



FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE Phone + Bluetooth & DTS b/g/n

MODEL NUMBER: LGL31L, L31L, LG-L31L

FCC ID: ZNFL31L

REPORT NUMBER: 13U16673-2 REV A

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Prepared for

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NVLAP LAB CODE 200065-0

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION: GSM/WCDMA/LTE Phone + Bluetooth & DTS b/g/n
MODEL: LGL31L, L31L, LG-L31L
SERIAL NUMBER: 1792208-VS
DATE TESTED: DECEMBER 14 – 30, 2013

| APPLICABLE STANDARDS | |
|--------------------------|--------------|
| STANDARD | TEST RESULTS |
| CFR 47 Part 15 Subpart C | 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:



PHILIP KIM
WiSE PROGRAM MANAGER
UL Verification Services Inc.

STEVEN TRAN
WiSE LAB TECHNICIAN
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2009.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

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 18000 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 GSM/WCDMA/LTE Phone + Bluetooth & DTS b/g/n

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

| Frequency Range (MHz) | Mode | Output Power (dBm) | Output Power (mW) |
|-----------------------|--------------|--------------------|-------------------|
| 2412 - 2462 | 802.11b | 18.03 | 63.53 |
| 2412 - 2462 | 802.11g | 20.18 | 104.23 |
| 2412 - 2462 | 802.11n HT20 | 20.24 | 105.68 |

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 0.1dBi.

5.4. 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.

Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|--------|---------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| AC Adapter | LG | LGL31L | N/A | N/A |
| Earphone | LG | N/A | N/A | N/A |

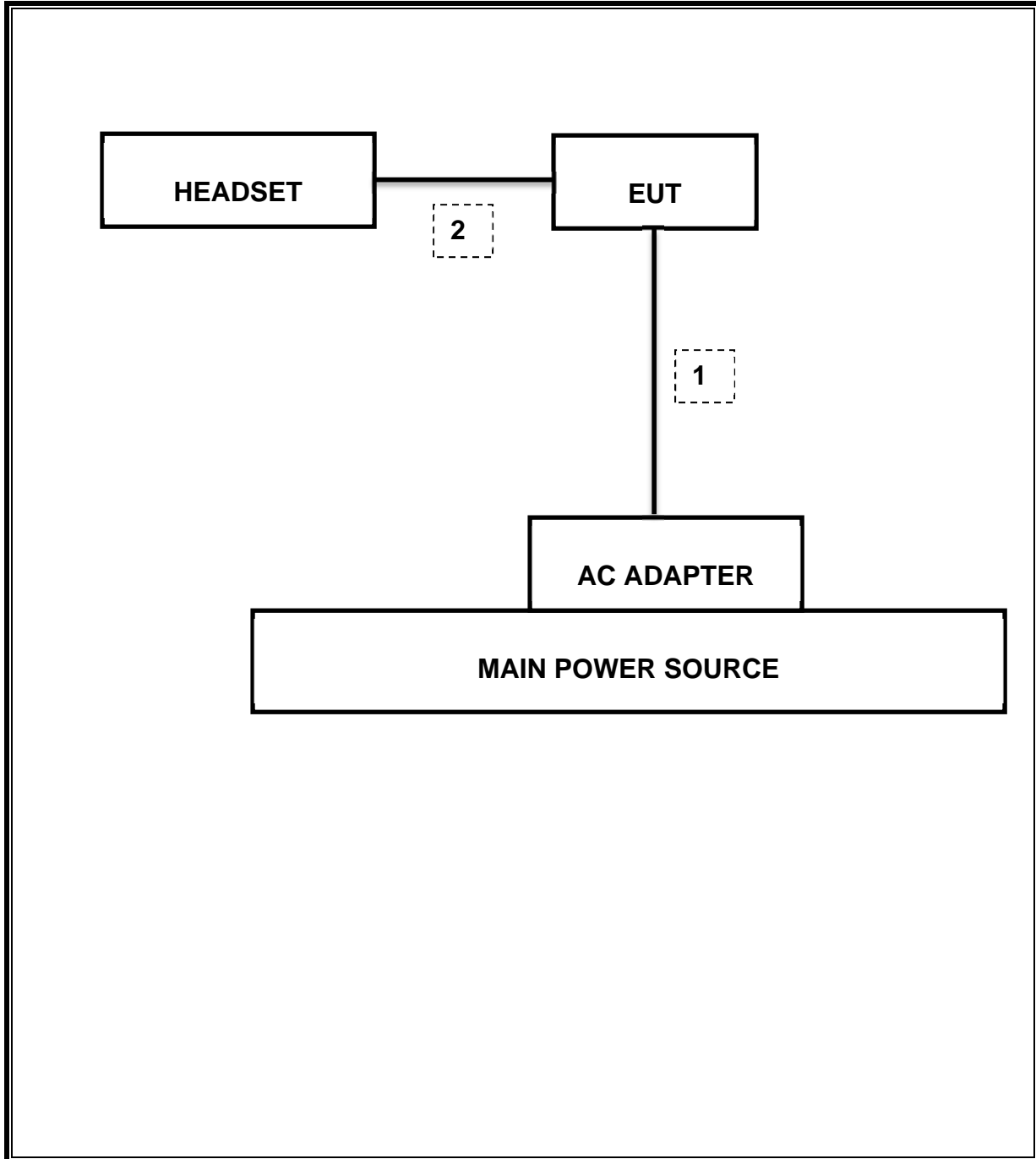
I/O CABLES

| I/O Cable List | | | | | | |
|----------------|----------|----------------------|----------------|------------|------------------|---------|
| Cable No | Port | # of identical ports | Connector Type | Cable Type | Cable Length (m) | Remarks |
| 1 | DC Power | 1 | Mini-USB | Shielded | 1.2m | N/A |
| 2 | Audio | 1 | Mini-Jack | Unshielded | 1m | N/A |

TEST SETUP

The EUT is a stand-alone unit during the tests. Test software exercised the radio card.

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 | Cal Due |
| Antenna, Biconolog, 30MHz-1 GHz | Sunol Sciences | JB1 | C01016 | 08/14/13 | 08/14/14 |
| Antenna, Horn, 18 GHz | ETS | 3117 | C01006 | 12/11/13 | 12/11/14 |
| Antenna, Horn, 25.5 GHz | ARA | MWH-1826/B | C00980 | 11/14/13 | 11/14/14 |
| Preamplifier, 1300 MHz | Agilent / HP | 8447D | C00885 | 01/16/13 | 01/16/14 |
| Preamplifier, 26.5 GHz | Agilent / HP | 8449B | C01063 | 10/22/13 | 10/22/14 |
| Spectrum Analyzer, 44 GHz | Agilent / HP | E4446A | C01012 | 10/21/13 | 10/21/14 |
| PXA SIGNAL ANALYZER | Agilent / HP | N9030A | N/A | | 05/09/14 |
| EMI Test Receiver, 30 MHz | R & S | ESHS 20 | N02396 | 08/08/13 | 08/08/14 |
| LISN, 30 MHz | FCC | 50/250-25-2 | C00626 | 01/14/13 | 01/14/14 |
| Reject Filter, 2.4GHz | Micro-Tronics | BRM50702 | N02684 | CNR | CNR |

7. MEASUREMENT METHODS

KDB 558074 D01 DTS Meas Guidance v03r01:Measurement Procedure PK2 is used for power and PKPSD is used for power spectral density.

Unwanted emissions within Restricted Bands are measured using traditional radiated procedures.

8. SUMMARY TABLE

| FCC Part Section | RSS Section(s) | Test Description | Test Limit | Test Condition | Test Result | Worst Case |
|--------------------|--------------------------------------|---|------------|----------------|-------------|----------------|
| 15.247 (a)(2) | RSS-210 A8.2(a) | Occupied Band width (6dB) | >500KHz | Conducted | Pass | 7.60 MHz |
| 2.1051, 15.247 (d) | RSS-210 A8.5 | Band Edge / Conducted Spurious Emission | -20dBc | | Pass | -32.67 dBm |
| 15.247 | RSS-210 A8.4 | TX conducted output power | <30dBm | | Pass | 20.24 dBm |
| 15.247 | RSS-210 A8.2 | PSD | <8dBm | | Pass | -6.43 dBm |
| 15.207 (a) | RSS-GEN 7.2.2 | AC Power Line conducted emissions | Section 10 | Radiated | Pass | 48.62 dBuV(PK) |
| 15.205, 15.209 | RSS-210 Clause 2.6, RSS-210 Clause 6 | Radiated Spurious Emission | < 54dBuV/m | | Pass | 44.098dBuV/m |

9. ANTENNA PORT TEST RESULTS

9.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

Reference to KDB 558074 D01 DTS Meas Guidance v03r01: The transmitter output is connected to a spectrum analyzer with the RBW set to 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

RESULTS

9.1.1. 802.11b MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---------|-----------------|----------------------|---------------------|
| Low | 2412 | 7.60 | 0.5 |
| Mid | 2437 | 7.65 | 0.5 |
| High | 2462 | 8.08 | 0.5 |
| Worst | | 7.60 | |

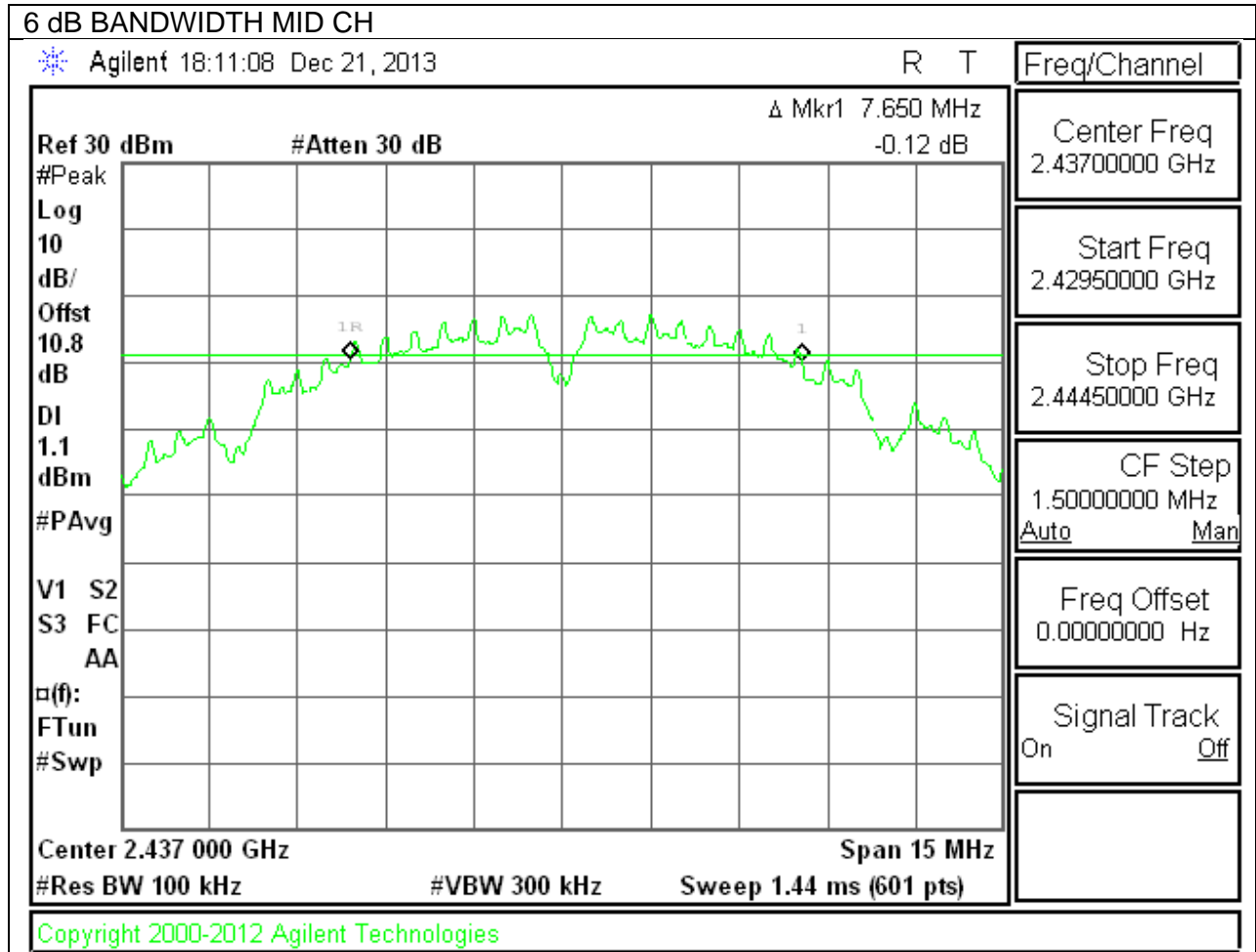
9.1.2. 802.11g MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---------|-----------------|----------------------|---------------------|
| Low | 2412 | 16.43 | 0.5 |
| Mid | 2437 | 16.43 | 0.5 |
| High | 2462 | 16.50 | 0.5 |
| Worst | | 16.43 | |

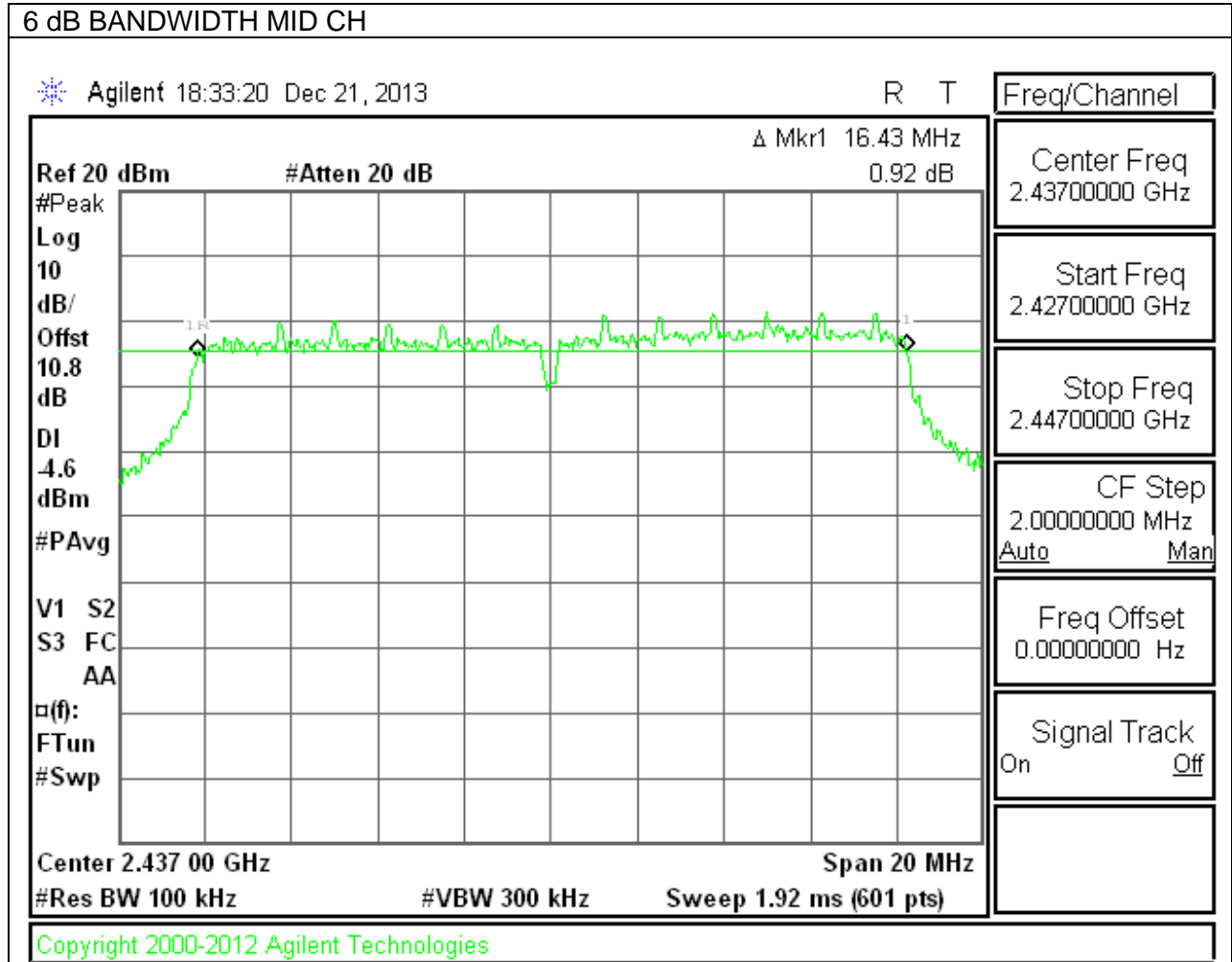
9.1.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | Minimum Limit (MHz) |
|---------|-----------------|----------------------|---------------------|
| Low | 2412 | 17.46 | 0.5 |
| Mid | 2437 | 17.42 | 0.5 |
| High | 2462 | 17.71 | 0.5 |
| Worst | | 17.42 | |

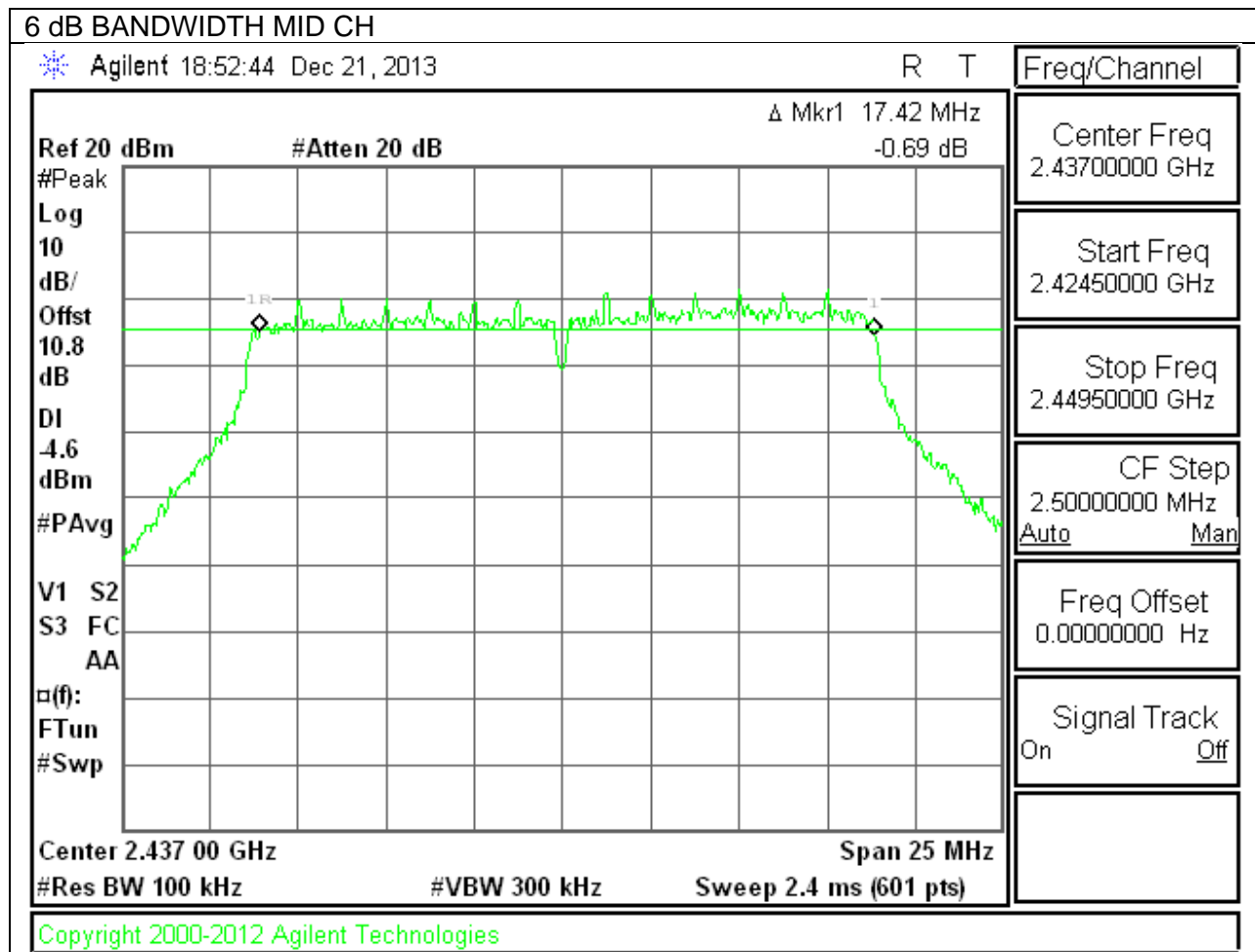
802.11b 6 dB BANDWIDTH



802.11g 6 dB BANDWIDTH



802.11n 6 dB BANDWIDTH



9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Low | 2412 | 11.77 |
| Mid | 2437 | 12.05 |
| High | 2462 | 12.05 |
| Worst | | 12.05 |

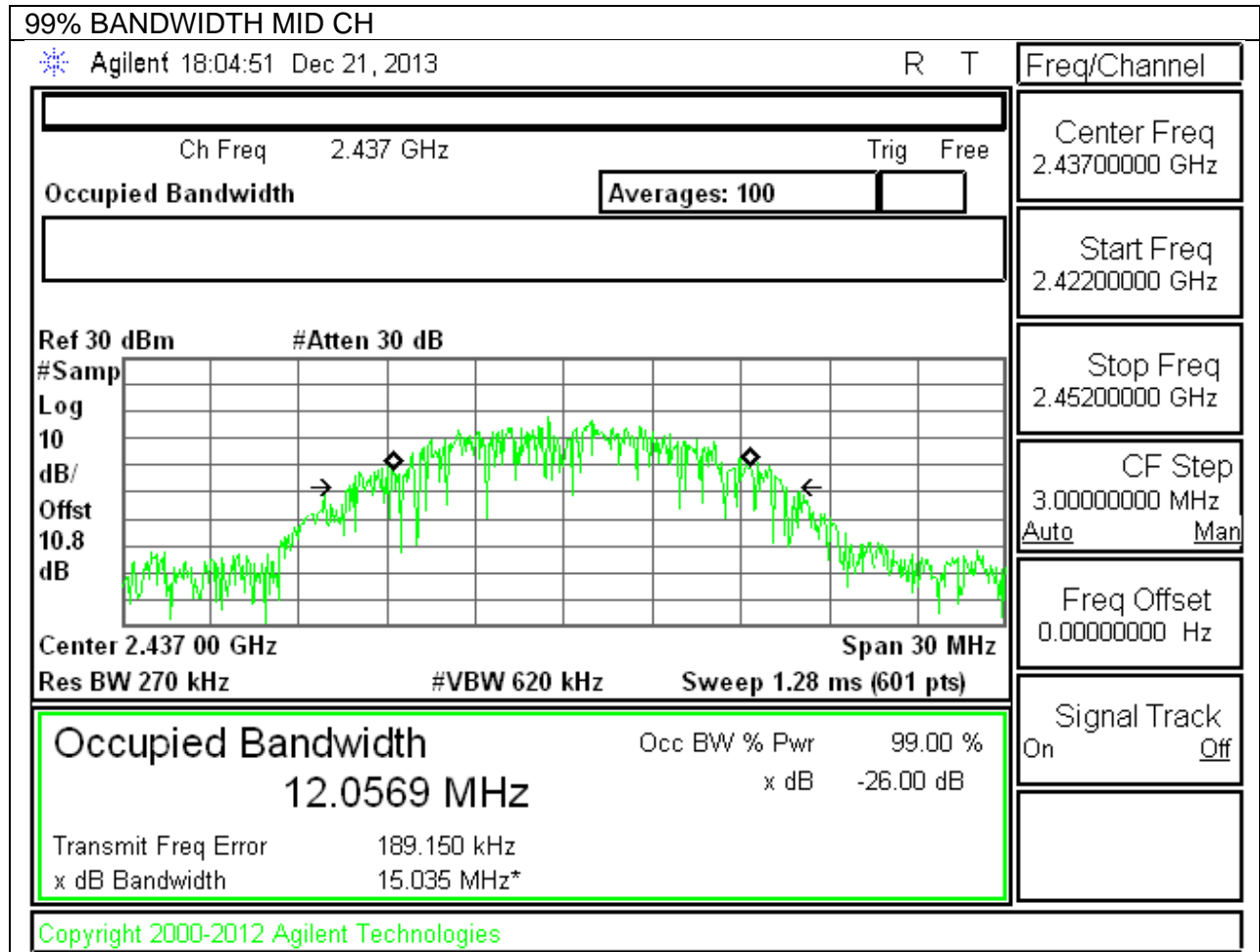
9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Low | 2412 | 16.38 |
| Mid | 2437 | 16.32 |
| High | 2462 | 16.43 |
| Worst | | 16.43 |

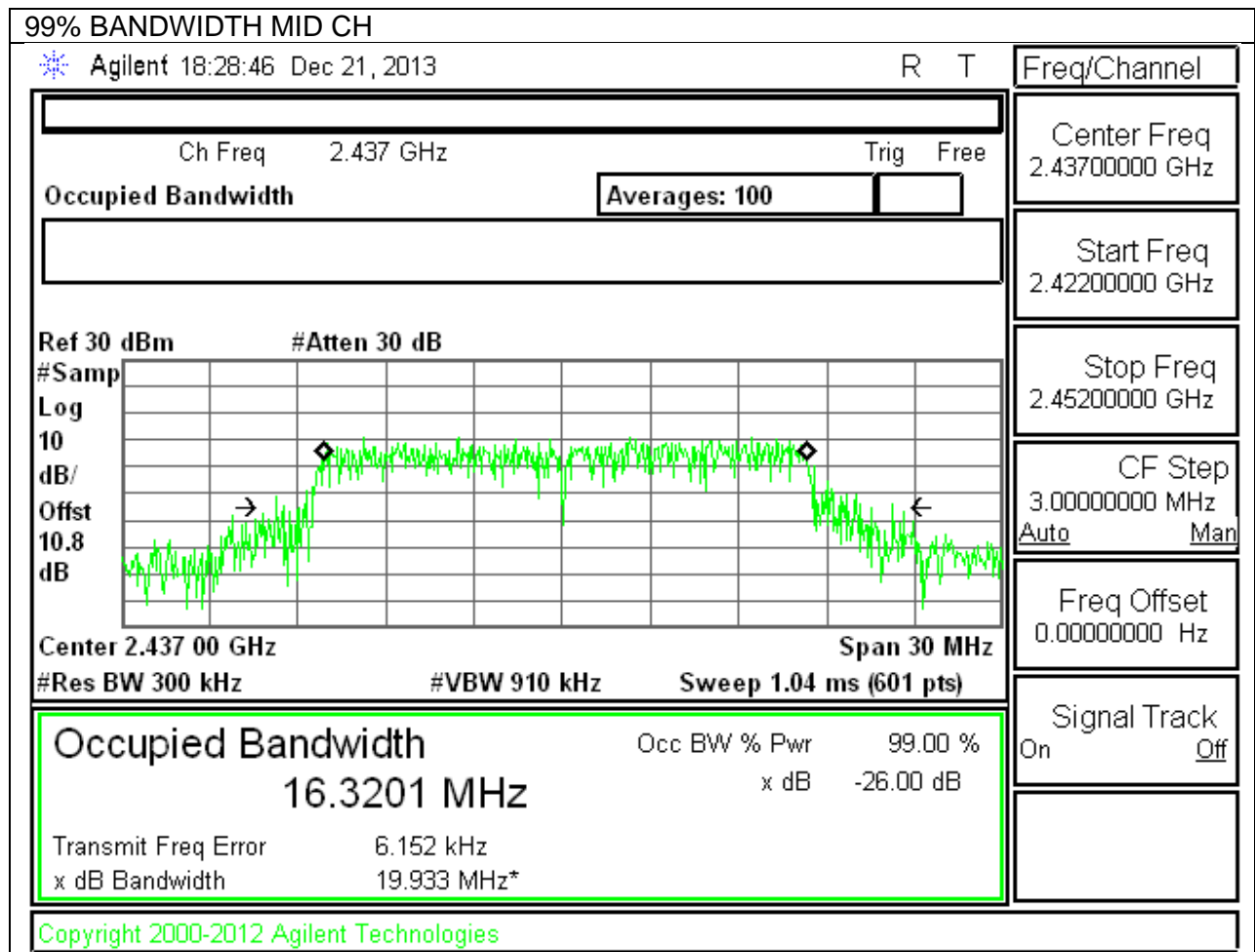
9.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | 99% Bandwidth (MHz) |
|---------|-----------------|---------------------|
| Low | 2412 | 17.58 |
| Mid | 2437 | 17.54 |
| High | 2462 | 17.62 |
| Worst | | 17.62 |

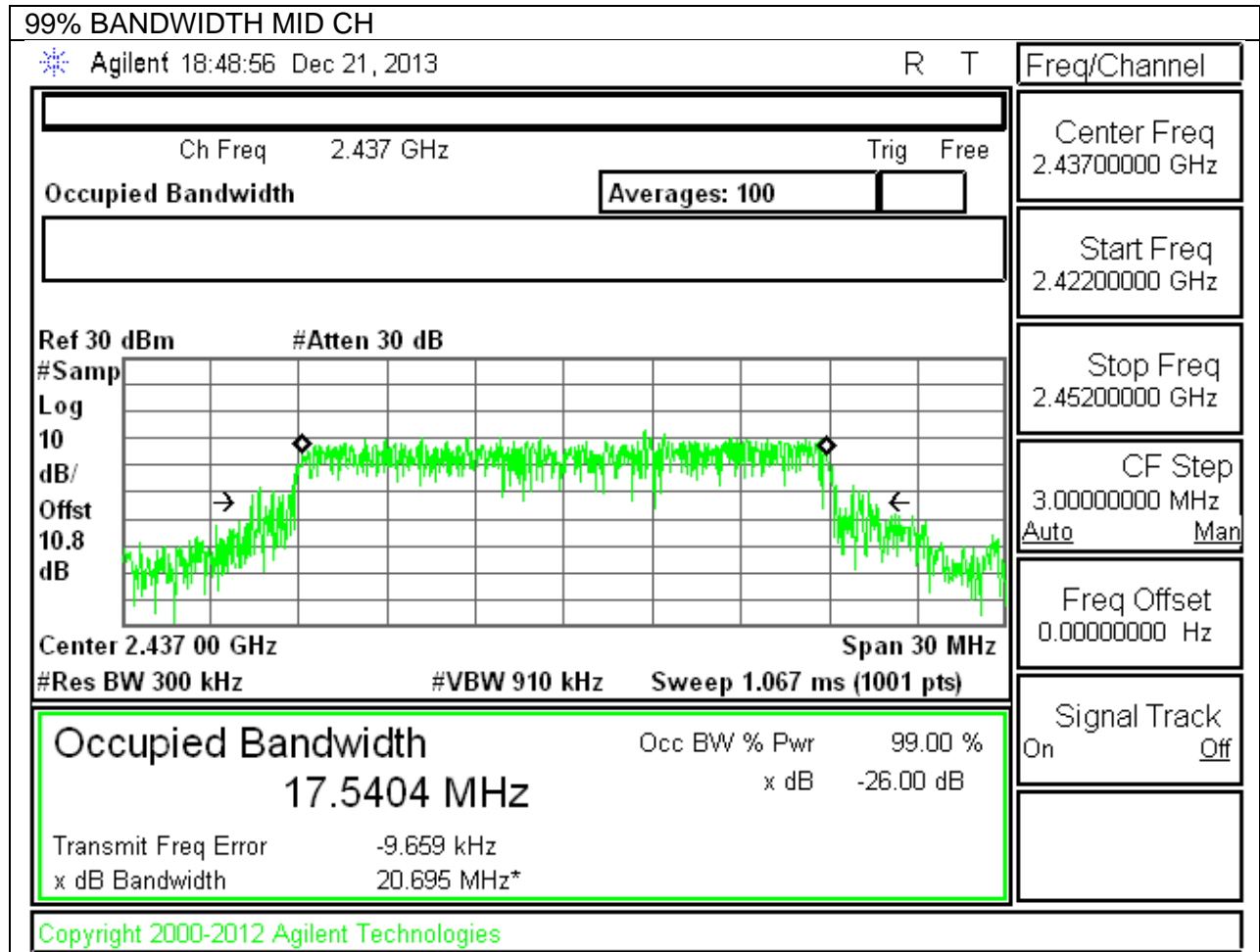
802.11b 99% BANDWIDTH



802.11g 99% BANDWIDTH



802.11n 99% BANDWIDTH



9.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 0.2 dB (including 10 dB pad and 0.2 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

9.3.1. 802.11b MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | Avg Power (dBm) |
|---------|-----------------|-----------------|
| Low | 2412 | 15.90 |
| Mid | 2437 | 15.50 |
| High | 2462 | 15.10 |
| Worst | | 15.900 |

9.3.2. 802.11g MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | Avg Power (dBm) |
|---------|-----------------|-----------------|
| Low | 2412 | 12.40 |
| Mid | 2437 | 12.30 |
| High | 2462 | 11.90 |
| Worst | | 12.400 |

9.3.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

| Channel | Frequency (MHz) | Avg Power (dBm) |
|---------|-----------------|-----------------|
| Low | 2412 | 12.30 |
| Mid | 2437 | 12.30 |
| High | 2462 | 11.90 |
| Worst | | 12.300 |

9.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

9.4.1. 802.11b MODE IN THE 2.4 GHz BAND

Limits

| Channel | Frequency (MHz) | Directional Gain (dBi) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Max Power (dBm) |
|---------|--------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|-----------------------|
| Low | 2412 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| Mid | 2437 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| High | 2462 | 0.10 | 30.00 | 30 | 36 | 30.00 |

Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|----------------|
| Low | 2412 | 18.03 | 18.03 | 30.00 | -11.97 |
| Mid | 2437 | 17.48 | 17.48 | 30.00 | -12.52 |
| High | 2462 | 17.26 | 17.26 | 30.00 | -12.74 |
| Worst | | | 18.03 | | |

9.4.2. 802.11g MODE IN THE 2.4 GHz BAND

Limits

| Channel | Frequency (MHz) | Directional Gain (dBi) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Max Power (dBm) |
|---------|--------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|-----------------------|
| Low | 2412 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| Mid | 2437 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| High | 2462 | 0.10 | 30.00 | 30 | 36 | 30.00 |

Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|----------------|
| Low | 2412 | 20.18 | 20.18 | 30.00 | -9.82 |
| Mid | 2437 | 19.95 | 19.95 | 30.00 | -10.05 |
| High | 2462 | 19.73 | 19.73 | 30.00 | -10.27 |
| Worst | | | 20.18 | | |

