Qingdao Yeelink Information Technology Co., Ltd.

RF TEST REPORT

Report Type:
FCC Part 15.247 & ISED RSS-247 RF report

Model:
YP-0194

Report Number:
2406B2005SHA-002

Issue Date:
August 5, 2024

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TEST REPORT

Report no. 2406B2005SHA-002

Applicant:	Qingdao Yeelink Information Technology Co., Ltd
Address of Applicant:	10F-B4, Building B, Qingdao International Innovation Park, No.1 Keyuan Weiyi Road, Laoshan District, Qingdao City, Shandong Province, P.R.China
Manufacturer:	Qingdao Yeelink Information Technology Co., Ltd
Address of Manufacturer:	10F-B4, Building B, Qingdao International Innovation Park, No.1 Keyuan Weiyi Road, Laoshan District, Qingdao City, Shandong Province, P.R.China
FCC ID:	2ABEU-YP-0194
IC:	27677-YP0194

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

47CFR Part 15 (2023): Radio Frequency Devices (Subpart C)

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

RSS-247 Issue 3 (August 2023): Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

RSS-Gen Issue 5 (February 2021) Amendment 2: General Requirements for Compliance of Radio Apparatus

PREPARED BY:	**REVIEWED BY:**
Project Engineer Damon Ding	Reviewer Eric Li

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Revision History

Report No.	Version	Description	Issued Date
2406B2005SHA-002	Rev. 01	Initial issue of report	August 5, 2024

Measurement Result Summary

TEST ITEM	FCC REFERENCE	IC REFERENCE	RESULT
Minimum 6dB Bandwidth	15.247(a)(2)	RSS-247 Issue 3 Clause 5.2	Pass
Maximum conducted output power and e.i.r.p.	15.247(b)(3)	RSS-247 Issue 3 Clause 5.4	Pass
Power spectrum density	15.247(e)	RSS-247 Issue 3 Clause 5.2	Pass
Emission outside the frequency band	15.247(d)	RSS-247 Issue 3 Clause 5.5	Pass
Radiated Emissions in restricted frequency bands	15.247(d), 15.205&15.209	RSS-Gen Issue 5 Clause 8.9&8.10	Pass
Power line conducted emission	15.207(a)	RSS-Gen Issue 5 Clause 8.8	Pass
Occupied bandwidth	-	RSS-Gen Issue 5 Clause 6.6	Tested
Antenna requirement	15.203	-	Pass

Notes:
1: NA =Not Applicable
2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.
3. Additions, Deviations and Exclusions from Standards: None.

TEST REPORT

1 General Information

1.1 Description of Equipment Under Test (EUT)

Product name:	Yeelight Pro S20 Gateway (BLE Mesh)
Type/Model/PMN/HVIN:	YP-0194
Description of EUT:	EUT is a wireless Yeelight Pro S20 Gateway (BLE Mesh) with BLE module and Wi-Fi. The BLE module has been approved with FCC ID: 2ABEU-EF-R32-RSA2.
Rating:	100-240VAC, 50/60Hz for adapter 5V ⎓ 1A for gateway
Category of EUT:	Class B
Brand name:	YEELIGHT
EUT type:	☒ Tabletop ☐ Floor standing
Software Version:	-
Hardware Version:	-
Sample Identification No.:	S202405113367-ZJA03/4
Sample received date:	May 11, 2024
Date of test:	May 20, 2024, to May 29, 2024

1.2 Technical Specification

Frequency Band:	2400MHz ~ 2483.5MHz
Support Standards:	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20), IEEE 802.11n(HT40)
Type of Modulation:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n(HT20): OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n(HT40): OFDM (64-QAM, 16-QAM, QPSK, BPSK)
Operating Frequency:	2412MHz to 2462MHz for IEEE 802.11b/g/n(HT20)/n(HT40)
Channel Number:	11 Channels for 802.11b, 802.11g, 802.11n(HT20) and 802.11n(HT40)
Channel Separation:	5 MHz

1.3 Antenna Information

No.	Antenna Type	Gain	Note
1	PCB antenna	0.5 dBi	Internal type(BLE)
2	PCB antenna	2 dBi	Internal type(WIFI)

Mode	Tx/Rx Function	Beamforming function	CDD function	Directional gain (dBi)
802.11b	1Tx/1Rx	NO	NO	-
802.11g	1Tx/1Rx	NO	NO	-
802.11n(HT20)	1Tx/1Rx	NO	NO	-
802.11n(HT40)	1Tx/1Rx	NO	NO	-

1.4 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road (North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Member No: 3598 (Registration No.: R-14243, G-10845, C-14723, T-12252)
	A2LA Accreditation Lab Certificate Number: 3309.02

All tests were sub-contracted at Shenzhen UnionTrust Quality and Technology Co., Ltd, and conducted by David Chen.
Reviewed and approved by Eric Li from Intertek Testing Services shanghai.

Name:	Shenzhen UnionTrust Quality and Technology Co., Ltd.
Address:	Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng Science and Technology Park, Longhua District, Shenzhen, China
Telephone:	+86 (0) 755 2823 0888
Telefax:	+86 (0) 755 2823 0886

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L969
	FCC Accredited Lab Designation Number: CN1194
	IC Registration Lab CAB identifier.: CN0032
	VCCI Registration Lab Member No: 4142 (Registration No.: C-20097, T-20098, R-20135, G-20130)
	A2LA Accreditation Lab Certificate Number: 4312.01

2 Test Specifications

2.1 Standards or Specification

47CFR Part 15 (2023)
ANSI C63.10 (2020)
KDB 558074 (v05r02)
RSS-247 Issue 3 (August 2023)
RSS-Gen Issue 5 (February 2021) Amendment 2

2.2 Mode of Operation During the Test

While testing transmitting mode of EUT, the internal modulation and continuous transmission was applied.

Software name	Manufacturer	Version	Supplied by
Command	-	-	Client

The lowest, middle and highest channels were tested as representatives.

Frequency Band (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
2400-2483.5	802.11b	2412	2437	2462
	802.11g	2412	2437	2462
	802.11n(HT20)	2412	2437	2462
	802.11n(HT40)	2422	2437	2452

Data rate and Power setting:
The pre-scan for the conducted power with all rates in each modulation and band was used, and the worst case was found and used in all test cases. After this pre-scan, we choose the following table of the data rata as the worst case.

Frequency Band (MHz)	Mode	Worst case data rate	Power Setting
2400-2483.5	802.11b	1Mbps	Default
	802.11g	6Mbps	Default
	802.11n(HT20)	MCS0	Default
	802.11n(HT40)	MCS0	Default

The EUT will use two types of antennas, and there have the following test mode:
Radiated test mode:
Mode 1: EUT transmitted signal with internal antenna.
Conducted test mode:
Mode 2: EUT transmitted signal from PCBA RF port connected to SPA directly.
We have verified all test modes, and list all the results in this report.

2.3 Test Software List

Test Items	Software	Manufacturer	Version
Conducted emission	EZ-CON	EZ-EMC	EMC-CON 3A1.1
Radiated emission	e3	Audix	9.160323

2.4 Test Peripherals List

Item No.	Name	Brand and Model	Description
1	Laptop computer	DELL 5480	100-240V AC, 50/60Hz

2.5 Test Environment Condition:

Test items	Temperature	Humidity
Minimum 6dB Bandwidth	23.3°C	61.5%RH
Maximum conducted output power and e.i.r.p.		
Power spectrum density		
Emission outside the frequency band		
Occupied bandwidth		
Radiated Emissions in restricted frequency bands	24.6 °C	57.8%RH
Power line conducted emission	23.5°C	61.0%RH

2.6 Instrument List

Conducted Emission						
Used	Equipment	Manufacturer	Type	Internal no.	Calibration date	Due date
☑	Receiver	R&S	ESR7	101181	27-Oct-2023	26-Oct-2024
☑	Pulse Limiter	R&S	ESH3-Z2	0357.8810.54	27-Oct-2023	26-Oct-2024
☑	LISN	R&S	ESH2-Z5	860014/024	27-Oct-2023	26-Oct-2024
☑	LISN	ETS-Lindgren	3816/2SH	00201088	27-Oct-2023	26-Oct-2024
☑	Test Software	EZ-EMC	EZ-CON	Software Version: EMC-CON 3A1.1		
Radiated Emission						
Used	Equipment	Manufacturer	Type	Internal no.	Calibration date	Due date
☑	3m Chamber SAC	ETS-LINDGREN	3m	NA	11-Nov-2023	10-Nov-2026
☑	Receiver	R&S	ESIB26	100114	27-Oct-2023	26-Oct-2024
☑	Broadband Antenna	ETS-LINDGREN	3142E	00201566	30-Oct-2023	29-Oct-2024
☑	6dB Attenuator	Talent	RA6A5-N-18	18103001	30-Oct-2023	29-Oct-2024
☑	Preamplifier	HP	8447F	2805A02960	31-Oct-2023	30-Oct-2024
☑	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-Lindgren	3117-PA	00201541	1- Apr-2023	31-Mar-2025
☑	Pre-amplifier	ETS-Lindgren	00118385	00201874	31-Oct-2023	30-Oct-2024
☑	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C-PA	00202652	30-Oct-2023	29-Oct-2024
☑	Pre-amplifier	ETS-Lindgren	00118384	00202652	30-Oct-2023	29-Oct-2024
☑	Multi device Controller	ETS-LINDGREN	7006-001	00160105	NA	NA
☑	Test Software	Audix	e3	Software Version: 9.160323		
RF test						
Used	Equipment	Manufacturer	Type	Internal no.	Calibration date	Due date
☑	EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY51440197	2024-03-29	2025-03-28
☑	USB Wideband Power Sensor	KEYSIGHT	U2021XA	MY55430035	2023-10-27	2024-10-26
☑	EXG-B RF Analog Signal Generator	KEYSIGHT	N5171B	MY53051777	2023-10-27	2024-10-26
☑	MXG X-Series RF Vector Signal Generator	KEYSIGHT	N5182B	MY51350267	2023-10-27	2024-10-26
☑	Temp & Humidity chamber	Votisch	VT4002	58566133290020	2024-03-29	2025-03-28

2.7 Measurement Uncertainty

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Measurement uncertainty
Maximum peak output power	± 0.74dB
Minimum 6dB bandwidth	
Powe spectrum density	
Emission outside the frequency band	
Occupied bandwidth	
Radiated Emissions in restricted frequency bands below 1GHz	± 4.90dB
Radiated Emissions in restricted frequency bands above 1GHz	± 5.02dB
Emission outside the frequency band	± 2.89dB
Power line conducted emission	± 3.19dB

3 Minimum 6dB Bandwidth

Test Result: Pass

3.1 Limit

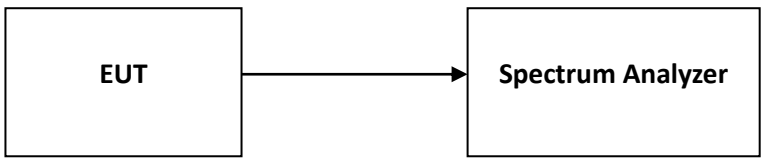
For systems using digital modulation techniques that may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz and 5725 - 5850 MHz bands, the minimum 6 dB bandwidth shall be at least 500 kHz.

3.2 Measurement Procedure

The EUT was tested according to Subclause 11.8 of ANSI C63.10.

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to 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.

3.3 Test Configuration



3.4 Test Results of Minimum 6dB bandwidth

Please refer to Appendix A.

4 Maximum Conducted Output Power and e.i.r.p.

Test Result: Pass

4.1 Limit

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 W. (The e.i.r.p. shall not exceed 4 W)

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the minimum of 30dBm and 30+ (6 –antenna gain-beam forming gain).

4.2 Measurement Procedure

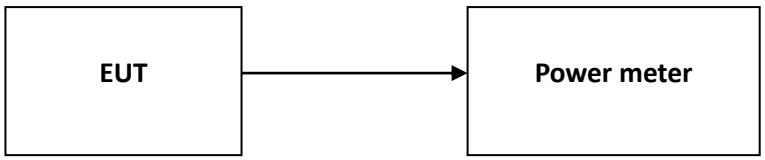
1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter.

2. Measure out each test modes' peak or average output power, record the power level.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on- and off-times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25 %.

4.3 Test Configuration



4.4 Test Results of Maximum Conducted Output Power

Mode	Channel/ Frequency (MHz)	Maximum Conducted Peak Power		Maximum Conducted Average Power (dBm)		Limit (dBm)	Result
		(dBm)	(W)	Measured Value	Corrected Value		
IEEE 802.11b	1(2412)	14.68	0.0294	11.58	11.74	30	Pass
	6(2437)	14.63	0.0290	11.55	11.71	30	Pass
	11(2462)	15.06	0.0321	***12.08***	***12.24***	30	Pass
IEEE 802.11g	1(2412)	19.51	0.0893	9.43	9.73	30	Pass
	6(2437)	19.63	0.0918	9.46	9.76	30	Pass
	11(2462)	19.91	0.0979	9.77	***10.07***	30	Pass
IEEE 802.11n-HT20	1(2412)	19.50	0.0891	9.45	9.80	30	Pass
	6(2437)	19.48	0.0887	9.23	9.58	30	Pass
	11(2462)	***19.97***	0.0993	9.65	***10.00***	30	Pass
IEEE 802.11n-HT40	3(2422)	18.23	0.0665	7.87	***8.88***	30	Pass
	6(2437)	17.73	0.0593	7.47	8.48	30	Pass
	9(2452)	18.21	0.0662	7.63	8.64	30	Pass

5 Power Spectrum Density

Test Result: **Pass**

5.1 Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the minimum of 8dBm/MHz and 8+ (6 –antenna gain-beam forming gain).

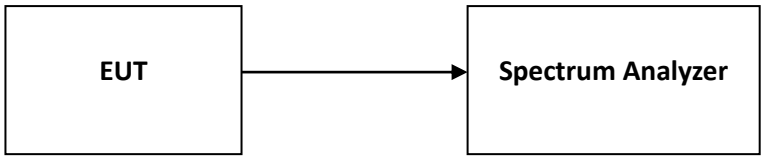
5.2 Measurement Procedure

The EUT was tested according to Subclause 11.10 of ANSI C63.10.

This procedure is applicable when the EUT cannot be configured to transmit continuously (i.e., duty cycle < 98 %), and when sweep triggering/signal gating cannot be used to measure only when the EUT is transmitting at its maximum power control level, and when the transmission duty cycle is constant (i.e., duty cycle variations are less than ± 2 %):

a) Measure the duty cycle (x) of the transmitter output signal as described in Section 6.0.
b) Set instrument center frequency to DTS channel center frequency.
c) Set span to at least 1.5 x OBW.
d) Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
e) Set VBW ≥3 x RBW.
f) Detector = power averaging (RMS) or sample detector (when RMS not available).
g) Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
h) Sweep time = auto couple.
i) Do not use sweep triggering. Allow sweep to “free run”.
j) Employ trace averaging (RMS) mode over a minimum of 100 traces.
k) Use the peak marker function to determine the maximum amplitude level.
l) Add 10 log (1/x), where x is the duty cycle measured in step (a, to the measured PSD to compute the average PSD during the actual transmission time.
m) If resultant value exceeds the limit, then reduce RBW (no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span in order to meet the minimum measurement point requirement as the RBW is reduced).

5.3 Test Configuration



5.4 Test Results of Power Spectrum Density

Please refer to Appendix A.

6 Emission Outside the Frequency Band

Test Result: **Pass**

6.1 Limit

In any 100 kHz 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 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

6.2 Measurement Procedure

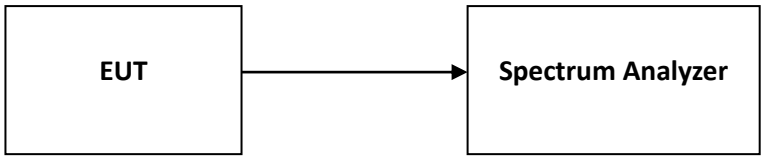
The EUT was tested according to Subclause 11.11 of ANSI C63.10.

Reference level measurement
Establish a reference level by using the following procedure:
a) Set instrument center frequency to DTS channel center frequency.
b) Set the span to ≥ 1.5 times the DTS bandwidth.
c) Set the RBW = 100 kHz.
d) Set the VBW ≥ 3 x RBW.
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum PSD level.

Emission level measurement
a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz.
c) Set the VBW ≥ 3 x RBW.
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

6.3 Test Configuration



6.4 The Results of Emission Outside the Frequency Band

Please refer to Appendix A.

7 Radiated Emissions in Restricted Frequency Bands

Test Result: **Pass**

7.1 Limit

The radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified showed as below:

Frequencies (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

7.2 Measurement Procedure

The EUT was tested according to Subclause 11.12 of ANSI C63.10.

For Radiated emission below 30MHz:

a) The EUT was placed on the top of a rotating turntable 0.1 meters above the ground in a 3-meter chamber room. The turntable was rotated 360 degrees to determine the position of the highest radiation.
b) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c) Both X and Y axes of the antenna are set to make the measurement.
d) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e) The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

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For Radiated emission above 30MHz:

a) The EUT was placed on the top of a rotating turntable 0.1 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3-meter chamber room for test. The turntable was rotated 360 degrees to determine the position of the highest radiation.

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

c) The height of antenna varies 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.

d) 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.

e) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

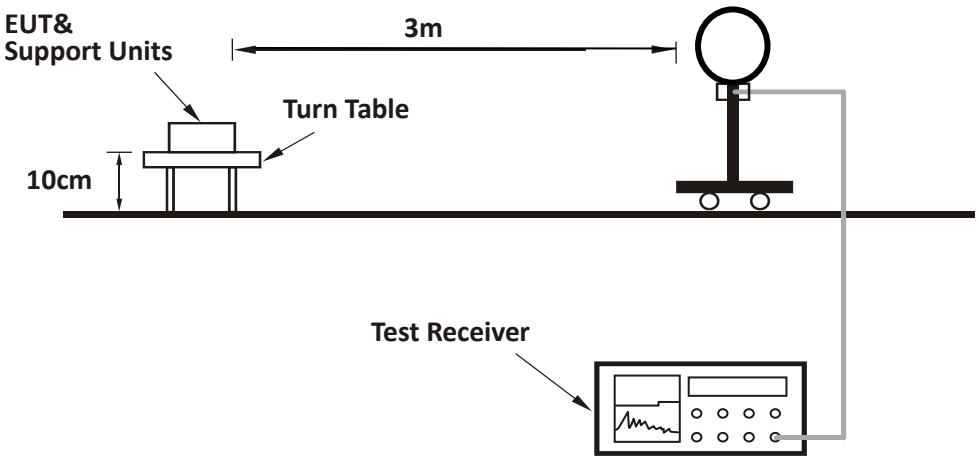
f) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets the average limit, measurement with the average detector is unnecessary.

