



FCC CFR47 PART 15 SUBPART C

**BLUETOOTH LOW ENERGY
C2PC CERTIFICATION TEST REPORT**

FOR

WALKIE-TALKIE ACCESSORY

MODEL NAME: GVC200WTH

MODEL NUMBER: LG-VC200, LGVC200, VC200, LG-VC200B, LGVC200B, VC200B

FCC ID: ZNFVC200

REPORT NUMBER: 16I22629 E3V2

ISSUE DATE: 2/15/2016

Prepared for

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NVLAP LAB CODE 200065-0

Revision History

| <u>Rev.</u> | <u>Issue Date</u> | <u>Revisions</u> | <u>Revised By</u> |
|-------------|-------------------|-------------------------|-------------------|
| V1 | 1/26/2016 | Initial Issue | D. CORONIA |
| V2 | 2/15/2016 | Updated EUT Description | D. CORONIA |

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION: WALKIE-TALKIE ACCESSORY
MODEL NAME: GVC200WTH
MODEL #: LG-VC200, LGVC200, VC200, LG-VC200B, LGVC200B, VC200B
SERIAL NUMBER: A1000040E03DCD, A1000040E03DCE, A1000040E03DC9
DATE TESTED: JANUARY 13-14, 2016

| 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 revision 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.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, and KDB 558074 D01 v03r04, ANSI C63.10-2013.

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 type="checkbox"/> Chamber A | <input type="checkbox"/> Chamber D |
| <input checked="" type="checkbox"/> Chamber B | <input type="checkbox"/> Chamber E |
| <input type="checkbox"/> Chamber C | <input type="checkbox"/> Chamber F |
| | <input type="checkbox"/> Chamber G |
| | <input type="checkbox"/> Chamber H |

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

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, 9KHz to 30 MHz | 2.14 dB |
| Radiated Disturbance, 30 to 1000 MHz | 4.98 dB |
| Radiated Disturbance, 1000 to 6000 MHz | 3.86 dB |
| Radiated Disturbance, 6000 to 18000 MHz | 4.23 dB |
| Radiated Disturbance, 18000 to 26000 MHz | 5.30 dB |
| Radiated Disturbance, 26000 to 40000 MHz | 5.23 dB |

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is WALKIE-TALKIE ACCESSORY.

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an LMA antenna, with a maximum gain of -0.14 dBi.

5.3. WORST-CASE CONFIGURATION AND MODE

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

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

5.4. DESCRIPTION OF TEST SETUP
SUPPORT EQUIPMENT

| Support Equipment List | | | | |
|------------------------|--------------|--------|---------------|--------|
| Description | Manufacturer | Model | Serial Number | FCC ID |
| AC Adapter | LG | DC1507 | EAD62377906 | N/A |

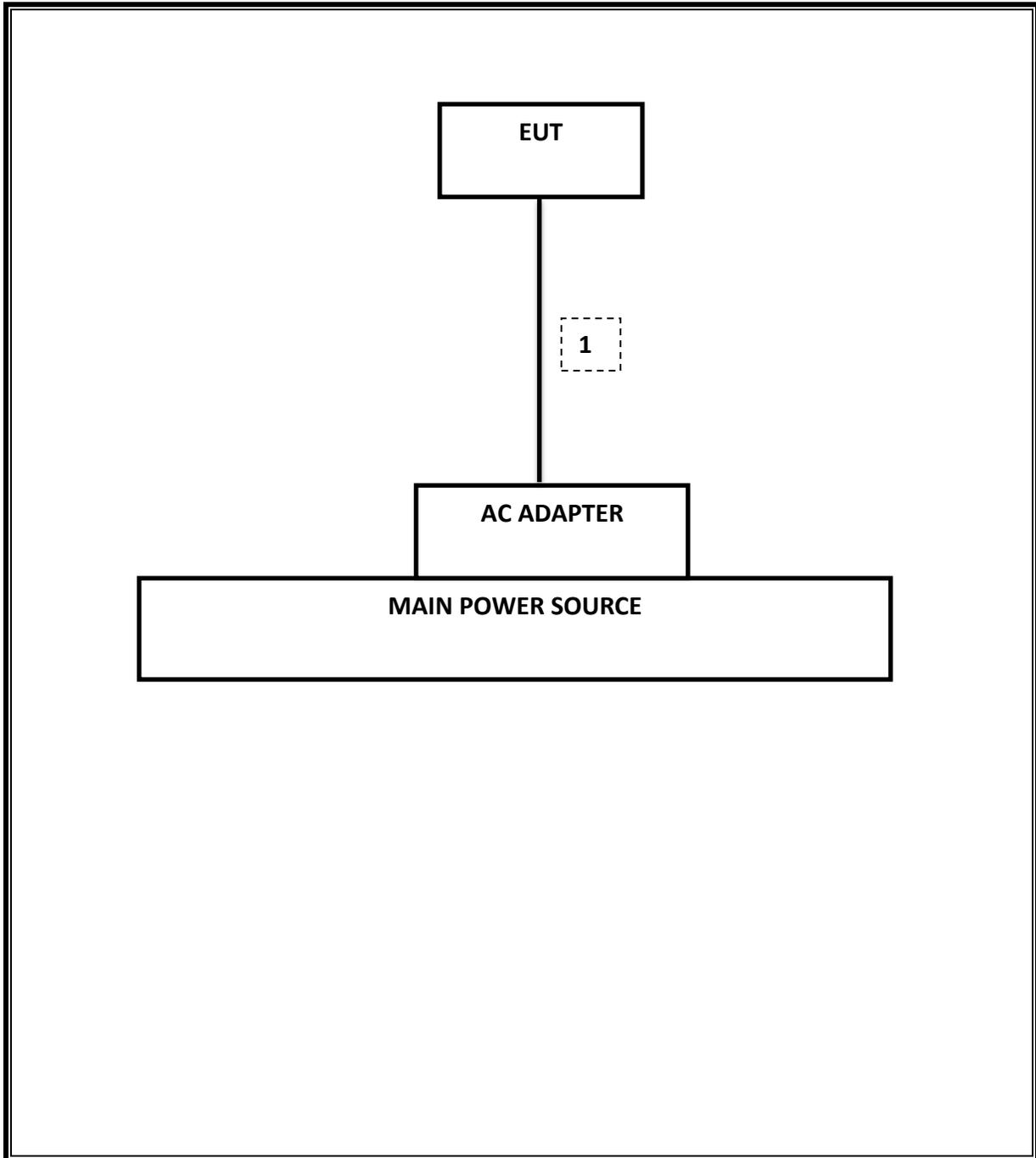
I/O CABLES

| 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 |

TEST SETUP

EUT was set in the Hidden menu mode to enable BLE communications.

