



ADT WTS800

Report #: RESI-27001

FCC ID: CFS8DLWTS800

FCC 15.247

Wireless Touchscreen

2.4 GHz WLAN Transmitter

Issue Date: 2026-01-06

Prepared by and for:

Resideo LLC.

2 Corporate Center Dr.

Suite 100 PO Box 9040

Melville, NY 11747

Testing

NVLAP Lab Code: 600110



Testing

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Test Report Revision History				
Revision	Prepared By	Reviewed By	Revision Detail	Release Date
V0	Jose Badia	Christian Fouth	Original Release	2025-12-17
V1	Jose Badia	Christian Fouth	Updated with tabular data for Spurious Radiated in for frequencies in elevated noise floor range	2026-01-06
V2	Jose Badia	Christian Fouth	Updated with 1-10 GHz prescan; added explanation for ambient signal	2026-01-10

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ATTESTATION OF TEST RESULTS

Company Name: Resideo LLC, 2 Corporate Center Dr., Melville, NY 11747, USA
EUT Description: 2.4 GHz WLAN Wireless Touchscreen
Model: ADT WTS800
Serial Number: Non-Serialized units
Sample receipt date: 10/22/2025
Last Date of test: 12/05/2025

Standards

Specification	Method
CFR 47 Pt 15 Subpart C, Section 15.247	ANSI C63.10: 2013 ANSI C63.10: 2020

Guidance

FCC KDB 558074 V05R02:2019

Resideo LLC. tested the above equipment in accordance with the requirements set forth in the listed standards. All indications of Pass/Fail in the report are opinions expressed by Resideo LLC. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

This document is a record of the FCC/ISED Test Report for Resideo LLC. products. It demonstrates the data required to be analyzed to certify a product according to the requirements of the FCC & ISED.

The results in the report reflect only the tested samples, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only.

This document may not be altered or revised in any way unless done so by Resideo LLC. and all revisions are duly noted in the revisions section. Any alterations of this document not carried out by Resideo LLC. will constitute fraud and shall nullify the document.

Resideo LLC. is the legal entity name for Honeywell Home / Resideo. All three names can be used interchangeably within this test report.

Report Prepared By:



Name: Jose Badia
Title: Project Engineer
Resideo LLC.

Reviewed & Approved By:



Name: Christian Fouth
Title: Sr. Wireless Certification Engineer
Resideo LLC.

TEST RESULT SUMMARY

Test Description	Result	FCC Section (s)	Comments
Emissions Bandwidth (6 dB)	Pass	15.247(a) (2)	
Occupied Bandwidth (99%)	Evaluated	15.247(a)	For reporting only
Maximum Conducted Output Power	Pass	15.247(b) (3)	
PSD	Pass	15.247(e)	
Spurious Conducted Emissions	Pass	15.247(d)	
Band Edge Compliance	Pass	15.247(d)	
AC Powerline	Pass	15.207	
Radiated Emissions	Pass	15.209, 15.205	

Deviations from test standard

None

ACCREDITATIONS AND AUTHORIZATIONS

USA

FCC - test site and measurement facility used to collect data are located at 2 Corporate Center Dr., Melville, NY 11747, USA. The Laboratory Code is 600110-0.

MEASUREMENT UNCERTAINTY

The measuring equipment utilized to perform the tests documented in this report have been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty
Frequency Accuracy	+/- 0.0007%
Amplitude Accuracy (dB)	+/- 1.2 dB
Conducted Power (dB)	+/- 1.2 dB
Radiated Emissions	9 kHz – 30 MHz +/- 3.9 dB 30 MHz – 1GHz: +/- 4.4 dB 1 GHz – 18 GHz: +/- 4.3 dB 18 GHz – 26 GHz: +/-
Occupied Bandwidth	1.22%
Power Spectral Density	2.4 dB
Temperature (°C)	+/- 0.7
Humidity (% RH)	+/- 2.5
DC Supply Voltages	+/- 0.7 %

Uncertainty figures are valid to a confidence level of 95% based on a coverage factor (k=2)

Sample Calculation

Where relevant, the following sample calculation is provided:

Radiated Emissions

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

Conducted Emissions:

Adjusted Level (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Transducer Factor (dB)

Radiated Power (EIRP) - Substitution Method:

Measured Power (dBm) = Measured Level into Substitution Antenna (dBm) + Substitution Antenna Factor (dBi)

Test Setup Diagram

Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 – 0.15	1.0	0.2	0.2
0.15 – 30.0	10.0	9.0	9.0
30.0 – 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Unless otherwise stated, measurements were made using the bandwidths and detectors specified. No video filter was used.

Antenna Port conducted measurements

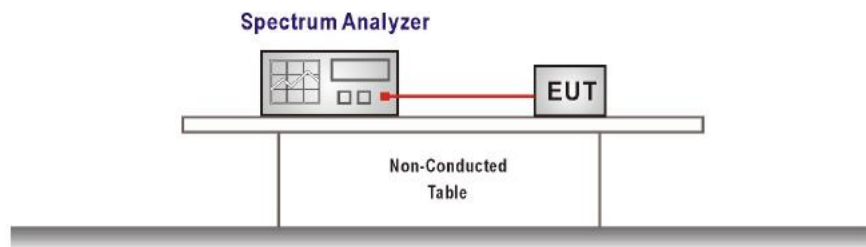


Figure 1 Antenna port measurements setup

Radiated Emission measurements

30 MHz – 1000 MHz

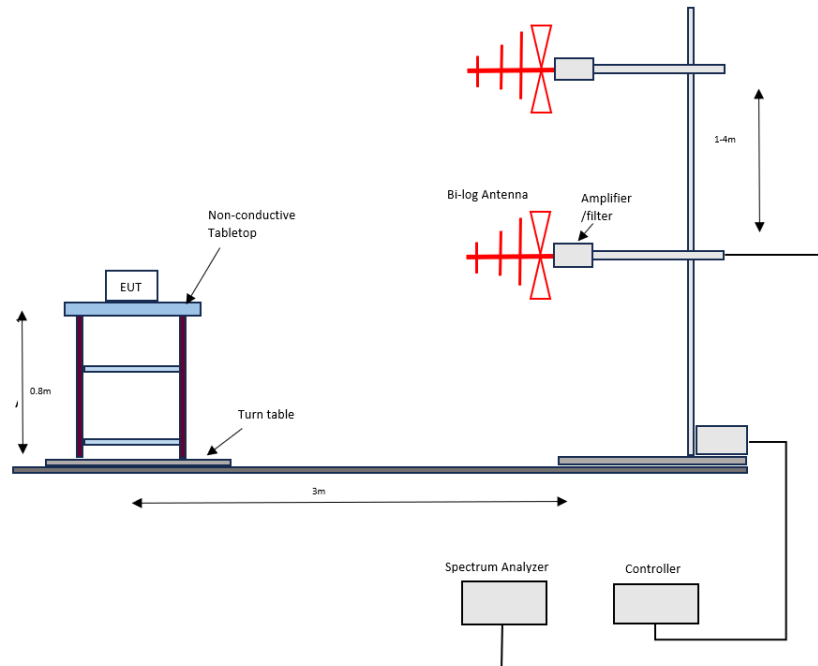


Figure 2 30 MHz - 1 GHz Radiated Emissions measurements setup

Above 1 GHz

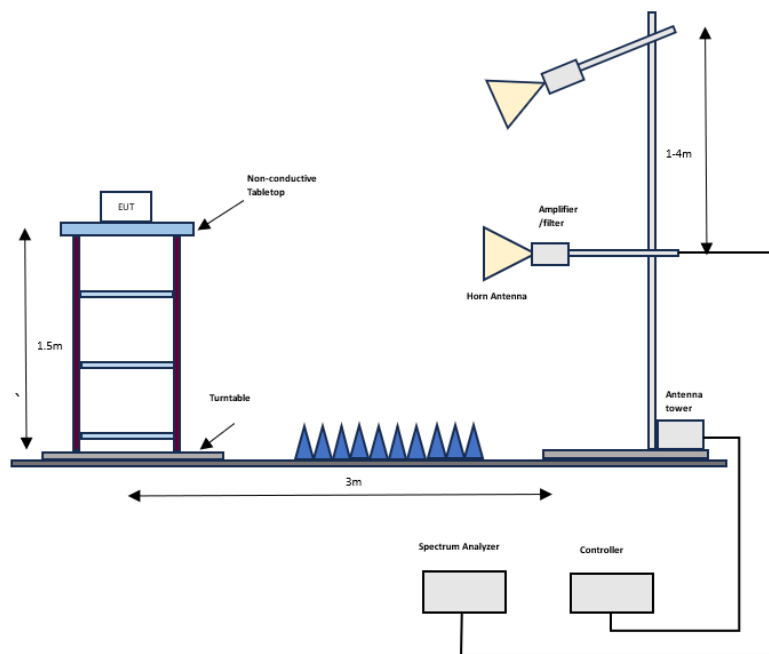


Figure 3 Above 1 GHz Radiated emissions measurements setup

AC conducted measurements

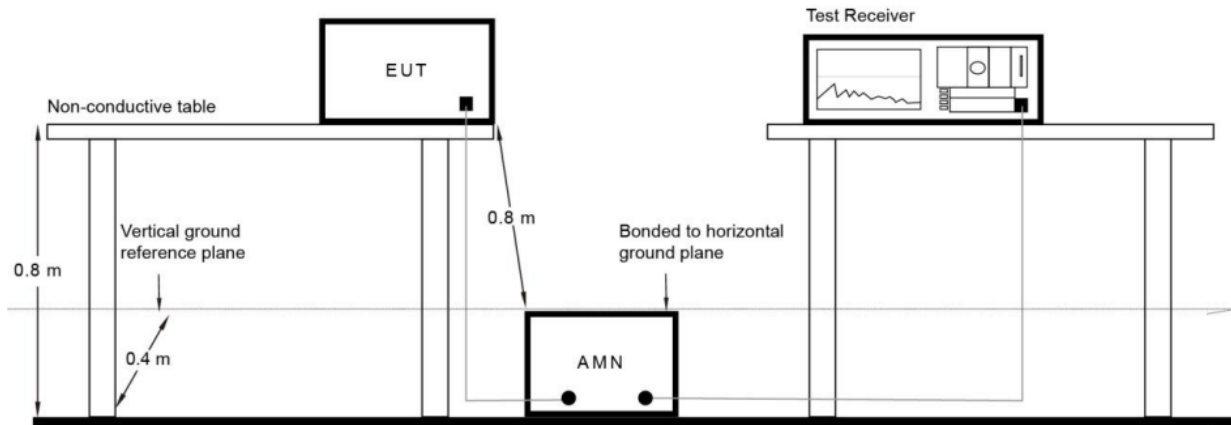


Figure 4 AC conducted measurements setup

EQUIPMENT UNDER TEST

Test Item Description

The EUT is a 2.4 GHz WLAN AC powered wireless Touchscreen platform intended for residential and light commercial applications.

Test Sample Identification

Sample ID Number	Sample Serial Number	Date Received	Equipment Condition
MEL-1196	Non-serialized production unit	10/22/2025	No damage

Antenna description

Antenna	Type	Frequency Range (MHz)	Gain (dBi)
Antenna 1	PCB Antenna	2412-2462	2.59
Antenna 2	PCB Antenna	2412-2462	2.29

TEST & MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
RF Lab (Power & Antenna Port Measurements)						
Spectrum Analyzer	1149	MY46187211	Agilent	E4440A	3/5/2024	3/5/2026
Power Sensor	11568	105317	Rohde & Schwarz	NRP-Z81	11/03/2023	11/03/2025
Attenuator	-	1624	Pasternack	PE7087-6	04/03/2025	04/02/2026
RF Chamber						
Spectrum Analyzer	1149	MY46187211	Agilent	E4440A	3/5/2024	3/5/2026
Loop Antenna (9kHz-30MHz)	11535	121080	Com-Power	AL-130R	3/4/2024	3/4/2026
Bilog Antenna (30MHz-5GHz)	11534	A012816	Sunol	JB6	3/4/2024	3/4/2026
Horn Antenna (1-18GHz)	2319	2317	EMCO	3115	11/30/2023	11/30/2025
Preamp (10-4200MHz)	11537	1603006	Mini Circuits	TVA-11-422	09/25/2025	09/24/2026
Preamp (500MHz-18GHz)	11557	18040034	Com-Power	PAM-118A	09/25/2025	09/24/2026
Band Reject Filter	11553	G041	Micro-tronics	BRM50702-01	09/25/2025	09/24/2026
RF Cable	-	-	Mini-Circuits	RDE#2	04/18/2025	04/17/2026
RF Cable	-	-	Insulated Wire	SMA#8	04/18/2025	04/17/2026
OATS						
Spectrum Analyzer	1149	MY46187211	Agilent	E4440A	3/5/2024	3/5/2026
Bilog Antenna (30MHz-6GHz)	11534	A012816	Sunol	JB6	3/4/2024	3/4/2026
Horn Antenna (1-18GHz)	2973	3127	EMCO	RGA-60	11/30/2023	11/30/2025
Preamp (100kHz-1.3GHz)	11540	2443AUF555	HP	8447D	04/18/2025	04/17/2026
Preamp (1-18GHz)	11539	160362	Amplicial	AMP1G18-35	04/17/2025	04/16/2026
High Pass Filter	11552	G018	Micro-tronics	HPM50111-01	03/28/2025	03/27/2026

RF Cable	-	-	Pasternack	RDE#1	04/17/2025	04/16/2026
RF Cable	-	-	MegaPhase	EMC2-S1S1-360	04/17/2025	04/16/2026
Misc.						
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11533	A070144	Extech Instruments	SD700		

*-Passive devices & Preamps are characterized in-house, not calibrated.

6 dB Emission Bandwidth (DTS Bandwidth)

Test Description

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.

Test Criteria

Reference	Method	Limit
CFR 47 Subpart C 15.247 (a) (2)	ANSI C63.10: 2013	≥ 500 kHz

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
Jose Badia	Melville, OATS	10/23/2025	23.3	69	1014	Pass

Worst case scenario

Measurements performed at the antenna with the highest output power, which is Antenna 1.

Test Results

6 dB Bandwidth Tabular results

802.11b – 1Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	10.11
Mid	2437	10.14
High	2462	10.16

802.11b – 11Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	11.37
Mid	2437	10.87
High	2462	10.47

802.11g – 6Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	16.5
Mid	2437	16.39
High	2462	16.44

802.11g – 54Mbps

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	16.55
Mid	2437	16.54
High	2462	16.52

802.11n HT20 – msc0

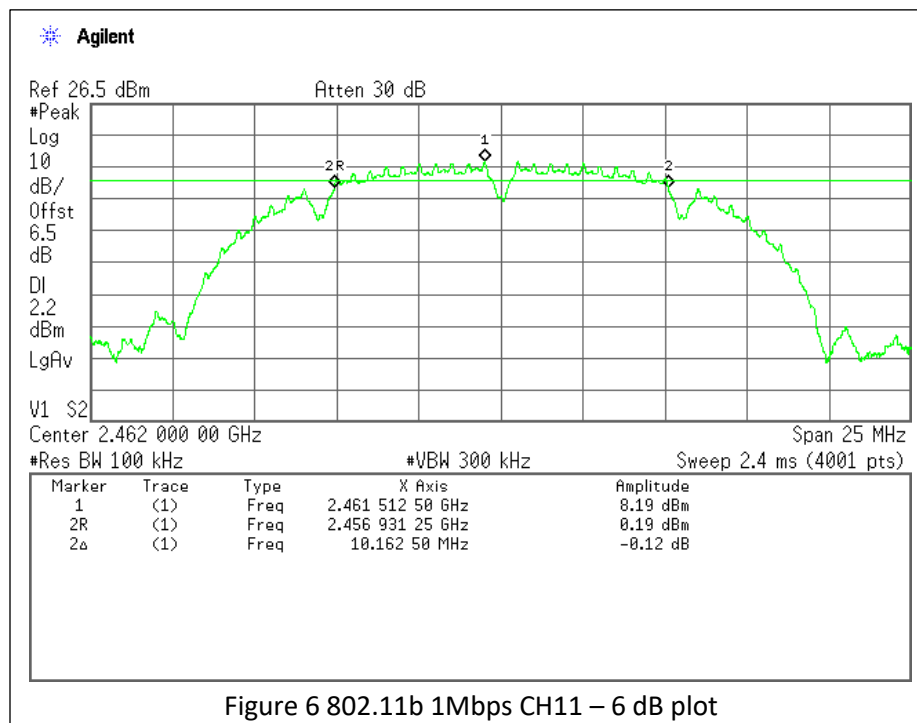
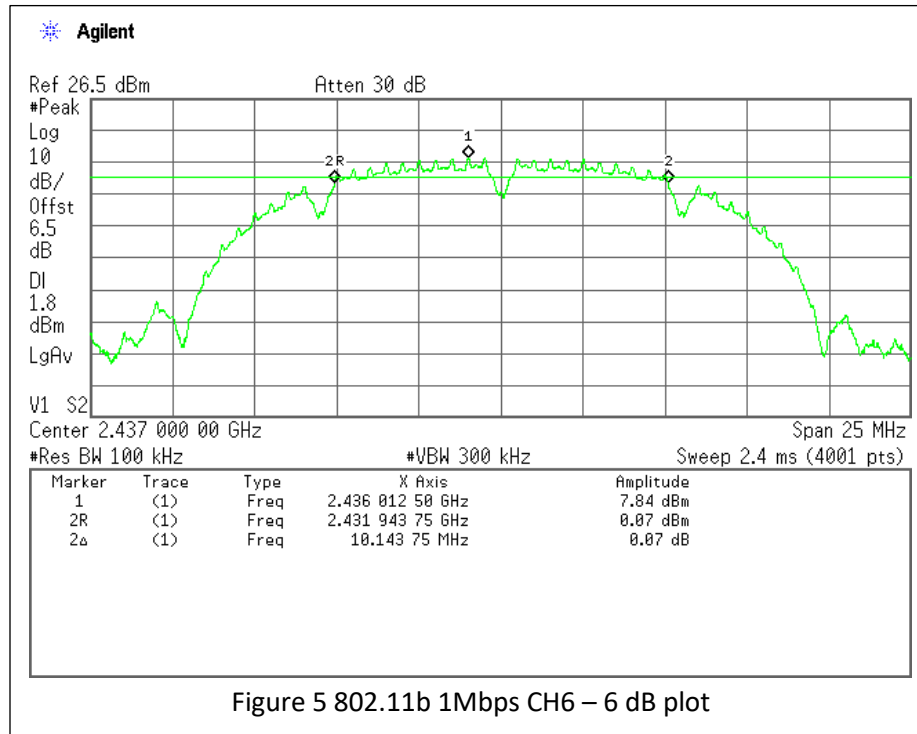
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	17.58
Mid	2437	17.61
High	2462	17.60

802.11n HT20 – msc7

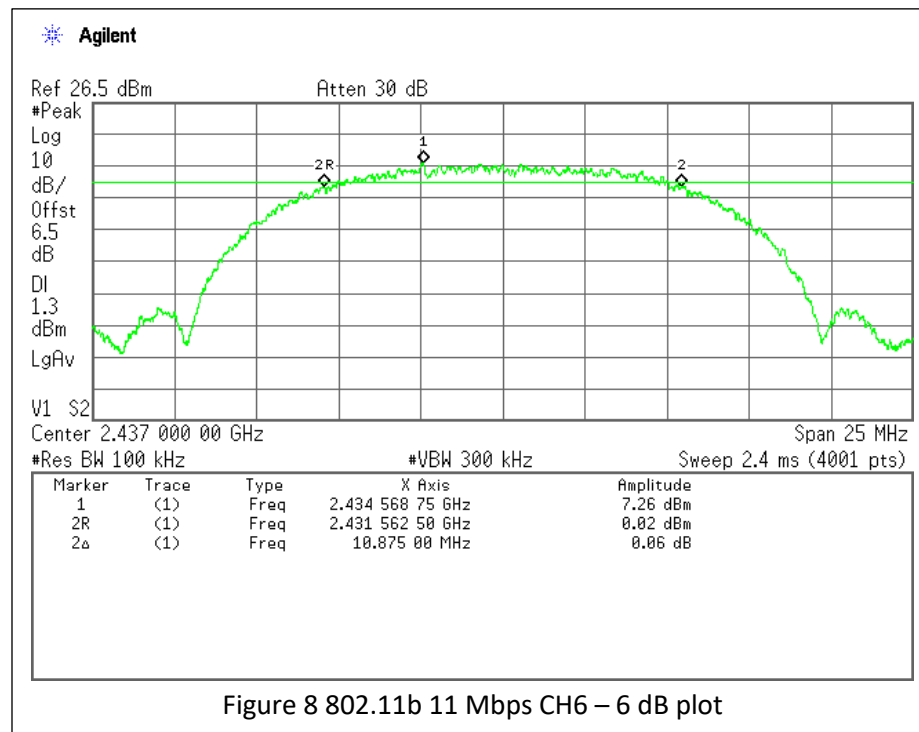
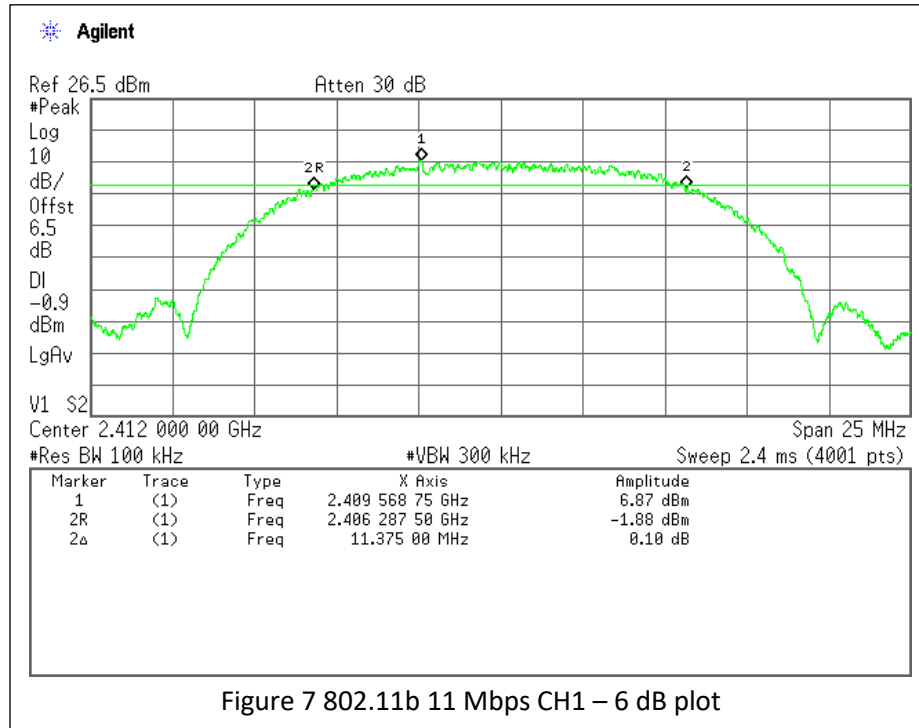
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
Low	2412	16.55
Mid	2437	16.52
High	2462	16.53

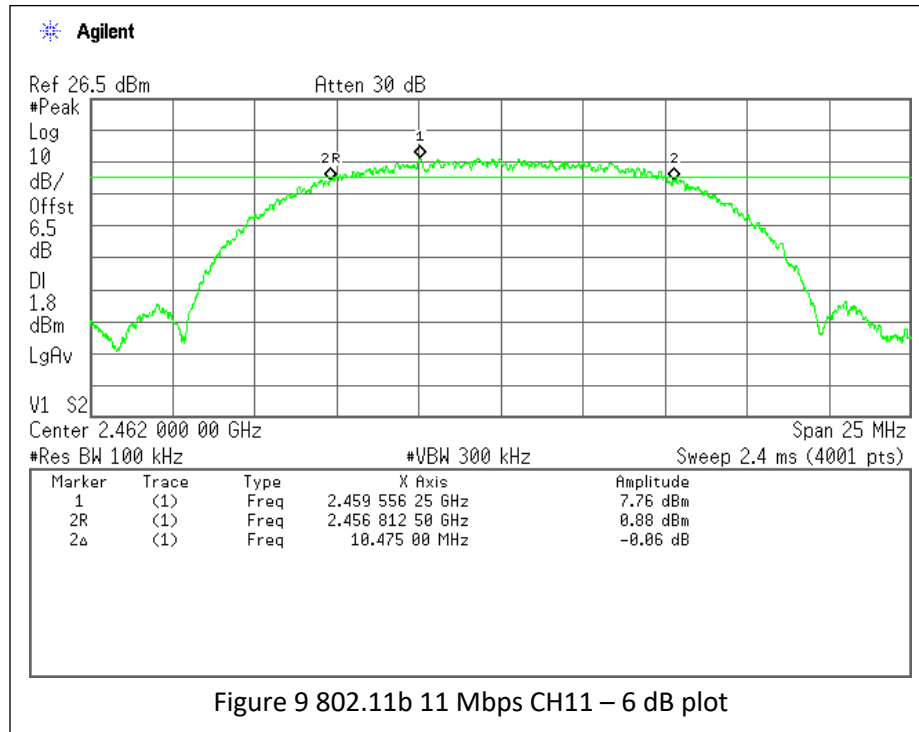
6 dB Bandwidth plots

802.11b – 1Mbps

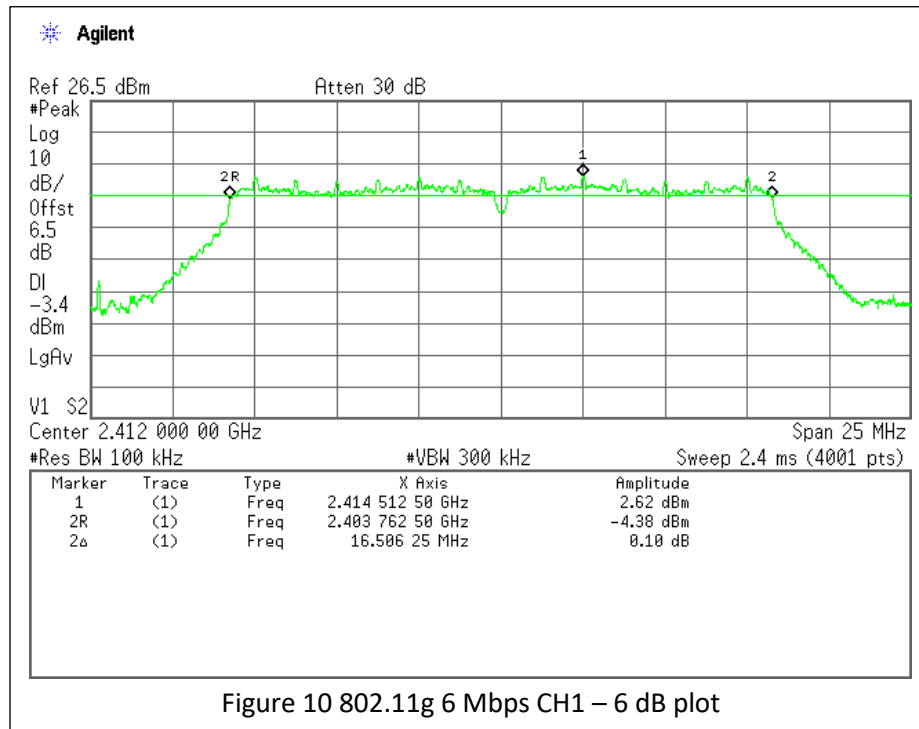


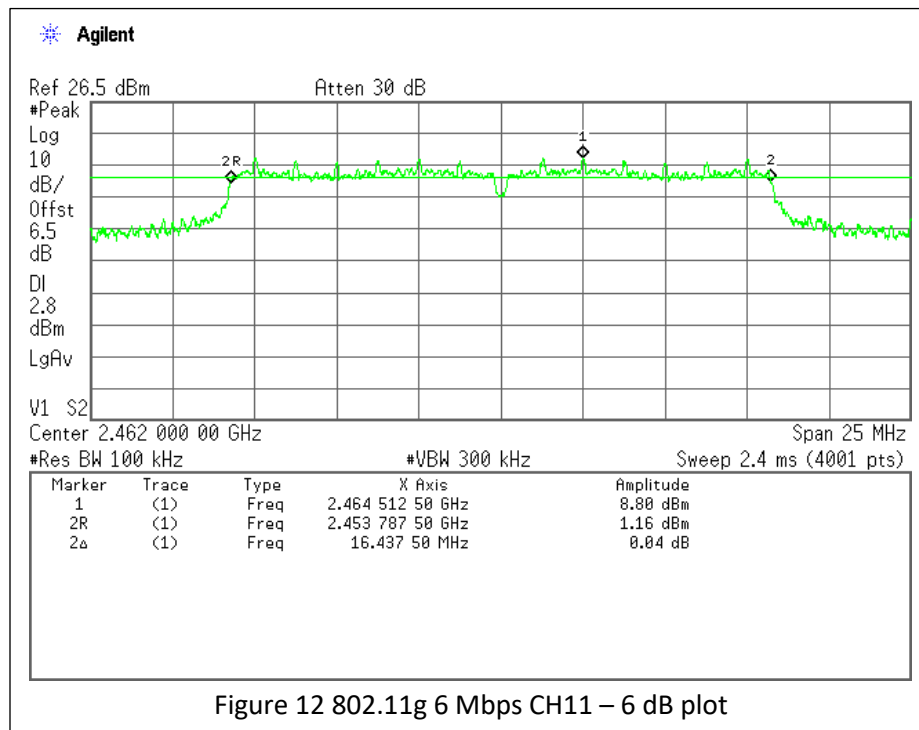
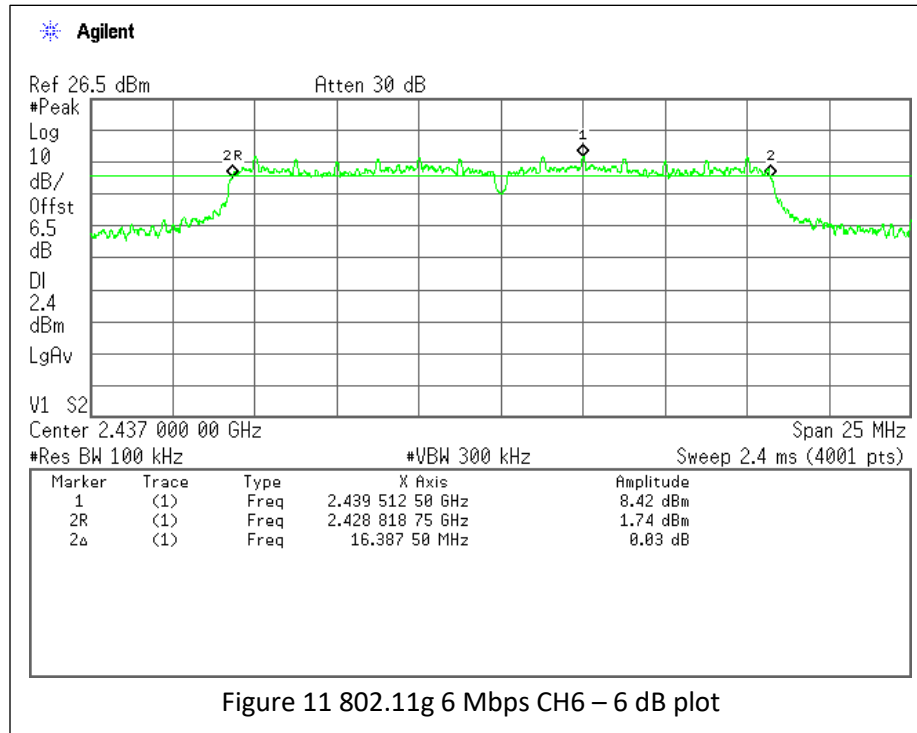
802.11b – 11 Mbps



