



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 8**

CERTIFICATION TEST REPORT

FOR

HANDELD COMPUTING DEVICE

MODEL NUMBER: 1572

FCC ID: C3K1572

IC: 3048A-1572

REPORT NUMBER: 13U16702-3A

ISSUE DATE: FEBRUARY 12, 2014

Prepared for

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052, U.S.A.

EUT DESCRIPTION: HANDHELD COMPUTING DEVICE WITH 802.11 A/B/G/N WLAN
AND BLUETOOTH RADIOS

MODEL: 1572

SERIAL NUMBER: 008079434852

DATE TESTED: JANUARY 8, 2014 to JANUARY 30, 2014

| APPLICABLE STANDARDS | |
|---|--------------|
| STANDARD | TEST RESULTS |
| CFR 47 Part 15 Subpart C | Pass |
| INDUSTRY CANADA RSS-210 Issue 8 Annex 8 | Pass |
| INDUSTRY CANADA RSS-GEN Issue 3 | Pass |

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Verification Services Inc. By:

Tested By:



TIM LEE
WiSE Program Manager
UL Verification Services Inc.

JOE VANG
EMC ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 47173 Benicia Street | 47266 Benicia Street |
|---|---|
| <input checked="" type="checkbox"/> Chamber A | <input type="checkbox"/> Chamber D |
| <input type="checkbox"/> Chamber B | <input checked="" type="checkbox"/> Chamber E |
| <input type="checkbox"/> Chamber C | <input type="checkbox"/> Chamber F |

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| PARAMETER | UNCERTAINTY |
|---------------------------------------|-------------|
| Conducted Disturbance, 0.15 to 30 MHz | 3.52 dB |
| Radiated Disturbance, 30 to 1000 MHz | 4.94 dB |

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a hand held computing device with 802.11 a/b/g/n WLAN and Bluetooth radios.

The unit supports AFH mode. The manufacturer attested the following.

- It is in compliance with Bluetooth Specification 1.2 or later specification.
- The number of hopping channels in AFH mode is 20 channels
- The output power does not transmit over 125 mW
- The channel separation is based upon 2/3 of 20 dB channel bandwidth

5.2. MAXIMUM OUTPUT POWER

The measured average power values were within ± 0.5 dB of the original values. Refer to original report number "13U15414-3A" for exact output power values and for all antenna port results.

5.3. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

The change filed under this application has the following changes.

- The reference oscillator type change from TXCO to simple Crystal, with the reference frequency stays the same and the new part pin for pin compatible with original.
- New PCB Layout with Different PCB stack up

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

T The radio utilizes a PIFA antenna, with a maximum gain of 3.1 dBi.

5.5. SOFTWARE AND FIRMWARE

The EUT driver software installed during testing was Window RT 8.1 Preview Build 943

The test utility software used during testing was Laptool 189.1.0.9.0\ WIFI Tool.exe

5.6. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, it was determined that Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|----------|-----------------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| USB Ethernet Adaptor | CISCO | USB 300M | CU90MC02233 | DoC |
| Laptop | Lenovo | L420 | 7854CT0 | DoC |
| AC Adaptor (laptop) | Lenovo | 92P1156 | 111S92P1156ZDXN272091 | N/A |

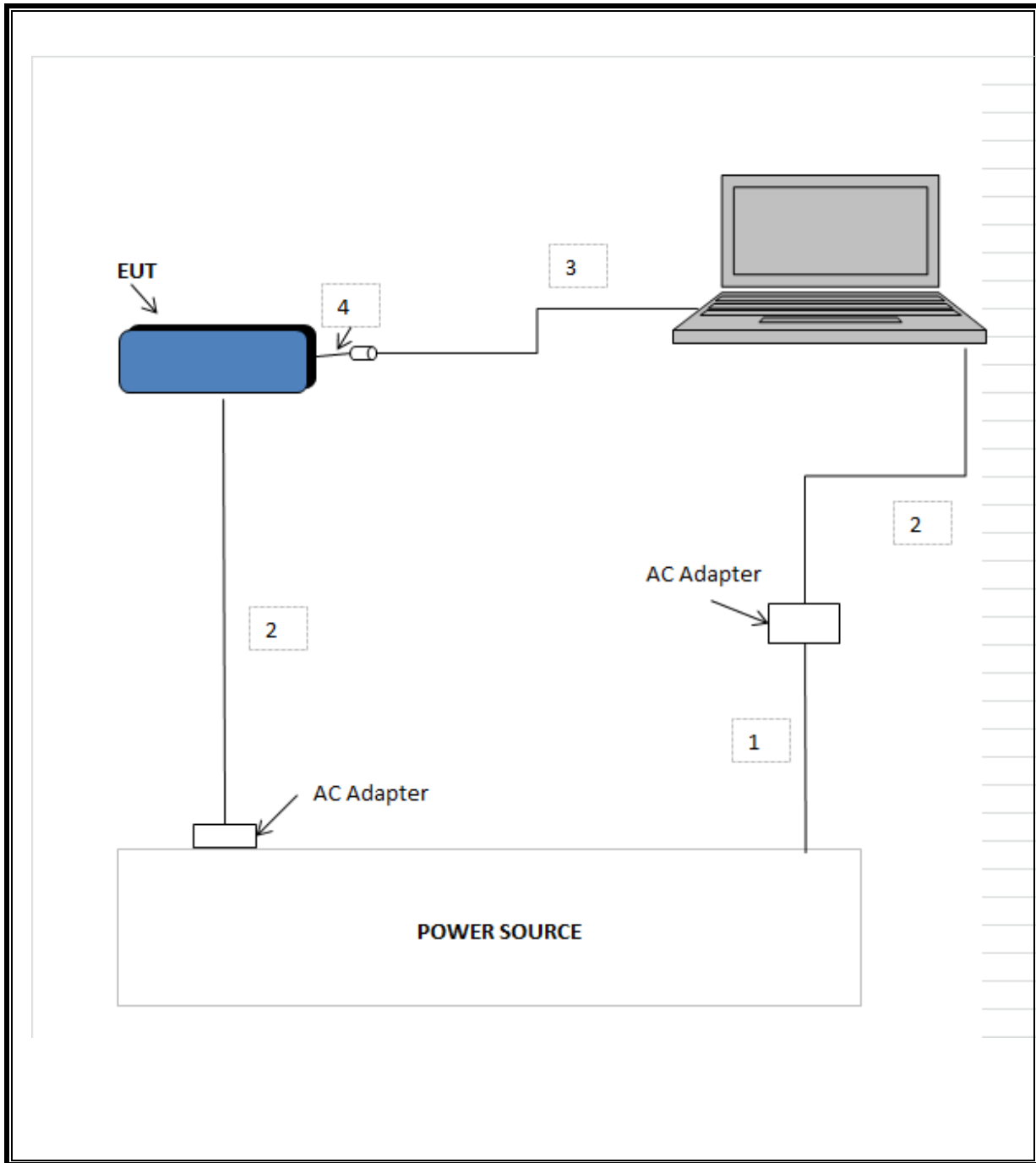
I/O CABLES

| I/O Cable List | | | | | | |
|----------------|----------|----------------------|----------------|------------|------------------|-------------------------|
| Cable No | Port | # of identical ports | Connector Type | Cable Type | Cable Length (m) | Remarks |
| 1 | AC | 1 | AC | Unshielded | 1.8 | AC adapter |
| 2 | USB | 1 | USB | Unshielded | 0.1 | USB to Ethernet adapter |
| 3 | DC | 1 | DC | Unshielded | 1.8 | |
| 4 | Ethernet | 1 | RJ 45 | Unshielded | 0.6 | Connects to USB adapter |

TEST SETUP

The EUT is a standalone wireless handheld computing device. Test software exercised the wireless module installed within the device under test.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| Test Equipment List | | | | |
|--|----------------|-------------|--------|------------|
| Description | Manufacturer | Model | Asset | Cal Date |
| Single Channel PK Power Meter | Agilent | N1911A | F00022 | 4/3/2013 |
| Wideband Power Sensor, 30MHz video bandwidth | Agilent | N1921A | F00358 | 10/1/2013 |
| Spectrum Analyzer, 44 GHz | Agilent | E4446A | C00986 | 4/1/2013 |
| Antenna, Horn, 18 GHz | ETS Lindgren | 3117 | C01022 | 2/21/2013 |
| Antenna, Biconolog, 30MHz-1 GHz | Sunol Sciences | JB1 | C01016 | 8/22/2013 |
| High Pass Filter | Micro-Tronics | HPM17543 | F00224 | 6/26/2013 |
| Low Pass Filter | Micro-Tronics | LPS17541 | F00219 | 6/26/2013 |
| High Pass Filter | Micro-Tronics | HPS17542 | F00222 | 6/26/2013 |
| RF PreAmplifier, 1-18GHz | Miteq | TBD | F00350 | 6/26/2013 |
| Preamplifier, 1300 MHz | Agilent | 8447D | C00885 | 6/26/2013 |
| Spectrum Analyzer, 40 GHz | Agilent | 8564E | C00951 | 7/29/2013 |
| PreAmplifier, 1-26.5GHz | Agilent | 8449B | F00167 | 3/23/2013 |
| Antenna, Horn, 40 GHz | ARA | MWH-2640/B | C00981 | 6/28/2013 |
| Antenna, Horn, 26.5 GHz | ARA | MWH-1826/B | C00980 | 11/26/2013 |
| Preamplifier, 40 GHz | Miteq | NSP4000-SP2 | C00990 | 8/20/2013 |

7. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

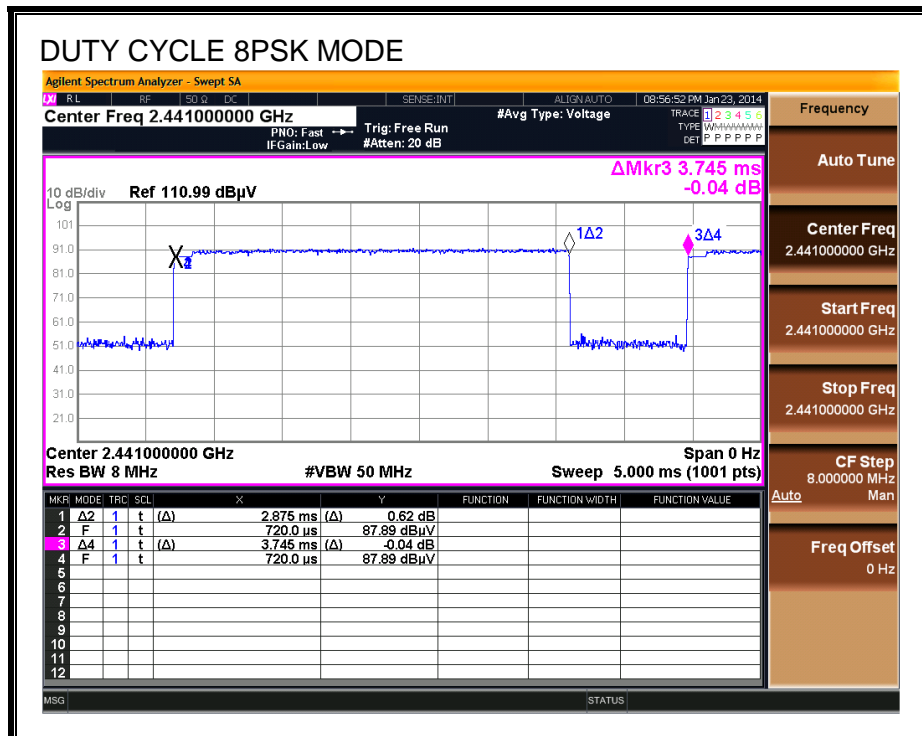
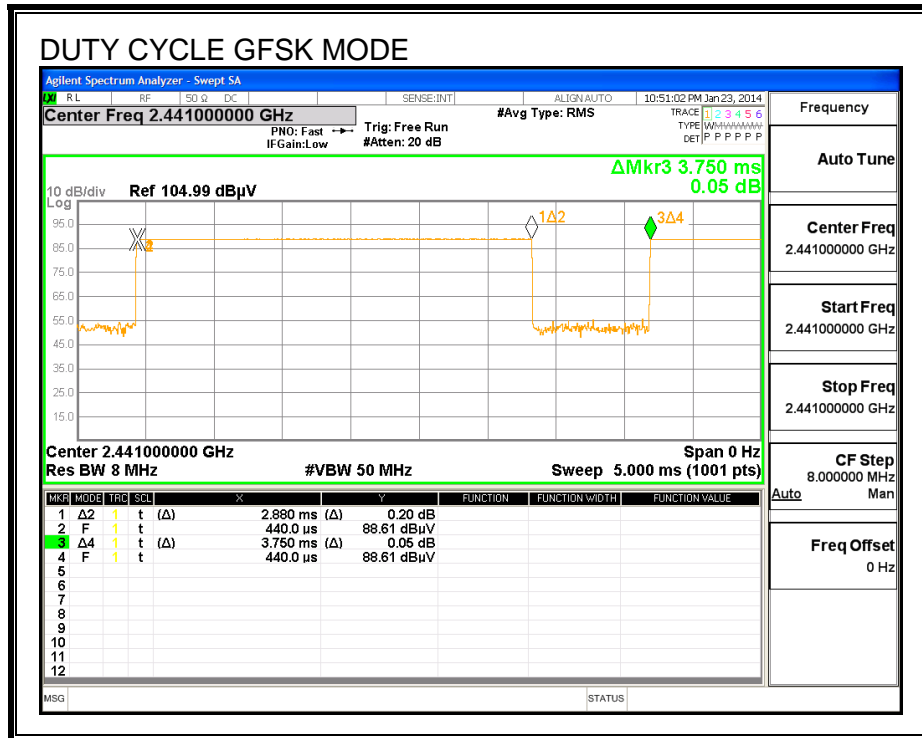
PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

