



Radiation Disturbance Test Limit for FCC (Above 1G)

| Frequency (MHz) | dB(uV/m) (at 3 meters) | |
|-----------------|------------------------|---------|
| | Peak | Average |
| Above 1000 | 74 | 54 |

IC Restricted bands please refer to ISED RSS-GEN Clause 8.10
FCC Restricted bands of operation:

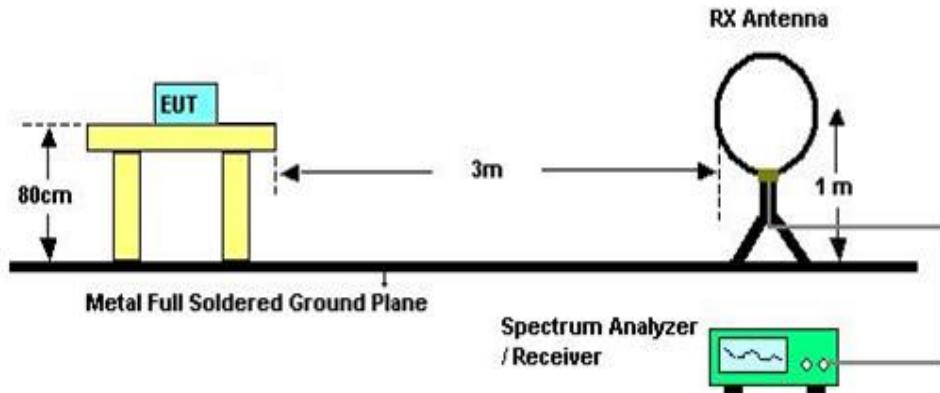
| MHz | MHz | MHz | GHz |
|--------------------------|---------------------|---------------|------------------|
| 0.090-0.110 | 16.42-16.423 | 399.9-410 | 4.5-5.15 |
| ¹ 0.495-0.505 | 16.69475-16.69525 | 608-614 | 5.35-5.46 |
| 2.1735-2.1905 | 16.80425-16.80475 | 960-1240 | 7.25-7.75 |
| 4.125-4.128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

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz

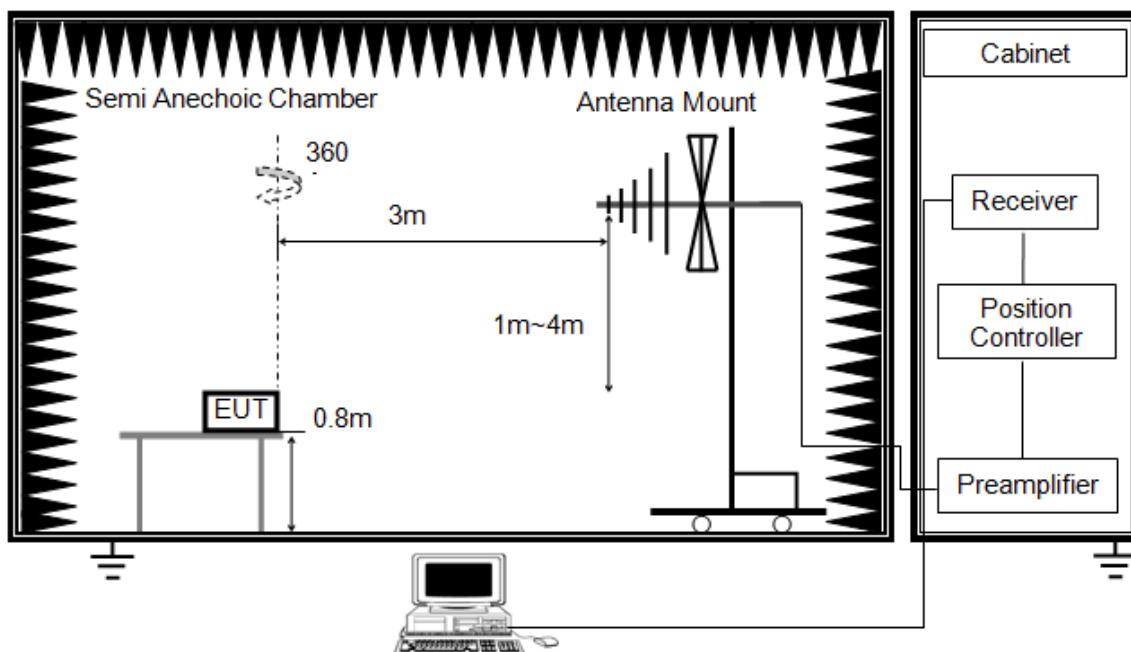


The setting of the spectrum analyser

| | |
|----------|--|
| RBW | 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz) |
| VBW | 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz) |
| Sweep | Auto |
| Detector | Peak/QP/ Average |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

Below 1G

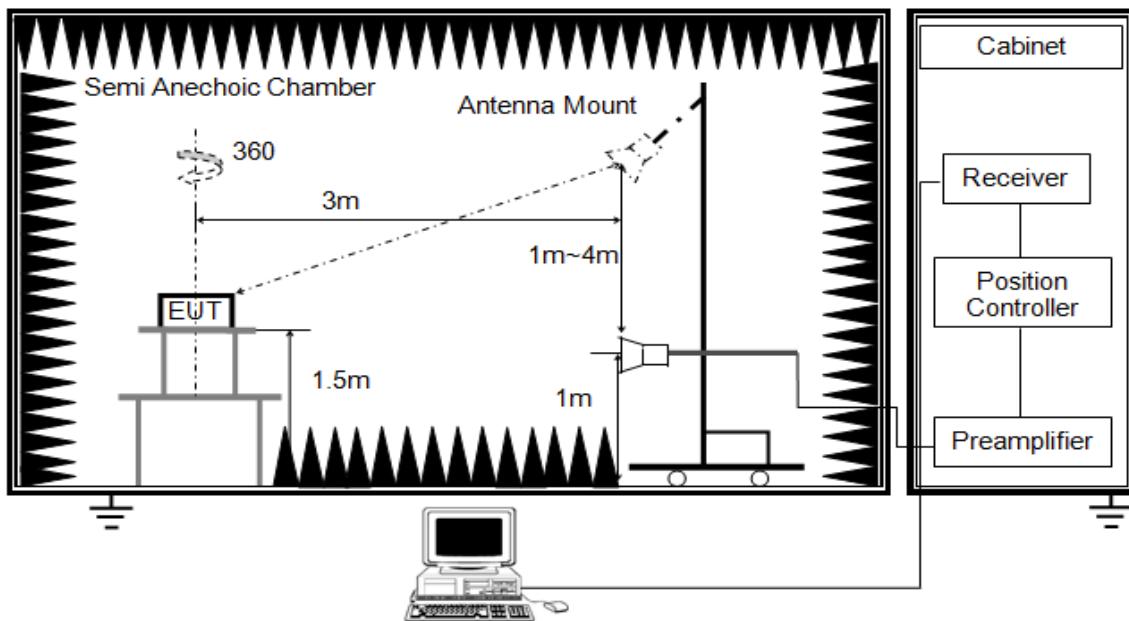


The setting of the spectrum analyser

| | |
|----------|----------|
| RBW | 120K |
| VBW | 300K |
| Sweep | Auto |
| Detector | Peak/QP |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

ABOVE 1G

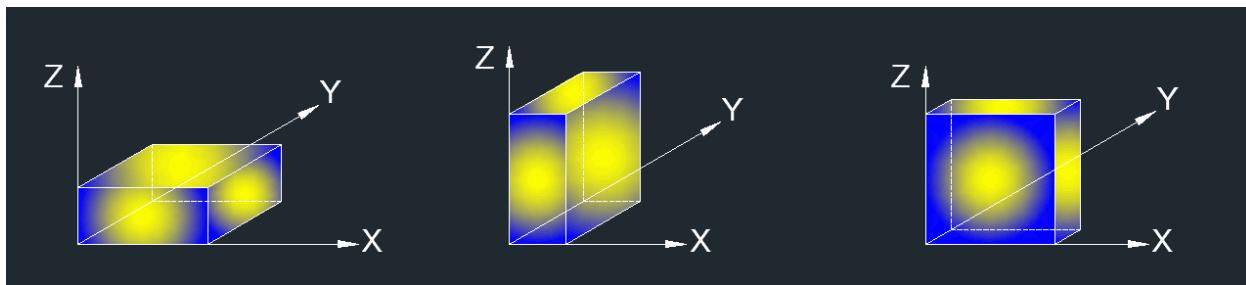


The setting of the spectrum analyser

| | |
|----------|-----------------------------|
| RBW | 1M |
| VBW | PEAK: 3M AVG: see note 6 |
| Sweep | Auto |
| Detector | Peak |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 8.1.ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



Note : For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

TEST ENVIRONMENT

| | | | |
|---------------------|--------|-------------------|---------|
| Temperature | 20°C | Relative Humidity | 56% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 5.0V |

9.1. RESTRICTED BANDEDGE

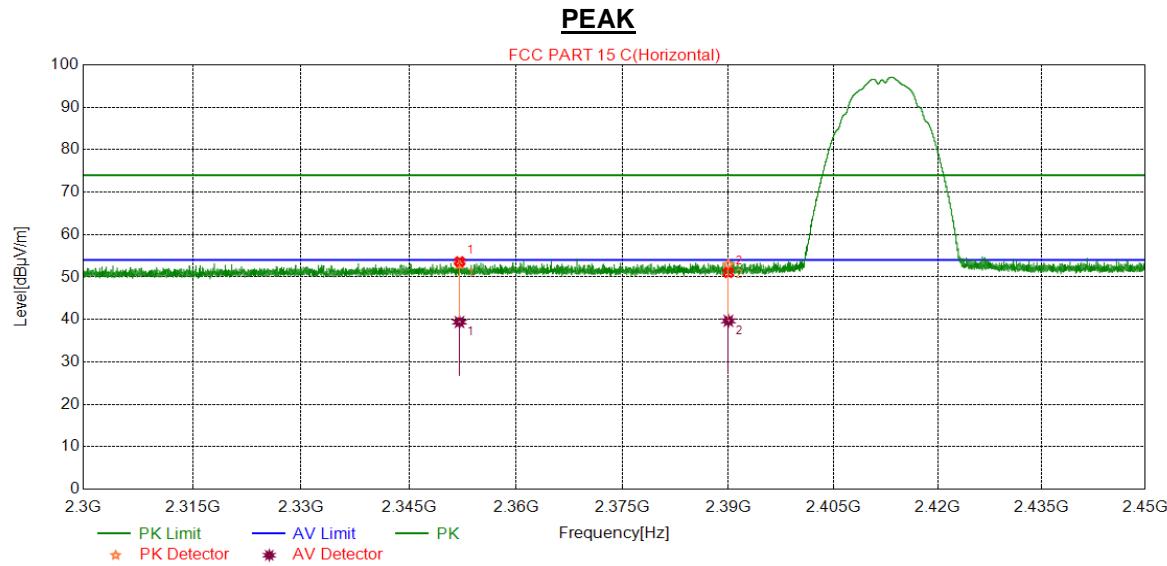
Test Result Table

| Test Mode | Test Antenna | Channel | Puw(dBm) | Verdict |
|------------|--------------|---------|----------|---------|
| 11B | Antenna 1+2 | LCH | <Limit | PASS |
| | | MCH | <Limit | PASS |
| | | HCH | <Limit | PASS |
| 11G | Antenna 1+2 | LCH | <Limit | PASS |
| | | MCH | <Limit | PASS |
| | | HCH | <Limit | PASS |
| 11N20 MIMO | Antenna 1+2 | LCH | <Limit | PASS |
| | | MCH | <Limit | PASS |
| | | HCH | <Limit | PASS |
| 11N40MIMO | Antenna 1+2 | LCH | <Limit | PASS |
| | | MCH | <Limit | PASS |
| | | HCH | <Limit | PASS |

Remark:

The antenna1 and antenna2 can transmit at the same time during work at 802.11B & 802.11G & 802.11N20 & 802.11N40 mode, and the PCL of the SISO and MIMO are the same, so the data of the MIMO mode is worse case, so only the data of worse case is shown in the test report.

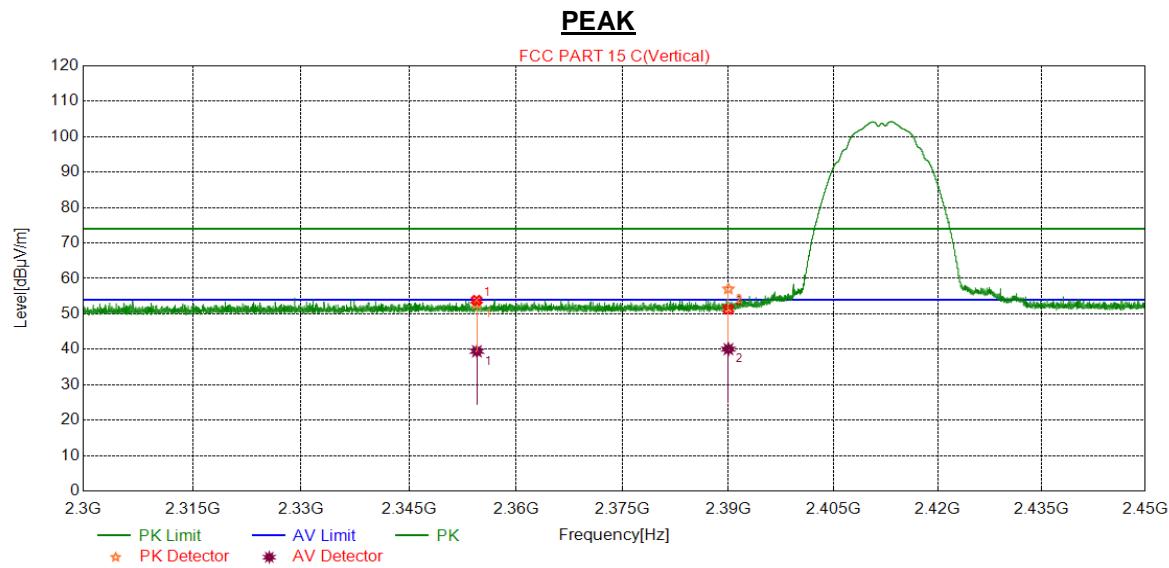
9.1.1. 802.11b SISO MODE

ANTENNA1+2RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------------|-------------------------|----------------|---------|
| 1 | 2352.0584 | 53.06 | 74.00 | -20.94 | peak |
| | | 39.39 | 54.00 | -14.61 | average |
| 2 | 2390.0000 | 52.91 | 74.00 | -21.09 | peak |
| | | 39.67 | 54.00 | -14.33 | average |

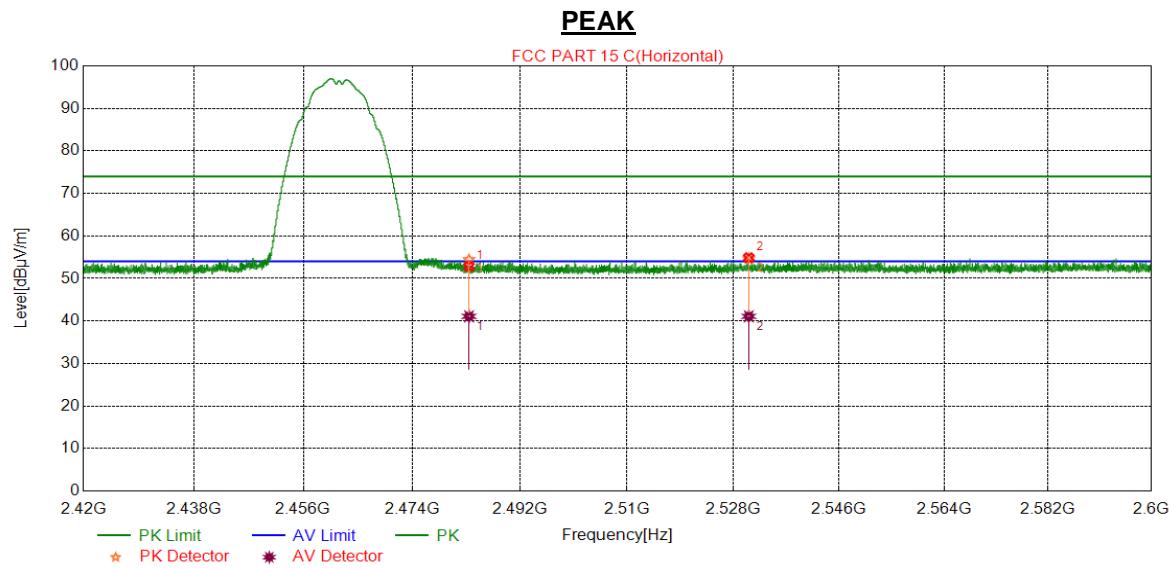
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=1/Ton where: ton is transmit duration.
4. For transmit duration, please refer to clause 8.1.
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