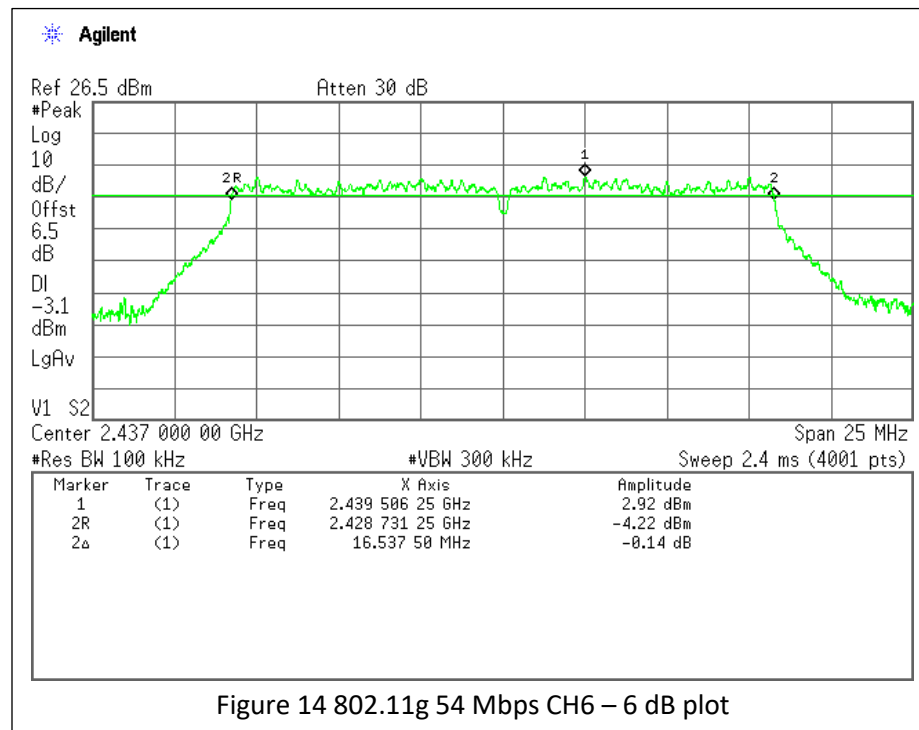
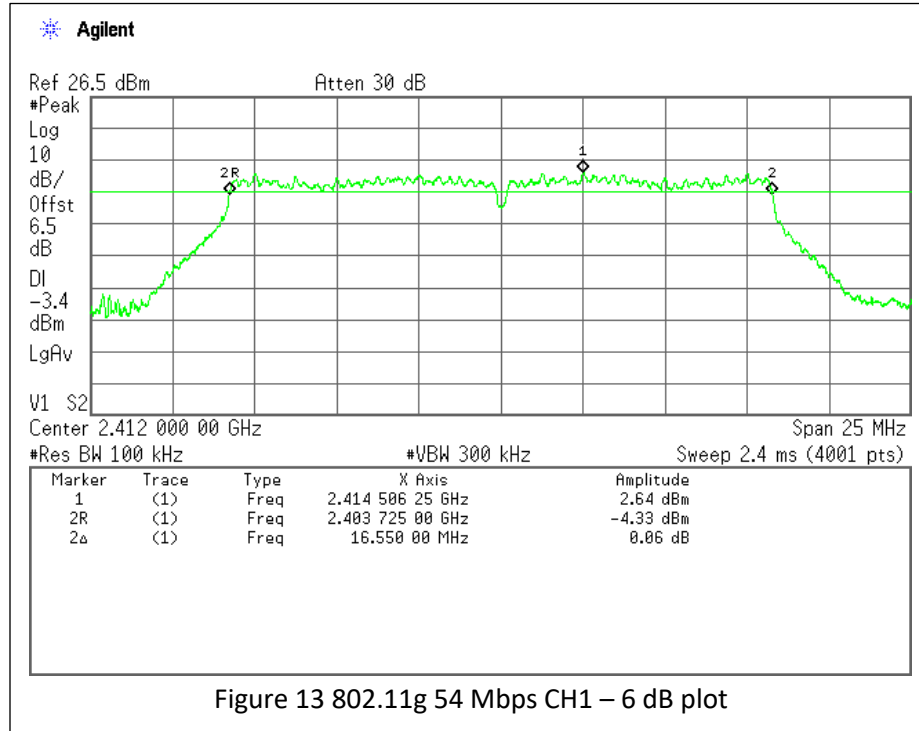


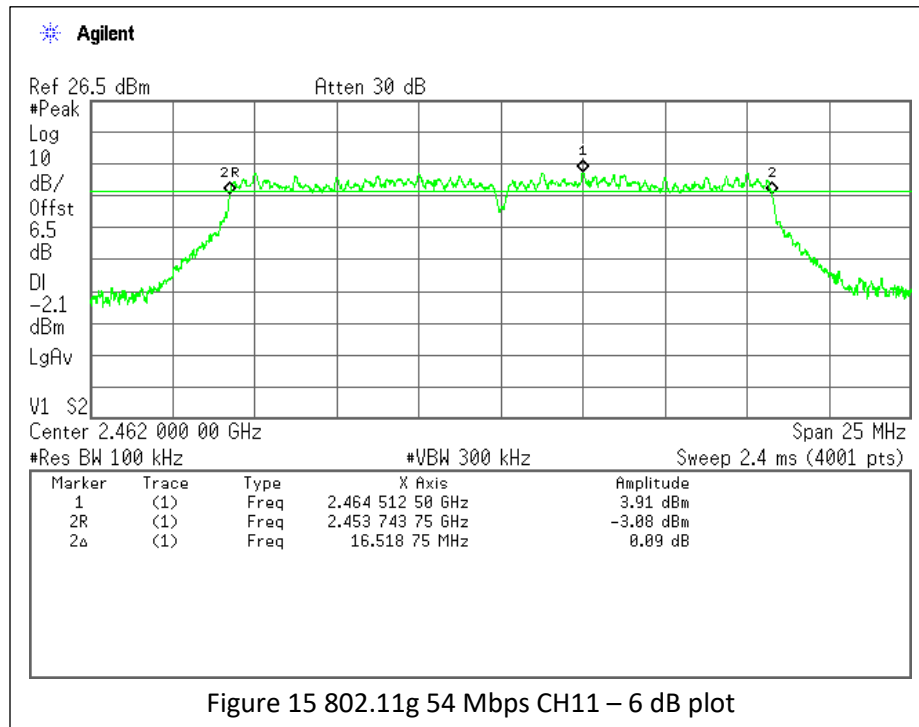
802.11g – 6 Mbps



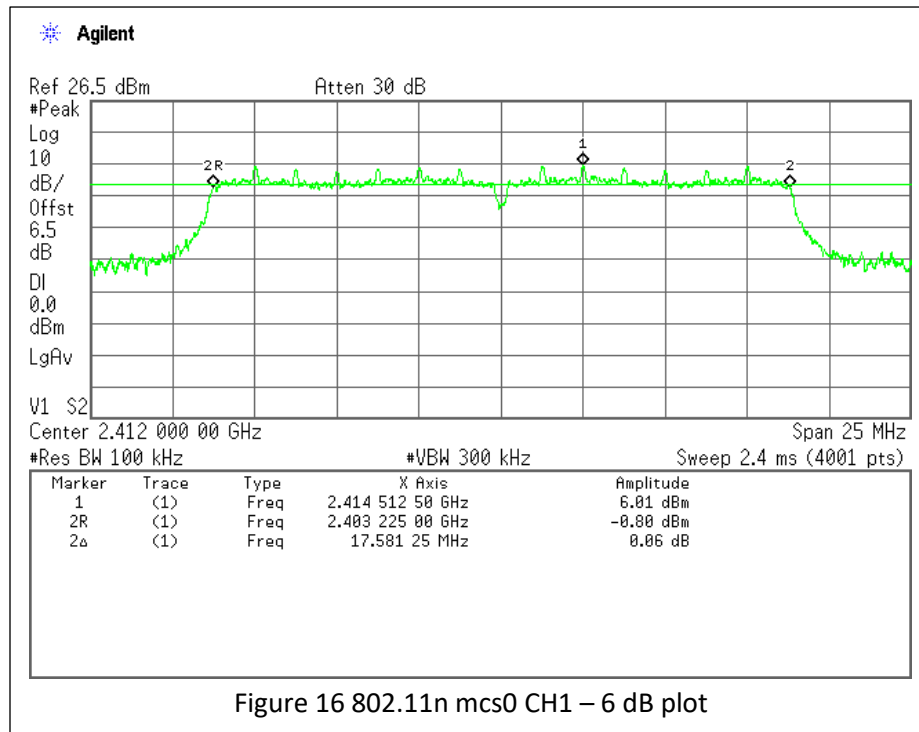


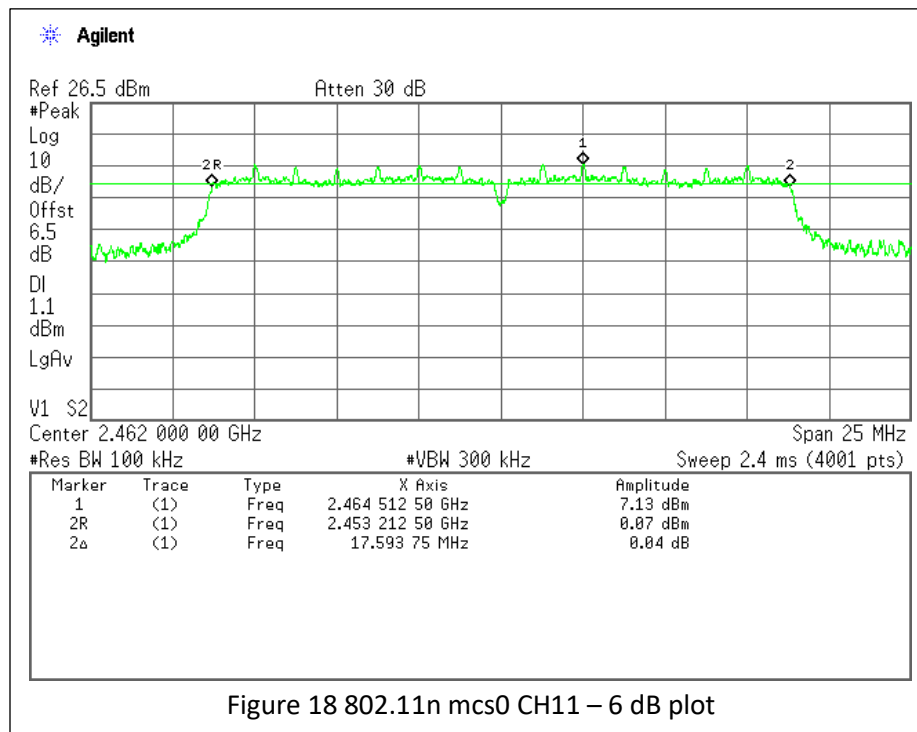
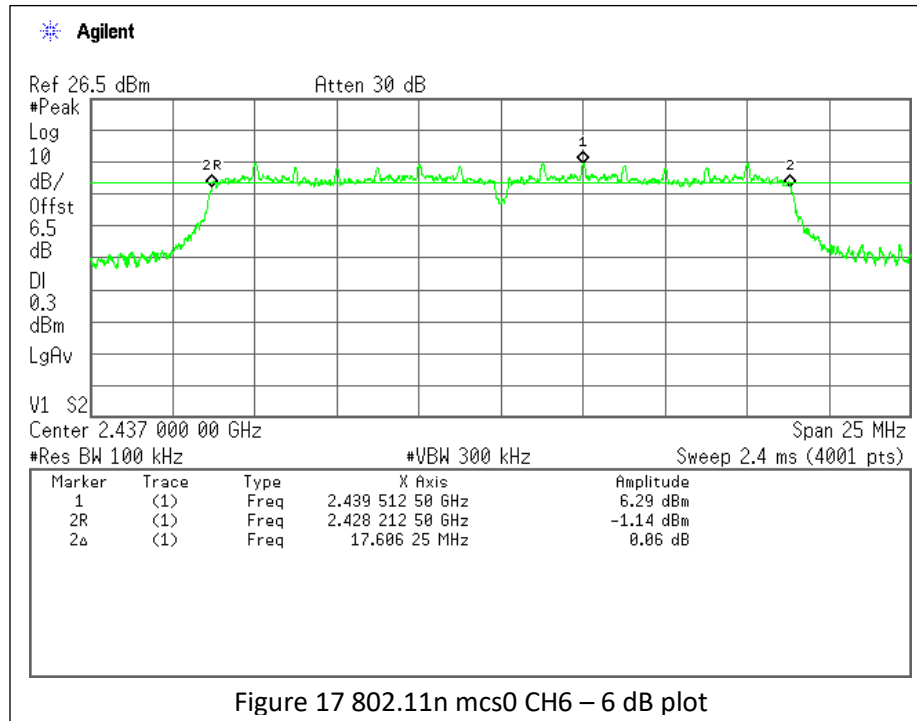
802.11g – 54 Mbps



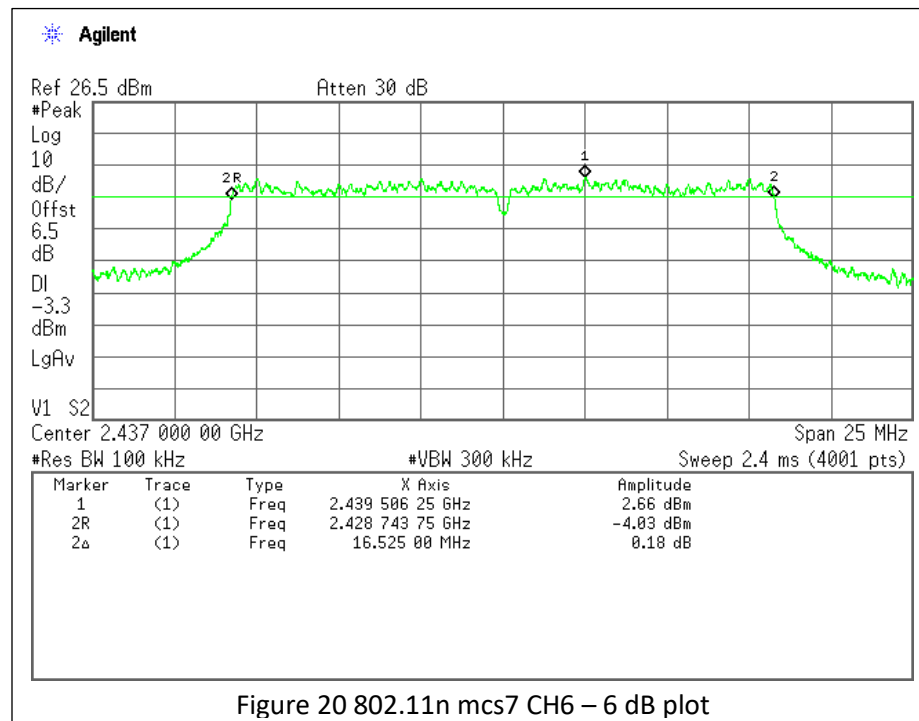
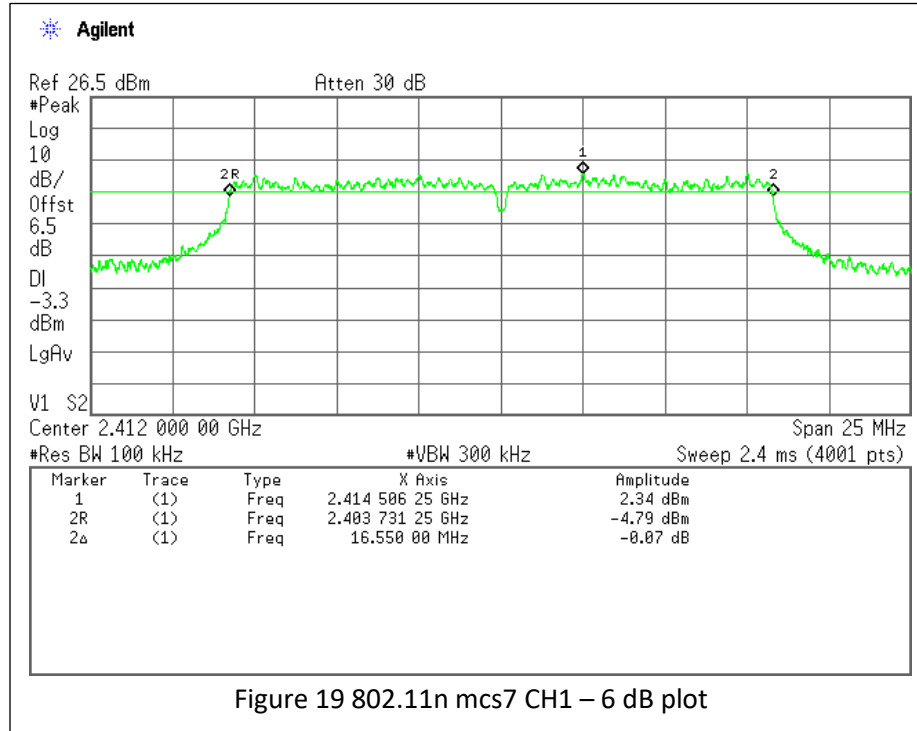


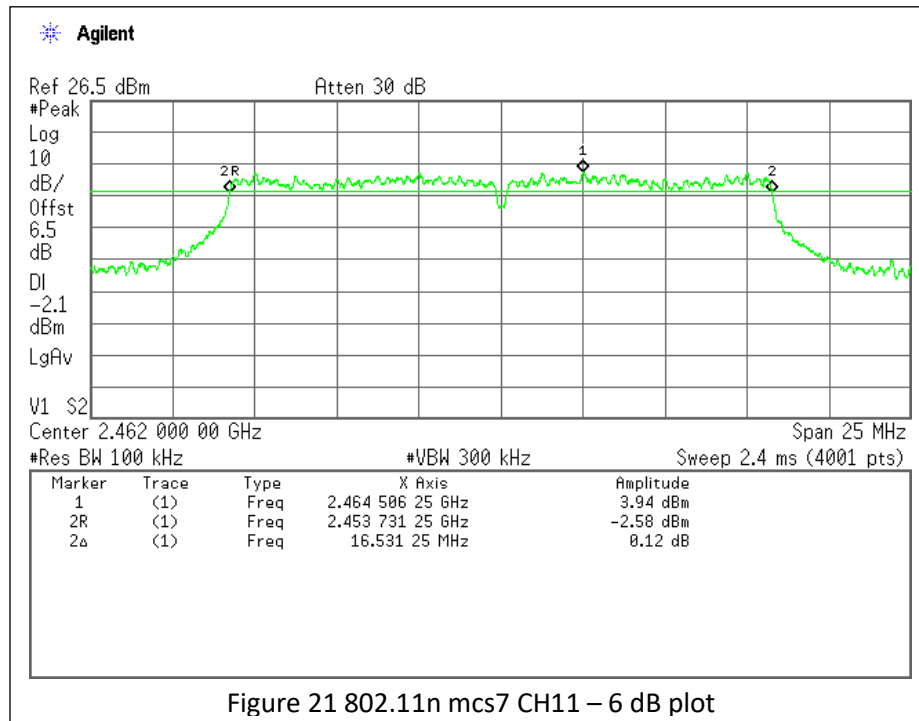
802.11n – H20 MCS0





802.11n – H2O mcs7





99% Occupied Bandwidth

Test Description

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.

Test Criteria

Reference	Method	Limit
CFR 47 Subpart C 15.247 (a) (2)	ANSI C63.10: 2013	≥ 500 kHz

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
Jose Badia	Melville, OATS	12/05/2025	23.3	69	1014	Pass

Worst case scenario

Measurements performed at the antenna with the highest output power, which is Antenna 1.

Test Results**99% OBW Tabular results**

802.11b – 1Mbps

Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	13.38
Mid	2437	13.39
High	2462	13.56

802.11b – 11Mbps

Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	13.21
Mid	2437	13.44
High	2462	13.33

802.11g – 6Mbps

Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	16.68
Mid	2437	16.81
High	2462	16.62

802.11g – 54Mbps

Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	16.57
Mid	2437	16.66
High	2462	16.62

802.11n HT20 – msc0

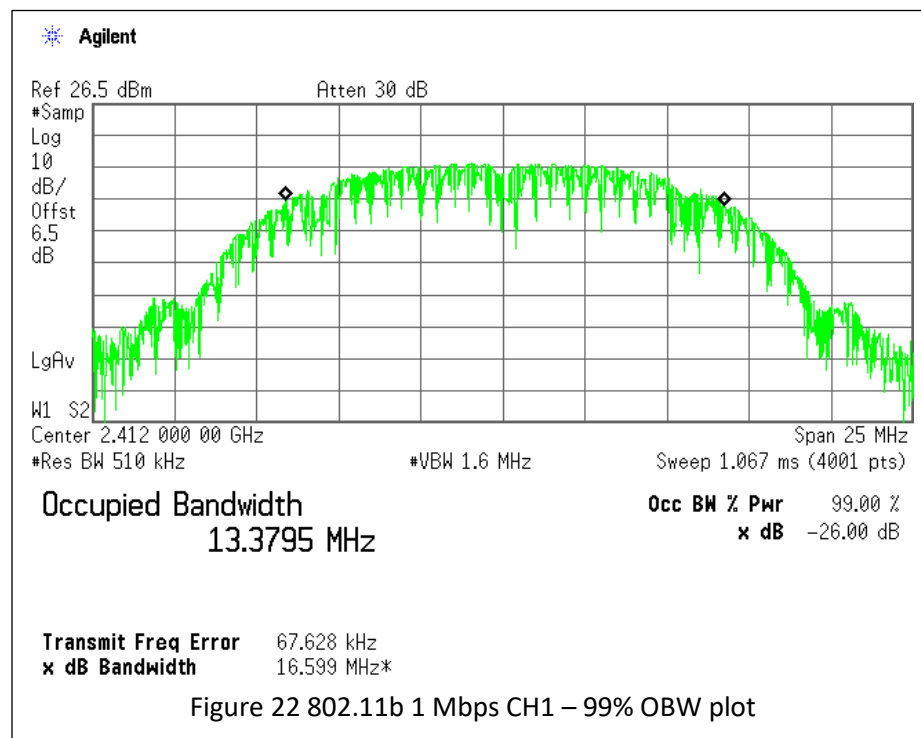
Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	17.81
Mid	2437	17.78
High	2462	17.76

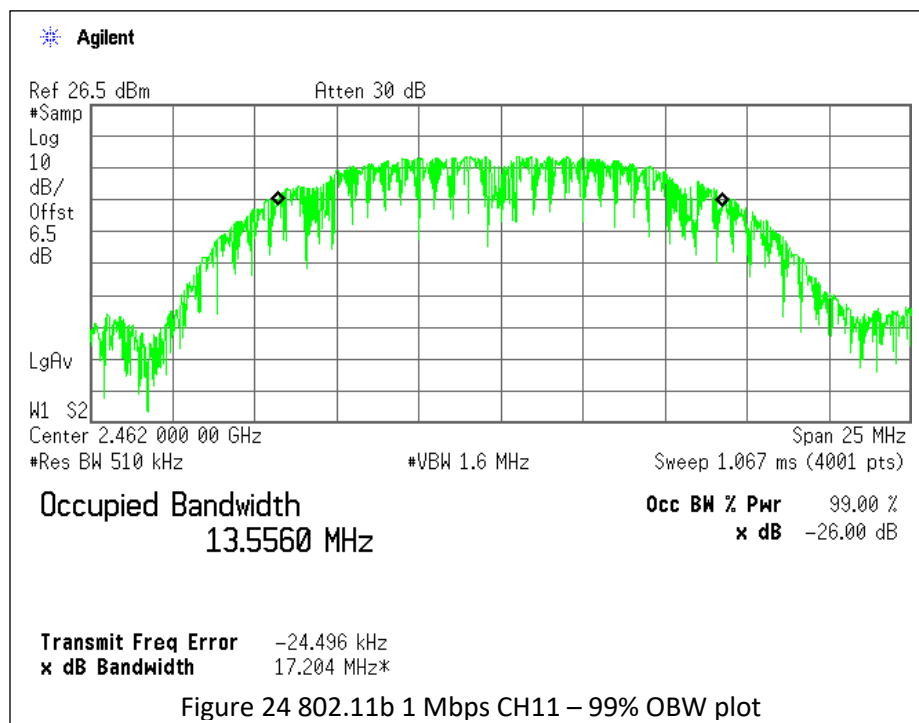
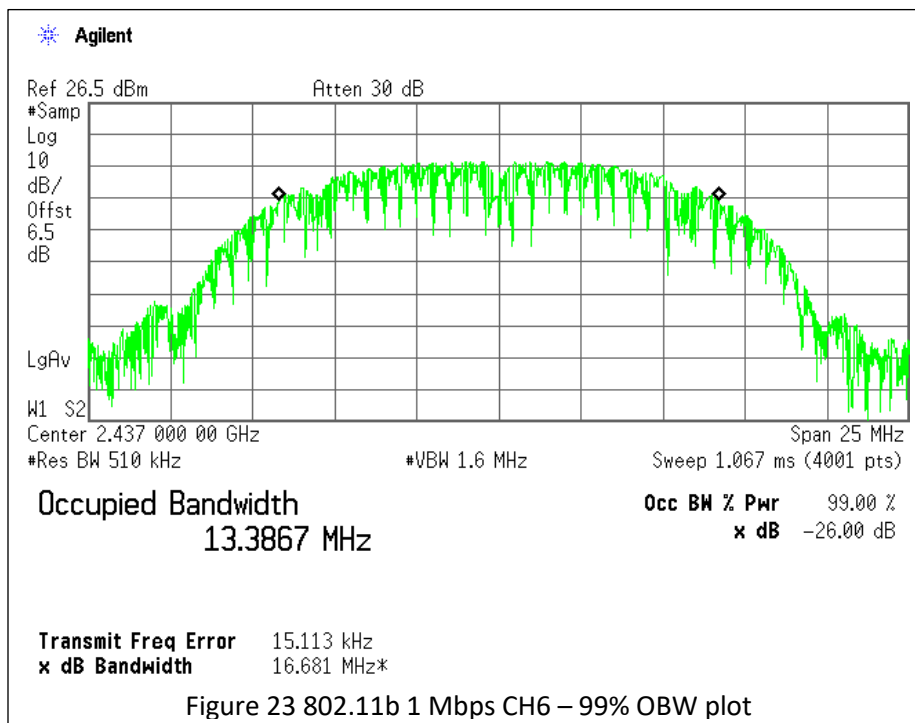
802.11n HT20 – msc7

Channel	Frequency (MHz)	99% OBW (MHz)
Low	2412	17.67
Mid	2437	17.68
High	2462	17.68