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 | T Number | Cal Due |
| Antenna, Biconolog, 30MHz-1 GHz | Sunol Sciences | JB1 | 130 | 09/01/16 |
| Antenna, Horn, 18GHz | ETS Lindgren | 3117 | 345 | 03/03/16 |
| Antenna, Horn, 26.5 GHz | ARA | MWH-1826/B | 447 | 05/12/16 |
| RF Preamplifier, 1GHz - 18GHz | Miteq | NSP4000-SP2 | 88 | 04/07/16 |
| RF Preamplifier, 1GHz - 26.5GHz | HP | 8449B | 404 | 06/29/16 |
| Amplifier, 10KHz to 1 GHz | Keysight | 8447D | 15 | 08/14/16 |
| Spectrum Analyzer, PXA, 3 Hz to 44 GHz | Keysight | N9030A | 907 | 01/06/17 |
| Low Pass Filter 5GHz | Micro-Tronics | LPS17541 | 417 | 05/04/16 |
| High Pass Filter 6GHz | Micro-Tronics | HPS17542 | 893 | 04/25/16 |
| High Pass Filter 3GHz | Micro-Tronics | HPS17543 | 898 | 04/25/16 |

| Test Software List | | | |
|--------------------|--------------|--------|----------------------------|
| Description | Manufacturer | Model | Version |
| Radiated Software | UL | UL EMC | Version 9.5, June 24, 2015 |

7. SUMMARY TABLE

2PC Reason: Please see LG-VC200 FCC Class II change description for details.

| FCC Part Section | RSS Section(s) | Test Description | Test Limit | Test Condition | Test Result |
|--------------------|----------------|---|------------|----------------|--------------|
| 15.247 (a)(2) | RSS-247 5.2.1 | Occupied Bandwidth (6dB) | >500KHz | Conducted | See Original |
| 2.1051, 15.247 (d) | RSS-247 5.5 | Band Edge / Conducted Spurious Emission | -20dBc | | See Original |
| 15.247 | RSS-247 5.4.4 | TX conducted output power | <30dBm | | See Original |
| 15.247 | RSS-247 5.2.2 | PSD | <8dBm | | See Original |
| 15.207 (a) | RSS-GEN 8.8 | AC Power Line conducted emissions | Section 10 | Radiated | See Original |
| 15.205, 15.209 | RSS-GEN 8.9/7 | Radiated Spurious Emission | < 54dBuV/m | | Pass |

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME, DUTY CYCLE AND MEASUREMENTS METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

| Mode | ON Time B (msec) | Period (msec) | Duty Cycle x (linear) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/T Minimum VBW (kHz) |
|------|------------------------|------------------|-----------------------------|----------------------|---|-----------------------------|
| BLE | 0.390 | 0.626 | 0.623 | 62.30% | 2.06 | 2.564 |



9. RADIATED EMISSION TEST

LIMITS

FCC §15.205 and §15.209

| 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 for below 1GHz and 150cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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

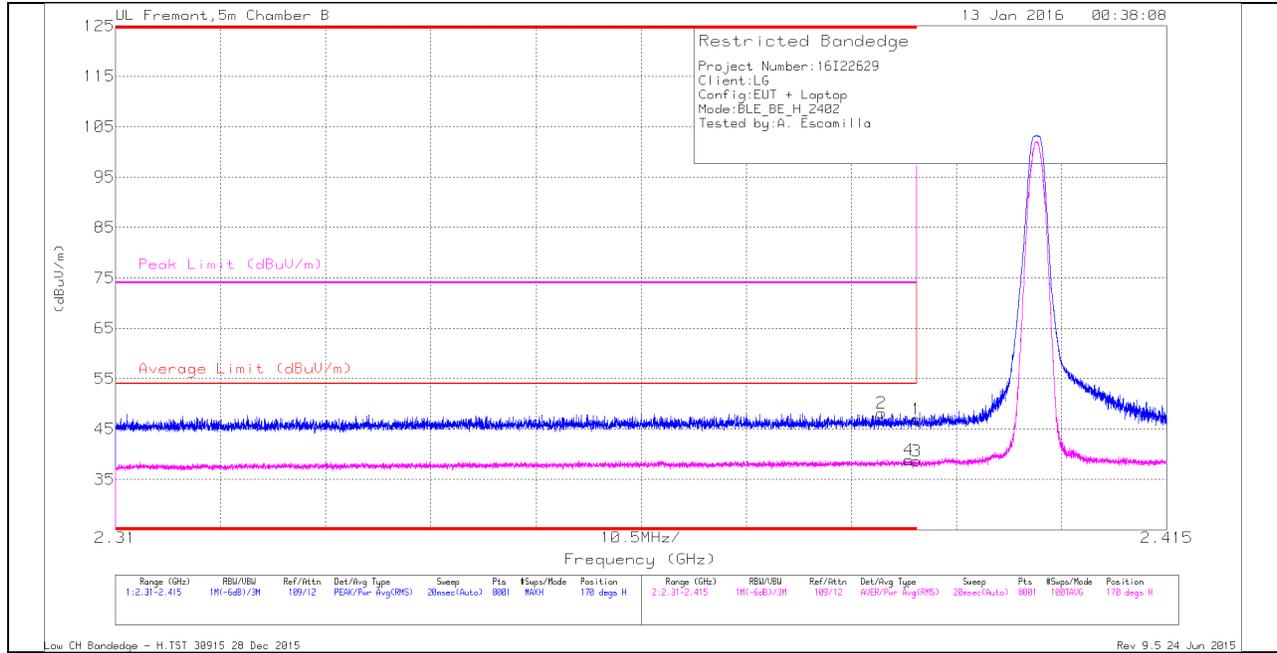
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor = $10 \log (1/x)$. For example: DCF = $10 \log (1/0.62) = 2.07\text{dB}$.

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.

