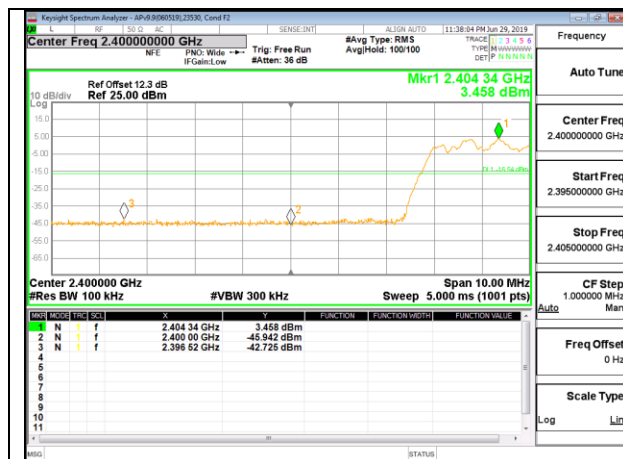
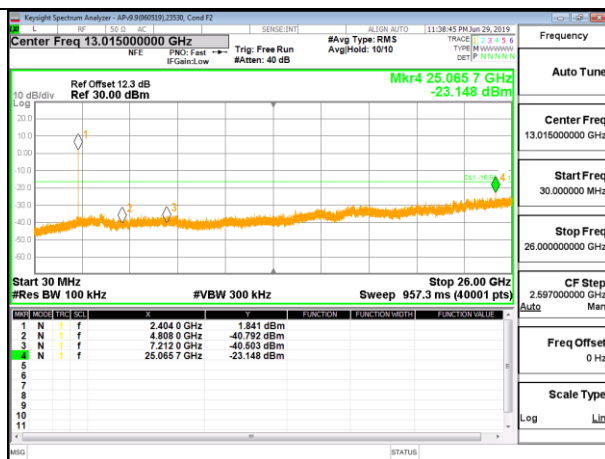


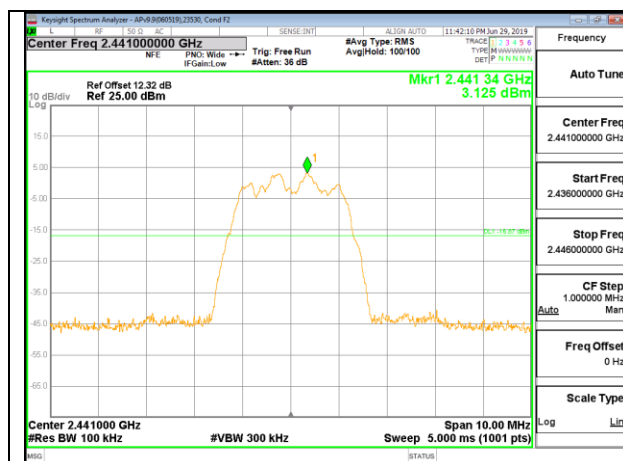
### Antenna 3



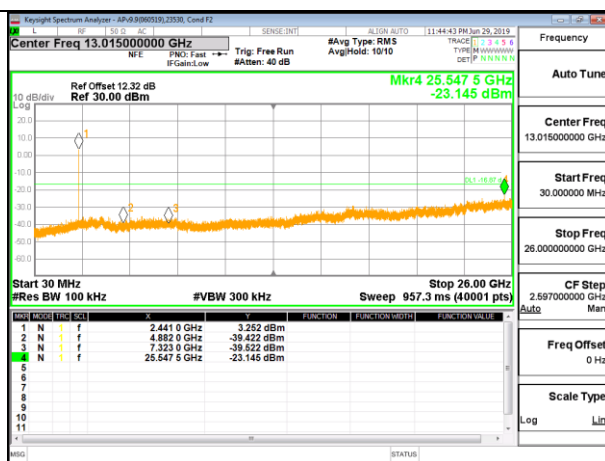
LOW CHANNEL , BANDEDGE ANT 3



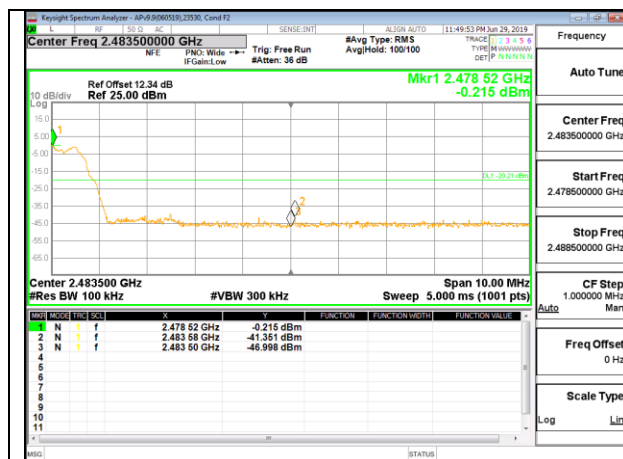
LOW CHANNEL OUT-OF-BAND ANT 3



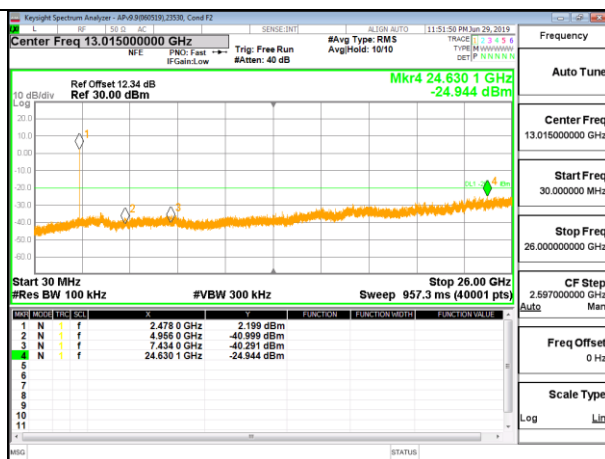
MID CHANNEL REFERENCE ANT 3



MID CHANNEL OUT-OF-BAND ANT 3



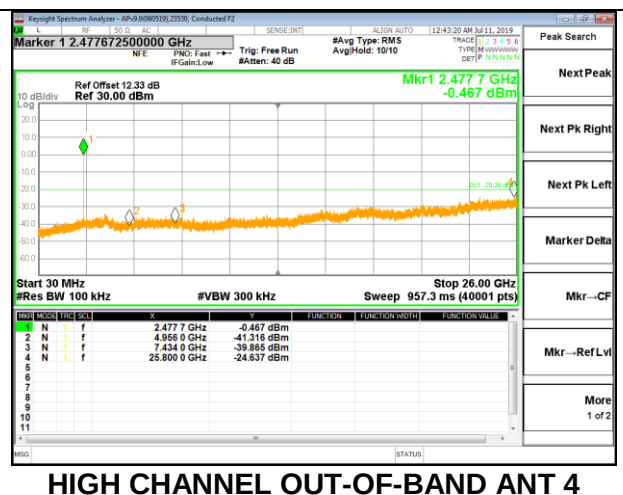
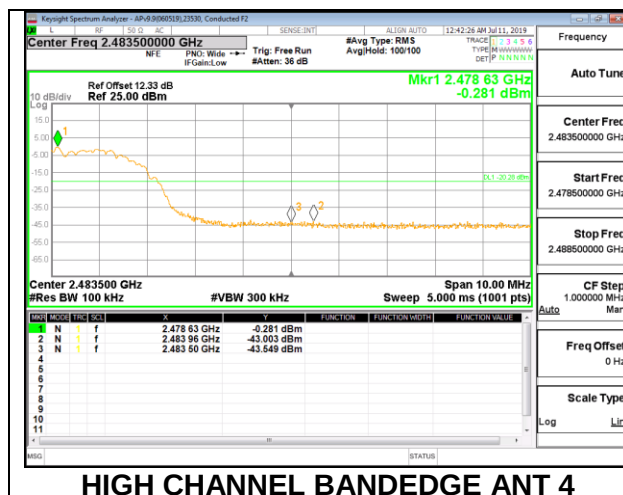
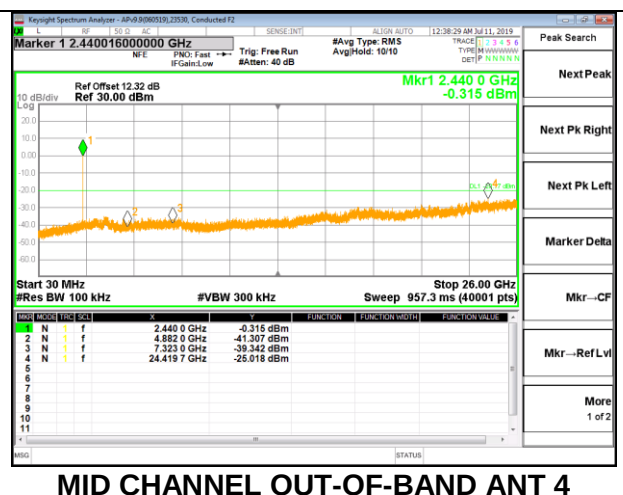
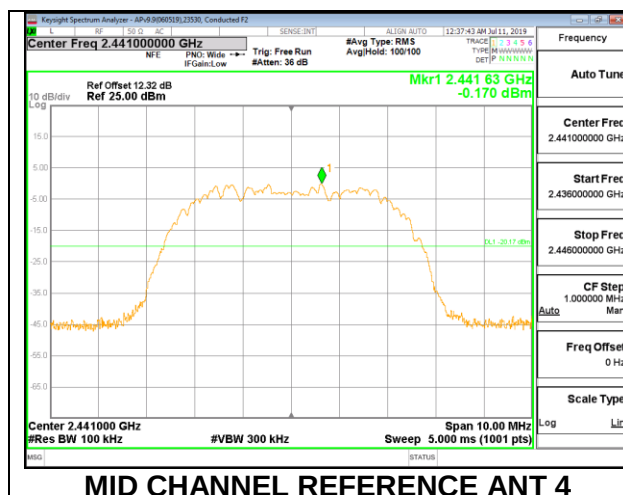
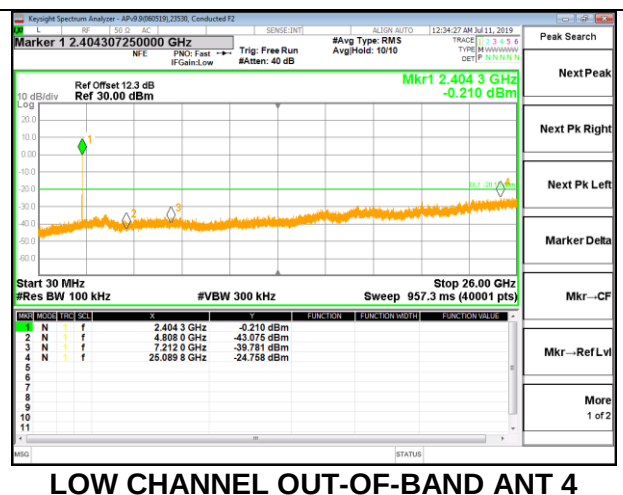
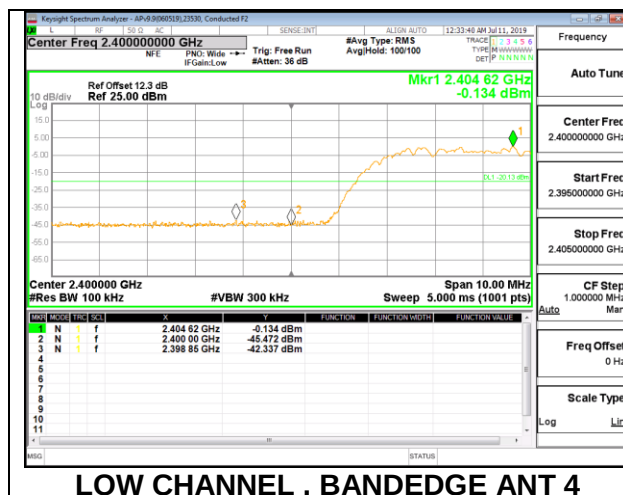
HIGH CHANNEL BANDEDGE ANT 3



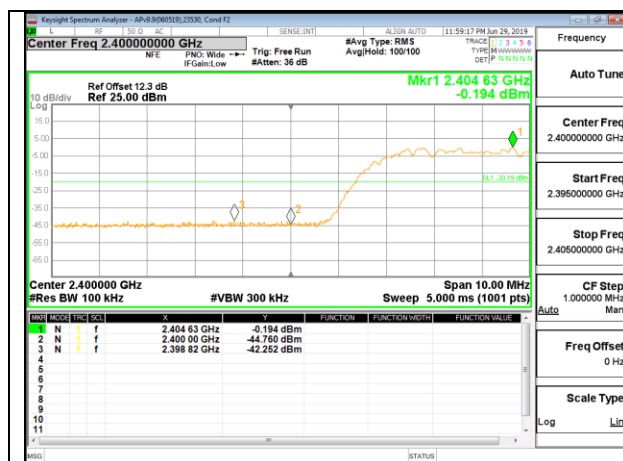
HIGH CHANNEL OUT-OF-BAND ANT 3

# 8.13.4. HDR8, LOW POWER

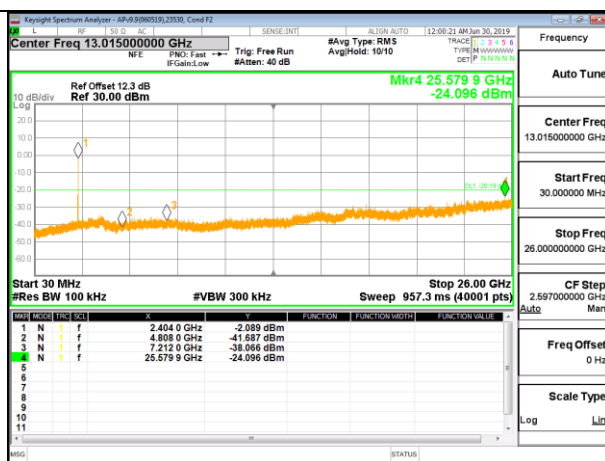
## Antenna 4



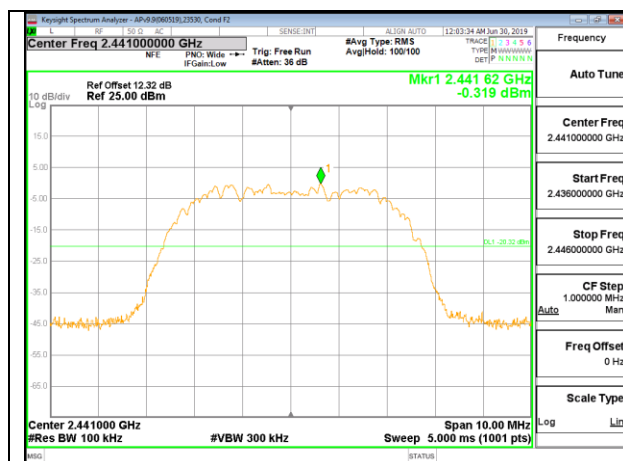
### Antenna 3



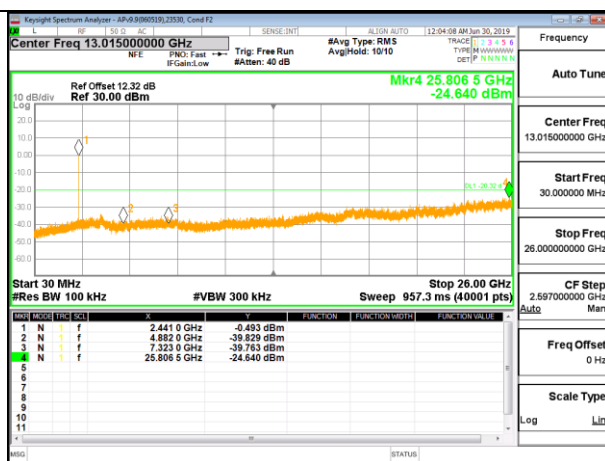
LOW CHANNEL , BANDEDGE ANT 3



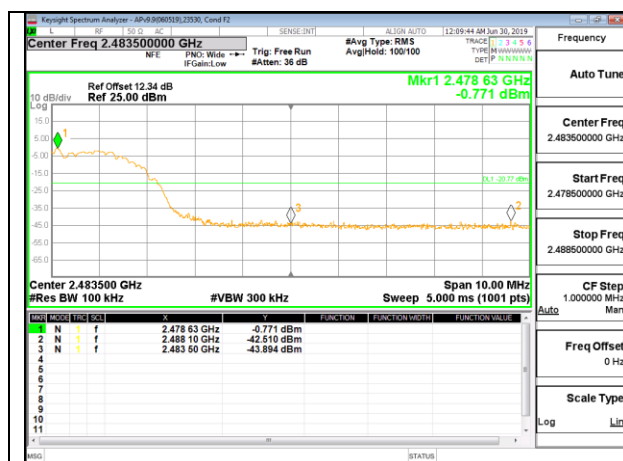
LOW CHANNEL OUT-OF-BAND ANT 3



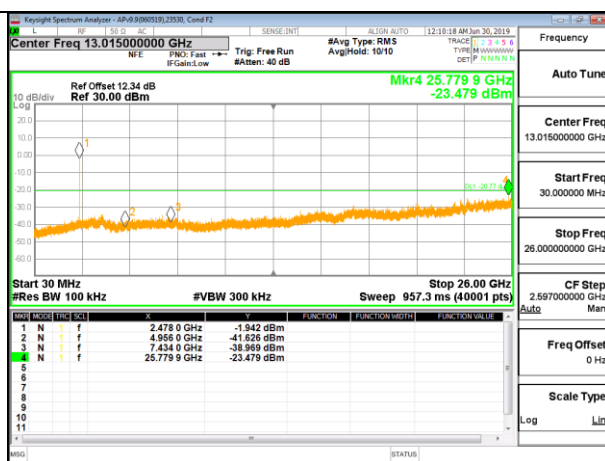
MID CHANNEL REFERENCE ANT 3



MID CHANNEL OUT-OF-BAND ANT 3



HIGH CHANNEL BANDEDGE ANT 3



HIGH CHANNEL OUT-OF-BAND ANT 3

## 9. RADIATED TEST RESULTS

### 9.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 0.009-0.490           | 2400/F(kHz) @ 300 m                | -                                    |
| 0.490-1.705           | 24000/F(kHz) @ 30 m                | -                                    |
| 1.705 - 30            | 30 @ 30m                           | -                                    |
| 30 - 88               | 100                                | 40                                   |
| 88 - 216              | 150                                | 43.5                                 |
| 216 - 960             | 200                                | 46                                   |
| Above 960             | 500                                | 54                                   |

#### TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement 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 pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

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.

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

**KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification**

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

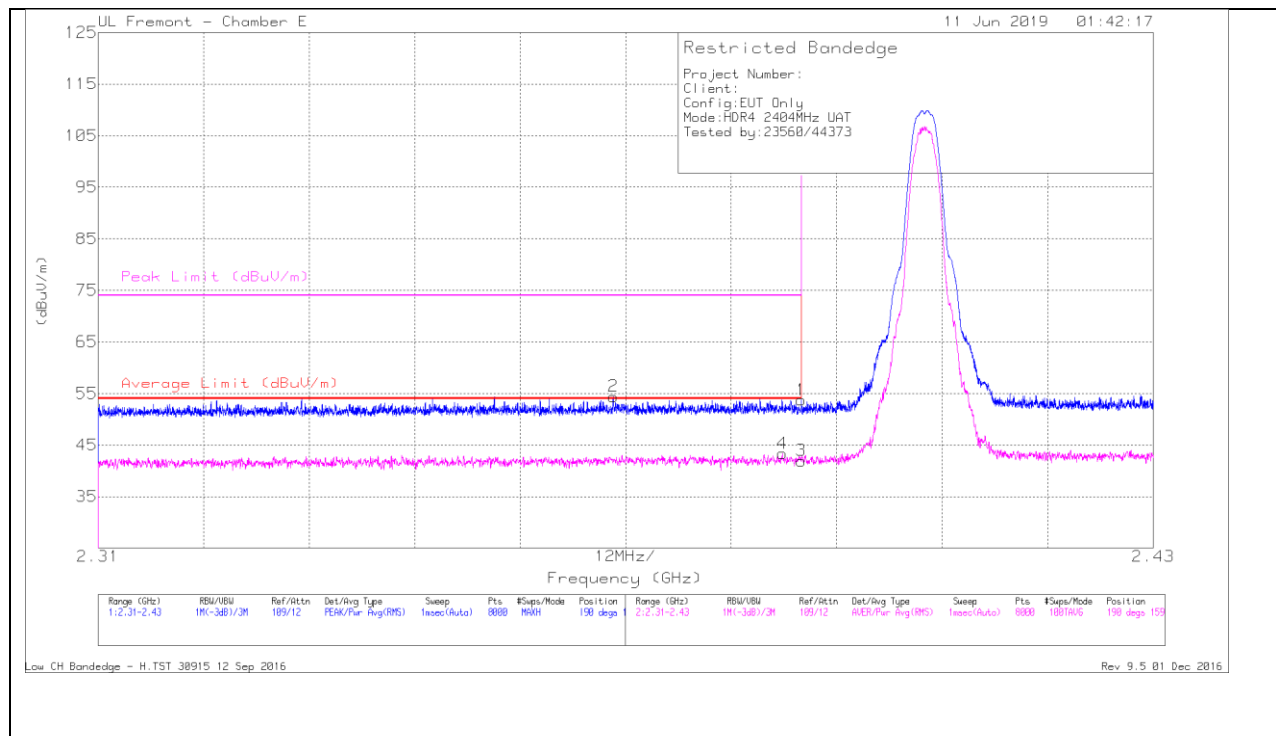
## 9.2. TRANSMITTER ABOVE 1 GHz

### 9.2.1. HIGH POWER HDR (HDR4)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

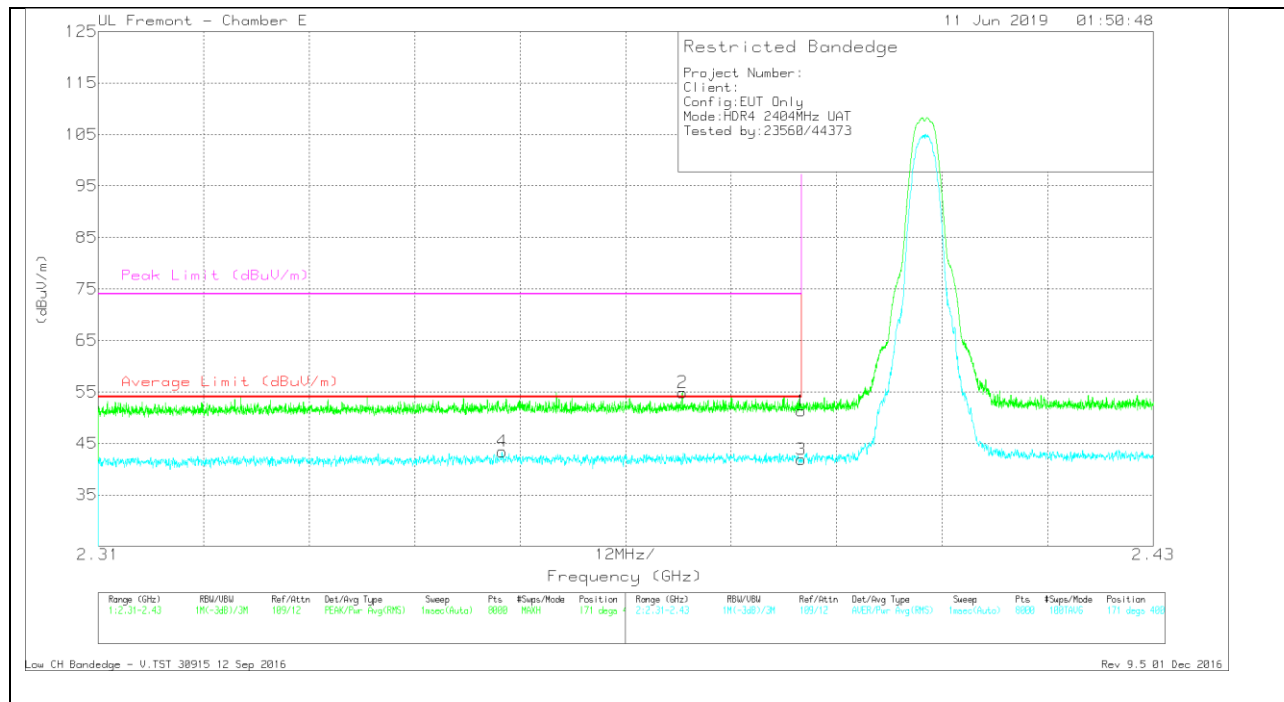
Pk - Peak detector

RMS - RMS detection

Low CH Bandedge - H.TST 30915 12 Sep 2016

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## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dBm) | Amp/Cbl/Fil/TP ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 4      | * 2.356         | 29.63                | RMS | 32            | -18.2                  | 43.43                      | 54                     | -10.57      | -                   | -              | 171            | 400         | V        |
| 2      | * 2.376         | 40.97                | Pk  | 32.2          | -18.3                  | 54.87                      | -                      | -           | 74                  | -19.13         | 171            | 400         | V        |
| 1      | * 2.39          | 37.3                 | Pk  | 32.3          | -18.3                  | 51.3                       | -                      | -           | 74                  | -22.7          | 171            | 400         | V        |
| 3      | * 2.39          | 27.89                | RMS | 32.3          | -18.3                  | 41.89                      | 54                     | -12.11      | -                   | -              | 171            | 400         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