9.4.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

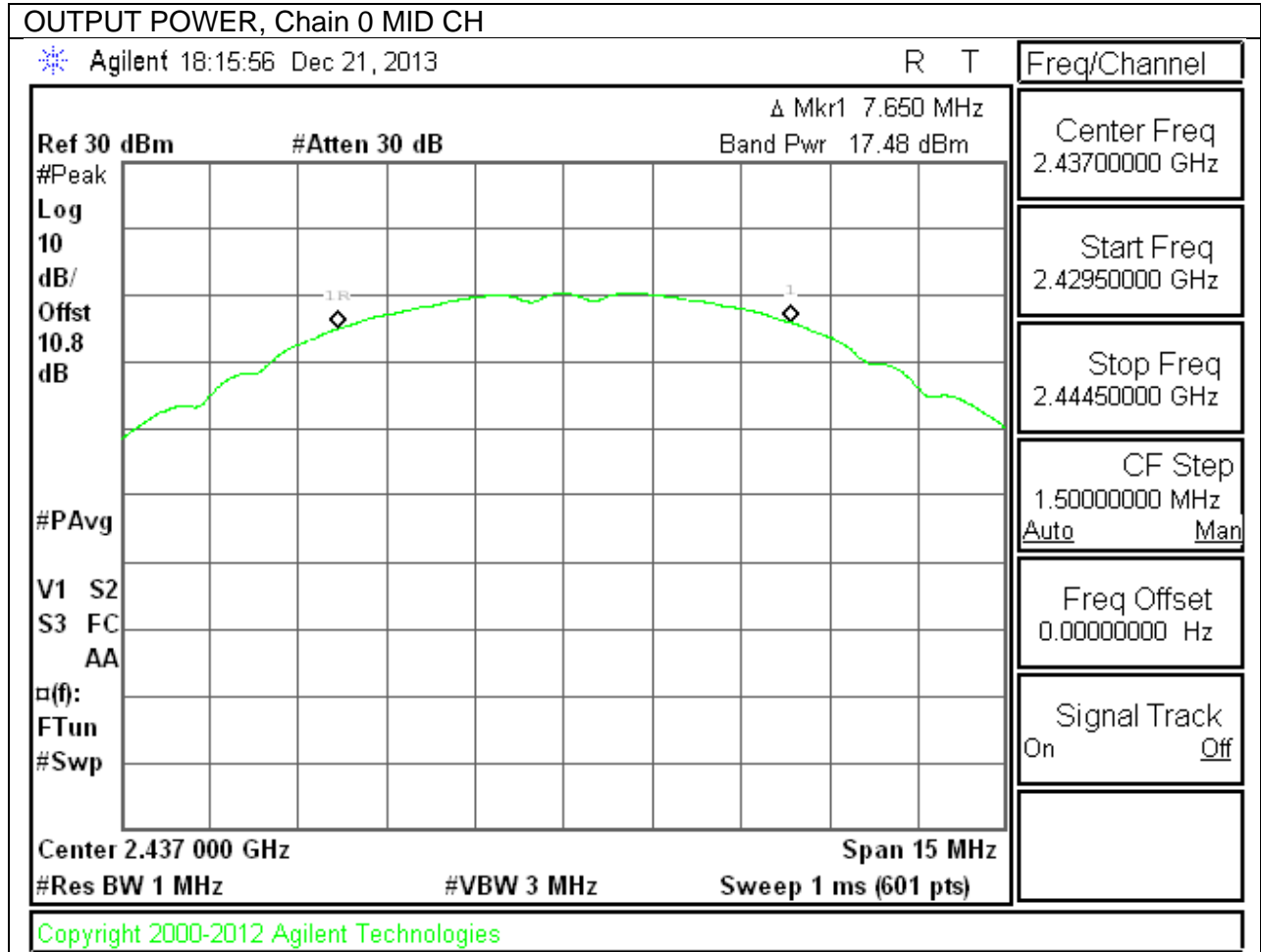
Limits

| Channel | Frequency (MHz) | Directional Gain (dBi) | FCC Power Limit (dBm) | IC Power Limit (dBm) | IC EIRP Limit (dBm) | Max Power (dBm) |
|---------|--------------------|------------------------------|--------------------------------|-------------------------------|------------------------------|-----------------------|
| Low | 2412 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| Mid | 2437 | 0.10 | 30.00 | 30 | 36 | 30.00 |
| High | 2462 | 0.10 | 30.00 | 30 | 36 | 30.00 |

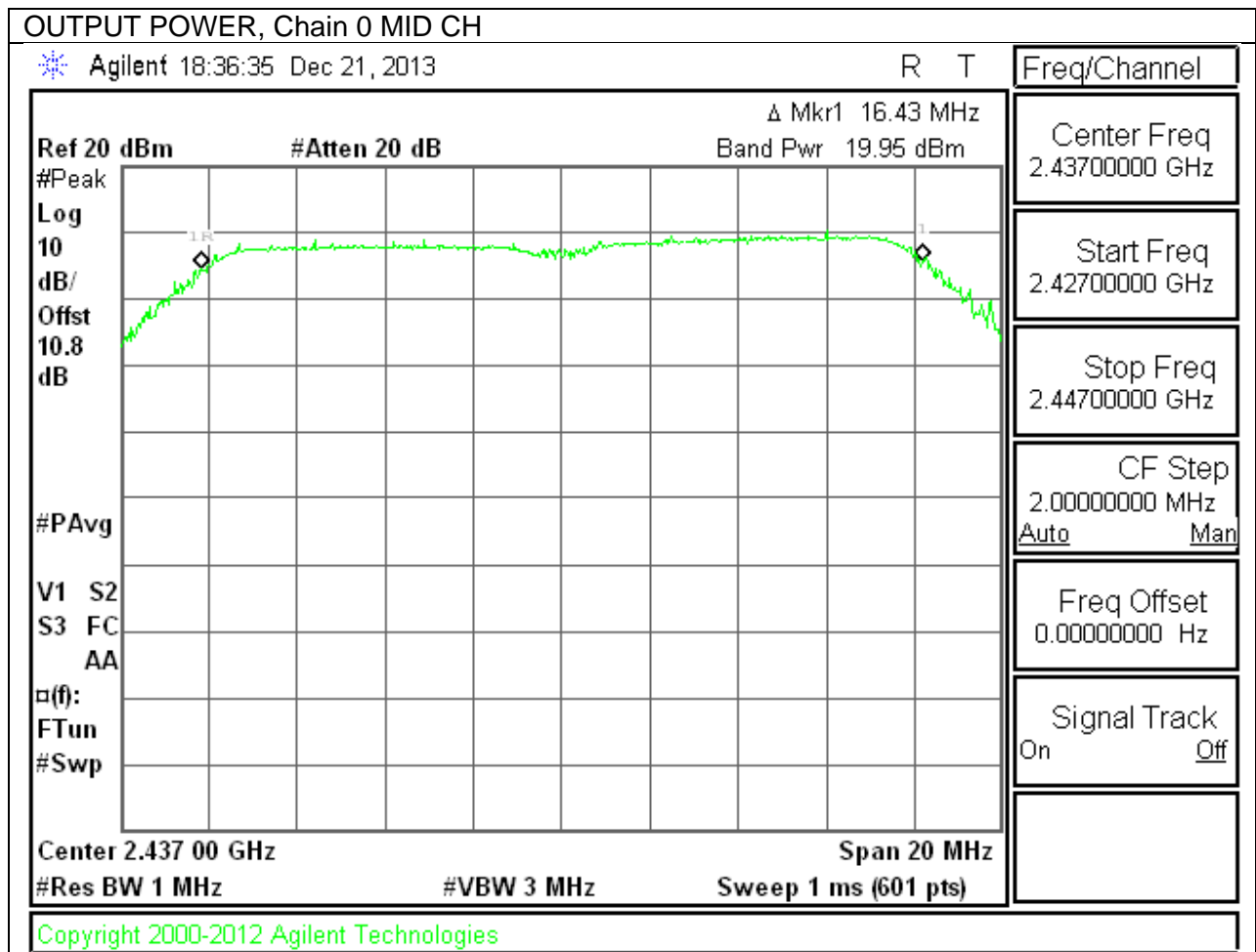
Results

| Channel | Frequency (MHz) | Chain 0 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-------------------------|----------------|
| Low | 2412 | 20.24 | 20.24 | 30.00 | -9.76 |
| Mid | 2437 | 20.18 | 20.18 | 30.00 | -9.82 |
| High | 2462 | 19.79 | 19.79 | 30.00 | -10.21 |
| Worst | | | 20.24 | | |

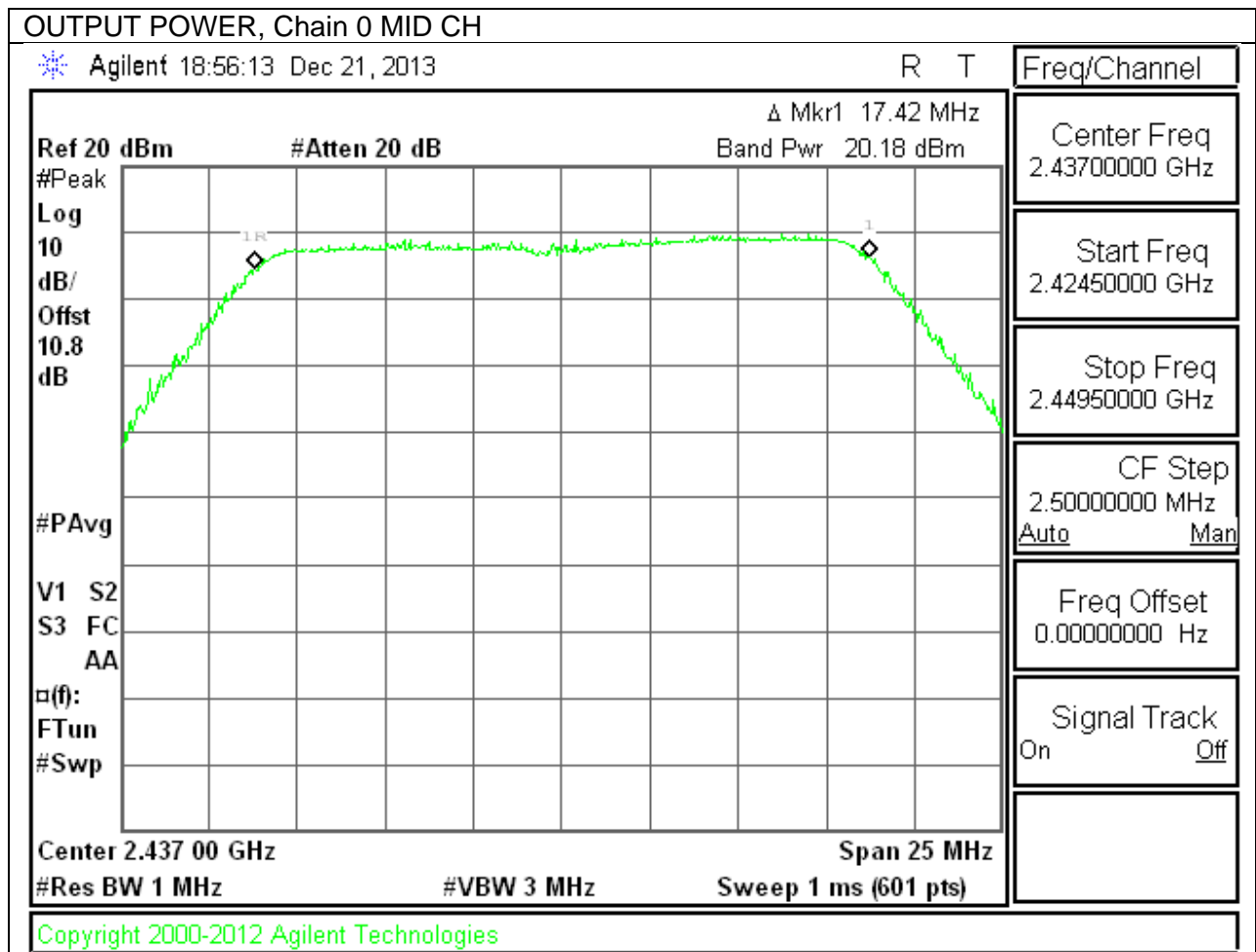
802.11b OUTPUT POWER, Chain 0



802.11g OUTPUT POWER, Chain 0



802.11n OUTPUT POWER, Chain 0



9.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

9.5.1. 802.11b MODE IN THE 2.4 GHz BAND

PSD Results

| Channel | Frequency (MHz) | Chain 0 Meas (dBm) | Limit (dBm) | Margin (dB) |
|---------|--------------------|--------------------------|----------------|----------------|
| Low | 2412 | -6.83 | 8.0 | -14.8 |
| Mid | 2437 | -6.43 | 8.0 | -14.4 |
| High | 2462 | -7.60 | 8.0 | -15.6 |

9.5.2. 802.11g MODE IN THE 2.4 GHz BAND

PSD Results

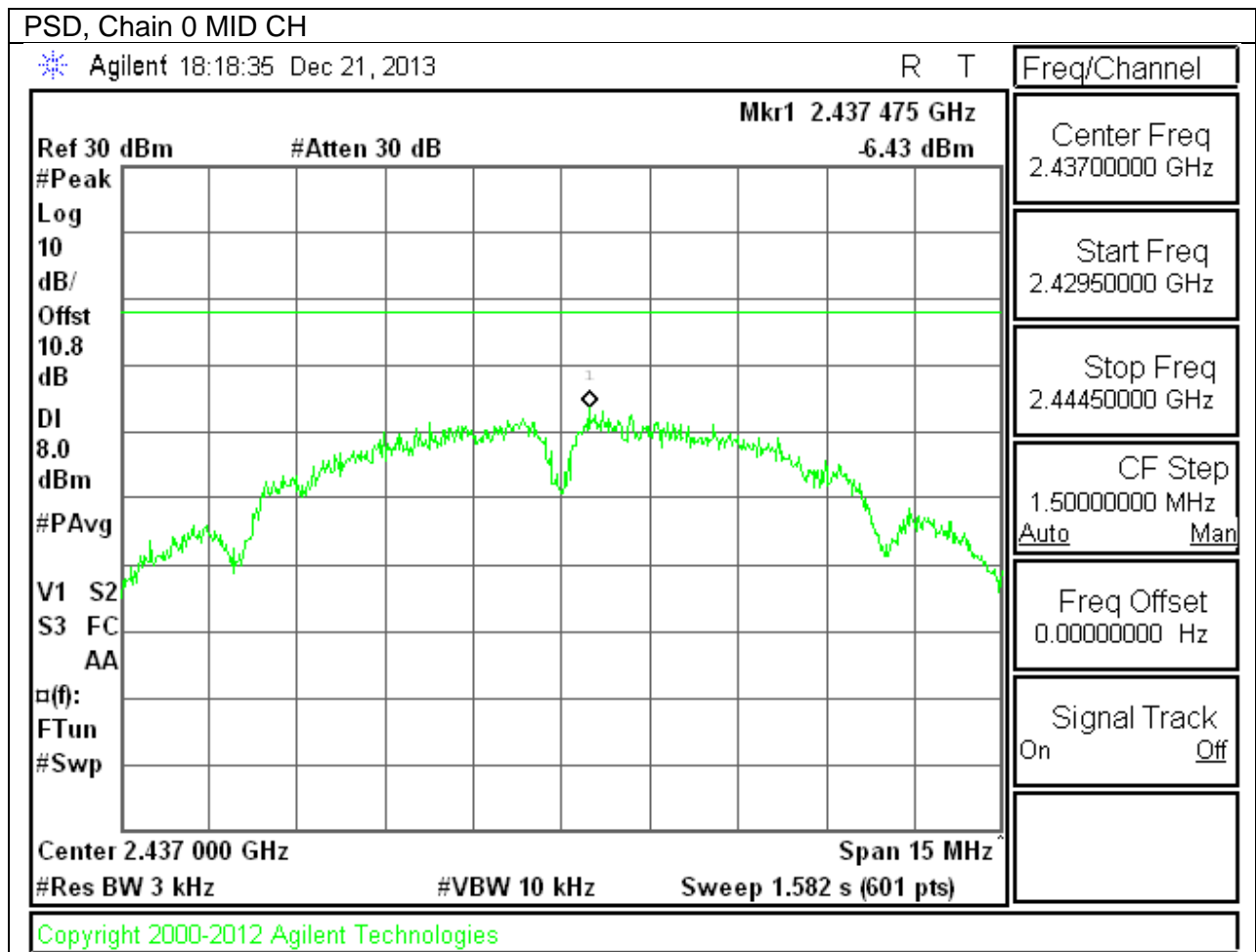
| Channel | Frequency (MHz) | Chain 0 Meas (dBm) | Limit (dBm) | Margin (dB) |
|---------|--------------------|--------------------------|----------------|----------------|
| Low | 2412 | -12.82 | 8.0 | -20.8 |
| Mid | 2437 | -12.02 | 8.0 | -20.0 |
| High | 2462 | -13.44 | 8.0 | -21.4 |

9.5.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

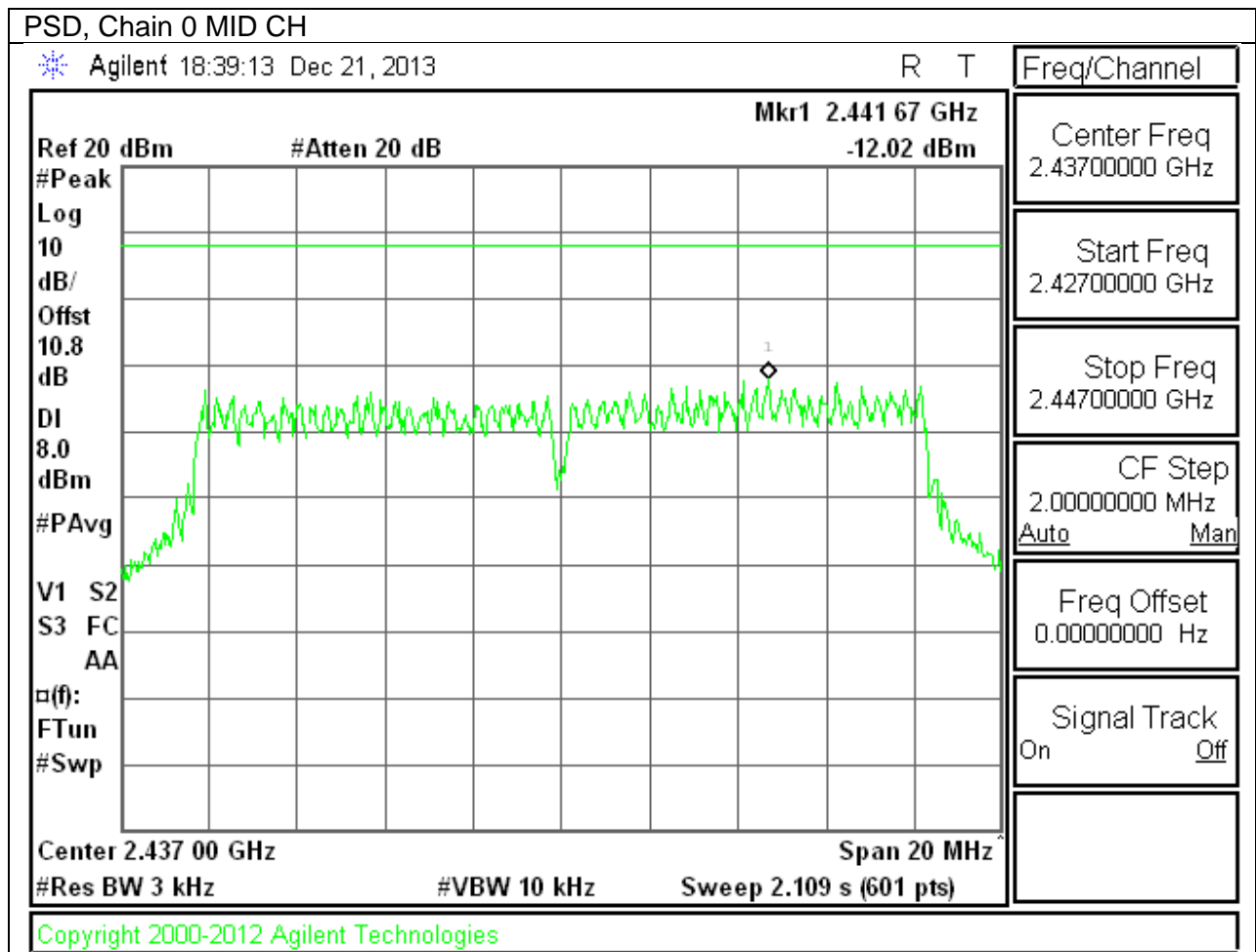
PSD Results

| Channel | Frequency (MHz) | Chain 0 Meas (dBm) | Limit (dBm) | Margin (dB) |
|---------|--------------------|--------------------------|----------------|----------------|
| Low | 2412 | -13.48 | 8.0 | -21.5 |
| Mid | 2437 | -13.30 | 8.0 | -21.3 |
| High | 2462 | -13.64 | 8.0 | -21.6 |

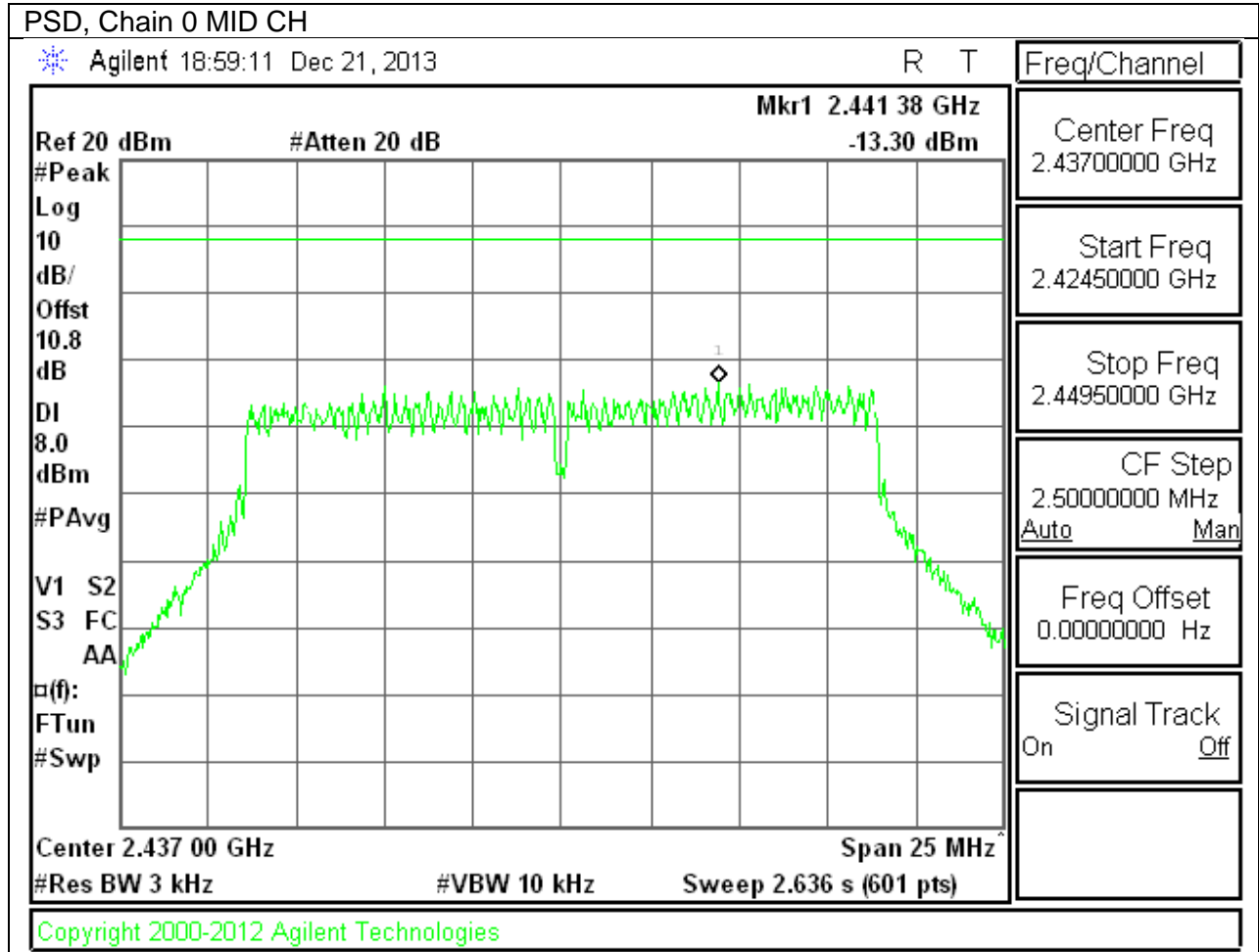
802.11b PSD, Chain 0



802.11g PSD, Chain 0



802.11n PSD, Chain 0



9.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

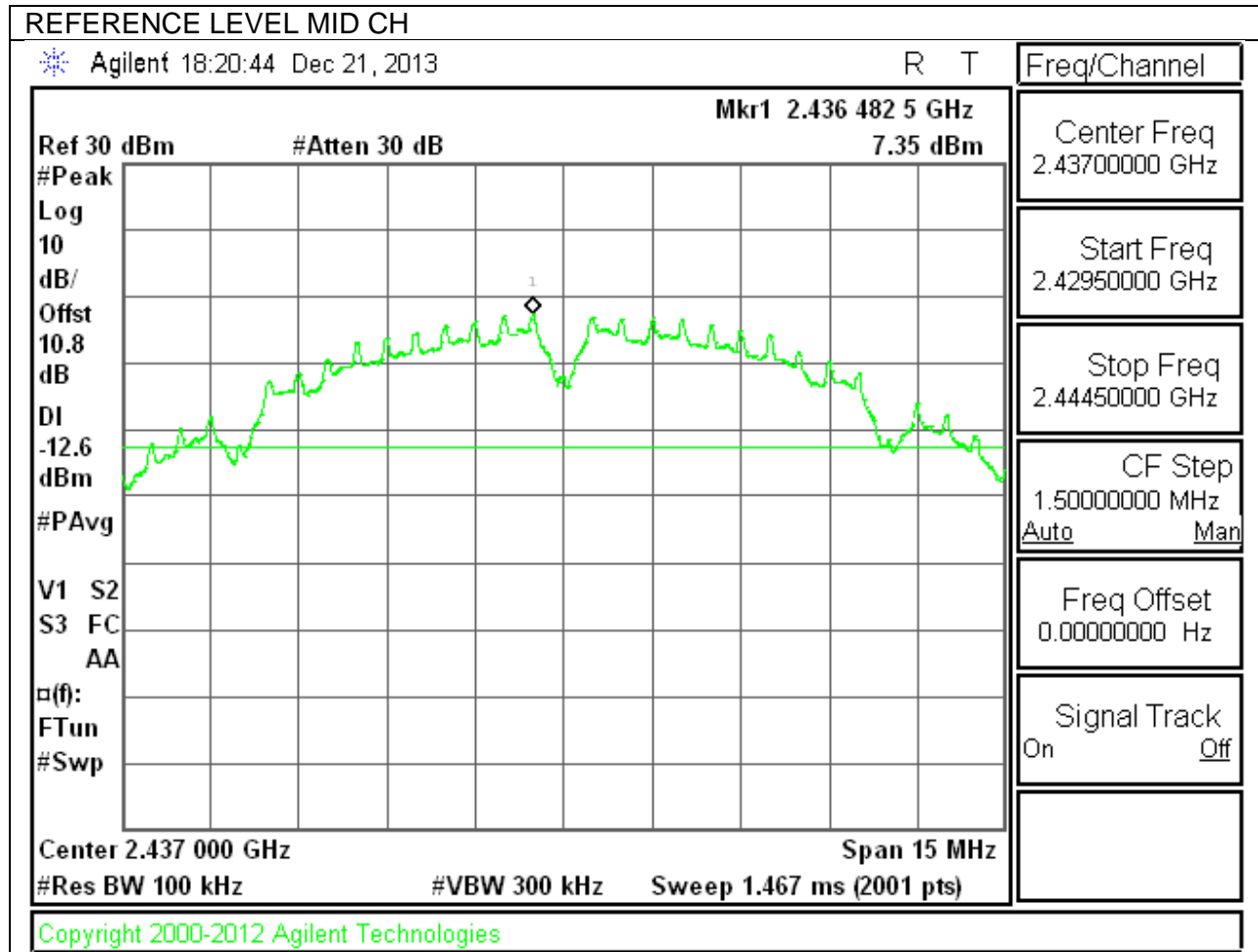
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