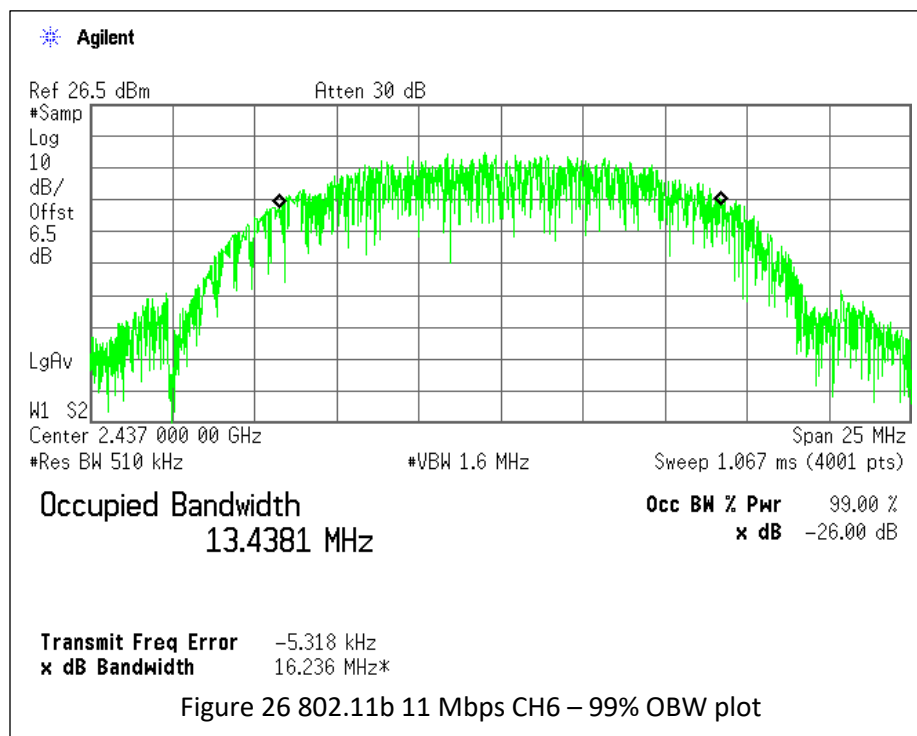
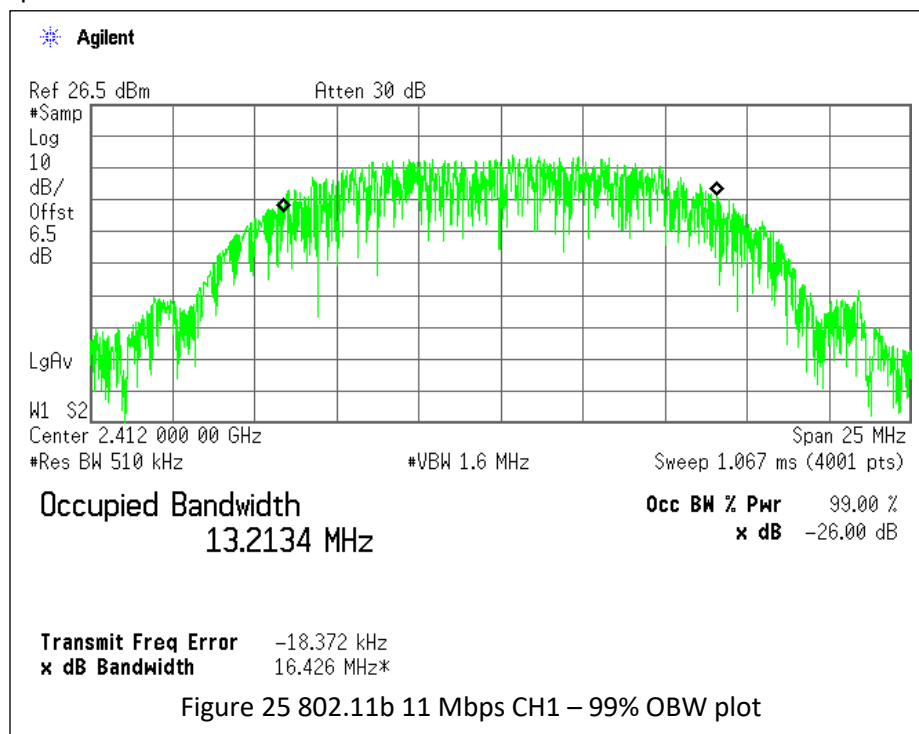
99% OBW plots

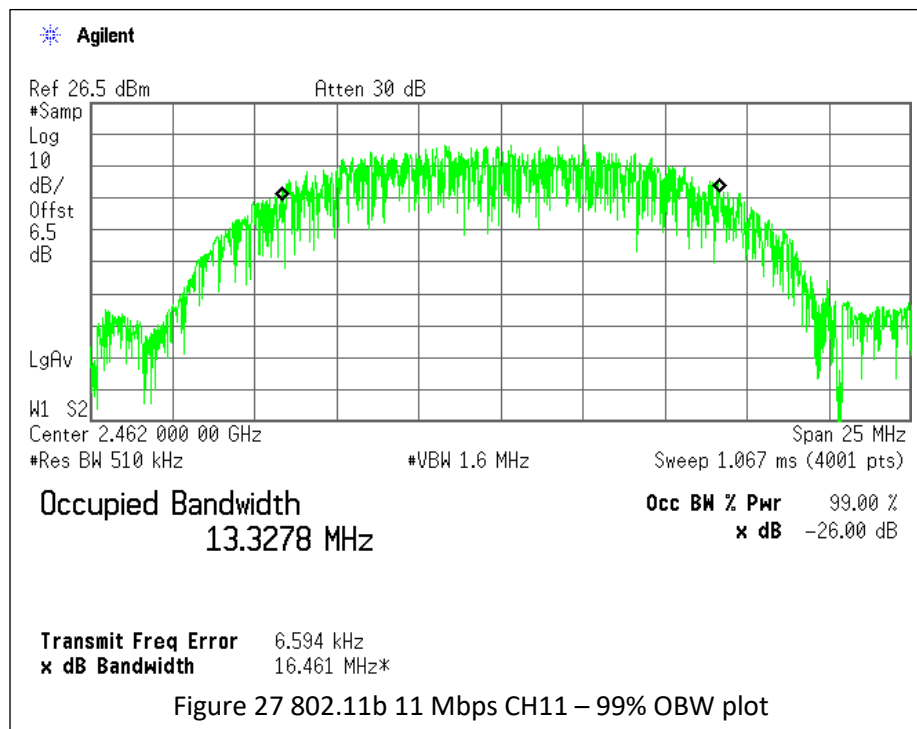
802.11b – 1Mbps



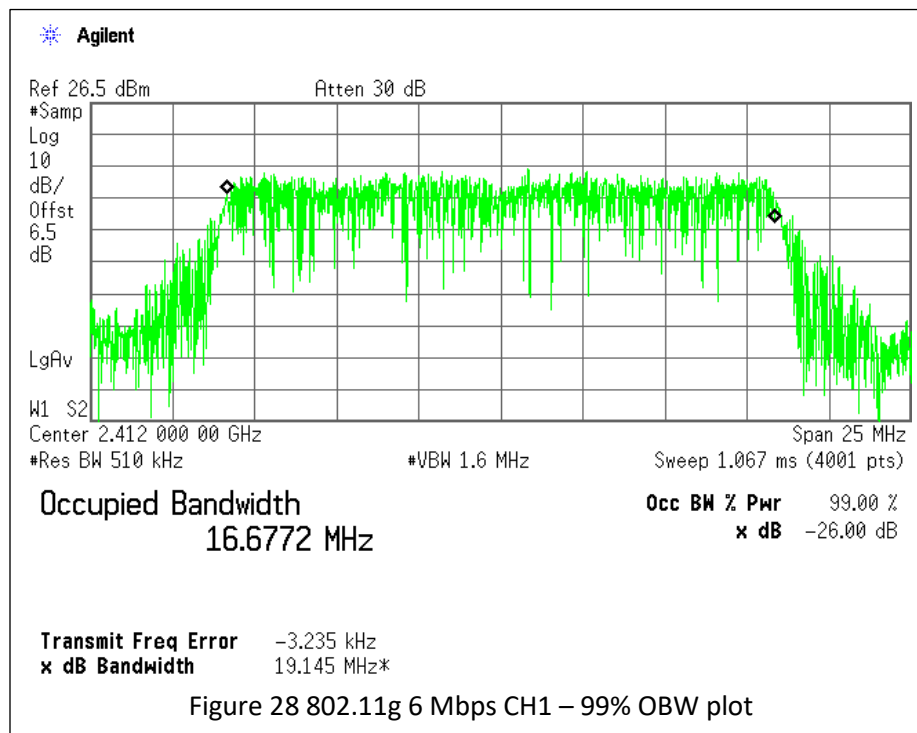


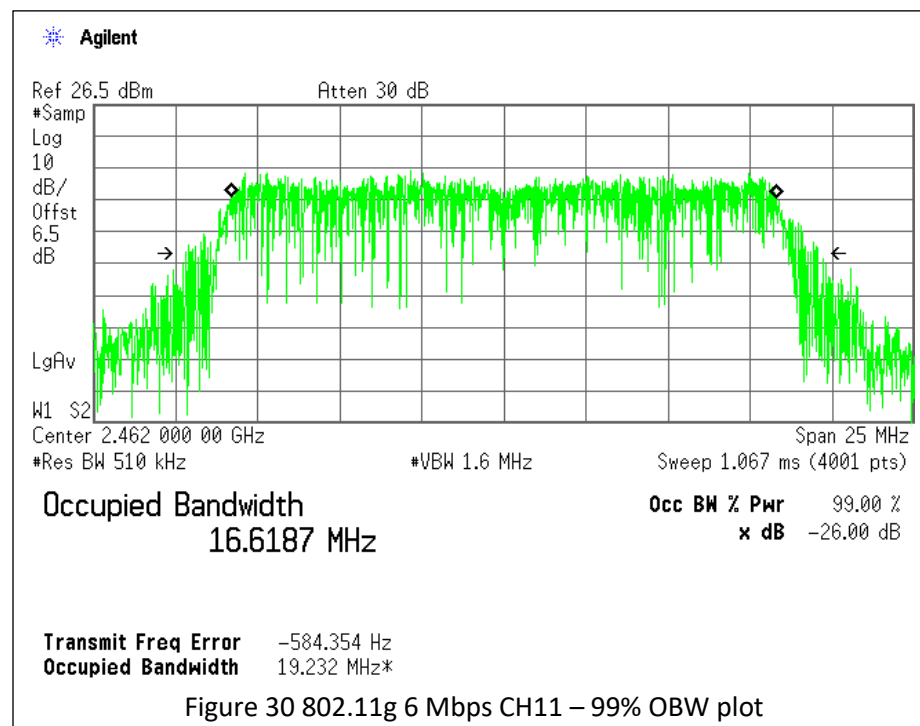
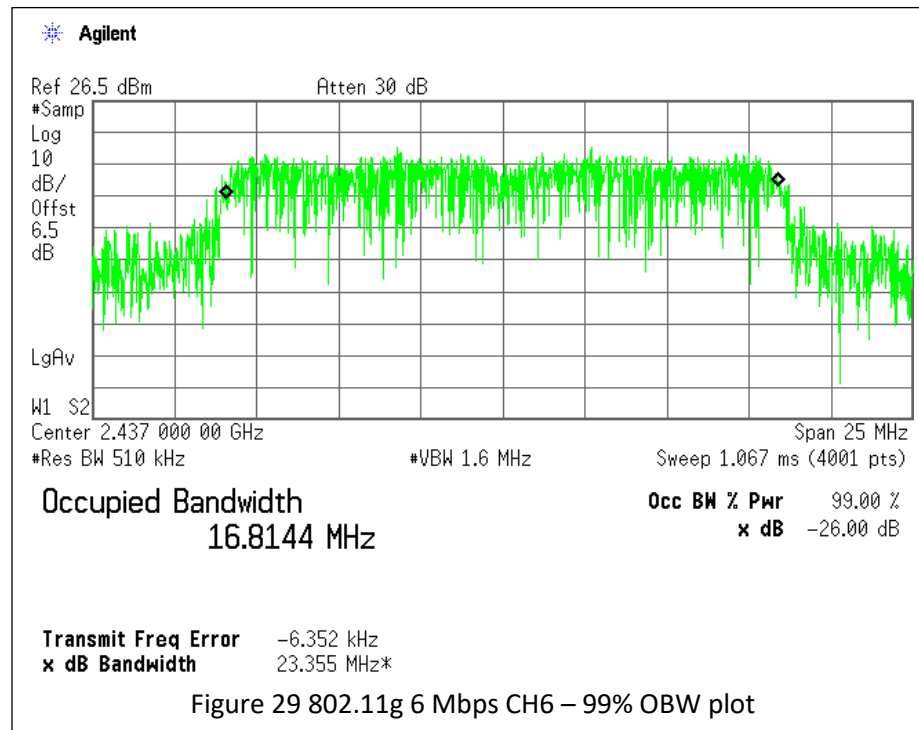
802.11b – 11 Mbps



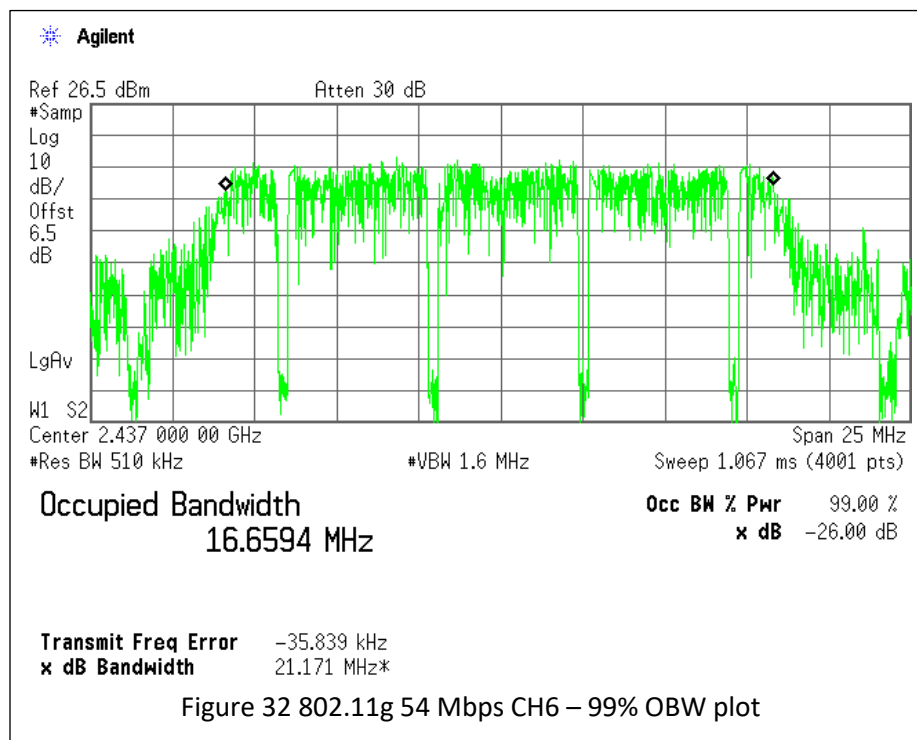
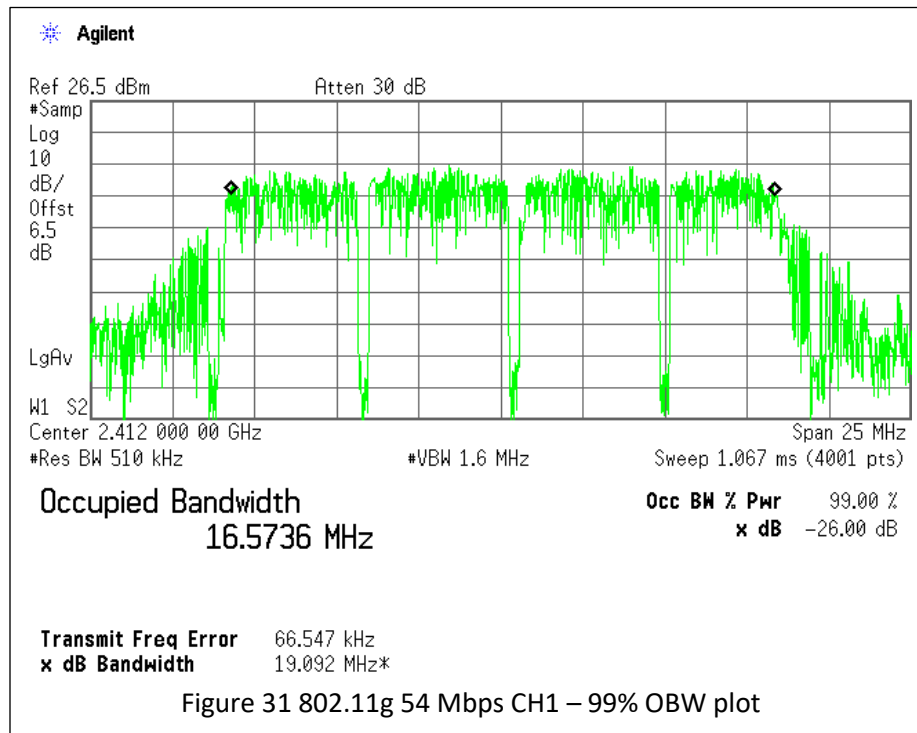


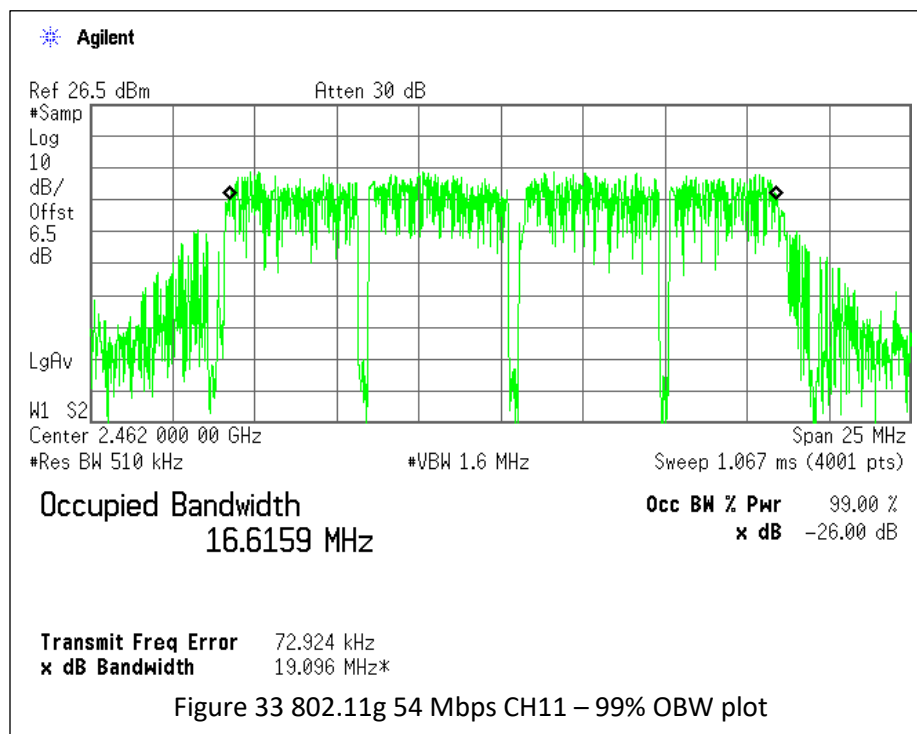
802.11g – 6 Mbps



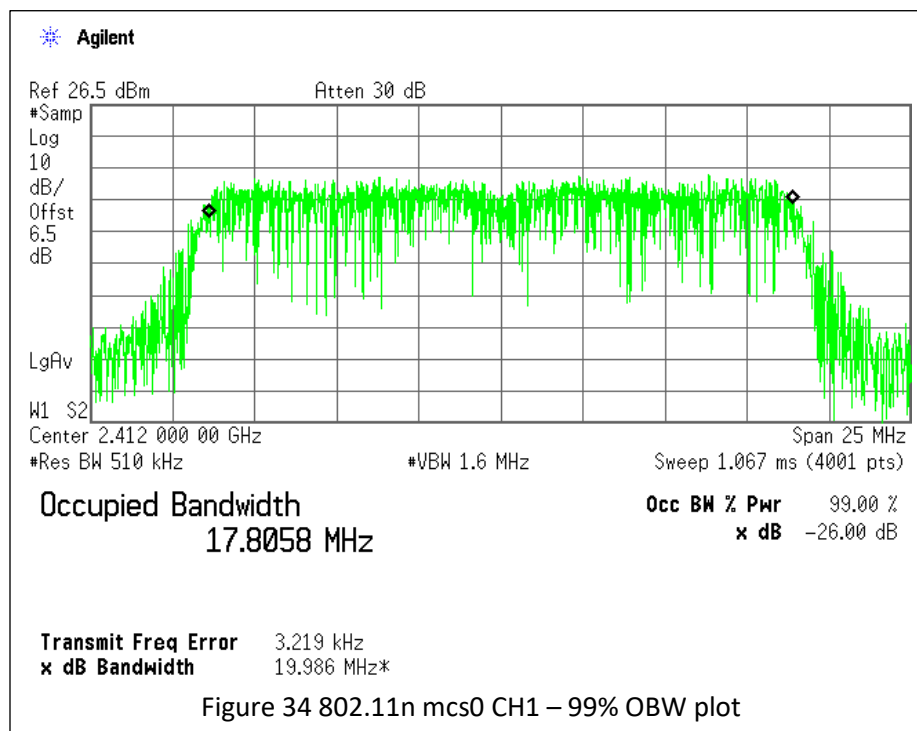


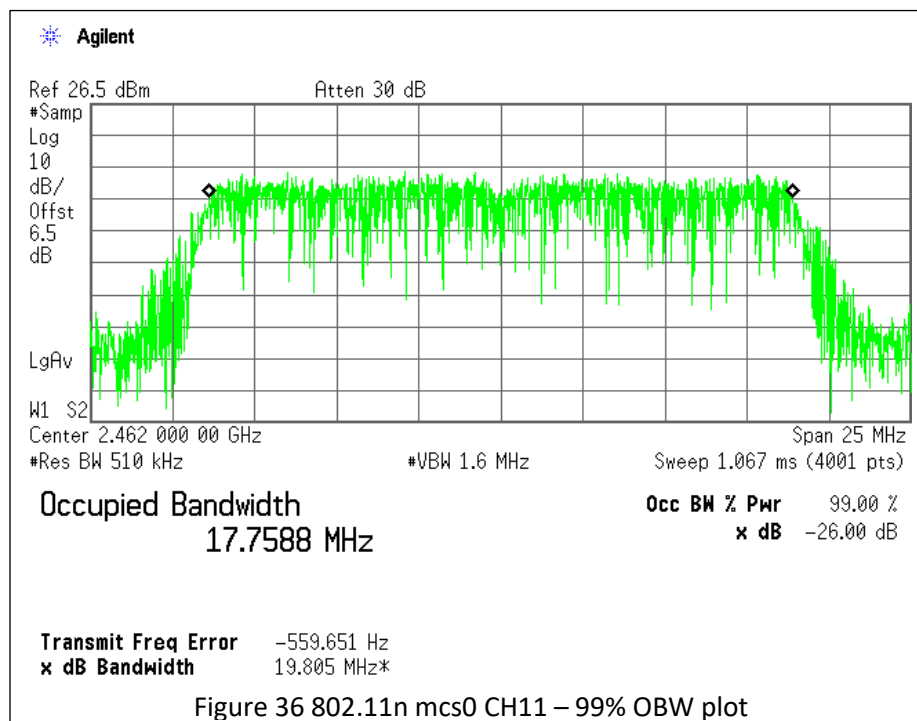
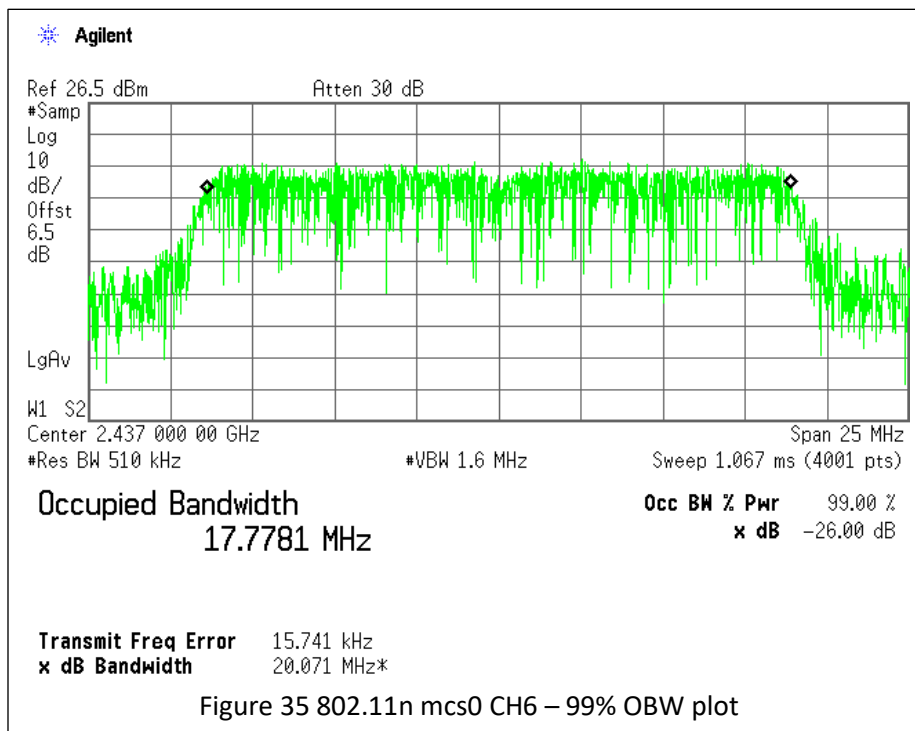
802.11g – 54 Mbps



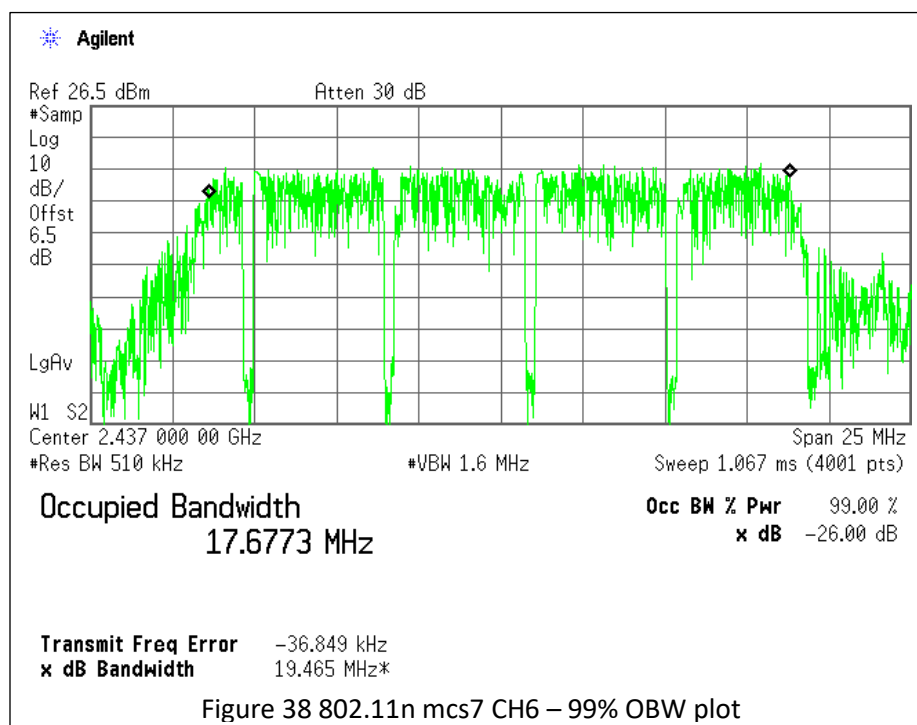
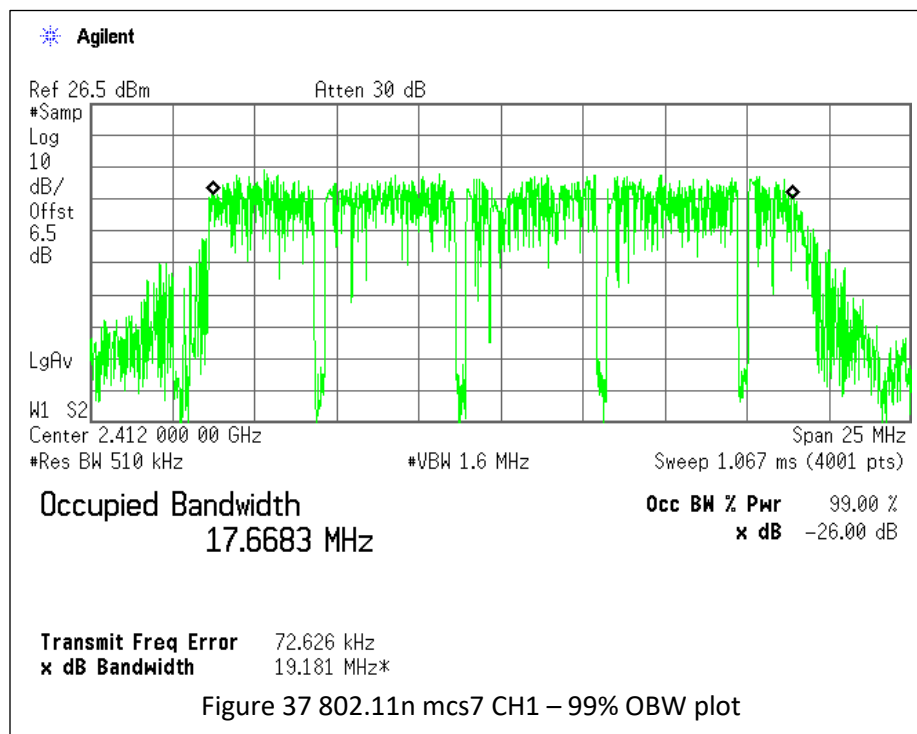


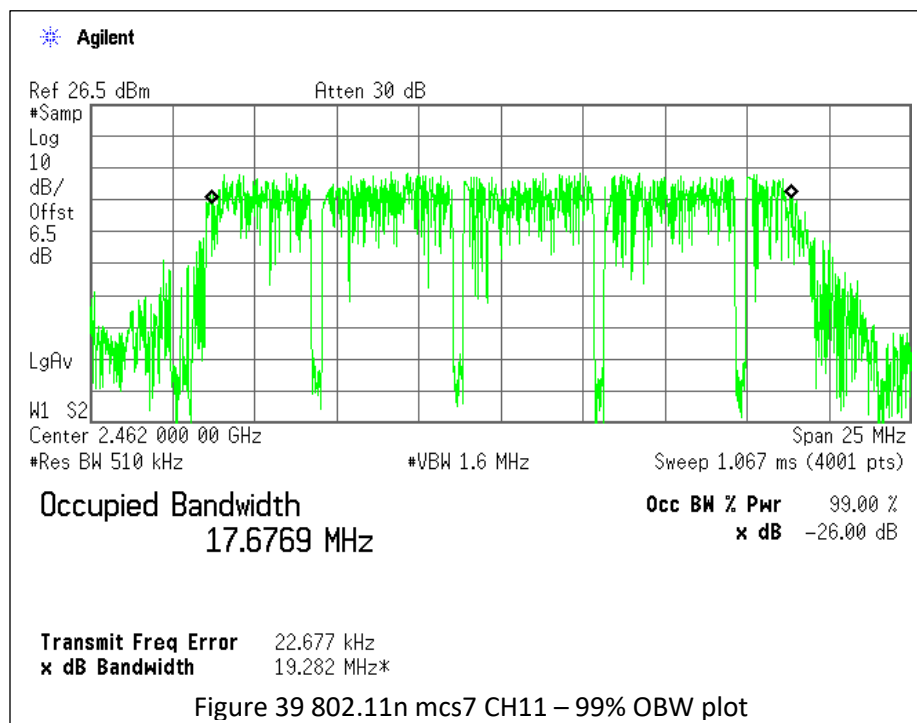
802.11n – H20 mcs0





802.11n – H2O MCS7





Maximum Conducted Output Power

Test Description

For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz and 5725-5850MHz bands, the conducted output power limit (specified below) is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Maximum peak conducted output power was the method employed to determine fundamental emission output power.

