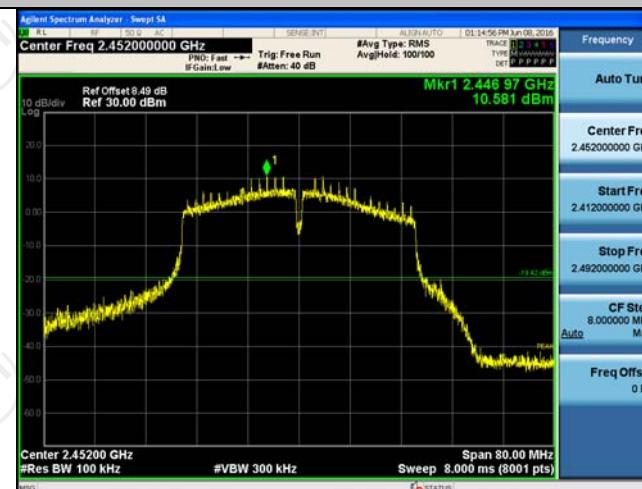


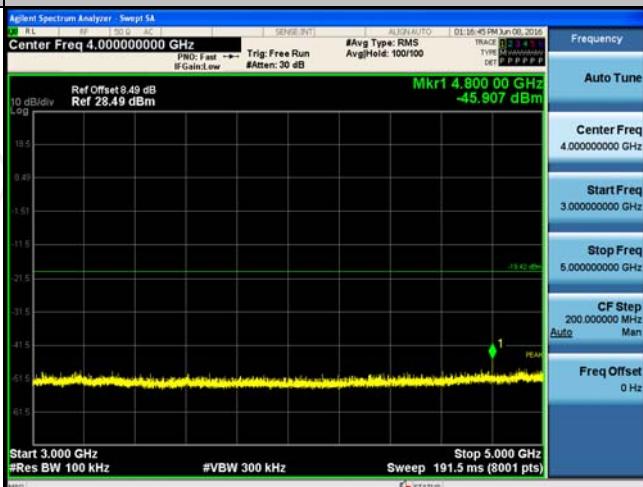
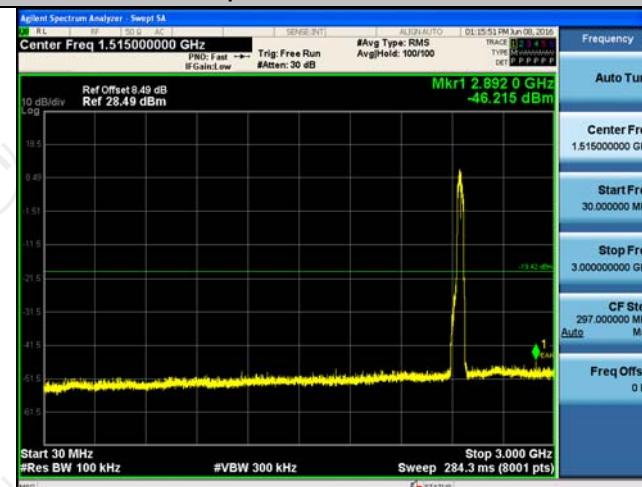
100kHz PSD reference Level



Band Edge



Spurious emission

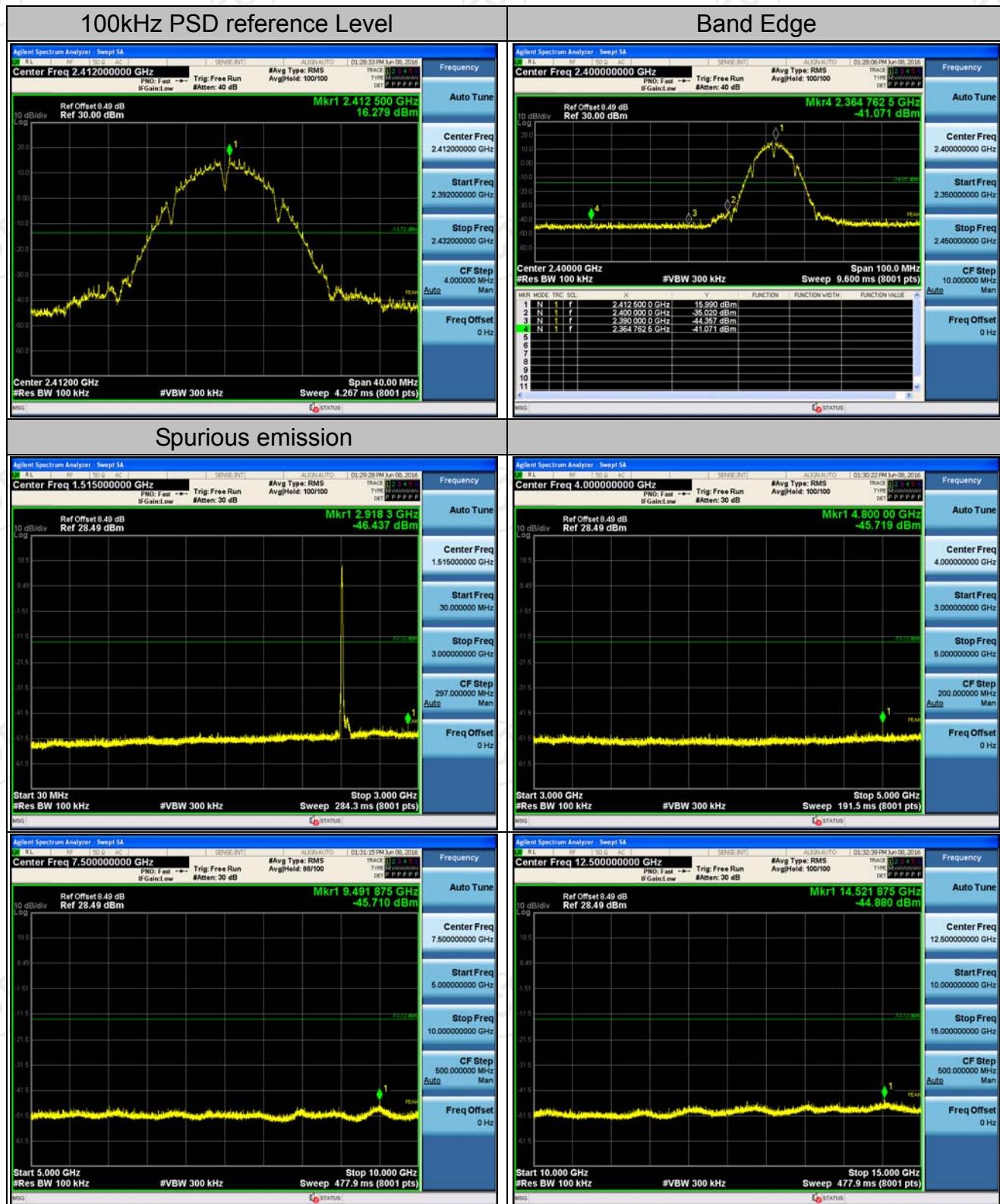




Highest Channel

Output 1:

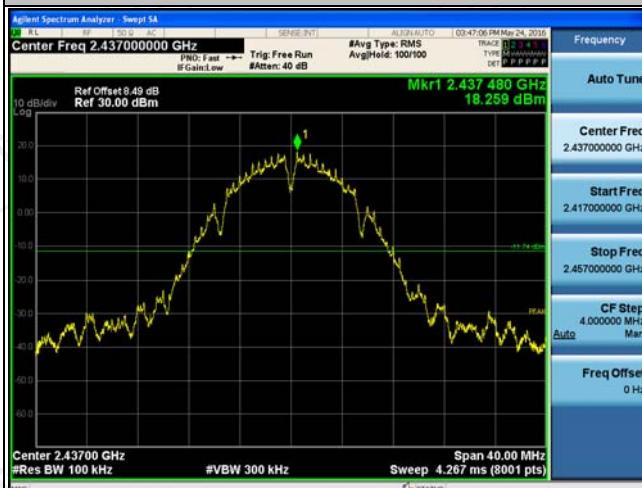
802.11b Modulation



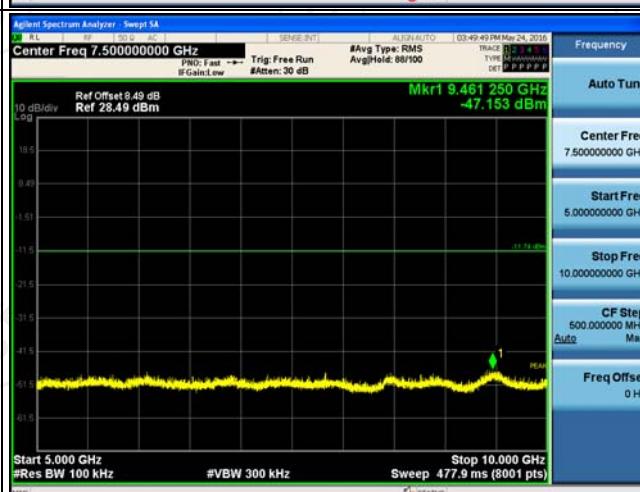
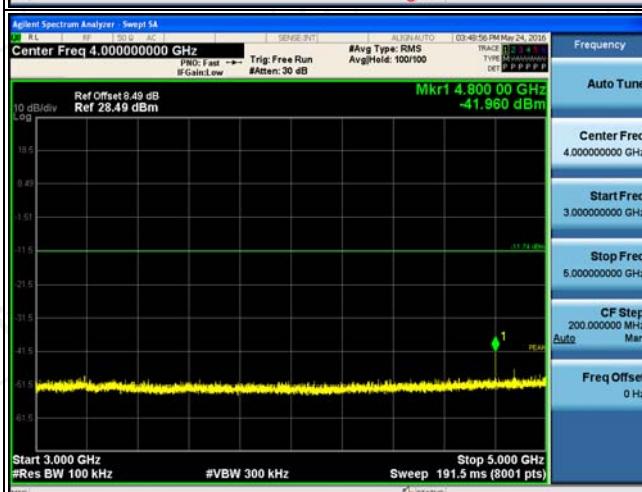
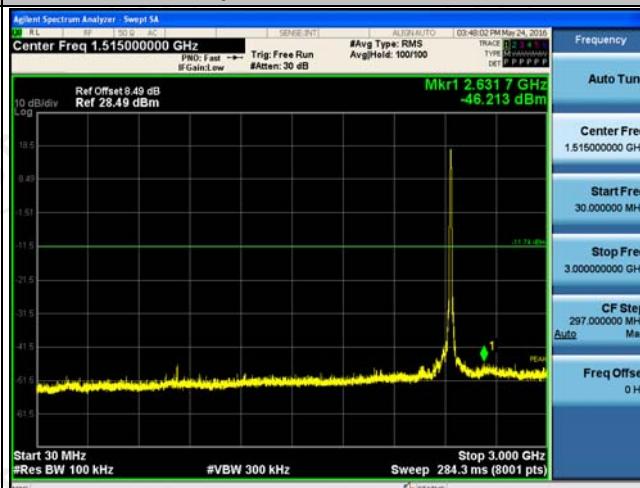


