

11.5. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407 (a) (3)

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

RESULTS

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

5.2

| Chain 0 Antenna Gain (dBi) | Chain 1 Antenna Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|---|---|---|
| 3.21 | 4.20 | 3.73 |

5.8

| Chain 0 Antenna Gain (dBi) | Chain 1 Antenna Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|---|---|---|
| 4.44 | 5.17 | 4.82 |

5.2

| Chain 0 Antenna Gain (dBi) | Chain 1 Antenna Gain (dBi) | Correlated Chains Directional Gain (dBi) |
|---|---|---|
| 3.21 | 4.20 | 6.73 |

5.8

| Chain 0 Antenna Gain (dBi) | Chain 1 Antenna Gain (dBi) | Correlated Chains Directional Gain (dBi) |
|---|---|---|
| 4.44 | 5.17 | 7.82 |

RESULTS

11.5.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|--|
| Low | 5180 | 25.42 | 18.04 | 3.73 | 6.73 |
| Mid | 5200 | 25.90 | 18.13 | 3.73 | 6.73 |
| High | 5240 | 27.33 | 18.11 | 3.73 | 6.73 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) | FCC PPSD Limit (dBm) | IC eirp PSD Limit (dBm) | PPSD Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------------------|------------------------|
| Low | 5180 | 24.00 | 22.56 | 18.83 | 24.00 | 10.27 | 10.00 | 10.27 |
| Mid | 5200 | 24.00 | 22.58 | 18.85 | 24.00 | 10.27 | 10.00 | 10.27 |
| High | 5240 | 24.00 | 22.58 | 18.85 | 24.00 | 10.27 | 10.00 | 10.27 |

| | | |
|--------------------|------|---|
| Duty Cycle CF (dB) | 0.31 | Included in Calculations of Corr'd Power & PPSD |
|--------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5180 | 10.80 | 10.80 | 14.12 | 24.00 | -9.88 |
| Mid | 5200 | 10.80 | 12.40 | 14.99 | 24.00 | -9.01 |
| High | 5240 | 10.80 | 12.50 | 15.05 | 24.00 | -8.95 |

PPSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PPSD (dBm) | Chain 1 Meas PPSD (dBm) | Total Corr'd PPSD (dBm) | PPSD Limit (dBm) | PPSD Margin (dB) |
|---------|--------------------|----------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| Low | 5180 | -0.45 | -0.62 | 2.79 | 10.27 | -7.48 |
| Mid | 5200 | -1.08 | -0.76 | 2.40 | 10.27 | -7.87 |
| High | 5240 | -1.31 | -1.16 | 2.09 | 10.27 | -8.18 |

11.5.2. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|--|
| Low | 5190 | 57.40 | 36.56 | 3.73 | 6.73 |
| High | 5230 | 58.10 | 36.51 | 3.73 | 6.73 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) | FCC PPSD Limit (dBm) | IC eirp PSD Limit (dBm) | PPSD Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------------------|------------------------|
| Low | 5190 | 24.00 | 23.00 | 19.27 | 24.00 | 10.27 | 10.00 | 10.27 |
| High | 5230 | 24.00 | 23.00 | 19.27 | 24.00 | 10.27 | 10.00 | 10.27 |

| | | |
|--------------------|------|---|
| Duty Cycle CF (dB) | 1.07 | Included in Calculations of Corr'd Power & PPSD |
|--------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5190 | 10.10 | 10.85 | 14.57 | 24.00 | -9.43 |
| High | 5230 | 10.05 | 10.30 | 14.26 | 24.00 | -9.74 |

PPSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PPSD (dBm) | Chain 1 Meas PPSD (dBm) | Total Corr'd PPSD (dBm) | PPSD Limit (dBm) | PPSD Margin (dB) |
|---------|--------------------|----------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| Low | 5190 | -4.13 | -3.56 | 0.24 | 10.27 | -10.03 |
| High | 5230 | -4.31 | -4.13 | -0.14 | 10.27 | -10.41 |

11.5.3. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|--|
| Low | 5210 | 104.50 | 75.90 | 3.73 | 6.73 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC EIRP Limit (dBm) | Max IC Power (dBm) | Power Limit (dBm) | FCC PPSD Limit (dBm) | IC eirp PSD Limit (dBm) | PPSD Limit (dBm) |
|---------|--------------------|--------------------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------------------|------------------------|
| Low | 5210 | 24.00 | 23.00 | 19.27 | 24.00 | 10.27 | 10.00 | 10.27 |

| | | |
|--------------------|------|---|
| Duty Cycle CF (dB) | 1.84 | Included in Calculations of Corr'd Power & PPSD |
|--------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5210 | 11.20 | 11.00 | 15.95 | 24.00 | -8.05 |

PPSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PPSD (dBm) | Chain 1 Meas PPSD (dBm) | Total Corr'd PPSD (dBm) | PPSD Limit (dBm) | PPSD Margin (dB) |
|---------|--------------------|----------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| Low | 5210 | -8.52 | -8.63 | -3.73 | 10.27 | -14.00 |

11.5.1. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|--|
| Low | 5745 | 36.83 | 18.34 | 4.82 | 7.82 |
| Mid | 5785 | 35.58 | 18.38 | 4.82 | 7.82 |
| High | 5825 | 36.25 | 18.46 | 4.82 | 7.82 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) | FCC PPSD Limit (dBm) | IC PSD Limit (dBm) | PPSD Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|-------------------------------|-----------------------------|------------------------|
| Low | 5745 | 30.00 | 29.63 | 35.63 | 29.63 | 30.00 | 30.00 | 30.00 |
| Mid | 5785 | 30.00 | 29.64 | 35.64 | 29.64 | 30.00 | 30.00 | 30.00 |
| High | 5825 | 30.00 | 29.66 | 35.66 | 29.66 | 30.00 | 30.00 | 30.00 |

| | | |
|--------------------|------|---|
| Duty Cycle CF (dB) | 0.31 | Included in Calculations of Corr'd Power & PPSD |
|--------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 10.50 | 9.60 | 13.39 | 29.63 | -16.24 |
| Mid | 5785 | 13.00 | 12.00 | 15.85 | 29.64 | -13.79 |
| High | 5825 | 13.00 | 12.00 | 15.85 | 29.66 | -13.81 |

PPSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PPSD (dBm) | Chain 1 Meas PPSD (dBm) | Total Corr'd PPSD (dBm) | PPSD Limit (dBm) | PPSD Margin (dB) |
|---------|--------------------|----------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| Low | 5745 | 1.58 | 0.43 | 4.36 | 30.00 | -25.64 |
| Mid | 5785 | 2.59 | 1.84 | 5.55 | 30.00 | -24.45 |
| High | 5825 | 2.47 | 1.09 | 5.15 | 30.00 | -24.85 |

Note: For 5.8GHz PSD the RBW of 1MHz was used which can be considered as worst case compared to the 500 kHz required by the standard.

11.5.2. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|--|
| Low | 5755 | 67.3 | 36.85 | 4.82 | 7.82 |
| High | 5795 | 92.0 | 36.92 | 4.82 | 7.82 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) | FCC PPSD Limit (dBm) | IC PSD Limit (dBm) | PPSD Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|-------------------------------|-----------------------------|------------------------|
| Low | 5755 | 30.00 | 30.00 | 36.00 | 30.00 | 30.00 | 30.00 | 30.00 |
| High | 5795 | 30.00 | 30.00 | 36.00 | 30.00 | 30.00 | 30.00 | 30.00 |

| | | |
|--------------------|------|---|
| Duty Cycle CF (dB) | 1.07 | Included in Calculations of Corr'd Power & PPSD |
|--------------------|------|---|

Output Power Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5755 | 10.80 | 9.60 | 14.32 | 30.00 | -15.68 |
| High | 5795 | 14.90 | 13.70 | 18.42 | 30.00 | -11.58 |

PPSD Results

| Channel | Frequency (MHz) | Chain 0 Meas PPSD (dBm) | Chain 1 Meas PPSD (dBm) | Total Corr'd PPSD (dBm) | PPSD Limit (dBm) | PPSD Margin (dB) |
|---------|--------------------|----------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| Low | 5755 | -6.55 | -5.35 | -1.83 | 30.00 | -31.83 |
| High | 5795 | -5.67 | -5.60 | -1.56 | 30.00 | -31.56 |

Note: For 5.8GHz PSD the RBW of 1MHz was used which can be considered as worst case compared to the 500 kHz required by the standard.

11.5.3. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

| Channel | Frequency (MHz) | Min 26 dB BW (MHz) | Min 99% BW (MHz) | Directional Gain for Power (dBi) | Directional Gain for PPSSD (dBi) |
|---------|--------------------|-----------------------------|---------------------------|---|---|
| Low | 5775 | 151.50 | 76.43 | 7.82 | 7.82 |

Limits

| Channel | Frequency (MHz) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Power Limit (dBm) | FCC PPSSD Limit (dBm) | IC PSD Limit (dBm) | PPSSD Limit (dBm) |
|---------|--------------------|--------------------------------|-------------------------------|------------------------------|-------------------------|--------------------------------|-----------------------------|-------------------------|
| Low | 5775 | 28.18 | 30.00 | 36.00 | 28.18 | 30.00 | 17.00 | 17.00 |

| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 1.84 | Included in Calculations of Corr'd Power & PPSSD |
|--------------------|------|--|

Output Power Results

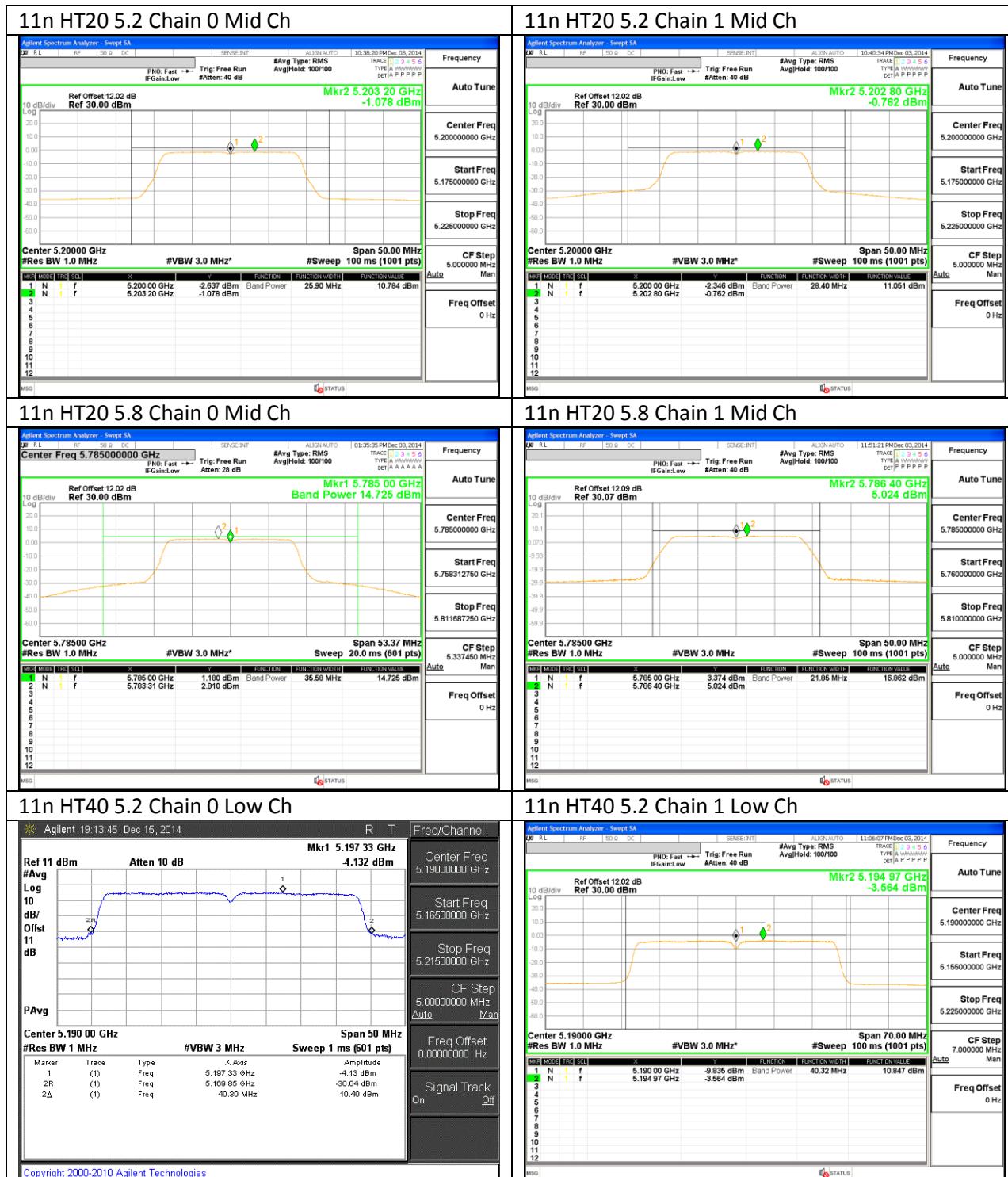
| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Chain 1 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5775 | 12.30 | 11.30 | 16.68 | 28.18 | -11.50 |

PPSSD Results

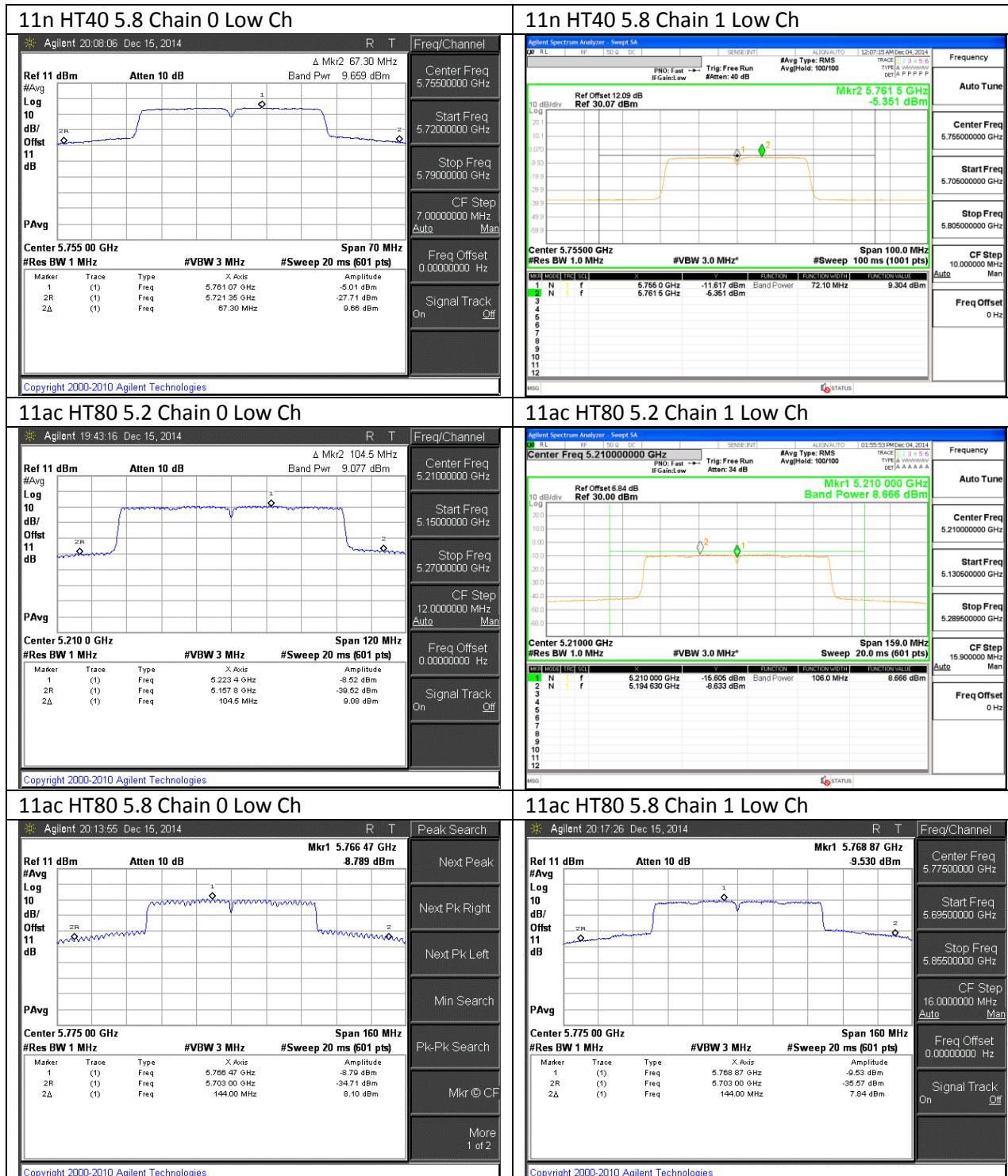
| Channel | Frequency (MHz) | Chain 0 Meas PPSSD (dBm) | Chain 1 Meas PPSSD (dBm) | Total Corr'd PPSSD (dBm) | PPSSD Limit (dBm) | PPSSD Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5775 | -8.79 | -9.53 | -4.29 | 17.00 | -21.29 |

Note: For 5.8GHz PSD the RBW of 1MHz was used which can be considered as worst case compared to the 500 kHz required by the standard.

11.5.4. OUTPUT POWER AND PPSD PLOTS



Note: For 5.8GHz PSD the RBW of 1MHz was used which can be considered as worst case compared to the 500 kHz required by the standard.



Note: For 5.8GHz PSD the RBW of 1MHz was used which can be considered as worst case compared to the 500 kHz required by the standard.

12. TRANSMITTER ABOVE 1 GHz SISO Chain 0

LIMITS

FCC §15.205 and §15.209

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 UNII part H) 6) d) Method VB:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

NOTE:

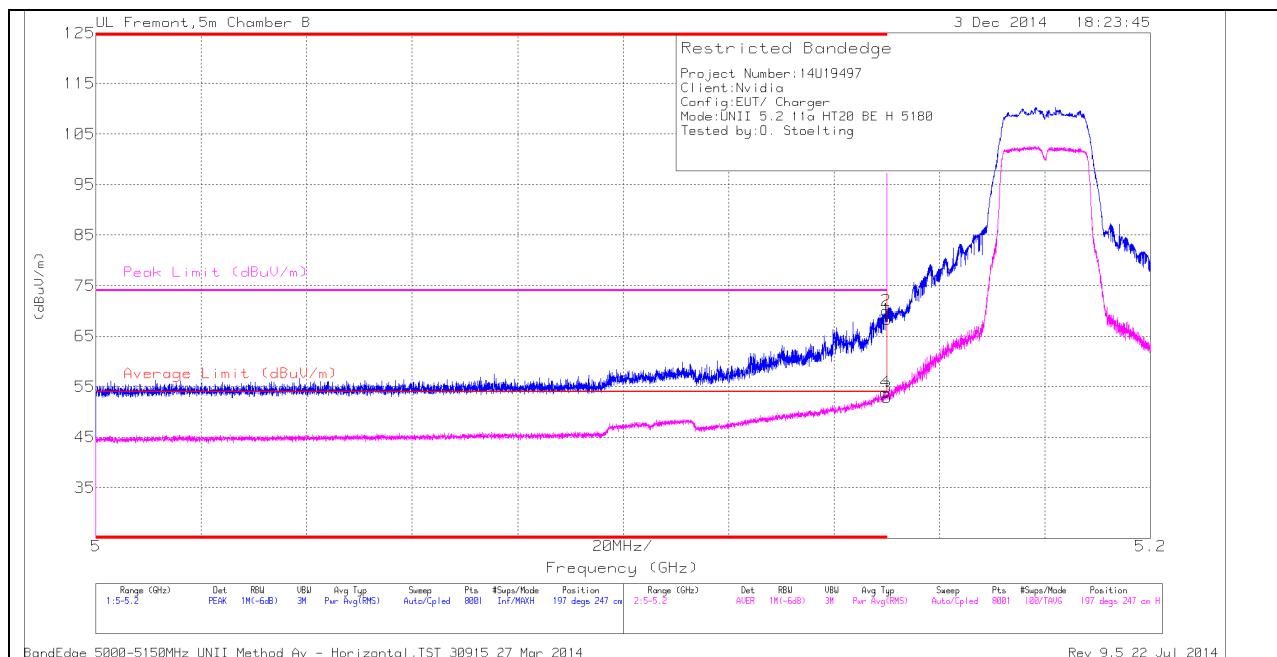
EUT was evaluated/investigated with peripheral cables. Peripheral cables effects are nominal to EUT during radiated evaluation.

12.1. 5.2 GHz

12.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

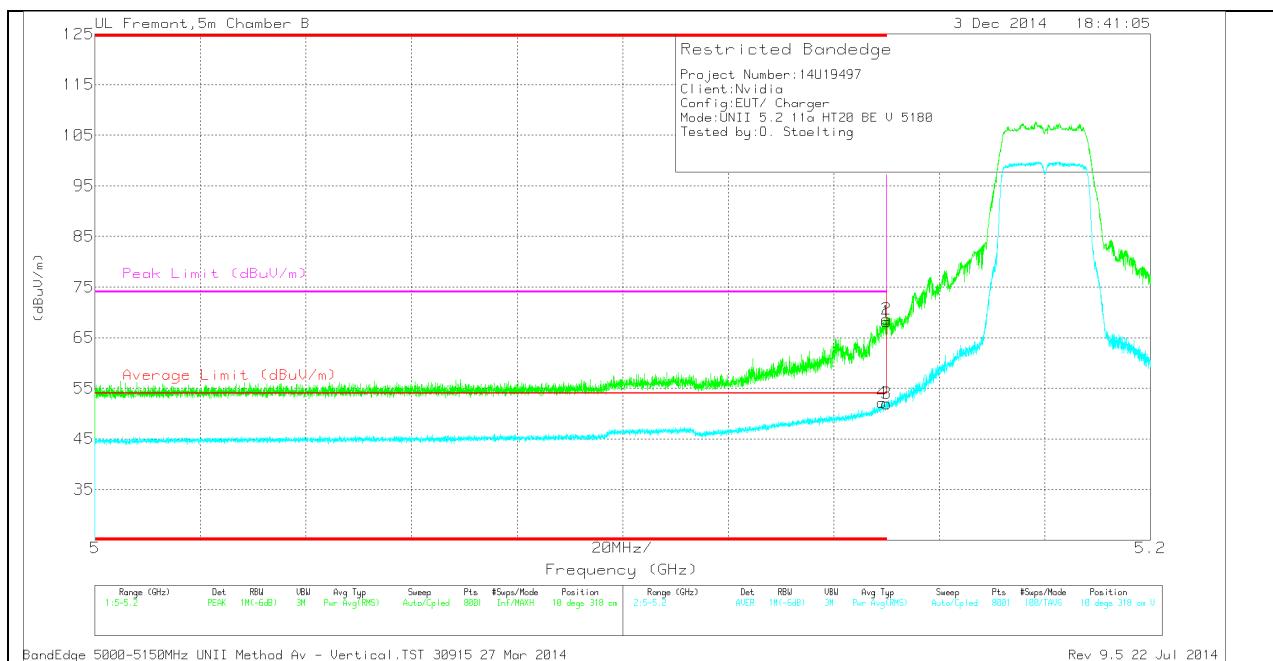
| Marker | Frequency (GHz) | Meter Reading (dBmV) | Det | AF T345 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBmV/m) | Average Limit (dBmV/m) | Margin (dB) | Peak Limit (dBmV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 54.54 | PK | 34.3 | -20.5 | 0 | 68.34 | - | - | 74 | -5.66 | 197 | 247 | H |
| 2 | * 5.15 | 56.28 | PK | 34.3 | -20.5 | 0 | 70.08 | - | - | 74 | -3.92 | 197 | 247 | H |
| 3 | * 5.15 | 38.8 | RMS | 34.3 | -20.5 | .3 | 52.92 | 54 | -1.08 | - | - | 197 | 247 | H |
| 4 | * 5.15 | 39.82 | RMS | 34.3 | -20.5 | .3 | 53.94 | 54 | -.06 | - | - | 197 | 247 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 54.37 | PK | 34.3 | -20.5 | 0 | 68.17 | - | - | 74 | -5.83 | 10 | 318 | V |
| 2 | * 5.15 | 54.83 | PK | 34.3 | -20.5 | 0 | 68.63 | - | - | 74 | -5.37 | 10 | 318 | V |
| 3 | * 5.15 | 37.85 | RMS | 34.3 | -20.5 | .3 | 51.97 | 54 | -2.03 | - | - | 10 | 318 | V |
| 4 | * 5.149 | 38.09 | RMS | 34.3 | -20.5 | .3 | 52.21 | 54 | -1.79 | - | - | 10 | 318 | V |

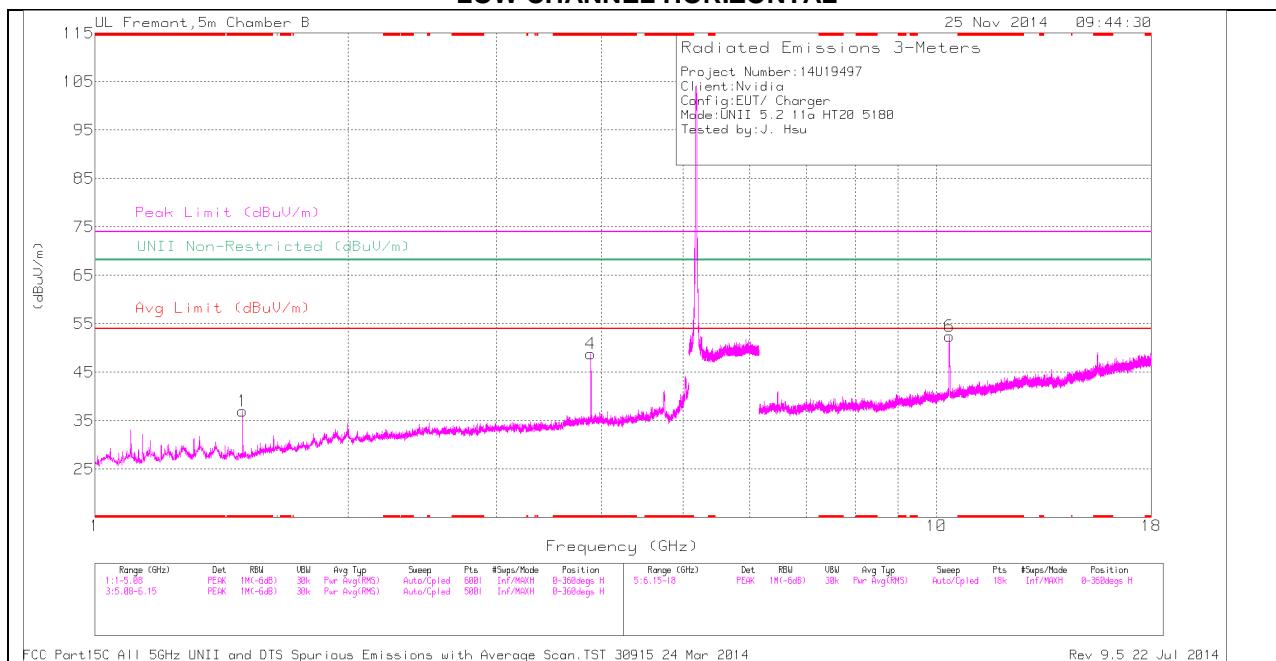
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

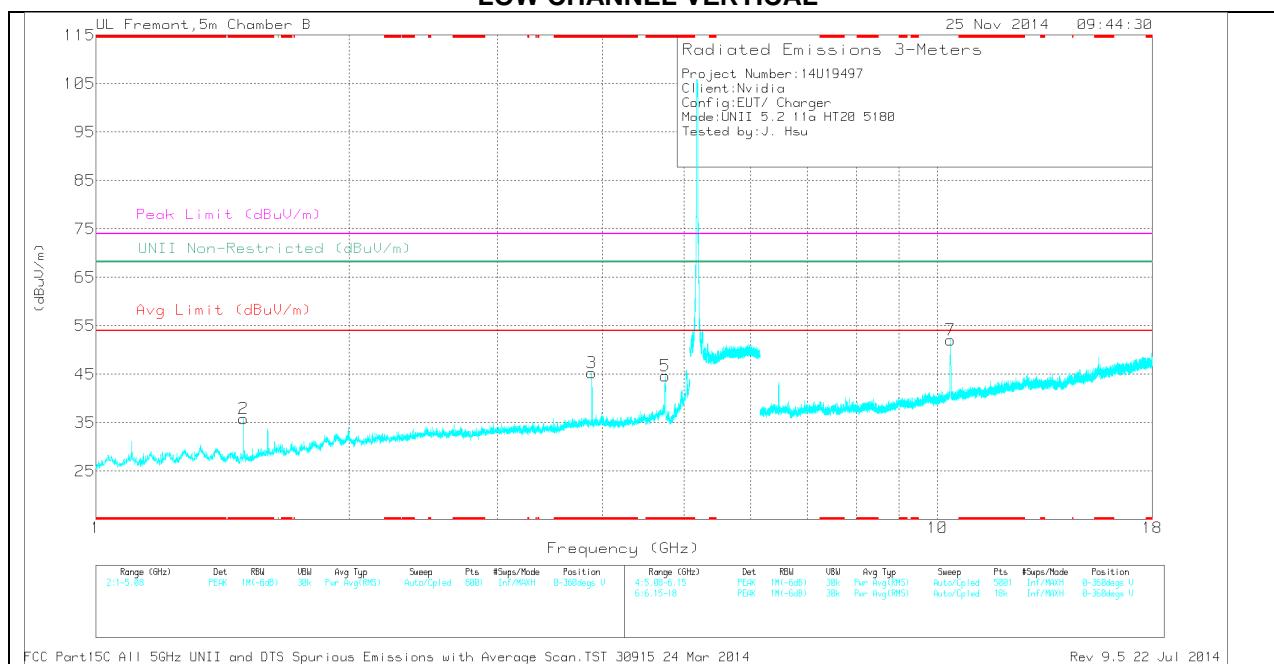
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.498 | 43.47 | PK | 27.9 | -34.4 | 0 | 36.97 | - | - | 74 | -37.03 | - | - | 0-360 | 199 | H |
| 4 | * 3.885 | 46.46 | PK | 33.8 | -31.5 | 0 | 48.76 | - | - | 74 | -25.24 | - | - | 0-360 | 199 | H |
| 2 | * 1.498 | 42.31 | PK | 27.9 | -34.4 | 0 | 35.81 | - | - | 74 | -38.19 | - | - | 0-360 | 100 | V |
| 3 | * 3.885 | 43.02 | PK | 33.8 | -31.5 | 0 | 45.32 | - | - | 74 | -28.68 | - | - | 0-360 | 100 | V |
| 5 | * 4.748 | 40.3 | PK | 34.2 | -29.8 | 0 | 44.7 | - | - | 74 | -29.3 | - | - | 0-360 | 199 | V |
| 6 | 10.359 | 38.61 | PK | 37.2 | -23.4 | 0 | 52.41 | - | - | - | - | 68.2 | -15.79 | 0-360 | 199 | H |
| 7 | 10.362 | 38.19 | PK | 37.3 | -23.4 | 0 | 52.09 | - | - | - | - | 68.2 | -16.11 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

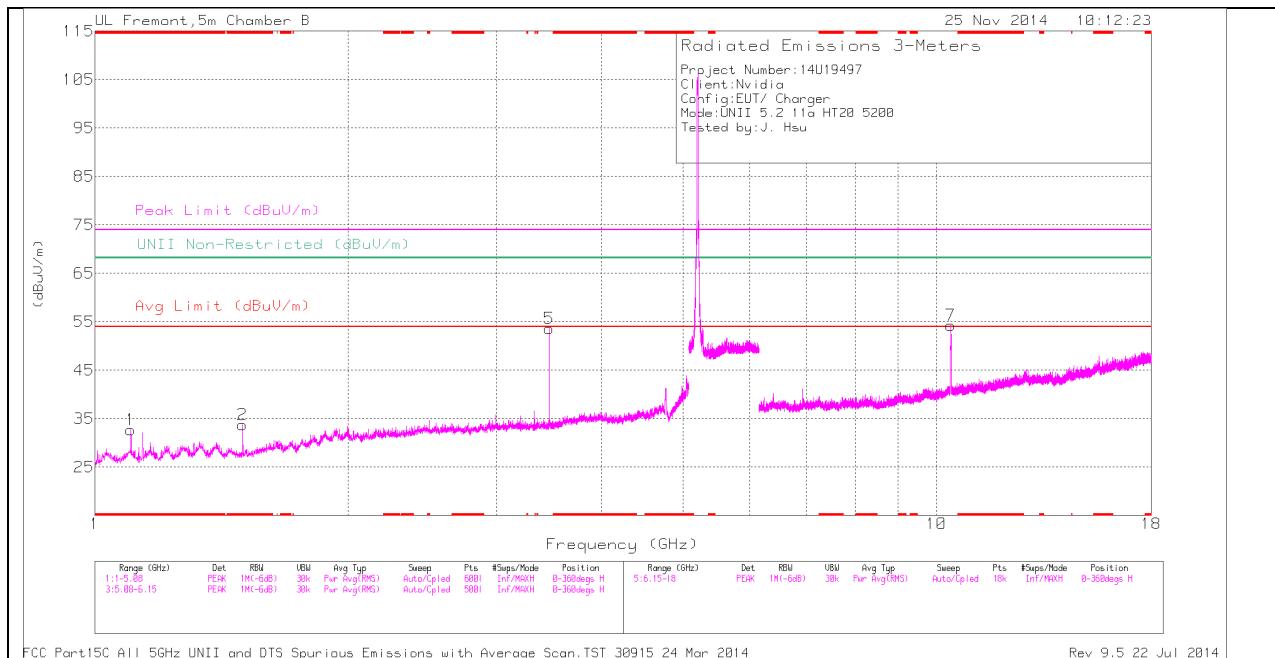
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.885 | 52.98 | PK1 | 33.8 | -31.5 | 0 | 55.28 | - | - | 74 | -18.72 | - | - | 83 | 277 | H |
| * 3.885 | 44.29 | AD1 | 33.8 | -31.5 | .3 | 46.89 | 54 | -7.11 | - | - | - | - | 83 | 277 | H |
| 10.358 | 53.47 | PK1 | 37.2 | -23.4 | 0 | 67.27 | - | - | - | - | 68.2 | -.93 | 35 | 201 | H |
| 10.359 | 38.72 | AD1 | 37.2 | -23.4 | .3 | 52.82 | - | - | - | - | - | - | 35 | 201 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

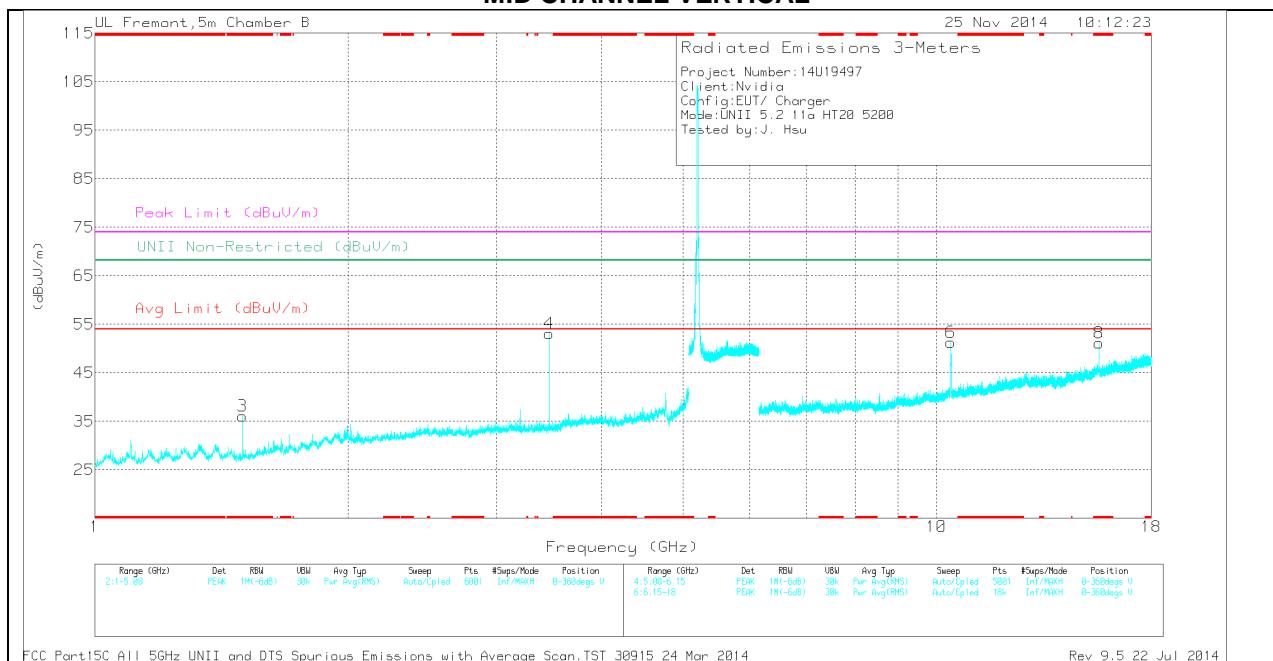
RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.103 | 39.77 | PK | 27.4 | -34.4 | 0 | 32.77 | - | - | 74 | -41.23 | - | - | 0-360 | 199 | H |
| 2 | * 1.498 | 40.25 | PK | 27.9 | -34.4 | 0 | 33.75 | - | - | 74 | -40.25 | - | - | 0-360 | 101 | H |
| 3 | * 1.498 | 42.62 | PK | 27.9 | -34.4 | 0 | 36.12 | - | - | 74 | -37.88 | - | - | 0-360 | 199 | V |
| 8 | * 15.603 | 30.73 | PK | 40.6 | -20.2 | 0 | 51.13 | - | - | 74 | -22.87 | - | - | 0-360 | 101 | V |
| 5 | 3.467 | 52.24 | PK | 32.8 | -31.4 | 0 | 53.64 | - | - | - | - | 68.2 | -14.56 | 0-360 | 101 | H |
| 4 | 3.467 | 51.61 | PK | 32.8 | -31.3 | 0 | 53.11 | - | - | - | - | 68.2 | -15.09 | 0-360 | 199 | V |
| 6 | 10.399 | 37.55 | PK | 37.3 | -23.6 | 0 | 51.25 | - | - | - | - | 68.2 | -16.95 | 0-360 | 101 | V |
| 7 | 10.401 | 40.61 | PK | 37.3 | -23.6 | 0 | 54.31 | - | - | - | - | 68.2 | -13.89 | 0-360 | 199 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