Note:

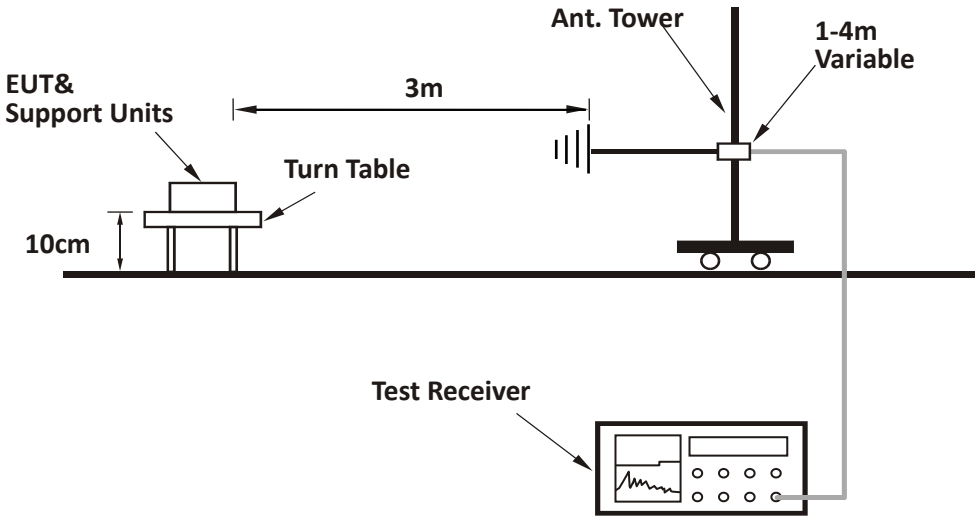
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz, and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz, and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 3 x RBW (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated, and the worst-case emissions are reported.

7.3 Test Configuration

For radiated emission below 30MHz:



For radiated emission 30MHz to 1GHz:



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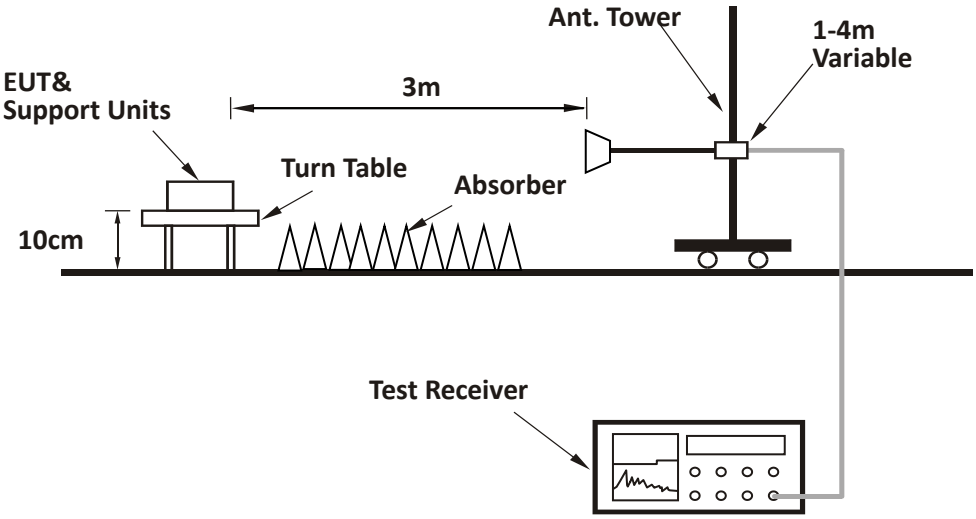
For radiated emission above 1GHz:

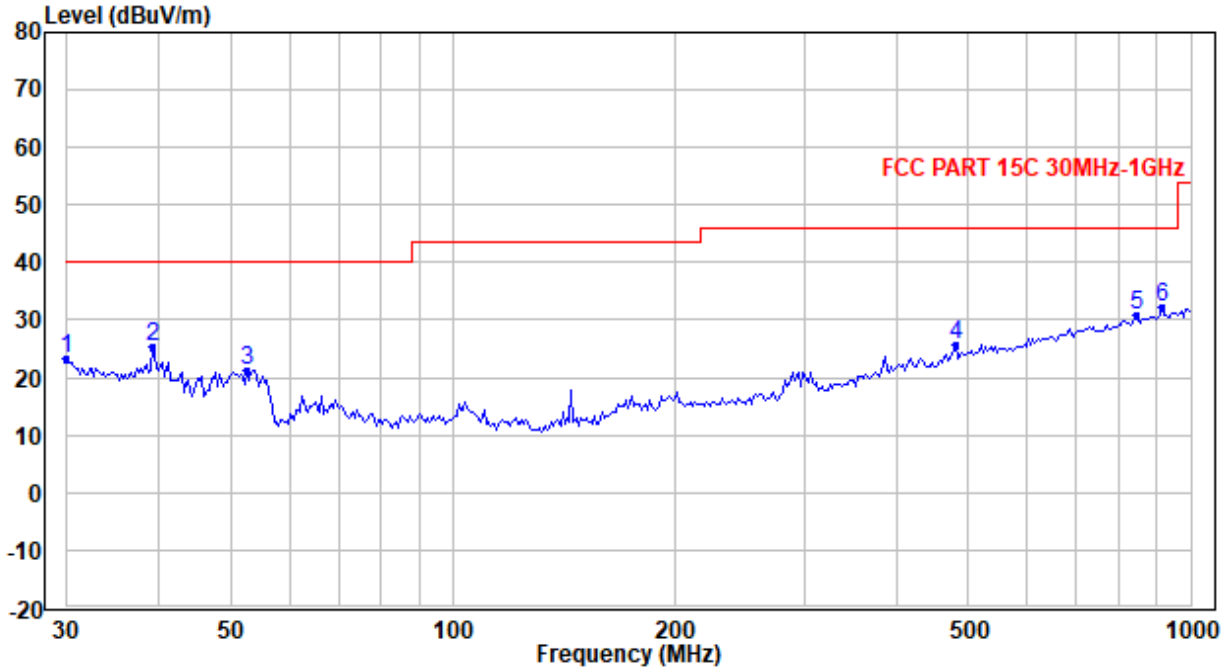


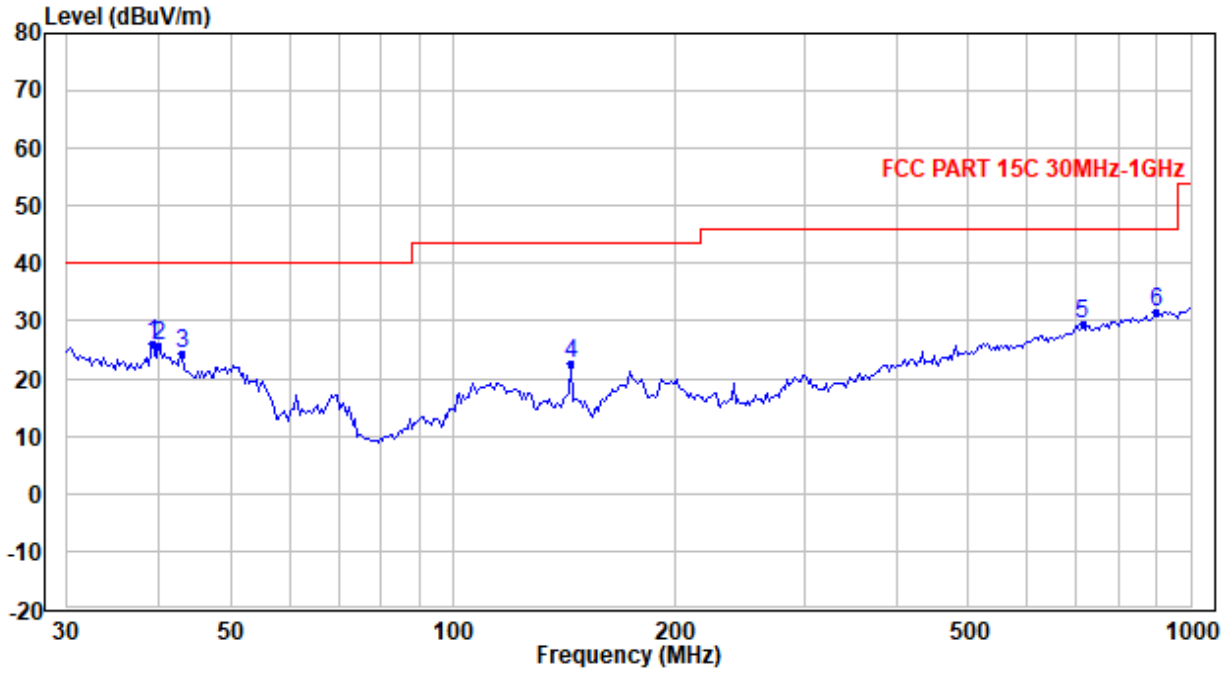
7.4 Test Results of Radiated Emissions

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

We test all models, and the worst waveform from 30MHz to 1000MHz is listed as below:

Test Curve (30M to 1GHz):





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Test Data:

Antenna Polarization	Frequency (MHz)	Corrected Reading (dBuV/m)	Original Receiver Reading dBuV	Correct Factor (dB/m)	Limit (dBuV/m)	Margin (dB/m)	Detector
H	30.000	23.46	27.54	-4.08	40.00	-16.54	QP
	39.182	25.53	33.65	-8.12	40.00	-14.47	QP
	52.634	21.17	35.92	-14.75	40.00	-18.83	QP
	481.511	25.62	28.68	-3.06	46.00	-20.38	QP
	844.803	30.74	26.91	3.83	46.00	-15.26	QP
	912.695	32.20	27.30	4.90	46.00	-13.80	QP
V	39.182	26.00	34.12	-8.12	40.00	-14.00	QP
	40.017	25.85	34.78	-8.93	40.00	-14.15	QP
	42.931	24.49	34.78	-10.29	40.00	-15.51	QP
	144.79	22.54	37.46	-14.92	43.50	-20.96	QP
	713.692	29.60	27.66	1.94	46.00	-16.40	QP
	899.958	31.71	26.98	4.73	46.00	-14.29	QP

Remark:

1. *Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz), the value was added to Original Receiver Reading by the software automatically.*
2. *Corrected Reading = Original Receiver Reading + Correct Factor*
3. *Margin = Limit - Corrected Reading*
4. *If the PK Corrected Reading is lower than AV limit, the AV test can be elided.*

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10.00dBuV,
Limit = 40.00dBuV/m.
Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m.
Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m.
Margin = 40.00dBuV/m - 10.20dBuV/m = 29.80dB.

TEST REPORT

Test Data:

The emission was conducted from 1GHz to 25GHz.

802.11b

CH	Antenna	Frequency (MHz)	Corrected Reading (dBuV/m)	Correct Factor (dB/m)	Limit (dBuV/m)	Margin (dBuV/m)	Detector
L	H	4824	37.99	-2.07	54.00	-16.01	Average
	H	4824	53.35	-2.07	74.00	-20.65	Peak
	V	4824	33.54	-2.07	54.00	-20.46	Average
	V	4824	48.94	-2.07	74.00	-25.06	Peak
	H	7236	36.64	1.30	54.00	-17.36	Average
	H	7236	48.66	1.30	74.00	-25.34	Peak
	V	7236	36.64	1.30	54.00	-17.36	Average
	V	7236	48.32	1.30	74.00	-25.68	Peak
M	H	4874	36.22	-2.05	54.00	-17.78	Average
	H	4874	51.26	-2.05	74.00	-22.74	Peak
	V	4874	33.65	-2.05	54.00	-20.35	Average
	V	4874	45.56	-2.05	74.00	-28.44	Peak
	H	7311	36.62	1.31	54.00	-17.38	Average
	H	7311	49.40	1.31	74.00	-24.60	Peak
	V	7311	36.62	1.31	54.00	-17.38	Average
	V	7311	49.70	1.31	74.00	-24.30	Peak
H	H	4924	35.95	-2.03	54.00	-18.05	Average
	H	4924	50.70	-2.03	74.00	-23.30	Peak
	V	4924	33.77	-2.03	54.00	-20.23	Average
	V	4924	45.96	-2.03	74.00	-28.04	Peak
	H	7386	36.53	1.31	54.00	-17.47	Average
	H	7386	48.19	1.31	74.00	-25.81	Peak
	V	7386	36.63	1.31	54.00	-17.37	Average
	V	7386	48.33	1.31	74.00	-25.67	Peak

TEST REPORT

802.11g

CH	Antenna	Frequency (MHz)	Corrected Reading (dBuV/m)	Correct Factor (dB/m)	Limit (dBuV/m)	Margin (dBuV/m)	Detector
L	H	4824	37.60	-2.07	54.00	-16.40	Average
	H	4824	50.65	-2.07	74.00	-23.35	Peak
	V	4824	35.66	-2.07	54.00	-18.34	Average
	V	4824	49.20	-2.07	74.00	-24.80	Peak
	H	7236	36.71	1.30	54.00	-17.29	Average
	H	7236	48.17	1.30	74.00	-25.83	Peak
	V	7236	36.57	1.30	54.00	-17.43	Average
	V	7236	49.02	1.30	74.00	-24.98	Peak
M	H	4874	35.52	-2.05	54.00	-18.48	Average
	H	4874	51.68	-2.05	74.00	-22.32	Peak
	V	4874	36.86	-2.05	54.00	-17.14	Average
	V	4874	49.54	-2.05	74.00	-24.46	Peak
	H	7311	36.62	1.31	54.00	-17.38	Average
	H	7311	48.74	1.31	74.00	-25.26	Peak
	V	7311	36.72	1.31	54.00	-17.28	Average
	V	7311	48.89	1.31	74.00	-25.11	Peak
H	H	4924	35.29	-2.03	54.00	-18.71	Average
	H	4924	48.49	-2.03	74.00	-25.51	Peak
	V	4924	34.00	-2.03	54.00	-20.00	Average
	V	4924	46.07	-2.03	74.00	-27.93	Peak
	H	7386	36.56	1.31	54.00	-17.44	Average
	H	7386	48.80	1.31	74.00	-25.20	Peak
	V	7386	36.61	1.31	54.00	-17.39	Average
	V	7386	47.86	1.31	74.00	-26.14	Peak

TEST REPORT

802.11n (HT20)

CH	Antenna	Frequency (MHz)	Corrected Reading (dBuV/m)	Correct Factor (dB/m)	Limit (dBuV/m)	Margin (dBuV/m)	Detector
L	H	4924	36.67	-2.03	54.00	-17.33	Average
	H	4924	49.60	-2.03	74.00	-24.40	Peak
	V	4924	36.79	-2.03	54.00	-17.21	Average
	V	4924	49.98	-2.03	74.00	-24.02	Peak
	H	7386	36.58	1.31	54.00	-17.42	Average
	H	7386	48.38	1.31	74.00	-25.62	Peak
	V	7386	36.48	1.31	54.00	-17.52	Average
	V	7386	48.89	1.31	74.00	-25.11	Peak
M	H	4924	36.65	-2.03	54.00	-17.35	Average
	H	4924	50.07	-2.03	74.00	-23.93	Peak
	V	4924	35.74	-2.03	54.00	-18.26	Average
	V	4924	49.78	-2.03	74.00	-24.22	Peak
	H	7386	36.56	1.31	54.00	-17.44	Average
	H	7386	48.48	1.31	74.00	-25.52	Peak
	V	7386	36.63	1.31	54.00	-17.37	Average
	V	7386	48.82	1.31	74.00	-25.18	Peak
H	H	4924	35.45	-2.03	54.00	-18.55	Average
	H	4924	46.25	-2.03	74.00	-27.75	Peak
	V	4924	34.02	-2.03	54.00	-19.98	Average
	V	4924	45.84	-2.03	74.00	-28.16	Peak
	H	7386	36.51	1.31	54.00	-17.49	Average
	H	7386	48.19	1.31	74.00	-25.81	Peak
	V	7386	36.53	1.31	54.00	-17.47	Average
	V	7386	49.26	1.31	74.00	-24.74	Peak

TEST REPORT

802.11n (HT40)

CH	Antenna	Frequency (MHz)	Corrected Reading (dBuV/m)	Correct Factor (dB/m)	Limit (dBuV/m)	Margin (dBuV/m)	Detector
L	H	4844	35.77	-2.03	54.00	-18.23	Average
	H	4844	51.96	-2.03	74.00	-22.04	Peak
	V	4844	36.43	1.31	54.00	-17.57	Average
	V	4844	48.32	1.31	74.00	-25.68	Peak
	H	7266	35.79	-2.03	54.00	-18.21	Average
	H	7266	50.20	-2.03	74.00	-23.80	Peak
	V	7266	36.66	1.31	54.00	-17.34	Average
	V	7266	48.29	1.31	74.00	-25.71	Peak
M	H	4874	35.72	-2.03	54.00	-18.28	Average
	H	4874	48.65	-2.03	74.00	-25.35	Peak
	V	4874	33.93	-2.03	54.00	-20.07	Average
	V	4874	48.33	-2.03	74.00	-25.67	Peak
	H	7311	36.56	1.31	54.00	-17.44	Average
	H	7311	49.03	1.31	74.00	-24.97	Peak
	V	7311	36.63	1.31	54.00	-17.37	Average
	V	7311	48.80	1.31	74.00	-25.20	Peak
H	H	4904	35.91	-2.03	54.00	-18.09	Average
	H	4904	48.69	-2.03	74.00	-25.31	Peak
	V	4904	35.98	-2.03	54.00	-18.02	Average
	V	4904	50.41	-2.03	74.00	-23.59	Peak
	H	7356	36.58	1.31	54.00	-17.42	Average
	H	7356	48.94	1.31	74.00	-25.06	Peak
	V	7356	36.68	1.31	54.00	-17.32	Average
	V	7356	49.20	1.31	74.00	-24.80	Peak

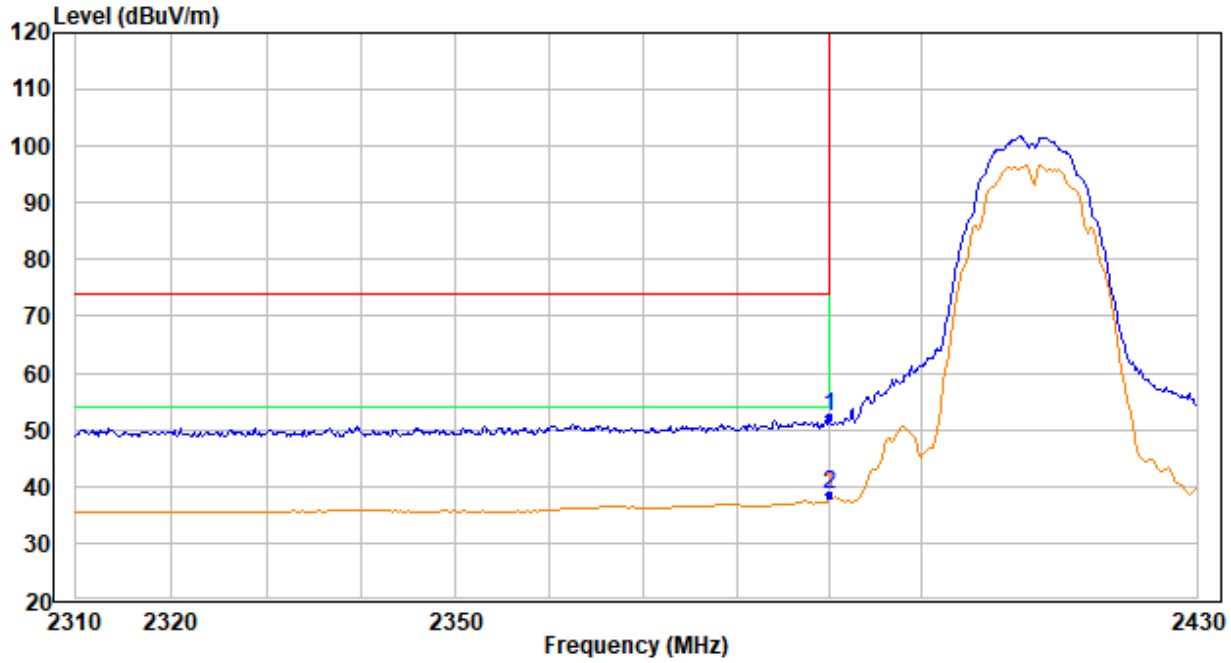
Note: Choose the worst power to test as representative.