Lowest Channel

100kHz PSD reference Level



Spurious emission



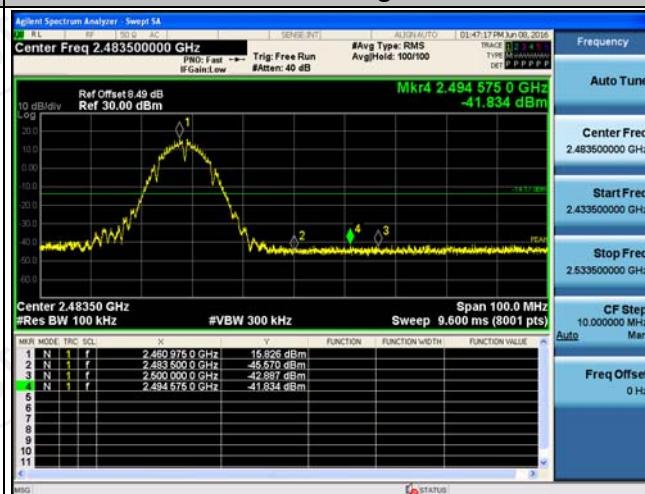


Middle Channel

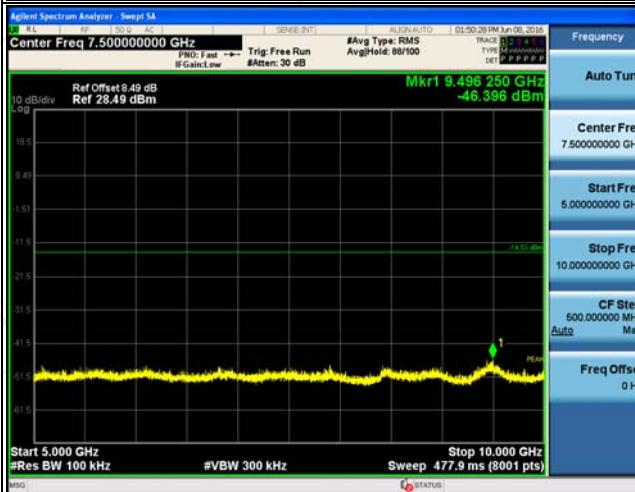
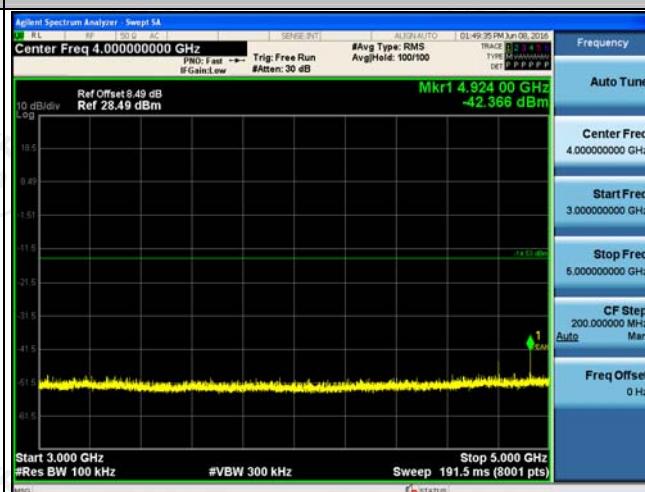
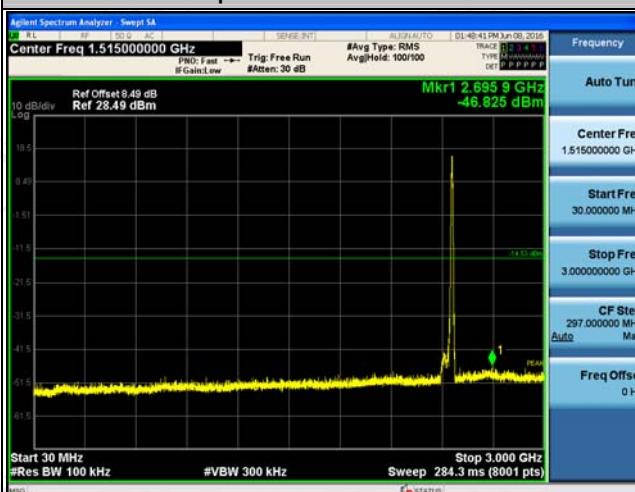
100kHz PSD reference Level



Band Edge



Spurious emission





Highest Channel

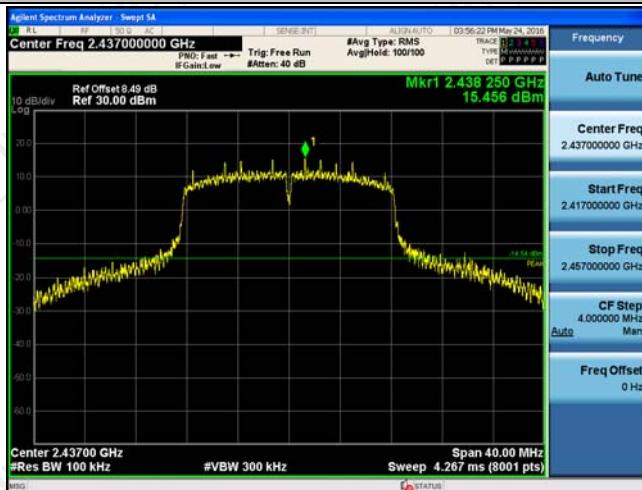
802.11g Modulation



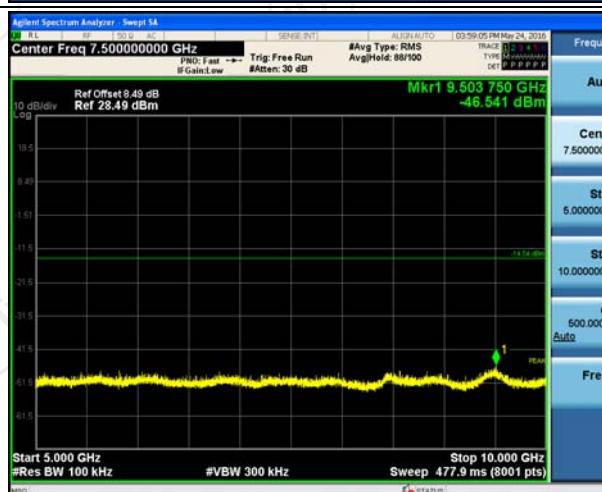
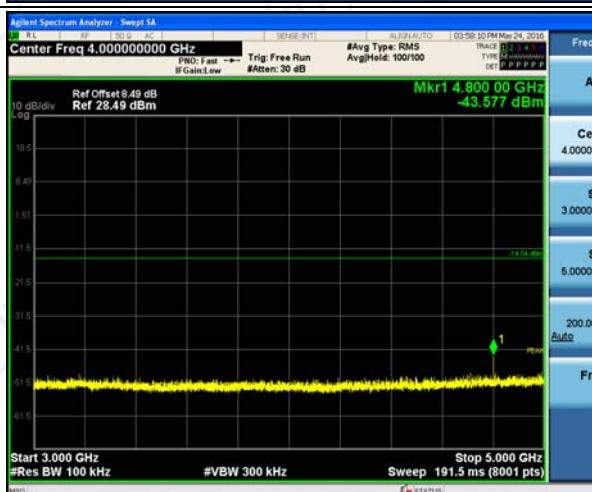
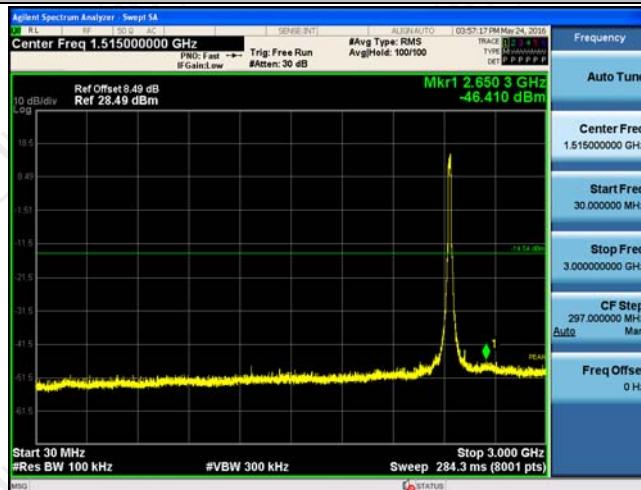