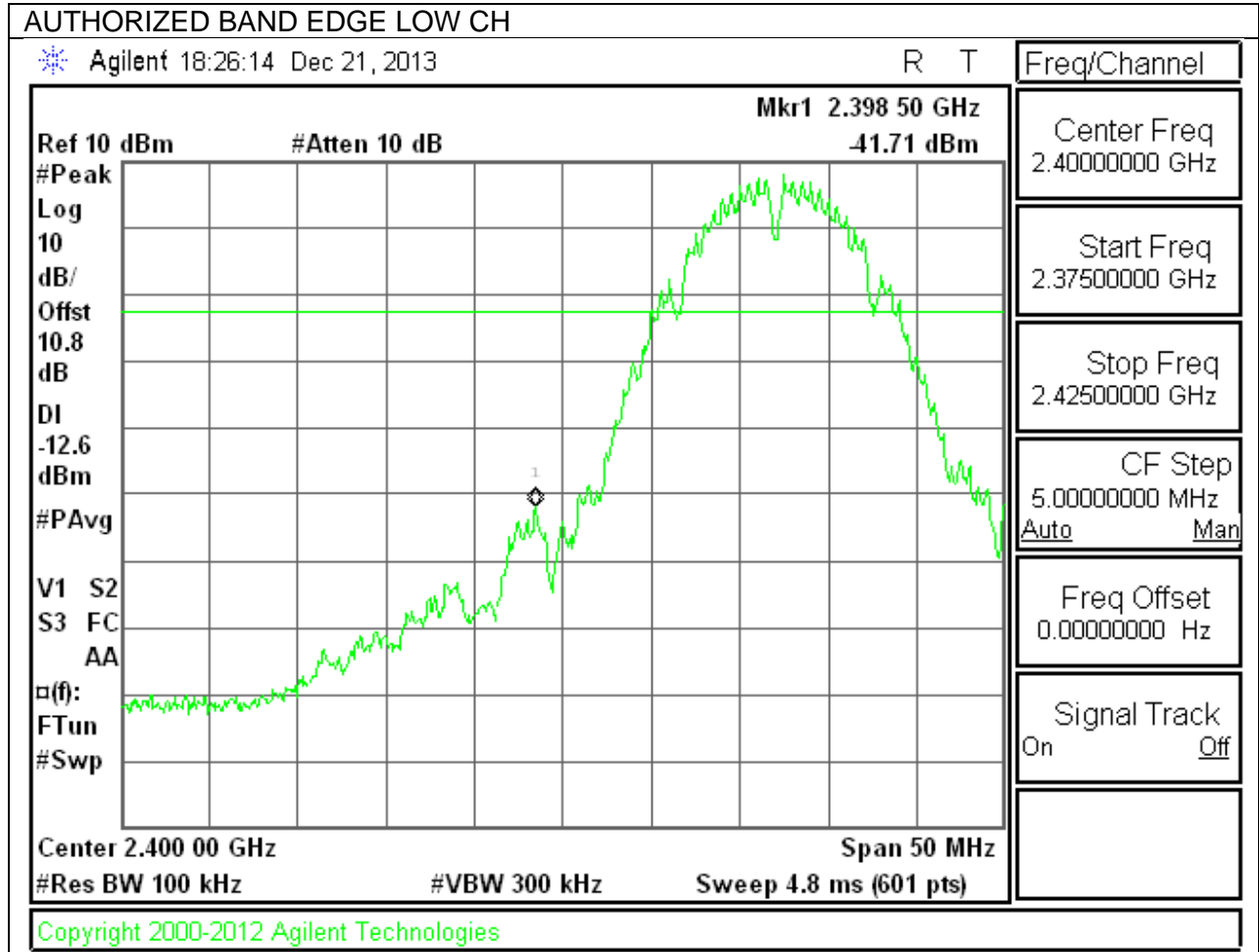
RESULTS

9.6.1. 802.11b MODE IN THE 2.4 GHz BAND

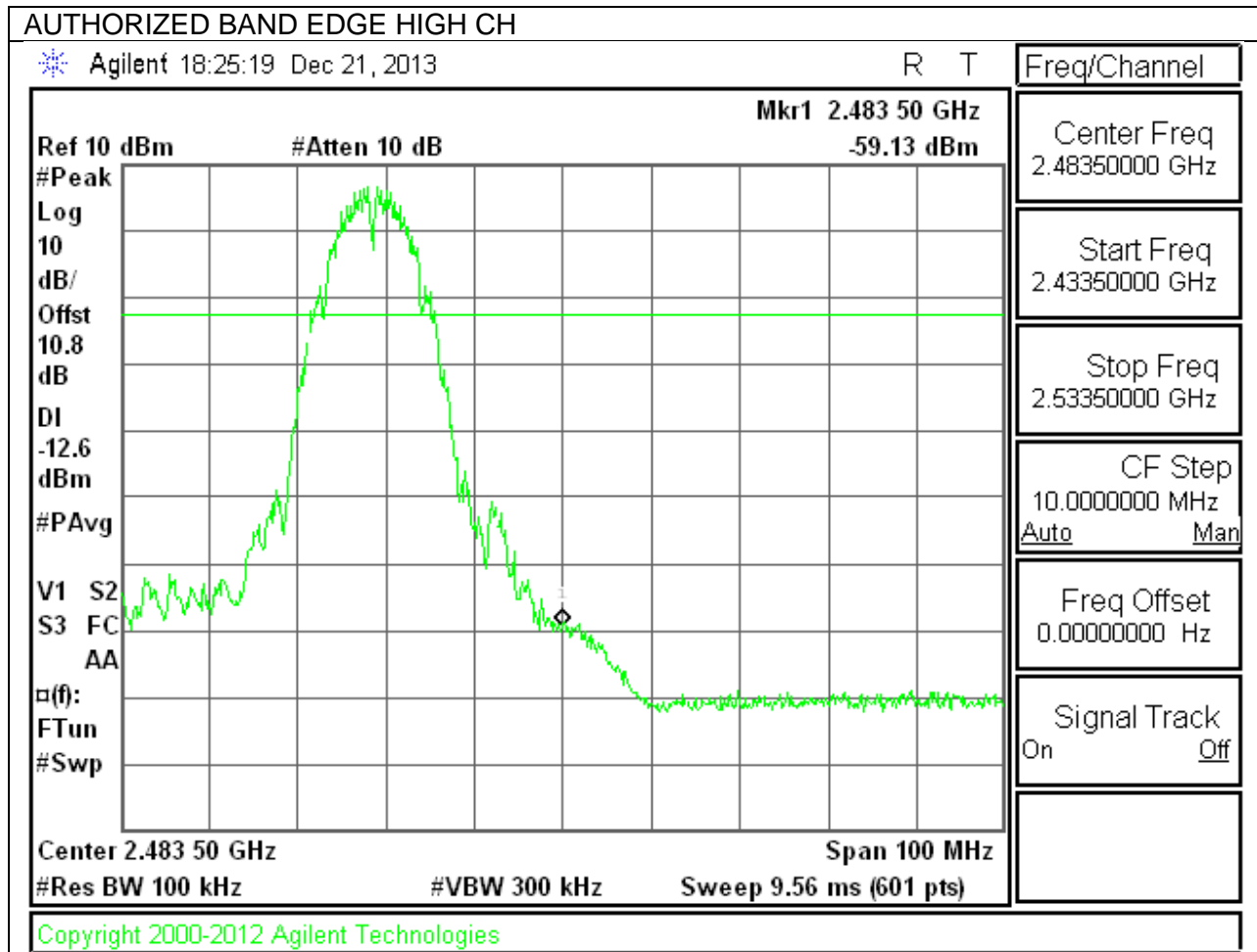
IN-BAND REFERENCE LEVEL



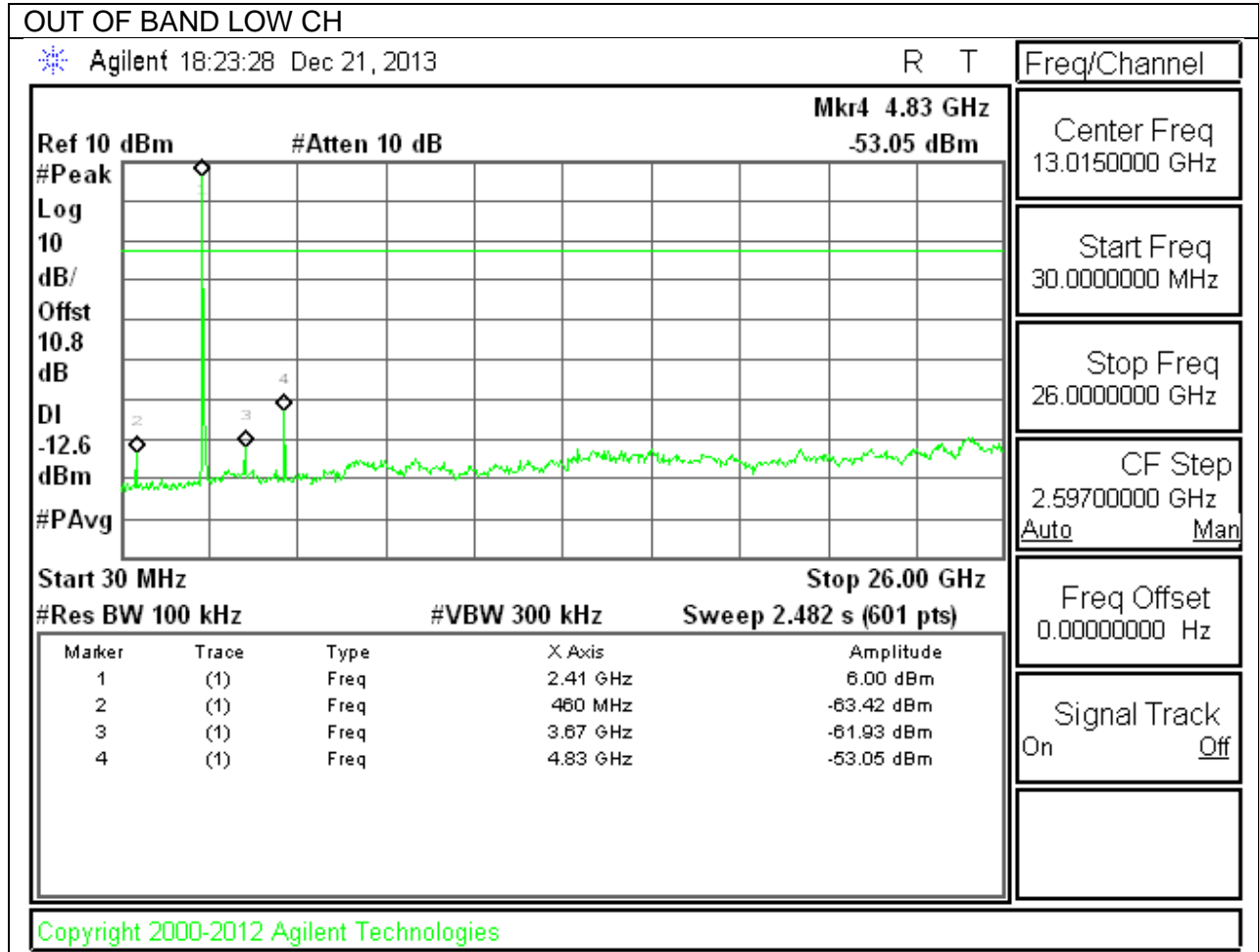
LOW CHANNEL BANDEDGE



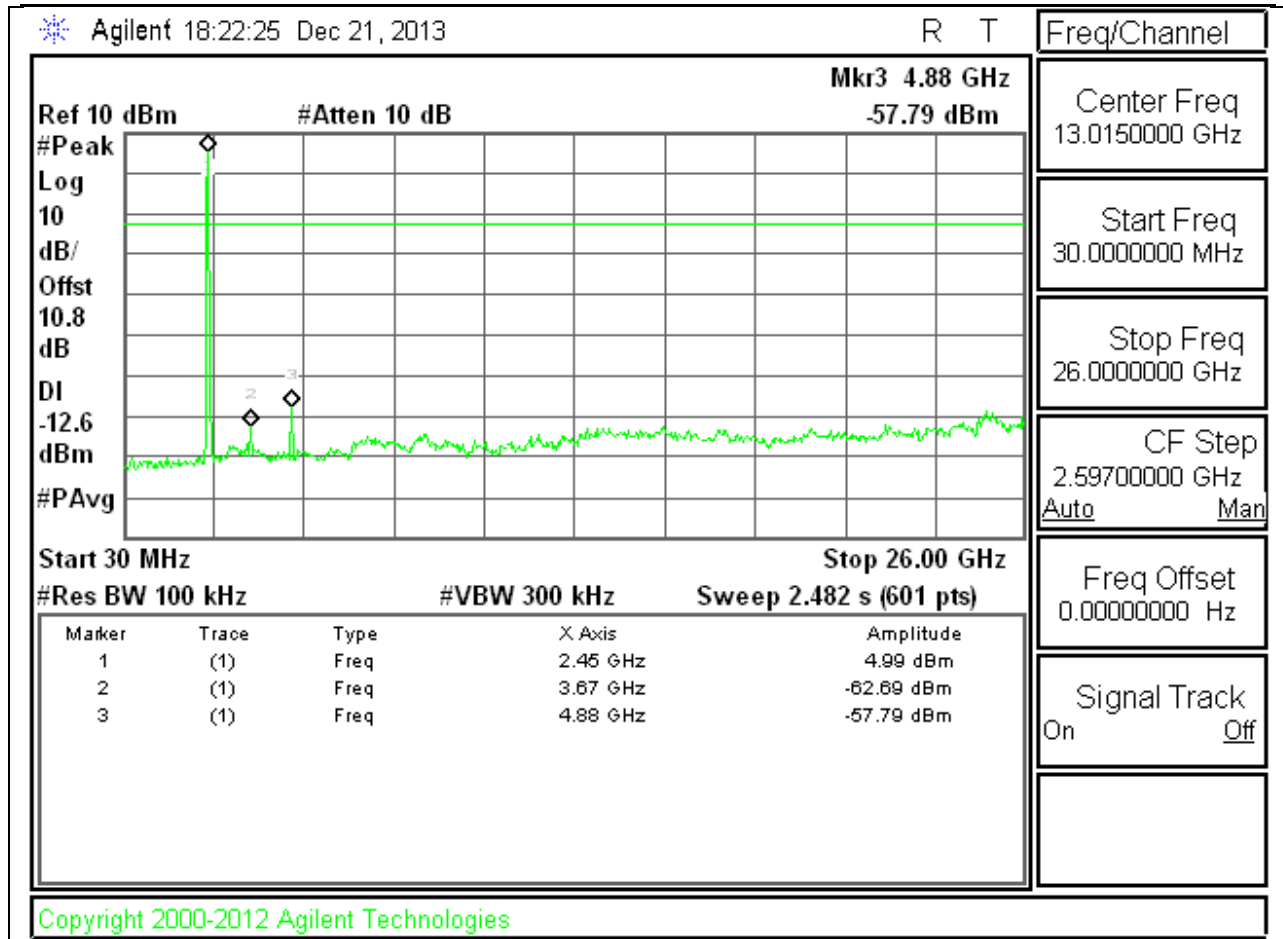
HIGH CHANNEL BANDEDGE

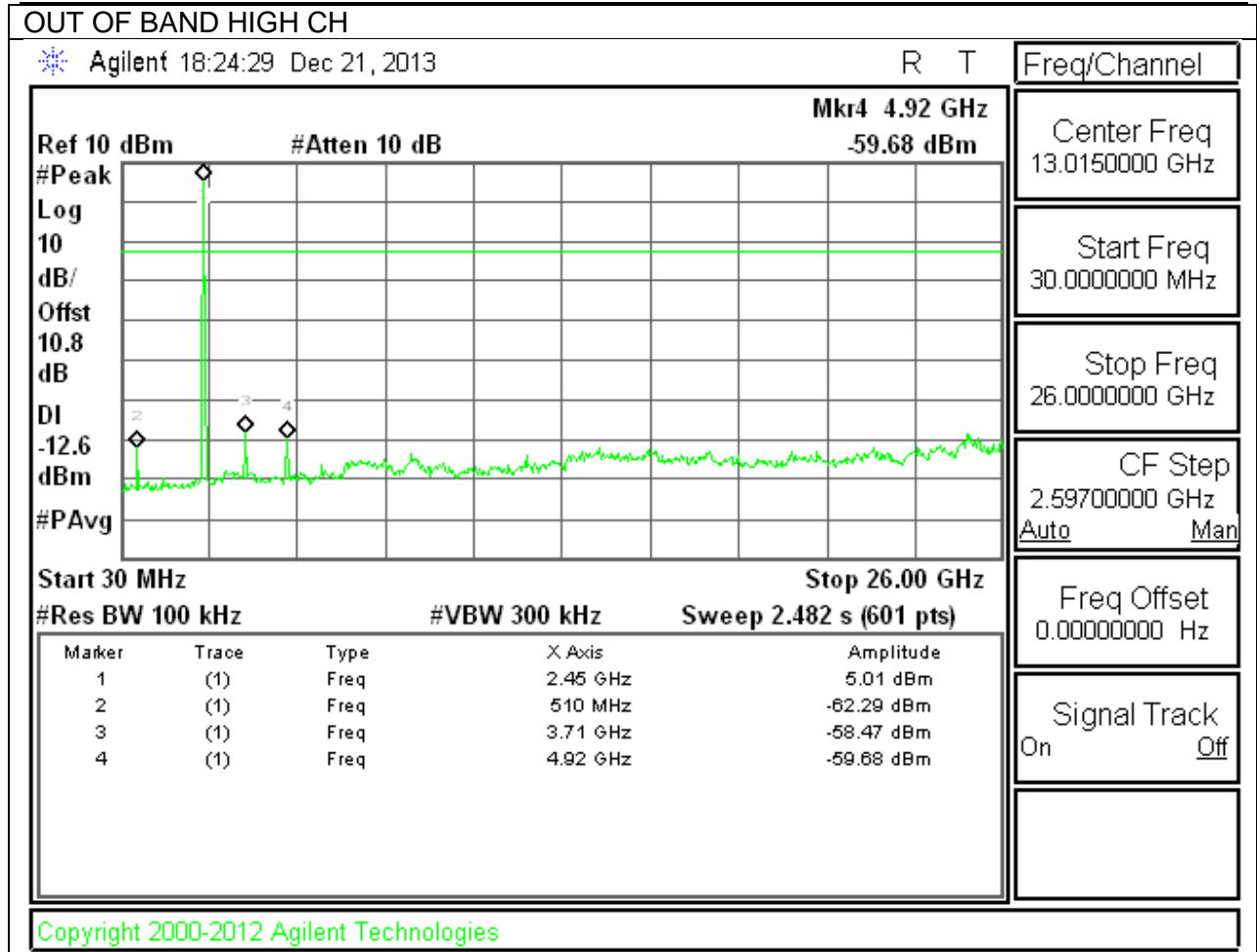


OUT-OF-BAND EMISSIONS



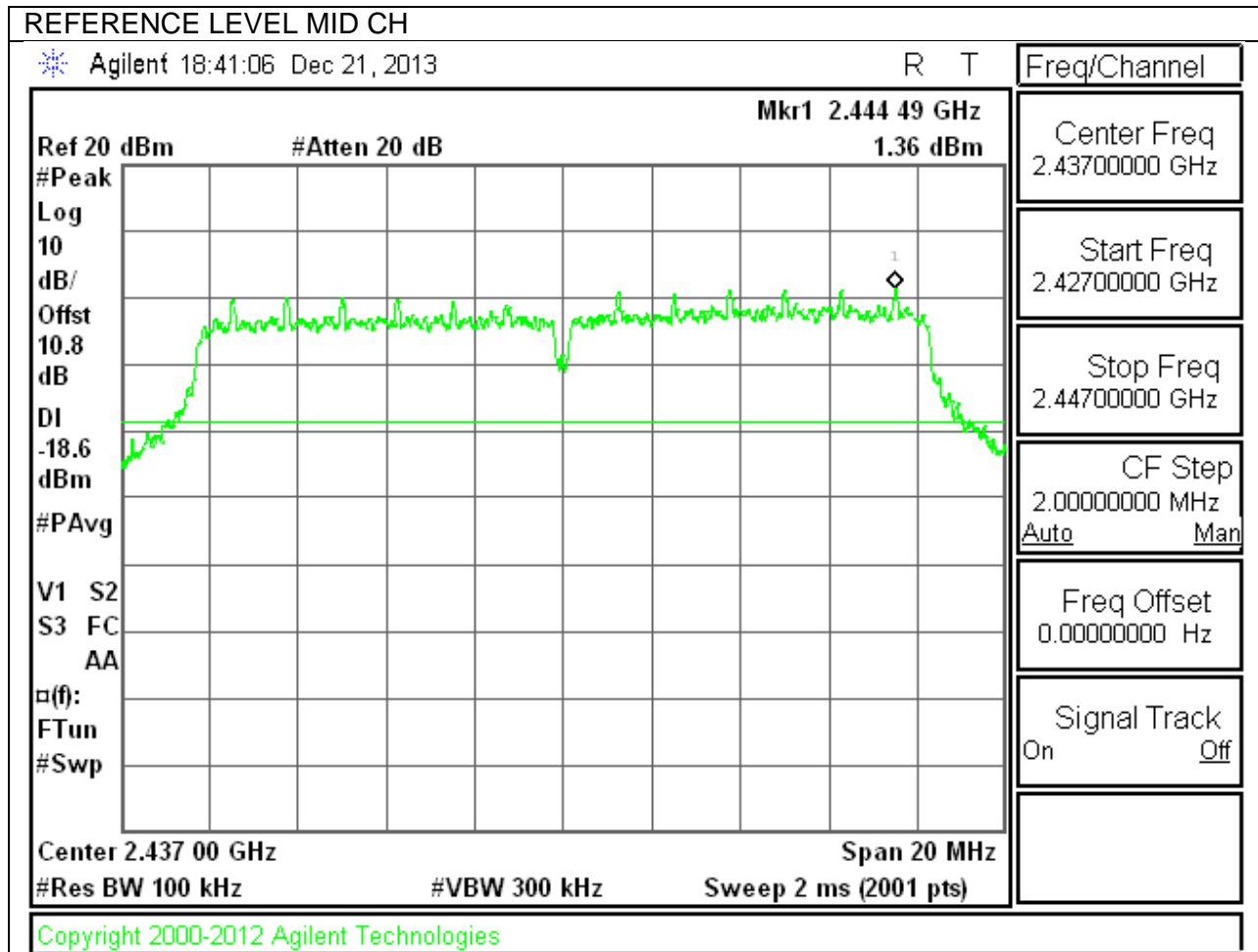
OUT OF BAND MID CH



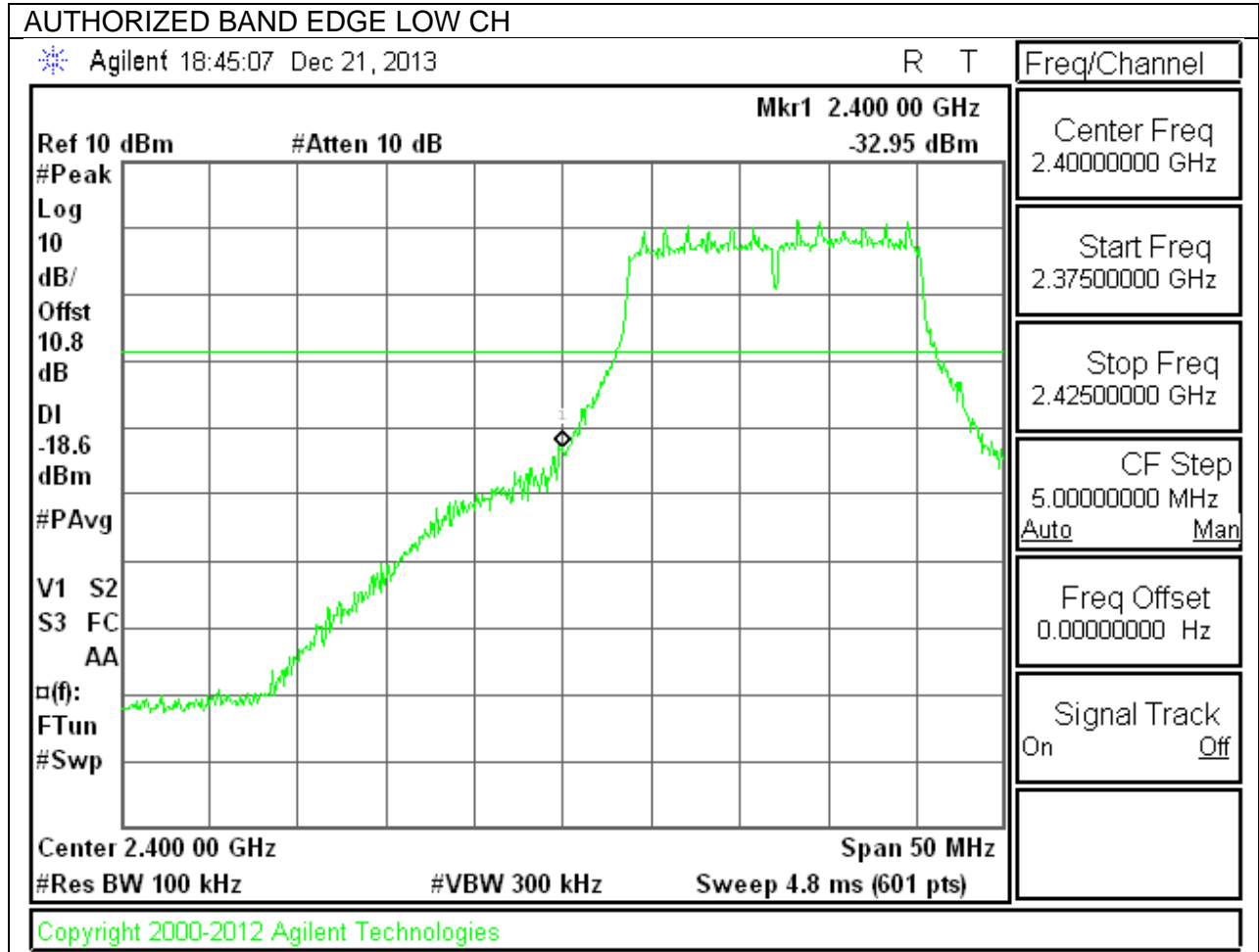


9.6.2. 802.11g MODE IN THE 2.4 GHz BAND

IN-BAND REFERENCE LEVEL

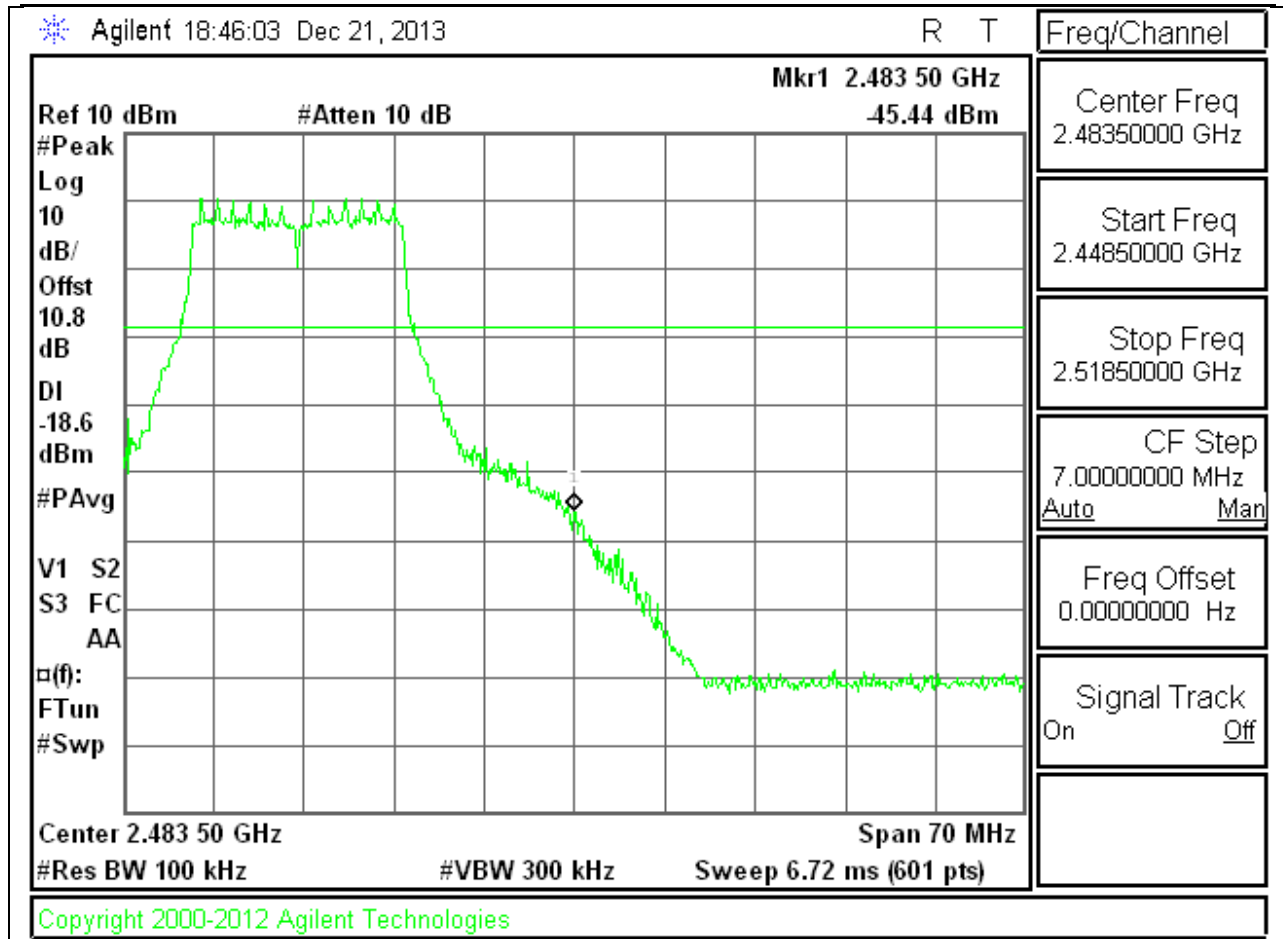


LOW CHANNEL BANDEDGE

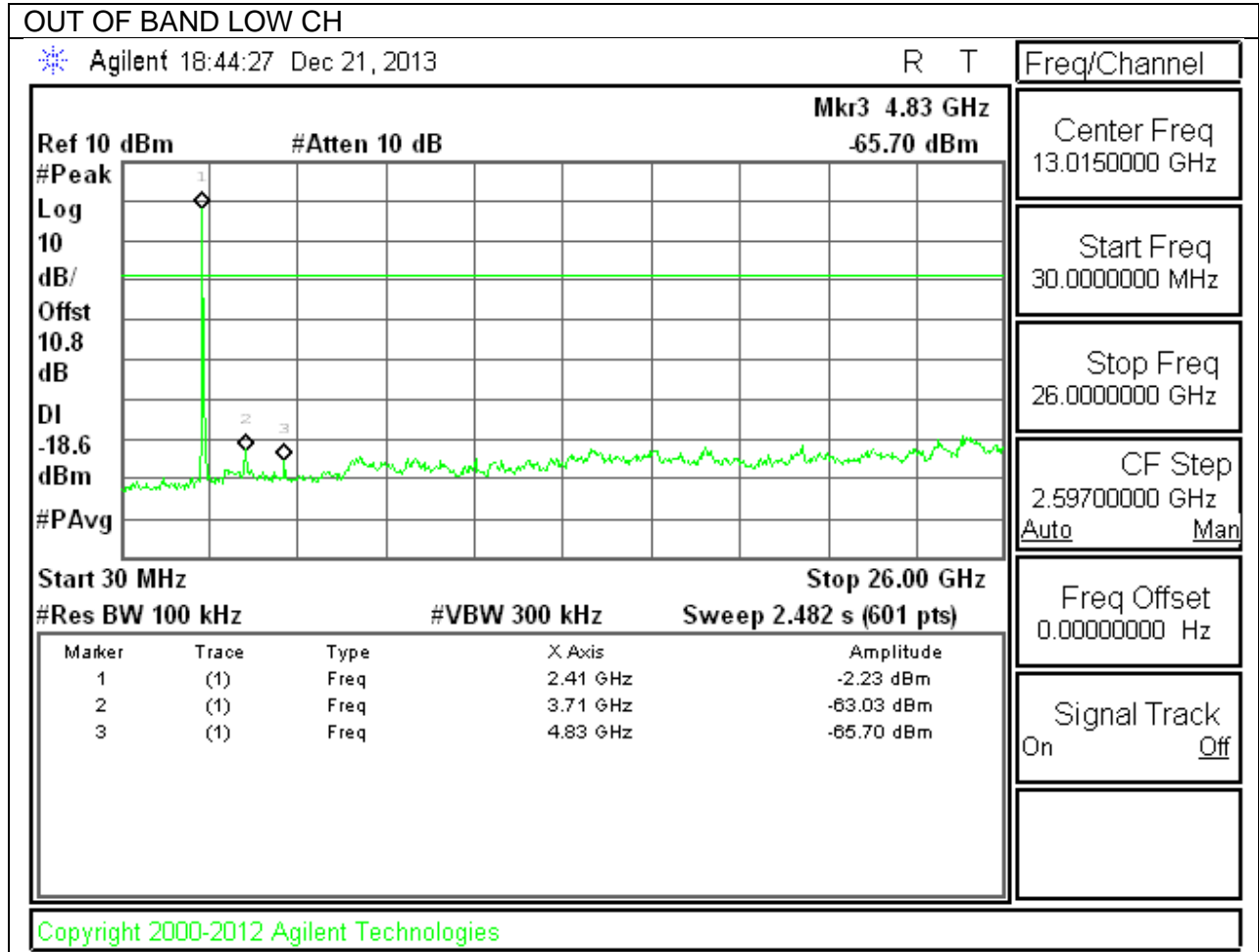


HIGH CHANNEL BANDEDGE

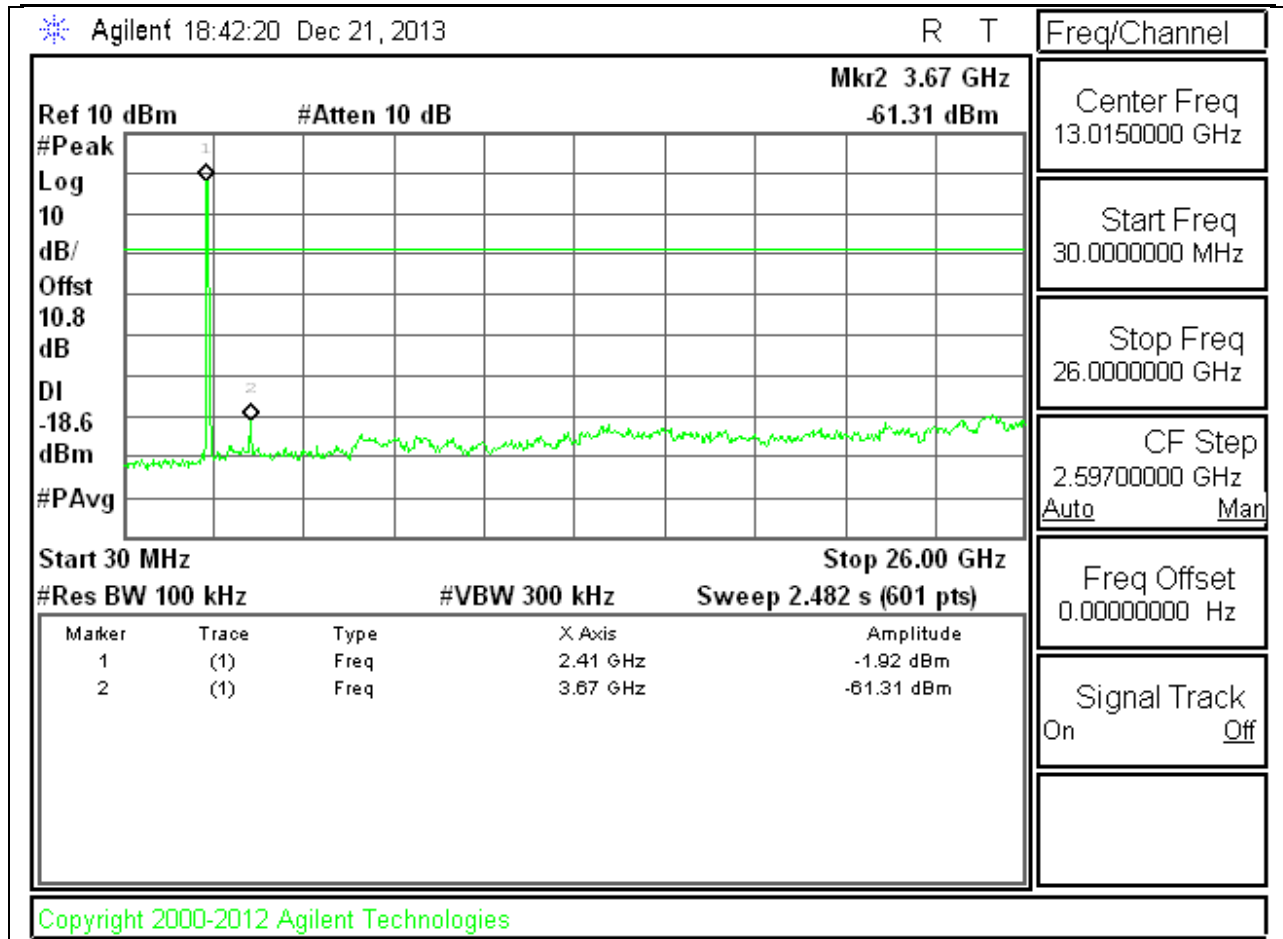
AUTHORIZED BAND EDGE HIGH CH

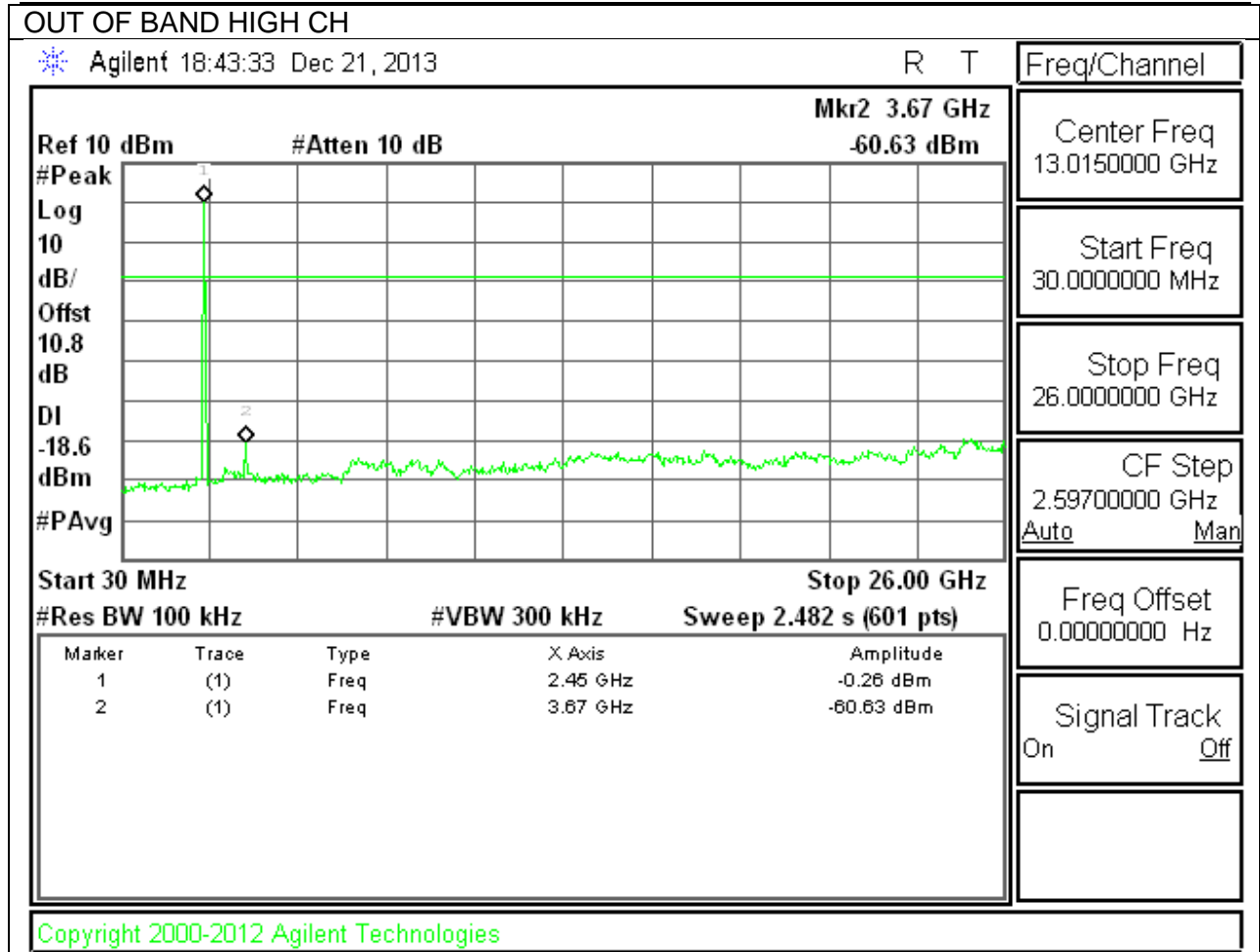


OUT-OF-BAND EMISSIONS



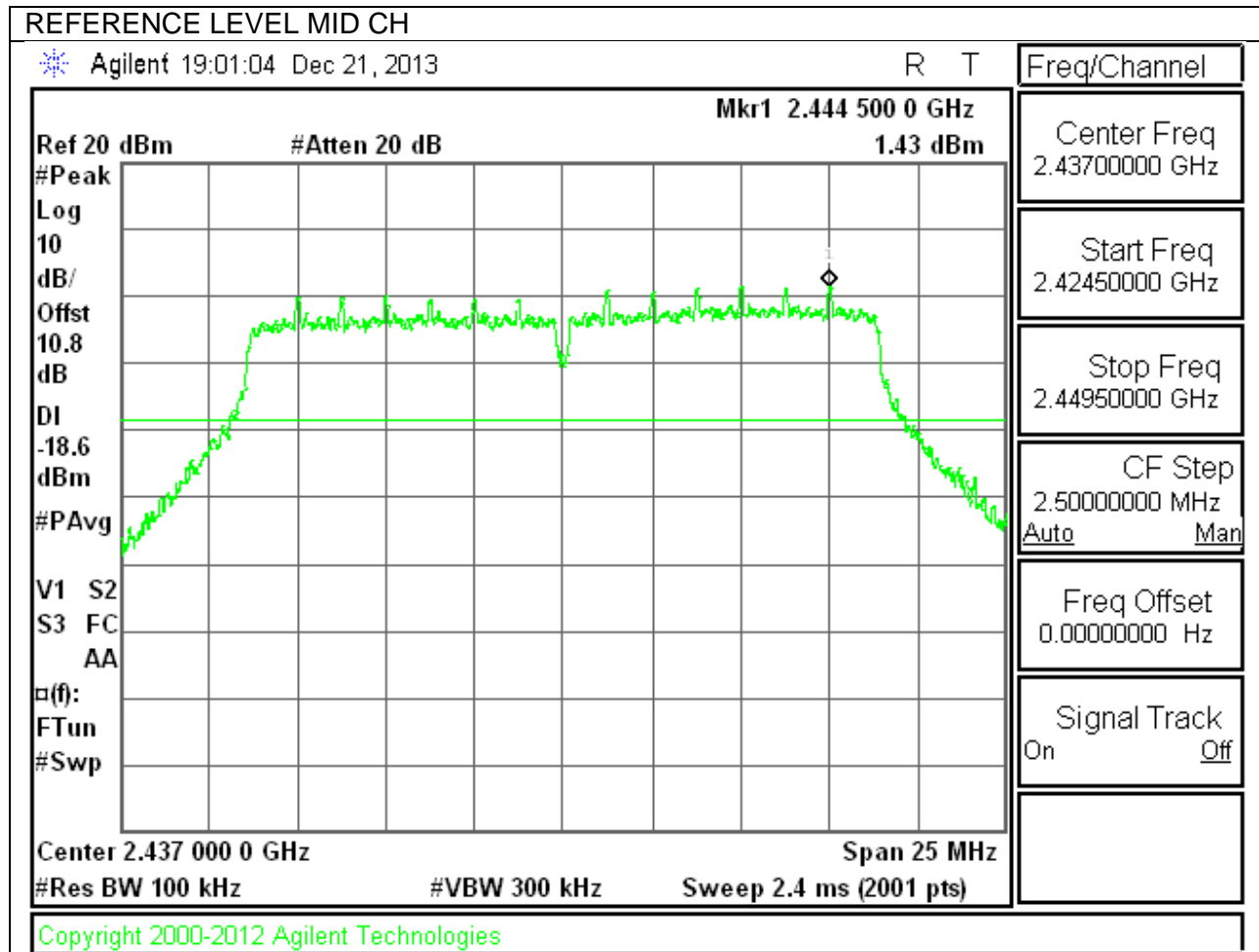
OUT OF BAND MID CH



