

TEST REPORT

Report No.	CISRR26020507801
Project No.	CISR260205078
FCC ID	2BKIM-C-8031U
Applicant	Shenzhen Shi Xinzhongxin Technology Co., Ltd
Address	Floor1~3 of Block 2, Dong Huan Industrial Park, NanPu Road No.293, Shang Liao Community, Xin Qiao Street, BaoAn District, Shenzhen City, Guangdong Province, PRC.
Manufacturer	Shenzhen Shi Xinzhongxin Technology Co., Ltd
Address	Floor1~3 of Block 2, Dong Huan Industrial Park, NanPu Road No.293, Shang Liao Community, Xin Qiao Street, BaoAn District, Shenzhen City, Guangdong Province, PRC.
Product Name	WIFI Module
Trade mark	-
Model/Type reference	C-8031U
Listed Model(s)	-
Standard	47 CFR Part 15.247
Date of sample receipt	February 5, 2026
Test date	February 5, 2026 to March 23, 2026
Issue date	March 23, 2026
Test result	Complied

Lucas Huang

Reviewed by: Lucas Huang



Approved by: Hans Hu

The test results relate only to the tested samples.

The test report should not be reproduced except in full without the written approval of Shenzhen Bangce Testing Technology Co., Ltd.

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1. STANDARD AND APPLICABLE TEST METHODS

The tests were performed according to following standards:

47 CFR Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

ANSI C63.10-2020: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. REPORT VERSION

Version No.	Issue date	Description
00	March 23, 2026	Original

3. TEST DESCRIPTION

No.	Test Item	Standard Requirement	Result
1	Antenna Requirement	47 CFR 15.203	Pass
2	6dB Bandwidth	47 CFR 15.247(a)(2)	Pass
3	Maximum Conducted Output Power	47 CFR 15.247(b)(3)	Pass
4	Power Spectral Density	47 CFR 15.247(e)	Pass
5	Conducted band edge and spurious emission	47 CFR 15.247(d)	Pass
6	Radiated band edge emission	47 CFR 15.247(d), 15.209, 15.205	Pass
7	Radiated Spurious Emission (below 1GHz)	47 CFR 15.247(d), 15.209, 15.205	Pass
8	Radiated Spurious Emission (Above 1GHz)	47 CFR 15.247(d), 15.209, 15.205	Pass

Note:

- The measurement uncertainty is not included in the test result.

4. SUMMARY

4.1. Product Description *

Main unit information:	
Product Name:	WIFI Module
Trade mark:	-
Model No.:	C-8031U
Listed Model(s):	-
Model difference:	-
Power supply:	DC 3.3V
Hardware version:	-
Software version:	-

4.2. Radio Specification Description *

Modulation type:	802.11b: DSSS(CCK, DQPSK, DBPSK); 802.11g/n(HT20)/n(HT40): OFDM(BPSK, QPSK, 16QAM, 64QAM)
Operation frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz; 802.11n(HT40): 2422MHz to 2452MHz
Channel number:	802.11b/g/n(HT20): 11 Channels; 802.11n(HT40): 7 Channels
Channel separation:	5MHz
Antenna type:	PCB antenna
Antenna gain:	0dBi

Note:

- 1) *: As the above information is provided by the applicant, all relevant results and conclusions of this report are based solely on such information. Bangce lab shall not be liable for the authenticity, integrity, and resulting outcomes of the information, and/or the validity of the conclusions herein.
- 2) Operation frequency list as follow:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	6	2437	11	2462
2	2417	7	2442	12	2467
3	2422	8	2447	13	2472
4	2427	9	2452	/	/
5	2432	10	2457	/	/

4.3. Modification of EUT

No modifications are made to the EUT during all test items.

4.4. Deviation from standards

None

4.5. Testing Site

Laboratory Name	Shenzhen Bangce Testing Technology Co., Ltd.
Laboratory Location	101, building 10, Yunli Intelligent Park, Shutianpu community, Matian Street, Guangming District, Shenzhen, Guangdong, China
Contact information	Tel: 86-755-2319 6848, email: service@cis-cn.net Website: http://www.cis-cn.net/
FCC registration number	736346
FCC designation number	CN1372

5. TEST CONFIGURATION

5.1. Test frequency list

Bandwidth (MHz)	Lowest Channel (LCH) (MHz)	Middle Channel (MCH) (MHz)	Highest Channel (HCH) (MHz)
20	2412	2437	2462
40	2422	2437	2452

5.2. Descriptions of test mode

No	Test mode	Description
TM1	802.11b mode	Keep the EUT in 802.11b transmitting mode at lowest, middle and highest channel.
TM2	802.11g mode	Keep the EUT in 802.11g transmitting mode at lowest, middle and highest channel.
TM3	802.11n(HT20) mode	Keep the EUT in 802.11n(HT20) transmitting mode at lowest, middle and highest channel.
TM4	802.11n(HT40) mode	Keep the EUT in 802.11n(HT40) transmitting mode at lowest, middle and highest channel.
TM5	Link mode	Keep the EUT in WiFi linking mode with AE.

5.3. Test sample information

Type	Sample No.
Engineer sample	CISRR260205078-S01
Normal sample	CISRR260205078-S02

5.4. Environmental conditions

Type	Requirement
Temperature:	15~35°C
Relative Humidity:	25~75%
Air Pressure:	860~1060mbar

5.5. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	Bandwidth	0.19%
2	Conducted output power	1.38dB
3	Power spectral density	1.39dB
4	Conducted spurious emission	1.40dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

5.6. Equipment Used during the Test

6dB Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in non-restricted frequency bands						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Spectrum analyzer	ROHDE&SCHWARZ	FSV-40N	CIS-EE076	2026-01-06	2027-01-05
2	Notch Filter Assembly	WCS	SMU-1003	CIS-EE093	2026-01-06	2027-01-05
3	Vector Signal Generator	Agilent	N5182A	CIS-RE012	2026-01-06	2027-01-05
4	Analog Signal Generator	Agilent	N5181A	CIS-RE013	2026-01-06	2027-01-05
5	Test software	WCS	WCN-Regulator y	CIS-EE103	/	/

Band edge emissions (Radiated) Emissions in frequency bands (below 1GHz) Emissions in frequency bands (above 1GHz)						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	9*6*6 anechoic chamber	SKET	9.3*6.3*6	N/A	2024-09-02	2027-09-01
2	Spectrum analyzer	Agilent	N9020A	MY50530263	2026-01-06	2027-01-05
3	Spectrum analyzer	R&S	FSV-40N	102130	2026-01-06	2027-01-05
4	Bilog Antenna	Schwarzbeck	VULB 9163	1463	2026-01-06	2029-01-05
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	2487	2026-01-06	2029-01-05
6	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	2026-01-06	2029-01-05
7	RF Cable	Tonscend	Cable 1	/	2026-01-06	2027-01-05
8	RF Cable	Tonscend	Cable 2	/	2026-01-06	2027-01-05
9	RF Cable	SKET	Cable 3	/	2026-01-06	2027-01-05
10	L.I.S.N.#1	Schwarzbeck	NSLK8127	/	2026-01-06	2027-01-05
11	L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	2026-01-06	2027-01-05
12	Horn Antenna	SCHWARZBECK	BBHA9170	1130	2026-01-06	2029-01-05
13	Preamplifier	Tonscend	TAP18040048	AP21C806126	2026-01-06	2027-01-05
14	Variable-frequency power source	Pinhong	PH1110	/	2026-01-06	2027-01-05

15	6dB Attenuator	SKET	DC-6G	/	2026-01-06	2027-01-05
16	Antenna tower	SKT	Bk-4AT-BS	AT202104010 1-V1	2026-01-06	2027-01-05

6. TEST RESULTS

6.1. Evaluation Results (Evaluation)

6.1.1. Antenna Requirement

Test Requirement:	Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
Test Method:	---

6.1.1.1. Test Result

Pass

6.1.1.2. Conclusion:

The EUT antenna is PCB antenna. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used. Antenna structure please refer to the EUT internal photographs antenna photo.

6.2. Radio Spectrum Matter Test Results (RF)

6.2.1. 6dB Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2020+Cor 1-2023, section 11.8
Procedure:	11.8.1 Option 1 The steps for the first option are as follows: a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz. b) Set the VBW $\geq [3 \times \text{RBW}]$. c) Detector = peak. d) Trace mode = max-hold. e) Sweep = No faster than coupled (auto) time. f) Allow the trace to stabilize. g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value. 11.8.2 Option 2 The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW $\geq 3 \times \text{RBW}$, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

6.2.1.1. E.U.T. Operation

Operating Environment:					
Temperature:	23.3 °C	Humidity:	55.1 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.1.2. Test Setup Diagram



6.2.1.3. Test Result

Pass

6.2.1.4. Test Data

Please Refer to Appendix for Details.

6.2.2. Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2020+Cor 1-2023 section 11.9.1
Procedure:	ANSI C63.10-2020+Cor 1-2023, section 11.9.1 Maximum peak conducted output power

6.2.2.1. E.U.T. Operation

Operating Environment:					
Temperature:	22.7 °C	Humidity:	56.8 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.2.2. Test Setup Diagram



6.2.2.3. Test Result

Pass

6.2.2.4. Test Data

Please Refer to Appendix for Details.

6.2.3. Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), 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 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10-2020+Cor 1-2023, section 11.10
Procedure:	ANSI C63.10-2020+Cor 1-2023, section 11.10, Maximum power spectral density level in the fundamental emission

6.2.3.1. E.U.T. Operation

Operating Environment:					
Temperature:	23.2 °C	Humidity:	56.3 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.3.2. Test Setup Diagram



6.2.3.3. Test Result

Pass

6.2.3.4. Test Data

Please Refer to Appendix for Details.

6.2.4. Conducted band edge and spurious emission

Test Requirement:	47 CFR 15.247(d)
Test Limit:	Refer to 47 CFR 15.247(d), In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	ANSI C63.10-2020+Cor 1-2023 section 11.11
Procedure:	ANSI C63.10-2020+Cor 1-2023 Section 11.11.1, Section 11.11.2, Section 11.11.3

6.2.4.1. E.U.T. Operation

Operating Environment:					
Temperature:	23 °C	Humidity:	56.6 %	Atmospheric Pressure:	102 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	TM1, TM2, TM3, TM4				

6.2.4.2. Test Setup Diagram



6.2.4.3. Test Result

Pass

6.2.4.4. Test Data

Please Refer to Appendix for Details.

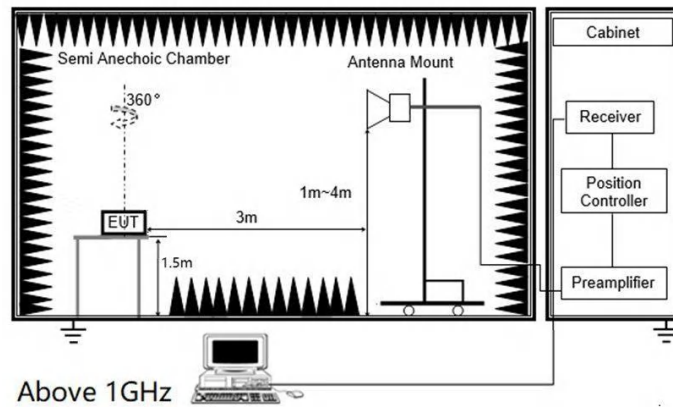
6.2.5. Radiated band edge emission

Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020+Cor 1-2023 section 6.10		
Procedure:	1>. EUT was setup and tested according to ANSI C63.10 . 2>. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. 3>. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. 4>. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement. 5>. Use the following spectrum analyzer settings: a) Span shall wide enough to fully capture the emission being measured b) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement For average measurement: use duty cycle correction factor method (DCCF), Average level = Peak level + DCCF		

6.2.5.1. E.U.T. Operation

Operating Environment:					
Temperature:	23 °C	Humidity:	56.6 %	Atmospheric Pressure:	102.2 kPa
Pre test mode:	TM1, TM2, TM3, TM4				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM4) is recorded in the report				