Method PKPM1 per C63.10 and KDB 558074 was utilized for this test program.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (b)(3)	1W (30dBm)

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
Jose Badia	RF Lab	10/26/2025	21.11	28	1002.9	P

Test Results

Maximum Conducted Output Power tabular results

802.11b – 1Mbps

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	17.16	17.14
Mid	2437	20.06	19.7
High	2462	19.88	18.89

802.11b – 11Mbps

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	17.23	16.51
Mid	2437	19.75	19.61
High	2462	19.82	16.88

802.11g – 6Mbps

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	20.99	19.77
Mid	2437	22.92	21.8
High	2462	20.95	18.11

802.11g – 54Mbps

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	20.5	19.92
Mid	2437	23.13	22.89
High	2462	20.8	19.89

802.11n HT20 – msc0

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	19.83	18.99
Mid	2437	22.81	22.73
High	2462	20.15	18.85

802.11n HT20 – msc7

Channel	Frequency (MHz)	Tx Channel Power (dBm)	
		Antenna 1	Antenna 2
Low	2412	19.21	18.84
Mid	2437	22.99	22.64
High	2462	19.4	18.82

Output Power Plots:

Note: PKPM1 method uses a power meter for measurement and therefore no plots are produced.

Maximum Power Spectral Density**Test Description**

The DTS rules specify a conducted PSD limit within the *DTS bandwidth* during any time interval of continuous transmission. Such specifications require that the same method as used to determine the conducted output power shall also be used to determine the power spectral density. Therefore, if maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used.

Since maximum peak conducted output power was the method employed to determine fundamental emission output power, then the peak power spectral density method was utilized.

Method PKPSD per C63.10 and KDB 558074 was utilized for this test program.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (e)	< 8 dBm in any 3 kHz Band

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
Jose Badia	RF Lab	10/27/2025	21.67	40	1017	P

Worst case scenario

Measurements performed at the antenna with the highest output power, which is Antenna 1.

Test Results

Maximum PSD Tabular results

802.11b – 1Mbps

Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	-5.45
Mid	2437	-3.19
High	2462	-0.93

802.11b – 11Mbps

Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	0.65
Mid	2437	-0.88
High	2462	-2.09

802.11g – 6Mbps

Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	-11.85
Mid	2437	-6.72
High	2462	-12.35

802.11g – 54Mbps

Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	-11.93
Mid	2437	-5.67
High	2462	-9.47

802.11n HT20 – msc0

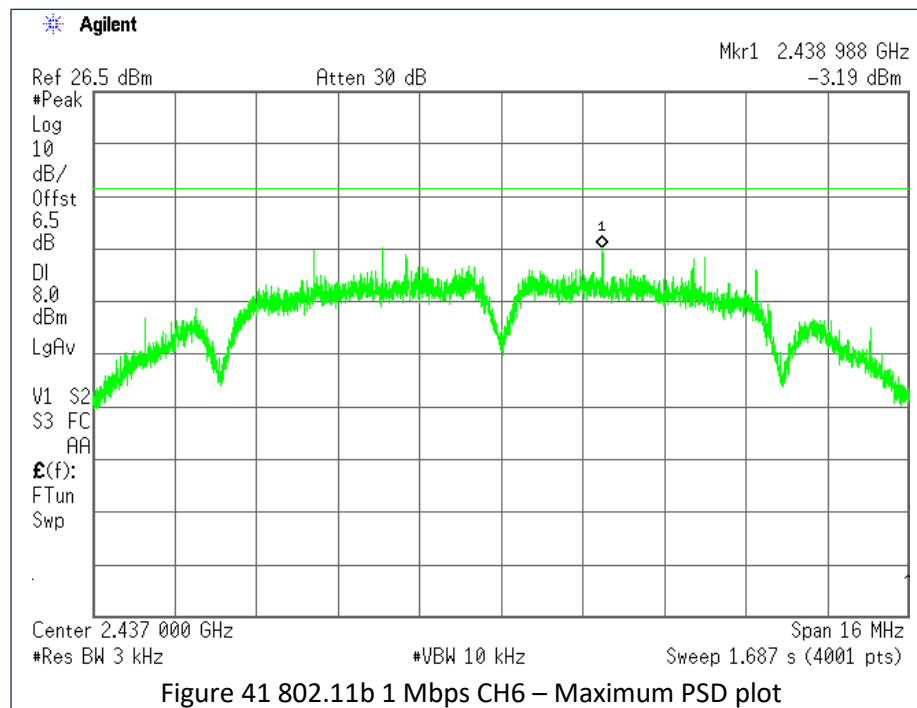
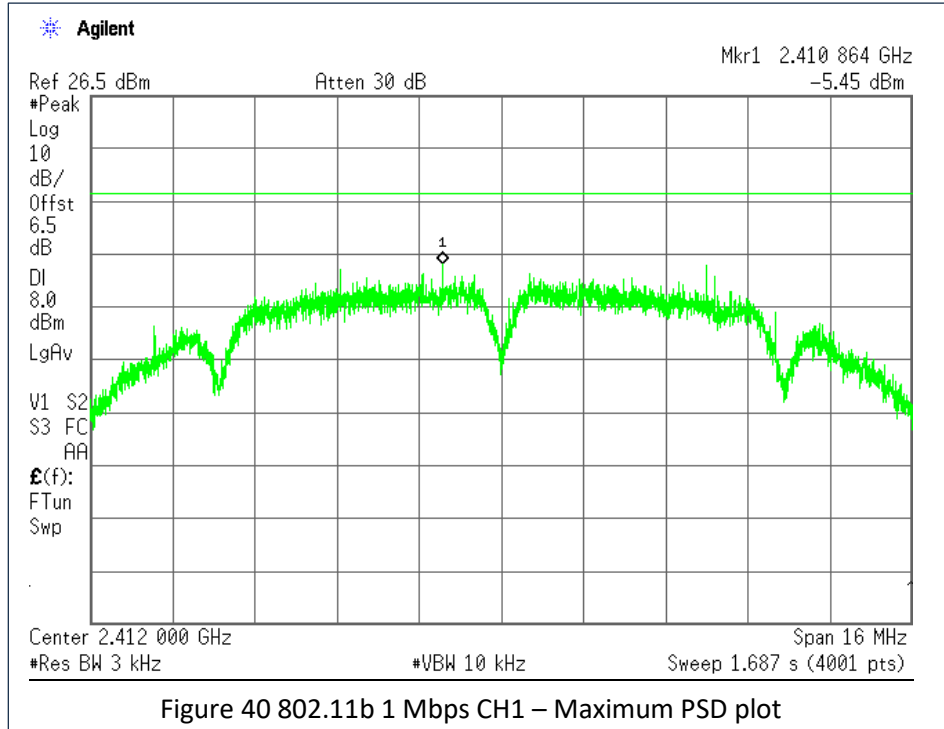
Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	-12.14
Mid	2437	-7.68
High	2462	-12.12

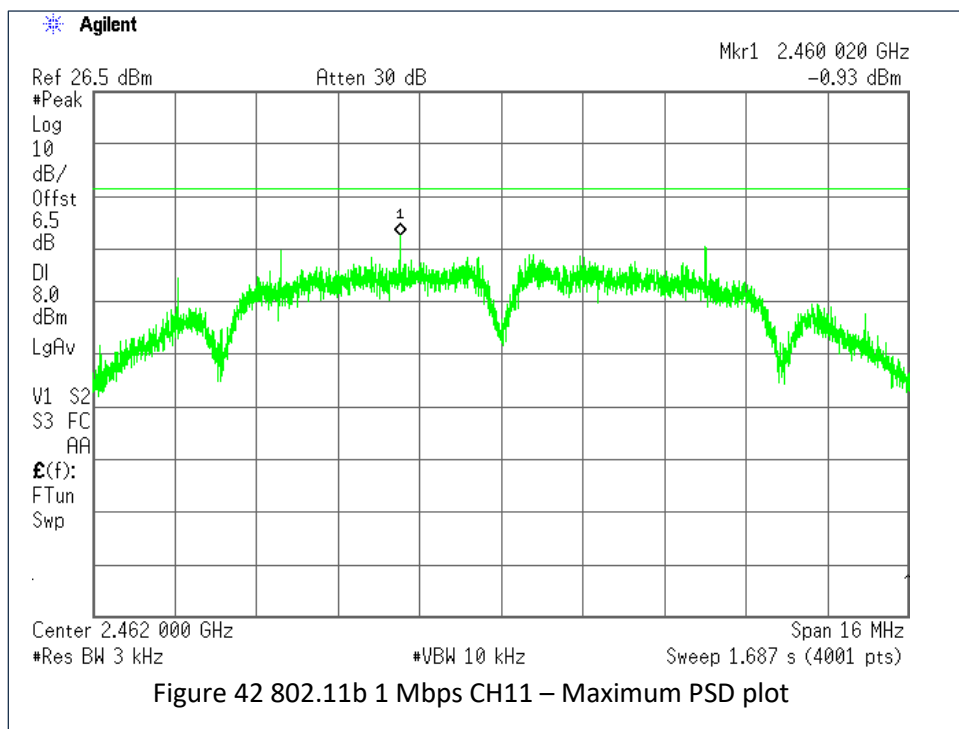
802.11n HT20 – msc7

Channel	Frequency (MHz)	Max PSD (dBm)
Low	2412	-12.04
Mid	2437	-9.20
High	2462	-10.98

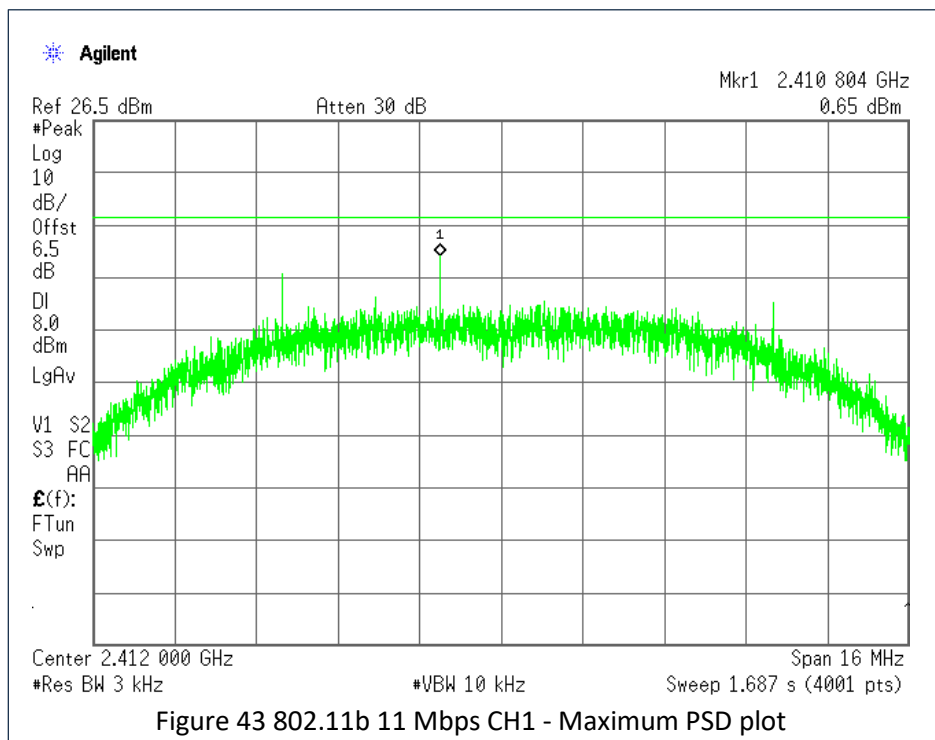
Maximum PSD plots

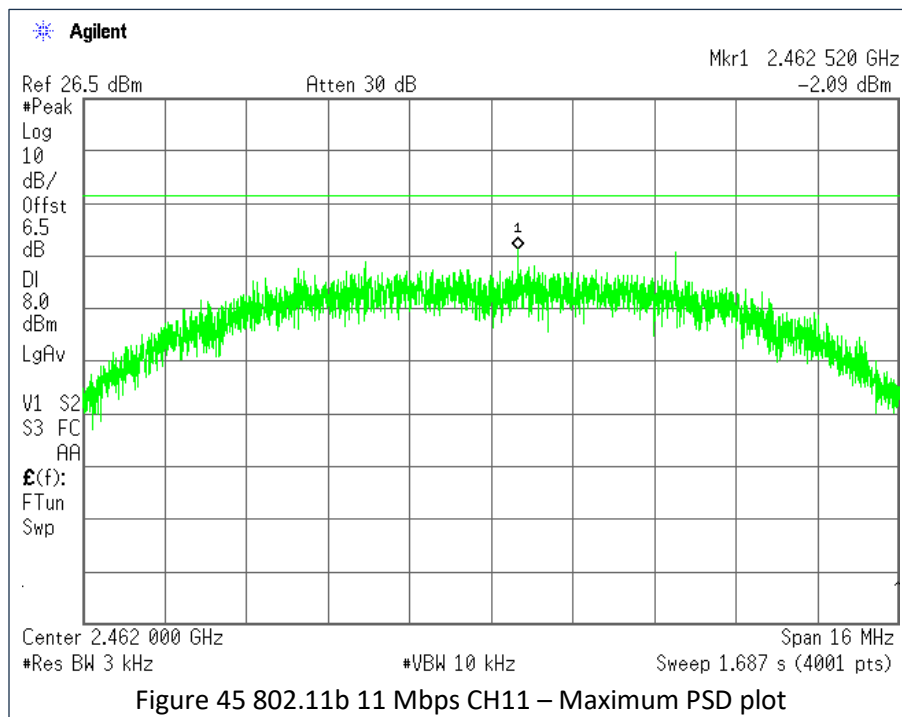
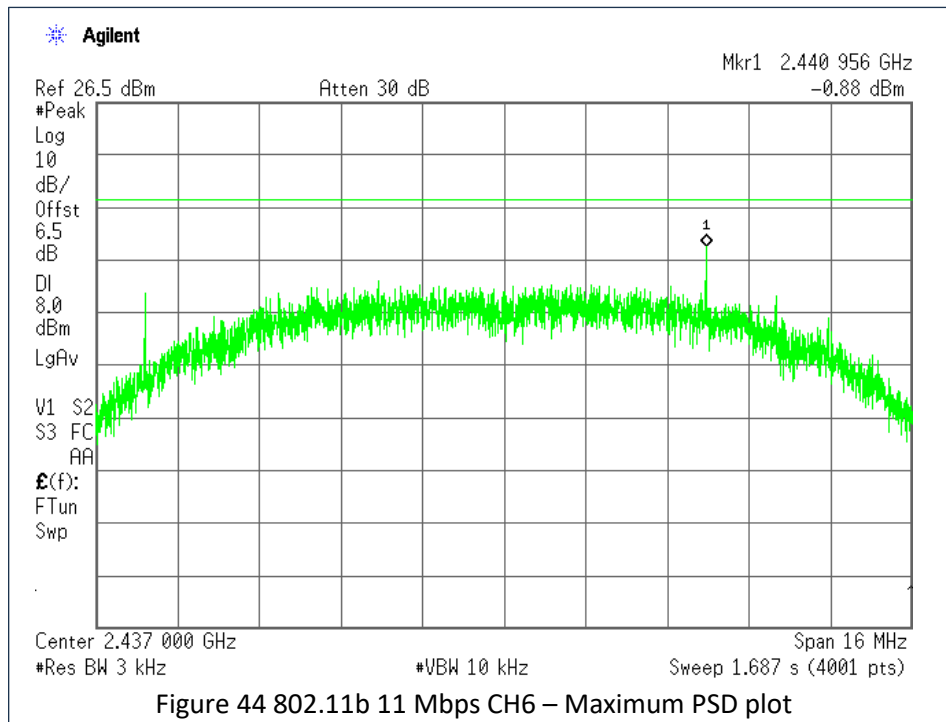
802.11b - 1 Mbps



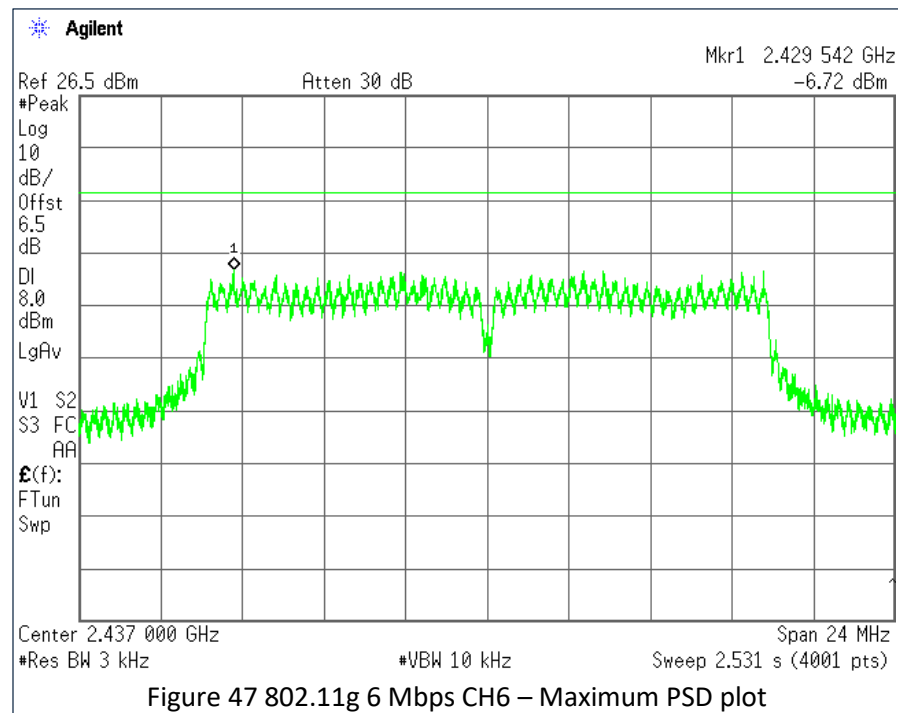
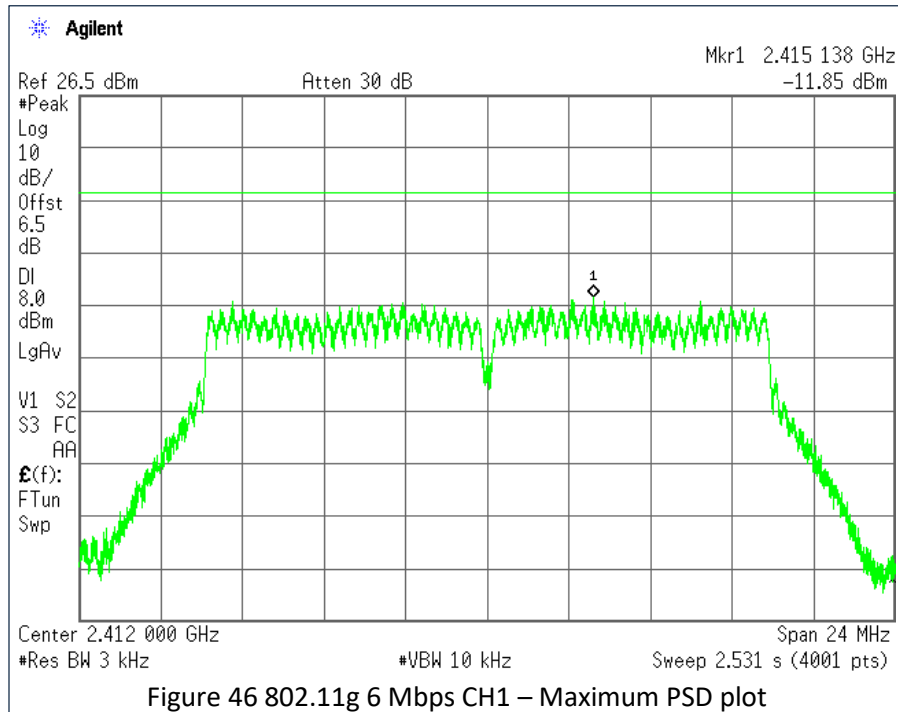


