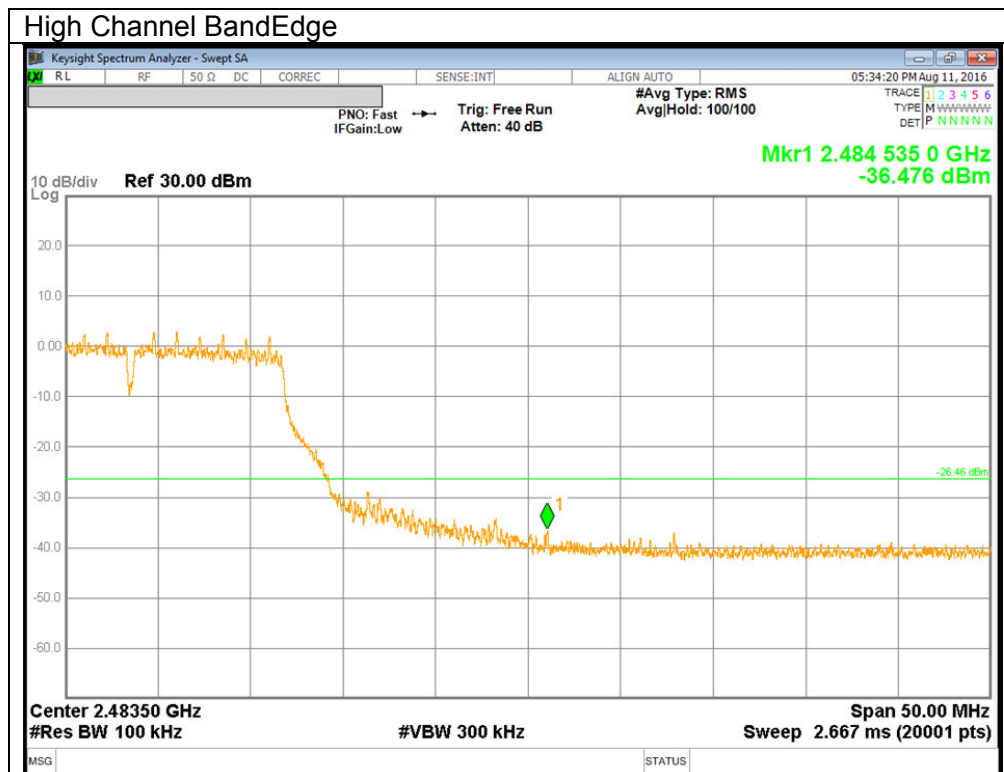
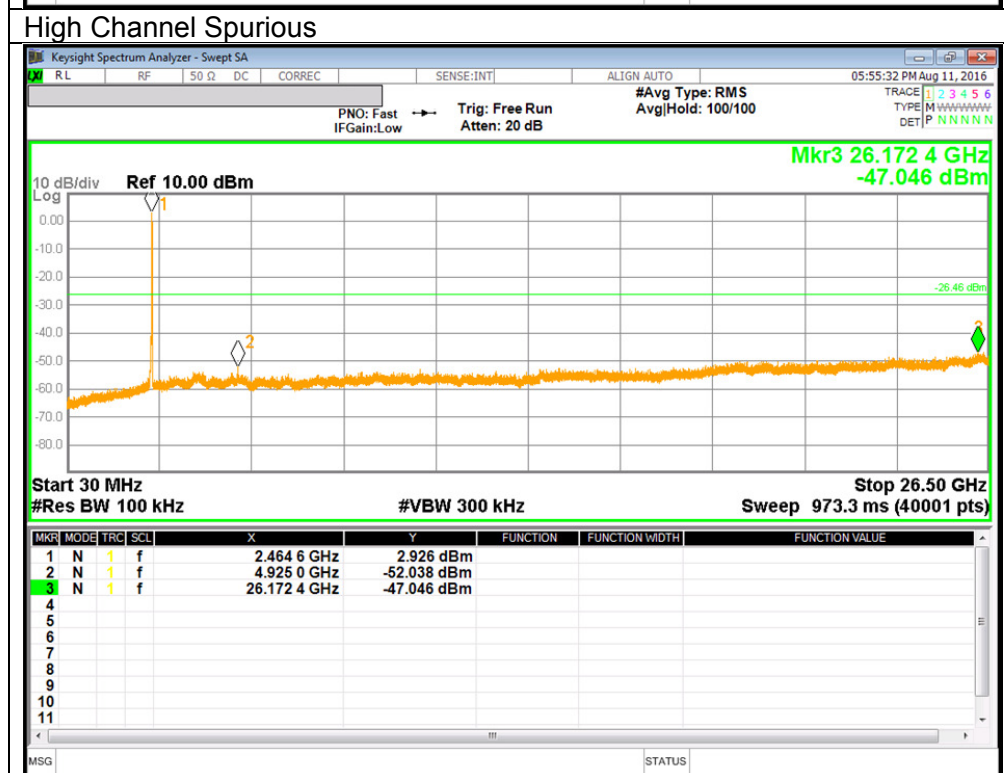
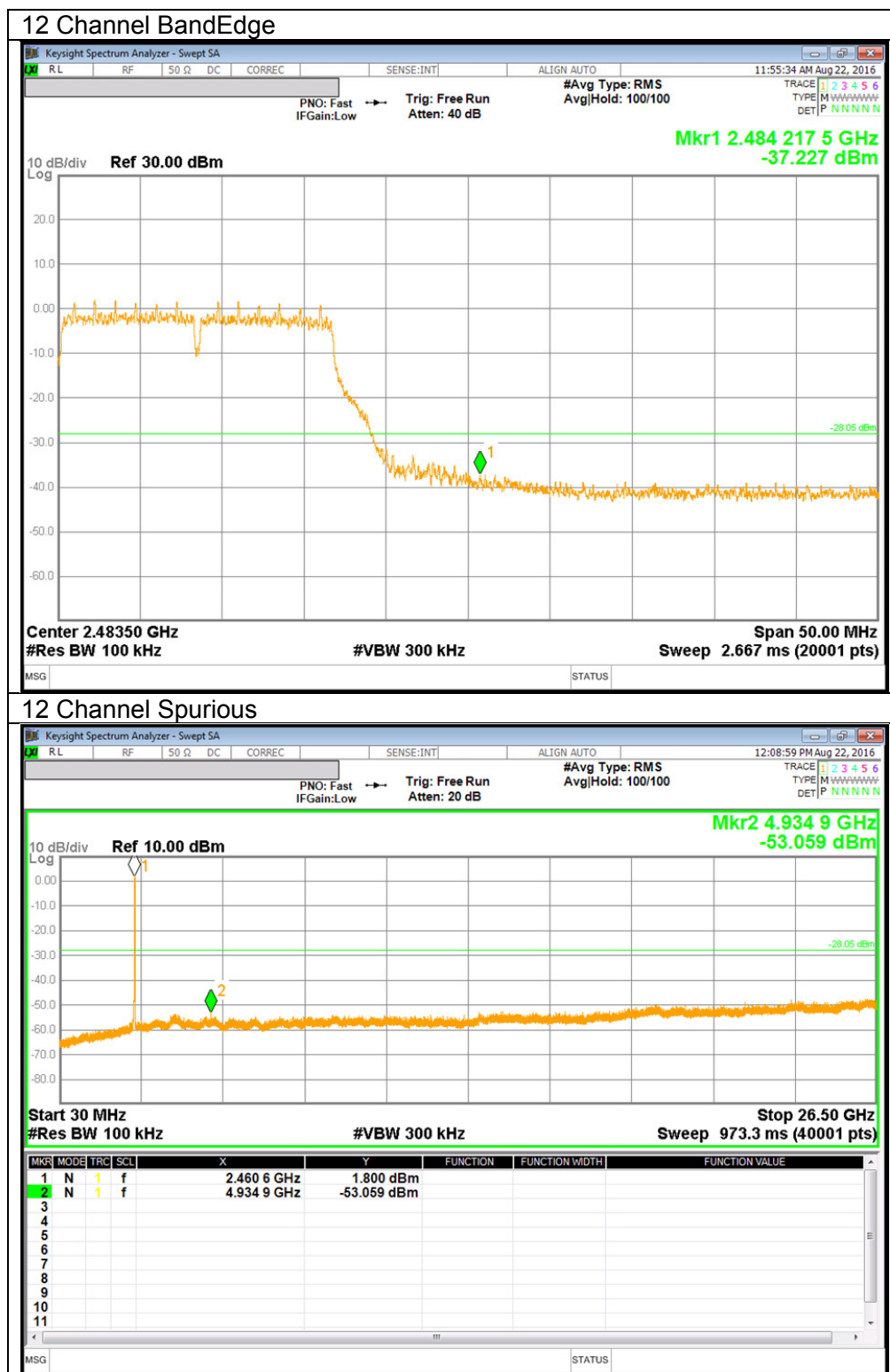
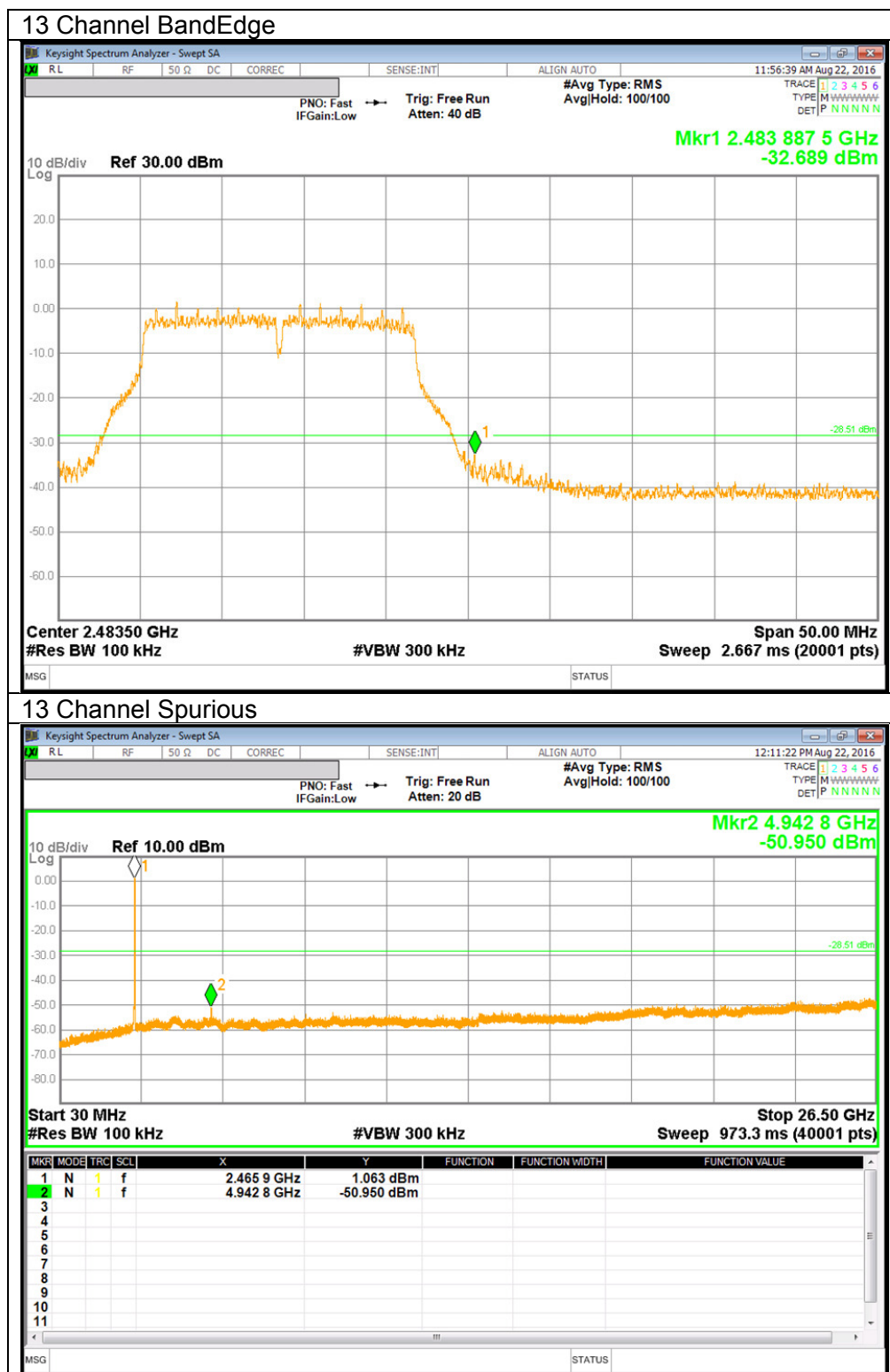
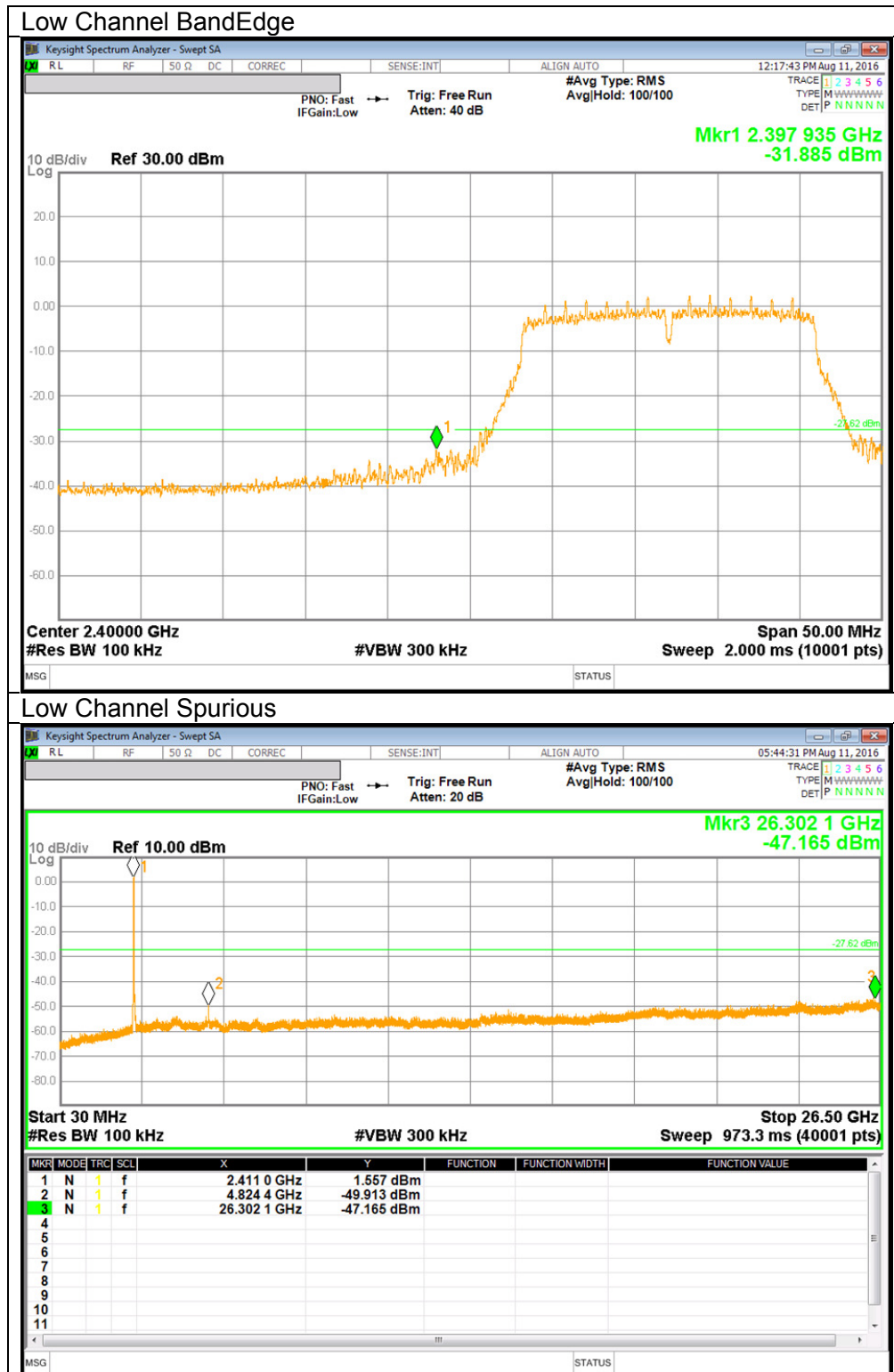


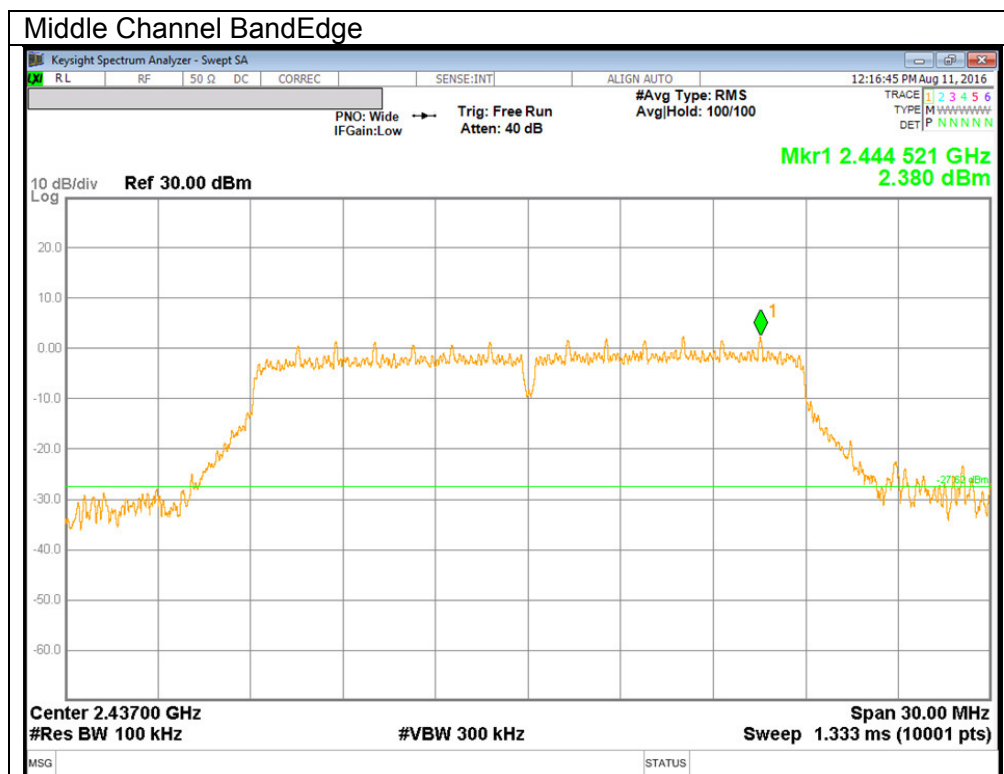
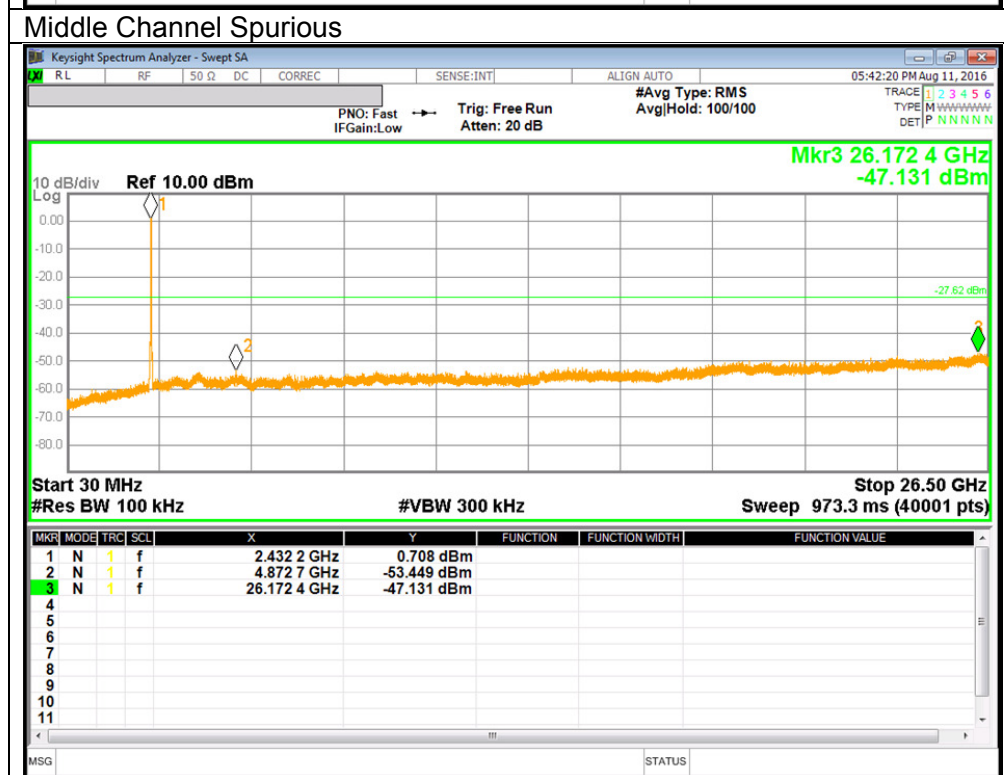