7.1. ON TIME AND DUTY CYCLE RESULTS

| Mode | ON Time B (msec) | Period (msec) | Duty Cycle x (linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/B Minimum VBW (kHz) |
|----------------|------------------------|------------------|-----------------------------|----------------------|---|-----------------------------|
| Bluetooth GFSK | 2.880 | 3.750 | 0.768 | 76.80% | 1.15 | 0.347 |
| Bluetooth 8PSK | 2.875 | 3.745 | 0.768 | 76.77% | 1.15 | 0.348 |

7.2. DUTY CYCLE PLOTS



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
|-----------------------|------------------------------------|--------------------------------------|
| 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. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

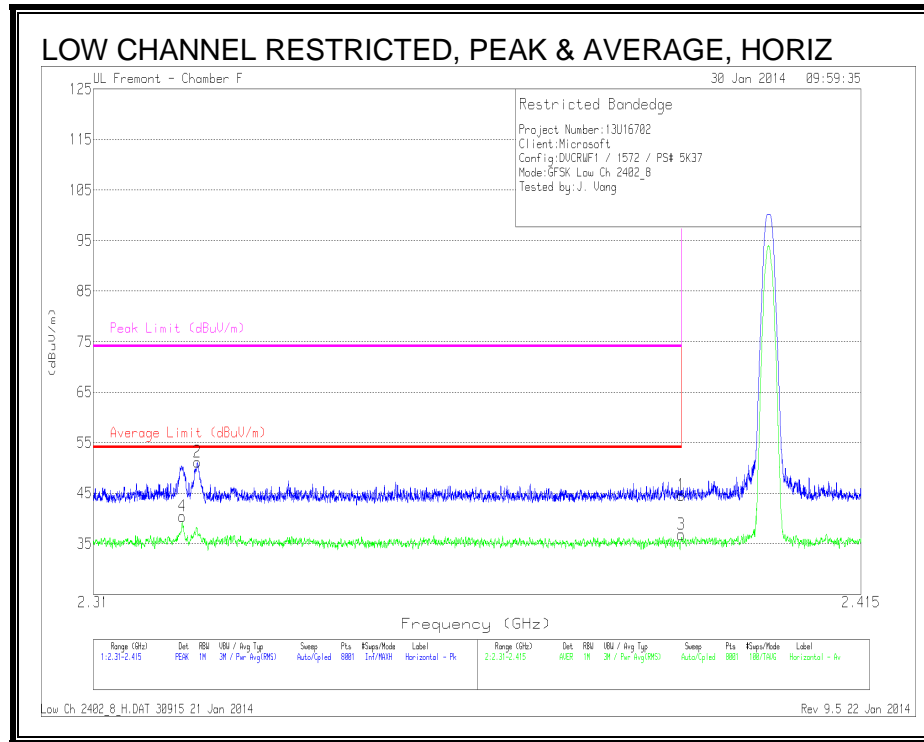
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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

8.2. TRANSMITTER ABOVE 1 GHz

8.2.1. BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

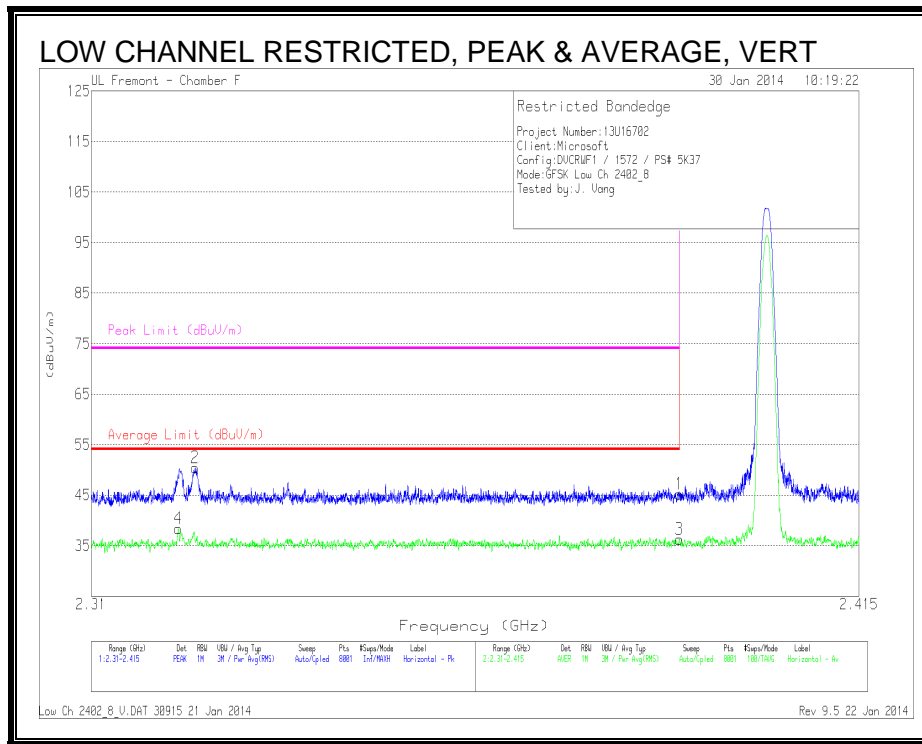


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.39 | 36.3 | PK | 32.1 | -23.8 | 44.6 | - | - | 74 | -29.4 | 260 | 109 | H |
| 2 | 2.324 | 42.64 | PK | 32 | -23.5 | 51.14 | - | - | 74 | -22.86 | 260 | 109 | H |
| 3 | 2.39 | 27.32 | RMS | 32.1 | -23.8 | 35.62 | 54 | -18.38 | - | - | 260 | 109 | H |
| 4 | 2.322 | 30.72 | RMS | 32 | -23.5 | 39.22 | 54 | -14.78 | - | - | 260 | 109 | H |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

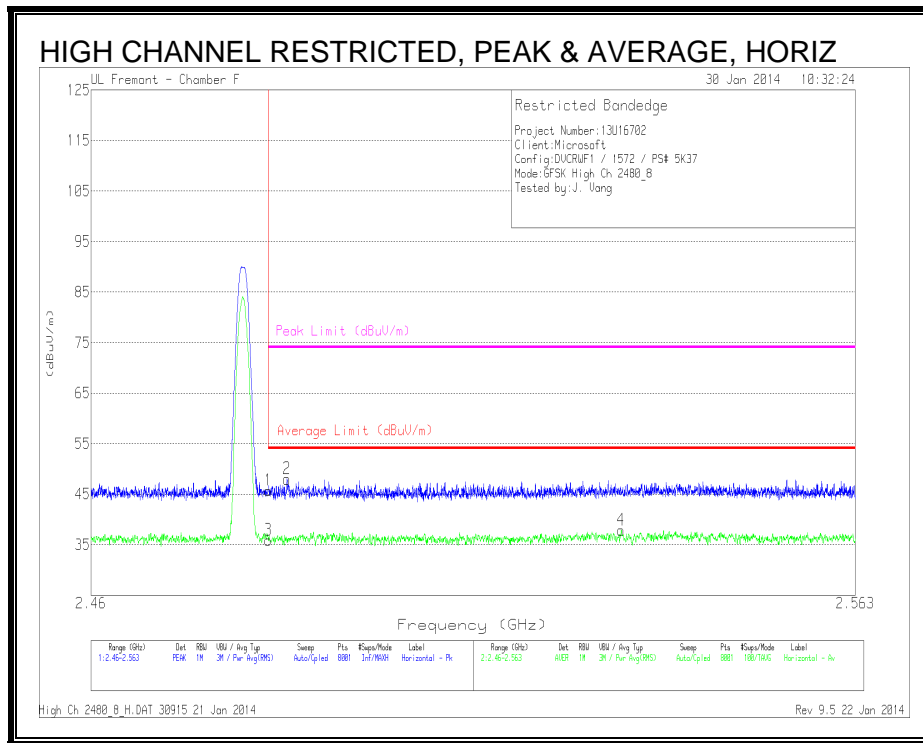


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.39 | 36.91 | PK | 32.1 | -23.8 | 45.21 | - | - | 74 | -28.79 | 314 | 179 | V |
| 2 | 2.324 | 41.9 | PK | 32 | -23.5 | 50.4 | - | - | 74 | -23.6 | 314 | 179 | V |
| 3 | 2.39 | 27.96 | RMS | 32.1 | -23.8 | 36.26 | 54 | -17.74 | - | - | 314 | 179 | V |
| 4 | 2.322 | 29.89 | RMS | 32 | -23.5 | 38.39 | 54 | -15.61 | - | - | 314 | 179 | V |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

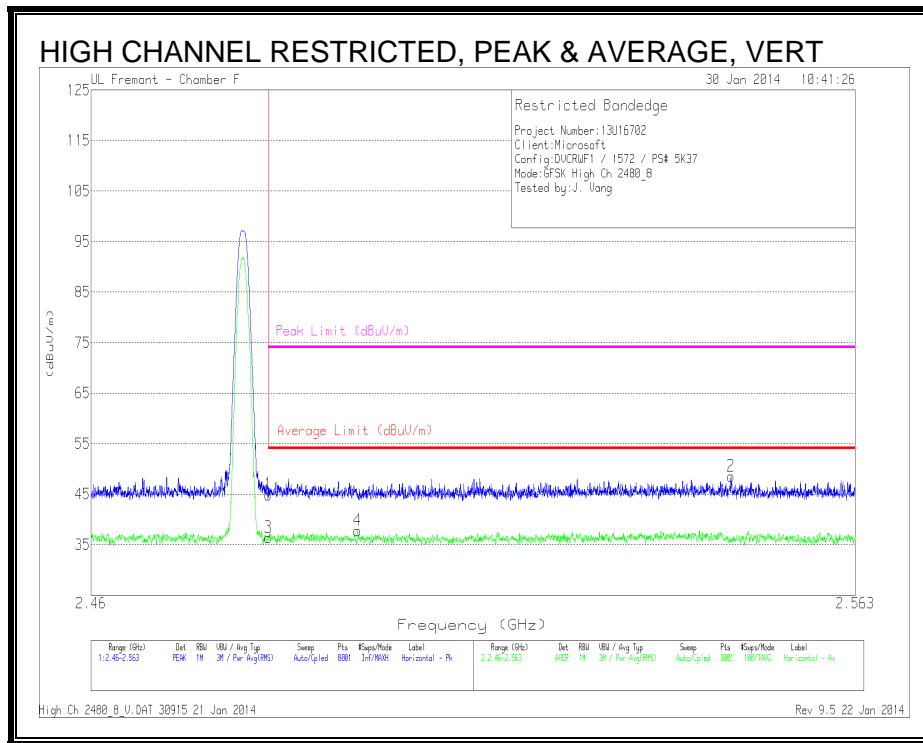


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.484 | 36.35 | PK | 32.4 | -23 | 45.75 | - | - | 74 | -28.25 | 305 | 108 | H |
| 2 | 2.486 | 38.53 | PK | 32.4 | -22.9 | 48.03 | - | - | 74 | -25.97 | 305 | 108 | H |
| 3 | 2.484 | 26.5 | RMS | 32.4 | -23 | 35.9 | 54 | -18.1 | - | - | 305 | 108 | H |
| 4 | 2.531 | 28.19 | RMS | 32.5 | -22.8 | 37.89 | 54 | -16.11 | - | - | 305 | 108 | H |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



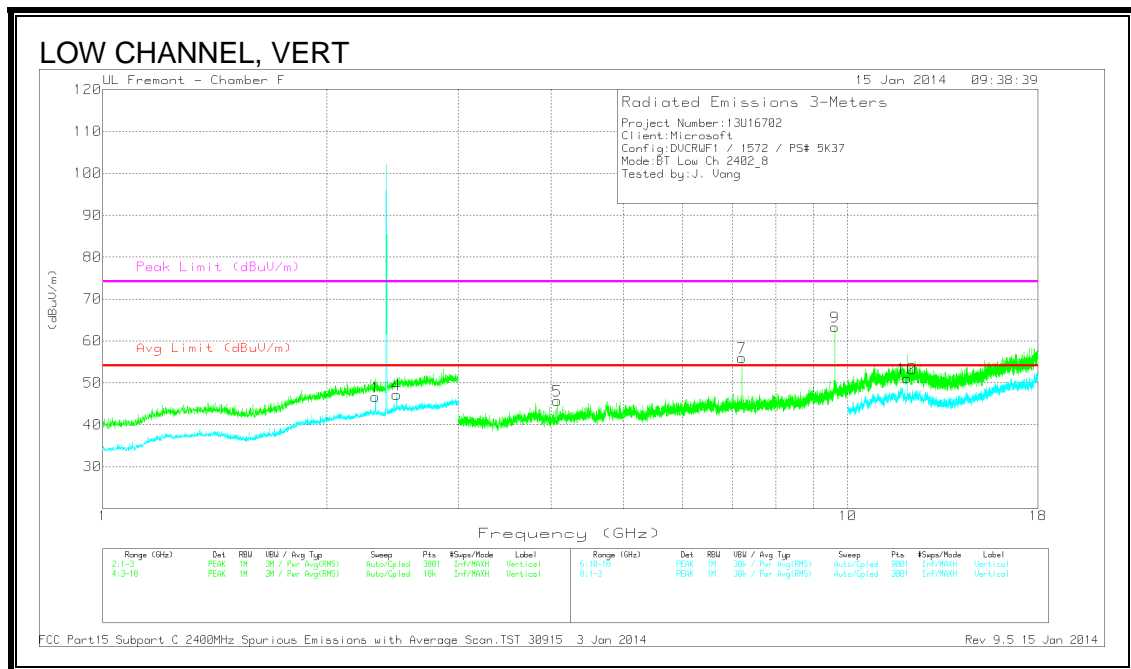
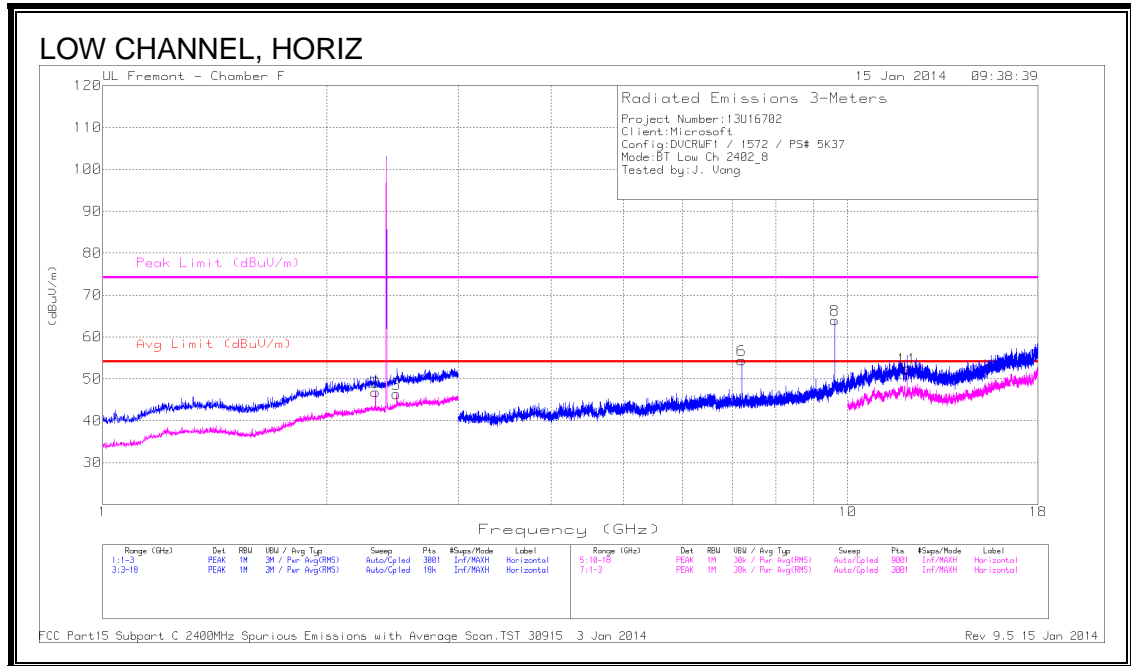
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.484 | 35.53 | PK | 32.4 | -23 | 44.93 | - | - | 74 | -29.07 | 248 | 263 | V |
| 2 | 2.546 | 38.94 | PK | 32.6 | -23 | 48.54 | - | - | 74 | -25.46 | 248 | 263 | V |
| 3 | 2.484 | 26.97 | RMS | 32.4 | -23 | 36.37 | 54 | -17.63 | - | - | 248 | 263 | V |
| 4 | 2.495 | 28.3 | RMS | 32.5 | -23 | 37.8 | 54 | -16.2 | - | - | 248 | 263 | V |