TEST REPORT

7.5 Band Edge Measurements (Radiated)

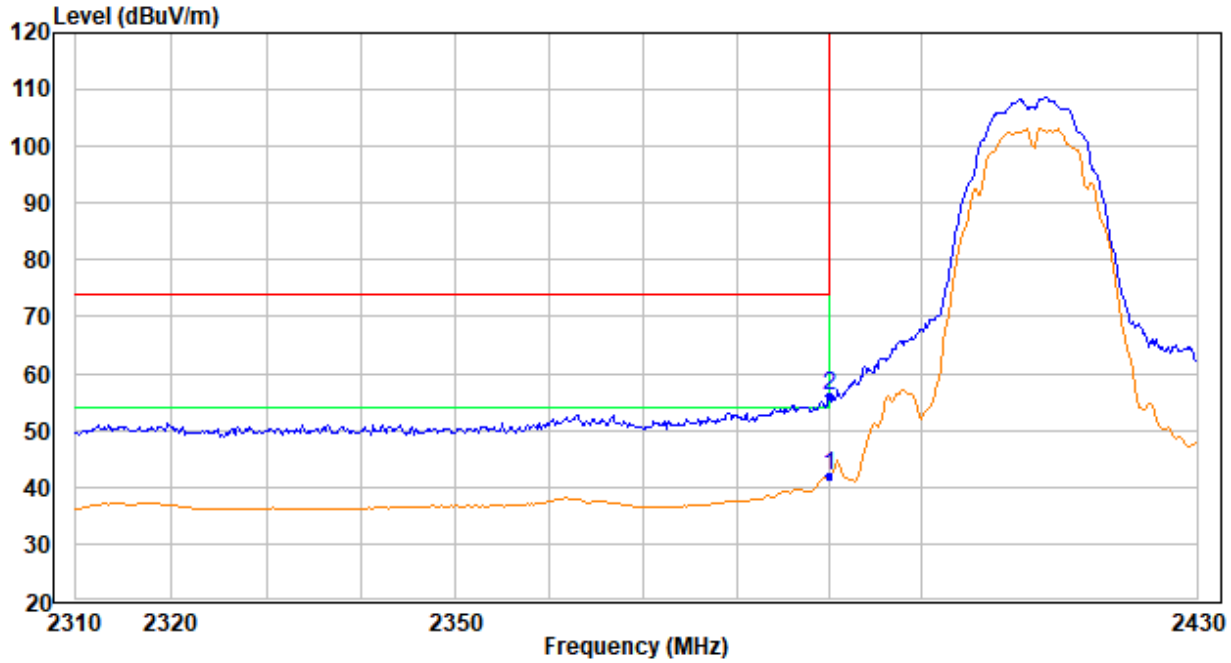
IEEE 802.11b

Test Channel:	Channel 1	Ant. Polar. :	Horizontal



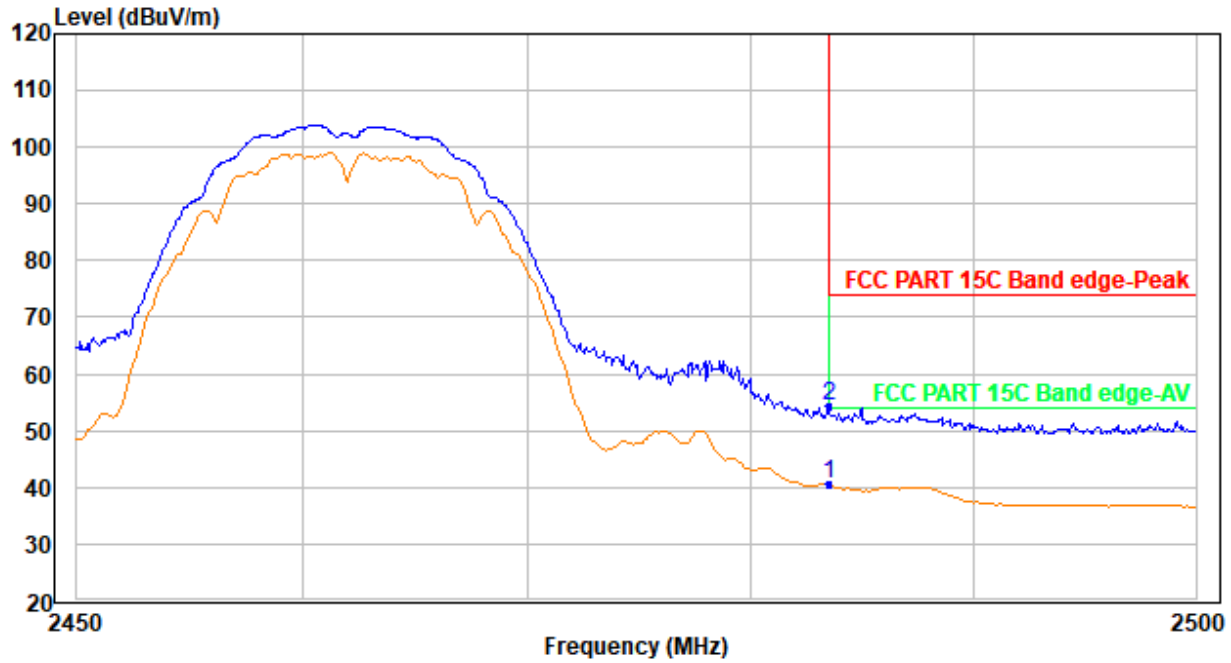
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	52.33	74.00	38.64	54.00	Pass

Test Channel:	Channel 1	Ant. Polar. :	Vertical



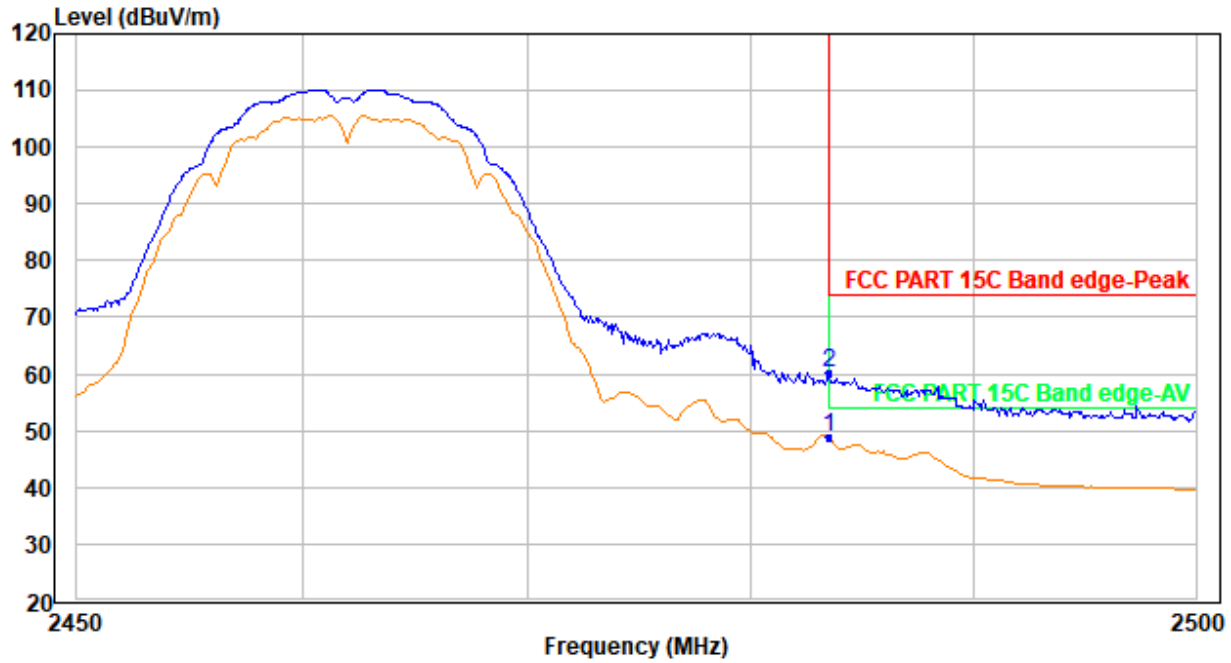
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	55.99	74.00	42.00	54.00	Pass

Test Channel:	Channel 11	Ant. Polar. :	Horizontal



Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	54.52	74.00	40.52	54.00	Pass

Test Channel:	Channel 11	Ant. Polar. :	Vertical

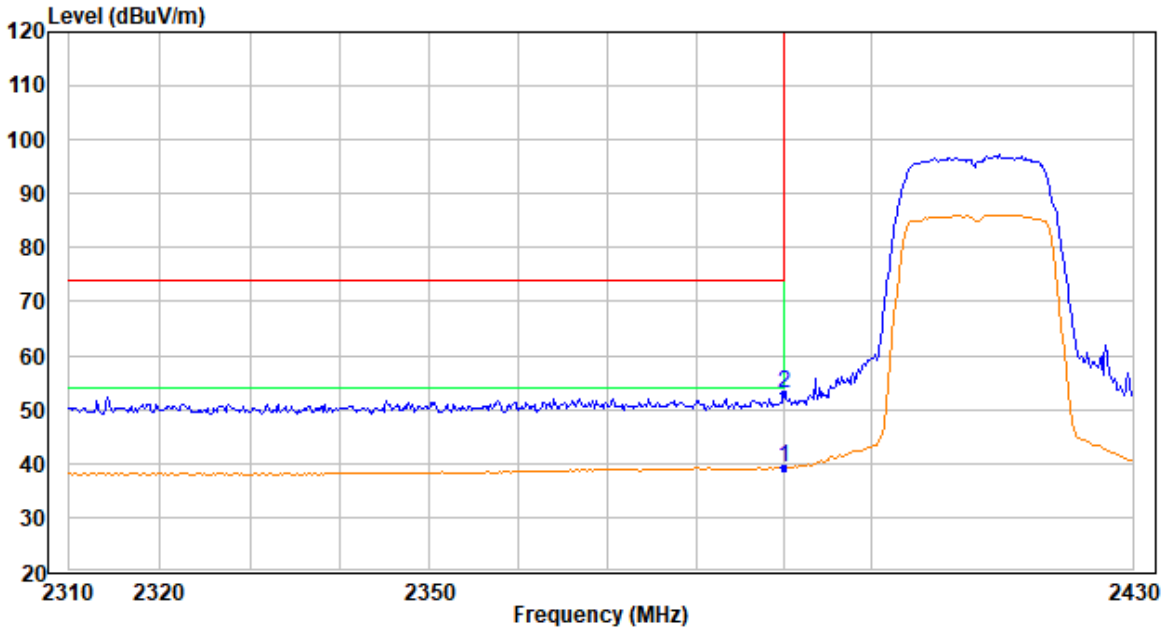


Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	60.34	74.00	48.91	54.00	Pass

TEST REPORT

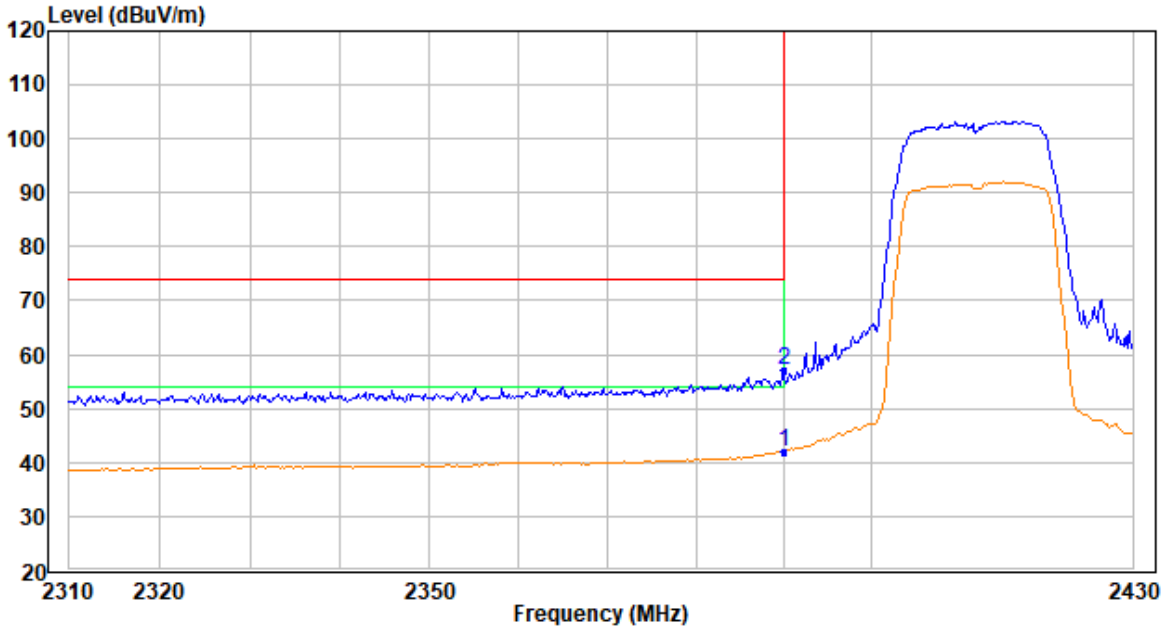
IEEE 802.11g

Test Channel:	Channel 1	Ant. Polar. :	Horizontal



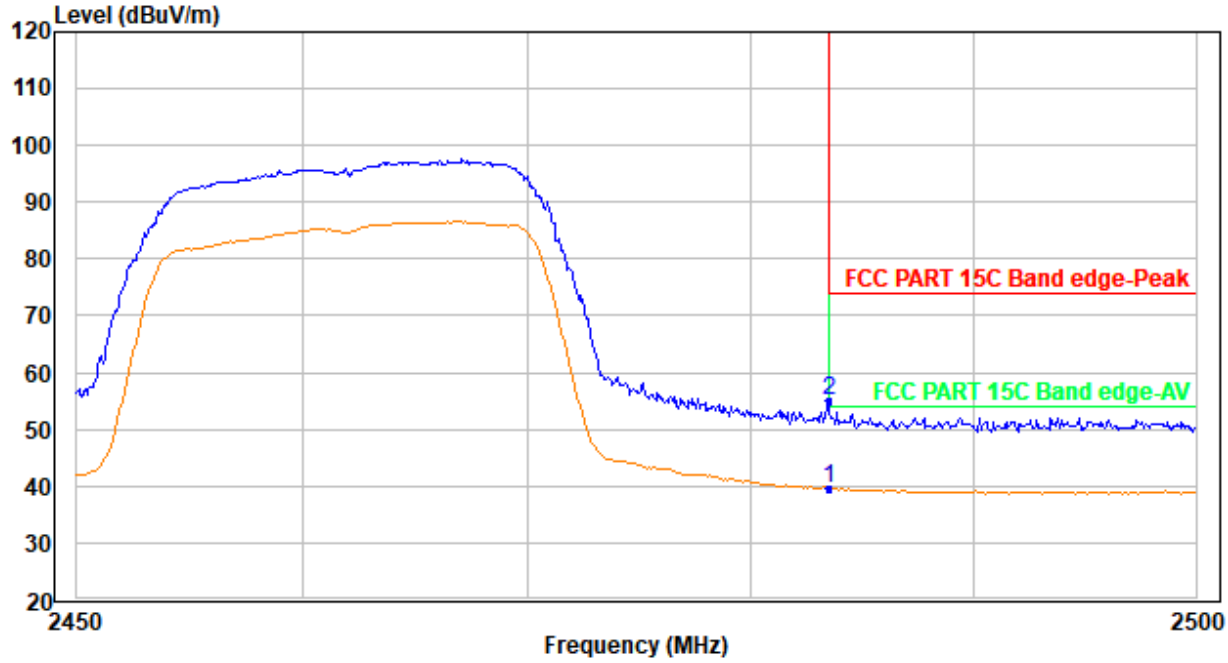
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	53.02	74.00	39.19	54.00	Pass

Test Channel:	Channel 1	Ant. Polar. :	Vertical



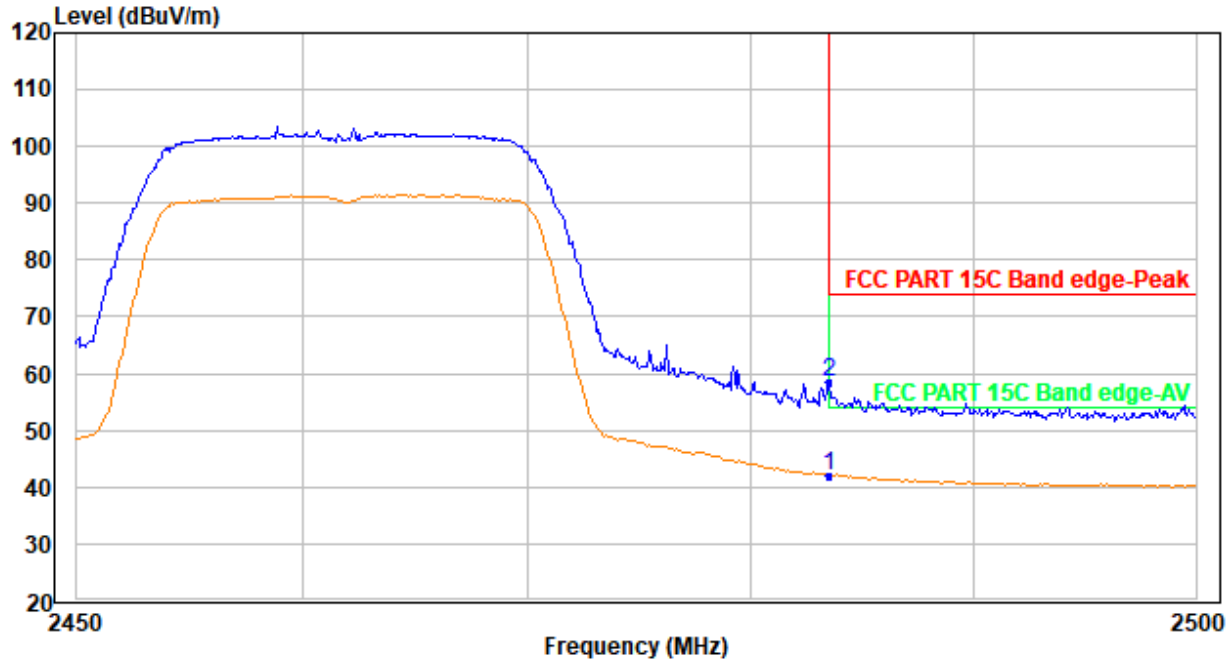
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	56.99	74.00	42.16	54.00	Pass

Test Channel:	Channel 11	Ant. Polar. :	Horizontal



Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	54.88	74.00	39.58	54.00	Pass

