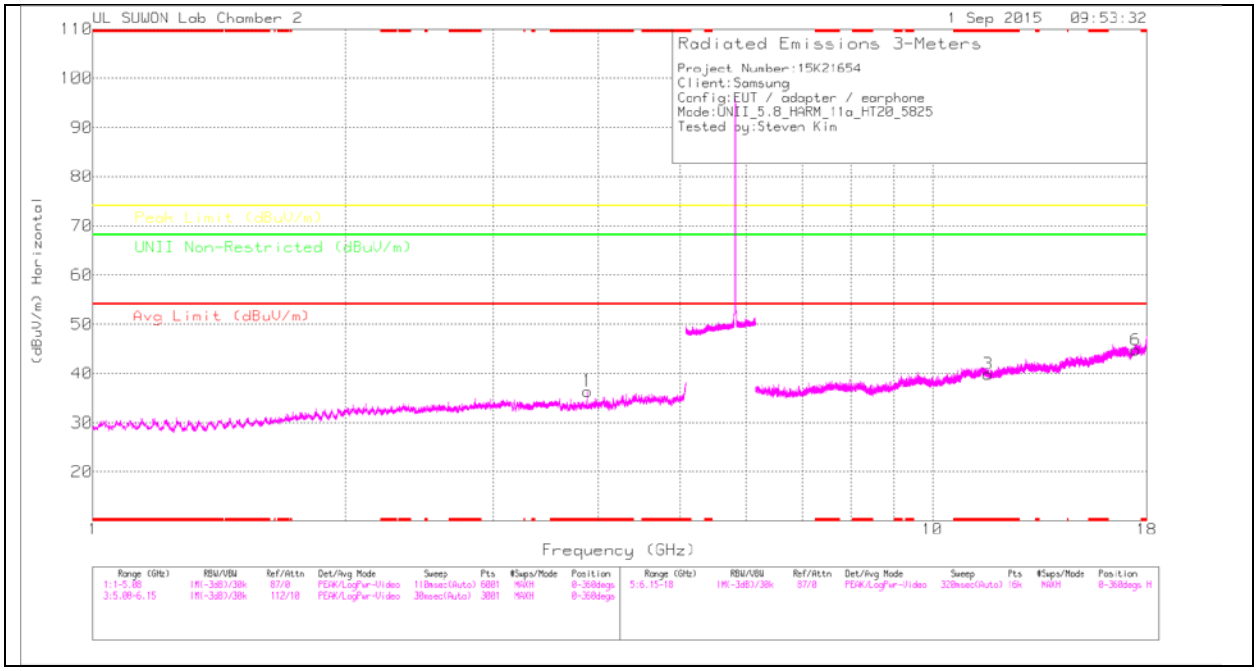
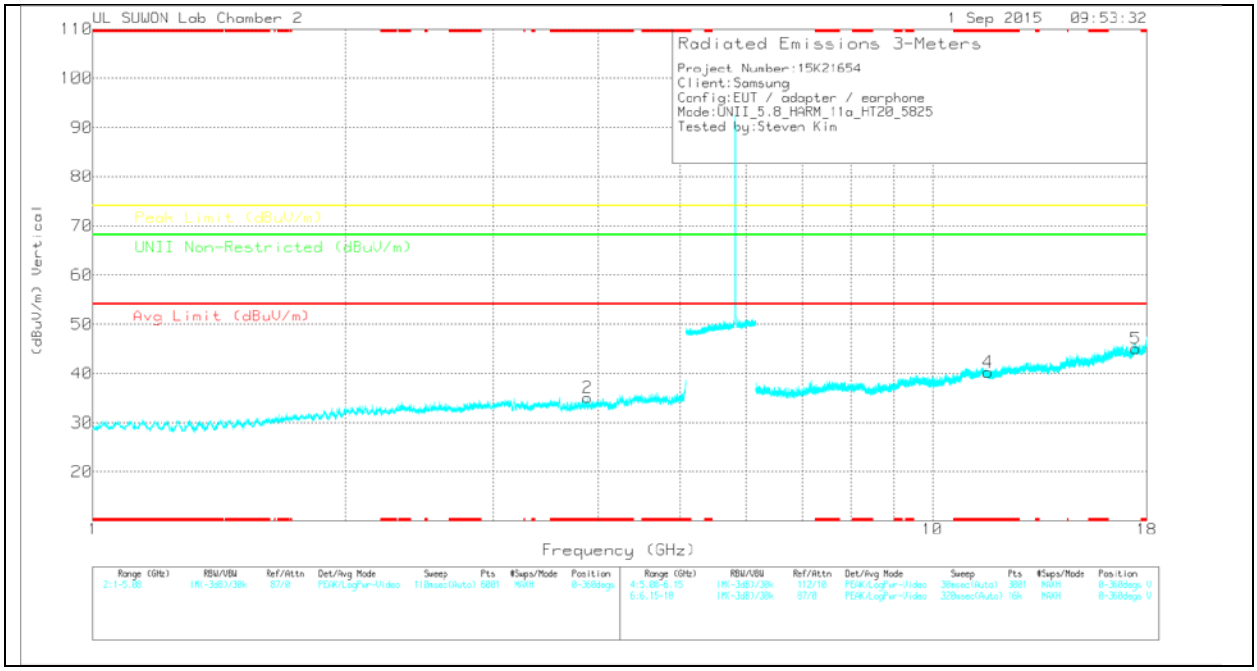
**HIGH CHANNEL HORIZONTAL**




**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.



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## HIGH CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.884 | 28.81 | PK | 33.1 | -25.5 | 0 | 36.41 | - | - | 74 | -37.59 | - | - | 0-360 | 200 | H |
| 2 | * 3.883 | 27.47 | PK | 33.1 | -25.5 | 0 | 35.07 | - | - | 74 | -38.93 | - | - | 0-360 | 200 | V |
| 3 | * 11.649 | 18.87 | PK | 38.4 | -17.4 | 0 | 39.87 | - | - | 74 | -34.13 | - | - | 0-360 | 100 | H |
| 6 | 17.475 | 17.97 | PK | 41.3 | -14.5 | 0 | 44.77 | - | - | - | - | 68.2 | -23.43 | 0-360 | 200 | H |
| 4 | * 11.651 | 19.23 | PK | 38.4 | -17.4 | 0 | 40.23 | - | - | 74 | -33.77 | - | - | 0-360 | 100 | V |
| 5 | 17.476 | 18.22 | PK | 41.3 | -14.5 | 0 | 45.02 | - | - | - | - | 68.2 | -23.18 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

### *Radiated Emissions*

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 3.883 | 38.02 | PK-U | 33.1 | -25.5 | 0 | 45.62 | - | - | 74 | -28.38 | - | - | 260 | 392 | H |
| * 3.883 | 28.9 | ADR | 33.1 | -25.5 | 0 | 36.5 | 54 | -17.5 | - | - | - | - | 260 | 392 | H |
| * 3.883 | 37.79 | PK-U | 33.1 | -25.5 | 0 | 45.39 | - | - | 74 | -28.61 | - | - | 191 | 320 | V |
| * 3.883 | 26.95 | ADR | 33.1 | -25.5 | 0 | 34.55 | 54 | -19.45 | - | - | - | - | 191 | 320 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average


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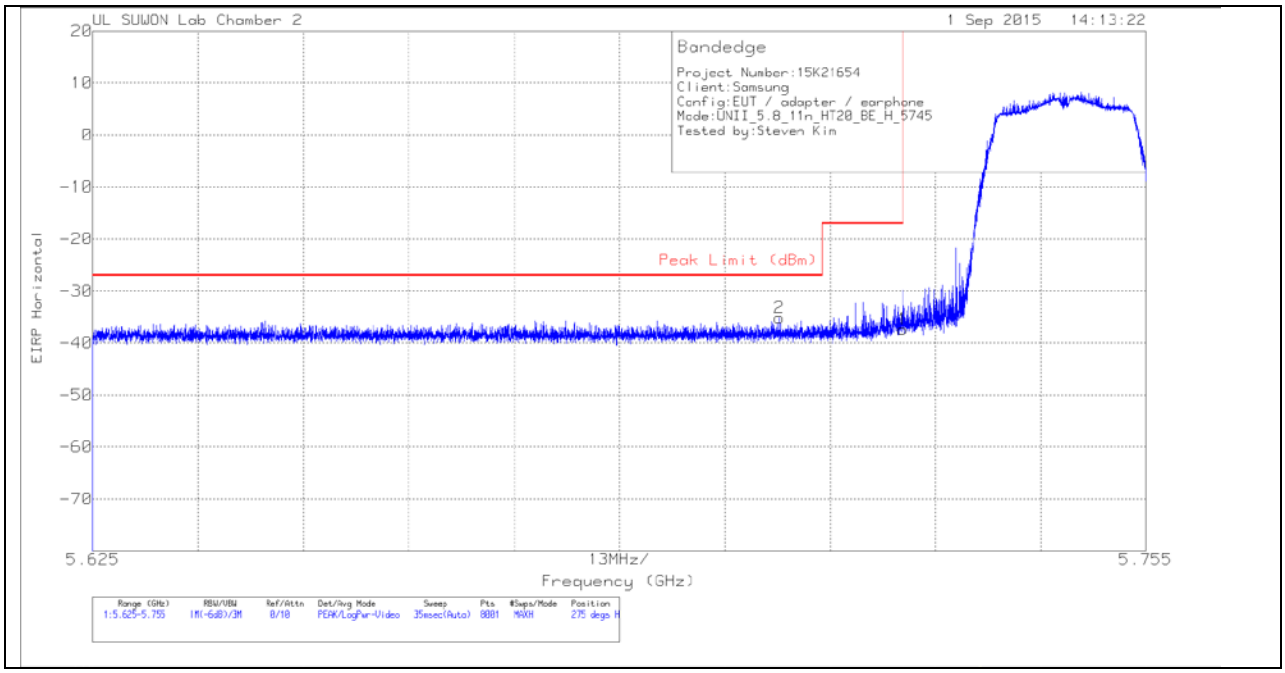
## 11.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

## HARMONICS AND SPURIOUS EMISSIONS

### HORIZONTAL PEAK PLOT




### HORIZONTAL DATA

***TRACE MARKERS***

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.725 | -68.22 | Pk | 34.7 | -15.6 | 11.8 | 0 | -37.32 | -17 | -20.32 | 275 | 328 | H |
| 2 | 5.71 | -66.04 | Pk | 34.7 | -15.6 | 11.8 | 0 | -35.14 | -27 | -8.14 | 275 | 328 | H |

Pk - Peak detector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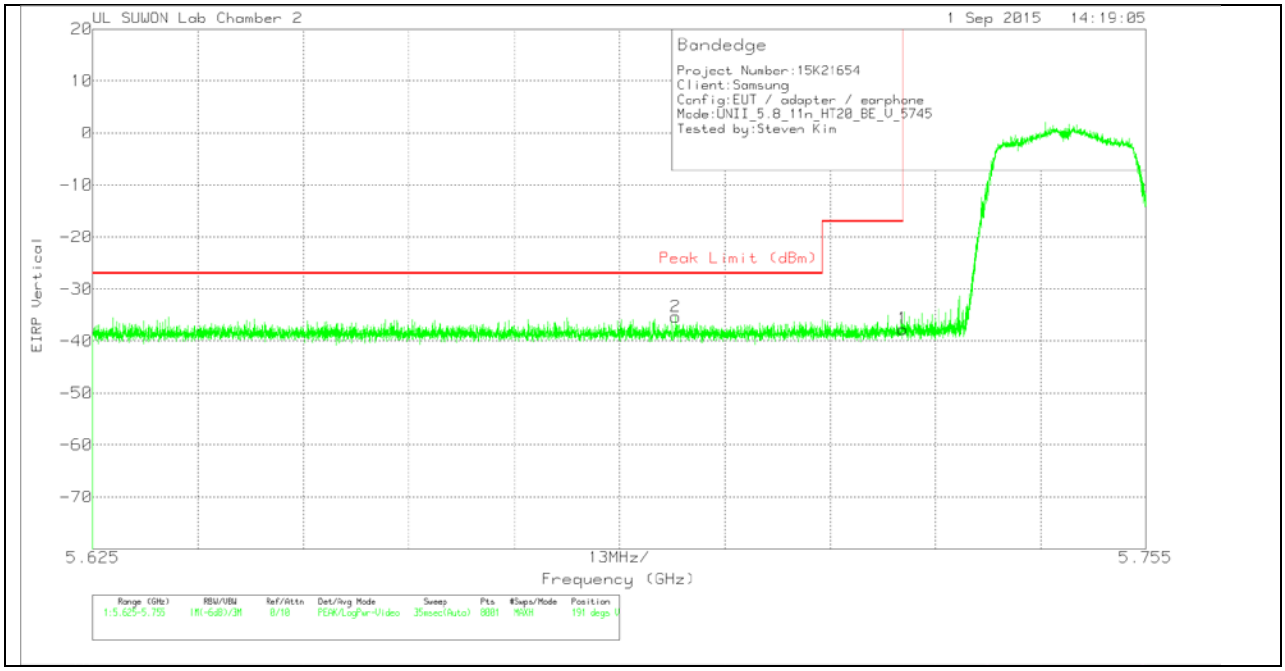
## VERTICAL PEAK PLOT




## VERTICAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(0016 8724)_150 619 | Path_2_10 dB | Conversio n Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.725 | -68.55 | Pk | 34.7 | -15.6 | 11.8 | 0 | -37.65 | -17 | -20.65 | 191 | 117 | V |
| 2 | 5.697 | -66.23 | Pk | 34.7 | -15.6 | 11.8 | 0 | -35.33 | -27 | -8.33 | 191 | 117 | V |

Pk - Peak detector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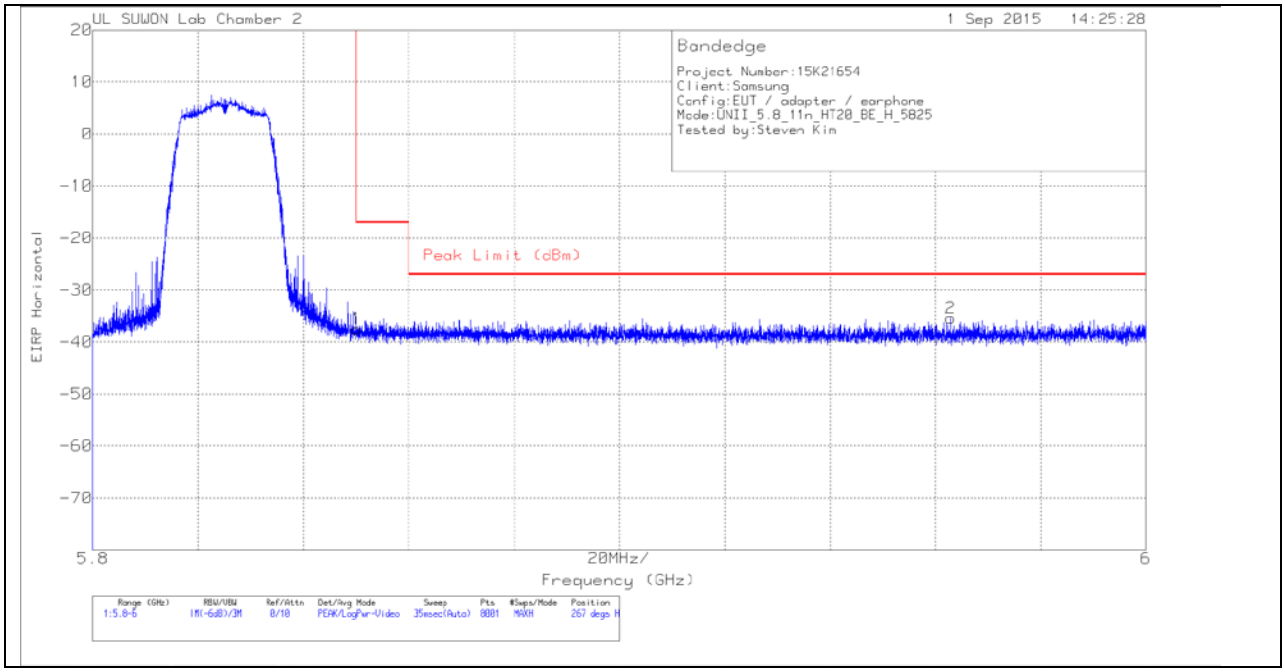
# AUTHORIZED BANDEDGE (HIGH CHANNEL)

## HORIZONTAL PEAK AND AVERAGE PLOT




## HORIZONTAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -68.49 | Pk | 34.7 | -15.5 | 11.8 | 0 | -37.49 | -17 | -20.49 | 267 | 351 | H |
| 2 | 5.963 | -66.61 | Pk | 34.8 | -15.4 | 11.8 | 0 | -35.41 | -27 | -8.41 | 267 | 351 | H |

