

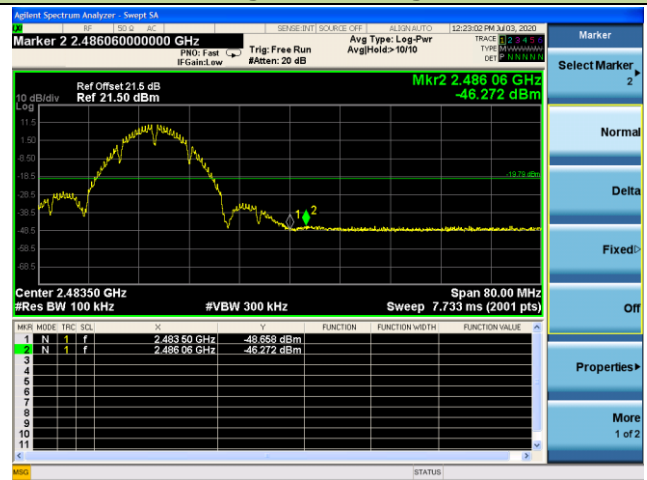
SISO Mode - 802.11b Out-of-Band Emissions

Channel 11 (2462MHz)

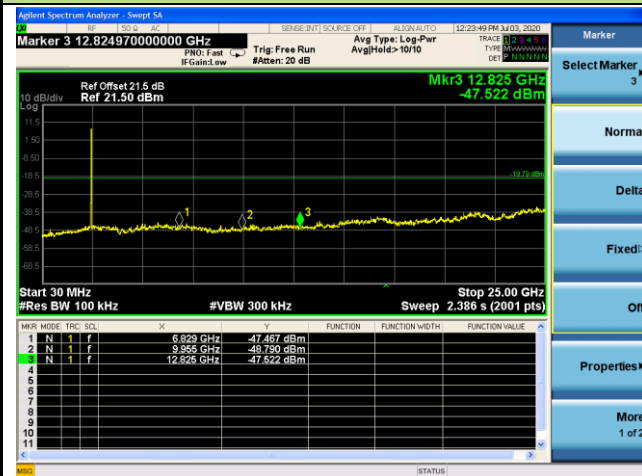
100kHz PSD Reference Level



High Band Edge



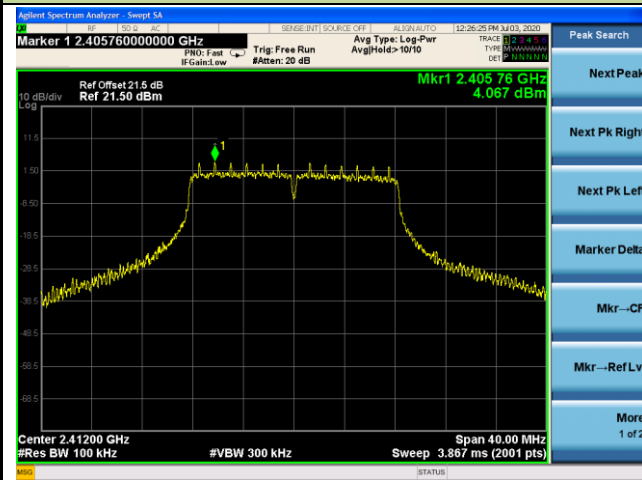
Spurious Emission



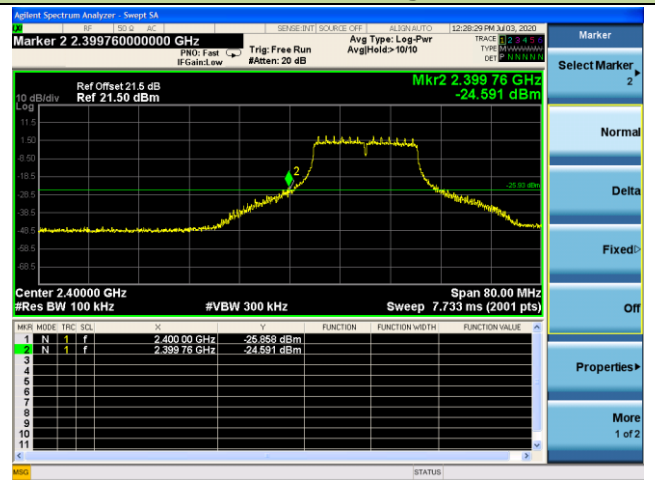
SISO Mode - 802.11g Out-of-Band Emissions

Channel 01 (2412MHz)

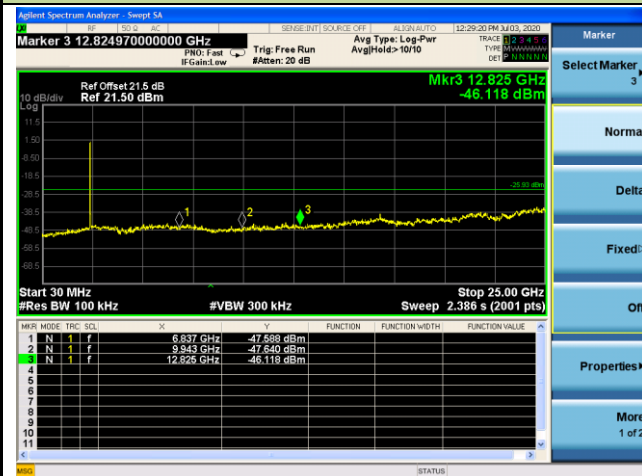
100kHz PSD Reference Level



Low Band Edge

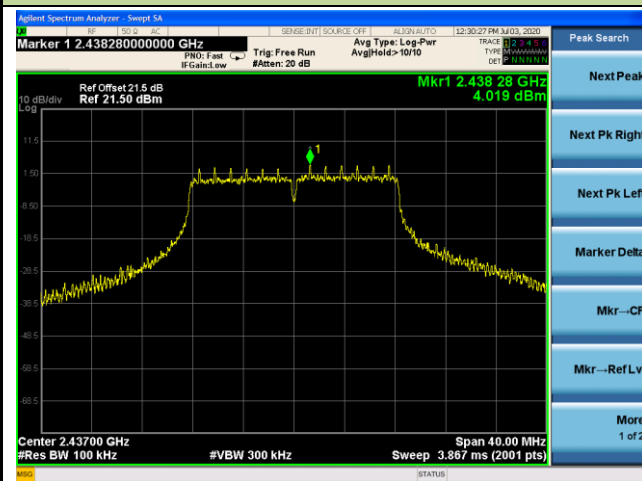


Spurious Emission

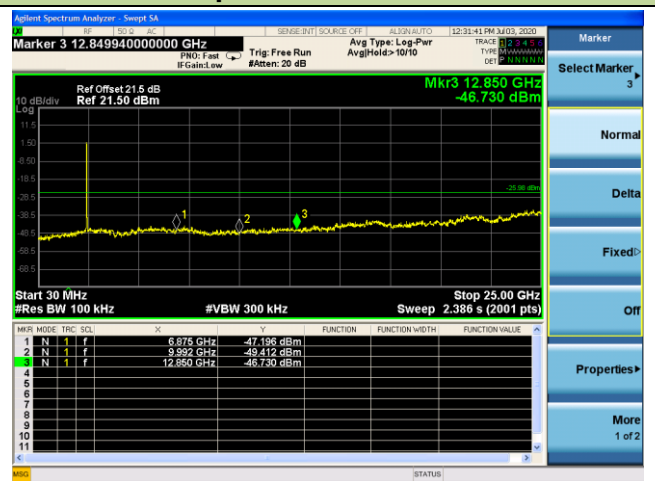


Channel 06 (2437MHz)

100kHz PSD Reference Level



Spurious Emission



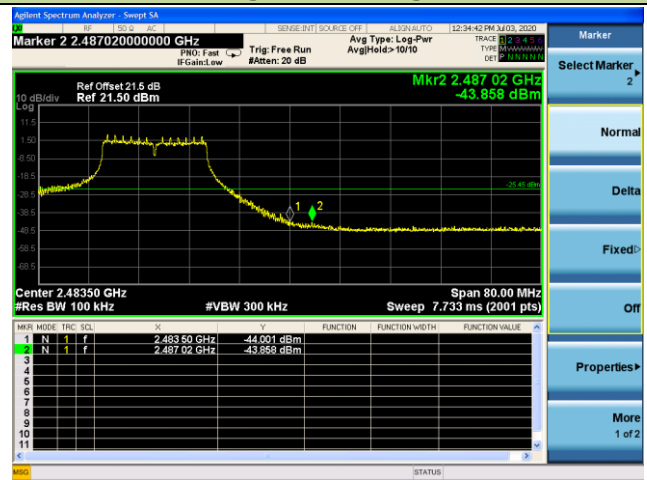
SISO Mode - 802.11g Out-of-Band Emissions

Channel 11 (2462MHz)

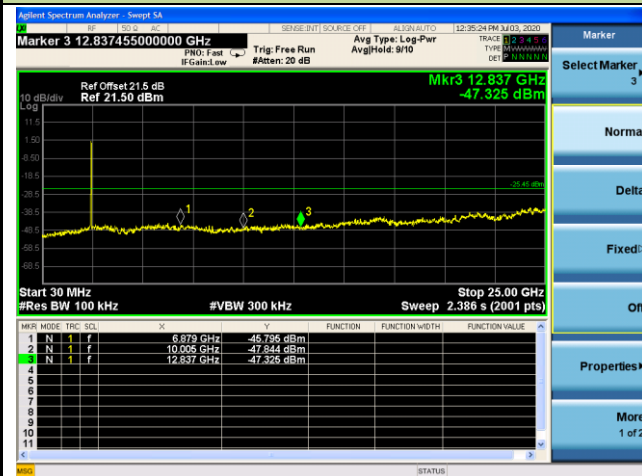
100kHz PSD Reference Level



High Band Edge



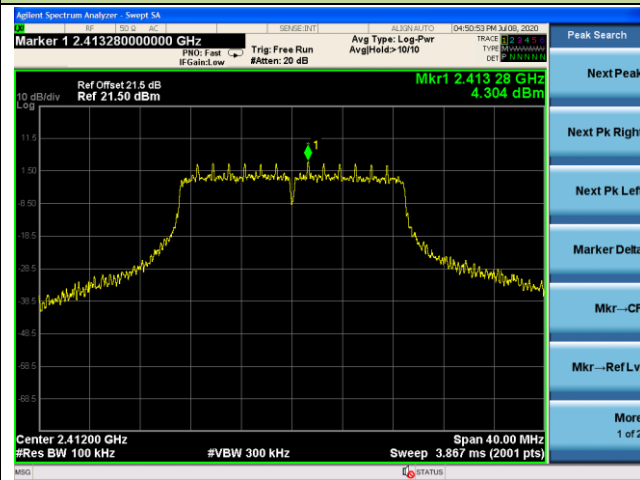
Spurious Emission



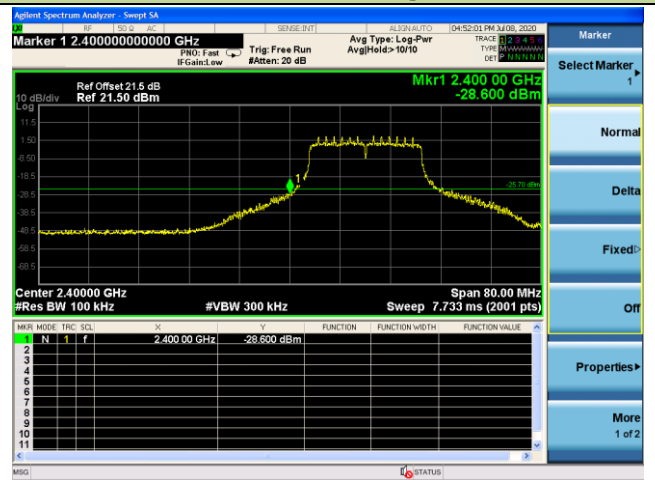
SISO Mode - 802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

