FCC CFR47 PART 15 SUBPART C

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-E4V3

ISSUE DATE: 2/15/2016

Prepared for

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Prepared by

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	1/26/2016	Initial Issue	D. CORONIA
V2	2/10/2016	Updated Section 5.2	D. CORONIA
V3	2/15/2016	Updated EUT Description	D. CORONIA

TABLE OF CONTENTS

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.

Approved & Released
For UL Verification Services Inc. By:

DAN CORONIA
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UL VERIFICATION SERVICES INC

Tested By:

JEFFREY WU
CONSUMER TECHNOLOGY DIVISION
WiSE ENGINEER
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, 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
☐ Chamber A	☐ Chamber D
☒ Chamber B	☐ Chamber E
☐ Chamber C	☐ Chamber F
	☐ Chamber G
	☐ 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:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
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.

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

802.11 b mode: 1 Mbps
802.11 g mode: 6 Mbps

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

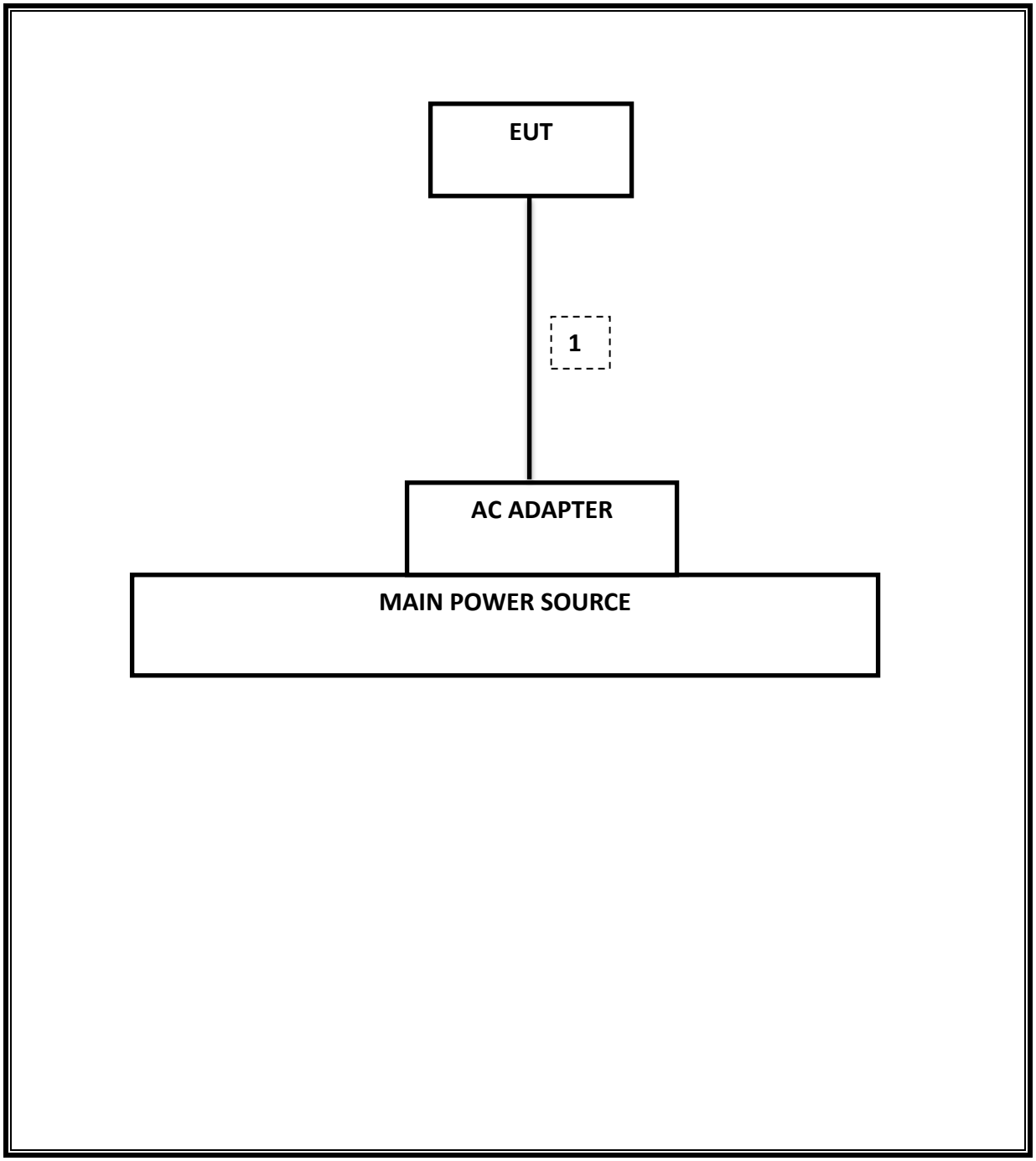
I/O CABLES

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

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**	**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. MEASUREMENT METHODS

KDB 558074 D01 DTS Meas Guidance v03r04: Measurement Procedure AVGPM-G is used for power and AVGPSD-3 is used for power spectral density.

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

Band edge emissions within Restricted Bands are measured using RMS with duty cycle factor offset method.

8. 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

9. ANTENNA PORT TEST RESULTS

9.1 ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

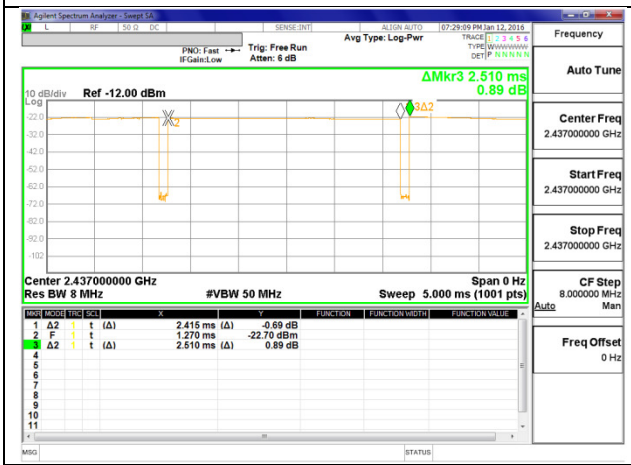
None; for reporting purposes only.

PROCEDURE

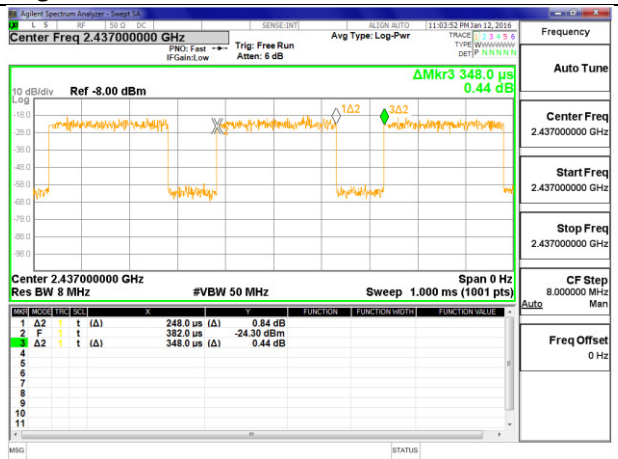
KDB 558074 Zero-Span Spectrum Analyzer Method.

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11b	2.42	2.51	0.962	96.2%	0.17	0.414
802.11g	0.25	0.35	0.713	71.3%	1.47	4.032

11b 2.4



11g 2.4



10. RADIATED TEST RESULTS

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; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor= 10log (1/x).

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

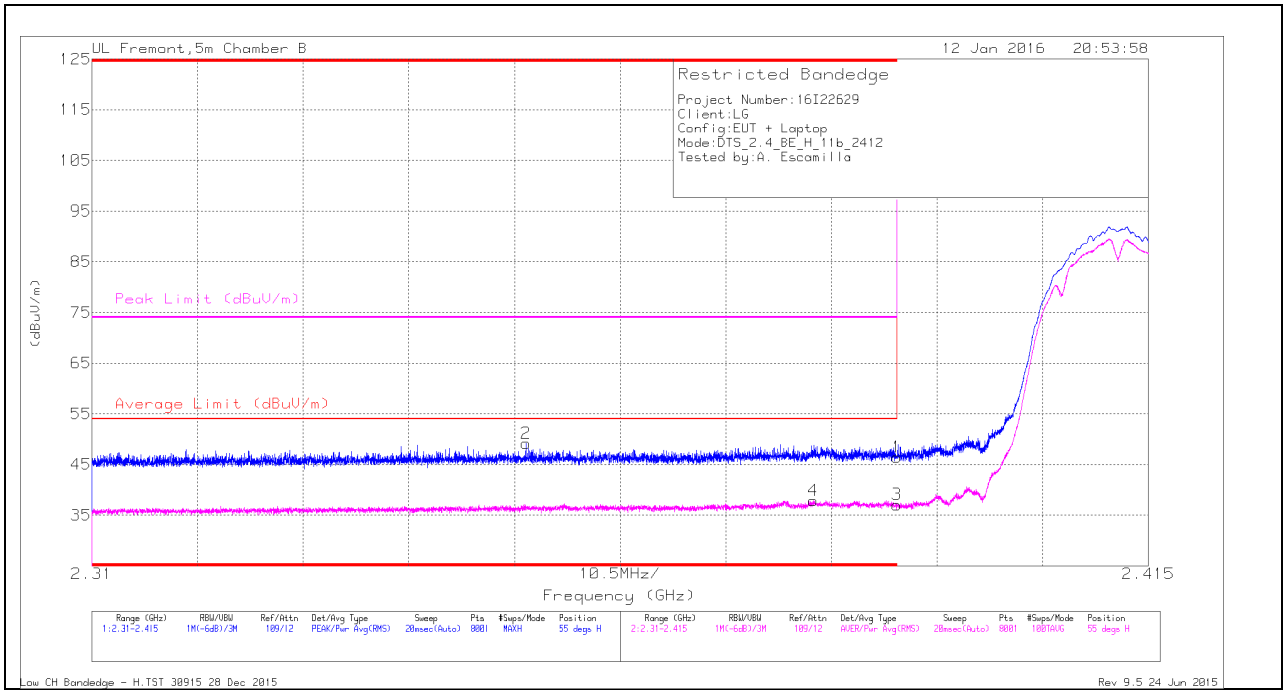
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.1. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