Pk - Peak detector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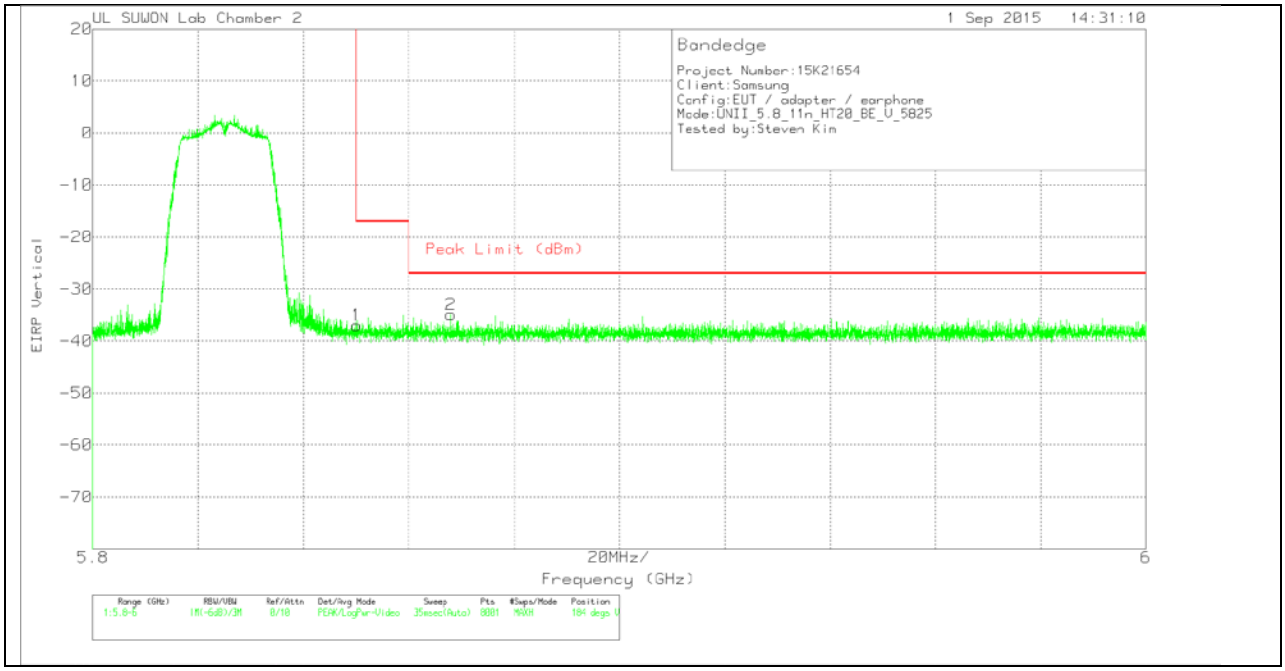
## VERTICAL PEAK PLOT




## VERTICAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -67.96 | Pk | 34.7 | -15.5 | 11.8 | 0 | -36.96 | -17 | -19.96 | 184 | 366 | V |
| 2 | 5.868 | -65.93 | Pk | 34.7 | -15.5 | 11.8 | 0 | -34.93 | -27 | -7.93 | 184 | 366 | V |

Pk - Peak detector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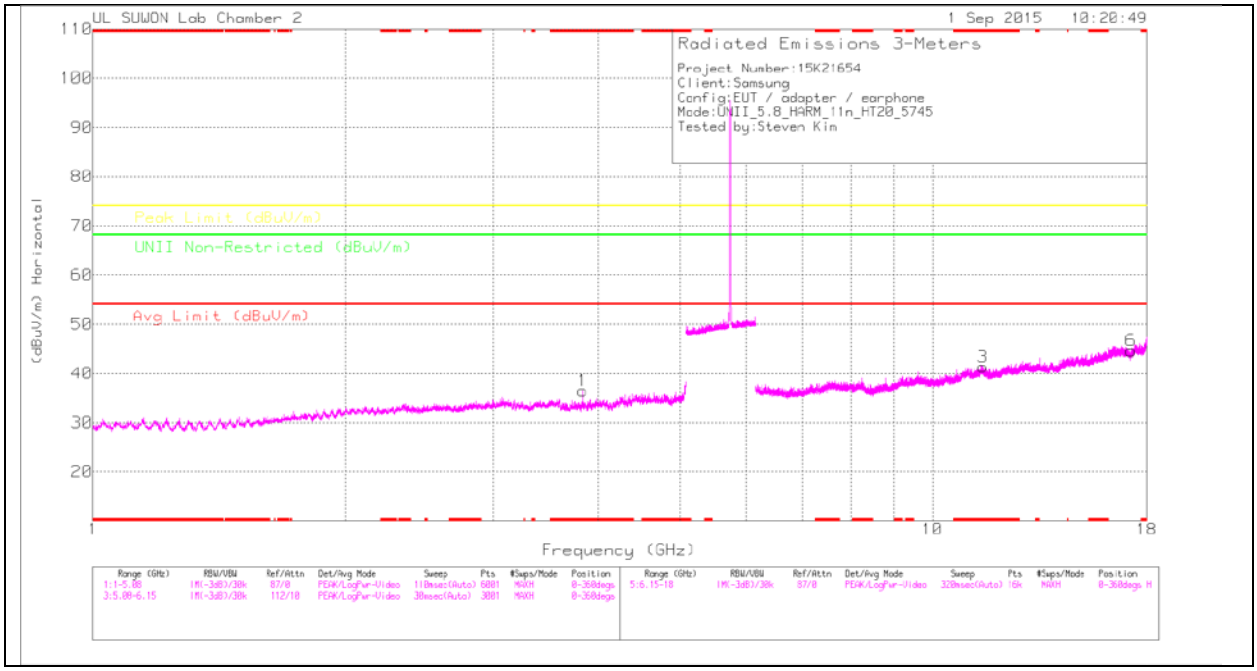
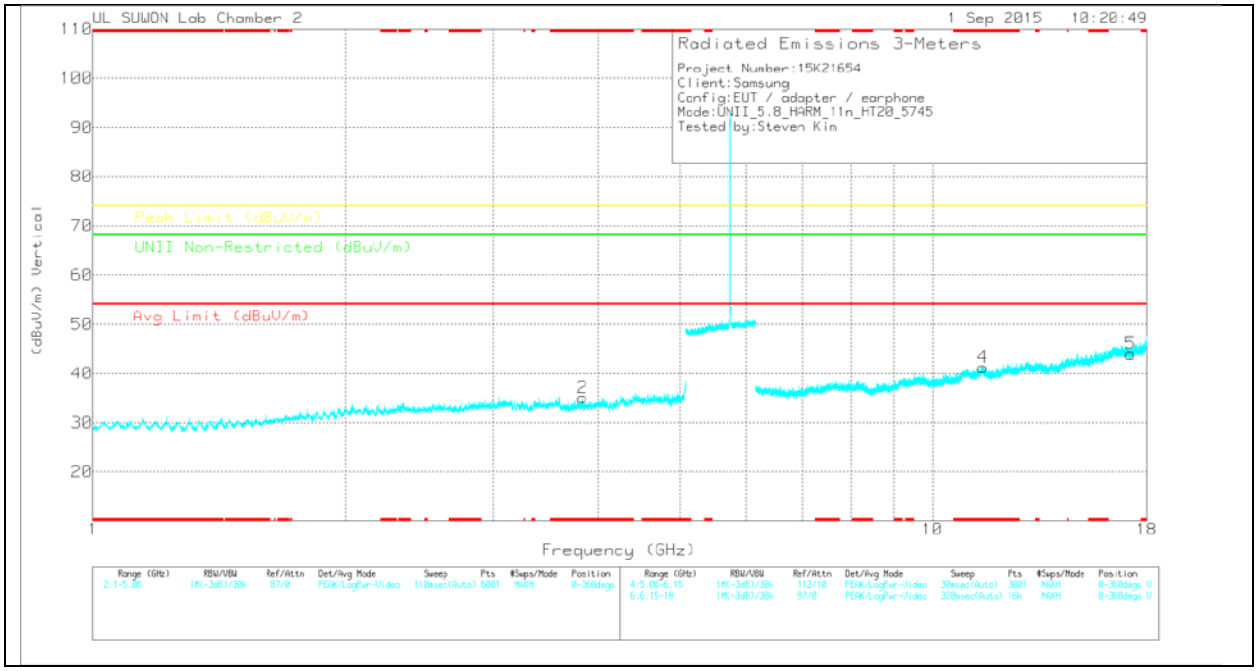
**LOW CHANNEL HORIZONTAL**




**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.



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## LOW CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.83 | 29.09 | PK | 33.1 | -25.7 | 0 | 36.49 | - | - | 74 | -37.51 | - | - | 0-360 | 200 | H |
| 2 | * 3.83 | 27.68 | PK | 33.1 | -25.7 | 0 | 35.08 | - | - | 74 | -38.92 | - | - | 0-360 | 200 | V |
| 3 | * 11.482 | 20.51 | PK | 38.3 | -17.5 | 0 | 41.31 | - | - | 74 | -32.69 | - | - | 0-360 | 200 | H |
| 6 | 17.243 | 18.62 | PK | 41.2 | -15.2 | 0 | 44.62 | - | - | - | - | 68.2 | -23.58 | 0-360 | 100 | H |
| 4 | * 11.481 | 20.47 | PK | 38.3 | -17.5 | 0 | 41.27 | - | - | 74 | -32.73 | - | - | 0-360 | 200 | V |
| 5 | 17.236 | 17.98 | PK | 41.2 | -15.2 | 0 | 43.98 | - | - | - | - | 68.2 | -24.22 | 0-360 | 100 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

### *Radiated Emissions*

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 3.83 | 37.63 | PK-U | 33.1 | -25.7 | 0 | 45.03 | - | - | 74 | -28.97 | - | - | 251 | 299 | H |
| * 3.83 | 27.4 | ADR | 33.1 | -25.7 | 0 | 34.8 | 54 | -19.2 | - | - | - | - | 251 | 299 | H |
| * 3.835 | 37.15 | PK-U | 33.1 | -25.6 | 0 | 44.65 | - | - | 74 | -29.35 | - | - | 292 | 147 | V |
| * 3.827 | 23.6 | ADR | 33.1 | -25.7 | 0 | 31 | 54 | -23 | - | - | - | - | 292 | 147 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average


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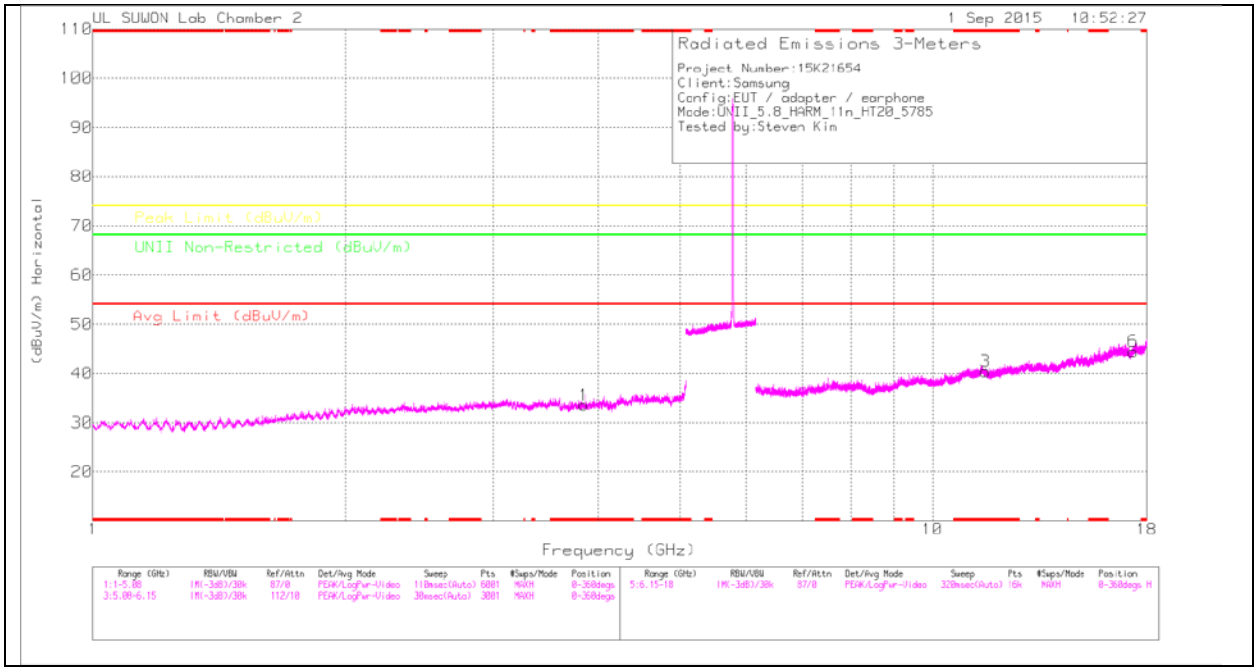
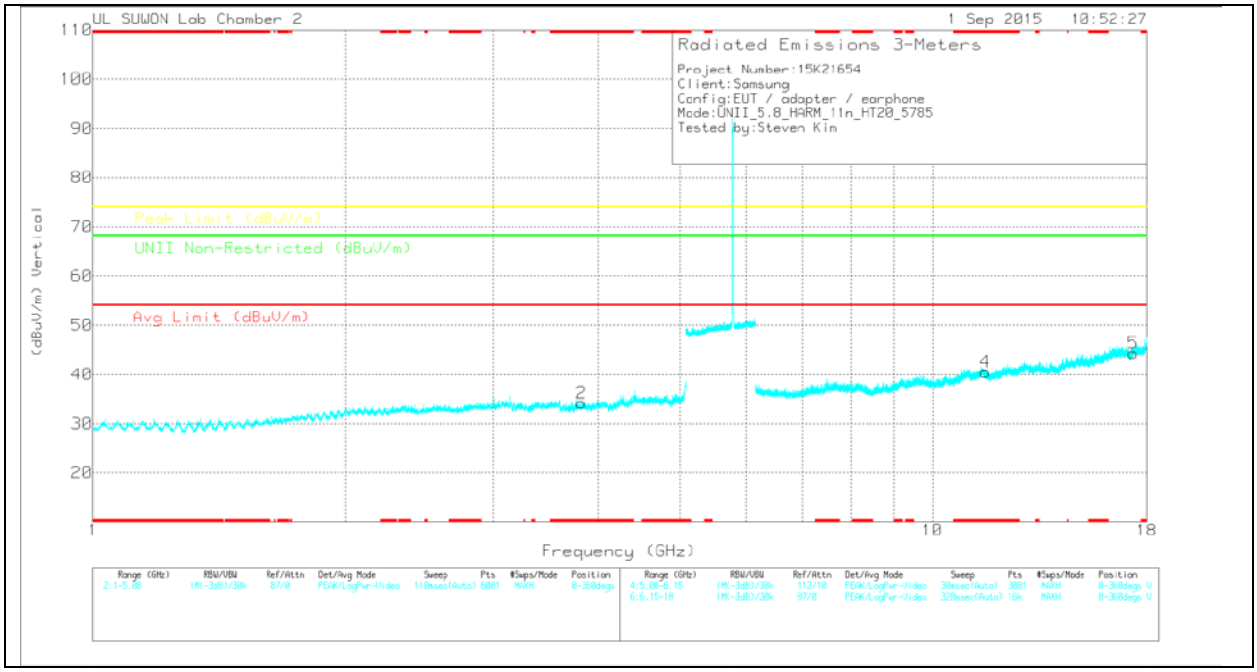
**MID CHANNEL HORIZONTAL**




**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.



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## MID CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.845 | 25.94 | PK | 33.1 | -25.5 | 0 | 33.54 | - | - | 74 | -40.46 | - | - | 0-360 | 200 | H |
| 2 | * 3.819 | 26.86 | PK | 33.1 | -25.8 | 0 | 34.16 | - | - | 74 | -39.84 | - | - | 0-360 | 100 | V |
| 3 | * 11.569 | 19.49 | PK | 38.4 | -17.5 | 0 | 40.39 | - | - | 74 | -33.61 | - | - | 0-360 | 100 | H |
| 6 | 17.361 | 18.26 | PK | 41.2 | -15 | 0 | 44.46 | - | - | - | - | 68.2 | -23.74 | 0-360 | 100 | H |
| 4 | * 11.575 | 19.6 | PK | 38.4 | -17.5 | 0 | 40.5 | - | - | 74 | -33.5 | - | - | 0-360 | 200 | V |
| 5 | 17.357 | 18.22 | PK | 41.2 | -15.1 | 0 | 44.32 | - | - | - | - | 68.2 | -23.88 | 0-360 | 100 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).