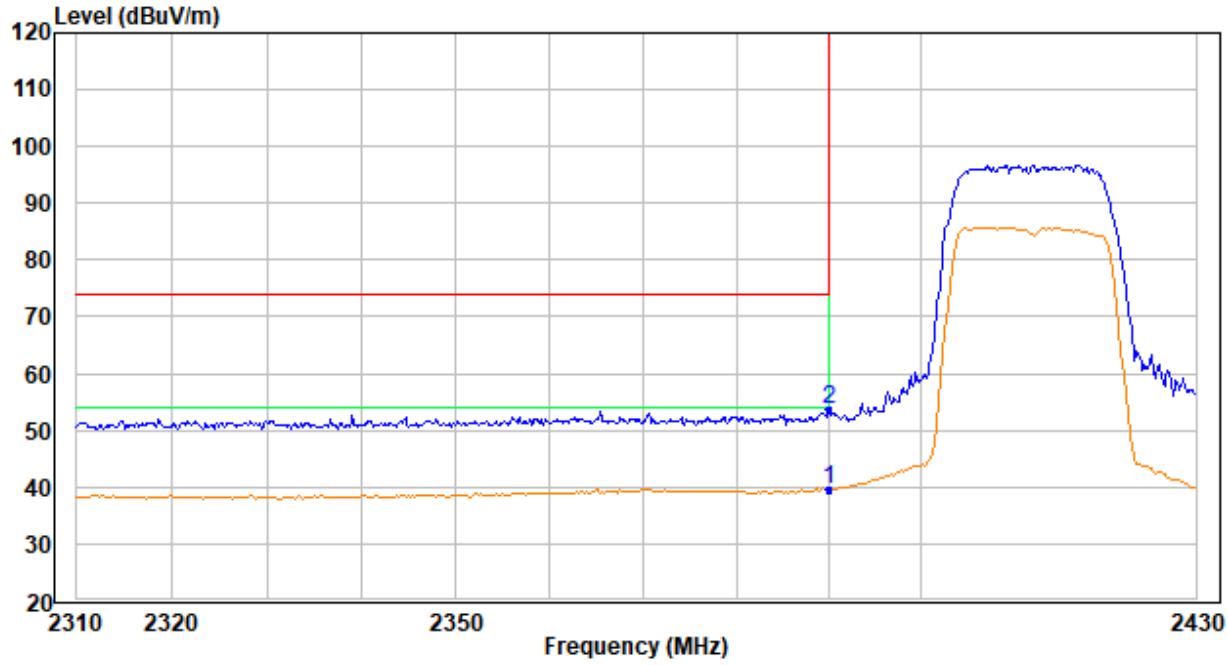
Test Channel:	Channel 11	Ant. Polar. :	Vertical



Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	58.45	74.00	42.10	54.00	Pass

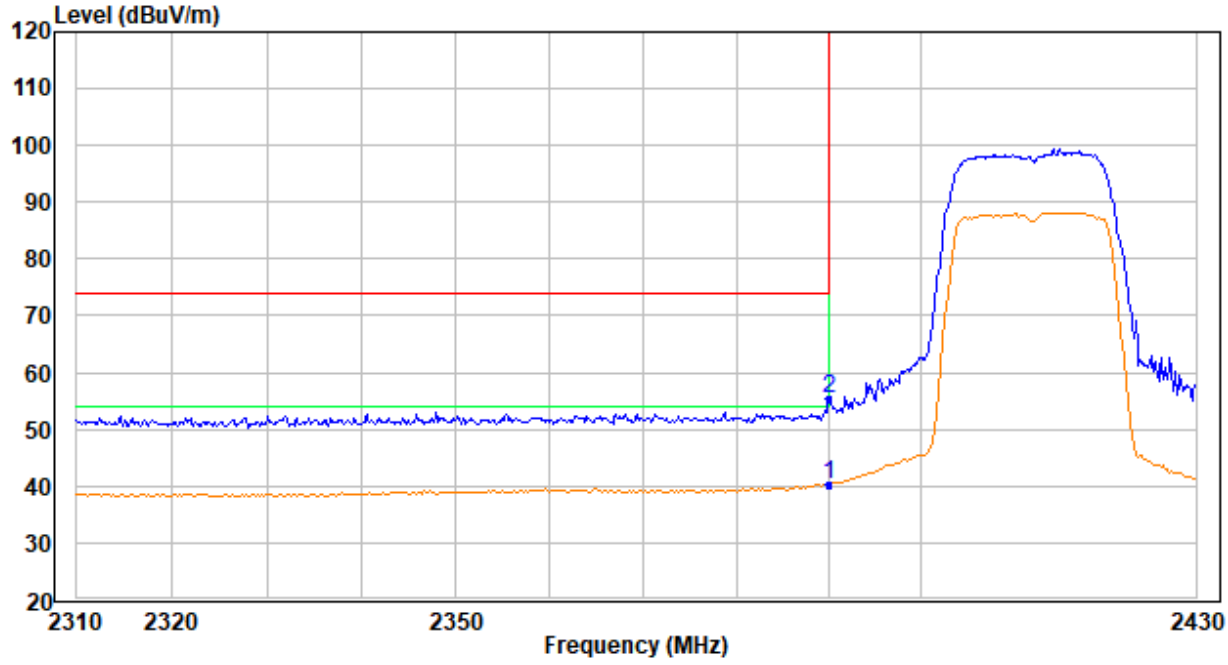
IEEE 802.11n-HT20

Test Channel:	Channel 1	Ant. Polar. :	Horizontal



Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	53.60	74.00	39.64	54.00	Pass

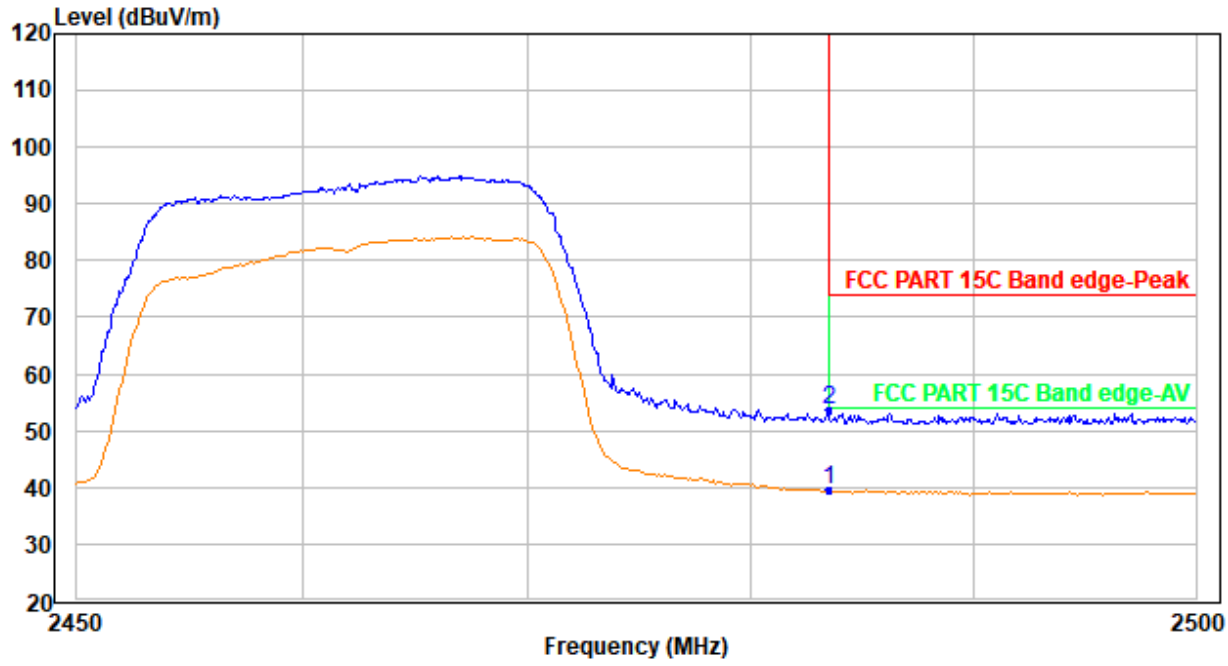
Test Channel:	Channel 1	Ant. Polar. :	Vertical



Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	55.31	74.00	40.37	54.00	Pass

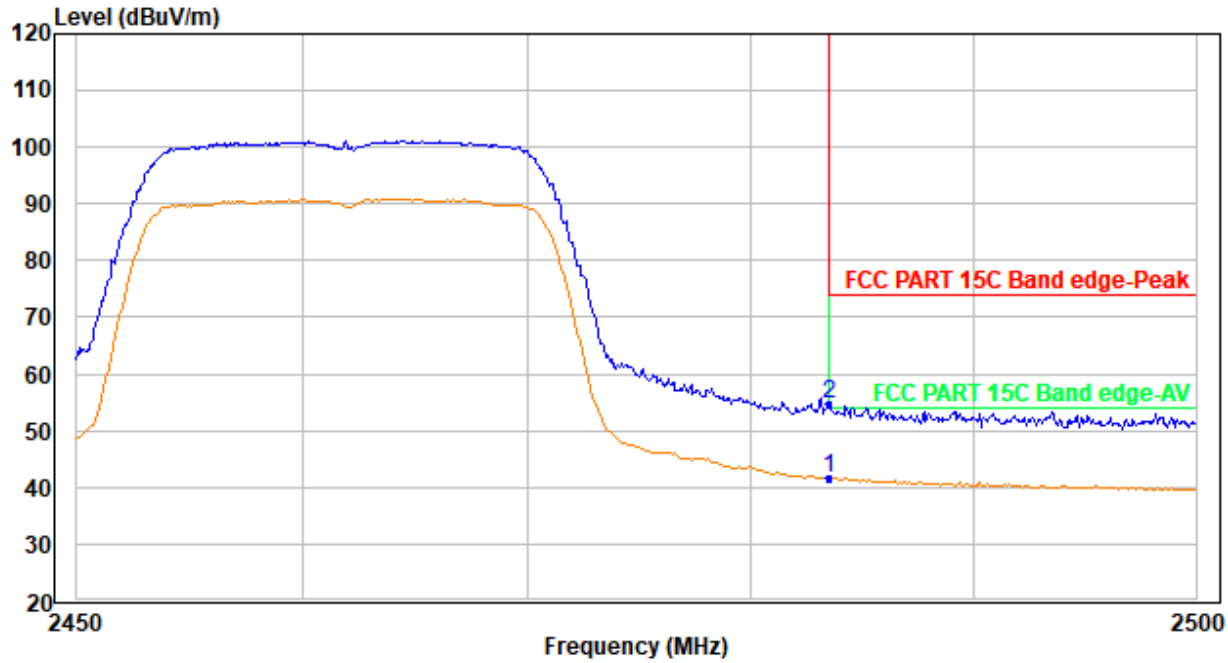
TEST REPORT

Test Channel:	Channel 11	Ant. Polar. :	Horizontal



Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2483.500	53.85	74.00	39.44	54.00	Pass

Test Channel:	Channel 11	Ant. Polar. :	Vertical

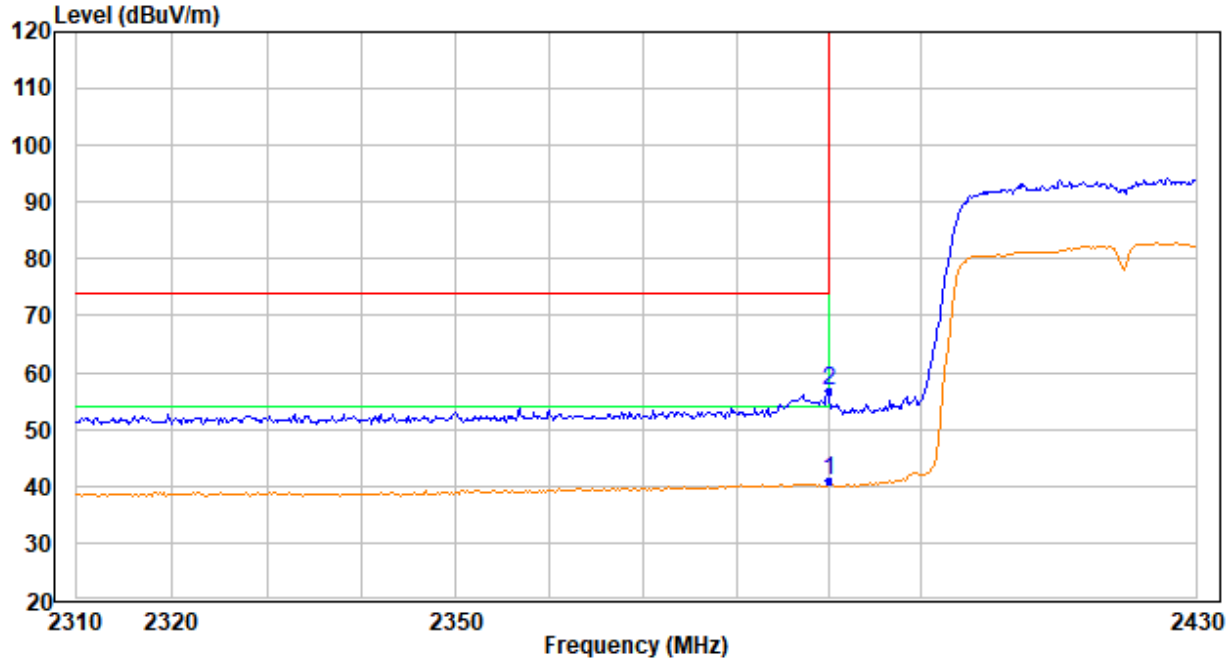


Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2483.500	54.69	74.00	41.57	54.00	Pass

TEST REPORT

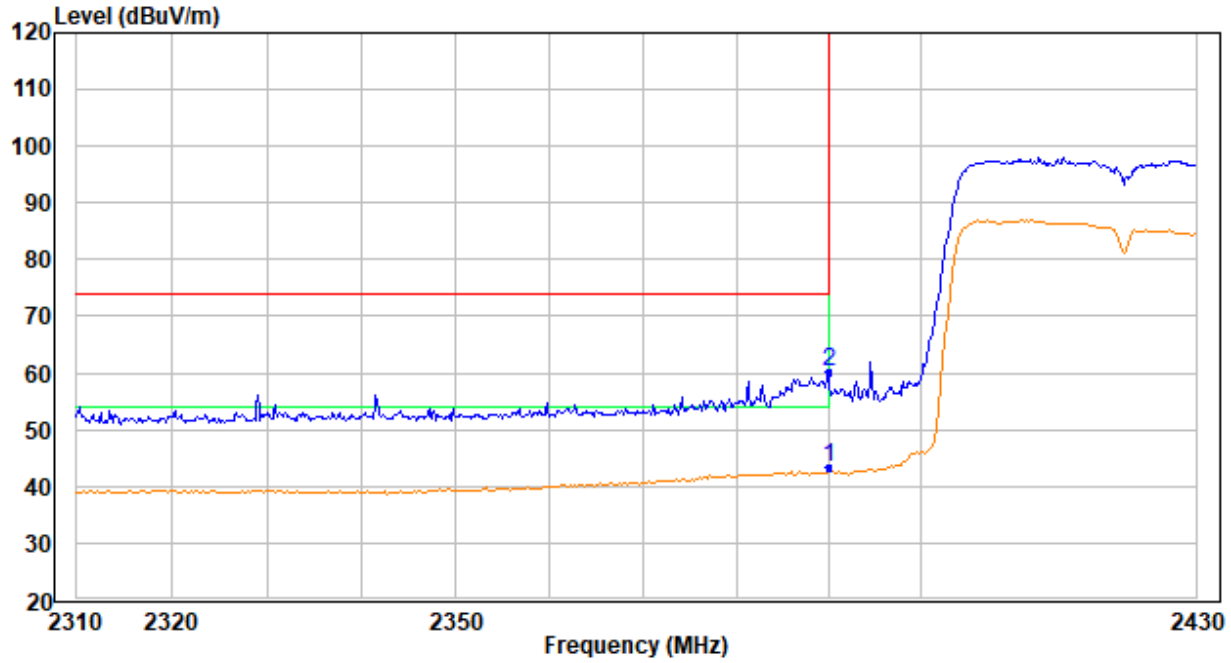
IEEE 802.11n-HT40

Test Channel:	Channel 3	Ant. Polar. :	Horizontal



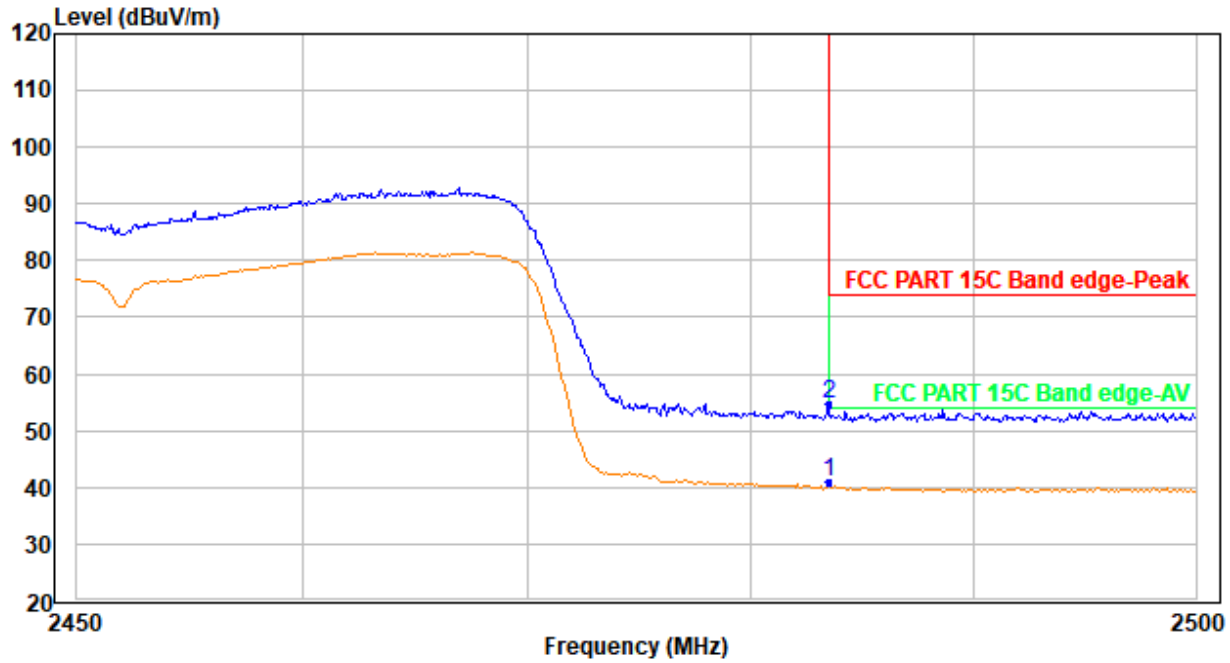
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	56.74	74.00	40.94	54.00	Pass