6.2.5.2. Test Setup Diagram

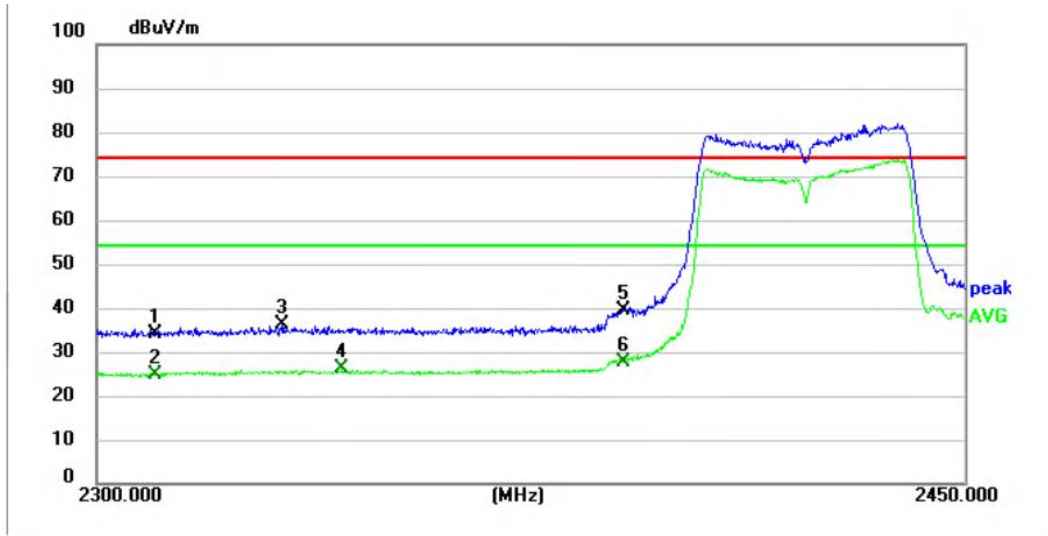


6.2.5.3. Test Result

Pass

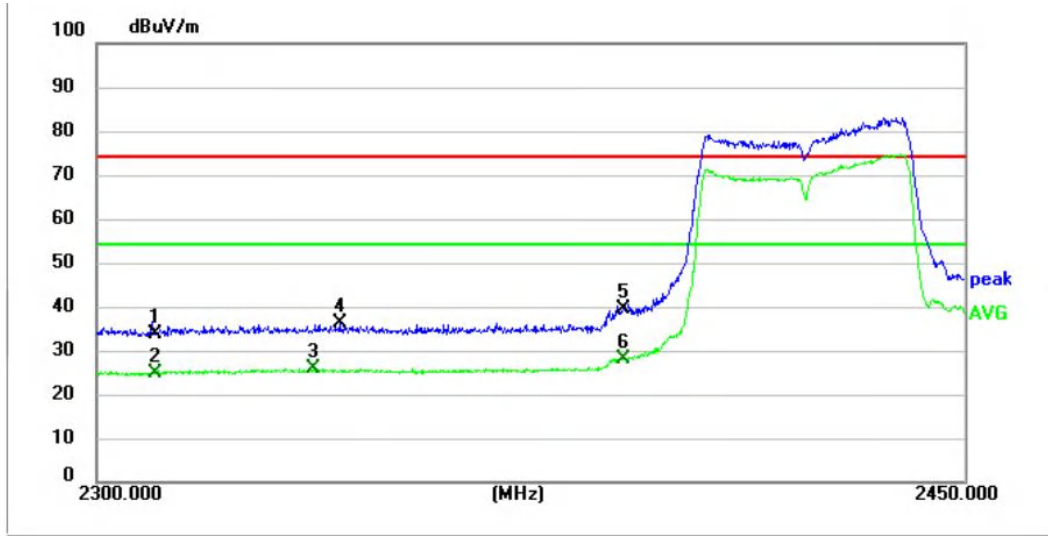
6.2.5.4. Test Data

Mode1 / Polarization: Horizontal / CH: L



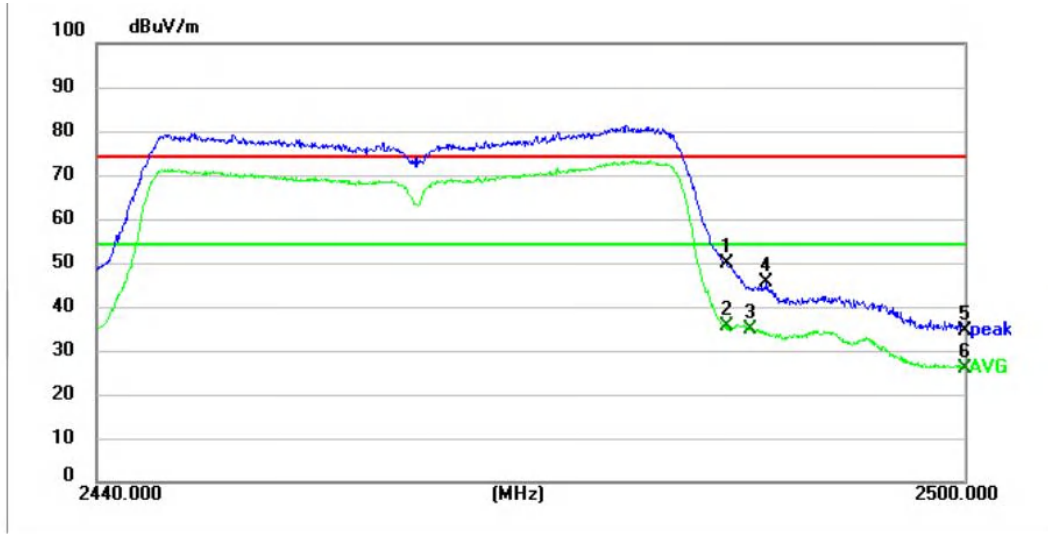
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2310.0000	51.80	-17.52	34.28	74.00	39.72	peak
2	2310.0000	42.33	-17.52	24.81	54.00	29.19	AVG
3	2331.1850	53.64	-17.48	36.16	74.00	37.84	peak
4	2341.5500	43.56	-17.47	26.09	54.00	27.91	AVG
5	2390.0000	56.73	-17.32	39.41	74.00	34.59	peak
6 *	2390.0000	45.14	-17.32	27.82	54.00	26.18	AVG

Mode1 / Polarization: Vertical / CH: L



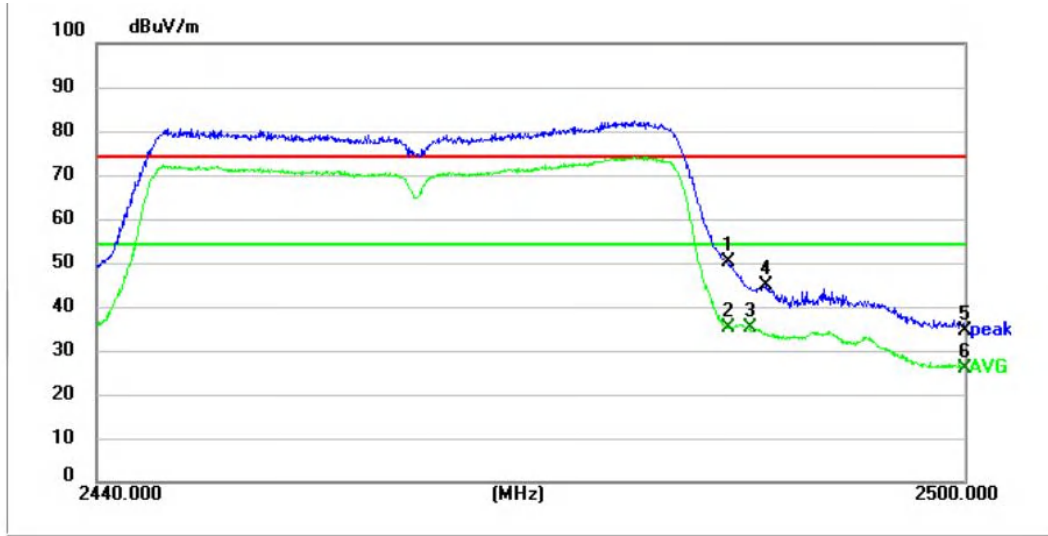
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2310.0000	51.14	-17.52	33.62	74.00	40.38	peak
2	2310.0000	42.33	-17.52	24.81	54.00	29.19	AVG
3	2336.7500	43.40	-17.47	25.93	54.00	28.07	AVG
4	2341.1150	53.75	-17.47	36.28	74.00	37.72	peak
5	2390.0000	56.95	-17.32	39.63	74.00	34.37	peak
6 *	2390.0000	45.45	-17.32	28.13	54.00	25.87	AVG

Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.5000	66.69	-17.03	49.66	74.00	24.34	peak
2 *	2483.5000	52.47	-17.03	35.44	54.00	18.56	AVG
3	2485.1500	51.90	-17.02	34.88	54.00	19.12	AVG
4	2486.2360	62.52	-17.02	45.50	74.00	28.50	peak
5	2500.0000	51.57	-16.94	34.63	74.00	39.37	peak
6	2500.0000	42.67	-16.94	25.73	54.00	28.27	AVG

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.5000	67.07	-17.03	50.04	74.00	23.96	peak
2 *	2483.5000	52.31	-17.03	35.28	54.00	18.72	AVG
3	2485.1020	52.13	-17.02	35.11	54.00	18.89	AVG
4	2486.2360	61.76	-17.02	44.74	74.00	29.26	peak
5	2500.0000	51.42	-16.94	34.48	74.00	39.52	peak
6	2500.0000	42.76	-16.94	25.82	54.00	28.18	AVG

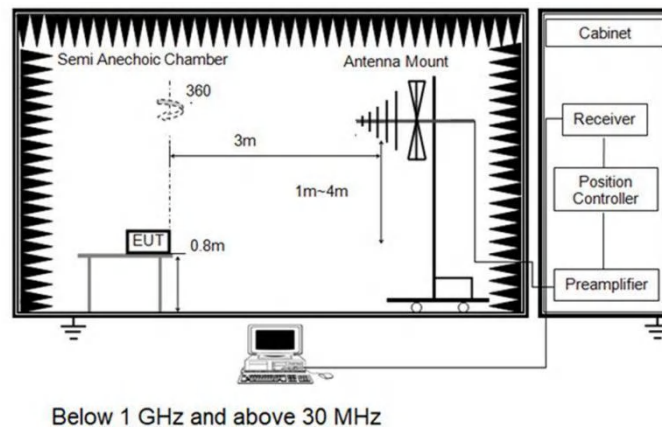
6.2.6. Radiated Spurious Emission (below 1GHz)

Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020+Cor 1-2023 section 6.6.4		
Procedure:	1>. The EUT was setup and tested according to ANSI C63.10. 2>. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level. 3>. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower. 4>. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines. 5>. Set to the maximum power setting and enable the EUT transmit continuously. 6>. Use the following spectrum analyzer settings a) Span shall wide enough to fully capture the emission being measured; b) RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.		

6.2.6.1. E.U.T. Operation

Operating Environment:					
Temperature:	23.2 °C	Humidity:	55.6 %	Atmospheric Pressure:	102.2 kPa
Pre test mode:	TM1, TM2, TM3, TM4, TM5				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM1) is recorded in the report				

6.2.6.2. Test Setup Diagram



6.2.6.3. Test Result

Pass

6.2.6.4. Test Data

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	46.9947	51.63	-29.27	22.36	40.00	17.64	QP
2 *	72.0843	61.97	-33.41	28.56	40.00	11.44	QP
3	147.9214	57.37	-33.62	23.75	43.50	19.75	QP
4	264.7457	48.66	-28.40	20.26	46.00	25.74	QP
5	485.6092	44.55	-22.36	22.19	46.00	23.81	QP
6	919.2865	44.80	-14.70	30.10	46.00	15.90	QP

Mode1 / Polarization: Vertical / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.9618	65.41	-32.07	33.34	40.00	6.66	QP
2	47.8260	58.24	-29.23	29.01	40.00	10.99	QP
3 *	71.9253	67.21	-33.39	33.82	40.00	6.18	QP
4	149.4857	64.50	-33.42	31.08	43.50	12.42	QP
5	333.6867	53.26	-26.17	27.09	46.00	18.91	QP
6	605.6592	46.92	-18.97	27.95	46.00	18.05	QP

Note:

1>. For 9 kHz ~ 30 MHz Measurement

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

2>. Level= Reading + Factor (Antenna Factor+ Cable Loss- Preamp Factor)

3>. Margin = Limit – Level

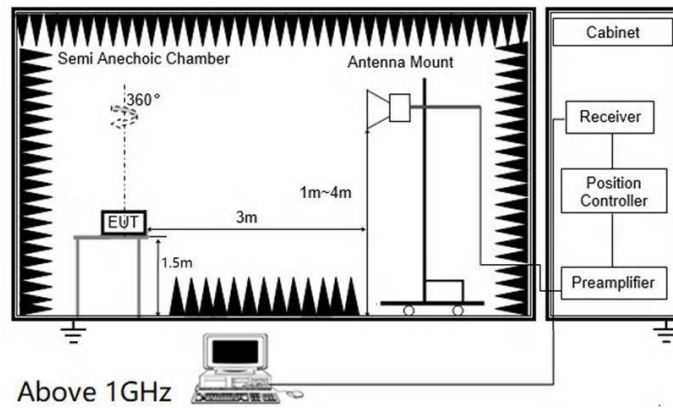
6.2.7. Radiated Spurious Emission (Above 1GHz)

Test Requirement:	Refer to 47 CFR 15.247(d), in addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100 **	3
	88-216	150 **	3
	216-960	200 **	3
	Above 960	500	3
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.			
Test Method:	ANSI C63.10-2020+Cor 1-2023 section 6.6.4		
Procedure:	1>. The EUT was setup and tested according to ANSI C63.10. 2>. The EUT is placed on a turn table which is 0.8 meter above ground for 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level. 3>. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower. 4>. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines. 5>. Set to the maximum power setting and enable the EUT transmit continuously. 6>. Use the following spectrum analyzer settings a) Span shall wide enough to fully capture the emission being measured; b) Set RBW=1MHz, VBW=3MHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement For average measurement: use duty cycle correction factor method (DCCF) Average level = Peak level + DCCF		

6.2.7.1. E.U.T. Operation

Operating Environment:					
Temperature:	23 °C	Humidity:	55.3 %	Atmospheric Pressure:	102.2 kPa
Pre test mode:	TM1, TM2, TM3, TM4, TM5				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (TM1) is recorded in the report				

