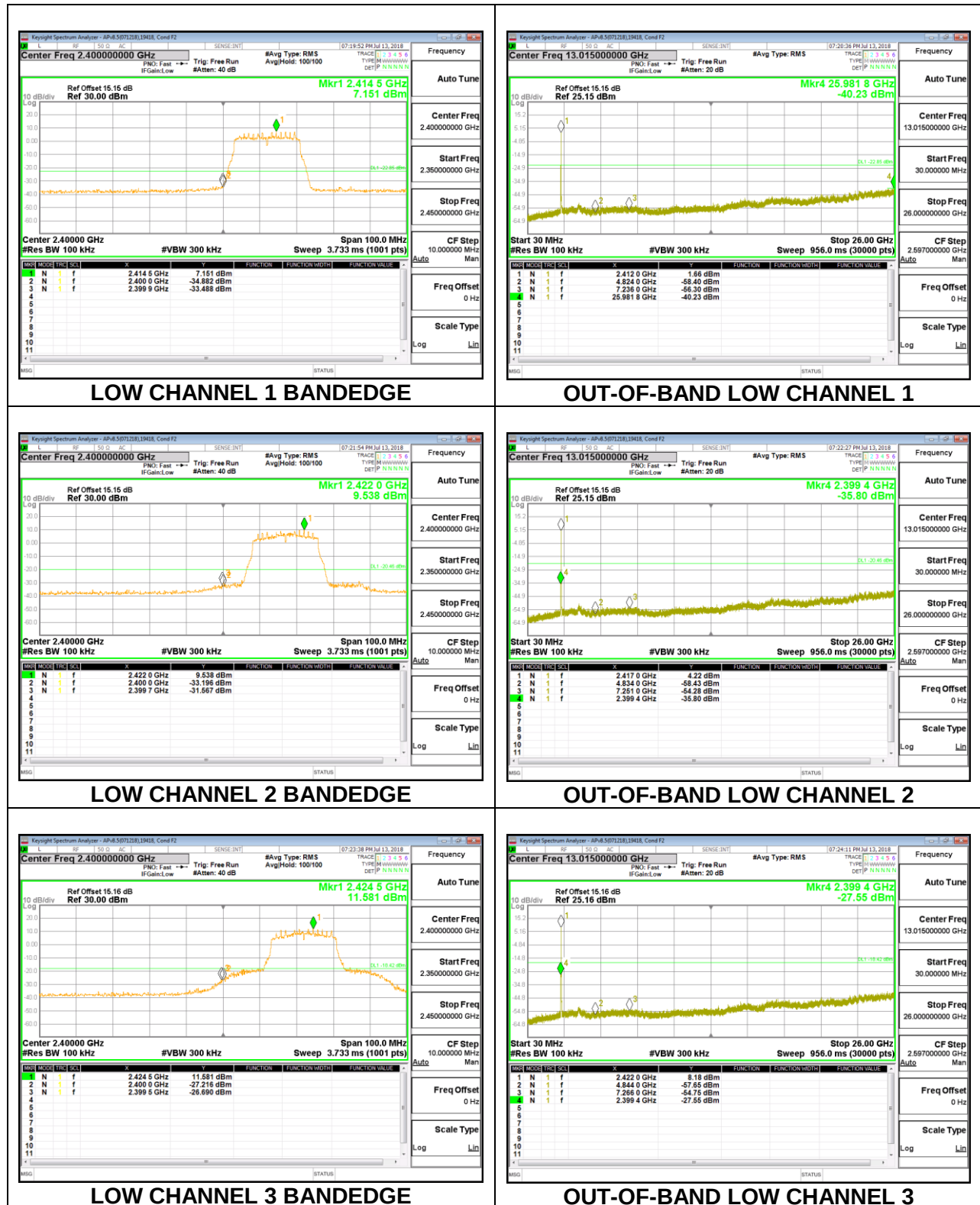
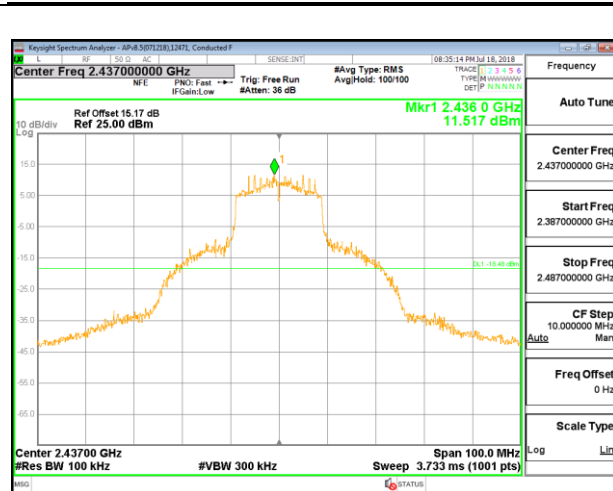
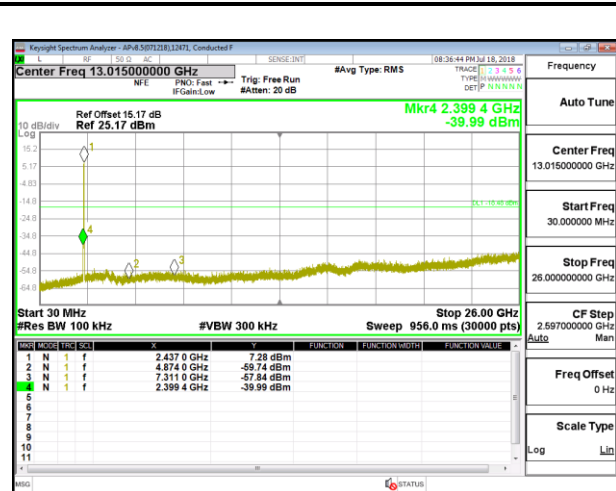


