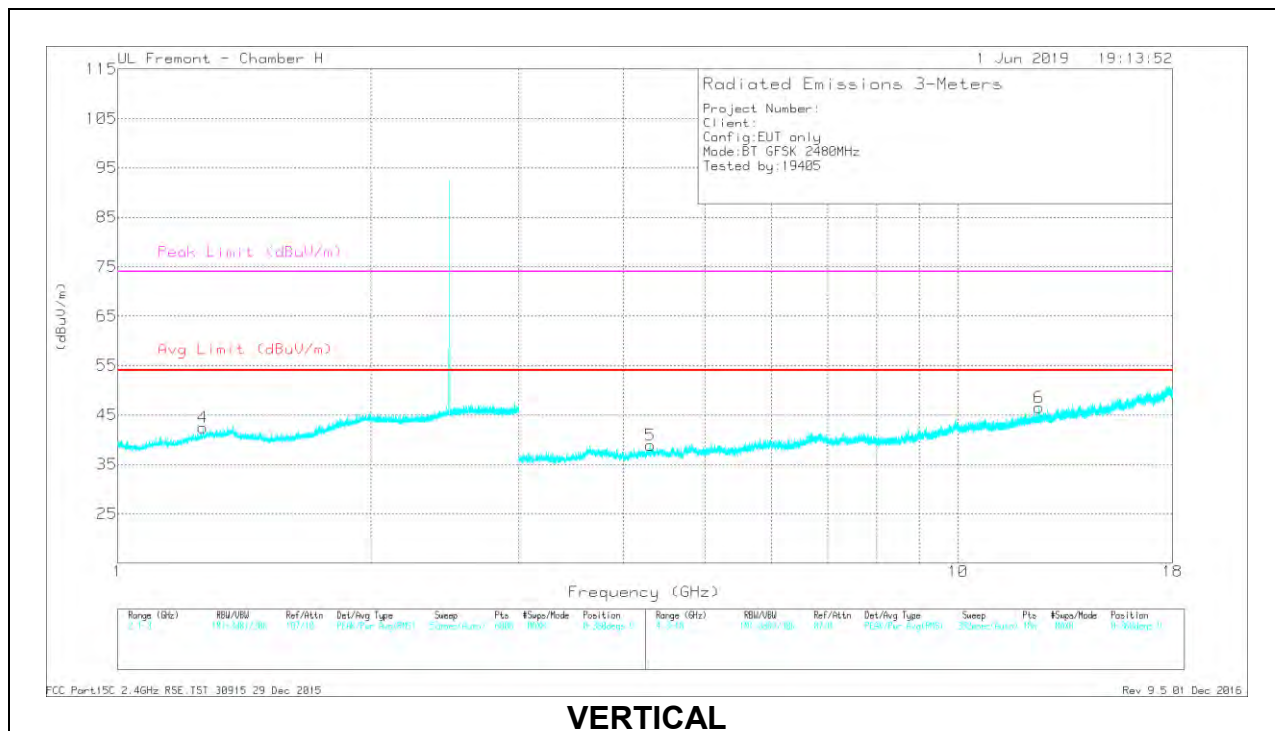
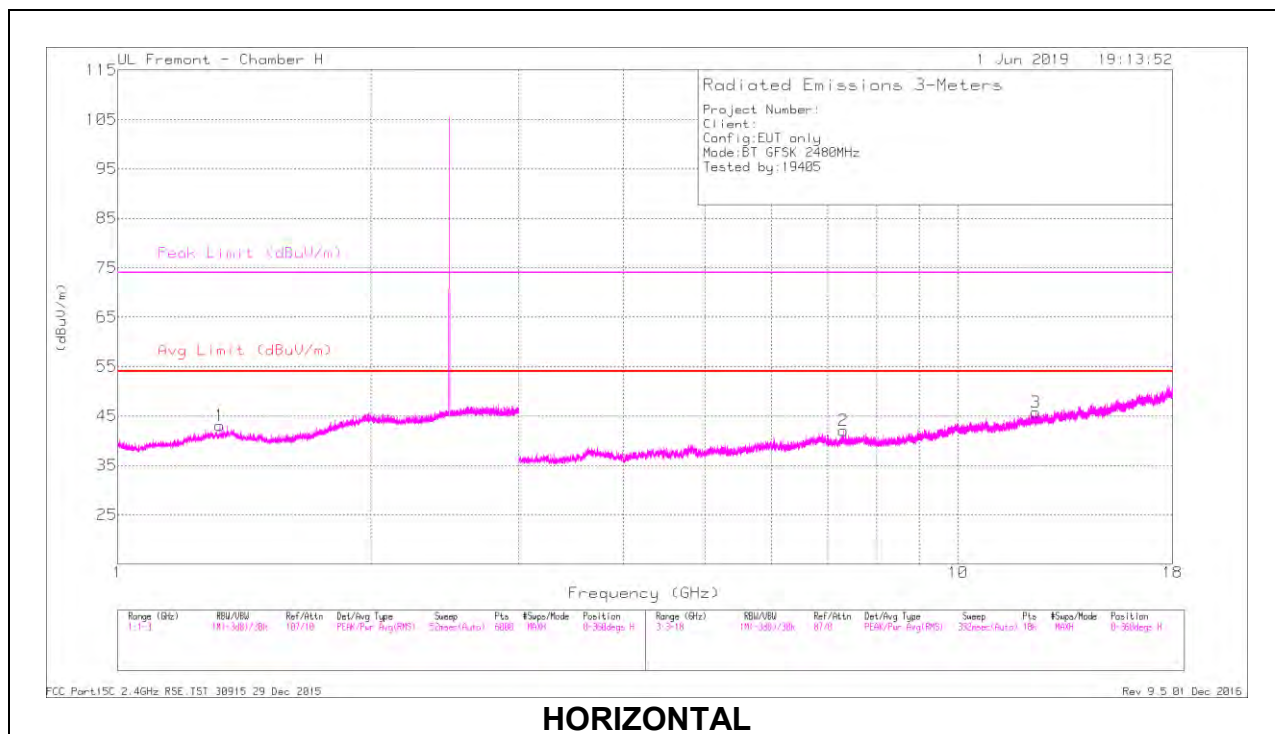


## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (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      | * 1.32          | 43.45                | PKFH | 29.2           | -25.3                  | 47.35                      | -                  | -           | 74                  | -26.65         | 328            | 206         | H        |
|        | * 1.322         | 31.96                | VA1T | 29.2           | -25.3                  | 35.86                      | 54                 | -18.14      | -                   | -              | 328            | 206         | H        |
| 4      | * 1.263         | 44.6                 | PKFH | 28.8           | -25.5                  | 47.9                       | -                  | -           | 74                  | -26.1          | 32             | 254         | V        |
|        | * 1.262         | 31.95                | VA1T | 28.8           | -25.5                  | 35.25                      | 54                 | -18.75      | -                   | -              | 32             | 254         | V        |
| 2      | * 7.309         | 37.59                | PKFH | 36.4           | -26.4                  | 47.59                      | -                  | -           | 74                  | -26.41         | 144            | 287         | H        |
|        | * 7.308         | 25.33                | VA1T | 36.4           | -26.4                  | 35.33                      | 54                 | -18.67      | -                   | -              | 144            | 287         | H        |
| 3      | * 12.382        | 36.21                | PKFH | 39.2           | -23.4                  | 52.01                      | -                  | -           | 74                  | -21.99         | 77             | 193         | H        |
|        | * 12.382        | 23.19                | VA1T | 39.2           | -23.4                  | 38.99                      | 54                 | -15.01      | -                   | -              | 77             | 193         | H        |
| 5      | * 4.304         | 39.93                | PKFH | 33.7           | -29.9                  | 43.73                      | -                  | -           | 74                  | -30.27         | 231            | 137         | V        |
|        | * 4.306         | 27.87                | VA1T | 33.7           | -29.9                  | 31.67                      | 54                 | -22.33      | -                   | -              | 231            | 137         | V        |
| 6      | * 12.495        | 34.46                | PKFH | 39.2           | -23.3                  | 50.36                      | -                  | -           | 74                  | -23.64         | 96             | 262         | V        |
|        | * 12.491        | 23.18                | VA1T | 39.2           | -23.3                  | 39.08                      | 54                 | -14.92      | -                   | -              | 96             | 262         | V        |

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

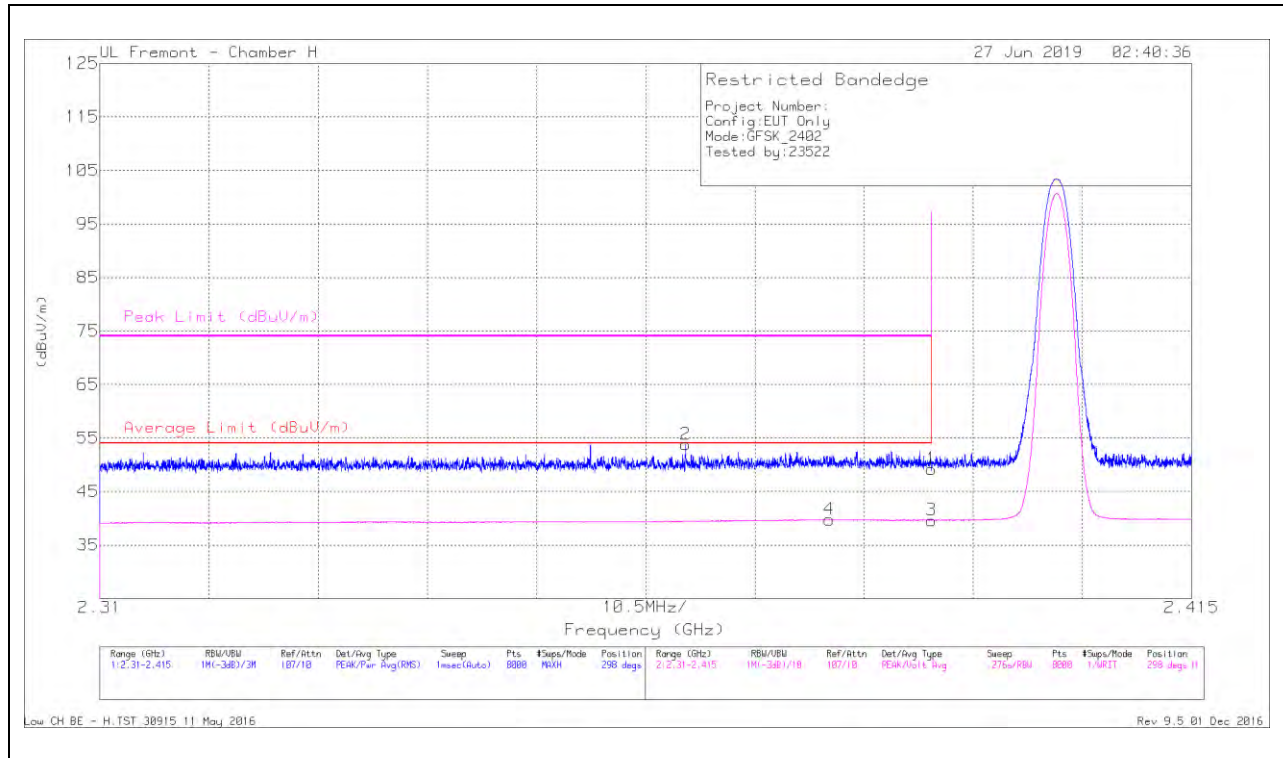
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

**Antenna 3**

**BANDEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



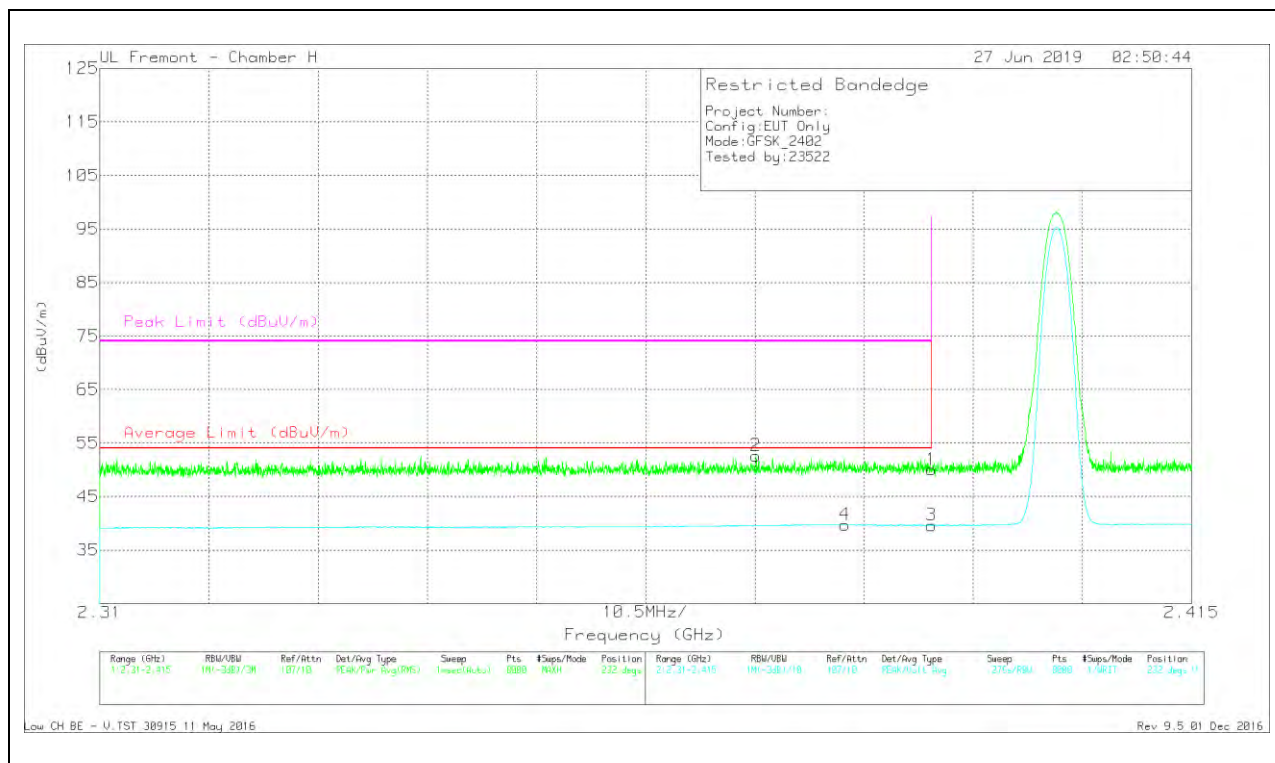
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 40.59                | Pk   | 32.1           | -23.5                  | 49.19                      | -                      | -           | 74                  | -24.81         | 298            | 100         | H        |
| 2      | * 2.366         | 45.39                | Pk   | 32             | -23.6                  | 53.79                      | -                      | -           | 74                  | -20.21         | 298            | 100         | H        |
| 3      | * 2.39          | 31.03                | VA1T | 32.1           | -23.5                  | 39.63                      | 54                     | -14.37      | -                   | -              | 298            | 100         | H        |
| 4      | * 2.38          | 31.06                | VA1T | 32.2           | -23.5                  | 39.76                      | 54                     | -14.24      | -                   | -              | 298            | 100         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AFT863 (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          | 41.43                | Pk   | 32.1          | -23.5                  | 50.03                      | -                      | -           | 74                  | -23.97         | 232            | 391         | V        |
| 2      | * 2.373         | 44                   | Pk   | 32.1          | -23.5                  | 52.6                       | -                      | -           | 74                  | -21.4          | 232            | 391         | V        |
| 3      | * 2.39          | 31.03                | VA1T | 32.1          | -23.5                  | 39.63                      | 54                     | -14.37      | -                   | -              | 232            | 391         | V        |
| 4      | * 2.382         | 31.03                | VA1T | 32.2          | -23.5                  | 39.73                      | 54                     | -14.27      | -                   | -              | 232            | 391         | V        |

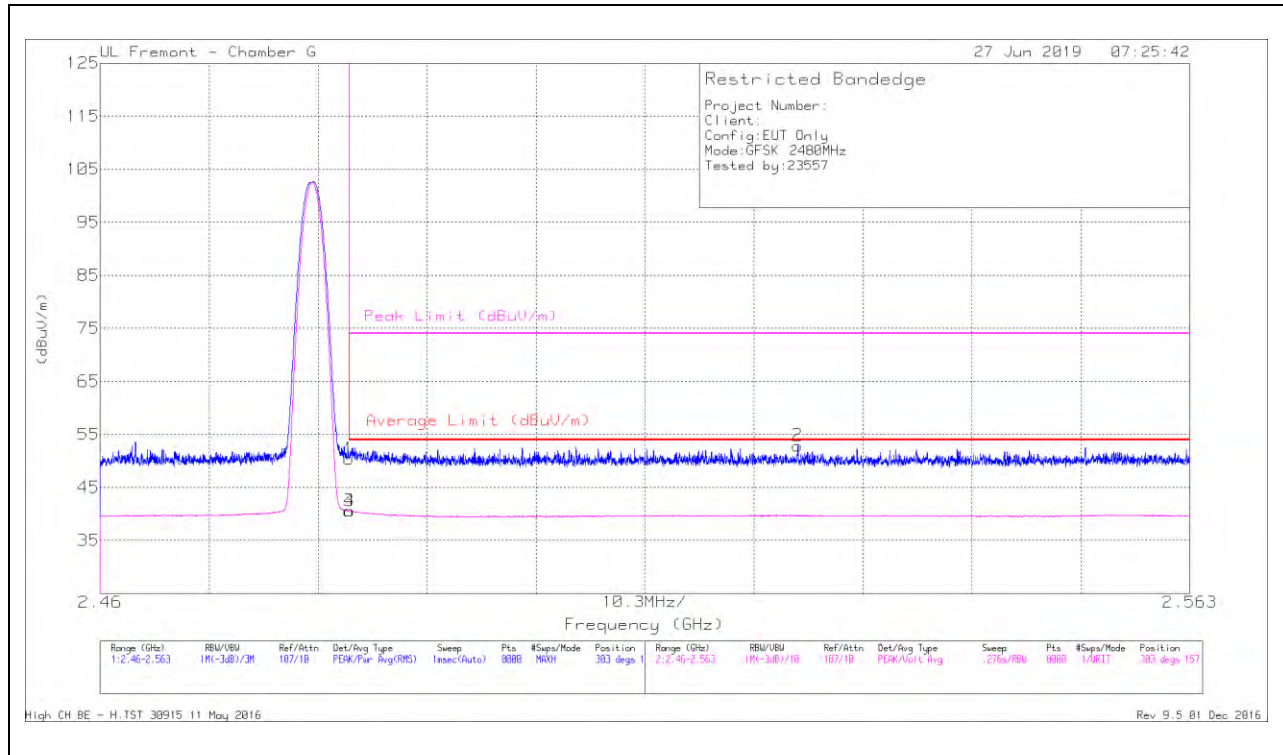
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

# **BANEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



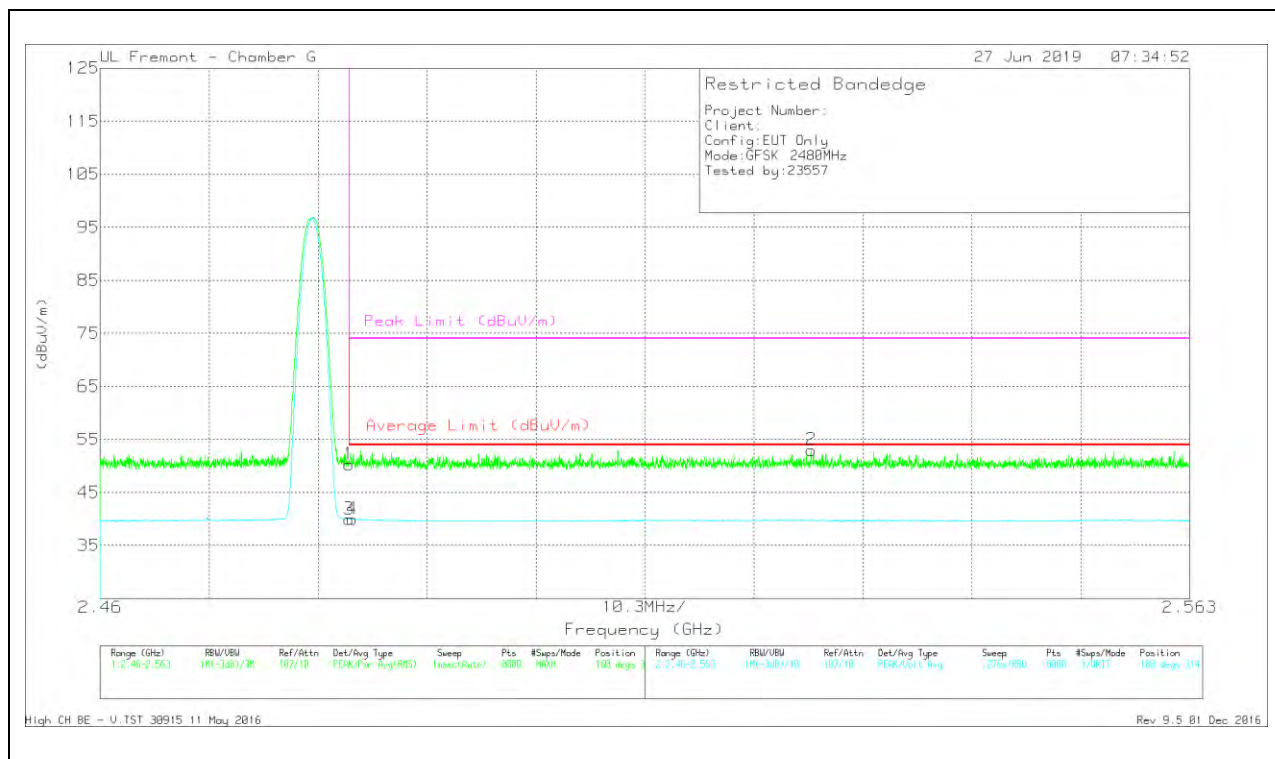
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 40.1                 | Pk   | 32.4           | -22.1                  | 50.4                       | -                      | -           | 74                  | -23.6          | 303            | 157         | H        |
| 3      | * 2.484         | 30.24                | VA1T | 32.4           | -22.1                  | 40.54                      | 54                     | -13.46      | -                   | -              | 303            | 157         | H        |
| 4      | * 2.484         | 30.26                | VA1T | 32.4           | -22.1                  | 40.56                      | 54                     | -13.44      | -                   | -              | 303            | 157         | H        |
| 2      | 2.526           | 42.58                | Pk   | 32.4           | -22.1                  | 52.88                      | -                      | -           | 74                  | -21.12         | 303            | 157         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (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      | * 2.484         | 39.99                | Pk   | 32.4           | -22.1                 | 50.29                      | -                      | -           | 74                  | -23.71         | 160            | 314         | V        |
| 3      | * 2.484         | 29.68                | VA1T | 32.4           | -22.1                 | 39.98                      | 54                     | -14.02      | -                   | -              | 160            | 314         | V        |
| 4      | * 2.484         | 29.69                | VA1T | 32.4           | -22.1                 | 39.99                      | 54                     | -14.01      | -                   | -              | 160            | 314         | V        |
| 2      | 2.527           | 42.72                | Pk   | 32.4           | -22.1                 | 53.02                      | -                      | -           | 74                  | -20.98         | 160            | 314         | V        |

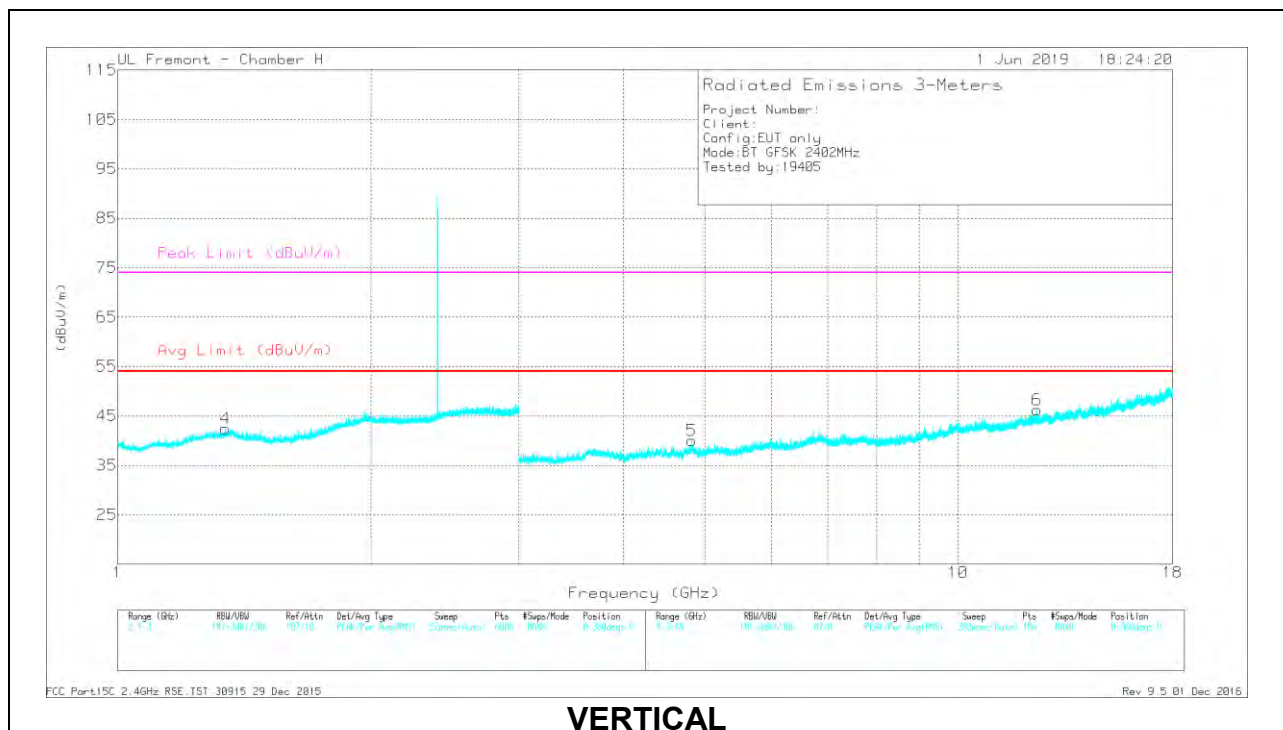
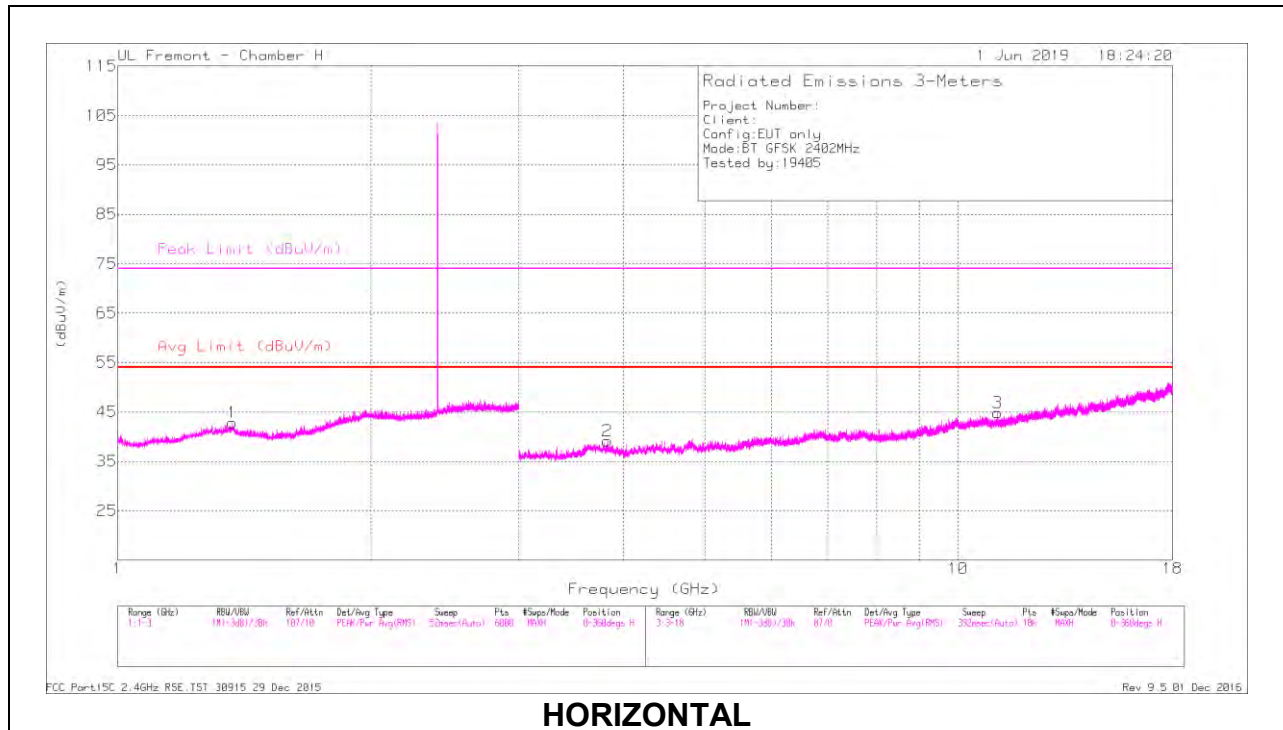
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

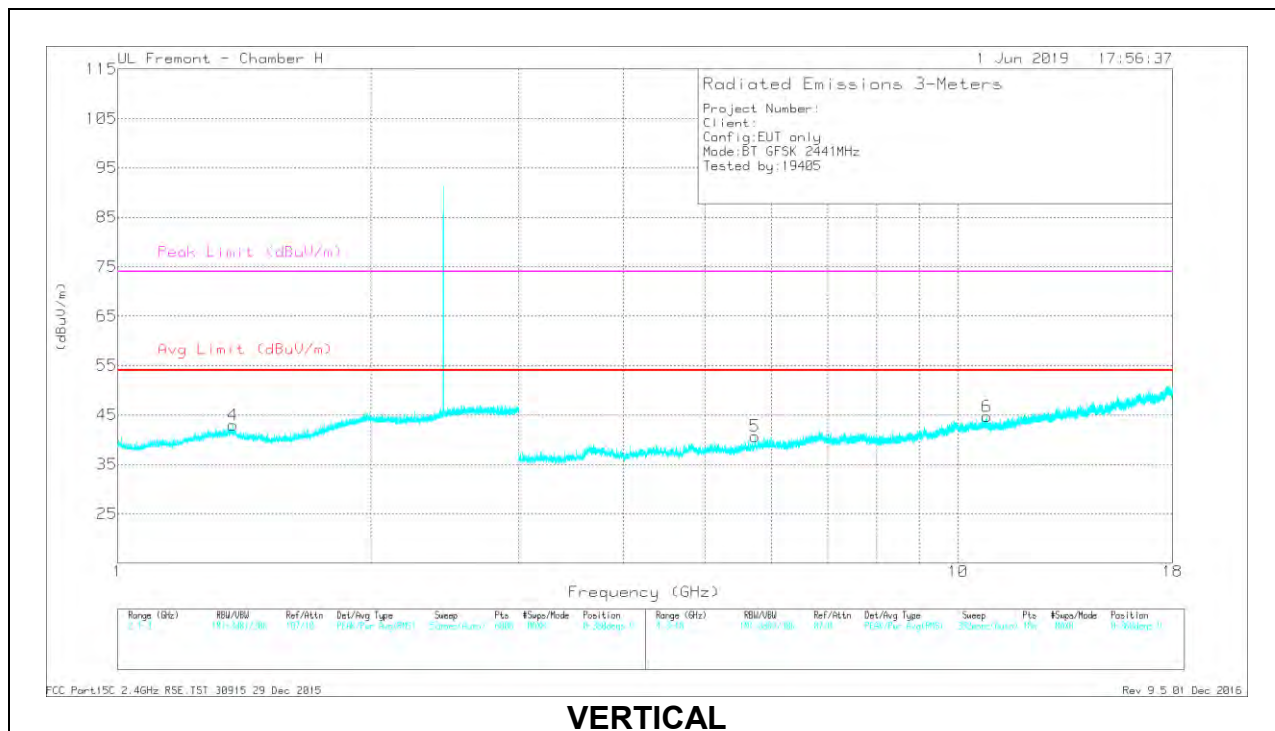
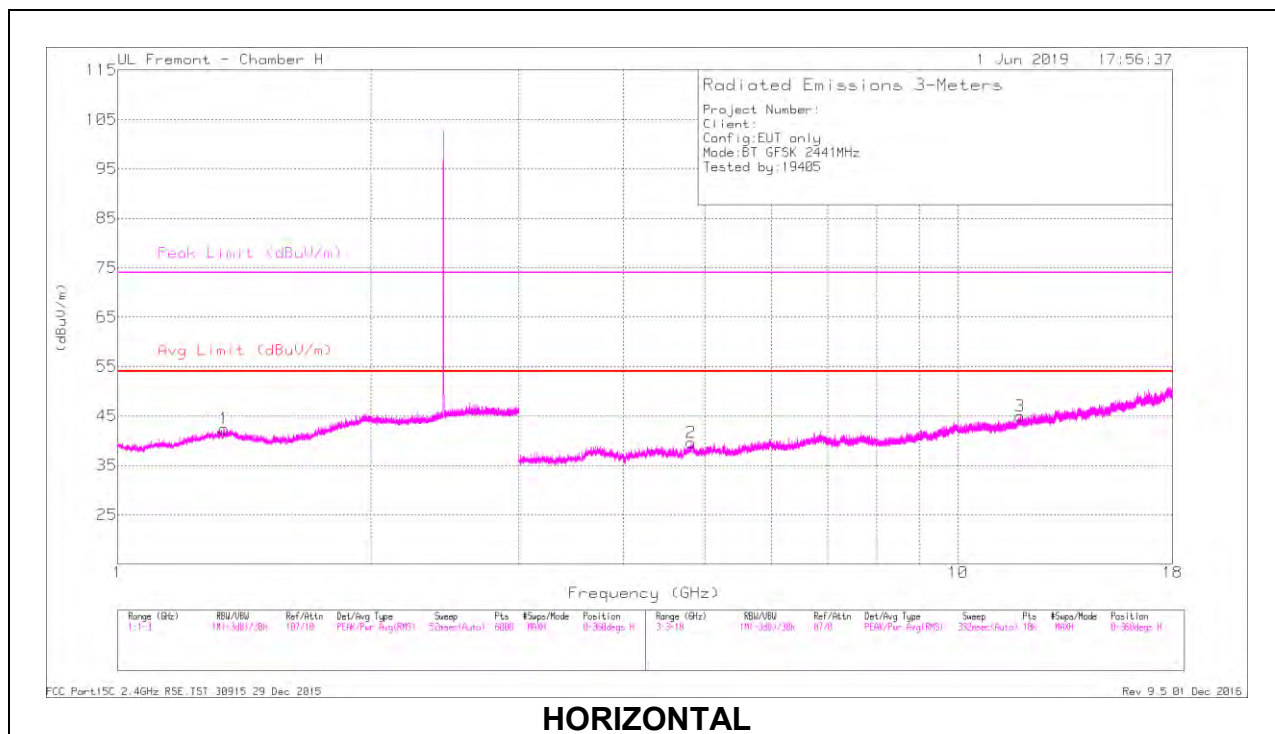
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.37          | 43.92                | PKFH | 29.6           | -25.2                  | 48.32                      | -                  | -           | 74                  | -25.68         | 246            | 382         | H        |
|        | * 1.37          | 31.86                | VA1T | 29.6           | -25.2                  | 36.26                      | 54                 | -17.74      | -                   | -              | 246            | 382         | H        |
| 4      | * 1.342         | 43.81                | PKFH | 29.4           | -25.3                  | 47.91                      | -                  | -           | 74                  | -26.09         | 209            | 118         | V        |
|        | * 1.342         | 31.8                 | VA1T | 29.4           | -25.3                  | 35.9                       | 54                 | -18.1       | -                   | -              | 209            | 118         | V        |
| 2      | * 3.826         | 42                   | PKFH | 33.4           | -30.9                  | 44.5                       | -                  | -           | 74                  | -29.5          | 88             | 257         | H        |
|        | * 3.829         | 29.72                | VA1T | 33.4           | -30.9                  | 32.22                      | 54                 | -21.78      | -                   | -              | 88             | 257         | H        |
| 3      | * 11.148        | 33.96                | PKFH | 37.9           | -22.7                  | 49.16                      | -                  | -           | 74                  | -24.84         | 152            | 298         | H        |
|        | * 11.148        | 22.49                | VA1T | 37.9           | -22.7                  | 37.69                      | 54                 | -16.31      | -                   | -              | 152            | 298         | H        |
| 5      | * 4.823         | 40.85                | PKFH | 34.1           | -30.3                  | 44.65                      | -                  | -           | 74                  | -29.35         | 245            | 273         | V        |
|        | * 4.827         | 28.95                | VA1T | 34.1           | -30.3                  | 32.75                      | 54                 | -21.25      | -                   | -              | 245            | 273         | V        |
| 6      | * 12.428        | 35.39                | PKFH | 39.2           | -23.5                  | 51.09                      | -                  | -           | 74                  | -22.91         | 28             | 390         | V        |
|        | * 12.429        | 23.3                 | VA1T | 39.2           | -23.5                  | 39                         | 54                 | -15         | -                   | -              | 28             | 390         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