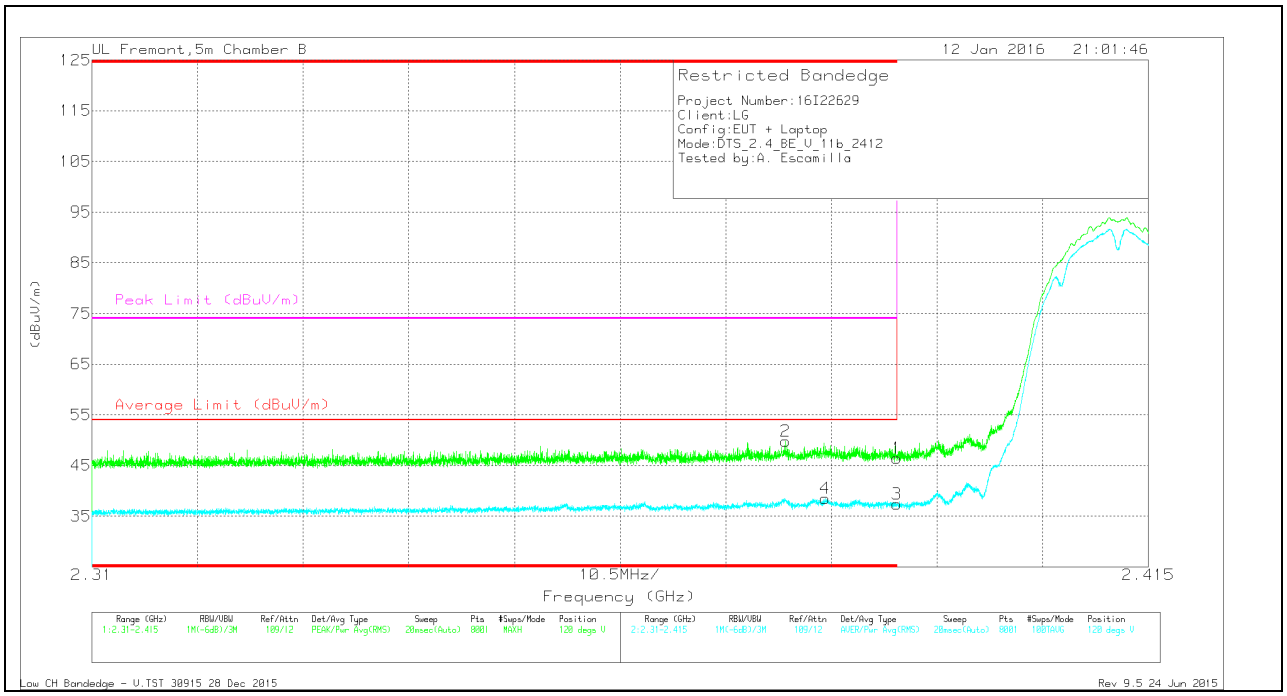
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.33	Pk	32	-21.9	0	46.43	-	-	74	-27.57	55	186	H
2	* 2.353	39.22	Pk	31.8	-21.9	0	49.12	-	-	74	-24.88	55	186	H
3	* 2.39	26.8	RMS	32	-21.9	.17	37.07	54	-16.93	-	-	55	186	H
4	* 2.382	27.54	RMS	32	-21.8	.17	37.91	54	-16.09	-	-	55	186	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/Fltr/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	* 2.39	36.39	Pk	32	-21.9	0	46.49	-	-	74	-27.51	120	275	V
2	* 2.379	39.83	Pk	31.9	-21.9	0	49.83	-	-	74	-24.17	120	275	V
3	* 2.39	27.12	RMS	32	-21.9	.17	37.39	54	-16.61	-	-	120	275	V
4	* 2.383	28.16	RMS	32	-21.8	.17	38.53	54	-15.47	-	-	120	275	V

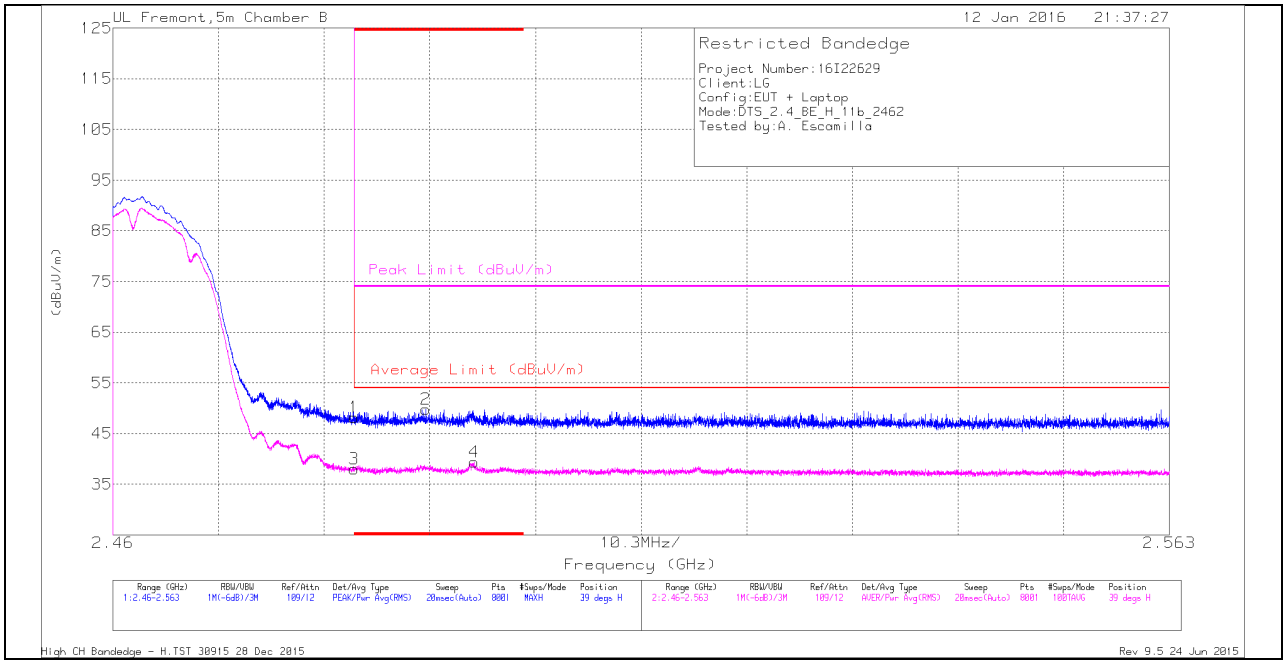
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

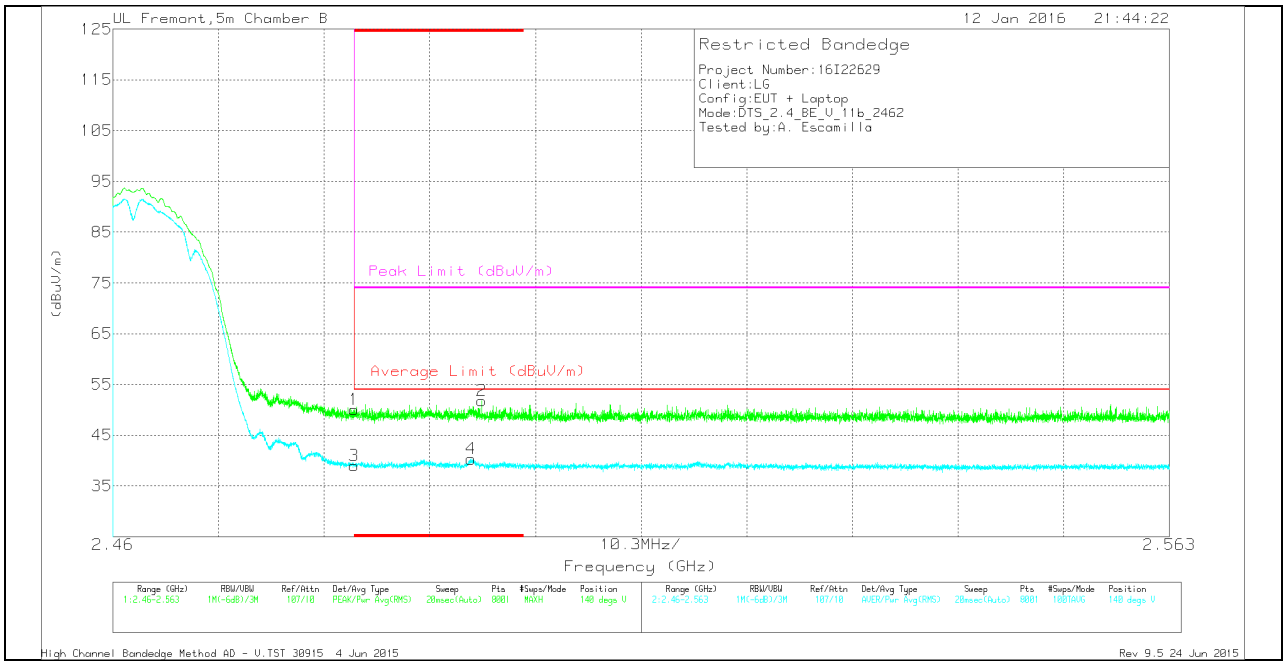
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	37.47	Pk	32.5	-21.8	0	48.17	-	-	74	-25.83	39	181	H
2	* 2.491	39.24	Pk	32.5	-21.9	0	49.84	-	-	74	-24.16	39	181	H
3	* 2.484	27.08	RMS	32.5	-21.8	.17	37.95	54	-16.05	-	-	39	181	H
4	* 2.495	28.47	RMS	32.5	-21.8	.17	39.34	54	-14.66	-	-	39	181	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt 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	41.51	Pk	32.5	-24	0	50.01	-	-	74	-23.99	140	228	V
3	* 2.484	30.32	RMS	32.5	-24	.17	38.99	-	-	-	-	140	228	V
4	* 2.495	31.53	RMS	32.5	-23.9	.17	40.3	-	-	-	-	140	228	V
2	* 2.496	43.32	Pk	32.5	-24	0	51.82	-	-	74	-22.18	140	228	V