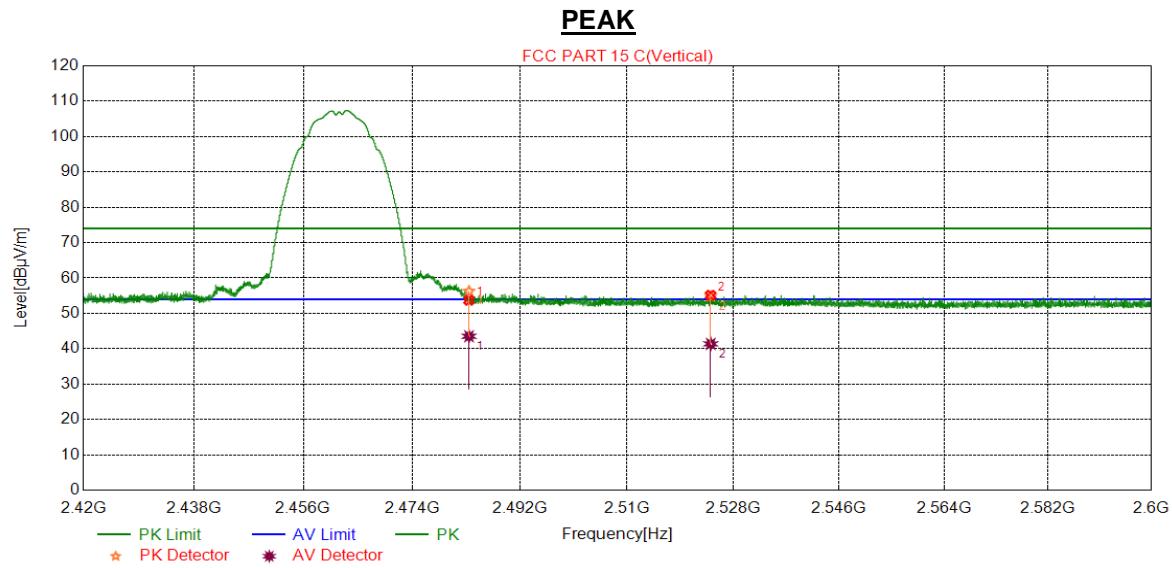
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 2354.4988 | 52.81 | 74.00 | -21.19 | peak |
| | | 39.45 | 54.00 | -14.55 | average |
| 2 | 2390.0000 | 57.03 | 74.00 | -16.97 | peak |
| | | 40.05 | 54.00 | -13.95 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2483.5000 | 54.42 | 74.00 | -19.58 | peak |
| | | 41.08 | 54.00 | -12.92 | average |
| 2 | 2530.6015 | 54.67 | 74.00 | -19.33 | peak |
| | | 41.09 | 54.00 | -12.91 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

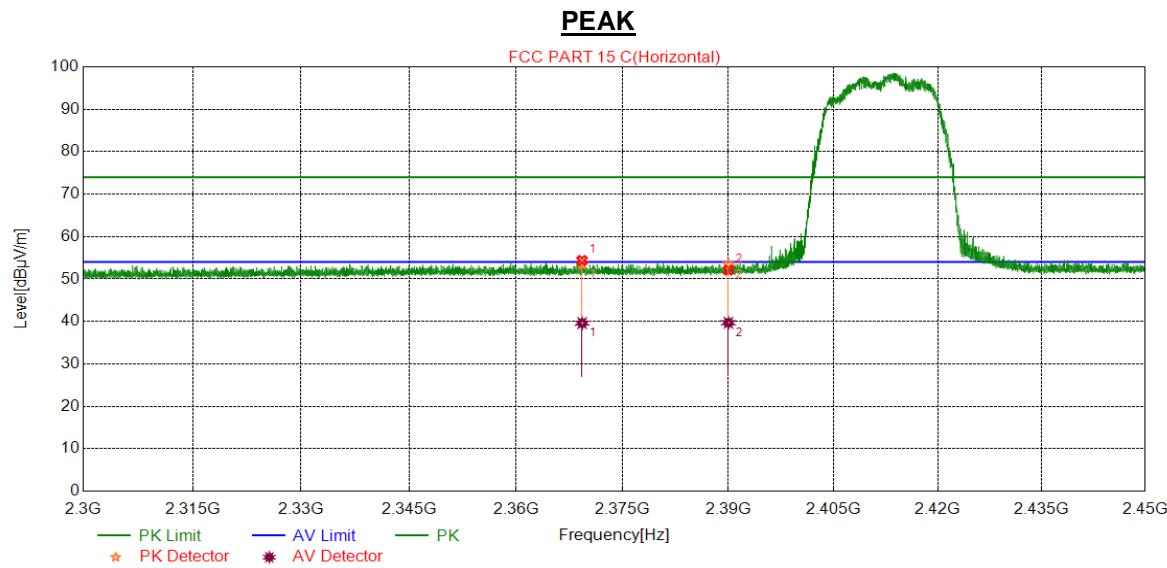
| No. | Frequency (MHz) | Result (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------------|----------------------|-------------|---------|
| 1 | 2483.5000 | 56.26 | 74.00 | -17.74 | peak |
| | | 43.52 | 54.00 | -10.48 | average |
| 2 | 2524.1470 | 54.79 | 74.00 | -19.21 | peak |
| | | 41.37 | 54.00 | -12.63 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

9.1.2. 802.11g SISO MODE

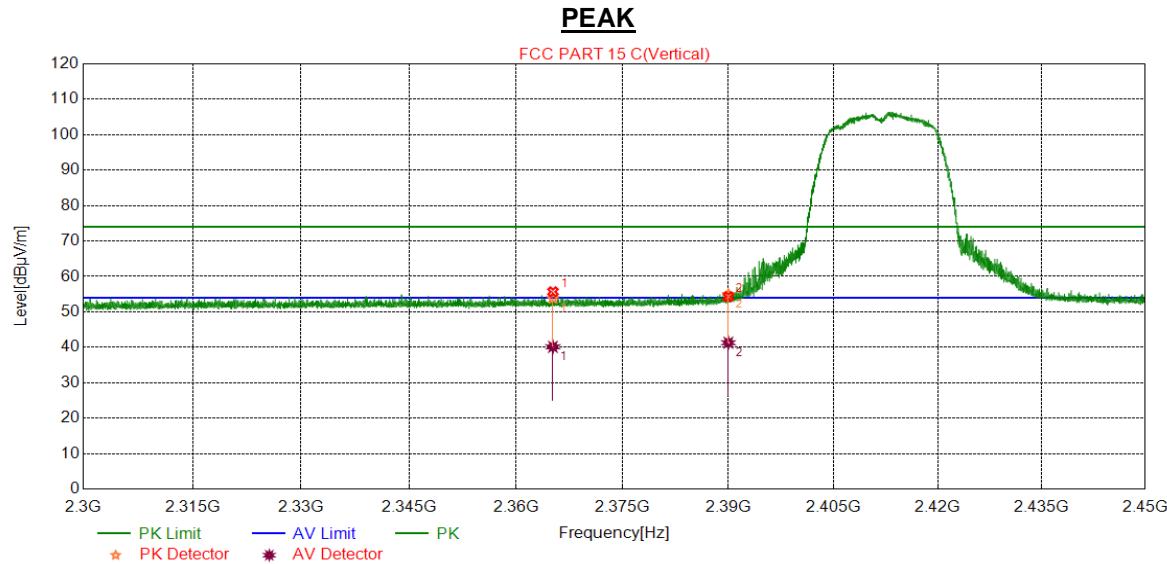
ANTENNA1+2

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



| No. | Frequency (MHz) | Result (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------------|-------------------------|----------------|---------|
| 1 | 2369.2899 | 53.44 | 74.00 | -20.56 | peak |
| | | 39.60 | 54.00 | -14.40 | average |
| 2 | 2390.0000 | 53.46 | 74.00 | -20.54 | peak |
| | | 39.69 | 54.00 | -14.31 | average |

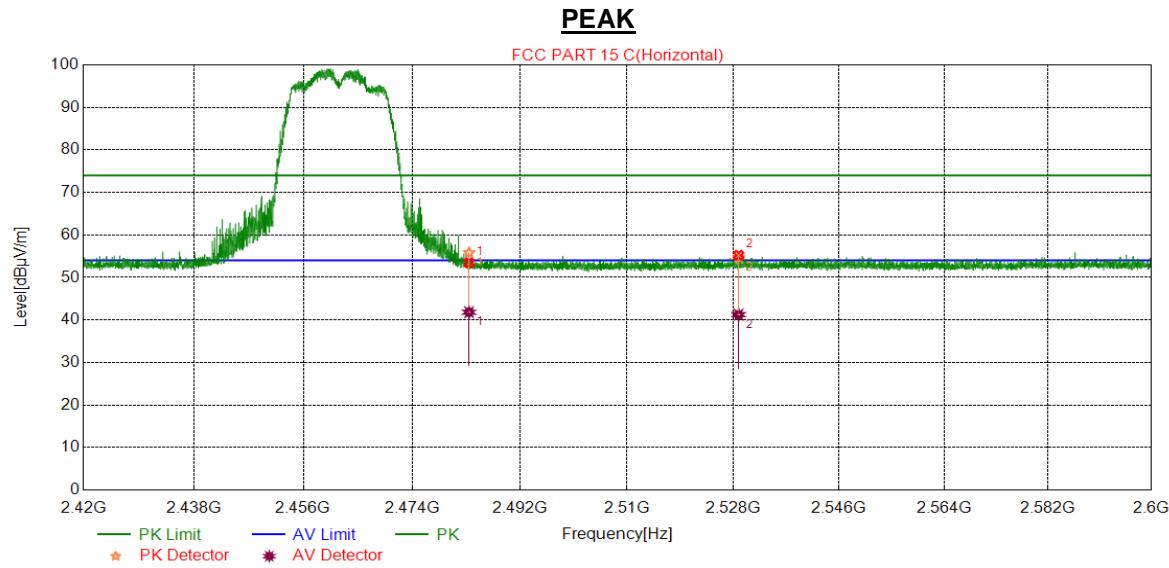
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2365.1747 | 53.80 | 74.00 | -20.20 | peak |
| | | 40.13 | 54.00 | -13.87 | average |
| 2 | 2390.0000 | 54.95 | 74.00 | -19.05 | peak |
| | | 41.29 | 54.00 | -12.71 | average |

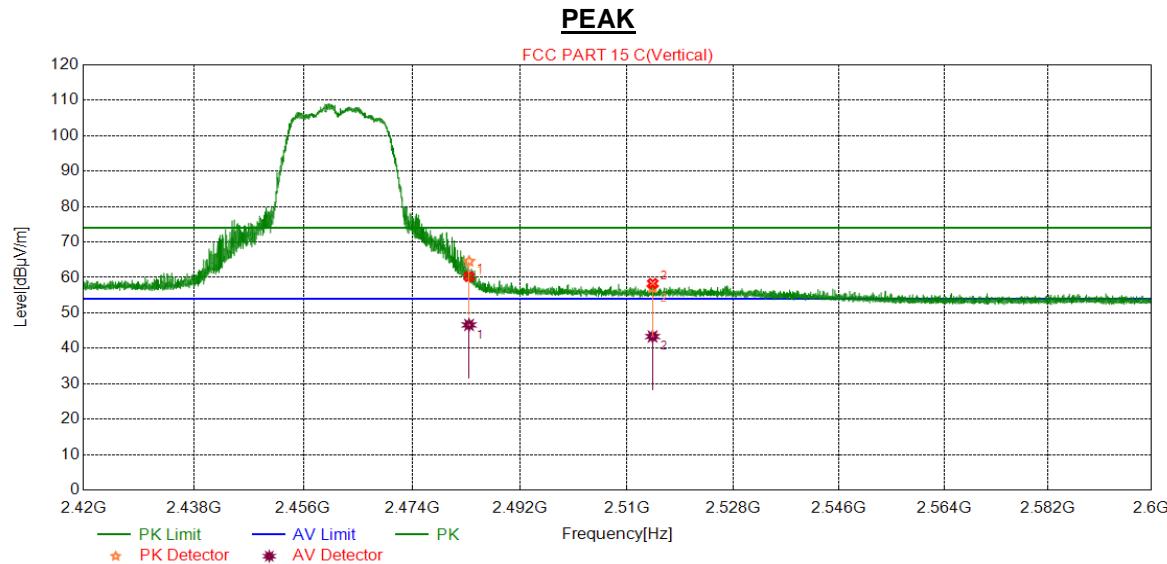
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2483.5000 | 55.81 | 74.00 | -18.19 | peak |
| | | 41.82 | 54.00 | -12.18 | average |
| 2 | 2528.8761 | 54.65 | 74.00 | -19.35 | peak |
| | | 41.23 | 54.00 | -12.77 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)


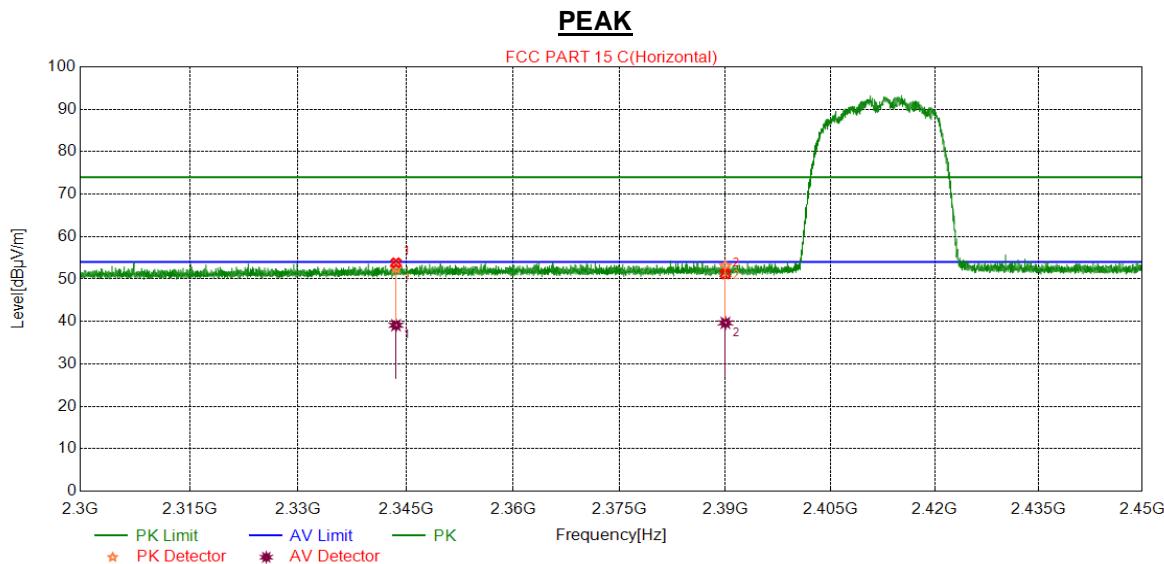
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2483.5000 | 64.55 | 74.00 | -9.45 | peak |
| | | 46.59 | 54.00 | -7.41 | average |
| 2 | 2514.3063 | 57.00 | 74.00 | -17.00 | peak |
| | | 43.33 | 54.00 | -10.67 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

9.1.3. 802.11n HT20 MIMO MODE

ANTENNA1+2

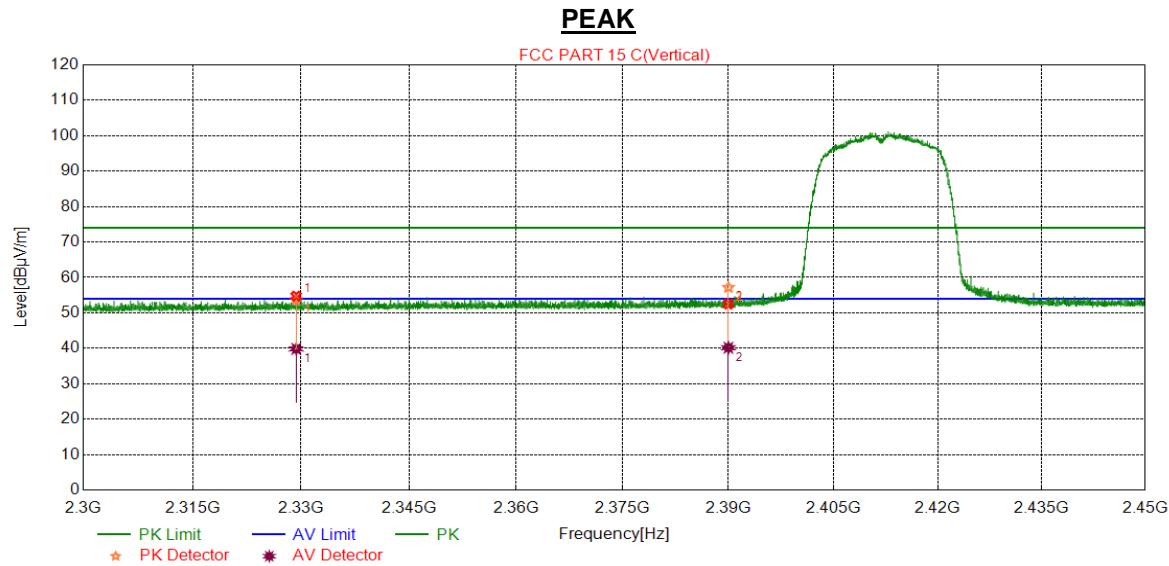
RESTRICTED BANEDGE (LOW CHANNEL, HORIZONTAL)



| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2343.6094 | 52.51 | 74.00 | -21.49 | peak |
| | | 39.10 | 54.00 | -14.90 | average |
| 2 | 2390.0000 | 53.08 | 74.00 | -20.92 | peak |
| | | 39.66 | 54.00 | -14.34 | average |