9.1. TRANSMITTER ABOVE 1 GHz RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

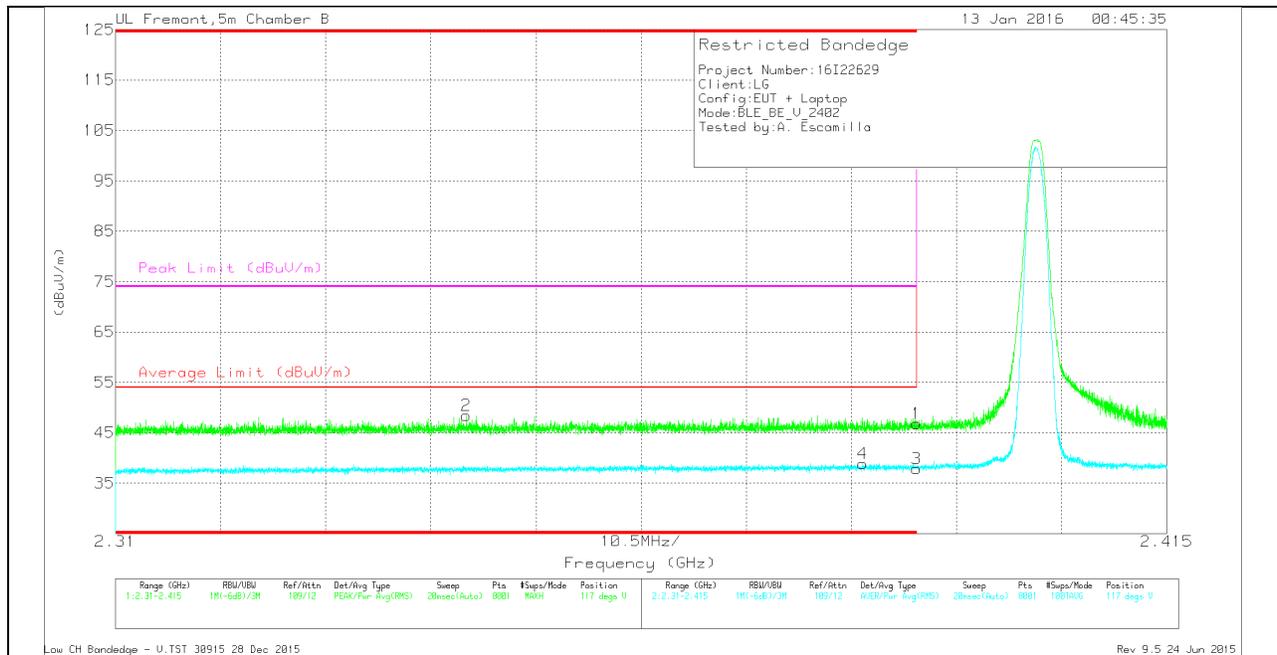
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Fit r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2 | * 2.387 | 38.11 | Pk | 32 | -21.9 | 0 | 48.21 | - | - | 74 | -25.79 | 170 | 353 | H |
| 4 | * 2.389 | 26.76 | RMS | 32 | -21.9 | 2.06 | 38.92 | 54 | -15.08 | - | - | 170 | 353 | H |
| 1 | * 2.39 | 36.89 | Pk | 32 | -21.9 | 0 | 46.99 | - | - | 74 | -27.01 | 170 | 353 | H |
| 3 | * 2.39 | 26.47 | RMS | 32 | -21.9 | 2.06 | 38.63 | 54 | -15.37 | - | - | 170 | 353 | H |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Fitter/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 2 | * 2.345 | 38.53 | Pk | 31.8 | -21.9 | 0 | 48.43 | - | - | 74 | -25.57 | 117 | 313 | V |
| 4 | * 2.385 | 26.73 | RMS | 32 | -21.9 | 2.06 | 38.89 | 54 | -15.11 | - | - | 117 | 313 | V |
| 1 | * 2.39 | 36.69 | Pk | 32 | -21.9 | 0 | 46.79 | - | - | 74 | -27.21 | 117 | 313 | V |
| 3 | * 2.39 | 25.75 | RMS | 32 | -21.9 | 2.06 | 37.91 | 54 | -16.09 | - | - | 117 | 313 | V |

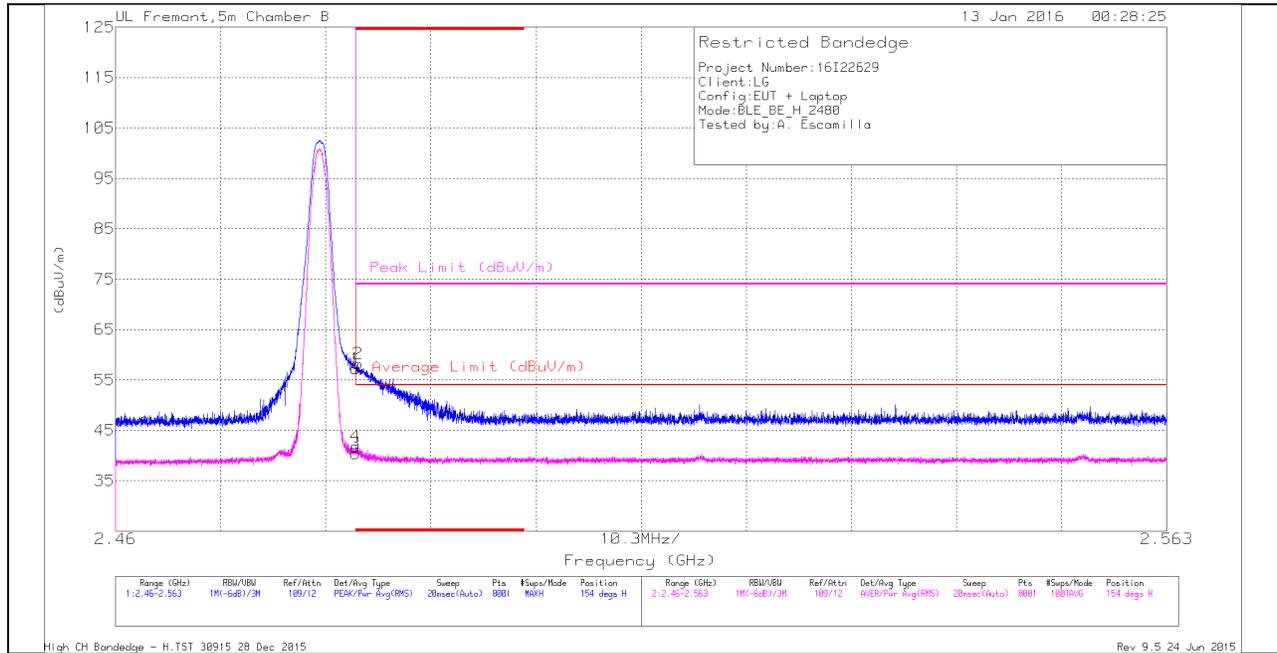
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