Test Channel:	Channel 3	Ant. Polar. :	Vertical



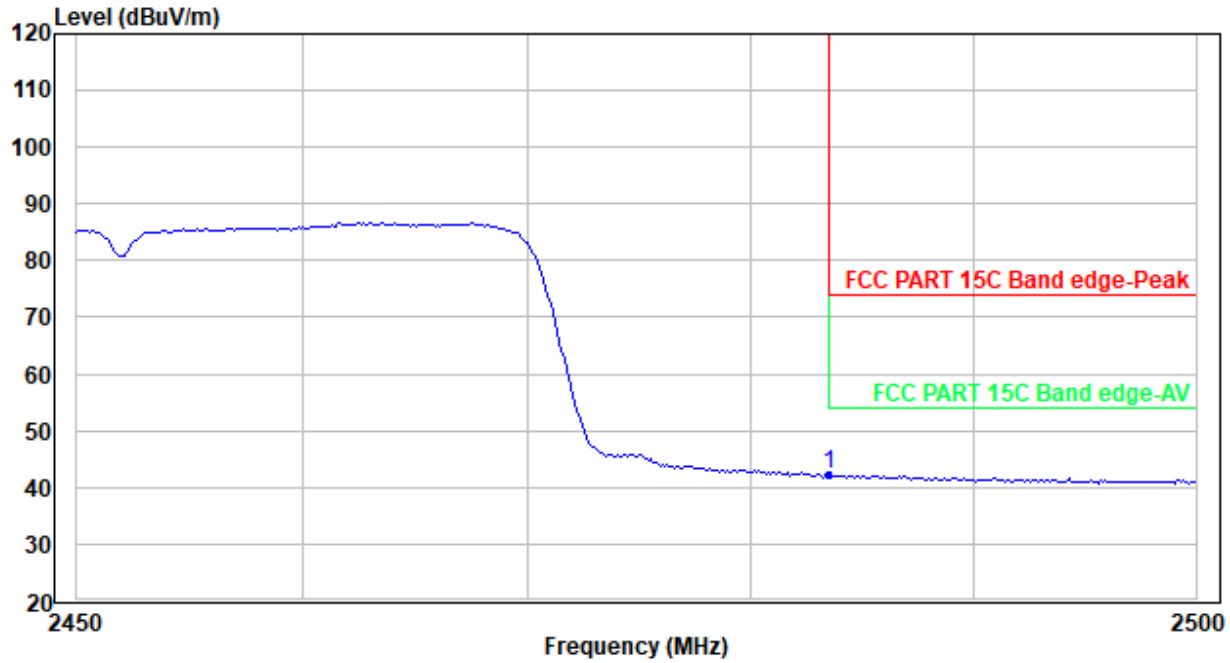
Frequency (MHz)	Peak level (dBµV/m)	Peak Limit (dBµV/m)	AV level (dBµV/m)	AV Limit (dBµV/m)	Conclusion
2390.000	60.06	74.00	43.53	54.00	Pass

Test Channel:	Channel 9	Ant. Polar. :	Horizontal



Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	54.63	74.00	40.91	54.00	Pass

Test Channel:	Channel 9	Ant. Polar. :	Vertical



Frequency (MHz)	Peak level (dBμV/m)	Peak Limit (dBμV/m)	AV level (dBμV/m)	AV Limit (dBμV/m)	Conclusion
2483.500	56.64	74.00	42.28	54.00	Pass

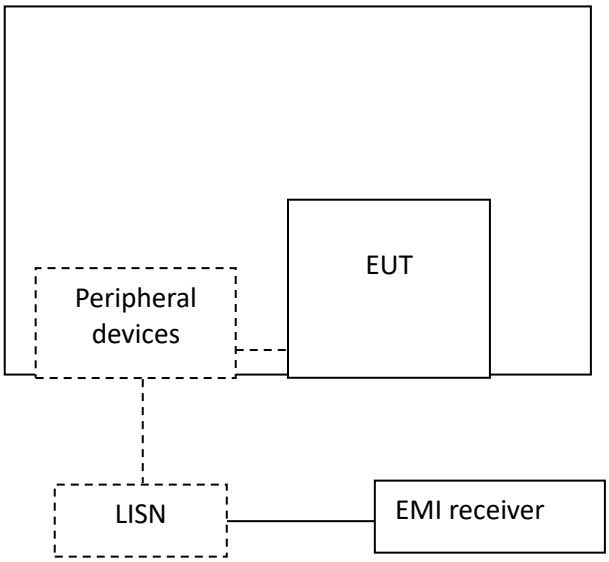
8 Power Line Conducted Emission

Test Result: **Pass**

8.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	QP	AV
0.15-0.5	66 to 56*	56 to 46 *
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

8.2 Test Configuration



8.3 Measurement Procedure

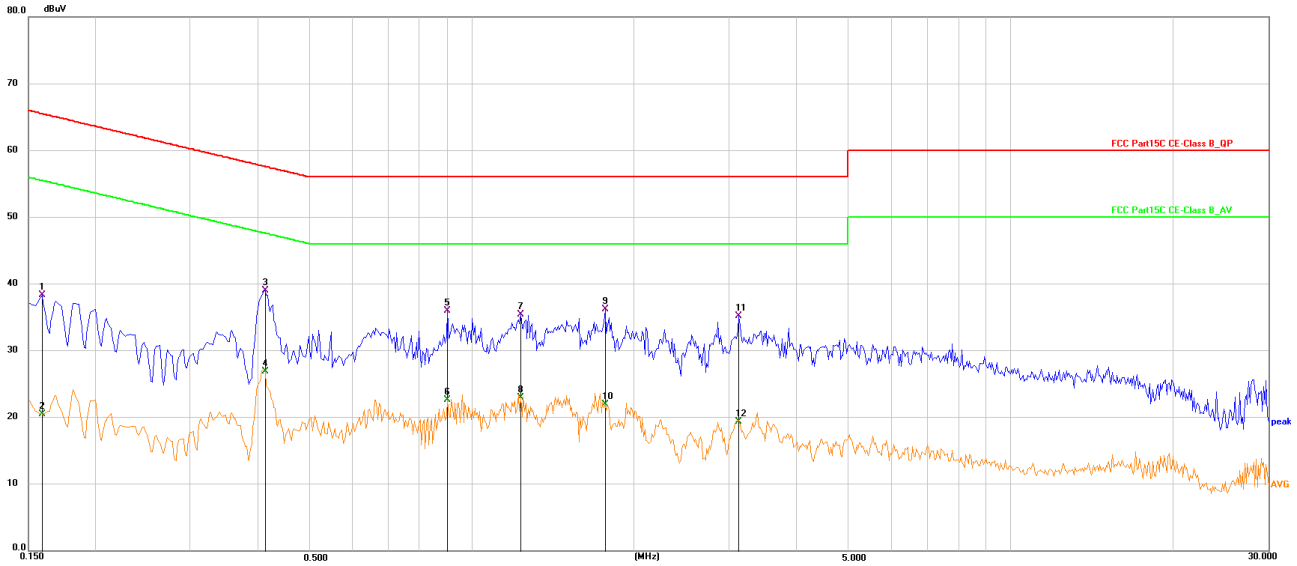
Measured levels of ac powerline conducted emission shall be the emission voltages from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), where permitted, terminated into a 50 Ω measuring instrument. All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer. For those measurements using a LISN, the 50 Ω measuring port is terminated by a measuring instrument having 50 Ω input impedance. All other ports are terminated in 50 Ω loads.

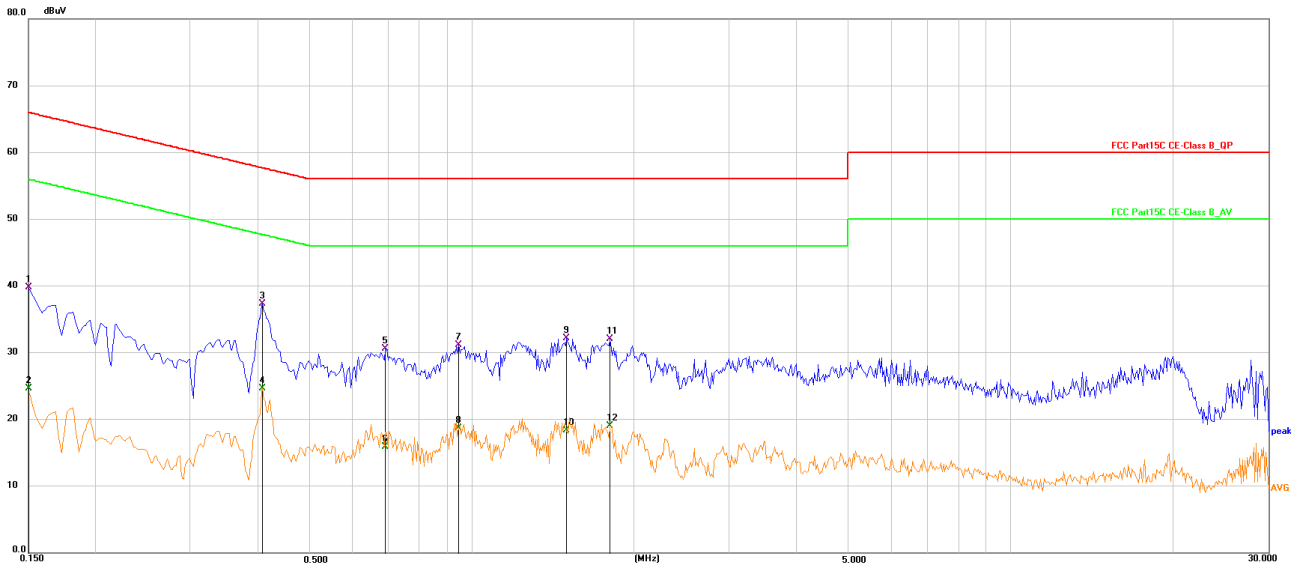
Tabletop devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

The bandwidth of the test receiver is set at 9 kHz.

8.4 Test Results of Power Line Conducted Emission

Test Curve:





TEST REPORT

Test Data:

Frequency (MHz)	Limit (dBuV)	Corrected Reading (dBuV)	Margin (dB)	Original Receiver Reading (dBuV)	Correct Factor (dB)	Detector	Phase
0.1590	65.52	38.31	-27.21	28.11	10.20	QP	L1
0.4110	57.63	38.95	-18.68	28.82	10.13	QP	L1
0.9014	56.00	36.00	-20.00	25.70	10.30	QP	L1
1.2300	56.00	35.45	-20.55	25.13	10.32	QP	L1
1.7700	56.00	36.22	-19.78	25.97	10.25	QP	L1
3.1244	56.00	35.20	-20.80	24.95	10.25	QP	L1
0.1500	66.00	39.78	-26.22	29.59	10.19	QP	N
0.4063	57.72	37.35	-20.37	27.15	10.20	QP	N
0.6900	56.00	30.56	-25.44	20.31	10.25	QP	N
0.9465	56.00	31.09	-24.91	20.92	10.17	QP	N
1.5000	56.00	32.17	-23.83	21.92	10.25	QP	N
1.8015	56.00	32.03	-23.97	21.73	10.30	QP	N
0.1590	55.52	20.45	-35.07	10.25	10.20	CAV	L1
0.4110	47.63	26.84	-20.79	16.71	10.13	CAV	L1
0.9014	46.00	22.57	-23.43	12.27	10.30	CAV	L1
1.2300	46.00	22.92	-23.08	12.60	10.32	CAV	L1
1.7700	46.00	21.89	-24.11	11.64	10.25	CAV	L1
3.1244	46.00	19.34	-26.66	9.09	10.25	CAV	L1
0.1500	56.00	24.58	-31.42	14.39	10.19	CAV	N
0.4063	47.72	24.66	-23.06	14.46	10.20	CAV	N
0.6900	46.00	15.90	-30.10	5.65	10.25	CAV	N
0.9465	46.00	18.64	-27.36	8.47	10.17	CAV	N
1.5000	46.00	18.40	-27.60	8.15	10.25	CAV	N
1.8015	46.00	19.04	-26.96	8.74	10.30	CAV	N

Remark: 1. Correct Factor = LISN Factor + Cable Loss, the value was added to Original Receiver Reading by the software automatically.

2. Corrected Reading = Original Receiver Reading + Correct Factor

3. Margin = Limit - Corrected Reading

4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

9 Occupied Bandwidth

Test Result: **Pass**

9.1 Limit

None.

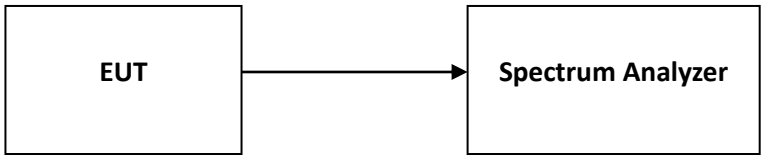
9.2 Measurement Procedure

The occupied bandwidth per RSS-Gen Issue 4 Clause 6.6 was measured using the Spectrum Analyzer.

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.

The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW.

9.3 Test Configuration



9.4 The Results of Occupied Bandwidth

Please refer to Appendix A.

10 Antenna Requirement

Requirement:
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.

Result:
EUT uses permanently attached antenna to the intentional radiator, so it can comply with the provisions of this section.

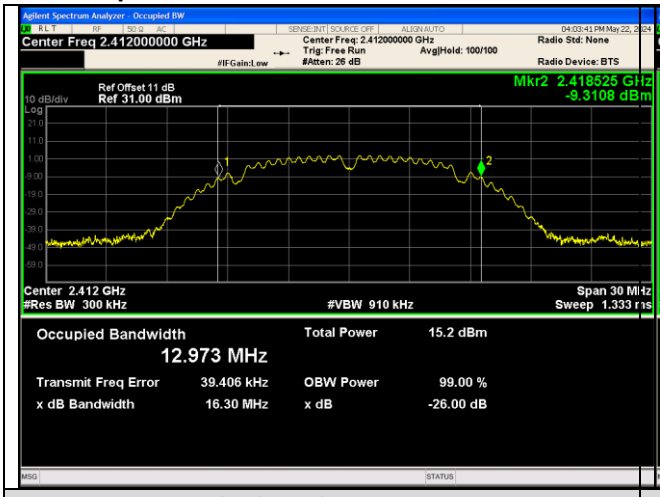
TEST REPORT

11 Appendix A: Test Results

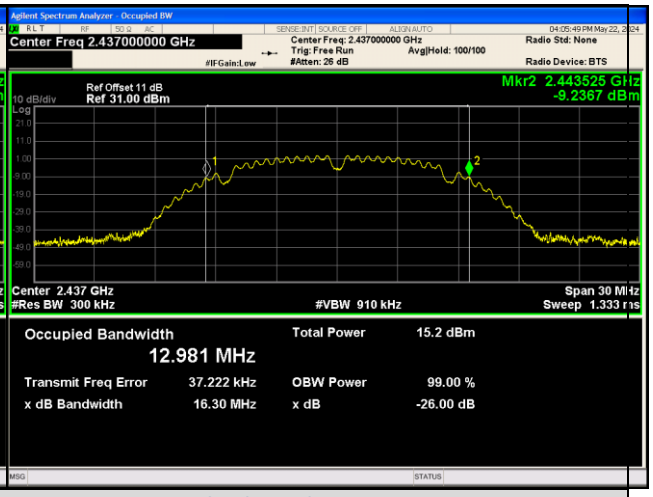
A.1 99% Bandwidth

Mode	Channel	Ant.	99% BW (MHz)
IEEE 802.11b	1	0	12.973
	6		12.981
	11		12.989
IEEE 802.11g	1		16.576
	6		16.592
	11		16.590
IEEE 802.11n_20	1		17.524
	6		17.524
	11		17.525
IEEE 802.11n_40	3		35.882
	6		35.876
	9		35.906

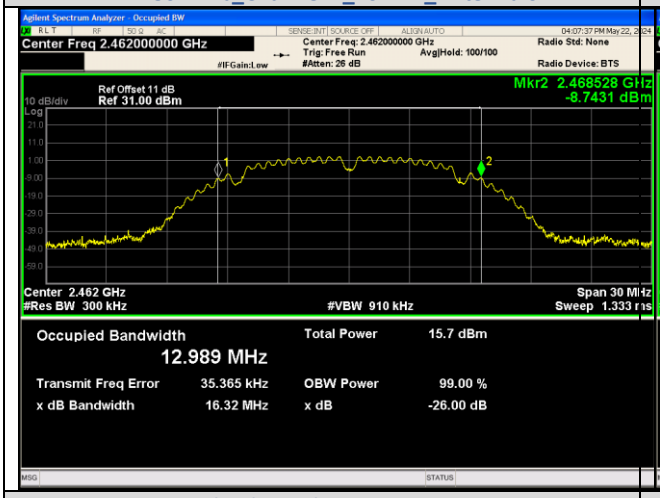
Test Graphs



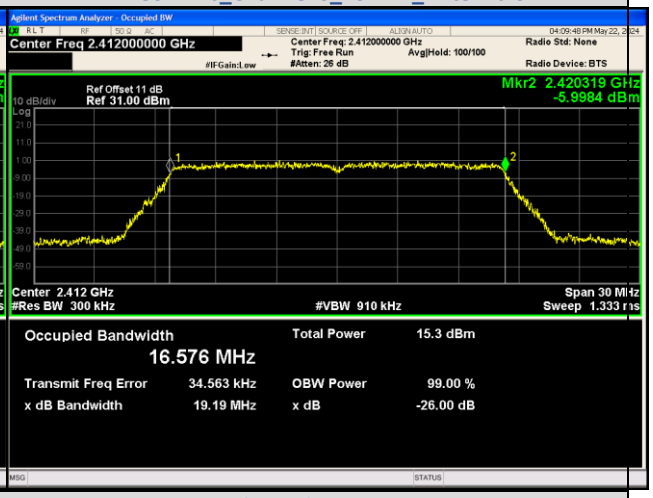
IEEE 802.11b_Channel 1_20MHz_Antenna 0



IEEE 802.11b_Channel 6_20MHz_Antenna 0



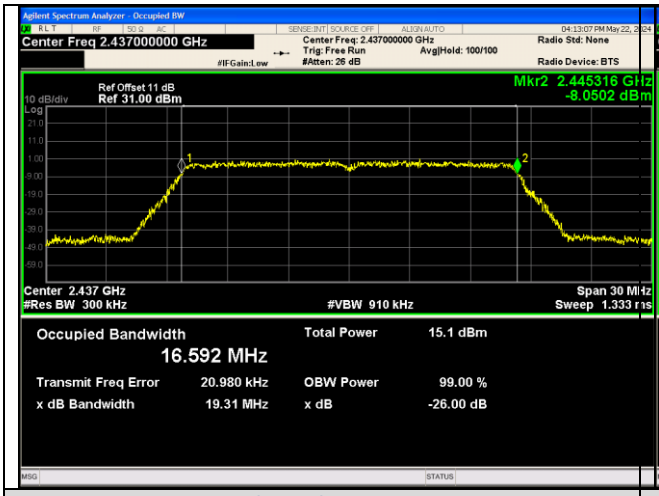
IEEE 802.11b_Channel 11_20MHz_Antenna 0



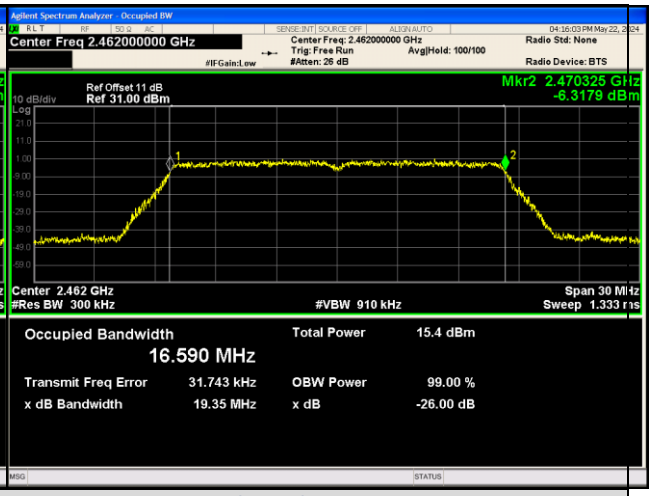
IEEE 802.11g_Channel 1_20MHz_Antenna 0

Total Quality. Assured.