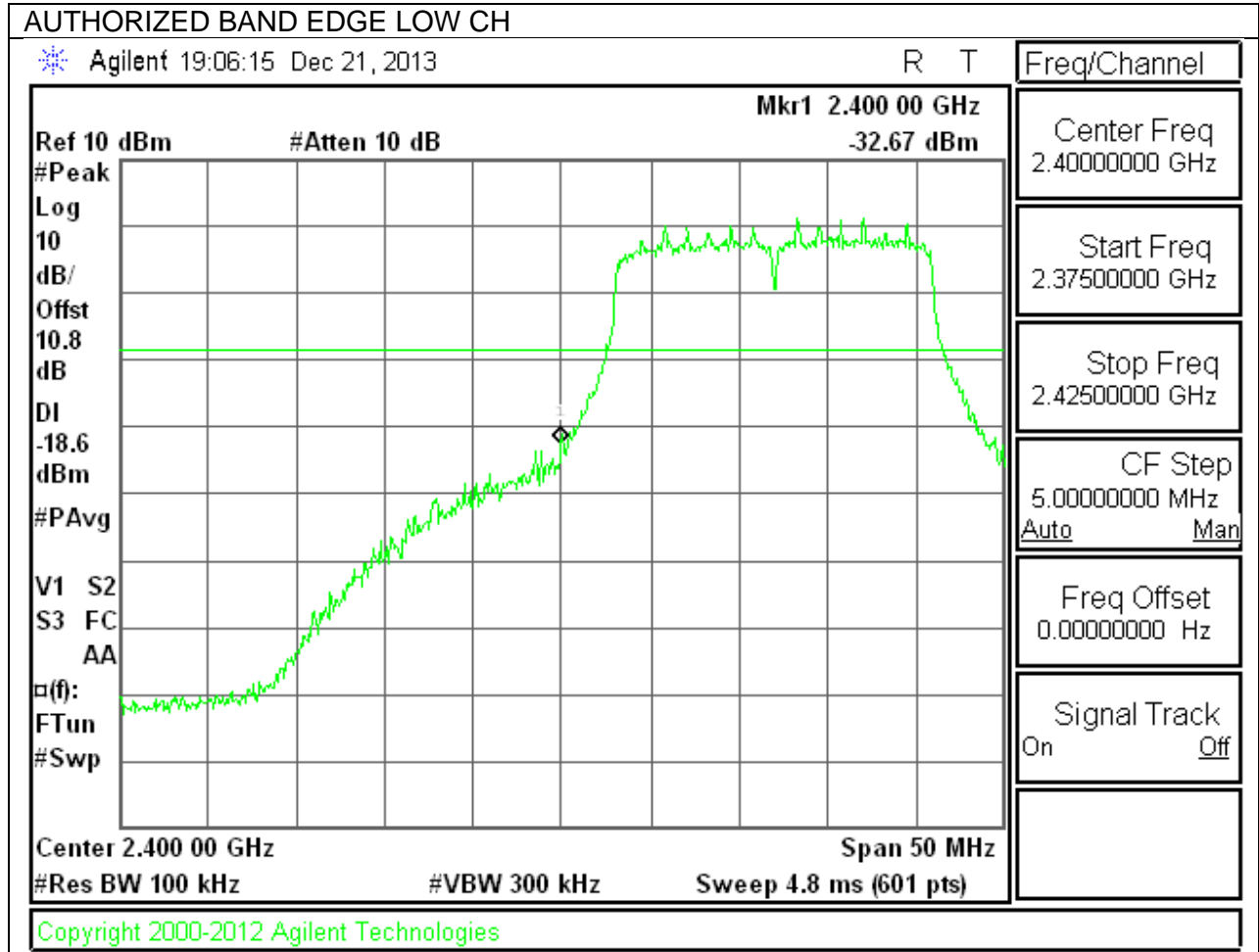


9.6.3. 802.11n MODE IN THE 2.4 GHz BAND

IN-BAND REFERENCE LEVEL

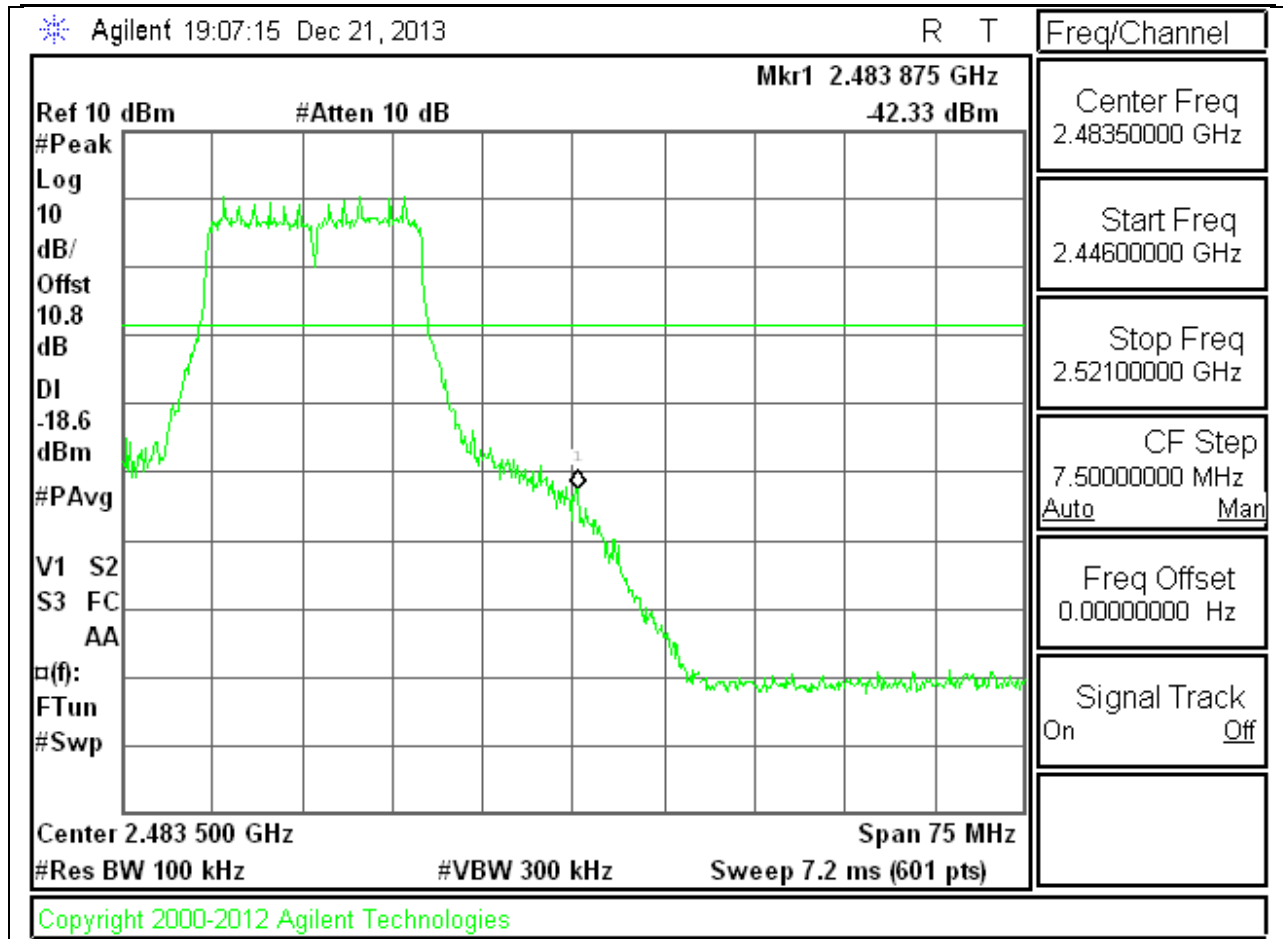


LOW CHANNEL BANDEDGE

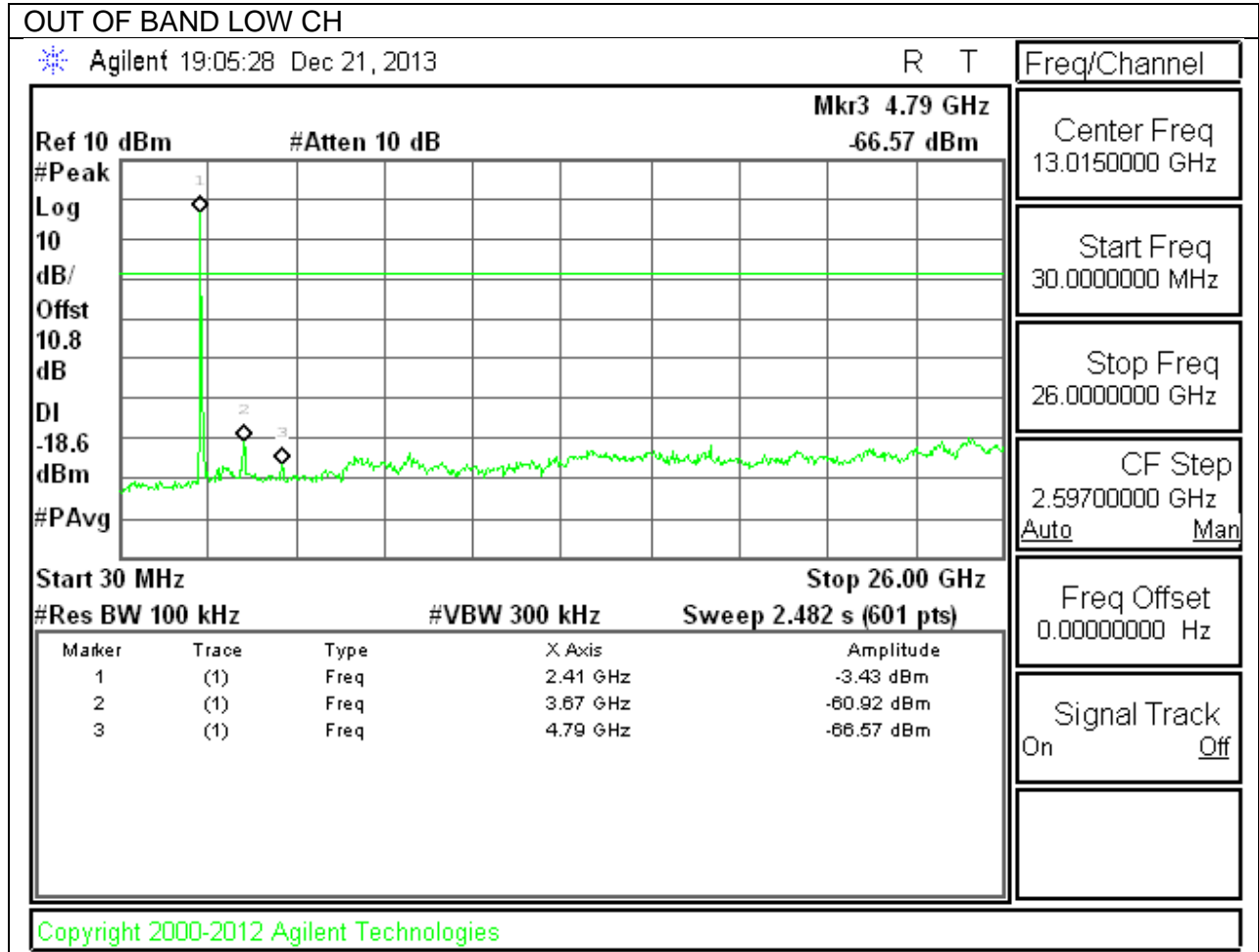


HIGH CHANNEL BANDEDGE

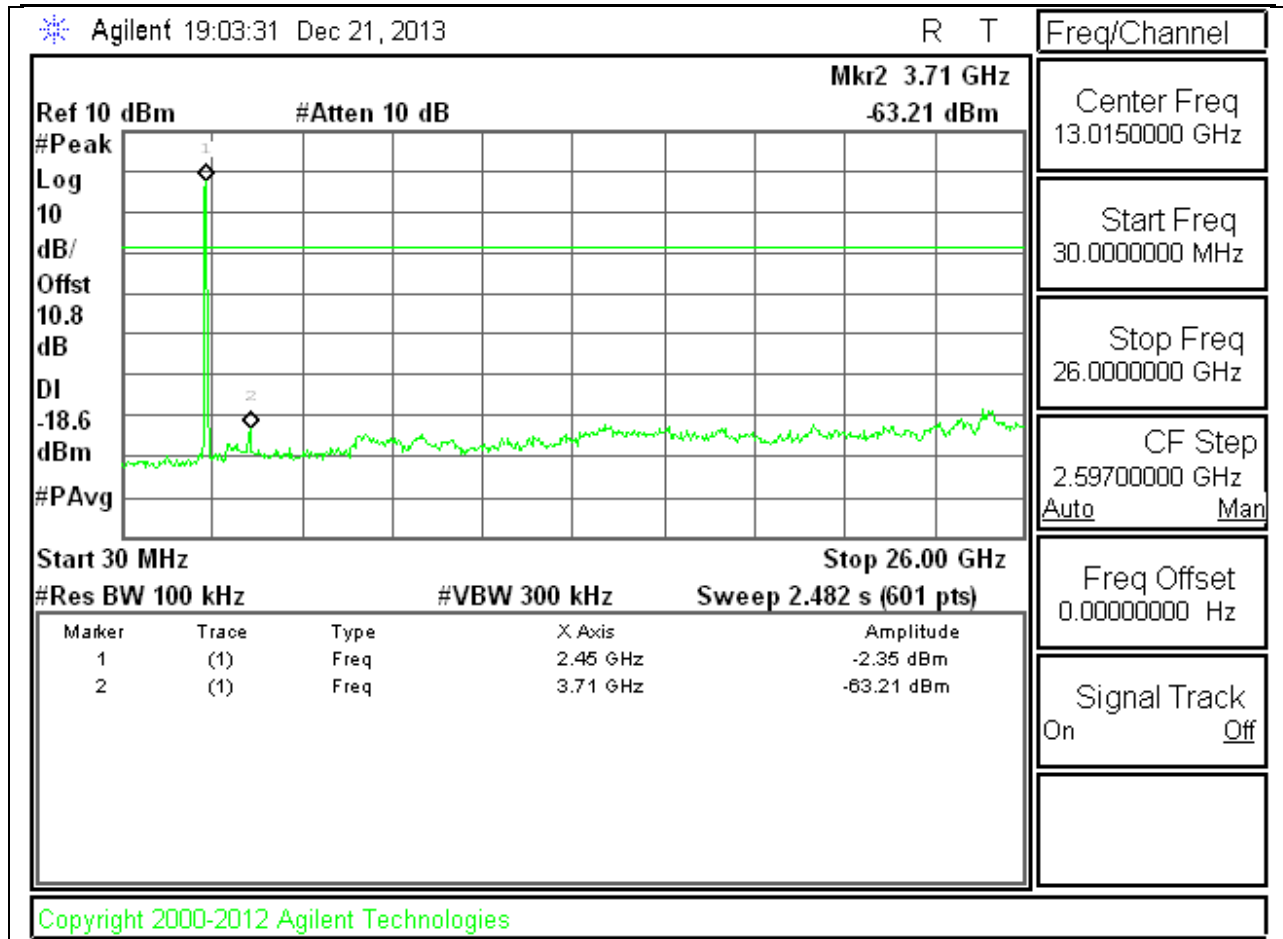
AUTHORIZED BAND EDGE HIGH CH

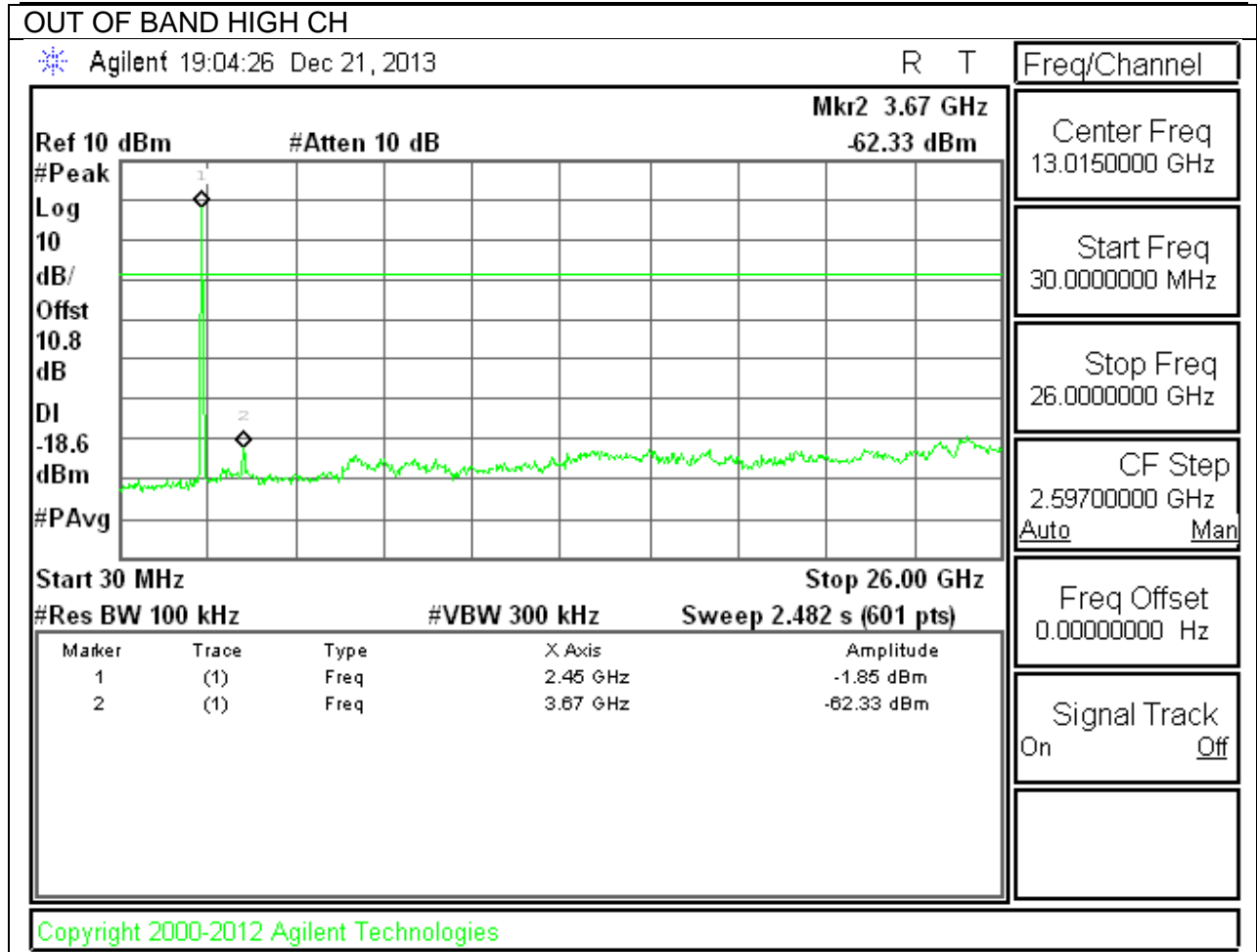


OUT-OF-BAND EMISSIONS



OUT OF BAND MID CH





10. RADIATED TEST RESULTS

10.1. 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.

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.

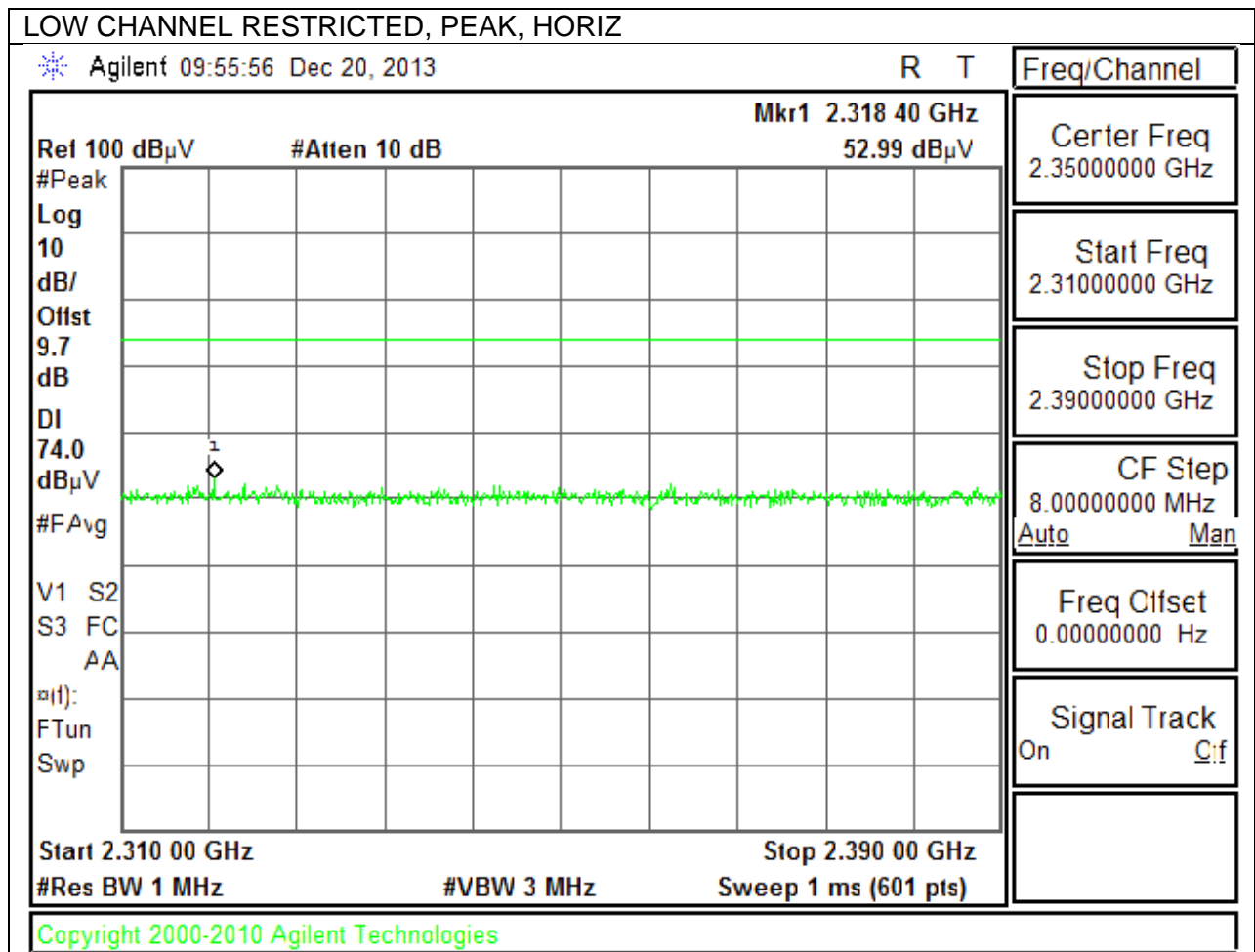
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor= $10\log(1/x)$ For this sample B mode = 0dB (duty cycle >98%); G mode = 0.21dB; N mode = 0.23dB.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

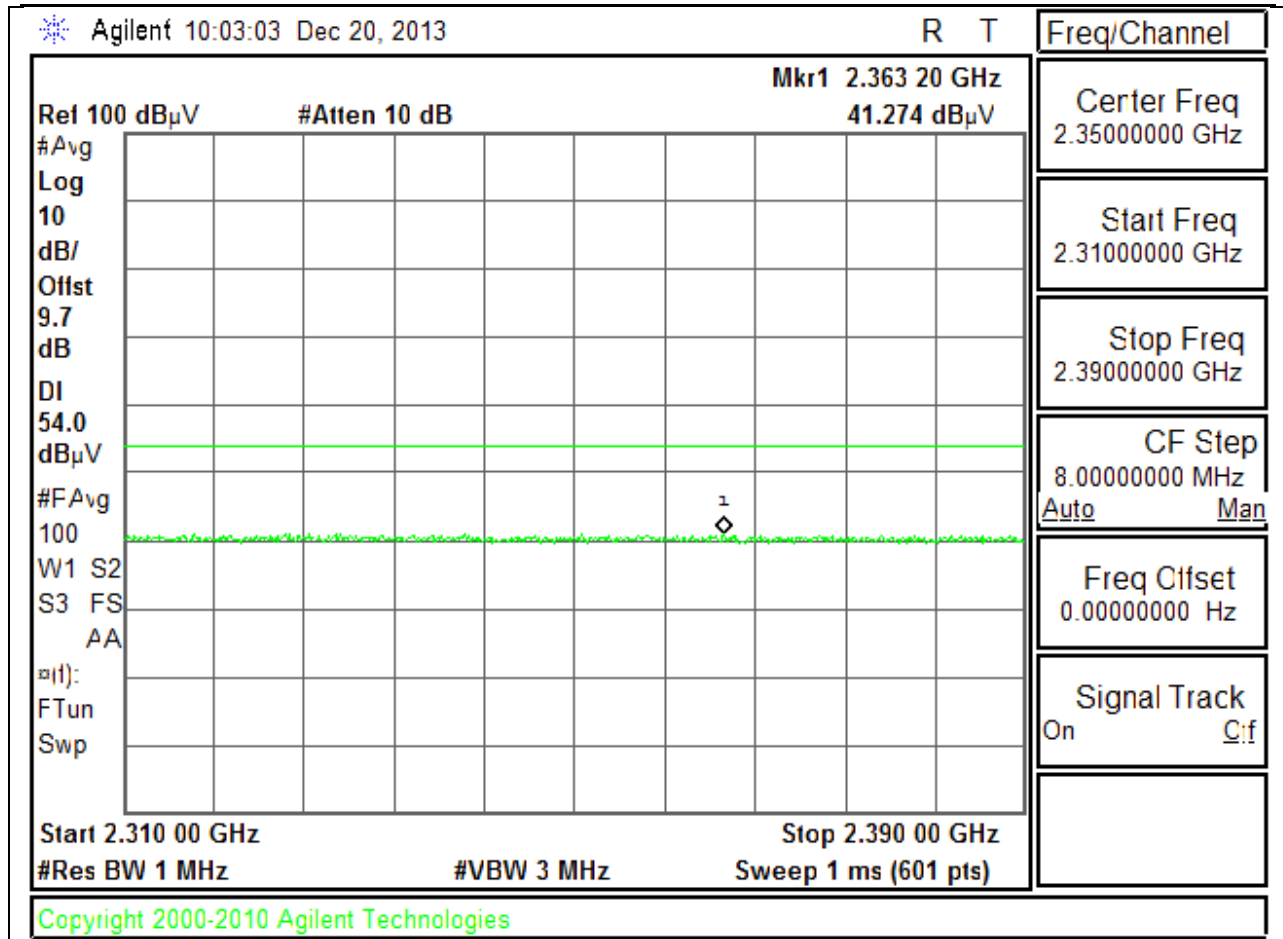
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

