FCC RADIO TEST REPORT

Applicant……	:PIKO Spielwaren GmbH
Address……...	:Lutherstraße 30, 96515 Sonneberg, Thüringen, Germany
Manufacturer……..	:PIKO Spielwaren GmbH
Address……...	:Lutherstraße 30, 96515 Sonneberg, Thüringen, Germany
Factory……	:PIKO Spielwaren GmbH
Address……..	:Lutherstraße 30, 96515 Sonneberg, Thüringen, Germany
Product Name…….	:PIKO G-SmartBox wlan
Brand Name……...	:PIKO
Model No. ……..	:35050
FCC ID……....	:2ATRN-35050
Measurement Standard…….	:47 CFR FCC Part 15, Subpart C (Section 15.247)
Receipt Date of Samples….	:May 14, 2026
Date of Tested……	:May 15, 2026 to May 29, 2026
Date of Report……	:July 04, 2026

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore Testing Center Co., Ltd, this report shall not be reproduced except in full.

Prepared by

Alina Guo / Project Engineer

Approved by

Iori Fan / Authorized Signatory

Table of Contents

Revision History

Report Number	Description	Issued Date
NTC2605141FV00	Initial Issue	2026-07-04

1. Summary of Test Result

FCC Rules	Description of Test	Result	Remarks
§15.207 (a)	AC Power Conducted Emission	PASS	---
§15.247(b)(3)	Maximum Conducted Output Power	PASS	---
§15.247(a)(2)	6dB Bandwidth	PASS	---
§15.247(e)	Power Spectral Density	PASS	---
§15.247(d)	Band Edge and Conducted Spurious Emissions	PASS	---
§15.247(d),§15.209, §15.205	Radiated Spurious Emissions and Restricted Bands	PASS	---
§15.203	Antenna Requirement	PASS	---

2. General Description of EUT

Product Information	
Product Name:	PIKO G-SmartBox wlan
Main Model Name:	35050
Additional Model Name:	N/A
Model Difference:	N/A
S/N:	2605-2594
Brand Name:	PIKO
Hardware Version:	1.0
Software Version:	2.0
Rating:	DC 18-24V come from adapter
Typical Arrangement:	Table-top
I/O Port:	Refer to the user manual
Accessories Information	
Adapter:	N/A
Cable:	N/A
Other:	N/A
Additional Information	
Note:	N/A
Remark:	All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual.

Technical Specification	
Frequency Range:	2412-2462MHz for IEEE 802.11b/g/n(HT20) 2422-2452MHz for IEEE 802.11n(HT40)
Modulation Technology:	DSSS, OFDM
Modulation Type:	CCK, DQPSK, DBPSK, 64-QAM, 16-QAM, QPSK, BPSK
Number of Channel:	11 for IEEE 802.11b/g/n(HT20) 7 for IEEE 802.11n(HT40)
Channel Space:	5MHz
Antenna Type:	PCB antenna
Antenna Gain:	1.89dBi (Declared by the manufacturer)

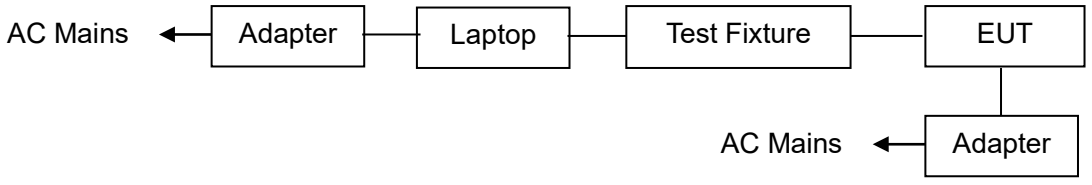
Channel List			
IEEE 802.11b/ g/ n(HT20)		IEEE 802.11n(HT40)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	---	---
2	2417	---	---
3	2422	3	2422
4	2427	4	2427
5	2432	5	2432
6	2437	6	2437
7	2442	7	2442
8	2447	8	2447
9	2452	9	2452
10	2457	----	----
11	2462	----	----

3. Test Channels and Modes Detail

Mode		Channel	Frequency (MHz)	Remark
1	TX	1	2412	IEEE 802.11b/ g/ n(HT20)
		3	2422	IEEE 802.11n(HT40)
		6	2437	IEEE 802.11b/ g/ n(HT20)/ n(HT40)
		9	2452	IEEE 802.11n(HT40)
		11	2462	IEEE 802.11b/ g/ n(HT20)
2.	Normal Mode	---	---	---
Note: TX mode means that the EUT was programmed to be in continuously transmitting mode.				

4. Configuration of EUT

TX Mode



5. Modification of EUT

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

6. Description of Support Device

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Brand	M/N	S/N	Cable Specification	Remarks
1.	Laptop	DELL	VOSTR03400	H3K2XA01	I/P: AC 100-240V 50-60Hz, 1.3A O/P: DC 19.5V 2.31A 45W AC Line: 1.13m unshielded DC Line: 1.15m unshielded with a core	Provided by the lab
2.	Adapter of laptop	DELL	HA45NM140	---		Provided by the lab
3.	Test fixture	---	---	---	---	Provided by the lab
4.	Adapter	PIKO	MF-22005000	---	Input: AC 100-240V, 50/60Hz Output: DC 22V, 5.0A	Provided by the Manufacturer

Software	Mode	Power Setting
EspRFTestTool_v5.2_Manual.exe	802.11b	0
	802.11g	0
	802.11n(HT20)	0
	802.11n(HT40)	2

7. Test Facility and Location

Test Site	:	Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)
Accreditations and Authorizations	:	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 Listed by CNAS, August 13, 2018 The Certificate Registration Number is L5795. The Certificate is valid until August 13, 2030 The Laboratory has been assessed and proved to be in compliance with ISO17025 Listed by A2LA, November 01, 2017 The Certificate Registration Number is 4429.01 The Certificate is valid until December 31, 2027 Listed by FCC, November 06, 2017 Test Firm Registration Number: 907417 Listed by Industry Canada, June 08, 2017 The Certificate Registration Number. Is 46405-9743A
Test Site Location	:	Room 101, 1101, Building 2, No. 61, Hongmei Section, Wangsha Road, Hongmei Town, Dongguan, Guangdong, People's Republic of China

8. Applicable Standards and References

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

Test Standards:

47 CFR Part 15, Subpart C, 15.247

ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

References Test Guidance:

DTS KDB 558074 D01 15.247 Meas Guidance v05r02

9. Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

10. Test Conditions

No.	Test Item	Test Mode	Test Voltage	Tested by	Remarks
1.	AC Power Conducted Emission	1	AC 120V 60Hz	Chance	See note 5
2.	Max. Conducted Output Power	1	AC 120V 60Hz	Chance	See note 1
3.	6dB Bandwidth	1	AC 120V 60Hz	Chance	See note 1
4.	Power Spectral Density	1	AC 120V 60Hz	Chance	See note 1
5.	Band Edge and Conducted Spurious Emissions	1	AC 120V 60Hz	Chance	See note 1
6.	Radiated Spurious Emissions and Restricted Bands	1, 2	AC 120V 60Hz	Chance	See note 1,3
7..	Antenna Requirement	---	---	---	---

Note:

1. The testing climatic conditions for temperature, humidity, and atmospheric pressure are within: 15~35℃, 30~70%, 86~106kPa.
2. For test voltage AC 120V 60Hz was come from Adapter, only the worst voltage was recorded on the report.

11. Measurement Uncertainty

No.	Test Item	Frequency	Uncertainty	Remarks
1.	Conducted Emission	150KHz ~ 30MHz	±3.04 dB	---
2.	Radiated Emission	9kHz ~ 30MHz	±5.04 dB	
		30MHz ~ 1GHz	± 5.63 dB	---
		1GHz ~ 18GHz	± 5.16 dB	---
		18GHz ~ 40GHz	±5.23 dB	
3.	Conducted Spurious Emissions	10Hz ~ 40GHz	±0.78 dB	---
4.	RF Output Power	10Hz ~ 40GHz	±0.86 dB	
5.	Power Spectral Density	10Hz ~ 40GHz	±1.06 dB	
6.	Occupied Channel Bandwidth	---	±1.42 x10^{-7}	---

Note:

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The measurement uncertainly levels above are estimated and calculated according to CISPR 16-4-2.
3. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

12. Sample Calculations

Conducted Emission						
Freq. (MHz)	**Reading Level (dBuV)**	**Correct Factor (dB)**	**Measurement (dBuV)**	**Limit (dBuV)**	**Over (dB)**	**Detector**
0.1900	28.80	10.60	39.40	64.04	-24.64	QP

Where,

Freq.	= Emission frequency in MHz
Reading Level	= Analyzer/Receiver reading
Corrector Factor	= Insertion loss of LISN + Cable Loss + RF Switching Unit attenuation
Measurement	= Reading + Corrector Factor
Limit	= Limit stated in standard
Margin	= Measurement - Limit
Detector	= Reading for Quasi-Peak / Average / Peak

Radiated Spurious Emissions and Restricted Bands						
Freq. (MHz)	**Reading Level (dBuV)**	**Correct Factor (dB/m)**	**Measurement (dBuV/m)**	**Limit (dBuV/m)**	**Over (dB)**	**Detector**
49.4000	25.74	-7.00	18.74	40.00	-21.26	QP

Where,

Freq.	= Emission frequency in MHz
Reading Level	= Analyzer/Receiver reading
Corrector Factor	= Antenna Factor + Cable Loss - Pre-amplifier
Measurement	= Reading + Corrector Factor
Limit	= Limit stated in standard
Over	= Margin, which calculated by Measurement - Limit
Detector	= Reading for Quasi-Peak / Average / Peak

Note: For all conducted test items, the spectrum analyzer offset or transducer is derived from RF cable loss and attenuator factor. The offset or transducer is equal to the RF cable loss plus attenuator factor.

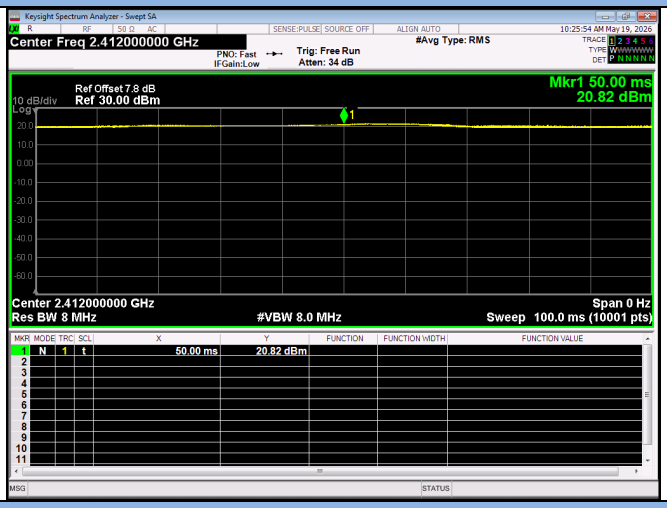
13. Test Items and Results

13.1 Duty cycle

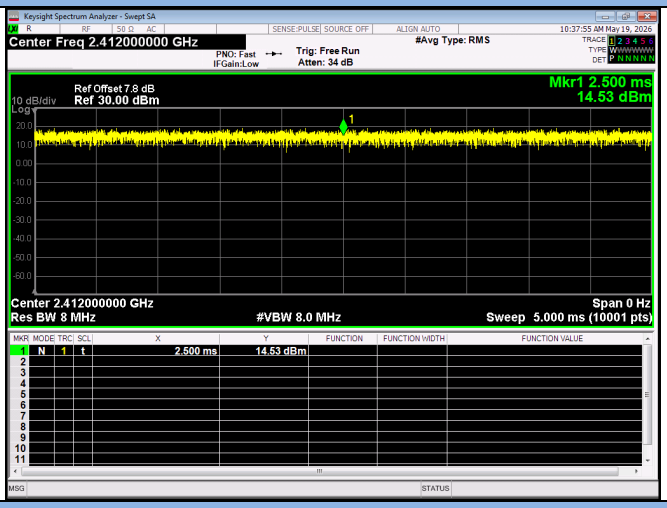
Mode	Ton (ms)	Ton+off (ms)	Duty Cycle (%)	1/T minimum VBW (kHz)	Duty Cycle Factor (dB)
802.11b	100	100	100.00%	0.01	0
802.11g	100	100	100.00%	0.01	0
802.11n(HT20)	100	100	100.00%	0.01	0
802.11n(HT40)	100	100	100.00%	0.01	0

Remark: Duty Cycle= (Ton/ Ton+off)*100%
Duty Cycle factor=10*log(1/ Duty cycle)

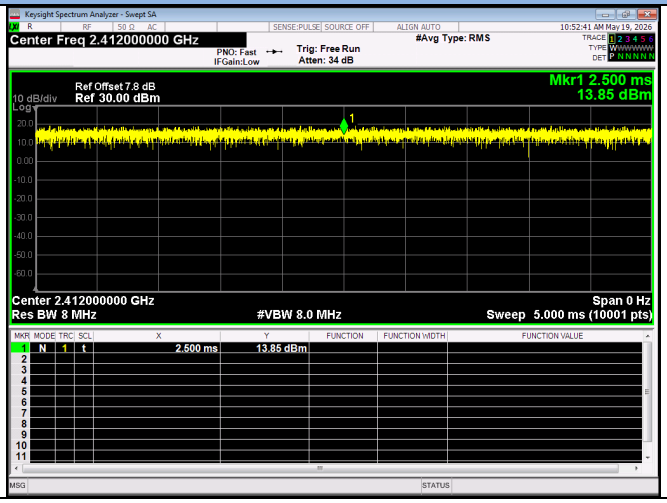
IEEE 802.11b



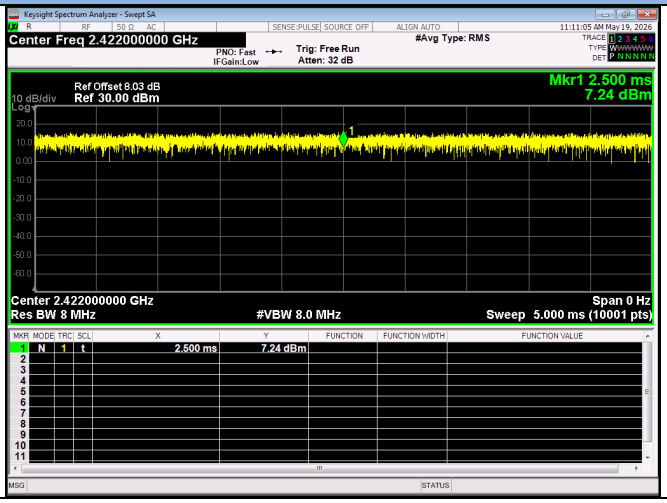
IEEE 802.11g



IEEE 802.11n(HT20)



IEEE 802.11n(HT40)



13.2 Conducted Emissions Measurement

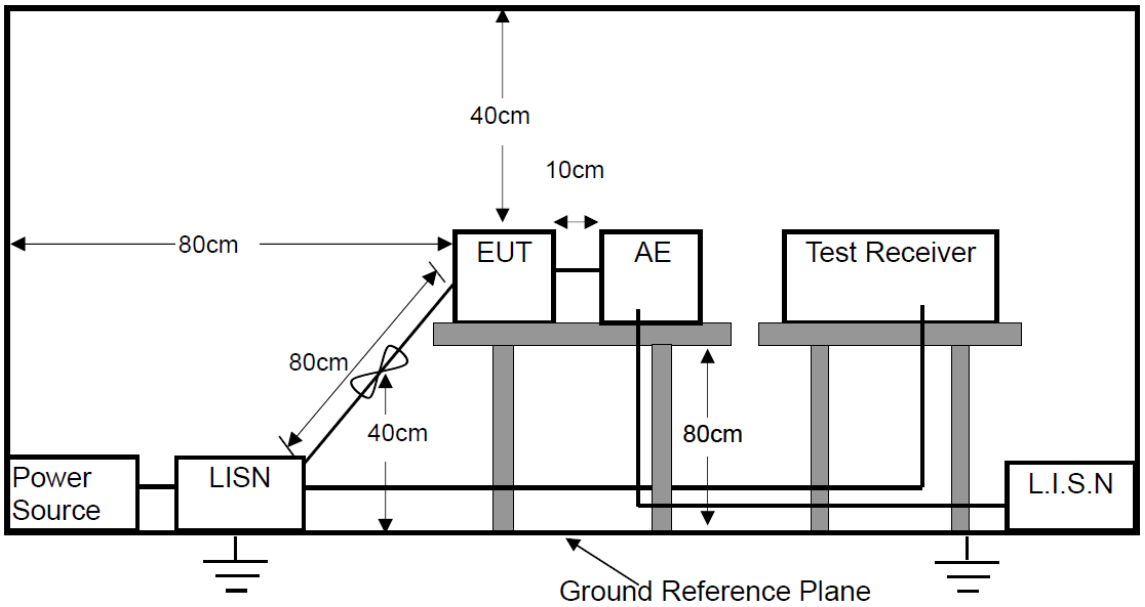
LIMITS

According to the requirements of FCC PART 15.207, the limits are as follows:

Frequency (MHz)	Quasi-peak	Average
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 to 30	60	50

Note: 1. If the limits for the average detector are met when using the quasi-peak detector, then the limits for the measurements with the average detector are considered to be met.
2. The lower limit shall apply at the transition frequencies.
3. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz.

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

a. The EUT was placed on a wooden table 0.8m height from the metal ground plan and 0.4m from the conducting wall of the shielding room and it was kept at 0.8m from any other grounded conducting surface.

b. All I/O cables and support devices were positioned as per ANSI C63.10.

c. Connect mains power port of the EUT to a line impedance stabilization network (LISN).

d. Connect all support devices to the other LISN and AAN, if needed.

e. Scan the frequency range from 150KHz to 30MHz at both sides of AC line for maximum conducted interference checking and record the test data.

TEST RESULTS

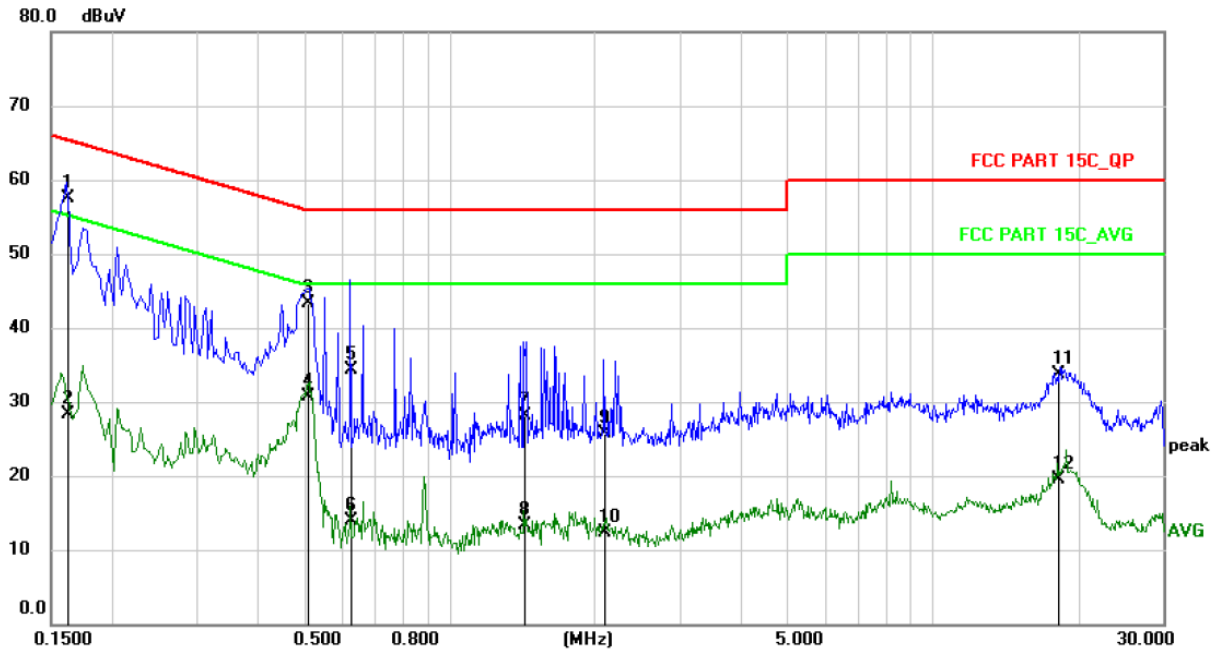
PASS

Please refer to the following pages.

