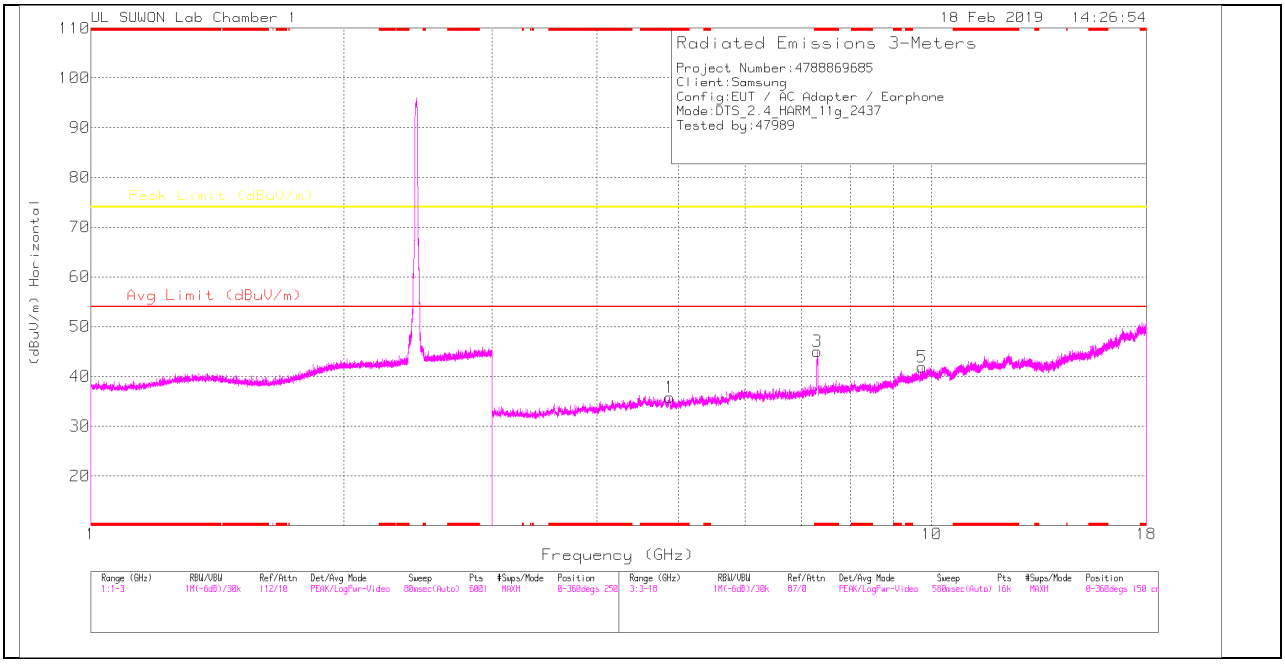
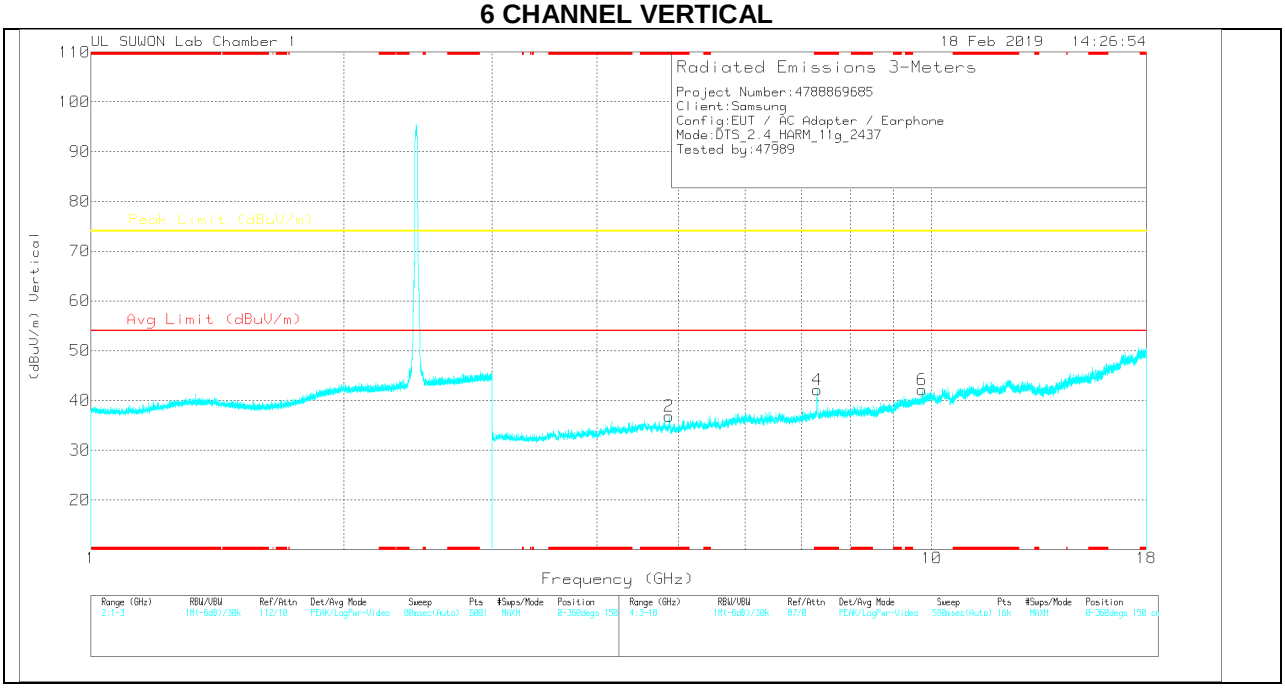
**6 CHANNEL HORIZONTAL**




**6 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.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# 6 CHANNEL DATA

## Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | 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 | * 4.876 | 33.12 | PK | 34.2 | -31.5 | 0 | 35.82 | - | - | 74 | -38.18 | 0-360 | 150 | H |
| 3 | * 7.309 | 36.61 | PK | 35.8 | -27.4 | 0 | 45.01 | - | - | 74 | -28.99 | 0-360 | 250 | H |
| 5 | 9.748 | 28.62 | PK | 37.2 | -23.9 | 0 | 41.92 | - | - | 74 | -32.08 | 0-360 | 250 | H |
| 2 | * 4.874 | 34.17 | PK | 34.2 | -31.5 | 0 | 36.87 | - | - | 74 | -37.13 | 0-360 | 150 | V |
| 4 | * 7.309 | 33.77 | PK | 35.8 | -27.4 | 0 | 42.17 | - | - | 74 | -31.83 | 0-360 | 150 | V |
| 6 | 9.748 | 28.89 | PK | 37.2 | -23.9 | 0 | 42.19 | - | - | 74 | -31.81 | 0-360 | 250 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

## Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 7.314 | 48.81 | PK2 | 35.8 | -27.4 | 0 | 57.21 | - | - | 74 | -16.79 | 167 | 100 | H |
| * 7.31 | 35.44 | MAv1 | 35.8 | -27.4 | .2 | 44.04 | 54 | -9.96 | - | - | 167 | 100 | H |
| * 7.314 | 43.83 | PK2 | 35.8 | -27.4 | 0 | 52.23 | - | - | 74 | -21.77 | 138 | 227 | V |
| * 7.31 | 30.95 | MAv1 | 35.8 | -27.4 | .2 | 39.55 | 54 | -14.45 | - | - | 138 | 227 | V |
| 9.748 | 37.94 | PK2 | 37.2 | -23.9 | 0 | 51.24 | - | - | 74 | -22.76 | 114 | 109 | H |
| 9.748 | 36 | PK2 | 37.2 | -23.9 | 0 | 49.3 | - | - | 74 | -24.7 | 72 | 106 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average


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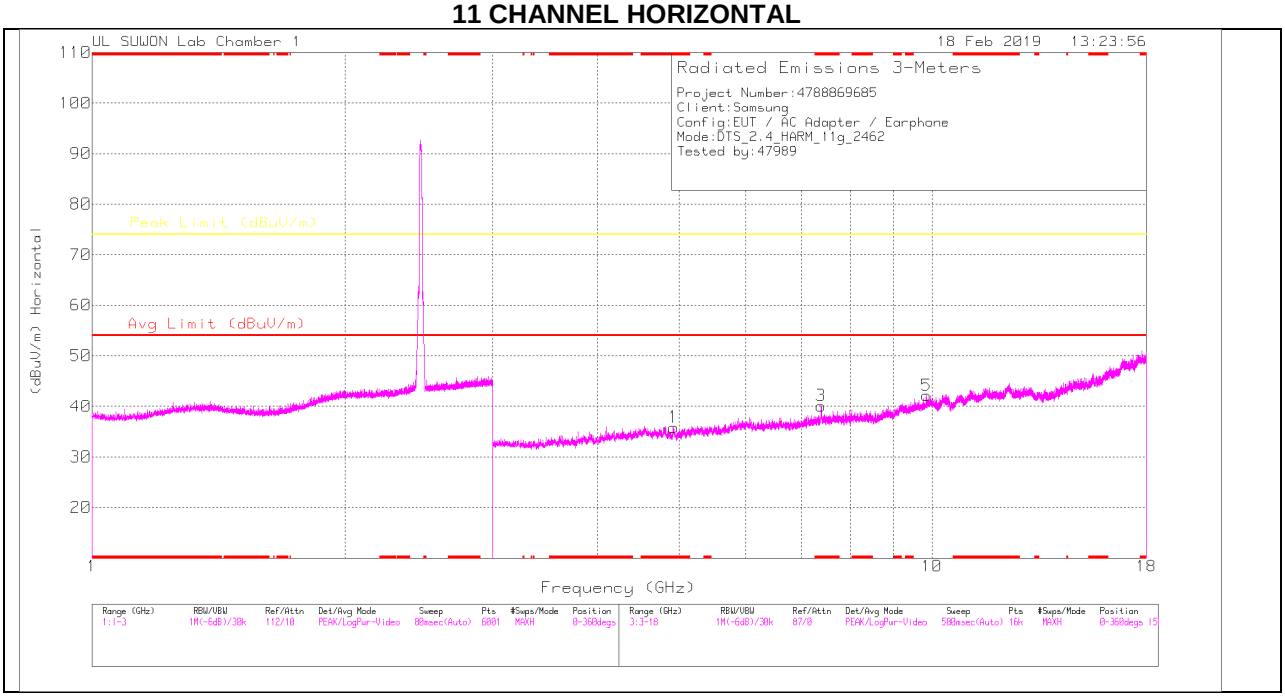
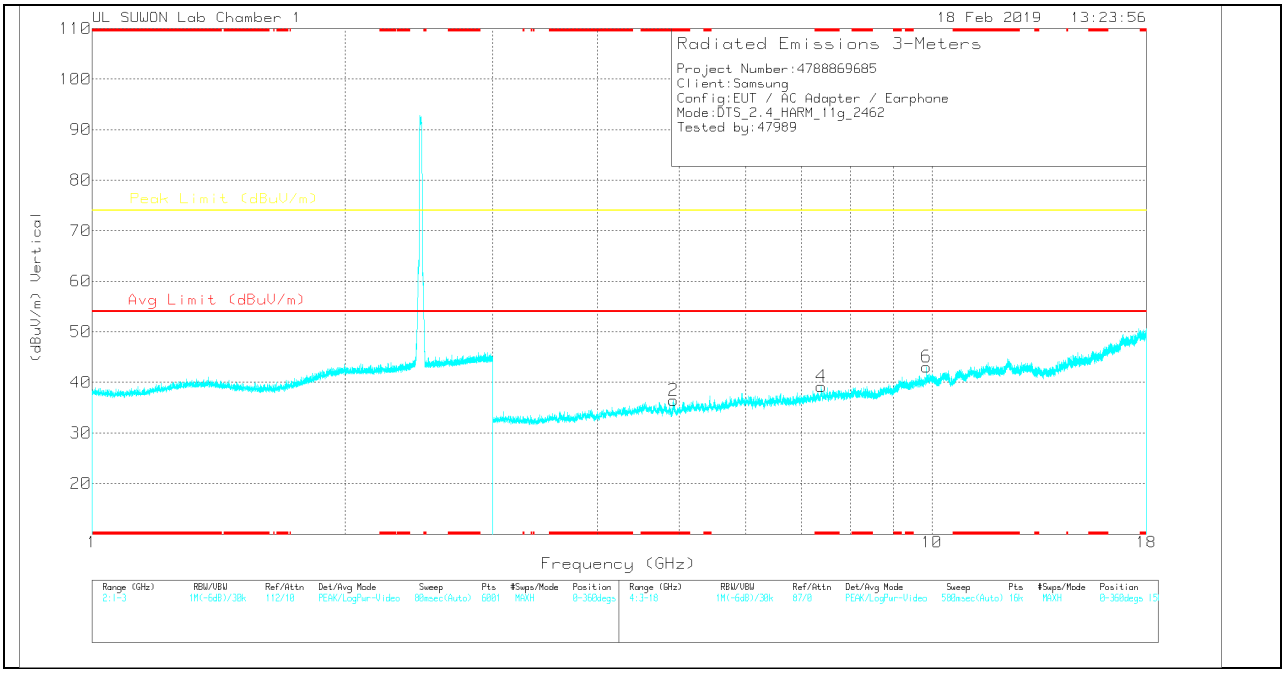
**11 CHANNEL HORIZONTAL**