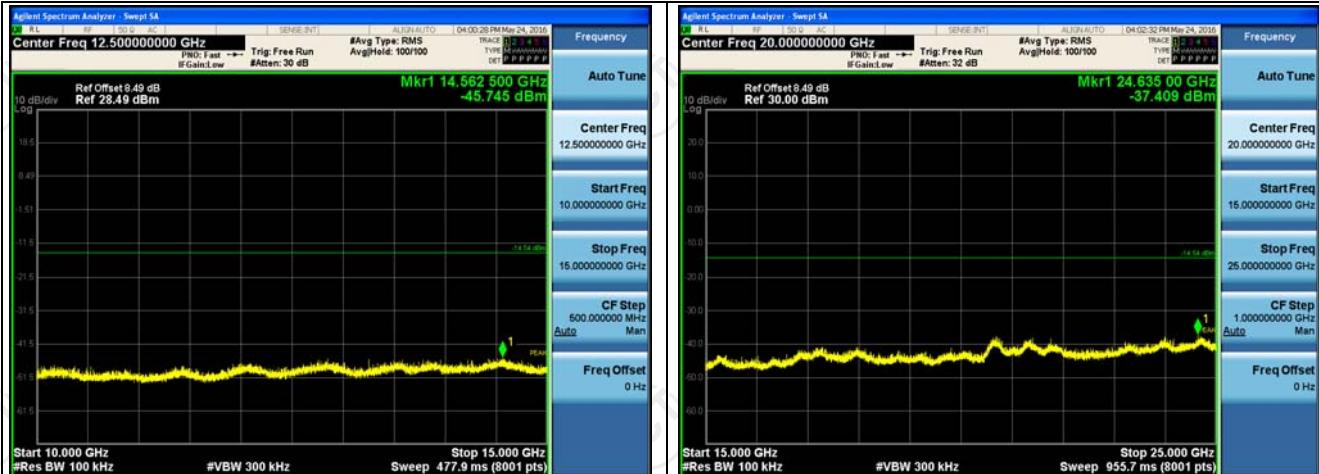
Lowest Channel

100kHz PSD reference Level



Spurious emission



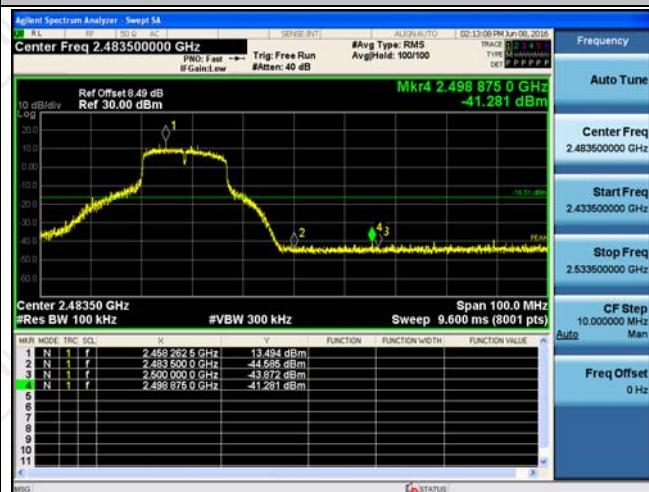


Middle Channel

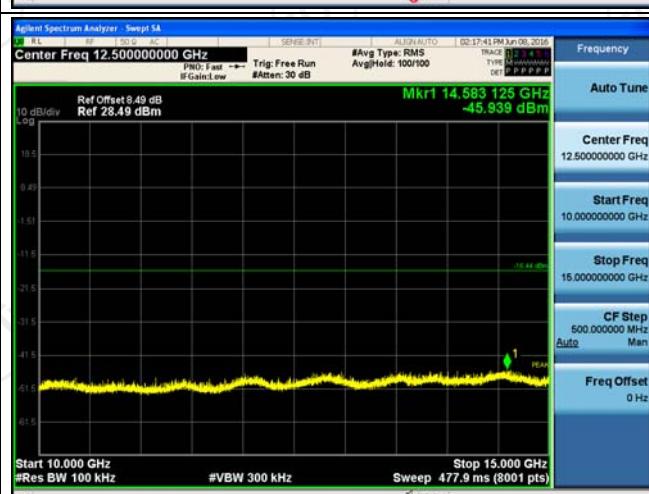
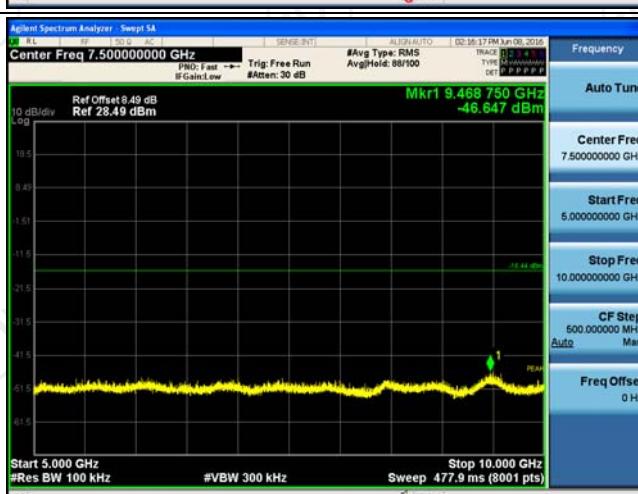
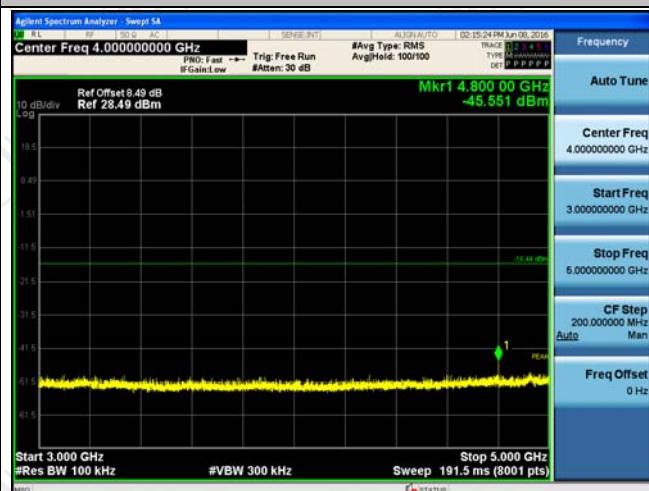
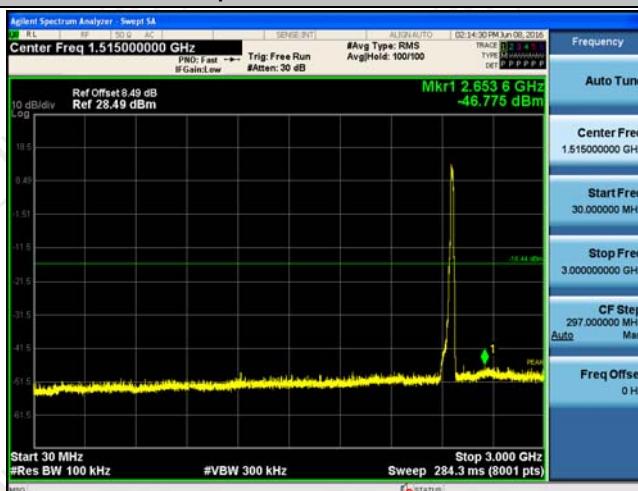
100kHz PSD reference Level



Band Edge



Spurious emission





Highest Channel

802.11n (HT20) Modulation



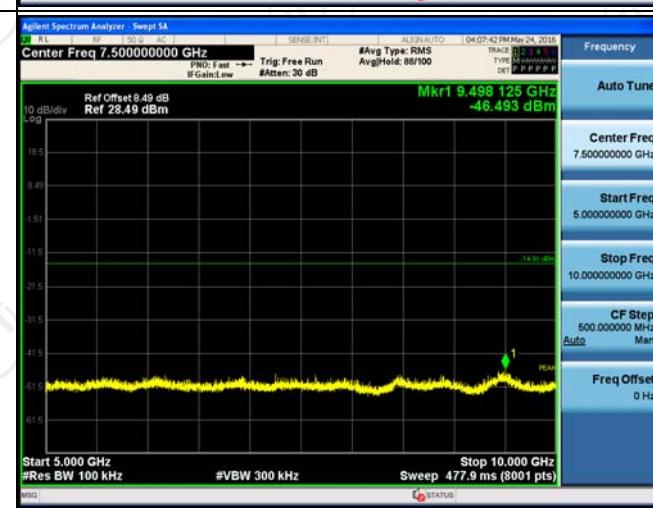
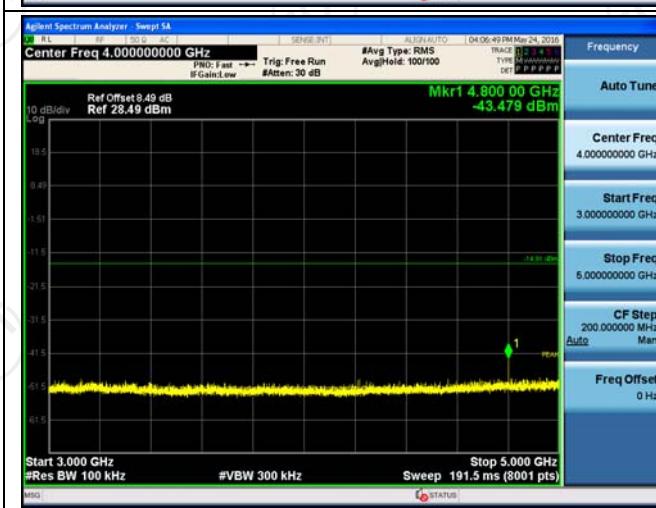
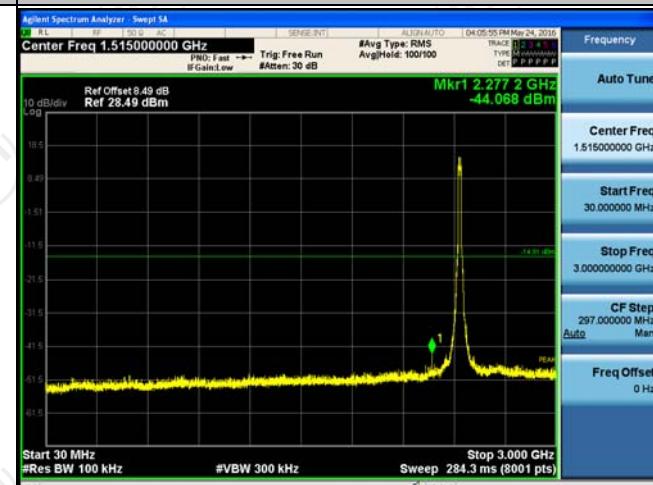