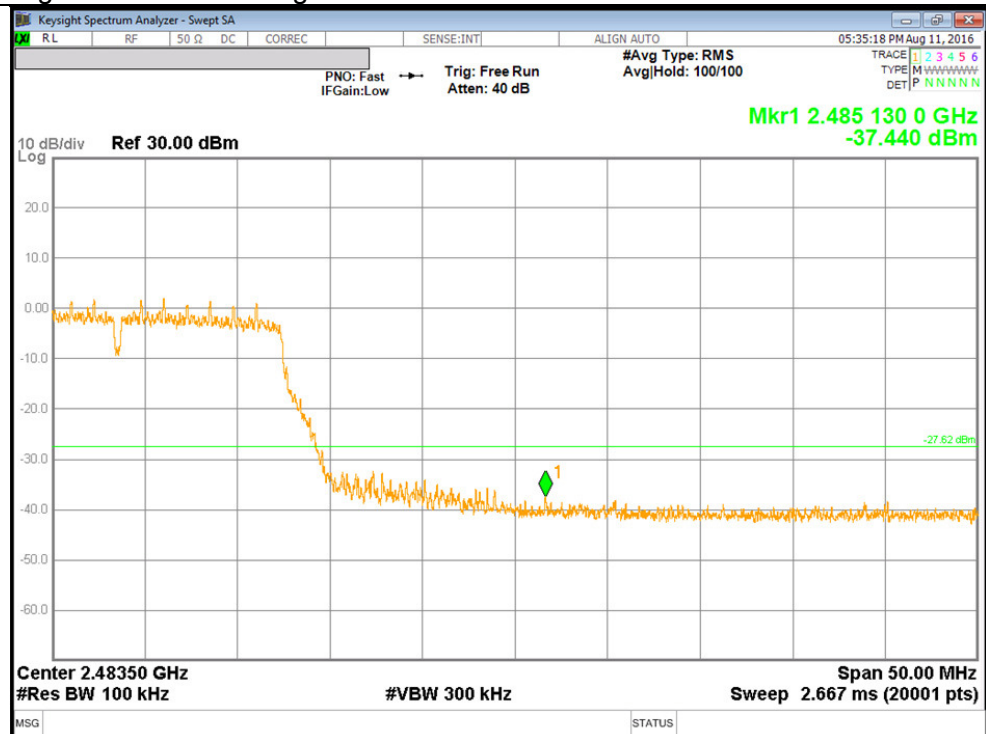


### 10.5.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

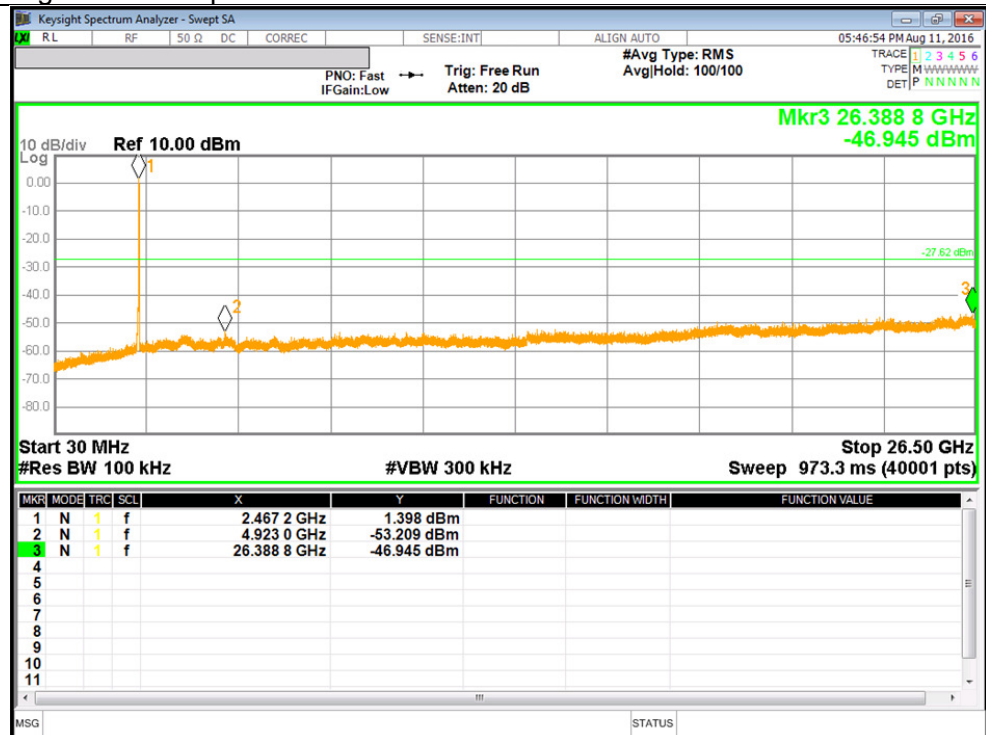




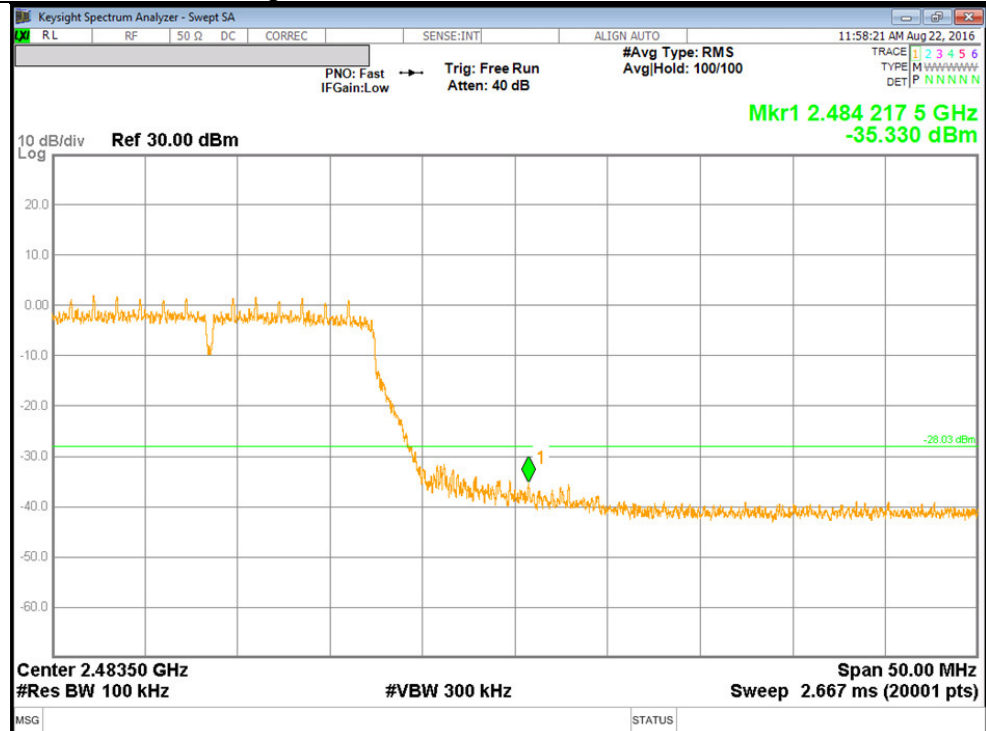
### High Channel BandEdge



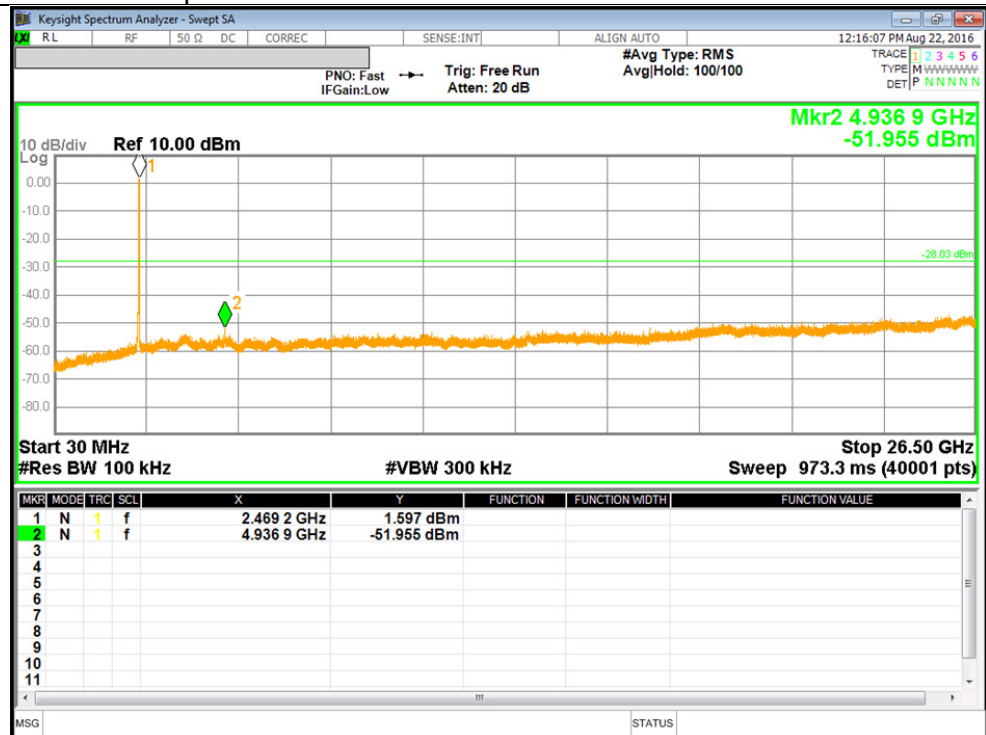
### High Channel Spurious



## 12 Channel BandEdge



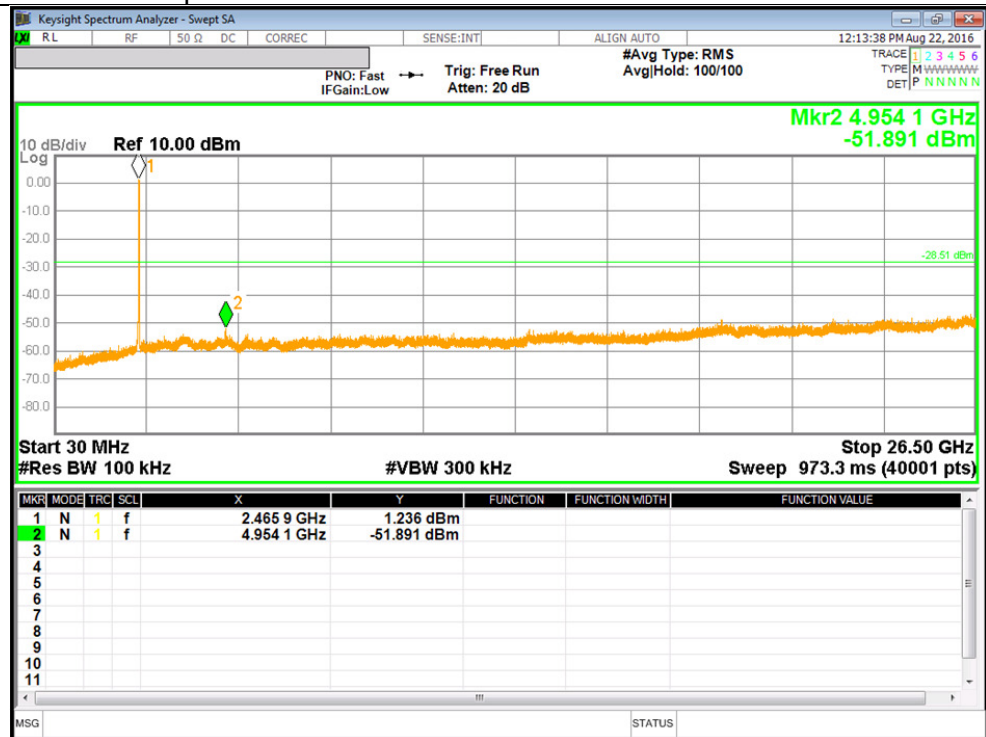
## 12 Channel Spurious



## 13 Channel BandEdge



### 13 Channel Spurious



## 11. RADIATED TEST RESULTS

### 11.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

| Limits for radiated disturbance of an intentional radiator |                 |                          |
|------------------------------------------------------------|-----------------|--------------------------|
| Frequency range (MHz)                                      | Limits (µV/m)   | Measurement Distance (m) |
| 0.009 – 0.490                                              | 2400 / F (kHz)  | 300                      |
| 0.490 – 1.705                                              | 24000 / F (kHz) | 30                       |
| 1.705 – 30.0                                               | 30              | 30                       |
| 30 – 88                                                    | 100**           | 3                        |
| 88 - 216                                                   | 150**           | 3                        |
| 216 – 960                                                  | 200**           | 3                        |
| Above 960                                                  | 500             | 3                        |

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

## **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. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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.

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 for average measurements. (Restricted bandedge, Final detection of spurious harmonic emissions)  
Duty cycle factor =  $10 \log (1/x)$  For this sample B mode = 0dB (duty cycle >98%); G mode = 0.32dB; N mode = 0.34dB.

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

The spectrum from 30 MHz to 26 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 : Emission was pre-scanned from 9KHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).  
Per FCC part 15.31(o), test results were not reported.

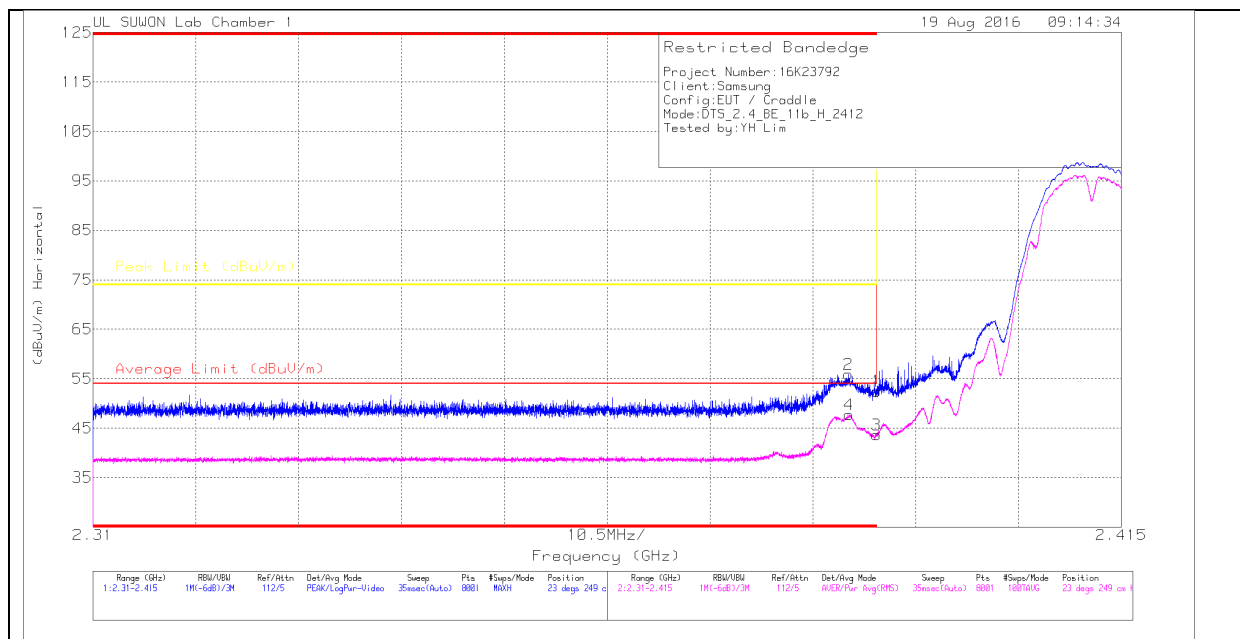
Formula for converting the filed strength from uV/m to dBuV/m is:  
Limit (dBuV/m) = 20 log limit (uV/m)

## 11.2. TRANSMITTER ABOVE 1 GHz

### 11.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

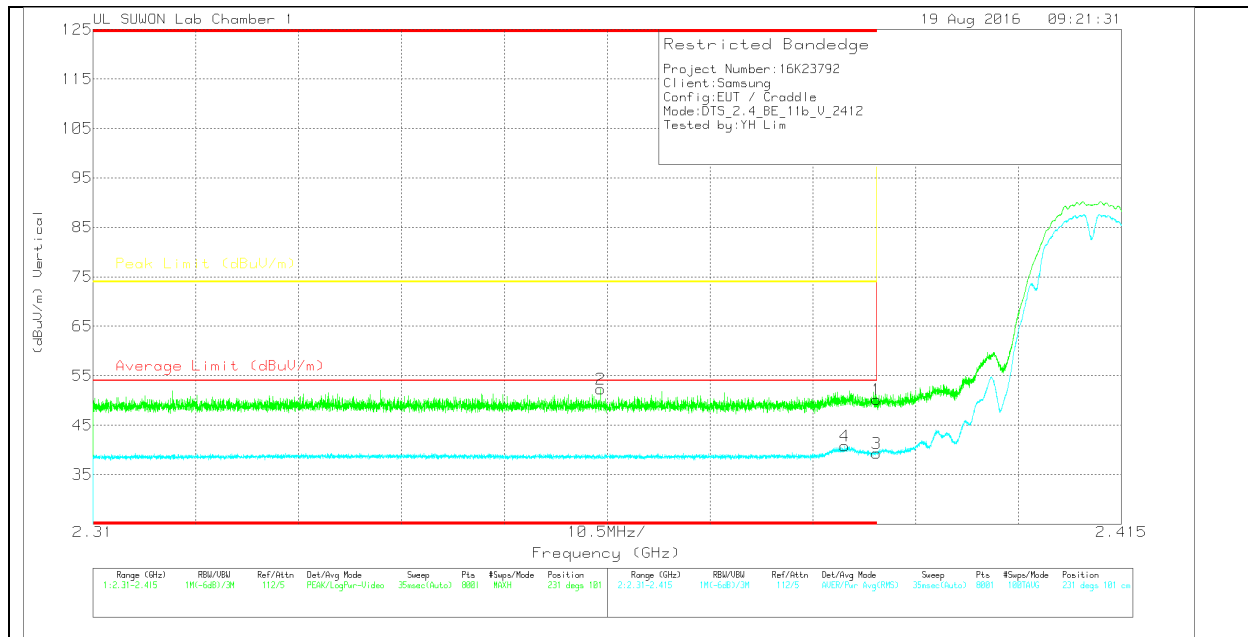
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 49.69                | Pk  | 31.8                   | -29    | 0            | 52.49                      | -                      | -           | 74                  | -21.51         | 23             | 249         | H        |
| 2      | * 2.387         | 53.06                | Pk  | 31.8                   | -29    | 0            | 55.86                      | -                      | -           | 74                  | -18.14         | 23             | 249         | H        |
| 3      | * 2.39          | 40.9                 | RMS | 31.8                   | -29    | 0            | 43.7                       | 54                     | -10.3       | -                   | -              | 23             | 249         | H        |
| 4      | * 2.387         | 44.92                | RMS | 31.8                   | -29    | 0            | 47.72                      | 54                     | -6.28       | -                   | -              | 23             | 249         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.39          | 47.45                | Pk  | 31.8                   | -29    | 0            | 50.25                      | -                      | -           | 74                  | -23.75         | 231            | 101         | V        |
| 2      | * 2.362         | 49.55                | Pk  | 31.7                   | -29    | 0            | 52.25                      | -                      | -           | 74                  | -21.75         | 231            | 101         | V        |
| 3      | * 2.39          | 36.55                | RMS | 31.8                   | -29    | 0            | 39.35                      | 54                     | -14.65      | -                   | -              | 231            | 101         | V        |
| 4      | * 2.387         | 37.96                | RMS | 31.8                   | -29    | 0            | 40.76                      | 54                     | -13.24      | -                   | -              | 231            | 101         | V        |

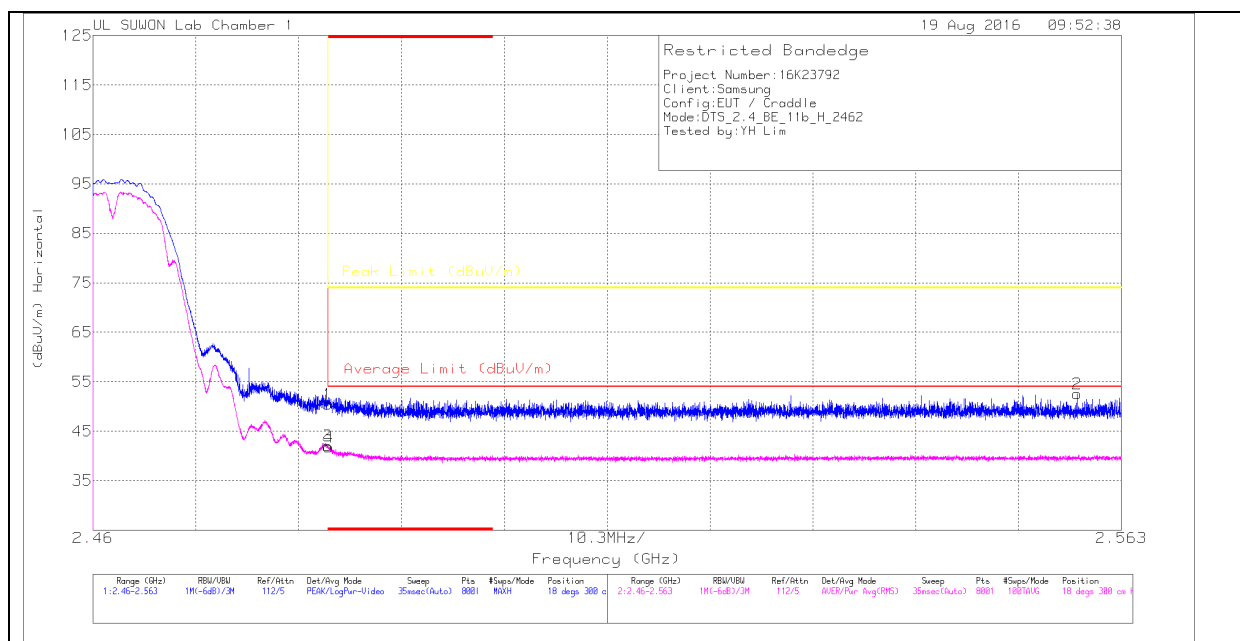
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (HIGH CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

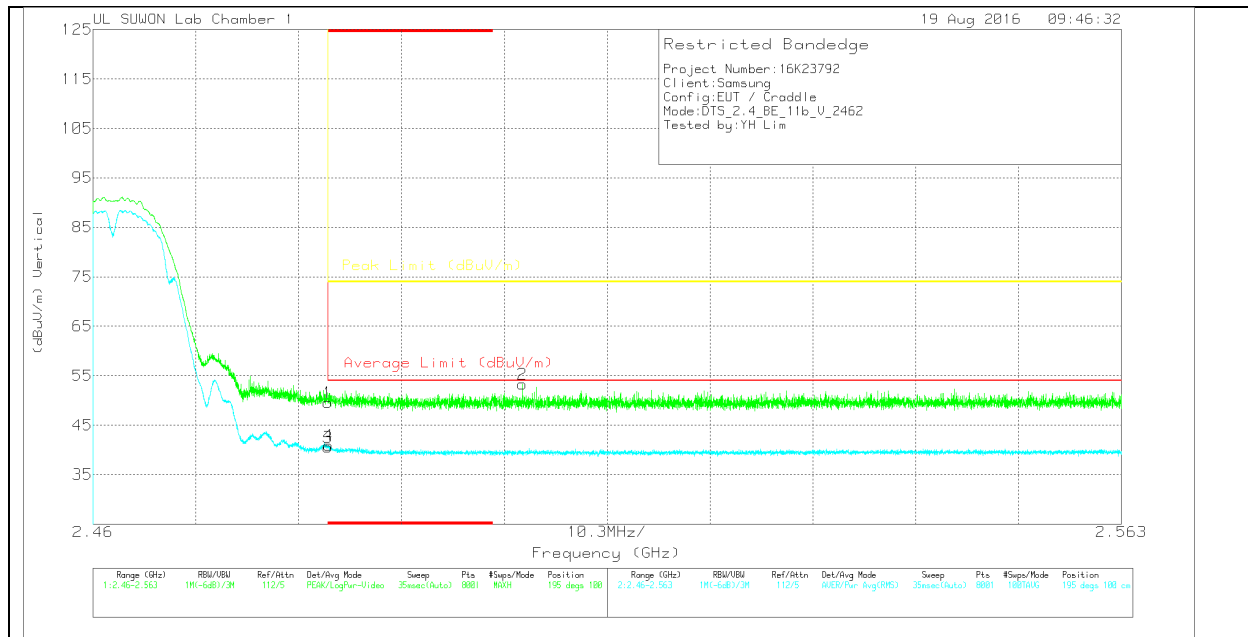
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 46.78                | Pk  | 32                     | -28.3  | 0            | 50.48                      | -                      | -           | 74                  | -23.52         | 18             | 300         | H        |
| 2      | 2.559           | 48.71                | Pk  | 32                     | -28.2  | 0            | 52.51                      | -                      | -           | 74                  | -21.49         | 18             | 300         | H        |
| 3      | * 2.484         | 38.31                | RMS | 32                     | -28.3  | 0            | 42.01                      | 54                     | -11.99      | -                   | -              | 18             | 300         | H        |
| 4      | * 2.484         | 38.05                | RMS | 32                     | -28.3  | 0            | 41.75                      | 54                     | -12.25      | -                   | -              | 18             | 300         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 45.91                | Pk  | 32                     | -28.3  | 0            | 49.61                      | -                      | -           | 74                  | -24.39         | 195            | 100         | V        |
| 2      | 2.503           | 49.57                | Pk  | 32                     | -28.3  | 0            | 53.27                      | -                      | -           | 74                  | -20.73         | 195            | 100         | V        |
| 3      | * 2.484         | 36.81                | RMS | 32                     | -28.3  | 0            | 40.51                      | 54                     | -13.49      | -                   | -              | 195            | 100         | V        |
| 4      | * 2.484         | 37.28                | RMS | 32                     | -28.3  | 0            | 40.98                      | 54                     | -13.02      | -                   | -              | 195            | 100         | V        |

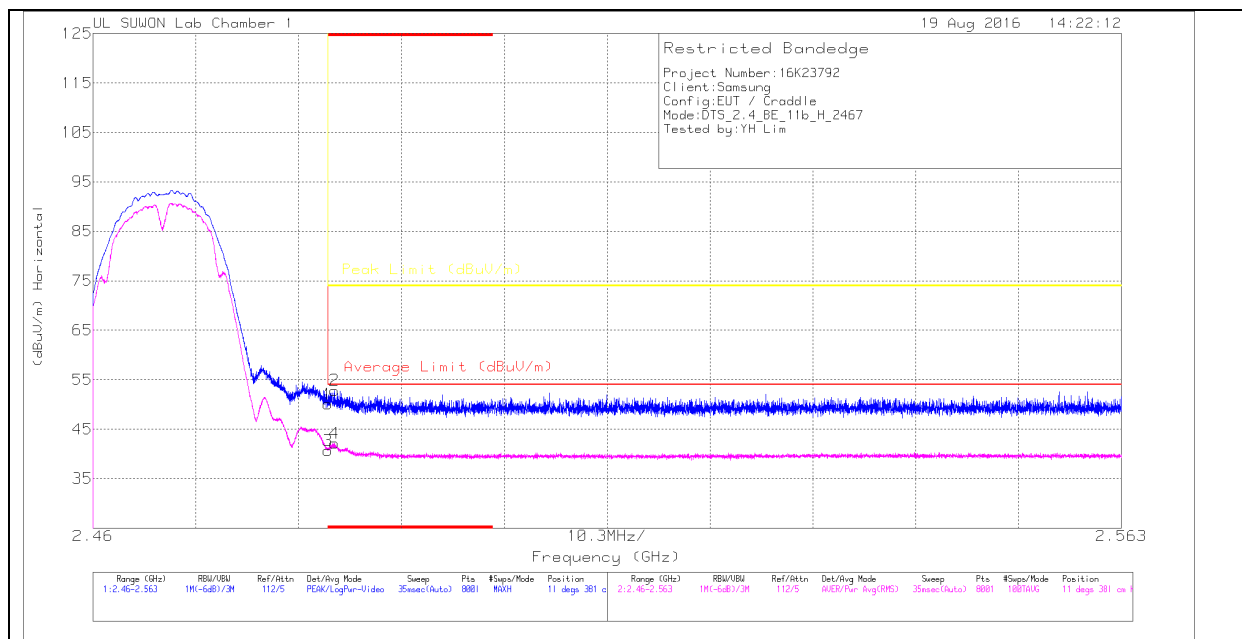
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (12 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

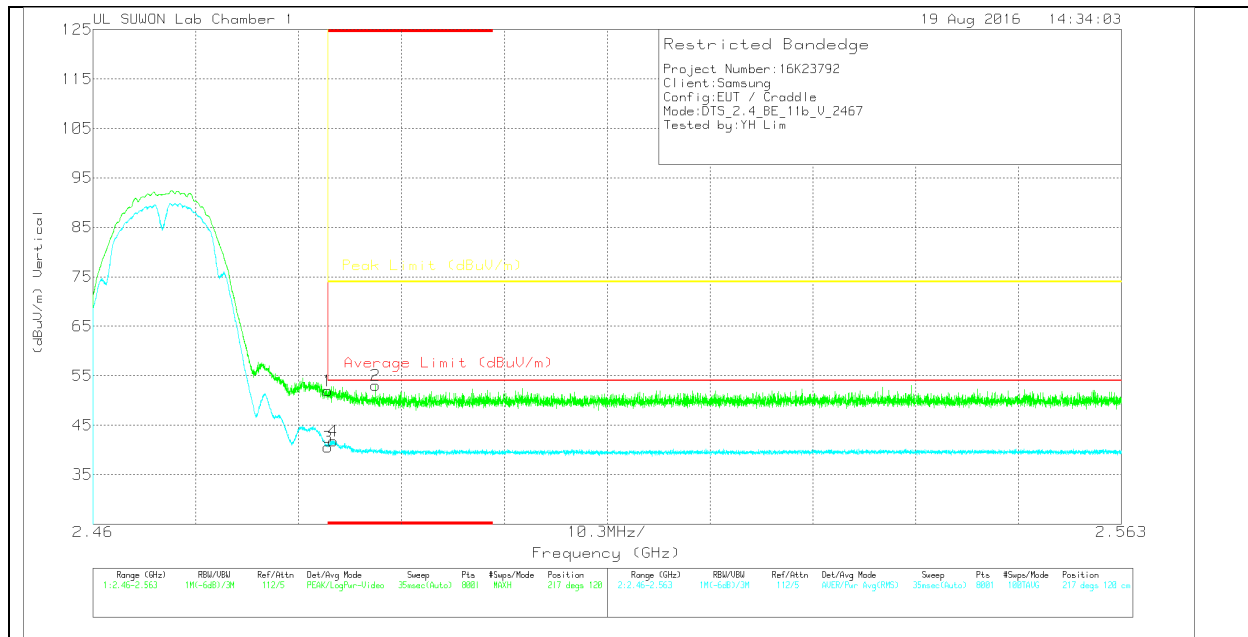
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117/001687 17_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|-----------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 46.42                | Pk  | 32                    | -28.3  | 0            | 50.12                      | -                      | -           | 74                  | -23.88         | 11             | 381         | H        |
| 2      | * 2.484         | 49.16                | Pk  | 32                    | -28.3  | 0            | 52.86                      | -                      | -           | 74                  | -21.14         | 11             | 381         | H        |
| 3      | * 2.484         | 37.03                | RMS | 32                    | -28.3  | 0            | 40.73                      | 54                     | -13.27      | -                   | -              | 11             | 381         | H        |
| 4      | * 2.484         | 38.51                | RMS | 32                    | -28.3  | 0            | 42.21                      | 54                     | -11.79      | -                   | -              | 11             | 381         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 48.27                | Pk  | 32                     | -28.3  | 0            | 51.97                      | -                      | -           | 74                  | -22.03         | 217            | 120         | V        |
| 2      | * 2.488         | 49.33                | Pk  | 32                     | -28.3  | 0            | 53.03                      | -                      | -           | 74                  | -20.97         | 217            | 120         | V        |
| 3      | * 2.484         | 36.88                | RMS | 32                     | -28.3  | 0            | 40.58                      | 54                     | -13.42      | -                   | -              | 217            | 120         | V        |
| 4      | * 2.484         | 38.1                 | RMS | 32                     | -28.3  | 0            | 41.8                       | 54                     | -12.2       | -                   | -              | 217            | 120         | V        |

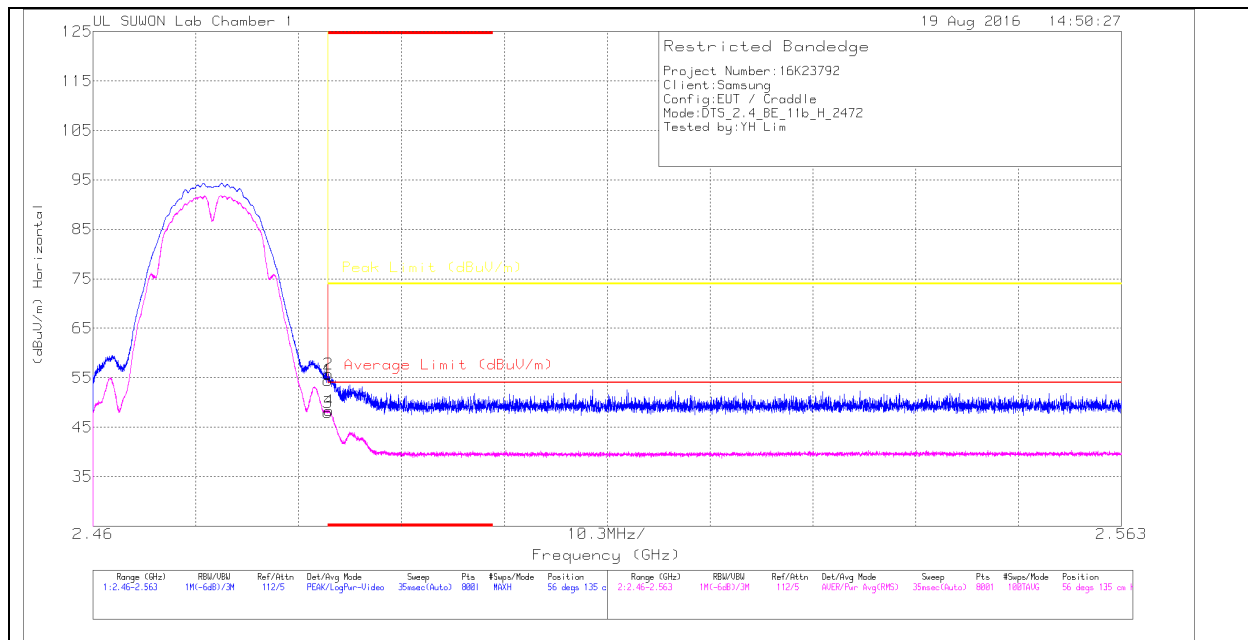
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (13 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