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



LOW CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Ftr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 5 | * 4.075 | 41.52 | PK | 33.4 | -29.2 | 0 | 45.72 | 54 | -8.28 | 74 | -28.28 | 0-360 | 201 | V |
| 11 | * 12.01 | 33.68 | Avg | 39.3 | -20.5 | 5.2 | 57.68 | - | - | 74 | -16.32 | 0-360 | 201 | H |
| 10 | * 12.009 | 32.27 | Avg | 39.3 | -20.5 | 5.2 | 56.27 | - | - | 74 | -17.73 | 0-360 | 199 | V |
| 2 | * 2.324 | 38.37 | Avg | 32 | -23.5 | 5.2 | 52.07 | 54 | -1.93 | 74 | -21.93 | 0-360 | 101 | H |
| 1 | * 2.321 | 38.14 | Avg | 32 | -23.5 | 5.2 | 51.84 | 54 | -2.16 | 74 | -22.16 | 0-360 | 199 | V |
| 3 | ** 2.479 | 37.19 | Avg | 32.4 | -23.2 | 5.2 | 51.59 | - | - | 74 | -22.41 | 0-360 | 201 | H |
| 4 | ** 2.48 | 37.96 | Avg | 32.4 | -23.2 | 5.2 | 52.36 | - | - | 74 | -21.64 | 0-360 | 199 | V |
| 6 | ** 7.206 | 45.43 | PK | 35.7 | -26.7 | 0 | 54.43 | - | - | 74 | -19.57 | 0-360 | 200 | H |
| 7 | ** 7.207 | 46.85 | PK | 35.7 | -26.6 | 0 | 55.95 | - | - | 74 | -18.05 | 0-360 | 101 | V |
| 8 | ** 9.609 | 47.78 | PK | 37.3 | -21.1 | 0 | 63.98 | - | - | 74 | -10.02 | 0-360 | 200 | H |
| 9 | ** 9.609 | 47.15 | PK | 37.3 | -21.1 | 0 | 63.35 | - | - | 74 | -10.65 | 0-360 | 201 | V |

Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/ Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------------------|----------------------------|------|-------------------|------------------------------|-----------------|----------------------------------|-----------------------|----------------|------------------------|----------------|-------------------|----------------|----------|
| * 2.322 | 45.58 | PK3 | 32 | -23.5 | 0 | 54.08 | - | - | 74 | -19.92 | 277 | 399 | H |
| * 2.322 | 33.64 | VB1T | 32 | -23.5 | 1.2 | 43.34 | 54 | -10.66 | - | - | 277 | 399 | H |
| * 2.324 | 47.15 | PK3 | 32 | -23.5 | 0 | 55.65 | - | - | 74 | -18.35 | 337 | 215 | V |
| * 2.322 | 34.87 | VB1T | 32 | -23.5 | 1.2 | 44.57 | 54 | -9.43 | - | - | 337 | 215 | V |
| * 12.009 | 41.23 | PK3 | 39.3 | -20.5 | 0 | 60.03 | - | - | 74 | -13.97 | 353 | 214 | H |
| * 12.009 | 32.6 | VB1T | 39.3 | -20.5 | 1.2 | 52.6 | 54 | -1.4 | - | - | 353 | 214 | H |
| * 12.011 | 41.54 | PK3 | 39.3 | -20.5 | 0 | 60.34 | - | - | 74 | -13.66 | 18 | 217 | V |
| * 12.009 | 32.67 | VB1T | 39.3 | -20.5 | 1.2 | 52.67 | 54 | -1.33 | - | - | 18 | 217 | V |

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

** - Denotes a frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

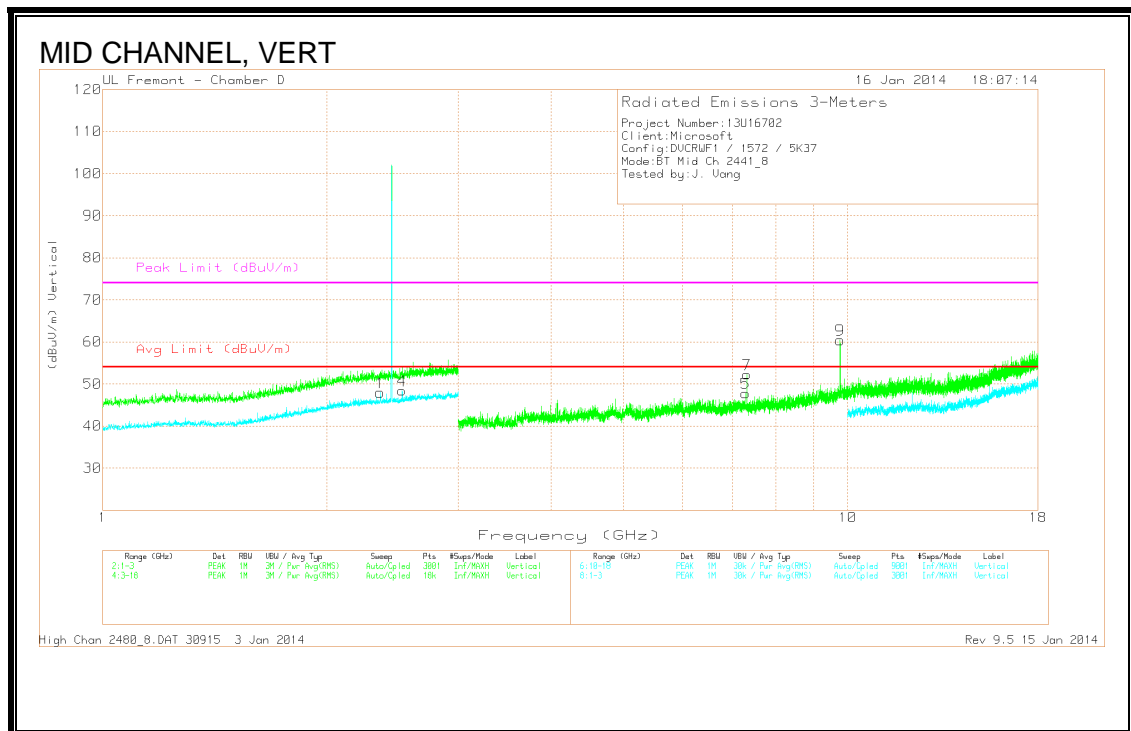
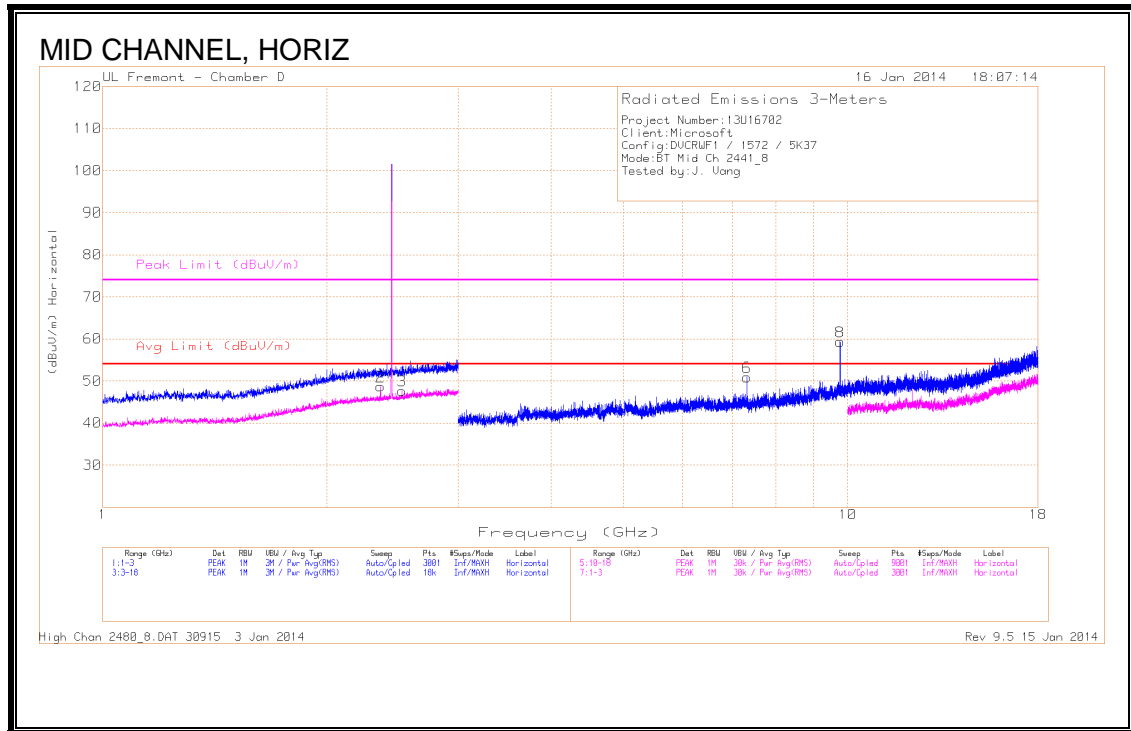
PK - Peak detector

Avg - Video bandwidth < Resolution bandwidth

PK3 - FHSS Method: Maximum Peak

VB 1/T - FHSS Method: Reduced Video Bandwidth

MID CHANNEL



MID CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 6 | * 7.324 | 40 | PK | 35.9 | -25 | 50.9 | 54 | -3.1 | 74 | -23.1 | 0-360 | 201 | H |
| 5 | * 7.291 | 36.73 | PK | 35.9 | -24.8 | 47.83 | 54 | -6.17 | 74 | -26.17 | 0-360 | 100 | V |
| 7 | * 7.324 | 41.39 | PK | 35.9 | -25 | 52.29 | 54 | -1.71 | 74 | -21.71 | 0-360 | 100 | V |
| 2 | * 2.359 | 37.09 | Avg | 32.4 | -20.8 | 48.69 | 54 | -5.31 | - | - | 0-360 | 100 | H |
| 1 | * 2.357 | 36.38 | Avg | 32.4 | -20.8 | 47.98 | 54 | -6.02 | - | - | 0-360 | 201 | V |
| 3 | ** 2.522 | 35.78 | Avg | 32.4 | -20.5 | 47.68 | - | - | 74 | -26.32 | 0-360 | 100 | H |
| 4 | ** 2.523 | 36.55 | Avg | 32.4 | -20.5 | 48.45 | - | - | 74 | -25.55 | 0-360 | 201 | V |
| 8 | ** 9.765 | 43.46 | PK | 37.4 | -21.5 | 59.36 | - | - | 74 | -14.64 | 0-360 | 100 | H |
| 9 | ** 9.765 | 44.54 | PK | 37.4 | -21.5 | 60.44 | - | - | 74 | -13.56 | 0-360 | 201 | V |

Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cbl/ Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------------------|----------------------------|------|-------------------|------------------------------|-----------------|----------------------------------|-----------------------|----------------|------------------------|----------------|-------------------|----------------|----------|
| * 2.357 | 47.35 | PK3 | 32.4 | -20.8 | 0 | 58.95 | - | - | 74 | -15.05 | 295 | 130 | H |
| * 2.357 | 34.74 | VB1T | 32.4 | -20.8 | 1.2 | 47.54 | 54 | -6.46 | - | - | 295 | 130 | H |
| * 7.323 | 46.06 | PK3 | 35.9 | -25 | 0 | 56.96 | - | - | 74 | -17.04 | 26 | 299 | H |
| * 7.323 | 40.46 | VB1T | 35.9 | -25 | 1.2 | 52.56 | 54 | -1.44 | - | - | 26 | 299 | H |
| * 7.323 | 45.35 | PK3 | 35.9 | -25 | 0 | 56.25 | - | - | 74 | -17.75 | 34 | 341 | V |
| * 7.323 | 40.84 | VB1T | 35.9 | -25 | 1.2 | 52.94 | 54 | -1.06 | - | - | 34 | 341 | V |