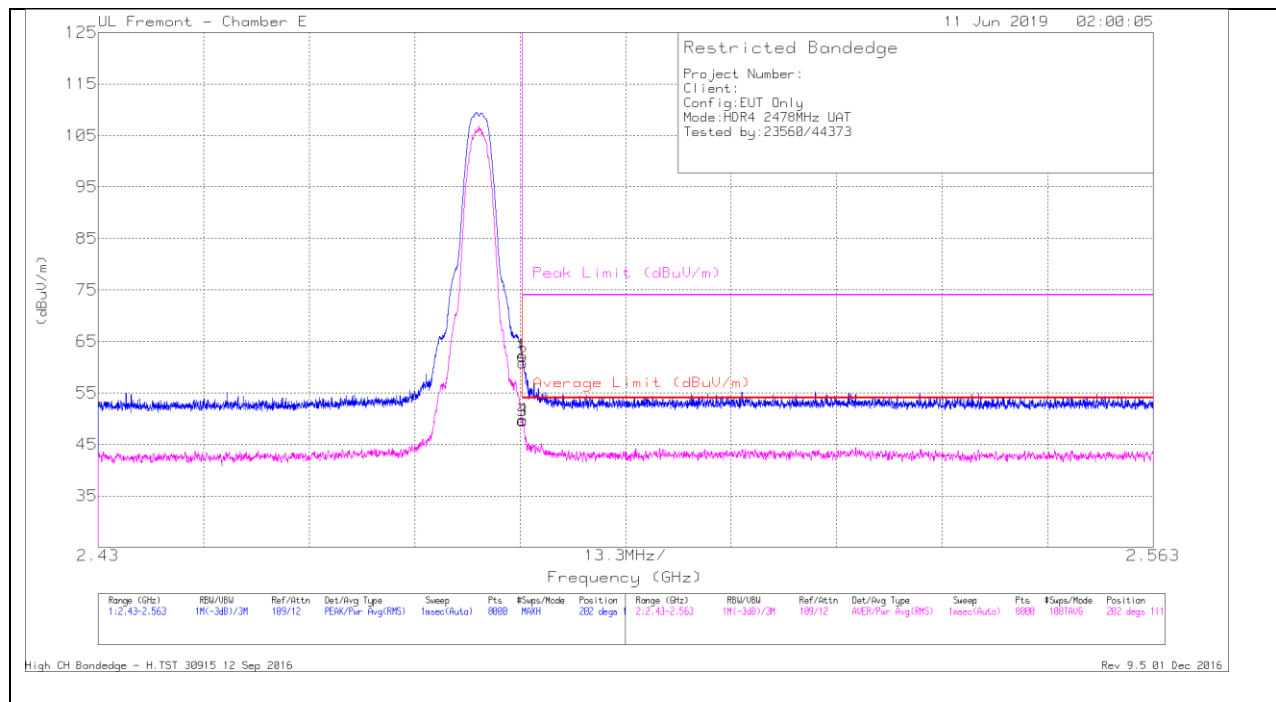
RMS - RMS detection

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# **BANDEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filtri/Pad (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         | 47.5                 | Pk  | 32.8           | -18.1                   | 62.2                       | -                      | -           | 74                  | -11.8          | 202            | 111         | H        |
| 2      | * 2.484         | 46.13                | Pk  | 32.8           | -18.1                   | 60.83                      | -                      | -           | 74                  | -13.17         | 202            | 111         | H        |
| 3      | * 2.484         | 34.9                 | RMS | 32.8           | -18.1                   | 49.6                       | 54                     | -4.4        | -                   | -              | 202            | 111         | H        |
| 4      | * 2.484         | 35.09                | RMS | 32.8           | -18.1                   | 49.79                      | 54                     | -4.21       | -                   | -              | 202            | 111         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

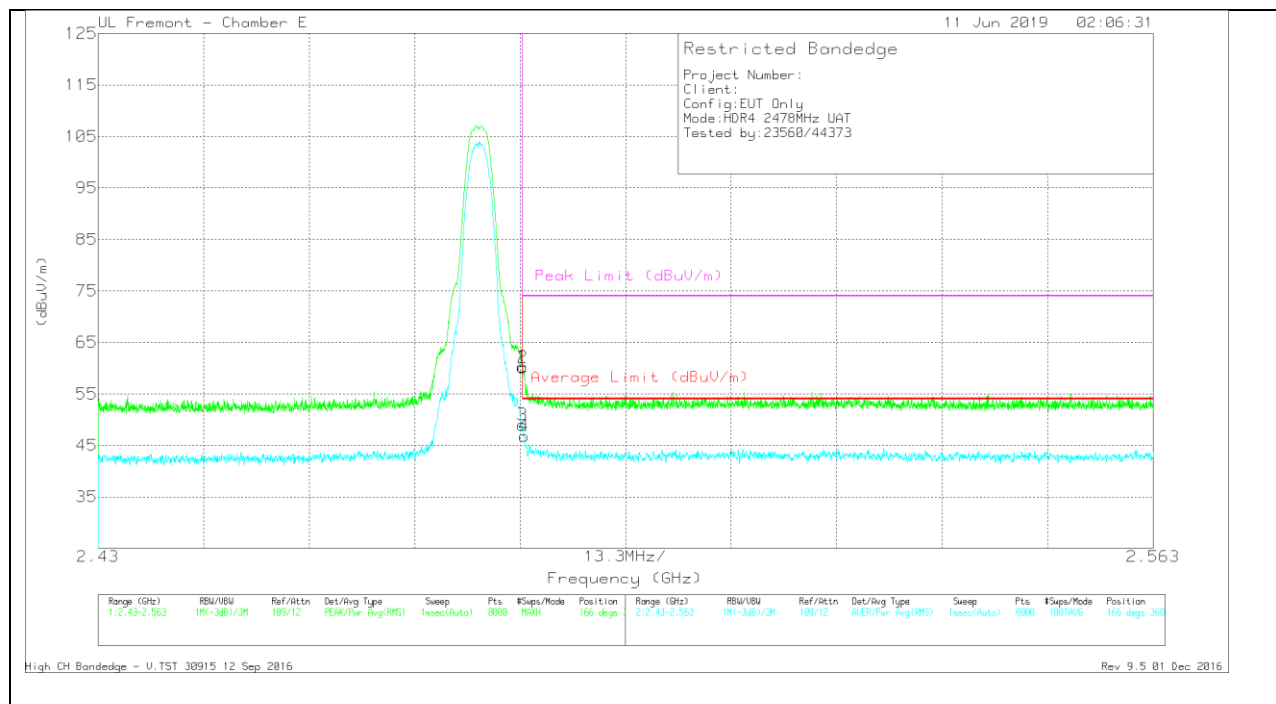
Pk - Peak detector

RMS - RMS detection

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## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Ch/Filt/P ad (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         | 45.6                 | Pk  | 32.8           | -18.1                 | 60.3                       | -                      | -           | 74                  | -13.7          | 166            | 360         | V        |
| 2      | * 2.484         | 45.45                | Pk  | 32.8           | -18.1                 | 60.15                      | -                      | -           | 74                  | -13.85         | 166            | 360         | V        |
| 3      | * 2.484         | 34.3                 | RMS | 32.8           | -18.1                 | 49                         | 54                     | -5          | -                   | -              | 166            | 360         | V        |
| 4      | * 2.484         | 32.11                | RMS | 32.8           | -18.1                 | 46.81                      | 54                     | -7.19       | -                   | -              | 166            | 360         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

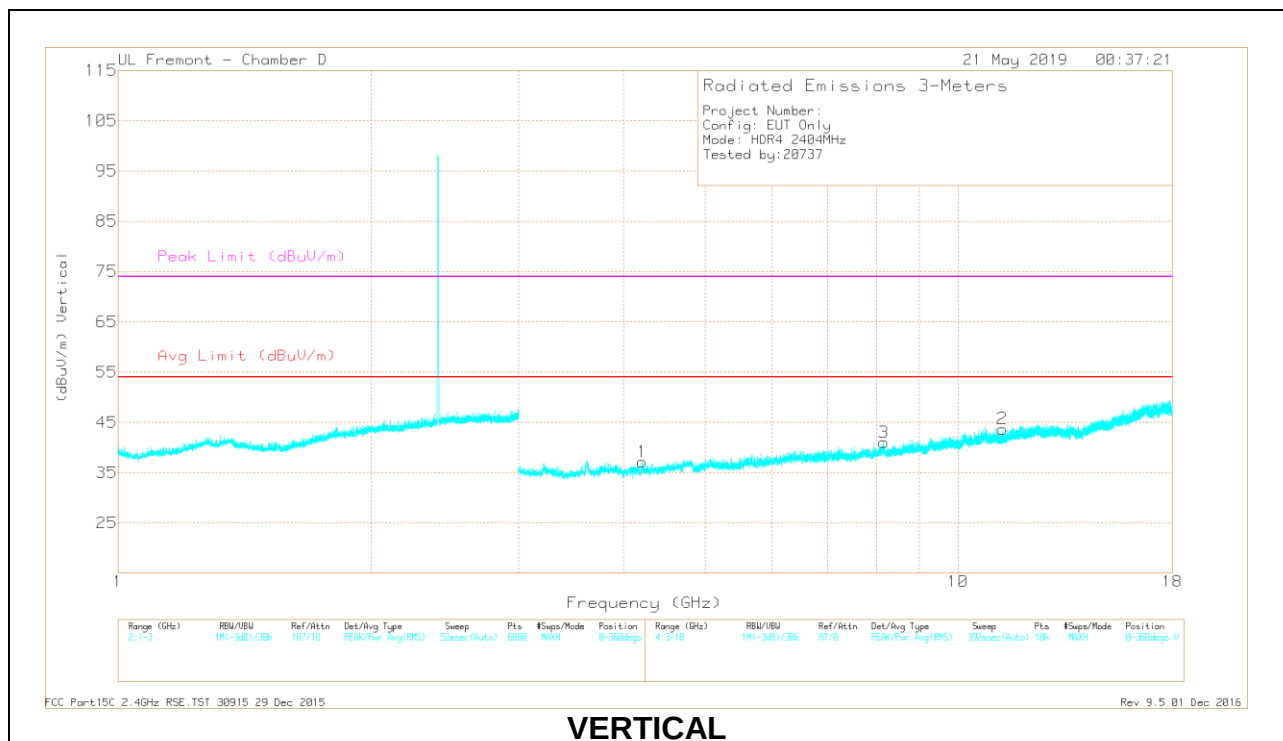
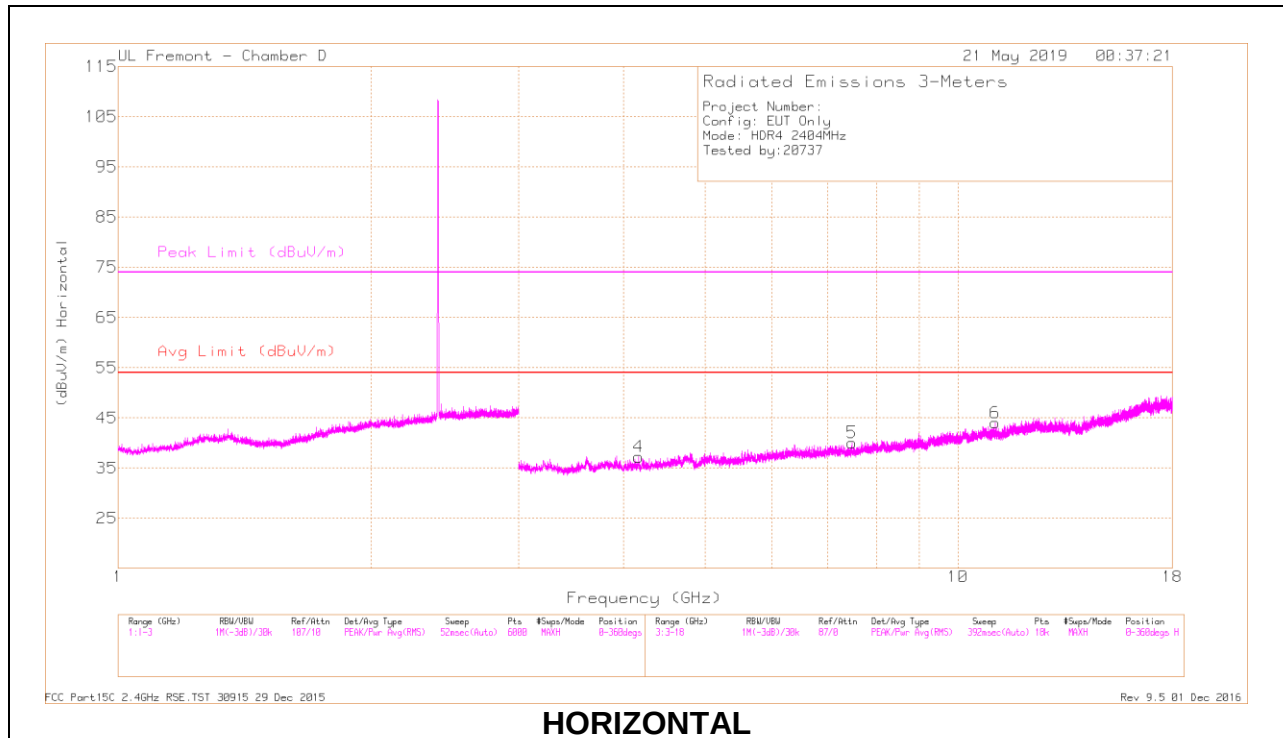
RMS - RMS detection

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## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

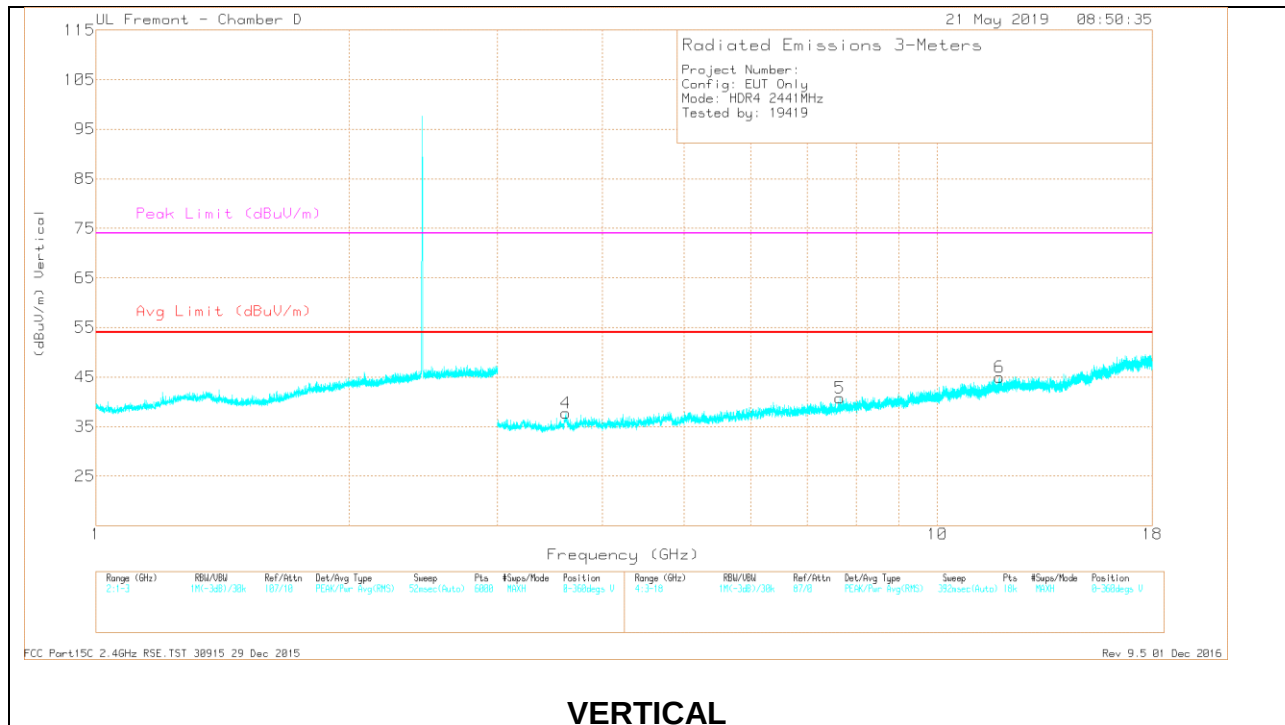
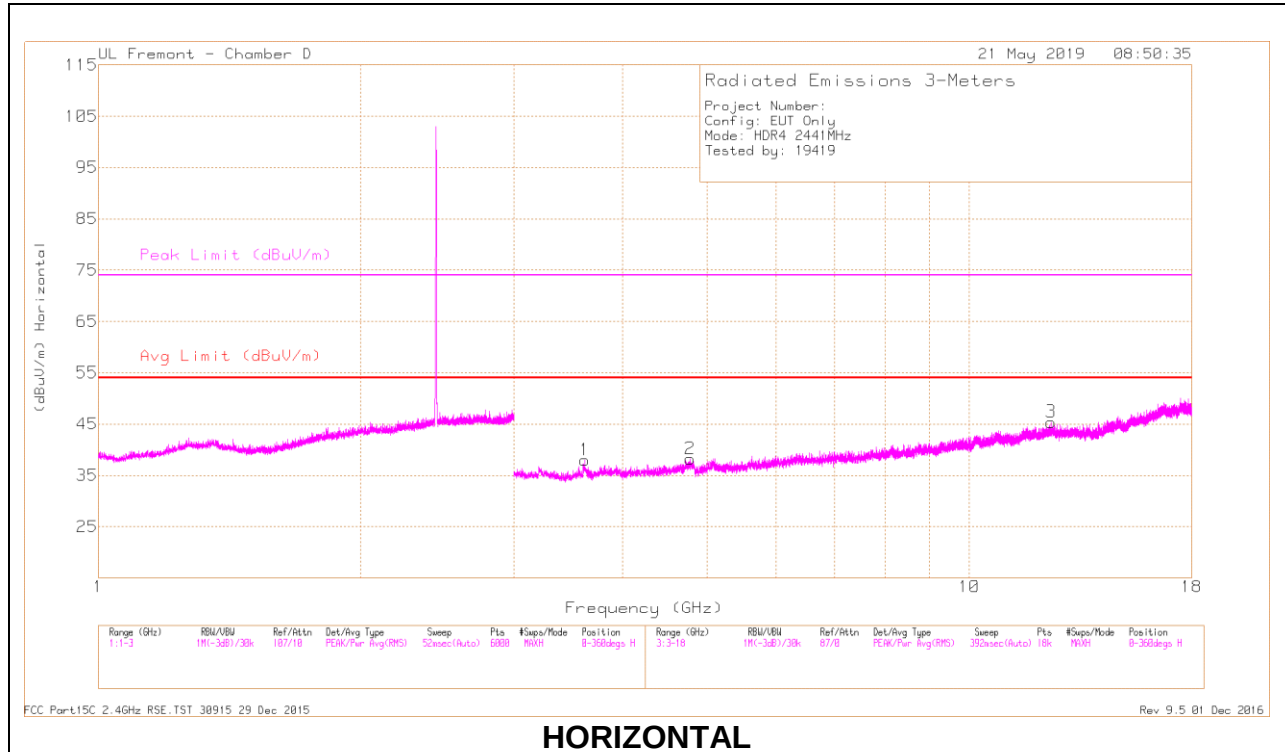
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Fitr/P ad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 4      | * 4.166         | 38.65                | PK2  | 33.2           | -27.9                  | 43.95                      | -                  | -           | 74                  | -30.05         | 348            | 123         | H        |
|        | * 4.166         | 26.82                | MAv1 | 33.2           | -27.9                  | 32.12                      | 54                 | -21.88      | -                   | -              | 348            | 123         | H        |
| 5      | * 7.482         | 35.58                | PK2  | 35.4           | -24.6                  | 46.38                      | -                  | -           | 74                  | -27.62         | 263            | 151         | H        |
|        | * 7.48          | 23.71                | MAv1 | 35.4           | -24.7                  | 34.41                      | 54                 | -19.59      | -                   | -              | 263            | 151         | H        |
| 6      | * 11.084        | 34.8                 | PK2  | 37.7           | -21.3                  | 51.2                       | -                  | -           | 74                  | -22.8          | 173            | 192         | H        |
|        | * 11.084        | 21.43                | MAv1 | 37.7           | -21.3                  | 37.83                      | 54                 | -16.17      | -                   | -              | 173            | 192         | H        |
| 1      | * 4.214         | 39.05                | PK2  | 33.3           | -27.4                  | 44.95                      | -                  | -           | 74                  | -29.05         | 183            | 214         | V        |
|        | * 4.213         | 26.79                | MAv1 | 33.3           | -27.5                  | 32.59                      | 54                 | -21.41      | -                   | -              | 183            | 214         | V        |
| 2      | * 11.3          | 33.7                 | PK2  | 37.9           | -21.3                  | 50.3                       | -                  | -           | 74                  | -23.7          | 236            | 297         | V        |
|        | * 11.301        | 21.16                | MAv1 | 37.9           | -21.3                  | 37.76                      | 54                 | -16.24      | -                   | -              | 236            | 297         | V        |
| 3      | * 8.16          | 35.81                | PK2  | 35.7           | -23.2                  | 48.31                      | -                  | -           | 74                  | -25.69         | 196            | 335         | V        |
|        | * 8.161         | 22.8                 | MAv1 | 35.7           | -23.2                  | 35.3                       | 54                 | -18.7       | -                   | -              | 196            | 335         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

