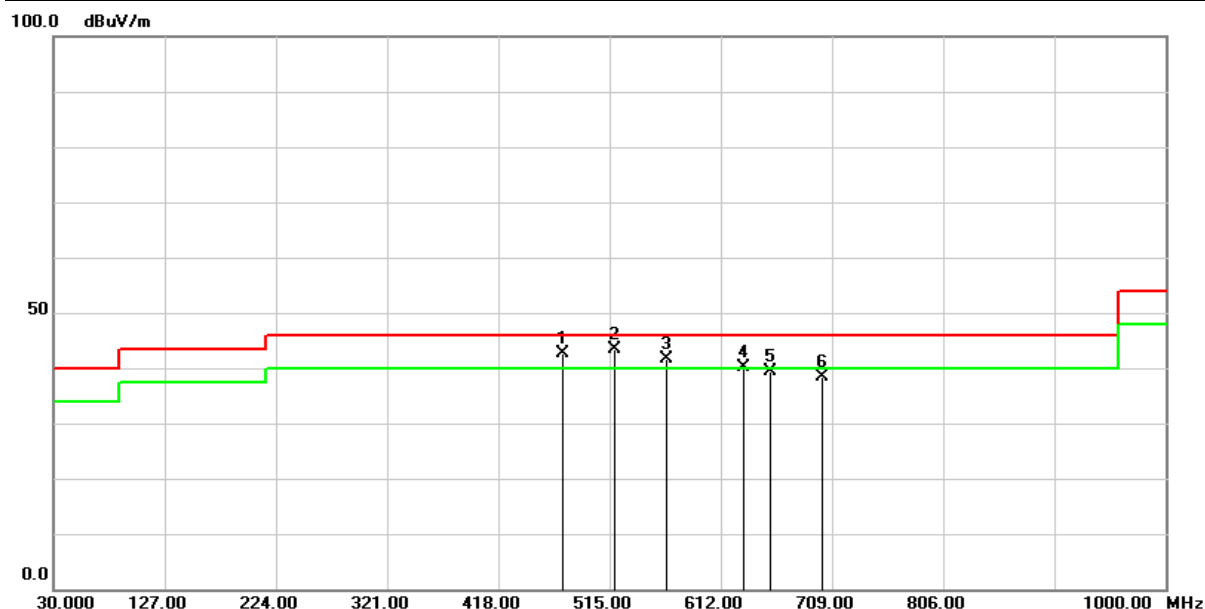


No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	474.2600	42.52	-3.80	38.72	46.00	-7.28	QP
2	564.4700	40.78	-1.86	38.92	46.00	-7.08	QP
3	711.9100	41.65	1.46	43.11	46.00	-2.89	QP
4	835.1000	36.60	3.80	40.40	46.00	-5.60	QP
5	858.3800	35.51	4.33	39.84	46.00	-6.16	QP
6	880.6900	36.40	4.47	40.87	46.00	-5.13	QP

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

Test Mode :	Mode 2 : Transmit (802.11g 6Mbps)	Test Date :	2024/12/25
Test Channel :	CH06(2437MHz)	Temperature :	21.1 °C
Polarization :	Vertical	Relative Humidity :	53 %



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	474.1430	46.34	-3.80	42.54	46.00	-3.46	QP
2	519.3091	46.25	-2.84	43.41	46.00	-2.59	QP
3	564.4700	43.42	-1.86	41.56	46.00	-4.44	QP
4	632.3700	39.88	0.36	40.24	46.00	-5.76	QP
5	654.6800	39.08	0.37	39.45	46.00	-6.55	QP
6	700.2700	37.34	1.16	38.50	46.00	-7.50	QP

Remark :

1. Correction Factor = Antenna factor + Cable loss – Amplifier gain
2. Result Value = Reading Level + Correct Factor
3. Margin Level = Result Value – Limit Value
4. The other emission levels were very low against the limit