# 1TX Antenna 3 MODE

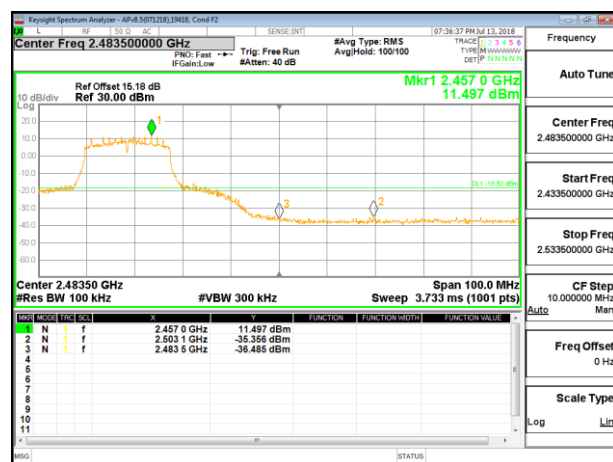




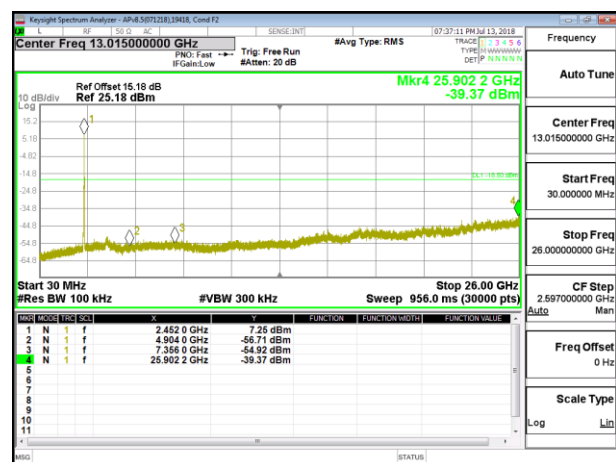
IN-BAND REFERENCE LEVEL



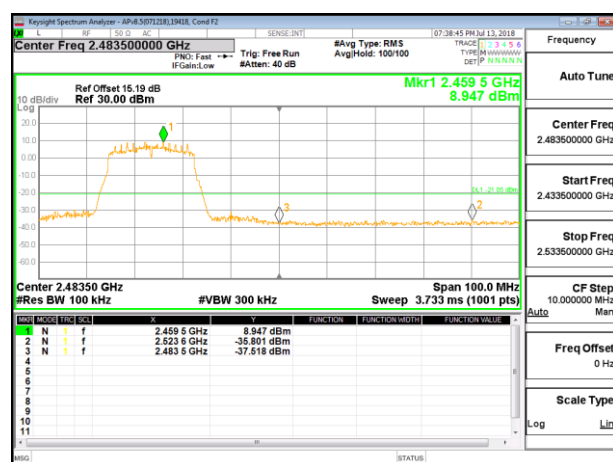
OUT-OF-BAND MID CHANNEL



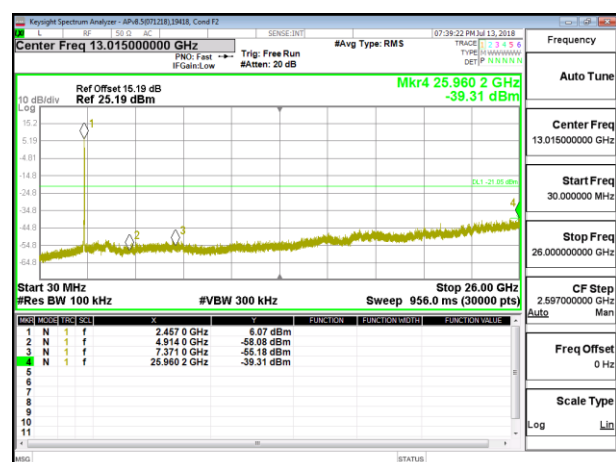
HIGH CHANNEL 9 BANDEDGE



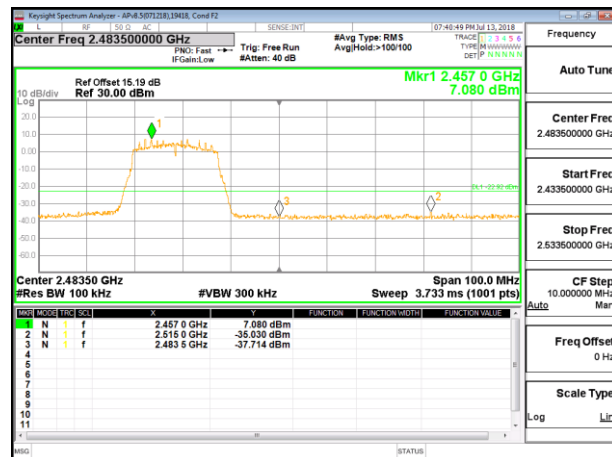
OUT-OF-BAND HIGH CHANNEL 9



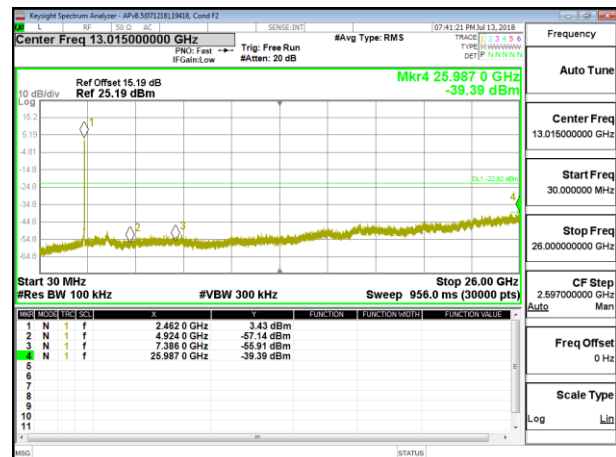
HIGH CHANNEL 10 BANDEDGE



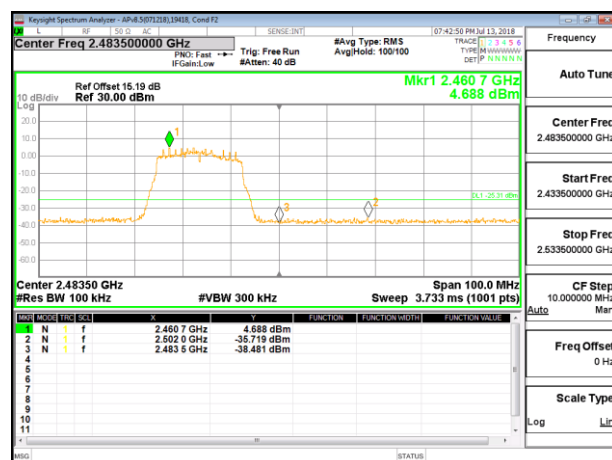
OUT-OF-BAND HIGH CHANNEL 10



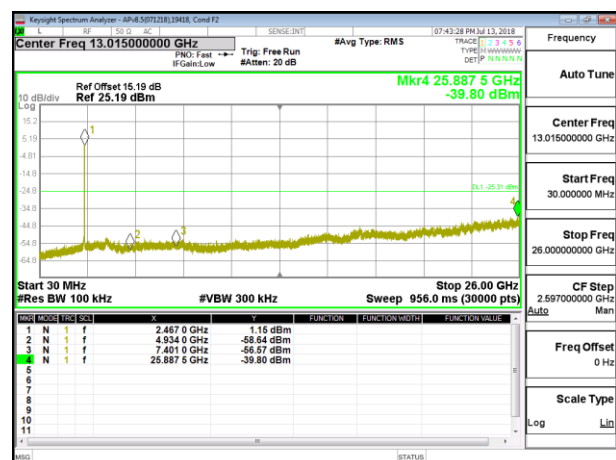
HIGH CHANNEL 11 BANDEDGE



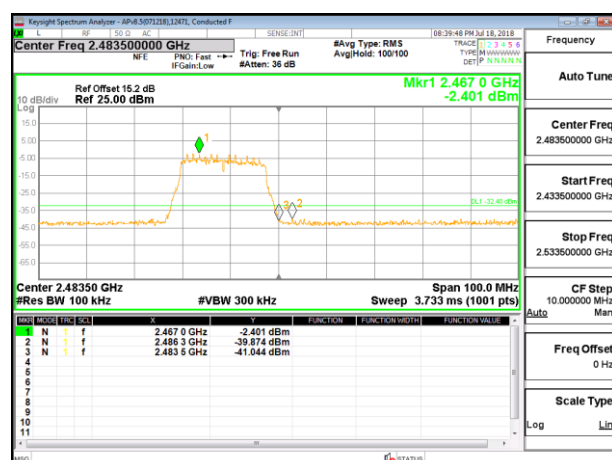
OUT-OF-BAND HIGH CHANNEL 11



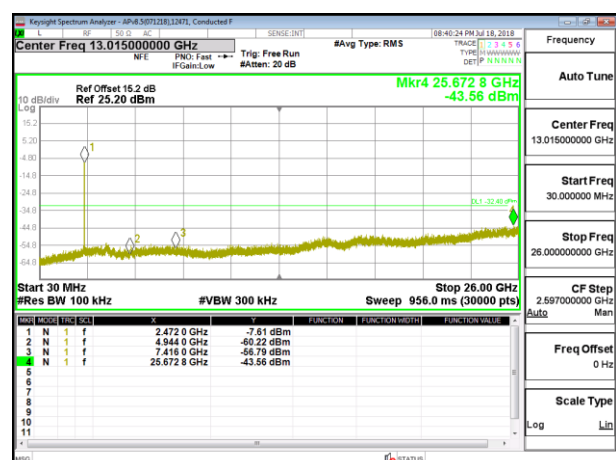
HIGH CHANNEL 12 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 12