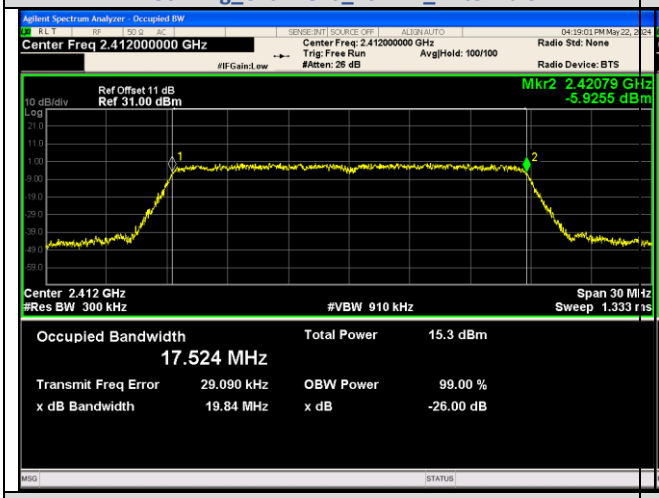
TEST REPORT



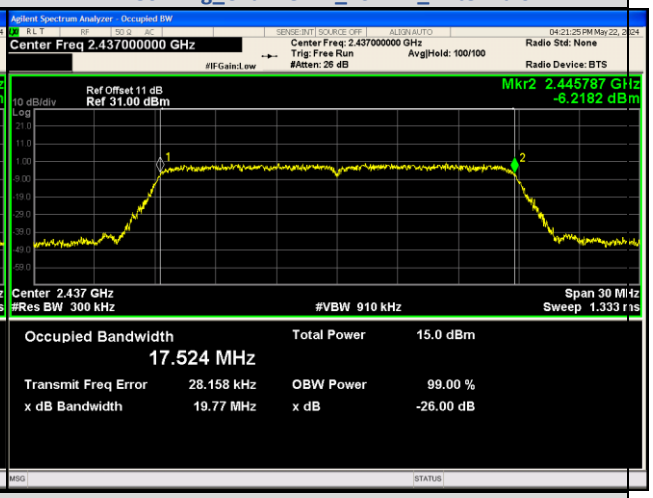
IEEE 802.11g_Channel 6_20MHz_Antenna 0



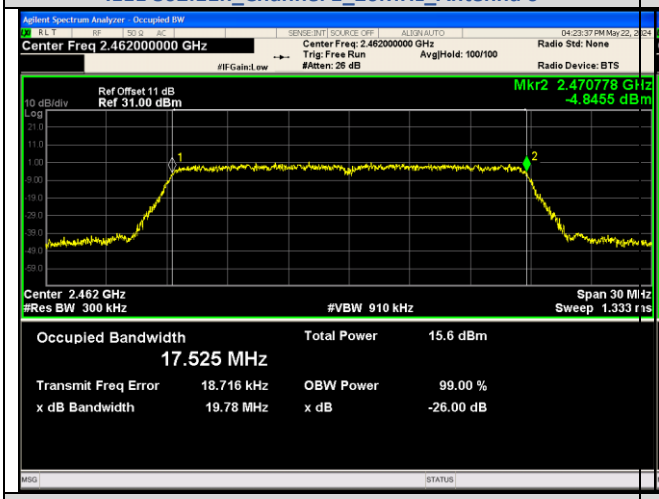
IEEE 802.11g_Channel 11_20MHz_Antenna 0



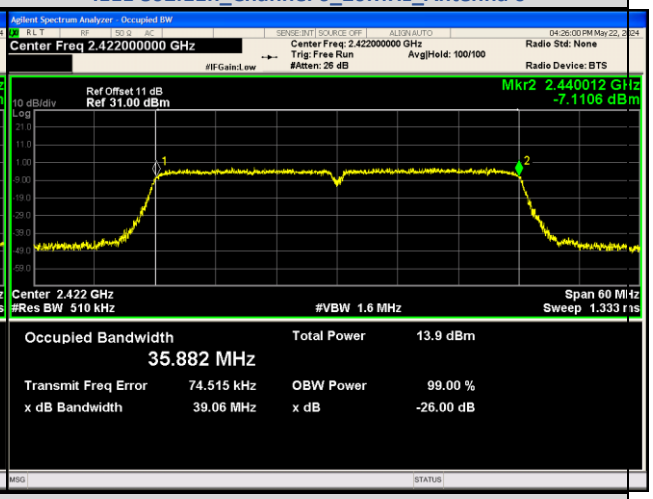
IEEE 802.11n_Channel 1_20MHz_Antenna 0



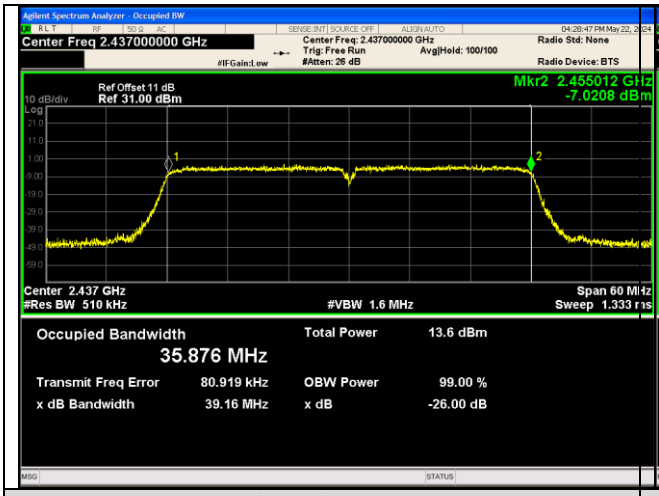
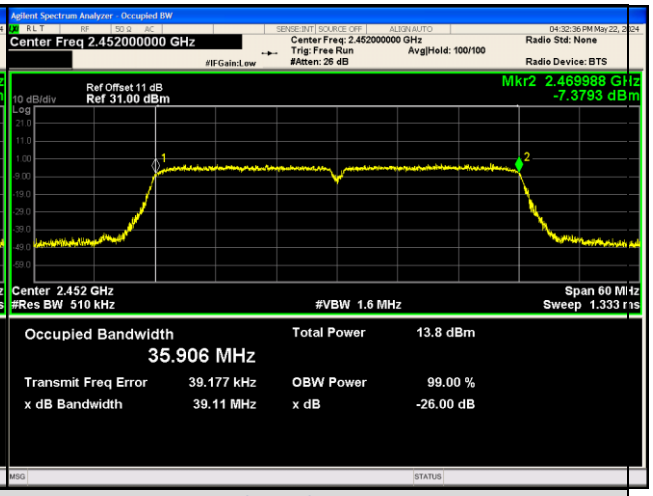
IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0



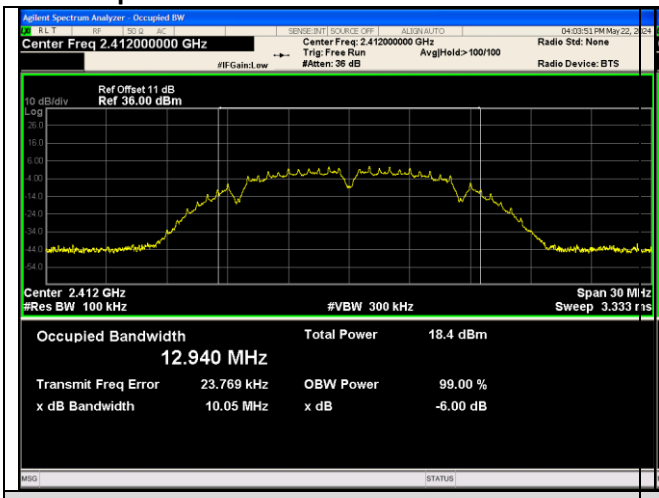
IEEE 802.11n_Channel 3_40MHz_Antenna 0

	
IEEE 802.11n_Channel 6_40MHz_Antenna 0	IEEE 802.11n_Channel 9_40MHz_Antenna 0

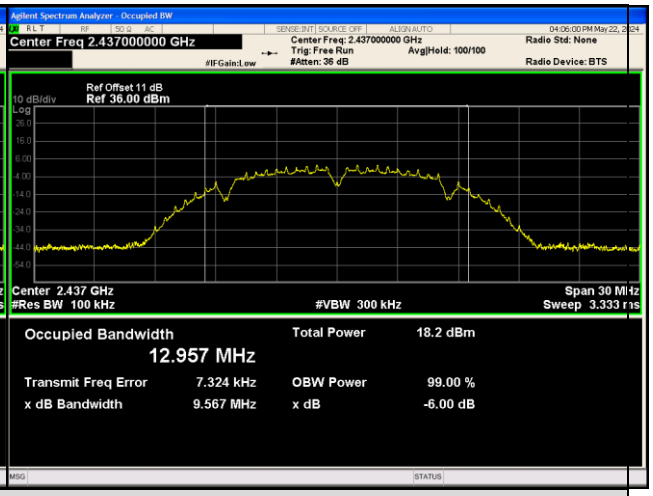
A.2 6dB Bandwidth

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	10.05	0.5	PASS
	6		2437	9.567		PASS
	11		2462	10.05		PASS
IEEE 802.11g	1		2412	16.33		PASS
	6		2437	16.33		PASS
	11		2462	16.33		PASS
IEEE 802.11n_20	1		2412	17.08		PASS
	6		2437	17.02		PASS
	11		2462	17.04		PASS
IEEE 802.11n_40	3		2422	35.13		PASS
	6		2437	35.32		PASS
	9		2452	35.15		PASS

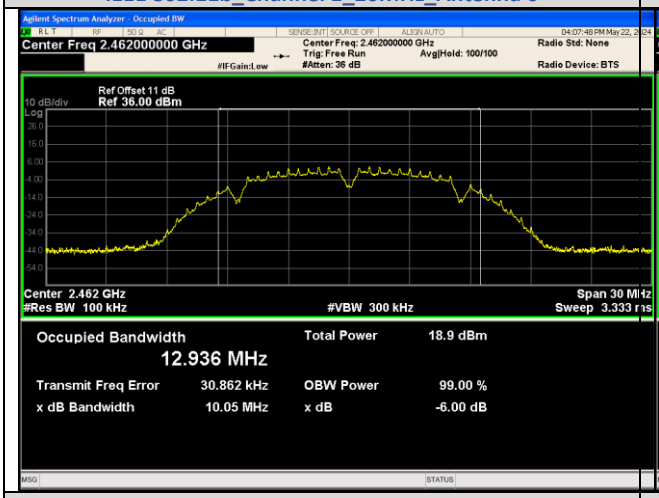
Test Graphs



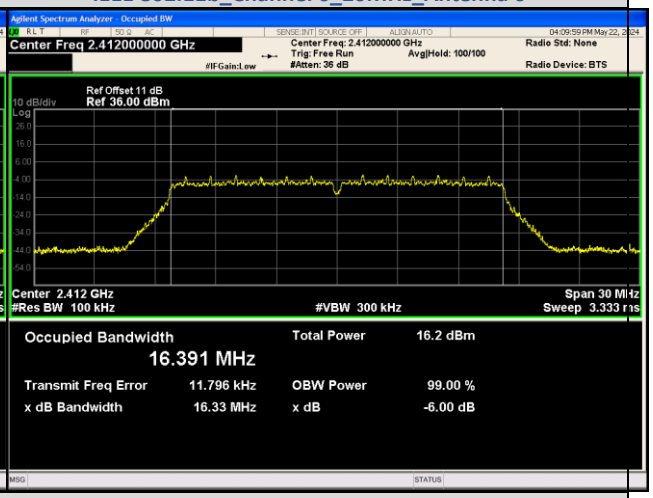
IEEE 802.11b_Channel 1_20MHz_Antenna 0



IEEE 802.11b_Channel 6_20MHz_Antenna 0

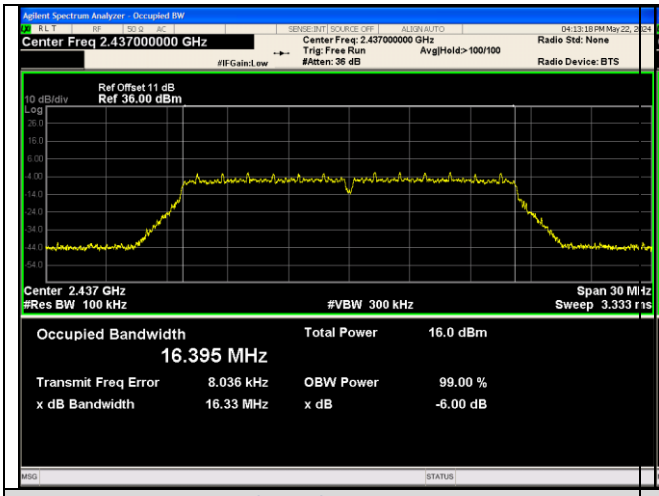


IEEE 802.11b_Channel 11_20MHz_Antenna 0

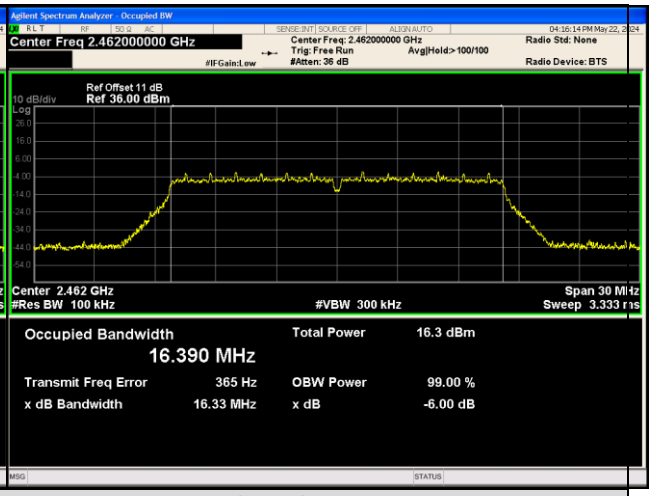


IEEE 802.11g_Channel 1_20MHz_Antenna 0

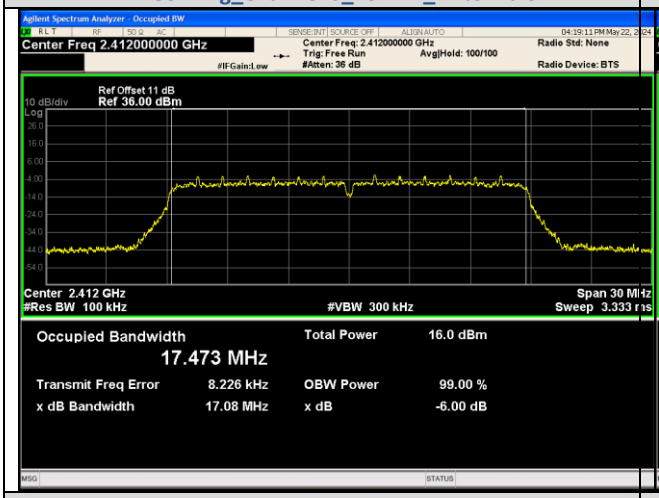
TEST REPORT



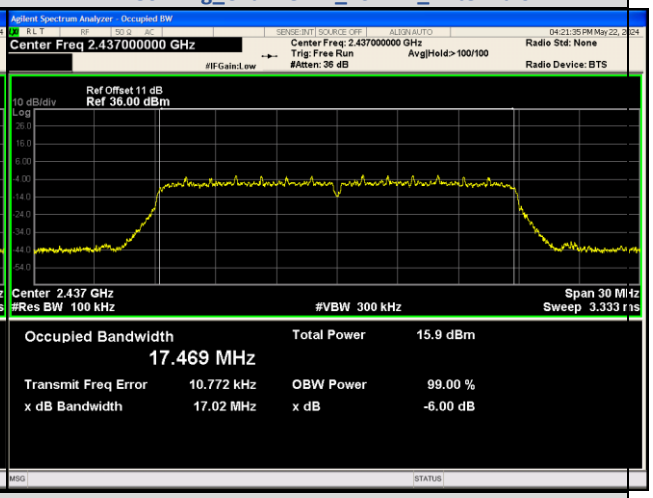
IEEE 802.11g_Channel 6_20MHz_Antenna 0



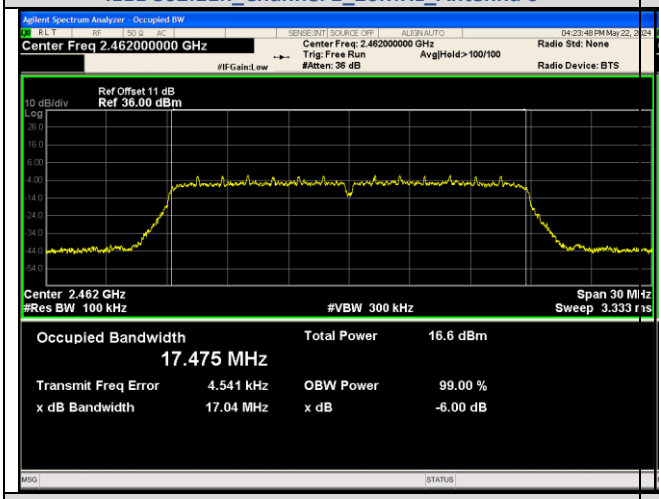
IEEE 802.11g_Channel 11_20MHz_Antenna 0



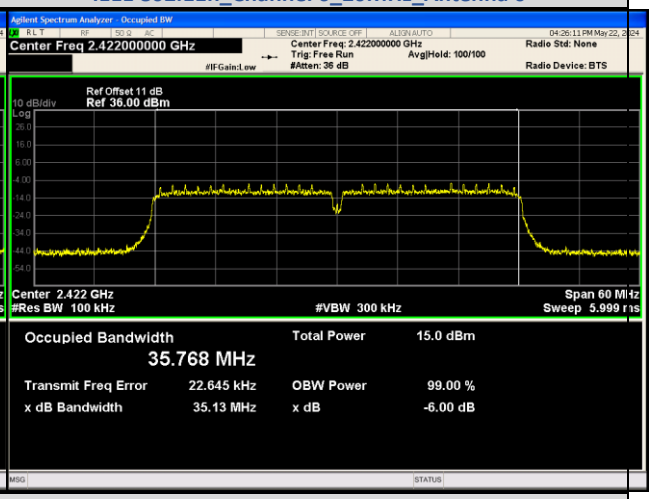
IEEE 802.11n_Channel 1_20MHz_Antenna 0



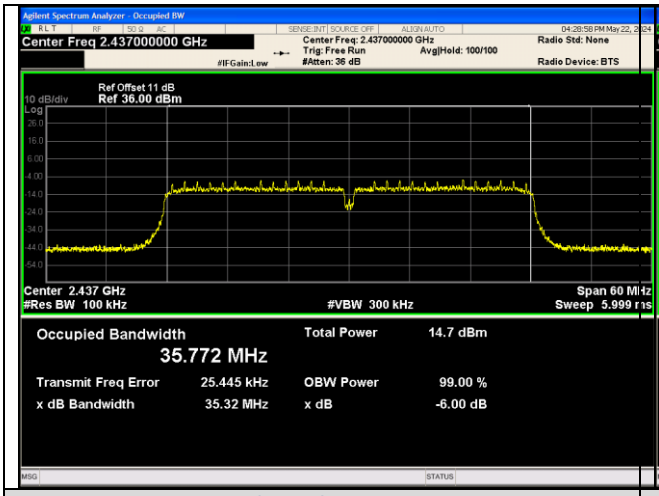
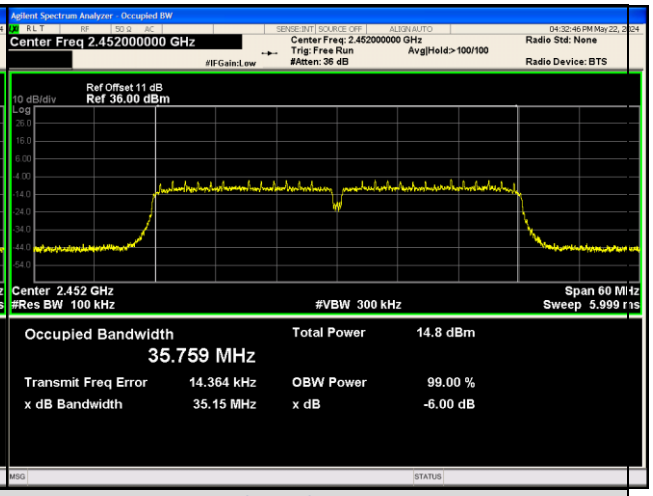
IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 3_40MHz_Antenna 0