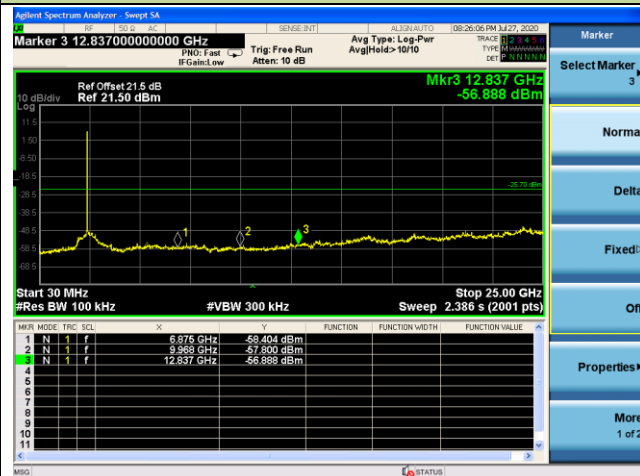
100kHz PSD Reference Level



Low Band Edge

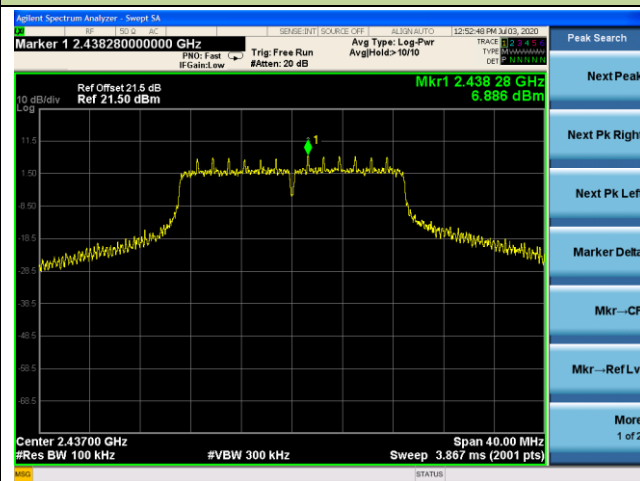


Spurious Emission

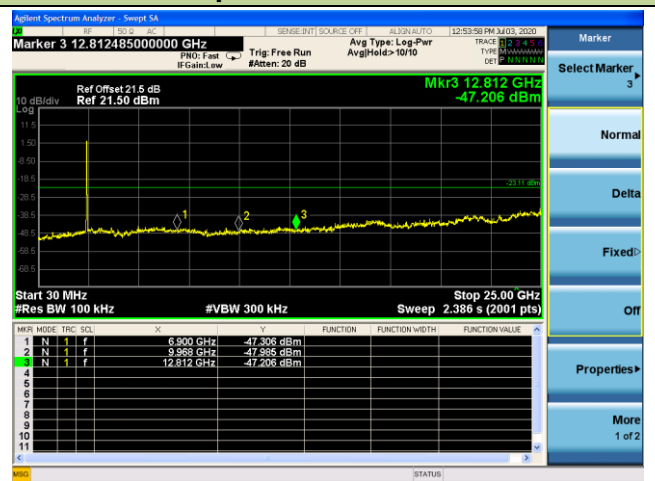


Channel 06 (2437MHz)

100kHz PSD Reference Level



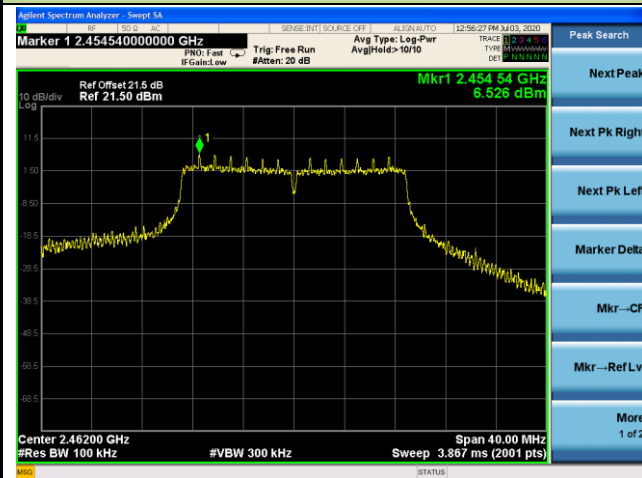
Spurious Emission



SISO Mode - 802.11n-HT20 Out-of-Band Emissions

Channel 11 (2462MHz)

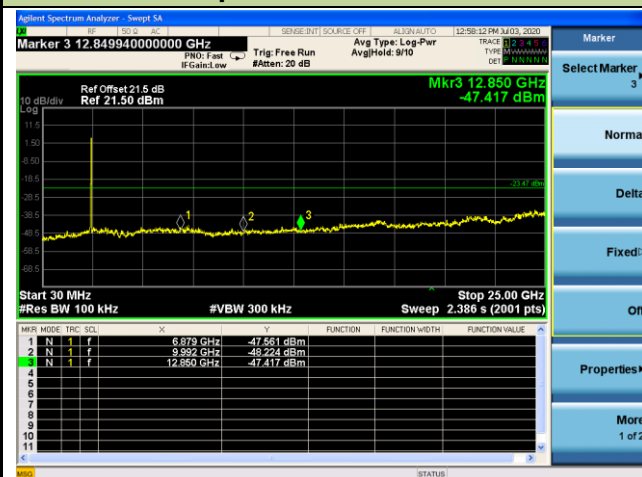
100kHz PSD Reference Level



High Band Edge



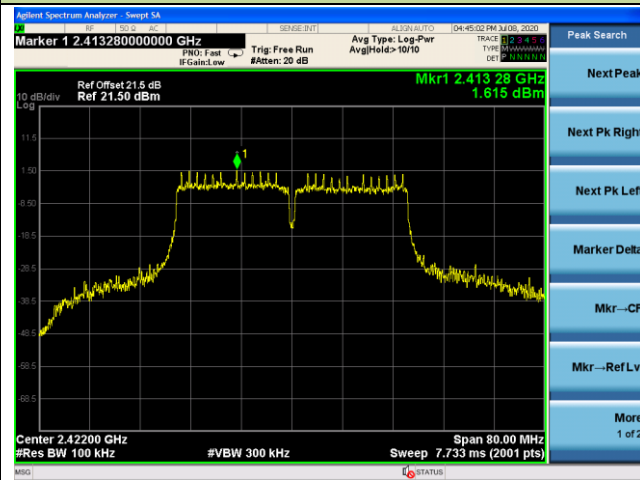
Spurious Emission



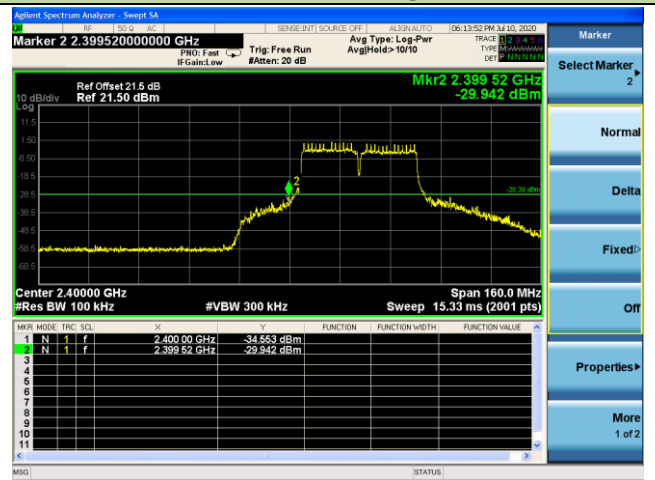
SISO Mode - 802.11n-HT40 Out-of-Band Emissions

Channel 03 (2422MHz)

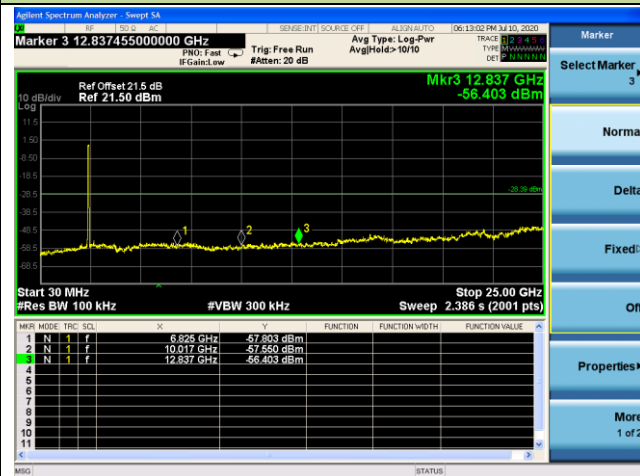
100kHz PSD Reference Level



Low Band Edge

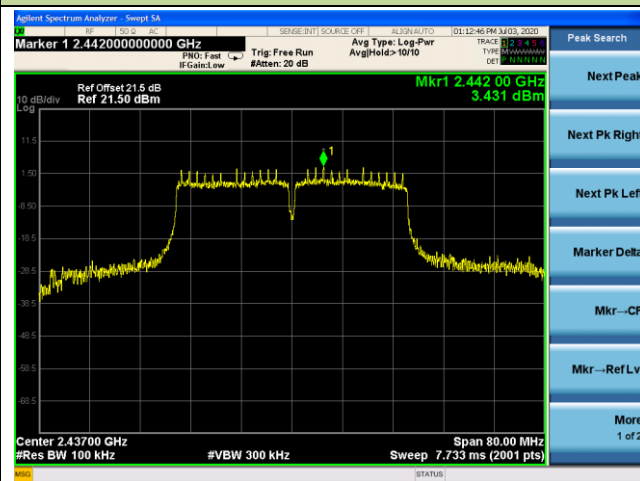


Spurious Emission

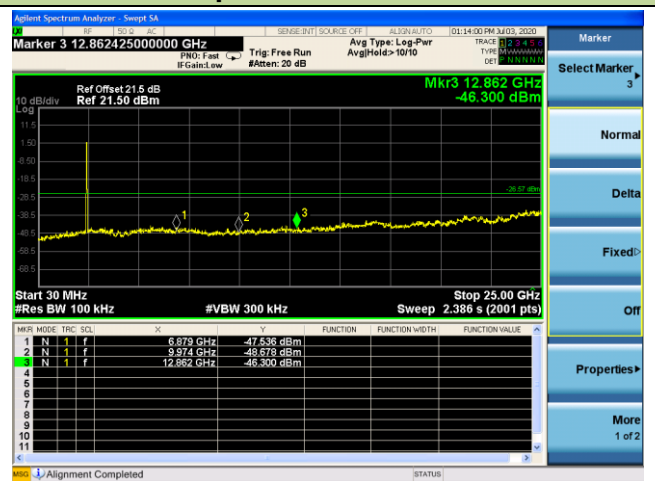


Channel 06 (2437MHz)

