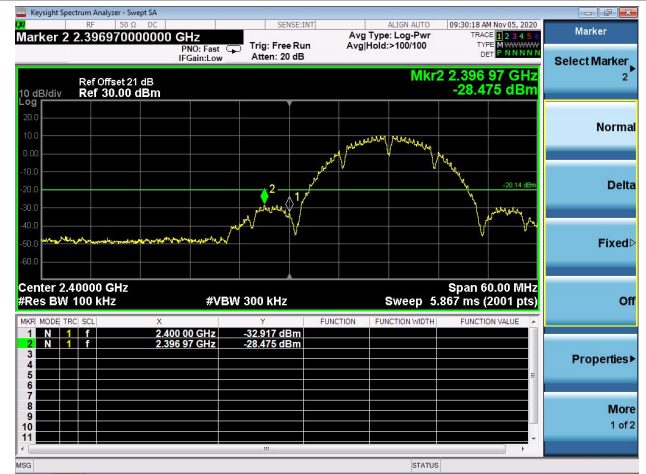


802.11b Out-of-Band Emissions - Ant 1 / Ant 0 + 1

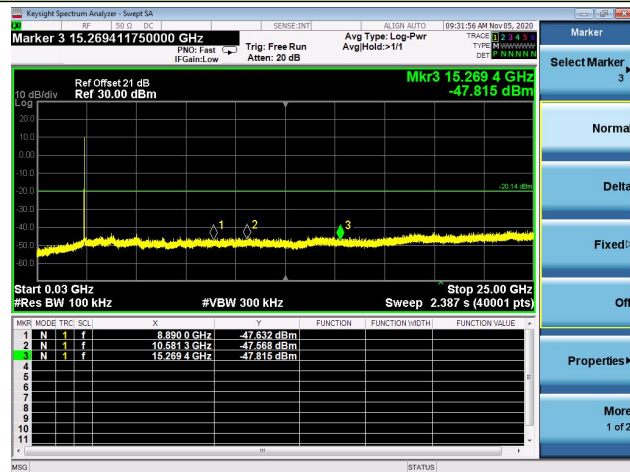
Channel 01 (2412MHz)

100kHz PSD Reference Level

Low Band Edge



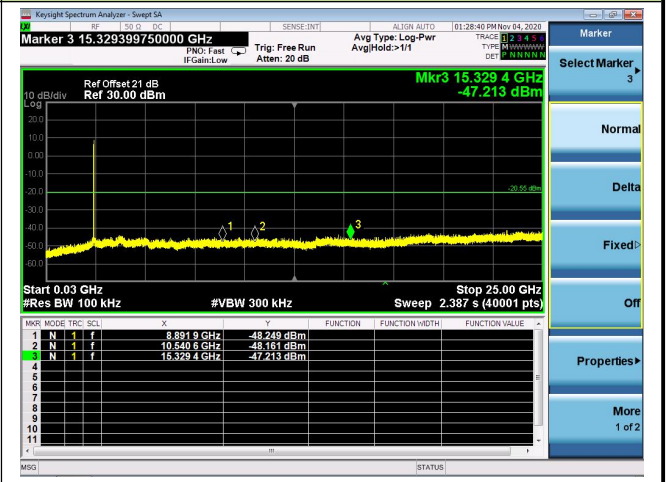
Spurious Emission



802.11b Out-of-Band Emissions - Ant 1 / Ant 0 + 1
Channel 06 (2437MHz)

100kHz PSD Reference Level

Spurious Emission

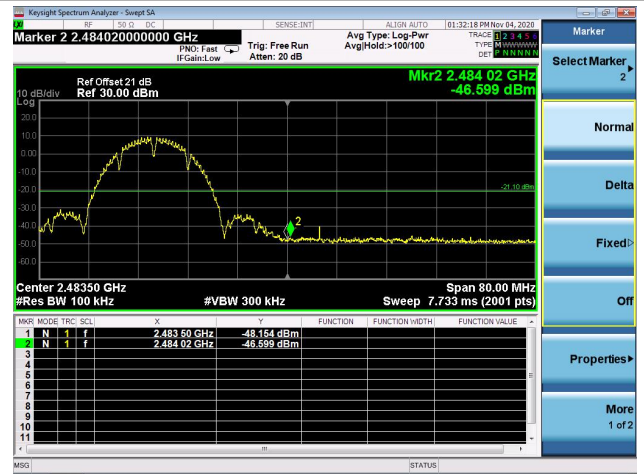


802.11b Out-of-Band Emissions - Ant 1 / Ant 0 + 1
Channel 11 (2462MHz)

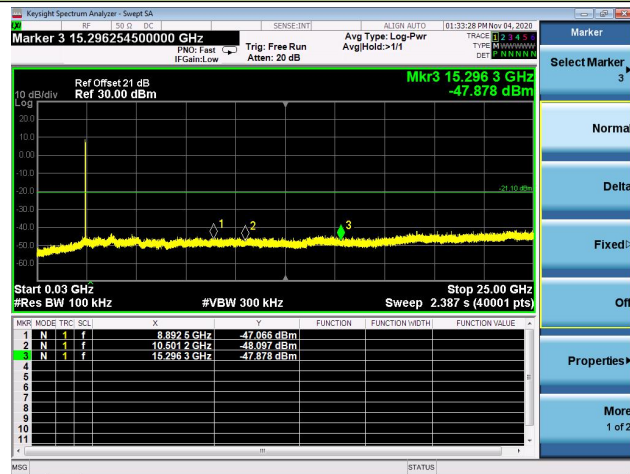
100kHz PSD Reference Level



High Band Edge



Spurious Emission

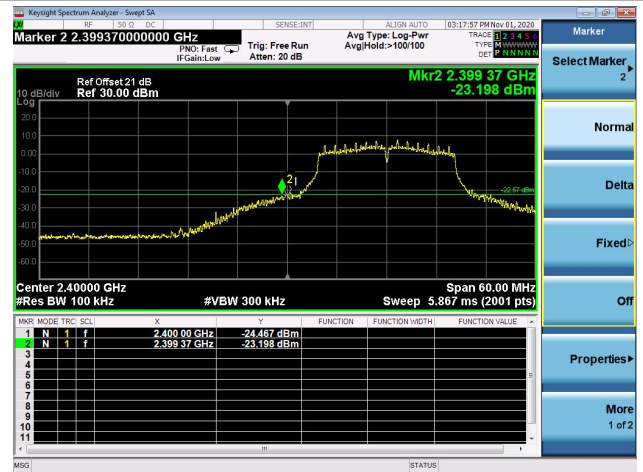
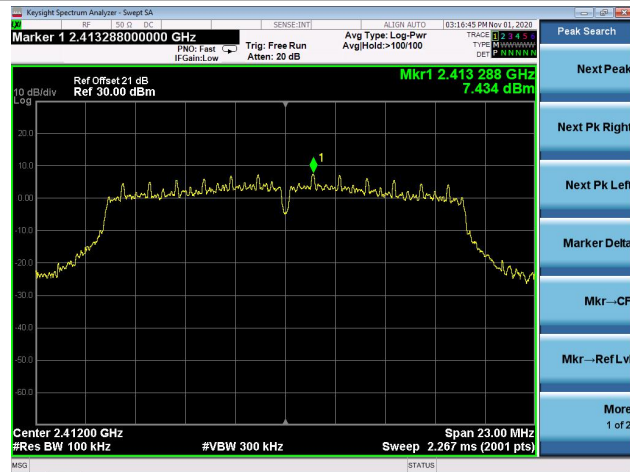


802.11g Out-of-Band Emissions - Ant 1 / Ant 0 + 1

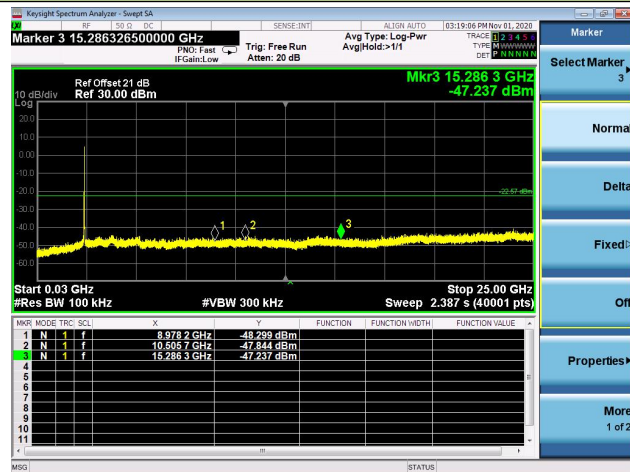
Channel 01 (2412MHz)