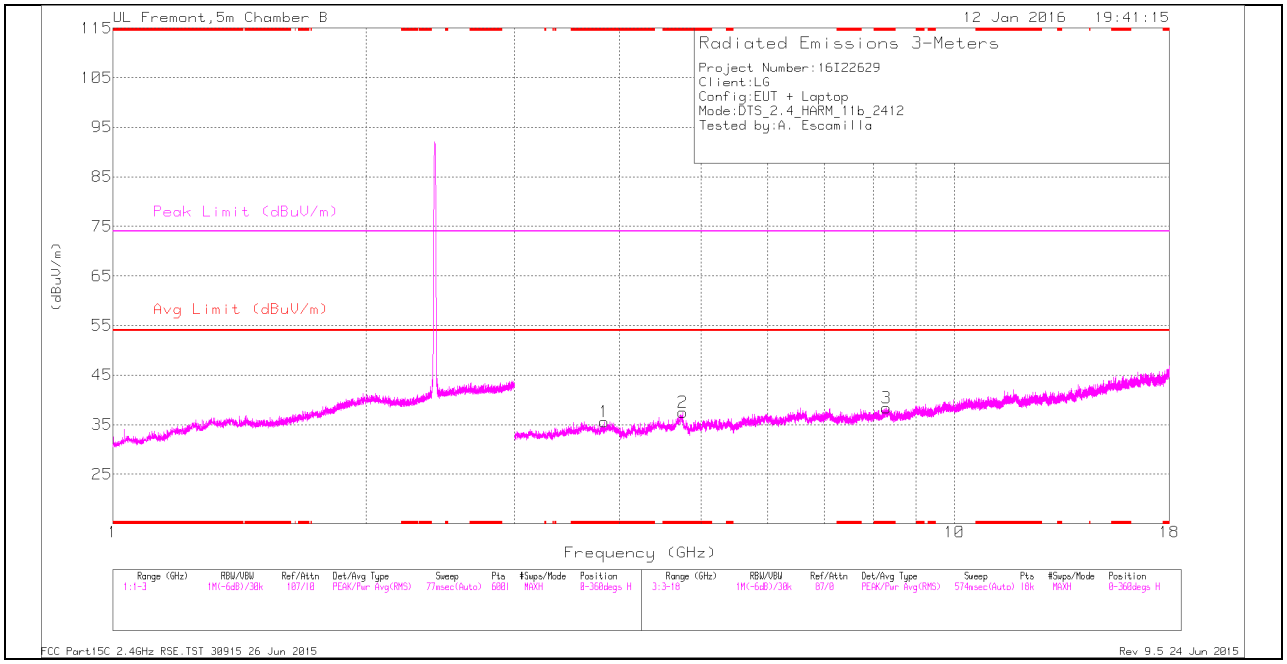
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

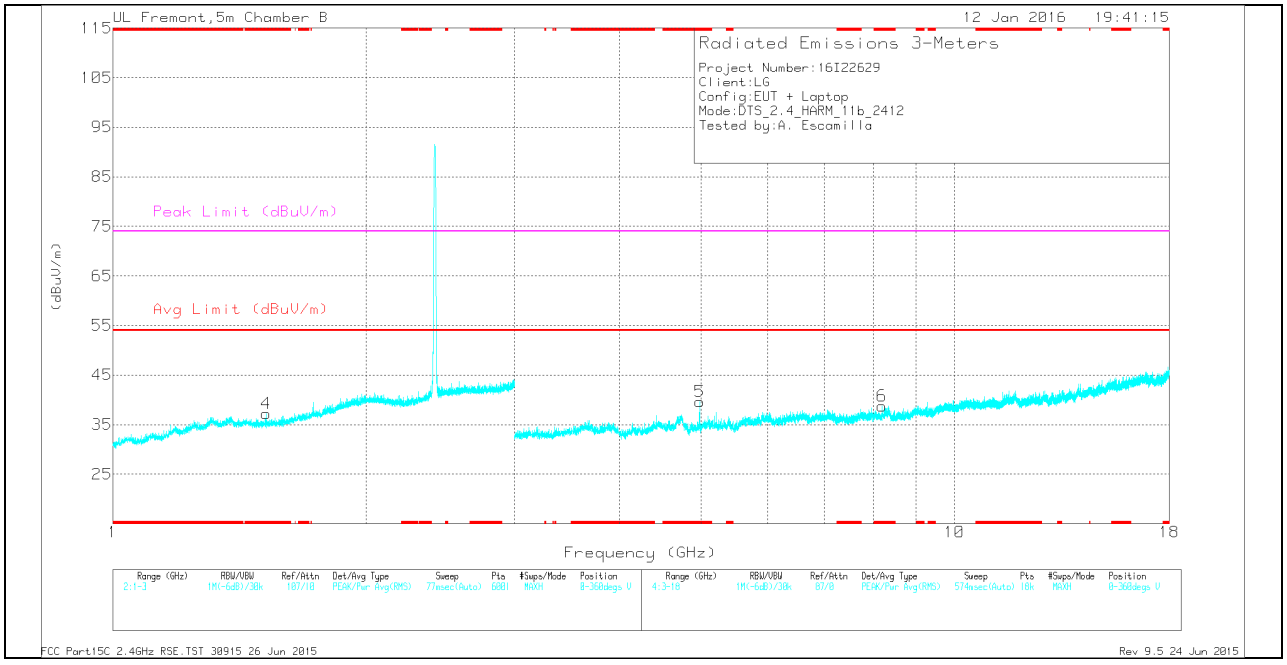
HARMONICS AND SPURIOUS EMISSIONS

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/Cbl/Fltr /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
4	* 1.521	30.44	Pk	28.7	-21.9	0	37.24	-	-	74	-36.76	0-360	101	V
1	* 3.833	34.25	Pk	33.4	-32.1	0	35.55	-	-	74	-38.45	0-360	101	H
2	* 4.752	33.87	Pk	34.3	-30.7	0	37.47	-	-	74	-36.53	0-360	101	H
3	* 8.306	30.42	Pk	35.7	-27.7	0	38.42	-	-	74	-35.58	0-360	101	H
5	* 4.977	37.1	Pk	34.1	-31.6	0	39.6	-	-	74	-34.4	0-360	101	V
6	* 8.201	32	Pk	35.7	-28.9	0	38.8	-	-	74	-35.2	0-360	200	V

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

Pk - Peak detector

Radiated Emissions

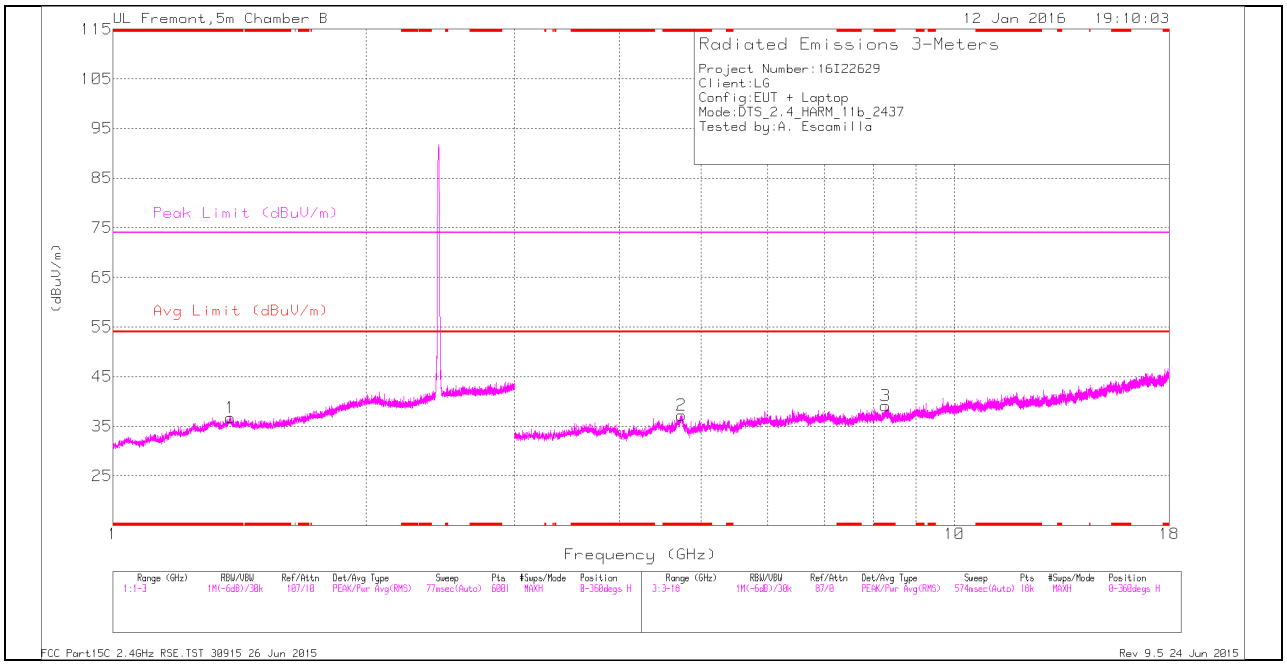
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.522	37.14	PK2	28.7	-21.9	0	43.94	-	-	74	-30.06	57	129	V
* 1.519	25.38	MAv1	28.7	-22	.17	32.25	54	-21.75	-	-	57	129	V
* 3.833	41.79	PK2	33.4	-32.1	0	43.09	-	-	74	-30.91	154	152	H
* 3.833	30.65	MAv1	33.4	-32.1	.17	32.12	54	-21.88	-	-	154	152	H
* 4.753	41.94	PK2	34.3	-30.7	0	45.54	-	-	74	-28.46	123	134	H
* 4.753	31.1	MAv1	34.3	-30.7	.17	34.87	54	-19.13	-	-	123	134	H
* 8.306	37.89	PK2	35.7	-27.7	0	45.89	-	-	74	-28.11	214	221	H
* 8.304	27.15	MAv1	35.7	-27.7	.17	35.32	54	-18.68	-	-	214	221	H
* 4.977	44.84	PK2	34.1	-31.6	0	47.34	-	-	74	-26.66	150	210	V
* 4.978	30.1	MAv1	34.1	-31.6	.17	32.77	54	-21.23	-	-	150	210	V
* 8.2	39.12	PK2	35.7	-28.9	0	45.92	-	-	74	-28.08	360	182	V
* 8.201	27.74	MAv1	35.7	-28.9	.17	34.71	54	-19.29	-	-	360	182	V