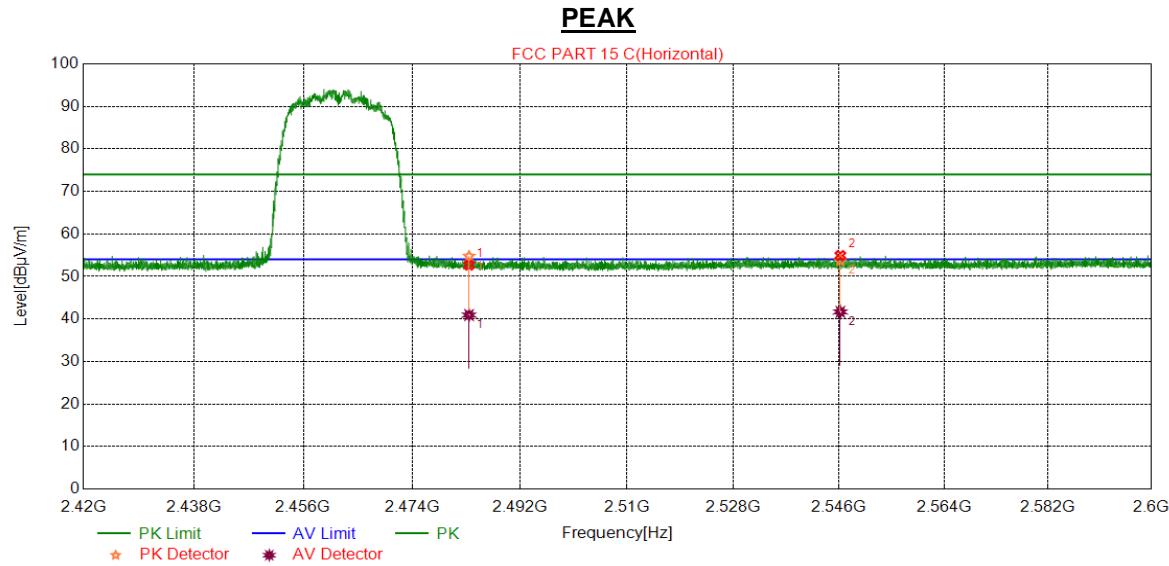
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

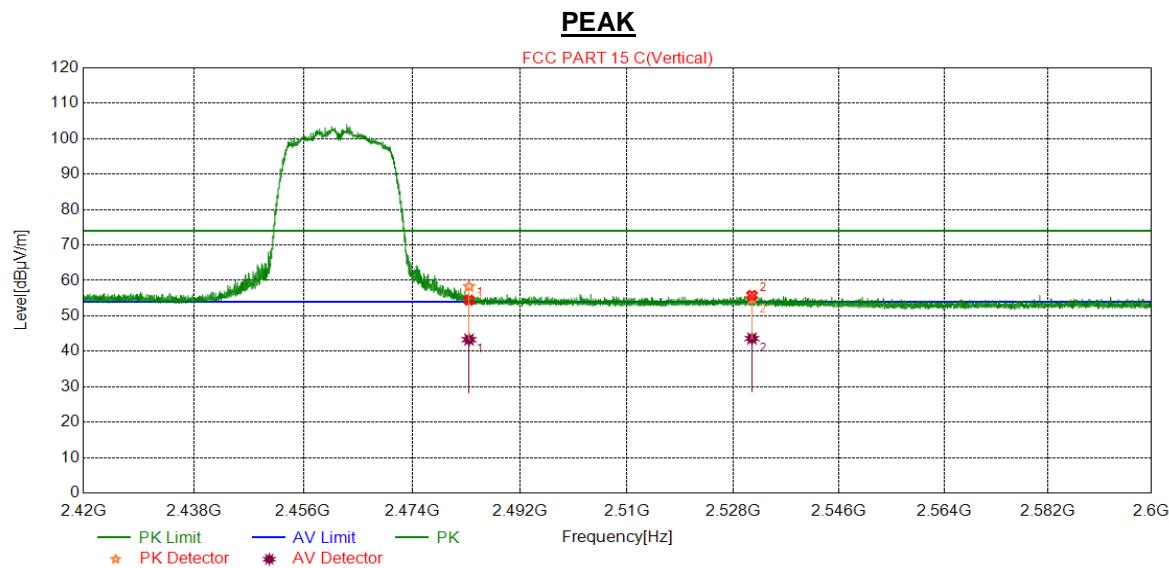
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 2329.3129 | 53.72 | 74.00 | -20.28 | peak |
| | | 39.84 | 54.00 | -14.16 | average |
| 2 | 2390.0000 | 57.17 | 74.00 | -16.83 | peak |
| | | 40.17 | 54.00 | -13.83 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 2483.5000 | 54.76 | 74.00 | -19.24 | peak |
| | | 40.92 | 54.00 | -13.08 | average |
| 2 | 2546.2106 | 53.74 | 74.00 | -20.26 | peak |
| | | 41.66 | 54.00 | -12.34 | average |

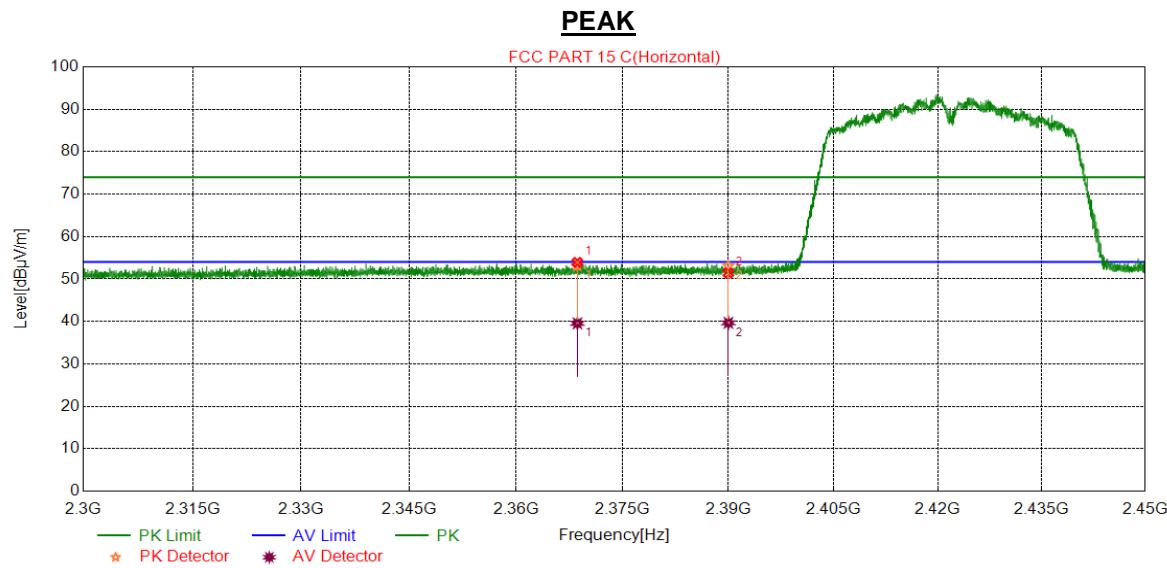
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2483.5000 | 58.29 | 74.00 | -15.71 | peak |
| | | 43.31 | 54.00 | -10.69 | average |
| 2 | 2531.1431 | 54.79 | 74.00 | -19.21 | peak |
| | | 43.61 | 54.00 | -10.39 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

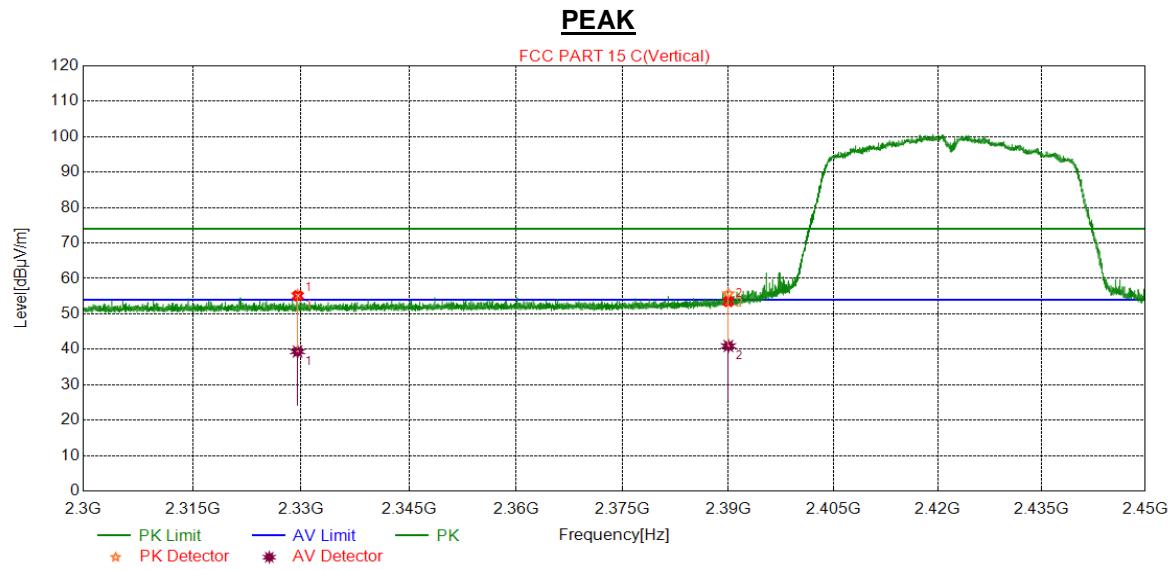
9.1.1. 802.11n HT40 MIMO MODE

ANTENNA1+2RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------------|-------------------------|----------------|---------|
| 1 | 2368.6230 | 53.07 | 74.00 | -20.93 | peak |
| | | 39.55 | 54.00 | -14.45 | average |
| 2 | 2390.0000 | 53.07 | 74.00 | -20.93 | peak |
| | | 39.67 | 54.00 | -14.33 | average |

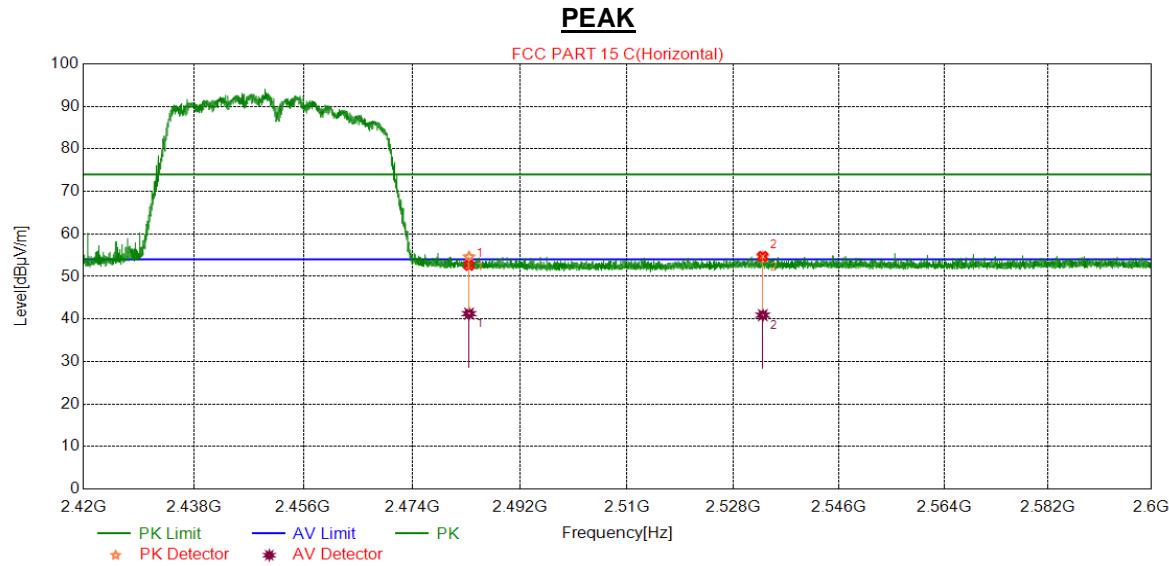
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

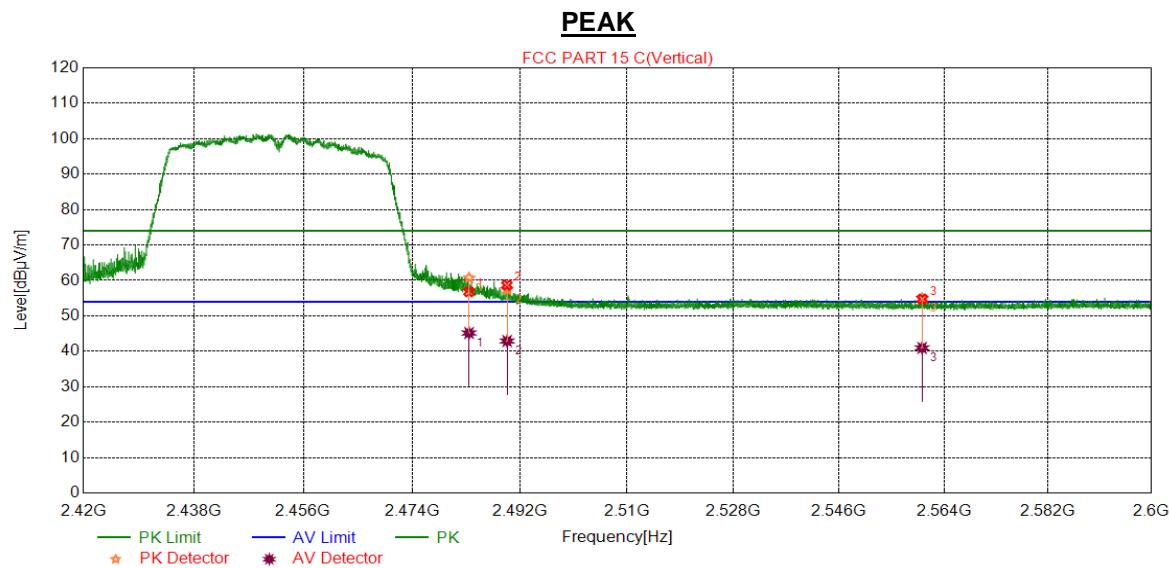
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 2329.5062 | 55.35 | 74.00 | -18.65 | peak |
| | | 39.35 | 54.00 | -14.65 | average |
| 2 | 2390.0000 | 55.67 | 74.00 | -18.33 | peak |
| | | 40.95 | 54.00 | -13.05 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 2483.5000 | 54.60 | 74.00 | -19.40 | peak |
| | | 41.25 | 54.00 | -12.75 | average |
| 2 | 2532.9771 | 54.58 | 74.00 | -19.42 | peak |
| | | 40.89 | 54.00 | -13.11 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

Note:

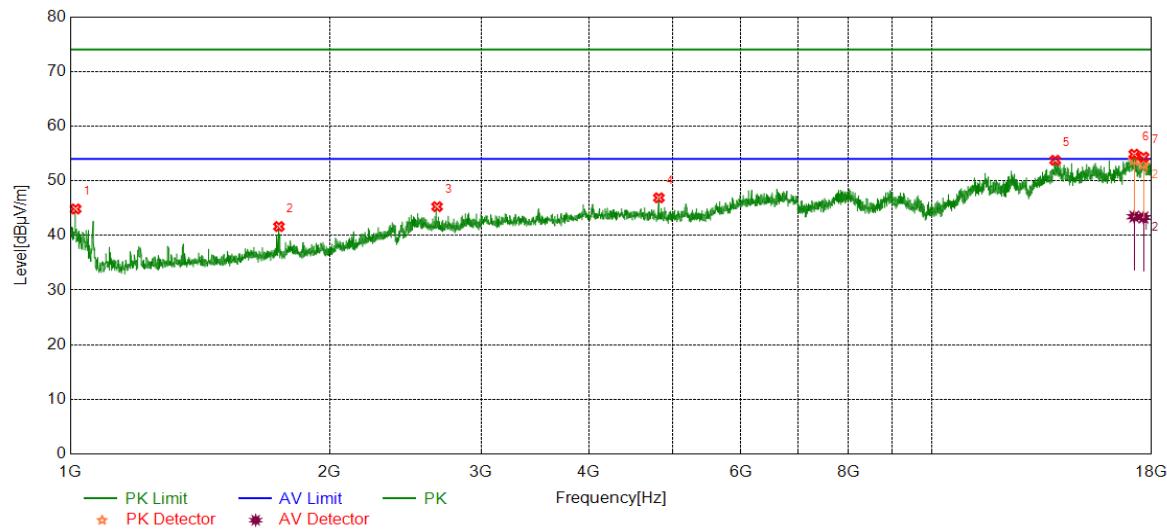
1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