M/N: 35050	Testing Voltage: AC 120V 60Hz
Phase: L1	Detector: QP & AVG
Test Mode: 2	

Conducted Emission Measurement

Date: 2026/5/20 Time: 11:27:18

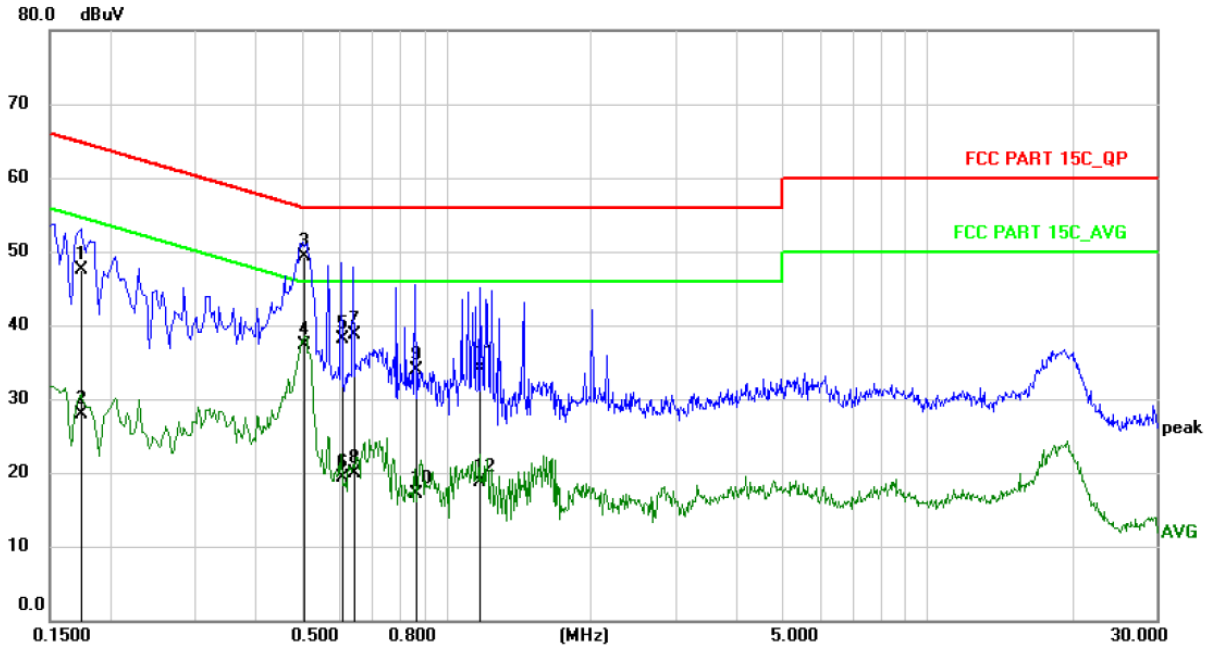


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1620	36.83	20.77	57.60	65.36	-7.76	QP	
2		0.1624	7.53	20.77	28.30	55.34	-27.04	AVG	
3		0.5100	22.14	21.16	43.30	56.00	-12.70	QP	
4		0.5100	9.54	21.16	30.70	46.00	-15.30	AVG	
5		0.6260	13.25	21.15	34.40	56.00	-21.60	QP	
6		0.6260	-7.25	21.15	13.90	46.00	-32.10	AVG	
7		1.4299	7.01	21.09	28.10	56.00	-27.90	QP	
8		1.4299	-7.79	21.09	13.30	46.00	-32.70	AVG	
9		2.0900	4.71	20.99	25.70	56.00	-30.30	QP	
10		2.0900	-8.59	20.99	12.40	46.00	-33.60	AVG	
11		18.2139	13.41	20.29	33.70	60.00	-26.30	QP	
12		18.2139	-0.69	20.29	19.60	50.00	-30.40	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Phase: N	Detector: QP & AVG
Test Mode: 2	

Conducted Emission Measurement

Date: 2026/5/20 Time: 11:35:43



No. Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1740	26.74	20.76	47.50	64.77	-17.27	QP	
2	0.1740	7.24	20.76	28.00	54.77	-26.77	AVG	
3 *	0.5060	28.18	21.12	49.30	56.00	-6.70	QP	
4	0.5060	16.28	21.12	37.40	46.00	-8.60	AVG	
5	0.6060	16.98	21.12	38.10	56.00	-17.90	QP	
6	0.6060	-1.82	21.12	19.30	46.00	-26.70	AVG	
7	0.6419	17.58	21.12	38.70	56.00	-17.30	QP	
8	0.6419	-1.12	21.12	20.00	46.00	-26.00	AVG	
9	0.8620	12.88	21.12	34.00	56.00	-22.00	QP	
10	0.8620	-3.92	21.12	17.20	46.00	-28.80	AVG	
11	1.1740	13.11	21.09	34.20	56.00	-21.80	QP	
12	1.1740	-2.29	21.09	18.80	46.00	-27.20	AVG	

13.3 Maximum Conducted Output Power Measurement

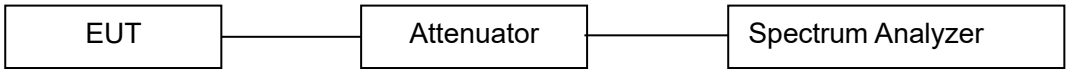
LIMITS

For system using digital modulation in the 2400-2483.5 MHz bands, the limit for peak output power is 1 Watt.

If the transmitting antenna of directional gain greater than 6dBi are used the peak output power form the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the Antenna exceeds 6dBi.

In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of Antenna exceeds 6dBi.

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024, Section 11.9.2.2.4

TEST RESULTS

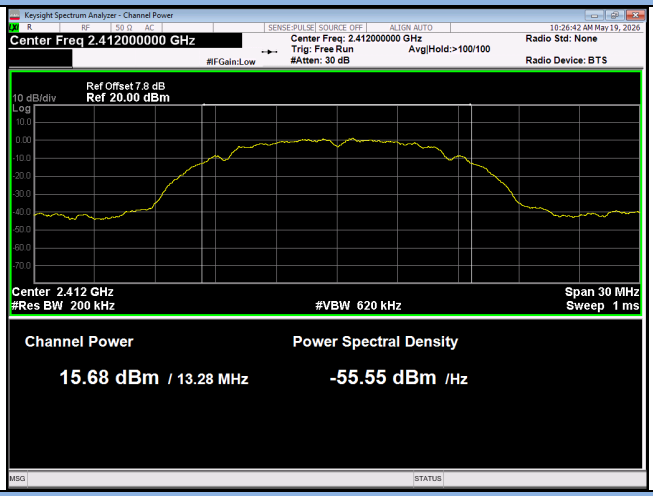
PASS

Please refer to the following table.

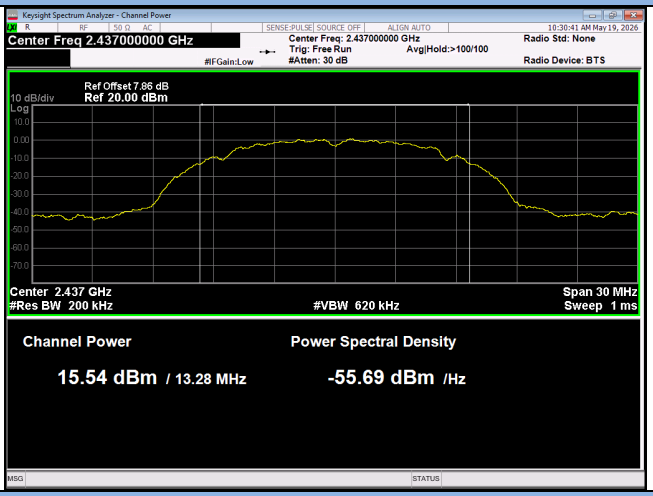
Channel	Frequency (MHz)	Data Rate (Mbps)	Measured Power (dBm)	Duty Cycle Factor (dB)	AVG power (dBm)	Limit (dBm)	Result
IEEE 802.11b							
1	2412	1	15.68	0	15.68	≤30	PASS
6	2437	1	15.54	0	15.54	≤30	PASS
11	2462	1	14.69	0	14.69	≤30	PASS
IEEE 802.11g							
1	2412	6	14.27	0	14.27	≤30	PASS
6	2437	6	14.38	0	14.38	≤30	PASS
11	2462	6	13.45	0	13.45	≤30	PASS
IEEE 802.11n(HT20)							
1	2412	MCS0	14.19	0	14.19	≤30	PASS
6	2437	MCS0	14.26	0	14.26	≤30	PASS
11	2462	MCS0	13.28	0	13.28	≤30	PASS
IEEE 802.11n(HT40)							
3	2422	MCS0	13.34	0	13.34	≤30	PASS
6	2437	MCS0	13.23	0	13.23	≤30	PASS
9	2452	MCS0	12.82	0	12.82	≤30	PASS

Test Plots

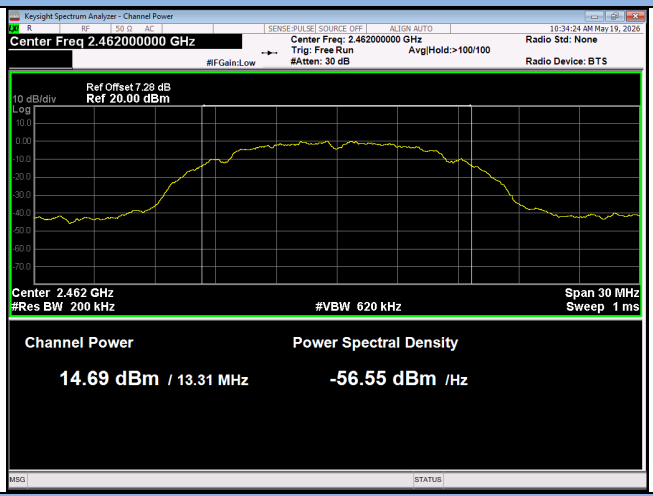
IEEE 802.11b - 2412MHz



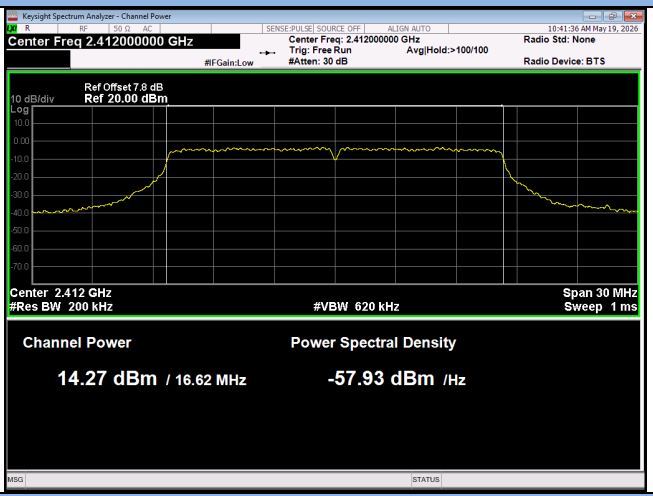
IEEE 802.11b - 2437MHz



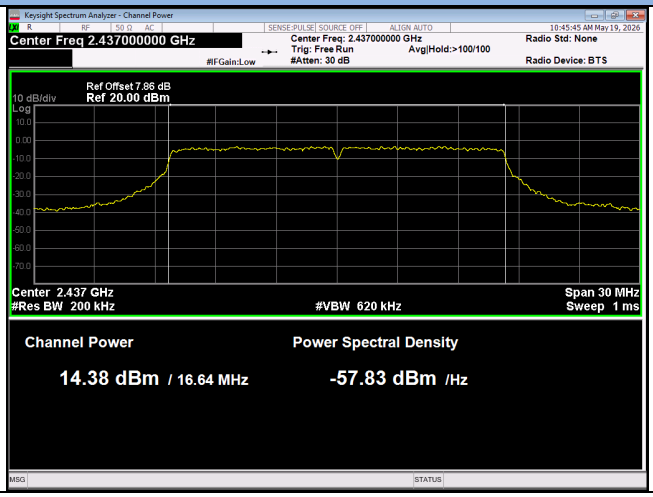
IEEE 802.11b - 2462MHz



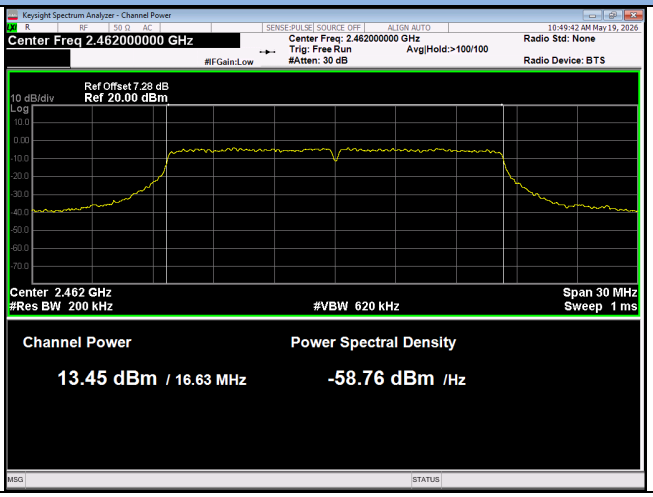
IEEE 802.11g - 2412MHz



IEEE 802.11g - 2437MHz

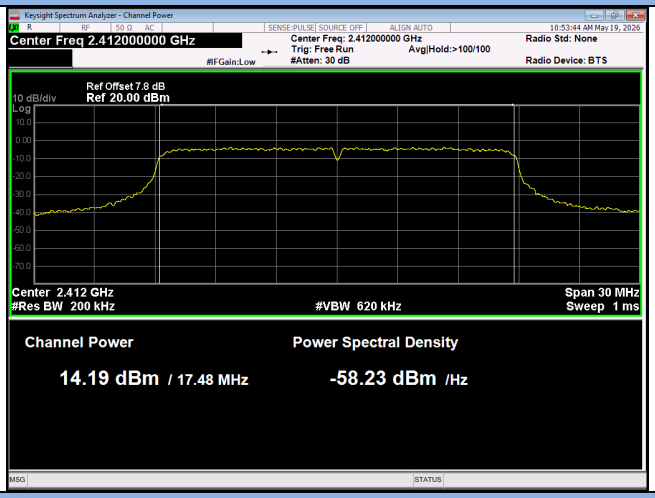


IEEE 802.11g - 2462MHz

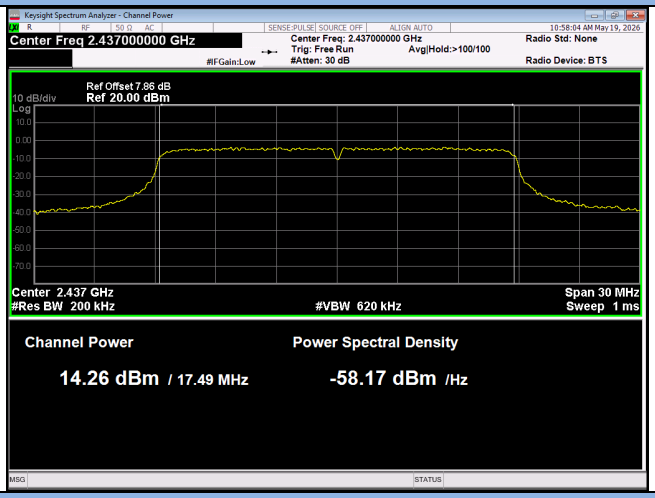


Test Plots

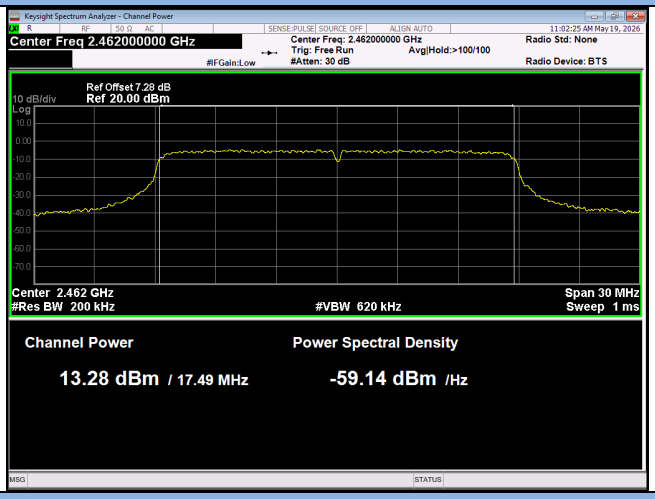
IEEE 802.11n(HT20) - 2412MHz



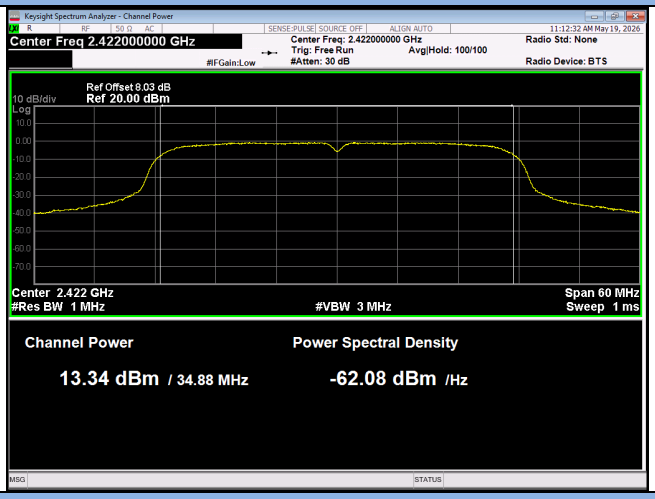
IEEE 802.11n(HT20) - 2437MHz



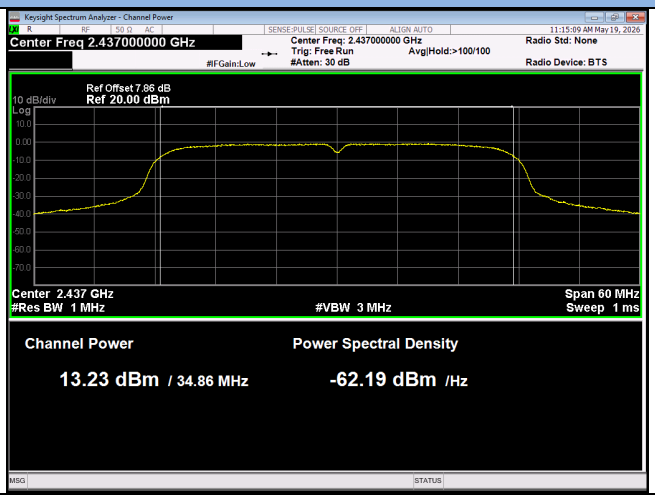
IEEE 802.11n(HT20) - 2462MHz



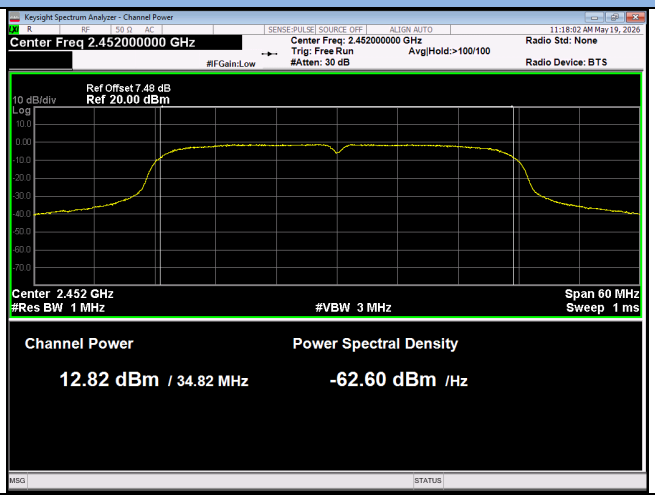
IEEE 802.11n(HT40) - 2422MHz



IEEE 802.11n(HT40) - 2437MHz



IEEE 802.11n(HT40) - 2452MHz

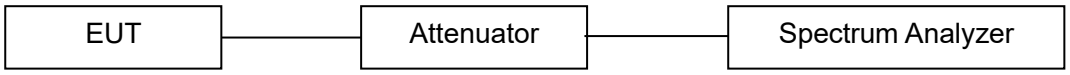


13.4 6dB Bandwidth and 99% Bandwidth Measurement

LIMITS

The minimum 6dB bandwidth shall be at least 500 kHz

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to DTS KDB 558074 D01 15.247 Meas Guidance v05r02:

a. Set the RBW = hall be in the range of 1% to 5% of the OBW but not less than 100KHz.

b. Set the VBW ≥ 3 x RBW

c. Set the Detector = peak.

d. Set the Sweep time = auto couple.

e. Set the Trace mode = max hold.

f. Allow trace to fully stabilize.

g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission, and use the spectrum 99% bandwidth function to measure the 99% bandwidth.