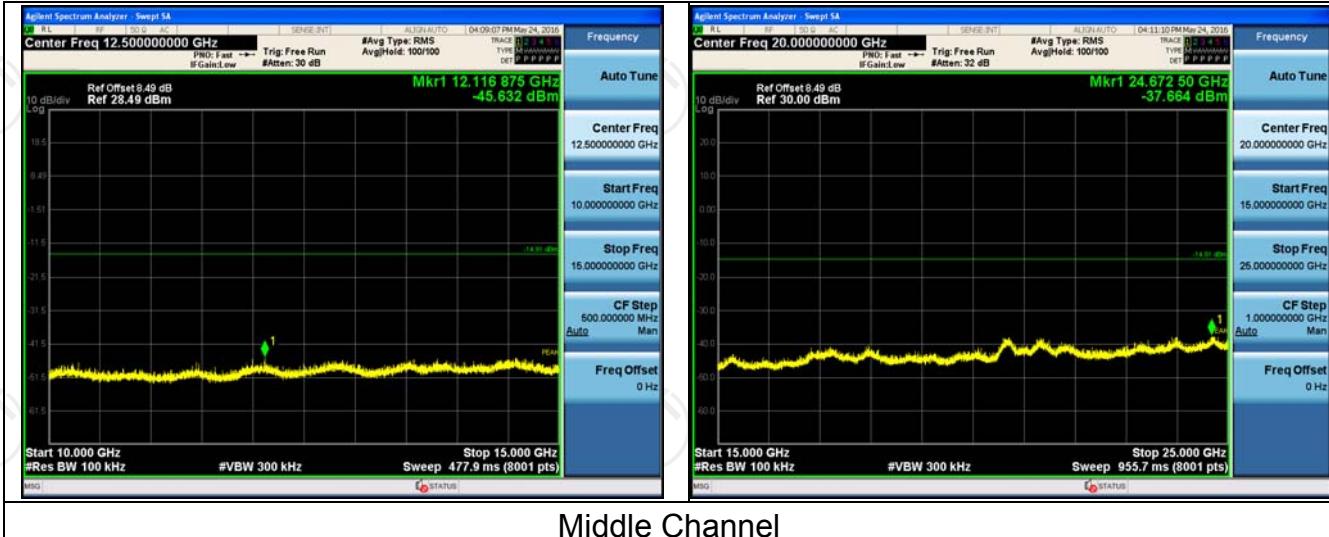
Lowest Channel

100kHz PSD reference Level



Spurious emission





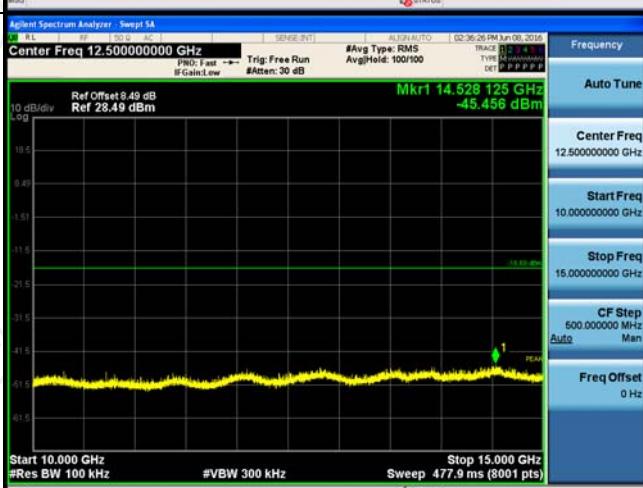
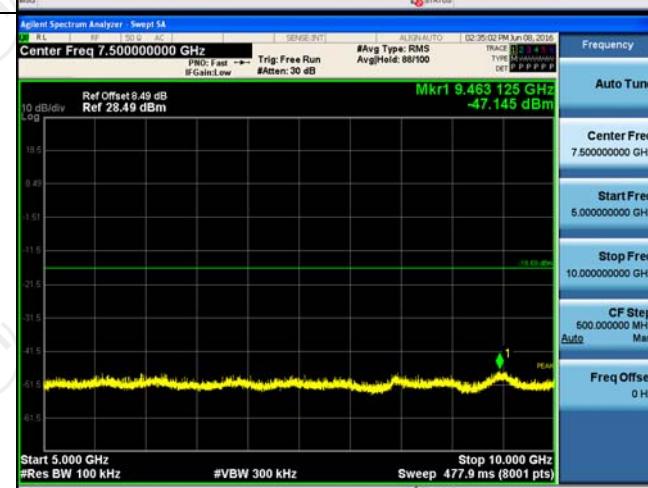
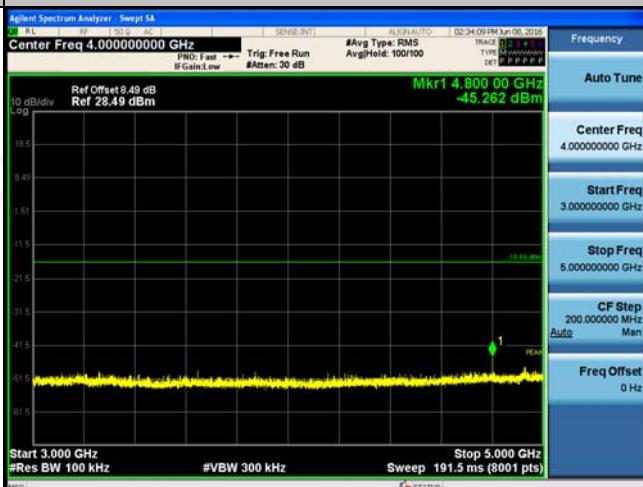
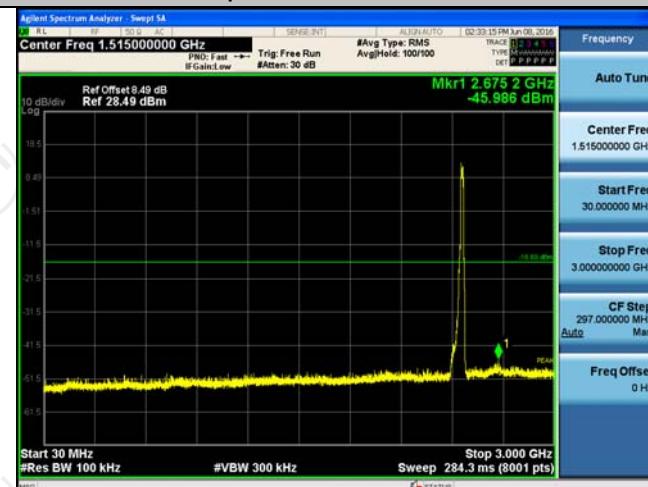
100kHz PSD reference Level