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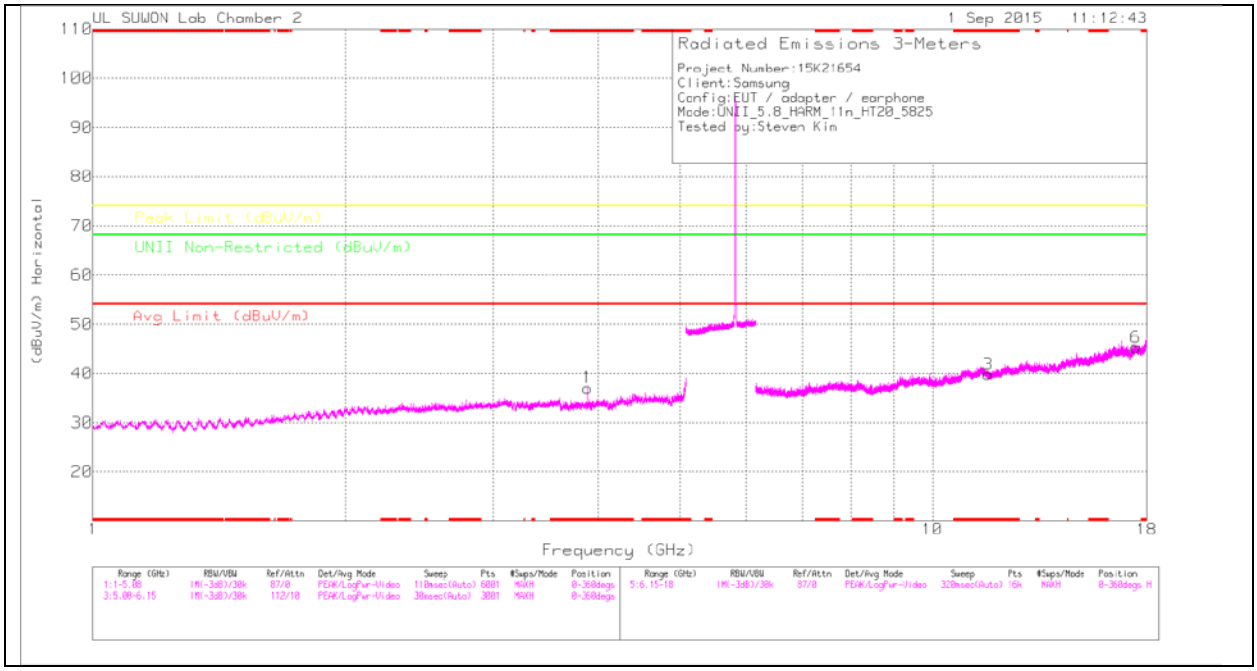
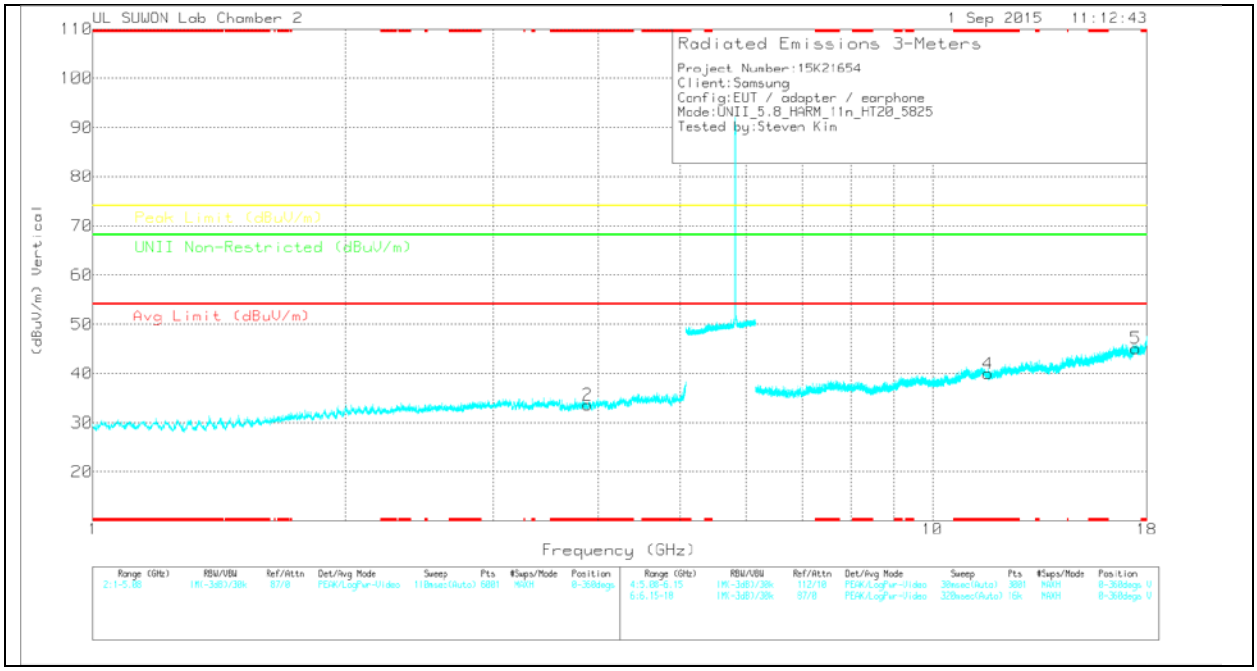
**HIGH CHANNEL HORIZONTAL**




**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.



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## HIGH CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.883 | 29.46 | PK | 33.1 | -25.5 | 0 | 37.06 | - | - | 74 | -36.94 | - | - | 0-360 | 200 | H |
| 2 | * 3.883 | 25.99 | PK | 33.1 | -25.5 | 0 | 33.59 | - | - | 74 | -40.41 | - | - | 0-360 | 100 | V |
| 3 | * 11.652 | 18.77 | PK | 38.4 | -17.4 | 0 | 39.77 | - | - | 74 | -34.23 | - | - | 0-360 | 100 | H |
| 6 | 17.479 | 18.39 | PK | 41.3 | -14.4 | 0 | 45.29 | - | - | - | - | 68.2 | -22.91 | 0-360 | 200 | H |
| 4 | * 11.647 | 18.93 | PK | 38.4 | -17.4 | 0 | 39.93 | - | - | 74 | -34.07 | - | - | 0-360 | 200 | V |
| 5 | 17.476 | 18.19 | PK | 41.3 | -14.4 | 0 | 45.09 | - | - | - | - | 68.2 | -23.11 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

### *Radiated Emissions*

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 3.883 | 37.19 | PK-U | 33.1 | -25.5 | 0 | 44.79 | - | - | 74 | -29.21 | - | - | 247 | 345 | H |
| * 3.883 | 27.93 | ADR | 33.1 | -25.5 | 0 | 35.53 | 54 | -18.47 | - | - | - | - | 247 | 345 | H |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average


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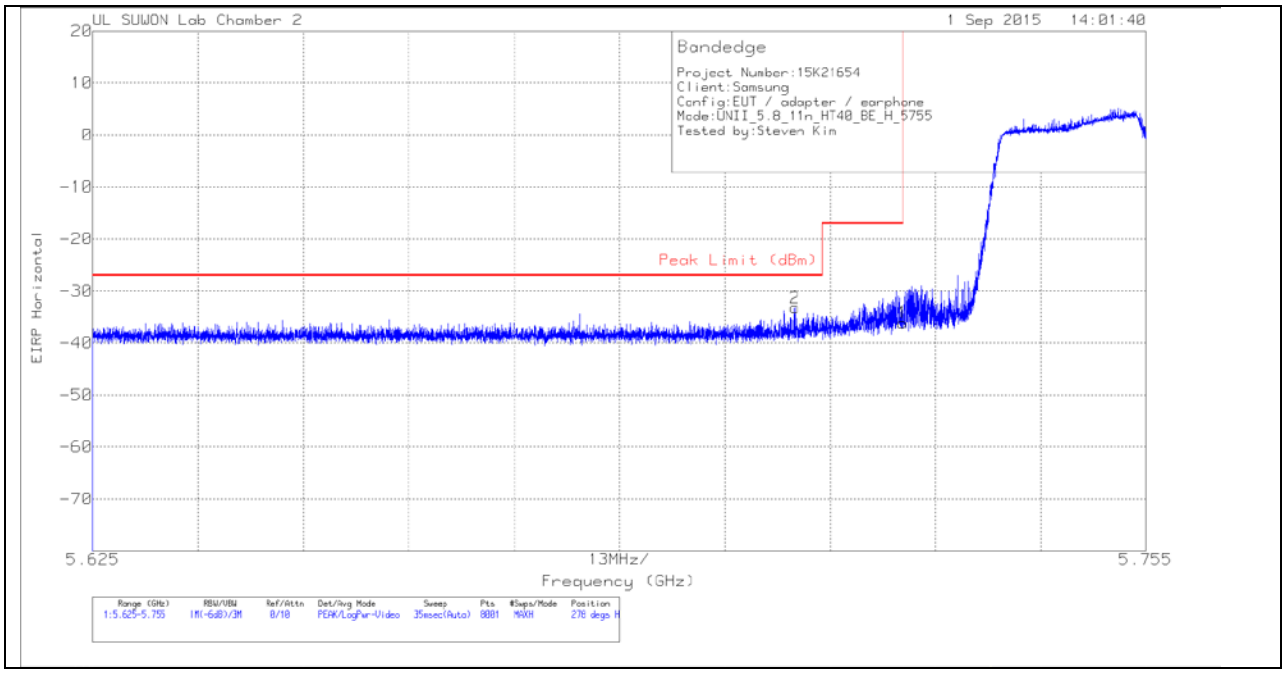
## 11.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

## HARMONICS AND SPURIOUS EMISSIONS

### HORIZONTAL PEAK PLOT




### HORIZONTAL DATA

***TRACE MARKERS***

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.725 | -67.07 | Pk | 34.7 | -15.6 | 11.8 | 0 | -36.17 | -17 | -19.17 | 278 | 327 | H |
| 2 | 5.712 | -64.14 | Pk | 34.7 | -15.6 | 11.8 | 0 | -33.24 | -27 | -6.24 | 278 | 327 | H |

Pk - Peak detector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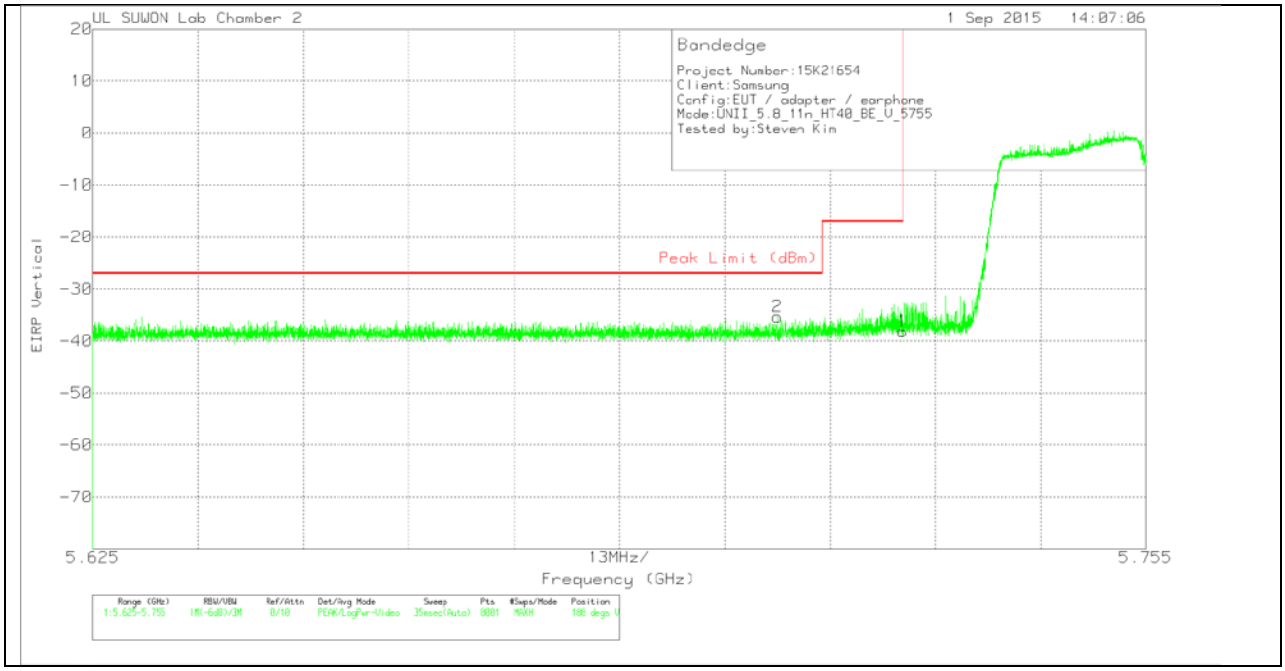
## VERTICAL PEAK PLOT




## VERTICAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.725 | -69.03 | Pk | 34.7 | -15.6 | 11.8 | 0 | -38.13 | -17 | -21.13 | 188 | 118 | V |
| 2 | 5.71 | -66.24 | Pk | 34.7 | -15.6 | 11.8 | 0 | -35.34 | -27 | -8.34 | 188 | 118 | V |

Pk - Peak detector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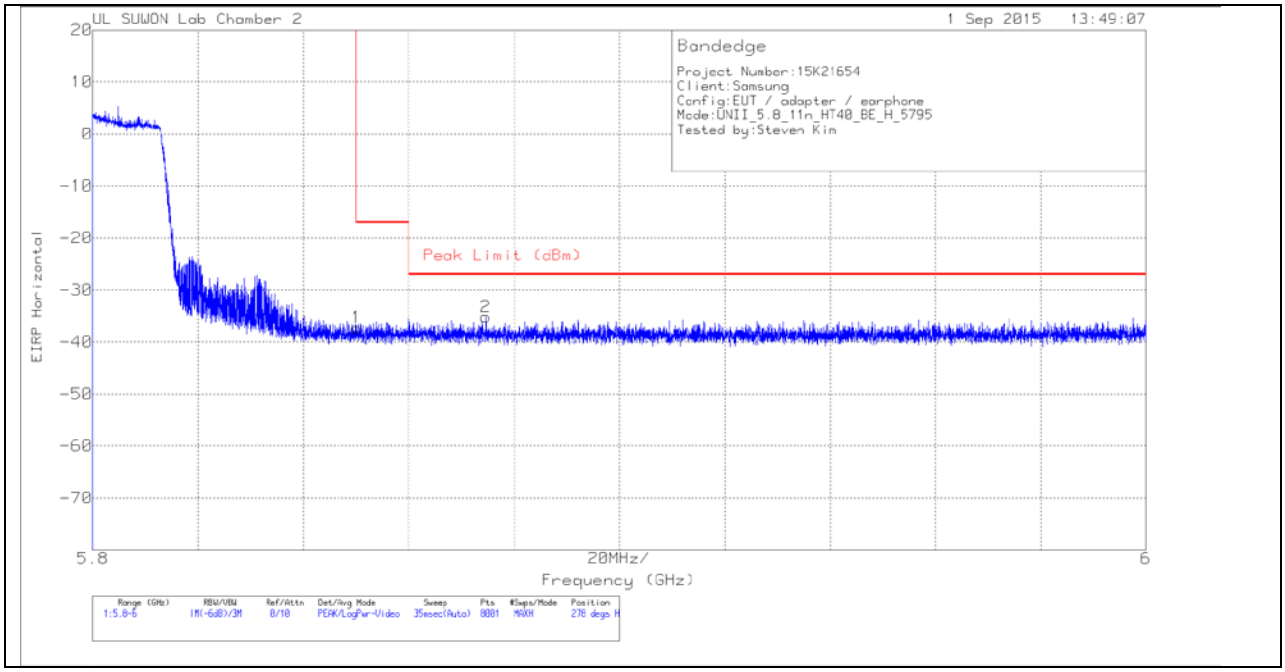
# AUTHORIZED BANDEDGE (HIGH CHANNEL)

## HORIZONTAL PEAK PLOT




## HORIZONTAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -68.22 | Pk | 34.7 | -15.5 | 11.8 | 0 | -37.22 | -17 | -20.22 | 278 | 321 | H |
| 2 | 5.875 | -66.17 | Pk | 34.7 | -15.5 | 11.8 | 0 | -35.17 | -27 | -8.17 | 278 | 321 | H |

Pk - Peak detector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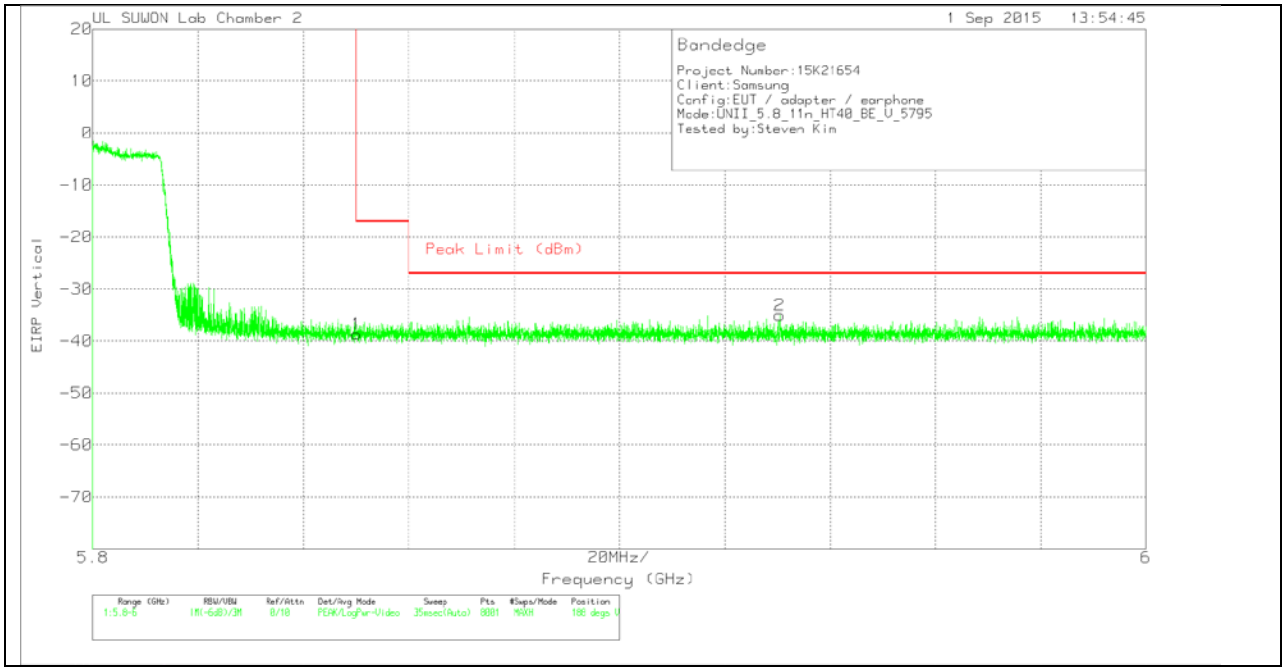
## VERTICAL PEAK PLOT




## VERTICAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -69.67 | Pk | 34.7 | -15.5 | 11.8 | 0 | -38.67 | -17 | -21.67 | 188 | 373 | V |
| 2 | 5.93 | -66.16 | Pk | 34.8 | -15.5 | 11.8 | 0 | -35.06 | -27 | -8.06 | 188 | 373 | V |

Pk - Peak detector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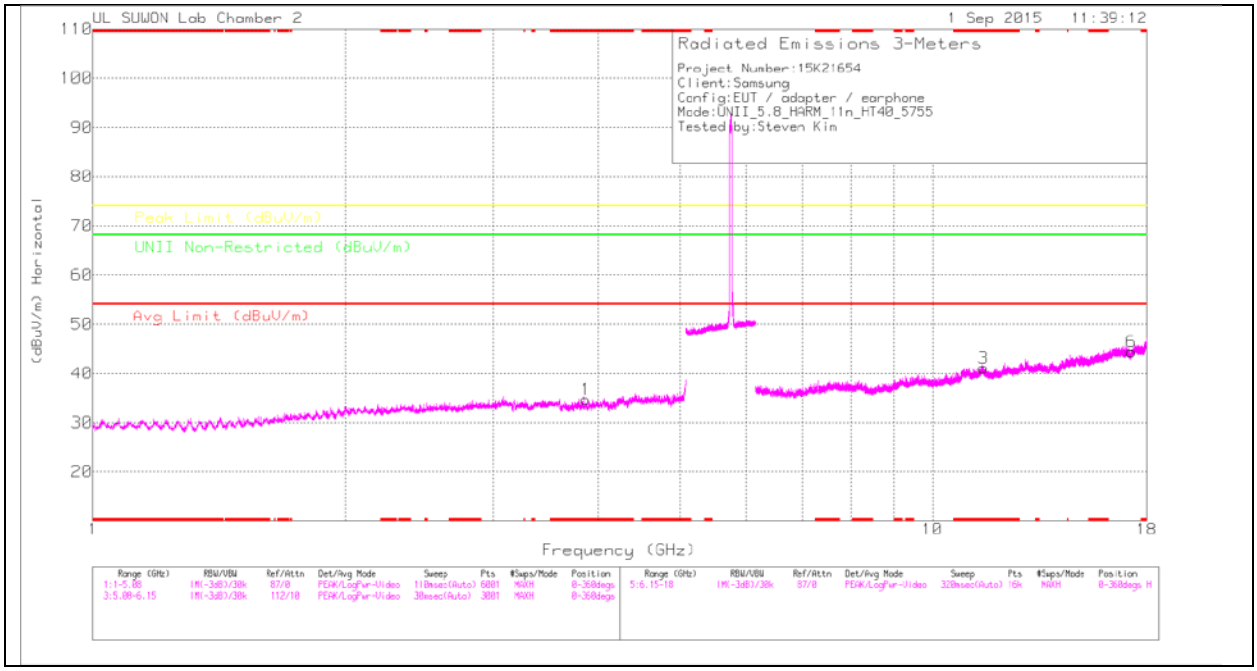
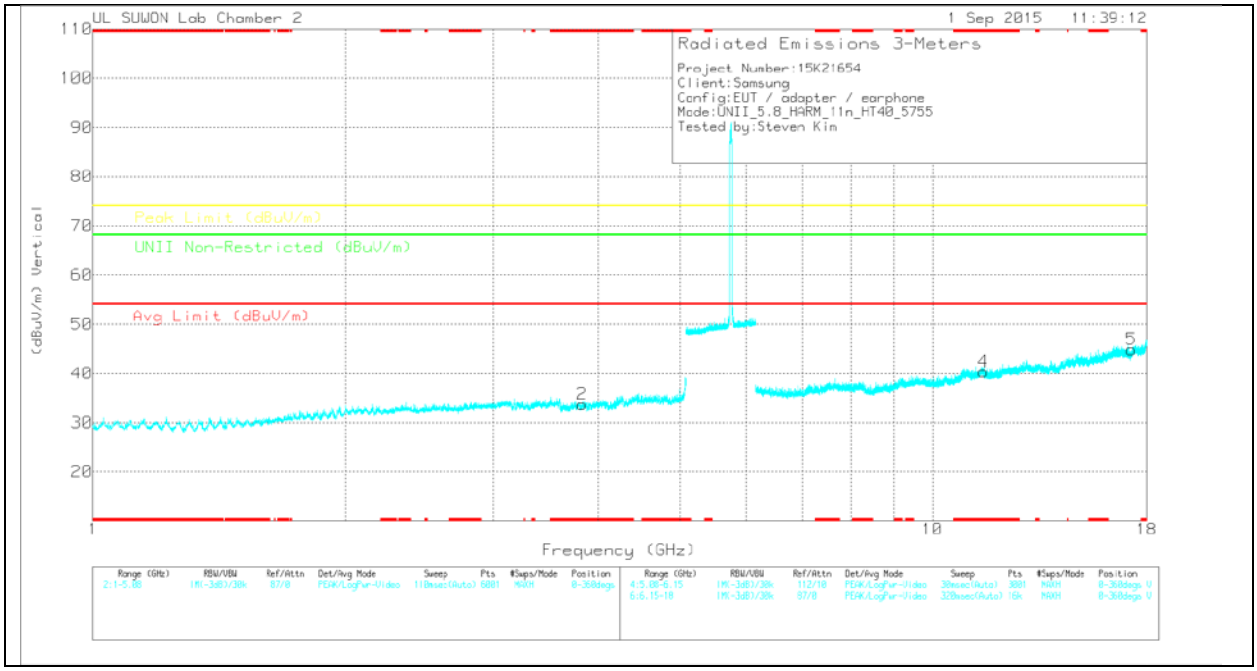
**LOW CHANNEL HORIZONTAL**




**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.



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## LOW CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.861 | 27.09 | PK | 33.1 | -25.5 | 0 | 34.69 | - | - | 74 | -39.31 | - | - | 0-360 | 100 | H |
| 2 | * 3.824 | 26.34 | PK | 33.1 | -25.7 | 0 | 33.74 | - | - | 74 | -40.26 | - | - | 0-360 | 200 | V |
| 3 | * 11.513 | 20.29 | PK | 38.3 | -17.5 | 0 | 41.09 | - | - | 74 | -32.91 | - | - | 0-360 | 200 | H |
| 6 | 17.266 | 18.4 | PK | 41.2 | -15.2 | 0 | 44.4 | - | - | - | - | 68.2 | -23.8 | 0-360 | 200 | H |
| 4 | * 11.508 | 19.56 | PK | 38.3 | -17.5 | 0 | 40.36 | - | - | 74 | -33.64 | - | - | 0-360 | 100 | V |
| 5 | 17.265 | 18.86 | PK | 41.2 | -15.2 | 0 | 44.86 | - | - | - | - | 68.2 | -23.34 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).


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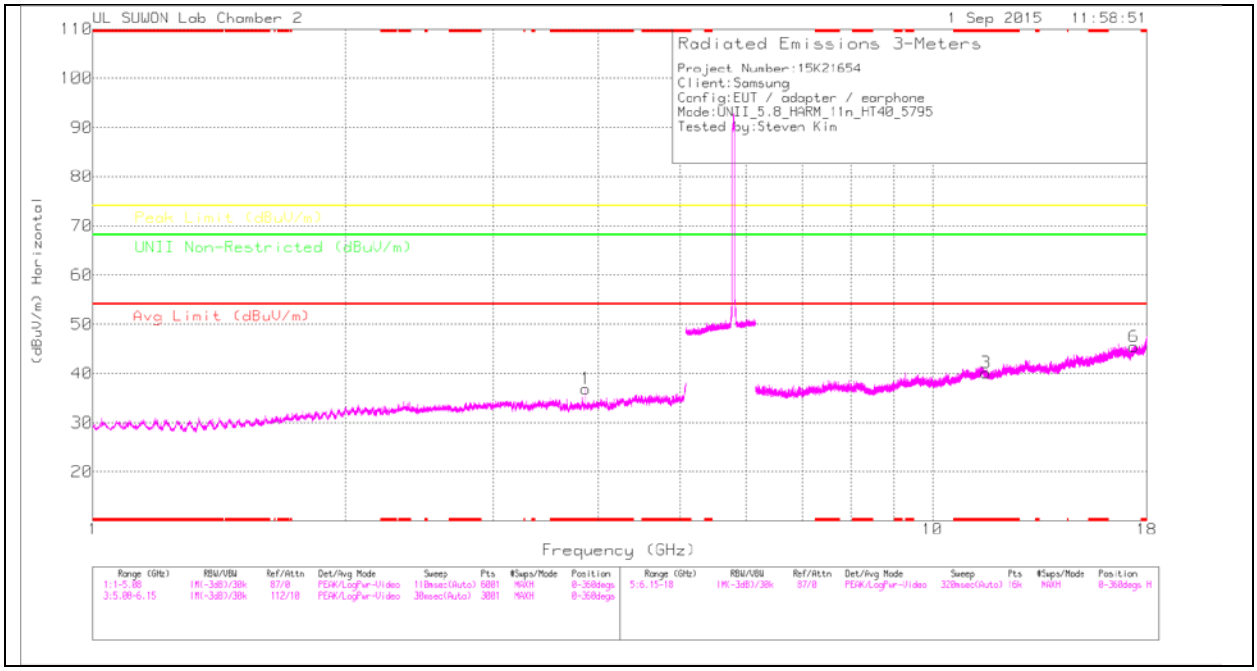
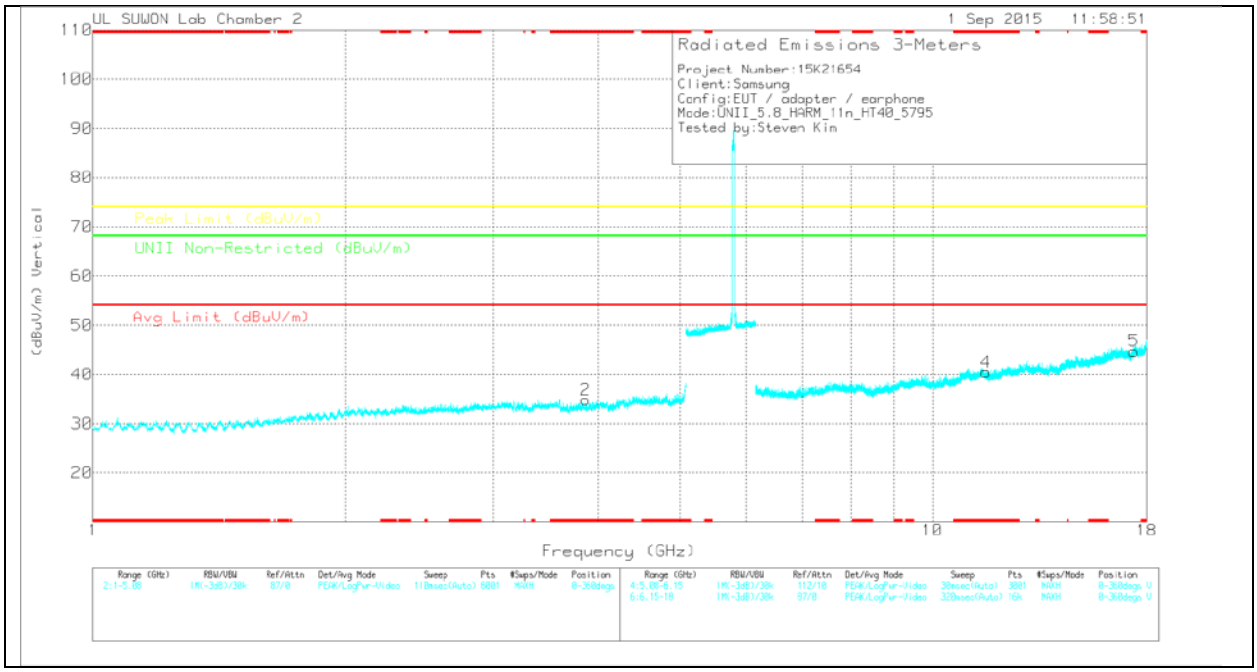
**HIGH CHANNEL HORIZONTAL**




**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.



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## HIGH CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.863 | 29.27 | PK | 33.1 | -25.5 | 0 | 36.87 | - | - | 74 | -37.13 | - | - | 0-360 | 200 | H |
| 2 | * 3.863 | 27.2 | PK | 33.1 | -25.5 | 0 | 34.8 | - | - | 74 | -39.2 | - | - | 0-360 | 200 | V |
| 3 | * 11.59 | 19.13 | PK | 38.4 | -17.4 | 0 | 40.13 | - | - | 74 | -33.87 | - | - | 0-360 | 100 | H |
| 6 | 17.386 | 19.19 | PK | 41.2 | -15 | 0 | 45.39 | - | - | - | - | 68.2 | -22.81 | 0-360 | 200 | H |
| 4 | * 11.587 | 19.42 | PK | 38.4 | -17.4 | 0 | 40.42 | - | - | 74 | -33.58 | - | - | 0-360 | 200 | V |
| 5 | 17.385 | 18.53 | PK | 41.2 | -15 | 0 | 44.73 | - | - | - | - | 68.2 | -23.47 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).


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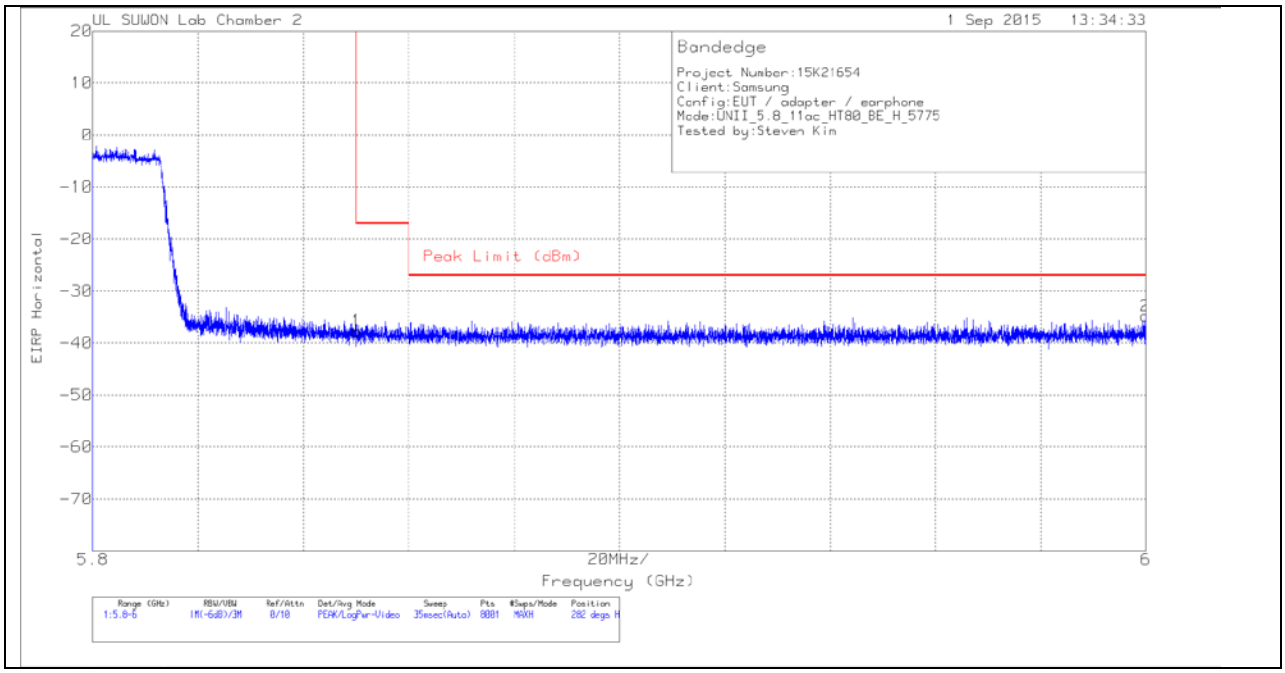
## 11.4.4. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

## HARMONICS AND SPURIOUS EMISSIONS

### HORIZONTAL PEAK PLOT




### HORIZONTAL DATA

***TRACE MARKERS***

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -68.68 | Pk | 34.7 | -15.5 | 11.8 | 0 | -37.68 | -17 | -20.68 | 282 | 322 | H |
| 2 | 6 | -65.99 | Pk | 34.8 | -15.4 | 11.8 | 0 | -34.79 | -27 | -7.79 | 282 | 322 | H |

