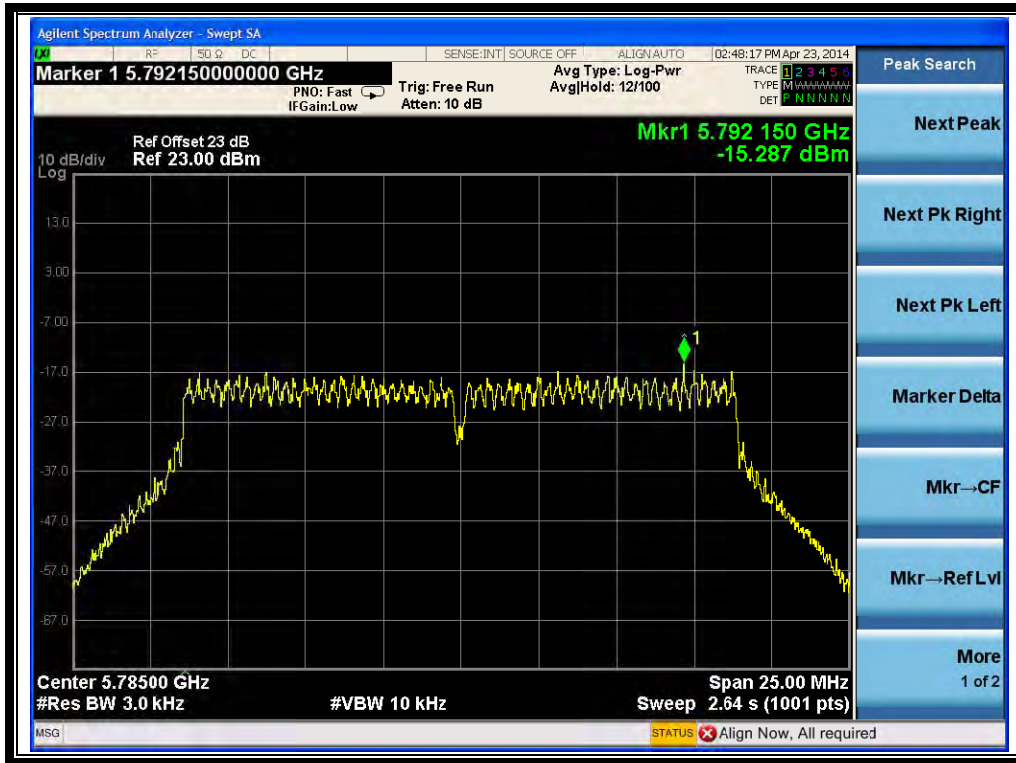
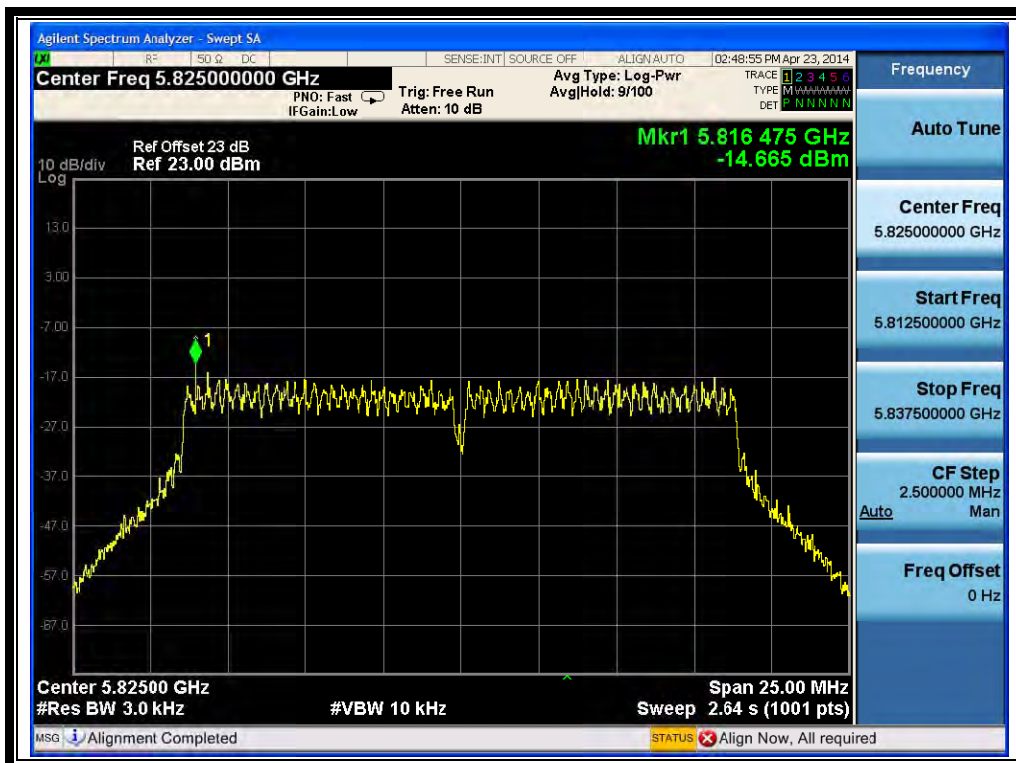




(Channel = 157 @ 802.11n-20MHz)



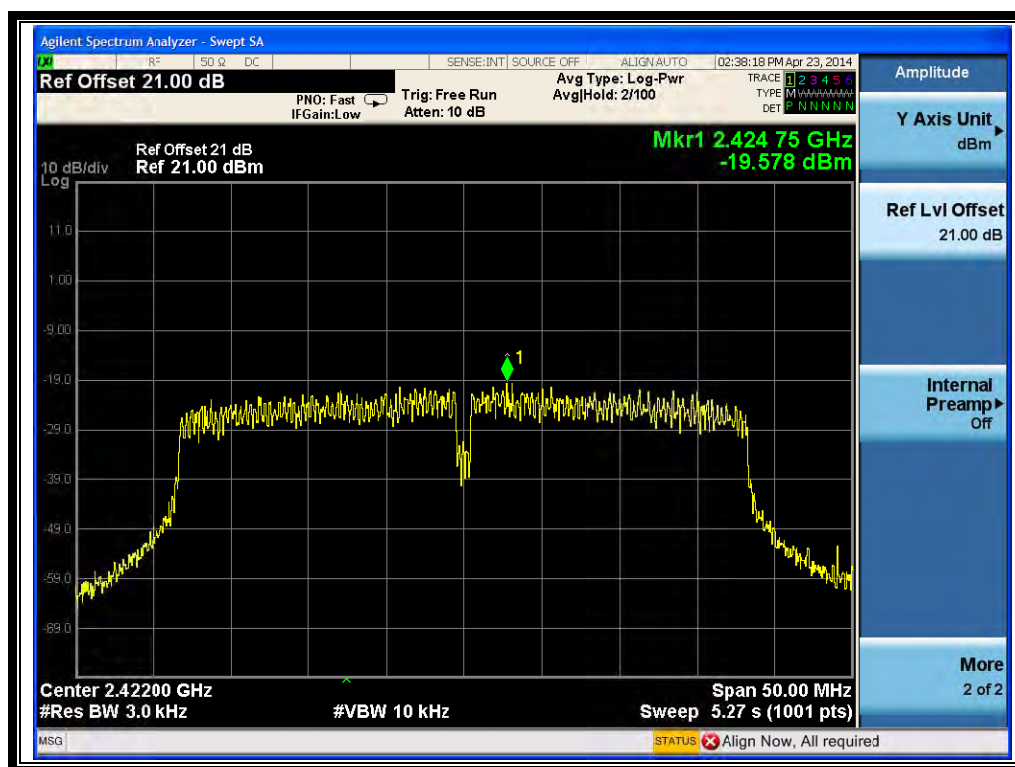
(Channel = 165 @ 802.11n-20MHz)

### 3.5.3.4. 802.11n-40MHz Test mode

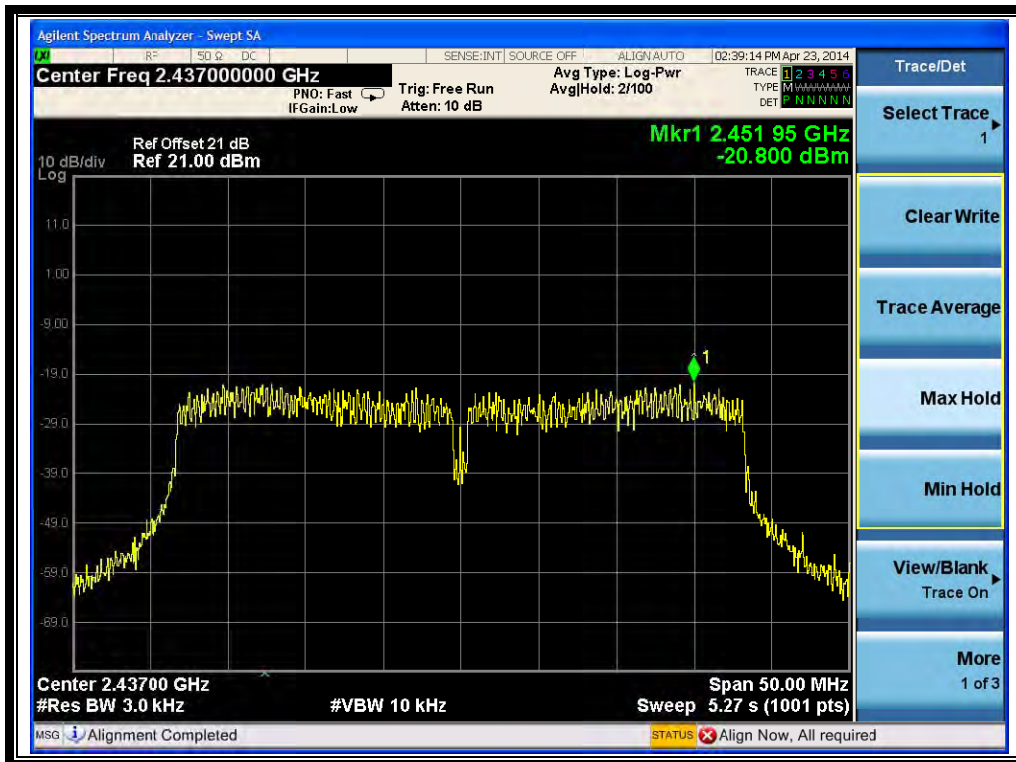
#### A. Test Verdict:

| Spectral power density (dBm/3kHz)     |                    |                            |                     |         |
|---------------------------------------|--------------------|----------------------------|---------------------|---------|
| Chann<br>el                           | Frequency<br>(MHz) | Measured PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
| 3                                     | 2422               | -19.578                    | 8                   | PASS    |
| 6                                     | 2437               | -20.800                    | 8                   | PASS    |
| 9                                     | 2452               | -18.302                    | 8                   | PASS    |
| 151                                   | 5755               | -20.448                    | 8                   | PASS    |
| 159                                   | 5795               | -21.38                     | 8                   | PASS    |
| Measurement uncertainty: $\pm 1.3$ dB |                    |                            |                     |         |

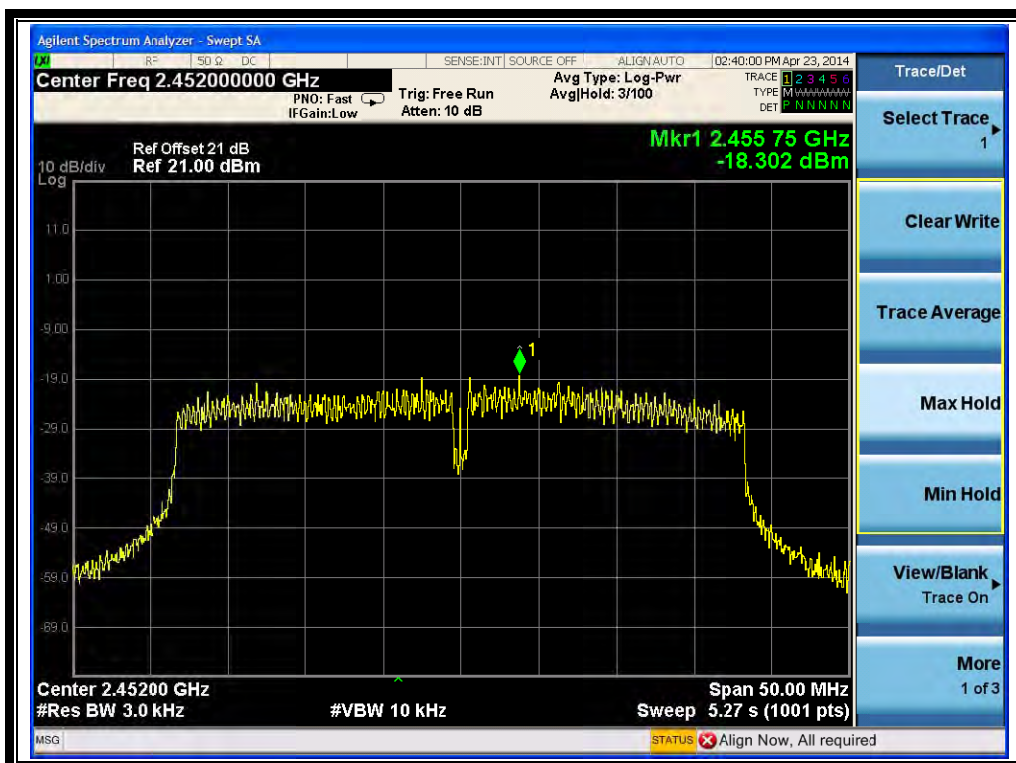
#### B. Test Plots:



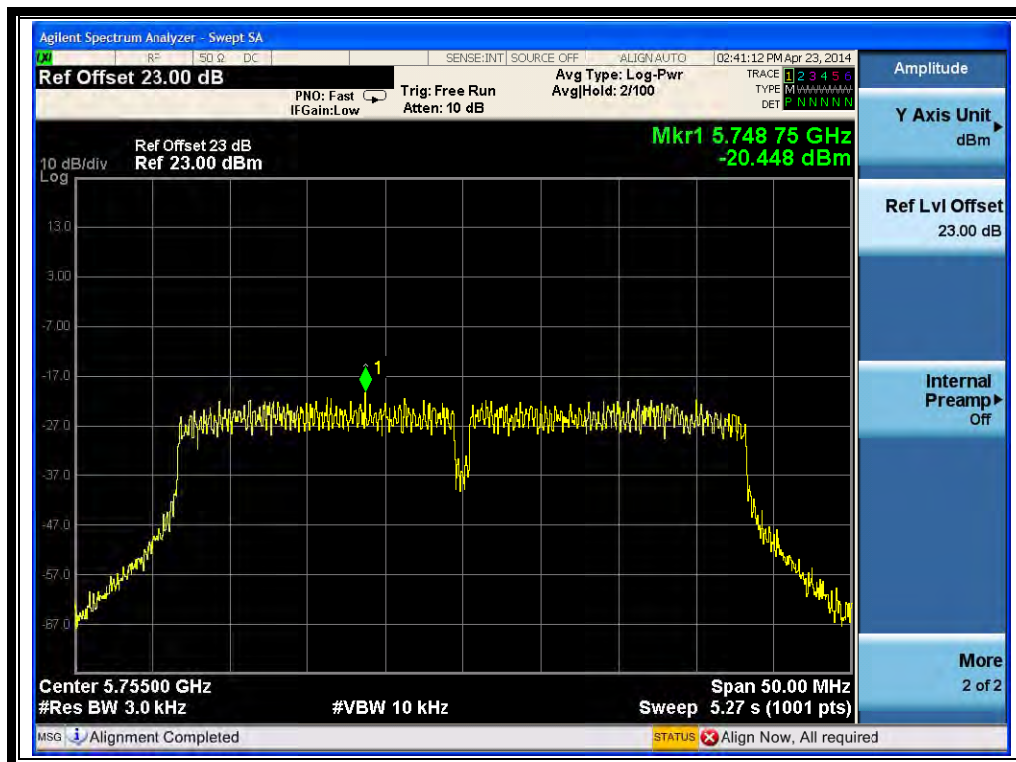
(Channel = 3 @ 802.11n-40MHz)



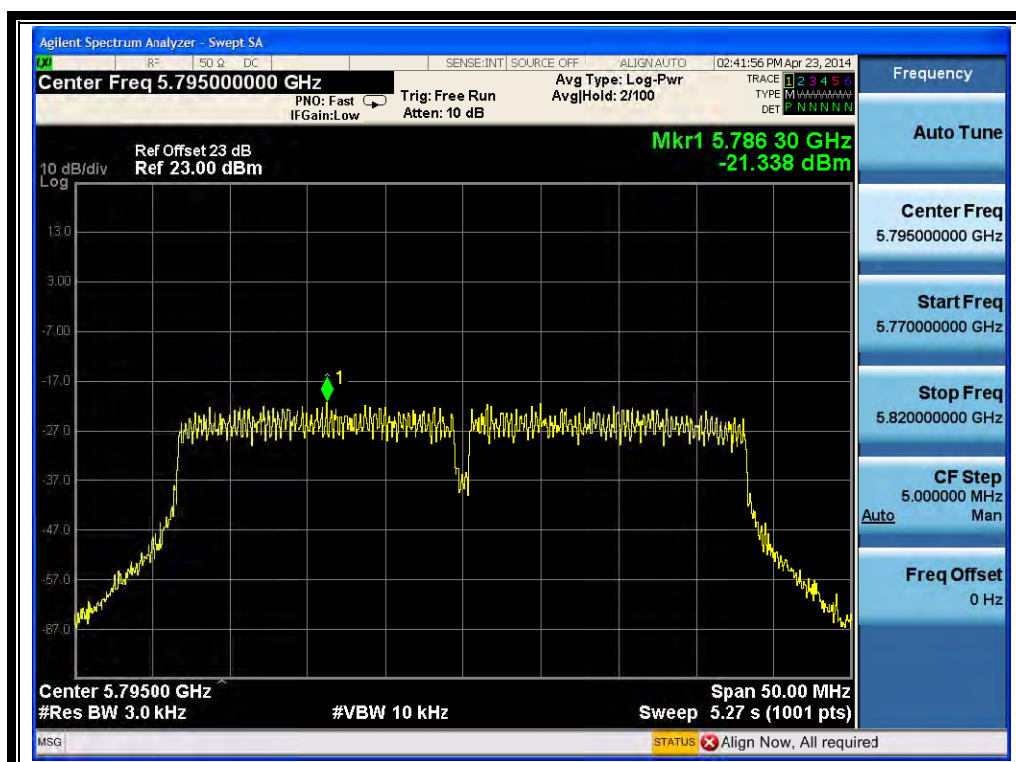
(Channel = 6 @ 802.11n-40MHz)



(Channel = 9 @ 802.11n-40MHz)



(Channel = 151 @ 802.11n-40MHz)



(Channel = 159 @ 802.11n-40MHz)

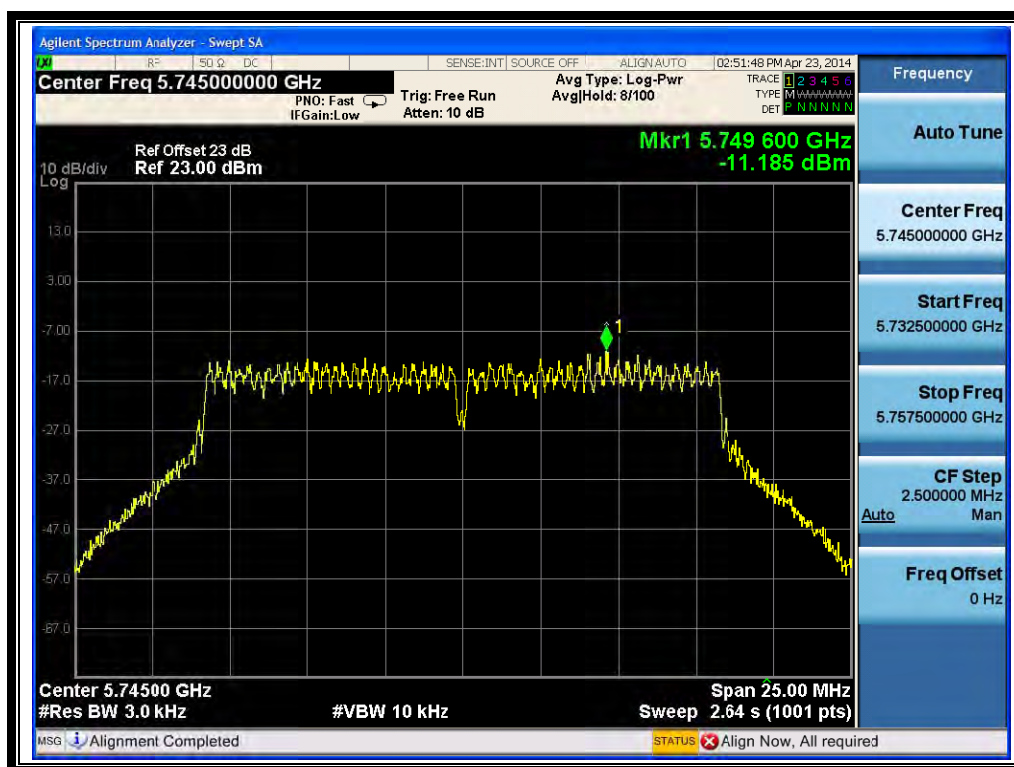
### 3.5.3.5. 802.11a Test mode

#### A. Test Verdict:

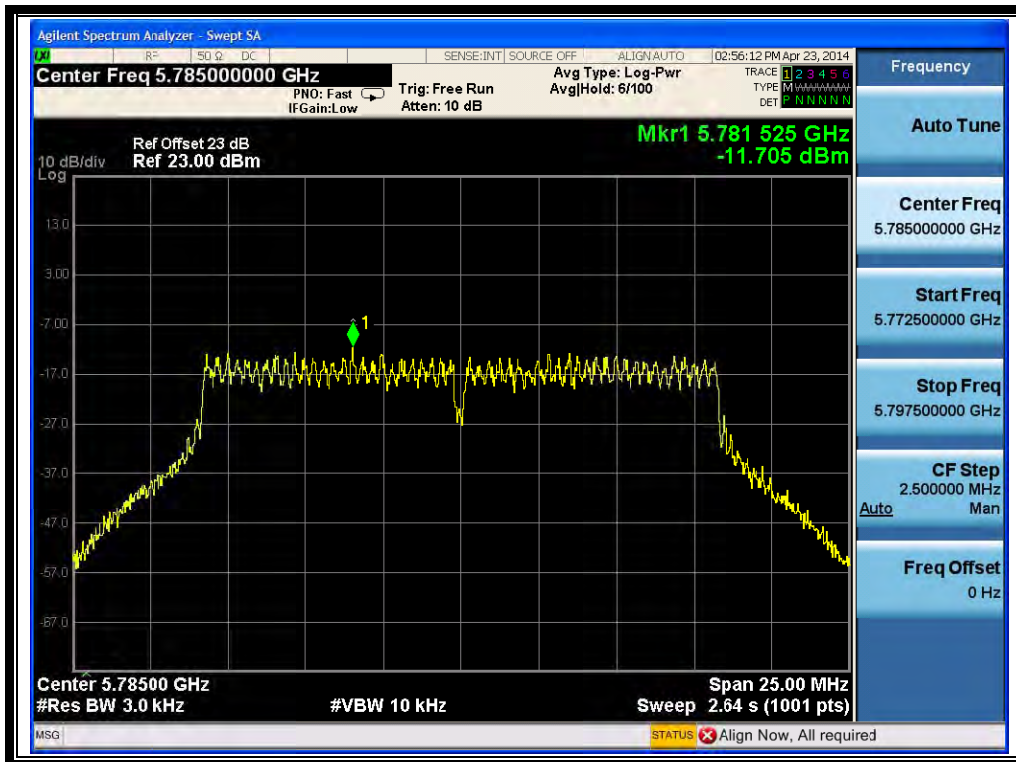
| Spectral power density (dBm/3kHz) |                    |                            |                     |         |
|-----------------------------------|--------------------|----------------------------|---------------------|---------|
| Chann<br>el                       | Frequency<br>(MHz) | Measured PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
| 149                               | 5745               | -11.185                    | 8                   | PASS    |
| 157                               | 5785               | -11.705                    | 8                   | PASS    |
| 165                               | 5825               | -12.230                    | 8                   | PASS    |

Measurement uncertainty:  $\pm 1.3$ dB

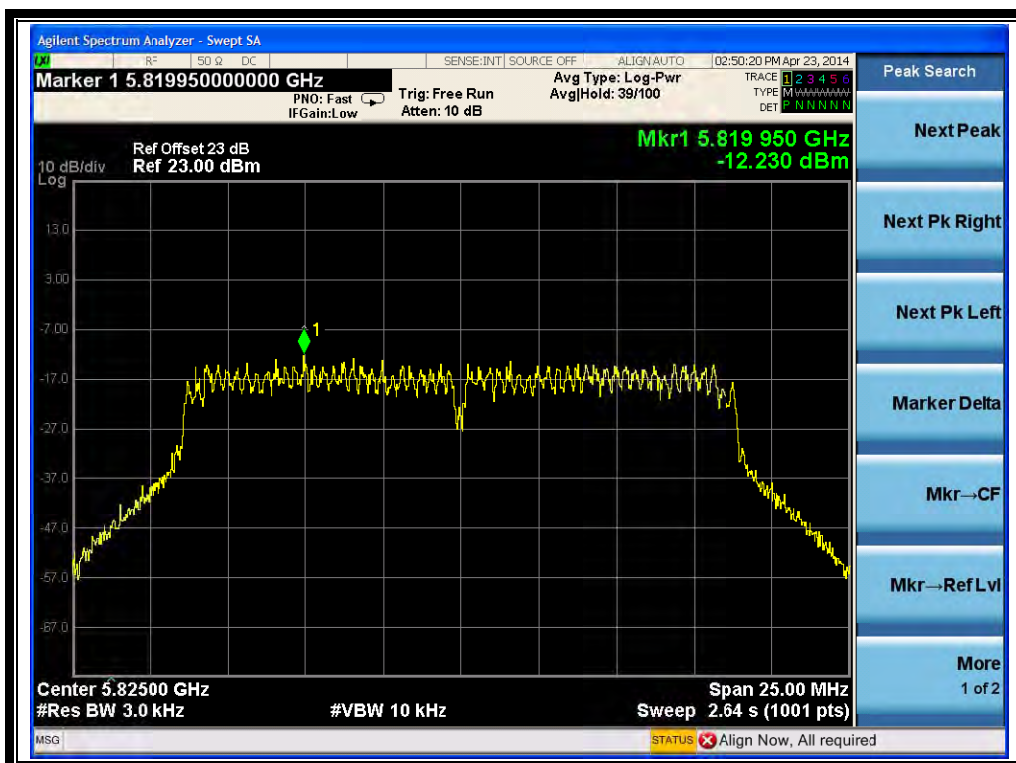
#### B. Test Plots:



(Channel = 149 @ 802.11a)



(Channel = 157 @ 802.11a)



(Channel = 165 @ 802.11a)

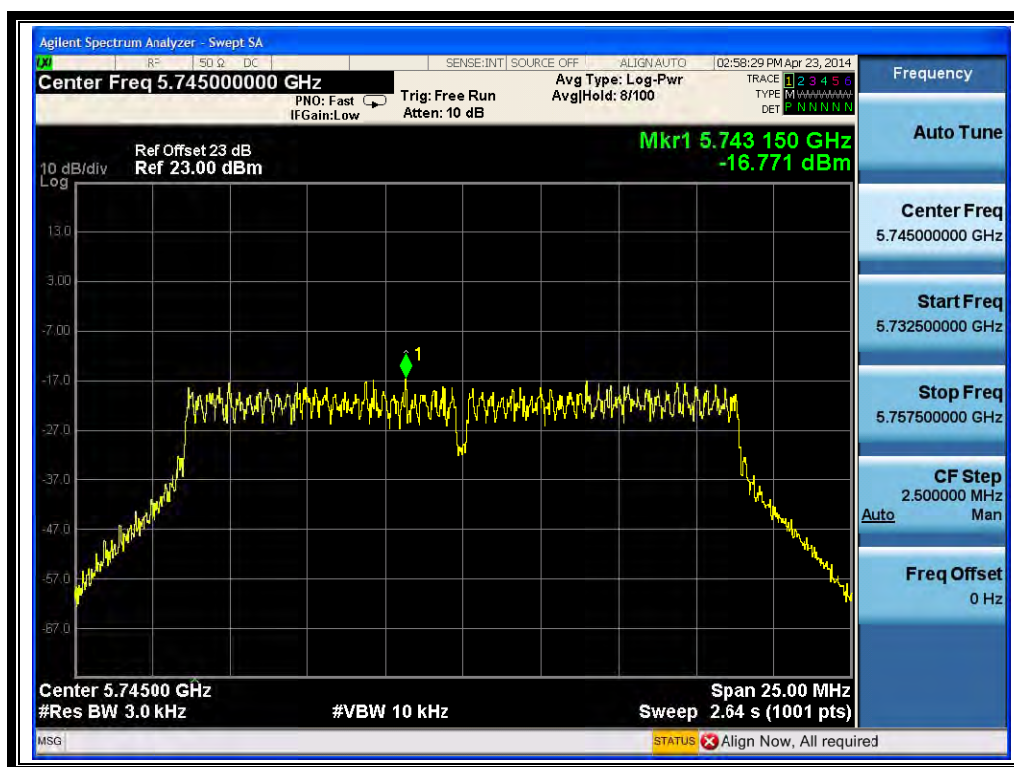
### 3.5.3.6. 802.11ac-20MHz Test mode

### A. Test Verdict:

| Spectral power density (dBm/3kHz) |                    |                            |                     |         |
|-----------------------------------|--------------------|----------------------------|---------------------|---------|
| Chann<br>el                       | Frequency<br>(MHz) | Measured PSD<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
| 149                               | 5745               | -16.771                    | 8                   | PASS    |
| 157                               | 5785               | -16.035                    | 8                   | PASS    |
| 165                               | 5825               | -17.309                    | 8                   | PASS    |
| Measurement uncertainty: ±1.3dB   |                    |                            |                     |         |

Measurement uncertainty:  $\pm 1.3\text{dB}$ 

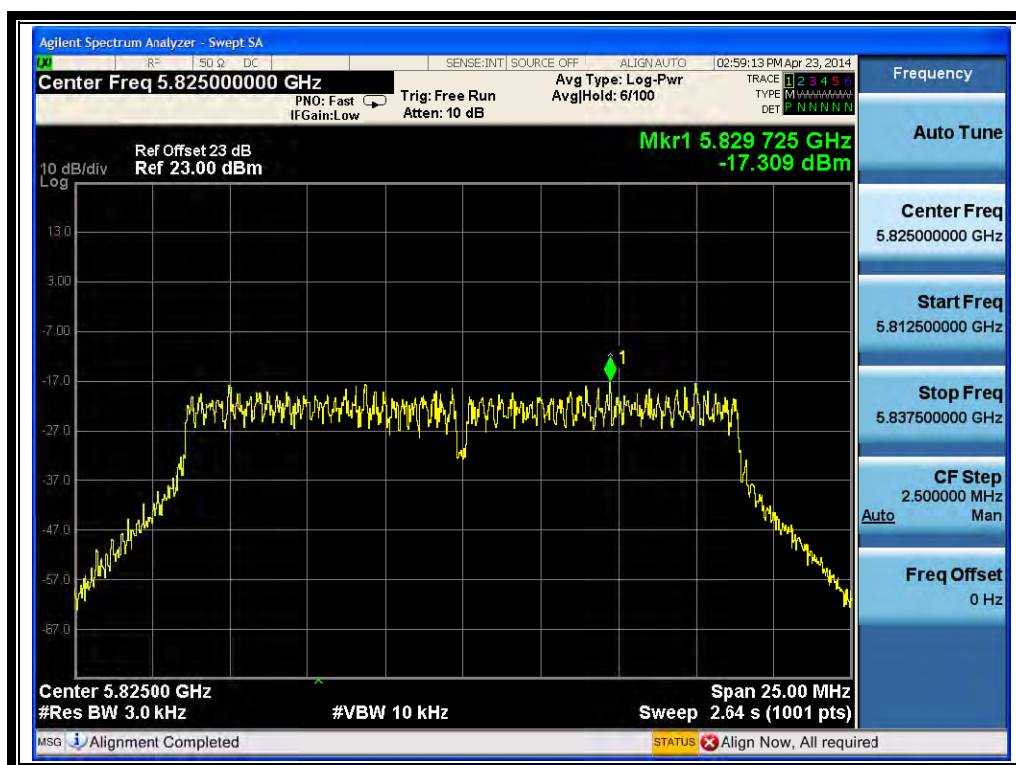
### B. Test Plots:



(Channel = 149 @ 802.11 ac-20MHz)



(Channel = 157 @ 802.11 ac-20MHz)



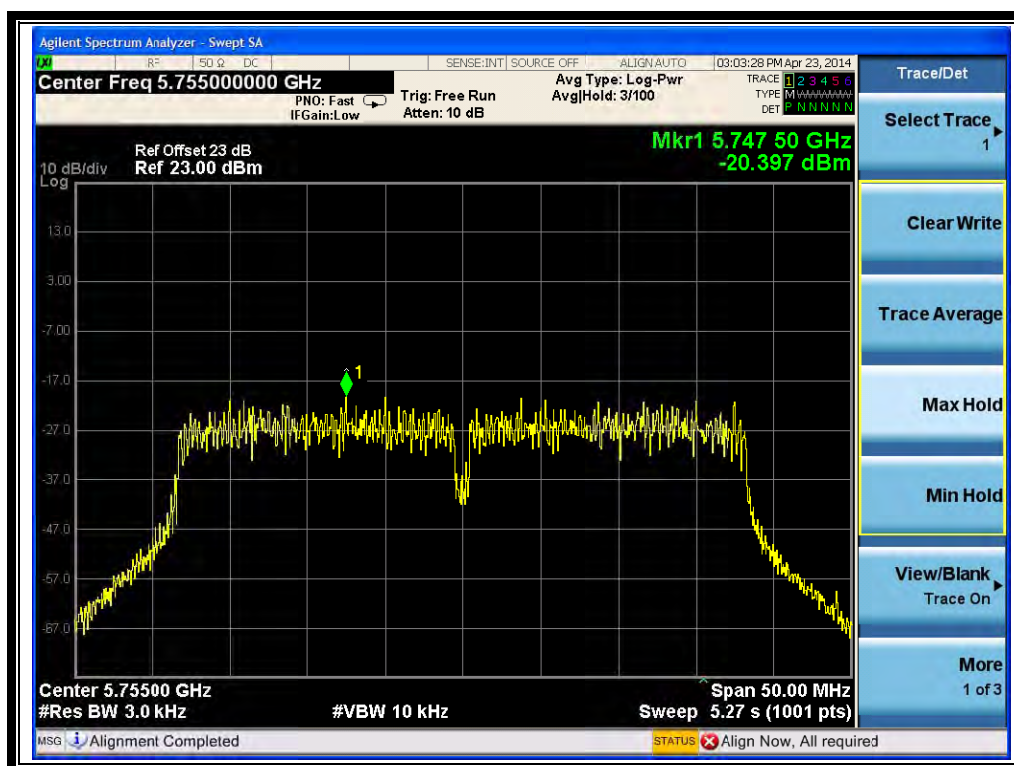
(Channel = 165 @ 802.11ac-20MHz)

### 3.5.3.7. 802.11ac-40MHz Test mode

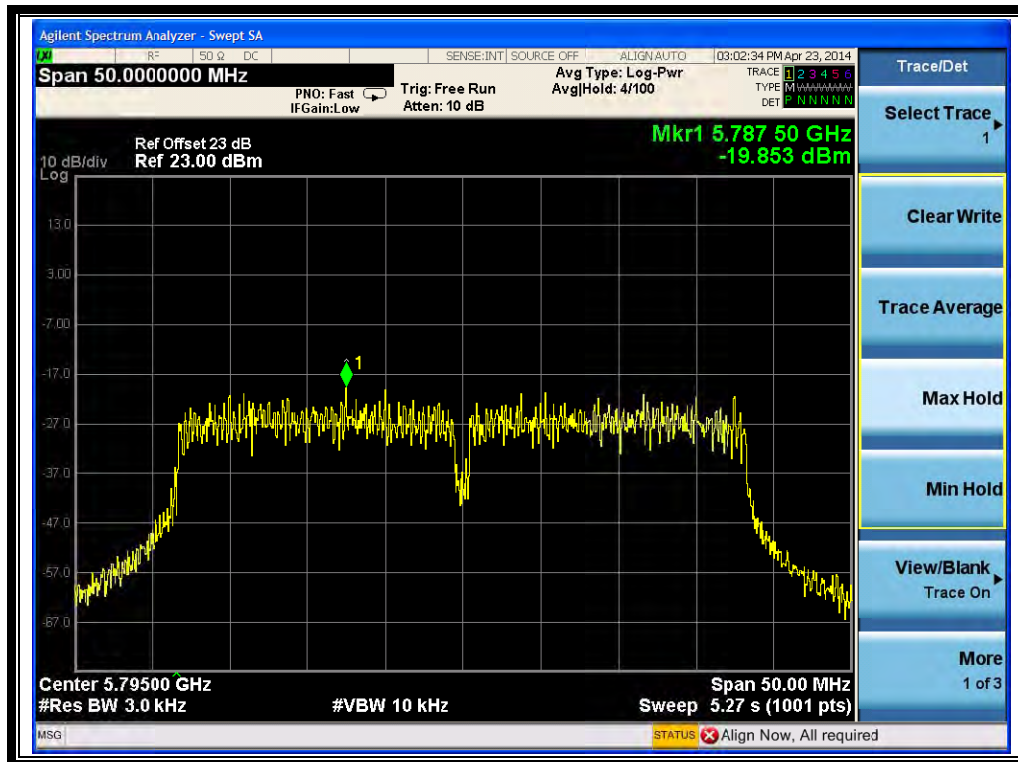
#### A. Test Verdict:

| Spectral power density (dBm/3kHz)     |                 |                         |                  |         |
|---------------------------------------|-----------------|-------------------------|------------------|---------|
| Channel                               | Frequency (MHz) | Measured PSD (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
| 151                                   | 5755            | -20.397                 | 8                | PASS    |
| 159                                   | 5795            | -19.853                 | 8                | PASS    |
| Measurement uncertainty: $\pm 1.3$ dB |                 |                         |                  |         |

#### B. Test Plots:



(Channel = 151 @ 802.11 ac-40MHz)



(Channel = 159 @ 802.11 ac-40MHz)

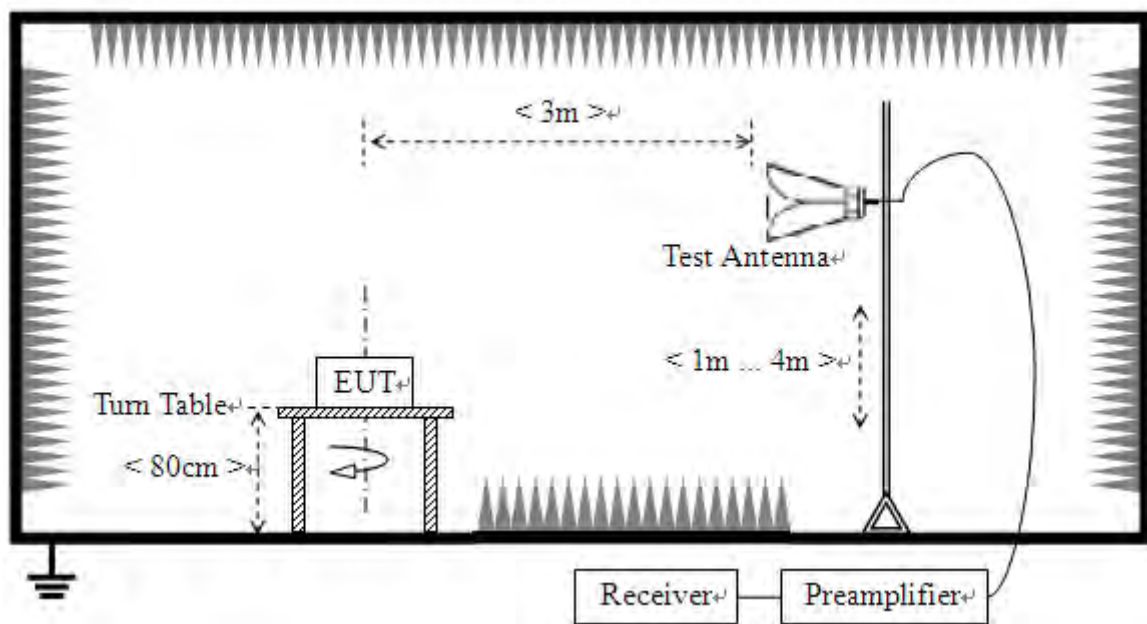
### 3.6. Restricted Frequency Bands

#### 3.6.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

#### 3.6.2. Test Description

##### A. Test Setup



The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

KDB 558074 Section 12.1 was used in order to prove compliance.

## B. Equipments List:

| Description           | Manufacturer | Model      | Serial No. | Cal. Date  | Cal. Due   |
|-----------------------|--------------|------------|------------|------------|------------|
| Receiver              | Agilent      | E7405A     | US44210471 | 2014.02.26 | 2015.02.25 |
| Full-Anechoic Chamber | Albatross    | 9m*6m*6m   | (n.a.)     | 2012.05.12 | 2015.02.25 |
| Test Antenna - Horn   | Schwarzbeck  | BBHA 9120D | 9120D-963  | 2014.02.26 | 2015.02.25 |

## 3.6.3. Test Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

$A_T$ : Total correction Factor except Antenna

$U_R$ : Receiver Reading

$G_{\text{preamp}}$ : Preamplifier Gain

$A_{\text{Factor}}$ : Antenna Factor at 3m

**Note:** Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

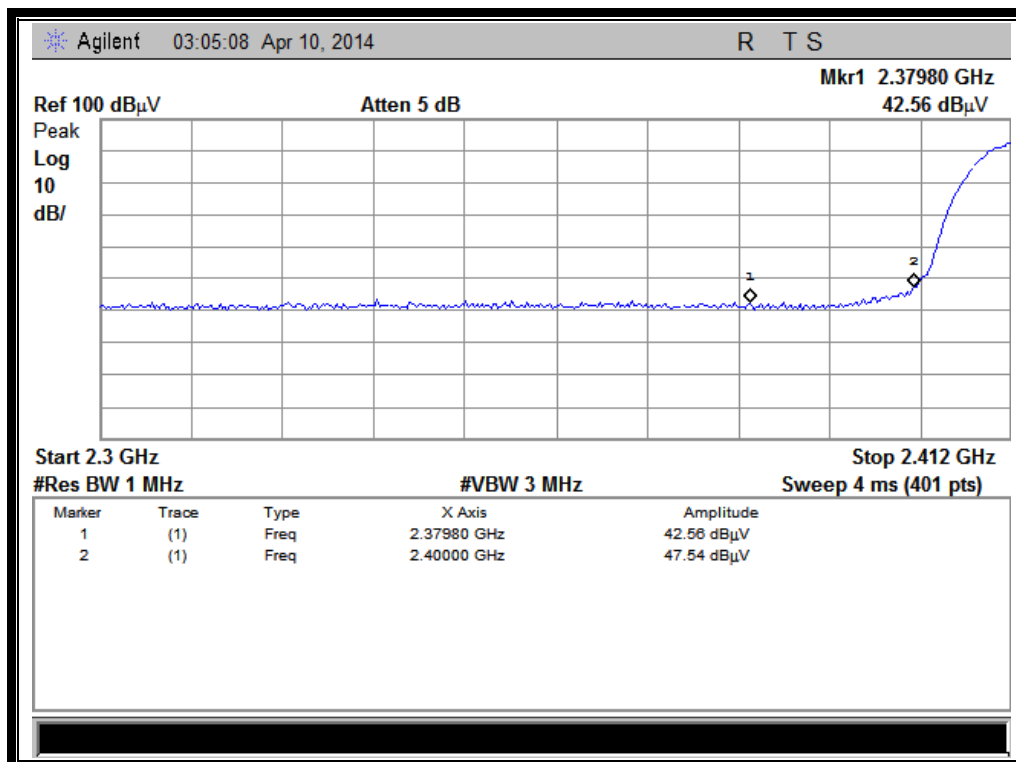
### 3.6.3.1. 802.11b Test mode

The lowest and highest channels are tested to verify the band edge emissions.

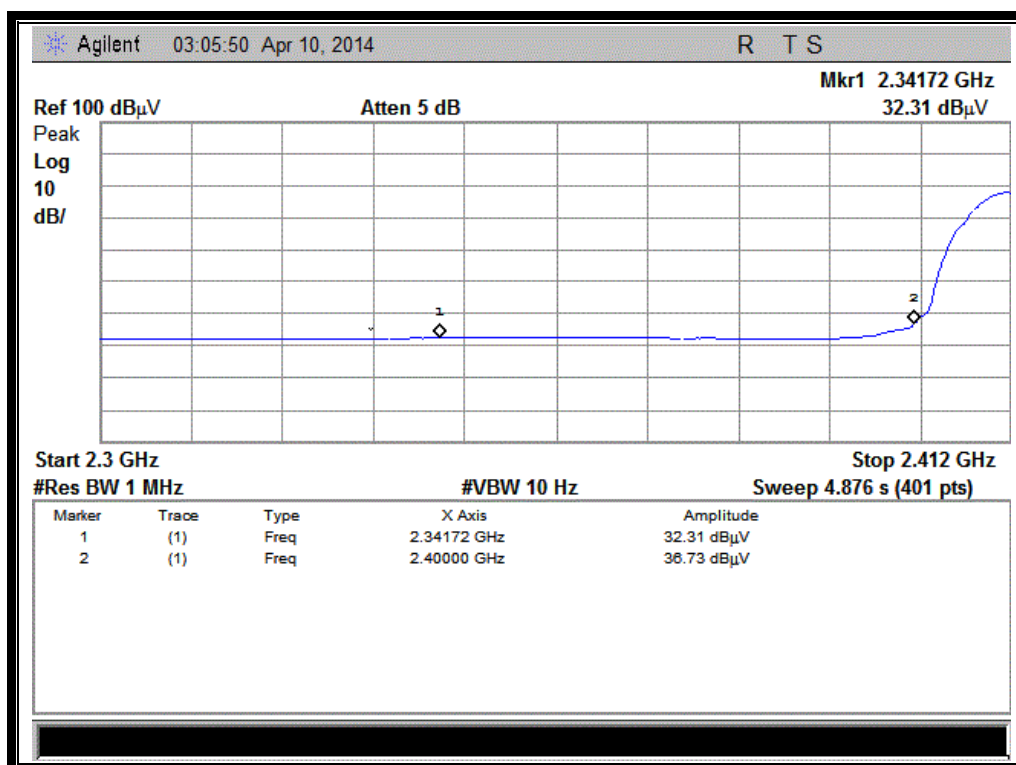
## A. Test Verdict:

| Channel | Frequency (MHz) | Detector | Receiver Reading UR (dBuV) | AT (dB) | AFactor (dB@3m) | Max. Emission E (dBμV/m) | Limit (dBμV/m) | Verdict |
|---------|-----------------|----------|----------------------------|---------|-----------------|--------------------------|----------------|---------|
|         |                 | PK/ AV   |                            |         |                 |                          |                |         |
| 1       | 2379.80         | PK       | 42.56                      | -30.93  | 32.56           | 44.19                    | 74             | Pass    |
| 1       | 2341.72         | AV       | 32.31                      | -30.93  | 32.56           | 33.94                    | 54             | Pass    |
| 11      | 2486.80         | PK       | 44.27                      | -29.05  | 32.50           | 47.72                    | 74             | Pass    |
| 11      | 2483.50         | AV       | 34.35                      | -29.05  | 32.50           | 37.80                    | 54             | Pass    |

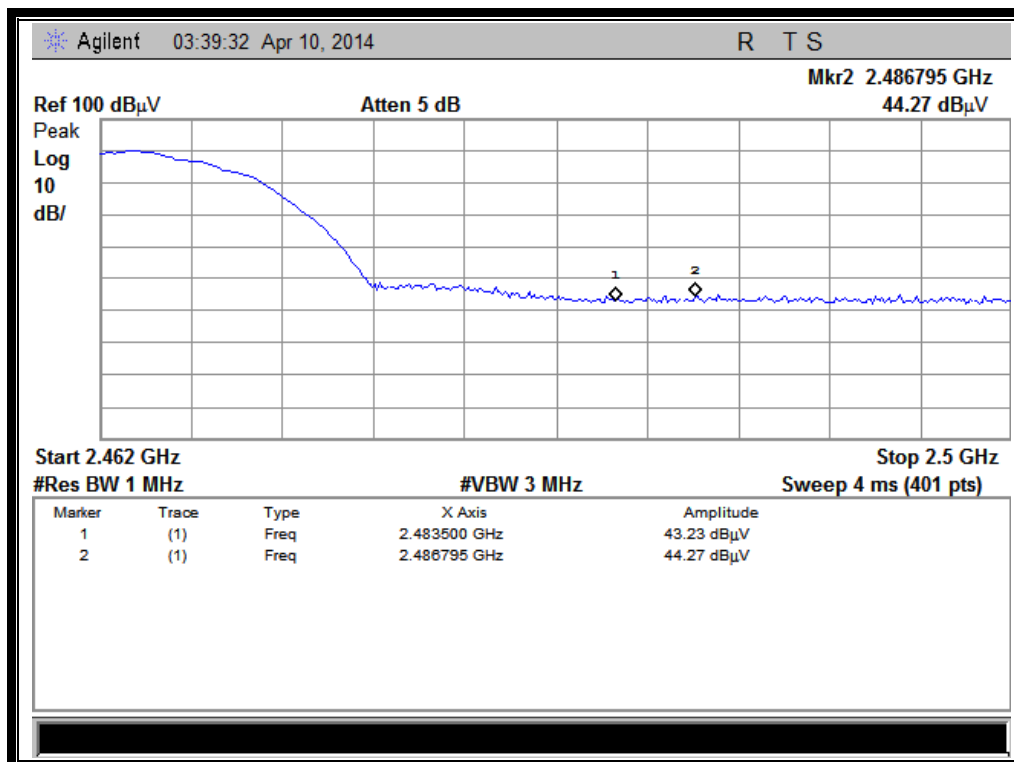
## B. Test Plots:



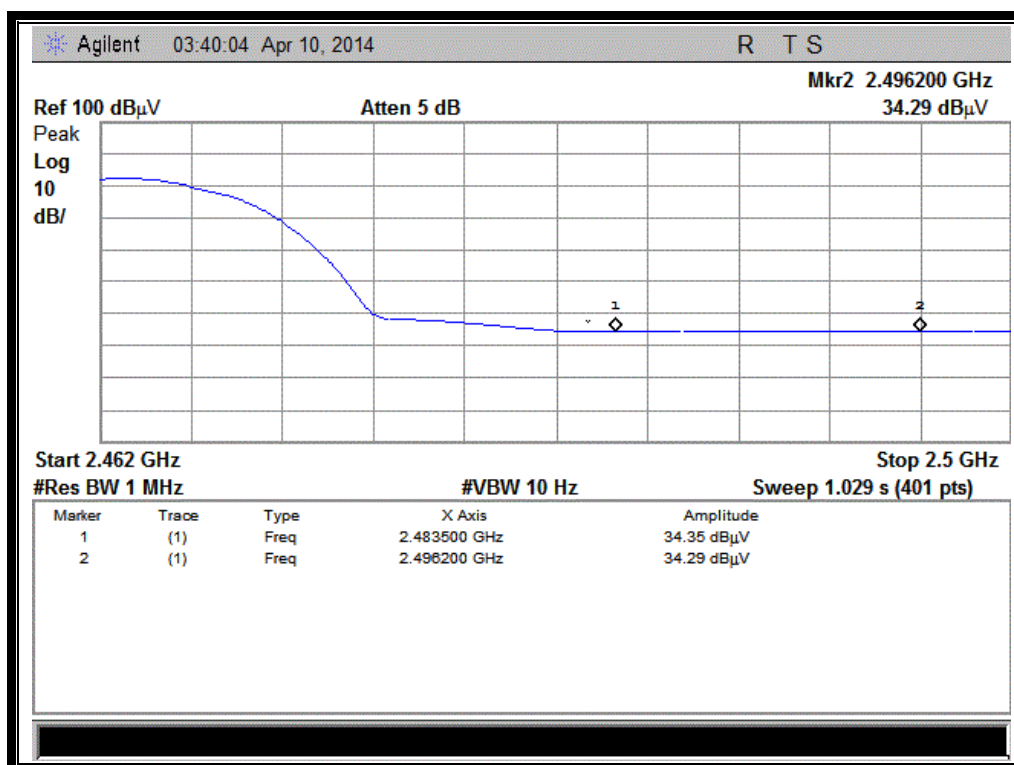
(Plot A1: Channel = 1 PEAK @ 802.11b)



(Plot A2: Channel = 1 AVG @ 802.11b)



(Plot B1: Channel = 11 PEAK @ 802.11b)



(Plot B2: Channel = 11 AVG @ 802.11b)

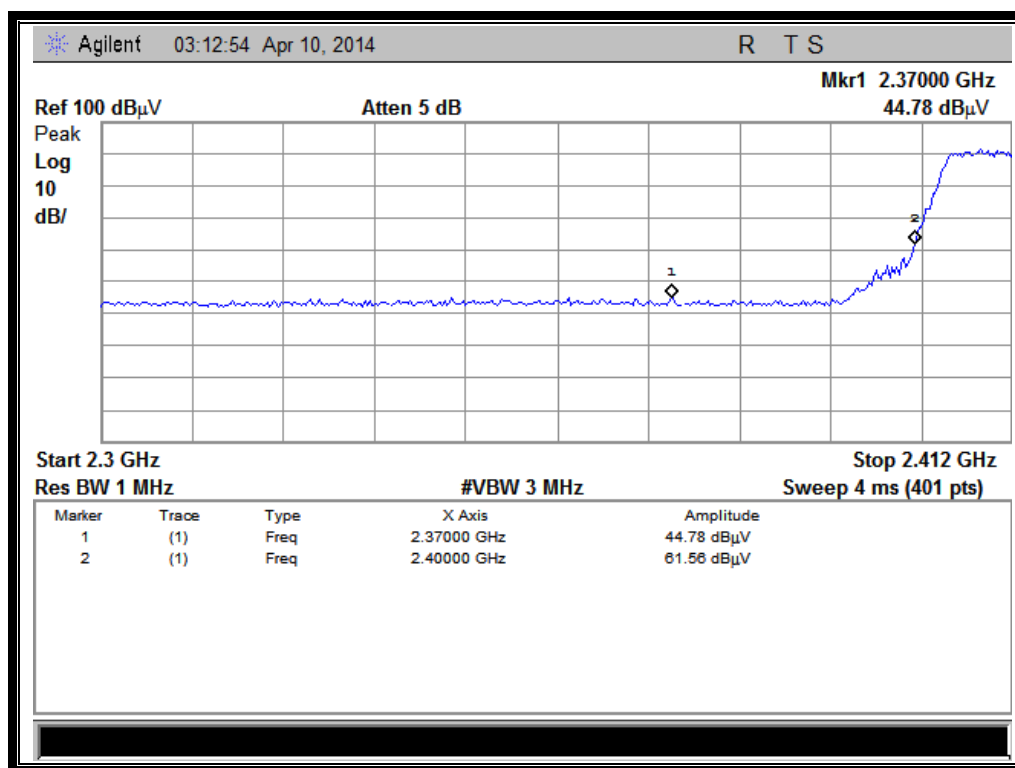
### 3.6.3.2. 802.11g Test mode

The lowest and highest channels are tested to verify the band edge emissions.