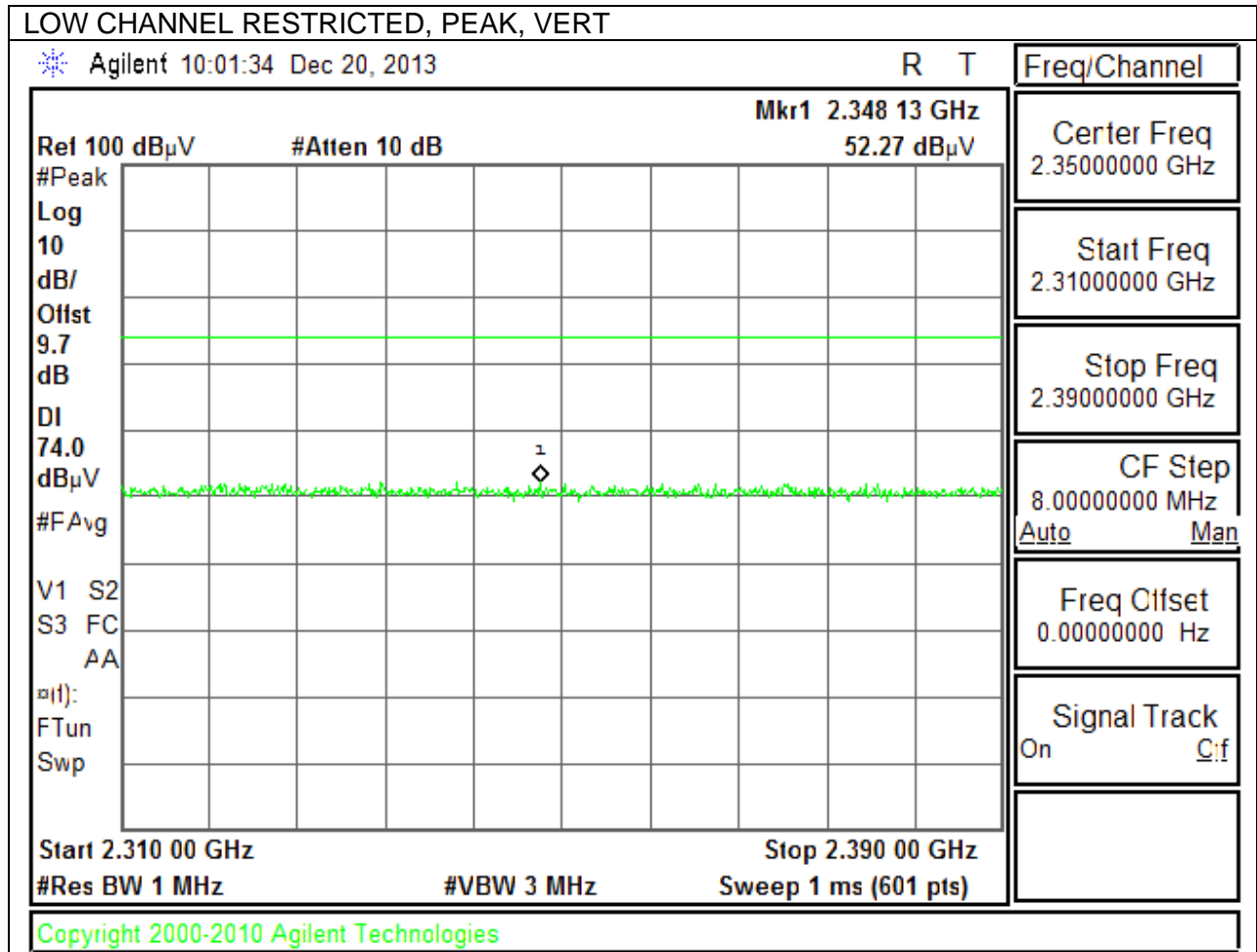
10.2. TRANSMITTER ABOVE 1 GHz

**10.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND
 RESTRICTED BANDEDGE (LOW CHANNEL)**

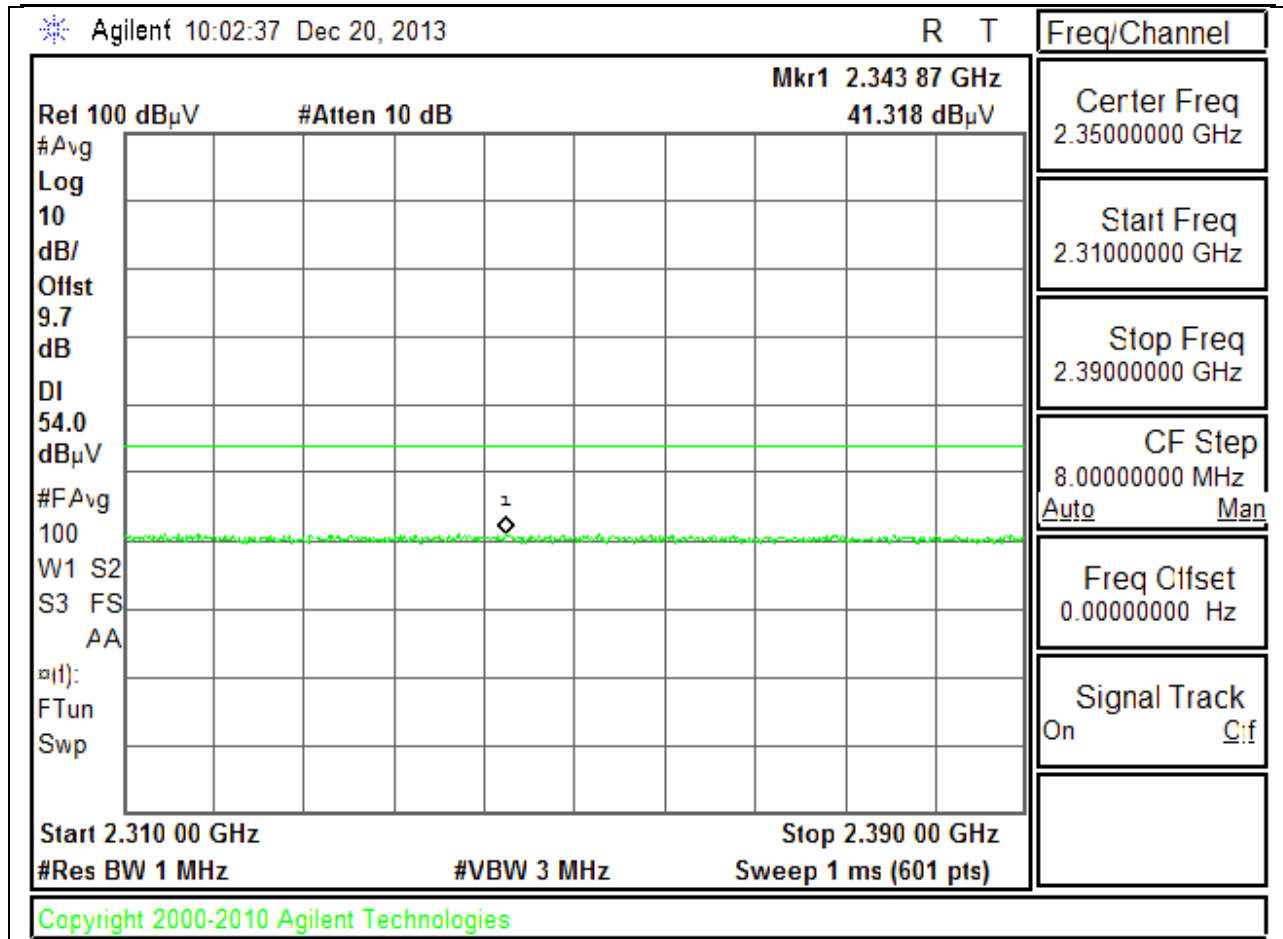


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

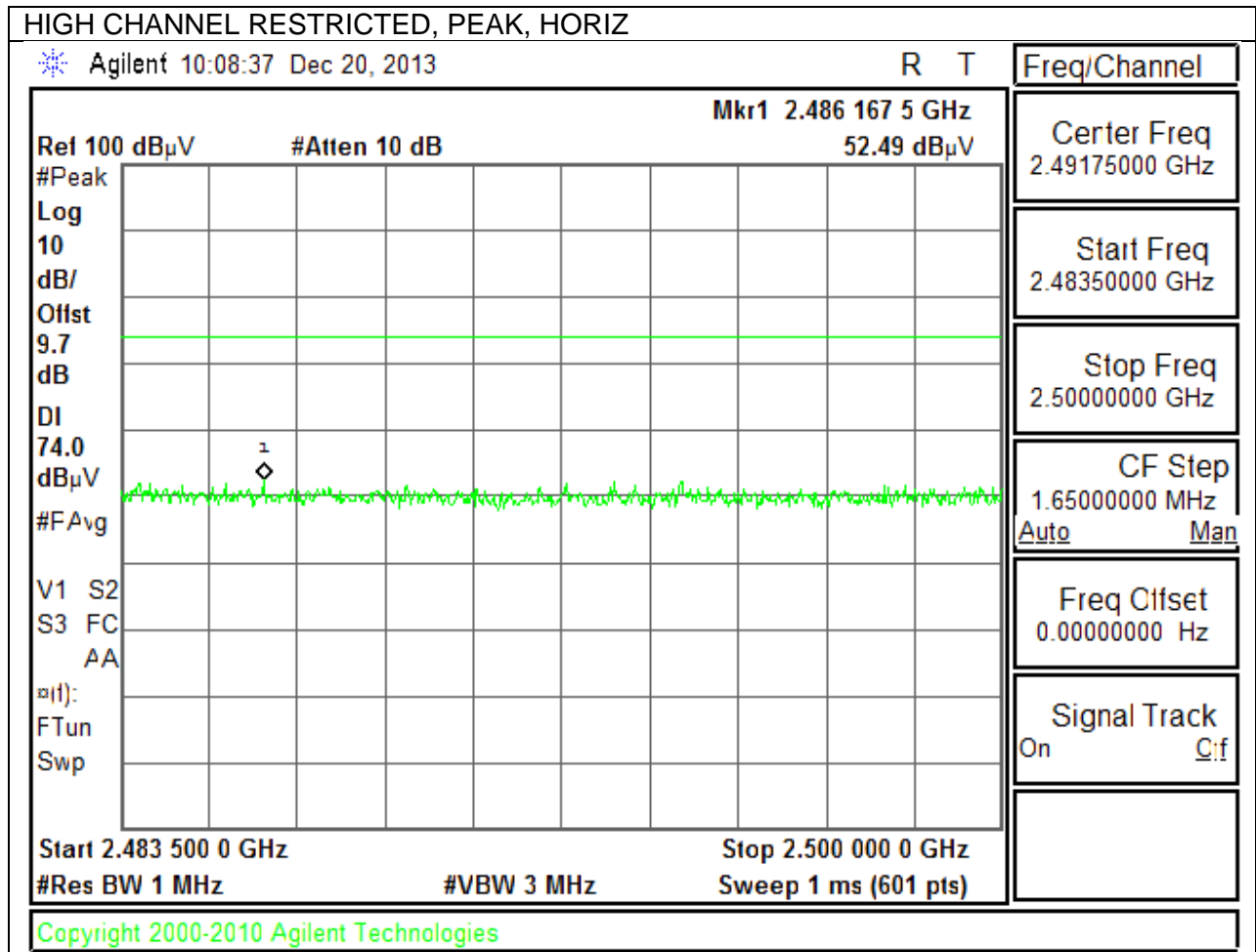




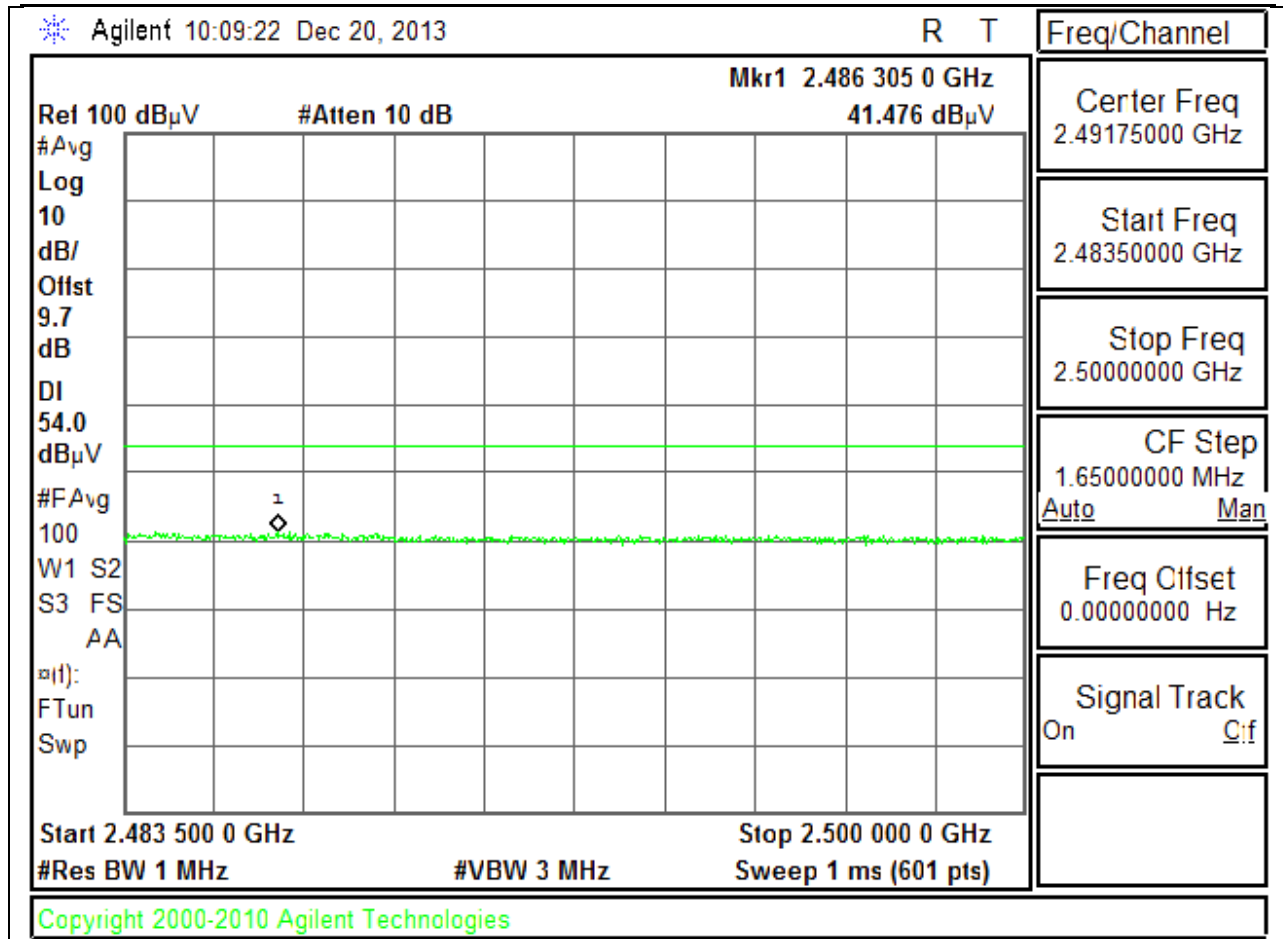
LOW CHANNEL RESTRICTED, AVERAGE, VERT

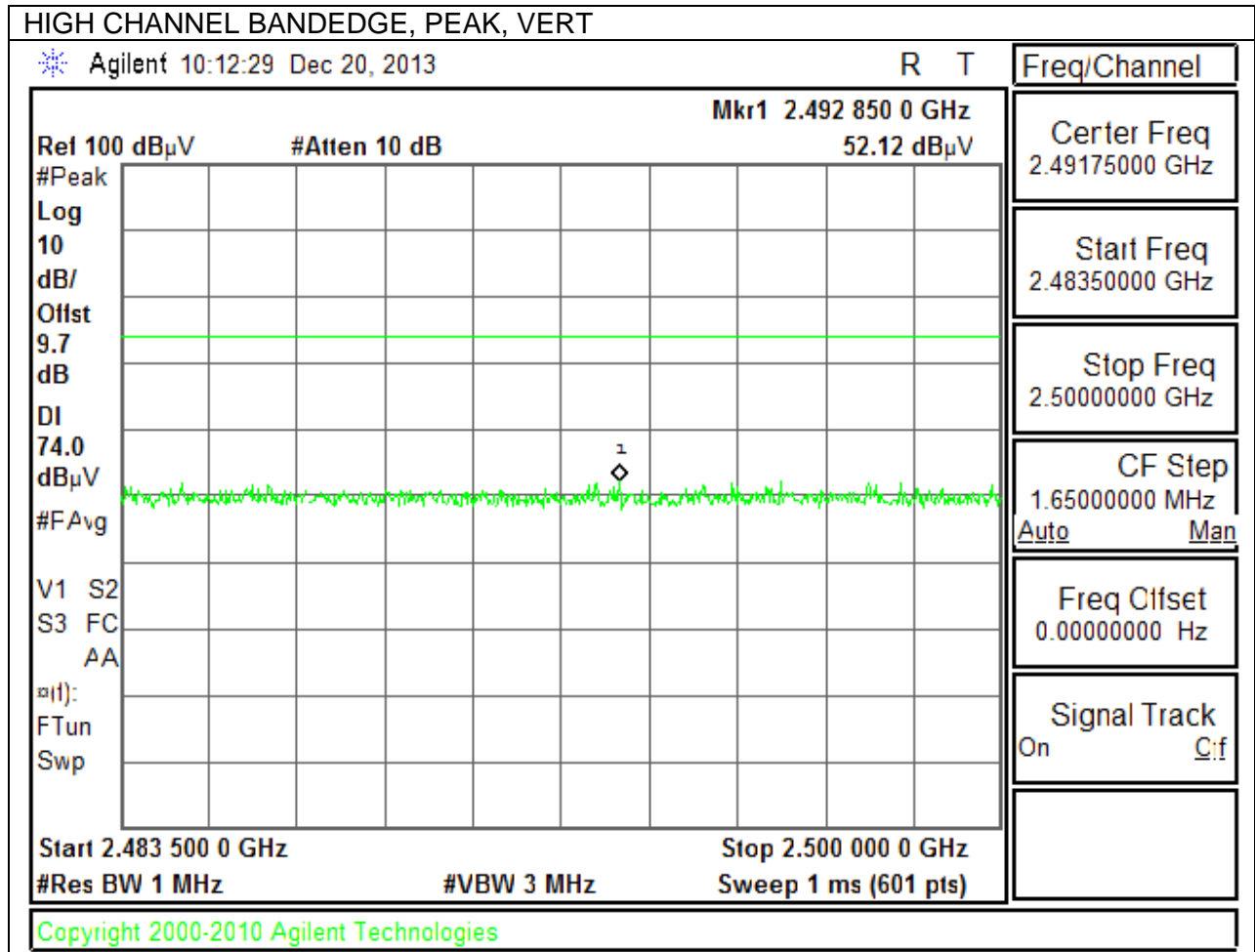


AUTHORIZED BANDEDGE (HIGH CHANNEL)

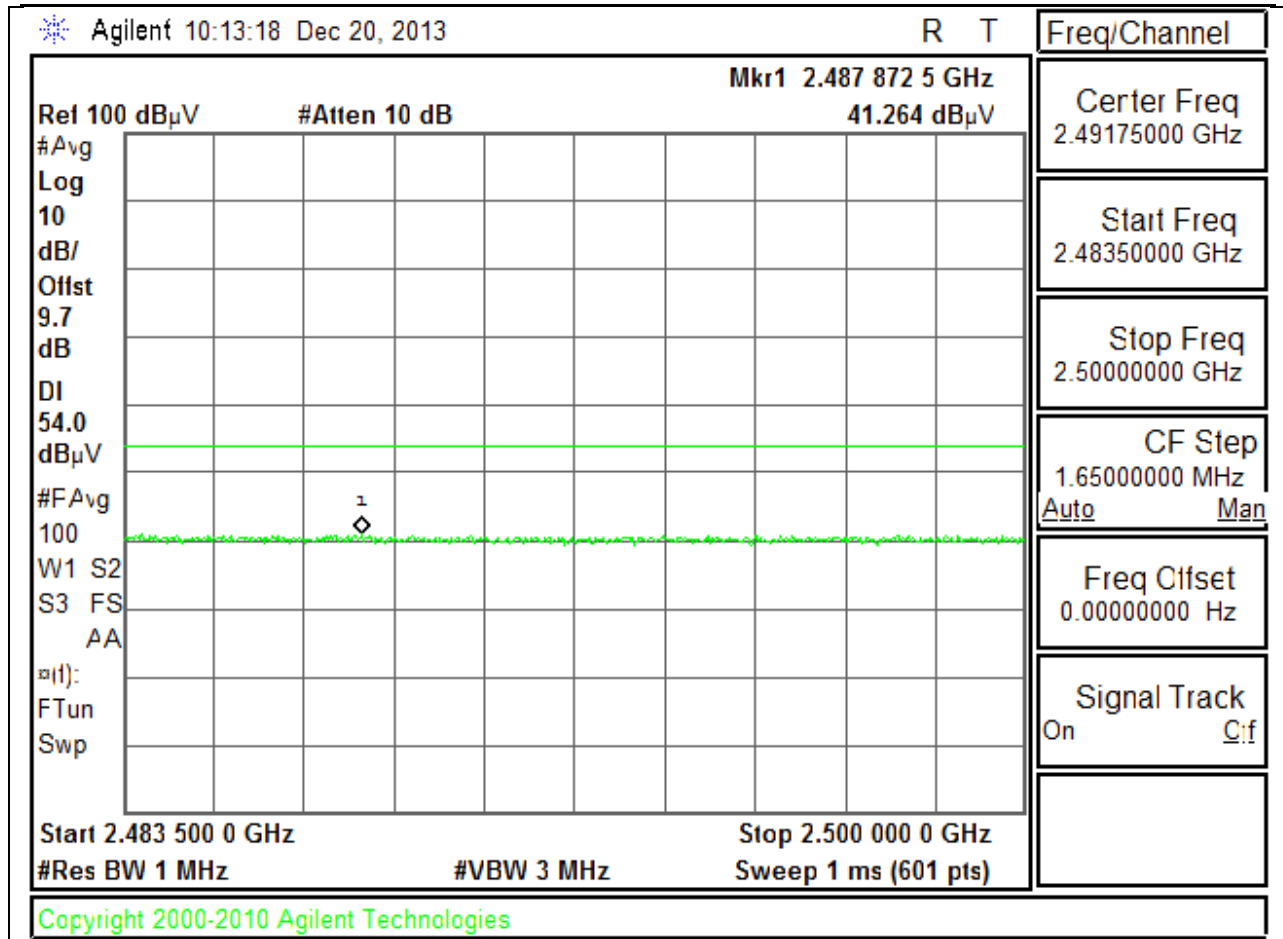


HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

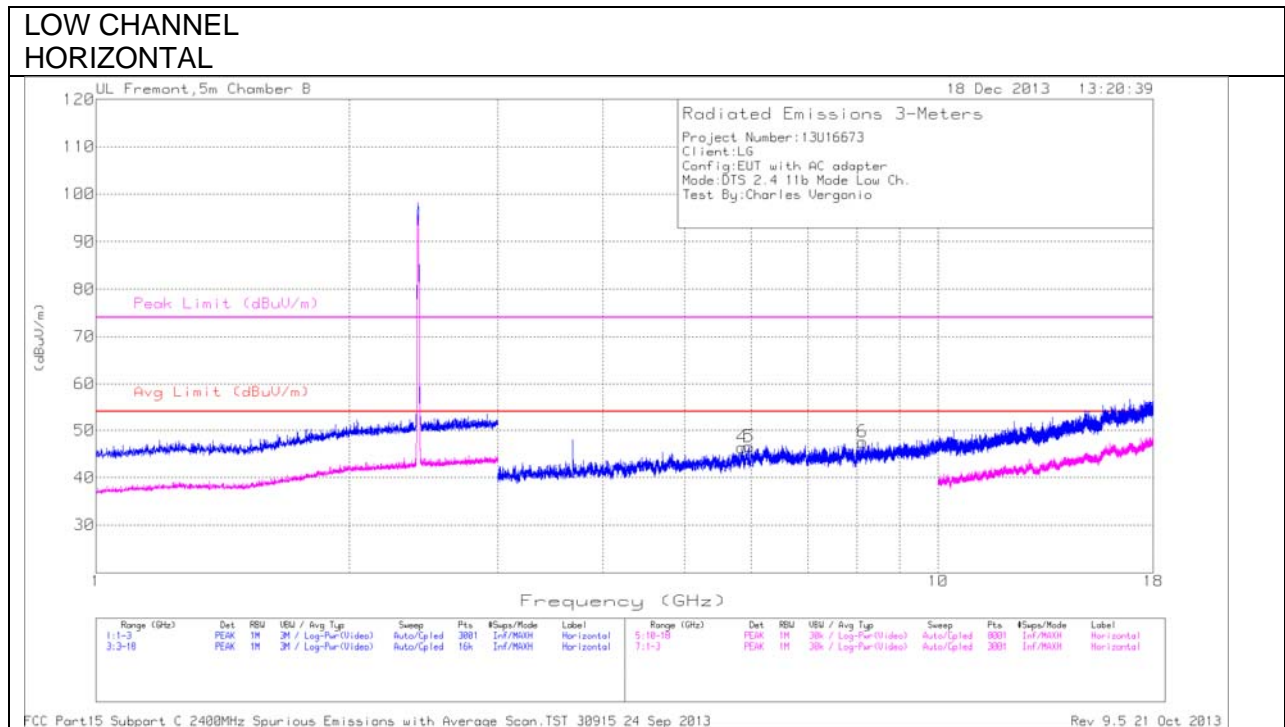




HIGH CHANNEL BANDEDGE, AVERAGE, VERT

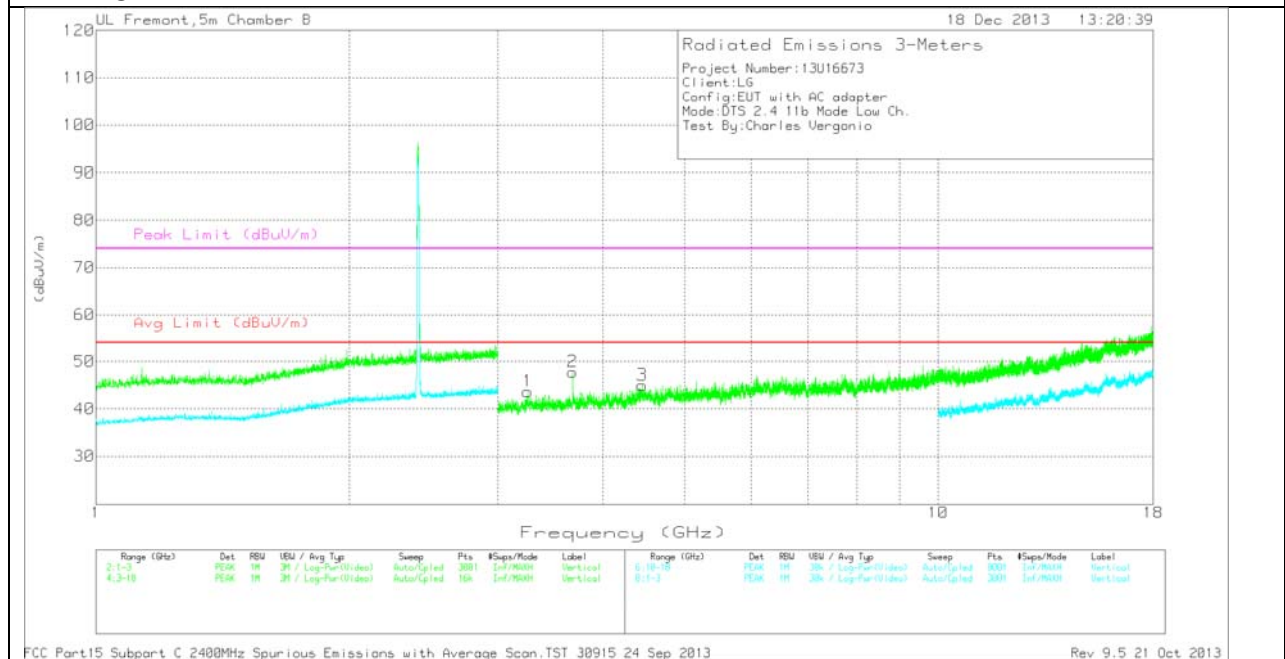


HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

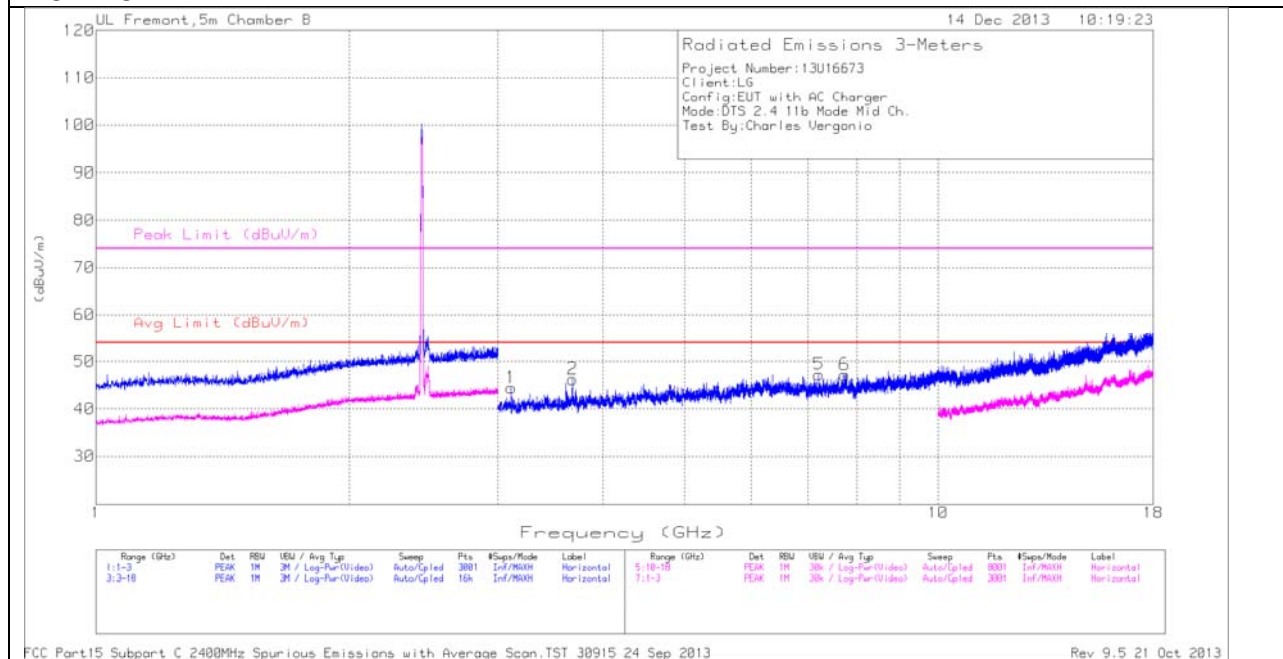
Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.256 | 41.36 | PK | 33.3 | -31 | 43.66 | 53.97 | -10.31 | 74 | -30.34 | 0-360 | 201 | V |
| 2 | 3.682 | 45.4 | PK | 33.6 | -31.2 | 47.8 | 53.97 | -6.17 | 74 | -26.2 | 0-360 | 201 | V |
| 3 | 4.451 | 39.56 | PK | 34.4 | -29 | 44.96 | 53.97 | -9.01 | 74 | -29.04 | 0-360 | 99 | V |
| 4 | 5.85 | 40.08 | PK | 35.5 | -29.2 | 46.38 | 53.97 | -7.59 | 74 | -27.62 | 0-360 | 99 | H |
| 5 | 5.962 | 39.34 | PK | 35.8 | -28.6 | 46.54 | 53.97 | -7.43 | 74 | -27.46 | 0-360 | 201 | H |
| 6 | 8.132 | 37.77 | PK | 36.1 | -26.3 | 47.57 | 53.97 | -6.4 | 74 | -26.43 | 0-360 | 99 | H |

PK - Peak detector

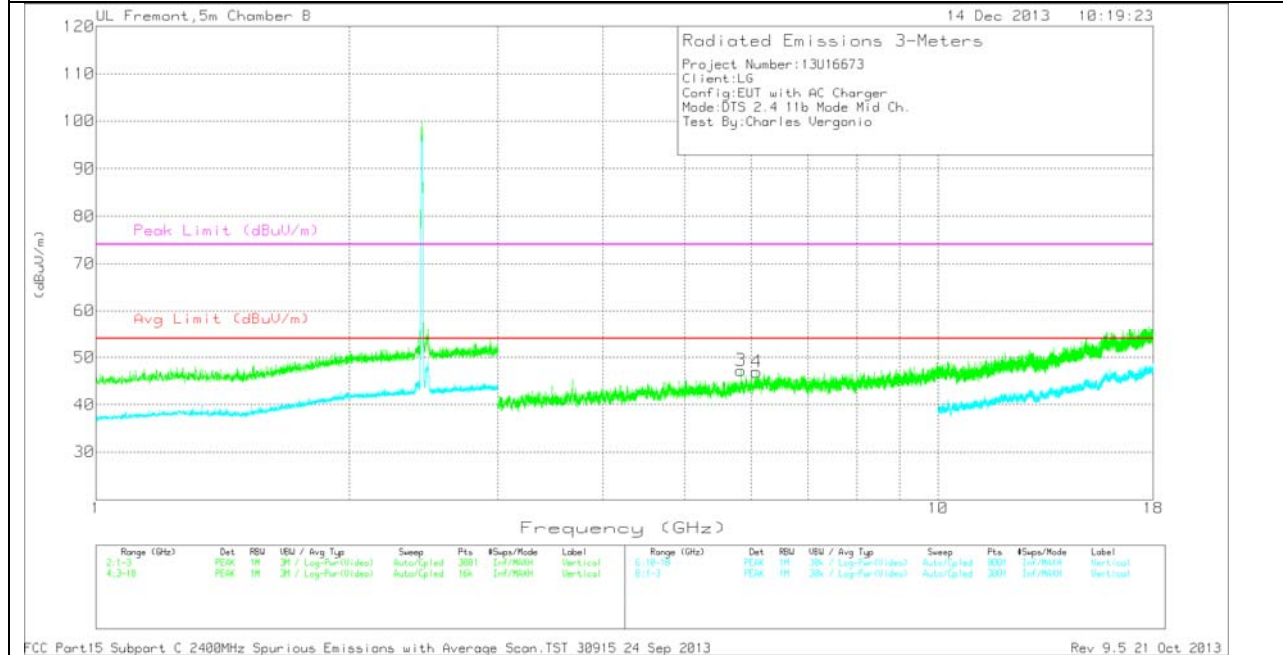
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

MID CHANNEL
 HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

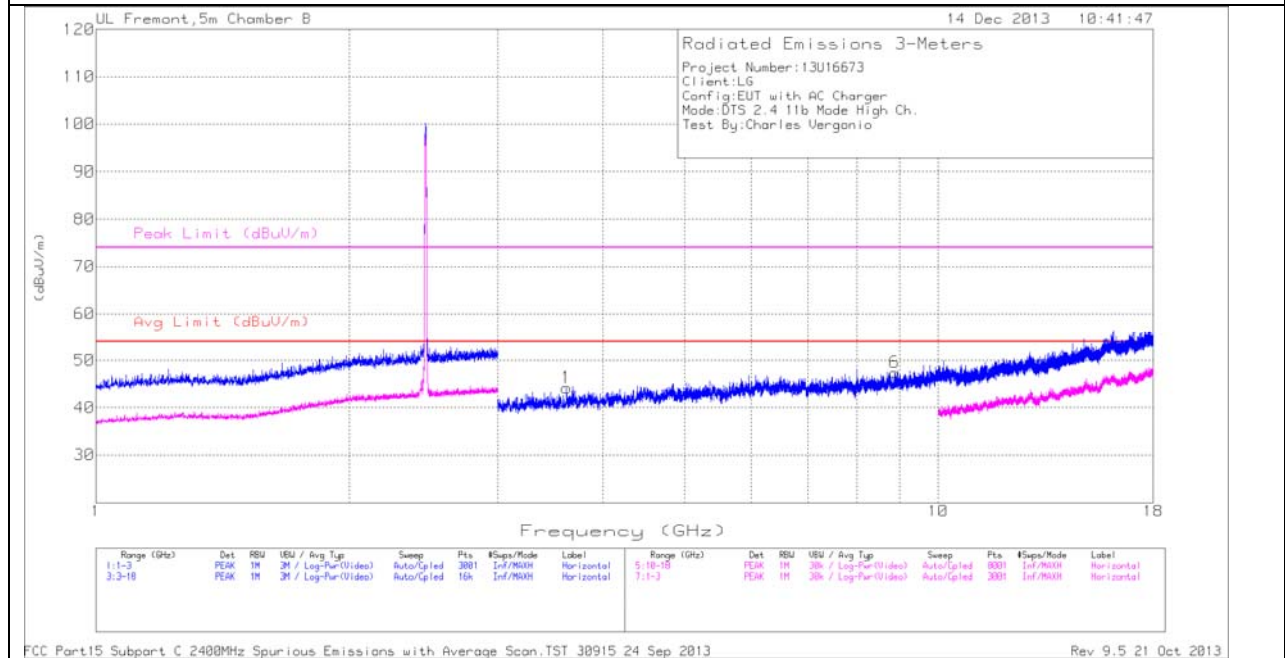
MID CHANNEL DATA
 Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Ftr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.112 | 42.82 | PK | 33.2 | -31.6 | 44.42 | 53.97 | -9.55 | 74 | -29.58 | 0-360 | 99 | H |
| 2 | 3.681 | 43.86 | PK | 33.6 | -31.2 | 46.26 | 53.97 | -7.71 | 74 | -27.74 | 0-360 | 99 | H |
| 3 | 5.832 | 41.11 | PK | 35.4 | -29.3 | 47.21 | 53.97 | -6.76 | 74 | -26.79 | 0-360 | 202 | V |
| 4 | 6.088 | 40.1 | PK | 35.9 | -29.1 | 46.9 | 53.97 | -7.07 | 74 | -27.1 | 0-360 | 99 | V |
| 5 | 7.215 | 38.05 | PK | 35.8 | -26.6 | 47.25 | 53.97 | -6.72 | 74 | -26.75 | 0-360 | 99 | H |
| 6 | 7.741 | 36.96 | PK | 36.2 | -26 | 47.16 | 53.97 | -6.81 | 74 | -26.84 | 0-360 | 99 | H |

PK - Peak detector

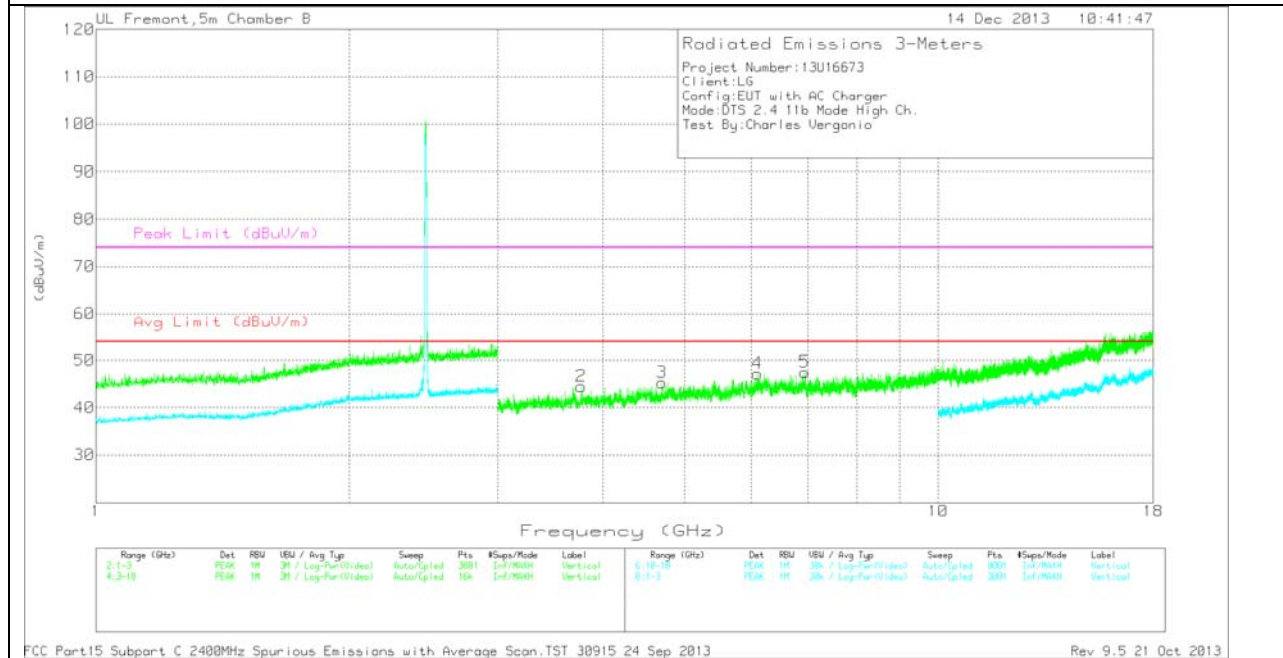
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

**HIGH CHANNEL
 HORIZONTAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**HIGH CHANNEL
 VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

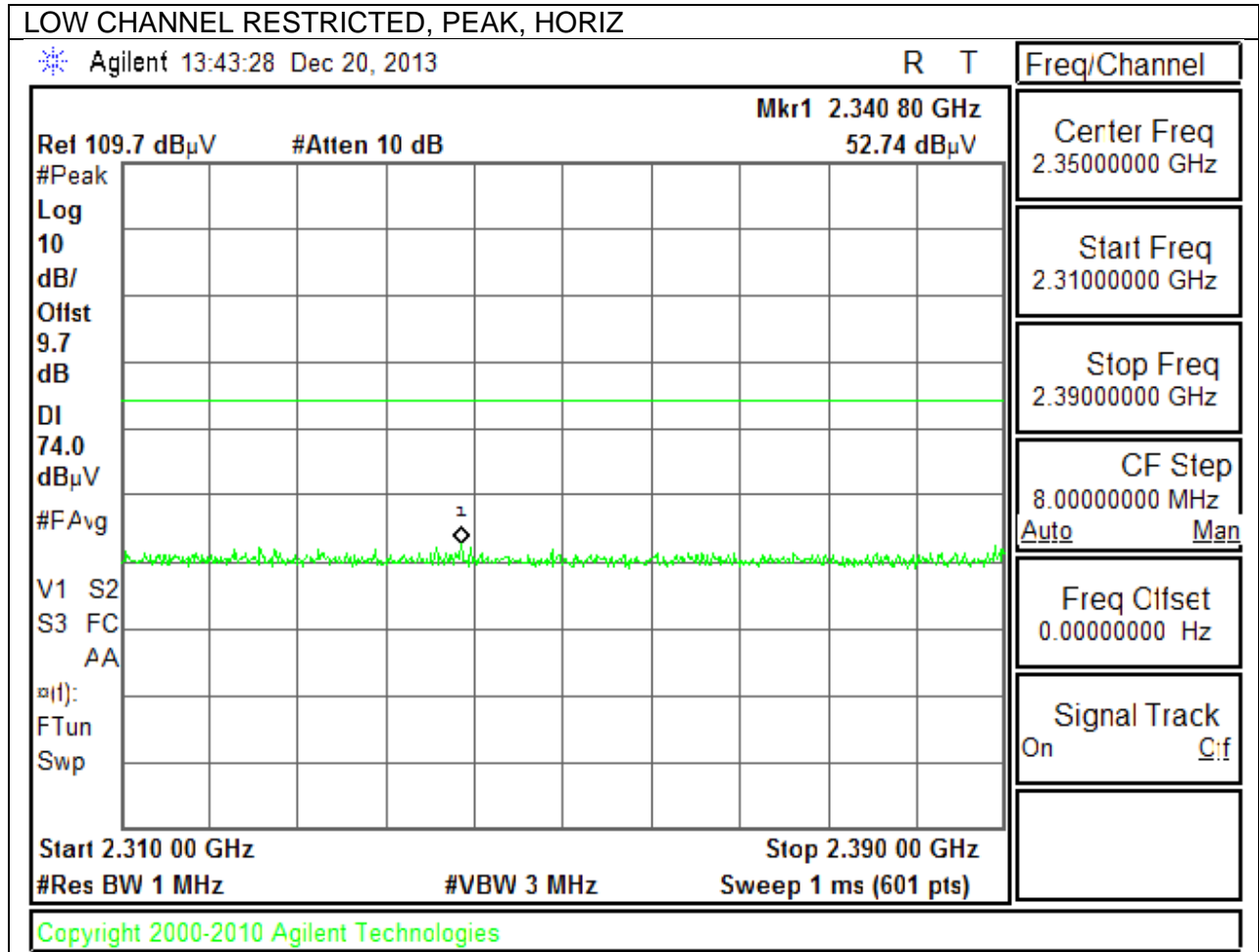
Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.621 | 41.84 | PK | 33.5 | -31.2 | 44.14 | 53.97 | -9.83 | 74 | -29.86 | 0-360 | 99 | H |
| 2 | 3.769 | 41.89 | PK | 33.8 | -31.2 | 44.49 | 53.97 | -9.48 | 74 | -29.51 | 0-360 | 99 | V |
| 3 | 4.7 | 40.39 | PK | 34.7 | -29.8 | 45.29 | 53.97 | -8.68 | 74 | -28.71 | 0-360 | 202 | V |
| 4 | 6.105 | 40.48 | PK | 35.9 | -29.2 | 47.18 | 53.97 | -6.79 | 74 | -26.82 | 0-360 | 99 | V |
| 5 | 6.943 | 39.59 | PK | 35.9 | -28 | 47.49 | 53.97 | -6.48 | 74 | -26.51 | 0-360 | 99 | V |
| 6 | 8.881 | 36.68 | PK | 36.6 | -25.9 | 47.38 | 53.97 | -6.59 | 74 | -26.62 | 0-360 | 99 | H |