Pk - Peak detector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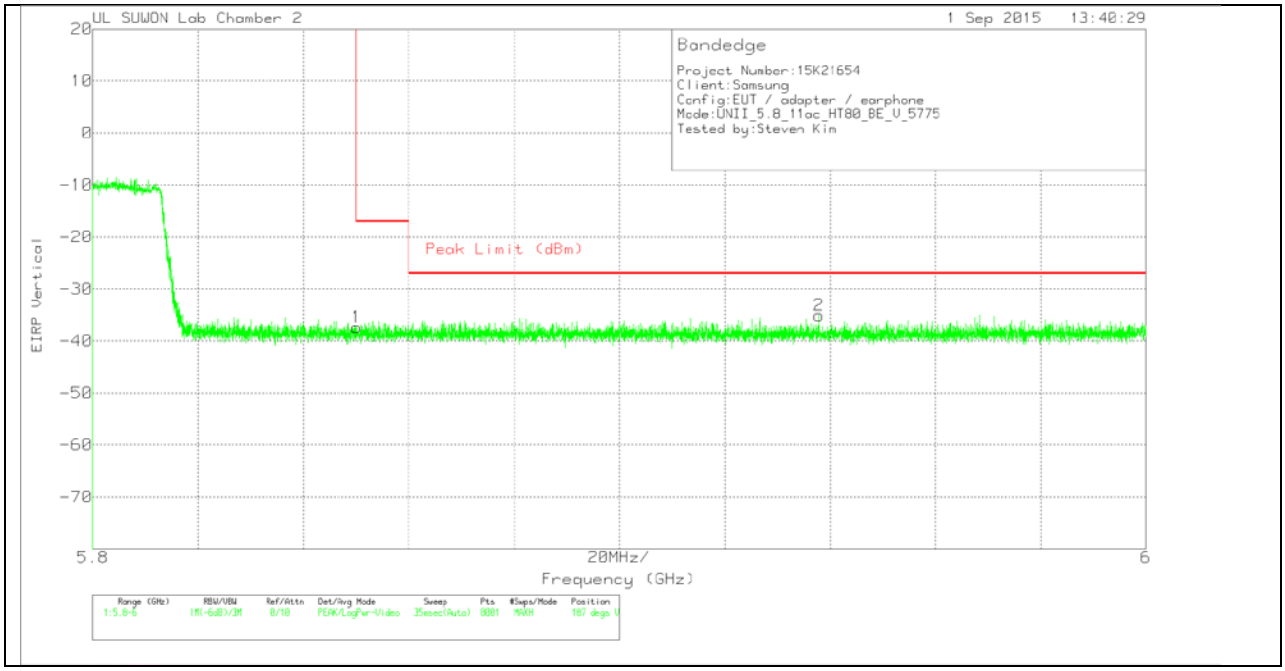
## VERTICAL PEAK PLOT




## VERTICAL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117(00168724)_150619 | Path_2_10 dB | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.85 | -68.37 | Pk | 34.7 | -15.5 | 11.8 | 0 | -37.37 | -17 | -20.37 | 187 | 100 | V |
| 2 | 5.938 | -66.19 | Pk | 34.8 | -15.5 | 11.8 | 0 | -35.09 | -27 | -8.09 | 187 | 100 | V |

Pk - Peak detector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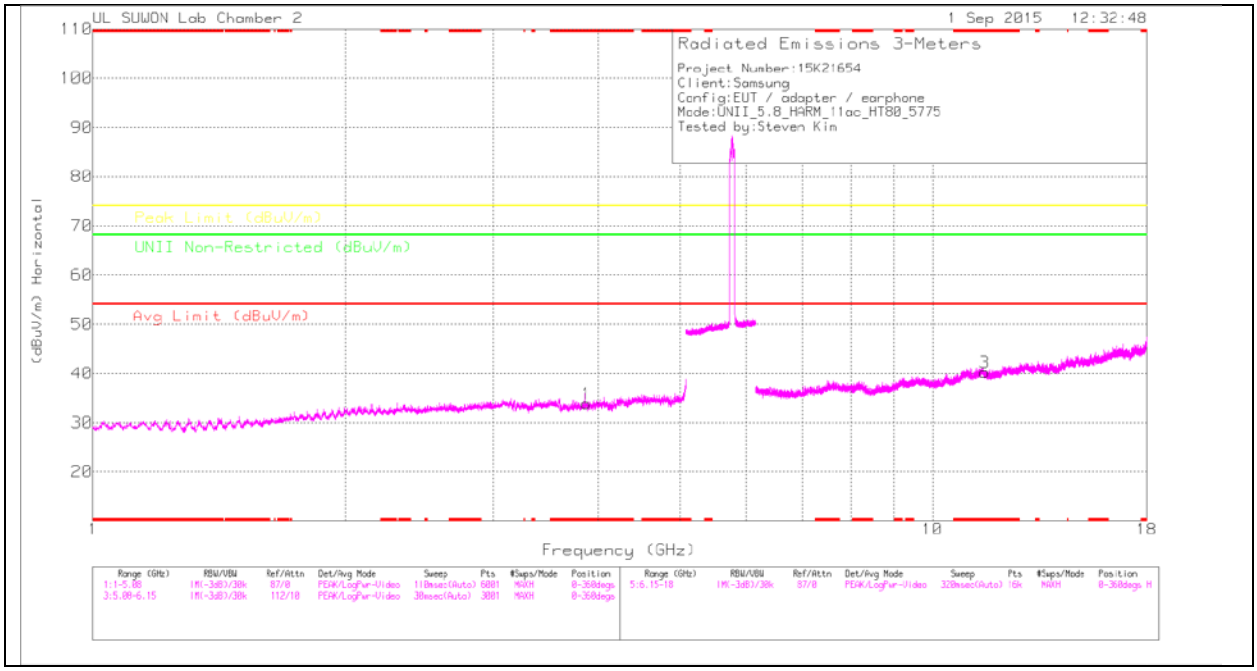
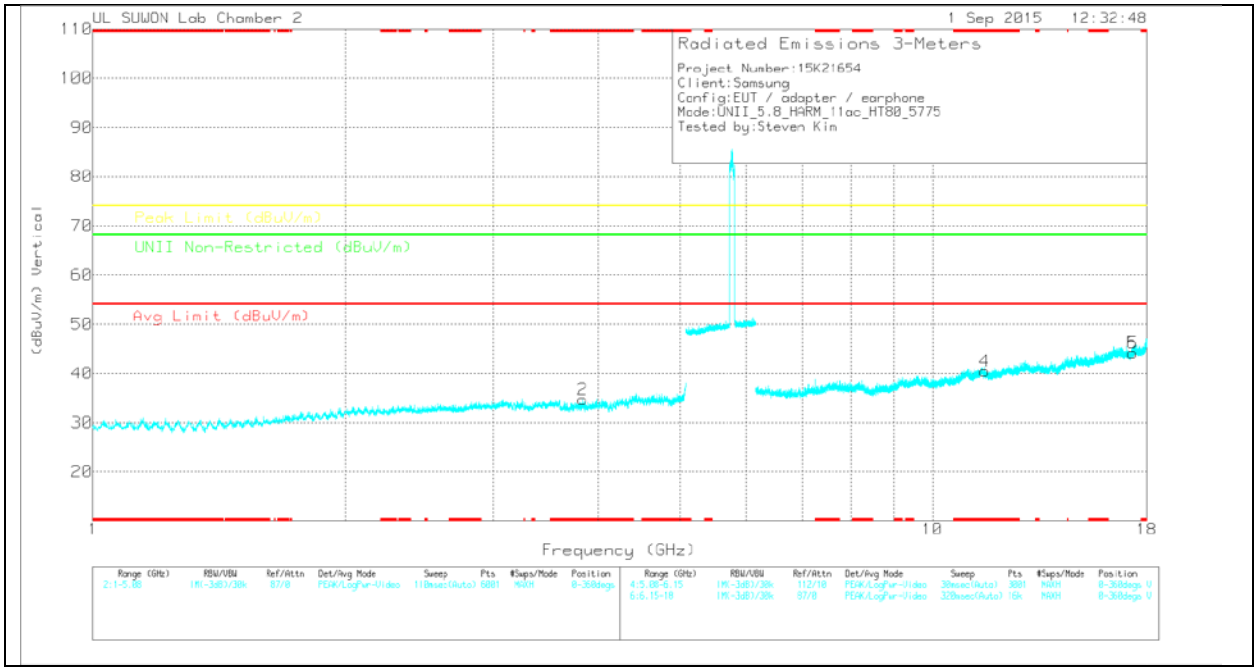
**LOW CHANNEL HORIZONTAL**




**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.



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## LOW CHANNEL DATA

### *TRACE MARKERS*

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(00168724)_150619 | Path_4 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 3.872 | 26.17 | PK | 33.1 | -25.5 | 0 | 33.77 | - | - | 74 | -40.23 | - | - | 0-360 | 200 | H |
| 2 | * 3.827 | 27.27 | PK | 33.1 | -25.7 | 0 | 34.67 | - | - | 74 | -39.33 | - | - | 0-360 | 100 | V |
| 3 | * 11.551 | 19.3 | PK | 38.4 | -17.5 | 0 | 40.2 | - | - | 74 | -33.8 | - | - | 0-360 | 200 | H |
| 4 | * 11.55 | 19.55 | PK | 38.4 | -17.5 | 0 | 40.45 | - | - | 74 | -33.55 | - | - | 0-360 | 200 | V |
| 5 | 17.326 | 18.06 | PK | 41.2 | -15.1 | 0 | 44.16 | - | - | - | - | 68.2 | -24.04 | 0-360 | 200 | V |
| 6 | 17.326 | 18.06 | PK | 41.2 | -15.1 | 0 | 44.16 | - | - | - | - | 68.2 | -24.04 | 0-360 | 200 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).


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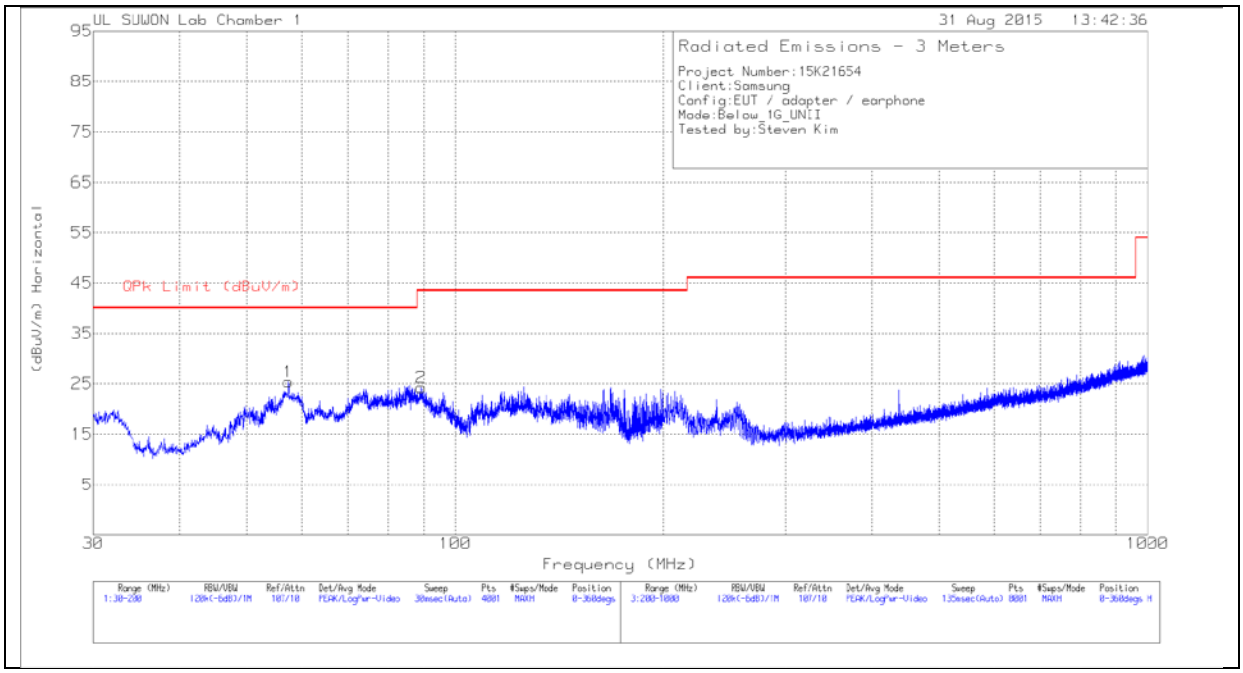
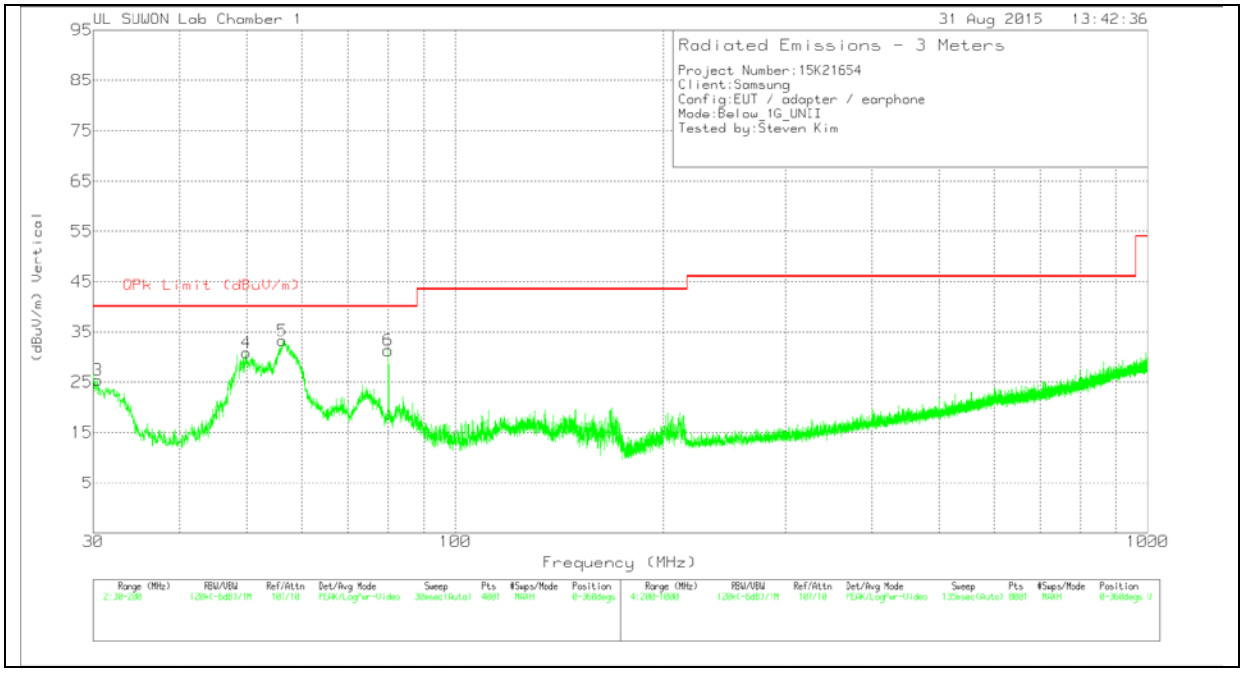
# 12. WORST-CASE BELOW 1 GHz (in the 5.3 GHz Band)

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




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





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**Below 1G Data**

***TRACE MARKERS***

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | VULB9163-750 | Bi-Log | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 57.4975 | 42.36 | Pk | 13 | -30 | 25.36 | 40 | -14.64 | 0-360 | 400 | H |
| 2 | 89.245 | 44.33 | Pk | 9.3 | -29.4 | 24.23 | 43.52 | -19.29 | 0-360 | 200 | H |
| 3 | 30.4675 | 45.6 | Pk | 10.3 | -30.5 | 25.4 | 40 | -14.6 | 0-360 | 100 | V |
| 4 | 49.9325 | 47.16 | Pk | 13.9 | -30.2 | 30.86 | 40 | -9.14 | 0-360 | 100 | V |
| 5 | 56.3075 | 50.11 | Pk | 13.1 | -30 | 33.21 | 40 | -6.79 | 0-360 | 100 | V |
| 6 | 79.98 | 54.02 | Pk | 6.9 | -29.6 | 31.32 | 40 | -8.68 | 0-360 | 100 | V |

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector


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# 13. AC POWER LINE CONDUCTED EMISSIONS

**LIMITS**

FCC §15.207 (a)
IC RSS-GEN Clause 8.8

| 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.