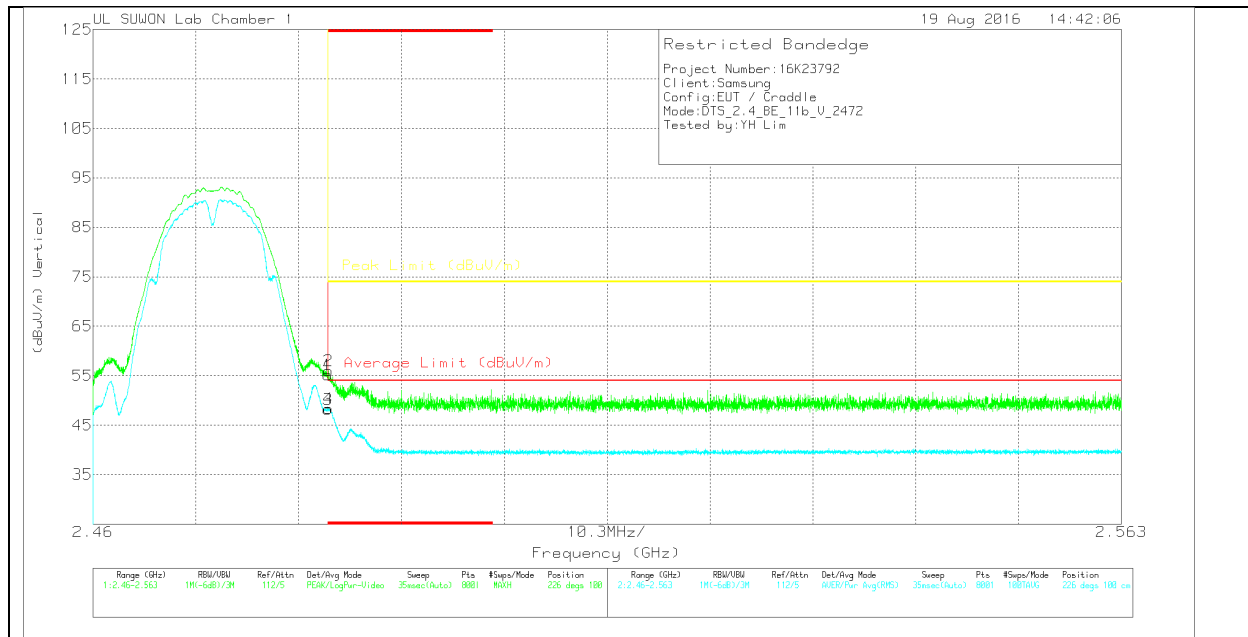
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 50.77                | Pk  | 32                     | -28.3  | 0            | 54.47                      | -                      | -           | 74                  | -19.53         | 56             | 135         | H        |
| 2      | * 2.484         | 52.07                | Pk  | 32                     | -28.3  | 0            | 55.77                      | -                      | -           | 74                  | -18.23         | 56             | 135         | H        |
| 3      | * 2.484         | 44.28                | RMS | 32                     | -28.3  | 0            | 47.98                      | 54                     | -6.02       | -                   | -              | 56             | 135         | H        |
| 4      | * 2.484         | 44.64                | RMS | 32                     | -28.3  | 0            | 48.34                      | 54                     | -5.66       | -                   | -              | 56             | 135         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 51.42                | Pk  | 32                     | -28.3  | 0            | 55.12                      | -                      | -           | 74                  | -18.88         | 226            | 100         | V        |
| 2      | * 2.484         | 52.28                | Pk  | 32                     | -28.3  | 0            | 55.98                      | -                      | -           | 74                  | -18.02         | 226            | 100         | V        |
| 3      | * 2.484         | 44.52                | RMS | 32                     | -28.3  | 0            | 48.22                      | 54                     | -5.78       | -                   | -              | 226            | 100         | V        |
| 4      | * 2.484         | 44.62                | RMS | 32                     | -28.3  | 0            | 48.32                      | 54                     | -5.68       | -                   | -              | 226            | 100         | V        |

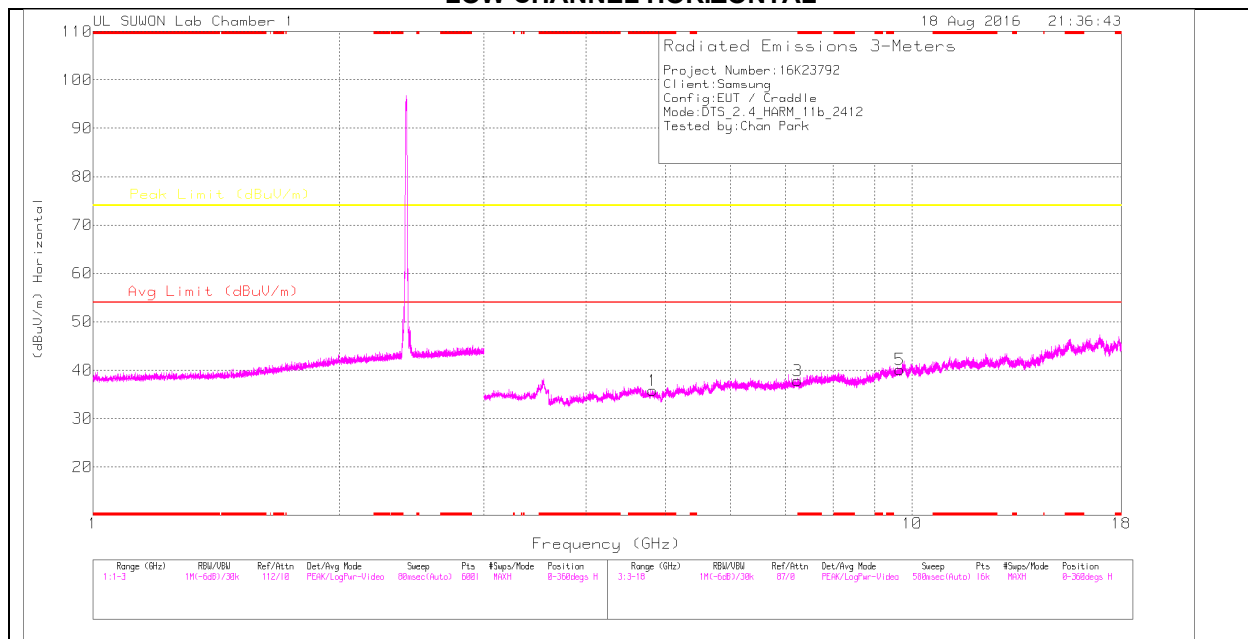
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

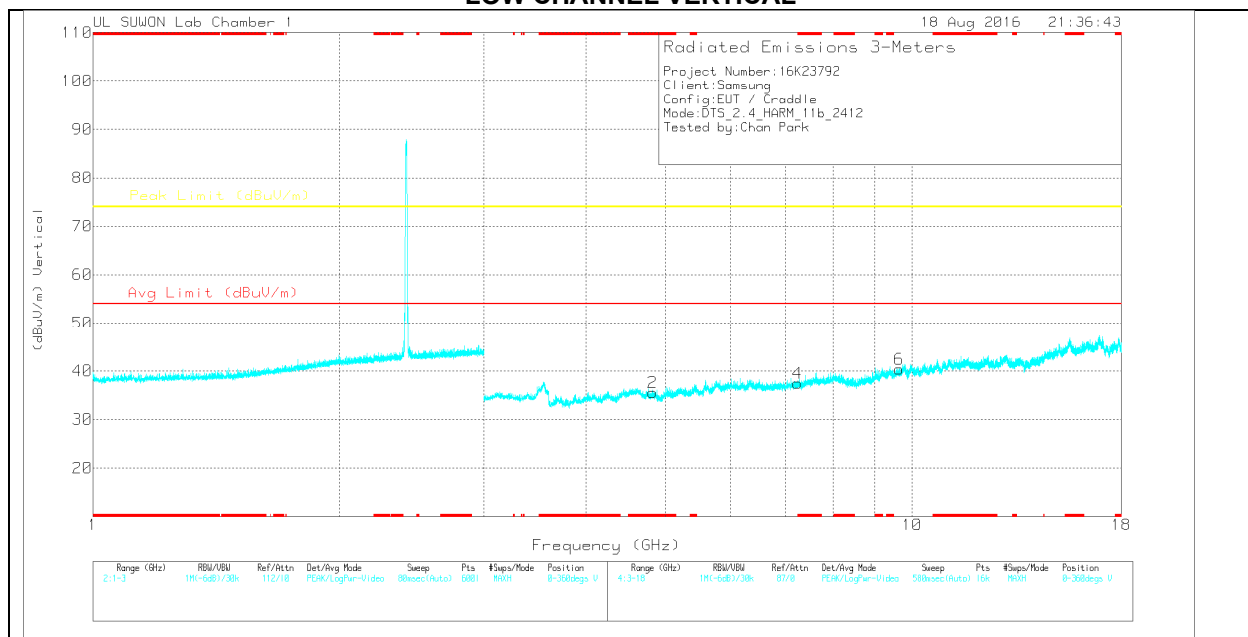
RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL HORIZONTAL



### LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## LOW CHANNEL DATA

### Trace Markers

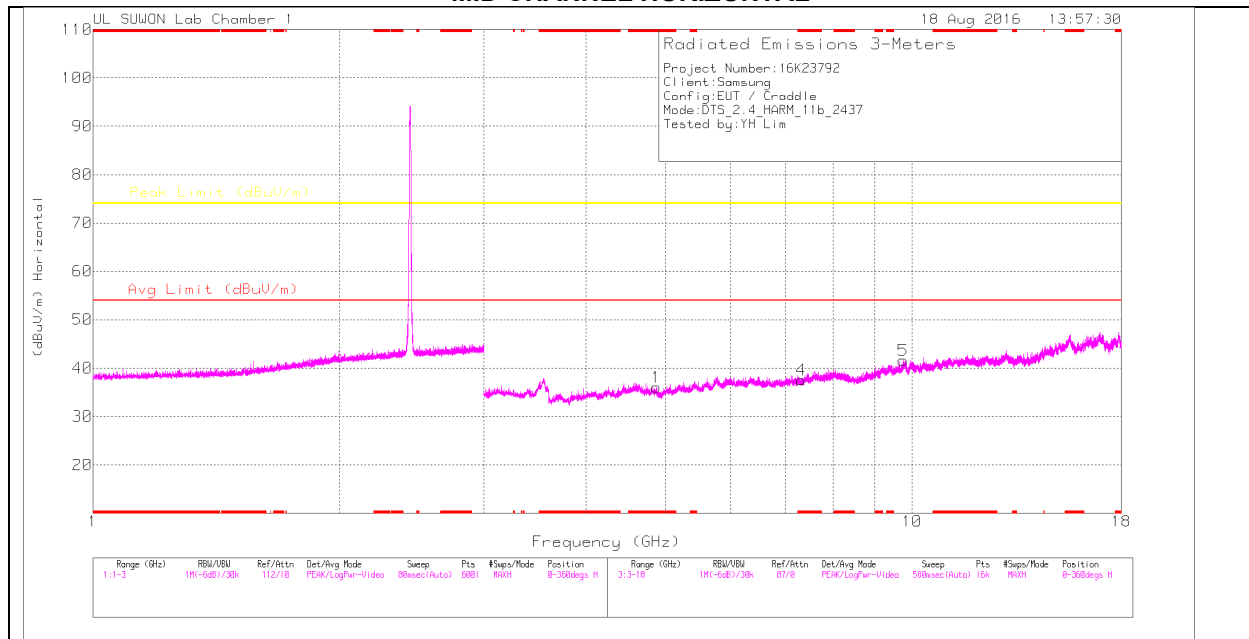
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.825         | 35.65                | PK  | 34                     | -33.8  | 0            | 35.85                      | -                  | -           | 74                  | -38.15      | 0-360          | 150         | H        |
| 3      | 7.241           | 33.01                | PK  | 35.7                   | -30.9  | 0            | 37.81                      | -                  | -           | 74                  | -36.19      | 0-360          | 150         | H        |
| 5      | 9.651           | 30.47                | PK  | 37.1                   | -27.4  | 0            | 40.17                      | -                  | -           | 74                  | -33.83      | 0-360          | 150         | H        |
| 2      | * 4.822         | 35.31                | PK  | 34                     | -33.8  | 0            | 35.51                      | -                  | -           | 74                  | -38.49      | 0-360          | 250         | V        |
| 4      | 7.244           | 32.68                | PK  | 35.7                   | -30.9  | 0            | 37.48                      | -                  | -           | 74                  | -36.52      | 0-360          | 250         | V        |
| 6      | 9.647           | 30.67                | PK  | 37.1                   | -27.4  | 0            | 40.37                      | -                  | -           | 74                  | -33.63      | 0-360          | 250         | V        |

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

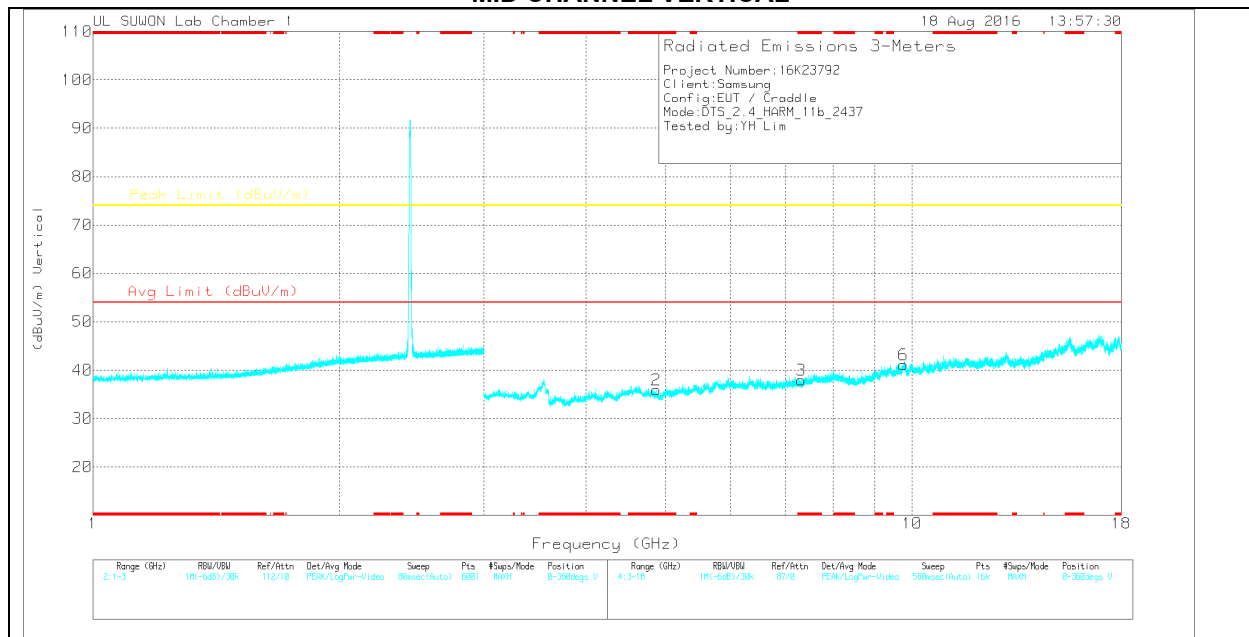
PK – Peak detector

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

### MID CHANNEL HORIZONTAL



### MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## MID CHANNEL DATA

### Trace Markers

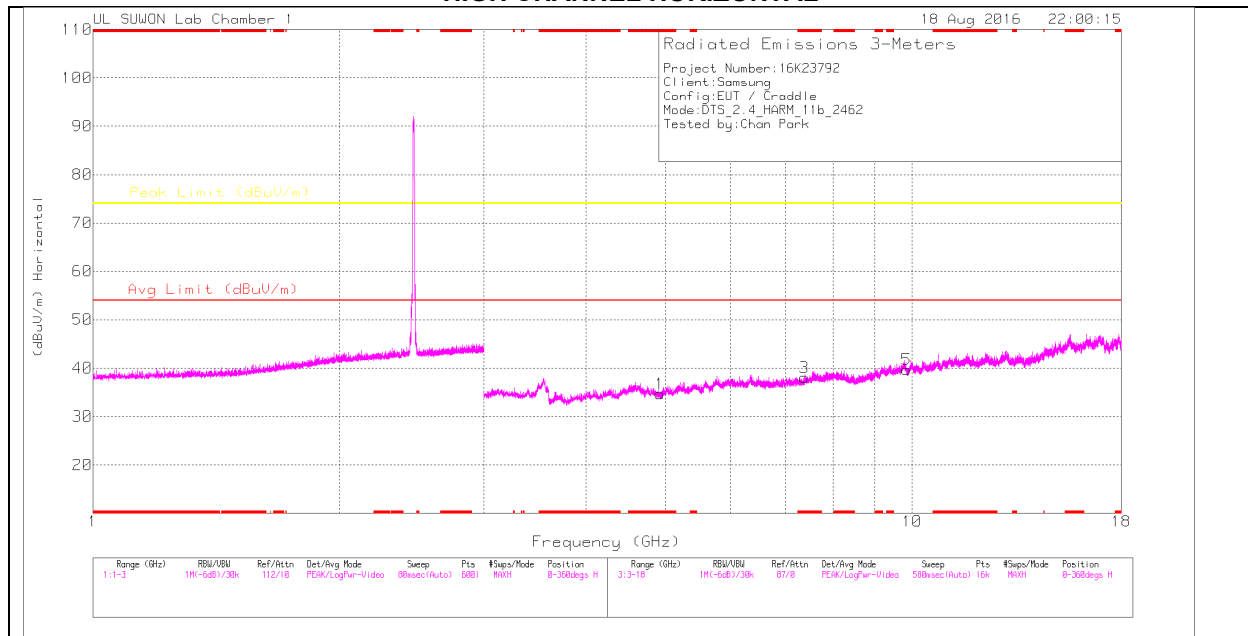
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.871         | 36.03                | Pk  | 34                     | -34    | 0            | 36.03                      | -                  | -           | 74                  | -37.97      | 0-360          | 250         | H        |
| 4      | * 7.323         | 32.64                | Pk  | 35.8                   | -30.9  | 0            | 37.54                      | -                  | -           | 74                  | -36.46      | 0-360          | 250         | H        |
| 5      | 9.749           | 31.23                | Pk  | 37.2                   | -26.8  | 0            | 41.63                      | -                  | -           | 74                  | -32.37      | 0-360          | 250         | H        |
| 2      | * 4.875         | 35.98                | Pk  | 34                     | -34    | 0            | 35.98                      | -                  | -           | 74                  | -38.02      | 0-360          | 250         | V        |
| 3      | * 7.322         | 33.06                | Pk  | 35.8                   | -30.9  | 0            | 37.96                      | -                  | -           | 74                  | -36.04      | 0-360          | 250         | V        |
| 6      | 9.75            | 30.67                | Pk  | 37.2                   | -26.8  | 0            | 41.07                      | -                  | -           | 74                  | -32.93      | 0-360          | 150         | V        |

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

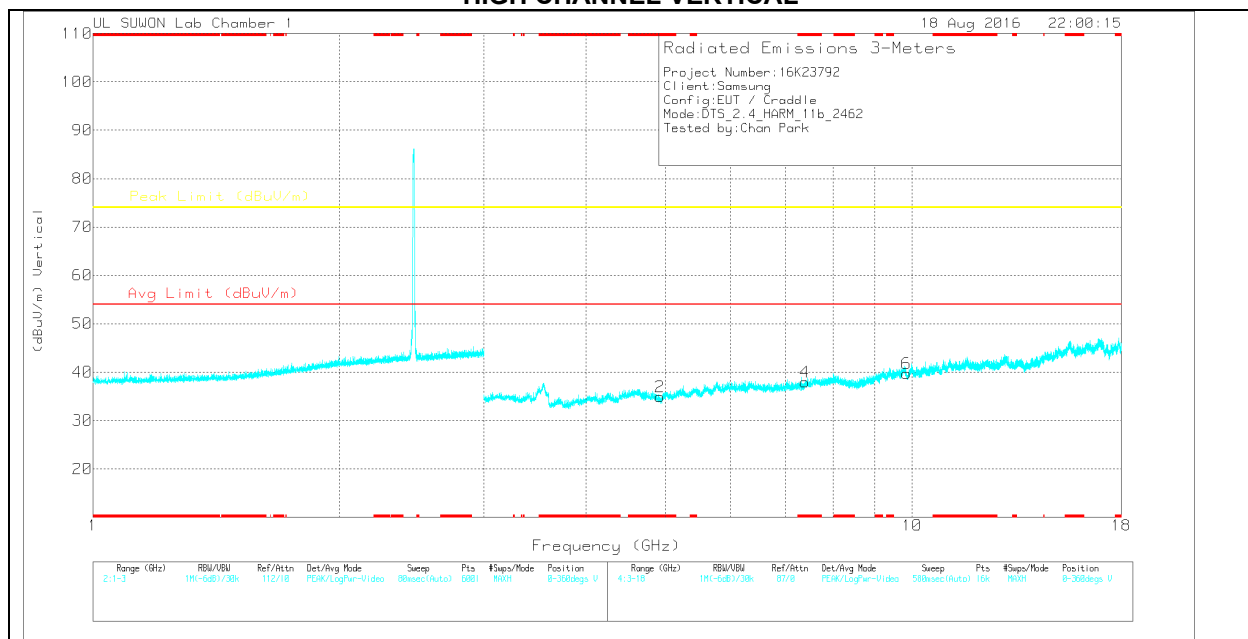
Pk – Peak detector

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

### HIGH CHANNEL HORIZONTAL



### HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## HIGH CHANNEL DATA

### Trace Markers

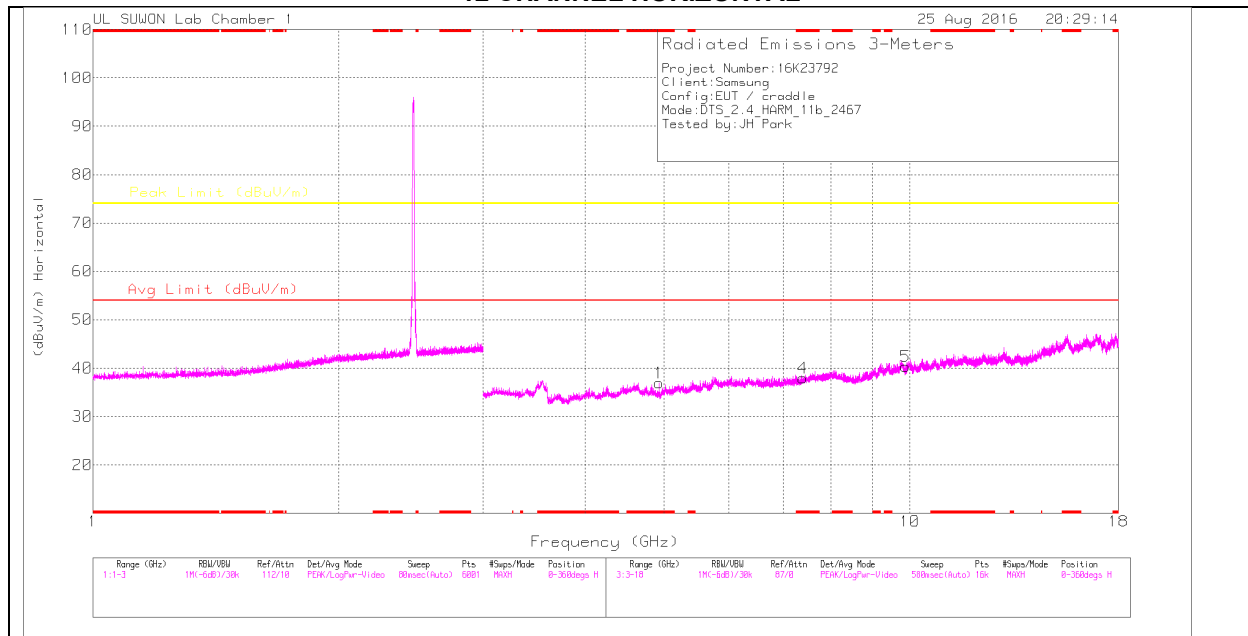
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.924         | 34.65                | PK  | 34                     | -34    | 0            | 34.65                      | -                  | -           | 74                  | -39.35      | 0-360          | 250         | H        |
| 3      | * 7.386         | 32.96                | PK  | 35.8                   | -30.7  | 0            | 38.06                      | -                  | -           | 74                  | -35.94      | 0-360          | 250         | H        |
| 5      | 9.848           | 30.02                | PK  | 37.3                   | -27.6  | 0            | 39.72                      | -                  | -           | 74                  | -34.28      | 0-360          | 150         | H        |
| 2      | * 4.924         | 34.88                | PK  | 34                     | -34    | 0            | 34.88                      | -                  | -           | 74                  | -39.12      | 0-360          | 150         | V        |
| 4      | * 7.392         | 32.72                | PK  | 35.8                   | -30.6  | 0            | 37.92                      | -                  | -           | 74                  | -36.08      | 0-360          | 250         | V        |
| 6      | 9.846           | 30.06                | PK  | 37.3                   | -27.6  | 0            | 39.76                      | -                  | -           | 74                  | -34.24      | 0-360          | 250         | V        |