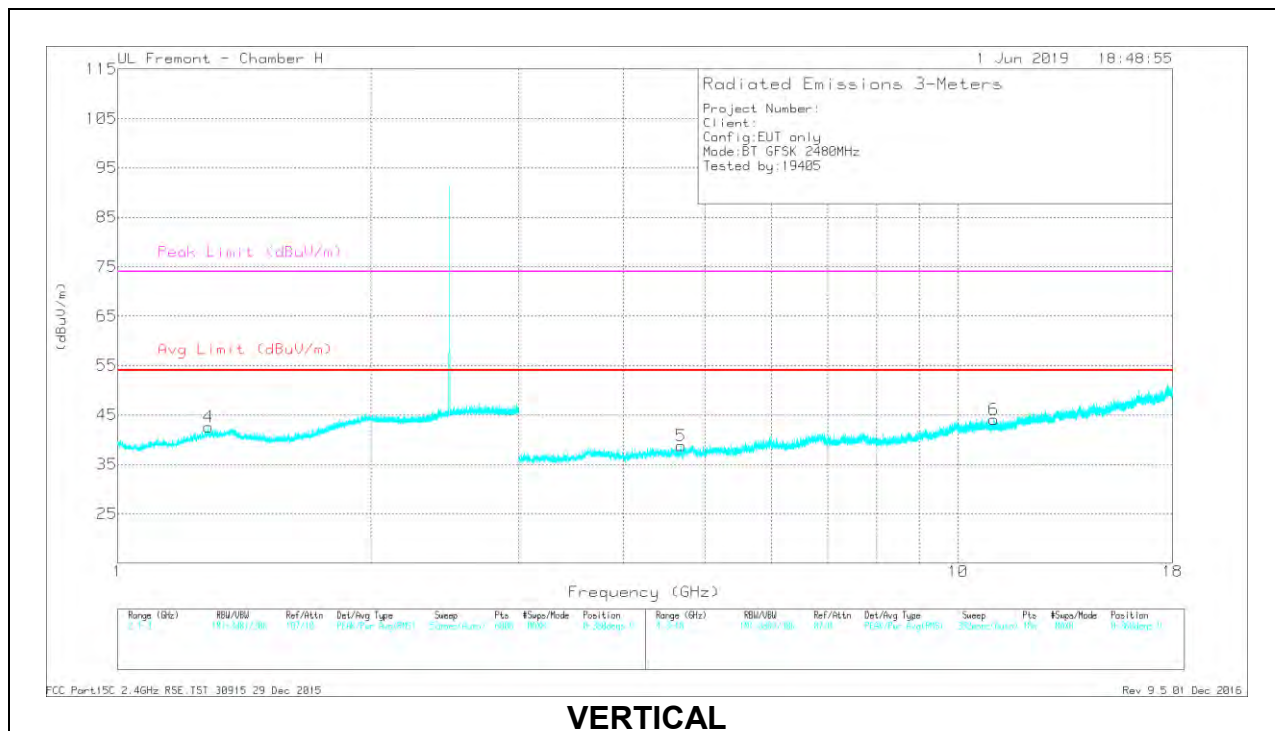
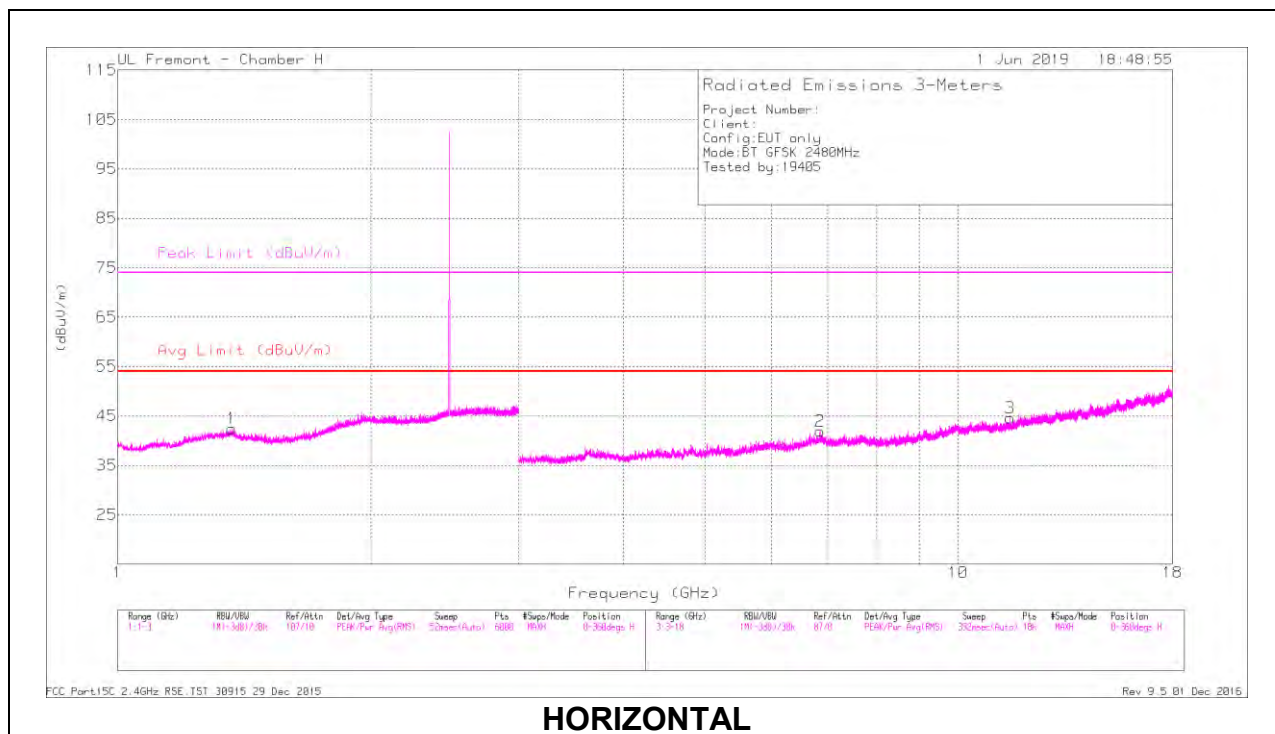
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.339         | 43.33                | PKFH | 29.4           | -25.3                   | 47.43                      | -                  | -           | 74                  | -26.57         | 161            | 280         | H        |
|        | * 1.338         | 31.86                | VA1T | 29.3           | -25.3                   | 35.86                      | 54                 | -18.14      | -                   | -              | 161            | 280         | H        |
| 4      | * 1.372         | 43.87                | PKFH | 29.5           | -25.2                   | 48.17                      | -                  | -           | 74                  | -25.83         | 326            | 266         | V        |
|        | * 1.373         | 31.89                | VA1T | 29.4           | -25.2                   | 36.09                      | 54                 | -17.91      | -                   | -              | 326            | 266         | V        |
| 2      | * 4.815         | 40.34                | PKFH | 34.1           | -30.3                   | 44.14                      | -                  | -           | 74                  | -29.86         | 46             | 322         | H        |
|        | * 4.817         | 28.68                | VA1T | 34.1           | -30.3                   | 32.48                      | 54                 | -21.52      | -                   | -              | 46             | 322         | H        |
| 3      | * 11.858        | 34.9                 | PKFH | 38.7           | -22.8                   | 50.8                       | -                  | -           | 74                  | -23.2          | 154            | 224         | H        |
|        | * 11.861        | 23                   | VA1T | 38.7           | -22.8                   | 38.9                       | 54                 | -15.1       | -                   | -              | 154            | 224         | H        |
| 6      | * 10.833        | 34.07                | PKFH | 37.8           | -22.9                   | 48.97                      | -                  | -           | 74                  | -25.03         | 265            | 284         | V        |
|        | * 10.833        | 22.55                | VA1T | 37.8           | -22.9                   | 37.45                      | 54                 | -16.55      | -                   | -              | 265            | 284         | V        |
| 5      | 5.735           | 38.97                | PKFH | 35.2           | -28.5                   | 45.67                      | -                  | -           | -                   | -              | 310            | 174         | V        |
|        | 5.736           | 27.12                | VA1T | 35.2           | -28.5                   | 33.82                      | -                  | -           | -                   | -              | 310            | 174         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (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      | * 1.368         | 44.67                | PKFH | 29.7           | -25.2                  | 49.17                      | -                  | -           | 74                  | -24.83         | 183            | 233         | H        |
|        | * 1.368         | 31.82                | VA1T | 29.7           | -25.2                  | 36.32                      | 54                 | -17.68      | -                   | -              | 183            | 233         | H        |
| 4      | * 1.283         | 43.76                | PKFH | 29.2           | -25.4                  | 47.56                      | -                  | -           | 74                  | -26.44         | 148            | 178         | V        |
|        | * 1.281         | 31.93                | VA1T | 29.2           | -25.4                  | 35.73                      | 54                 | -18.27      | -                   | -              | 148            | 178         | V        |
| 3      | * 11.527        | 35.33                | PKFH | 38.3           | -23.2                  | 50.43                      | -                  | -           | 74                  | -23.57         | 318            | 149         | H        |
|        | * 11.526        | 22.86                | VA1T | 38.3           | -23.2                  | 37.96                      | 54                 | -16.04      | -                   | -              | 318            | 149         | H        |
| 5      | * 4.687         | 40.66                | PKFH | 34             | -30                    | 44.66                      | -                  | -           | 74                  | -29.34         | 40             | 213         | V        |
|        | * 4.685         | 28.57                | VA1T | 34.1           | -30                    | 32.67                      | 54                 | -21.33      | -                   | -              | 40             | 213         | V        |
| 6      | * 11.024        | 35.33                | PKFH | 37.8           | -23.4                  | 49.73                      | -                  | -           | 74                  | -24.27         | 296            | 163         | V        |
|        | * 11.026        | 23.07                | VA1T | 37.8           | -23.4                  | 37.47                      | 54                 | -16.53      | -                   | -              | 296            | 163         | V        |
| 2      | 6.853           | 37.68                | PKFH | 36.6           | -27.6                  | 46.68                      | -                  | -           | -                   | -              | 344            | 222         | H        |
|        | 6.853           | 25.98                | VA1T | 36.6           | -27.6                  | 34.98                      | -                  | -           | -                   | -              | 344            | 222         | H        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

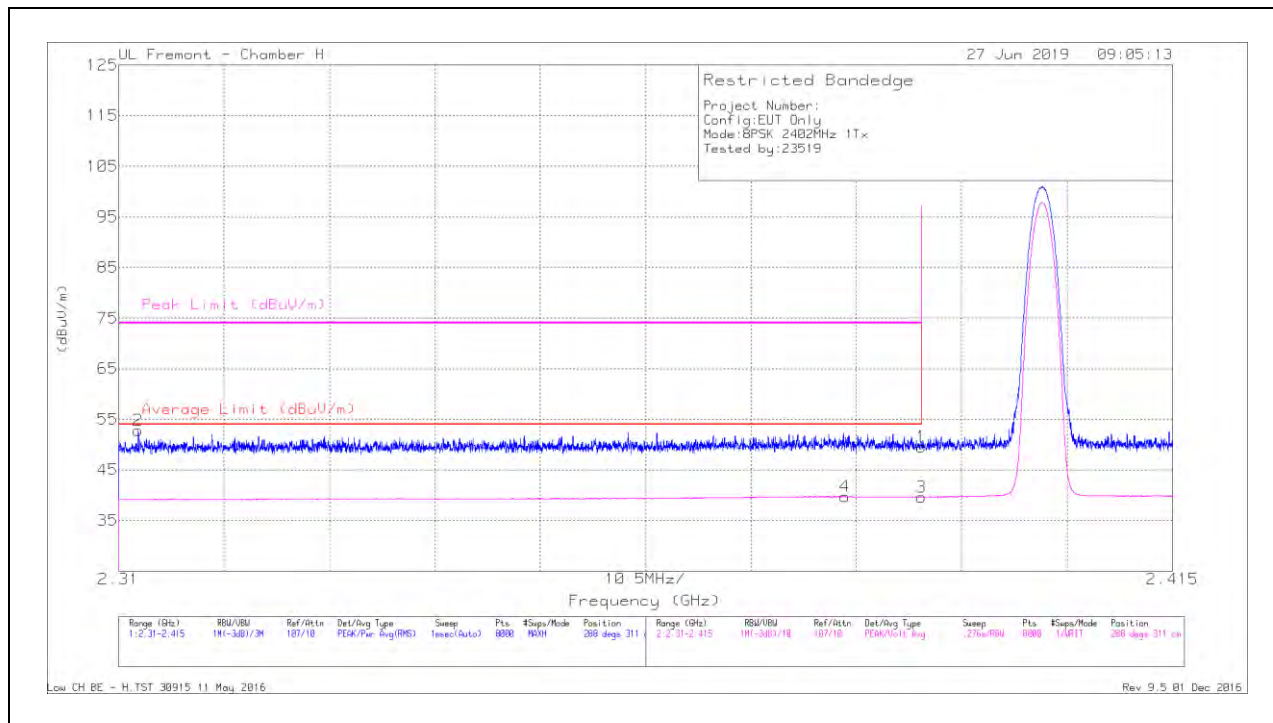
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 9.1.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

### Antenna 4

### BANDEDGE (LOW CHANNEL)

### HORIZONTAL RESULT



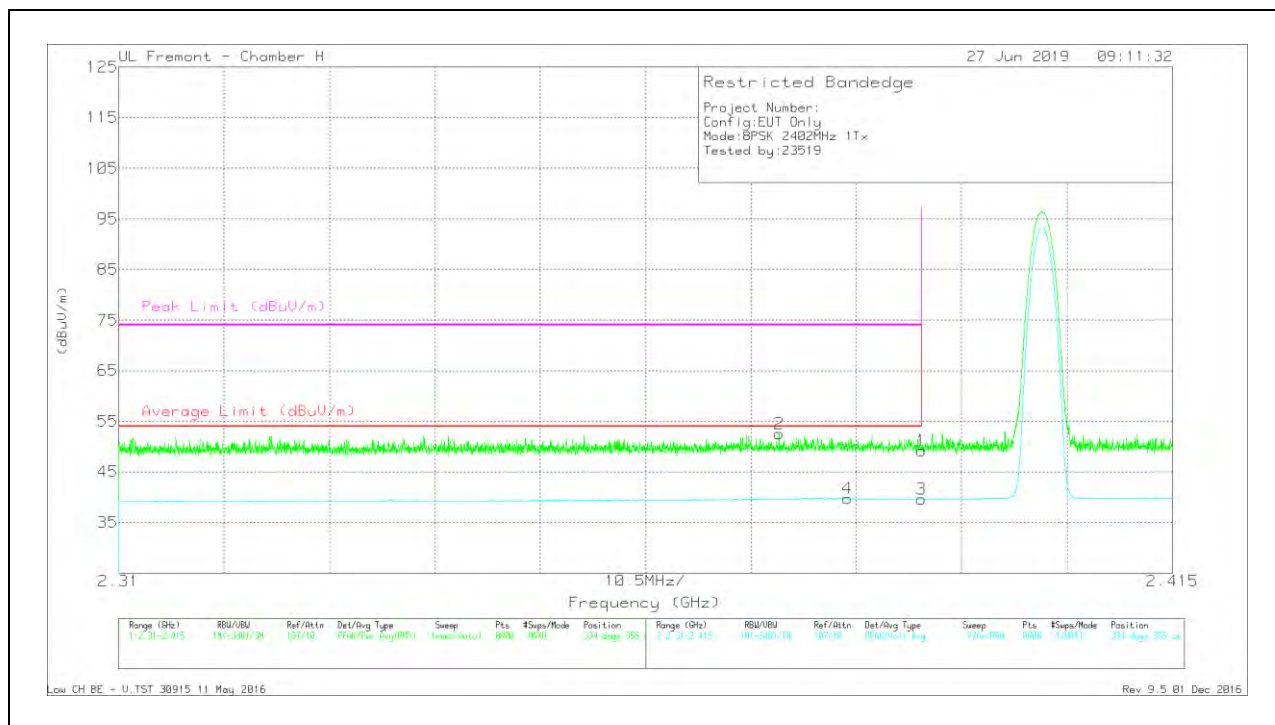
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filtr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 40.95                | Pk   | 32.1           | -23.5                   | 49.55                      | -                      | -           | 74                  | -24.45         | 288            | 311         | H        |
| 2      | * 2.312         | 44.67                | Pk   | 31.8           | -23.7                   | 52.77                      | -                      | -           | 74                  | -21.23         | 288            | 311         | H        |
| 3      | * 2.39          | 31.04                | VA1T | 32.1           | -23.5                   | 39.64                      | 54                     | -14.36      | -                   | -              | 288            | 311         | H        |
| 4      | * 2.382         | 31.03                | VA1T | 32.2           | -23.5                   | 39.73                      | 54                     | -14.27      | -                   | -              | 288            | 311         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT

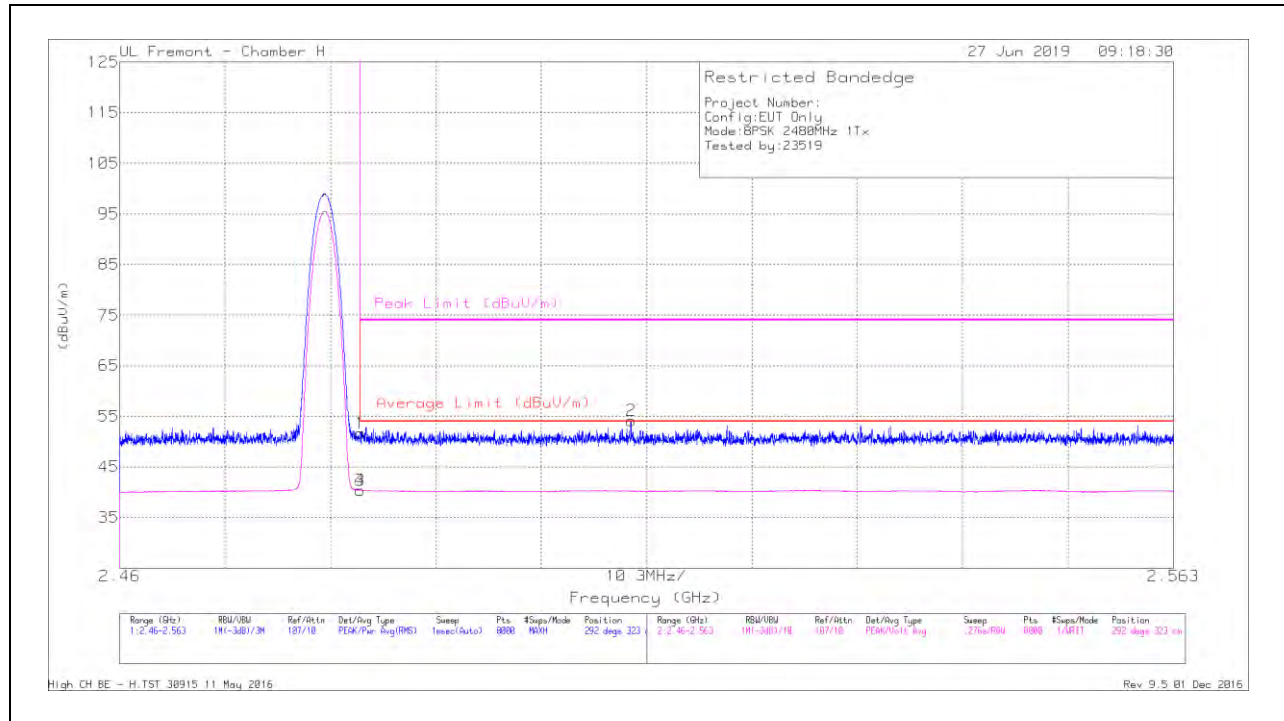


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filtr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 40.61                | Pk   | 32.1           | -23.5                   | 49.21                      | -                      | -           | 74                  | -24.79         | 334            | 355         | V        |
| 2      | * 2.376         | 43.89                | Pk   | 32.1           | -23.5                   | 52.49                      | -                      | -           | 74                  | -21.51         | 334            | 355         | V        |
| 3      | * 2.39          | 31.03                | VA1T | 32.1           | -23.5                   | 39.63                      | 54                     | -14.37      | -                   | -              | 334            | 355         | V        |
| 4      | * 2.383         | 31.03                | VA1T | 32.2           | -23.5                   | 39.73                      | 54                     | -14.27      | -                   | -              | 334            | 355         | V        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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

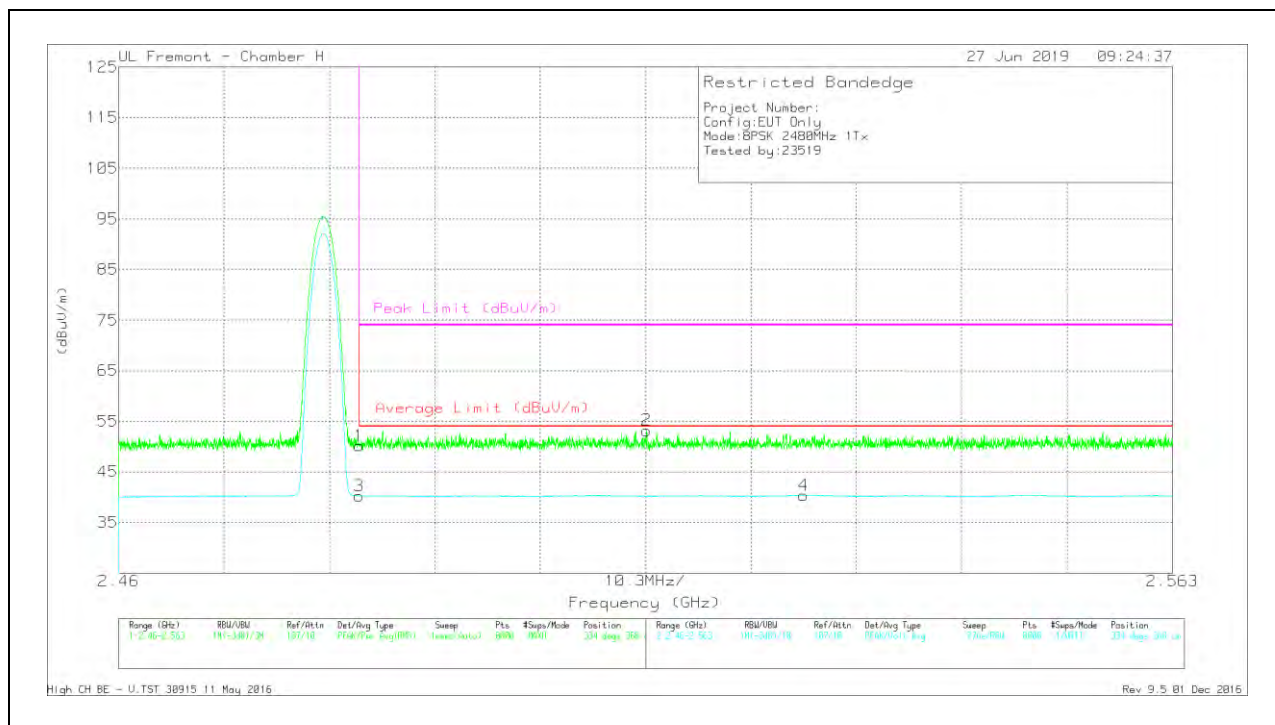
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Ftr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 42.46                | Pk   | 32.5           | -23.3                 | 51.66                      | -                      | -           | 74                  | -22.34         | 292            | 323         | H        |
| 3      | * 2.484         | 31.17                | VA1T | 32.5           | -23.3                 | 40.37                      | 54                     | -13.63      | -                   | -              | 292            | 323         | H        |
| 4      | * 2.484         | 31.17                | VA1T | 32.5           | -23.3                 | 40.37                      | 54                     | -13.63      | -                   | -              | 292            | 323         | H        |
| 2      | 2.51            | 44.69                | Pk   | 32.6           | -23.2                 | 54.09                      | -                      | -           | 74                  | -19.91         | 292            | 323         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filtr/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      | * 2.484         | 40.97                | Pk   | 32.5           | -23.3                   | 50.17                      | -                      | -           | 74                  | -23.83         | 334            | 368         | V        |
| 3      | * 2.484         | 31.06                | VA1T | 32.5           | -23.3                   | 40.26                      | 54                     | -13.74      | -                   | -              | 334            | 368         | V        |
| 2      | 2.512           | 43.91                | Pk   | 32.6           | -23.3                   | 53.21                      | -                      | -           | 74                  | -20.79         | 334            | 368         | V        |
| 4      | 2.527           | 30.9                 | VA1T | 32.6           | -23.1                   | 40.4                       | 54                     | -13.6       | -                   | -              | 334            | 368         | V        |

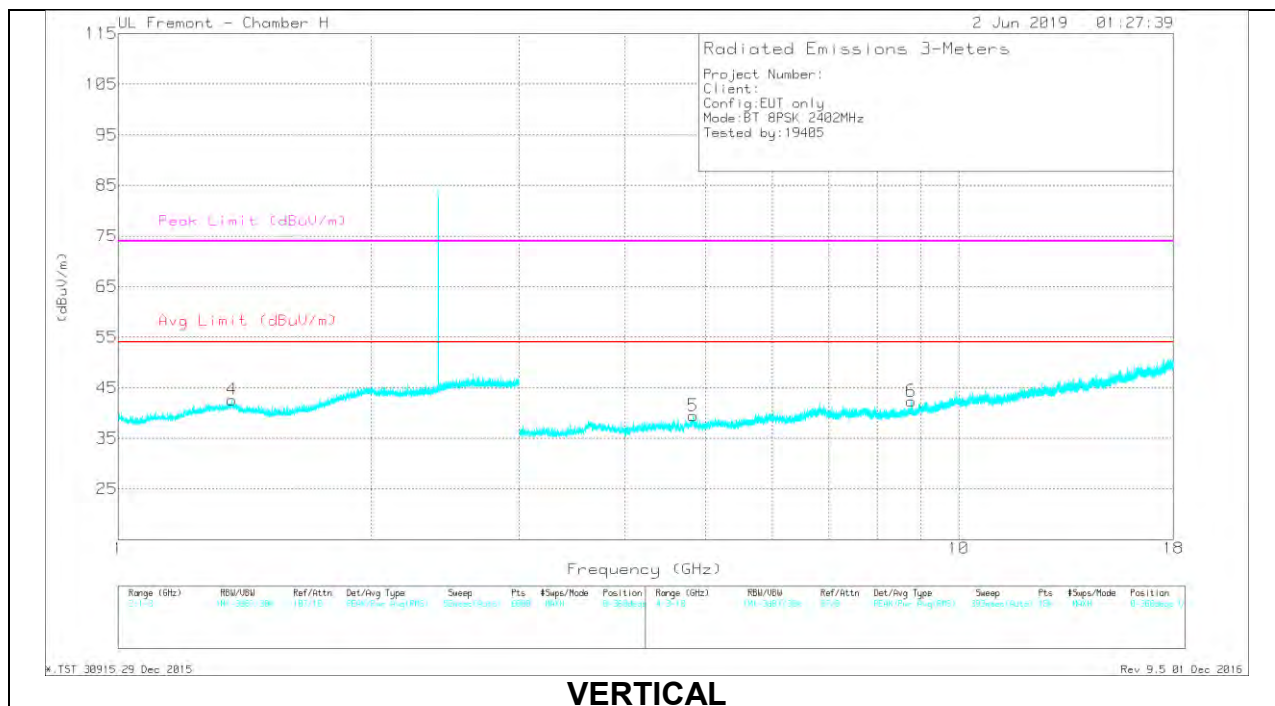
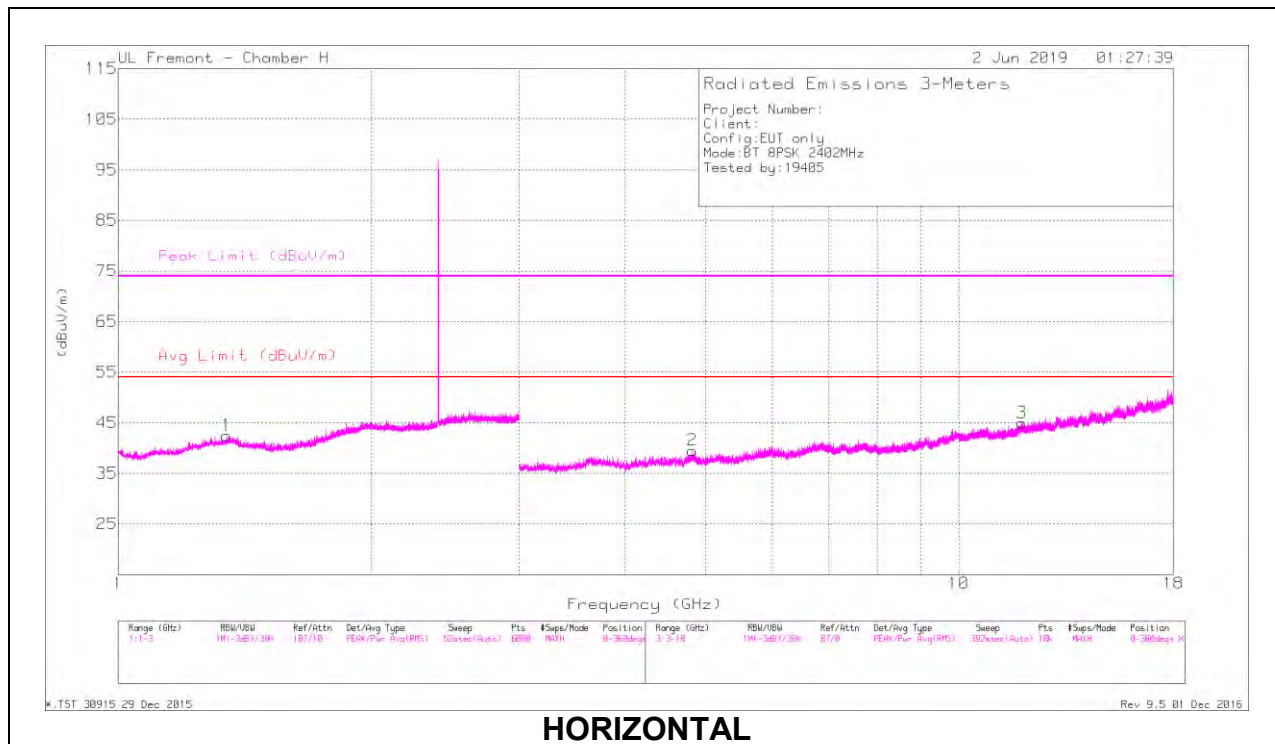
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

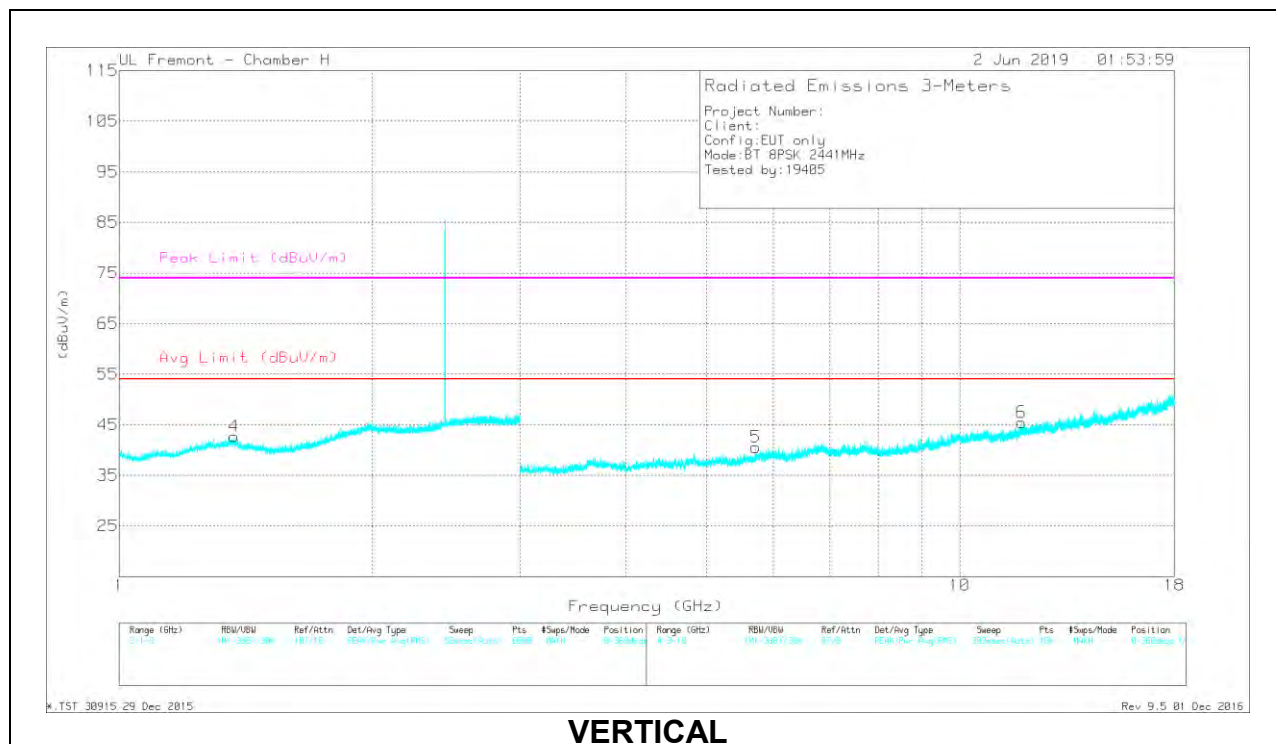
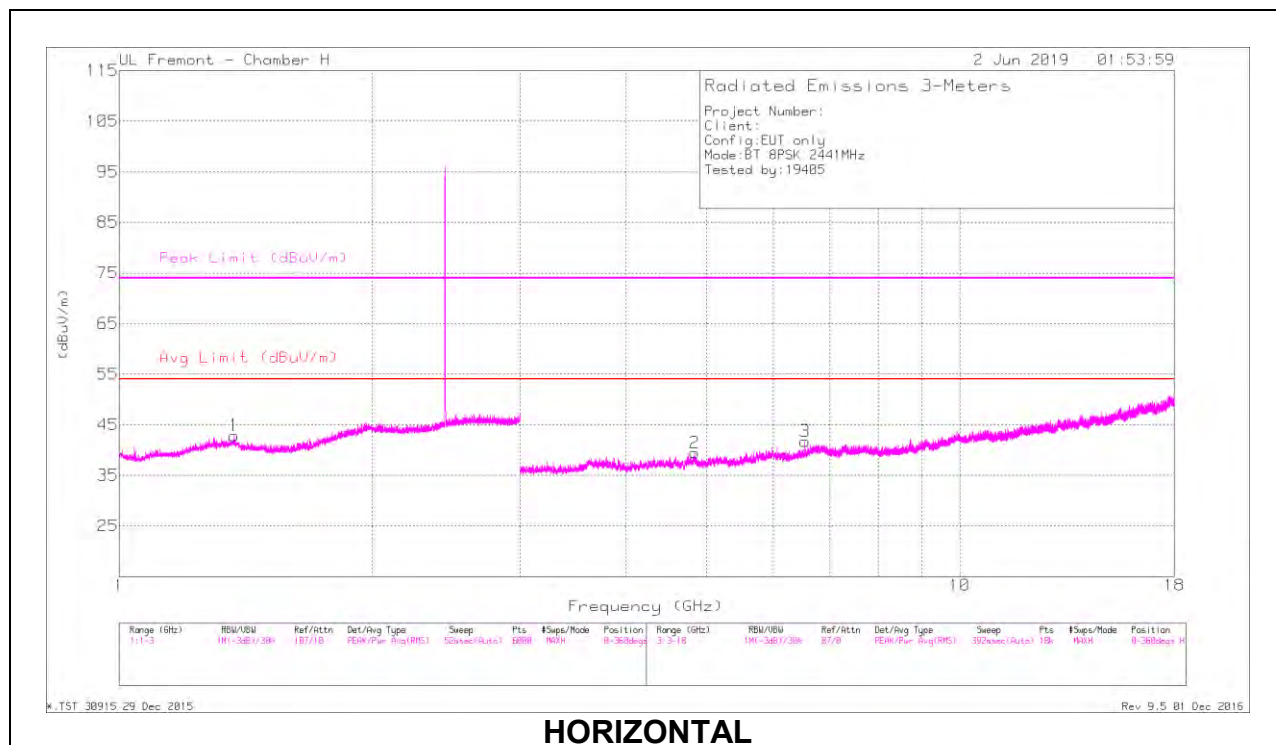
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.346         | 43.31                | PKFH | 29.4           | -25.3                  | 47.41                      | -                  | -           | 74                  | -26.59         | 344            | 220         | H        |
|        | * 1.346         | 31.81                | VA1T | 29.4           | -25.3                  | 35.91                      | 54                 | -18.09      | -                   | -              | 344            | 220         | H        |
| 4      | * 1.364         | 43.38                | PKFH | 29.6           | -25.2                  | 47.78                      | -                  | -           | 74                  | -26.22         | 291            | 148         | V        |
|        | * 1.366         | 31.85                | VA1T | 29.7           | -25.2                  | 36.35                      | 54                 | -17.65      | -                   | -              | 291            | 148         | V        |
| 2      | * 4.823         | 40.64                | PKFH | 34.1           | -30.3                  | 44.44                      | -                  | -           | 74                  | -29.56         | 173            | 369         | H        |
|        | * 4.822         | 28.9                 | VA1T | 34.1           | -30.4                  | 32.6                       | 54                 | -21.4       | -                   | -              | 173            | 369         | H        |
| 3      | * 11.88         | 34.83                | PKFH | 38.7           | -22.7                  | 50.83                      | -                  | -           | 74                  | -23.17         | 53             | 237         | H        |
|        | * 11.877        | 22.95                | VA1T | 38.7           | -22.7                  | 38.95                      | 54                 | -15.05      | -                   | -              | 53             | 237         | H        |
| 5      | * 4.83          | 40.84                | PKFH | 34.1           | -30.4                  | 44.54                      | -                  | -           | 74                  | -29.46         | 264            | 119         | V        |
|        | * 4.832         | 29.07                | VA1T | 34.1           | -30.4                  | 32.77                      | 54                 | -21.23      | -                   | -              | 264            | 119         | V        |
| 6      | 8.784           | 36.2                 | PKFH | 36.1           | -25.3                  | 47                         | -                  | -           | -                   | -              | 327            | 191         | V        |
|        | 8.784           | 24.22                | VA1T | 36.1           | -25.3                  | 35.02                      | -                  | -           | -                   | -              | 327            | 191         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