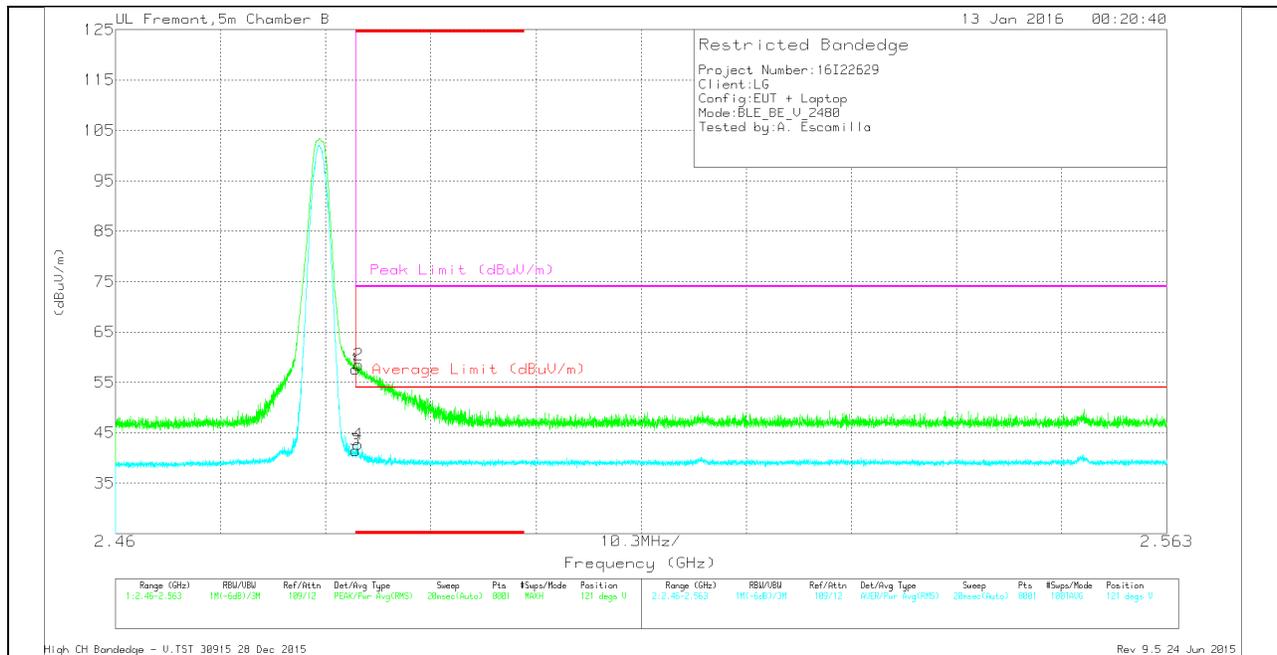
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb/Filter/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|------------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 2.484 | 46.54 | Pk | 32.5 | -21.8 | 0 | 57.24 | - | - | 74 | -16.76 | 154 | 309 | H |
| 2 | * 2.484 | 47.56 | Pk | 32.5 | -21.8 | 0 | 58.26 | - | - | 74 | -15.74 | 154 | 309 | H |
| 3 | * 2.484 | 27.64 | RMS | 32.5 | -21.8 | 2.06 | 40.4 | 54 | -13.6 | - | - | 154 | 309 | H |
| 4 | * 2.484 | 29.12 | RMS | 32.5 | -21.8 | 2.06 | 41.88 | 54 | -12.12 | - | - | 154 | 309 | H |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb/Fit r/Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|-----------------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1 | * 2.484 | 46.93 | Pk | 32.5 | -21.8 | 0 | 57.63 | - | - | 74 | -16.37 | 121 | 264 | V |
| 2 | * 2.484 | 47.77 | Pk | 32.5 | -21.8 | 0 | 58.47 | - | - | 74 | -15.53 | 121 | 264 | V |
| 3 | * 2.484 | 28.78 | RMS | 32.5 | -21.8 | 2.06 | 41.54 | 54 | -12.46 | - | - | 121 | 264 | V |
| 4 | * 2.484 | 29.93 | RMS | 32.5 | -21.8 | 2.06 | 42.69 | 54 | -11.31 | - | - | 121 | 264 | V |

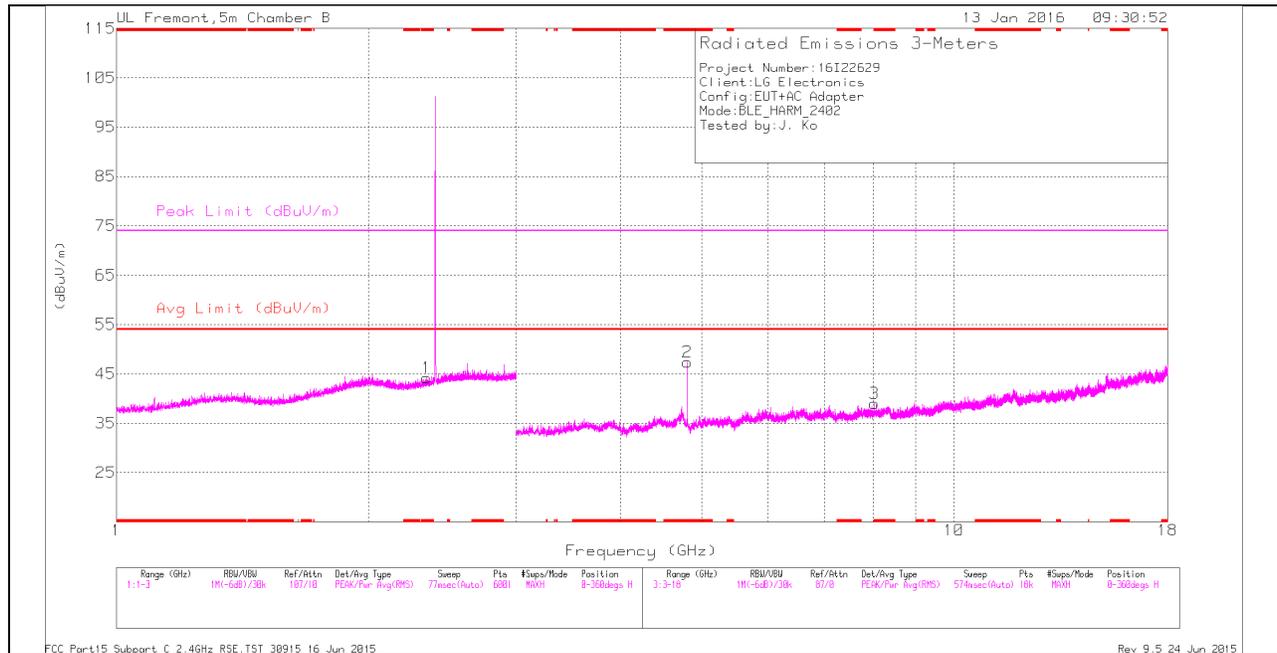
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

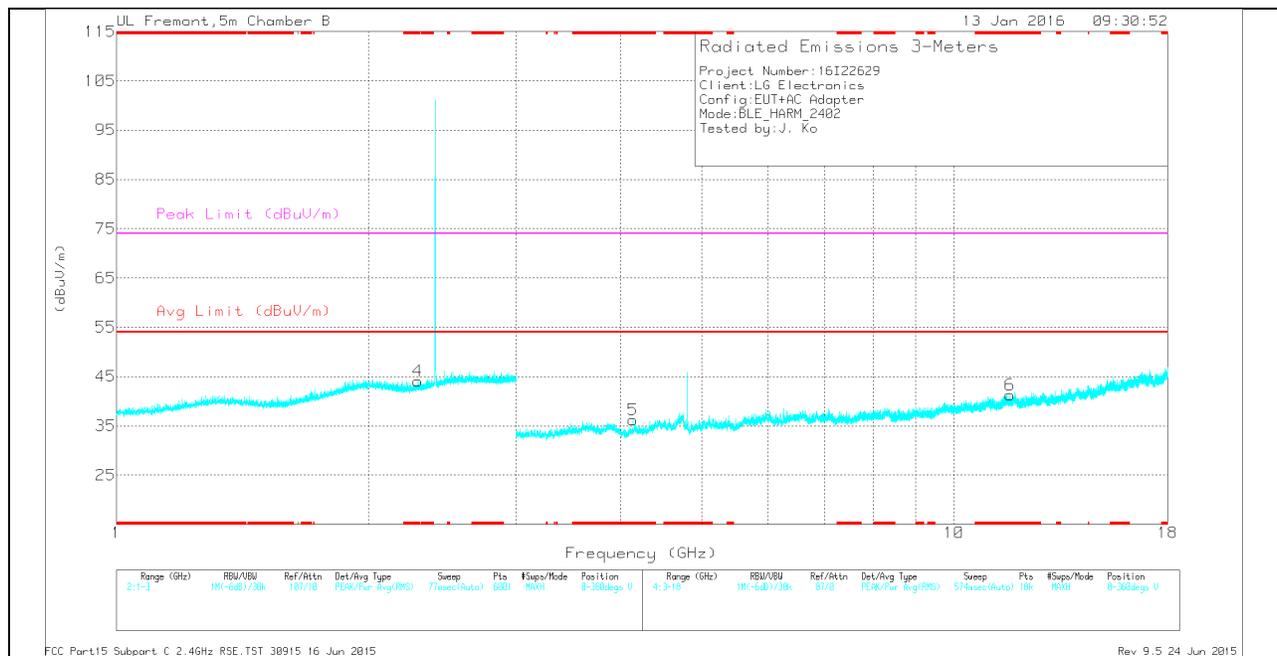
HARMONICS AND SPURIOUS EMISSIONS

LOW 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.