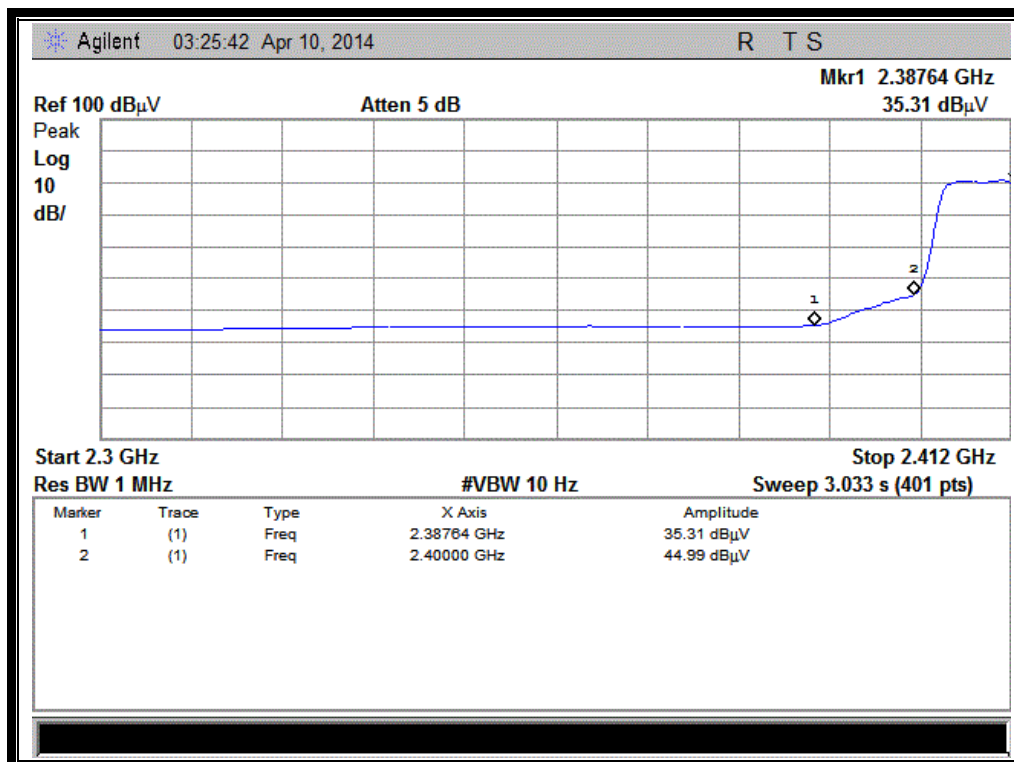
#### A. Test Verdict:

| Channel | Frequency (MHz) | Detector | Receiver Reading UR (dBuV) | AT (dB) | AFactor (dB@3m) | Max. Emission E (dBμV/m) | Limit (dBμV/m) | Verdict |
|---------|-----------------|----------|----------------------------|---------|-----------------|--------------------------|----------------|---------|
|         |                 | PK/ AV   |                            |         |                 |                          |                |         |
| 1       | 2370.00         | PK       | 44.78                      | -30.93  | 32.56           | 46.41                    | 74             | Pass    |
| 1       | 2387.64         | AV       | 35.31                      | -30.93  | 32.56           | 36.94                    | 54             | Pass    |
| 11      | 2484.71         | PK       | 45.70                      | -29.05  | 32.50           | 49.15                    | 74             | Pass    |
| 11      | 2483.50         | AV       | 35.53                      | -29.05  | 32.50           | 38.98                    | 54             | Pass    |

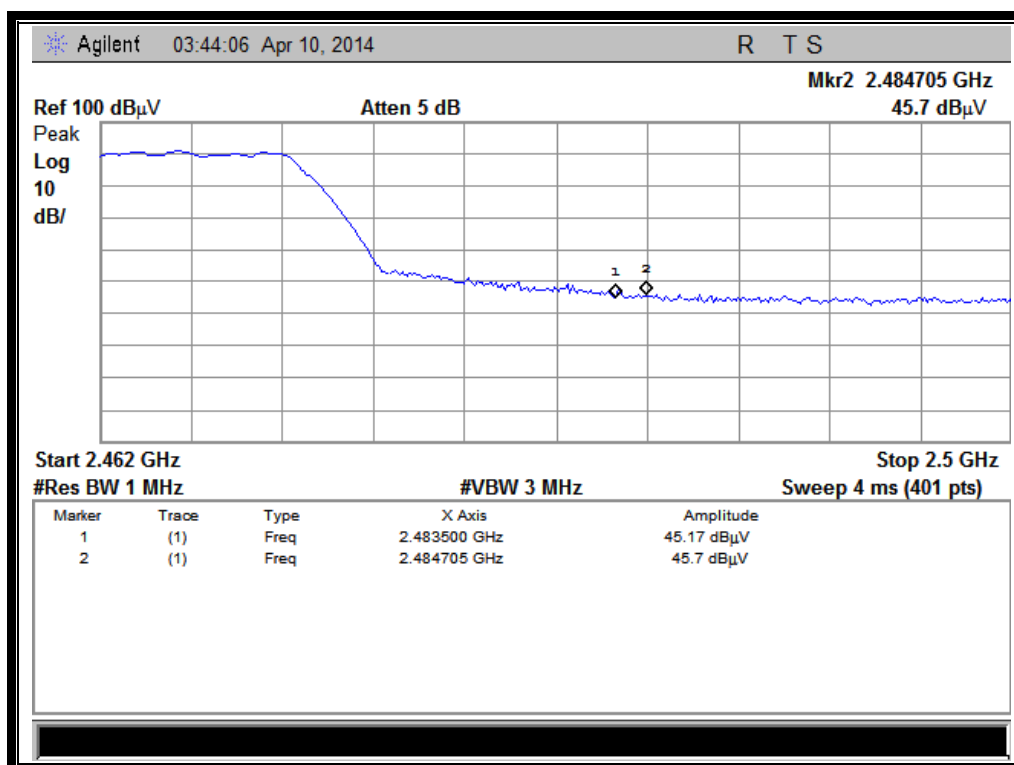
#### B. Test Plots:



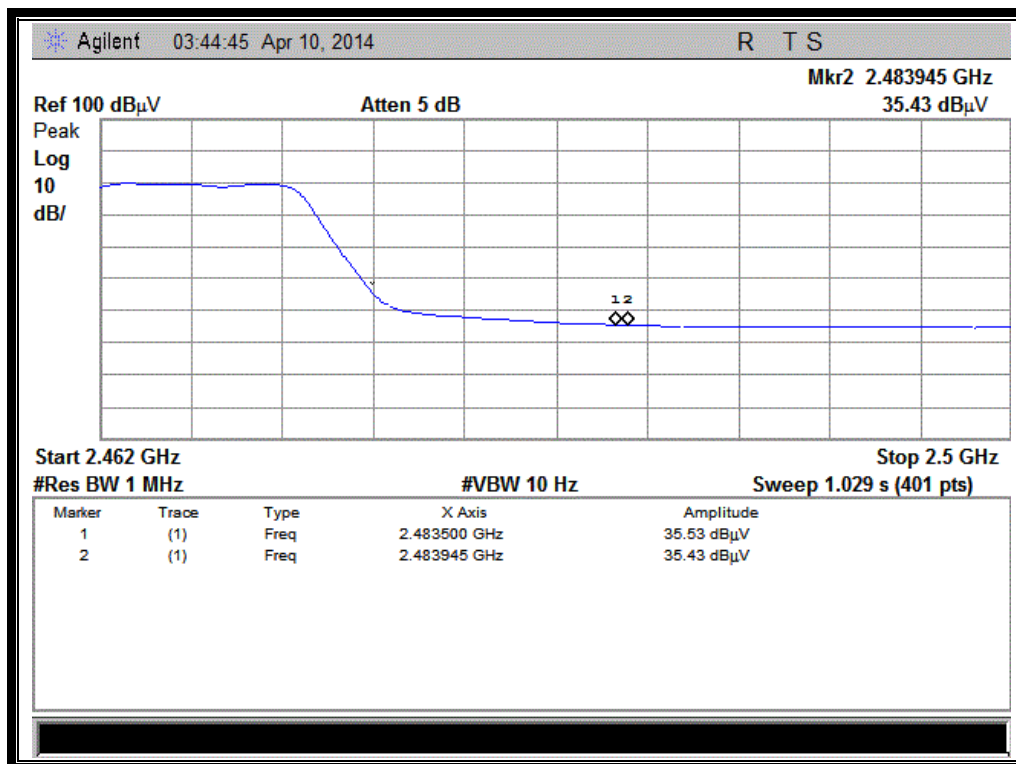
(Plot C1: Channel = 1 PEAK @ 802.11g)



(Plot C2: Channel = 1 AVG @ 802.11g)



(Plot D1: Channel = 11 PEAK @ 802.11g)



(Plot D2: Channel = 11 AVG @ 802.11g)

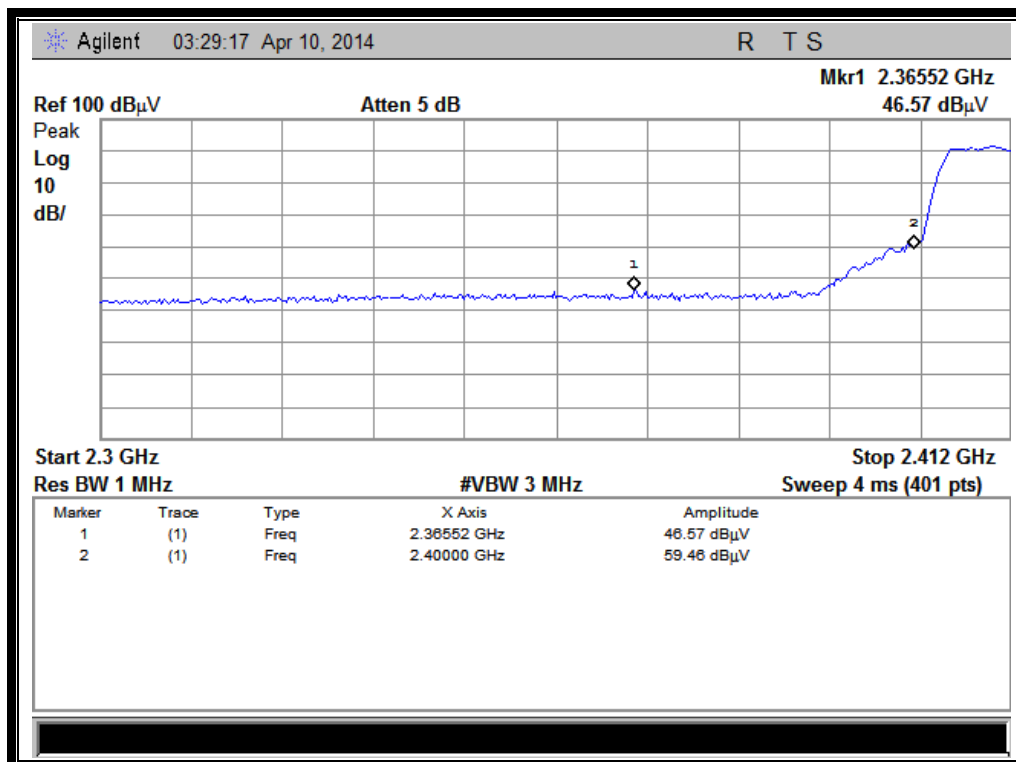
### 3.6.3.3. 802.11n-20MHz Test mode

The lowest and highest channels are tested to verify the band edge emissions.

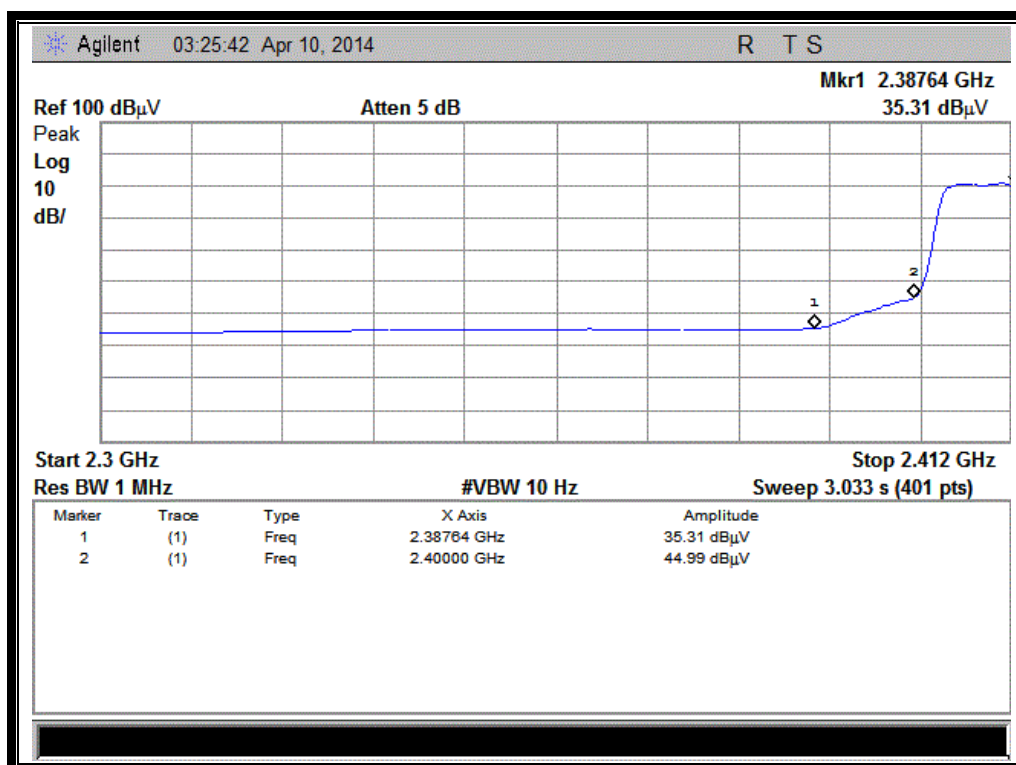
#### A. Test Verdict:

| Channel | Frequency (MHz) | Detector | Receiver Reading UR (dBuV) | AT (dB) | AFactor (dB@3m) | Max. Emission E (dBμV/m) | Limit (dBμV/m) | Verdict |
|---------|-----------------|----------|----------------------------|---------|-----------------|--------------------------|----------------|---------|
|         |                 | PK/ AV   |                            |         |                 |                          |                |         |
| 1       | 2365.52         | PK       | 46.57                      | -30.93  | 32.56           | 48.20                    | 74             | Pass    |
| 1       | 2387.64         | AV       | 35.31                      | -30.93  | 32.56           | 36.94                    | 54             | Pass    |
| 11      | 2483.50         | PK       | 45.92                      | -29.05  | 32.50           | 49.37                    | 74             | Pass    |
| 11      | 2483.50         | AV       | 35.09                      | -29.05  | 32.50           | 38.54                    | 54             | Pass    |

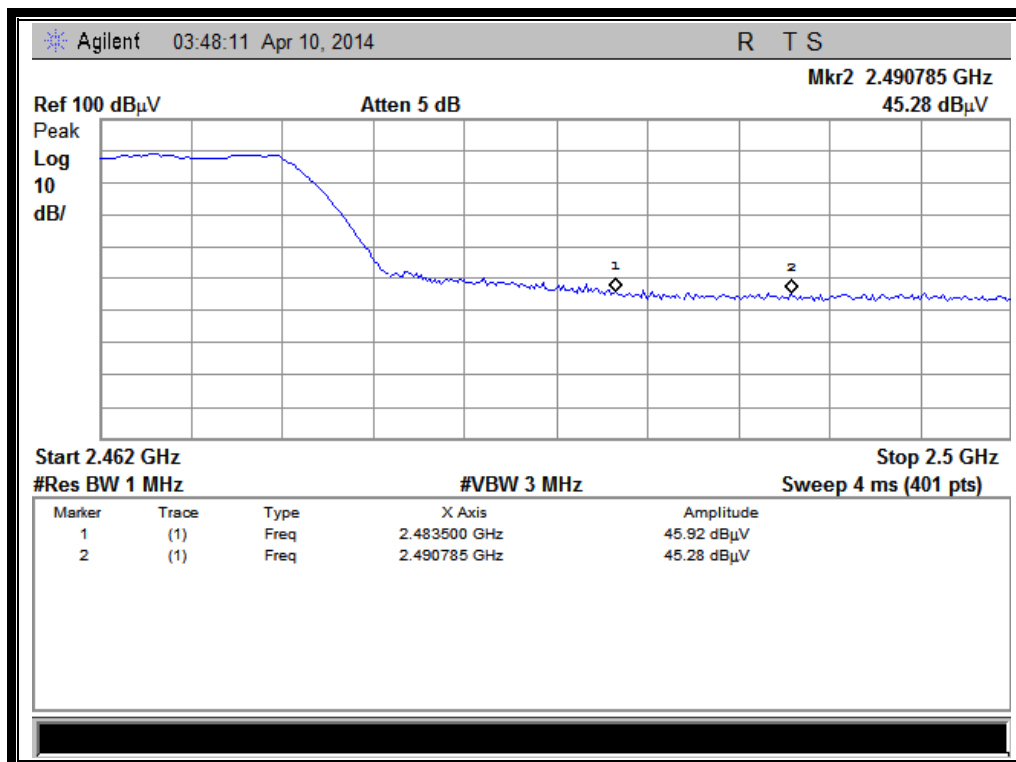
#### B. Test Plots:



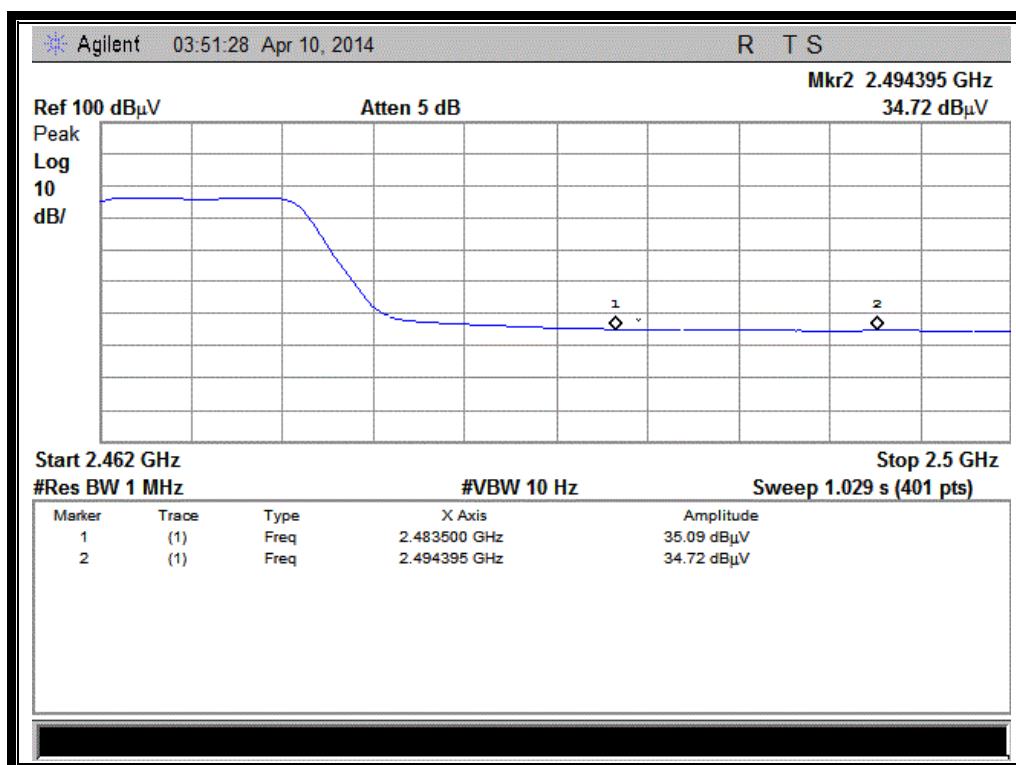
(Plot E1: Channel = 1 PEAK @ 802.11n-20)



(Plot E2: Channel = 1 AVG @ 802.11n-20)



(Plot F1: Channel = 11 PEAK @ 802.11n-20)



(Plot F2: Channel = 11 AVG @ 802.11n-20)

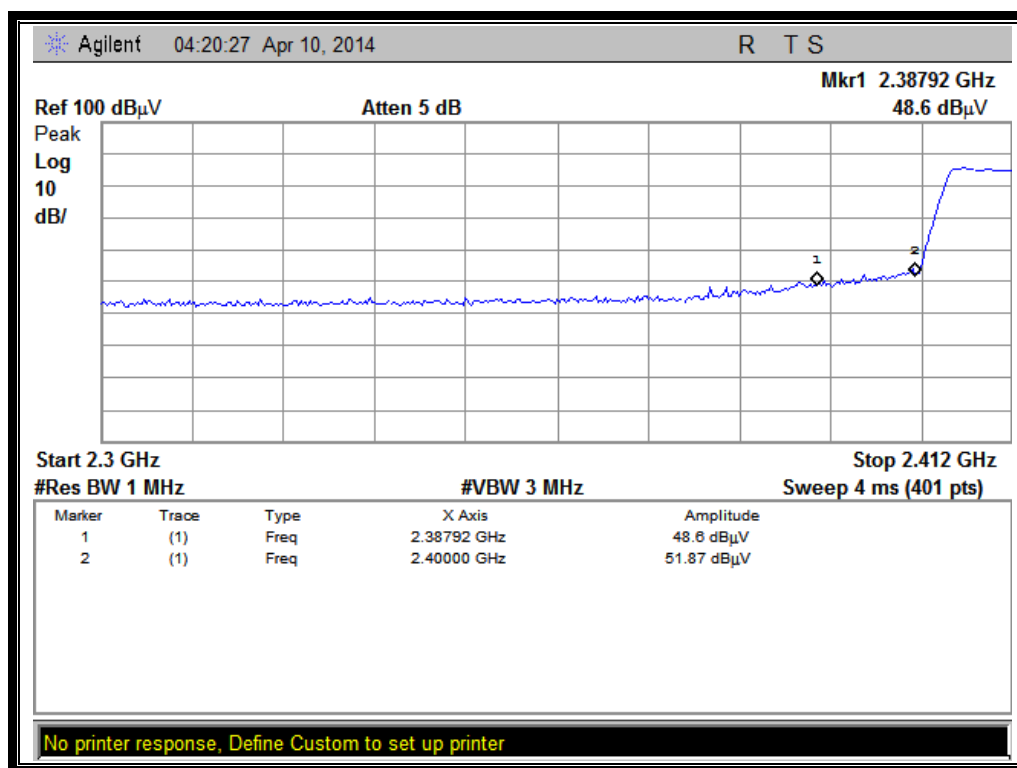
### 3.6.3.4. 802.11n-40MHz Test mode

The lowest and highest channels are tested to verify the band edge emissions.