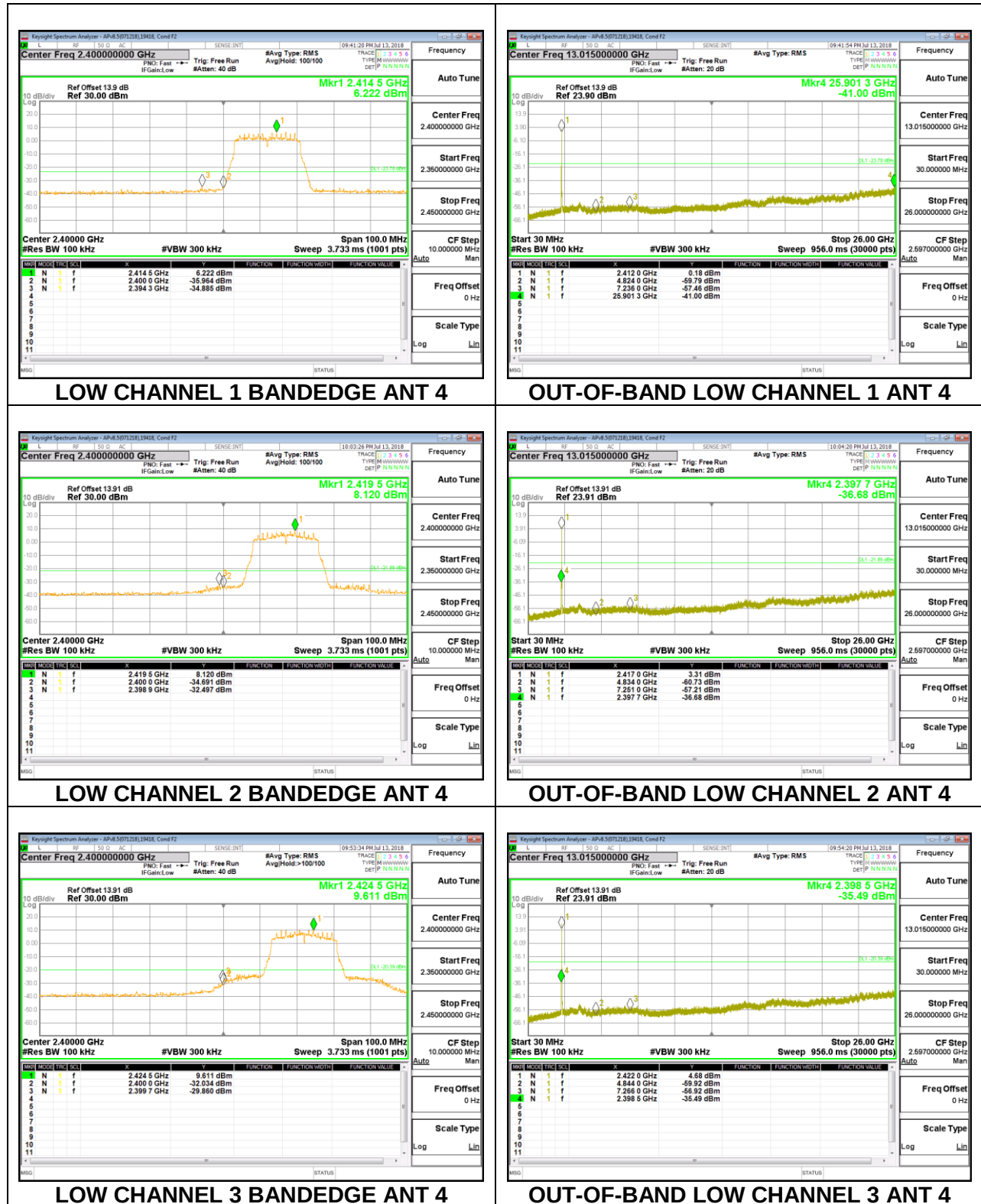


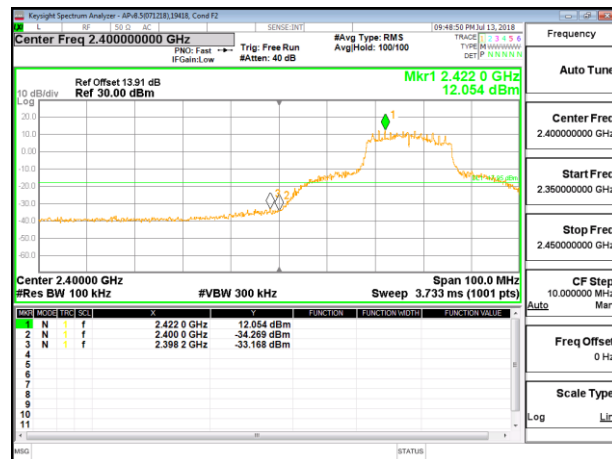
HIGH CHANNEL 13 BANDEDGE



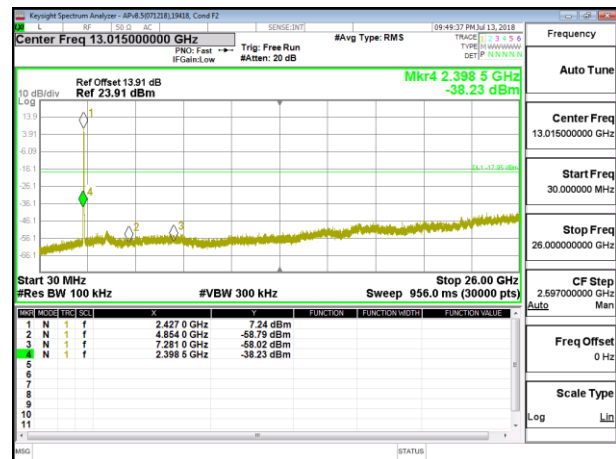
OUT-OF-BAND HIGH CHANNEL 13

### 8.6.3. 2TX Antenna 4 + Antenna 3 CDD MODE

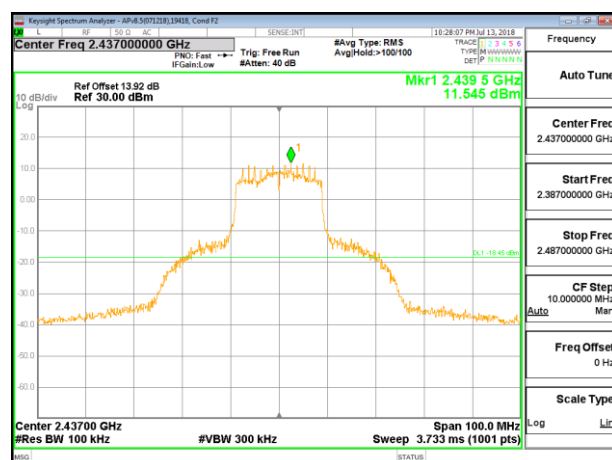




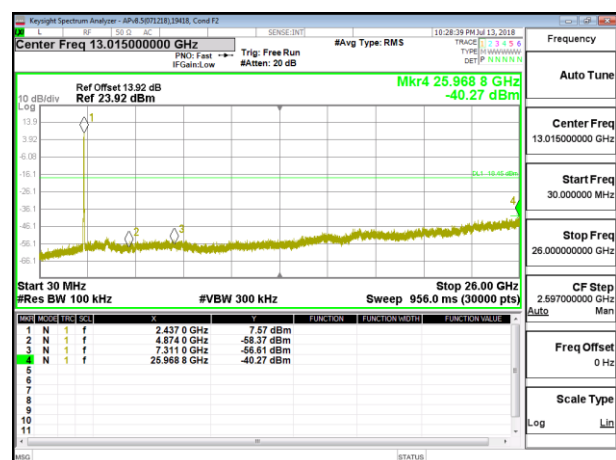
LOW CHANNEL 4 BANDEDGE ANT 4



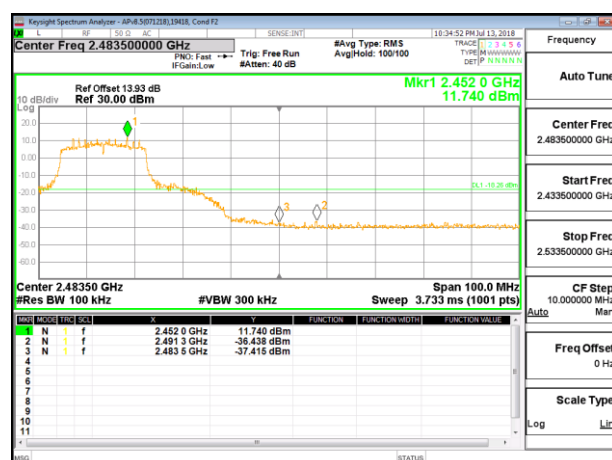
OUT-OF-BAND LOW CHANNEL 4 ANT 4



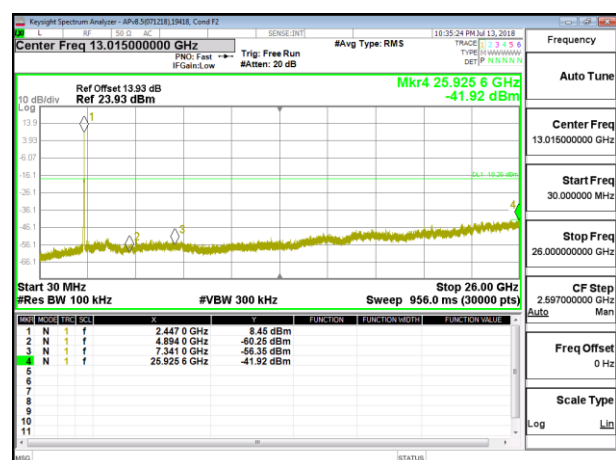
IN-BAND REFERENCE LEVEL ANT 4



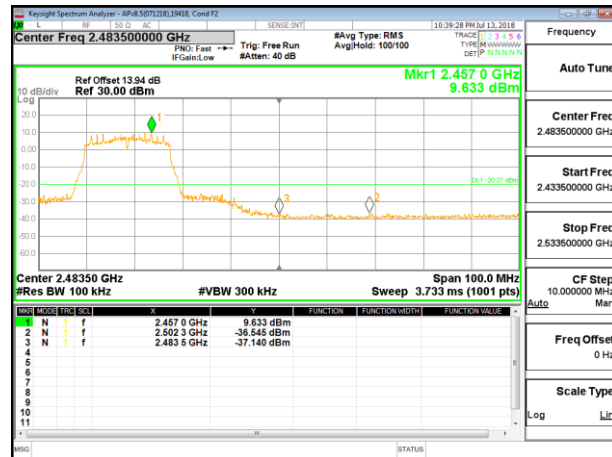
OUT-OF-BAND MID CHANNEL ANT 4



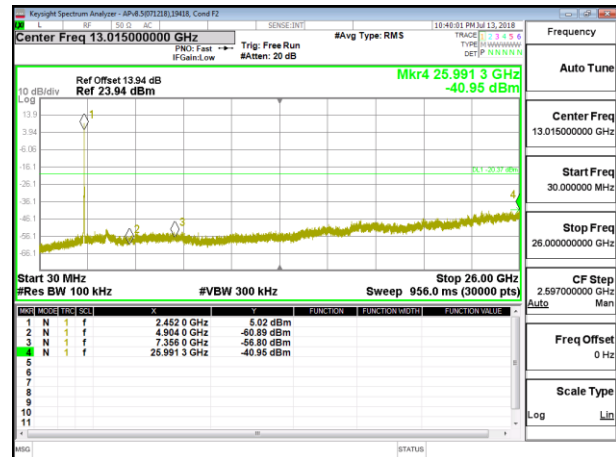
HIGH CHANNEL 8 BANDEDGE ANT 4



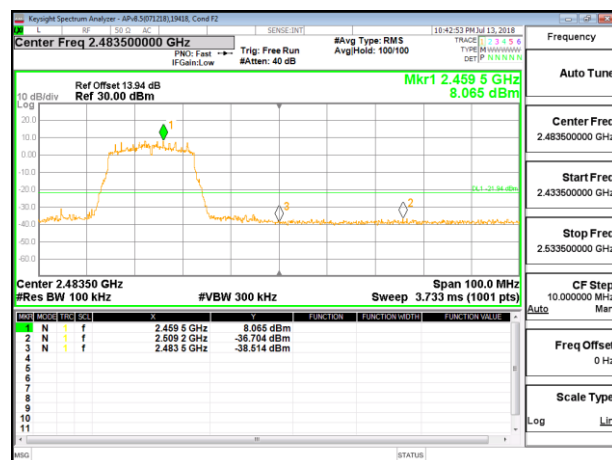
OUT-OF-BAND HIGH CHANNEL 8 ANT 4



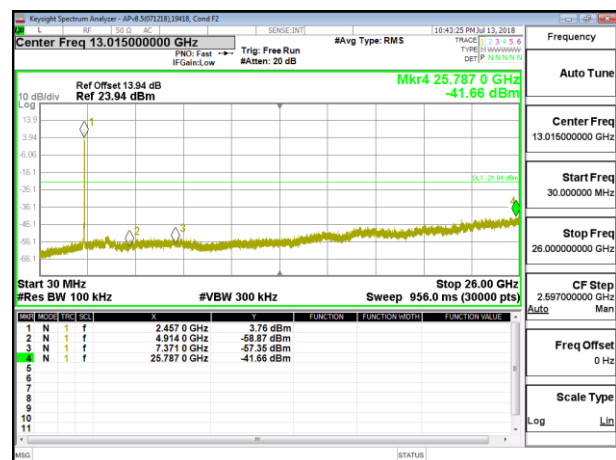