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/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 | * 2.345 | 36.66 | Pk | 31.8 | -24.2 | 0 | 44.26 | - | - | 74 | -29.74 | 0-360 | 101 | H |
| 4 | * 2.29 | 36.91 | Pk | 31.5 | -24.3 | 0 | 44.11 | - | - | 74 | -29.89 | 0-360 | 101 | V |
| 2 | * 4.804 | 44.13 | Pk | 34.3 | -31 | 0 | 47.43 | - | - | 74 | -26.57 | 0-360 | 199 | H |
| 3 | * 8.029 | 31.79 | Pk | 35.6 | -28.4 | 0 | 38.99 | - | - | 74 | -35.01 | 0-360 | 101 | H |
| 5 | * 4.136 | 34.91 | Pk | 33.3 | -32 | 0 | 36.21 | - | - | 74 | -37.79 | 0-360 | 199 | V |
| 6 | * 11.674 | 27.79 | Pk | 38.5 | -25 | 0 | 41.29 | - | - | 74 | -32.71 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

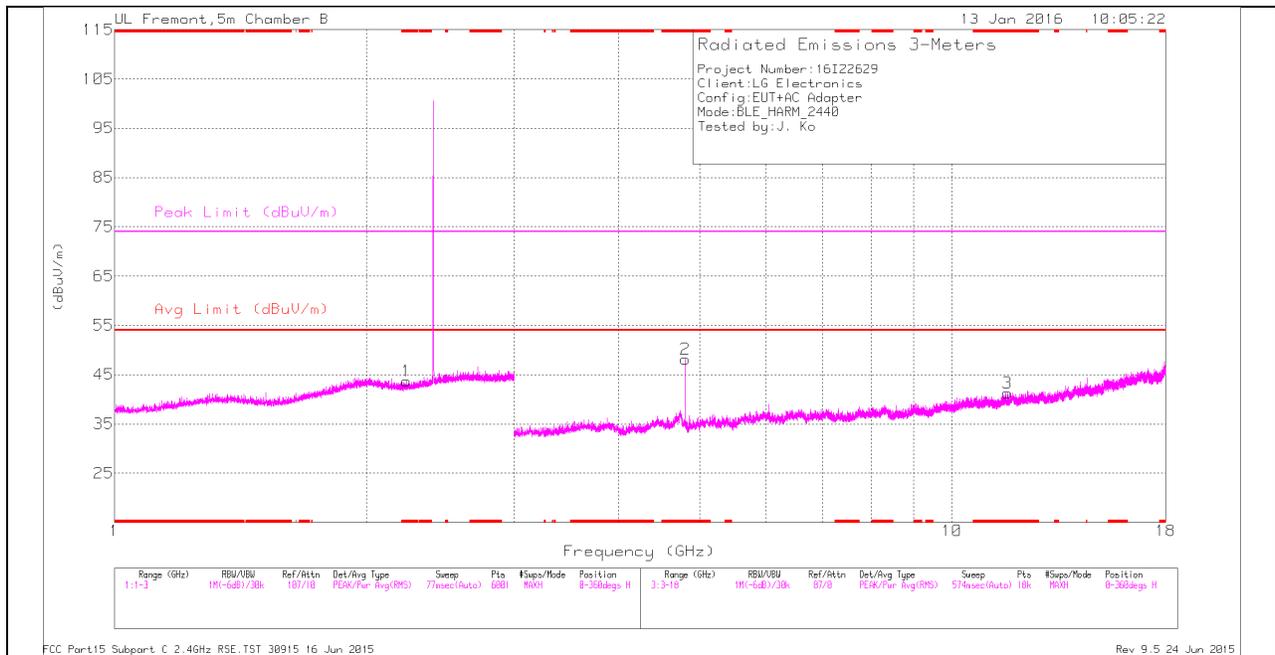
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb/Ftr /Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| * 2.344 | 44.85 | PK2 | 31.8 | -24.2 | 0 | 52.45 | - | - | 74 | -21.55 | 328 | 151 | H |
| * 2.343 | 32.54 | MAV1 | 31.8 | -24.2 | 2.06 | 42.2 | 54 | -11.8 | - | - | 328 | 151 | H |
| * 2.288 | 44.77 | PK2 | 31.5 | -24.3 | 0 | 51.97 | - | - | 74 | -22.03 | 189 | 212 | V |
| * 2.29 | 32.49 | MAV1 | 31.5 | -24.3 | 2.06 | 41.75 | 54 | -12.25 | - | - | 189 | 212 | V |
| * 4.803 | 51.13 | PK2 | 34.3 | -31 | 0 | 54.43 | - | - | 74 | -19.57 | 296 | 335 | H |
| * 4.804 | 45.52 | MAV1 | 34.3 | -31 | 2.06 | 50.88 | 54 | -3.12 | - | - | 296 | 335 | H |
| * 8.028 | 38.14 | PK2 | 35.6 | -28.4 | 0 | 45.34 | - | - | 74 | -28.66 | 354 | 111 | H |
| * 8.029 | 27.4 | MAV1 | 35.6 | -28.4 | 2.06 | 36.66 | 54 | -17.34 | - | - | 354 | 111 | H |
| * 4.137 | 41.62 | PK2 | 33.3 | -32 | 0 | 42.92 | - | - | 74 | -31.08 | 54 | 265 | V |
| * 4.137 | 30.7 | MAV1 | 33.3 | -32 | 2.06 | 34.06 | 54 | -19.94 | - | - | 54 | 265 | V |
| * 11.674 | 35.28 | PK2 | 38.5 | -25 | 0 | 48.78 | - | - | 74 | -25.22 | 168 | 222 | V |
| * 11.673 | 23.96 | MAV1 | 38.5 | -25 | 2.06 | 39.52 | 54 | -14.48 | - | - | 168 | 222 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