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

PK2 - KDB558074 Method: Maximum Peak

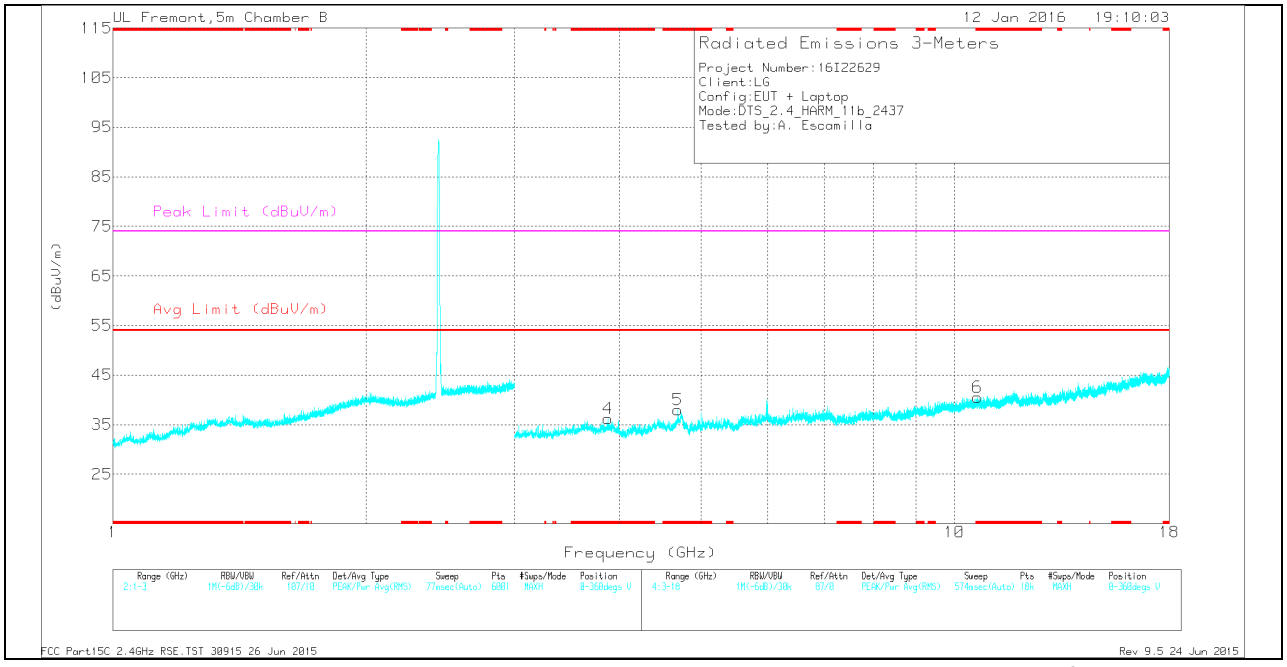
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/Cbl/Fltr /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	* 1.379	29.65	Pk	29.4	-22.3	0	36.75	-	-	74	-37.25	0-360	101	H
2	* 4.736	33.59	Pk	34.3	-30.7	0	37.19	-	-	74	-36.81	0-360	200	H
3	* 8.28	31.1	Pk	35.7	-27.7	0	39.1	-	-	74	-34.9	0-360	200	H
4	* 3.873	34.3	Pk	33.5	-31.6	0	36.2	-	-	74	-37.8	0-360	200	V
5	* 4.694	35.49	Pk	34.2	-31.7	0	37.99	-	-	74	-36.01	0-360	200	V
6	* 10.649	27.94	Pk	37.6	-25	0	40.54	-	-	74	-33.46	0-360	200	V

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

Pk - Peak detector

Radiated Emissions

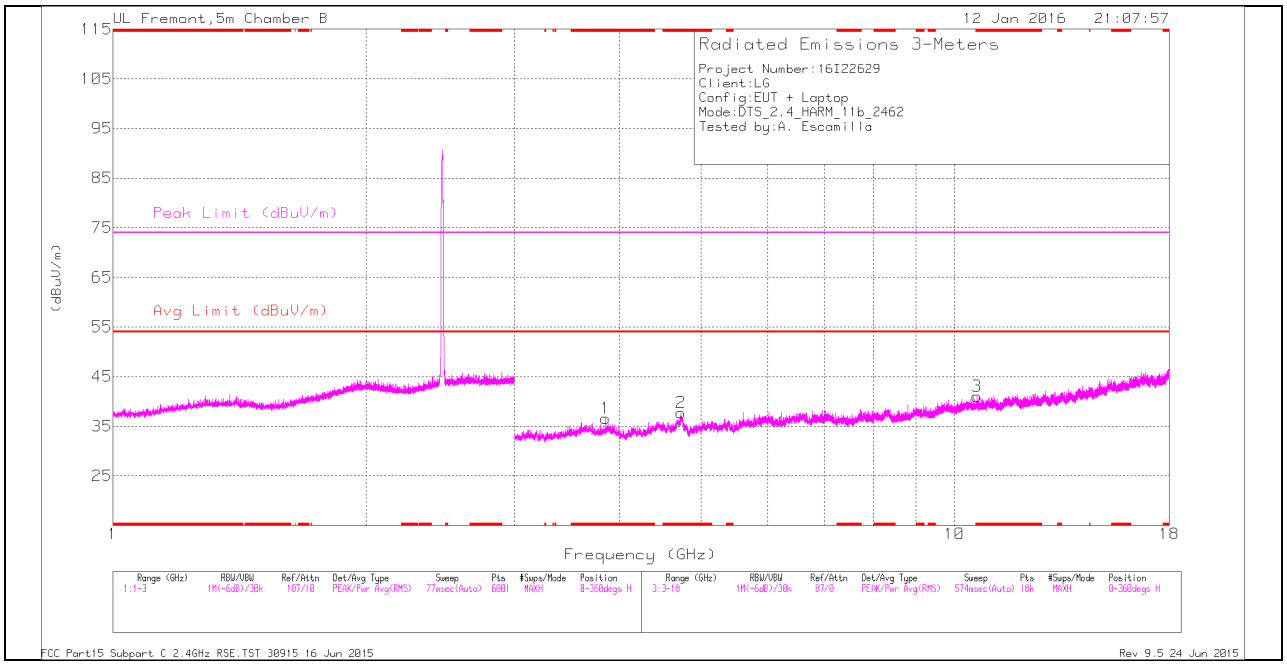
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.378	36.99	PK2	29.4	-22.3	0	44.09	-	-	74	-29.91	260	112	H
* 1.378	25.56	MAv1	29.4	-22.3	.17	32.83	54	-21.17	-	-	260	112	H
* 4.736	41.52	PK2	34.3	-30.7	0	45.12	-	-	74	-28.88	201	146	H
* 4.735	30.51	MAv1	34.3	-30.7	.17	34.28	54	-19.72	-	-	201	146	H
* 8.28	38.12	PK2	35.7	-27.7	0	46.12	-	-	74	-27.88	153	155	H
* 8.282	27.39	MAv1	35.7	-27.6	.17	35.66	54	-18.34	-	-	153	155	H
* 3.872	41.74	PK2	33.5	-31.6	0	43.64	-	-	74	-30.36	179	200	V
* 3.875	30.65	MAv1	33.5	-31.6	.17	32.72	54	-21.28	-	-	179	200	V
* 4.693	42.66	PK2	34.2	-31.7	0	45.16	-	-	74	-28.84	98	263	V
* 4.692	30.97	MAv1	34.2	-31.7	.17	33.64	54	-20.36	-	-	98	263	V
* 10.647	34.45	PK2	37.6	-25	0	47.05	-	-	74	-26.95	29	234	V
* 10.648	23.8	MAv1	37.6	-25	.17	36.57	54	-17.43	-	-	29	234	V

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

PK2 - KDB558074 Method: Maximum Peak

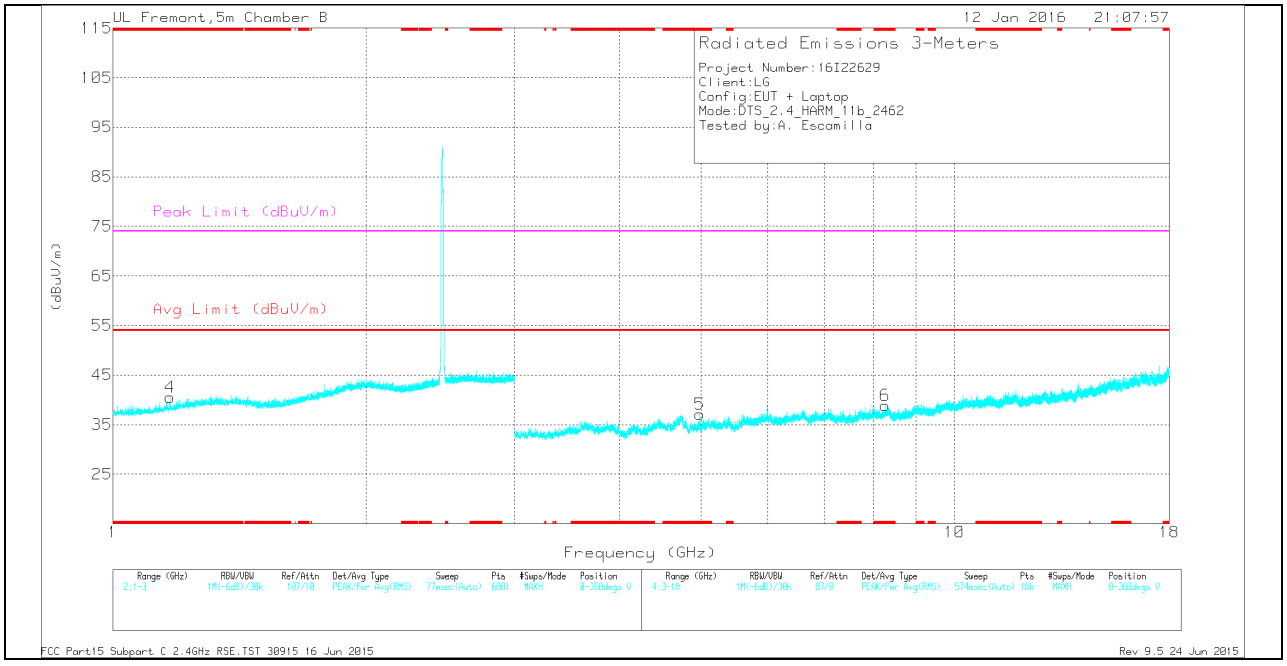
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/Fltr /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
4	* 1.169	37.77	Pk	28.2	-25.5	0	40.47	-	-	74	-33.53	0-360	101	V
3	* 10.628	28.42	Pk	37.6	-25	0	41.02	-	-	74	-32.98	0-360	199	H
1	* 3.848	35.2	Pk	33.4	-32	0	36.6	-	-	74	-37.4	0-360	199	H
2	* 4.73	34.18	Pk	34.3	-30.7	0	37.78	-	-	74	-36.22	0-360	101	H
5	* 4.978	34.54	Pk	34.1	-31.6	0	37.04	-	-	74	-36.96	0-360	101	V
6	* 8.268	31.24	Pk	35.7	-28.1	0	38.84	-	-	74	-35.16	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/ Fltr/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
* 1.17	44.65	PK2	28.2	-25.5	0	47.35	-	-	74	-26.65	155	182	V
* 1.17	32.78	MAv1	28.2	-25.5	.17	35.65	-	-	-	-	155	182	V
* 3.848	41.49	PK2	33.4	-32	0	42.89	-	-	74	-31.11	194	190	H
* 3.848	30.82	MAv1	33.4	-32	.17	32.39	-	-	-	-	194	190	H
* 4.729	42.02	PK2	34.3	-30.7	0	45.62	-	-	74	-28.38	184	176	H
* 4.728	30.63	MAv1	34.3	-30.7	.17	34.4	-	-	-	-	184	176	H
* 10.627	35.33	PK2	37.6	-25	0	47.93	-	-	74	-26.07	270	232	H
* 10.626	24.23	MAv1	37.6	-25	.17	37	-	-	-	-	270	232	H
* 4.979	45.85	PK2	34.1	-31.6	0	48.35	-	-	74	-25.65	335	213	V
* 4.977	29.93	MAv1	34.1	-31.6	.17	32.6	-	-	-	-	335	213	V
* 8.267	39.14	PK2	35.7	-28.1	0	46.74	-	-	74	-27.26	359	172	V
* 8.269	27.55	MAv1	35.7	-28	.17	35.42	-	-	-	-	359	172	V