TEST RESULTS

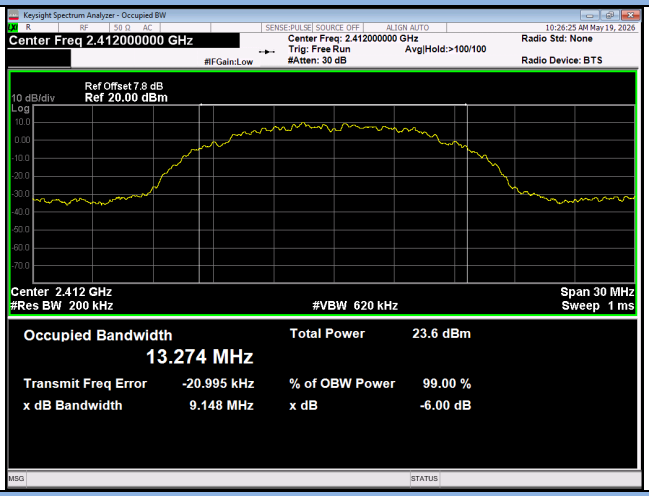
PASS

Please refer to the following tables.

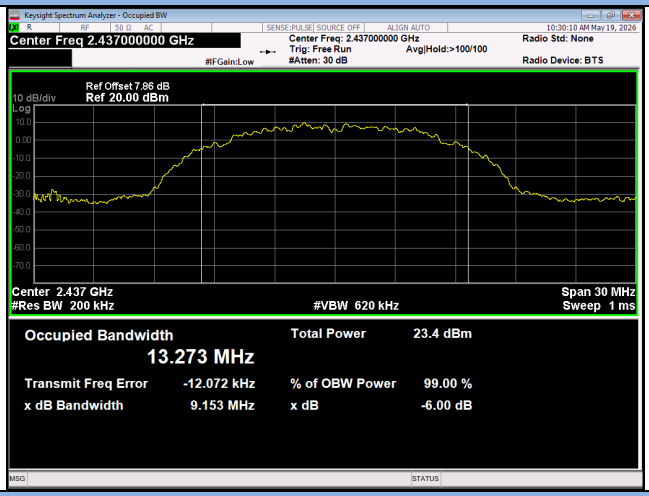
Channel	Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b						
1	2412	1	9.148	13.281	>0.5	PASS
6	2437	1	9.153	13.276	>0.5	PASS
11	2462	1	9.143	13.310	>0.5	PASS
IEEE 802.11g						
1	2412	6	16.47	16.623	>0.5	PASS
6	2437	6	16.47	16.637	>0.5	PASS
11	2462	6	16.47	16.631	>0.5	PASS
IEEE 802.11n(HT20)						
1	2412	MCS0	17.46	17.476	>0.5	PASS
6	2437	MCS0	17.46	17.486	>0.5	PASS
11	2462	MCS0	17.42	17.489	>0.5	PASS
IEEE 802.11n(HT40)						
3	2422	MCS0	33.36	34.879	>0.5	PASS
6	2437	MCS0	33.24	34.865	>0.5	PASS
9	2452	MCS0	33.32	34.822	>0.5	PASS