802.11b – 11 Mbps





802.11g – 6 Mbps



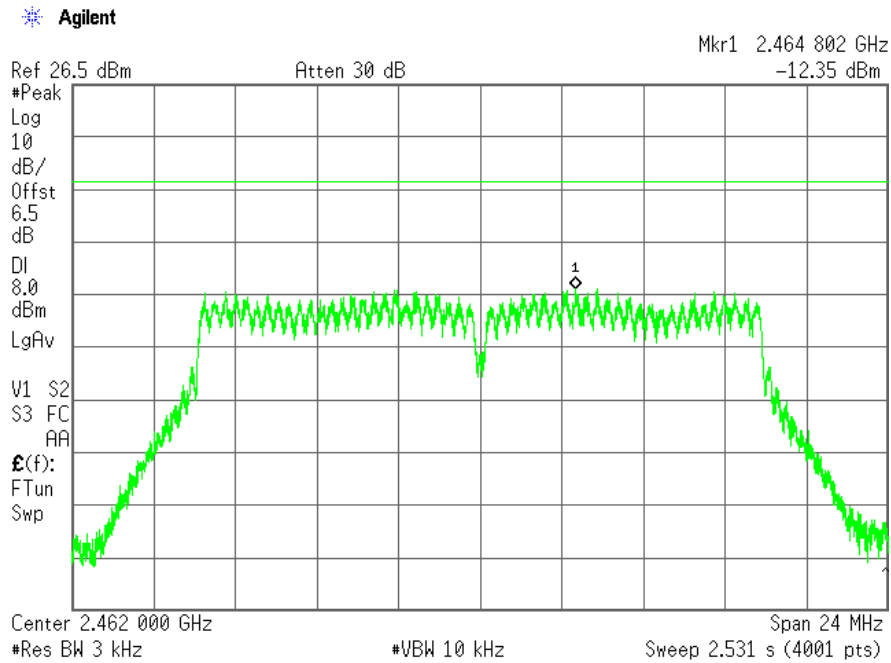


Figure 48 802.11g 6 Mbps CH11 – Maximum PSD plot

802.11g – 54 Mbps

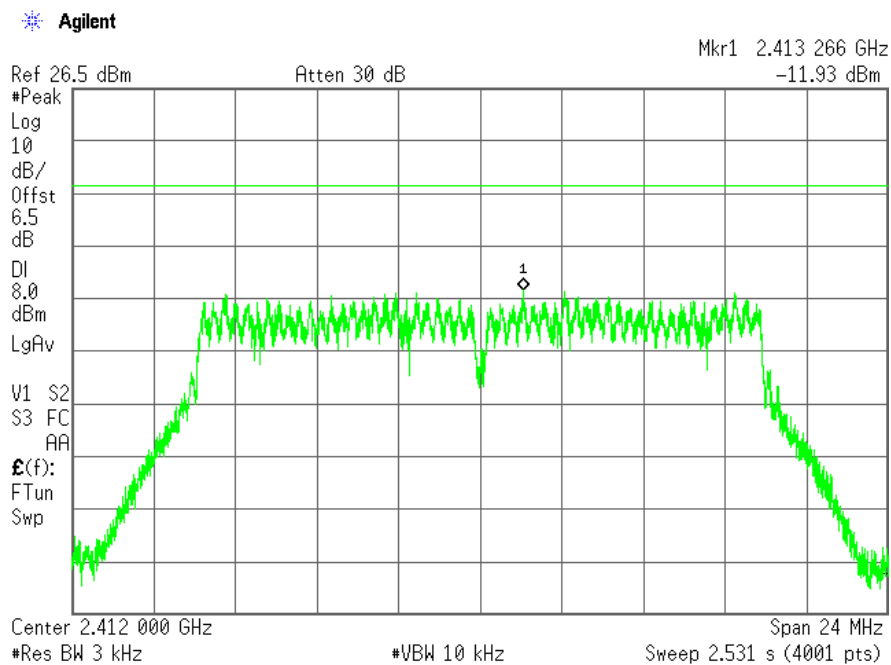


Figure 49 802.11g 54 Mbps CH1 – Maximum PSD plot

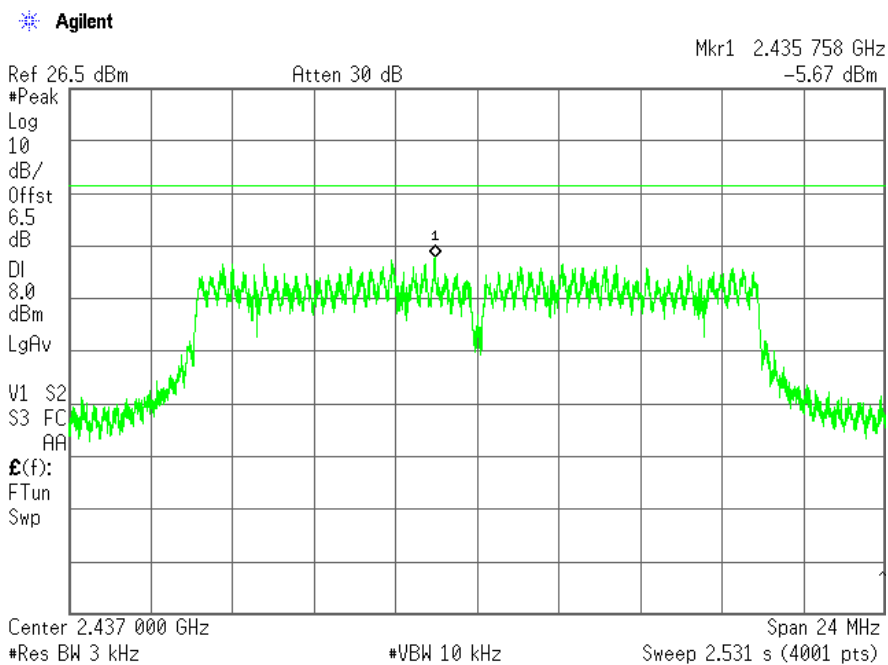


Figure 50 802.11g 54 Mbps CH6 –Maximum PSD plot

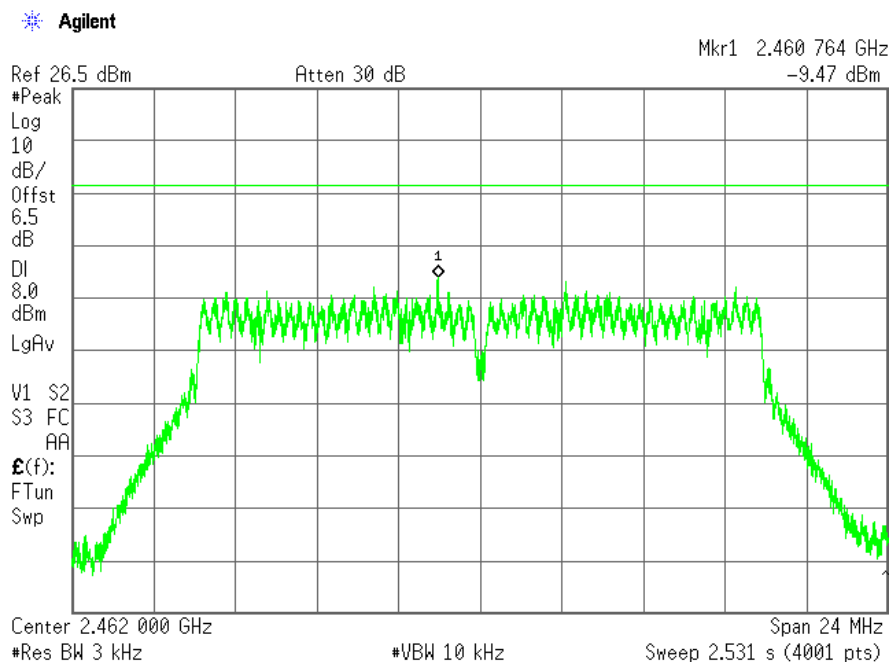


Figure 51 802.11g 54 Mbps CH11 – Maximum PSD plot

892.11n – mcs0

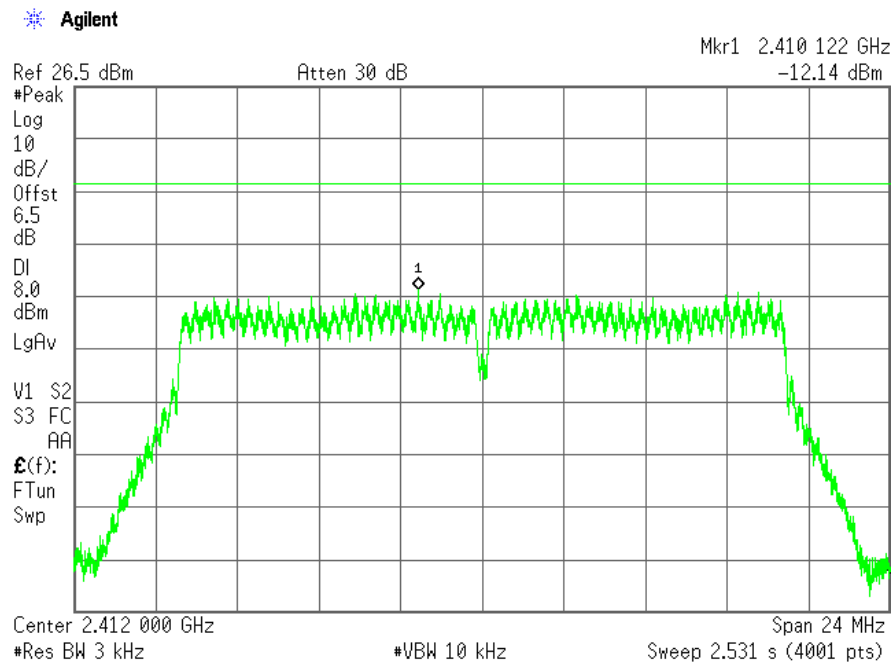


Figure 52 802.11n mcs0 CH1 – Maximum PSD plot

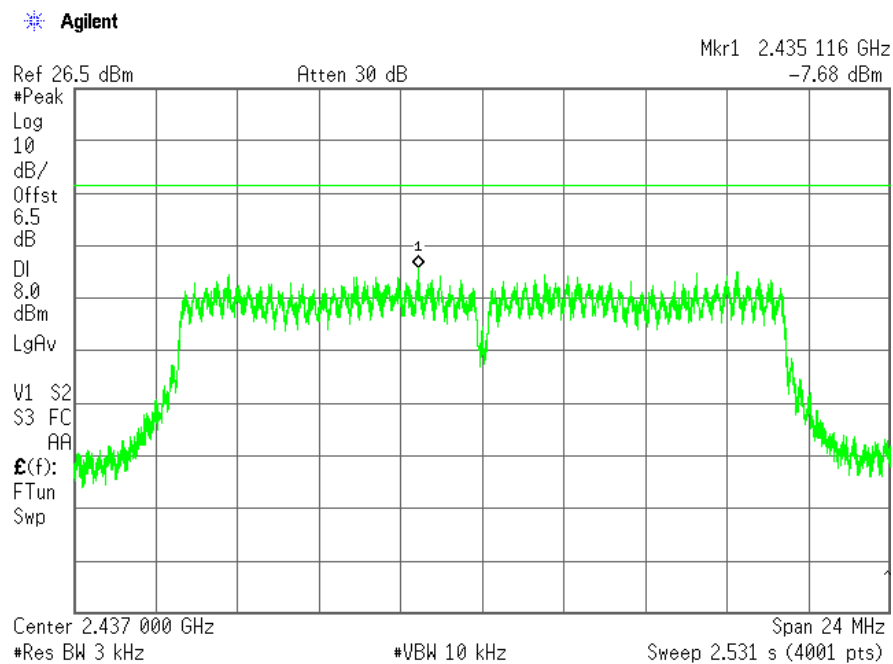


Figure 53 802.11n mcs0 CH6 – Maximum PSD plot

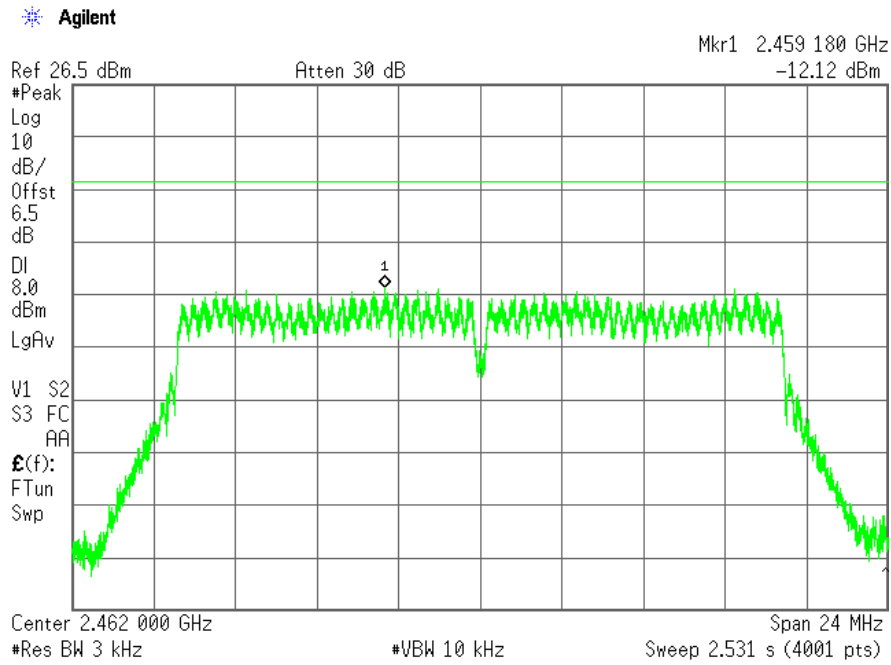


Figure 54 802.11n mcs0 CH11 – Maximum PSD plot

802.11n – mcs7

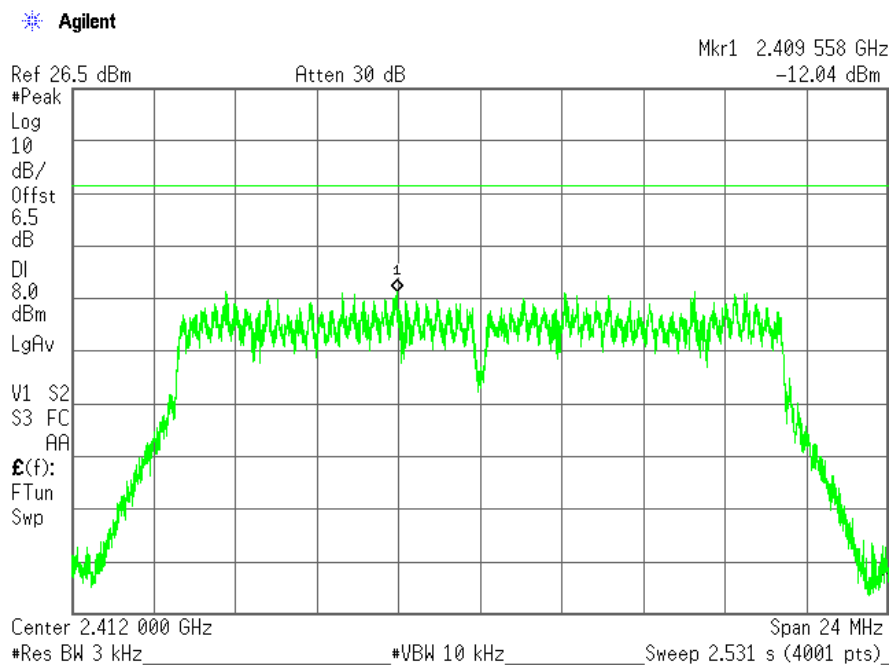


Figure 55 802.11n mcs7 CH1 – Maximum PSD plot

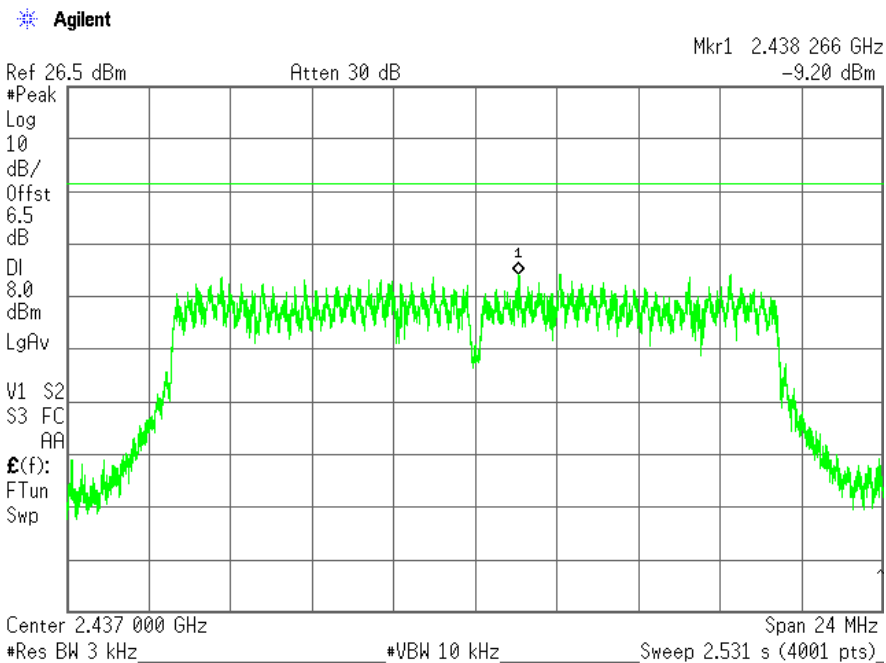


Figure 56 802.11n mcs7 CH6 – Maximum PSD plot

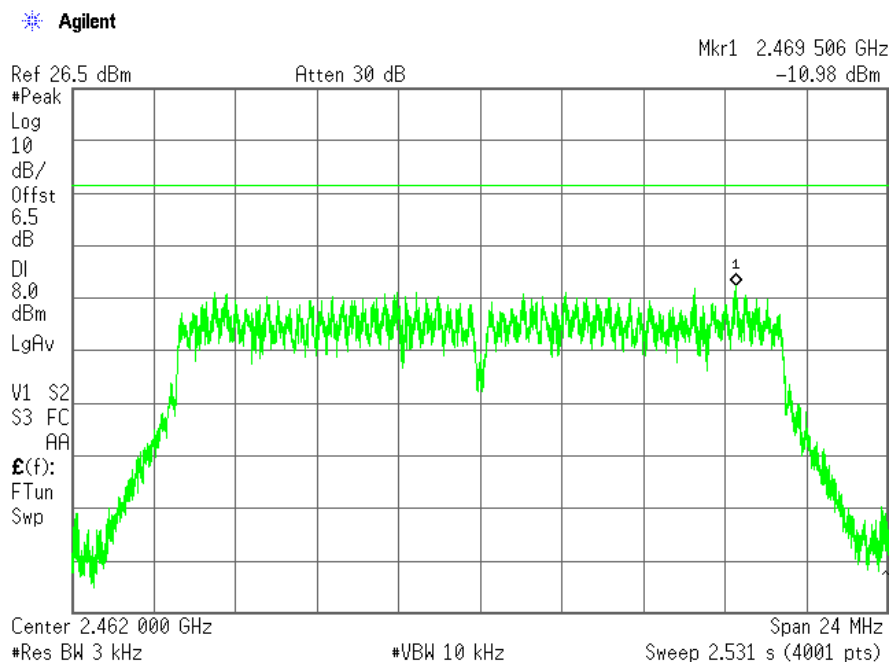


Figure 57 802.11n mcs7 CH11 – Maximum PSD plot

Conducted Band Edge

Test Description

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (d)	20dBc Below the Fundamental

Note: 20dBc is in reference to the previously measured PSD measurements as referenced in ANSI C63.10 Section 11.11.2

Worst case scenario

Measurements are performed on the Antenna with the highest output power, which is Antenna 1.

Test Information

<u>Tester</u>	<u>Test Location</u>	<u>Date</u>	<u>Temperature</u> (°C)	<u>Humidity</u> (%RH)	<u>Pressure</u> (mbar)	<u>Results (P/F)</u>
Jose Badia	RF Lab	10/27/2025	22.22	37	1043	P

Test Results

Conducted Band Edge plots

802.11b – 1 Mbps

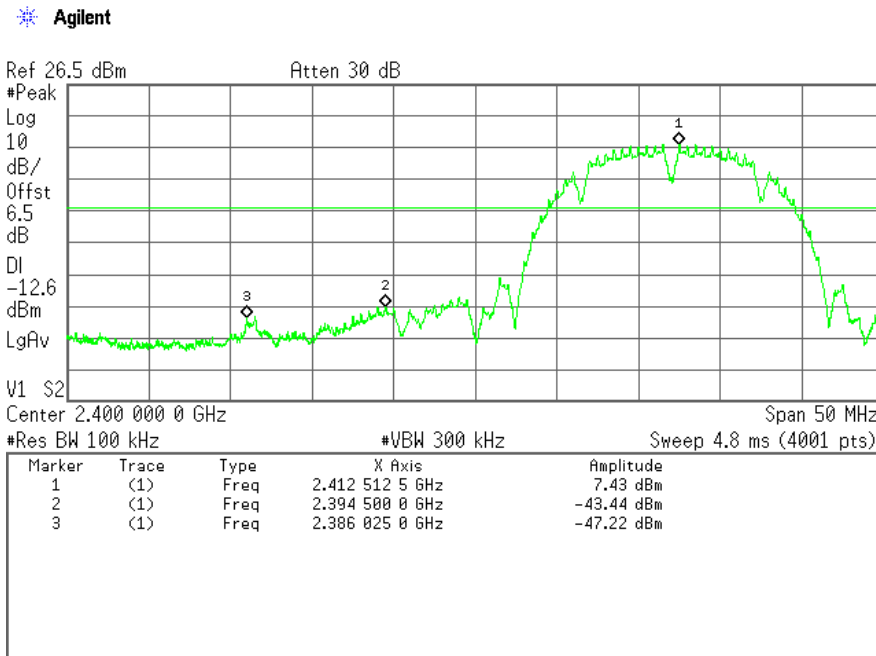


Figure 58 802.11b 1 Mbps CH1 - CBE plot

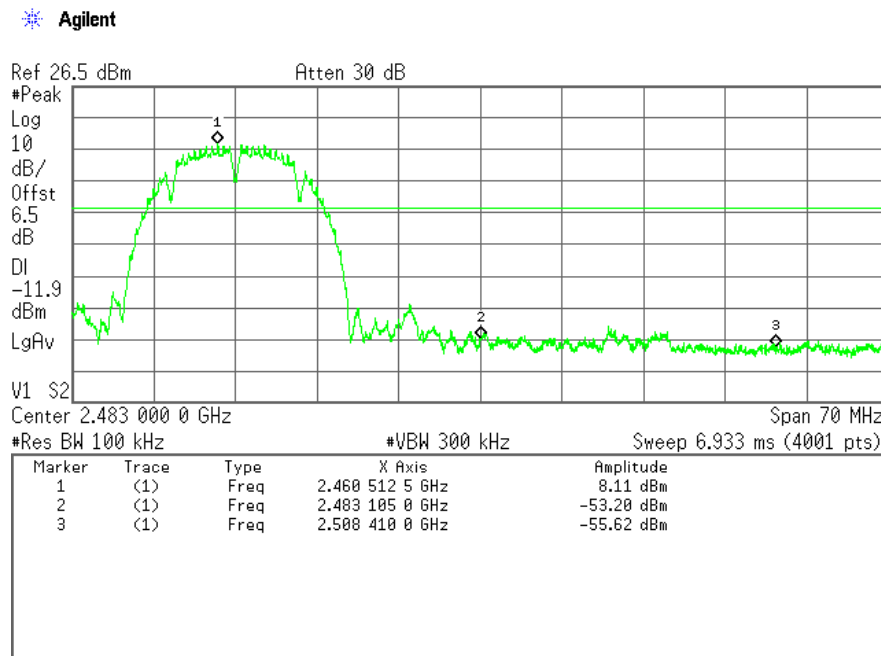


Figure 59 802.11b 1 Mbps CH11 - CBE plot

802.11b – 11 Mbps

* Agilent

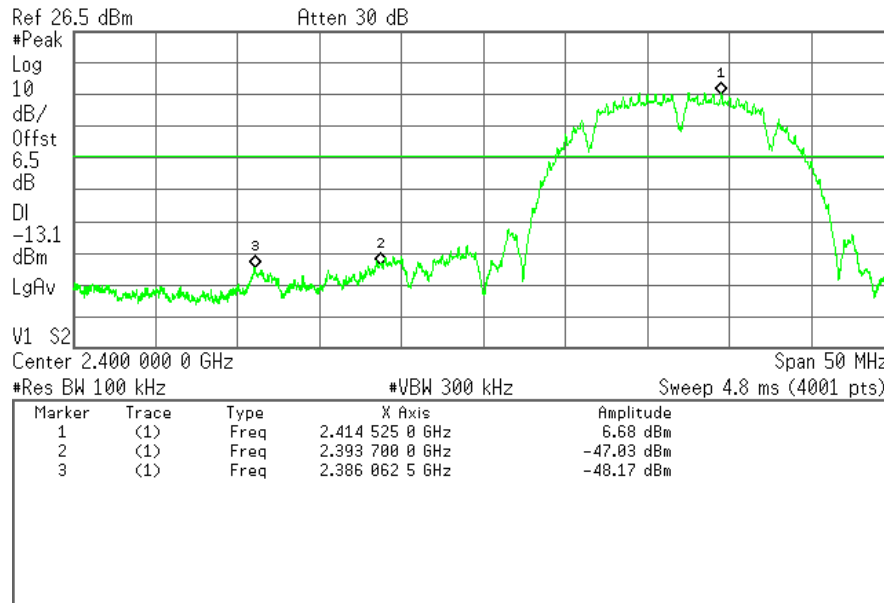


Figure 60 802.11b 11 Mbps CH1 - CBE plot

* Agilent

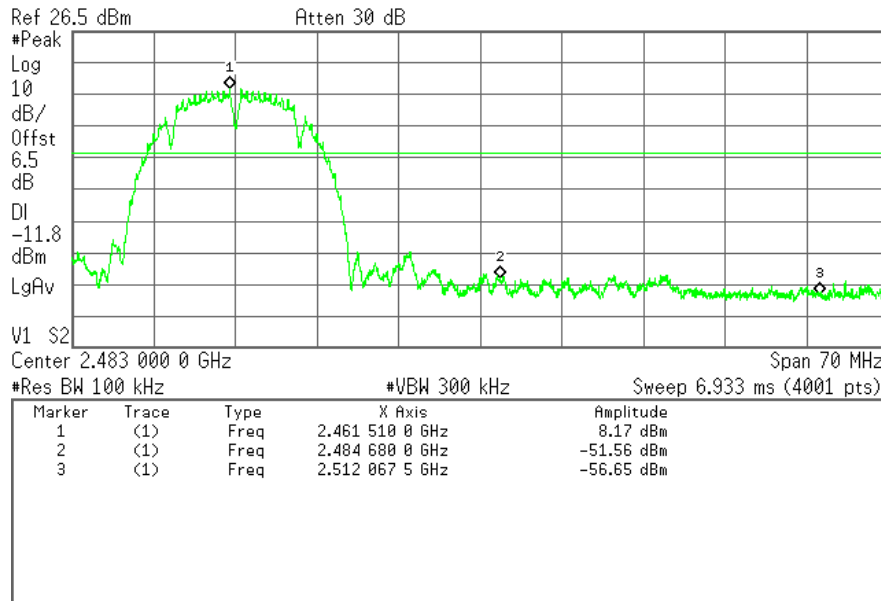


Figure 61 802.11b 11 Mbps CH11 - CBE plot

802.11g – 6 Mbps

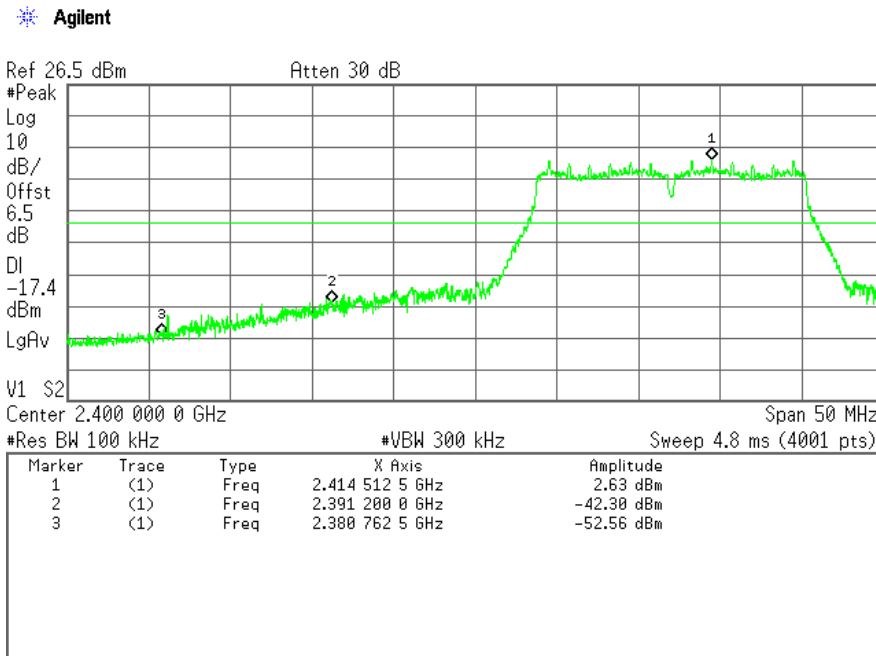


Figure 62 802.11g 6 Mbps CH1 - CBE plot

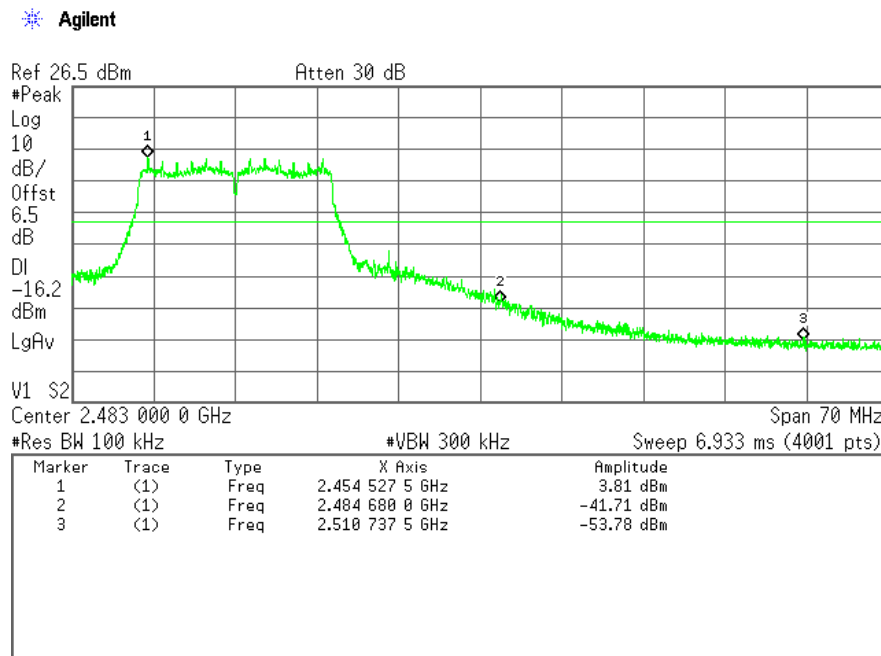


Figure 63 802.11g 54 Mbps CH11 - CBE plot

802.11n – mcs0 plots

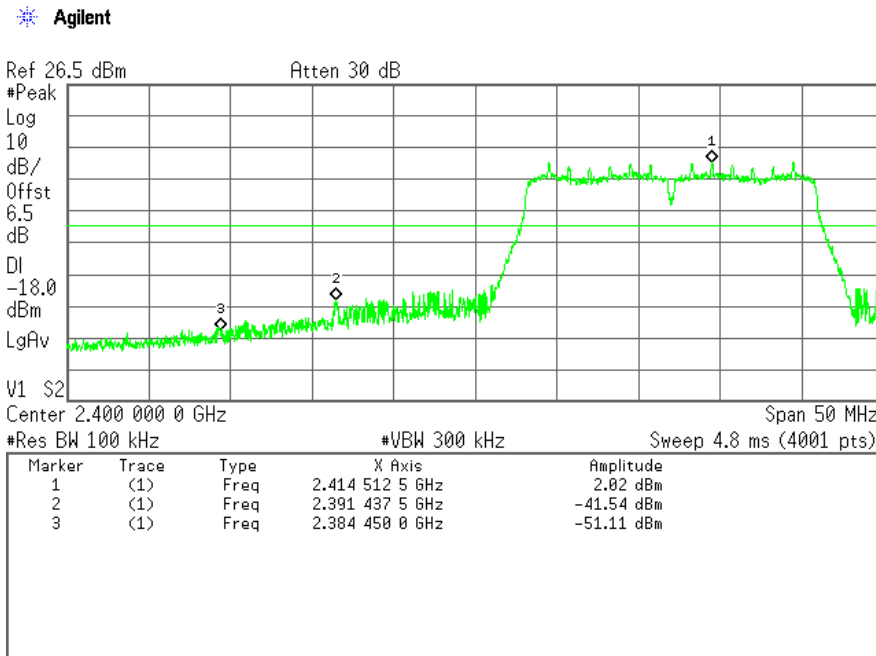


Figure 64 802.11n mcs0 CH1 - CBE plot

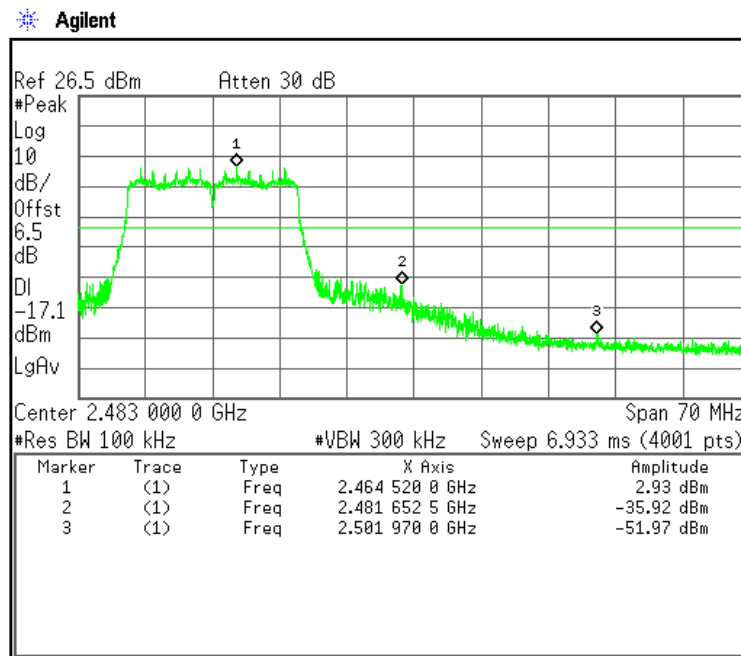


Figure 65 802.11n mcs0 CH11 - CBE plot

802.11n – mcs7 plots

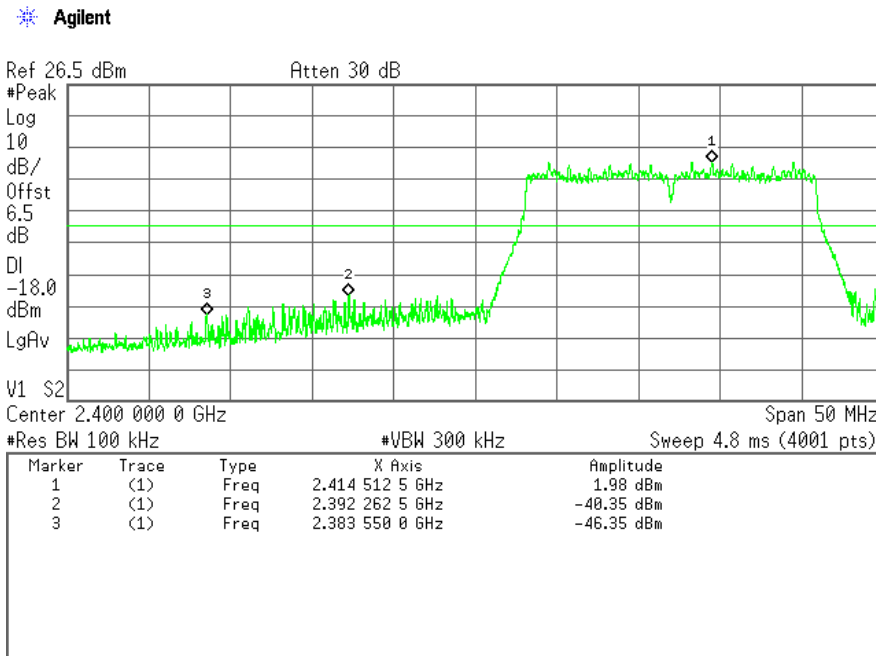


Figure 66 802.11n mcs7 CH1 - CBE plot

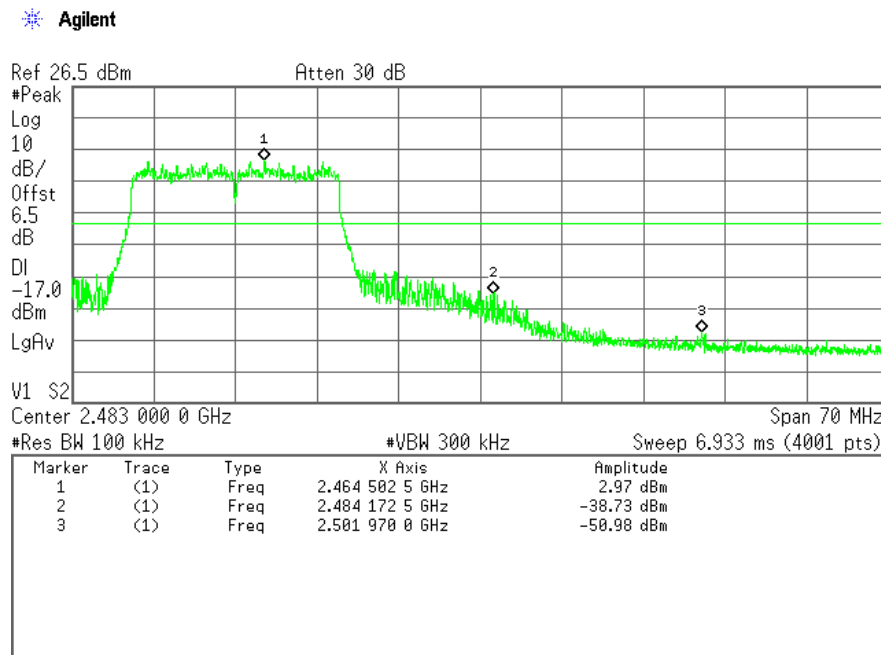


Figure 67 802.11n mcs7 CH11 - CBE plot

Spurious Conducted Emissions

Test Description

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (d)	20dBc Below the Fundamental

Note: 20dBc is in reference to the previously measured PSD measurements as referenced in ANSI C63.10 Section 11.11.2

Test Information

<u>Tester</u>	<u>Test Location</u>	<u>Date</u>	<u>Temperature (°C)</u>	<u>Humidity (%RH)</u>	<u>Pressure (mbar)</u>	<u>Results (P/F)</u>
Jose Badia	RF Lab	10/27/2025	21.11	34	1021	P

Worst case scenario

Measurements are performed on the Antenna with the highest output power, which is Antenna 1.