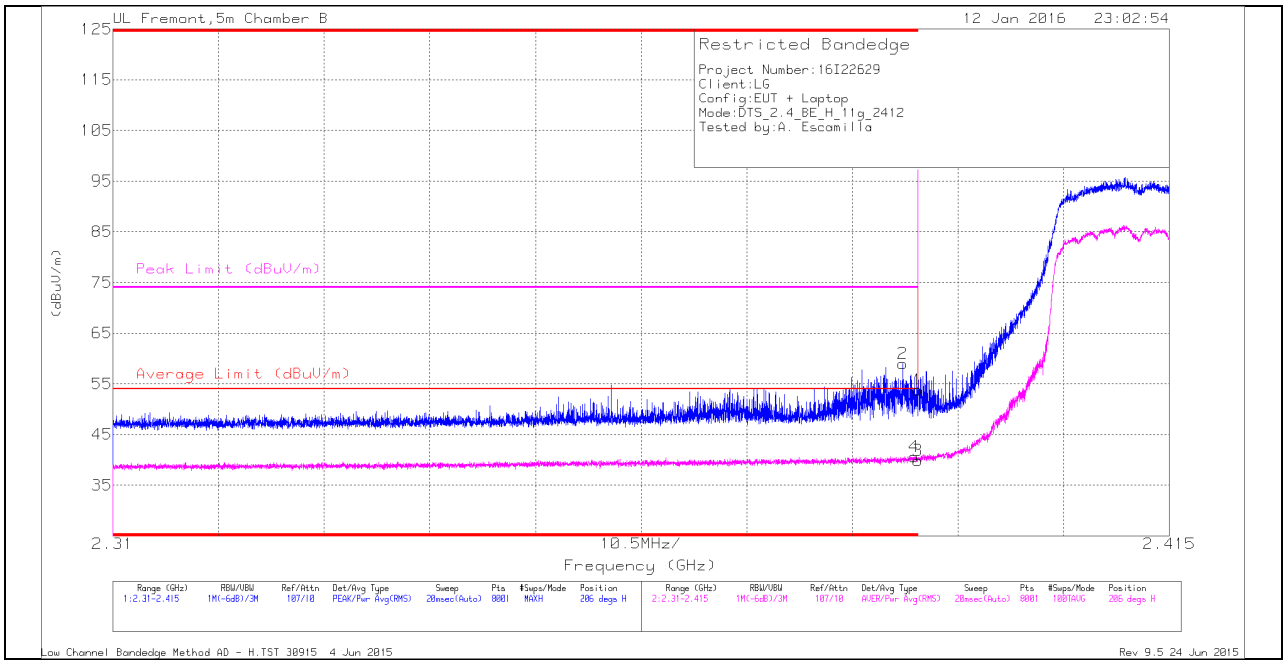
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

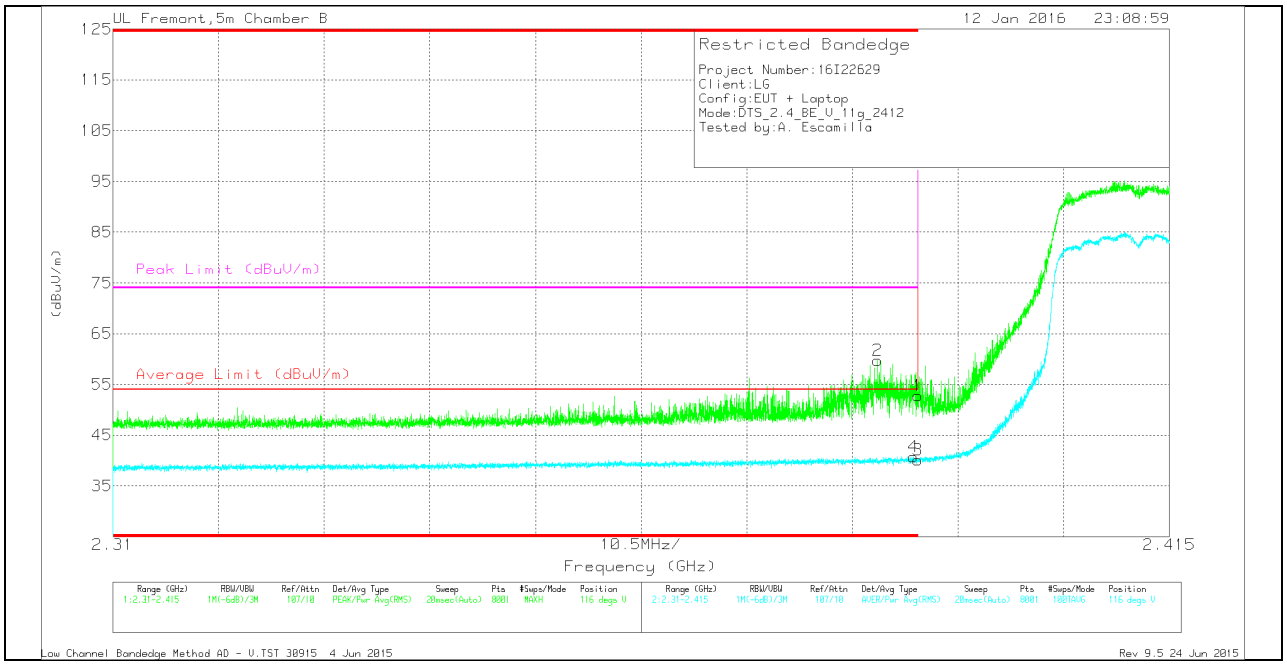
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	45.88	Pk	32	-24.1	0	53.78	-	-	74	-20.22	206	112	H
2	* 2.389	51.06	Pk	32	-24.1	0	58.96	-	-	74	-15.04	206	112	H
3	* 2.39	30.5	RMS	32	-24.1	1.47	39.87	54	-14.13	-	-	206	112	H
4	* 2.39	31.27	RMS	32	-24.1	1.47	40.64	54	-13.36	-	-	206	112	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt 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	* 2.39	44.89	Pk	32	-24.1	0	52.79	-	-	74	-21.21	116	363	V
2	* 2.386	51.85	Pk	32	-24.1	0	59.75	-	-	74	-14.25	116	363	V
3	* 2.39	30.73	RMS	32	-24.1	1.47	40.1	54	-13.9	-	-	116	363	V
4	* 2.39	31.37	RMS	32	-24.1	1.47	40.74	54	-13.26	-	-	116	363	V

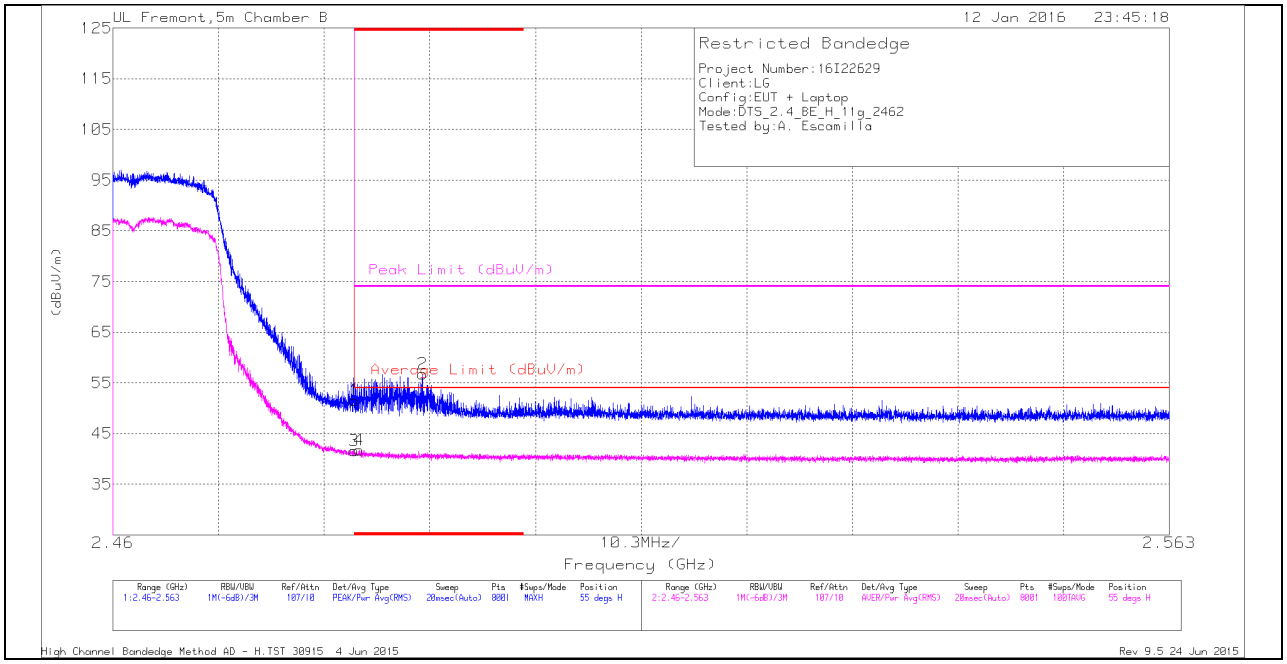
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