**11 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.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# 11 CHANNEL DATA

## Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | 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 | 33.26 | PK | 34.2 | -31.6 | 0 | 35.86 | - | - | 74 | -38.14 | 0-360 | 250 | H |
| 3 | * 7.38 | 31.31 | PK | 35.8 | -27 | 0 | 40.11 | - | - | 74 | -33.89 | 0-360 | 150 | H |
| 5 | 9.848 | 27.96 | PK | 37.4 | -23.2 | 0 | 42.16 | - | - | 74 | -31.84 | 0-360 | 250 | H |
| 2 | * 4.926 | 33.76 | PK | 34.2 | -31.5 | 0 | 36.46 | - | - | 74 | -37.54 | 0-360 | 250 | V |
| 4 | * 7.384 | 30.4 | PK | 35.8 | -27 | 0 | 39.2 | - | - | 74 | -34.8 | 0-360 | 150 | V |
| 6 | 9.848 | 28.88 | PK | 37.4 | -23.2 | 0 | 43.08 | - | - | 74 | -30.92 | 0-360 | 250 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

## Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 7.388 | 44.77 | PK2 | 35.8 | -27 | 0 | 53.57 | - | - | 74 | -20.43 | 163 | 106 | H |
| * 7.385 | 31.3 | MAv1 | 35.8 | -27 | .2 | 40.3 | 54 | -13.7 | - | - | 163 | 106 | H |
| * 7.378 | 41.35 | PK2 | 35.8 | -27 | 0 | 50.15 | - | - | 74 | -23.85 | 123 | 129 | V |
| * 7.385 | 27.78 | MAv1 | 35.8 | -27 | .2 | 36.78 | 54 | -17.22 | - | - | 123 | 129 | V |
| 9.848 | 37.26 | PK2 | 37.4 | -23.2 | 0 | 51.46 | - | - | 74 | -22.54 | 112 | 106 | H |
| 9.848 | 36.02 | PK2 | 37.4 | -23.3 | 0 | 50.12 | - | - | 74 | -23.88 | 106 | 123 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average


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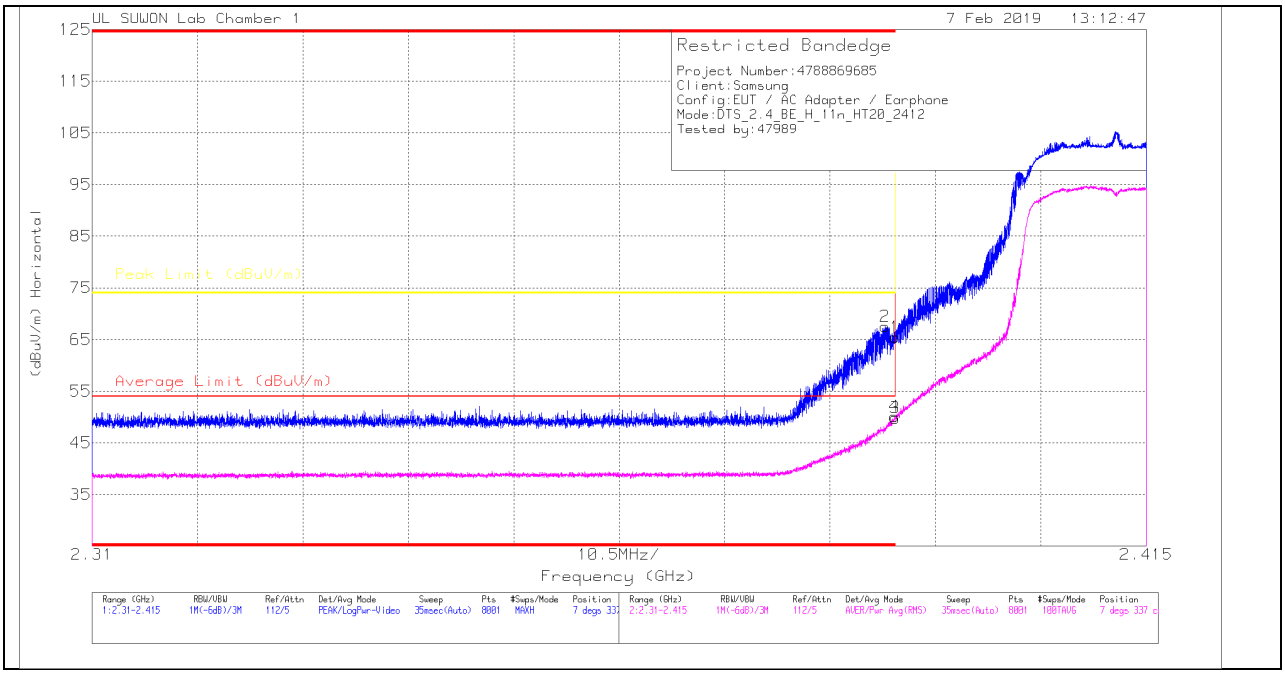
## 11.2.3.TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

## RESTRICTED BANDEDGE (1 CHANNEL)

### HORIZONTAL PEAK AND AVERAGE PLOT




### HORIZONTAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.39 | 59.25 | Pk | 31.7 | -25.5 | 0 | 65.45 | - | - | 74 | -8.55 | 7 | 337 | H |
| 2 | * 2.389 | 61.3 | Pk | 31.7 | -25.5 | 0 | 67.5 | - | - | 74 | -6.5 | 7 | 337 | H |
| 3 | * 2.39 | 43.45 | RMS | 31.7 | -25.5 | .17 | 49.82 | 54 | -4.18 | - | - | 7 | 337 | H |
| 4 | * 2.39 | 43.74 | RMS | 31.7 | -25.5 | .17 | 50.11 | 54 | -3.89 | - | - | 7 | 337 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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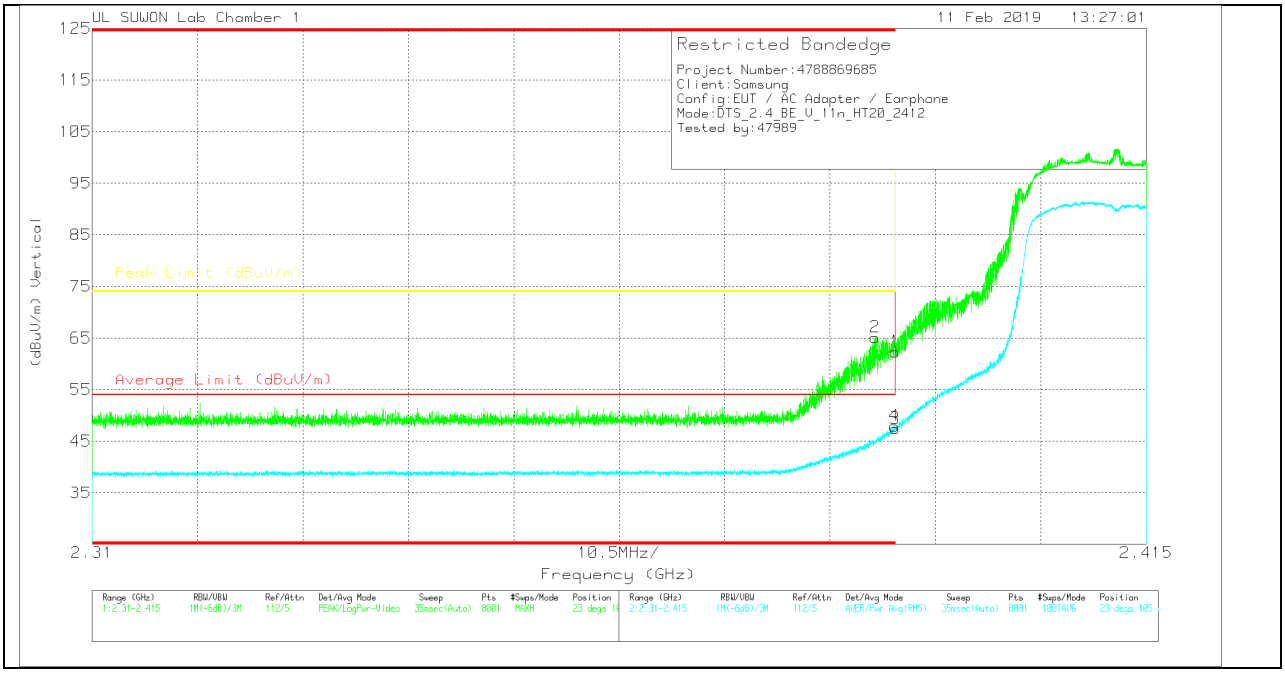
## VERTICAL PEAK AND AVERAGE PLOT




## VERTICAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.39 | 56.14 | Pk | 31.7 | -25.5 | 0 | 62.34 | - | - | 74 | -11.66 | 23 | 105 | V |
| 2 | * 2.388 | 58.95 | Pk | 31.7 | -25.5 | 0 | 65.15 | - | - | 74 | -8.85 | 23 | 105 | V |
| 3 | * 2.39 | 41.09 | RMS | 31.7 | -25.5 | .17 | 47.46 | 54 | -6.54 | - | - | 23 | 105 | V |
| 4 | * 2.39 | 41.62 | RMS | 31.7 | -25.5 | .17 | 47.99 | 54 | -6.01 | - | - | 23 | 105 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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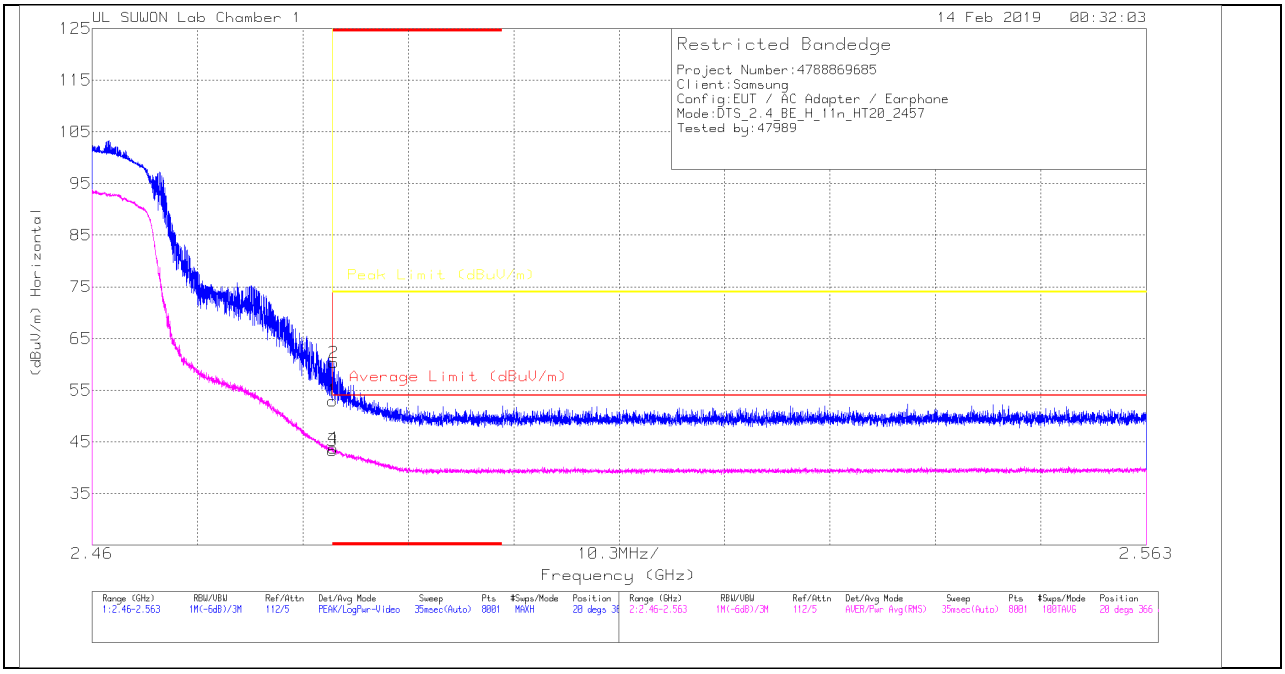
# AUTHORIZED BANDEDGE (10 CHANNEL)

## HORIZONTAL PEAK AND AVERAGE PLOT




## HORIZONTAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 46.37 | Pk | 31.9 | -25.3 | 0 | 52.97 | - | - | 74 | -21.03 | 20 | 366 | H |
| 2 | * 2.484 | 53.74 | Pk | 31.9 | -25.3 | 0 | 60.34 | - | - | 74 | -13.66 | 20 | 366 | H |
| 3 | * 2.484 | 36.55 | RMS | 31.9 | -25.3 | .17 | 43.32 | 54 | -10.68 | - | - | 20 | 366 | H |
| 4 | * 2.484 | 37.03 | RMS | 31.9 | -25.3 | .17 | 43.8 | 54 | -10.2 | - | - | 20 | 366 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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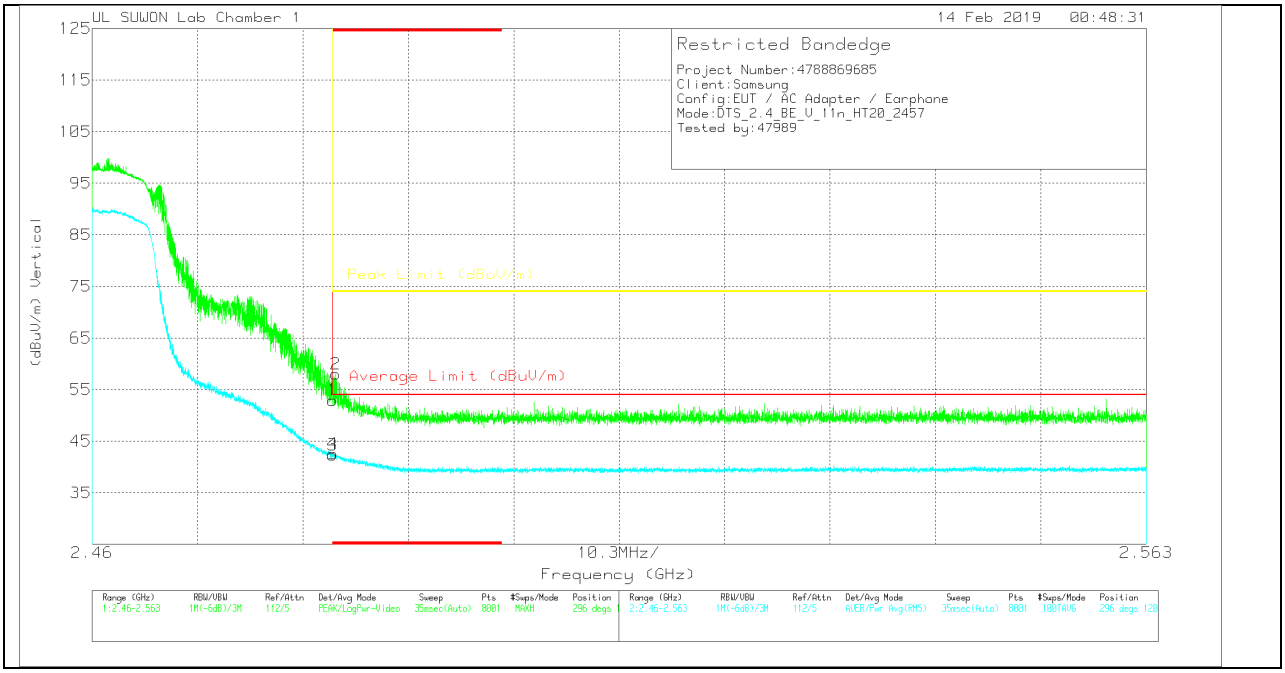
## VERTICAL PEAK AND AVERAGE PLOT




## VERTICAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 46.36 | Pk | 31.9 | -25.3 | 0 | 52.96 | - | - | 74 | -21.04 | 296 | 120 | V |
| 2 | * 2.484 | 51.42 | Pk | 31.9 | -25.3 | 0 | 58.02 | - | - | 74 | -15.98 | 296 | 120 | V |
| 3 | * 2.484 | 35.55 | RMS | 31.9 | -25.3 | .17 | 42.32 | 54 | -11.68 | - | - | 296 | 120 | V |
| 4 | * 2.484 | 35.78 | RMS | 31.9 | -25.3 | .17 | 42.55 | 54 | -11.45 | - | - | 296 | 120 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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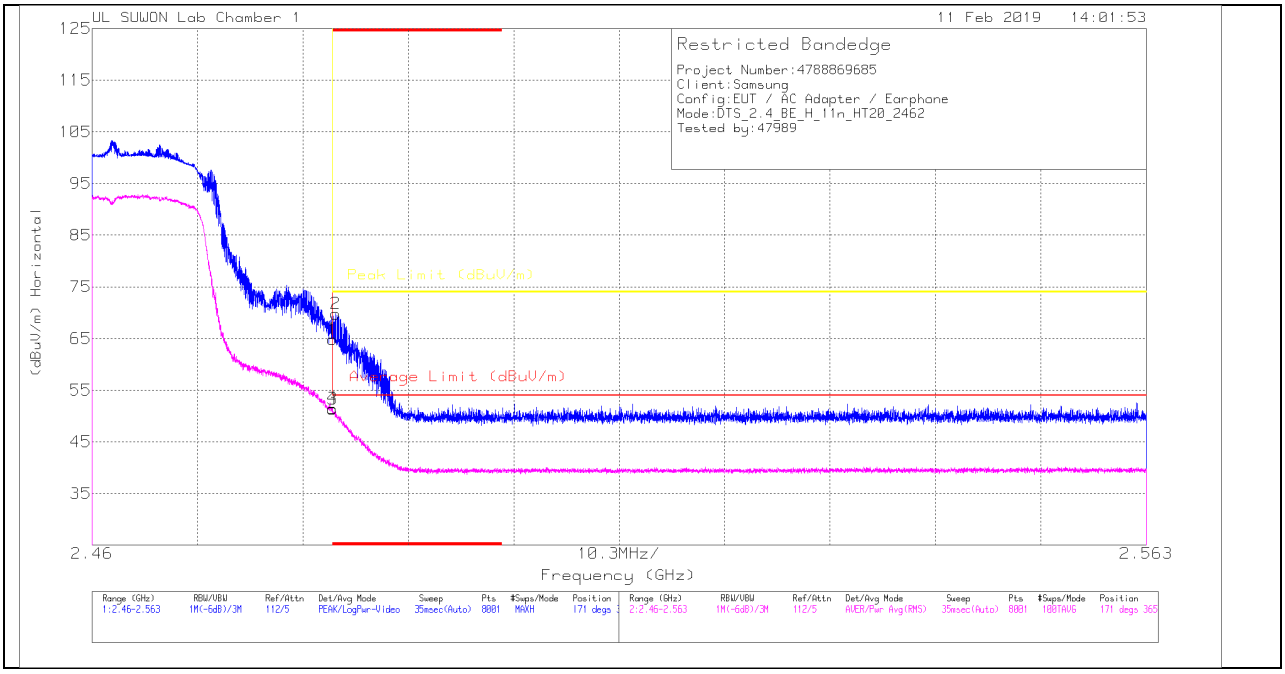
# AUTHORIZED BANDEDGE (11 CHANNEL)