9.2. SPURIOUS EMISSIONS 1~18GHz)

9.2.1. 802.11b SISO MODE

ANTENNA1+2

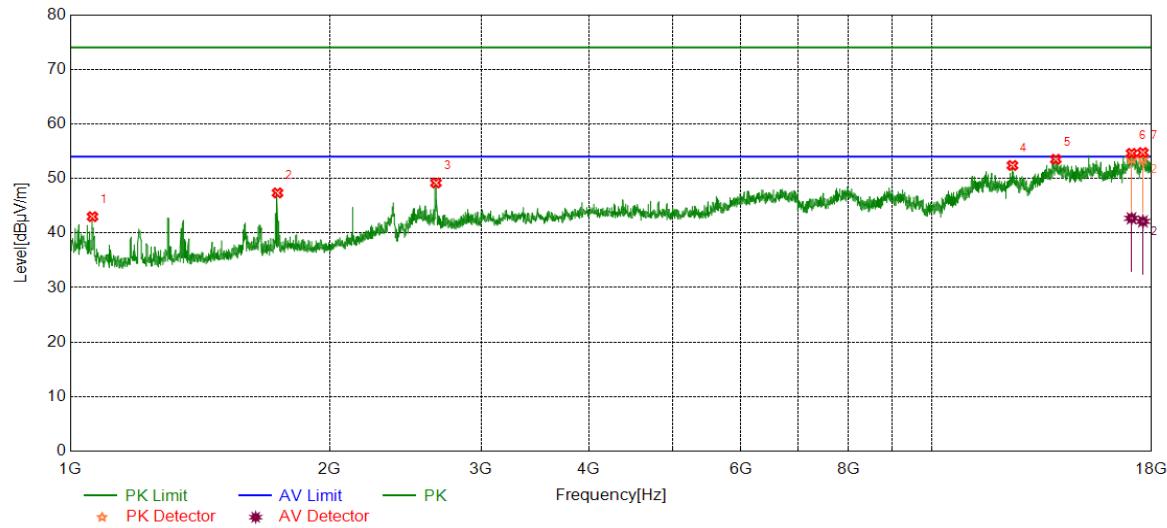
HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 1014.6716 | 44.84 | 74.00 | -29.16 | peak |
| 2 | 1746.9156 | 41.63 | 74.00 | -32.37 | peak |
| 3 | 2665.8886 | 45.26 | 74.00 | -28.74 | peak |
| 4 | 4822.8038 | 46.89 | 74.00 | -27.11 | peak |
| 5 | 13911.8186 | 53.75 | 74.00 | -20.25 | peak |
| 6 | 17179.8633 | 53.74 | 74.00 | -20.26 | peak |
| | | 43.44 | 54.00 | -10.56 | average |
| 7 | 17617.4362 | 52.96 | 74.00 | -21.04 | peak |
| | | 43.28 | 54.00 | -10.72 | average |

Note:

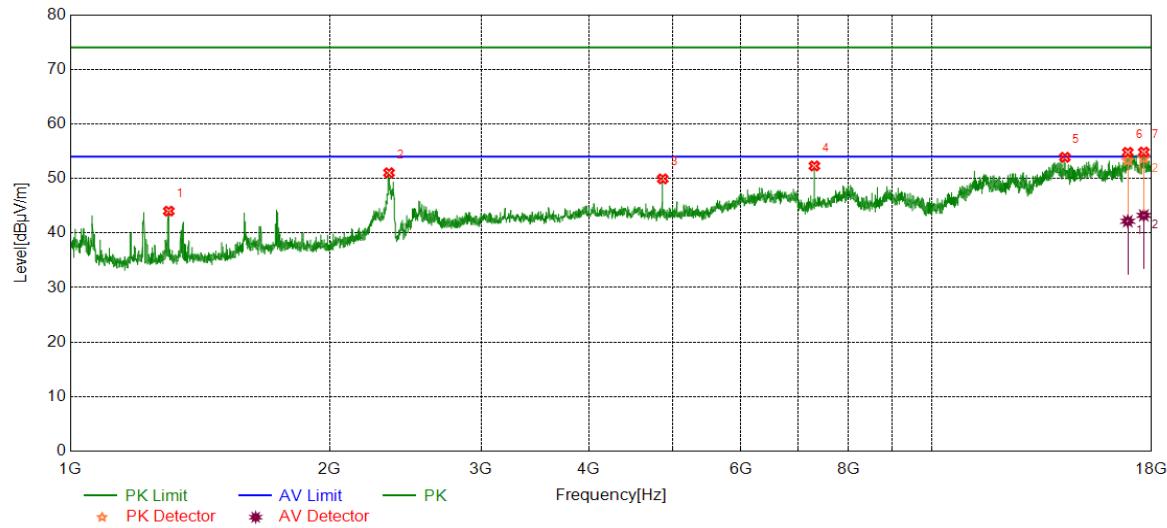
1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1061.3538 | 42.99 | 74.00 | -31.01 | peak |
| 2 | 1740.2467 | 47.35 | 74.00 | -26.65 | peak |
| 3 | 2657.8860 | 49.18 | 74.00 | -24.82 | peak |
| 4 | 12409.0682 | 52.38 | 74.00 | -21.62 | peak |
| 5 | 1061.3538 | 42.99 | 74.00 | -31.01 | peak |
| 6 | 17057.3429 | 53.55 | 74.00 | -20.45 | peak |
| | | 42.69 | 54.00 | -11.31 | average |
| 7 | 17584.9308 | 53.52 | 74.00 | -20.48 | peak |
| | | 42.13 | 54.00 | -11.87 | average |

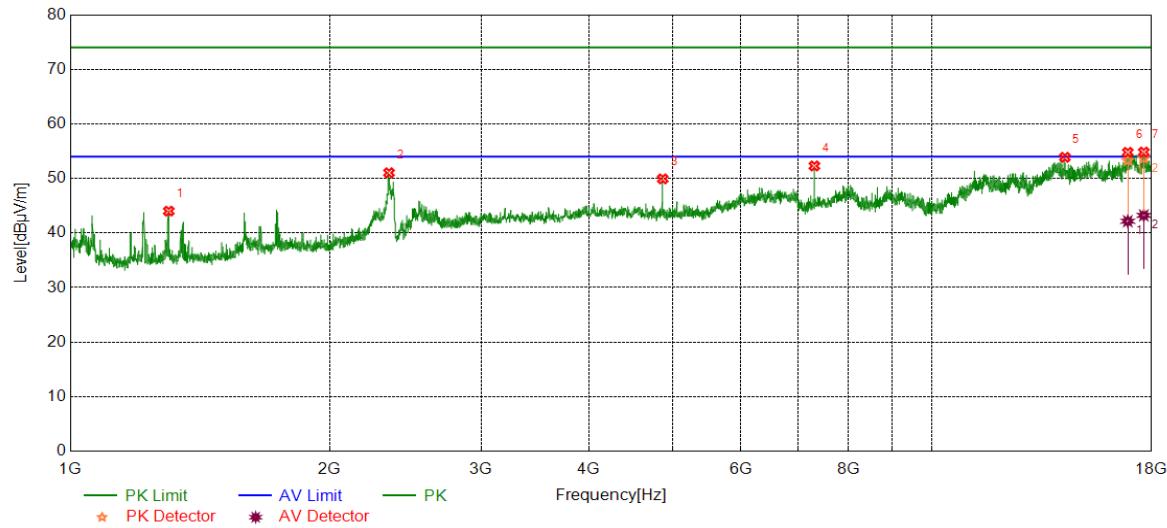
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

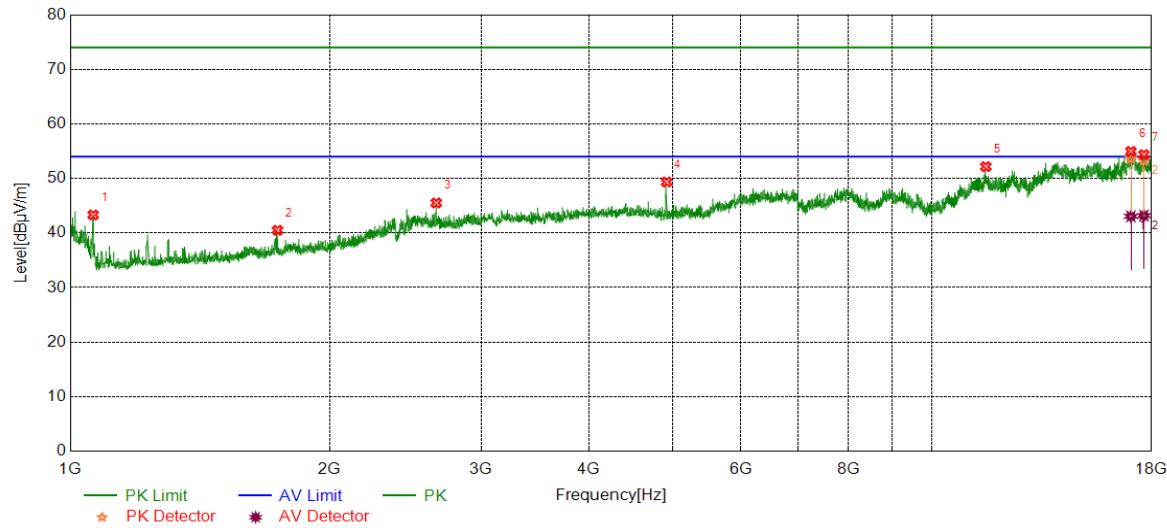
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1062.6876 | 43.74 | 74.00 | -30.26 | peak |
| 2 | 1740.2467 | 40.82 | 74.00 | -33.18 | peak |
| 3 | 4872.8121 | 52.22 | 74.00 | -21.78 | peak |
| 4 | 11561.4269 | 51.40 | 74.00 | -22.60 | peak |
| 5 | 15434.5724 | 53.81 | 74.00 | -20.19 | peak |
| 6 | 17189.8650 | 52.76 | 74.00 | -21.24 | peak |
| | | 43.47 | 54.00 | -10.53 | average |
| 7 | 17652.4421 | 53.48 | 74.00 | -20.52 | peak |
| | | 42.63 | 54.00 | -11.37 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1301.4338 | 44.01 | 74.00 | -29.99 | peak |
| 2 | 2344.4481 | 51.04 | 74.00 | -22.96 | peak |
| 3 | 4872.8121 | 49.92 | 74.00 | -24.08 | peak |
| 4 | 7308.2180 | 52.29 | 74.00 | -21.71 | peak |
| 5 | 14276.8795 | 53.88 | 74.00 | -20.12 | peak |
| 6 | 16887.3146 | 53.30 | 74.00 | -20.70 | peak |
| | | 42.16 | 54.00 | -11.84 | average |
| 7 | 17627.4379 | 53.67 | 74.00 | -20.33 | peak |
| | | 43.23 | 54.00 | -10.77 | average |

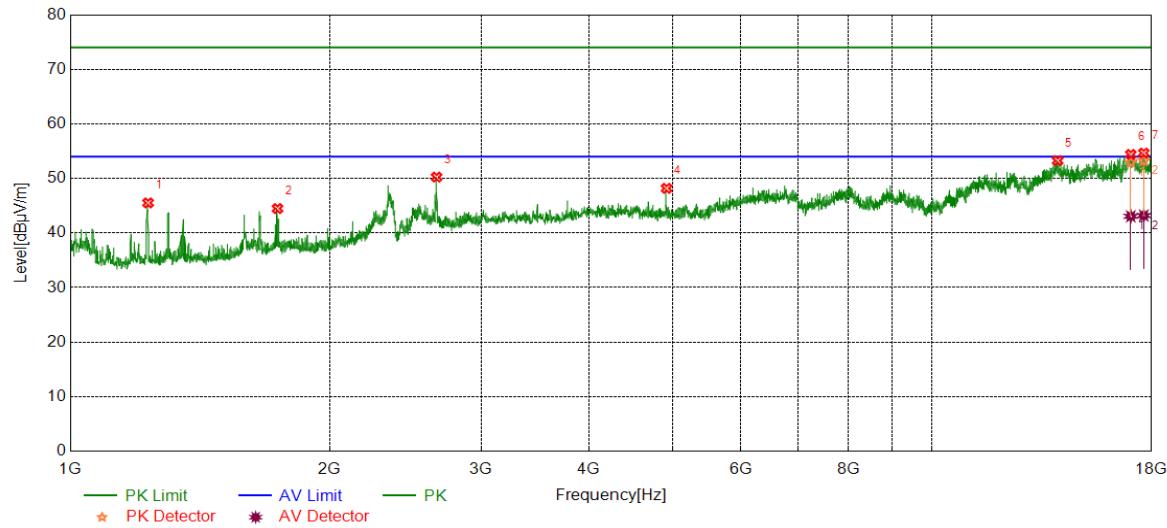
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1063.3545 | 43.31 | 74.00 | -30.69 | peak |
| 2 | 1740.2467 | 40.50 | 74.00 | -33.50 | peak |
| 3 | 2659.8866 | 45.51 | 74.00 | -28.49 | peak |
| 4 | 4922.8205 | 49.35 | 74.00 | -24.65 | peak |
| 5 | 11556.4261 | 52.16 | 74.00 | -21.84 | peak |
| 6 | 17029.8383 | 53.64 | 74.00 | -20.36 | peak |
| | | 43.05 | 54.00 | -10.95 | average |
| 7 | 17634.9392 | 53.30 | 74.00 | -20.70 | peak |
| | | 43.19 | 54.00 | -10.81 | average |

Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

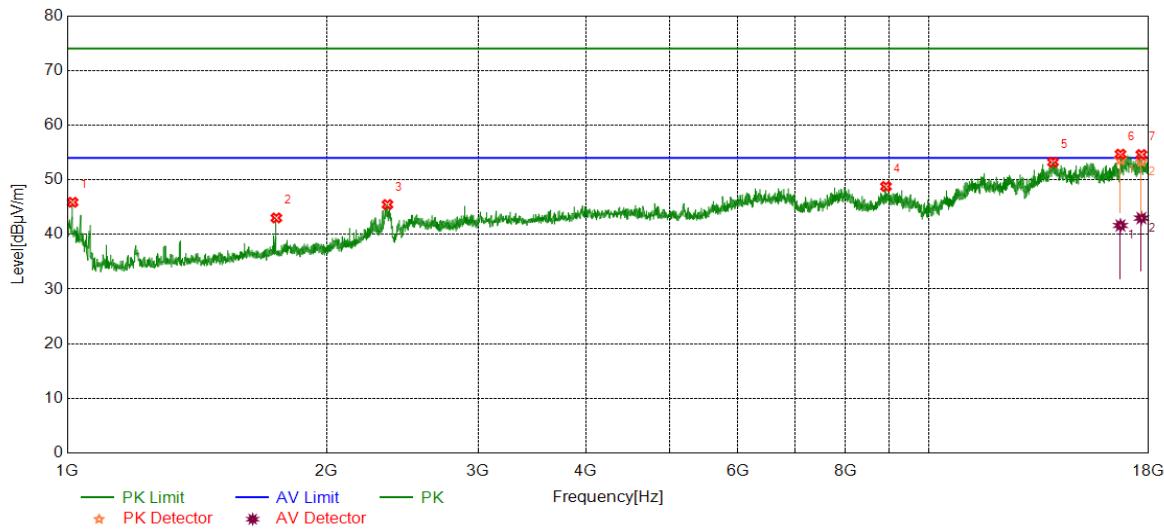
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1231.4105 | 45.52 | 74.00 | -28.48 | peak |
| 2 | 1740.2467 | 44.48 | 74.00 | -29.52 | peak |
| 3 | 2662.5542 | 50.25 | 74.00 | -23.75 | peak |
| 4 | 4922.8205 | 48.19 | 74.00 | -25.81 | peak |
| 5 | 14001.8336 | 53.26 | 74.00 | -20.74 | peak |
| 6 | 17024.8375 | 52.94 | 74.00 | -21.06 | peak |
| | | 43.06 | 54.00 | -10.94 | average |
| 7 | 17627.4379 | 53.25 | 74.00 | -20.75 | peak |
| | | 43.20 | 54.00 | -10.80 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All antennas have been tested, only the worst data record in the report.