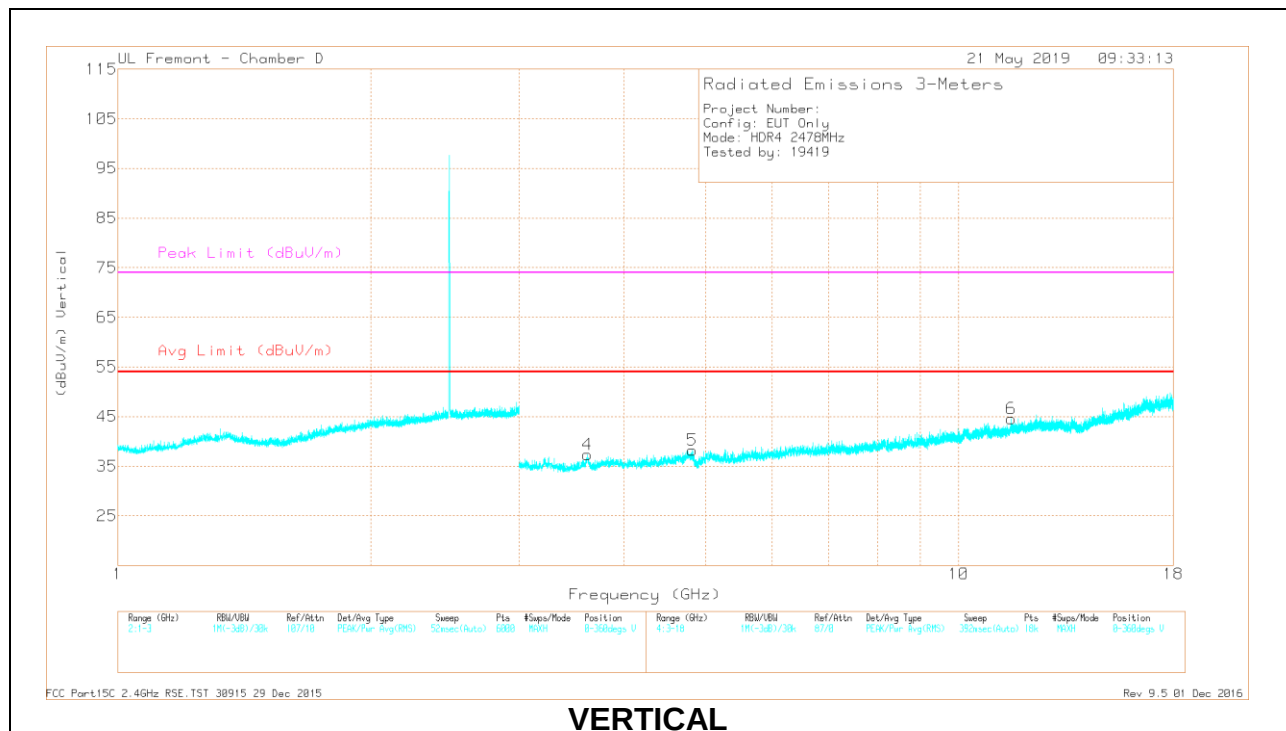
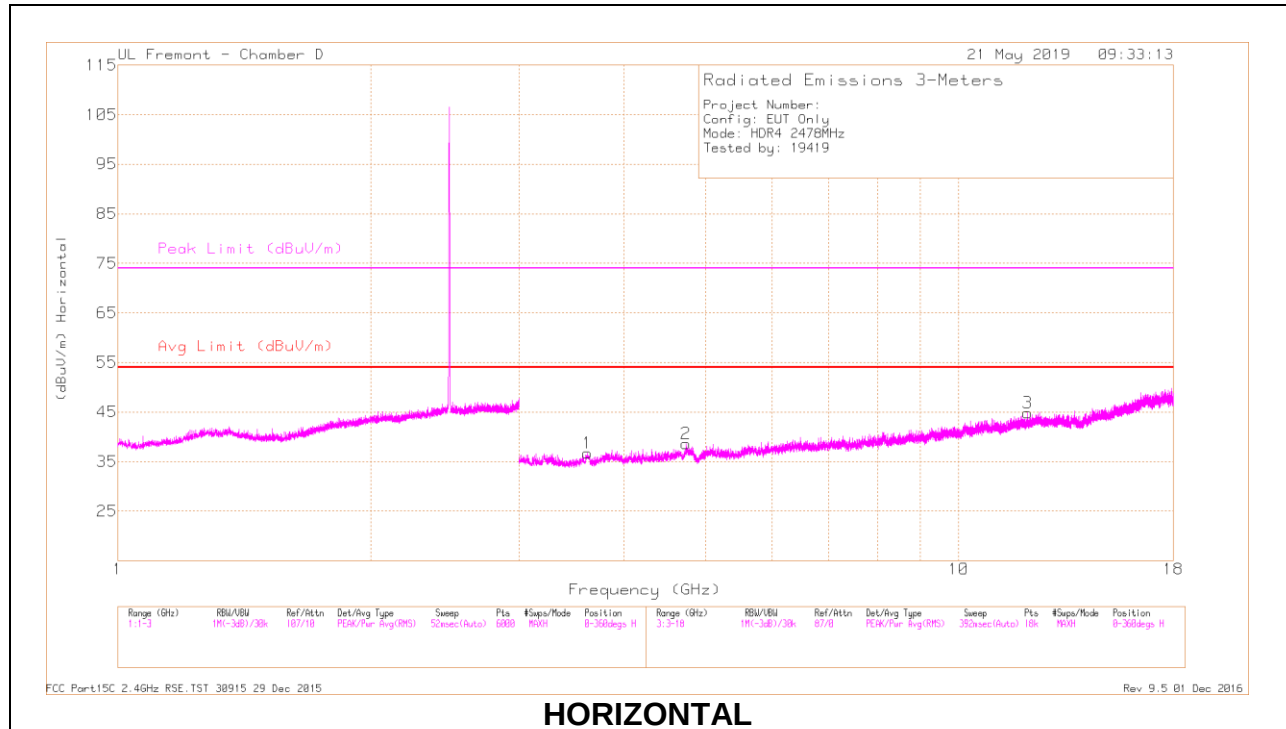
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.617         | 39.19                | PK2  | 33.6           | -28.4                   | 44.39                      | -                  | -           | 74                  | -29.61         | 180            | 221         | H        |
|        | * 3.619         | 26.91                | MAv1 | 33.5           | -28.4                   | 32.01                      | 54                 | -21.99      | -                   | -              | 180            | 221         | H        |
| 2      | * 4.781         | 38.78                | PK2  | 34             | -26.8                   | 45.98                      | -                  | -           | 74                  | -28.02         | 277            | 143         | H        |
|        | * 4.782         | 25.91                | MAv1 | 34             | -26.9                   | 33.01                      | 54                 | -20.99      | -                   | -              | 277            | 143         | H        |
| 3      | * 12.404        | 34.65                | PK2  | 38.9           | -21.4                   | 52.15                      | -                  | -           | 74                  | -21.85         | 326            | 223         | H        |
|        | * 12.407        | 21.1                 | MAv1 | 38.9           | -21.6                   | 38.4                       | 54                 | -15.6       | -                   | -              | 326            | 223         | H        |
| 4      | * 3.618         | 39.35                | PK2  | 33.5           | -28.4                   | 44.45                      | -                  | -           | 74                  | -29.55         | 315            | 180         | V        |
|        | * 3.619         | 27.02                | MAv1 | 33.5           | -28.4                   | 32.12                      | 54                 | -21.88      | -                   | -              | 315            | 180         | V        |
| 5      | * 7.65          | 36.71                | PK2  | 35.6           | -24.9                   | 47.41                      | -                  | -           | 74                  | -26.59         | 359            | 152         | V        |
|        | * 7.652         | 23.28                | MAv1 | 35.6           | -24.9                   | 33.98                      | 54                 | -20.02      | -                   | -              | 359            | 152         | V        |
| 6      | * 11.85         | 34.25                | PK2  | 38.5           | -21.3                   | 51.45                      | -                  | -           | 74                  | -22.55         | 4              | 218         | V        |
|        | * 11.85         | 20.96                | MAv1 | 38.5           | -21.3                   | 38.16                      | 54                 | -15.84      | -                   | -              | 4              | 218         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.62          | 39.42                | PK2  | 33.5           | -28.4                   | 44.52                      | -                  | -           | 74                  | -29.48         | 329            | 111         | H        |
|        | * 3.62          | 27.19                | MAv1 | 33.5           | -28.4                   | 32.29                      | 54                 | -21.71      | -                   | -              | 329            | 111         | H        |
| 2      | * 4.735         | 37.74                | PK2  | 33.9           | -26.6                   | 45.04                      | -                  | -           | 74                  | -28.96         | 0              | 233         | H        |
|        | * 4.735         | 25.29                | MAv1 | 33.9           | -26.7                   | 32.49                      | 54                 | -21.51      | -                   | -              | 0              | 233         | H        |
| 3      | * 12.076        | 34.36                | PK2  | 38.7           | -22.1                   | 50.96                      | -                  | -           | 74                  | -23.04         | 135            | 295         | H        |
|        | * 12.078        | 21.04                | MAv1 | 38.7           | -22.1                   | 37.64                      | 54                 | -16.36      | -                   | -              | 135            | 295         | H        |
| 4      | * 3.618         | 39.63                | PK2  | 33.6           | -28.4                   | 44.83                      | -                  | -           | 74                  | -29.17         | 0              | 356         | V        |
|        | * 3.617         | 26.62                | MAv1 | 33.6           | -28.4                   | 31.82                      | 54                 | -22.18      | -                   | -              | 0              | 356         | V        |
| 5      | * 4.823         | 38.65                | PK2  | 34             | -27.2                   | 45.45                      | -                  | -           | 74                  | -28.55         | 28             | 392         | V        |
|        | * 4.823         | 25.94                | MAv1 | 34             | -27.2                   | 32.74                      | 54                 | -21.26      | -                   | -              | 28             | 392         | V        |
| 6      | * 11.541        | 34                   | PK2  | 38.2           | -21.1                   | 51.1                       | -                  | -           | 74                  | -22.9          | 156            | 259         | V        |
|        | * 11.541        | 20.33                | MAv1 | 38.2           | -21.1                   | 37.43                      | 54                 | -16.57      | -                   | -              | 156            | 259         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

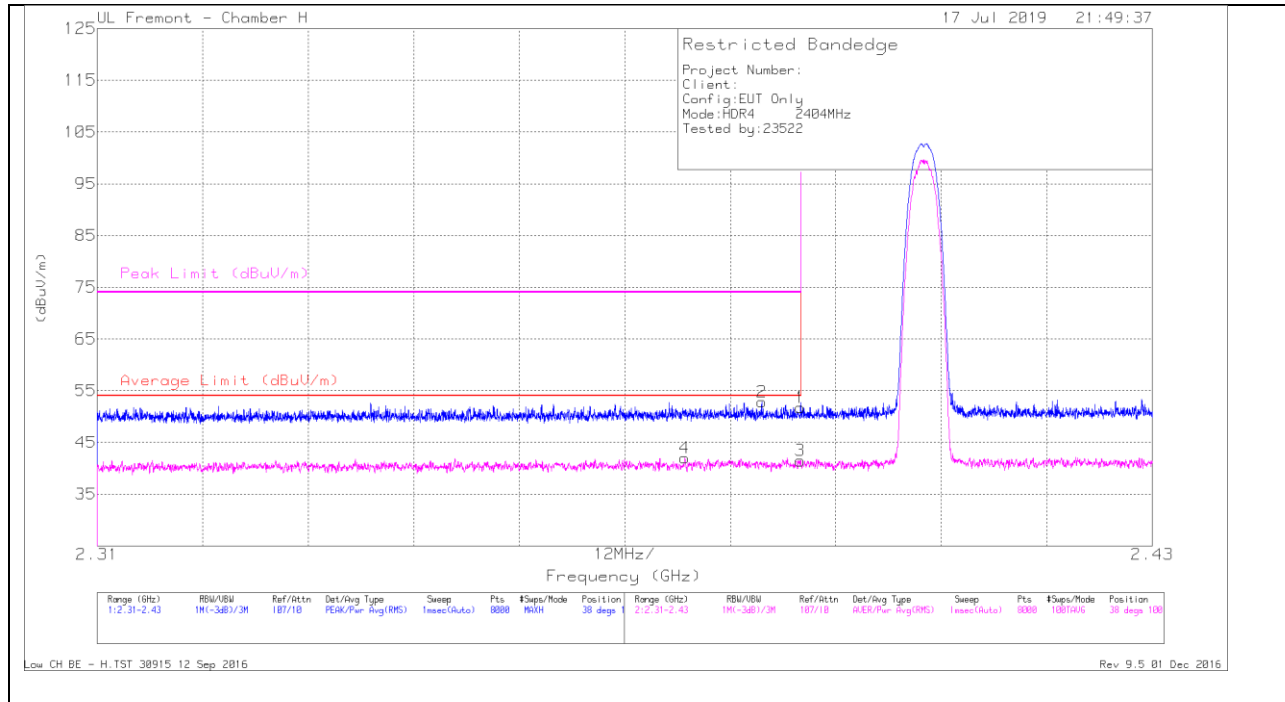
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

# **Antenna 3**

## **BANDEDGE (LOW CHANNEL)**

### **HORIZONTAL RESULT**



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dBm) | Amp/Cbl/Filtr/P ad (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          | 43.13                | Pk  | 32.1          | -23.5                   | 51.73                      | -                      | -           | 74                  | -22.27         | 38             | 100         | H        |
| 2      | * 2.386         | 44.21                | Pk  | 32.1          | -23.5                   | 52.81                      | -                      | -           | 74                  | -21.19         | 38             | 100         | H        |
| 3      | * 2.39          | 32.87                | RMS | 32.1          | -23.5                   | 41.47                      | 54                     | -12.53      | -                   | -              | 38             | 100         | H        |
| 4      | * 2.377         | 33.4                 | RMS | 32.1          | -23.5                   | 42                         | 54                     | -12         | -                   | -              | 38             | 100         | H        |

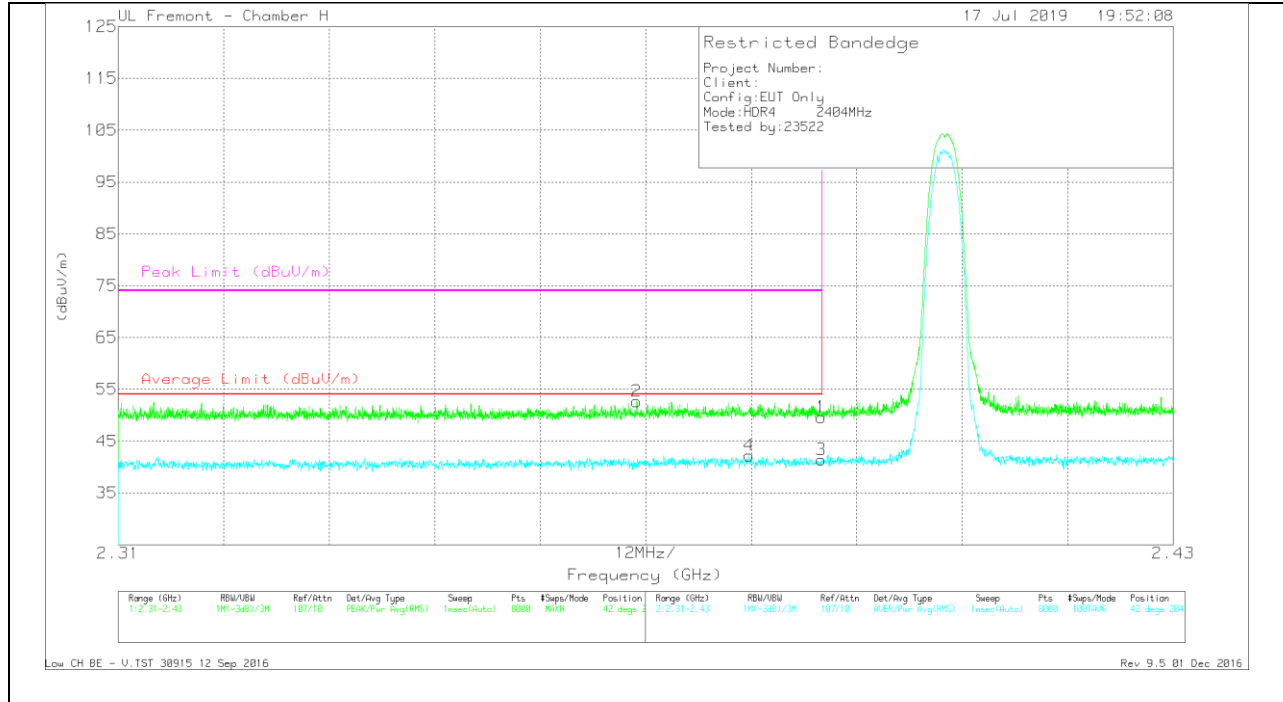
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

Low CH BE - H.TST 30915 12 Sep 2016

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dBm) | Amp/Cbl/Filr/P ad (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          | 41.02                | Pk  | 32.1          | -23.5                  | 49.62                      | -                      | -           | 74                  | -24.38         | 42             | 284         | V        |
| 2      | * 2.369         | 44.17                | Pk  | 32            | -23.5                  | 52.67                      | -                      | -           | 74                  | -21.33         | 42             | 284         | V        |
| 3      | * 2.39          | 32.81                | RMS | 32.1          | -23.5                  | 41.41                      | 54                     | -12.59      | -                   | -              | 42             | 284         | V        |
| 4      | * 2.382         | 33.51                | RMS | 32.2          | -23.5                  | 42.21                      | 54                     | -11.79      | -                   | -              | 42             | 284         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

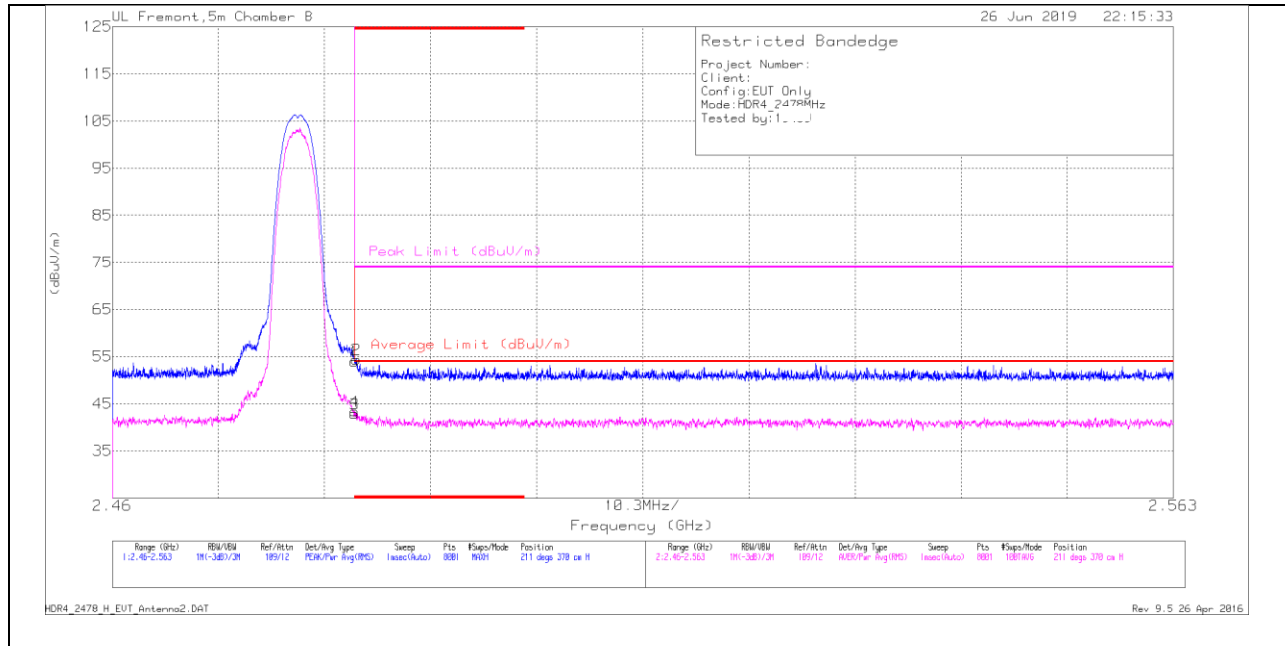
Pk - Peak detector

RMS - RMS detection

Low CH BE - V.TST 30915 12 Sep 2016

# **BANDEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT(similar to low power)**



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/Filtr/P ad (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         | 40.58                | Pk  | 32.3           | -18.9                   | 53.98                      | -                      | -           | 74                  | -20.02         | 211            | 370         | H        |
| 2      | * 2.484         | 41.03                | Pk  | 32.3           | -18.9                   | 54.43                      | -                      | -           | 74                  | -19.57         | 211            | 370         | H        |
| 3      | * 2.484         | 29.48                | RMS | 32.3           | -18.9                   | 42.88                      | 54                     | -11.12      | -                   | -              | 211            | 370         | H        |
| 4      | * 2.484         | 30.02                | RMS | 32.3           | -18.9                   | 43.42                      | 54                     | -10.58      | -                   | -              | 211            | 370         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

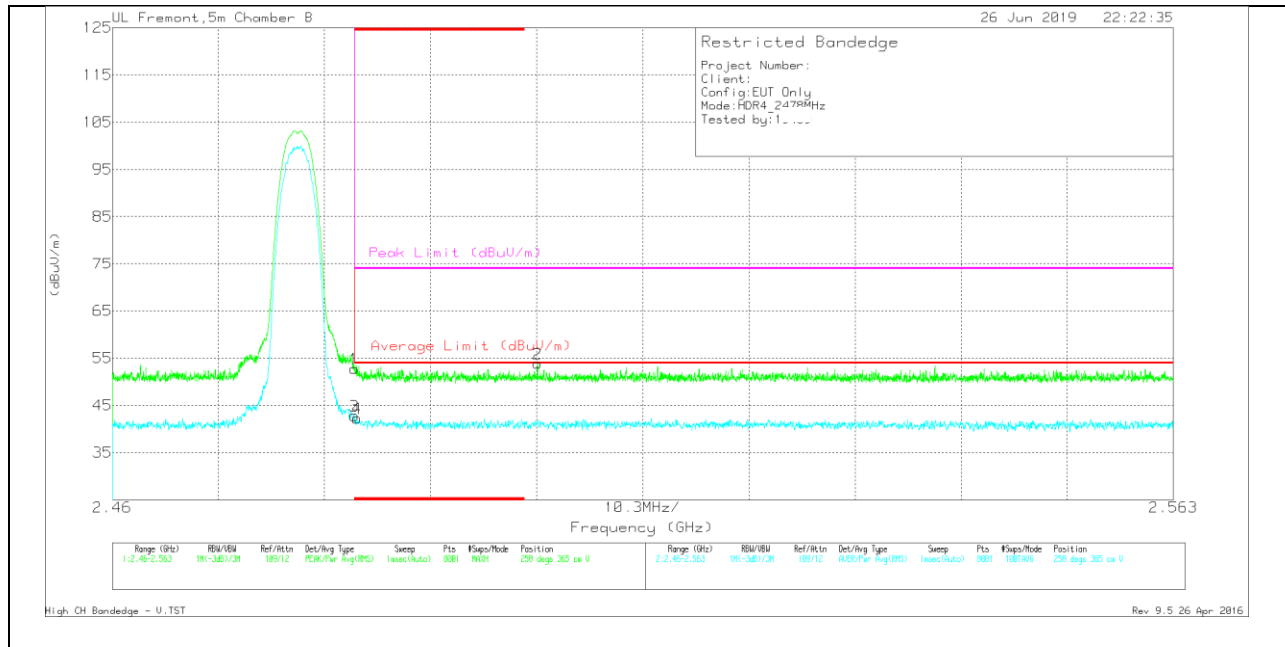
Pk - Peak detector

RMS - RMS detection

HDR4\_2478\_H\_EVT\_Antenna2.DAT

Rev 9.5 26 Apr 2016

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/Filtr/P ad (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         | 39.39                | Pk  | 32.3           | -18.9                   | 52.79                      | -                      | -           | 74                  | -21.21         | 258            | 365         | V        |
| 3      | * 2.484         | 29.46                | RMS | 32.3           | -18.9                   | 42.86                      | 54                     | -11.14      | -                   | -              | 258            | 365         | V        |
| 4      | * 2.484         | 28.9                 | RMS | 32.3           | -18.9                   | 42.3                       | 54                     | -11.7       | -                   | -              | 258            | 365         | V        |
| 2      | 2.501           | 40.44                | Pk  | 32.4           | -19                     | 53.84                      | -                      | -           | 74                  | -20.16         | 258            | 365         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