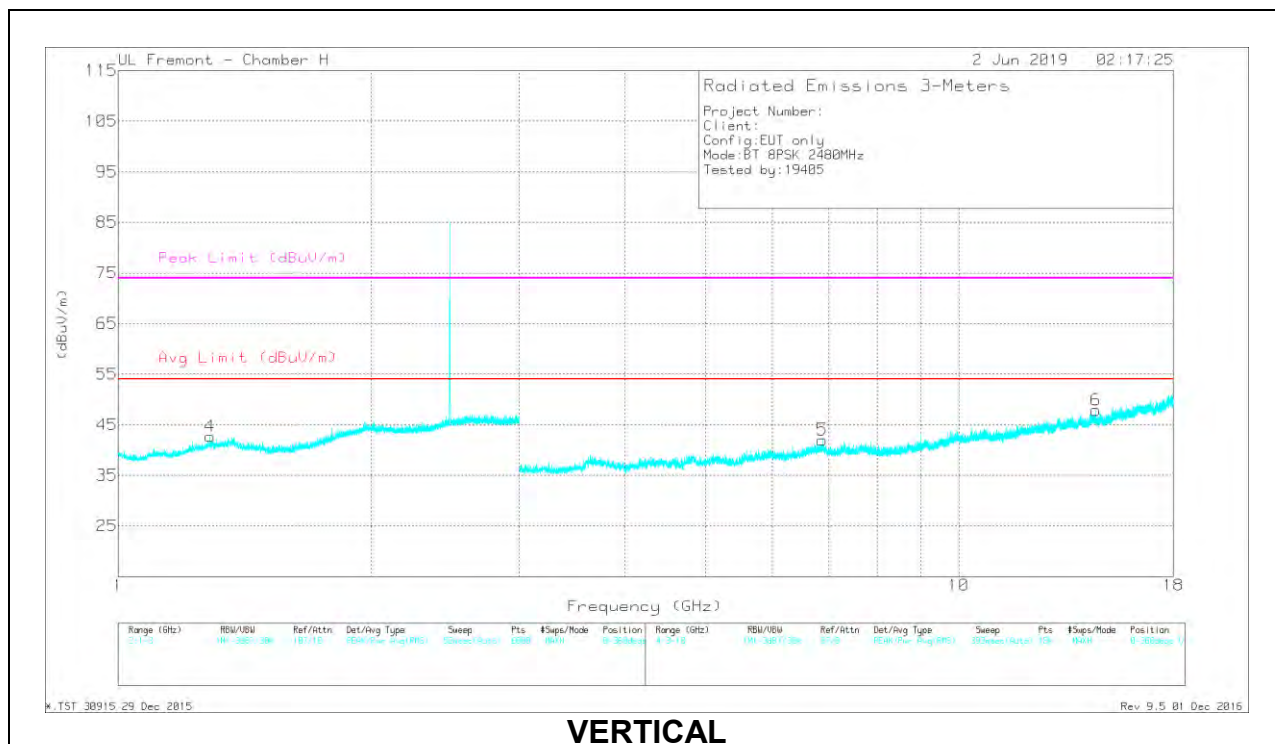
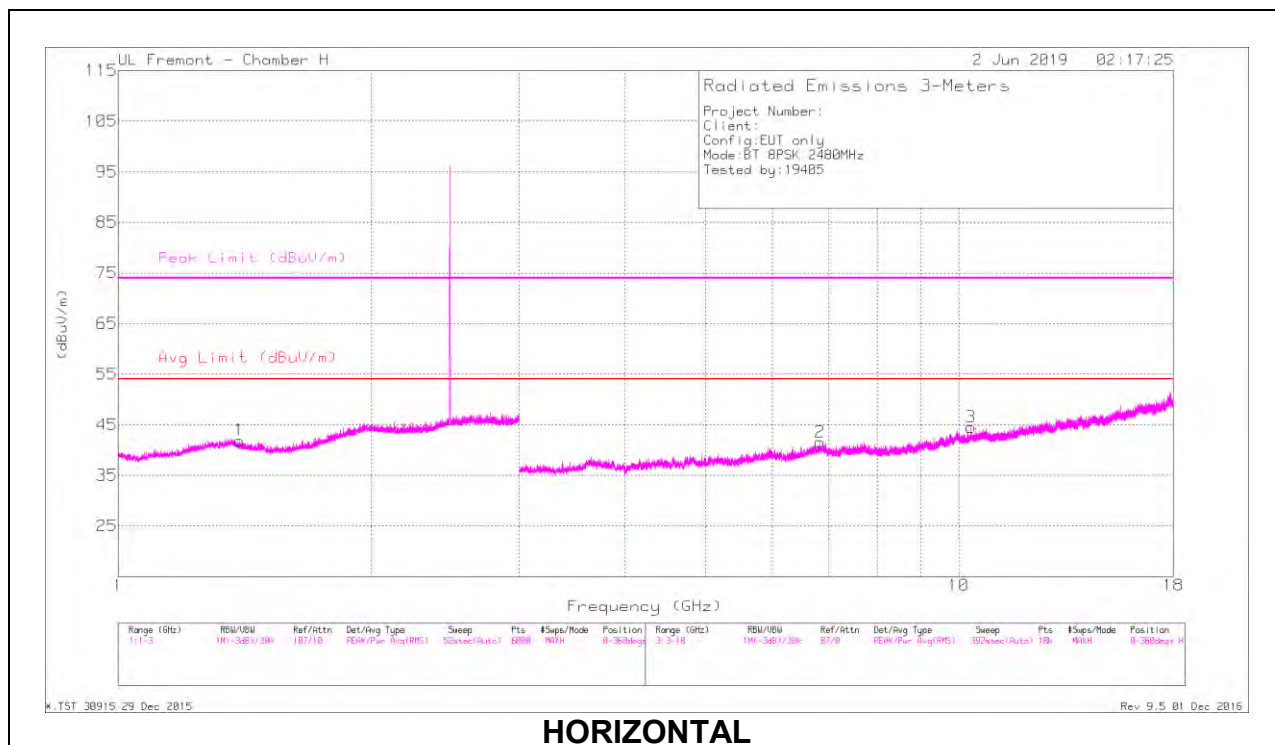
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.371         | 43.44                | PKFH | 29.6           | -25.2                  | 47.84                      | -                  | -           | 74                  | -26.16         | 47             | 153         | H        |
|        | * 1.37          | 31.87                | VA1T | 29.6           | -25.2                  | 36.27                      | 54                 | -17.73      | -                   | -              | 47             | 153         | H        |
| 4      | * 1.368         | 43.76                | PKFH | 29.7           | -25.2                  | 48.26                      | -                  | -           | 74                  | -25.74         | 137            | 226         | V        |
|        | * 1.368         | 31.87                | VA1T | 29.7           | -25.2                  | 36.37                      | 54                 | -17.63      | -                   | -              | 137            | 226         | V        |
| 2      | * 4.836         | 40.18                | PKFH | 34             | -30.3                  | 43.88                      | -                  | -           | 74                  | -30.12         | 82             | 138         | H        |
|        | * 4.836         | 28.66                | VA1T | 34             | -30.3                  | 32.36                      | 54                 | -21.64      | -                   | -              | 82             | 138         | H        |
| 6      | * 11.852        | 34.42                | PKFH | 38.7           | -22.9                  | 50.22                      | -                  | -           | 74                  | -23.78         | 216            | 270         | V        |
|        | * 11.849        | 22.82                | VA1T | 38.7           | -22.9                  | 38.62                      | 54                 | -15.38      | -                   | -              | 216            | 270         | V        |
| 5      | 5.723           | 39.11                | PKFH | 35.1           | -28.8                  | 45.41                      | -                  | -           | -                   | -              | 340            | 154         | V        |
|        | 5.723           | 27.08                | VA1T | 35.1           | -28.8                  | 33.38                      | -                  | -           | -                   | -              | 340            | 154         | V        |
| 3      | 6.543           | 37.59                | PKFH | 36.2           | -27.9                  | 45.89                      | -                  | -           | -                   | -              | 291            | 188         | H        |
|        | 6.546           | 26.34                | VA1T | 36.2           | -27.9                  | 34.64                      | -                  | -           | -                   | -              | 291            | 188         | H        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (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      | * 1.394         | 43.29                | PKFH | 28.9           | -25.1                  | 47.09                      | -                  | -           | 74                  | -26.91         | 199            | 363         | H        |
|        | * 1.393         | 31.76                | VA1T | 28.9           | -25.1                  | 35.56                      | 54                 | -18.44      | -                   | -              | 199            | 363         | H        |
| 4      | * 1.287         | 43.73                | PKFH | 29.2           | -25.4                  | 47.53                      | -                  | -           | 74                  | -26.47         | 256            | 183         | V        |
|        | * 1.285         | 31.92                | VA1T | 29.2           | -25.4                  | 35.72                      | 54                 | -18.28      | -                   | -              | 256            | 183         | V        |
| 2      | 6.836           | 26.52                | VA1T | 36.7           | -28                    | 35.22                      | -                  | -           | -                   | -              | 316            | 239         | H        |
|        | 6.838           | 37.88                | PKFH | 36.8           | -27.9                  | 46.78                      | -                  | -           | -                   | -              | 316            | 239         | H        |
| 5      | 6.881           | 36.71                | PKFH | 36.7           | -27                    | 46.41                      | -                  | -           | -                   | -              | 294            | 178         | V        |
|        | 6.881           | 25.39                | VA1T | 36.7           | -27                    | 35.09                      | -                  | -           | -                   | -              | 294            | 178         | V        |
| 3      | 10.335          | 34.61                | PKFH | 37.4           | -22.7                  | 49.31                      | -                  | -           | -                   | -              | 126            | 260         | H        |
|        | 10.335          | 22.65                | VA1T | 37.4           | -22.7                  | 37.35                      | -                  | -           | -                   | -              | 126            | 260         | H        |
| 6      | 14.555          | 35.33                | PKFH | 40             | -21.9                  | 53.43                      | -                  | -           | -                   | -              | 358            | 248         | V        |
|        | 14.555          | 22.88                | VA1T | 39.9           | -21.9                  | 40.88                      | -                  | -           | -                   | -              | 358            | 248         | V        |

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

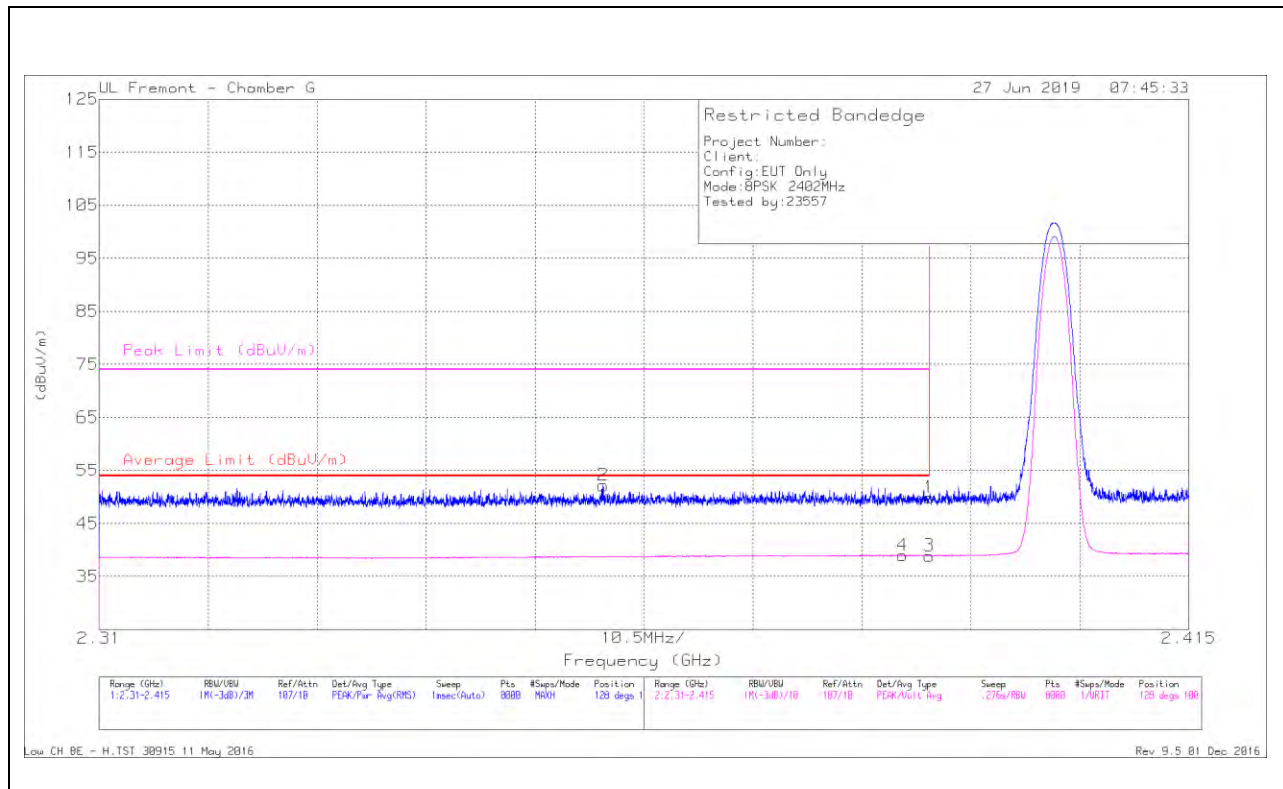
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

**Antenna 3**

**BANEDGE (LOW CHANNEL)**

**HORIZONTAL RESULT**



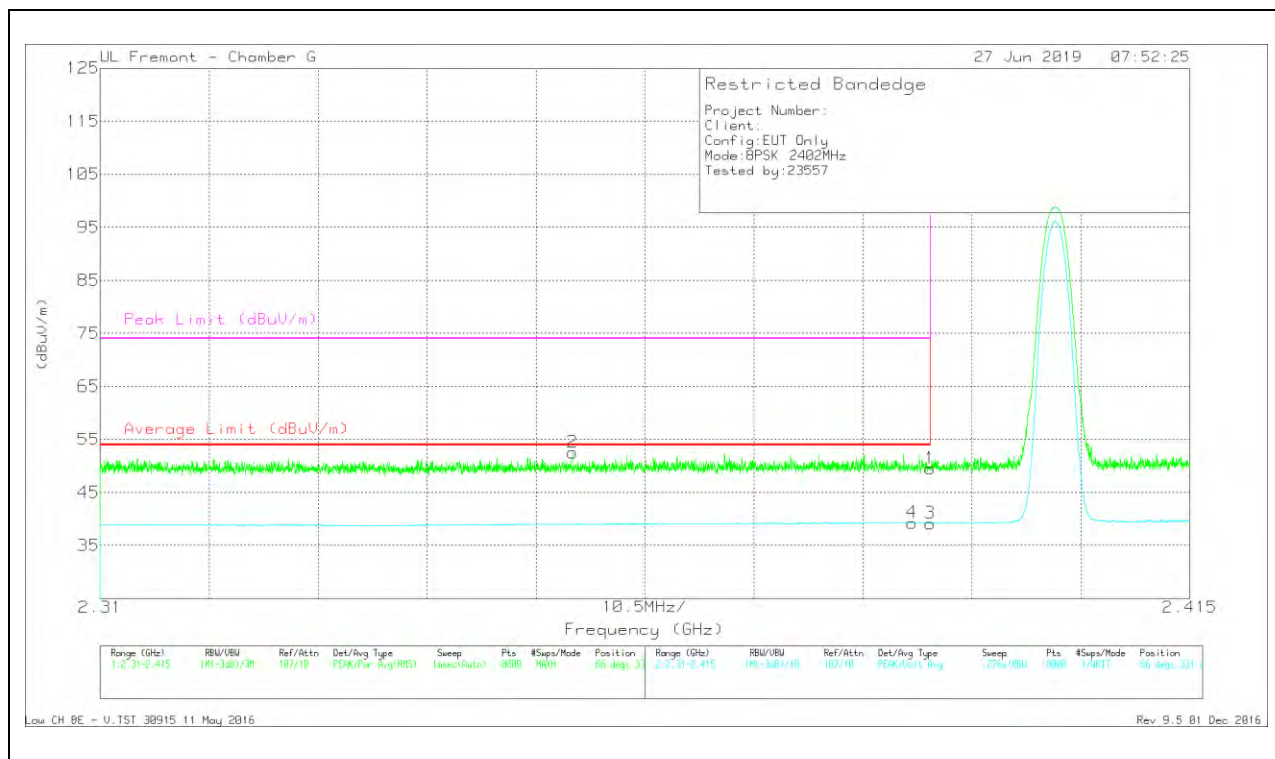
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Filtr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 40.2                 | Pk   | 31.9           | -22.2                   | 49.9                       | -                      | -           | 74                  | -24.1          | 128            | 100         | H        |
| 2      | * 2.359         | 42.67                | Pk   | 31.7           | -22.2                   | 52.17                      | -                      | -           | 74                  | -21.83         | 128            | 100         | H        |
| 3      | * 2.39          | 29.2                 | VA1T | 31.9           | -22.2                   | 38.9                       | 54                     | -15.1       | -                   | -              | 128            | 100         | H        |
| 4      | * 2.387         | 29.27                | VA1T | 31.9           | -22.2                   | 38.97                      | 54                     | -15.03      | -                   | -              | 128            | 100         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT

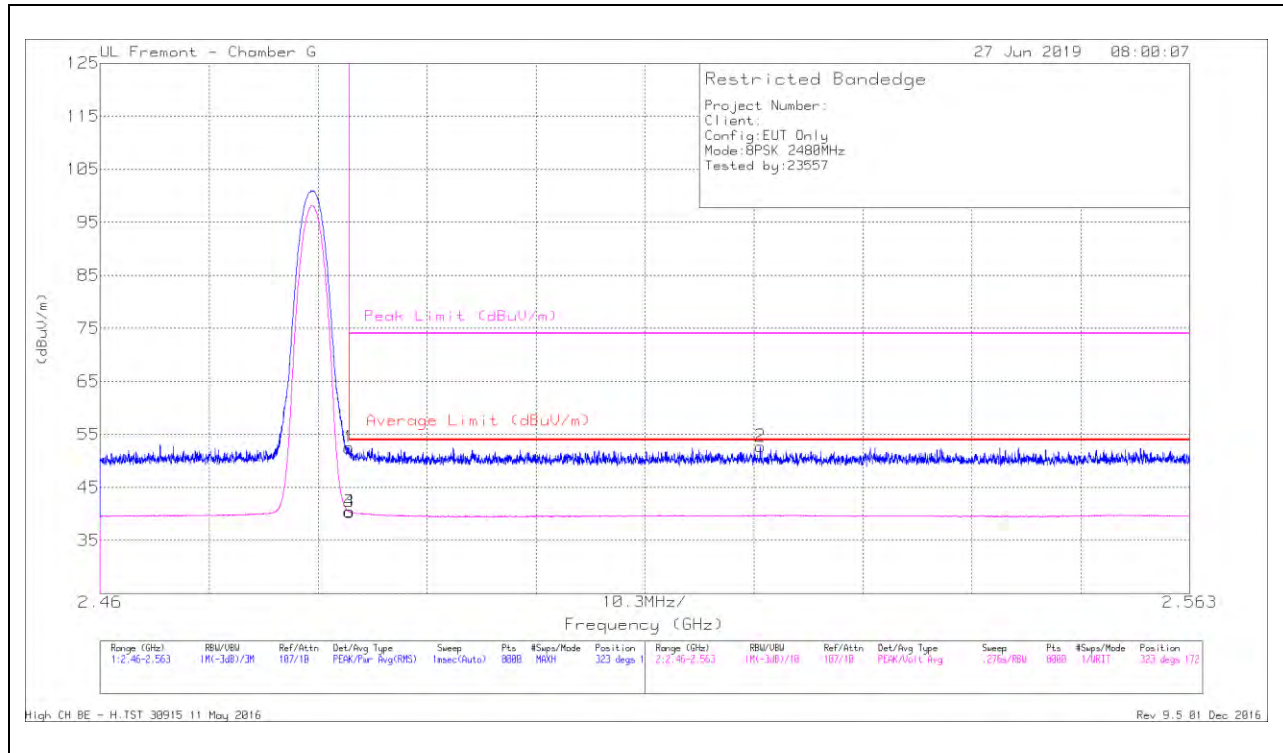


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Ftr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 39.84                | Pk   | 31.9           | -22.2                 | 49.54                      | -                      | -           | 74                  | -24.46         | 86             | 331         | V        |
| 2      | * 2.356         | 43.03                | Pk   | 31.7           | -22.2                 | 52.53                      | -                      | -           | 74                  | -21.47         | 86             | 331         | V        |
| 3      | * 2.39          | 29.45                | VA1T | 31.9           | -22.2                 | 39.15                      | 54                     | -14.85      | -                   | -              | 86             | 331         | V        |
| 4      | * 2.388         | 29.57                | VA1T | 31.9           | -22.2                 | 39.27                      | 54                     | -14.73      | -                   | -              | 86             | 331         | V        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

**BANEDGE (HIGH CHANNEL)****HORIZONTAL RESULT**

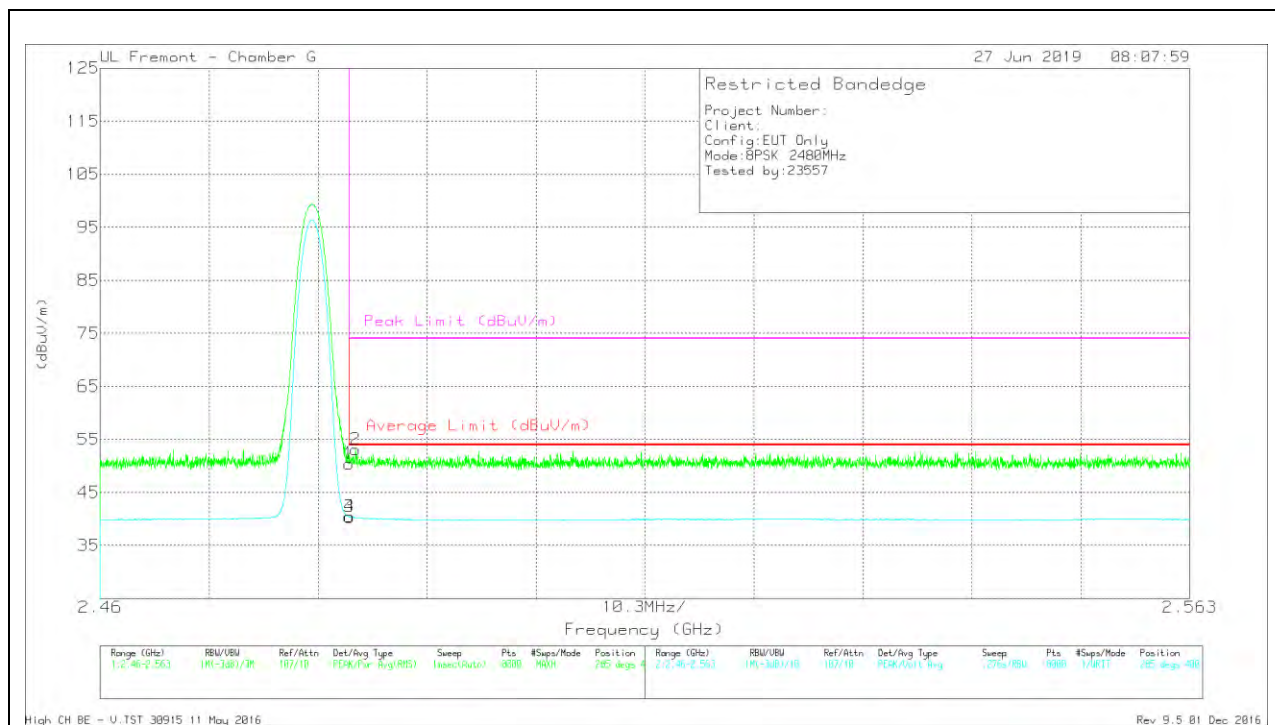
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Filr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 42.23                | Pk   | 32.4           | -22.1                  | 52.53                      | -                      | -           | 74                  | -21.47         | 323            | 172         | H        |
| 3      | * 2.484         | 30.14                | VA1T | 32.4           | -22.1                  | 40.44                      | 54                     | -13.56      | -                   | -              | 323            | 172         | H        |
| 4      | * 2.484         | 30.09                | VA1T | 32.4           | -22.1                  | 40.39                      | 54                     | -13.61      | -                   | -              | 323            | 172         | H        |
| 2      | 2.522           | 42.44                | Pk   | 32.4           | -22.1                  | 52.74                      | -                      | -           | 74                  | -21.26         | 323            | 172         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (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      | * 2.484         | 40.12                | Pk   | 32.4           | -22.1                  | 50.42                      | -                      | -           | 74                  | -23.58         | 285            | 400         | V        |
| 2      | * 2.484         | 42.8                 | Pk   | 32.4           | -22.1                  | 53.1                       | -                      | -           | 74                  | -20.9          | 285            | 400         | V        |
| 3      | * 2.484         | 30.11                | VA1T | 32.4           | -22.1                  | 40.41                      | 54                     | -13.59      | -                   | -              | 285            | 400         | V        |
| 4      | * 2.484         | 30.09                | VA1T | 32.4           | -22.1                  | 40.39                      | 54                     | -13.61      | -                   | -              | 285            | 400         | V        |

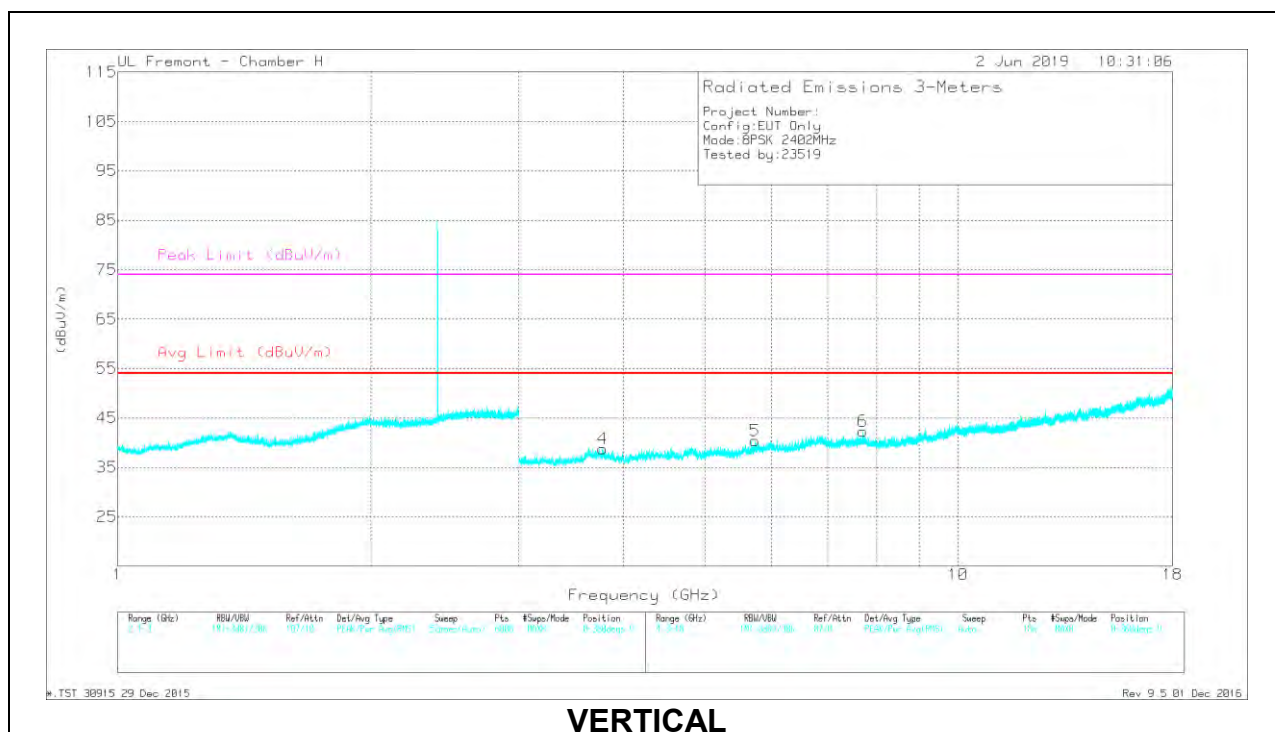
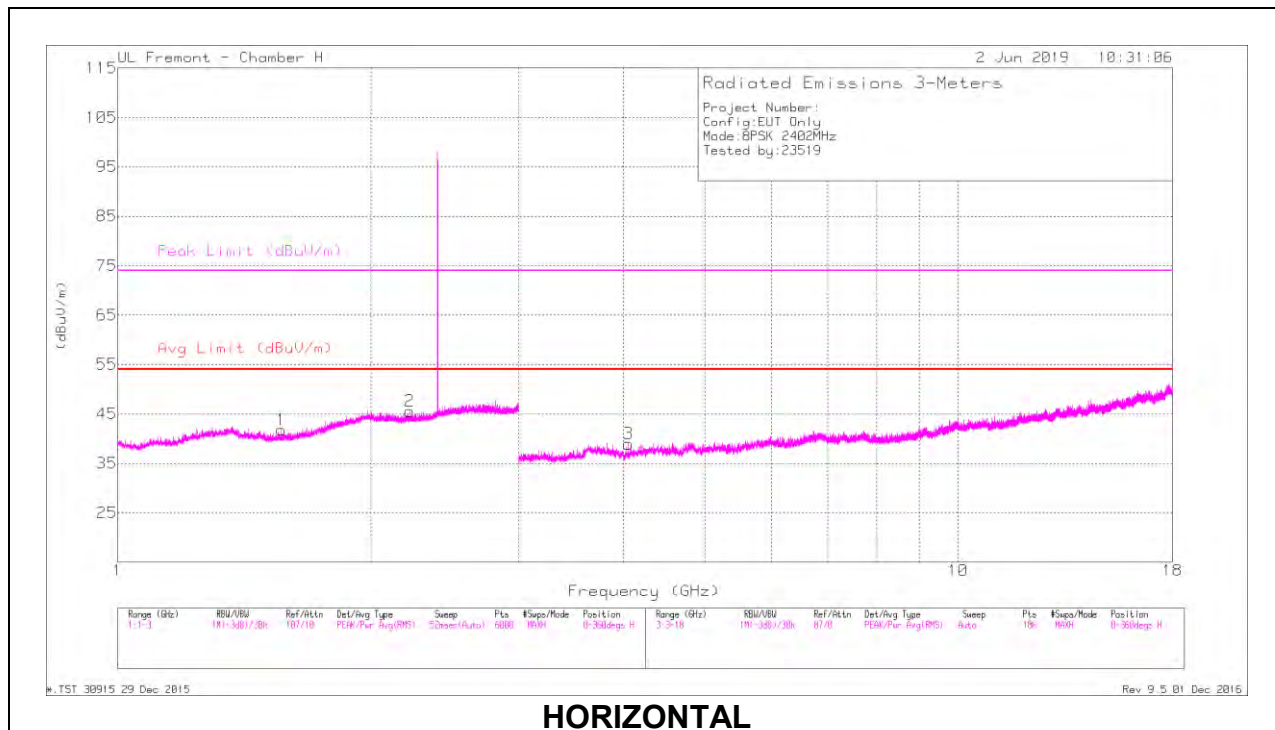
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

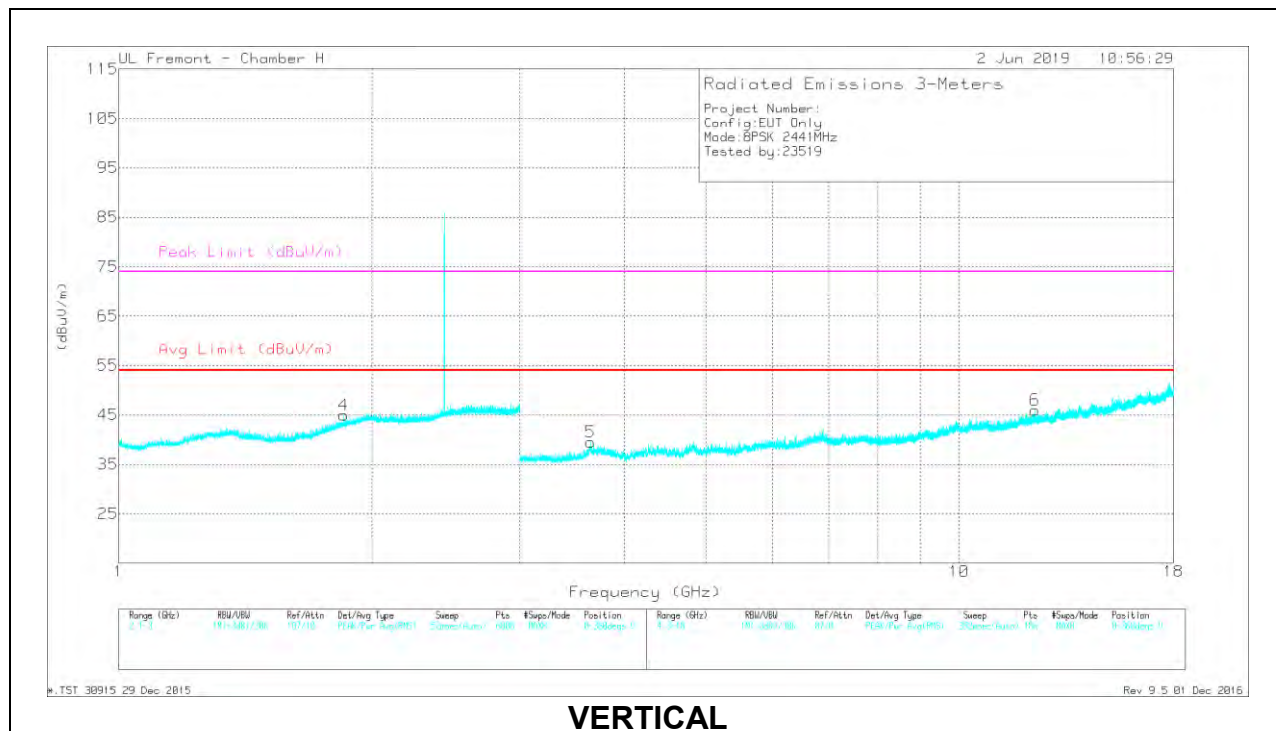
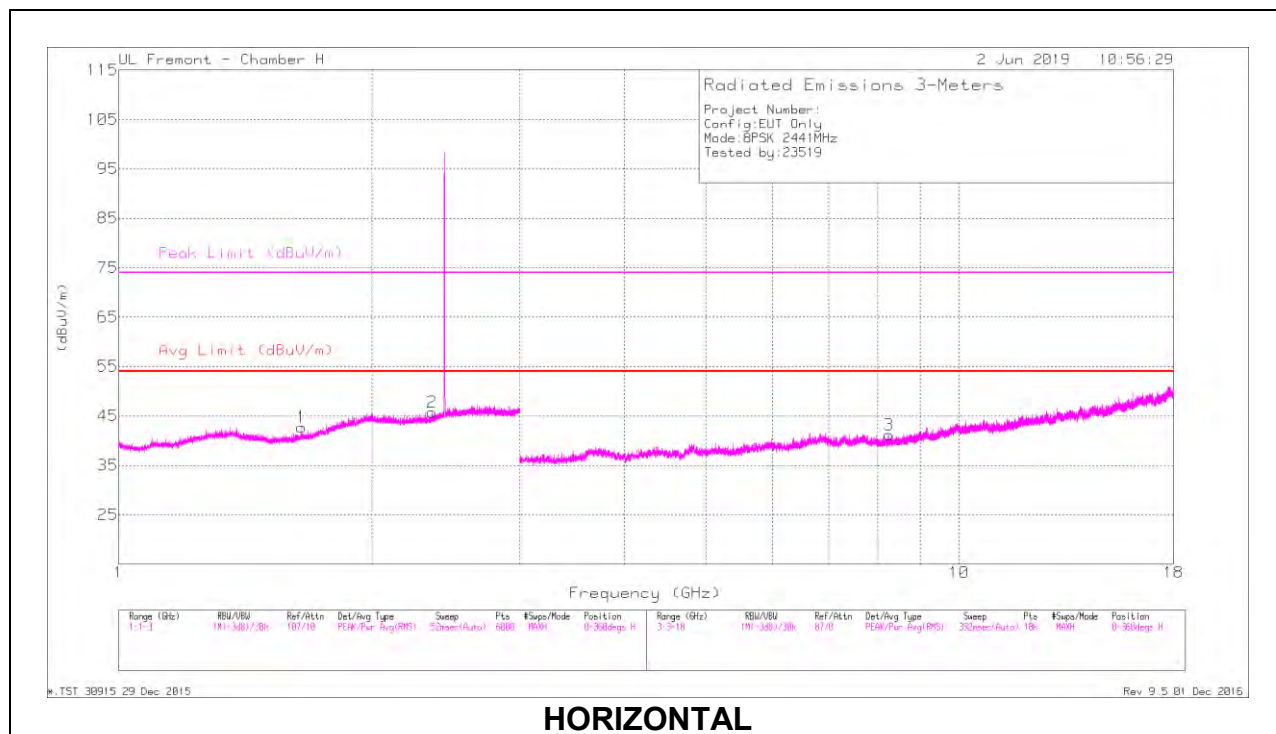
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.565         | 43.43                | PKFH | 28             | -24.7                  | 46.73                      | -                  | -           | 74                  | -27.27         | 91             | 152         | H        |
|        | * 1.563         | 31.5                 | VA1T | 28             | -24.7                  | 34.8                       | 54                 | -19.2       | -                   | -              | 91             | 152         | H        |
| 2      | * 2.224         | 43.31                | PKFH | 31.4           | -23.9                  | 50.81                      | -                  | -           | 74                  | -23.19         | 185            | 181         | H        |
|        | * 2.226         | 31.15                | VA1T | 31.3           | -23.9                  | 38.55                      | 54                 | -15.45      | -                   | -              | 185            | 181         | H        |
| 3      | * 4.053         | 40.37                | PKFH | 33.3           | -30.5                  | 43.17                      | -                  | -           | 74                  | -30.83         | 121            | 203         | H        |
|        | * 4.053         | 28.4                 | VA1T | 33.3           | -30.5                  | 31.2                       | 54                 | -22.8       | -                   | -              | 121            | 203         | H        |
| 4      | * 3.775         | 41.14                | PKFH | 33.3           | -31                    | 43.44                      | -                  | -           | 74                  | -30.56         | 192            | 219         | V        |
|        | * 3.777         | 29.39                | VA1T | 33.3           | -31                    | 31.69                      | 54                 | -22.31      | -                   | -              | 192            | 219         | V        |
| 6      | * 7.701         | 37.93                | PKFH | 36.6           | -26.7                  | 47.83                      | -                  | -           | 74                  | -26.17         | 183            | 171         | V        |
|        | * 7.7           | 25.23                | VA1T | 36.6           | -26.7                  | 35.13                      | 54                 | -18.87      | -                   | -              | 183            | 171         | V        |
| 5      | 5.736           | 39.15                | PKFH | 35.2           | -28.5                  | 45.85                      | -                  | -           | 74                  | -28.15         | 265            | 132         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