100kHz PSD Reference Level

Low Band Edge



Spurious Emission

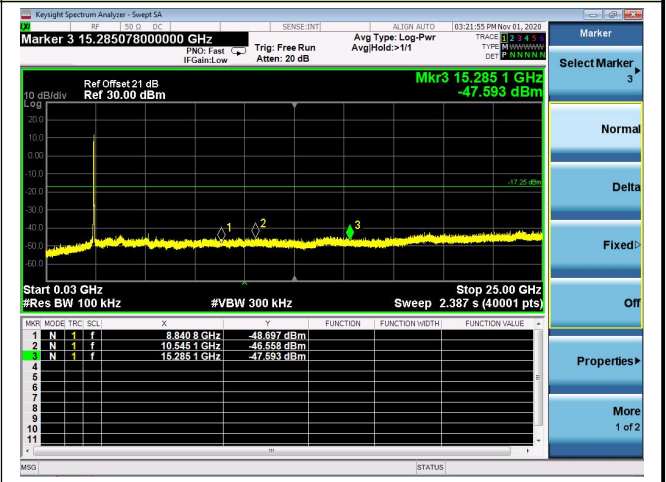


802.11g Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 06 (2437MHz)

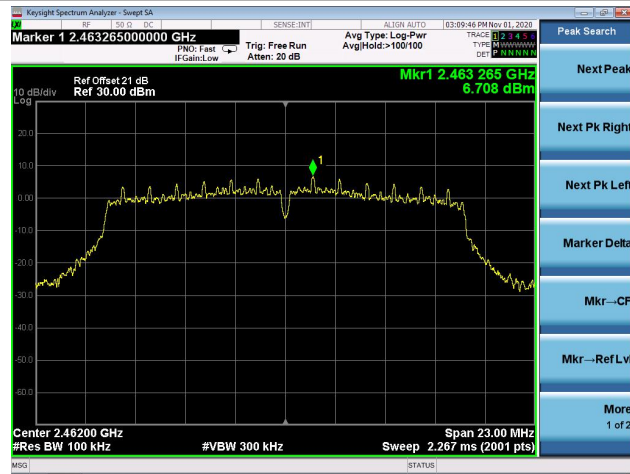
100kHz PSD Reference Level

Spurious Emission

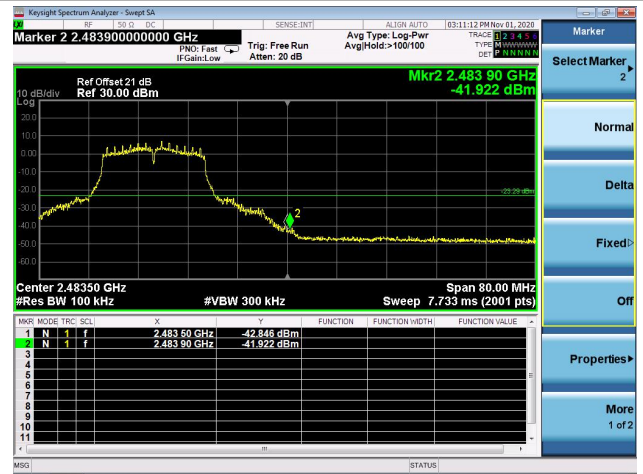


802.11g Out-of-Band Emissions - Ant 1 / Ant 0 + 1
Channel 11 (2462MHz)

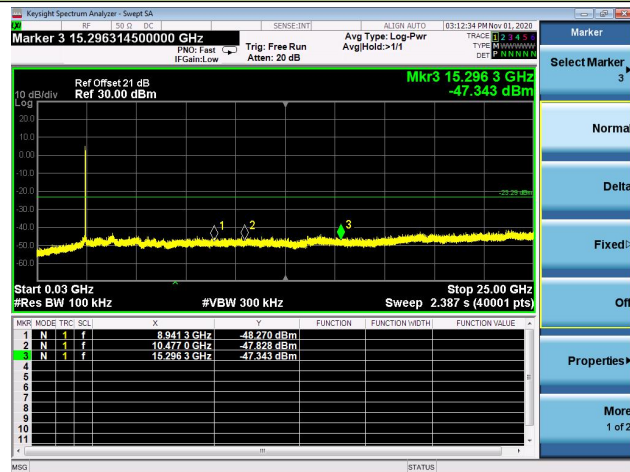
100kHz PSD Reference Level



High Band Edge



Spurious Emission

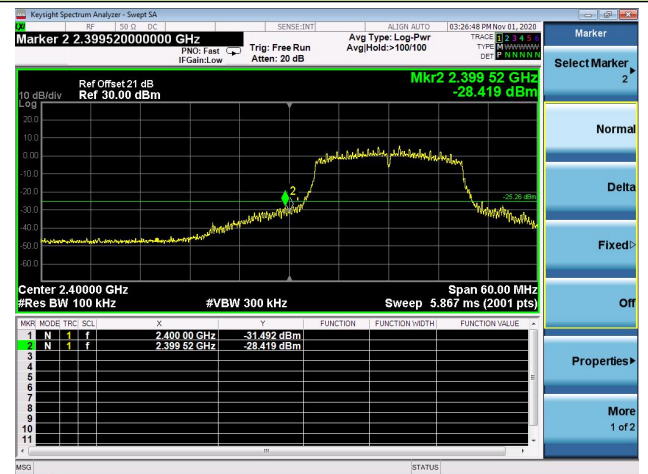
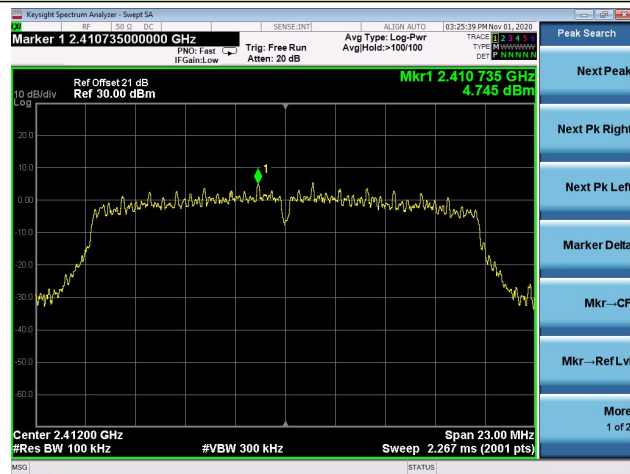


802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

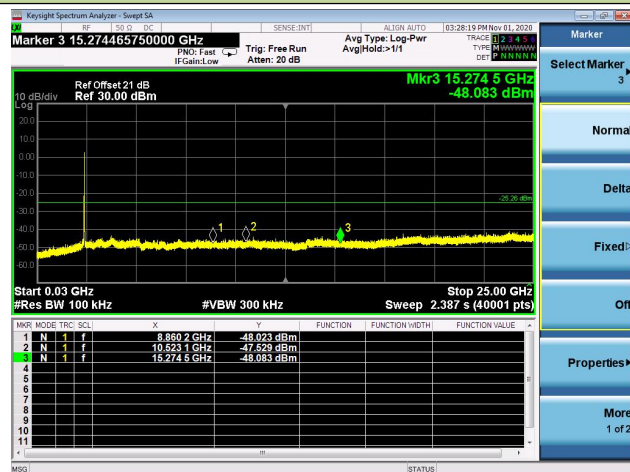
Channel 01 (2412MHz)

100kHz PSD Reference Level

Low Band Edge



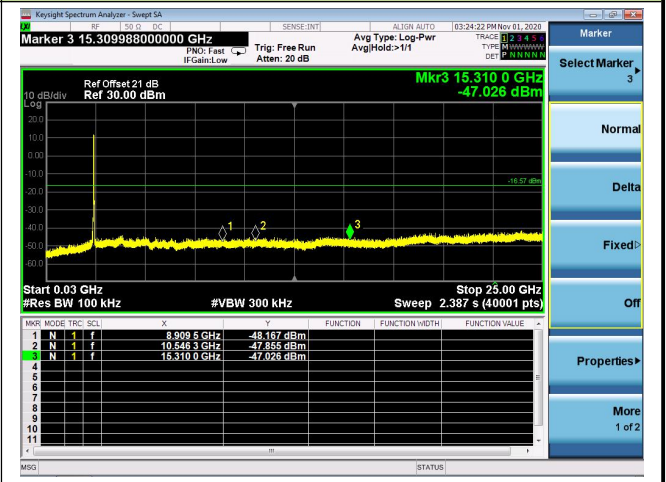
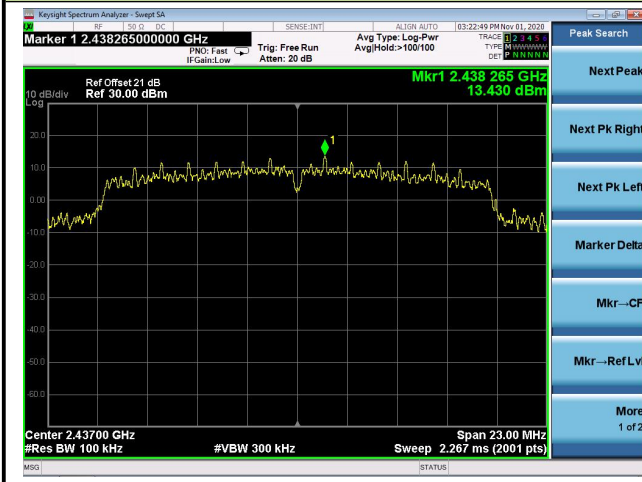
Spurious Emission