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

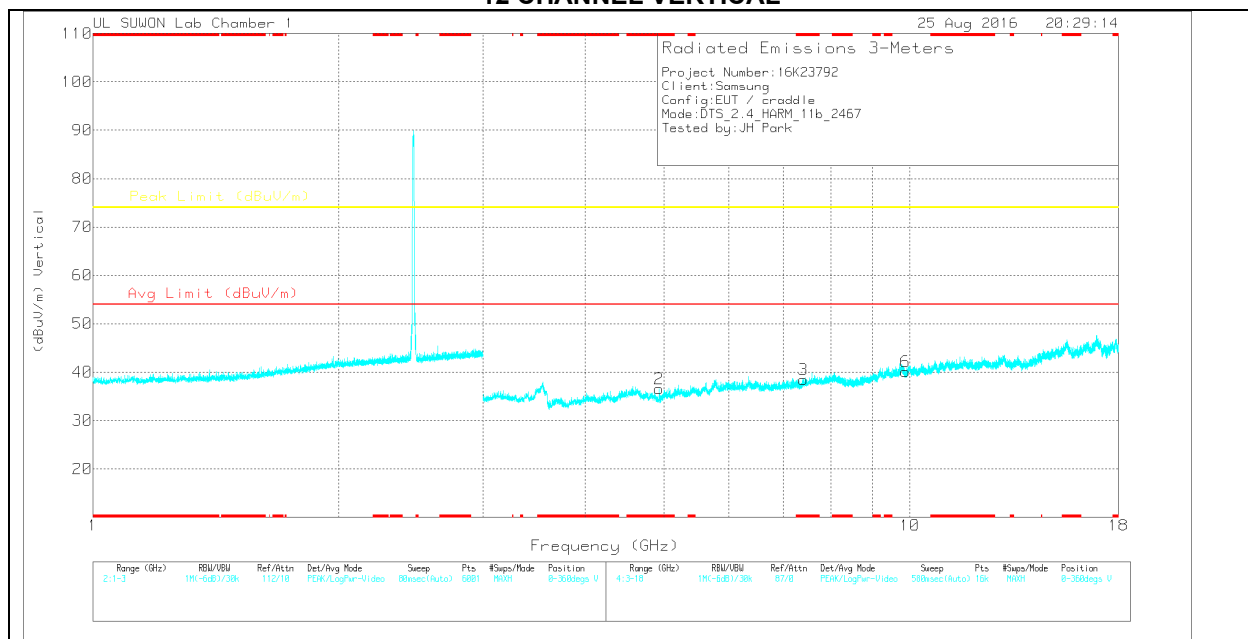
PK – Peak detector

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

### 12 CHANNEL HORIZONTAL



### 12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## 12 CHANNEL DATA

### Trace Markers

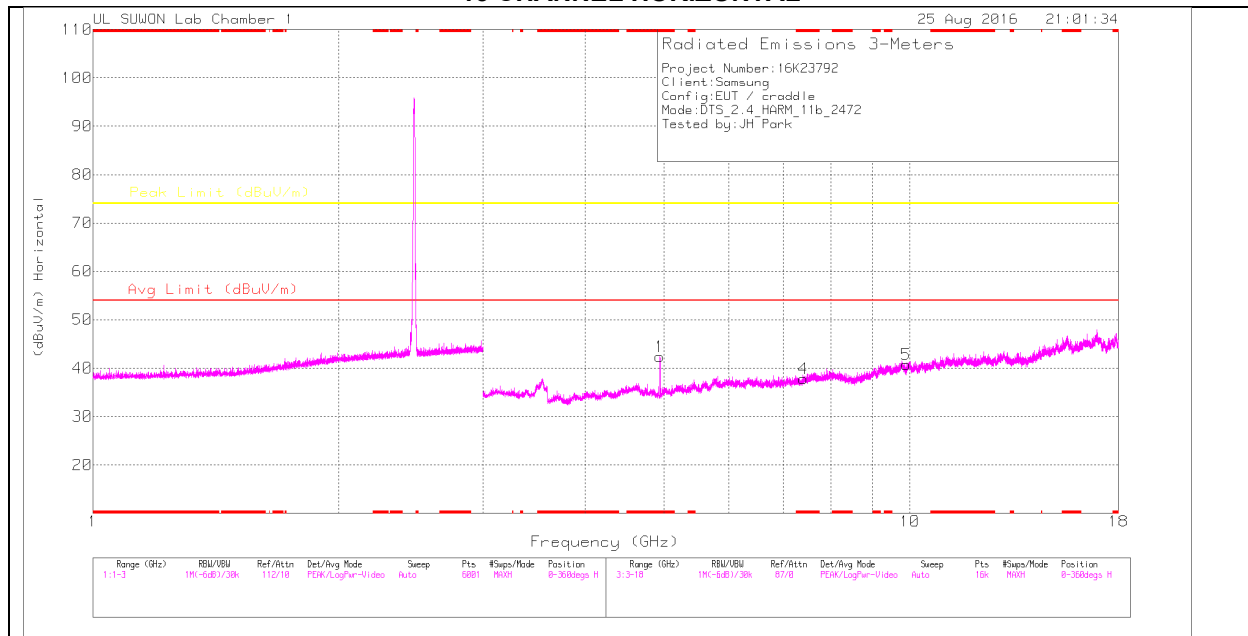
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.934         | 37                   | PK  | 34                     | -34    | 0            | 37                         | -                  | -           | 74                  | -37         | 0-360          | 250         | H        |
| 4      | * 7.398         | 32.8                 | PK  | 35.8                   | -30.6  | 0            | 38                         | -                  | -           | 74                  | -36         | 0-360          | 150         | H        |
| 5      | 9.87            | 30.93                | PK  | 37.3                   | -27.9  | 0            | 40.33                      | -                  | -           | 74                  | -33.67      | 0-360          | 250         | H        |
| 2      | * 4.933         | 36.53                | PK  | 34                     | -34    | 0            | 36.53                      | -                  | -           | 74                  | -37.47      | 0-360          | 150         | V        |
| 3      | * 7.402         | 33.32                | PK  | 35.8                   | -30.6  | 0            | 38.52                      | -                  | -           | 74                  | -35.48      | 0-360          | 150         | V        |
| 6      | 9.872           | 30.8                 | PK  | 37.3                   | -28    | 0            | 40.1                       | -                  | -           | 74                  | -33.9       | 0-360          | 150         | V        |

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

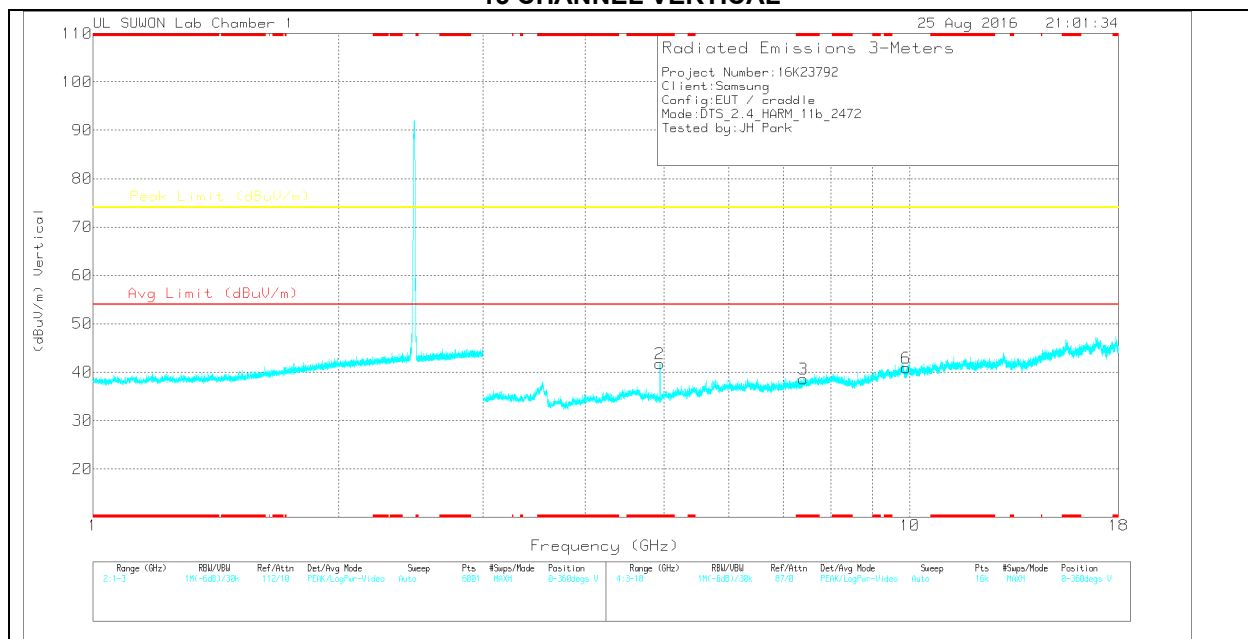
PK – Peak Detector

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

### 13 CHANNEL HORIZONTAL



### 13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

### 13 CHANNEL DATA

#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.943         | 42.35                | PK  | 34                     | -34    | 0            | 42.35                      | -                  | -           | 74                  | -31.65      | 0-360          | 250         | H        |
| 4      | * 7.403         | 32.62                | PK  | 35.8                   | -30.6  | 0            | 37.82                      | -                  | -           | 74                  | -36.18      | 0-360          | 250         | H        |
| 5      | 9.895           | 31.02                | PK  | 37.4                   | -27.7  | 0            | 40.72                      | -                  | -           | 74                  | -33.28      | 0-360          | 150         | H        |
| 2      | * 4.943         | 41.78                | PK  | 34                     | -34    | 0            | 41.78                      | -                  | -           | 74                  | -32.22      | 0-360          | 250         | V        |
| 3      | * 7.403         | 33.34                | PK  | 35.8                   | -30.6  | 0            | 38.54                      | -                  | -           | 74                  | -35.46      | 0-360          | 150         | V        |
| 6      | 9.898           | 31.12                | PK  | 37.4                   | -27.7  | 0            | 40.82                      | -                  | -           | 74                  | -33.18      | 0-360          | 150         | V        |

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

PK – Peak Detector

#### Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det  | 3117(001 68717)_1 50619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|-------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| * 4.944         | 49.1                 | PK2  | 34                      | -34    | 0            | 49.1                       | -                  | -           | 74                  | -24.9       | 21             | 100         | V        |
| * 4.944         | 41.11                | MAv1 | 34                      | -34    | 0            | 41.11                      | 54                 | -12.89      | -                   | -           | 21             | 100         | V        |
| * 4.944         | 49.04                | PK2  | 34                      | -34    | 0            | 49.04                      | -                  | -           | 74                  | -24.96      | 341            | 100         | H        |
| * 4.944         | 39.88                | MAv1 | 34                      | -34    | 0            | 39.88                      | 54                 | -14.12      | -                   | -           | 341            | 100         | H        |

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

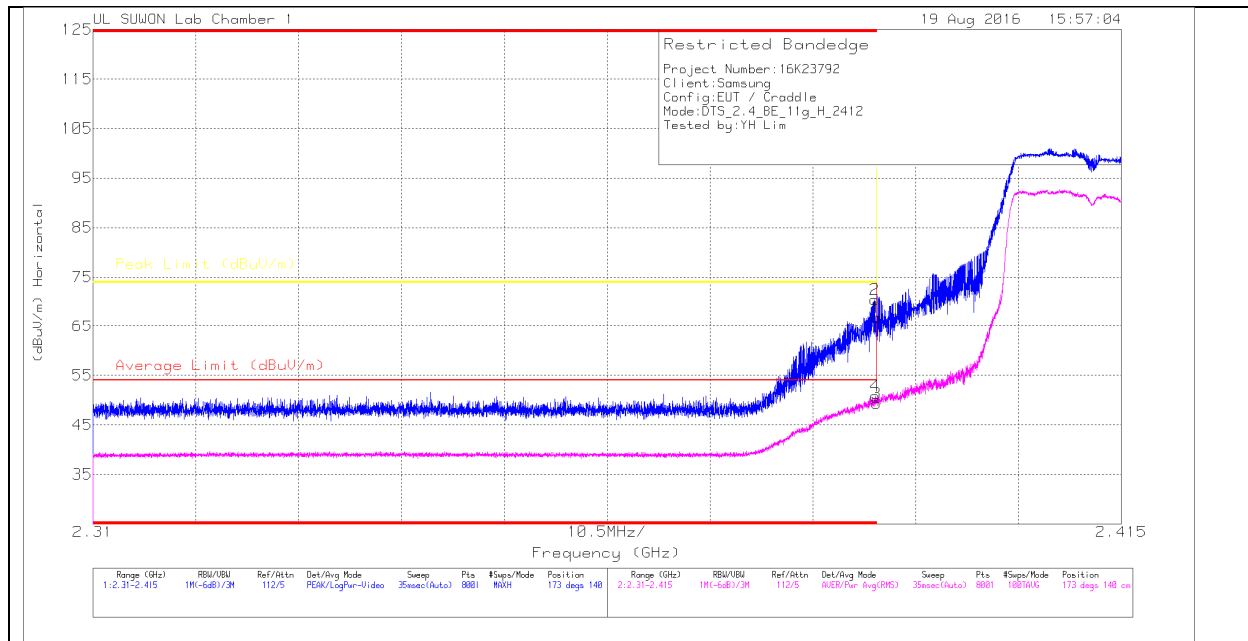
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## 11.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

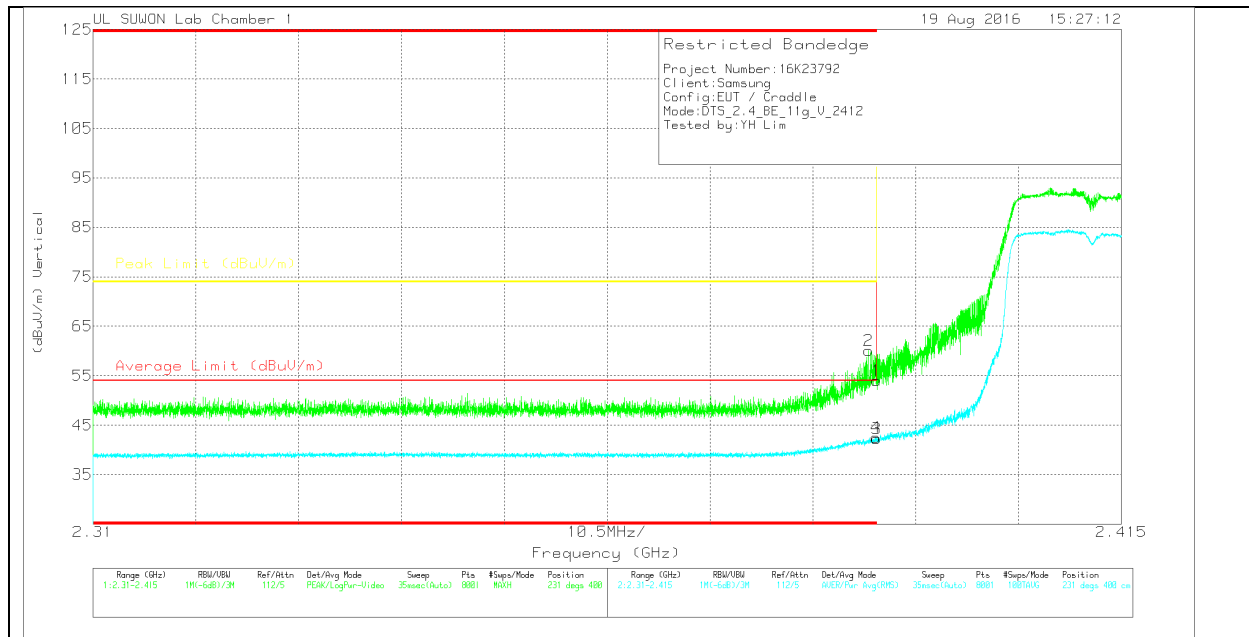
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 64.13                | Pk  | 31.8                   | -29    | 0            | 66.93                      | -                      | -           | 74                  | -7.07          | 173            | 140         | H        |
| 2      | * 2.39          | 67.66                | Pk  | 31.8                   | -29    | 0            | 70.46                      | -                      | -           | 74                  | -3.54          | 173            | 140         | H        |
| 3      | * 2.39          | 46.2                 | RMS | 31.8                   | -29    | .32          | 49.32                      | 54                     | -4.68       | -                   | -              | 173            | 140         | H        |
| 4      | * 2.39          | 47.75                | RMS | 31.8                   | -29    | .32          | 50.87                      | 54                     | -3.13       | -                   | -              | 173            | 140         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.39          | 51.19                | Pk  | 31.8                   | -29    | 0            | 53.99                      | -                      | -           | 74                  | -20.01         | 231            | 400         | V        |
| 2      | * 2.389         | 57.32                | Pk  | 31.8                   | -29    | 0            | 60.12                      | -                      | -           | 74                  | -13.88         | 231            | 400         | V        |
| 3      | * 2.39          | 39.12                | RMS | 31.8                   | -29    | .32          | 42.24                      | 54                     | -11.76      | -                   | -              | 231            | 400         | V        |
| 4      | * 2.39          | 39.36                | RMS | 31.8                   | -29    | .32          | 42.48                      | 54                     | -11.52      | -                   | -              | 231            | 400         | V        |

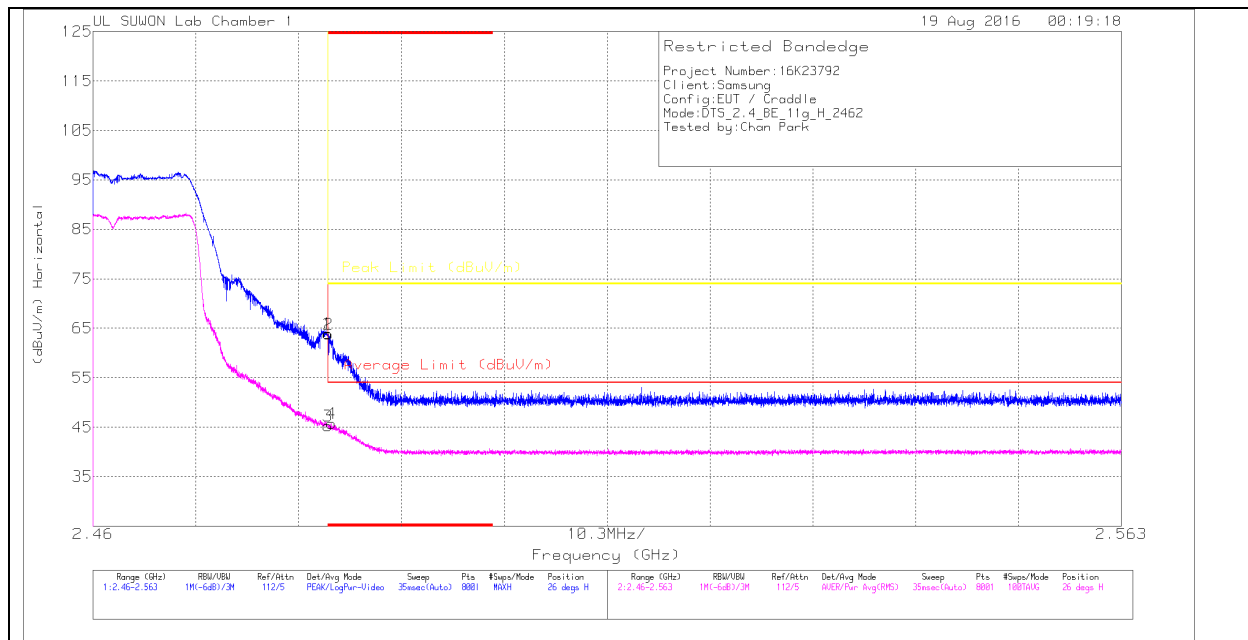
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (HIGH CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

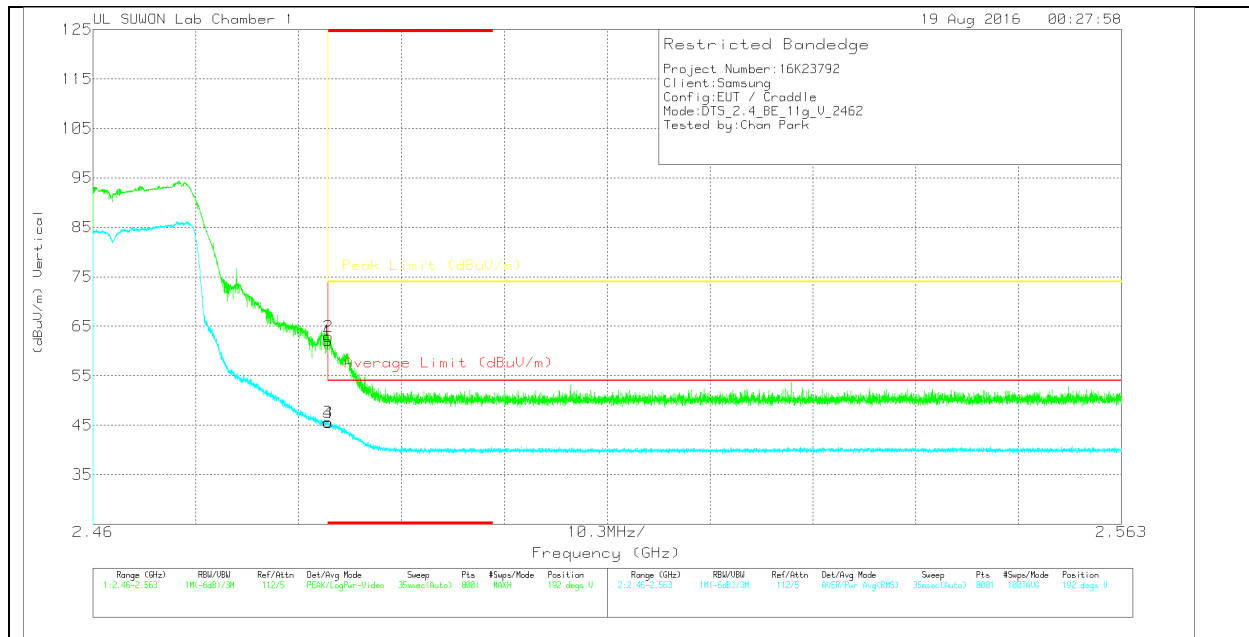
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Altitude (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|-----------------|-------------|----------|
| 1      | * 2.484         | 60.25                | Pk  | 32                     | -28.3  | 0            | 63.95                      | -                      | -           | 74                  | -10.05         | 26              | 140         | H        |
| 2      | * 2.484         | 60.06                | Pk  | 32                     | -28.3  | 0            | 63.76                      | -                      | -           | 74                  | -10.24         | 26              | 140         | H        |
| 3      | * 2.484         | 41.18                | RMS | 32                     | -28.3  | .32          | 45.2                       | 54                     | -8.8        | -                   | -              | 26              | 140         | H        |
| 4      | * 2.484         | 41.74                | RMS | 32                     | -28.3  | .32          | 45.76                      | 54                     | -8.24       | -                   | -              | 26              | 140         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 58.42                | Pk  | 32                     | -28.3  | 0            | 62.12                      | -                      | -           | 74                  | -11.88         | 192            | 120         | V        |
| 2      | * 2.484         | 59.2                 | Pk  | 32                     | -28.3  | 0            | 62.9                       | -                      | -           | 74                  | -11.1          | 192            | 120         | V        |
| 3      | * 2.484         | 41.57                | RMS | 32                     | -28.3  | .32          | 45.59                      | 54                     | -8.41       | -                   | -              | 192            | 120         | V        |
| 4      | * 2.484         | 41.48                | RMS | 32                     | -28.3  | .32          | 45.5                       | 54                     | -8.5        | -                   | -              | 192            | 120         | V        |

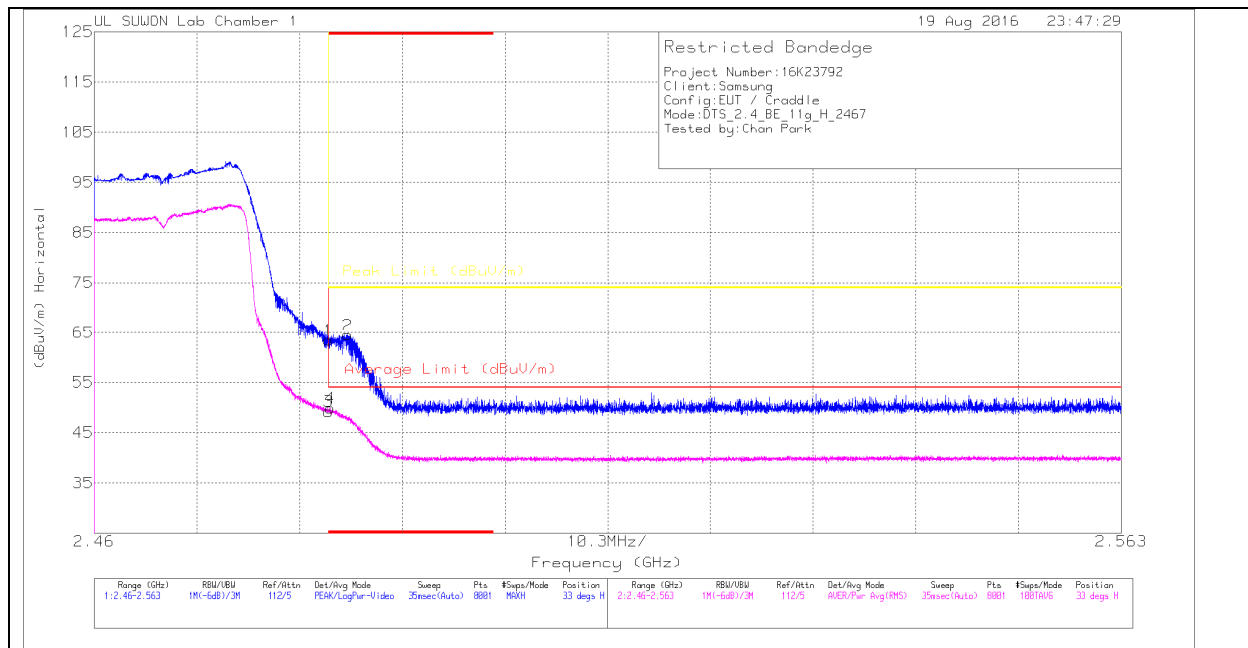
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (12 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

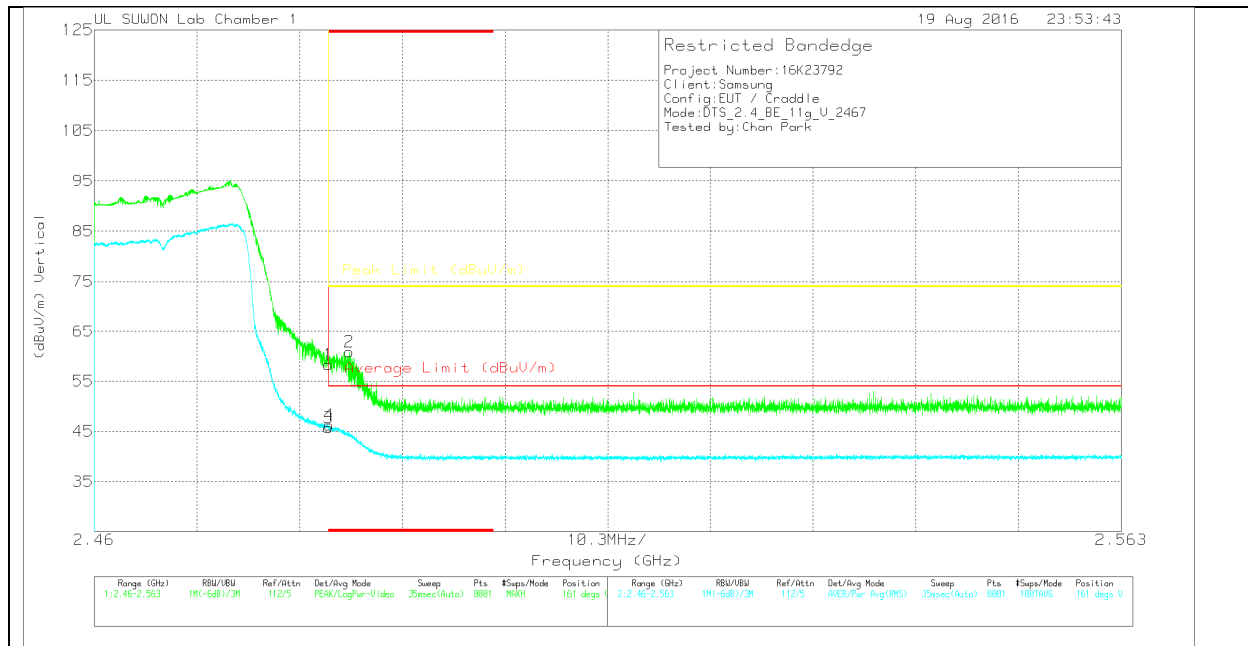
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|-----------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 59.74                | Pk  | 32                    | -28.3  | 0            | 63.44                      | -                      | -           | 74                  | -10.56         | 33             | 185         | H        |
| 2      | * 2.485         | 60.78                | Pk  | 32                    | -28.3  | 0            | 64.48                      | -                      | -           | 74                  | -9.52          | 33             | 185         | H        |
| 3      | * 2.484         | 45.2                 | RMS | 32                    | -28.3  | .32          | 49.22                      | 54                     | -4.78       | -                   | -              | 33             | 185         | H        |
| 4      | * 2.484         | 45.85                | RMS | 32                    | -28.3  | .32          | 49.87                      | 54                     | -4.13       | -                   | -              | 33             | 185         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | 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      | * 2.484         | 54.6                 | Pk  | 32                     | -28.3  | 0            | 58.3                       | -                      | -           | 74                  | -15.7          | 161            | 150         | V        |
| 2      | * 2.486         | 57.16                | Pk  | 32                     | -28.3  | 0            | 60.86                      | -                      | -           | 74                  | -13.14         | 161            | 150         | V        |
| 3      | * 2.484         | 41.72                | RMS | 32                     | -28.3  | .32          | 45.74                      | 54                     | -8.26       | -                   | -              | 161            | 150         | V        |
| 4      | * 2.484         | 42.23                | RMS | 32                     | -28.3  | .32          | 46.25                      | 54                     | -7.75       | -                   | -              | 161            | 150         | V        |