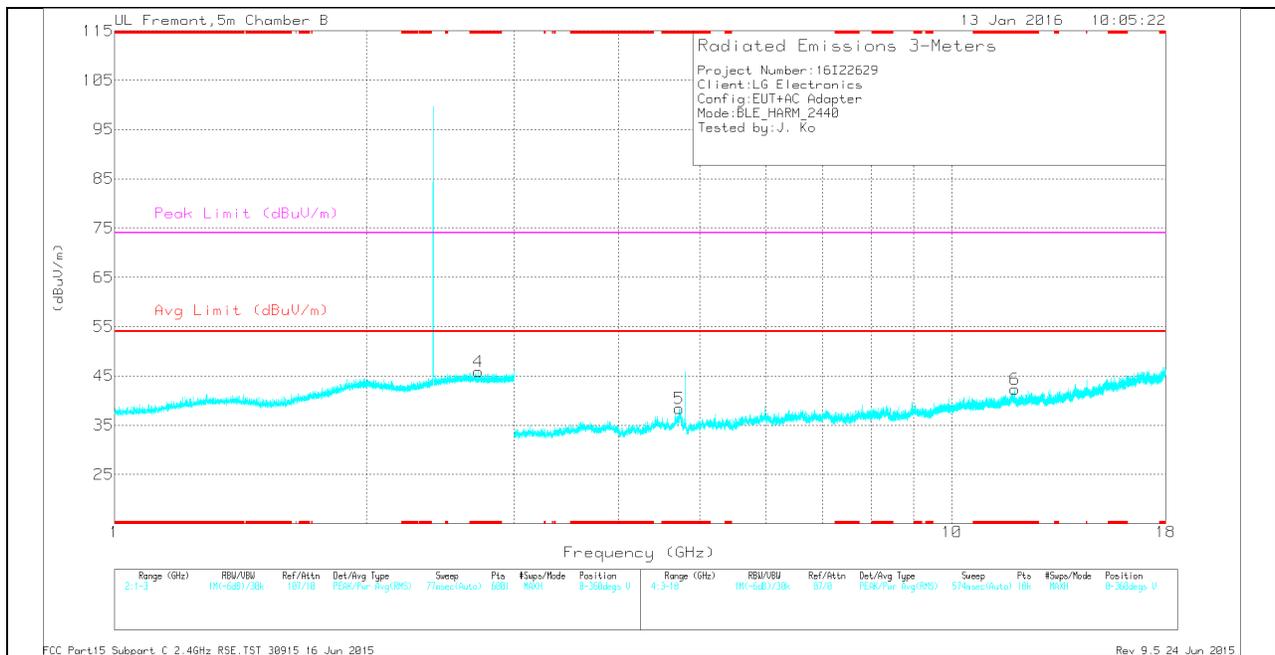
MAV1 - KDB558074 Option 1 Maximum RMS Average

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/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 | * 2.232 | 36.75 | Pk | 31.2 | -24.3 | 0 | 43.65 | - | - | 74 | -30.35 | 0-360 | 199 | H |
| 4 | * 2.719 | 37.02 | Pk | 32.6 | -23.8 | 0 | 45.82 | - | - | 74 | -28.18 | 0-360 | 101 | V |
| 2 | * 4.803 | 44.82 | Pk | 34.3 | -31 | 0 | 48.12 | - | - | 74 | -25.88 | 0-360 | 199 | H |
| 3 | * 11.655 | 27.69 | Pk | 38.5 | -24.9 | 0 | 41.29 | - | - | 74 | -32.71 | 0-360 | 101 | H |
| 5 | * 4.72 | 34.98 | Pk | 34.3 | -30.9 | 0 | 38.38 | - | - | 74 | -35.62 | 0-360 | 199 | V |
| 6 | * 11.894 | 28.65 | Pk | 38.6 | -24.9 | 0 | 42.35 | - | - | 74 | -31.65 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

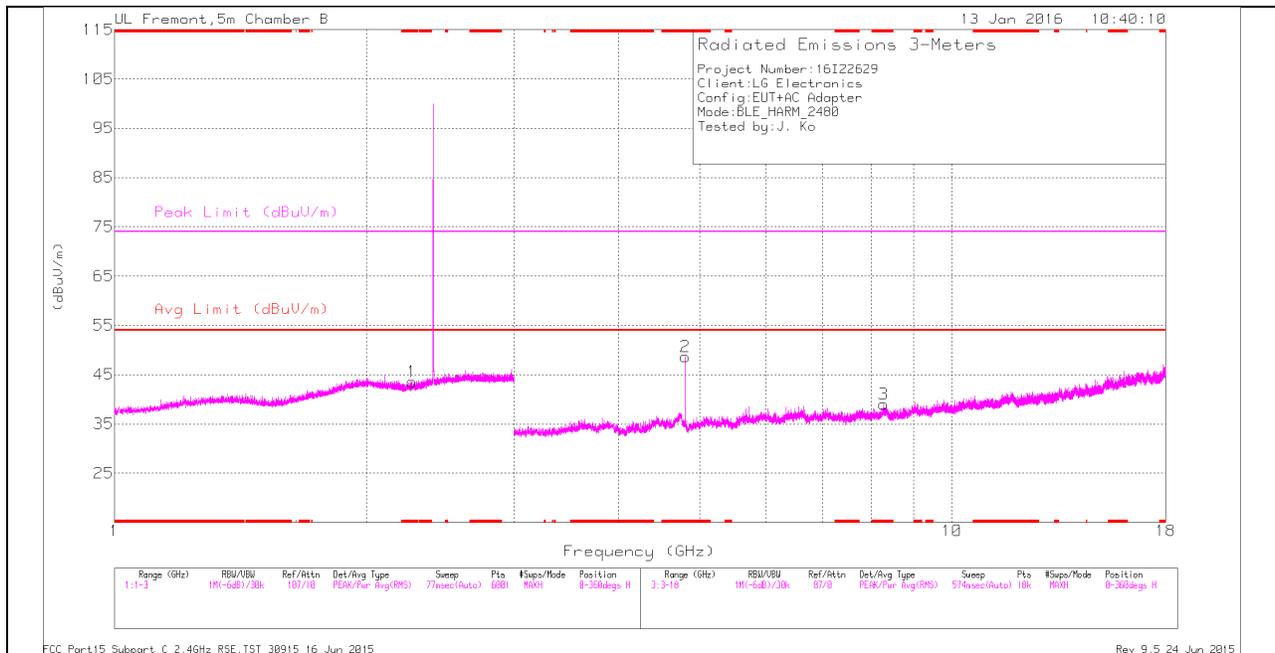
| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cb/Ftr /Pad (dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|----------------|----------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| * 2.234 | 44.3 | PK2 | 31.2 | -24.3 | 0 | 51.2 | - | - | 74 | -22.8 | 16 | 203 | H |
| * 2.232 | 32.52 | MAV1 | 31.2 | -24.3 | 2.06 | 41.48 | 54 | -12.52 | - | - | 16 | 203 | H |
| * 2.719 | 44.4 | PK2 | 32.6 | -23.8 | 0 | 53.2 | - | - | 74 | -20.8 | 315 | 142 | V |
| * 2.719 | 32.5 | MAV1 | 32.6 | -23.8 | 2.06 | 43.36 | 54 | -10.64 | - | - | 315 | 142 | V |
| * 4.804 | 49.7 | PK2 | 34.3 | -31 | 0 | 53 | - | - | 74 | -21 | 291 | 292 | H |
| * 4.804 | 43.81 | MAV1 | 34.3 | -31 | 2.06 | 49.17 | 54 | -4.83 | - | - | 291 | 292 | H |
| * 11.655 | 35.08 | PK2 | 38.5 | -24.9 | 0 | 48.68 | - | - | 74 | -25.32 | 291 | 219 | H |
| * 11.653 | 24.27 | MAV1 | 38.5 | -24.9 | 2.06 | 39.93 | 54 | -14.07 | - | - | 291 | 219 | H |
| * 4.719 | 41.44 | PK2 | 34.3 | -31 | 0 | 44.74 | - | - | 74 | -29.26 | 184 | 292 | V |
| * 4.718 | 30.74 | MAV1 | 34.2 | -31 | 2.06 | 36 | 54 | -18 | - | - | 184 | 292 | V |
| * 11.895 | 34.84 | PK2 | 38.6 | -24.9 | 0 | 48.54 | - | - | 74 | -25.46 | 333 | 148 | V |
| * 11.894 | 24.39 | MAV1 | 38.6 | -24.9 | 2.06 | 40.15 | 54 | -13.85 | - | - | 333 | 148 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