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

** - Denotes a frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

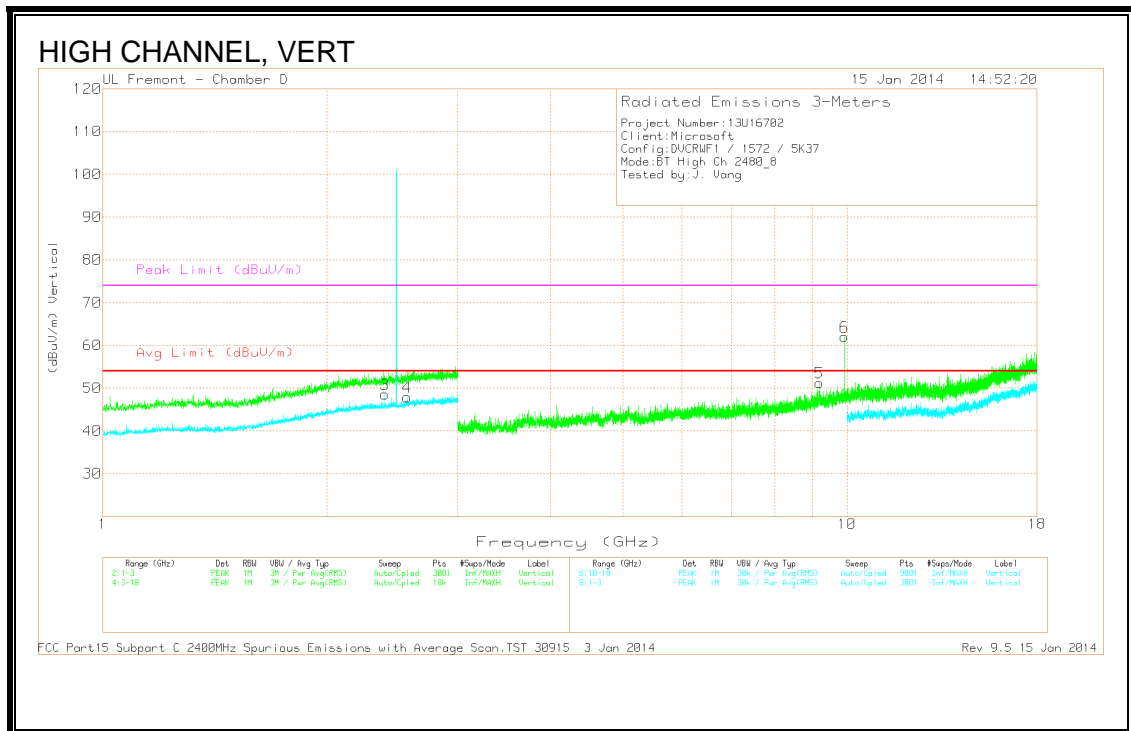
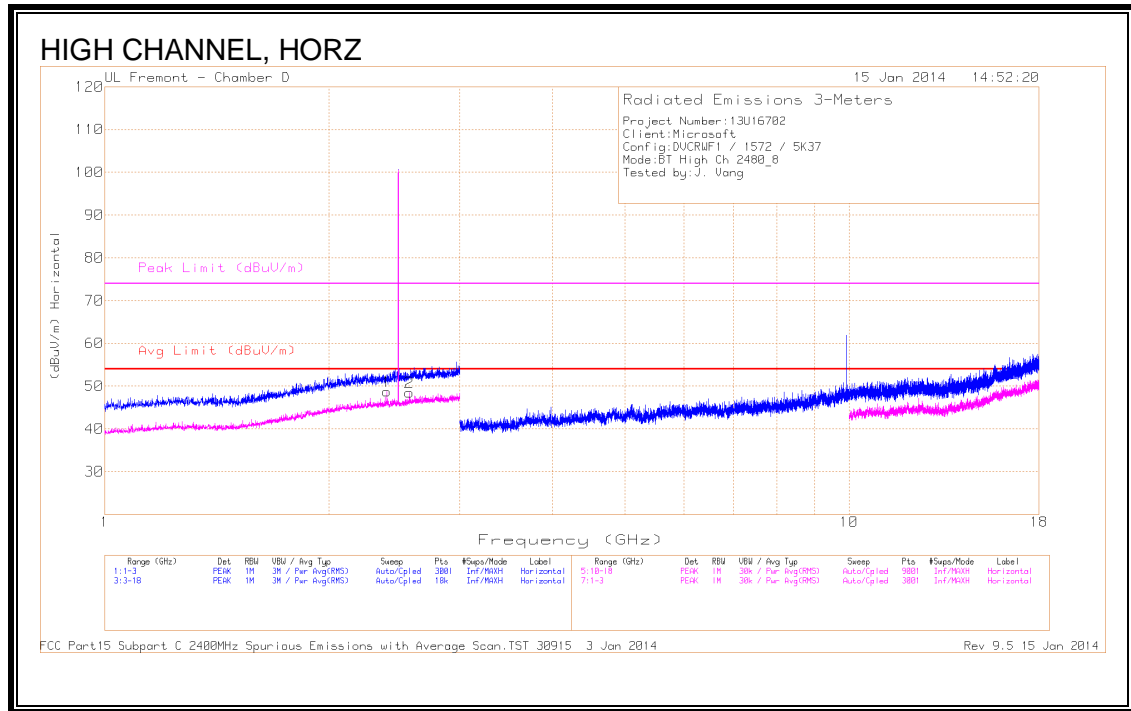
PK - Peak detector

Avg - Video bandwidth < Resolution bandwidth

PK3 - FHSS Method: Maximum Peak

VB 1/T - FHSS Method: Reduced Video Bandwidth

HIGH CHANNEL



HIGH CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 5 | * 9.184 | 35.64 | PK | 36.8 | -21.2 | 0 | 51.24 | 54 | -2.76 | 74 | -22.76 | 0-360 | 100 | V |
| 1 | ** 2.394 | 36.88 | Avg | 32.4 | -20.5 | 5.2 | 53.98 | - | - | 74 | -20.02 | 0-360 | 100 | H |
| 3 | ** 2.395 | 36.67 | Avg | 32.4 | -20.5 | 5.2 | 53.77 | - | - | 74 | -20.23 | 0-360 | 201 | V |
| 4 | ** 2.565 | 35.93 | Avg | 32.5 | -20.5 | 5.2 | 53.13 | - | - | 74 | -20.87 | 0-360 | 201 | V |
| 2 | ** 2.567 | 36.53 | Avg | 32.5 | -20.5 | 5.2 | 53.73 | - | - | 74 | -20.27 | 0-360 | 100 | H |
| 6 | ** 9.92 | 46.02 | PK | 37.7 | -21.7 | 0 | 62.02 | - | - | 74 | -11.98 | 0-360 | 100 | V |

Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cbl/Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|-----------------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| * 9.178 | 37.6 | PK3 | 36.8 | -21.3 | 0 | 53.1 | - | - | 74 | -20.9 | 264 | 360 | V |
| * 9.159 | 25.31 | VB1T | 36.8 | -22 | 1.2 | 41.31 | 54 | -12.69 | - | - | 264 | 360 | V |

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

** - Denotes a frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

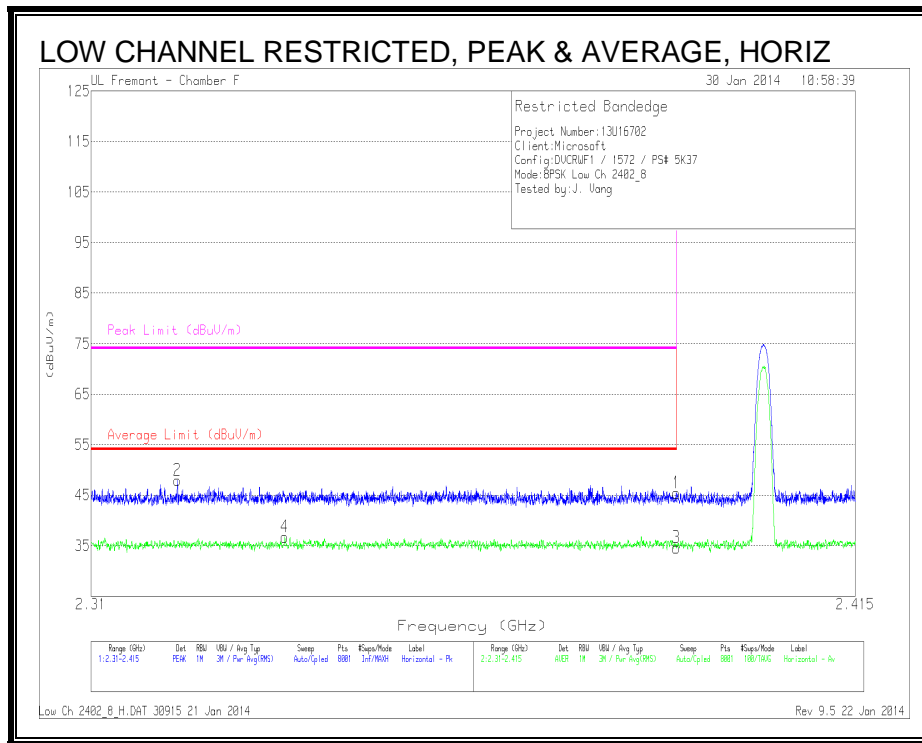
PK - Peak detector

Avg - Video bandwidth < Resolution bandwidth

PK3 - FHSS Method: Maximum Peak

8.2.2. BASIC DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

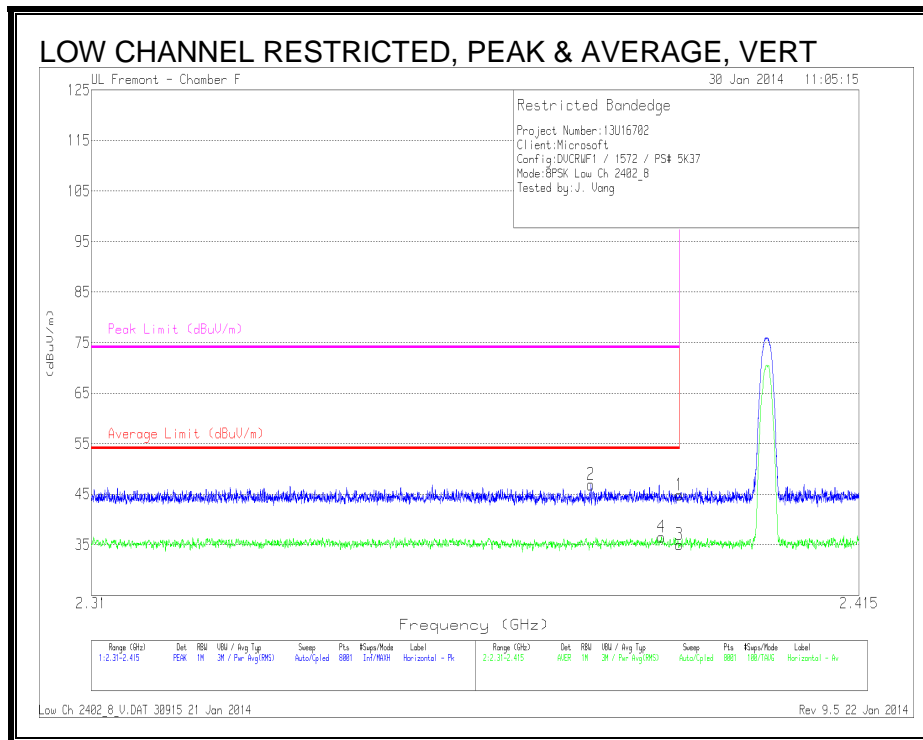


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.39 | 37.11 | PK | 32.1 | -23.8 | 45.41 | - | - | 74 | -28.59 | 306 | 279 | H |
| 2 | 2.322 | 39.43 | PK | 32 | -23.5 | 47.93 | - | - | 74 | -26.07 | 306 | 279 | H |
| 3 | 2.39 | 26.3 | RMS | 32.1 | -23.8 | 34.6 | 54 | -19.4 | - | - | 306 | 279 | H |
| 4 | 2.336 | 28.22 | RMS | 32 | -23.5 | 36.72 | 54 | -17.28 | - | - | 306 | 279 | H |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

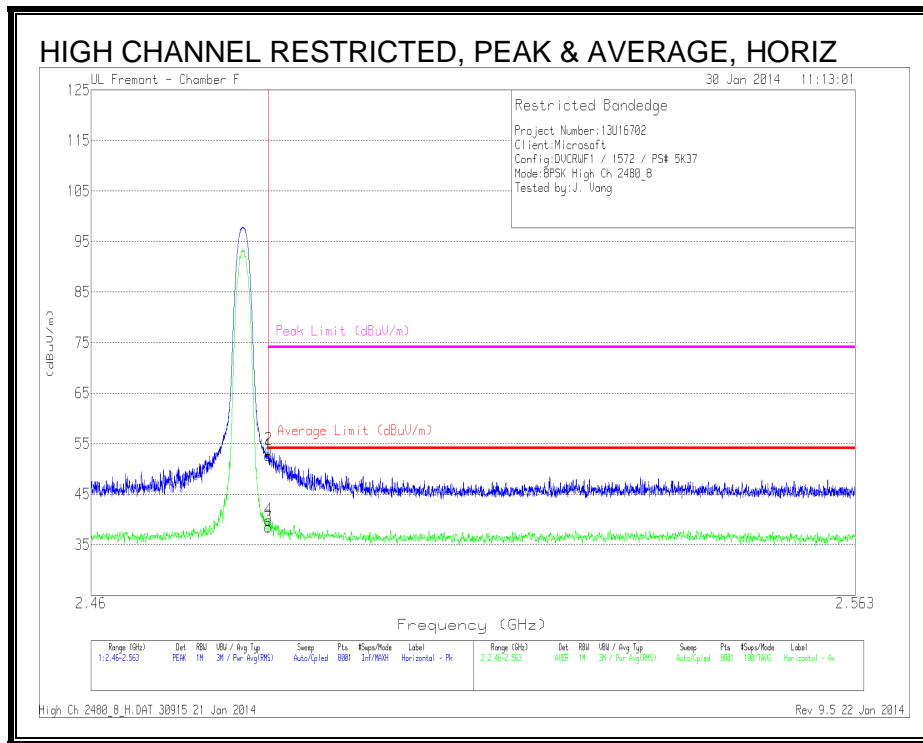


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.39 | 36.52 | PK | 32.1 | -23.8 | 44.82 | - | - | 74 | -29.18 | 159 | 101 | V |
| 2 | 2.378 | 38.7 | PK | 32.1 | -23.9 | 46.9 | - | - | 74 | -27.1 | 159 | 101 | V |
| 3 | 2.39 | 26.71 | RMS | 32.1 | -23.8 | 35.01 | 54 | -18.99 | - | - | 159 | 101 | V |
| 4 | 2.388 | 28.22 | RMS | 32.1 | -23.8 | 36.52 | 54 | -17.48 | - | - | 159 | 101 | V |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)