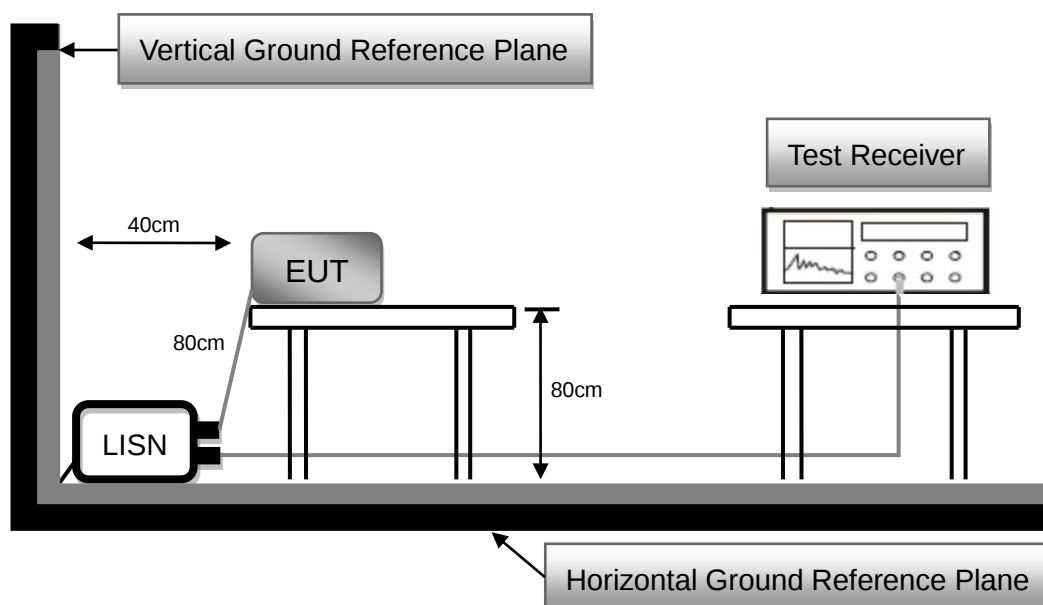
2.7 AC Conducted Emissions Measurement

2.7.1 Limit

Frequency (MHz)	FCC Part 15 Subpart C Paragraph 15.207 (dBμV) Limit	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.50 to 5.0	56	46
5.0 to 30.0	60	50

*Decreases with the logarithm of the frequency

2.7.2 Test Setup

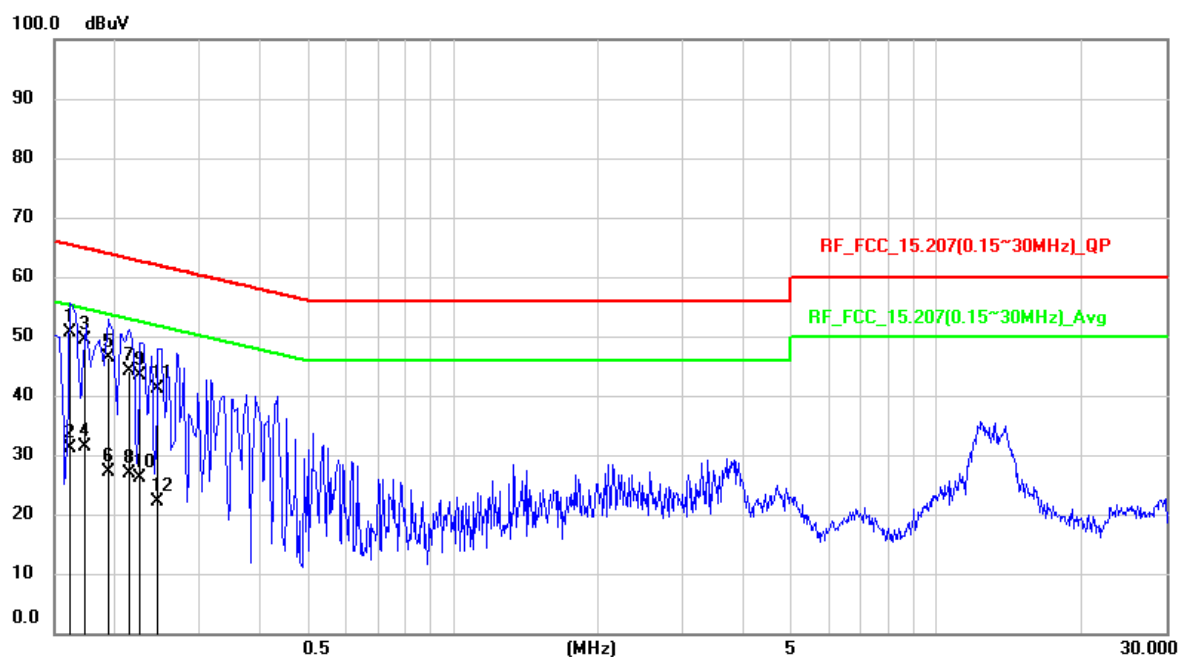


2.7.3 Test Procedure

1. Reference ANSI C63.10 : 2013 chapter 6.2
2. The EUT was placed 0.8 meter height wooden table from the horizontal ground plane with EUT being connected to power source through a line impedance stabilization network (LISN). The LISN at least be 80 cm from nearest chassis of EUT.
3. The line impedance stabilization network (LISN) provides 50 ohm/50uH of coupling impedance for the measuring instrument. All other support equipments powered from additional LISN(s).
4. Interrelating cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle. All I/O cables were positioned to simulate typical usage.
5. All I/O cables that are not connected to a peripheral shall be bundle in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
6. The EMI test receiver connected to LISN powering the EUT. The actual test configuration, please refer to EUT test photos.
7. The receiver scanned from 150kHz to 30MHz for emissions in each of test modes. Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz. A scan was taken on both power lines, Line and Neutral, recording at least six highest emissions.
8. The EUT and cable configuration of the above highest emission levels were recorded. The Test Data of the worst case was recorded.