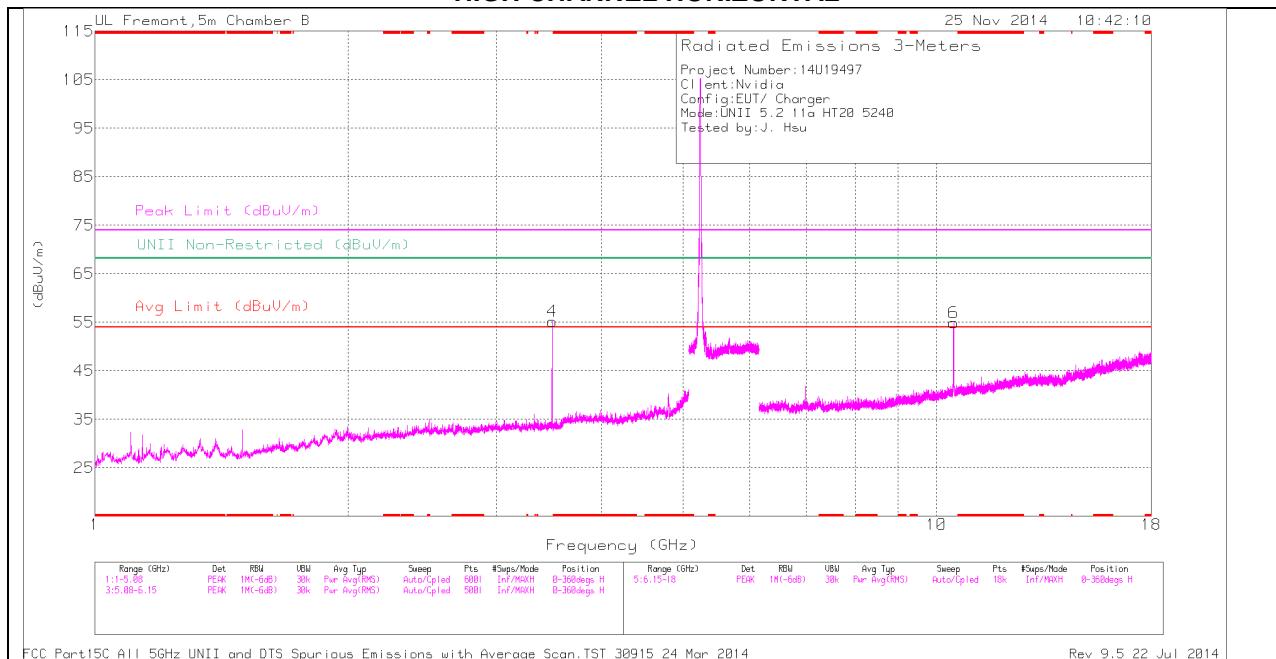
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3.467 | 56.06 | PK1 | 32.8 | -31.3 | 0 | 57.56 | - | - | - | - | 68.2 | -10.64 | 19 | 246 | H |
| 3.467 | 45.36 | AD1 | 32.8 | -31.3 | .3 | 47.16 | - | - | - | - | - | - | 19 | 246 | H |
| 10.398 | 52.1 | PK1 | 37.3 | -23.6 | 0 | 65.8 | - | - | - | - | 68.2 | -2.4 | 1 | 230 | H |
| 10.4 | 38.1 | AD1 | 37.3 | -23.6 | .3 | 52.1 | - | - | - | - | - | - | 1 | 230 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

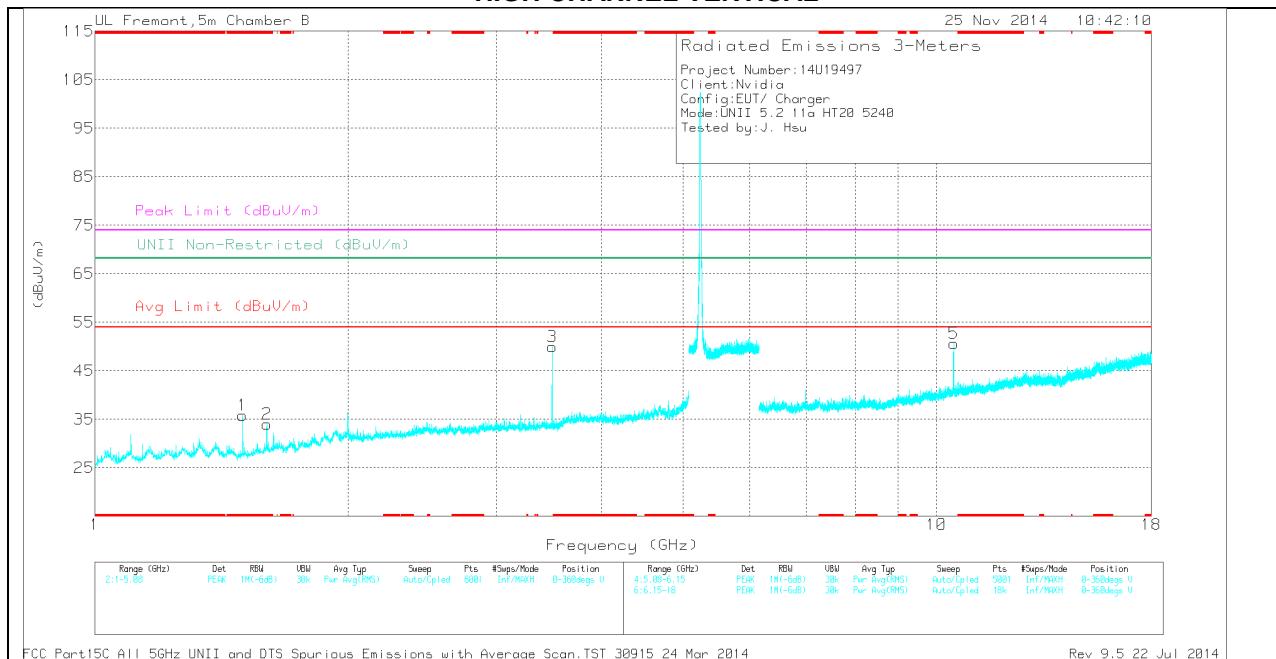
RMS - RMS detection

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.498 | 42.33 | PK | 27.9 | -34.4 | 0 | 35.83 | - | - | 74 | -38.17 | - | - | 0-360 | 199 | V |
| 2 | * 1.6 | 38.7 | PK | 28.5 | -33.2 | 0 | 34 | - | - | 74 | -40 | - | - | 0-360 | 101 | V |
| 4 | 3.494 | 53.95 | PK | 32.8 | -31.6 | 0 | 55.15 | - | - | - | - | 68.2 | -13.05 | 0-360 | 101 | H |
| 3 | 3.494 | 48.84 | PK | 32.8 | -31.6 | 0 | 50.04 | - | - | - | - | 68.2 | -18.16 | 0-360 | 101 | V |
| 6 | 10.479 | 41.62 | PK | 37.4 | -24.1 | 0 | 54.92 | - | - | - | - | 68.2 | -13.28 | 0-360 | 199 | H |
| 5 | 10.48 | 37.36 | PK | 37.4 | -24.1 | 0 | 50.66 | - | - | - | - | 68.2 | -17.54 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3.493 | 57.21 | PK1 | 32.8 | -31.6 | 0 | 58.41 | - | - | - | - | 68.2 | -9.79 | 14 | 243 | H |
| 3.493 | 45.98 | AD1 | 32.8 | -31.6 | .3 | 47.48 | - | - | - | - | - | - | 14 | 243 | H |
| 10.479 | 52.35 | PK1 | 37.4 | -24.1 | 0 | 65.65 | - | - | - | - | 68.2 | -2.55 | 18 | 251 | H |
| 10.48 | 38.85 | AD1 | 37.4 | -24.1 | .3 | 52.45 | - | - | - | - | - | - | 18 | 251 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

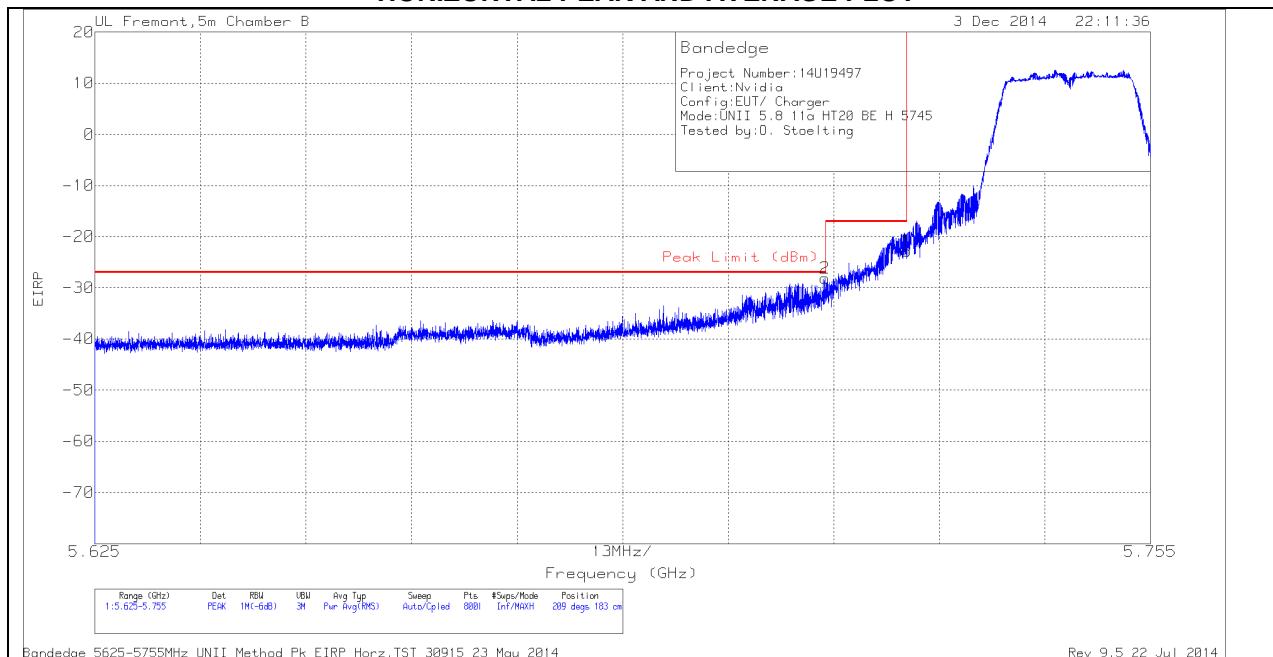
PK - Peak detector

RMS - RMS detection

12.2. 5.8 GHz

12.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PEAK AND AVERAGE PLOT



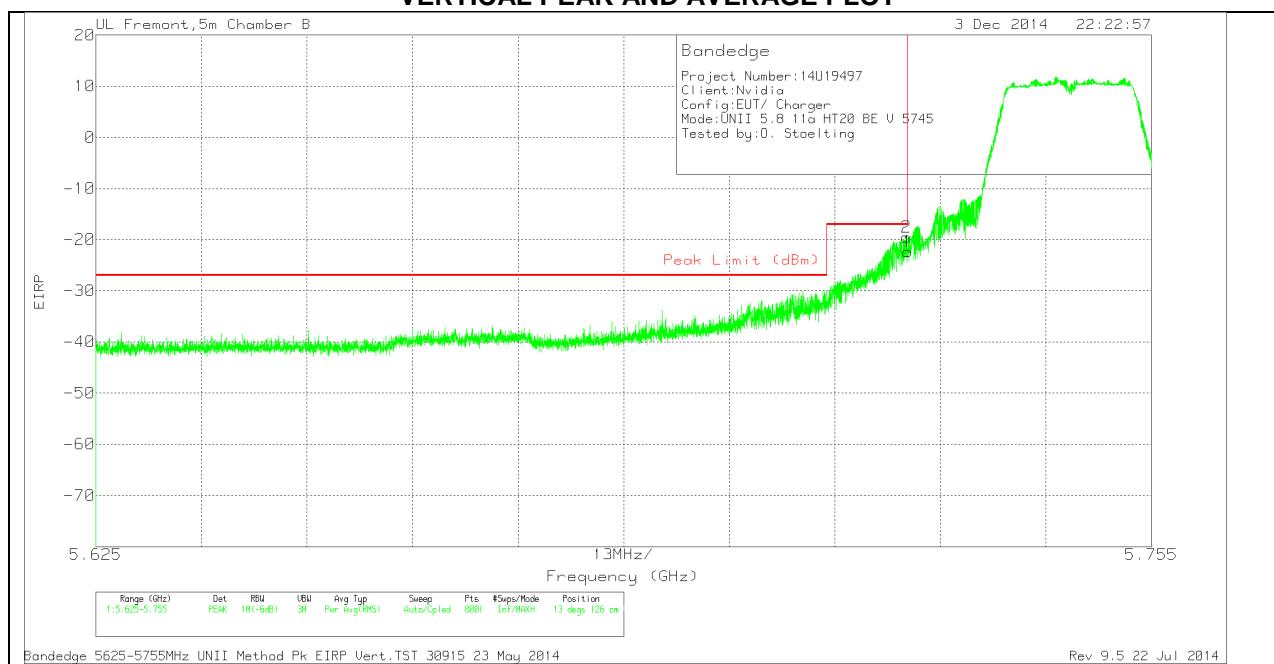
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.715 | -54.31 | PK | 34.5 | -20.1 | 11.8 | -28.11 | -27 | -1.11 | 209 | 183 | H |
| 1 | 5.725 | -49.13 | PK | 34.6 | -20.1 | 11.8 | -22.83 | -17 | -5.83 | 209 | 183 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

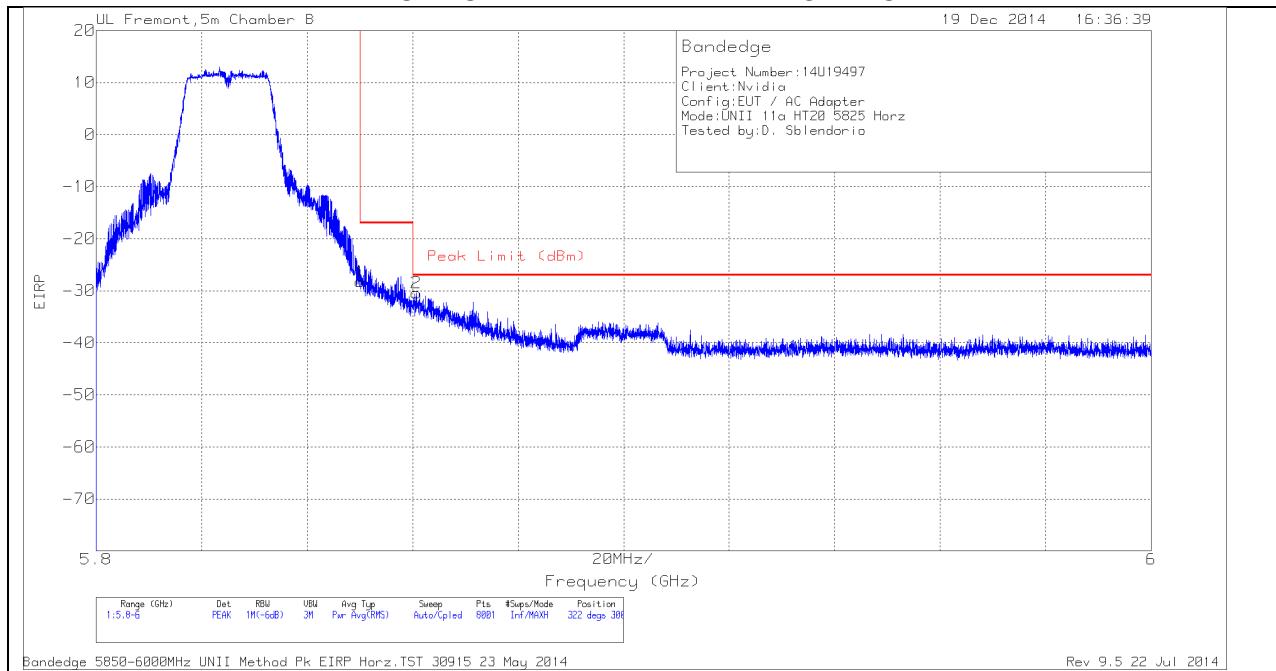
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.725 | -48.65 | PK | 34.6 | -20.1 | 11.8 | 0 | -22.35 | -17 | -5.35 | 13 | 126 | V |
| 2 | 5.725 | -45.77 | PK | 34.6 | -20.1 | 11.8 | 0 | -19.47 | -17 | -2.47 | 13 | 126 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



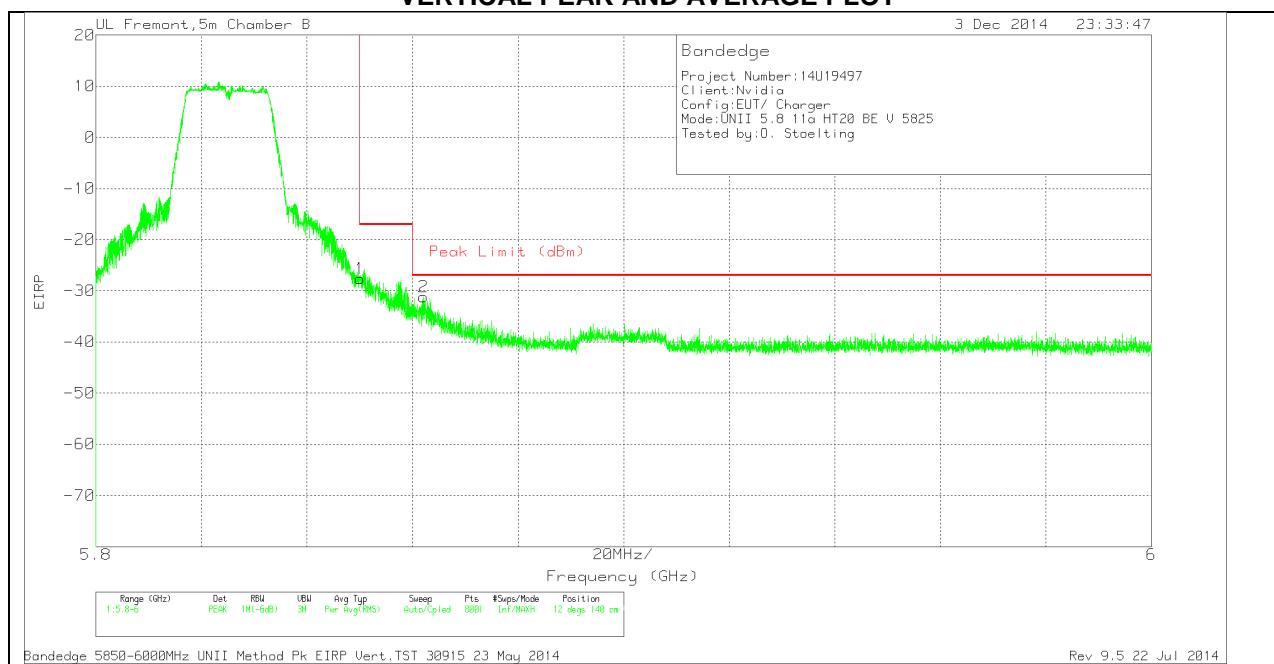
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/F ltr/Pad (dB) | Conversion Factor (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -54.96 | PK | 34.8 | -19.9 | 11.8 | -28.26 | -17 | -11.26 | 322 | 300 | H |
| 2 | 5.861 | -57.15 | PK | 34.8 | -19.9 | 11.8 | -30.45 | -27 | -3.45 | 322 | 300 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



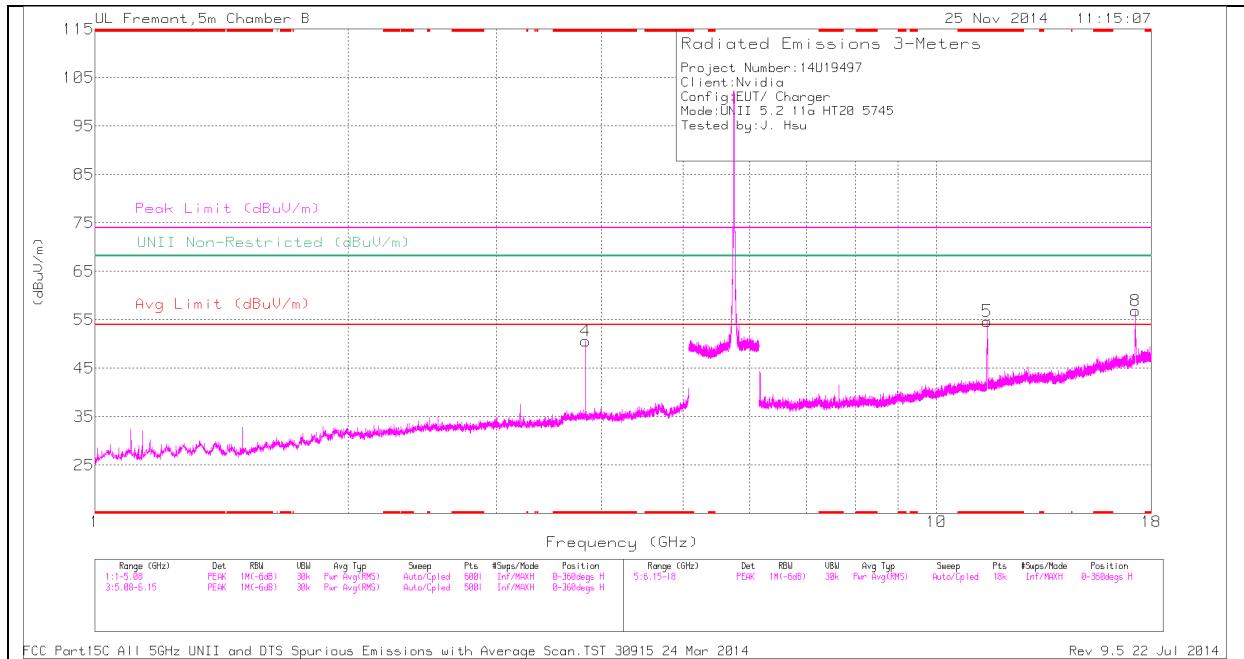
VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -54.34 | PK | 34.8 | -19.9 | 11.8 | 0 | -27.64 | -17 | -10.64 | 12 | 140 | V |
| 2 | 5.862 | -57.86 | PK | 34.8 | -19.9 | 11.8 | 0 | -31.16 | -27 | -4.16 | 12 | 140 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

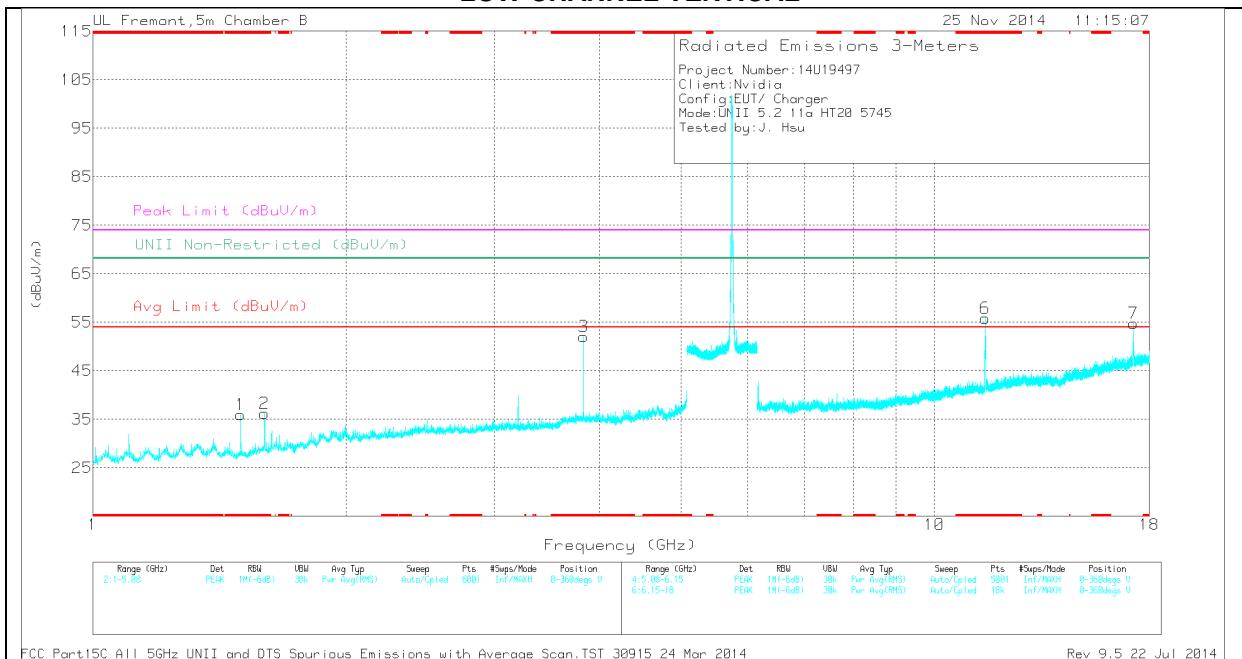
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ftr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 4 | * 3.83 | 48.2 | PK | 33.7 | -31.3 | 0 | 50.6 | - | - | 74 | -23.4 | - | - | 0-360 | 101 | H |
| 1 | * 1.498 | 42.48 | PK | 27.9 | -34.4 | 0 | 35.98 | - | - | 74 | -38.02 | - | - | 0-360 | 199 | V |
| 2 | * 1.6 | 40.9 | PK | 28.5 | -33.2 | 0 | 36.2 | - | - | 74 | -37.8 | - | - | 0-360 | 101 | V |
| 3 | * 3.83 | 49.66 | PK | 33.7 | -31.3 | 0 | 52.06 | - | - | 74 | -21.94 | - | - | 0-360 | 199 | V |
| 5 | * 11.493 | 39.62 | PK | 38 | -22.9 | 0 | 54.72 | - | - | 74 | -19.28 | - | - | 0-360 | 101 | H |
| 6 | * 11.489 | 40.7 | PK | 38 | -22.9 | 0 | 55.8 | - | - | 74 | -18.2 | - | - | 0-360 | 101 | V |
| 8 | 17.232 | 35.17 | PK | 41.5 | -19.8 | 0 | 56.87 | - | - | - | - | 68.2 | -11.33 | 0-360 | 101 | H |
| 7 | 17.233 | 33.14 | PK | 41.5 | -19.8 | 0 | 54.84 | - | - | - | - | 68.2 | -13.36 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

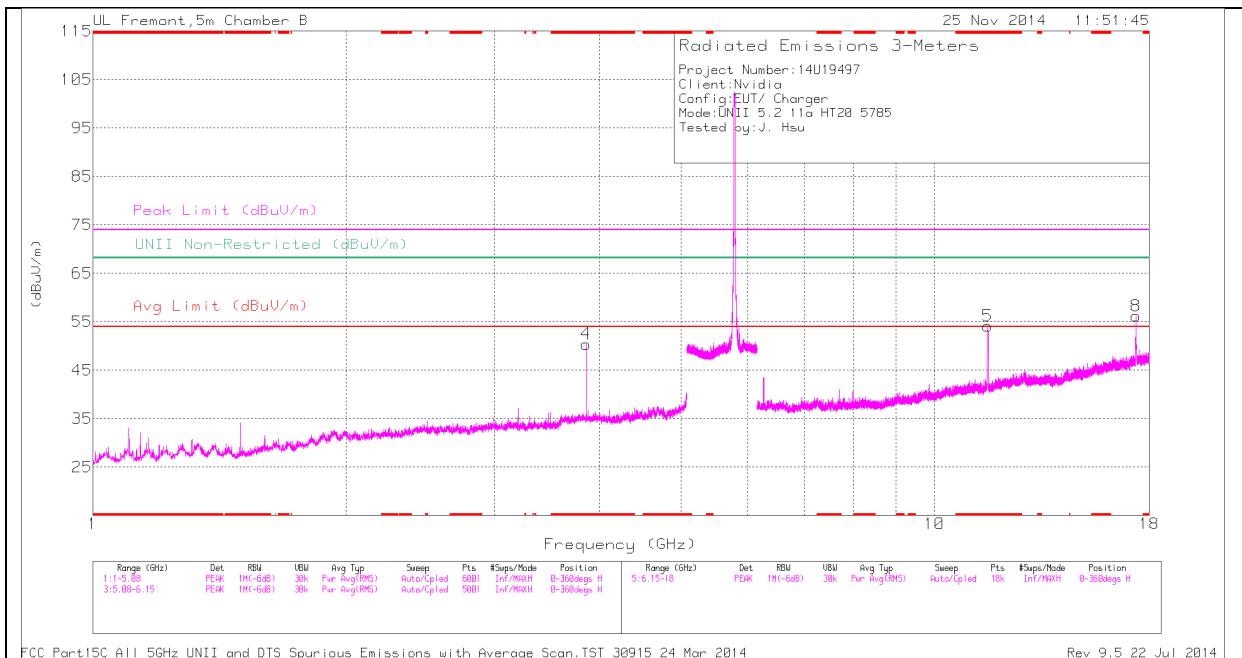
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ftr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.83 | 51.6 | PK1 | 33.7 | -31.3 | 0 | 54 | - | - | 74 | -20 | - | - | 51 | 233 | V |
| * 3.83 | 40.87 | AD1 | 33.7 | -31.3 | .3 | 43.57 | 54 | -10.43 | - | - | - | - | 51 | 233 | V |
| * 11.492 | 48.17 | PK1 | 38 | -22.9 | 0 | 63.27 | - | - | 74 | -10.73 | - | - | 17 | 108 | V |
| * 11.491 | 37.36 | AD1 | 38 | -22.9 | .3 | 52.76 | 54 | -1.24 | - | - | - | - | 17 | 108 | V |
| 17.236 | 42.28 | PK1 | 41.5 | -19.7 | 0 | 64.08 | - | - | - | - | 68.2 | -4.12 | 8 | 107 | H |
| 17.236 | 30.74 | AD1 | 41.5 | -19.7 | .3 | 52.84 | - | - | - | - | - | - | 8 | 107 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

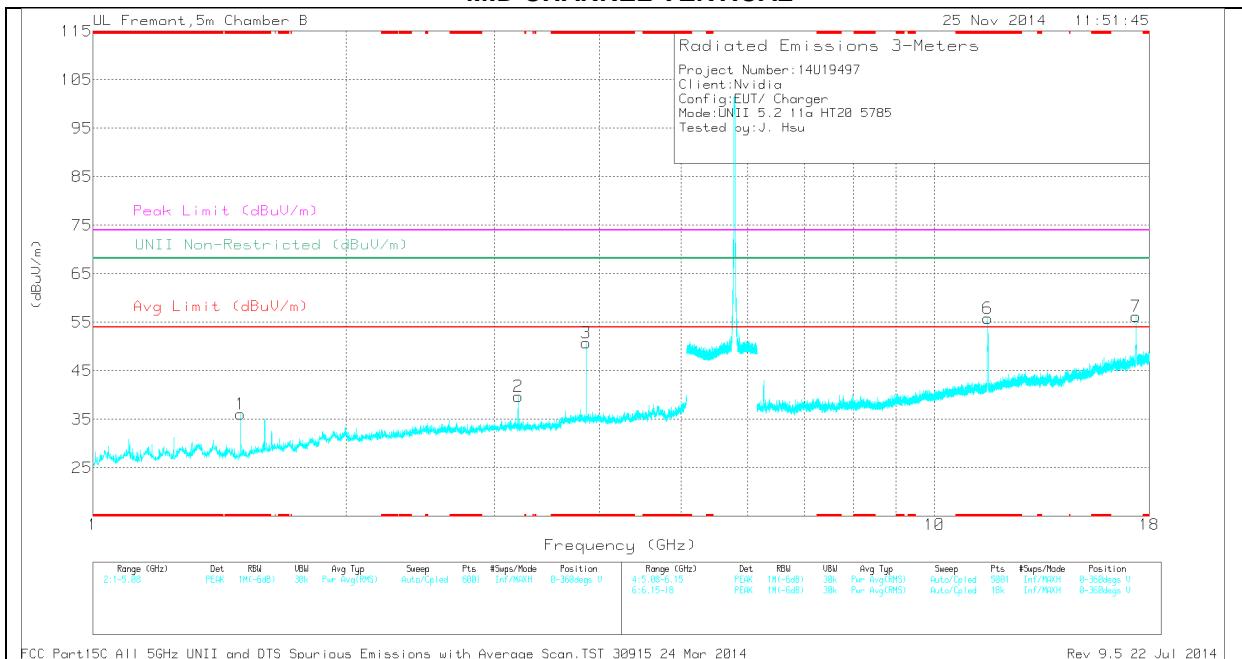
RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 4 | * 3.857 | 48.24 | PK | 33.7 | -31.5 | 0 | 50.44 | - | - | 74 | -23.56 | - | - | 0-360 | 101 | H |
| 1 | * 1.498 | 42.56 | PK | 27.9 | -34.4 | 0 | 36.06 | - | - | 74 | -37.94 | - | - | 0-360 | 101 | V |
| 3 | * 3.857 | 48.61 | PK | 33.7 | -31.5 | 0 | 50.81 | - | - | 74 | -23.19 | - | - | 0-360 | 199 | V |
| 5 | * 11.572 | 38.41 | PK | 38.1 | -22.4 | 0 | 54.11 | - | - | 74 | -19.89 | - | - | 0-360 | 200 | H |
| 6 | * 11.572 | 39.97 | PK | 38.1 | -22.3 | 0 | 55.77 | - | - | 74 | -18.23 | - | - | 0-360 | 200 | V |
| 2 | 3.2 | 38.64 | PK | 32.8 | -31.7 | 0 | 39.74 | - | - | - | - | 68.2 | -28.46 | 0-360 | 199 | V |
| 8 | 17.351 | 34.71 | PK | 41.6 | -20.1 | 0 | 56.21 | - | - | - | - | 68.2 | -11.99 | 0-360 | 200 | H |
| 7 | 17.353 | 34.67 | PK | 41.6 | -20.1 | 0 | 56.17 | - | - | - | - | 68.2 | -12.03 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

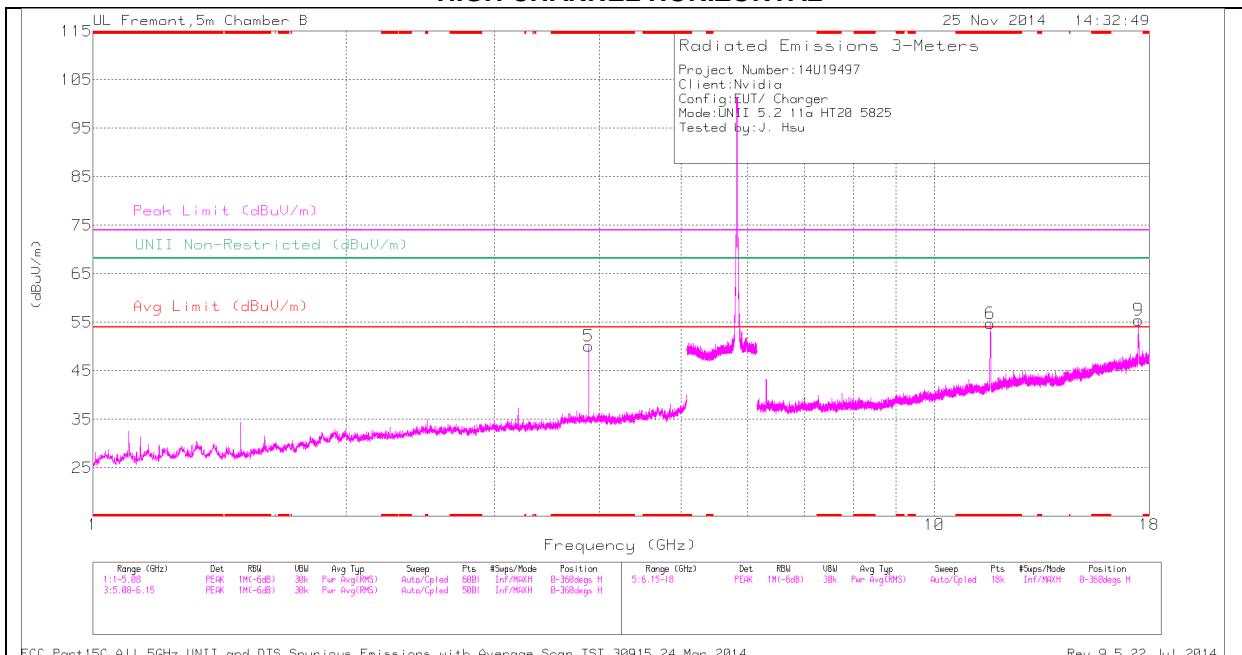
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.857 | 51.74 | PK1 | 33.7 | -31.5 | 0 | 53.94 | - | - | 74 | -20.06 | - | - | 177 | 206 | V |
| * 3.857 | 44.78 | AD1 | 33.7 | -31.5 | .3 | 47.28 | 54 | -6.72 | - | - | - | - | 177 | 206 | V |
| * 11.576 | 47.91 | PK1 | 38.1 | -22.5 | 0 | 63.51 | - | - | 74 | -10.49 | - | - | 333 | 280 | V |
| * 11.571 | 36.69 | AD1 | 38.1 | -22.3 | .3 | 52.79 | 54 | -1.21 | - | - | - | - | 333 | 280 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL HORIZONTAL

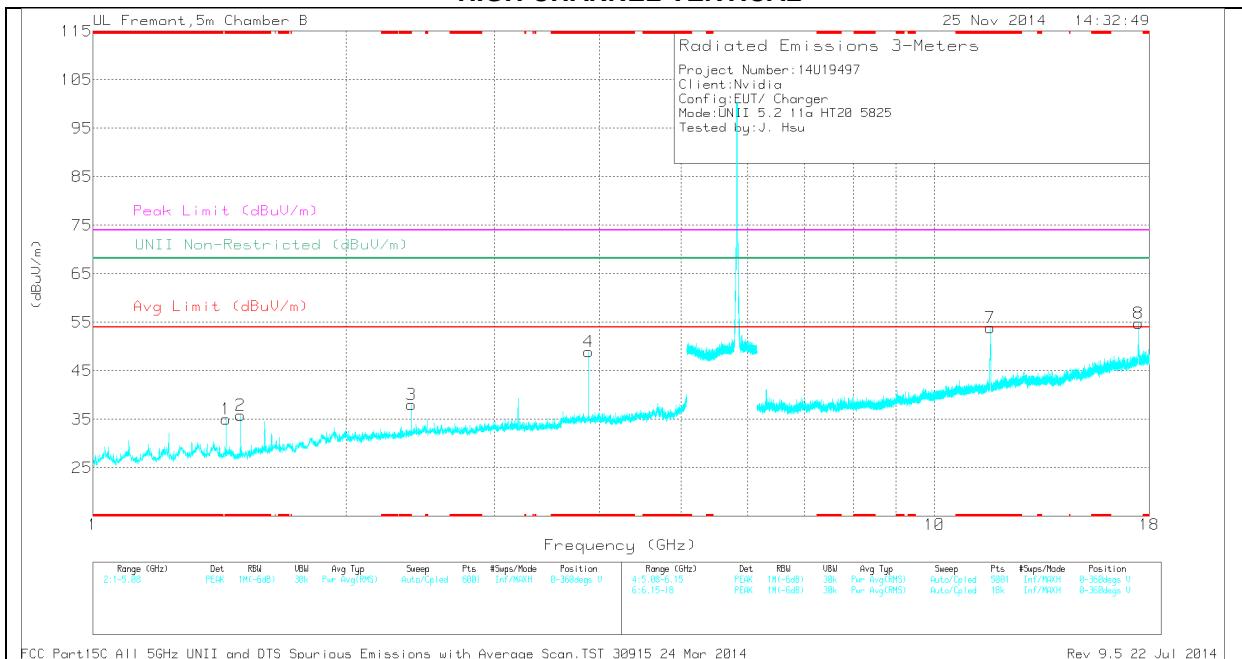


FCC Part 15C All 5GHz UNII and DTS Spurious Emissions with Average Scan, TST 30915, 24 Mar 2014