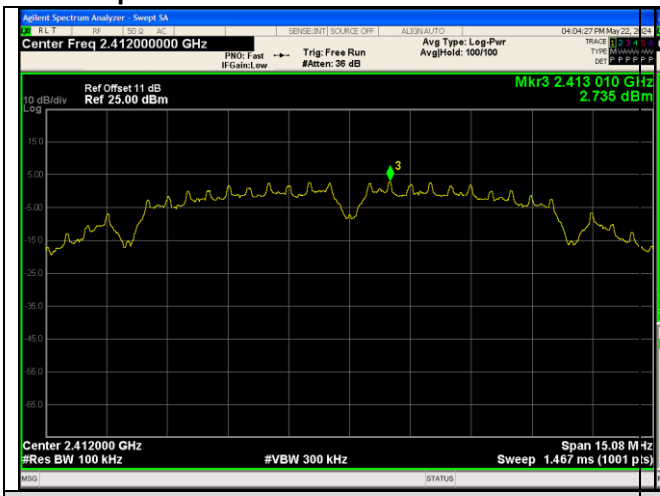
	
IEEE 802.11n_Channel 6_40MHz_Antenna 0	IEEE 802.11n_Channel 9_40MHz_Antenna 0

TEST REPORT

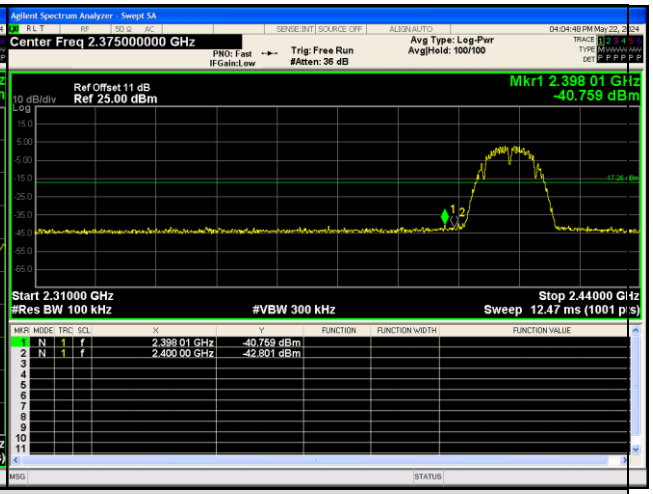
A.3 Conducted Out Of Band Emission

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2398.01	-40.759	-17.26	-23.499	PASS
			2400.00	-42.801	-17.26	-25.541	PASS
			4824.20	-38.999	-17.26	-21.739	PASS
	6		4874.18	-39.472	-17.36	-22.112	PASS
	11		2483.50	-43.418	-16.54	-26.878	PASS
			4924.12	-37.545	-16.54	-21.005	PASS
IEEE 802.11g	1		2398.79	-41.370	-21.27	-20.100	PASS
			2400.00	-41.428	-21.27	-20.158	PASS
			24546.8	-43.883	-21.27	-22.613	PASS
	6		24282.7	-43.411	-21.44	-21.971	PASS
	11		2483.50	-42.262	-20.94	-21.322	PASS
			24269.0	-43.711	-20.94	-22.771	PASS
IEEE 802.11n_20	1		2386.57	-40.927	-21.44	-19.487	PASS
			2400.00	-42.638	-21.44	-21.198	PASS
			24581.8	-44.127	-21.44	-22.687	PASS
	6		24332.1	-44.231	-21.4	-22.831	PASS
	11		2483.50	-42.751	-20.89	-21.861	PASS
			24287.7	-43.421	-20.89	-22.531	PASS
IEEE 802.11n_40	3		2383.71	-41.663	-25.34	-16.323	PASS
			2400.00	-42.497	-25.34	-17.157	PASS
			24852.1	-44.146	-25.34	-18.806	PASS
	6		24610.5	-44.573	-25.43	-19.143	PASS
	9		2483.50	-42.672	-25.64	-17.032	PASS
			24330.8	-44.178	-25.64	-18.538	PASS

Test Graphs

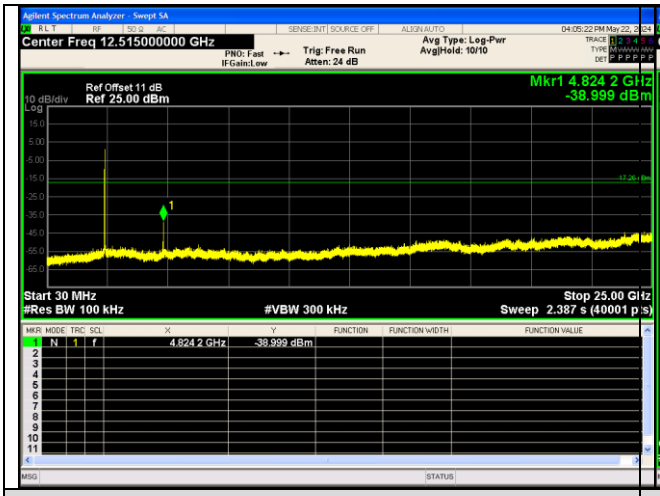


In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0

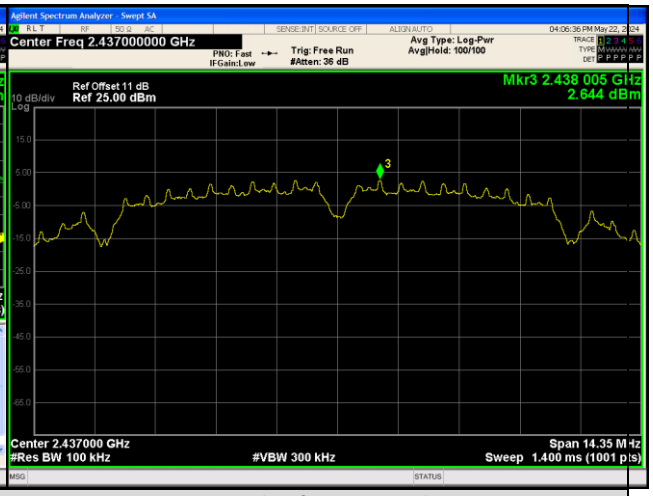


Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0

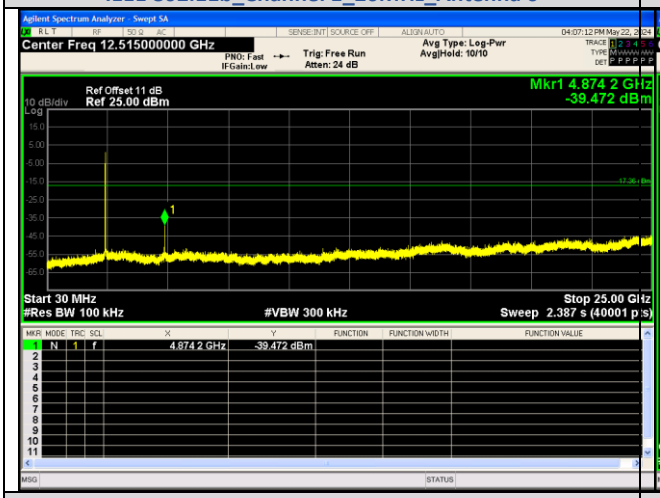
TEST REPORT



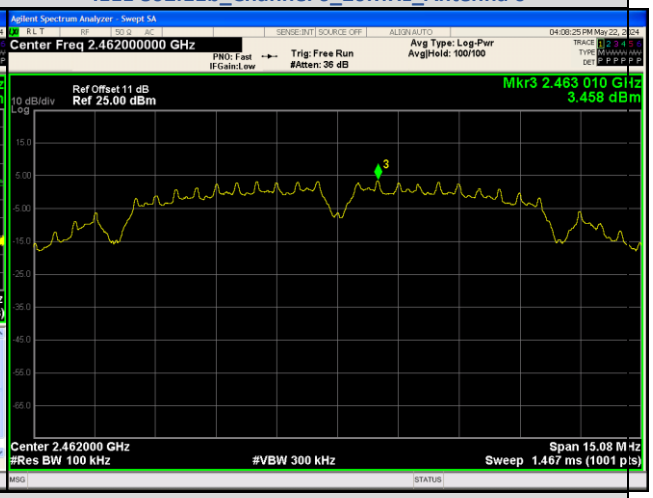
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



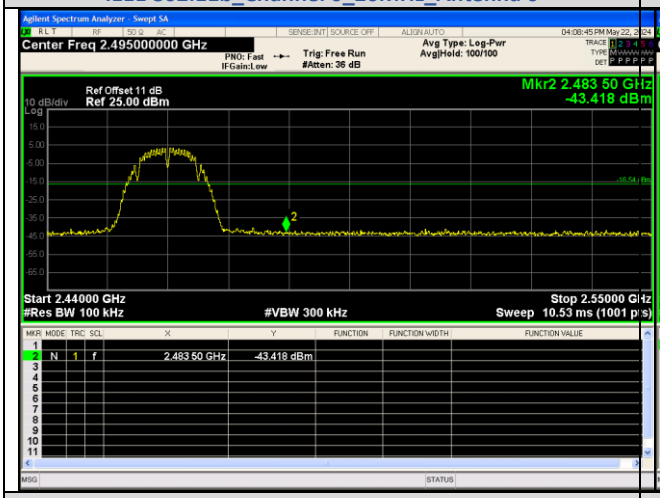
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



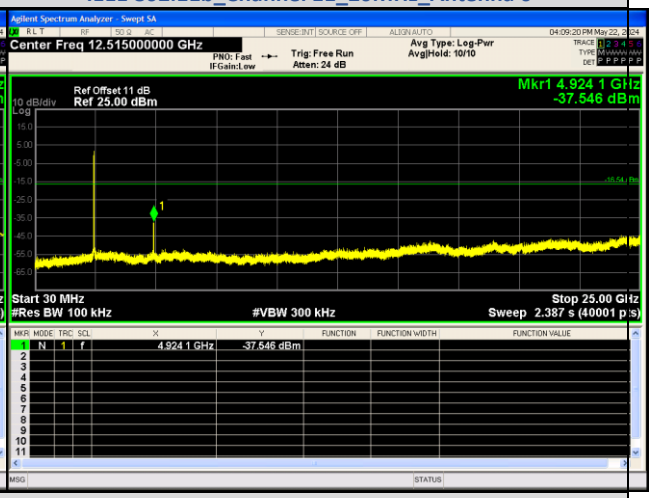
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0

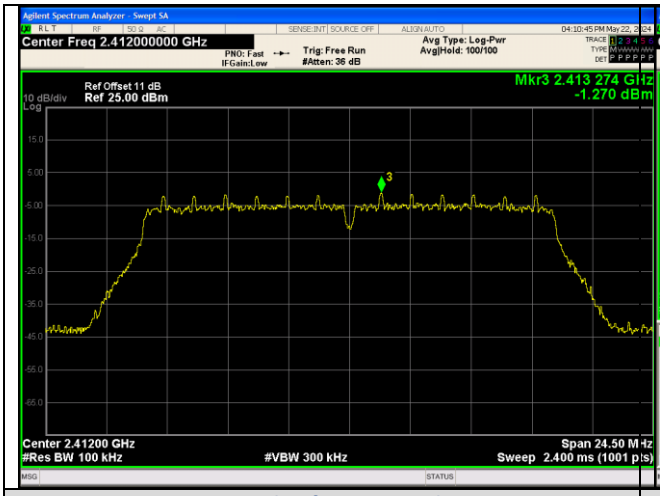


Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0

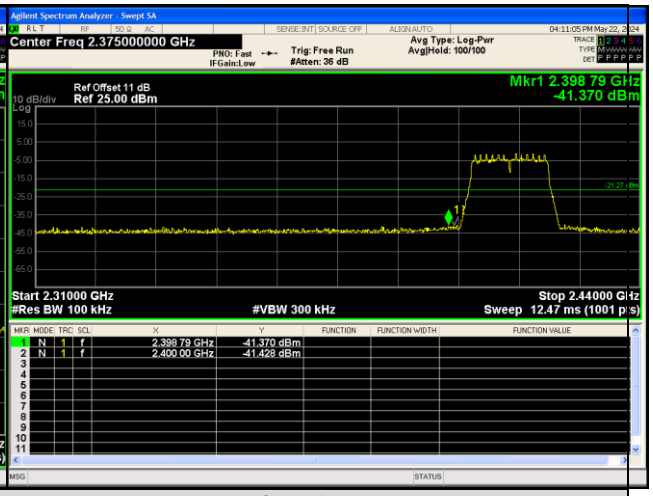


30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0

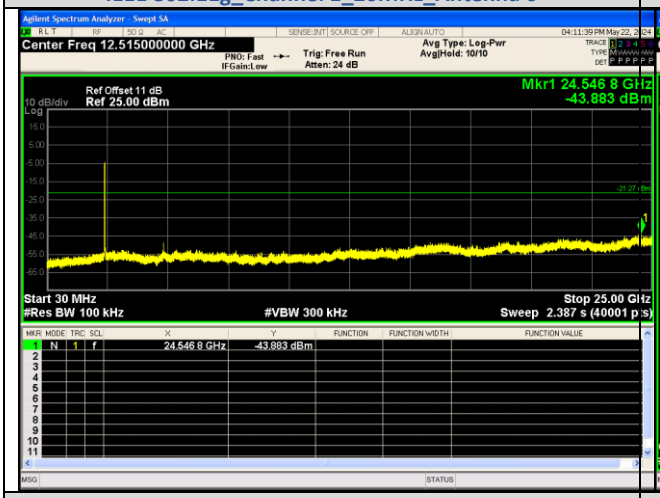
TEST REPORT



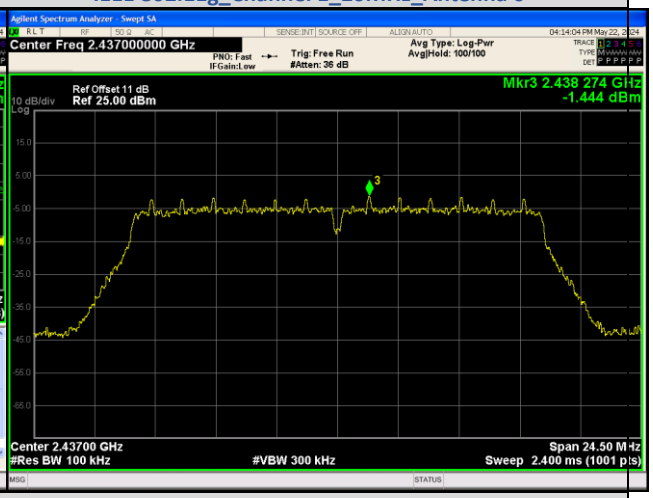
In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



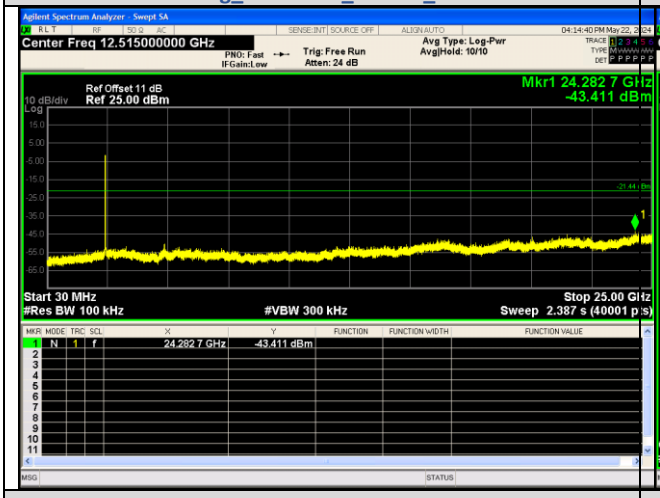
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



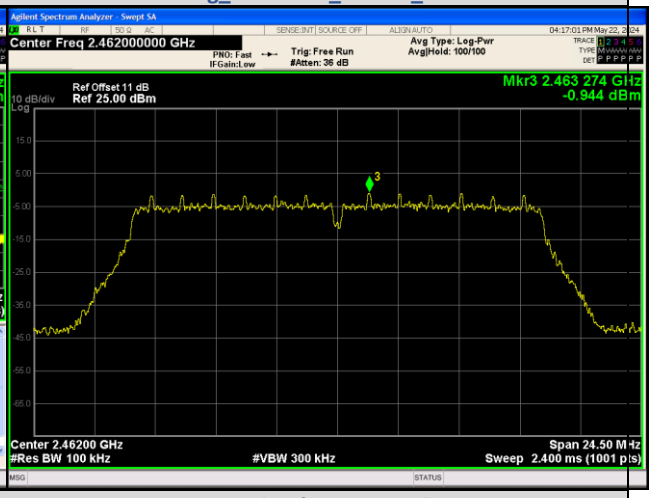
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0