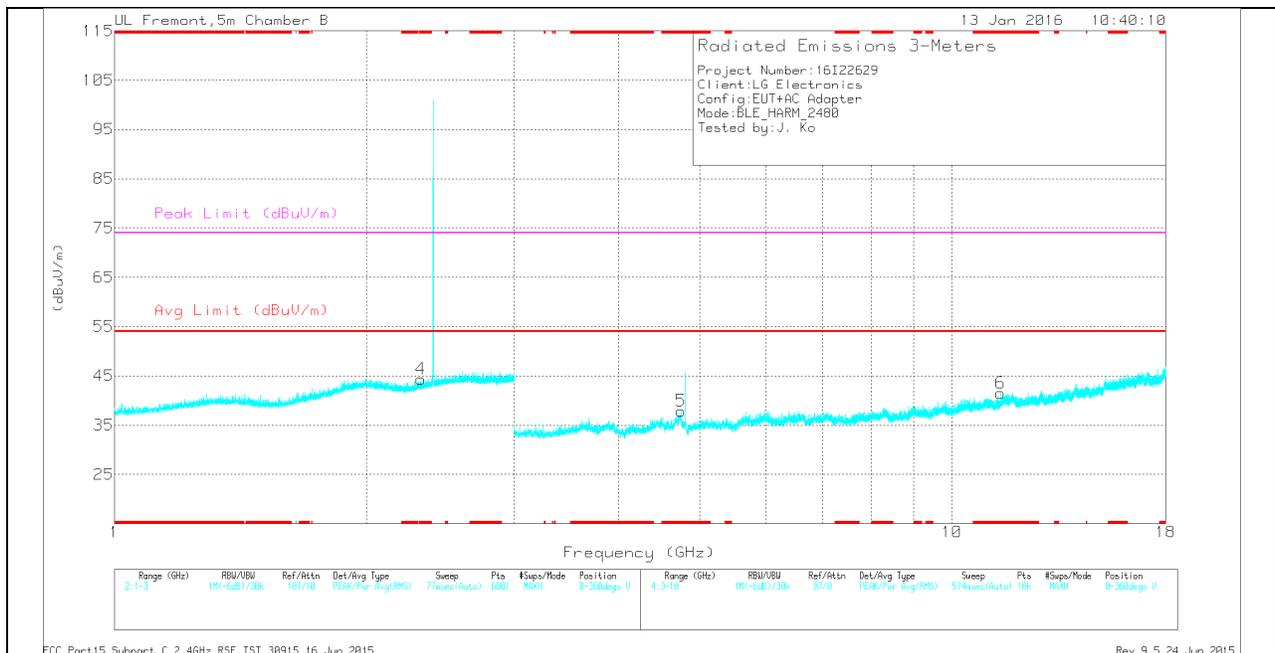
MAV1 - KDB558074 Option 1 Maximum RMS Average

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/Cbl/Filtr /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 | * 2.267 | 36.51 | Pk | 31.4 | -24.3 | 0 | 43.61 | - | - | 74 | -30.39 | 0-360 | 101 | H |
| 4 | * 2.322 | 36.89 | Pk | 31.7 | -24.2 | 0 | 44.39 | - | - | 74 | -29.61 | 0-360 | 101 | V |
| 2 | * 4.804 | 45.38 | Pk | 34.3 | -31 | 0 | 48.68 | - | - | 74 | -25.32 | 0-360 | 199 | H |
| 3 | * 8.291 | 30.83 | Pk | 35.7 | -27.5 | 0 | 39.03 | - | - | 74 | -34.97 | 0-360 | 101 | H |
| 5 | * 4.747 | 34.32 | Pk | 34.3 | -30.7 | 0 | 37.92 | - | - | 74 | -36.08 | 0-360 | 199 | V |
| 6 | * 11.435 | 28.08 | Pk | 38.1 | -24.7 | 0 | 41.48 | - | - | 74 | -32.52 | 0-360 | 101 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | AF T345 (dB/m) | Amp/Cbl/Filtr /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 |
|-----------------|----------------------|------|----------------|-------------------------|--------------|----------------------------|--------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| * 2.267 | 44.05 | PK2 | 31.4 | -24.3 | 0 | 51.15 | - | - | 74 | -22.85 | 360 | 101 | H |
| * 2.267 | 32.54 | MAv1 | 31.4 | -24.3 | 2.06 | 41.7 | 54 | -12.3 | - | - | 360 | 101 | H |
| * 2.323 | 44.17 | PK2 | 31.7 | -24.2 | 0 | 51.67 | - | - | 74 | -22.33 | 333 | 110 | V |
| * 2.321 | 32.48 | MAv1 | 31.7 | -24.2 | 2.06 | 42.04 | 54 | -11.96 | - | - | 333 | 110 | V |
| * 4.804 | 50.43 | PK2 | 34.3 | -31 | 0 | 53.73 | - | - | 74 | -20.27 | 296 | 292 | H |
| * 4.804 | 44.45 | MAv1 | 34.3 | -31 | 2.06 | 49.81 | 54 | -4.19 | - | - | 296 | 292 | H |
| * 8.292 | 38.82 | PK2 | 35.7 | -27.5 | 0 | 47.02 | - | - | 74 | -26.98 | 188 | 155 | H |
| * 8.293 | 27.02 | MAv1 | 35.7 | -27.6 | 2.06 | 37.18 | 54 | -16.82 | - | - | 188 | 155 | H |
| * 4.747 | 41.64 | PK2 | 34.3 | -30.7 | 0 | 45.24 | - | - | 74 | -28.76 | 185 | 265 | V |
| * 4.745 | 30.68 | MAv1 | 34.3 | -30.7 | 2.06 | 36.34 | 54 | -17.66 | - | - | 185 | 265 | V |
| * 11.434 | 35.06 | PK2 | 38.1 | -24.8 | 0 | 48.36 | - | - | 74 | -25.64 | 87 | 154 | V |
| * 11.433 | 23.77 | MAv1 | 38.1 | -24.8 | 2.06 | 39.13 | 54 | -14.87 | - | - | 87 | 154 | V |