Rev 9.5 22 Jul 2014

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 5 | * 3.883 | 47.82 | PK | 33.8 | -31.5 | 0 | 50.12 | - | - | 74 | -23.88 | - | - | 0-360 | 200 | H |
| 1 | * 1.439 | 40.9 | PK | 28.3 | -34.2 | 0 | 35 | - | - | 74 | -39 | - | - | 0-360 | 199 | V |
| 2 | * 1.498 | 42.35 | PK | 27.9 | -34.4 | 0 | 35.85 | - | - | 74 | -38.15 | - | - | 0-360 | 100 | V |
| 4 | * 3.883 | 46.65 | PK | 33.8 | -31.5 | 0 | 48.95 | - | - | 74 | -25.05 | - | - | 0-360 | 199 | V |
| 6 | * 11.653 | 39.74 | PK | 38.2 | -23.1 | 0 | 54.84 | - | - | 74 | -19.16 | - | - | 0-360 | 101 | H |
| 7 | * 11.651 | 38.89 | PK | 38.1 | -23.1 | 0 | 53.89 | - | - | 74 | -20.11 | - | - | 0-360 | 101 | V |
| 3 | 2.391 | 38.63 | PK | 32.1 | -32.7 | 0 | 38.03 | - | - | - | - | 68.2 | -30.17 | 0-360 | 100 | V |
| 9 | 17.478 | 33.7 | PK | 41.7 | -19.9 | 0 | 55.5 | - | - | - | - | 68.2 | -12.7 | 0-360 | 101 | H |
| 8 | 17.479 | 32.95 | PK | 41.7 | -19.9 | 0 | 54.75 | - | - | - | - | 68.2 | -13.45 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.883 | 52.11 | PK1 | 33.8 | -31.5 | 0 | 54.41 | - | - | 74 | -19.59 | - | - | 358 | 272 | H |
| * 3.883 | 42.37 | AD1 | 33.8 | -31.5 | .3 | 44.97 | 54 | -9.03 | - | - | - | - | 358 | 272 | H |
| * 11.648 | 49.28 | PK1 | 38.1 | -23 | 0 | 64.38 | - | - | 74 | -9.62 | - | - | 360 | 116 | H |
| * 11.648 | 36.44 | AD1 | 38.1 | -23 | .3 | 51.84 | 54 | -2.16 | - | - | - | - | 360 | 116 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

13. TRANSMITTER ABOVE 1 GHz SISO Chain 1

LIMITS

FCC §15.205 and §15.209

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 UNII part H) 6) d) Method VB:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

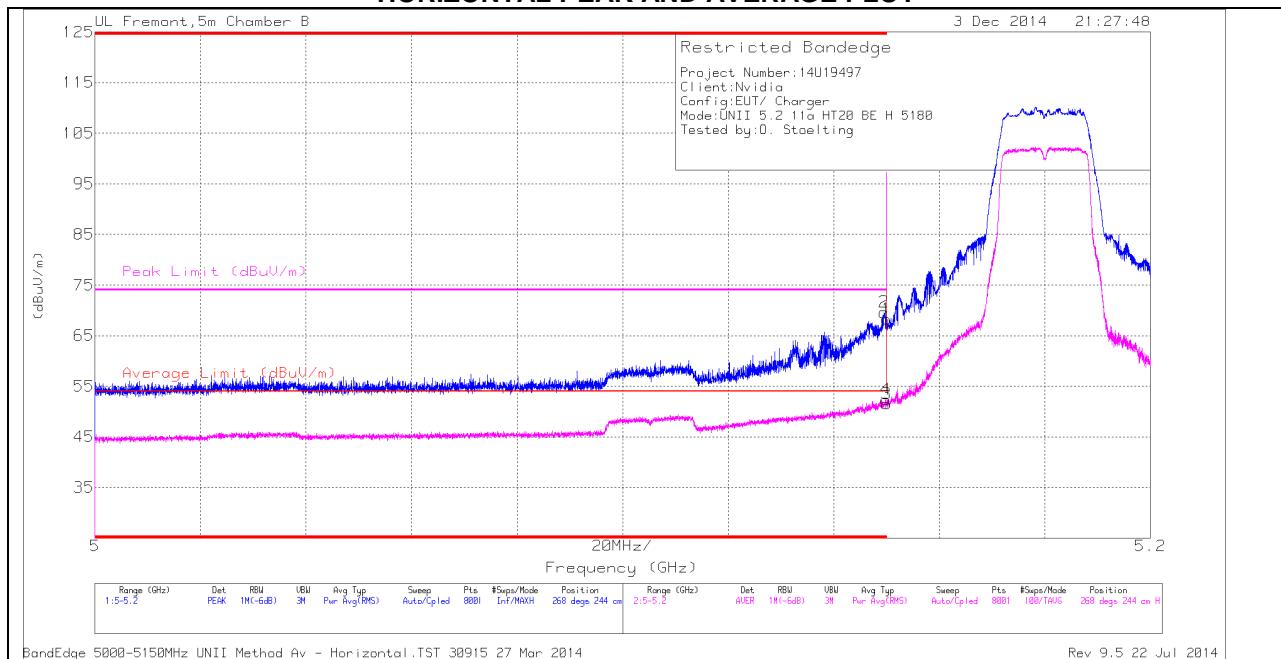
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

13.1. 5.2 GHz

13.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

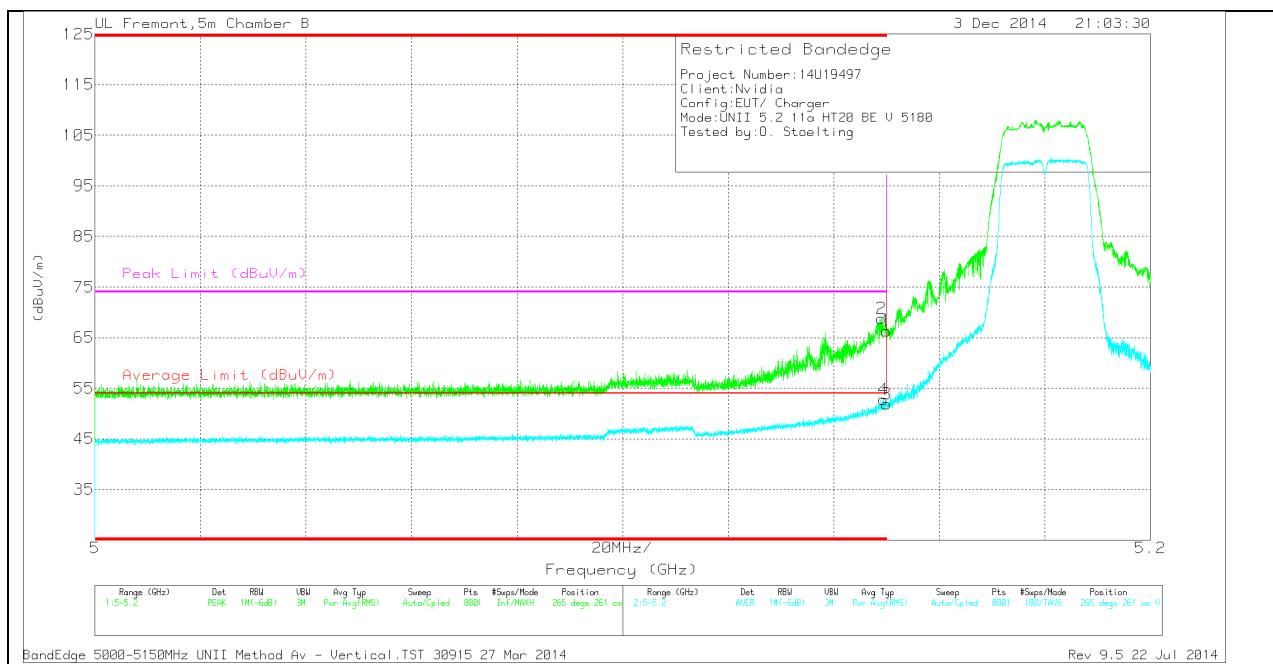
| Marker | Frequency (GHz) | Meter Reading (dBmV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBmV) | Average Limit (dBmV) | Margin (dB) | Peak Limit (dBmV) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|--------------------------|----------------------|-------------|-------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 54.44 | PK | 34.3 | -20.5 | 0 | 68.24 | - | - | 74 | -5.76 | 268 | 244 | H |
| 2 | * 5.15 | 55.8 | PK | 34.3 | -20.5 | 0 | 69.6 | - | - | 74 | -4.4 | 268 | 244 | H |
| 3 | * 5.15 | 37.37 | RMS | 34.3 | -20.5 | .3 | 51.49 | 54 | -2.51 | - | - | 268 | 244 | H |
| 4 | * 5.15 | 38.33 | RMS | 34.3 | -20.5 | .3 | 52.45 | 54 | -1.55 | - | - | 268 | 244 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2 | * 5.149 | 54.98 | PK | 34.3 | -20.5 | 0 | 68.78 | - | - | 74 | -5.22 | 265 | 261 | V |
| 4 | * 5.149 | 38.62 | RMS | 34.3 | -20.5 | .3 | 52.74 | 54 | -1.26 | - | - | 265 | 261 | V |
| 1 | * 5.15 | 52.57 | PK | 34.3 | -20.5 | 0 | 66.37 | - | - | 74 | -7.63 | 265 | 261 | V |
| 3 | * 5.15 | 37.81 | RMS | 34.3 | -20.5 | .3 | 51.93 | 54 | -2.07 | - | - | 265 | 261 | V |

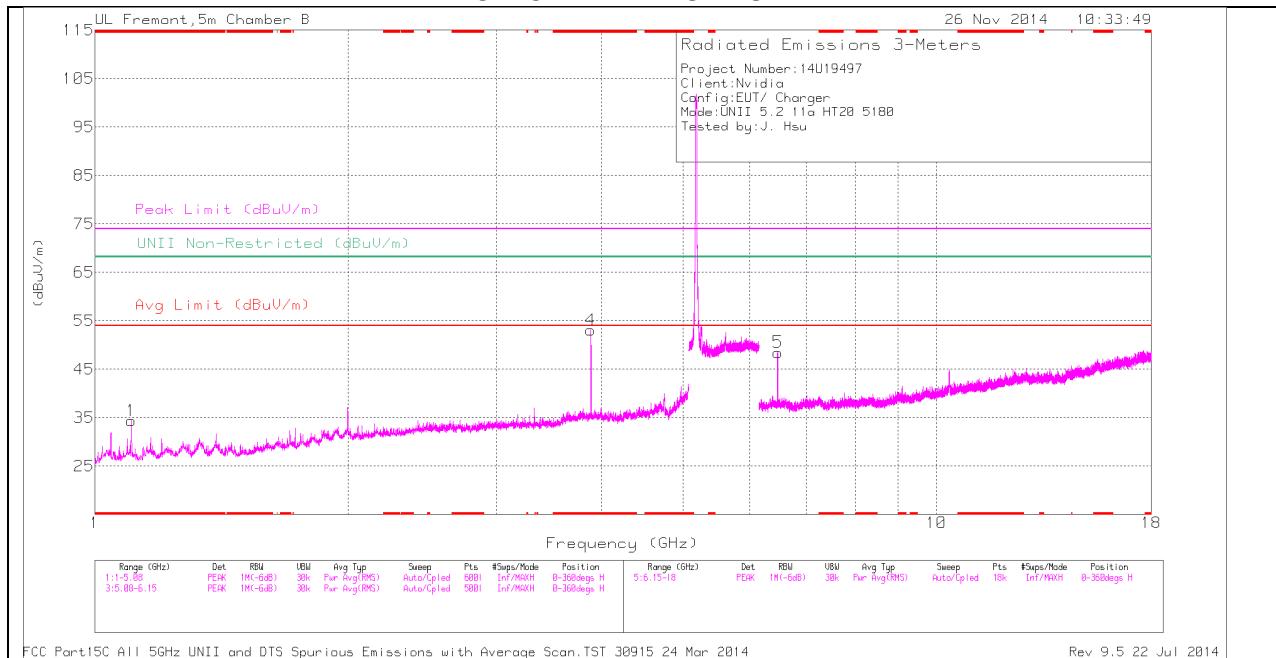
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

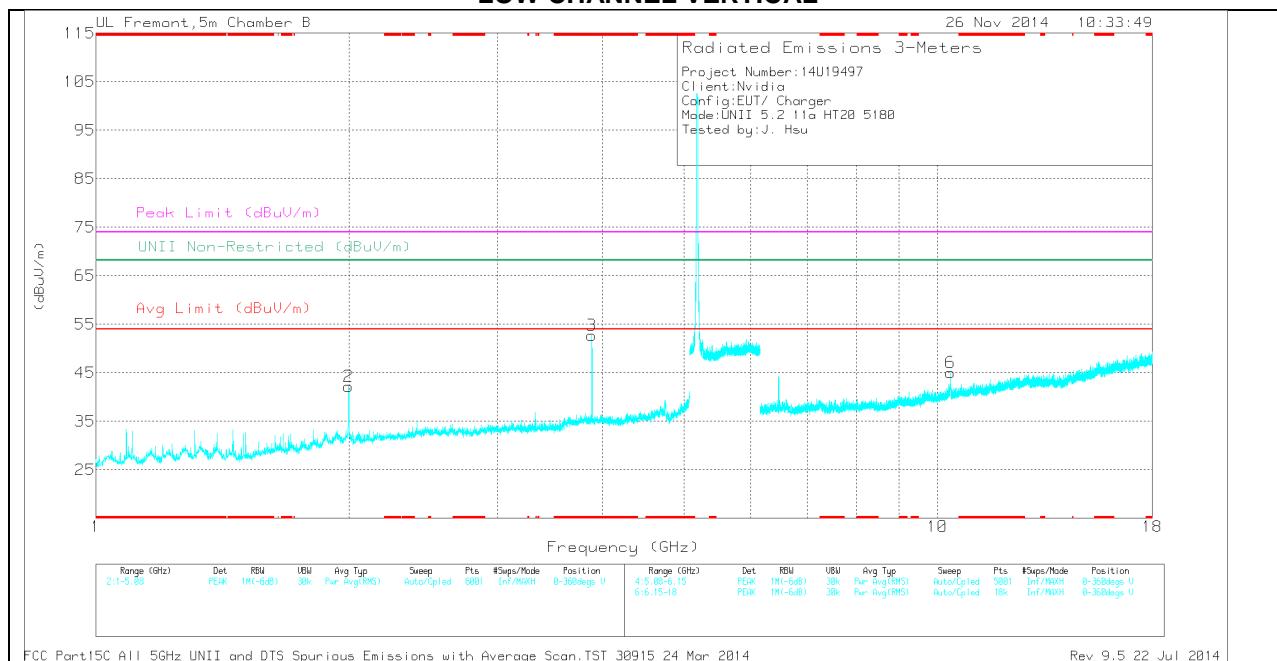
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.105 | 41.38 | PK | 27.4 | -34.4 | 0 | 34.38 | - | - | 74 | -39.62 | - | - | 0-360 | 199 | H |
| 4 | * 3.885 | 50.85 | PK | 33.8 | -31.5 | 0 | 53.15 | - | - | 74 | -20.85 | - | - | 0-360 | 99 | H |
| 3 | * 3.885 | 50.36 | PK | 33.8 | -31.5 | 0 | 52.66 | - | - | 74 | -21.34 | - | - | 0-360 | 199 | V |
| 2 | 1.997 | 43.96 | PK | 31.3 | -33.1 | 0 | 42.16 | - | - | - | - | 68.2 | -26.04 | 0-360 | 199 | V |
| 5 | 6.475 | 42.39 | PK | 35.6 | -29.5 | 0 | 48.49 | - | - | - | - | 68.2 | -19.71 | 0-360 | 199 | H |
| 6 | 10.358 | 31.21 | PK | 37.2 | -23.4 | 0 | 45.01 | - | - | - | - | 68.2 | -23.19 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

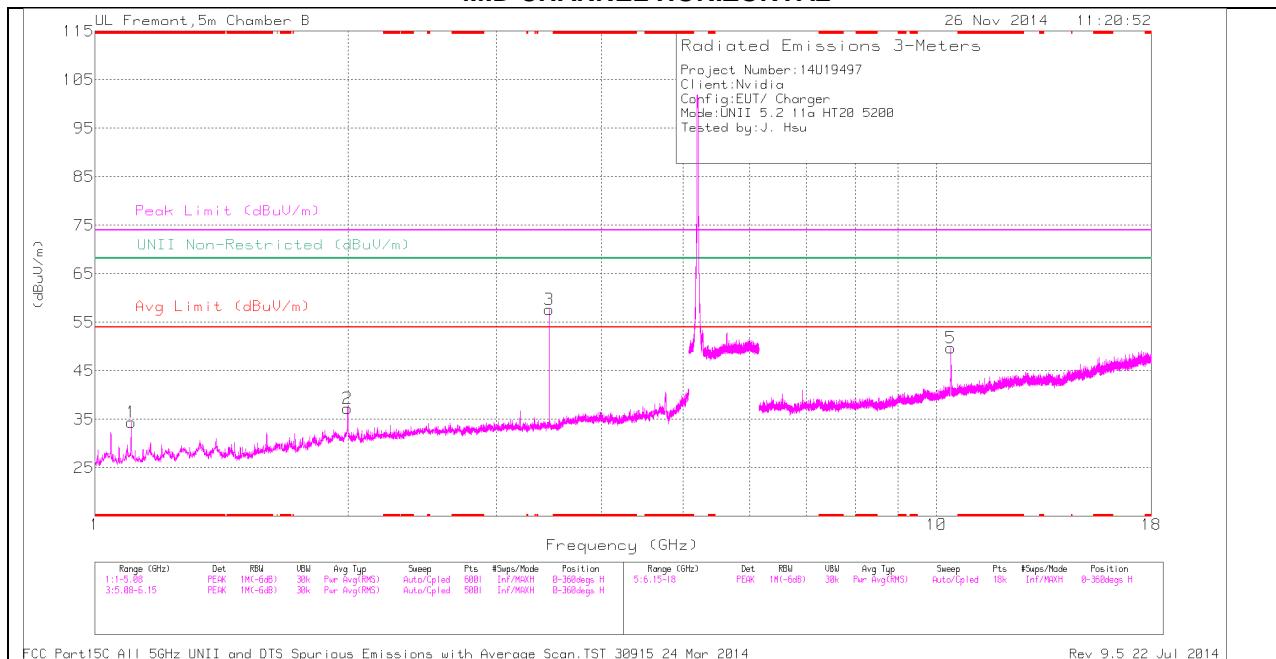
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.885 | 53.07 | PK1 | 33.8 | -31.5 | 0 | 55.37 | - | - | 74 | -18.63 | - | - | 64 | 175 | H |
| * 3.885 | 45.75 | AD1 | 33.8 | -31.5 | .3 | 48.34 | 54 | -5.66 | - | - | - | - | 64 | 175 | H |
| 10.359 | 43.26 | PK1 | 37.2 | -23.4 | 0 | 57.06 | - | - | - | - | 68.2 | -11.14 | 225 | 106 | V |
| 10.36 | 30.61 | AD1 | 37.2 | -23.4 | .3 | 44.7 | - | - | - | - | - | - | 225 | 106 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

MID CHANNEL HORIZONTAL

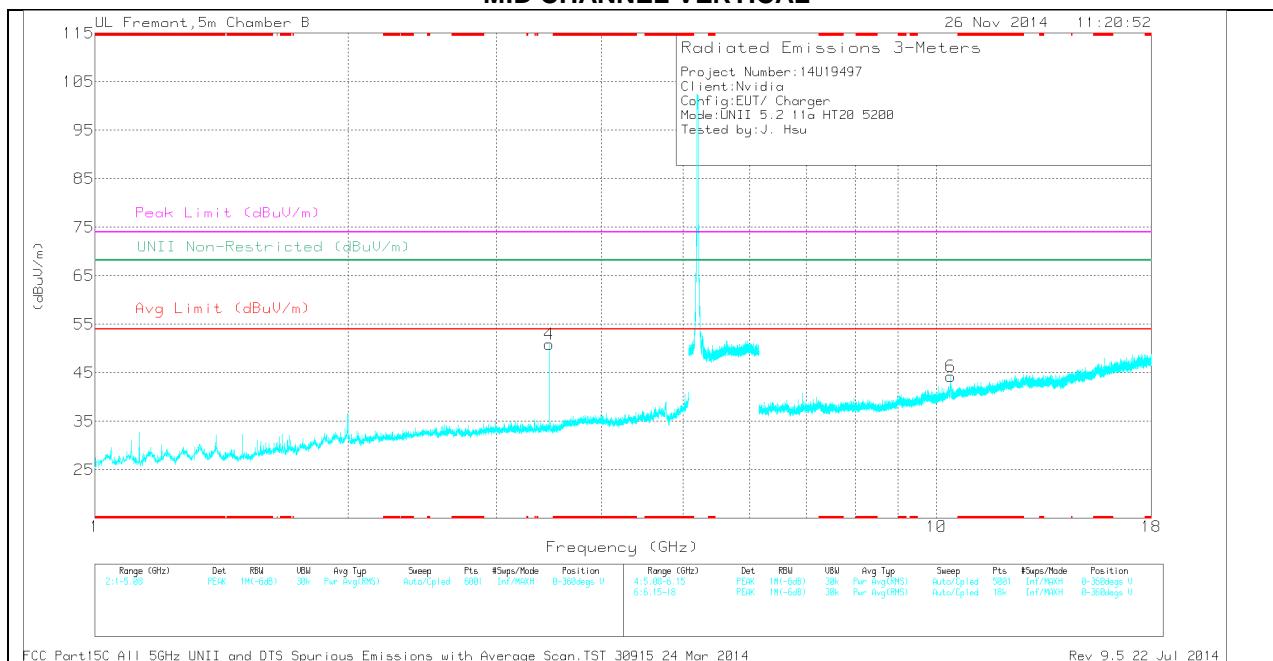


FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan, TST 30915 24 Mar 2014

Rev 9.5 22 Jul 2014

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.104 | 41.39 | PK | 27.4 | -34.4 | 0 | 34.39 | - | - | 74 | -39.61 | - | - | 0-360 | 199 | H |
| 2 | 1.997 | 39.01 | PK | 31.3 | -33.1 | 0 | 37.21 | - | - | - | - | 68.2 | -30.99 | 0-360 | 101 | H |
| 3 | 3.467 | 56.2 | PK | 32.8 | -31.4 | 0 | 57.6 | - | - | - | - | 68.2 | -10.6 | 0-360 | 101 | H |
| 4 | 3.467 | 49.44 | PK | 32.8 | -31.4 | 0 | 50.84 | - | - | - | - | 68.2 | -17.36 | 0-360 | 199 | V |
| 6 | 10.399 | 30.59 | PK | 37.3 | -23.6 | 0 | 44.29 | - | - | - | - | 68.2 | -23.91 | 0-360 | 200 | V |
| 5 | 10.4 | 35.97 | PK | 37.3 | -23.6 | 0 | 49.67 | - | - | - | - | 68.2 | -18.53 | 0-360 | 200 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

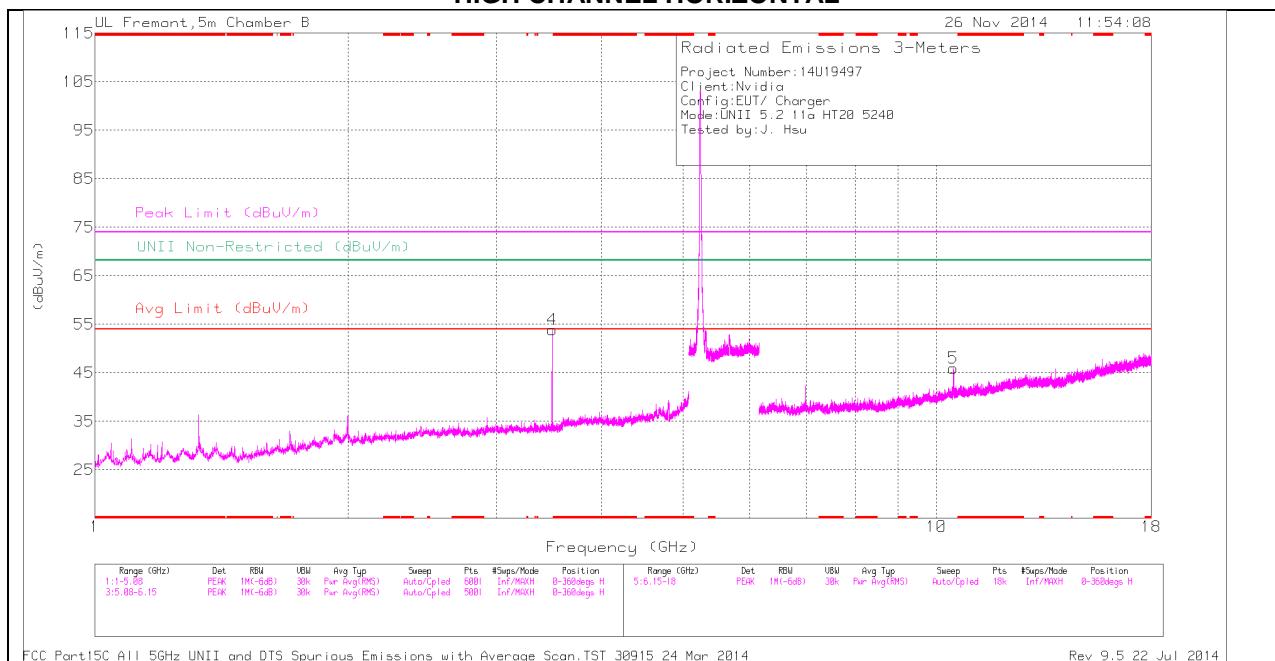
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3.467 | 57.7 | PK1 | 32.8 | -31.3 | 0 | 59.2 | - | - | - | - | 68.2 | -9 | 94 | 249 | H |
| 3.467 | 48.8 | AD1 | 32.8 | -31.3 | .3 | 50.59 | - | - | - | - | - | - | 94 | 249 | H |
| 10.399 | 46.9 | PK1 | 37.3 | -23.6 | 0 | 60.6 | - | - | - | - | 68.2 | -7.6 | 68 | 232 | H |
| 10.402 | 33.65 | AD1 | 37.3 | -23.6 | .3 | 47.64 | - | - | - | - | - | - | 68 | 232 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL HORIZONTAL

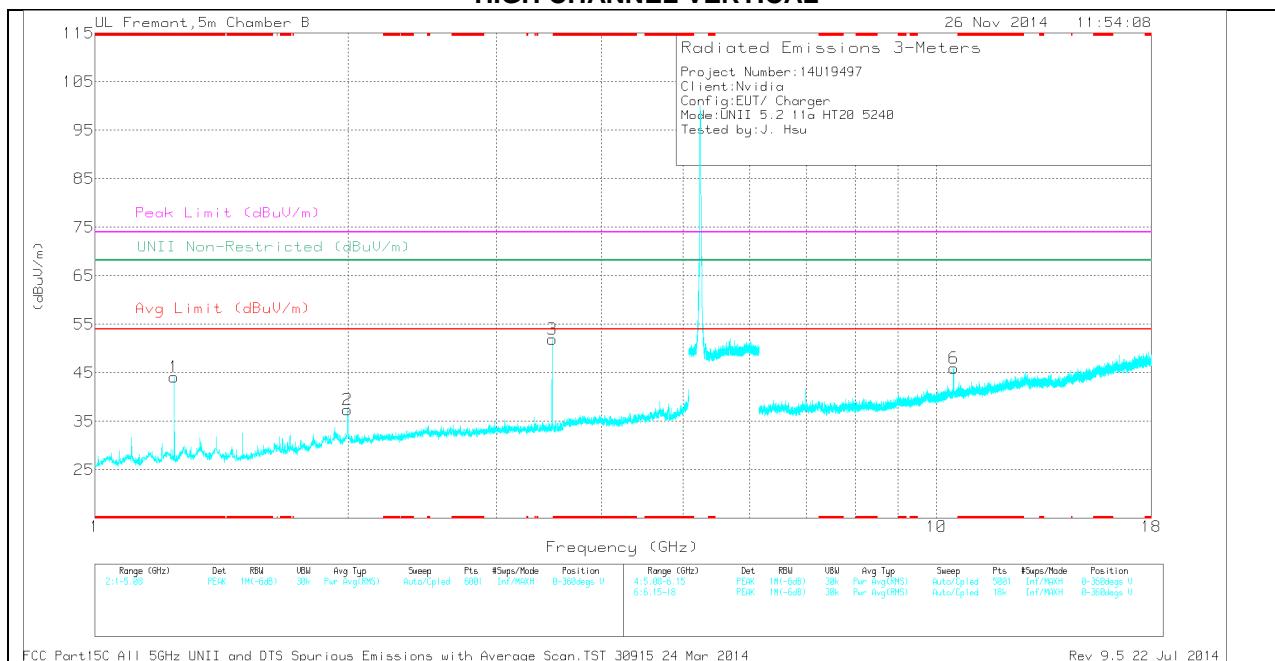


FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan, TST 30915 24 Mar 2014

Rev 9.5 22 Jul 2014

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.241 | 50.21 | PK | 28.5 | -34.6 | 0 | 44.11 | - | - | 74 | -29.89 | - | - | 0-360 | 101 | V |
| 2 | 1.997 | 39.16 | PK | 31.3 | -33.1 | 0 | 37.36 | - | - | - | - | 68.2 | -30.84 | 0-360 | 101 | V |
| 4 | 3.494 | 52.72 | PK | 32.8 | -31.6 | 0 | 53.92 | - | - | - | - | 68.2 | -14.28 | 0-360 | 101 | H |
| 3 | 3.494 | 50.71 | PK | 32.8 | -31.6 | 0 | 51.91 | - | - | - | - | 68.2 | -16.29 | 0-360 | 199 | V |
| 5 | 10.476 | 32.61 | PK | 37.4 | -24 | 0 | 46.01 | - | - | - | - | 68.2 | -22.19 | 0-360 | 101 | H |
| 6 | 10.481 | 32.68 | PK | 37.4 | -24.1 | 0 | 45.98 | - | - | - | - | 68.2 | -22.22 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3.493 | 58.15 | PK1 | 32.8 | -31.6 | 0 | 59.35 | - | - | - | - | 68.2 | -8.85 | 66 | 239 | H |
| 3.493 | 50.46 | AD1 | 32.8 | -31.6 | .3 | 51.95 | - | - | - | - | - | - | 66 | 239 | H |
| 10.479 | 44.09 | PK1 | 37.4 | -24.1 | 0 | 57.39 | - | - | - | - | 68.2 | -10.81 | 201 | 120 | H |
| 10.482 | 30.6 | AD1 | 37.4 | -24.1 | .3 | 44.19 | - | - | - | - | - | - | 201 | 120 | H |

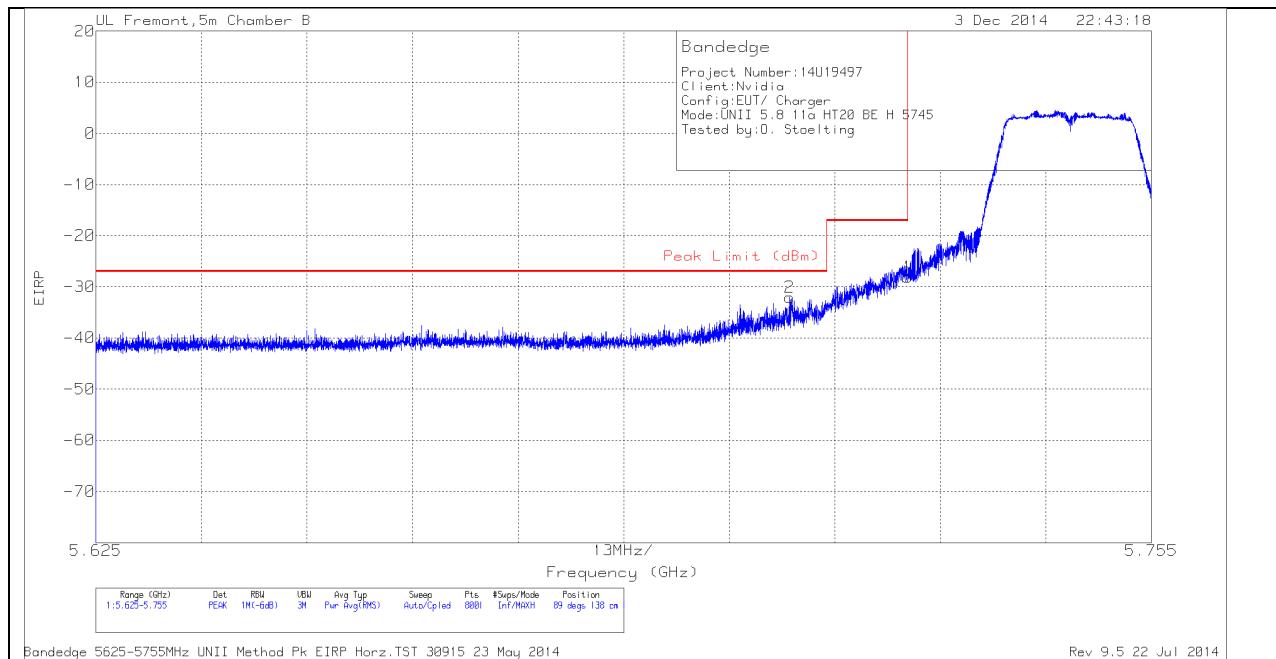
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

13.2. 5.8 GHz

13.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS HORIZONTAL PEAK AND AVERAGE PLOT



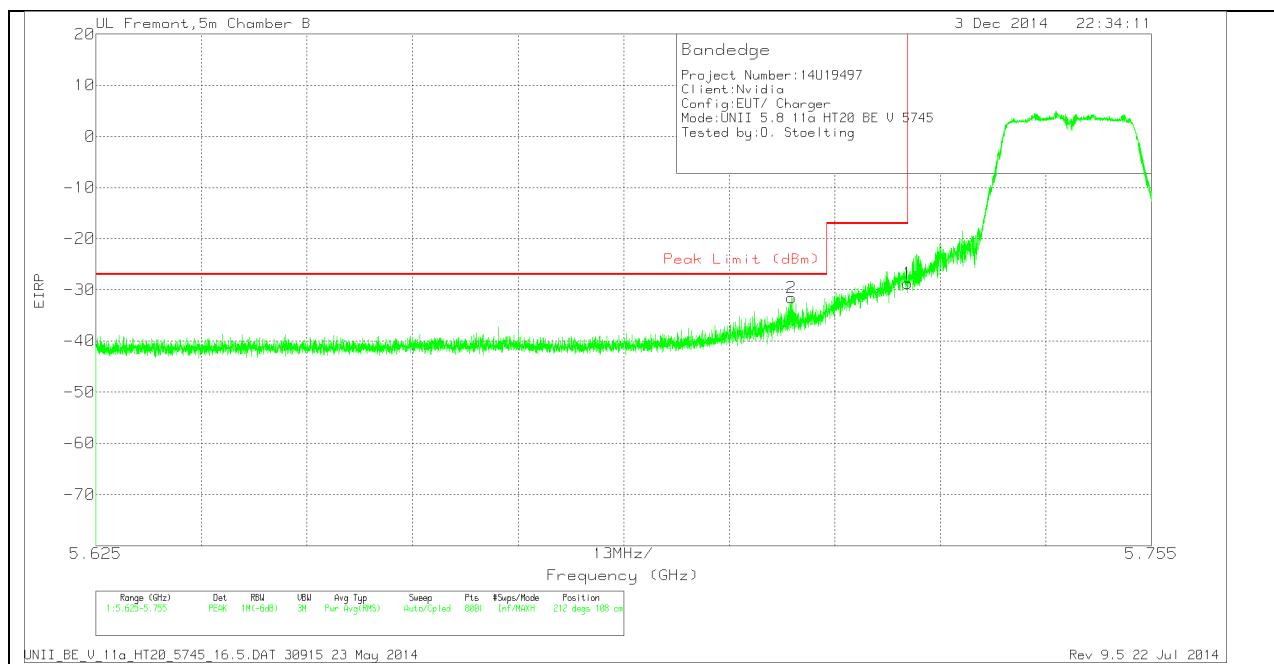
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.71 | -58.25 | PK | 34.5 | -20.1 | 11.8 | 0 | -32.05 | -27 | -5.05 | 89 | 138 | H |
| 1 | 5.725 | -54.39 | PK | 34.6 | -20.1 | 11.8 | 0 | -28.09 | -17 | -11.09 | 89 | 138 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