## HORIZONTAL PEAK AND AVERAGE PLOT




## HORIZONTAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 58.26 | Pk | 31.9 | -25.3 | 0 | 64.86 | - | - | 74 | -9.14 | 171 | 365 | H |
| 2 | * 2.484 | 63.2 | Pk | 31.9 | -25.3 | 0 | 69.8 | - | - | 74 | -4.2 | 171 | 365 | H |
| 3 | * 2.484 | 44.6 | RMS | 31.9 | -25.3 | .17 | 51.37 | 54 | -2.63 | - | - | 171 | 365 | H |
| 4 | * 2.484 | 44.73 | RMS | 31.9 | -25.3 | .17 | 51.5 | 54 | -2.5 | - | - | 171 | 365 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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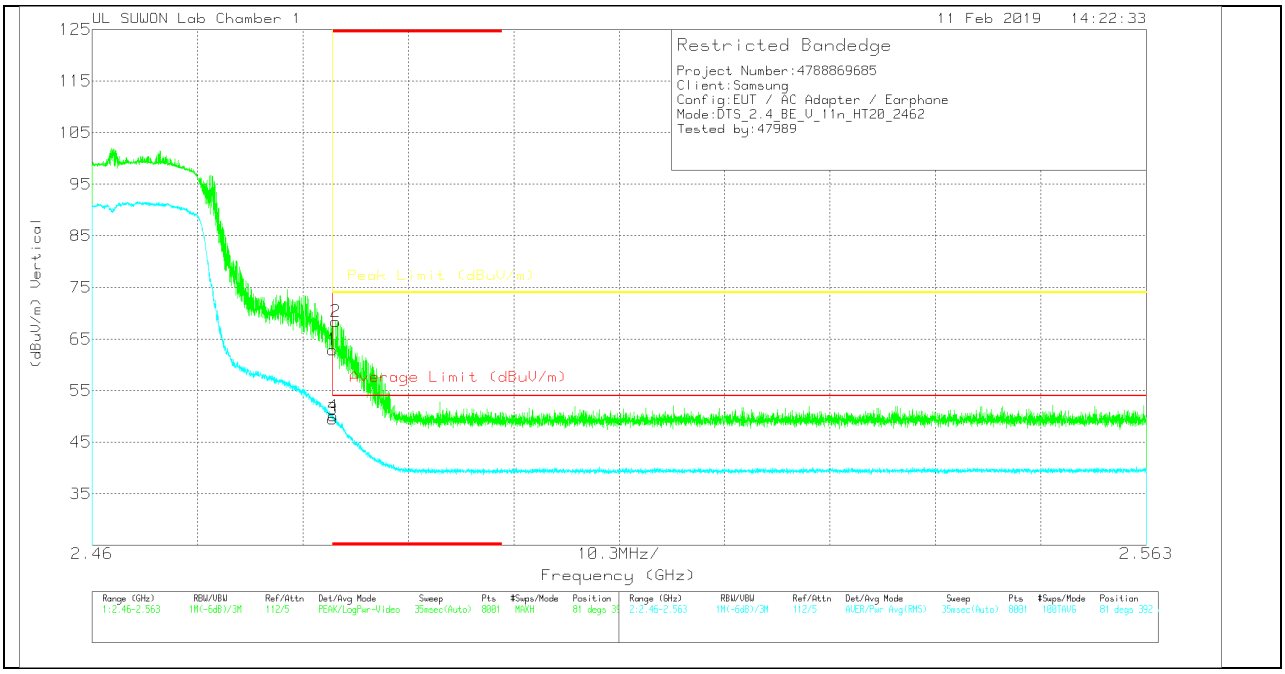
## VERTICAL PEAK AND AVERAGE PLOT




## VERTICAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 56.35 | Pk | 31.9 | -25.3 | 0 | 62.95 | - | - | 74 | -11.05 | 81 | 392 | V |
| 2 | * 2.484 | 61.8 | Pk | 31.9 | -25.3 | 0 | 68.4 | - | - | 74 | -5.6 | 81 | 392 | V |
| 3 | * 2.484 | 42.73 | RMS | 31.9 | -25.3 | .17 | 49.5 | 54 | -4.5 | - | - | 81 | 392 | V |
| 4 | * 2.484 | 43.36 | RMS | 31.9 | -25.3 | .17 | 50.13 | 54 | -3.87 | - | - | 81 | 392 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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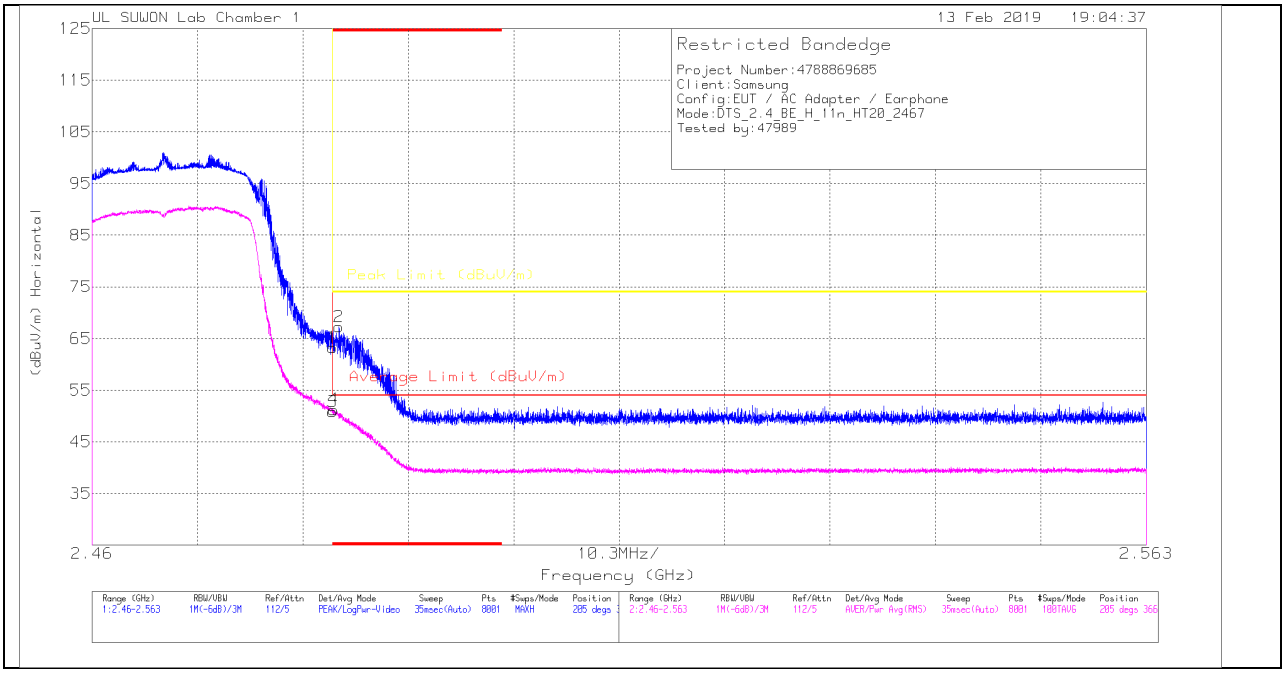
# AUTHORIZED BANDEDGE (12 CHANNEL)

## HORIZONTAL PEAK AND AVERAGE PLOT




## HORIZONTAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 56.67 | Pk | 31.9 | -25.3 | 0 | 63.27 | - | - | 74 | -10.73 | 205 | 366 | H |
| 2 | * 2.484 | 60.66 | Pk | 31.9 | -25.3 | 0 | 67.26 | - | - | 74 | -6.74 | 205 | 366 | H |
| 3 | * 2.484 | 44.13 | RMS | 31.9 | -25.3 | .17 | 50.90 | 54 | -3.10 | - | - | 205 | 366 | H |
| 4 | * 2.484 | 44.54 | RMS | 31.9 | -25.3 | .17 | 51.31 | 54 | -2.69 | - | - | 205 | 366 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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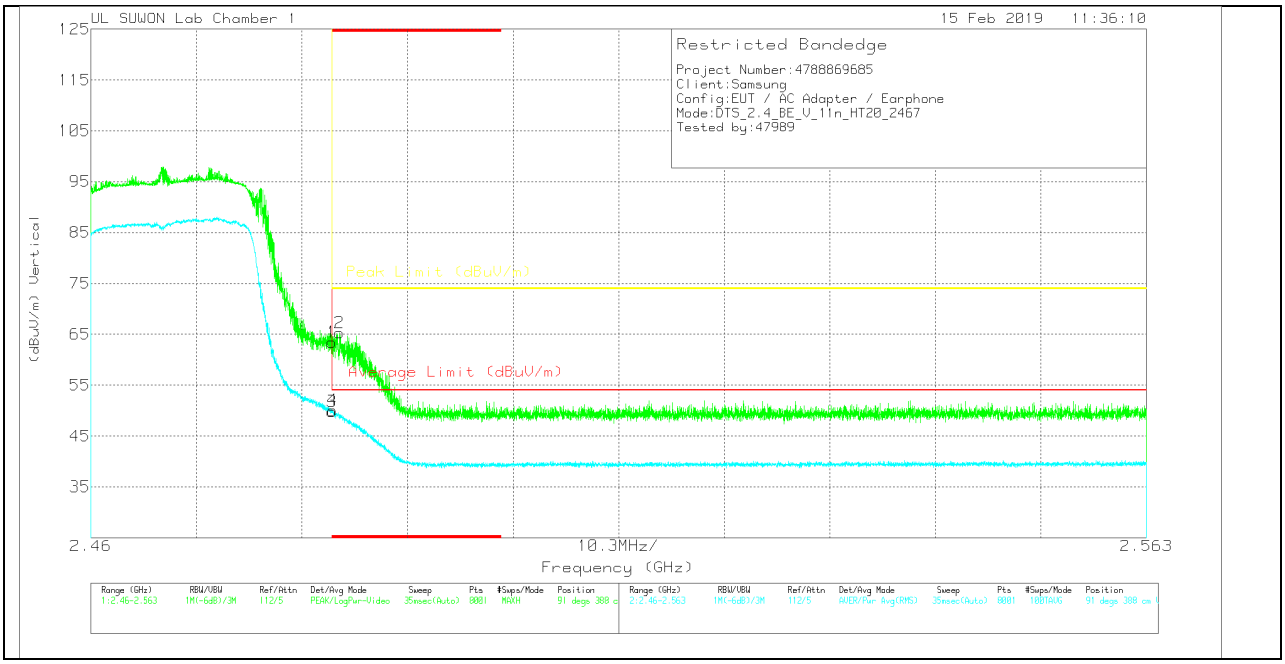
## VERTICAL PEAK AND AVERAGE PLOT




## VERTICAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 56.81 | Pk | 31.9 | -25.3 | 0 | 63.41 | - | - | 74 | -10.59 | 91 | 388 | V |
| 2 | * 2.484 | 58.69 | Pk | 31.9 | -25.3 | 0 | 65.29 | - | - | 74 | -8.71 | 91 | 388 | V |
| 3 | * 2.484 | 43.08 | RMS | 31.9 | -25.3 | .17 | 49.85 | 54 | -4.15 | - | - | 91 | 388 | V |
| 4 | * 2.484 | 43.25 | RMS | 31.9 | -25.3 | .17 | 50.02 | 54 | -3.98 | - | - | 91 | 388 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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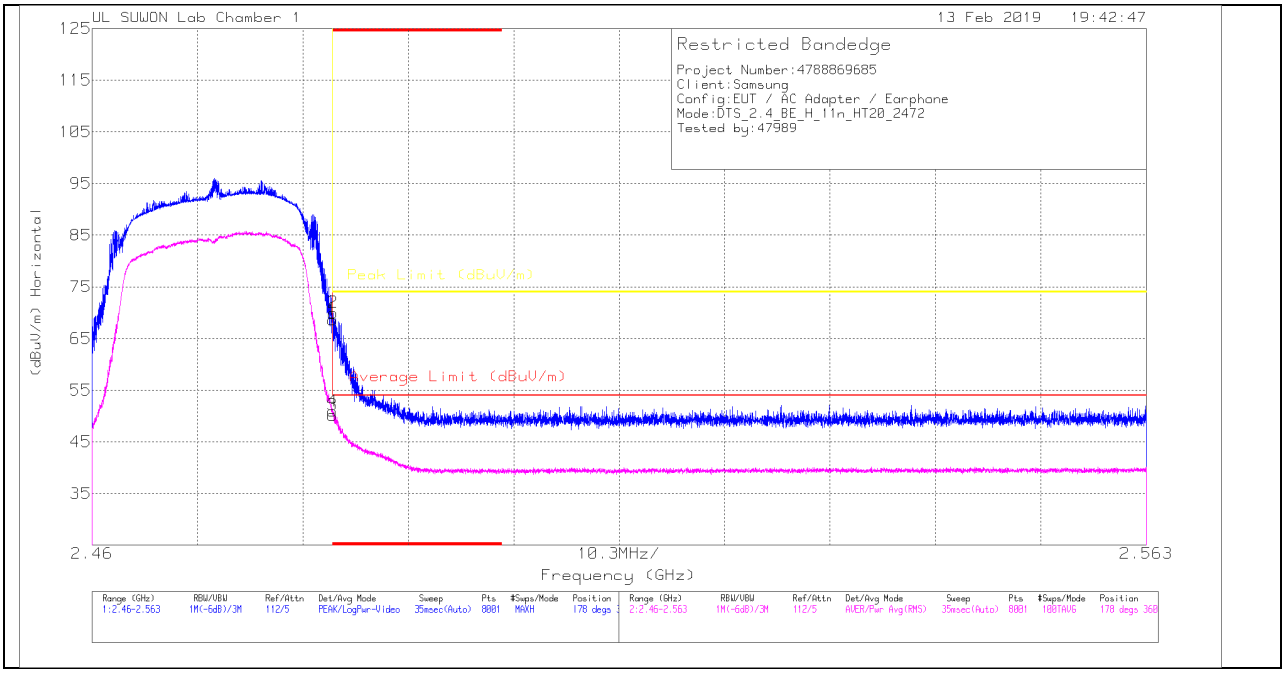
# AUTHORIZED BANDEDGE (13 CHANNEL)