802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1
Channel 06 (2437MHz)

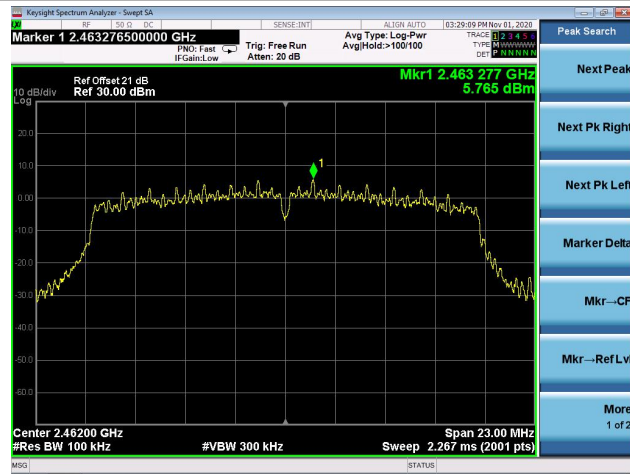
100kHz PSD Reference Level

Spurious Emission

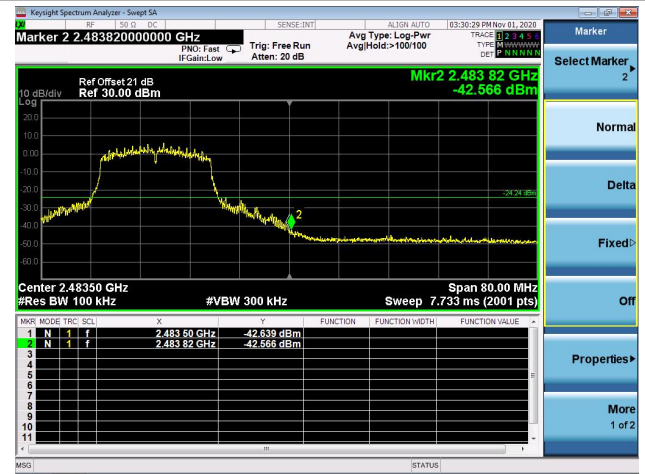


802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1
Channel 11 (2462MHz)

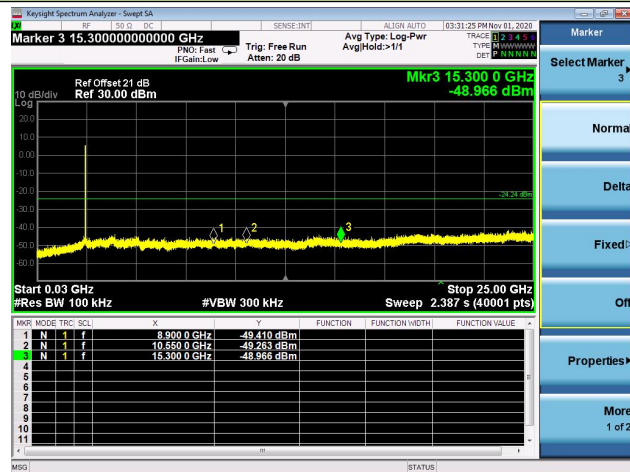
100kHz PSD Reference Level



High Band Edge



Spurious Emission

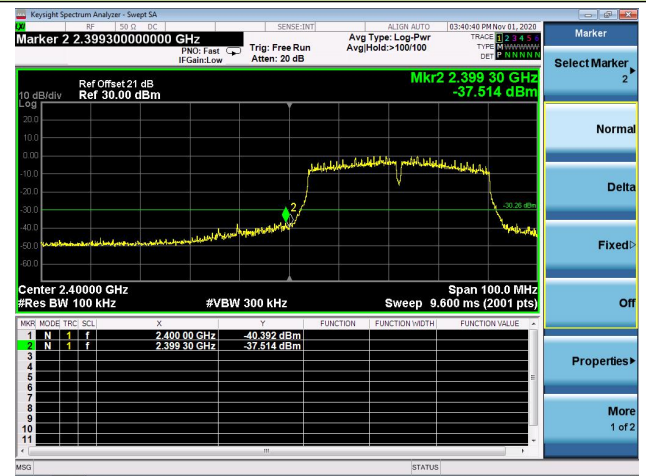
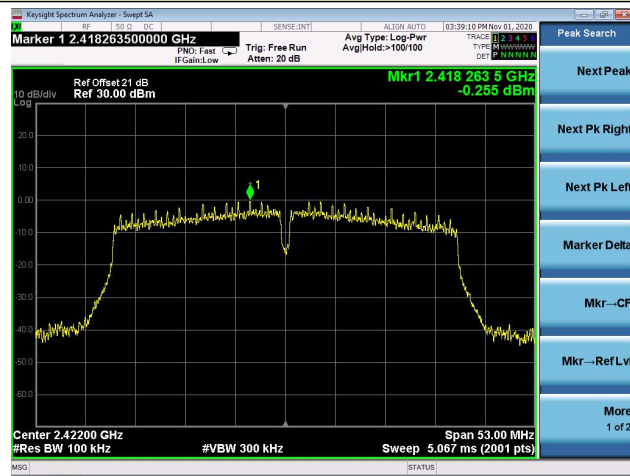


802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

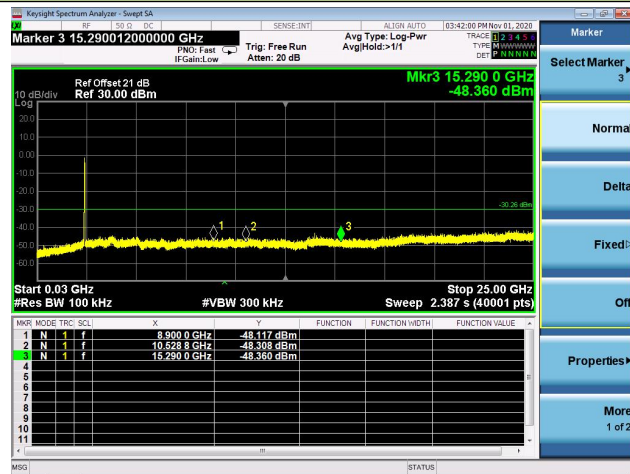
Channel 03 (2422MHz)

100kHz PSD Reference Level

Low Band Edge

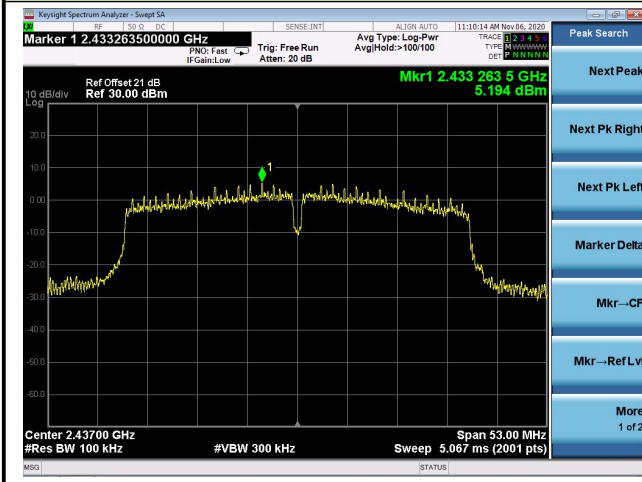


Spurious Emission

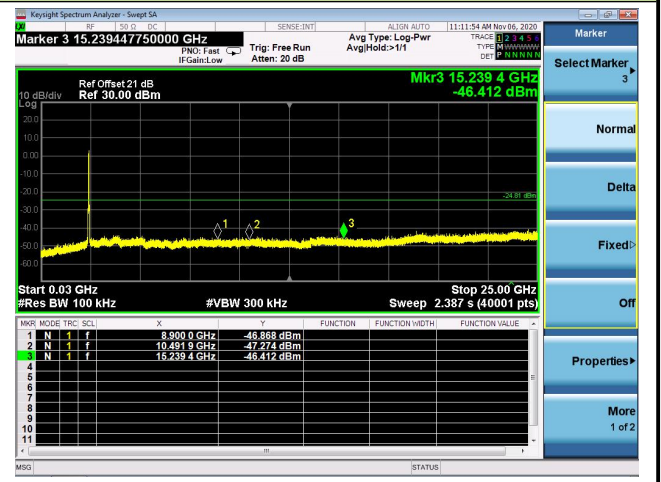


802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1
 Channel 06 (2437MHz)