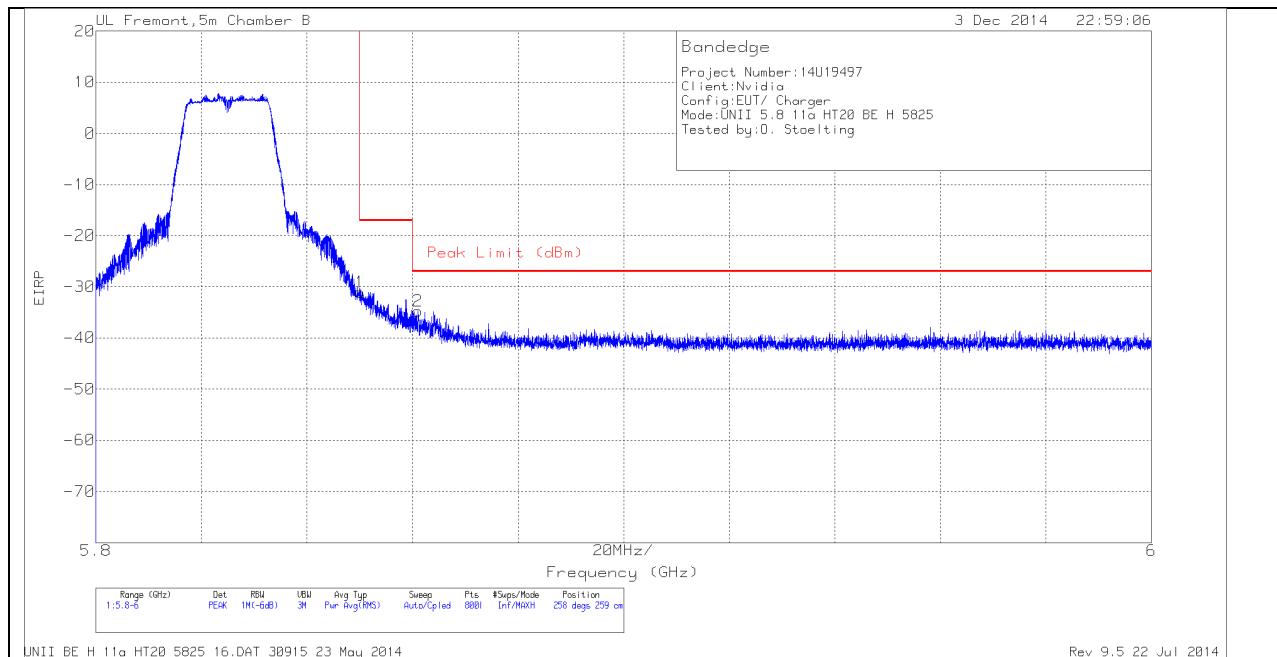
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.711 | -57.7 | PK | 34.5 | -20.1 | 11.8 | 0 | -31.5 | -27 | -4.5 | 212 | 108 | V |
| 1 | 5.725 | -55.03 | PK | 34.6 | -20.1 | 11.8 | 0 | -28.73 | -17 | -11.73 | 212 | 108 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



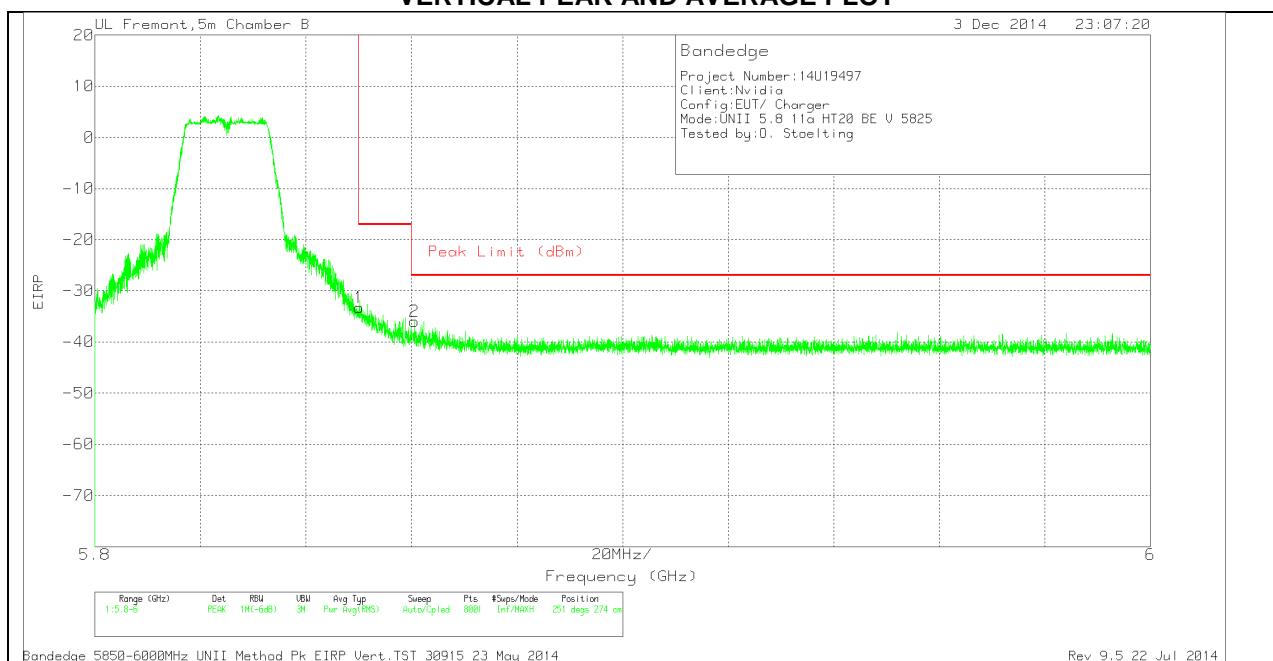
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -57.78 | PK | 34.8 | -19.9 | 11.8 | 0 | -31.08 | -17 | -14.08 | 258 | 259 | H |
| 2 | 5.861 | -61.42 | PK | 34.8 | -19.9 | 11.8 | 0 | -34.72 | -27 | -7.72 | 258 | 259 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



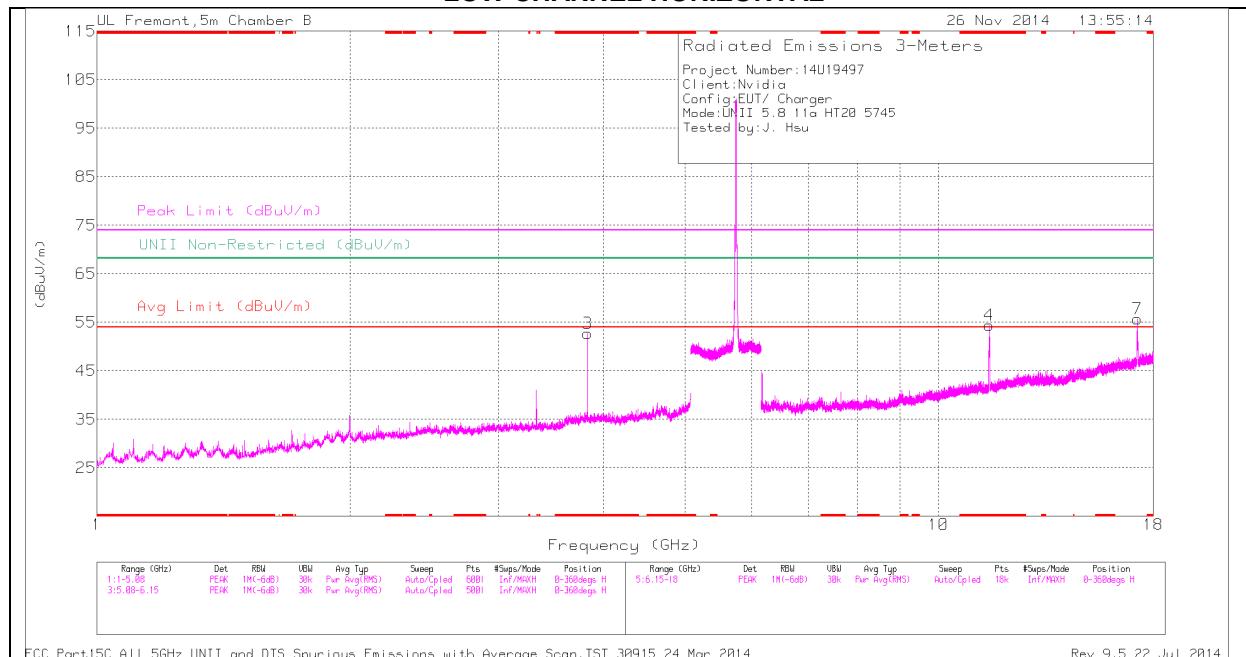
VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -59.95 | PK | 34.8 | -19.9 | 11.8 | 0 | -33.25 | -17 | -16.25 | 251 | 274 | V |
| 2 | 5.861 | -62.63 | PK | 34.8 | -19.9 | 11.8 | 0 | -35.93 | -27 | -8.93 | 251 | 274 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

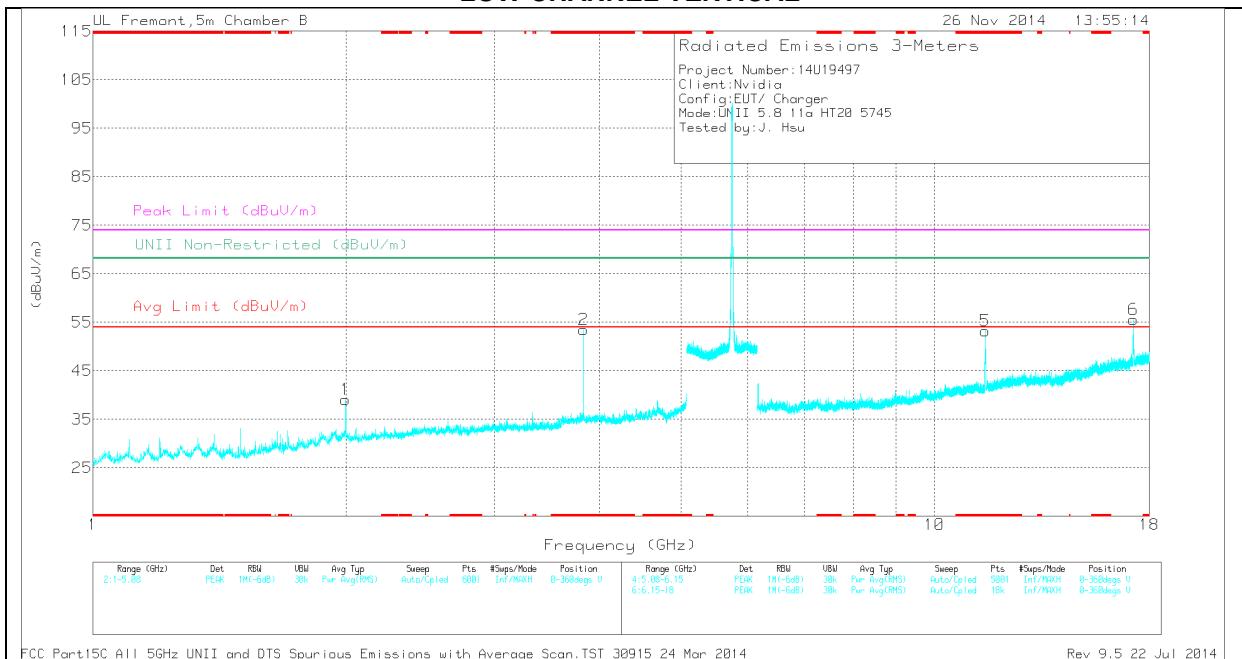
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * 3.83 | 50.37 | PK | 33.7 | -31.3 | 0 | 52.77 | - | - | 74 | -21.23 | - | - | 0-360 | 101 | H |
| 2 | * 3.83 | 51.09 | PK | 33.7 | -31.3 | 0 | 53.49 | - | - | 74 | -20.51 | - | - | 0-360 | 200 | V |
| 4 | * 11.489 | 39.29 | PK | 38 | -22.9 | 0 | 54.39 | - | - | 74 | -19.61 | - | - | 0-360 | 101 | H |
| 5 | * 11.492 | 38.14 | PK | 38 | -22.9 | 0 | 53.24 | - | - | 74 | -20.76 | - | - | 0-360 | 101 | V |
| 1 | 1.996 | 40.93 | PK | 31.3 | -33.1 | 0 | 39.13 | - | - | - | - | 68.2 | -29.07 | 0-360 | 200 | V |
| 7 | 17.228 | 34.14 | PK | 41.5 | -19.9 | 0 | 55.74 | - | - | - | - | 68.2 | -12.46 | 0-360 | 101 | H |
| 6 | 17.238 | 33.83 | PK | 41.5 | -19.8 | 0 | 55.53 | - | - | - | - | 68.2 | -12.67 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

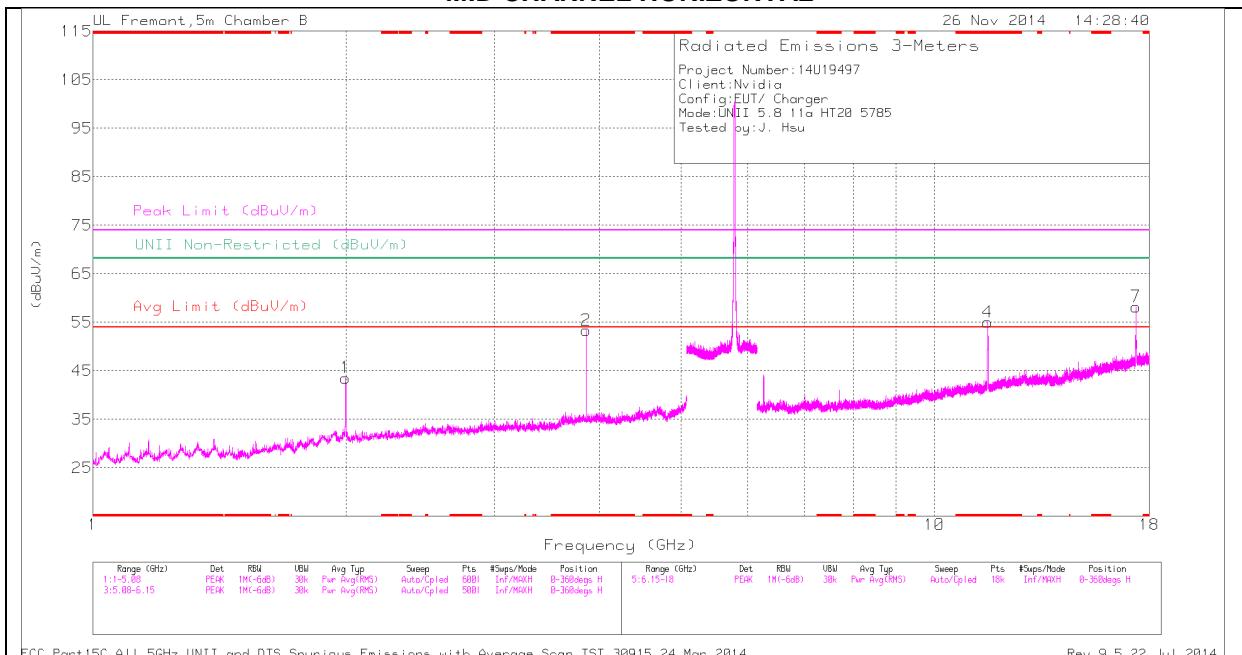
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.83 | 53.34 | PK1 | 33.7 | -31.3 | 0 | 55.74 | - | - | 74 | -18.26 | - | - | 169 | 300 | V |
| * 3.83 | 46.28 | AD1 | 33.7 | -31.3 | .29 | 48.97 | 54 | -5.03 | - | - | - | - | 169 | 300 | V |
| * 11.488 | 50.8 | PK1 | 38 | -22.9 | 0 | 65.9 | - | - | 74 | -8.1 | - | - | 60 | 137 | H |
| * 11.492 | 38.04 | AD1 | 38 | -22.9 | .29 | 53.43 | 54 | -.57 | - | - | - | - | 60 | 137 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

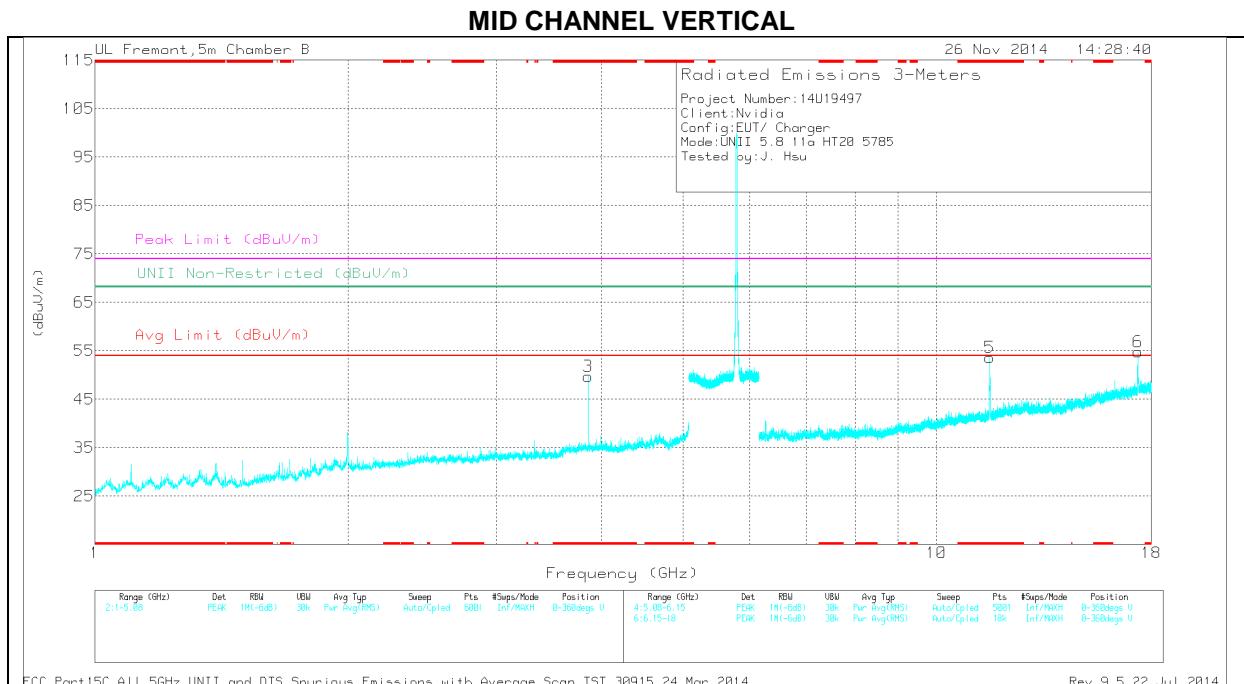
PK - Peak detector

RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 3.857 | 51.22 | PK | 33.7 | -31.5 | 0 | 53.42 | - | - | 74 | -20.58 | - | - | 0-360 | 199 | H |
| 3 | * 3.857 | 47.56 | PK | 33.7 | -31.5 | 0 | 49.76 | - | - | 74 | -24.24 | - | - | 0-360 | 101 | V |
| 4 | * 11.568 | 39.2 | PK | 38.1 | -22.3 | 0 | 55 | - | - | 74 | -19 | - | - | 0-360 | 101 | H |
| 5 | * 11.566 | 37.78 | PK | 38.1 | -22.2 | 0 | 53.68 | - | - | 74 | -20.32 | - | - | 0-360 | 199 | V |
| 1 | 1.997 | 45.36 | PK | 31.3 | -33.1 | 0 | 43.56 | - | - | - | 68.2 | -24.64 | 0-360 | 199 | H | |
| 7 | 17.349 | 36.73 | PK | 41.6 | -20.1 | 0 | 58.23 | - | - | - | 68.2 | -9.97 | 0-360 | 199 | H | |
| 6 | 17.359 | 33.26 | PK | 41.6 | -20.1 | 0 | 54.76 | - | - | - | 68.2 | -13.44 | 0-360 | 101 | V | |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

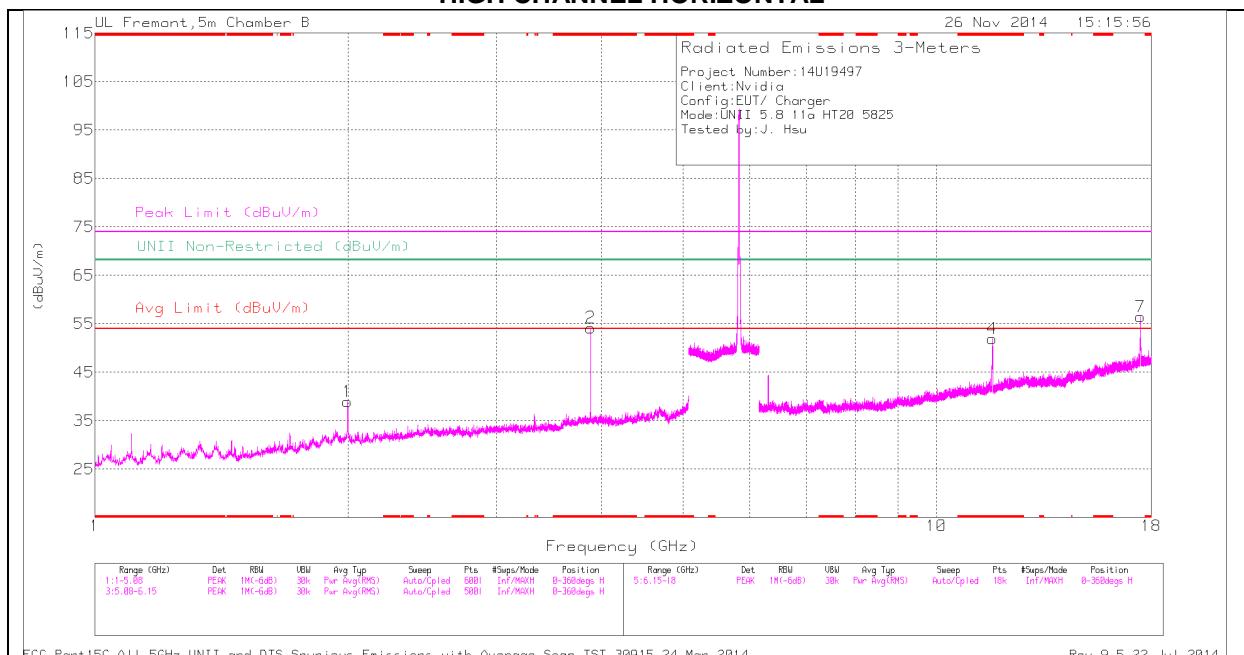
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.857 | 53.14 | PK1 | 33.7 | -31.5 | 0 | 55.34 | - | - | 74 | -18.66 | - | - | 45 | 209 | H |
| * 3.857 | 45.13 | AD1 | 33.7 | -31.5 | .29 | 47.62 | 54 | -6.38 | - | - | - | - | 45 | 209 | H |
| * 11.569 | 50.38 | PK1 | 38.1 | -22.3 | 0 | 66.18 | - | - | 74 | -7.82 | - | - | 42 | 272 | H |
| * 11.571 | 37 | AD1 | 38.1 | -22.3 | .29 | 53.09 | 54 | -.91 | - | - | - | - | 42 | 272 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

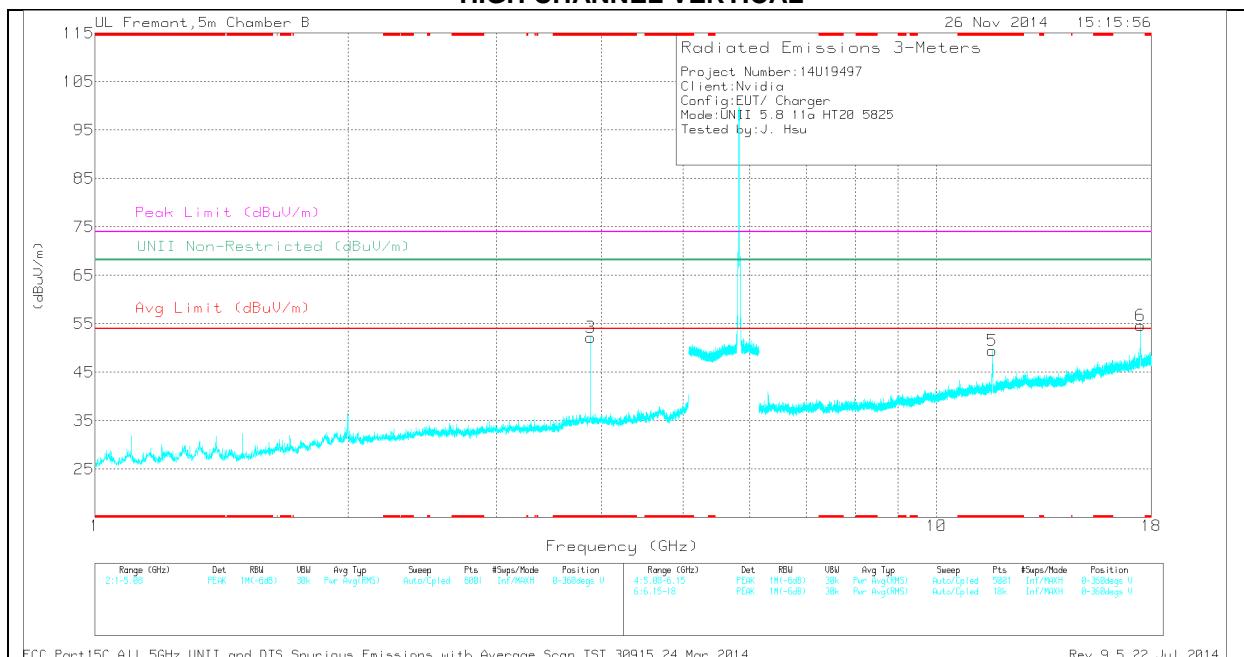
RMS - RMS detection

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 3.883 | 51.9 | PK | 33.8 | -31.5 | 0 | 54.2 | - | - | 74 | -19.8 | - | - | 0-360 | 101 | H |
| 3 | * 3.883 | 49.84 | PK | 33.8 | -31.5 | 0 | 52.14 | - | - | 74 | -21.86 | - | - | 0-360 | 199 | V |
| 4 | * 11.649 | 36.82 | PK | 38.1 | -23 | 0 | 51.92 | - | - | 74 | -22.08 | - | - | 0-360 | 199 | H |
| 5 | * 11.651 | 34.44 | PK | 38.1 | -23.1 | 0 | 49.44 | - | - | 74 | -24.56 | - | - | 0-360 | 101 | V |
| 1 | 1.997 | 40.8 | PK | 31.3 | -33.1 | 0 | 39 | - | - | - | - | 68.2 | -29.2 | 0-360 | 199 | H |
| 6 | 17.472 | 32.79 | PK | 41.7 | -19.8 | 0 | 54.69 | - | - | - | - | 68.2 | -13.51 | 0-360 | 101 | V |
| 7 | 17.473 | 34.58 | PK | 41.7 | -19.8 | 0 | 56.48 | - | - | - | - | 68.2 | -11.72 | 0-360 | 101 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.883 | 51.78 | PK1 | 33.8 | -31.5 | 0 | 54.08 | - | - | 74 | -19.92 | - | - | 64 | 106 | H |
| * 3.883 | 45.58 | AD1 | 33.8 | -31.5 | .29 | 48.17 | 54 | -5.83 | - | - | - | - | 64 | 106 | H |
| * 11.648 | 49.86 | PK1 | 38.1 | -23 | 0 | 64.96 | - | - | 74 | -9.04 | - | - | 41 | 280 | H |
| * 11.65 | 36.81 | AD1 | 38.1 | -23 | .29 | 52.2 | 54 | -1.8 | - | - | - | - | 41 | 280 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

14. TRANSMITTER ABOVE 1 GHz MIMO Chain 1

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 UNII part H) 6) d) Method VB:

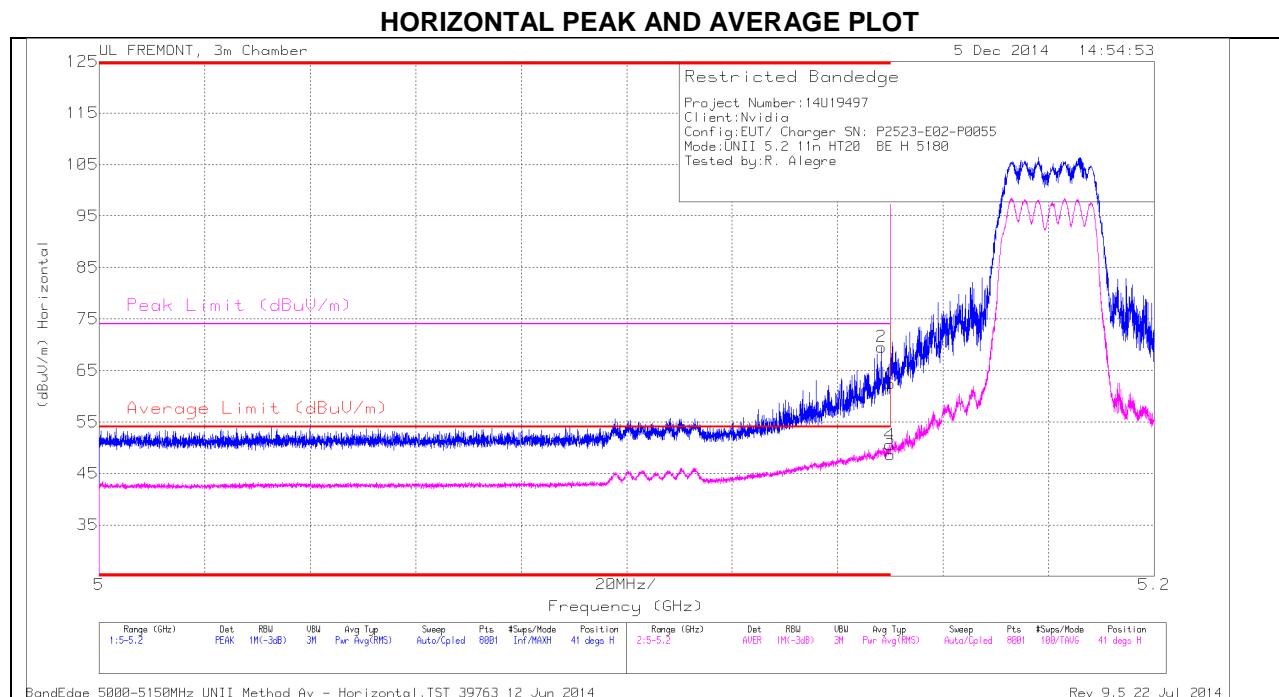
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

14.1. 5.2 GHz

14.1.1. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEdge (LOW CHANNEL)



HORIZONTAL DATA

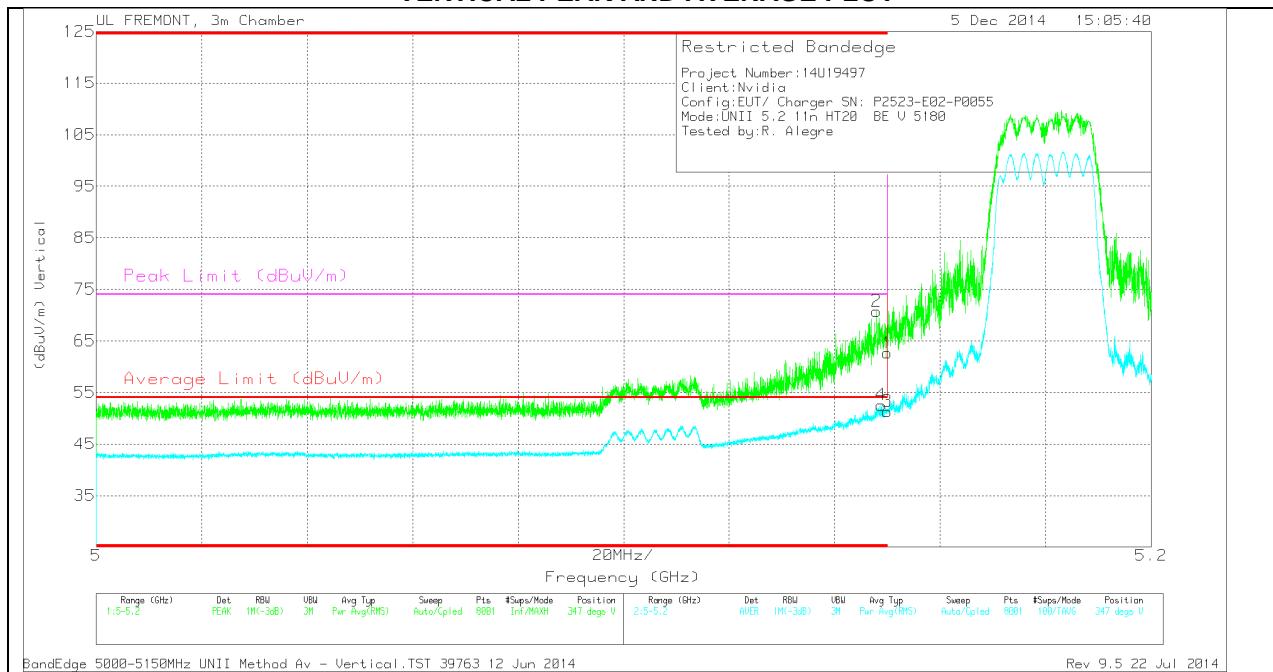
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 49.86 | PK | 34.2 | -21.6 | 0 | 62.46 | - | - | 74 | -11.54 | 41 | 314 | H |
| 2 | * 5.148 | 56.97 | PK | 34.2 | -21.6 | 0 | 69.57 | - | - | 74 | -4.43 | 41 | 314 | H |
| 3 | * 5.15 | 35.68 | RMS | 34.2 | -21.6 | .33 | 48.61 | 54 | -5.39 | - | - | 41 | 314 | H |
| 4 | * 5.15 | 37.62 | RMS | 34.2 | -21.6 | .33 | 50.55 | 54 | -3.45 | - | - | 41 | 314 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 50.07 | PK | 34.2 | -21.6 | 0 | 62.67 | - | - | 74 | -11.33 | 347 | 386 | V |
| 2 | * 5.148 | 58.16 | PK | 34.2 | -21.6 | 0 | 70.76 | - | - | 74 | -3.24 | 347 | 386 | V |
| 3 | * 5.15 | 38.41 | RMS | 34.2 | -21.6 | .33 | 51.34 | 54 | -2.66 | - | - | 347 | 386 | V |
| 4 | * 5.149 | 39.66 | RMS | 34.2 | -21.6 | .33 | 52.59 | 54 | -1.41 | - | - | 347 | 386 | V |

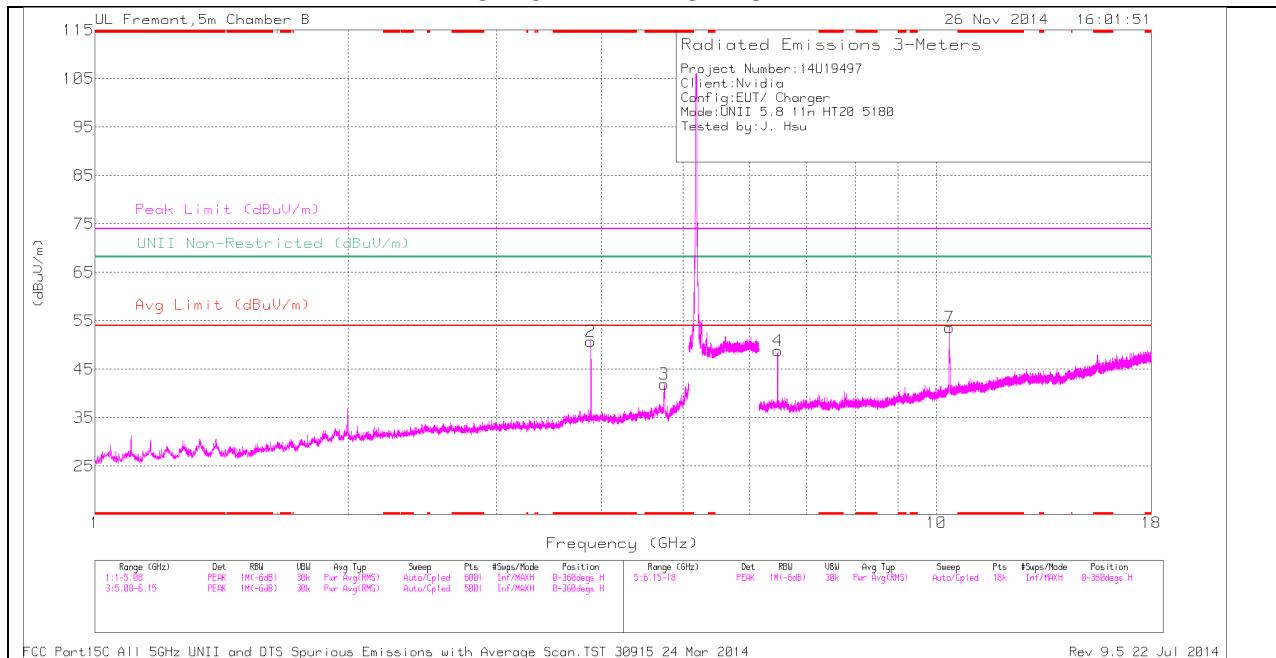
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

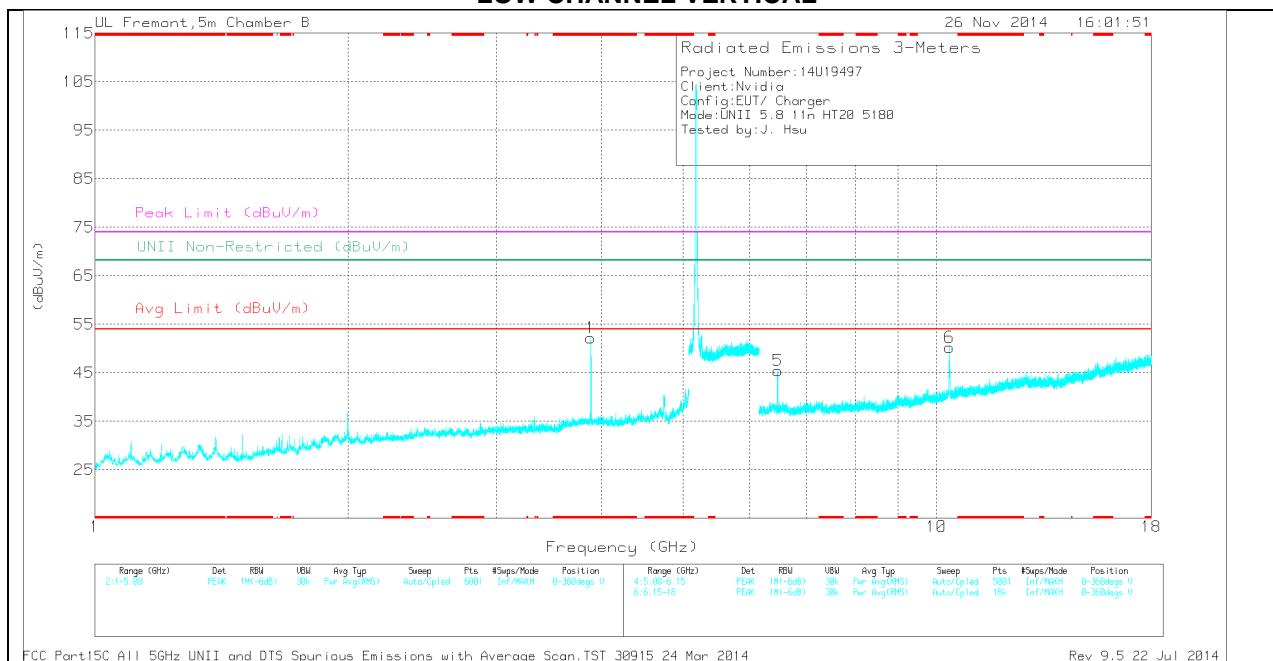
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 3.885 | 48.44 | PK | 33.8 | -31.5 | 0 | 50.74 | - | - | 74 | -23.26 | - | - | 0-360 | 200 | H |
| 3 | * 4.748 | 37.58 | PK | 34.2 | -29.8 | 0 | 41.98 | - | - | 74 | -32.02 | - | - | 0-360 | 101 | H |
| 1 | * 3.885 | 49.84 | PK | 33.8 | -31.5 | 0 | 52.14 | - | - | 74 | -21.86 | - | - | 0-360 | 101 | V |
| 4 | 6.475 | 42.75 | PK | 35.6 | -29.5 | 0 | 48.85 | - | - | - | - | 68.2 | -19.35 | 0-360 | 199 | H |
| 5 | 6.475 | 39.36 | PK | 35.6 | -29.5 | 0 | 45.46 | - | - | - | - | 68.2 | -22.74 | 0-360 | 199 | V |
| 7 | 10.357 | 39.87 | PK | 37.2 | -23.4 | 0 | 53.67 | - | - | - | - | 68.2 | -14.53 | 0-360 | 199 | H |
| 6 | 10.36 | 36.43 | PK | 37.2 | -23.4 | 0 | 50.23 | - | - | - | - | 68.2 | -17.97 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