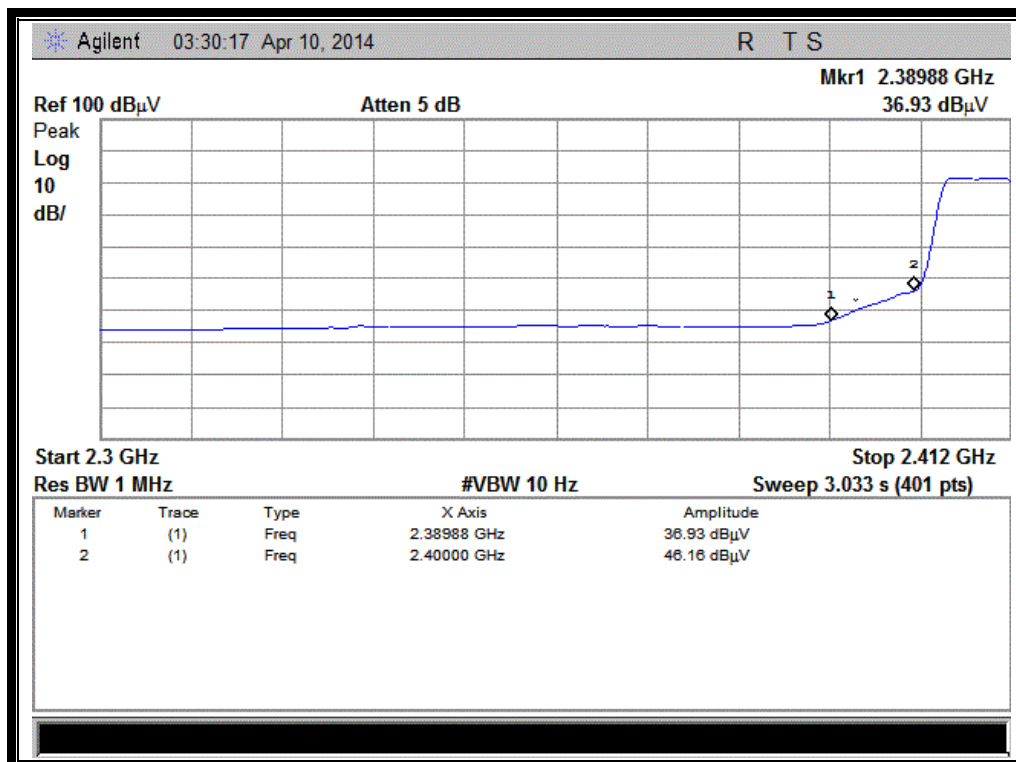
#### A. Test Verdict:

| Channel | Frequency (MHz) | Detector | Receiver Reading UR (dBuV) | AT (dB) | AFactor (dB@3m) | Max. Emission E (dBμV/m) | Limit (dBμV/m) | Verdict |
|---------|-----------------|----------|----------------------------|---------|-----------------|--------------------------|----------------|---------|
|         |                 | PK/ AV   |                            |         |                 |                          |                |         |
| 3       | 2387.92         | PK       | 48.60                      | -30.93  | 32.56           | 50.23                    | 74             | Pass    |
| 3       | 2389.88         | AV       | 36.93                      | -30.93  | 32.56           | 38.56                    | 54             | Pass    |
| 9       | 2483.95         | PK       | 56.44                      | -29.05  | 32.50           | 59.89                    | 74             | Pass    |
| 9       | 2483.50         | AV       | 38.59                      | -29.05  | 32.50           | 42.04                    | 54             | Pass    |

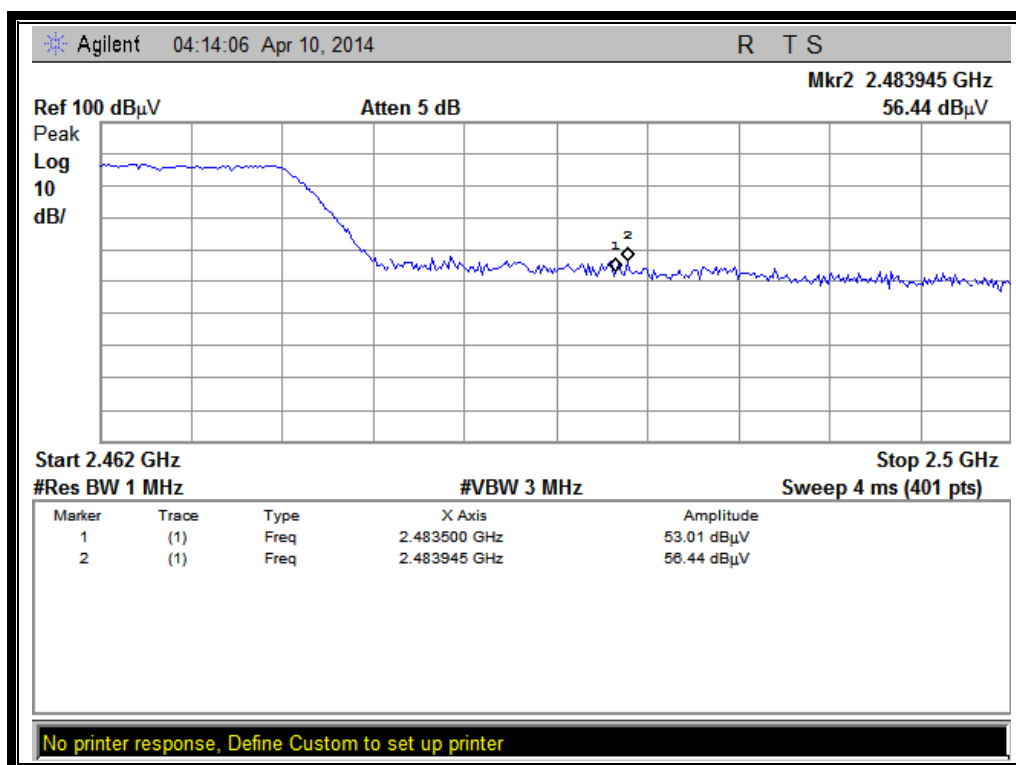
#### B. Test Plots:



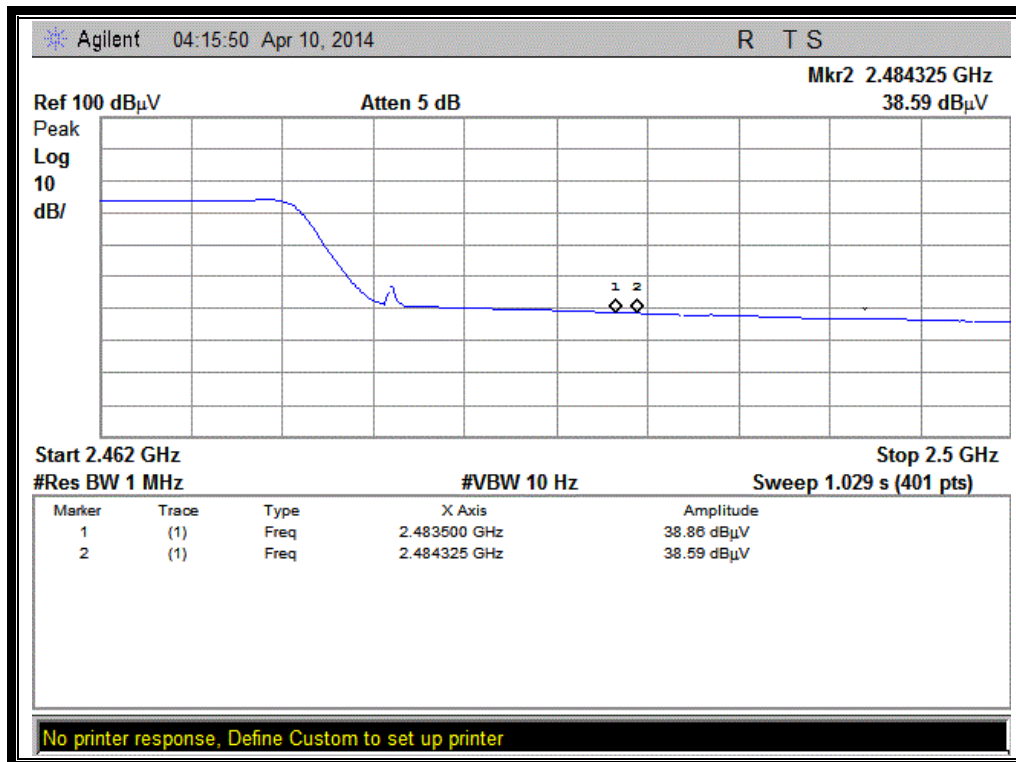
(Plot E1: Channel = 3 PEAK @ 802.11n-40)



(Plot E2: Channel = 3 AVG @ 802.11n-40)



(Plot F1: Channel = 9 PEAK @ 802.11n-40)



(Plot F2: Channel = 9 AVG @ 802.11n-40)

### 3.7. Conducted Emission

#### 3.7.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 $\mu$ H/50 $\Omega$  line impedance stabilization network (LISN).

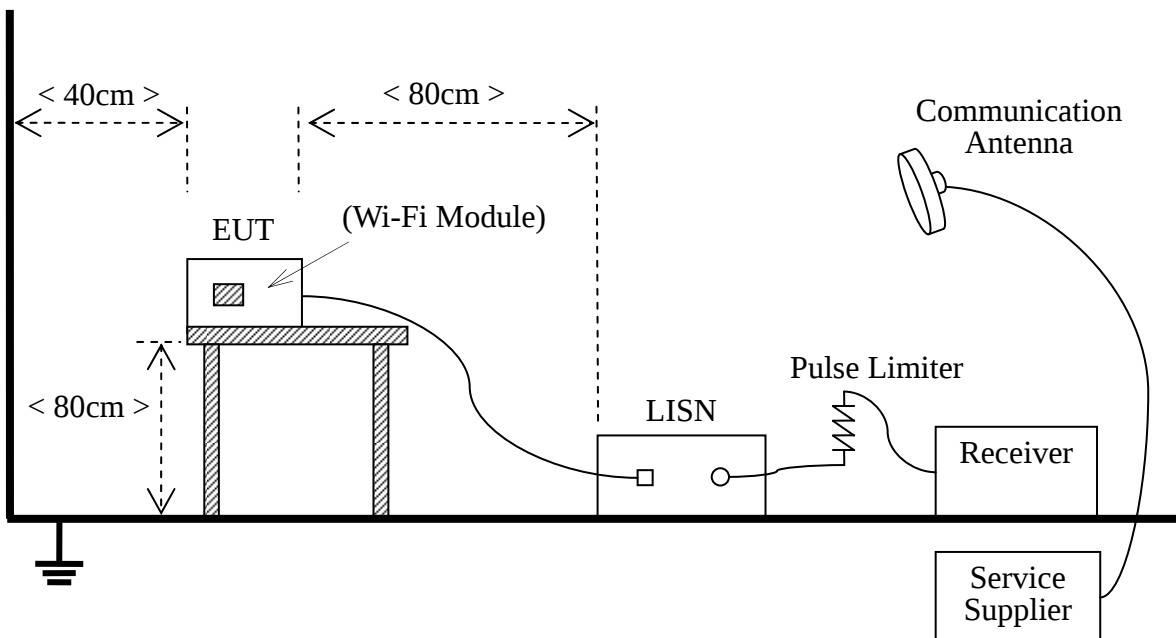
| Frequency range (MHz) | Conducted Limit (dB $\mu$ V) |          |
|-----------------------|------------------------------|----------|
|                       | Quai-peak                    | Average  |
| 0.15 - 0.50           | 66 to 56                     | 56 to 46 |
| 0.50 - 5              | 56                           | 46       |
| 5 - 30                | 60                           | 50       |

#### NOTE:

- The lower limit shall apply at the band edges.
- The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

#### 3.7.2. Test Description

##### A. Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.4:2009

The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply.

**B. Equipments List:**

| Description          | Manufacturer | Model       | Serial No. | Cal. Date  | Cal. Due   |
|----------------------|--------------|-------------|------------|------------|------------|
| Receiver             | Agilent      | E7405A      | US44210471 | 2014.02.26 | 2015.02.25 |
| LISN                 | Schwarzbeck  | NSLK 8127   | 812744     | 2014.02.26 | 2015.02.25 |
| Service Supplier     | R&S          | CMU200      | 100448     | 2014.02.26 | 2015.02.25 |
| Pulse Limiter (20dB) | Schwarzbeck  | VTSD 9561-D | 9391       | (n.a.)     | (n.a.)     |

**3.7.3. Test Result**

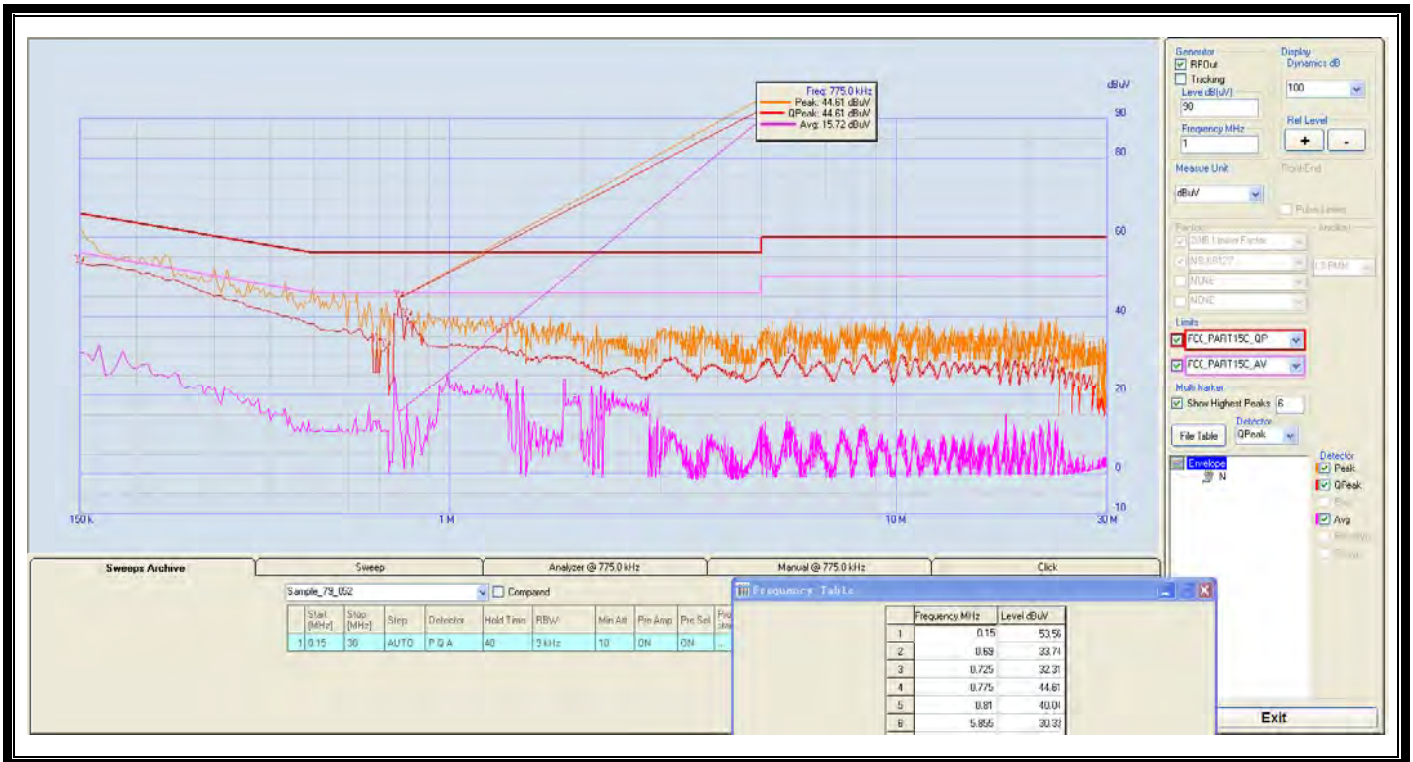
The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Note: All test modes are performed, only the worst case is recorded in this report.

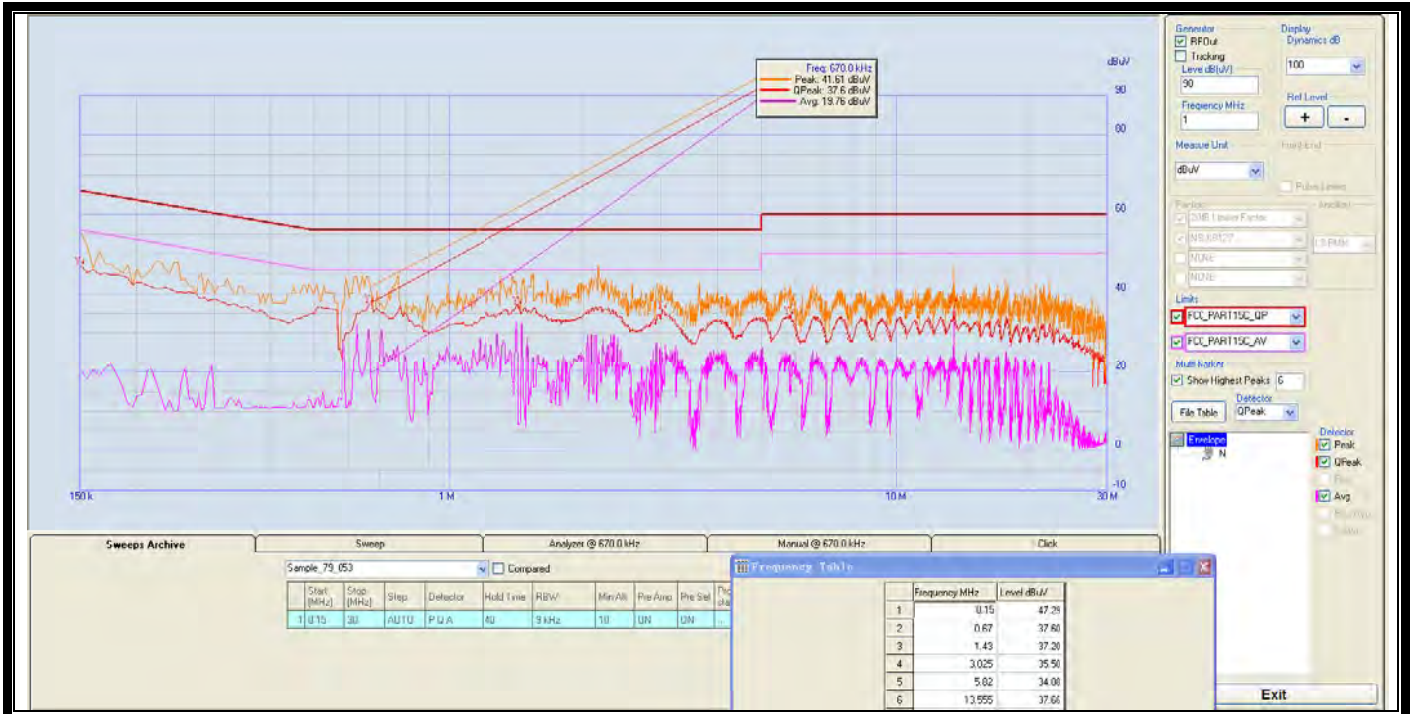
**A. Test setup:**

The EUT configuration of the emission tests is EUT + Link.

## B. Test Plots:



(Plot A: L Phase)



(Plot B: N Phase)

### 3.8. Radiated Emission

#### 3.8.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength ( $\mu\text{V/m}$ ) | Measurement Distance (m) |
|-----------------|------------------------------------|--------------------------|
| 0.009 - 0.490   | 2400/F(kHz)                        | 300                      |
| 0.490 - 1.705   | 24000/F(kHz)                       | 30                       |
| 1.705 - 30.0    | 30                                 | 30                       |
| 30 - 88         | 100                                | 3                        |
| 88 - 216        | 150                                | 3                        |
| 216 - 960       | 200                                | 3                        |
| Above 960       | 500                                | 3                        |

Note:

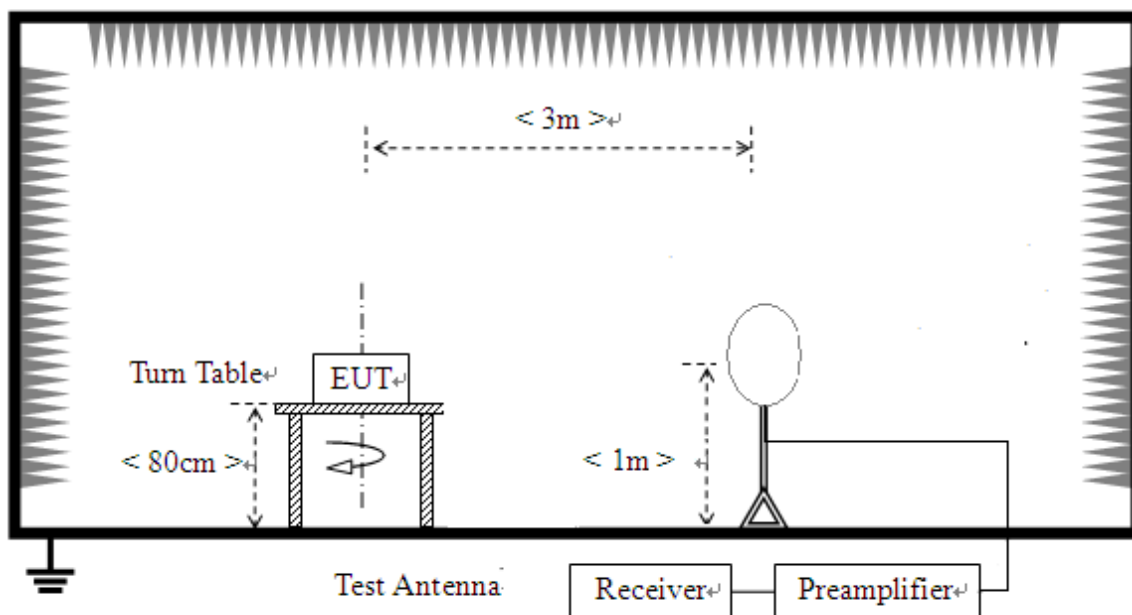
1. For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
2. For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK)

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table)

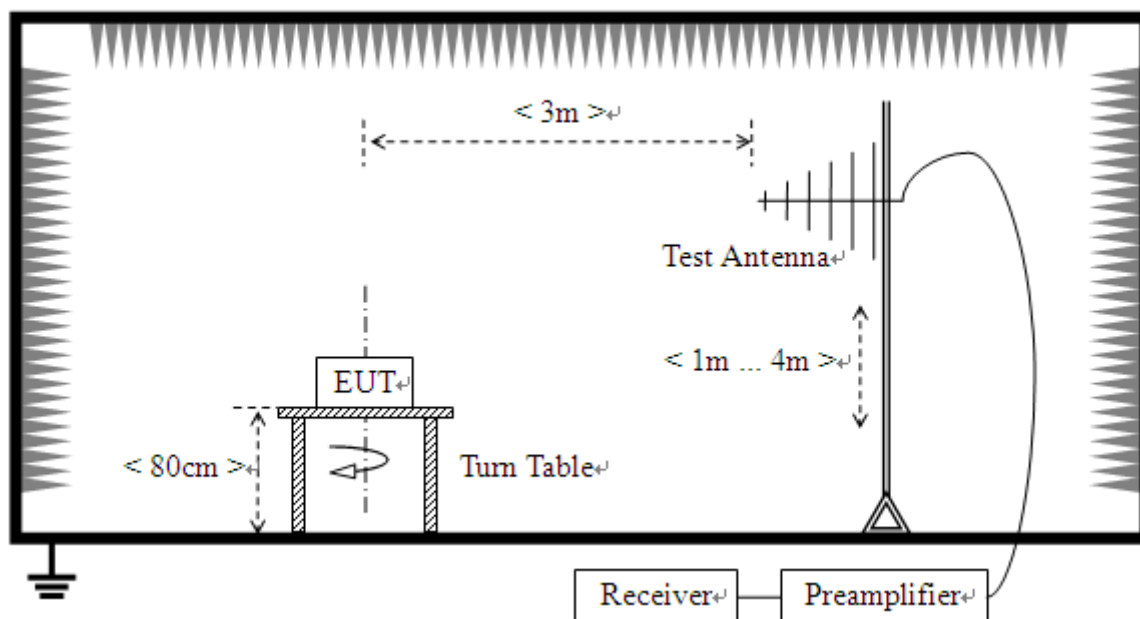
#### 3.8.2. Test Description

##### A. Test Setup:

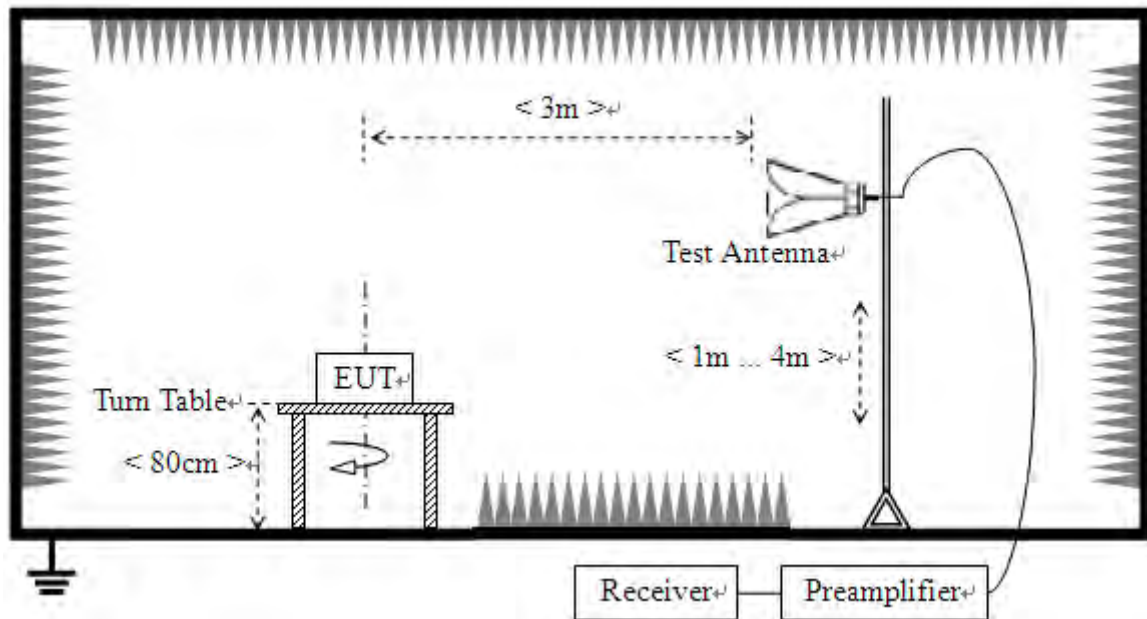
- 1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



## 3) For radiated emissions above 1GHz



The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.4 (2009). The EUT was set-up on insulator 80cm above the Ground Plane. The set-up and test methods were according to ANSI C63.4.

The EUT of the EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading. During the measurement, the EUT is activated and controlled by the Wireless Router via a Common Antenna, and is set to operate under hopping-on test mode.