100kHz PSD Reference Level



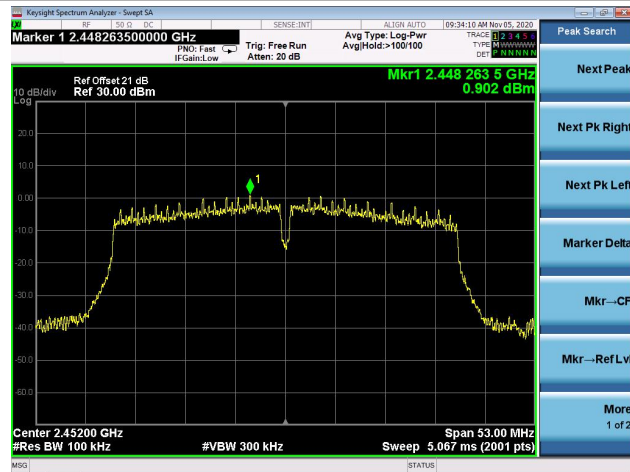
Spurious Emission



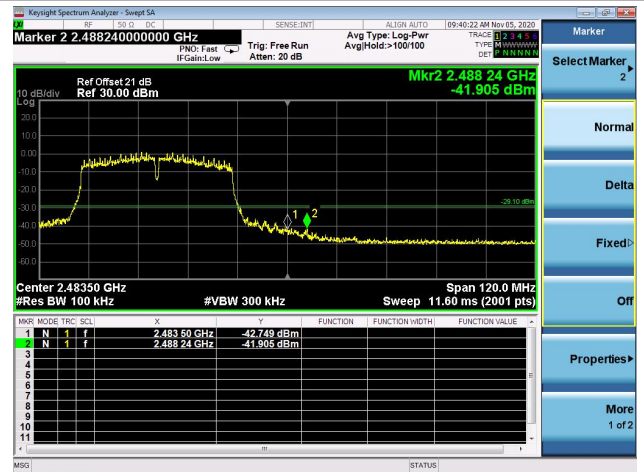
802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 09 (2452MHz)

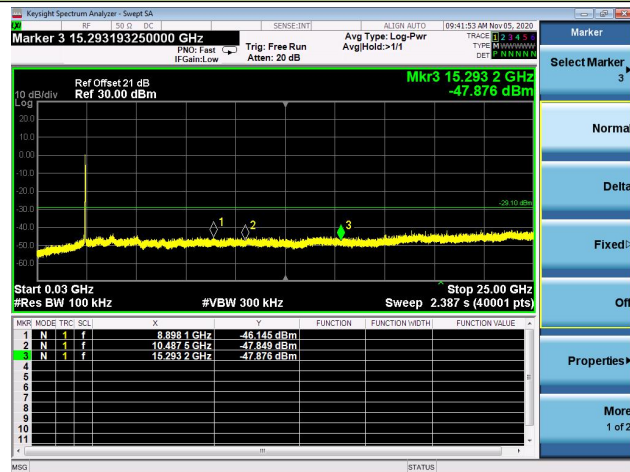
100kHz PSD Reference Level



High Band Edge



Spurious Emission



6.6. Radiated Spurious Emission Measurement

6.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.6.2. Test Procedure Used

ANSI C63.10-2013 Section 6.3& 6.4

6.6.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

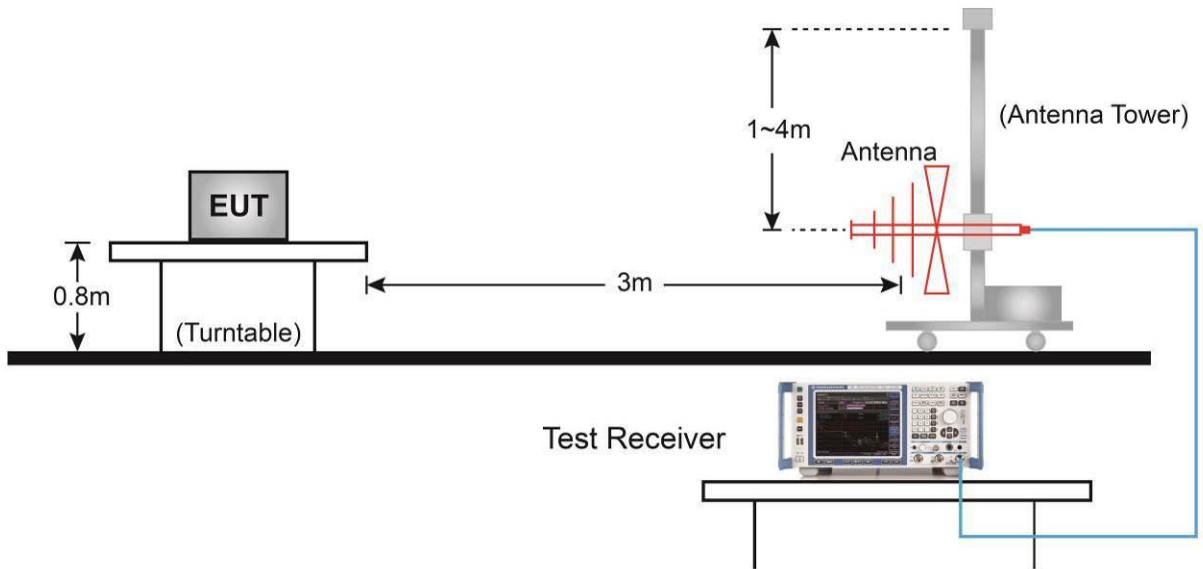
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

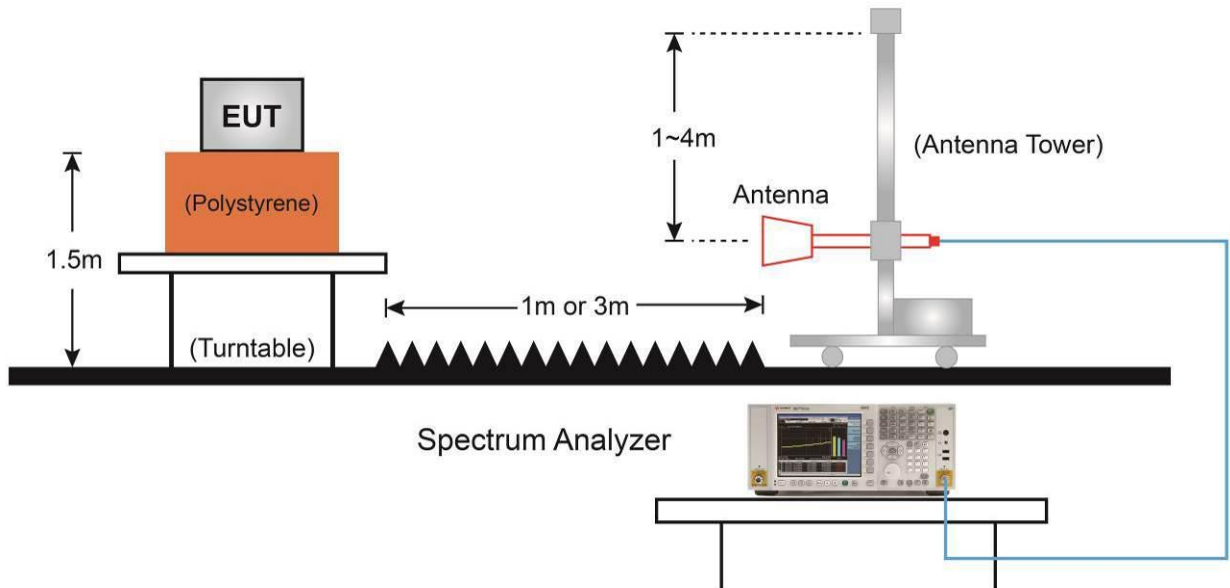
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.6.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.6.5. Test Result