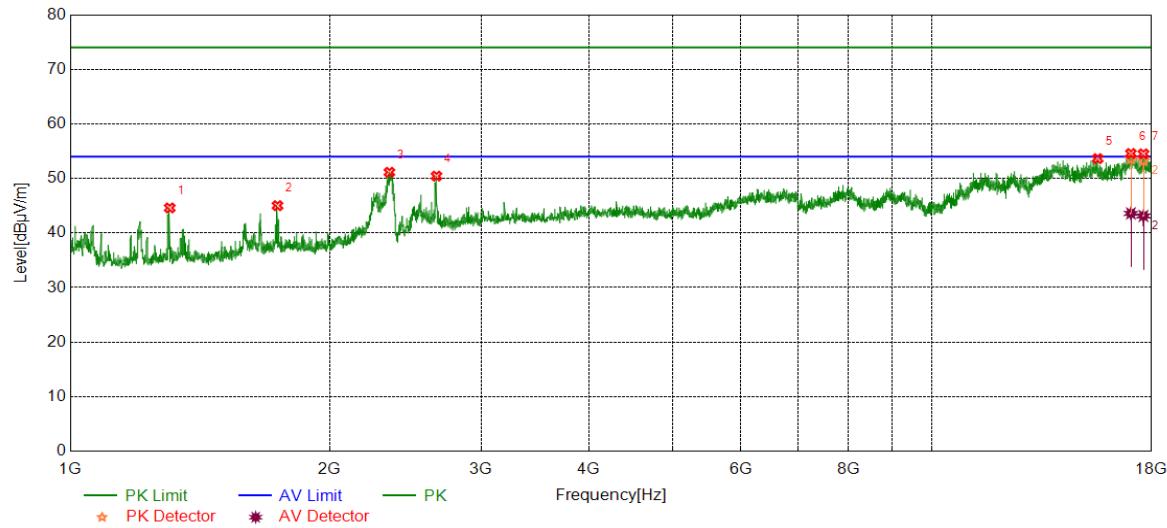
9.2.2. 802.11g SISO MODE

ANTENNA1+2HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1014.6716 | 45.88 | 74.00 | -28.12 | peak |
| 2 | 1748.9163 | 43.02 | 74.00 | -30.98 | peak |
| 3 | 2353.7846 | 45.47 | 74.00 | -28.53 | peak |
| 4 | 8920.9868 | 48.77 | 74.00 | -25.23 | peak |
| 5 | 13939.3232 | 53.23 | 74.00 | -20.77 | peak |
| 6 | 16694.7825 | 53.65 | 74.00 | -20.35 | peak |
| | | 41.64 | 54.00 | -12.36 | average |
| 7 | 17654.9425 | 53.33 | 74.00 | -20.67 | peak |
| | | 42.99 | 54.00 | -11.01 | average |

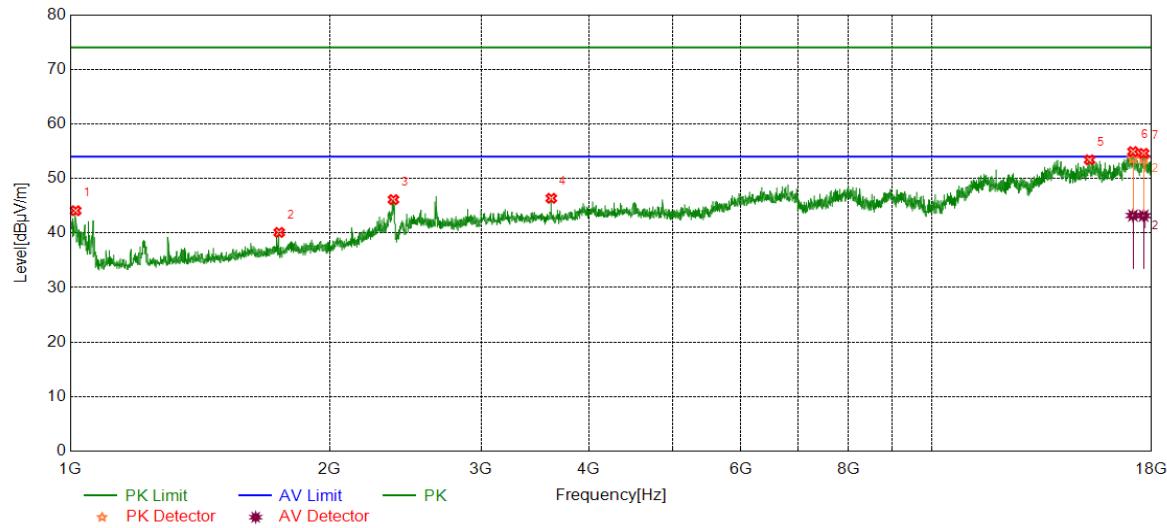
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

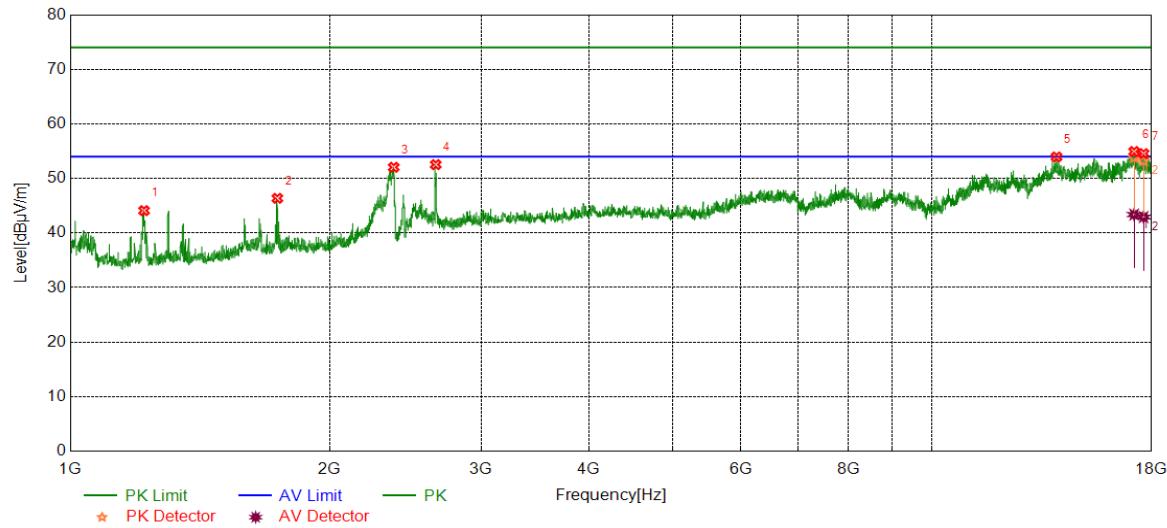
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1304.7683 | 44.60 | 74.00 | --29.40 | peak |
| 2 | 1740.2467 | 45.01 | 74.00 | -28.99 | peak |
| 3 | 2347.1157 | 51.13 | 74.00 | -22.87 | peak |
| 4 | 2661.8873 | 50.43 | 74.00 | -23.57 | peak |
| 5 | 15582.0970 | 53.64 | 74.00 | -20.36 | peak |
| 6 | 17029.8383 | 53.55 | 74.00 | -20.45 | peak |
| | | 43.59 | 54.00 | -10.41 | average |
| 7 | 17612.4354 | 53.23 | 74.00 | -20.77 | peak |
| | | 43.13 | 54.00 | -10.87 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1014.6716 | 44.09 | 74.00 | -29.91 | peak |
| 2 | 1748.2494 | 40.10 | 74.00 | -33.90 | peak |
| 3 | 2372.4575 | 46.12 | 74.00 | -27.88 | peak |
| 4 | 3617.6029 | 46.36 | 74.00 | -27.64 | peak |
| 5 | 15249.5416 | 53.41 | 74.00 | -20.59 | peak |
| 6 | 17124.8541 | 53.63 | 74.00 | -20.37 | peak |
| | | 43.21 | 54.00 | -10.79 | average |
| 7 | 17622.4371 | 53.56 | 74.00 | -20.44 | peak |
| | | 43.17 | 54.00 | -10.83 | average |

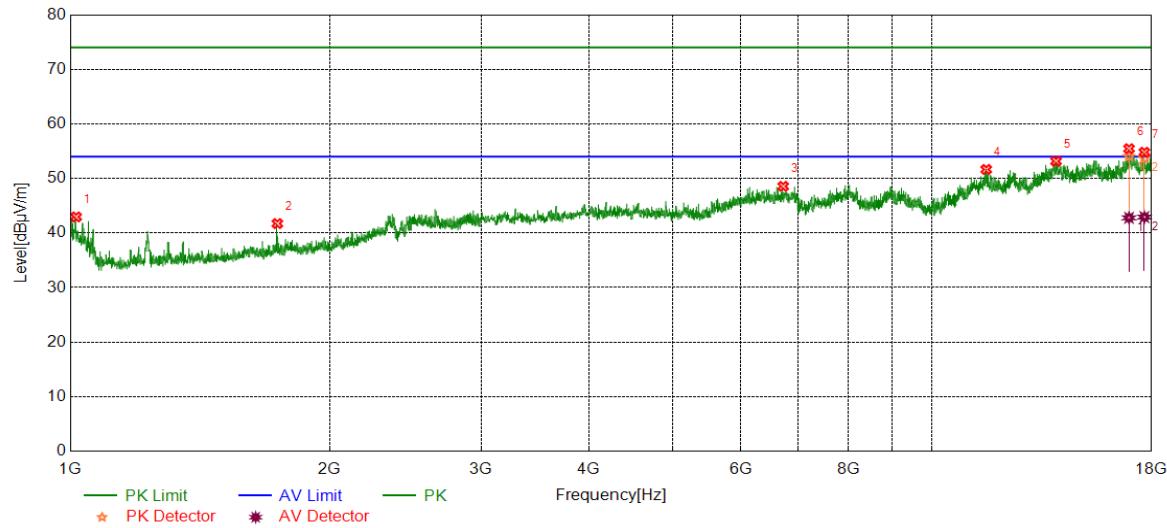
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1218.0727 | 44.10 | 74.00 | -29.90 | peak |
| 2 | 1739.5799 | 46.36 | 74.00 | -27.64 | peak |
| 3 | 2374.4582 | 52.05 | 74.00 | -21.95 | peak |
| 4 | 2656.5522 | 52.54 | 74.00 | -21.46 | peak |
| 5 | 1218.0727 | 44.10 | 74.00 | -29.90 | peak |
| 6 | 17177.3629 | 53.82 | 74.00 | -20.18 | peak |
| | | 43.38 | 54.00 | -10.62 | average |
| 7 | 17619.9367 | 53.19 | 74.00 | -20.81 | peak |
| | | 42.93 | 54.00 | -11.07 | average |

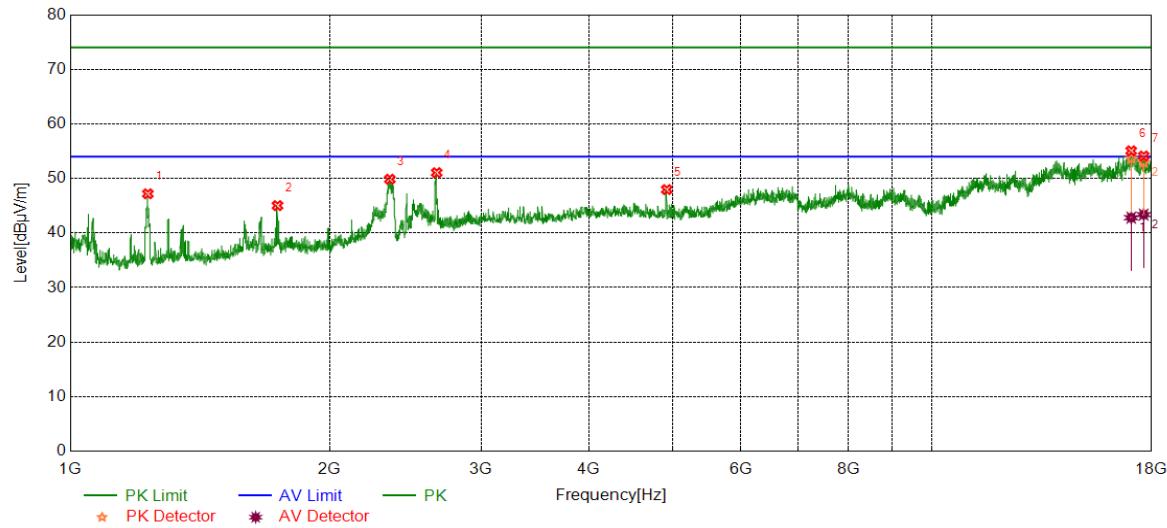
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1016.0053 | 42.95 | 74.00 | -31.05 | peak |
| 2 | 1739.5799 | 41.73 | 74.00 | -32.27 | peak |
| 3 | 6723.1205 | 48.55 | 74.00 | -25.45 | peak |
| 4 | 11568.9282 | 51.65 | 74.00 | -22.35 | peak |
| 5 | 13941.8236 | 53.16 | 74.00 | -20.84 | peak |
| 6 | 16944.8241 | 54.06 | 74.00 | -19.94 | peak |
| | | 42.78 | 54.00 | -11.22 | average |
| 7 | 17654.9425 | 53.74 | 74.00 | -20.26 | peak |
| | | 42.92 | 54.00 | -11.08 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

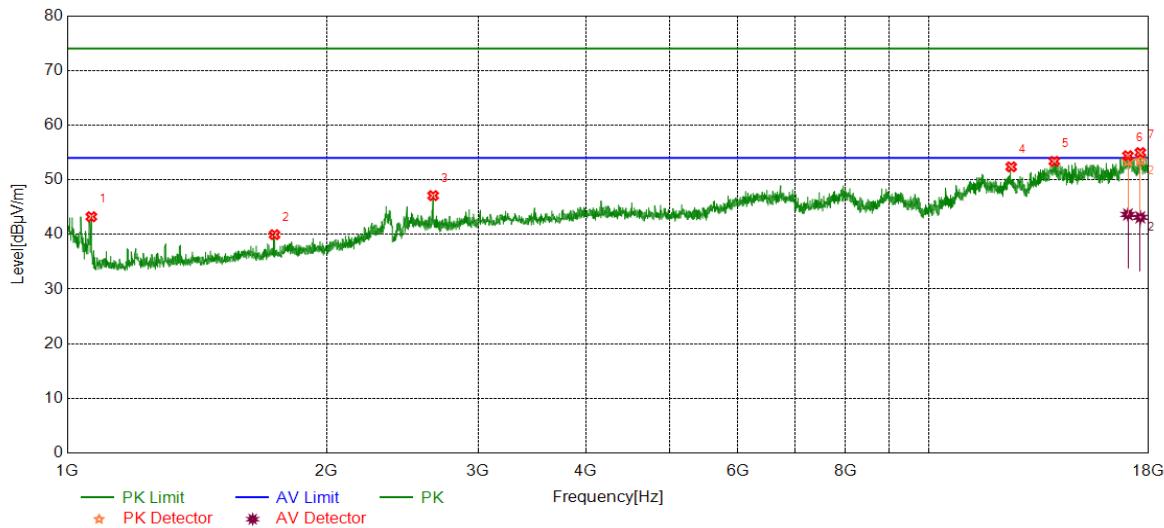
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1230.7436 | 47.19 | 74.00 | -26.81 | peak |
| 2 | 1740.2467 | 45.02 | 74.00 | -28.98 | peak |
| 3 | 2349.7833 | 49.86 | 74.00 | -24.14 | peak |
| 4 | 2663.2211 | 51.06 | 74.00 | -22.94 | peak |
| 5 | 4925.3209 | 47.96 | 74.00 | -26.04 | peak |
| 6 | 17044.8408 | 53.61 | 74.00 | -20.39 | peak |
| | | 42.81 | 54.00 | -11.19 | average |
| 7 | 17622.4371 | 52.91 | 74.00 | -21.09 | peak |
| | | 43.37 | 54.00 | -10.63 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

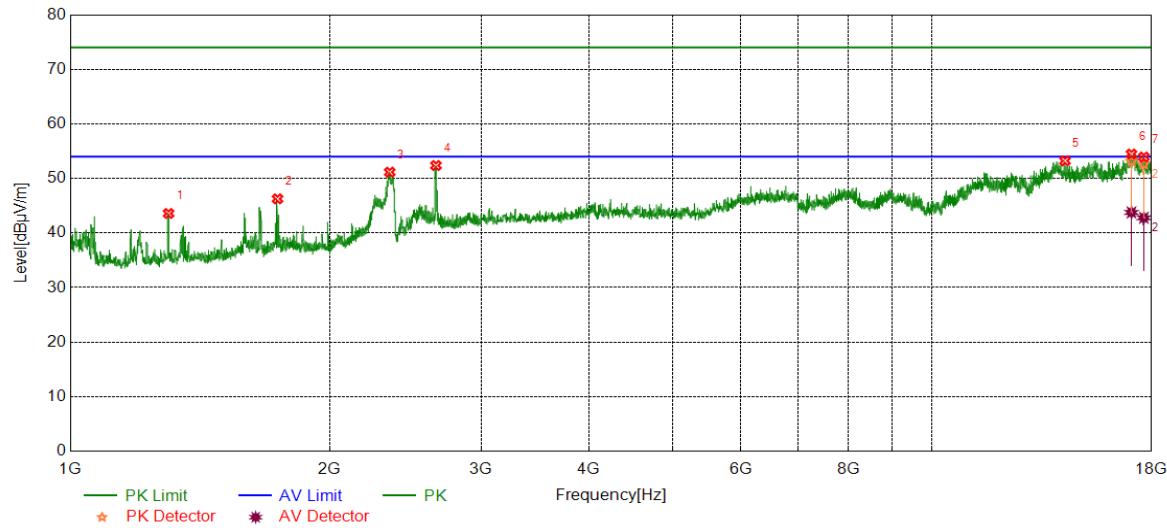
Note: All antennas have been tested, only the worst data record in the report.