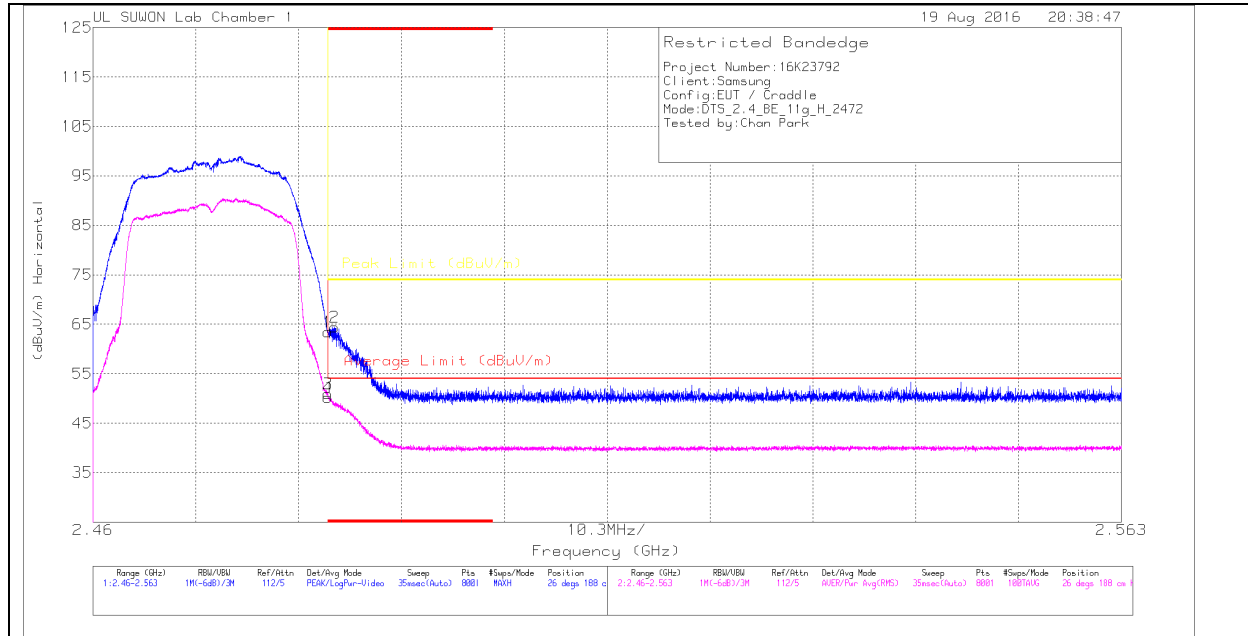
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (13 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

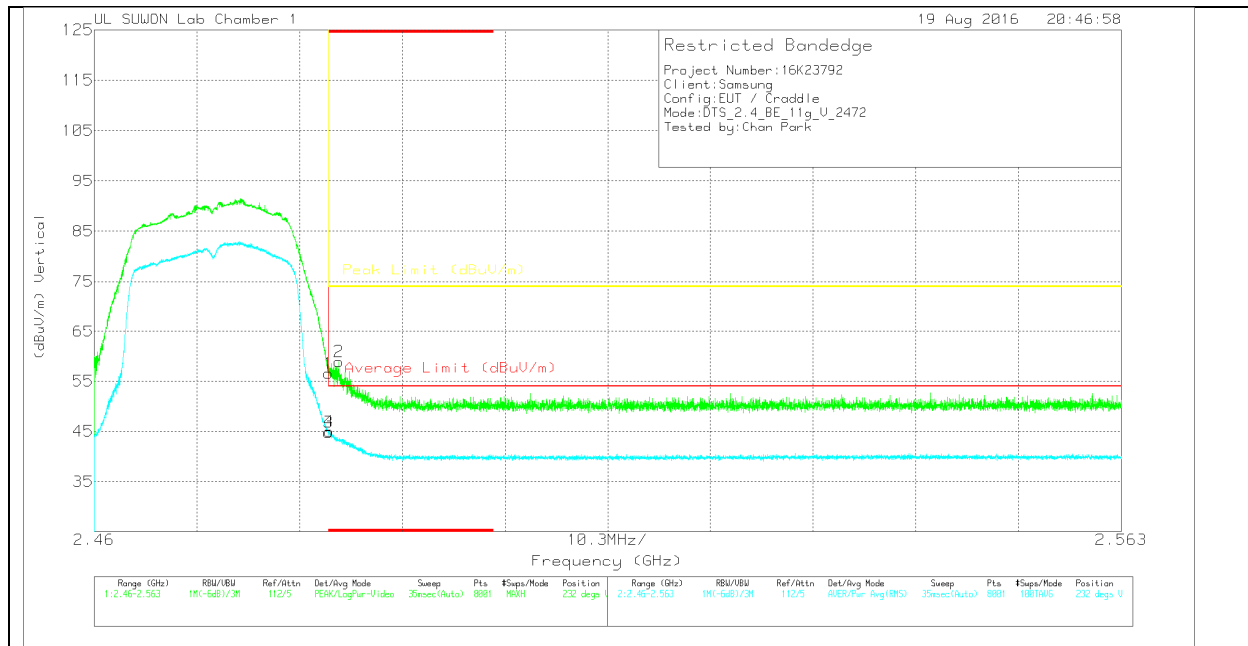
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117/001687 17_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|-----------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 59.74                | Pk  | 32                    | -28.3  | 0            | 63.44                      | -                      | -           | 74                  | -10.56         | 26             | 188         | H        |
| 2      | * 2.484         | 60.78                | Pk  | 32                    | -28.3  | 0            | 64.48                      | -                      | -           | 74                  | -9.52          | 26             | 188         | H        |
| 3      | * 2.484         | 46.93                | RMS | 32                    | -28.3  | .32          | 50.95                      | 54                     | -3.05       | -                   | -              | 26             | 188         | H        |
| 4      | * 2.484         | 46.23                | RMS | 32                    | -28.3  | .32          | 50.25                      | 54                     | -3.75       | -                   | -              | 26             | 188         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 52.88                | Pk  | 32                     | -28.3  | 0            | 56.58                      | -                      | -           | 74                  | -17.42         | 232            | 112         | V        |
| 2      | * 2.485         | 55.2                 | Pk  | 32                     | -28.3  | 0            | 58.9                       | -                      | -           | 74                  | -15.1          | 232            | 112         | V        |
| 3      | * 2.484         | 40.82                | RMS | 32                     | -28.3  | .32          | 44.84                      | 54                     | -9.16       | -                   | -              | 232            | 112         | V        |
| 4      | * 2.484         | 40.99                | RMS | 32                     | -28.3  | .32          | 45.01                      | 54                     | -8.99       | -                   | -              | 232            | 112         | V        |

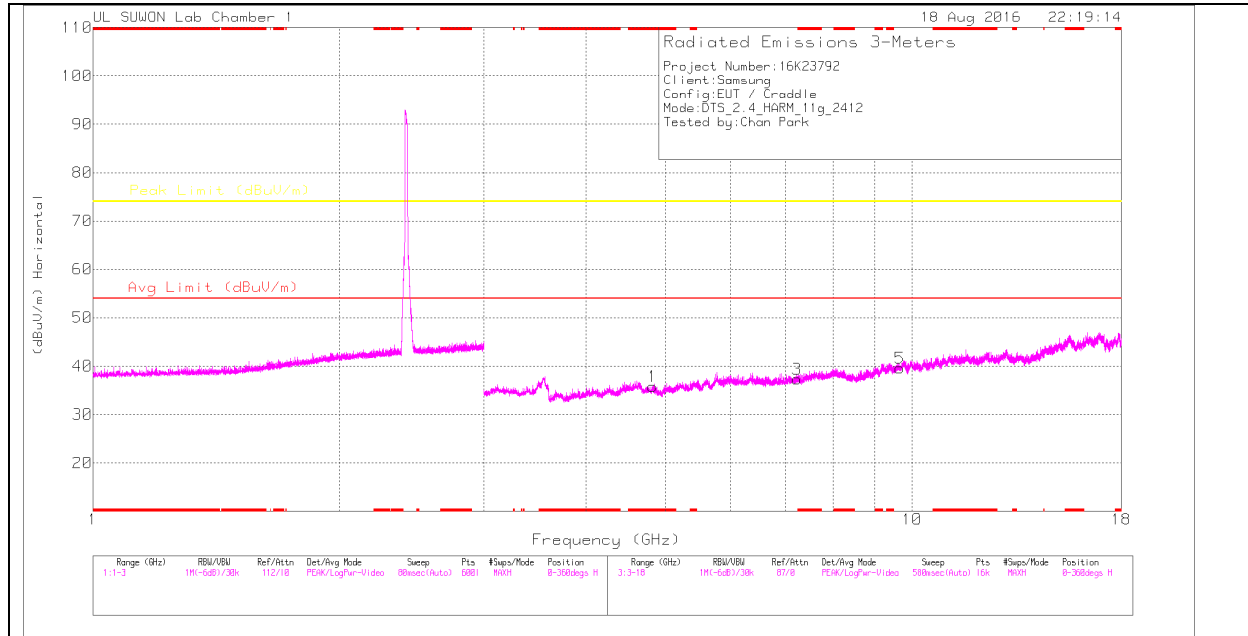
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

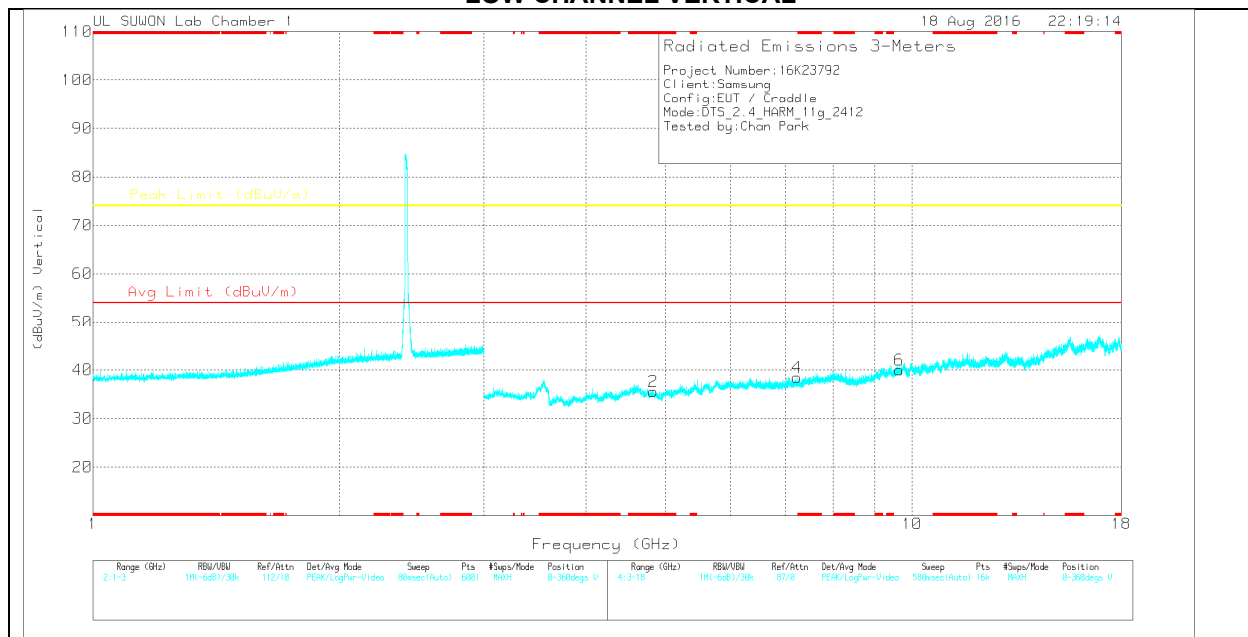
RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL HORIZONTAL



### LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## LOW CHANNEL DATA

### Trace Markers

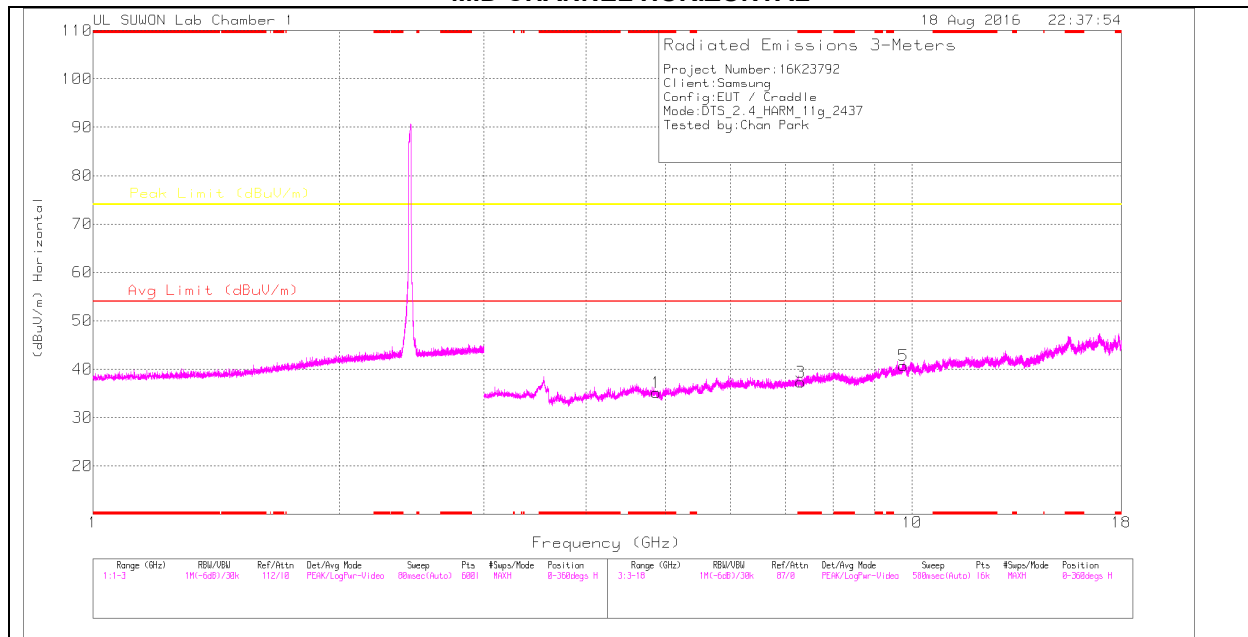
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.822         | 35.56                | PK  | 34                     | -33.8  | 0            | 35.76                      | -                  | -           | 74                  | -38.24      | 0-360          | 250         | H        |
| 3      | 7.238           | 32.54                | PK  | 35.7                   | -30.9  | 0            | 37.34                      | -                  | -           | 74                  | -36.66      | 0-360          | 250         | H        |
| 5      | 9.653           | 30.02                | PK  | 37.1                   | -27.5  | 0            | 39.62                      | -                  | -           | 74                  | -34.38      | 0-360          | 150         | H        |
| 2      | * 4.828         | 35.4                 | PK  | 34                     | -33.8  | 0            | 35.6                       | -                  | -           | 74                  | -38.4       | 0-360          | 250         | V        |
| 4      | 7.238           | 33.62                | PK  | 35.7                   | -30.9  | 0            | 38.42                      | -                  | -           | 74                  | -35.58      | 0-360          | 150         | V        |
| 6      | 9.648           | 30.23                | PK  | 37.1                   | -27.4  | 0            | 39.93                      | -                  | -           | 74                  | -34.07      | 0-360          | 150         | V        |

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

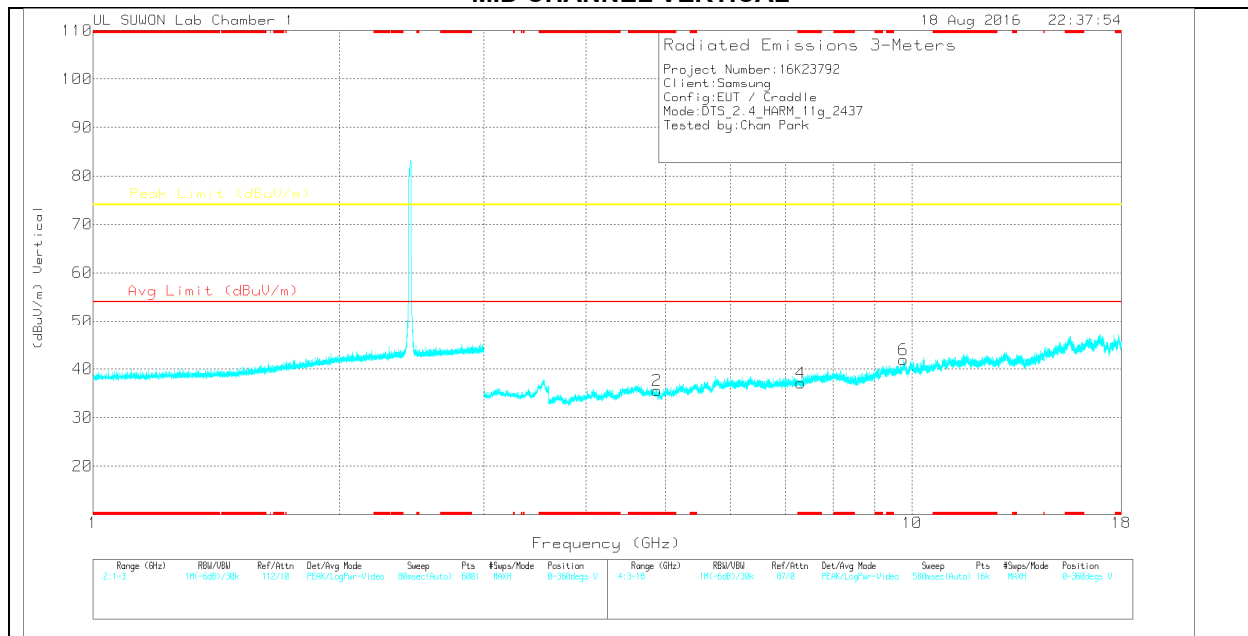
PK – Peak detector

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

### MID CHANNEL HORIZONTAL



### MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## MID CHANNEL DATA

### Trace Markers

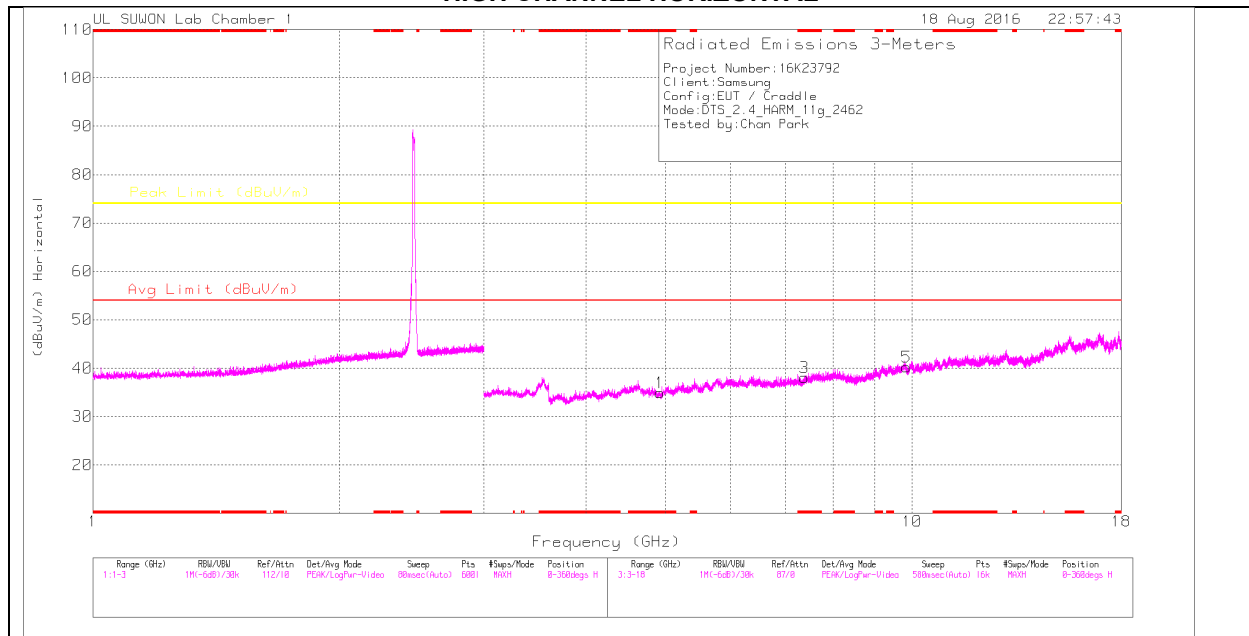
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.873         | 35.16                | PK  | 34                     | -34    | 0            | 35.16                      | -                  | -           | 74                  | -38.84      | 0-360          | 250         | H        |
| 3      | * 7.31          | 32.54                | PK  | 35.7                   | -30.9  | 0            | 37.34                      | -                  | -           | 74                  | -36.66      | 0-360          | 250         | H        |
| 5      | 9.751           | 30.4                 | PK  | 37.2                   | -26.8  | 0            | 40.8                       | -                  | -           | 74                  | -33.2       | 0-360          | 150         | H        |
| 2      | * 4.877         | 35.57                | PK  | 34                     | -34    | 0            | 35.57                      | -                  | -           | 74                  | -38.43      | 0-360          | 150         | V        |
| 4      | * 7.311         | 32.3                 | PK  | 35.7                   | -30.9  | 0            | 37.1                       | -                  | -           | 74                  | -36.9       | 0-360          | 150         | V        |
| 6      | 9.752           | 31.36                | PK  | 37.2                   | -26.7  | 0            | 41.86                      | -                  | -           | 74                  | -32.14      | 0-360          | 150         | V        |

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

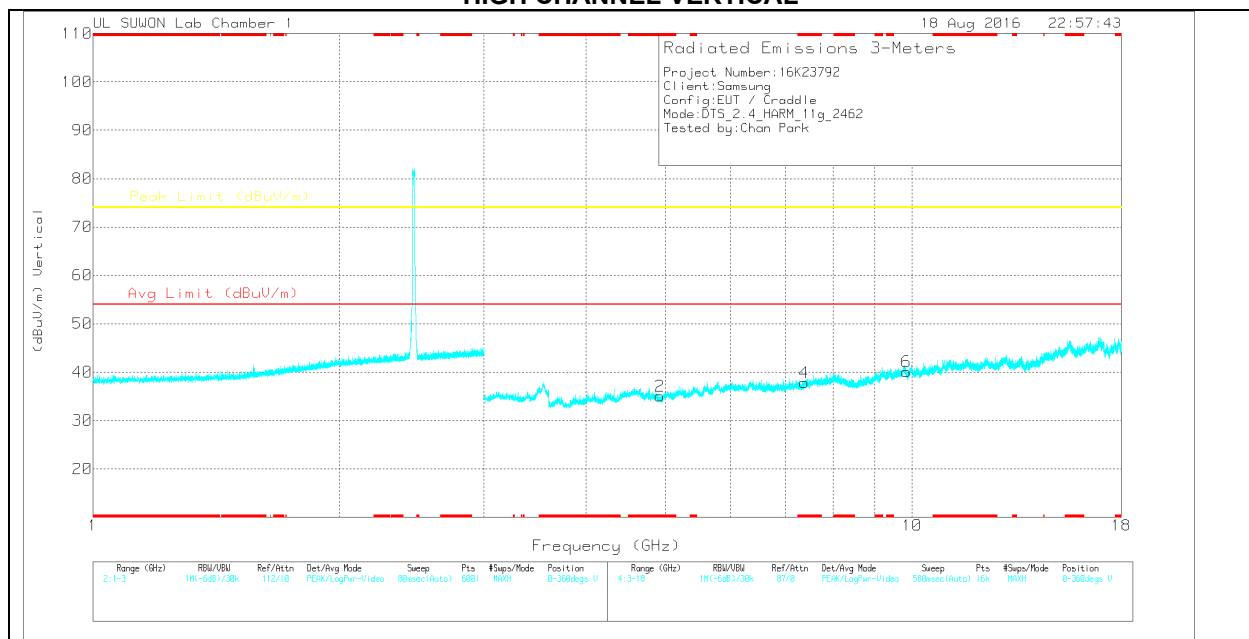
PK – Peak detector

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

### HIGH CHANNEL HORIZONTAL



### HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## HIGH CHANNEL DATA

### Trace Markers

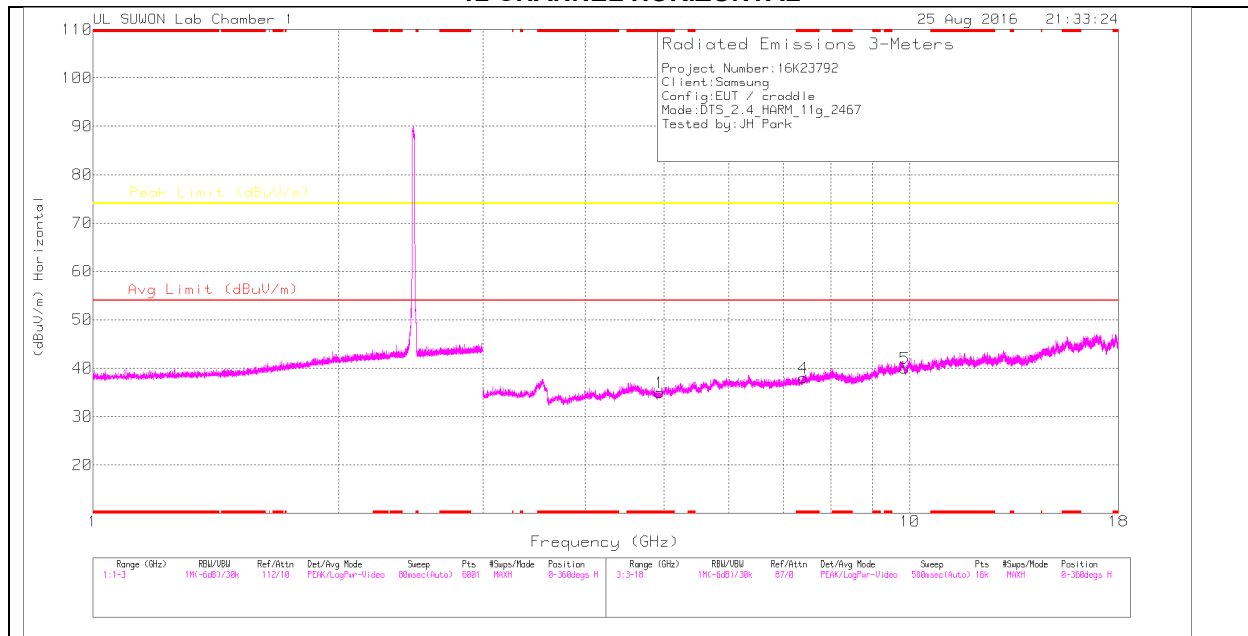
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.923         | 34.87                | PK  | 34                     | -34    | 0            | 34.87                      | -                  | -           | 74                  | -39.13      | 0-360          | 150         | H        |
| 3      | * 7.383         | 33.14                | PK  | 35.8                   | -30.8  | 0            | 38.14                      | -                  | -           | 74                  | -35.86      | 0-360          | 150         | H        |
| 5      | 9.849           | 30.58                | PK  | 37.3                   | -27.6  | 0            | 40.28                      | -                  | -           | 74                  | -33.72      | 0-360          | 150         | H        |
| 2      | * 4.924         | 35.01                | PK  | 34                     | -34    | 0            | 35.01                      | -                  | -           | 74                  | -38.99      | 0-360          | 250         | V        |
| 4      | * 7.386         | 32.79                | PK  | 35.8                   | -30.7  | 0            | 37.89                      | -                  | -           | 74                  | -36.11      | 0-360          | 150         | V        |
| 6      | 9.844           | 30.26                | PK  | 37.3                   | -27.5  | 0            | 40.06                      | -                  | -           | 74                  | -33.94      | 0-360          | 250         | V        |