6.2.7.2. Test Setup Diagram

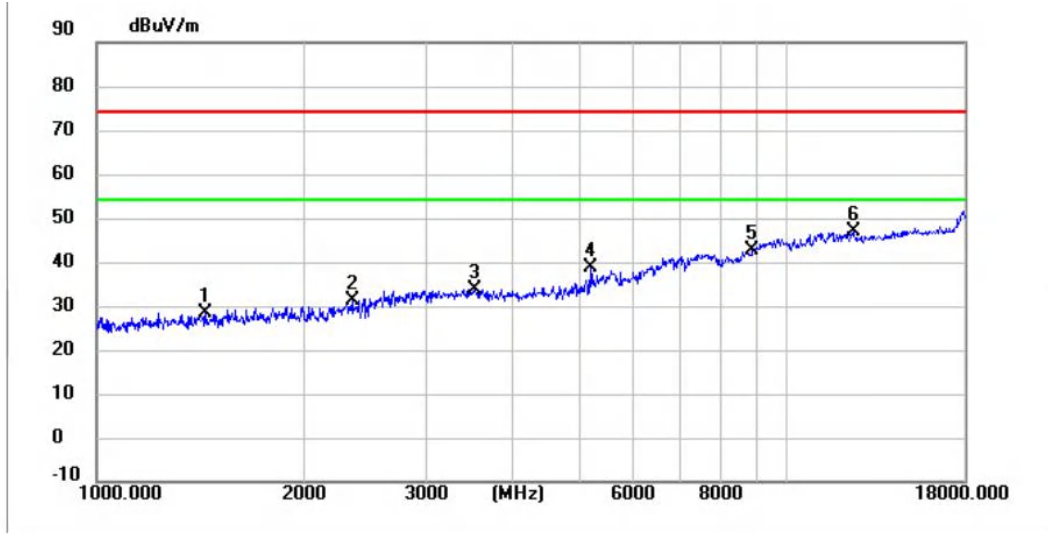


6.2.7.3. Test Result

Pass

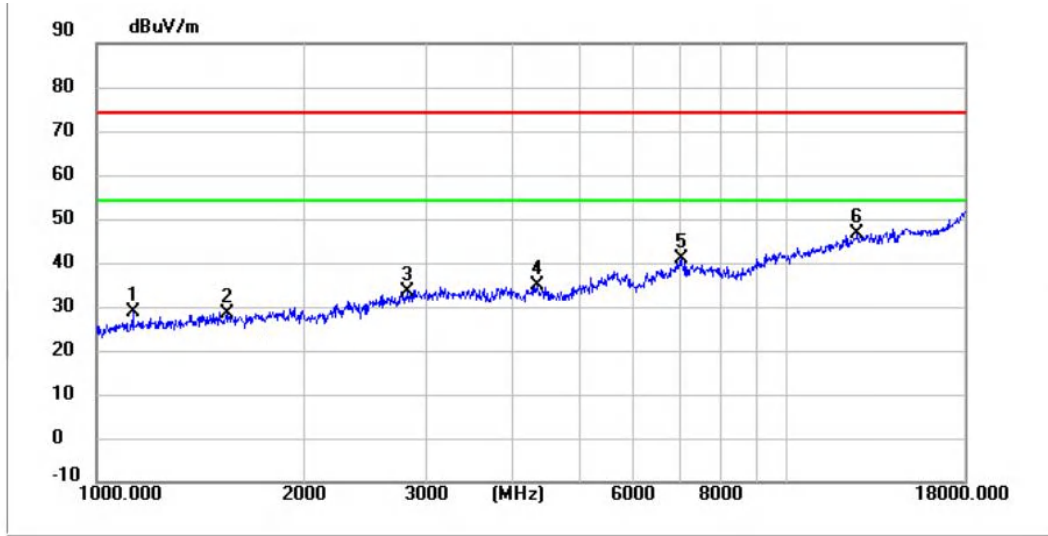
6.2.7.4. Test Data

Mode1 / Polarization: Horizontal / CH: L



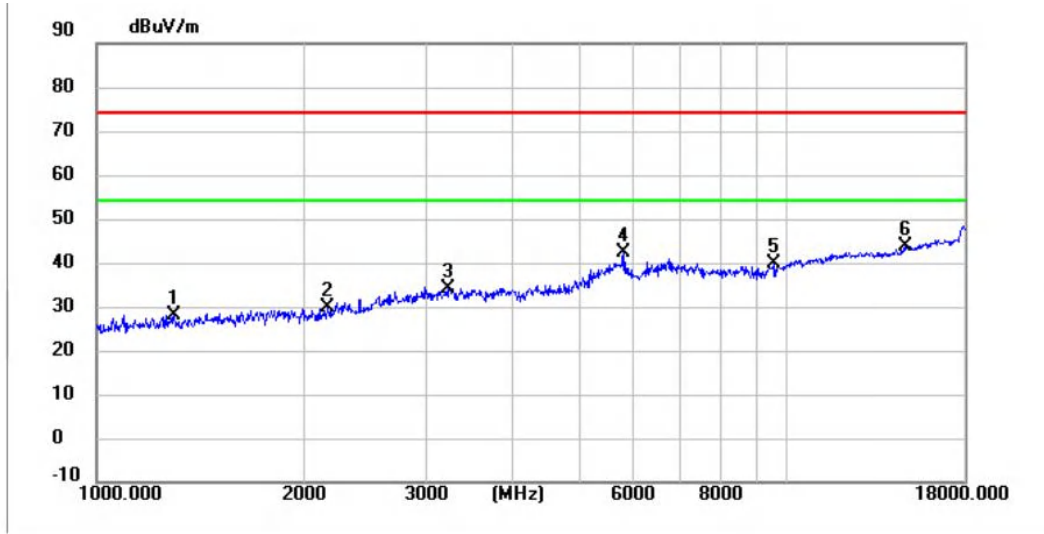
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1440.3000	49.24	-20.88	28.36	74.00	45.64	peak
2	2349.8000	48.64	-17.46	31.18	74.00	42.82	peak
3	3531.3000	47.35	-13.65	33.70	74.00	40.30	peak
4	5207.5000	46.66	-7.97	38.69	74.00	35.31	peak
5	8893.1000	34.56	7.99	42.55	74.00	31.45	peak
6 *	12449.5000	32.05	14.94	46.99	74.00	27.01	peak

Mode1 / Polarization: Vertical / CH: L



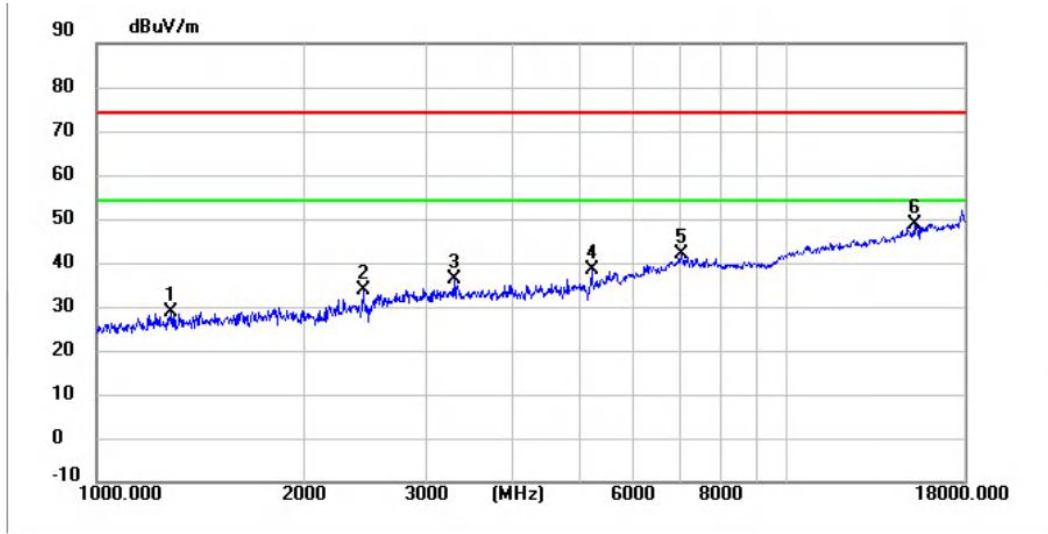
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1129.2000	50.51	-21.68	28.83	74.00	45.17	peak
2	1547.4000	49.12	-20.65	28.47	74.00	45.53	peak
3	2824.1000	48.63	-15.28	33.35	74.00	40.65	peak
4	4364.3000	46.38	-11.46	34.92	74.00	39.08	peak
5	7023.1000	37.20	3.75	40.95	74.00	33.05	peak
6 *	12628.0000	31.37	15.10	46.47	74.00	27.53	peak

Mode1 / Polarization: Horizontal / CH: M



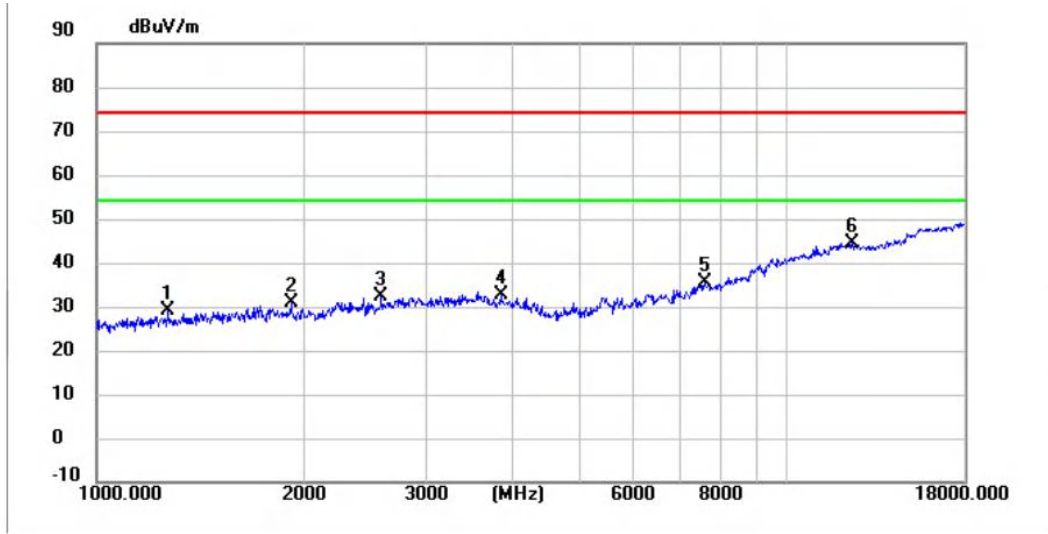
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1297.5000	49.45	-21.29	28.16	74.00	45.84	peak
2	2161.1000	47.83	-17.99	29.84	74.00	44.16	peak
3	3238.9000	48.21	-13.96	34.25	74.00	39.75	peak
4	5790.6000	48.47	-6.18	42.29	74.00	31.71	peak
5	9542.5000	29.80	9.87	39.67	74.00	34.33	peak
6 *	14795.5000	25.70	18.05	43.75	74.00	30.25	peak

Mode1 / Polarization: Vertical / CH: M



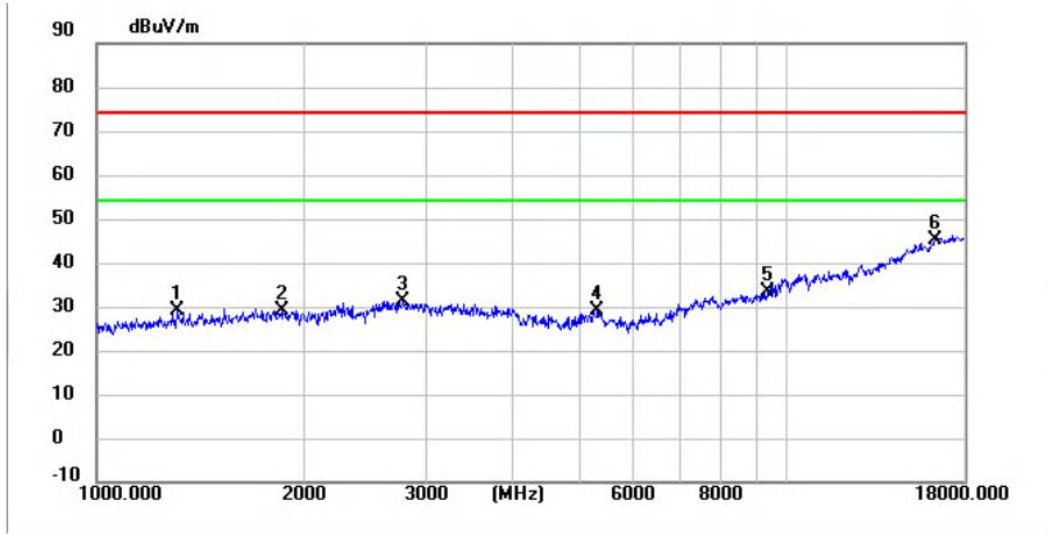
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1282.2000	50.02	-21.32	28.70	74.00	45.30	peak
2	2434.8000	50.84	-17.23	33.61	74.00	40.39	peak
3	3291.6000	50.24	-13.94	36.30	74.00	37.70	peak
4	5212.6000	46.19	-7.95	38.24	74.00	35.76	peak
5	7026.5000	38.20	3.75	41.95	74.00	32.05	peak
6 *	15325.9000	31.33	17.58	48.91	74.00	25.09	peak

Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1272.0000	50.51	-21.33	29.18	74.00	44.82	peak
2	1914.6000	50.22	-19.21	31.01	74.00	42.99	peak
3	2584.4000	48.80	-16.31	32.49	74.00	41.51	peak
4	3850.9000	45.54	-12.70	32.84	74.00	41.16	peak
5	7587.5000	29.75	5.63	35.38	74.00	38.62	peak
6 *	12432.5000	29.39	14.91	44.30	74.00	29.70	peak

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1309.4000	50.48	-21.27	29.21	74.00	44.79	peak
2	1856.8000	48.64	-19.40	29.24	74.00	44.76	peak
3	2776.5000	46.80	-15.48	31.32	74.00	42.68	peak
4	5302.7000	36.60	-7.60	29.00	74.00	45.00	peak
5	9374.2000	23.68	9.54	33.22	74.00	40.78	peak
6 *	16320.4000	28.64	16.61	45.25	74.00	28.75	peak

Note:

1>. Level= Reading + Factor (Antenna Factor+ Cable Loss- Preamp Factor)

2>. Margin = Limit – Level

3>. Average measurement was not performed if peak level is lower than average limit (54dBuV/m) above 1GHz.