Test Results

Spurious conducted plots

802.11b – 1 Mbps

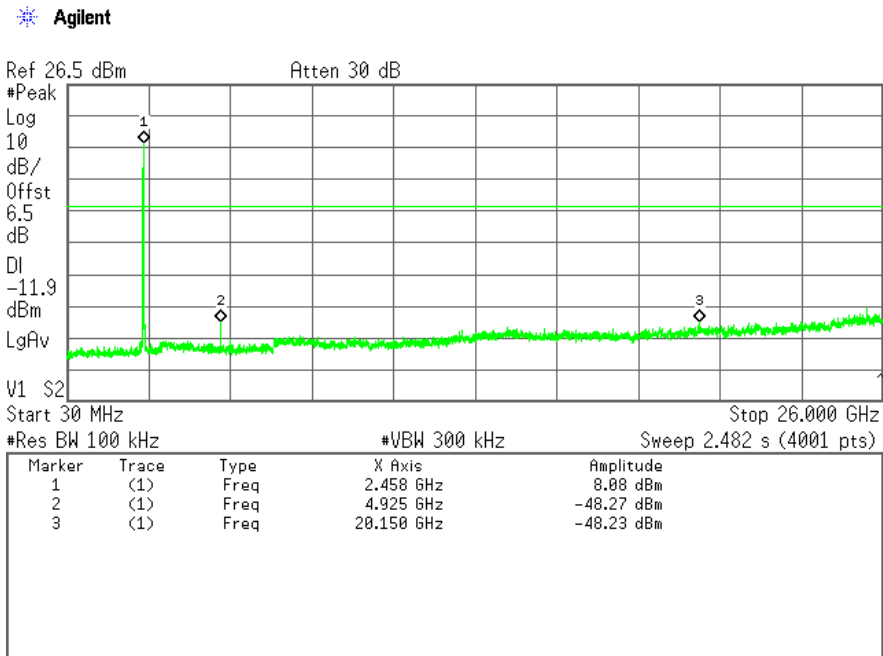


Figure 68 802.11b 1 Mbps CH1 - CSE plot

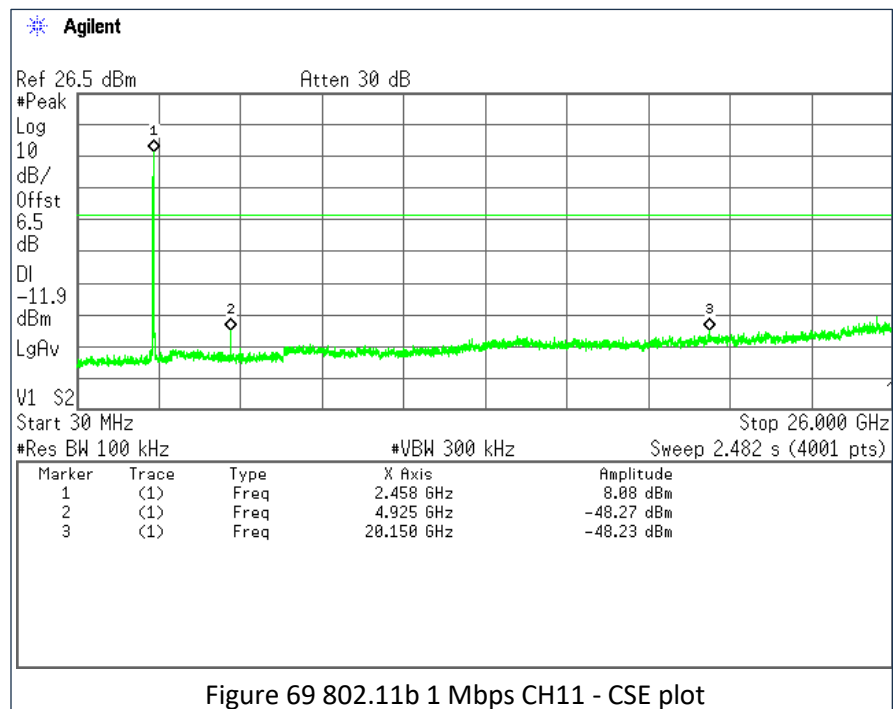


Figure 69 802.11b 1 Mbps CH11 - CSE plot

802.11b – 11 Mbps

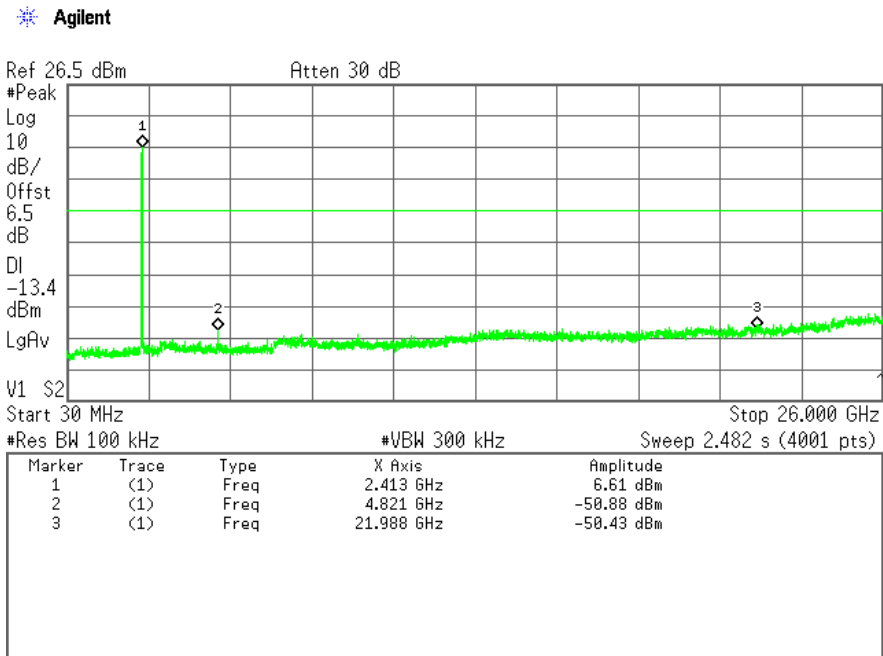


Figure 70 802.11b 11 Mbps CH1 - CSE plot

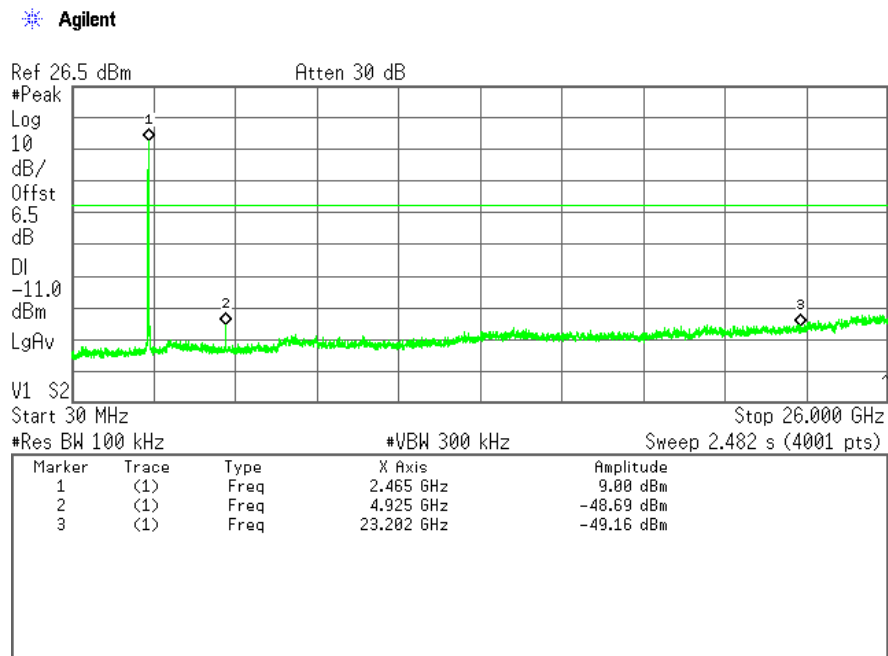


Figure 71 802.11b 11 Mbps CH11 - CSE plot

802.11g – 6 Mbps

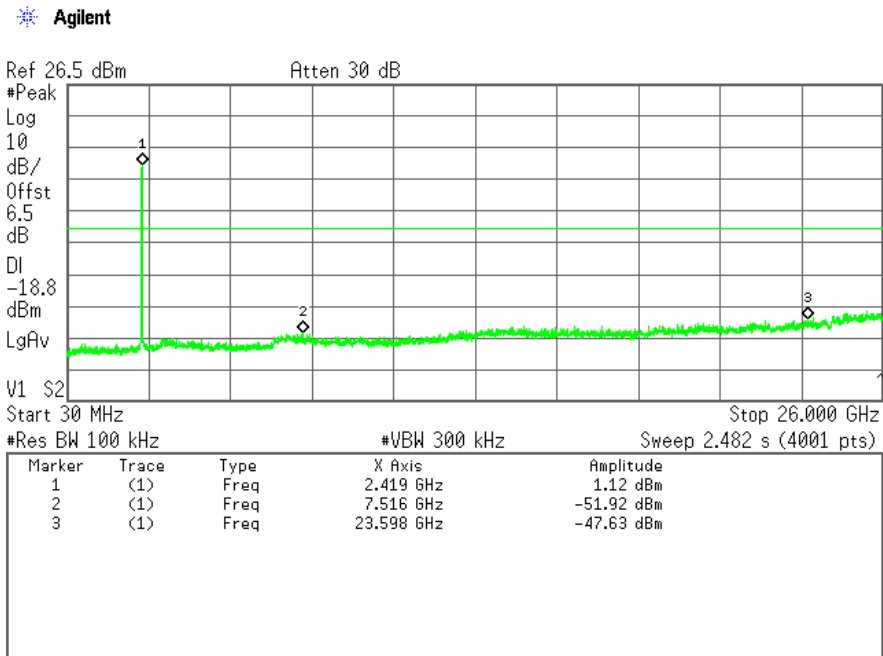


Figure 72 802.11g 6 Mbps CH1 - CSE plot

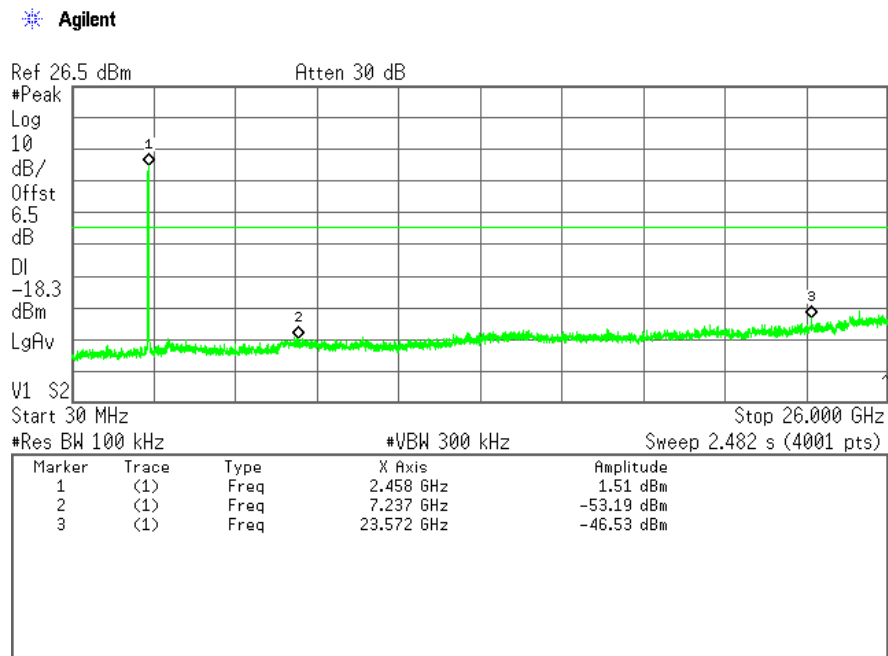


Figure 73 802.11g 6 Mbps CH11 - CSE plot

802.11g – 54 Mbps

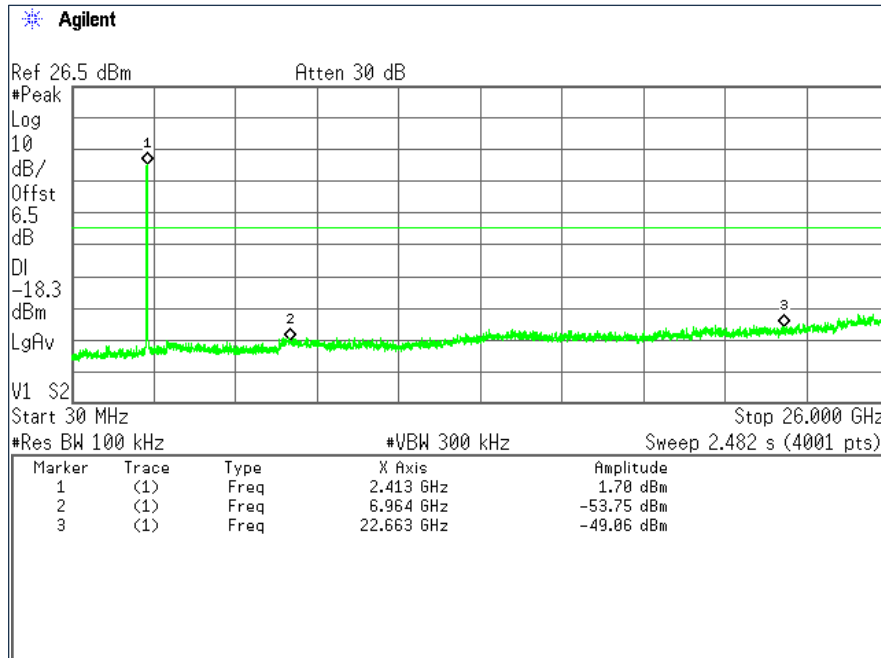


Figure 74 802.11g 54 Mbps CH1 - CSE plot

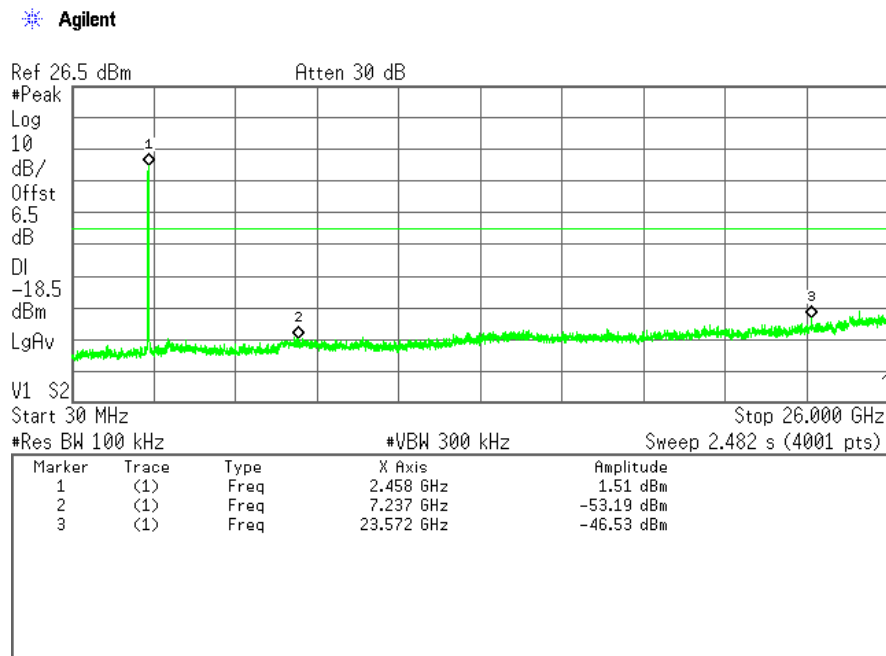


Figure 75 802.11g 54 Mbps CH11 – CSE plot

Radiated Emissions

Test description

Intentional Radiator Radiated Emissions are a test of the emissions, and harmonics on the EUT. The EUT is positioned to get the maximum emissions after a series of prescan measurements.

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz measurements and 1.5 m above the ground plane for above 1 GHz measurements. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

The EUT is set to transmit in a continuous mode.

Test Criteria

Reference	Limit		
	Frequency Range (MHz)	Field Strength Limit (uV/m)	Measurement distance (meters)
CFR 47 Subpart C, 15.205 CFR 47 Subpart C, 15.209	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

NOTE: Below 30MHz, pretesting showed that no emissions as a product of the EUT were detected within 20dB of the regulatory limit. Worse-case plot/data reported from 30MHz - 1GHz and above 18GHz. Prescans performed in an anechoic chamber, final measurements performed on an OATS.

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
Jose Badia	Melville, OATS	10/29/2025	27	56	1012	Pass

Worst case Configuration

The worst-case configuration for radiated measurements was determined to be **Antenna 1** operating in **802.11b mode at 11 Mbps on Channel 1**. This configuration produced the highest conducted PSD during exploratory testing, and radiated comparison measurements confirmed Antenna 1 as the radiated worst-case antenna.

Worst Case configuration Tx 30 MHz - 1 GHz

RF chamber ambient scan

The signal labeled as 'ambient' was identified by performing a measurement with the RF chamber empty and the EUT removed. No powered device or test sample was present in the chamber during this measurement. The observed signals therefore represent background ambient and system noise, and are not attributable to the EUT.

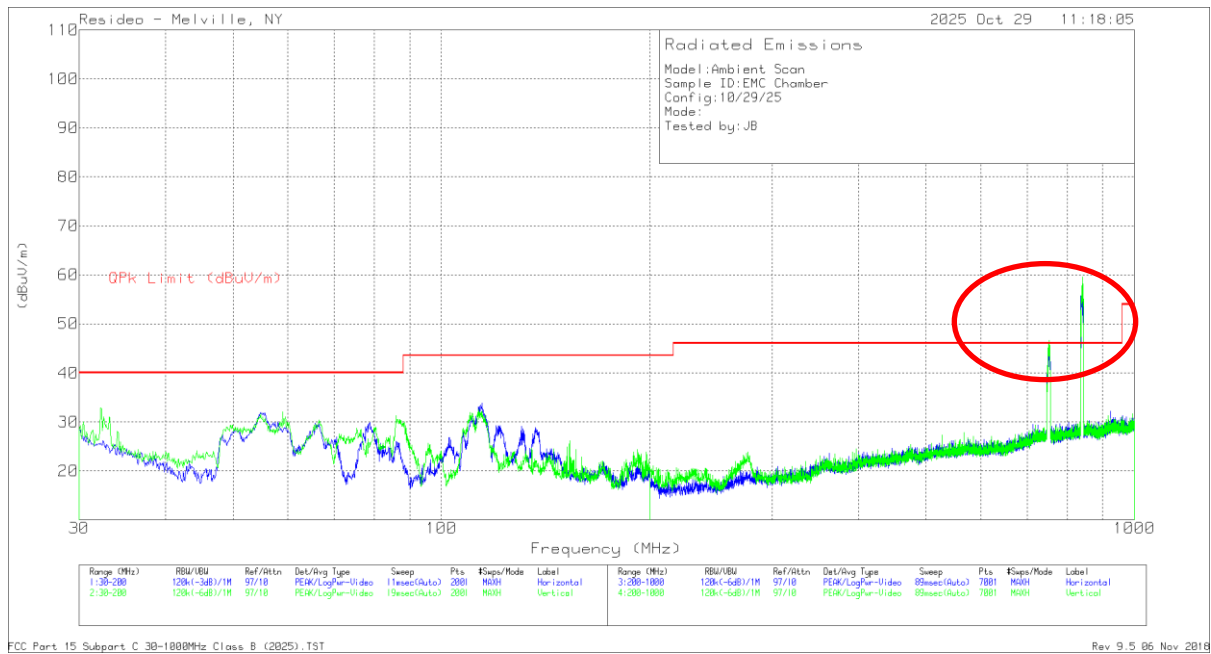


Figure 76 RF Chamber - Ambient scan

802.11b – 11 Mbps CH1

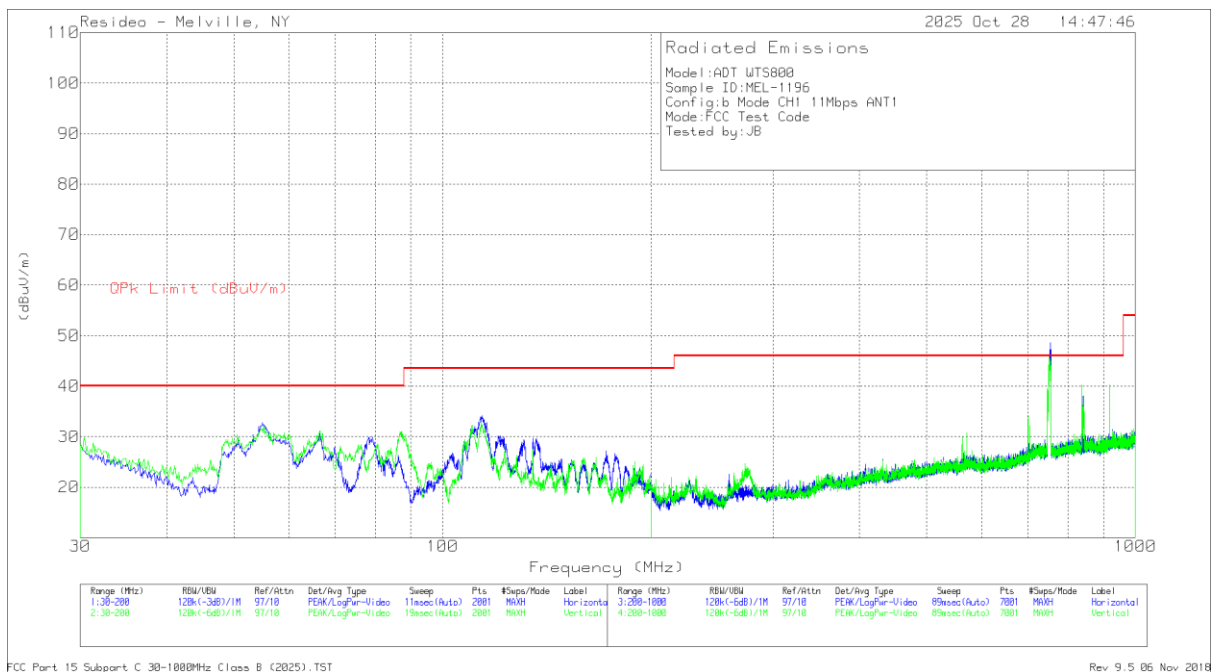


Figure 77 802.11b 11 Mbps – CH1 pre-scan

Frequency (MHz)	Meter Reading (dBuV)	Det	2024_10mh	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 114.4119	6.97	Qp	17.8	1.3	26.07	43.52	-17.45	211	385	H
55.3333	18.47	Qp	11.9	.9	31.27	40	-8.73	196	305	V
839.4729	5.98	Qp	26.5	3.8	36.28	46.02	-9.74	211	385	H
752.5142	9.57	Qp	25.3	3.7	38.57	46.02	-7.45	320	362	H
752.6476	6.02	Qp	25.3	3.7	35.02	46.02	-11	342	368	V
917.4255	14.37	Qp	27	4	45.37	46.02	-.65	140	227	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Qp - Quasi-Peak detector

FCC Pt 15 Subpart C 30-1000MHz (2025).TST

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1-18 GHz

802.11b 11 Mbps CH1

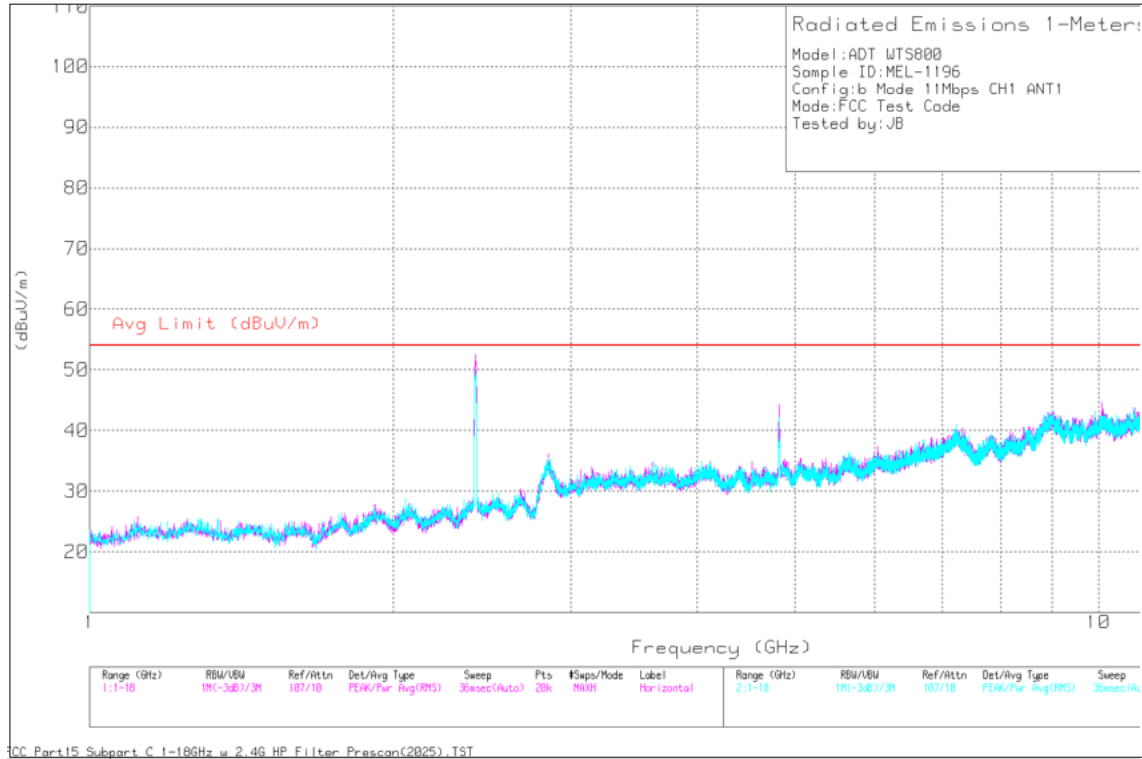


Figure 78 802.11b 11 Mbps CH1, pre-scan plot

Preliminary scans were performed to identify potential emissions within the measurement frequency range. No additional signals attributable to the EUT were detected within the measurement system sensitivity. Final measurements were performed at the frequencies exhibiting the highest levels relative to the applicable limits. The measurement points closest to the limit are reported and demonstrate compliance.