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11b (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4825.0	46.4	1.8	48.2	74.0	-25.8	Peak	Horizontal
*	6414.5	37.0	5.9	42.9	74.0	-31.1	Peak	Horizontal
	11727.0	33.9	15.4	49.3	74.0	-24.7	Peak	Horizontal
*	14897.5	34.6	18.6	53.2	74.0	-20.8	Peak	Horizontal
	4824.1	51.8	1.8	53.6	54.0	-0.4	Average	Vertical
	4824.1	53.7	1.8	55.5	74.0	-18.5	Peak	Vertical
*	6423.0	36.4	6.0	42.4	74.0	-31.6	Peak	Vertical
	12058.5	38.2	15.5	53.7	74.0	-20.3	Peak	Vertical
*	14132.5	35.3	17.2	52.5	74.0	-21.5	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11b (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4876.0	44.7	1.7	46.4	74.0	-27.6	Peak	Horizontal
*	6712.0	36.6	7.2	43.8	74.0	-30.2	Peak	Horizontal
	11633.5	32.6	15.6	48.2	74.0	-25.8	Peak	Horizontal
*	13673.5	34.9	17.1	52.0	74.0	-22.0	Peak	Horizontal
	4876.0	52.1	1.7	53.8	74.0	-20.2	Peak	Vertical
	6788.5	36.4	7.6	44.0	74.0	-30.0	Peak	Vertical
*	12184.4	33.8	15.6	49.4	54.0	-4.6	Average	Vertical
	12184.4	38.9	15.6	54.5	74.0	-19.5	Peak	Vertical
*	13988.0	35.1	16.9	52.0	74.0	-22.0	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11b (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4927.0	44.3	1.9	46.2	74.0	-27.8	Peak	Horizontal
*	6737.5	36.1	7.2	43.3	74.0	-30.7	Peak	Horizontal
	11616.5	34.5	15.5	50.0	74.0	-24.0	Peak	Horizontal
*	14115.5	34.9	17.4	52.3	74.0	-21.7	Peak	Horizontal
	4924.1	51.9	1.9	53.8	54.0	-0.2	Average	Vertical
	4924.1	52.9	1.9	54.8	74.0	-19.2	Peak	Vertical
*	6100.0	38.1	5.2	43.3	74.0	-30.7	Peak	Vertical
	12313.5	37.3	15.4	52.7	74.0	-21.3	Peak	Vertical
*	14107.0	34.9	17.4	52.3	74.0	-21.7	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11g (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4825.0	43.4	1.8	45.2	74.0	-28.8	Peak	Horizontal
*	6771.5	37.0	7.3	44.3	74.0	-29.7	Peak	Horizontal
	10673.0	37.2	13.5	50.7	74.0	-23.3	Peak	Horizontal
*	13971.0	34.9	17.0	51.9	74.0	-22.1	Peak	Horizontal
	4833.5	47.2	1.8	49.0	74.0	-25.0	Peak	Vertical
*	7230.5	38.3	9.0	47.3	74.0	-26.7	Peak	Vertical
	11361.5	34.3	14.3	48.6	74.0	-25.4	Peak	Vertical
*	14277.0	34.9	18.0	52.9	74.0	-21.1	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11g (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4867.5	46.1	1.7	47.8	74.0	-26.2	Peak	Horizontal
*	6414.5	36.9	5.9	42.8	74.0	-31.2	Peak	Horizontal
	7307.0	41.1	9.3	50.4	74.0	-23.6	Peak	Horizontal
*	10069.5	35.6	13.1	48.7	74.0	-25.3	Peak	Horizontal
	7310.7	50.8	9.3	60.1	74.0	-13.9	Peak	Vertical
	7310.7	39.8	9.3	49.1	54.0	-4.9	Average	Vertical
*	9746.5	40.0	12.0	52.0	74.0	-22.0	Peak	Vertical
	12181.7	43.8	15.6	59.4	74.0	-14.6	Peak	Vertical
	12181.7	35.2	15.6	50.8	54.0	-3.2	Average	Vertical
*	14166.5	36.1	17.3	53.4	74.0	-20.6	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11g (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4918.5	43.4	1.9	45.3	74.0	-28.7	Peak	Horizontal
*	6448.5	36.3	6.2	42.5	74.0	-31.5	Peak	Horizontal
	10800.5	35.7	13.6	49.3	74.0	-24.7	Peak	Horizontal
*	13665.0	34.8	17.1	51.9	74.0	-22.1	Peak	Horizontal
	4918.5	47.0	1.9	48.9	74.0	-25.1	Peak	Vertical
*	6805.5	37.2	7.7	44.9	74.0	-29.1	Peak	Vertical
	7502.5	38.7	9.6	48.3	74.0	-25.7	Peak	Vertical
*	10154.5	35.0	13.4	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT20 (CDD Mode)	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4816.5	40.2	1.8	42.0	74.0	-32.0	Peak	Horizontal
*	6720.5	36.3	7.2	43.5	74.0	-30.5	Peak	Horizontal
	8386.5	36.6	10.8	47.4	74.0	-26.6	Peak	Horizontal
*	10163.0	36.4	13.6	50.0	74.0	-24.0	Peak	Horizontal
	4825.0	44.4	1.8	46.2	74.0	-27.8	Peak	Vertical
*	6678.0	36.5	6.9	43.4	74.0	-30.6	Peak	Vertical
	7494.0	40.1	9.5	49.6	74.0	-24.4	Peak	Vertical
*	10163.0	35.3	13.6	48.9	74.0	-25.1	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT20 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4876.0	48.9	1.7	50.6	74.0	-23.4	Peak	Horizontal
*	6100.0	37.3	5.2	42.5	74.0	-31.5	Peak	Horizontal
	7307.0	40.9	9.3	50.2	74.0	-23.8	Peak	Horizontal
*	10222.5	35.5	13.1	48.6	74.0	-25.4	Peak	Horizontal
	7311.3	50.4	9.3	59.7	74.0	-14.3	Peak	Vertical
	7311.3	38.3	9.3	47.6	54.0	-6.4	Average	Vertical
*	8794.5	37.3	11.5	48.8	74.0	-25.2	Peak	Vertical
	12183.2	33.6	15.6	49.2	54.0	-4.8	Average	Vertical
	12183.2	42.5	15.6	58.1	74.0	-15.9	Peak	Vertical
*	16674.0	31.3	19.3	50.6	74.0	-23.4	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT20 (CDD Mode)	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4927.0	40.3	1.9	42.2	74.0	-31.8	Peak	Horizontal
*	6584.5	36.3	6.6	42.9	74.0	-31.1	Peak	Horizontal
	7706.5	36.1	9.7	45.8	74.0	-28.2	Peak	Horizontal
*	9942.0	36.5	12.9	49.4	74.0	-24.6	Peak	Horizontal
	4918.5	45.3	1.9	47.2	74.0	-26.8	Peak	Vertical
*	6593.0	37.1	6.6	43.7	74.0	-30.3	Peak	Vertical
	7494.0	39.1	9.5	48.6	74.0	-25.4	Peak	Vertical
*	9993.0	36.6	12.7	49.3	74.0	-24.7	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT40 (CDD Mode)	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4995.0	40.8	2.3	43.1	74.0	-30.9	Peak	Horizontal
*	6440.0	37.3	6.2	43.5	74.0	-30.5	Peak	Horizontal
	11055.5	34.9	14.3	49.2	74.0	-24.8	Peak	Horizontal
*	14251.5	34.7	17.4	52.1	74.0	-21.9	Peak	Horizontal
	4833.5	40.4	1.8	42.2	74.0	-31.8	Peak	Vertical
*	6295.5	37.6	5.4	43.0	74.0	-31.0	Peak	Vertical
	7494.0	39.6	9.5	49.1	74.0	-24.9	Peak	Vertical
*	10239.5	36.3	13.3	49.6	74.0	-24.4	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT40 (CDD Mode)	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4876.0	43.3	1.7	45.0	74.0	-29.0	Peak	Horizontal
*	6559.0	37.1	6.5	43.6	74.0	-30.4	Peak	Horizontal
	7315.5	38.4	9.3	47.7	74.0	-26.3	Peak	Horizontal
*	10052.5	35.6	13.2	48.8	74.0	-25.2	Peak	Horizontal
	7313.6	36.0	9.3	45.3	54.0	-8.7	Average	Vertical
	7313.6	45.5	9.3	54.8	74.0	-19.2	Peak	Vertical
*	9738.0	37.0	12.1	49.1	74.0	-24.9	Peak	Vertical
	12183.4	39.0	15.6	54.6	74.0	-19.4	Peak	Vertical
	12183.4	31.2	15.6	46.8	54.0	-7.2	Average	Vertical
*	13996.5	34.9	16.9	51.8	74.0	-22.2	Peak	Vertical

Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	MESH AP Product	Test Engineer	Silence Liu
Test Site	AC1	Test Date	2020/11/03
Test Mode:	802.11n-HT40 (CDD Mode)	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB μ V)	Factor (dB)	Measure Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
	4995.0	41.7	2.3	44.0	74.0	-30.0	Peak	Horizontal
*	6253.0	37.0	5.2	42.2	74.0	-31.8	Peak	Horizontal
	7562.0	35.6	9.5	45.1	74.0	-28.9	Peak	Horizontal
*	9831.5	36.2	12.4	48.6	74.0	-25.4	Peak	Horizontal
	4910.0	41.4	2.0	43.4	74.0	-30.6	Peak	Vertical
*	5870.5	38.2	4.4	42.6	74.0	-31.4	Peak	Vertical
	7494.0	40.3	9.5	49.8	74.0	-24.2	Peak	Vertical
*	10307.5	35.2	13.4	48.6	74.0	-25.4	Peak	Vertical

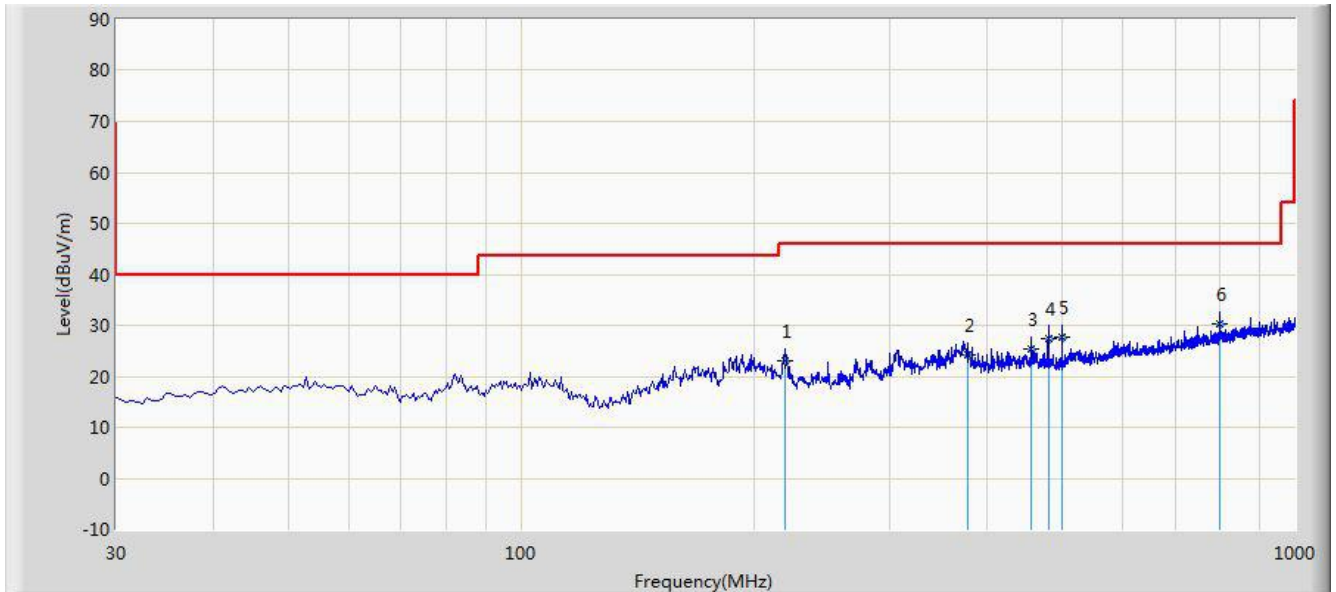
Note 1: "*" means test frequency did not fall into restricted band.

Note 2: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 1GHz:

Site: NS-AC1	Time: 2020/10/29 - 14:30
Limit: FCC_Part 15.209_RSE(3m)	Engineer: Louie Liu
Probe: NS-AC1_VULB9162_287_with 4dB attenuation	Polarity: Horizontal
EUT: MESH AP Product	Power: AC 120V/60Hz
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



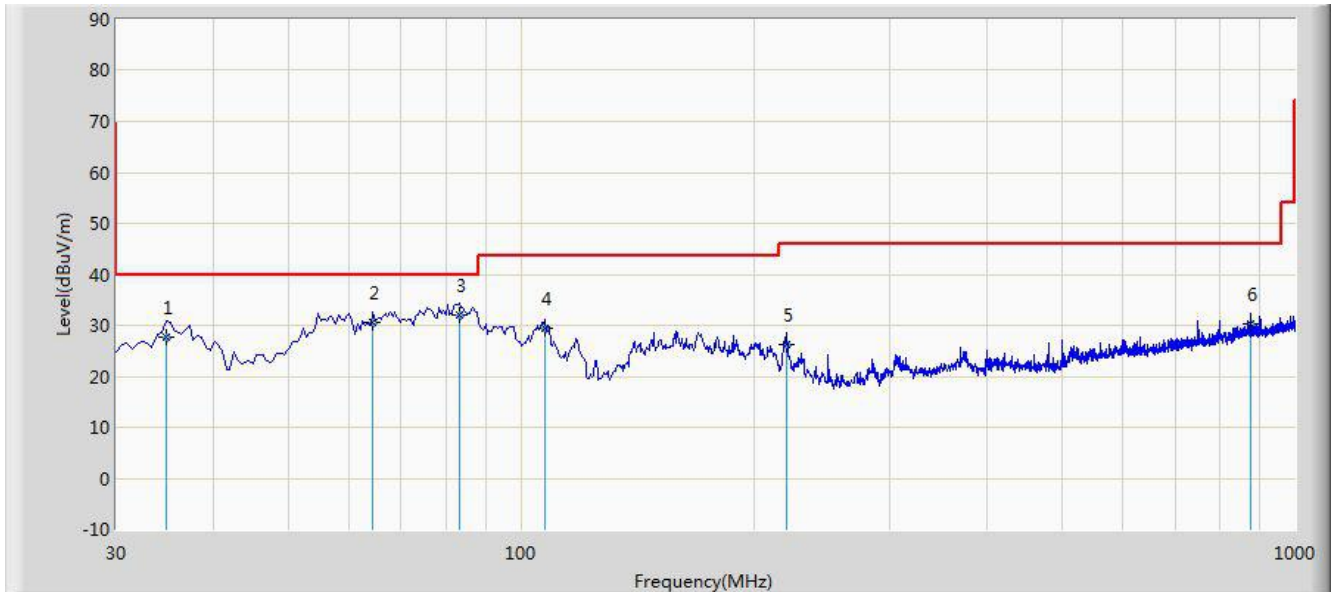
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			219.150	22.980	5.309	-23.020	46.000	17.671	QP
2			377.260	24.210	3.235	-21.790	46.000	20.975	QP
3			457.285	25.320	3.237	-20.680	46.000	22.083	QP
4			480.080	27.459	5.205	-18.541	46.000	22.254	QP
5			499.965	27.673	5.267	-18.327	46.000	22.405	QP
6		*	800.180	30.250	2.966	-15.750	46.000	27.284	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: NS-AC1	Time: 2020/10/29 - 14:32
Limit: FCC_Part 15.209_RSE(3m)	Engineer: Louie Liu
Probe: NS-AC1_VULB9162_287_with 4dB attenuation	Polarity: Vertical
EUT: MESH AP Product	Power: AC 120V/60Hz
Worst Case Mode: Transmit by 802.11n-HT20 at Channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			34.850	27.650	10.825	-12.350	40.000	16.825	QP
2			64.435	30.723	13.038	-9.277	40.000	17.685	QP
3		*	83.350	31.898	17.494	-8.102	40.000	14.404	QP
4			107.600	29.350	11.260	-14.150	43.500	18.090	QP
5			220.120	26.134	8.451	-19.866	46.000	17.683	QP
6			875.355	30.412	1.990	-15.588	46.000	28.422	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz ~ 30MHz, 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

6.7. Radiated Restricted Band Edge Measurement

6.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure Used

ANSI C63.10-2013 Section 6.3& 6.6.