7. APPENDIX REPORT

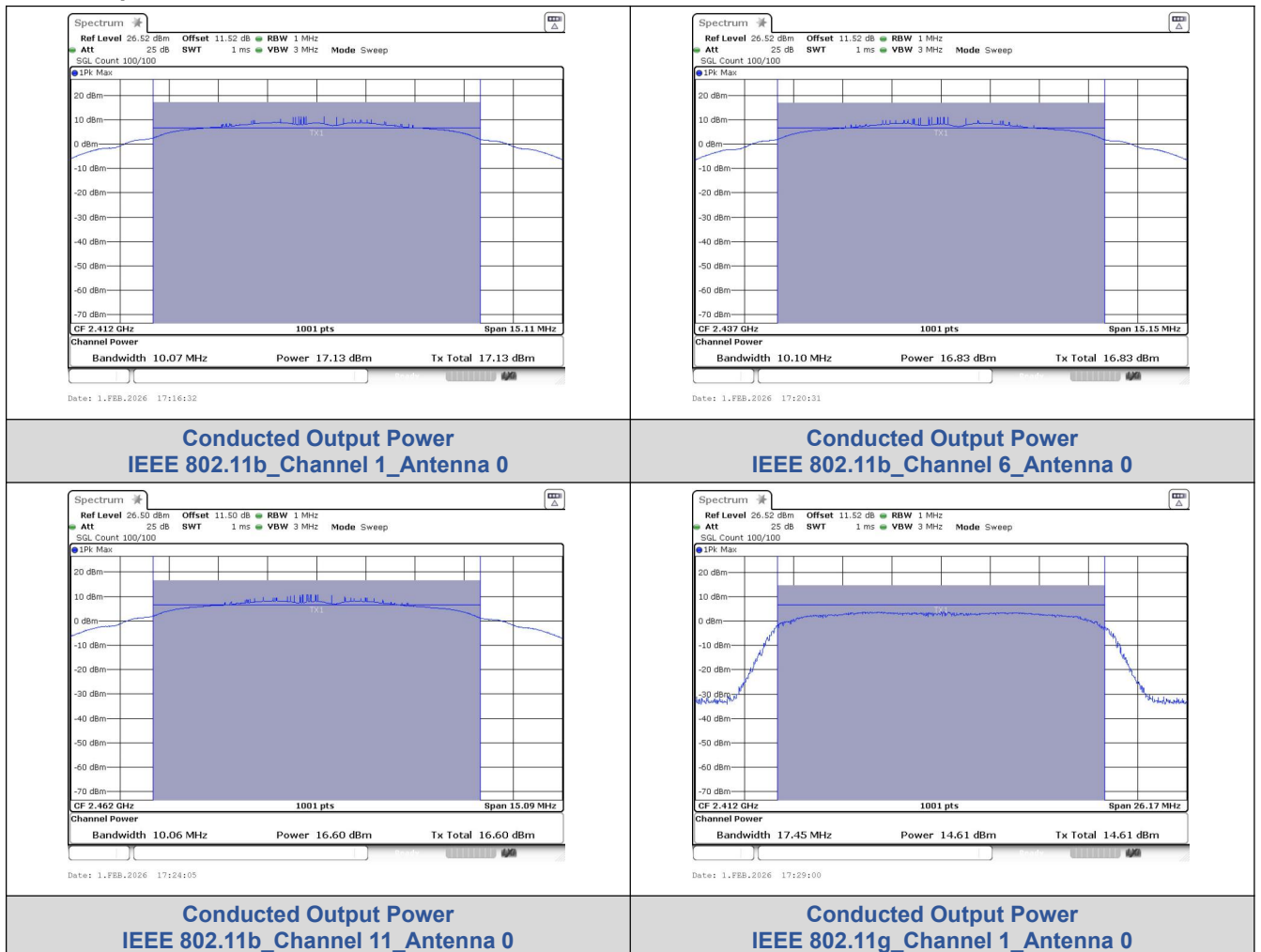
7.1. Conducted Output Power

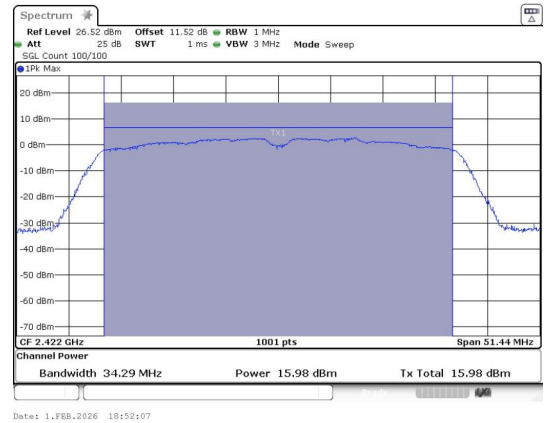
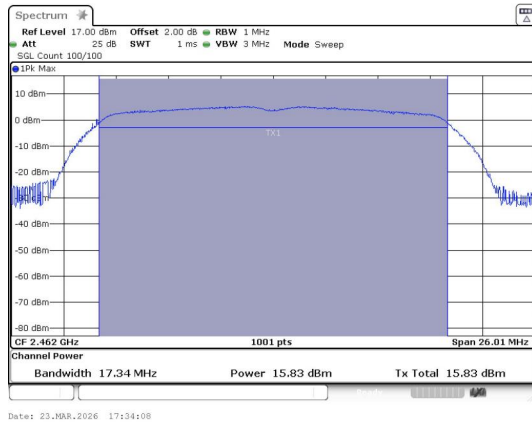
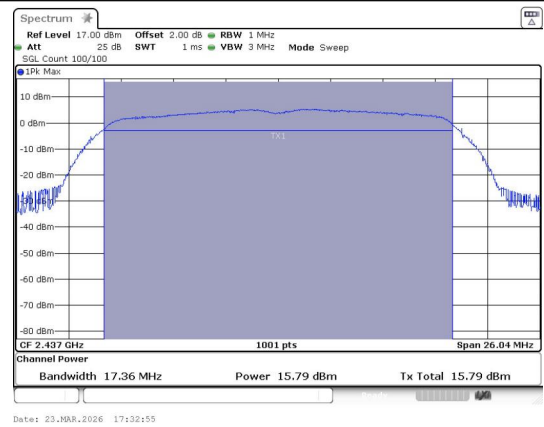
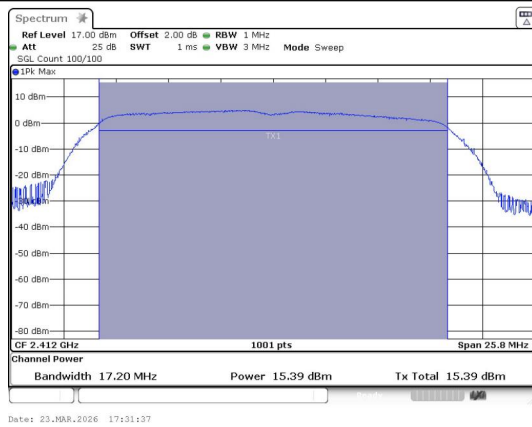
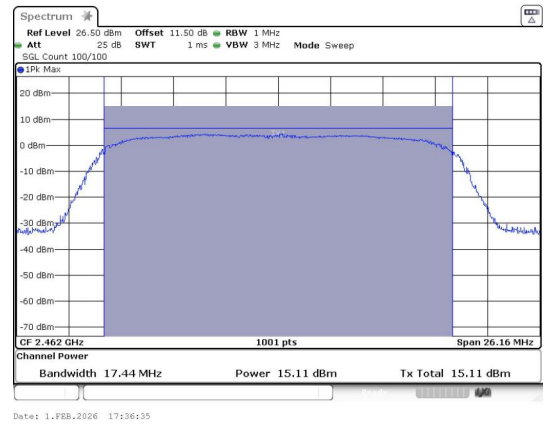
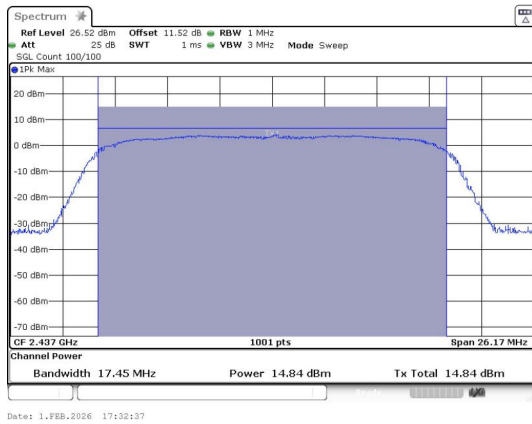
Test Result

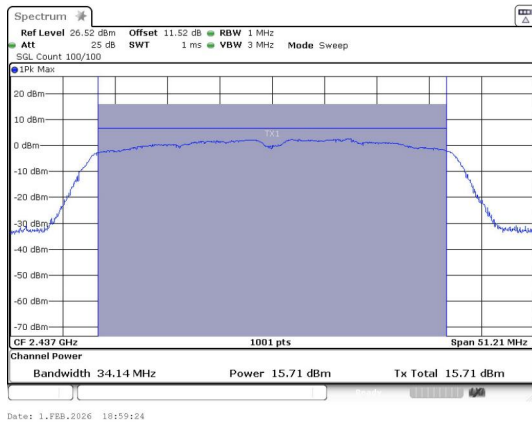
Conducted Output Power

Mode	Channel	Ant. 0 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	17.13	17.13	≤30	PASS
	6	16.83	16.83	≤30	PASS
	11	16.60	16.6	≤30	PASS
IEEE 802.11g	1	14.61	14.61	≤30	PASS
	6	14.84	14.84	≤30	PASS
	11	15.11	15.11	≤30	PASS
IEEE 802.11n_20	1	15.39	15.39	≤30	PASS
	6	15.79	15.79	≤30	PASS
	11	15.83	15.83	≤30	PASS
IEEE 802.11n_40	3	15.98	15.98	≤30	PASS
	6	15.71	15.71	≤30	PASS
	9	15.38	15.38	≤30	PASS

Test Graphs

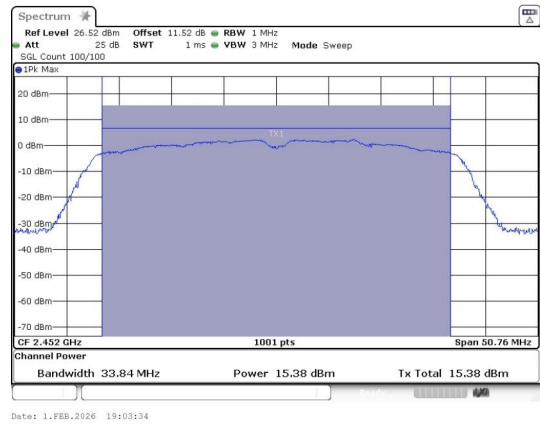






Date: 1.FEB.2026 18:59:24

**Conducted Output Power
IEEE 802.11n_40_Channel 6_Antenna 0**



Date: 1.FEB.2026 19:03:34

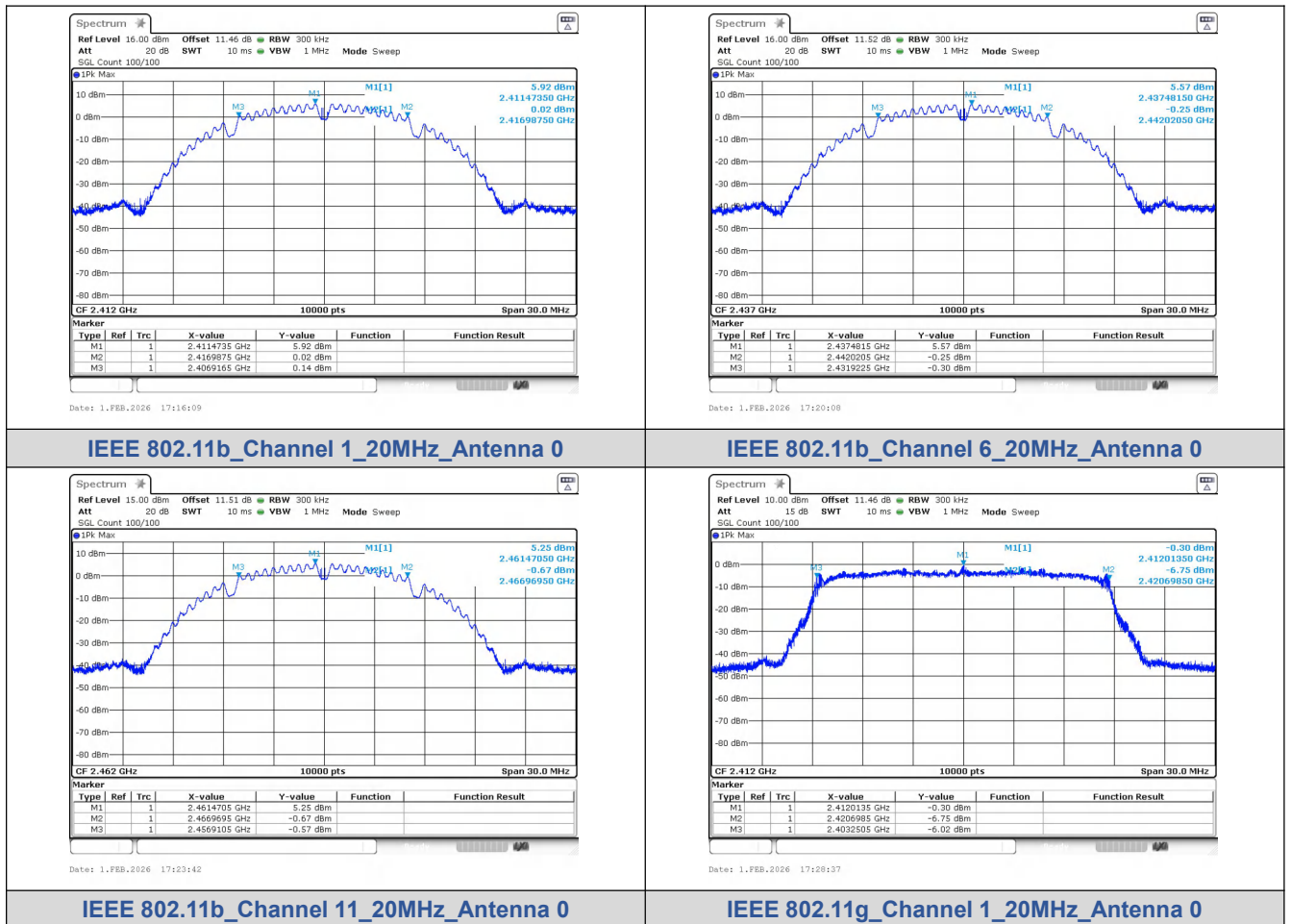
**Conducted Output Power
IEEE 802.11n_40_Channel 9_Antenna 0**