## HORIZONTAL PEAK AND AVERAGE PLOT




## HORIZONTAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 62.04 | Pk | 31.9 | -25.3 | 0 | 68.64 | - | - | 74 | -5.36 | 178 | 360 | H |
| 2 | * 2.484 | 63.41 | Pk | 31.9 | -25.3 | 0 | 70.01 | - | - | 74 | -3.99 | 178 | 360 | H |
| 3 | * 2.484 | 43.43 | RMS | 31.9 | -25.3 | .17 | 50.2 | 54 | -3.8 | - | - | 178 | 360 | H |
| 4 | * 2.484 | 44.21 | RMS | 31.9 | -25.3 | .17 | 50.98 | 54 | -3.02 | - | - | 178 | 360 | H |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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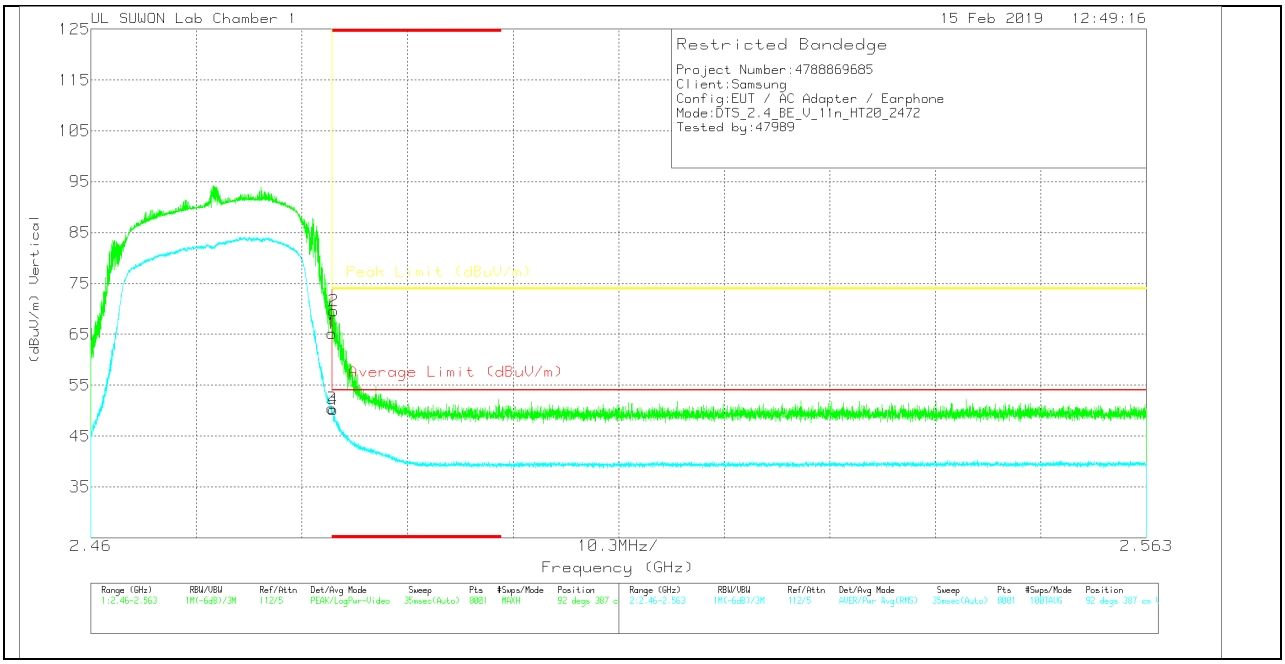
## VERTICAL PEAK AND AVERAGE PLOT




## VERTICAL DATA

Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 10dB[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | * 2.484 | 58.61 | Pk | 31.9 | -25.3 | 0 | 65.21 | - | - | 74 | -8.79 | 92 | 387 | V |
| 2 | * 2.484 | 63.06 | Pk | 31.9 | -25.3 | 0 | 69.66 | - | - | 74 | -4.34 | 92 | 387 | V |
| 3 | * 2.484 | 43.67 | RMS | 31.9 | -25.3 | .17 | 50.44 | 54 | -3.56 | - | - | 92 | 387 | V |
| 4 | * 2.484 | 43.47 | RMS | 31.9 | -25.3 | .17 | 50.24 | 54 | -3.76 | - | - | 92 | 387 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection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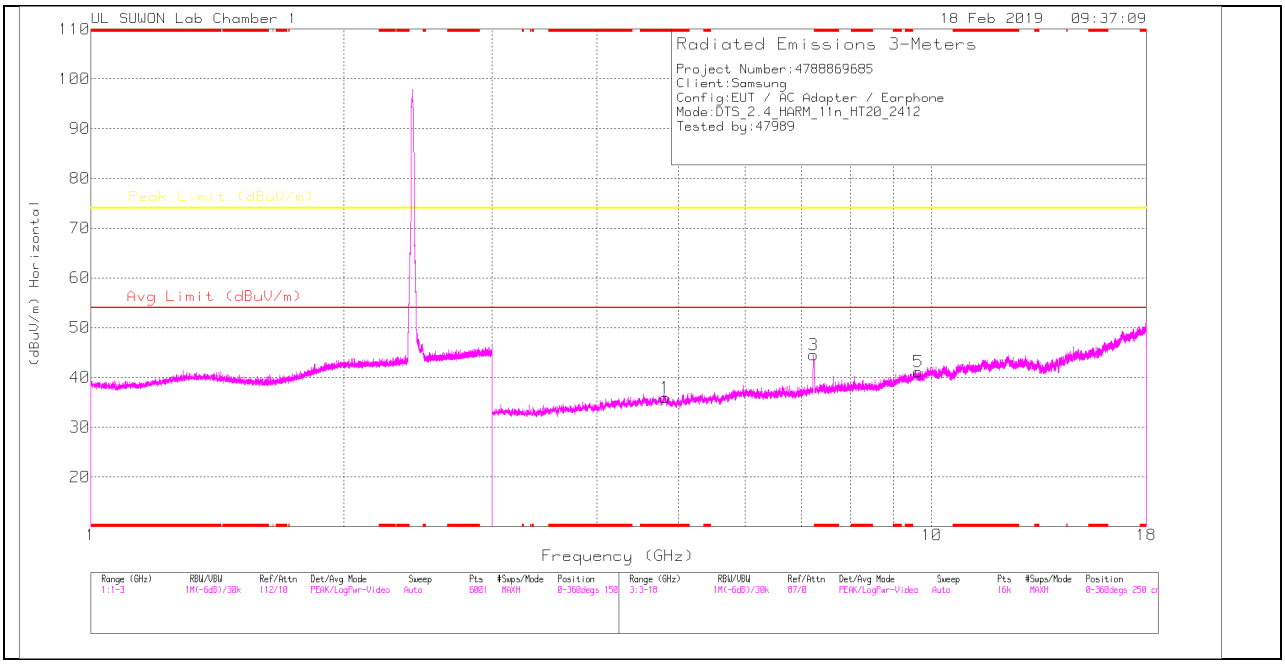
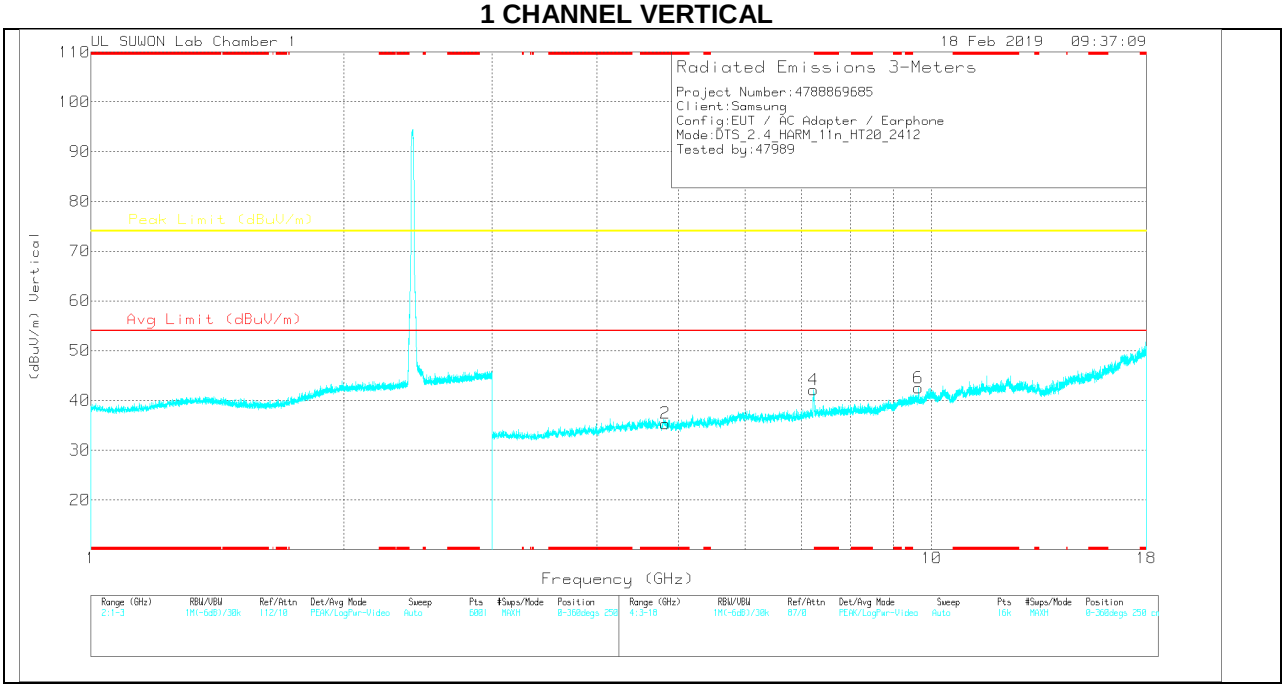
# HARMONICS AND SPURIOUS EMISSIONS

## 1 CHANNEL HORIZONTAL




## 1 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.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# 1 CHANNEL DATA

## Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | 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 | 33.12 | PK | 34.2 | -31.4 | 0 | 35.92 | - | - | 74 | -38.08 | 0-360 | 150 | H |
| 3 | 7.238 | 36.55 | PK | 35.8 | -27.8 | 0 | 44.55 | - | - | 74 | -29.45 | 0-360 | 150 | H |
| 5 | 9.647 | 27.3 | PK | 37.1 | -23.3 | 0 | 41.1 | - | - | 74 | -32.9 | 0-360 | 150 | H |
| 2 | * 4.824 | 32.57 | PK | 34.2 | -31.4 | 0 | 35.37 | - | - | 74 | -38.63 | 0-360 | 250 | V |
| 4 | 7.239 | 34.25 | PK | 35.8 | -27.9 | 0 | 42.15 | - | - | 74 | -31.85 | 0-360 | 250 | V |
| 6 | 9.648 | 28.7 | PK | 37.1 | -23.3 | 0 | 42.5 | - | - | 74 | -31.5 | 0-360 | 250 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

## Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.238 | 49.25 | PK2 | 35.8 | -27.8 | 0 | 57.25 | - | - | 74 | -16.75 | 161 | 100 | H |
| 7.237 | 44.87 | PK2 | 35.8 | -27.8 | 0 | 52.87 | - | - | 74 | -21.13 | 156 | 151 | V |
| 9.648 | 37.01 | PK2 | 37.1 | -23.3 | 0 | 50.81 | - | - | 74 | -23.19 | 111 | 119 | H |
| 9.648 | 36.95 | PK2 | 37.1 | -23.3 | 0 | 50.75 | - | - | 74 | -23.25 | 83 | 100 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak


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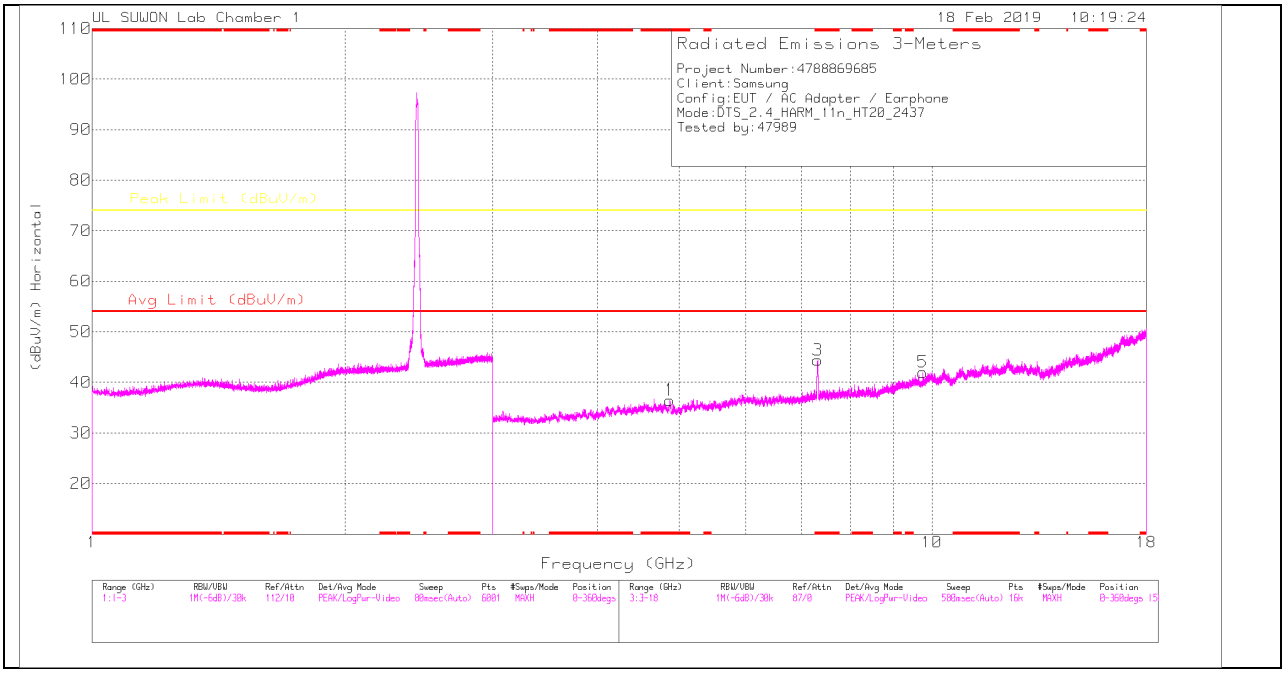
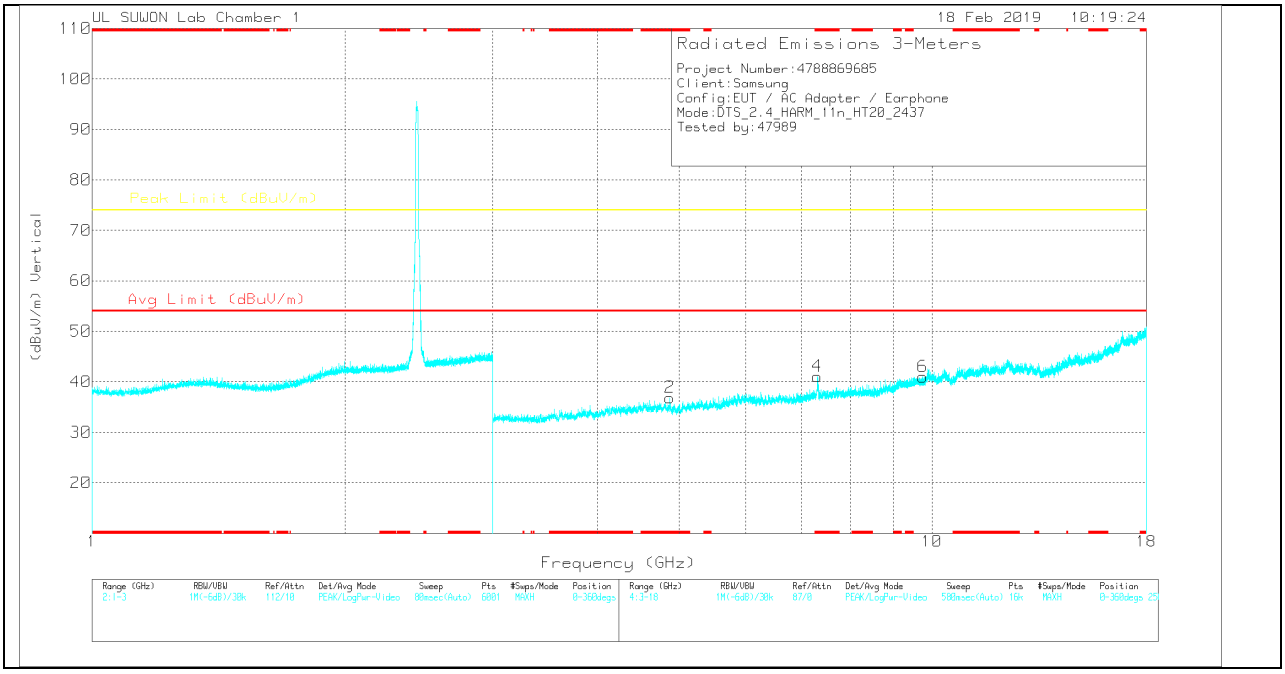
**6 CHANNEL HORIZONTAL**




**6 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.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## 6 CHANNEL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | 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 | * 4.875 | 33.77 | PK | 34.2 | -31.5 | 0 | 36.47 | - | - | 74 | -37.53 | 0-360 | 250 | H |
| 3 | * 7.31 | 36.09 | PK | 35.8 | -27.5 | 0 | 44.39 | - | - | 74 | -29.61 | 0-360 | 150 | H |
| 5 | 9.748 | 28.68 | PK | 37.2 | -23.9 | 0 | 41.98 | - | - | 74 | -32.02 | 0-360 | 250 | H |
| 2 | * 4.876 | 34.17 | PK | 34.2 | -31.5 | 0 | 36.87 | - | - | 74 | -37.13 | 0-360 | 150 | V |
| 4 | * 7.307 | 32.78 | PK | 35.8 | -27.5 | 0 | 41.08 | - | - | 74 | -32.92 | 0-360 | 250 | V |
| 6 | 9.748 | 27.7 | PK | 37.2 | -23.9 | 0 | 41 | - | - | 74 | -33 | 0-360 | 150 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

### Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 7.312 | 48.97 | PK2 | 35.8 | -27.4 | 0 | 57.37 | - | - | 74 | -16.63 | 161 | 111 | H |
| * 7.31 | 35.4 | MAv1 | 35.8 | -27.4 | .17 | 43.97 | 54 | -10.03 | - | - | 161 | 111 | H |
| * 7.31 | 45.25 | PK2 | 35.8 | -27.5 | 0 | 53.55 | - | - | 74 | -20.45 | 129 | 117 | V |
| * 7.308 | 31.28 | MAv1 | 35.8 | -27.5 | .17 | 39.75 | 54 | -14.25 | - | - | 129 | 117 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average