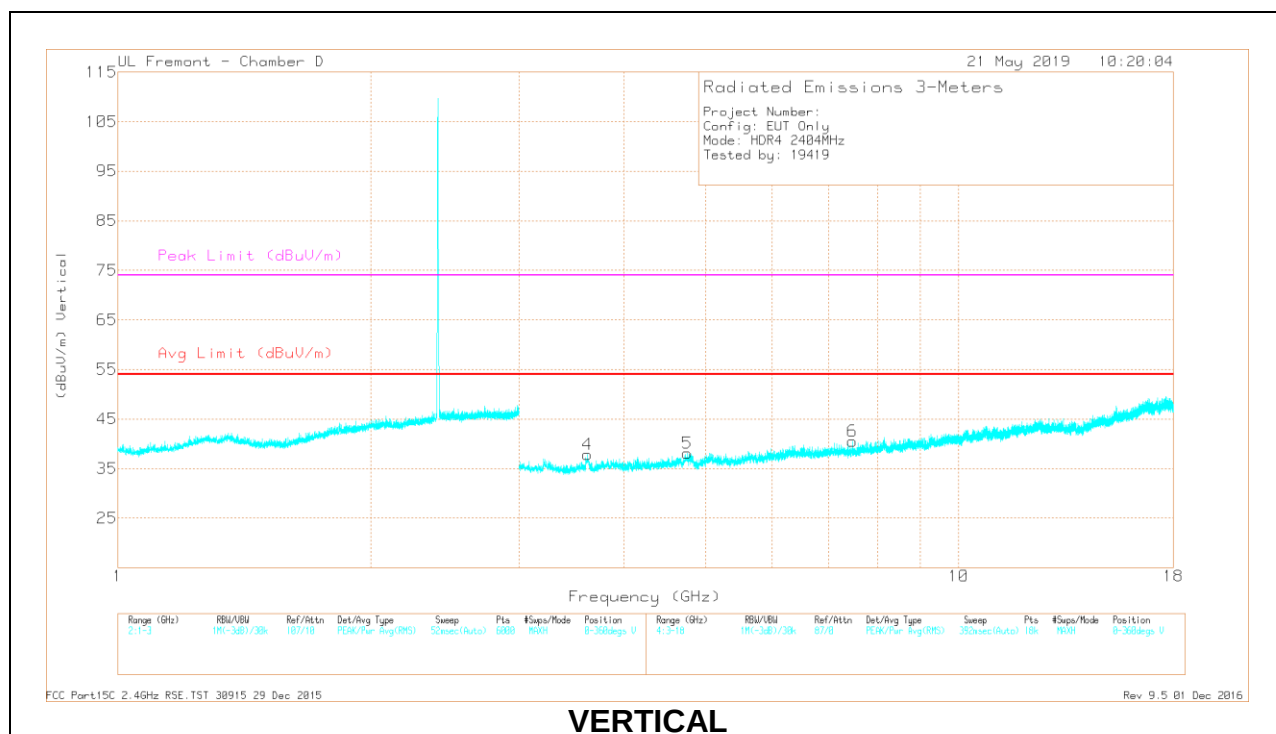
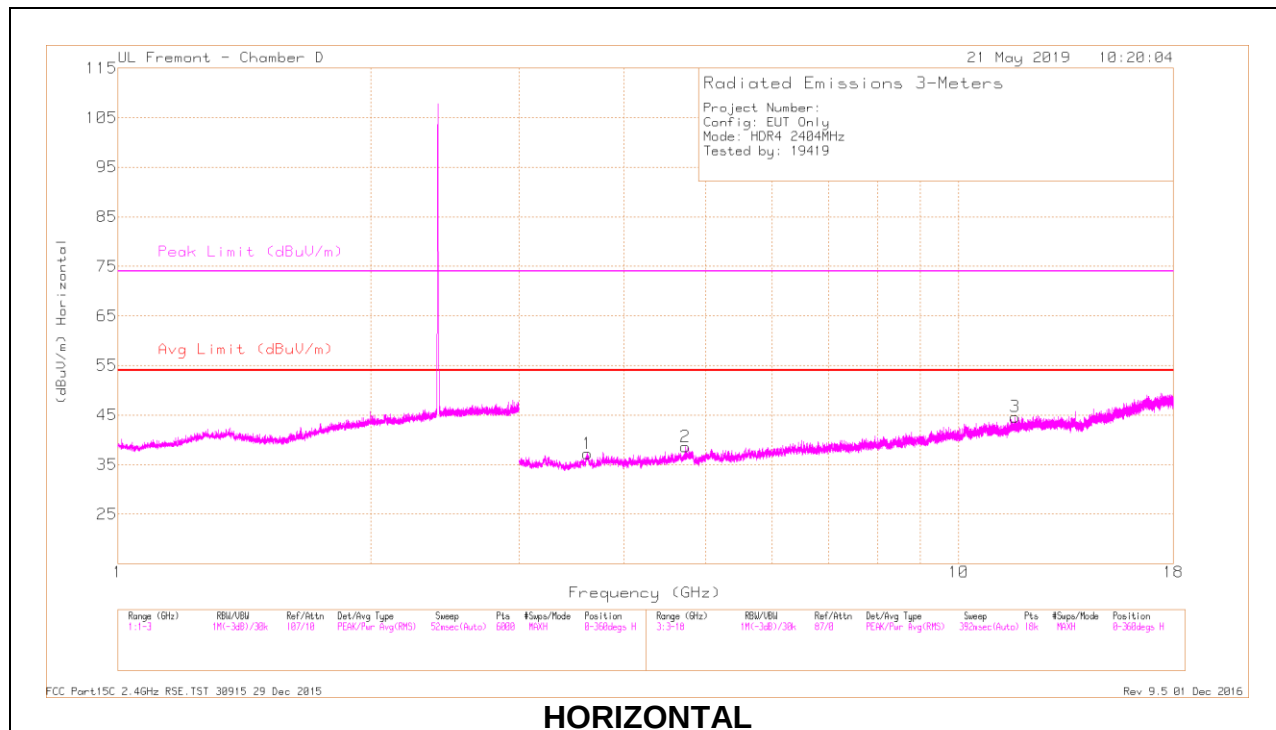
RMS - RMS detection

High CH Bandedge - U.TST

Rev 9.5 26 Apr 2016

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

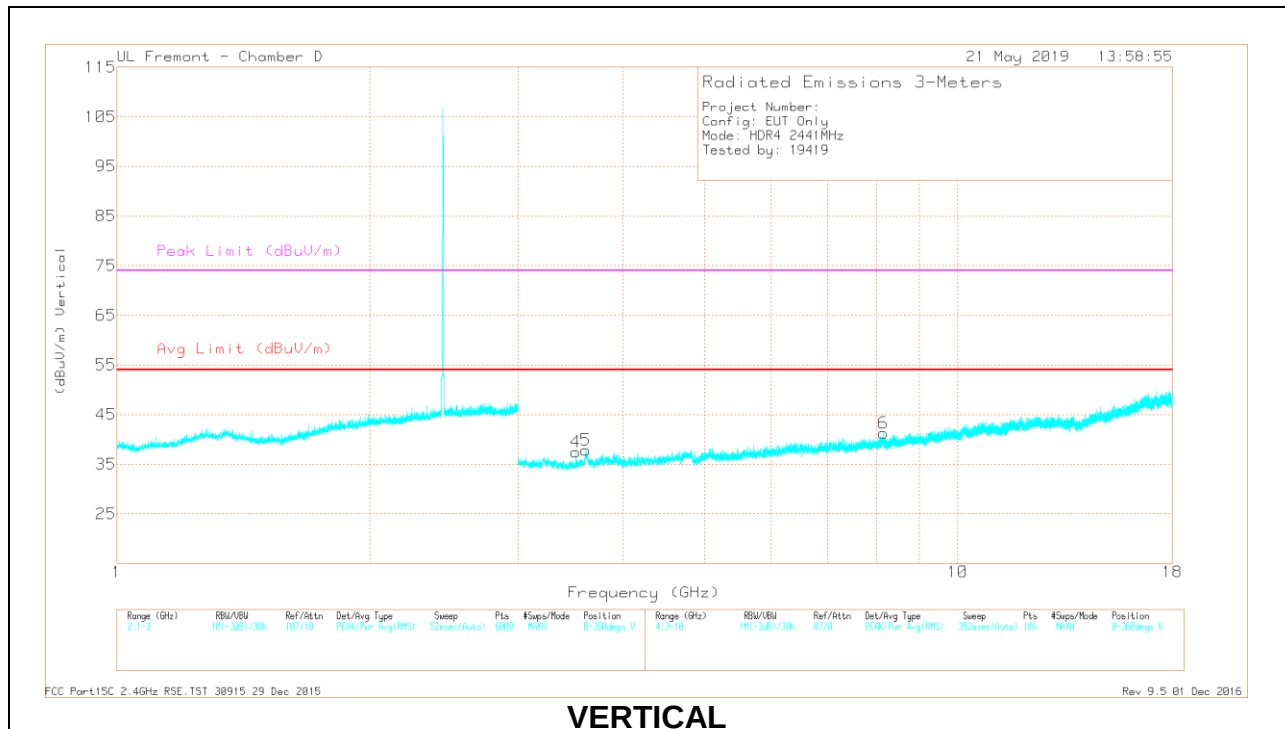
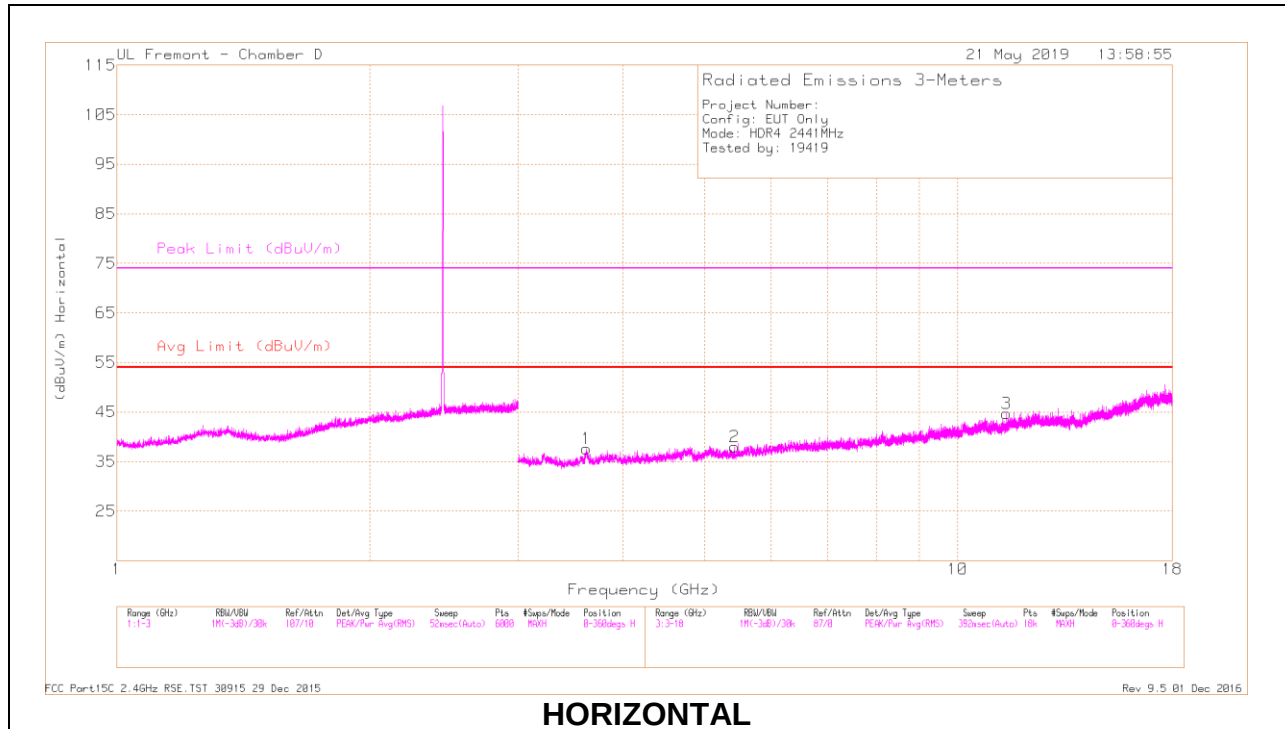
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.617         | 38.66                | PK2  | 33.6           | -28.4                   | 43.86                      | -                  | -           | 74                  | -30.14         | 164            | 347         | H        |
|        | * 3.618         | 26.81                | MAv1 | 33.6           | -28.4                   | 32.01                      | 54                 | -21.99      | -                   | -              | 164            | 347         | H        |
| 2      | * 4.73          | 37.94                | PK2  | 33.9           | -26.8                   | 45.04                      | -                  | -           | 74                  | -28.96         | 18             | 263         | H        |
|        | * 4.73          | 25.42                | MAv1 | 33.9           | -26.8                   | 32.52                      | 54                 | -21.48      | -                   | -              | 18             | 263         | H        |
| 3      | * 11.665        | 34.4                 | PK2  | 38.3           | -21                     | 51.7                       | -                  | -           | 74                  | -22.3          | 202            | 181         | H        |
|        | * 11.665        | 20.33                | MAv1 | 38.3           | -21                     | 37.63                      | 54                 | -16.37      | -                   | -              | 202            | 181         | H        |
| 4      | * 3.621         | 39.02                | PK2  | 33.5           | -28.4                   | 44.12                      | -                  | -           | 74                  | -29.88         | 358            | 361         | V        |
|        | * 3.622         | 27.01                | MAv1 | 33.4           | -28.4                   | 32.01                      | 54                 | -21.99      | -                   | -              | 358            | 361         | V        |
| 5      | * 4.76          | 38.34                | PK2  | 33.9           | -26.6                   | 45.64                      | -                  | -           | 74                  | -28.36         | 226            | 294         | V        |
|        | * 4.757         | 25.42                | MAv1 | 34             | -26.5                   | 32.92                      | 54                 | -21.08      | -                   | -              | 226            | 294         | V        |
| 6      | * 7.478         | 36.2                 | PK2  | 35.5           | -24.7                   | 47                         | -                  | -           | 74                  | -27            | 108            | 356         | V        |
|        | * 7.477         | 22.96                | MAv1 | 35.5           | -24.7                   | 33.76                      | 54                 | -20.24      | -                   | -              | 108            | 356         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

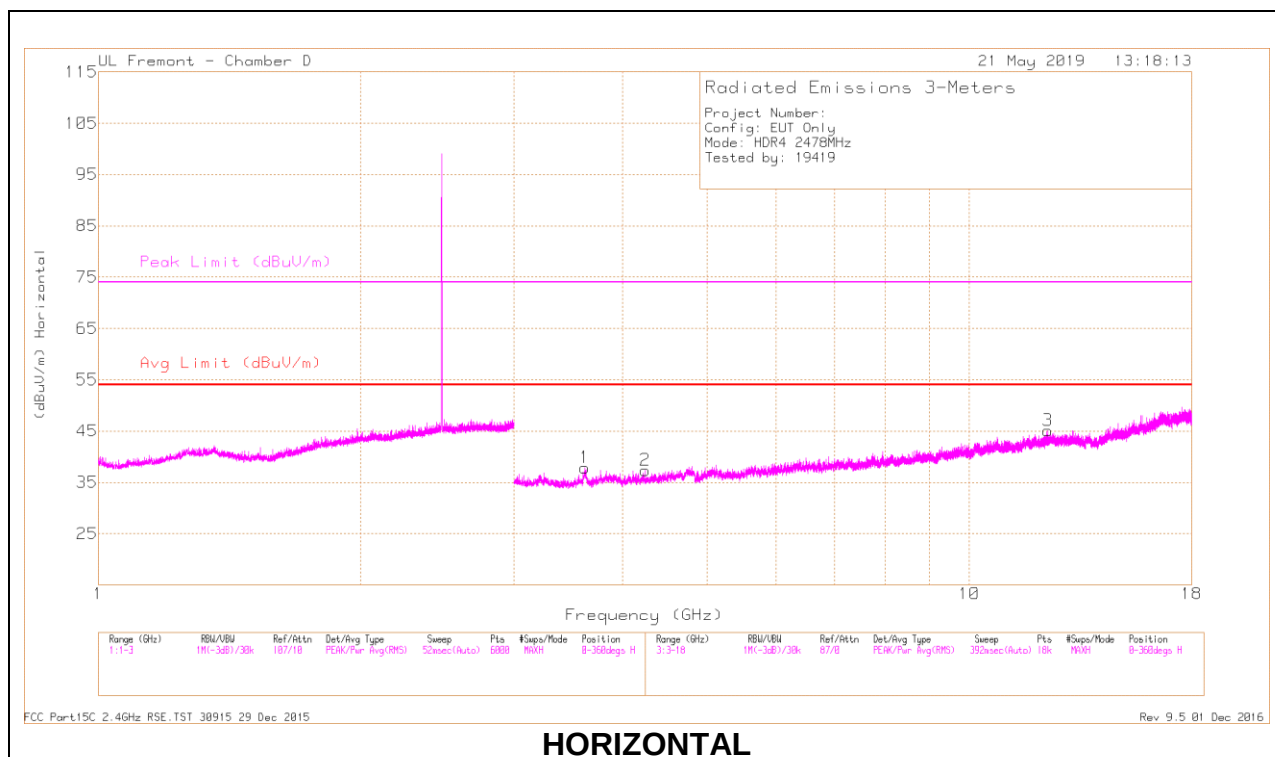
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.622         | 39.97                | PK2  | 33.4           | -28.4                   | 44.97                      | -                  | -           | 74                  | -29.03         | 27             | 166         | H        |
|        | * 3.622         | 27.1                 | MAv1 | 33.4           | -28.4                   | 32.1                       | 54                 | -21.9       | -                   | -              | 27             | 166         | H        |
| 2      | * 5.428         | 37.84                | PK2  | 34.4           | -27.7                   | 44.54                      | -                  | -           | 74                  | -29.46         | 67             | 102         | H        |
|        | * 5.427         | 25.68                | MAv1 | 34.4           | -27.7                   | 32.38                      | 54                 | -21.62      | -                   | -              | 67             | 102         | H        |
| 3      | * 11.424        | 33.99                | PK2  | 38             | -21.8                   | 50.19                      | -                  | -           | 74                  | -23.81         | 75             | 332         | H        |
|        | * 11.426        | 20.71                | MAv1 | 38             | -21.8                   | 36.91                      | 54                 | -17.09      | -                   | -              | 75             | 332         | H        |
| 4      | * 3.514         | 38.91                | PK2  | 32.8           | -28.5                   | 43.21                      | -                  | -           | 74                  | -30.79         | 275            | 259         | V        |
|        | * 3.516         | 26.49                | MAv1 | 32.8           | -28.4                   | 30.89                      | 54                 | -23.11      | -                   | -              | 275            | 259         | V        |
| 5      | * 3.612         | 38.96                | PK2  | 33.4           | -28.3                   | 44.06                      | -                  | -           | 74                  | -29.94         | 324            | 299         | V        |
|        | * 3.614         | 26.81                | MAv1 | 33.5           | -28.4                   | 31.91                      | 54                 | -22.09      | -                   | -              | 324            | 299         | V        |
| 6      | * 8.16          | 35.25                | PK2  | 35.7           | -23.2                   | 47.75                      | -                  | -           | 74                  | -26.25         | 250            | 269         | V        |
|        | * 8.16          | 23.06                | MAv1 | 35.7           | -23.2                   | 35.56                      | 54                 | -18.44      | -                   | -              | 250            | 269         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

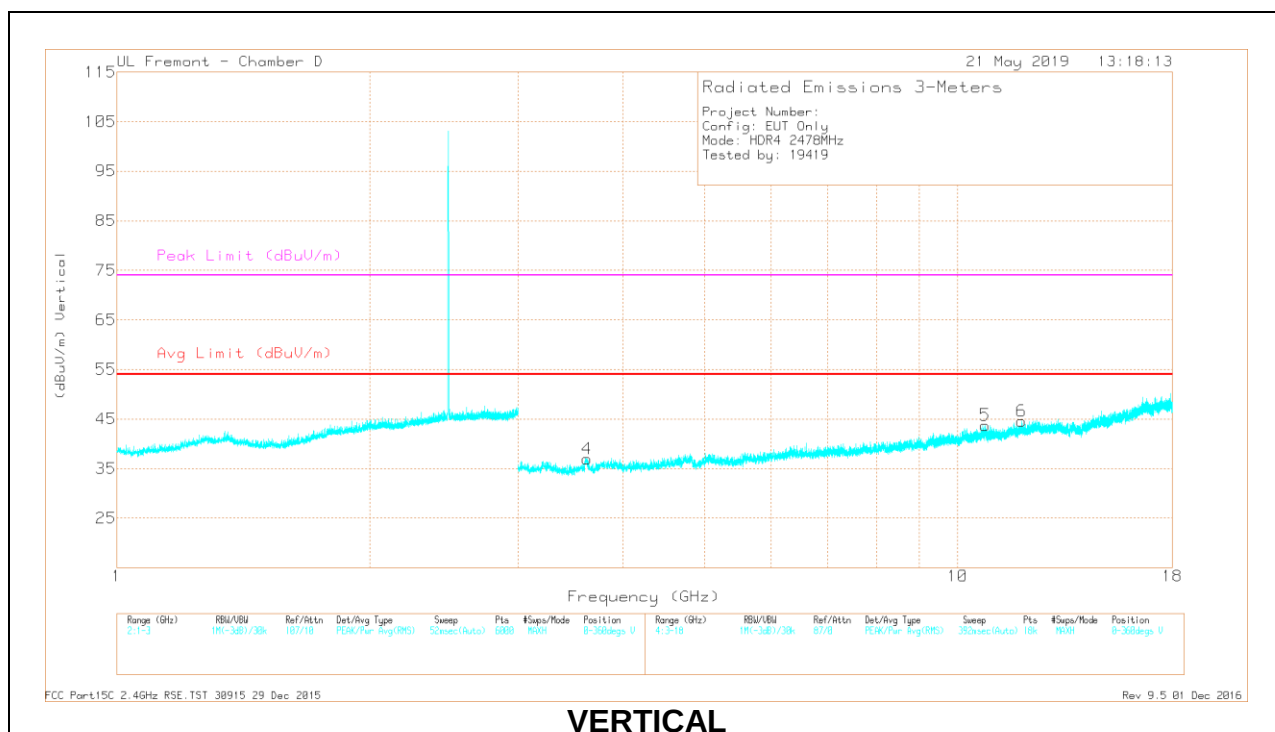
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## HIGH CHANNEL RESULTS



## HORIZONTAL



## VERTICAL

## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Fitr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.618         | 39.42                | PK2  | 33.5           | -28.4                  | 44.52                      | -                  | -           | 74                  | -29.48         | 278            | 195         | H        |
|        | * 3.621         | 26.95                | MAv1 | 33.4           | -28.4                  | 31.95                      | 54                 | -22.05      | -                   | -              | 278            | 195         | H        |
| 2      | * 4.246         | 38.97                | PK2  | 33.3           | -27.6                  | 44.67                      | -                  | -           | 74                  | -29.33         | 204            | 171         | H        |
|        | * 4.249         | 25.98                | MAv1 | 33.3           | -27.7                  | 31.58                      | 54                 | -22.42      | -                   | -              | 204            | 171         | H        |
| 3      | * 12.296        | 34.68                | PK2  | 38.9           | -22                    | 51.58                      | -                  | -           | 74                  | -22.42         | 58             | 211         | H        |
|        | * 12.298        | 21.35                | MAv1 | 38.9           | -22                    | 38.25                      | 54                 | -15.75      | -                   | -              | 58             | 211         | H        |
| 4      | * 3.621         | 39.75                | PK2  | 33.4           | -28.4                  | 44.75                      | -                  | -           | 74                  | -29.25         | 270            | 115         | V        |
|        | * 3.622         | 27.03                | MAv1 | 33.4           | -28.4                  | 32.03                      | 54                 | -21.97      | -                   | -              | 270            | 115         | V        |
| 5      | * 10.786        | 33.92                | PK2  | 37.8           | -20.9                  | 50.82                      | -                  | -           | 74                  | -23.18         | 131            | 317         | V        |
|        | * 10.788        | 19.75                | MAv1 | 37.8           | -20.9                  | 36.65                      | 54                 | -17.35      | -                   | -              | 131            | 317         | V        |
| 6      | * 11.918        | 34.09                | PK2  | 38.6           | -21.4                  | 51.29                      | -                  | -           | 74                  | -22.71         | 233            | 275         | V        |
|        | * 11.919        | 20.88                | MAv1 | 38.6           | -21.4                  | 38.08                      | 54                 | -15.92      | -                   | -              | 233            | 275         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

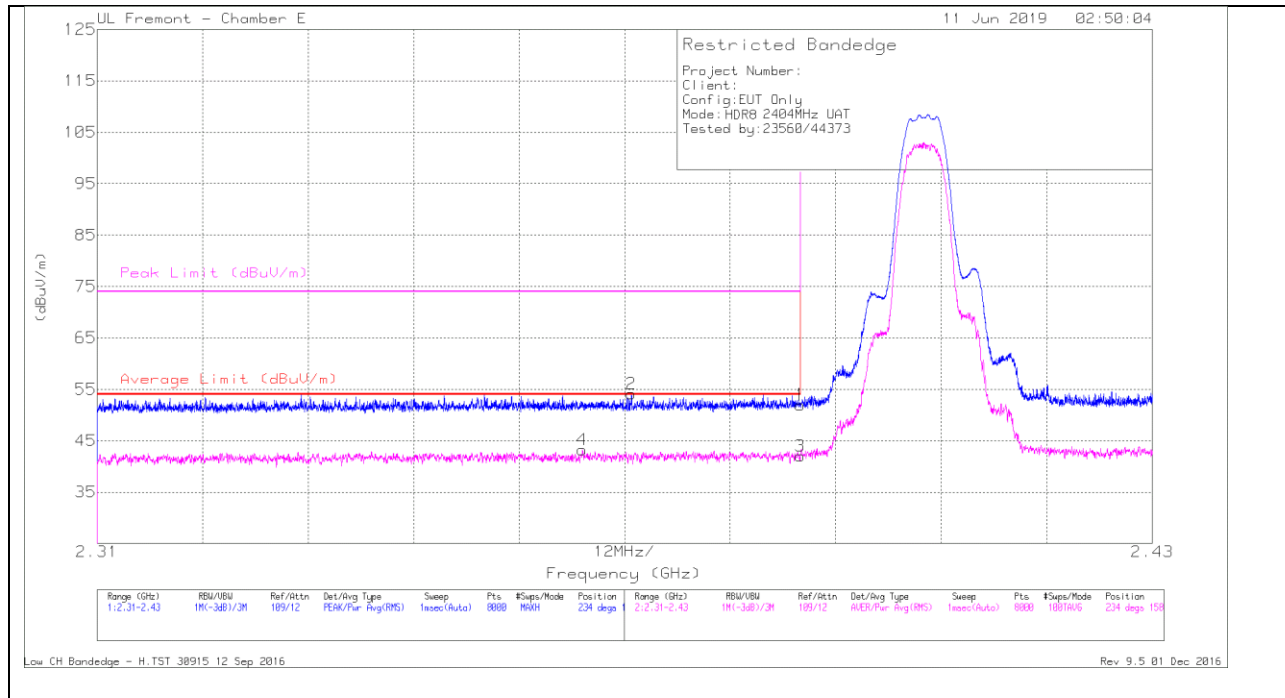
MAv1 - KDB558074 Option 1 Maximum RMS Average