HIGH CHANNEL 9 BANDEDGE ANT 4



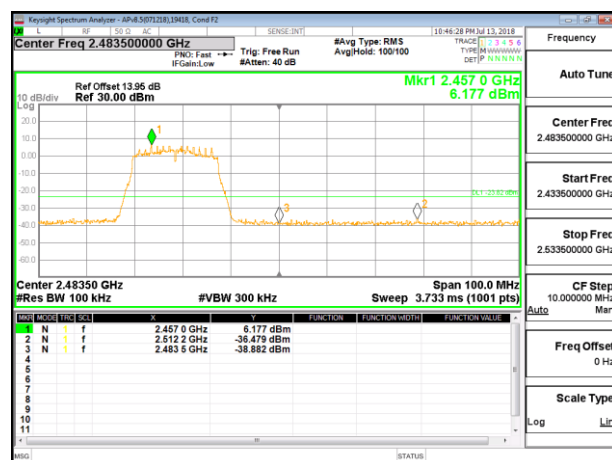
OUT-OF-BAND HIGH CHANNEL 9 ANT 4



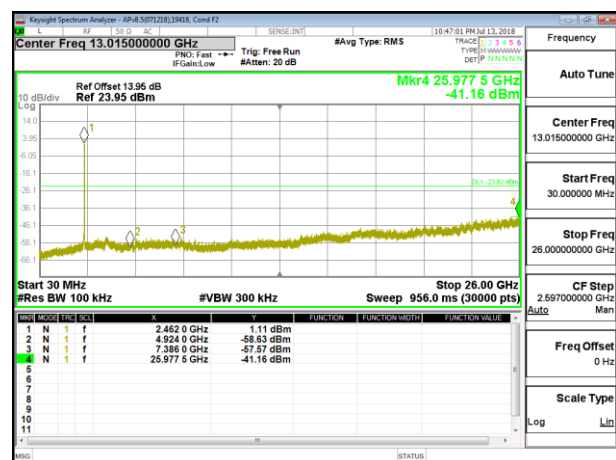
HIGH CHANNEL 10 BANDEDGE ANT 4



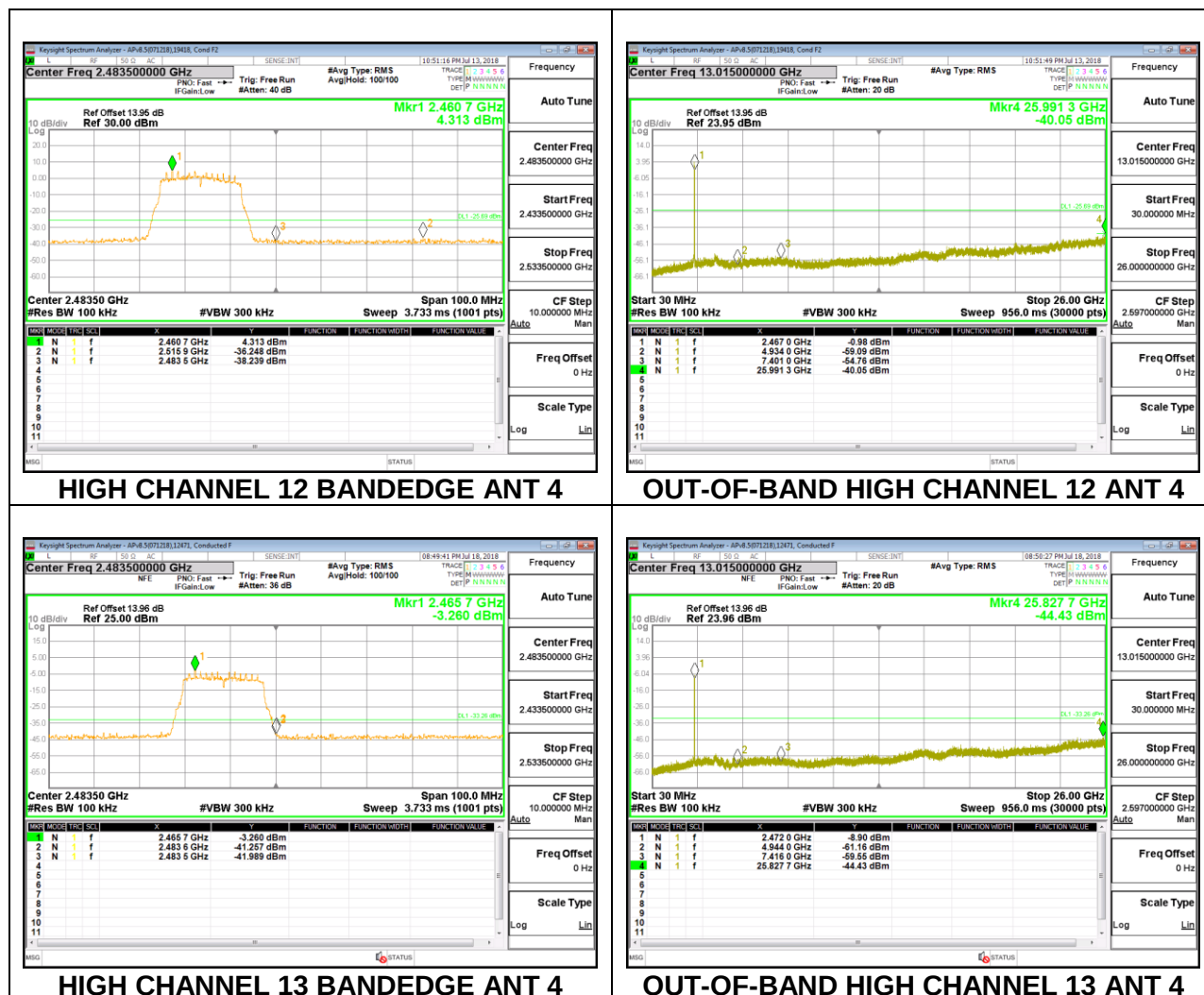
OUT-OF-BAND HIGH CHANNEL 10 ANT 4

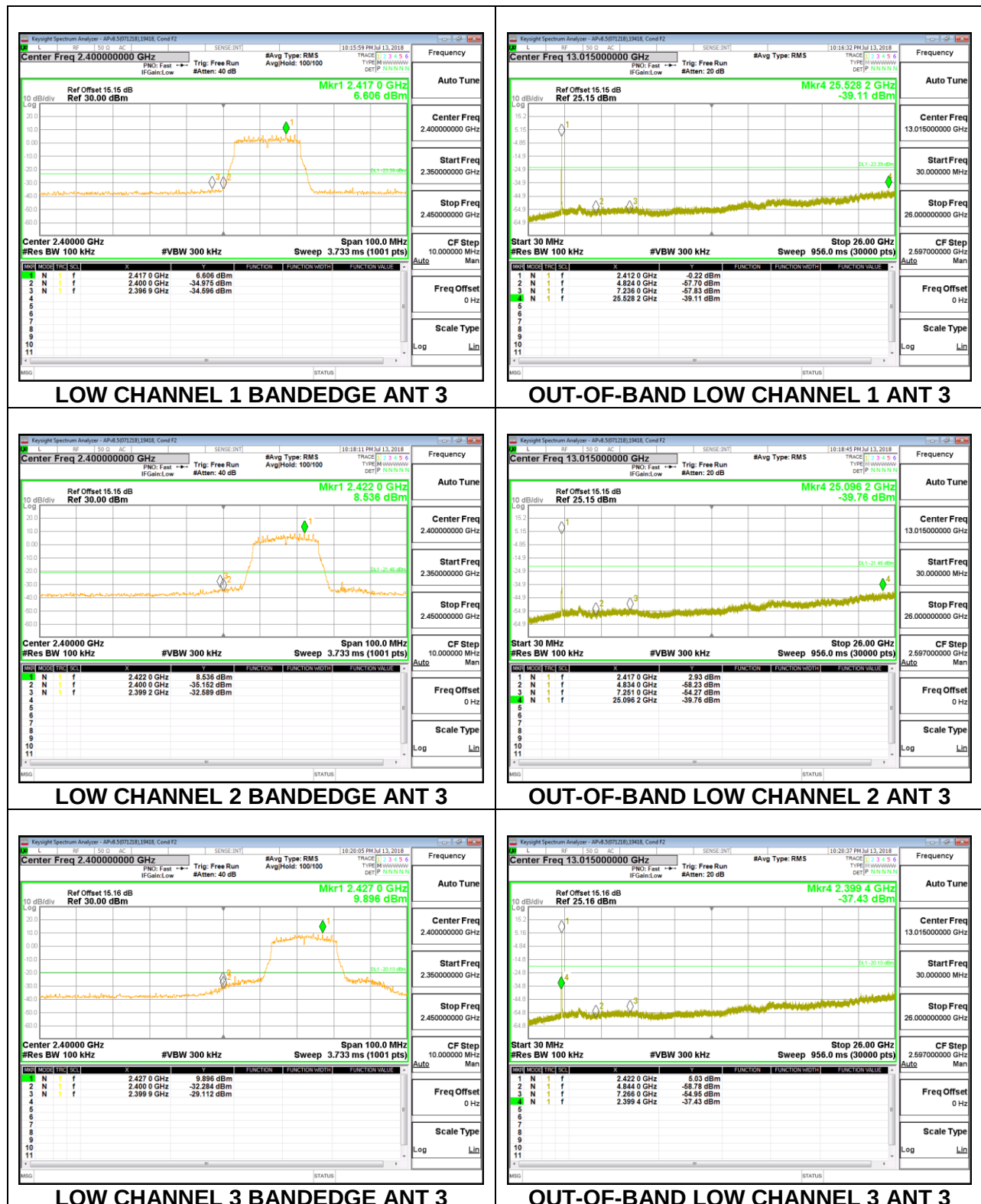


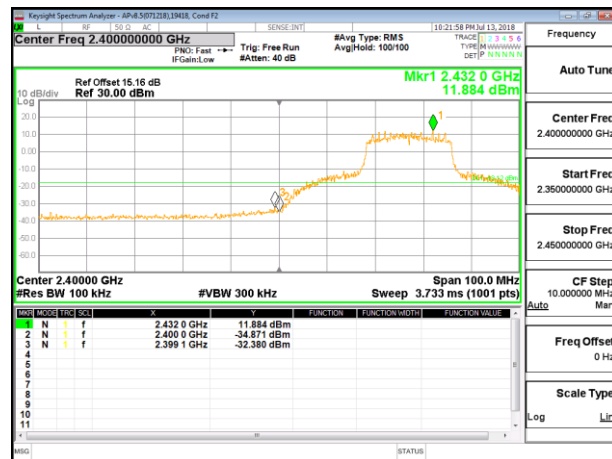
HIGH CHANNEL 11 BANDEDGE ANT 4



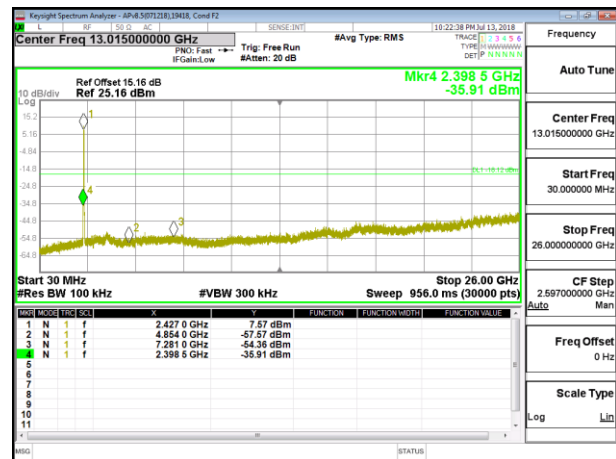
OUT-OF-BAND HIGH CHANNEL 11 ANT 4



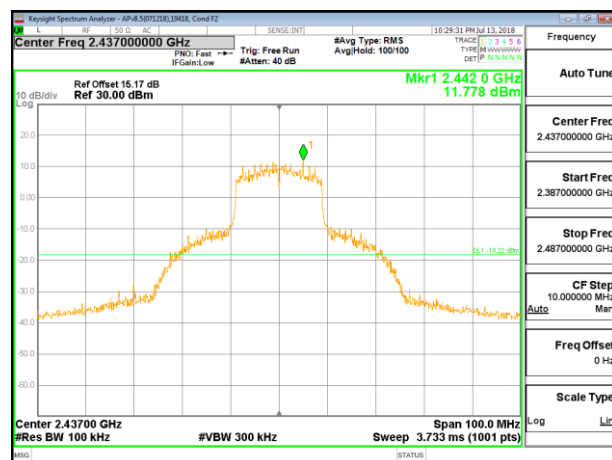




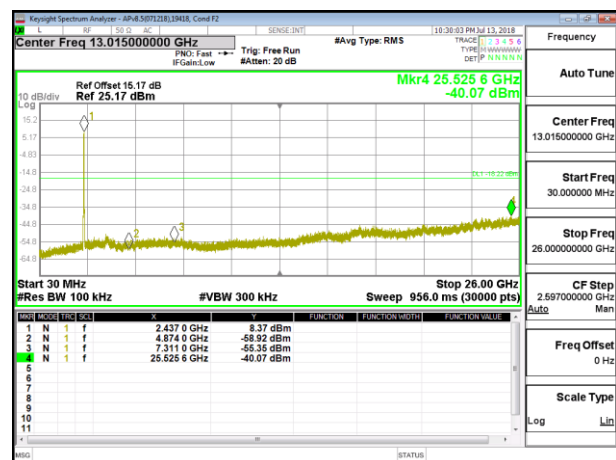
LOW CHANNEL 4 BANDEDGE ANT 3



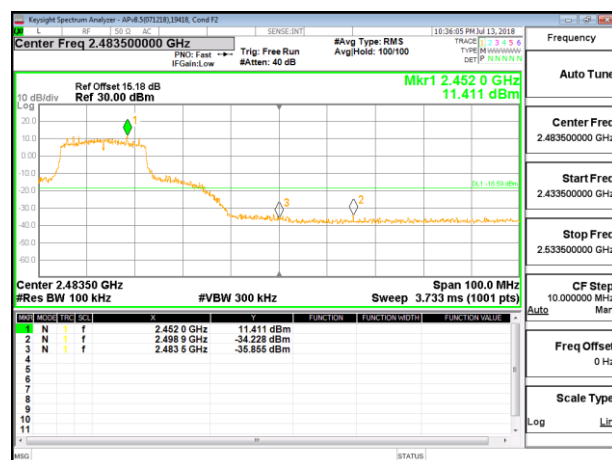
OUT-OF-BAND LOW CHANNEL 4 ANT 3



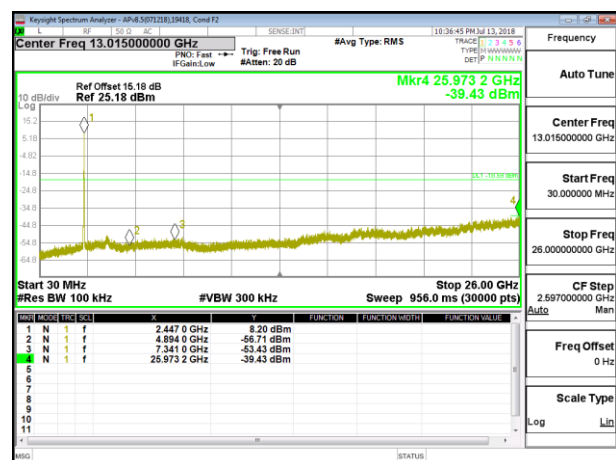
IN-BAND REFERENCE LEVEL ANT 3



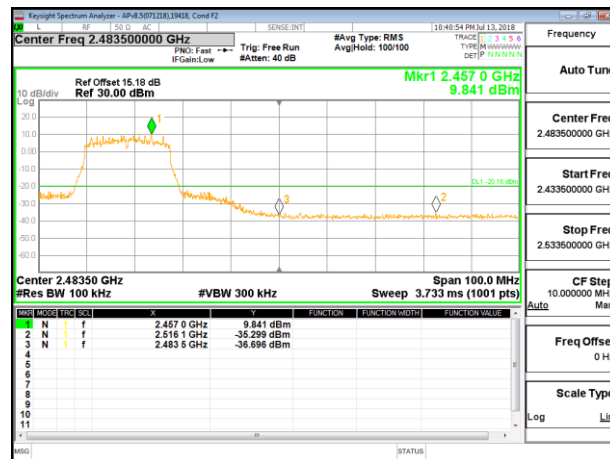