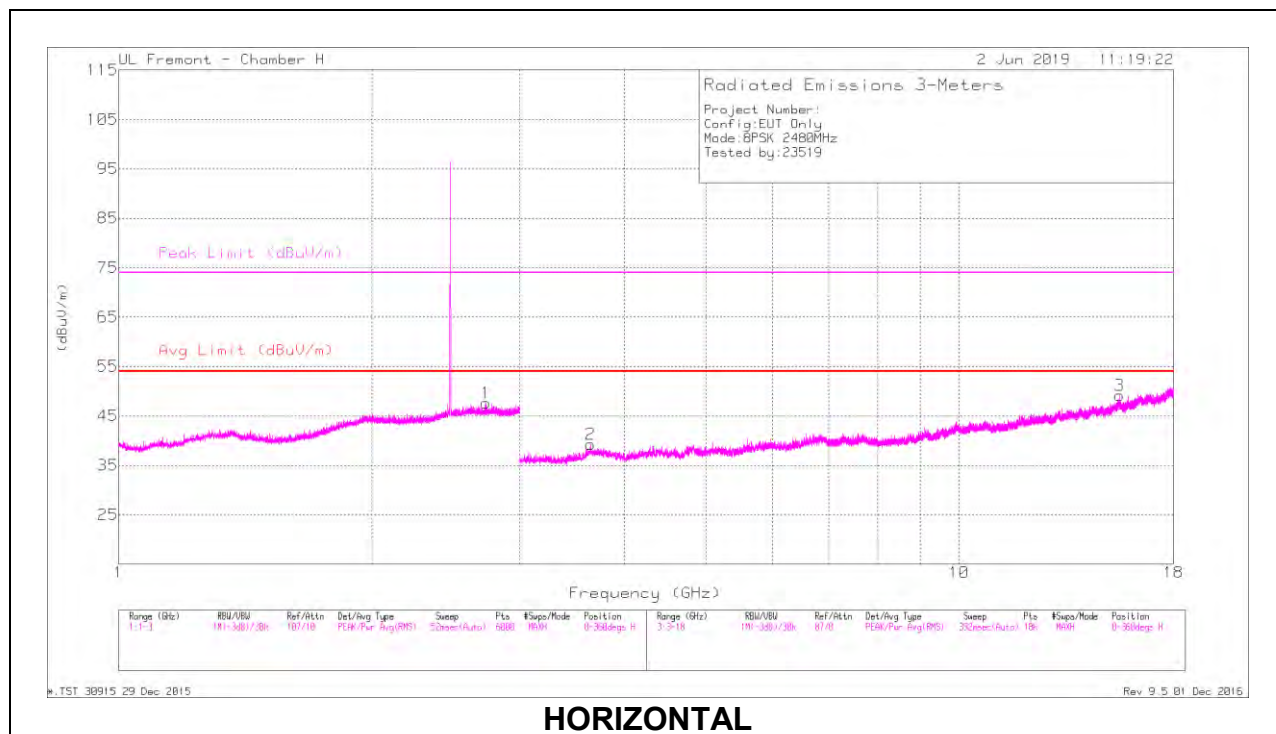
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 2.36          | 42.35                | PKFH | 31.4           | -23.6                  | 50.15                      | -                  | -           | 74                  | -23.85         | 225            | 161         | H        |
|        | * 2.359         | 31.07                | VA1T | 31.4           | -23.6                  | 38.87                      | 54                 | -15.13      | -                   | -              | 225            | 161         | H        |
| 3      | * 8.248         | 36.51                | PKFH | 35.9           | -25.8                  | 46.61                      | -                  | -           | 74                  | -27.39         | 248            | 143         | H        |
|        | * 8.25          | 24.55                | VA1T | 35.9           | -25.8                  | 34.65                      | 54                 | -19.35      | -                   | -              | 248            | 143         | H        |
| 5      | * 3.644         | 40.4                 | PKFH | 33.1           | -29.6                  | 43.9                       | -                  | -           | 74                  | -30.1          | 64             | 199         | V        |
|        | * 3.647         | 28.05                | VA1T | 33.1           | -29.6                  | 31.55                      | 54                 | -22.45      | -                   | -              | 64             | 199         | V        |
| 6      | * 12.321        | 35.97                | PKFH | 39             | -22.9                  | 52.07                      | -                  | -           | 74                  | -21.93         | 217            | 165         | V        |
|        | * 12.321        | 22.95                | VA1T | 39             | -22.9                  | 39.05                      | 54                 | -14.95      | -                   | -              | 217            | 165         | V        |
| 1      | 1.652           | 43.17                | PKFH | 28.5           | -24.6                  | 47.07                      | -                  | -           | 74                  | -26.93         | 273            | 134         | H        |
| 4      | 1.853           | 43                   | PKFH | 30.9           | -24.3                  | 49.6                       | -                  | -           | 74                  | -24.4          | 167            | 198         | V        |

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

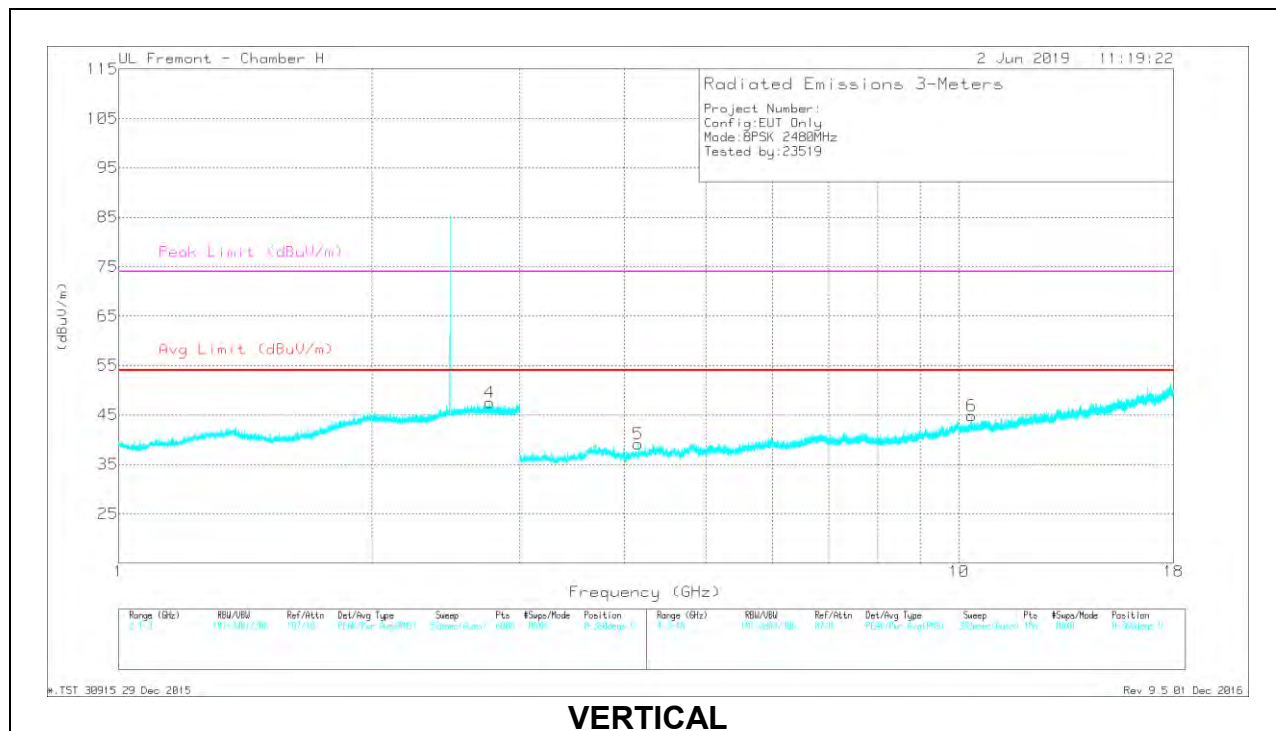
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T136 (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      | * 2.732         | 42.72                | PKFH | 32.5           | -23.2                  | 52.02                      | -                  | -           | 74                  | -21.98         | 86             | 124         | H        |
|        | * 2.732         | 30.96                | VA1T | 32.5           | -23.2                  | 40.26                      | 54                 | -13.74      | -                   | -              | 86             | 124         | H        |
| 4      | * 2.761         | 43.43                | PKFH | 32.5           | -23.1                  | 52.83                      | -                  | -           | 74                  | -21.17         | 142            | 143         | V        |
|        | * 2.762         | 30.92                | VA1T | 32.5           | -23.1                  | 40.32                      | 54                 | -13.68      | -                   | -              | 142            | 143         | V        |
| 2      | * 3.643         | 39.66                | PKFH | 33.1           | -29.6                  | 43.16                      | -                  | -           | 74                  | -30.84         | 149            | 209         | H        |
|        | * 3.647         | 28.04                | VA1T | 33.2           | -29.6                  | 31.64                      | 54                 | -22.36      | -                   | -              | 149            | 209         | H        |
| 3      | * 15.532        | 35.67                | PKFH | 40.9           | -22.2                  | 54.37                      | -                  | -           | 74                  | -19.63         | 237            | 154         | H        |
|        | * 15.532        | 23.11                | VA1T | 40.9           | -22.2                  | 41.81                      | 54                 | -12.19      | -                   | -              | 237            | 154         | H        |
| 5      | * 4.154         | 40.2                 | PKFH | 33.2           | -30.8                  | 42.6                       | -                  | -           | 74                  | -31.4          | 161            | 220         | V        |
|        | * 4.153         | 28.93                | VA1T | 33.2           | -30.8                  | 31.33                      | 54                 | -22.67      | -                   | -              | 161            | 220         | V        |
| 6      | 10.358          | 34.78                | PKFH | 37.5           | -22.5                  | 49.78                      | -                  | -           | 74                  | -24.44         | 283            | 167         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

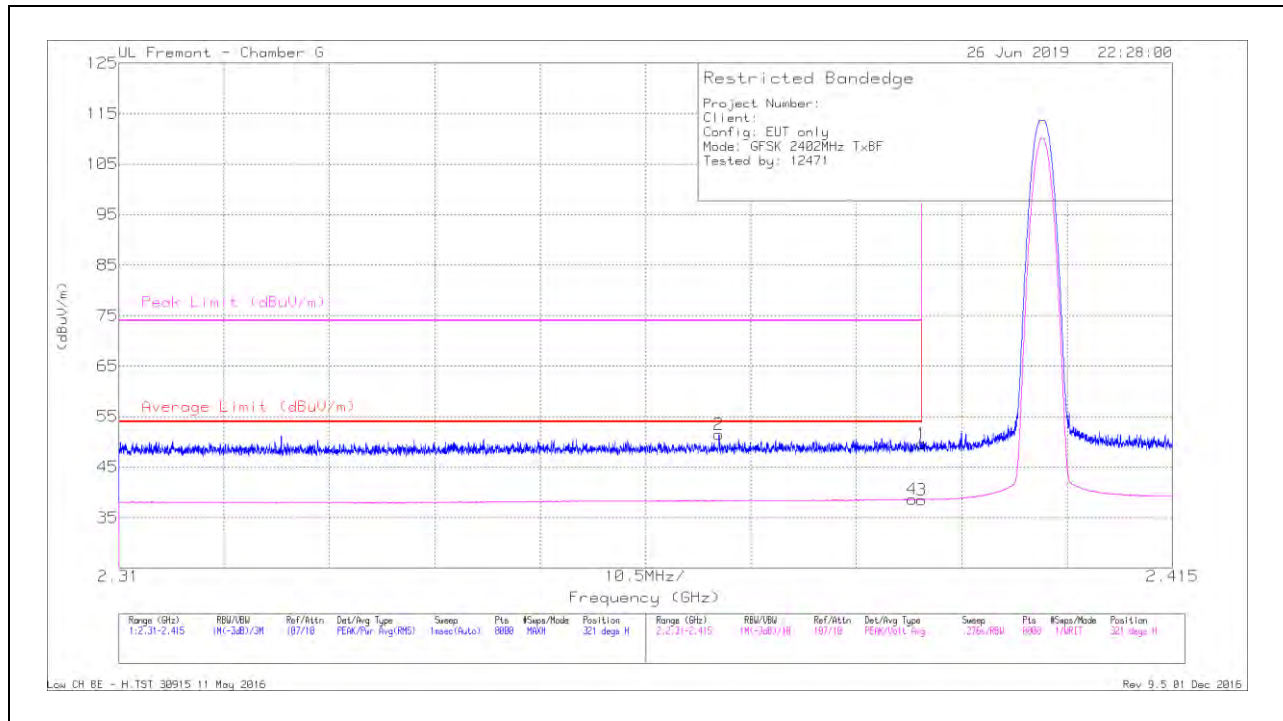
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 9.2. BEAMFORMING TRANSMITTER ABOVE 1 GHz

### 9.2.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



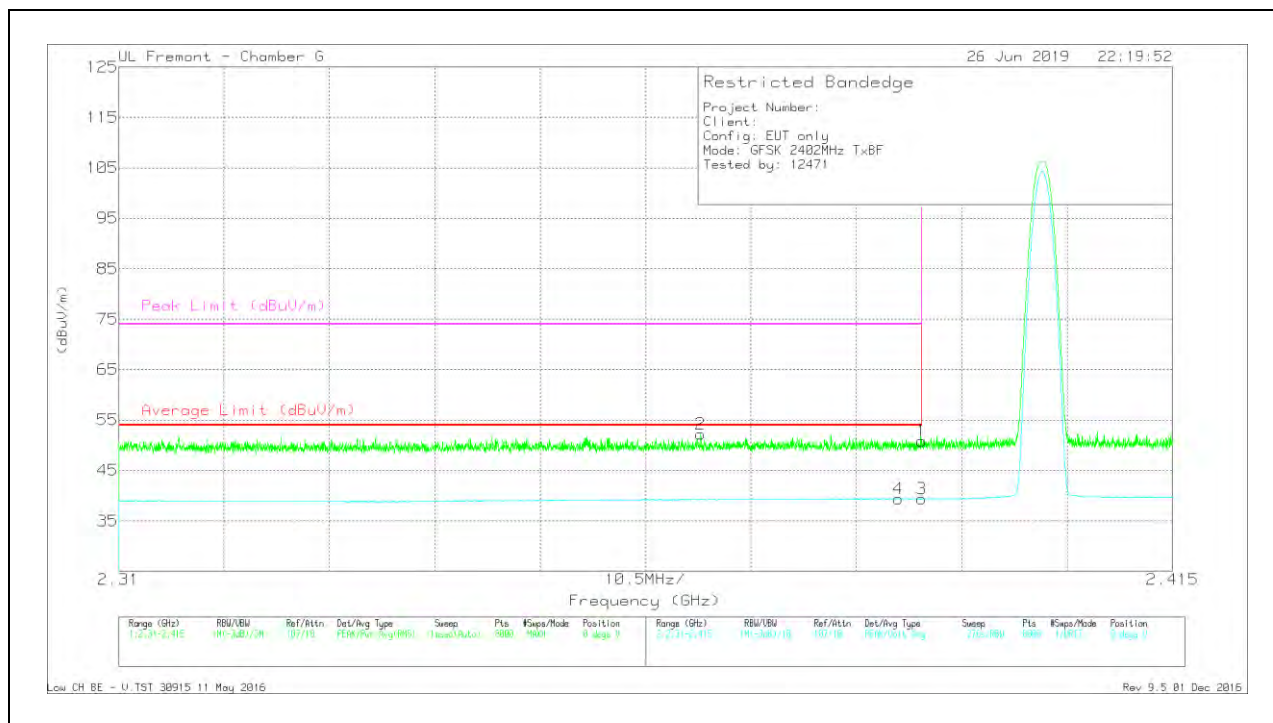
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | Af T120 (dB/m) | Amp/Cbl/Ftr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 39.9                 | Pk   | 31.9           | -22.2                | 49.6                       | -                      | -           | 74                  | -24.4          | 321            | 100         | H        |
| 2      | * 2.37          | 41.85                | Pk   | 31.8           | -22.2                | 51.45                      | -                      | -           | 74                  | -22.55         | 321            | 100         | H        |
| 3      | * 2.39          | 28.85                | VA1T | 31.9           | -22.2                | 38.55                      | 54                     | -15.45      | -                   | -              | 321            | 100         | H        |
| 4      | * 2.389         | 28.89                | VA1T | 31.9           | -22.2                | 38.59                      | 54                     | -15.41      | -                   | -              | 321            | 100         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Ftr/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          | 41.2                 | Pk   | 31.9           | -22.2                | 50.9                       | -                      | -           | 74                  | -23.1          | 0              | 384         | V        |
| 2      | * 2.368         | 42.57                | Pk   | 31.8           | -22.2                | 52.17                      | -                      | -           | 74                  | -21.83         | 0              | 384         | V        |
| 3      | * 2.39          | 29.64                | VA1T | 31.9           | -22.2                | 39.34                      | 54                     | -14.66      | -                   | -              | 0              | 384         | V        |
| 4      | * 2.388         | 29.69                | VA1T | 31.9           | -22.2                | 39.39                      | 54                     | -14.61      | -                   | -              | 0              | 384         | V        |

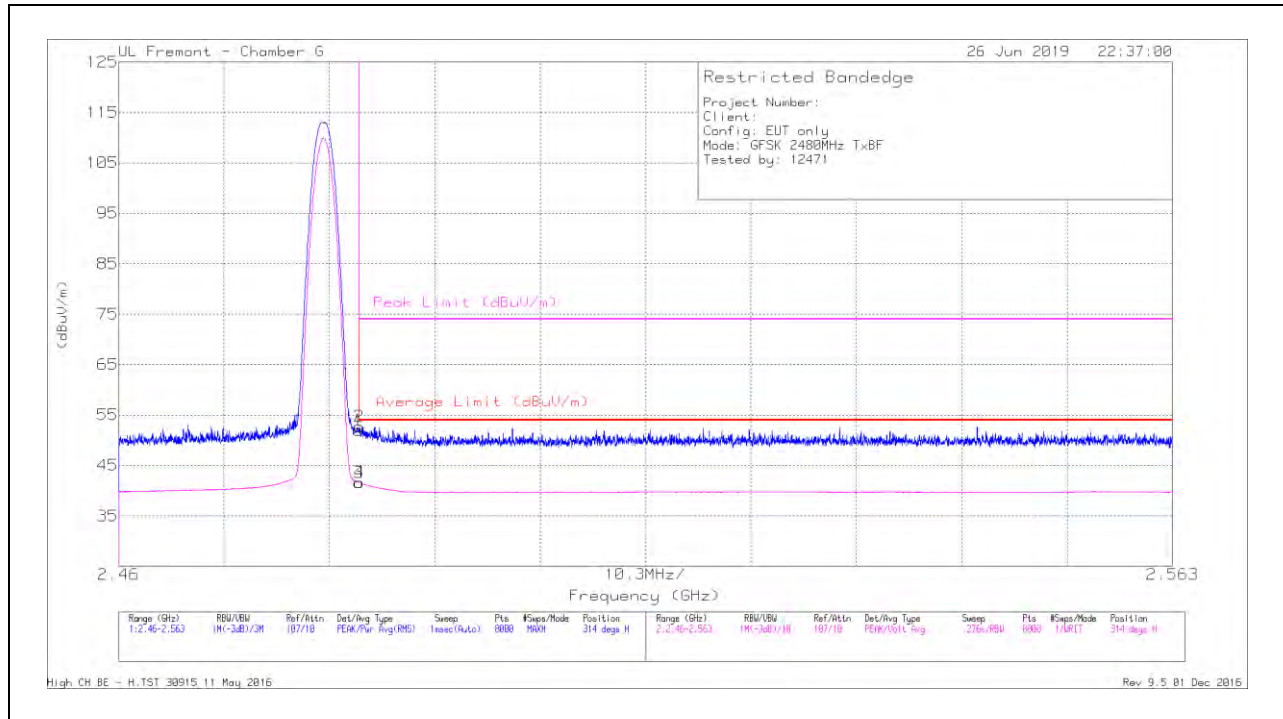
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

# **BANDEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



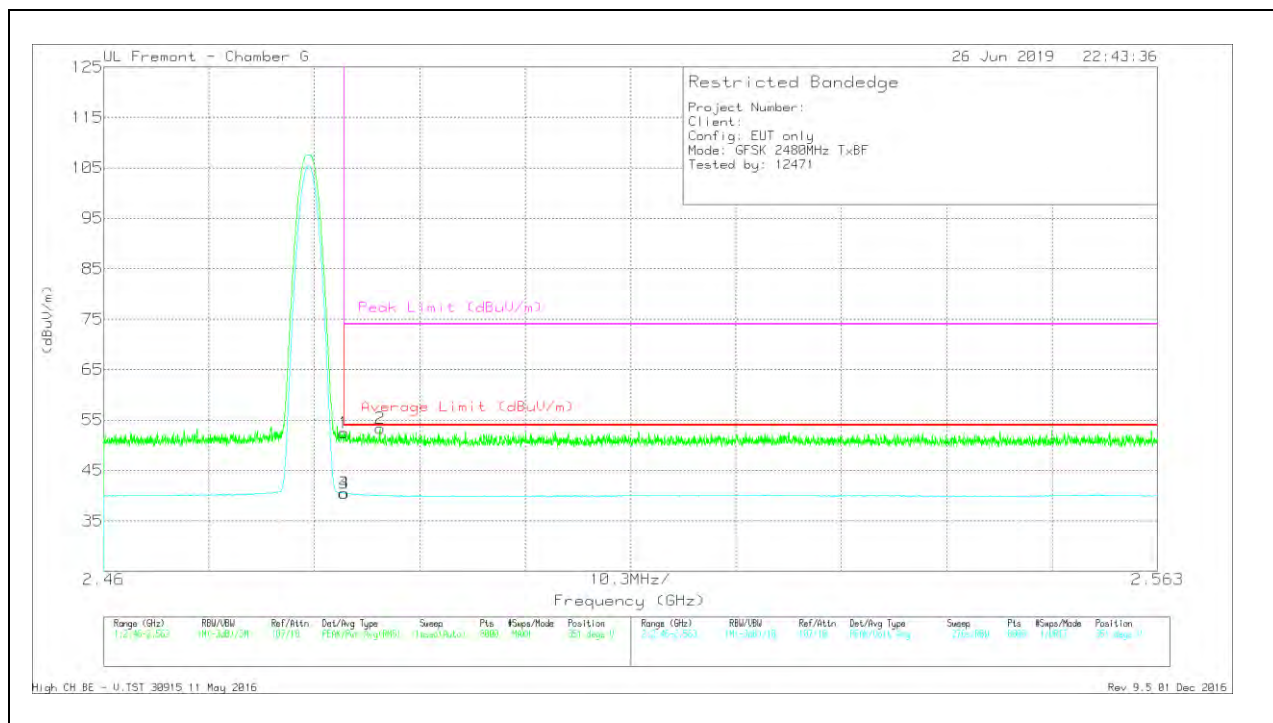
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Ftr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 41.7                 | Pk   | 32.4           | -22.1                 | 52                         | -                      | -           | 74                  | -22            | 314            | 310         | H        |
| 2      | * 2.484         | 42.41                | Pk   | 32.4           | -22.1                 | 52.71                      | -                      | -           | 74                  | -21.29         | 314            | 310         | H        |
| 3      | * 2.484         | 31.31                | VA1T | 32.4           | -22.1                 | 41.61                      | 54                     | -12.39      | -                   | -              | 314            | 310         | H        |
| 4      | * 2.484         | 31.29                | VA1T | 32.4           | -22.1                 | 41.59                      | 54                     | -12.41      | -                   | -              | 314            | 310         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Ftr/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         | 42.11                | Pk   | 32.4           | -22.1                | 52.41                      | -                      | -           | 74                  | -21.59         | 351            | 401         | V        |
| 2      | * 2.487         | 43.13                | Pk   | 32.4           | -22.2                | 53.33                      | -                      | -           | 74                  | -20.67         | 351            | 401         | V        |
| 3      | * 2.484         | 30.19                | VA1T | 32.4           | -22.1                | 40.49                      | 54                     | -13.51      | -                   | -              | 351            | 401         | V        |
| 4      | * 2.484         | 30.19                | VA1T | 32.4           | -22.1                | 40.49                      | 54                     | -13.51      | -                   | -              | 351            | 401         | V        |

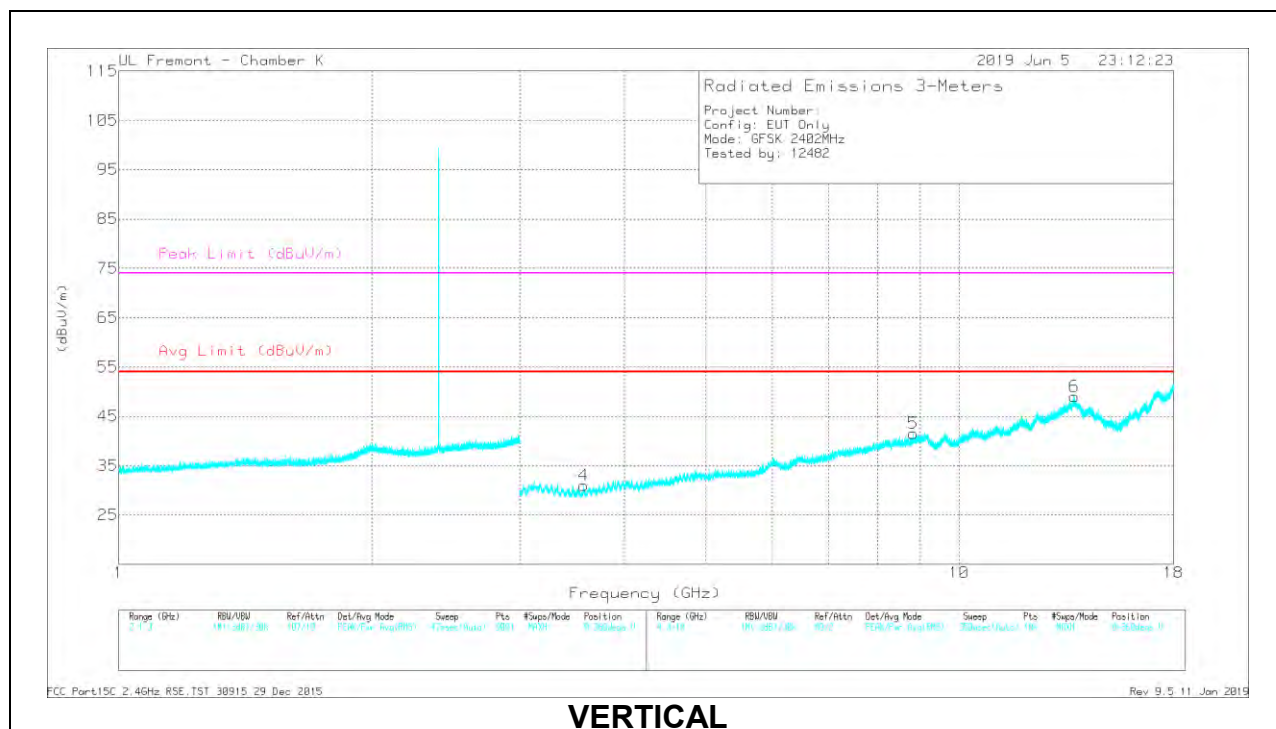
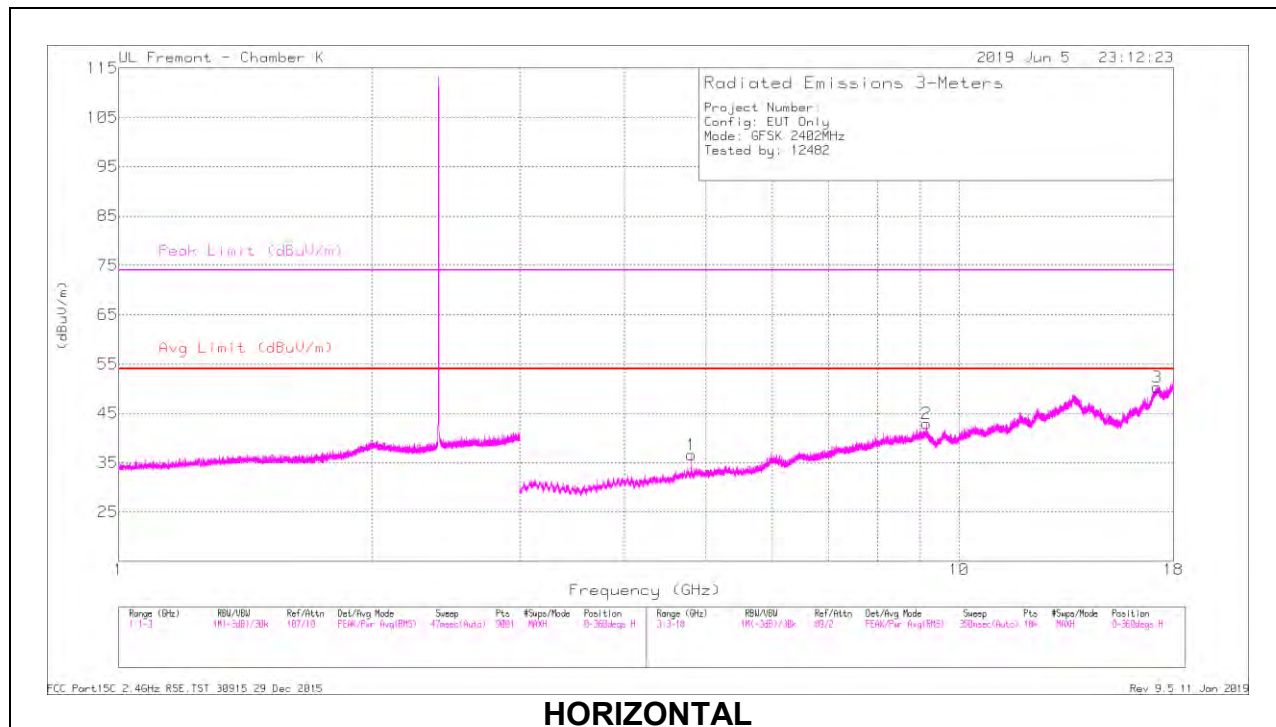
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

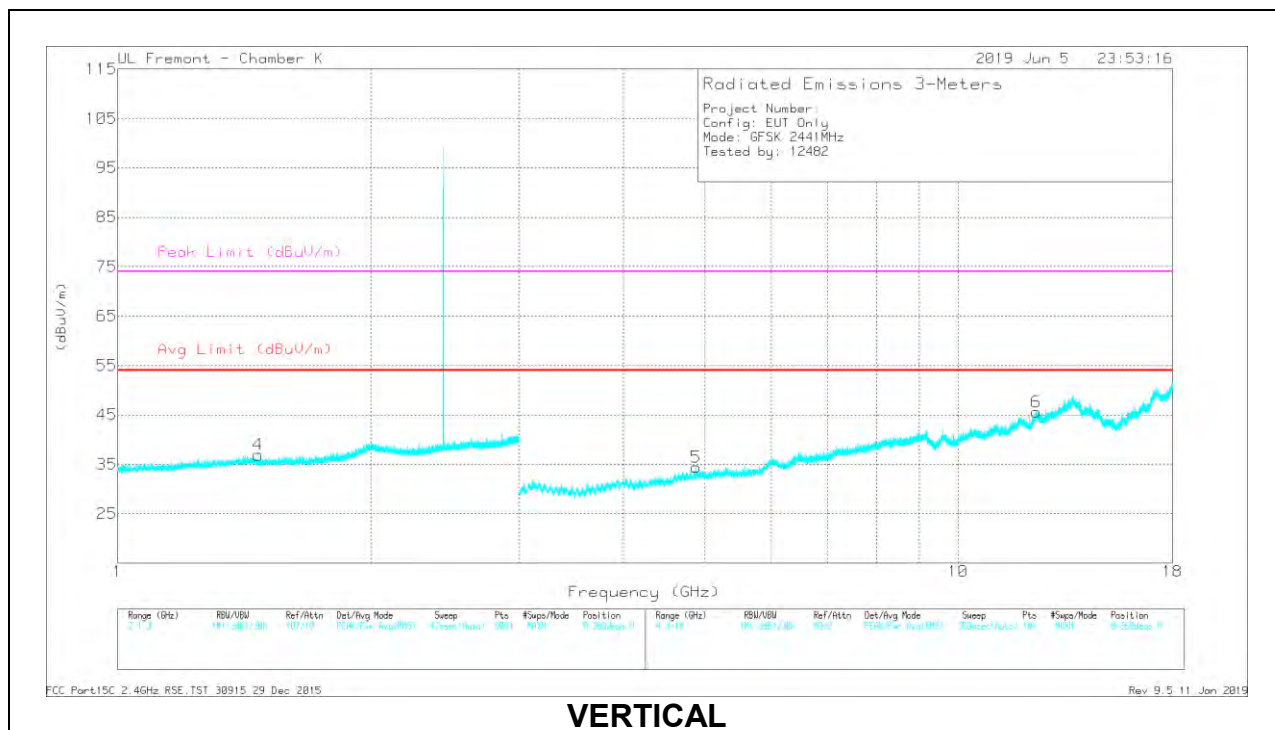
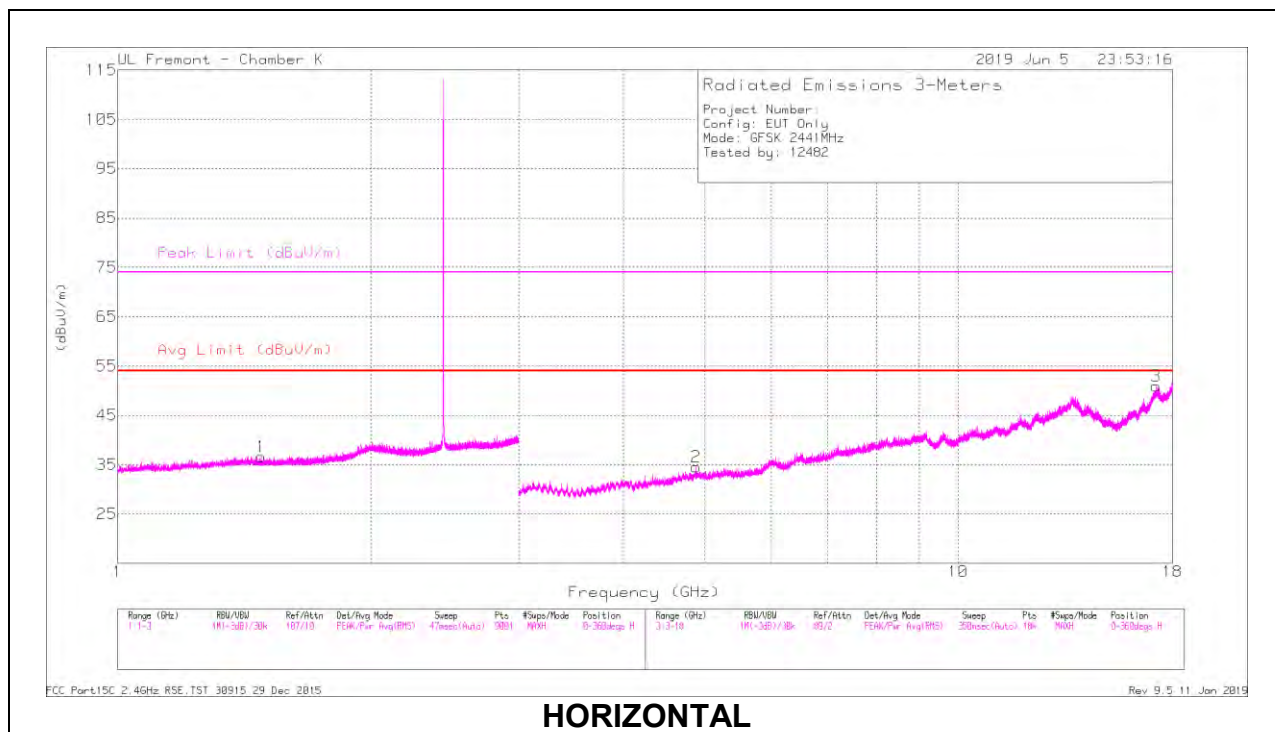
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE0190811 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 4.803         | 40.7                 | PKFH | 33                   | -30.3                  | 43.4                       | -                  | -           | 74                  | -30.6          | 187            | 161         | H        |
|        | * 4.804         | 29.09                | VA1T | 33                   | -30.3                  | 31.79                      | 54                 | -22.21      | -                   | -              | 187            | 161         | H        |
| 2      | * 9.14          | 33.91                | PKFH | 38.7                 | -23.3                  | 49.31                      | -                  | -           | 74                  | -24.69         | 23             | 367         | H        |
|        | * 9.143         | 20.86                | VA1T | 38.7                 | -23.3                  | 36.26                      | 54                 | -17.74      | -                   | -              | 23             | 367         | H        |
| 3      | 17.222          | 31.14                | PKFH | 43.4                 | -16.5                  | 58.04                      | -                  | -           | -                   | -              | 250            | 187         | H        |
| 4      | * 3.58          | 40.68                | PKFH | 29.9                 | -32.3                  | 38.28                      | -                  | -           | 74                  | -35.72         | 156            | 323         | V        |
|        | * 3.579         | 27.48                | VA1T | 29.9                 | -32.2                  | 25.18                      | 54                 | -28.82      | -                   | -              | 156            | 132         | V        |
| 5      | 8.82            | 34.8                 | PKFH | 38.6                 | -24                    | 49.4                       | -                  | -           | -                   | -              | 53             | 111         | V        |
| 6      | 13.713          | 31.81                | PKFH | 43                   | -18.7                  | 56.11                      | -                  | -           | -                   | -              | 230            | 243         | V        |