## 9.2.2. HIGH POWER HDR (HDR8)

### Antenna 4

### BANDEDGE (LOW CHANNEL)

### HORIZONTAL RESULT



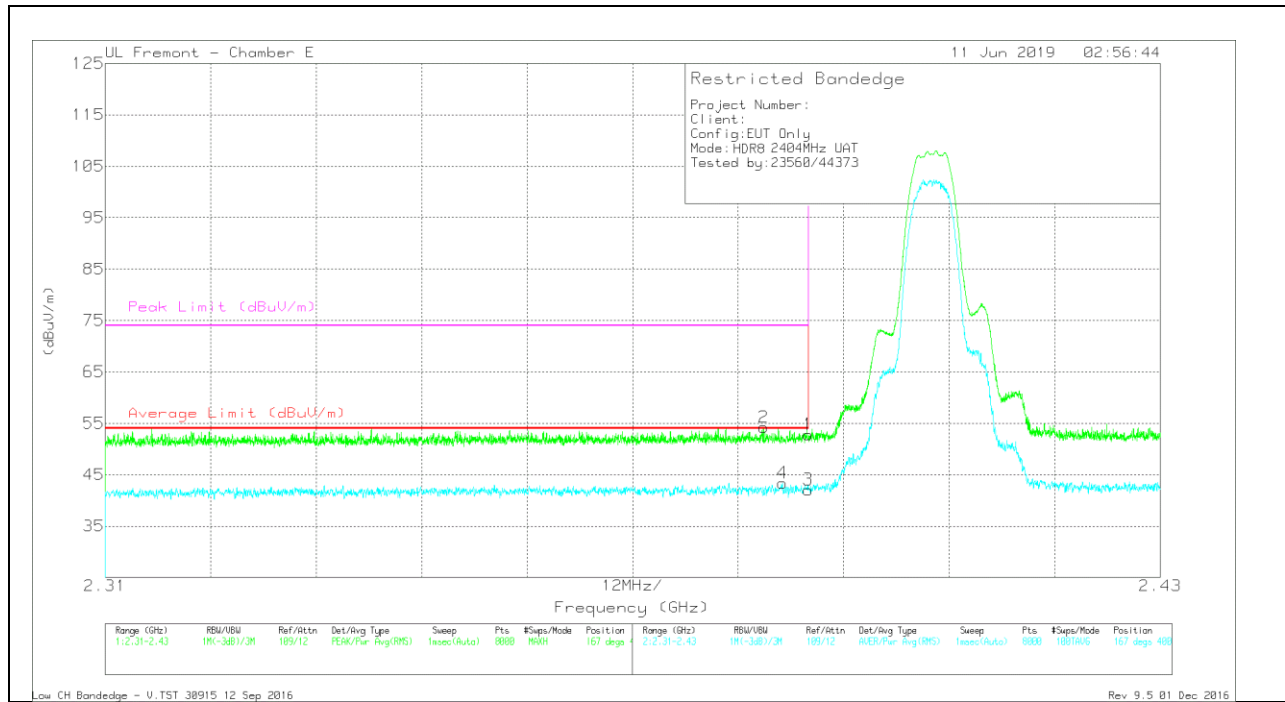
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Ampl/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 4      | * 2.365         | 29.43                | RMS | 32.1           | -18.3                   | 43.23                      | 54                     | -10.77      | -                   | -              | 234            | 158         | H        |
| 2      | * 2.371         | 40.29                | Pk  | 32.2           | -18.4                   | 54.09                      | -                      | -           | 74                  | -19.91         | 234            | 158         | H        |
| 1      | * 2.39          | 37.96                | Pk  | 32.3           | -18.3                   | 51.96                      | -                      | -           | 74                  | -22.04         | 234            | 158         | H        |
| 3      | * 2.39          | 28.01                | RMS | 32.3           | -18.3                   | 42.01                      | 54                     | -11.99      | -                   | -              | 234            | 158         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 2.385         | 40.12                | Pk  | 32.3           | -18.2                 | 54.22                      | -                      | -           | 74                  | -19.78         | 167            | 400         | V        |
| 4      | * 2.387         | 29.38                | RMS | 32.3           | -18.3                 | 43.38                      | 54                     | -10.62      | -                   | -              | 167            | 400         | V        |
| 1      | * 2.39          | 38.81                | Pk  | 32.3           | -18.3                 | 52.81                      | -                      | -           | 74                  | -21.19         | 167            | 400         | V        |
| 3      | * 2.39          | 28.07                | RMS | 32.3           | -18.3                 | 42.07                      | 54                     | -11.93      | -                   | -              | 167            | 400         | V        |

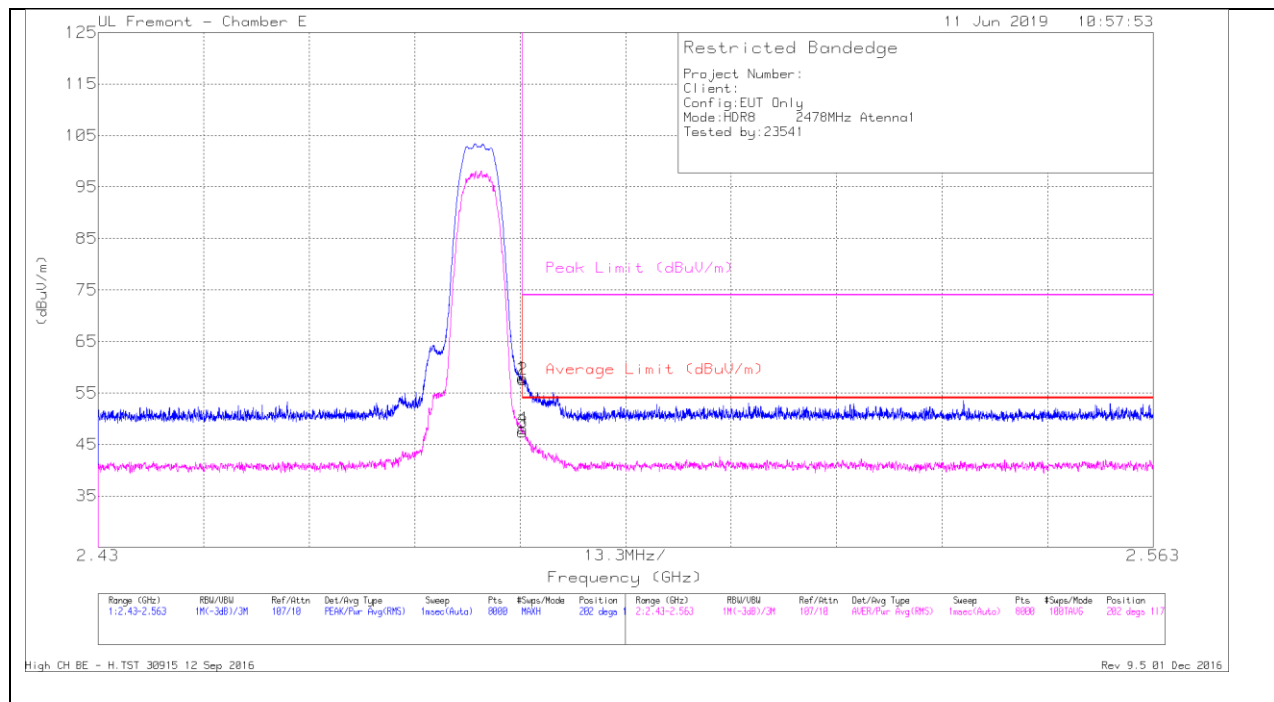
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

# **BANEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Ampl/Cbl/FiltriP ad (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         | 51.37                | Pk  | 32.8           | -26.3                    | 57.87                      | -                      | -           | 74                  | -16.13         | 202            | 117         | H        |
| 2      | * 2.484         | 51.09                | Pk  | 32.8           | -26.3                    | 57.59                      | -                      | -           | 74                  | -16.41         | 202            | 117         | H        |
| 3      | * 2.484         | 40.91                | RMS | 32.8           | -26.3                    | 47.41                      | 54                     | -6.59       | -                   | -              | 202            | 117         | H        |
| 4      | * 2.484         | 41.55                | RMS | 32.8           | -26.3                    | 48.05                      | 54                     | -5.95       | -                   | -              | 202            | 117         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

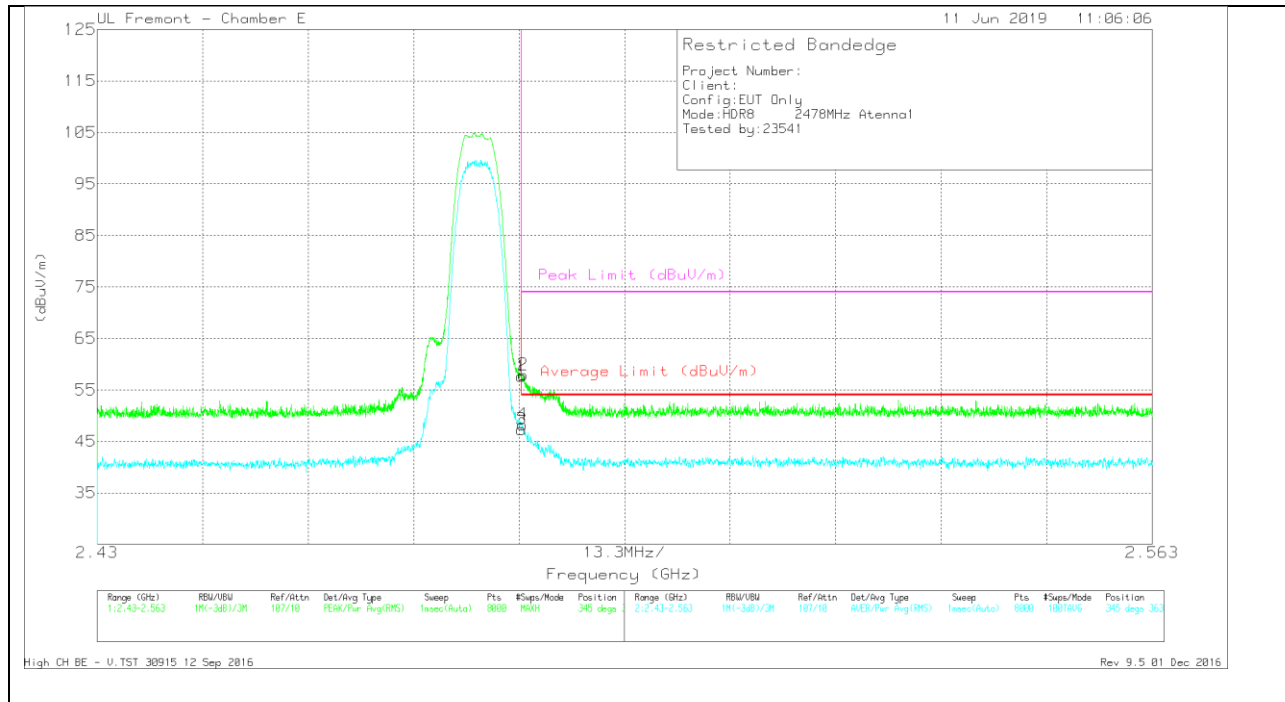
Pk - Peak detector

RMS - RMS detection

High CH BE - H.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Ch/Filt/P ad (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         | 51.14                | Pk  | 32.8           | -26.3                 | 57.64                      | -                      | -           | 74                  | -16.36         | 345            | 363         | V        |
| 2      | * 2.484         | 51.43                | Pk  | 32.8           | -26.3                 | 57.93                      | -                      | -           | 74                  | -16.07         | 345            | 363         | V        |
| 3      | * 2.484         | 40.84                | RMS | 32.8           | -26.3                 | 47.34                      | 54                     | -6.66       | -                   | -              | 345            | 363         | V        |
| 4      | * 2.484         | 41.8                 | RMS | 32.8           | -26.3                 | 48.3                       | 54                     | -5.7        | -                   | -              | 345            | 363         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

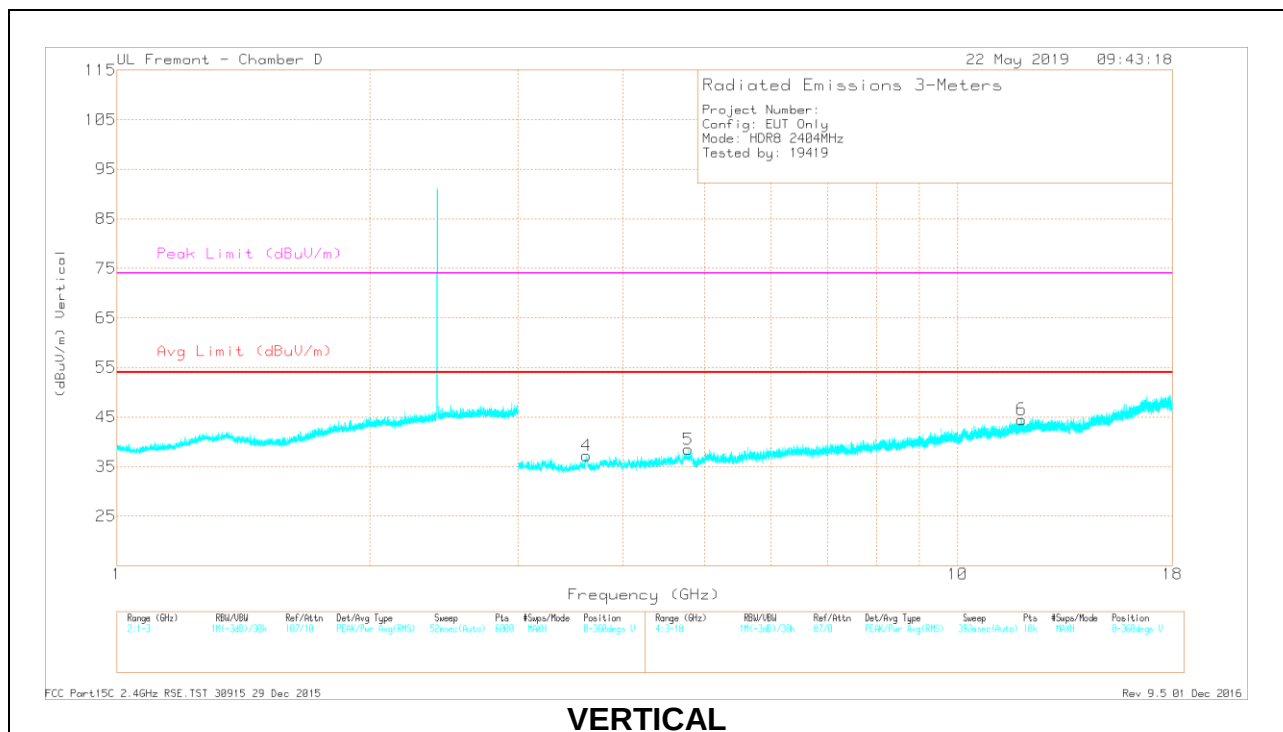
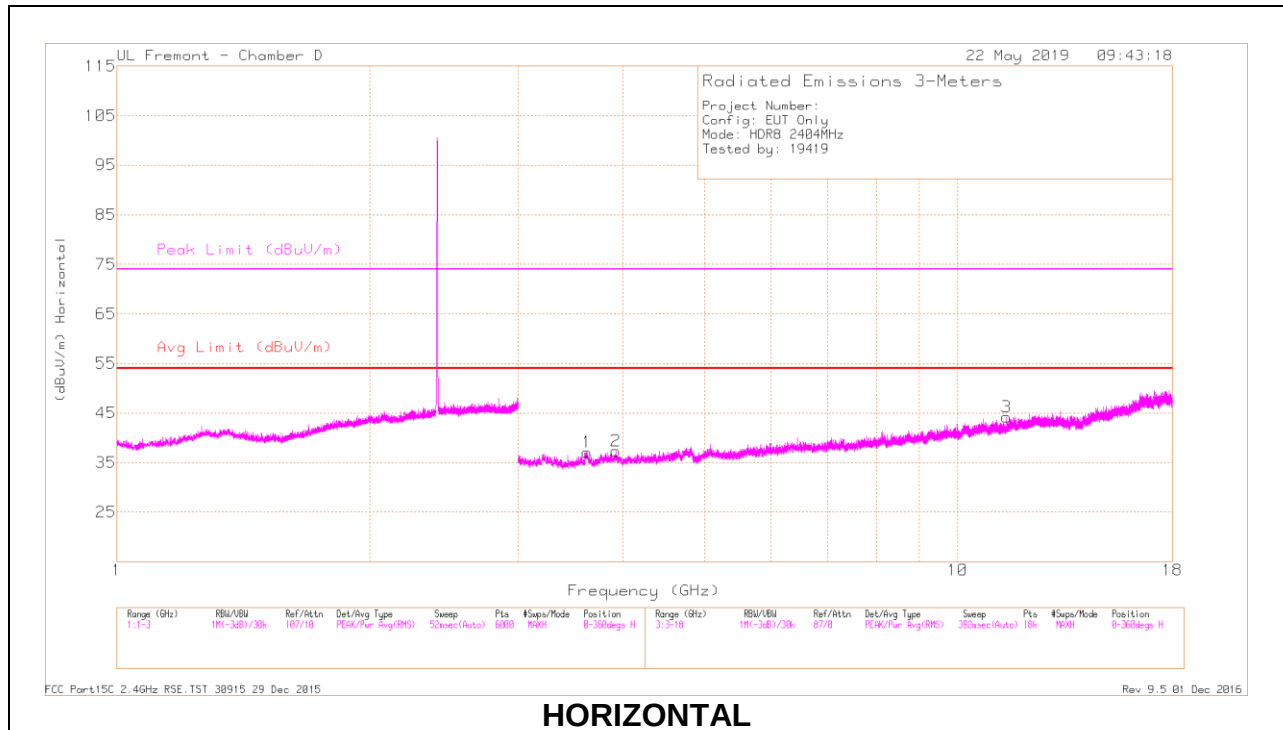
RMS - RMS detection

High CH BE - U.TST 30915 12 Sep 2016

Rev 9.5 01 Dec 2016

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

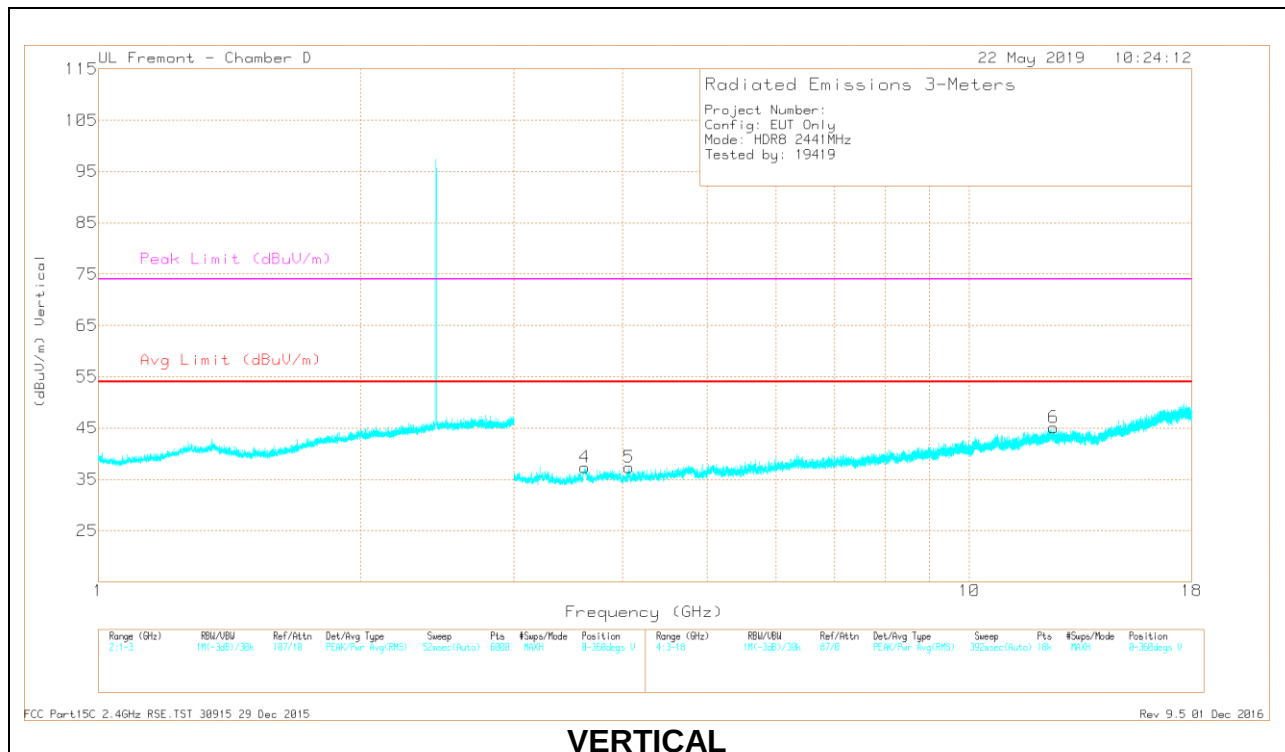
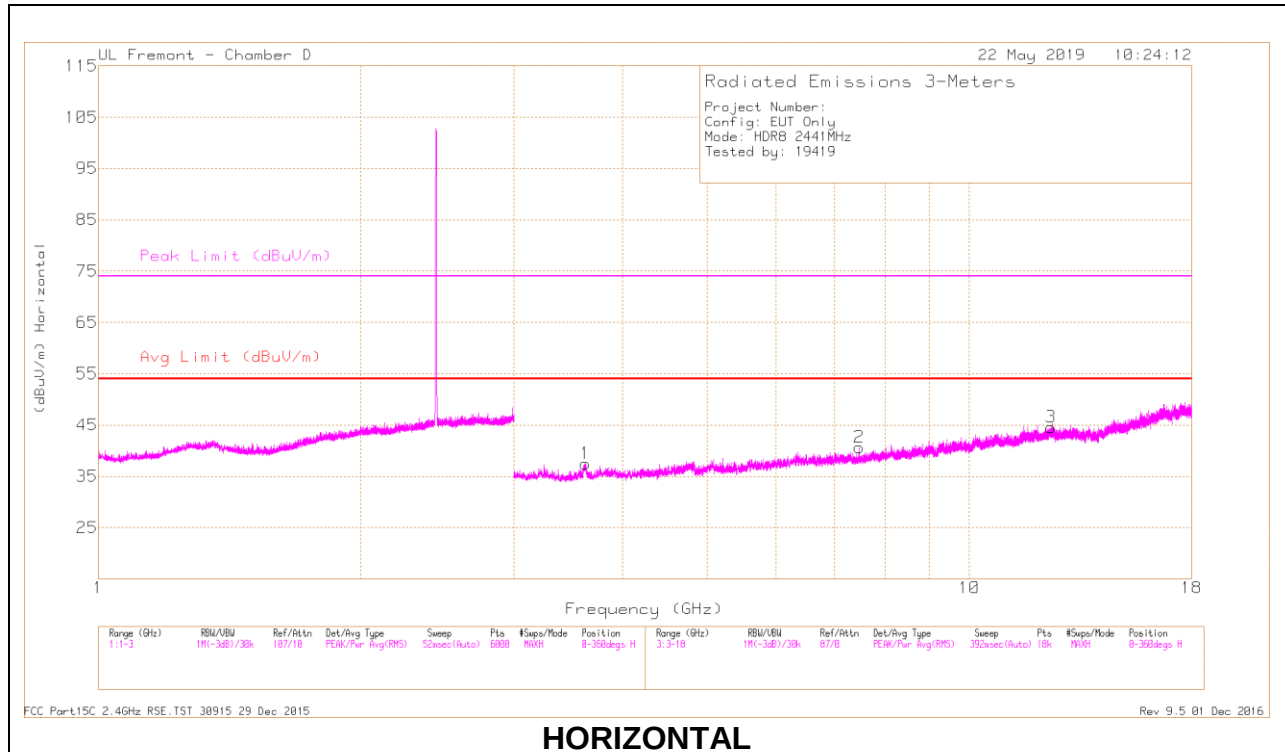
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.623         | 39.58                | PK2  | 33.3           | -28.5                   | 44.38                      | -                  | -           | 74                  | -29.62         | 262            | 265         | H        |
|        | * 3.625         | 27.03                | MAv1 | 33.2           | -28.6                   | 31.63                      | 54                 | -22.37      | -                   | -              | 262            | 265         | H        |
| 2      | * 3.92          | 39.49                | PK2  | 33.4           | -27.8                   | 45.09                      | -                  | -           | 74                  | -28.91         | 272            | 236         | H        |
|        | * 3.92          | 26.89                | MAv1 | 33.4           | -27.8                   | 32.49                      | 54                 | -21.51      | -                   | -              | 272            | 236         | H        |
| 3      | * 11.425        | 34.23                | PK2  | 38             | -21.8                   | 50.43                      | -                  | -           | 74                  | -23.57         | 13             | 268         | H        |
|        | * 11.427        | 20.66                | MAv1 | 38             | -21.8                   | 36.86                      | 54                 | -17.14      | -                   | -              | 13             | 268         | H        |
| 4      | * 3.616         | 39.44                | PK2  | 33.6           | -28.4                   | 44.64                      | -                  | -           | 74                  | -29.36         | 23             | 275         | V        |
|        | * 3.618         | 26.96                | MAv1 | 33.5           | -28.4                   | 32.06                      | 54                 | -21.94      | -                   | -              | 23             | 275         | V        |
| 5      | * 4.782         | 38.6                 | PK2  | 34             | -26.9                   | 45.7                       | -                  | -           | 74                  | -28.3          | 73             | 163         | V        |
|        | * 4.781         | 25.85                | MAv1 | 34             | -26.8                   | 33.05                      | 54                 | -20.95      | -                   | -              | 73             | 163         | V        |
| 6      | * 11.906        | 34.06                | PK2  | 38.6           | -21.3                   | 51.36                      | -                  | -           | 74                  | -22.64         | 114            | 245         | V        |
|        | * 11.903        | 20.5                 | MAv1 | 38.6           | -21.2                   | 37.9                       | 54                 | -16.1       | -                   | -              | 114            | 245         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