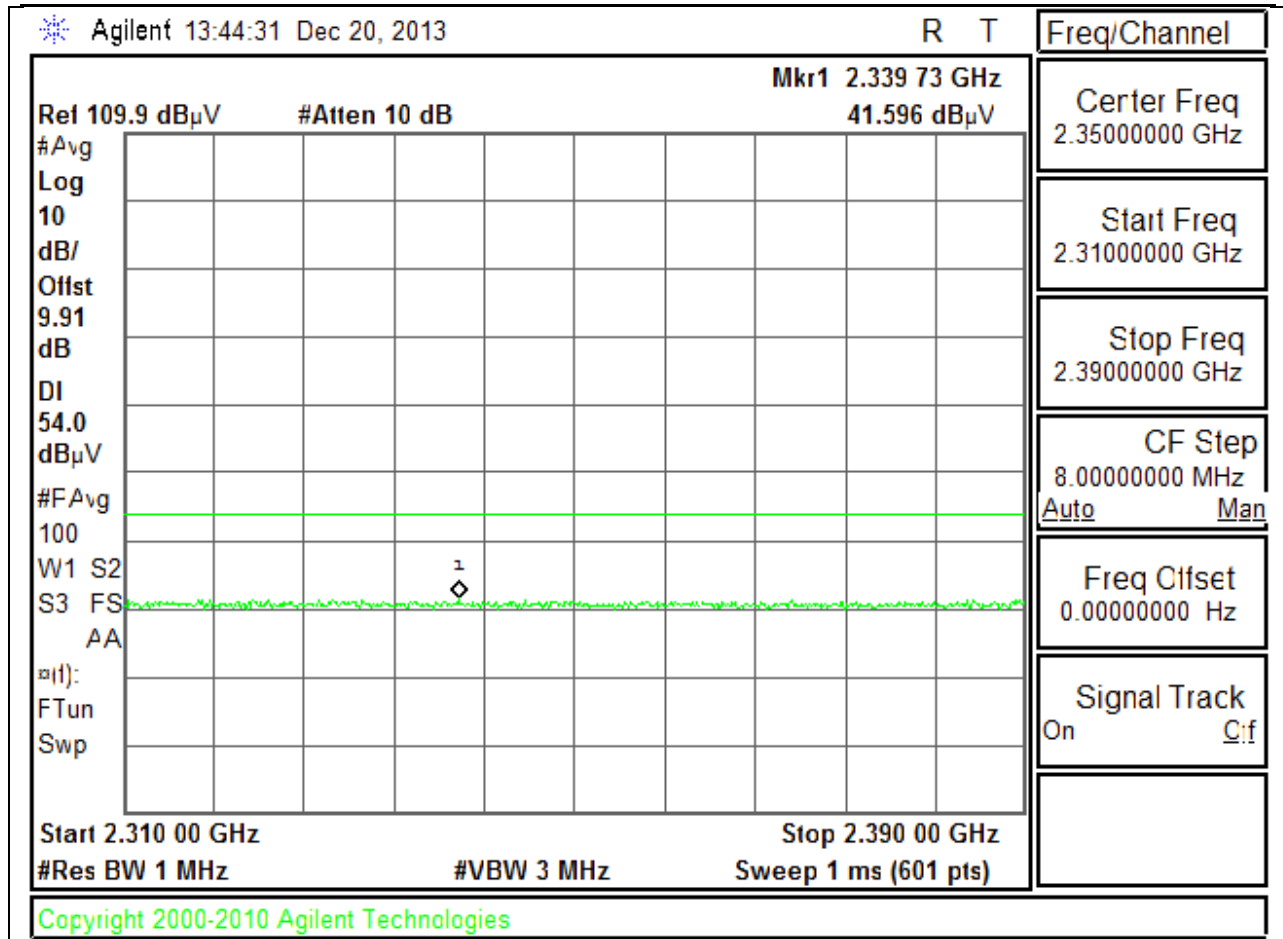
PK - Peak detector

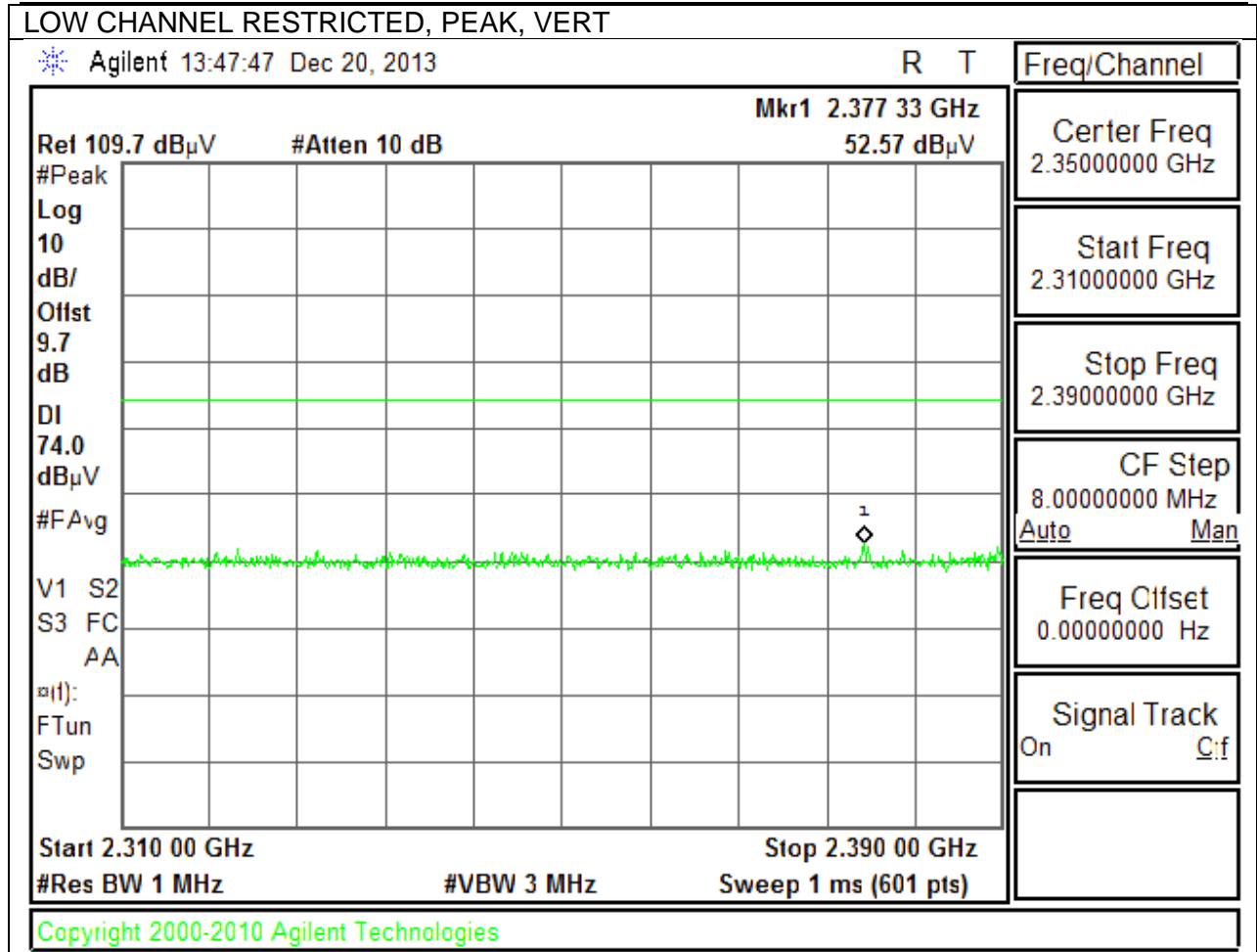
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

**10.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND
 RESTRICTED BANDEDGE (LOW CHANNEL)**

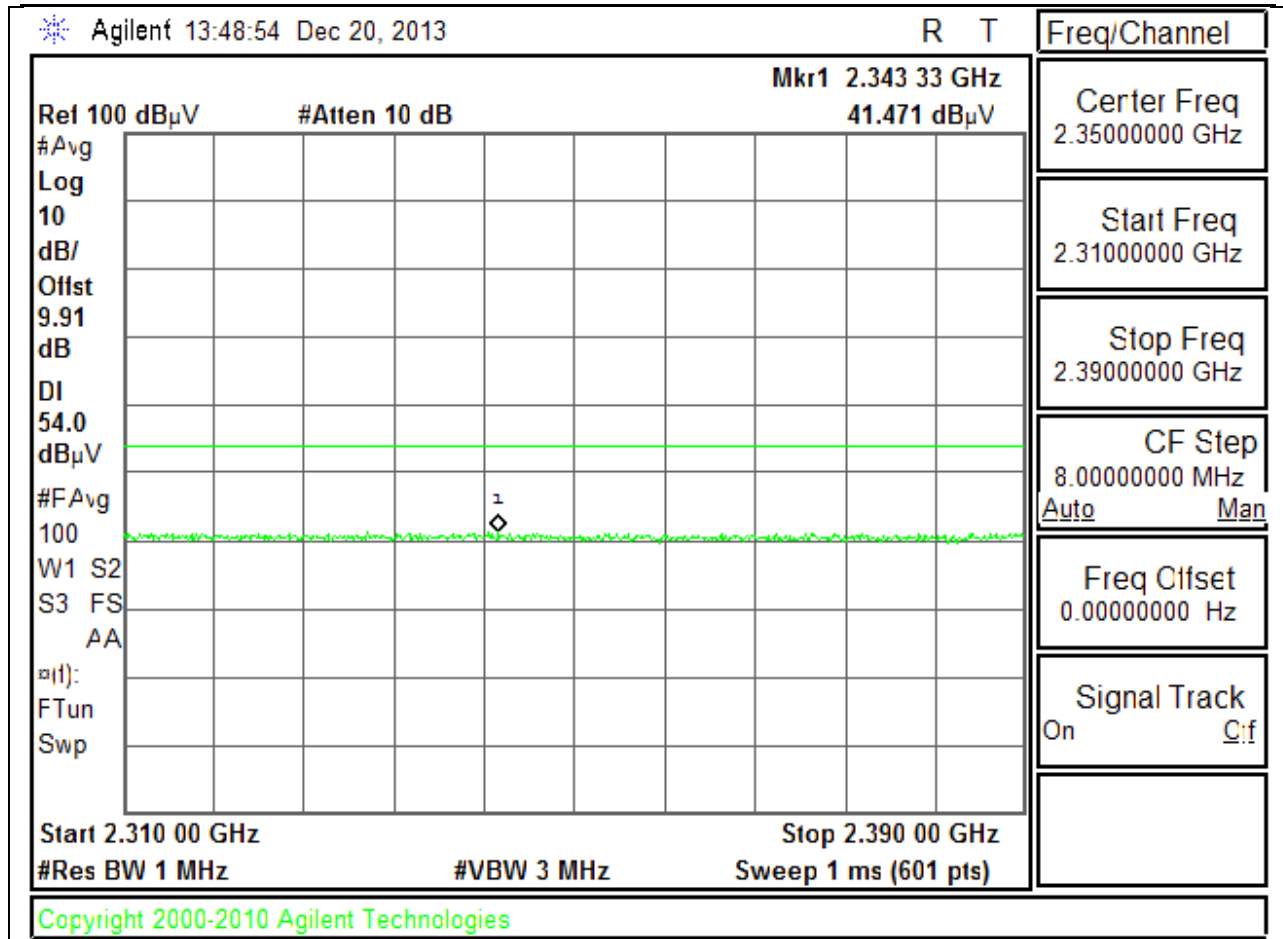


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

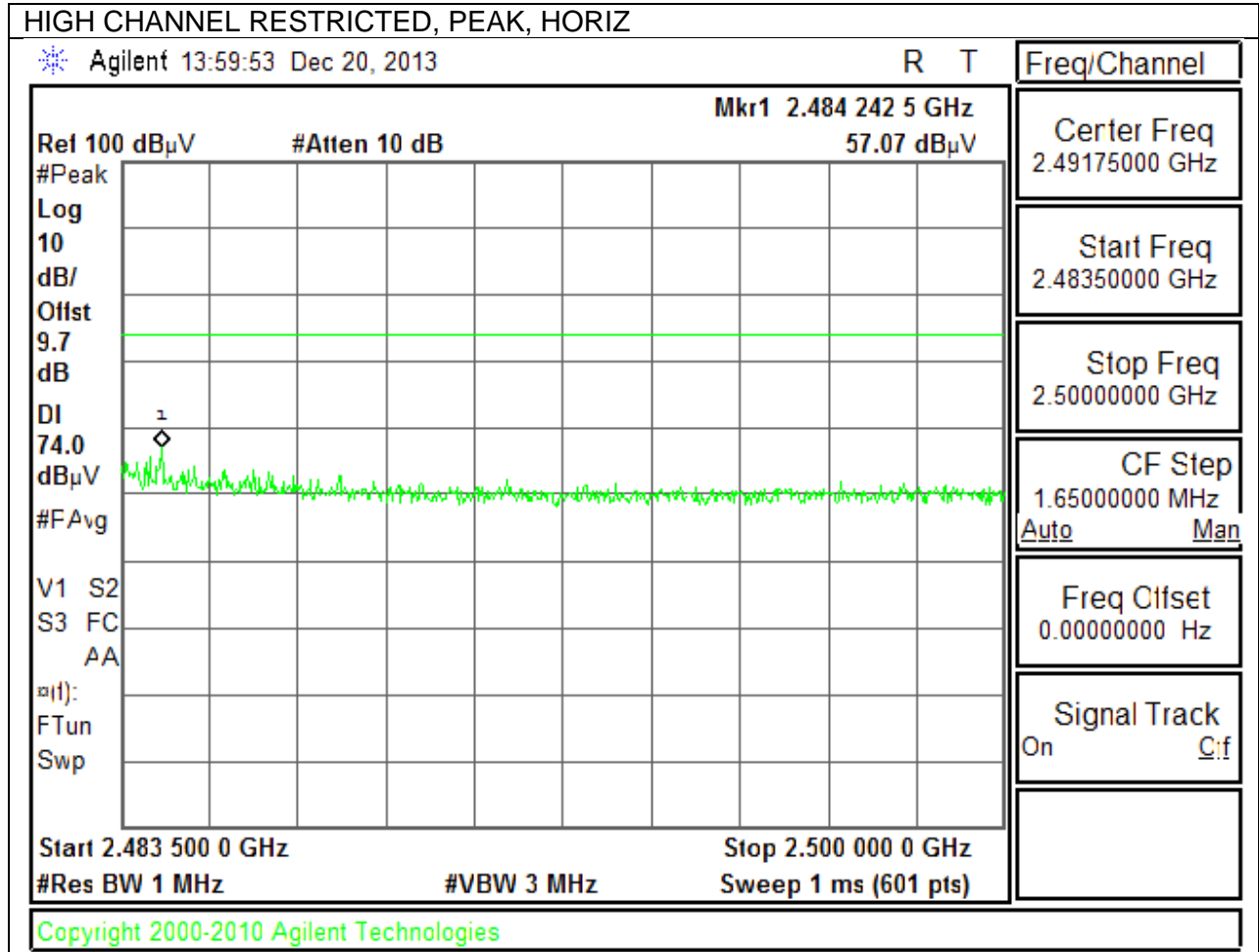




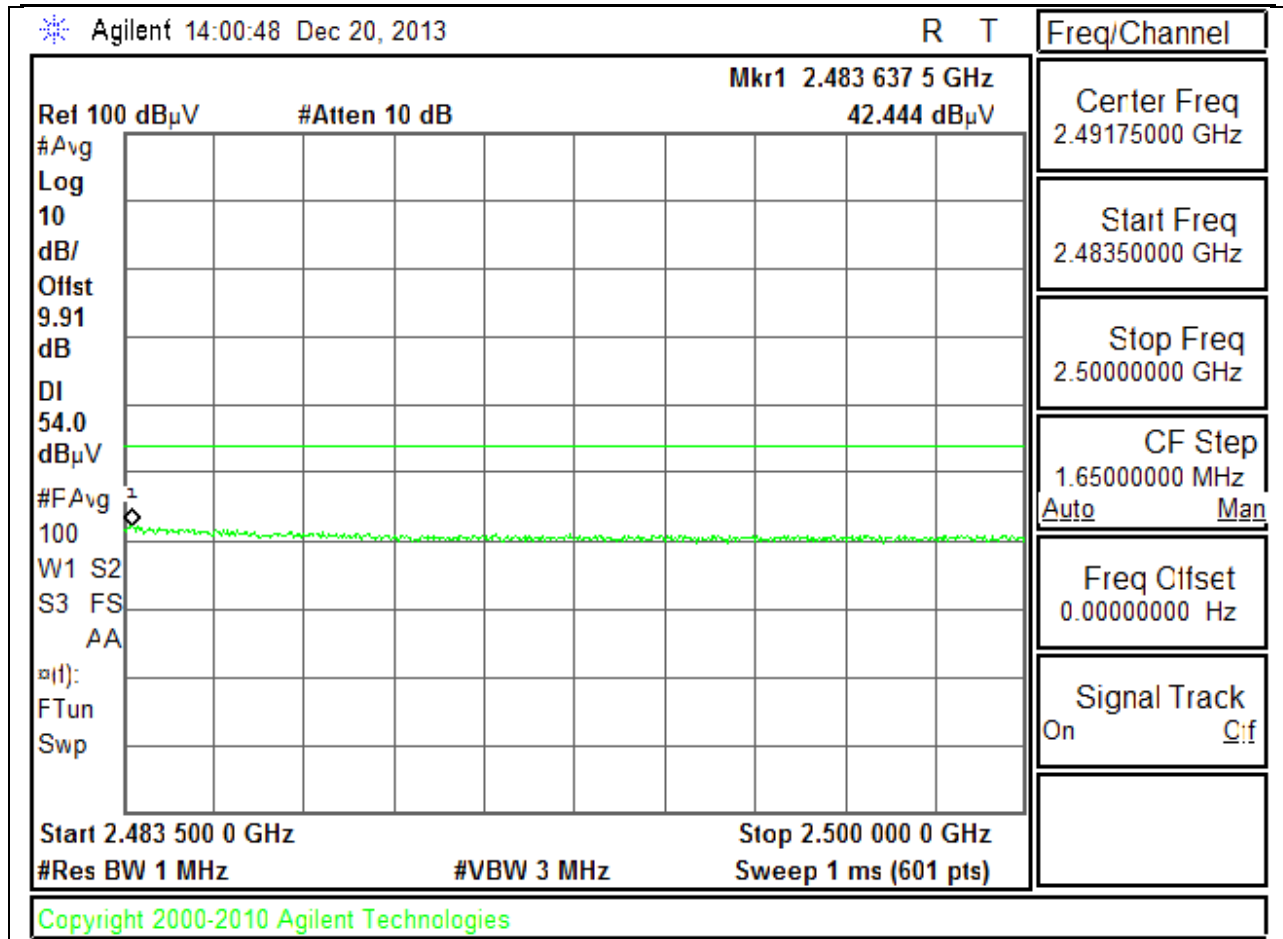
LOW CHANNEL RESTRICTED, AVERAGE, VERT

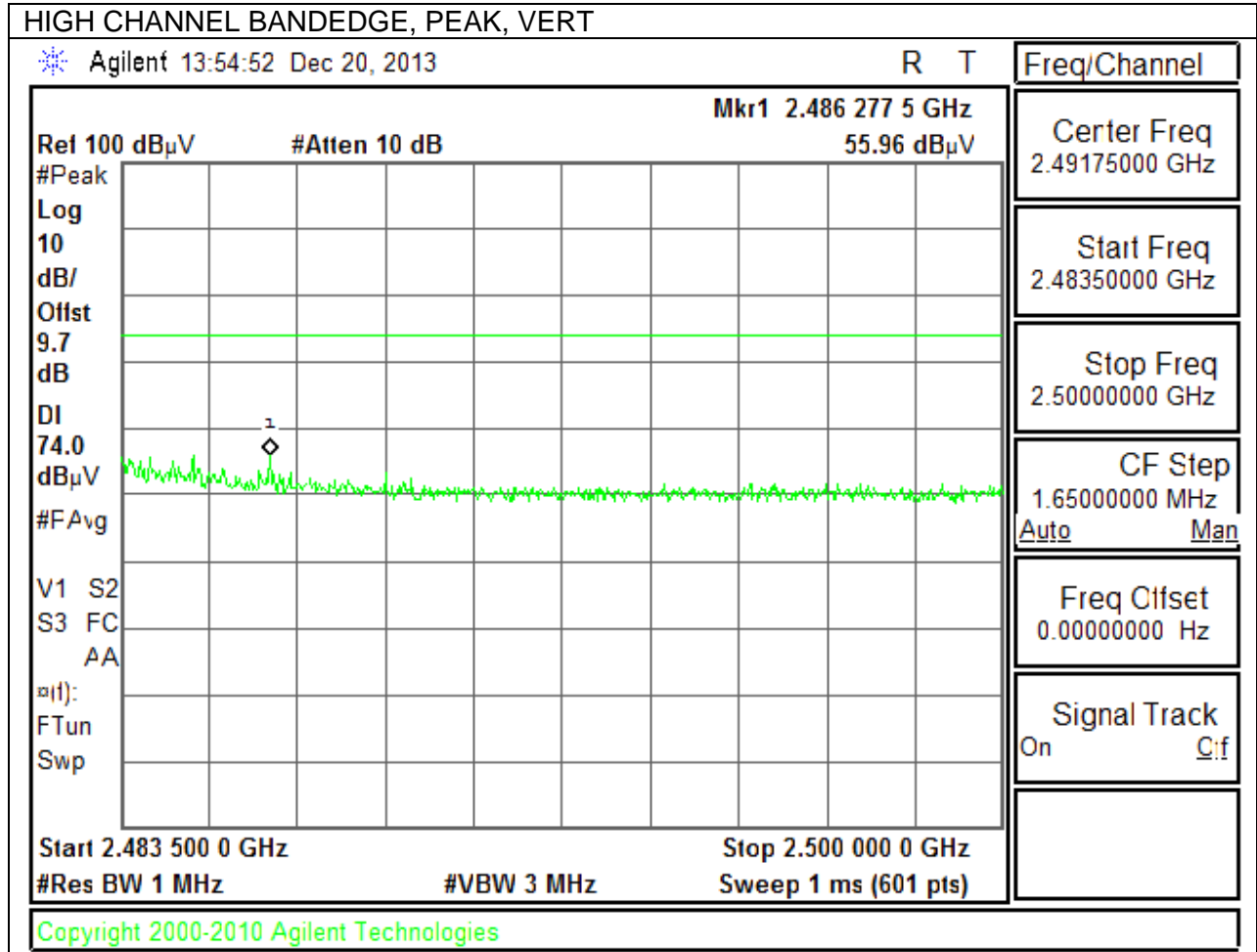


AUTHORIZED BANDEDGE (HIGH CHANNEL)

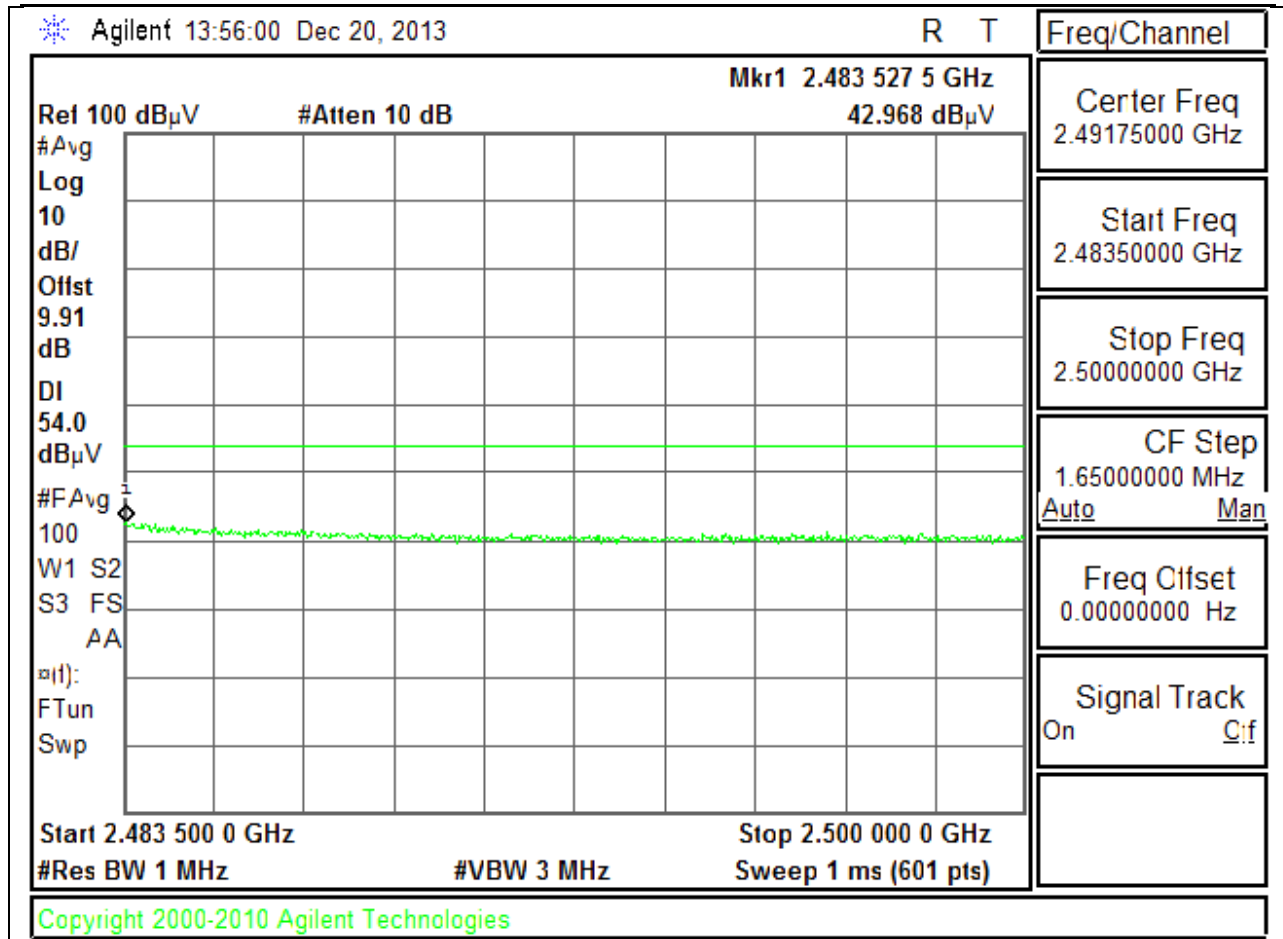


HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

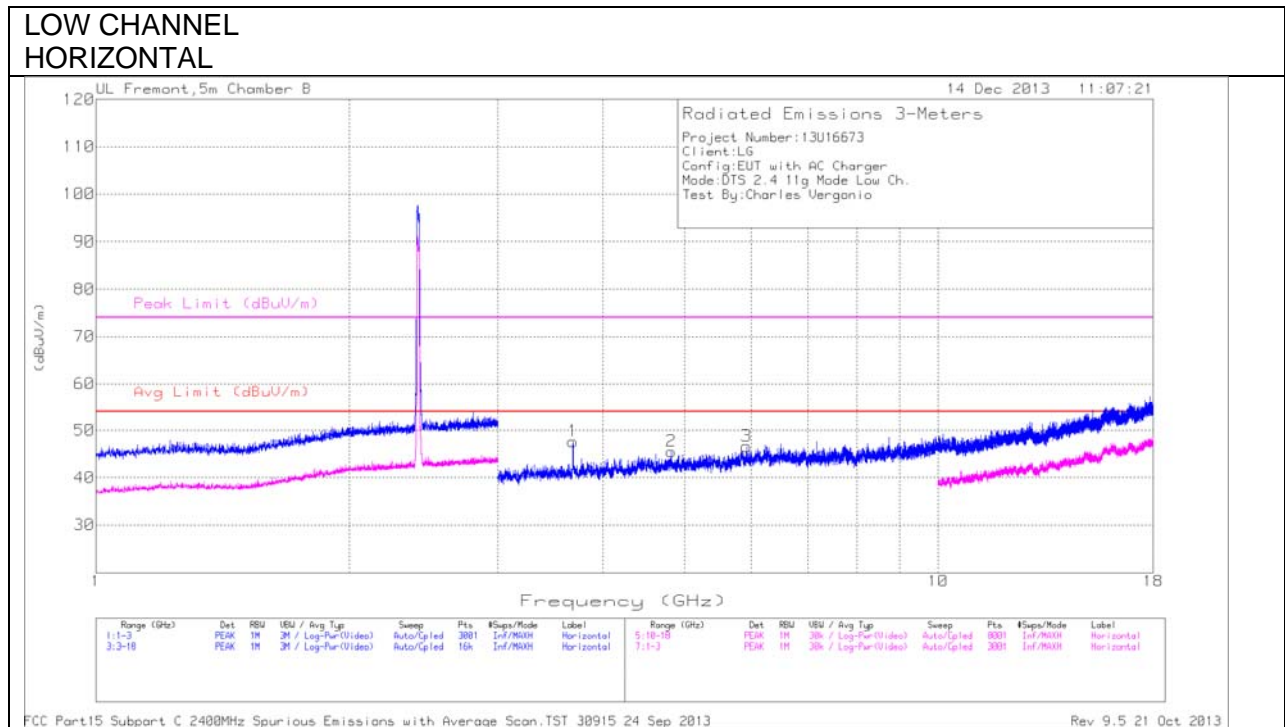




HIGH CHANNEL BANDEDGE, AVERAGE, VERT

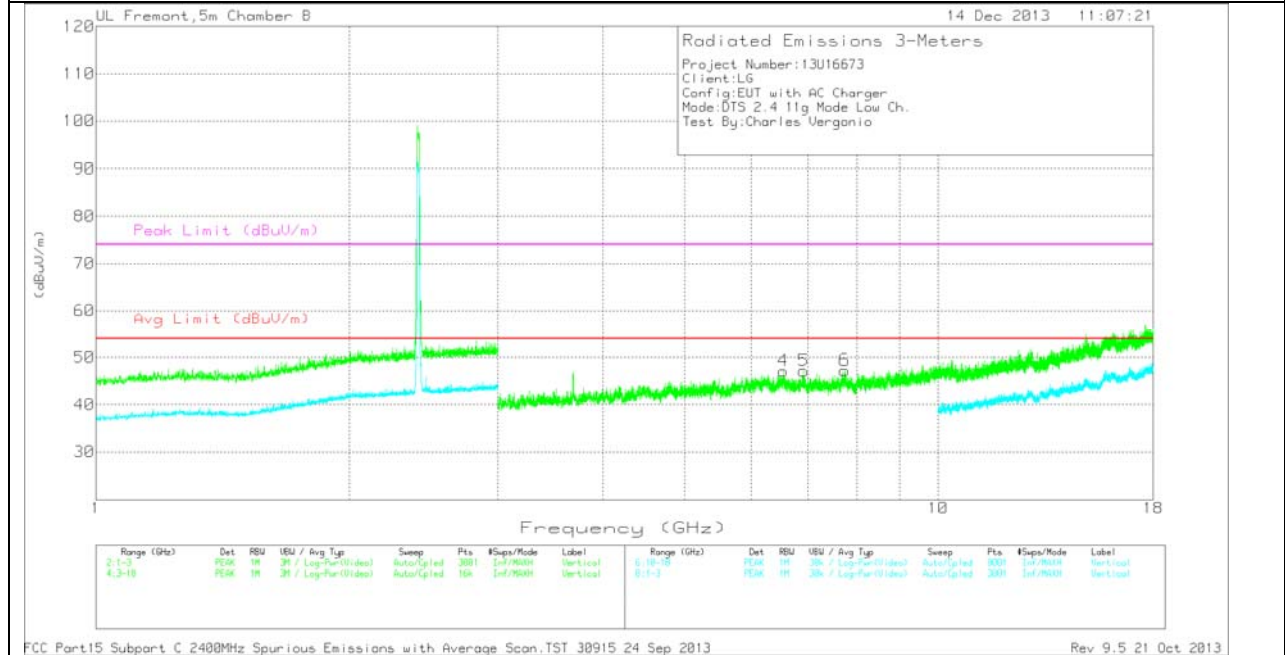


HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

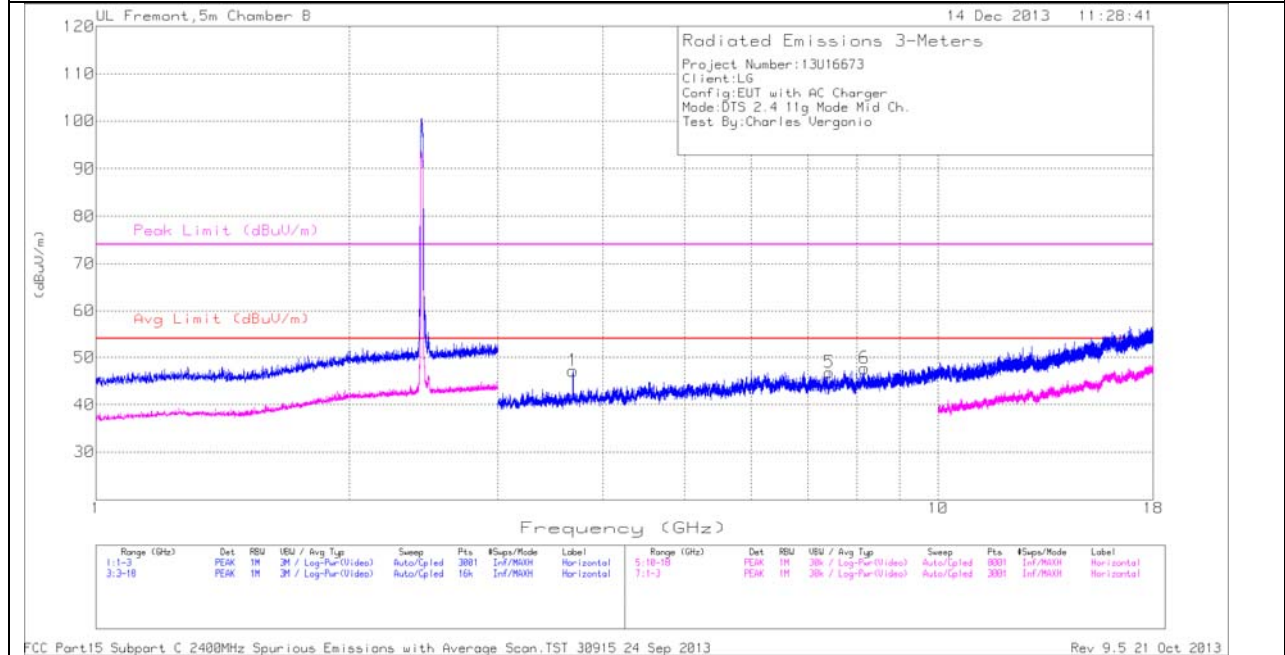
Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.684 | 45.27 | PK | 33.6 | -31.2 | 47.67 | 53.97 | -6.3 | 74 | -26.33 | 0-360 | 99 | H |
| 2 | 4.822 | 40.13 | PK | 34.7 | -29.3 | 45.53 | 53.97 | -8.44 | 74 | -28.47 | 0-360 | 201 | H |
| 3 | 5.921 | 39.32 | PK | 35.7 | -28.4 | 46.62 | 53.97 | -7.35 | 74 | -27.38 | 0-360 | 99 | H |
| 4 | 6.551 | 38.52 | PK | 35.9 | -27.3 | 47.12 | 53.97 | -6.85 | 74 | -26.88 | 0-360 | 202 | V |
| 5 | 6.922 | 38.85 | PK | 35.9 | -27.6 | 47.15 | 53.97 | -6.82 | 74 | -26.85 | 0-360 | 202 | V |
| 6 | 7.743 | 37.01 | PK | 36.2 | -26 | 47.21 | 53.97 | -6.76 | 74 | -26.79 | 0-360 | 202 | V |