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

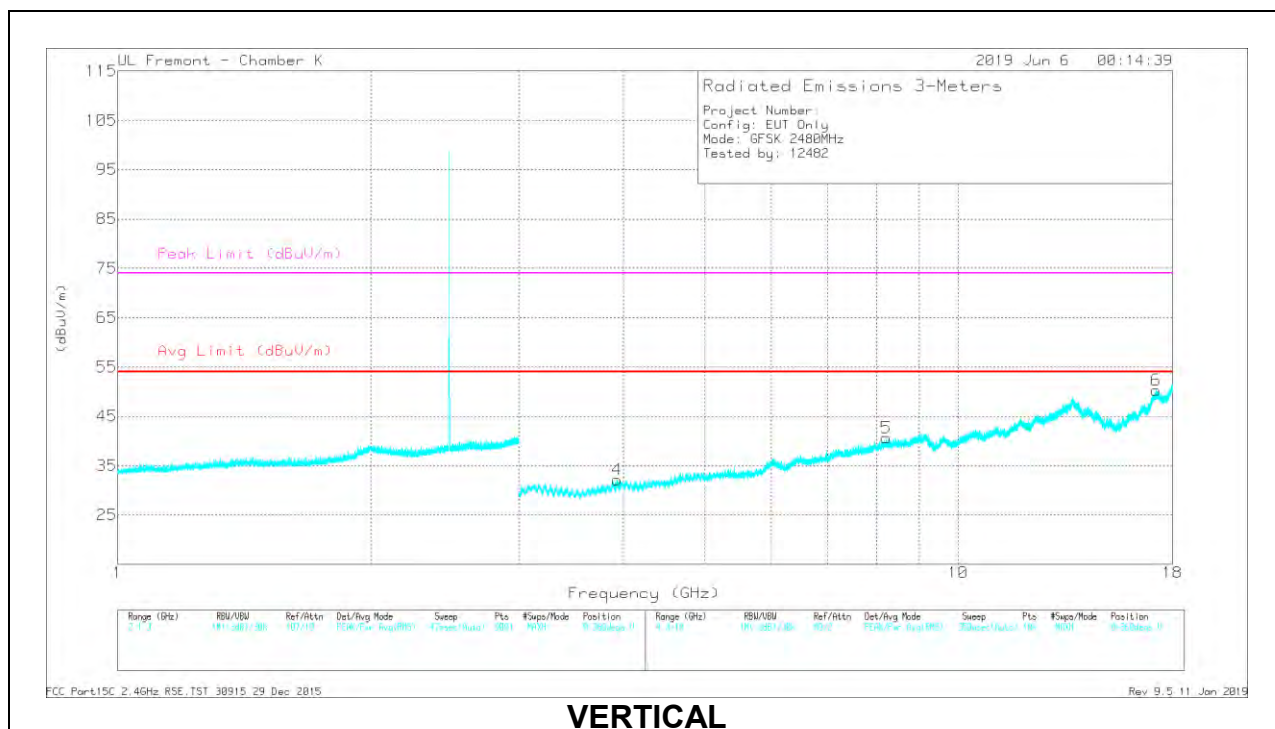
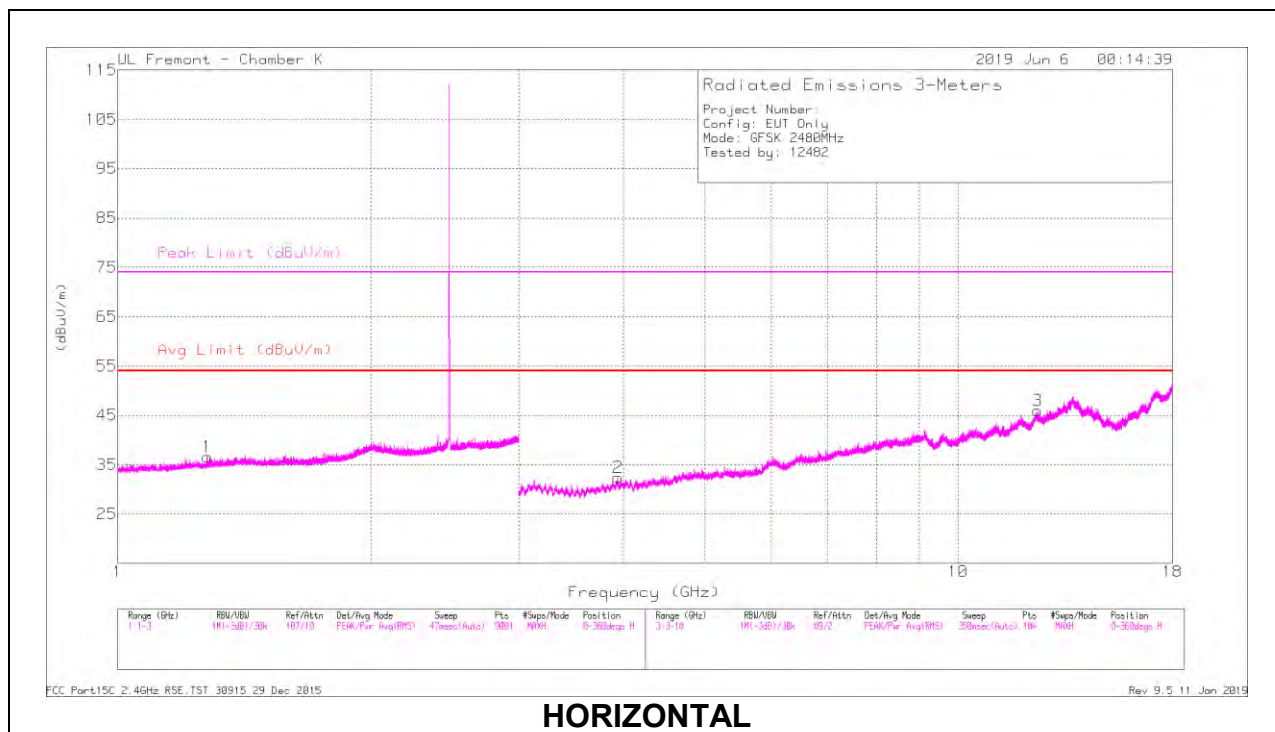
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE019081 1 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|-----------------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.482         | 43.61                | PKFH | 24.6                  | -23.9                  | 44.31                      | -                  | -           | 74                  | -29.69         | 32             | 166         | H        |
|        | * 1.483         | 30.1                 | VA1T | 24.6                  | -23.9                  | 30.8                       | 54                 | -23.2       | -                   | -              | 32             | 166         | H        |
| 4      | * 1.471         | 43.83                | PKFH | 24.6                  | -23.9                  | 44.53                      | -                  | -           | 74                  | -29.47         | 222            | 125         | V        |
|        | * 1.469         | 30.13                | VA1T | 24.6                  | -23.9                  | 30.83                      | 54                 | -23.17      | -                   | -              | 222            | 125         | V        |
| 2      | * 4.881         | 39.08                | PKFH | 33.2                  | -30.5                  | 41.78                      | -                  | -           | 74                  | -32.22         | 156            | 206         | H        |
|        | * 4.882         | 26.53                | VA1T | 33.2                  | -30.5                  | 29.23                      | 54                 | -24.77      | -                   | -              | 156            | 206         | H        |
| 3      | 17.215          | 30.53                | PKFH | 43.4                  | -16.6                  | 57.33                      | -                  | -           | -                   | -              | 98             | 157         | H        |
| 5      | * 4.88          | 38.36                | PKFH | 33.2                  | -30.5                  | 41.06                      | -                  | -           | 74                  | -32.94         | 352            | 255         | V        |
|        | * 4.881         | 25.37                | VA1T | 33.2                  | -30.5                  | 28.07                      | 54                 | -25.93      | -                   | -              | 352            | 255         | V        |
| 6      | * 12.405        | 32.72                | PKFH | 40.9                  | -20.1                  | 53.52                      | -                  | -           | 74                  | -20.48         | 22             | 307         | V        |
|        | * 12.407        | 19.06                | VA1T | 40.9                  | -20.1                  | 39.86                      | 54                 | -14.14      | -                   | -              | 22             | 307         | V        |

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE0190811 (dB/m) | Amp/Cbl/Fit r/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      | * 1.275         | 43.79                | PKFH | 24.4                 | -24                    | 44.19                      | -                  | -           | 74                  | -29.81         | 125            | 185         | H        |
|        | * 1.279         | 29.91                | VA1T | 24.4                 | -23.9                  | 30.41                      | 54                 | -23.59      | -                   | -              | 125            | 185         | H        |
| 2      | * 3.94          | 39.87                | PKFH | 31.5                 | -31.7                  | 39.67                      | -                  | -           | 74                  | -34.33         | 349            | 178         | H        |
|        | * 3.939         | 26.66                | VA1T | 31.5                 | -31.7                  | 26.46                      | 54                 | -27.54      | -                   | -              | 349            | 178         | H        |
| 3      | * 12.442        | 32.04                | PKFH | 40.9                 | -20.1                  | 52.84                      | -                  | -           | 74                  | -21.16         | 140            | 320         | H        |
|        | * 12.443        | 19.06                | VA1T | 40.9                 | -20.1                  | 39.86                      | 54                 | -14.14      | -                   | -              | 140            | 320         | H        |
| 4      | * 3.929         | 40.55                | PKFH | 31.4                 | -31.7                  | 40.25                      | -                  | -           | 74                  | -33.75         | 270            | 239         | V        |
|        | * 3.93          | 27.01                | VA1T | 31.4                 | -31.7                  | 26.71                      | 54                 | -27.29      | -                   | -              | 270            | 239         | V        |
| 5      | * 8.219         | 35.36                | PKFH | 38                   | -24.9                  | 48.46                      | -                  | -           | 74                  | -25.54         | 97             | 200         | V        |
|        | * 8.219         | 22.21                | VA1T | 38                   | -24.9                  | 35.31                      | 54                 | -18.69      | -                   | -              | 97             | 200         | V        |
| 6      | 17.217          | 31.71                | PKFH | 43.4                 | -16.6                  | 58.51                      | -                  | -           | -                   | -              | 233            | 184         | V        |

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

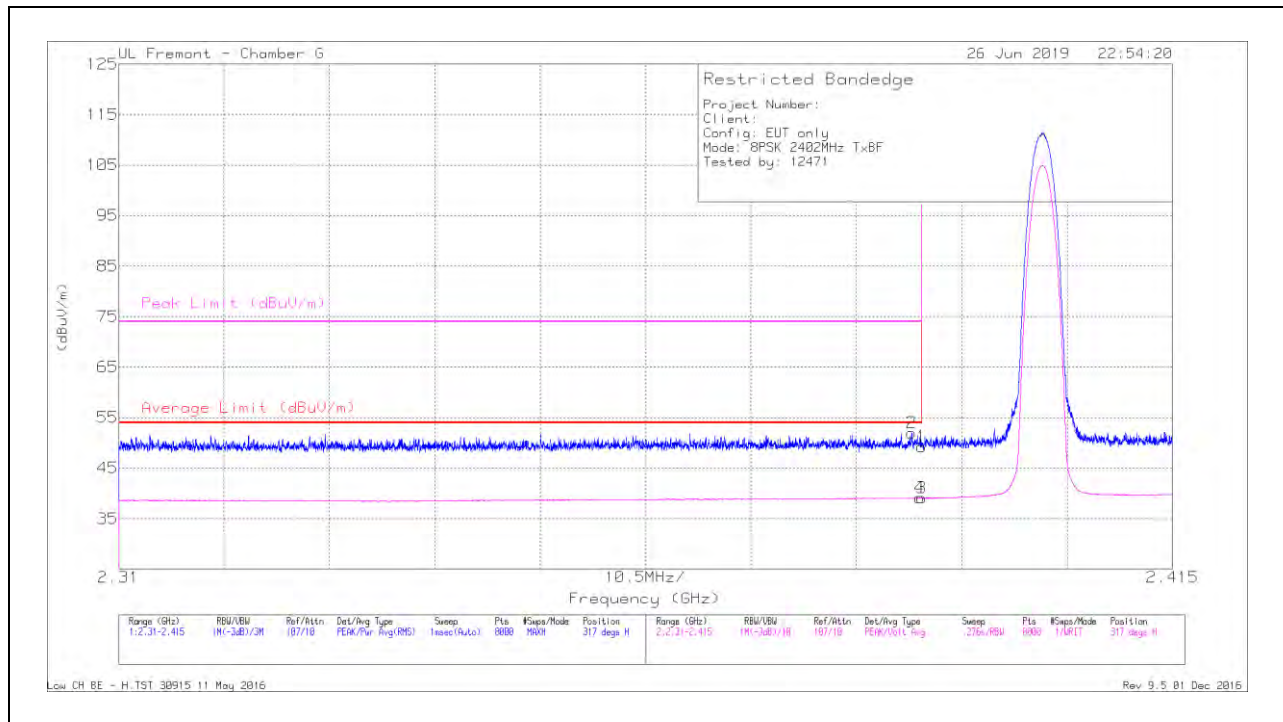
PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 9.2.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



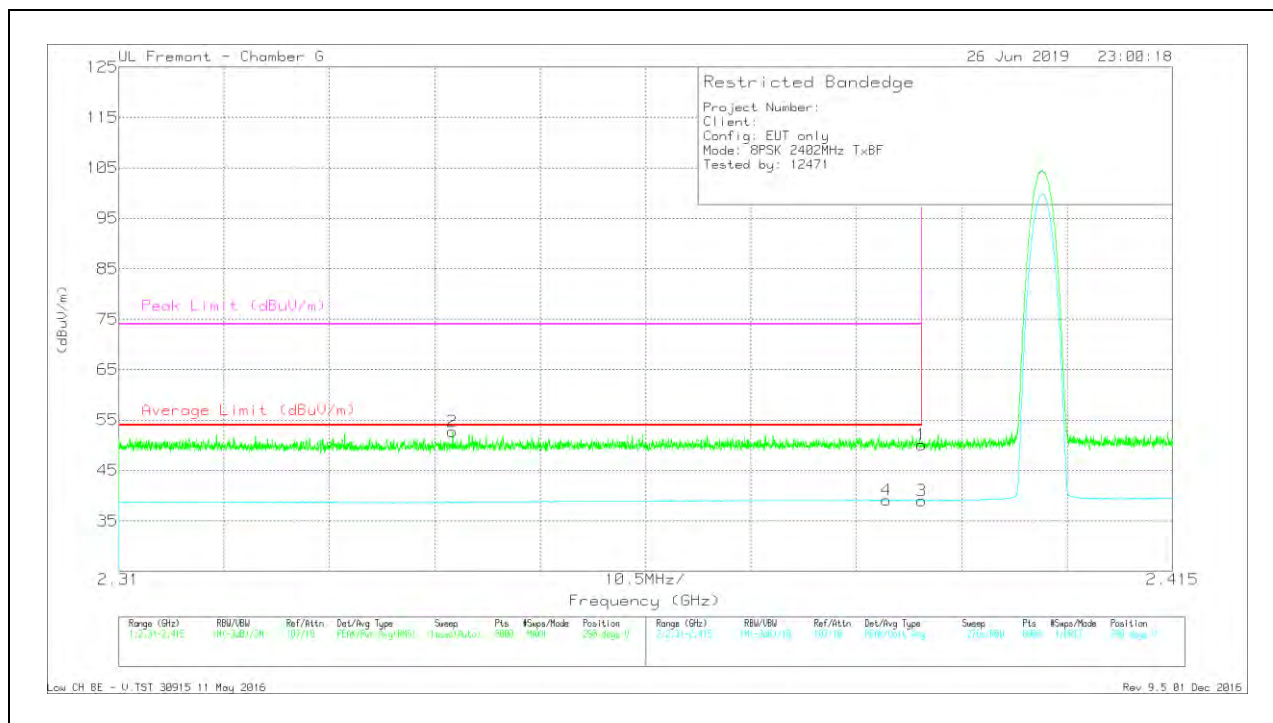
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | Af T120 (dB/m) | Amp/Cbl/Ftr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 39.54                | Pk   | 31.9           | -22.2                 | 49.24                      | -                      | -           | 74                  | -24.76         | 317            | 163         | H        |
| 2      | * 2.389         | 42.21                | Pk   | 31.9           | -22.2                 | 51.91                      | -                      | -           | 74                  | -22.09         | 317            | 163         | H        |
| 3      | * 2.39          | 29.39                | VA1T | 31.9           | -22.2                 | 39.09                      | 54                     | -14.91      | -                   | -              | 317            | 163         | H        |
| 4      | * 2.39          | 29.39                | VA1T | 31.9           | -22.2                 | 39.09                      | 54                     | -14.91      | -                   | -              | 317            | 163         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (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          | 40.35                | Pk   | 31.9           | -22.2                 | 50.05                      | -                      | -           | 74                  | -23.95         | 298            | 391         | V        |
| 2      | * 2.343         | 43.35                | Pk   | 31.6           | -22.2                 | 52.75                      | -                      | -           | 74                  | -21.25         | 298            | 391         | V        |
| 3      | * 2.39          | 29.36                | VA1T | 31.9           | -22.2                 | 39.06                      | 54                     | -14.94      | -                   | -              | 298            | 391         | V        |
| 4      | * 2.387         | 29.42                | VA1T | 31.9           | -22.2                 | 39.12                      | 54                     | -14.88      | -                   | -              | 298            | 391         | V        |

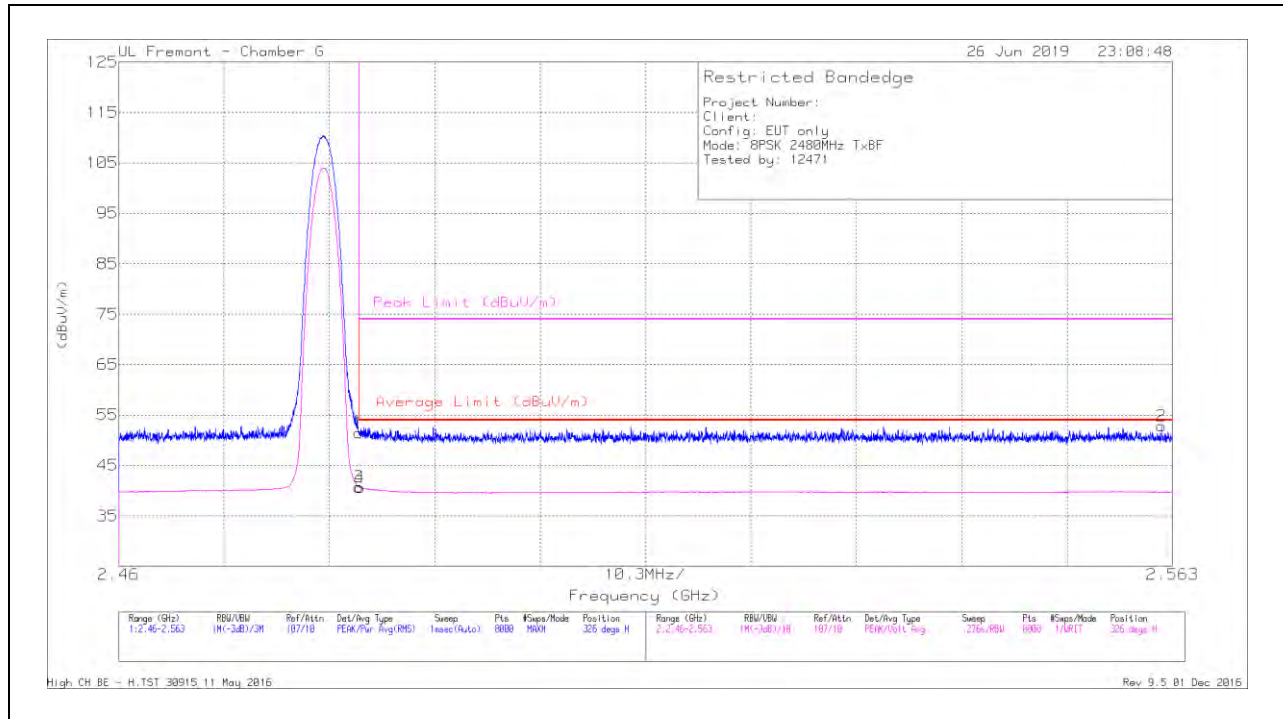
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

# **BANDEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



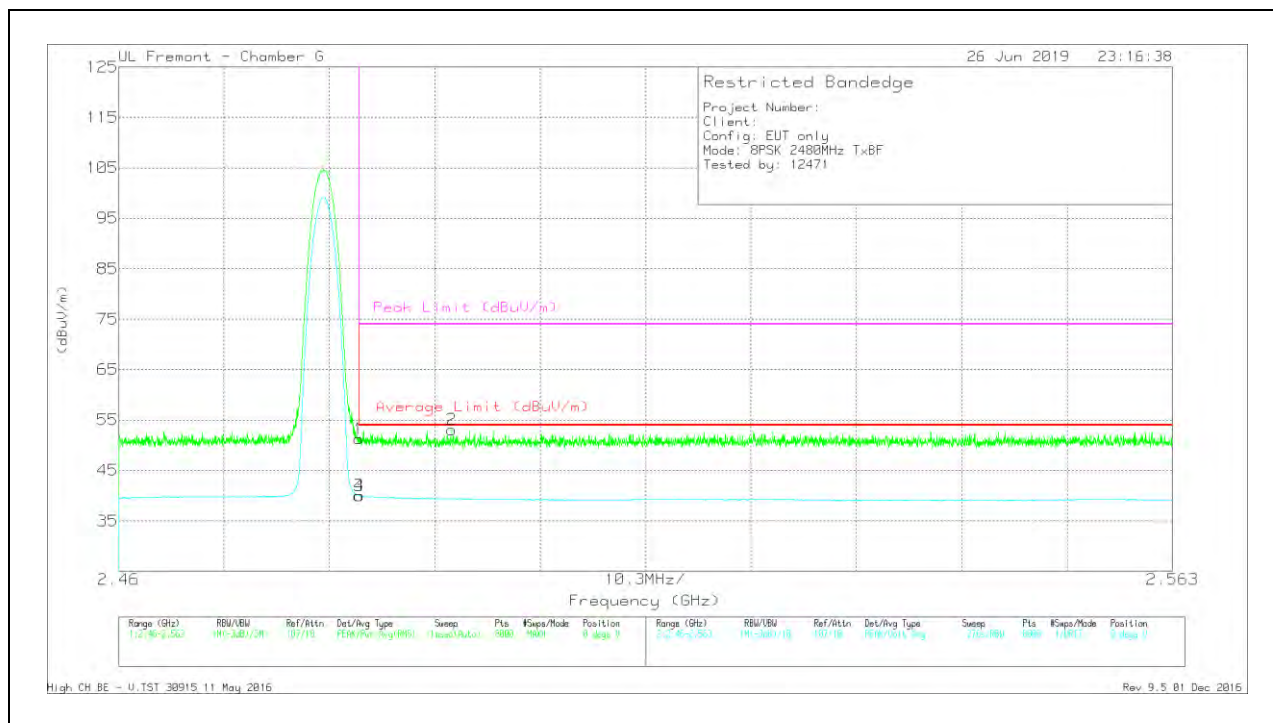
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (dB/m) | Amp/Cbl/Ftr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 41.11                | Pk   | 32.4           | -22.1                | 51.41                      | -                      | -           | 74                  | -22.59         | 326            | 311         | H        |
| 3      | * 2.484         | 30.43                | VA1T | 32.4           | -22.1                | 40.73                      | 54                     | -13.27      | -                   | -              | 326            | 310         | H        |
| 4      | * 2.484         | 30.36                | VA1T | 32.4           | -22.1                | 40.66                      | 54                     | -13.34      | -                   | -              | 326            | 310         | H        |
| 2      | 2.562           | 42.68                | Pk   | 32.4           | -22.2                | 52.88                      | -                      | -           | 74                  | -21.12         | 326            | 311         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T120 (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      | * 2.484         | 40.98                | Pk   | 32.4           | -22.1                 | 51.28                      | -                      | -           | 74                  | -22.72         | 0              | 403         | V        |
| 2      | * 2.493         | 42.84                | Pk   | 32.4           | -22.2                 | 53.04                      | -                      | -           | 74                  | -20.96         | 0              | 403         | V        |
| 3      | * 2.484         | 29.66                | VA1T | 32.4           | -22.1                 | 39.96                      | 54                     | -14.04      | -                   | -              | 0              | 403         | V        |
| 4      | * 2.484         | 29.66                | VA1T | 32.4           | -22.1                 | 39.96                      | 54                     | -14.04      | -                   | -              | 0              | 403         | V        |

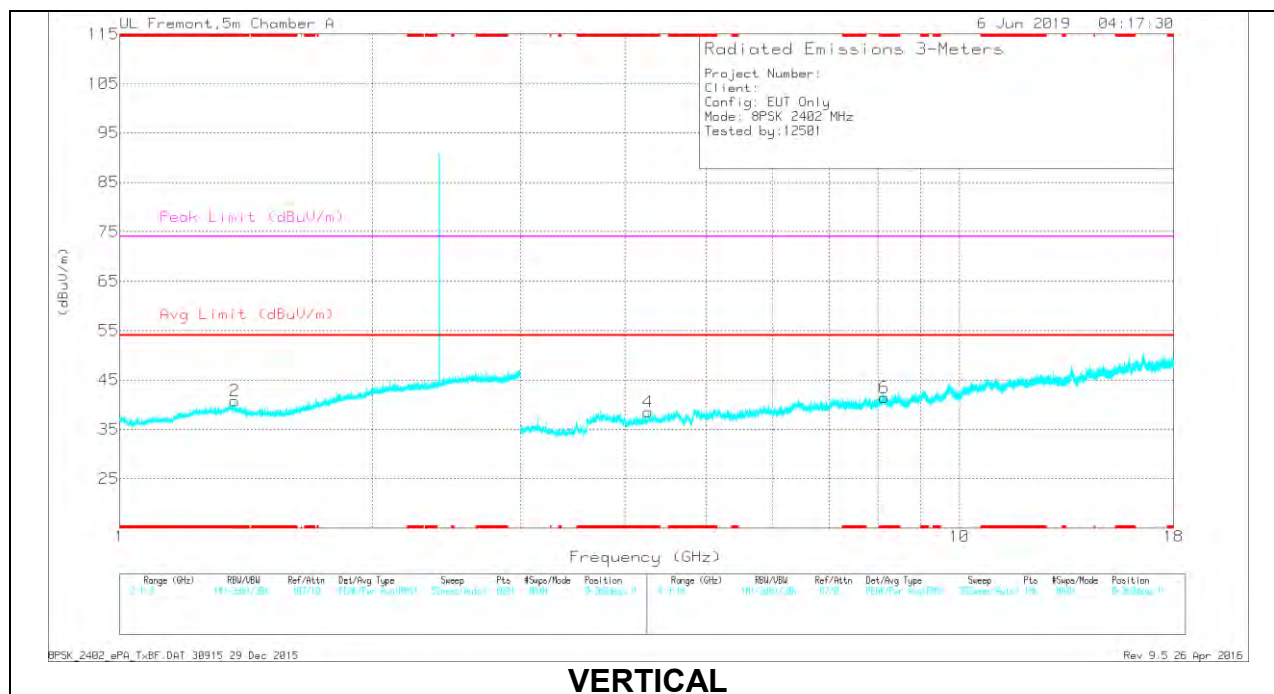
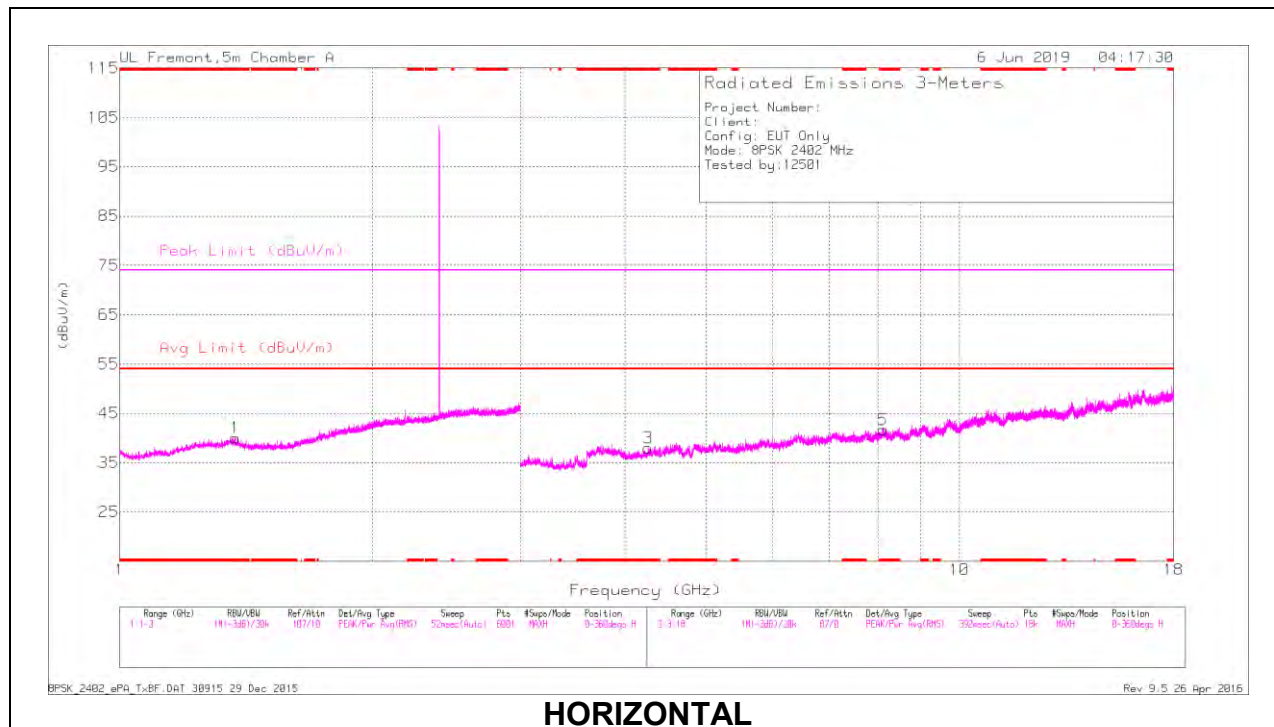
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $VB=1/T_{on}$  where:  $T_{on}$  is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

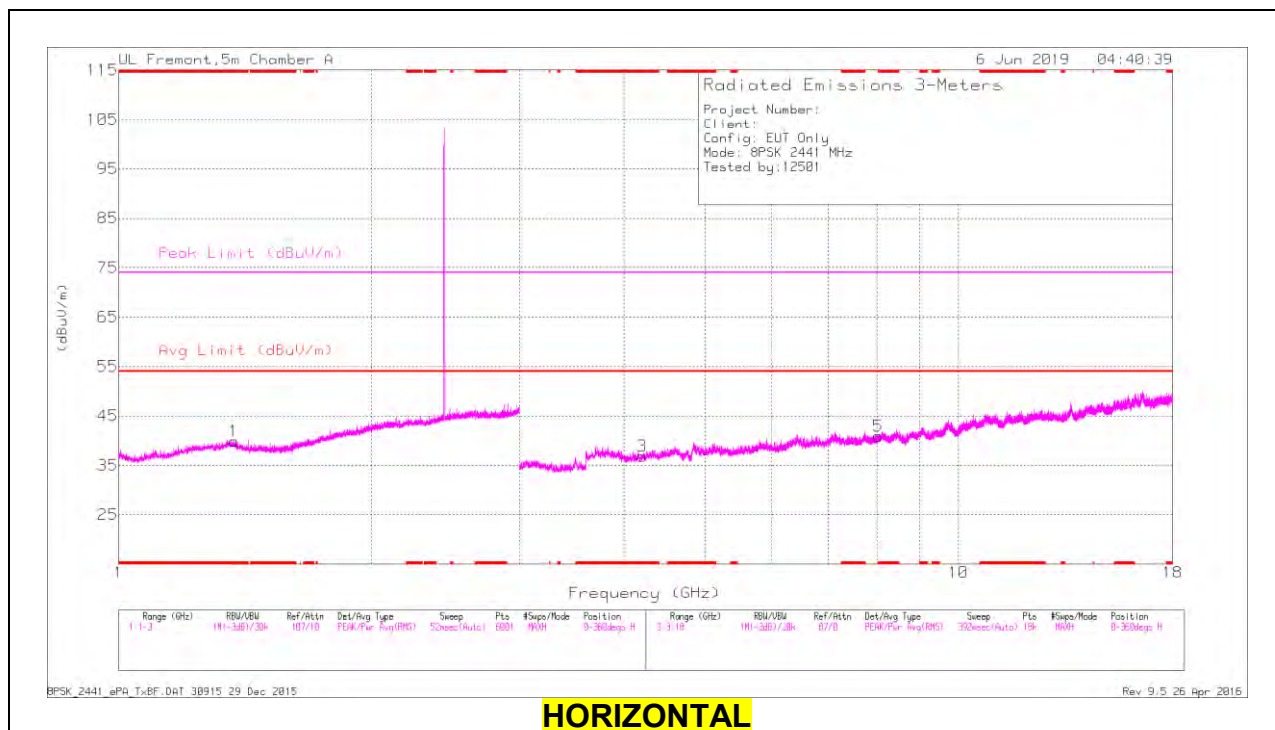
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.373         | 41.09                | PKFH | 29.4           | -25                    | 45.49                      | -                  | -           | 74                  | -28.51         | 75             | 140         | H        |
|        | * 1.375         | 29.64                | VA1T | 29.3           | -25                    | 33.94                      | 54                 | -20.06      | -                   | -              | 75             | 140         | H        |
| 2      | * 1.371         | 40.42                | PKFH | 29.5           | -25                    | 44.92                      | -                  | -           | 74                  | -29.08         | 65             | 155         | H        |
|        | * 1.373         | 29.63                | VA1T | 29.4           | -25                    | 34.03                      | 54                 | -19.97      | -                   | -              | 65             | 155         | H        |
| 3      | * 4.265         | 37.52                | PKFH | 33.5           | -28.2                  | 42.82                      | -                  | -           | 74                  | -31.18         | 80             | 156         | H        |
|        | * 4.263         | 26.8                 | VA1T | 33.5           | -28.2                  | 32.1                       | 54                 | -21.9       | -                   | -              | 80             | 156         | H        |
| 5      | * 8.113         | 35.06                | PKFH | 35.8           | -22.2                  | 48.66                      | -                  | -           | 74                  | -25.34         | 99             | 200         | H        |
|        | * 8.111         | 22.65                | VA1T | 35.8           | -22.2                  | 36.25                      | 54                 | -17.75      | -                   | -              | 99             | 200         | H        |
| 4      | * 4.261         | 38.31                | PKFH | 33.5           | -28.2                  | 43.61                      | -                  | -           | 74                  | -30.39         | 86             | 175         | V        |
|        | * 4.264         | 26.73                | VA1T | 33.5           | -28.2                  | 32.03                      | 54                 | -21.97      | -                   | -              | 86             | 175         | V        |
| 6      | * 8.141         | 33.96                | PKFH | 35.8           | -22.5                  | 47.26                      | -                  | -           | 74                  | -26.74         | 75             | 140         | V        |
|        | * 8.138         | 22.57                | VA1T | 35.7           | -22.5                  | 35.77                      | 54                 | -18.23      | -                   | -              | 75             | 140         | V        |

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

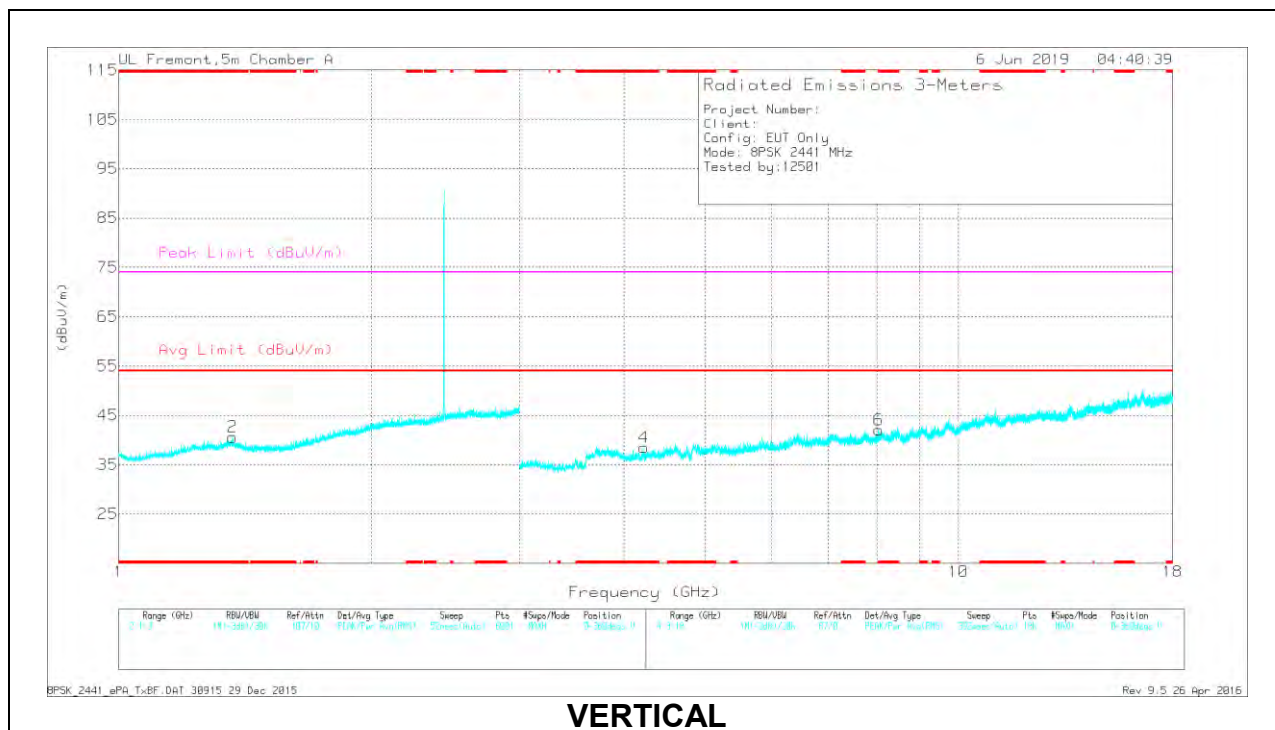
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## HORIZONTAL