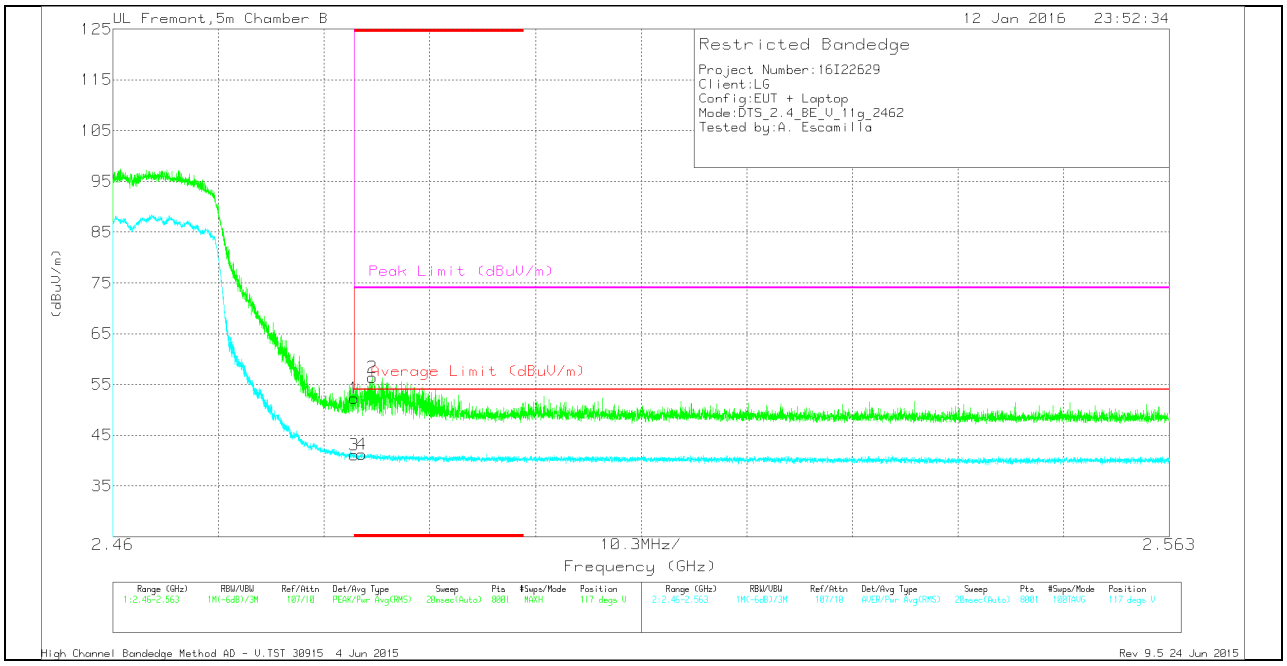
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	43.02	Pk	32.5	-24	0	51.52	-	-	74	-22.48	55	134	H
2	* 2.49	48.25	Pk	32.5	-24	0	56.75	-	-	74	-17.25	55	134	H
3	* 2.484	31.63	RMS	32.5	-24	1.47	41.6	54	-12.4	-	-	55	134	H
4	* 2.484	31.74	RMS	32.5	-24	1.47	41.71	54	-12.29	-	-	55	134	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt 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	43.82	Pk	32.5	-24	0	52.32	-	-	74	-21.68	117	222	V
3	* 2.484	31.08	RMS	32.5	-24	1.47	41.05	54	-12.95	-	-	117	222	V
4	* 2.484	31.3	RMS	32.5	-24	1.47	41.27	54	-12.73	-	-	117	222	V
2	* 2.485	47.9	Pk	32.5	-24	0	56.4	-	-	74	-17.6	117	222	V

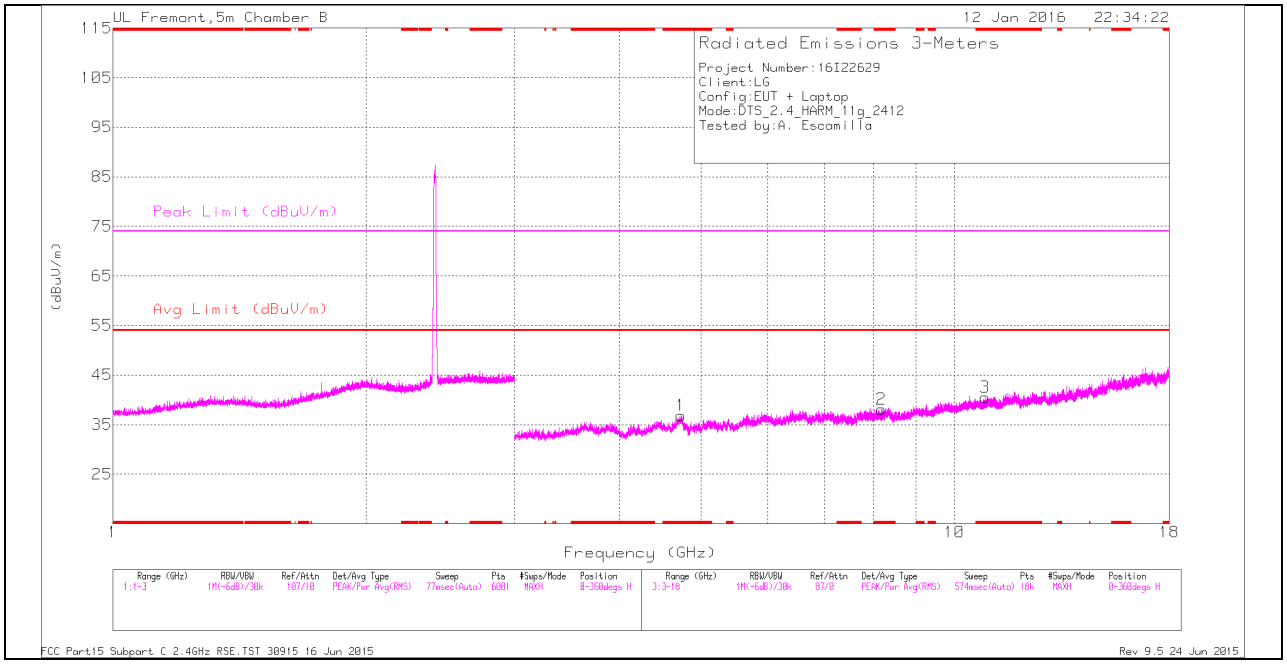
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

Pk - Peak detector

RMS - RMS detection

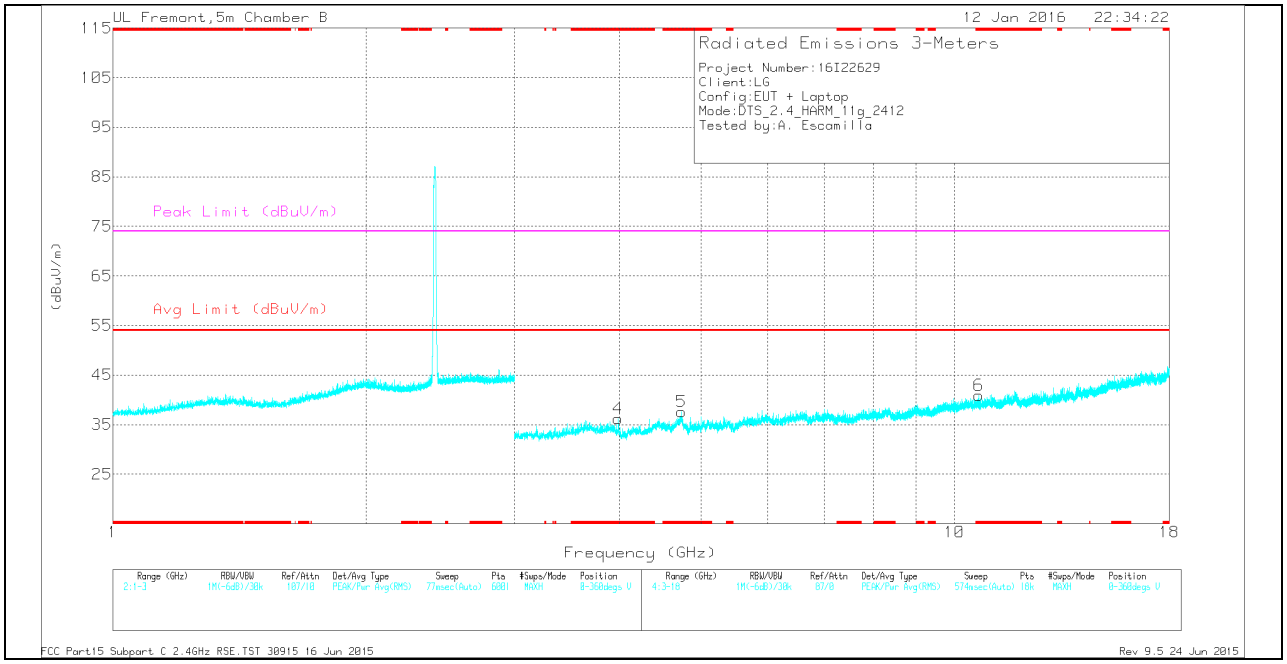
HARMONICS AND SPURIOUS EMISSIONS

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/Cbl/Fltr /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	* 4.734	33.29	Pk	34.3	-30.7	0	36.89	-	-	74	-37.11	0-360	200	H
2	* 8.181	31.24	Pk	35.7	-28.8	0	38.14	-	-	74	-35.86	0-360	200	H
3	* 10.878	28.09	Pk	37.7	-25.3	0	40.49	-	-	74	-33.51	0-360	101	H
4	* 3.984	35.55	Pk	33.3	-32.6	0	36.25	-	-	74	-37.75	0-360	101	V
5	* 4.736	34.02	Pk	34.3	-30.7	0	37.62	-	-	74	-36.38	0-360	200	V
6	* 10.681	28.36	Pk	37.7	-25.2	0	40.86	-	-	74	-33.14	0-360	101	V