PK - Peak detector

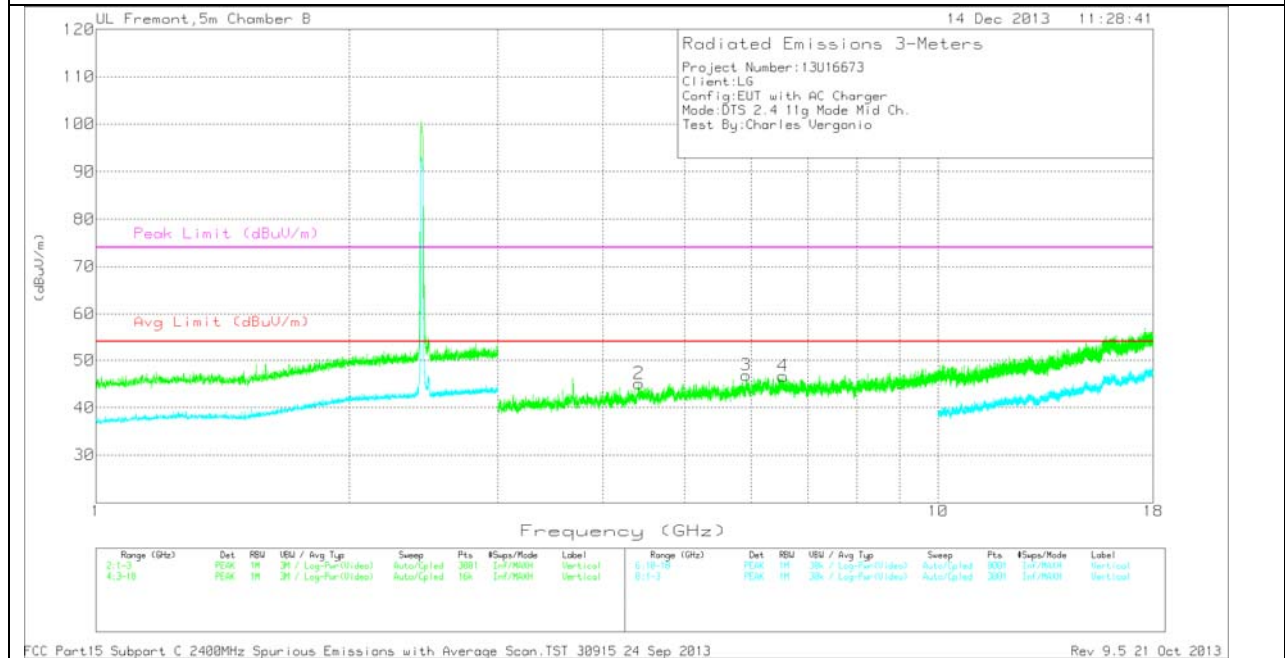
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

MID CHANNEL
 HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

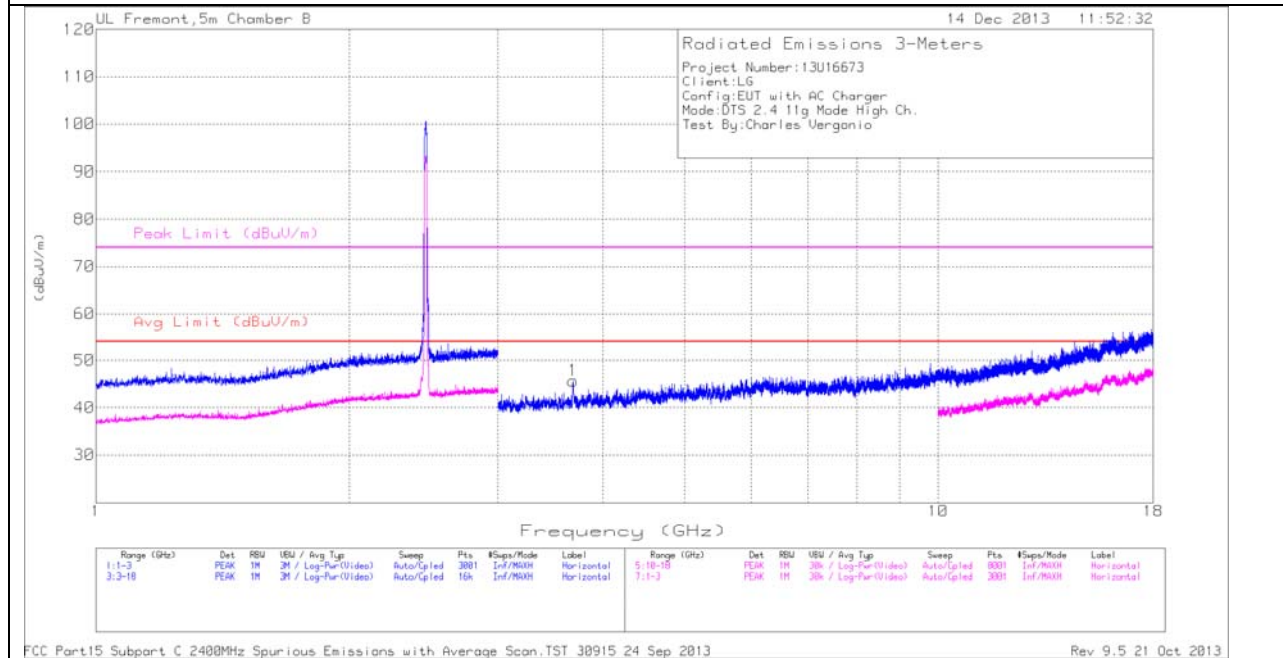
Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.684 | 44.76 | PK | 33.6 | -31.2 | 47.16 | 53.97 | -6.81 | 74 | -26.84 | 0-360 | 99 | H |
| 2 | 4.412 | 40.27 | PK | 34.4 | -29.6 | 45.07 | 53.97 | -8.9 | 74 | -28.93 | 0-360 | 201 | V |
| 3 | 5.915 | 39.55 | PK | 35.7 | -28.4 | 46.85 | 53.97 | -7.12 | 74 | -27.15 | 0-360 | 99 | V |
| 4 | 6.542 | 38.27 | PK | 35.9 | -27.5 | 46.67 | 53.97 | -7.3 | 74 | -27.33 | 0-360 | 99 | V |
| 5 | 7.426 | 37.6 | PK | 35.9 | -26.7 | 46.8 | 53.97 | -7.17 | 74 | -27.2 | 0-360 | 99 | H |
| 6 | 8.175 | 38.39 | PK | 36.1 | -26.8 | 47.69 | 53.97 | -6.28 | 74 | -26.31 | 0-360 | 99 | H |

PK - Peak detector

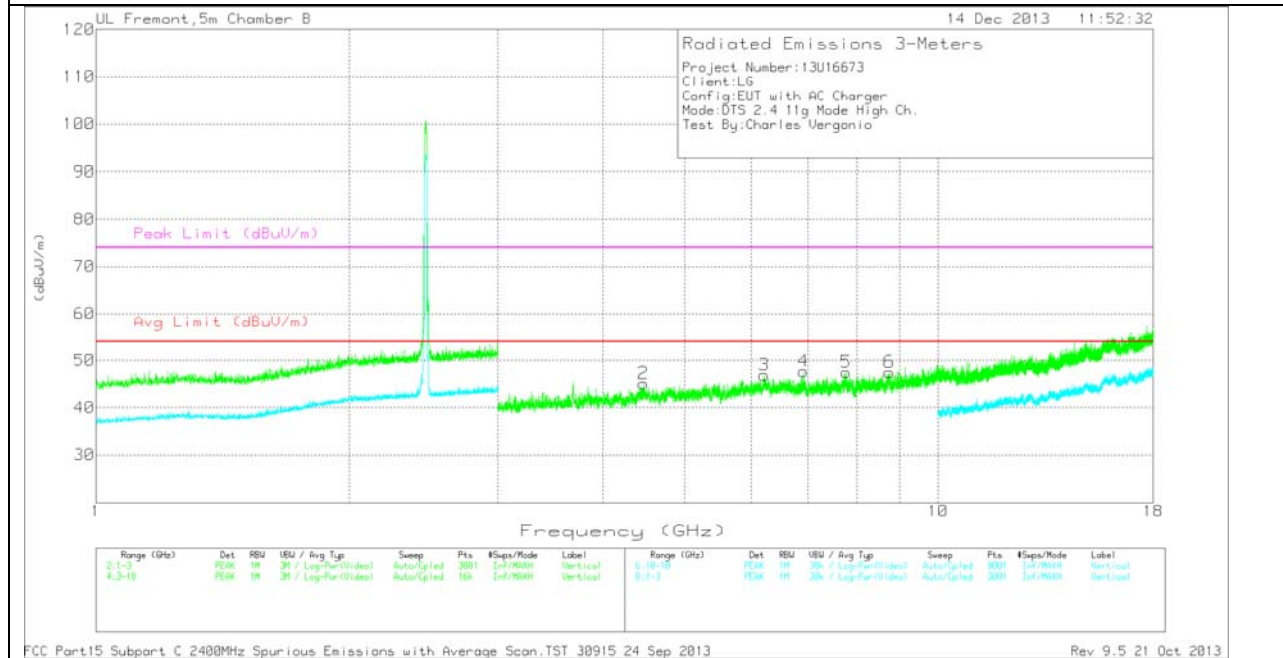
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

**HIGH CHANNEL
 HORIZONTAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**HIGH CHANNEL
 VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

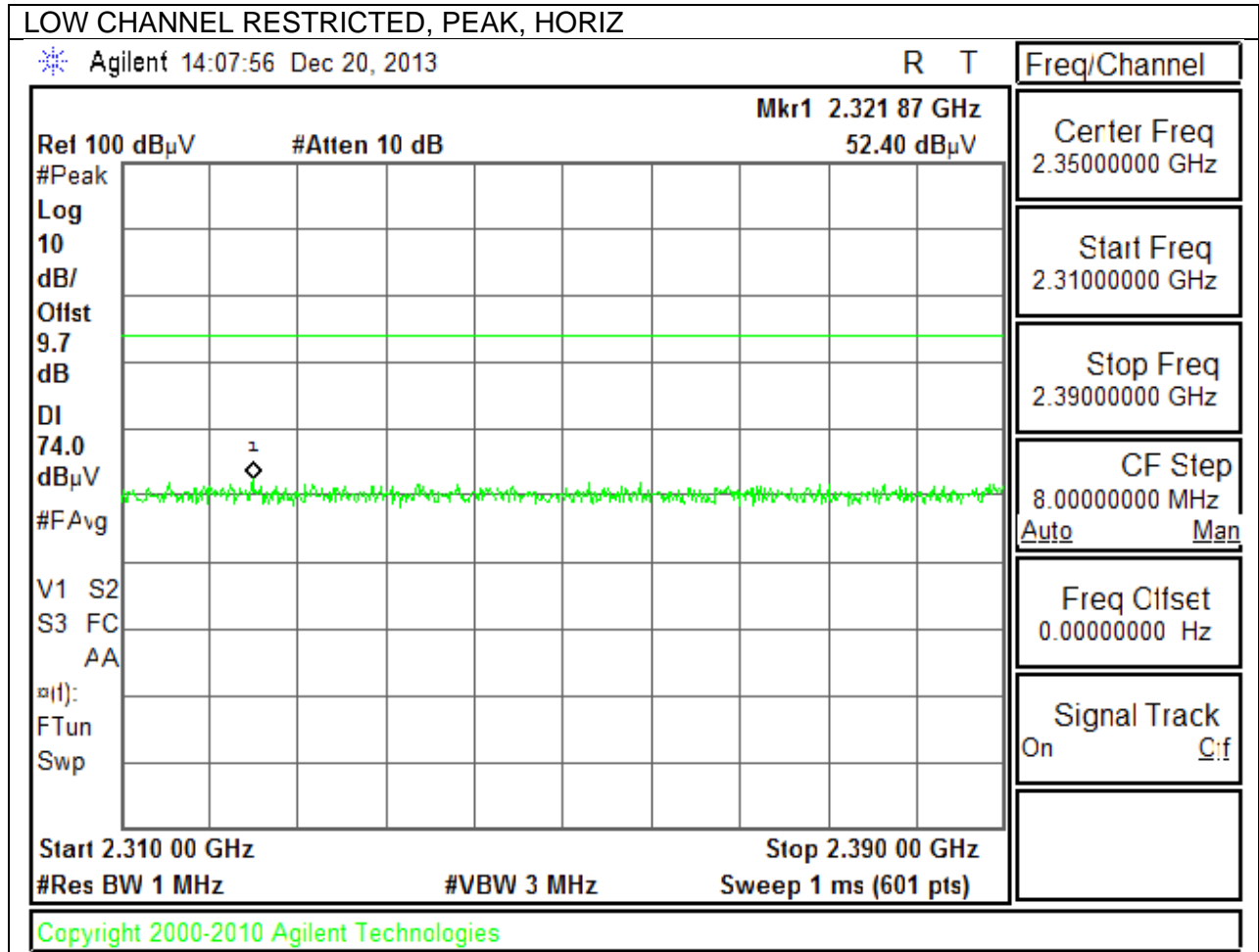
HIGH CHANNEL DATA
 Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Paid (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.685 | 43.29 | PK | 33.6 | -31.2 | 45.69 | 53.97 | -8.28 | 74 | -28.31 | 0-360 | 99 | H |
| 2 | 4.466 | 39.72 | PK | 34.4 | -29 | 45.12 | 53.97 | -8.85 | 74 | -28.88 | 0-360 | 202 | V |
| 3 | 6.213 | 38.68 | PK | 36 | -27.8 | 46.88 | 53.97 | -7.09 | 74 | -27.12 | 0-360 | 99 | V |
| 4 | 6.917 | 39.18 | PK | 35.9 | -27.4 | 47.68 | 53.97 | -6.29 | 74 | -26.32 | 0-360 | 202 | V |
| 5 | 7.773 | 37.27 | PK | 36.2 | -26 | 47.47 | 53.97 | -6.5 | 74 | -26.53 | 0-360 | 202 | V |
| 6 | 8.749 | 36.18 | PK | 36.4 | -25.1 | 47.48 | 53.97 | -6.49 | 74 | -26.52 | 0-360 | 202 | V |

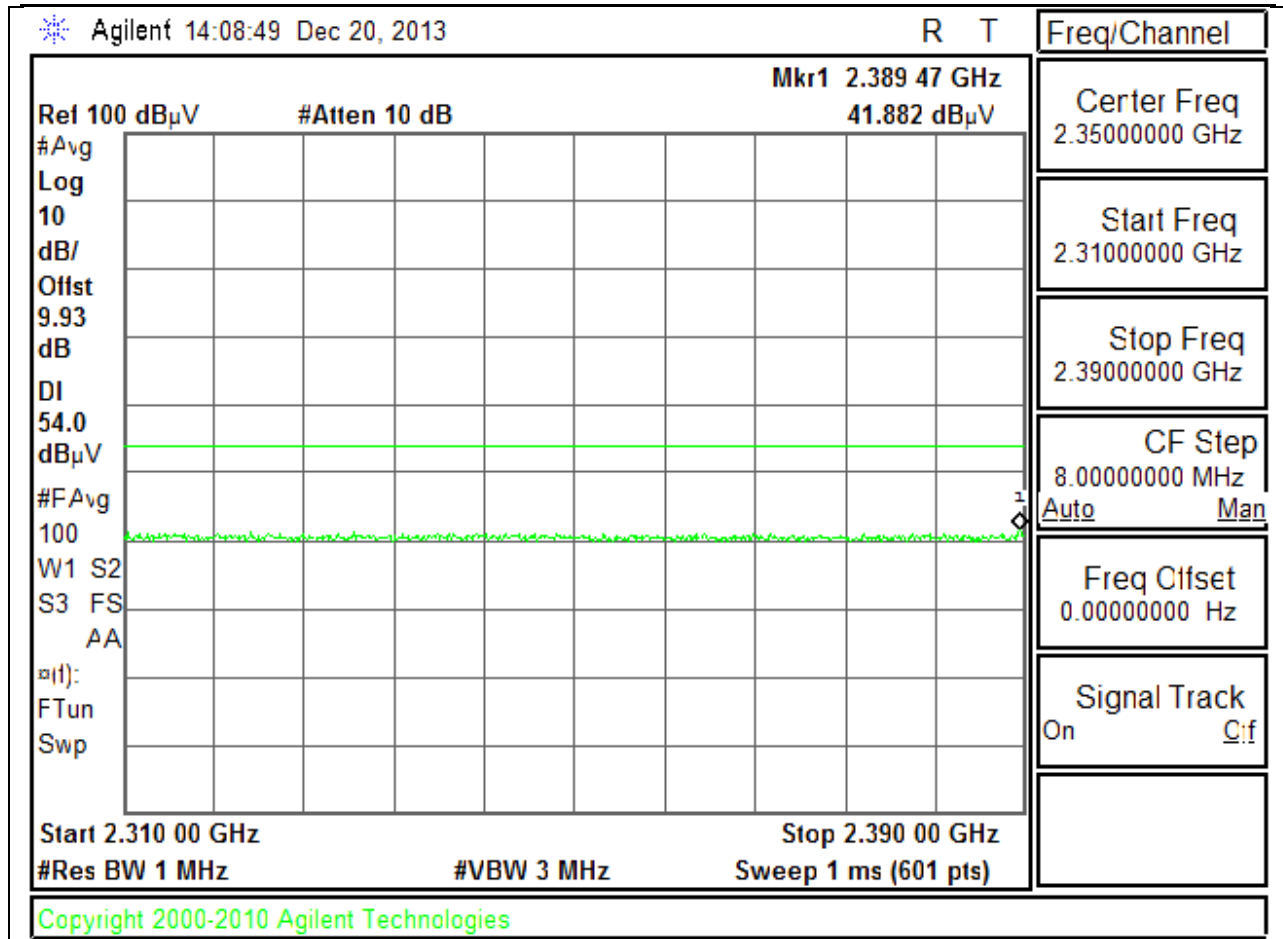
PK - Peak detector

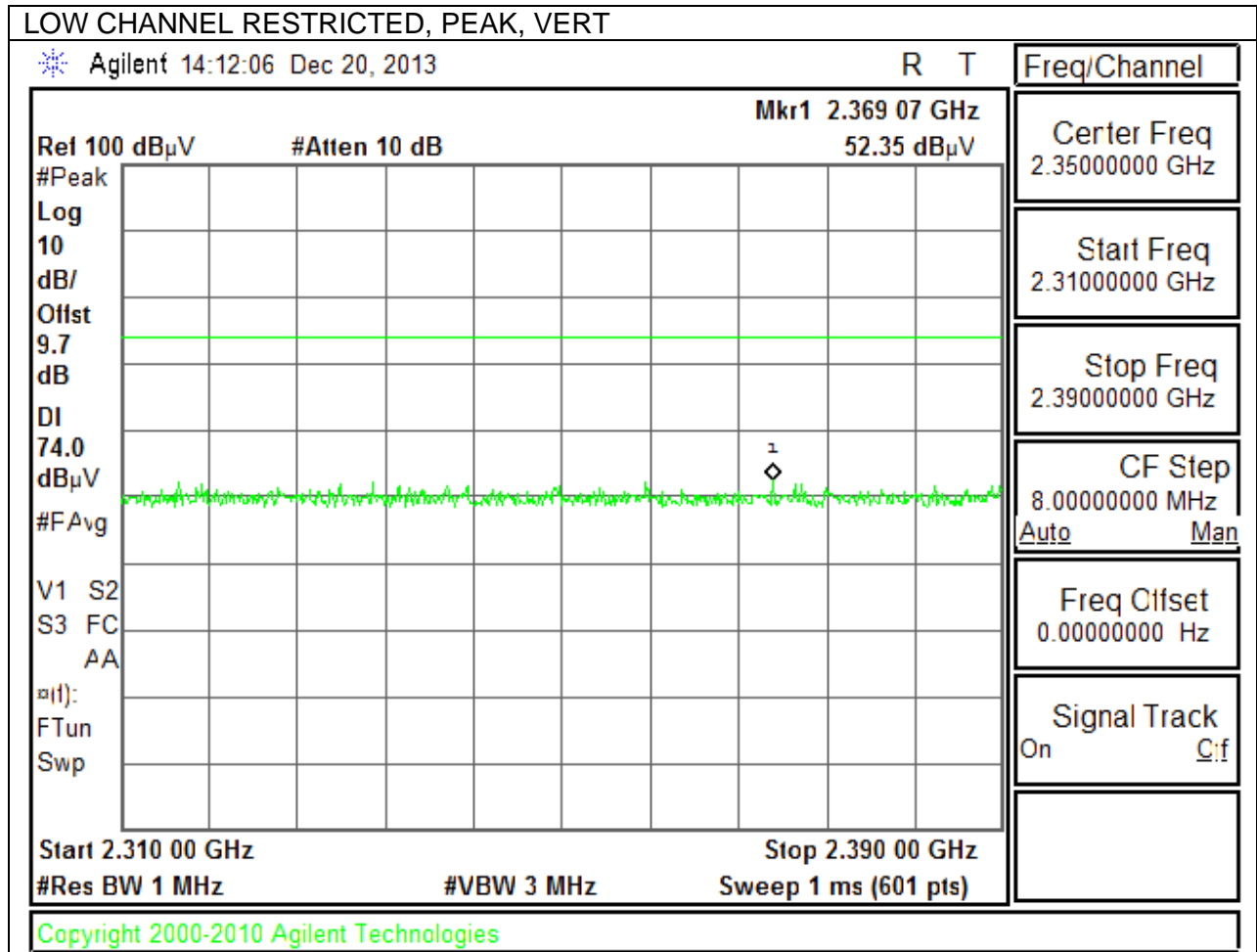
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

**10.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND
 RESTRICTED BANDEDGE (LOW CHANNEL)**

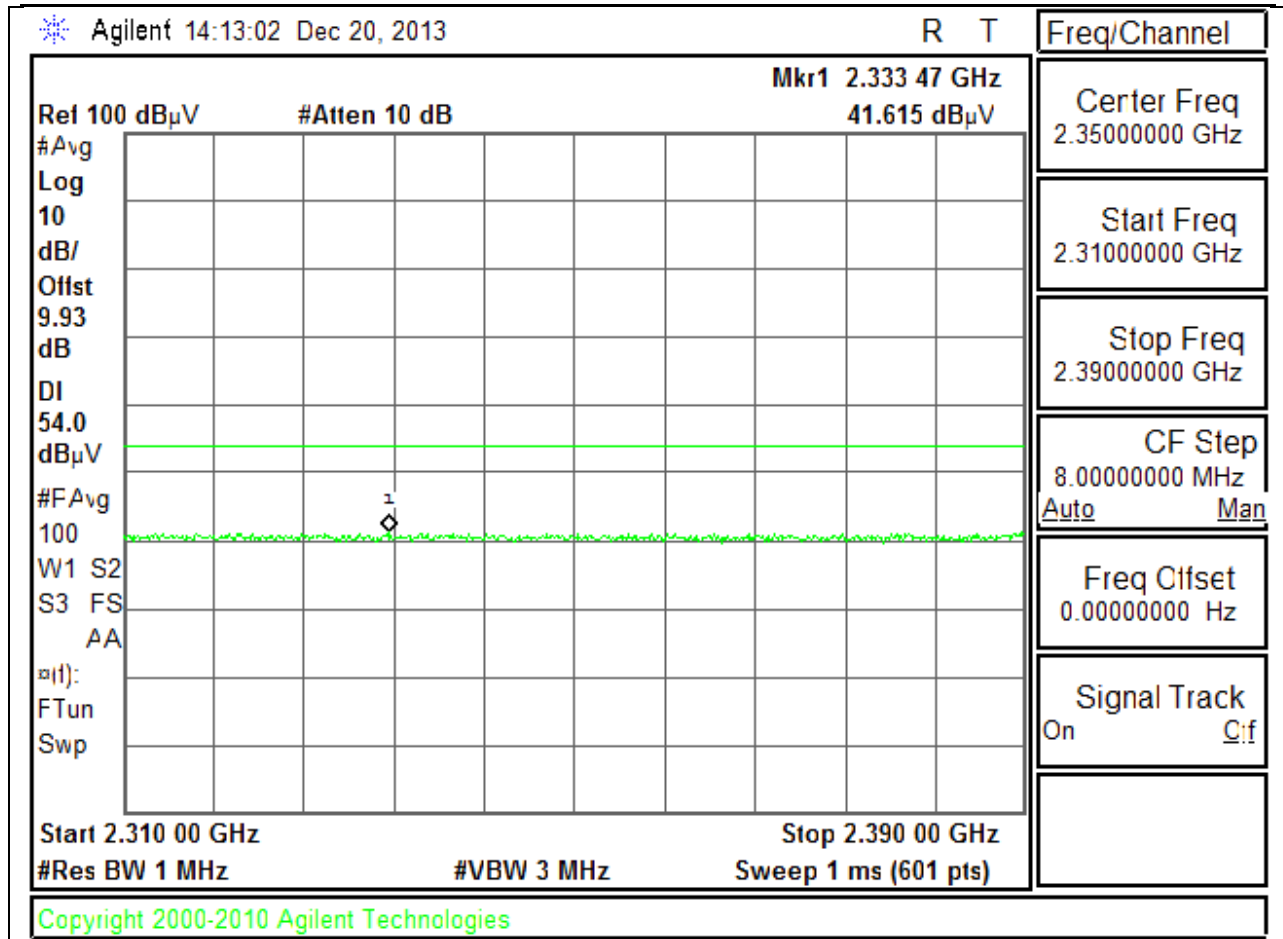


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

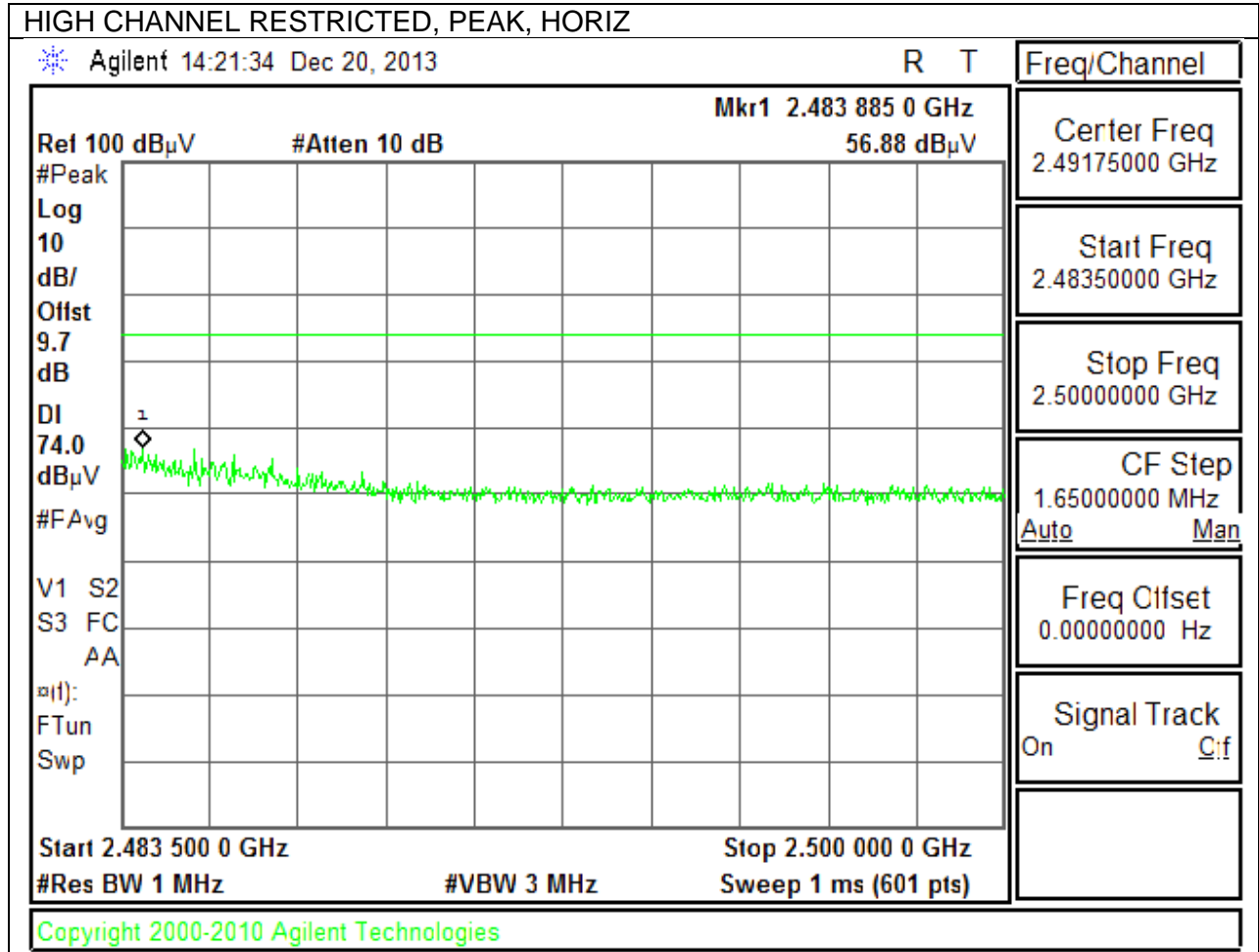




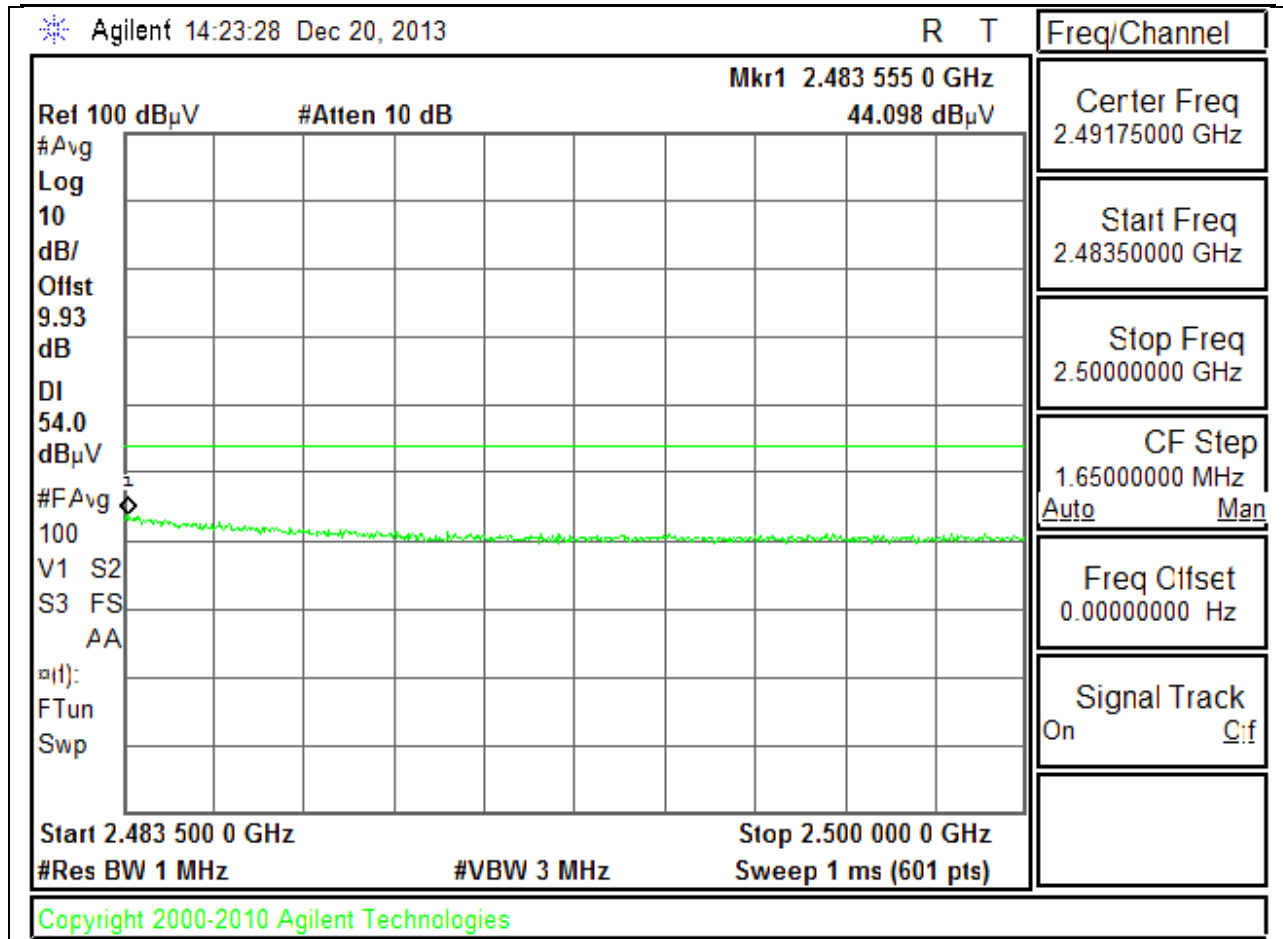
LOW CHANNEL RESTRICTED, AVERAGE, VERT

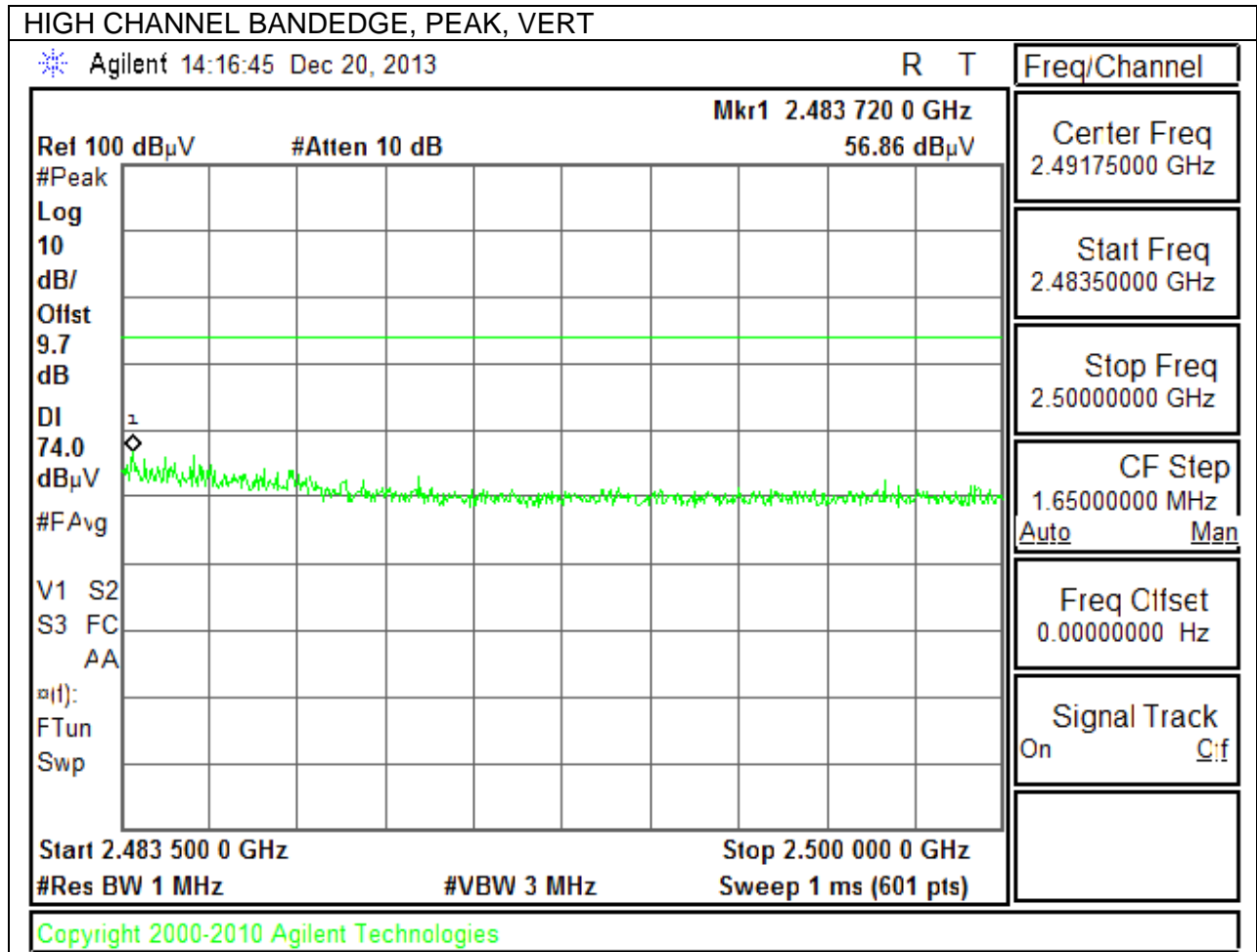


AUTHORIZED BANDEDGE (HIGH CHANNEL)