## VERTICAL

## RADIATED EMISSIONS

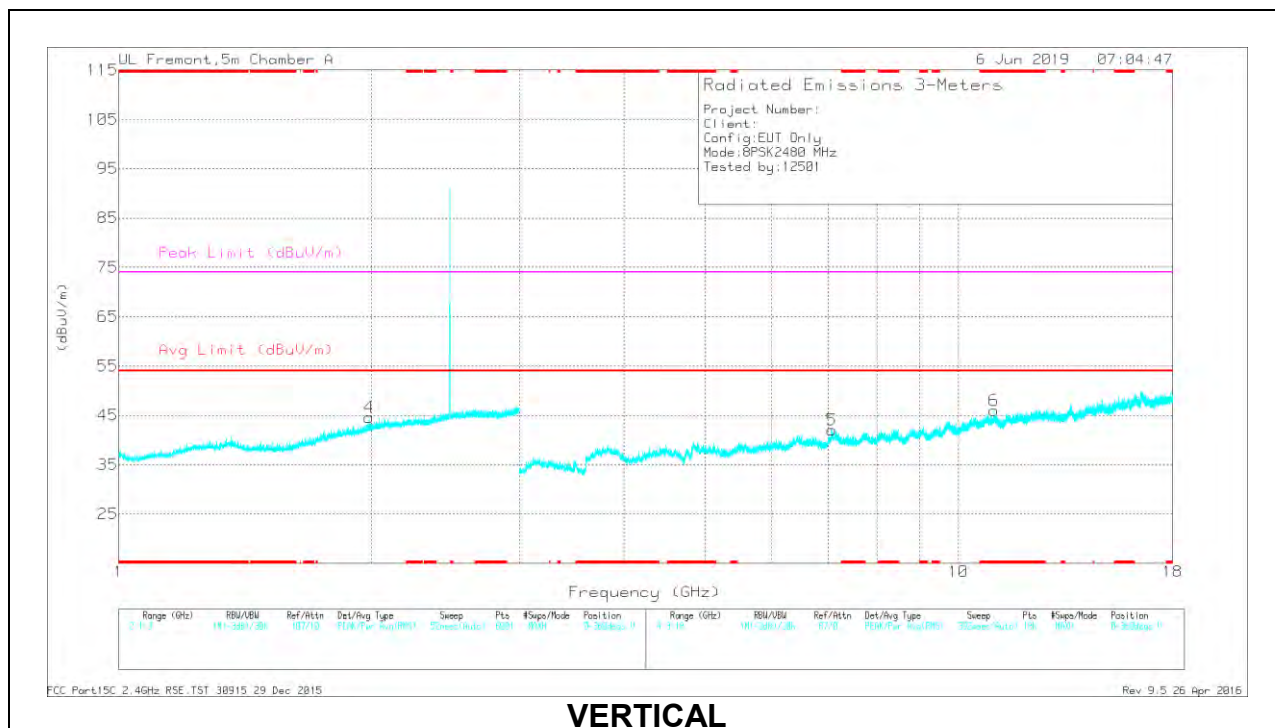
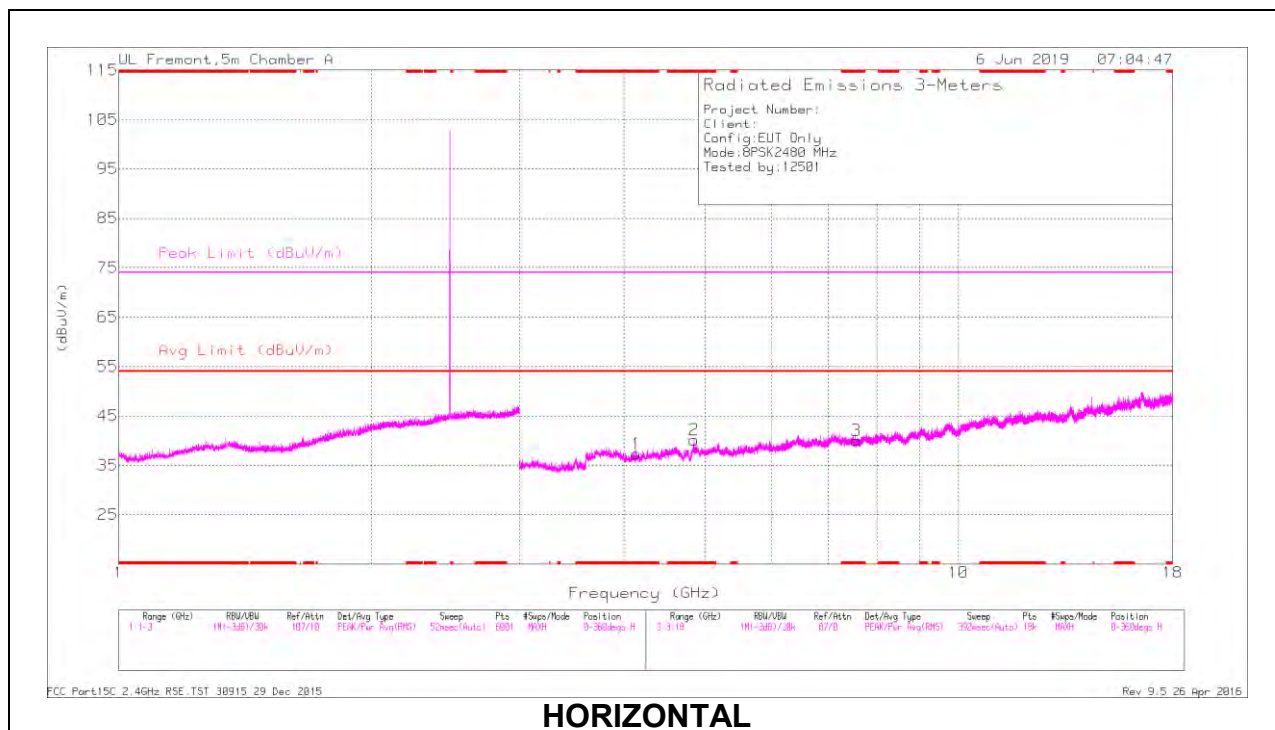
| Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Ftr/P ad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| * 1.372         | 40.81                | PKFH | 29.5           | -25                   | 45.31                      | -                  | -           | 74                  | -28.69         | 29             | 150         | H        |
| * 1.372         | 29.65                | VA1T | 29.5           | -25                   | 34.15                      | 54                 | -19.85      | -                   | -              | 29             | 150         | H        |
| * 1.366         | 41.09                | PKFH | 29.6           | -25                   | 45.69                      | -                  | -           | 74                  | -28.31         | 49             | 155         | V        |
| * 1.368         | 29.61                | VA1T | 29.6           | -25                   | 34.21                      | 54                 | -19.79      | -                   | -              | 49             | 155         | V        |
| * 4.204         | 38.96                | PKFH | 33.4           | -28.6                 | 43.76                      | -                  | -           | 74                  | -30.24         | 87             | 165         | H        |
| * 4.206         | 26.93                | VA1T | 33.4           | -28.6                 | 31.73                      | 54                 | -22.27      | -                   | -              | 87             | 165         | H        |
| * 8.027         | 35.28                | PKFH | 35.9           | -23.5                 | 47.68                      | -                  | -           | 74                  | -26.32         | 38             | 170         | H        |
| * 8.027         | 23.51                | VA1T | 35.9           | -23.5                 | 35.91                      | 54                 | -18.09      | -                   | -              | 38             | 170         | H        |
| * 4.225         | 38.15                | PKFH | 33.4           | -28                   | 43.55                      | -                  | -           | 74                  | -30.45         | 53             | 115         | V        |
| * 4.225         | 26.42                | VA1T | 33.4           | -28.1                 | 31.72                      | 54                 | -22.28      | -                   | -              | 53             | 115         | V        |
| * 8.037         | 35                   | PKFH | 35.8           | -23.3                 | 47.5                       | -                  | -           | 74                  | -26.5          | 76             | 135         | V        |
| * 8.038         | 23.39                | VA1T | 35.8           | -23.2                 | 35.99                      | 54                 | -18.01      | -                   | -              | 76             | 135         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Filtr/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 |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 4.141         | 38.39                | PKFH | 33.4           | -28.9                   | 42.89                      | -                  | -           | 74                  | -31.11         | 63             | 105         | H        |
|        | * 4.141         | 27.02                | VA1T | 33.4           | -28.9                   | 31.52                      | 54                 | -22.48      | -                   | -              | 63             | 105         | H        |
| 2      | * 4.844         | 38.83                | PKFH | 34.3           | -27                     | 46.13                      | -                  | -           | 74                  | -27.87         | 87             | 193         | H        |
|        | * 4.846         | 27.01                | VA1T | 34.3           | -27                     | 34.31                      | 54                 | -19.69      | -                   | -              | 87             | 193         | H        |
| 3      | * 7.559         | 34.57                | PKFH | 35.7           | -23.7                   | 46.57                      | -                  | -           | 74                  | -27.43         | 191            | 131         | H        |
|        | * 7.562         | 22.78                | VA1T | 35.7           | -23.8                   | 34.68                      | 54                 | -19.32      | -                   | -              | 191            | 131         | H        |
| 6      | * 11.037        | 34.71                | PKFH | 37.9           | -20.3                   | 52.31                      | -                  | -           | 74                  | -21.69         | 176            | 284         | V        |
|        | * 11.037        | 21.91                | VA1T | 37.9           | -20.3                   | 39.51                      | 54                 | -14.49      | -                   | -              | 176            | 284         | V        |
| 4      | 1.987           | 41.76                | PKFH | 31.5           | -23.7                   | 49.56                      | -                  | -           | -                   | -              | 32             | 162         | V        |
| 5      | 7.077           | 36.52                | PKFH | 36             | -23.6                   | 48.92                      | -                  | -           | -                   | -              | 41             | 201         | V        |

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

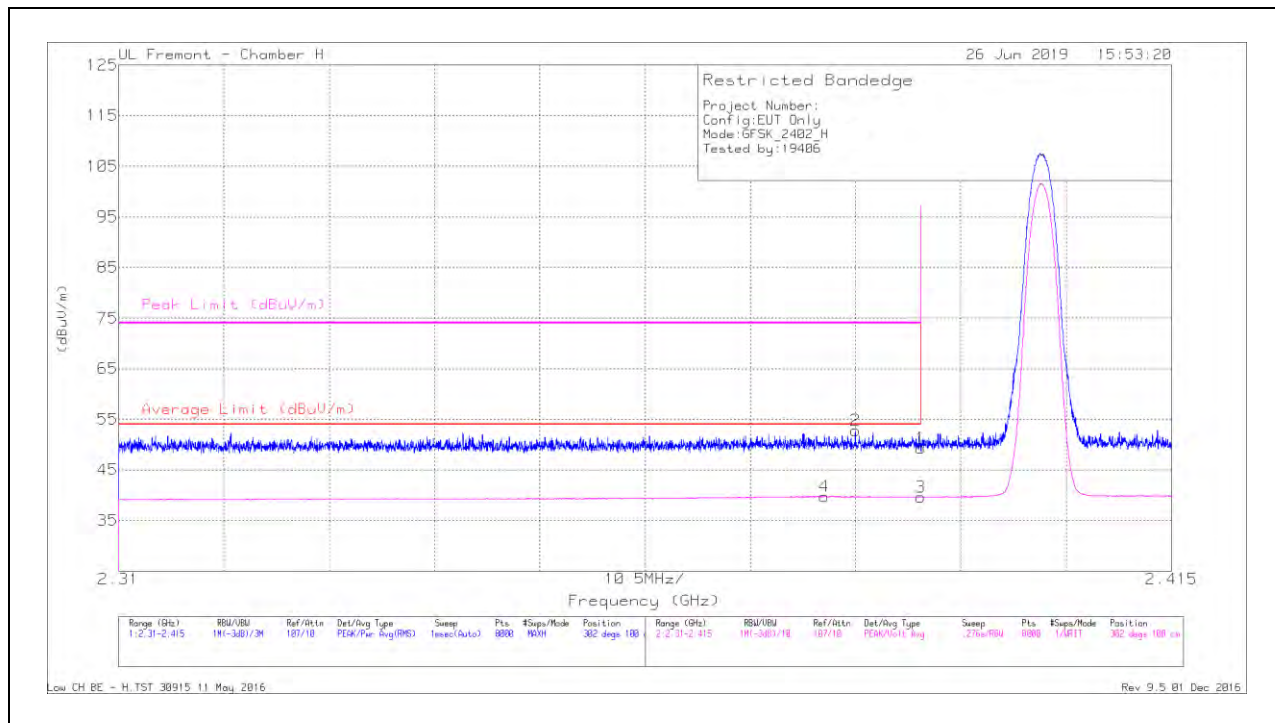
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 9.2.3. LOW POWER BASIC DATA RATE GFSK MODULATION

### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



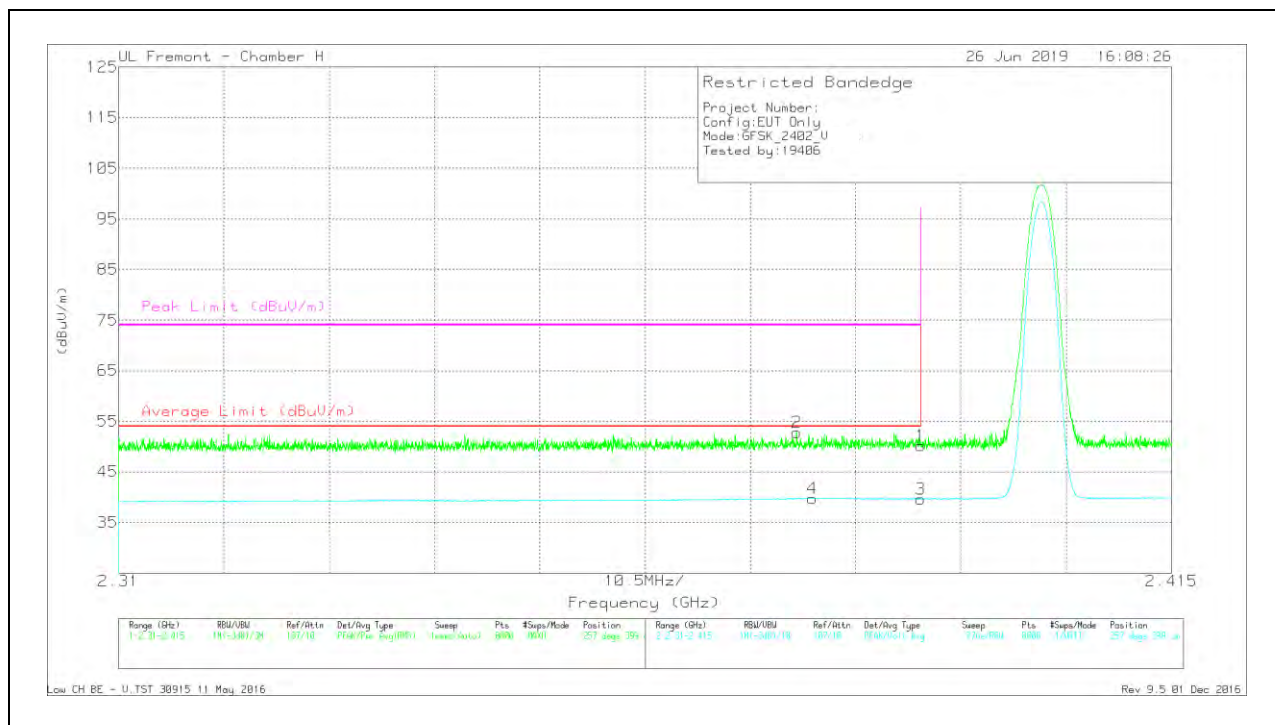
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cb/Fltr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 40.75                | Pk   | 32.1           | -23.5                 | 49.35                      | -                      | -           | 74                  | -24.65         | 302            | 100         | H        |
| 2      | * 2.383         | 44.21                | Pk   | 32.1           | -23.5                 | 52.81                      | -                      | -           | 74                  | -21.19         | 302            | 100         | H        |
| 3      | * 2.39          | 31.03                | VA1T | 32.1           | -23.5                 | 39.63                      | 54                     | -14.37      | -                   | -              | 302            | 100         | H        |
| 4      | * 2.38          | 31.04                | VA1T | 32.2           | -23.5                 | 39.74                      | 54                     | -14.26      | -                   | -              | 302            | 100         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (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          | 41.57                | Pk   | 32.1           | -23.5                  | 50.17                      | -                      | -           | 74                  | -23.83         | 257            | 399         | V        |
| 2      | * 2.378         | 44.02                | Pk   | 32.2           | -23.5                  | 52.72                      | -                      | -           | 74                  | -21.28         | 257            | 399         | V        |
| 3      | * 2.39          | 31.04                | VA1T | 32.1           | -23.5                  | 39.64                      | 54                     | -14.36      | -                   | -              | 257            | 399         | V        |
| 4      | * 2.379         | 31.08                | VA1T | 32.2           | -23.5                  | 39.78                      | 54                     | -14.22      | -                   | -              | 257            | 399         | V        |

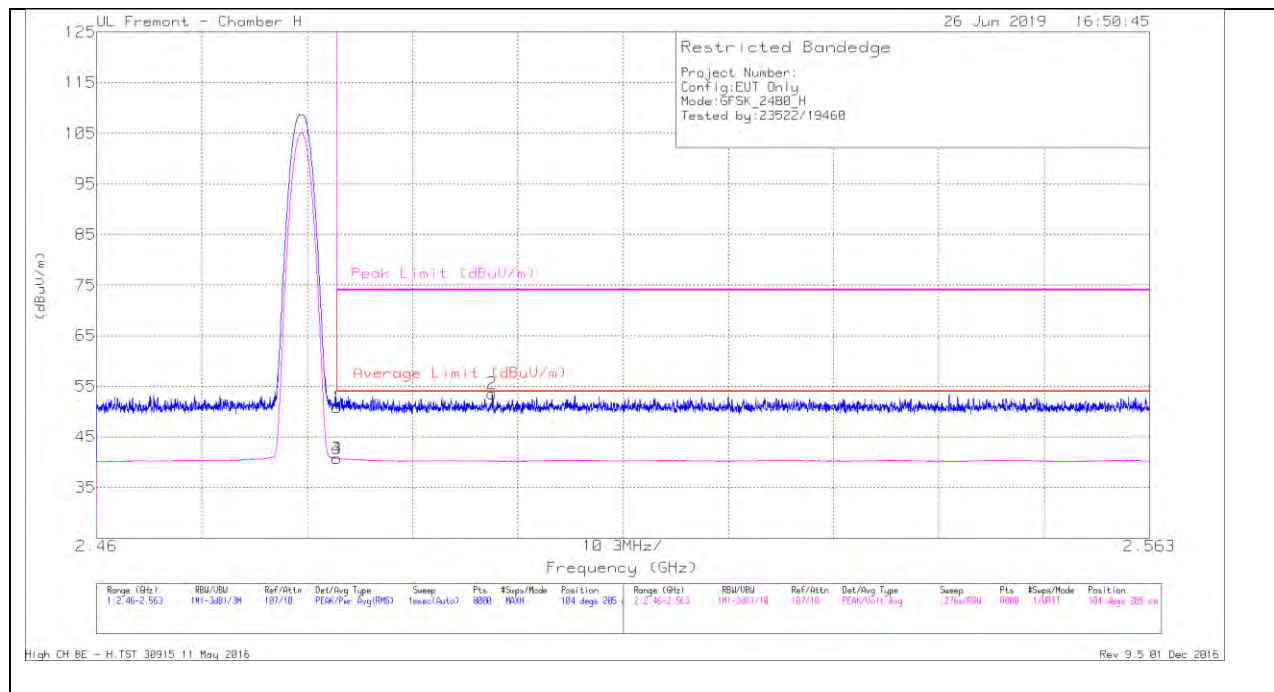
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

# **BANEDGE (HIGH CHANNEL)**

## **HORIZONTAL RESULT**



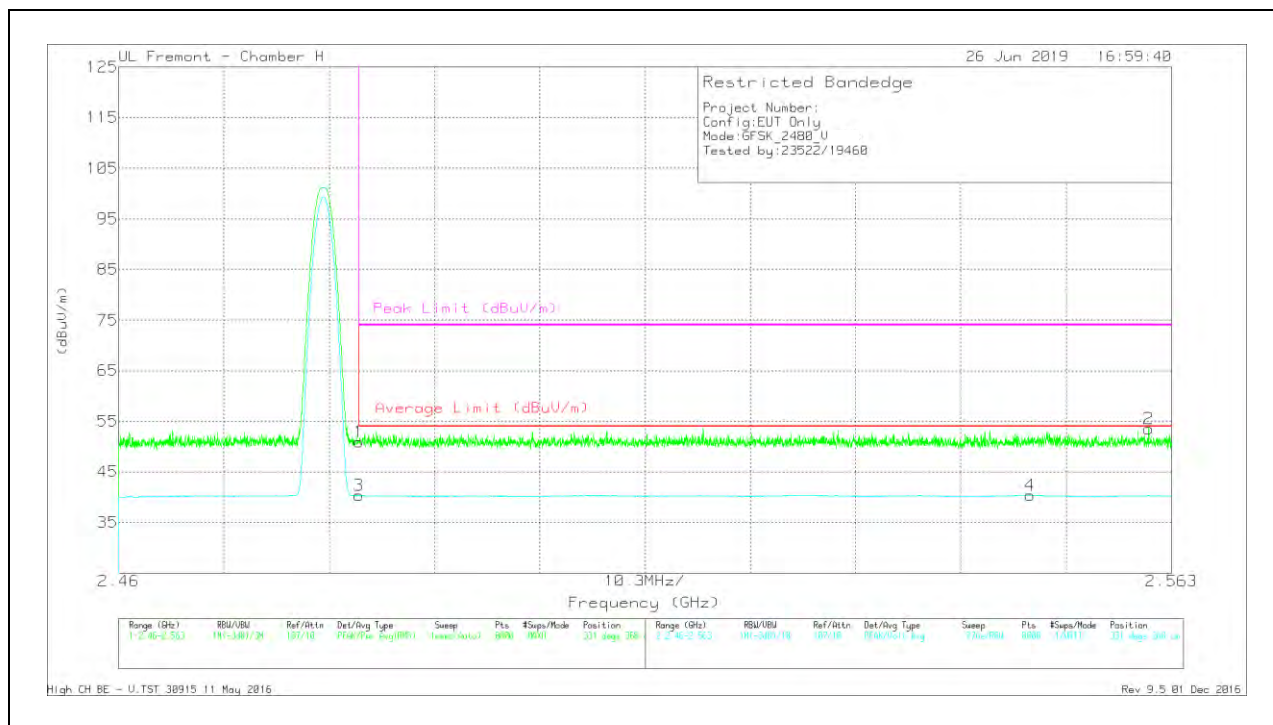
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filtr/Pa d (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 41.58                | Pk   | 32.5           | -23.3                   | 50.78                      | -                      | -           | 74                  | -23.22         | 104            | 205         | H        |
| 2      | * 2.499         | 44.38                | Pk   | 32.5           | -23.3                   | 53.58                      | -                      | -           | 74                  | -20.42         | 104            | 205         | H        |
| 3      | * 2.484         | 31.55                | VA1T | 32.5           | -23.3                   | 40.75                      | 54                     | -13.25      | -                   | -              | 104            | 205         | H        |
| 4      | * 2.484         | 31.55                | VA1T | 32.5           | -23.3                   | 40.75                      | 54                     | -13.25      | -                   | -              | 104            | 205         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (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      | * 2.484         | 41.75                | Pk   | 32.5           | -23.3                  | 50.95                      | -                      | -           | 74                  | -23.05         | 331            | 368         | V        |
| 3      | * 2.484         | 31.12                | VA1T | 32.5           | -23.3                  | 40.32                      | 54                     | -13.68      | -                   | -              | 331            | 368         | V        |
| 4      | 2.549           | 30.99                | VA1T | 32.5           | -23.1                  | 40.39                      | 54                     | -13.61      | -                   | -              | 331            | 368         | V        |
| 2      | 2.561           | 44.16                | Pk   | 32.5           | -23.1                  | 53.56                      | -                      | -           | 74                  | -20.44         | 331            | 368         | V        |

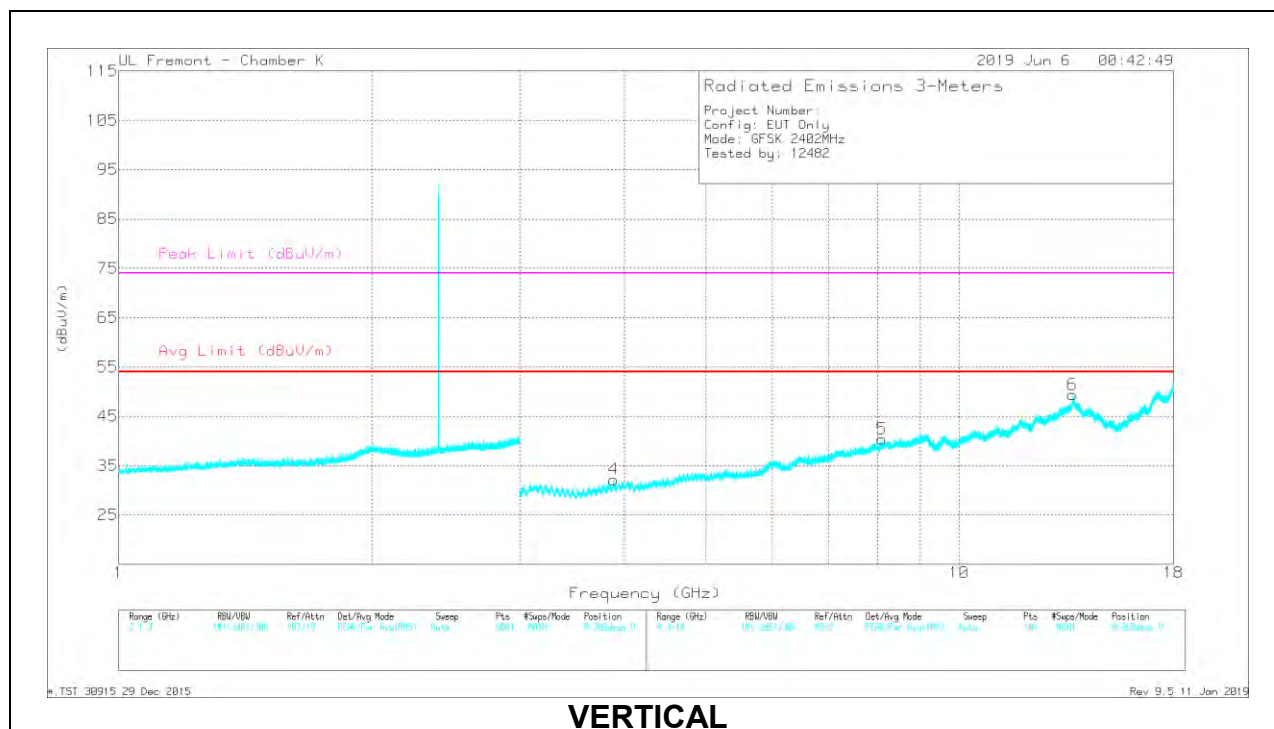
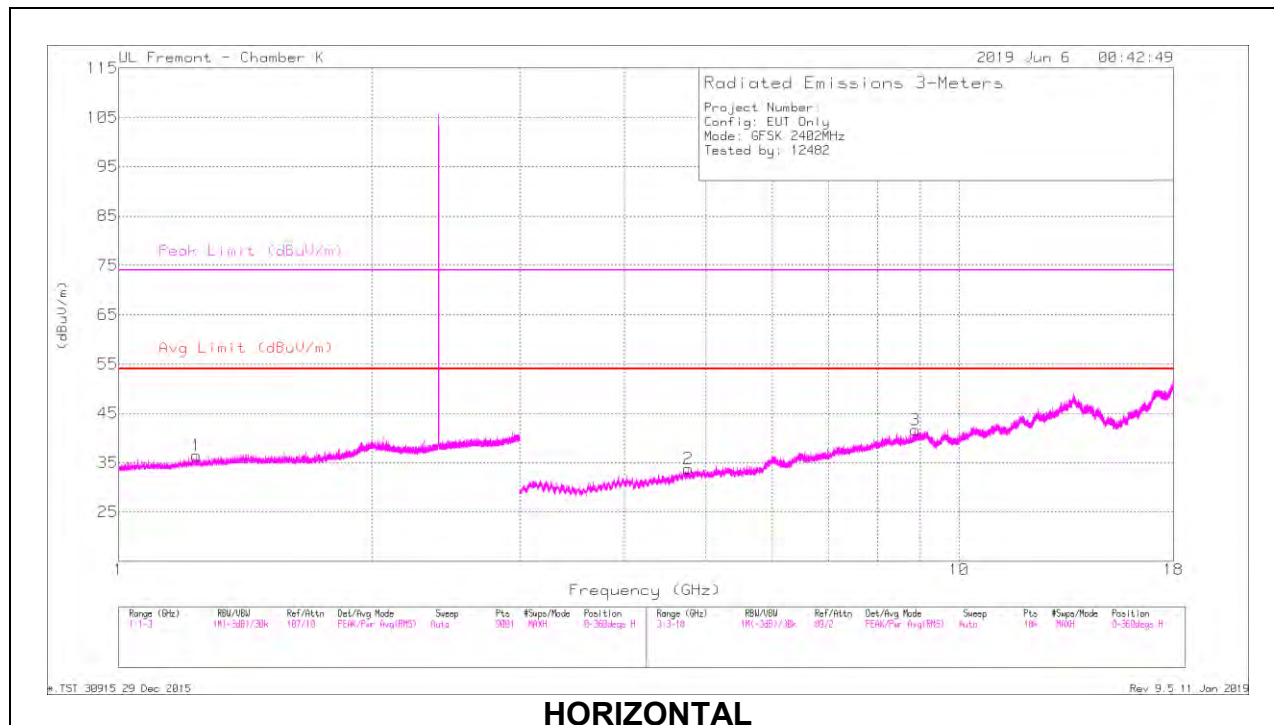
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

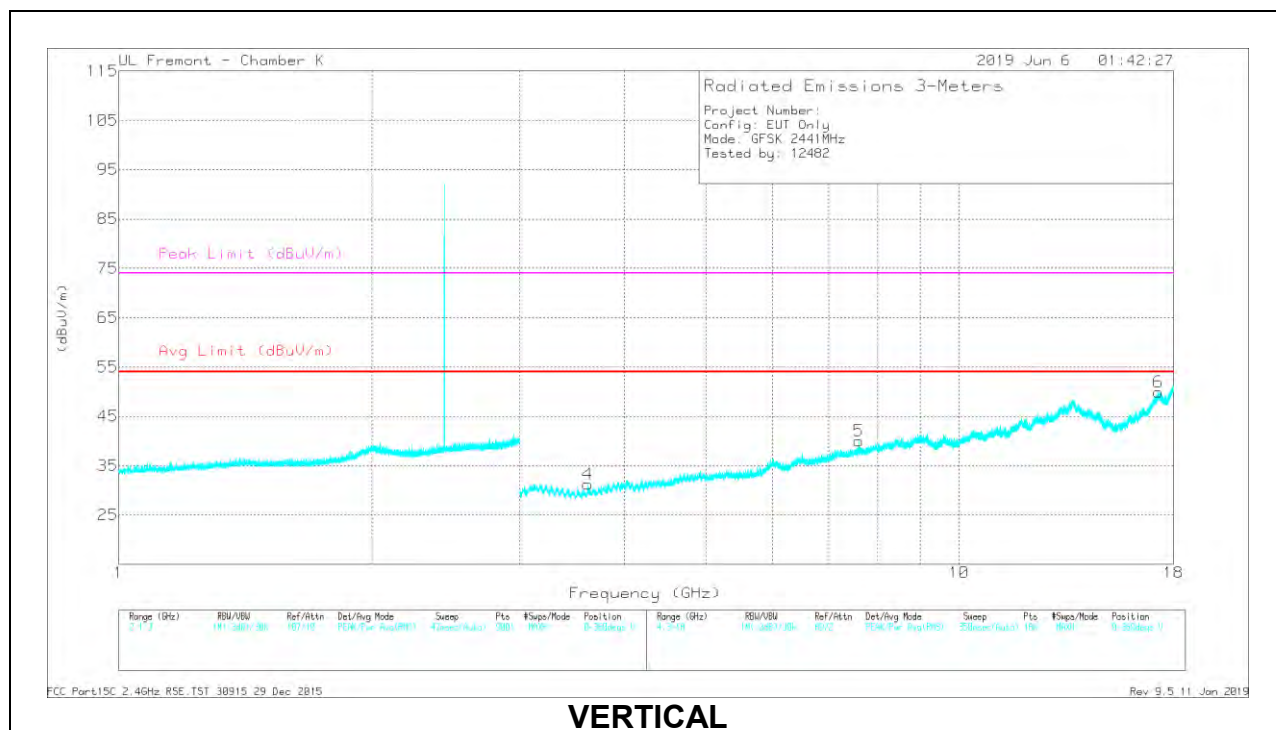
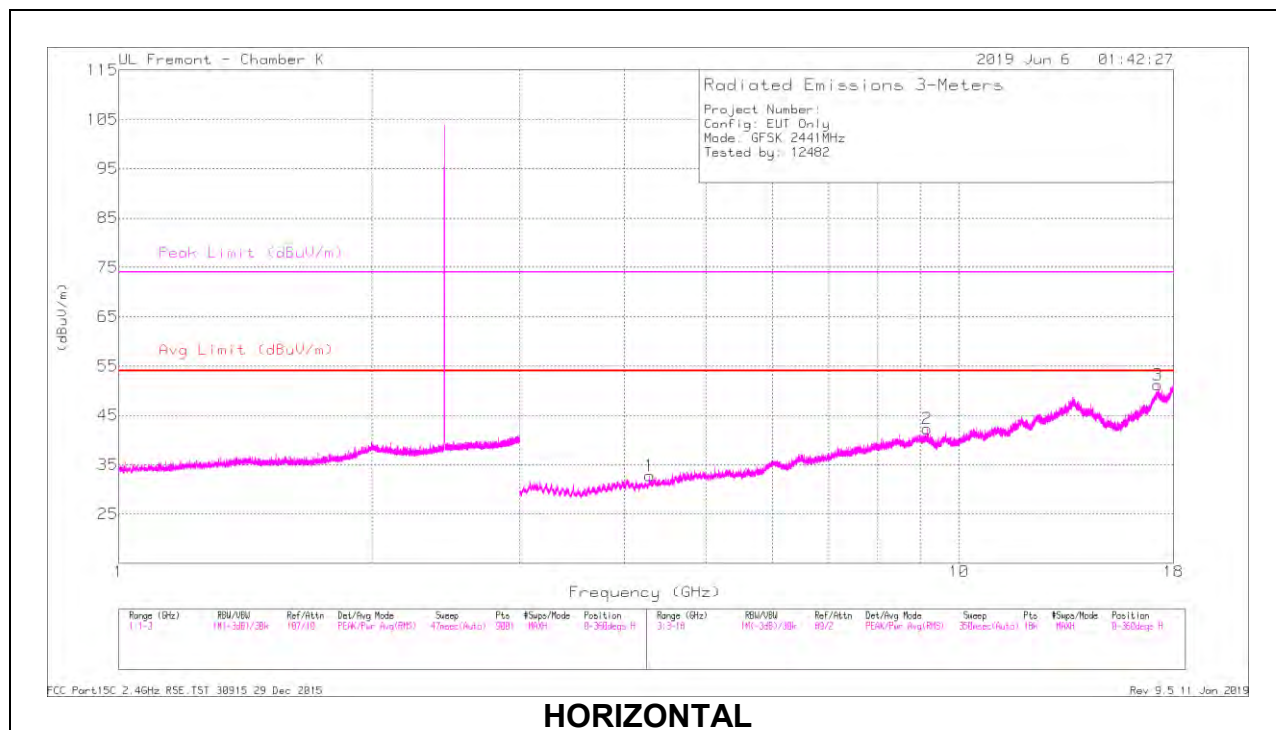
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE019081 1 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|-----------------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.238         | 43.22                | PKFH | 24.3                  | -23.9                  | 43.62                      | -                  | -           | 74                  | -30.38         | 267            | 155         | H        |
|        | * 1.237         | 30                   | VA1T | 24.3                  | -23.9                  | 30.4                       | 54                 | -23.6       | -                   | -              | 267            | 155         | H        |
| 2      | * 4.761         | 38.83                | PKFH | 32.8                  | -30.2                  | 41.43                      | -                  | -           | 74                  | -32.57         | 243            | 116         | H        |
|        | * 4.761         | 25.54                | VA1T | 32.8                  | -30.2                  | 28.14                      | 54                 | -25.86      | -                   | -              | 243            | 116         | H        |
| 3      | 8.865           | 34.43                | PKFH | 38.6                  | -23.9                  | 49.13                      | -                  | -           | -                   | -              | 179            | 265         | H        |
|        | 8.865           | 20.98                | VA1T | 38.6                  | -23.9                  | 35.68                      | -                  | -           | -                   | -              | 179            | 265         | H        |
| 4      | * 3.879         | 40.69                | PKFH | 31.3                  | -31.7                  | 40.29                      | -                  | -           | 74                  | -33.71         | 247            | 140         | V        |
|        | * 3.882         | 26.88                | VA1T | 31.3                  | -31.6                  | 26.58                      | 54                 | -27.42      | -                   | -              | 247            | 140         | V        |
| 5      | * 8.102         | 36.01                | PKFH | 37.9                  | -25.5                  | 48.41                      | -                  | -           | 74                  | -25.59         | 40             | 302         | V        |
|        | * 8.102         | 21.98                | VA1T | 37.9                  | -25.5                  | 34.38                      | 54                 | -19.62      | -                   | -              | 40             | 302         | V        |
| 6      | 13.647          | 30.93                | PKFH | 43.1                  | -18.5                  | 55.53                      | -                  | -           | -                   | -              | 275            | 170         | V        |

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

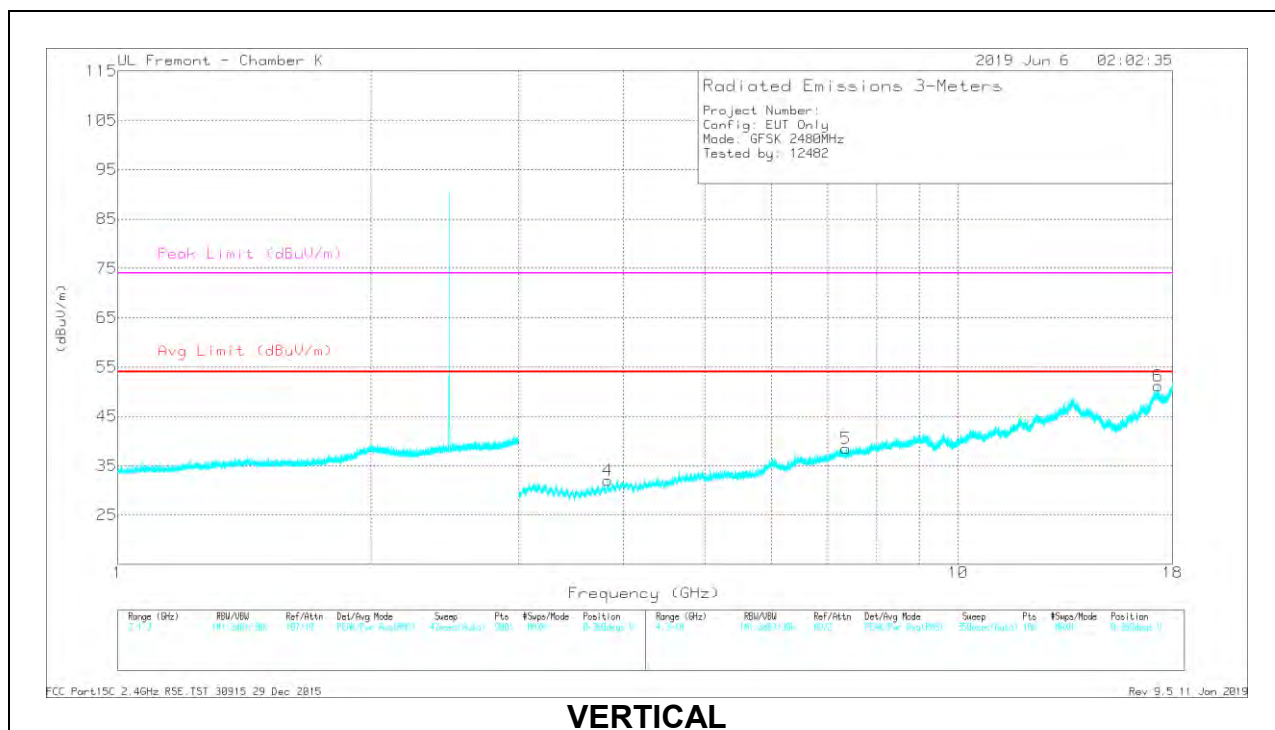
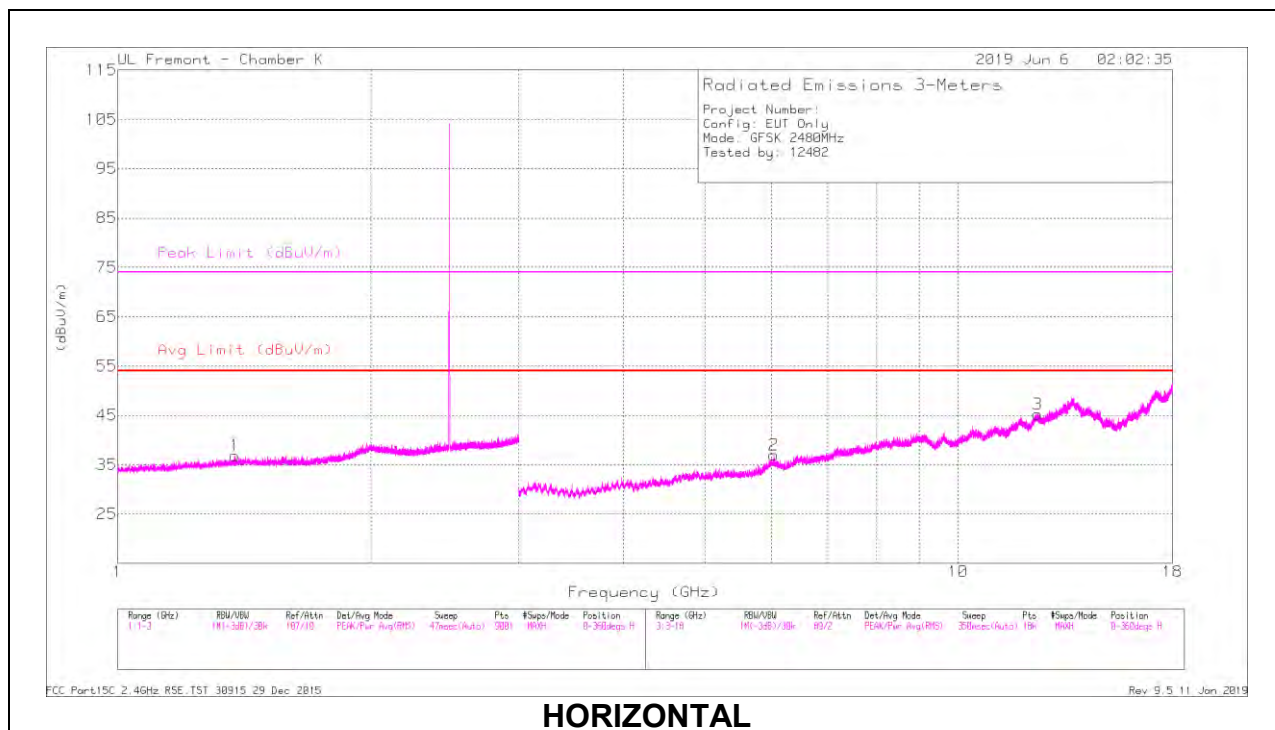
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE019081 1 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|-----------------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 4.285         | 40.28                | PKFH | 31.4                  | -31.4                  | 40.28                      | -                  | -           | 74                  | -33.72         | 111            | 226         | H        |
|        | * 4.287         | 26.81                | VA1T | 31.4                  | -31.4                  | 26.81                      | 54                 | -27.19      | -                   | -              | 111            | 226         | H        |
| 2      | * 9.166         | 33.95                | PKFH | 38.6                  | -22.9                  | 49.65                      | -                  | -           | 74                  | -24.35         | 123            | 189         | H        |
|        | * 9.169         | 20.36                | VA1T | 38.6                  | -22.9                  | 36.06                      | 54                 | -17.94      | -                   | -              | 123            | 189         | H        |
| 3      | 17.245          | 31.68                | PKFH | 43.3                  | -16.5                  | 58.48                      | -                  | -           | -                   | -              | 93             | 302         | H        |
| 4      | * 3.614         | 40.92                | PKFH | 29.9                  | -32.2                  | 38.62                      | -                  | -           | 74                  | -35.38         | 323            | 102         | V        |
|        | * 3.618         | 27.6                 | VA1T | 29.9                  | -32.2                  | 25.3                       | 54                 | -28.7       | -                   | -              | 323            | 102         | V        |
| 5      | * 7.608         | 35.44                | PKFH | 37.2                  | -25.4                  | 47.24                      | -                  | -           | 74                  | -26.76         | 114            | 151         | V        |
|        | * 7.606         | 21.63                | VA1T | 37.2                  | -25.4                  | 33.43                      | 54                 | -20.57      | -                   | -              | 114            | 151         | V        |
| 6      | 17.28           | 31.14                | PKFH | 43.2                  | -16                    | 58.34                      | -                  | -           | -                   | -              | 55             | 203         | V        |