For the Test Antenna:

- (a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- (b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 2GHz) and Horn Test Antenna (above 2GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

**B. Equipments List:**

| Description           | Manufacturer | Model      | Serial No. | Cal. Date  | Cal. Due   |
|-----------------------|--------------|------------|------------|------------|------------|
| Receiver              | Agilent      | E7405A     | US44210471 | 2014.02.26 | 2015.02.25 |
| EXA Signal Analyzer   | Agilent      | N9010A     | MY51440152 | 2014.02.26 | 2015.02.25 |
| Full-Anechoic Chamber | Albatross    | 9m*6m*6m   | (n.a.)     | 2012.05.12 | 2015.02.25 |
| Test Antenna - Bi-Log | Schwarzbeck  | VULB 9163  | 9163-274   | 2014.02.26 | 2015.02.25 |
| Test Antenna - Horn   | Schwarzbeck  | BBHA 9120D | 9120D-963  | 2014.02.26 | 2015.02.25 |
| Test Antenna - Horn   | Schwarzbeck  | BBHA9170   | 9170-872   | 2014.02.26 | 2015.02.25 |
| Test Antenna - Horn   | R&S          | HL050S7    | 71688      | 2014.02.26 | 2015.02.25 |
| Test Antenna -Loop    | Schwarzbeck  | FMZB 1519  | 1519-022   | 2014.02.26 | 2015.02.25 |

**3.8.3. Test Result**

According to ANSI C63.4 selection 4.2.2, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak limit, it is unnecessary to perform an quasi-peak measurement.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

$A_T$ : Total correction Factor except Antenna

$U_R$ : Receiver Reading

$G_{\text{preamp}}$ : Preamplifier Gain

$A_{\text{Factor}}$ : Antenna Factor at 3m

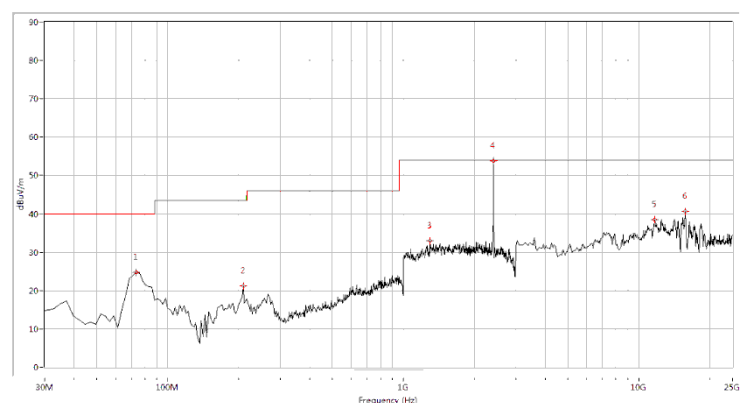
During the test, the total correction Factor  $A_T$  and  $A_{\text{Factor}}$  were built in test software.

**Note:** All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

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

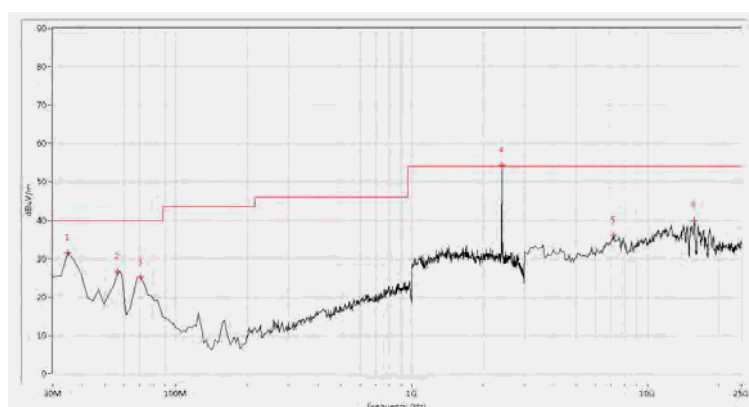
**3.8.3.1. 802.11b Test mode****A. Test Plots for the Whole Measurement Frequency Range:**

Plots for Channel = 1



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 73.541     | 24.69 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 209.002    | 21.16 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 1299.252   | 33.06 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2412.000   | 53.86 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 11668.329  | 38.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15728.180  | 40.72 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

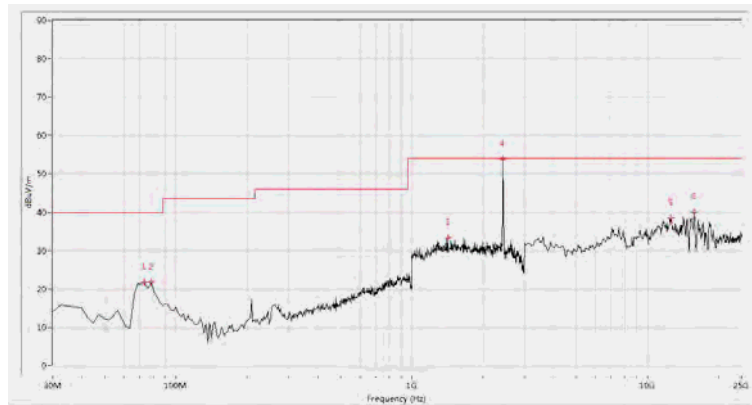
(Antenna Horizontal, 30MHz to 25GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 34.838     | 31.57 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 26.63 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 71.122     | 25.07 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 2412.000   | 54.33 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 7169.576   | 35.96 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15783.042  | 39.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

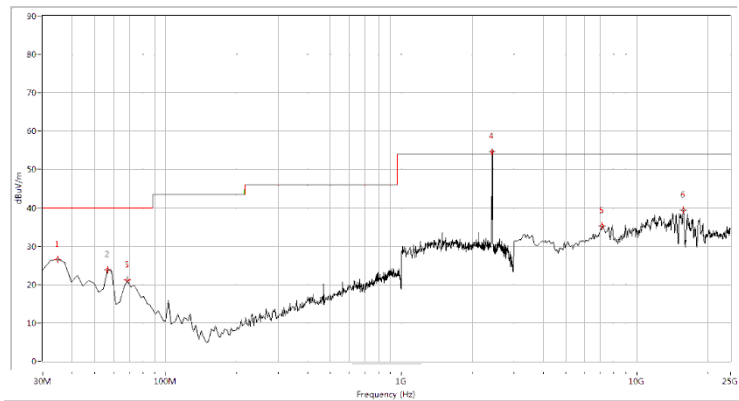
(Antenna Vertical, 30MHz to 25GHz)

### Plot for Channel = 6



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 73.541     | 21.77 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 78.379     | 21.66 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 1423.940   | 33.34 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2437.000   | 53.88 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 12600.998  | 38.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15783.042  | 40.16 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

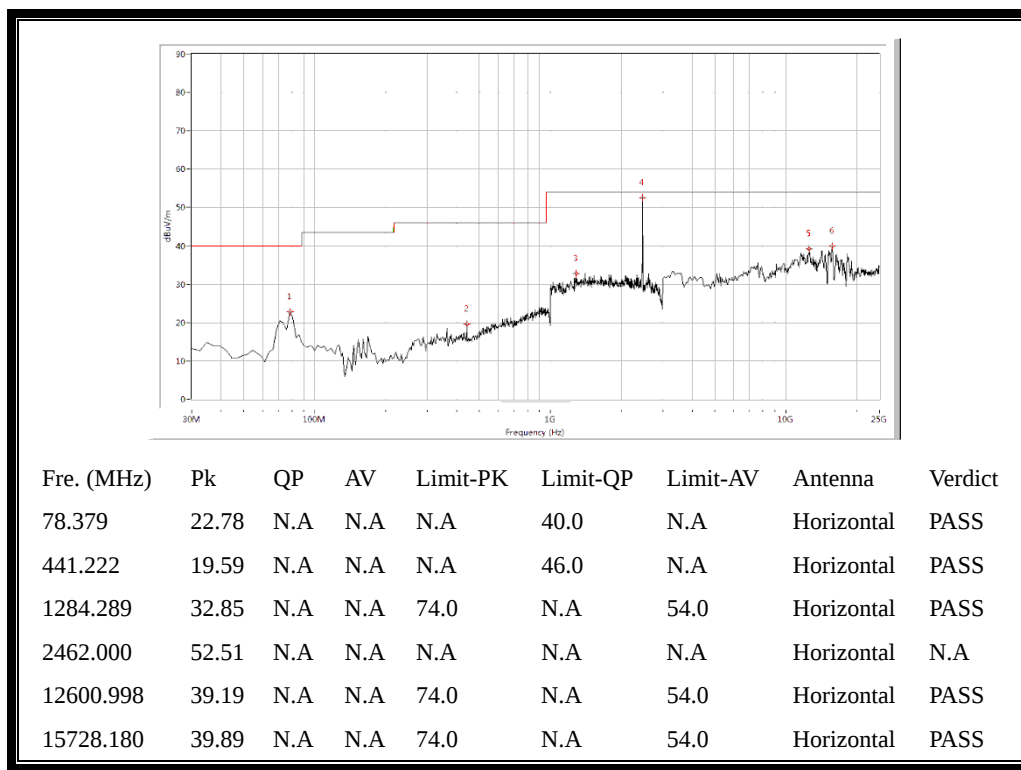
(Antenna Horizontal, 30MHz to 25GHz)



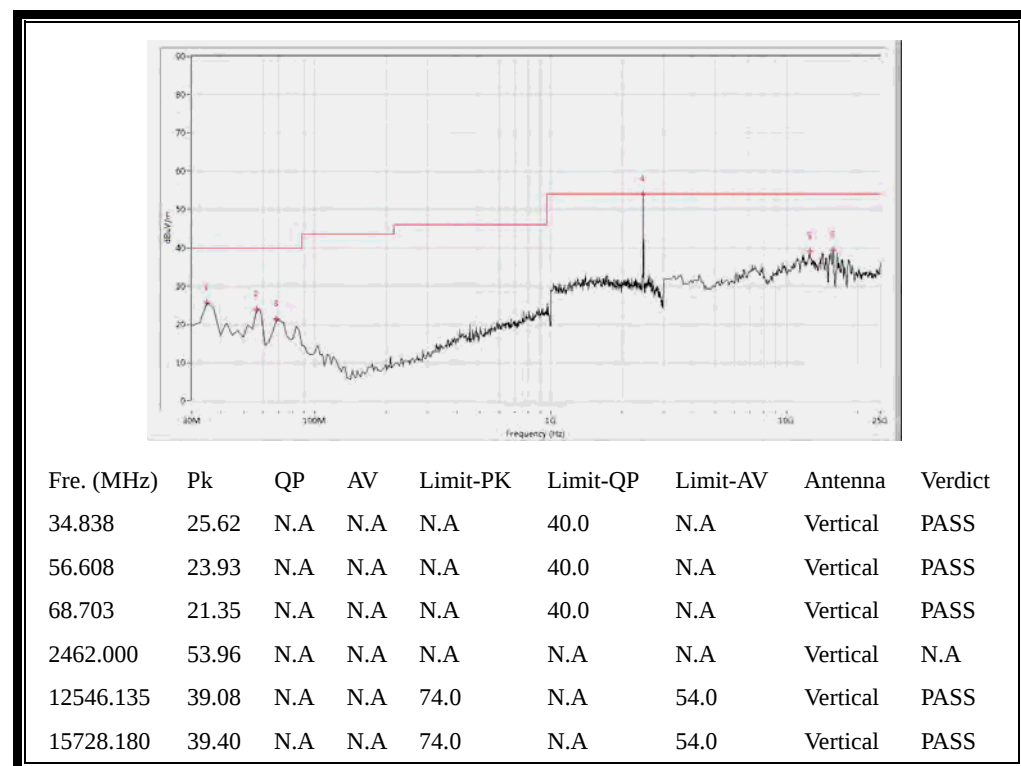
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 34.838     | 26.54 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 23.87 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 68.703     | 21.24 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 2437.000   | 54.68 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 7114.713   | 35.21 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15783.042  | 39.34 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 25GHz)

### Plot for Channel = 11



(Antenna Horizontal, 30MHz to 25GHz)

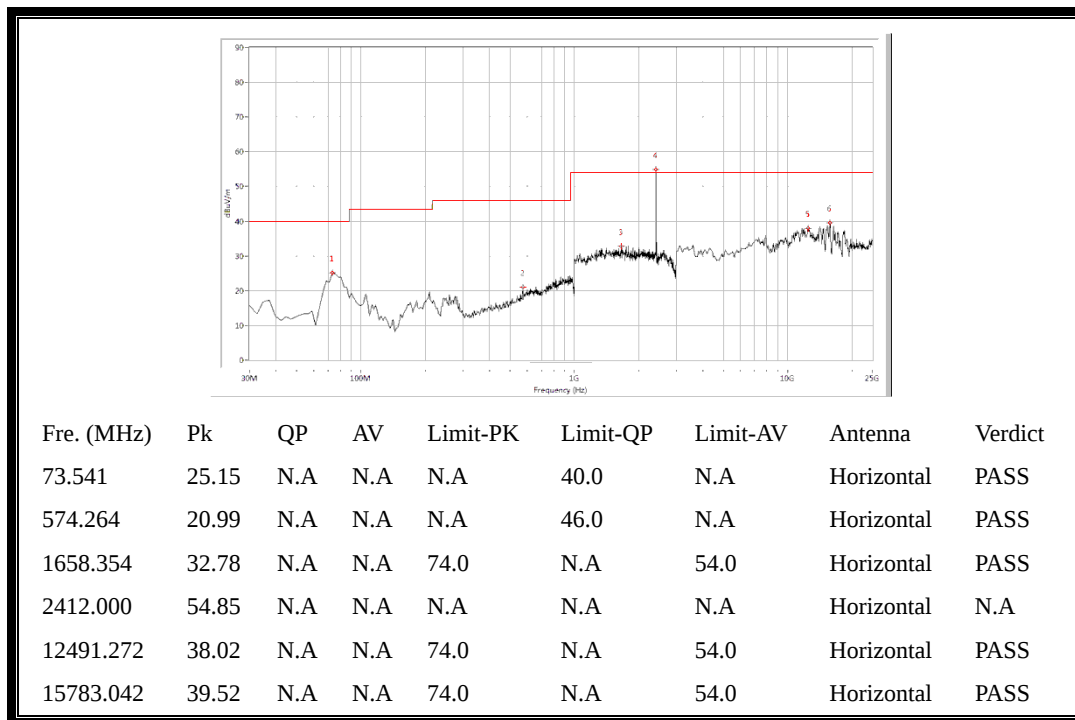


(Antenna Vertical, 30MHz to 25GHz)

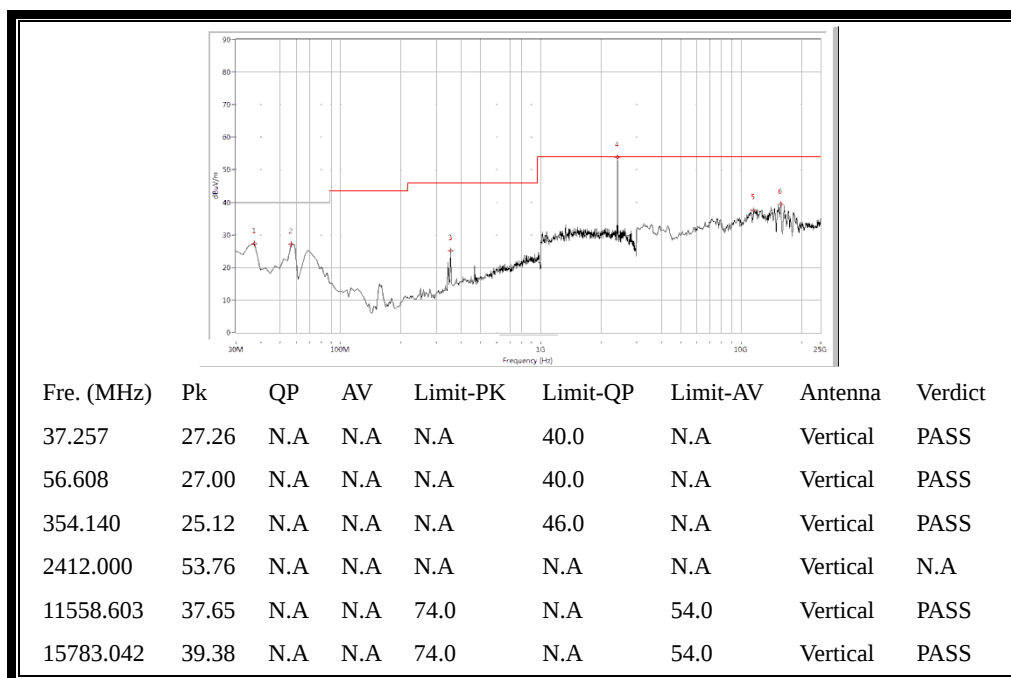
### 3.8.3.2. 802.11g Test mode

#### A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 1

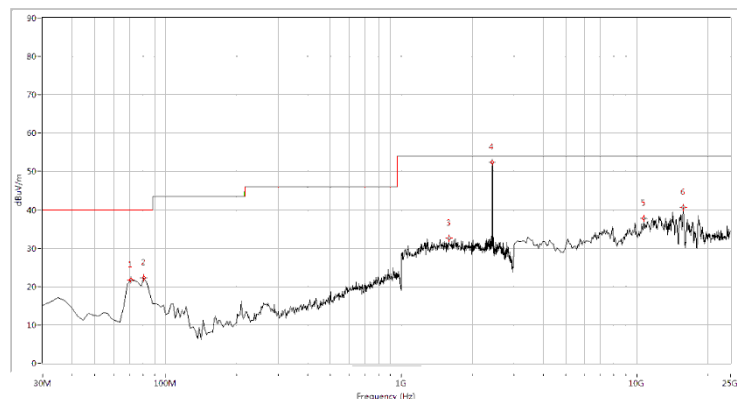


(Antenna Horizontal, 30MHz to 25GHz)



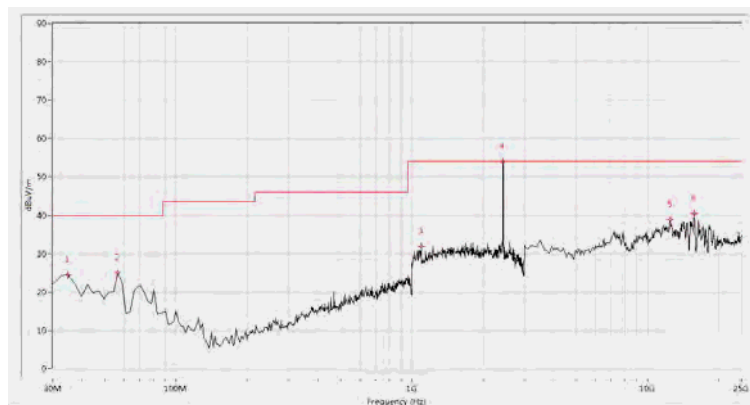
(Antenna Vertical, 30MHz to 25GHz)

# Plot for Channel = 6



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 71.122     | 21.76 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 80.798     | 22.31 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 1593.516   | 32.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2437.000   | 52.43 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 10735.661  | 37.73 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15728.180  | 40.67 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

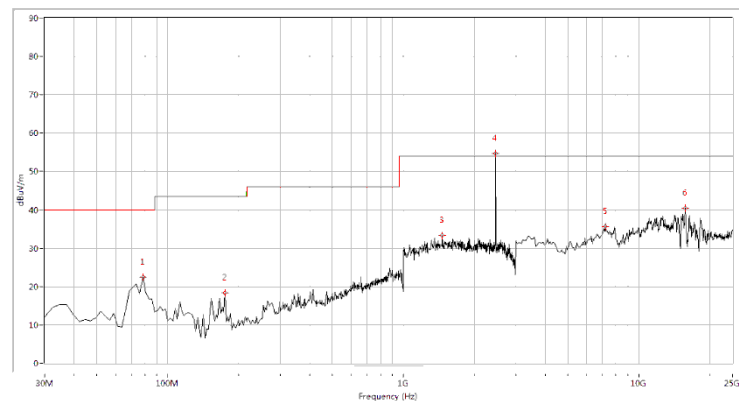
(Antenna Horizontal, 30MHz to 25GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 34.838     | 24.37 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 24.87 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 1094.763   | 31.87 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2437.000   | 53.93 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 12491.272  | 38.91 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15728.180  | 40.38 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

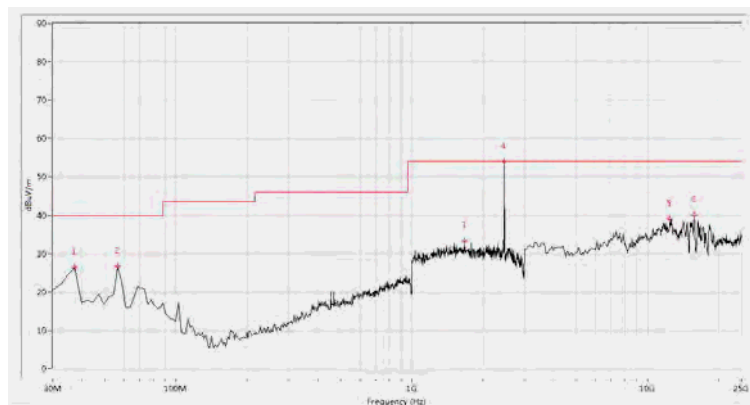
(Antenna Vertical, 30MHz to 25GHz)

### Plot for Channel = 11



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 78.379     | 22.43 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 175.137    | 18.31 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 1463.840   | 33.40 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2462.000   | 54.65 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7224.439   | 35.71 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15783.042  | 40.52 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 25GHz)



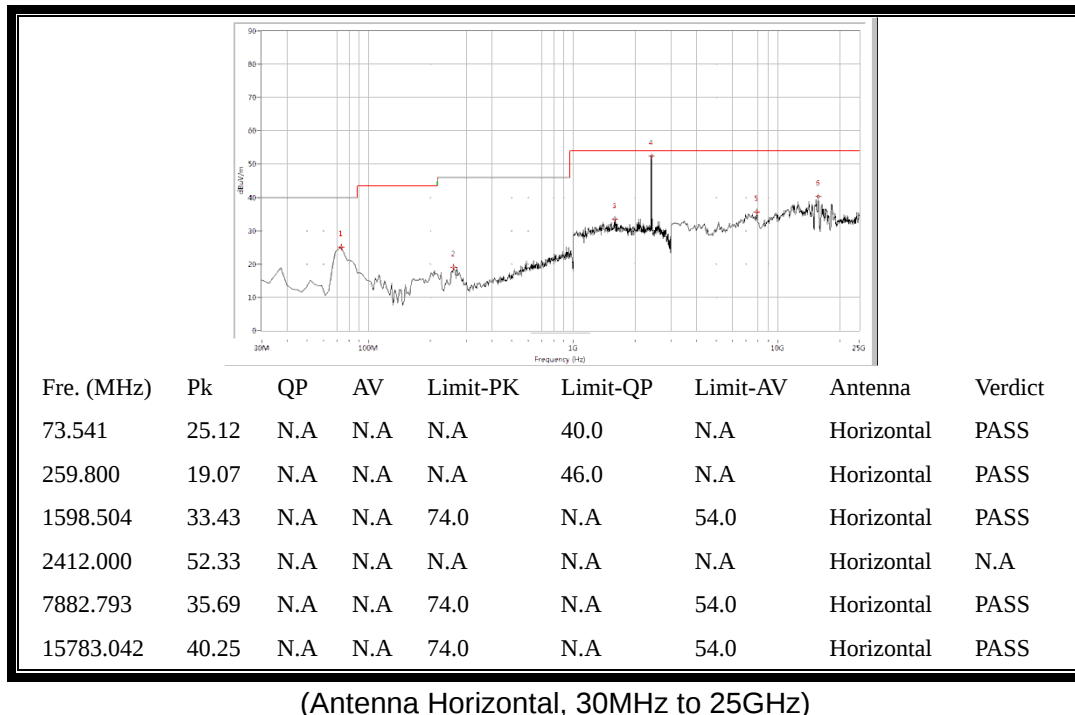
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 37.257     | 26.29 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 26.65 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 1668.329   | 33.34 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2462.000   | 53.94 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 12436.409  | 39.08 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15783.042  | 40.13 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 25GHz)

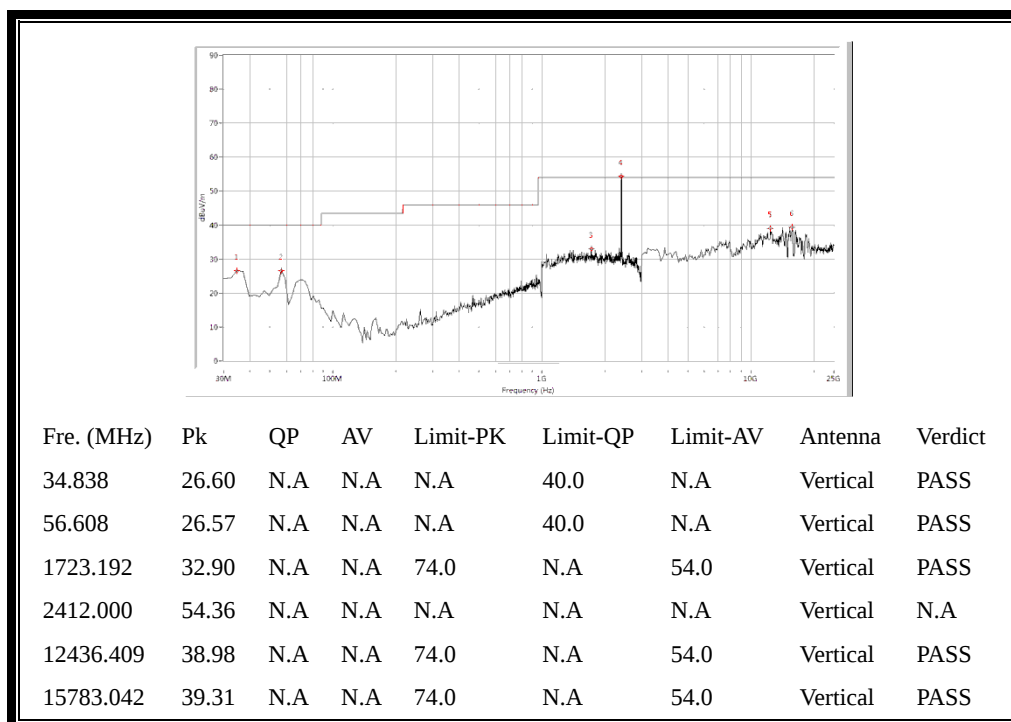
### 3.8.3.3. 802.11n-20MHz Test mode

#### A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 1

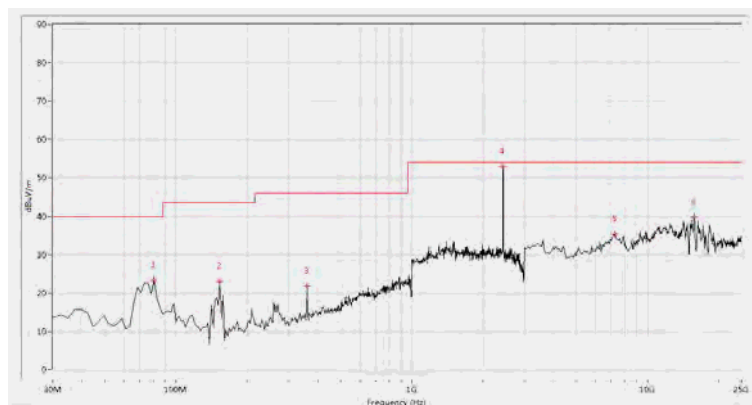


(Antenna Horizontal, 30MHz to 25GHz)