Band Edge



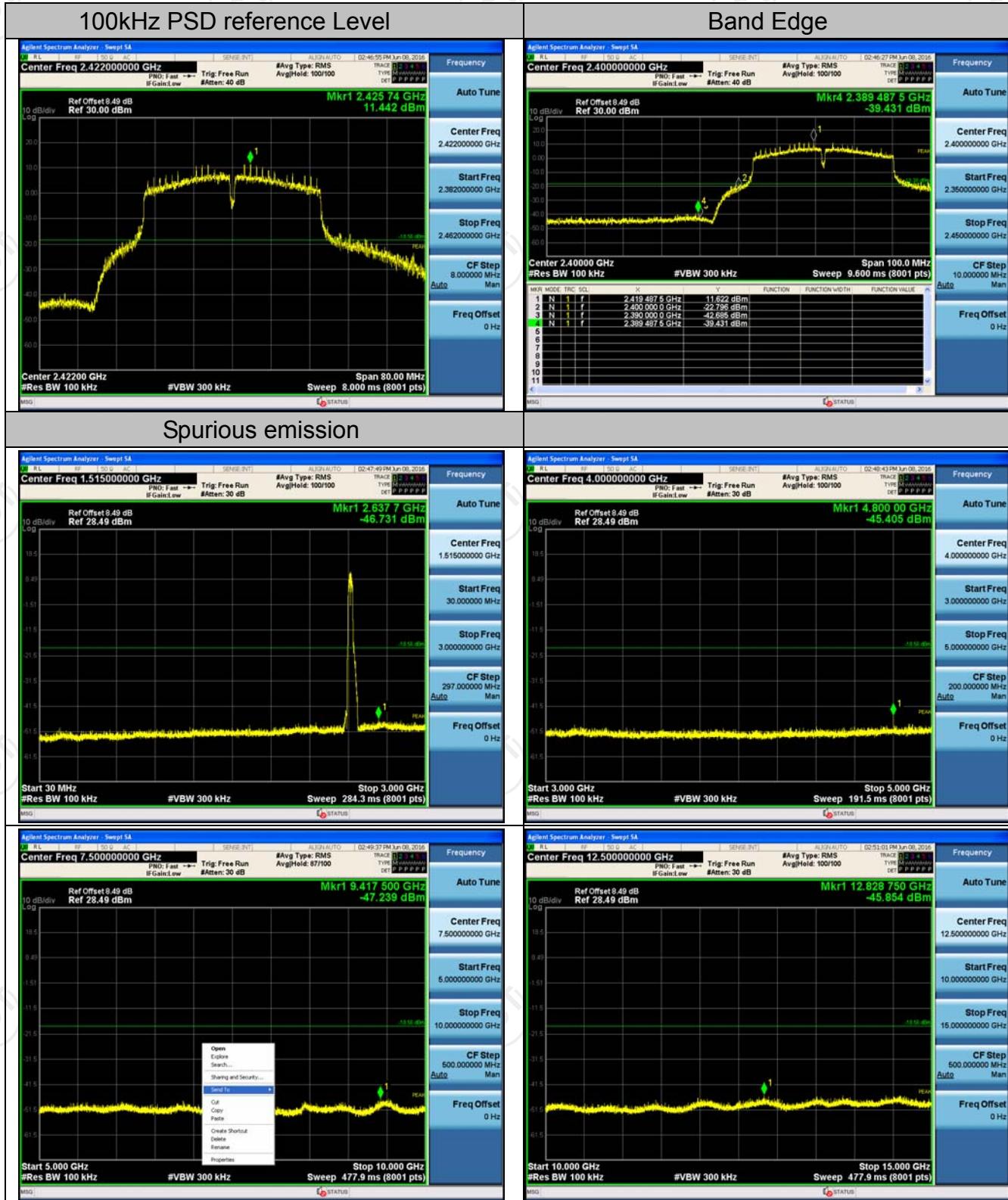
Spurious emission





Highest Channel

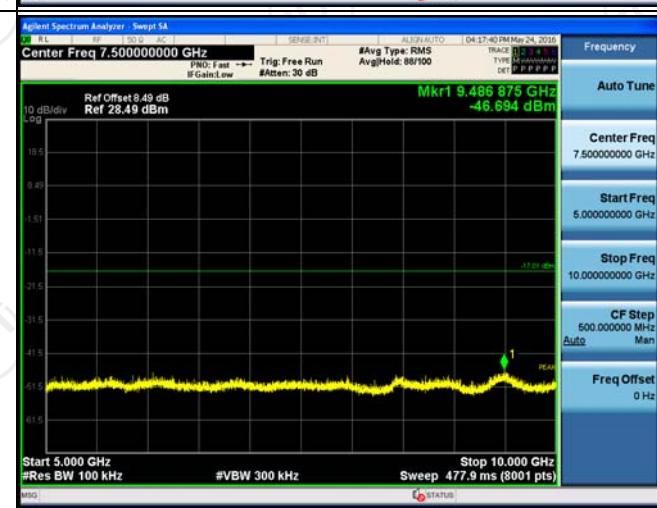
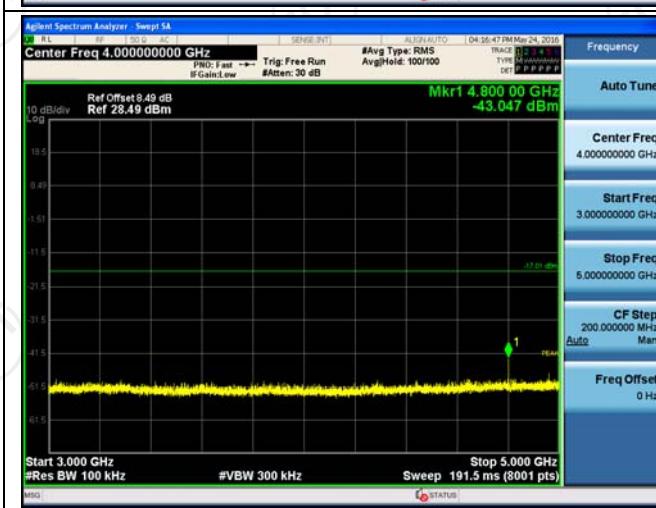
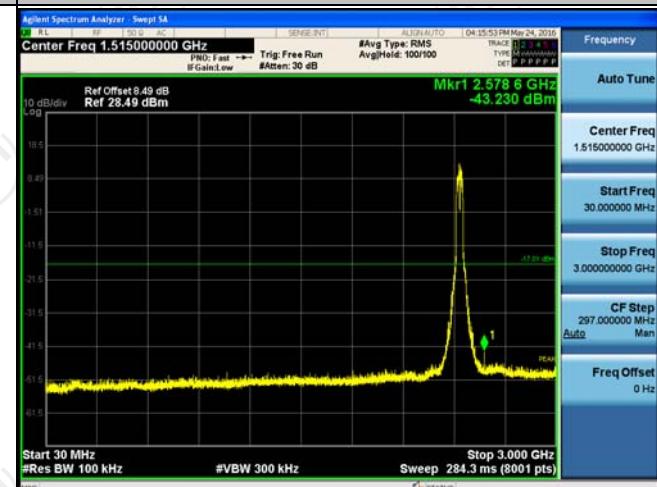
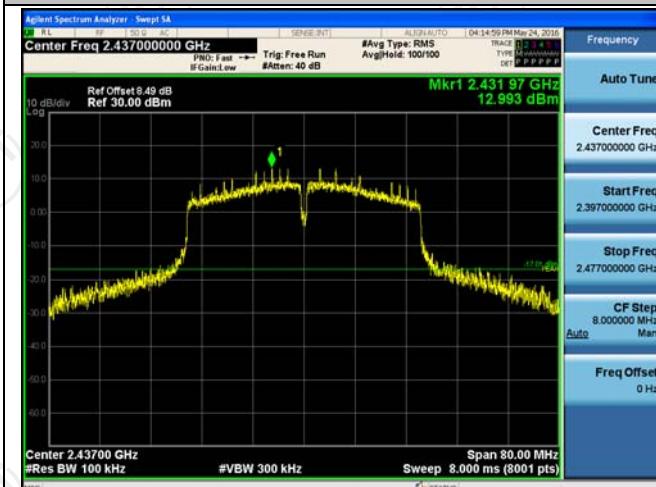
802.11n (HT40) Modulation