OUT-OF-BAND MID CHANNEL ANT 3



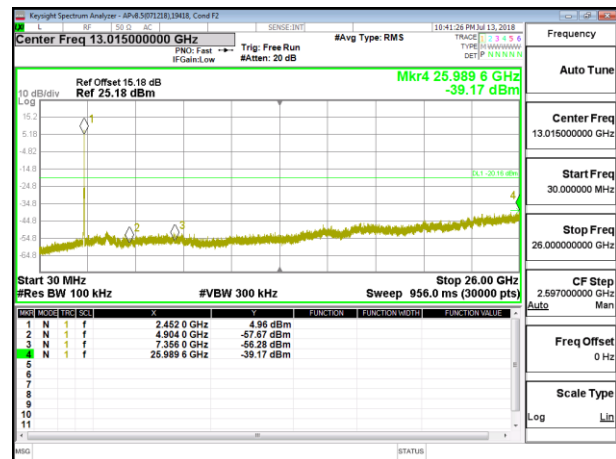
HIGH CHANNEL 8 BANDEDGE ANT 3



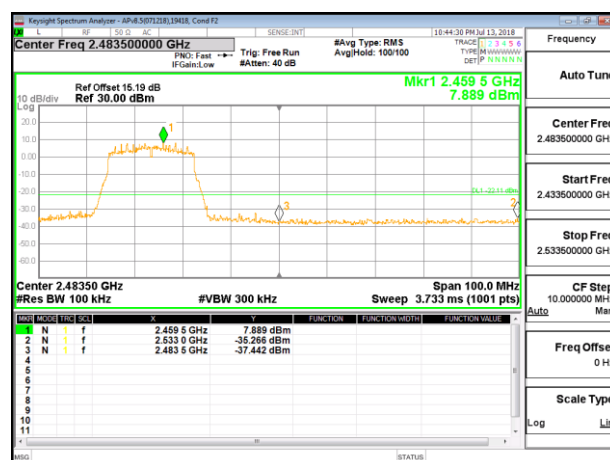
OUT-OF-BAND HIGH CHANNEL 8 ANT 3



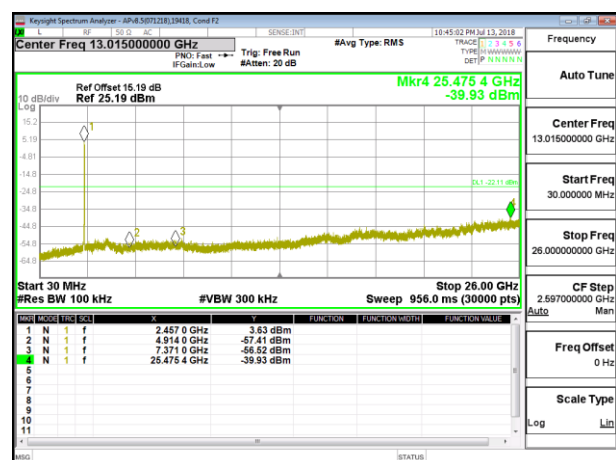
HIGH CHANNEL 9 BANDEDGE ANT 3



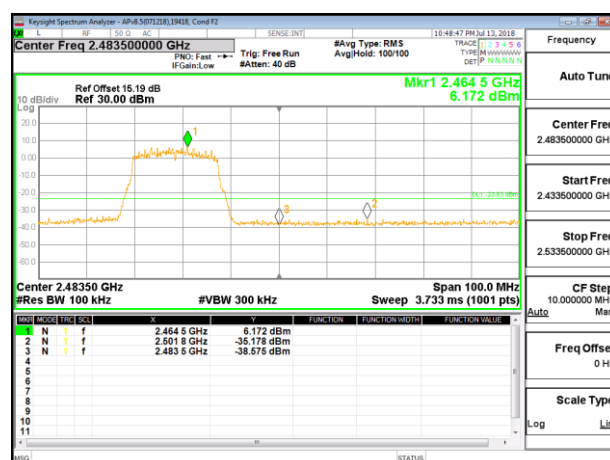
OUT-OF-BAND HIGH CHANNEL 9 ANT 3



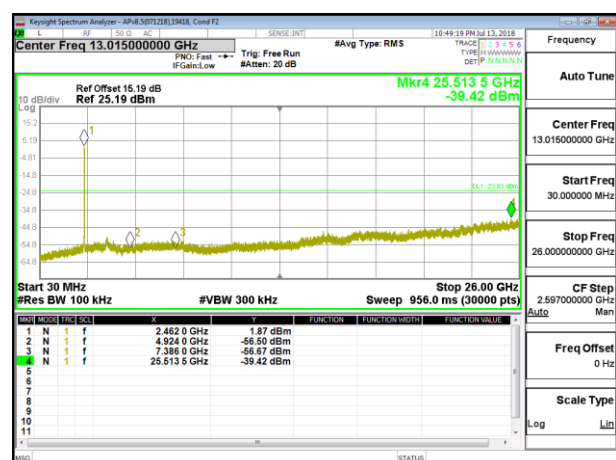
HIGH CHANNEL 10 BANDEDGE ANT 3



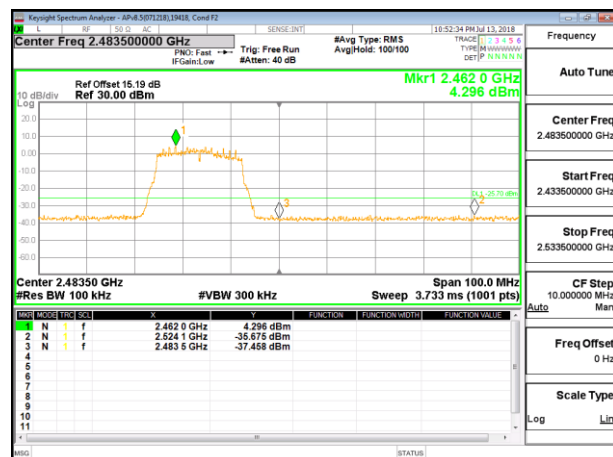
OUT-OF-BAND HIGH CHANNEL 10 ANT 3



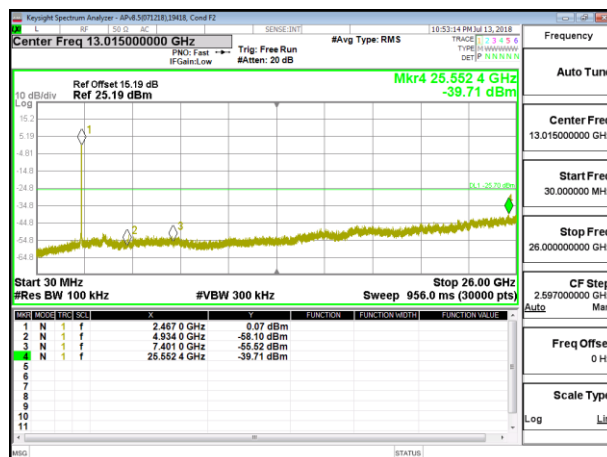
HIGH CHANNEL 11 BANDEDGE ANT 3



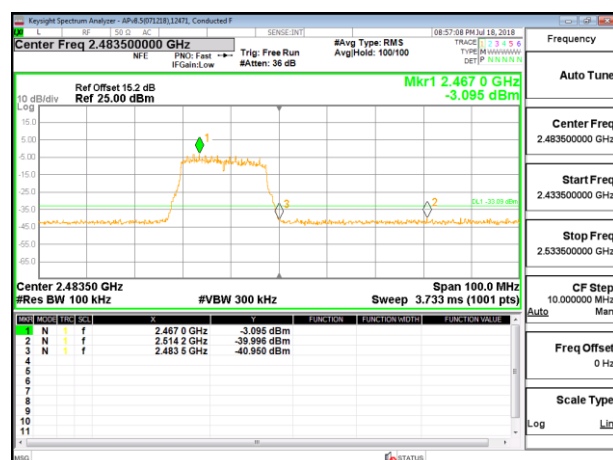
OUT-OF-BAND HIGH CHANNEL 11 ANT 3



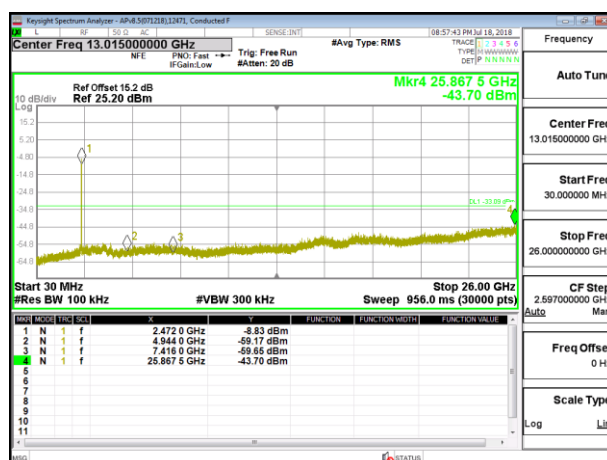
HIGH CHANNEL 12 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 12 ANT 3