Test Plots of 6dB Bandwidth

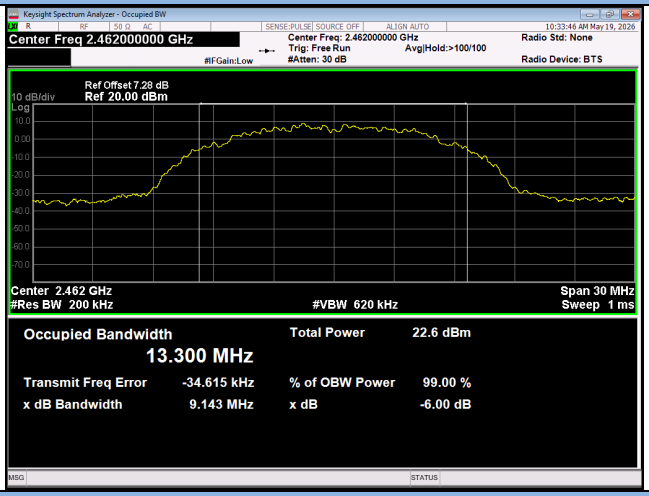
IEEE 802.11b - 2412MHz



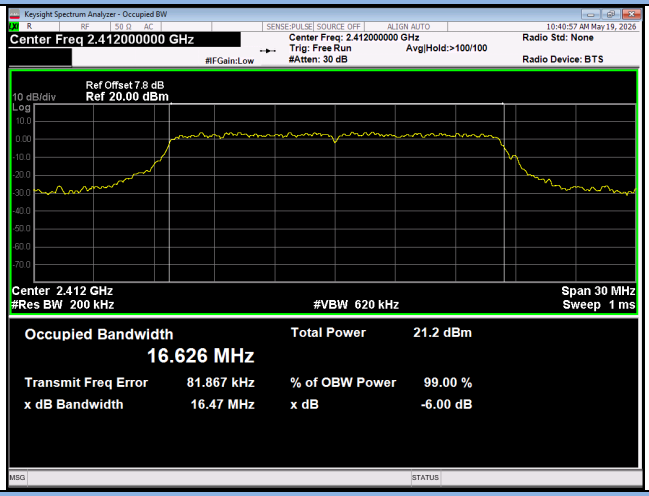
IEEE 802.11b - 2437MHz



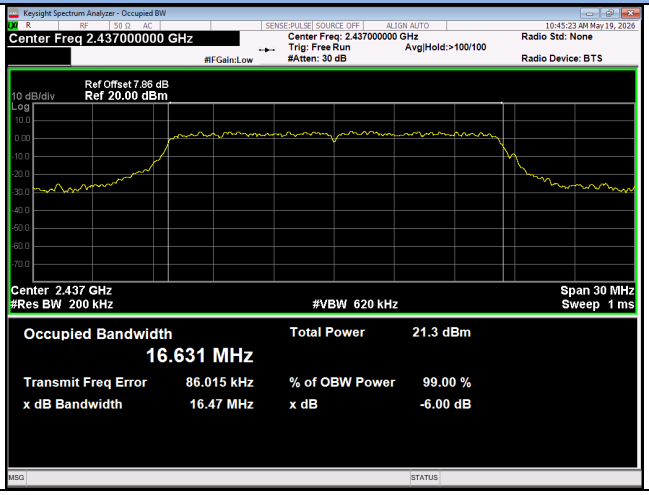
IEEE 802.11b - 2462MHz



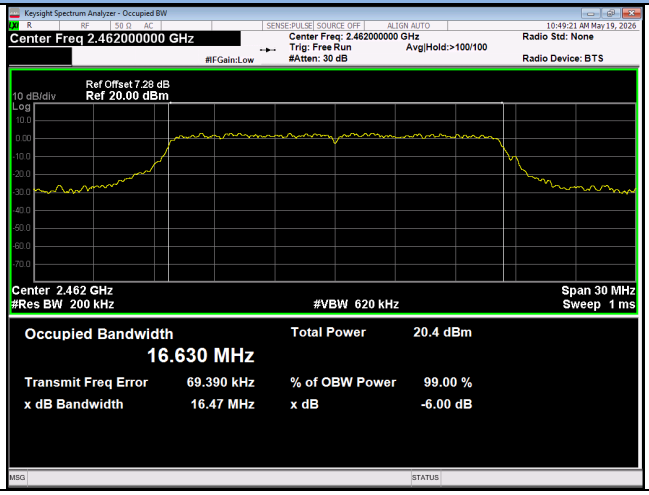
IEEE 802.11g - 2412MHz



IEEE 802.11g - 2437MHz

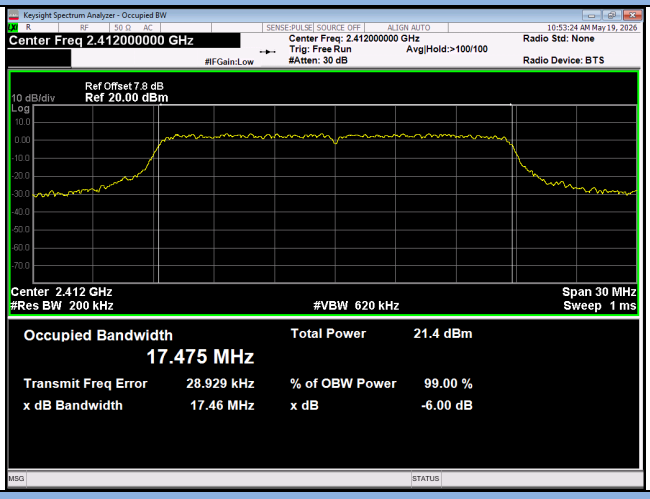


IEEE 802.11g - 2462MHz

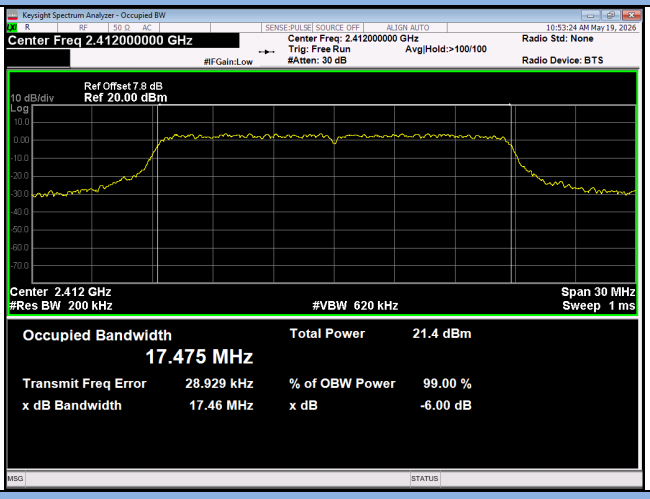


Test Plots of 6dB Bandwidth

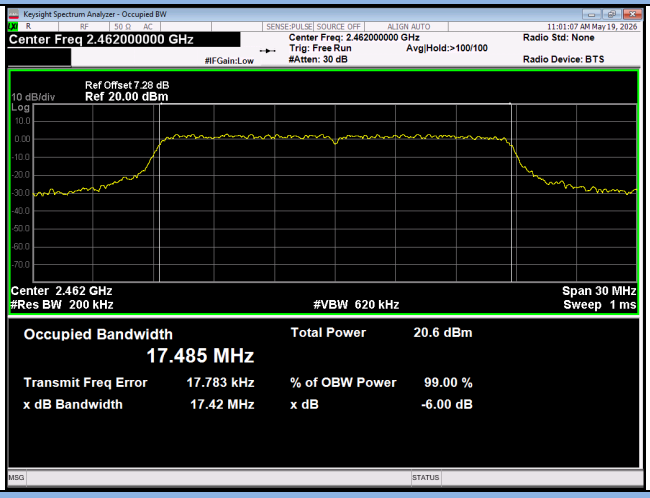
IEEE 802.11n(HT20) - 2412MHz



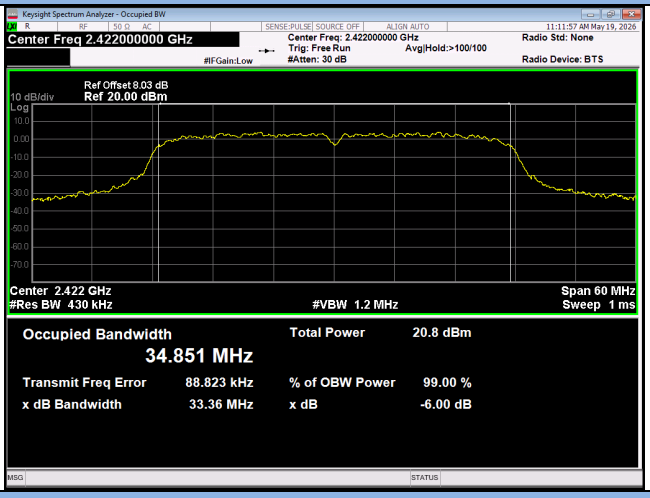
IEEE 802.11n(HT20) - 2437MHz



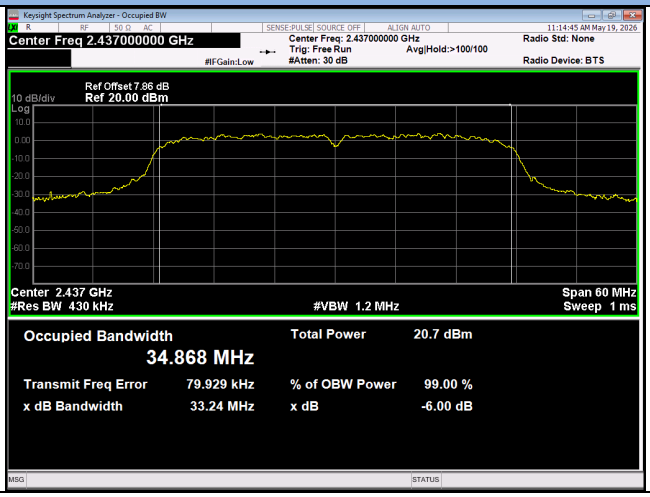
IEEE 802.11n(HT20) - 2462MHz



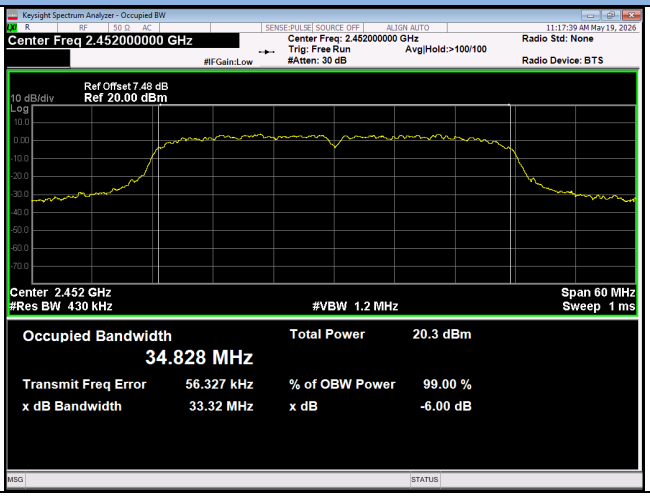
IEEE 802.11n(HT40) - 2422MHz



IEEE 802.11n(HT40) - 2437MHz

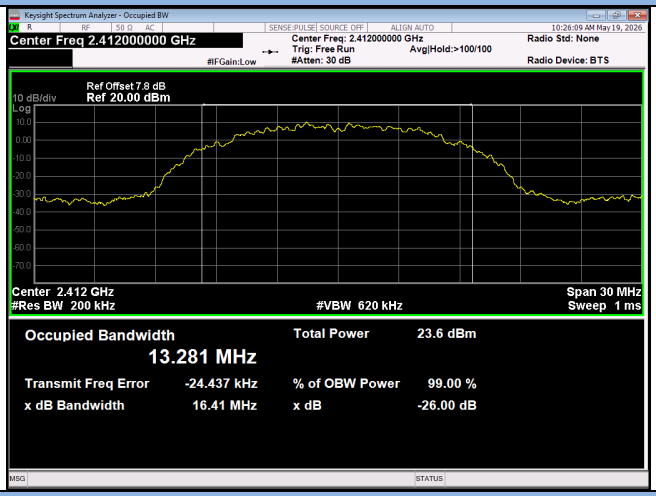


IEEE 802.11n(HT40) - 2452MHz

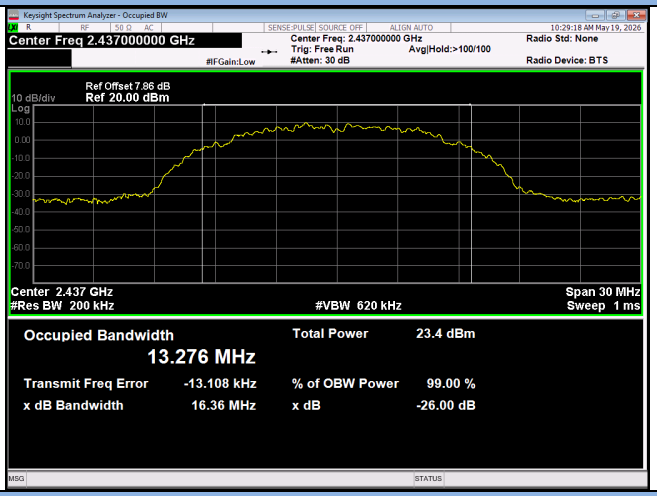


Test Plots of 99% Bandwidth

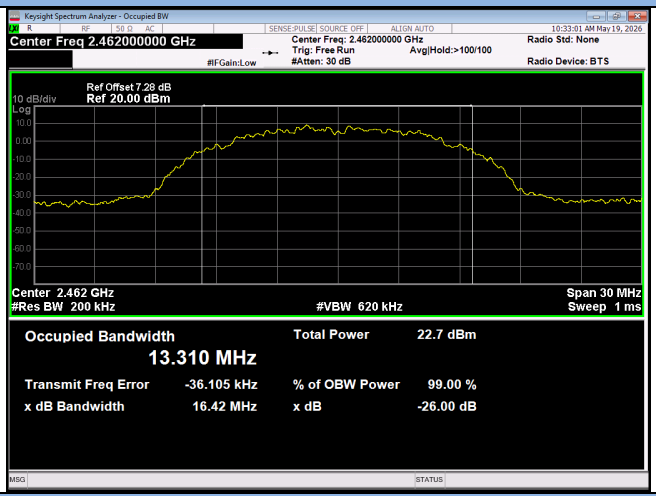
IEEE 802.11b - 2412MHz



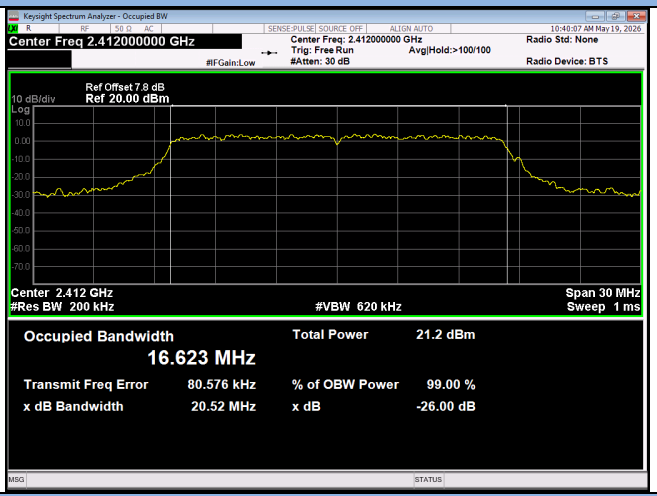
IEEE 802.11b - 2437MHz



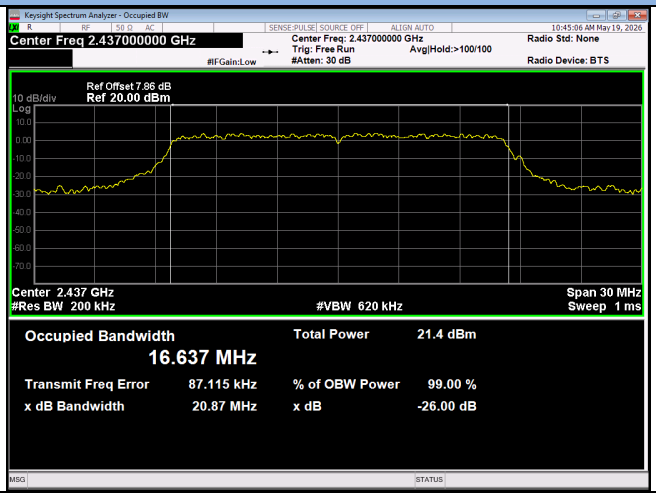
IEEE 802.11b - 2462MHz



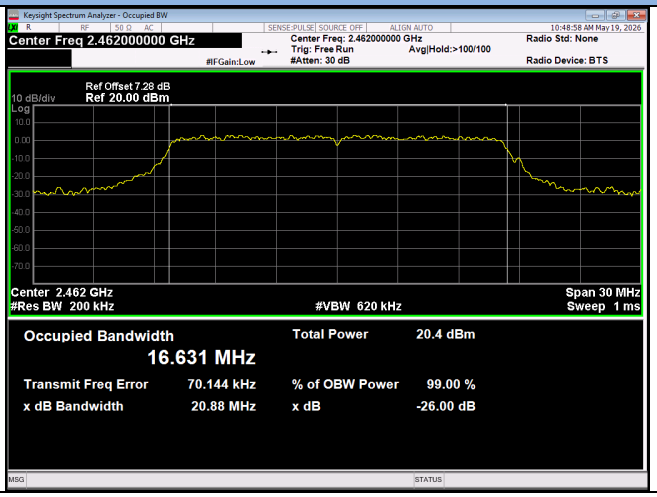
IEEE 802.11g - 2412MHz



IEEE 802.11g - 2437MHz

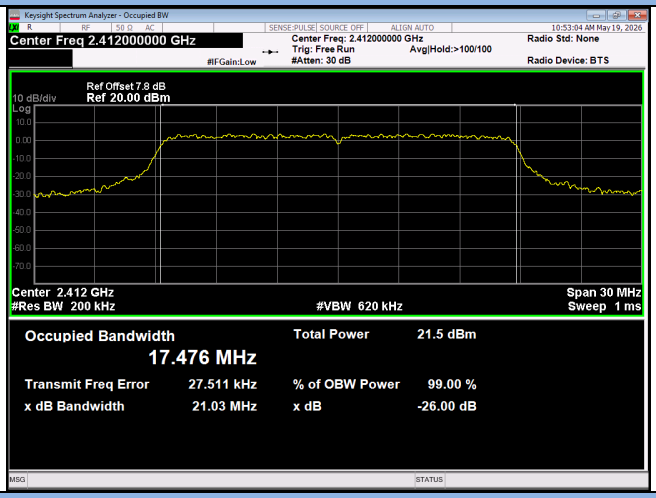


IEEE 802.11g - 2462MHz

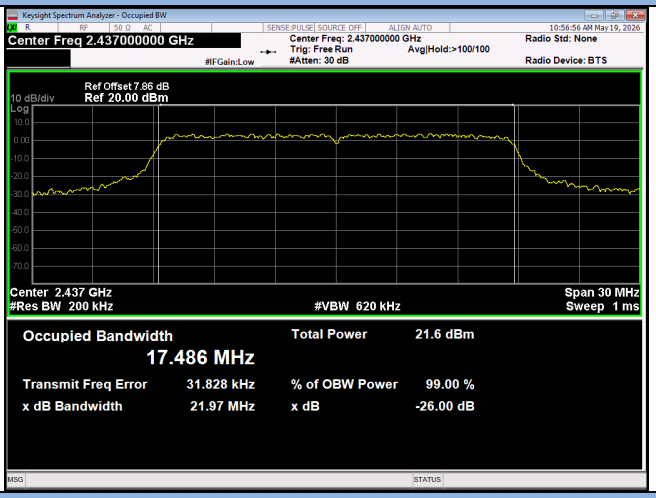


Test Plots of 99% Bandwidth

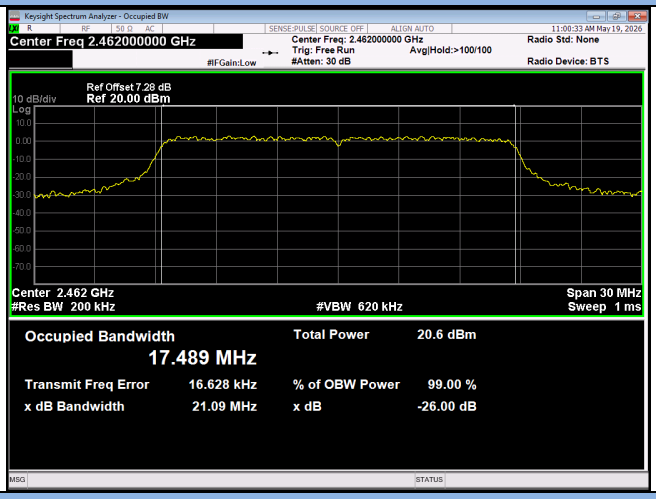
IEEE 802.11n(HT20) - 2412MHz



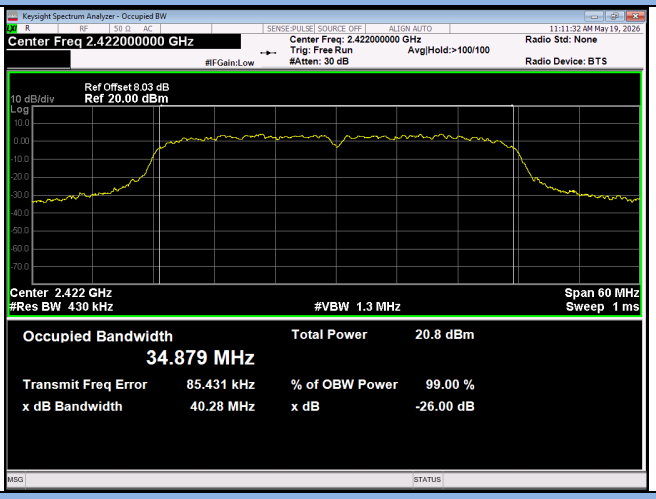
IEEE 802.11n(HT20) - 2437MHz



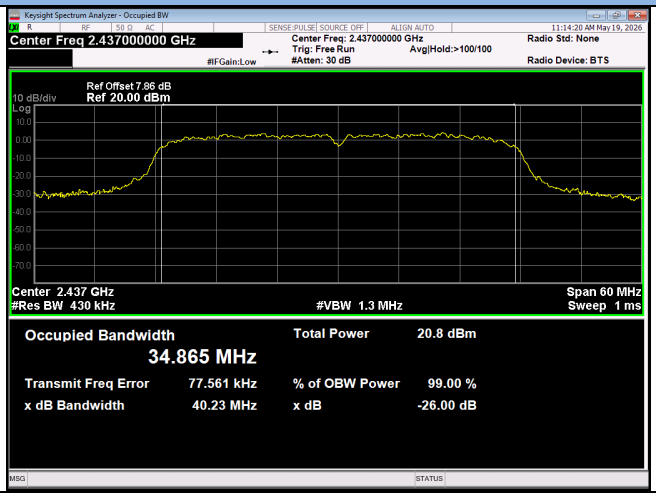
IEEE 802.11n(HT20) - 2462MHz



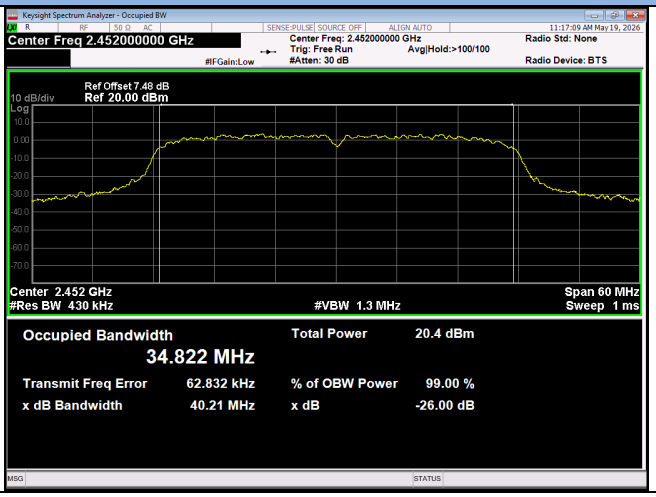
IEEE 802.11n(HT40) - 2422MHz



IEEE 802.11n(HT40) - 2437MHz



IEEE 802.11n(HT40) - 2452MHz

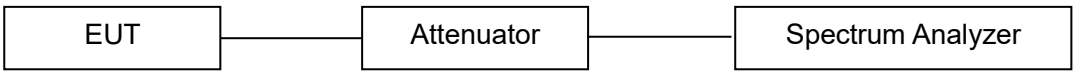


13.5 Power Spectral Density Measurement

LIMITS

The Maximum of Power Spectral Density Measurement is 8dBm in any 3 kHz.

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to FCC DTS KDB 558074 D01 15.247 Meas Guidance v05r02:

a. Set analyzer center frequency to DTS channel center frequency.

b. Set the span to 1.5 times the DTS bandwidth.

c. Set the RBW to: 3 kHz ≤ RBW ≤ 100KHz

d. Set the VBW ≥ 3 x RBW.

e. Set the Detector = AVG.

f. Set the Sweep time = auto couple.

g. Set the Trace mode = max hold.

h. Allow trace to fully stabilize.

i. Use the peak marker function to determine the maximum amplitude level within the RBW.

j. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST RESULTS

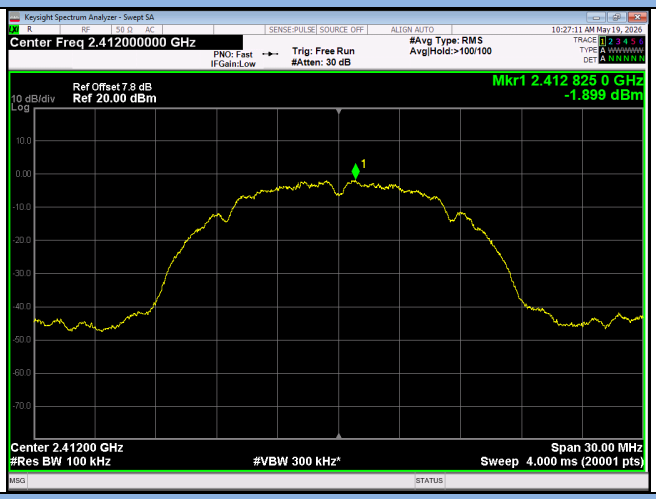
PASS

Please refer to the following table.

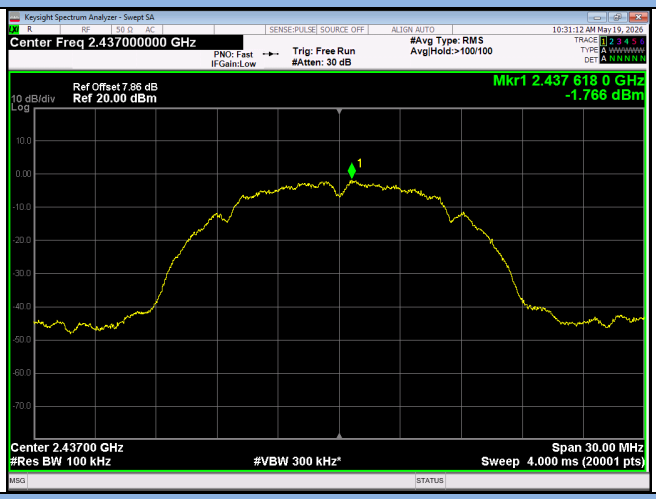
Channel	Frequency (MHz)	Data Rate (Mbps)	PSD (dBm)	Limit dBm / 3kHz	Result
IEEE 802.11b					
1	2412	1	-1.899	8	PASS
6	2437	1	-1.766	8	PASS
11	2462	1	-3.025	8	PASS
IEEE 802.11g					
1	2412	6	-5.623	8	PASS
6	2437	6	-5.567	8	PASS
11	2462	6	-6.356	8	PASS
IEEE 802.11n(HT20)					
1	2412	MCS0	-5.843	8	PASS
6	2437	MCS0	-5.634	8	PASS
11	2462	MCS0	-6.694	8	PASS
IEEE 802.11n(HT40)					
3	2422	MCS0	-8.895	8	PASS
6	2437	MCS0	-9.555	8	PASS
9	2452	MCS0	-9.630	8	PASS

Test Plots of Power Spectral Density

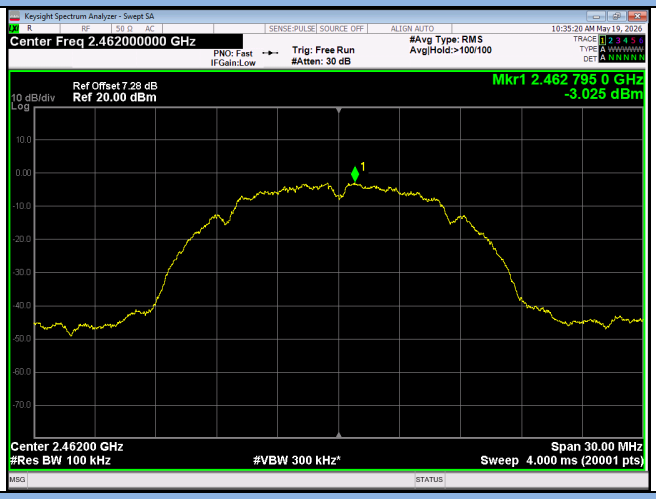
IEEE 802.11b - 2412MHz



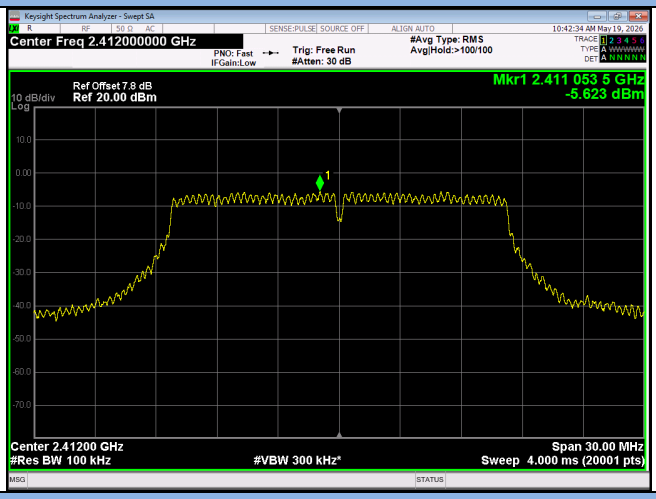
IEEE 802.11b - 2437MHz



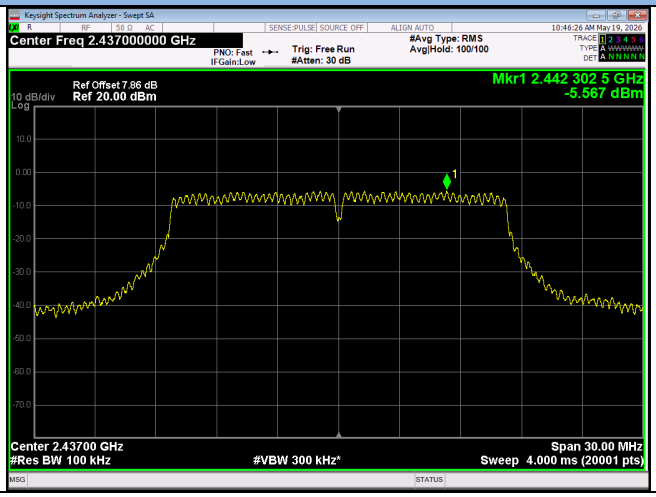
IEEE 802.11b - 2462MHz



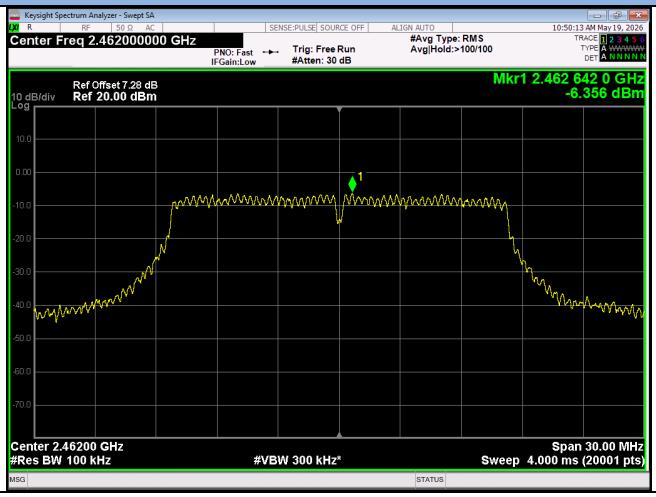
IEEE 802.11g - 2412MHz



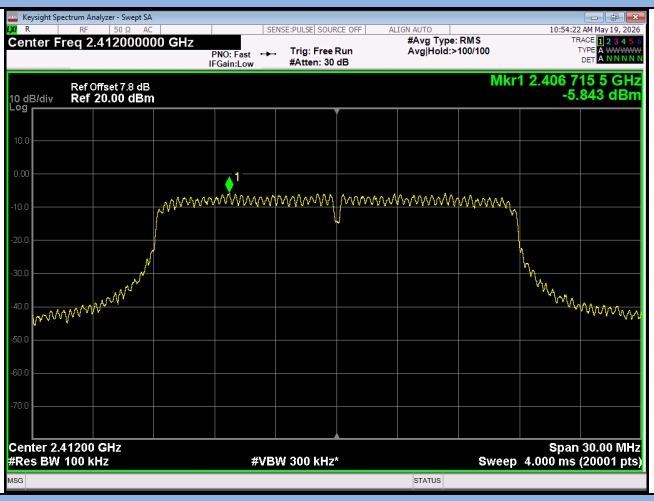
IEEE 802.11g - 2437MHz



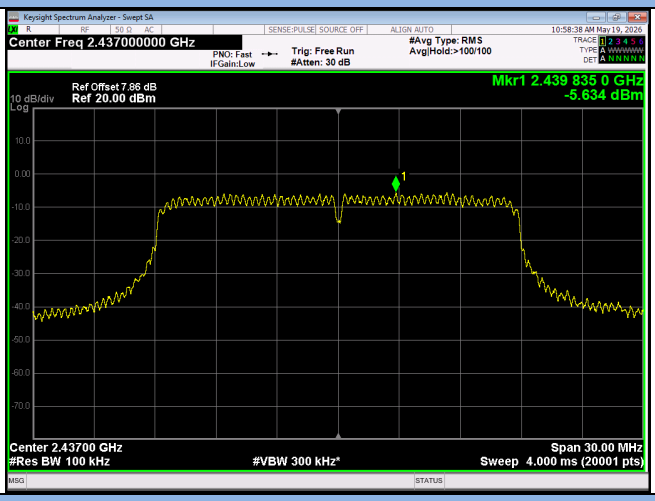
IEEE 802.11g - 2462MHz



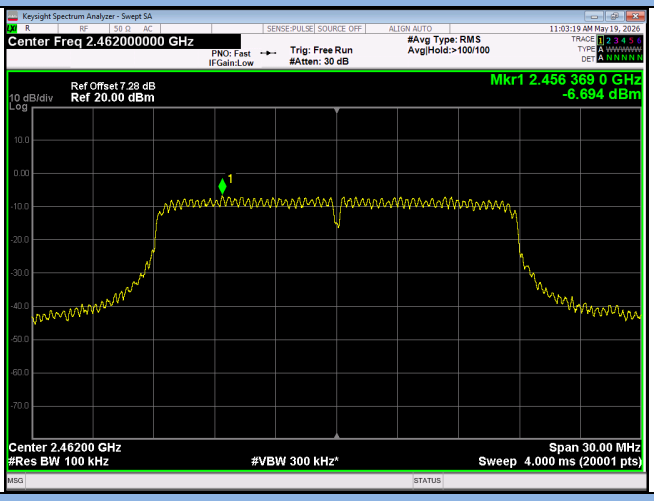
IEEE 802.11n(HT20) - 2412MHz



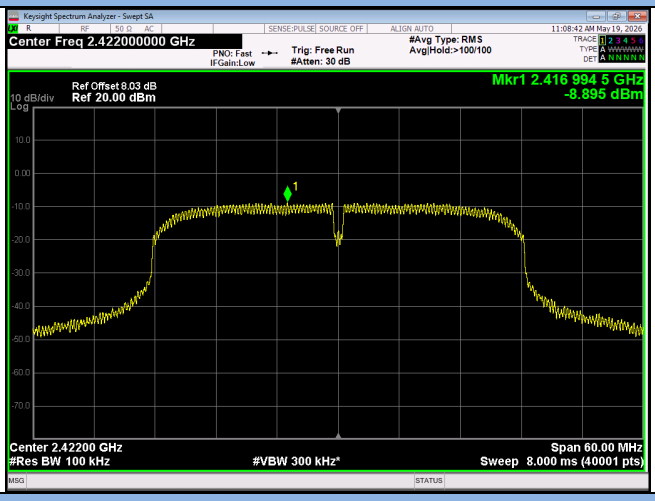
IEEE 802.11n(HT20) - 2437MHz



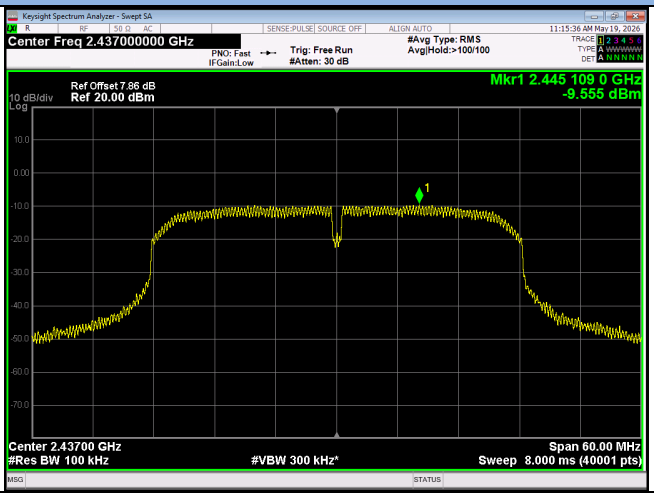
IEEE 802.11n(HT20) - 2462MHz



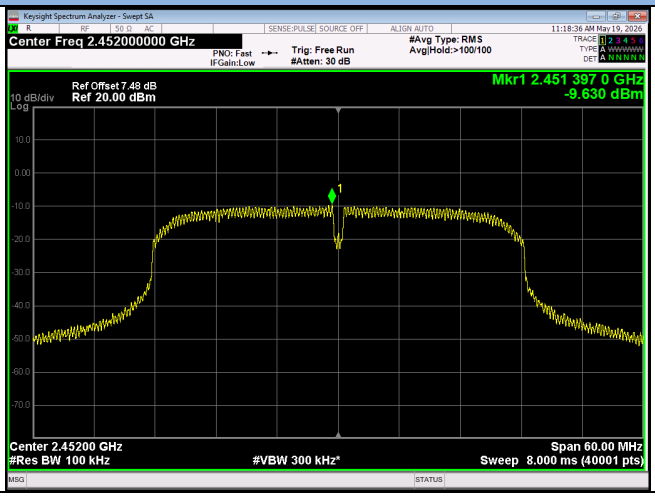
IEEE 802.11n(HT40) - 2422MHz



IEEE 802.11n(HT40) - 2437MHz



IEEE 802.11n(HT40) - 2452MHz



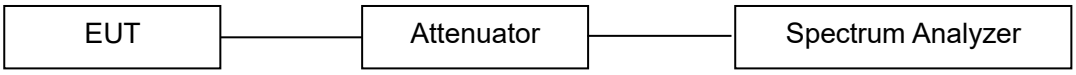
13.6 Band Edge and Conducted Spurious Emissions Measurement

LIMITS

In any 100KHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

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 S15.209(a) is not required.