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**


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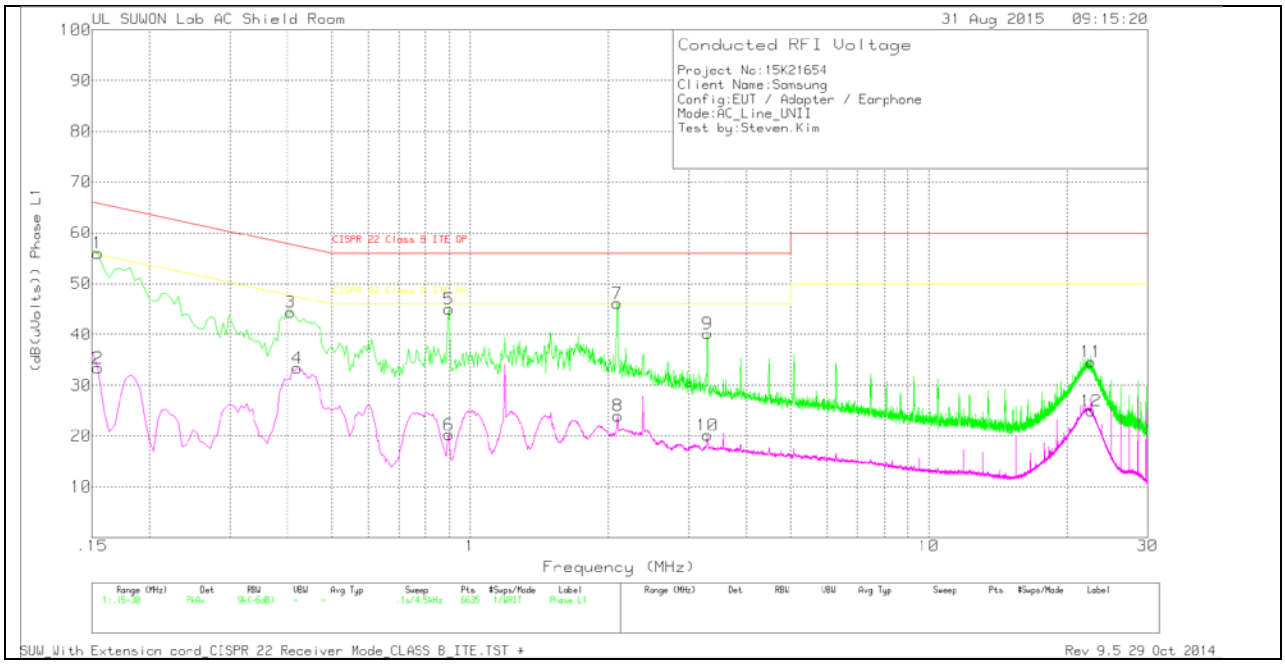
**6 WORST EMISSIONS**

## LINE 1 PLOT



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# LINE 1 RESULTS

### *TRACE MARKERS*

Phase L1 .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_with ex-cord_L1 | CE Shield Room | Corrected Reading (dBuV) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .1545 | 46.06 | Pk | 9.9 | 0 | 55.96 | 65.75 | -9.79 | - | - |
| 2 | .1545 | 23.5 | Av | 9.9 | 0 | 33.4 | - | - | 55.75 | -22.35 |
| 3 | .4065 | 34.27 | Pk | 10.1 | 0 | 44.37 | 57.72 | -13.35 | - | - |
| 4 | .42 | 23.29 | Av | 10.1 | 0 | 33.39 | - | - | 47.45 | -14.06 |
| 5 | .897 | 35.05 | Pk | 9.9 | 0 | 44.95 | 56 | -11.05 | - | - |
| 6 | .897 | 10.32 | Av | 9.9 | 0 | 20.22 | - | - | 46 | -25.78 |
| 7 | 2.0895 | 36.25 | Pk | 9.8 | .1 | 46.15 | 56 | -9.85 | - | - |
| 8 | 2.094 | 14.01 | Av | 9.8 | .1 | 23.91 | - | - | 46 | -22.09 |
| 9 | 3.291 | 30.24 | Pk | 9.8 | .1 | 40.14 | 56 | -15.86 | - | - |
| 10 | 3.291 | 10.19 | Av | 9.8 | .1 | 20.09 | - | - | 46 | -25.91 |
| 11 | 22.5825 | 23.91 | Pk | 10.5 | .2 | 34.61 | 60 | -25.39 | - | - |
| 12 | 22.578 | 14.29 | Av | 10.5 | .2 | 24.99 | - | - | 50 | -25.01 |

Pk - Peak detector

Av - Average detection

### *Quasi-Peak Emissions*

Phase L1 .15 - 30MHz

| Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_with ex-cord_L1 | CE Shield Room | Corrected Reading (dBuV) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|
| .15 | 43.92 | Qp | 9.8 | 0 | 53.72 | 66 | -12.28 | - | - |
| 2.0931 | 31.93 | Qp | 9.8 | .1 | 41.83 | 56 | -14.17 | - | - |

Qp - Quasi-Peak detector


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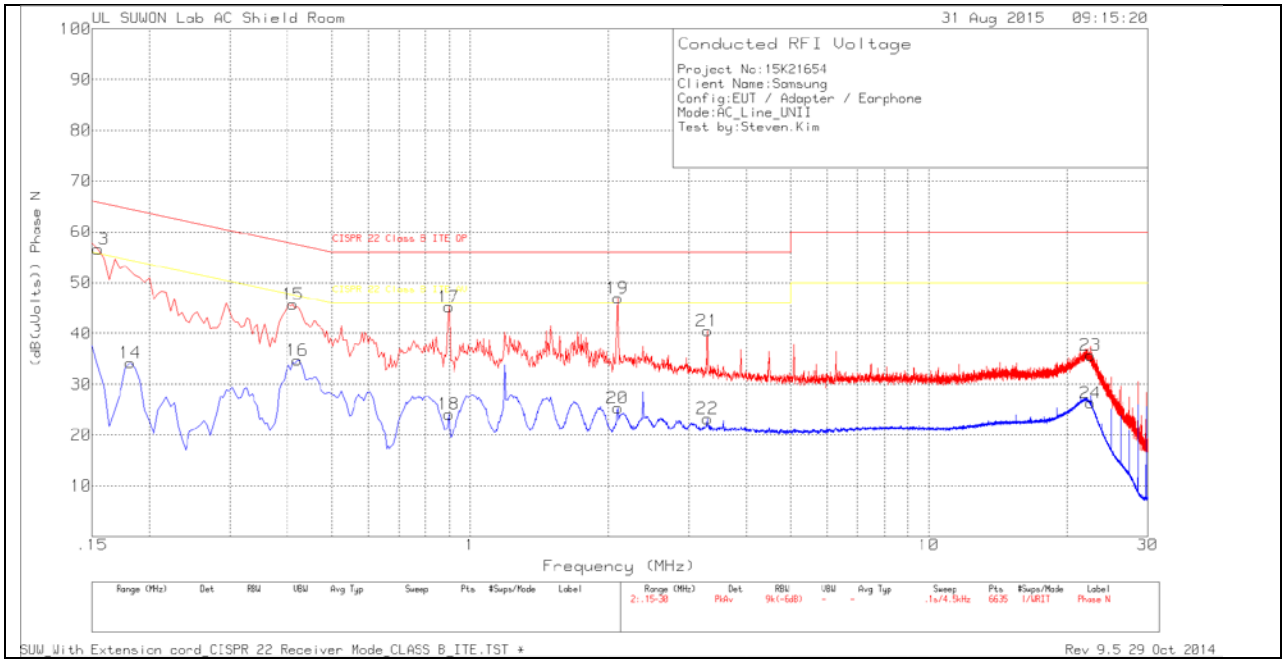
# LINE 2 PLOT



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# LINE 2 RESULTS

### *TRACE MARKERS*

Phase N .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_with ex-cord_N | CE Shield Room | Corrected Reading (dBuV) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | .1545 | 46.73 | Pk | 9.9 | 0 | 56.63 | 65.75 | -9.12 | - | - |
| 14 | .1815 | 24.15 | Av | 10.1 | 0 | 34.25 | - | - | 54.42 | -20.17 |
| 15 | .411 | 35.64 | Pk | 10.1 | 0 | 45.74 | 57.63 | -11.89 | - | - |
| 16 | .42 | 24.6 | Av | 10.1 | 0 | 34.7 | - | - | 47.45 | -12.75 |
| 17 | .897 | 35.32 | Pk | 9.9 | 0 | 45.22 | 56 | -10.78 | - | - |
| 18 | .897 | 14.21 | Av | 9.9 | 0 | 24.11 | - | - | 46 | -21.89 |
| 19 | 2.094 | 37.05 | Pk | 9.8 | .1 | 46.95 | 56 | -9.05 | - | - |
| 20 | 2.094 | 15.42 | Av | 9.8 | .1 | 25.32 | - | - | 46 | -20.68 |
| 21 | 3.2865 | 30.67 | Pk | 9.8 | .1 | 40.57 | 56 | -15.43 | - | - |
| 22 | 3.291 | 13.32 | Av | 9.8 | .1 | 23.22 | - | - | 46 | -22.78 |
| 23 | 22.48125 | 24.77 | Pk | 10.7 | .2 | 35.67 | 60 | -24.33 | - | - |
| 24 | 22.4835 | 15.41 | Av | 10.7 | .2 | 26.31 | - | - | 50 | -23.69 |

Pk - Peak detector

Av - Average detection

### *Quasi-Peak Emissions*

Phase N .15 - 30MHz

| Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_with ex-cord_N | CE Shield Room | Corrected Reading (dBuV) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|
| .15 | 44.76 | Qp | 9.8 | 0 | 54.56 | 66 | -11.44 | - | - |
| 2.094 | 31.89 | Qp | 9.8 | .1 | 41.79 | 56 | -14.21 | - | - |

Qp - Quasi-Peak detector



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# 14. DYNAMIC FREQUENCY SELECTION

## 14.1. OVERVIEW

### 14.1.1. LIMITS

**INDUSTRY CANADA**

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-247 Issue §6.3

**Note:** For the band 5600–5650 MHz, no operation is permitted.

Until further notice, devices subject to this annex shall not be capable of transmitting in the band 5600–5650 MHz. This restriction is for the protection of Environment Canada weather radars operating in this band.

**FCC**

§15.407 (h), FCC KDB 905462 D02 “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION” and KDB 905462 D03 “U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY”.


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**Table 1: Applicability of DFS requirements prior to use of a channel**

| Requirement | Operational Mode | | |
|---|---|---|---|
| | Master | Client (without radar detection) | Client (with radar detection) |
| Non-Occupancy Period | Yes | Not required | Yes |
| DFS Detection Threshold | Yes | Not required | Yes |
| Channel Availability Check Time | Yes | Not required | Not required |
| U-NII Detection Bandwidth | Yes | Not required | Yes |

**Table 2: Applicability of DFS requirements during normal operation**

| Requirement | Operational Mode | | |
|---|---|---|---|
| | Master | Client **(without DFS)** | Client **(with DFS)** |
| DFS Detection Threshold | Yes | Not required | Yes |
| Channel Closing Transmission Time | Yes | Yes | Yes |
| Channel Move Time | Yes | Yes | Yes |
| U-NII Detection Bandwidth | Yes | Not required | Yes |

| Additional requirements for devices with multiple bandwidth modes | Master Device or Client with Radar DFS | Client (without DFS) |
|---|---|---|
| U-NII Detection Bandwidth and Statistical Performance Check | All BW modes must be tested | Not required |
| Channel Move Time and Channel Closing Transmission Time | Test using widest BW mode available | Test using the widest BW mode available for the link |
| All other tests | Any single BW mode | Not required |
| **Note**: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in all 20 MHz channel blocks and a null frequency between the bonded 20 MHz channel blocks. | | |


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**Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring**

| Maximum Transmit Power | Value (see notes) |
|---|---|
| E.I.R.P. ≥ 200 mill watt | -64 dBm |
| E.I.R.P. < 200 mill watt and power spectral density < 10 dBm/MHz | -62 dBm |
| E.I.R.P. < 200 mill watt that do not meet power spectral density requirement | -64 dBm |

**Note 1:** This is the level at the input of the receiver assuming a 0 dBi receive antenna
**Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
**Note 3:** E.I.R.P. is based on the highest antenna gain. For MIMO devices refer to KDB publication 662911 D01.

**Table 4: DFS Response requirement values**

| Parameter | Value |
|---|---|
| *Non-occupancy period* | 30 minutes |
| *Channel Availability Check Time* | 60 seconds |
| *Channel Move Time* | 10 seconds (See Note 1) |
| *Channel Closing Transmission Time* | 200 milliseconds + approx. 60 milliseconds over remaining 10 second period. (See Notes 1 and 2) |
| *U-NII Detection Bandwidth* | Minimum 100% of the U-NII 99% transmission power bandwidth. (See Note 3) |

**Note 1:** *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
**Note 2:** The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
**Note 3:** During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.


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**Table 5 – Short Pulse Radar Test Waveforms**

| Radar Type | Pulse Width (usec) | PRI (usec) | Pulses | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|
| 0 | 1 | 1428 | 18 | See Note 1 | See Note 1 |
| 1 | 1 | Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in table 5a | Roundup: {(1/360) x (19 x $10^6$ $PRI_{usec}$)} | 60% | 30 |
| | | Test B: 15 unique PRI values randomly selected within the range of 518-3066 usec. With a minimum increment of 1 usec, excluding PRI values selected in Test A | | | |
| 2 | 1-5 | 150-230 | 23-29 | 60% | 30 |
| 3 | 6-10 | 200-500 | 16-18 | 60% | 30 |
| 4 | 11-20 | 200-500 | 12-16 | 60% | 30 |
| Aggregate (Radar Types 1-4) | | | | 80% | 120 |
| **Note 1:** Short Pulse Radar Type 0 should be used for the *Detection Bandwidth* test, *Channel Move Time*, and *Channel Closing Time* tests. | | | | | |

**Table 6 – Long Pulse Radar Test Signal**

| Radar Waveform Type | Pulse Width (µsec) | Chirp Width (MHz) | PRI (µsec) | Pulses per Burst | Number of Bursts | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|---|---|
| 5 | 50-100 | 5-20 | 1000-2000 | 1-3 | 8-20 | 80% | 30 |

**Table 7 – Frequency Hopping Radar Test Signal**

| Radar Waveform Type | Pulse Width (µsec) | PRI (µsec) | Pulses per Hop | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|---|---|
| 6 | 1 | 333 | 9 | 0.333 | 300 | 70% | 30 |


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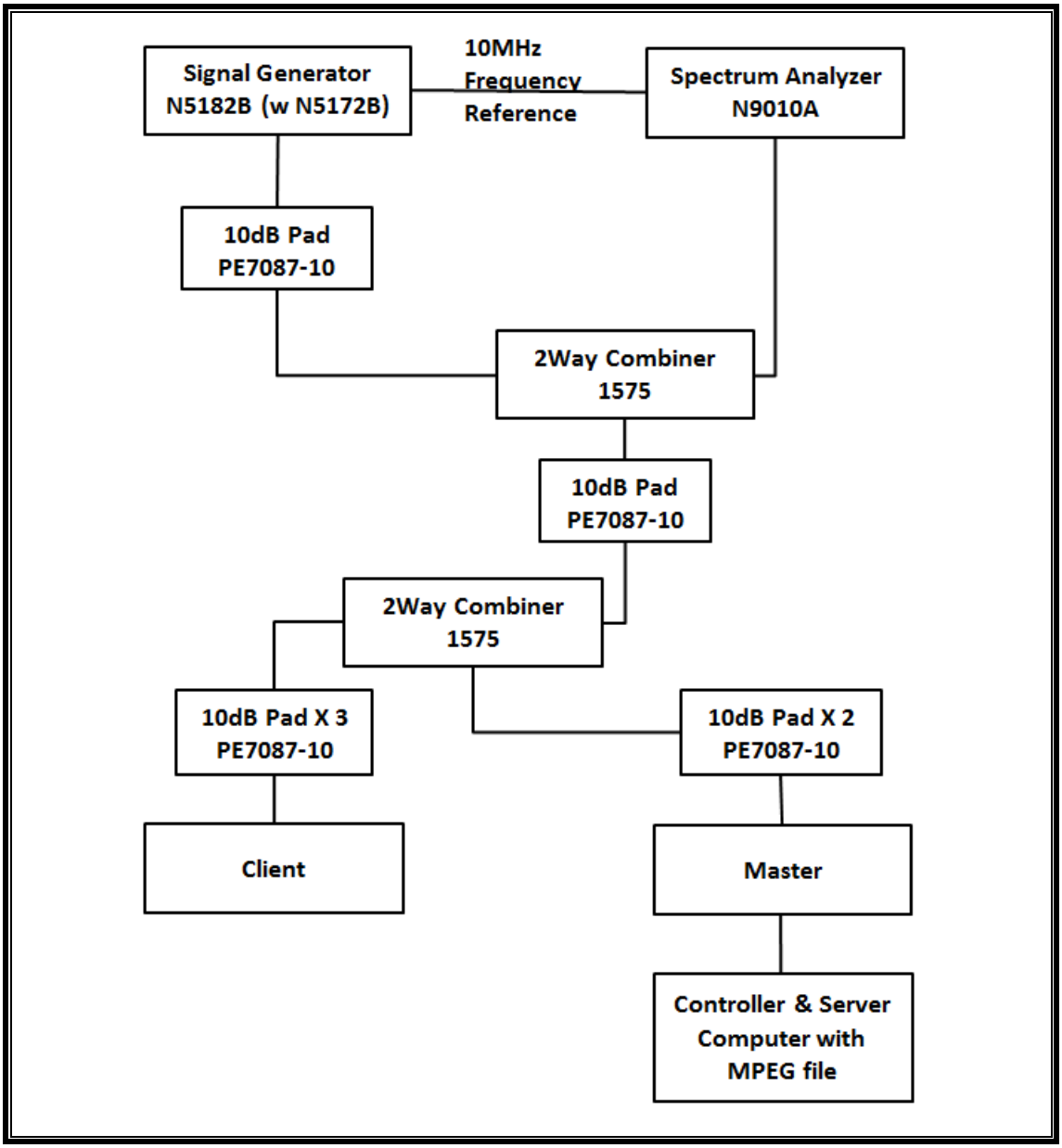
### 14.1.1. TEST AND MEASUREMENT SYSTEM

**CONDUCTED METHOD SYSTEM BLOCK DIAGRAM**





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**SYSTEM OVERVIEW**

The short pulse and long pulse signal generating system utilizes the Keysite Signal Studio for Pulse Building as N5172B. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 1, 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of KDB 905462 D02. The frequency of the signal generator is incremented in 1 MHz steps from $F_L$ to $F_H$ for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

**SYSTEM CALIBRATION**

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.