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

Pk - Peak detector

Radiated Emissions

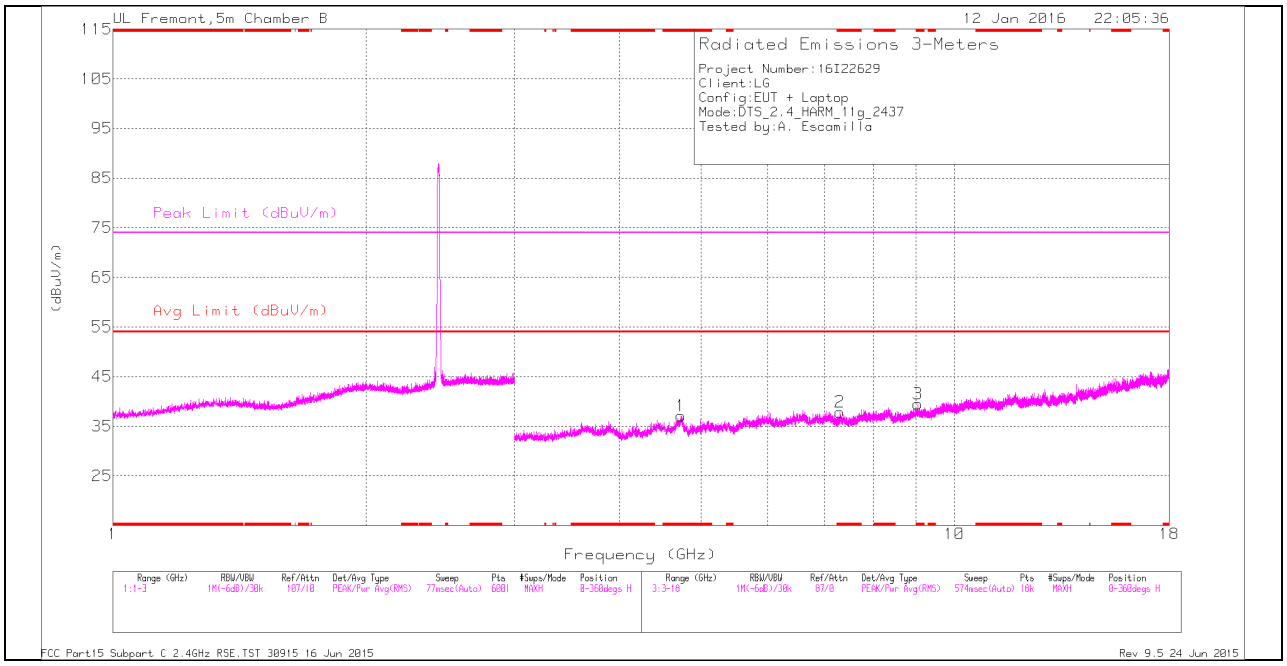
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.735	41.43	PK2	34.3	-30.7	0	45.03	-	-	74	-28.97	27	126	H
* 4.734	30.45	MAv1	34.3	-30.7	1.47	35.52	54	-18.48	-	-	27	126	H
* 8.181	38.78	PK2	35.7	-28.8	0	45.68	-	-	74	-28.32	89	185	H
* 8.183	27.67	MAv1	35.7	-28.8	1.47	36.04	54	-17.96	-	-	89	185	H
* 10.88	35.04	PK2	37.7	-25.3	0	47.44	-	-	74	-26.56	65	171	H
* 10.877	24.26	MAv1	37.7	-25.3	1.47	38.13	54	-15.87	-	-	65	171	H
* 3.983	42.67	PK2	33.4	-32.6	0	43.47	-	-	74	-30.53	231	137	V
* 3.986	30.82	MAv1	33.3	-32.6	1.47	32.99	54	-21.01	-	-	231	137	V
* 4.734	42.55	PK2	34.3	-30.7	0	46.15	-	-	74	-27.85	171	233	V
* 4.734	30.45	MAv1	34.3	-30.7	1.47	35.52	54	-18.48	-	-	171	233	V
* 10.68	35.39	PK2	37.7	-25.2	0	47.89	-	-	74	-26.11	100	111	V
* 10.682	24.3	MAv1	37.7	-25.2	1.47	38.27	54	-15.73	-	-	100	111	V

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

PK2 - KDB558074 Method: Maximum Peak

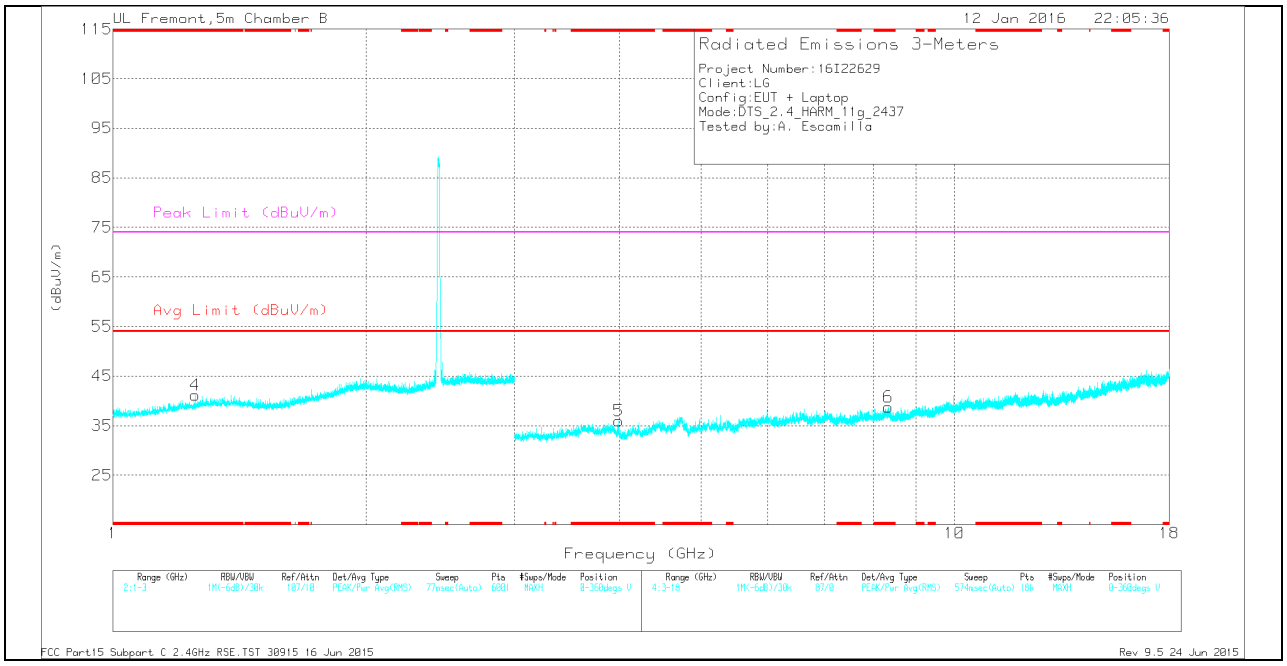
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/Cbl/Fltr /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
4	* 1.252	37.57	Pk	29	-25.4	0	41.17	-	-	74	-32.83	0-360	101	V
5	* 3.987	35.21	Pk	33.3	-32.6	0	35.91	-	-	74	-38.09	0-360	200	V
1	* 4.733	33.47	Pk	34.3	-30.7	0	37.07	-	-	74	-36.93	0-360	200	H
2	* 7.311	32.73	Pk	35.3	-30.2	0	37.83	-	-	74	-36.17	0-360	200	H
6	* 8.351	30.19	Pk	35.7	-27.2	0	38.69	-	-	74	-35.31	0-360	200	V
3	* 9.041	30.57	Pk	36.1	-27.2	0	39.47	-	-	74	-34.53	0-360	200	H

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

Pk - Peak detector

Radiated Emissions

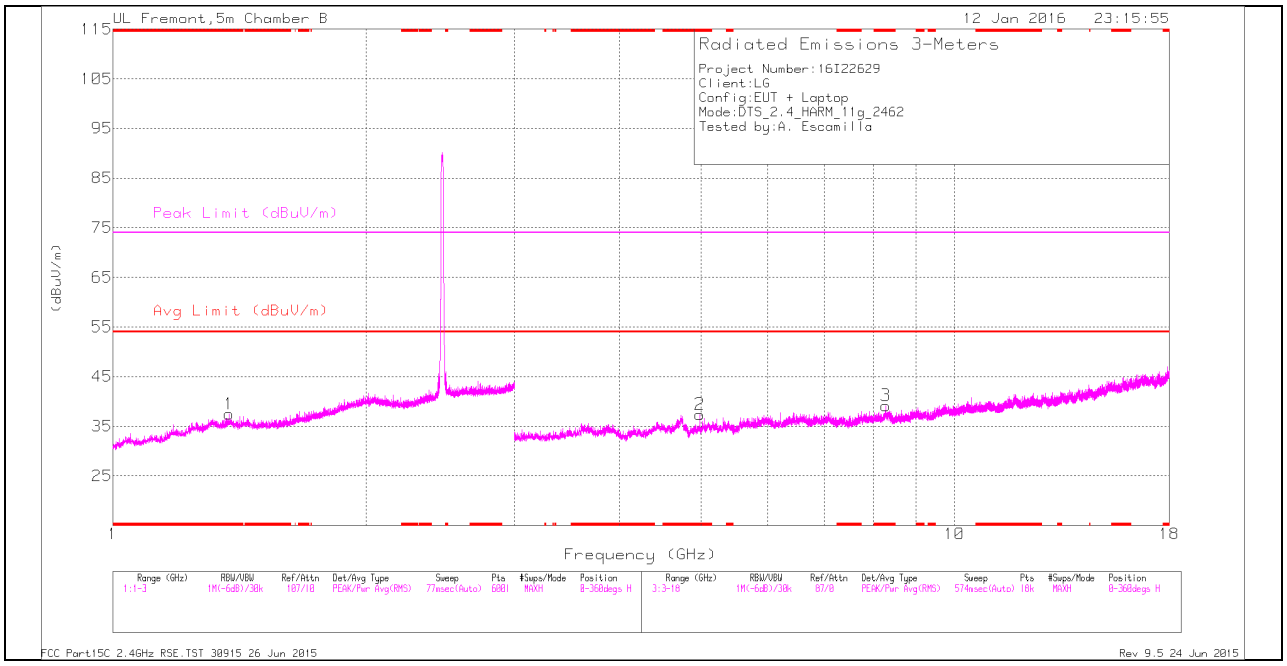
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.252	44.91	PK2	29	-25.4	0	48.51	-	-	74	-25.49	80	163	V
* 1.252	32.71	MAv1	29	-25.4	1.47	37.78	54	-16.22	-	-	80	163	V
* 4.732	41.3	PK2	34.3	-30.7	0	44.9	-	-	74	-29.1	193	186	H
* 4.734	30.38	MAv1	34.3	-30.7	1.47	35.45	54	-18.55	-	-	193	186	H
* 7.31	40.07	PK2	35.3	-30.2	0	45.17	-	-	74	-28.83	171	223	H
* 7.311	29.24	MAv1	35.3	-30.2	1.47	35.81	54	-18.19	-	-	171	223	H
* 9.042	37.72	PK2	36.1	-27.2	0	46.62	-	-	74	-27.38	243	272	H
* 9.043	26.36	MAv1	36.1	-27.2	1.47	36.73	54	-17.27	-	-	243	272	H
* 3.986	41.78	PK2	33.3	-32.6	0	42.48	-	-	74	-31.52	314	216	V
* 3.987	30.91	MAv1	33.3	-32.6	1.47	33.08	54	-20.92	-	-	314	216	V
* 8.349	38.19	PK2	35.7	-27.2	0	46.69	-	-	74	-27.31	19	125	V
* 8.352	26.76	MAv1	35.7	-27.2	1.47	36.73	54	-17.27	-	-	19	125	V