BLOCK DIAGRAM OF TEST SETUP



TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to ANSI C63.10, Section 11.11

Measurement Procedure REF

a. Set the RBW = 100 kHz.

b. Set the VBW ≥ 300 kHz.

c. Set the Detector = peak.

d. Set the Sweep time = auto couple.

e. Trace mode = max hold.

f. Allow trace to fully stabilize.

g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

Measurement Procedure OOBE

a. Set RBW = 100 kHz.

b. Set VBW ≥ 300 kHz.

c. Set the Detector = peak.

d. Set the Sweep = auto couple.

e. Set the Trace Mode = max hold.

f. Allow trace to fully stabilize.

g. Use the peak marker function to determine the maximum amplitude level.

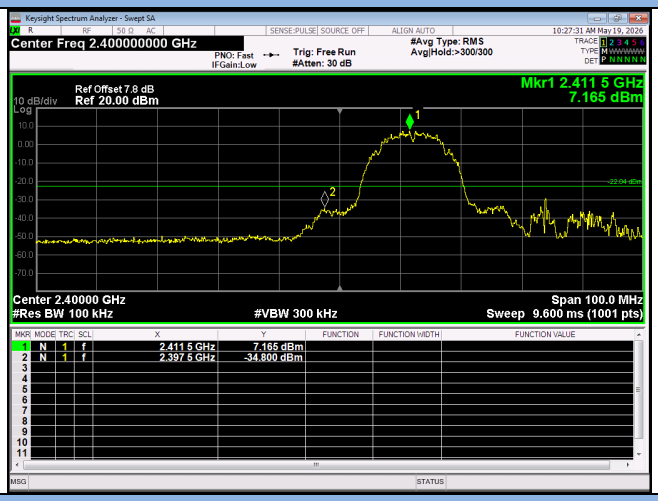
TEST RESULTS

PASS

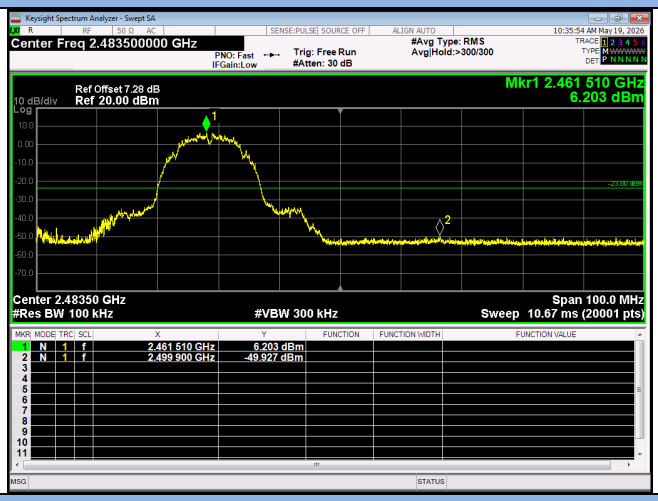
Please refer to the following test plots.

Band Edge

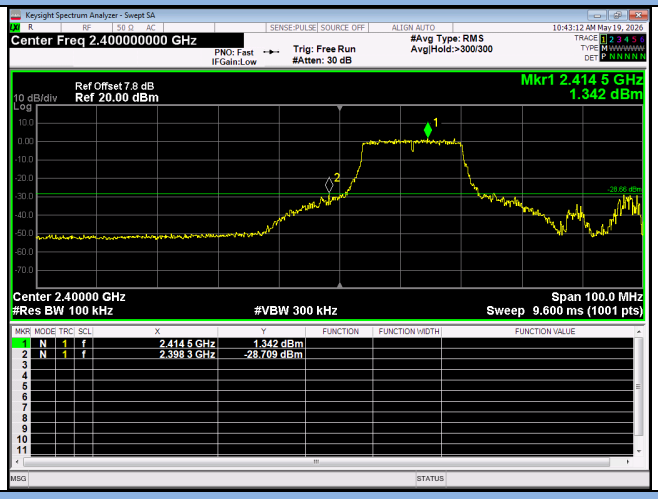
IEEE 802.11b / Low Channel



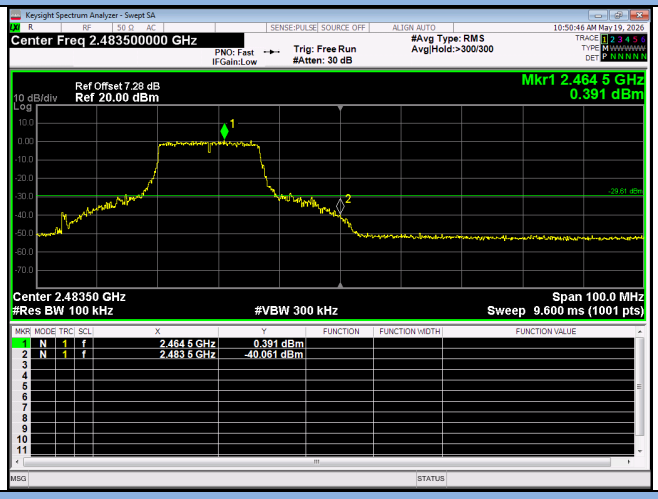
IEEE 802.11b / High Channel



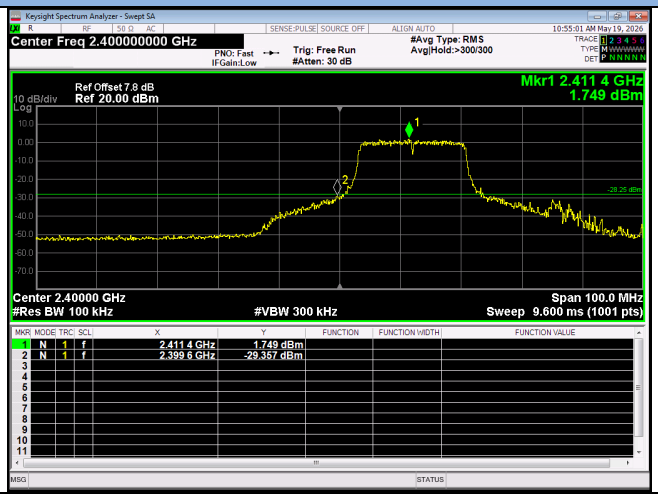
IEEE 802.11g / Low Channel



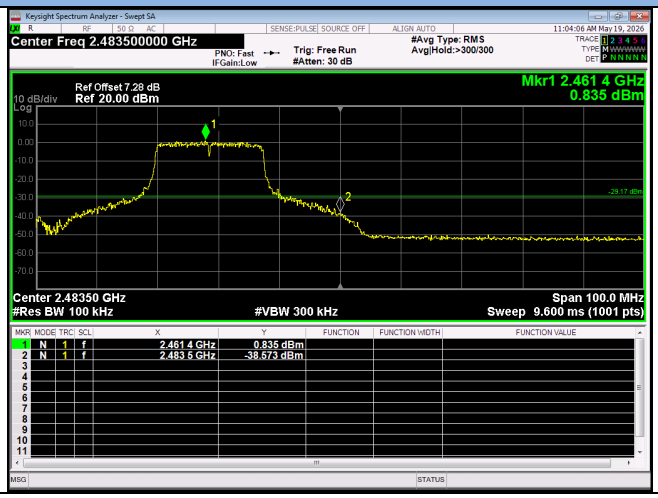
IEEE 802.11g / High Channel

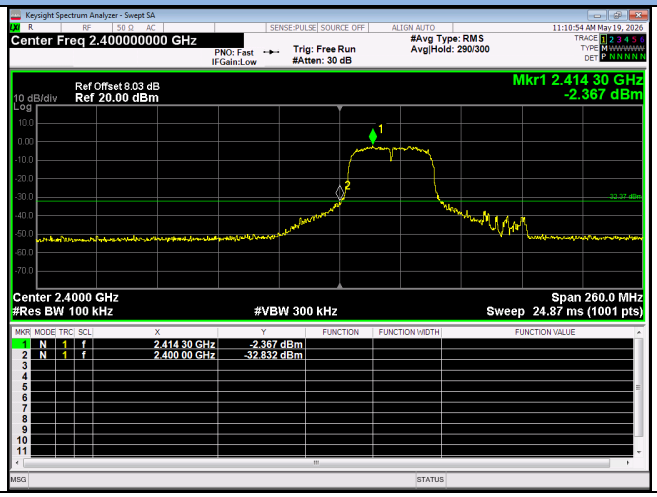
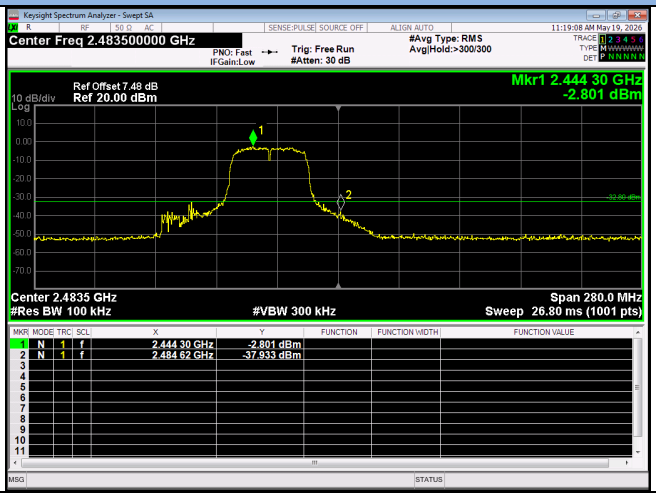


IEEE 802.11n(HT20) / Low Channel



IEEE 802.11n(HT20) / High Channel

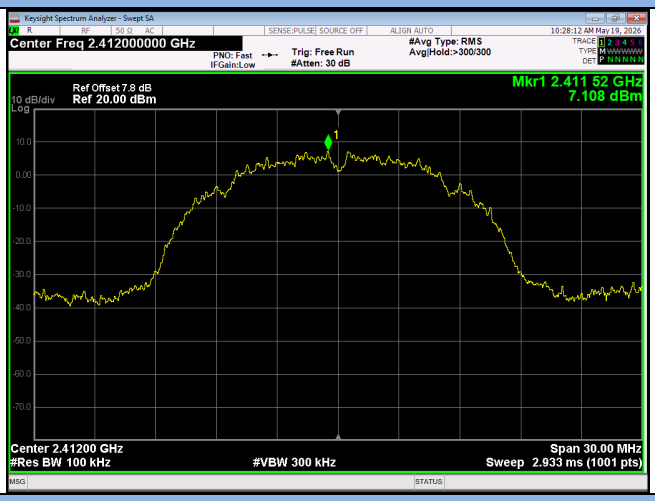


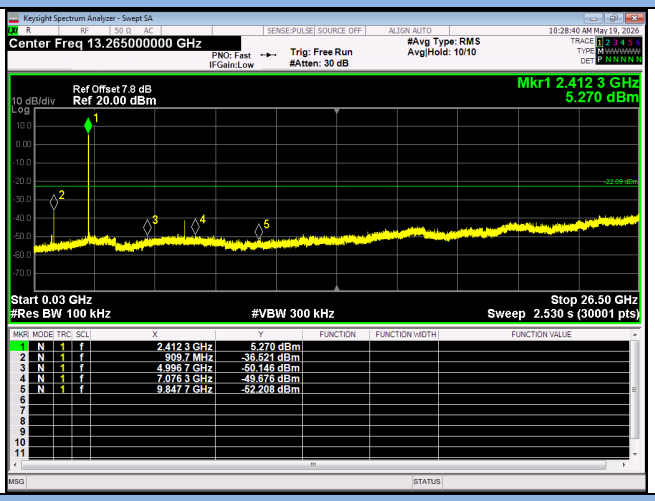
IEEE 802.11n(HT40) / Low Channel	IEEE 802.11n(HT40) / High Channel
	

All modes have been tested, and the report only recorded the worst data: 802.11b mode.

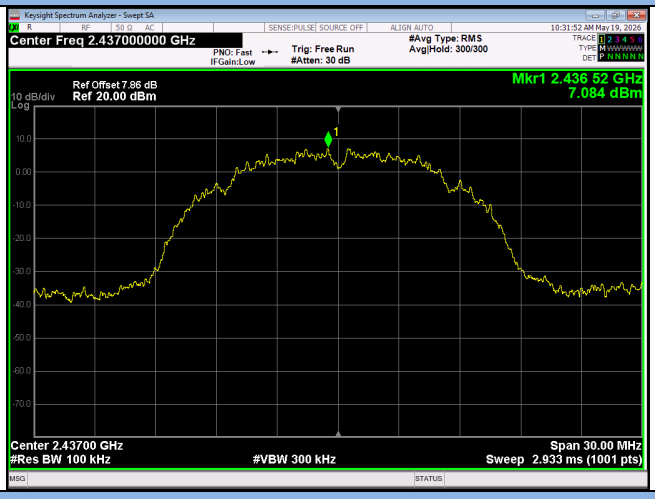
Conducted Spurious Emissions – IEEE 802.11b (The Worst Case)

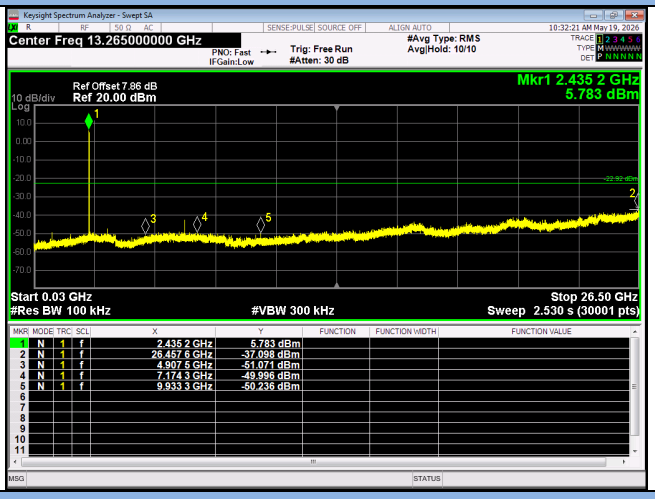
Lowest Channel



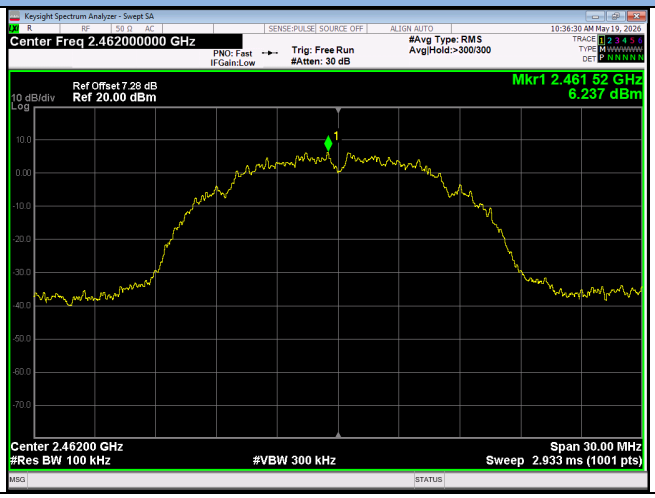


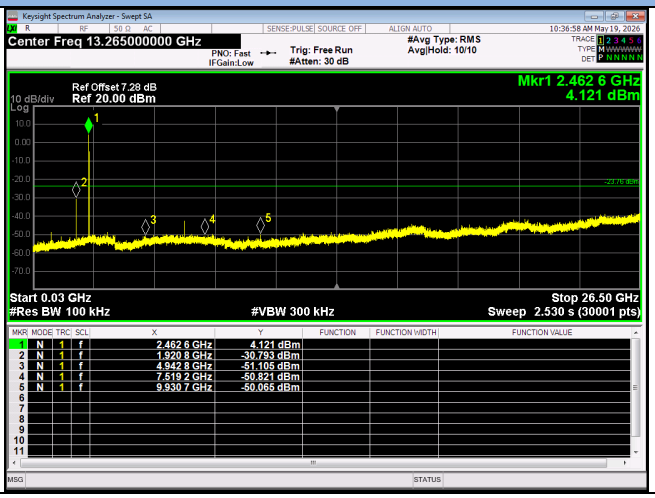
Middle Channel





Highest Channel





13.7 Radiated Spurious Emissions and Restricted Bands Measurement

LIMIT of Radiated Band Edges and non-restricted bands

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

LIMIT of Restricted bands

In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below:

Frequency range MHz	Distance Meters	Field Strengths Limit (15.209)
		μV/m
0.009 ~ 0.490	300	2400/F(kHz)
0.490 ~ 1.705	30	24000/F(kHz)
1.705 ~ 30	30	30
30 ~ 88	3	100
88 ~ 216	3	150
216 ~ 960	3	200
Above 960	3	500

Remark: (1) Emission level (dB)μV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

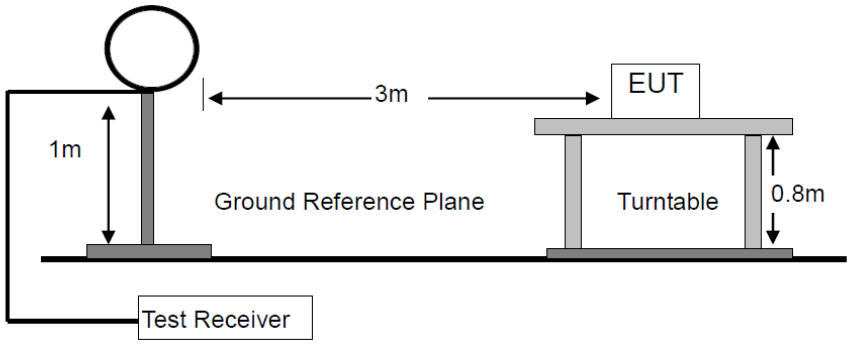
(3) As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

(4) The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

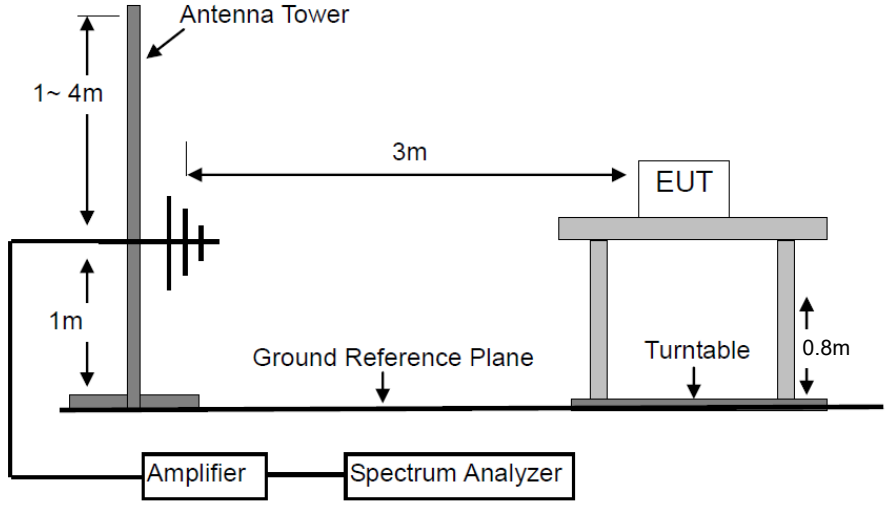
(5) §15.247(d) specifies that emissions which fall in the restricted bands, as defined in §15.205 comply with radiated emission limits specified in §15.209.