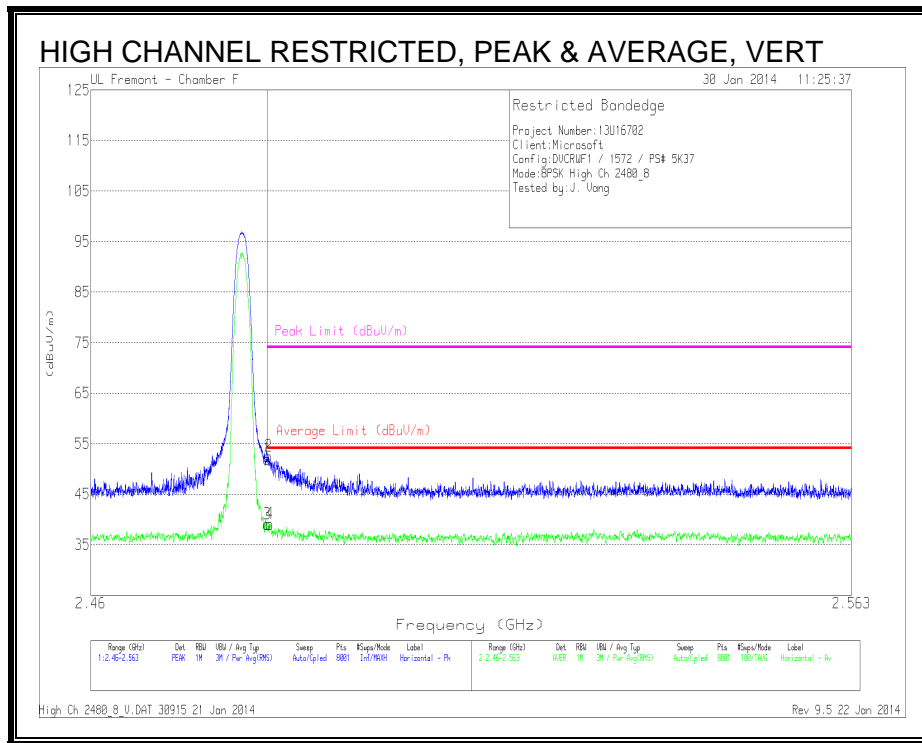


| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.484 | 43.3 | PK | 32.4 | -23 | 52.7 | - | - | 74 | -21.3 | 262 | 281 | H |
| 2 | 2.484 | 44.46 | PK | 32.4 | -23 | 53.86 | - | - | 74 | -20.14 | 262 | 281 | H |
| 3 | 2.484 | 29.13 | RMS | 32.4 | -23 | 38.53 | 54 | -15.47 | - | - | 262 | 281 | H |
| 4 | 2.484 | 30.45 | RMS | 32.4 | -23 | 39.85 | 54 | -14.15 | - | - | 262 | 281 | H |

PK - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



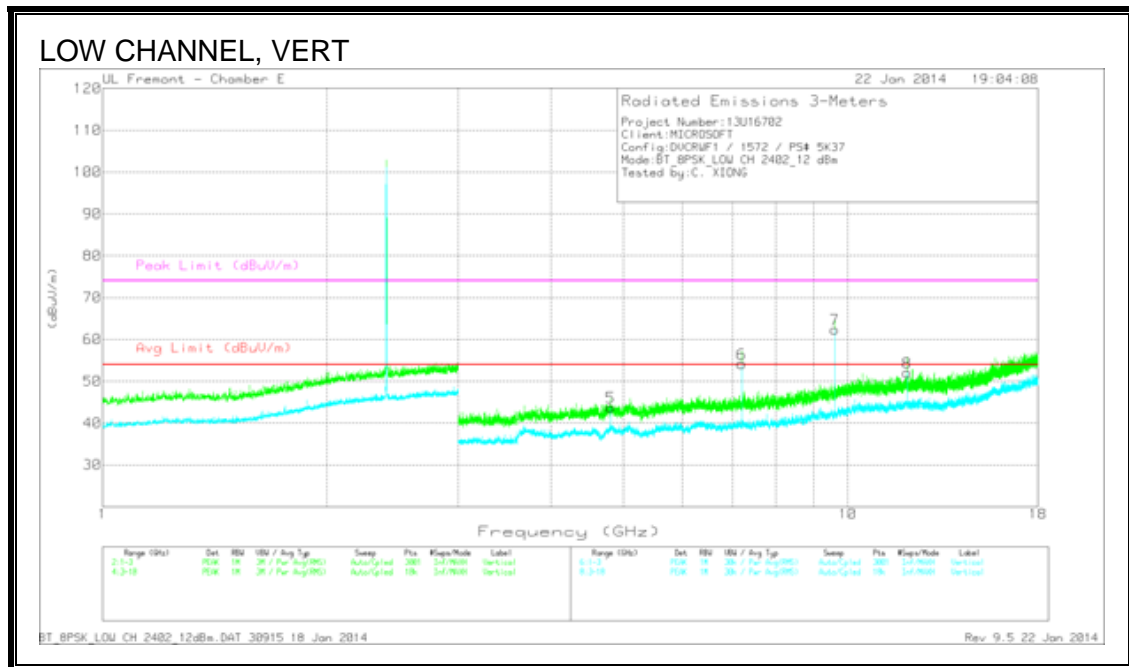
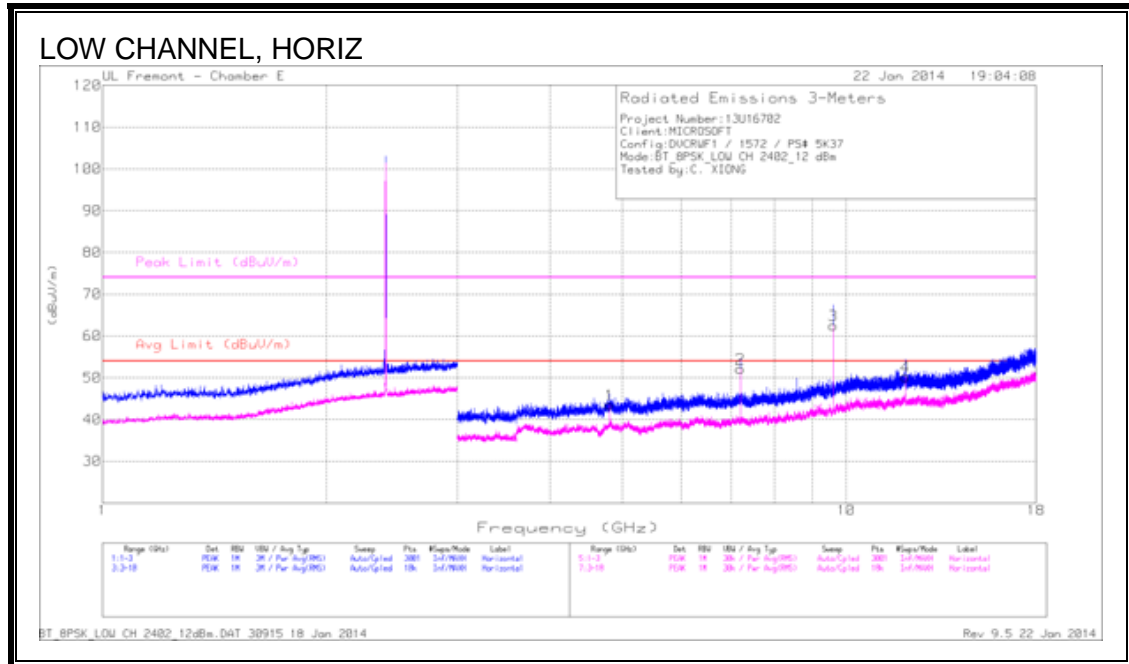
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T120 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | 2.484 | 42.58 | PK | 32.4 | -23 | 51.98 | - | - | 74 | -22.02 | 287 | 117 | V |
| 2 | 2.484 | 43.08 | PK | 32.4 | -23 | 52.48 | - | - | 74 | -21.52 | 287 | 117 | V |
| 3 | 2.484 | 29.65 | RMS | 32.4 | -23 | 39.05 | 54 | -14.95 | - | - | 287 | 117 | V |
| 4 | 2.484 | 29.69 | RMS | 32.4 | -23 | 39.09 | 54 | -14.91 | - | - | 287 | 117 | V |

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



LOW CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/Fitr /Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|-------------------|--------------------------|--------------|----------------------------------|-----------------------|----------------|------------------------|-------------------|-------------------|----------------|----------|
| 1 | * 4.805 | 36.22 | Avg | 34.4 | -27.1 | 0 | 43.52 | 53.97 | -10.45 | - | - | 0-360 | 100 | H |
| 4 | * 12.009 | 31.94 | Avg | 39.2 | -20.9 | 0 | 50.24 | 53.97 | -3.73 | - | - | 0-360 | 201 | H |
| 5 | * 4.804 | 36.45 | Avg | 34.4 | -27.1 | 0 | 43.75 | 53.97 | -10.22 | - | - | 0-360 | 100 | V |
| 8 | * 12.01 | 33.77 | Avg | 39.2 | -20.9 | 0 | 52.07 | 53.97 | -1.9 | - | - | 0-360 | 100 | V |
| 2 | **7.206 | 41.31 | Avg | 35.9 | -25.1 | 0 | 52.11 | - | - | - | - | 0-360 | 201 | H |
| 6 | **7.206 | 43.4 | Avg | 35.9 | -25.1 | 0 | 54.2 | - | - | - | - | 0-360 | 100 | V |
| 3 | **9.607 | 47.74 | Avg | 37.3 | -22.5 | 0 | 62.54 | - | - | - | - | 0-360 | 100 | H |
| 7 | **9.607 | 47.55 | Avg | 37.3 | -22.5 | 0 | 62.35 | - | - | - | - | 0-360 | 201 | V |