6.7.3. Test Setting

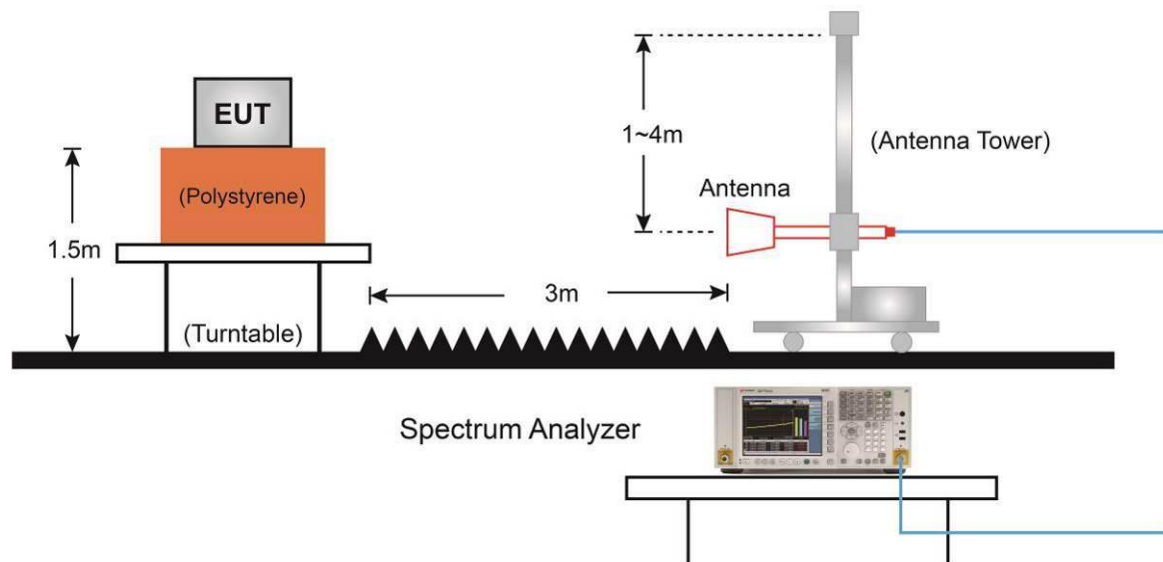
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

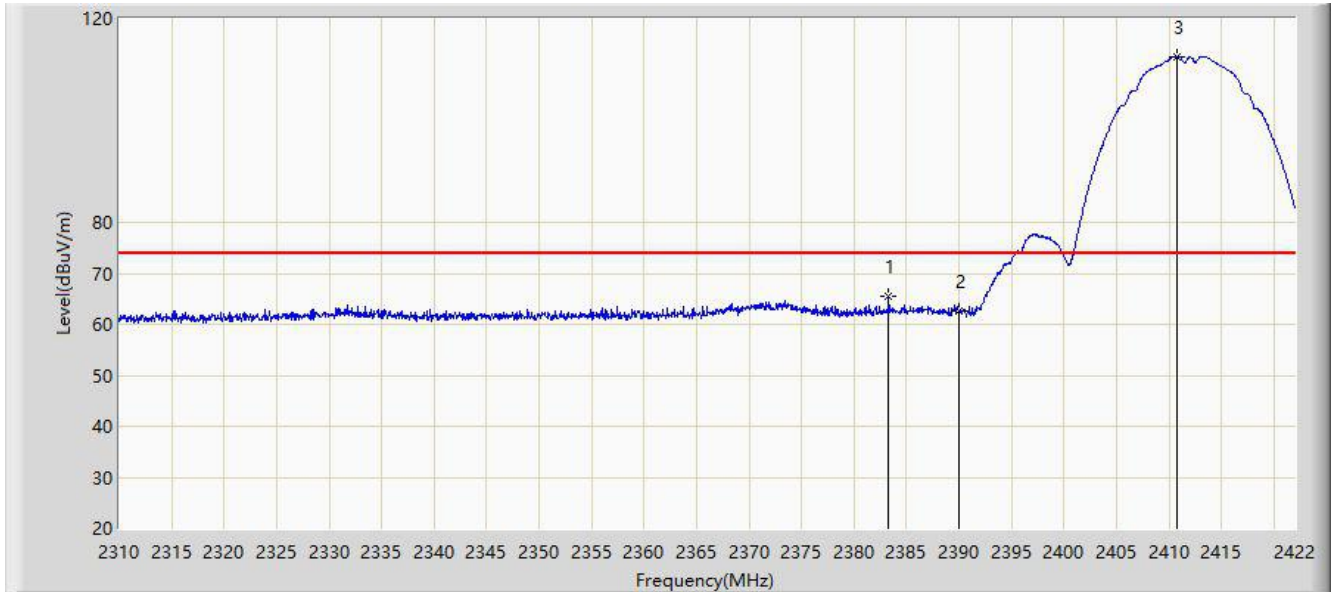
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.7.4. Test Setup



6.7.5. Test Result

Site: NS-AC1	Time: 2020/11/03 - 20:29
Limit: FCC_Part 15_15.209 RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: MESH AP Product	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz (CDD Mode)	

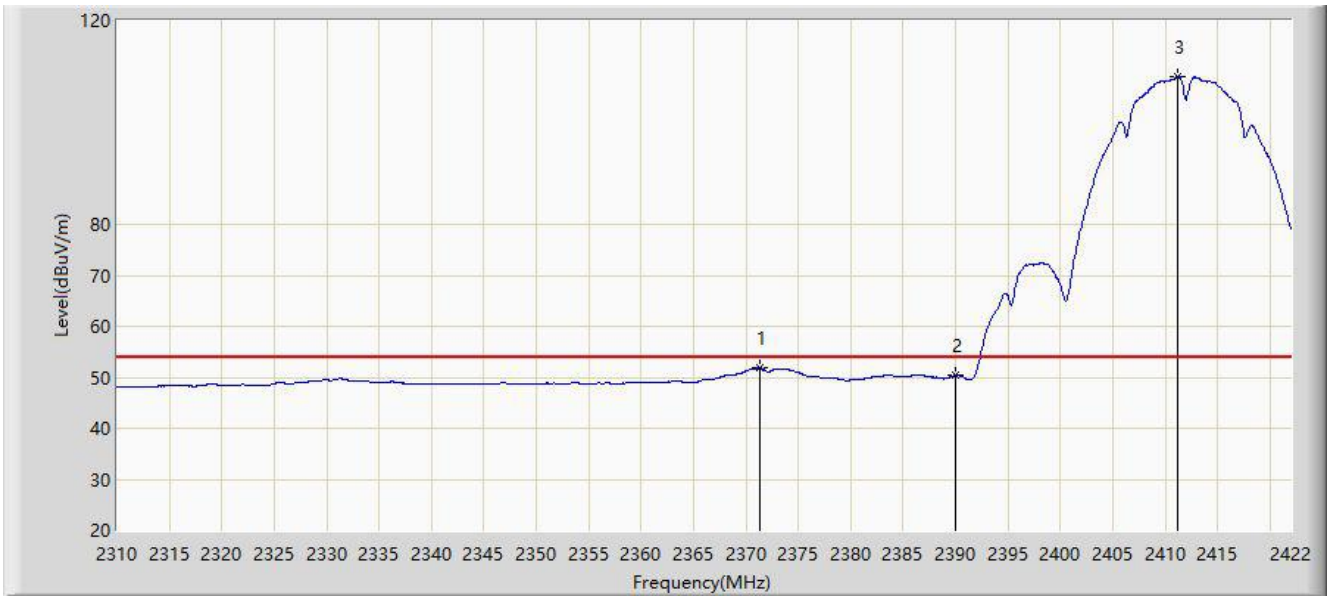


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2383.304	65.407	35.935	-8.593	74.000	29.471	PK
2			2390.000	62.635	33.153	-11.365	74.000	29.482	PK
3		*	2410.800	112.537	82.998	N/A	N/A	29.539	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2020/11/03 - 20:32
Limit: FCC_Part 15_15.209 RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: MESH AP Product	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz (CDD Mode)	