BLOCK DIAGRAM OF TEST SETUP

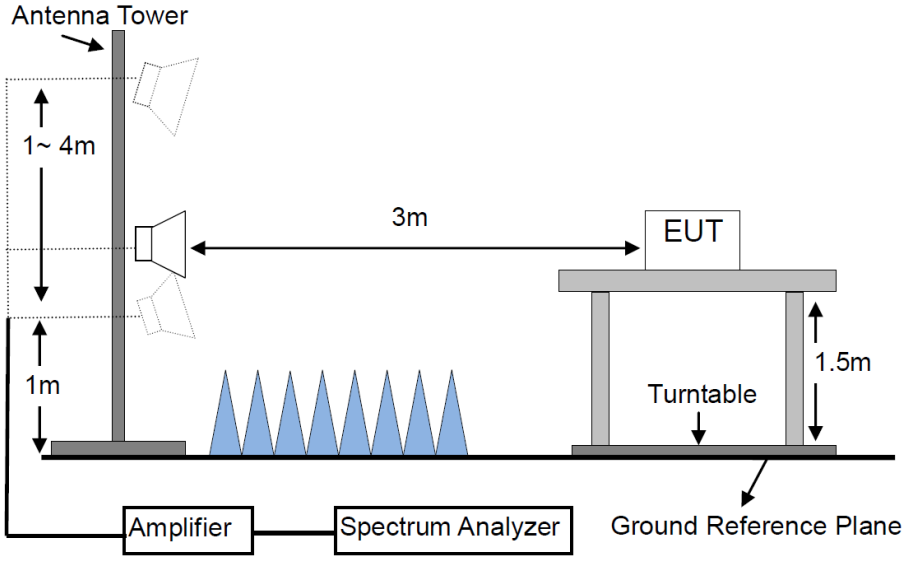
For Radiated Emission below 30MHz



For Radiated Emission 30-1000MHz



For Radiated Emission Above 1000MHz.



TEST PROCEDURES

a. Below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.

b. For the radiated emission test above 1GHz:

The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

c. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.

f. A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

g. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and packet type.

The worst case was found when the EUT was positioned on X axis for radiated emission.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Frequency Band (MHz)	Detector	Resolution Bandwidth	Video Bandwidth
0.009~0.15	QP & AVG	200 Hz	1 kHz
0.15~30	QP & AVG	10 kHz	30 kHz
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	3 MHz
	Average	1 MHz	10 Hz

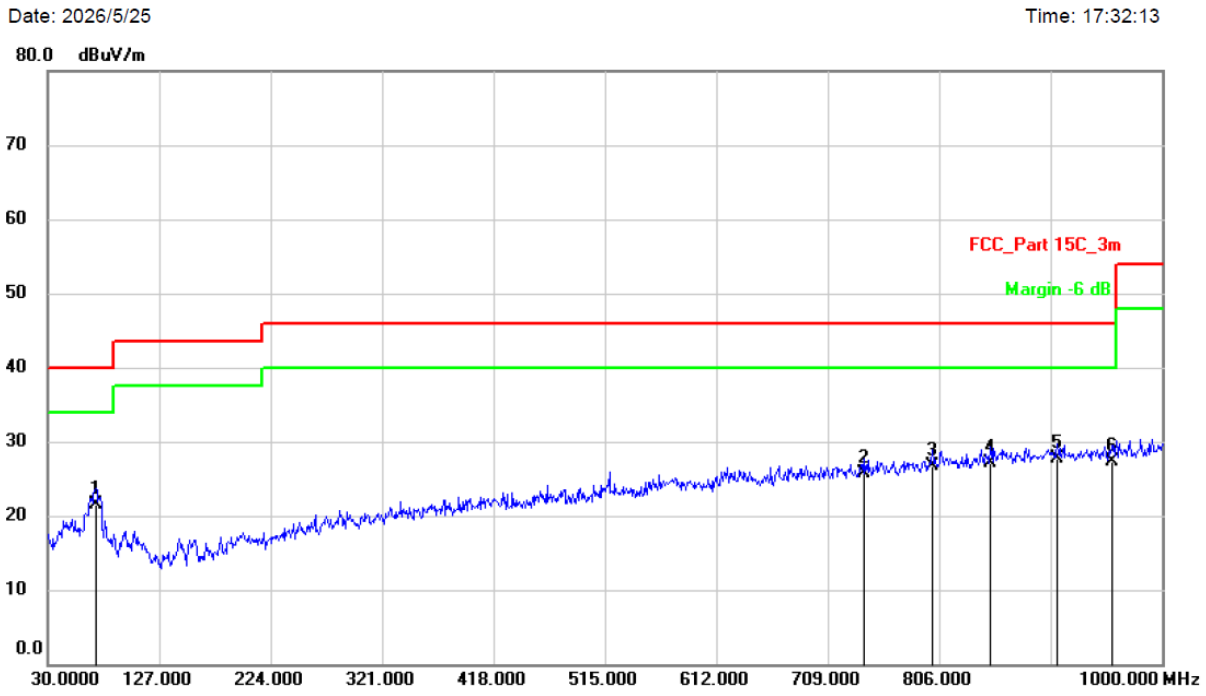
TEST RESULTS

PASS

Please refer to the following pages of the worst case.

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: QP
Test Mode: 1 (the worst case, 802.11b / Low channel)	Distance: 3m

Radiated Emission Measurement

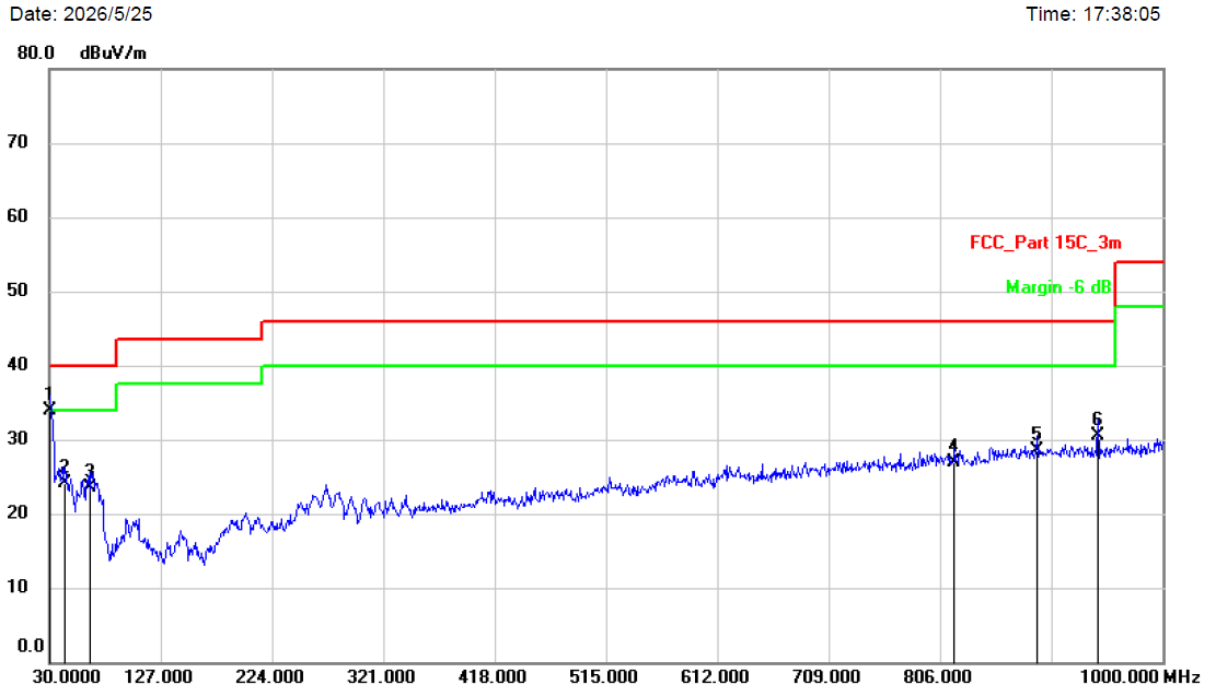


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		71.7100	34.14	-12.54	21.60	40.00	-18.40	QP	
2		741.0100	24.13	1.57	25.70	46.00	-20.30	QP	
3		800.1800	24.43	2.37	26.80	46.00	-19.20	QP	
4		850.6200	23.94	3.26	27.20	46.00	-18.80	QP	
5	*	908.8200	23.96	3.74	27.70	46.00	-18.30	QP	
6		956.3500	23.52	3.88	27.40	46.00	-18.60	QP	

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: QP
Test Mode: 1(the worst case, 802.11b / Low channel)	Distance: 3m

Radiated Emission Measurement

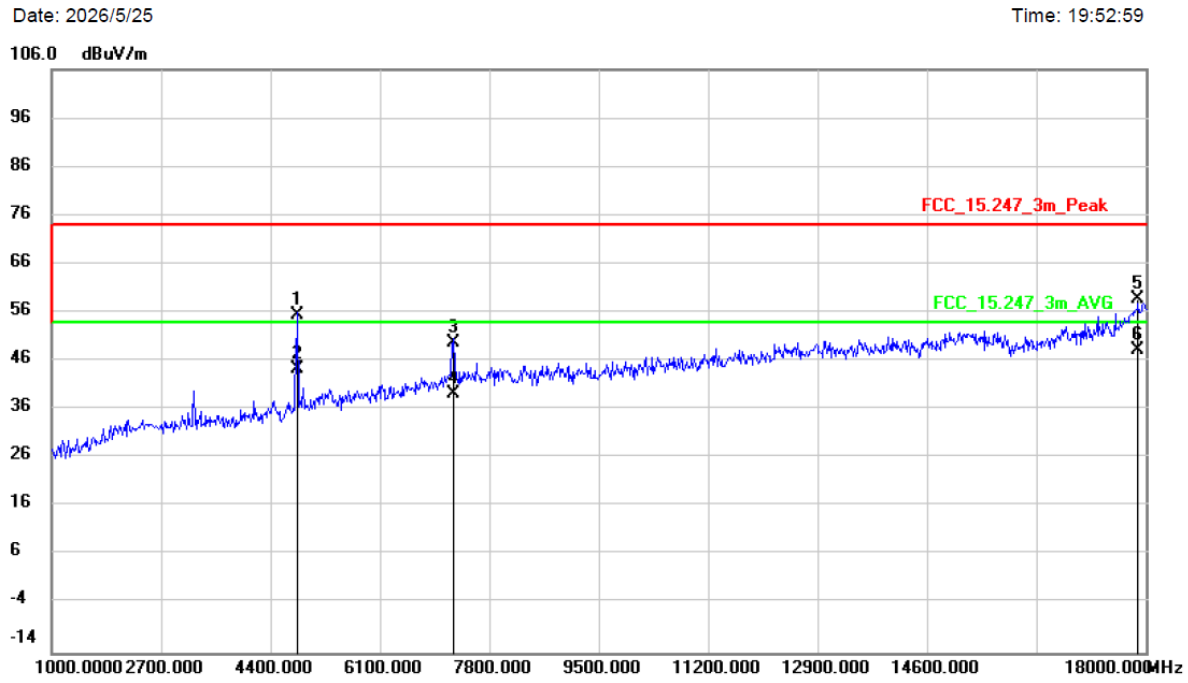


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	30.9700	44.59	-10.69	33.90	40.00	-6.10	QP	
2		43.5800	32.34	-8.14	24.20	40.00	-15.80	QP	
3		65.8900	33.99	-10.39	23.60	40.00	-16.40	QP	
4		818.6100	24.16	2.74	26.90	46.00	-19.10	QP	
5		890.3900	24.83	3.67	28.50	46.00	-17.50	QP	
6		943.7400	26.79	3.81	30.60	46.00	-15.40	QP	

Note: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b ((Low Channel)	Distance: 3m

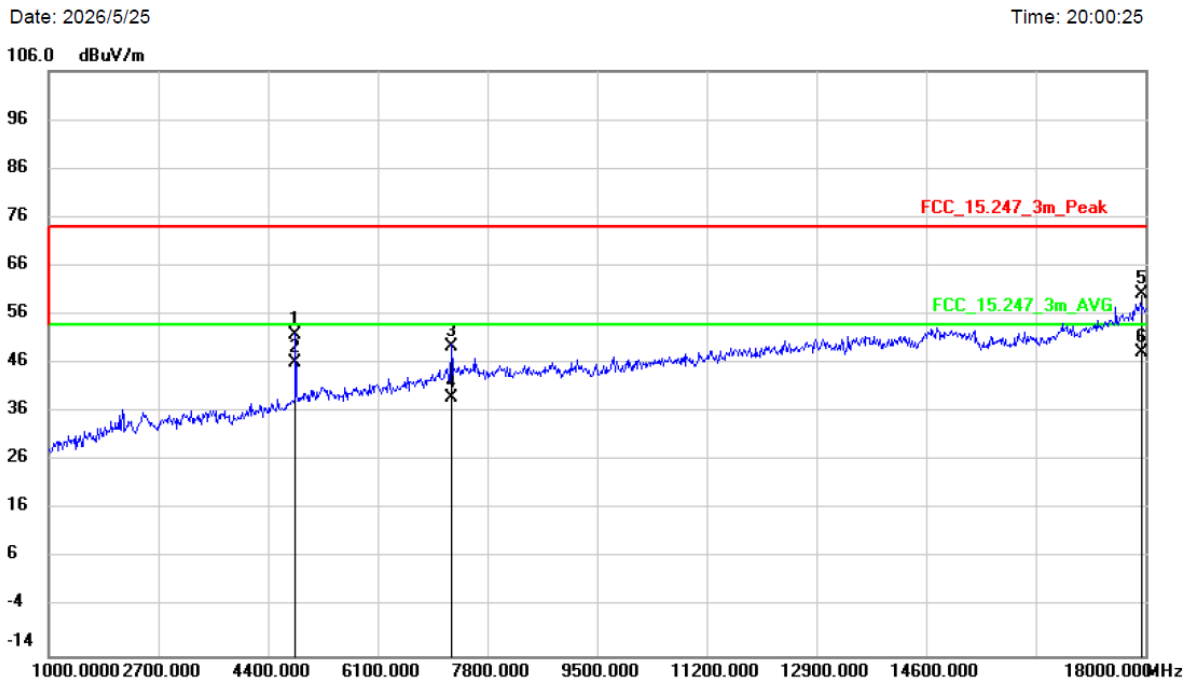
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	51.60	3.86	55.46	74.00	-18.54	peak	
2		4824.000	40.49	3.86	44.35	54.00	-9.65	AVG	
3		7236.000	41.18	8.66	49.84	74.00	-24.16	peak	
4		7236.000	30.51	8.66	39.17	54.00	-14.83	AVG	
5		17881.000	38.54	20.18	58.72	74.00	-15.28	peak	
6	*	17881.000	28.18	20.18	48.36	54.00	-5.64	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b ((Low Channel)	Distance: 3m

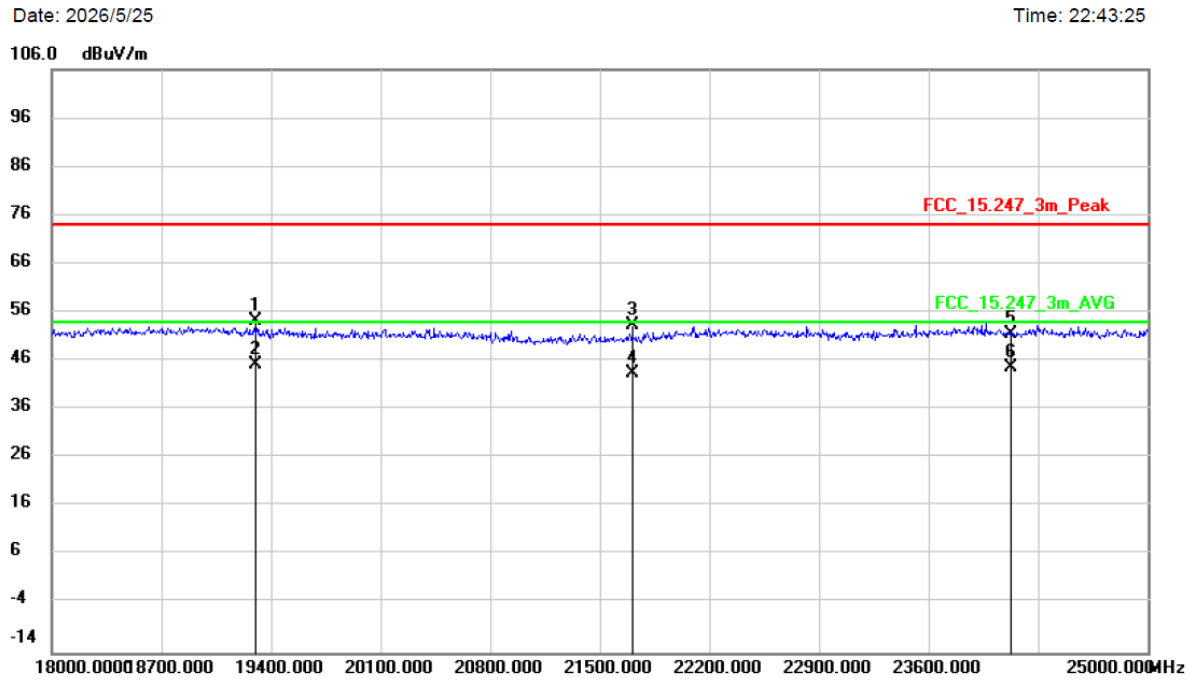
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	47.87	3.86	51.73	74.00	-22.27	peak	
2		4824.000	42.32	3.86	46.18	54.00	-7.82	AVG	
3		7236.000	40.88	8.66	49.54	74.00	-24.46	peak	
4		7236.000	30.24	8.66	38.90	54.00	-15.10	AVG	
5		17932.000	39.78	20.42	60.20	74.00	-13.80	peak	
6	*	17932.000	27.83	20.42	48.25	54.00	-5.75	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b (Low Channel)	Distance: 3m

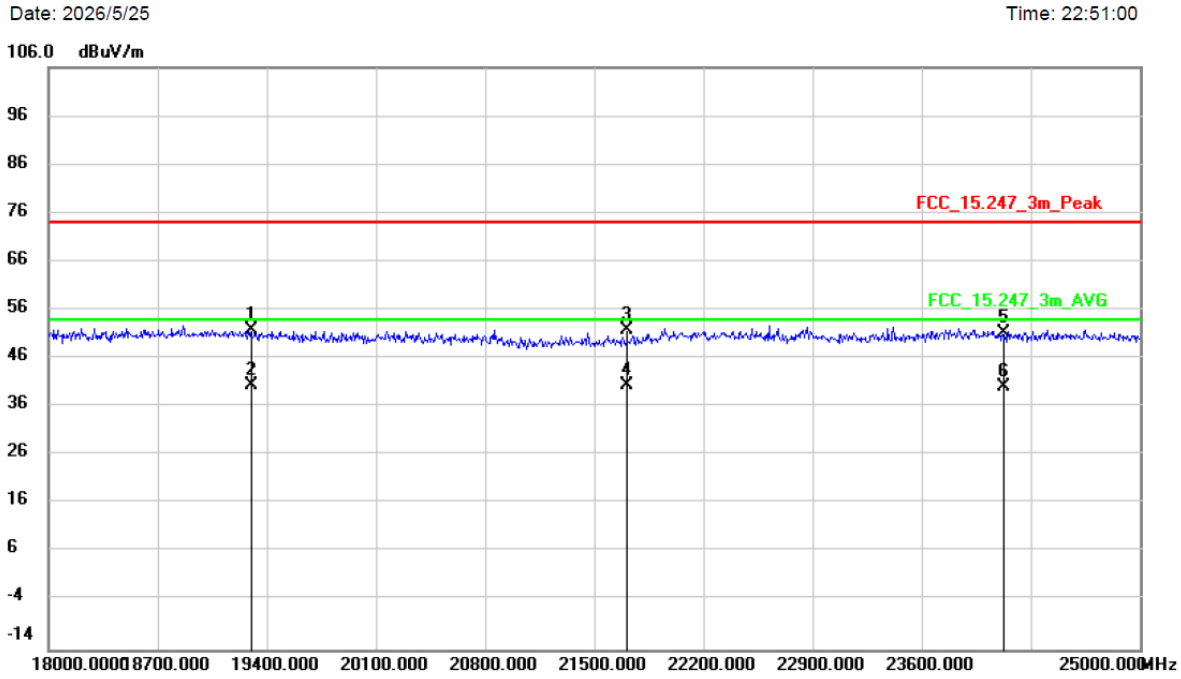
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19296.000	47.17	6.97	54.14	74.00	-19.86	peak	
2	*	19296.000	38.43	6.97	45.40	54.00	-8.60	AVG	
3		21708.000	48.30	5.10	53.40	74.00	-20.60	peak	
4		21708.000	38.44	5.10	43.54	54.00	-10.46	AVG	
5		24120.000	46.04	5.50	51.54	74.00	-22.46	peak	
6		24120.000	39.04	5.50	44.54	54.00	-9.46	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b (Low Channel)	Distance: 3m