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

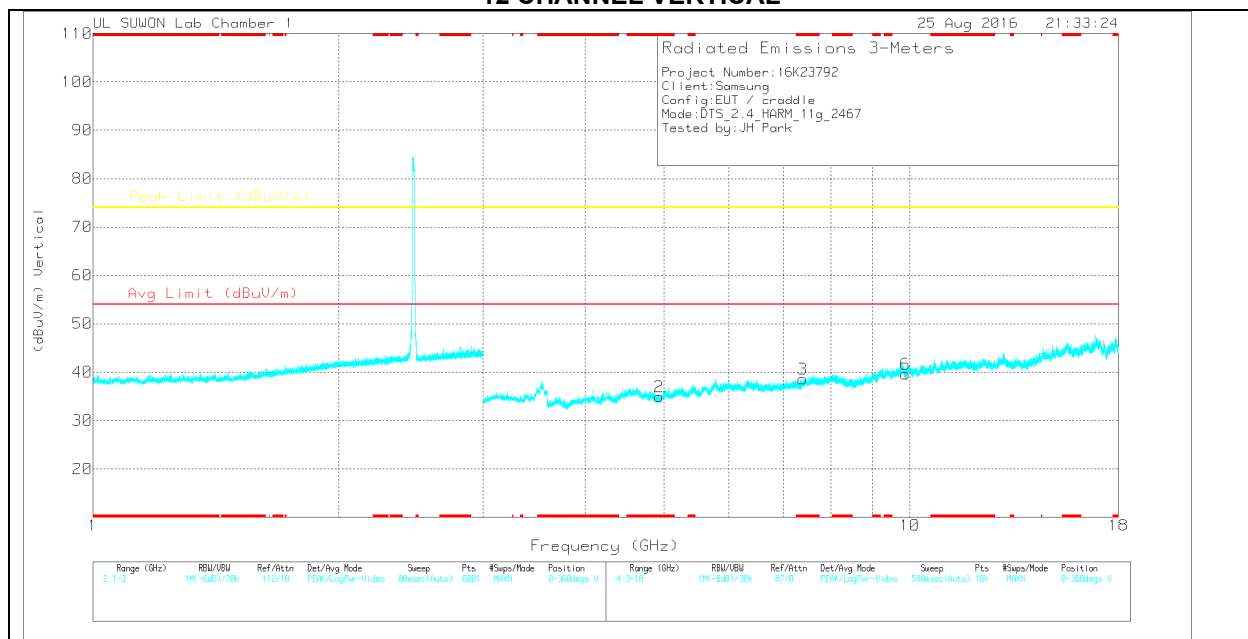
PK – Peak detector

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

### 12 CHANNEL HORIZONTAL



### 12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## 12 CHANNEL DATA

### Trace Markers

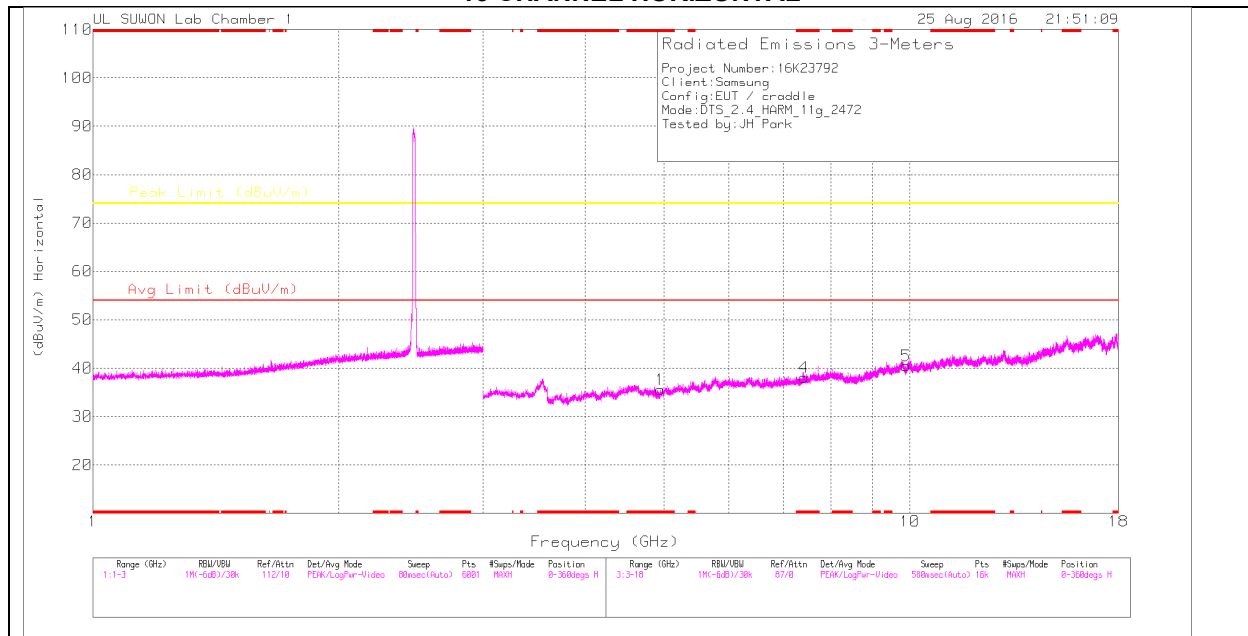
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.94          | 34.97                | PK  | 34                     | -34    | 0            | 34.97                      | -                  | -           | 74                  | -39.03      | 0-360          | 250         | H        |
| 4      | * 7.405         | 32.8                 | PK  | 35.8                   | -30.6  | 0            | 38                         | -                  | -           | 74                  | -36         | 0-360          | 150         | H        |
| 5      | 9.866           | 30.57                | PK  | 37.3                   | -27.9  | 0            | 39.97                      | -                  | -           | 74                  | -34.03      | 0-360          | 150         | H        |
| 2      | * 4.934         | 34.98                | PK  | 34                     | -34    | 0            | 34.98                      | -                  | -           | 74                  | -39.02      | 0-360          | 150         | V        |
| 3      | * 7.395         | 33.35                | PK  | 35.8                   | -30.6  | 0            | 38.55                      | -                  | -           | 74                  | -35.45      | 0-360          | 150         | V        |
| 6      | 9.869           | 30.26                | PK  | 37.3                   | -27.9  | 0            | 39.66                      | -                  | -           | 74                  | -34.34      | 0-360          | 250         | V        |

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

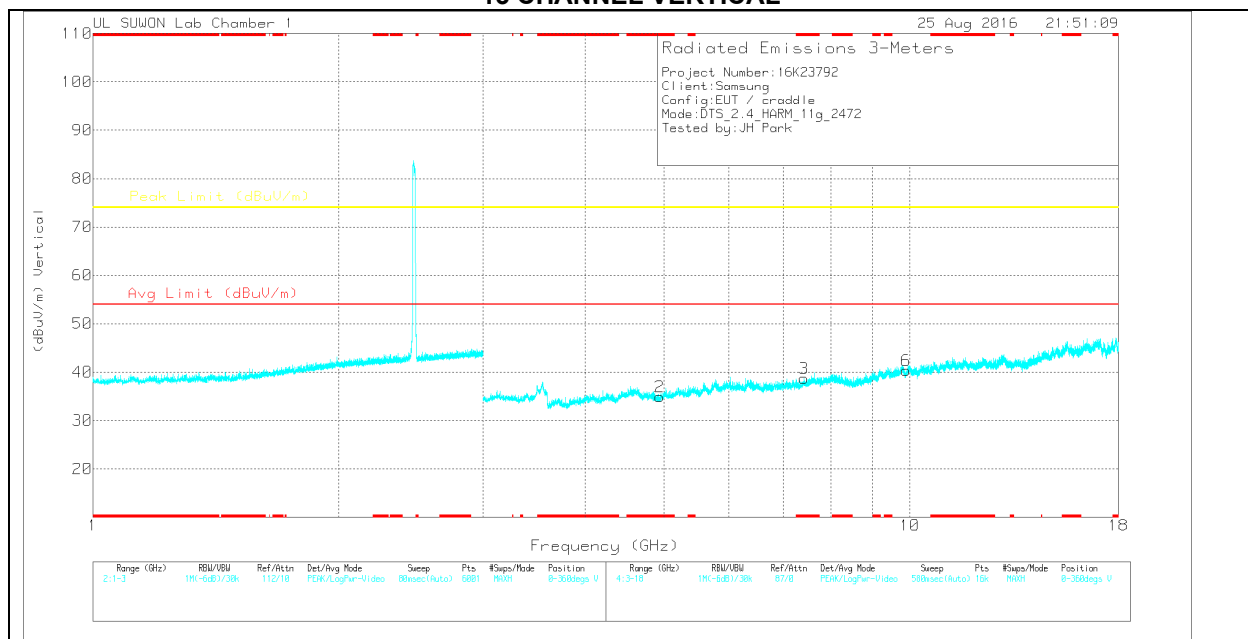
PK – Peak Detector

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

### 13 CHANNEL HORIZONTAL



### 13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

### 13 CHANNEL DATA

#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.947         | 35.56                | PK  | 34                     | -34    | 0            | 35.56                      | -                  | -           | 74                  | -38.44      | 0-360          | 250         | H        |
| 4      | * 7.417         | 32.99                | PK  | 35.8                   | -30.7  | 0            | 38.09                      | -                  | -           | 74                  | -35.91      | 0-360          | 250         | H        |
| 5      | 9.894           | 30.94                | PK  | 37.4                   | -27.8  | 0            | 40.54                      | -                  | -           | 74                  | -33.46      | 0-360          | 250         | H        |
| 2      | * 4.943         | 34.91                | PK  | 34                     | -34    | 0            | 34.91                      | -                  | -           | 74                  | -39.09      | 0-360          | 150         | V        |
| 3      | * 7.423         | 33.76                | PK  | 35.8                   | -30.8  | 0            | 38.76                      | -                  | -           | 74                  | -35.24      | 0-360          | 250         | V        |
| 6      | 9.889           | 30.87                | PK  | 37.3                   | -27.8  | 0            | 40.37                      | -                  | -           | 74                  | -33.63      | 0-360          | 250         | V        |

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

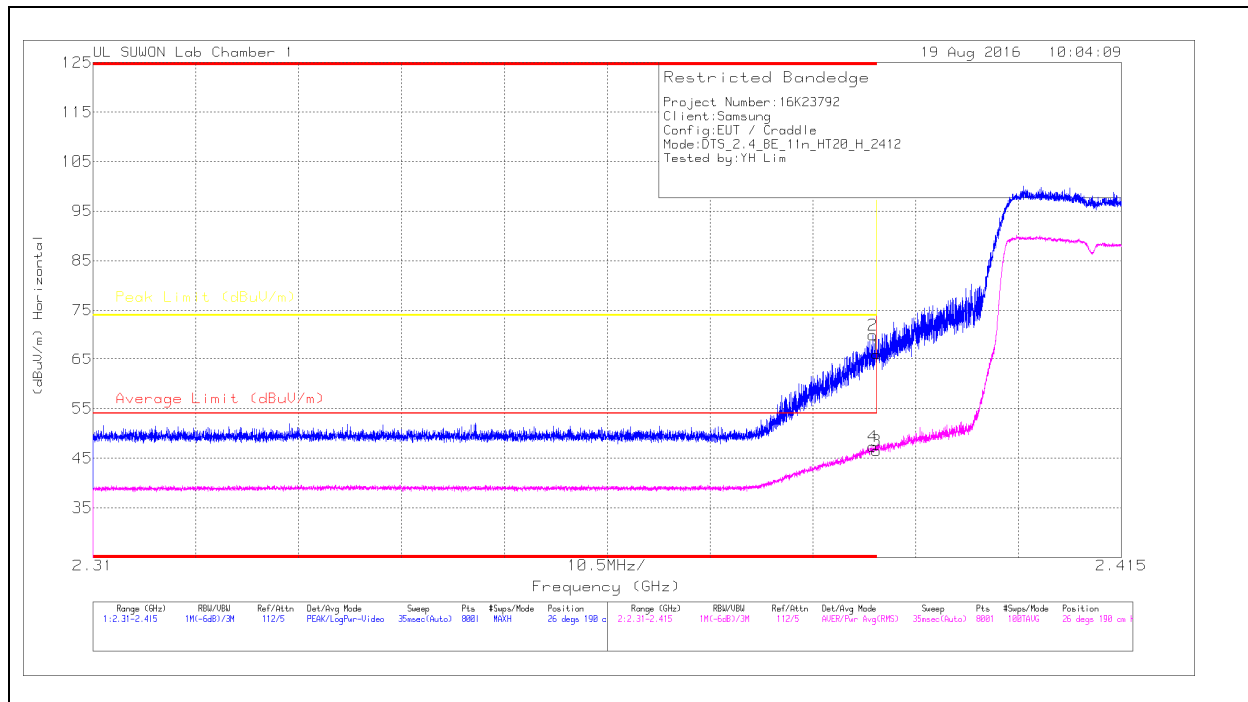
PK – Peak Detector

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

### 11.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)

#### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

##### Trace Markers

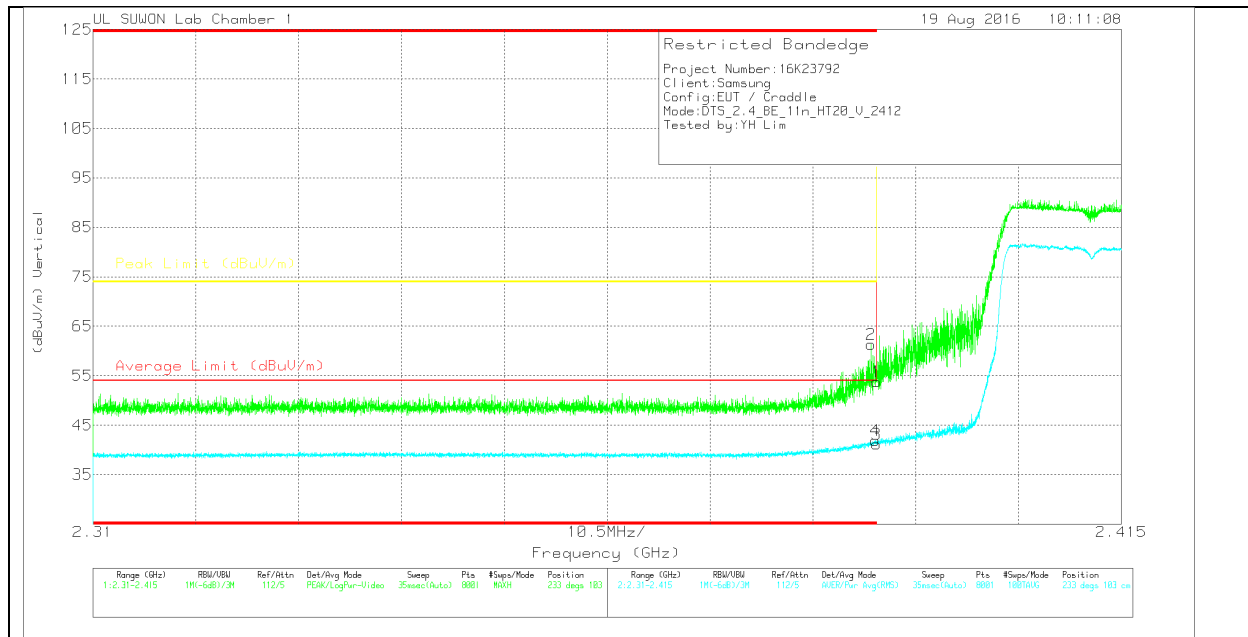
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619 | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Altitude (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|-----------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|-----------------|-------------|----------|
| 1      | * 2.39          | 63.21                | Pk  | 31.8                  | -29    | 0            | 66.01                      | -                      | -           | 74                  | -7.99          | 26              | 190         | H        |
| 2      | * 2.39          | 67.14                | Pk  | 31.8                  | -29    | 0            | 69.94                      | -                      | -           | 74                  | -4.06          | 26              | 190         | H        |
| 3      | * 2.39          | 43.37                | RMS | 31.8                  | -29    | .34          | 46.51                      | 54                     | -7.49       | -                   | -              | 26              | 190         | H        |
| 4      | * 2.39          | 44.24                | RMS | 31.8                  | -29    | .34          | 47.38                      | 54                     | -6.62       | -                   | -              | 26              | 190         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.39          | 50.96                | Pk  | 31.8                   | -29    | 0            | 53.76                      | -                      | -           | 74                  | -20.24         | 233            | 103         | V        |
| 2      | * 2.389         | 58.54                | Pk  | 31.8                   | -29    | 0            | 61.34                      | -                      | -           | 74                  | -12.66         | 233            | 103         | V        |
| 3      | * 2.39          | 37.99                | RMS | 31.8                   | -29    | .34          | 41.13                      | 54                     | -12.87      | -                   | -              | 233            | 103         | V        |
| 4      | * 2.39          | 38.73                | RMS | 31.8                   | -29    | .34          | 41.87                      | 54                     | -12.13      | -                   | -              | 233            | 103         | V        |

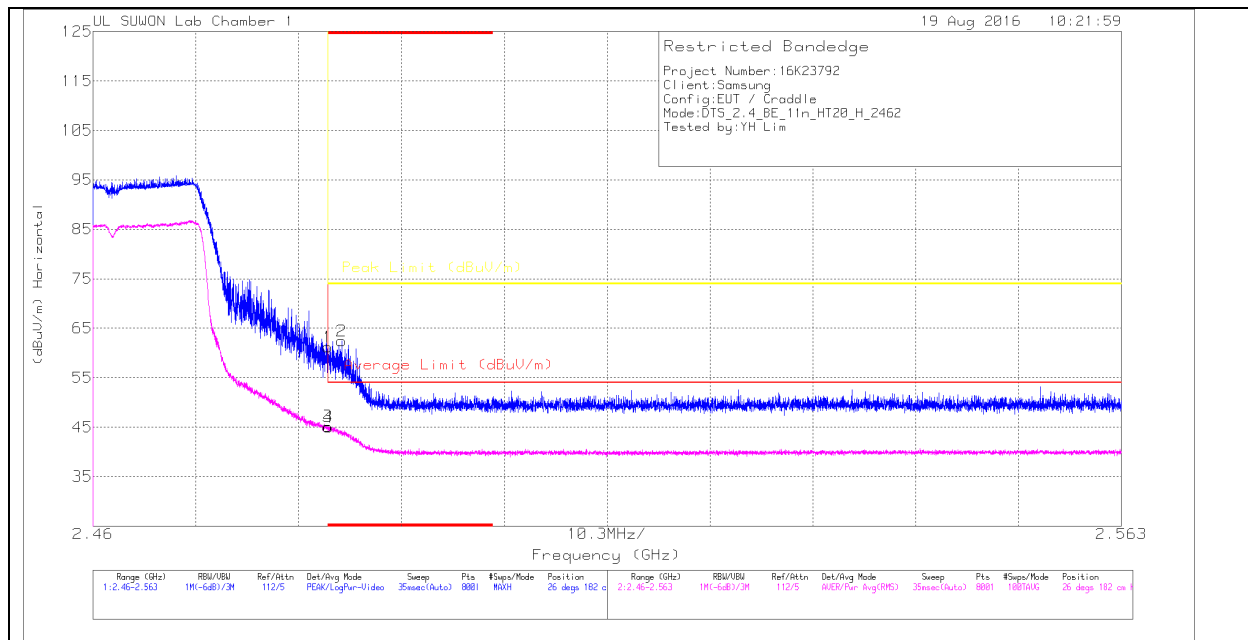
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (HIGH CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

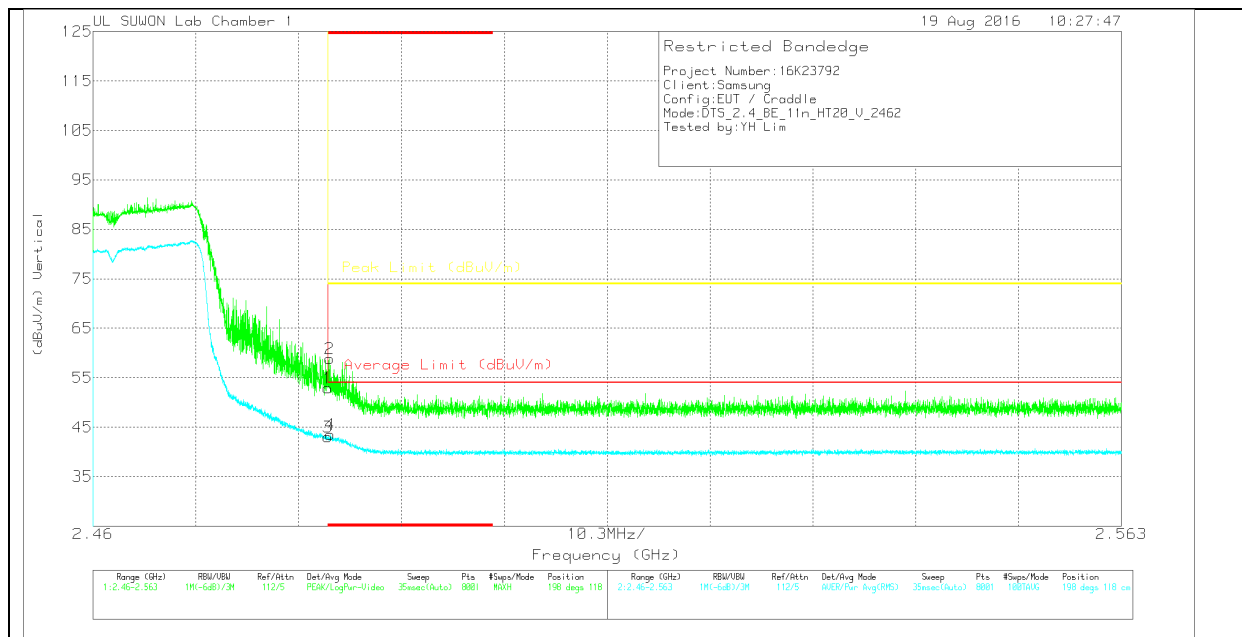
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 57.48                | Pk  | 32                     | -28.3  | 0            | 61.18                      | -                      | -           | 74                  | -12.82         | 26             | 182         | H        |
| 2      | * 2.485         | 58.79                | Pk  | 32                     | -28.3  | 0            | 62.49                      | -                      | -           | 74                  | -11.51         | 26             | 182         | H        |
| 3      | * 2.484         | 41.15                | RMS | 32                     | -28.3  | .34          | 45.19                      | 54                     | -8.81       | -                   | -              | 26             | 182         | H        |
| 4      | * 2.484         | 41.01                | RMS | 32                     | -28.3  | .34          | 45.05                      | 54                     | -8.95       | -                   | -              | 26             | 182         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_2 | 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      | * 2.484         | 49.2                 | Pk  | 32                     | -28.3  | 0            | 52.9                       | -                      | -           | 74                  | -21.1          | 198            | 118         | V        |
| 2      | * 2.484         | 55.19                | Pk  | 32                     | -28.3  | 0            | 58.89                      | -                      | -           | 74                  | -15.11         | 198            | 118         | V        |
| 3      | * 2.484         | 39.04                | RMS | 32                     | -28.3  | .34          | 43.08                      | 54                     | -10.92      | -                   | -              | 198            | 118         | V        |
| 4      | * 2.484         | 39.51                | RMS | 32                     | -28.3  | .34          | 43.55                      | 54                     | -10.45      | -                   | -              | 198            | 118         | V        |

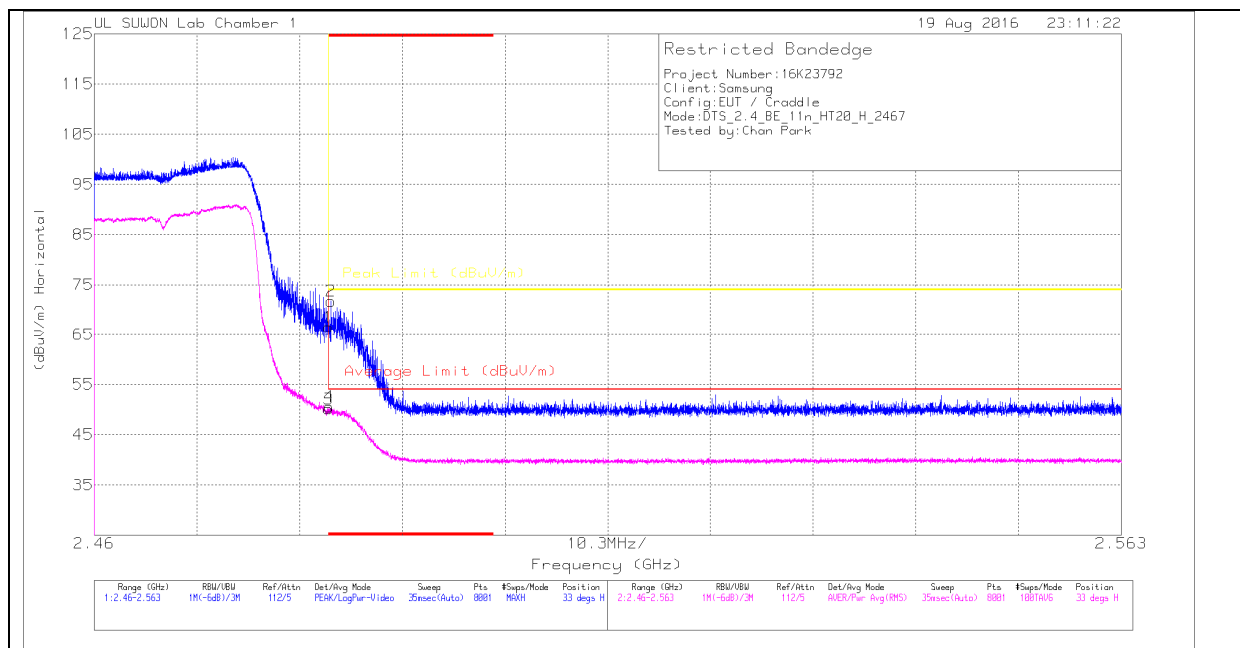
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (12 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

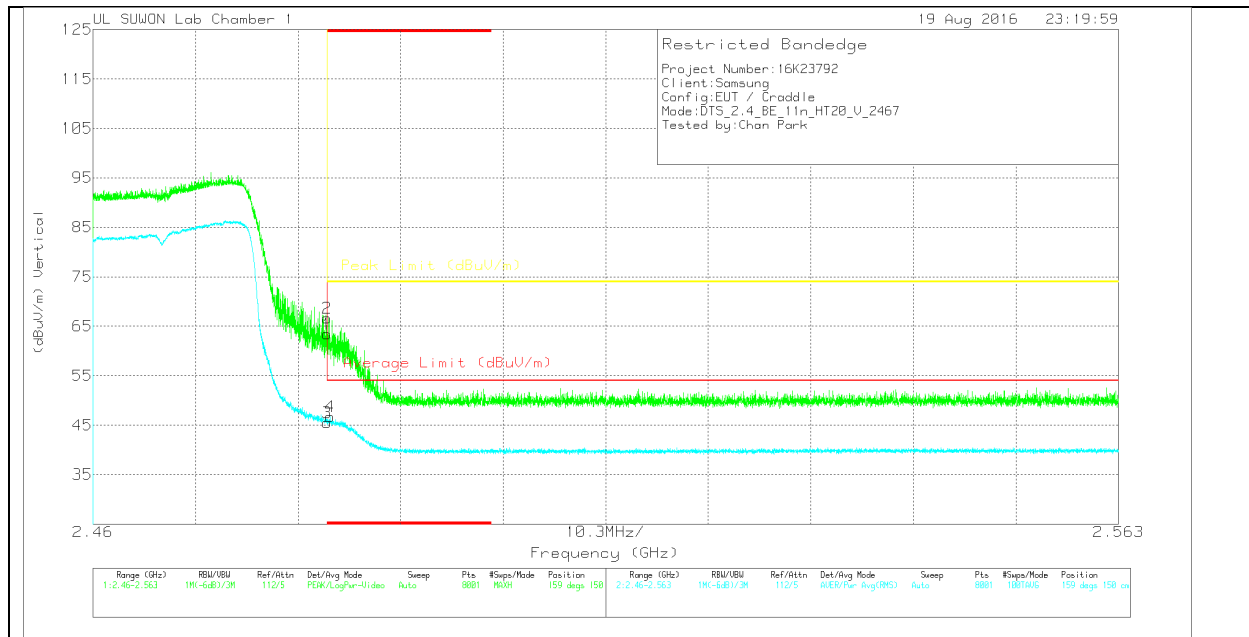
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 62.85                | Pk  | 32                     | -28.3  | 0            | 66.55                      | -                      | -           | 74                  | -7.45          | 33             | 185         | H        |
| 2      | * 2.484         | 68.04                | Pk  | 32                     | -28.3  | 0            | 71.74                      | -                      | -           | 74                  | -2.26          | 33             | 185         | H        |
| 3      | * 2.484         | 46.07                | RMS | 32                     | -28.3  | .34          | 50.11                      | 54                     | -3.89       | -                   | -              | 33             | 185         | H        |
| 4      | * 2.484         | 46.51                | RMS | 32                     | -28.3  | .34          | 50.55                      | 54                     | -3.45       | -                   | -              | 33             | 185         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | 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      | * 2.484         | 59.7                 | Pk  | 32                     | -28.3  | 0            | 63.4                       | -                      | -           | 74                  | -10.6          | 159            | 150         | V        |
| 2      | * 2.484         | 62.99                | Pk  | 32                     | -28.3  | 0            | 66.69                      | -                      | -           | 74                  | -7.31          | 159            | 150         | V        |
| 3      | * 2.484         | 41.41                | RMS | 32                     | -28.3  | .34          | 45.45                      | 54                     | -8.55       | -                   | -              | 159            | 150         | V        |
| 4      | * 2.484         | 42.66                | RMS | 32                     | -28.3  | .34          | 46.7                       | 54                     | -7.3        | -                   | -              | 159            | 150         | V        |