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

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF PRE019081 1 (dB/m) | Amp/Cbl/Fit r/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      | * 1.377         | 43.75                | PKFH | 24.7                  | -23.8                  | 44.65                      | -                  | -           | 74                  | -29.35         | 358            | 146         | H        |
|        | * 1.379         | 30.09                | VA1T | 24.7                  | -23.8                  | 30.99                      | 54                 | -23.01      | -                   | -              | 358            | 146         | H        |
| 2      | 6.04            | 36.84                | PKFH | 35                    | -27.2                  | 44.64                      | -                  | -           | -                   | -              | 58             | 230         | H        |
| 3      | * 12.446        | 32.47                | PKFH | 40.9                  | -20.1                  | 53.27                      | -                  | -           | 74                  | -20.73         | 346            | 126         | H        |
|        | * 12.449        | 18.96                | VA1T | 40.9                  | -20.1                  | 39.76                      | 54                 | -14.24      | -                   | -              | 346            | 126         | H        |
| 4      | * 3.83          | 40.03                | PKFH | 31                    | -31.3                  | 39.73                      | -                  | -           | 74                  | -34.27         | 85             | 218         | V        |
|        | * 3.83          | 26.52                | VA1T | 31                    | -31.3                  | 26.22                      | 54                 | -27.78      | -                   | -              | 85             | 218         | V        |
| 5      | * 7.35          | 35.87                | PKFH | 37.1                  | -26.4                  | 46.57                      | -                  | -           | 74                  | -27.43         | 199            | 232         | V        |
|        | * 7.352         | 22.18                | VA1T | 37.1                  | -26.4                  | 32.88                      | 54                 | -21.12      | -                   | -              | 199            | 232         | V        |
| 6      | 17.291          | 30.97                | PKFH | 43.2                  | -15.9                  | 58.27                      | -                  | -           | -                   | -              | 268            | 216         | V        |

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

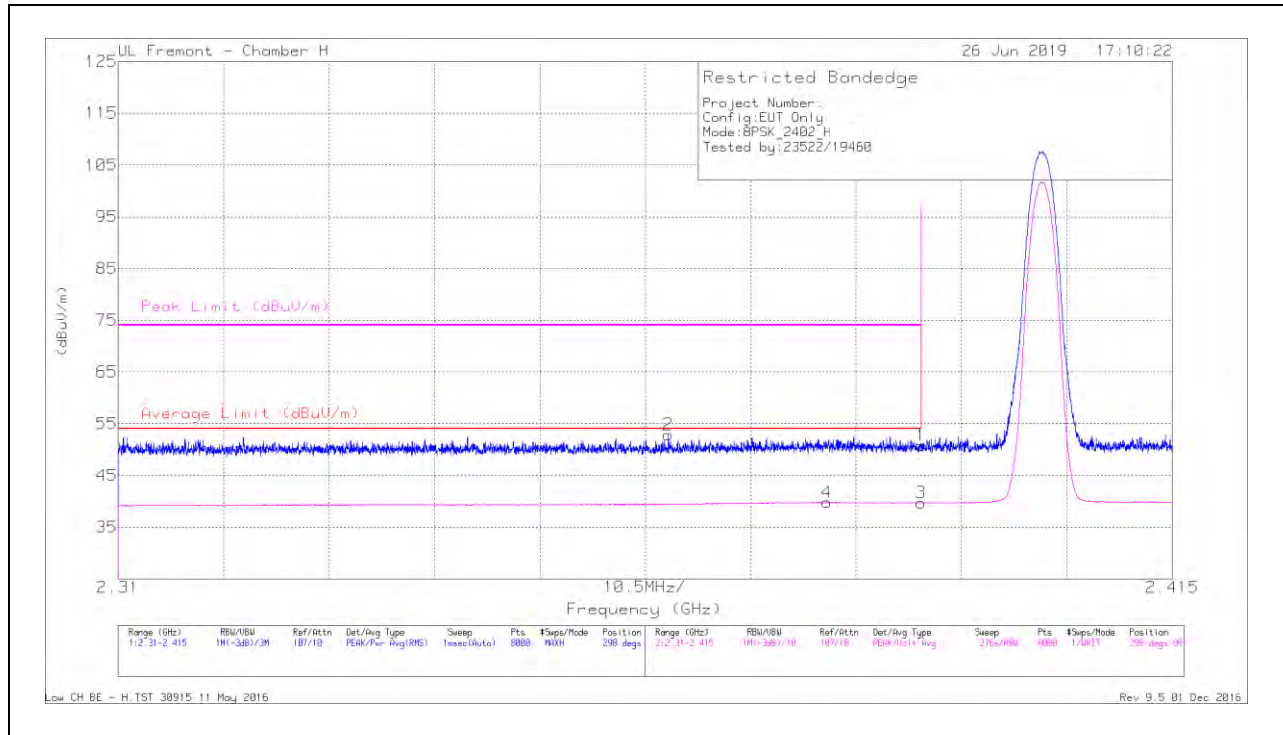
PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 9.2.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (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 |
|--------|-----------------|----------------------|------|----------------|-----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2      | * 2.365         | 44.45                | Pk   | 32             | -23.6                 | 52.85                      | -                      | -           | 74                  | -21.15         | 298            | 98          | H        |
| 4      | * 2.381         | 31.1                 | VA1T | 32.2           | -23.5                 | 39.8                       | 54                     | -14.2       | -                   | -              | 298            | 98          | H        |
| 1      | * 2.39          | 42.17                | Pk   | 32.1           | -23.5                 | 50.77                      | -                      | -           | 74                  | -23.23         | 298            | 98          | H        |
| 3      | * 2.39          | 31.13                | VA1T | 32.1           | -23.5                 | 39.73                      | 54                     | -14.27      | -                   | -              | 298            | 98          | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

UL Fremont - Chamber H

26 Jun 2019 17:18:35

Restricted Bandedge

Project Number:  
Config: EUT Only  
Mode: 8PSK\_2402 U  
Tested by: 23522/19468

Peak Limit (dBuV/m)

Average Limit (dBuV/m)

dBuV/m

Frequency (GHz)

2.31 2.415

10.5MHz/

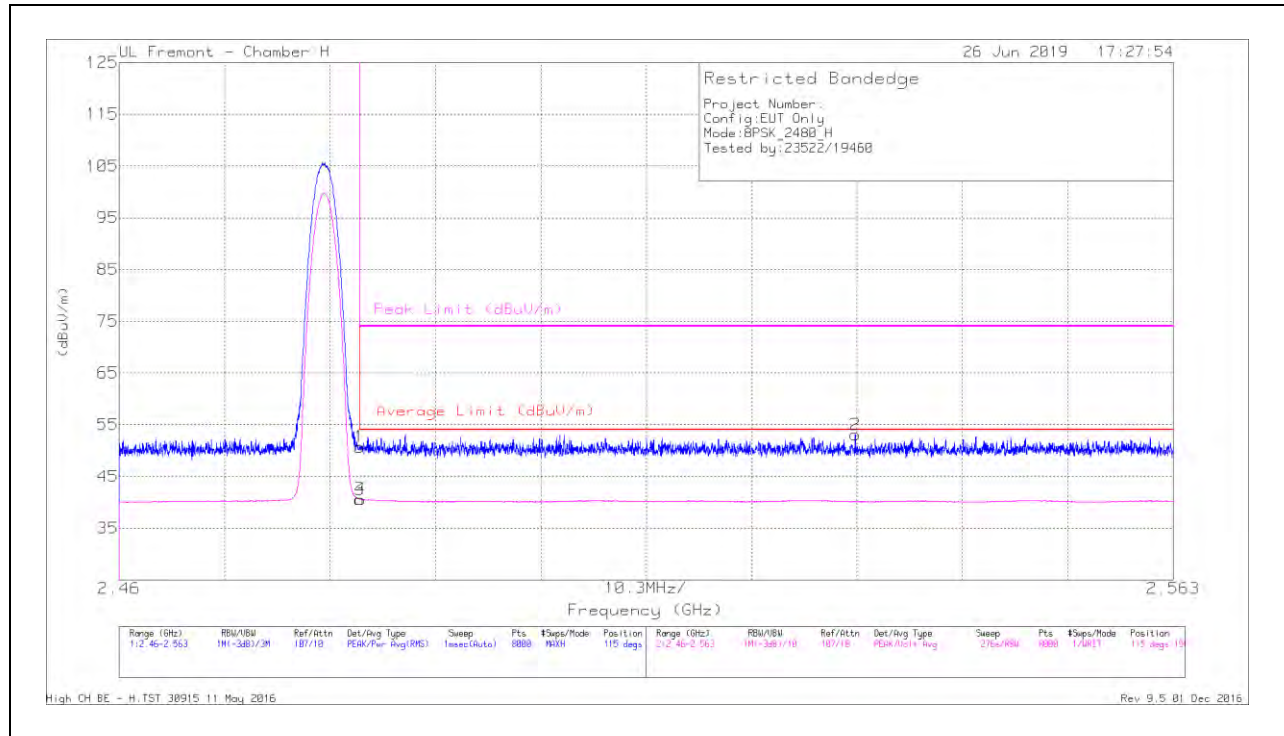
| Range (Hz) | RBW/VBW    | Ref/Att'n | Det/Avg Type | Sweep         | Pts  | #Sps/Mode | Position | Range (Hz) | RBW/VBW    | Ref/Att'n | Det/Avg Type | Sweep         | Pts  | #Sps/Mode | Position |
|------------|------------|-----------|--------------|---------------|------|-----------|----------|------------|------------|-----------|--------------|---------------|------|-----------|----------|
| 2.31-2.415 | 100-300-30 | 107/10    | PK-Avg       | 1 Sweep/100Hz | 4000 | 1000      | 210 deg  | 2.31-2.415 | 100-300-30 | 107/10    | PK-Avg       | 1 Sweep/100Hz | 4000 | 1000      | 210 deg  |

Low CH BE - U-TST 38915: 11 May 2016

Rev 9.5 01 Dec 2016

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (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          | 41.84                | PK   | 32.1           | -23.5                 | 50.44                      | -                      | -           | 74                  | -23.56         | 255            | 351         | V        |
| 2      | * 2.388         | 44.28                | PK   | 32.1           | -23.5                 | 52.88                      | -                      | -           | 74                  | -21.12         | 255            | 351         | V        |
| 3      | * 2.39          | 31.09                | VA1T | 32.1           | -23.5                 | 39.69                      | 54                     | -14.31      | -                   | -              | 255            | 351         | V        |
| 4      | * 2.382         | 31.07                | VA1T | 32.2           | -23.5                 | 39.77                      | 54                     | -14.23      | -                   | -              | 255            | 351         | V        |

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

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

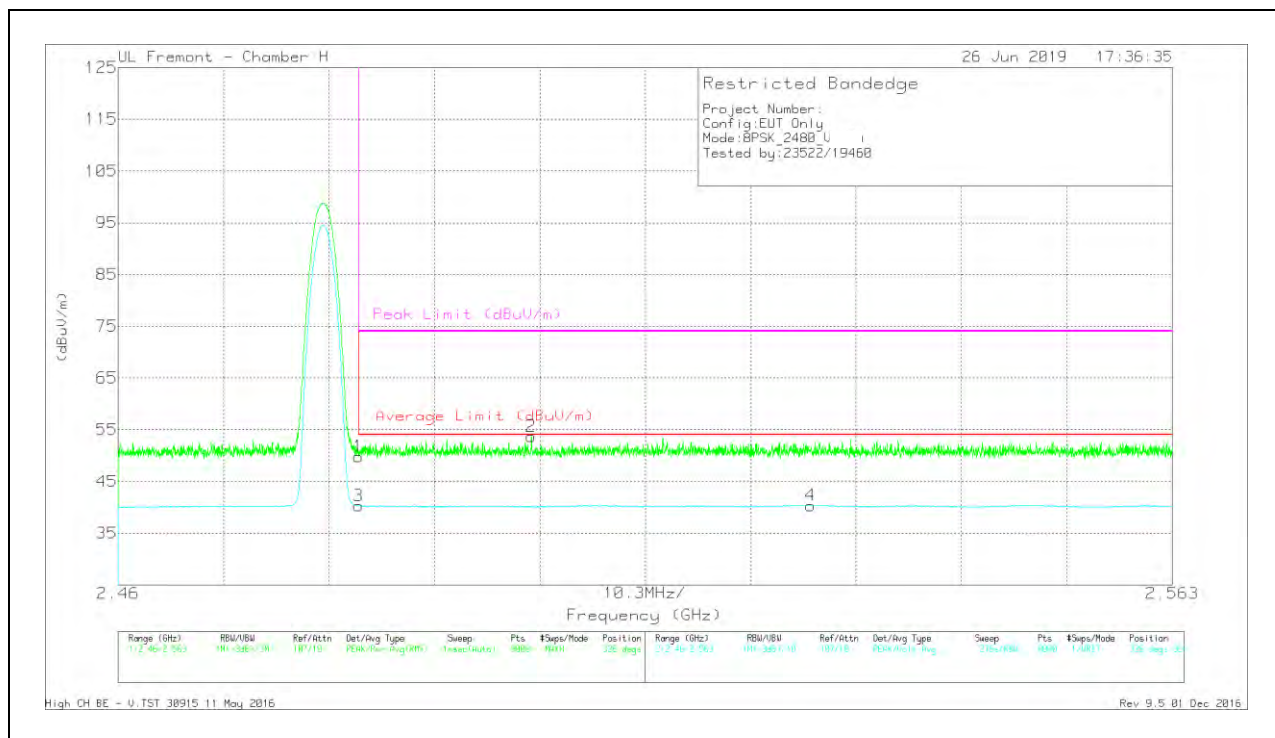
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 41.52                | Pk   | 32.5           | -23.3                  | 50.72                      | -                      | -           | 74                  | -23.28         | 115            | 156         | H        |
| 3      | * 2.484         | 31.36                | VA1T | 32.5           | -23.3                  | 40.56                      | 54                     | -13.44      | -                   | -              | 115            | 156         | H        |
| 4      | * 2.484         | 31.39                | VA1T | 32.5           | -23.3                  | 40.59                      | 54                     | -13.41      | -                   | -              | 115            | 156         | H        |
| 2      | 2.532           | 43.67                | Pk   | 32.6           | -23.2                  | 53.07                      | -                      | -           | 74                  | -20.93         | 115            | 156         | H        |

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

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T863 (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      | * 2.484         | 40.64                | Pk   | 32.5           | -23.3                  | 49.84                      | -                      | -           | 74                  | -24.16         | 326            | 368         | V        |
| 3      | * 2.484         | 31.07                | VA1T | 32.5           | -23.3                  | 40.27                      | 54                     | -13.73      | -                   | -              | 326            | 368         | V        |
| 2      | 2.5             | 44.49                | Pk   | 32.5           | -23.3                  | 53.69                      | -                      | -           | 74                  | -20.31         | 326            | 368         | V        |
| 4      | 2.528           | 30.85                | VA1T | 32.6           | -23.1                  | 40.35                      | 54                     | -13.65      | -                   | -              | 326            | 368         | V        |

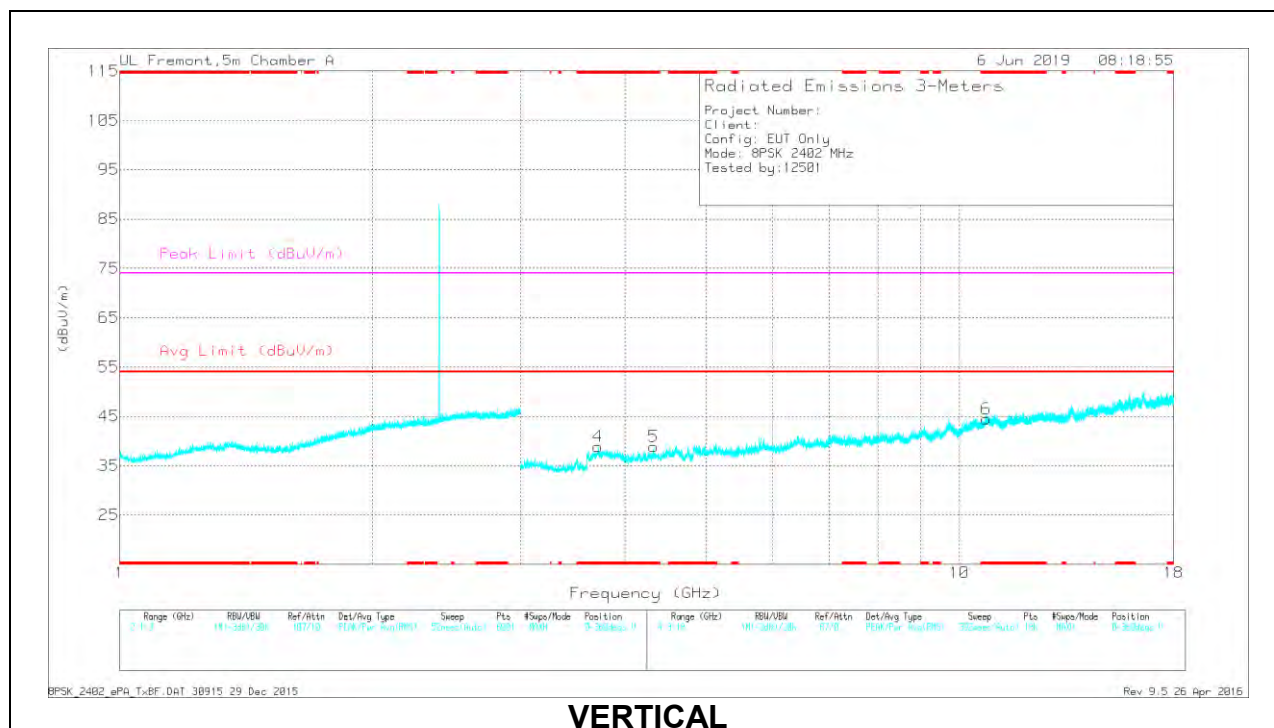
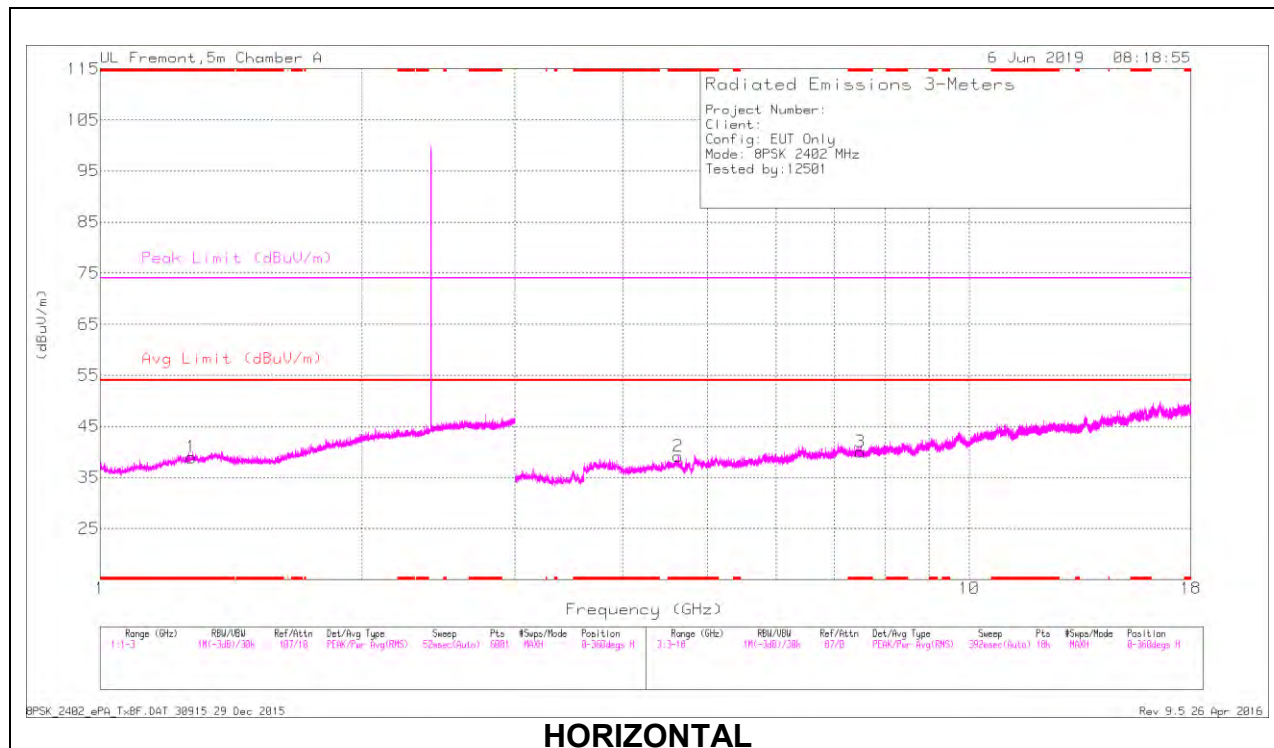
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average  $V_B = 1/T_{on}$  where:  $T_{on}$  is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



## RADIATED EMISSIONS

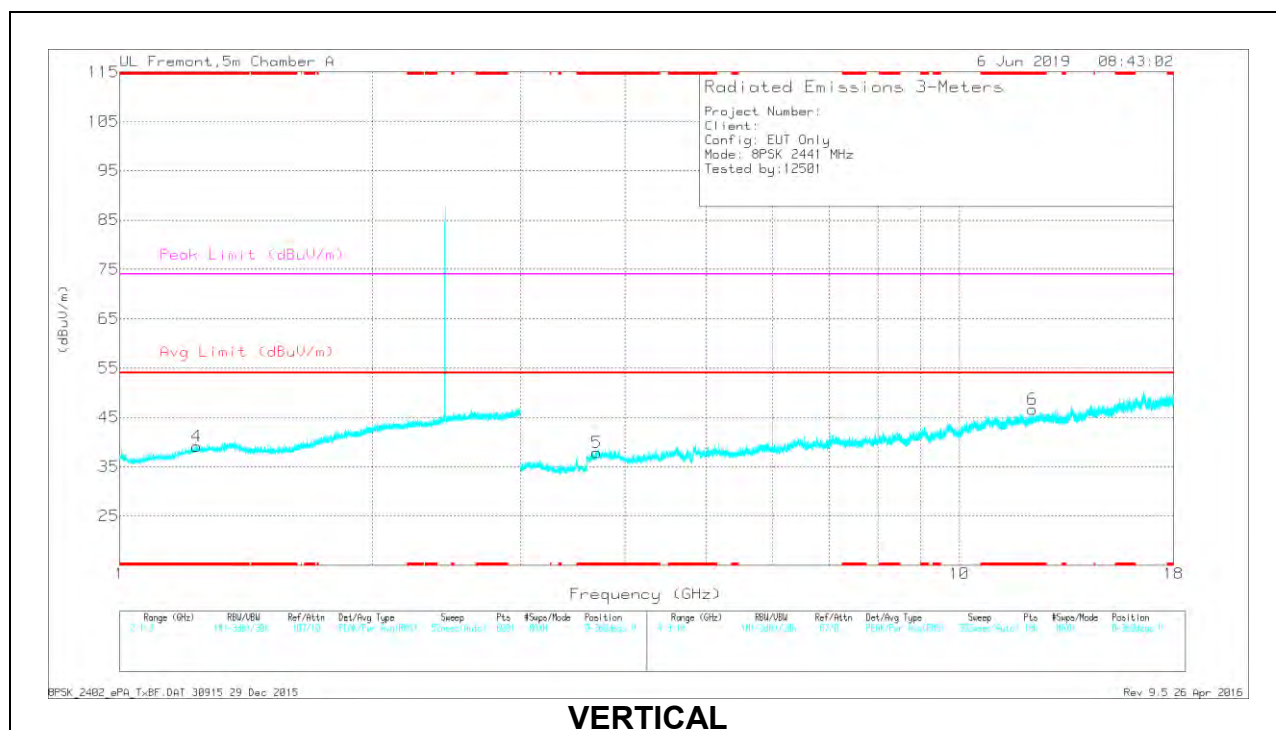
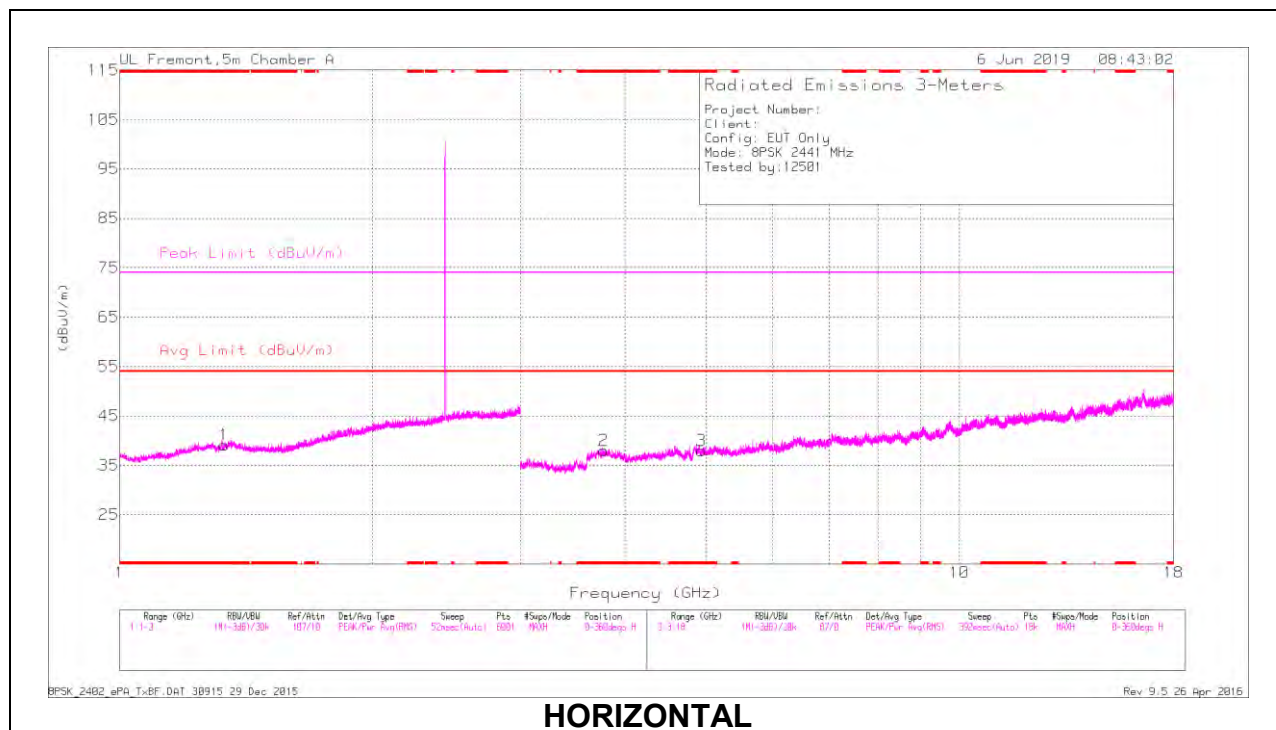
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.273         | 41.05                | PKFH | 29.1           | -25                    | 45.15                      | -                  | -           | 74                  | -28.85         | 16             | 102         | H        |
|        | * 1.274         | 29.64                | VA1T | 29.1           | -24.9                  | 33.84                      | 54                 | -20.16      | -                   | -              | 16             | 102         | H        |
| 2      | * 4.63          | 38.91                | PKFH | 34.3           | -28.5                  | 44.71                      | -                  | -           | 74                  | -29.29         | 83             | 199         | H        |
|        | * 4.627         | 26.81                | VA1T | 34.3           | -28.4                  | 32.71                      | 54                 | -21.29      | -                   | -              | 83             | 199         | H        |
| 3      | * 7.494         | 33.83                | PKFH | 35.8           | -23.1                  | 46.53                      | -                  | -           | 74                  | -27.47         | 109            | 142         | H        |
|        | * 7.494         | 22.52                | VA1T | 35.8           | -23.1                  | 35.22                      | 54                 | -18.78      | -                   | -              | 109            | 142         | H        |
| 4      | * 3.715         | 39.02                | PKFH | 33.3           | -28.6                  | 43.72                      | -                  | -           | 74                  | -30.28         | 231            | 181         | V        |
|        | * 3.715         | 27.59                | VA1T | 33.3           | -28.6                  | 32.29                      | 54                 | -21.71      | -                   | -              | 231            | 181         | V        |
| 5      | * 4.329         | 39.03                | PKFH | 33.6           | -28.5                  | 44.13                      | -                  | -           | 74                  | -29.87         | 104            | 288         | V        |
|        | * 4.329         | 27.22                | VA1T | 33.6           | -28.5                  | 32.32                      | 54                 | -21.68      | -                   | -              | 104            | 288         | V        |
| 6      | * 10.77         | 32.38                | PKFH | 37.9           | -19.6                  | 50.68                      | -                  | -           | 74                  | -23.32         | 213            | 167         | V        |
|        | * 10.77         | 21.25                | VA1T | 37.9           | -19.6                  | 39.55                      | 54                 | -14.45      | -                   | -              | 213            | 167         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## MID CHANNEL RESULTS



## RADIATED EMISSIONS

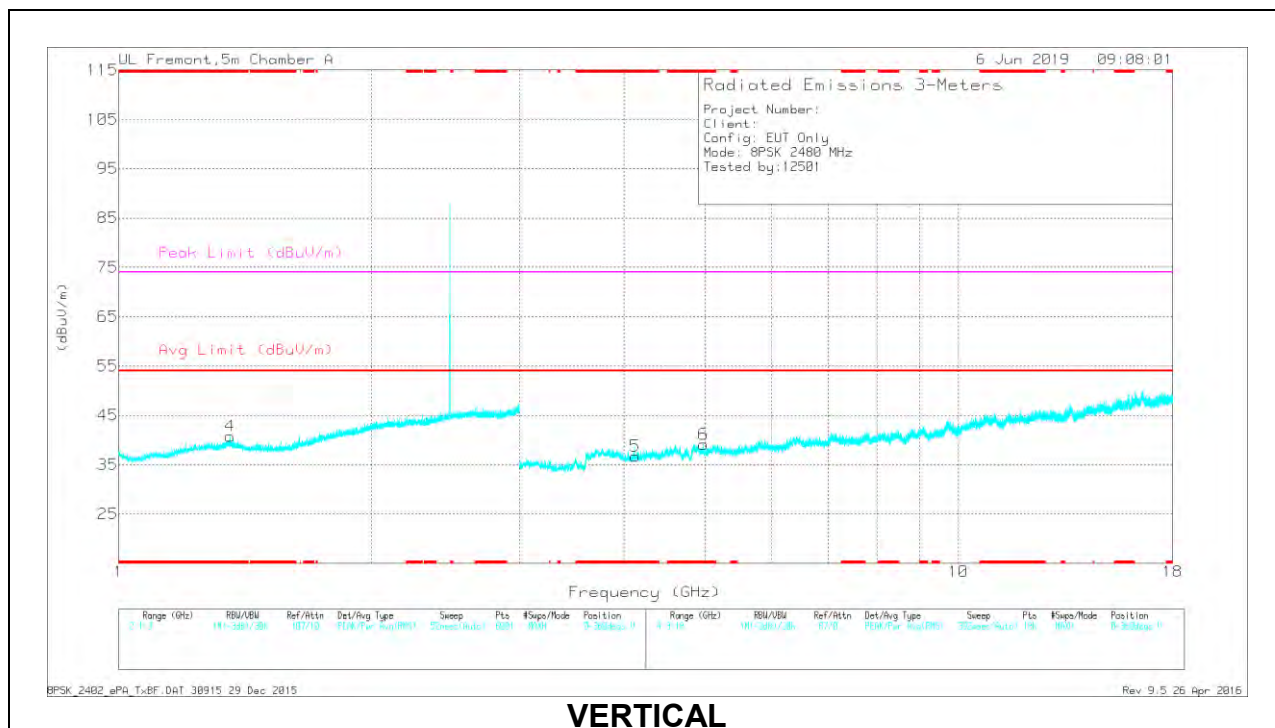
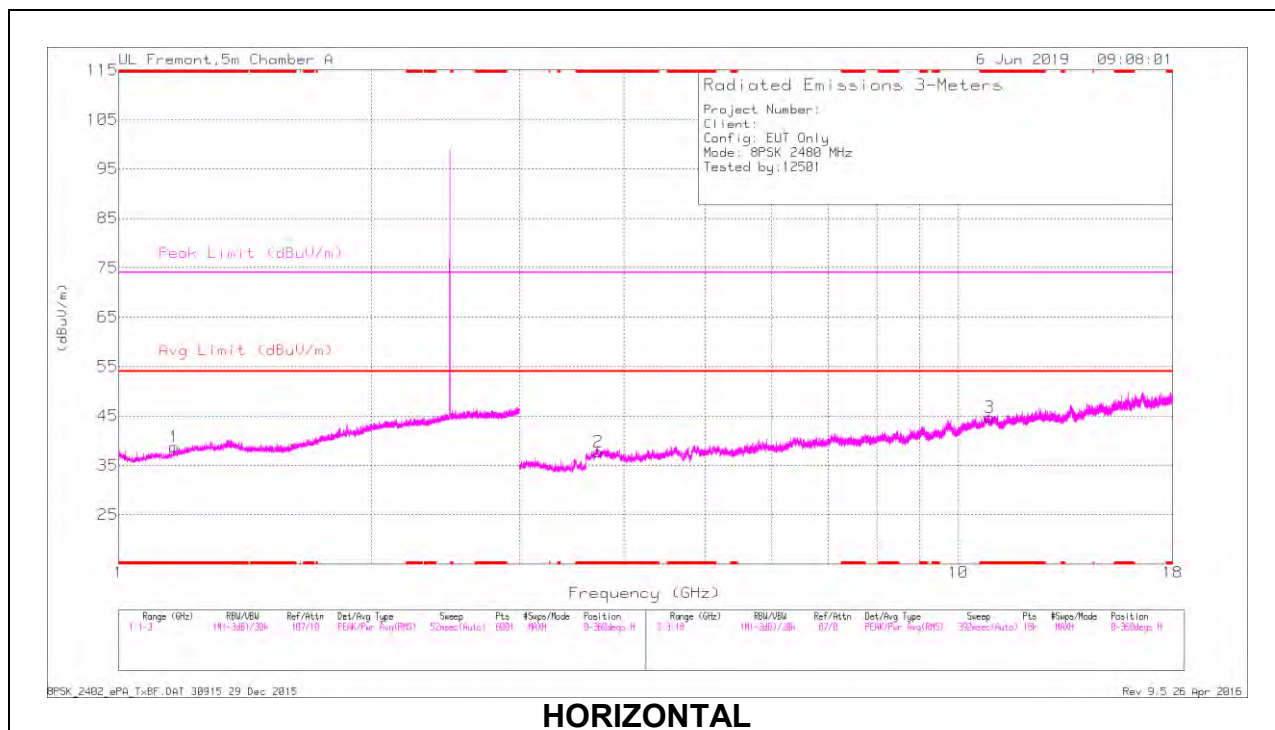
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|------|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 1.333         | 40.83                | PKFH | 29.1           | -25                    | 44.93                      | -                  | -           | 74                  | -29.07         | 312            | 384         | H        |
|        | * 1.334         | 29.73                | VA1T | 29.1           | -24.9                  | 33.93                      | 54                 | -20.07      | -                   | -              | 312            | 384         | H        |
| 4      | * 1.233         | 40.76                | PKFH | 28.8           | -24.9                  | 44.66                      | -                  | -           | 74                  | -29.34         | 102            | 274         | V        |
|        | * 1.233         | 29.72                | VA1T | 28.8           | -24.9                  | 33.62                      | 54                 | -20.38      | -                   | -              | 102            | 274         | V        |
| 2      | * 3.773         | 38.88                | PKFH | 33.6           | -28.9                  | 43.58                      | -                  | -           | 74                  | -30.42         | 213            | 193         | H        |
|        | * 3.771         | 27.75                | VA1T | 33.6           | -29                    | 32.35                      | 54                 | -21.65      | -                   | -              | 213            | 193         | H        |
| 3      | * 4.927         | 37.33                | PKFH | 34.2           | -27.8                  | 43.73                      | -                  | -           | 74                  | -30.27         | 284            | 180         | H        |
|        | * 4.927         | 26.03                | VA1T | 34.2           | -27.8                  | 32.43                      | 54                 | -21.57      | -                   | -              | 284            | 180         | H        |
| 5      | * 3.703         | 39.91                | PKFH | 33.2           | -28.6                  | 44.51                      | -                  | -           | 74                  | -29.49         | 118            | 173         | V        |
|        | * 3.705         | 27.63                | VA1T | 33.3           | -28.7                  | 32.23                      | 54                 | -21.77      | -                   | -              | 118            | 173         | V        |
| 6      | * 12.229        | 33.04                | PKFH | 39             | -20.2                  | 51.84                      | -                  | -           | 74                  | -22.16         | 274            | 103         | V        |
|        | * 12.231        | 21.35                | VA1T | 38.9           | -20.2                  | 40.05                      | 54                 | -13.95      | -                   | -              | 274            | 103         | V        |