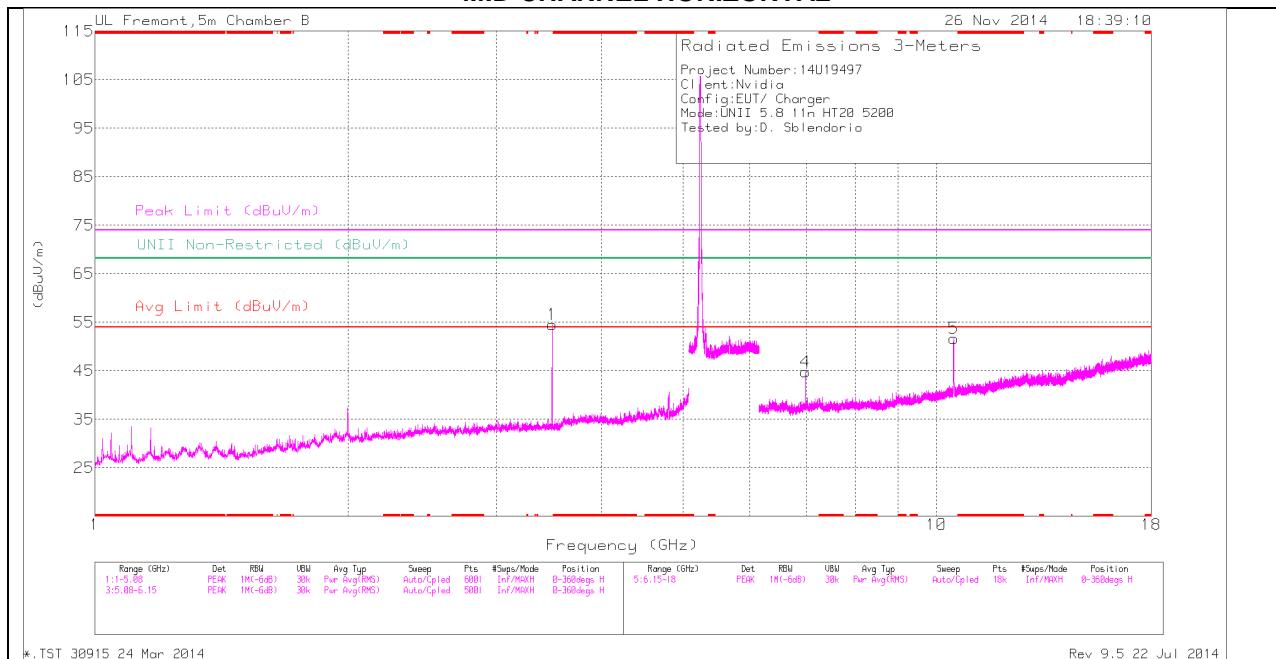
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 10.358 | 49.43 | PK1 | 37.2 | -23.4 | 0 | 63.23 | - | - | - | - | 68.2 | -4.97 | 40 | 251 | H |
| 10.361 | 36.08 | AD1 | 37.2 | -23.4 | .33 | 50.21 | - | - | - | - | - | - | 40 | 251 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

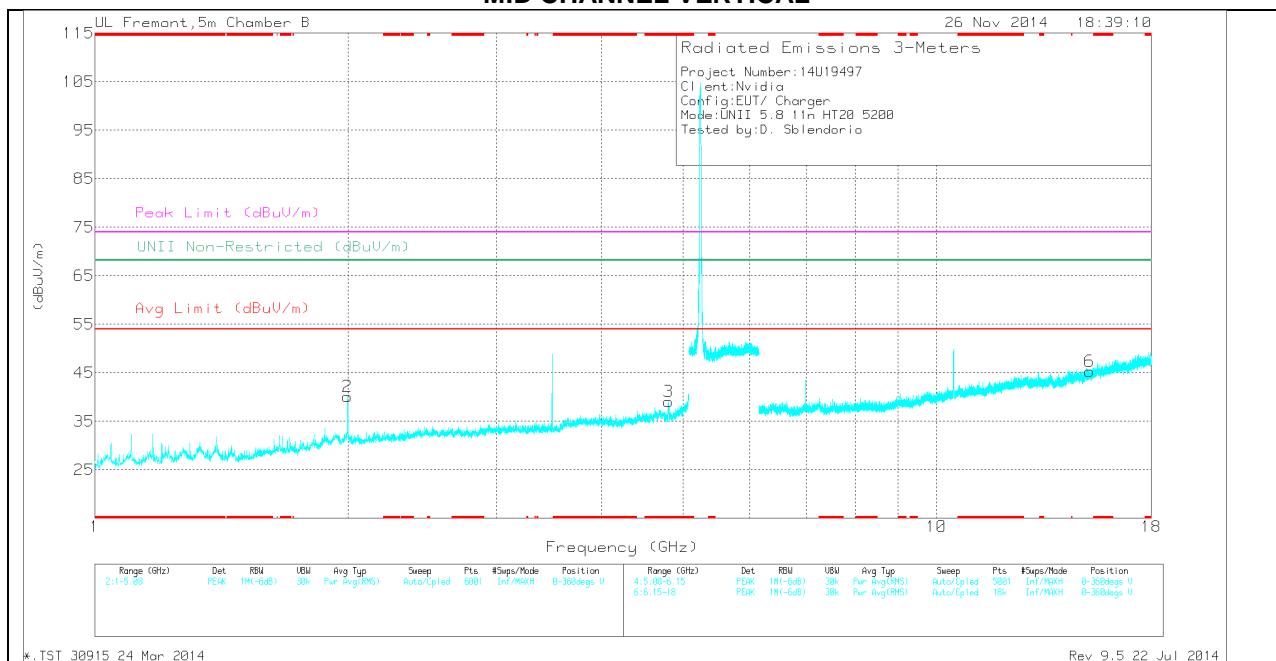
RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * 4.808 | 34.74 | PK | 34.2 | -29.9 | 0 | 39.04 | - | - | 74 | -34.96 | - | - | 0-360 | 199 | V |
| 2 | 1.997 | 41.96 | PK | 31.3 | -33.1 | 0 | 40.16 | - | - | - | - | 68.2 | -28.04 | 0-360 | 101 | V |
| 1 | 3.494 | 53.35 | PK | 32.8 | -31.6 | 0 | 54.55 | - | - | - | - | 68.2 | -13.65 | 0-360 | 199 | H |
| 4 | 6.987 | 36.59 | PK | 35.6 | -27.4 | 0 | 44.79 | - | - | - | - | 68.2 | -23.41 | 0-360 | 200 | H |
| 5 | 10.48 | 38.39 | PK | 37.4 | -24.1 | 0 | 51.69 | - | - | - | - | 68.2 | -16.51 | 0-360 | 200 | H |
| 6 | 15.211 | 26.27 | PK | 40 | -20.9 | 0 | 45.37 | - | - | - | - | 68.2 | -22.83 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

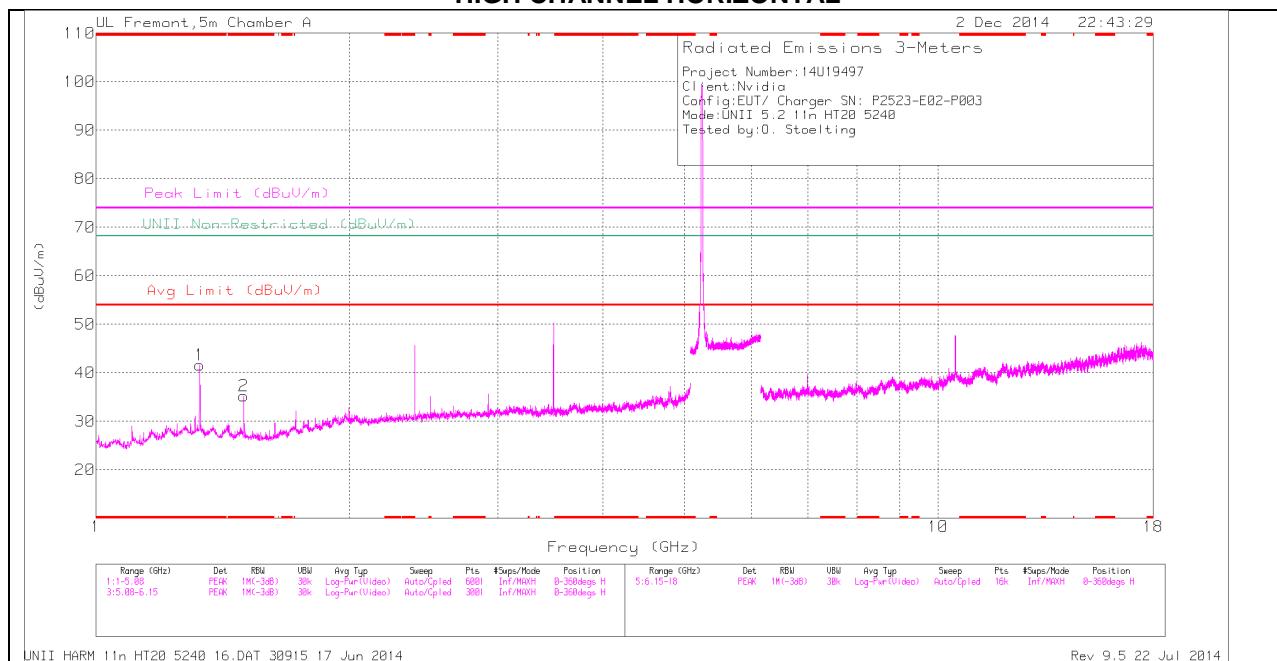
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3.493 | 58.81 | PK1 | 32.8 | -31.6 | 0 | 60.01 | - | - | - | - | 68.2 | -8.19 | 251 | 210 | H |
| 3.493 | 47.8 | AD1 | 32.8 | -31.6 | .31 | 49.31 | - | - | - | - | - | - | 251 | 210 | H |
| 6.987 | 41.57 | PK1 | 35.6 | -27.4 | 0 | 49.77 | - | - | - | - | 68.2 | -18.43 | 188 | 234 | H |
| 6.987 | 34.91 | AD1 | 35.6 | -27.4 | .31 | 43.42 | - | - | - | - | - | - | 188 | 234 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

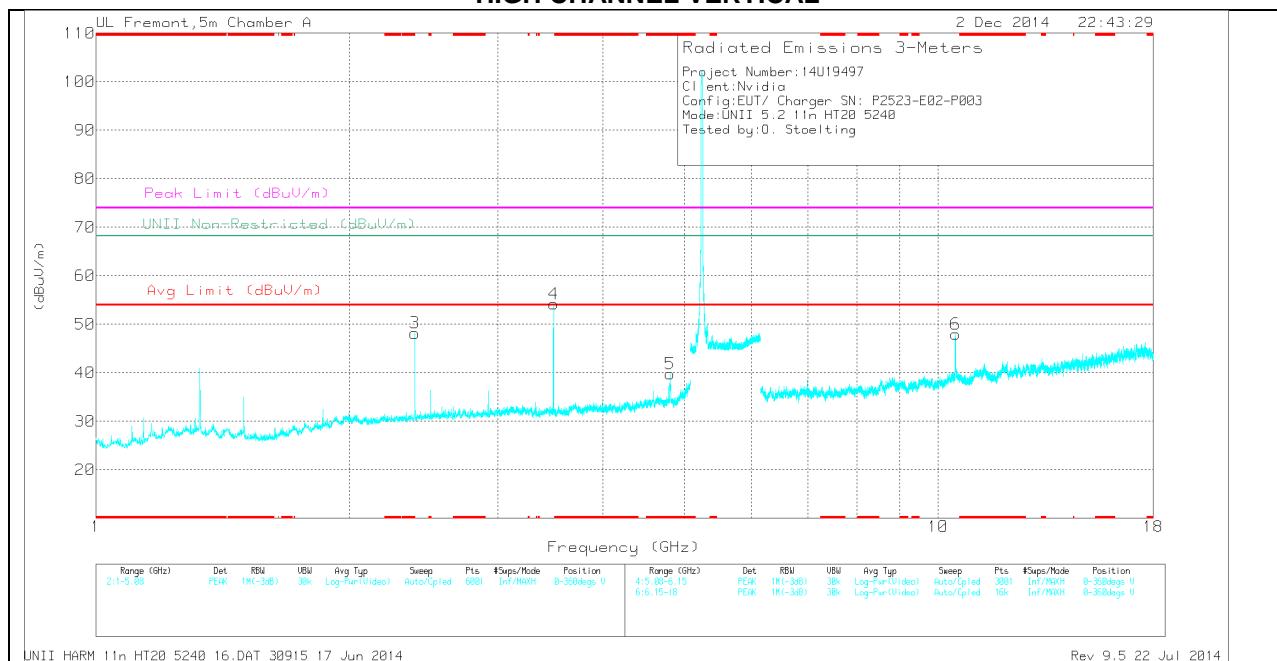
RMS - RMS detection

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.328 | 45.3 | PK | 29.9 | -33.6 | 0 | 41.6 | - | - | 74 | -32.4 | - | - | 0-360 | 100 | H |
| 2 | * 1.498 | 39.64 | PK | 28.5 | -32.9 | 0 | 35.24 | - | - | 74 | -38.76 | - | - | 0-360 | 100 | H |
| 5 | * 4.803 | 35.99 | PK | 34.1 | -30.3 | 0 | 39.79 | - | - | 74 | -34.21 | - | - | 0-360 | 100 | V |
| 3 | 2.391 | 48.77 | PK | 32.1 | -32.7 | 0 | 48.17 | - | - | - | - | 68.2 | -20.03 | 0-360 | 200 | V |
| 4 | 3.494 | 52.65 | PK | 33 | -31.5 | 0 | 54.15 | - | - | - | - | 68.2 | -14.05 | 0-360 | 200 | V |
| 6 | 10.479 | 36.23 | PK | 37.5 | -25.7 | 0 | 48.03 | - | - | - | - | 68.2 | -20.17 | 0-360 | 100 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.328 | 49.88 | PK1 | 29.9 | -33.6 | 0 | 46.18 | - | - | 74 | -27.82 | - | - | 39 | 103 | H |
| * 1.328 | 36.72 | AD1 | 29.9 | -33.6 | .31 | 33.33 | 54 | -20.67 | - | - | - | - | 39 | 103 | H |
| * 1.498 | 45.03 | PK1 | 28.5 | -32.9 | 0 | 40.63 | - | - | 74 | -33.37 | - | - | 141 | 105 | H |
| * 1.498 | 36.05 | AD1 | 28.5 | -32.9 | .31 | 31.96 | 54 | -22.04 | - | - | - | - | 141 | 105 | H |
| * 4.803 | 46.62 | PK1 | 34.1 | -30.3 | 0 | 50.42 | - | - | 74 | -23.58 | - | - | 291 | 152 | V |
| * 4.803 | 37.47 | AD1 | 34.1 | -30.3 | .31 | 41.58 | 54 | -12.42 | - | - | - | - | 291 | 152 | V |
| 2.39 | 40.31 | AD1 | 32.1 | -32.7 | .31 | 40.02 | - | - | - | - | - | - | 196 | 260 | V |
| 2.391 | 50.4 | PK1 | 32.1 | -32.7 | 0 | 49.8 | - | - | - | - | 68.2 | -18.4 | 196 | 260 | V |
| 3.493 | 53.01 | PK1 | 33 | -31.5 | 0 | 54.51 | - | - | - | - | 68.2 | -13.69 | 209 | 226 | V |
| 3.493 | 41.77 | AD1 | 33 | -31.5 | .31 | 43.58 | - | - | - | - | - | - | 209 | 226 | V |
| 10.48 | 48.9 | PK1 | 37.5 | -25.7 | 0 | 60.7 | - | - | - | - | 68.2 | -7.5 | 244 | 134 | V |
| 10.48 | 35.18 | AD1 | 37.5 | -25.7 | .31 | 47.29 | - | - | - | - | - | - | 244 | 134 | V |

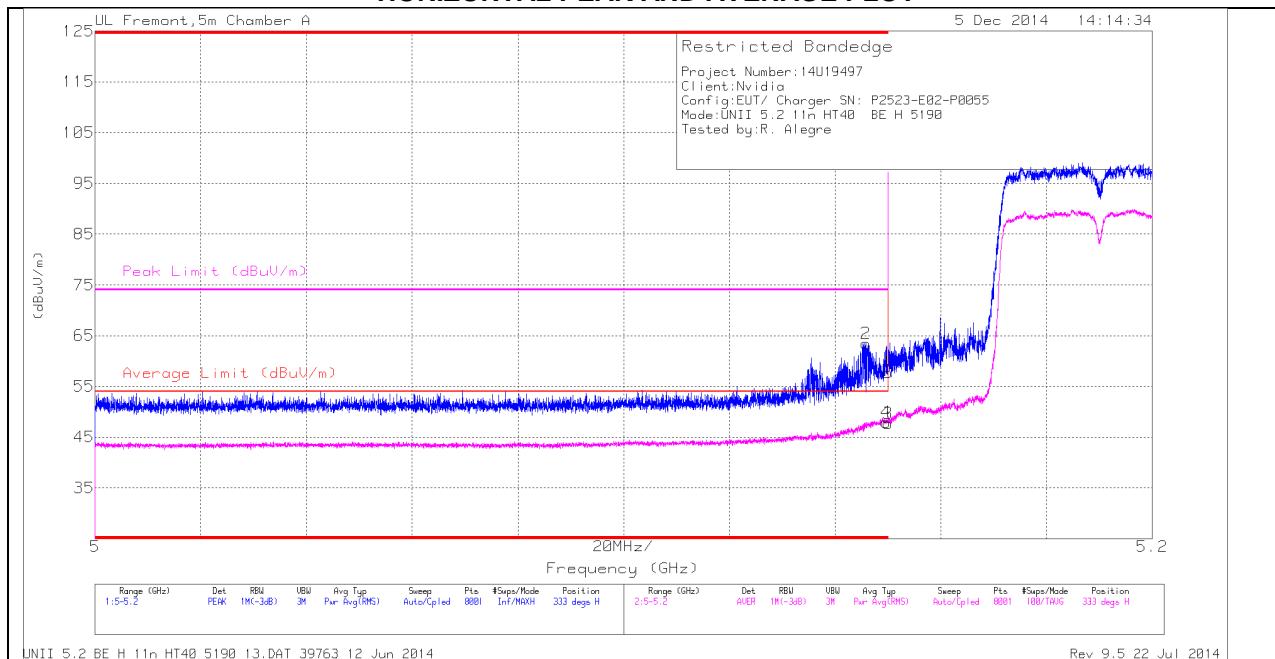
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

14.1.2. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

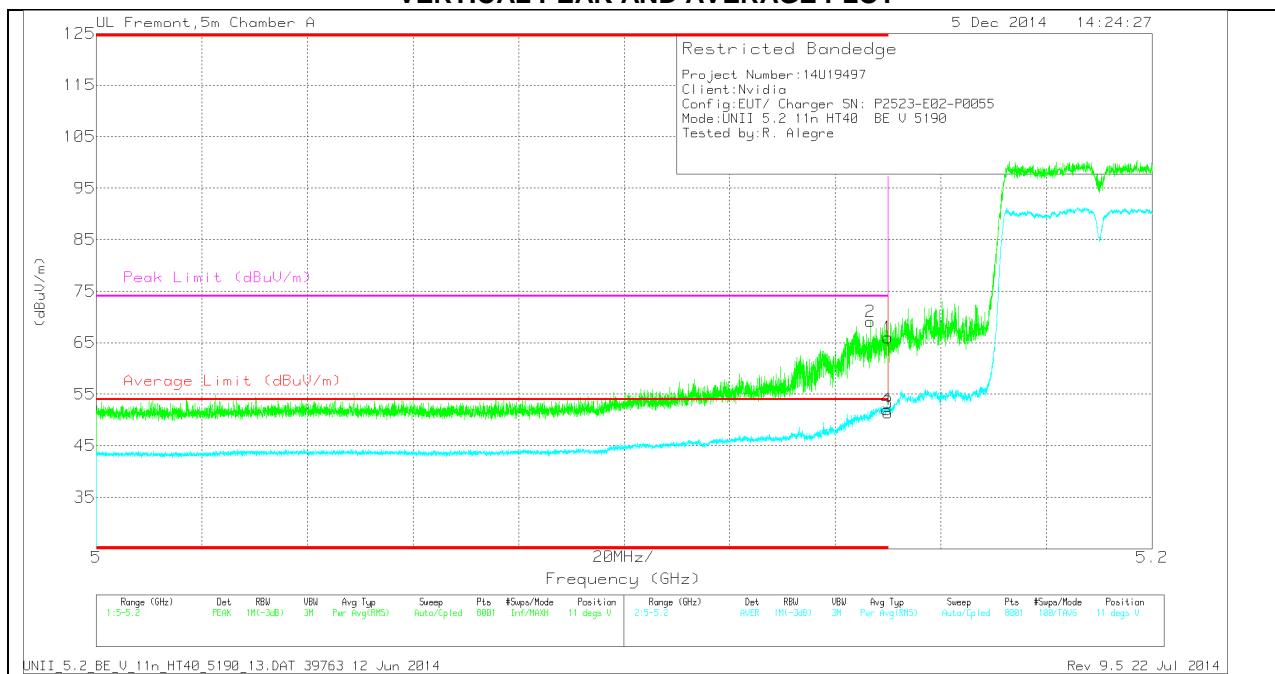
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 45.13 | PK | 34.2 | -21.6 | 0 | 57.73 | - | - | 74 | -16.27 | 333 | 109 | H |
| 2 | * 5.146 | 50.89 | PK | 34.2 | -21.6 | 0 | 63.49 | - | - | 74 | -10.51 | 333 | 109 | H |
| 3 | * 5.15 | 34.65 | RMS | 34.2 | -21.6 | 1.07 | 48.32 | 54 | -5.68 | - | - | 333 | 109 | H |
| 4 | * 5.15 | 35 | RMS | 34.2 | -21.6 | 1.07 | 48.67 | 54 | -5.33 | - | - | 333 | 109 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 53.39 | PK | 34.2 | -21.6 | 0 | 65.99 | - | - | 74 | -8.01 | 11 | 269 | V |
| 2 | * 5.147 | 56.47 | PK | 34.2 | -21.6 | 0 | 69.07 | - | - | 74 | -4.93 | 11 | 269 | V |
| 3 | * 5.15 | 38.4 | RMS | 34.2 | -21.6 | 1.07 | 52.07 | 54 | -1.93 | - | - | 11 | 269 | V |
| 4 | * 5.15 | 39.05 | RMS | 34.2 | -21.6 | 1.07 | 52.72 | 54 | -1.28 | - | - | 11 | 269 | V |

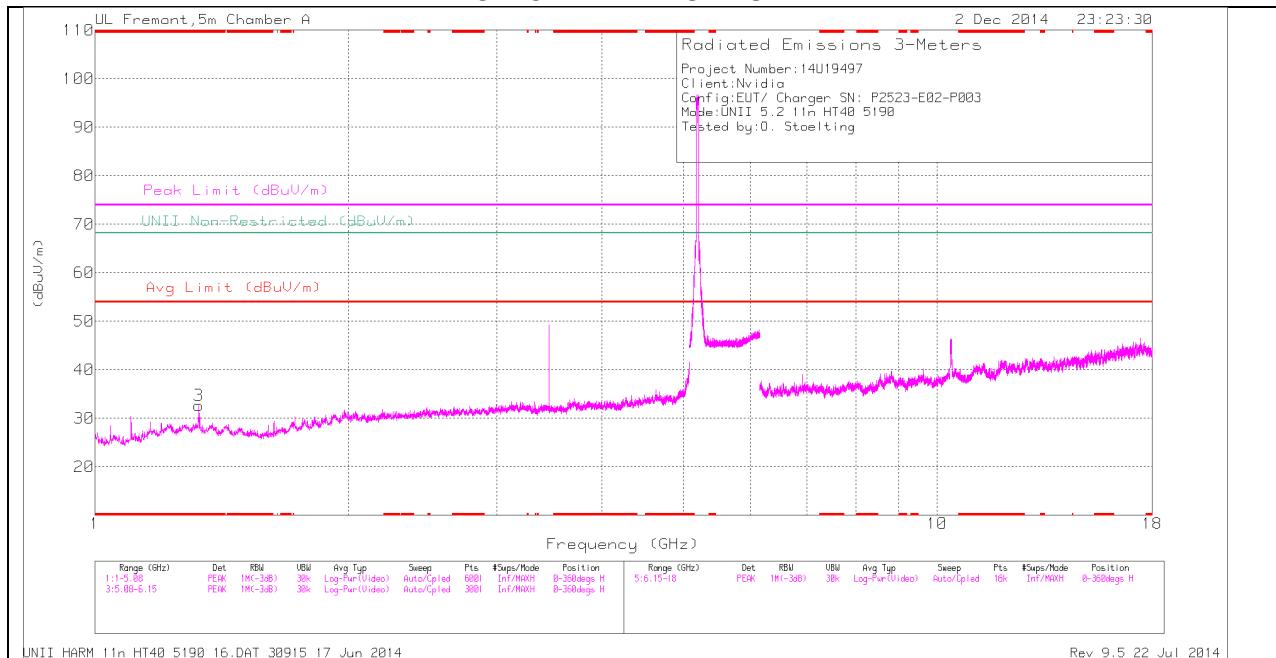
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

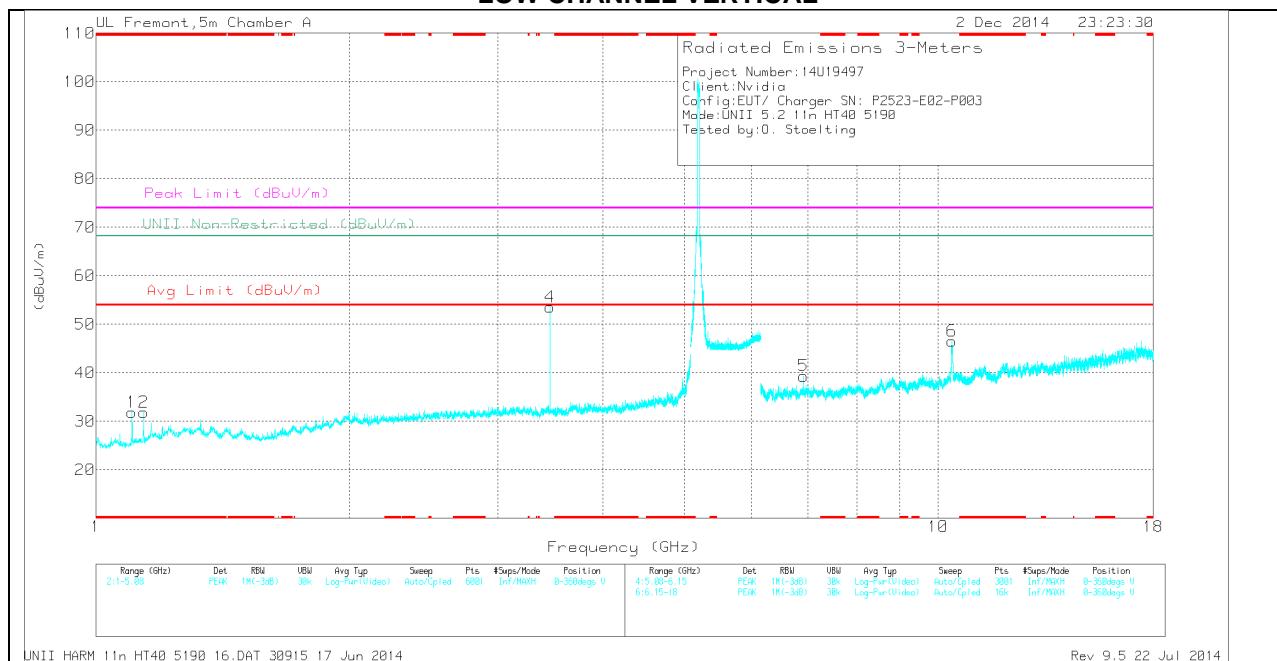
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity | |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|---|
| 3 | * 1.328 | 36.34 | PK | 29.9 | -33.6 | 0 | 32.64 | - | - | 74 | -41.36 | - | - | - | 0-360 | 200 | H |
| 1 | * 1.103 | 38.12 | PK | 27.3 | -33.5 | 0 | 31.92 | - | - | 74 | -42.08 | - | - | - | 0-360 | 200 | V |
| 2 | * 1.139 | 37.24 | PK | 28 | -33.4 | 0 | 31.84 | - | - | 74 | -42.16 | - | - | - | 0-360 | 200 | V |
| 4 | 3.46 | 51.85 | PK | 33 | -31.3 | 0 | 53.55 | - | - | - | - | 68.2 | -14.65 | 0-360 | 100 | V | |
| 5 | 6.92 | 32.44 | PK | 35.6 | -28.7 | 0 | 39.34 | - | - | - | - | 68.2 | -28.86 | 0-360 | 100 | V | |
| 6 | 10.381 | 34.89 | PK | 37.3 | -25.6 | 0 | 46.59 | - | - | - | - | 68.2 | -21.61 | 0-360 | 100 | V | |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

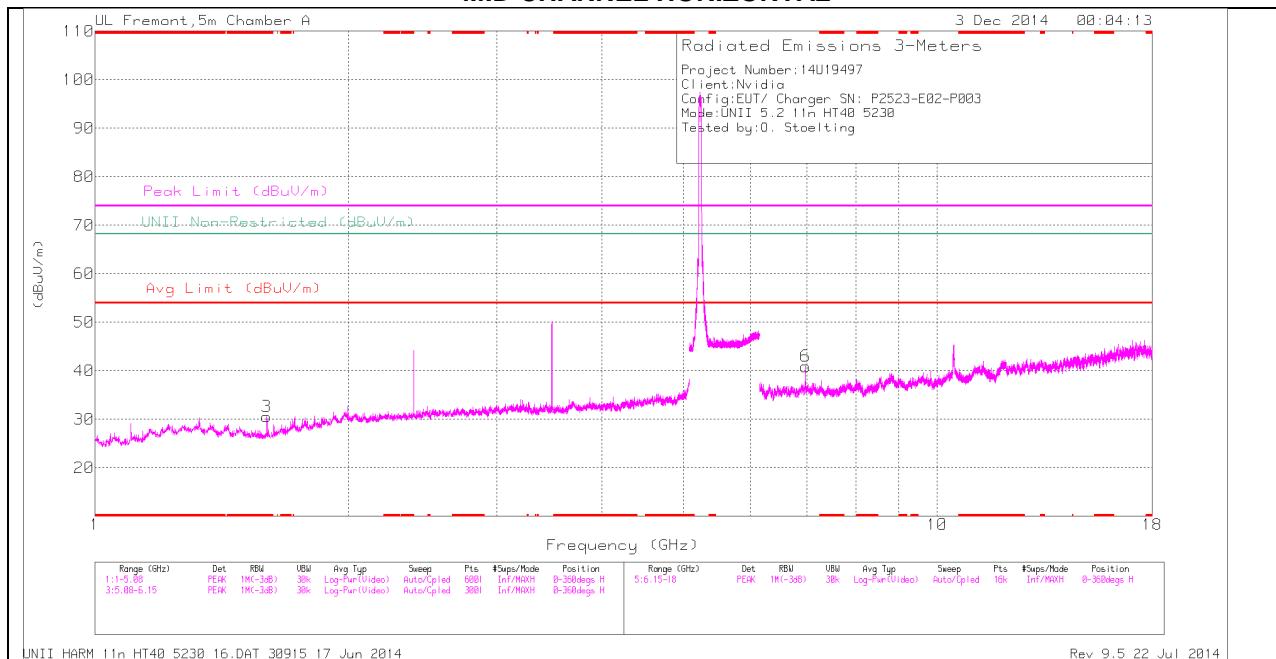
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.326 | 42.17 | PK1 | 29.9 | -33.6 | 0 | 38.47 | - | - | 74 | -35.53 | - | - | 140 | 287 | H |
| * 1.327 | 30.15 | AD1 | 29.9 | -33.6 | 1.07 | 27.52 | 54 | -26.48 | - | - | - | - | 140 | 287 | H |
| * 1.103 | 44.65 | PK1 | 27.3 | -33.5 | 0 | 38.45 | - | - | 74 | -35.55 | - | - | 182 | 206 | V |
| * 1.103 | 35.72 | AD1 | 27.3 | -33.5 | 1.07 | 30.59 | 54 | -23.41 | - | - | - | - | 182 | 206 | V |
| * 1.139 | 43.92 | PK1 | 28 | -33.4 | 0 | 38.52 | - | - | 74 | -35.48 | - | - | 10 | 203 | V |
| * 1.139 | 33.75 | AD1 | 28 | -33.4 | 1.07 | 29.42 | 54 | -24.58 | - | - | - | - | 10 | 203 | V |
| 3.46 | 53.88 | PK1 | 33 | -31.3 | 0 | 55.58 | - | - | - | - | 68.2 | -12.62 | 265 | 183 | V |
| 3.46 | 46.43 | AD1 | 33 | -31.3 | 1.07 | 49.2 | - | - | - | - | - | - | 265 | 183 | V |
| 6.92 | 41.12 | PK1 | 35.6 | -28.7 | 0 | 48.02 | - | - | - | - | 68.2 | -20.18 | 88 | 132 | V |
| 6.92 | 32.17 | AD1 | 35.6 | -28.7 | 1.07 | 40.14 | - | - | - | - | - | - | 88 | 132 | V |
| 10.381 | 46.83 | PK1 | 37.3 | -25.6 | 0 | 58.53 | - | - | - | - | 68.2 | -9.67 | 240 | 130 | V |
| 10.381 | 32.98 | AD1 | 37.3 | -25.6 | 1.07 | 45.75 | - | - | - | - | - | - | 240 | 130 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

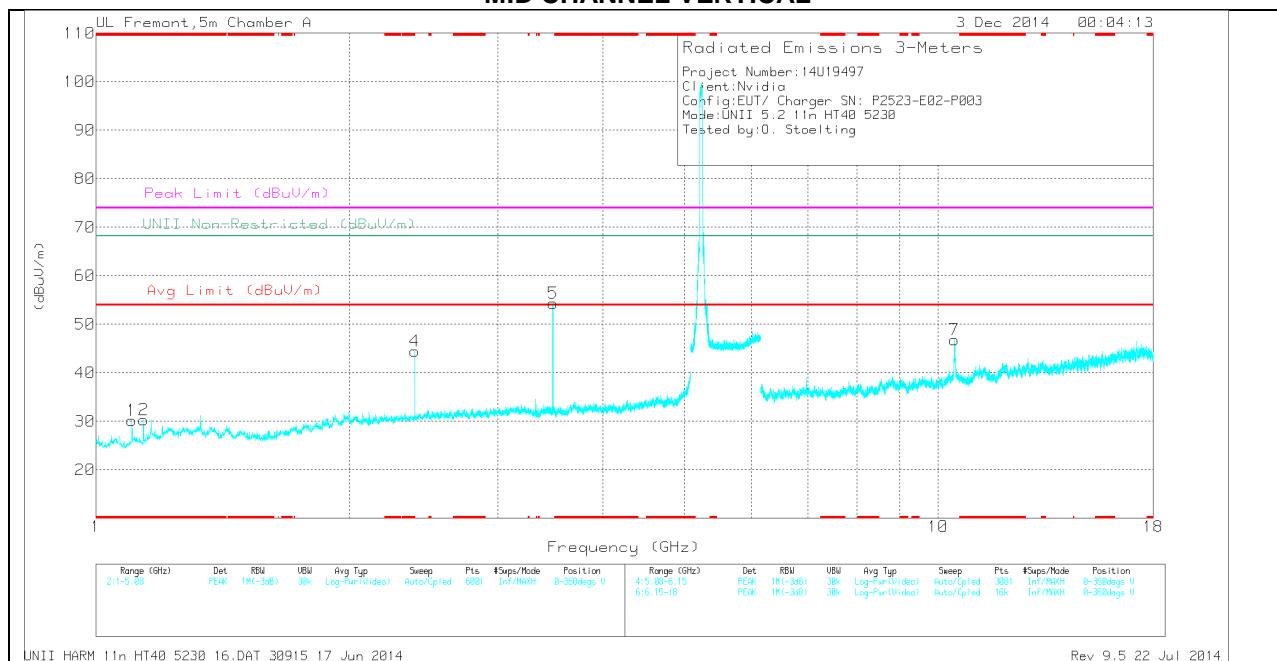
RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * 1.6 | 35.88 | PK | 28 | -33.3 | 0 | 30.58 | - | - | 74 | -43.42 | - | - | 0-360 | 100 | H |
| 1 | * 1.103 | 36.37 | PK | 27.3 | -33.5 | 0 | 30.17 | - | - | 74 | -43.83 | - | - | 0-360 | 200 | V |
| 2 | * 1.139 | 35.68 | PK | 28 | -33.4 | 0 | 30.28 | - | - | 74 | -43.72 | - | - | 0-360 | 200 | V |
| 4 | 2.391 | 45.1 | PK | 32.1 | -32.7 | 0 | 44.5 | - | - | - | - | 68.2 | -23.7 | 0-360 | 100 | V |
| 5 | 3.487 | 52.84 | PK | 33 | -31.5 | 0 | 54.34 | - | - | - | - | 68.2 | -13.86 | 0-360 | 200 | V |
| 6 | 6.973 | 33.9 | PK | 35.6 | -28.6 | 0 | 40.9 | - | - | - | - | 68.2 | -27.3 | 0-360 | 200 | H |
| 7 | 10.456 | 35.19 | PK | 37.4 | -25.8 | 0 | 46.79 | - | - | - | - | 68.2 | -21.41 | 0-360 | 100 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.599 | 48 | PK1 | 28.1 | -33.3 | 0 | 42.8 | - | - | 74 | -31.2 | - | - | 243 | 197 | H |
| * 1.6 | 30.06 | AD1 | 28 | -33.3 | 1.07 | 25.83 | 54 | -28.17 | - | - | - | - | 243 | 197 | H |
| * 1.103 | 44.86 | PK1 | 27.3 | -33.5 | 0 | 38.66 | - | - | 74 | -35.34 | - | - | 191 | 136 | V |
| * 1.103 | 36.68 | AD1 | 27.3 | -33.5 | 1.07 | 31.55 | 54 | -22.45 | - | - | - | - | 191 | 136 | V |
| * 1.139 | 43.37 | PK1 | 28 | -33.4 | 0 | 37.97 | - | - | 74 | -36.03 | - | - | 175 | 294 | V |
| * 1.139 | 33.14 | AD1 | 28 | -33.4 | 1.07 | 28.81 | 54 | -25.19 | - | - | - | - | 175 | 294 | V |
| 2.391 | 41.46 | PK1 | 32.1 | -32.7 | 0 | 40.86 | - | - | - | - | 68.2 | -27.34 | 74 | 179 | V |
| 2.391 | 29.4 | AD1 | 32.1 | -32.7 | 1.07 | 29.87 | - | - | - | - | - | - | 74 | 179 | V |
| 3.487 | 55.89 | PK1 | 33 | -31.5 | 0 | 57.39 | - | - | - | - | 68.2 | -10.81 | 264 | 204 | V |
| 3.487 | 48.77 | AD1 | 33 | -31.5 | 1.07 | 51.34 | - | - | - | - | - | - | 264 | 204 | V |
| 6.973 | 41.33 | PK1 | 35.6 | -28.6 | 0 | 48.33 | - | - | - | - | 68.2 | -19.87 | 66 | 163 | H |
| 6.973 | 32.44 | AD1 | 35.6 | -28.6 | 1.07 | 40.51 | - | - | - | - | - | - | 66 | 163 | H |