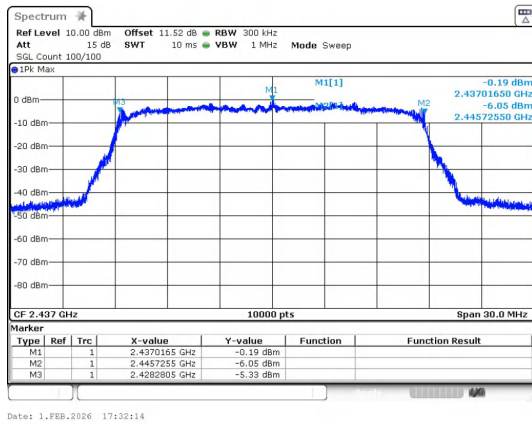
7.2. 6dB Bandwidth

Test Result

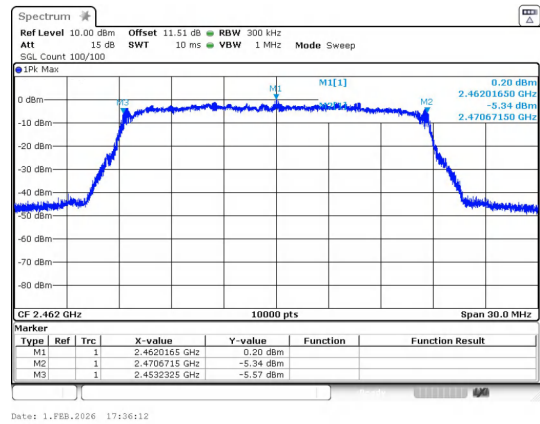
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	10.07	≥0.5	PASS
	6		2437	10.10		PASS
	11		2462	10.06		PASS
IEEE 802.11g	1		2412	17.45		PASS
	6		2437	17.45		PASS
	11		2462	17.44		PASS
IEEE 802.11n_20	1		2412	17.20		PASS
	6		2437	17.36		PASS
	11		2462	17.34		PASS
IEEE 802.11n_40	3		2422	34.80		PASS
	6		2437	34.14		PASS
	9		2452	33.84		PASS

Test Graphs

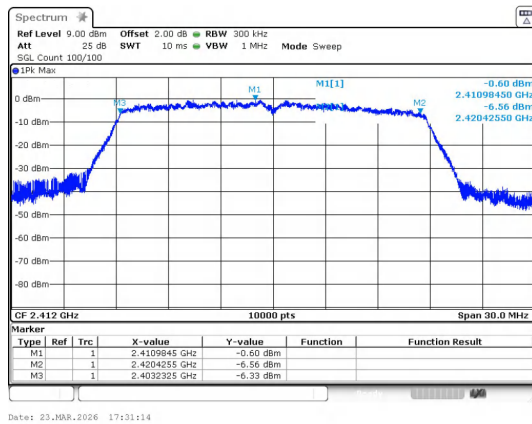




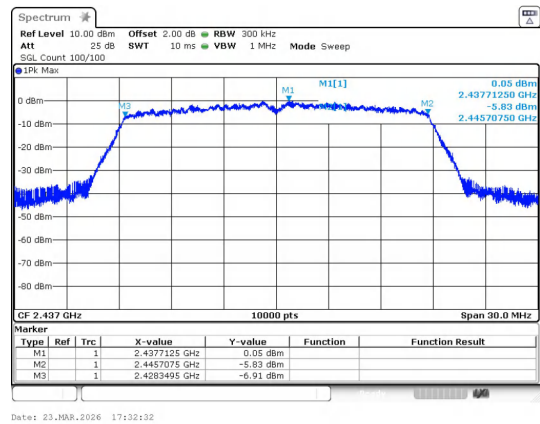
IEEE 802.11g_Channel 6_20MHz_Antenna 0



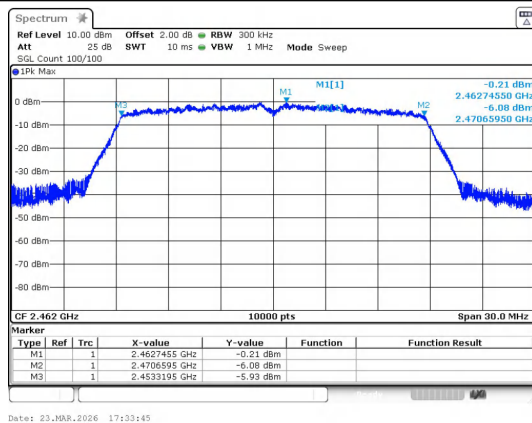
IEEE 802.11g_Channel 11_20MHz_Antenna 0



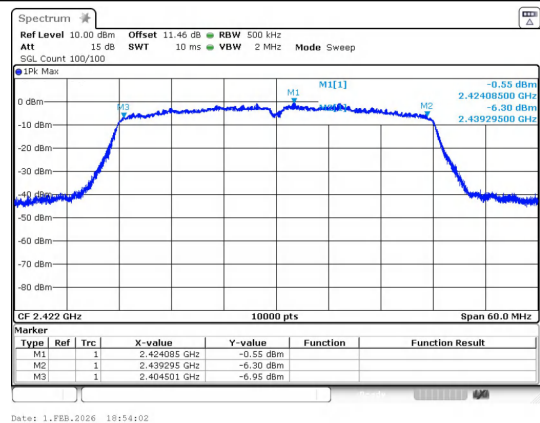
IEEE 802.11n_Channel 1_20MHz_Antenna 0



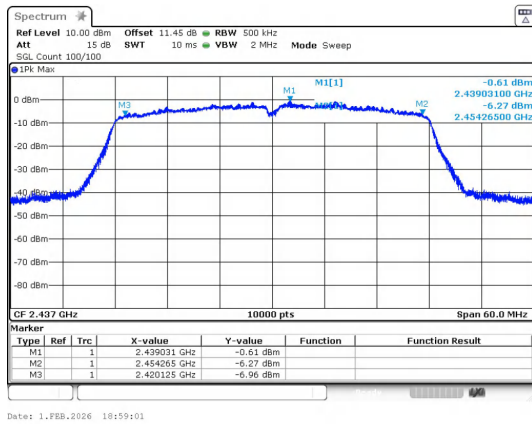
IEEE 802.11n_Channel 6_20MHz_Antenna 0



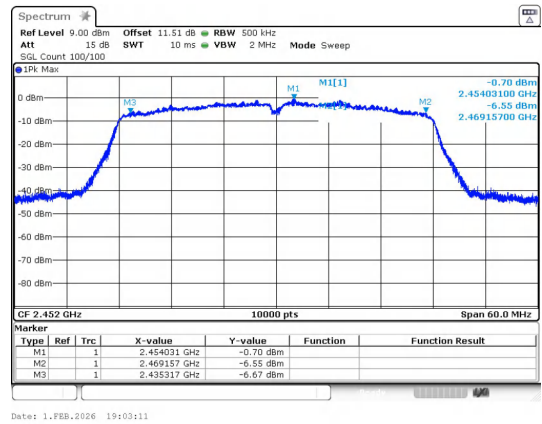
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_40MHz_Antenna 0



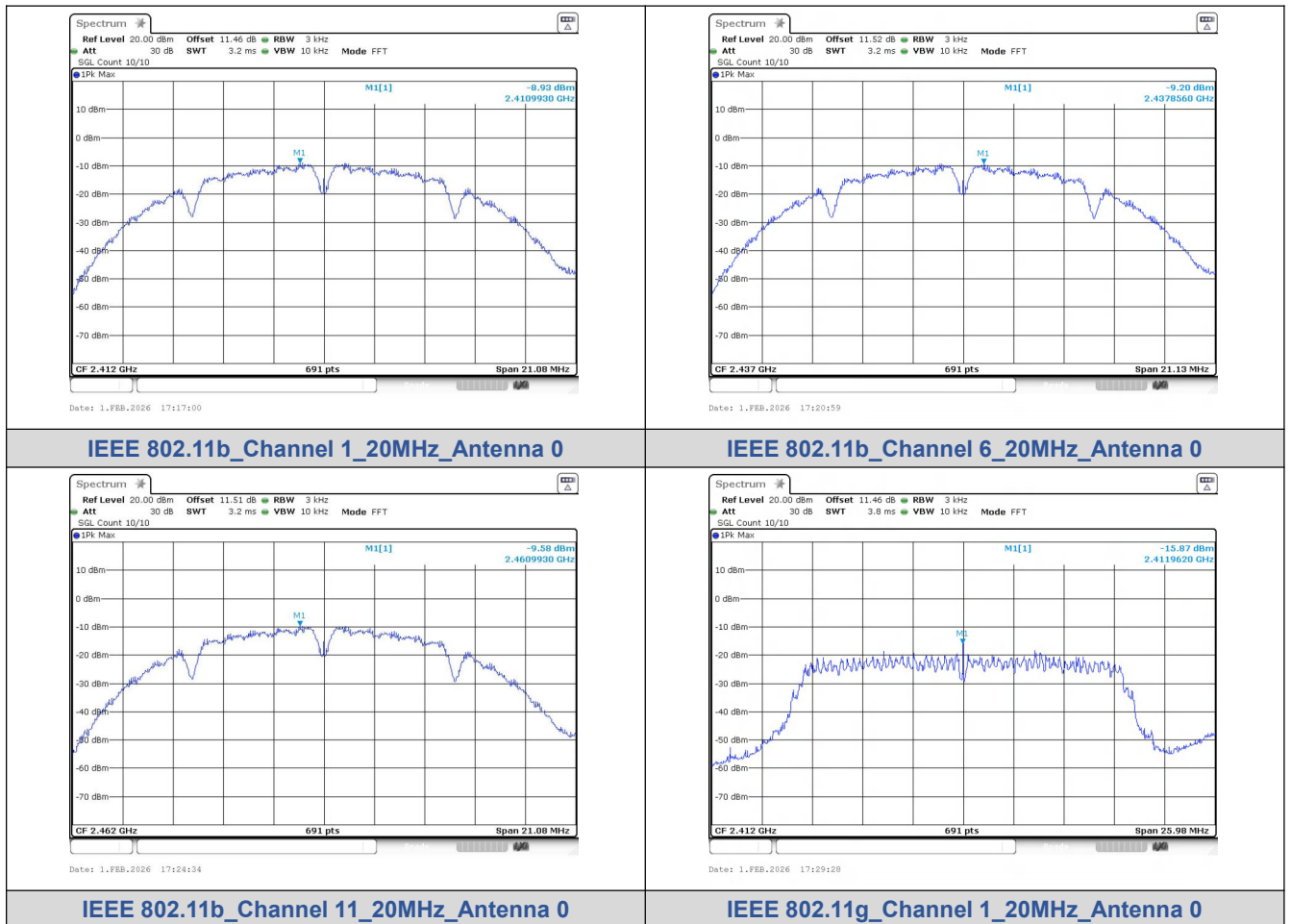
IEEE 802.11n_Channel 9_40MHz_Antenna 0

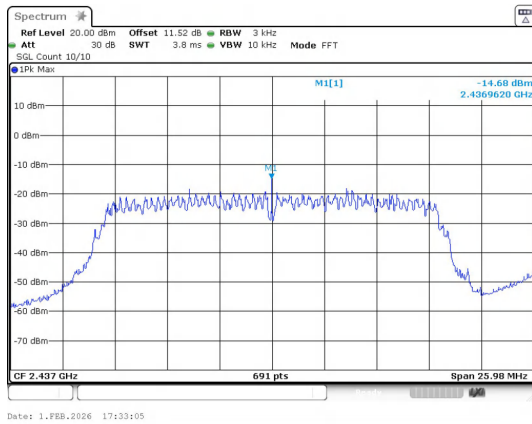
7.3. Power Spectral Density

Test Result

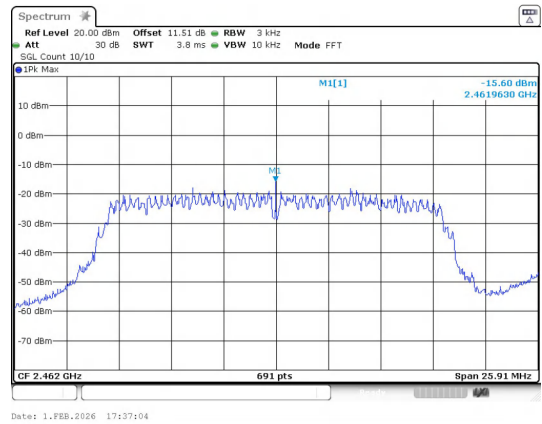
Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Limit (dBm/MHz)	Result
IEEE 802.11b	1	-8.930	≤8	≤-17.23	PASS
	6	-9.200			PASS
	11	-9.580			PASS
IEEE 802.11g	1	-15.870			PASS
	6	-14.680			PASS
	11	-15.600			PASS
IEEE 802.11n_20	1	-12.360			PASS
	6	-5.860			PASS
	11	-7.460			PASS
IEEE 802.11n_40	3	-14.570			PASS
	6	-15.800			PASS
	9	-15.260			PASS