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

** - indicates frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

Avg - Video bandwidth < Resolution bandwidth

Radiated Emissions

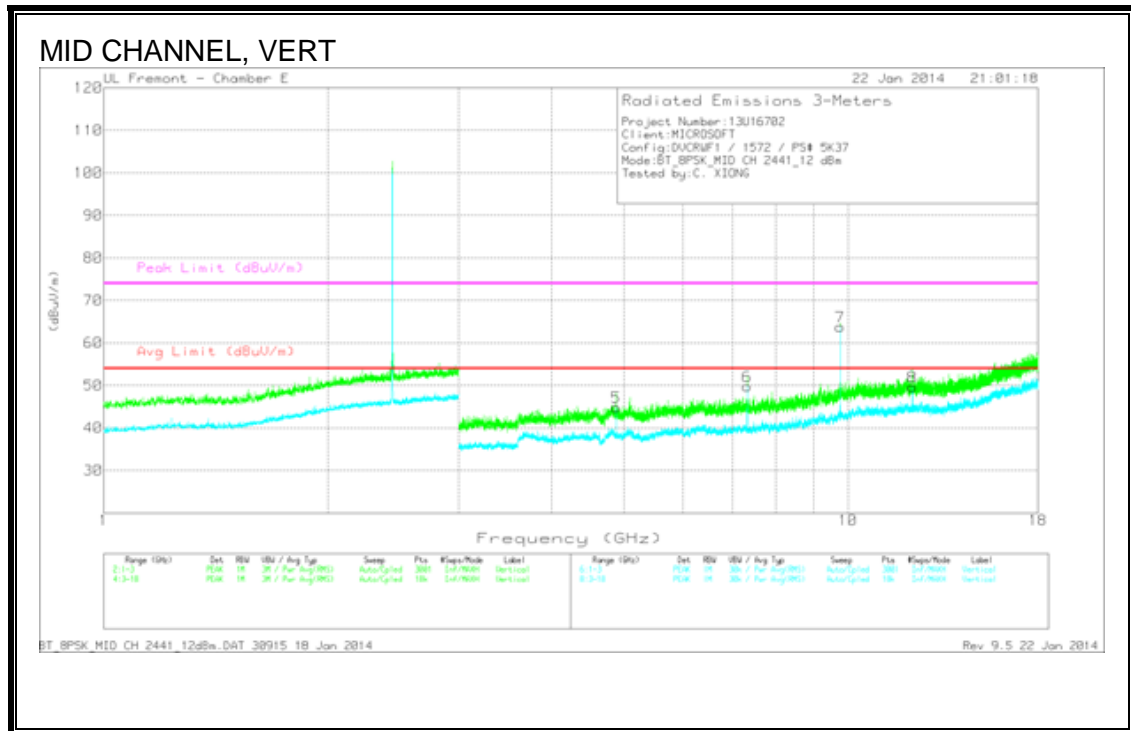
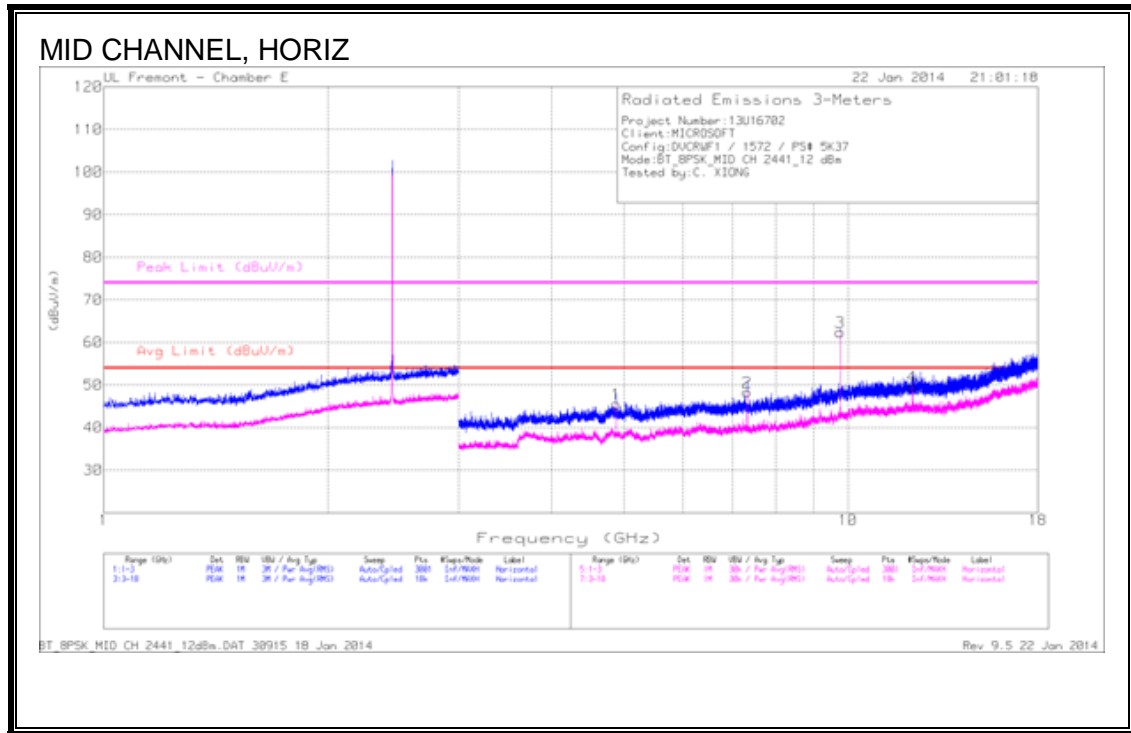
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/ Fitr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------------------|----------------------------|------|-------------------|-----------------------------|-----------------|----------------------------------|-----------------------|----------------|------------------------|-------------------|-------------------|----------------|----------|
| * 12.009 | 41.81 | PK3 | 39.2 | -20.9 | 0 | 60.11 | - | - | 74 | -13.89 | 360 | 197 | H |
| * 12.01 | 33.28 | VB1T | 39.2 | -20.9 | 1.2 | 52.78 | 53.97 | -1.19 | - | - | 360 | 197 | H |
| * 12.01 | 41.87 | PK3 | 39.2 | -20.9 | 0 | 60.17 | - | - | 74 | -13.83 | 354 | 145 | V |
| * 12.01 | 33.17 | VB1T | 39.2 | -20.9 | 1.2 | 52.67 | 53.97 | -1.3 | - | - | 354 | 145 | V |

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

PK3 - FHSS Method: Maximum Peak

VB 1/T - FHSS Method: Reduced Video Bandwidth

MID CHANNEL



MID CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/Ftr /Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|-------------------|-------------------------|--------------|----------------------------------|-----------------------|----------------|------------------------|-------------------|-------------------|----------------|----------|
| 1 | * 4.882 | 38.36 | Avg | 34.3 | -27.1 | 0 | 45.56 | 53.97 | -8.41 | - | - | 0-360 | 100 | H |
| 2 | * 7.323 | 37.42 | Avg | 35.9 | -25 | 0 | 48.32 | 53.97 | -5.65 | - | - | 0-360 | 201 | H |
| 4 | * 12.204 | 31.9 | Avg | 39.2 | -21.4 | 0 | 49.7 | 53.97 | -4.27 | - | - | 0-360 | 201 | H |
| 5 | * 4.882 | 37.56 | Avg | 34.3 | -27 | 0 | 44.86 | 53.97 | -9.11 | - | - | 0-360 | 100 | V |
| 6 | * 7.322 | 38.88 | Avg | 35.9 | -25 | 0 | 49.78 | 53.97 | -4.19 | - | - | 0-360 | 201 | V |
| 8 | * 12.206 | 31.86 | Avg | 39.2 | -21.4 | 0 | 49.66 | 53.97 | -4.31 | - | - | 0-360 | 100 | V |
| 3 | **9.764 | 46.54 | Avg | 37.4 | -21.5 | 0 | 62.44 | - | - | - | - | 0-360 | 201 | H |
| 7 | **9.765 | 47.87 | Avg | 37.4 | -21.5 | 0 | 63.77 | - | - | - | - | 0-360 | 100 | V |

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

** - indicates frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

Avg - Video bandwidth < Resolution bandwidth

Radiated Emissions

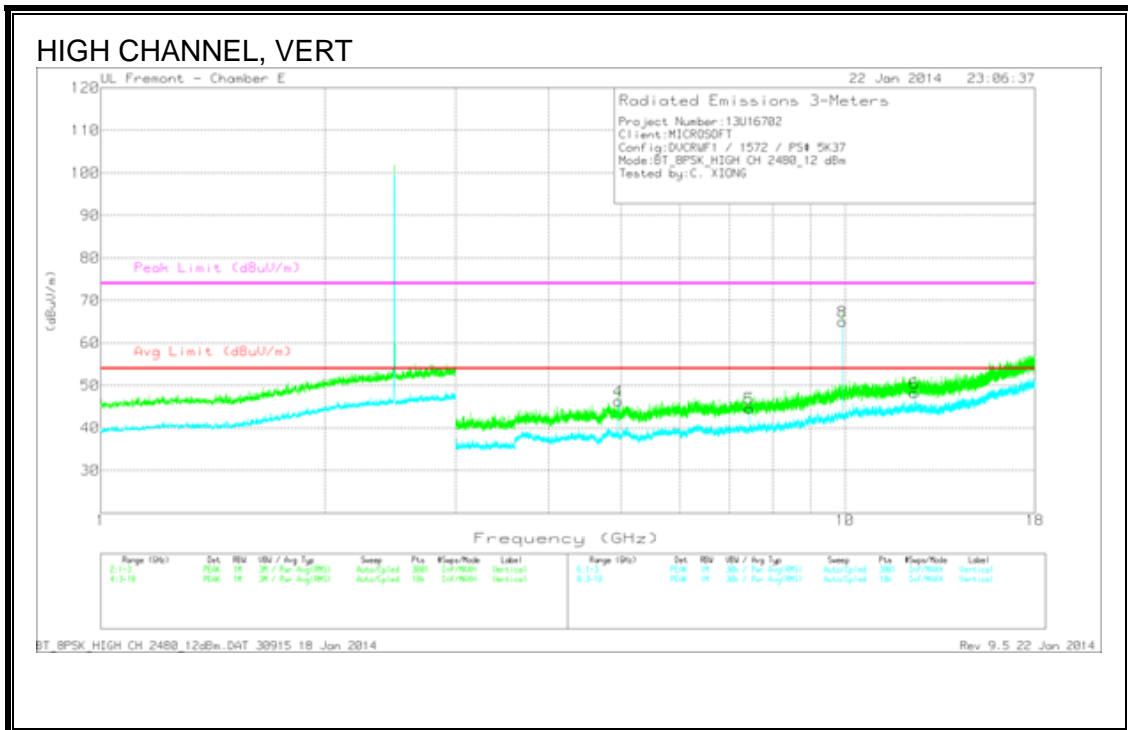
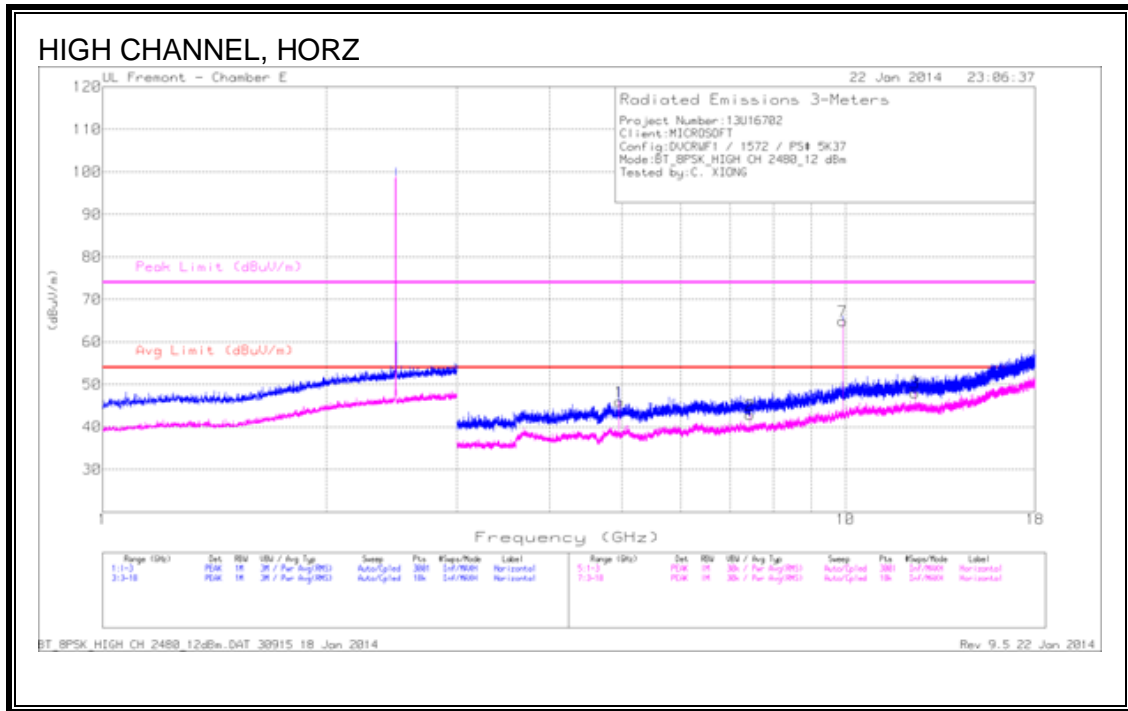
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/ Ftr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------------------|----------------------------|------|-------------------|----------------------------|-----------------|----------------------------------|-----------------------|----------------|------------------------|-------------------|-------------------|----------------|----------|
| * 7.323 | 46.37 | PK3 | 35.9 | -25 | 0 | 57.27 | - | - | 74 | -16.73 | 24 | 361 | H |
| * 7.323 | 39.52 | VB1T | 35.9 | -25 | 1.2 | 51.62 | 53.97 | -2.35 | - | - | 24 | 361 | H |
| * 12.206 | 40.24 | PK3 | 39.2 | -21.4 | 0 | 58.04 | - | - | 74 | -15.96 | 265 | 106 | H |
| * 12.205 | 31.08 | VB1T | 39.2 | -21.4 | 1.2 | 50.08 | 53.97 | -3.89 | - | - | 265 | 106 | H |
| * 7.323 | 48.05 | PK3 | 35.9 | -25 | 0 | 58.95 | - | - | 74 | -15.05 | 38 | 365 | V |
| * 7.323 | 41.41 | VB1T | 35.9 | -25 | 1.2 | 53.51 | 53.97 | -4.46 | - | - | 38 | 365 | V |
| * 12.204 | 40.35 | PK3 | 39.2 | -21.4 | 0 | 58.15 | - | - | 74 | -15.85 | 287 | 102 | V |
| * 12.205 | 31.22 | VB1T | 39.2 | -21.4 | 1.2 | 50.22 | 53.97 | -3.75 | - | - | 287 | 102 | V |

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

PK3 - FHSS Method: Maximum Peak

VB 1/T - FHSS Method: Reduced Video Bandwidth

HIGH CHANNEL



HIGH CHANNEL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/Ftr /Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 4.96 | 39.77 | Avg | 34.3 | -28.1 | 0 | 45.97 | 53.97 | -8 | - | - | 0-360 | 100 | H |
| 2 | * 7.44 | 31.74 | Avg | 35.9 | -24.8 | 0 | 42.84 | 53.97 | -11.13 | - | - | 0-360 | 201 | H |
| 3 | * 12.4 | 30.23 | Avg | 39.2 | -21.4 | 0 | 48.03 | 53.97 | -5.94 | - | - | 0-360 | 201 | H |
| 4 | * 4.96 | 40.13 | Avg | 34.3 | -28.1 | 0 | 46.33 | 53.97 | -7.64 | - | - | 0-360 | 201 | V |
| 5 | * 7.44 | 33.49 | Avg | 35.9 | -24.8 | 0 | 44.59 | 53.97 | -9.38 | - | - | 0-360 | 100 | V |
| 6 | * 12.399 | 30.51 | Avg | 39.2 | -21.5 | 0 | 48.21 | 53.97 | -5.76 | - | - | 0-360 | 100 | V |
| 7 | **9.919 | 48.92 | Avg | 37.7 | -21.7 | 0 | 64.92 | - | - | - | - | 0-360 | 201 | H |
| 8 | **9.92 | 49.01 | Avg | 37.7 | -21.7 | 0 | 65.01 | - | - | - | - | 0-360 | 201 | V |

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

** - indicates frequency in a non-restricted band. Compliance is shown in conducted Out Of Band Emissions testing (-20dBc) for Peak and (-30dBc) for Average.