9.2.3. 802.11n HT20 MIMO MODE

ANTENNA1+2HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1066.6889 | 43.24 | 74.00 | -30.76 | peak |
| 2 | 1740.2467 | 39.96 | 74.00 | -34.04 | peak |
| 3 | 2659.2197 | 47.10 | 74.00 | -26.90 | peak |
| 4 | 12466.5778 | 52.37 | 74.00 | -21.63 | peak |
| 5 | 13989.3316 | 53.38 | 74.00 | -20.62 | peak |
| 6 | 17029.8383 | 53.39 | 74.00 | -20.61 | peak |
| | | 43.65 | 54.00 | -10.35 | average |
| 7 | 17604.9342 | 53.53 | 74.00 | -20.47 | peak |
| | | 43.13 | 54.00 | -10.87 | average |

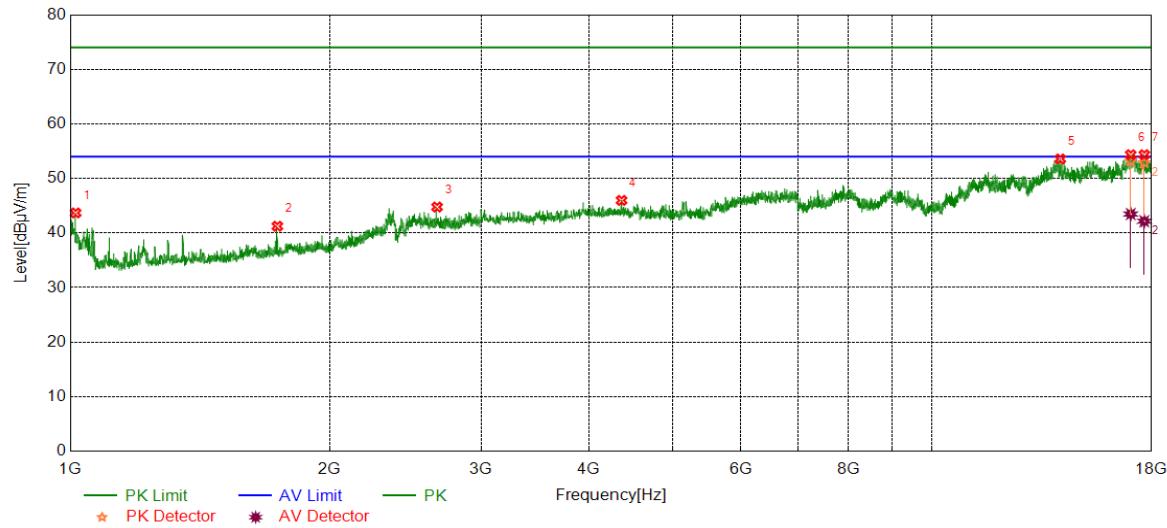
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1300.7669 | 43.58 | 74.00 | -30.42 | peak |
| 2 | 1740.2467 | 46.26 | 74.00 | -27.74 | peak |
| 3 | 2349.1164 | 51.15 | 74.00 | -22.85 | peak |
| 4 | 2657.8860 | 52.37 | 74.00 | -21.63 | peak |
| 5 | 14279.3799 | 53.22 | 74.00 | -20.78 | peak |
| 6 | 17054.8425 | 53.12 | 74.00 | -20.88 | peak |
| | | 43.77 | 54.00 | -10.23 | average |
| 7 | 17629.9383 | 52.64 | 74.00 | -21.36 | peak |
| | | 42.79 | 54.00 | -11.21 | average |

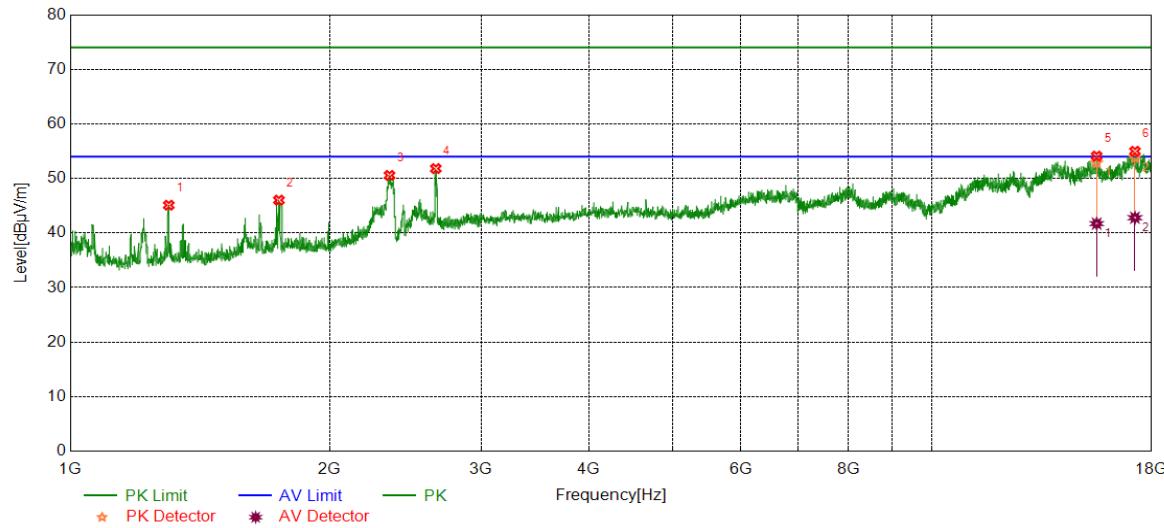
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1014.6716 | 43.68 | 74.00 | -30.32 | peak |
| 2 | 1739.5799 | 41.24 | 74.00 | -32.76 | peak |
| 3 | 2665.8886 | 44.76 | 74.00 | -29.24 | peak |
| 4 | 4365.2275 | 45.98 | 74.00 | -28.02 | peak |
| 5 | 14099.3499 | 53.58 | 74.00 | -20.42 | peak |
| 6 | 17022.3371 | 53.15 | 74.00 | -20.85 | peak |
| | | 43.47 | 54.00 | -10.53 | average |
| 7 | 17649.9417 | 52.89 | 74.00 | -21.11 | peak |
| | | 42.16 | 54.00 | -11.84 | average |

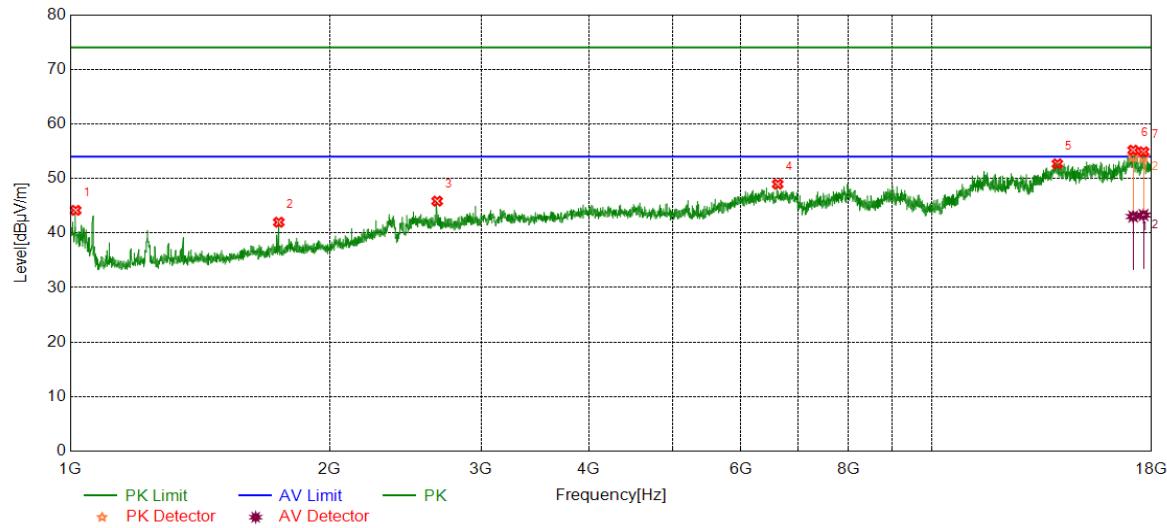
Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1301.4338 | 45.10 | 74.00 | -28.90 | peak |
| 2 | 1746.9156 | 46.02 | 74.00 | -27.98 | peak |
| 3 | 2347.7826 | 50.56 | 74.00 | -23.44 | peak |
| 4 | 2657.2191 | 51.81 | 74.00 | -22.19 | peak |
| 5 | 15542.0903 | 52.86 | 74.00 | -21.14 | peak |
| | | 41.72 | 54.00 | -12.28 | average |
| 6 | 17214.8691 | 53.82 | 74.00 | -20.18 | peak |
| | | 42.80 | 54.00 | -11.20 | average |

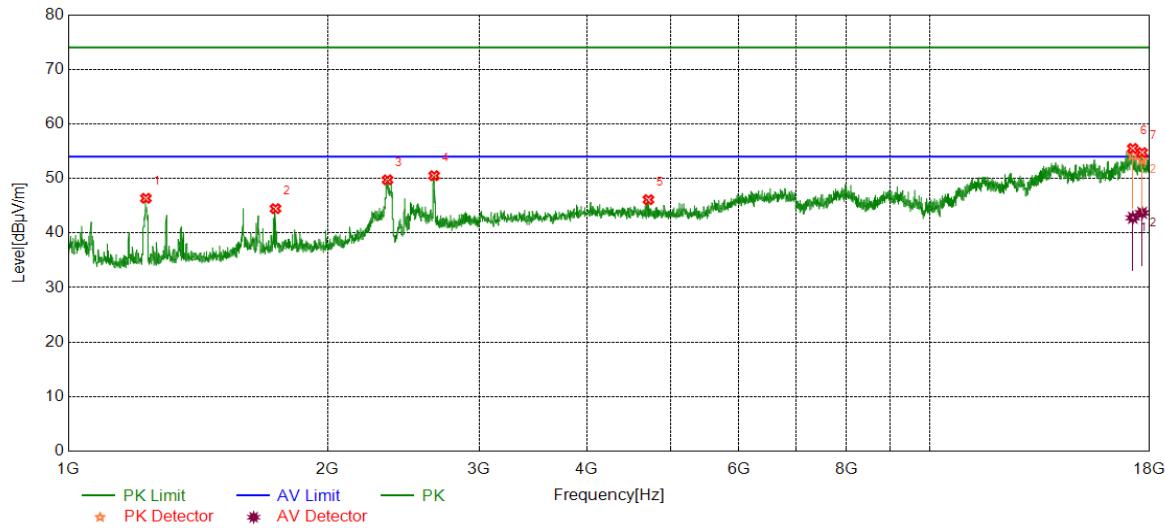
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|------------------|-----------------|
| 1 | 1014.6716 | 44.16 | 74.00 | -29.84 | peak |
| 2 | 1746.2488 | 41.97 | 74.00 | -32.03 | peak |
| 3 | 2666.5555 | 45.84 | 74.00 | -28.16 | peak |
| 4 | 6625.6043 | 48.96 | 74.00 | -25.04 | peak |
| 5 | 13991.8320 | 52.68 | 74.00 | -21.32 | peak |
| 6 | 17132.3554 | 53.94 43.02 | 74.00 54.00 | -20.06 -10.98 | peak average |
| 7 | 17617.4362 | 53.89 43.29 | 74.00 54.00 | -20.11 -10.71 | peak average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

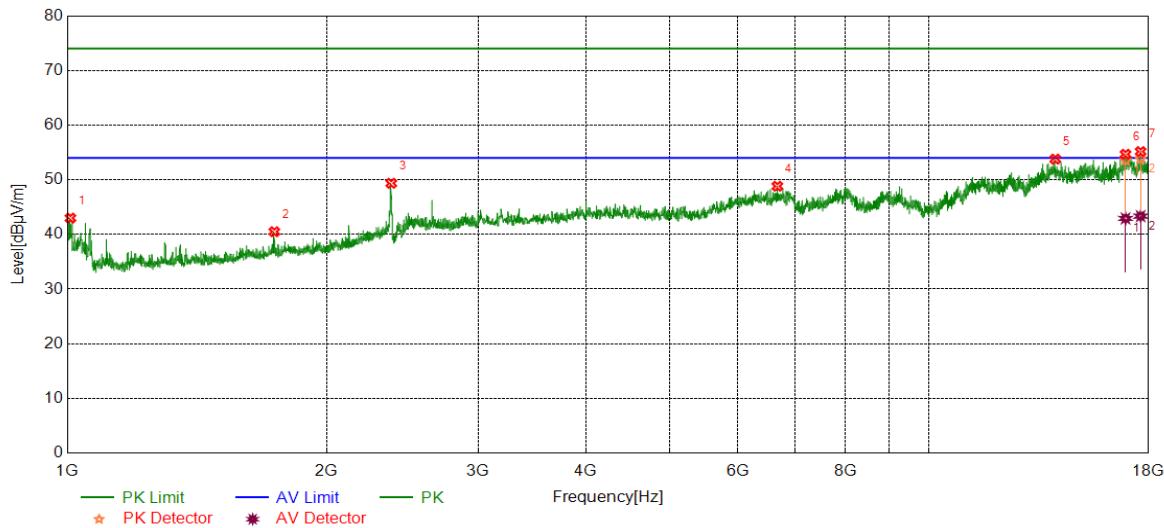
HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1230.7436 | 46.36 | 74.00 | -27.64 | peak |
| 2 | 1740.2467 | 44.46 | 74.00 | -29.54 | peak |
| 3 | 2347.7826 | 49.75 | 74.00 | -24.25 | peak |
| 4 | 2659.2197 | 50.50 | 74.00 | -23.50 | peak |
| 5 | 4715.2859 | 46.11 | 74.00 | -27.89 | peak |
| 6 | 17207.3679 | 54.26 | 74.00 | -19.74 | peak |
| | | 42.79 | 54.00 | -11.21 | average |
| 7 | 17642.4404 | 53.44 | 74.00 | -20.56 | peak |
| | | 43.70 | 54.00 | -10.30 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All antennas have been tested, only the worst data record in the report.

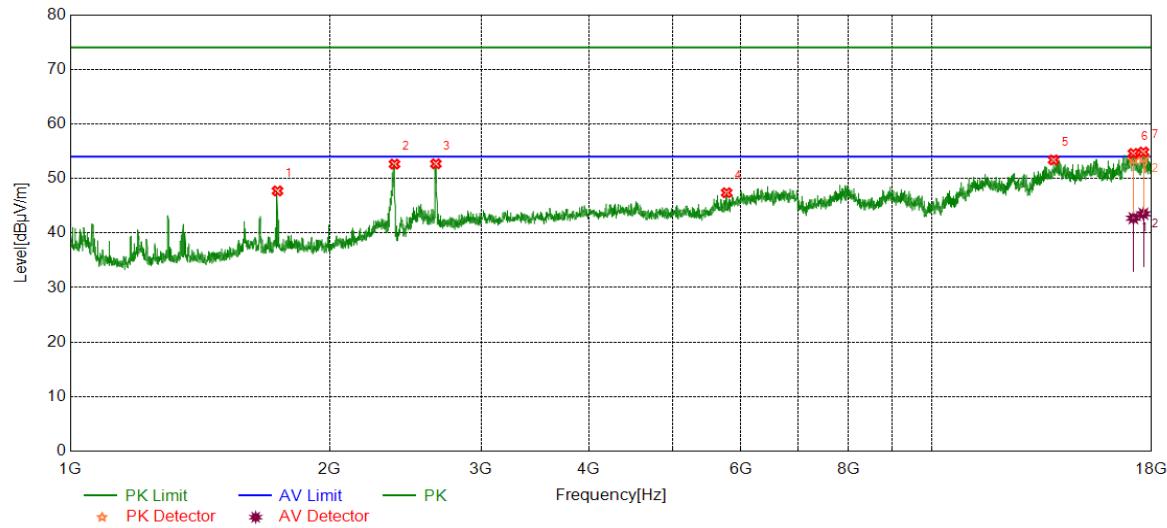
9.2.4. 802.11n HT40 MIMO MODE

ANTENNA1+2HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 1008.6696 | 42.99 | 74.00 | -31.01 | peak |
| 2 | 1739.5799 | 40.50 | 74.00 | -33.50 | peak |
| 3 | 2377.7926 | 49.36 | 74.00 | -24.64 | peak |
| 4 | 6673.1122 | 48.82 | 74.00 | -25.18 | peak |
| 5 | 14024.3374 | 53.78 | 74.00 | -20.22 | peak |
| 6 | 16922.3204 | 53.53 | 74.00 | -20.47 | peak |
| | | 42.93 | 54.00 | -11.07 | average |
| 7 | 17619.9367 | 53.85 | 74.00 | -20.15 | peak |
| | | 43.35 | 54.00 | -10.65 | average |

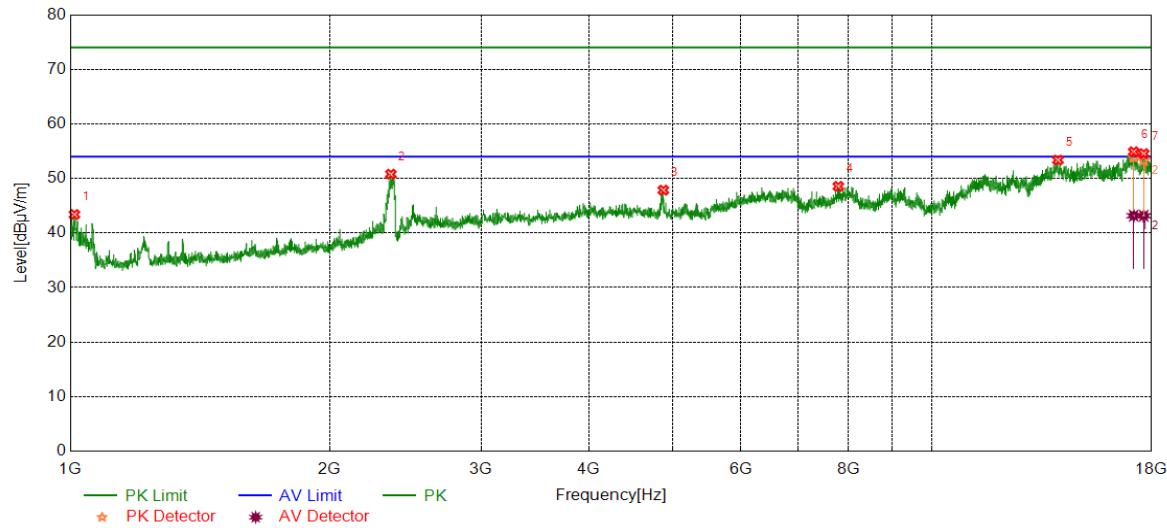
Note:

1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

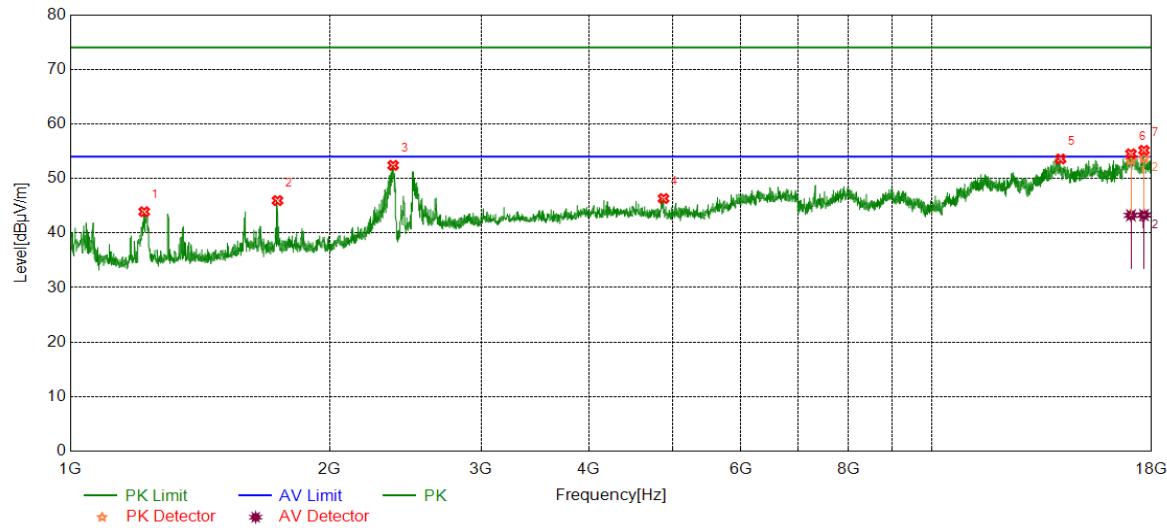
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1740.2467 | 47.71 | 74.00 | -26.29 | peak |
| 2 | 2379.1264 | 52.63 | 74.00 | -21.37 | peak |
| 3 | 2657.2191 | 52.69 | 74.00 | -21.31 | peak |
| 4 | 5780.4634 | 47.38 | 74.00 | -26.62 | peak |
| 5 | 13851.8086 | 53.39 | 74.00 | -20.61 | peak |
| 6 | 17142.3571 | 53.44 | 74.00 | -20.56 | peak |
| | | 42.72 | 54.00 | -11.28 | average |
| 7 | 17609.9350 | 53.64 | 74.00 | -20.36 | peak |
| | | 43.53 | 54.00 | -10.47 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

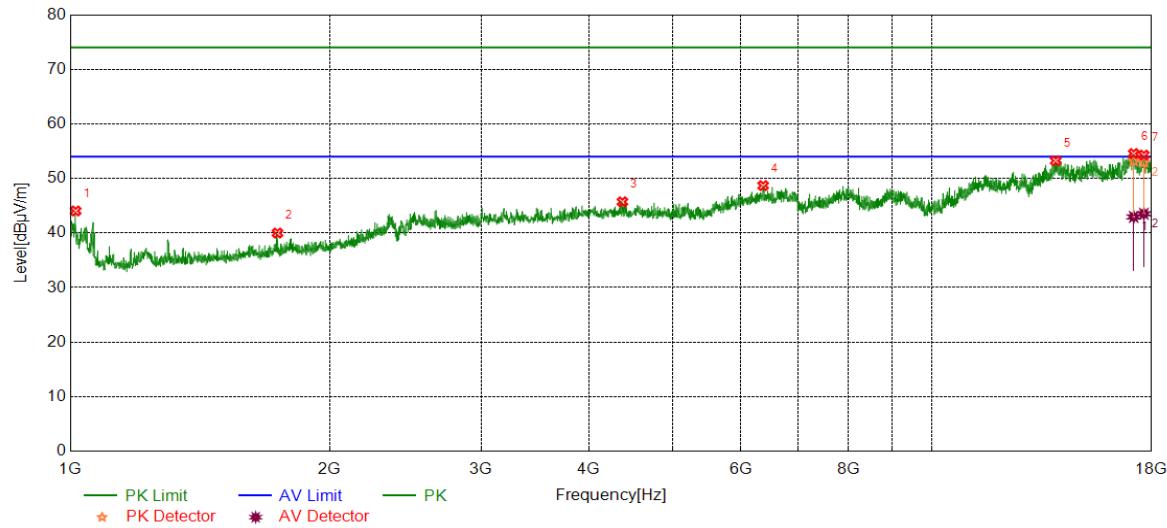
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1011.3371 | 43.39 | 74.00 | -30.61 | peak |
| 2 | 2356.4522 | 50.78 | 74.00 | -23.22 | peak |
| 3 | 4880.3134 | 47.85 | 74.00 | -26.15 | peak |
| 4 | 7790.7985 | 48.55 | 74.00 | -25.45 | peak |
| 5 | 14014.3357 | 53.37 | 74.00 | -20.63 | peak |
| 6 | 17157.3596 | 53.87 | 74.00 | -20.13 | peak |
| | | 43.17 | 54.00 | -10.83 | average |
| 7 | 17624.9375 | 53.28 | 74.00 | -20.72 | peak |
| | | 43.16 | 54.00 | -10.84 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

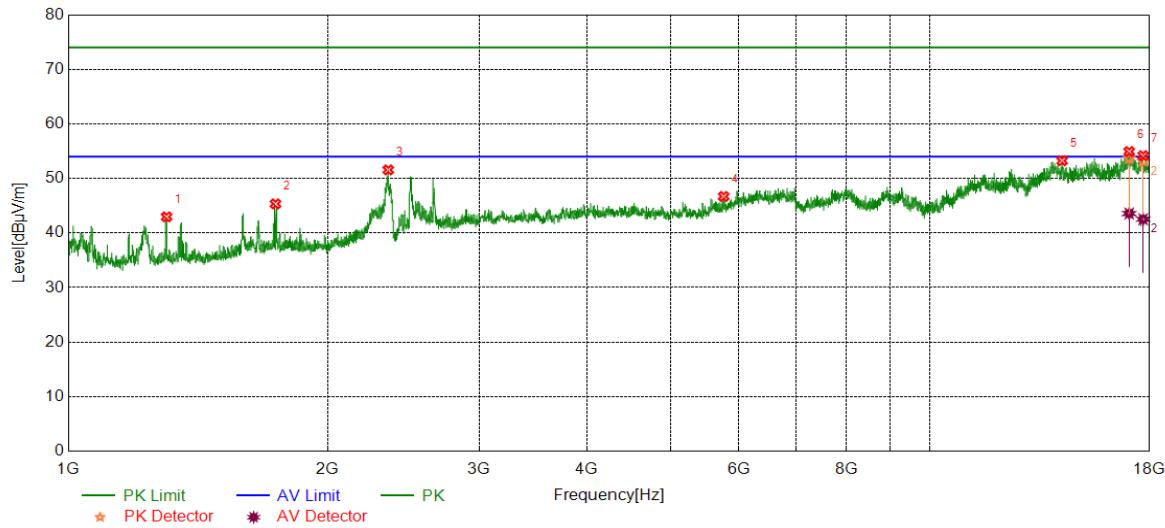
| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1218.7396 | 43.90 | 74.00 | -30.10 | peak |
| 2 | 1740.2467 | 45.94 | 74.00 | -28.06 | peak |
| 3 | 2370.4568 | 52.40 | 74.00 | -21.60 | peak |
| 4 | 4882.8138 | 46.32 | 74.00 | -27.68 | peak |
| 5 | 14111.8520 | 53.57 | 74.00 | -20.43 | peak |
| 6 | 17034.8391 | 53.34 | 74.00 | -20.66 | peak |
| | | 43.24 | 54.00 | -10.76 | average |
| 7 | 17634.9392 | 53.73 | 74.00 | -20.27 | peak |
| | | 43.30 | 54.00 | -10.70 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|---------|
| 1 | 1014.6716 | 44.04 | 74.00 | -29.96 | peak |
| 2 | 1740.2467 | 39.99 | 74.00 | -34.01 | peak |
| 3 | 4375.2292 | 45.72 | 74.00 | -28.28 | peak |
| 4 | 6373.0622 | 48.69 | 74.00 | -25.31 | peak |
| 5 | 13929.3216 | 53.24 | 74.00 | -20.76 | peak |
| 6 | 17157.3596 | 53.20 | 74.00 | -20.80 | peak |
| | | 42.95 | 54.00 | -11.05 | average |
| 7 | 17632.4387 | 52.99 | 74.00 | -21.01 | peak |
| | | 43.53 | 54.00 | -10.47 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|---------|
| 1 | 1300.7669 | 42.96 | 74.00 | -31.04 | peak |
| 2 | 1740.2467 | 45.34 | 74.00 | -28.66 | peak |
| 3 | 2352.4508 | 51.57 | 74.00 | -22.43 | peak |
| 4 | 5765.4609 | 46.70 | 74.00 | -27.30 | peak |
| 5 | 14246.8745 | 53.24 | 74.00 | -20.76 | peak |
| 6 | 17042.3404 | 53.62 | 74.00 | -20.38 | peak |
| | | 43.57 | 54.00 | -10.43 | average |
| 7 | 17689.9483 | 53.12 | 74.00 | -20.88 | peak |
| | | 42.52 | 54.00 | -11.48 | average |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. AVG: VBW=10 Hz.
 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

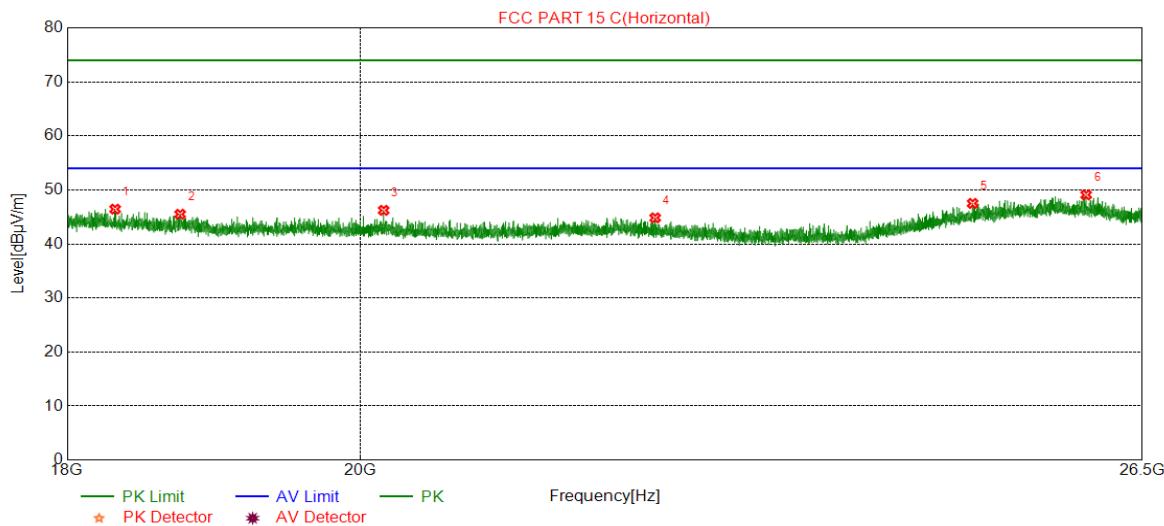
Note: All antennas have been tested, only the worst data record in the report.

9.3. SPURIOUS EMISSIONS (18~26GHz)

9.3.1. 802.11g MODE(THE WORST CASE)

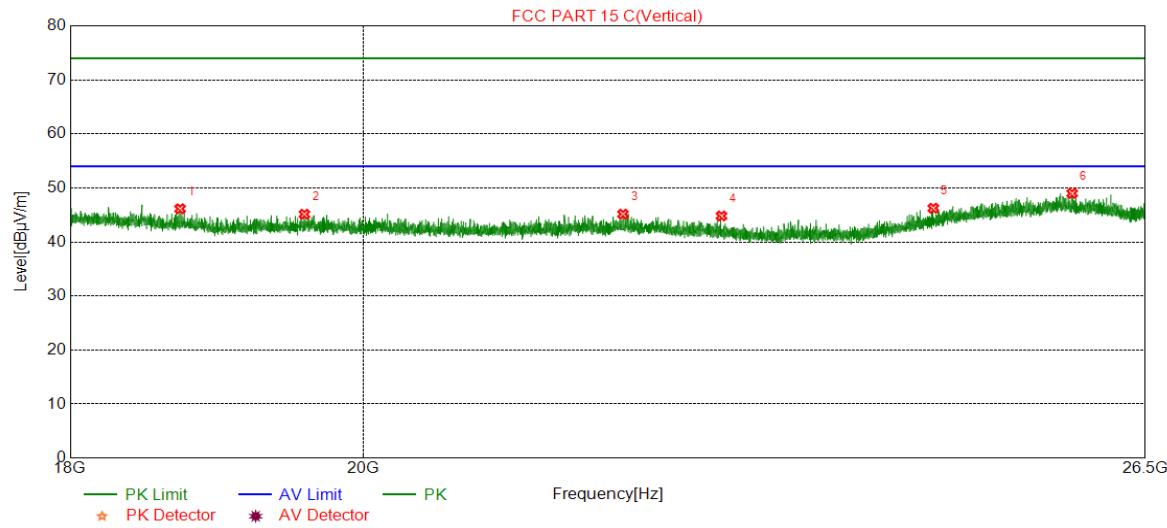
ANTENNA1+2

SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|--------|
| 1 | 18312.8313 | 46.44 | 74.00 | -27.56 | peak |
| 2 | 18746.3746 | 45.50 | 74.00 | -28.50 | peak |
| 3 | 20171.1171 | 46.22 | 74.00 | -27.78 | peak |
| 4 | 22241.0741 | 44.83 | 74.00 | -29.17 | peak |
| 5 | 24933.2933 | 47.50 | 74.00 | -26.50 | peak |
| 6 | 25972.0972 | 49.08 | 74.00 | -24.92 | peak |

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Peak: Peak detector.
3. AVG: VBW=10 Hz.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------|-------------------|----------------|--------|
| 1 | 18725.9726 | 46.13 | 74.00 | -27.87 | peak |
| 2 | 19582.8583 | 45.13 | 74.00 | -28.87 | peak |
| 3 | 21961.3961 | 45.15 | 74.00 | -28.85 | peak |
| 4 | 22753.6754 | 44.81 | 74.00 | -29.19 | peak |
| 5 | 24555.8556 | 46.24 | 74.00 | -27.76 | peak |
| 6 | 25813.9814 | 48.98 | 74.00 | -25.02 | peak |

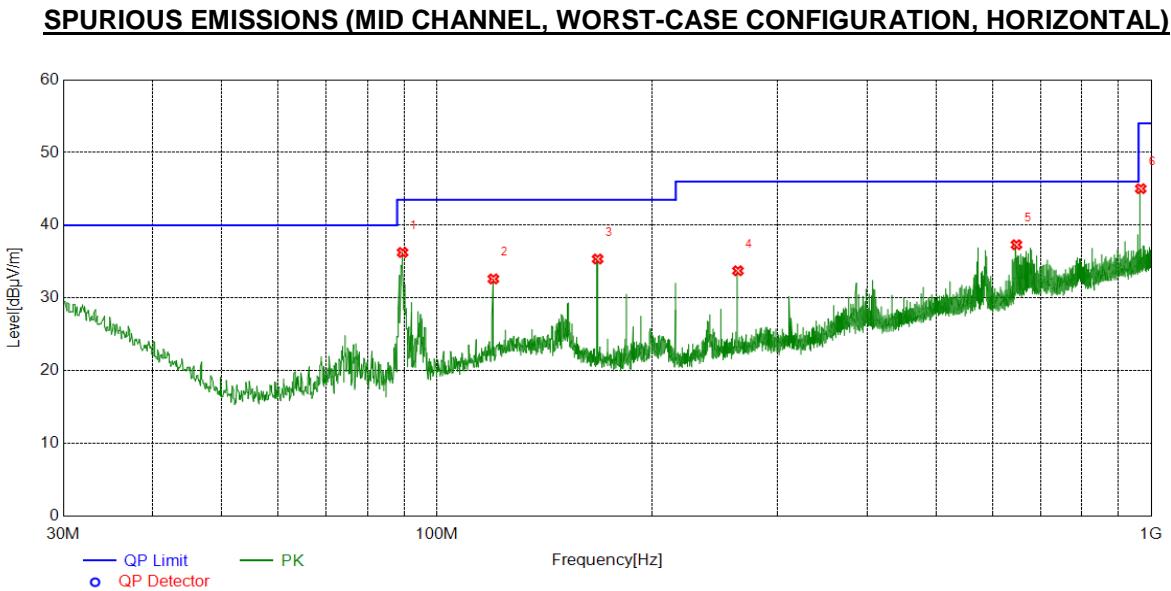
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

Note: All antennas and test modes have been tested, only the worst data record in the report.