2.7.4 Test Result

Test Voltage :	120Vac, 60Hz	Frequency Range:	0.15-30 MHz
Test Mode :	Mode 5 : Charging Mode	6dB Bandwidth :	9 kHz
Test Date :	2024/12/24	Phase :	L
Temperature :	22.6 °C	Humidity :	42 %

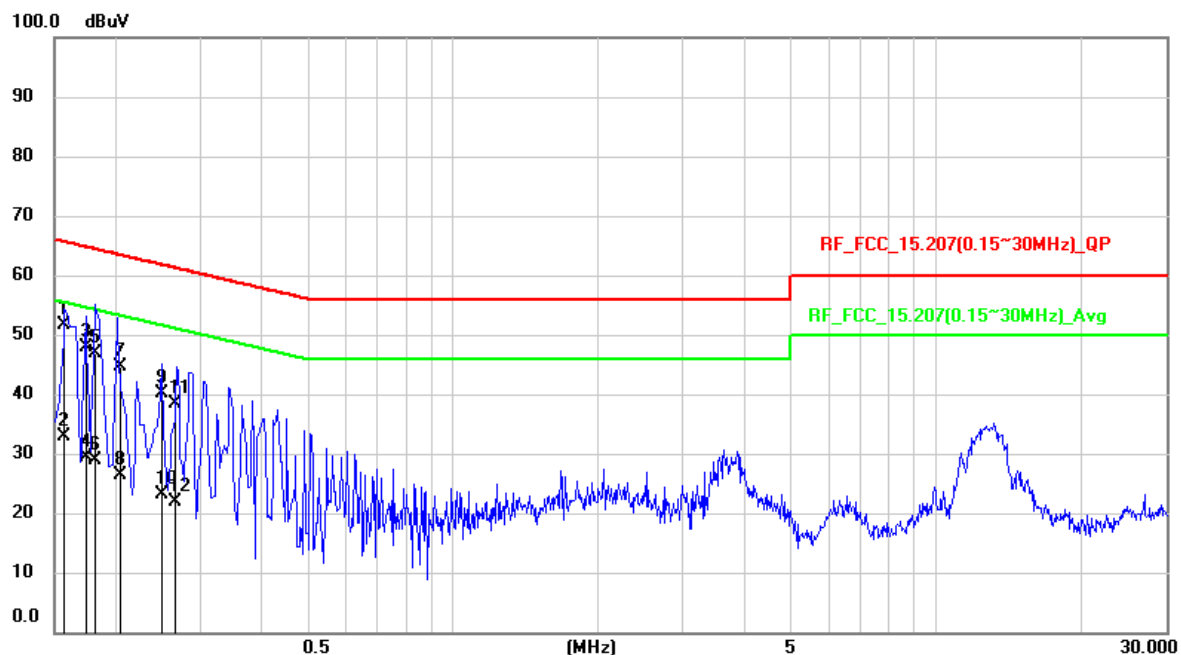


No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1621	40.82	9.83	50.65	65.36	-14.71	QP
2	0.1621	21.34	9.83	31.17	55.36	-24.19	AVG
3	0.1725	39.65	9.83	49.48	64.84	-15.36	QP
4	0.1725	21.47	9.83	31.3	54.84	-23.54	AVG
5	0.1944	36.47	9.82	46.29	63.85	-17.56	QP
6	0.1944	17.36	9.82	27.18	53.85	-26.67	AVG
7	0.2136	34.21	9.82	44.03	63.06	-19.03	QP
8	0.2136	17.15	9.82	26.97	53.06	-26.09	AVG
9	0.2251	33.55	9.82	43.37	62.63	-19.26	QP
10	0.2251	16.37	9.82	26.19	52.63	-26.44	AVG
11	0.2461	31.23	9.82	41.05	61.89	-20.84	QP
12	0.2461	12.43	9.82	22.25	51.89	-29.64	AVG

Remark:

1. QP = Quasi Peak, AVG = Average
2. Correction Factor = Insertion loss of LISN + Cable loss
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value – Limit Value

Test Voltage :	120Vac, 60Hz	Frequency Range:	0.15-30 MHz
Test Mode :	Mode 5 : Charging Mode	6dB Bandwidth :	9 kHz
Test Date :	2024/12/24	Phase :	N
Temperature :	22.6 °C	Humidity :	42 %



No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.156	41.91	9.82	51.73	65.67	-13.94	QP
2	0.156	23.15	9.82	32.97	55.67	-22.7	AVG
3	0.1734	38	9.82	47.82	64.8	-16.98	QP
4	0.1734	19.48	9.82	29.3	54.8	-25.5	AVG
5	0.1826	37.01	9.81	46.82	64.37	-17.55	QP
6	0.1826	19.01	9.81	28.82	54.37	-25.55	AVG
7	0.2057	34.81	9.81	44.62	63.38	-18.76	QP
8	0.2057	16.5	9.81	26.31	53.38	-27.07	AVG
9	0.2495	30.2	9.81	40.01	61.77	-21.76	QP
10	0.2495	13.21	9.81	23.02	51.77	-28.75	AVG
11	0.2667	28.49	9.81	38.3	61.22	-22.92	QP
12	0.2667	12.08	9.81	21.89	51.22	-29.33	AVG

Remark:

1. QP = Quasi Peak, AVG = Average
2. Correction Factor = Insertion loss of LISN + Cable loss
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value – Limit Value

--- END ---