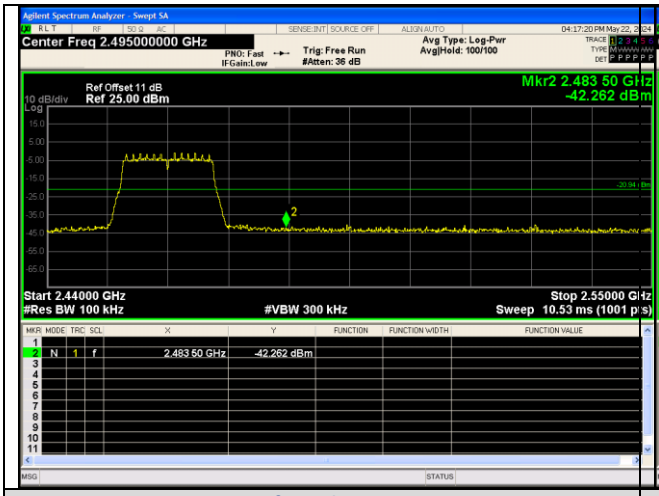


30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 6_20MHz_Antenna 0

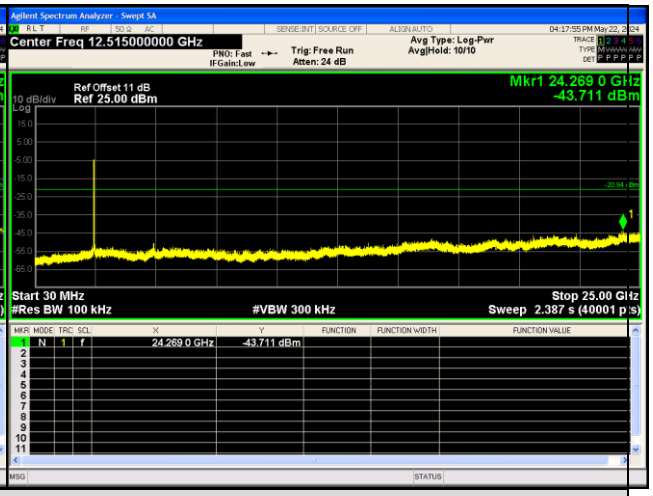


In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0

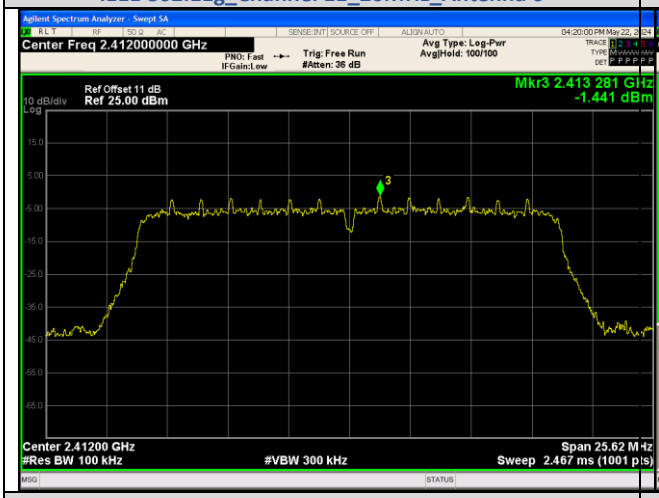
TEST REPORT



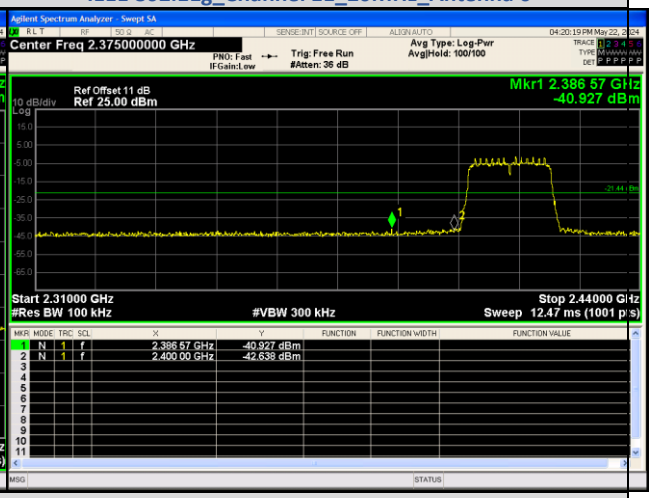
Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



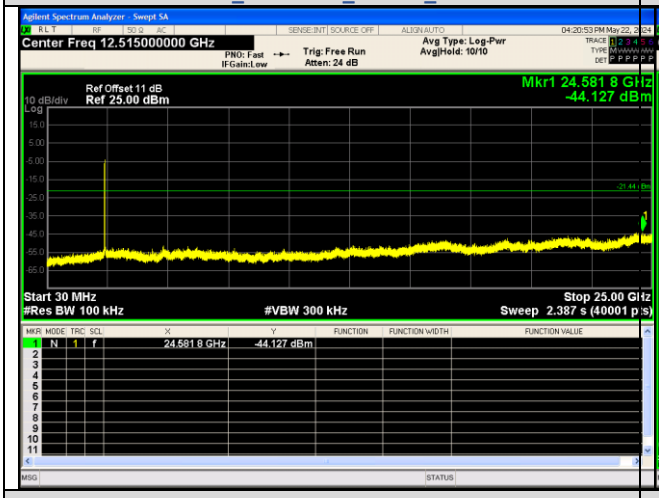
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 11_20MHz_Antenna 0



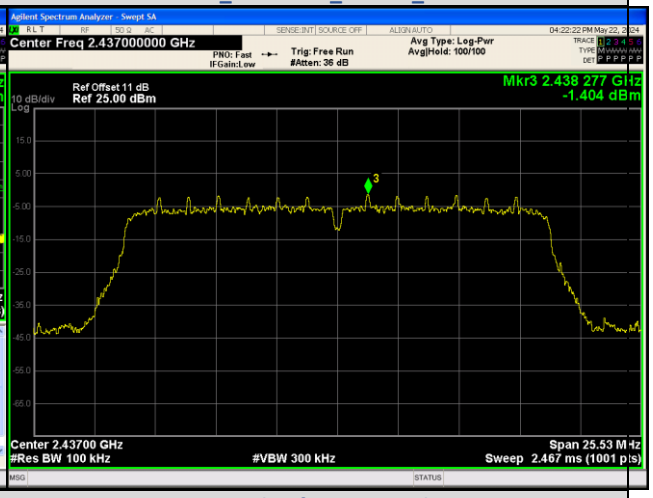
In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0

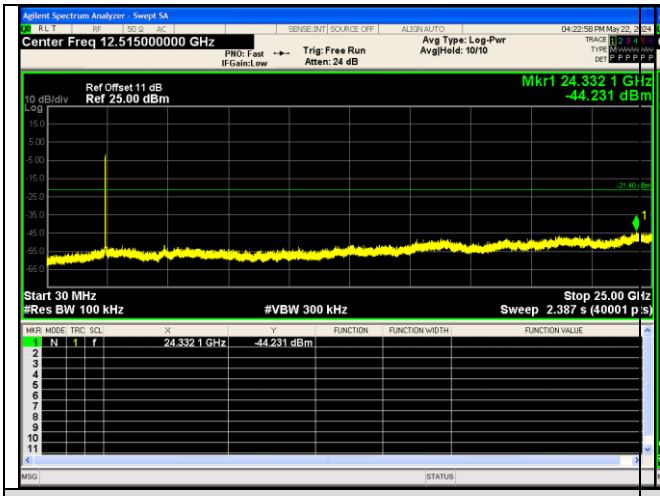


30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 1_20MHz_Antenna 0

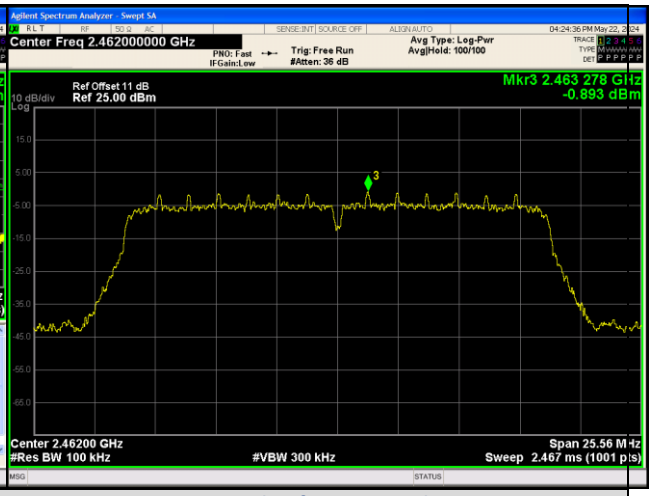


In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0

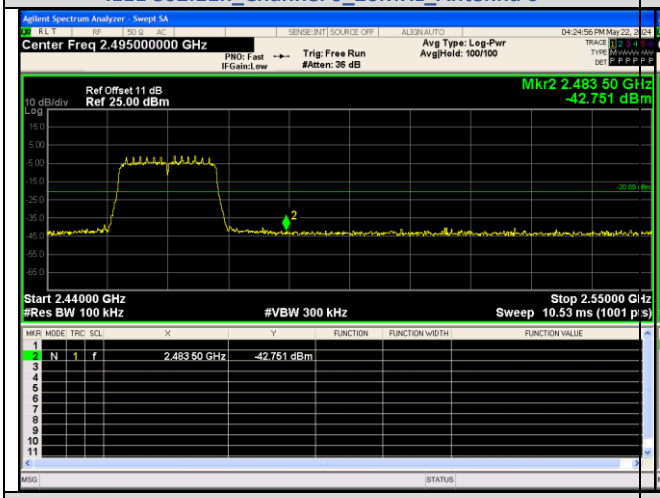
TEST REPORT



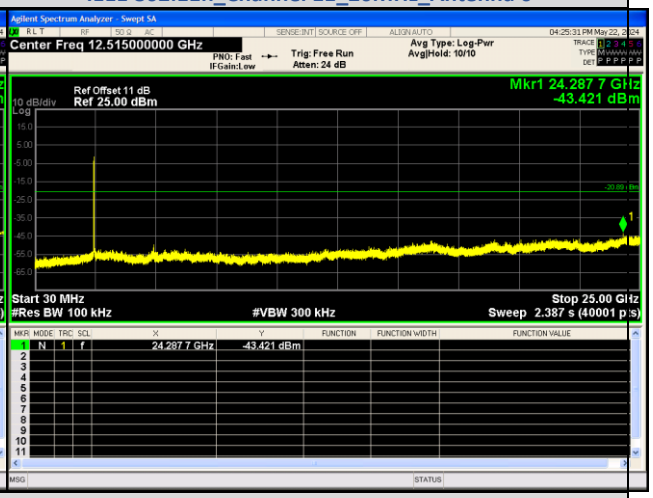
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



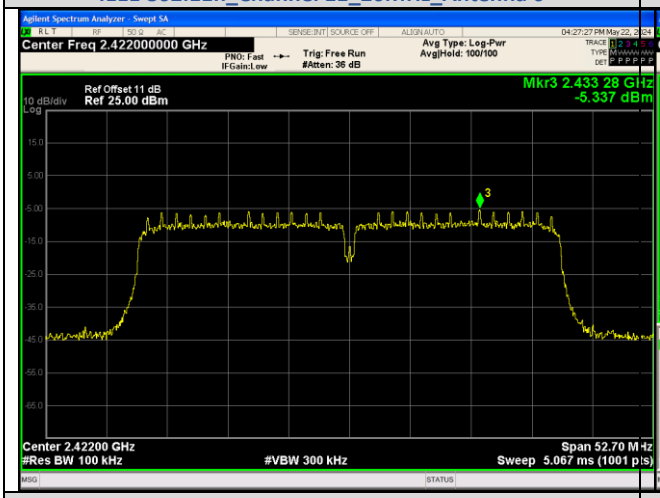
In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



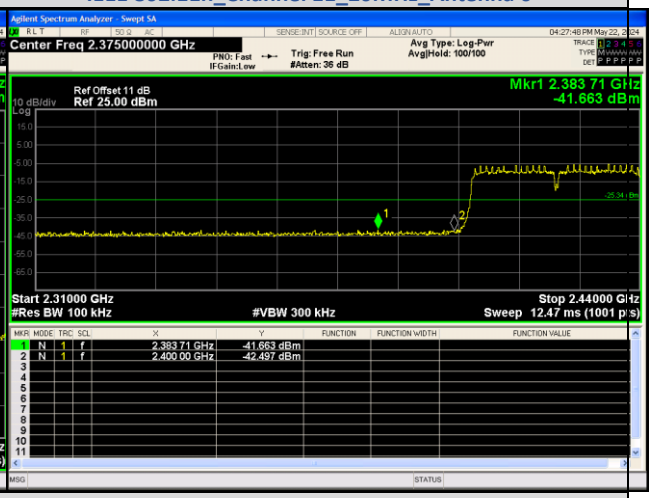
Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0

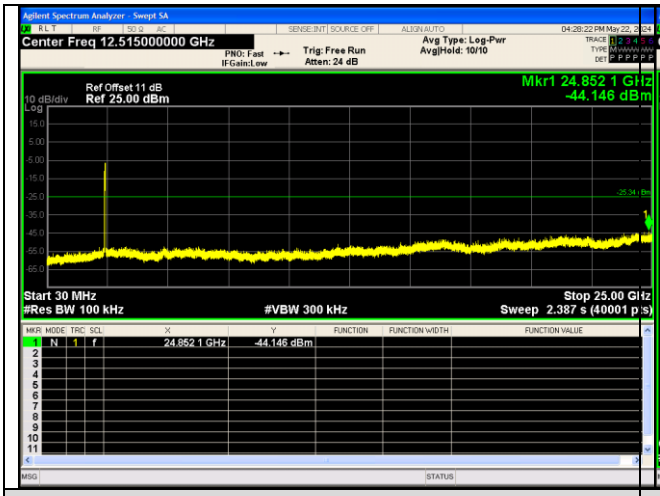


In-Band Reference Level
IEEE 802.11n_Channel 3_40MHz_Antenna 0

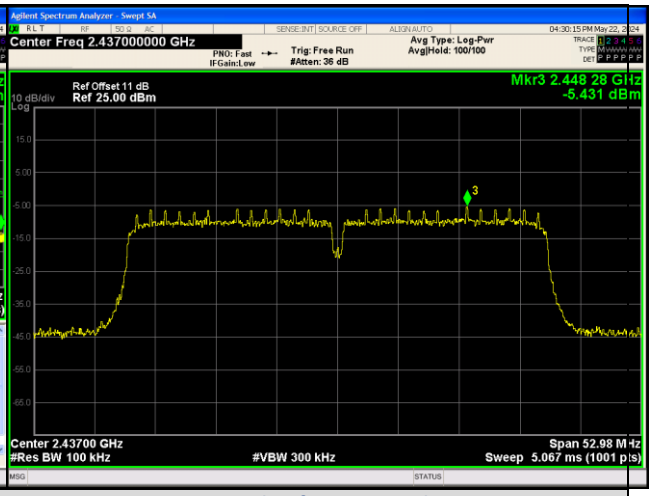


Out Of Band Emission
IEEE 802.11n_Channel 3_40MHz_Antenna 0

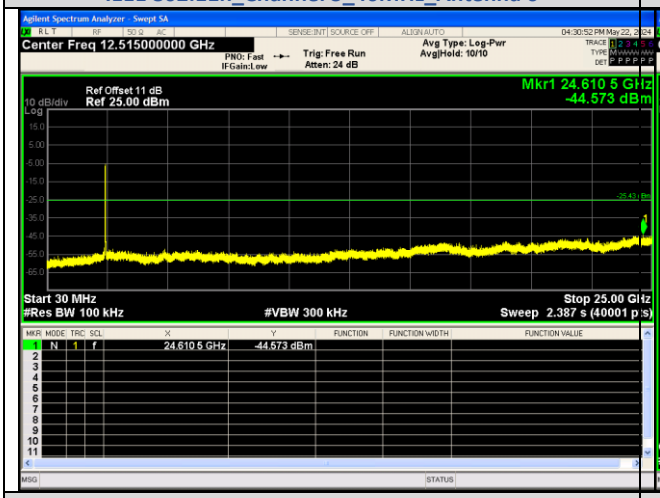
TEST REPORT



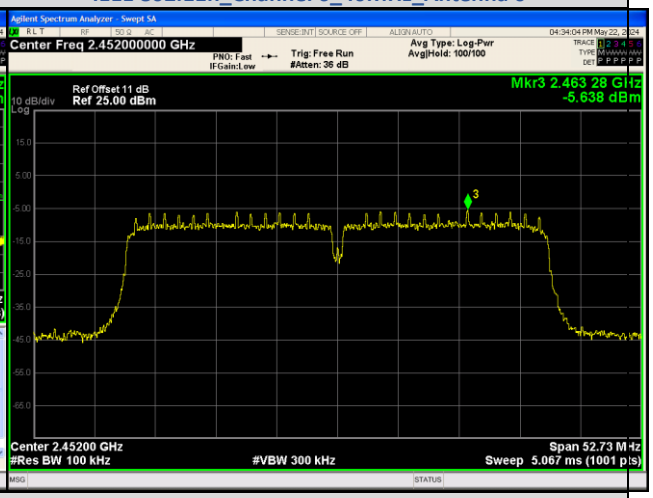
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 3_40MHz_Antenna 0



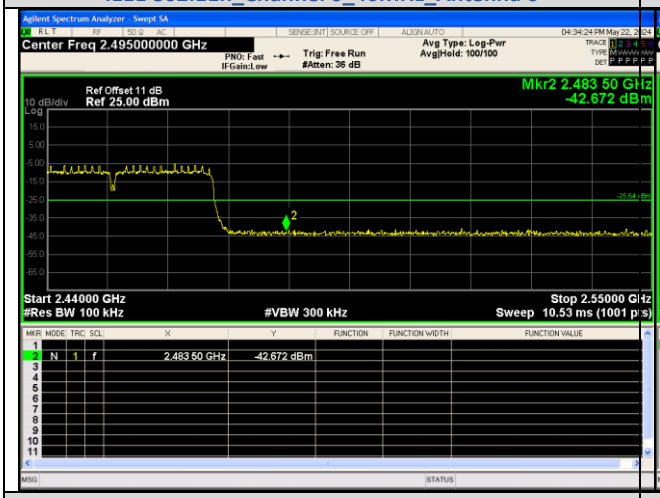
In-Band Reference Level
IEEE 802.11n_Channel 6_40MHz_Antenna 0



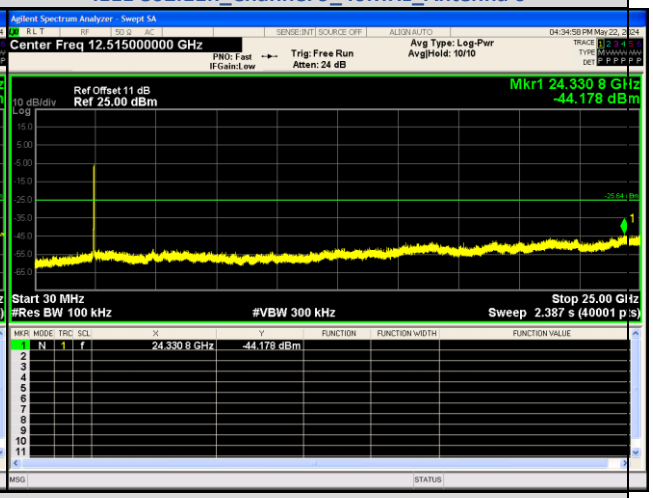
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_40MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 9_40MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 9_40MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 9_40MHz_Antenna 0