100kHz PSD Reference Level



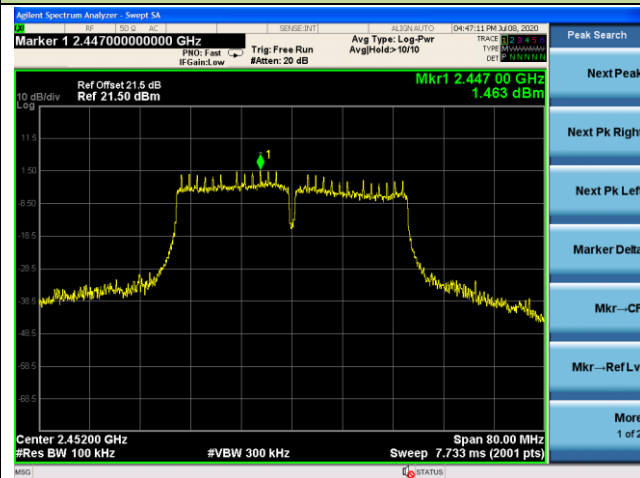
Spurious Emission



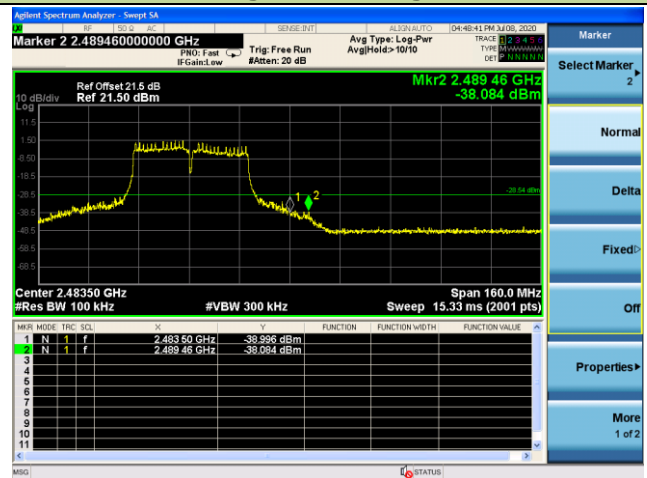
SISO Mode - 802.11n-HT40 Out-of-Band Emissions

Channel 09 (2452MHz)

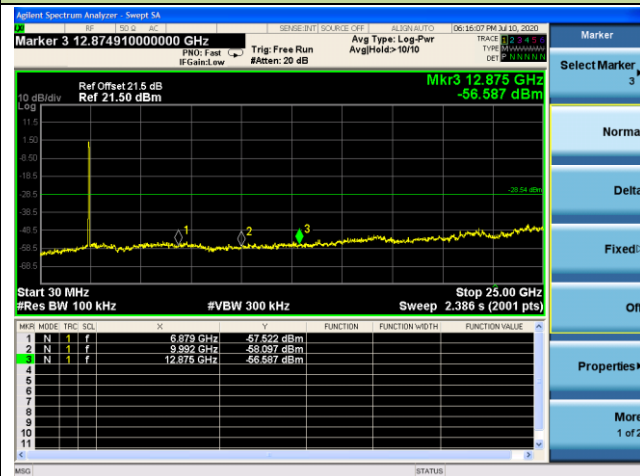
100kHz PSD Reference Level



High Band Edge



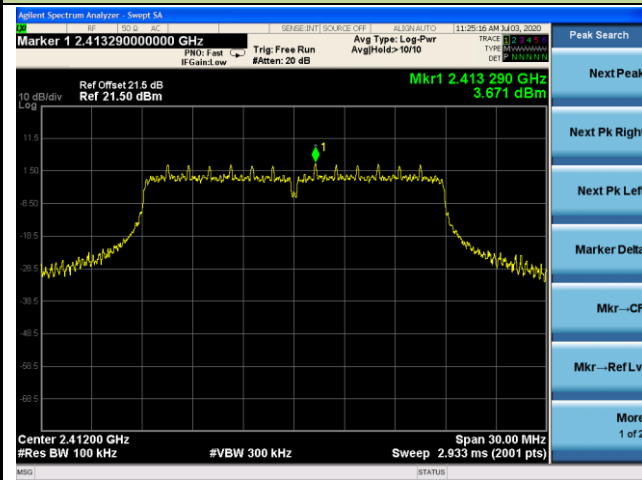
Spurious Emission



MIMO Mode Ant 1 - 802.11n-HT20 Out-of-Band Emissions

Channel 01 (2412MHz)

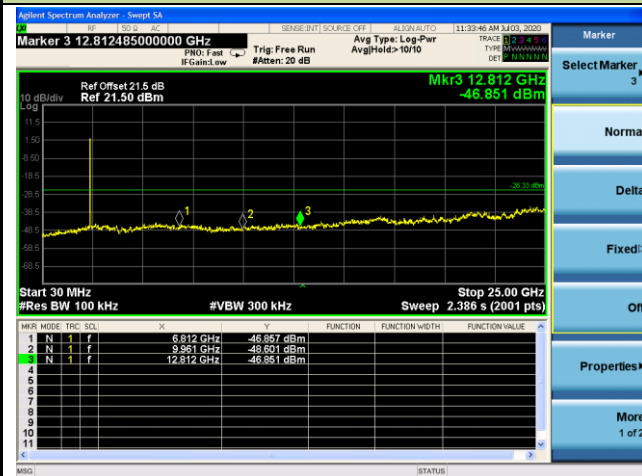
100kHz PSD Reference Level



Low Band Edge

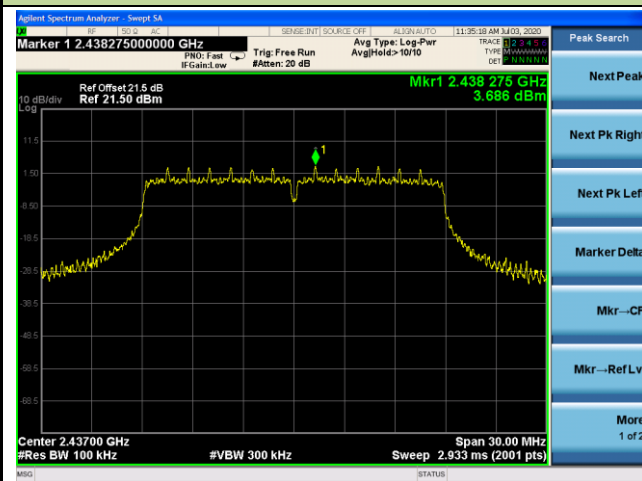


Spurious Emission

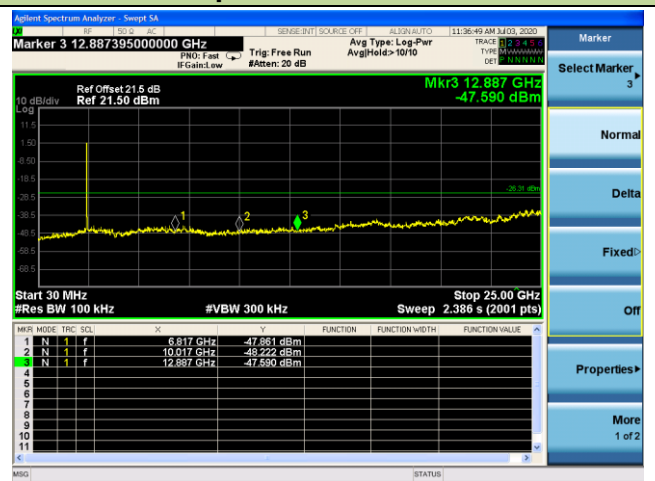


Channel 06 (2437MHz)

100kHz PSD Reference Level



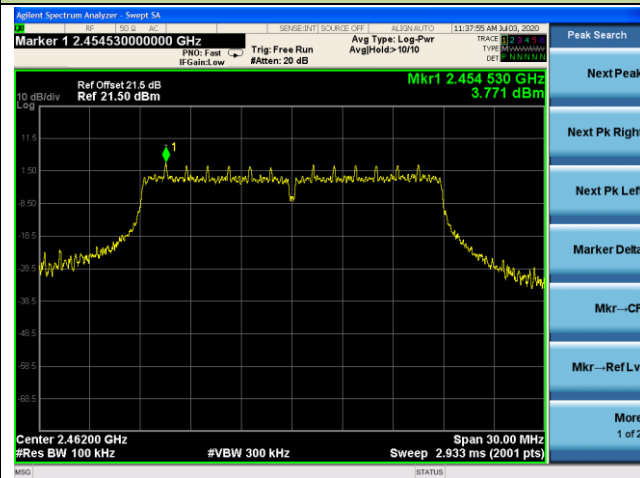
Spurious Emission



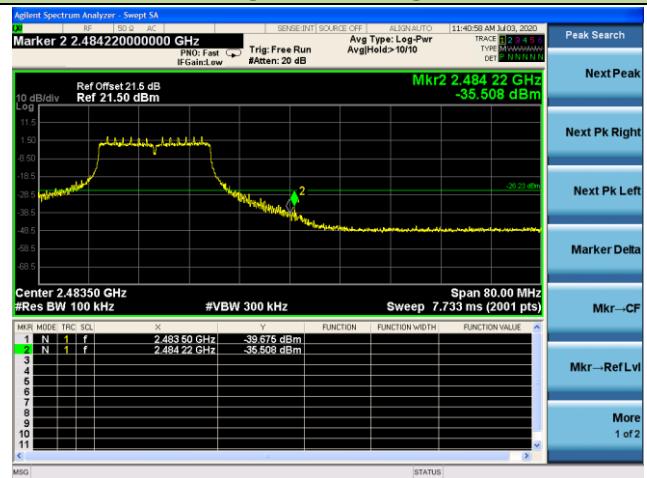
MIMO Mode Ant 1 - 802.11n-HT20 Out-of-Band Emissions

Channel 11 (2462MHz)

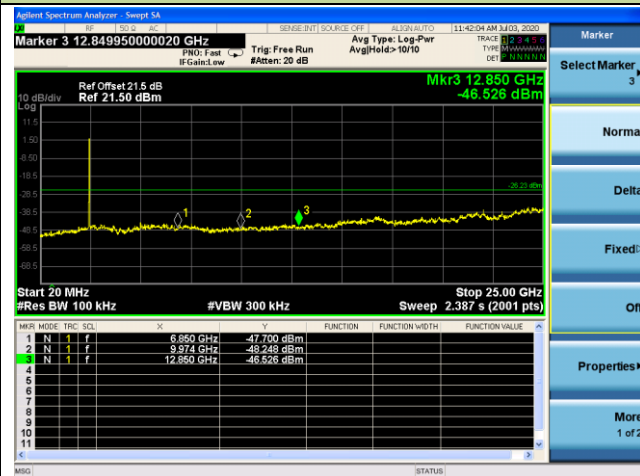
100kHz PSD Reference Level



High Band Edge



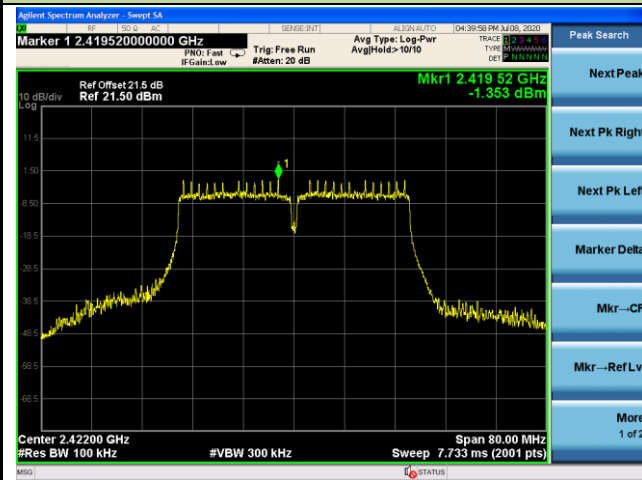
Spurious Emission



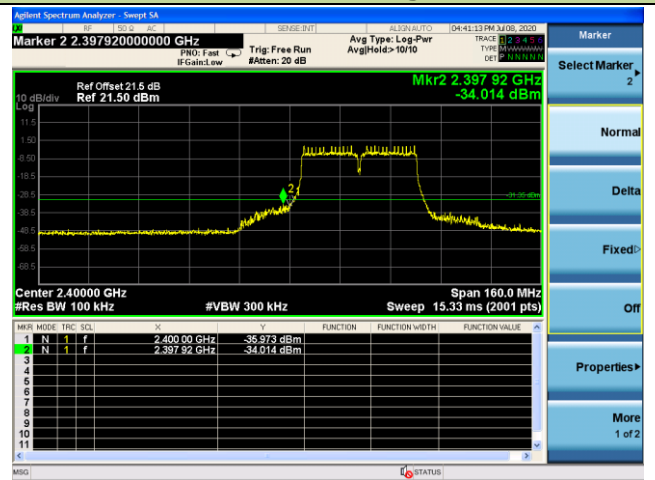
MIMO Mode Ant 1 - 802.11n-HT40 Out-of-Band Emissions

Channel 03 (2422MHz)

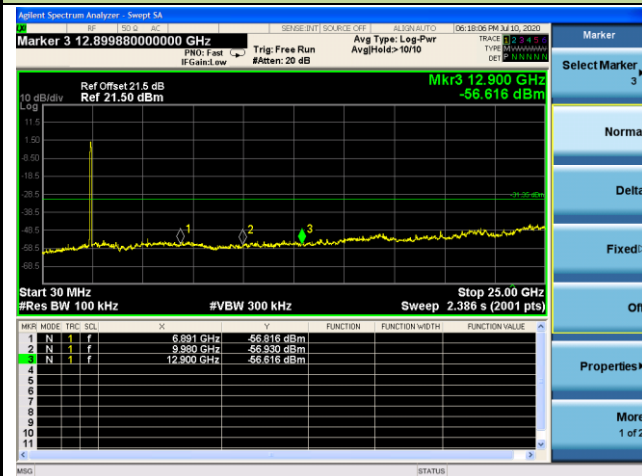
100kHz PSD Reference Level



Low Band Edge

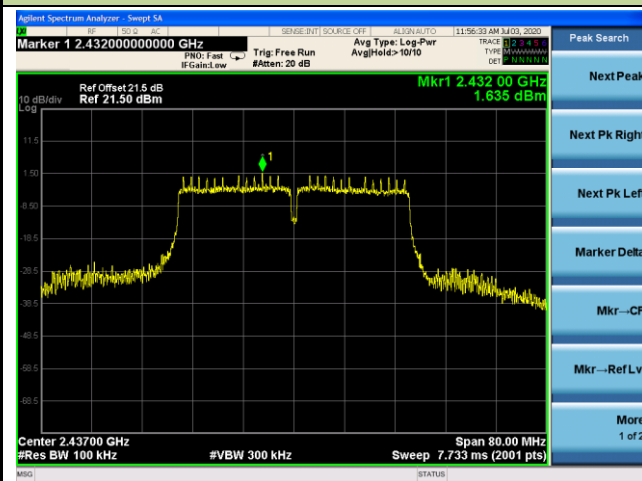


Spurious Emission

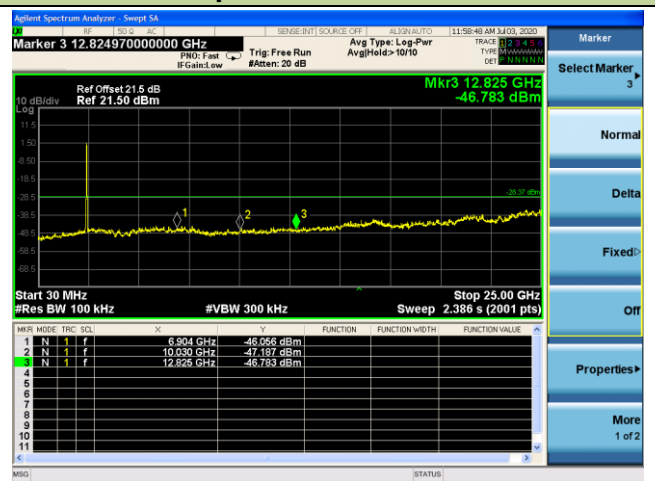


Channel 06 (2437MHz)

100kHz PSD Reference Level



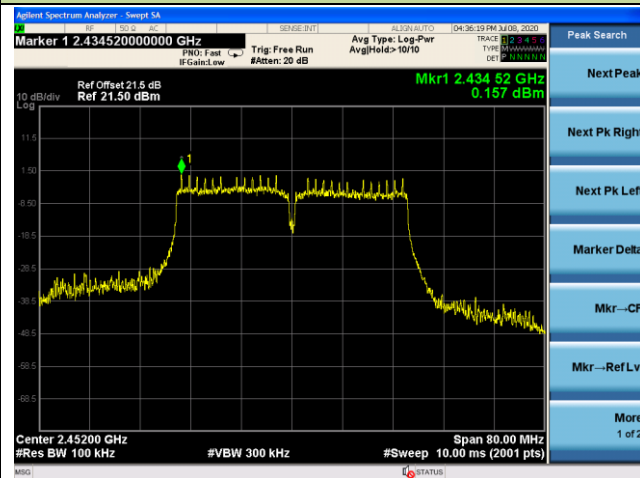
Spurious Emission



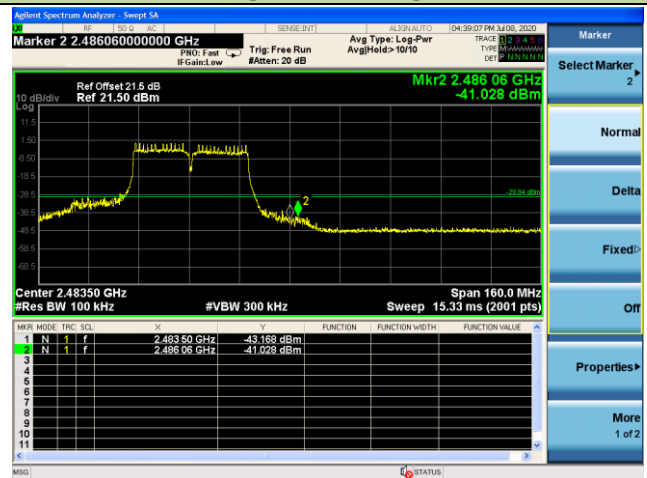
MIMO Mode Ant 1 - 802.11n-HT40 Out-of-Band Emissions

Channel 09 (2452MHz)

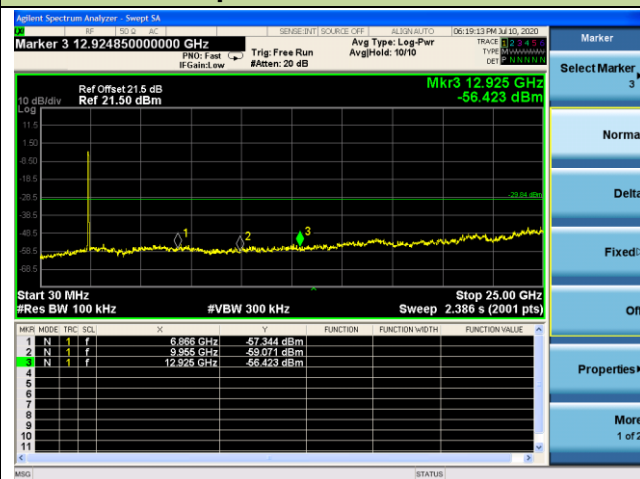
100kHz PSD Reference Level



High Band Edge



Spurious Emission



7.6. Radiated Spurious Emission Measurement

7.6.1. 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

7.6.2. Test Procedure Used

ANSI C63.10-2013 Section 6.3

ANSI C63.10-2013 Section 6.4

ANSI C63.10-2013 Section 6.5

ANSI C63.10-2013 Section 6.6

7.6.3. 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

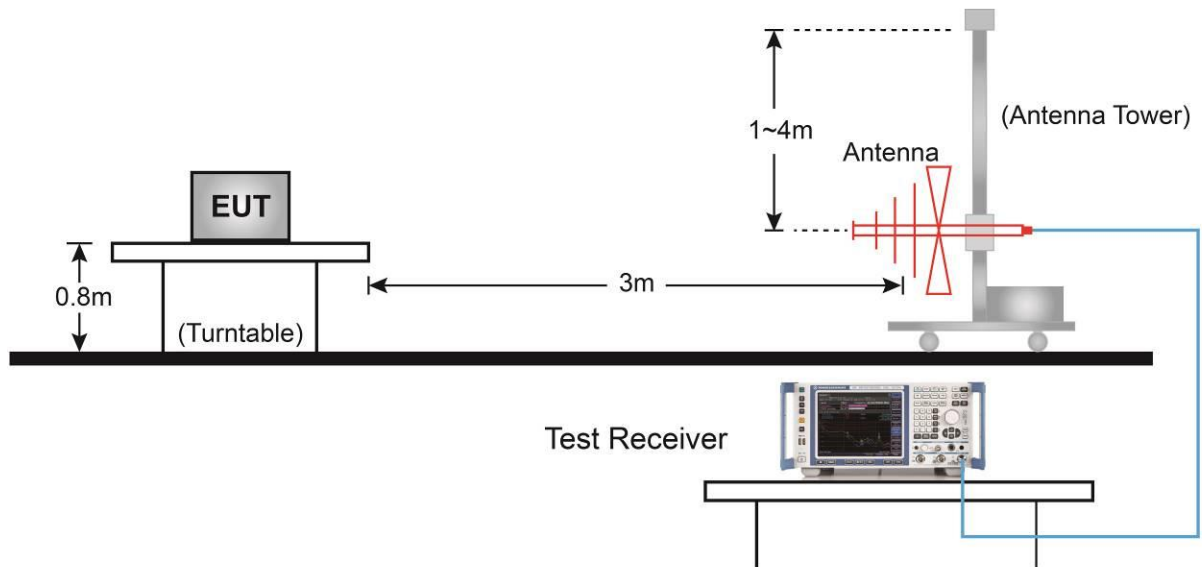
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

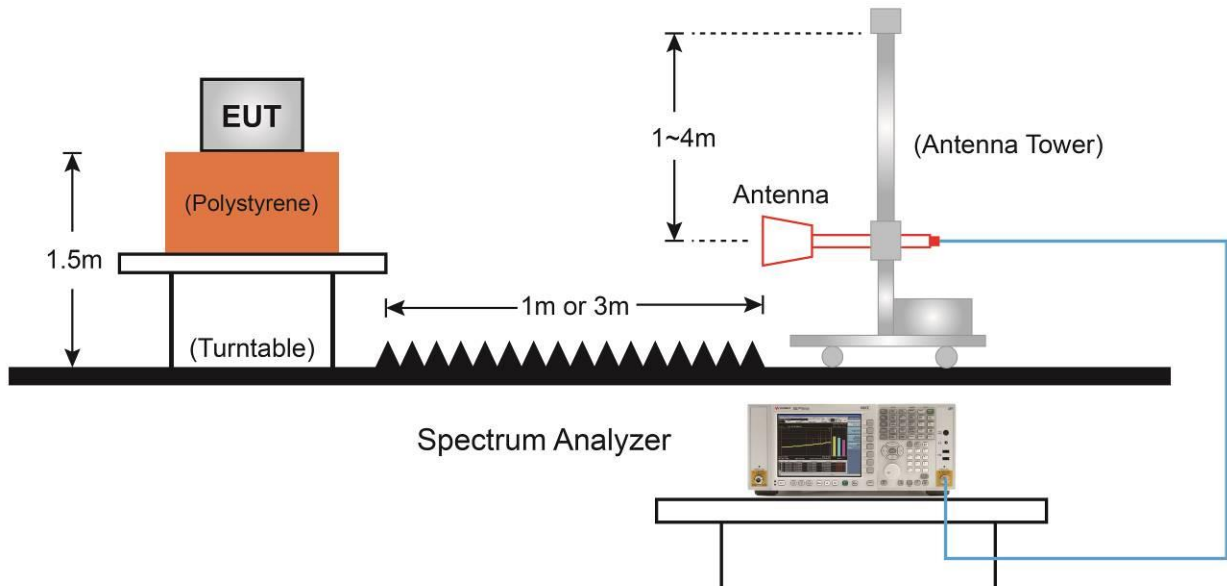
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4.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

7.6.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



7.6.5. Test Result

Product	Mobile Computer	Test Engineer	Antony Yang
Test Site	AC1	Test Date	2020/07/06~2020/07/07
Test Mode:	SISO Mode - 802.11b	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3728.5	40.5	2.6	43.1	74.0	-30.9	Peak	Horizontal
	4825.0	40.8	5.8	46.6	74.0	-27.4	Peak	Horizontal
*	5216.0	35.2	6.1	41.3	74.0	-32.7	Peak	Horizontal
*	5862.0	37.4	6.8	44.2	74.0	-29.8	Peak	Horizontal
	3720.0	44.1	2.6	46.7	74.0	-27.3	Peak	Vertical
*	4825.0	45.3	5.8	51.1	74.0	-22.9	Peak	Vertical
*	5250.0	37.3	6.2	43.5	74.0	-30.5	Peak	Vertical
*	6151.0	37.8	7.4	45.2	74.0	-28.8	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Antony Yang
Test Site	AC1	Test Date	2020/07/06~2020/07/07
Test Mode:	SISO Mode - 802.11b	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4009.0	38.5	3.4	41.9	74.0	-32.1	Peak	Horizontal
	4876.0	41.7	5.5	47.2	74.0	-26.8	Peak	Horizontal
*	5258.5	37.1	6.2	43.3	74.0	-30.7	Peak	Horizontal
*	7060.5	38.6	9.9	48.5	74.0	-25.5	Peak	Horizontal
	3720.0	43.1	2.6	45.7	74.0	-28.3	Peak	Vertical
	4876.0	43.4	5.5	48.9	74.0	-25.1	Peak	Vertical
*	6737.5	35.5	8.9	44.4	74.0	-29.6	Peak	Vertical
*	8735.0	36.5	12.7	49.2	74.0	-24.8	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Antony Yang
Test Site	AC1	Test Date	2020/07/06~2020/07/07
Test Mode:	SISO Mode - 802.11b	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3720.0	40.2	2.6	42.8	74.0	-31.2	Peak	Horizontal
	4927.0	38.4	6.2	44.6	74.0	-29.4	Peak	Horizontal
*	6856.5	37.0	9.1	46.1	74.0	-27.9	Peak	Horizontal
*	7842.5	37.2	11.0	48.2	74.0	-25.8	Peak	Horizontal
	3737.0	46.0	2.7	48.7	74.0	-25.3	Peak	Vertical
	4927.0	41.4	6.2	47.6	74.0	-26.4	Peak	Vertical
*	6567.5	36.7	8.6	45.3	74.0	-28.7	Peak	Vertical
*	7987.0	36.7	11.3	48.0	74.0	-26.0	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11g	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3728.5	39.8	2.6	42.4	74.0	-31.6	Peak	Horizontal
	4825.0	36.9	5.8	42.7	74.0	-31.3	Peak	Horizontal
*	6244.5	37.2	7.4	44.6	74.0	-29.4	Peak	Horizontal
*	7970.0	37.8	11.5	49.3	74.0	-24.7	Peak	Horizontal
	3728.5	42.0	2.6	44.6	74.0	-29.4	Peak	Vertical
	4816.5	38.2	5.8	44.0	74.0	-30.0	Peak	Vertical
*	7077.5	37.5	10.2	47.7	74.0	-26.3	Peak	Vertical
*	7987.0	37.6	11.3	48.9	74.0	-25.1	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11g	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7502.5	37.0	10.8	47.8	74.0	-26.2	Peak	Horizontal
	8276.0	35.5	11.2	46.7	74.0	-27.3	Peak	Horizontal
*	8633.0	35.6	12.2	47.8	74.0	-26.2	Peak	Horizontal
*	9967.5	34.3	14.7	49.0	74.0	-25.0	Peak	Horizontal
	3728.5	45.5	2.6	48.1	74.0	-25.9	Peak	Vertical
	4995.0	37.2	6.3	43.5	74.0	-30.5	Peak	Vertical
*	6329.5	36.4	7.8	44.2	74.0	-29.8	Peak	Vertical
*	7868.0	36.8	11.2	48.0	74.0	-26.0	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11g	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3873.0	38.1	3.2	41.3	74.0	-32.7	Peak	Horizontal
	4995.0	36.5	6.3	42.8	74.0	-31.2	Peak	Horizontal
*	5658.0	36.4	6.4	42.8	74.0	-31.2	Peak	Horizontal
*	7936.0	36.2	11.4	47.6	74.0	-26.4	Peak	Horizontal
	3728.5	46.3	2.6	48.9	74.0	-25.1	Peak	Vertical
	5071.5	37.3	6.4	43.7	74.0	-30.3	Peak	Vertical
*	7069.0	36.7	10.1	46.8	74.0	-27.2	Peak	Vertical
*	8616.0	35.7	12.4	48.1	74.0	-25.9	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3881.5	38.4	3.2	41.6	74.0	-32.4	Peak	Horizontal
	4825.0	38.7	5.8	44.5	74.0	-29.5	Peak	Horizontal
*	8692.5	36.5	13.1	49.6	74.0	-24.4	Peak	Horizontal
*	9814.5	34.7	15.3	50.0	74.0	-24.0	Peak	Horizontal
	3728.5	39.4	2.6	42.0	74.0	-32.0	Peak	Vertical
	4825.0	41.0	5.8	46.8	74.0	-27.2	Peak	Vertical
*	6703.5	35.7	8.8	44.5	74.0	-29.5	Peak	Vertical
*	8905.0	35.0	13.1	48.1	74.0	-25.9	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3720.0	39.2	2.6	41.8	74.0	-32.2	Peak	Horizontal
	4876.0	37.8	5.5	43.3	74.0	-30.7	Peak	Horizontal
*	7817.0	36.8	10.9	47.7	74.0	-26.3	Peak	Horizontal
*	8692.5	35.1	13.1	48.2	74.0	-25.8	Peak	Horizontal
	3720.0	41.5	2.6	44.1	74.0	-29.9	Peak	Vertical
	4884.5	41.1	5.6	46.7	74.0	-27.3	Peak	Vertical
*	7953.0	36.1	11.7	47.8	74.0	-26.2	Peak	Vertical
*	8777.5	35.6	12.8	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4119.5	38.6	3.7	42.3	74.0	-31.7	Peak	Horizontal
	4927.0	36.7	6.2	42.9	74.0	-31.1	Peak	Horizontal
*	6618.5	34.9	8.4	43.3	74.0	-30.7	Peak	Horizontal
*	7885.0	36.4	11.1	47.5	74.0	-26.5	Peak	Horizontal
	3720.0	43.2	2.6	45.8	74.0	-28.2	Peak	Vertical
	4910.0	39.3	5.8	45.1	74.0	-28.9	Peak	Vertical
*	7162.5	37.2	10.6	47.8	74.0	-26.2	Peak	Vertical
*	7961.5	36.8	11.6	48.4	74.0	-25.6	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT40	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
	4017.5	37.8	3.5	41.3	74.0	-32.7	Peak	Horizontal
	4969.5	36.5	6.1	42.6	74.0	-31.4	Peak	Horizontal
*	6890.5	35.4	8.8	44.2	74.0	-29.8	Peak	Horizontal
*	8616.0	35.4	12.4	47.8	74.0	-26.2	Peak	Horizontal
	3737.0	39.3	2.7	42.0	74.0	-32.0	Peak	Vertical
	4995.0	37.5	6.3	43.8	74.0	-30.2	Peak	Vertical
*	6890.5	35.3	8.8	44.1	74.0	-29.9	Peak	Vertical
*	8769.0	35.6	12.9	48.5	74.0	-25.5	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT40	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3601.0	38.8	2.4	41.2	74.0	-32.8	Peak	Horizontal
	4986.5	38.3	6.4	44.7	74.0	-29.3	Peak	Horizontal
*	6729.0	36.6	8.9	45.5	74.0	-28.5	Peak	Horizontal
*	8633.0	35.1	12.2	47.3	74.0	-26.7	Peak	Horizontal
	3728.5	44.2	2.6	46.8	74.0	-27.2	Peak	Vertical
	4876.0	37.9	5.5	43.4	74.0	-30.6	Peak	Vertical
*	7018.0	36.9	9.8	46.7	74.0	-27.3	Peak	Vertical
*	8692.5	36.1	13.1	49.2	74.0	-24.8	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	SISO Mode - 802.11n-HT40	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3839.0	37.9	3.0	40.9	74.0	-33.1	Peak	Horizontal
	4825.0	36.3	5.8	42.1	74.0	-31.9	Peak	Horizontal
*	6253.0	37.0	7.5	44.5	74.0	-29.5	Peak	Horizontal
*	8735.0	35.2	12.7	47.9	74.0	-26.1	Peak	Horizontal
	3728.5	41.5	2.6	44.1	74.0	-29.9	Peak	Vertical
	4986.5	37.6	6.4	44.0	74.0	-30.0	Peak	Vertical
*	7086.0	36.4	10.3	46.7	74.0	-27.3	Peak	Vertical
*	8658.5	35.8	12.8	48.6	74.0	-25.4	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3728.5	39.2	2.6	41.8	74.0	-32.4	Peak	Horizontal
	4825.0	37.0	5.8	42.8	74.0	-29.5	Peak	Horizontal
*	7026.5	37.0	9.8	46.8	74.0	-24.4	Peak	Horizontal
*	8735.0	35.7	12.7	48.4	74.0	-24.0	Peak	Horizontal
	3728.5	39.7	2.6	42.3	74.0	-32.0	Peak	Vertical
	4638.0	37.6	5.4	43.0	74.0	-27.2	Peak	Vertical
*	7103.0	36.4	10.4	46.8	74.0	-29.5	Peak	Vertical
*	7961.5	37.0	11.6	48.6	74.0	-25.9	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3720.0	40.1	2.6	42.7	74.0	-31.3	Peak	Horizontal
	4604.0	38.2	5.0	43.2	74.0	-30.8	Peak	Horizontal
*	6329.5	36.4	7.8	44.2	74.0	-29.8	Peak	Horizontal
*	10137.5	36.4	15.6	52.0	74.0	-22.0	Peak	Horizontal
	3728.5	44.0	2.6	46.6	74.0	-27.4	Peak	Vertical
	5088.5	36.9	6.5	43.4	74.0	-30.6	Peak	Vertical
*	7018.0	36.6	9.8	46.4	74.0	-27.6	Peak	Vertical
*	8794.5	34.5	12.9	47.4	74.0	-26.6	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT20	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3737.0	38.1	2.7	40.8	74.0	-33.2	Peak	Horizontal
	4816.5	36.3	5.8	42.1	74.0	-31.9	Peak	Horizontal
*	6576.0	36.5	8.7	45.2	74.0	-28.8	Peak	Horizontal
*	8769.0	35.3	12.9	48.2	74.0	-25.8	Peak	Horizontal
	3728.5	43.3	2.6	45.9	74.0	-28.1	Peak	Vertical
	4663.5	38.3	5.2	43.5	74.0	-30.5	Peak	Vertical
*	6576.0	36.8	8.7	45.5	74.0	-28.5	Peak	Vertical
*	8769.0	35.7	12.9	48.6	74.0	-25.4	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT40	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
	3728.5	40.3	2.6	42.9	74.0	-31.1	Peak	Horizontal
	4995.0	38.8	6.3	45.1	74.0	-28.9	Peak	Horizontal
*	5998.0	38.0	7.1	45.1	74.0	-28.9	Peak	Horizontal
*	7910.5	36.8	11.2	48.0	74.0	-26.0	Peak	Horizontal
	3728.5	41.0	2.6	43.6	74.0	-30.4	Peak	Vertical
	4986.5	37.9	6.4	44.3	74.0	-29.7	Peak	Vertical
*	6423.0	36.5	8.3	44.8	74.0	-29.2	Peak	Vertical
*	8803.0	36.9	13.0	49.9	74.0	-24.1	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT40	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4009.0	36.4	3.4	39.8	74.0	-34.2	Peak	Horizontal
	4944.0	36.3	6.1	42.4	74.0	-31.6	Peak	Horizontal
*	7060.5	36.9	9.9	46.8	74.0	-27.2	Peak	Horizontal
*	7919.0	37.0	11.3	48.3	74.0	-25.7	Peak	Horizontal
	3728.5	44.8	2.6	47.4	74.0	-26.6	Peak	Vertical
	4986.5	37.2	6.4	43.6	74.0	-30.4	Peak	Vertical
*	6729.0	37.1	8.9	46.0	74.0	-28.0	Peak	Vertical
*	7919.0	37.5	11.3	48.8	74.0	-25.2	Peak	Vertical

Note 1: "*" means test frequency didn't 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	Mobile Computer	Test Engineer	Buter Shi
Test Site	AC1	Test Date	2020/07/07~2020/07/08
Test Mode:	MIMO Mode - 802.11n-HT40	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 (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4102.5	37.3	3.5	40.8	74.0	-33.2	Peak	Horizontal
	4910.0	37.2	5.8	43.0	74.0	-31.0	Peak	Horizontal
*	6363.5	36.0	8.1	44.1	74.0	-29.9	Peak	Horizontal
*	7851.0	36.9	11.0	47.9	74.0	-26.1	Peak	Horizontal
	3720.0	39.2	2.6	41.8	74.0	-32.2	Peak	Vertical
	4995.0	38.2	6.3	44.5	74.0	-29.5	Peak	Vertical
*	6151.0	37.2	7.4	44.6	74.0	-29.4	Peak	Vertical
*	7970.0	37.3	11.5	48.8	74.0	-25.2	Peak	Vertical

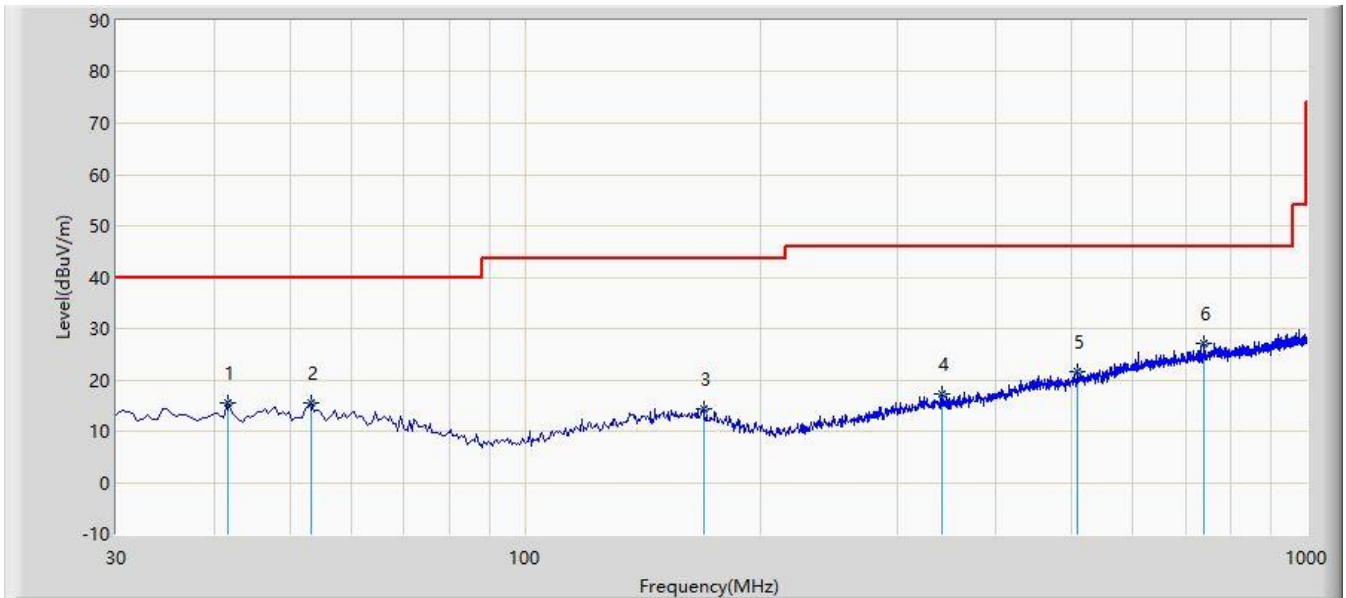
Note 1: "*" means test frequency didn't fall into restricted band.

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

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

The Result of Radiated Emission below 1GHz:

Site: AC1	Time: 2020/07/11 - 16:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_VULB 9168 _30-1000MHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			41.640	15.547	1.464	-24.453	40.000	14.083	QP
2			53.280	15.498	1.080	-24.502	40.000	14.418	QP
3			169.195	14.383	0.326	-29.117	43.500	14.057	QP
4			341.370	17.122	1.274	-28.878	46.000	15.848	QP
5			509.180	21.725	1.907	-24.275	46.000	19.818	QP
6		*	740.040	27.199	3.152	-18.801	46.000	24.047	QP

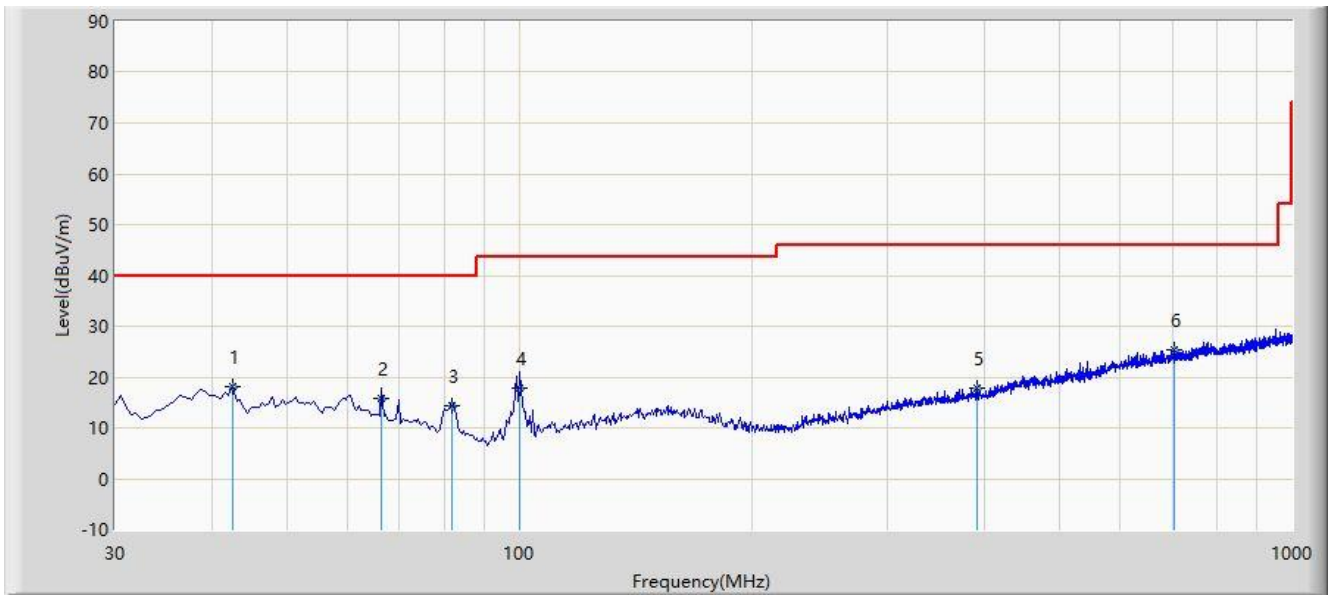
Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 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: AC1	Time: 2020/07/11 - 16:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_VULB 9168 _30-1000MHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Worst Case Mode: Transmit by 802.11n-HT40 at channel 2422MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			42.610	18.181	4.038	-21.819	40.000	14.143	QP
2			66.375	15.863	2.810	-24.137	40.000	13.053	QP
3			81.895	14.413	4.910	-25.587	40.000	9.503	QP
4			100.325	17.842	8.190	-25.658	43.500	9.652	QP
5			391.325	17.682	0.522	-28.318	46.000	17.160	QP
6		*	703.665	25.389	2.106	-20.611	46.000	23.283	QP

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

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

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 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.

7.7. Radiated Restricted Band Edge Measurement

7.7.1. 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

7.7.2.Test Procedure Used

ANSI C63.10-2013 Section 6.3

ANSI C63.10-2013 Section 6.6

ANSI C63.10-2013 Section 11.13

7.7.3.Test Setting

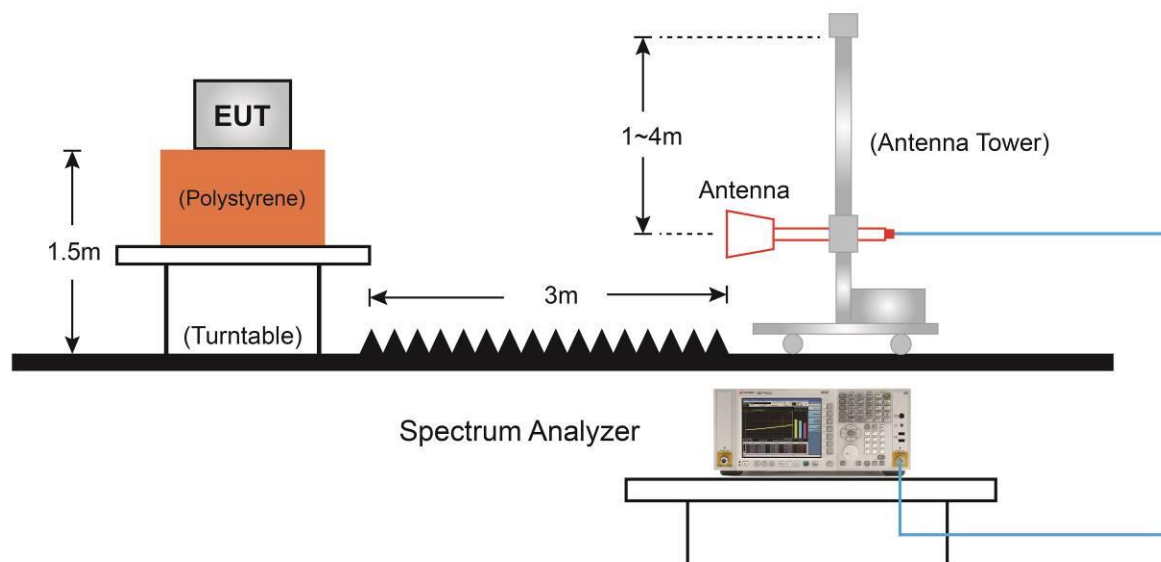
Peak Field Strength Measurements

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

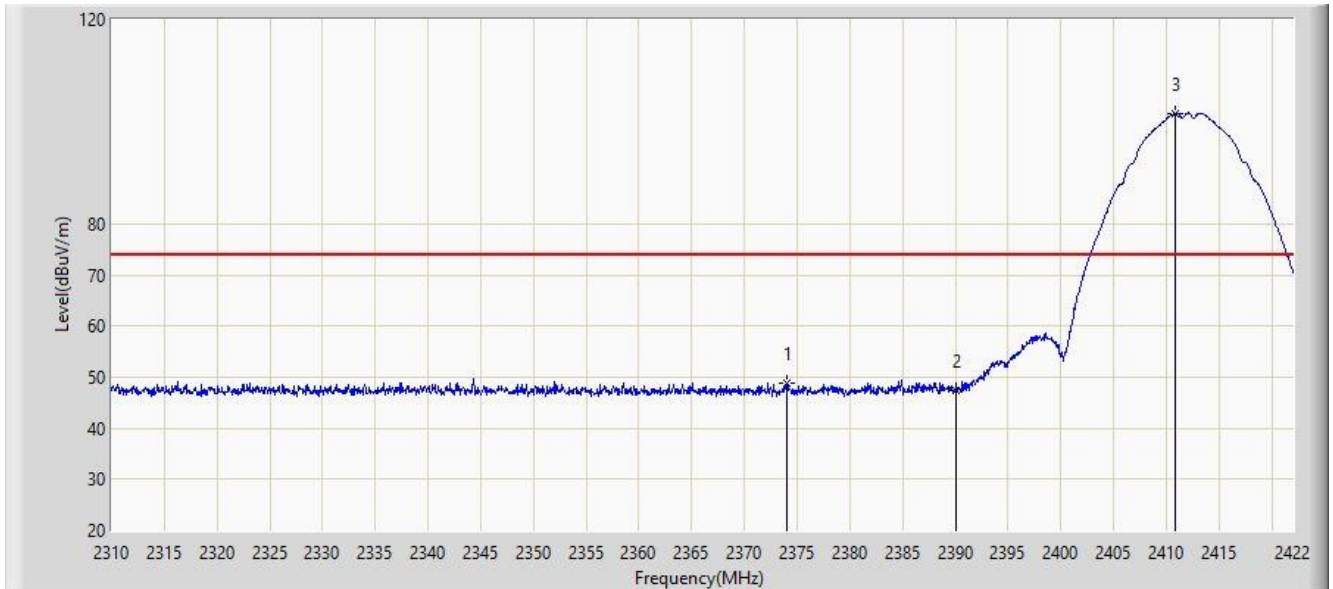
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

7.7.4.Test Setup



7.7.5.Test Result

Site: AC1	Time: 2020/07/06 - 10:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0	

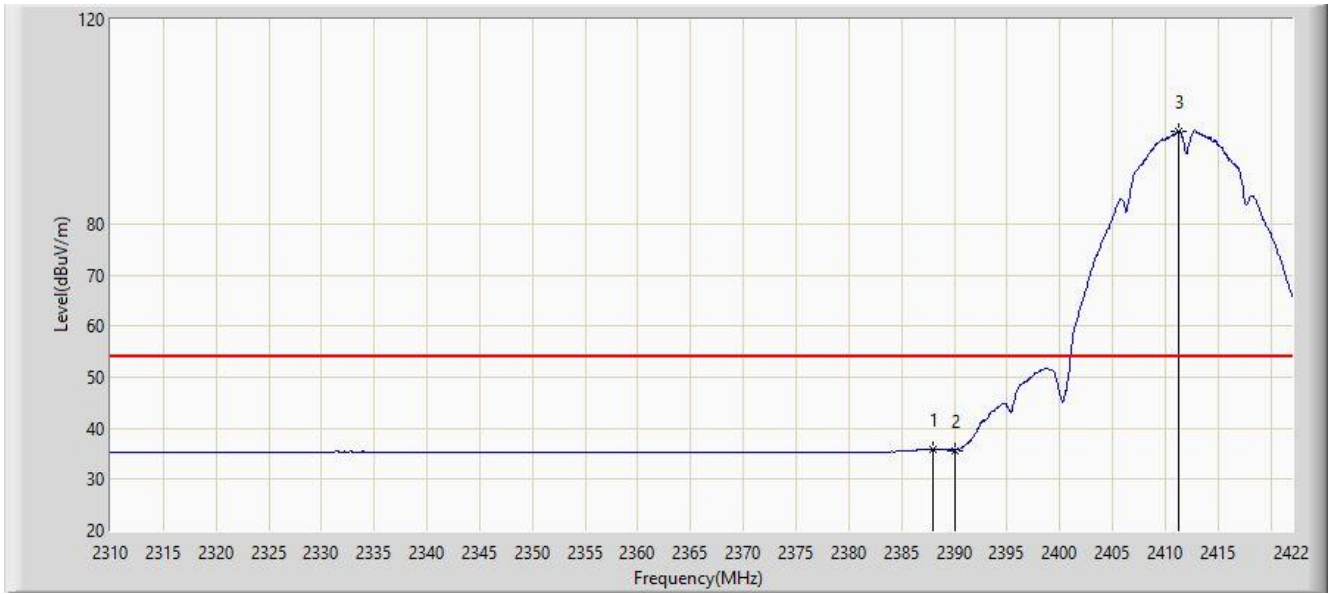


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2374.064	48.722	16.029	-25.278	74.000	32.694	PK
2		2390.000	47.462	14.750	-26.538	74.000	32.712	PK
3	*	2410.856	101.531	68.800	N/A	N/A	32.731	PK

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

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

Site: AC1	Time: 2020/07/06 - 10:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0	

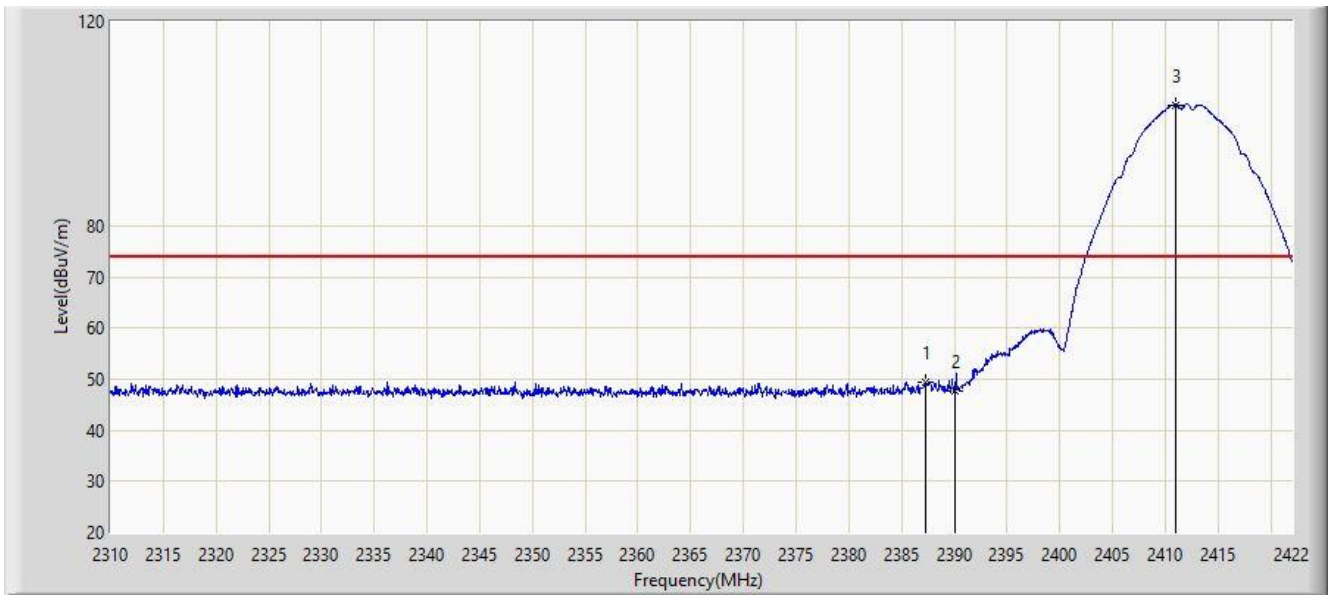


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.952	35.936	3.234	-18.064	54.000	32.703	AV
2		2390.000	35.698	2.986	-18.302	54.000	32.712	AV
3	*	2411.192	98.182	65.451	N/A	N/A	32.731	AV

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

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

Site: AC1	Time: 2020/07/06 - 10:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0	

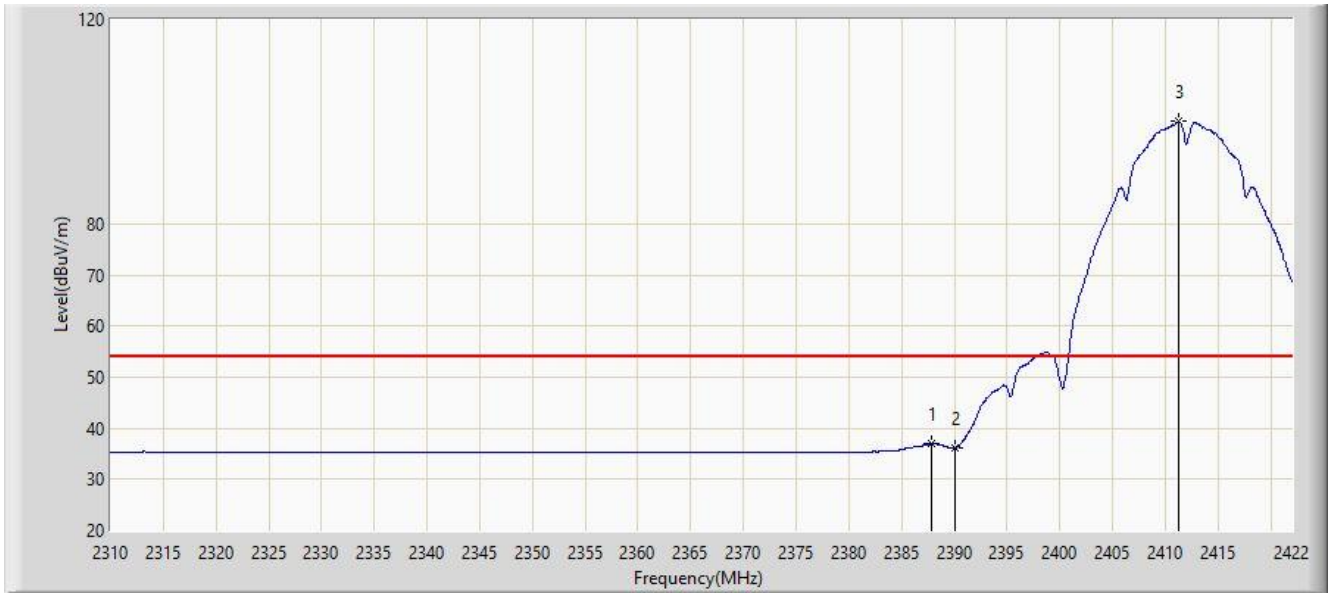


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.224	49.418	16.719	-24.582	74.000	32.699	PK
2		2390.000	47.714	15.002	-26.286	74.000	32.712	PK
3	*	2410.912	103.712	70.981	N/A	N/A	32.731	PK

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

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

Site: AC1	Time: 2020/07/06 - 10:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2412MHz Ant 0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.840	36.931	4.229	-17.069	54.000	32.702	AV
2		2390.000	36.153	3.441	-17.847	54.000	32.712	AV
3	*	2411.192	100.081	67.350	N/A	N/A	32.731	AV

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

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

Site: AC1	Time: 2020/07/06 - 10:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0	

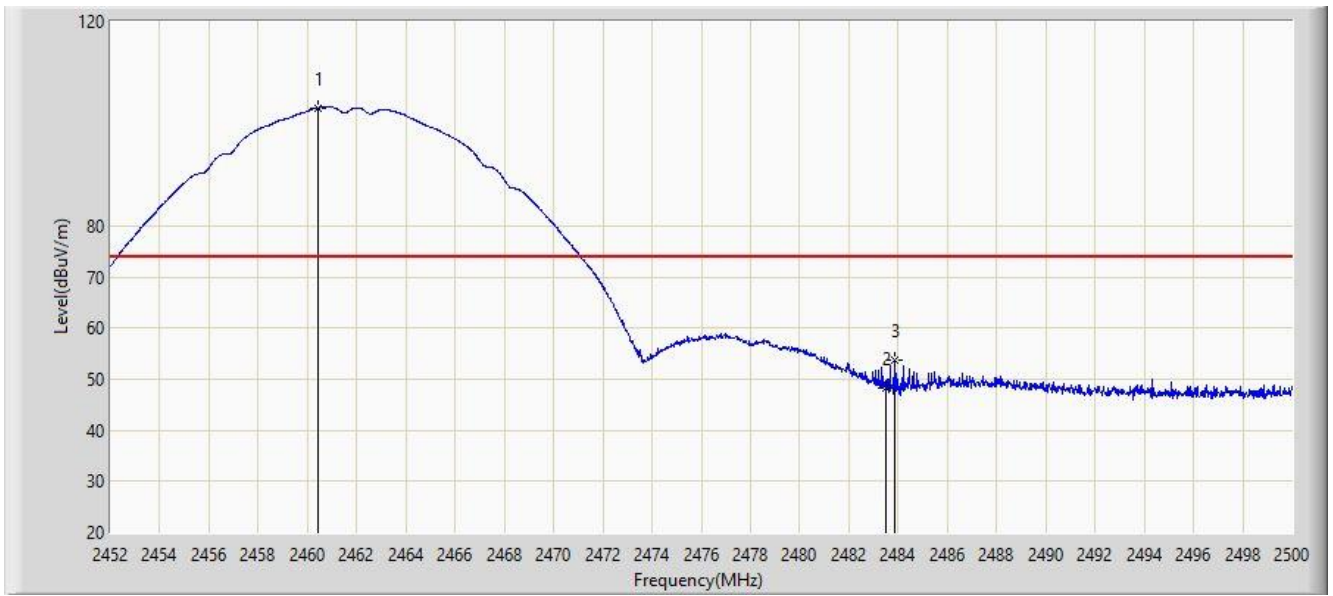


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.048	99.672	66.919	N/A	N/A	32.753	AV
2		2483.500	36.470	3.820	-17.530	54.000	32.651	AV
3		2486.608	37.793	5.170	-16.207	54.000	32.623	AV

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

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

Site: AC1	Time: 2020/07/06 - 10:51
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant 0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.448	103.085	70.334	N/A	N/A	32.751	PK
2		2483.500	48.274	15.624	-25.726	74.000	32.651	PK
3		2483.848	53.599	20.952	-20.401	74.000	32.647	PK

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

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

Site: AC1	Time: 2020/07/06 - 10:53
Limit: FCC_Part15.209_RE(3m)	Engineer: Antony Yang
Probe: AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: By Battery
Test Mode: Transmit by 802.11b at Channel 2462MHz Ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.808	99.667	66.915	N/A	N/A	32.752	AV
2		2483.500	36.814	4.164	-17.186	54.000	32.651	AV
3		2486.920	38.245	5.624	-15.755	54.000	32.621	AV

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

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