Test Graphs

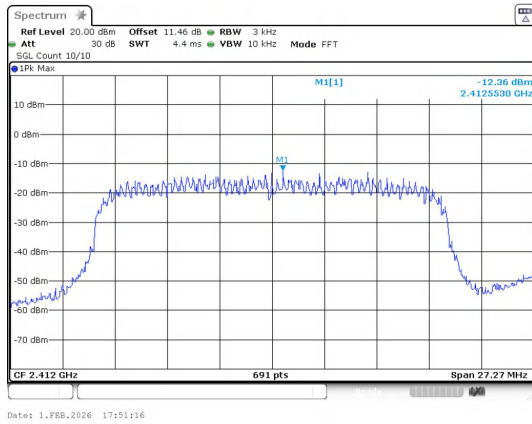




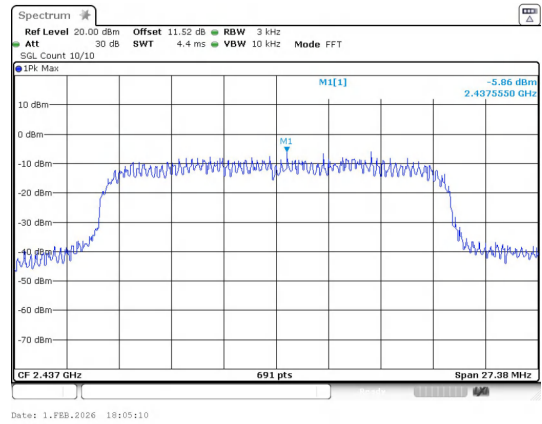
IEEE 802.11g_Channel 6_20MHz_Antenna 0



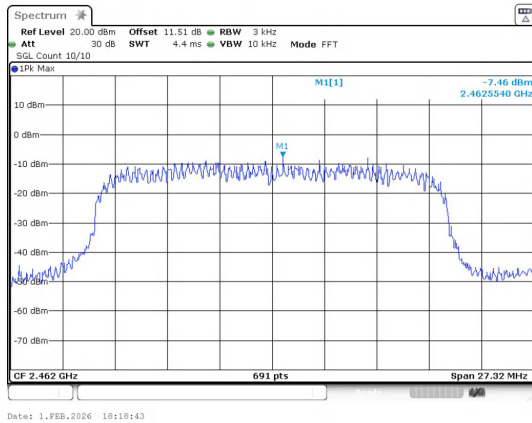
IEEE 802.11g_Channel 11_20MHz_Antenna 0



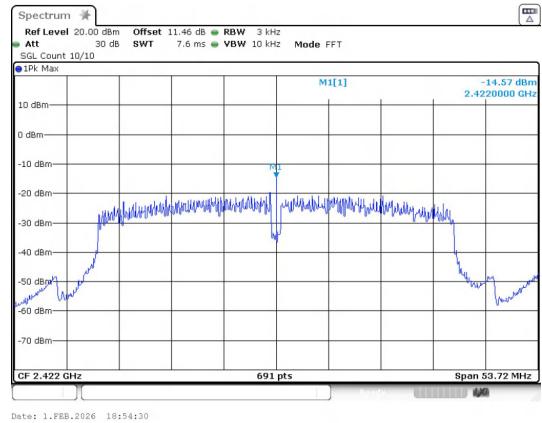
IEEE 802.11n_Channel 1_20MHz_Antenna 0



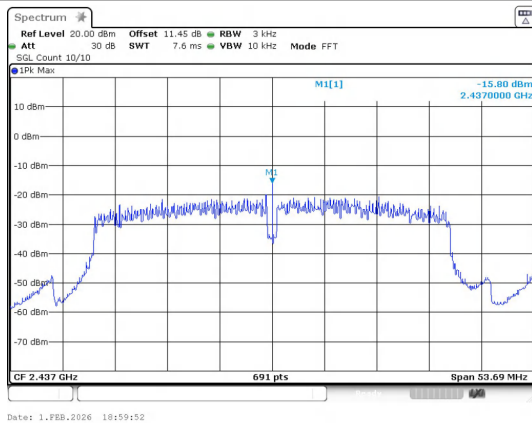
IEEE 802.11n_Channel 6_20MHz_Antenna 0



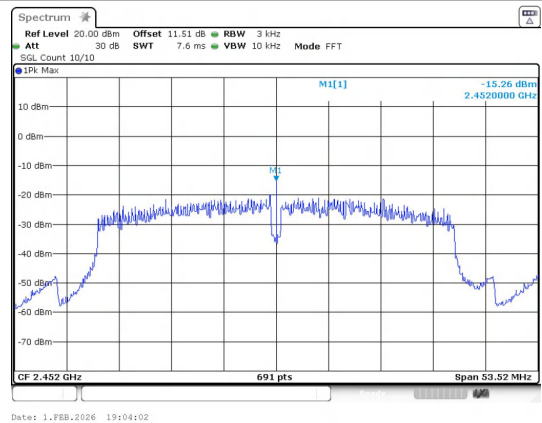
IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0

IEEE 802.11n_Channel 6_40MHz_Antenna 0

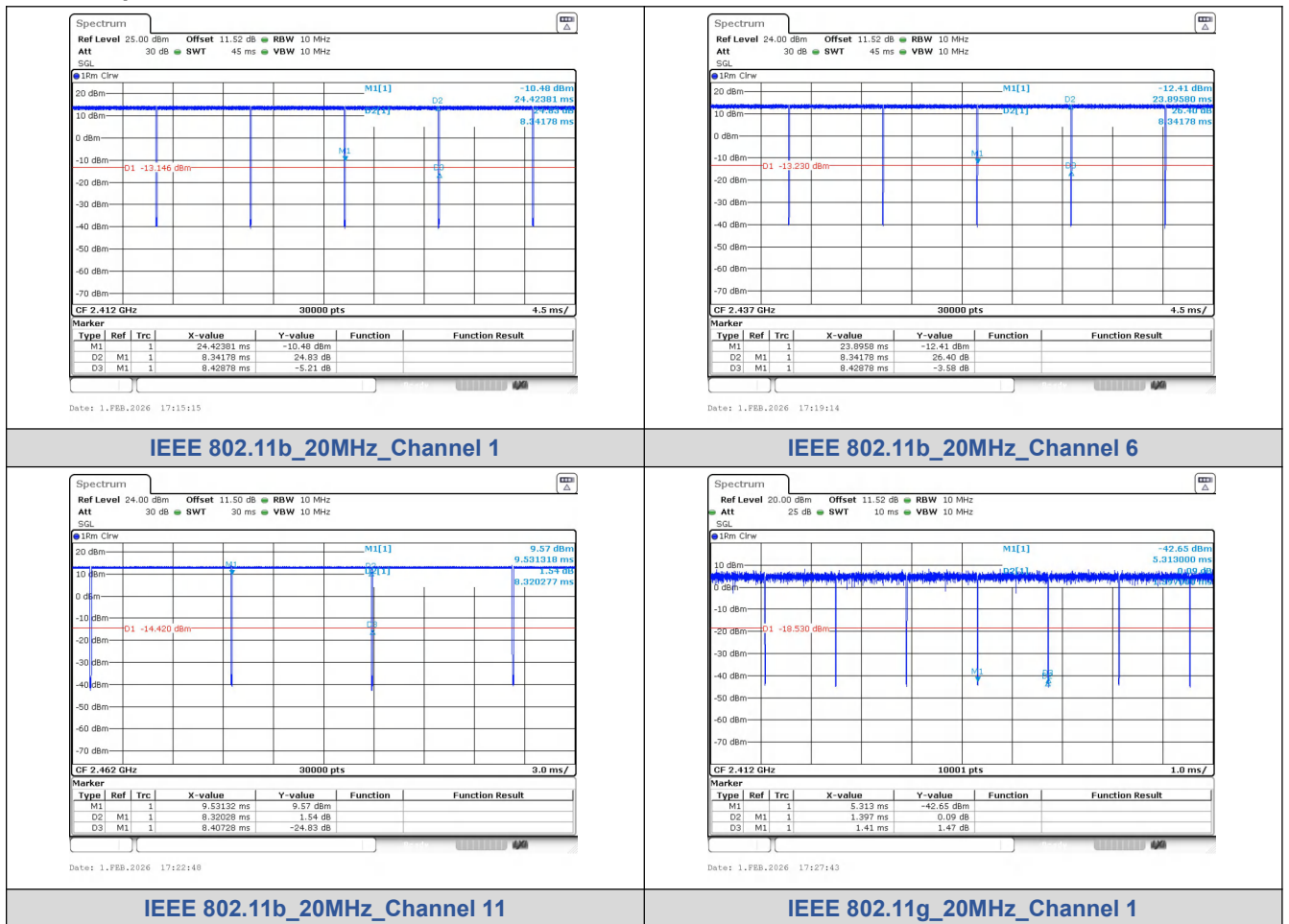
IEEE 802.11n_Channel 9_40MHz_Antenna 0

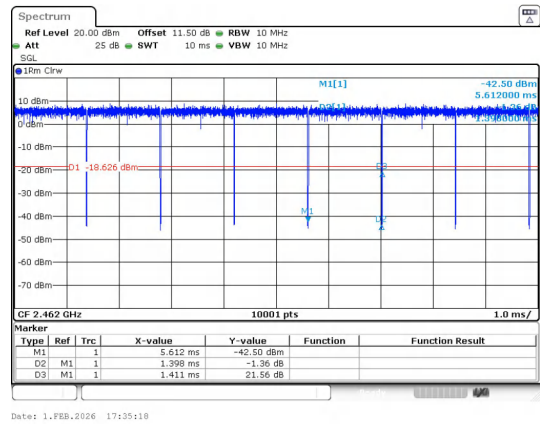
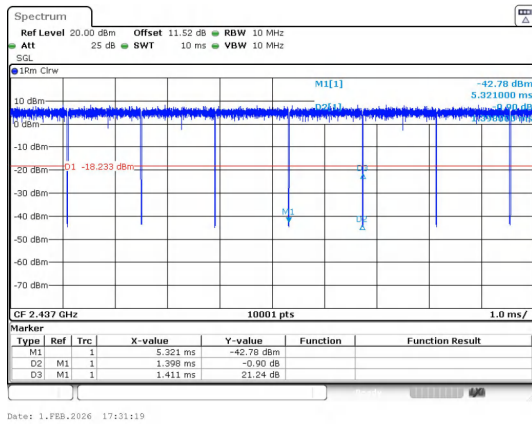
7.4. Duty Cycle

Test Result

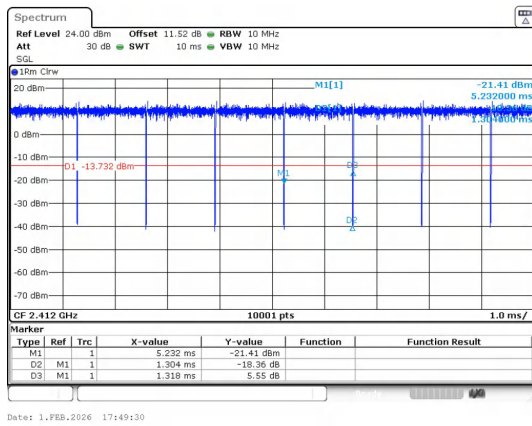
Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	1	8.342	8.429	98.97	0.9897	0.045	0.1199
		6		8.342	8.429	98.97	0.9897	0.045	0.1199
		11		8.320	8.407	98.97	0.9897	0.045	0.1202
IEEE 802.11g		1		1.397	1.410	99.08	0.9908	0.0401	0.7158
		6		1.398	1.411	99.08	0.9908	0.0401	0.7153
		11		1.398	1.411	99.08	0.9908	0.0401	0.7153
IEEE 802.11n_20	MCS 0	1		1.304	1.318	98.94	0.9894	0.0463	0.7669
		6		1.304	1.318	98.94	0.9894	0.0463	0.7669
		11		1.293	1.307	98.88	0.9888	0.0489	0.7734
IEEE 802.11n_40		3		0.652	0.658	98.99	0.9899	0.0441	1.5337
		6		0.652	0.658	98.99	0.9899	0.0441	1.5337
		9		0.652	0.658	98.99	0.9899	0.0441	1.5337