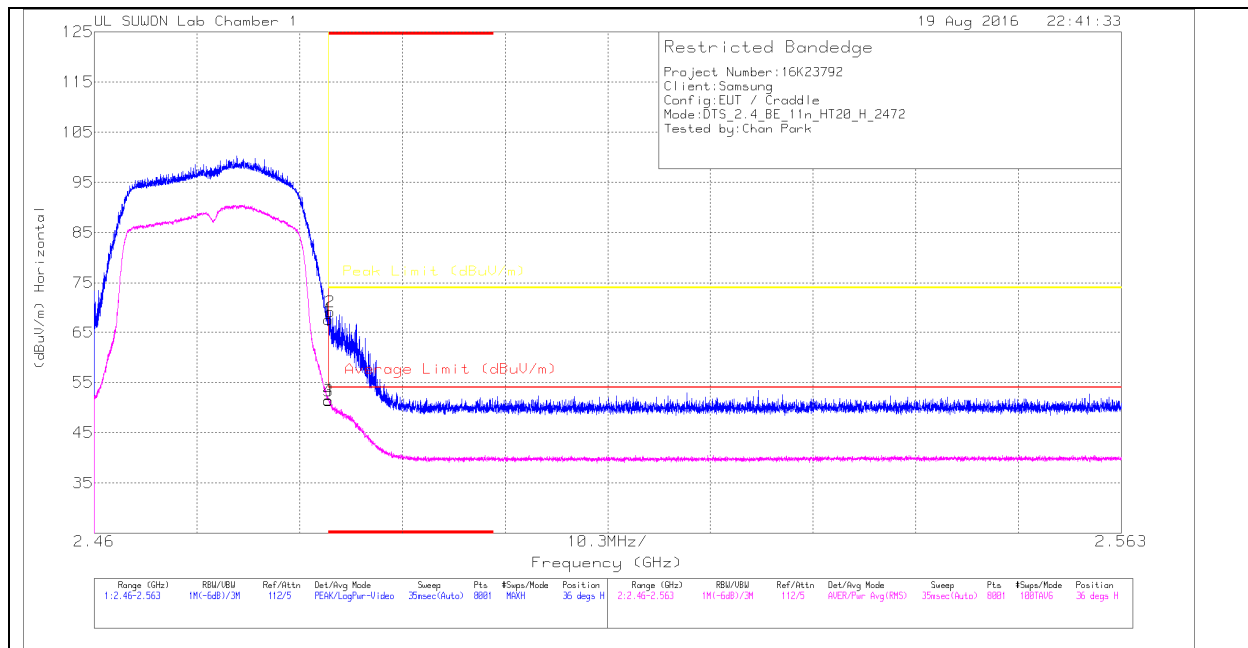
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

## AUTHORIZED BANDEDGE (13 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT



### HORIZONTAL DATA

#### Trace Markers

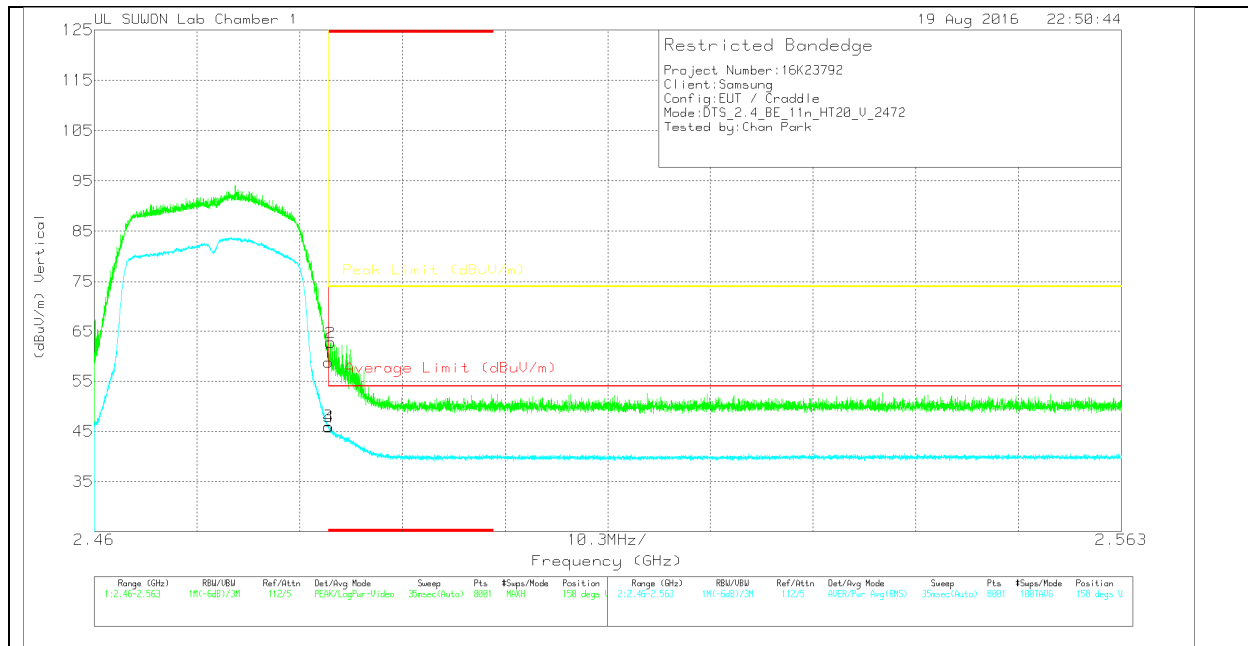
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619) | Path_2 | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 63.99                | Pk  | 32                     | -28.3  | 0            | 67.69                      | -                      | -           | 74                  | -6.31          | 36             | 240         | H        |
| 2      | * 2.484         | 65.5                 | Pk  | 32                     | -28.3  | 0            | 69.2                       | -                      | -           | 74                  | -4.8           | 36             | 240         | H        |
| 3      | * 2.484         | 47.32                | RMS | 32                     | -28.3  | .34          | 51.36                      | 54                     | -2.64       | -                   | -              | 36             | 240         | H        |
| 4      | * 2.484         | 47.44                | RMS | 32                     | -28.3  | .34          | 51.48                      | 54                     | -2.52       | -                   | -              | 36             | 240         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL PEAK AND AVERAGE PLOT



## VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17_150619 | Path_2 | 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      | * 2.484         | 55.07                | Pk  | 32                    | -28.3  | 0            | 58.77                      | -                      | -           | 74                  | -15.23         | 158            | 175         | V        |
| 2      | * 2.484         | 59.03                | Pk  | 32                    | -28.3  | 0            | 62.73                      | -                      | -           | 74                  | -11.27         | 158            | 175         | V        |
| 3      | * 2.484         | 41.97                | RMS | 32                    | -28.3  | .34          | 46.01                      | 54                     | -7.99       | -                   | -              | 158            | 175         | V        |
| 4      | * 2.484         | 41.83                | RMS | 32                    | -28.3  | .34          | 45.87                      | 54                     | -8.13       | -                   | -              | 158            | 175         | V        |

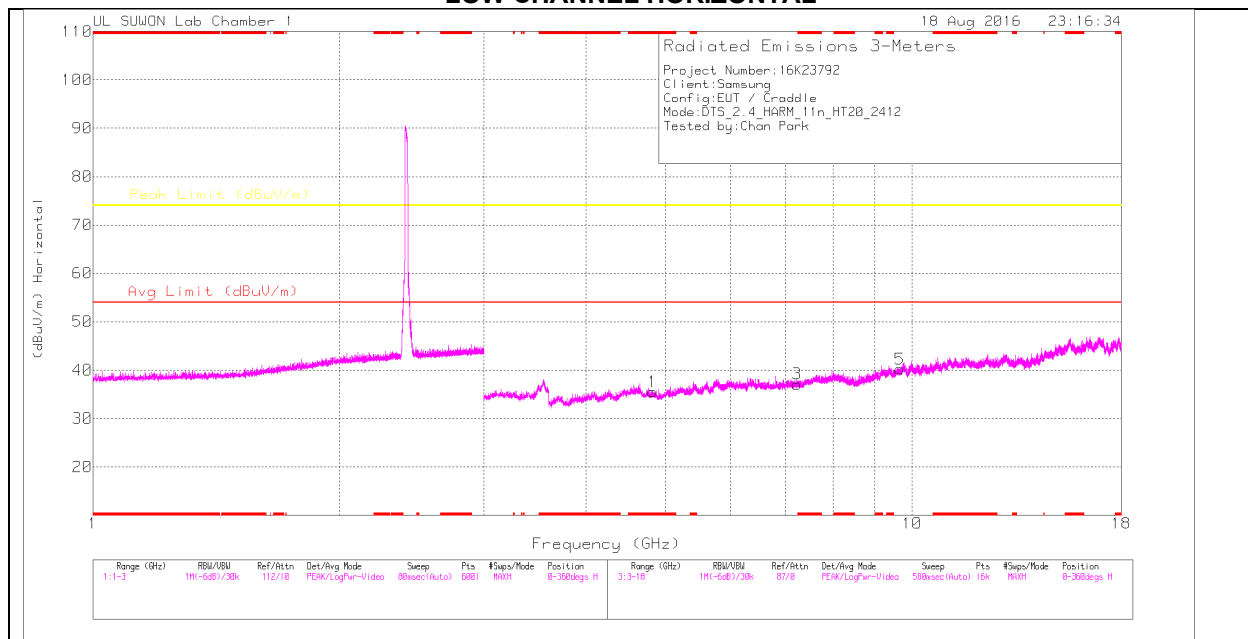
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

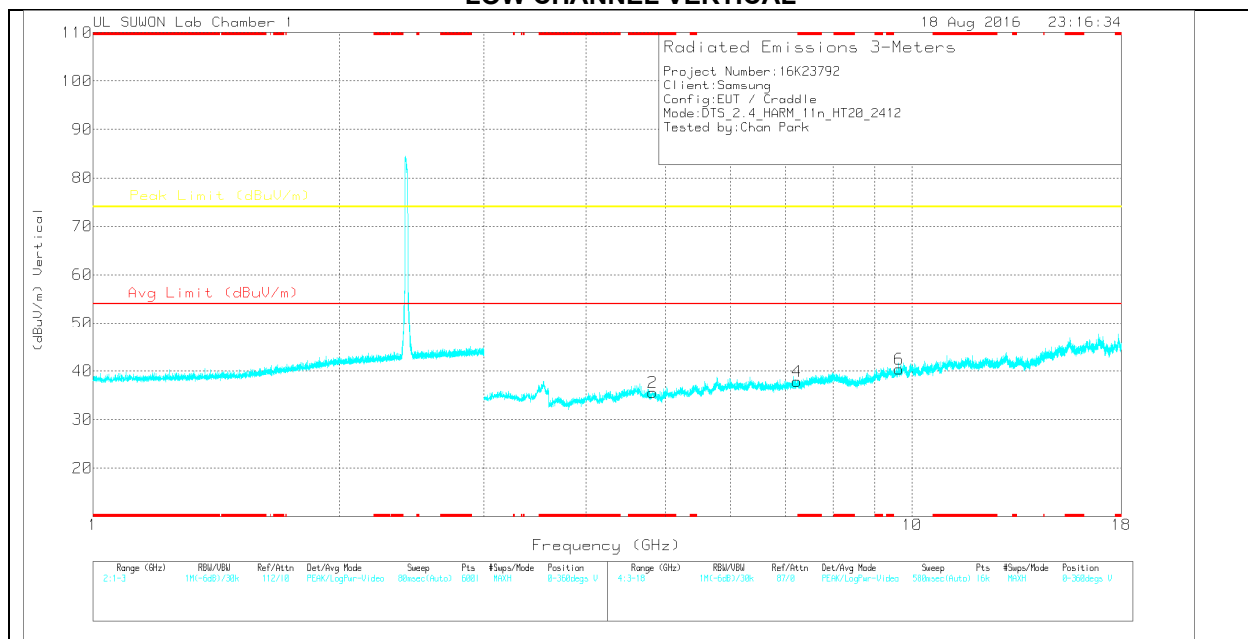
RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL HORIZONTAL



### LOW CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## LOW CHANNEL DATA

### Trace Markers

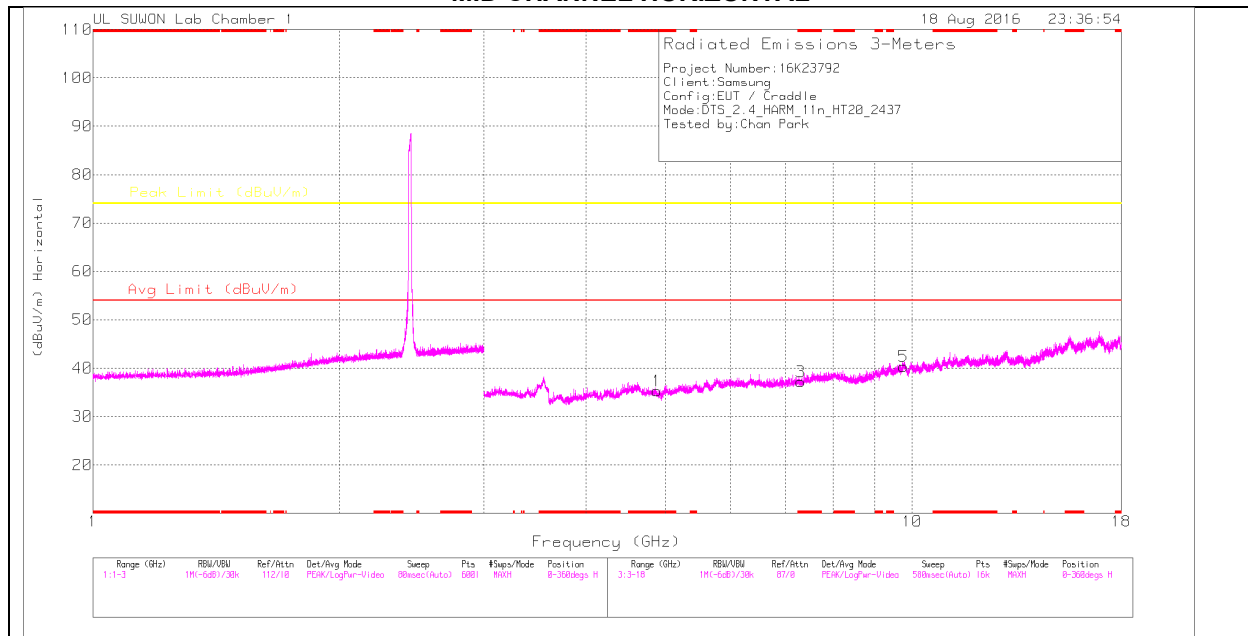
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.824         | 35.39                | PK  | 34                     | -33.8  | 0            | 35.59                      | -                  | -           | 74                  | -38.41      | 0-360          | 150         | H        |
| 3      | 7.237           | 32.34                | PK  | 35.7                   | -30.9  | 0            | 37.14                      | -                  | -           | 74                  | -36.86      | 0-360          | 250         | H        |
| 5      | 9.651           | 30.59                | PK  | 37.1                   | -27.4  | 0            | 40.29                      | -                  | -           | 74                  | -33.71      | 0-360          | 150         | H        |
| 2      | * 4.825         | 35.35                | PK  | 34                     | -33.8  | 0            | 35.55                      | -                  | -           | 74                  | -38.45      | 0-360          | 250         | V        |
| 4      | 7.238           | 33                   | PK  | 35.7                   | -30.9  | 0            | 37.8                       | -                  | -           | 74                  | -36.2       | 0-360          | 150         | V        |
| 6      | 9.648           | 30.64                | PK  | 37.1                   | -27.4  | 0            | 40.34                      | -                  | -           | 74                  | -33.66      | 0-360          | 150         | V        |

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

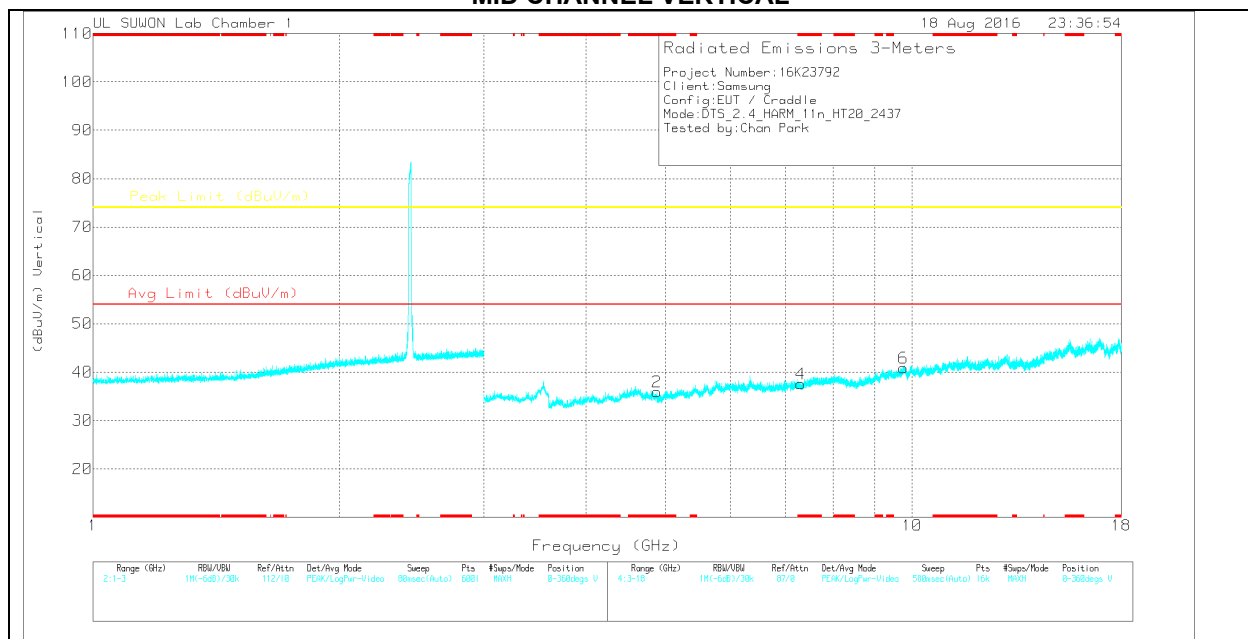
PK – Peak detector

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

### MID CHANNEL HORIZONTAL



### MID CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## MID CHANNEL DATA

### Trace Markers

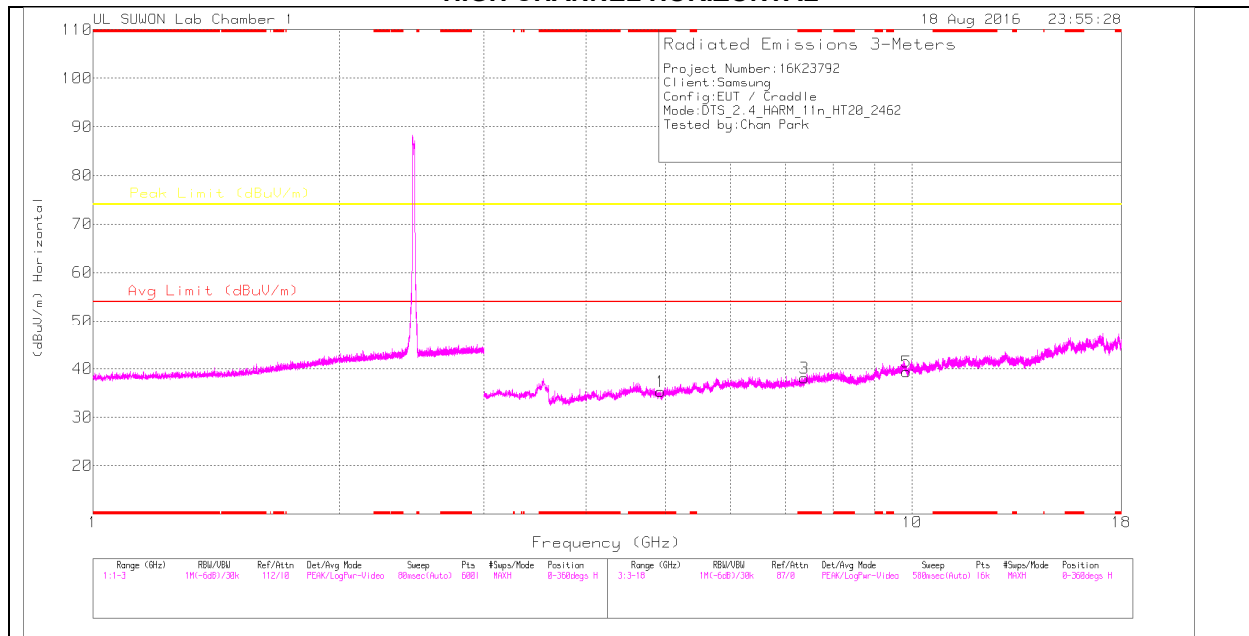
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.879         | 35.32                | PK  | 34                     | -34    | 0            | 35.32                      | -                  | -           | 74                  | -38.68      | 0-360          | 250         | H        |
| 3      | * 7.313         | 32.3                 | PK  | 35.8                   | -30.9  | 0            | 37.2                       | -                  | -           | 74                  | -36.8       | 0-360          | 150         | H        |
| 5      | 9.751           | 30                   | PK  | 37.2                   | -26.8  | 0            | 40.4                       | -                  | -           | 74                  | -33.6       | 0-360          | 250         | H        |
| 2      | * 4.881         | 35.92                | PK  | 34                     | -34    | 0            | 35.92                      | -                  | -           | 74                  | -38.08      | 0-360          | 150         | V        |
| 4      | * 7.312         | 32.82                | PK  | 35.7                   | -30.9  | 0            | 37.62                      | -                  | -           | 74                  | -36.38      | 0-360          | 150         | V        |
| 6      | 9.751           | 30.45                | PK  | 37.2                   | -26.8  | 0            | 40.85                      | -                  | -           | 74                  | -33.15      | 0-360          | 250         | V        |

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

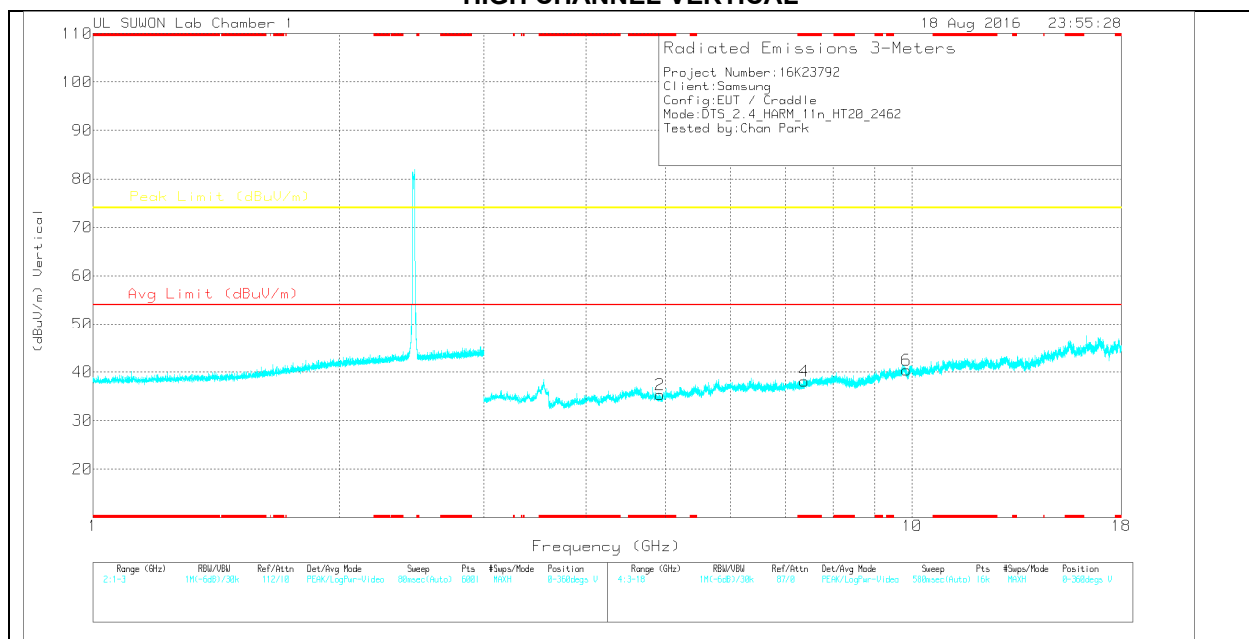
PK – Peak detector

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

### HIGH CHANNEL HORIZONTAL



### HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## HIGH CHANNEL DATA

### Trace Markers

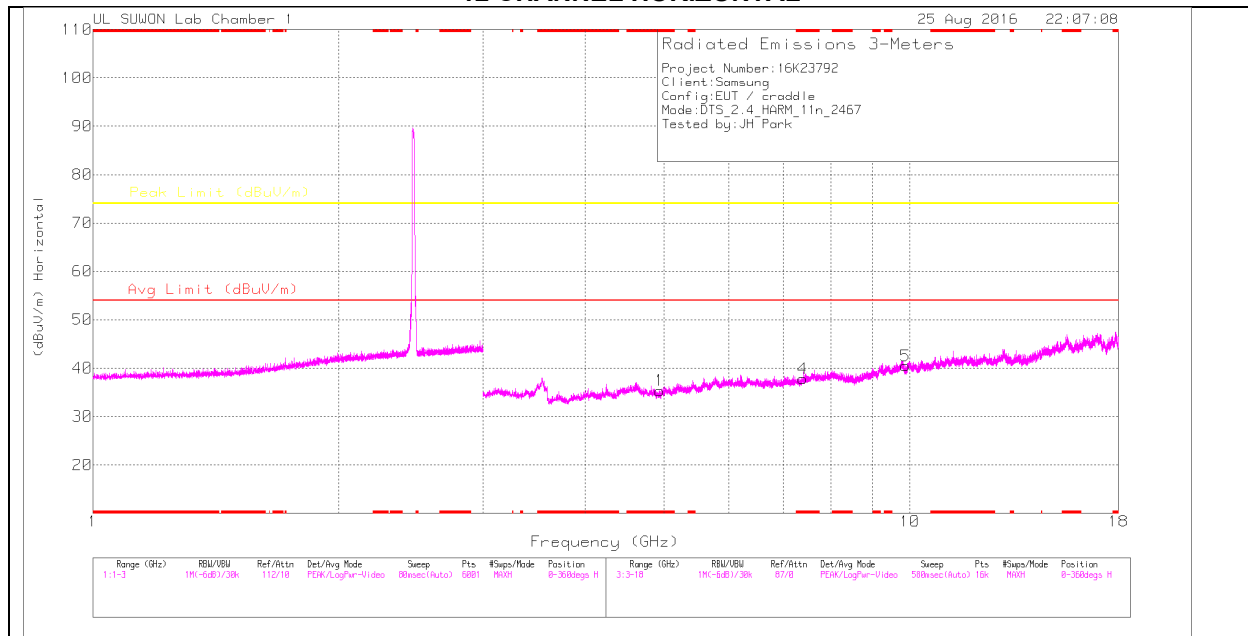
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.927         | 35.28                | PK  | 34                     | -34    | 0            | 35.28                      | -                  | -           | 74                  | -38.72      | 0-360          | 150         | H        |
| 3      | * 7.389         | 32.99                | PK  | 35.8                   | -30.7  | 0            | 38.09                      | -                  | -           | 74                  | -35.91      | 0-360          | 150         | H        |
| 5      | 9.847           | 29.71                | PK  | 37.3                   | -27.6  | 0            | 39.41                      | -                  | -           | 74                  | -34.59      | 0-360          | 150         | H        |
| 2      | * 4.923         | 35.26                | PK  | 34                     | -34    | 0            | 35.26                      | -                  | -           | 74                  | -38.74      | 0-360          | 150         | V        |
| 4      | * 7.389         | 32.97                | PK  | 35.8                   | -30.7  | 0            | 38.07                      | -                  | -           | 74                  | -35.93      | 0-360          | 250         | V        |
| 6      | 9.845           | 30.61                | PK  | 37.3                   | -27.5  | 0            | 40.41                      | -                  | -           | 74                  | -33.59      | 0-360          | 150         | V        |