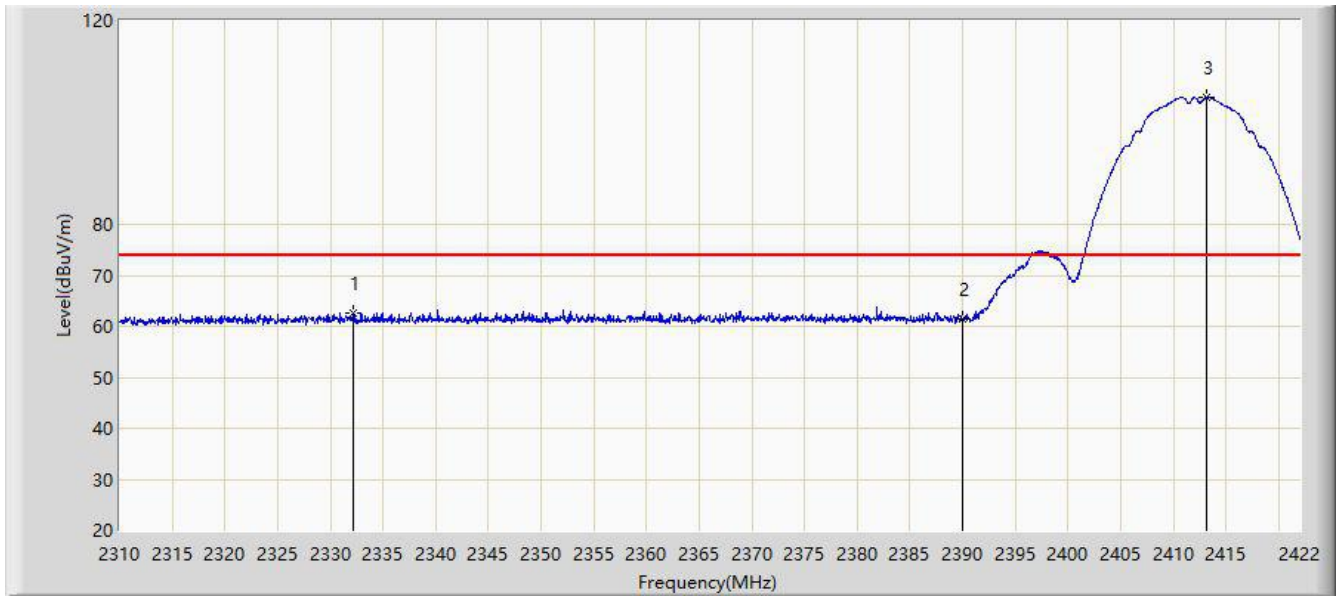


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2371.264	51.798	22.348	-2.202	54.000	29.449	AV
2			2390.000	50.430	20.948	-3.570	54.000	29.482	AV
3	X	*	2411.248	109.086	79.547	N/A	N/A	29.539	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2020/11/03 - 20:33
Limit: FCC_Part 15_15.209 RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: MESH AP Product	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz (CDD Mode)	

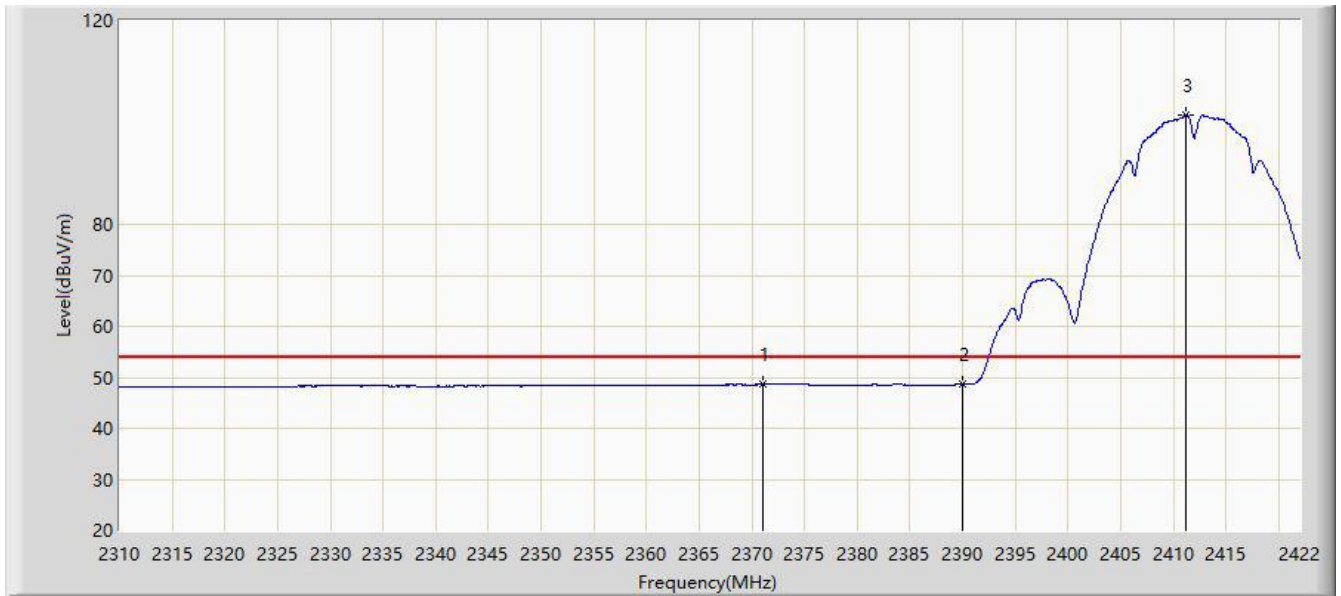


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2332.120	62.728	33.345	-11.272	74.000	29.383	PK
2			2390.000	61.505	32.023	-12.495	74.000	29.482	PK
3		*	2413.208	104.852	75.311	N/A	N/A	29.540	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2020/11/03 - 20:35
Limit: FCC_Part 15_15.209 RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Vertical
EUT: MESH AP Product	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz (CDD Mode)	

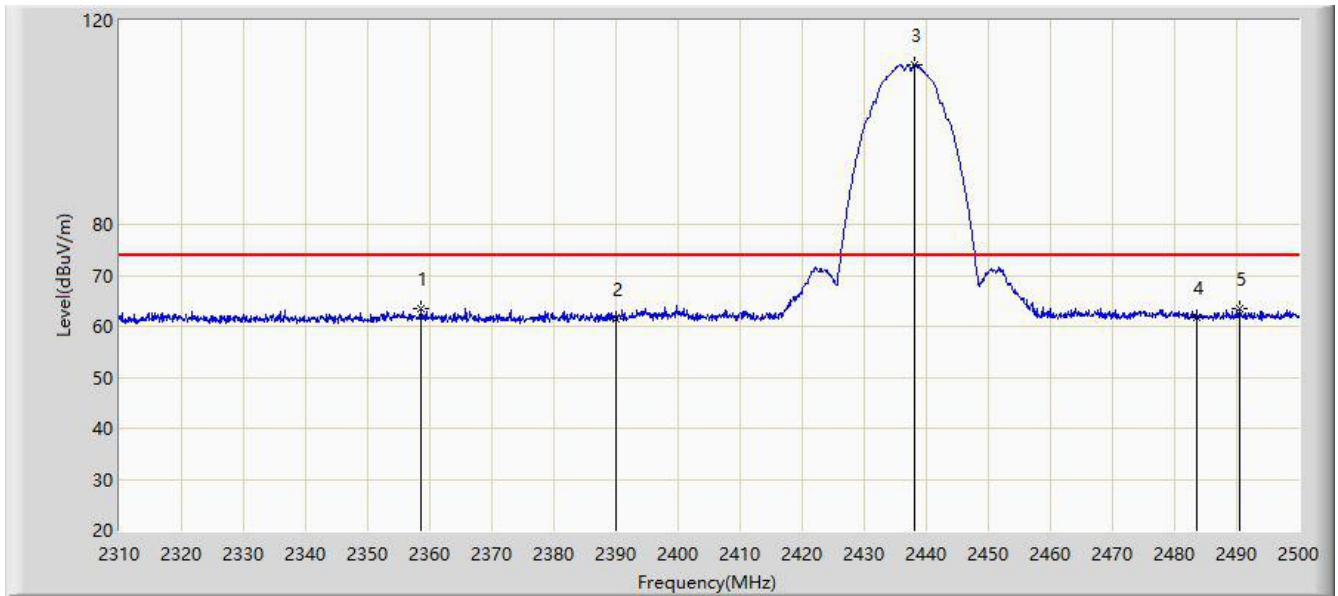


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2371.096	48.742	19.293	-5.258	54.000	29.449	AV
2			2390.000	48.630	19.148	-5.370	54.000	29.482	AV
3		*	2411.248	101.462	71.923	N/A	N/A	29.539	AV

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Time: 2020/11/03 - 20:37
Limit: FCC_Part 15_15.209 RE(3m)	Engineer: Silence Liu
Probe: NS-AC1_BBHA9120D_2111	Polarity: Horizontal
EUT: MESH AP Product	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2437MHz (CDD Mode)	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2358.640	63.493	34.069	-10.507	74.000	29.424	PK
2			2390.000	61.451	31.969	-12.549	74.000	29.482	PK
3		*	2438.155	111.273	81.708	N/A	N/A	29.565	PK
4			2483.500	61.816	32.154	-12.184	74.000	29.662	PK
5			2490.500	63.533	33.869	-10.467	74.000	29.663	PK

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).