HIGH CHANNEL 13 BANDEDGE ANT 3



OUT-OF-BAND HIGH CHANNEL 13 ANT 3

## 9. RADIATED TEST RESULTS

### LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10

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

### TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

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

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

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

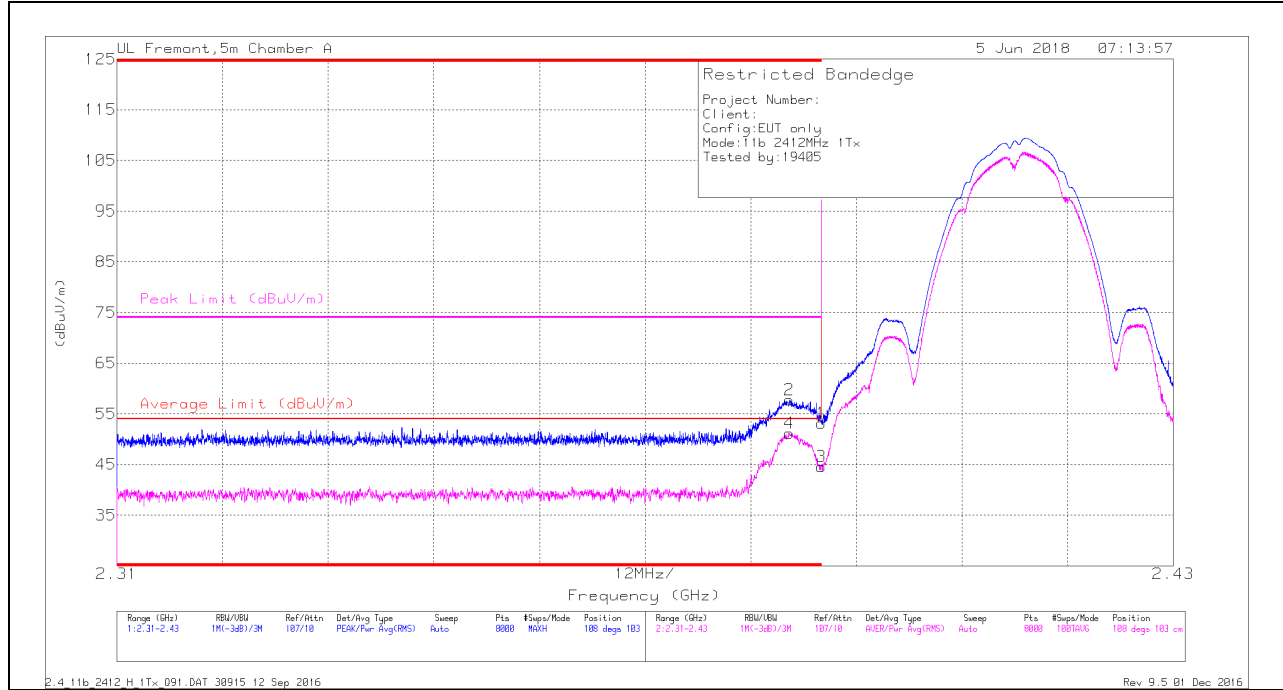
## 9.1. TRANSMITTER ABOVE 1 GHz

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

#### 1TX Antenna 4 MODE

#### BANDEDGE (LOW CHANNEL, CH 1)

#### HORIZONTAL RESULT



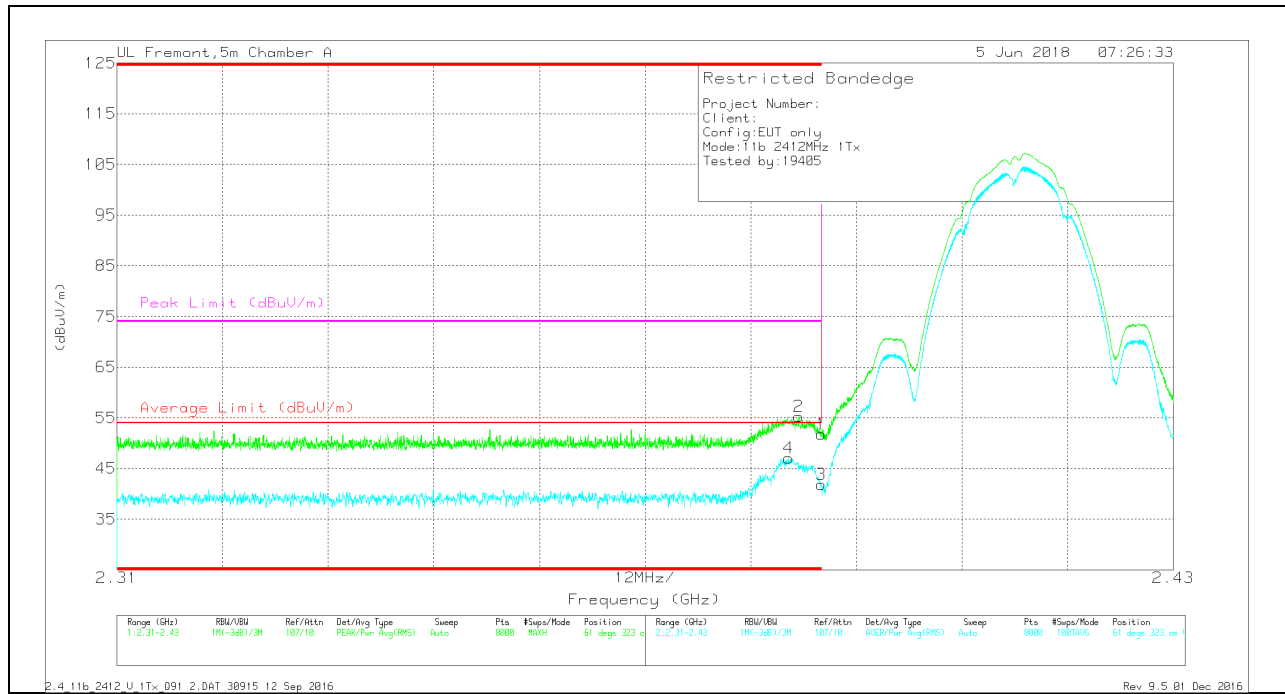
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 43.79                | PK  | 32             | -22.6                  | 53.19                      | -                      | -           | 74                  | -20.81         | 108            | 103         | H        |
| 2      | * 2.386         | 48.46                | PK  | 31.9           | -22.6                  | 57.76                      | -                      | -           | 74                  | -16.24         | 108            | 103         | H        |
| 3      | * 2.39          | 35.21                | RMS | 32             | -22.6                  | 44.61                      | 54                     | -9.39       | -                   | -              | 108            | 103         | H        |
| 4      | * 2.386         | 41.85                | RMS | 31.9           | -22.6                  | 51.15                      | 54                     | -2.85       | -                   | -              | 108            | 103         | H        |

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

PK - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dBm) | Amp/CbI/Filt/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 42.38                | Pk  | 32            | -22.6                  | 51.78                      | -                      | -           | 74                  | -22.22         | 61             | 323         | V        |
| 2      | * 2.387         | 45.96                | Pk  | 31.9          | -22.6                  | 55.26                      | -                      | -           | 74                  | -18.74         | 61             | 323         | V        |
| 3      | * 2.39          | 32.45                | RMS | 32            | -22.6                  | 41.85                      | 54                     | -12.15      | -                   | -              | 61             | 323         | V        |
| 4      | * 2.386         | 37.75                | RMS | 31.9          | -22.6                  | 47.05                      | 54                     | -6.95       | -                   | -              | 61             | 323         | V        |

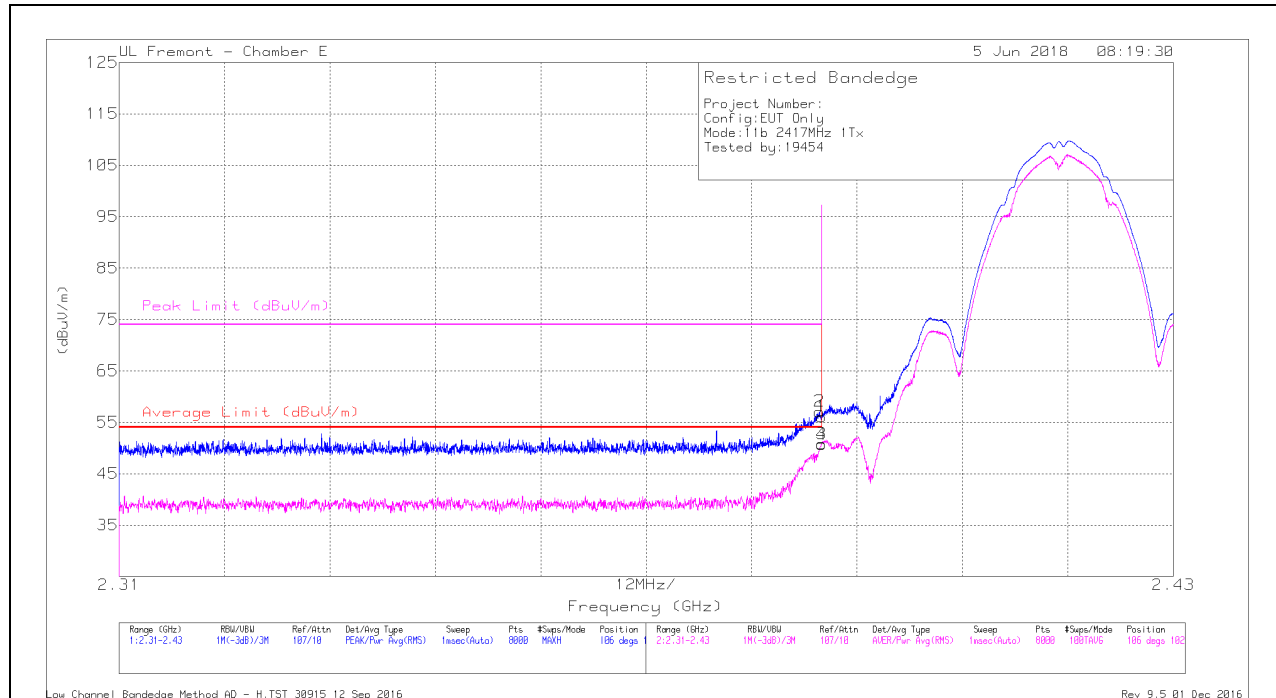
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

# **BANDEDGE (LOW CHANNEL, CH 2)**

## **HORIZONTAL RESULT**



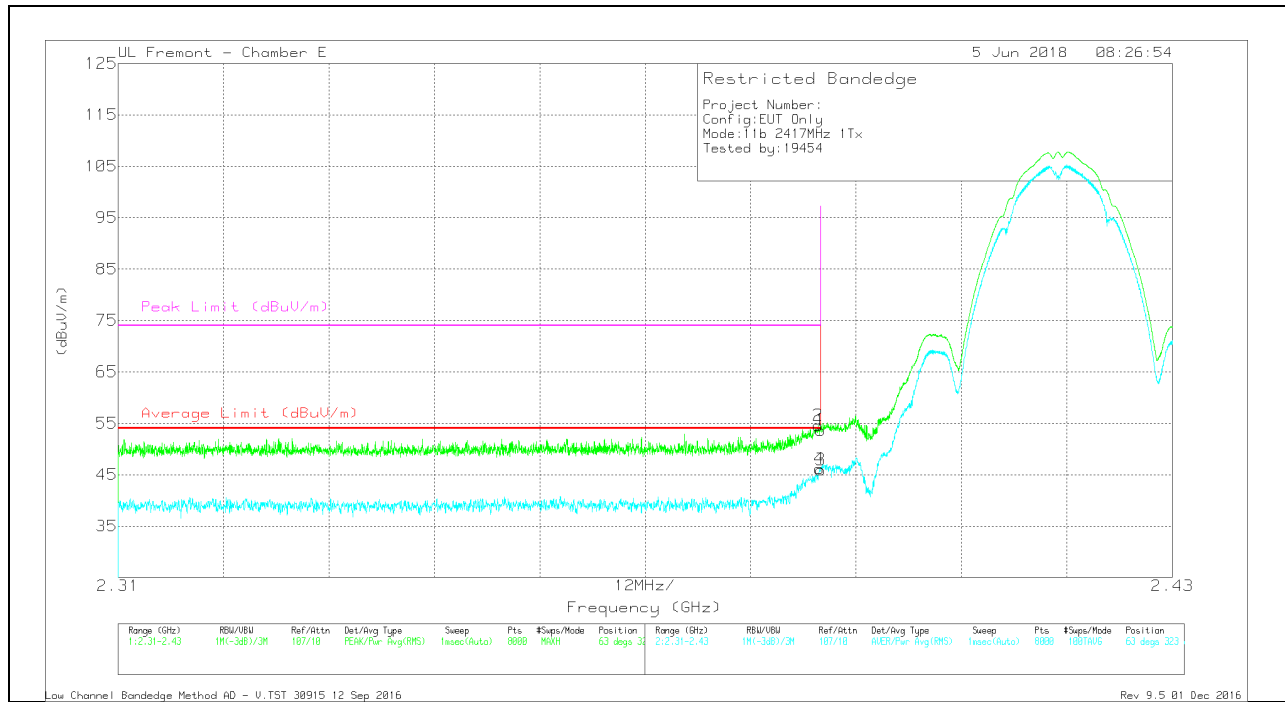
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Amp/Ch/Filt/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 46.66                | Pk  | 32             | -22.6                | 56.06                      | -                      | -           | 74                  | -17.94         | 106            | 102         | H        |
| 2      | * 2.39          | 47.7                 | Pk  | 32             | -22.6                | 57.1                       | -                      | -           | 74                  | -16.9          | 106            | 102         | H        |
| 3      | * 2.39          | 41.42                | RMS | 32             | -22.6                | 50.82                      | 54                     | -3.18       | -                   | -              | 106            | 102         | H        |
| 4      | * 2.39          | 41.31                | RMS | 32             | -22.6                | 50.71                      | 54                     | -3.29       | -                   | -              | 106            | 102         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Amp/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.39          | 44.26                | Pk  | 32             | -22.6                   | 53.66                      | -                      | -           | 74                  | -20.34         | 63             | 323         | V        |
| 2      | * 2.39          | 45.19                | Pk  | 32             | -22.6                   | 54.59                      | -                      | -           | 74                  | -19.41         | 63             | 323         | V        |
| 3      | * 2.39          | 36.57                | RMS | 32             | -22.6                   | 45.97                      | 54                     | -8.03       | -                   | -              | 63             | 323         | V        |
| 4      | * 2.39          | 36.74                | RMS | 32             | -22.6                   | 46.14                      | 54                     | -7.86       | -                   | -              | 63             | 323         | V        |