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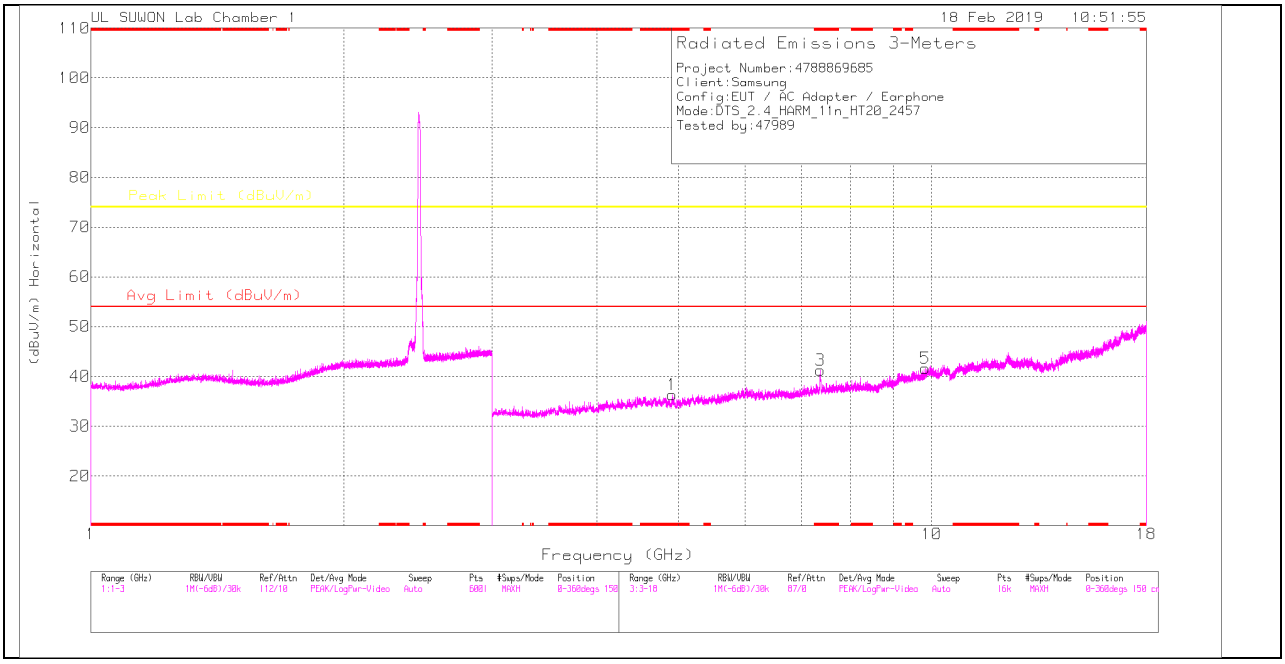
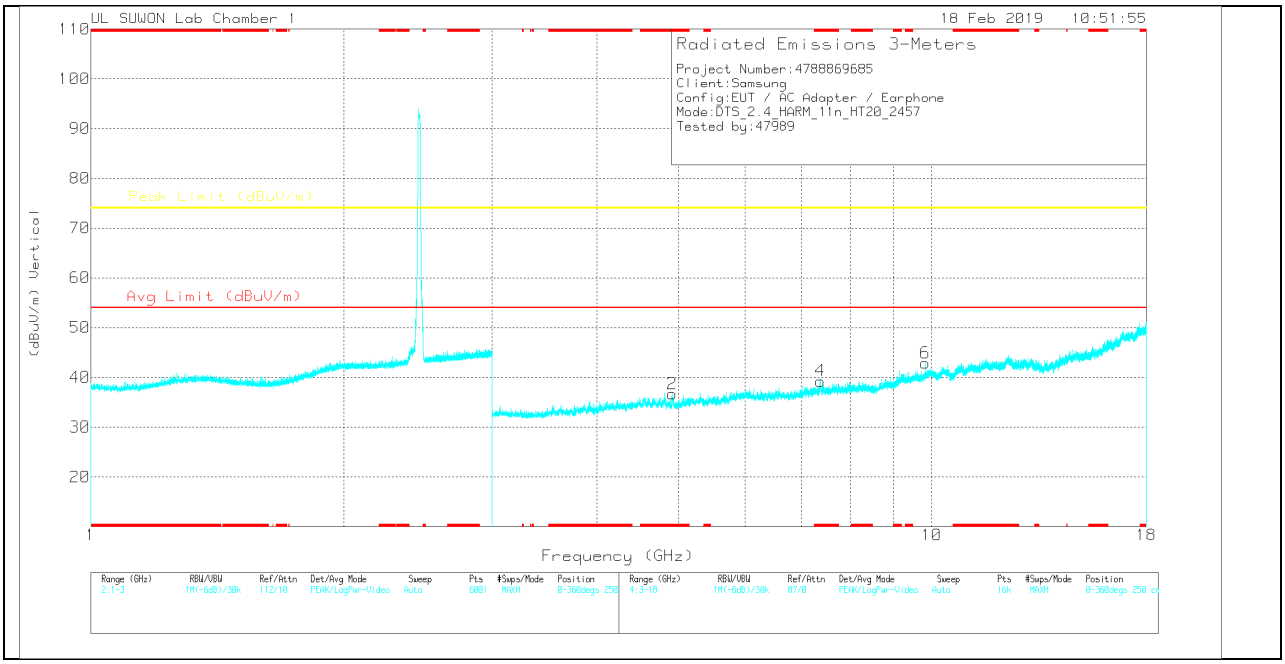
**10 CHANNEL HORIZONTAL**




**10 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.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# 10 CHANNEL DATA

## Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | 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 | * 4.917 | 33.62 | PK | 34.2 | -31.5 | 0 | 36.32 | - | - | 74 | -37.68 | 0-360 | 250 | H |
| 3 | * 7.375 | 32.41 | PK | 35.8 | -27 | 0 | 41.21 | - | - | 74 | -32.79 | 0-360 | 150 | H |
| 5 | 9.828 | 27.66 | PK | 37.4 | -23.4 | 0 | 41.66 | - | - | 74 | -32.34 | 0-360 | 150 | H |
| 2 | * 4.911 | 34 | PK | 34.2 | -31.5 | 0 | 36.7 | - | - | 74 | -37.3 | 0-360 | 150 | V |
| 4 | * 7.376 | 30.49 | PK | 35.8 | -27 | 0 | 39.29 | - | - | 74 | -34.71 | 0-360 | 250 | V |
| 6 | 9.828 | 28.85 | PK | 37.4 | -23.4 | 0 | 42.85 | - | - | 74 | -31.15 | 0-360 | 250 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK – Peak Detector

## Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 3GHz_HP[dB] | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * 7.371 | 45.91 | PK2 | 35.8 | -27 | 0 | 54.71 | - | - | 74 | -19.29 | 162 | 106 | H |
| * 7.369 | 31.24 | MAv1 | 35.8 | -27 | .17 | 40.21 | 54 | -13.79 | - | - | 162 | 106 | H |
| * 7.365 | 41.3 | PK2 | 35.8 | -27 | 0 | 50.1 | - | - | 74 | -23.9 | 123 | 144 | V |
| * 7.367 | 27.96 | MAv1 | 35.8 | -27 | .17 | 36.93 | 54 | -17.07 | - | - | 123 | 144 | V |
| 9.828 | 37.74 | PK2 | 37.4 | -23.4 | 0 | 51.74 | - | - | 74 | -22.26 | 118 | 100 | H |
| 9.828 | 36.16 | PK2 | 37.4 | -23.4 | 0 | 50.16 | - | - | 74 | -23.84 | 95 | 117 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average


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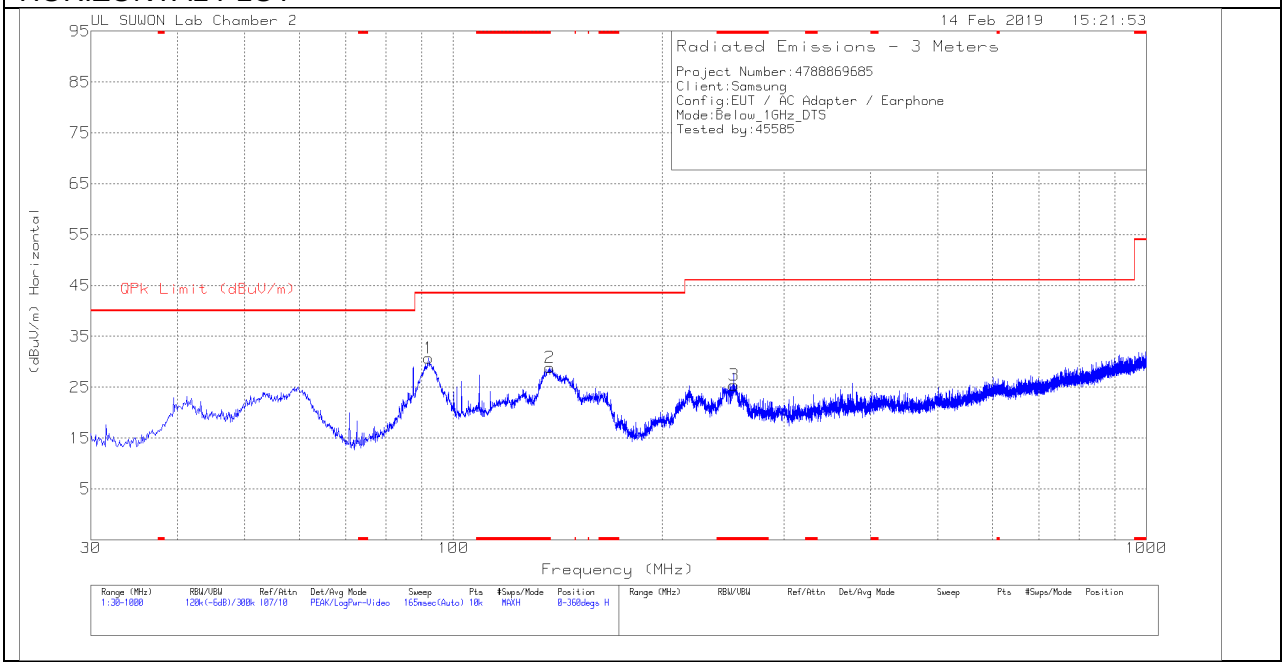
## 11.3. WORST-CASE BELOW 1 GHz

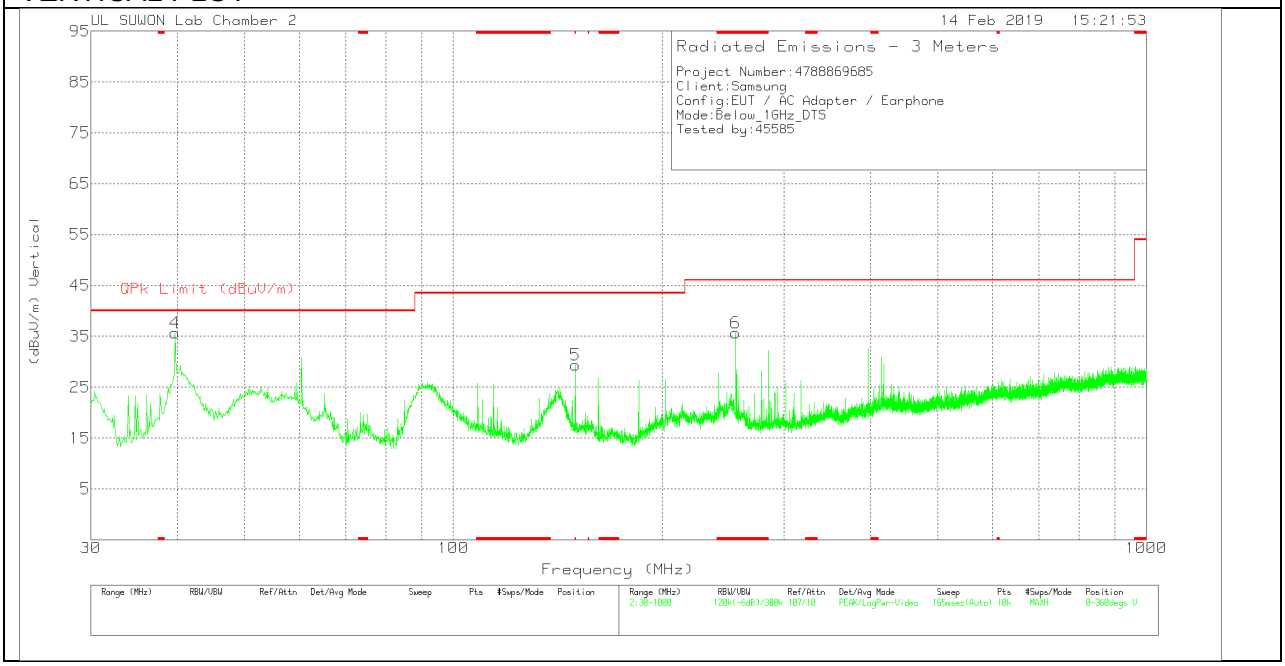
**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)**

HORIZONTAL PLOT




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

VERTICAL PLOT





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**Below 1G Data**

Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | VULB9163_749 | Below_1G[dB] | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 92.08 | 45.81 | Pk | 16.4 | -31.5 | 30.71 | 43.52 | -12.81 | 0-360 | 200 | H |
| 2 | * 137.767 | 45.91 | Pk | 14.1 | -31.2 | 28.81 | 43.52 | -14.71 | 0-360 | 200 | H |
| 3 | * 254.167 | 36.76 | Pk | 19.2 | -30.6 | 25.36 | 46.02 | -20.66 | 0-360 | 100 | H |
| 4 | 39.7 | 48.93 | Pk | 18.6 | -31.9 | 35.63 | 40 | -4.37 | 0-360 | 100 | V |
| 5 | * 149.989 | 46.46 | Pk | 14.1 | -31.2 | 29.36 | 43.52 | -14.16 | 0-360 | 100 | V |
| 6 | * 255.525 | 47.2 | Pk | 19.1 | -30.6 | 35.7 | 46.02 | -10.32 | 0-360 | 100 | V |

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector


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# 12. AC POWER LINE CONDUCTED EMISSIONS

**LIMITS**

FCC §15.207 (a)
IC RSS-GEN Clause 8.8

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

* Decreases with the logarithm of the frequency.