Test Graphs

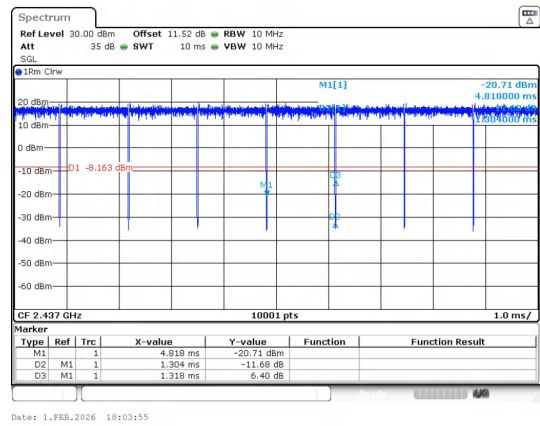




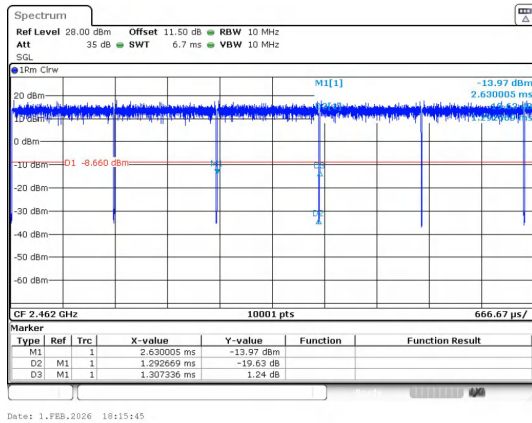
IEEE 802.11g_20MHz_Channel 6



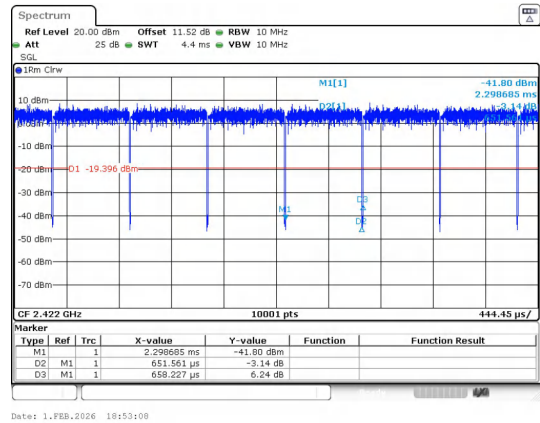
IEEE 802.11g_20MHz_Channel 11



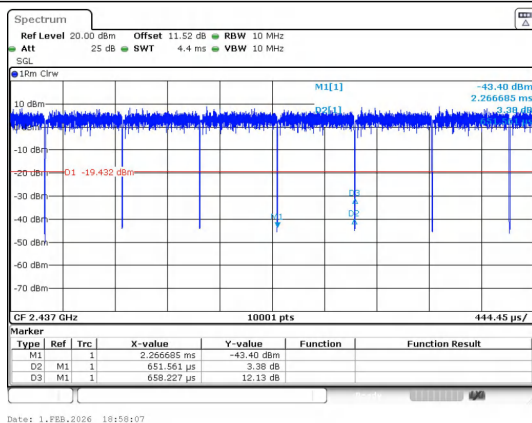
IEEE 802.11n_20MHz_Channel 1



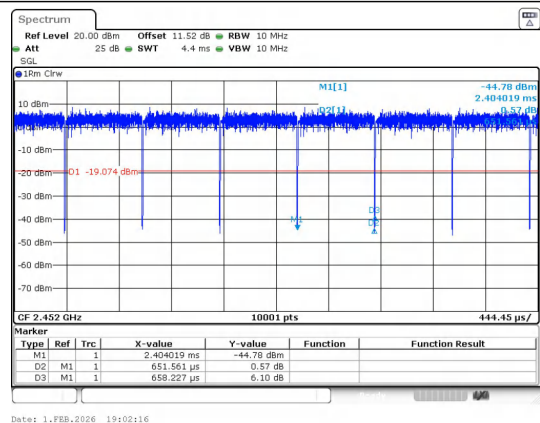
IEEE 802.11n_20MHz_Channel 6



IEEE 802.11n_20MHz_Channel 11



IEEE 802.11n_40MHz_Channel 3



IEEE 802.11n_40MHz_Channel 6

IEEE 802.11n_40MHz_Channel 9

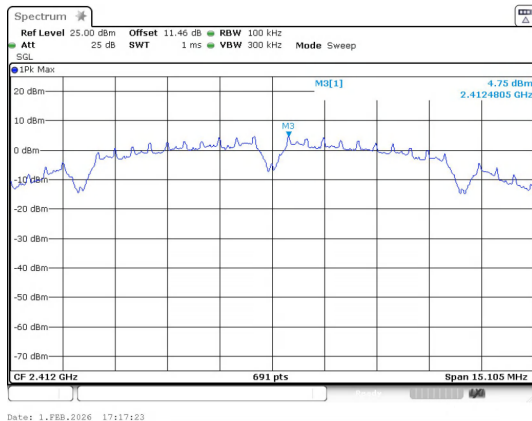
7.5. Conducted Spurious & Band Edge Emission

Test Result

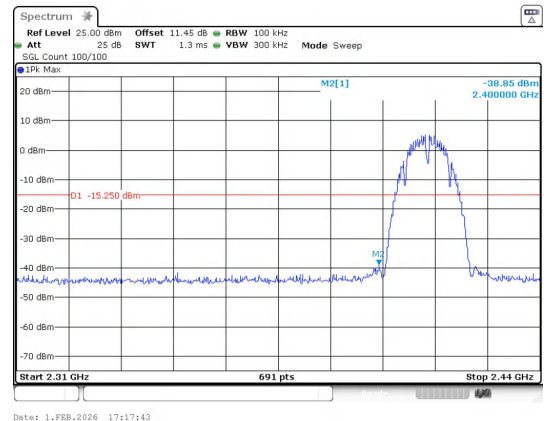
Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	
IEEE 802.11b	1	0	2400.00	-38.850	-15.25	-23.600	PASS	
			22103.1	-38.263	-15.25	-23.013	PASS	
	6		6021.55	-37.421	-15.44	-21.981	PASS	
	11		2483.50	-43.790	-15.75	-28.040	PASS	
			6989.56	-38.533	-15.75	-22.783	PASS	
IEEE 802.11g	1		2398.33	-41.838	-25.36	-16.478	PASS	
			2400.00	-43.140	-25.36	-17.780	PASS	
	6		22093.1	-38.094	-25.36	-12.734	PASS	
			24799.0	-38.226	-25.07	-13.156	PASS	
			11	2483.50	-42.890	-24.87	-18.020	PASS
				6962.92	-38.229	-24.87	-13.359	PASS
IEEE 802.11n_20	1		2397.20	-40.104	-15.02	-25.084	PASS	
			2400.00	-40.700	-15.02	-25.680	PASS	
	6		6993.70	-38.175	-15.02	-23.155	PASS	
			11	6891.34	-38.037	-10.08	-27.957	PASS
				2483.50	-37.630	-11.29	-26.340	PASS
			6955.43	-36.712	-11.29	-25.422	PASS	
IEEE 802.11n_40	3		2400.00	-41.180	-25.38	-15.800	PASS	
			6962.92	-36.685	-25.38	-11.305	PASS	
	6		22058.1	-38.181	-25.47	-12.711	PASS	
			9	2483.50	-42.890	-25.68	-17.210	PASS
	6955.43			-38.257	-25.68	-12.577	PASS	

Note: input compensation coefficient (dB)= Cable Loss (dB)

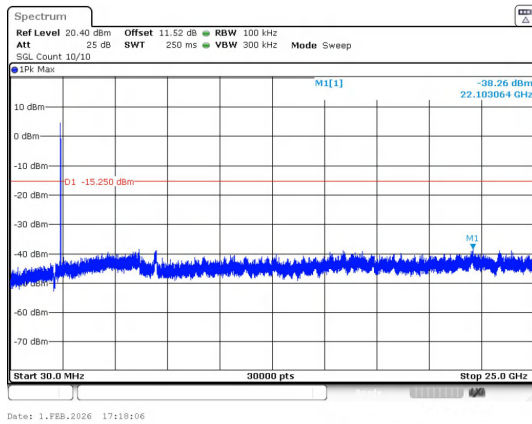
Test Graphs



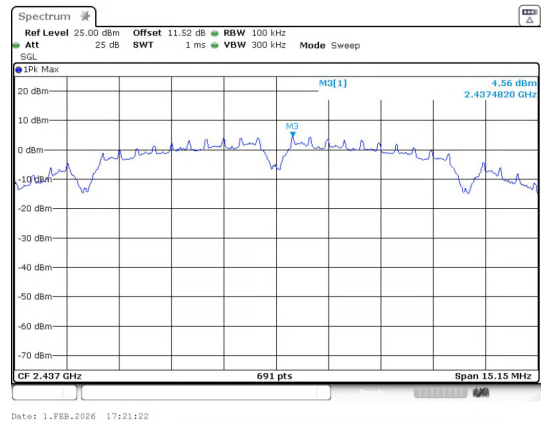
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



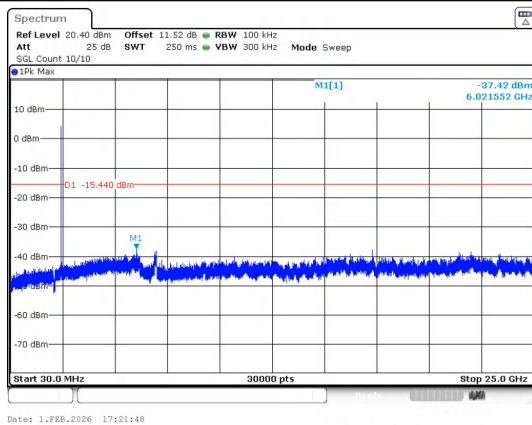
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



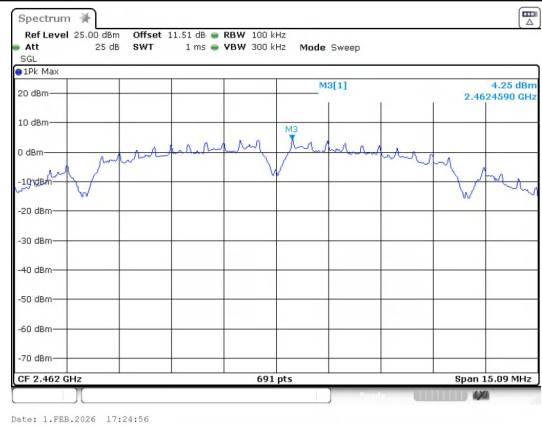
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



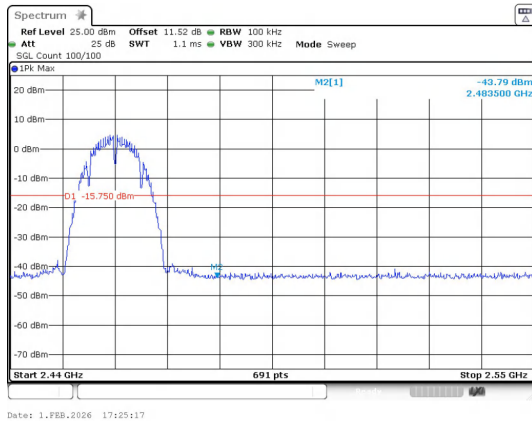
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



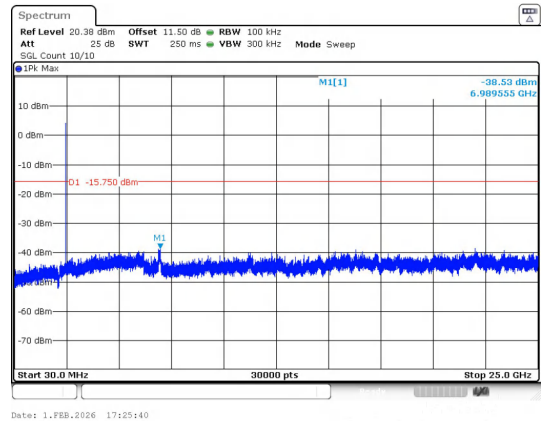
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IEEE 802.11b_Channel 6_20MHz_Antenna 0



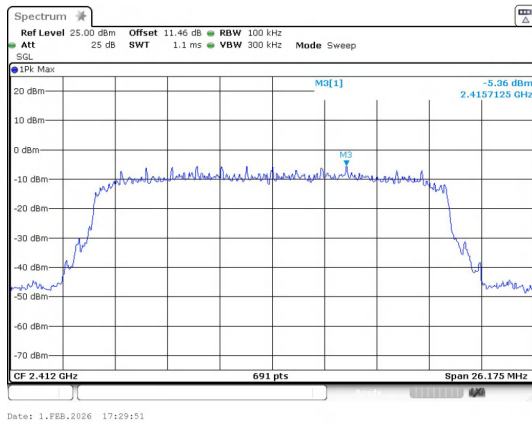
In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



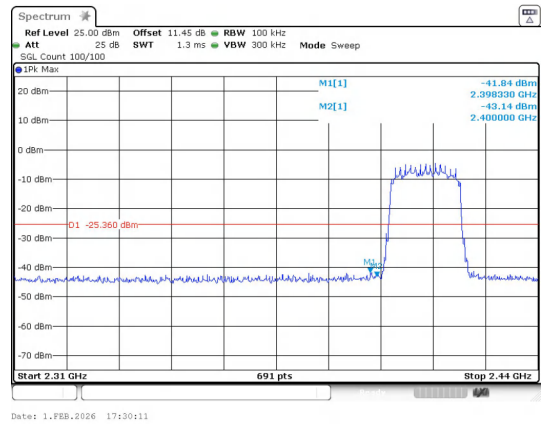
Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



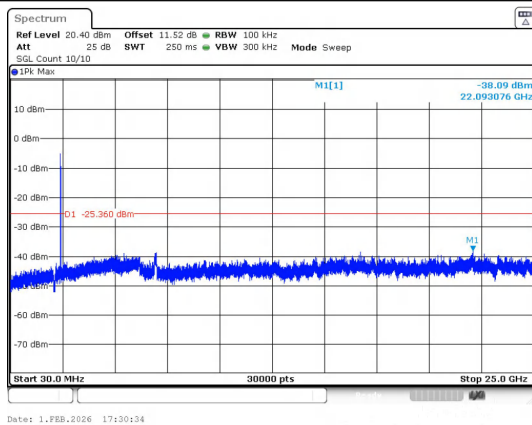
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IEEE 802.11b_Channel 11_20MHz_Antenna 0



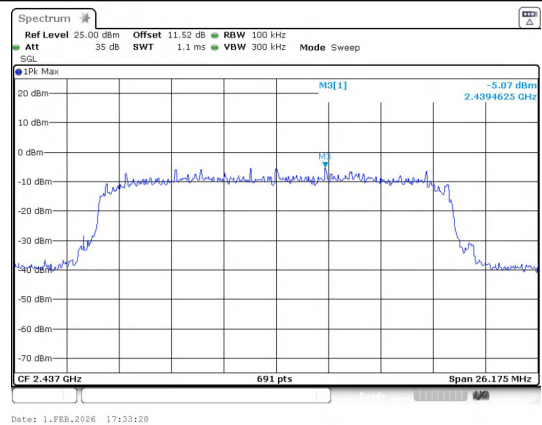
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



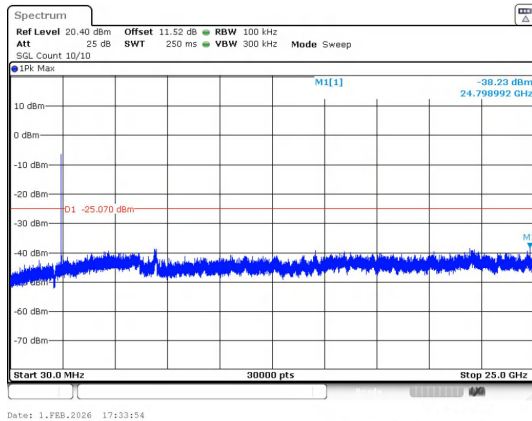
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