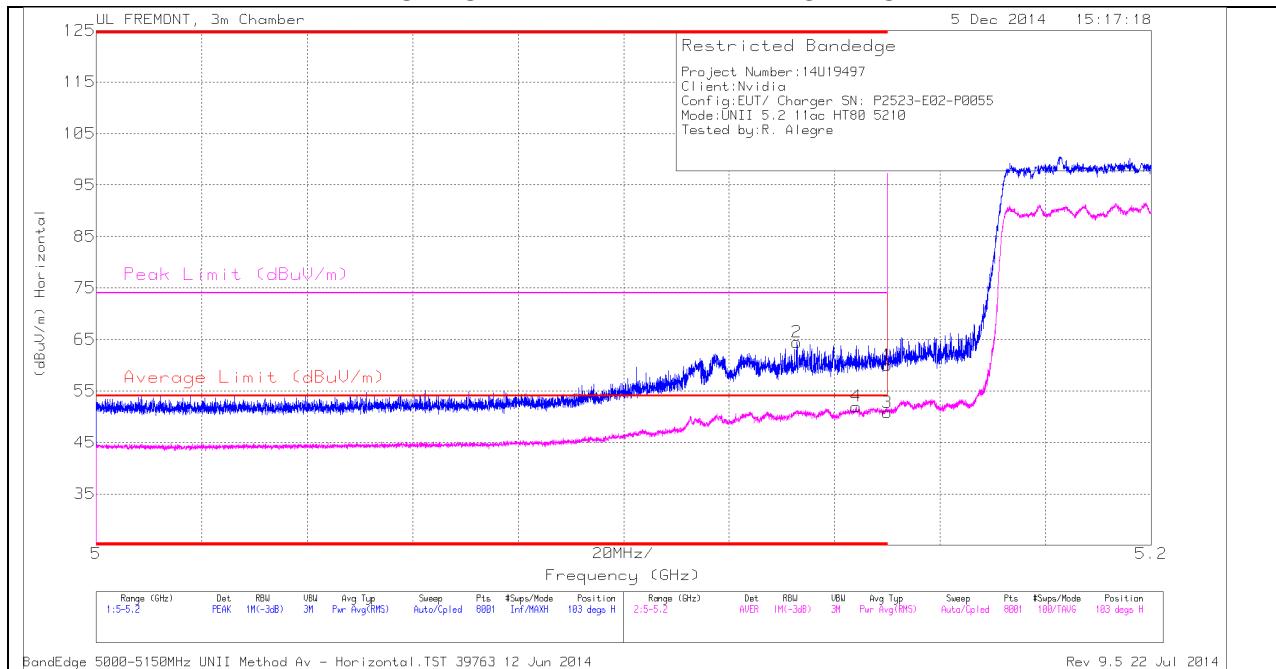
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

14.1.3. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

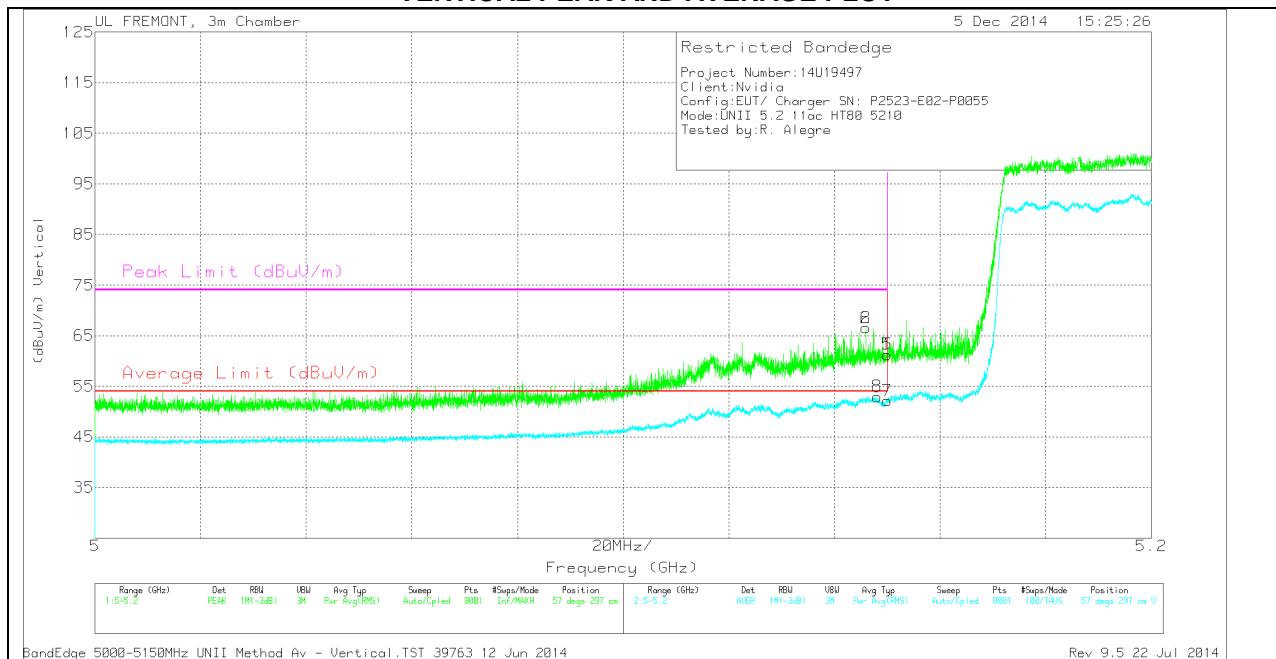
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 5.15 | 47.37 | PK | 34.2 | -21.6 | 0 | 59.97 | - | - | 74 | -14.03 | 103 | 369 | H |
| 2 | * 5.133 | 51.75 | PK | 34.2 | -21.5 | 0 | 64.45 | - | - | 74 | -9.55 | 103 | 369 | H |
| 3 | * 5.15 | 36.37 | RMS | 34.2 | -21.6 | 1.85 | 50.82 | 54 | -3.18 | - | - | 103 | 369 | H |
| 4 | * 5.144 | 37.53 | RMS | 34.2 | -21.6 | 1.85 | 51.98 | 54 | -2.02 | - | - | 103 | 369 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AFT119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2 | 5.146 | 53.92 | PK | 34.2 | -21.6 | 0 | 66.52 | - | - | 74 | -7.48 | 57 | 297 | V |
| 6 | 5.146 | 53.92 | PK | 34.2 | -21.6 | 0 | 66.52 | - | - | 74 | -7.48 | 57 | 297 | V |
| 4 | 5.148 | 38.51 | RMS | 34.2 | -21.6 | 1.85 | 52.96 | 54 | -1.04 | - | - | 57 | 297 | V |
| 8 | 5.148 | 38.51 | RMS | 34.2 | -21.6 | 1.85 | 52.96 | 54 | -1.04 | - | - | 57 | 297 | V |
| 1 | 5.15 | 48.68 | PK | 34.2 | -21.6 | 0 | 61.28 | - | - | 74 | -12.72 | 57 | 297 | V |
| 5 | 5.15 | 48.68 | PK | 34.2 | -21.6 | 0 | 61.28 | - | - | 74 | -12.72 | 57 | 297 | V |
| 3 | 5.15 | 37.68 | RMS | 34.2 | -21.6 | 1.85 | 52.13 | 54 | -1.87 | - | - | 57 | 297 | V |
| 7 | 5.15 | 37.68 | RMS | 34.2 | -21.6 | 1.85 | 52.13 | 54 | -1.87 | - | - | 57 | 297 | V |

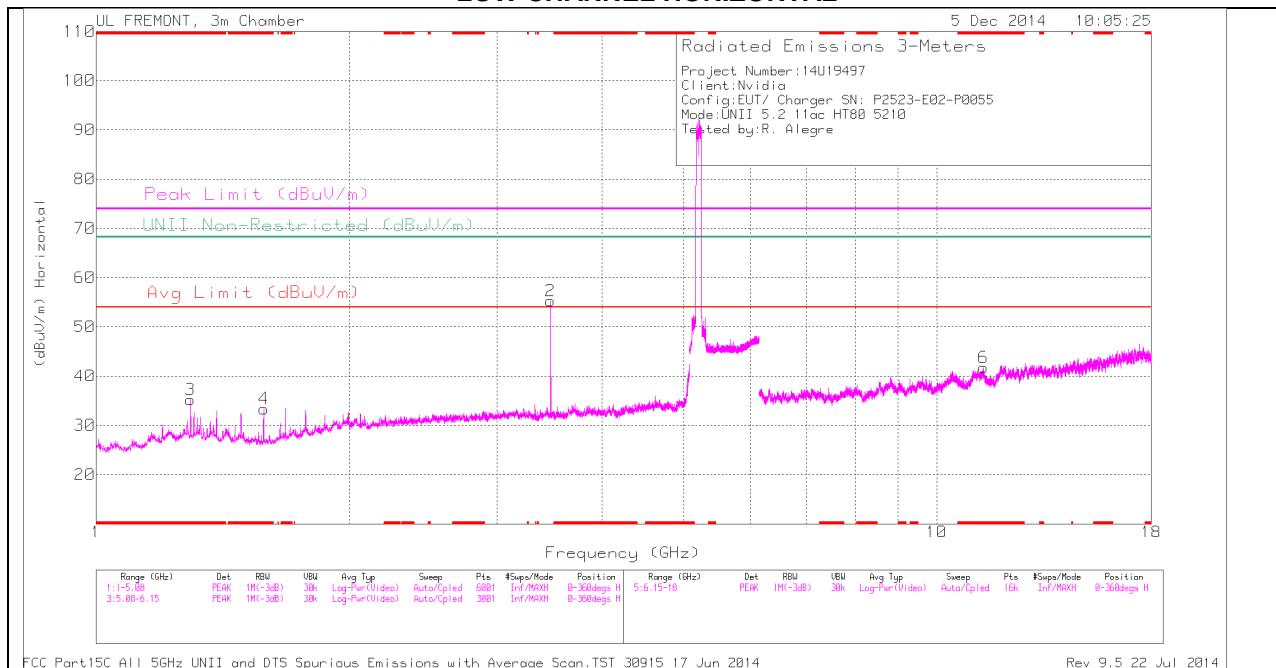
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

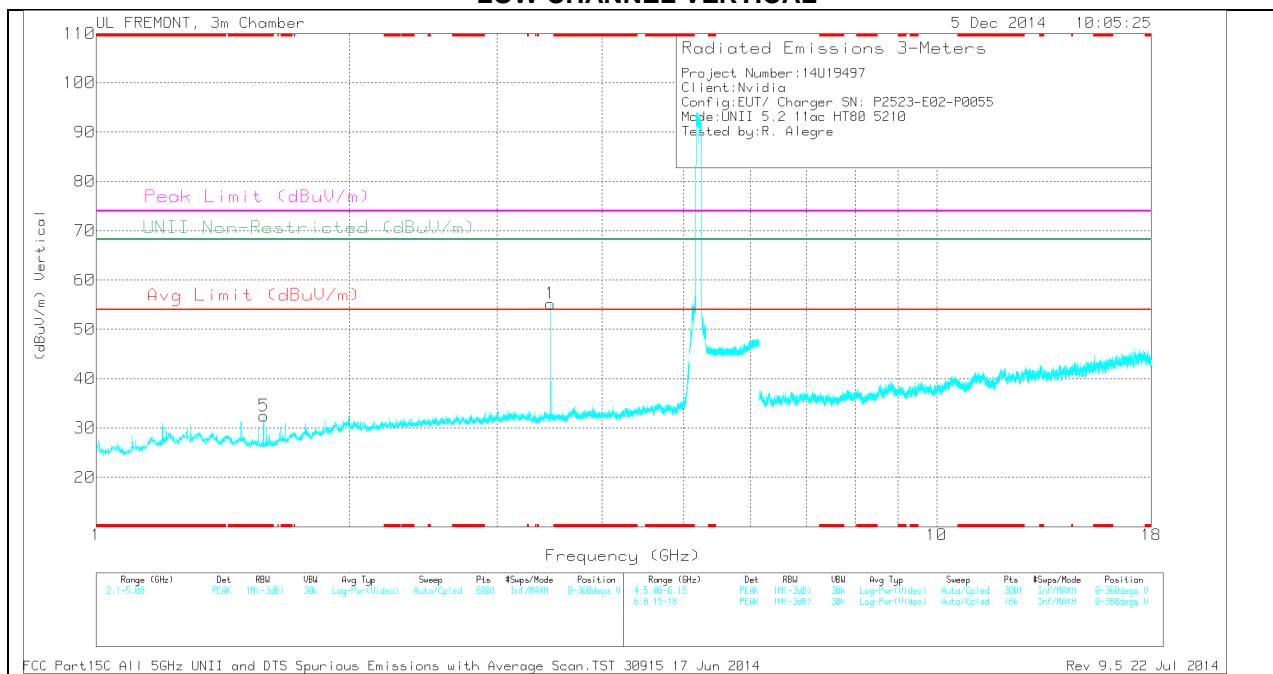
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 3 | * 1.295 | 38.71 | PK | 30.2 | -33.7 | 0 | 35.21 | - | - | 74 | -38.79 | - | - | 0-360 | 200 | H |
| 4 | * 1.583 | 38.63 | PK | 28.1 | -33.4 | 0 | 33.33 | - | - | 74 | -40.67 | - | - | 0-360 | 200 | H |
| 5 | * 1.583 | 37.76 | PK | 28.1 | -33.4 | 0 | 32.46 | - | - | 74 | -41.54 | - | - | 0-360 | 200 | V |
| 6 | * 11.363 | 29.54 | PK | 38.1 | -25.9 | 0 | 41.74 | - | - | 74 | -32.26 | - | - | 0-360 | 100 | H |
| 2 | 3.473 | 53.67 | PK | 33 | -31.4 | 0 | 55.27 | - | - | - | - | 68.2 | -12.93 | 0-360 | 200 | H |
| 1 | 3.473 | 53.62 | PK | 33 | -31.4 | 0 | 55.22 | - | - | - | - | 68.2 | -12.98 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.295 | 42.3 | PK1 | 30.2 | -33.7 | 0 | 38.8 | - | - | 74 | -35.2 | - | - | 308 | 200 | H |
| * 1.295 | 33.05 | AD1 | 30.2 | -33.7 | 1.85 | 31.4 | 54 | -22.6 | - | - | - | - | 308 | 200 | H |
| * 1.583 | 45.57 | PK1 | 28.1 | -33.4 | 0 | 40.27 | - | - | 74 | -33.73 | - | - | 74 | 135 | H |
| * 1.583 | 37.5 | AD1 | 28.1 | -33.4 | 1.85 | 34.05 | 54 | -19.95 | - | - | - | - | 74 | 135 | H |
| 3.473 | 55.91 | PK1 | 33 | -31.4 | 0 | 57.51 | - | - | - | - | 68.2 | -10.69 | 285 | 188 | H |
| 3.473 | 50.32 | AD1 | 33 | -31.4 | 1.85 | 53.77 | 54 | -0.23 | - | - | - | - | 285 | 188 | H |
| 3.473 | 55.08 | PK1 | 33 | -31.4 | 0 | 56.68 | - | - | - | - | 68.2 | -11.52 | 335 | 302 | V |
| 3.473 | 49.25 | AD1 | 33 | -31.4 | 1.85 | 52.7 | 54 | -1.3 | - | - | - | - | 335 | 302 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

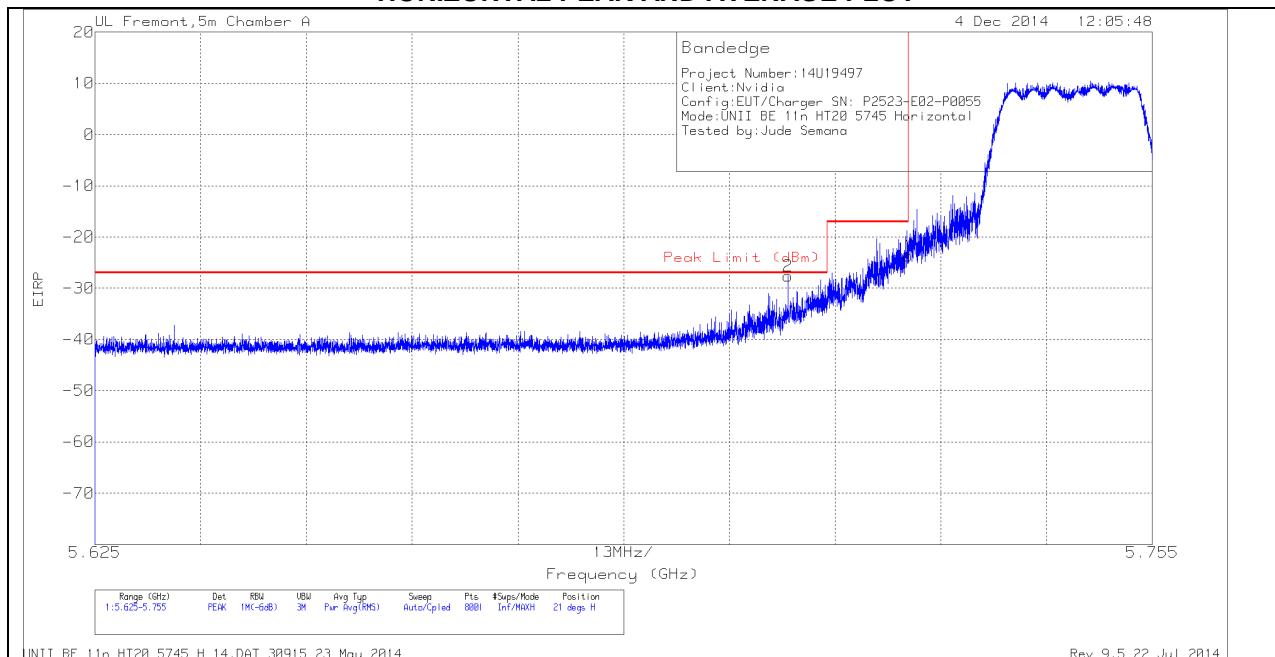
PK - Peak detector

RMS - RMS detection

14.2. 5.8 GHz

14.2.1. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PEAK AND AVERAGE PLOT



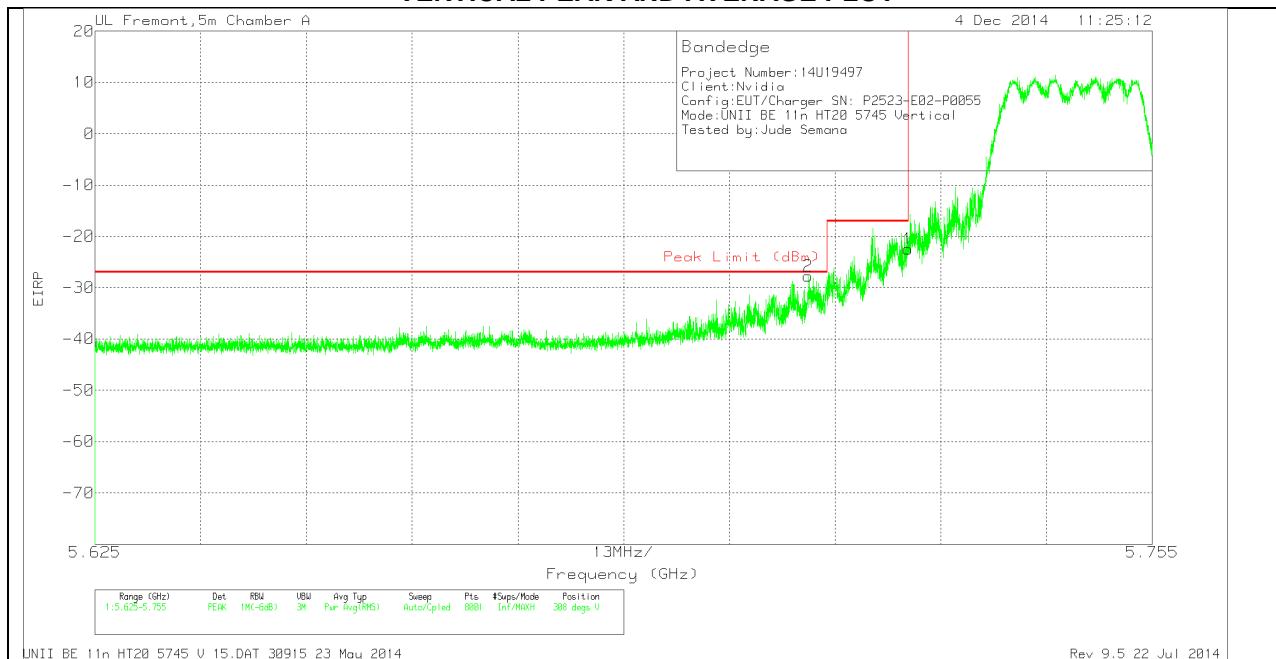
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.71 | -53.82 | PK | 34.5 | -20.1 | 11.8 | 0 | -27.62 | -27 | -.62 | 21 | 346 | H |
| 1 | 5.725 | -50.03 | PK | 34.6 | -20.1 | 11.8 | 0 | -23.73 | -17 | -6.73 | 21 | 346 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

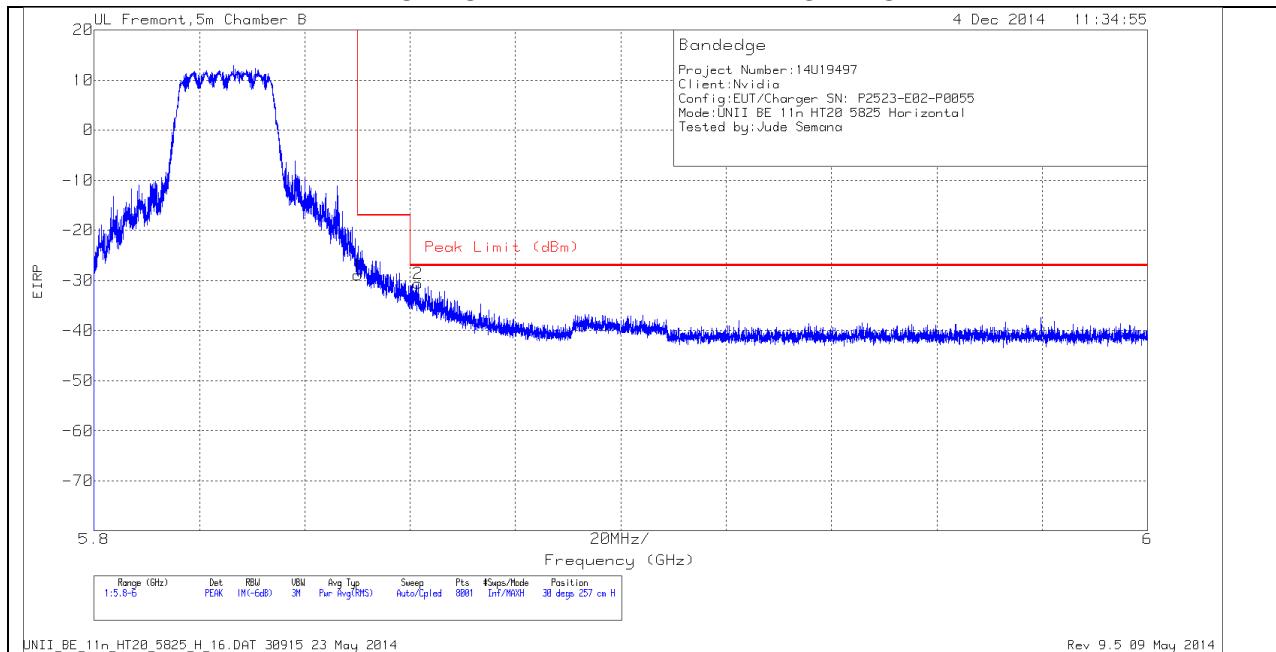
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.713 | -53.89 | PK | 34.5 | -20.1 | 11.8 | 0 | -27.69 | -27 | -.69 | 308 | 181 | V |
| 1 | 5.725 | -48.71 | PK | 34.6 | -20.1 | 11.8 | 0 | -22.41 | -17 | -5.41 | 308 | 181 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



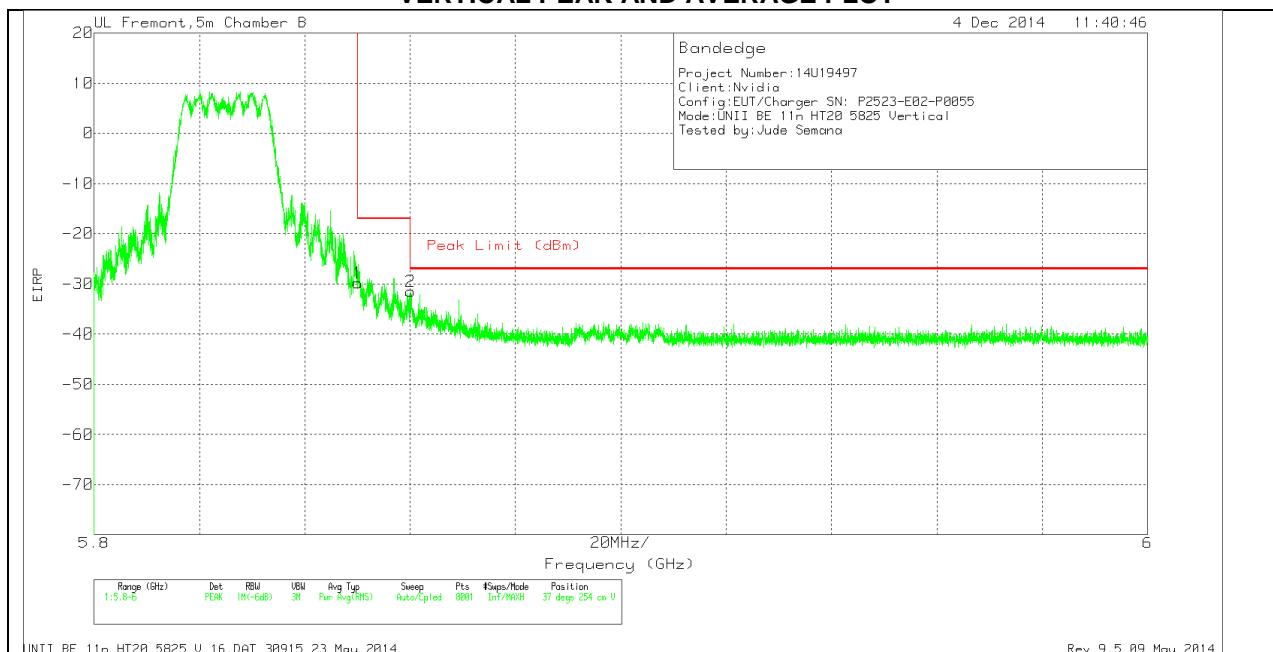
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -55.57 | PK | 34.8 | -19.9 | 11.8 | 0 | -28.87 | -17 | -11.87 | 30 | 257 | H |
| 2 | 5.861 | -57.31 | PK | 34.8 | -19.9 | 11.8 | 0 | -30.61 | -27 | -3.61 | 30 | 257 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



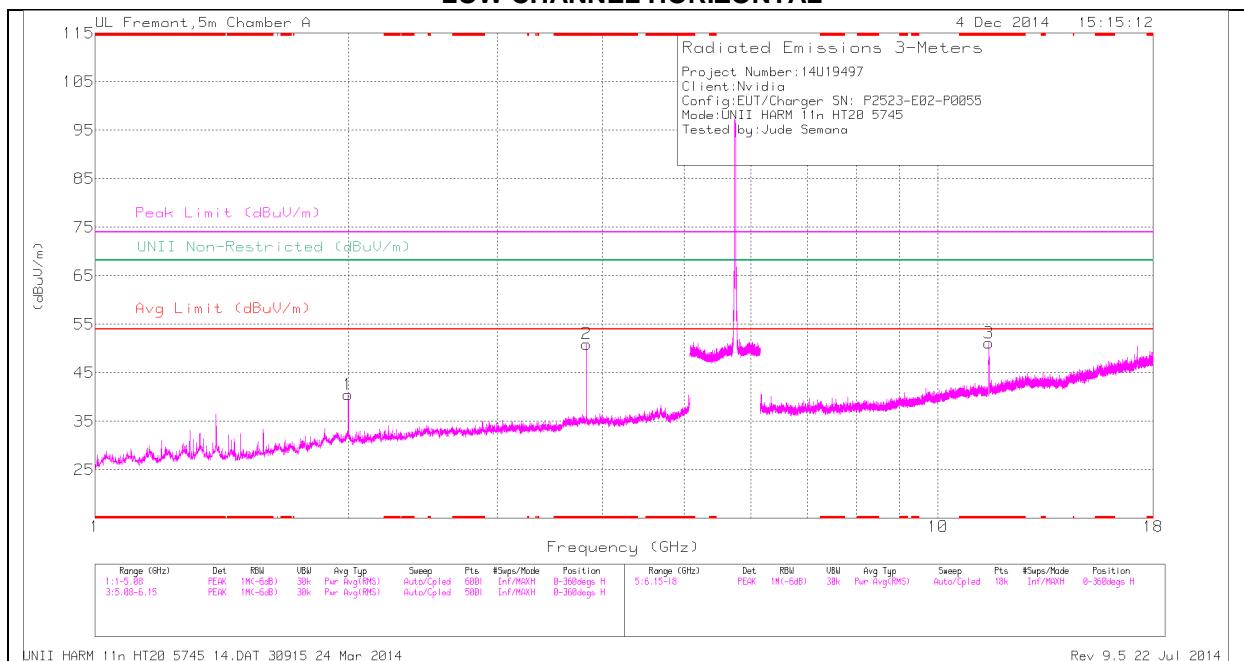
VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -56.52 | PK | 34.8 | -19.9 | 11.8 | 0 | -29.82 | -17 | -12.82 | 37 | 254 | V |
| 2 | 5.86 | -58.19 | PK | 34.8 | -19.9 | 11.8 | 0 | -31.49 | -27 | -4.49 | 37 | 254 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

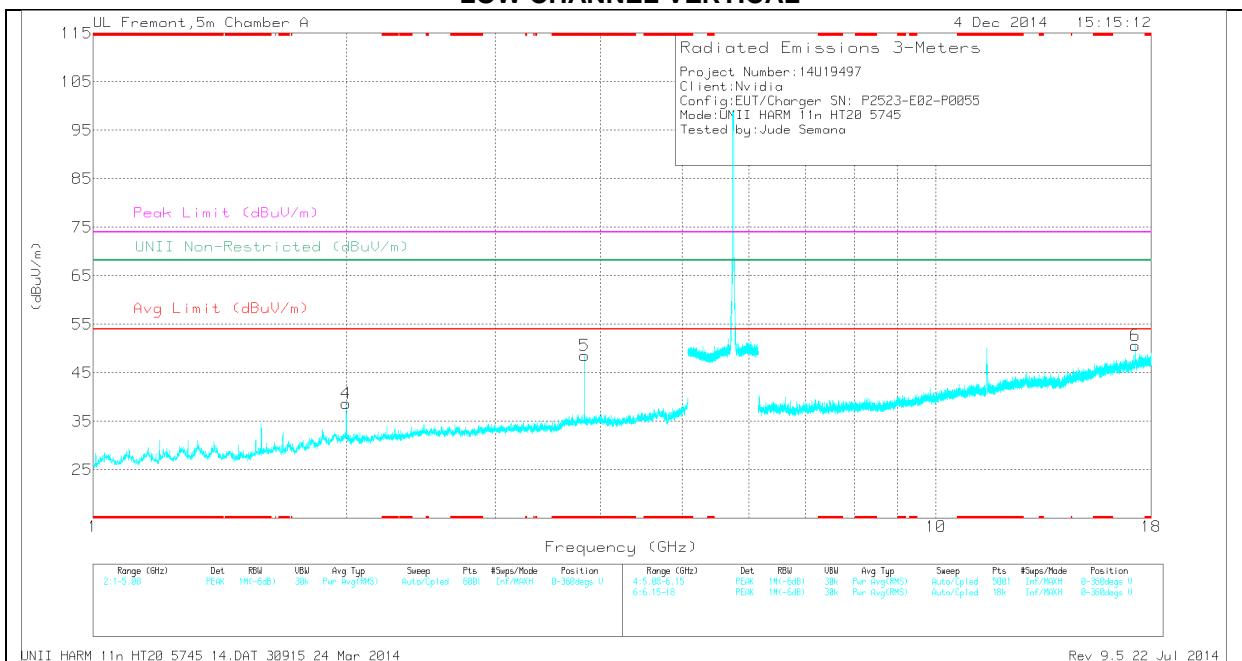
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 3.83 | 48.56 | PK | 33.7 | -31.3 | 0 | 50.96 | - | - | 74 | -23.04 | - | - | 0-360 | 101 | H |
| 5 | * 3.83 | 46.13 | PK | 33.7 | -31.3 | 0 | 48.53 | - | - | 74 | -25.47 | - | - | 0-360 | 200 | V |
| 3 | * 11.491 | 36.01 | PK | 38 | -22.9 | 0 | 51.11 | - | - | 74 | -22.89 | - | - | 0-360 | 199 | H |
| 1 | 1.997 | 42.34 | PK | 31.3 | -33.1 | 0 | 40.54 | - | - | - | - | 68.2 | -27.66 | 0-360 | 101 | H |
| 4 | 1.997 | 40.51 | PK | 31.3 | -33.1 | 0 | 38.71 | - | - | - | - | 68.2 | -29.49 | 0-360 | 200 | V |
| 6 | 17.237 | 28.96 | PK | 41.5 | -19.8 | 0 | 50.66 | - | - | - | - | 68.2 | -17.54 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

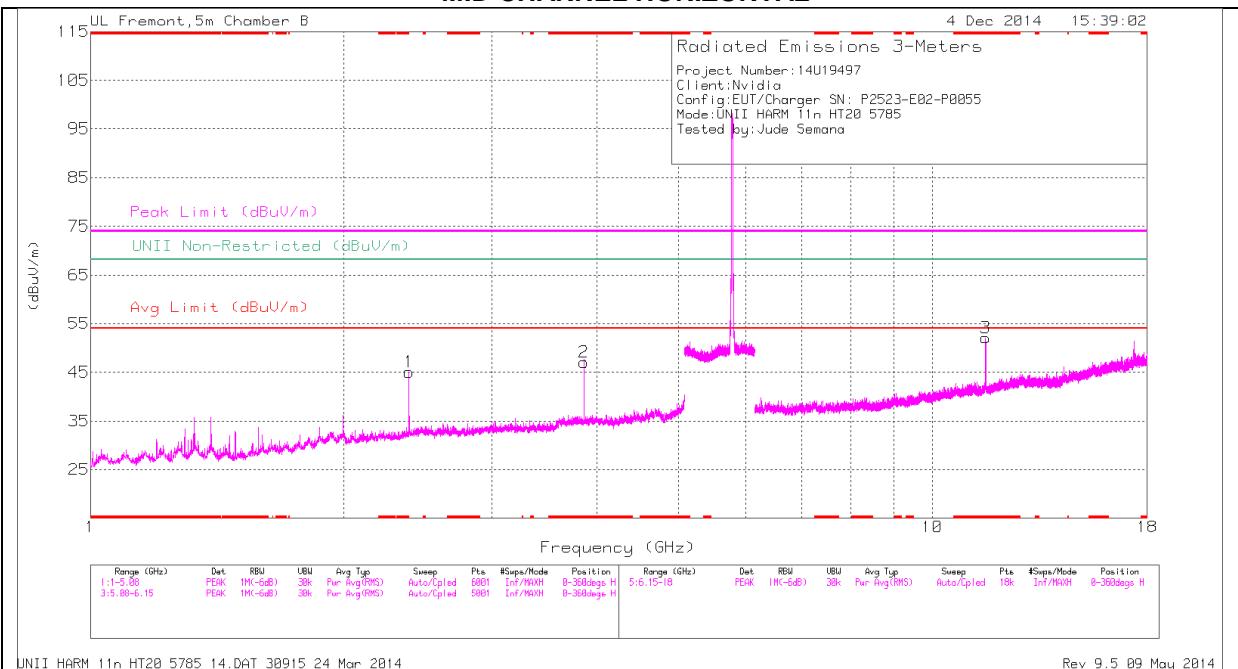
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.83 | 53.54 | PK1 | 33.7 | -31.3 | 0 | 55.94 | - | - | 74 | -18.06 | - | - | 259 | 166 | H |
| * 3.83 | 44.54 | AD1 | 33.7 | -31.3 | .31 | 47.25 | 54 | -6.75 | - | - | - | - | 259 | 166 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