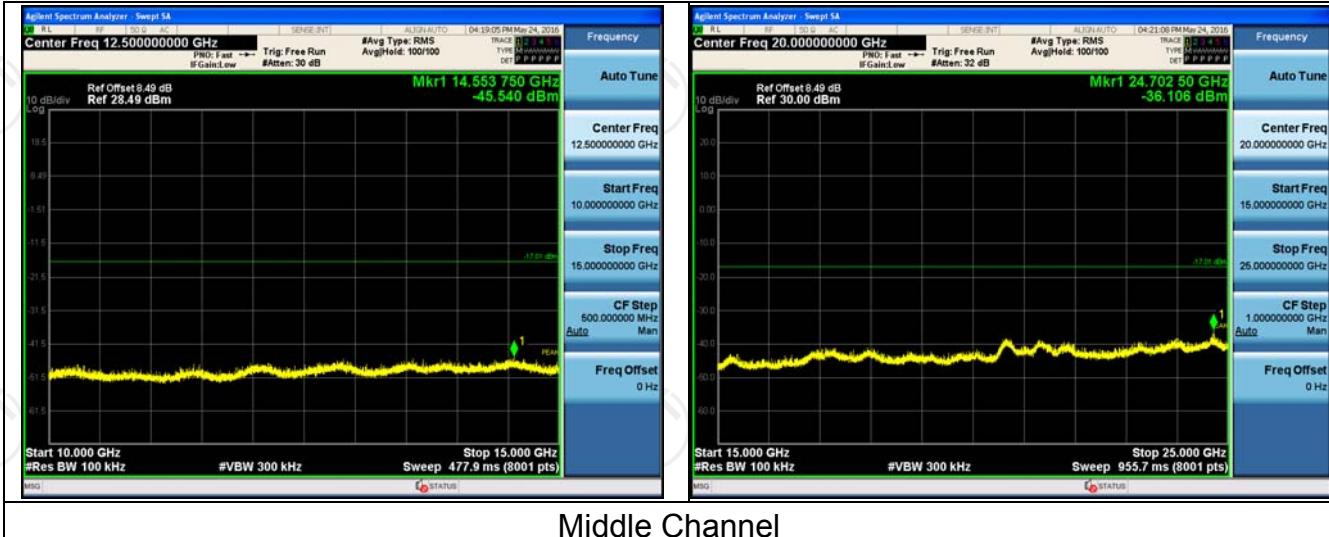


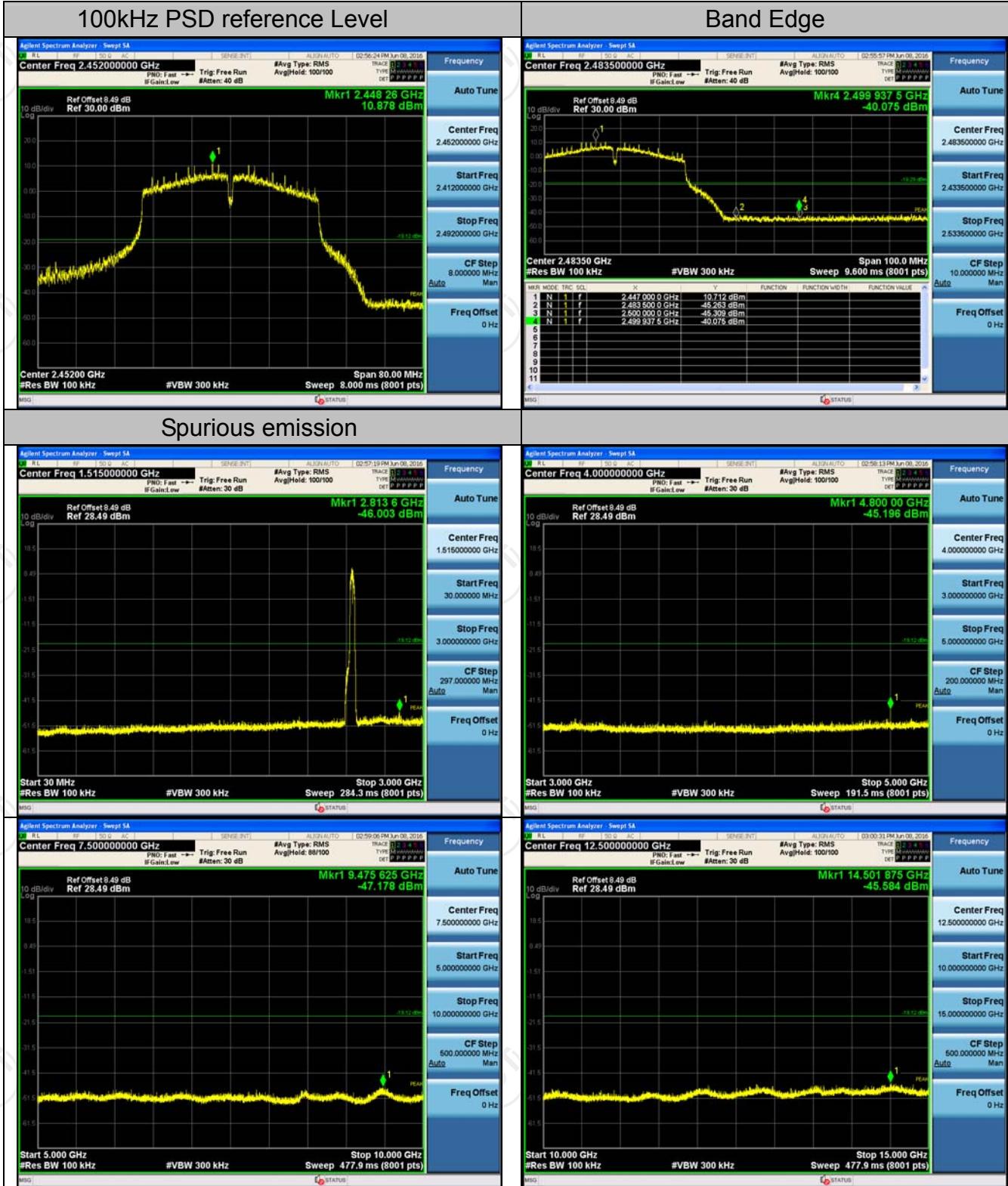


Lowest Channel

100kHz PSD reference Level





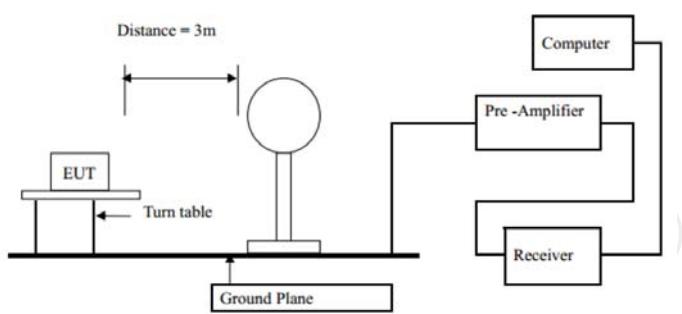


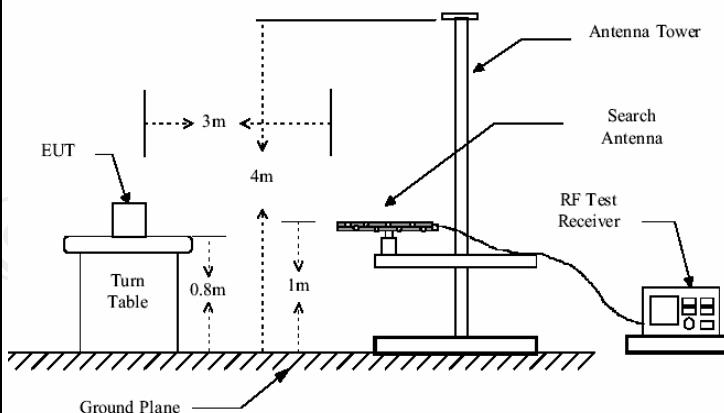


Highest Channel

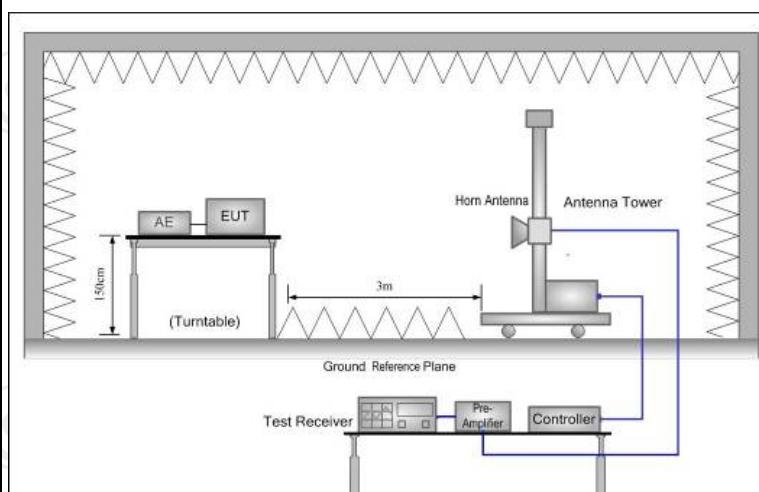
6.7. Radiated Spurious Emission Measurement

6.7.1. Test Specification

| | | | | | |
|------------------------------|---|-----------------------------------|--------|-------------------------------|------------------|
| Test Requirement: | FCC Part15 C Section 15.209/ Part2 J Section 2.1053 | | | | |
| Test Method: | KDB558074 | | | | |
| Frequency Range: | 9 kHz to 25 GHz | | | | |
| Measurement Distance: | 3 m | | | | |
| Antenna Polarization: | Horizontal & Vertical | | | | |
| Operation mode: | Transmitting mode with modulation | | | | |
| Receiver Setup: | Frequency | Detector | RBW | VBW | Remark |
| | 9kHz- 150kHz | Quasi-peak | 200Hz | 1kHz | Quasi-peak Value |
| | 150kHz- 30MHz | Quasi-peak | 9kHz | 30kHz | Quasi-peak Value |
| | 30MHz-1GHz | Quasi-peak | 100KHz | 300KHz | Quasi-peak Value |
| | Above 1GHz | Peak | 1MHz | 3MHz | Peak Value |
| | | Peak | 1MHz | 10Hz | Average Value |
| Limit: | Frequency | Field Strength (microvolts/meter) | | Measurement Distance (meters) | |
| | 0.009-0.490 | 2400/F(KHz) | | 300 | |
| | 0.490-1.705 | 24000/F(KHz) | | 30 | |
| | 1.705-30 | 30 | | 30 | |
| | 30-88 | 100 | | 3 | |
| | 88-216 | 150 | | 3 | |
| | 216-960 | 200 | | 3 | |
| | Above 960 | 500 | | 3 | |
| | Frequency | Field Strength (microvolts/meter) | | Measurement Distance (meters) | Detector |
| | Above 1GHz | 500 | | 3 | Average |
| | | 5000 | | 3 | Peak |
| Test setup: | For radiated emissions below 30MHz  30MHz to 1GHz | | | | |



Above 1GHz



Test Procedure:

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
2. For the radiated emission test below 1GHz:
The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. 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.
For the radiated emission test above 1GHz:
Place the measurement antenna on a turntable with 1.5 meter above ground, which is away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT,

| | |
|----------------------|--|
| | <p>depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.</p> <p>3. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level</p> <p>4. For measurement below 1GHz, 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.</p> <p>5. Use the following spectrum analyzer settings:</p> <ul style="list-style-type: none">(1) Span shall wide enough to fully capture the emission being measured;(2) Set RBW=100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;(3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. <p>For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.</p> |
| Test results: | PASS |

6.7.2. Test Instruments

| Radiated Emission Test Site (966) | | | | |
|-----------------------------------|------------------------------------|------------|---------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Due |
| ESPI Test Receiver | ROHDE&SCHW ARZ | ESVD | 100008 | Sep. 11, 2016 |
| Spectrum Analyzer | ROHDE&SCHW ARZ | FSEM | 848597/001 | Sep. 11, 2016 |
| Spectrum Analyzer | Agilent | N9020A | MY49100060 | Sep. 12, 2016 |
| Pre-amplifier | EM Electronics Corporation CO.,LTD | EM30265 | 07032613 | Sep. 11, 2016 |
| Pre-amplifier | HP | 8447D | 2727A05017 | Sep. 11, 2016 |
| Loop antenna | ZHINAN | ZN30900A | 12024 | Sep. 13, 2016 |
| Broadband Antenna | Schwarzbeck | VULB9163 | 340 | Sep. 13, 2016 |
| Horn Antenna | Schwarzbeck | BBHA 9120D | 631 | Sep. 13, 2016 |
| Horn Antenna | Schwarzbeck | BBHA 9170 | 373 | Sep. 13, 2016 |
| Coax cable | TCT | RE-low-01 | N/A | Sep. 11, 2016 |
| Coax cable | TCT | RE-high-02 | N/A | Sep. 11, 2016 |
| Coax cable | TCT | RE-low-03 | N/A | Sep. 11, 2016 |
| Coax cable | TCT | RE-High-04 | N/A | Sep. 11, 2016 |
| Antenna Mast | CCS | CC-A-4M | N/A | Sep. 12, 2016 |
| EMI Test Software | Shurples Technology | EZ-EMC | N/A | N/A |

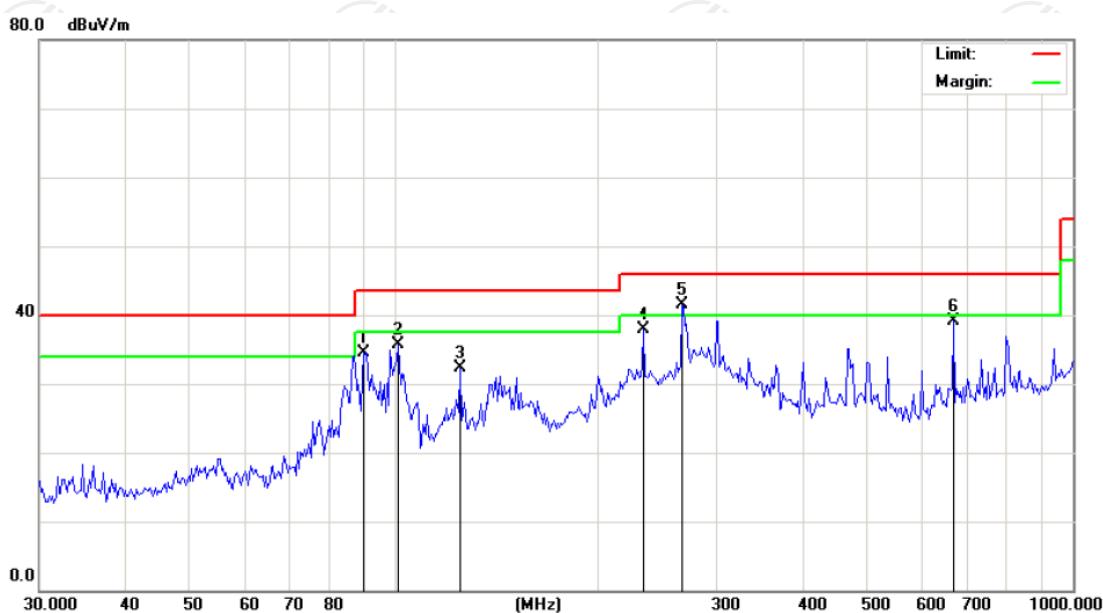
Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