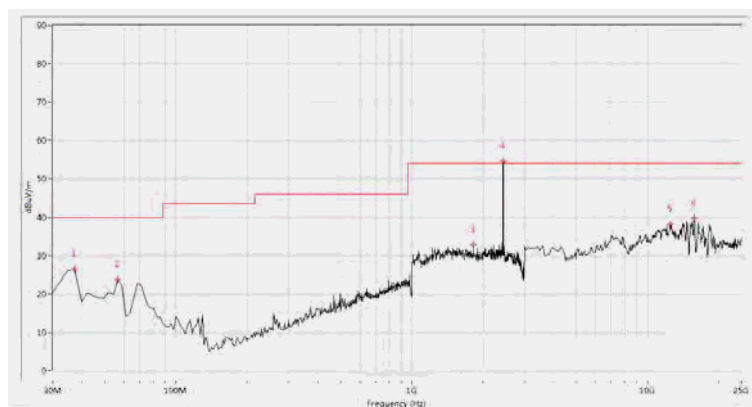
(Antenna Vertical, 30MHz to 25GHz)

### Plot for Channel = 6



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 80.798     | 23.35 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 153.367    | 22.96 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 358.978    | 21.79 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 2437.000   | 52.94 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7279.302   | 35.24 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15783.042  | 39.78 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

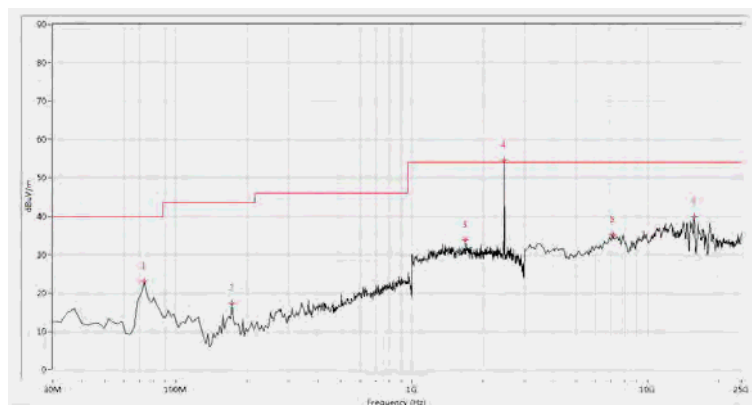
(Antenna Horizontal, 30MHz to 25GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 37.257     | 26.30 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 23.68 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 1822.943   | 32.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2437.000   | 54.52 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 12491.272  | 38.08 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15728.180  | 39.69 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

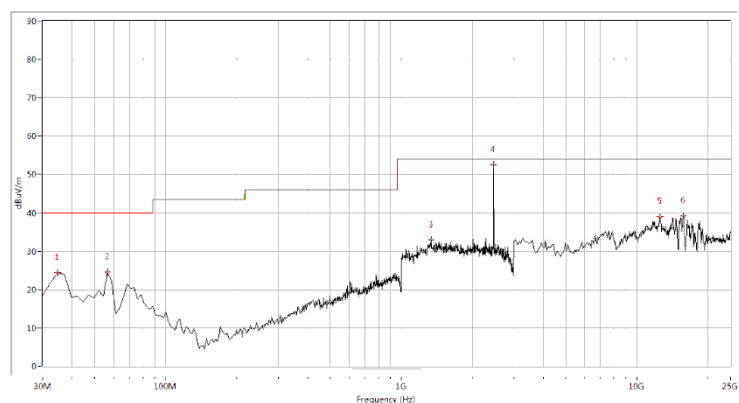
(Antenna Vertical, 30MHz to 25GHz)

### Plot for Channel = 11



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 73.541     | 23.05 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 172.718    | 17.30 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 1683.292   | 33.80 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2462.000   | 54.45 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7114.713   | 35.07 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15728.180  | 39.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

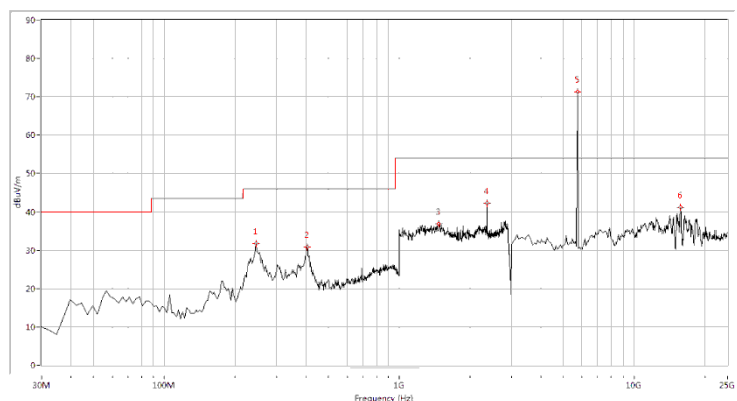
(Antenna Horizontal, 30MHz to 25GHz)



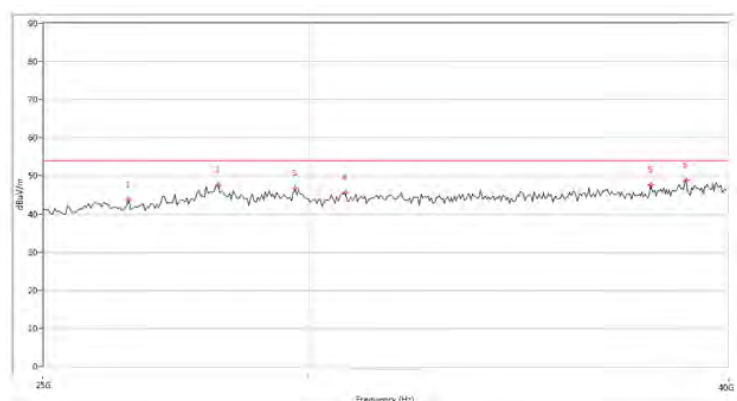
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 34.838     | 24.41 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 56.608     | 24.58 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 1339.152   | 33.03 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2462.000   | 52.58 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 12546.135  | 39.00 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15728.180  | 39.23 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 25GHz)

# Plots for Channel = 149

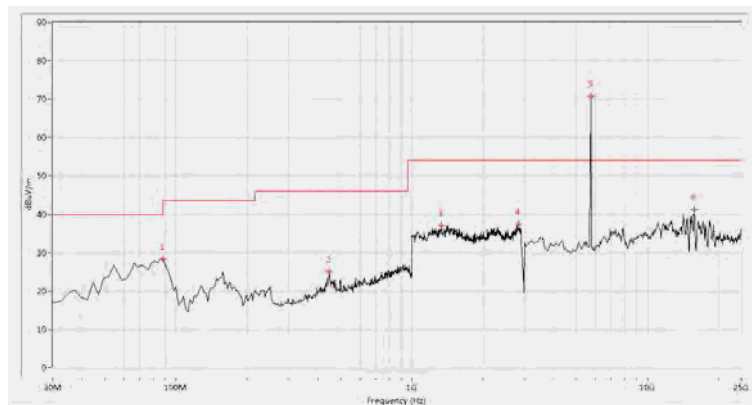


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 245.287    | 31.80 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 404.938    | 30.84 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1473.815   | 36.83 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2366.584   | 42.31 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5745.000   | 71.29 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 41.15 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

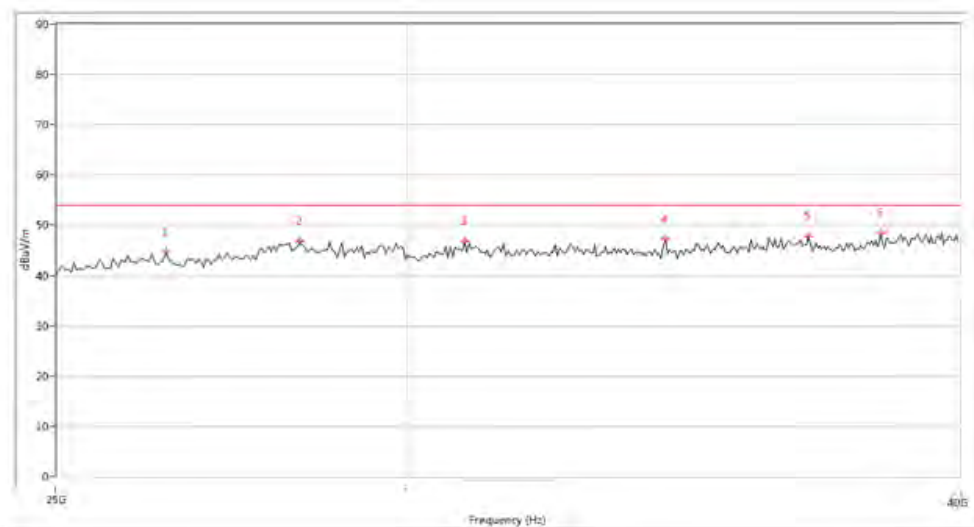


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26491.626  | 43.78 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28174.955  | 47.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29716.322  | 46.63 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 30764.060  | 45.70 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 37943.264  | 47.54 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 38870.781  | 48.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



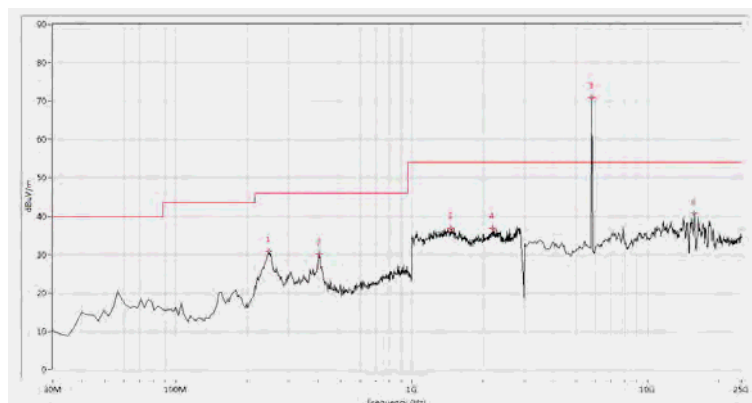
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 88.055     | 28.34 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 446.060    | 24.99 | N.A | N.A | N.A      | 46.0     | N.A      | Vertical | PASS    |
| 1334.165   | 37.10 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2835.411   | 37.38 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5745.000   | 70.79 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15728.180  | 41.16 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



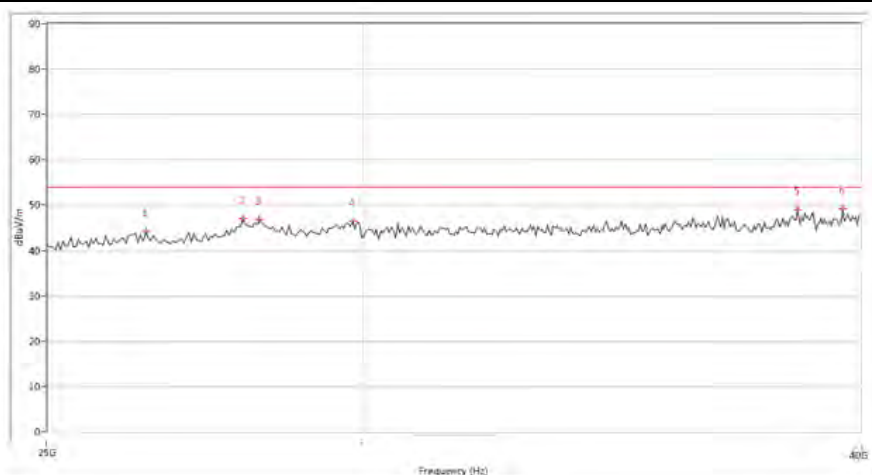
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 26455.885  | 44.82 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28361.658  | 46.93 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30916.022  | 46.85 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 34315.421  | 47.22 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 36977.007  | 47.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 38393.152  | 48.54 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plot for Channel = 157

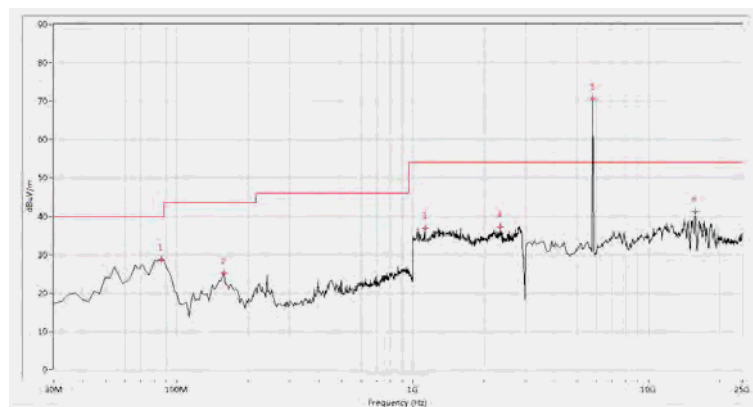


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 30.91 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 404.938    | 30.11 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1458.853   | 36.86 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2201.995   | 36.83 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5785.000   | 70.86 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.66 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

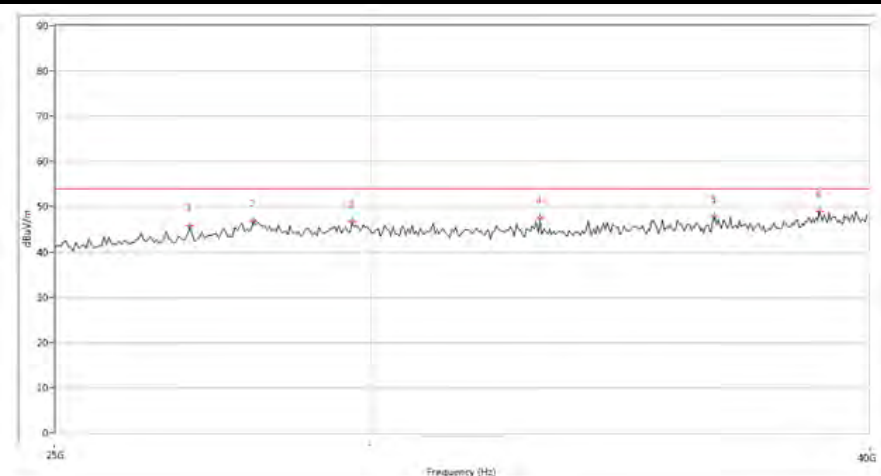


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26415.885  | 44.15 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 27992.252  | 47.02 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28253.436  | 46.88 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29842.544  | 46.46 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 38507.855  | 49.04 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39518.853  | 49.20 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



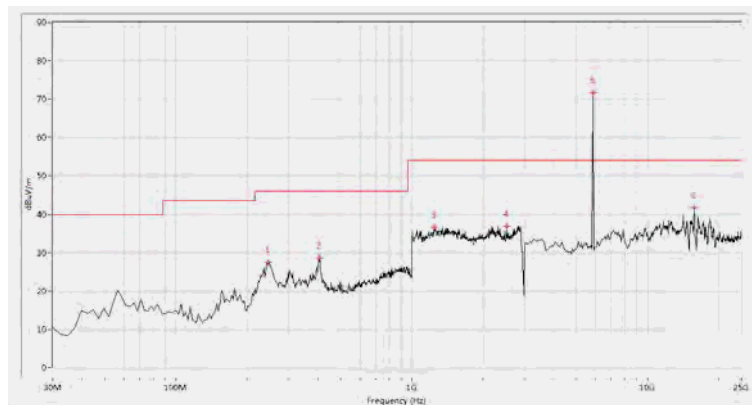
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 85.636     | 28.64 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 158.204    | 25.19 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 1124.688   | 36.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2351.621   | 37.23 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5785.000   | 70.50 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15728.180  | 41.16 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



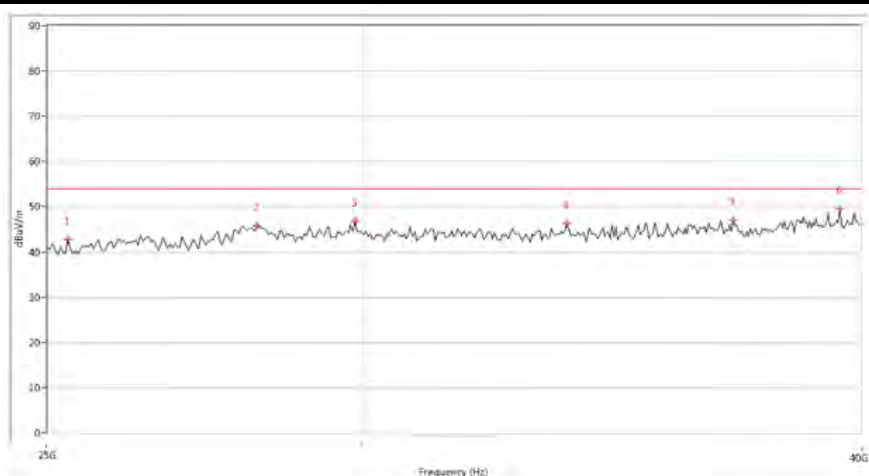
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 27019.995  | 45.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28024.993  | 46.93 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29657.581  | 46.67 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 33073.980  | 47.58 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 36509.601  | 47.81 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 38817.781  | 48.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plot for Channel = 165

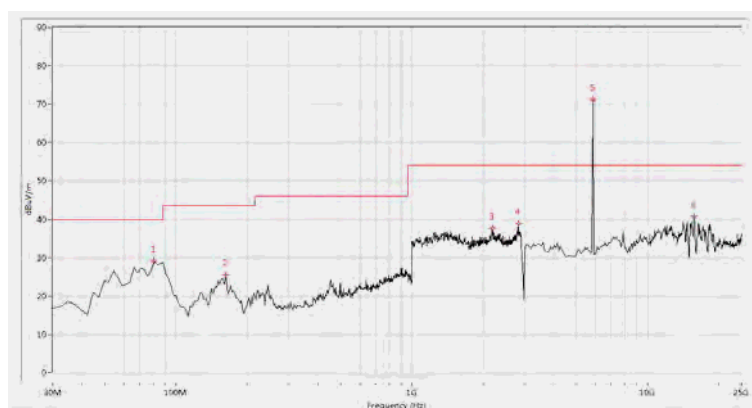


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 245.287    | 27.45 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 404.938    | 28.63 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1244.389   | 36.65 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2531.172   | 36.86 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5825.000   | 71.63 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 41.79 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

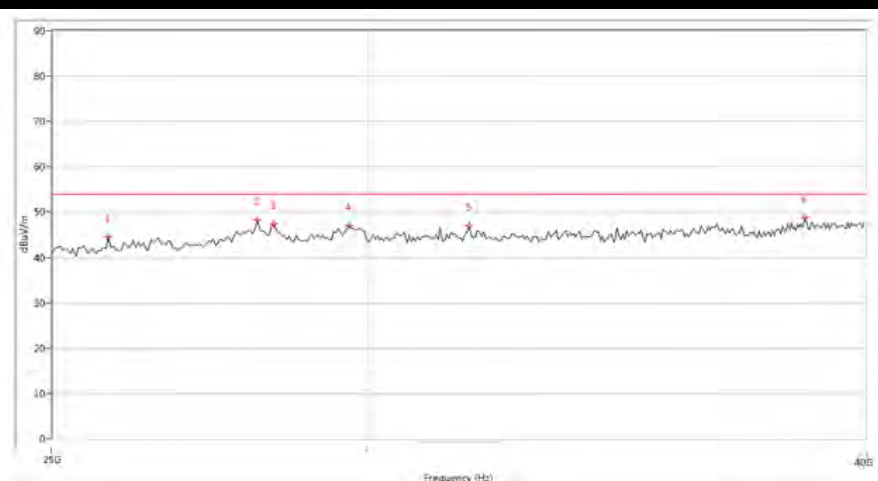


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 25291.925  | 42.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28211.696  | 45.78 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29826.284  | 46.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 33735.312  | 46.36 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 37159.711  | 47.07 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39514.372  | 49.63 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 80.798     | 29.07 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 163.042    | 25.42 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2201.995   | 37.62 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2830.424   | 38.81 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5825.000   | 71.10 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 40.71 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



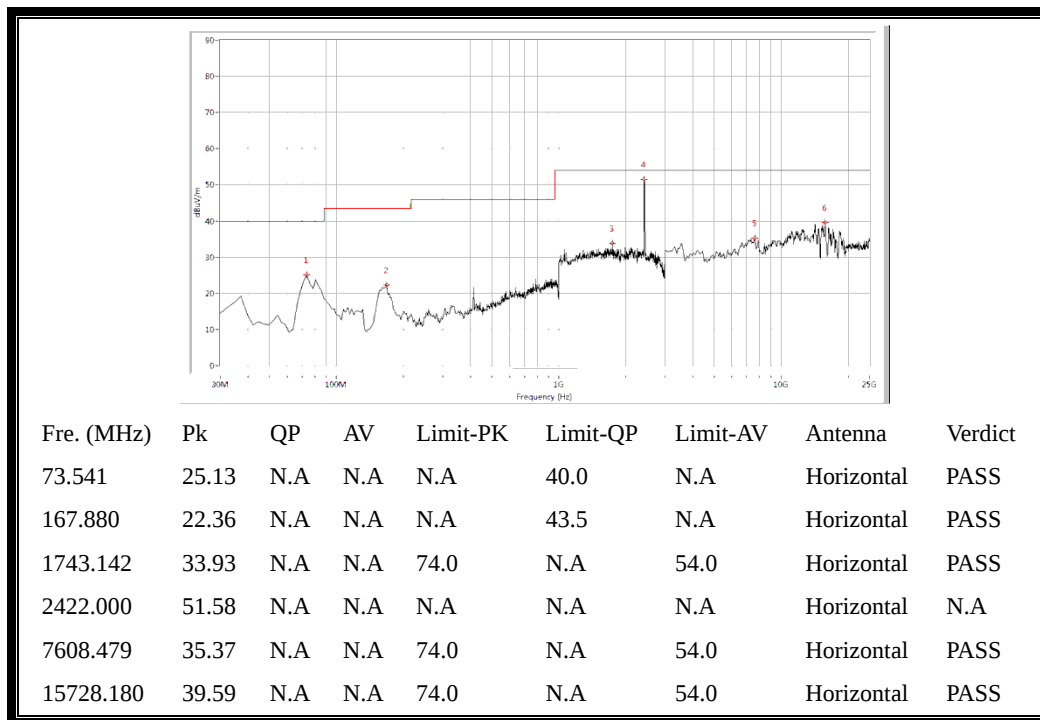
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 25824.294  | 44.52 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28114.214  | 48.36 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28430.399  | 47.44 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29617.581  | 47.07 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 31809.798  | 47.11 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 38617.596  | 48.75 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

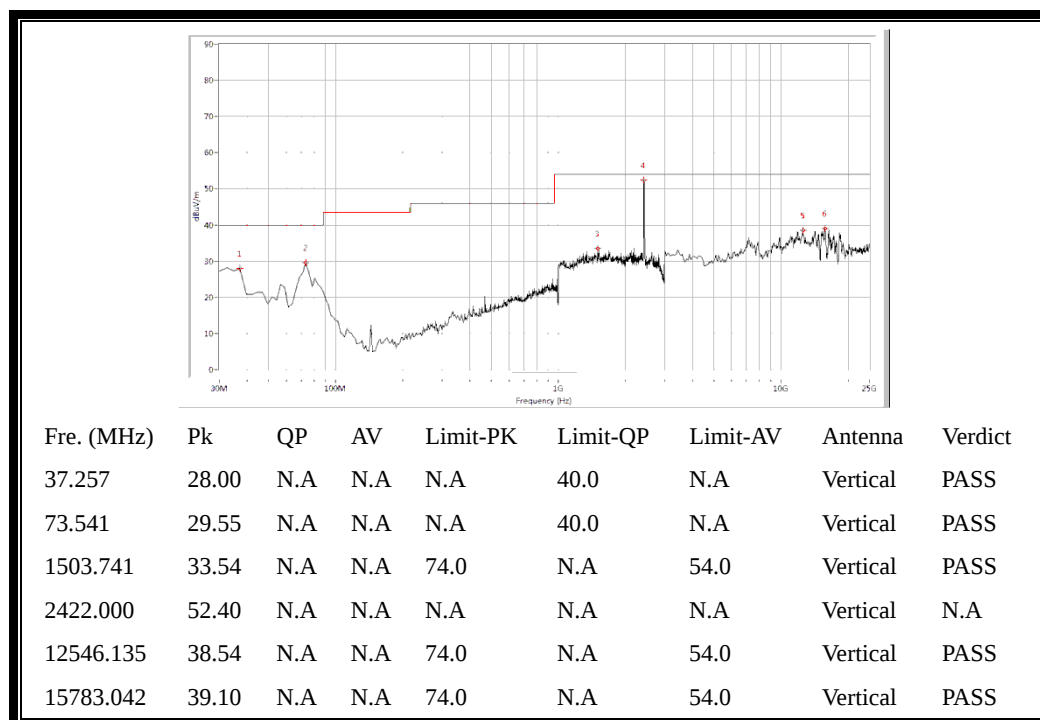
### 3.8.3.4. 802.11n-40MHz Test mode

#### A. Test Plots for the Whole Measurement Frequency Range:

Plots for Channel = 3

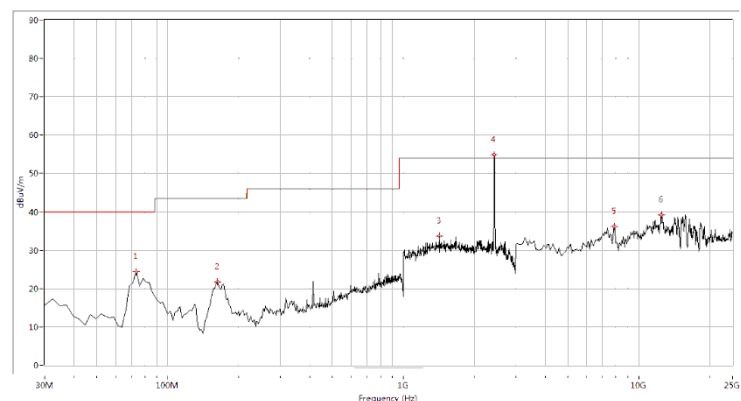


(Plot A.2: Antenna Horizontal, 30MHz to 25GHz)