Avg - Video bandwidth < Resolution bandwidth

Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T344 (db/m) | Amp/Cb/ Ftr/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| * 12.399 | 37.89 | PK3 | 39.2 | -21.5 | 0 | 55.59 | - | - | 74 | -18.41 | 259 | 105 | H |
| * 12.4 | 27.76 | VB1T | 39.2 | -21.4 | 1.2 | 46.76 | 53.97 | -7.21 | - | - | 259 | 105 | H |
| * 12.401 | 38.14 | PK3 | 39.2 | -21.4 | 0 | 55.94 | - | - | 74 | -18.06 | 262 | 109 | V |
| * 12.4 | 27.91 | VB1T | 39.2 | -21.4 | 1.2 | 46.91 | 53.97 | -7.06 | - | - | 262 | 109 | V |
| * 7.323 | 48.05 | PK3 | 35.9 | -25 | 0 | 58.95 | - | - | 74 | -15.05 | 38 | 365 | V |
| * 7.323 | 41.41 | VB1T | 35.9 | -25 | 1.2 | 53.51 | 53.97 | -46 | - | - | 38 | 365 | V |
| * 12.204 | 40.35 | PK3 | 39.2 | -21.4 | 0 | 58.15 | - | - | 74 | -15.85 | 287 | 102 | V |
| * 12.205 | 31.22 | VB1T | 39.2 | -21.4 | 1.2 | 50.22 | 53.97 | -3.75 | - | - | 287 | 102 | V |

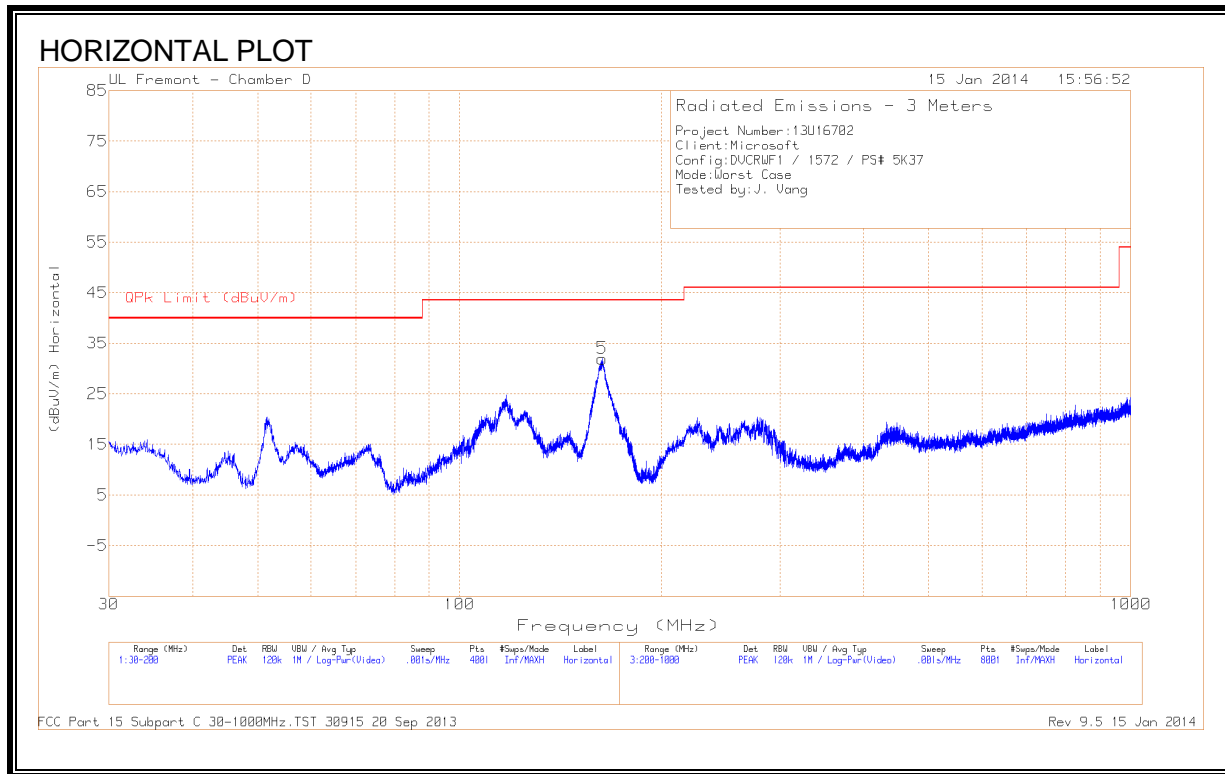
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK3 - FHSS Method: Maximum Peak

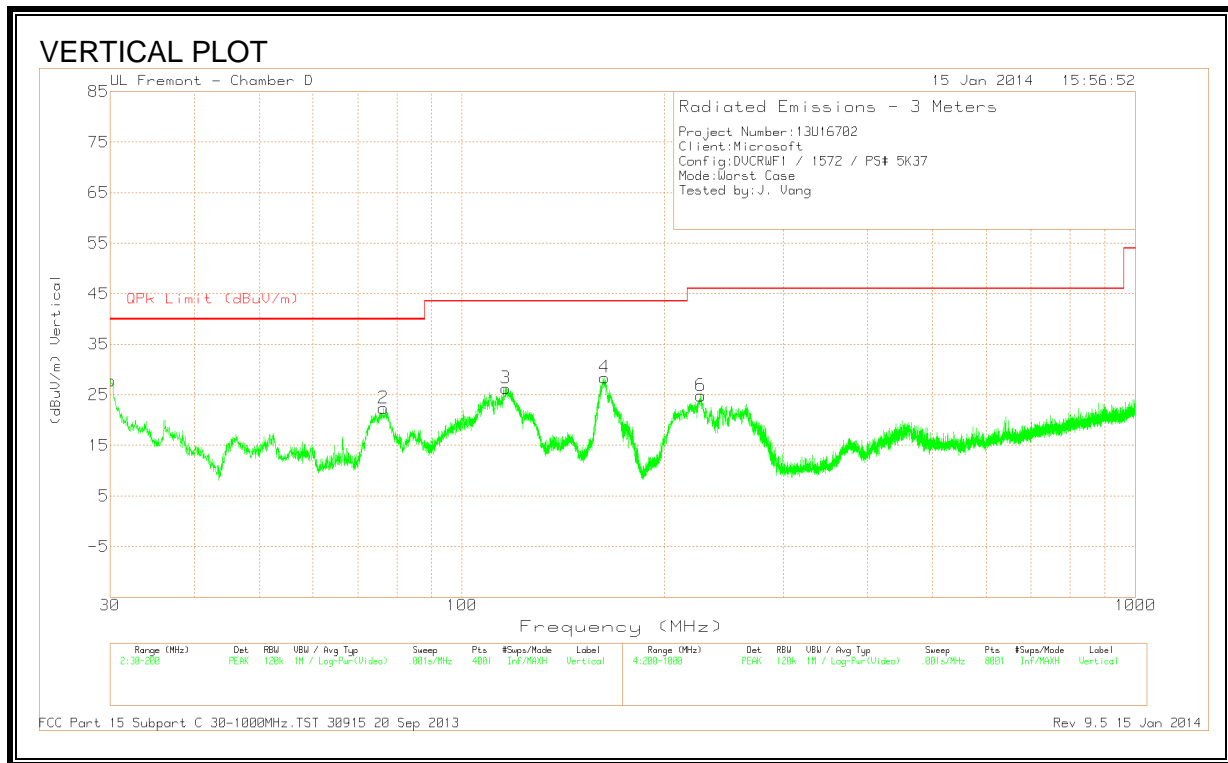
VB 1/T - FHSS Method: Reduced Video Bandwidth

8.3. WORST-CASE BELOW 1 GHz

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



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



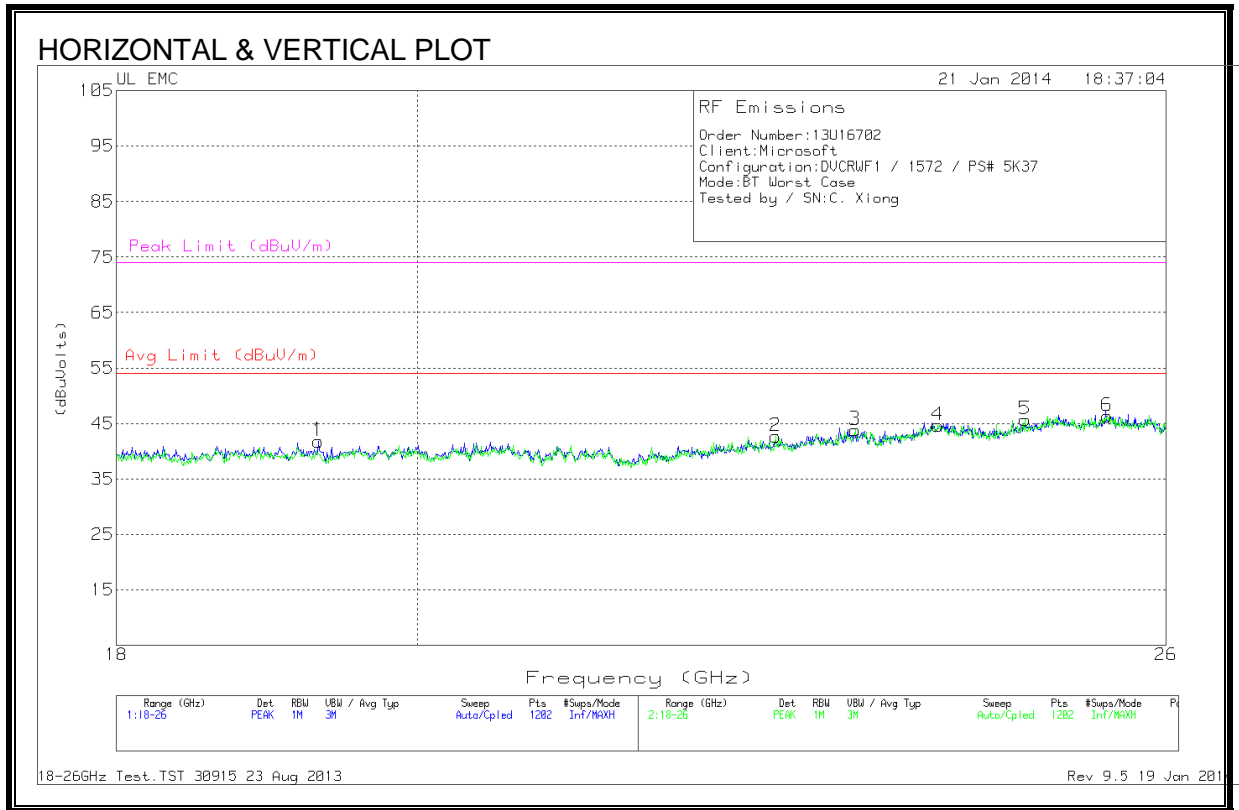
BELOW 1G DATA

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T407 dB/m | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|--------------------|----------------------------|-----|-----------------|-----------------|----------------------------------|-----------------------|----------------|-------------------|----------------|----------|
| 1 | 30.0425 | 38.63 | PK | 21.3 | -32.1 | 27.83 | 40 | -12.17 | 0-360 | 100 | V |
| 2 | 76.4525 | 45.95 | PK | 8.1 | -31.7 | 22.35 | 40 | -17.65 | 0-360 | 100 | V |
| 3 | 116.105 | 44.49 | PK | 13.4 | -31.6 | 26.29 | 43.52 | -17.23 | 0-360 | 100 | V |
| 4 | 162.8125 | 47.6 | PK | 12.1 | -31.3 | 28.4 | 43.52 | -15.12 | 0-360 | 100 | V |
| 5 | 163.1525 | 51.04 | PK | 12.1 | -31.2 | 31.94 | 43.52 | -11.58 | 0-360 | 200 | H |
| 6 | 226.2 | 44.93 | PK | 10.9 | -31 | 24.83 | 46.02 | -21.19 | 0-360 | 100 | V |

PK - Peak detector

8.4. WORST-CASE 18 to 26GHz

SPURIOUS EMISSIONS 18000 26000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)