9.4. SPURIOUS EMISSIONS (0.03 ~ 1 GHz)

9.4.1. 802.11g SISO MODE(THE WORST CASE)

ANTENNA1+2



| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|--------|
| 1 | 89.5640 | 36.26 | 43.50 | -7.24 | QP |
| 2 | 120.0250 | 32.62 | 43.50 | -10.88 | QP |
| 3 | 167.9478 | 35.36 | 43.50 | -8.14 | QP |
| 4 | 263.9874 | 33.74 | 46.00 | -12.26 | QP |
| 5 | 647.7578 | 37.32 | 46.00 | -8.68 | QP |
| 6 | 966.8227 | 45.03 | 54.00 | -8.97 | QP |

Note: 1. Result Level = Read Level + Correct Factor.
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

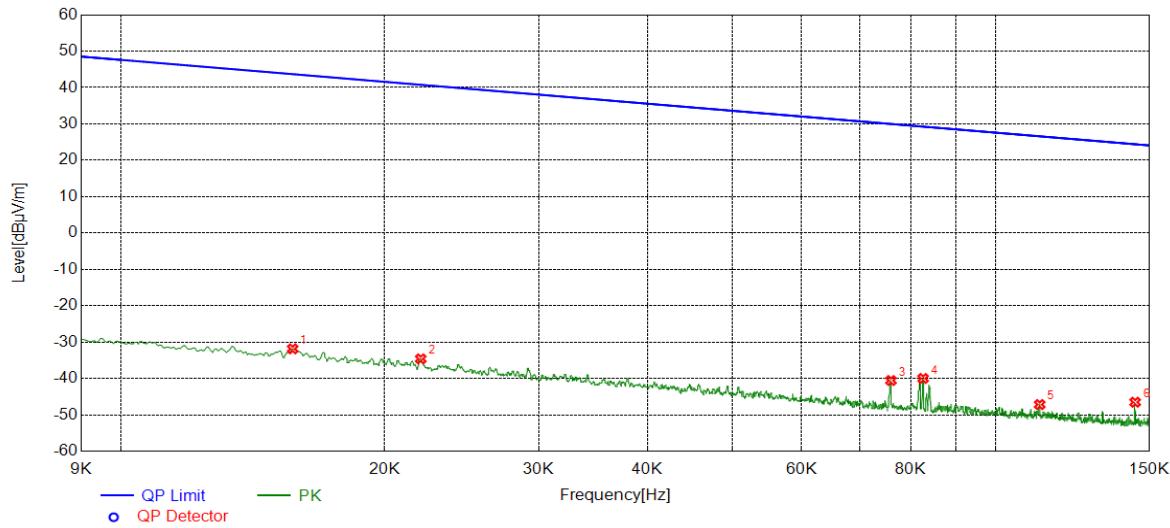
9.5. SPURIOUS EMISSIONS BELOW 30M

9.5.1. 802.11g SISO MODE(THE WORST CASE)

ANTENNA1+2

SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

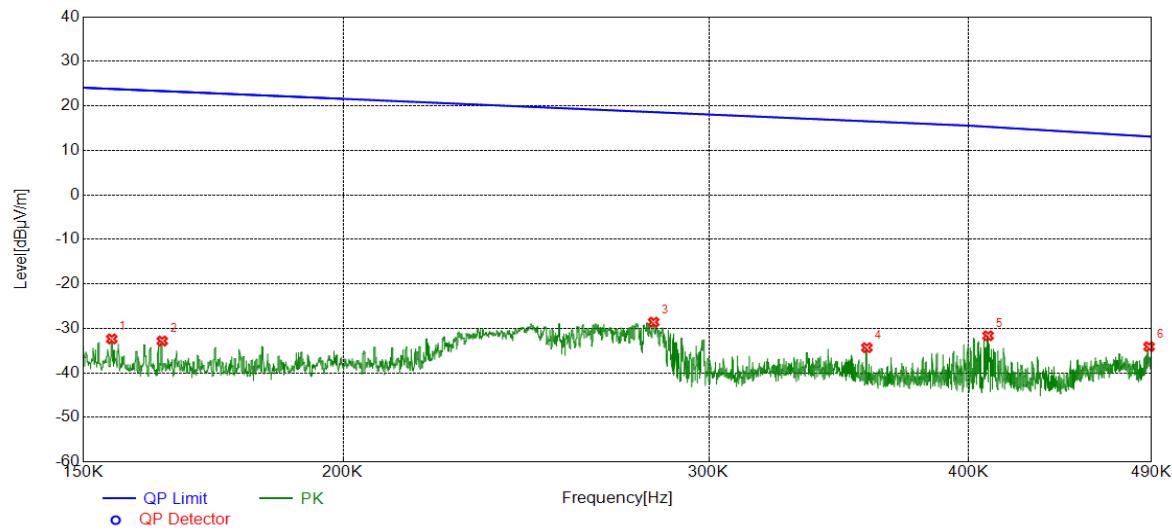
0.09~150kHz



| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|--------|
| 1 | 0.0157 | -31.85 | 43.67 | -75.52 | peak |
| 2 | 0.0220 | -34.61 | 40.74 | -75.35 | peak |
| 3 | 0.0759 | -40.56 | 30.00 | -70.56 | peak |
| 4 | 0.0826 | -40.00 | 29.26 | -69.26 | peak |
| 5 | 0.1123 | -47.17 | 26.60 | -73.77 | peak |
| 6 | 0.1444 | -46.53 | 24.41 | -70.94 | peak |

Note: 1. Measurement = Reading Level + Correct Factor.

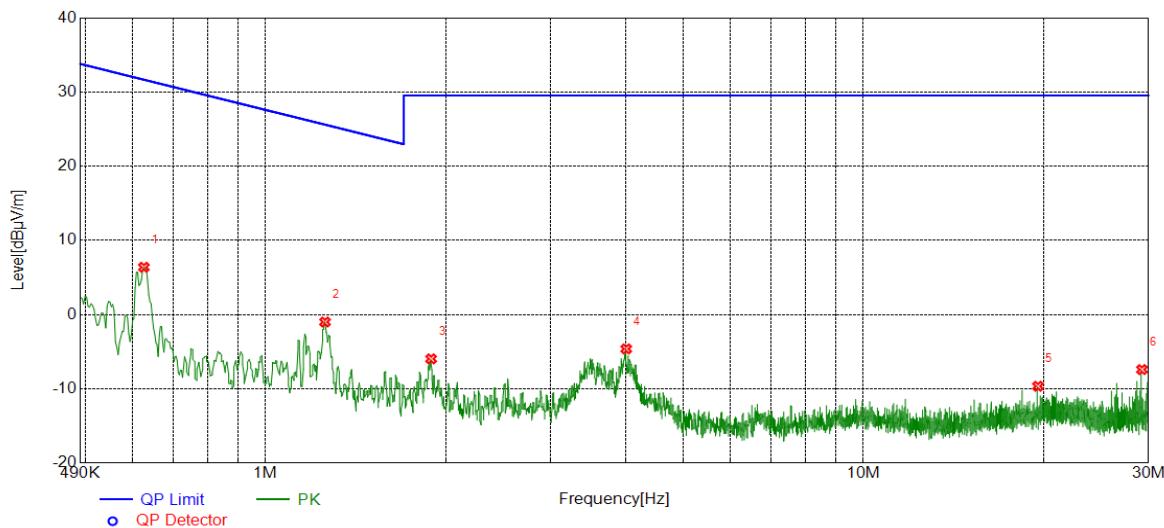
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

150kHz ~ 490kHz


| No. | Frequency (MHz) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|-----------------|----------------|-------------|--------|
| 1 | 0.1548 | -32.37 | 23.81 | -56.18 | peak |
| 2 | 0.1637 | -32.83 | 23.33 | -56.16 | peak |
| 3 | 0.2822 | -28.59 | 18.59 | -47.18 | peak |
| 4 | 0.3574 | -34.33 | 16.54 | -50.87 | peak |
| 5 | 0.4088 | -31.65 | 15.29 | -46.94 | peak |
| 6 | 0.4886 | -34.10 | 13.11 | -47.21 | peak |

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

490kHz ~ 30MHz

| No. | Frequency (MHz) | Result (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) | Remark |
|-----|--------------------|--------------------------|-------------------------|----------------|--------|
| 1 | 0.6258 | 6.38 | 31.67 | -25.29 | peak |
| 2 | 1.2573 | -1.00 | 25.62 | -26.62 | peak |
| 3 | 1.8919 | -5.97 | 29.54 | -35.51 | peak |
| 4 | 4.0109 | -4.63 | 29.54 | -34.17 | peak |
| 5 | 19.5878 | -9.66 | 29.54 | -39.20 | peak |
| 6 | 29.2386 | -7.41 | 29.54 | -36.95 | peak |

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

Note: All constructions and test modes have been tested, only the worst data record in the report.

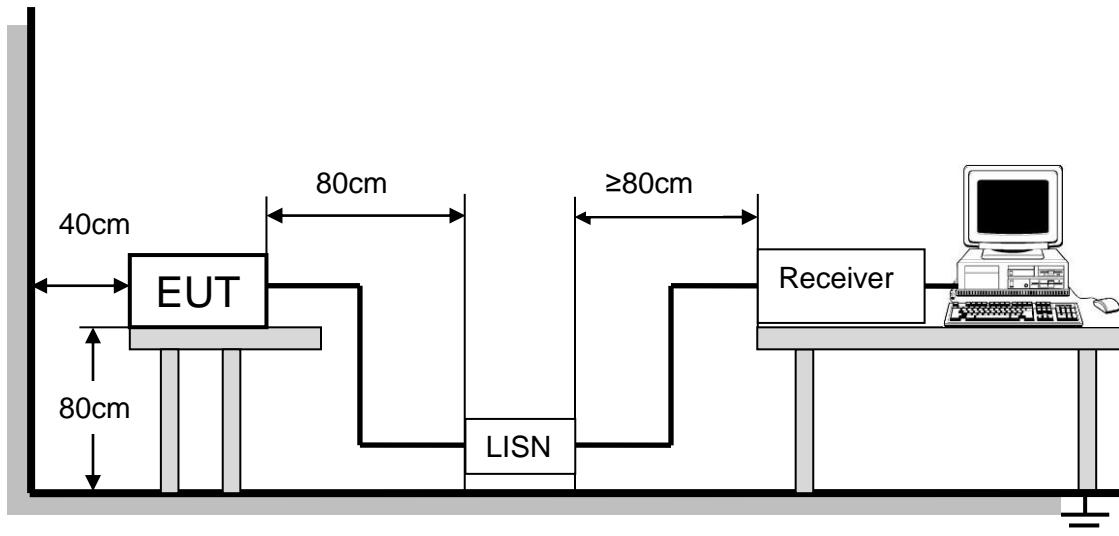
10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

| FREQUENCY (MHz) | Quasi-peak | Average |
|-----------------|------------|-----------|
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * |
| 0.50 -5.0 | 56.00 | 46.00 |
| 5.0 -30.0 | 60.00 | 50.00 |

TEST SETUP AND PROCEDURE

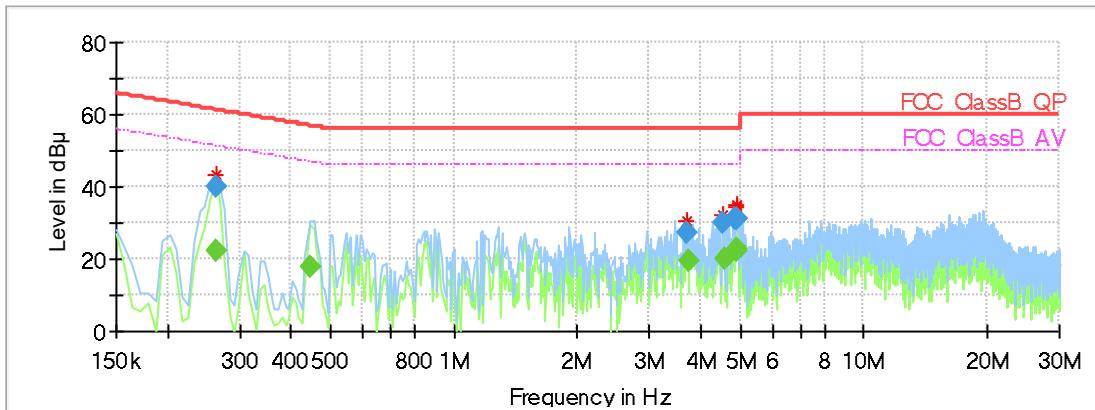


The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 7 and 13 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

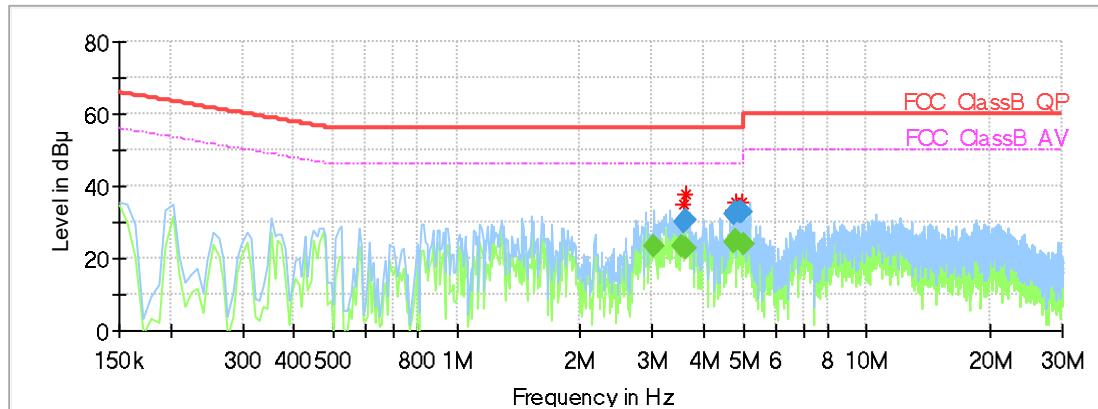
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

| | | | |
|---------------------|--------|-------------------|---------|
| Temperature | 20°C | Relative Humidity | 56% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 5.0V |

TEST RESULTS**10.1. 802.11g SISO MODE(THE WORST CASE)**ANTENNA1+2LINE N RESULTS (MID CHANNEL, WORST-CASE CONFIGURATION)**Final_Result**

| Frequency (MHz) | QuasiPeak (dB μ V) | Average (dB μ V) | Limit (dB μ V) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------------|----------------------|--------------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.261938 | --- | 22.25 | 51.37 | 29.12 | 1000.0 | 9.000 | N | OFF | 9.6 |
| 0.261938 | 39.79 | --- | 61.37 | 21.58 | 1000.0 | 9.000 | N | OFF | 9.6 |
| 0.448500 | --- | 18.02 | 46.90 | 28.89 | 1000.0 | 9.000 | N | OFF | 9.6 |
| 3.709613 | 27.18 | --- | 56.00 | 28.82 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 3.761850 | --- | 19.61 | 46.00 | 26.39 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.508100 | 29.95 | --- | 56.00 | 26.05 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.560338 | --- | 20.13 | 46.00 | 25.87 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.828988 | 31.36 | --- | 56.00 | 24.64 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.896150 | 31.02 | --- | 56.00 | 24.98 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.896150 | --- | 22.57 | 46.00 | 23.43 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.926000 | --- | 22.34 | 46.00 | 23.66 | 1000.0 | 9.000 | N | OFF | 9.7 |
| 4.926000 | 30.88 | --- | 56.00 | 25.12 | 1000.0 | 9.000 | N | OFF | 9.7 |

LINE L RESULTS (HIGH CHANNEL, WORST-CASE CONFIGURATION)Final Result

| Frequency (MHz) | QuasiPeak (dB μ V) | Average (dB μ V) | Limit (dB μ V) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------------|----------------------|--------------------|-------------|-----------------|-----------------|------|--------|------------|
| 3.030525 | --- | 23.36 | 46.00 | 22.64 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 3.530513 | --- | 23.24 | 46.00 | 22.76 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 3.567825 | 30.01 | --- | 56.00 | 25.99 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 3.620063 | 30.65 | --- | 56.00 | 25.35 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 3.627525 | --- | 22.85 | 46.00 | 23.15 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.746900 | --- | 24.59 | 46.00 | 21.41 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.746900 | 32.13 | --- | 56.00 | 23.87 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.791675 | 32.68 | --- | 56.00 | 23.32 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.791675 | --- | 25.23 | 46.00 | 20.77 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.926000 | 32.53 | --- | 56.00 | 23.47 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.985700 | 32.53 | --- | 56.00 | 23.47 | 1000.0 | 9.000 | L1 | OFF | 9.7 |
| 4.993163 | --- | 24.15 | 46.00 | 21.85 | 1000.0 | 9.000 | L1 | OFF | 9.7 |

Note: All antennas and test modes have been tested, only the worst data record in the report.

11. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that exceeds 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

ANTENNA CONNECTOR

EUT has two PCB Antennas.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi, but the Directional gain = $10\log [(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}] = 6.01 > 6\text{dBi}$, where the N_{ANT} is the numbers of antenna. So the power and power density limit shall be reduced amount in dB that the directional gain of the antenna exceeds 6dBi.

END OF REPORT