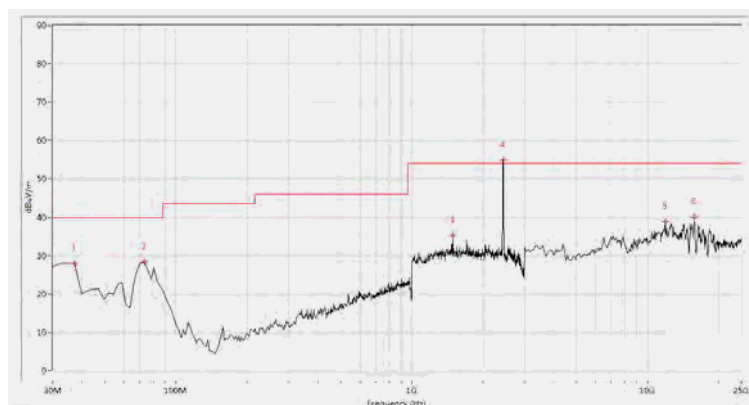
(Plot A.3: Antenna Vertical, 30MHz to 25GHz)

# Plots for Channel = 6



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 73.541     | 24.40 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 163.042    | 21.67 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 1423.940   | 33.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2437.000   | 54.84 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7882.793   | 36.17 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 12491.272  | 39.14 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

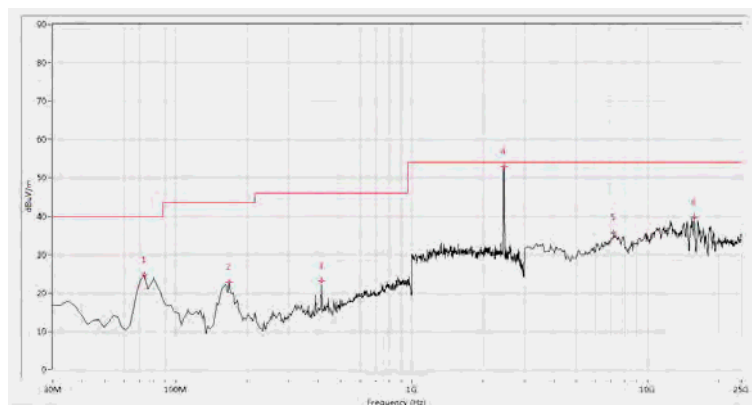
(Plot B.2: Antenna Horizontal, 30MHz to 25GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 37.257     | 27.97 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 73.541     | 28.29 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 1488.778   | 35.23 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2437.000   | 54.88 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 11887.781  | 38.87 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15783.042  | 40.04 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

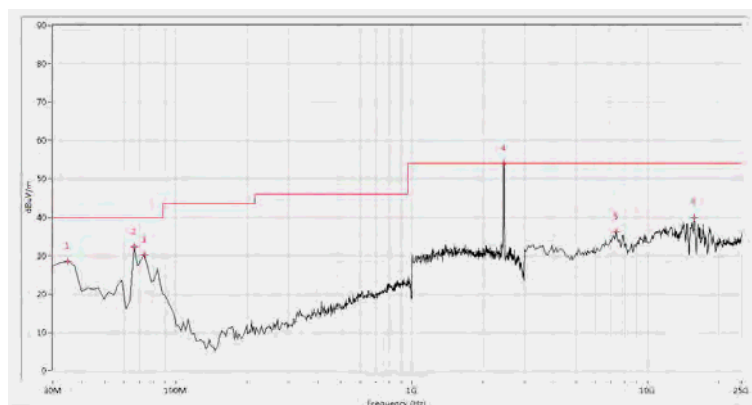
(Plot B.3: Antenna Vertical, 30MHz to 25GHz)

# Plots for Channel = 9



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 73.541     | 24.60 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 167.880    | 22.73 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 414.613    | 23.13 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 2452.000   | 52.92 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7169.576   | 35.64 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15783.042  | 39.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

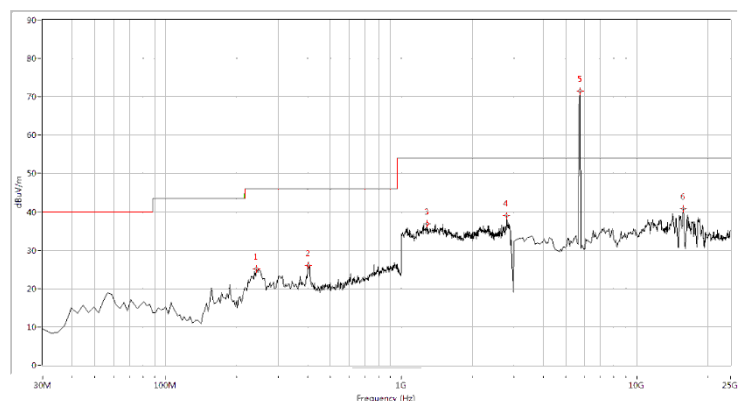
(Plot C.2: Antenna Horizontal, 30MHz to 25GHz)



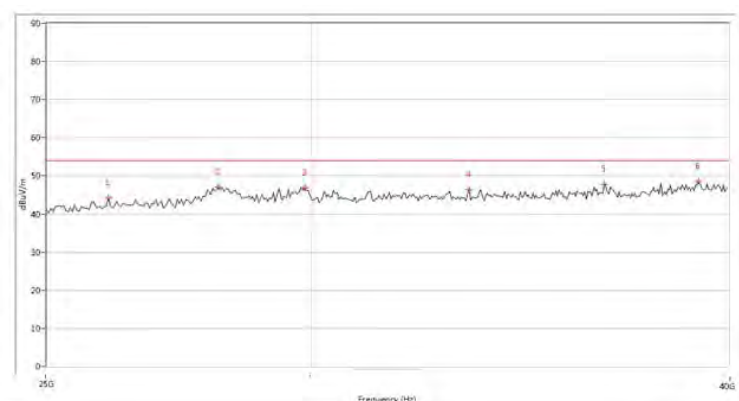
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 34.838     | 28.53 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 66.284     | 32.20 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 73.541     | 30.19 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 2452.000   | 53.95 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 7389.027   | 36.12 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15783.042  | 39.95 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Plot C.3: Antenna Vertical, 30MHz to 25GHz)

# Plots for Channel = 151

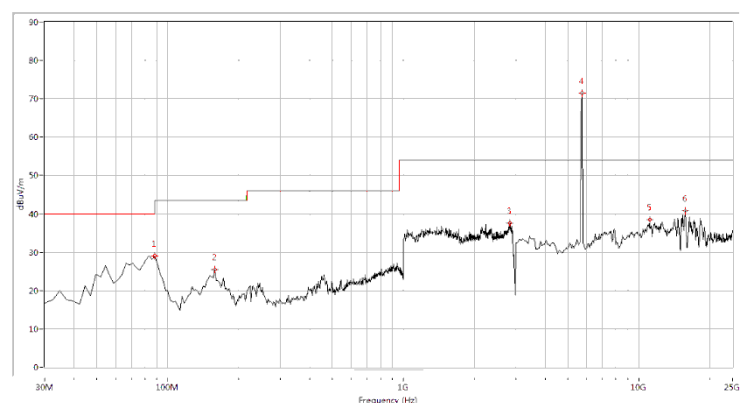


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 242.868    | 25.20 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 402.519    | 25.95 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1289.277   | 36.90 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2805.486   | 38.97 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5755.000   | 71.48 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15728.180  | 40.88 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

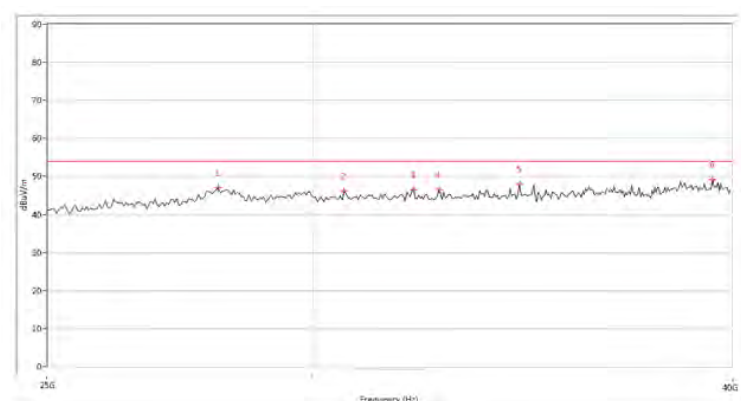


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26081.479  | 44.26 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28124.214  | 46.99 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29816.284  | 46.85 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 33459.387  | 46.33 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 36707.823  | 47.73 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39176.706  | 48.44 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



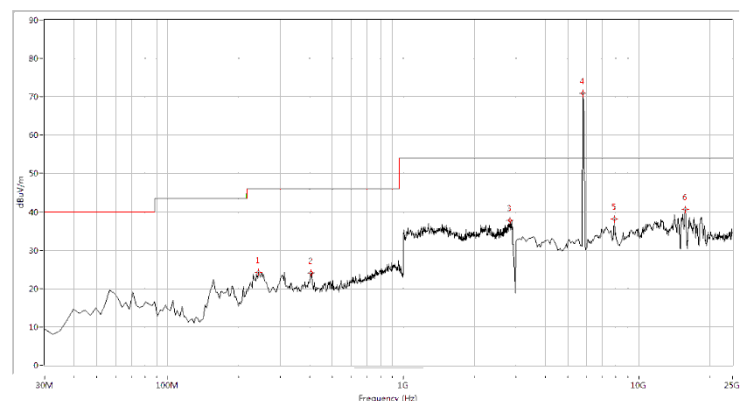
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 88.055     | 29.04 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 158.204    | 25.52 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2840.399   | 37.55 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5755.000   | 71.51 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 11119.701  | 38.47 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15728.180  | 40.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



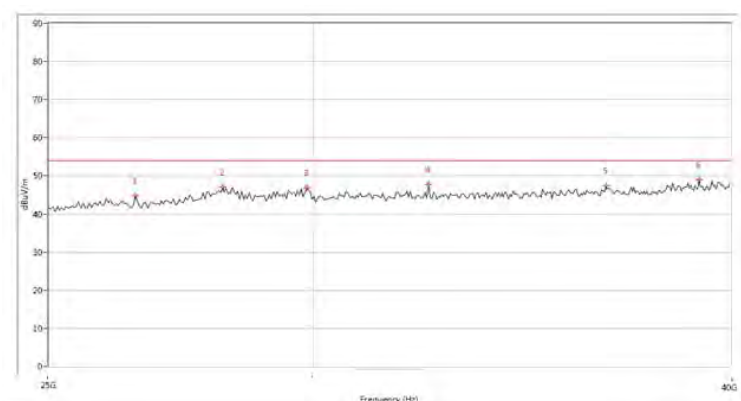
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28109.474  | 47.05 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30614.838  | 46.12 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32142.464  | 46.43 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32707.574  | 46.60 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 34573.606  | 47.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39427.631  | 49.21 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plots for Channel = 159

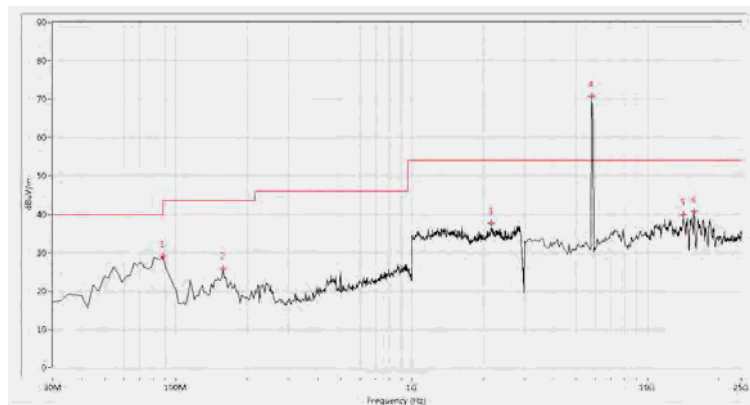


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 242.868    | 24.32 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 404.938    | 24.07 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 2840.399   | 37.80 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5795.000   | 71.00 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 7882.793   | 38.08 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 15783.042  | 40.59 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

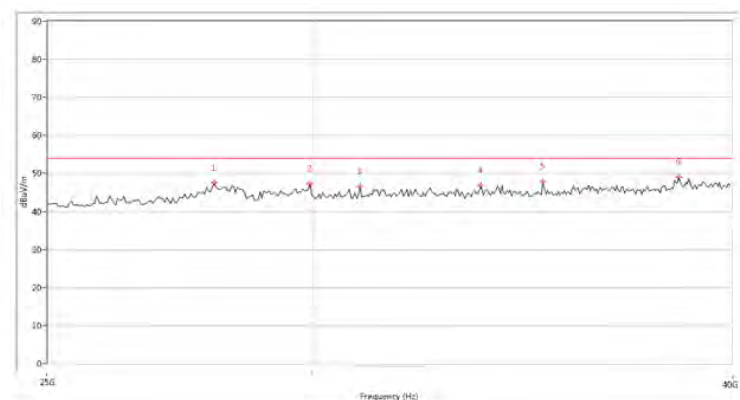


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26513.367  | 44.70 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28176.955  | 47.14 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29863.284  | 46.82 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 32480.130  | 47.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 36707.823  | 47.35 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39133.965  | 48.99 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 88.055     | 29.11 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 158.204    | 25.80 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2167.082   | 37.59 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5795.000   | 70.69 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 14137.157  | 39.89 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 15728.180  | 40.56 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

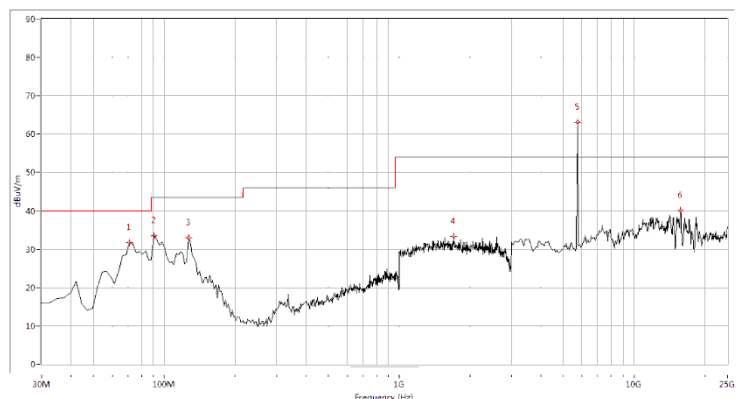


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28025.993  | 47.65 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29937.766  | 47.30 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30982.504  | 46.56 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 33617.830  | 46.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 35133.716  | 47.79 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 38517.855  | 49.06 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

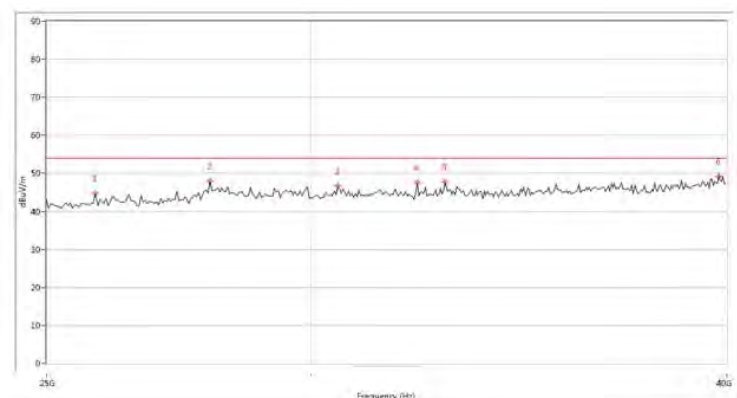
(Antenna Vertical, 30MHz to 40GHz)

### 3.8.3.5. 802.11a Test mode

Plots for Channel = 149

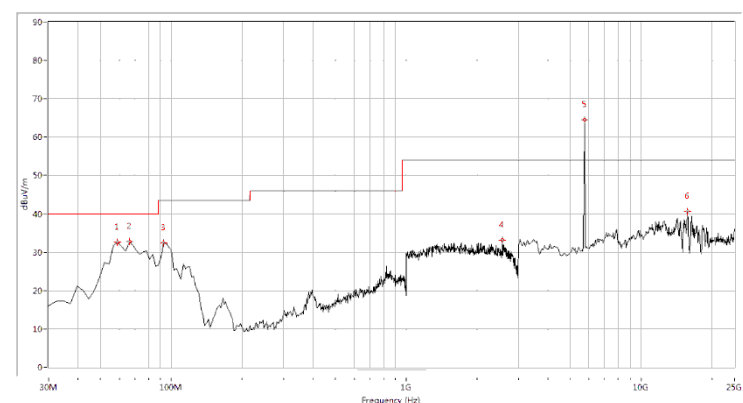


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 71.122     | 31.65 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 90.474     | 33.45 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 126.758    | 32.93 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 1703.242   | 33.25 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5745.000   | 63.15 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.06 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

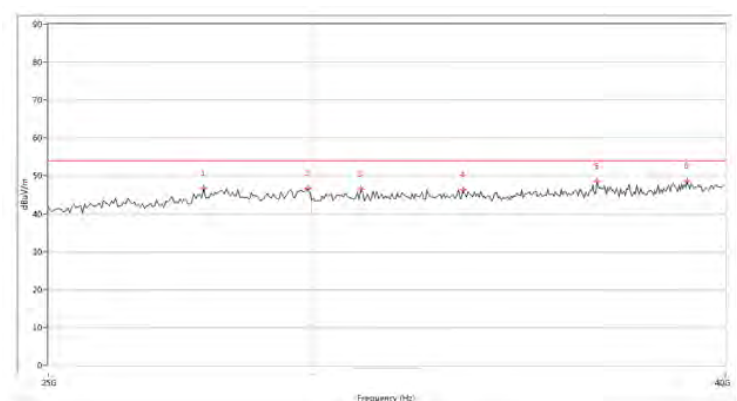


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 25860.035  | 44.67 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 27992.252  | 48.01 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 30574.357  | 46.75 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 32239.426  | 47.55 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 32903.017  | 47.70 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39778.556  | 49.20 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



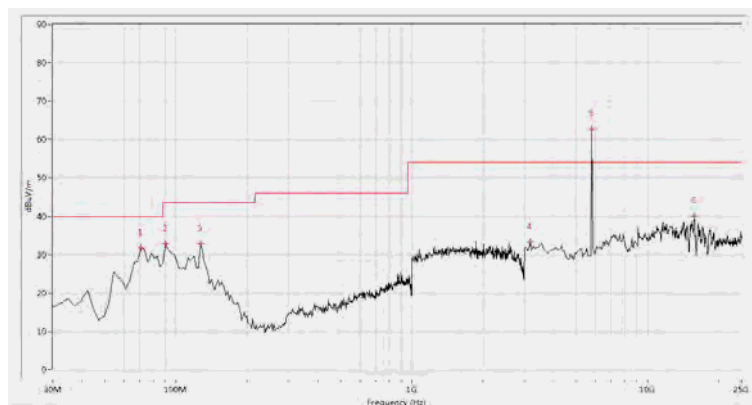
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 59.027     | 32.65 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 66.284     | 32.75 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 92.893     | 32.49 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2561.097   | 33.15 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5745.000   | 64.56 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 40.65 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



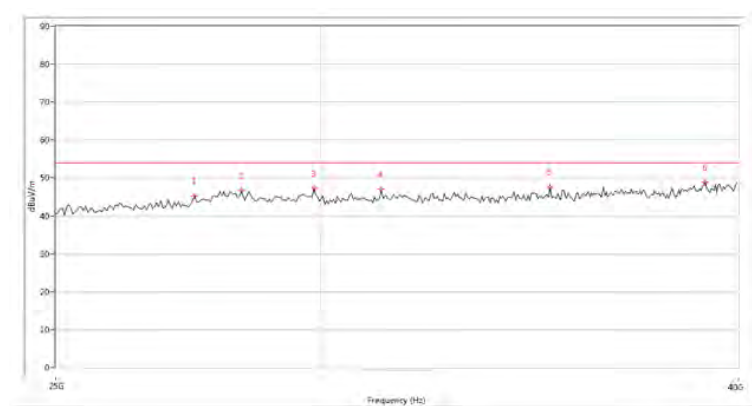
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 27841.289  | 46.65 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29913.766  | 46.75 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 31053.985  | 46.54 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 33348.165  | 46.29 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 36596.601  | 48.43 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 38957.262  | 48.63 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plot for Channel = 157

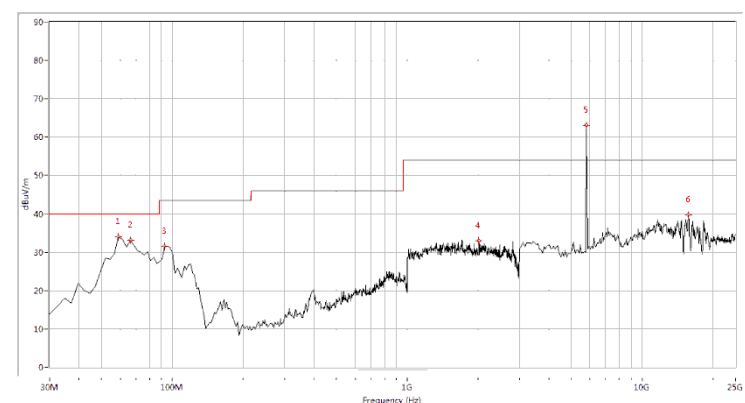


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 71.122     | 31.69 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 90.474     | 32.74 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 126.758    | 32.71 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 3164.589   | 33.40 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5785.000   | 62.74 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.09 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

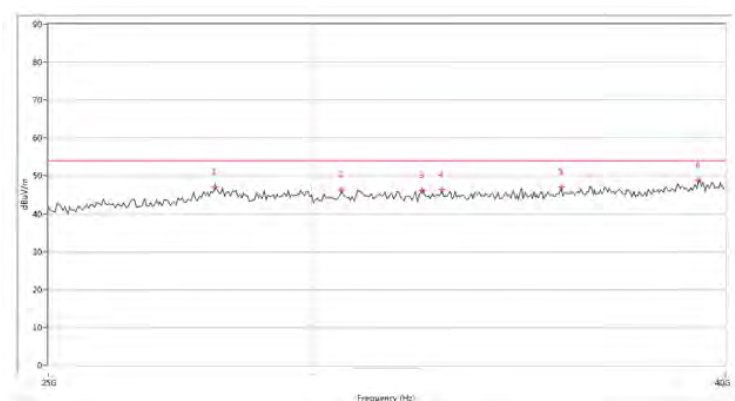


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 27510.623  | 45.30 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28409.399  | 46.64 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29861.284  | 47.22 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 31218.429  | 47.09 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 35103.716  | 47.54 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39130.224  | 48.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



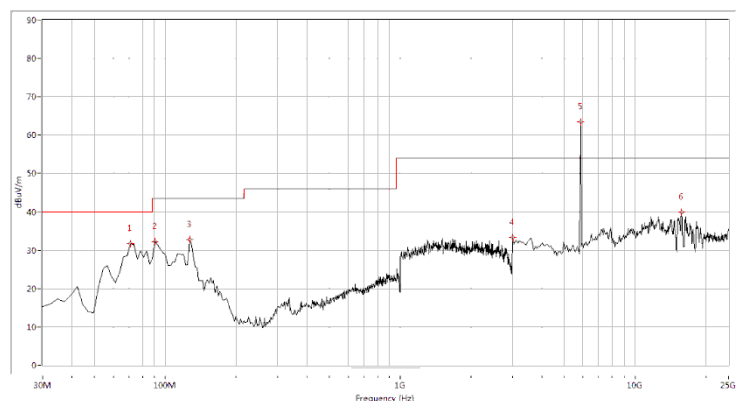
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 59.027     | 33.98 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 66.284     | 33.20 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 92.893     | 31.62 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2022.444   | 32.91 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5785.000   | 63.15 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15728.180  | 39.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



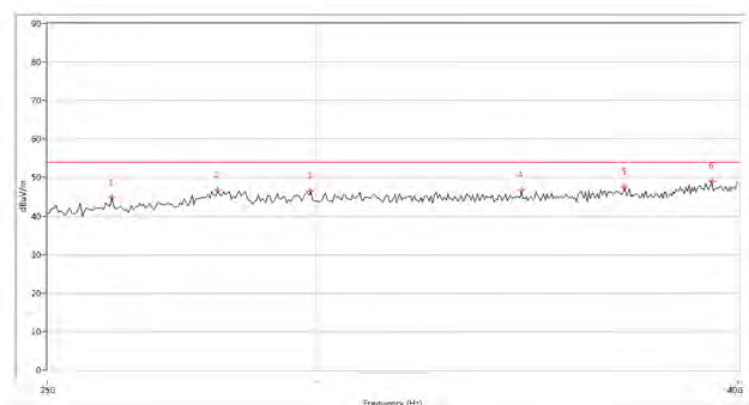
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28069.733  | 47.10 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30647.838  | 46.27 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32406.648  | 46.21 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32815.536  | 46.33 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 35609.825  | 47.02 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39275.187  | 48.82 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plot for Channel = 165

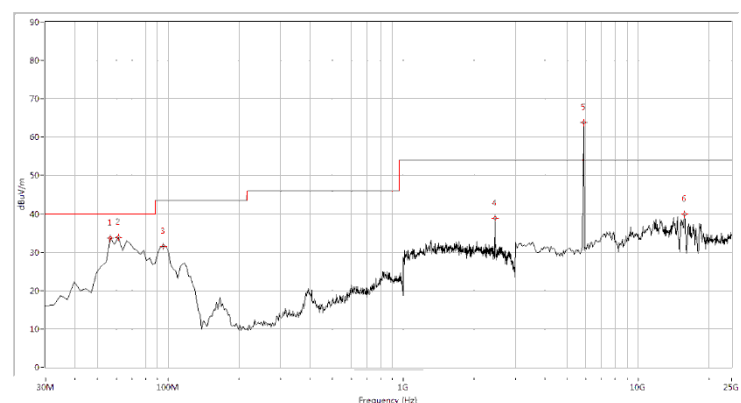


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 71.122     | 31.70 | N.A | N.A | N.A      | 40.0     | N.A      | Horizontal | PASS    |
| 90.474     | 32.27 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 126.758    | 32.75 | N.A | N.A | N.A      | 43.5     | N.A      | Horizontal | PASS    |
| 3000.000   | 33.24 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5825.000   | 63.41 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 39.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