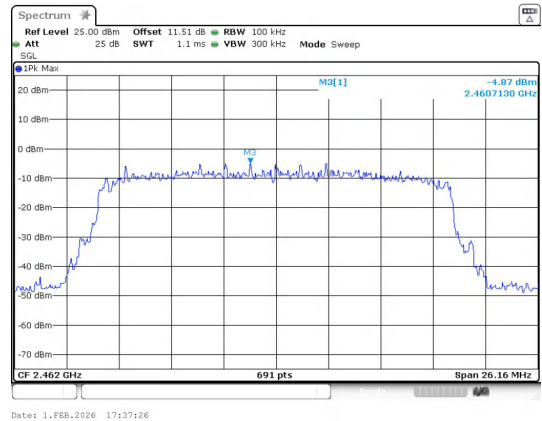
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IEEE 802.11g_Channel 1_20MHz_Antenna 0



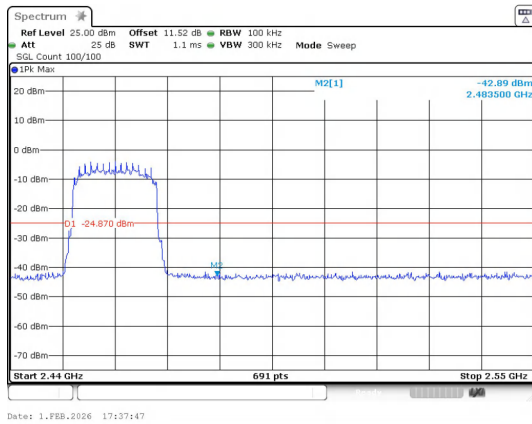
In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



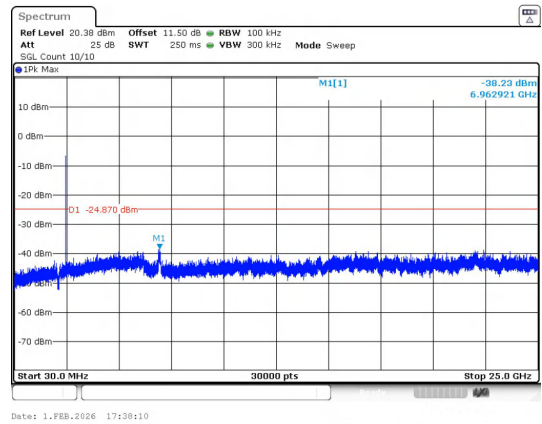
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IEEE 802.11g_Channel 6_20MHz_Antenna 0



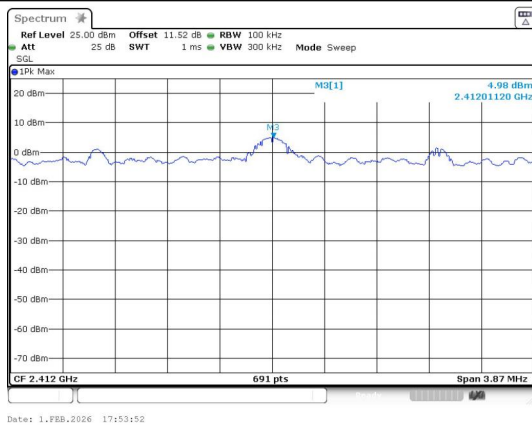
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IEEE 802.11g_Channel 11_20MHz_Antenna 0



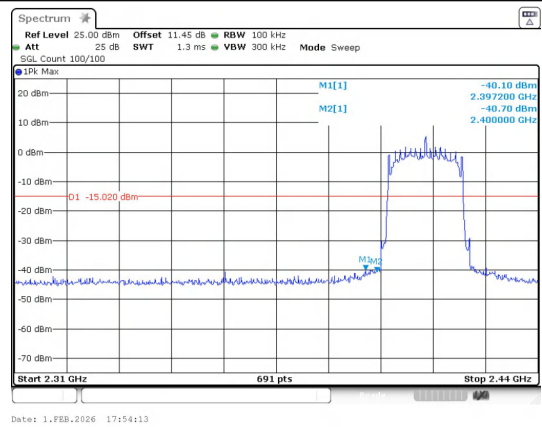
Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



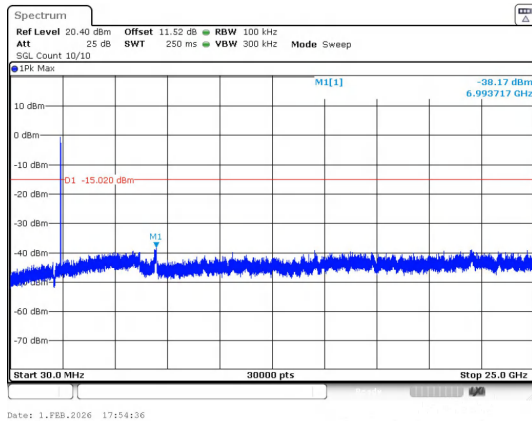
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IEEE 802.11g_Channel 11_20MHz_Antenna 0



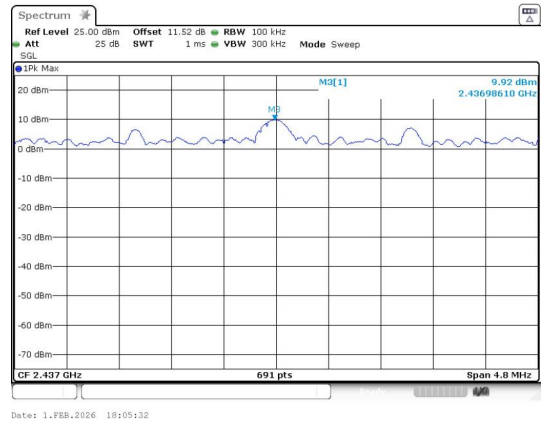
In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



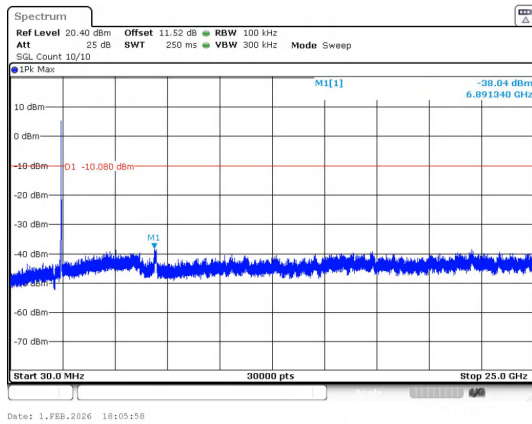
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



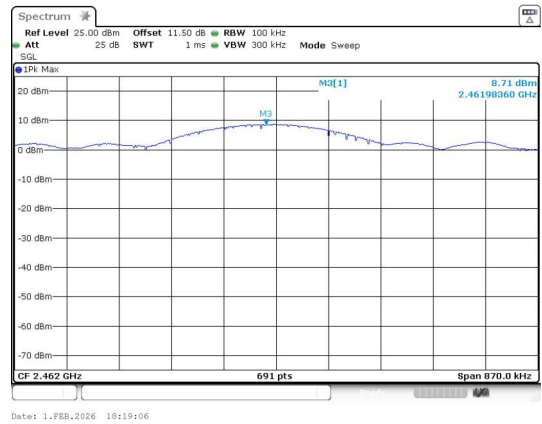
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 1_20MHz_Antenna 0



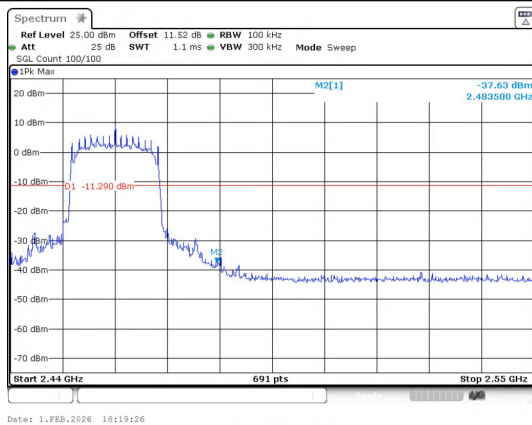
In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



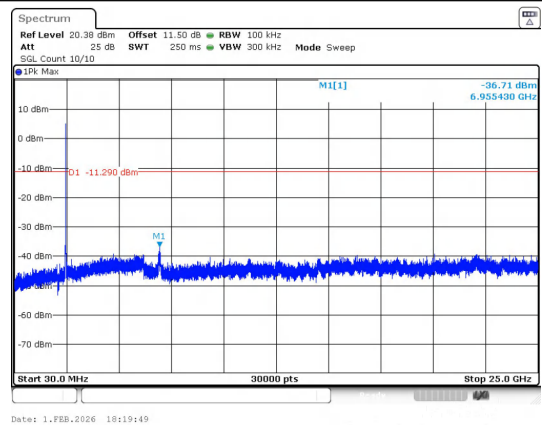
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



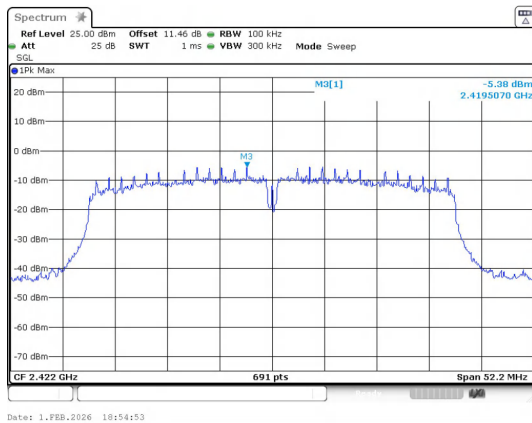
In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



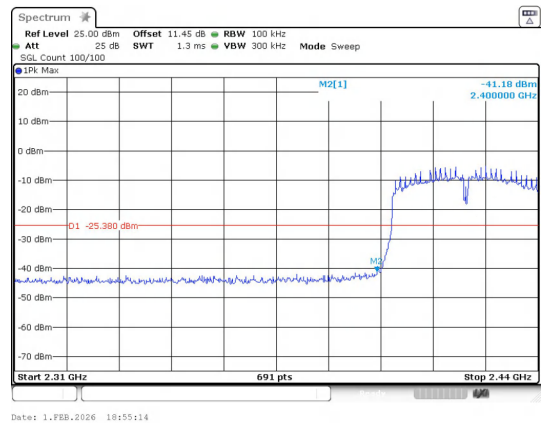
Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



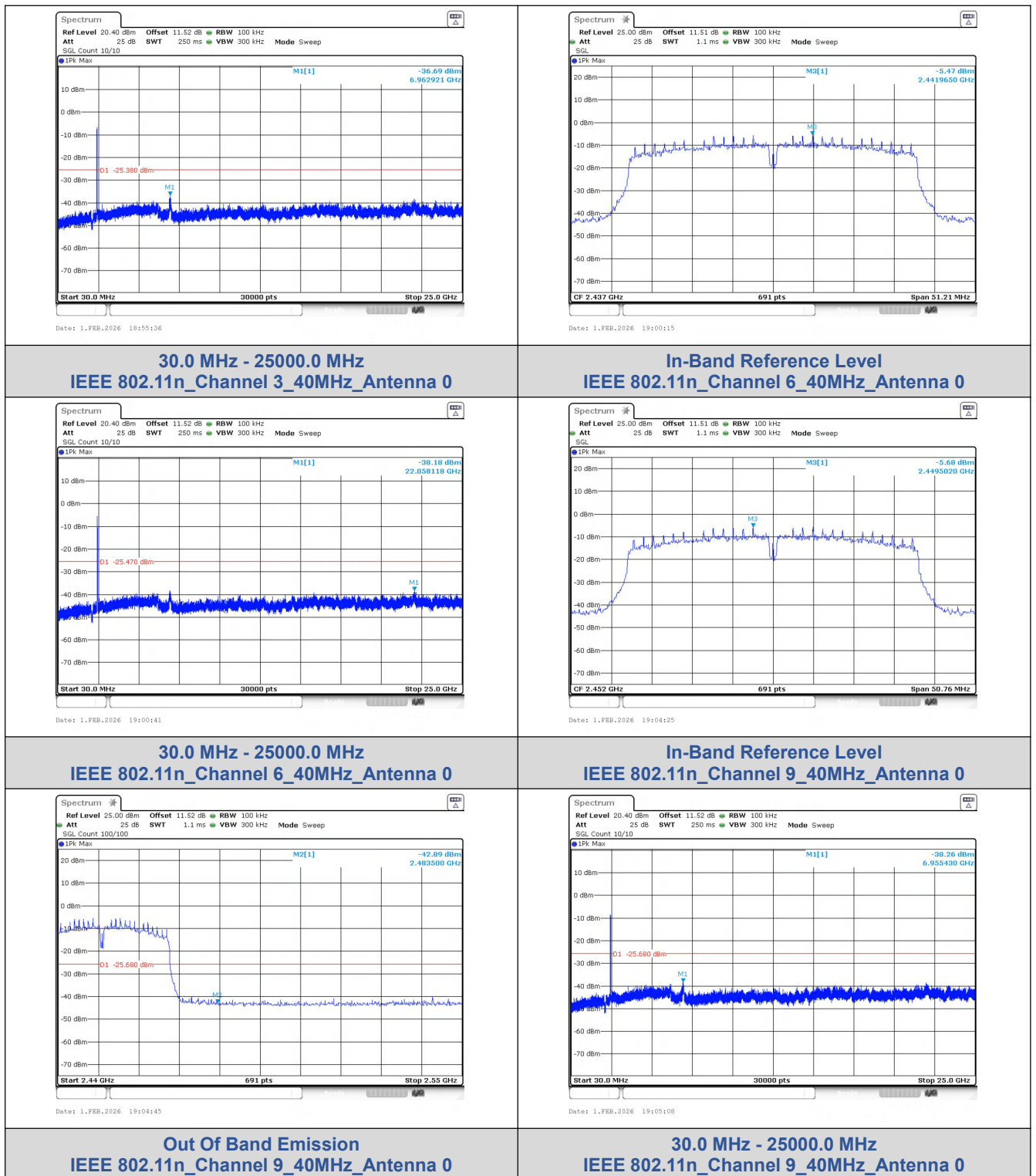
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 3_40MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0



-----End of the report-----