Frequency (GHz)	Meter Reading (dBuV)	Det	2023-3MH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.812	43.27	PK2	32.8	-34	42.47	-	-	74	-31.53	303	159	H
* 4.818	31.88	MAV1	32.9	-34	31.08	54	-22.92	-	-	303	159	H
7.24	41.72	PK2	36.6	-30.6	48.22	-	-	74	-25.78	155	232	H
7.239	29.57	MAV1	36.6	-30.7	35.97	54	-18.03	-	-	155	232	H
9.651	47.42	PK2	37.6	-28.3	57.42	-	-	74	-16.58	253	179	H
9.648	28.14	MAV1	37.6	-28.3	38.14	54	-15.86	-	-	253	179	H
* 12.064	38.51	PK2	39.4	-24.8	52.51	-	-	74	-21.49	116	378	H
* 12.059	27.03	MAV1	39.4	-24.8	41.03	54	-12.97	-	-	116	378	H
* 14.496	39.3	PK2	42.9	-23.8	57.7	-	-	74	-16.3	131	262	H
* 14.498	28.35	MAV1	42.9	-23.8	46.75	54	-7.25	-	-	131	262	H
16.869	39.31	PK2	40.1	-23.6	58.71	-	-	74	-15.29	218	387	H
16.898	28.14	MAV1	40.3	-23.6	47.44	54	-6.56	-	-	218	387	H
* 4.828	43.61	PK2	32.9	-34	42.81	-	-	74	-31.19	322	281	V

* 4.826	32.01	MAv1	32.9	-34	31.21	54	-22.79	-	-	322	281	V
7.233	40.98	PK2	36.6	-30.6	47.48	-	-	74	-26.52	33	293	V
7.233	29.7	MAv1	36.6	-30.7	36.1	54	-17.9	-	-	33	293	V
9.651	39.98	PK2	37.6	-28.3	49.98	-	-	74	-24.02	161	280	V
9.652	28.28	MAv1	37.6	-28.3	38.28	54	-15.72	-	-	161	280	V
* 12.064	38.38	PK2	39.4	-24.8	52.38	-	-	74	-21.62	261	215	V
* 12.063	27.25	MAv1	39.4	-24.8	41.25	54	-12.75	-	-	261	215	V
* 14.483	40.36	PK2	42.9	-23.8	58.76	-	-	74	-15.24	22	212	V
* 14.496	28.65	MAv1	42.9	-23.8	47.05	54	-6.95	-	-	22	212	V
16.885	39.67	PK2	40.2	-23.6	59.07	-	-	74	-14.93	281	339	V
16.881	28.27	MAv1	40.2	-23.6	47.57	54	-6.43	-	-	281	339	V
* 18	37.91	PK2	46.9	-23.4	61.41	-	-	74	-12.59	246	165	H
* 18	27.45	MAv1	46.9	-23.4	50.95	54	-3.05	-	-	246	165	H
* 16	35.99	PK2	37.6	-23.6	49.99	-	-	74	-24.01	108	173	H
* 16	26.47	MAv1	37.6	-23.6	40.47	54	-13.53	-	-	108	173	H
* 16	36.35	PK2	37.6	-23.6	50.35	-	-	74	-23.65	304	286	V
* 16	26.82	MAv1	37.6	-23.6	40.82	54	-13.18	-	-	304	286	V
* 17.997	37.14	PK2	46.9	-23.4	60.64	-	-	74	-13.36	67	209	V
* 18	27.78	MAv1	46.9	-23.4	51.28	54	-2.72	-	-	67	209	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

FCC Pt15 Subpart C 1-18GHz - Preamp In Filter In (2025).TST

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Radiated Band Edge

The signal labeled as 'ambient' was identified by performing a measurement on the OATS with the EUT removed from the test site and no equipment under test present. During this measurement, the OATS was configured identically to the EUT test configuration, with the antenna, cabling, and receiver active. The observed signals therefore represent ambient background signals and system noise, and are not attributable to the EUT.

Ambient RBE CH1

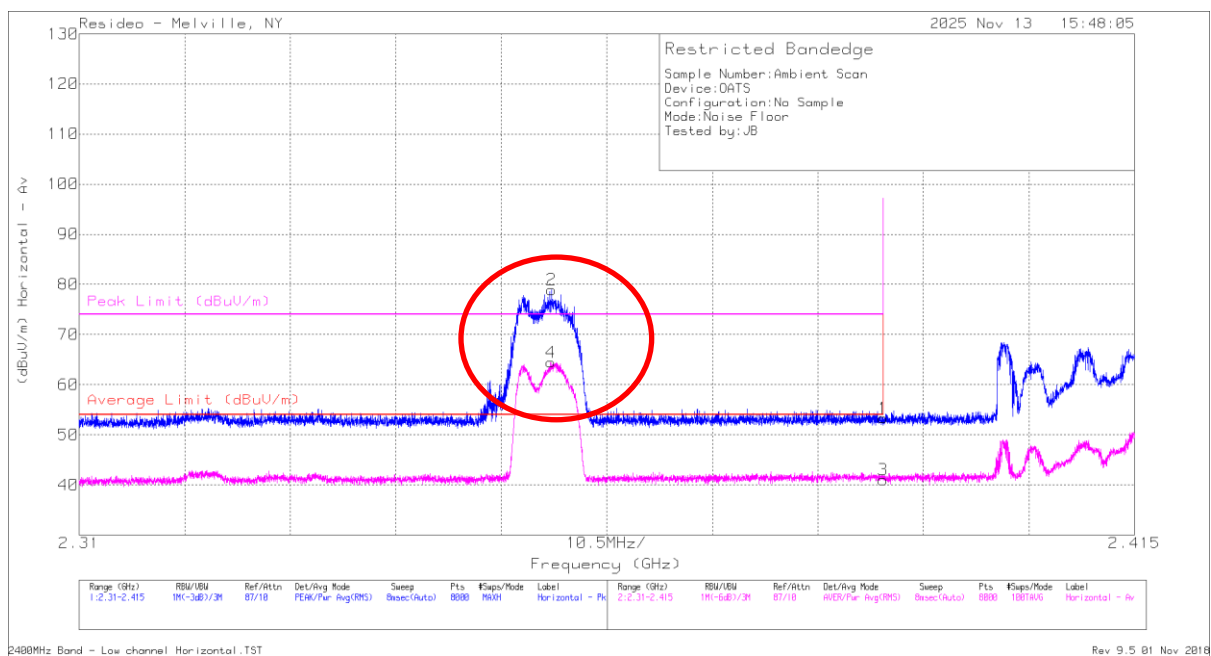


Figure 79 Ambient RBE CH1

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	19.03	Pk	28.5	5.8	53.33	-	-	74	-20.67	185	318	H
2	* 2.357	44.98	Pk	28.2	5.8	78.98	-	-	74	4.98	185	318	H
3	* 2.39	6.71	RMS	28.5	5.8	41.01	54	-12.99	-	-	185	318	H
4	* 2.357	30.47	RMS	28.2	5.8	64.47	54	10.47	-	-	185	318	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Horizontal.TST

Rev 9.5 01 Nov 2018

RBE Ambient correction for Low channel

Marker	Frequency (GHz)	Det	Ambient CF	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	Pk	0	185	318	H
2	* 2.357	Pk	25	185	318	H
3	* 2.39	RMS	0	185	318	H
4	* 2.357	RMS	23	185	318	H

Ambient RBE CH11

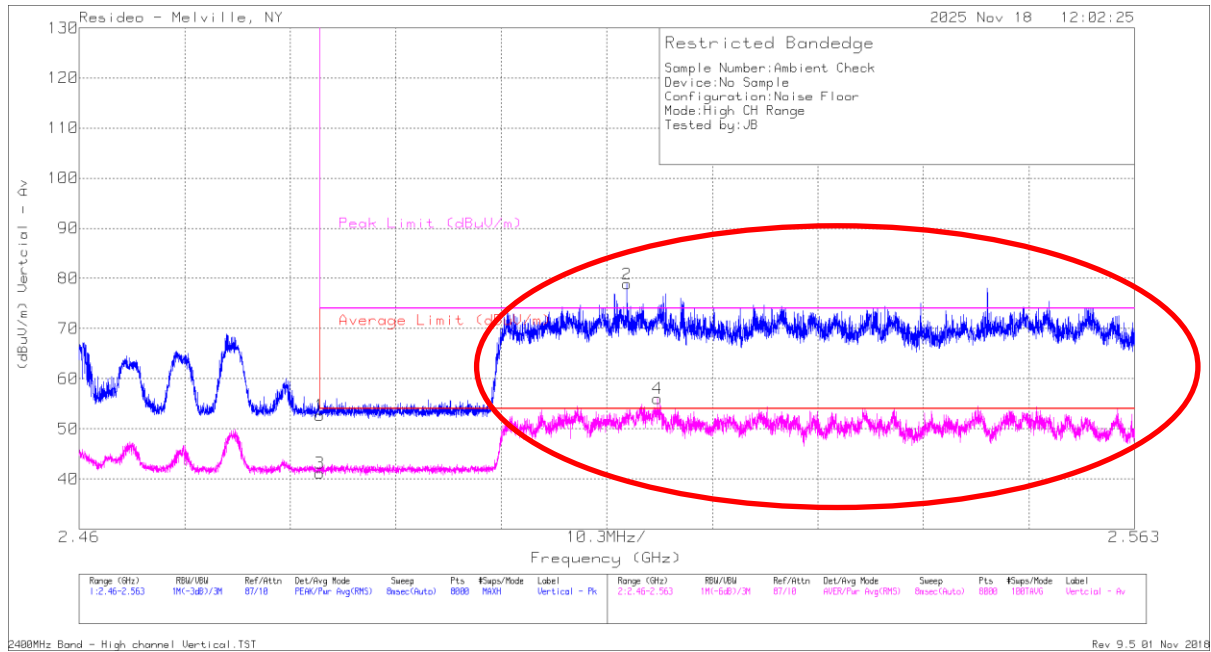


Figure 80 Ambient RBE CH11

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	18.04	Pk	28.7	5.9	52.64	-	-	74	-21.36	74	253	V
2	2.513	44.08	Pk	28.8	6	78.88	-	-	74	4.88	74	253	V
3	* 2.484	6.52	RMS	28.7	5.9	41.12	54	-12.88	-	-	74	253	V
4	2.516	21.18	RMS	28.8	6	55.98	54	1.98	-	-	74	253	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Vertical.TST

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Marker	Frequency (GHz)	Det	Ambient CF	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	Pk	0	185	318	H
2	* 2.357	Pk	26	185	318	H
3	* 2.39	RMS	0	185	318	H
4	* 2.357	RMS	14	185	318	H

802.11b 11 Mbps CH1 Horizontal

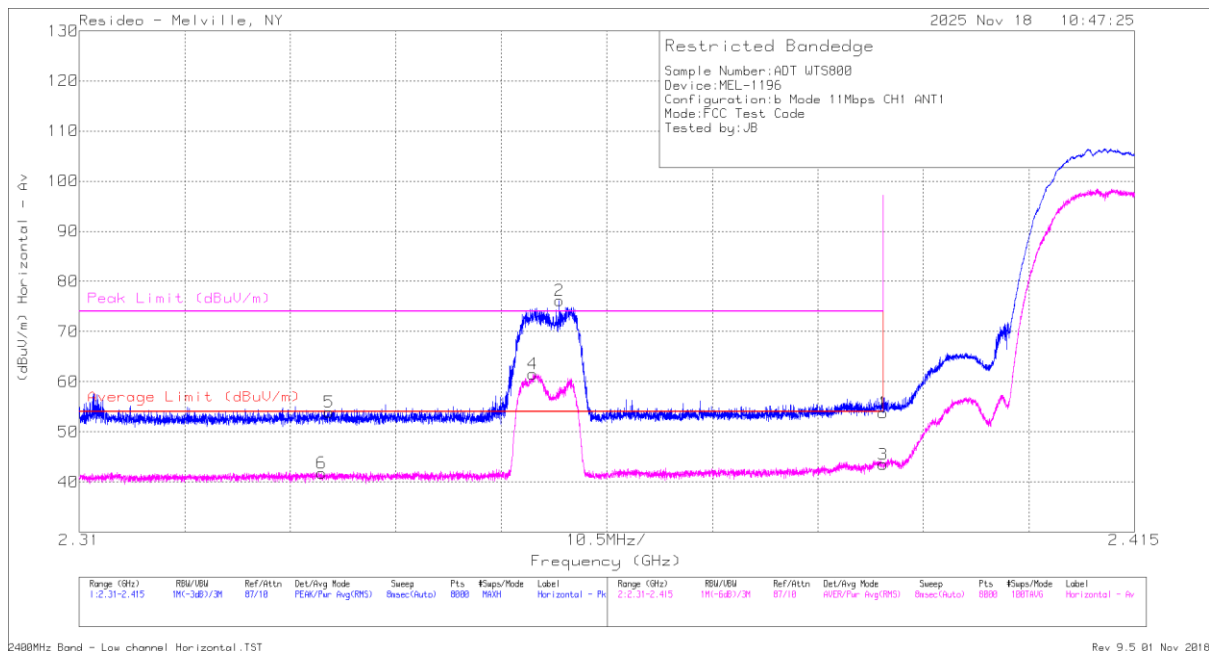


Figure 81 802.11b 11 Mbps – CH1 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	19.5	Pk	28.5	5.8	0	53.8	-	-	74	-20.2	126	103	H
2	* 2.358	42.14	Pk	28.2	5.8	25	51.14	-	-	74	-22.86	126	103	H
5	* 2.335	20.04	Pk	28.1	5.8	0	53.94	-	-	74	-20.06	126	103	H
3	* 2.39	9.16	RMS	28.5	5.8	0	43.46	54	-10.54	-	-	126	103	H
4	* 2.355	27.51	RMS	28.2	5.8	23	38.51	54	-15.49	-	-	126	103	H
6	* 2.334	7.9	RMS	28.1	5.8	0	41.8	54	-12.2	-	-	126	103	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11b 11 Mbps CH1 Vertical

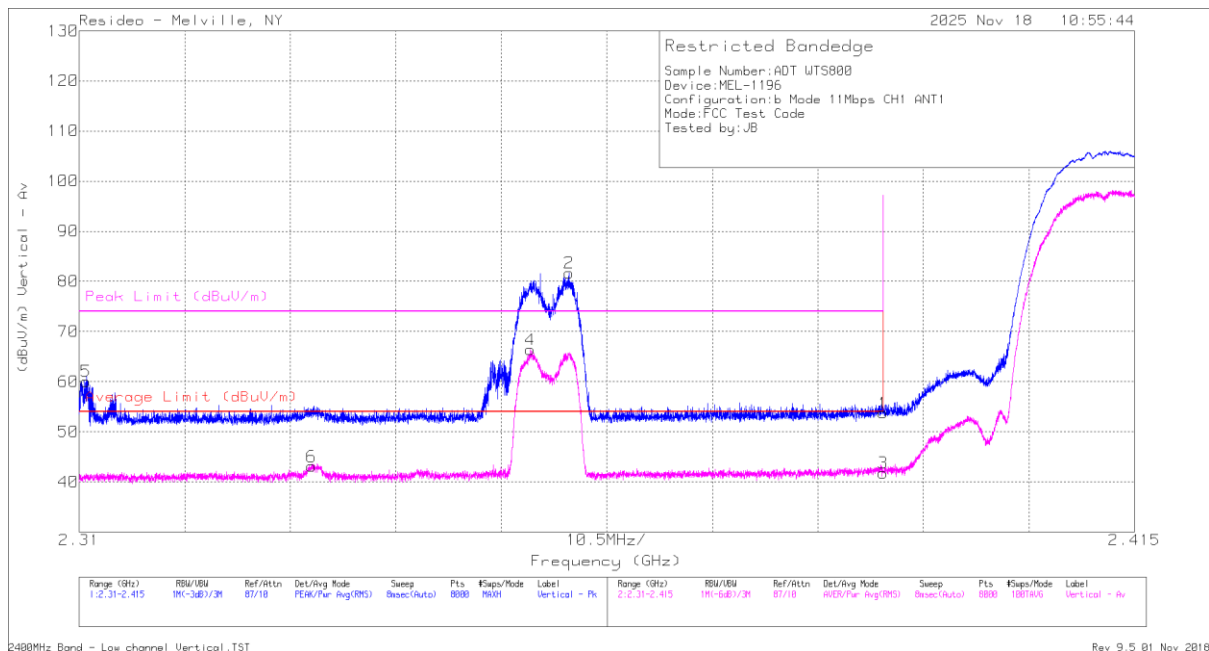


Figure 82 802.11b 11 Mbps – CH1 Vertical

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	19.42	Pk	28.5	5.8	0	53.72	-	-	74	-20.28	273	296	V
2	* 2.359	47.59	Pk	28.3	5.8	25	56.69	-	-	74	-17.31	273	296	V
5	* 2.311	26.4	Pk	27.9	5.7	0	60	-	-	74	-14	273	296	V
3	* 2.39	7.41	RMS	28.5	5.8	0	41.71	54	-12.29	-	-	273	296	V
4	* 2.355	32.36	RMS	28.2	5.8	23	43.36	54	-10.64	-	-	273	296	V
6	* 2.333	9.17	RMS	28.1	5.8	0	43.07	54	-10.93	-	-	273	296	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Vertical.TST

Rev 9.5 01 Nov 2018

802.11b 11 Mbps CH11 Horizontal

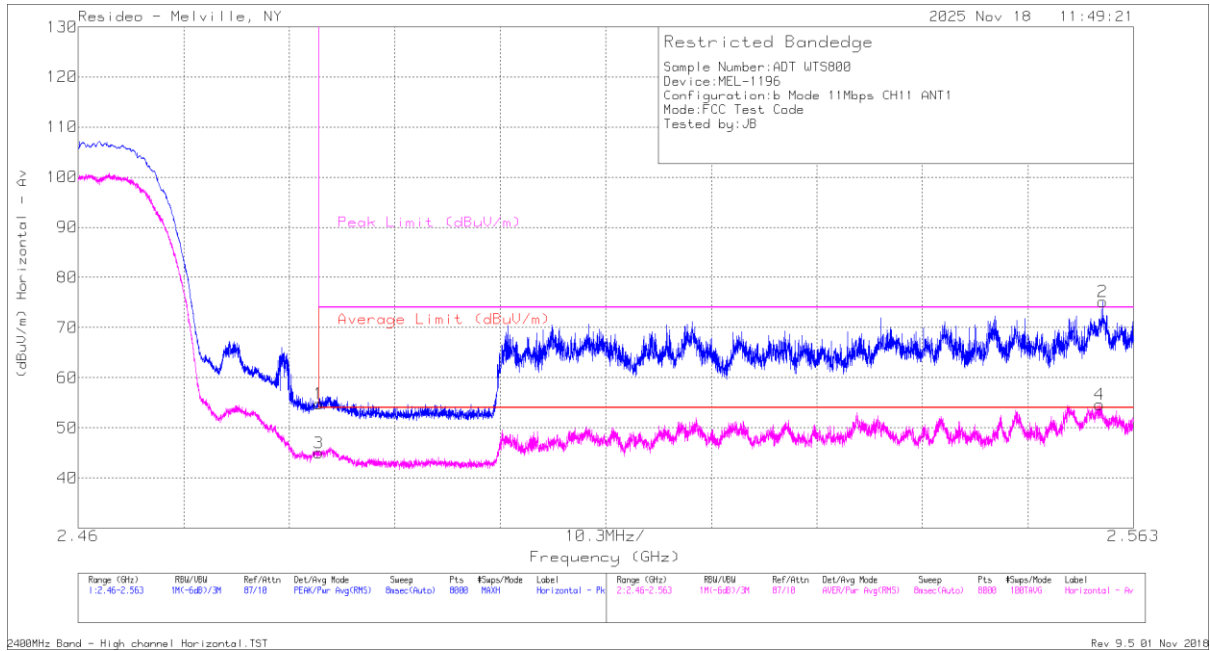


Figure 83 802.11b 11 Mbps – CH11 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB0)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	20.15	Pk	28.7	5.9	0	54.75	-	-	74	-19.25	317	310	H
2	2.56	40.17	Pk	29	6	26	49.17	-	-	74	-24.83	317	310	H
3	* 2.484	10.36	RMS	28.7	5.9	0	44.96	54	-9.04	-	-	317	310	H
4	2.56	19.62	RMS	29	6	14	40.62	54	-13.38	-	-	317	310	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11b 11 Mbps CH11 Vertical

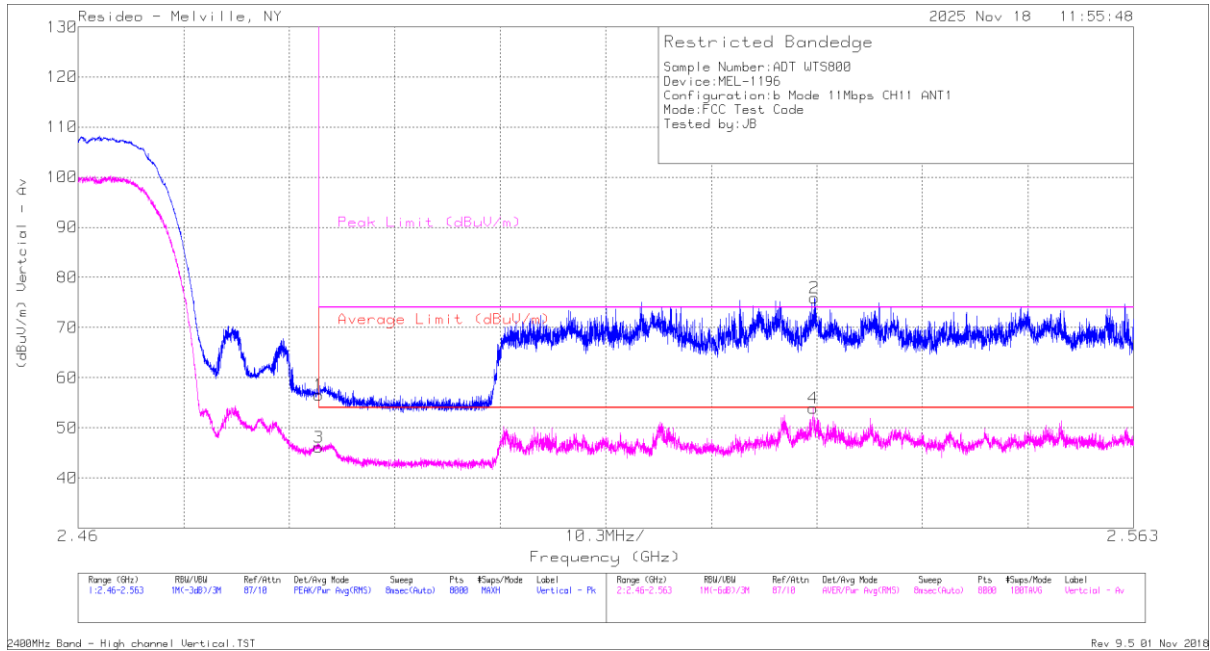


Figure 84 802.11b 11 Mbps – CH11 Vertical

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	21.96	Pk	28.7	5.9	0	56.56	-	-	74	-17.44	74	253	V
2	2.532	41.03	Pk	28.9	6	26	75.93	-	-	74	-24.07	74	253	V
3	* 2.484	11.49	RMS	28.7	5.9	0	46.09	54	-7.91	-	-	74	253	V
4	2.532	19.05	RMS	28.9	6	14	53.95	54	-14.05	-	-	74	253	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Vertical.TST

Rev 9.5 01 Nov 2018

802.11g 54 Mbps CH1 Horizontal

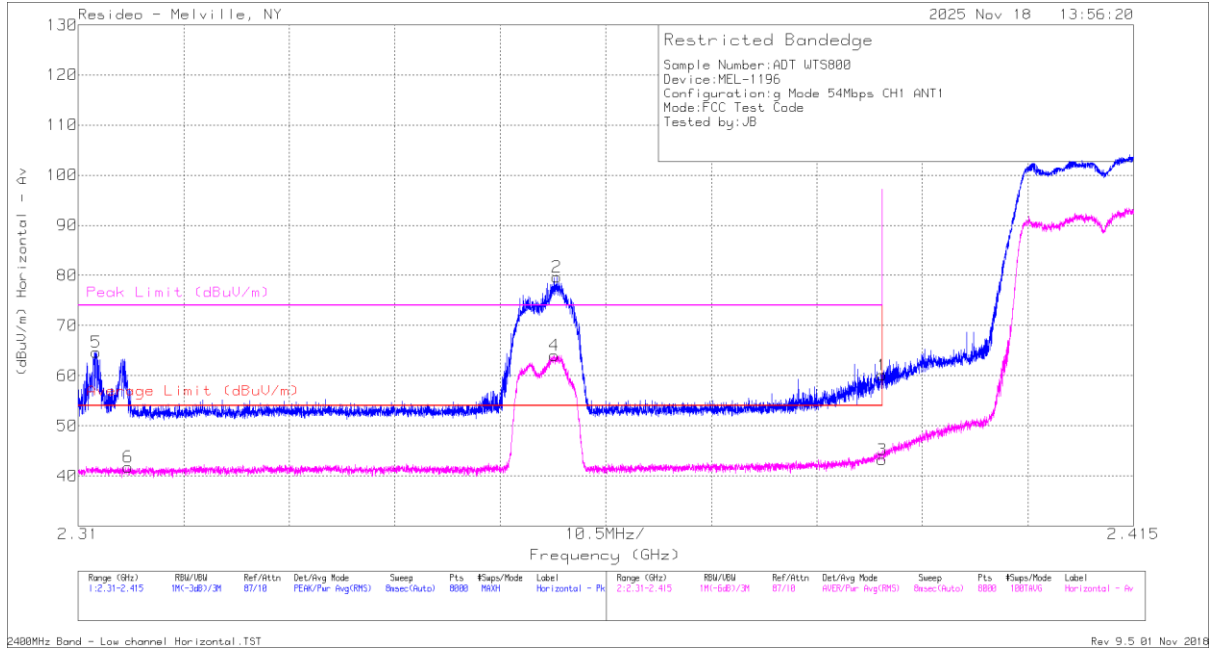


Figure 85 802.11g 54 Mbps – CH1 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	25.8	Pk	28.5	5.8	0	60.1	-	-	74	-13.9	174	278	H
2	* 2.358	45.65	Pk	28.2	5.8	25	54.65	-	-	74	-19.35	174	278	H
5	* 2.312	31.1	Pk	27.9	5.7	0	64.7	-	-	74	-9.3	174	278	H
3	* 2.39	8.91	RMS	28.5	5.8	0	43.21	54	-10.79	-	-	174	278	H
4	* 2.357	30.08	RMS	28.2	5.8	23	41.08	54	-12.92	-	-	174	278	H
6	* 2.315	8.13	RMS	27.9	5.7	0	41.73	54	-12.27	-	-	174	278	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11g 54 Mbps CH1 Vertical

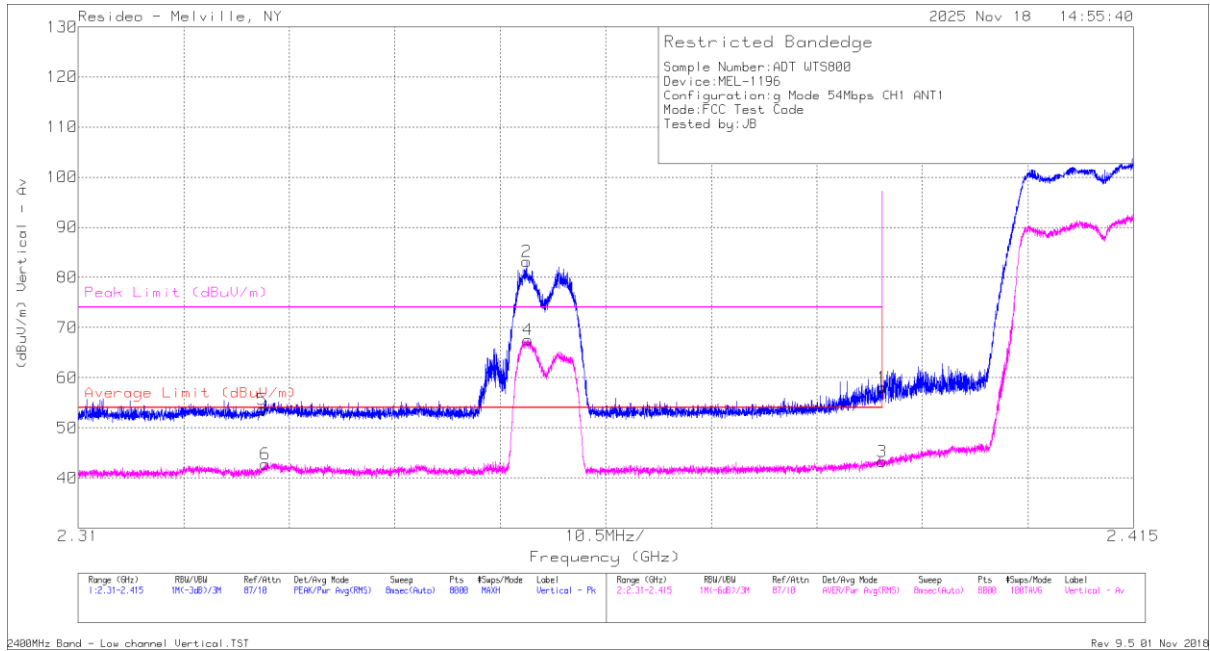


Figure 86 802.11g 54 Mbps – CH1 Vertical

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB0)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	23.71	Pk	28.5	5.8	0	58.01	-	-	74	-15.99	262	324	V
2	* 2.355	49.15	Pk	28.2	5.8	25	58.15	-	-	74	-15.85	262	324	V
5	* 2.328	19.92	Pk	28	5.7	0	53.62	-	-	74	-20.38	262	324	V
3	* 2.39	8.93	RMS	28.5	5.8	0	43.23	54	-10.77	-	-	262	324	V
4	* 2.355	33.59	RMS	28.2	5.8	23	44.59	54	-9.41	-	-	262	324	V
6	* 2.329	9.11	RMS	28	5.7	0	42.81	54	-11.19	-	-	262	324	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Vertical.TST