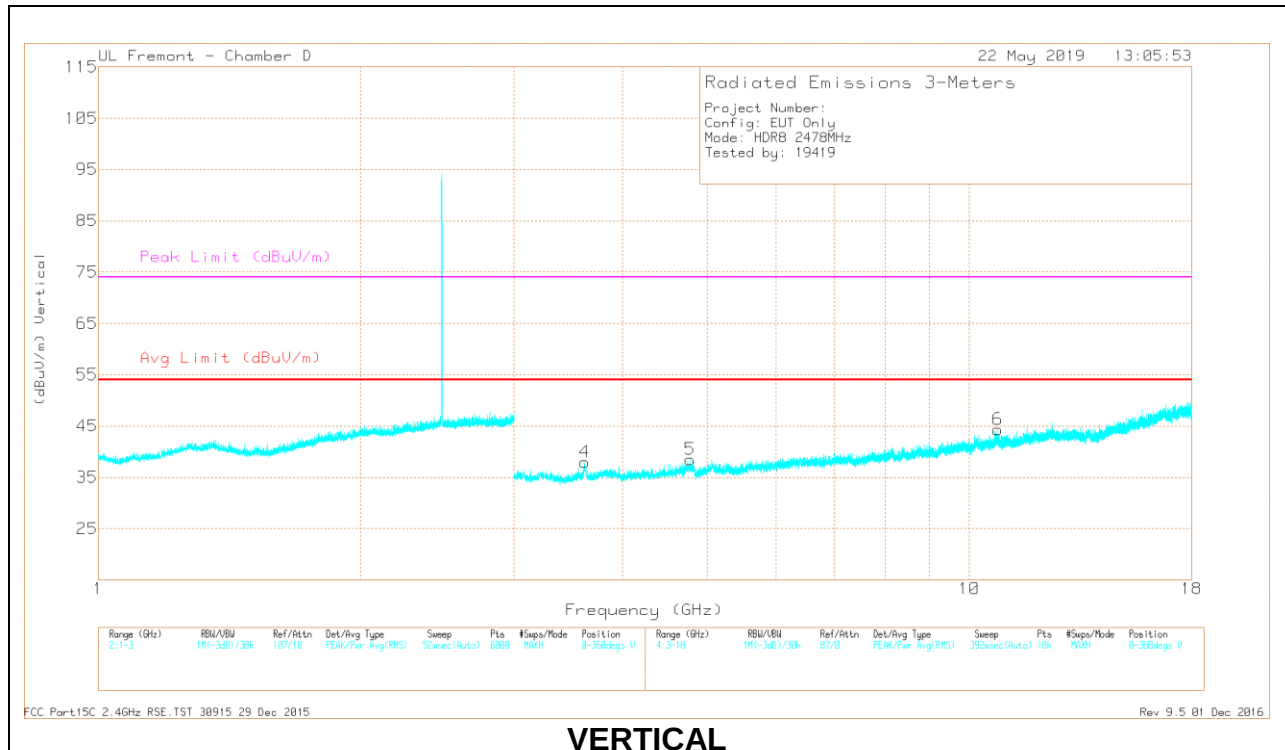
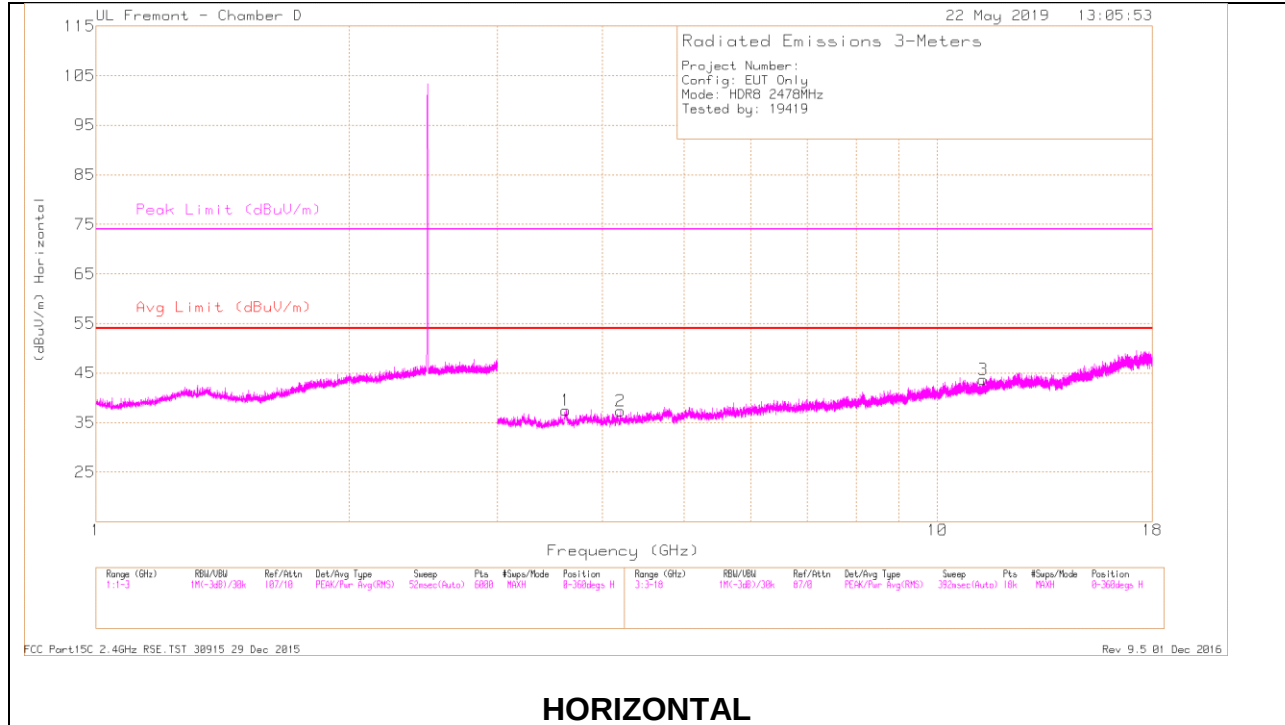
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.623         | 39.38                | PK2  | 33.3           | -28.5                   | 44.18                      | -                  | -           | 74                  | -29.82         | 356            | 124         | H        |
|        | * 3.624         | 26.98                | MAv1 | 33.3           | -28.5                   | 31.78                      | 54                 | -22.22      | -                   | -              | 356            | 124         | H        |
| 2      | * 7.473         | 36.52                | PK2  | 35.5           | -24.7                   | 47.32                      | -                  | -           | 74                  | -26.68         | 6              | 252         | H        |
|        | * 7.473         | 22.97                | MAv1 | 35.5           | -24.7                   | 33.77                      | 54                 | -20.23      | -                   | -              | 6              | 252         | H        |
| 3      | * 12.412        | 34.56                | PK2  | 38.9           | -21.7                   | 51.76                      | -                  | -           | 74                  | -22.24         | 323            | 129         | H        |
|        | * 12.415        | 21.23                | MAv1 | 38.9           | -21.7                   | 38.43                      | 54                 | -15.57      | -                   | -              | 323            | 129         | H        |
| 4      | * 3.62          | 39.06                | PK2  | 33.5           | -28.4                   | 44.16                      | -                  | -           | 74                  | -29.84         | 115            | 129         | V        |
|        | * 3.618         | 26.98                | MAv1 | 33.5           | -28.4                   | 32.08                      | 54                 | -21.92      | -                   | -              | 115            | 129         | V        |
| 5      | * 4.066         | 39.22                | PK2  | 33.5           | -28.1                   | 44.62                      | -                  | -           | 74                  | -29.38         | 356            | 152         | V        |
|        | * 4.067         | 26.53                | MAv1 | 33.5           | -28                     | 32.03                      | 54                 | -21.97      | -                   | -              | 356            | 152         | V        |
| 6      | * 12.503        | 34.91                | PK2  | 38.9           | -21.3                   | 52.51                      | -                  | -           | 74                  | -21.49         | 93             | 337         | V        |
|        | * 12.505        | 20.94                | MAv1 | 38.9           | -21.3                   | 38.54                      | 54                 | -15.46      | -                   | -              | 93             | 337         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.617         | 39.34                | PK2  | 33.6           | -28.4                   | 44.54                      | -                  | -           | 74                  | -29.46         | 304            | 133         | H        |
|        | * 3.619         | 27.13                | MAv1 | 33.5           | -28.4                   | 32.23                      | 54                 | -21.77      | -                   | -              | 304            | 133         | H        |
| 2      | * 4.205         | 39.53                | PK2  | 33.4           | -27.5                   | 45.43                      | -                  | -           | 74                  | -28.57         | 274            | 332         | H        |
|        | * 4.205         | 25.92                | MAv1 | 33.4           | -27.5                   | 31.82                      | 54                 | -22.18      | -                   | -              | 274            | 332         | H        |
| 3      | * 11.342        | 33.96                | PK2  | 38             | -21.6                   | 50.36                      | -                  | -           | 74                  | -23.64         | 124            | 134         | H        |
|        | * 11.339        | 20.31                | MAv1 | 38             | -21.5                   | 36.81                      | 54                 | -17.19      | -                   | -              | 124            | 134         | H        |
| 4      | * 3.616         | 39.46                | PK2  | 33.6           | -28.4                   | 44.66                      | -                  | -           | 74                  | -29.34         | 65             | 213         | V        |
|        | * 3.617         | 26.6                 | MAv1 | 33.6           | -28.4                   | 31.8                       | 54                 | -22.2       | -                   | -              | 65             | 213         | V        |
| 5      | * 4.78          | 38.67                | PK2  | 34             | -26.7                   | 45.97                      | -                  | -           | 74                  | -28.03         | 304            | 311         | V        |
|        | * 4.778         | 25.81                | MAv1 | 34             | -26.6                   | 33.21                      | 54                 | -20.79      | -                   | -              | 304            | 311         | V        |
| 6      | * 10.782        | 34.81                | PK2  | 37.8           | -20.8                   | 51.81                      | -                  | -           | 74                  | -22.19         | 169            | 163         | V        |
|        | * 10.778        | 19.7                 | MAv1 | 37.8           | -20.8                   | 36.7                       | 54                 | -17.3       | -                   | -              | 169            | 163         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

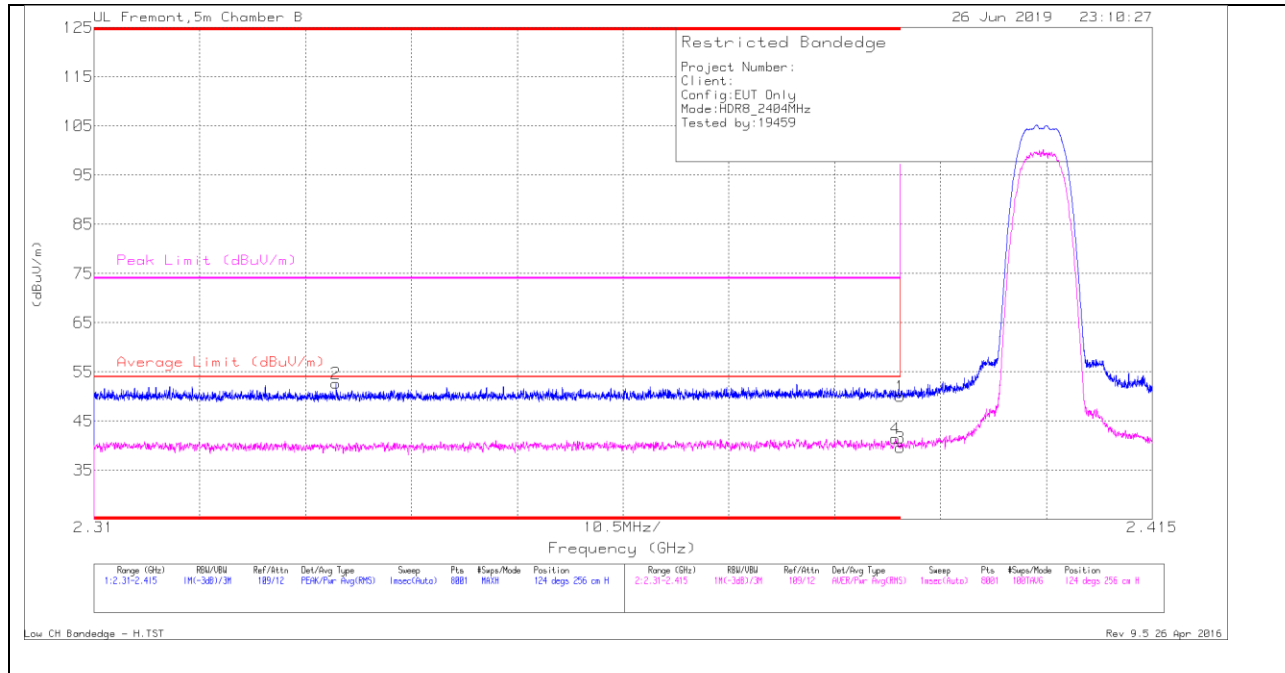
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



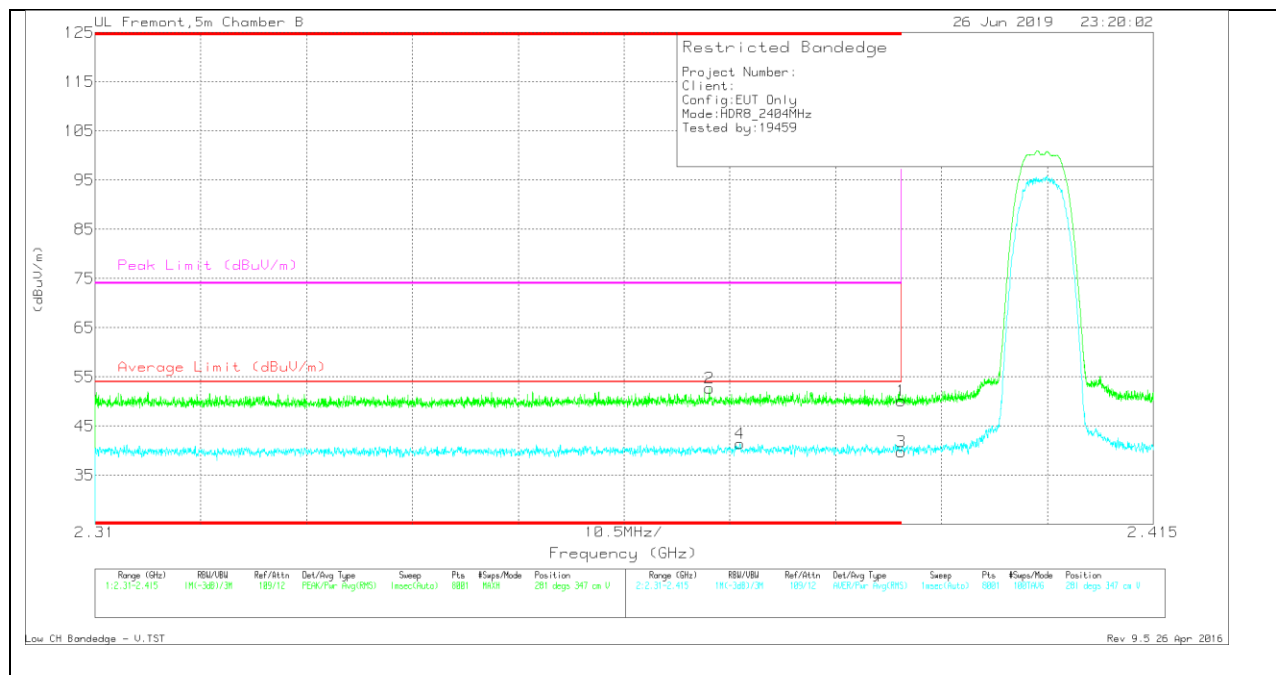
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 36.98                | Pk  | 31.9           | -18.9                  | 49.98                      | -                      | -           | 74                  | -24.02         | 124            | 256         | H        |
| 2      | * 2.334         | 40.06                | Pk  | 31.6           | -19                    | 52.66                      | -                      | -           | 74                  | -21.34         | 124            | 256         | H        |
| 3      | * 2.39          | 26.6                 | RMS | 31.9           | -18.9                  | 39.6                       | 54                     | -14.4       | -                   | -              | 124            | 256         | H        |
| 4      | * 2.39          | 28.46                | RMS | 31.9           | -18.9                  | 41.46                      | 54                     | -12.54      | -                   | -              | 124            | 256         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 2.371         | 39.82                | Pk  | 31.8           | -18.9                   | 52.72                      | -                      | -           | 74                  | -21.28         | 281            | 347         | V        |
| 4      | * 2.374         | 28.57                | RMS | 31.8           | -18.9                   | 41.47                      | 54                     | -12.53      | -                   | -              | 281            | 347         | V        |
| 1      | * 2.39          | 37.19                | Pk  | 31.9           | -18.9                   | 50.19                      | -                      | -           | 74                  | -23.81         | 281            | 347         | V        |
| 3      | * 2.39          | 26.8                 | RMS | 31.9           | -18.9                   | 39.8                       | 54                     | -14.2       | -                   | -              | 281            | 347         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

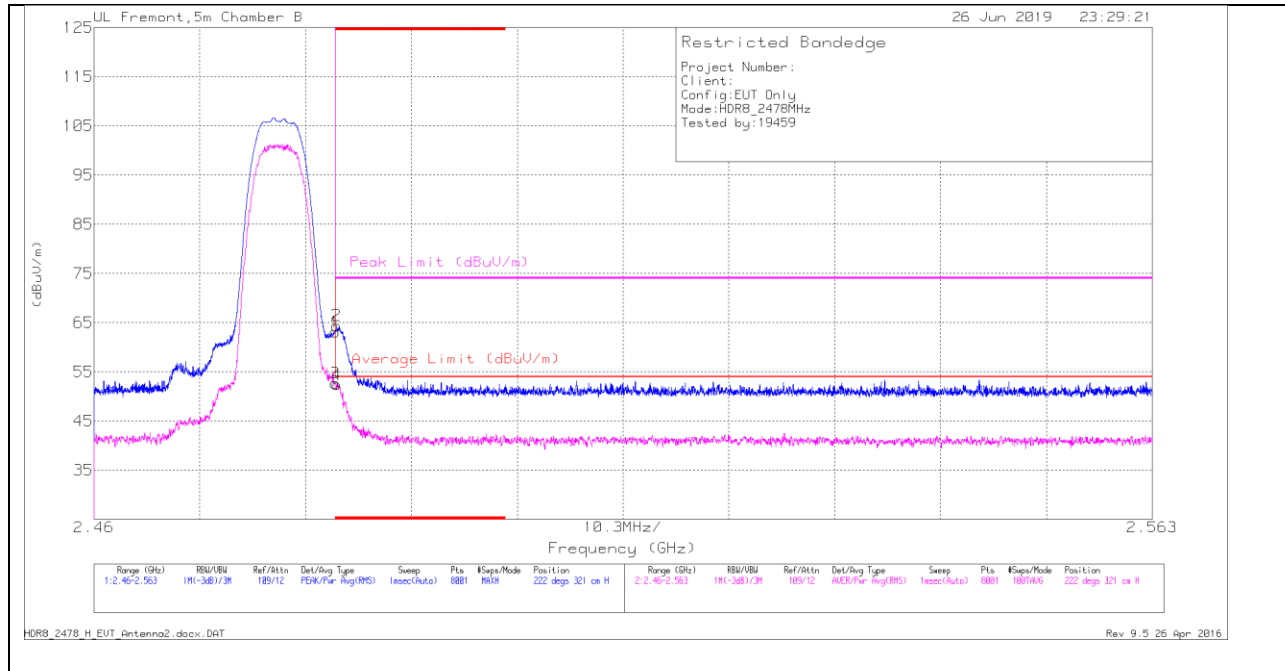
RMS - RMS detection

Low CH Bandedge - V.TST

Rev 9.5 26 Apr 2016

# **BANEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Ampl/Cbl/Filtr/P ad (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         | 49.69                | Pk  | 32.3           | -18.9                    | 63.09                      | -                      | -           | 74                  | -10.91         | 222            | 321         | H        |
| 2      | * 2.484         | 51.02                | Pk  | 32.3           | -18.9                    | 64.42                      | -                      | -           | 74                  | -9.58          | 222            | 321         | H        |
| 3      | * 2.484         | 39.33                | RMS | 32.3           | -18.9                    | 52.73                      | 54                     | -1.27       | -                   | -              | 222            | 321         | H        |
| 4      | * 2.484         | 39.02                | RMS | 32.3           | -18.9                    | 52.42                      | 54                     | -1.58       | -                   | -              | 222            | 321         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

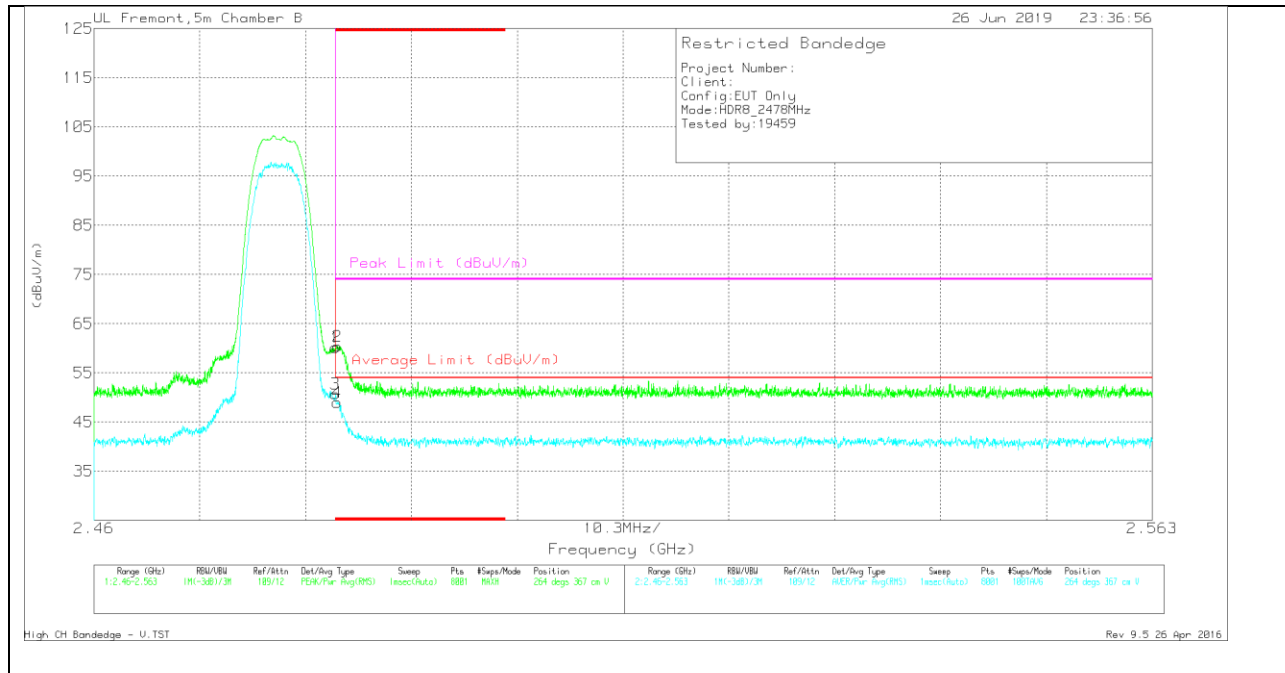
Pk - Peak detector

RMS - RMS detection

HDR8\_2478\_H\_EVT\_Antenna2.docx.DAT

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## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (dB/m) | Amp/Chn/Filt/P ad (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         | 46.76                | Pk  | 32.3           | -18.9                  | 60.16                      | -                      | -           | 74                  | -13.84         | 264            | 367         | V        |
| 2      | * 2.484         | 47                   | Pk  | 32.3           | -18.9                  | 60.4                       | -                      | -           | 74                  | -13.6          | 264            | 367         | V        |
| 3      | * 2.484         | 37.33                | RMS | 32.3           | -18.9                  | 50.73                      | 54                     | -3.27       | -                   | -              | 264            | 367         | V        |
| 4      | * 2.484         | 35.59                | RMS | 32.3           | -18.9                  | 48.99                      | 54                     | -5.01       | -                   | -              | 264            | 367         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