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

PK2 - KDB558074 Method: Maximum Peak

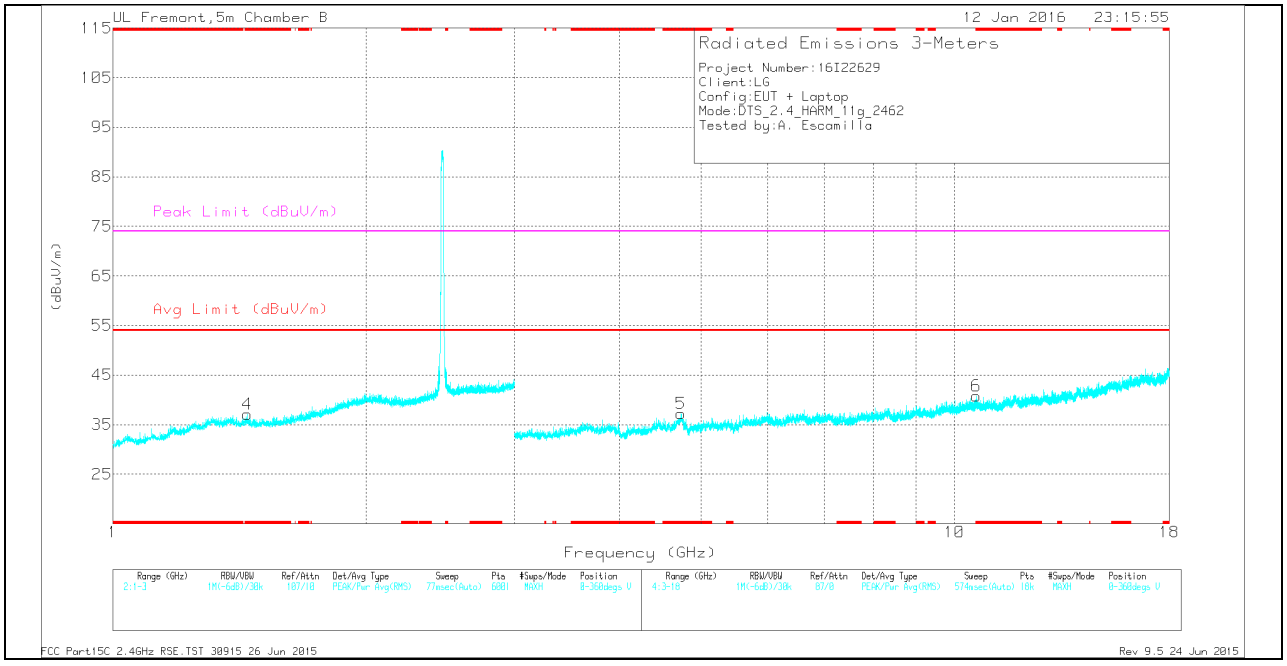
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/Fltr /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	* 1.375	30.38	Pk	29.4	-22.3	0	37.48	-	-	74	-36.52	0-360	101	H
4	* 1.444	30.15	Pk	29	-22.1	0	37.05	-	-	74	-36.95	0-360	101	V
6	* 10.615	28.4	Pk	37.6	-25.2	0	40.8	-	-	74	-33.2	0-360	101	V
5	* 4.732	33.58	Pk	34.3	-30.7	0	37.18	-	-	74	-36.82	0-360	101	V
2	* 4.978	34.91	Pk	34.1	-31.6	0	37.41	-	-	74	-36.59	0-360	199	H
3	* 8.285	30.99	Pk	35.7	-27.5	0	39.19	-	-	74	-34.81	0-360	199	H

* - 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/ Fltr/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
* 1.373	37.59	PK2	29.4	-22.3	0	44.69	-	-	74	-29.31	5	113	H
* 1.376	25.6	MAv1	29.4	-22.3	1.47	34.17	54	-19.83	-	-	5	113	H
* 1.442	37.27	PK2	29.1	-22.1	0	44.27	-	-	74	-29.73	145	172	V
* 1.445	25.52	MAv1	29	-22.1	1.47	33.89	54	-20.11	-	-	145	172	V
* 4.98	42.31	PK2	34.1	-31.6	0	44.81	-	-	74	-29.19	189	197	H
* 4.98	29.87	MAv1	34.1	-31.6	1.47	33.84	54	-20.16	-	-	189	197	H
* 8.285	38.24	PK2	35.7	-27.5	0	46.44	-	-	74	-27.56	311	308	H
* 8.284	27.29	MAv1	35.7	-27.5	1.47	36.96	54	-17.04	-	-	311	308	H
* 4.732	41.64	PK2	34.3	-30.7	0	45.24	-	-	74	-28.76	250	293	V
* 4.731	30.47	MAv1	34.3	-30.7	1.47	35.54	54	-18.46	-	-	250	293	V
* 10.615	35.24	PK2	37.6	-25.2	0	47.64	-	-	74	-26.36	182	232	V
* 10.616	24.22	MAv1	37.6	-25.2	1.47	38.09	54	-15.91	-	-	182	232	V

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

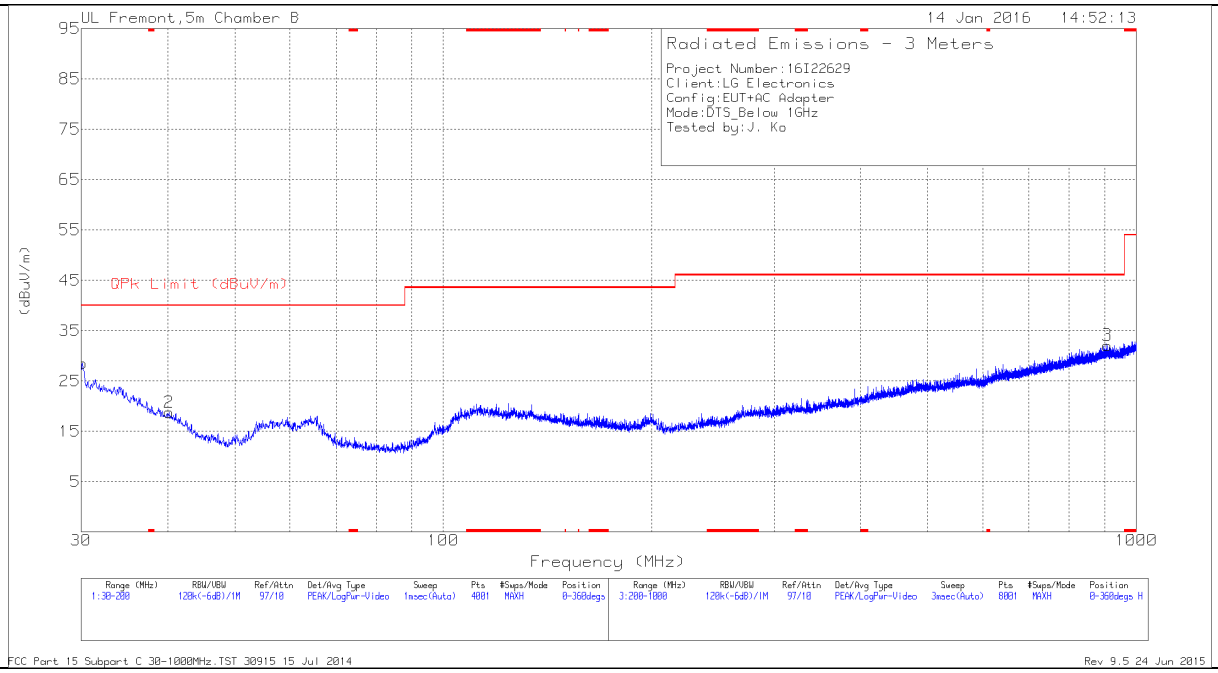
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2. WORST-CASE BELOW 1 GHz

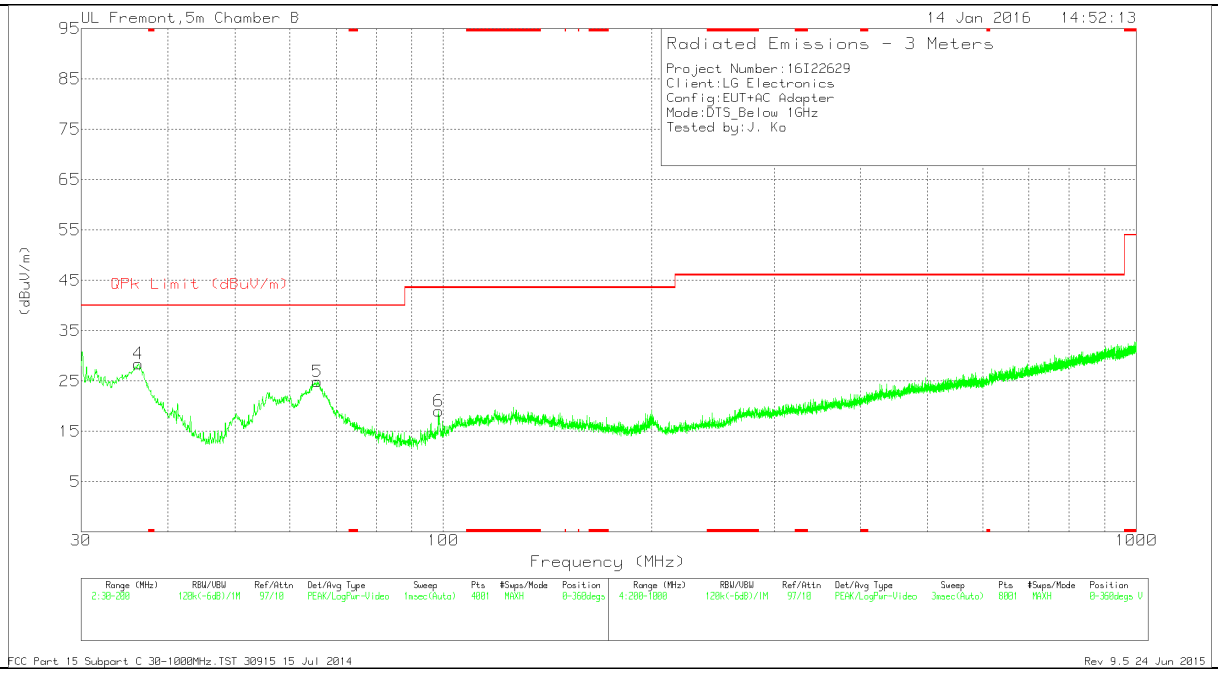
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



Below 1G Data

Trace Markers

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
1	30.1275	32.19	Pk	25.1	-28.8	28.49	40	-11.51	0-360	299	H
4	36.29	36.43	Pk	20.8	-28.8	28.43	40	-11.57	0-360	101	V
2	40.2	29.78	Pk	17.8	-28.8	18.78	40	-21.22	0-360	299	H
5	65.785	41.29	Pk	12	-28.4	24.89	40	-15.11	0-360	101	V
6	98.4675	33.3	Pk	13.8	-28.1	19	43.52	-24.52	0-360	101	V
3	907.5	29.26	Pk	26.6	-23.8	32.06	46.02	-13.96	0-360	399	H

Pk - Peak detector