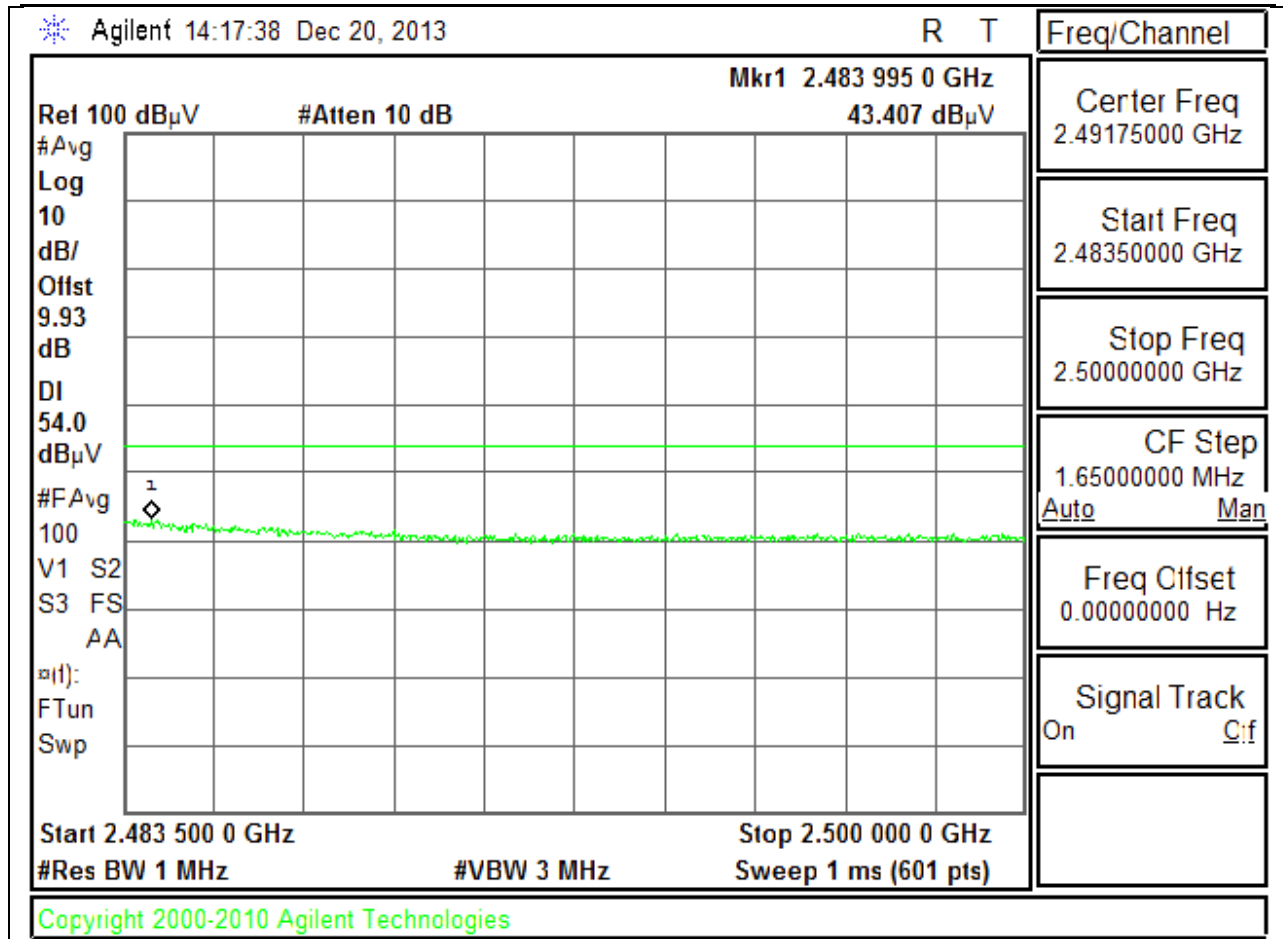


HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

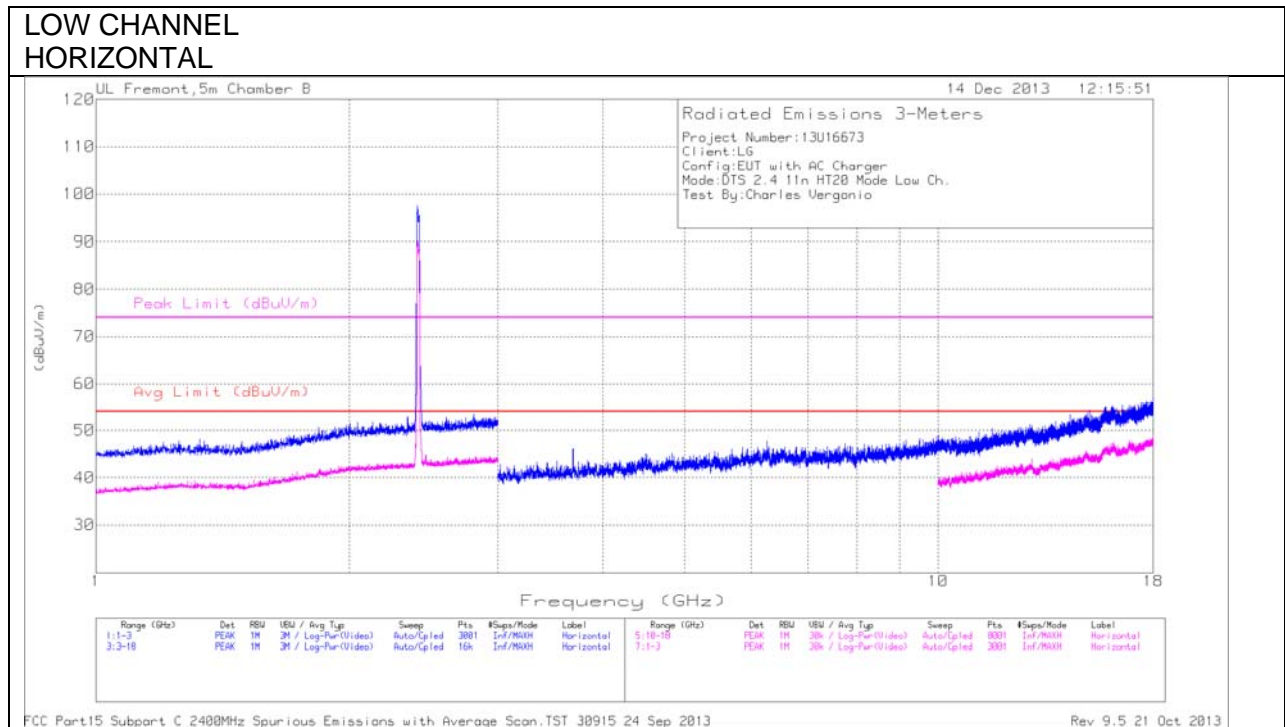




HIGH CHANNEL BANDEDGE, AVERAGE, VERT

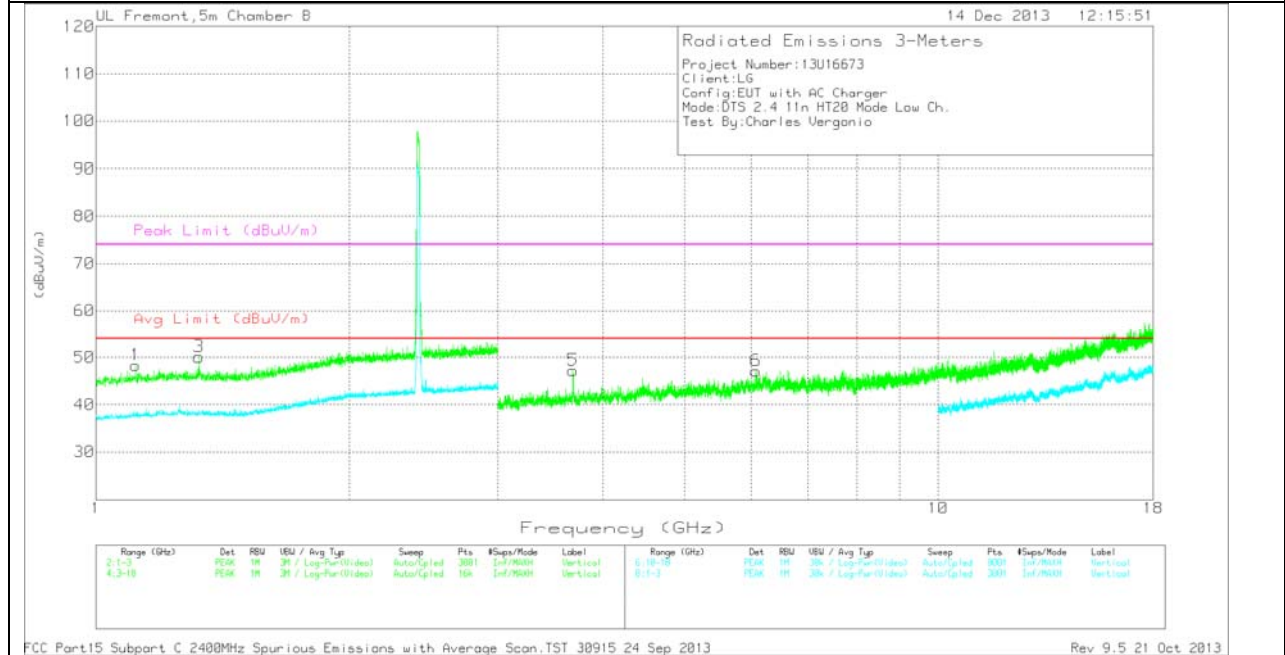


HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA
 Trace Markers

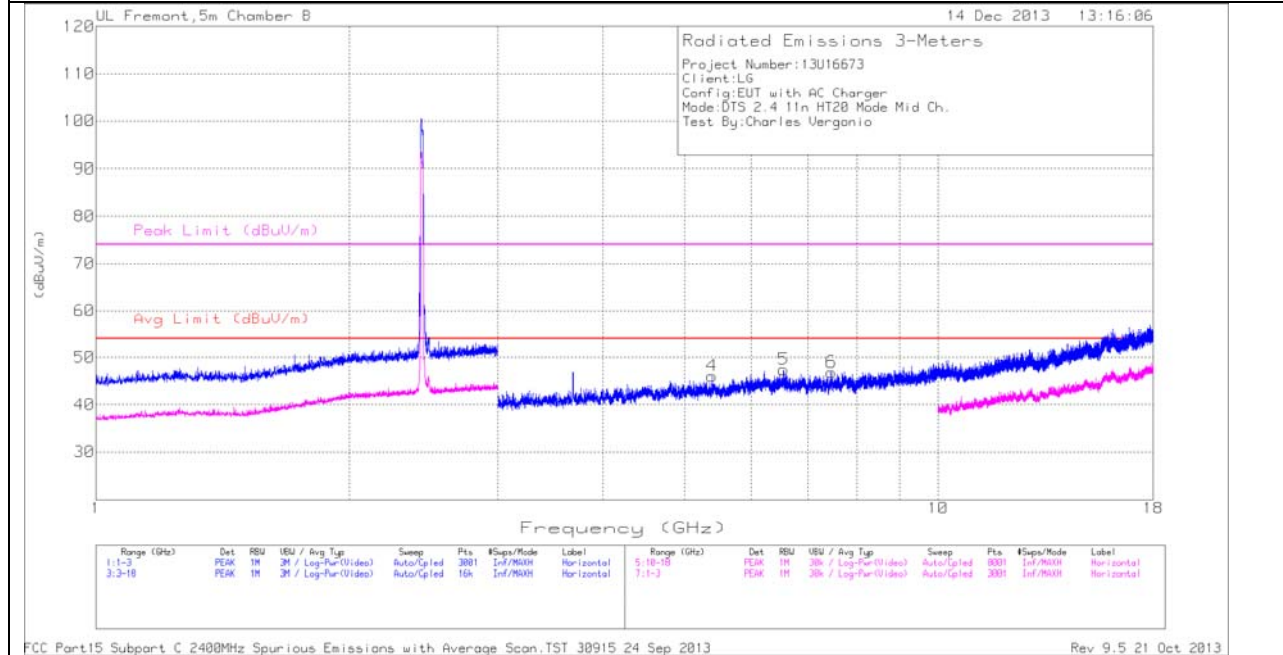
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 2 | 1.109 | 35.6 | Avg | 27.9 | -24.8 | 38.7 | - | - | - | - | 0-360 | 202 | V |
| 1 | 1.114 | 45.12 | PK | 27.9 | -24.7 | 48.32 | 53.97 | -5.65 | 74 | -25.68 | 0-360 | 202 | V |
| 4 | 1.323 | 35.12 | Avg | 28.5 | -24.6 | 39.02 | - | - | - | - | 0-360 | 99 | V |
| 3 | 1.325 | 46.2 | PK | 28.5 | -24.6 | 50.1 | 53.97 | -3.87 | 74 | -23.9 | 0-360 | 202 | V |
| 5 | 3.683 | 44.84 | PK | 33.6 | -31.2 | 47.24 | 53.97 | -6.73 | 74 | -26.76 | 0-360 | 99 | V |
| 6 | 6.076 | 40.34 | PK | 35.9 | -29.1 | 47.14 | 53.97 | -6.83 | 74 | -26.86 | 0-360 | 202 | V |

PK - Peak detector

Avg - Video bandwidth < Resolution bandwidth

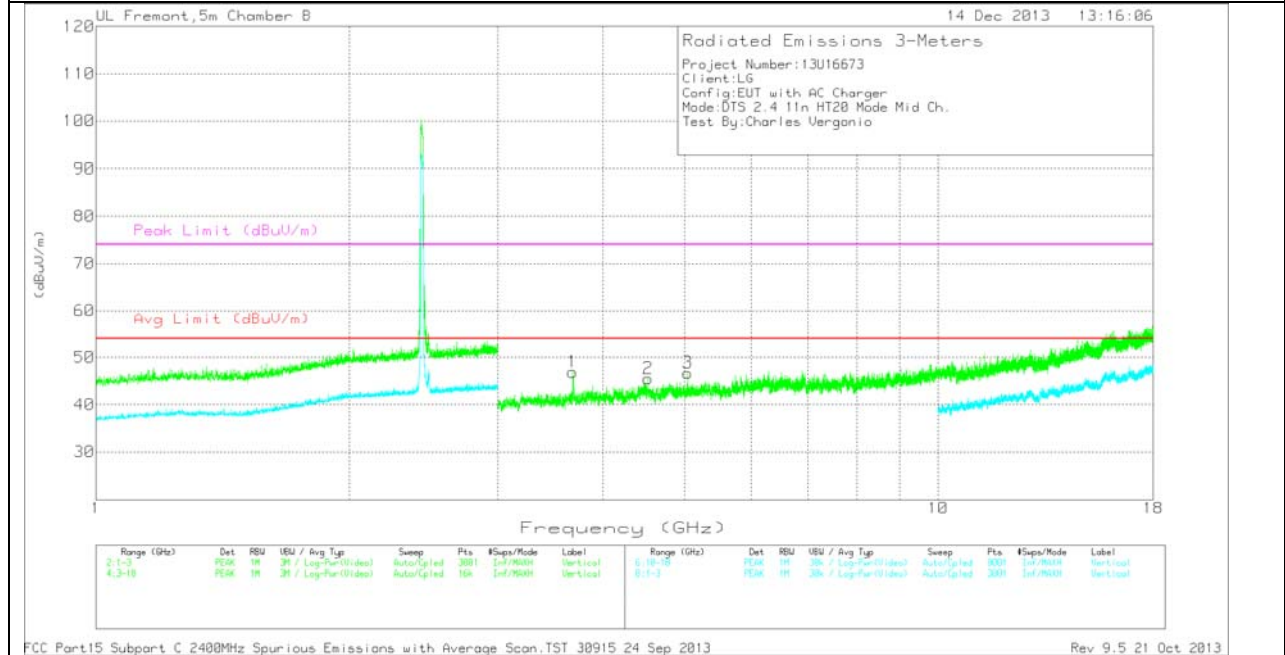
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

MID CHANNEL
 HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL
 VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

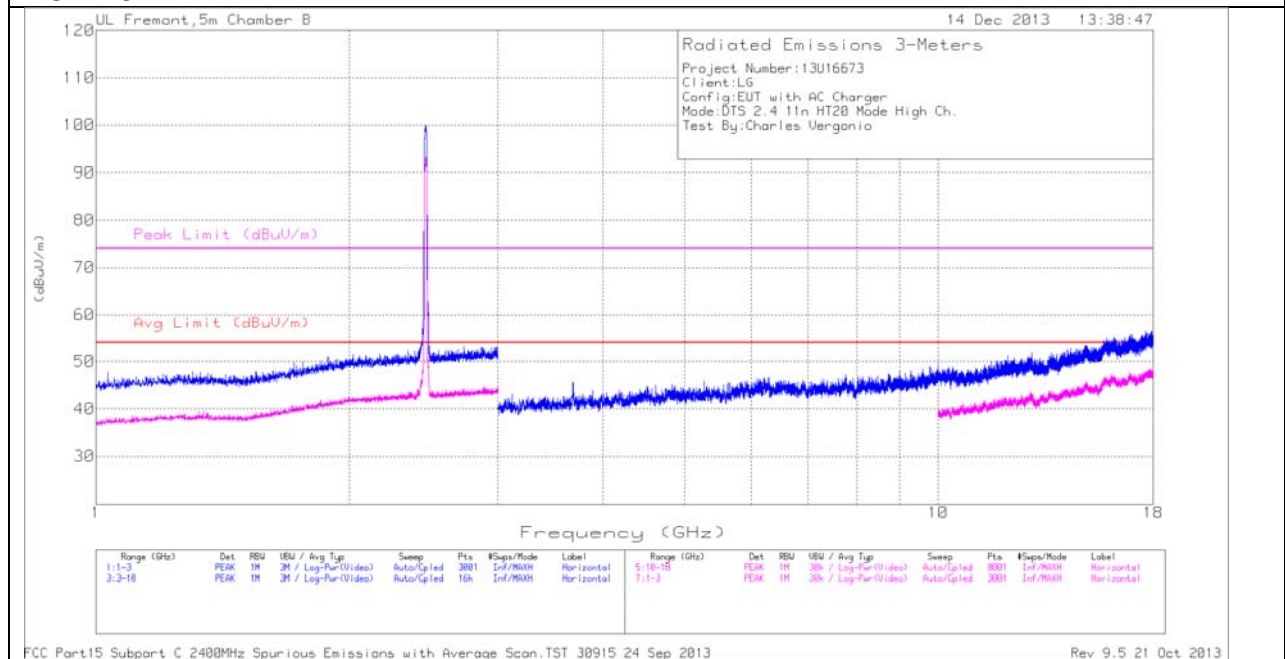
Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.682 | 44.49 | PK | 33.6 | -31.2 | 46.89 | 53.97 | -7.08 | 74 | -27.11 | 0-360 | 99 | V |
| 2 | 4.523 | 40.31 | PK | 34.5 | -29.3 | 45.51 | 53.97 | -8.46 | 74 | -28.49 | 0-360 | 99 | V |
| 3 | 5.045 | 40.71 | PK | 34.7 | -28.7 | 46.71 | 53.97 | -7.26 | 74 | -27.29 | 0-360 | 202 | V |
| 4 | 5.387 | 39.66 | PK | 34.9 | -28.5 | 46.06 | 53.97 | -7.91 | 74 | -27.94 | 0-360 | 99 | H |
| 5 | 6.552 | 38.81 | PK | 35.9 | -27.3 | 47.41 | 53.97 | -6.56 | 74 | -26.59 | 0-360 | 201 | H |
| 6 | 7.469 | 37.74 | PK | 36 | -26.9 | 46.84 | 53.97 | -7.13 | 74 | -27.16 | 0-360 | 99 | H |

PK - Peak detector

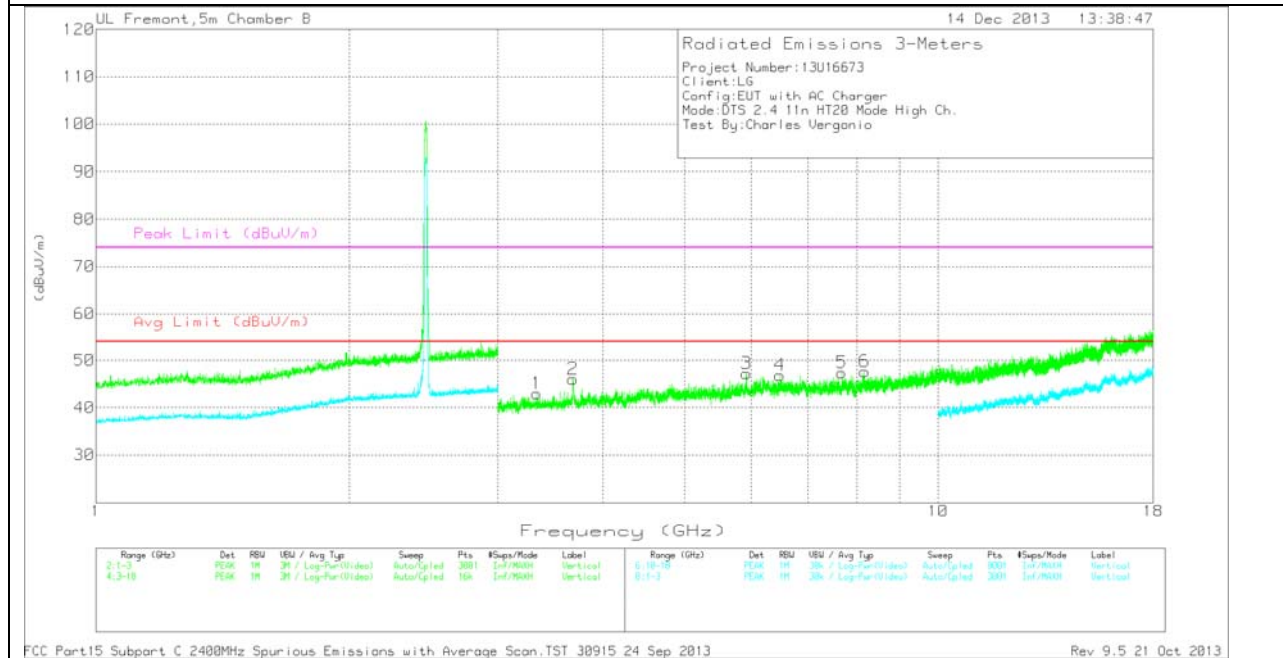
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

**HIGH CHANNEL
 HORIZONTAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**HIGH CHANNEL
 VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Trace Markers

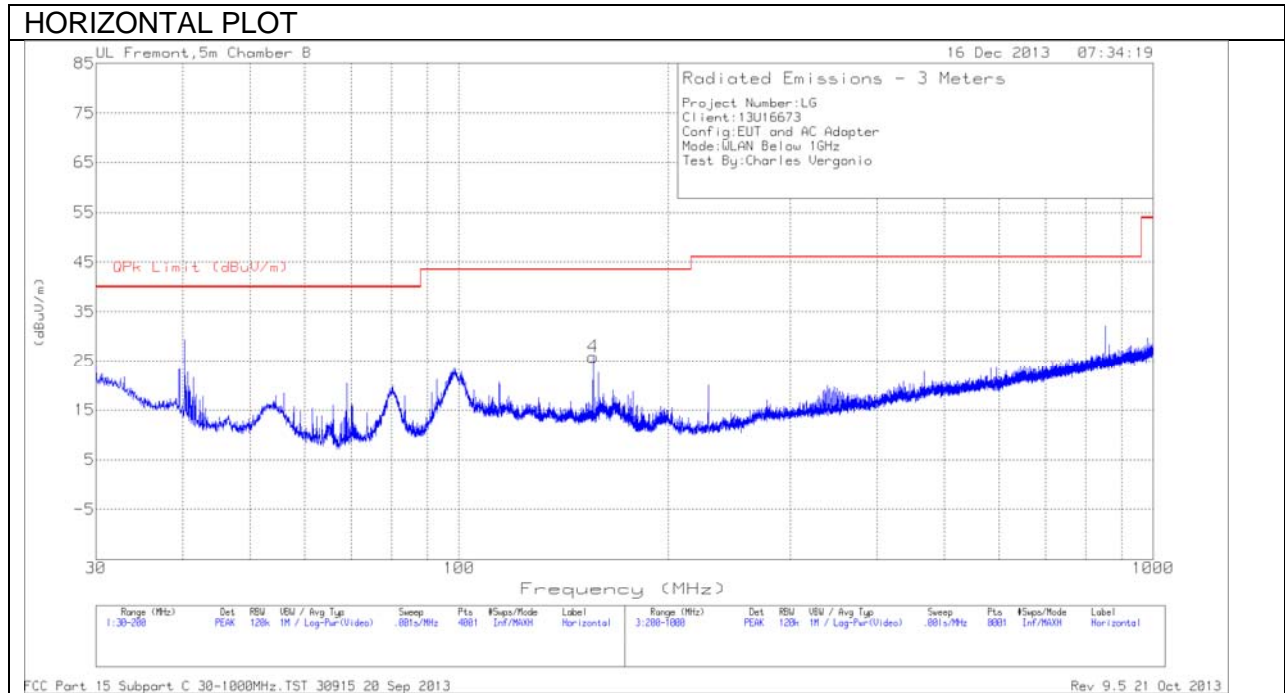
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb I/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|----------------------------|--------------------|-------------|---------------------|-------------|----------------|-------------|----------|
| 1 | 3.338 | 41.18 | PK | 33.3 | -31.5 | 42.98 | 53.97 | -10.99 | 74 | -31.02 | 0-360 | 202 | V |
| 2 | 3.683 | 43.62 | PK | 33.6 | -31.2 | 46.02 | 53.97 | -7.95 | 74 | -27.98 | 0-360 | 99 | V |
| 3 | 5.92 | 39.93 | PK | 35.7 | -28.4 | 47.23 | 53.97 | -6.74 | 74 | -26.77 | 0-360 | 99 | V |
| 4 | 6.488 | 39.33 | PK | 35.9 | -28.4 | 46.83 | 53.97 | -7.14 | 74 | -27.17 | 0-360 | 99 | V |
| 5 | 7.684 | 37.96 | PK | 36.1 | -26.7 | 47.36 | 53.97 | -6.61 | 74 | -26.64 | 0-360 | 99 | V |
| 6 | 8.178 | 38.44 | PK | 36.1 | -26.9 | 47.64 | 53.97 | -6.33 | 74 | -26.36 | 0-360 | 99 | V |

PK - Peak detector

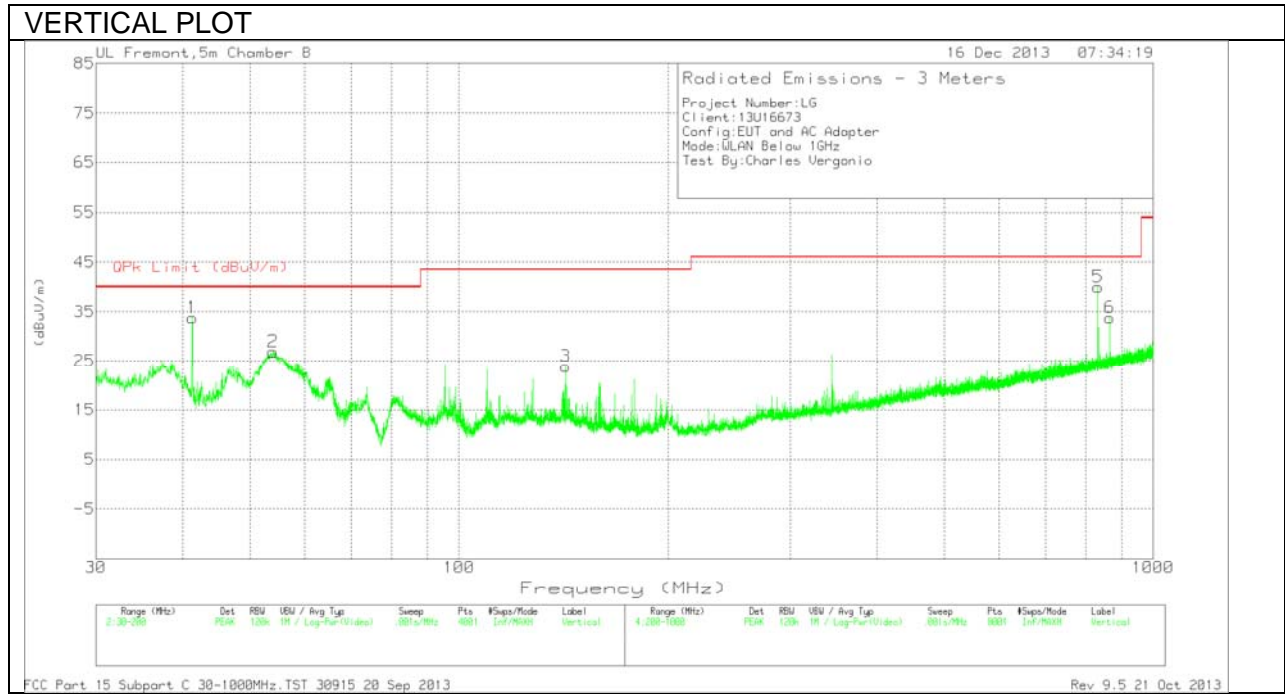
FCC Part15 Subpart C 2400MHz Spurious Emissions with Average Scan.TST 30915 24 Sep 2013 Rev 9.5 21 Oct 2013

10.3. 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

Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T243 (dB/m) | Amp/Cbl/Filtr/Pad (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 1 | 41.305 | 49.95 | PK | 12.5 | -28.7 | 33.75 | 40 | -6.25 | 0-360 | 100 | V |
| 2 | 53.97 | 48.57 | PK | 6.9 | -28.6 | 26.87 | 40 | -13.13 | 0-360 | 100 | V |
| 3 | 142.4975 | 38.79 | PK | 12.7 | -27.6 | 23.89 | 43.52 | -19.63 | 0-360 | 100 | V |
| 4 | 156.0125 | 41.13 | PK | 12.1 | -27.4 | 25.83 | 43.52 | -17.69 | 0-360 | 200 | H |
| 5 | 832.8 | 41.98 | PK | 21.7 | -23.7 | 39.98 | 46.02 | -6.04 | 0-360 | 100 | V |
| 6 | 866.2 | 35.39 | PK | 21.7 | -23.3 | 33.79 | 46.02 | -12.23 | 0-360 | 100 | V |

PK - Peak detector

FCC Part 15 Subpart C 30-1000MHz.TST 30915 20 Sep 2013 Rev 9.5 21 Oct 2013

11. 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 2009.

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

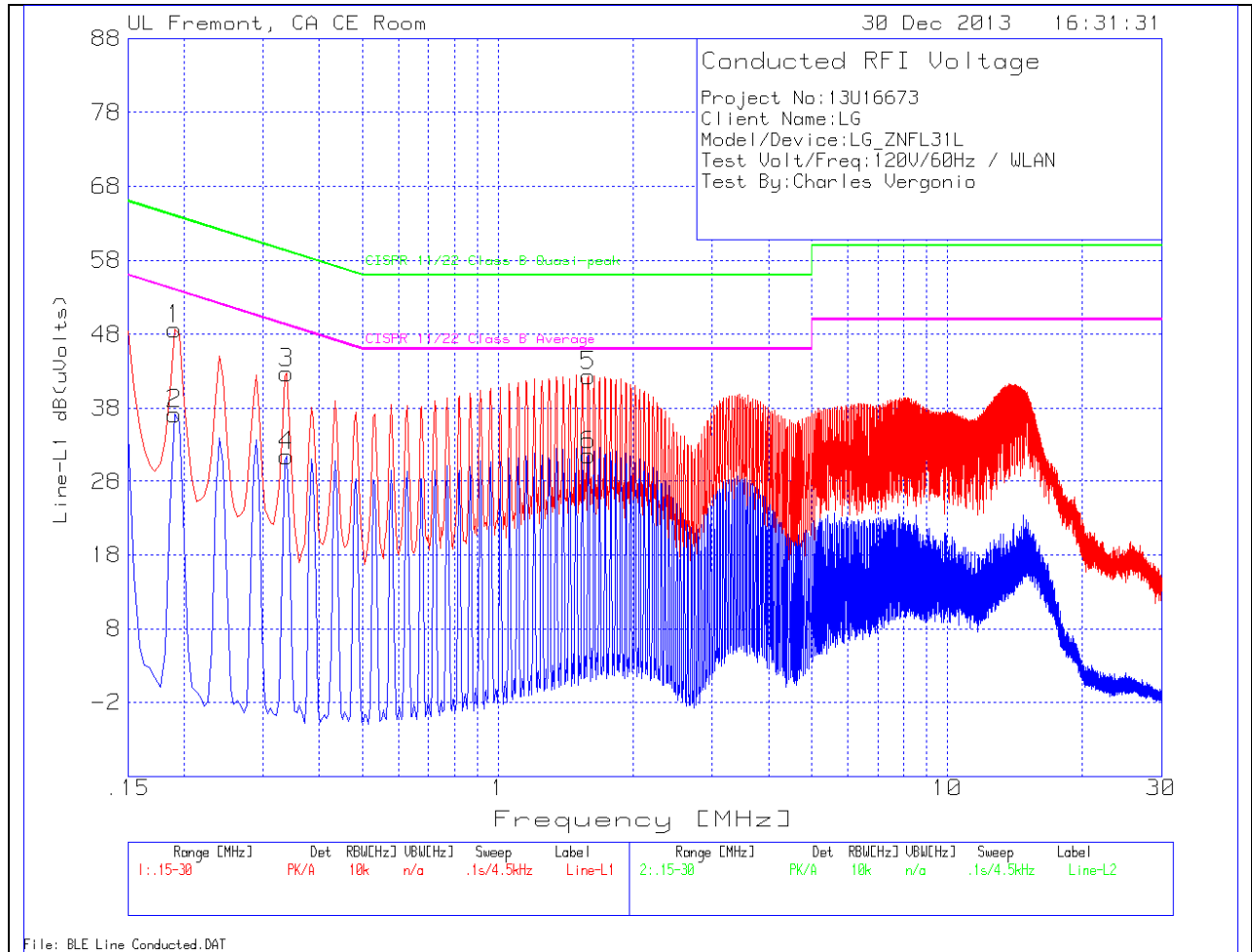
6 WORST EMISSIONS

| 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) | CISPR 11/22 Class B Quasi-peak | Margin to Limit (dB) | CISPR 11/22 Class B Average | Margin to Limit (dB) |
| 1 | .1905 | 48.52 | PK | .1 | 0 | 48.62 | 64 | -15.38 | - | - |
| 2 | .1905 | 37.08 | Av | .1 | 0 | 37.18 | - | - | 54 | -16.82 |
| 3 | .339 | 42.63 | PK | .1 | 0 | 42.73 | 59.2 | -16.47 | - | - |
| 4 | .339 | 31.45 | Av | .1 | 0 | 31.55 | - | - | 49.2 | -17.65 |
| 5 | 1.59 | 42.17 | PK | .1 | .1 | 42.37 | 56 | -13.63 | - | - |
| 6 | 1.59 | 31.4 | Av | .1 | .1 | 31.6 | - | - | 46 | -14.4 |

| 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) | CISPR 11/22 Class B Quasi-peak | Margin to Limit (dB) | CISPR 11/22 Class B Average | Margin to Limit (dB) |
| 7 | .2895 | 39.62 | PK | .1 | 0 | 39.72 | 60.5 | -20.78 | - | - |
| 8 | .2895 | 29.29 | Av | .1 | 0 | 29.39 | - | - | 50.5 | -21.11 |
| 9 | .4335 | 39.42 | PK | .1 | 0 | 39.52 | 57.2 | -17.68 | - | - |
| 10 | .4335 | 29.14 | Av | .1 | 0 | 29.24 | - | - | 47.2 | -17.96 |
| 11 | 1.491 | 40.97 | PK | .1 | .1 | 41.17 | 56 | -14.83 | - | - |
| 12 | 1.491 | 30.98 | Av | .1 | .1 | 31.18 | - | - | 46 | -14.82 |

PK - Peak detector
 Av - average detection

LINE 1 RESULTS



LINE 2 RESULTS