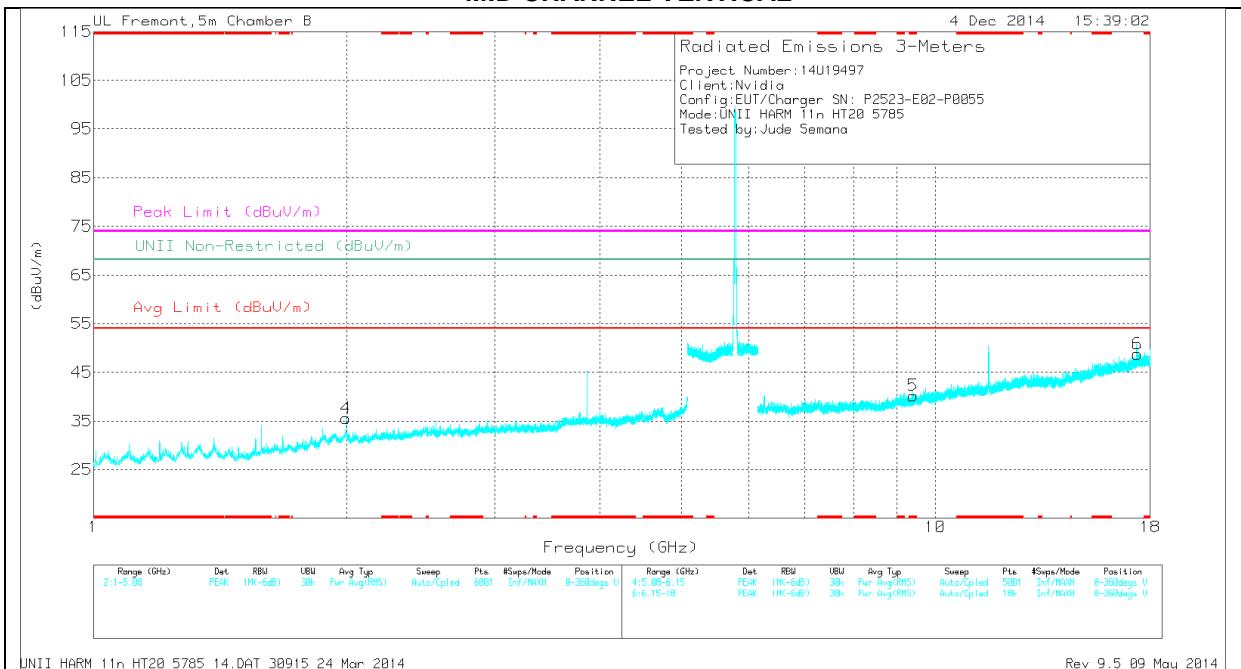
RMS - RMS detection

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 3.857 | 44.86 | PK | 33.7 | -31.5 | 0 | 47.06 | - | - | 74 | -26.94 | - | - | 0-360 | 101 | H |
| 3 | * 11.568 | 36.29 | PK | 38.1 | -22.3 | 0 | 52.09 | - | - | 74 | -21.91 | - | - | 0-360 | 199 | H |
| 5 | * 9.409 | 28.69 | PK | 36.5 | -25 | 0 | 40.19 | - | - | 74 | -33.81 | - | - | 0-360 | 199 | V |
| 4 | 1.996 | 37.35 | PK | 31.3 | -33.1 | 0 | 35.55 | - | - | - | - | 68.2 | -32.65 | 0-360 | 199 | V |
| 1 | 2.391 | 45.63 | PK | 32.1 | -32.7 | 0 | 45.03 | - | - | - | - | 68.2 | -23.17 | 0-360 | 101 | H |
| 6 | 17.388 | 26.76 | PK | 41.7 | -19.7 | 0 | 48.76 | - | - | - | - | 68.2 | -19.44 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

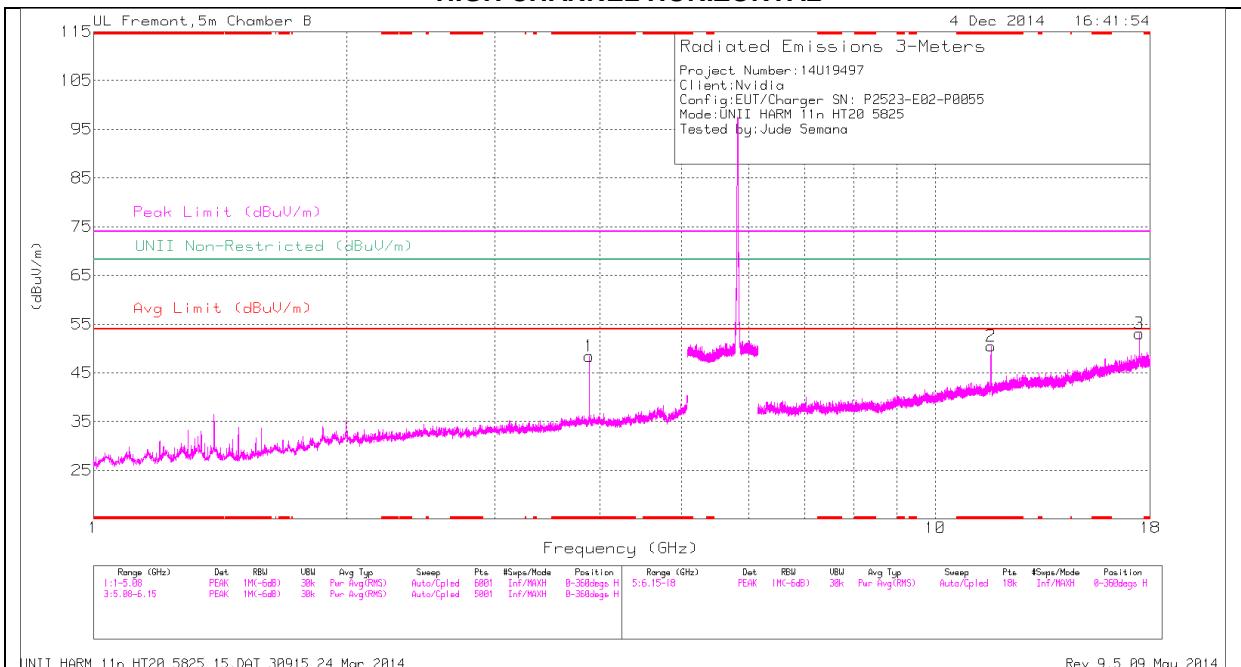
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 3.83 | 53.54 | PK1 | 33.7 | -31.3 | 0 | 55.94 | - | - | 74 | -18.06 | - | - | 259 | 166 | H |
| * 3.83 | 44.54 | AD1 | 33.7 | -31.3 | 0.31 | 47.25 | 54 | 6.75 | - | - | - | - | 259 | 166 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

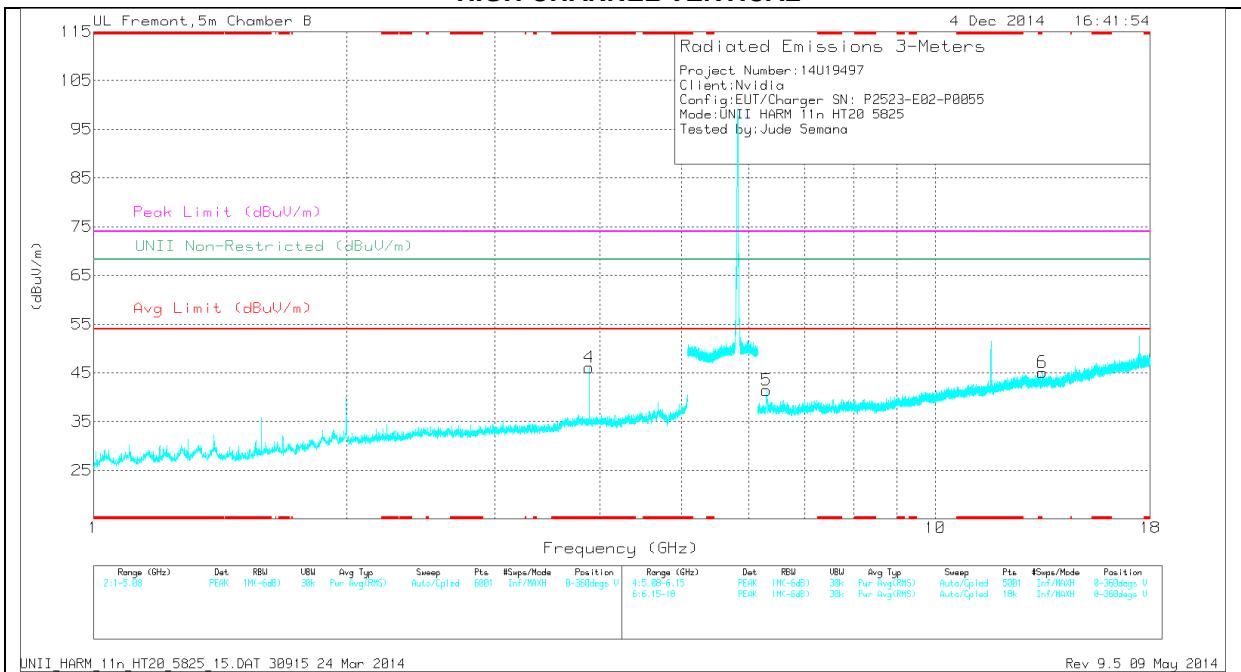
RMS - RMS detection

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 3.883 | 46.13 | PK | 33.8 | -31.5 | 0 | 48.43 | - | - | 74 | -25.57 | - | - | 0-360 | 101 | H |
| 4 | * 3.883 | 43.78 | PK | 33.8 | -31.5 | 0 | 46.08 | - | - | 74 | -27.92 | - | - | 0-360 | 200 | V |
| 2 | * 11.651 | 35.49 | PK | 38.1 | -23.1 | 0 | 50.49 | - | - | 74 | -23.51 | - | - | 0-360 | 200 | H |
| 5 | 6.303 | 34.94 | PK | 35.5 | -29 | 0 | 41.44 | - | - | - | - | 68.2 | -26.76 | 0-360 | 200 | V |
| 6 | 13.401 | 28.1 | PK | 39.2 | -22.2 | 0 | 45.1 | - | - | - | - | 68.2 | -23.1 | 0-360 | 101 | V |
| 3 | 17.477 | 31.24 | PK | 41.7 | -19.9 | 0 | 53.04 | - | - | - | - | 68.2 | -15.16 | 0-360 | 200 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Flt r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 11.652 | 46.86 | PK1 | 38.2 | -23.1 | 0 | 61.96 | - | - | 74 | -12.04 | - | - | 0 | 347 | H |
| * 11.654 | 34.47 | AD1 | 38.2 | -23.1 | 0.31 | 49.88 | 54 | -4.12 | - | - | - | - | 0 | 347 | H |
| * 11.648 | 43.96 | PK1 | 38.1 | -23 | 0 | 59.06 | - | - | 74 | -14.94 | - | - | 25 | 206 | V |
| * 11.651 | 32.19 | AD1 | 38.1 | -23.1 | 0.31 | 47.50 | 54 | -6.50 | - | - | - | - | 25 | 206 | V |
| 17.479 | 28.78 | AD1 | 41.7 | -19.9 | 0.31 | 50.89 | - | - | - | - | - | - | 112 | 210 | H |
| 17.48 | 41.48 | PK1 | 41.7 | -19.9 | 0 | 63.28 | - | - | - | - | 68.2 | -4.92 | 112 | 210 | H |

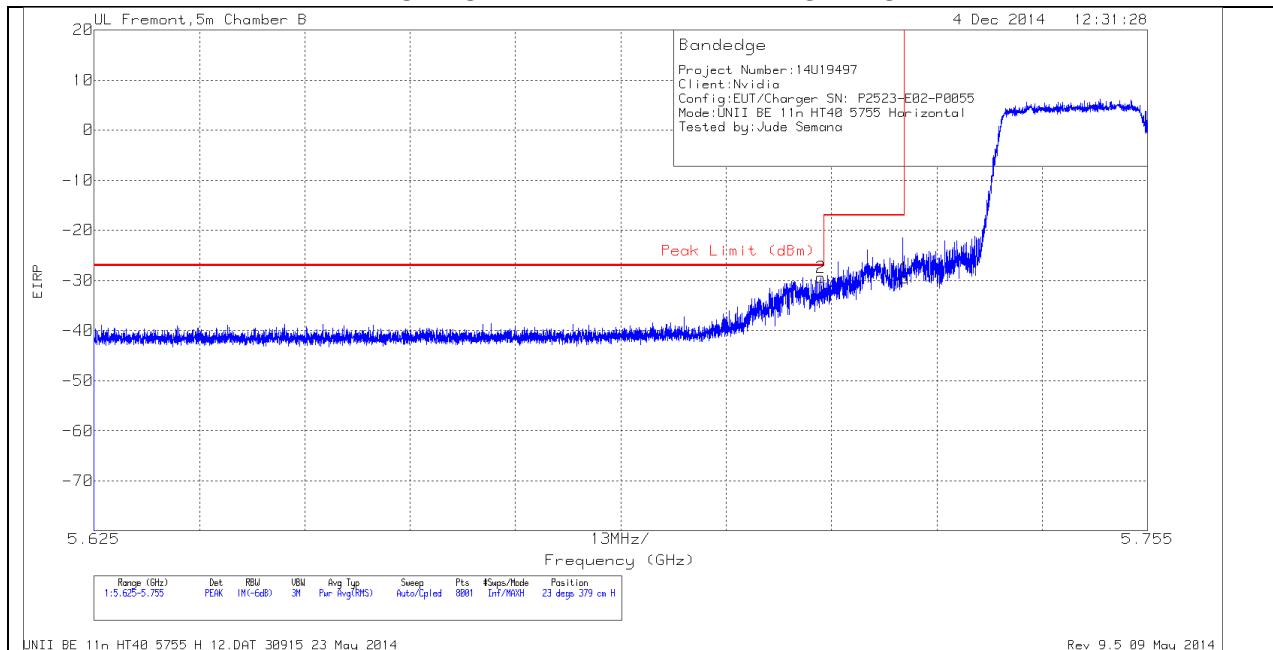
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

14.2.2. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PEAK AND AVERAGE PLOT



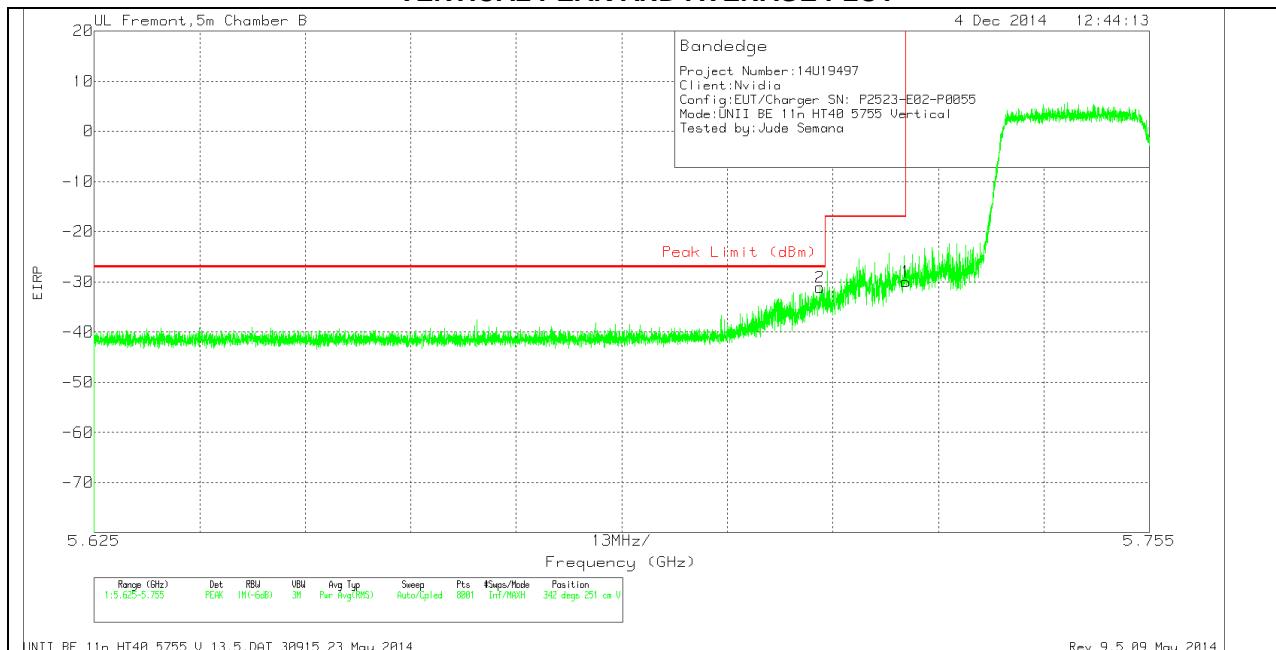
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.715 | -55.59 | PK | 34.5 | -20.1 | 11.8 | 0 | -29.39 | -27 | -2.39 | 23 | 379 | H |
| 1 | 5.725 | -55.83 | PK | 34.6 | -20.1 | 11.8 | 0 | -29.53 | -17 | -12.53 | 23 | 379 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

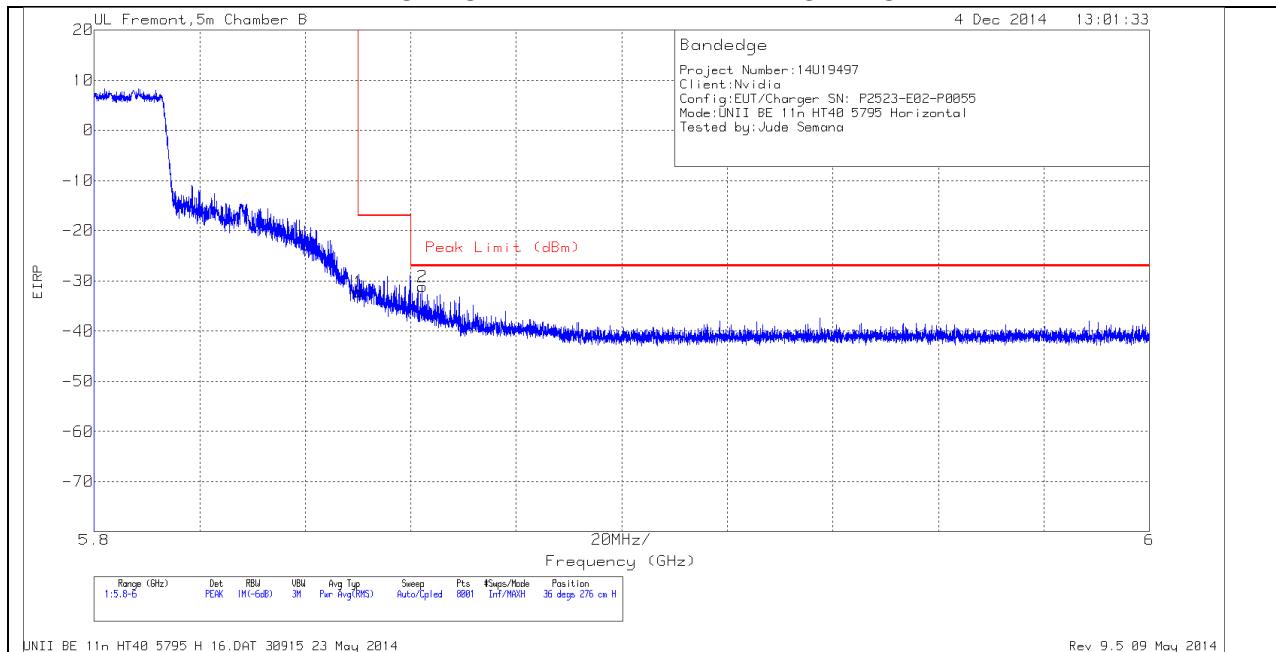
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.714 | -57.3 | PK | 34.5 | -20.1 | 11.8 | 0 | -31.1 | -27 | -4.1 | 342 | 251 | V |
| 1 | 5.725 | -56.28 | PK | 34.6 | -20.1 | 11.8 | 0 | -29.98 | -17 | -12.98 | 342 | 251 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



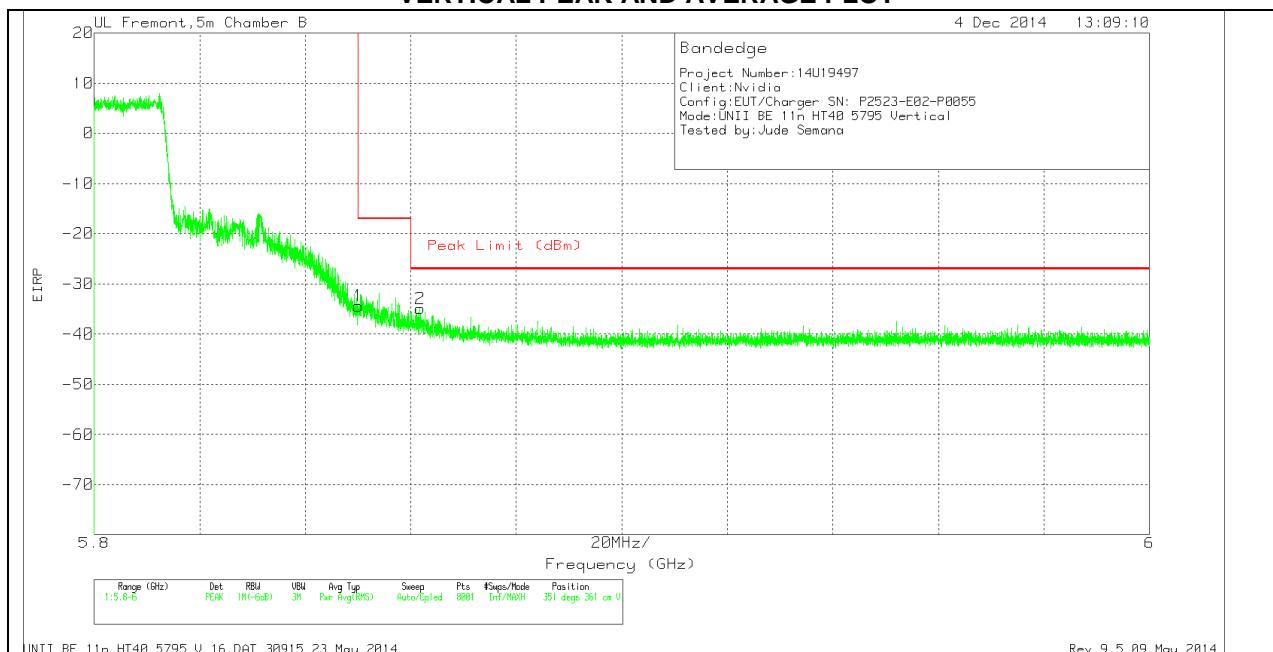
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -58.96 | PK | 34.8 | -19.9 | 11.8 | 0 | -32.26 | -17 | -15.26 | 36 | 276 | H |
| 2 | 5.862 | -57.82 | PK | 34.8 | -19.9 | 11.8 | 0 | -31.12 | -27 | -4.12 | 36 | 276 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



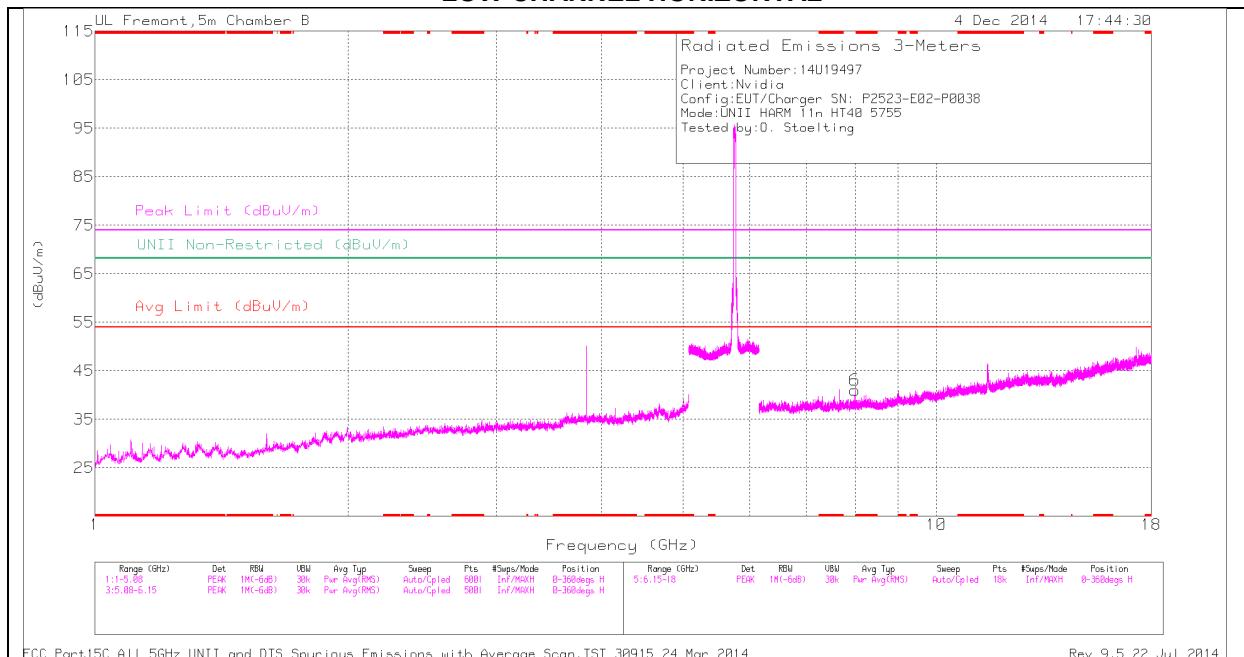
VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -61.08 | PK | 34.8 | -19.9 | 11.8 | 0 | -34.38 | -17 | -17.38 | 351 | 361 | V |
| 2 | 5.862 | -61.58 | PK | 34.8 | -19.9 | 11.8 | 0 | -34.88 | -27 | -7.88 | 351 | 361 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

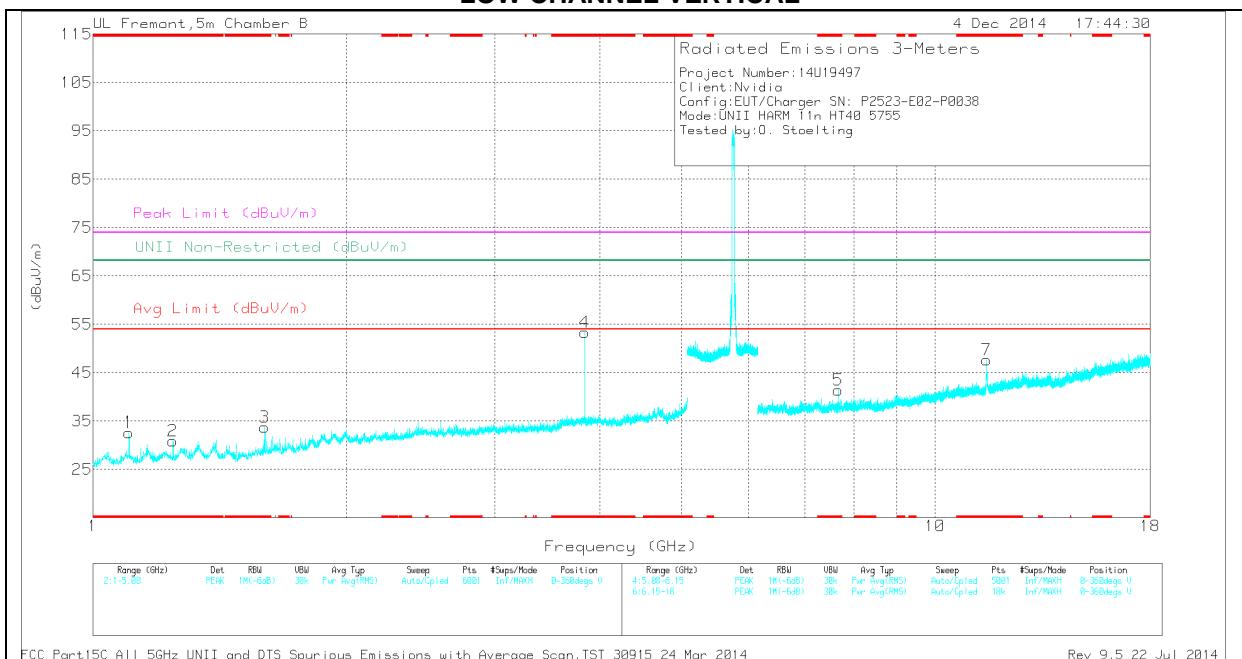
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity | |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|---|
| 1 | * 1.103 | 39.65 | PK | 27.4 | -34.4 | 0 | 32.65 | - | - | 74 | -41.35 | - | - | - | 0-360 | 200 | V |
| 2 | * 1.245 | 36.87 | PK | 28.5 | -34.5 | 0 | 30.87 | - | - | 74 | -43.13 | - | - | - | 0-360 | 101 | V |
| 3 | * 1.6 | 38.44 | PK | 28.5 | -33.2 | 0 | 33.74 | - | - | 74 | -40.26 | - | - | - | 0-360 | 200 | V |
| 4 | * 3.837 | 50.99 | PK | 33.7 | -31.3 | 0 | 53.39 | - | - | 74 | -20.61 | - | - | - | 0-360 | 200 | V |
| 5 | * 7.673 | 33.39 | PK | 35.7 | -27.7 | 0 | 41.39 | - | - | 74 | -32.61 | - | - | - | 0-360 | 101 | V |
| 7 | * 11.508 | 32.25 | PK | 38.1 | -22.7 | 0 | 47.65 | - | - | 74 | -26.35 | - | - | - | 0-360 | 101 | V |
| 6 | 8 | 32.43 | PK | 35.7 | -27.1 | 0 | 41.03 | - | - | - | - | 68.2 | -27.17 | 0-360 | 199 | H | |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

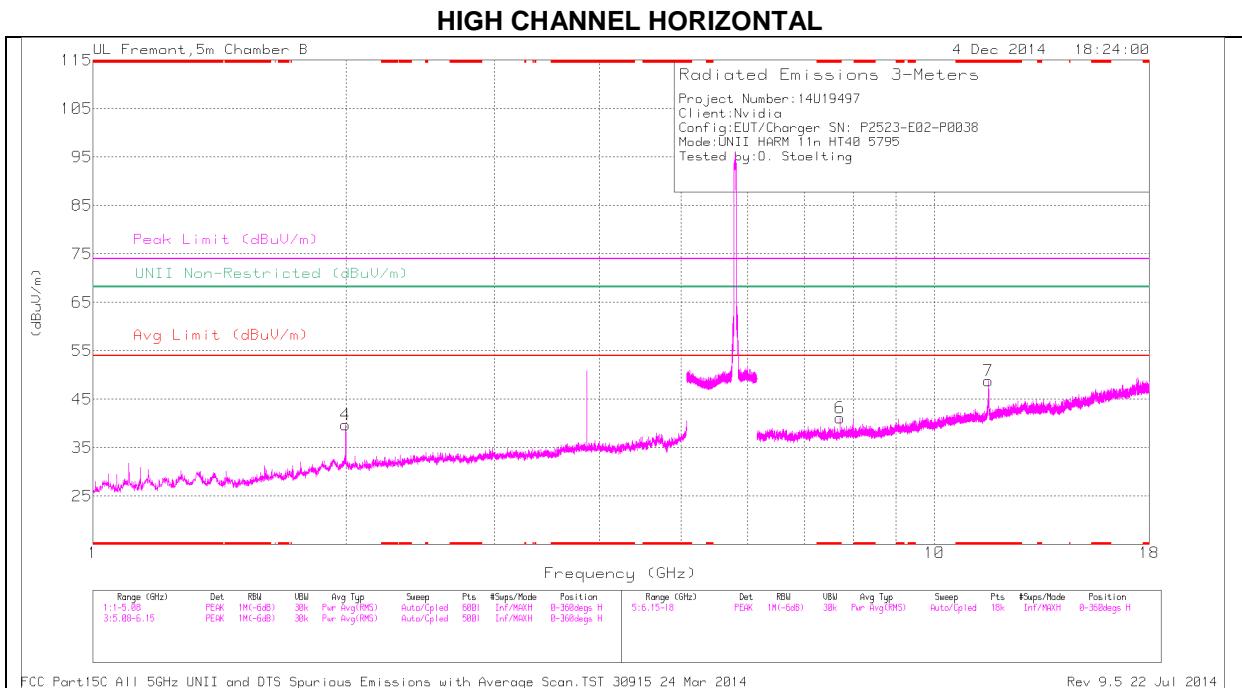
RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity | |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|---|
| * 1.103 | 46.34 | PK1 | 27.4 | -34.4 | 0 | 39.34 | - | - | 74 | -34.66 | - | - | - | 4 | 192 | V |
| * 1.103 | 37.31 | AD1 | 27.4 | -34.4 | 1.07 | 31.38 | 54 | -22.62 | - | - | - | - | - | 4 | 192 | V |
| * 1.599 | 42.61 | PK1 | 28.5 | -33.2 | 0 | 37.91 | - | - | 74 | -36.09 | - | - | - | 5 | 223 | V |
| * 1.6 | 30.65 | AD1 | 28.5 | -33.2 | 1.07 | 27.02 | 54 | -26.98 | - | - | - | - | - | 5 | 223 | V |
| * 3.837 | 53.14 | PK1 | 33.7 | -31.3 | 0 | 55.54 | - | - | 74 | -18.46 | - | - | - | 357 | 173 | V |
| * 3.837 | 47.19 | AD1 | 33.7 | -31.3 | 1.07 | 50.66 | 54 | -3.34 | - | - | - | - | - | 357 | 173 | V |
| * 11.508 | 37.69 | PK1 | 38.1 | -22.7 | 0 | 53.09 | - | - | 74 | -20.91 | - | - | - | 165 | 139 | V |
| * 11.509 | 25.6 | AD1 | 38.1 | -22.7 | 1.07 | 42.07 | 54 | -11.93 | - | - | - | - | - | 165 | 139 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

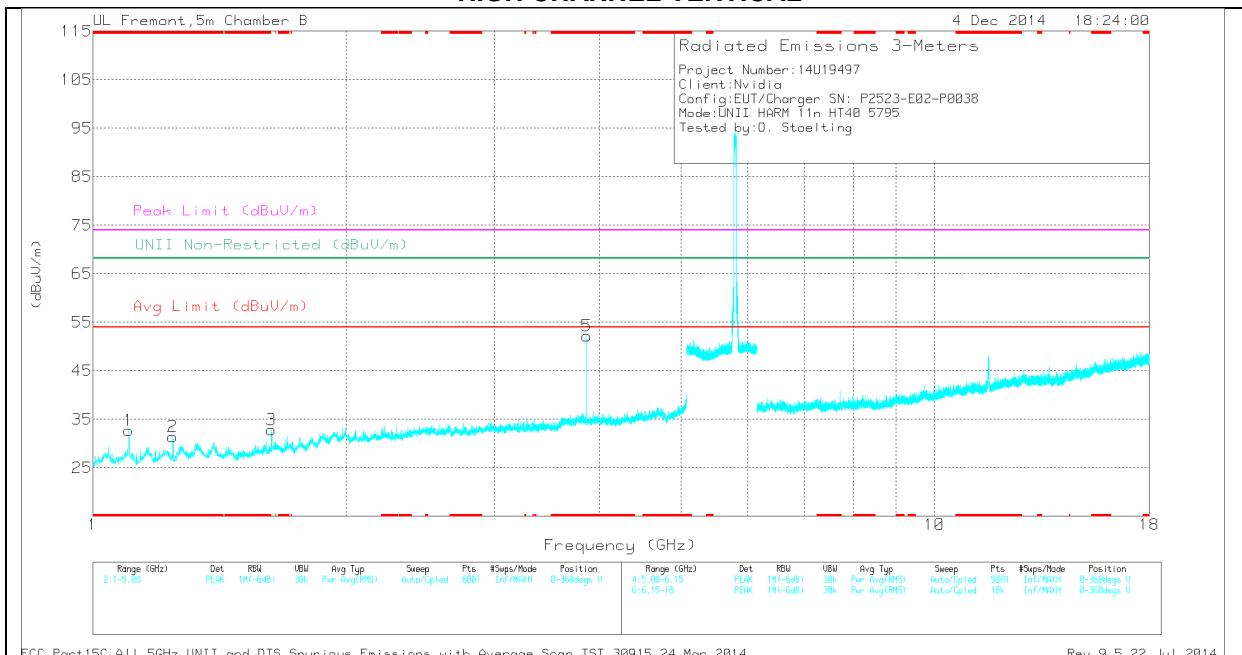
PK - Peak detector

RMS - RMS detection



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 1 | * 1.103 | 39.72 | PK | 27.4 | -34.4 | 0 | 32.72 | - | - | 74 | -41.28 | - | - | 0-360 | 101 | V |
| 2 | * 1.245 | 37.44 | PK | 28.5 | -34.5 | 0 | 31.44 | - | - | 74 | -42.56 | - | - | 0-360 | 101 | V |
| 5 | * 3.863 | 50.07 | PK | 33.7 | -31.6 | 0 | 52.17 | - | - | 74 | -21.83 | - | - | 0-360 | 200 | V |
| 6 | * 7.727 | 32.54 | PK | 35.7 | -27.1 | 0 | 41.14 | - | - | 74 | -32.86 | - | - | 0-360 | 101 | H |
| 7 | * 11.591 | 33.47 | PK | 38.1 | -22.7 | 0 | 48.87 | - | - | 74 | -25.13 | - | - | 0-360 | 199 | H |
| 3 | 1.63 | 36.97 | PK | 28.7 | -32.8 | 0 | 32.87 | - | - | - | - | 68.2 | -35.33 | 0-360 | 200 | V |
| 4 | 1.997 | 41.56 | PK | 31.3 | -33.1 | 0 | 39.76 | - | - | - | - | 68.2 | -28.44 | 0-360 | 101 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filt/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.103 | 45.67 | PK1 | 27.4 | -34.4 | 0 | 38.67 | - | - | 74 | -35.33 | - | - | 335 | 164 | V |
| * 1.103 | 36.84 | AD1 | 27.4 | -34.4 | 1.07 | 30.91 | 54 | -23.09 | - | - | - | - | 335 | 164 | V |
| * 3.863 | 52.2 | PK1 | 33.7 | -31.6 | 0 | 54.3 | - | - | 74 | -19.7 | - | - | 360 | 196 | V |
| * 3.863 | 46.99 | AD1 | 33.7 | -31.6 | 1.07 | 50.16 | 54 | -3.84 | - | - | - | - | 360 | 196 | V |
| * 11.591 | 41.32 | PK1 | 38.1 | -22.7 | 0 | 56.72 | - | - | 74 | -17.28 | - | - | 192 | 245 | H |
| * 11.591 | 27.72 | AD1 | 38.1 | -22.7 | 1.07 | 44.19 | 54 | -9.81 | - | - | - | - | 192 | 245 | H |
| 1.997 | 50.8 | PK1 | 31.3 | -33.1 | 0 | 49 | - | - | - | - | 68.2 | -19.2 | 220 | 159 | H |
| 1.997 | 31.66 | AD1 | 31.3 | -33.1 | 1.07 | 30.93 | - | - | - | - | - | - | 220 | 159 | H |