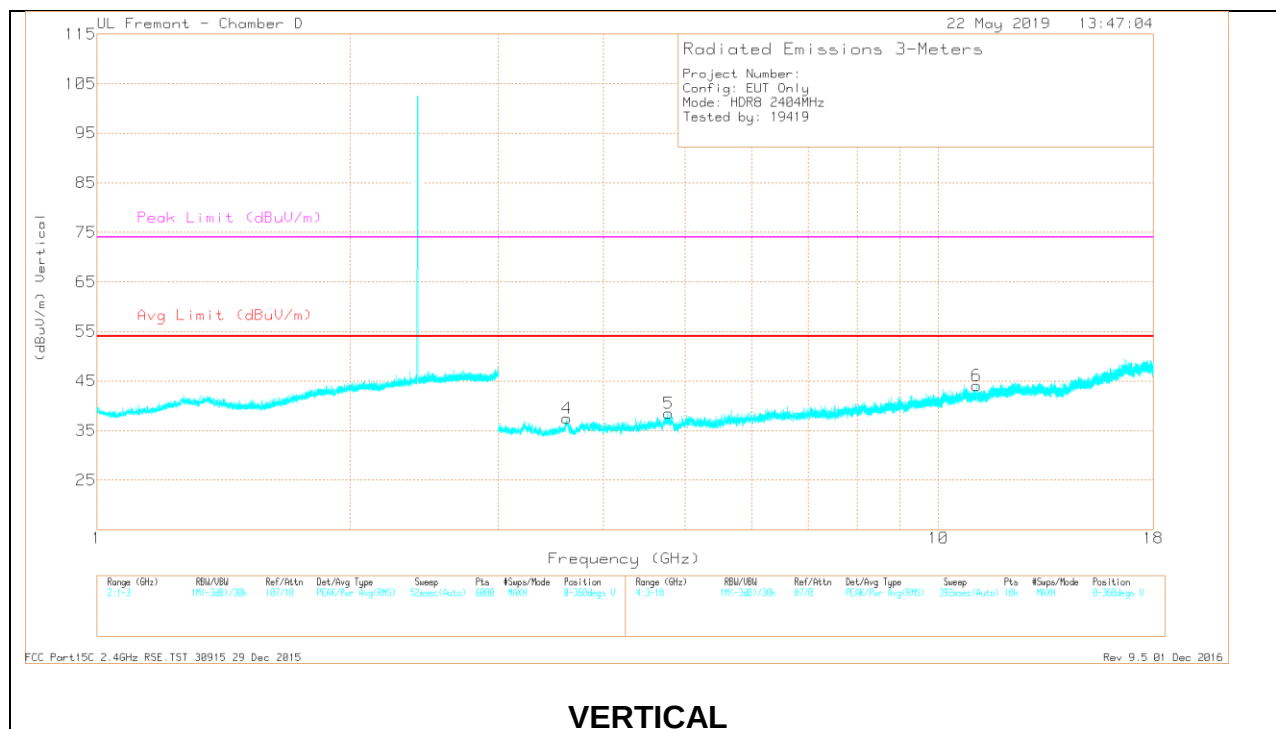
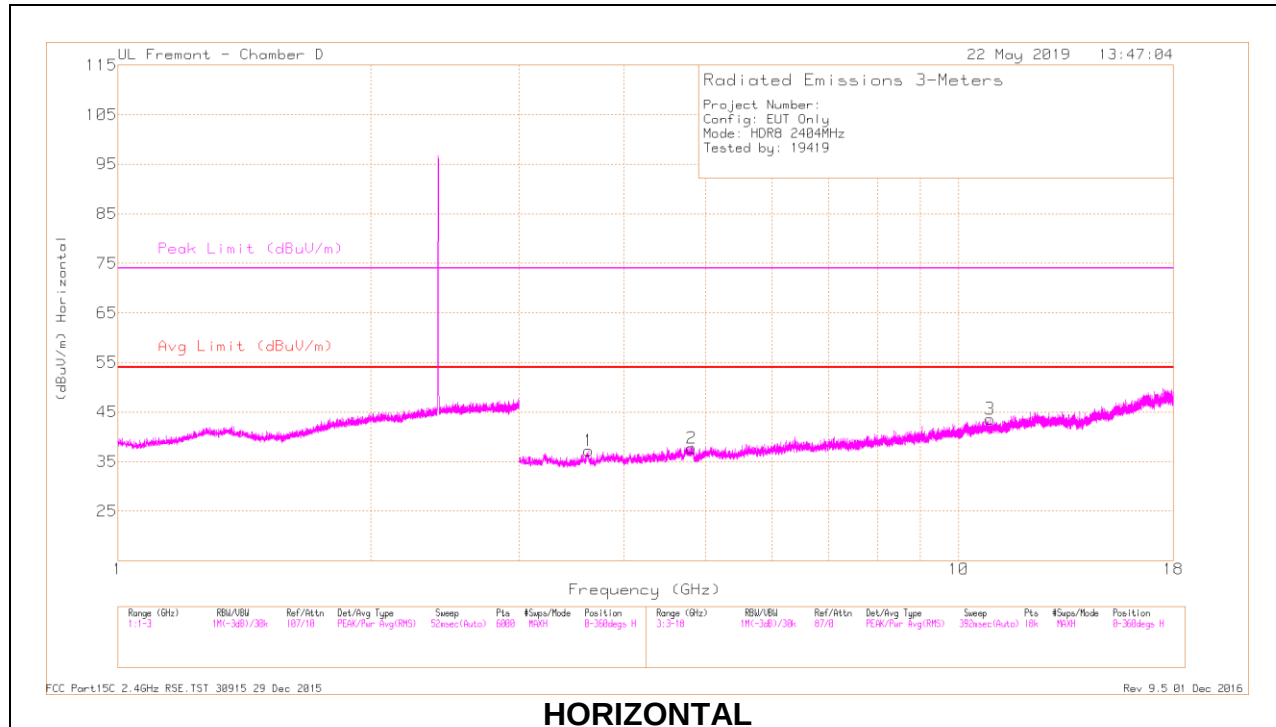
RMS - RMS detection

High CH Bandedge - V.TST

Rev 9.5 26 Apr 2016

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

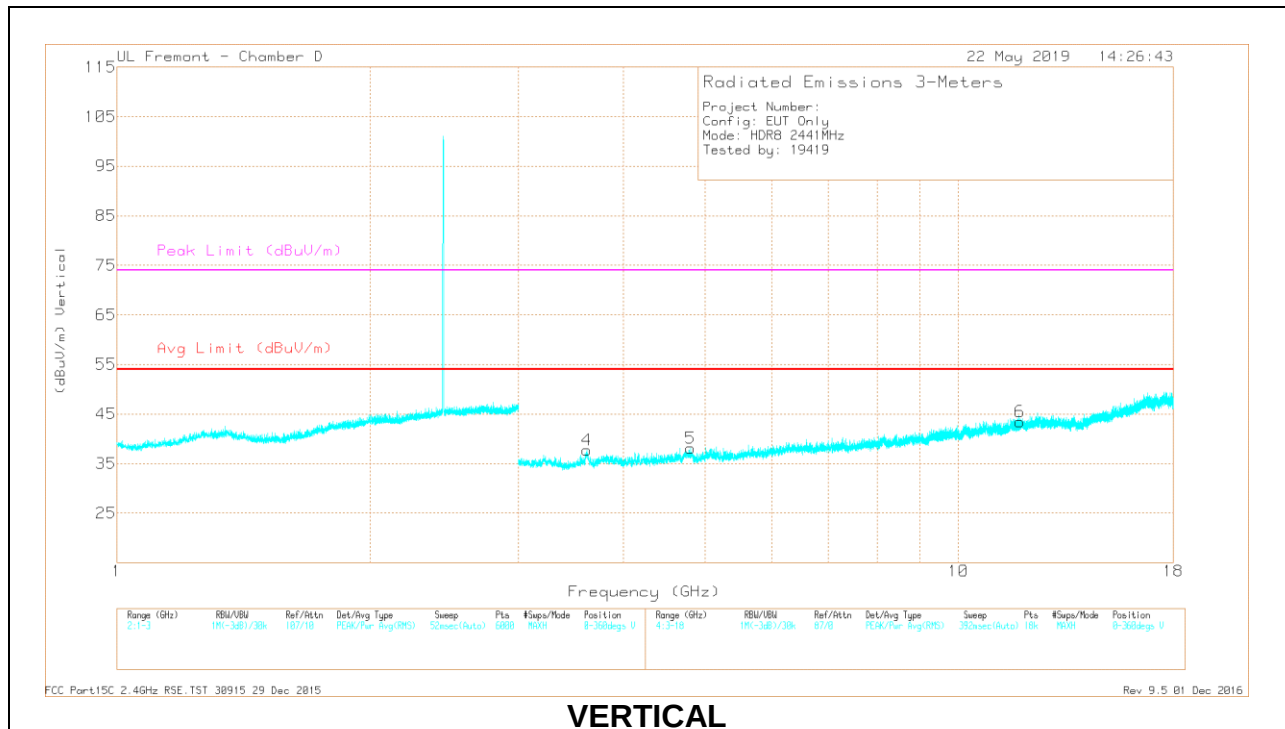
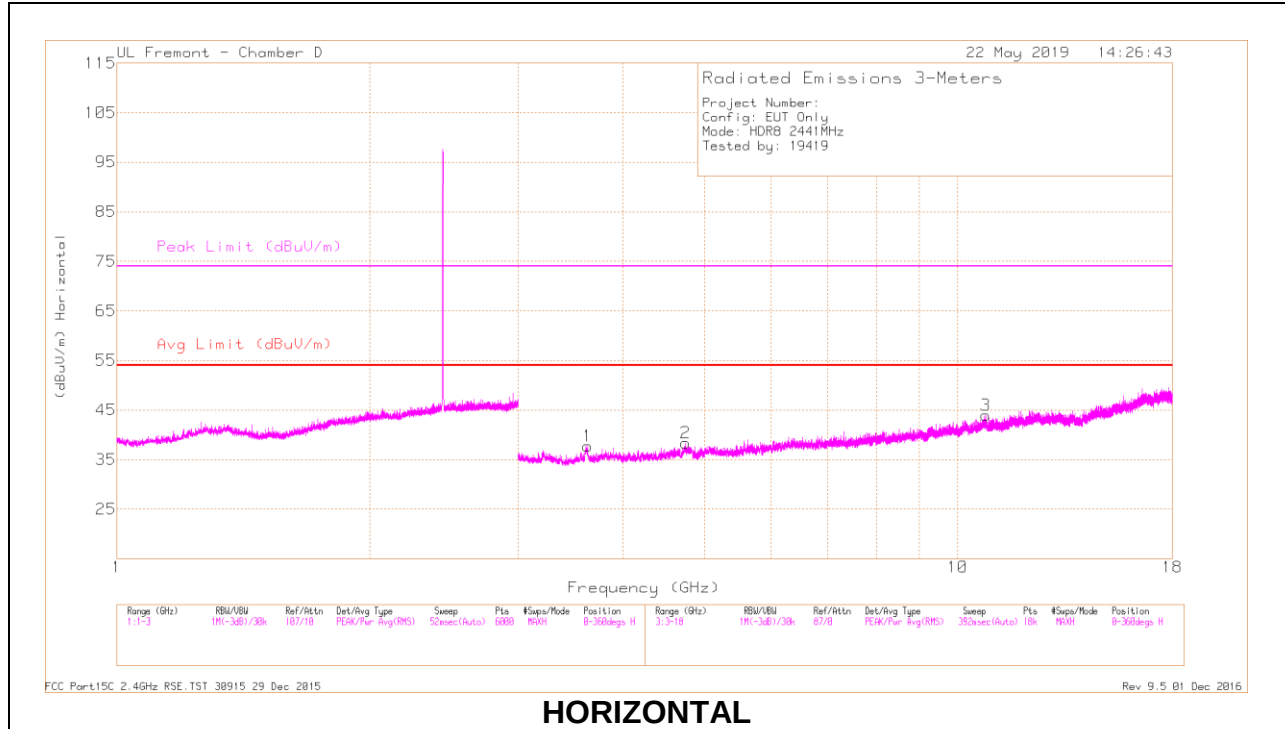
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.631         | 39.18                | PK2  | 33.1           | -28.5                   | 43.78                      | -                  | -           | 74                  | -30.22         | 178            | 256         | H        |
|        | * 3.631         | 26.88                | MAv1 | 33.1           | -28.5                   | 31.48                      | 54                 | -22.52      | -                   | -              | 178            | 256         | H        |
| 2      | * 4.817         | 38.53                | PK2  | 34             | -27                     | 45.53                      | -                  | -           | 74                  | -28.47         | 192            | 153         | H        |
|        | * 4.818         | 25.9                 | MAv1 | 34             | -27                     | 32.9                       | 54                 | -21.1       | -                   | -              | 192            | 153         | H        |
| 3      | * 10.888        | 34.44                | PK2  | 37.8           | -21.5                   | 50.74                      | -                  | -           | 74                  | -23.26         | 354            | 236         | H        |
|        | * 10.889        | 20.04                | MAv1 | 37.8           | -21.5                   | 36.34                      | 54                 | -17.66      | -                   | -              | 354            | 236         | H        |
| 4      | * 3.619         | 39.16                | PK2  | 33.5           | -28.4                   | 44.26                      | -                  | -           | 74                  | -29.74         | 137            | 378         | V        |
|        | * 3.62          | 26.87                | MAv1 | 33.5           | -28.4                   | 31.97                      | 54                 | -22.03      | -                   | -              | 137            | 378         | V        |
| 5      | * 4.776         | 38.19                | PK2  | 34             | -26.6                   | 45.59                      | -                  | -           | 74                  | -28.41         | 230            | 125         | V        |
|        | * 4.779         | 25.88                | MAv1 | 34             | -26.7                   | 33.18                      | 54                 | -20.82      | -                   | -              | 230            | 125         | V        |
| 6      | * 11.107        | 35.08                | PK2  | 37.8           | -21.4                   | 51.48                      | -                  | -           | 74                  | -22.52         | 298            | 172         | V        |
|        | * 11.11         | 20.75                | MAv1 | 37.8           | -21.5                   | 37.05                      | 54                 | -16.95      | -                   | -              | 298            | 172         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

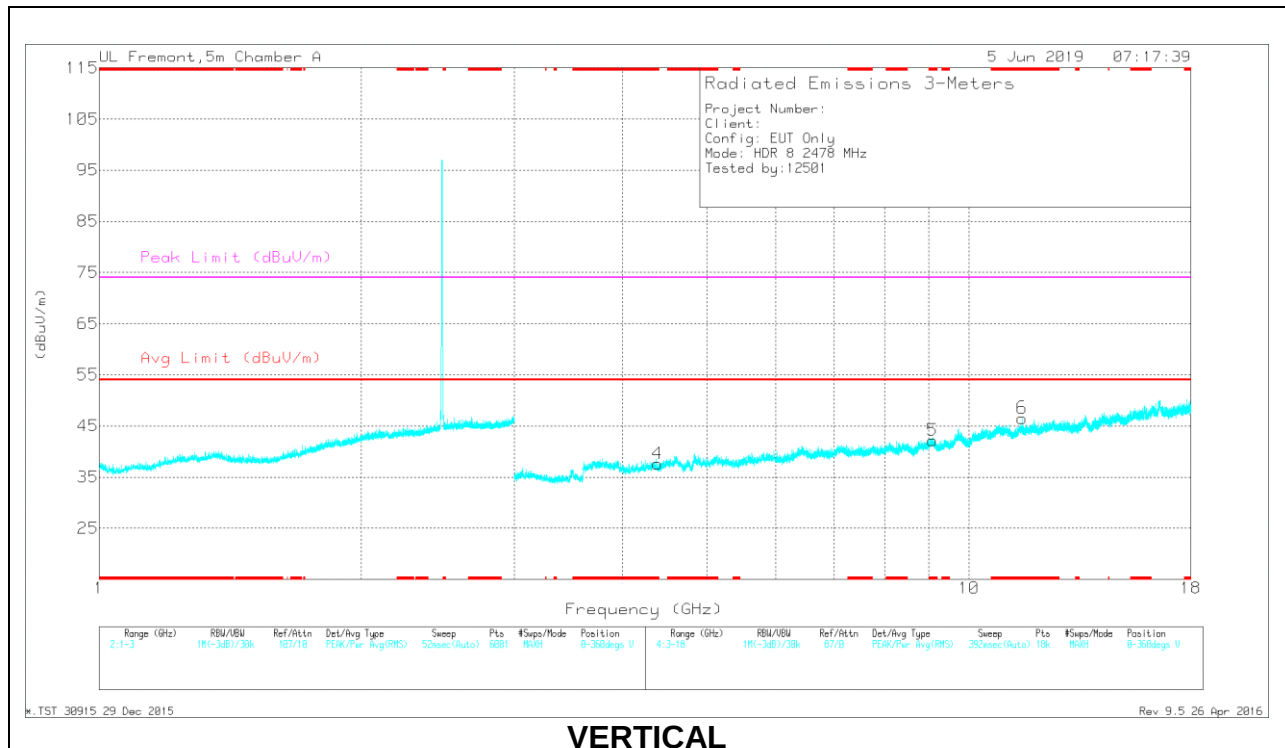
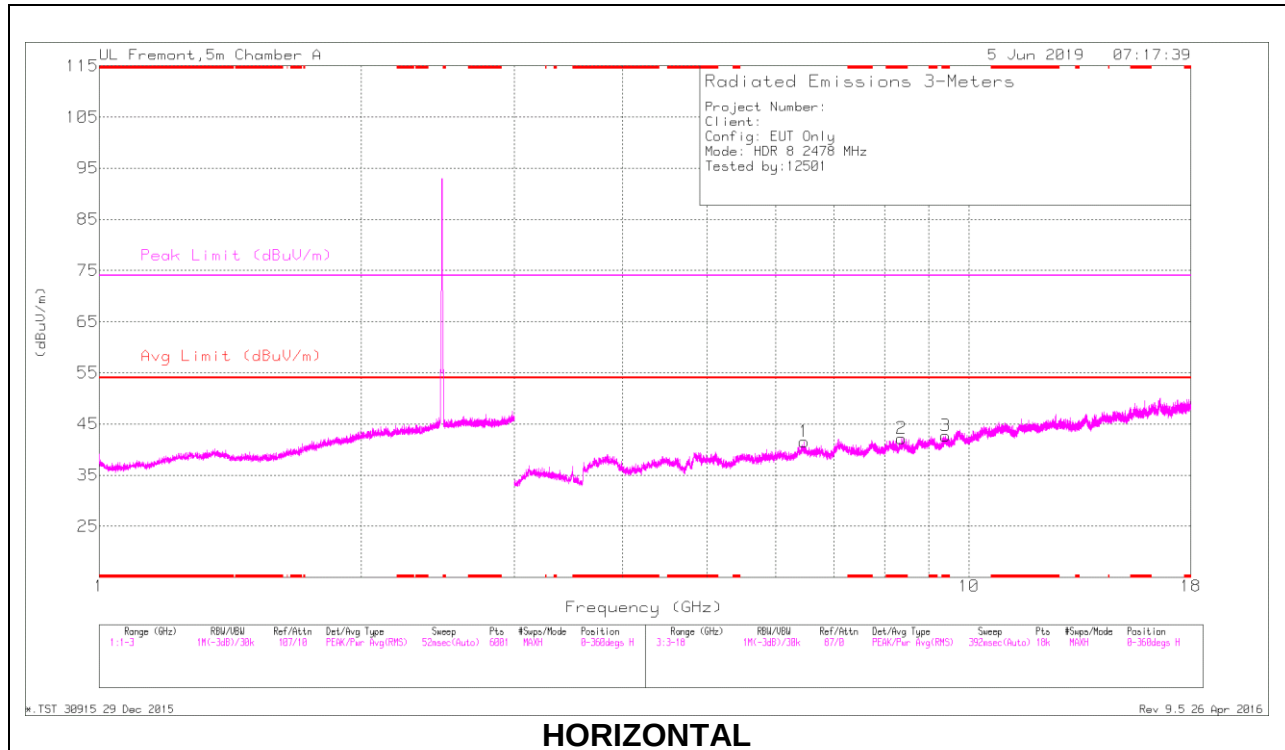
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Filtr/ Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.629         | 39.82                | PK2  | 33.1           | -28.5                   | 44.42                      | -                  | -           | 74                  | -29.58         | 328            | 127         | H        |
|        | * 3.628         | 26.75                | MAv1 | 33.2           | -28.5                   | 31.45                      | 54                 | -22.55      | -                   | -              | 328            | 127         | H        |
| 2      | * 4.747         | 38.4                 | PK2  | 33.9           | -26.6                   | 45.7                       | -                  | -           | 74                  | -28.3          | 52             | 167         | H        |
|        | * 4.748         | 25.36                | MAv1 | 33.9           | -26.7                   | 32.56                      | 54                 | -21.44      | -                   | -              | 52             | 167         | H        |
| 3      | * 10.801        | 33.69                | PK2  | 37.8           | -21.2                   | 50.29                      | -                  | -           | 74                  | -23.71         | 2              | 250         | H        |
|        | * 10.8          | 19.9                 | MAv1 | 37.8           | -21.2                   | 36.5                       | 54                 | -17.5       | -                   | -              | 2              | 250         | H        |
| 4      | * 3.621         | 39.23                | PK2  | 33.4           | -28.4                   | 44.23                      | -                  | -           | 74                  | -29.77         | 87             | 372         | V        |
|        | * 3.621         | 27.05                | MAv1 | 33.4           | -28.4                   | 32.05                      | 54                 | -21.95      | -                   | -              | 87             | 372         | V        |
| 5      | * 4.803         | 39.02                | PK2  | 34.1           | -26.8                   | 46.32                      | -                  | -           | 74                  | -27.68         | 123            | 230         | V        |
|        | * 4.801         | 26.75                | MAv1 | 34.1           | -26.8                   | 34.05                      | 54                 | -19.95      | -                   | -              | 123            | 230         | V        |
| 6      | * 11.82         | 34.52                | PK2  | 38.5           | -21.5                   | 51.52                      | -                  | -           | 74                  | -22.48         | 106            | 159         | V        |
|        | * 11.822        | 21.43                | MAv1 | 38.5           | -21.5                   | 38.43                      | 54                 | -15.57      | -                   | -              | 106            | 159         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| * 8.369         | 35.18                | PK2  | 35.9           | -23.3                 | 47.78                      | -                  | -           | 74                  | -26.22      | 360            | 101         | H        |
| * 8.368         | 25.17                | MAv1 | 35.9           | -23.3                 | 37.77                      | 54                 | -16.23      | -                   | -           | 360            | 101         | H        |
| * 9.398         | 34.42                | PK2  | 36.4           | -21.6                 | 49.22                      | -                  | -           | 74                  | -24.78      | 360            | 199         | H        |
| * 9.399         | 24.03                | MAv1 | 36.4           | -21.6                 | 38.83                      | 54                 | -15.17      | -                   | -           | 360            | 199         | H        |
| * 4.391         | 39.85                | PK2  | 33.7           | -29.1                 | 44.45                      | -                  | -           | 74                  | -29.55      | 360            | 199         | V        |
| * 4.389         | 29.64                | MAv1 | 33.7           | -29                   | 34.34                      | 54                 | -19.66      | -                   | -           | 360            | 199         | V        |
| * 9.085         | 33.98                | PK2  | 36.3           | -21.8                 | 48.48                      | -                  | -           | 74                  | -25.52      | 360            | 199         | V        |
| * 9.087         | 24.3                 | MAv1 | 36.3           | -21.8                 | 38.8                       | 54                 | -15.2       | -                   | -           | 360            | 199         | V        |
| * 11.514        | 33.33                | PK2  | 38.1           | -19.9                 | 51.53                      | -                  | -           | 74                  | -22.47      | 360            | 102         | V        |
| * 11.513        | 23.19                | MAv1 | 38.1           | -19.9                 | 41.39                      | 54                 | -12.61      | -                   | -           | 360            | 102         | V        |
| 6.46            | 36.22                | PK2  | 35.9           | -24.9                 | 47.22                      | -                  | -           | -                   | -           | 360            | 101         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