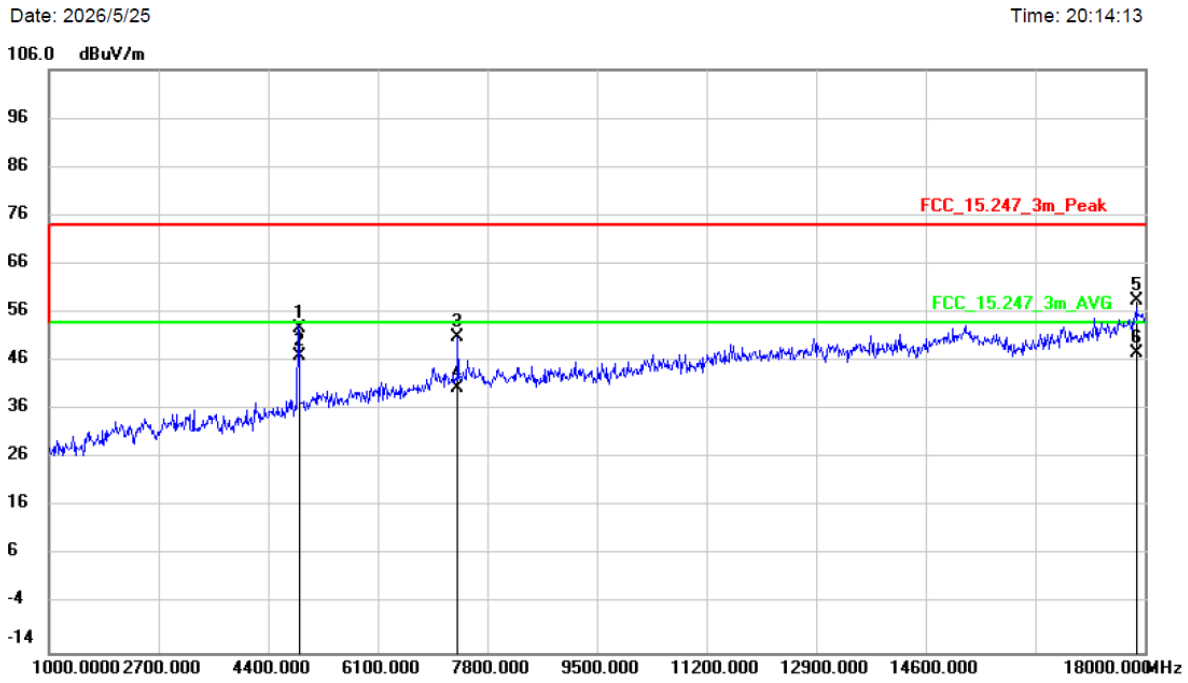
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19296.000	44.88	6.97	51.85	74.00	-22.15	peak	
2	*	19296.000	33.37	6.97	40.34	54.00	-13.66	AVG	
3		21708.000	46.66	5.10	51.76	74.00	-22.24	peak	
4		21708.000	35.23	5.10	40.33	54.00	-13.67	AVG	
5		24120.000	45.78	5.50	51.28	74.00	-22.72	peak	
6		24120.000	34.57	5.50	40.07	54.00	-13.93	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b (Middle Channel)	Distance: 3m

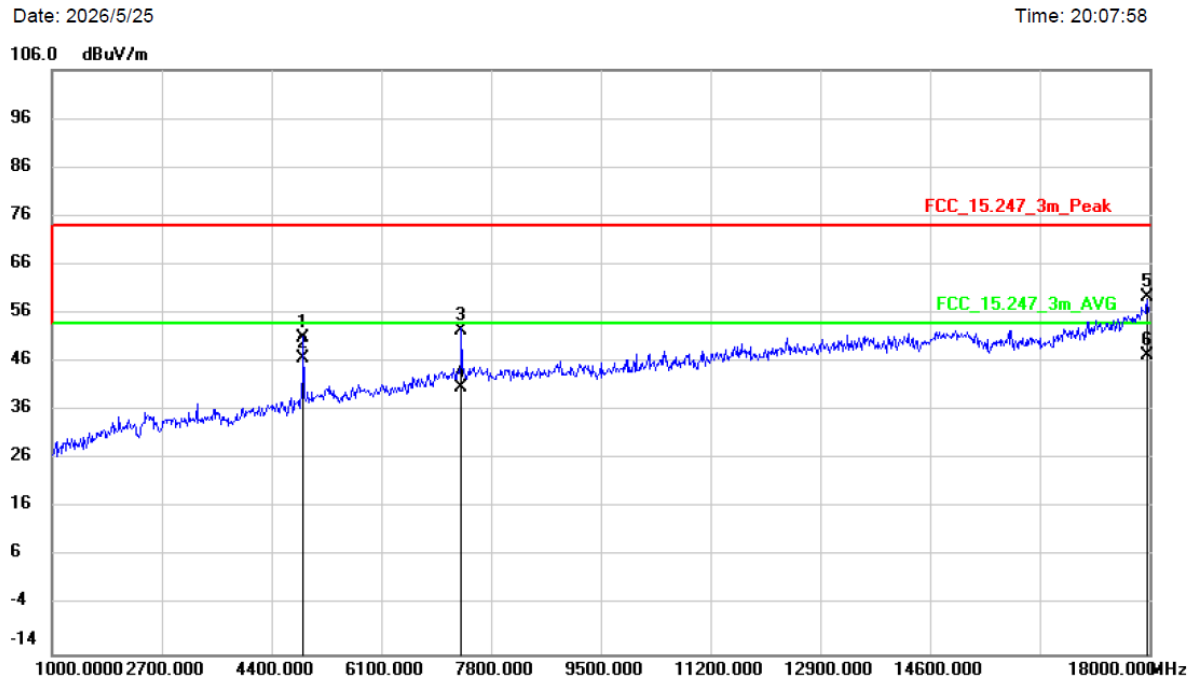
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	48.59	4.02	52.61	74.00	-21.39	peak	
2		4874.000	43.04	4.02	47.06	54.00	-6.94	AVG	
3		7311.000	41.88	8.97	50.85	74.00	-23.15	peak	
4		7311.000	31.60	8.97	40.57	54.00	-13.43	AVG	
5		17864.000	38.26	20.10	58.36	74.00	-15.64	peak	
6	*	17864.000	27.43	20.10	47.53	54.00	-6.47	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b (Middle Channel)	Distance: 3m

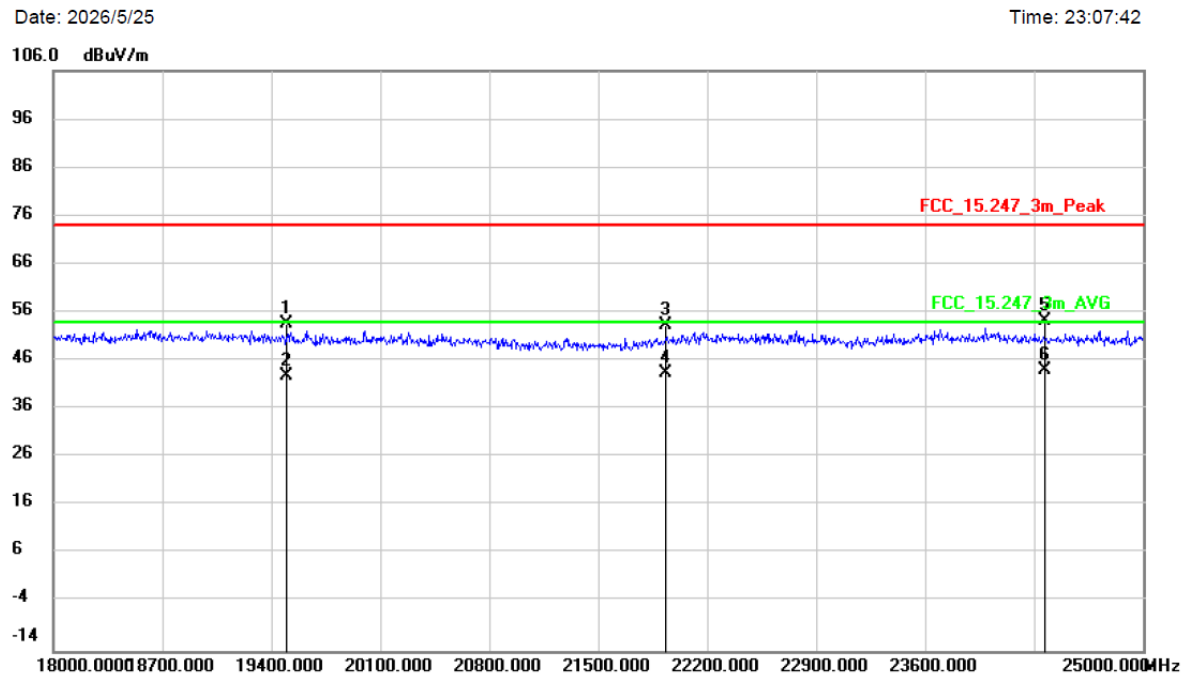
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	46.97	4.02	50.99	74.00	-23.01	peak	
2		4874.000	42.60	4.02	46.62	54.00	-7.38	AVG	
3		7311.000	43.57	8.97	52.54	74.00	-21.46	peak	
4		7311.000	31.78	8.97	40.75	54.00	-13.25	AVG	
5		17966.000	38.65	20.58	59.23	74.00	-14.77	peak	
6	*	17966.000	26.80	20.58	47.38	54.00	-6.62	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b (Middle Channel)	Distance: 3m

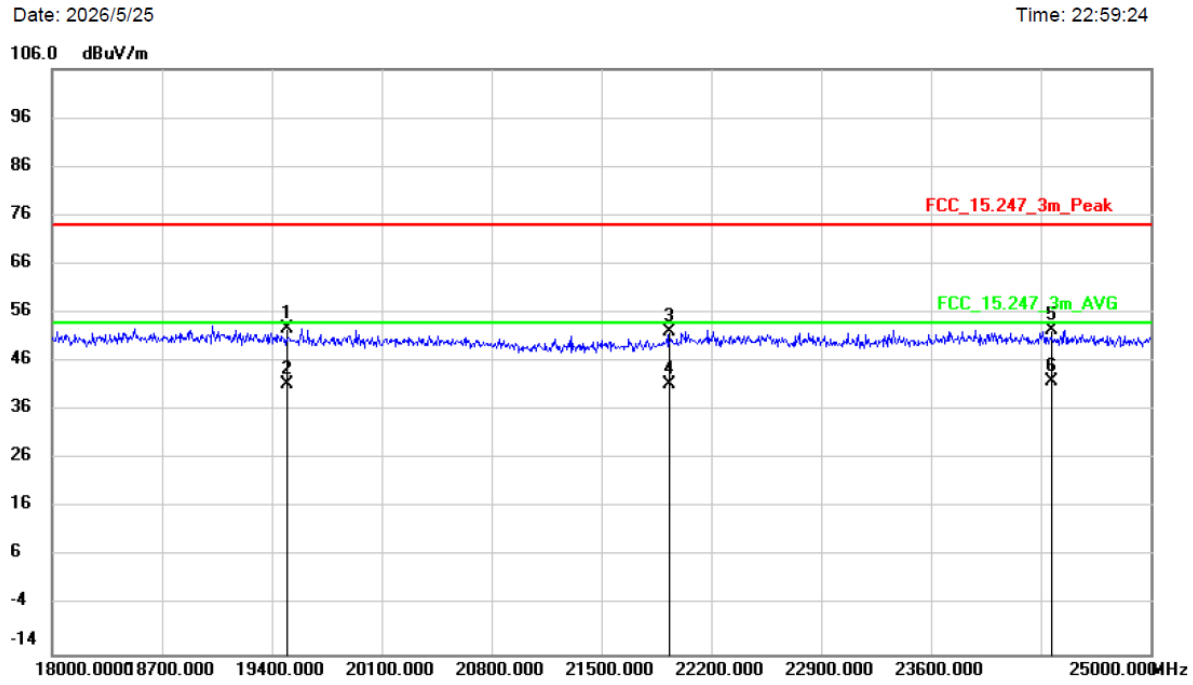
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19496.000	46.97	6.67	53.64	74.00	-20.36	peak	
2		19496.000	36.09	6.67	42.76	54.00	-11.24	AVG	
3		21933.000	47.99	5.40	53.39	74.00	-20.61	peak	
4		21933.000	37.98	5.40	43.38	54.00	-10.62	AVG	
5		24370.000	48.59	5.65	54.24	74.00	-19.76	peak	
6	*	24370.000	38.37	5.65	44.02	54.00	-9.98	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b (Middle Channel)	Distance: 3m

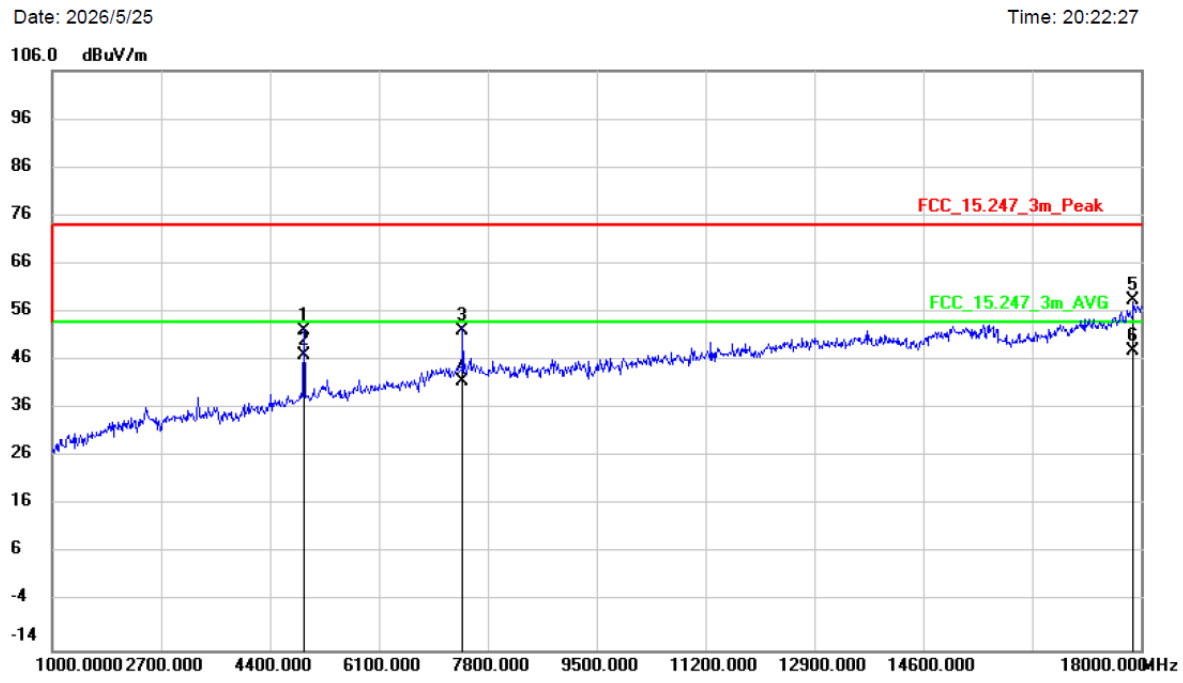
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19496.000	45.98	6.67	52.65	74.00	-21.35	peak	
2		19496.000	34.58	6.67	41.25	54.00	-12.75	AVG	
3		21933.000	46.85	5.40	52.25	74.00	-21.75	peak	
4		21933.000	35.97	5.40	41.37	54.00	-12.63	AVG	
5		24370.000	46.91	5.65	52.56	74.00	-21.44	peak	
6	*	24370.000	36.38	5.65	42.03	54.00	-11.97	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b (High Channel)	Distance: 3m

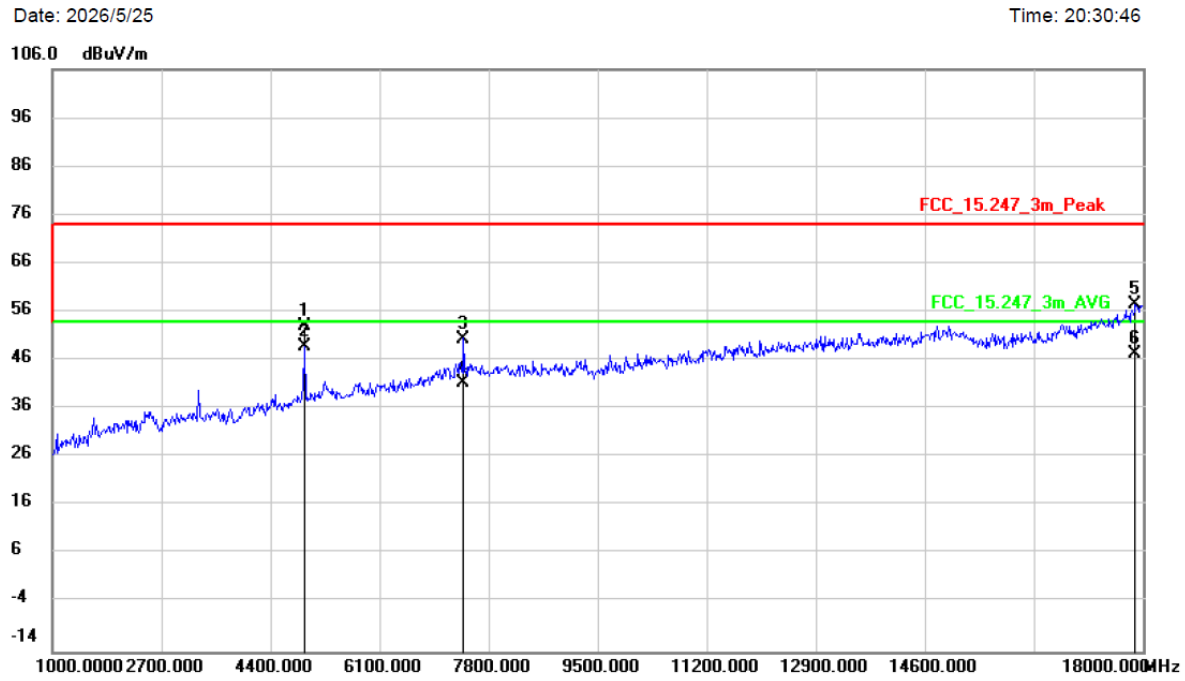
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	47.83	4.20	52.03	74.00	-21.97	peak	
2		4924.000	42.91	4.20	47.11	54.00	-6.89	AVG	
3		7386.000	42.72	9.33	52.05	74.00	-21.95	peak	
4		7386.000	32.25	9.33	41.58	54.00	-12.42	AVG	
5		17881.000	38.18	20.18	58.36	74.00	-15.64	peak	
6	*	17881.000	27.73	20.18	47.91	54.00	-6.09	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b (High Channel)	Distance: 3m