**TEST PROCEDURE**

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

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

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


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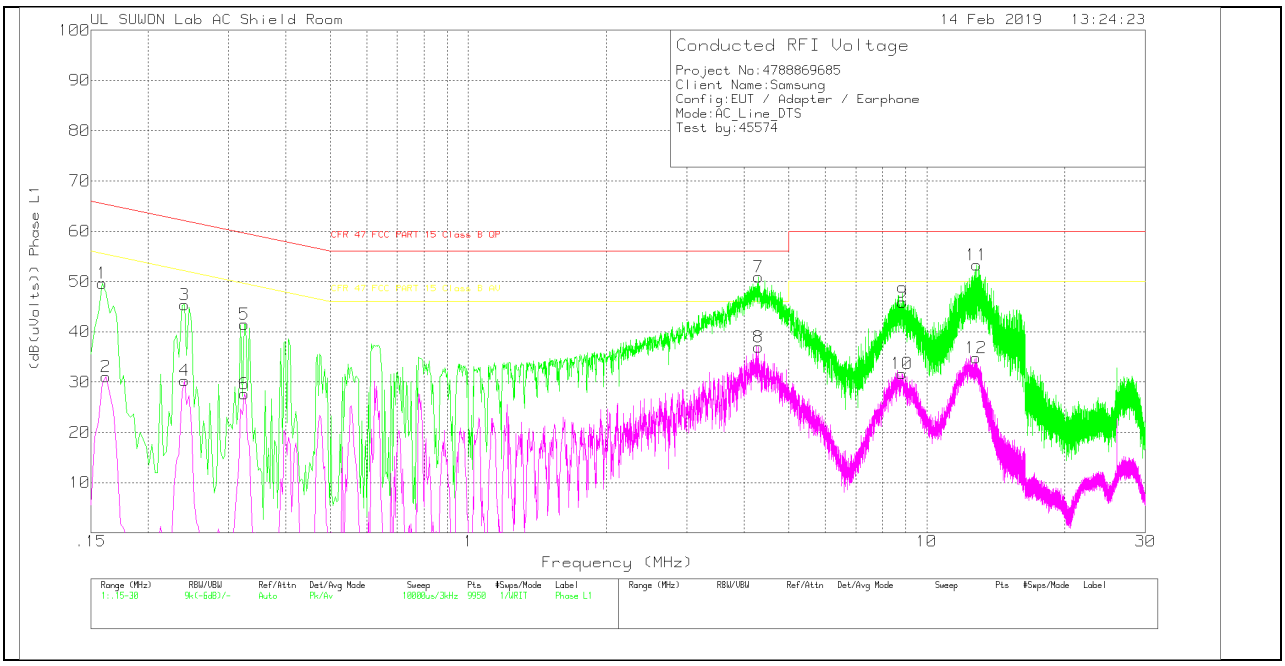
**RESULTS**

**WORST EMISSIONS**

## LINE 1 PLOT





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## LINE 1 RESULTS

Range 1: Phase L1 .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | ENV216_101836_With ex-cord_L1 | CABLELOSS(dB) | Corrected Reading (dB(uVolts)) | CFR 47 FCC PART 15 Class B QP | Margin (dB) | CFR 47 FCC PART 15 Class B AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .159 | 39.66 | Pk | 9.9 | .1 | 49.66 | 65.52 | -15.86 | - | - |
| 2 | .162 | 20.91 | Av | 10 | .1 | 31.01 | - | - | 55.36 | -24.35 |
| 3 | .24 | 35.52 | Pk | 9.7 | .2 | 45.42 | 62.1 | -16.68 | - | - |
| 4 | .24 | 20.41 | Av | 9.7 | .2 | 30.31 | - | - | 52.1 | -21.79 |
| 5 | .324 | 31.53 | Pk | 9.8 | .2 | 41.53 | 59.6 | -18.07 | - | - |
| 6 | .324 | 17.63 | Av | 9.8 | .2 | 27.63 | - | - | 49.6 | -21.97 |
| 7 | 4.299 | 40.78 | Pk | 9.8 | .3 | 50.88 | 56 | -5.12 | - | - |
| 8 | 4.293 | 26.9 | Av | 9.8 | .3 | 37 | - | - | 46 | -9 |
| 9 | 8.853 | 35.51 | Pk | 10 | .4 | 45.91 | 60 | -14.09 | - | - |
| 10 | 8.817 | 21.24 | Av | 10 | .4 | 31.64 | - | - | 50 | -18.36 |
| 11 | 12.834 | 42.84 | Pk | 10.1 | .4 | 53.34 | 60 | -6.66 | - | - |
| 12 | 12.81 | 24.33 | Av | 10.1 | .4 | 34.83 | - | - | 50 | -15.17 |

Pk - Peak detector
Av - Average detection

## Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

| Frequency (MHz) | Meter Reading (dBuV) | Det | ENV216_101836_With ex-cord_L1 | CABLELOSS(dB) | Corrected Reading (dB(uVolts)) | CFR 47 FCC PART 15 Class B QP | Margin (dB) | CFR 47 FCC PART 15 Class B AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|
| 4.29975 | 30.87 | Qp | 9.8 | .3 | 40.97 | 56 | -15.03 | - | - |
| 12.8342 | 31.21 | Qp | 10.1 | .4 | 41.71 | 60 | -18.29 | - | - |

Qp - Quasi-Peak detector


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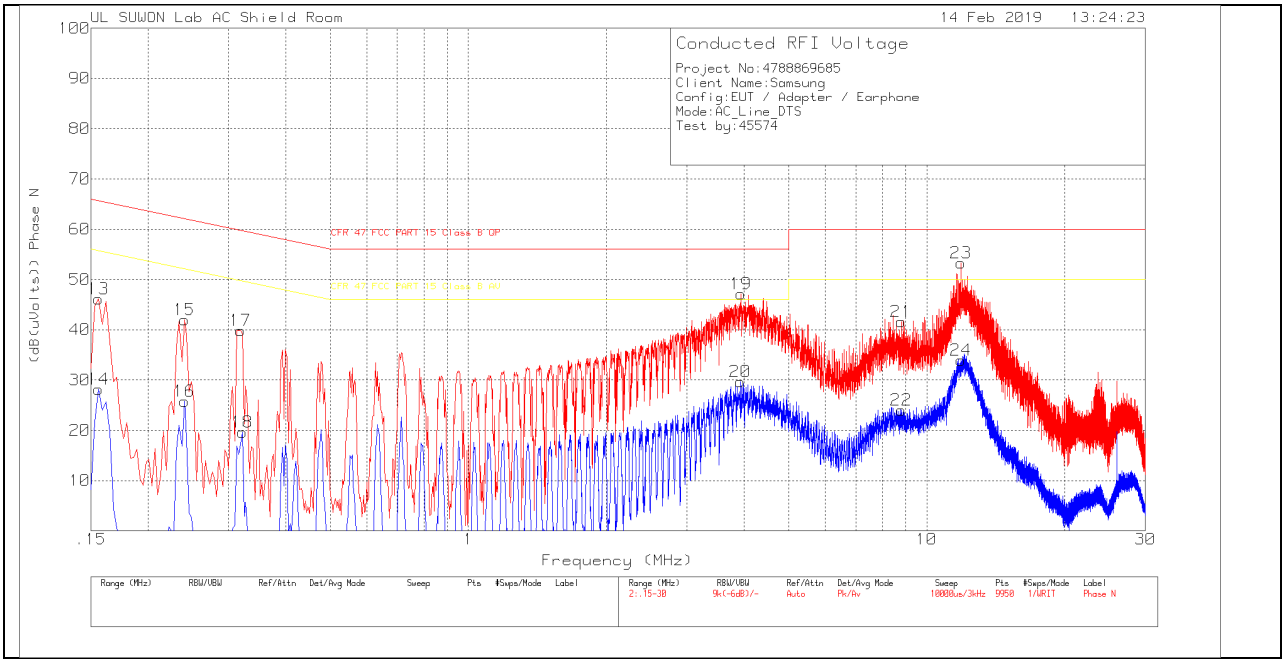
## LINE 2 PLOT





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## LINE 2 RESULTS

Range 2: Phase N .15 - 30MHz

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | ENV216_101836_With ex-cord_N | CABLELOSS(dB) | Corrected Reading (dB(uVolts)) | CFR 47 FCC PART 15 Class B QP | Margin (dB) | CFR 47 FCC PART 15 Class B AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | .156 | 36.26 | Pk | 9.8 | .1 | 46.16 | 65.67 | -19.51 | - | - |
| 14 | .156 | 18.32 | Av | 9.8 | .1 | 28.22 | - | - | 55.67 | -27.45 |
| 15 | .24 | 32.09 | Pk | 9.7 | .2 | 41.99 | 62.1 | -20.11 | - | - |
| 16 | .24 | 15.84 | Av | 9.7 | .2 | 25.74 | - | - | 52.1 | -26.36 |
| 17 | .318 | 29.86 | Pk | 9.8 | .2 | 39.86 | 59.76 | -19.9 | - | - |
| 18 | .321 | 9.64 | Av | 9.8 | .2 | 19.64 | - | - | 49.68 | -30.04 |
| 19 | 3.93 | 37.06 | Pk | 9.8 | .3 | 47.16 | 56 | -8.84 | - | - |
| 20 | 3.915 | 19.59 | Av | 9.8 | .3 | 29.69 | - | - | 46 | -16.31 |
| 21 | 8.808 | 31.34 | Pk | 9.9 | .4 | 41.64 | 60 | -18.36 | - | - |
| 22 | 8.799 | 13.75 | Av | 9.9 | .4 | 24.05 | - | - | 50 | -25.95 |
| 23 | 11.874 | 42.9 | Pk | 10.1 | .3 | 53.3 | 60 | -6.7 | - | - |
| 24 | 11.874 | 23.53 | Av | 10.1 | .3 | 33.93 | - | - | 50 | -16.07 |

Pk - Peak detector
Av - Average detection

## Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

| Frequency (MHz) | Meter Reading (dBuV) | Det | ENV216_101836_With ex-cord_N | CABLELOSS(dB) | Corrected Reading (dB(uVolts)) | CFR 47 FCC PART 15 Class B QP | Margin (dB) | CFR 47 FCC PART 15 Class B AV | Margin (dB) |
|---|---|---|---|---|---|---|---|---|---|
| 3.93075 | 31.76 | Qp | 9.8 | .3 | 41.86 | 56 | -14.14 | - | - |
| 11.8733 | 33.94 | Qp | 10.1 | .3 | 44.34 | 60 | -15.66 | - | - |

Qp - Quasi-Peak detector


UL Korea, Ltd. Suwon Laboratory FORM ID: FCC_15C
218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea TEL: (031) 337-9902 FAX: (031) 213-5433
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