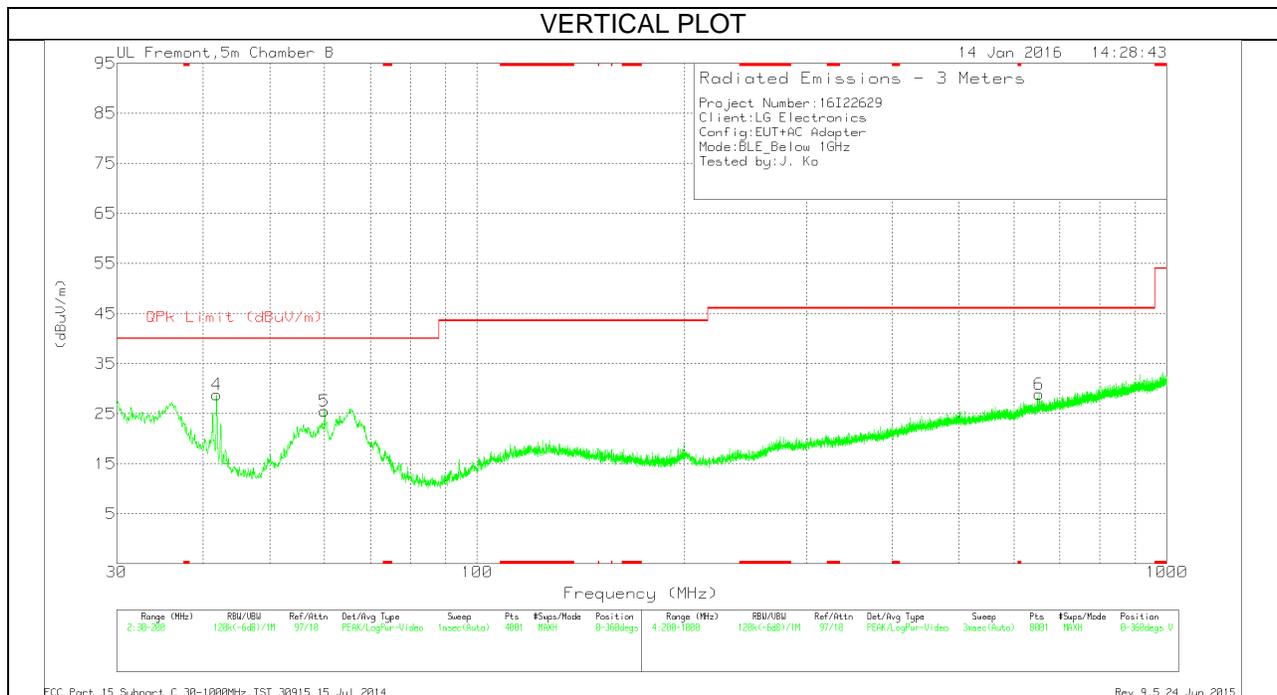
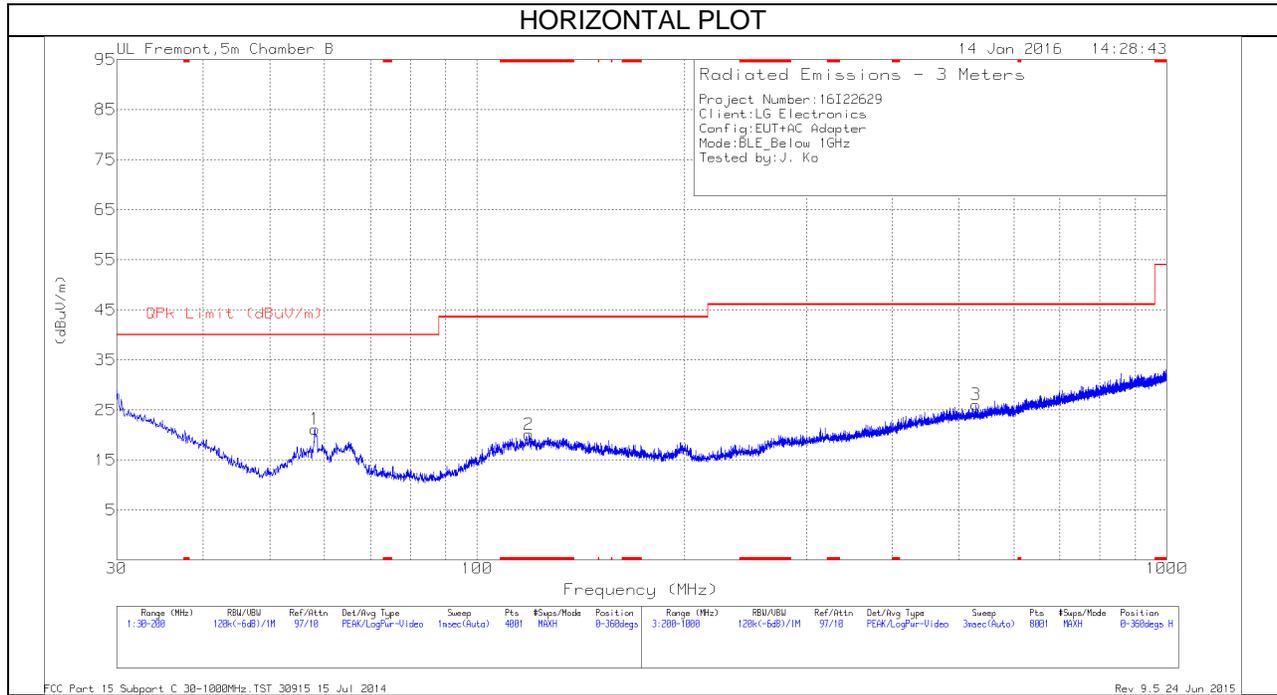
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2. WORST-CASE BELOW 1 GHz

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



BELOW 1 GHz TABLE

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T130 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 2 | * 118.825 | 30.32 | Pk | 17.7 | -27.9 | 20.12 | 43.52 | -23.4 | 0-360 | 299 | H |
| 4 | 41.9 | 40.99 | Pk | 16.5 | -28.7 | 28.79 | 40 | -11.21 | 0-360 | 101 | V |
| 1 | 58.135 | 38.49 | Pk | 11.3 | -28.6 | 21.19 | 40 | -18.81 | 0-360 | 199 | H |
| 5 | 60.0688 | 42.52 | Pk | 11.6 | -28.6 | 25.52 | 40 | -14.48 | 0-360 | 101 | V |
| 3 | 528.5 | 30.36 | Pk | 21.9 | -26.2 | 26.06 | 46.02 | -19.96 | 0-360 | 399 | H |
| 6 | 653 | 30.88 | Pk | 23.7 | -25.7 | 28.88 | 46.02 | -17.14 | 0-360 | 199 | V |

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector