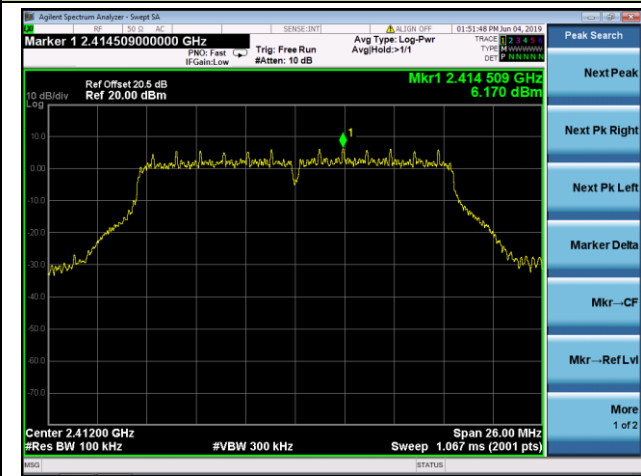


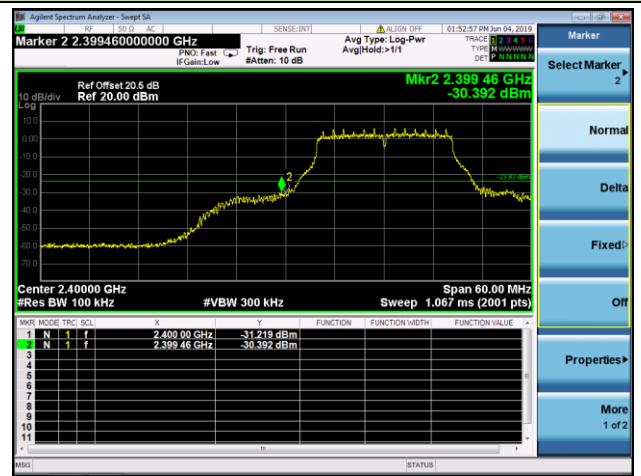
802.11g Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 01 (2412MHz)

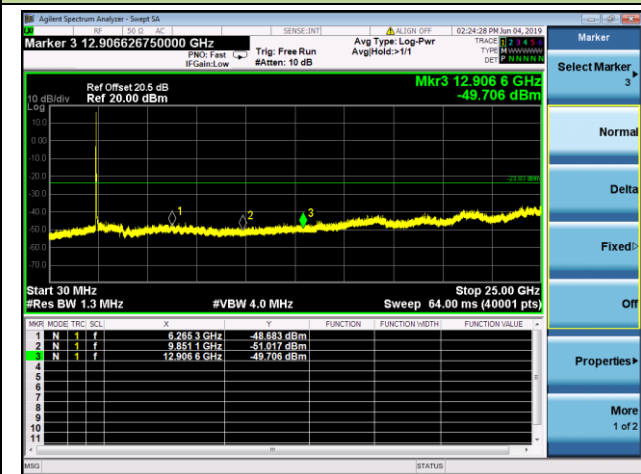
100kHz PSD reference Level



Low Band Edge



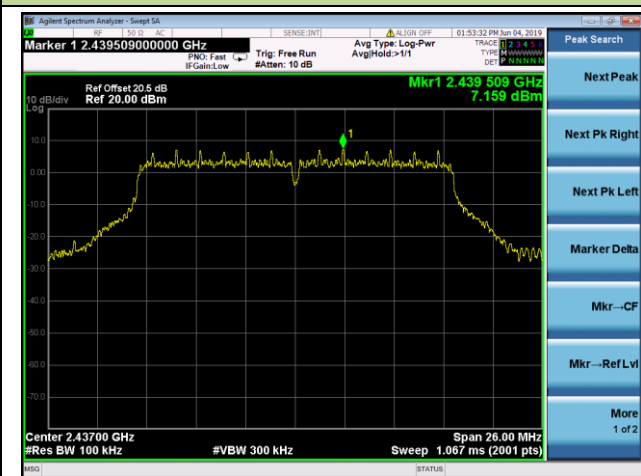
Spurious Emission



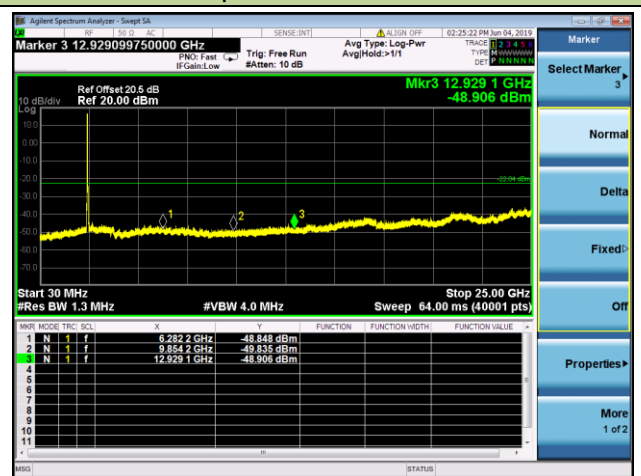
Note: The Value of the Display Line is -23.83dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

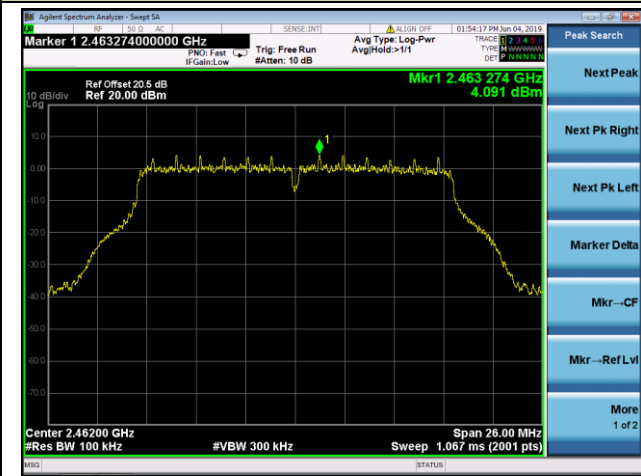


Note: The Value of the Display Line is -22.91dBm

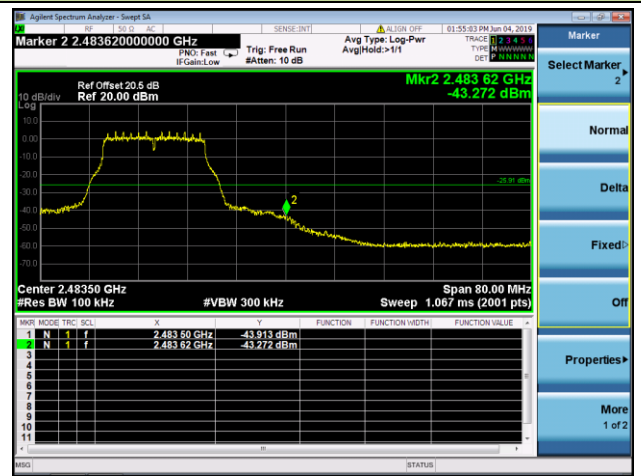
802.11g Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 11 (2462MHz)

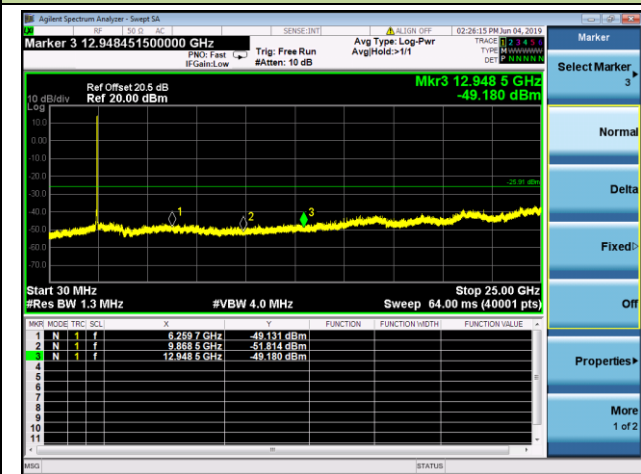
100kHz PSD reference Level



High Band Edge



Spurious Emission

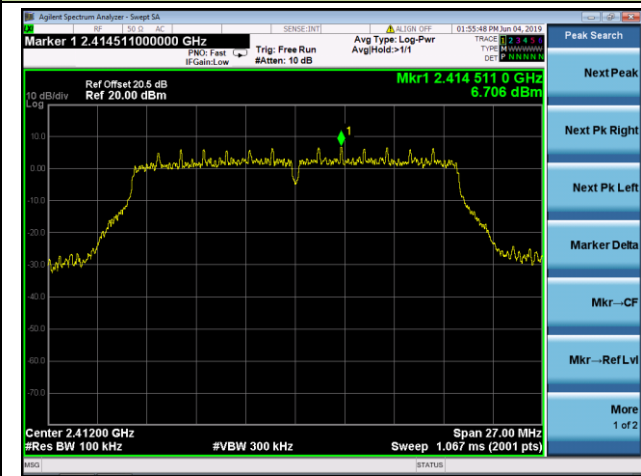


Note: The Value of the Display Line is -25.91dBm

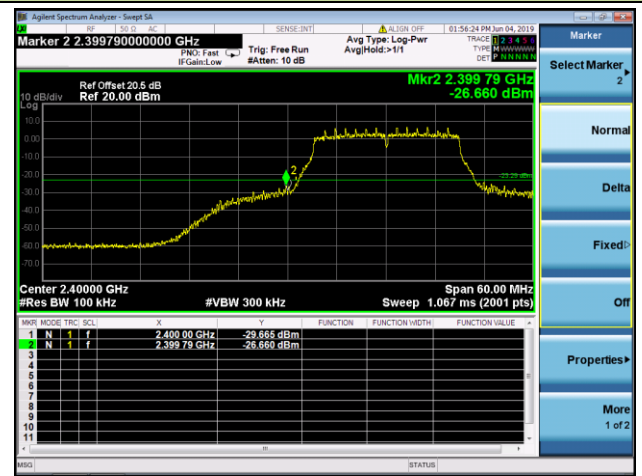
802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 01 (2412MHz)

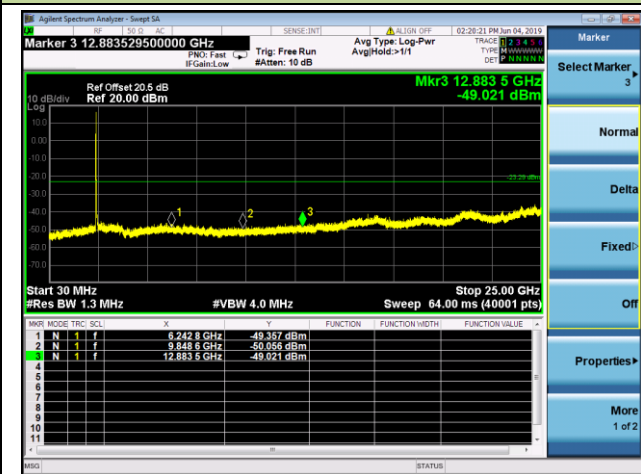
100kHz PSD reference Level



Low Band Edge



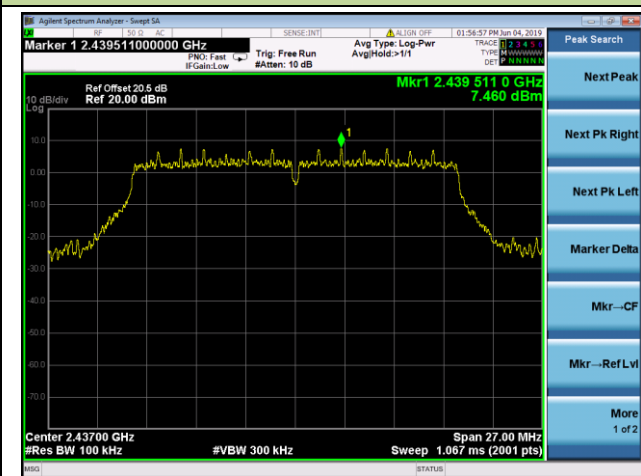
Spurious Emission



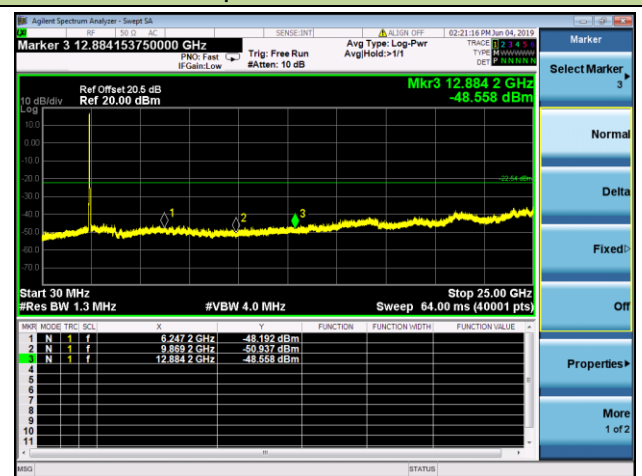
Note: The Value of the Display Line is -23.29dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

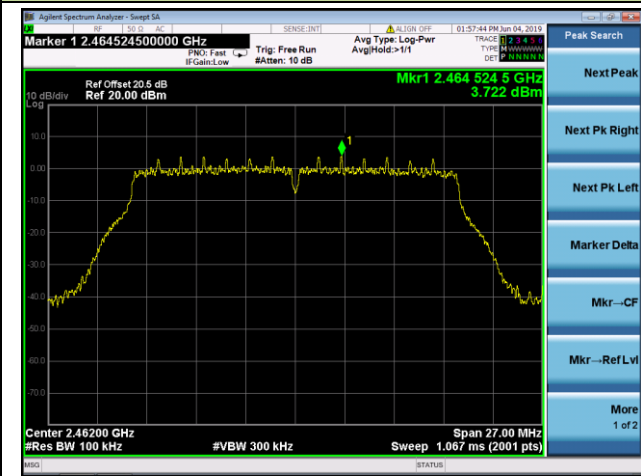


Note: The Value of the Display Line is -22.54dBm

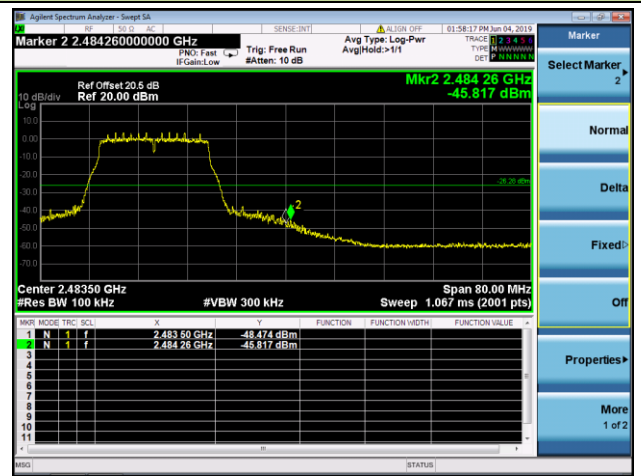
802.11n-HT20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 11 (2462MHz)

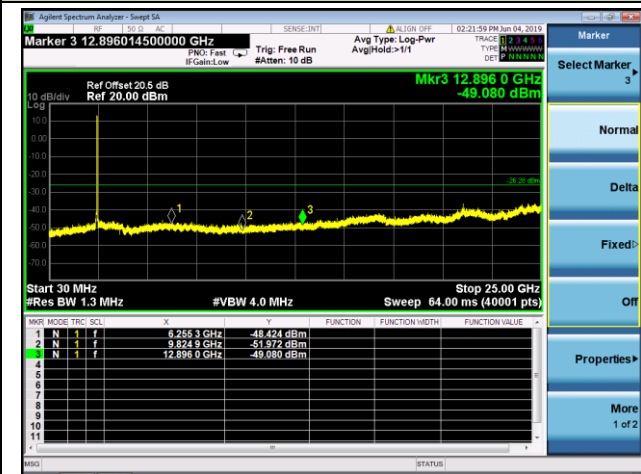
100kHz PSD reference Level



High Band Edge



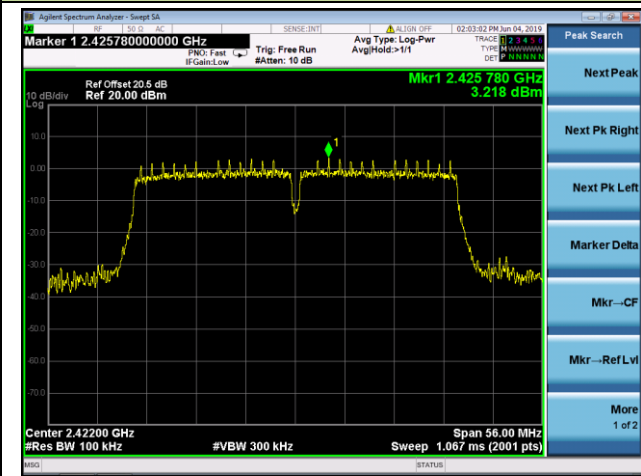
Spurious Emission



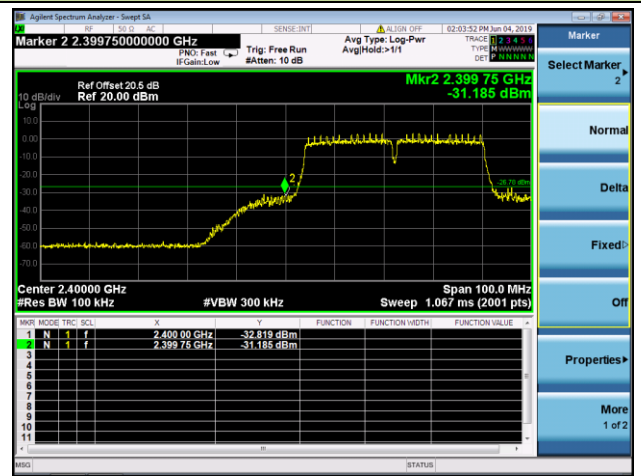
Note: The Value of the Display Line is -26.28dBm

802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1  
Channel 03 (2422MHz)

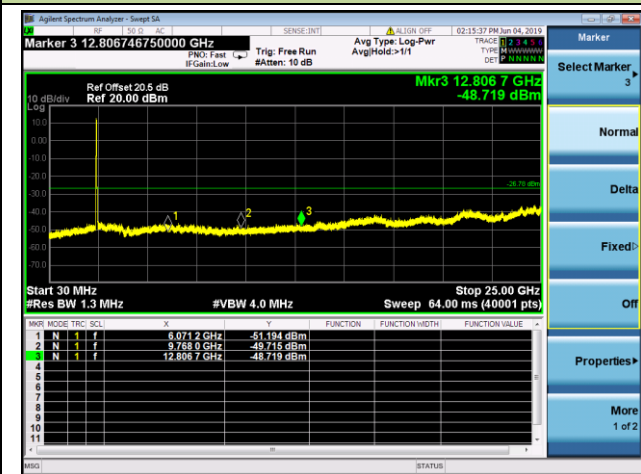
100kHz PSD reference Level



Low Band Edge



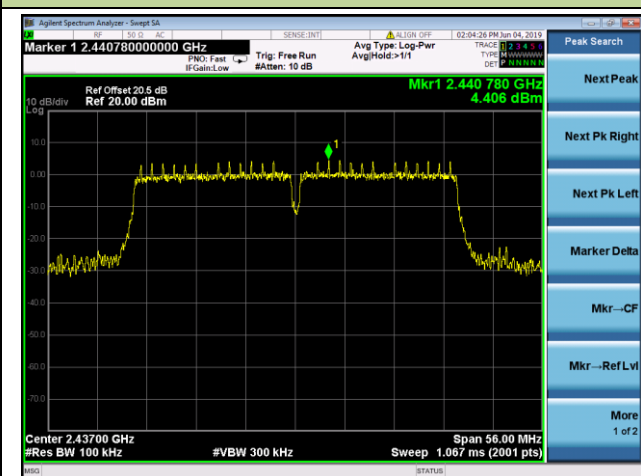
Spurious Emission



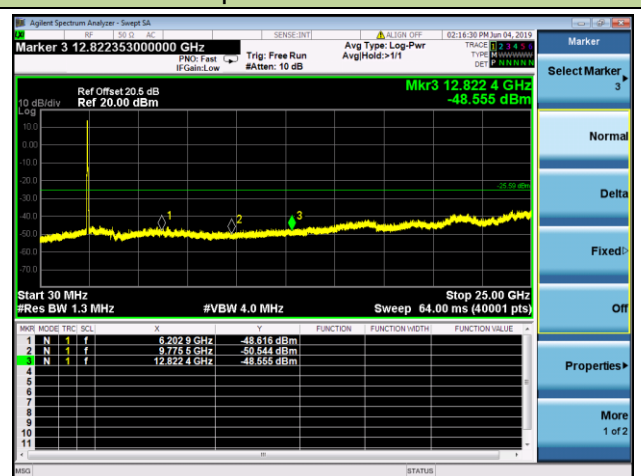
Note: The Value of the Display Line is -26.78dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

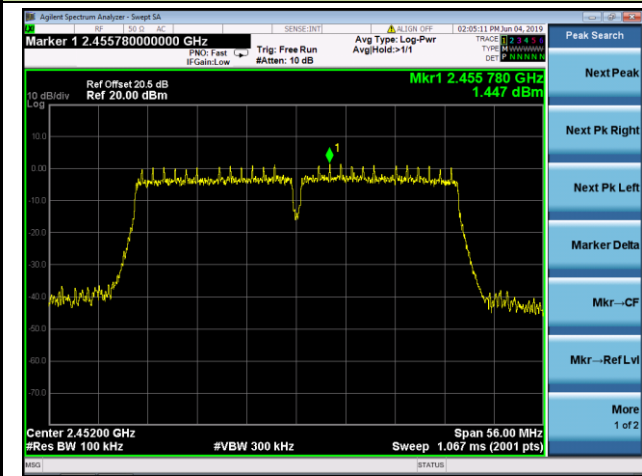


Note: The Value of the Display Line is -25.59dBm

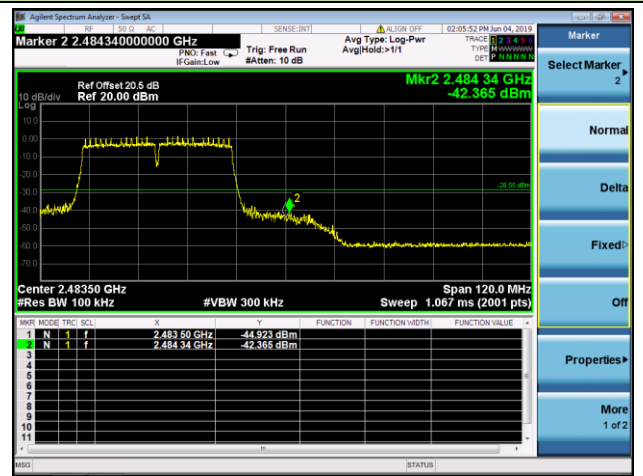
802.11n-HT40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 09 (2452MHz)

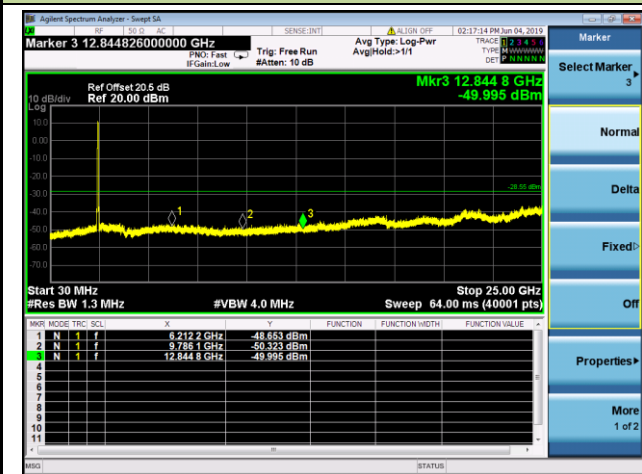
100kHz PSD reference Level



High Band Edge



Spurious Emission

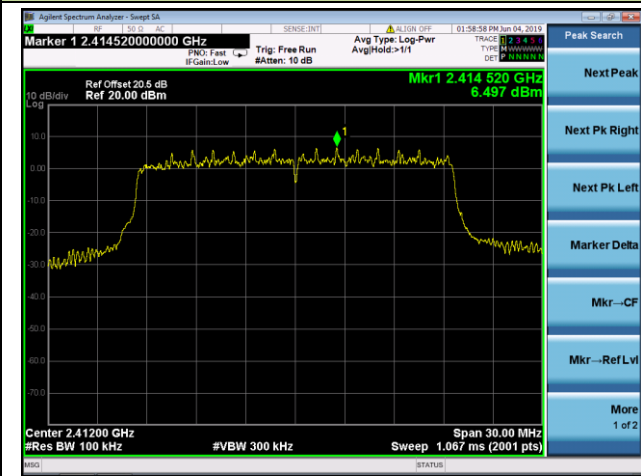


Note: The Value of the Display Line is -28.55dBm

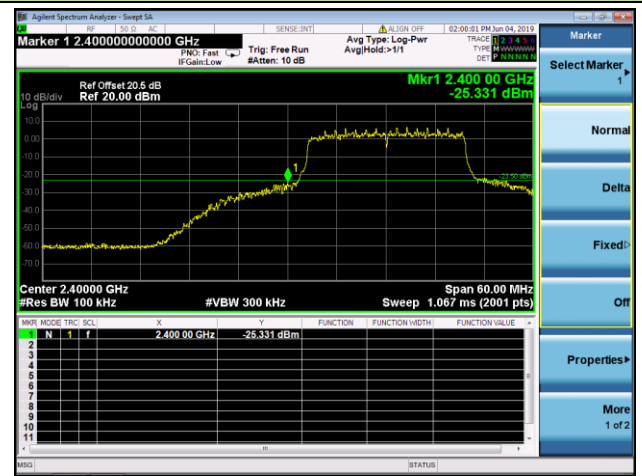
802.11ax-HE20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 01 (2412MHz)

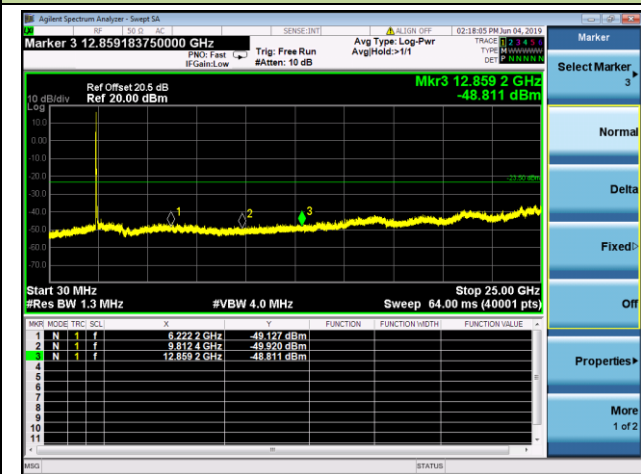
100kHz PSD reference Level



Low Band Edge



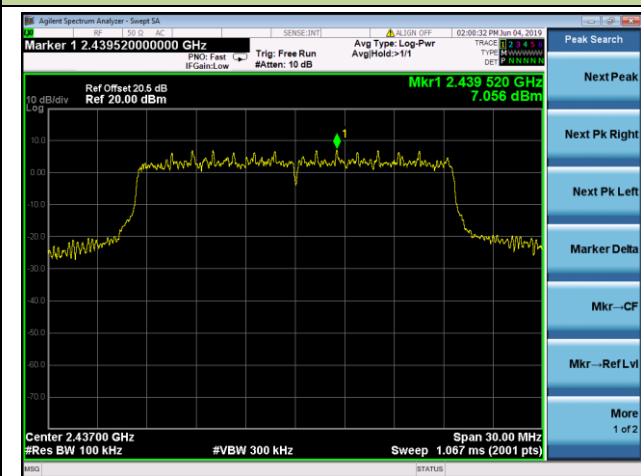
Spurious Emission



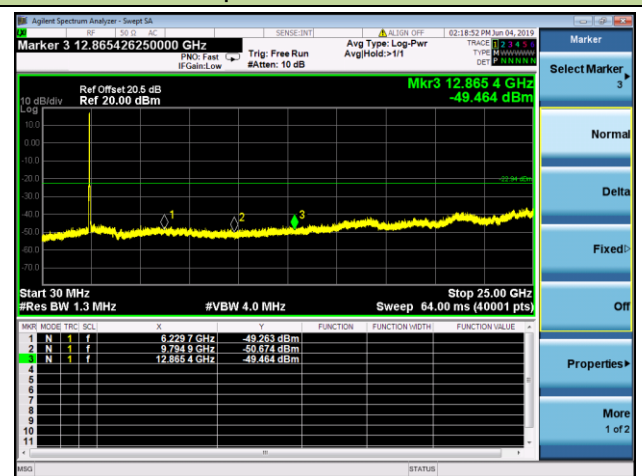
Note: The Value of the Display Line is -23.50dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

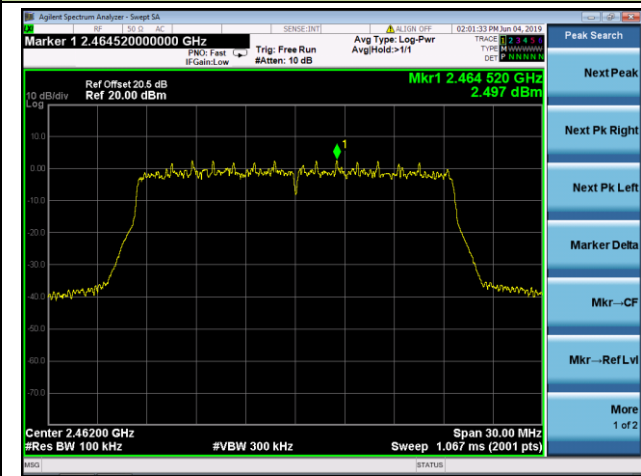


Note: The Value of the Display Line is -22.94dBm

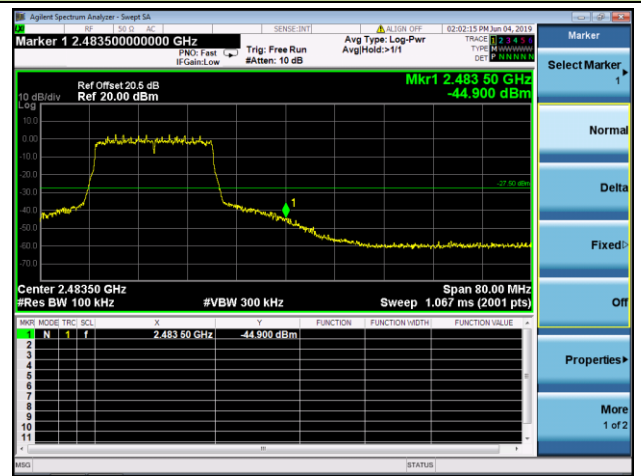
802.11ax-HE20 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 11 (2462MHz)

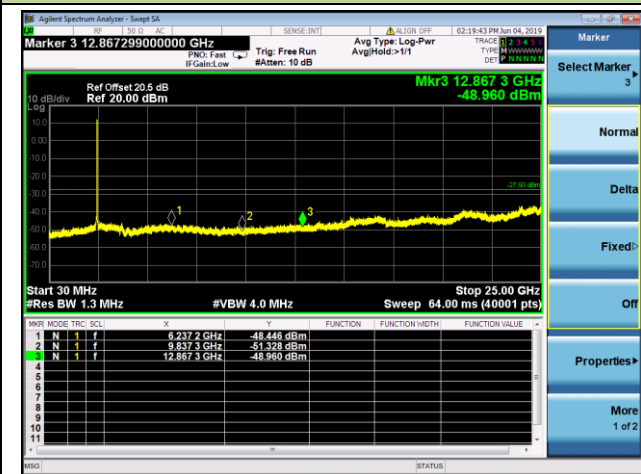
100kHz PSD reference Level



High Band Edge



Spurious Emission



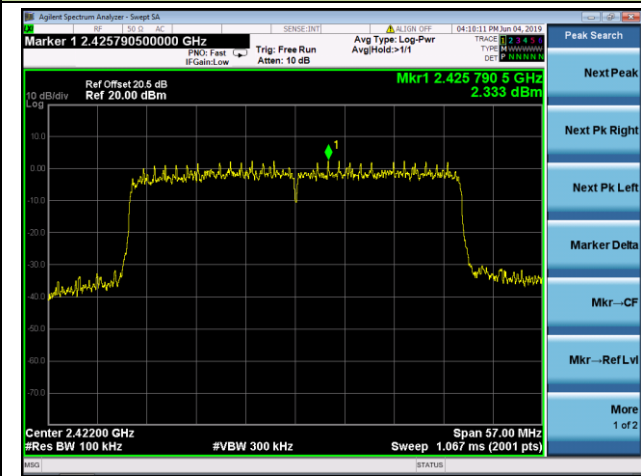
Note: The Value of the Display Line is -27.50dBm



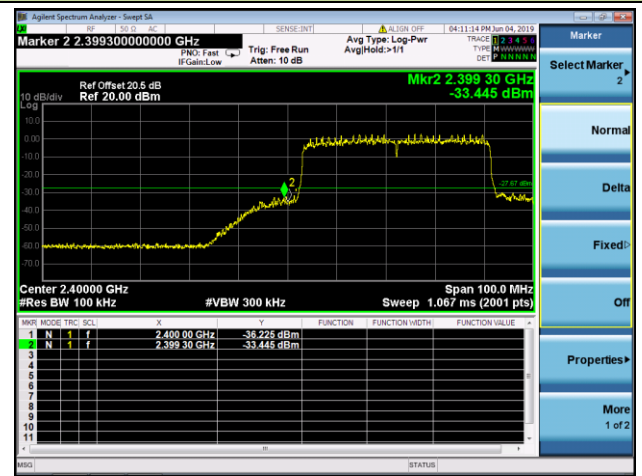
802.11ax-HE40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 03 (2422MHz)

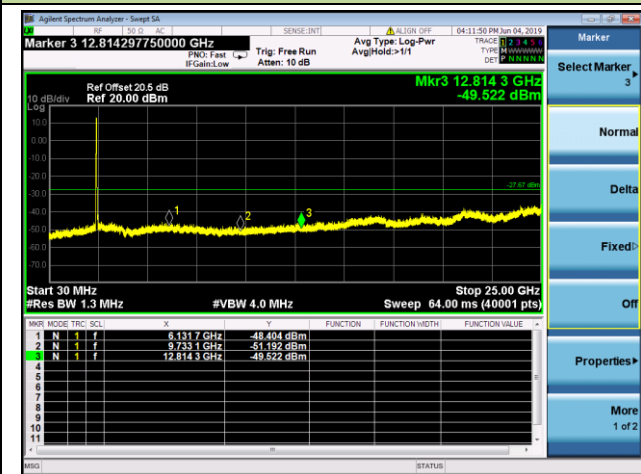
100kHz PSD reference Level



Low Band Edge



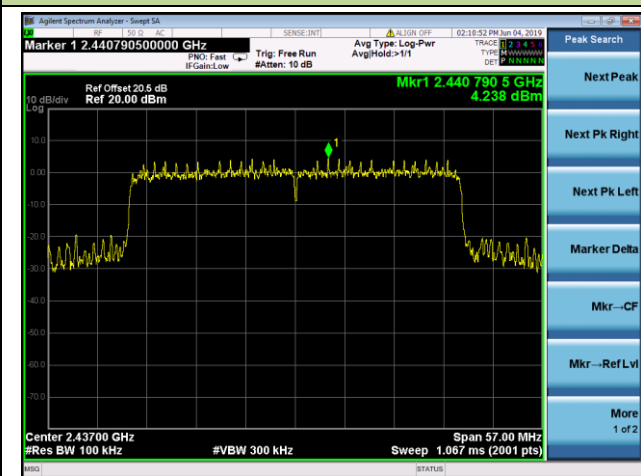
Spurious Emission



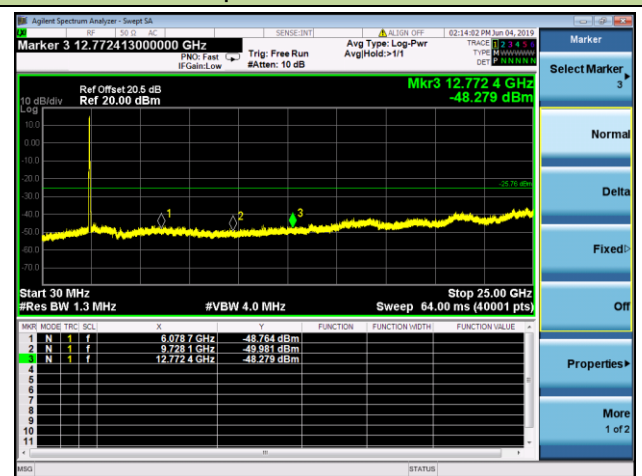
Note: The Value of the Display Line is -27.67dBm

Channel 06 (2437MHz)

100kHz PSD reference Level



Spurious Emission

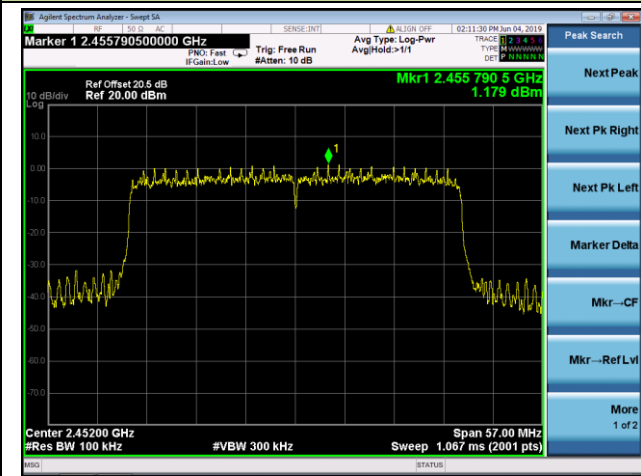


Note: The Value of the Display Line is -25.76dBm

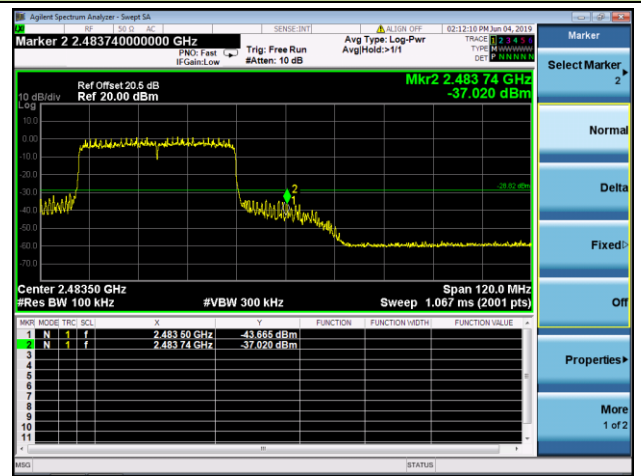
802.11ax-HE40 Out-of-Band Emissions - Ant 1 / Ant 0 + 1

Channel 09 (2452MHz)

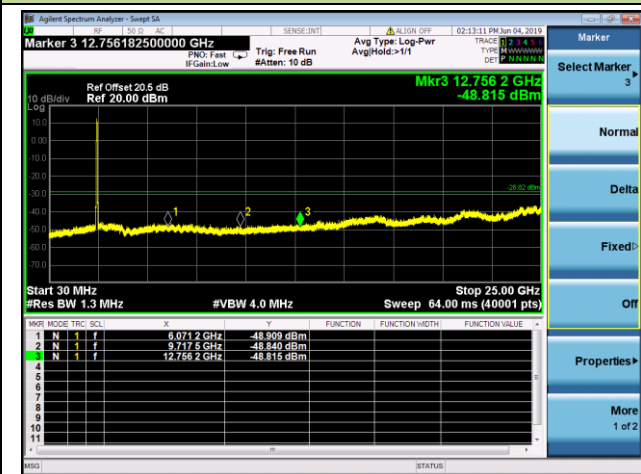
100kHz PSD reference Level



High Band Edge



Spurious Emission



Note: The Value of the Display Line is -28.82dBm

## 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 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

### 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

**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**

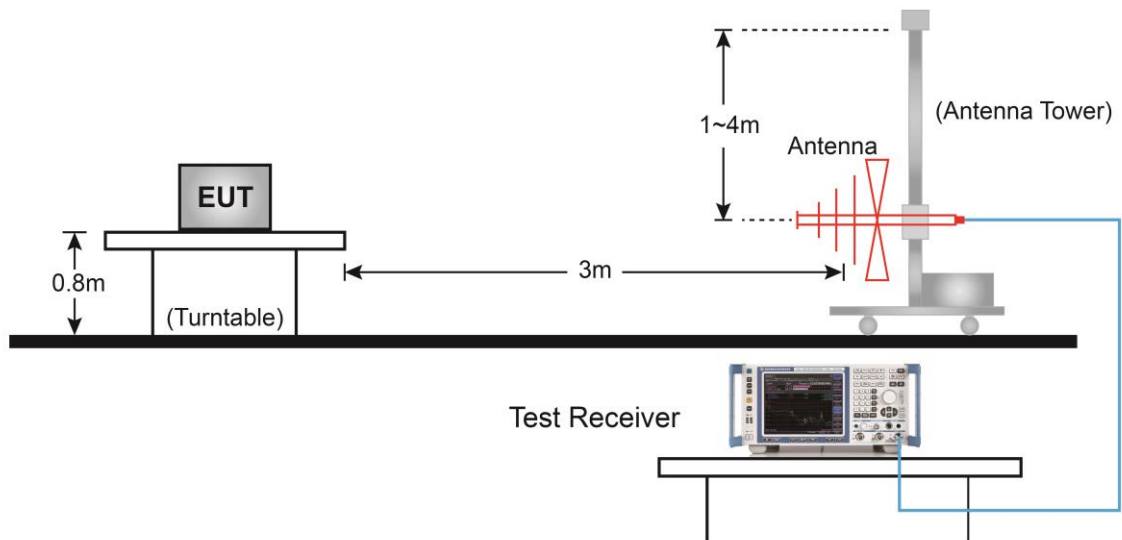
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Average Measurements above 1GHz**

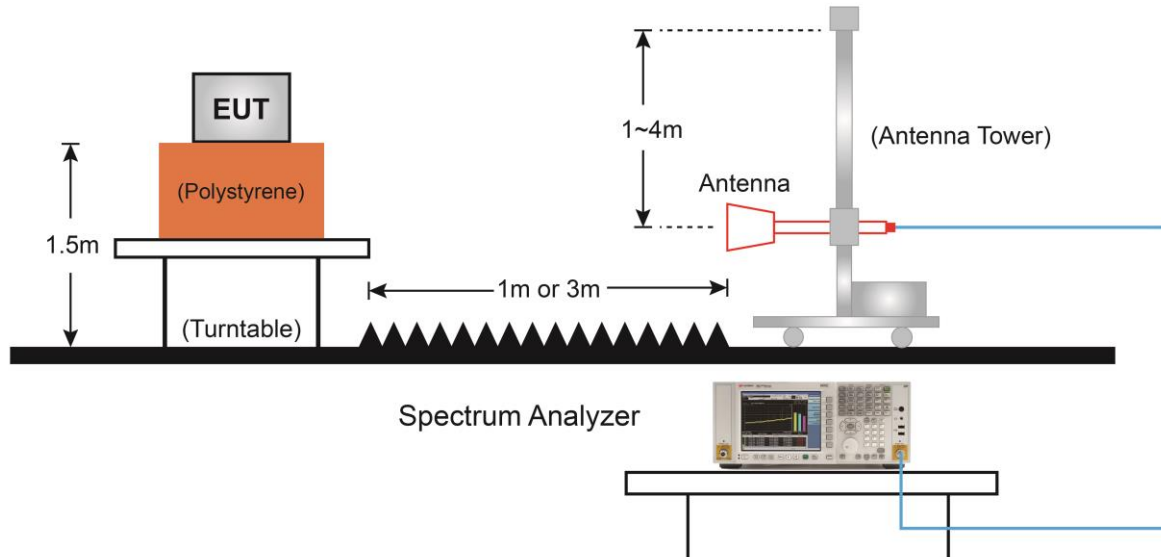
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle  $\geq 98\%$ , set VBW = 10 Hz.  
If the EUT duty cycle is  $< 98\%$ , set VBW  $\geq 1/T$ . T is the minimum transmission duration.
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:



Note: This item was performed with the Wi-Fi antenna connected.

### 7.6.5. Test Result

#### For APIN0504 - Omni Antenna (AP-ANT-20W):

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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	41.2	0.6	41.8	54.0	-12.2	Peak	Horizontal
	4952.5	39.3	3.6	42.9	54.0	-11.1	Peak	Horizontal
*	6244.5	36.0	7.3	43.3	86.4	-43.1	Peak	Horizontal
*	9678.5	34.9	15.0	49.9	86.4	-36.5	Peak	Horizontal
	4009.0	40.2	0.6	40.8	54.0	-13.2	Peak	Vertical
	4723.0	38.7	3.1	41.8	54.0	-12.2	Peak	Vertical
*	6159.5	36.3	6.9	43.2	86.4	-43.2	Peak	Vertical
*	10120.5	33.1	16.3	49.4	86.4	-37.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3796.5	40.9	0.0	40.9	54.0	-13.1	Peak	Horizontal
	4859.0	39.7	3.4	43.1	54.0	-10.9	Peak	Horizontal
*	6491.0	37.1	8.5	45.6	86.2	-40.6	Peak	Horizontal
*	9602.0	34.0	14.9	48.9	86.2	-37.3	Peak	Horizontal
	4051.5	40.4	0.8	41.2	54.0	-12.8	Peak	Vertical
	5139.5	39.4	3.9	43.3	54.0	-10.7	Peak	Vertical
*	6355.0	36.7	7.8	44.5	86.2	-41.7	Peak	Vertical
*	9763.5	33.9	15.2	49.1	86.2	-37.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4085.5	39.9	0.9	40.8	54.0	-13.2	Peak	Horizontal
	5029.0	39.1	3.8	42.9	54.0	-11.1	Peak	Horizontal
*	6542.0	37.1	8.7	45.8	85.8	-40.0	Peak	Horizontal
*	10188.5	32.8	16.6	49.4	85.8	-36.4	Peak	Horizontal
	3975.0	40.4	0.5	40.9	54.0	-13.1	Peak	Vertical
	4884.5	39.8	3.5	43.3	54.0	-10.7	Peak	Vertical
*	6236.0	37.9	7.2	45.1	85.8	-40.7	Peak	Vertical
*	8650.0	34.4	13.5	47.9	85.8	-37.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.8dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4077.0	39.8	0.9	40.7	54.0	-13.3	Peak	Horizontal
	4969.5	38.0	3.7	41.7	54.0	-12.3	Peak	Horizontal
*	6414.5	35.5	8.1	43.6	86.1	-42.5	Peak	Horizontal
*	8684.0	33.0	13.6	46.6	86.1	-39.5	Peak	Horizontal
	4034.5	40.6	0.7	41.3	54.0	-12.7	Peak	Vertical
	4816.5	38.0	3.3	41.3	54.0	-12.7	Peak	Vertical
*	6108.5	37.9	6.6	44.5	86.1	-41.6	Peak	Vertical
*	10129.0	32.3	16.3	48.6	86.1	-37.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4060.0	40.1	0.8	40.9	54.0	-13.1	Peak	Horizontal
	4961.0	38.6	3.7	42.3	54.0	-11.7	Peak	Horizontal
*	6465.5	35.0	8.3	43.3	87.5	-44.2	Peak	Horizontal
*	8769.0	33.2	13.8	47.0	87.5	-40.5	Peak	Horizontal
	3932.5	39.7	0.4	40.1	54.0	-13.9	Peak	Vertical
	3932.5	39.7	0.4	40.1	54.0	-13.9	Peak	Vertical
*	6576.0	37.1	8.9	46.0	87.5	-41.5	Peak	Vertical
*	9814.5	33.5	15.3	48.8	87.5	-38.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4026.0	40.1	0.7	40.8	54.0	-13.2	Peak	Horizontal
	4893.0	38.6	3.5	42.1	54.0	-11.9	Peak	Horizontal
*	6295.5	36.5	7.5	44.0	78.8	-34.8	Peak	Horizontal
*	10078.0	32.6	16.1	48.7	78.8	-30.1	Peak	Horizontal
	4196.0	39.4	1.4	40.8	54.0	-13.2	Peak	Vertical
	5012.0	39.3	3.8	43.1	54.0	-10.9	Peak	Vertical
*	6593.0	36.2	9.0	45.2	78.8	-33.6	Peak	Vertical
*	10069.5	32.6	16.1	48.7	78.8	-30.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (108.8dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dB $\mu$ V)	Factor (dB)	Measure Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
	4017.5	39.5	0.7	40.2	54.0	-13.8	Peak	Horizontal
	4935.5	38.9	3.6	42.5	54.0	-11.5	Peak	Horizontal
*	6491.0	36.9	8.5	45.4	85.6	-40.2	Peak	Horizontal
*	9959.0	32.8	15.7	48.5	85.6	-37.1	Peak	Horizontal
	4034.5	38.9	0.7	39.6	54.0	-14.4	Peak	Vertical
	4799.5	39.4	3.3	42.7	54.0	-11.3	Peak	Vertical
*	6593.0	36.3	9.0	45.3	85.6	-40.3	Peak	Vertical
*	8684.0	33.0	13.6	46.6	85.6	-39.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.6dB $\mu$ V/m) or 15.209 which is higher.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2018/06/21
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4094.0	39.9	1.0	40.9	54.0	-13.1	Peak	Horizontal
	4995.0	38.7	3.7	42.4	54.0	-11.6	Peak	Horizontal
*	6703.5	34.1	9.6	43.7	87.1	-43.4	Peak	Horizontal
*	8709.5	32.8	13.7	46.5	87.1	-40.6	Peak	Horizontal
	4264.0	38.8	1.7	40.5	54.0	-13.5	Peak	Vertical
	4859.0	38.3	3.4	41.7	54.0	-12.3	Peak	Vertical
*	6253.0	36.3	7.3	43.6	87.1	-43.5	Peak	Vertical
*	8726.5	32.8	13.7	46.5	87.1	-40.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3796.5	40.0	0.0	40.0	54.0	-14.0	Peak	Horizontal
	4876.0	38.7	3.5	42.2	54.0	-11.8	Peak	Horizontal
*	6797.0	36.3	10.2	46.5	82.8	-36.3	Peak	Horizontal
*	8692.5	33.7	13.6	47.3	82.8	-35.5	Peak	Horizontal
	4026.0	39.6	0.7	40.3	54.0	-13.7	Peak	Vertical
	4816.5	38.5	3.3	41.8	54.0	-12.2	Peak	Vertical
*	6754.5	35.3	9.9	45.2	82.8	-37.6	Peak	Vertical
*	10112.0	32.6	16.3	48.9	82.8	-33.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.8dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4017.5	40.7	0.7	41.4	54.0	-12.6	Peak	Horizontal
	4910.0	38.3	3.6	41.9	54.0	-12.1	Peak	Horizontal
*	6729.0	35.9	9.8	45.7	81.2	-35.5	Peak	Horizontal
*	8752.0	32.7	13.8	46.5	81.2	-34.7	Peak	Horizontal
	4034.5	39.4	0.7	40.1	54.0	-13.9	Peak	Vertical
	5054.5	38.9	3.8	42.7	54.0	-11.3	Peak	Vertical
*	6448.5	37.1	8.2	45.3	81.2	-35.9	Peak	Vertical
*	10078.0	32.7	16.1	48.8	81.2	-32.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4051.5	39.5	0.8	40.3	54.0	-13.7	Peak	Horizontal
	4782.5	39.1	3.3	42.4	54.0	-11.6	Peak	Horizontal
*	6644.0	35.2	9.3	44.5	81.6	-37.1	Peak	Horizontal
*	10001.5	32.9	15.8	48.7	81.6	-32.9	Peak	Horizontal
	4017.5	39.6	0.7	40.3	54.0	-13.7	Peak	Vertical
	4952.5	39.0	3.6	42.6	54.0	-11.4	Peak	Vertical
*	6380.5	36.4	7.9	44.3	81.6	-37.3	Peak	Vertical
*	9925.0	33.2	15.6	48.8	81.6	-32.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.6dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3915.5	40.0	0.3	40.3	54.0	-13.7	Peak	Horizontal
	4816.5	38.5	3.3	41.8	54.0	-12.2	Peak	Horizontal
*	6414.5	36.8	8.1	44.9	80.1	-35.2	Peak	Horizontal
*	9874.0	33.3	15.5	48.8	80.1	-31.3	Peak	Horizontal
	3915.5	40.5	0.3	40.8	54.0	-13.2	Peak	Vertical
	4859.0	37.9	3.4	41.3	54.0	-12.7	Peak	Vertical
*	6797.0	35.3	10.2	45.5	80.1	-34.6	Peak	Vertical
*	8735.0	33.1	13.7	46.8	80.1	-33.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4153.5	39.0	1.2	40.2	54.0	-13.8	Peak	Horizontal
	5046.0	38.3	3.8	42.1	54.0	-11.9	Peak	Horizontal
*	6610.0	36.8	9.1	45.9	86.5	-40.6	Peak	Horizontal
*	8675.5	34.9	13.6	48.5	86.5	-38.0	Peak	Horizontal
	3915.5	40.2	0.3	40.5	54.0	-13.5	Peak	Vertical
	4918.5	38.8	3.6	42.4	54.0	-11.6	Peak	Vertical
*	6287.0	37.0	7.5	44.5	86.5	-42.0	Peak	Vertical
*	8777.5	34.5	13.8	48.3	86.5	-38.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4162.0	38.3	1.3	39.6	54.0	-14.4	Peak	Horizontal
	4850.5	39.7	3.4	43.1	54.0	-10.9	Peak	Horizontal
*	6720.5	35.7	9.7	45.4	88.9	-43.5	Peak	Horizontal
*	8769.0	33.6	13.8	47.4	88.9	-41.5	Peak	Horizontal
	4068.5	39.8	0.9	40.7	54.0	-13.3	Peak	Vertical
	4893.0	38.7	3.5	42.2	54.0	-11.8	Peak	Vertical
*	6270.0	35.8	7.4	43.2	88.9	-45.7	Peak	Vertical
*	8743.5	33.2	13.8	47.0	88.9	-41.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (118.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4060.0	40.0	0.8	40.8	54.0	-13.2	Peak	Horizontal
	5003.5	38.9	3.7	42.6	54.0	-11.4	Peak	Horizontal
*	6499.5	36.4	8.5	44.9	84.8	-39.9	Peak	Horizontal
*	9848.5	33.4	15.4	48.8	84.8	-36.0	Peak	Horizontal
	4034.5	39.5	0.7	40.2	54.0	-13.8	Peak	Vertical
	4884.5	38.1	3.5	41.6	54.0	-12.4	Peak	Vertical
*	6465.5	34.3	8.3	42.6	84.8	-42.2	Peak	Vertical
*	8803.0	32.9	13.9	46.8	84.8	-38.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.8dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4085.5	39.4	0.9	40.3	54.0	-13.7	Peak	Horizontal
	4833.5	38.1	3.4	41.5	54.0	-12.5	Peak	Horizontal
*	6533.5	36.2	8.7	44.9	83.1	-38.2	Peak	Horizontal
*	9806.0	33.2	15.3	48.5	83.1	-34.6	Peak	Horizontal
	3975.0	40.4	0.5	40.9	54.0	-13.1	Peak	Vertical
	4876.0	38.7	3.5	42.2	54.0	-11.8	Peak	Vertical
*	6159.5	35.4	6.9	42.3	83.1	-40.8	Peak	Vertical
*	8786	32.6	13.9	46.5	83.1	-36.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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	40.2	0.7	40.9	54.0	-13.1	Peak	Horizontal
	5088.5	39.3	3.8	43.1	54.0	-10.9	Peak	Horizontal
*	6440.0	35.2	8.2	43.4	83.3	-39.9	Peak	Horizontal
*	10078.0	32.9	16.1	49.0	83.3	-34.3	Peak	Horizontal
	4102.5	38.9	1.0	39.9	54.0	-14.1	Peak	Vertical
	4782.5	38.3	3.3	41.6	54.0	-12.4	Peak	Vertical
*	6525.0	36.2	8.6	44.8	83.3	-38.5	Peak	Vertical
*	10086.5	32.7	16.1	48.8	83.3	-34.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/03
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	09
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4068.5	40.0	0.9	40.9	54.0	-13.1	Peak	Horizontal
	4986.5	38.2	3.7	41.9	54.0	-12.1	Peak	Horizontal
*	6270.0	35.5	7.4	42.9	82.3	-39.4	Peak	Horizontal
*	10069.5	32.2	16.1	48.3	82.3	-34.0	Peak	Horizontal
	4043.0	40.1	0.8	40.9	54.0	-13.1	Peak	Vertical
	4910.0	38.5	3.6	42.1	54.0	-11.9	Peak	Vertical
*	6780.0	34.8	10.1	44.9	82.3	-37.4	Peak	Vertical
*	9840.0	33.2	15.4	48.6	82.3	-33.7	Peak	Vertical

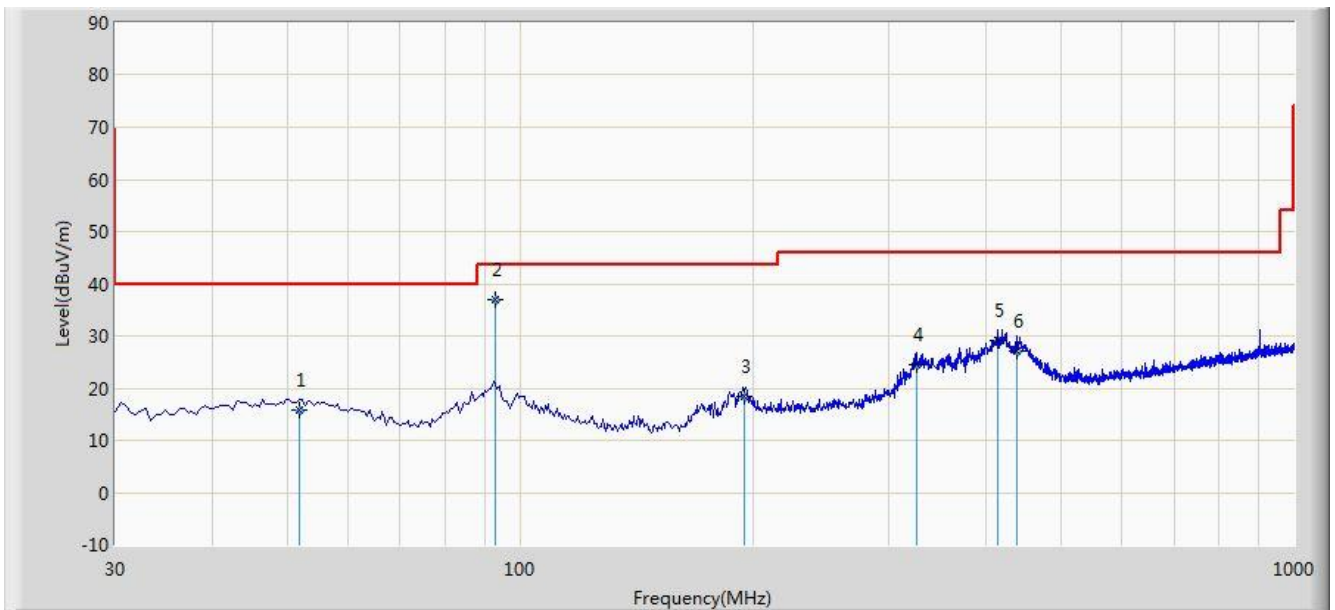
Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.3dBμV/m) or 15.209 which is higher.

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 Worst Case of Radiated Emission below 1GHz:**

Site: AC1	Time: 2019/07/13 - 12:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	51.890	15.858	-5.659	-24.142	40.000	21.517	QP
2			92.970	19.330	1.698	-24.170	43.500	17.632	QP
3			195.280	18.280	-0.617	-25.220	43.500	18.897	QP
4			325.370	24.534	2.155	-21.466	46.000	22.380	QP
5			413.580	29.112	5.009	-16.888	46.000	24.104	QP
6			439.580	27.195	2.815	-18.805	46.000	24.380	QP

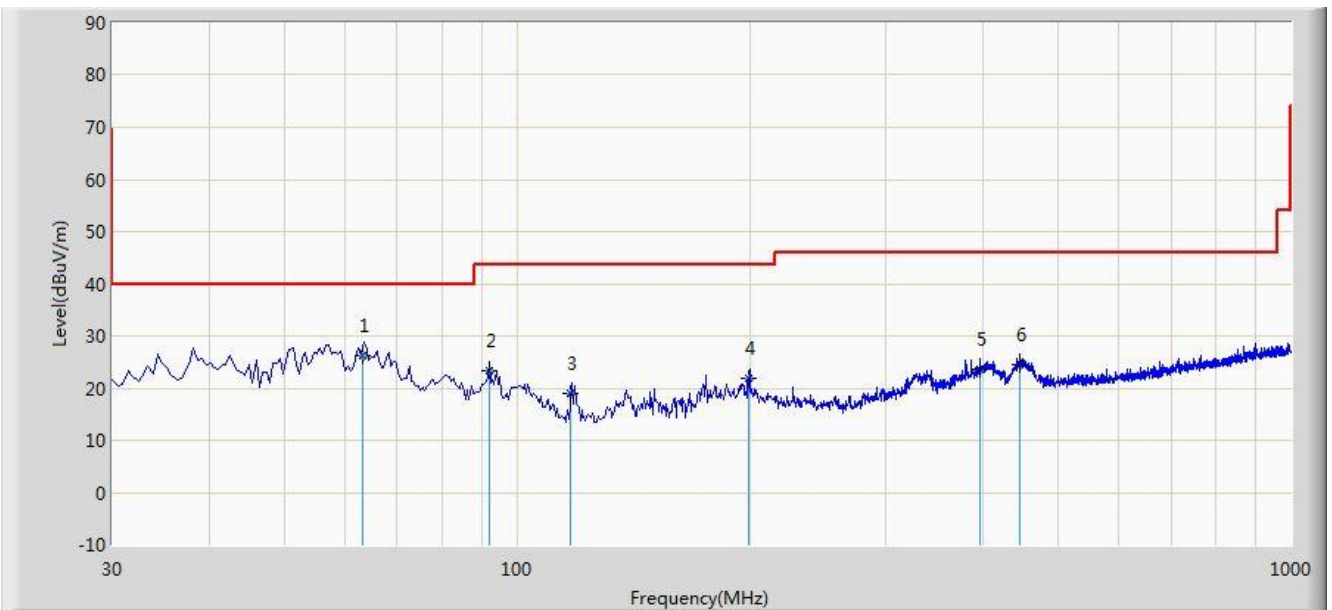
Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.



Site: AC1	Time: 2019/07/13 - 12:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	63.180	26.129	7.429	-13.871	40.000	18.700	QP
2			92.087	23.220	5.778	-20.280	43.500	17.441	QP
3			117.490	19.009	0.745	-24.491	43.500	18.263	QP
4			199.480	21.821	2.699	-21.679	43.500	19.123	QP
5			396.870	23.517	-0.404	-22.483	46.000	23.921	QP
6			446.970	24.521	0.063	-21.479	46.000	24.458	QP

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

**For APIN0504 - Omni Antenna (AP-ANT-40):**

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3898.5	39.4	0.3	39.7	54.0	-14.3	Peak	Horizontal
	4995.0	37.5	3.7	41.2	54.0	-12.8	Peak	Horizontal
*	6440.0	35.4	8.2	43.6	81.2	-37.6	Peak	Horizontal
*	8692.5	35.2	13.6	48.8	81.2	-32.4	Peak	Horizontal
	3839.0	41.2	0.1	41.3	54.0	-12.7	Peak	Vertical
	5054.5	38.6	3.8	42.4	54.0	-11.6	Peak	Vertical
*	5683.5	36.6	4.9	41.5	81.2	-39.7	Peak	Vertical
*	7009.5	33.7	11.3	45.0	81.2	-36.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3864.5	40.7	0.2	40.9	54.0	-13.1	Peak	Horizontal
	4791.0	37.5	3.3	40.8	54.0	-13.2	Peak	Horizontal
*	5887.5	37.2	5.7	42.9	80.4	-37.5	Peak	Horizontal
*	7111.5	35.5	11.6	47.1	80.4	-33.3	Peak	Horizontal
	3779.5	39.6	0.0	39.6	54.0	-14.4	Peak	Vertical
	4672.0	37.1	3.0	40.1	54.0	-13.9	Peak	Vertical
*	5811.0	36.3	5.4	41.7	80.4	-38.7	Peak	Vertical
*	6950.0	35.3	11.0	46.3	80.4	-34.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3720.0	40.7	-0.2	40.5	54.0	-13.5	Peak	Horizontal
	4969.5	37.5	3.7	41.2	54.0	-12.8	Peak	Horizontal
*	6168.0	35.4	6.9	42.3	78.9	-36.6	Peak	Horizontal
*	6848.0	33.5	10.4	43.9	78.9	-35.0	Peak	Horizontal
	3728.5	41.0	-0.2	40.8	54.0	-13.2	Peak	Vertical
	4629.5	38.3	2.9	41.2	54.0	-12.8	Peak	Vertical
*	5938.5	37.9	5.9	43.8	78.9	-35.1	Peak	Vertical
*	7009.5	34.3	11.3	45.6	78.9	-33.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (108.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3822.0	39.8	0.1	39.9	54.0	-14.1	Peak	Horizontal
	4731.5	37.1	3.2	40.3	54.0	-13.7	Peak	Horizontal
*	5683.5	37.6	4.9	42.5	82.7	-40.2	Peak	Horizontal
*	6950.0	33.0	11.0	44.0	82.7	-38.7	Peak	Horizontal
	3839.0	39.8	0.1	39.9	54.0	-14.1	Peak	Vertical
	4578.5	36.4	2.8	39.2	54.0	-14.8	Peak	Vertical
*	5938.5	35.5	5.9	41.4	82.7	-41.3	Peak	Vertical
*	6958.5	33.0	11.1	44.1	82.7	-38.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.7dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3796.5	40.9	0.0	40.9	54.0	-13.1	Peak	Horizontal
	4680.5	36.3	3.0	39.3	54.0	-14.7	Peak	Horizontal
*	5615.5	36.2	4.6	40.8	81.9	-41.1	Peak	Horizontal
*	6780.0	33.2	10.1	43.3	81.9	-38.6	Peak	Horizontal
	3813.5	40.0	0.1	40.1	54.0	-13.9	Peak	Vertical
	4731.5	37.1	3.2	40.3	54.0	-13.7	Peak	Vertical
*	5717.5	37.6	5.0	42.6	81.9	-39.3	Peak	Vertical
*	6984.0	34.1	11.2	45.3	81.9	-36.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.9BμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3813.5	40.4	0.1	40.5	54.0	-13.5	Peak	Horizontal
	4578.5	37.9	2.8	40.7	54.0	-13.3	Peak	Horizontal
*	5564.5	36.6	4.4	41.0	80.6	-39.6	Peak	Horizontal
*	6780.0	33.2	10.1	43.3	80.6	-37.3	Peak	Horizontal
	3839.0	39.8	0.1	39.9	54.0	-14.1	Peak	Vertical
	4706.0	36.3	3.1	39.4	54.0	-14.6	Peak	Vertical
*	5913.0	35.7	5.8	41.5	80.6	-39.1	Peak	Vertical
*	6890.5	33.1	10.7	43.8	80.6	-36.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.6dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3796.5	38.4	0.0	38.4	54.0	-15.6	Peak	Horizontal
	4689.0	36.2	3.1	39.3	54.0	-14.7	Peak	Horizontal
*	5853.5	35.7	5.5	41.2	82.3	-41.1	Peak	Horizontal
*	7009.5	34.5	11.3	45.8	82.3	-36.5	Peak	Horizontal
	3711.5	40.1	-0.2	39.9	54.0	-14.1	Peak	Vertical
	4604.0	36.3	2.9	39.2	54.0	-14.8	Peak	Vertical
*	5692.0	36.4	4.9	41.3	82.3	-41.0	Peak	Vertical
*	6992.5	32.4	11.3	43.7	82.3	-38.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4017.5	39.7	0.7	40.4	54.0	-13.6	Peak	Horizontal
	4714.5	36.4	3.1	39.5	54.0	-14.5	Peak	Horizontal
*	5632.5	36.0	4.7	40.7	81.3	-40.6	Peak	Horizontal
*	6763.0	33.0	10.0	43.0	81.3	-38.3	Peak	Horizontal
	3864.5	39.1	0.2	39.3	54.0	-14.7	Peak	Vertical
	4689.0	36.7	3.1	39.8	54.0	-14.2	Peak	Vertical
*	5658.0	35.7	4.8	40.5	81.3	-40.8	Peak	Vertical
*	6669.5	33.4	9.4	42.8	81.3	-38.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dB $\mu$ V)	Factor (dB)	Measure Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector	Polarization
	3779.5	39.4	0.0	39.4	54.0	-14.6	Peak	Horizontal
	4697.5	35.9	3.1	39.0	54.0	-15.0	Peak	Horizontal
*	5683.5	35.8	4.9	40.7	80.3	-39.6	Peak	Horizontal
*	6958.5	32.9	11.1	44.0	80.3	-36.3	Peak	Horizontal
	3728.5	39.9	-0.2	39.7	54.0	-14.3	Peak	Vertical
	4655.0	38.9	3.0	41.9	54.0	-12.1	Peak	Vertical
*	5607.0	35.8	4.6	40.4	80.3	-39.9	Peak	Vertical
*	6941.5	33.0	11.0	44.0	80.3	-36.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.3dB $\mu$ V/m) or 15.209 which is higher.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3805.0	39.6	0.0	39.6	54.0	-14.4	Peak	Horizontal
	4663.5	36.4	3.0	39.4	54.0	-14.6	Peak	Horizontal
*	5743.0	35.9	5.1	41.0	78.7	-37.7	Peak	Horizontal
*	6831.0	33.5	10.4	43.9	78.7	-34.8	Peak	Horizontal
	3720.0	40.1	-0.2	39.9	54.0	-14.1	Peak	Vertical
	4646.5	35.8	3.0	38.8	54.0	-15.2	Peak	Vertical
*	5607.0	36.3	4.6	40.9	78.7	-37.8	Peak	Vertical
*	6984.0	33.2	11.2	44.4	78.7	-34.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (108.7dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3788.0	40.3	0.0	40.3	54.0	-13.7	Peak	Horizontal
	4689.0	36.3	3.1	39.4	54.0	-14.6	Peak	Horizontal
*	5811.0	36.0	5.4	41.4	76.0	-34.6	Peak	Horizontal
*	6814.0	32.8	10.3	43.1	76.0	-32.9	Peak	Horizontal
	3779.5	40.2	0.0	40.2	54.0	-13.8	Peak	Vertical
	4680.5	35.9	3.0	38.9	54.0	-15.1	Peak	Vertical
*	5862.0	35.4	5.6	41.0	76.0	-35.0	Peak	Vertical
*	6865.0	33.2	10.5	43.7	76.0	-32.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (106.0dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	09
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3898.5	37.8	0.3	38.1	54.0	-15.9	Peak	Horizontal
	4731.5	36.4	3.2	39.6	54.0	-14.4	Peak	Horizontal
*	5760.0	37.4	5.2	42.6	76.7	-34.1	Peak	Horizontal
*	7001.0	33.0	11.3	44.3	76.7	-32.4	Peak	Horizontal
	3762.5	39.3	-0.1	39.2	54.0	-14.8	Peak	Vertical
	4740.0	36.3	3.2	39.5	54.0	-14.5	Peak	Vertical
*	5658.0	35.8	4.8	40.6	76.7	-36.1	Peak	Vertical
*	6873.5	33.4	10.6	44.0	76.7	-32.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (106.7dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3983.5	39.6	0.5	40.1	54.0	-13.9	Peak	Horizontal
	4867.5	36.7	3.5	40.2	54.0	-13.8	Peak	Horizontal
*	5785.5	39.0	5.3	44.3	82.7	-38.4	Peak	Horizontal
*	6950.0	33.1	11.0	44.1	82.7	-38.6	Peak	Horizontal
	3915.5	40.2	0.3	40.5	54.0	-13.5	Peak	Vertical
	4961.0	37.0	3.7	40.7	54.0	-13.3	Peak	Vertical
*	5624.0	37.0	4.6	41.6	82.7	-41.1	Peak	Vertical
*	6797.0	33.3	10.2	43.5	82.7	-39.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.7dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3805.0	39.9	0.0	39.9	54.0	-14.1	Peak	Horizontal
	4859.0	37.3	3.4	40.7	54.0	-13.3	Peak	Horizontal
*	5981.0	35.5	6.0	41.5	81.6	-40.1	Peak	Horizontal
*	6890.5	33.1	10.7	43.8	81.6	-37.8	Peak	Horizontal
	3728.5	39.3	-0.2	39.1	54.0	-14.9	Peak	Vertical
	4689.0	36.4	3.1	39.5	54.0	-14.5	Peak	Vertical
*	5785.5	36.5	5.3	41.8	81.6	-39.8	Peak	Vertical
*	6992.5	32.8	11.3	44.1	81.6	-37.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.6dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	3771.0	40.0	-0.1	39.9	54.0	-14.1	Peak	Horizontal
	4748.5	37.4	3.2	40.6	54.0	-13.4	Peak	Horizontal
*	5632.5	37.0	4.7	41.7	81.0	-39.3	Peak	Horizontal
*	6975.5	33.0	11.2	44.2	81.0	-36.8	Peak	Horizontal
	3788.0	39.8	0.0	39.8	54.0	-14.2	Peak	Vertical
	4689.0	36.2	3.1	39.3	54.0	-14.7	Peak	Vertical
*	5811.0	35.5	5.4	40.9	81.0	-40.1	Peak	Vertical
*	6865.0	33.3	10.5	43.8	81.0	-37.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.0dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3711.5	38.2	-0.2	38.0	54.0	-16.0	Peak	Horizontal
	4663.5	36.2	3.0	39.2	54.0	-14.8	Peak	Horizontal
*	5658.0	36.0	4.8	40.8	80.2	-39.4	Peak	Horizontal
*	7009.5	32.8	11.3	44.1	80.2	-36.1	Peak	Horizontal
	3813.5	39.8	0.1	39.9	54.0	-14.1	Peak	Vertical
	4893.0	37.4	3.5	40.9	54.0	-13.1	Peak	Vertical
*	5819.5	35.9	5.4	41.3	80.2	-38.9	Peak	Vertical
*	6950.0	33.0	11.0	44.0	80.2	-36.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3762.5	38.8	-0.1	38.7	54.0	-15.3	Peak	Horizontal
	4731.5	36.8	3.2	40.0	54.0	-14.0	Peak	Horizontal
*	5734.5	35.8	5.1	40.9	78.8	-37.9	Peak	Horizontal
*	6737.5	33.9	9.8	43.7	78.8	-35.1	Peak	Horizontal
	3796.5	39.3	0.0	39.3	54.0	-14.7	Peak	Vertical
	4697.5	36.6	3.1	39.7	54.0	-14.3	Peak	Vertical
*	5709.0	36.0	5.0	41.0	78.8	-37.8	Peak	Vertical
*	6950.0	33.4	11.0	44.4	78.8	-34.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (108.8dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/29
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	09
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3771.0	40.2	-0.1	40.1	54.0	-13.9	Peak	Horizontal
	4791.0	36.6	3.3	39.9	54.0	-14.1	Peak	Horizontal
*	5734.5	35.9	5.1	41.0	79.6	-38.6	Peak	Horizontal
*	6992.5	33.0	11.3	44.3	79.6	-35.3	Peak	Horizontal
	3890.0	39.6	0.3	39.9	54.0	-14.1	Peak	Vertical
	4672.0	36.4	3.0	39.4	54.0	-14.6	Peak	Vertical
*	5607.0	35.6	4.6	40.2	79.6	-39.4	Peak	Vertical
*	6865.0	32.9	10.5	43.4	79.6	-36.2	Peak	Vertical

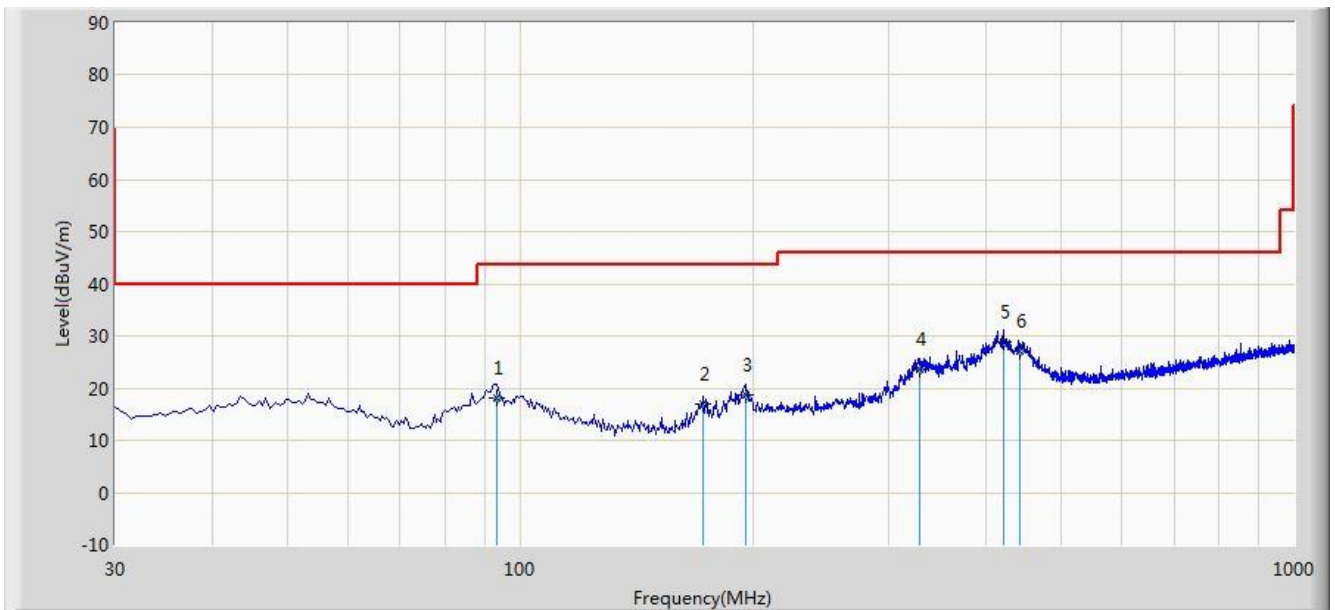
Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (109.6dBμV/m) or 15.209 which is higher.

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 Worst Case of Radiated Emission below 1GHz:**

Site: AC1	Time: 2019/07/13 - 12:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



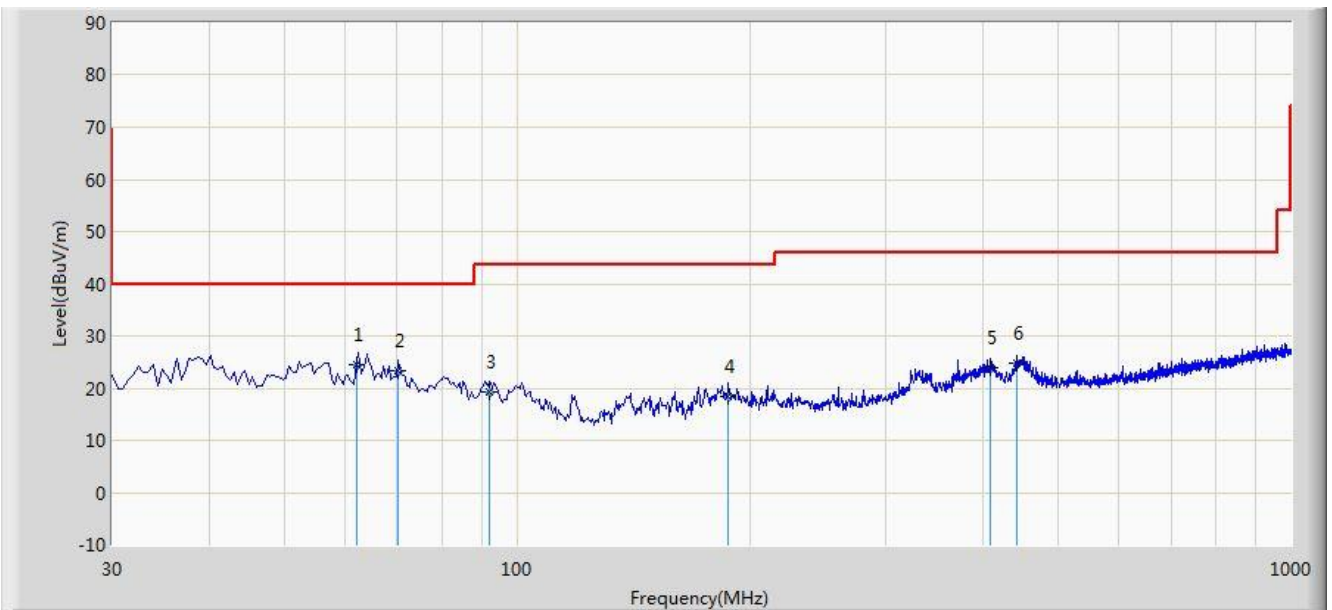
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	93.280	18.117	0.418	-25.383	43.500	17.699	QP
2			172.548	17.005	0.420	-26.495	43.500	16.585	QP
3			195.790	18.719	-0.205	-24.781	43.500	18.924	QP
4			328.290	23.528	1.037	-22.472	46.000	22.491	QP
5			421.890	28.786	4.594	-17.214	46.000	24.192	QP
6			441.970	27.112	2.707	-18.888	46.000	24.405	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

Site: AC1	Time: 2019/07/13 - 12:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	62.150	24.441	5.283	-15.559	40.000	19.158	QP
2			70.289	23.213	7.561	-16.787	40.000	15.652	QP
3			92.158	19.338	1.881	-24.162	43.500	17.457	QP
4			187.480	18.492	0.289	-25.008	43.500	18.203	QP
5			409.480	24.056	-0.004	-21.944	46.000	24.060	QP
6			442.105	24.813	0.407	-21.187	46.000	24.406	QP

Note 1: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

**For APIN0504 - Directional Antenna (AP-ANT-28):**

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4808.0	39.5	3.3	42.8	54.0	-11.2	Peak	Horizontal
*	6253.0	36.9	7.3	44.2	87.3	-43.1	Peak	Horizontal
*	8616.0	35.0	13.4	48.4	87.3	-38.9	Peak	Horizontal
	11871.5	31.1	18.9	50.0	54.0	-4.0	Peak	Horizontal
	4799.5	38.9	3.3	42.2	54.0	-11.8	Peak	Vertical
*	6355.0	35.2	7.8	43.0	87.3	-44.3	Peak	Vertical
*	9721.0	34.1	15.1	49.2	87.3	-38.1	Peak	Vertical
	12424.0	31.1	18.4	49.5	54.0	-4.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4799.5	37.8	3.3	41.1	54.0	-12.9	Peak	Horizontal
*	6321.0	36.8	7.6	44.4	87.3	-42.9	Peak	Horizontal
*	9780.5	34.6	15.3	49.9	87.3	87.3	Peak	Horizontal
	11769.5	30.8	19.0	49.8	54.0	87.3	Peak	Horizontal
	4893.0	39.0	3.5	42.5	54.0	-11.5	Peak	Vertical
*	6066.0	36.6	6.4	43.0	87.3	-44.3	Peak	Vertical
*	8947.5	31.7	14.3	46.0	87.3	-41.3	Peak	Vertical
	11174.5	31.9	19.1	51.0	54.0	-3.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4833.5	39.1	3.4	42.5	54.0	-11.5	Peak	Horizontal
*	6363.5	36.9	7.8	44.7	87.2	-42.5	Peak	Horizontal
*	8684.0	33.4	13.6	47.0	87.2	-40.2	Peak	Horizontal
	11990.5	30.9	18.8	49.7	54.0	-4.3	Peak	Horizontal
	4816.5	38.8	3.3	42.1	54.0	-11.9	Peak	Vertical
*	6329.5	37.2	7.7	44.9	87.2	-42.3	Peak	Vertical
*	8743.5	33.2	13.8	47.0	87.2	-40.2	Peak	Vertical
	11871.5	30.8	18.9	49.7	54.0	-4.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	5063.0	38.4	3.8	42.2	54.0	-11.8	Peak	Horizontal
*	6584.5	36.8	9.0	45.8	85.9	-40.1	Peak	Horizontal
*	8692.5	32.9	13.6	46.5	85.9	-39.4	Peak	Horizontal
	11829.0	30.8	19.0	49.8	54.0	-4.2	Peak	Horizontal
	4910.0	38.1	3.6	41.7	54.0	-12.3	Peak	Vertical
*	6975.5	34.5	11.2	45.7	85.9	-40.2	Peak	Vertical
*	10078.0	31.9	16.1	48.0	85.9	-37.9	Peak	Vertical
	11990.5	29.7	18.8	48.5	54.0	-5.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4731.5	37.6	3.2	40.8	54.0	-13.2	Peak	Horizontal
*	6134.0	36.5	6.7	43.2	86.9	-43.7	Peak	Horizontal
*	8624.5	33.8	13.5	47.3	86.9	-39.6	Peak	Horizontal
	11897.0	30.2	18.9	49.1	54.0	-4.9	Peak	Horizontal
	4765.5	37.8	3.2	41.0	54.0	-13.0	Peak	Vertical
*	6584.5	35.9	9.0	44.9	86.9	-42.0	Peak	Vertical
*	8794.5	32.2	13.9	46.1	86.9	-40.8	Peak	Vertical
	11769.5	30.7	19.0	49.7	54.0	-4.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.9BμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	11
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4774.0	37.3	3.3	40.6	54.0	-13.4	Peak	Horizontal
*	6525.0	36.4	8.6	45.0	84.5	-39.5	Peak	Horizontal
*	8692.5	33.5	13.6	47.1	84.5	-37.4	Peak	Horizontal
	11812.0	30.4	19.0	49.4	54.0	-4.6	Peak	Horizontal
	4808.0	39.0	3.3	42.3	54.0	-11.7	Peak	Vertical
*	6465.5	36.3	8.3	44.6	84.5	-39.9	Peak	Vertical
*	8769.0	32.0	13.8	45.8	84.5	-38.7	Peak	Vertical
	11888.5	29.9	18.9	48.8	54.0	-5.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4816.5	39.2	3.3	42.5	54.0	-11.5	Peak	Horizontal
*	6304.0	35.0	7.6	42.6	84.6	-42.0	Peak	Horizontal
*	8675.5	32.7	13.6	46.3	84.6	-38.3	Peak	Horizontal
	11735.5	30.3	19.0	49.3	54.0	-4.7	Peak	Horizontal
	4859.0	38.4	3.4	41.8	54.0	-12.2	Peak	Vertical
*	6261.5	36.7	7.3	44.0	84.6	-40.6	Peak	Vertical
*	8879.5	32.8	14.1	46.9	84.6	-37.7	Peak	Vertical
	11446.5	30.8	19.2	50.0	54.0	-4.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.6dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4774.0	38.9	3.3	42.2	54.0	-11.8	Peak	Horizontal
*	6567.5	37.0	8.9	45.9	85.9	-40.0	Peak	Horizontal
*	8650.0	34.1	13.5	47.6	85.9	-38.3	Peak	Horizontal
	11846.0	30.5	19.0	49.5	54.0	-4.5	Peak	Horizontal
	5046.0	38.8	3.8	42.6	54.0	-11.4	Peak	Vertical
*	6542.0	36.3	8.7	45.0	85.9	-40.9	Peak	Vertical
*	8913.5	32.1	14.2	46.3	85.9	-39.6	Peak	Vertical
	11965.0	31.6	18.9	50.5	54.0	-3.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4944.0	39.5	3.6	43.1	54.0	-10.9	Peak	Horizontal
*	6533.5	36.6	8.7	45.3	83.5	-38.2	Peak	Horizontal
*	8633.0	34.0	13.5	47.5	83.5	-36.0	Peak	Horizontal
	11820.5	30.7	19.0	49.7	54.0	-4.3	Peak	Horizontal
	4799.5	39.0	3.3	42.3	54.0	-11.7	Peak	Vertical
*	6737.5	34.7	9.8	44.5	83.5	-39.0	Peak	Vertical
*	8769.0	32.2	13.8	46.0	83.5	-37.5	Peak	Vertical
	11837.5	30.4	19.0	49.4	54.0	-4.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	03
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4808.0	38.8	3.3	42.1	54.0	-11.9	Peak	Horizontal
*	6533.5	36.2	8.7	44.9	81.9	-37.0	Peak	Horizontal
*	8726.5	33.9	13.7	47.6	81.9	-34.3	Peak	Horizontal
	11999.0	30.3	18.8	49.1	54.0	-4.9	Peak	Horizontal
	4808.0	39.1	3.3	42.4	54.0	-11.6	Peak	Vertical
*	6329.5	36.3	7.7	44.0	81.9	-37.9	Peak	Vertical
*	8760.5	32.0	13.8	45.8	81.9	-36.1	Peak	Vertical
	11820.5	29.9	19.0	48.9	54.0	-5.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4799.5	38.7	3.3	42.0	54.0	-12.0	Peak	Horizontal
*	6397.5	36.7	8.0	44.7	82.4	-37.7	Peak	Horizontal
*	8735.0	34.3	13.7	48.0	82.4	-34.4	Peak	Horizontal
	11837.5	30.6	19.0	49.6	54.0	-4.4	Peak	Horizontal
	4833.5	37.7	3.4	41.1	54.0	-12.9	Peak	Vertical
*	6499.5	36.3	8.5	44.8	82.4	-37.6	Peak	Vertical
*	9729.5	32.9	15.1	48.0	82.4	-34.4	Peak	Vertical
	12024.5	30.6	18.8	49.4	54.0	-4.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	09
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	5097.0	39.4	3.8	43.2	54.0	-10.8	Peak	Horizontal
*	6593.0	36.2	9.0	45.2	80.5	-35.3	Peak	Horizontal
*	8743.5	33.2	13.8	47.0	80.5	-33.5	Peak	Horizontal
	11897.0	31.3	18.9	50.2	54.0	-3.8	Peak	Horizontal
	4799.5	37.9	3.3	41.2	54.0	-12.8	Peak	Vertical
*	6822.5	33.6	10.3	43.9	80.5	-36.6	Peak	Vertical
*	8658.5	32.5	13.5	46.0	80.5	-34.5	Peak	Vertical
	11803.5	30.1	19.0	49.1	54.0	-4.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4808.0	38.5	3.3	41.8	54.0	-12.2	Peak	Horizontal
*	6584.5	36.3	9.0	45.3	87.2	-41.9	Peak	Horizontal
*	10256.5	31.3	16.9	48.2	87.2	-39.0	Peak	Horizontal
	11999.0	29.9	18.8	48.7	54.0	-5.3	Peak	Horizontal
	4961.0	38.6	3.7	42.3	54.0	-11.7	Peak	Vertical
*	6457.0	35.8	8.3	44.1	87.2	-43.1	Peak	Vertical
*	8956.0	32.1	14.3	46.4	87.2	-40.8	Peak	Vertical
	10996.0	31.3	19.1	50.4	54.0	-3.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (117.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4859.0	37.5	3.4	40.9	54.0	-13.1	Peak	Horizontal
*	5972.5	37.7	6.0	43.7	85.2	-41.5	Peak	Horizontal
*	8667.0	34.2	13.6	47.8	85.2	-37.4	Peak	Horizontal
	11701.5	32.0	19.1	51.1	54.0	-2.9	Peak	Horizontal
	5012.0	39.3	3.8	43.1	54.0	-10.9	Peak	Vertical
*	6610.0	36.7	9.1	45.8	85.2	-39.4	Peak	Vertical
*	9806.0	32.4	15.3	47.7	85.2	-37.5	Peak	Vertical
	12441.0	30.6	18.4	49.0	54.0	-5.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	38.0	3.4	41.4	54.0	-12.6	Peak	Horizontal
*	6508.0	36.3	8.5	44.8	84.2	-39.4	Peak	Horizontal
*	8709.5	34.4	13.7	48.1	84.2	-36.1	Peak	Horizontal
	11956.5	31.4	18.9	50.3	54.0	-3.7	Peak	Horizontal
	4952.5	38.7	3.6	42.3	54.0	-11.7	Peak	Vertical
*	6499.5	36.1	8.5	44.6	84.2	-39.6	Peak	Vertical
*	8675.5	34.1	13.6	47.7	84.2	-36.5	Peak	Vertical
	11642.0	31.5	19.1	50.6	54.0	-3.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4714.5	37.7	3.1	40.8	54.0	-13.2	Peak	Horizontal
*	6482.5	36.2	8.4	44.6	84.2	-39.6	Peak	Horizontal
*	8735.0	33.9	13.7	47.6	84.2	-36.6	Peak	Horizontal
	11633.5	30.8	19.1	49.9	54.0	-4.1	Peak	Horizontal
	4825.0	38.7	3.4	42.1	54.0	-11.9	Peak	Vertical
*	6414.5	35.3	8.1	43.4	84.2	-40.8	Peak	Vertical
*	8794.5	32.0	13.9	45.9	84.2	-38.3	Peak	Vertical
	12101.0	30.4	18.7	49.1	54.0	-4.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4842.0	38.5	3.4	41.9	54.0	-12.1	Peak	Horizontal
*	7094.5	35.5	11.6	47.1	84.3	-37.2	Peak	Horizontal
*	8692.5	33.3	13.6	46.9	84.3	-37.4	Peak	Horizontal
	11880.0	30.0	18.9	48.9	54.0	-5.1	Peak	Horizontal
	4952.5	38.6	3.6	42.2	54.0	-11.8	Peak	Vertical
*	6720.5	35.1	9.7	44.8	84.3	-39.5	Peak	Vertical
*	8667.0	33.0	13.6	46.6	84.3	-37.7	Peak	Vertical
	11378.5	31.3	19.2	50.5	54.0	-3.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/07/11
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4689.0	38.1	3.1	41.2	54.0	-12.8	Peak	Horizontal
*	6559.0	36.1	8.8	44.9	82.2	-37.3	Peak	Horizontal
*	8811.5	32.8	13.9	46.7	82.2	-35.5	Peak	Horizontal
	11786.5	30.3	19.0	49.3	54.0	-4.7	Peak	Horizontal
	4859.0	38.4	3.4	41.8	54.0	-12.2	Peak	Vertical
*	6355.0	37.3	7.8	45.1	82.2	-37.1	Peak	Vertical
*	8930.5	32.6	14.2	46.8	82.2	-35.4	Peak	Vertical
	11693.0	30.9	19.1	50.0	54.0	-4.0	Peak	Vertical

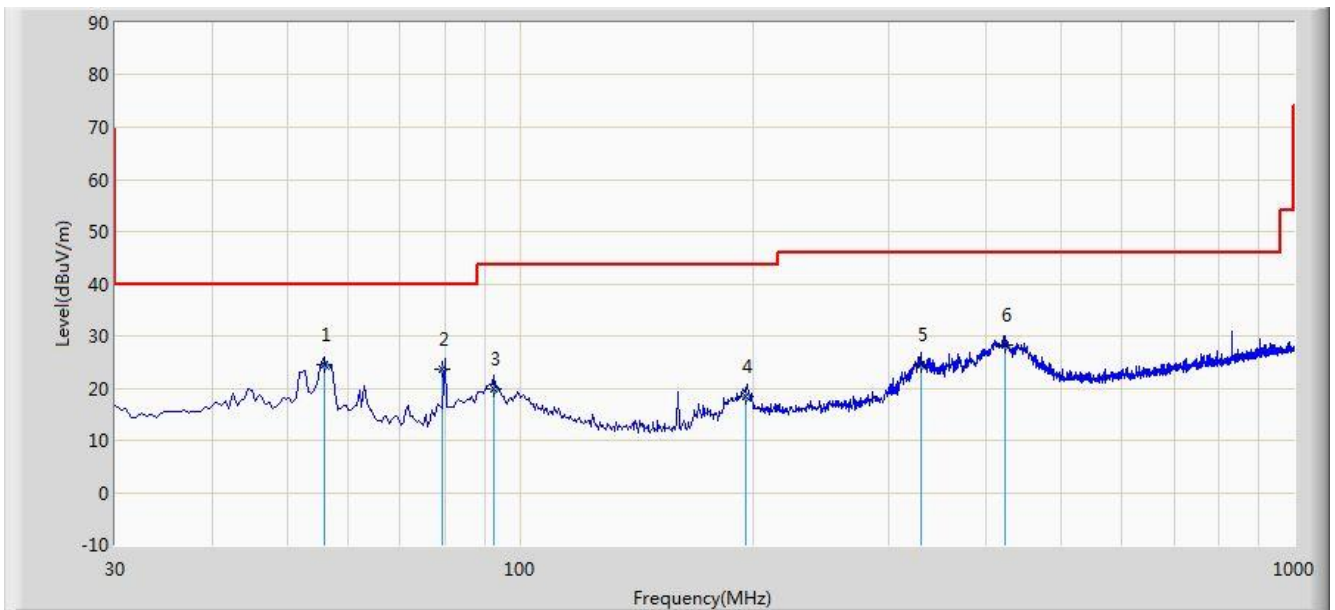
Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.2dBμV/m) or 15.209 which is higher.

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 Worst Case of Radiated Emission below 1GHz:**

Site: AC1	Time: 2019/07/13 - 12:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	55.914	24.361	3.540	-15.639	40.000	20.822	QP
2			79.548	23.685	9.657	-16.315	40.000	14.028	QP
3			92.580	19.901	2.353	-23.599	43.500	17.548	QP
4			196.125	18.439	-0.503	-25.061	43.500	18.942	QP
5			329.458	24.561	2.025	-21.439	46.000	22.536	QP
6			422.890	28.240	4.037	-17.760	46.000	24.202	QP

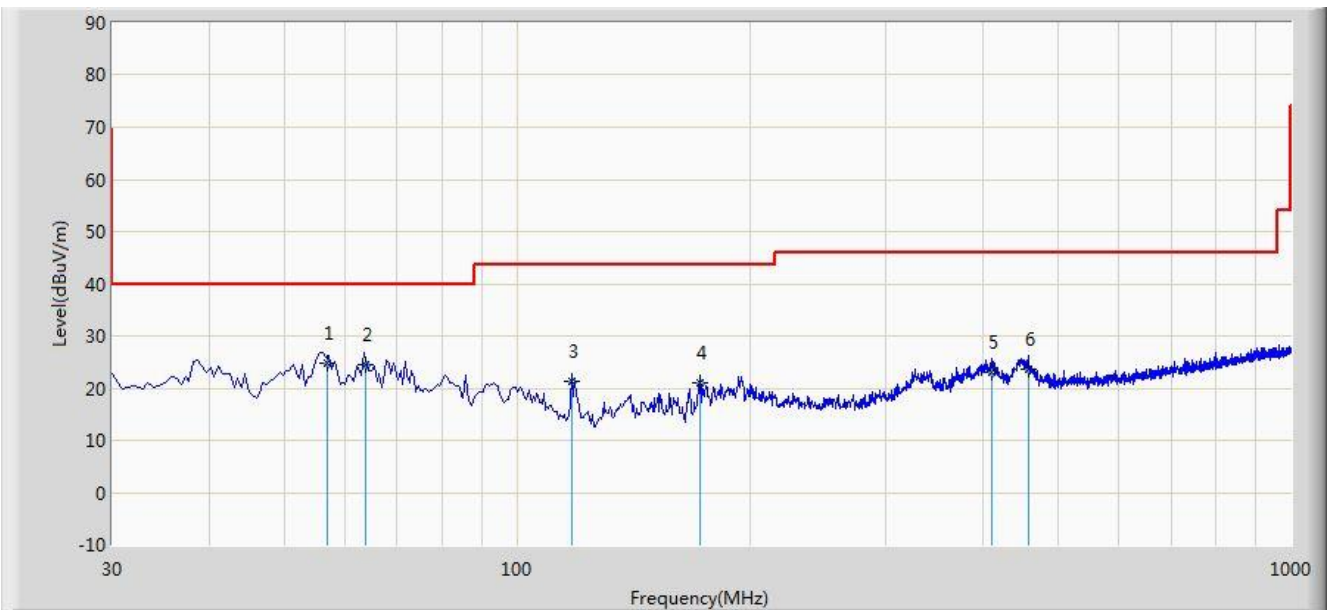
Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.



Site: AC1	Time: 2019/07/13 - 12:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	56.840	24.886	4.226	-15.114	40.000	20.661	QP
2			63.854	24.580	6.179	-15.420	40.000	18.401	QP
3			117.940	21.383	3.176	-22.117	43.500	18.207	QP
4			172.150	21.146	4.582	-22.354	43.500	16.563	QP
5			410.146	23.065	-1.002	-22.935	46.000	24.067	QP
6			457.548	23.638	-1.083	-22.362	46.000	24.722	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

**For APIN0505:**

Product	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	01
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4000.5	39.4	0.6	40.0	54.0	-14.0	Peak	Horizontal
	4714.5	36.6	3.1	39.7	54.0	-14.3	Peak	Horizontal
*	5913.0	35.6	5.8	41.4	83.4	-42.0	Peak	Horizontal
*	7001.0	32.7	11.3	44.0	83.4	-39.4	Peak	Horizontal
	4264.0	38.7	1.7	40.4	54.0	-13.6	Peak	Vertical
	4799.5	37.8	3.3	41.1	54.0	-12.9	Peak	Vertical
*	5785.5	36.5	5.3	41.8	83.4	-41.6	Peak	Vertical
*	6737.5	33.1	9.8	42.9	83.4	-40.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3949.5	38.3	0.4	38.7	54.0	-15.3	Peak	Horizontal
	4833.5	38.2	3.4	41.6	54.0	-12.4	Peak	Horizontal
*	5887.5	36.2	5.7	41.9	83.4	-41.5	Peak	Horizontal
*	6703.5	33.9	9.6	43.5	83.4	-39.9	Peak	Horizontal
	4281.0	37.4	1.7	39.1	54.0	-14.9	Peak	Vertical
	4757.0	36.3	3.2	39.5	54.0	-14.5	Peak	Vertical
*	5760.0	36.7	5.2	41.9	83.4	-41.5	Peak	Vertical
*	6958.5	32.5	11.1	43.6	83.4	-39.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11b - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4162.0	38.7	1.3	40.0	54.0	-14.0	Peak	Horizontal
	4816.5	37.8	3.3	41.1	54.0	-12.9	Peak	Horizontal
*	5828.0	38.5	5.4	43.9	83.4	-39.5	Peak	Horizontal
*	6856.5	33.3	10.5	43.8	83.4	-39.6	Peak	Horizontal
	4332.0	38.7	2.0	40.7	54.0	-13.3	Peak	Vertical
	5080.0	37.5	3.8	41.3	54.0	-12.7	Peak	Vertical
*	6108.5	34.9	6.6	41.5	83.4	-41.9	Peak	Vertical
*	8769.0	32.5	13.8	46.3	83.4	-37.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4332.0	38.4	2.0	40.4	54.0	-13.6	Peak	Horizontal
	4859.0	38.1	3.4	41.5	54.0	-12.5	Peak	Horizontal
*	6321.0	36.5	7.6	44.1	84.5	-40.4	Peak	Horizontal
*	8811.5	33.4	13.9	47.3	84.5	-37.2	Peak	Horizontal
	4051.5	38.8	0.8	39.6	54.0	-14.4	Peak	Vertical
	4561.5	35.8	2.8	38.6	54.0	-15.4	Peak	Vertical
*	5717.5	35.3	5.0	40.3	84.5	-44.2	Peak	Vertical
*	6856.5	32.7	10.5	43.2	84.5	-41.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4026.0	39.1	0.7	39.8	54.0	-14.2	Peak	Horizontal
	4808.0	38.8	3.3	42.1	54.0	-11.9	Peak	Horizontal
*	5743.0	37.6	5.1	42.7	83.9	-41.2	Peak	Horizontal
*	6916.0	32.9	10.8	43.7	83.9	-40.2	Peak	Horizontal
	4136.5	38.9	1.1	40.0	54.0	-14.0	Peak	Vertical
	4791.0	38.9	3.3	42.2	54.0	-11.8	Peak	Vertical
*	5683.5	37.6	4.9	42.5	83.9	-41.4	Peak	Vertical
*	6831.0	34.1	10.4	44.5	83.9	-39.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.9BμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11g - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4051.5	39.7	0.8	40.5	54.0	-13.5	Peak	Horizontal
	4986.5	38.3	3.7	42.0	54.0	-12.0	Peak	Horizontal
*	5989.5	37.0	6.0	43.0	81.6	-38.6	Peak	Horizontal
*	6984.0	35.1	11.2	46.3	81.6	-35.3	Peak	Horizontal
	4026.0	40.8	0.7	41.5	54.0	-12.5	Peak	Vertical
	4774.0	39.1	3.3	42.4	54.0	-11.6	Peak	Vertical
*	5785.5	36.8	5.3	42.1	81.6	-39.5	Peak	Vertical
*	6737.5	34.6	9.8	44.4	81.6	-37.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.6dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4000.5	41.0	0.6	41.6	54.0	-12.4	Peak	Horizontal
	5003.5	38.3	3.7	42.0	54.0	-12.0	Peak	Horizontal
*	5785.5	36.5	5.3	41.8	84.3	-42.5	Peak	Horizontal
*	6763.0	32.9	10.0	42.9	84.3	-41.4	Peak	Horizontal
	4170.5	37.4	1.3	38.7	54.0	-15.3	Peak	Vertical
	4731.5	36.7	3.2	39.9	54.0	-14.1	Peak	Vertical
*	5836.5	37.2	5.5	42.7	84.3	-41.6	Peak	Vertical
*	6984.0	32.9	11.2	44.1	84.3	-40.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.3dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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	39.7	0.7	40.4	54.0	-13.6	Peak	Horizontal
	4816.5	37.9	3.3	41.2	54.0	-12.8	Peak	Horizontal
*	5607.0	37.2	4.6	41.8	84.9	-43.1	Peak	Horizontal
*	6763.0	33.2	10.0	43.2	84.9	-41.7	Peak	Horizontal
	4213.0	38.1	1.5	39.6	54.0	-14.4	Peak	Vertical
	5046.0	38.6	3.8	42.4	54.0	-11.6	Peak	Vertical
*	5760.0	36.5	5.2	41.7	84.9	-43.2	Peak	Vertical
*	6746.0	33.0	9.9	42.9	84.9	-42.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT20 - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4043.0	40.0	0.8	40.8	54.0	-13.2	Peak	Horizontal
	4901.5	38.8	3.5	42.3	54.0	-11.7	Peak	Horizontal
*	5913.0	36.7	5.8	42.5	82.2	-39.7	Peak	Horizontal
*	6950.0	33.0	11.0	44.0	82.2	-38.2	Peak	Horizontal
	4170.5	37.8	1.3	39.1	54.0	-14.9	Peak	Vertical
	4901.5	37.9	3.5	41.4	54.0	-12.6	Peak	Vertical
*	5590.0	37.6	4.5	42.1	82.2	-40.1	Peak	Vertical
*	6958.5	32.9	11.1	44.0	82.2	-38.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (112.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3958.0	39.7	0.5	40.2	54.0	-13.8	Peak	Horizontal
	4859.0	38.4	3.4	41.8	54.0	-12.2	Peak	Horizontal
*	5760.0	37.2	5.2	42.4	81.0	-38.6	Peak	Horizontal
*	7009.5	32.6	11.3	43.9	81.0	-37.1	Peak	Horizontal
	4051.5	40.1	0.8	40.9	54.0	-13.1	Peak	Vertical
	4799.5	38.8	3.3	42.1	54.0	-11.9	Peak	Vertical
*	5743.0	37.6	5.1	42.7	81.0	-38.3	Peak	Vertical
*	6737.5	33.6	9.8	43.4	81.0	-37.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (110.0dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	06
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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
	4043.0	38.7	0.8	39.5	54.0	-14.5	Peak	Horizontal
	4706.0	36.6	3.1	39.7	54.0	-14.3	Peak	Horizontal
*	5692.0	36.0	4.9	40.9	81.2	-40.3	Peak	Horizontal
*	6873.5	32.8	10.6	43.4	81.2	-37.8	Peak	Horizontal
	4111.0	37.2	1.0	38.2	54.0	-15.8	Peak	Vertical
	4731.5	38.1	3.2	41.3	54.0	-12.7	Peak	Vertical
*	5760.0	39.2	5.2	44.4	81.2	-36.8	Peak	Vertical
*	7077.5	34.1	11.5	45.6	81.2	-35.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.2dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11n-HT40 - Ant 0 + 1	Test Channel:	09
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3983.5	39.2	0.5	39.7	54.0	-14.3	Peak	Horizontal
	4808.0	38.3	3.3	41.6	54.0	-12.4	Peak	Horizontal
*	5904.5	37.6	5.7	43.3	78.1	-34.8	Peak	Horizontal
*	6984.0	32.9	11.2	44.1	78.1	-34.0	Peak	Horizontal
	4094.0	39.3	1.0	40.3	54.0	-13.7	Peak	Vertical
	4791.0	38.0	3.3	41.3	54.0	-12.7	Peak	Vertical
*	5709.0	37.8	5.0	42.8	78.1	-35.3	Peak	Vertical
*	6950.0	33.1	11.0	44.1	78.1	-34.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (108.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	01
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4196.0	36.8	1.4	38.2	54.0	-15.8	Peak	Horizontal
	4986.5	37.9	3.7	41.6	54.0	-12.4	Peak	Horizontal
*	5692.0	37.0	4.9	41.9	85.4	-43.5	Peak	Horizontal
*	6890.5	33.4	10.7	44.1	85.4	-41.3	Peak	Horizontal
	4136.5	37.7	1.1	38.8	54.0	-15.2	Peak	Vertical
	4867.5	38.0	3.5	41.5	54.0	-12.5	Peak	Vertical
*	5938.5	36.8	5.9	42.7	85.4	-42.7	Peak	Vertical
*	6924.5	32.7	10.9	43.6	85.4	-41.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (115.4dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4230.0	38.7	1.5	40.2	54.0	-13.8	Peak	Horizontal
	4978.0	38.8	3.7	42.5	54.0	-11.5	Peak	Horizontal
*	5760.0	36.9	5.2	42.1	86.1	-44.0	Peak	Horizontal
*	6916.0	33.4	10.8	44.2	86.1	-41.9	Peak	Horizontal
	4298.0	38.4	1.8	40.2	54.0	-13.8	Peak	Vertical
	4927.0	37.3	3.6	40.9	54.0	-13.1	Peak	Vertical
*	6202.0	34.7	7.1	41.8	86.1	-44.3	Peak	Vertical
*	8658.5	33.9	13.5	47.4	86.1	-38.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (116.1dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE20 - Ant 0 + 1	Test Channel:	11
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4077.0	39.2	0.9	40.1	54.0	-13.9	Peak	Horizontal
	4867.5	38.3	3.5	41.8	54.0	-12.2	Peak	Horizontal
*	5879.0	37.5	5.6	43.1	81.9	-38.8	Peak	Horizontal
*	6984.0	33.0	11.2	44.2	81.9	-37.7	Peak	Horizontal
	4119.5	38.3	1.1	39.4	54.0	-14.6	Peak	Vertical
	4961.0	39.4	3.7	43.1	54.0	-10.9	Peak	Vertical
*	5734.5	36.2	5.1	41.3	81.9	-40.6	Peak	Vertical
*	6984.0	32.8	11.2	44.0	81.9	-37.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.9dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	03
Remark:	<ol style="list-style-type: none"> <li>Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	3975.0	38.0	0.5	38.5	54.0	-15.5	Peak	Horizontal
	4876.0	37.4	3.5	40.9	54.0	-13.1	Peak	Horizontal
*	5658.0	35.7	4.8	40.5	83.0	-42.5	Peak	Horizontal
*	6763.0	32.7	10.0	42.7	83.0	-40.3	Peak	Horizontal
	4000.5	39.8	0.6	40.4	54.0	-13.6	Peak	Vertical
	4969.5	37.2	3.7	40.9	54.0	-13.1	Peak	Vertical
*	5785.5	36.6	5.3	41.9	83.0	-41.1	Peak	Vertical
*	6907.5	32.6	10.8	43.4	83.0	-39.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (113.0dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	06
Remark:	<ol style="list-style-type: none"> <li>1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands.</li> <li>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.</li> </ol>		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4264.0	38.7	1.7	40.4	54.0	-13.6	Peak	Horizontal
	4927.0	38.5	3.6	42.1	54.0	-11.9	Peak	Horizontal
*	5811.0	37.3	5.4	42.7	84.5	-41.8	Peak	Horizontal
*	6644.0	34.8	9.3	44.1	84.5	-40.4	Peak	Horizontal
	4170.5	37.7	1.3	39.0	54.0	-15.0	Peak	Vertical
	4782.5	37.1	3.3	40.4	54.0	-13.6	Peak	Vertical
*	5802.5	36.7	5.3	42.0	84.5	-42.5	Peak	Vertical
*	7247.5	32.5	12.0	44.5	84.5	-40.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (114.5dBμV/m) or 15.209 which is higher.