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

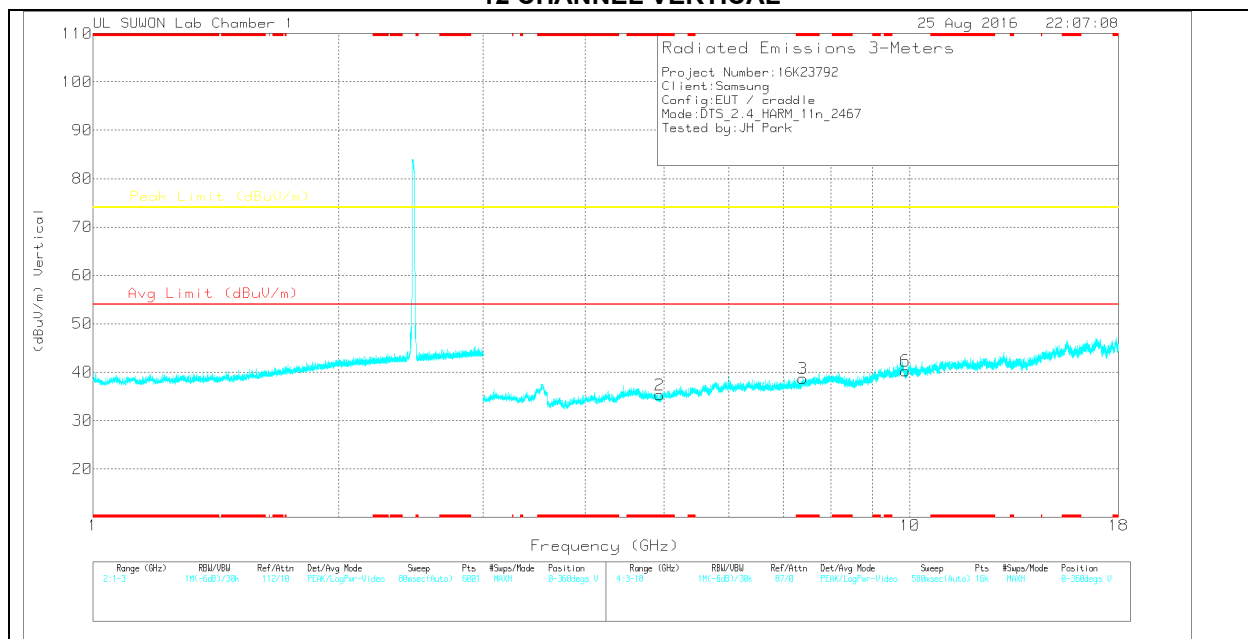
PK – Peak detector

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

### 12 CHANNEL HORIZONTAL



### 12 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## 12 CHANNEL DATA

### Trace Markers

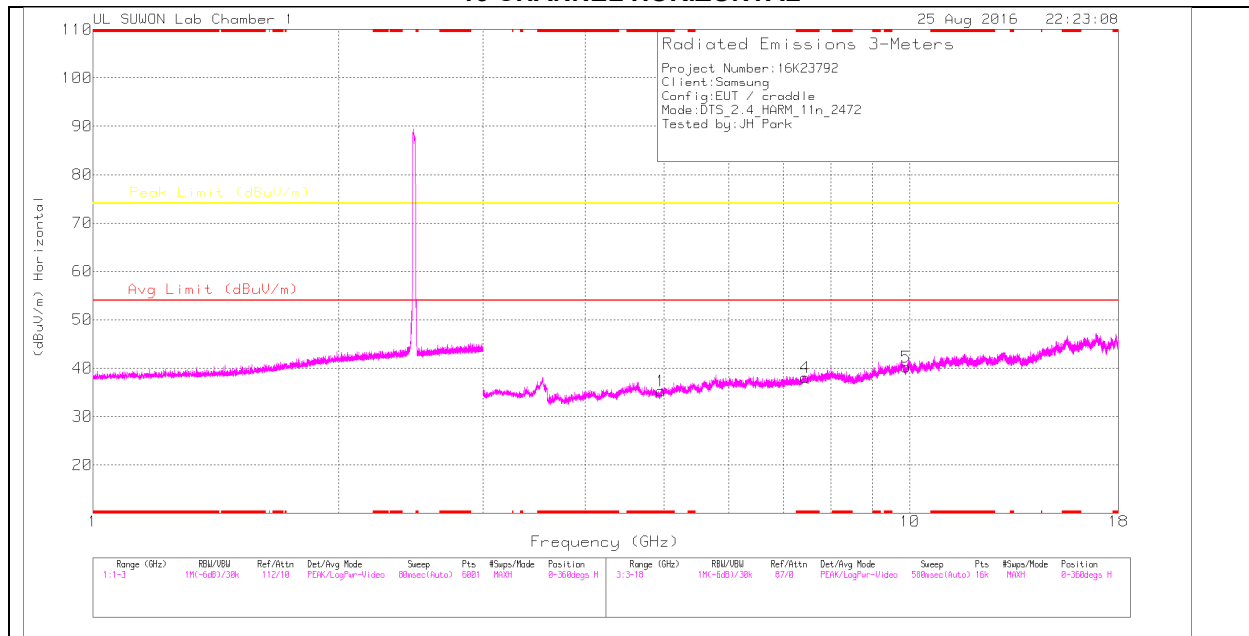
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.936         | 35.37                | PK  | 34                     | -34    | 0            | 35.37                      | -                  | -           | 74                  | -38.63      | 0-360          | 150         | H        |
| 4      | * 7.395         | 32.58                | PK  | 35.8                   | -30.6  | 0            | 37.78                      | -                  | -           | 74                  | -36.22      | 0-360          | 250         | H        |
| 5      | 9.882           | 31.1                 | PK  | 37.3                   | -27.9  | 0            | 40.5                       | -                  | -           | 74                  | -33.5       | 0-360          | 150         | H        |
| 2      | * 4.941         | 35.27                | PK  | 34                     | -34    | 0            | 35.27                      | -                  | -           | 74                  | -38.73      | 0-360          | 150         | V        |
| 3      | * 7.397         | 33.51                | PK  | 35.8                   | -30.6  | 0            | 38.71                      | -                  | -           | 74                  | -35.29      | 0-360          | 250         | V        |
| 6      | 9.877           | 31                   | PK  | 37.3                   | -28    | 0            | 40.3                       | -                  | -           | 74                  | -33.7       | 0-360          | 150         | V        |

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

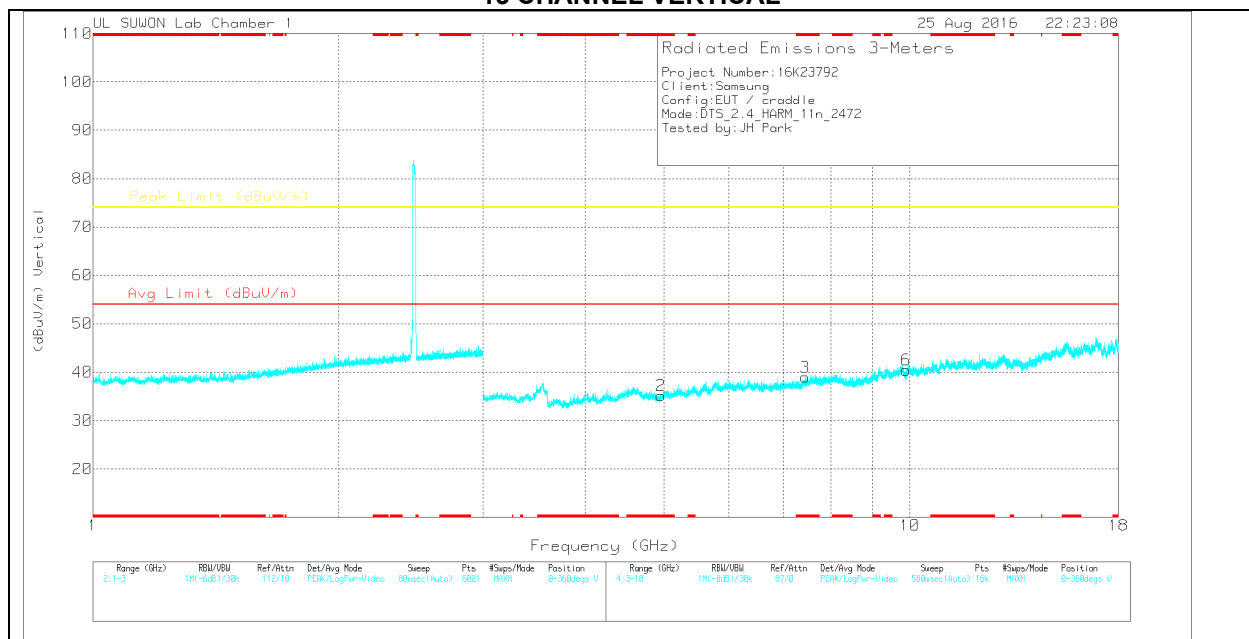
PK – Peak Detector

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

### 13 CHANNEL HORIZONTAL



### 13 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

### 13 CHANNEL DATA

#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117(001687 17)_150619 | Path_3 | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|------------------------|--------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1      | * 4.957         | 35.27                | PK  | 34                     | -34    | 0            | 35.27                      | -                  | -           | 74                  | -38.73      | 0-360          | 150         | H        |
| 4      | * 7.439         | 33.02                | PK  | 35.8                   | -30.7  | 0            | 38.12                      | -                  | -           | 74                  | -35.88      | 0-360          | 150         | H        |
| 5      | 9.898           | 30.51                | PK  | 37.4                   | -27.7  | 0            | 40.21                      | -                  | -           | 74                  | -33.79      | 0-360          | 150         | H        |
| 2      | * 4.953         | 35.14                | PK  | 34                     | -34    | 0            | 35.14                      | -                  | -           | 74                  | -38.86      | 0-360          | 250         | V        |
| 3      | * 7.44          | 33.88                | PK  | 35.8                   | -30.7  | 0            | 38.98                      | -                  | -           | 74                  | -35.02      | 0-360          | 150         | V        |
| 6      | 9.893           | 30.83                | PK  | 37.4                   | -27.8  | 0            | 40.43                      | -                  | -           | 74                  | -33.57      | 0-360          | 150         | V        |

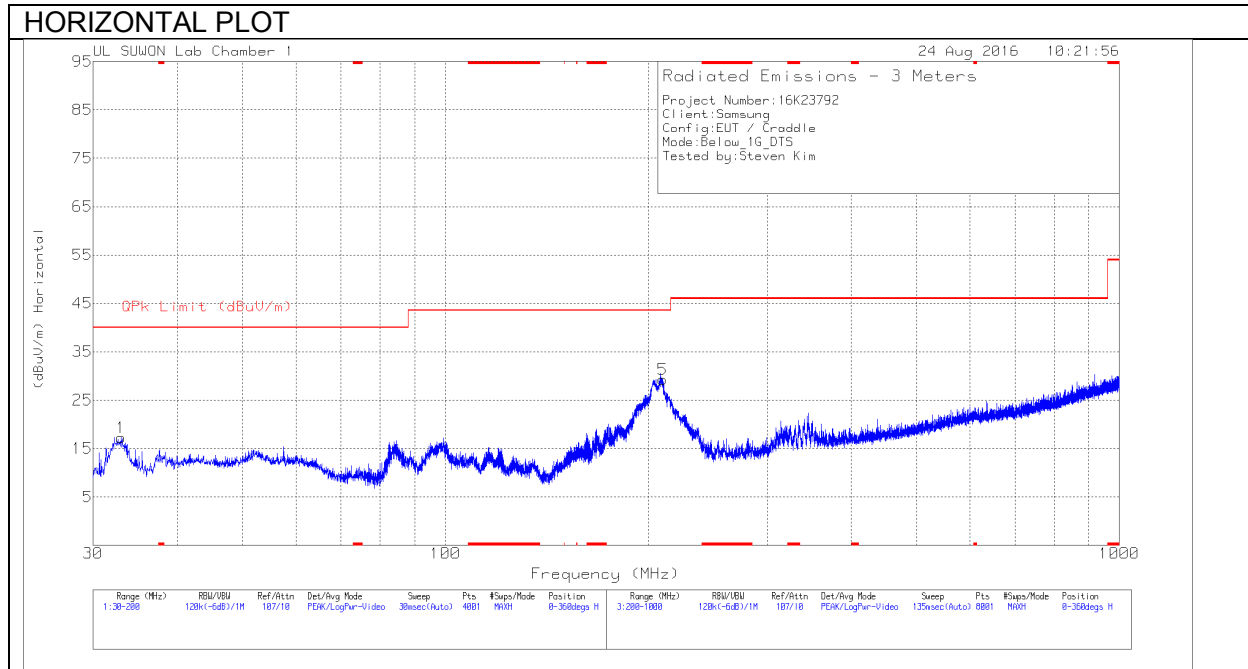
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak Detector

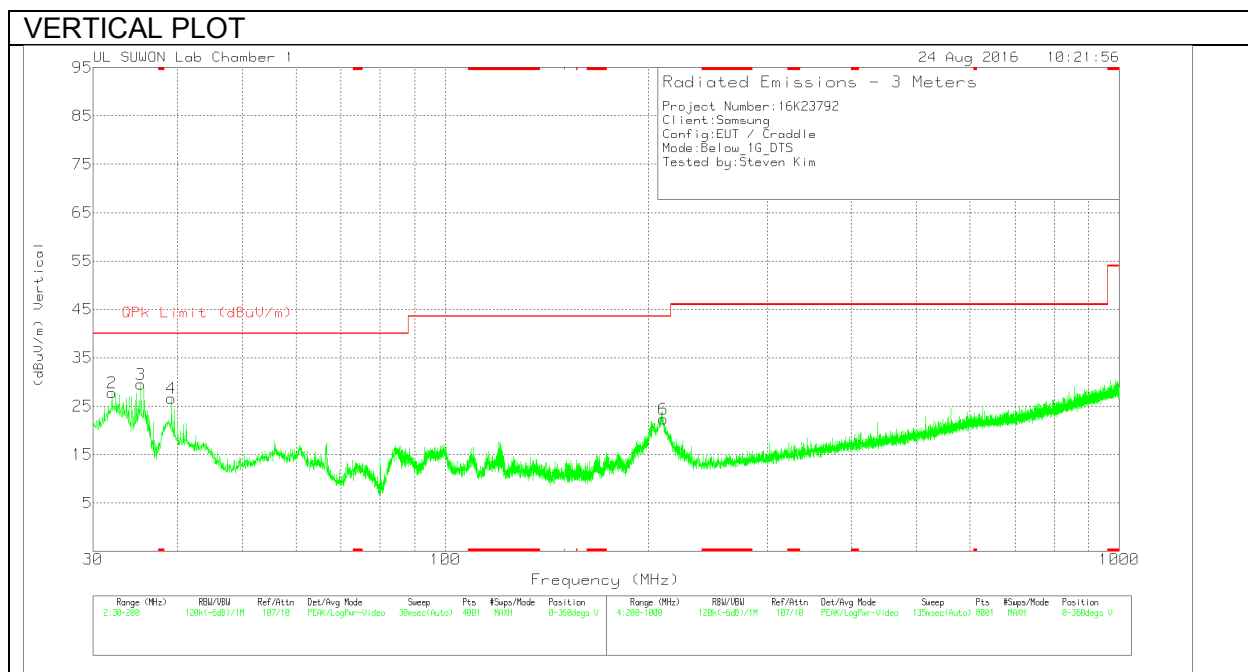
Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

### 11.3. WORST-CASE BELOW 1 GHz

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



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



**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      | 33.0175         | 37.38                | Pk  | 10.4         | -30.5  | 17.28                      | 40                 | -22.72      | 0-360          | 300         | H        |
| 2      | 31.9975         | 47.95                | Pk  | 10.3         | -30.5  | 27.75                      | 40                 | -12.25      | 0-360          | 100         | V        |
| 3      | 35.3125         | 49.39                | Pk  | 10.6         | -30.4  | 29.59                      | 40                 | -10.41      | 0-360          | 200         | V        |
| 4      | 39.2225         | 44.77                | Pk  | 12.2         | -30.3  | 26.67                      | 40                 | -13.33      | 0-360          | 200         | V        |
| 5      | 209.9           | 45.91                | Pk  | 11.5         | -28.1  | 29.31                      | 43.52              | -14.21      | 0-360          | 200         | H        |
| 6      | 210.5           | 38.85                | Pk  | 11.6         | -28.1  | 22.35                      | 43.52              | -21.17      | 0-360          | 100         | V        |

Pk - Peak detector

## 12. 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 <sup>*</sup>  | 56 to 46 <sup>*</sup> |
| 0.5-5                       | 56                     | 46                    |
| 5-30                        | 60                     | 50                    |

<sup>\*</sup> 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.

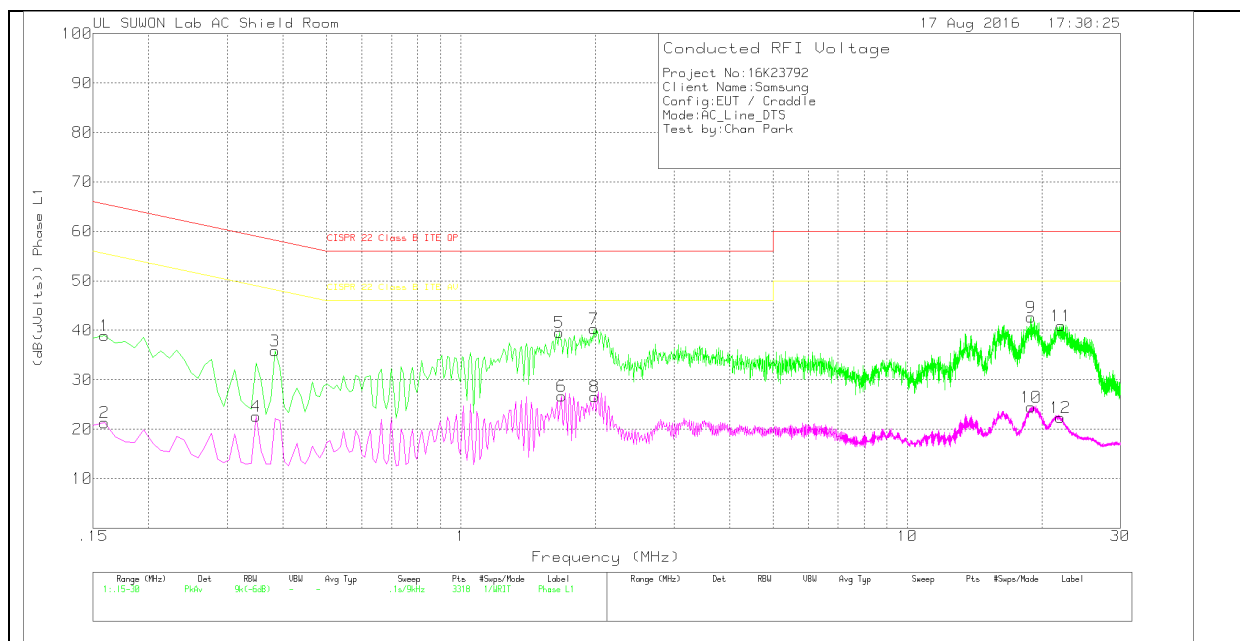
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

## RESULTS

### WORST EMISSIONS

#### LINE 1 PLOT



#### LINE 1 RESULTS

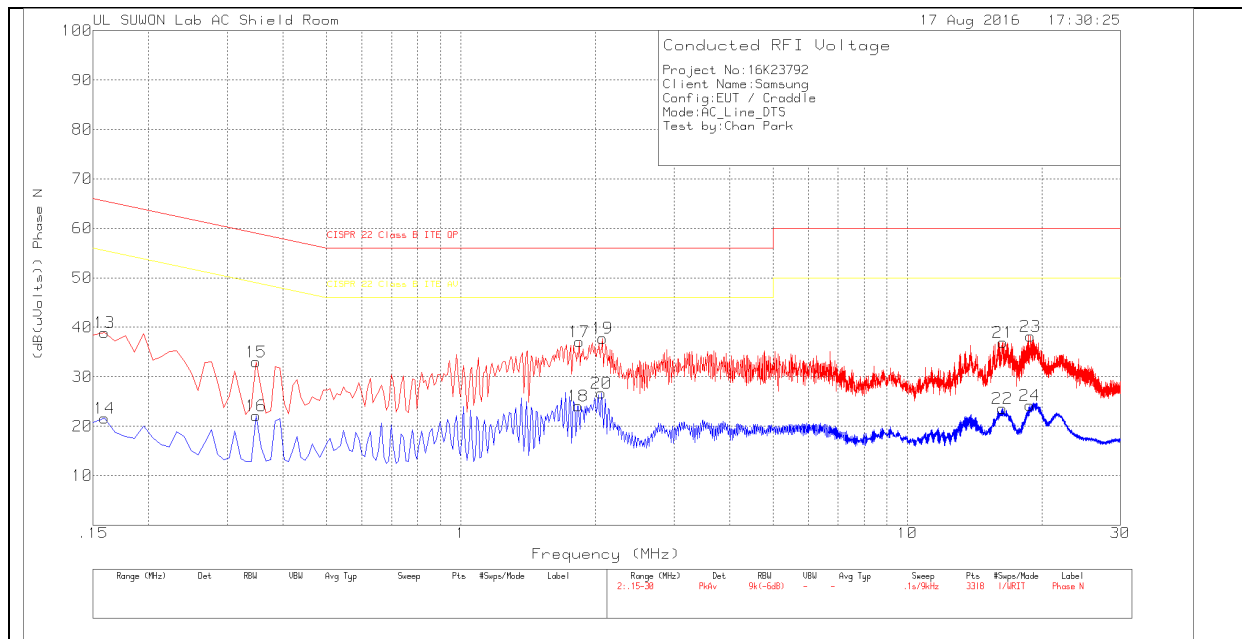
Phase L1 .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_w ith ex-cord_L1 | CE Shield Room | Corrected Reading (dB(uVolts)) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|--------|-----------------|----------------------|-----|-------------------------|----------------|--------------------------------|-------------------------|-------------|-------------------------|-------------|
| 1      | .159            | 28.9                 | Pk  | 10                      | 0              | 38.9                           | 65.52                   | -26.62      | -                       | -           |
| 2      | .159            | 11.31                | Av  | 10                      | 0              | 21.31                          | -                       | -           | 55.52                   | -34.21      |
| 3      | .384            | 25.71                | Pk  | 10.1                    | 0              | 35.81                          | 58.19                   | -22.38      | -                       | -           |
| 4      | .348            | 12.49                | Av  | 10.1                    | 0              | 22.59                          | -                       | -           | 49.01                   | -26.42      |
| 5      | 1.662           | 29.62                | Pk  | 9.8                     | .1             | 39.52                          | 56                      | -16.48      | -                       | -           |
| 6      | 1.68            | 16.83                | Av  | 9.8                     | .1             | 26.73                          | -                       | -           | 46                      | -19.27      |
| 7      | 1.986           | 30.34                | Pk  | 9.8                     | .1             | 40.24                          | 56                      | -15.76      | -                       | -           |
| 8      | 1.995           | 16.68                | Av  | 9.8                     | .1             | 26.58                          | -                       | -           | 46                      | -19.42      |
| 9      | 18.951          | 32.05                | Pk  | 10.4                    | .2             | 42.65                          | 60                      | -17.35      | -                       | -           |
| 10     | 18.951          | 13.89                | Av  | 10.4                    | .2             | 24.49                          | -                       | -           | 50                      | -25.51      |
| 11     | 22.083          | 30.25                | Pk  | 10.5                    | .2             | 40.95                          | 60                      | -19.05      | -                       | -           |
| 12     | 22.011          | 11.66                | Av  | 10.5                    | .2             | 22.36                          | -                       | -           | 50                      | -27.64      |

Pk - Peak detector

Av - Average detection

## LINE 2 PLOT



## LINE 2 RESULTS

Phase N .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | 101837_w ith ex-cord_N | CE Shield Room | Corrected Reading (dB(uVolts)) | CISPR 22 Class B ITE QP | Margin (dB) | CISPR 22 Class B ITE AV | Margin (dB) |
|--------|-----------------|----------------------|-----|------------------------|----------------|--------------------------------|-------------------------|-------------|-------------------------|-------------|
| 13     | .159            | 28.89                | Pk  | 10                     | 0              | 38.89                          | 65.52                   | -26.63      | -                       | -           |
| 14     | .159            | 11.63                | Av  | 10                     | 0              | 21.63                          | -                       | -           | 55.52                   | -33.89      |
| 15     | .348            | 23.05                | Pk  | 10                     | 0              | 33.05                          | 59.01                   | -25.96      | -                       | -           |
| 16     | .348            | 12.11                | Av  | 10                     | 0              | 22.11                          | -                       | -           | 49.01                   | -26.9       |
| 17     | 1.842           | 27.17                | Pk  | 9.8                    | .1             | 37.07                          | 56                      | -18.93      | -                       | -           |
| 18     | 1.833           | 14.23                | Av  | 9.8                    | .1             | 24.13                          | -                       | -           | 46                      | -21.87      |
| 19     | 2.076           | 27.86                | Pk  | 9.8                    | .1             | 37.76                          | 56                      | -18.24      | -                       | -           |
| 20     | 2.067           | 16.76                | Av  | 9.8                    | .1             | 26.66                          | -                       | -           | 46                      | -19.34      |
| 21     | 16.368          | 26.39                | Pk  | 10.4                   | .2             | 36.99                          | 60                      | -23.01      | -                       | -           |
| 22     | 16.323          | 12.97                | Av  | 10.4                   | .2             | 23.57                          | -                       | -           | 50                      | -26.43      |
| 23     | 18.852          | 27.34                | Pk  | 10.6                   | .2             | 38.14                          | 60                      | -21.86      | -                       | -           |
| 24     | 18.825          | 13.4                 | Av  | 10.6                   | .2             | 24.2                           | -                       | -           | 50                      | -25.8       |

Pk - Peak detector

Av - Average detection