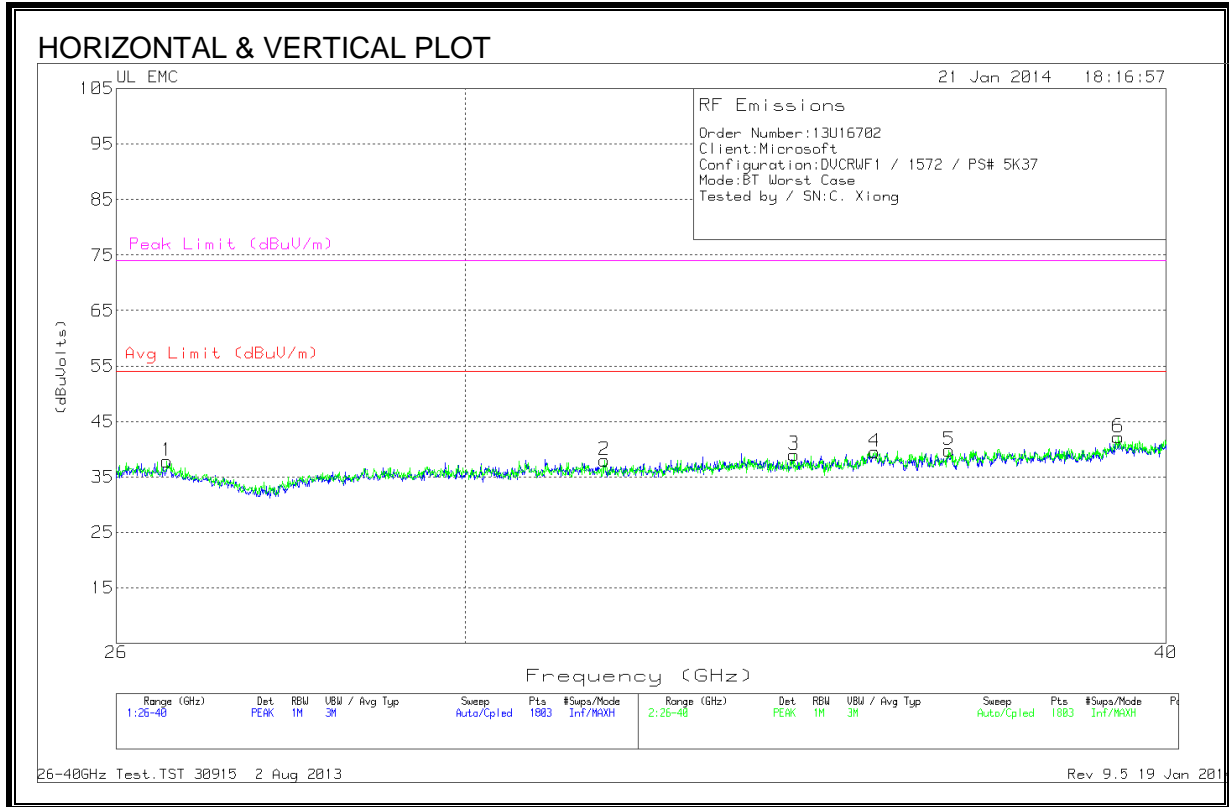
18 TO 26G DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T89 (dB/m) | Amp/Cb l (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|---------------|---------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1 | 19.319 | 42.63 | PK | 32.5 | -23.8 | -9.5 | 41.83 | 54 | -12.16 | 74 | -32.16 |
| 2 | 22.676 | 42.37 | PK | 33.4 | -23.6 | -9.5 | 42.66 | 54 | -11.33 | 74 | -31.33 |
| 3 | 23.316 | 43.03 | PK | 33.4 | -23.1 | -9.5 | 43.83 | 54 | -10.16 | 74 | -30.16 |
| 4 | 24.002 | 43.27 | PK | 33.6 | -22.7 | -9.5 | 44.66 | 54 | -9.33 | 74 | -29.33 |
| 5 | 24.748 | 43.87 | PK | 34 | -22.7 | -9.5 | 45.66 | 54 | -8.33 | 74 | -28.33 |
| 6 | 25.467 | 44.33 | PK | 34.1 | -22.6 | -9.5 | 46.33 | 54 | -7.66 | 74 | -27.66 |

PK - Peak detector

8.5. WORST-CASE 26 to 40GHz

SPURIOUS EMISSIONS 2600 40000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)



26 TO 40G DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T90 AF (dB/m) | Amp/Cb I (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|---------------|---------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1 | 26.544 | 45.43 | PK | 35.5 | -33.6 | -9.5 | 37.83 | 54 | -16.16 | 74 | -36.16 |
| 2 | 31.765 | 46.7 | PK | 36.3 | -35.5 | -9.5 | 38 | 54 | -16 | 74 | -36 |
| 3 | 34.336 | 48 | PK | 37.1 | -36.6 | -9.5 | 39 | 54 | -15 | 74 | -35 |
| 4 | 35.49 | 48.3 | PK | 37.9 | -37.2 | -9.5 | 39.5 | 54 | -14.5 | 74 | -34.5 |
| 5 | 36.589 | 50.13 | PK | 37.1 | -37.9 | -9.5 | 39.83 | 54 | -14.16 | 74 | -34.16 |
| 6 | 39.223 | 49.17 | PK | 38.5 | -36 | -9.5 | 42.16 | 54 | -11.83 | 74 | -31.83 |

PK - Peak detector

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

| 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.

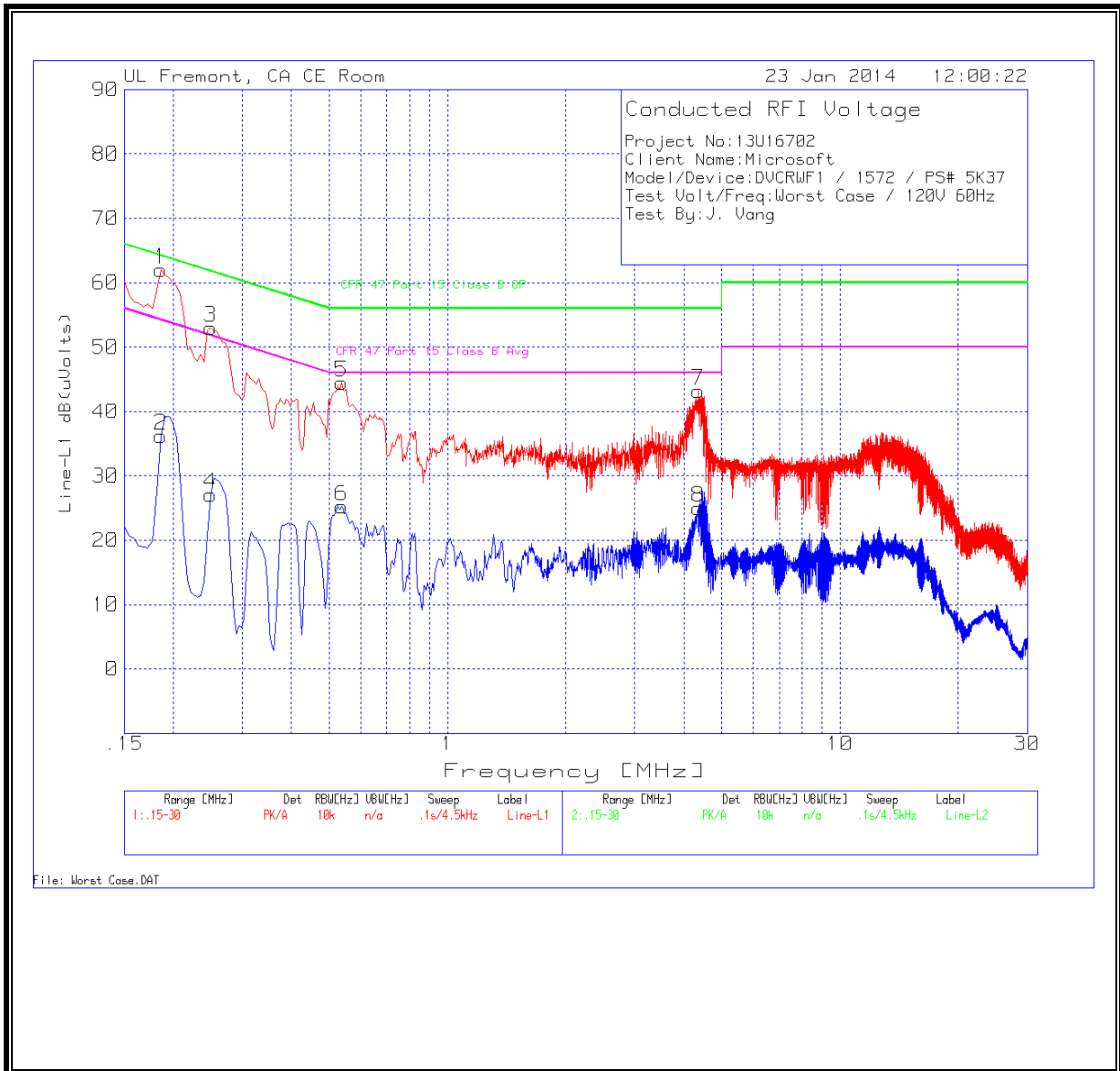
TEST PROCEDURE

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.

LINE 1 RESULTS



LINE 1 DATA RESULTS

Line-L1 .15 - 30MHz

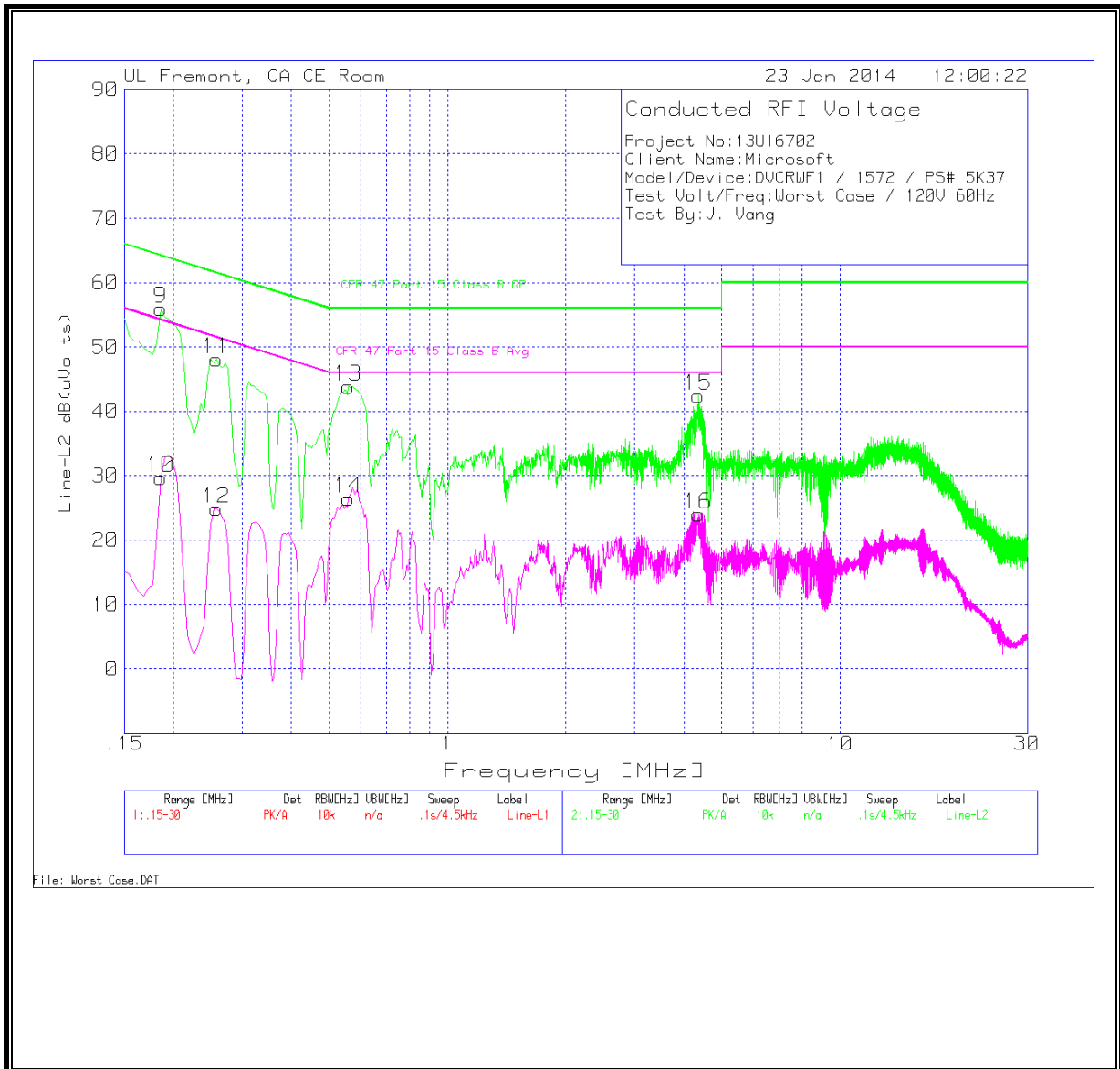
Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | T24 IL L1 (dB) | LC Cables 1&3 (dB) | Corrected Reading dB(uVolts) | CFR 47 Part 15 Class B QP | Margin to Limit (dB) | CFR 47 Part 15 Class B Avg | Margin to Limit (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------------|------------------------------|---------------------------|----------------------|----------------------------|----------------------|
| 1 | .186 | 61.04 | PK | 1 | 0 | 62.04 | 64.2 | -2.16 | - | - |
| 2 | .186 | 35.2 | Av | 1 | 0 | 36.2 | - | - | 54.2 | -18 |
| 3 | .249 | 52.31 | PK | .7 | 0 | 53.01 | 61.8 | -8.79 | - | - |
| 4 | .249 | 26.38 | Av | .7 | 0 | 27.08 | - | - | 51.8 | -24.72 |
| 5 | .537 | 44.13 | PK | .3 | 0 | 44.43 | 56 | -11.57 | - | - |
| 6 | .537 | 24.92 | Av | .3 | 0 | 25.22 | - | - | 46 | -20.78 |
| 7 | 4.362 | 42.86 | PK | .2 | .1 | 43.16 | 56 | -12.84 | - | - |
| 8 | 4.362 | 24.75 | Av | .2 | .1 | 25.05 | - | - | 46 | -20.95 |

PK - Peak detector

Av - average detection

LINE 2 RESULTS



LINE 2 DATA RESULTS

Line-L2 .15 - 30MHz

| Trace Markers | | | | | | | | | | |
|---------------|-----------------|----------------------|-----|----------------|--------------------|------------------------------|---------------------------|----------------------|----------------------------|----------------------|
| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | T24 IL L2 (dB) | LC Cables 2&3 (dB) | Corrected Reading dB(uVolts) | CFR 47 Part 15 Class B QP | Margin to Limit (dB) | CFR 47 Part 15 Class B Avg | Margin to Limit (dB) |
| 9 | .186 | 54.87 | PK | 1.1 | 0 | 55.97 | 64.2 | -8.23 | - | - |
| 10 | .186 | 28.57 | Av | 1.1 | 0 | 29.67 | - | - | 54.2 | -24.53 |
| 11 | .258 | 47.41 | PK | .7 | 0 | 48.11 | 61.5 | -13.39 | - | - |
| 12 | .258 | 24.13 | Av | .7 | 0 | 24.83 | - | - | 51.5 | -26.67 |
| 13 | .5595 | 43.59 | PK | .3 | 0 | 43.89 | 56 | -12.11 | - | - |
| 14 | .5595 | 26.18 | Av | .3 | 0 | 26.48 | - | - | 46 | -19.52 |
| 15 | 4.362 | 42.07 | PK | .2 | .1 | 42.37 | 56 | -13.63 | - | - |
| 16 | 4.362 | 23.72 | Av | .2 | .1 | 24.02 | - | - | 46 | -21.98 |

PK - Peak detector

Av - average detection