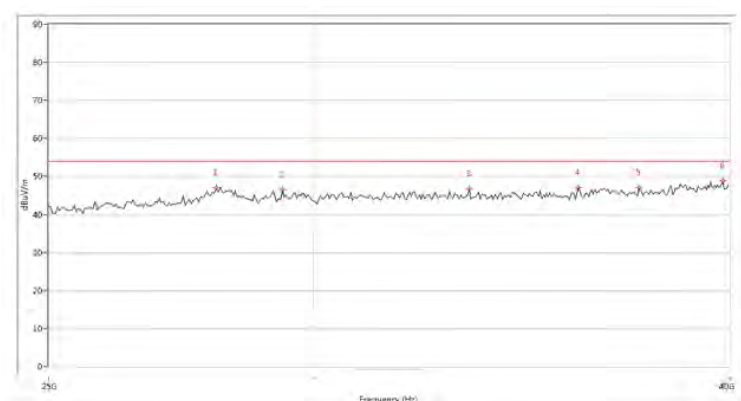


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26129.219  | 44.83 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28067.733  | 46.65 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29960.025  | 46.60 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 34510.125  | 46.60 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 37009.748  | 47.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39215.187  | 48.95 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 56.608     | 33.61 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 61.446     | 33.86 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 95.312     | 31.56 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 2461.347   | 38.85 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5825.000   | 63.87 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15728.180  | 39.85 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

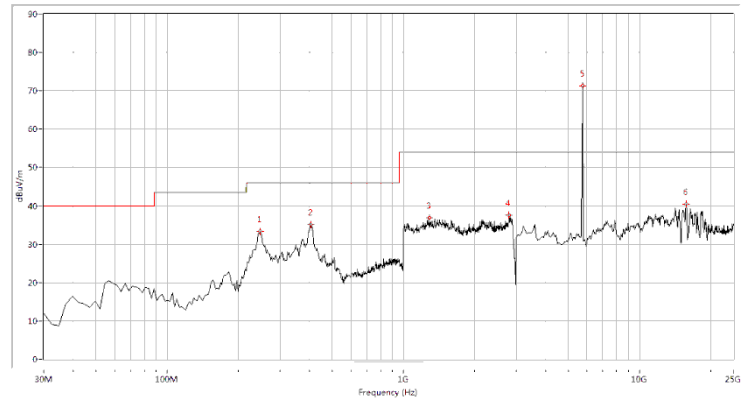


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28016.733  | 47.04 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29373.656  | 46.44 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 33421.646  | 46.63 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 36037.491  | 46.98 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 37565.858  | 47.04 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39818.297  | 48.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

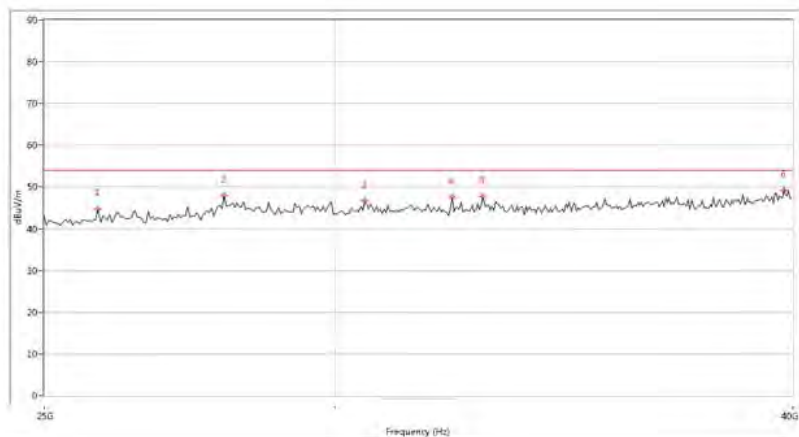
(Antenna Vertical, 30MHz to 40GHz)

### 3.8.3.6. 802.11ac-20MHz Test mode

Plots for Channel = 149

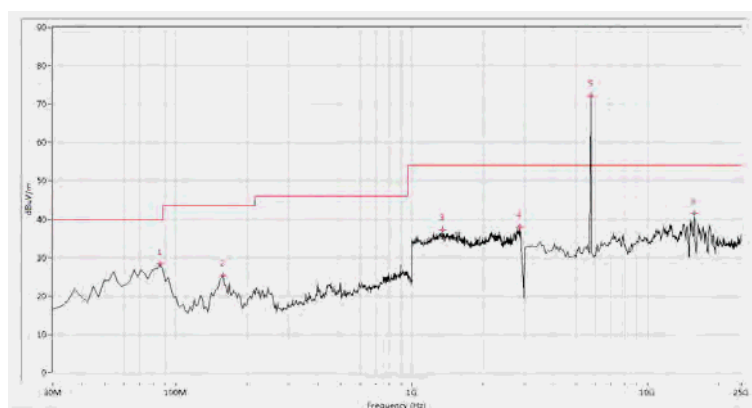


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 33.41 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 404.938    | 35.02 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1289.277   | 36.90 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2800.499   | 37.63 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5745.000   | 71.34 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.39 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

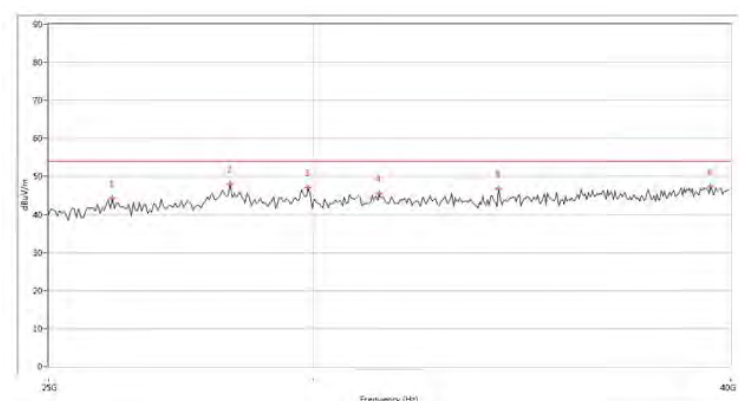


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 26085.479  | 43.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28219.177  | 47.40 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29623.840  | 46.94 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 33949.015  | 46.79 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 36554.860  | 47.96 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39109.224  | 48.62 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



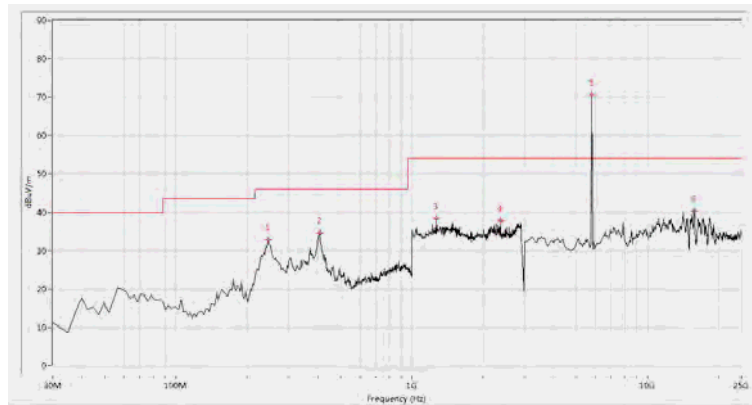
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 85.636     | 28.42 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 158.204    | 25.33 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 1354.115   | 37.27 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2875.312   | 38.02 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5745.000   | 72.16 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 41.45 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



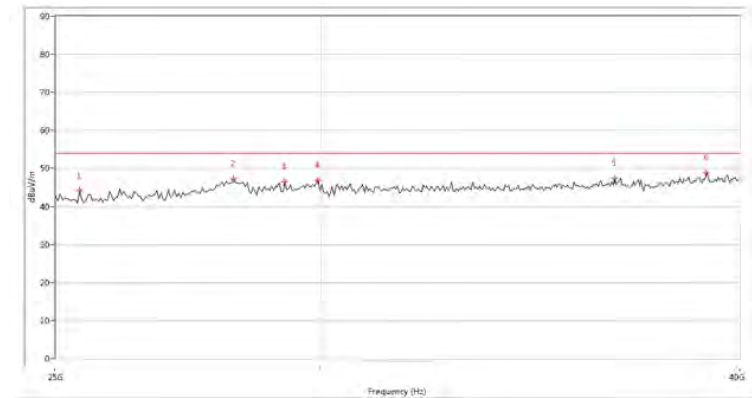
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 26129.219  | 44.14 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28312.918  | 47.90 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29906.025  | 47.02 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 31319.651  | 45.51 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 34008.978  | 46.70 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39439.890  | 47.14 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

### Plot for Channel = 157

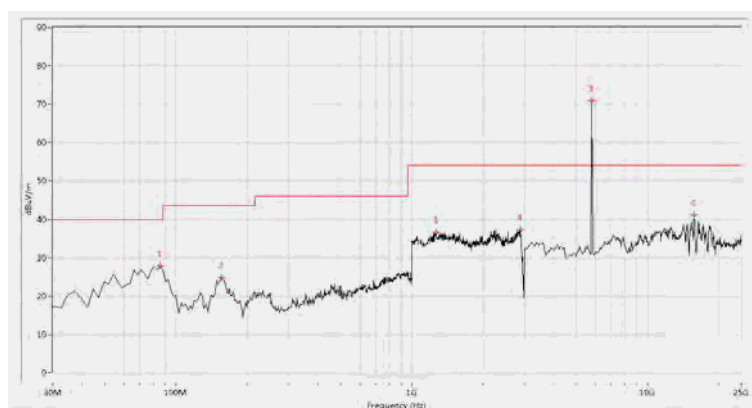


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 245.287    | 32.77 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 407.357    | 34.52 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1274.314   | 38.37 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2376.559   | 37.80 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5785.000   | 70.54 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.34 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

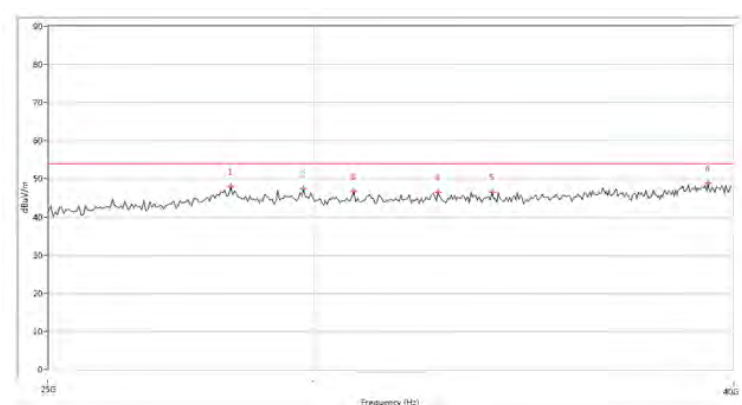


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 25419.147  | 44.25 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28215.436  | 47.21 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29206.434  | 46.46 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29939.766  | 46.81 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 36707.823  | 47.38 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39106.224  | 48.90 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



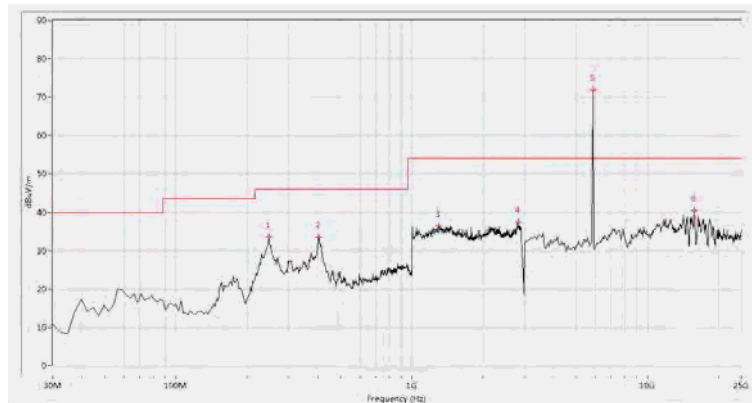
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 85.636     | 27.82 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 155.786    | 24.80 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 1269.327   | 36.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2895.262   | 37.22 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5785.000   | 70.91 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 40.98 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



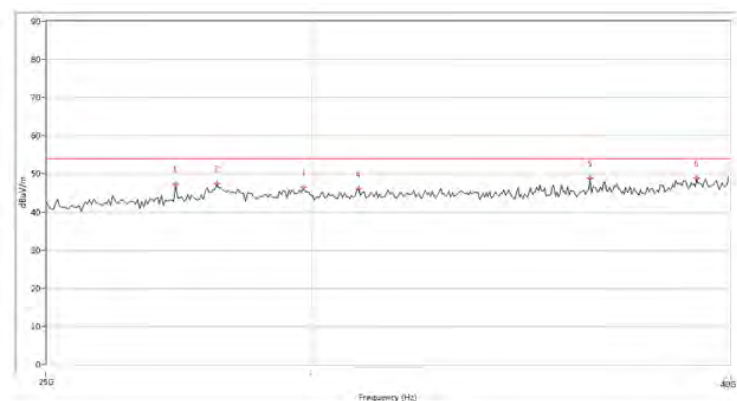
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28321.918  | 47.96 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29718.803  | 47.43 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30833.541  | 46.64 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32616.833  | 46.54 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 33903.274  | 46.49 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39324.668  | 48.82 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

### Plot for Channel = 165

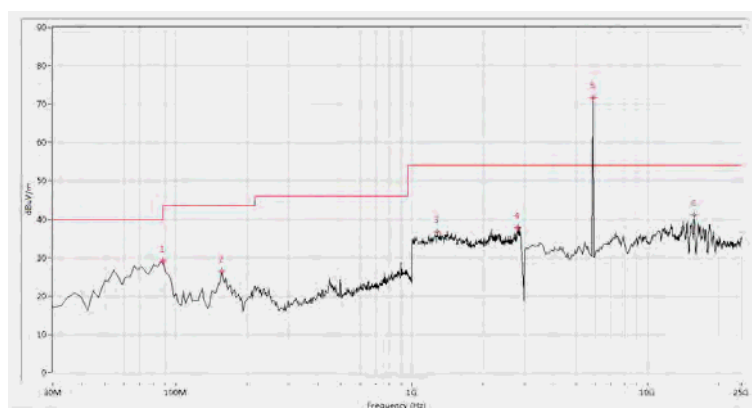


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 33.42 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 402.519    | 33.45 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1299.252   | 36.37 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2835.411   | 37.36 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5825.000   | 71.90 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.45 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

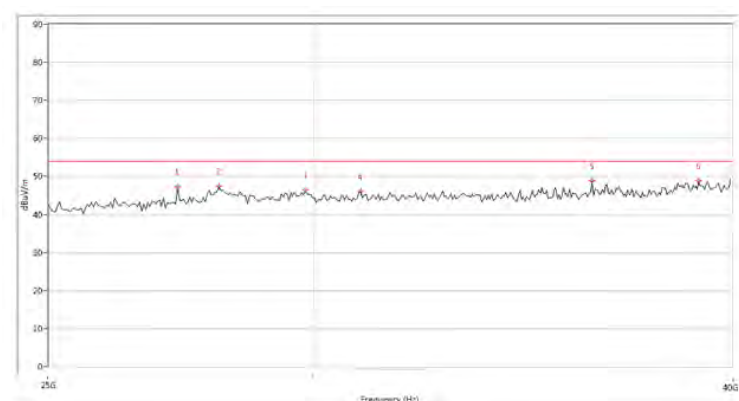


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 27319.920  | 47.18 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28103.474  | 47.33 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29812.544  | 46.55 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 30918.504  | 45.89 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 36337.416  | 48.90 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39104.224  | 48.76 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 88.055     | 29.12 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 155.786    | 26.36 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 1279.302   | 36.75 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2810.474   | 37.79 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5825.000   | 71.57 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15728.180  | 41.07 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

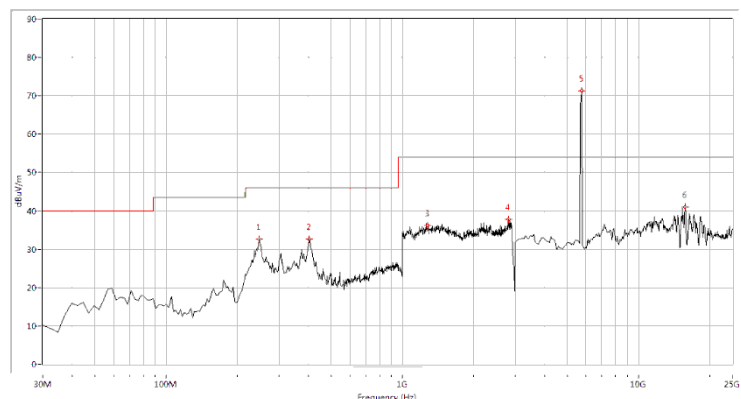


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 26126.219  | 45.56 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 28404.140  | 47.32 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29787.803  | 46.11 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32811.796  | 46.28 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 35504.863  | 46.96 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39028.743  | 48.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

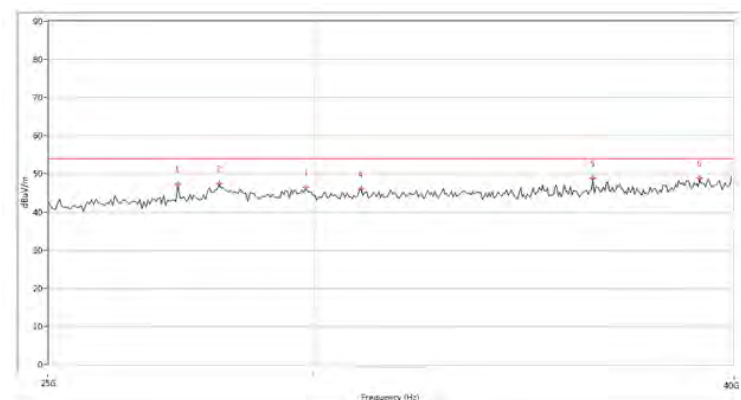
(Antenna Vertical, 30MHz to 40GHz)

### 3.8.3.7. 802.11ac-40MHz Test mode

Plots for Channel = 151

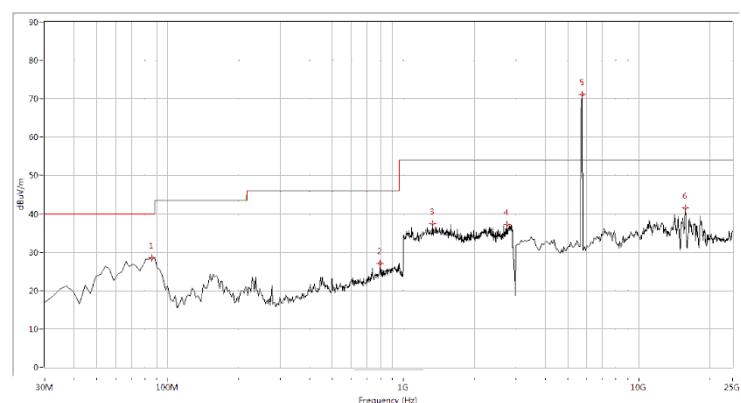


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 32.63 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 402.519    | 32.67 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1279.302   | 36.11 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2810.474   | 37.86 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5755.000   | 71.35 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 40.99 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

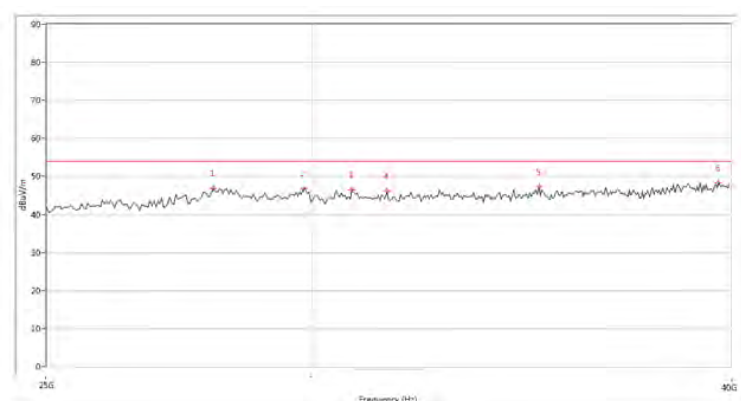


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 27139.217  | 44.15 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 28171.955  | 47.36 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 29111.471  | 46.31 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 31302.170  | 46.05 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 37716.820  | 47.84 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 39952.519  | 48.95 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



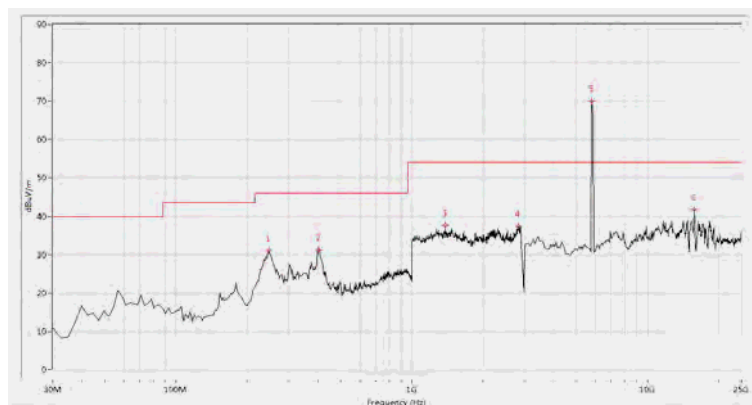
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 85.636     | 28.52 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 799.227    | 27.10 | N.A | N.A | N.A      | 46.0     | N.A      | Vertical | PASS    |
| 1329.177   | 37.46 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2750.623   | 37.17 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5755.000   | 71.14 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 41.58 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



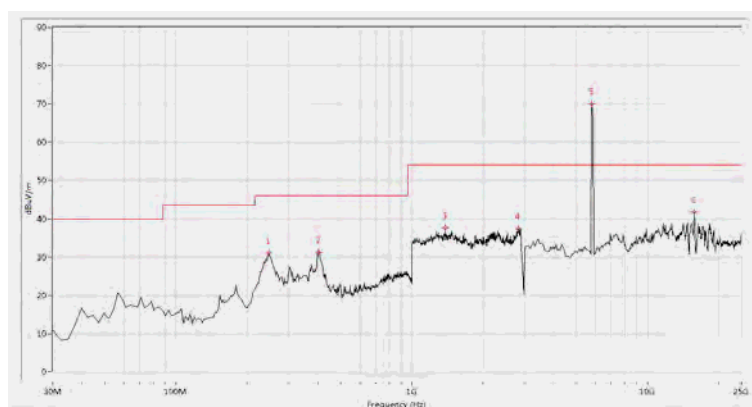
| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 28021.993  | 46.80 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29829.544  | 46.96 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30863.541  | 46.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 31581.354  | 46.19 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 35036.234  | 47.15 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39606.334  | 48.35 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

# Plots for Channel = 159

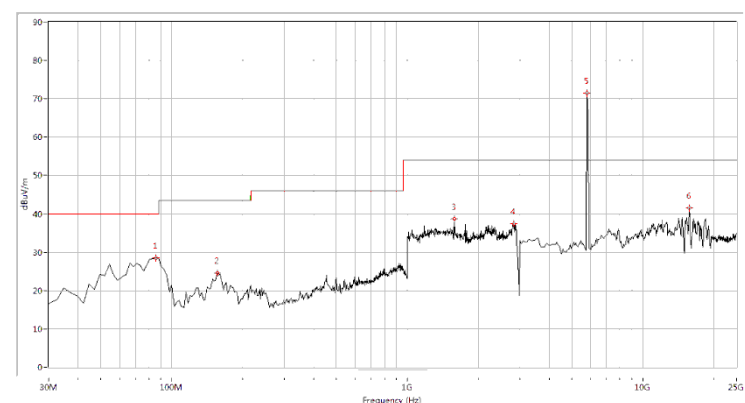


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 30.99 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 402.519    | 31.28 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1384.040   | 37.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2830.424   | 37.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5795.000   | 70.00 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 41.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

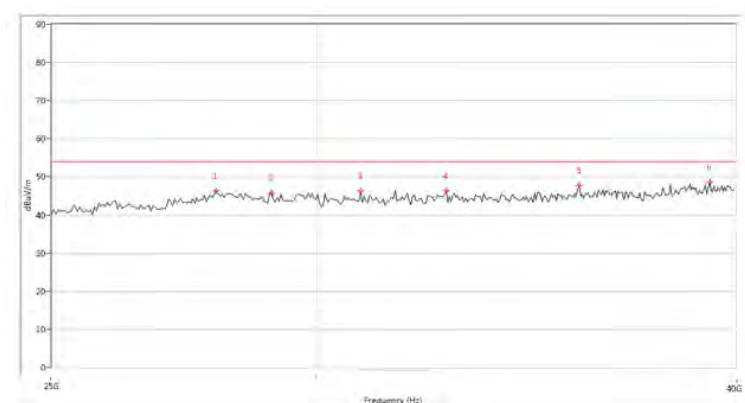


| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna    | Verdict |
|------------|-------|-----|-----|----------|----------|----------|------------|---------|
| 247.706    | 30.99 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 402.519    | 31.28 | N.A | N.A | N.A      | 46.0     | N.A      | Horizontal | PASS    |
| 1384.040   | 37.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 2830.424   | 37.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |
| 5795.000   | 70.00 | N.A | N.A | N.A      | N.A      | N.A      | Horizontal | N.A     |
| 15783.042  | 41.77 | N.A | N.A | 74.0     | N.A      | 54.0     | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 40GHz)



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 85.636     | 28.52 | N.A | N.A | N.A      | 40.0     | N.A      | Vertical | PASS    |
| 155.786    | 24.59 | N.A | N.A | N.A      | 43.5     | N.A      | Vertical | PASS    |
| 1583.541   | 38.67 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 2840.399   | 37.48 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 5795.000   | 71.46 | N.A | N.A | N.A      | N.A      | N.A      | Vertical | N.A     |
| 15783.042  | 41.53 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |



| Fre. (MHz) | Pk    | QP  | AV  | Limit-PK | Limit-QP | Limit-AV | Antenna  | Verdict |
|------------|-------|-----|-----|----------|----------|----------|----------|---------|
| 27909.252  | 46.29 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 29071.731  | 45.73 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 30931.022  | 46.28 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 32748.055  | 46.34 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 35920.269  | 47.71 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |
| 39283.928  | 48.64 | N.A | N.A | 74.0     | N.A      | 54.0     | Vertical | PASS    |

(Antenna Vertical, 30MHz to 40GHz)

### **3.9. RF exposure evaluation**

#### **3.9.1. Requirement**

According to § 1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of Commission's guideline.

#### **3.9.2. Result**

Please refer to SAR report.

**\*\* END OF REPORT \*\***