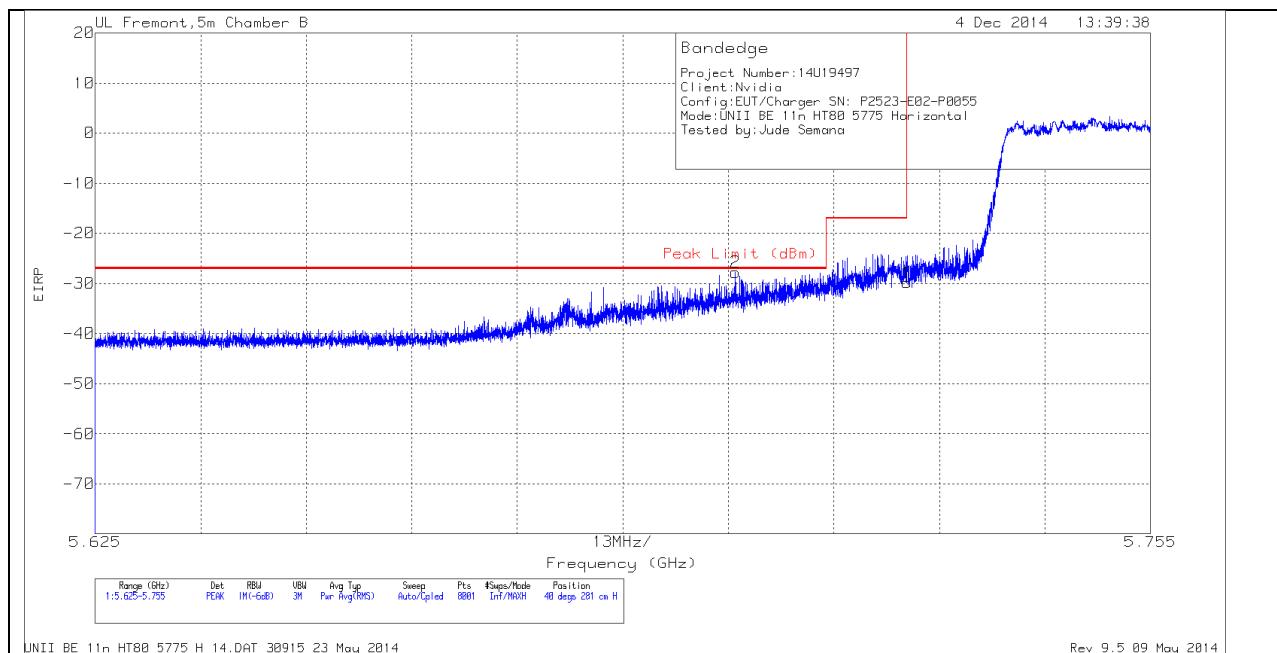
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

14.2.3. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS

HORIZONTAL PEAK AND AVERAGE PLOT



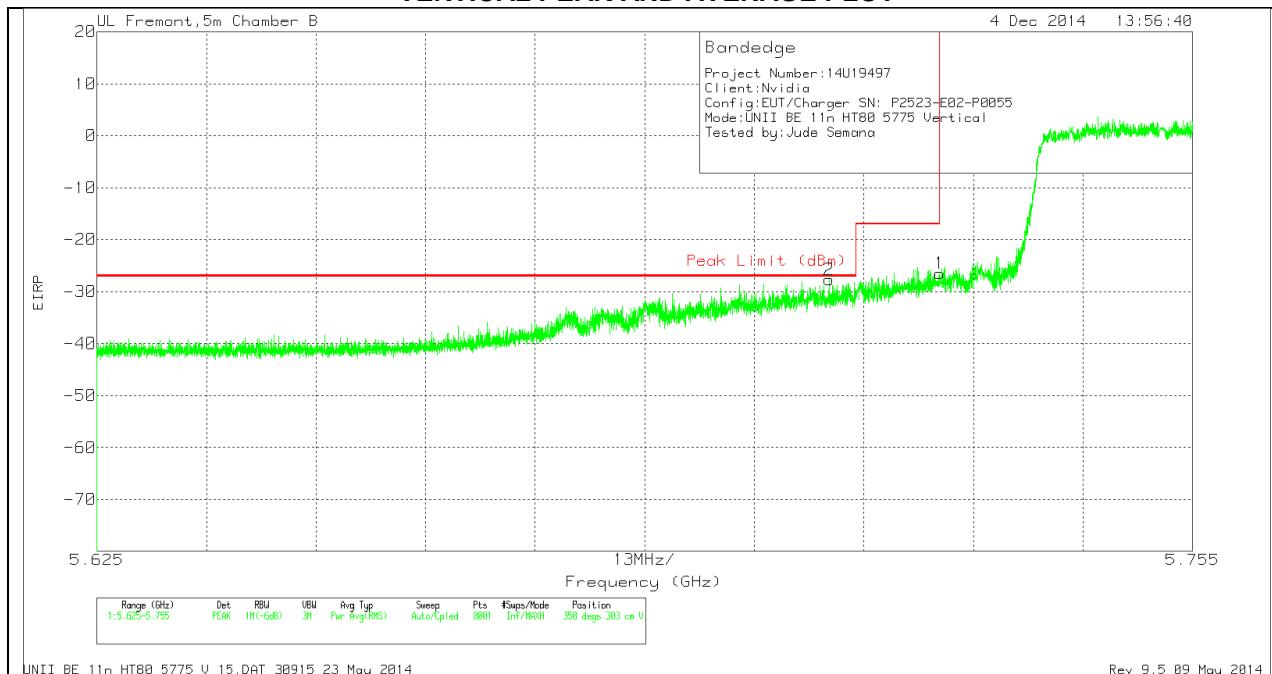
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Fltr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.704 | -53.98 | PK | 34.5 | -20.1 | 11.8 | 0 | -27.78 | -27 | -.78 | 40 | 281 | H |
| 1 | 5.725 | -56.15 | PK | 34.6 | -20.1 | 11.8 | 0 | -29.85 | -17 | -12.85 | 40 | 281 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

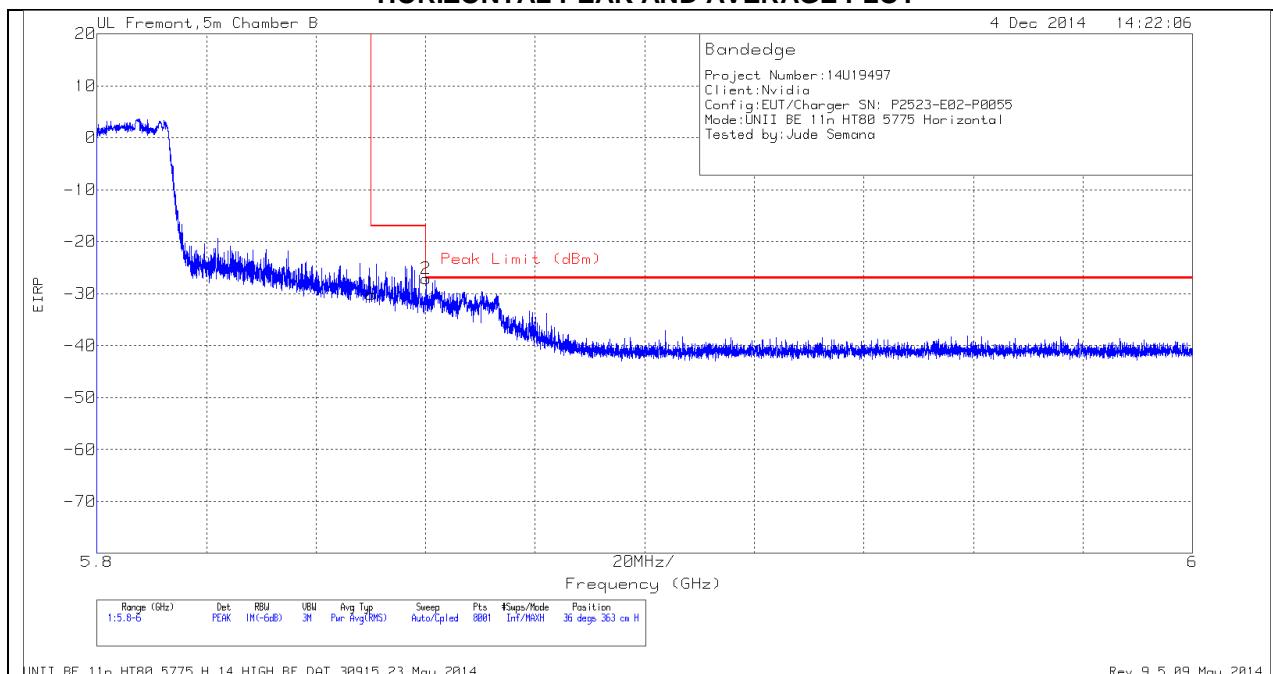
| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 2 | 5.712 | -53.9 | PK | 34.5 | -20.1 | 11.8 | 0 | -27.7 | -27 | -.7 | 350 | 303 | V |
| 1 | 5.725 | -52.83 | PK | 34.6 | -20.1 | 11.8 | 0 | -26.53 | -17 | -9.53 | 350 | 303 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



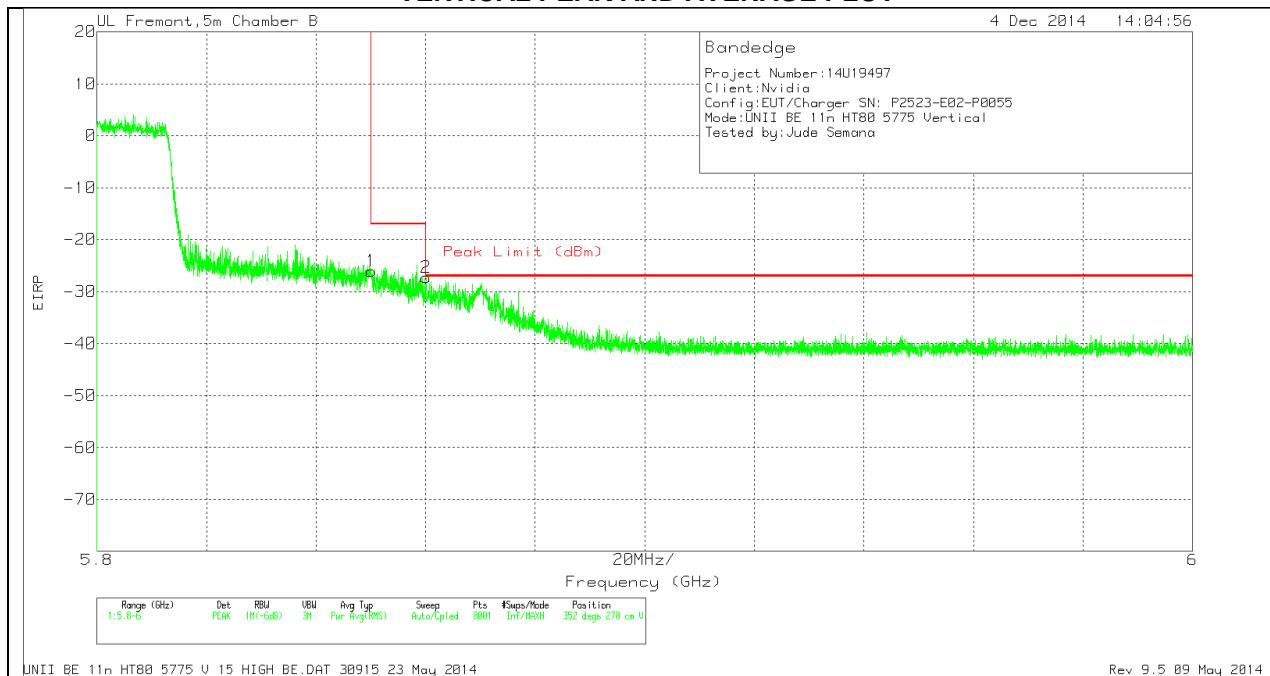
HORIZONTAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Filt/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|-----------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -56.79 | PK | 34.8 | -19.9 | 11.8 | 0 | -30.09 | -17 | -13.09 | 36 | 363 | H |
| 2 | 5.86 | -53.84 | PK | 34.8 | -19.9 | 11.8 | 0 | -27.14 | -27 | -14 | 36 | 363 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



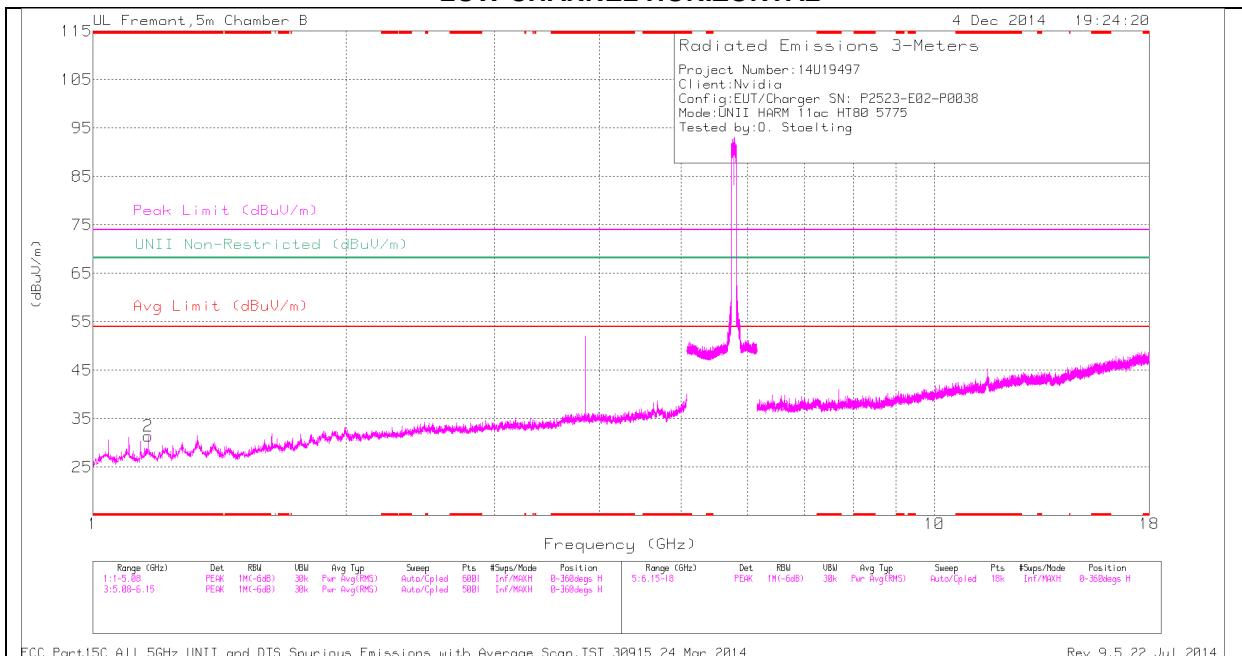
VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|----------------|------------------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1 | 5.85 | -52.76 | PK | 34.8 | -19.9 | 11.8 | 0 | -26.06 | -17 | -9.06 | 352 | 270 | V |
| 2 | 5.86 | -53.98 | PK | 34.8 | -19.9 | 11.8 | 0 | -27.28 | -27 | -28 | 352 | 270 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

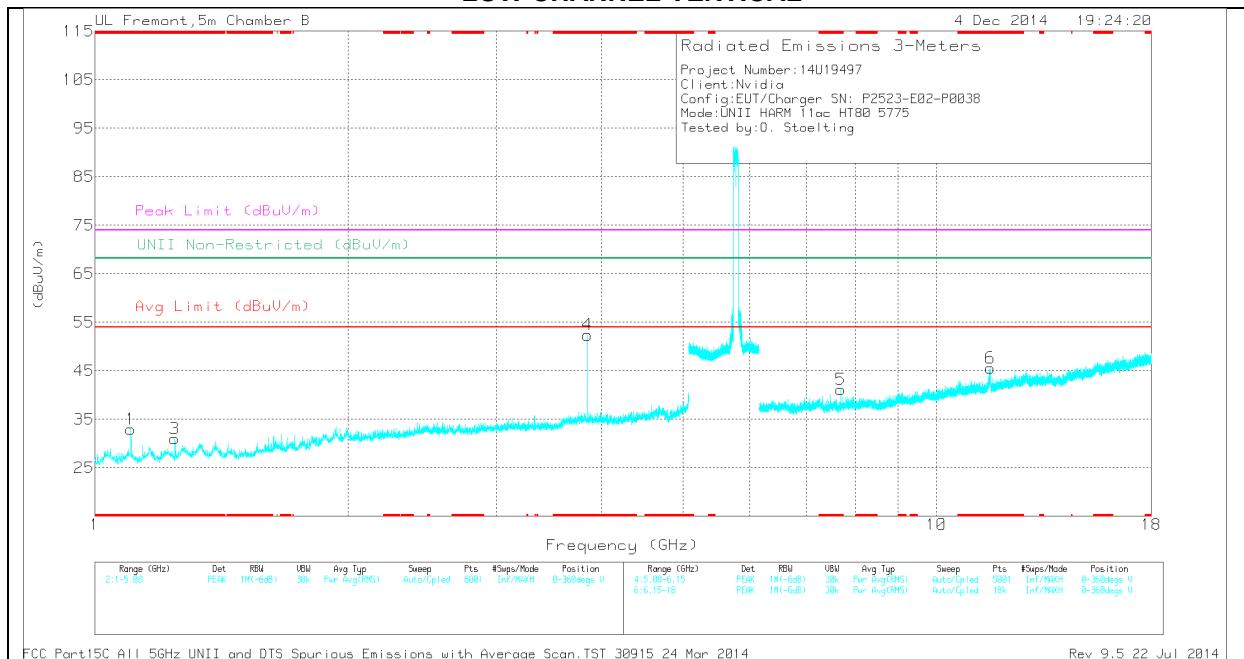
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| 2 | * 1.163 | 38.06 | PK | 27.9 | -34.5 | 0 | 31.46 | - | - | 74 | -42.54 | - | - | 0-360 | 199 | H |
| 1 | * 1.103 | 39.92 | PK | 27.4 | -34.4 | 0 | 32.92 | - | - | 74 | -41.08 | - | - | 0-360 | 101 | V |
| 3 | * 1.245 | 37.04 | PK | 28.5 | -34.5 | 0 | 31.04 | - | - | 74 | -42.96 | - | - | 0-360 | 101 | V |
| 4 | * 3.85 | 50.09 | PK | 33.7 | -31.4 | 0 | 52.39 | - | - | 74 | -21.61 | - | - | 0-360 | 199 | V |
| 5 | * 7.7 | 32.92 | PK | 35.7 | -27.5 | 0 | 41.12 | - | - | 74 | -32.88 | - | - | 0-360 | 101 | V |
| 6 | * 11.591 | 30.19 | PK | 38.1 | -22.7 | 0 | 45.59 | - | - | 74 | -28.41 | - | - | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

RMS - RMS detection

RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Ft tr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | UNII Non-Restricted (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|------------------------------|----------------|----------------|-------------|----------|
| * 1.103 | 45.92 | PK1 | 27.4 | -34.4 | 0 | 38.92 | - | - | 74 | -35.08 | - | - | 349 | 180 | V |
| * 1.103 | 37.36 | AD1 | 27.4 | -34.4 | 1.81 | 32.17 | 54 | -21.83 | - | - | - | - | 349 | 180 | V |
| * 3.85 | 52.44 | PK1 | 33.7 | -31.4 | 0 | 54.74 | - | - | 74 | -19.26 | - | - | 358 | 225 | V |
| * 3.85 | 48.41 | AD1 | 33.7 | -31.4 | 1.81 | 52.52 | 54 | -1.48 | - | - | - | - | 358 | 225 | V |
| * 11.591 | 36.54 | PK1 | 38.1 | -22.7 | 0 | 51.94 | - | - | 74 | -22.06 | - | - | 62 | 110 | V |
| * 11.591 | 24.62 | AD1 | 38.1 | -22.7 | 1.81 | 41.83 | 54 | -12.17 | - | - | - | - | 62 | 110 | V |

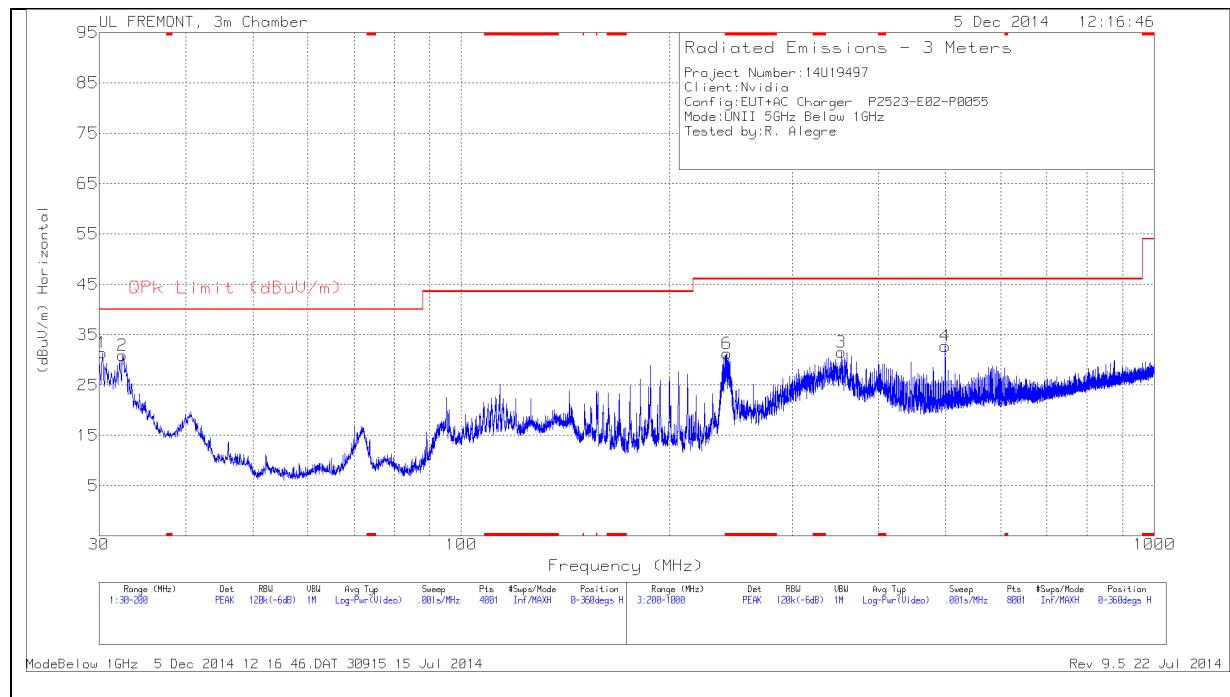
* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

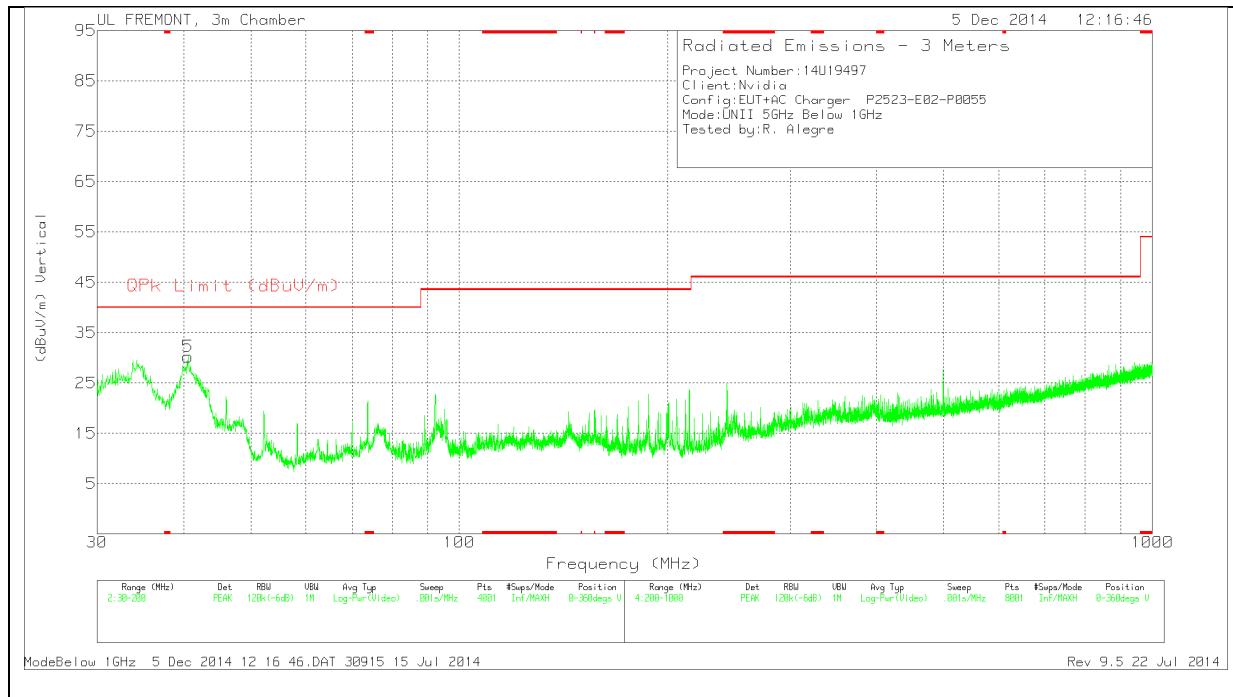
RMS - RMS detection

15. WORST-CASE BELOW 1 GHz (in the 5.3 GHz Band)

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



Below 1G Data

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T477 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 6 | * 241.8 | 46.05 | PK | 11.6 | -26.4 | 31.25 | 46.02 | -14.77 | 0-360 | 101 | H |
| 1 | 30.34 | 39.11 | PK | 21.1 | -28.8 | 31.41 | 40 | -8.59 | 0-360 | 101 | H |
| 2 | 32.4225 | 40.08 | PK | 19.6 | -28.8 | 30.88 | 40 | -9.12 | 0-360 | 101 | H |
| 5 | 40.5825 | 45.53 | PK | 13.3 | -28.6 | 30.23 | 40 | -9.77 | 0-360 | 101 | V |
| 3 | 353.2 | 42.8 | PK | 14.5 | -25.8 | 31.5 | 46.02 | -14.52 | 0-360 | 101 | H |
| 4 | 499.2 | 41.22 | PK | 17.4 | -25.9 | 32.72 | 46.02 | -13.3 | 0-360 | 200 | H |

* - indicates frequency in CFR15.205/IC 8.10 Restricted Band

PK - Peak detector

16. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

| Frequency of Emission (MHz) | Conducted Limit (dBuV) | |
|-----------------------------|------------------------|----------|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56 | 56 to 46 |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10-2013

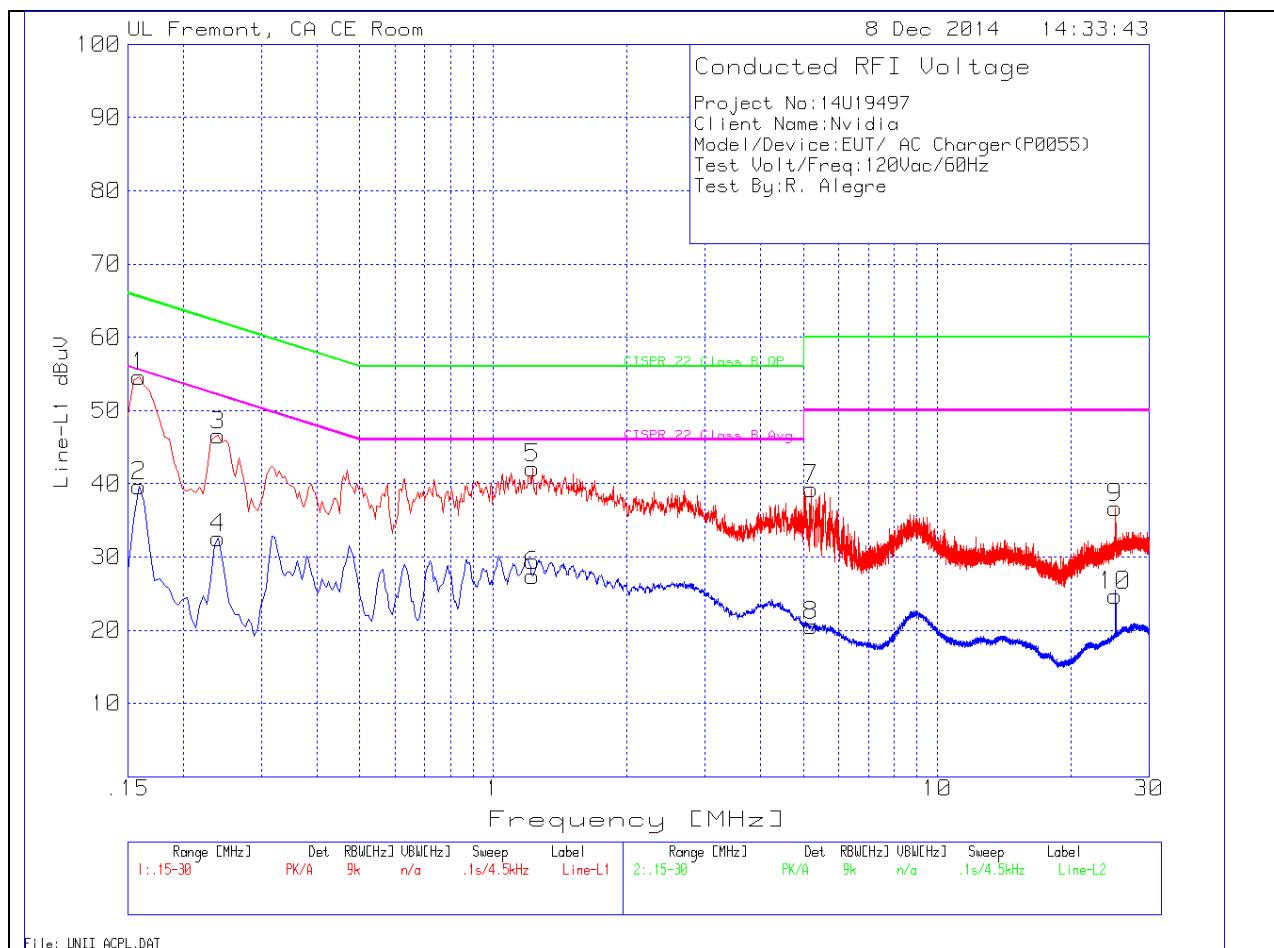
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



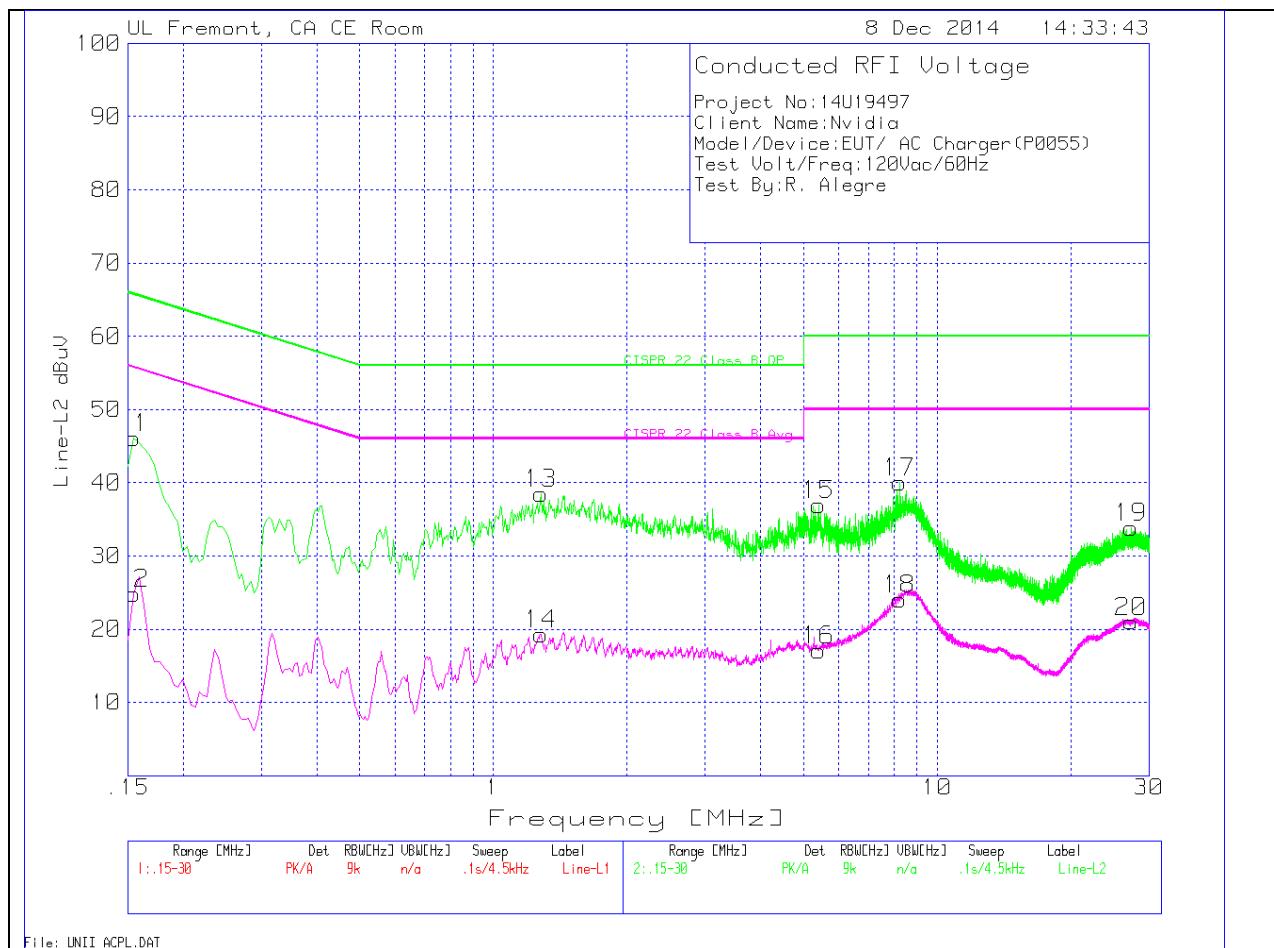
LINE 1 RESULTS

Line-L1 .15 - 30MHz

Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | T24 IL L1 (dB) | LC Cables 1&3 (dB) | Corrected Reading dBuV | CISPR 22 Class B QP | Margin to Limit (dB) | CISPR 22 Class B Avg | Margin to Limit (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------------|------------------------|---------------------|----------------------|----------------------|----------------------|
| 1 | .159 | 53.34 | PK | 1.3 | 0 | 54.64 | 65.5 | -10.86 | - | - |
| 2 | .159 | 38.39 | Av | 1.3 | 0 | 39.69 | - | - | 55.5 | -15.81 |
| 3 | .24 | 45.86 | PK | .7 | 0 | 46.56 | 62.1 | -15.54 | - | - |
| 4 | .24 | 31.91 | Av | .7 | 0 | 32.61 | - | - | 52.1 | -19.49 |
| 5 | 1.2255 | 41.78 | PK | .2 | .1 | 42.08 | 56 | -13.92 | - | - |
| 6 | 1.2255 | 27.06 | Av | .2 | .1 | 27.36 | - | - | 46 | -18.64 |
| 7 | 5.199 | 38.92 | PK | .2 | .1 | 39.22 | 60 | -20.78 | - | - |
| 8 | 5.199 | 20.32 | Av | .2 | .1 | 20.62 | - | - | 50 | -29.38 |
| 9 | 25.206 | 36.09 | PK | .3 | .3 | 36.69 | 60 | -23.31 | - | - |
| 10 | 25.206 | 24.16 | Av | .3 | .3 | 24.76 | - | - | 50 | -25.24 |

LINE 2 PLOT



LINE 2 RESULTS

Line-L2 .15 - 30MHz

Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | T24 IL L2 (dB) | LC Cables 2&3 (dB) | Corrected Reading dBuV | CISPR 22 Class B QP | Margin to Limit (dB) | CISPR 22 Class B Avg | Margin to Limit (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------------|------------------------|---------------------|----------------------|----------------------|----------------------|
| 11 | .1545 | 44.67 | PK | 1.4 | 0 | 46.07 | 65.8 | -19.73 | - | - |
| 12 | .1545 | 23.47 | Av | 1.4 | 0 | 24.87 | - | - | 55.8 | -30.93 |
| 13 | 1.2795 | 38.17 | PK | .2 | .1 | 38.47 | 56 | -17.53 | - | - |
| 14 | 1.2795 | 18.96 | Av | .2 | .1 | 19.26 | - | - | 46 | -26.74 |
| 15 | 5.406 | 36.64 | PK | .2 | .1 | 36.94 | 60 | -23.06 | - | - |
| 16 | 5.406 | 16.83 | Av | .2 | .1 | 17.13 | - | - | 50 | -32.87 |
| 17 | 8.241 | 39.74 | PK | .2 | .1 | 40.04 | 60 | -19.96 | - | - |
| 18 | 8.241 | 23.79 | Av | .2 | .1 | 24.09 | - | - | 50 | -25.91 |
| 19 | 27.3525 | 33.29 | PK | .3 | .3 | 33.89 | 60 | -26.11 | - | - |
| 20 | 27.3525 | 20.43 | Av | .3 | .3 | 21.03 | - | - | 50 | -28.97 |

PK - Peak detector

Av - average detection