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	ACCESS POINT	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	56%
Test Site	AC1	Test Date	2019/06/27
Test Mode:	802.11ax-HE40 - Ant 0 + 1	Test Channel:	09
Remark:	1. Average measurement was not performed if peak level lower than average limit. So the margin was calculated using the average limit for emissions fall within the restricted bands. 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	39.8	1.0	40.8	54.0	-13.2	Peak	Horizontal
	4825.0	38.5	3.4	41.9	54.0	-12.1	Peak	Horizontal
*	5845.0	37.5	5.5	43.0	81.0	-38.0	Peak	Horizontal
*	6873.5	32.7	10.6	43.3	81.0	-37.7	Peak	Horizontal
	4060.0	38.8	0.8	39.6	54.0	-14.4	Peak	Vertical
	4799.5	38.1	3.3	41.4	54.0	-12.6	Peak	Vertical
*	5666.5	37.1	4.8	41.9	81.0	-39.1	Peak	Vertical
*	7111.5	34.7	11.6	46.3	81.0	-34.7	Peak	Vertical

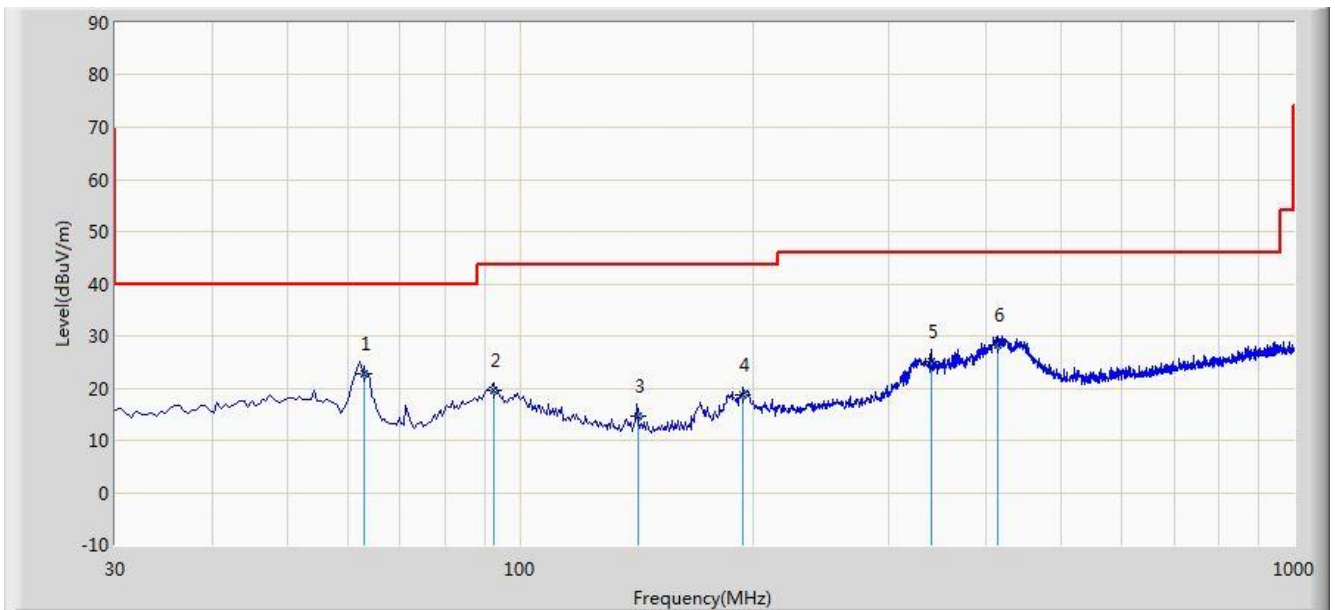
Note 1: "\*" is not in restricted band, its limit is 30dBc of the fundamental emission level (111.0dBμV/m) or 15.209 which is higher.

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 Worst Case of Radiated Emission below 1GHz:**

Site: AC1	Time: 2019/07/13 - 12:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



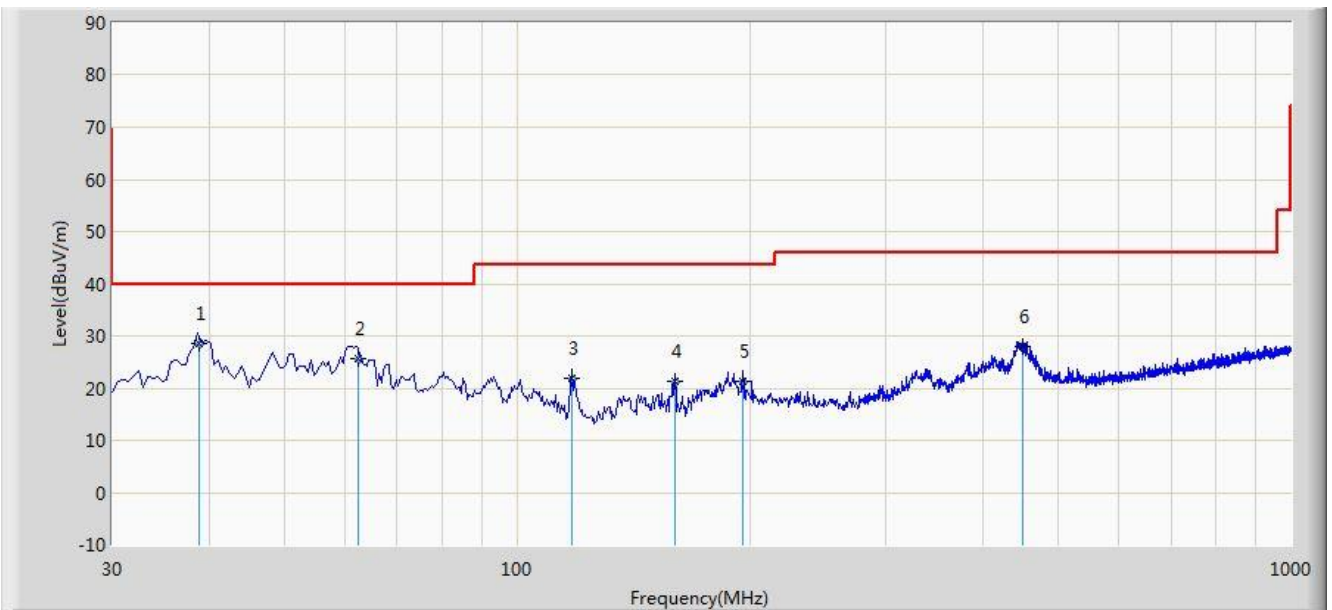
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			62.854	22.628	3.783	-17.372	40.000	18.845	QP
2			92.540	19.583	2.044	-23.917	43.500	17.539	QP
3			141.940	14.743	-0.896	-28.757	43.500	15.639	QP
4		*	194.440	18.701	-0.151	-24.799	43.500	18.853	QP
5			340.158	25.213	2.264	-20.787	46.000	22.949	QP
6			414.590	28.183	4.069	-17.817	46.000	24.115	QP

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

Site: AC1	Time: 2019/07/13 - 12:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: VULB 9168_20-2000MHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
<b>Test Mode: There is the worst case within frequency range 30MHz~1GHz.</b>	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	38.790	28.529	8.214	-11.471	40.000	20.316	38.790
2			62.458	25.721	6.700	-14.279	40.000	19.021	62.458
3			117.940	21.989	3.782	-21.511	43.500	18.207	117.940
4			159.970	21.413	5.297	-22.087	43.500	16.116	159.970
5			195.854	21.423	2.495	-22.077	43.500	18.927	195.854
6			449.840	27.869	3.381	-18.131	46.000	24.489	449.840

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

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

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report. Besides, there is a comparison data of both open-field test site and alternative test site semi-Anechoic chamber according to KDB 414788 D01 radiated test site v01r01, this comparison result was very similar.

## 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
<sup>1</sup> 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	8.25 - 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 - 156.525	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	( <sup>2</sup> )
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 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

### 7.7.3. Test Setting

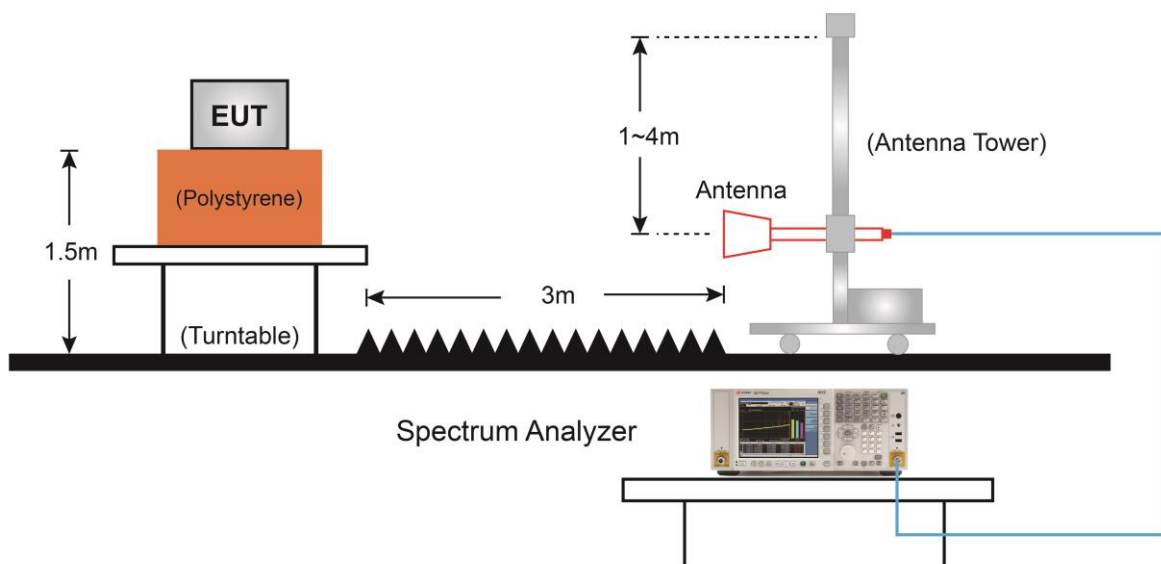
#### Peak Field Strength Measurements

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 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

#### 7.7.4. Test Setup



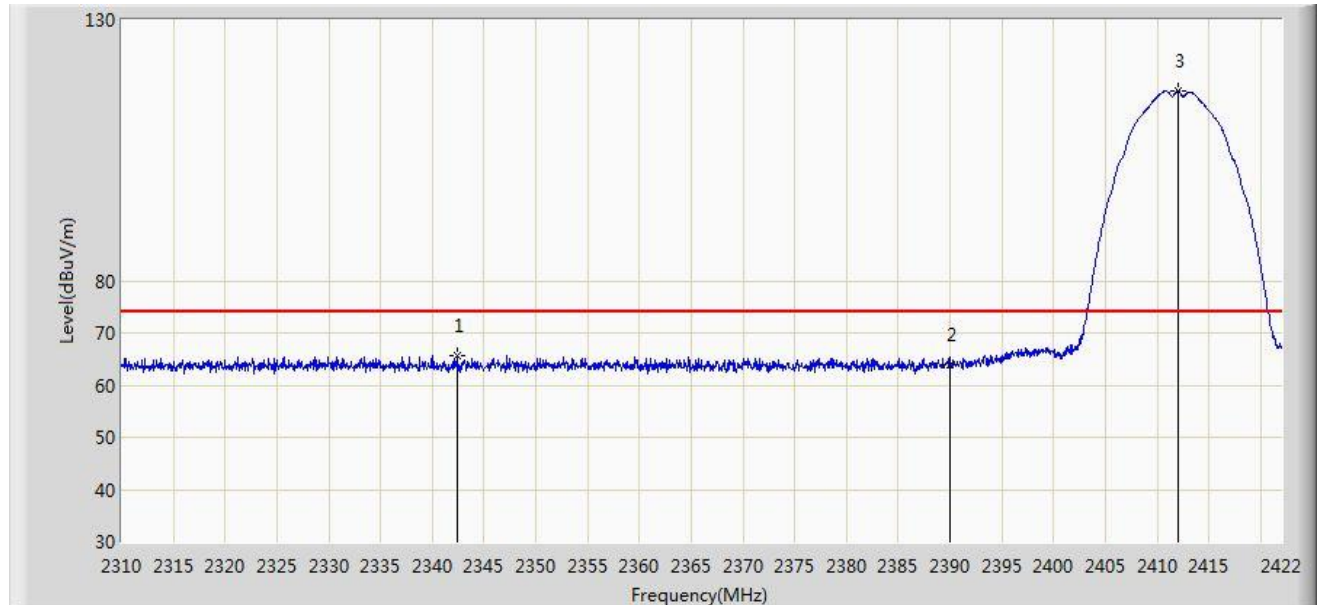
Note: This item was performed with the WIFI antenna connected.



### 7.7.5. Test Result

#### For APIN0504 - Omni Antenna (AP-ANT20W)

Site: AC1	Time: 2019/06/27 - 07:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

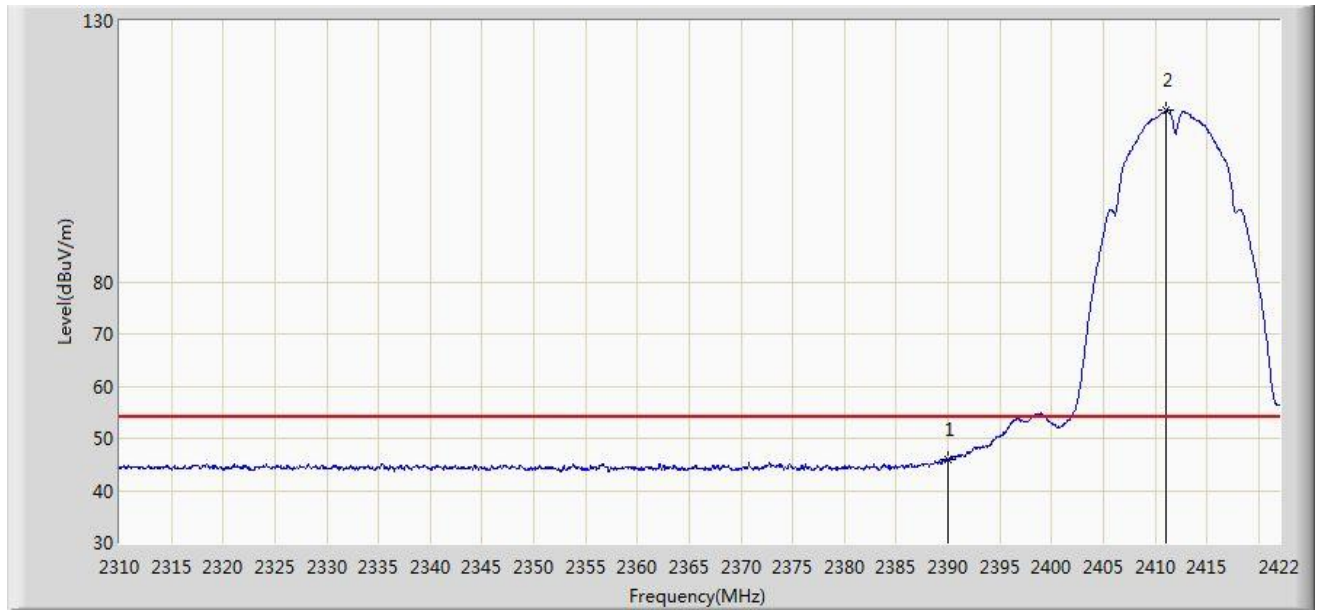


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2342.480	65.742	33.424	-8.258	74.000	32.318	PK
2			2390.000	63.980	31.462	-10.020	74.000	32.518	PK
3		*	2412.032	116.354	83.744	N/A	N/A	32.610	PK

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

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

Site: AC1	Time: 2019/06/27 - 07:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

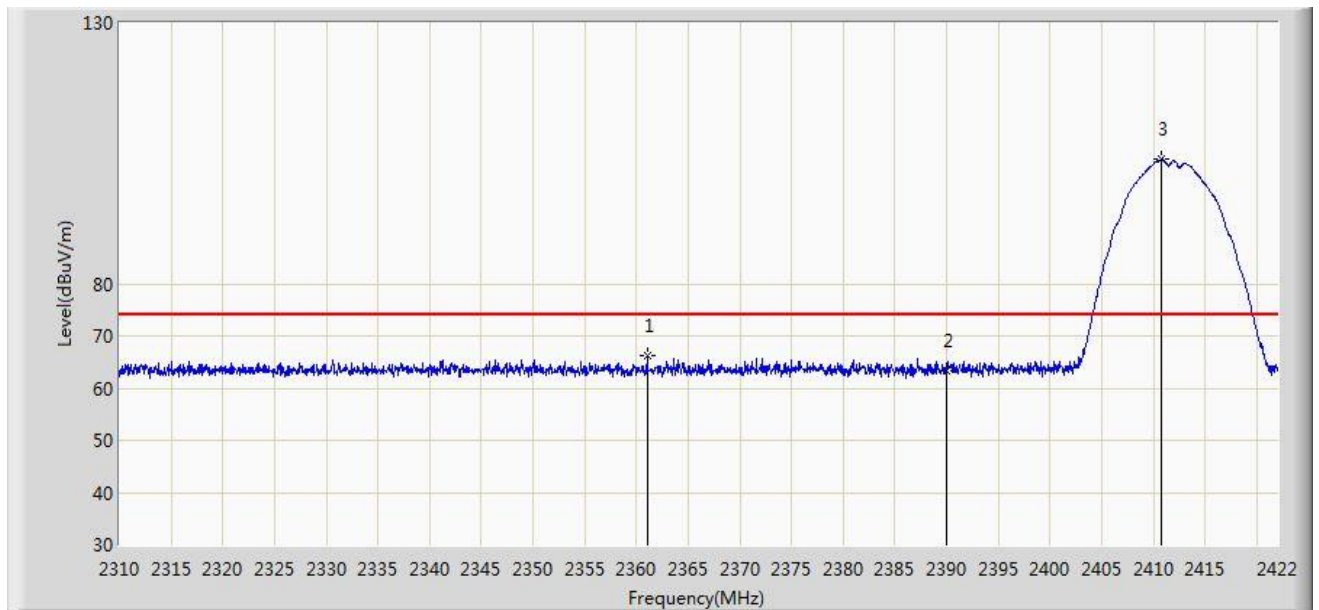


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	45.806	13.288	-8.194	54.000	32.518	AV
2	X	*	2411.024	112.765	80.159	N/A	N/A	32.606	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