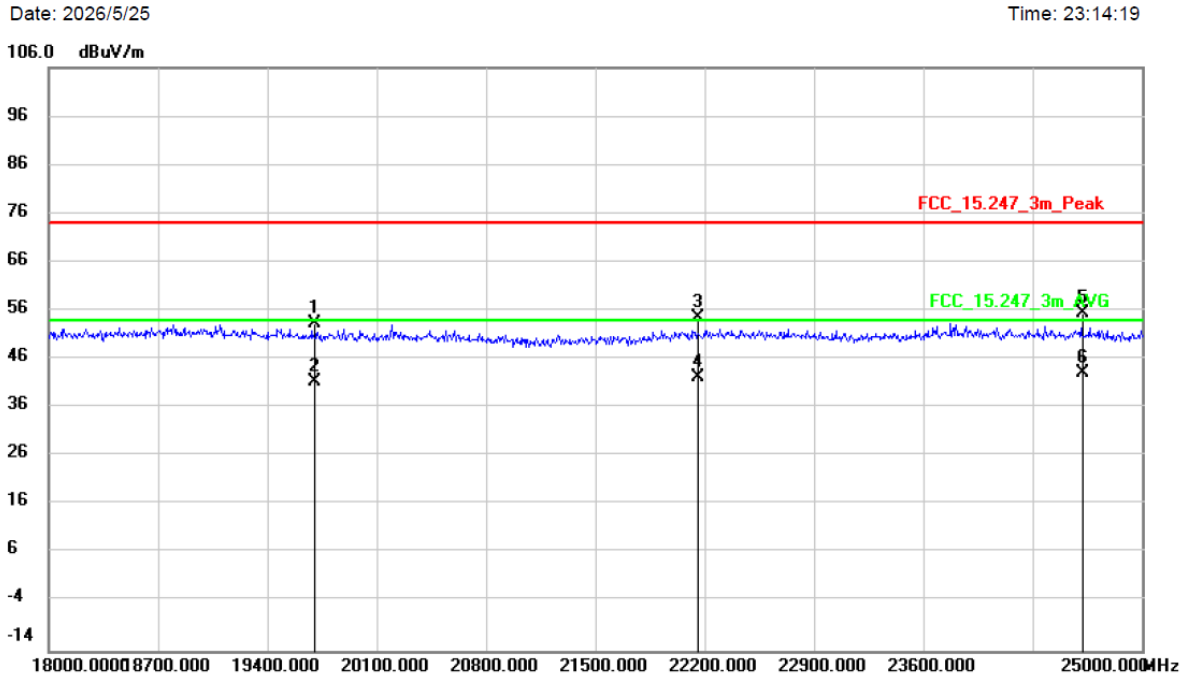
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	48.99	4.20	53.19	74.00	-20.81	peak	
2	*	4924.000	44.68	4.20	48.88	54.00	-5.12	AVG	
3		7386.000	41.13	9.33	50.46	74.00	-23.54	peak	
4		7386.000	31.88	9.33	41.21	54.00	-12.79	AVG	
5		17881.000	37.37	20.18	57.55	74.00	-16.45	peak	
6		17881.000	27.21	20.18	47.39	54.00	-6.61	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: 802.11b (High Channel)	Distance: 3m

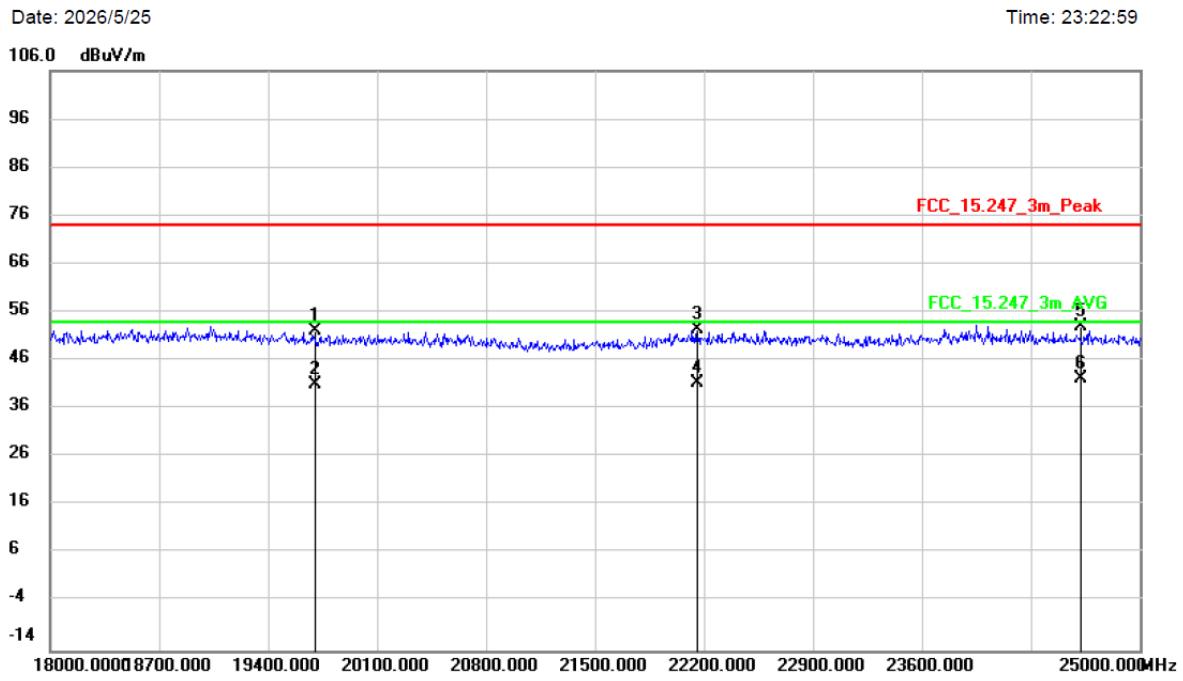
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19696.000	46.80	6.62	53.42	74.00	-20.58	peak	
2		19696.000	34.73	6.62	41.35	54.00	-12.65	AVG	
3		22158.000	49.16	5.51	54.67	74.00	-19.33	peak	
4		22158.000	36.74	5.51	42.25	54.00	-11.75	AVG	
5		24620.000	49.76	5.73	55.49	74.00	-18.51	peak	
6	*	24620.000	37.28	5.73	43.01	54.00	-10.99	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: 802.11b (High Channel)	Distance: 3m

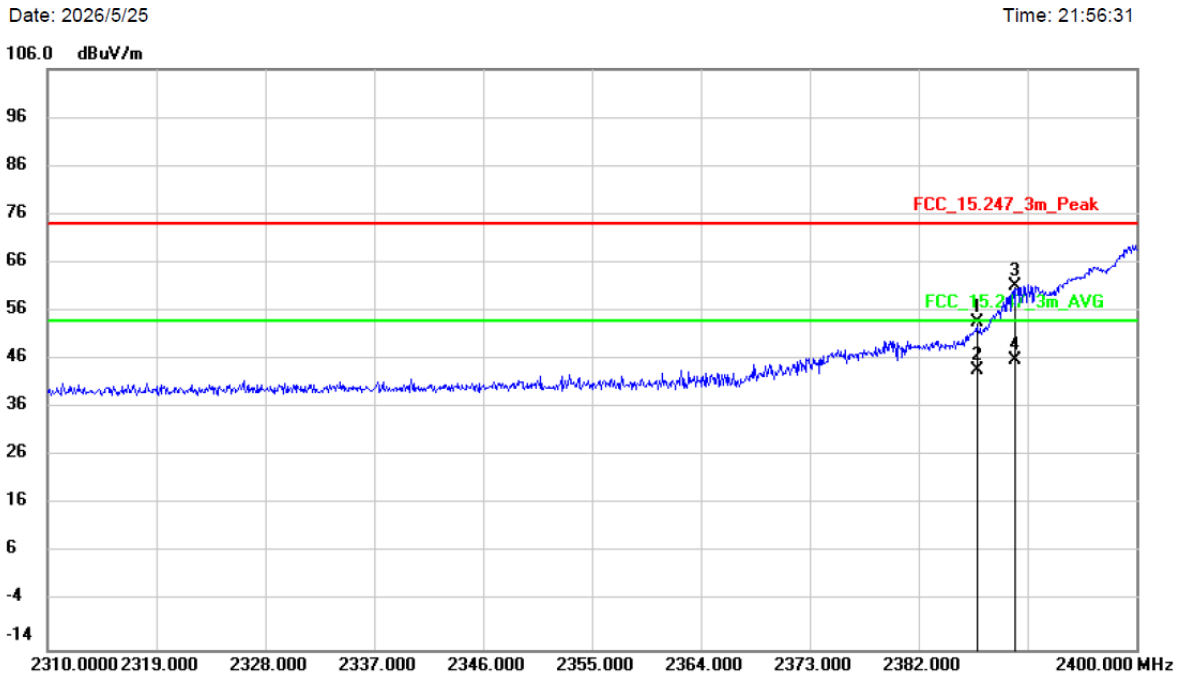
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		19696.000	45.63	6.62	52.25	74.00	-21.75	peak	
2		19696.000	34.45	6.62	41.07	54.00	-12.93	AVG	
3		22158.000	46.85	5.51	52.36	74.00	-21.64	peak	
4		22158.000	35.74	5.51	41.25	54.00	-12.75	AVG	
5		24620.000	47.29	5.73	53.02	74.00	-20.98	peak	
6	*	24620.000	36.45	5.73	42.18	54.00	-11.82	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: Band Edge 802.11n(HT20) (Low Channel) the worst case	Distance: 3m

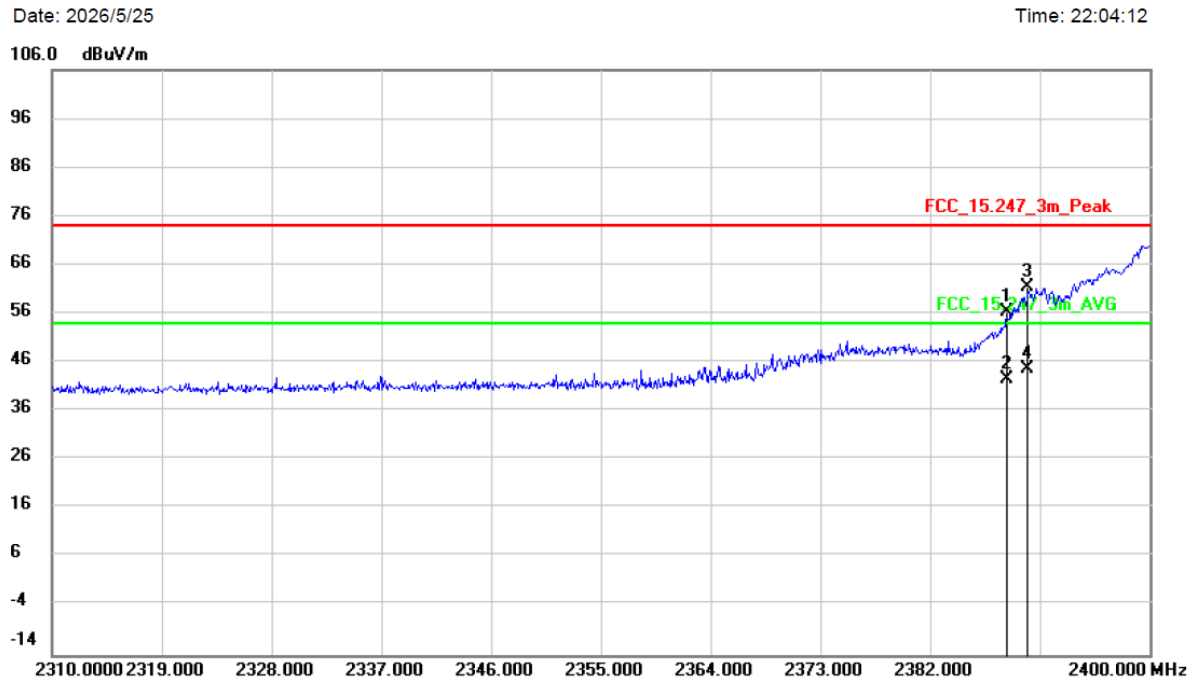
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.860	56.62	-2.98	53.64	74.00	-20.36	peak	
2		2386.860	46.65	-2.98	43.67	54.00	-10.33	AVG	
3		2390.000	64.24	-2.98	61.26	74.00	-12.74	peak	
4	*	2390.000	48.95	-2.98	45.97	54.00	-8.03	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: Band Edge802.11n(HT20) (Low Channel) the worst case	Distance: 3m

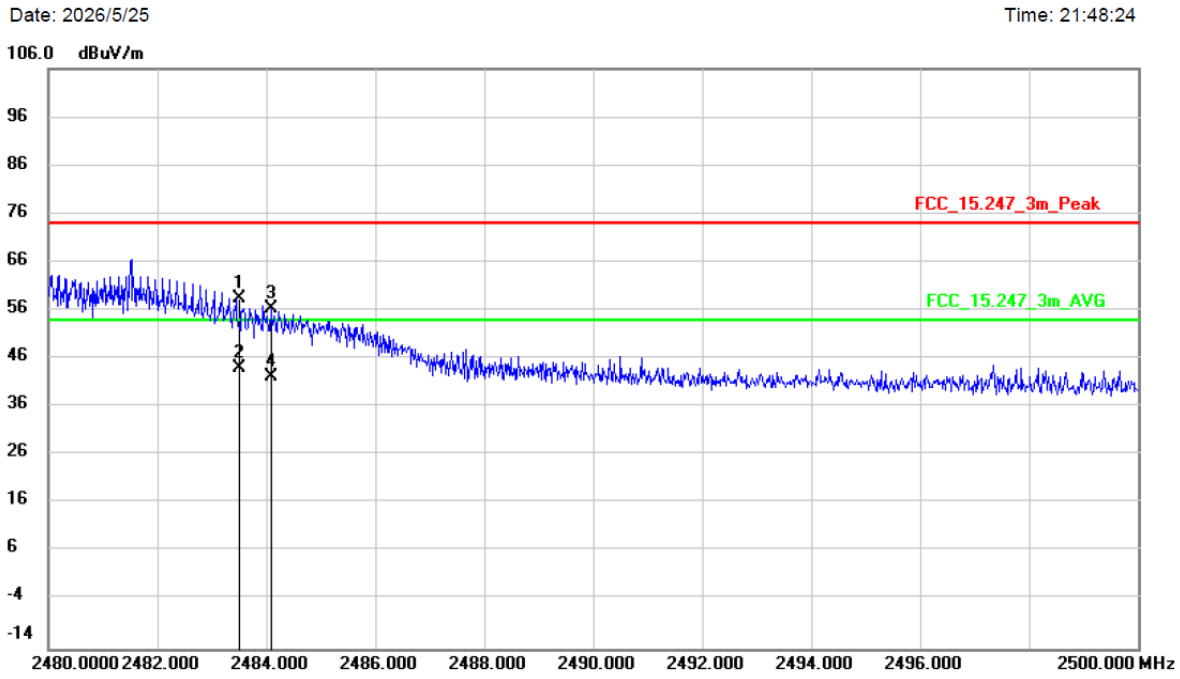
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.300	59.42	-2.98	56.44	74.00	-17.56	peak	
2		2388.300	45.63	-2.98	42.65	54.00	-11.35	AVG	
3		2390.000	64.36	-2.98	61.38	74.00	-12.62	peak	
4	*	2390.000	47.67	-2.98	44.69	54.00	-9.31	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Horizontal	Detector: PK, AVG
Test Mode: Band Edge 802.11n(HT20) (High Channel) the worst case	Distance: 3m

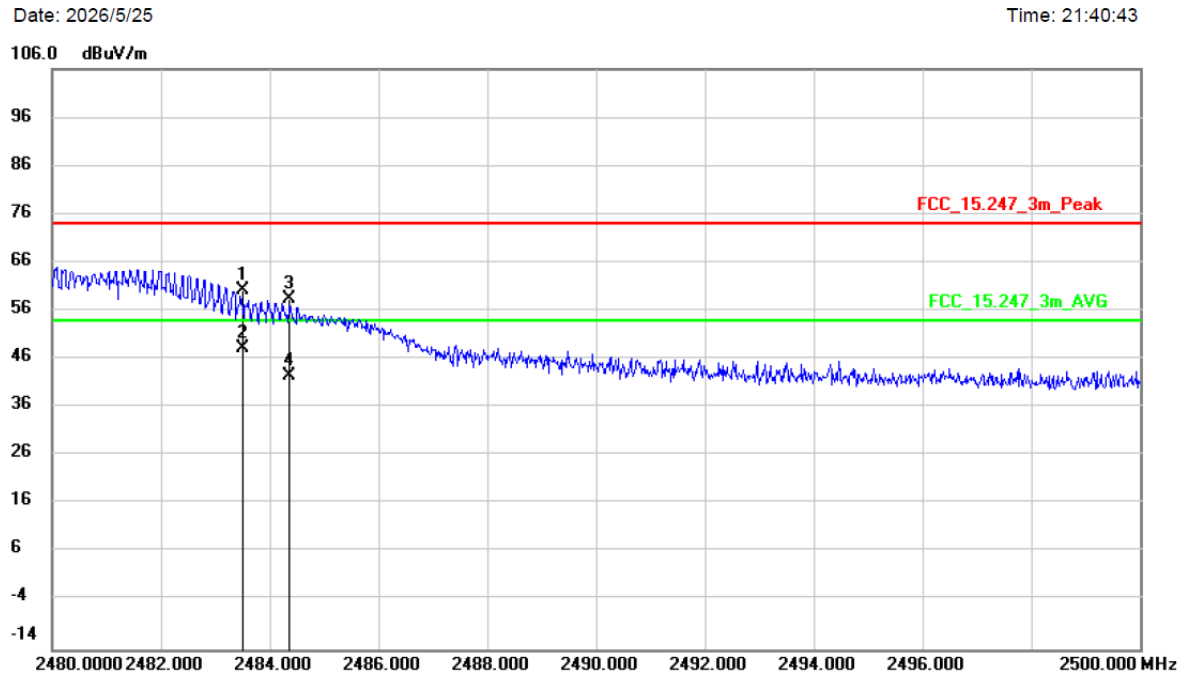
Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	61.32	-2.84	58.48	74.00	-15.52	peak	
2	*	2483.500	46.94	-2.84	44.10	54.00	-9.90	AVG	
3		2484.080	59.19	-2.83	56.36	74.00	-17.64	peak	
4		2484.080	45.09	-2.83	42.26	54.00	-11.74	AVG	

M/N: 35050	Testing Voltage: AC 120V 60Hz
Polarization: Vertical	Detector: PK, AVG
Test Mode: Band Edge 802.11n(HT20) (High Channel) the worst case	Distance: 3m

Radiated Emission Measurement



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	63.09	-2.84	60.25	74.00	-13.75	peak	
2	*	2483.500	51.11	-2.84	48.27	54.00	-5.73	AVG	
3		2484.360	61.19	-2.83	58.36	74.00	-15.64	peak	
4		2484.360	45.37	-2.83	42.54	54.00	-11.46	AVG	

13.8 Antenna Requirement

STANDARD APPLICABLE

According to of FCC part 15C section 15.203 and 15.247:

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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Systems operating in the 2400-2483.5MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

ANTENNA CONNECTED CONSTRUCTION

The EUT is a PCB antenna that no antenna other than furnished by the responsible party shall be used with the device, and the best-case gain of the antenna is 1.89 dBi, Therefore, the antenna is considered to meet the requirement.

14. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	101152	Aug. 21, 2025	1 Year
2.	L.I.S.N	Rohde & Schwarz	ENV 216	101317	Aug. 21, 2025	1 Year
3.	L.I.S.N	Schwarzbeck	NNLK8129	00558	Aug. 23, 2025	1 Year
4.	RF Switching Unit	Compliance Direction Systems Inc.	RSU-M2	38311	Aug. 21, 2025	1 Year
5.	Test Receiver	Rohde & Schwarz	ESCI7	100837	Aug. 21, 2025	1 Year
6.	Spectrum Analyzer	Keysight	N9020A	MY50510314	Aug. 21, 2025	1 Year
7.	Spectrum Analyzer	Keysight	N9020A	MY54200831	Aug. 22, 2025	1 Year
8.	Spectrum Analyzer	Keysight	N9010B	MY62170254	Aug. 21, 2025	1 Year
9.	Antenna	Schwarzbeck	VULB9163	01552	Aug. 16, 2025	2 Year
10.	Loop Antenna	Schwarzbeck	FMZB 1513	1513-272	Aug. 16, 2025	2 Year
11.	Horn Antenna	COM-Power	AH-118	071078	Aug. 16, 2025	2 Year
12.	Pre-Amplifier	HP	HP 8447D	1145A00203	Aug. 21, 2025	1 Year
13.	Pre-Amplifier	HP	HP 8449B	3008A00964	Aug. 23, 2025	1 Year
14.	Communication Tester	Rohde & Schwarz	CMW500	109851	Aug. 28, 2025	1 Year
15.	Power Sensor	DARE	RPR3006W	15I00041SNO 64	Aug. 28, 2025	1 Year
18.	Horn Antenna	COM-Power	AH-840	10100020	Aug. 28, 2025	2 Year
19.	Temperature & Humidity Chamber	Wanshun	SS-HWHS-80	N/A	Aug. 09, 2025	1 Year
20.	DC Source	ZHAOXIN	KXN305D	N/A	Aug. 23, 2025	1 Year
21.	Temporary antenna connector	TESCOM	SS402	N/A	N/A	N/A
22.	Chamber	YIHENG	9*6*6m	N/A	Sep. 22, 2025	2 Year
23.	Test Software	MWRF	MTS 8310, V2.0.0.0	N/A	N/A	N/A
24.	Test Software	EZ	EZ_EMC, NTC-3A1.1	N/A	N/A	N/A

Note: For photographs of EUT and measurement, please refer to appendix in separate documents.

---End---