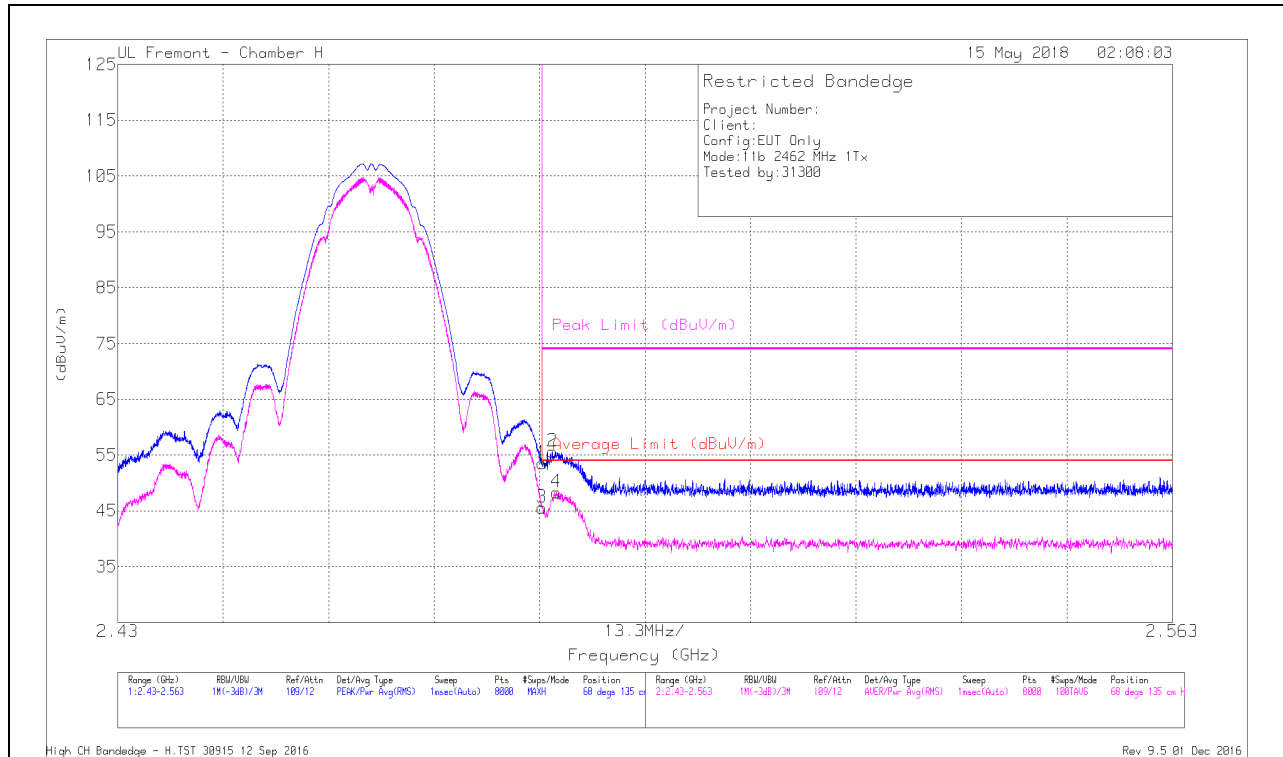
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

# **BANDEDGE (HIGH CHANNEL, CH 11)**

## **HORIZONTAL RESULT**



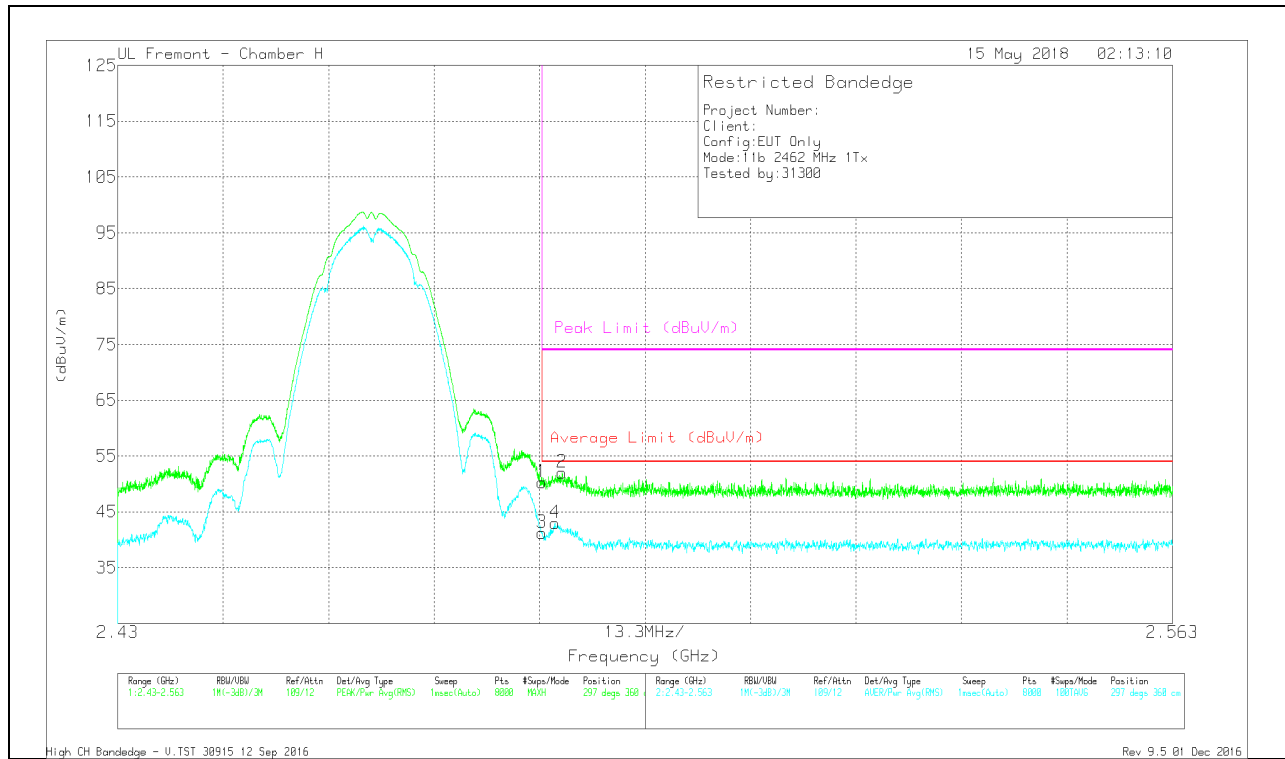
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Ampl/Cbl/Filt/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 42.96                | Pk  | 32.3           | -21.7                   | 53.56                      | -                      | -           | 74                  | -20.44         | 68             | 135         | H        |
| 3      | * 2.484         | 34.95                | RMS | 32.3           | -21.7                   | 45.55                      | 54                     | -8.45       | -                   | -              | 68             | 135         | H        |
| 2      | * 2.485         | 44.98                | Pk  | 32.3           | -21.7                   | 55.58                      | -                      | -           | 74                  | -18.42         | 68             | 135         | H        |
| 4      | * 2.485         | 37.76                | RMS | 32.3           | -21.7                   | 48.36                      | 54                     | -5.64       | -                   | -              | 68             | 135         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dBm) | Amp/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 39.65                | Pk  | 32.3          | -21.7                   | 50.25                      | -                      | -           | 74                  | -23.75         | 297            | 360         | V        |
| 3      | * 2.484         | 30.62                | RMS | 32.3          | -21.7                   | 41.22                      | 54                     | -12.78      | -                   | -              | 297            | 360         | V        |
| 4      | * 2.485         | 32.31                | RMS | 32.3          | -21.7                   | 42.91                      | 54                     | -11.09      | -                   | -              | 297            | 360         | V        |
| 2      | * 2.486         | 41.44                | Pk  | 32.3          | -21.7                   | 52.04                      | -                      | -           | 74                  | -21.96         | 297            | 360         | V        |

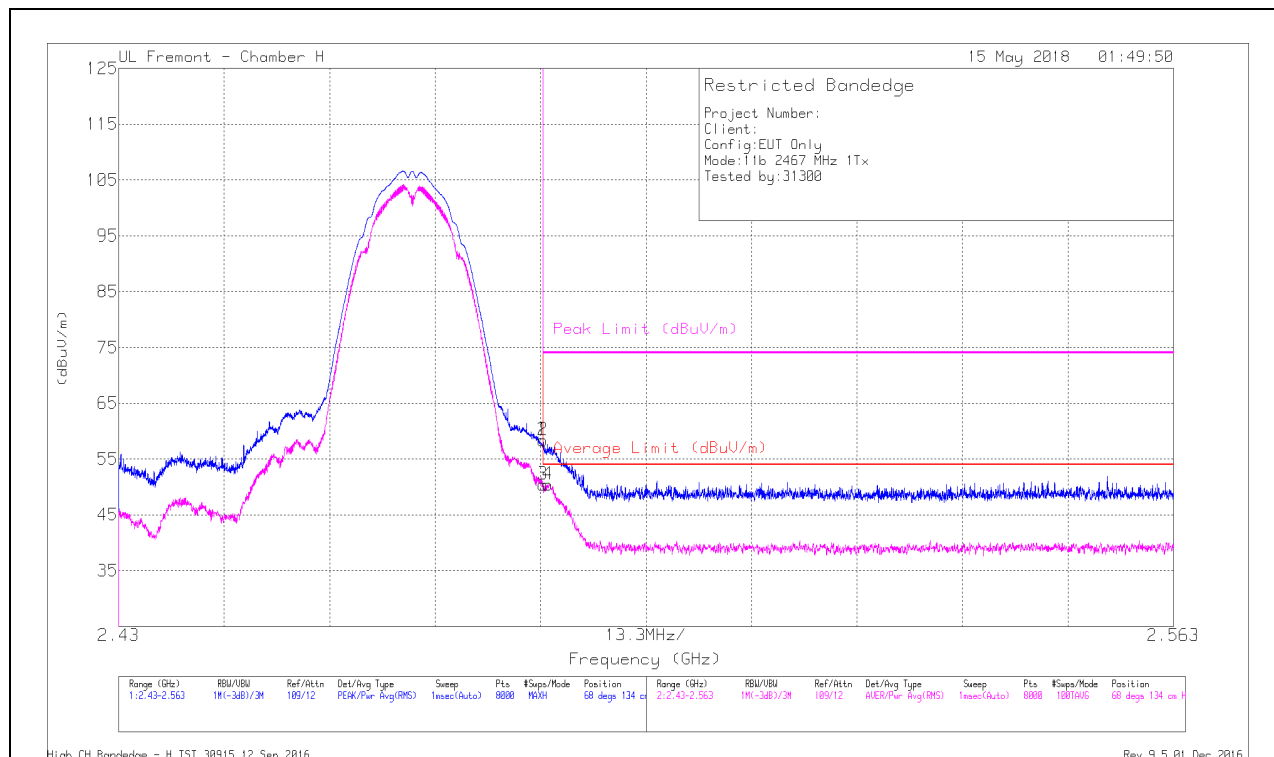
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