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

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HIGH CHANNEL RESULTS



## RADIATED EMISSIONS

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det  | AF T346 (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      | * 1.166         | 41.66                | PKFH | 27.8           | -25.1                  | 44.36                      | -                  | -           | 74                  | -29.64         | 23             | 198         | H        |
|        | * 1.166         | 29.71                | VA1T | 27.8           | -25.1                  | 32.41                      | 54                 | -21.59      | -                   | -              | 23             | 198         | H        |
| 4      | * 1.357         | 41.63                | PKFH | 29.6           | -25                    | 46.23                      | -                  | -           | 74                  | -27.77         | 118            | 117         | V        |
|        | * 1.358         | 29.69                | VA1T | 29.6           | -25                    | 34.29                      | 54                 | -19.71      | -                   | -              | 118            | 117         | V        |
| 2      | * 3.723         | 38.92                | PKFH | 33.4           | -28.7                  | 43.62                      | -                  | -           | 74                  | -30.38         | 298            | 241         | H        |
|        | * 3.723         | 27.48                | VA1T | 33.4           | -28.7                  | 32.18                      | 54                 | -21.82      | -                   | -              | 298            | 241         | H        |
| 3      | * 10.903        | 34.21                | PKFH | 38             | -20.3                  | 51.91                      | -                  | -           | 74                  | -22.09         | 321            | 301         | H        |
|        | * 10.901        | 21.75                | VA1T | 38             | -20.3                  | 39.45                      | 54                 | -14.55      | -                   | -              | 321            | 301         | H        |
| 5      | * 4.122         | 38.43                | PKFH | 33.5           | -28.7                  | 43.23                      | -                  | -           | 74                  | -30.77         | 202            | 219         | V        |
|        | * 4.121         | 26.61                | VA1T | 33.5           | -28.7                  | 31.41                      | 54                 | -22.59      | -                   | -              | 202            | 219         | V        |
| 6      | * 4.975         | 38.16                | PKFH | 34.3           | -28.2                  | 44.26                      | -                  | -           | 74                  | -29.74         | 100            | 116         | V        |
|        | * 4.972         | 26.73                | VA1T | 34.3           | -28.2                  | 32.83                      | 54                 | -21.17      | -                   | -              | 100            | 116         | V        |

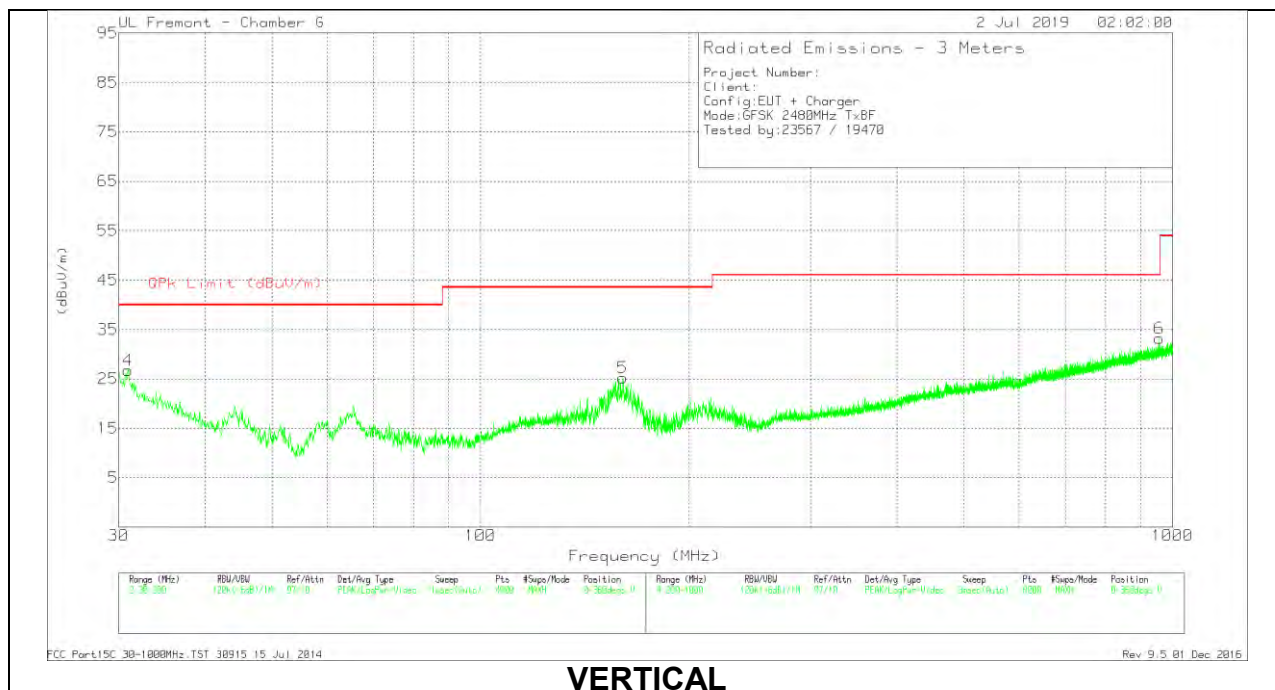
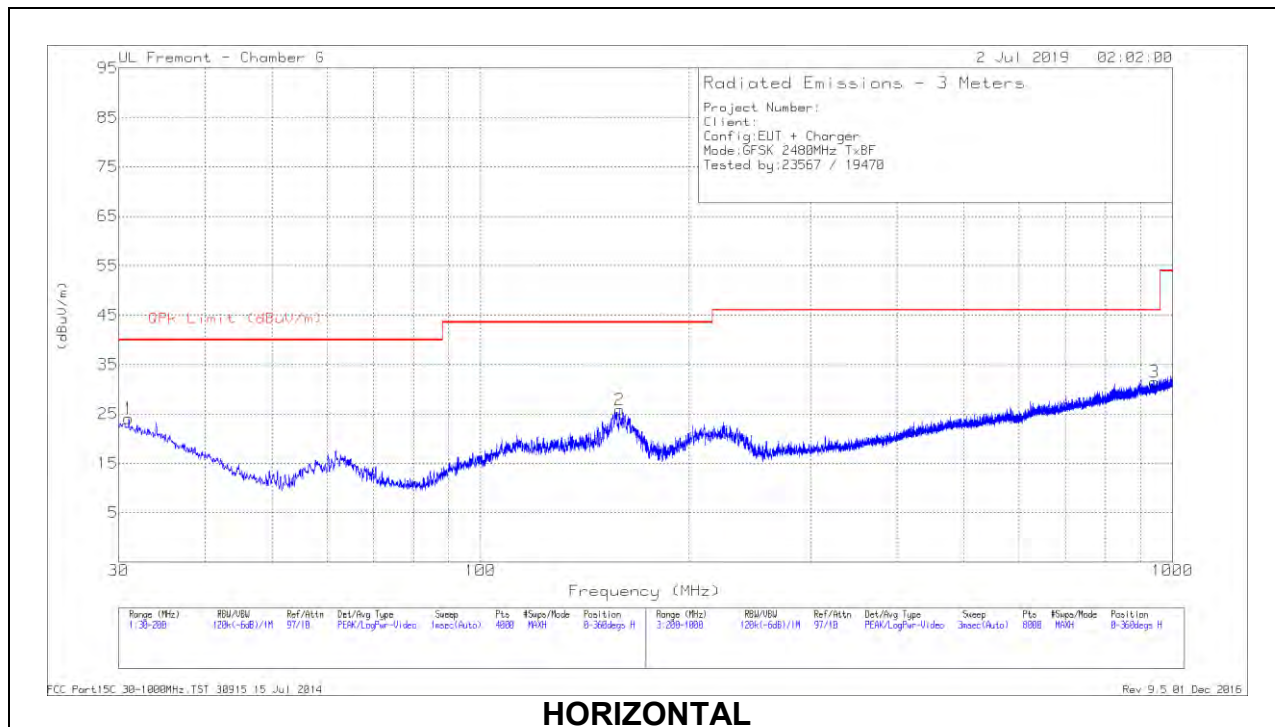
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

### 9.3. WORST CASE BELOW 1 GHZ

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



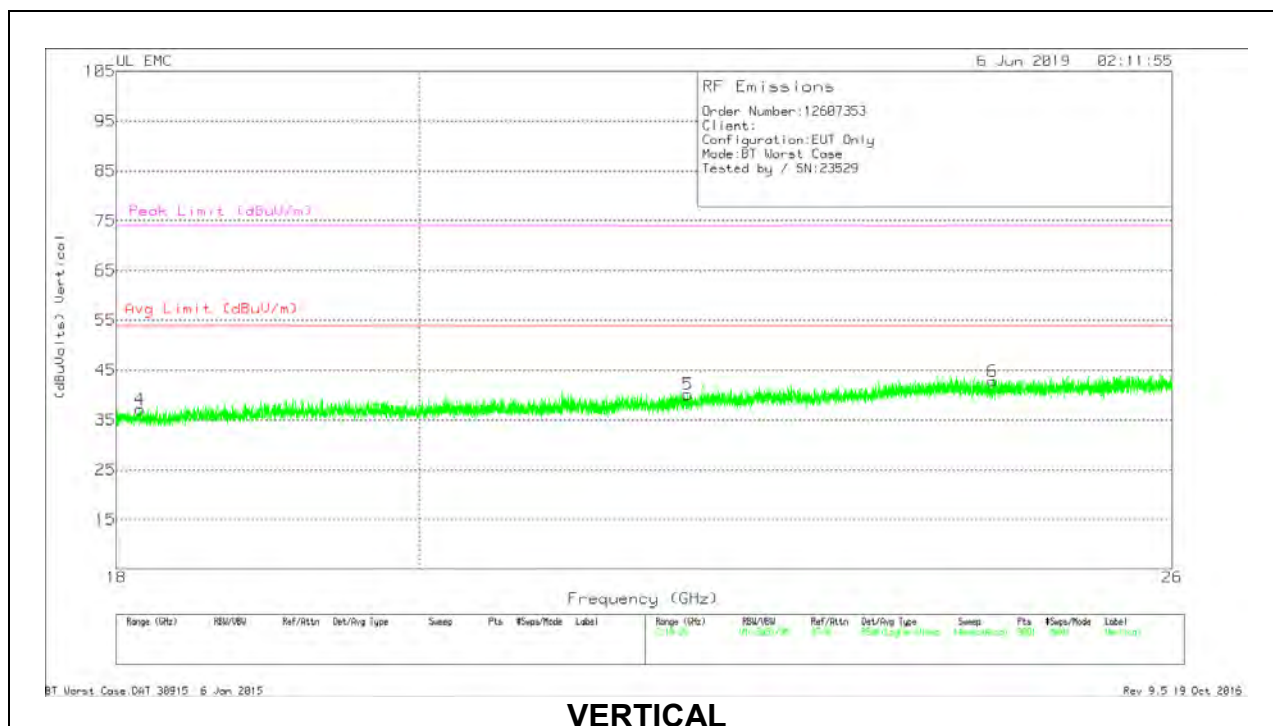
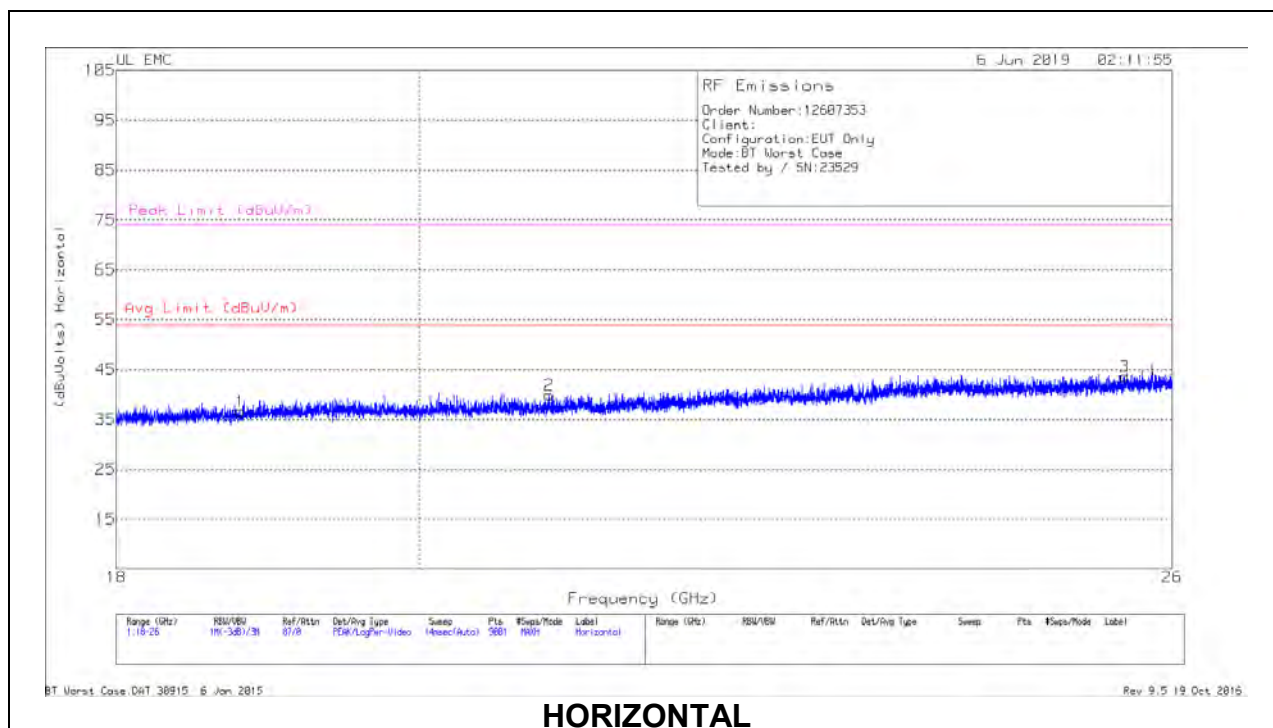
## Below 1GHz Data

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T477 (dB/m) | Amp Cbl (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 4      | 31.0822         | 22.56                | Qp  | 26.3           | -31.2        | 17.66                      | 40                 | -22.34      | 0              | 100         | H        |
| 1      | 158.5689        | 22.76                | Qp  | 18.1           | -29.9        | 10.96                      | 43.52              | -32.56      | 0              | 100         | H        |
| 2      | 30.711          | 24.54                | Qp  | 26.4           | -31.2        | 19.74                      | 40                 | -20.26      | 0              | 100         | V        |
| 5      | 160.6505        | 26.59                | Qp  | 18             | -29.8        | 14.79                      | 43.52              | -28.73      | 0              | 100         | V        |
| 3      | 940.7232        | 21.72                | Qp  | 28.5           | -25.5        | 24.72                      | 46.02              | -21.3       | 0              | 100         | H        |
| 6      | 956.4586        | 21.65                | Qp  | 28.8           | -25.4        | 25.05                      | 46.02              | -20.97      | 0              | 100         | V        |

Qp - Quasi-Peak detector

## 9.4. WORST CASE 18-26 GHZ

### SPURIOUS EMISSIONS 18-26 GHz (WORST-CASE CONFIGURATION)



## 18 – 26GHz DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T447 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1      | 18.796          | 35.62                | Pk  | 32.4           | -21.9        | -9.5           | 36.62                        | 54                 | -17.38      | 74                  | -37.38         |
| 2      | 20.927          | 37.49                | Pk  | 33.1           | -21.2        | -9.5           | 39.89                        | 54                 | -14.11      | 74                  | -34.11         |
| 3      | 25.572          | 38.41                | Pk  | 34.5           | -19.8        | -9.5           | 43.61                        | 54                 | -10.39      | 74                  | -30.39         |
| 4      | 18.148          | 36.81                | Pk  | 32.3           | -22.4        | -9.5           | 37.21                        | 54                 | -16.79      | 74                  | -36.79         |
| 5      | 21.962          | 37.13                | Pk  | 33.3           | -20.8        | -9.5           | 40.13                        | 54                 | -13.87      | 74                  | -33.87         |
| 6      | 24.423          | 37.58                | Pk  | 34.3           | -19.6        | -9.5           | 42.78                        | 54                 | -11.22      | 74                  | -31.22         |

Pk - Peak detector

## 10. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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

\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

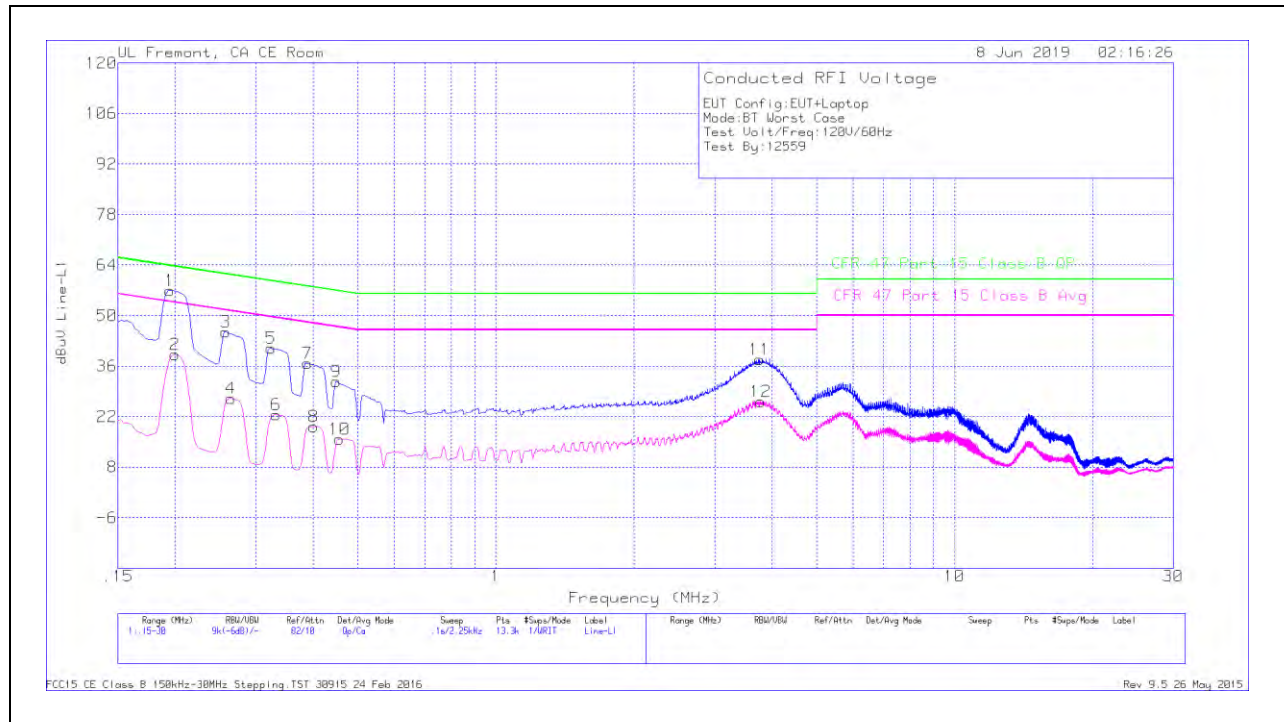
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

### RESULTS

## 10.1. AC Power Line Host

### LINE 1 RESULTS

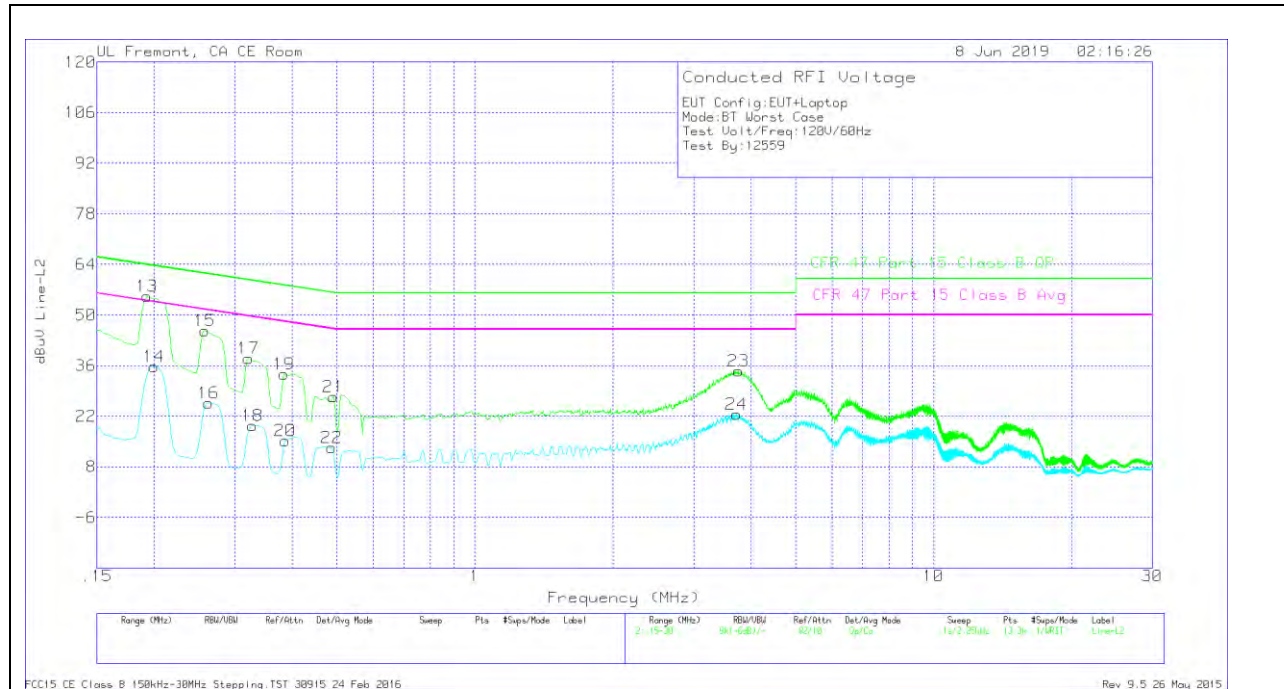


| Range 1: Line-L1 .15 - 30MHz |                 |                      |     |         |                 |              |                        |                           |                |                            |                       |
|------------------------------|-----------------|----------------------|-----|---------|-----------------|--------------|------------------------|---------------------------|----------------|----------------------------|-----------------------|
| Marker                       | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN L1 | LC Cables C1&C3 | Limiter (dB) | Corrected Reading dBuV | CFR 47 Part 15 Class B QP | QP Margin (dB) | CFR 47 Part 15 Class B Avg | Av(CISPR) Margin (dB) |
| 1                            | .195            | 46.93                | Qp  | 0       | 0               | 10.1         | 57.03                  | 63.82                     | -6.79          | -                          | -                     |
| 2                            | .1995           | 29.06                | Ca  | 0       | 0               | 10.1         | 39.16                  | -                         | -              | 53.63                      | -14.47                |
| 3                            | .258            | 35.41                | Qp  | 0       | 0               | 10.1         | 45.51                  | 61.5                      | -15.99         | -                          | -                     |
| 4                            | .26475          | 16.91                | Ca  | 0       | 0               | 10.1         | 27.01                  | -                         | -              | 51.28                      | -24.27                |
| 5                            | .32325          | 30.84                | Qp  | 0       | 0               | 10.1         | 40.94                  | 59.62                     | -18.68         | -                          | -                     |
| 6                            | .33225          | 12.42                | Ca  | 0       | 0               | 10.1         | 22.52                  | -                         | -              | 49.39                      | -26.87                |
| 7                            | .3885           | 26.65                | Qp  | 0       | 0               | 10.1         | 36.75                  | 58.1                      | -21.35         | -                          | -                     |
| 8                            | .40087          | 9.14                 | Ca  | 0       | 0               | 10.1         | 19.24                  | -                         | -              | 47.84                      | -28.6                 |
| 9                            | .44925          | 21.65                | Qp  | 0       | 0               | 10.1         | 31.75                  | 56.89                     | -25.14         | -                          | -                     |
| 10                           | .456            | 5.65                 | Ca  | 0       | 0               | 10.1         | 15.75                  | -                         | -              | 46.77                      | -31.02                |
| 11                           | 3.759           | 27.69                | Qp  | 0       | .1              | 10.1         | 37.89                  | 56                        | -18.11         | -                          | -                     |
| 12                           | 3.77925         | 15.95                | Ca  | 0       | .1              | 10.1         | 26.15                  | -                         | -              | 46                         | -19.85                |

Qp - Quasi-Peak detector

Ca - CISPR average detection

## LINE 2 RESULTS



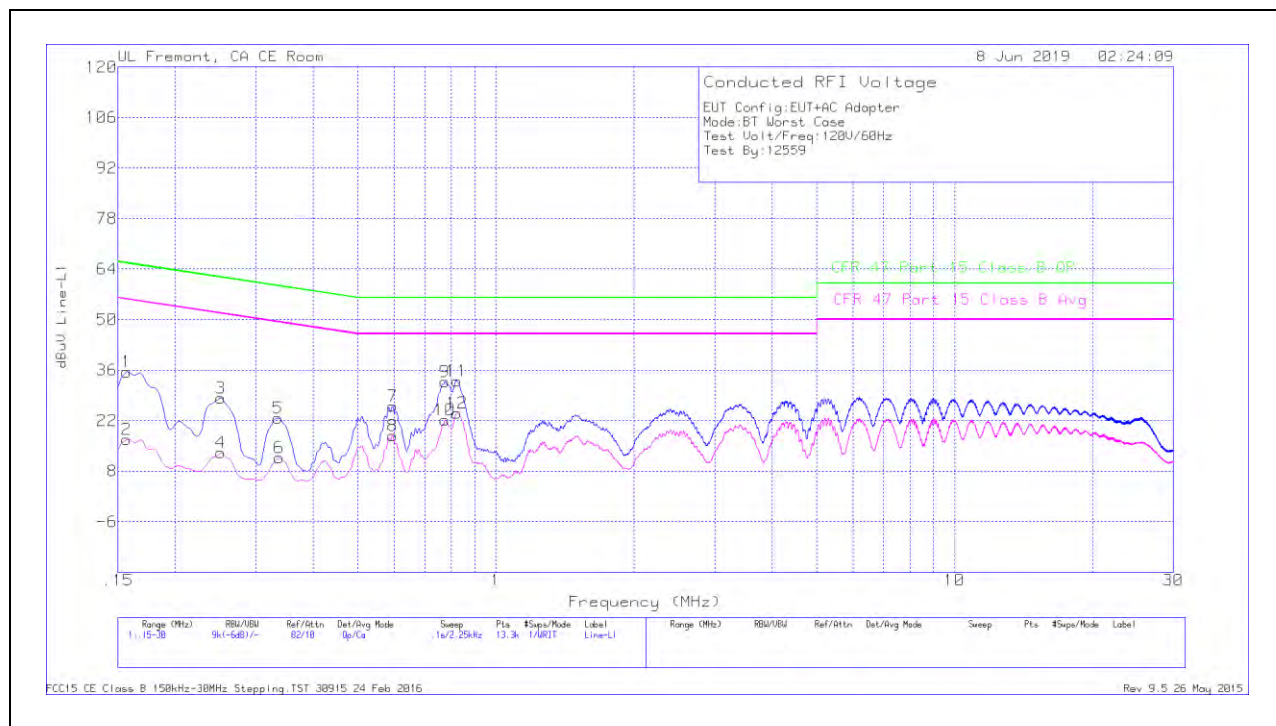
| Range 2: Line-L2 .15 - 30MHz |                 |                      |     |         |                 |              |                        |                           |                |                            |                       |
|------------------------------|-----------------|----------------------|-----|---------|-----------------|--------------|------------------------|---------------------------|----------------|----------------------------|-----------------------|
| Marker                       | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN L2 | LC Cables C2&C3 | Limiter (dB) | Corrected Reading dBuV | CFR 47 Part 15 Class B QP | QP Margin (dB) | CFR 47 Part 15 Class B Avg | Av(CISPR) Margin (dB) |
| 13                           | .19275          | 45.1                 | Qp  | 0       | 0               | 10.1         | 55.2                   | 63.92                     | -8.72          | -                          | -                     |
| 14                           | .1995           | 25.7                 | Ca  | 0       | 0               | 10.1         | 35.8                   | -                         | -              | 53.63                      | -17.83                |
| 15                           | .258            | 35.53                | Qp  | 0       | 0               | 10.1         | 45.63                  | 61.5                      | -15.87         | -                          | -                     |
| 16                           | .2625           | 15.53                | Ca  | 0       | 0               | 10.1         | 25.63                  | -                         | -              | 51.35                      | -25.72                |
| 17                           | .321            | 27.85                | Qp  | 0       | 0               | 10.1         | 37.95                  | 59.68                     | -21.73         | -                          | -                     |
| 18                           | .32775          | 9.25                 | Ca  | 0       | 0               | 10.1         | 19.35                  | -                         | -              | 49.51                      | -30.16                |
| 19                           | .384            | 23.6                 | Qp  | 0       | 0               | 10.1         | 33.7                   | 58.19                     | -24.49         | -                          | -                     |
| 20                           | .38625          | 5.13                 | Ca  | 0       | 0               | 10.1         | 15.23                  | -                         | -              | 48.14                      | -32.91                |
| 21                           | .492            | 17.37                | Qp  | 0       | 0               | 10.1         | 27.47                  | 56.13                     | -28.66         | -                          | -                     |
| 22                           | .4875           | 3.2                  | Ca  | 0       | 0               | 10.1         | 13.3                   | -                         | -              | 46.21                      | -32.91                |
| 23                           | 3.75675         | 24.27                | Qp  | 0       | .1              | 10.1         | 34.47                  | 56                        | -21.53         | -                          | -                     |
| 24                           | 3.71625         | 12.31                | Ca  | 0       | .1              | 10.1         | 22.51                  | -                         | -              | 46                         | -23.49                |

Qp - Quasi-Peak detector

Ca - CISPR average detection

## 10.2. AC Power Line Norm

### LINE 1 RESULTS

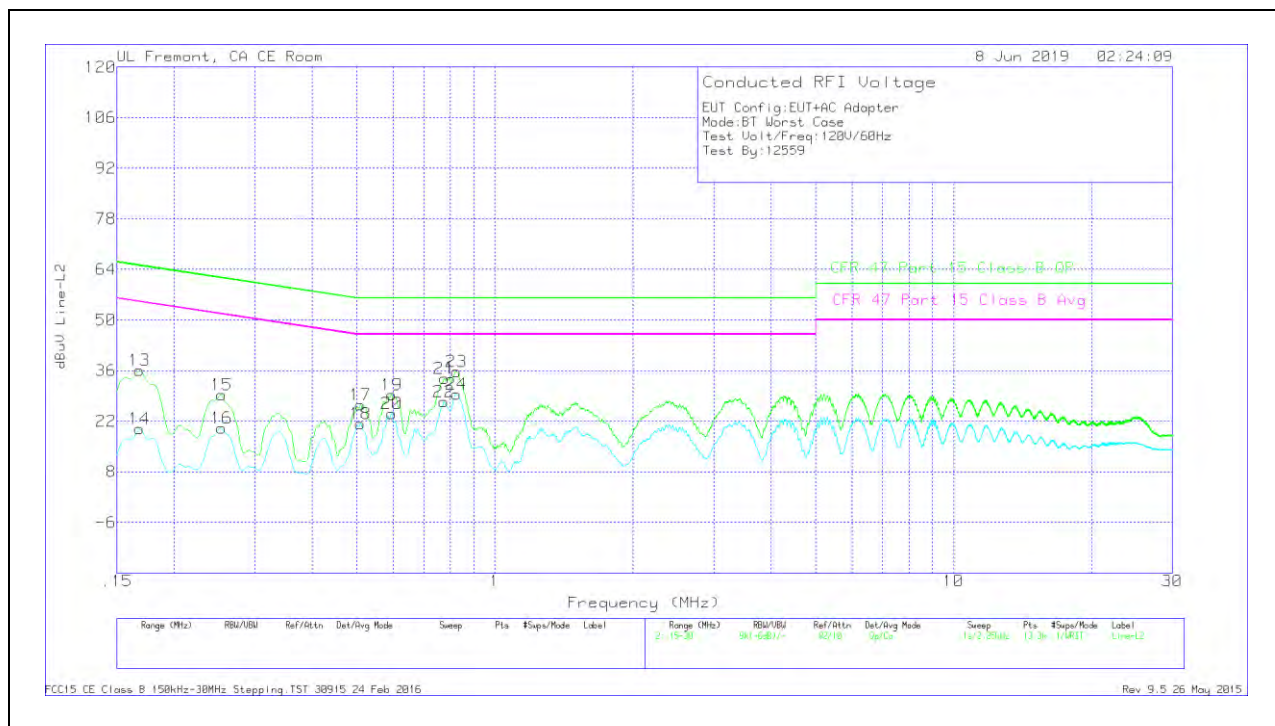


| Range 1: Line-L1 .15 - 30MHz |                 |                      |     |         |                 |              |                        |                           |                |                            |                       |
|------------------------------|-----------------|----------------------|-----|---------|-----------------|--------------|------------------------|---------------------------|----------------|----------------------------|-----------------------|
| Marker                       | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN L1 | LC Cables C1&C3 | Limiter (dB) | Corrected Reading dBuV | CFR 47 Part 15 Class B QP | QP Margin (dB) | CFR 47 Part 15 Class B Avg | Av(CISPR) Margin (dB) |
| 1                            | .15675          | 25.29                | Qp  | .1      | 0               | 10.1         | 35.49                  | 65.63                     | -30.14         | -                          | -                     |
| 2                            | .15675          | 6.67                 | Ca  | .1      | 0               | 10.1         | 16.87                  | -                         | -              | 55.63                      | -38.76                |
| 3                            | .25125          | 18.2                 | Qp  | 0       | 0               | 10.1         | 28.3                   | 61.72                     | -33.42         | -                          | -                     |
| 4                            | .25125          | 3.01                 | Ca  | 0       | 0               | 10.1         | 13.11                  | -                         | -              | 51.72                      | -38.61                |
| 5                            | .3345           | 12.67                | Qp  | 0       | 0               | 10.1         | 22.77                  | 59.34                     | -36.57         | -                          | -                     |
| 6                            | .33675          | 1.68                 | Ca  | 0       | 0               | 10.1         | 11.78                  | -                         | -              | 49.28                      | -37.5                 |
| 7                            | .5955           | 15.94                | Qp  | 0       | 0               | 10.1         | 26.04                  | 56                        | -29.96         | -                          | -                     |
| 8                            | .5955           | 7.67                 | Ca  | 0       | 0               | 10.1         | 17.77                  | -                         | -              | 46                         | -28.23                |
| 9                            | .7755           | 22.69                | Qp  | 0       | 0               | 10.1         | 32.79                  | 56                        | -23.21         | -                          | -                     |
| 10                           | .7755           | 12.05                | Ca  | 0       | 0               | 10.1         | 22.15                  | -                         | -              | 46                         | -23.85                |
| 11                           | .82275          | 22.8                 | Qp  | 0       | 0               | 10.1         | 32.9                   | 56                        | -23.1          | -                          | -                     |
| 12                           | .82275          | 14.04                | Ca  | 0       | 0               | 10.1         | 24.14                  | -                         | -              | 46                         | -21.86                |

Qp - Quasi-Peak detector

Ca - CISPR average detection

## LINE 2 RESULTS



| Range 2: Line-L2 .15 - 30MHz |                 |                      |     |         |                 |              |                        |                           |                |                            |                       |
|------------------------------|-----------------|----------------------|-----|---------|-----------------|--------------|------------------------|---------------------------|----------------|----------------------------|-----------------------|
| Marker                       | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN L2 | LC Cables C2&C3 | Limiter (dB) | Corrected Reading dBuV | CFR 47 Part 15 Class B QP | QP Margin (dB) | CFR 47 Part 15 Class B Avg | Av(CISPR) Margin (dB) |
| 13                           | .168            | 25.92                | Qp  | .1      | 0               | 10.1         | 36.12                  | 65.06                     | -28.94         | -                          | -                     |
| 14                           | .168            | 9.65                 | Ca  | .1      | 0               | 10.1         | 19.85                  | -                         | -              | 55.06                      | -35.21                |
| 15                           | .2535           | 19.24                | Qp  | 0       | 0               | 10.1         | 29.34                  | 61.64                     | -32.3          | -                          | -                     |
| 16                           | .2535           | 9.98                 | Ca  | 0       | 0               | 10.1         | 20.08                  | -                         | -              | 51.64                      | -31.56                |
| 17                           | .51             | 16.48                | Qp  | 0       | 0               | 10.1         | 26.58                  | 56                        | -29.42         | -                          | -                     |
| 18                           | .51             | 11.29                | Ca  | 0       | 0               | 10.1         | 21.39                  | -                         | -              | 46                         | -24.61                |
| 19                           | .5955           | 19.28                | Qp  | 0       | 0               | 10.1         | 29.38                  | 56                        | -26.62         | -                          | -                     |
| 20                           | .5955           | 13.93                | Ca  | 0       | 0               | 10.1         | 24.03                  | -                         | -              | 46                         | -21.97                |
| 21                           | .77775          | 23.67                | Qp  | 0       | 0               | 10.1         | 33.77                  | 56                        | -22.23         | -                          | -                     |
| 22                           | .7775           | 17.28                | Ca  | 0       | 0               | 10.1         | 27.38                  | -                         | -              | 46                         | -18.62                |
| 23                           | .825            | 25.62                | Qp  | 0       | 0               | 10.1         | 35.72                  | 56                        | -20.28         | -                          | -                     |
| 24                           | .82387          | 19.38                | Ca  | 0       | 0               | 10.1         | 29.48                  | -                         | -              | 46                         | -16.52                |

Qp - Quasi-Peak detector

Ca - CISPR average detection

## END OF TEST REPORT

## **11. SETUP PHOTOS**

Please refer to 12607353-EP1V1 for setup photos