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## ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

## TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the DFS tests documented in this report:

| TEST EQUIPMENT LIST | | | | |
|---|---|---|---|---|
| **Description** | **Manufacturer** | **Model** | **S/N** | **Cal Due** |
| Spectrum Analyzer, 7 GHz | Agilent / HP | N9010A | MY54200580 | 08-19-16 |
| Vector Signal Generator, 6GHz | Agilent / HP | N5182B | MY53051241 | 08-19-16 |


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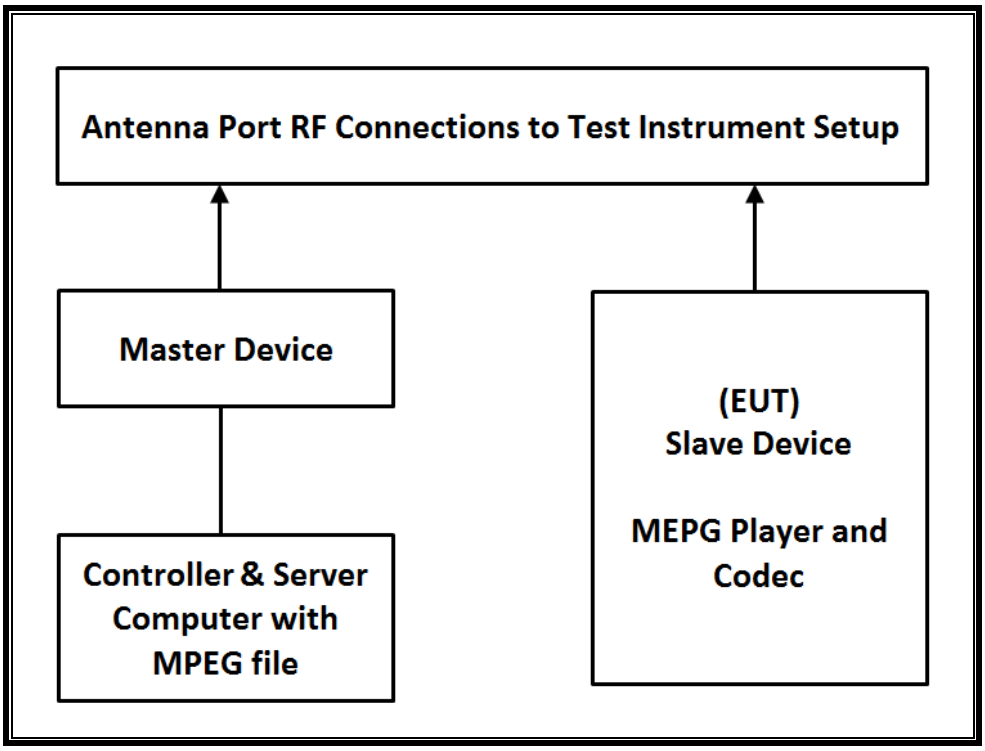
### 14.1.2. SETUP OF EUT

**CONDUCTED METHOD EUT TEST SETUP**




**SUPPORT EQUIPMENT**

The following support equipment was utilized for the DFS tests documented in this report:

| PERIPHERAL SUPPORT EQUIPMENT LIST | | | | |
|---|---|---|---|---|
| **Description** | **Manufacturer** | **Model** | **Serial Number** | **FCC ID** |
| Wireless Access Point | Cisco | AIR-CAP3702E-A-K9 | FTX182276QX | LDK102087 |
| Notebook PC (Controller/Server) | HP | HP EliteDesk 800 G1 TWR | CZC4125J25 | DoC |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### 14.1.3. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 11.163 dBm in the 5250-5350 MHz band and 11.253 dBm in the 5470-5725 MHz band.

The antenna assembly utilized antenna with the EUT is -0.08 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required conducted threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic that meets or exceeds the minimum required loading was generated by transferring a data stream from the controller/server PC to the EUT using iPerf version 2.0.5 software package.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz.

The software installed in the access point is 12.4(25d)JA1.

**UNIFORM CHANNEL SPREADING**

This requirement is not applicable to Slave radio devices.

**OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS**

The Master Device is a Cisco Access Point, FCC ID: LDK102087. The minimum antenna gain for the Master Device is 6 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.


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## 14.2. RESULTS FOR 20 MHz BANDWIDTH

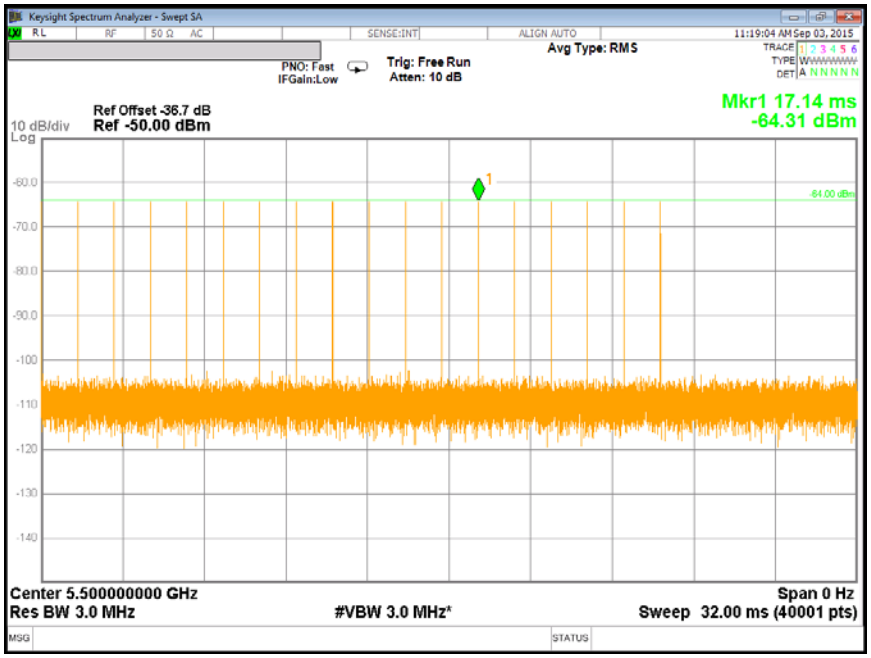
### 14.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5500 MHz.

### 14.2.2. RADAR WAVEFORM AND TRAFFIC

**RADAR WAVEFORM**

SHORT PULSE RADAR TYPE 0 AT MASTER





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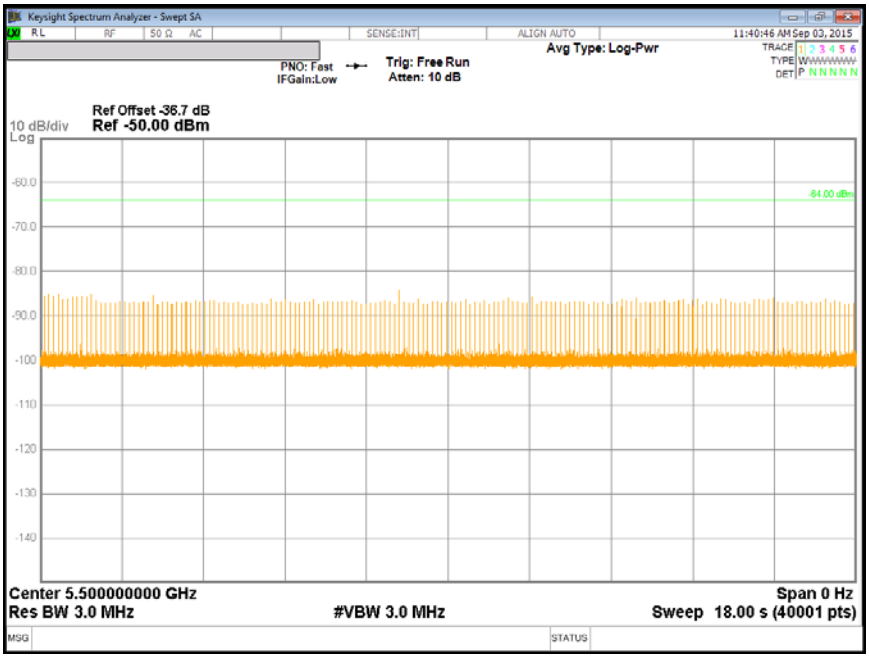
**TRAFFIC**

SLAVE TRAFFIC





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### 14.2.3. OVERLAPPING CHANNEL TESTS

**RESULTS**

These tests are not applicable.

### 14.2.4. MOVE AND CLOSING TIME

**REPORTING NOTES**

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.562 | 10 |

| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 3.000 | 60 |


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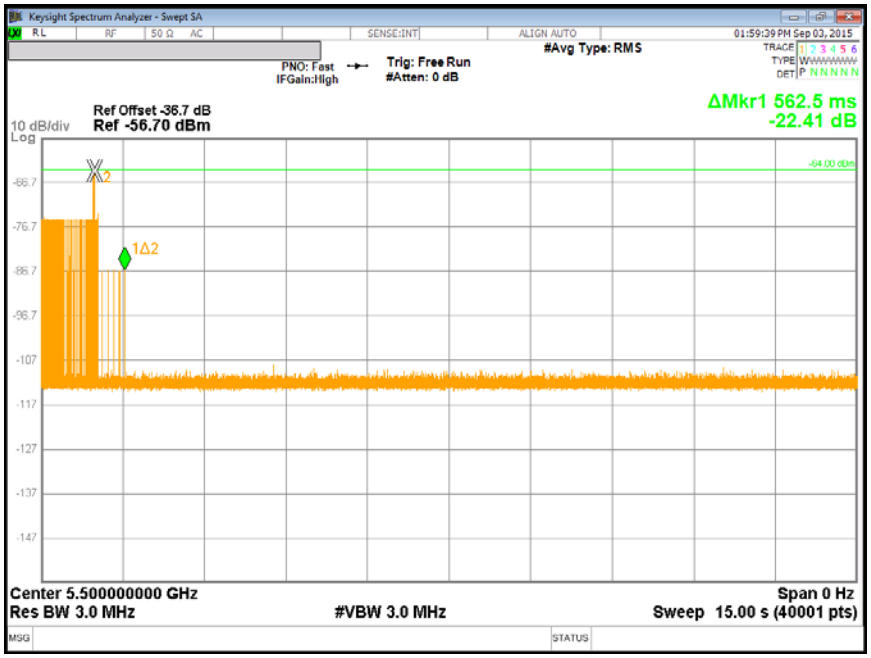
## MOVE TIME & CHANNEL CLOSING TIME

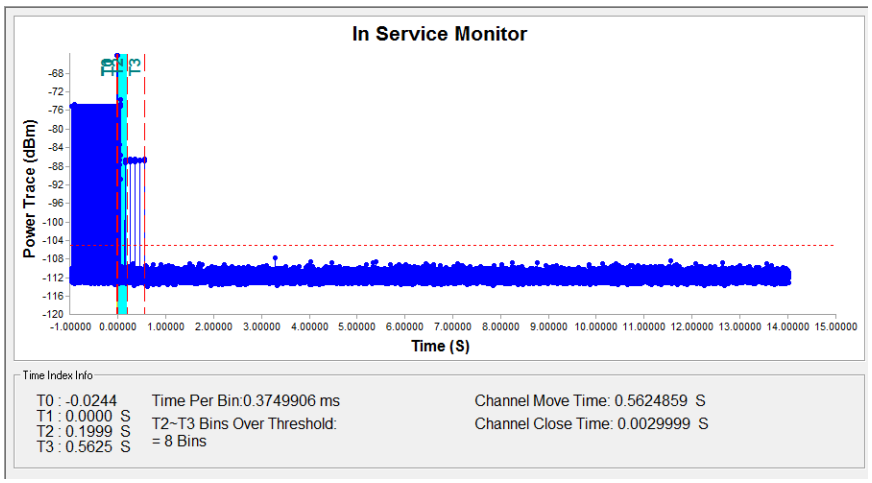
## AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

MOVE TIME & AGGREGATE CHANNEL CLOSING TRANSMISSION TIME




MOVE TIME & CLOSING TIME AT IN SERVISE MONITER





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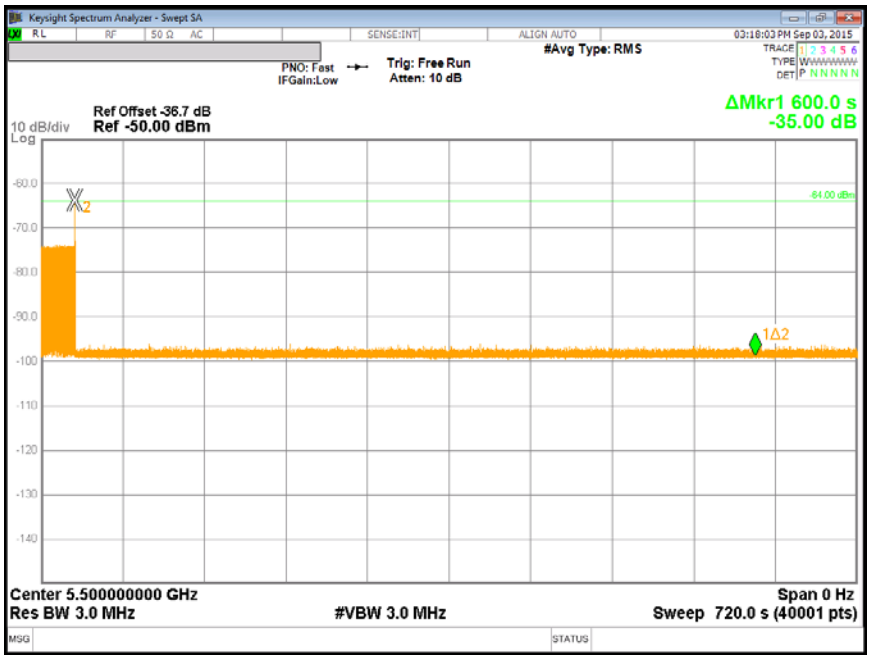
**NON-OCCUPANCY PERIOD**

**RESULTS**

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD





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## 14.3. RESULTS FOR 40 MHz BANDWIDTH

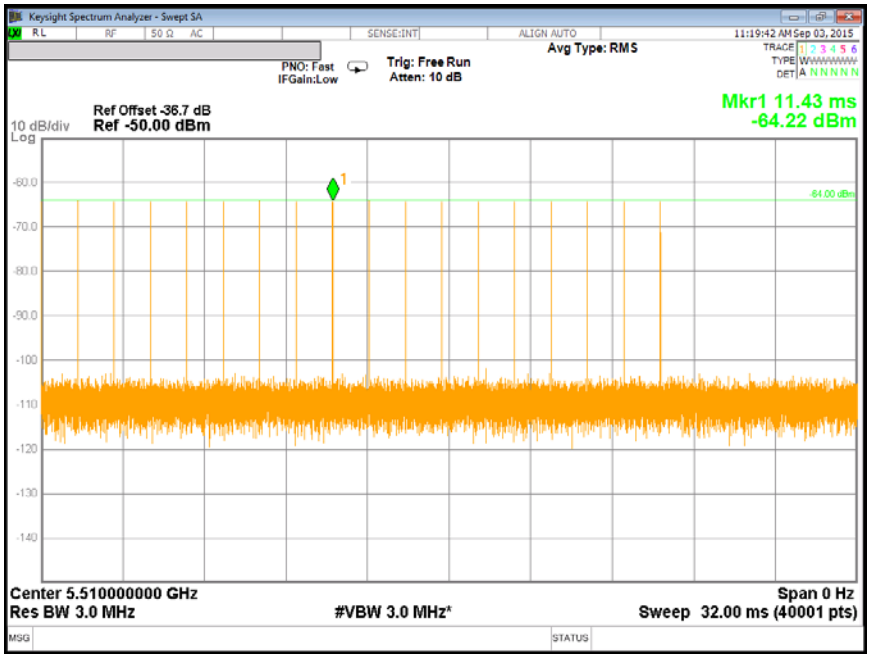
### 14.3.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5510 MHz.