6.7.3. Test Data

Please refer to following diagram for individual

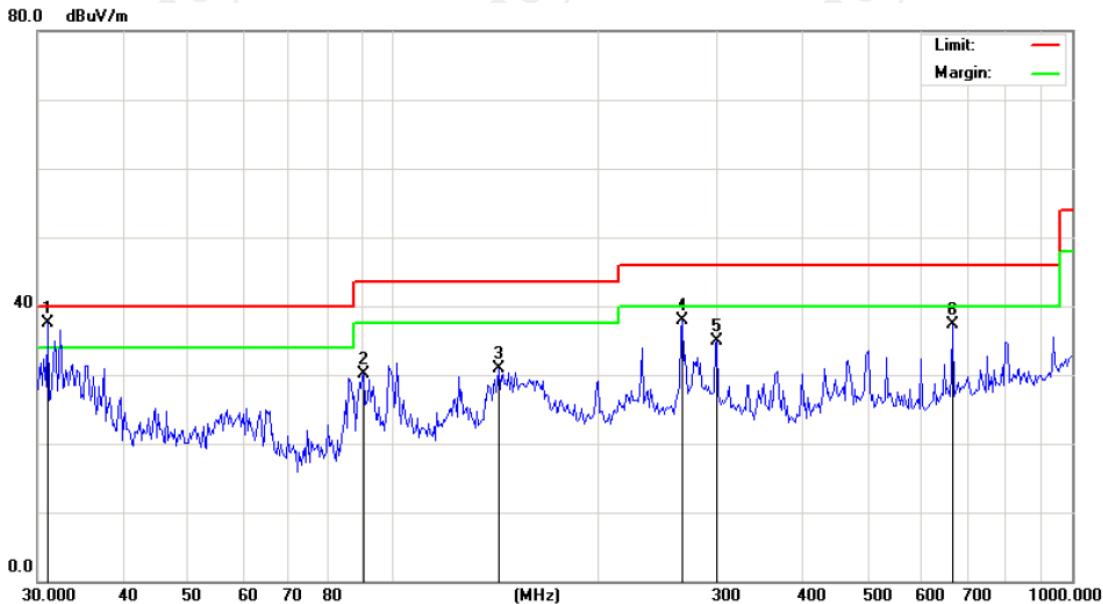
Below 1GHz

Horizontal:



| Site Limit: FCC Part 15B Class B RE_3 m | | | | Polarization: Horizontal | | | | Temperature: 25 | | |
|--|-----|----------|---------------|---------------------------------|--------------|--------|--------|-----------------|--------------|---------|
| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | Antenna Height | Table Degree | Comment |
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree |
| 1 | | 90.2530 | 47.52 | -12.95 | 34.57 | 43.50 | -8.93 | peak | 0 | |
| 2 | | 101.5575 | 47.15 | -11.51 | 35.64 | 43.50 | -7.86 | peak | 0 | |
| 3 | | 125.0291 | 46.68 | -14.34 | 32.34 | 43.50 | -11.16 | peak | 0 | |
| 4 | | 233.2962 | 48.38 | -10.54 | 37.84 | 46.00 | -8.16 | peak | 0 | |
| 5 | * | 265.4847 | 50.94 | -9.43 | 41.51 | 46.00 | -4.49 | peak | 0 | |
| 6 | | 667.2418 | 39.58 | -0.54 | 39.04 | 46.00 | -6.96 | peak | 0 | |

Vertical:



| Site | | | | Polarization: <i>Vertical</i> | | | Temperature: 25 | | |
|------------------------------------|-----|----------|---------------|-------------------------------|--------------|--------|-----------------|----------------|--------------|
| Limit: FCC Part 15B Class B RE_3 m | | | | Power: AC 120V/60Hz | | | Humidity: 54 % | | |
| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | Antenna Height | Table Degree |
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm |
| 1 | * | 31.0288 | 50.32 | -13.60 | 36.72 | 40.00 | -3.28 | QP | 0 |
| 2 | | 90.7615 | 42.99 | -12.87 | 30.12 | 43.50 | -13.38 | peak | 0 |
| 3 | | 143.0814 | 46.23 | -15.31 | 30.92 | 43.50 | -12.58 | peak | 0 |
| 4 | | 266.9808 | 47.33 | -9.37 | 37.96 | 46.00 | -8.04 | peak | 0 |
| 5 | | 300.4213 | 43.17 | -8.24 | 34.93 | 46.00 | -11.07 | peak | 0 |
| 6 | | 667.2418 | 37.77 | -0.54 | 37.23 | 46.00 | -8.77 | peak | 0 |

Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)), and the worst case Mode (Middle channel and 802.11b)

Test Result of Radiated Spurious at Band edges

Modulation Type: 802.11b

Low channel: 2412 MHz

| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
|-----------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| 2310(PK) | H | 43.51 | -4.20 | 39.31 | 74.00 | 54.00 |
| 2388.98(PK) | H | 70.38 | -4.10 | 66.28 | 74.00 | 54.00 |
| 2388.98(AV) | H | 56.21 | -4.10 | 52.11 | 74.00 | 54.00 |
| 2390(PK) | H | 52.94 | -3.94 | 49.00 | 74.00 | 54.00 |
| 2310(PK) | V | 45.72 | -4.20 | 41.52 | 74.00 | 54.00 |
| 2388.98(PK) | V | 68.54 | -4.10 | 64.44 | 74.00 | 54.00 |
| 2388.98(AV) | V | 54.74 | -4.10 | 50.64 | 74.00 | 54.00 |
| 2390(PK) | V | 49.80 | -3.94 | 45.86 | 74.00 | 54.00 |

Modulation Type: 802.11b

High channel: 2462 MHz

| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
|-----------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| 2483.5(PK) | H | 68.02 | -3.60 | 64.42 | 74.00 | 54.00 |
| 2483.5(AV) | H | 52.32 | -3.60 | 48.72 | 74.00 | 54.00 |
| 2485.78(PK) | H | 45.67 | -3.50 | 42.17 | 74.00 | 54.00 |
| 2500(PK) | H | 45.62 | -3.34 | 42.28 | 74.00 | 54.00 |
| 2483.5(PK) | V | 71.61 | -3.60 | 68.01 | 74.00 | 54.00 |
| 2483.5(AV) | V | 55.26 | -3.60 | 51.66 | 74.00 | 54.00 |
| 2485.78(PK) | V | 45.70 | -3.50 | 42.20 | 74.00 | 54.00 |
| 2500(PK) | V | 39.81 | -3.34 | 36.47 | 74.00 | 54.00 |

Modulation Type: 802.11g

Low channel: 2412 MHz

| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
|-----------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| 2310(PK) | H | 40.39 | -4.20 | 36.19 | 74.00 | 54.00 |
| 2387.82(PK) | H | 51.23 | -4.12 | 47.11 | 74.00 | 54.00 |
| 2390(PK) | H | 72.54 | -3.94 | 68.60 | 74.00 | 54.00 |
| 2390(AV) | H | 57.98 | -3.94 | 54.04 | 74.00 | 54.00 |
| 2310(PK) | V | 45.74 | -4.20 | 41.54 | 74.00 | 54.00 |
| 2387.82(PK) | V | 45.86 | -4.12 | 41.74 | 74.00 | 54.00 |
| 2390(PK) | V | 70.34 | -3.94 | 66.40 | 74.00 | 54.00 |
| 2390(AV) | V | 50.24 | -3.94 | 46.30 | 74.00 | 54.00 |

Modulation Type: 802.11g

High channel: 2462 MHz

| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
|-----------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| 2483.5(PK) | H | 70.56 | -3.60 | 66.96 | 74.00 | 54.00 |
| 2483.5(AV) | H | 55.14 | -3.60 | 51.54 | 74.00 | 54.00 |
| 2489.65(PK) | H | 56.14 | -3.52 | 52.62 | 74.00 | 54.00 |
| 2500(PK) | H | 48.65 | -3.34 | 45.31 | 74.00 | 54.00 |
| 2483.5(PK) | V | 68.95 | -3.60 | 65.35 | 74.00 | 54.00 |
| 2483.5(AV) | V | 54.74 | -3.60 | 51.14 | 74.00 | 54.00 |
| 2489.65(PK) | V | 45.74 | -3.52 | 42.22 | 74.00 | 54.00 |
| 2500(PK) | V | 40.42 | -3.34 | 37.08 | 74.00 | 54.00 |

Modulation Type: 802.11n(20MHz)

| Low channel: 2412 MHz | | | | | | |
|-----------------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
| 2310(PK) | H | 50.18 | -4.20 | 45.98 | 74.00 | 54.00 |
| 2388.01(PK) | H | 55.94 | -4.10 | 51.84 | 74.00 | 54.00 |
| 2390(PK) | H | 71.65 | -3.94 | 67.71 | 74.00 | 54.00 |
| 2390(AV) | H | 56.32 | -3.94 | 52.38 | 74.00 | 54.00 |
| 2310(PK) | V | 48.34 | -4.20 | 44.14 | 74.00 | 54.00 |
| 2388.01(PK) | V | 50.76 | -4.10 | 46.66 | 74.00 | 54.00 |
| 2390(PK) | V | 67.42 | -3.94 | 63.48 | 74.00 | 54.00 |
| 2390(AV) | V | 52.41 | -3.94 | 48.47 | 74.00 | 54.00 |

Modulation Type: 802.11n(20MHz)

| High channel: 2462 MHz | | | | | | |
|------------------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
| 2483.5(PK) | H | 72.06 | -3.60 | 68.46 | 74.00 | 54.00 |
| 2483.5(AV) | H | 57.00 | -3.60 | 53.40 | 74.00 | 54.00 |
| 2392.55(PK) | H | 50.84 | -3.50 | 47.34 | 74.00 | 54.00 |
| 2500(PK) | H | 46.15 | -3.34 | 42.81 | 74.00 | 54.00 |
| 2483.5(PK) | V | 69.67 | -3.60 | 66.07 | 74.00 | 54.00 |
| 2483.5(AV) | V | 53.46 | -3.60 | 49.86 | 74.00 | 54.00 |
| 2392.55(PK) | V | 39.55 | -3.50 | 36.05 | 74.00 | 54.00 |
| 2500(PK) | V | 36.87 | -3.34 | 33.53 | 74.00 | 54.00 |

Modulation Type: 802.11n(40MHz)

| Low channel: 2422 MHz | | | | | | |
|-----------------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
| 2310(PK) | H | 55.21 | -4.20 | 51.01 | 74.00 | 54.00 |
| 2387.85(PK) | H | 50.62 | -4.10 | 46.52 | 74.00 | 54.00 |
| 2390(PK) | H | 68.32 | -3.94 | 64.38 | 74.00 | 54.00 |
| 2390(AV) | H | 52.36 | -3.94 | 48.42 | 74.00 | 54.00 |
| 2310(PK) | V | 56.25 | -4.20 | 52.05 | 74.00 | 54.00 |
| 2389.98(PK) | V | 48.68 | -4.10 | 44.58 | 74.00 | 54.00 |
| 2390(PK) | V | 66.98 | -3.94 | 63.04 | 74.00 | 54.00 |
| 2390(AV) | V | 51.98 | -3.94 | 48.04 | 74.00 | 54.00 |

Modulation Type: 802.11n(40MHz)

| High channel: 2452 MHz | | | | | | |
|------------------------|---------------|----------------------|--------------------------|----------------------|---------------------------|-------------------------|
| Frequency (MHz) | Ant. Pol. H/V | Reading (dB μ V) | Correction Factor (dB/m) | Final Emission Level | Peak limit (dB μ V/m) | AV limit (dB μ V/m) |
| 2483.5(PK) | H | 45.66 | -3.60 | 42.06 | 74.00 | 54.00 |
| 2487.51(PK) | H | 68.79 | -3.50 | 65.29 | 74.00 | 54.00 |
| 2487.51(AV) | H | 53.01 | -3.50 | 49.51 | 74.00 | 54.00 |
| 2500(PK) | H | 51.46 | -3.34 | 48.12 | 74.00 | 54.00 |
| 2483.5(PK) | V | 44.35 | -3.60 | 40.75 | 74.00 | 54.00 |
| 2487.51(PK) | V | 69.75 | -3.50 | 66.25 | 74.00 | 54.00 |
| 2487.51(AV) | V | 52.69 | -3.50 | 49.19 | 74.00 | 54.00 |
| 2500(PK) | V | 53.47 | -3.34 | 50.13 | 74.00 | 54.00 |

Note:

1. Peak Final Emission Level=Peak Reading + Correction Factor;
2. Correction Factor=Antenna Factor + Cable loss – Pre-amplifier
3. If the Final Emission level below the AV limit , then the Final AV emission will not report.