Rev 9.5 01 Nov 2018

802.11g 54 Mbps CH11 Horizontal

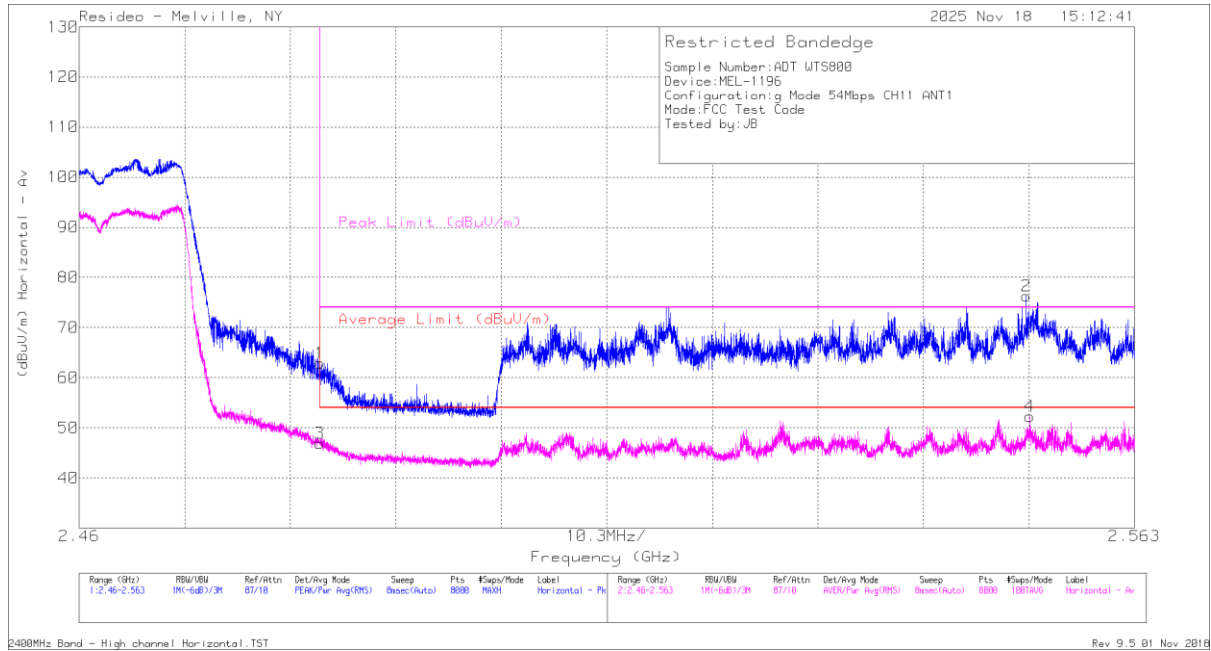


Figure 87 802.11g 54 Mbps – CH11 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	28.27	Pk	28.7	5.9	0	62.87	-	-	74	-11.13	170	242	H
2	2.552	41.28	Pk	29	6	26	50.28	-	-	74	-23.72	170	242	H
3	* 2.484	12.26	RMS	28.7	5.9	0	46.86	54	-7.14	-	-	170	242	H
4	2.553	17.31	RMS	29	6	14	38.31	54	-15.69	-	-	170	242	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11g 54 Mbps CH11 Vertical

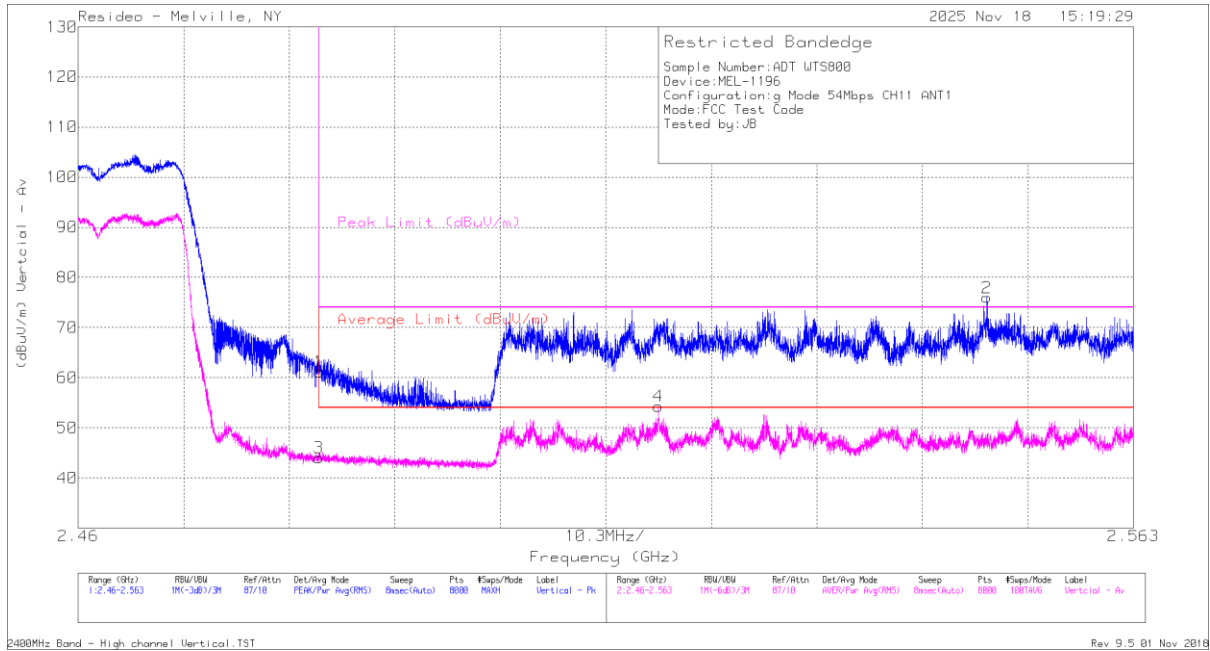


Figure 88 802.11g 54 Mbps – CH11 Vertical

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	26.54	Pk	28.7	5.9	0	61.14	-	-	74	-12.86	267	288	V
2	2.549	40.99	Pk	29	6	26	59.99	-	-	74	-14.01	267	288	V
3	* 2.484	9.37	RMS	28.7	5.9	0	43.97	54	-10.03	-	-	267	288	V
4	2.517	19.47	RMS	28.8	6	14	40.27	54	-13.73	-	-	267	288	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Vertical.TST

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802.11n mcs7 CH1 Horizontal

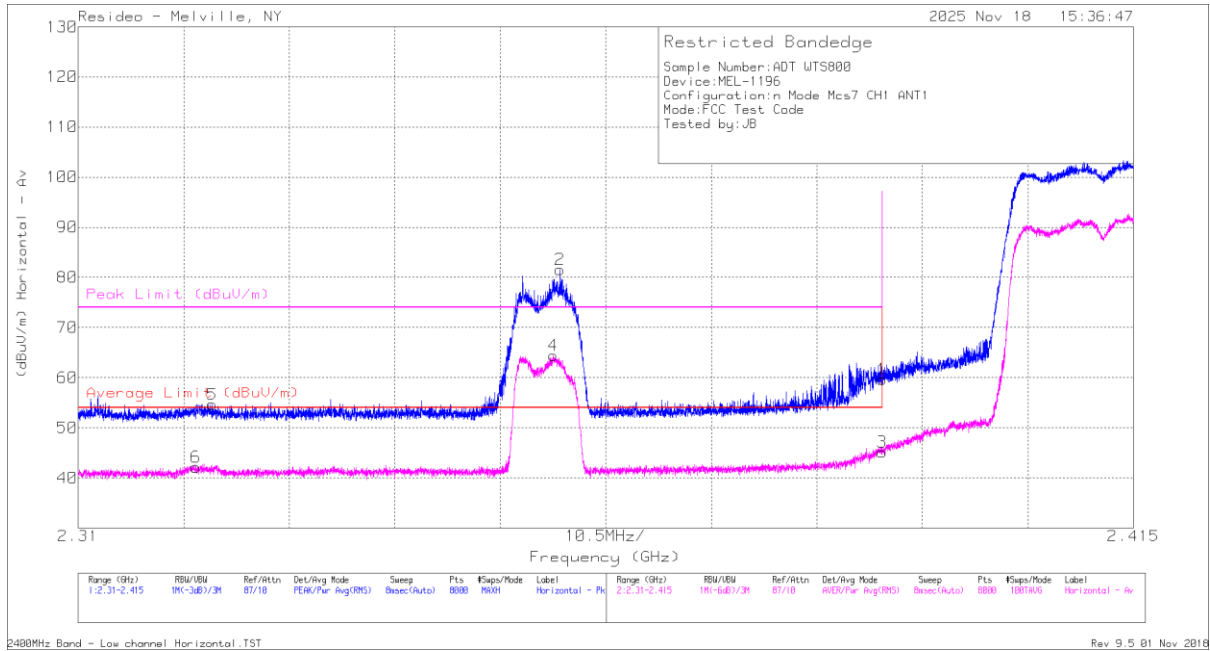


Figure 89 802.11n mcs7 – CH1 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	25.33	Pk	28.5	5.8	0	59.63	-	-	74	-14.37	42	288	H
2	* 2.358	47.54	Pk	28.2	5.8	25	56.54	-	-	74	-17.46	42	288	H
5	* 2.323	20.9	Pk	28	5.7	0	54.6	-	-	74	-19.4	42	288	H
3	* 2.39	10.86	RMS	28.5	5.8	0	45.16	54	-8.84	-	-	42	288	H
4	* 2.357	30.4	RMS	28.2	5.8	23	41.4	54	-12.6	-	-	42	288	H
6	* 2.322	8.48	RMS	28	5.7	0	42.18	54	-11.82	-	-	42	288	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11n mcs7 CH1 Vertical

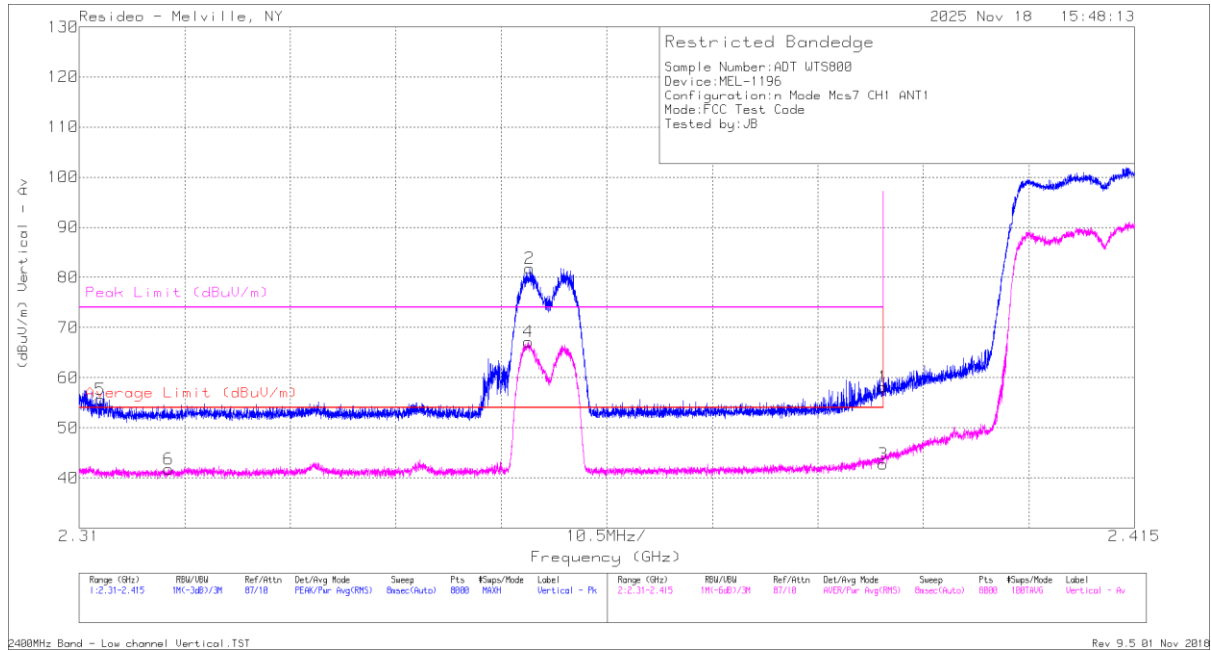


Figure 90 802.11n mcs7 – CH1 Vertical

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	23.89	Pk	28.5	5.8	0	58.19	-	-	74	-15.81	75	318	V
2	* 2.355	47.86	Pk	28.2	5.8	25	56.86	-	-	74	-17.14	75	318	V
5	* 2.312	22.03	Pk	27.9	5.7	0	55.63	-	-	74	-18.37	75	318	V
3	* 2.39	8.48	RMS	28.5	5.8	0	42.78	54	-11.22	-	-	75	318	V
4	* 2.355	33.13	RMS	28.2	5.8	23	44.13	54	-9.87	-	-	75	318	V
6	* 2.319	8.03	RMS	28	5.7	0	41.73	54	-12.27	-	-	75	318	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - Low channel Vertical.TST

Rev 9.5 01 Nov 2018

802.11n mcs7 CH11 Horizontal

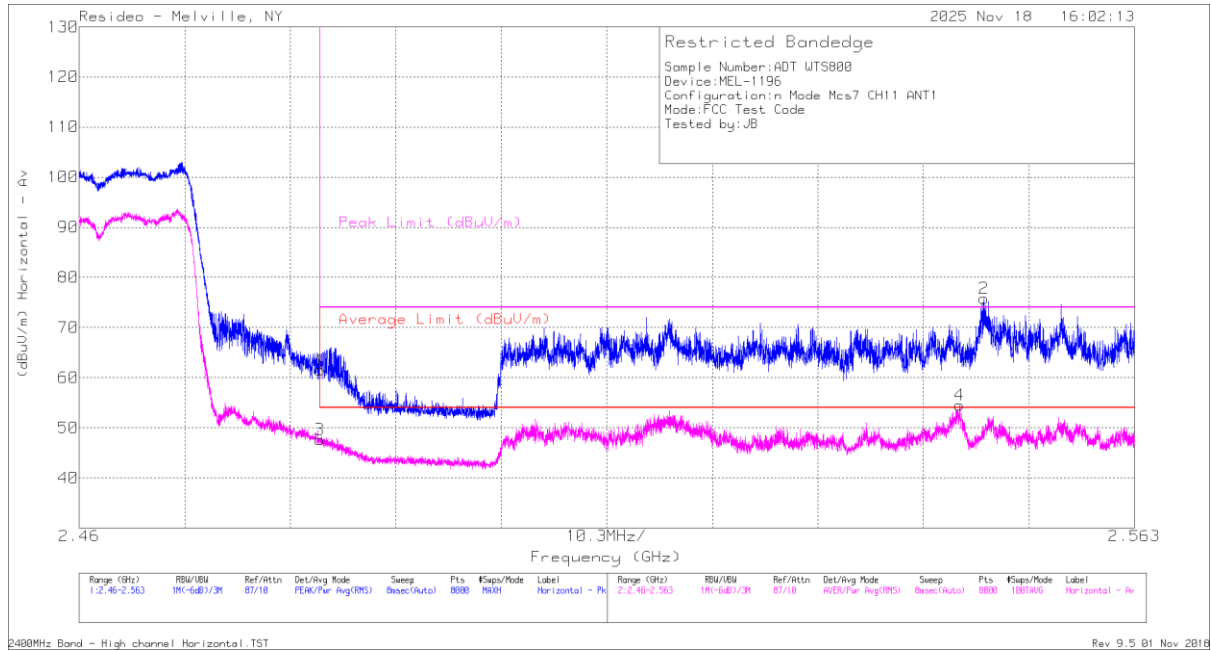


Figure 91 802.11n mcs7 – CH11 Horizontal

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	26.88	Pk	28.7	5.9	0	61.48	-	-	74	-12.52	173	363	H
2	2.548	40.77	Pk	29	6	26	49.77	-	-	74	-24.23	173	363	H
3	* 2.484	13.04	RMS	28.7	5.9	0	47.64	54	-6.36	-	-	173	363	H
4	2.546	19.49	RMS	29	6	14	40.49	54	-13.51	-	-	173	363	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Horizontal.TST

Rev 9.5 01 Nov 2018

802.11n mcs7 CH11 Vertical

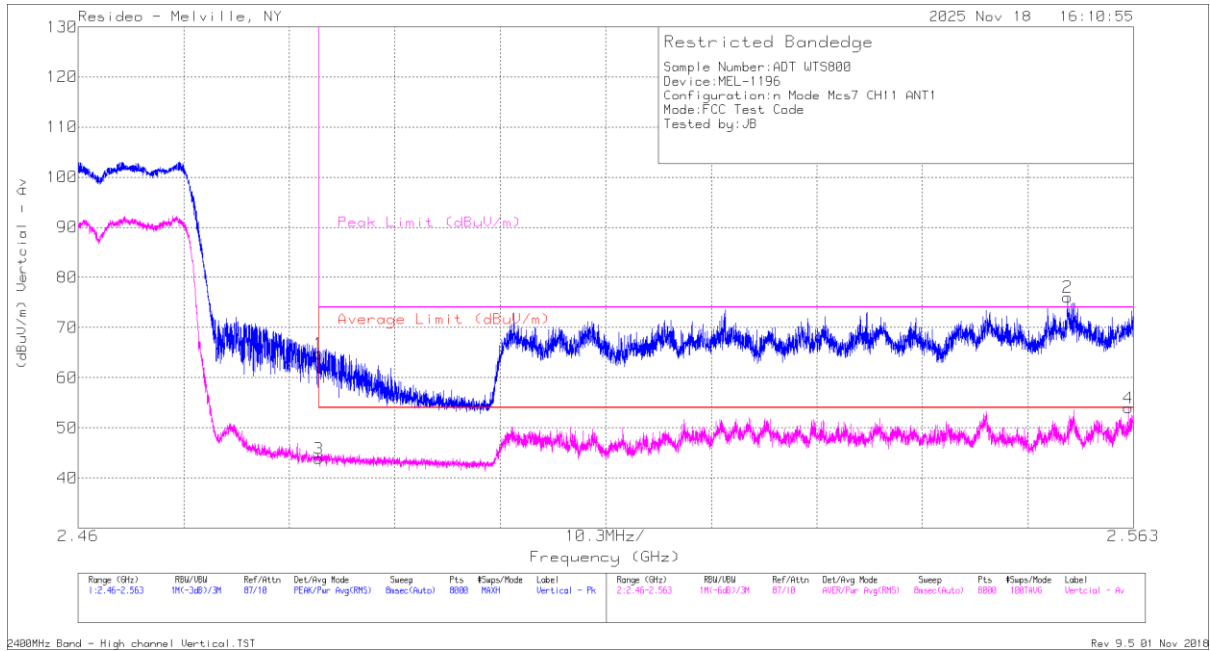


Figure 92 802.11n mcs7 – CH11 Vertical

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	Gain/Loss (dB)	Ambient Correction (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	30.15	Pk	28.7	5.9	0	64.75	-	-	74	-9.25	270	285	V
2	2.557	41.06	Pk	29	6	26	50.06	-	-	74	-23.94	270	285	V
3	* 2.484	9.23	RMS	28.7	5.9	0	43.83	54	-10.17	-	-	270	285	V
4	2.563	18.96	RMS	29	6	14	39.96	54	-14.04	-	-	270	285	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

2400MHz Band - High channel Vertical.TST

Rev 9.5 01 Nov 2018

Elevated data points observed near the band edge are attributable to ambient signals present during the measurement.

Worst Case configuration Tx 18 GHz- 26 GHz (Antenna 1)

No additional EUT-related emissions were detected within the measurement system sensitivity across the evaluated frequency range. Final measurements were performed only at the frequencies closest to the applicable limits, which are reported herein.

Frequency (GHz)	Meter Reading (dBuV)	Det	2024-3MH	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
24	30.46	PK2	45.5	-19.5	56.46	-	-	74	-17.54	153	177	H
24	21.08	MAv1	45.5	-19.5	47.08	54	-6.92	-	-	153	177	H
25.004	35.1	PK2	45.6	-20.2	60.5	-	-	74	-13.5	13	145	H
25.004	23.59	MAv1	45.6	-20.2	48.99	54	-5.01	-	-	13	145	H
26	39.03	PK2	46.7	-20	65.73	-	-	74	-8.27	37	188	H
26	26.83	MAv1	46.7	-20	53.53	54	-0.47	-	-	37	188	H
24	29.09	PK2	45.5	-19.4	55.19	-	-	74	-18.81	27	130	V
24	20.61	MAv1	45.5	-19.5	46.61	54	-7.39	-	-	27	130	V
25	32.52	PK2	45.6	-20.2	57.92	-	-	74	-16.08	27	281	V
25	22.54	MAv1	45.6	-20.2	47.94	54	-6.06	-	-	27	281	V
25.995	35.48	PK2	46.7	-20	62.18	-	-	74	-11.82	165	281	V
25.999	26.86	MAv1	46.7	-20	53.56	54	-0.44	-	-	165	281	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

FCC Pt15 Subpart C 18-26GHz 1-Meter (2025).TST

Rev 9.5 01 Nov 2018

AC Power Conducted

EUT:	MEL-1196	Date:	11/05/2025
Serial Number	Non-serialized	Temperature	21.7 °C
Customer:	Resideo LLC. / Ademco Inc.	Relative Humidity	28
Tested By:	Jose Badia	Bar Pressure:	1012
Power:		Job site	Melville, NY

Test specifications

Specification: Equipment Class B	Method
FCC 15.207	ANSI C63.4:2014

Test parameters

Run#:		Polarity	Neutral	Additional Ext. Attenuation (dB)	
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EUT OPERATING MODE:

FCC Test Mode

DEVIATIONS FROM TEST STANDARDS:

None

Test results

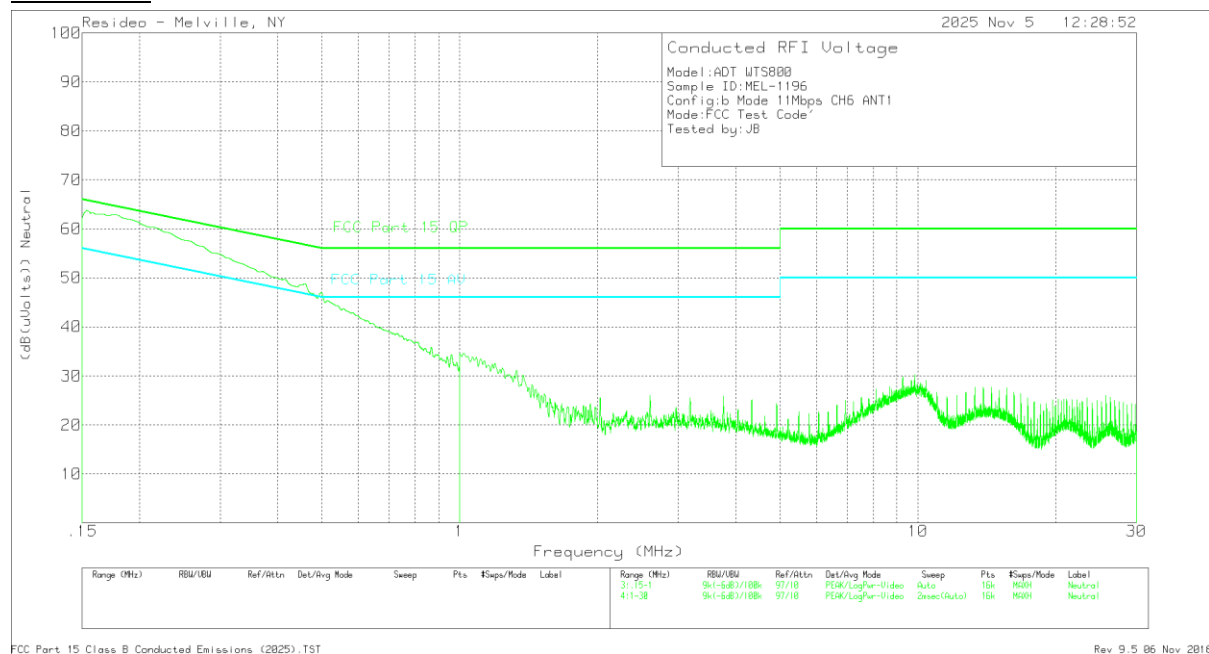


Figure 93 Powerline Conducted Emissions - Neutral

Report #: RESI-27001

Conclusion

Pass

Test parameters

Run#:		Polarity	Line	Additional Ext. Attenuation (dB)	
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EUT OPERATING MODE:

FCC Test Mode

DEVIATIONS FROM TEST STANDARDS:

None

Test results

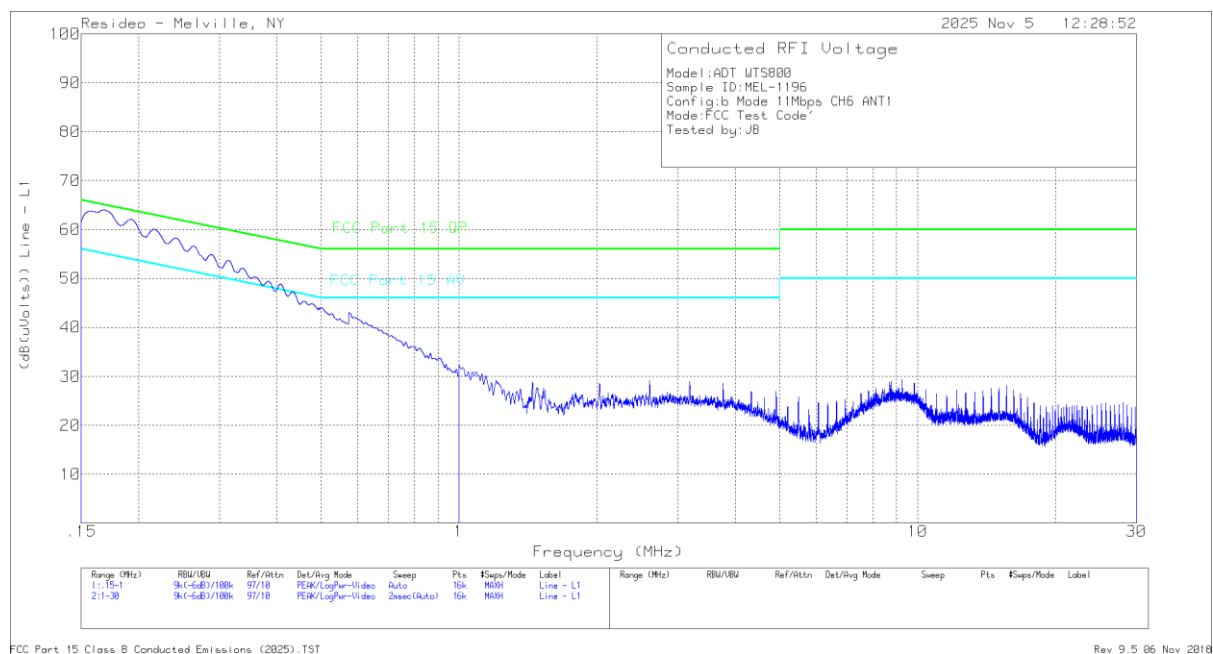


Figure 94 Powerline Conducted Emissions - Line

Trace Markers

Frequency (MHz)	Meter Reading (dBuV)	Det	2025-LISN05 241259 (IL L1 Limi	Gain/Loss (dB)	Corrected Reading (dB(uVolts))	FCC Part 15 QP	Margin (dB)
.16736	53.2	Pk	10.8	0	64	65.09	-1.09
.19423	51.25	Pk	10.7	0	61.95	63.85	-1.9
.24773	46.54	Pk	10.5	0	57.04	61.83	-4.79
.42849	36.52	Pk	10.4	0	46.92	57.28	-10.36
.57191	30.47	Pk	10.3	0	40.77	56	-15.23
2.60362	18.76	Pk	10.3	0	29.06	56	-26.94
16.16463	13.2	Pk	10.2	.1	23.5	60	-36.5
.16842	52.1	Pk	10.8	0	62.9	65.04	-2.14
.21702	49.64	Pk	10.6	0	60.24	62.93	-2.69
.32206	43.01	Pk	10.4	0	53.41	59.65	-6.24
.45626	38.27	Pk	10.4	0	48.67	56.76	-8.09
.49818	36.64	Pk	10.4	0	47.04	56.03	-8.99
3.75968	15.62	Pk	10.3	0	25.92	56	-30.08
25.75373	13.89	Pk	10.4	.1	24.39	60	-35.61

Pk - Peak detector

Frequency (MHz)	Meter Reading (dBuV)	Det	2025-LISN05 241259 (IL L1 Limi	Gain/Loss (dB)	Corrected Reading (dB(uVolts))	FCC Part 15 AV	Margin (dB)
.1673	23.03	Ca	10.8	0	33.83	55.09	-21.26
.19368	26.61	Ca	10.7	0	37.31	53.88	-16.57
.24817	20.74	Ca	10.5	0	31.24	51.82	-20.58
.42876	.58	Ca	10.4	0	10.98	47.28	-36.3
.57193	1.56	Ca	10.3	0	11.86	46	-34.14
2.60466	12.17	Ca	10.3	0	22.47	46	-23.53
16.1673	2.95	Ca	10.2	.1	13.25	50	-36.75
.1684	17.37	Ca	10.8	0	28.17	55.04	-26.87
.2176	14.8	Ca	10.6	0	25.4	52.91	-27.51
.32247	9.59	Ca	10.4	0	19.99	49.64	-29.65
.45594	16.77	Ca	10.4	0	27.17	46.77	-19.6
.49775	20.92	Ca	10.4	0	31.32	46.04	-14.72
3.76011	8.12	Ca	10.3	0	18.42	46	-27.58
25.745	9.44	Ca	10.4	.1	19.94	50	-30.06

Ca - CISPR average detection

FCC Part 15 Class B Conducted Emissions (2025).TST

Rev 9.5 06 Nov 2018

Conclusion:

Pass

END OF REPORT