### 14.3.2. RADAR WAVEFORM AND TRAFFIC

**RADAR WAVEFORM**

SHORT PULSE RADAR TYPE 0 AT MASTER





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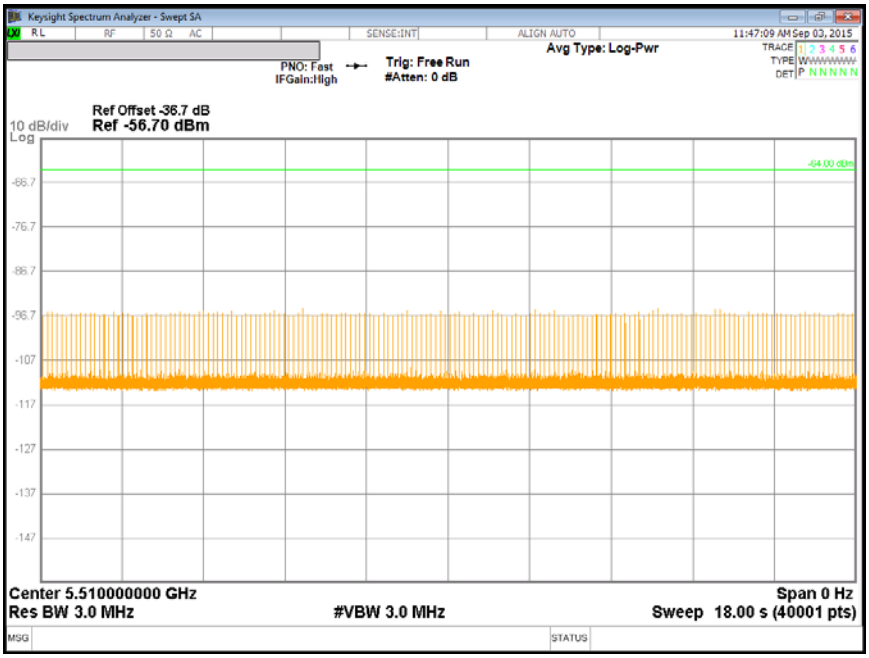
**TRAFFIC**

SLAVE TRAFFIC





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### 14.3.3. OVERLAPPING CHANNEL TESTS

**RESULTS**

These tests are not applicable.

### 14.3.4. MOVE AND CLOSING TIME

**REPORTING NOTES**

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.610 | 10 |

| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 3.000 | 60 |


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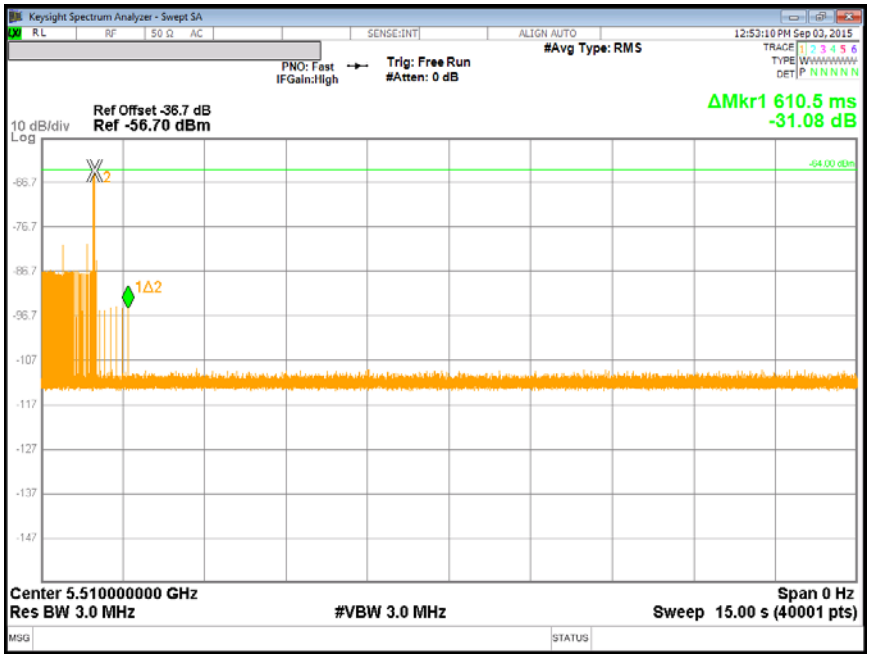
## MOVE TIME & CHANNEL CLOSING TIME

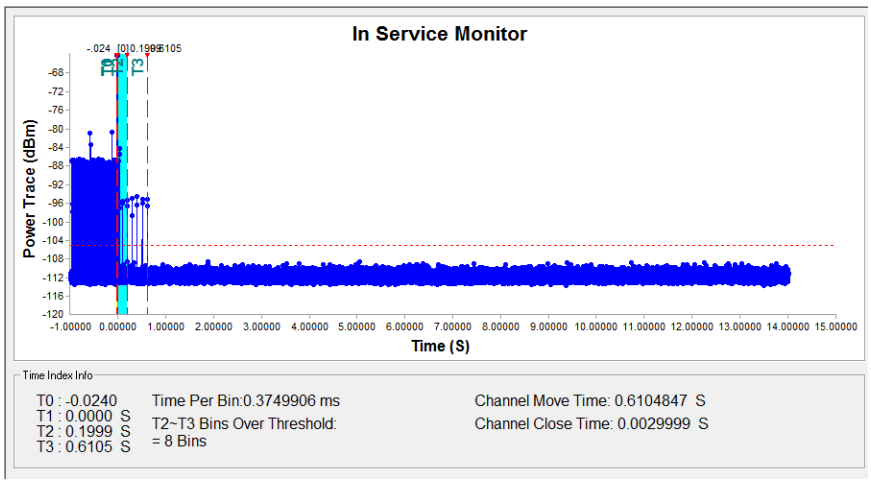
## AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

MOVE TIME & AGGREGATE CHANNEL CLOSING TRANSMISSION TIME




MOVE TIME & CLOSING TIME AT IN SERVISE MONITER





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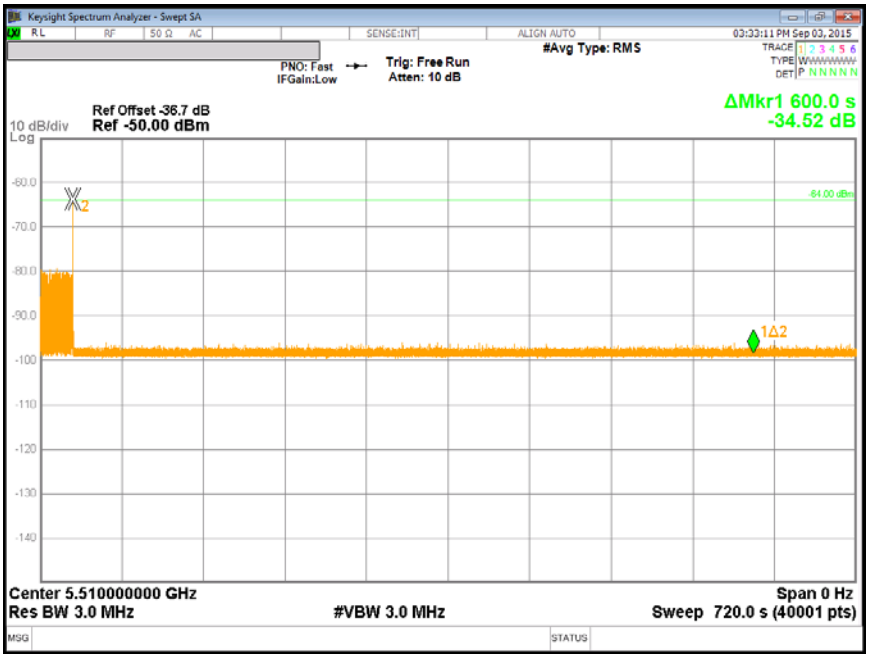
**NON-OCCUPANCY PERIOD**

**RESULTS**

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD





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## 14.4. RESULTS FOR 80 MHz BANDWIDTH

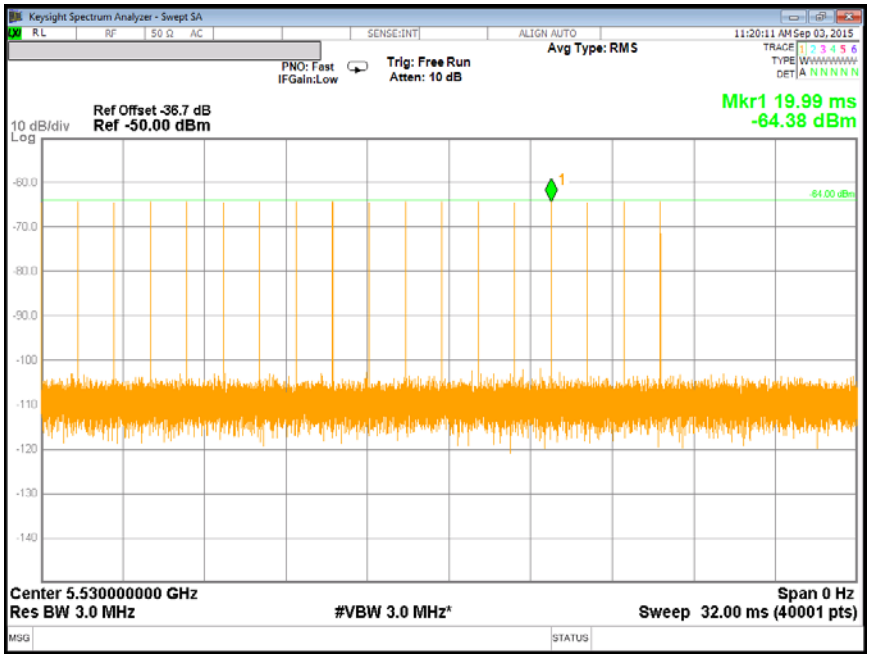
### 14.4.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz.

### 14.4.2. RADAR WAVEFORM AND TRAFFIC

**RADAR WAVEFORM**

SHORT PULSE RADAR TYPE 0 AT MASTER





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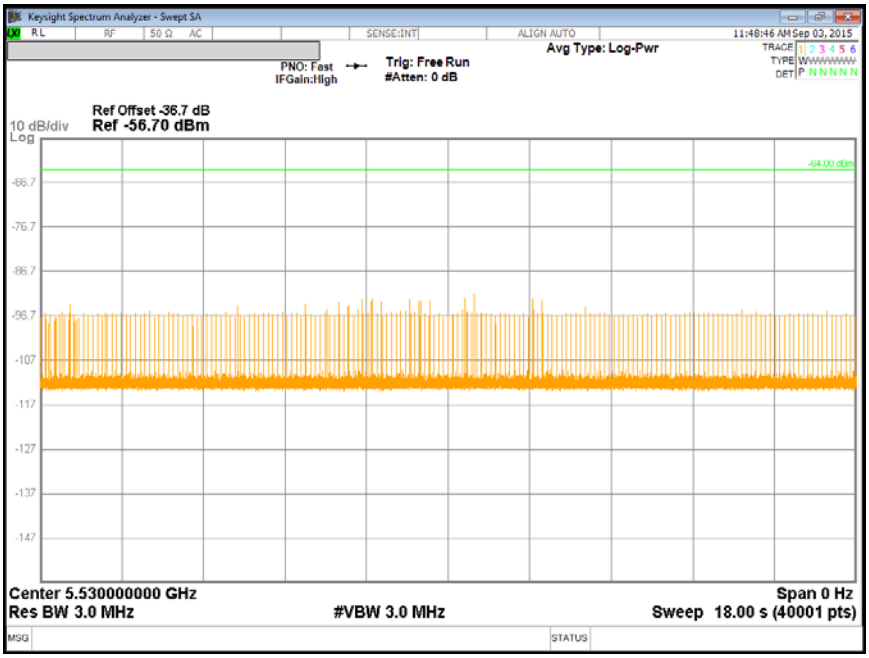
**TRAFFIC**

SLAVE TRAFFIC





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### 14.4.3. OVERLAPPING CHANNEL TESTS

**RESULTS**

These tests are not applicable.

### 14.4.4. MOVE AND CLOSING TIME

**REPORTING NOTES**

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

**RESULTS**

| Channel Move Time (sec) | Limit (sec) |
|---|---|
| 0.607 | 10 |

| Aggregate Channel Closing Transmission Time (msec) | Limit (msec) |
|---|---|
| 2.250 | 60 |


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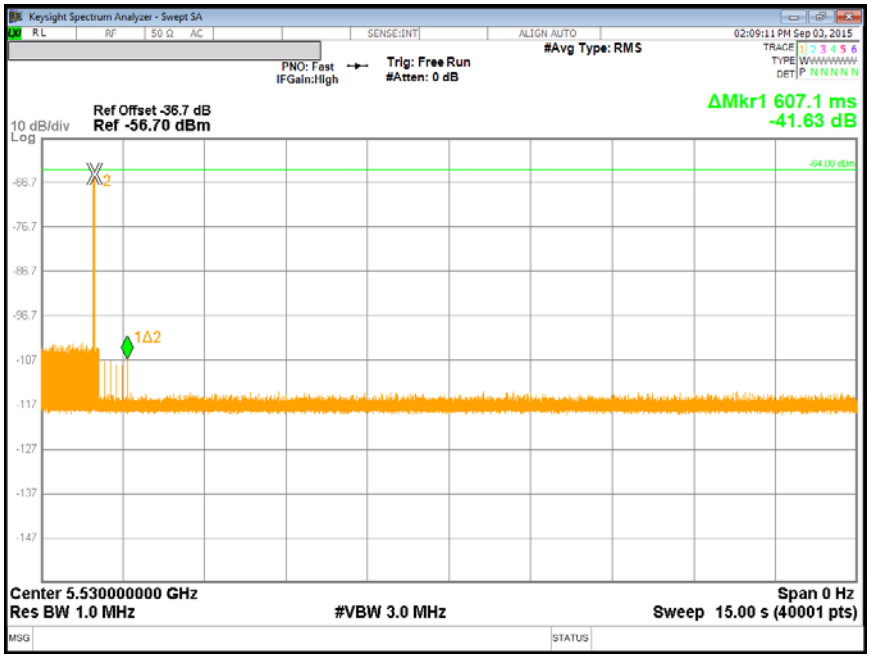
## MOVE TIME & CHANNEL CLOSING TIME

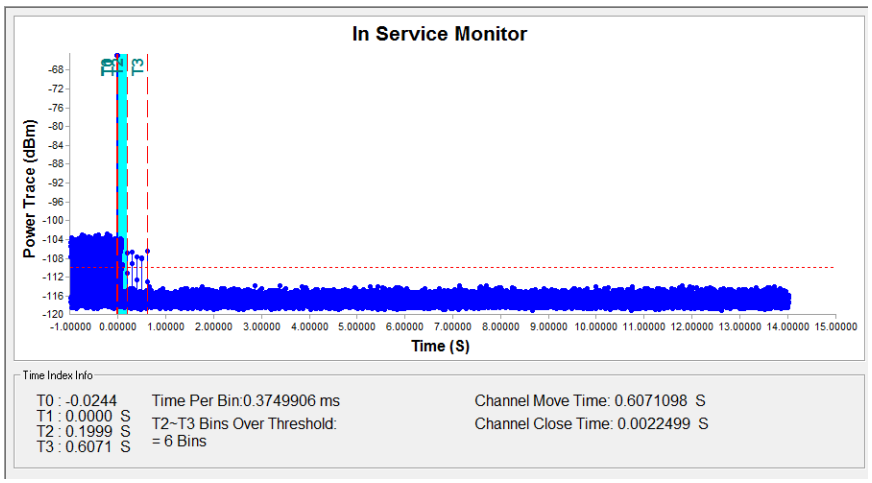
## AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

MOVE TIME & AGGREGATE CHANNEL CLOSING TRANSMISSION TIME




MOVE TIME & CLOSING TIME AT IN SERVISE MONITER





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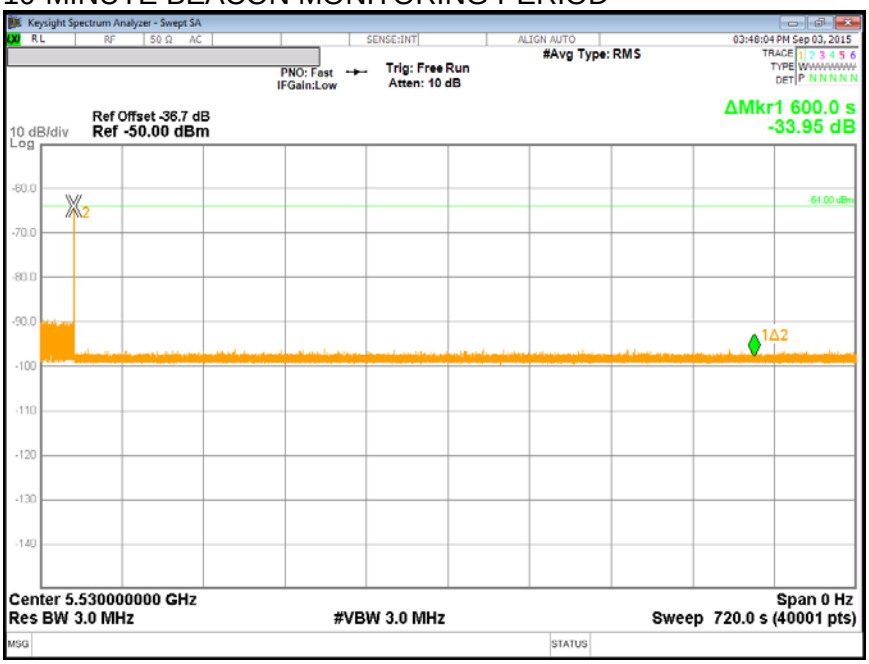
**NON-OCCUPANCY PERIOD**

**RESULTS**

No EUT transmissions were observed on the test channel during the 10-minute observation time.

10-MINUTE BEACON MONITORING PERIOD





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