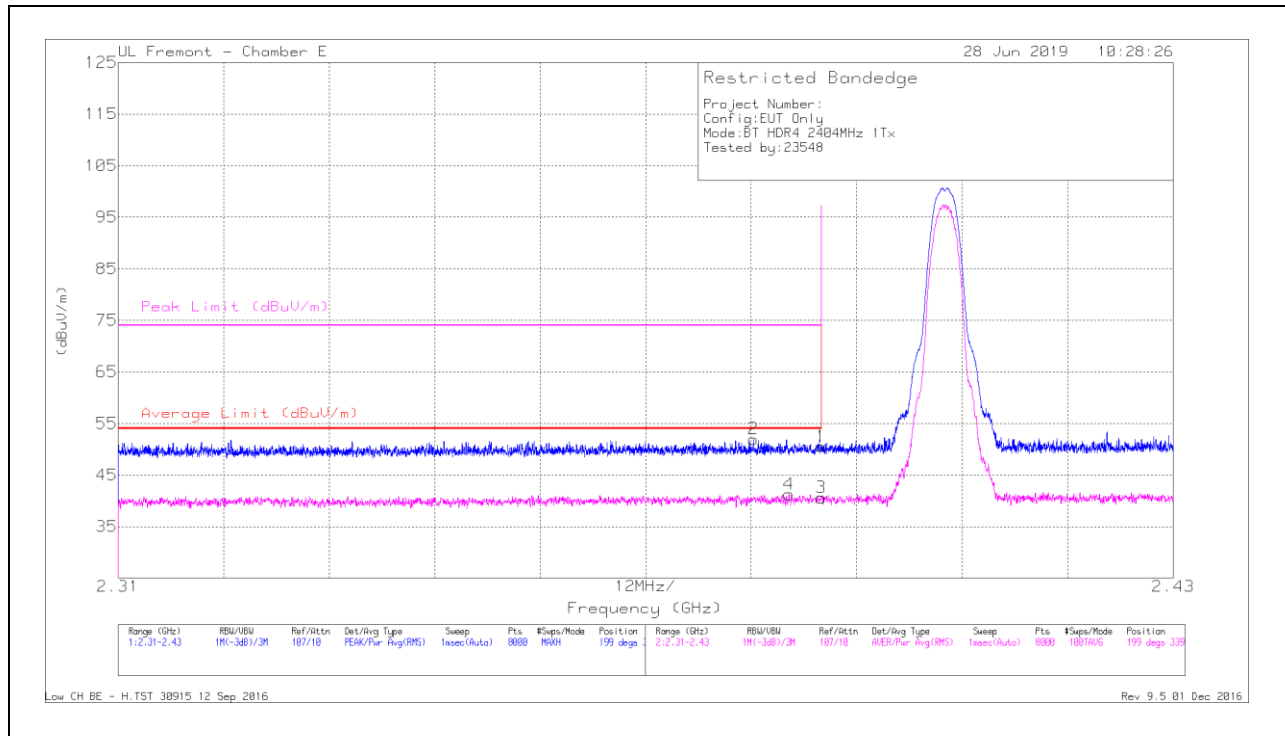
MAv1 - KDB558074 Option 1 Maximum RMS Average

### 9.2.3. LOW POWER HDR (HDR4)

#### Antenna 4

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



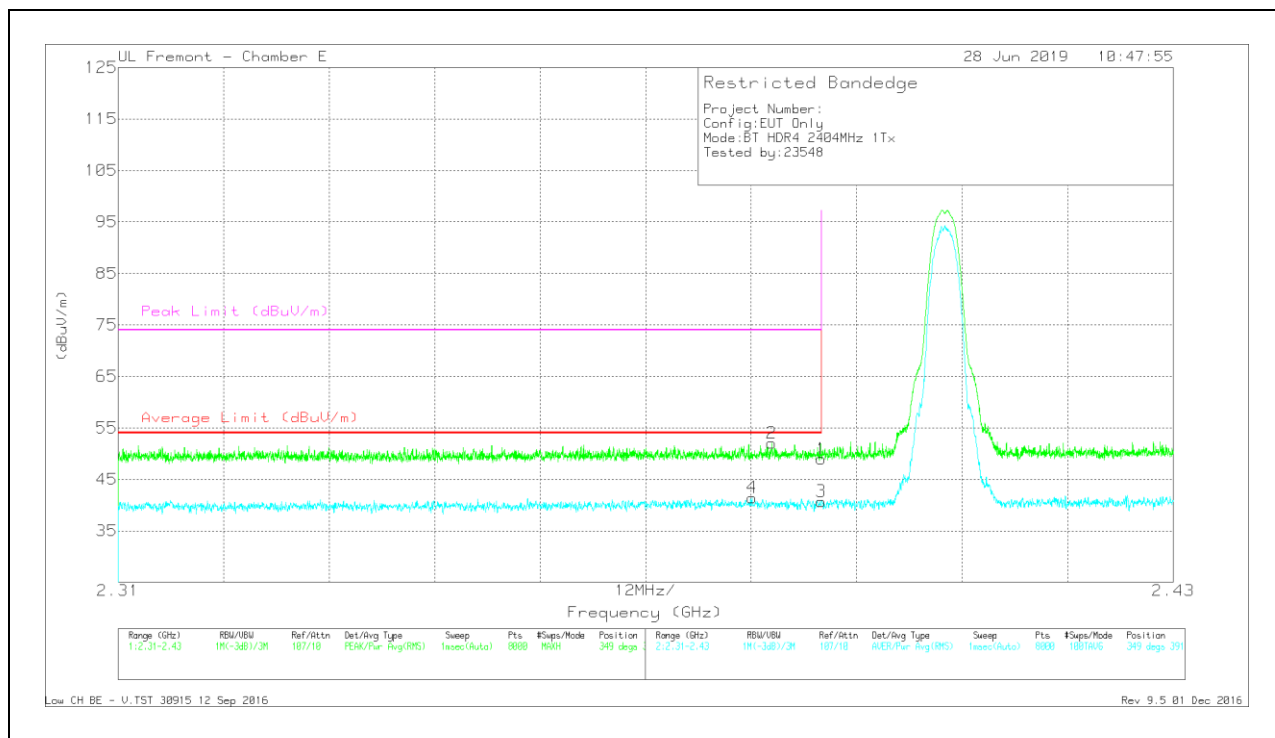
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Ftr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 44.48                | Pk  | 32.3           | -26.2                 | 50.58                      | -                      | -           | 74                  | -23.42         | 199            | 339         | H        |
| 2      | * 2.382         | 45.98                | Pk  | 32.3           | -26.3                 | 51.98                      | -                      | -           | 74                  | -22.02         | 199            | 339         | H        |
| 3      | * 2.39          | 34.53                | RMS | 32.3           | -26.2                 | 40.63                      | 54                     | -13.37      | -                   | -              | 199            | 339         | H        |
| 4      | * 2.386         | 35.25                | RMS | 32.3           | -26.3                 | 41.25                      | 54                     | -12.75      | -                   | -              | 199            | 339         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT

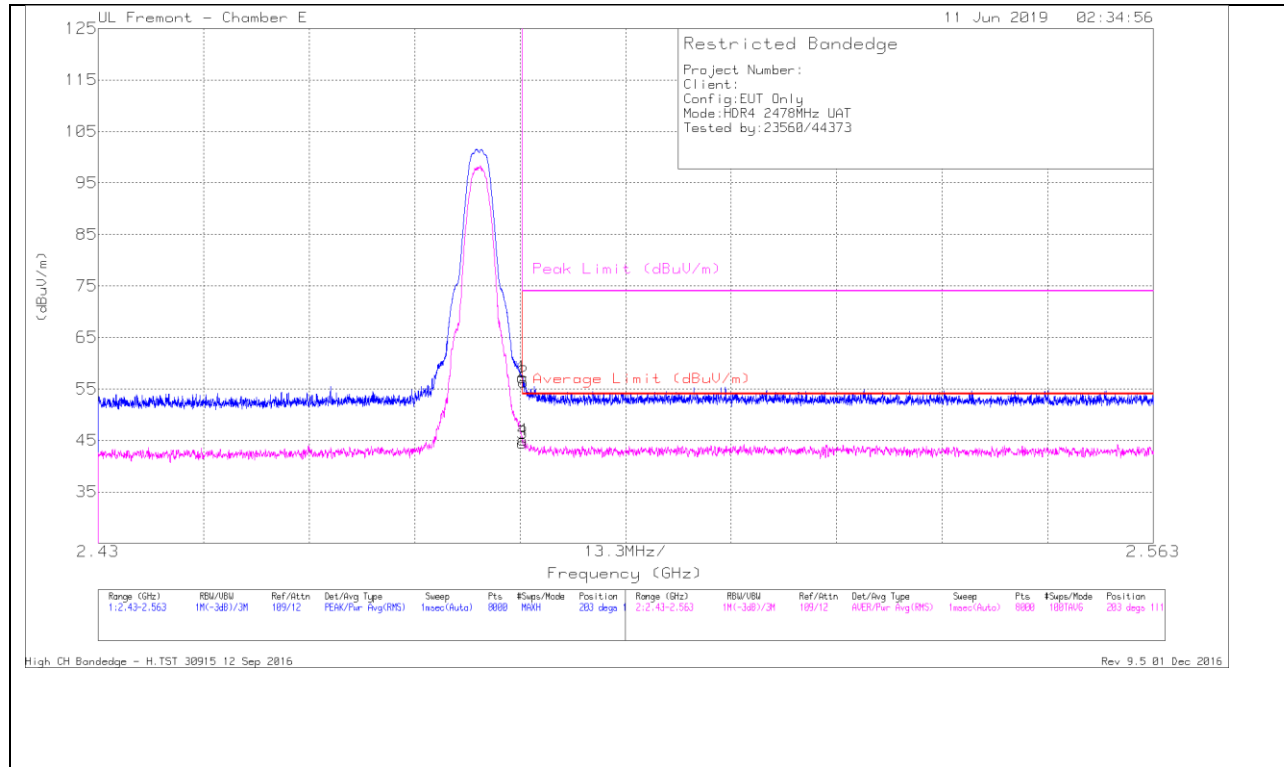


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Fitr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 42.87                | Pk  | 32.3           | -26.2                  | 48.97                      | -                      | -           | 74                  | -25.03         | 349            | 391         | V        |
| 2      | * 2.384         | 46.03                | Pk  | 32.3           | -26.3                  | 52.03                      | -                      | -           | 74                  | -21.97         | 349            | 391         | V        |
| 3      | * 2.39          | 34.62                | RMS | 32.3           | -26.2                  | 40.72                      | 54                     | -13.28      | -                   | -              | 349            | 391         | V        |
| 4      | * 2.382         | 35.45                | RMS | 32.3           | -26.3                  | 41.45                      | 54                     | -12.55      | -                   | -              | 349            | 391         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

**BANDEDGE (HIGH CHANNEL)****HORIZONTAL RESULT**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Amp/Cbl/Filtri/Pad (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         | 42.54                | Pk  | 32.8           | -18.1                   | 57.24                      | -                      | -           | 74                  | -16.76         | 203            | 111         | H        |
| 2      | * 2.484         | 41.58                | Pk  | 32.8           | -18.1                   | 56.28                      | -                      | -           | 74                  | -17.72         | 203            | 111         | H        |
| 3      | * 2.484         | 29.79                | RMS | 32.8           | -18.1                   | 44.49                      | 54                     | -9.51       | -                   | -              | 203            | 111         | H        |
| 4      | * 2.484         | 30.38                | RMS | 32.8           | -18.1                   | 45.08                      | 54                     | -8.92       | -                   | -              | 203            | 111         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

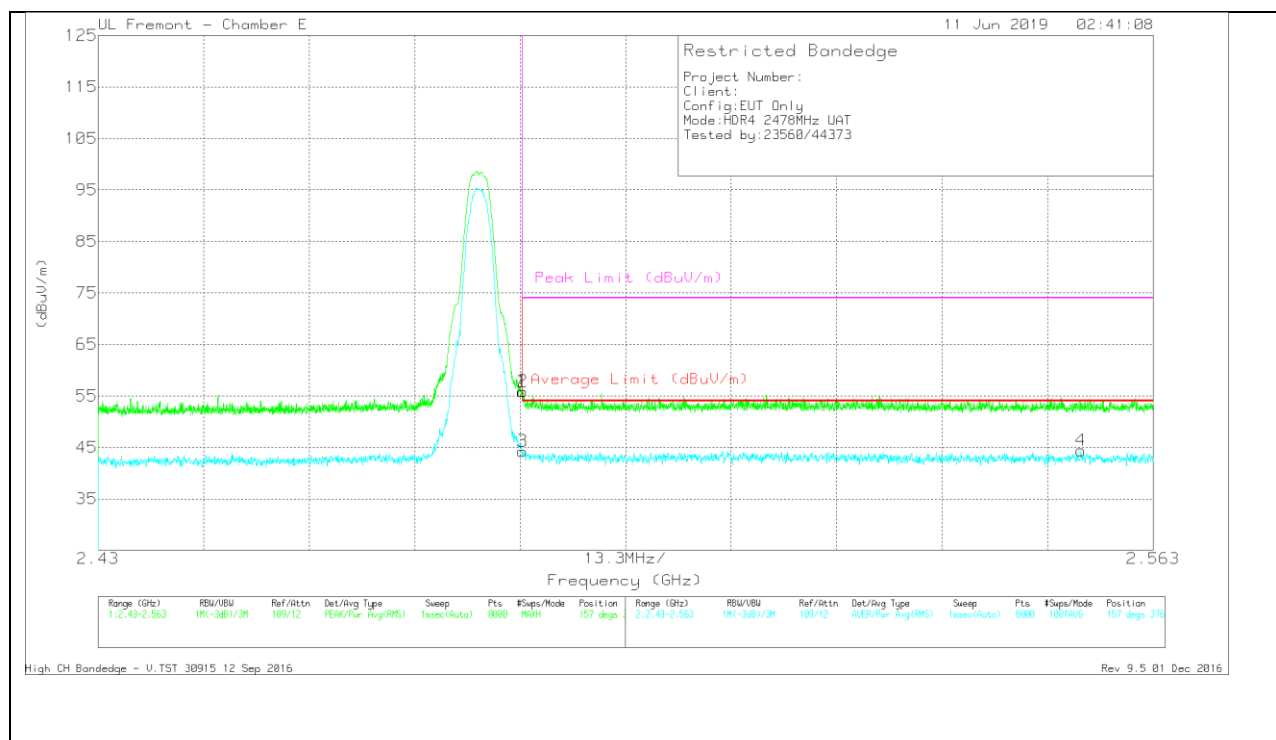
Pk - Peak detector

RMS - RMS detection

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## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T119 (dB/m) | Ampl/Chn/Filtr/P ad (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         | 41.15                | Pk  | 32.8           | -18.1                    | 55.85                      | -                      | -           | 74                  | -18.15         | 157            | 376         | V        |
| 2      | * 2.484         | 41.17                | Pk  | 32.8           | -18.1                    | 55.87                      | -                      | -           | 74                  | -18.13         | 157            | 376         | V        |
| 3      | * 2.484         | 29.56                | RMS | 32.8           | -18.1                    | 44.26                      | 54                     | -9.74       | -                   | -              | 157            | 376         | V        |
| 4      | 2.554           | 29.81                | RMS | 32.8           | -18.2                    | 44.41                      | 54                     | -9.59       | -                   | -              | 157            | 376         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

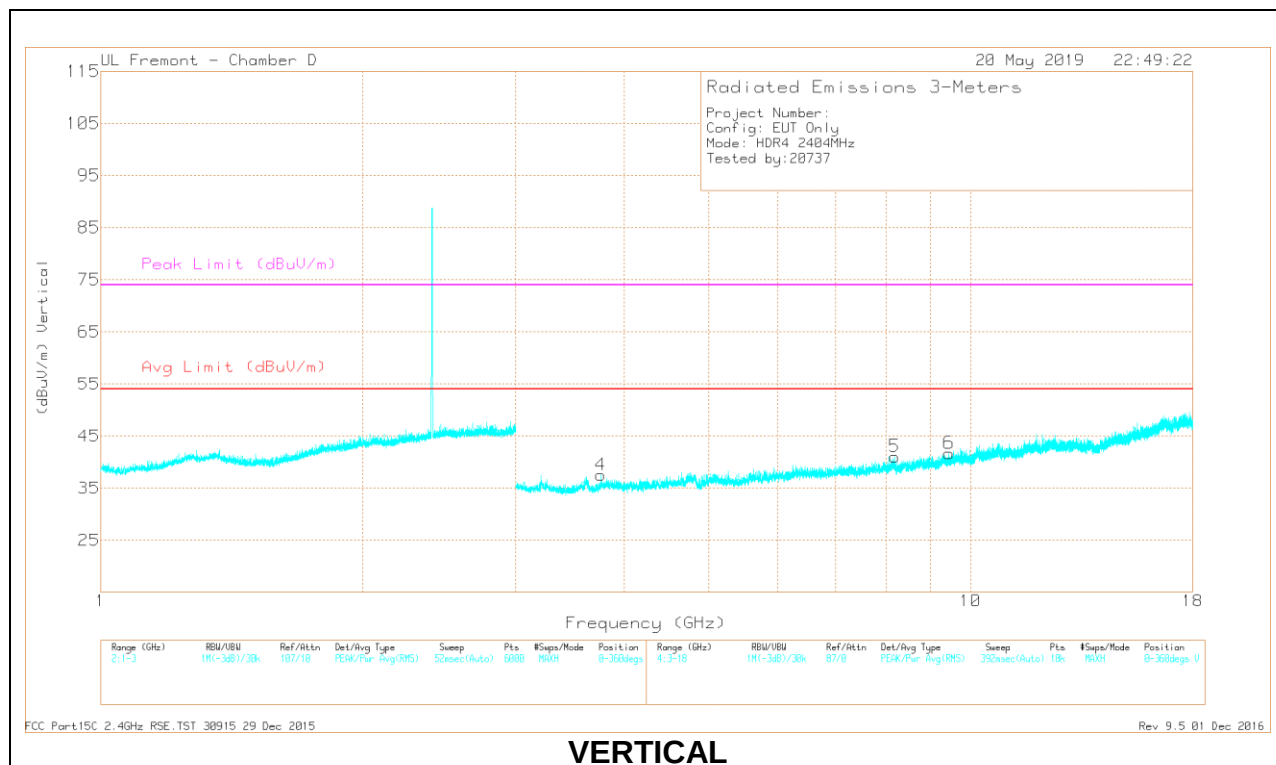
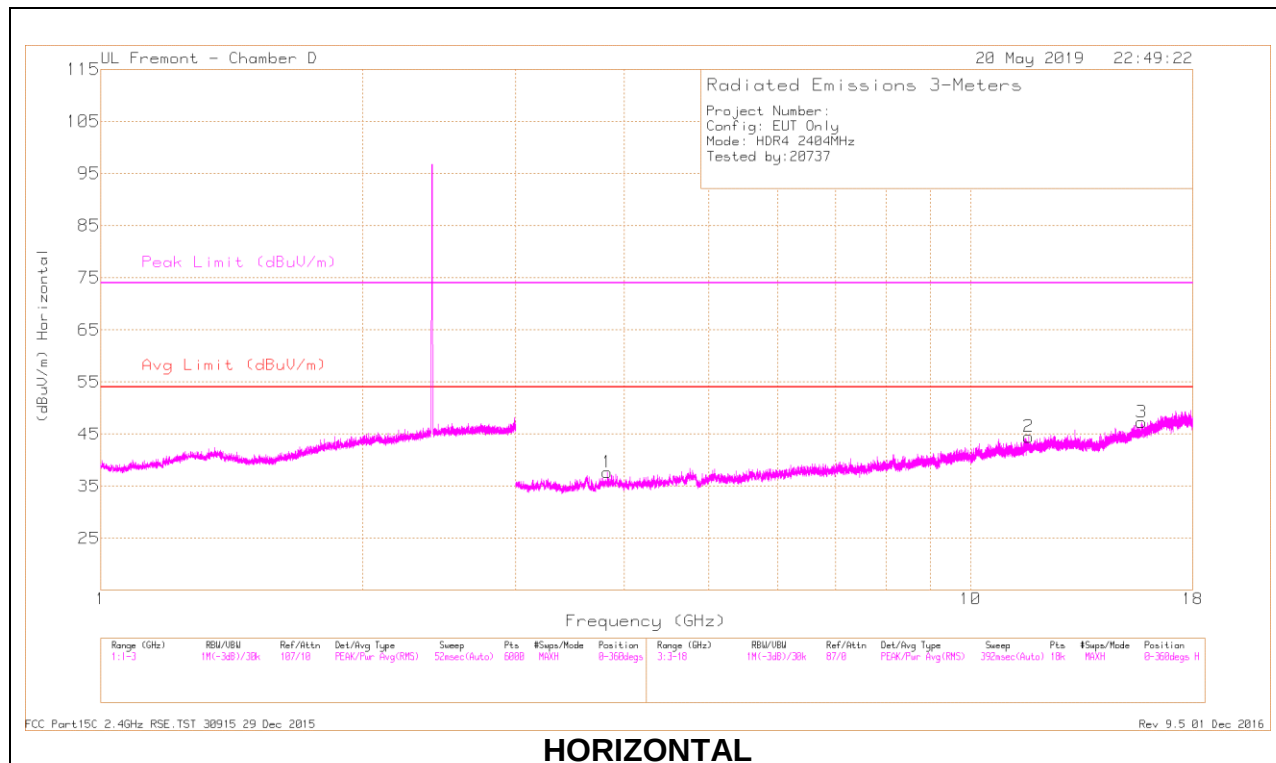
RMS - RMS detection

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## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T712 (dB/m) | Amp/Cbl/Fitr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 3.823         | 39.98                | PK2  | 33.5           | -28.4                 | 45.08                      | -                  | -           | 74                  | -28.92         | 43             | 124         | H        |
|        | * 3.825         | 27.8                 | MAv1 | 33.5           | -28.4                 | 32.9                       | 54                 | -21.1       | -                   | -              | 43             | 124         | H        |
| 2      | * 11.666        | 34.69                | PK2  | 38.3           | -21.1                 | 51.89                      | -                  | -           | 74                  | -22.11         | 360            | 154         | H        |
|        | * 11.667        | 21.37                | MAv1 | 38.3           | -21.1                 | 38.57                      | 54                 | -15.43      | -                   | -              | 360            | 154         | H        |
| 3      | * 15.722        | 35.03                | PK2  | 40.2           | -20.3                 | 54.93                      | -                  | -           | 74                  | -19.07         | 303            | 209         | H        |
|        | * 15.724        | 21.87                | MAv1 | 40.2           | -20.4                 | 41.67                      | 54                 | -12.33      | -                   | -              | 303            | 209         | H        |
| 4      | * 3.76          | 39.61                | PK2  | 33.3           | -27.9                 | 45.01                      | -                  | -           | 74                  | -28.99         | 235            | 259         | V        |
|        | * 3.76          | 27.57                | MAv1 | 33.3           | -27.9                 | 32.97                      | 54                 | -21.03      | -                   | -              | 235            | 259         | V        |
| 5      | * 8.182         | 35.18                | PK2  | 35.7           | -23.3                 | 47.58                      | -                  | -           | 74                  | -26.42         | 176            | 304         | V        |
|        | * 8.182         | 23.21                | MAv1 | 35.7           | -23.4                 | 35.51                      | 54                 | -18.49      | -                   | -              | 176            | 304         | V        |
| 6      | * 9.444         | 34.3                 | PK2  | 36.5           | -21.9                 | 48.9                       | -                  | -           | 74                  | -25.1          | 210            | 283         | V        |
|        | * 9.445         | 21.72                | MAv1 | 36.5           | -22                   | 36.22                      | 54                 | -17.78      | -                   | -              | 210            | 283         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average