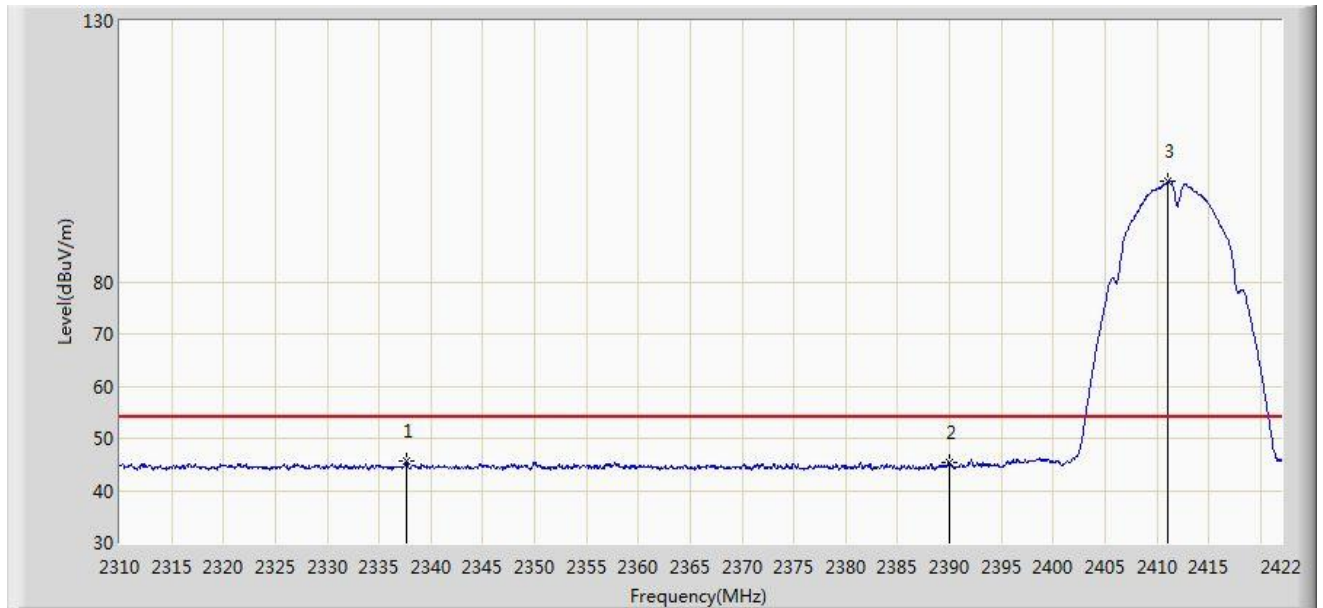


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2361.072	66.223	33.826	-7.777	74.000	32.397	PK
2			2390.000	63.220	30.702	-10.780	74.000	32.518	PK
3		*	2410.744	103.792	71.187	N/A	N/A	32.605	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2412MHz Ant 0 + 1	

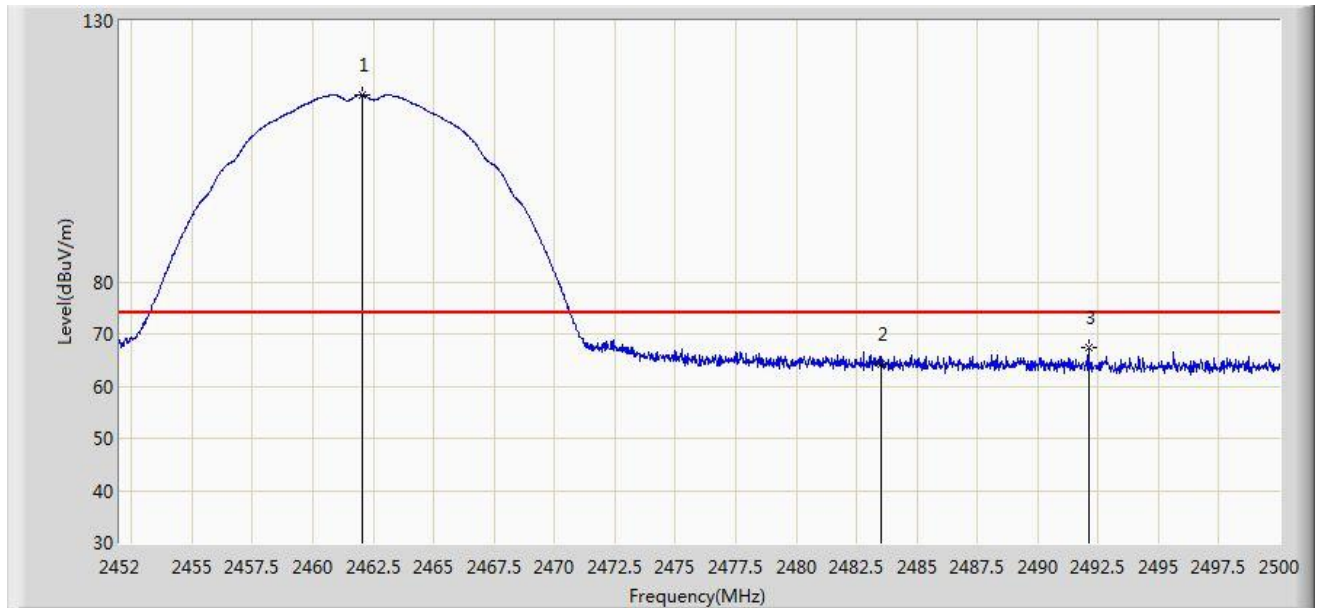


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2337.664	45.590	13.292	-8.410	54.000	32.298	AV
2			2390.000	45.256	12.738	-8.744	54.000	32.518	AV
3		*	2411.080	99.181	66.575	N/A	N/A	32.606	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:04
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	

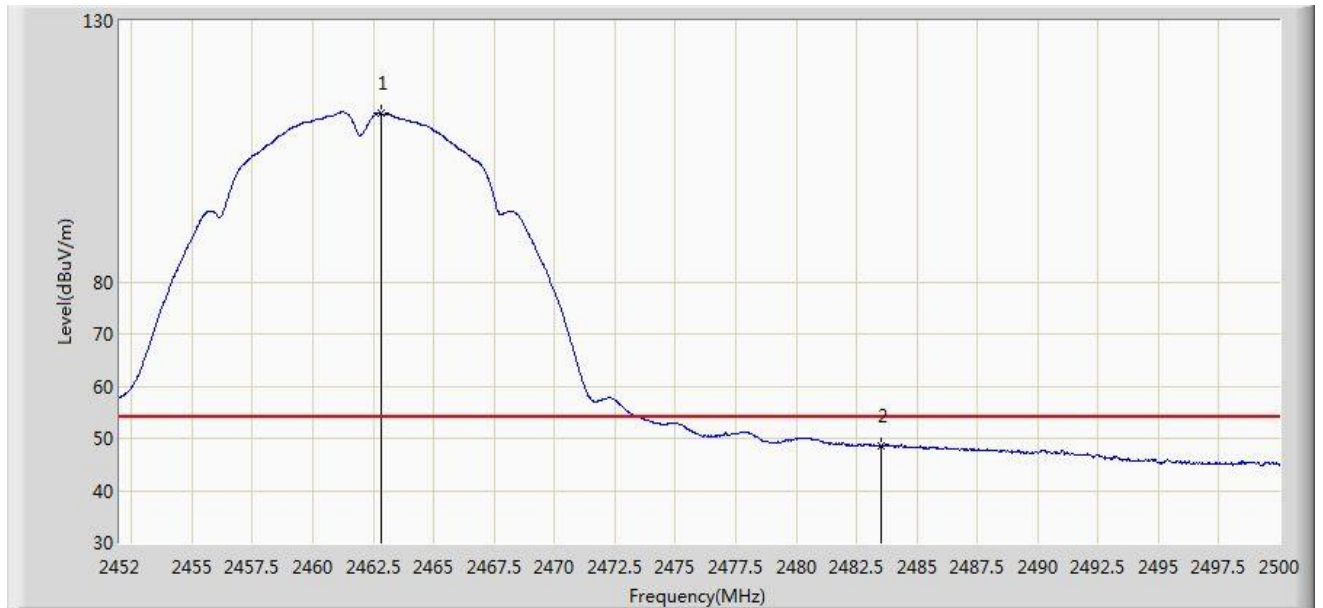


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.056	115.788	82.967	N/A	N/A	32.820	PK
2			2483.500	64.310	31.399	-9.690	74.000	32.911	PK
3			2492.104	67.354	34.407	-6.646	74.000	32.946	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	

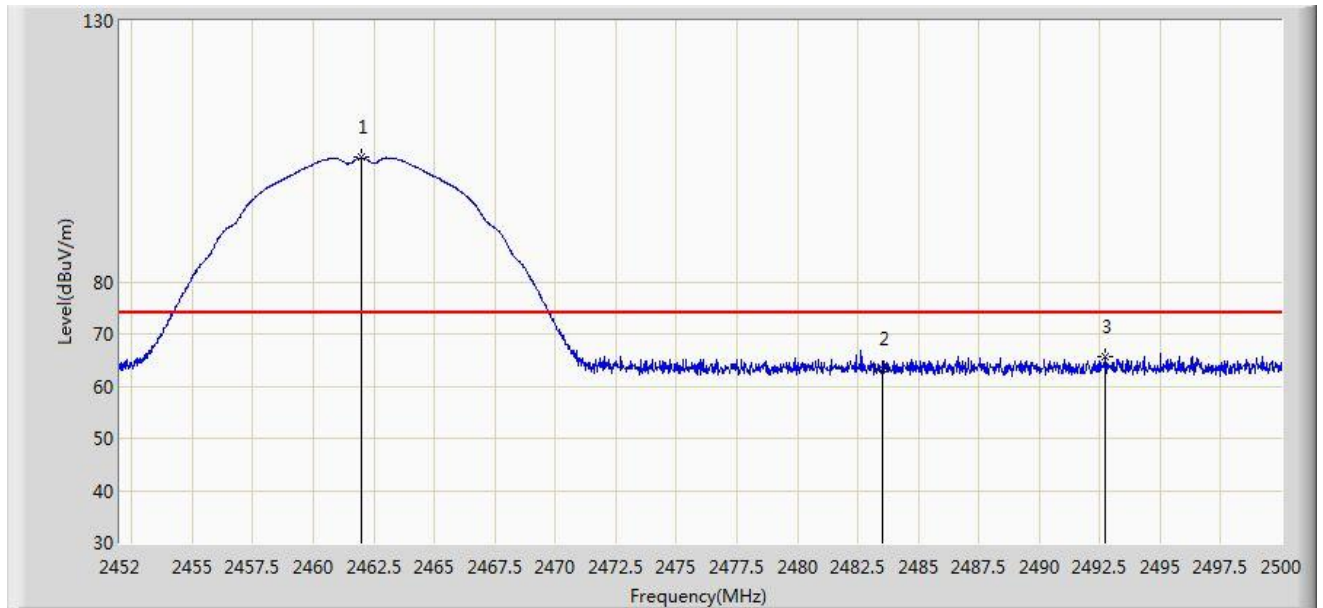


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	X	*	2462.800	112.283	79.459	N/A	N/A	32.823	AV
2			2483.500	48.663	15.752	-5.337	54.000	32.911	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	

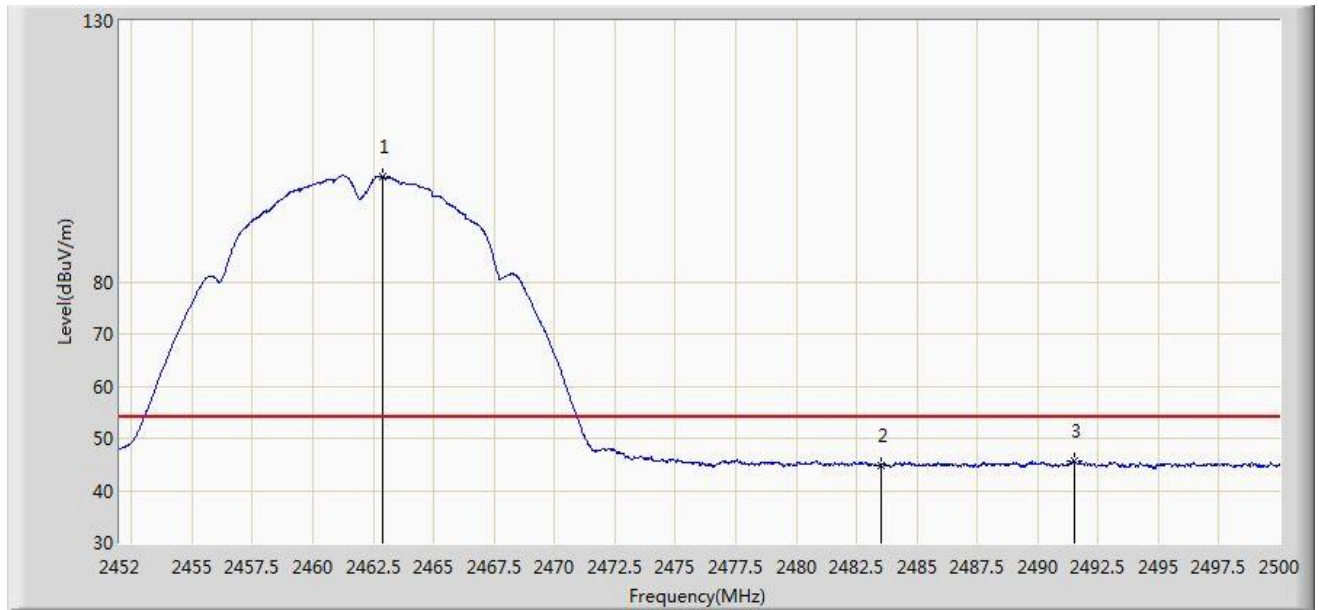


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.008	103.769	70.949	N/A	N/A	32.820	PK
2			2483.500	63.203	30.292	-10.797	74.000	32.911	PK
3			2492.728	65.648	32.699	-8.352	74.000	32.949	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/06/27 - 08:11
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Vertical
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at channel 2462MHz Ant 0 + 1	



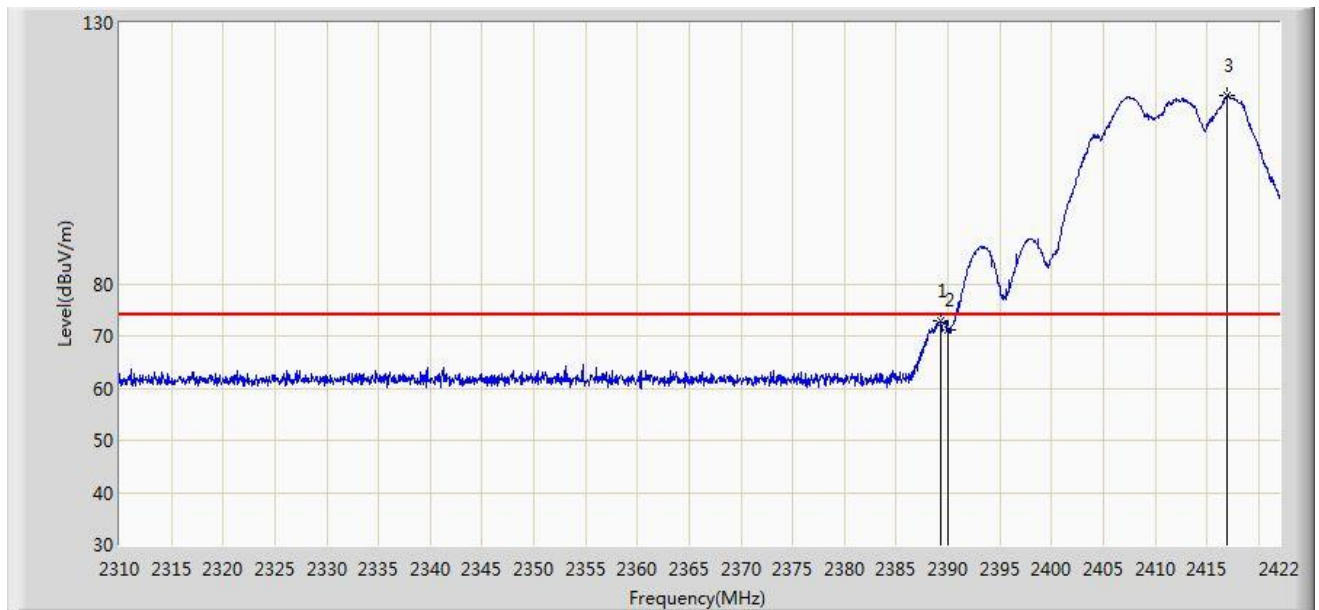
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2462.872	100.132	67.308	N/A	N/A	32.824	AV
2			2483.500	44.786	11.875	-9.214	54.000	32.911	AV
3			2491.504	45.701	12.757	-8.299	54.000	32.945	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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



Site: AC1	Time: 2019/07/01 - 21:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode : Transmit by 802.11g at channel 2412MHz Ant 0 + 1	

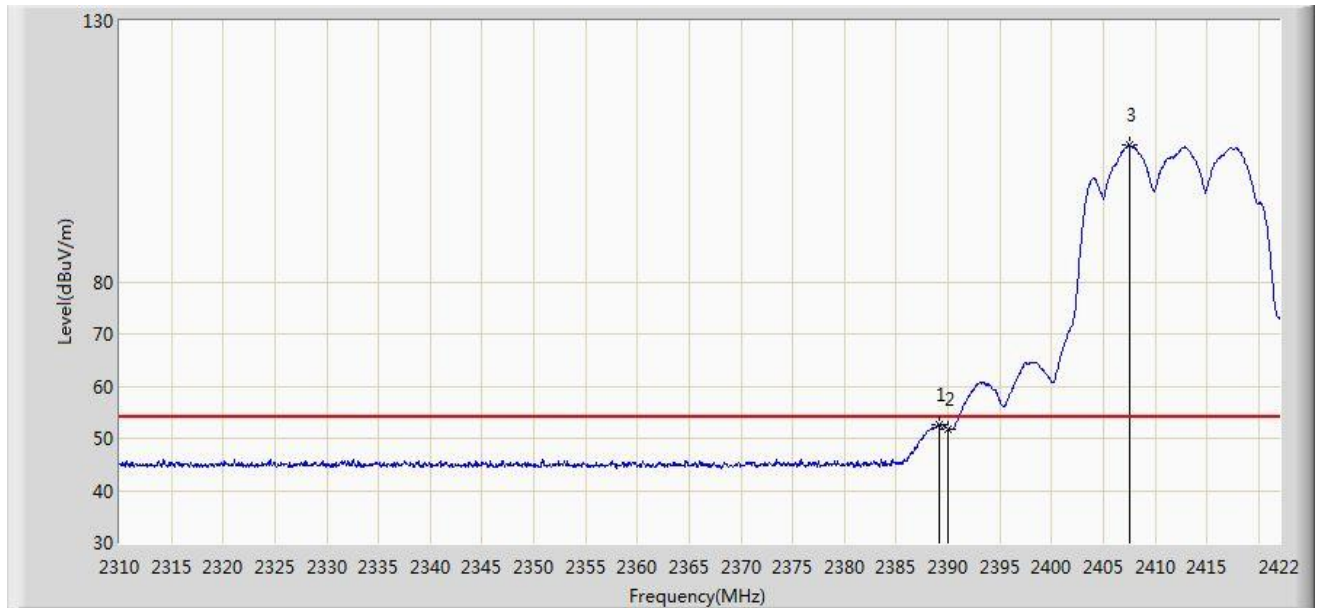


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.352	72.958	40.443	-1.042	74.000	32.515	PK
2			2390.000	71.018	38.500	-2.982	74.000	32.518	PK
3		*	2416.960	116.094	83.463	N/A	N/A	32.631	PK

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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

Site: AC1	Time: 2019/07/01 - 21:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker
Probe: BBHA 9120D_1-18GHz	Polarity: Horizontal
EUT: ACCESS POINT	Power: AC 120V/60Hz
Test Mode : Transmit by 802.11g at channel 2412MHz Ant 0 + 1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.184	52.751	20.236	-1.249	54.000	32.515	AV
2			2390.000	51.801	19.283	-2.199	54.000	32.518	AV
3		*	2407.552	106.112	73.521	N/A	N/A	32.592	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

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