# **BANDEDGE (HIGH CHANNEL, CH 12)**

## **HORIZONTAL RESULT**



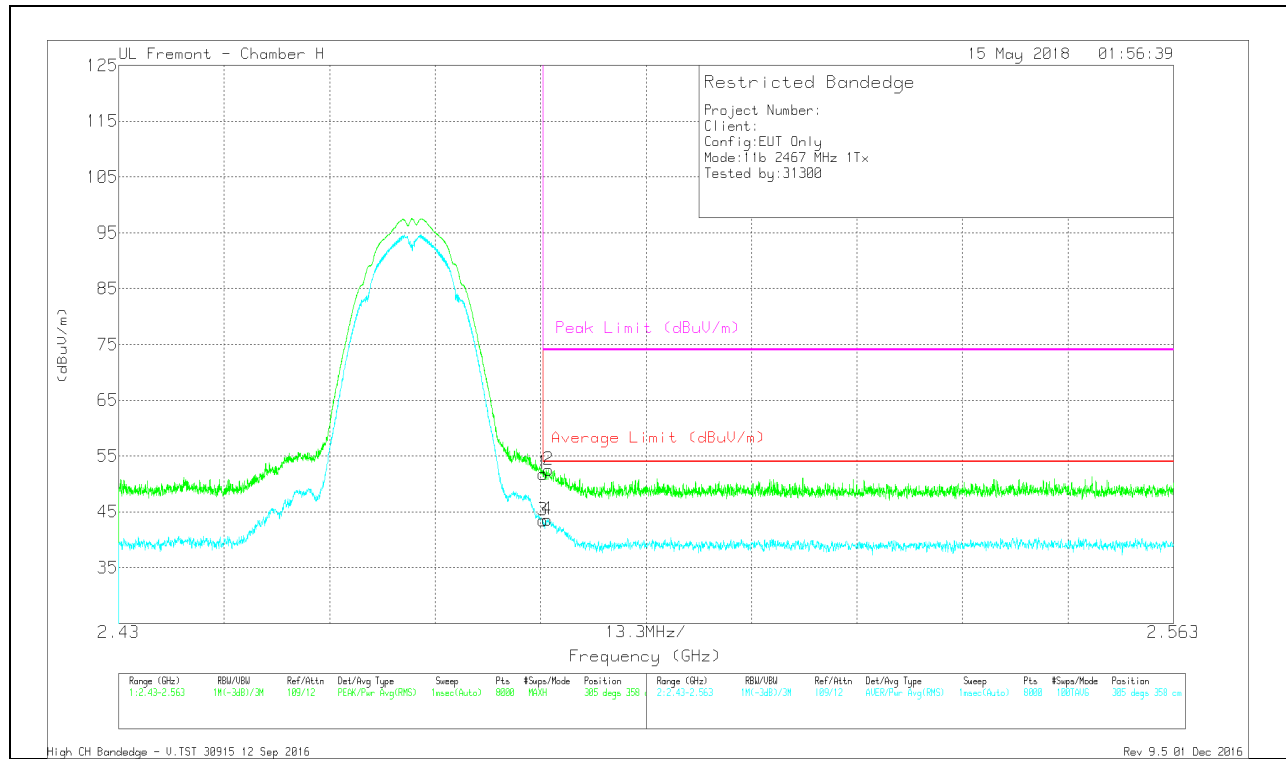
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Ampl/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 47.73                | Pk  | 32.3           | -21.7                    | 58.33                      | -                      | -           | 74                  | -15.67         | 68             | 134         | H        |
| 2      | * 2.484         | 47.76                | Pk  | 32.3           | -21.7                    | 58.36                      | -                      | -           | 74                  | -15.64         | 68             | 134         | H        |
| 3      | * 2.484         | 39.8                 | RMS | 32.3           | -21.7                    | 50.4                       | 54                     | -3.6        | -                   | -              | 68             | 134         | H        |
| 4      | * 2.484         | 39.85                | RMS | 32.3           | -21.7                    | 50.45                      | 54                     | -3.55       | -                   | -              | 68             | 134         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dBm) | 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         | 41.24                | Pk  | 32.3          | -21.7                  | 51.84                      | -                      | -           | 74                  | -22.16         | 305            | 358         | V        |
| 2      | * 2.484         | 41.98                | Pk  | 32.3          | -21.7                  | 52.58                      | -                      | -           | 74                  | -21.42         | 305            | 358         | V        |
| 3      | * 2.484         | 32.86                | RMS | 32.3          | -21.7                  | 43.46                      | 54                     | -10.54      | -                   | -              | 305            | 358         | V        |
| 4      | * 2.484         | 33.04                | RMS | 32.3          | -21.7                  | 43.64                      | 54                     | -10.36      | -                   | -              | 305            | 358         | V        |

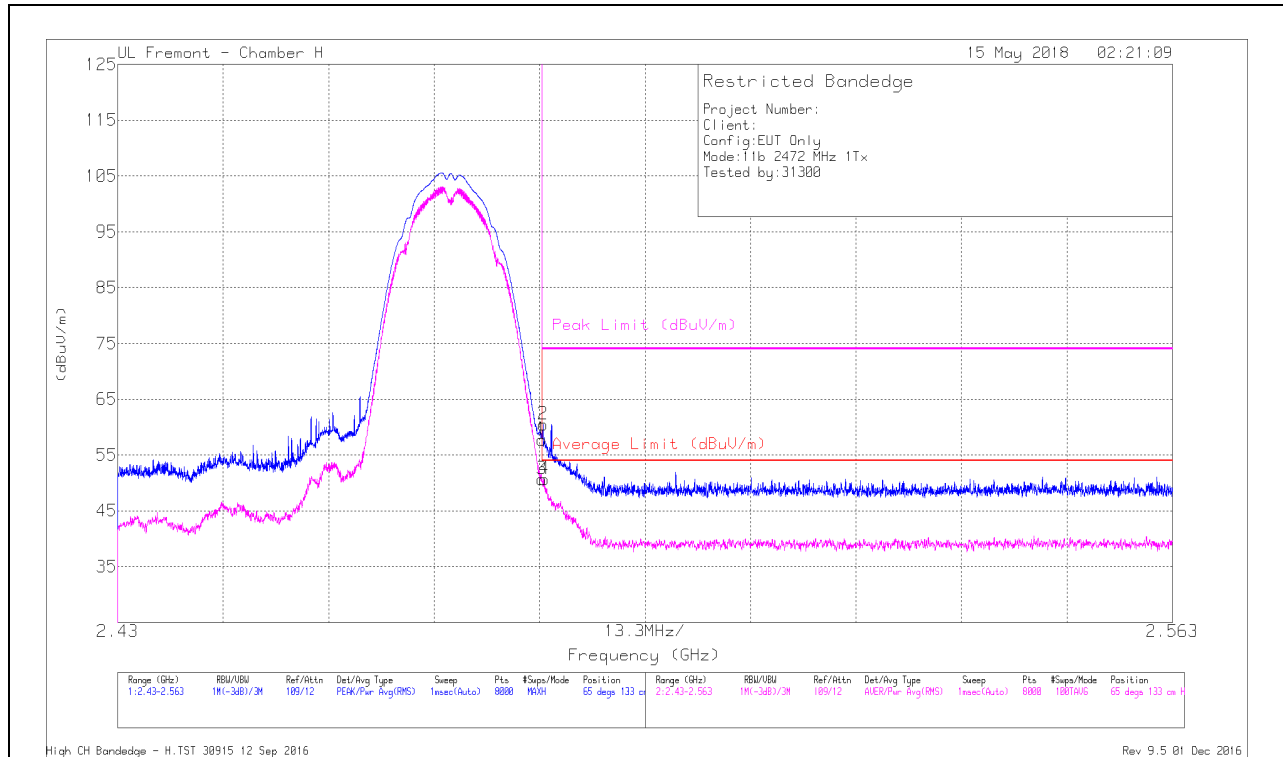
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

# **BANDEDGE (HIGH CHANNEL, CH 13)**

## **HORIZONTAL RESULT**



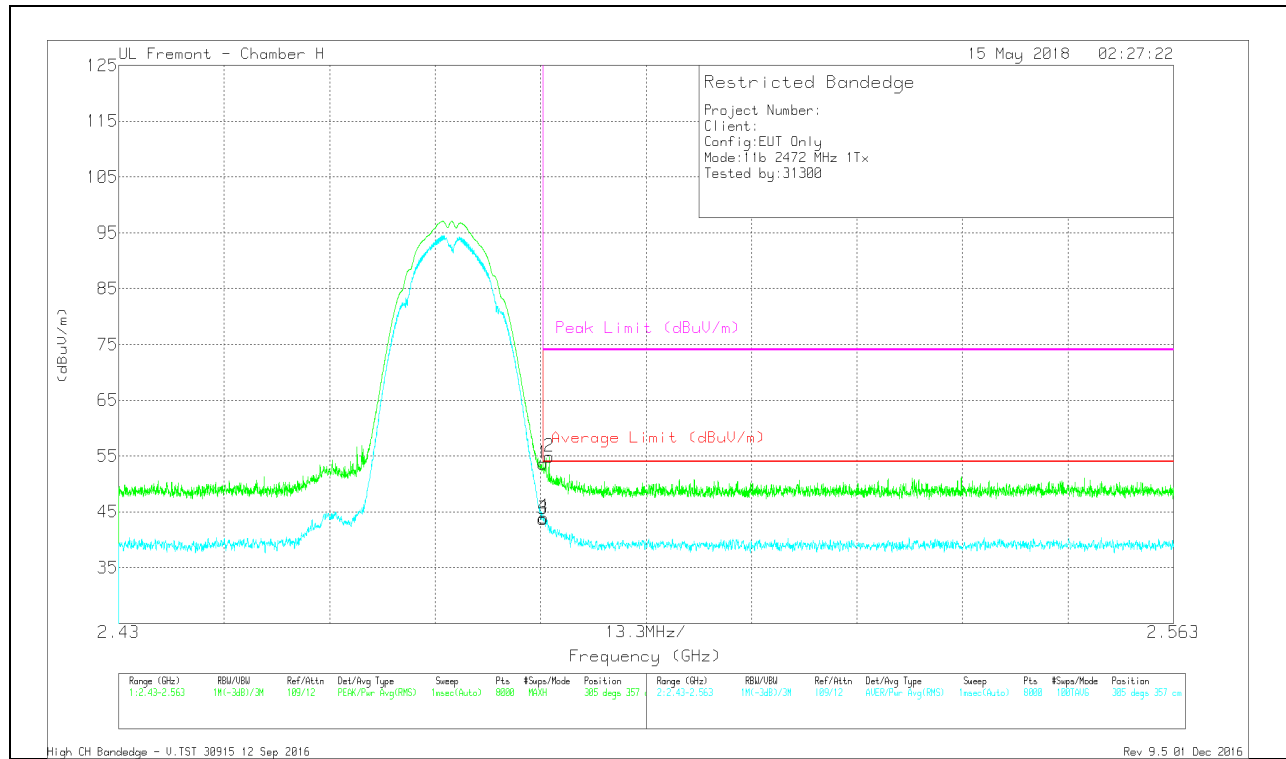
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dB/m) | Ampl/Cbl/Filtr/P ad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 2.484         | 47.09                | Pk  | 32.3           | -21.7                    | 57.69                      | -                      | -           | 74                  | -16.31         | 65             | 133         | H        |
| 2      | * 2.484         | 49.87                | Pk  | 32.3           | -21.7                    | 60.47                      | -                      | -           | 74                  | -13.53         | 65             | 133         | H        |
| 3      | * 2.484         | 40.01                | RMS | 32.3           | -21.7                    | 50.61                      | 54                     | -3.39       | -                   | -              | 65             | 133         | H        |
| 4      | * 2.484         | 40.09                | RMS | 32.3           | -21.7                    | 50.69                      | 54                     | -3.31       | -                   | -              | 65             | 133         | H        |

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T346 (dBm) | 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         | 43.04                | Pk  | 32.3          | -21.7                  | 53.64                      | -                      | -           | 74                  | -20.36         | 305            | 357         | V        |
| 2      | * 2.484         | 44.3                 | Pk  | 32.3          | -21.7                  | 54.9                       | -                      | -           | 74                  | -19.1          | 305            | 357         | V        |
| 3      | * 2.484         | 33.11                | RMS | 32.3          | -21.7                  | 43.71                      | 54                     | -10.29      | -                   | -              | 305            | 357         | V        |
| 4      | * 2.484         | 33.42                | RMS | 32.3          | -21.7                  | 44.02                      | 54                     | -9.98       | -                   | -              | 305            | 357         | V        |

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

Pk - Peak detector

RMS - RMS detection