Above 1GHz

Modulation Type: 802.11b

Low channel: 2412 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4824 | H | 51.23 | --- | 0.66 | 51.89 | --- | 74 | 54 | 2.11 |
| 7236 | H | 38.71 | --- | 9.5 | 48.21 | --- | 74 | 54 | 5.79 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4824 | V | 49.4 | --- | 0.66 | 50.06 | --- | 74 | 54 | 3.94 |
| 7236 | V | 40.51 | --- | 9.5 | 50.01 | --- | 74 | 54 | 3.99 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Middle channel: 2437MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4874 | H | 52.12 | --- | 0.99 | 53.11 | --- | 74 | 54 | 0.89 |
| 7311 | H | 39.84 | --- | 9.85 | 49.69 | --- | 74 | 54 | 4.31 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4874 | V | 49.57 | --- | 0.99 | 50.56 | --- | 74 | 54 | 3.44 |
| 7311 | V | 38.42 | --- | 9.85 | 48.27 | --- | 74 | 54 | 5.73 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

High channel: 2462 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4924 | H | 48.15 | --- | 1.33 | 49.48 | --- | 74 | 54 | 4.52 |
| 7386 | H | 39.34 | --- | 10.22 | 49.56 | --- | 74 | 54 | 4.44 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4924 | V | 50.7 | --- | 1.33 | 52.03 | --- | 74 | 54 | 1.97 |
| 7386 | V | 40.41 | --- | 10.22 | 50.63 | --- | 74 | 54 | 3.37 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: 802.11g

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4824 | H | 48.62 | --- | 0.66 | 49.28 | --- | 74 | 54 | 4.72 |
| 7236 | H | 35.76 | --- | 9.5 | 45.26 | --- | 74 | 54 | 8.74 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4824 | V | 49.73 | --- | 0.66 | 50.39 | --- | 74 | 54 | 3.61 |
| 7236 | V | 38.44 | --- | 9.5 | 47.94 | --- | 74 | 54 | 6.06 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Middle channel: 2437MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4874 | H | 50.18 | --- | 0.99 | 51.17 | --- | 74 | 54 | 2.83 |
| 7311 | H | 36.51 | --- | 9.85 | 46.36 | --- | 74 | 54 | 7.64 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4874 | V | 48.57 | --- | 0.99 | 49.56 | --- | 74 | 54 | 4.44 |
| 7311 | V | 37.11 | --- | 9.85 | 46.96 | --- | 74 | 54 | 7.04 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

High channel: 2462 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|-----------------|---------------|---------------------------|-------------------------|--------------------------|---------------------|-------------------|---------------------------|-------------------------|-------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4924 | H | 47.49 | --- | 1.33 | 48.82 | --- | 74 | 54 | 5.18 |
| 7386 | H | 36.27 | --- | 10.22 | 46.49 | --- | 74 | 54 | 7.51 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4924 | V | 49.8 | --- | 1.33 | 51.13 | --- | 74 | 54 | 2.87 |
| 7386 | V | 37.48 | --- | 10.22 | 47.7 | --- | 74 | 54 | 6.3 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: 802.11n (HT20)

Low channel: 2412 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4824 | H | 46.75 | --- | 0.66 | 47.41 | --- | 74 | 54 | 6.59 |
| 7236 | H | 34.53 | --- | 9.5 | 44.03 | --- | 74 | 54 | 9.97 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4824 | V | 48.49 | --- | 0.66 | 49.15 | --- | 74 | 54 | 4.85 |
| 7236 | V | 35.72 | --- | 9.5 | 45.22 | --- | 74 | 54 | 8.78 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Middle channel: 2437MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4874 | H | 48.6 | --- | 0.99 | 49.59 | --- | 74 | 54 | 4.41 |
| 7311 | H | 36.49 | --- | 9.85 | 46.34 | --- | 74 | 54 | 7.66 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4874 | V | 49.33 | --- | 0.99 | 50.32 | --- | 74 | 54 | 3.68 |
| 7311 | V | 35.55 | --- | 9.85 | 45.4 | --- | 74 | 54 | 8.6 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

High channel: 2462 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4924 | H | 50.7 | --- | 1.33 | 52.03 | --- | 74 | 54 | 1.97 |
| 7386 | H | 36.84 | --- | 10.22 | 47.06 | --- | 74 | 54 | 6.94 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4924 | V | 49.65 | --- | 1.33 | 50.98 | --- | 74 | 54 | 3.02 |
| 7386 | V | 36.21 | --- | 10.22 | 46.43 | --- | 74 | 54 | 7.57 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: 802.11n (HT40)

Low channel: 2422 MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4844 | H | 50.41 | --- | 0.66 | 51.07 | --- | 74 | 54 | 2.93 |
| 7266 | H | 38.56 | --- | 9.5 | 48.06 | --- | 74 | 54 | 5.94 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4844 | V | 49.34 | --- | 0.66 | 50 | --- | 74 | 54 | 4.0 |
| 7266 | V | 37.8 | --- | 9.5 | 47.3 | --- | 74 | 54 | 6.7 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Middle channel: 2437MHz

| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4874 | H | 51.11 | --- | 0.99 | 52.1 | --- | 74 | 54 | 1.9 |
| 7311 | H | 39.56 | --- | 9.85 | 49.41 | --- | 74 | 54 | 4.59 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4874 | V | 49.72 | --- | 0.99 | 50.71 | --- | 74 | 54 | 3.29 |
| 7311 | V | 38.95 | --- | 9.85 | 48.8 | --- | 74 | 54 | 5.2 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

High channel: 2452 MHz

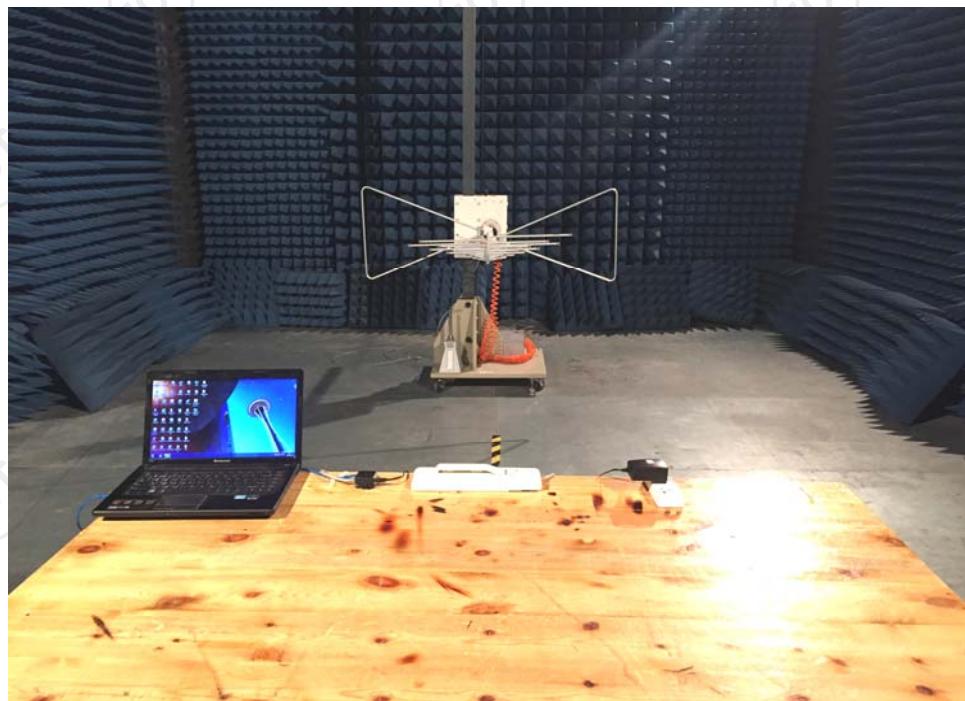
| Frequency (MHz) | Ant. Pol. H/V | Peak reading (dB μ V) | AV reading (dB μ V) | Correction Factor (dB/m) | Emission Level | | Peak limit (dB μ V/m) | AV limit (dB μ V/m) | Margin (dB) |
|--------------------|------------------|---------------------------------|----------------------------|--------------------------------|------------------------|----------------------|------------------------------|----------------------------|----------------|
| | | | | | Peak (dB μ V/m) | AV (dB μ V/m) | | | |
| 4904 | H | 49.73 | --- | 1.33 | 51.06 | --- | 74 | 54 | 2.94 |
| 7356 | H | 37.2 | --- | 10.22 | 47.42 | --- | 74 | 54 | 6.58 |
| --- | H | --- | --- | --- | --- | --- | --- | --- | --- |
| 4904 | V | 48.35 | --- | 1.33 | 49.68 | --- | 74 | 54 | 4.32 |
| 7356 | V | 39.64 | --- | 10.22 | 49.86 | --- | 74 | 54 | 4.14 |
| --- | V | --- | --- | --- | --- | --- | --- | --- | --- |

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

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

Appendix A: Photographs of Test Setup Radiated Emission



Conducted Emission

