



FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

CDMA/LTE PHONE WITH BT & DTS WLAN b/g/n

MODEL NUMBER: LGL62VL, L62VL, LG-L62VL

FCC ID: ZNFL62VL

REPORT NUMBER: 15I22333-E4V1

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Prepared for

**LG ELECTRONICS MOBILECOMM U.S.A., INC
1000 SYLVAN AVENUE
ENGLEWOOD CLIFFS,
NEW JERSEY, 07632, U.S.A**

Prepared by

**UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888**



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: CDMA/LTE PHONE WITH BT & DTS WLAN b/g/n
MODEL: LGL62VL, L62VL, LG-L62VL
SERIAL NUMBER: 511KPWQ000233, 511KPXV000234, 511KPKN0002299, 511KPUU000230
DATE TESTED: NOVEMBER 23-24, 2015

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:



DAN CORONIA
CONSUMER TECHNOLOGY DIVISION
WISE PROJECT LEAD
UL VERIFICATION SERVICES INC



KIYA KEDIDA
CONSUMER TECHNOLOGY DIVISION
WISE LAB ENGINEER
UL VERIFICATION SERVICES INC



PENG ZHANG
CONSUMER TECHNOLOGY DIVISION
WISE OPERATION MANAGER
UL VERIFICATION SERVICES INC

TEST METHODOLOGY

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

2. 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.

3. CALIBRATION AND UNCERTAINTY

3.1. 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.

3.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

3.3. 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%.

4. EQUIPMENT UNDER TEST

4.1. DESCRIPTION OF EUT

The EUT is a CDMA/LTE PHONE WITH BT & DTS WLAN b/g/n.

4.2. 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	16.00	39.81
2412 - 2462	802.11g	13.00	19.95
2412 - 2462	802.11n HT20	12.00	15.85

4.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 0.24dBi.

4.4. 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 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:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20mode: MCS0

4.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-02WRE	N/A	N/A
Earphone	LG	N/A	N/A	N/A

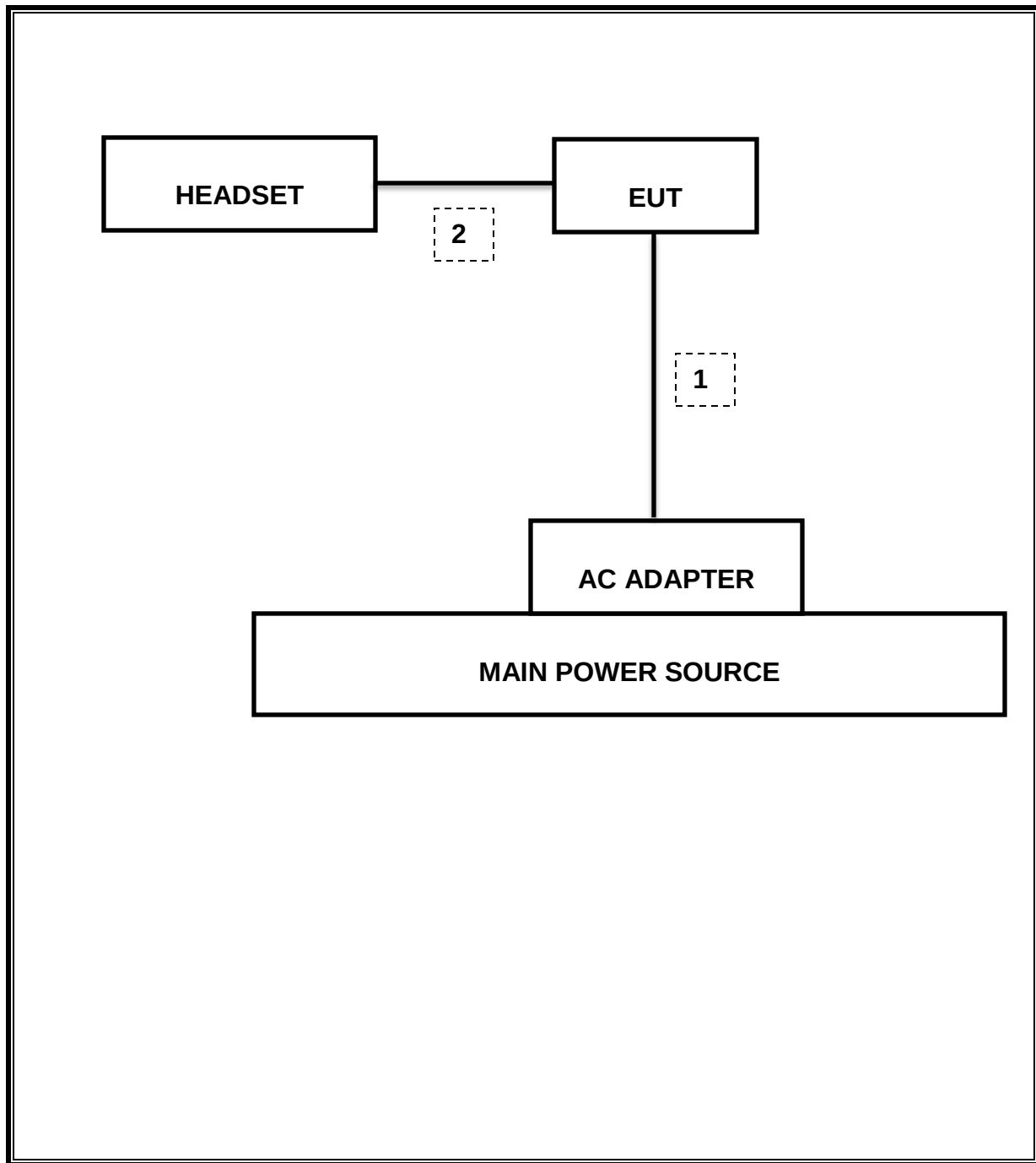
I/O CABLES

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



5. 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, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	477	06/10/16
Antenna, Horn, 18GHz	EMCO	3115	59	11/18/16
Antenna, Horn, 18GHz	ETS Lindgren	3117	345	03/03/16
Antenna, Horn, 18GHz	ETS Lindgren	3117	136	03/03/16
Antenna, Horn, 18GHz	ETS Lindgren	3117	863	04/10/16
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
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	123	10/22/16
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	908	03/03/16
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	907	01/07/16
EMI Test Receiver, 9 KHz to 7 GHz	Rohde & Schwarz	ECSI7	284	09/10/16
Peak Power Meter	Agilent / HP	E4416A	84	01/26/16
Peak / Average Power Sensor	Keysight	E9327A	117	03/09/16
LISN, 30 MHz	FCC	50/250-25-2	24	01/16/16
Reject Filter, 2.4GHz	Micro-Tronics	BRM50702	160	CNR
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	Ver 9.5, June 24, 2015
Conducted Software	UL	UL EMC	Ver 9.5, May 26, 2015
CLT Software	UL	UL RF	Ver 1.0, Feb 2, 2015
Antenna Port Software	UL	UL RF	Ver 3.7, Nov 12, 2015

6. MEASUREMENT METHODS

On Time and Duty Cycle: KDB 558074 D01 v03r03, Section 6.0.

6 dB BW: KDB 558074 D01 v03r03, Section 8.1.

99% BW: ANSI C63.10-2013, Section 6.9.3.

Output Power: KDB 558074 D01 v03r03, Section 9.2.3.2.

Power Spectral Density: KDB 558074 D01 v03r03, Section 10.3.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r03, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r03, Section 12.1.

AC Power Line Conducted Emissions: ANSI C63.10-2013 Section 6.2.

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.

7. SUMMARY TABLE

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)(2)	RSS-247 5.2.1	Occupied Band width (6dB)	>500KHz	Conducted	Pass	7.07 MHz
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	-34.93 dBm
15.247	RSS-247 5.4.4	TX conducted output power	<30dBm		Pass	16.1 dBm
15.247	RSS-247 5.2.2	PSD	<8dBm		Pass	-5.47 dBm
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	46.05 dBuV(PK)
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass	45.66 dBuV/m

8. ANTENNA PORT TEST RESULTS

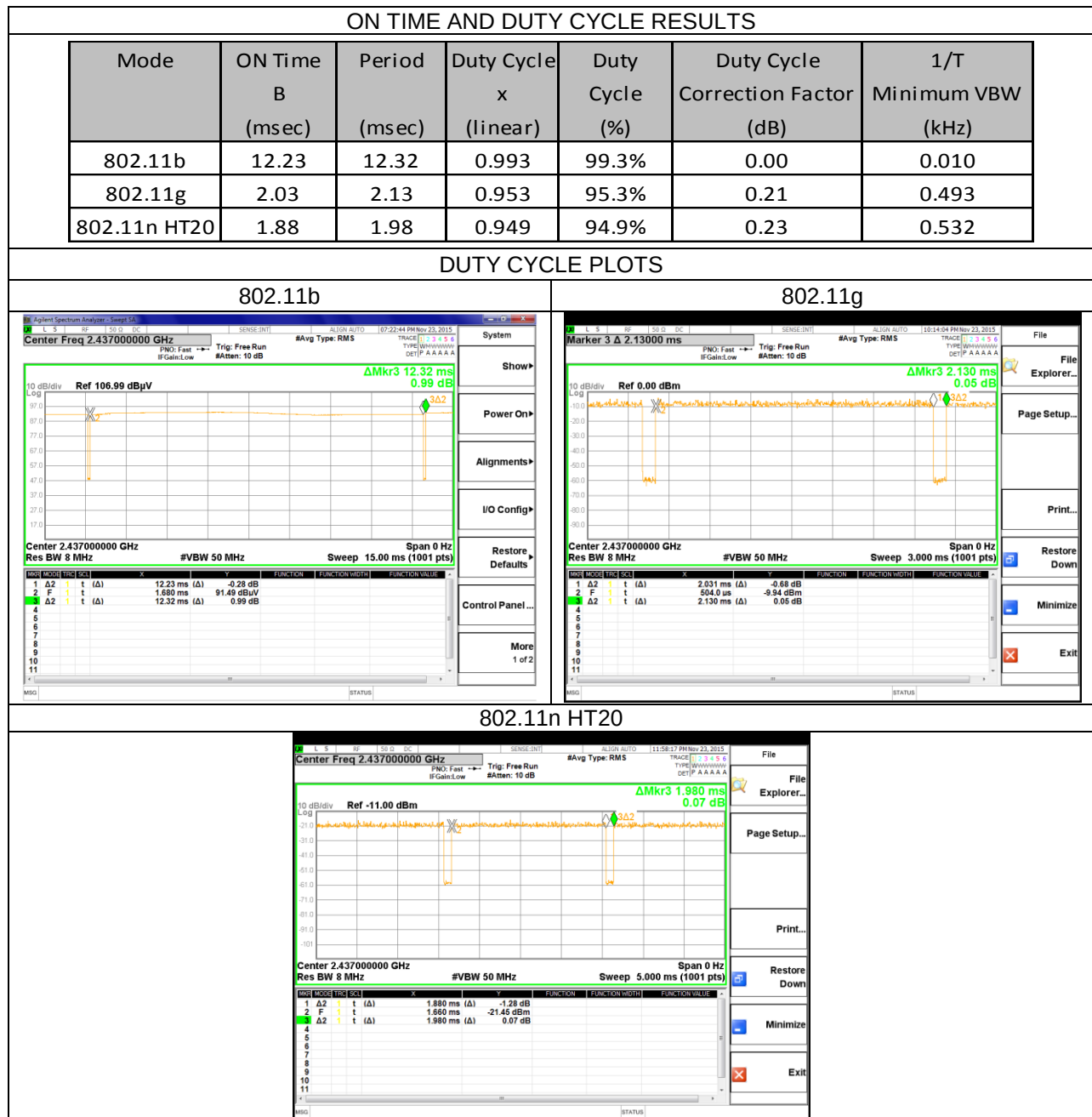
8.1. ON TIME, DUTY CYCLE

LIMITS

None; for reporting purposes only

PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method



8.2. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

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

TEST PROCEDURE

Reference to KDB 558074 D01 DTS Meas Guidance v03r03: The transmitter output is connected to a spectrum analyzer with the RBW set to 100 kHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

RESULTS

8.2.1. 6 dB BANDWIDTH PLOTS AND TABLE

802.11b TEST RESULT TABLE			MID CHANNEL	
			Agilent 09:39:16 Nov 24, 2015 APV3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 7.117 MHz -0.625 dB Peak Log 10 dB/ Offst 10.6 dB DI 2.2 dBm PAvg 100 V1 S2 S3 FS AA Ⓔ(f): FTun Swp Center 2.437 000 GHz Span 11 MHz Res BW 100 kHz VBW 300 kHz Sweep 1.067 ms (1001 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		
Low	2412	7.550		
Middle	2437	7.117		
High	2462	7.070		
Worst		7.550		
802.11g TEST RESULT TABLE			MID CHANNEL	
			Agilent 11:31:45 Nov 24, 2015 APV3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 16.375 MHz -0.032 dB Peak Log 10 dB/ Offst 10.6 dB DI -4.4 dBm PAvg 100 V1 S2 S3 FS AA Ⓔ(f): FTun Swp Center 2.437 000 GHz Span 25 MHz Res BW 100 kHz VBW 300 kHz Sweep 2.4 ms (1001 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		
Low	2412	16.400		
Middle	2437	16.375		
High	2462	16.400		
Worst		16.400		
802.11n HT20 TEST RESULT TABLE			MID CHANNEL	
			Agilent 14:37:25 Nov 24, 2015 APV3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 17.631 MHz -0.188 dB Peak Log 10 dB/ Offst 10.6 dB DI -5.5 dBm PAvg 100 V1 S2 S3 FS AA Ⓔ(f): FTun Swp Center 2.437 000 GHz Span 27 MHz Res BW 100 kHz VBW 300 kHz Sweep 2.6 ms (1001 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		
Low	2412	17.580		
Middle	2437	17.631		
High	2462	17.600		
Worst		17.631		
NOTE: --				

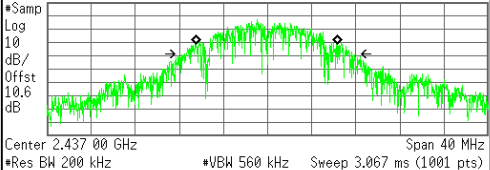
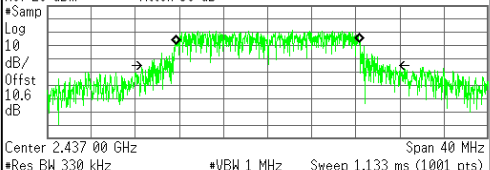
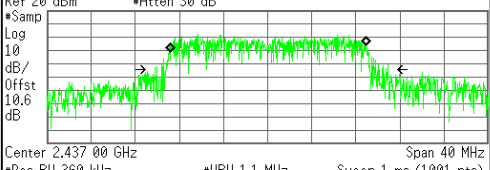
8.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

8.3.1. 99% BANDWIDTH PLOTS AND TABLE

802.11b TEST RESULT TABLE			MID CHANNEL	
			Agilent 09:40:28 Nov 24, 2015 L Ch Freq 2.437 GHz Trig Free Occupied Bandwidth Averages: 100 APv3.7(111215),45258, Conducted B Ref 20 dBm *Atten 30 dB *Samp Log 10 dB/Offst 10.6 dB  Center 2.437 00 GHz Span 40 MHz *Res BW 200 kHz *VBW 500 kHz Sweep 3.067 ms (1001 pts) Occupied Bandwidth 12.6065 MHz Transmit Freq Error 76.048 kHz x dB Bandwidth 15.685 MHz* Occ BW % Pwr 99.00 % x dB -26.00 dB Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	99% Bandwidth (MHz)		
Low	2412	12.350		
Middle	2437	12.607		
High	2462	12.310		
Worst		12.607		
802.11g TEST RESULT TABLE			MID CHANNEL	
			Agilent 11:34:26 Nov 24, 2015 L Ch Freq 2.437 GHz Trig Free Occupied Bandwidth Averages: 100 APv3.7(111215),45258, Conducted B Ref 20 dBm *Atten 30 dB *Samp Log 10 dB/Offst 10.6 dB  Center 2.437 00 GHz Span 40 MHz *Res BW 330 kHz *VBW 1 MHz Sweep 1.133 ms (1001 pts) Occupied Bandwidth 16.4285 MHz Transmit Freq Error 53.455 kHz x dB Bandwidth 21.728 MHz* Occ BW % Pwr 99.00 % x dB -26.00 dB Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	99% Bandwidth (MHz)		
Low	2412	16.440		
Middle	2437	16.429		
High	2462	16.340		
Worst		16.440		
802.11n HT20 TEST RESULT TABLE			MID CHANNEL	
			Agilent 14:38:04 Nov 24, 2015 L Ch Freq 2.437 GHz Trig Free Occupied Bandwidth Averages: 100 APv3.7(111215),45258, Conducted B Ref 20 dBm *Atten 30 dB *Samp Log 10 dB/Offst 10.6 dB  Center 2.437 00 GHz Span 40 MHz *Res BW 360 kHz *VBW 1.1 MHz Sweep 1 ms (1001 pts) Occupied Bandwidth 17.6477 MHz Transmit Freq Error 41.242 kHz x dB Bandwidth 21.835 MHz* Occ BW % Pwr 99.00 % x dB -26.00 dB Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
Channel	Frequency (MHz)	99% Bandwidth (MHz)		
Low	2412	17.500		
Middle	2437	17.648		
High	2462	17.490		
Worst		17.648		

NOTE: --

8.4. OUTPUT POWER

LIMITS

FCC §15.247

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

8.4.1. 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	0.24	30.00	30	36	30.00
Mid	2437	0.24	30.00	30	36	30.00
High	2462	0.24	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	16.00	16.00	30.00	-14.00
Mid	2437	16.00	16.00	30.00	-14.00
High	2462	16.00	16.00	30.00	-14.00
Worst			16.00		

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.4.2. 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	0.24	30.00	30	36	30.00
Mid	2437	0.24	30.00	30	36	30.00
High	2462	0.24	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	13.00	13.00	30.00	-17.00
Mid	2437	13.00	13.00	30.00	-17.00
High	2462	13.00	13.00	30.00	-17.00
Worst			13.00		

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.4.3. 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	0.24	30.00	30	36	30.00
Mid	2437	0.24	30.00	30	36	30.00
High	2462	0.24	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	12.00	12.00	30.00	-18.00
Mid	2437	12.00	12.00	30.00	-18.00
High	2462	12.00	12.00	30.00	-18.00
Worst			12.00		

Note: the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

8.5. PSD

LIMITS

FCC §15.247

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

8.5.1. POWER SPECTRAL DENSITY PLOTS AND TABLE

802.11b TEST RESULT TABLE					MID CHANNEL																					
<table><thead><tr><th>Channel</th><th>Frequency (MHz)</th><th>PSD (dBm)</th><th>Limit (dBm)</th><th>Margin (dB)</th></tr></thead><tbody><tr><td>Low</td><td>2412</td><td>-5.47</td><td>8</td><td>-13.47</td></tr><tr><td>Middle</td><td>2437</td><td>-5.68</td><td>8</td><td>-13.68</td></tr><tr><td>High</td><td>2462</td><td>-5.52</td><td>8</td><td>-13.52</td></tr></tbody></table>					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)	Low	2412	-5.47	8	-13.47	Middle	2437	-5.68	8	-13.68	High	2462	-5.52	8	-13.52	Agilent 09:41:12 Nov 24, 2015 APv3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 2.437 679 GHz -5.680 dBm *Avg Log 10 dB/ Offst 10.6 dB DI 8.0 dBm *PAvg 100 V1 S2 S3 FS AA E(f): FTun Swp Center 2.437 000 GHz Span 19 MHz Res BW 30 kHz VBW 91 kHz Sweep 63.76 ms (1261 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)																	
					Low	2412	-5.47	8	-13.47																	
					Middle	2437	-5.68	8	-13.68																	
					High	2462	-5.52	8	-13.52																	
802.11g TEST RESULT TABLE					MID CHANNEL																					
<table><thead><tr><th>Channel</th><th>Frequency (MHz)</th><th>PSD (dBm)</th><th>Limit (dBm)</th><th>Margin (dB)</th></tr></thead><tbody><tr><td>Low</td><td>2412</td><td>-10.97</td><td>8</td><td>-18.97</td></tr><tr><td>Middle</td><td>2437</td><td>-11.78</td><td>8</td><td>-19.784</td></tr><tr><td>High</td><td>2462</td><td>-11.95</td><td>8</td><td>-19.95</td></tr></tbody></table>					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)	Low	2412	-10.97	8	-18.97	Middle	2437	-11.78	8	-19.784	High	2462	-11.95	8	-19.95	Agilent 11:35:11 Nov 24, 2015 APv3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 2.441 994 GHz -11.784 dBm *Avg Log 10 dB/ Offst 10.6 dB DI 8.0 dBm *PAvg 100 V1 S2 S3 FS AA E(f): FTun Swp Center 2.437 000 GHz Span 25 MHz Res BW 30 kHz VBW 91 kHz Sweep 83.96 ms (1643 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)																	
					Low	2412	-10.97	8	-18.97																	
					Middle	2437	-11.78	8	-19.784																	
					High	2462	-11.95	8	-19.95																	
802.11n HT20 TEST RESULT TABLE					MID CHANNEL																					
<table><thead><tr><th>Channel</th><th>Frequency (MHz)</th><th>PSD (dBm)</th><th>Limit (dBm)</th><th>Margin (dB)</th></tr></thead><tbody><tr><td>Low</td><td>2412</td><td>-12.81</td><td>8</td><td>-20.81</td></tr><tr><td>Middle</td><td>2437</td><td>-13.08</td><td>8</td><td>-21.078</td></tr><tr><td>High</td><td>2462</td><td>-13.19</td><td>8</td><td>-21.19</td></tr></tbody></table>					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)	Low	2412	-12.81	8	-20.81	Middle	2437	-13.08	8	-21.078	High	2462	-13.19	8	-21.19	Agilent 14:38:40 Nov 24, 2015 APv3.7(111215),45258, Conducted B Ref 20 dBm Atten 20 dB Mkr1 2.441 347 GHz -13.078 dBm *Avg Log 10 dB/ Offst 10.6 dB DI 8.0 dBm *PAvg 100 V1 S2 S3 FS AA E(f): FTun Swp Center 2.437 000 GHz Span 27 MHz Res BW 30 kHz VBW 91 kHz Sweep 90.67 ms (1765 pts) Copyright 2000-2011 Agilent Technologies	Measure Meas Off Channel Power Occupied BW ACP Multi Carrier Power Power Stat CCDF More 1 of 2
					Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)																	
					Low	2412	-12.81	8	-20.81																	
					Middle	2437	-13.08	8	-21.078																	
					High	2462	-13.19	8	-21.19																	

NOTE: --

NOTE: --

8.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

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.

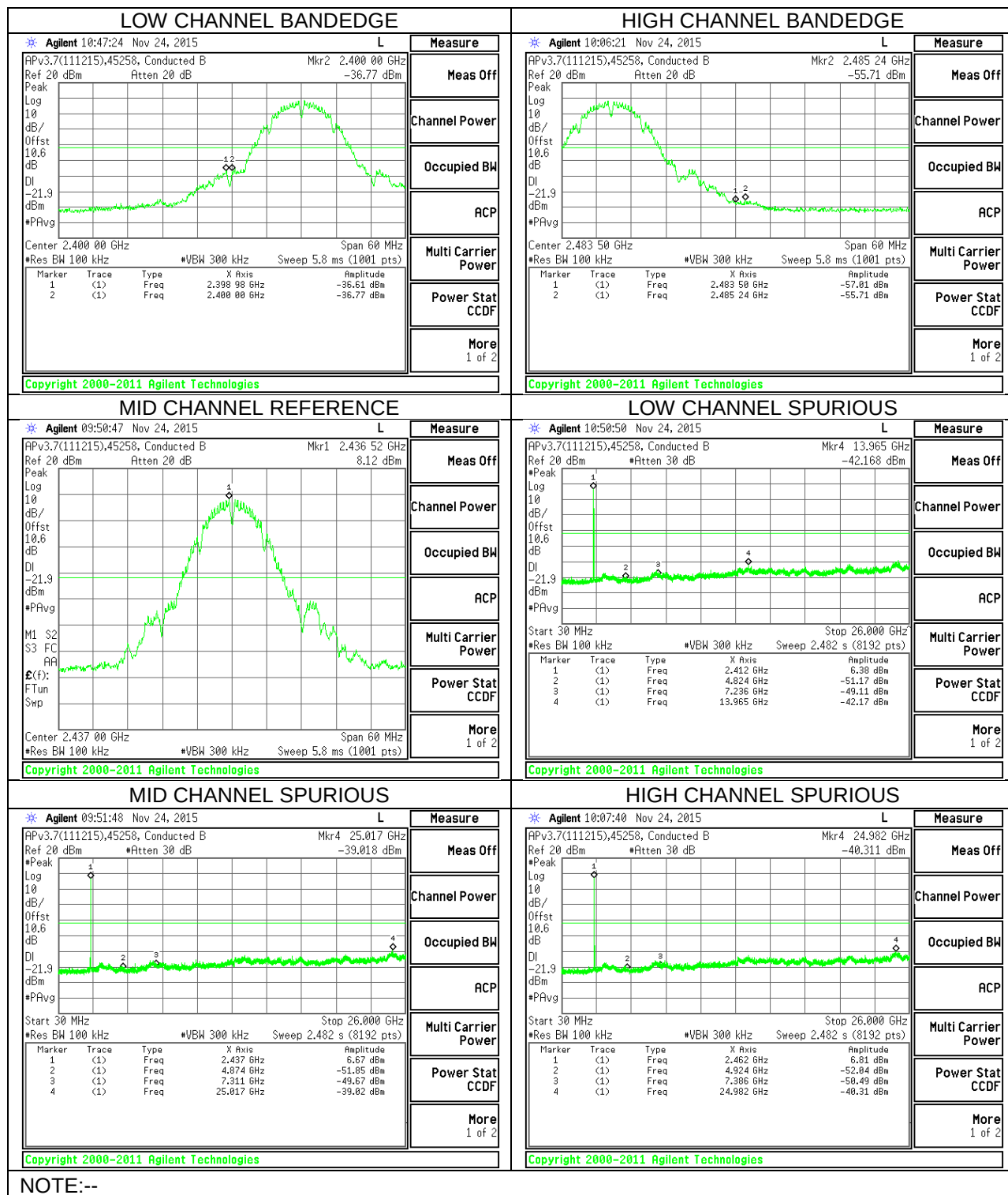
TEST PROCEDURE

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

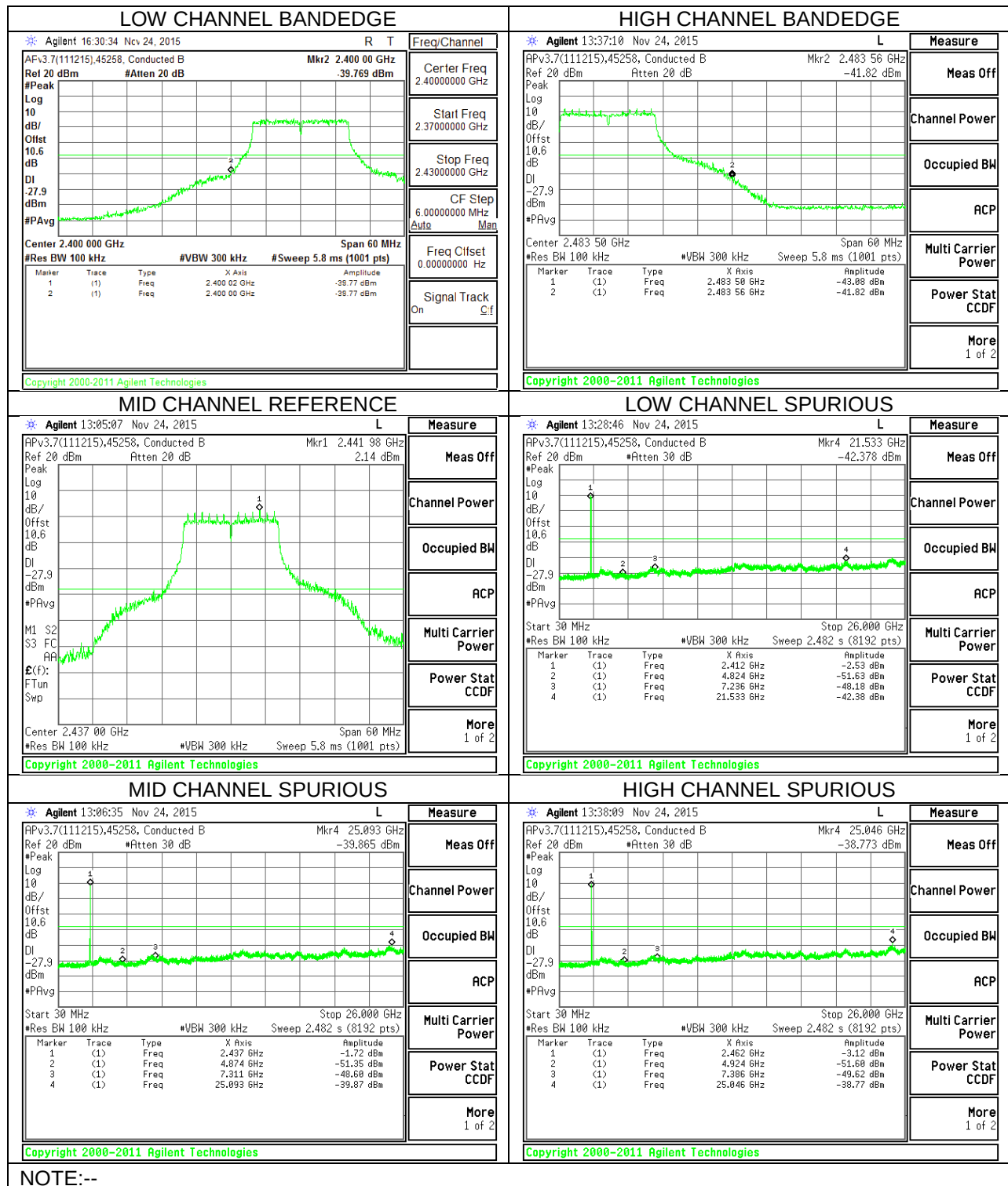
8.6.1. 802.11b MODE IN THE 2.4 GHz BAND

BANDEDGE AND SPURIOUS EMISSIONS PLOTS



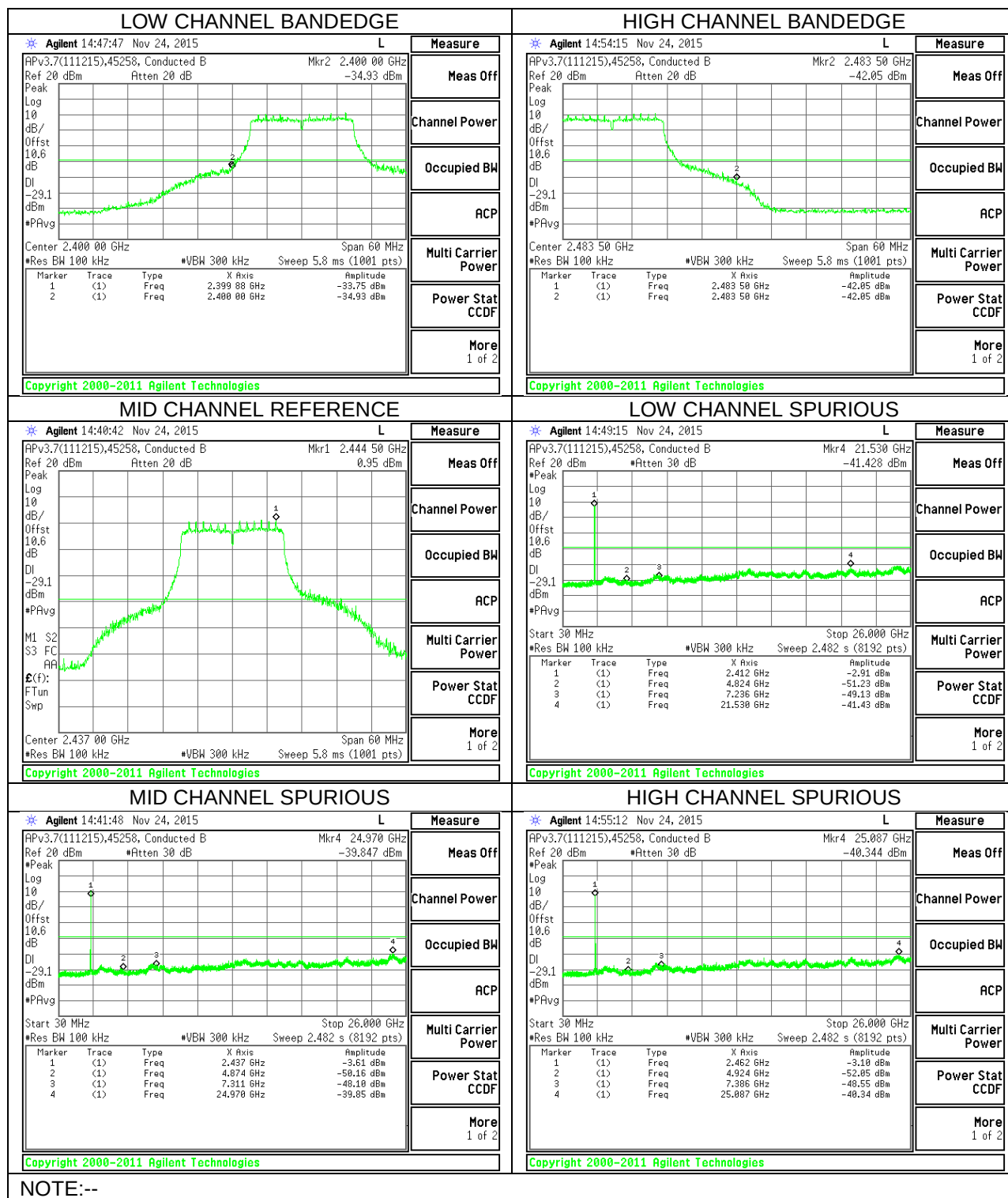
8.6.1. 802.11g MODE IN THE 2.4 GHz BAND

BANDEDGE AND SPURIOUS EMISSIONS PLOTS



8.6.2. 802.11n HT20 MODE IN THE 2.4 GHz BAND

BANDEDGE AND SPURIOUS EMISSIONS PLOTS



9. 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, then the video bandwidth is set to 1 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor = $10 \log (1/x)$.

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.

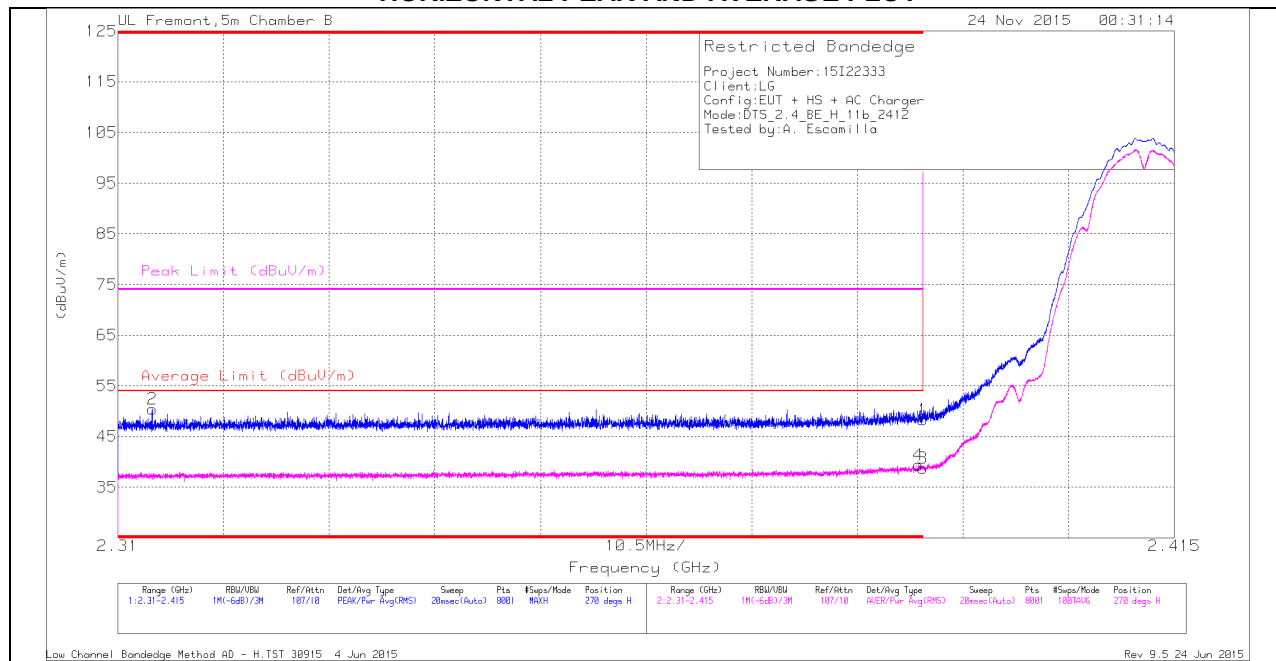
RESULTS

9.1. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

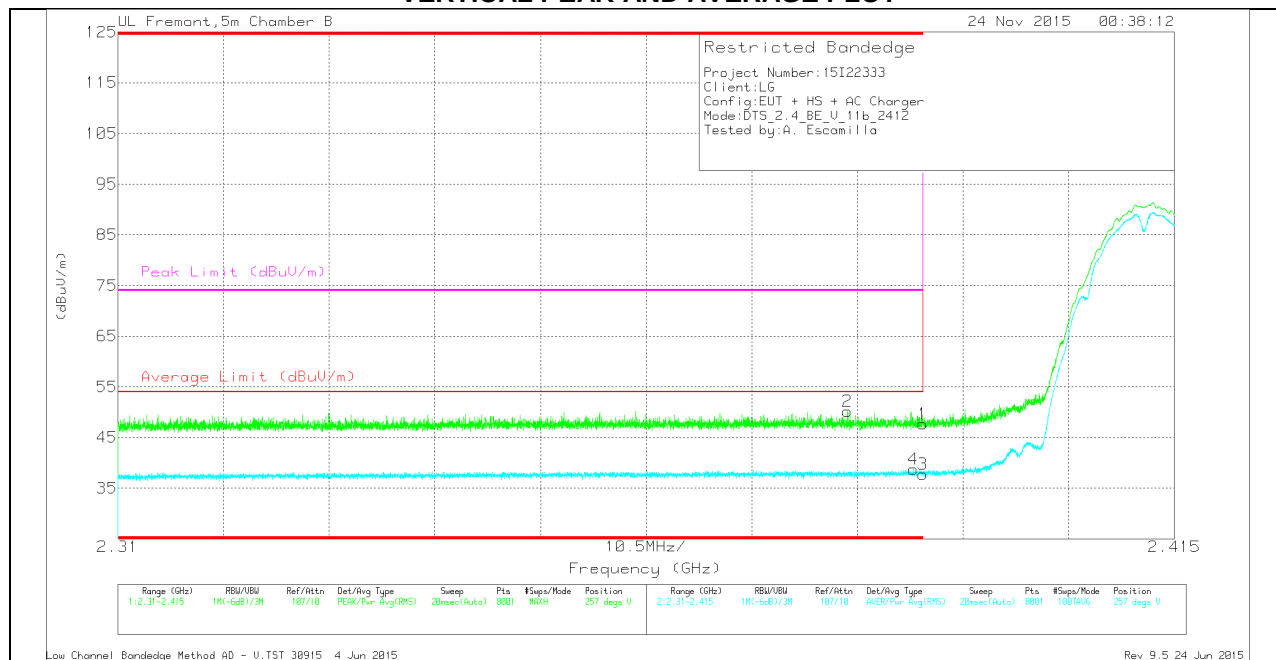
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.39	Pk	32	-24.1	0	48.29	-	-	74	-25.71	270	170	H
2	* 2.313	43.03	Pk	31.6	-24.2	0	50.43	-	-	74	-23.57	270	170	H
3	* 2.39	30.83	RMS	32	-24.1	0	38.73	54	-15.27	-	-	270	170	H
4	* 2.39	31.42	RMS	32	-24.1	0	39.32	54	-14.68	-	-	270	170	H

* - indicates frequency in CFR15.205/IC7.2.2 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/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	* 2.383	42.29	Pk	32	-24.1	0	50.19	-	-	74	-23.81	257	399	V
4	* 2.389	30.82	RMS	32	-24.1	0	38.72	54	-15.28	-	-	257	399	V
1	* 2.39	39.74	Pk	32	-24.1	0	47.64	-	-	74	-26.36	257	399	V
3	* 2.39	29.9	RMS	32	-24.1	0	37.8	54	-16.2	-	-	257	399	V

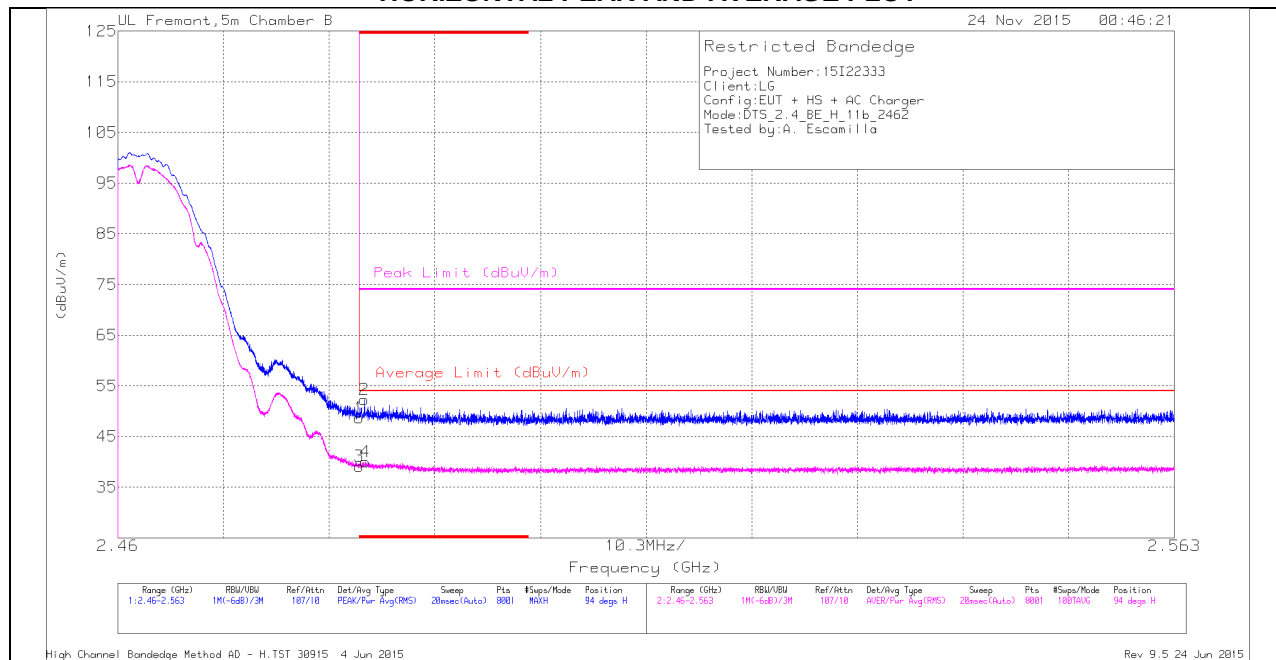
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

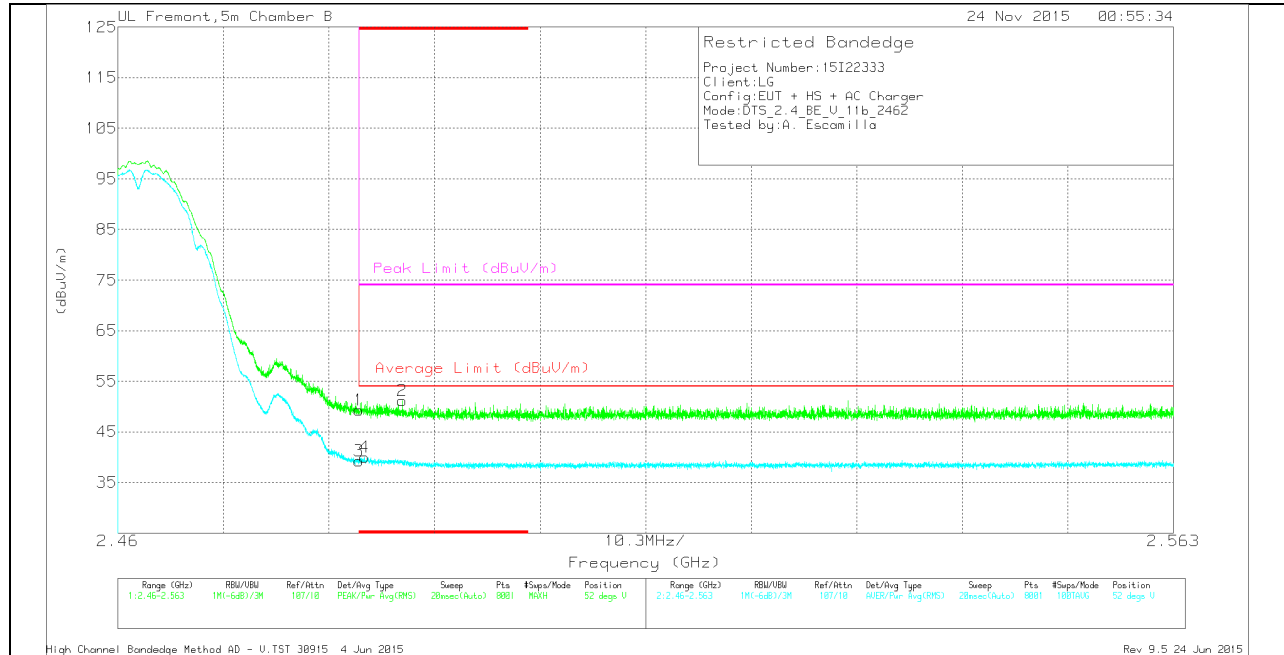
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.2	Pk	32.5	-24	0	48.7	-	-	74	-25.3	94	396	H
2	* 2.484	43.77	Pk	32.5	-24	0	52.27	-	-	74	-21.73	94	396	H
3	* 2.484	30.67	RMS	32.5	-24	0	39.17	54	-14.83	-	-	94	396	H
4	* 2.484	31.51	RMS	32.5	-24	0	40.01	54	-13.99	-	-	94	396	H

* - indicates frequency in CFR15.205/IC7.2.2 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/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	40.75	Pk	32.5	-24	0	49.25	-	-	74	-24.75	52	396	V
3	* 2.484	30.74	RMS	32.5	-24	0	39.24	54	-14.76	-	-	52	396	V
4	* 2.484	31.45	RMS	32.5	-24	0	39.95	54	-14.05	-	-	52	396	V
2	* 2.488	42.7	Pk	32.5	-24	0	51.2	-	-	74	-22.8	52	396	V

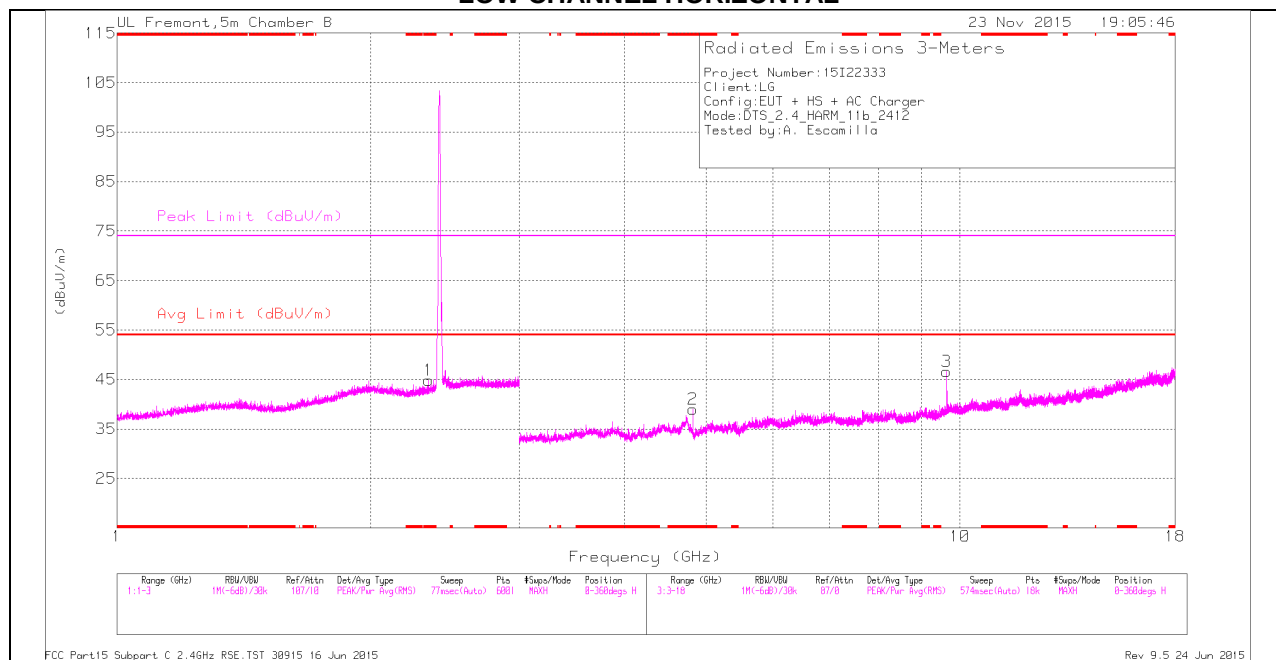
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

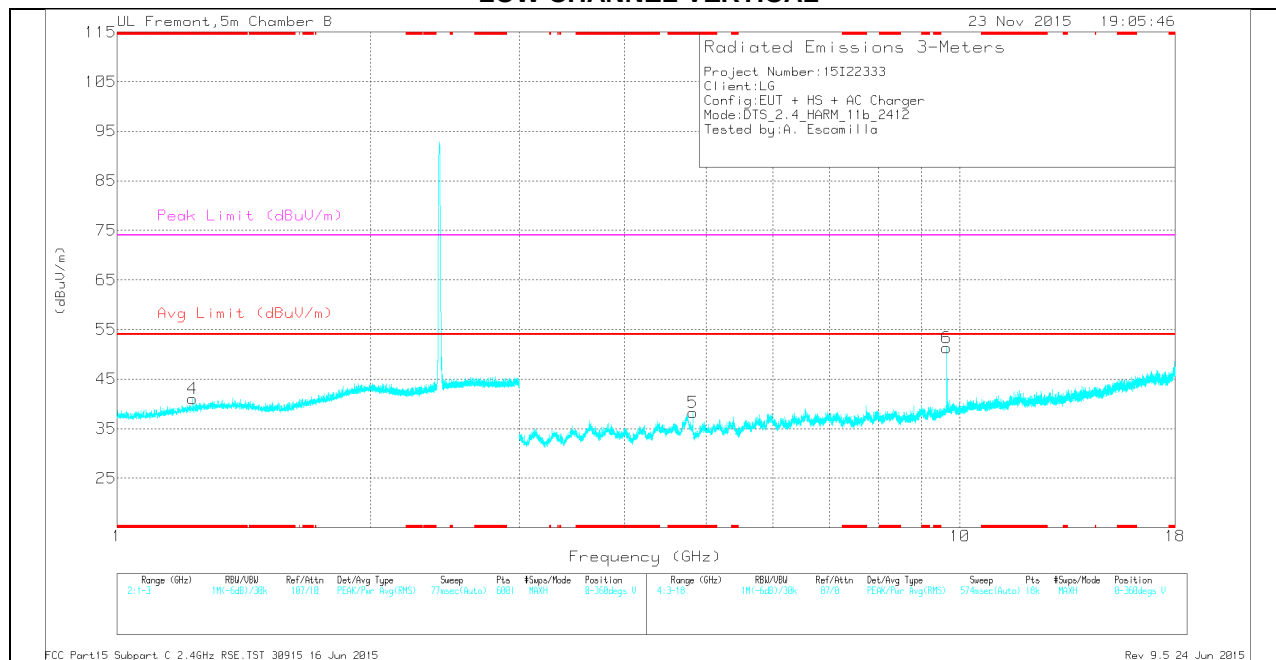
HARMONICS AND SPURIOUS EMISSIONS

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/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	* 2.341	37.26	Pk	31.8	-24.2	0	44.86	-	-	74	-29.14	0-360	200	H
4	* 1.229	37.78	Pk	28.8	-25.5	0	41.08	-	-	74	-32.92	0-360	200	V
2	* 4.824	36.34	Pk	34.3	-31.6	0	39.04	-	-	74	-34.96	0-360	101	H
5	* 4.823	35.52	Pk	34.3	-31.6	0	38.22	-	-	74	-35.78	0-360	101	V
6	9.647	41.06	Pk	36.7	-26.5	0	51.26	-	-	-	-	0-360	101	V
3	9.648	36.39	Pk	36.7	-26.5	0	46.59	-	-	-	-	0-360	101	H

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

Pk - Peak detector

RADIATED EMISSIONS

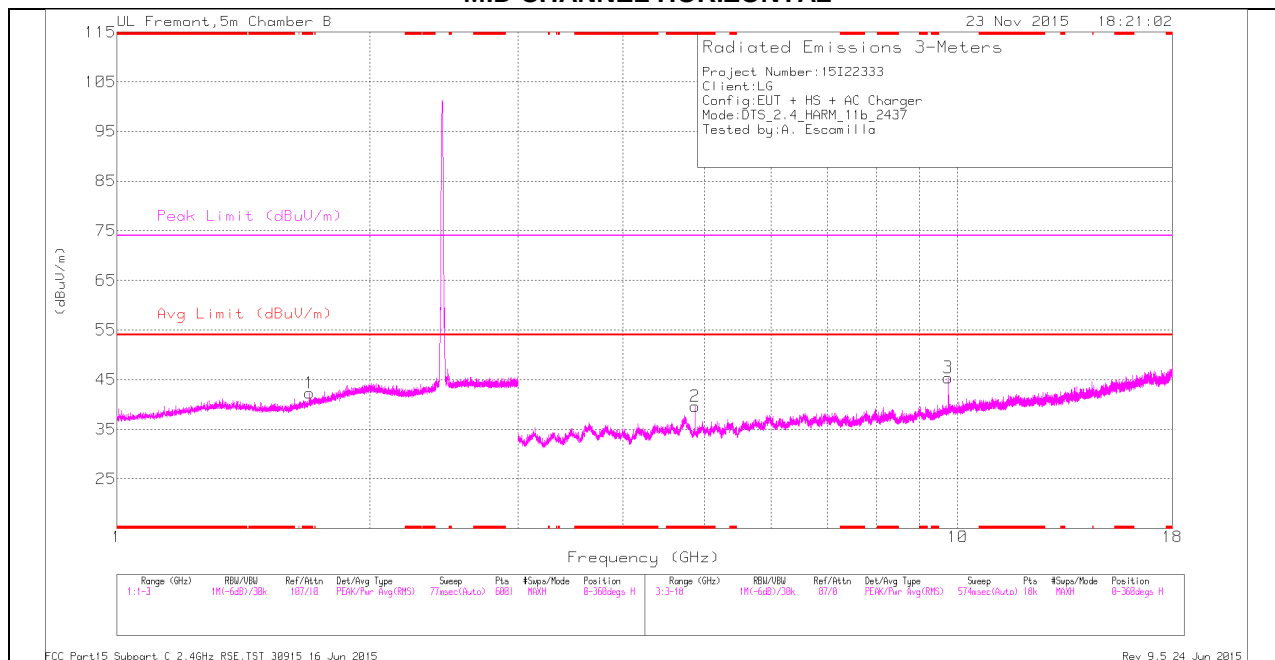
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.341	43.98	PK2	31.8	-24.2	0	51.58	-	-	74	-22.42	264	173	H
* 2.343	32.15	MAv1	31.8	-24.2	0	39.75	54	-14.25	-	-	264	173	H
* 1.228	45.15	PK2	28.7	-25.5	0	48.35	-	-	74	-25.65	154	198	V
* 1.231	33.02	MAv1	28.8	-25.5	0	36.32	54	-17.68	-	-	154	198	V
* 4.824	43.45	PK2	34.3	-31.6	0	46.15	-	-	74	-27.85	172	105	H
* 4.824	35.88	MAv1	34.3	-31.6	0	38.58	54	-15.42	-	-	172	105	H
* 4.824	41.89	PK2	34.3	-31.6	0	44.59	-	-	74	-29.41	221	114	V
* 4.824	33.4	MAv1	34.3	-31.6	0	36.1	54	-17.9	-	-	221	114	V
9.648	40.58	PK2	36.7	-26.5	0	50.78	-	-	74	-23.22	186	119	H
9.648	44.17	PK2	36.7	-26.5	0	54.37	-	-	74	-19.63	197	115	V

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

PK2 - KDB558074 Method: Maximum Peak

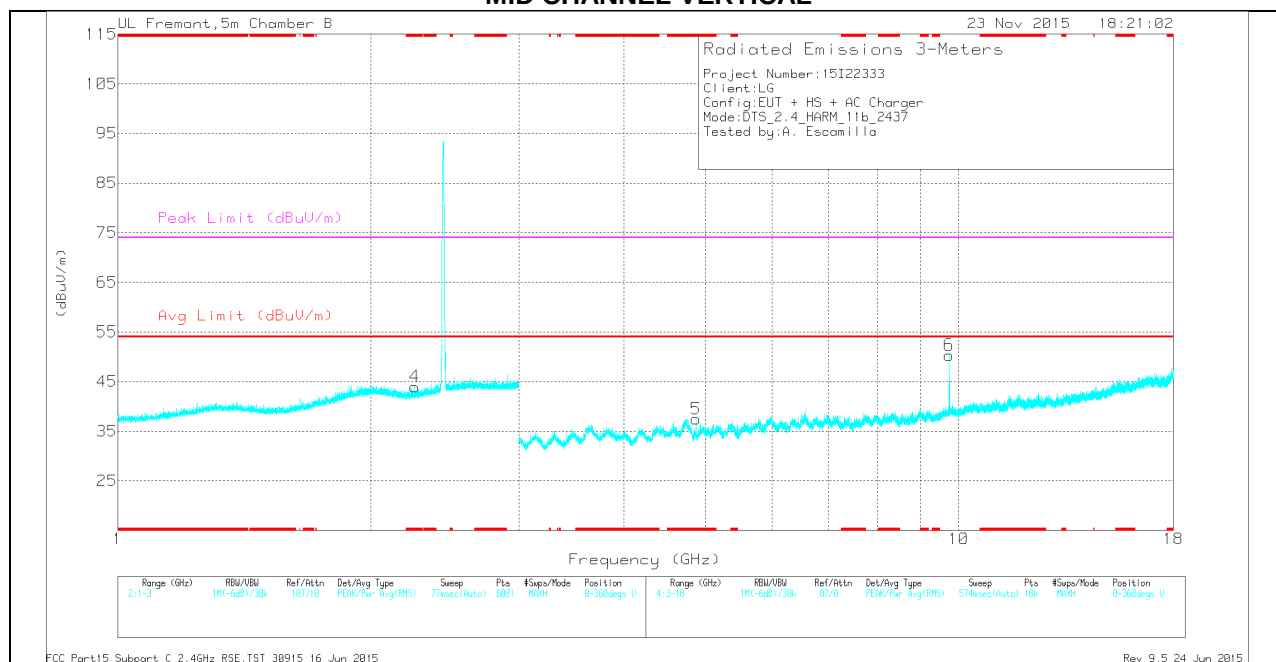
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/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	* 1.696	37.51	Pk	29.7	-24.9	0	42.31	-	-	74	-31.69	0-360	199	H
4	* 2.254	37.01	Pk	31.3	-24.3	0	44.01	-	-	74	-29.99	0-360	199	V
2	* 4.874	37.82	Pk	34.2	-32.4	0	39.62	-	-	74	-34.38	0-360	101	H
5	* 4.874	35.72	Pk	34.2	-32.4	0	37.52	-	-	74	-36.48	0-360	199	V
3	9.747	34.81	Pk	36.9	-26.3	0	45.41	-	-	-	-	0-360	101	H
6	9.748	39.76	Pk	36.9	-26.3	0	50.36	-	-	-	-	0-360	101	V

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

Pk - Peak detector

RADIATED EMISSIONS

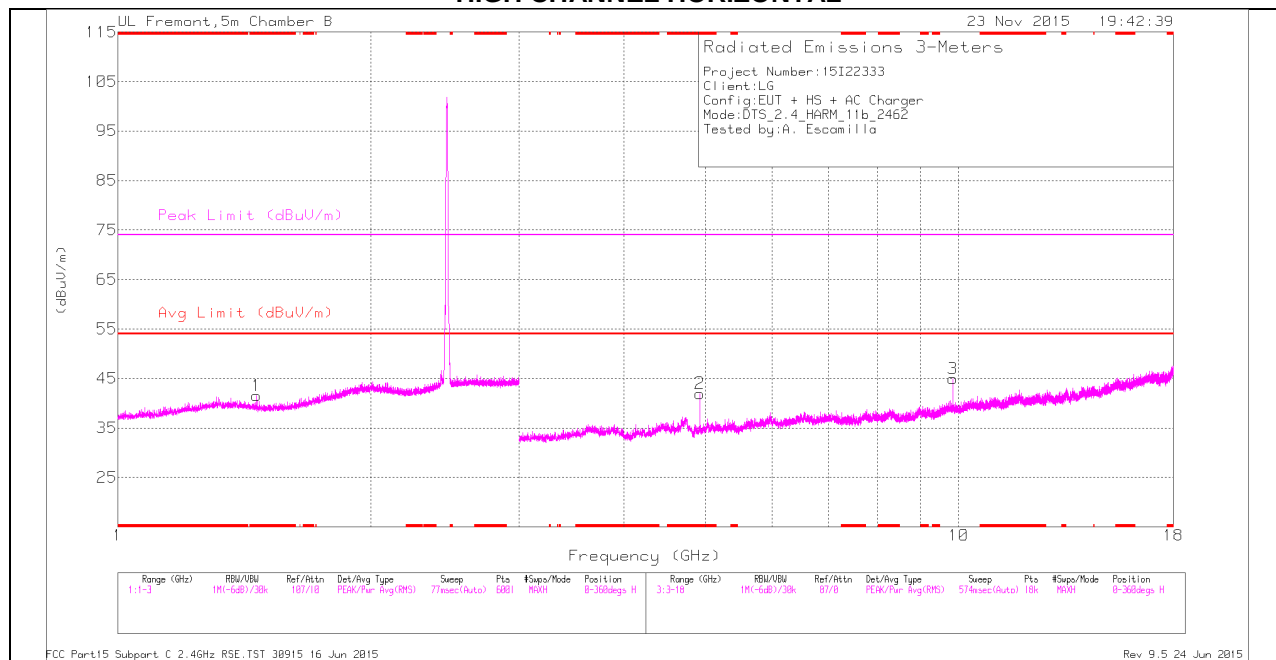
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.698	44.47	PK2	29.7	-24.8	0	49.37	-	-	74	-24.63	59	143	H
* 1.695	32.72	MAv1	29.7	-24.9	0	37.52	54	-16.48	-	-	59	143	H
* 2.256	43.95	PK2	31.3	-24.3	0	50.95	-	-	74	-23.05	179	189	V
* 2.254	32.38	MAv1	31.3	-24.3	0	39.38	54	-14.62	-	-	179	189	V
* 4.874	43.64	PK2	34.2	-32.4	0	45.44	-	-	74	-28.56	273	117	H
* 4.874	36.38	MAv1	34.2	-32.4	0	38.18	54	-15.82	-	-	273	117	H
* 4.874	43.26	PK2	34.2	-32.4	0	45.06	-	-	74	-28.94	234	124	V
* 4.874	33.9	MAv1	34.2	-32.4	0	35.7	54	-18.3	-	-	234	124	V
9.748	40.48	PK2	36.9	-26.3	0	51.08	-	-	74	-22.92	184	119	H
9.748	43.09	PK2	36.9	-26.3	0	53.69	-	-	74	-20.31	195	112	V

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

PK2 - KDB558074 Method: Maximum Peak

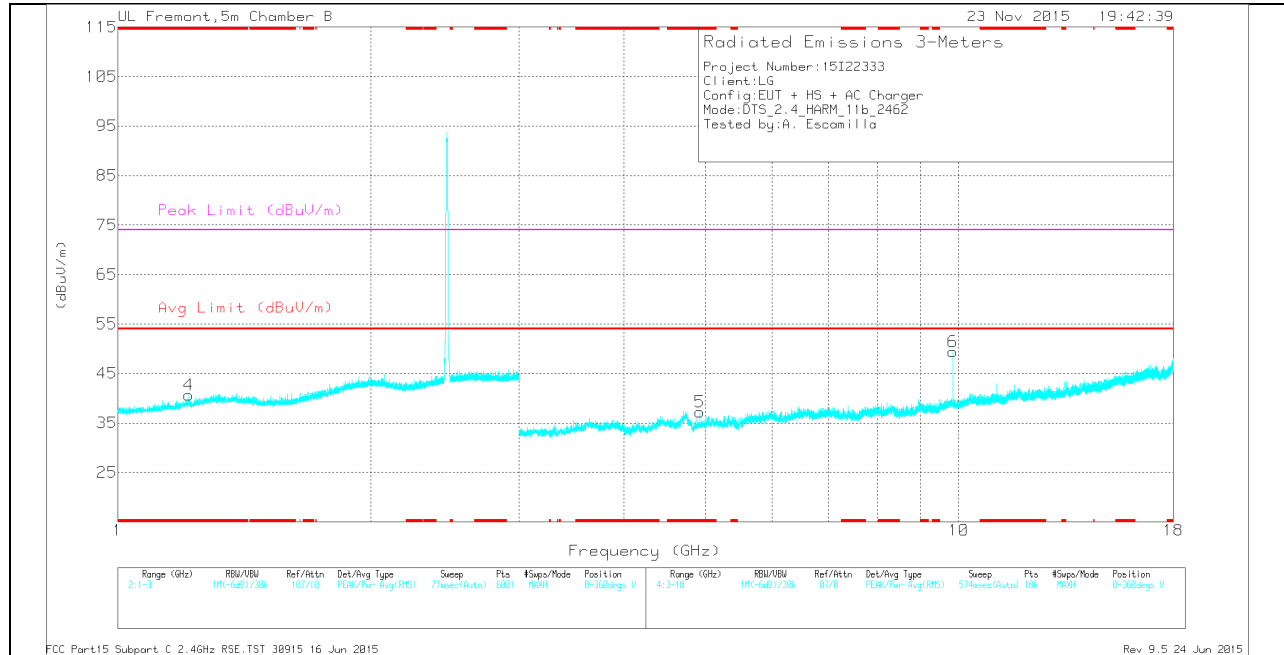
MAv1 - KDB558074 Option 1 Maximum RMS Average

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	* 1.462	37.89	Pk	28.9	-25.2	0	41.59	-	-	74	-32.41	0-360	200	H
4	* 1.214	37.55	Pk	28.6	-25.5	0	40.65	-	-	74	-33.35	0-360	200	V
2	* 4.924	40.38	Pk	34.1	-32.5	0	41.98	-	-	74	-32.02	0-360	101	H
5	* 4.924	35.68	Pk	34.1	-32.5	0	37.28	-	-	74	-36.72	0-360	101	V
3	9.848	33.77	Pk	37	-25.8	0	44.97	-	-	-	-	0-360	101	H
6	9.848	38.21	Pk	37	-25.8	0	49.41	-	-	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 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
* 1.462	44.15	PK2	28.9	-25.2	0	47.85	-	-	74	-26.15	156	156	H
* 1.461	32.77	MAv1	28.9	-25.2	0	36.47	54	-17.53	-	-	156	156	H
* 1.212	44.25	PK2	28.6	-25.5	0	47.35	-	-	74	-26.65	156	187	V
* 1.214	32.98	MAv1	28.6	-25.5	0	36.08	54	-17.92	-	-	156	187	V
* 4.924	45.42	PK2	34.1	-32.5	0	47.02	-	-	74	-26.98	271	115	H
* 4.924	38.58	MAv1	34.1	-32.5	0	40.18	54	-13.82	-	-	271	115	H
9.848	39.85	PK2	37	-25.8	0	51.05	-	-	74	-22.95	182	115	H
9.848	41.5	PK2	37	-25.8	0	52.7	-	-	74	-21.3	198	116	V

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

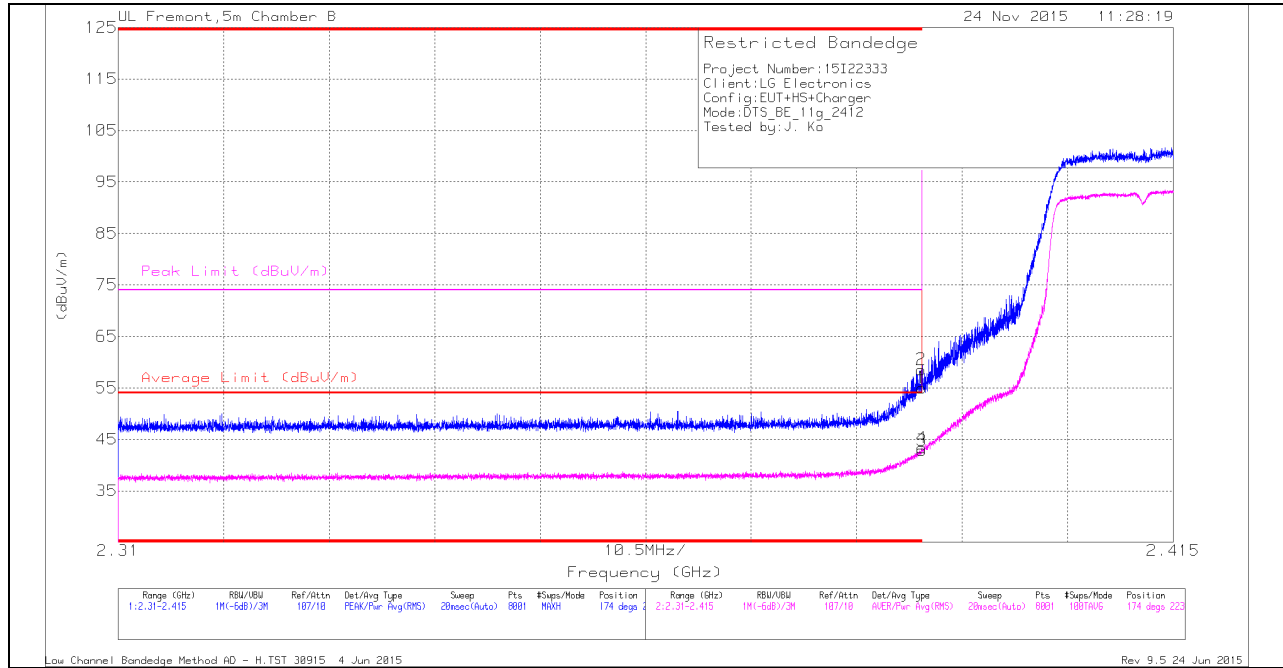
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

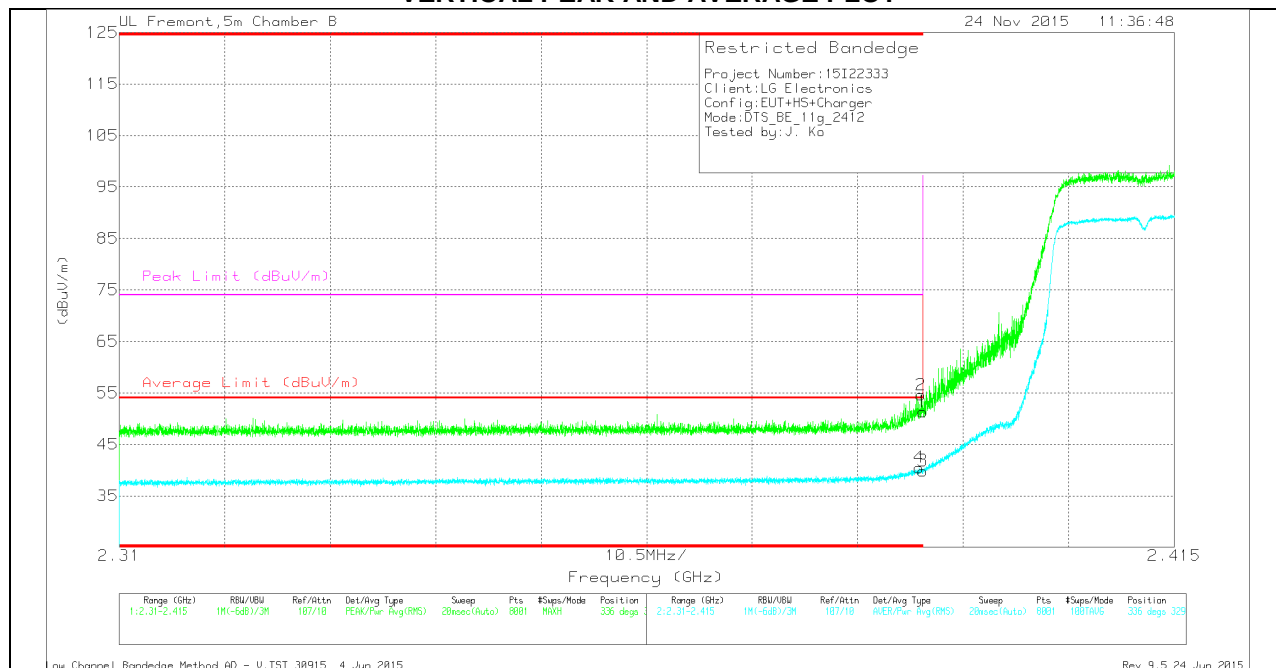
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	47.12	Pk	32	-24.1	0	55.02	-	-	74	-18.98	174	223	H
2	* 2.39	50.66	Pk	32	-24.1	0	58.56	-	-	74	-15.44	174	223	H
3	* 2.39	34.76	RMS	32	-24.1	.21	42.87	54	-11.13	-	-	174	223	H
4	* 2.39	35.24	RMS	32	-24.1	.21	43.35	54	-10.65	-	-	174	223	H

* - indicates frequency in CFR15.205/IC7.2.2 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/Filter (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	43.43	Pk	32	-24.1	0	51.33	-	-	74	-22.67	336	329	V
2	* 2.39	46.71	Pk	32	-24.1	0	54.61	-	-	74	-19.39	336	329	V
3	* 2.39	31.75	RMS	32	-24.1	.21	39.86	54	-14.14	-	-	336	329	V
4	* 2.39	32.38	RMS	32	-24.1	.21	40.49	54	-13.51	-	-	336	329	V

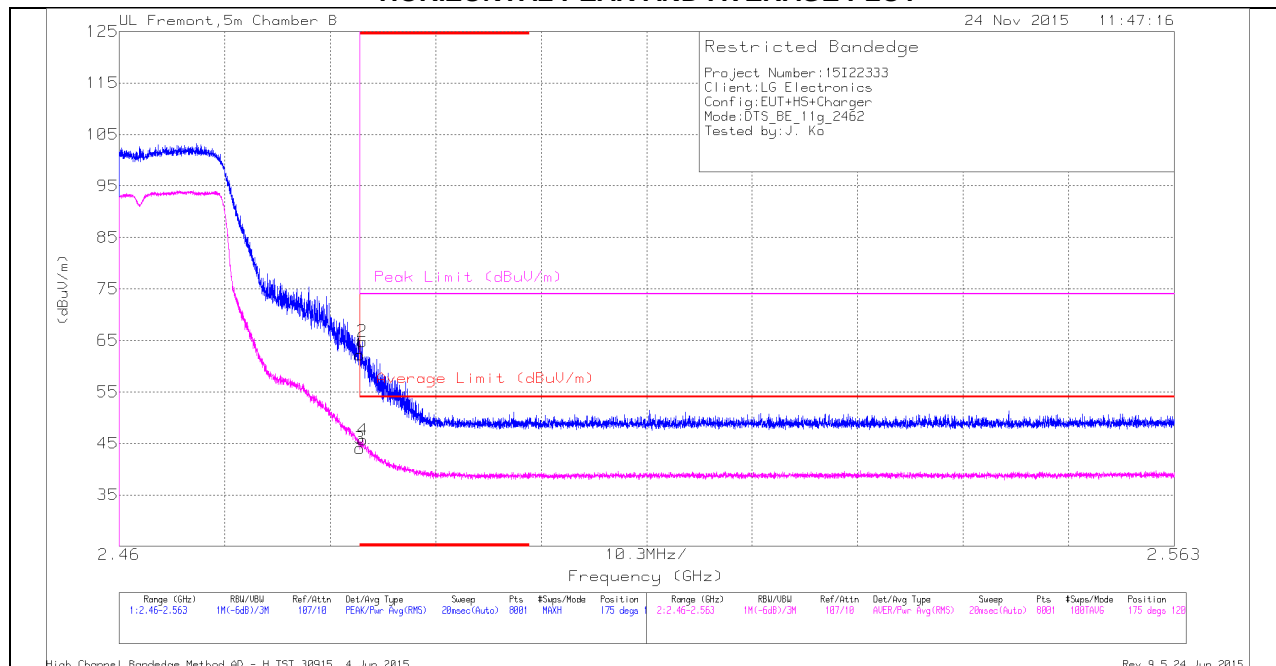
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

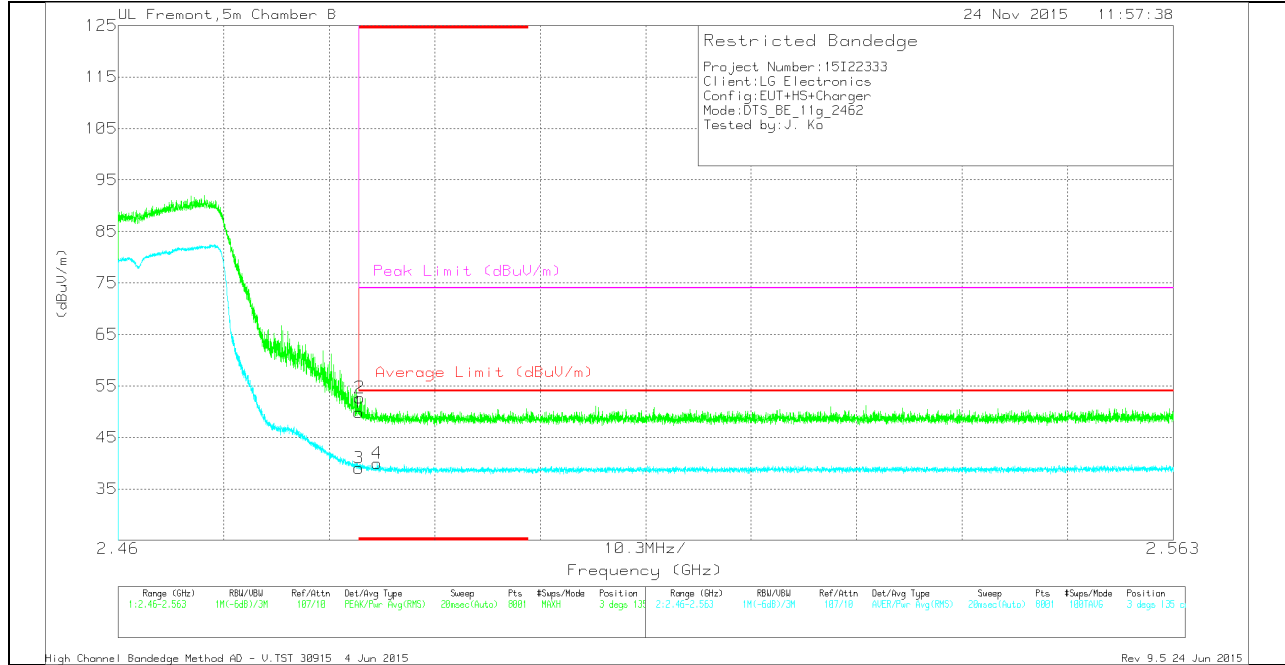
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.74	Pk	32.5	-24	0	62.24	-	-	74	-11.76	175	120	H
2	* 2.484	56.27	Pk	32.5	-24	0	64.77	-	-	74	-9.23	175	120	H
3	* 2.484	35.33	RMS	32.5	-24	.21	44.04	54	-9.96	-	-	175	120	H
4	* 2.484	36.95	RMS	32.5	-24	.21	45.66	54	-8.34	-	-	175	120	H

* - indicates frequency in CFR15.205/IC7.2.2 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/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	41.31	Pk	32.5	-24	0	49.81	-	-	74	-24.19	3	135	V
2	* 2.484	44.18	Pk	32.5	-24	0	52.68	-	-	74	-21.32	3	135	V
3	* 2.484	30.33	RMS	32.5	-24	.21	39.04	54	-14.96	-	-	3	135	V
4	* 2.485	31.27	RMS	32.5	-24	.21	39.98	54	-14.02	-	-	3	135	V

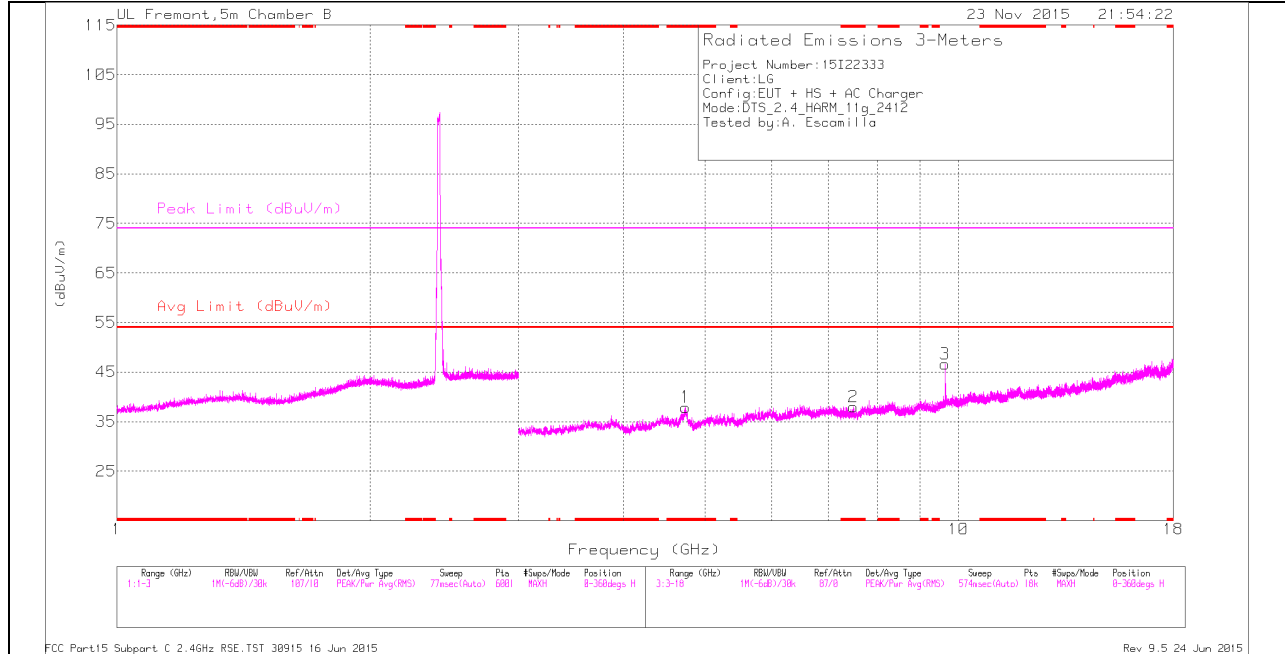
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

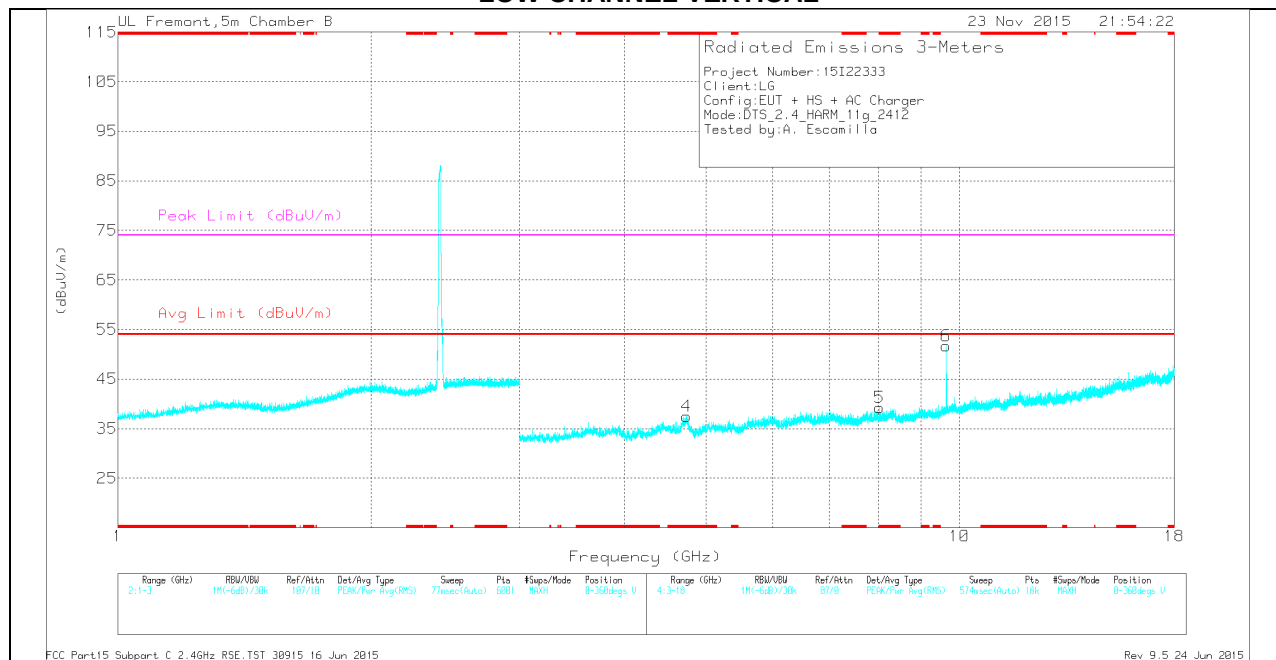
HARMONICS AND SPURIOUS EMISSIONS

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	* 4.742	34.32	Pk	34.3	-30.7	0	37.92	-	-	74	-36.08	0-360	101	H
2	* 7.501	31.97	Pk	35.3	-29.3	0	37.97	-	-	74	-36.03	0-360	101	H
4	* 4.737	33.89	Pk	34.3	-30.7	0	37.49	-	-	74	-36.51	0-360	199	V
5	* 8.032	31.91	Pk	35.6	-28.3	0	39.21	-	-	74	-34.79	0-360	101	V
3	9.648	36.37	Pk	36.7	-26.5	0	46.57	-	-	-	-	0-360	101	H
6	9.648	41.52	Pk	36.7	-26.5	0	51.72	-	-	-	-	0-360	101	V

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

Pk - Peak detector

RADIATED EMISSIONS

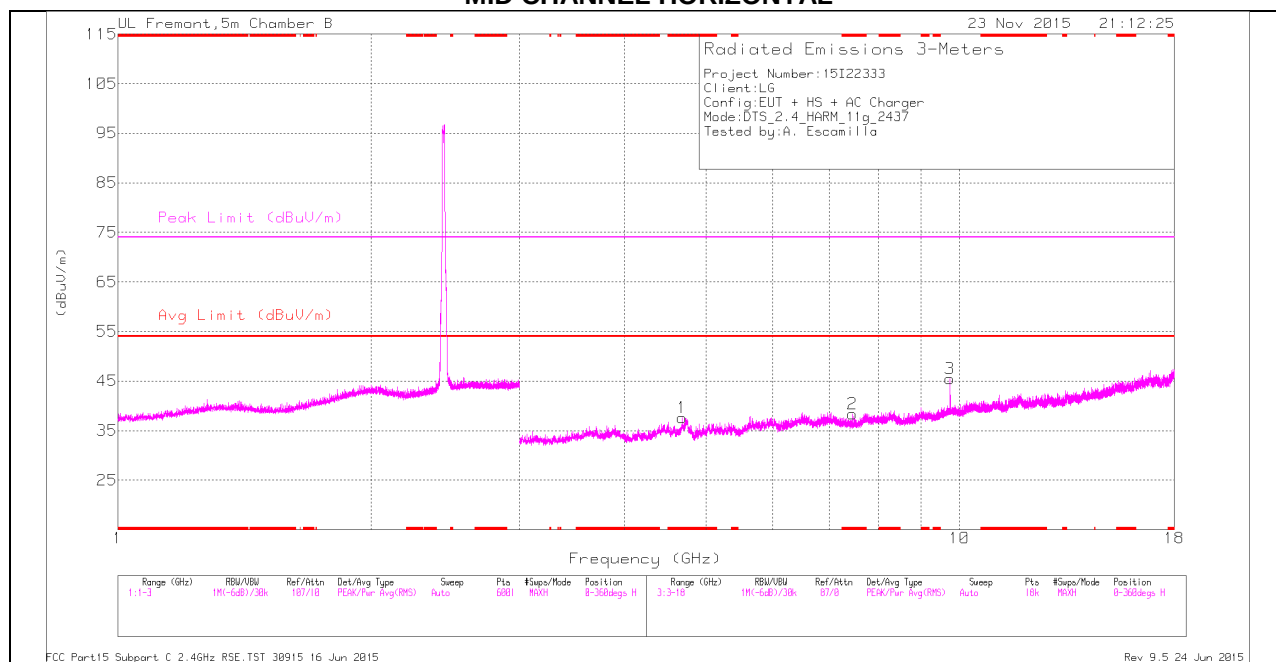
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.744	42.09	PK2	34.3	-30.7	0	45.69	-	-	74	-28.31	215	140	H
* 4.742	30.85	MAv1	34.3	-30.7	.21	34.66	54	-19.34	-	-	215	140	H
* 7.501	39.52	PK2	35.3	-29.3	0	45.52	-	-	74	-28.48	166	123	H
* 7.5	28.39	MAv1	35.3	-29.3	.21	34.6	54	-19.4	-	-	166	123	H
* 4.738	41.75	PK2	34.3	-30.7	0	45.35	-	-	74	-28.65	231	143	V
* 4.737	31.03	MAv1	34.3	-30.7	.21	34.84	54	-19.16	-	-	231	143	V
* 8.03	38.61	PK2	35.6	-28.3	0	45.91	-	-	74	-28.09	133	122	V
* 8.031	27.57	MAv1	35.6	-28.3	.21	35.08	54	-18.92	-	-	133	122	V
9.648	41.19	PK2	36.7	-26.5	0	51.39	-	-	74	-22.61	172	116	H
9.648	44.4	PK2	36.7	-26.5	0	54.6	-	-	74	-19.4	198	113	V

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

PK2 - KDB558074 Method: Maximum Peak

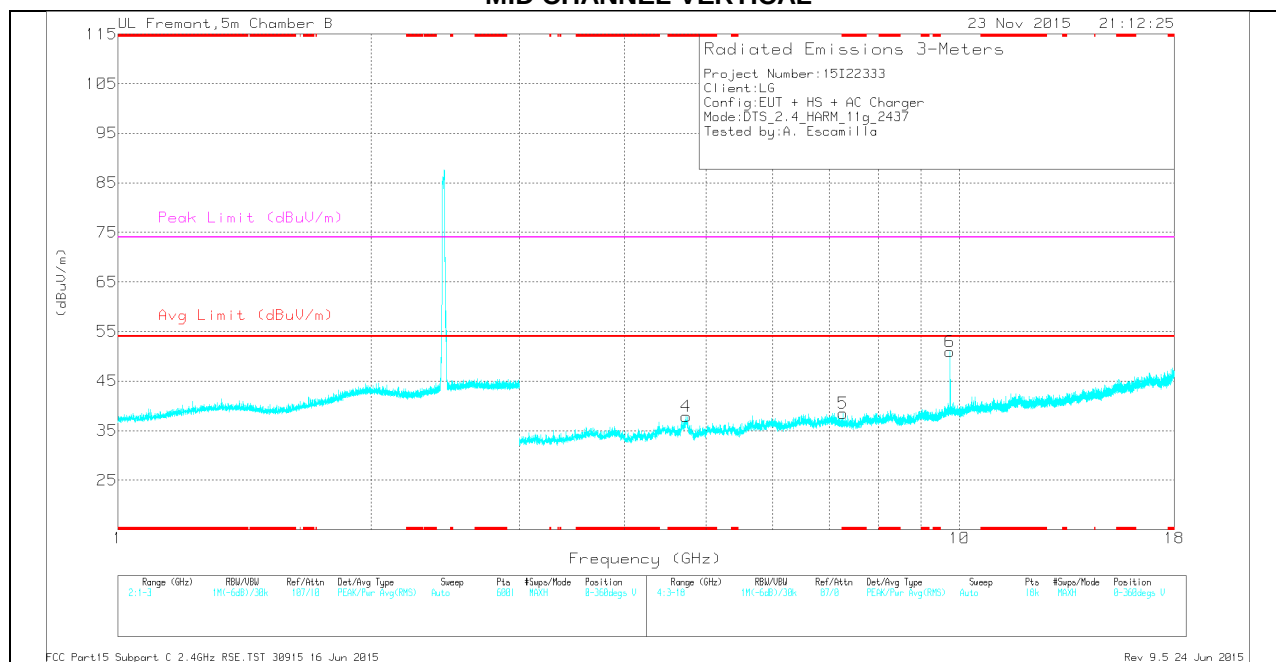
MAv1 - KDB558074 Option 1 Maximum RMS Average

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	* 4.683	35.16	Pk	34.2	-31.8	0	37.56	-	-	74	-36.44	0-360	101	H
2	* 7.456	32.23	Pk	35.3	-29.2	0	38.33	-	-	74	-35.67	0-360	101	H
4	* 4.735	34.26	Pk	34.3	-30.7	0	37.86	-	-	74	-36.14	0-360	101	V
5	* 7.276	33.61	Pk	35.3	-30.4	0	38.51	-	-	74	-35.49	0-360	199	V
3	9.747	34.82	Pk	36.9	-26.3	0	45.42	-	-	-	-	0-360	101	H
6	9.748	40.39	Pk	36.9	-26.3	0	50.99	-	-	-	-	0-360	101	V

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

Pk - Peak detector

RADIATED EMISSIONS

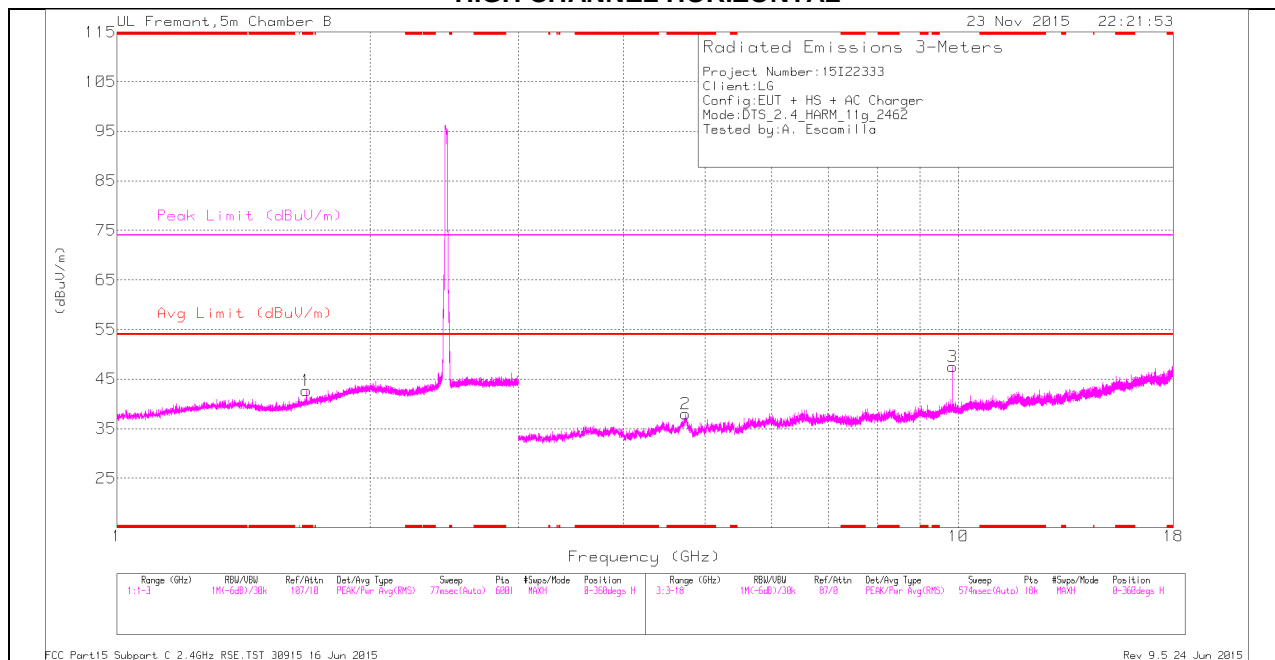
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.682	42.71	PK2	34.2	-31.8	0	45.11	-	-	74	-28.89	223	162	H
* 4.683	31.22	MAv1	34.2	-31.8	.21	33.83	54	-20.17	-	-	223	162	H
* 7.458	39.57	PK2	35.3	-29.2	0	45.67	-	-	74	-28.33	173	131	H
* 7.455	27.93	MAv1	35.3	-29.2	.21	34.24	54	-21.76	-	-	173	131	H
* 4.733	42.01	PK2	34.3	-30.7	0	45.61	-	-	74	-28.39	226	178	V
* 4.736	30.8	MAv1	34.3	-30.7	.21	34.61	54	-19.39	-	-	226	178	V
* 7.276	40.21	PK2	35.3	-30.4	0	45.11	-	-	74	-28.89	182	148	V
* 7.275	29.32	MAv1	35.3	-30.4	.21	34.43	54	-19.57	-	-	182	148	V
9.747	40.75	PK2	36.9	-26.3	0	51.35	-	-	74	-22.65	192	121	H
9.748	43.19	PK2	36.9	-26.3	0	53.79	-	-	74	-20.21	194	109	V

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

PK2 - KDB558074 Method: Maximum Peak

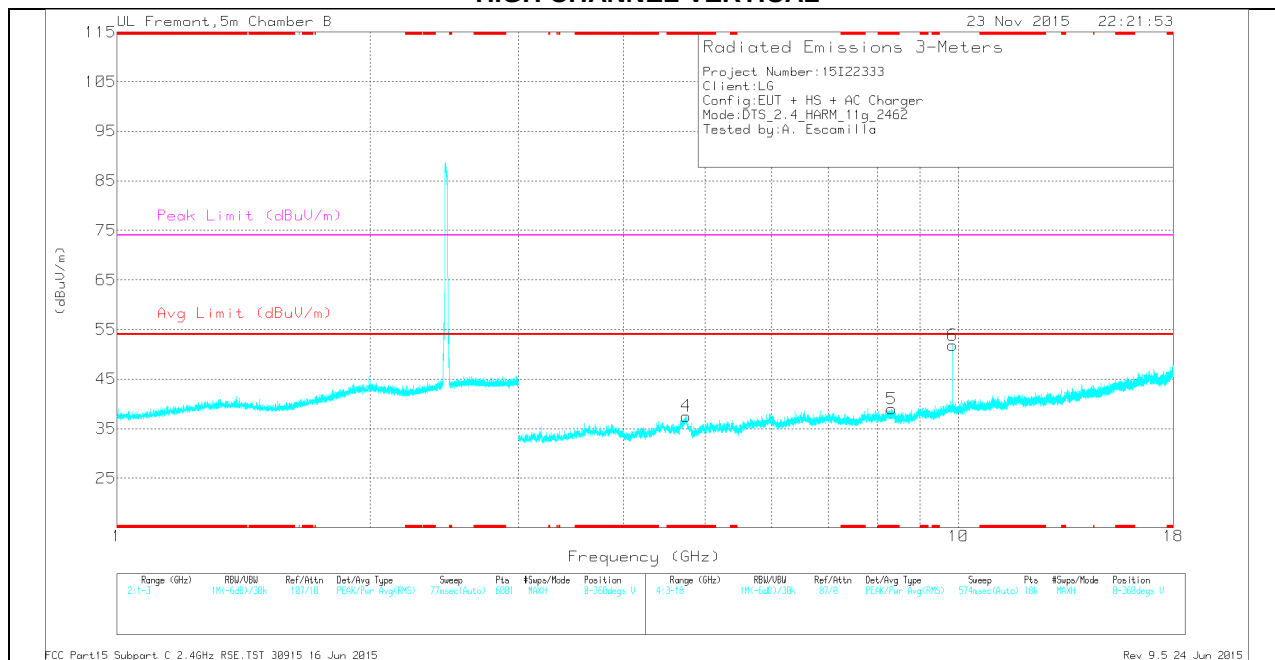
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/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	* 1.679	37.95	Pk	29.6	-24.9	0	42.65	-	-	74	-31.35	0-360	102	H
2	* 4.737	34.4	Pk	34.3	-30.7	0	38	-	-	74	-36	0-360	199	H
4	* 4.75	33.94	Pk	34.3	-30.7	0	37.54	-	-	74	-36.46	0-360	199	V
5	* 8.332	30.93	Pk	35.7	-27.6	0	39.03	-	-	74	-34.97	0-360	199	V
3	9.847	36.28	Pk	37	-25.8	0	47.48	-	-	-	-	0-360	101	H
6	9.848	40.64	Pk	37	-25.8	0	51.84	-	-	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 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
* 1.68	45.31	PK2	29.6	-24.9	0	50.01	-	-	74	-23.99	183	148	H
* 1.679	32.63	MAv1	29.6	-24.9	.21	37.54	54	-16.46	-	-	183	148	H
* 4.735	42.88	PK2	34.3	-30.7	0	46.48	-	-	74	-27.52	270	122	H
* 4.736	30.79	MAv1	34.3	-30.7	.21	34.6	54	-19.4	-	-	270	122	H
* 4.749	42.72	PK2	34.3	-30.7	0	46.32	-	-	74	-27.68	230	127	V
* 4.752	30.6	MAv1	34.3	-30.7	.21	34.41	54	-19.59	-	-	230	127	V
* 8.33	38.76	PK2	35.7	-27.7	0	46.76	-	-	74	-27.24	152	171	V
* 8.334	27.34	MAv1	35.7	-27.6	.21	35.65	54	-18.35	-	-	152	171	V
9.848	39.94	PK2	37	-25.8	0	51.14	-	-	74	-22.86	195	116	H
9.848	41.75	PK2	37	-25.8	0	52.95	-	-	74	-21.05	199	123	V

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

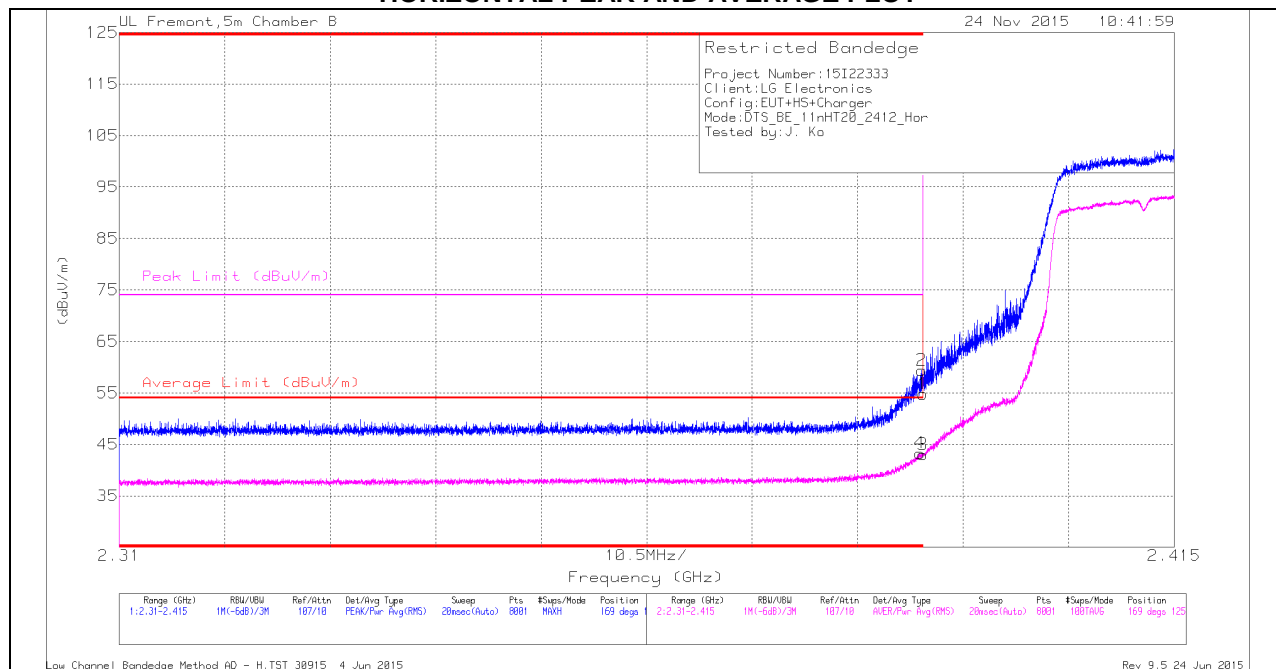
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.1.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

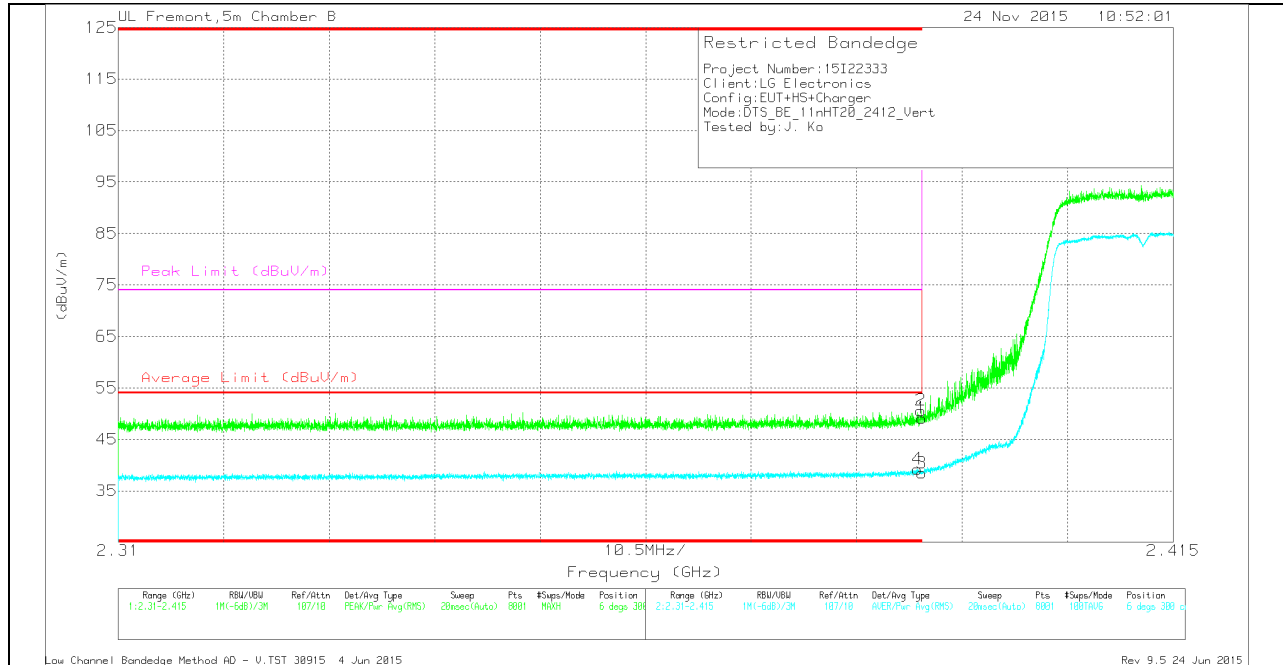
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	46.91	Pk	32	-24.1	0	54.81	-	-	74	-19.19	169	125	H
2	* 2.39	51.49	Pk	32	-24.1	0	59.39	-	-	74	-14.61	169	125	H
3	* 2.39	34.89	RMS	32	-24.1	.23	43.02	54	-10.98	-	-	169	125	H
4	* 2.39	35.17	RMS	32	-24.1	.23	43.3	54	-10.7	-	-	169	125	H

* - indicates frequency in CFR15.205/IC7.2.2 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/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	* 2.39	41.25	Pk	32	-24.1	0	49.15	-	-	74	-24.85	6	300	V
2	* 2.39	42.73	Pk	32	-24.1	0	50.63	-	-	74	-23.37	6	300	V
3	* 2.39	30.35	RMS	32	-24.1	.23	38.48	54	-15.52	-	-	6	300	V
4	* 2.39	31.1	RMS	32	-24.1	.23	39.23	54	-14.77	-	-	6	300	V

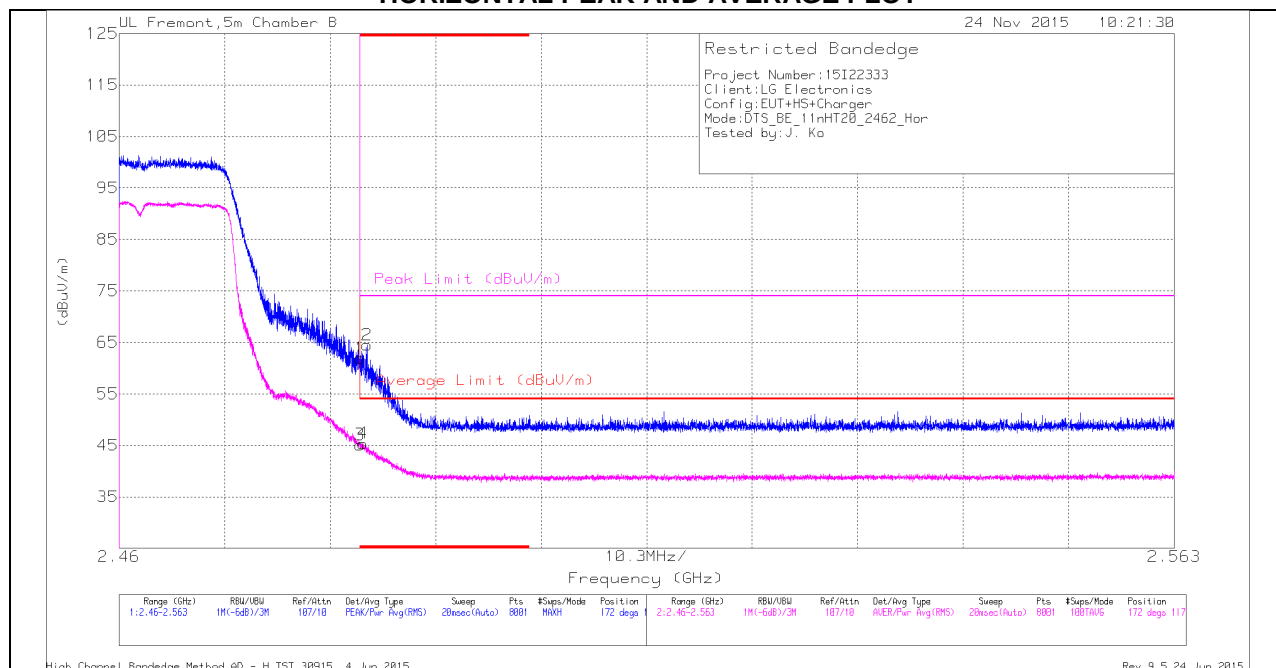
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

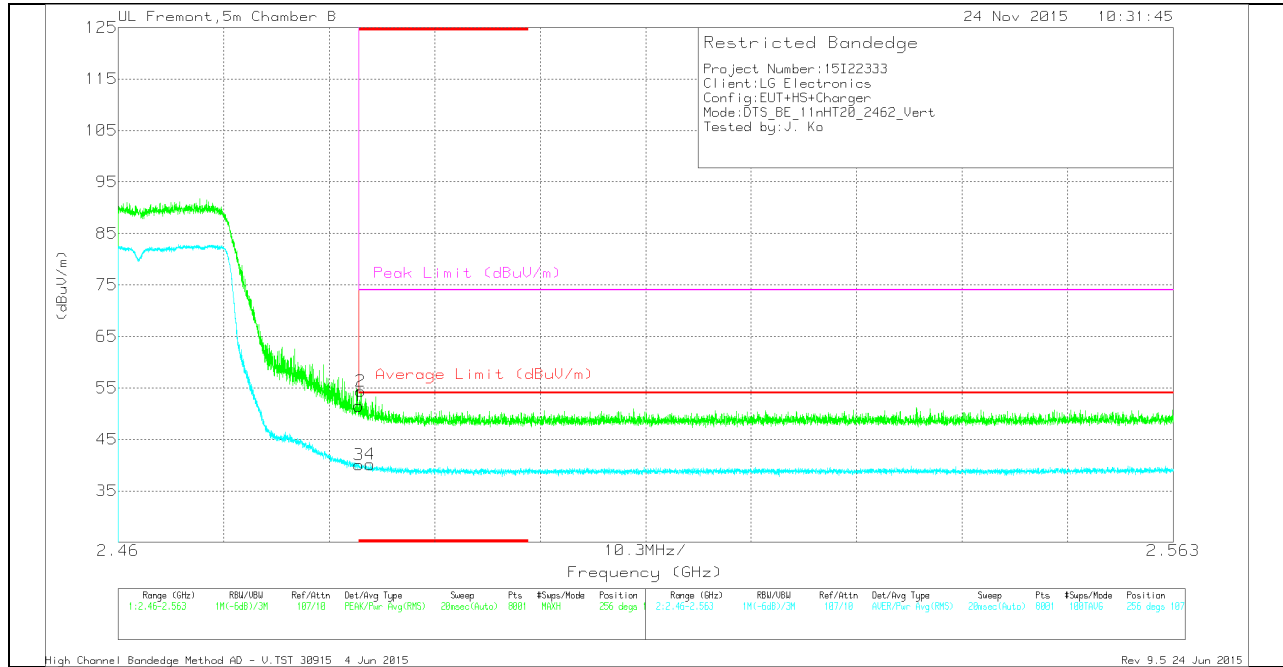
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.39	Pk	32.5	-24	0	61.89	-	-	74	-12.11	172	117	H
2	* 2.484	56	Pk	32.5	-24	0	64.5	-	-	74	-9.5	172	117	H
3	* 2.484	36.39	RMS	32.5	-24	.23	45.12	54	-8.88	-	-	172	117	H
4	* 2.484	36.64	RMS	32.5	-24	.23	45.37	54	-8.63	-	-	172	117	H

* - indicates frequency in CFR15.205/IC7.2.2 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/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	43.01	Pk	32.5	-24	0	51.51	-	-	74	-22.49	256	107	V
2	* 2.484	45.87	Pk	32.5	-24	0	54.37	-	-	74	-19.63	256	107	V
3	* 2.484	31.31	RMS	32.5	-24	.23	40.04	54	-13.96	-	-	256	107	V
4	* 2.485	31.42	RMS	32.5	-24	.23	40.15	54	-13.85	-	-	256	107	V

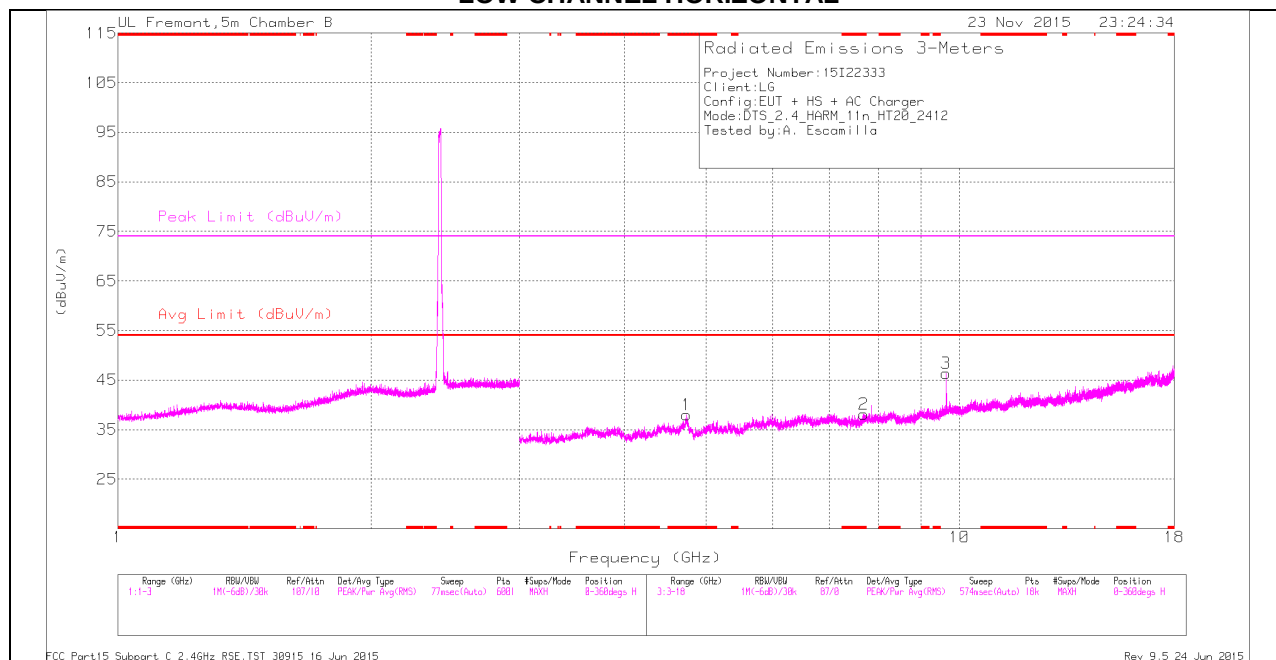
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

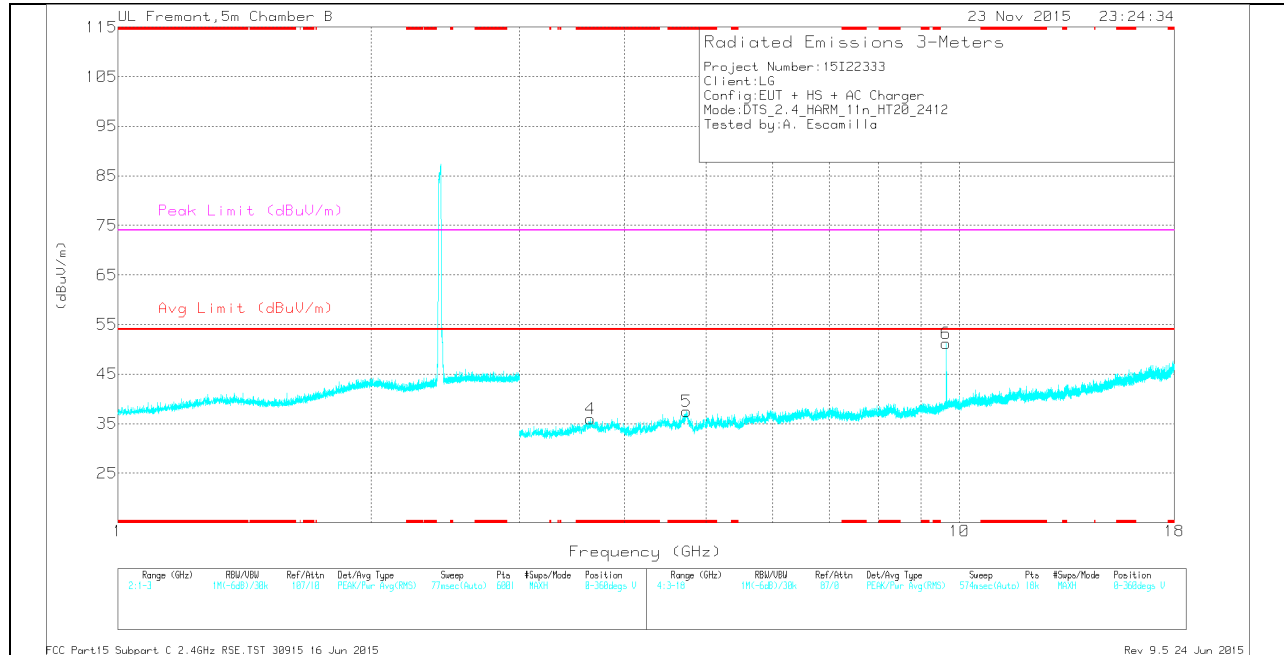
HARMONICS AND SPURIOUS EMISSIONS

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	* 4.739	34.38	Pk	34.3	-30.7	0	37.98	-	-	74	-36.02	0-360	200	H
2	* 7.692	30.88	Pk	35.5	-28.3	0	38.08	-	-	74	-35.92	0-360	200	H
4	* 3.64	34.9	Pk	33.7	-32.7	0	35.9	-	-	74	-38.1	0-360	200	V
5	* 4.742	33.91	Pk	34.3	-30.7	0	37.51	-	-	74	-36.49	0-360	101	V
3	9.648	36.22	Pk	36.7	-26.5	0	46.42	-	-	-	-	0-360	101	H
6	9.648	41.04	Pk	36.7	-26.5	0	51.24	-	-	-	-	0-360	101	V

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

Pk - Peak detector

RADIATED EMISSIONS

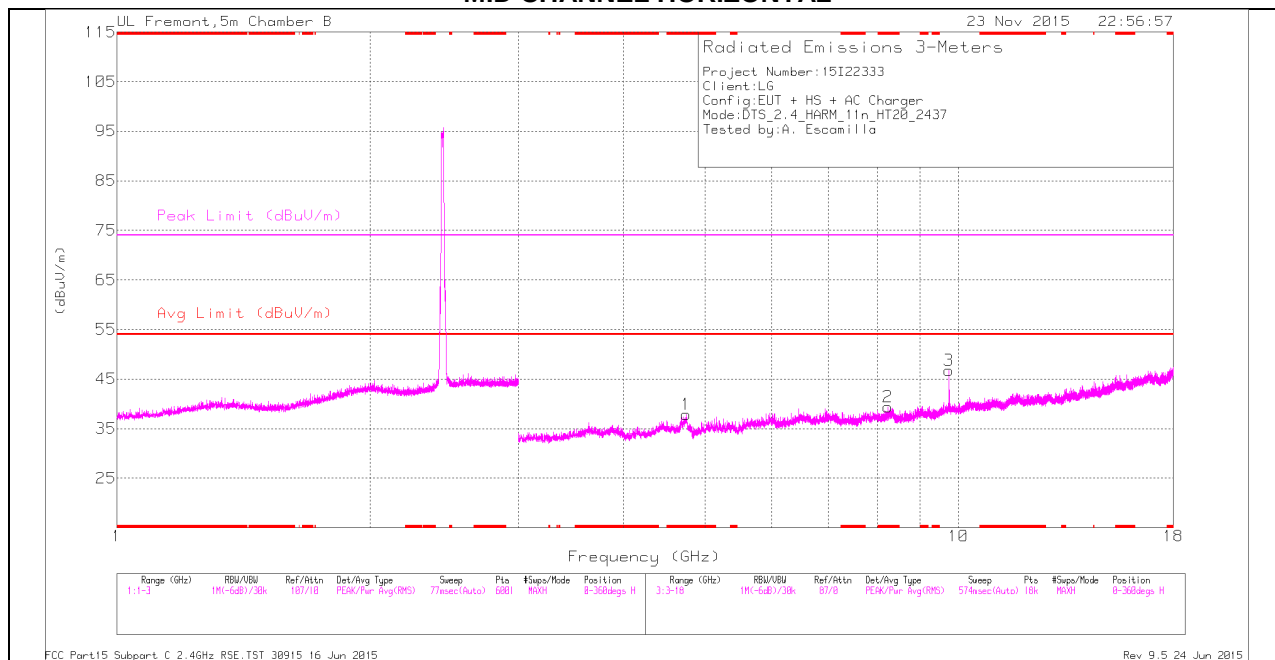
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.738	41.88	PK2	34.3	-30.7	0	45.48	-	-	74	-28.52	271	120	H
* 4.741	30.82	MAv1	34.3	-30.7	.23	34.65	54	-19.35	-	-	271	120	H
* 7.693	38.98	PK2	35.5	-28.3	0	46.18	-	-	74	-27.82	218	142	H
* 7.691	27.78	MAv1	35.5	-28.3	.23	35.21	54	-18.79	-	-	218	142	H
* 3.641	42.98	PK2	33.7	-32.7	0	43.98	-	-	74	-30.02	94	188	V
* 3.641	31.77	MAv1	33.7	-32.7	.23	33	54	-21	-	-	94	188	V
* 4.744	42.4	PK2	34.3	-30.7	0	46	-	-	74	-28	222	125	V
* 4.744	31.13	MAv1	34.3	-30.7	.23	34.96	54	-19.04	-	-	222	125	V
9.648	40.2	PK2	36.7	-26.5	0	50.4	-	-	74	-23.6	159	118	H
9.648	44.58	PK2	36.7	-26.5	0	54.78	-	-	74	-19.22	167	113	V

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

PK2 - KDB558074 Method: Maximum Peak

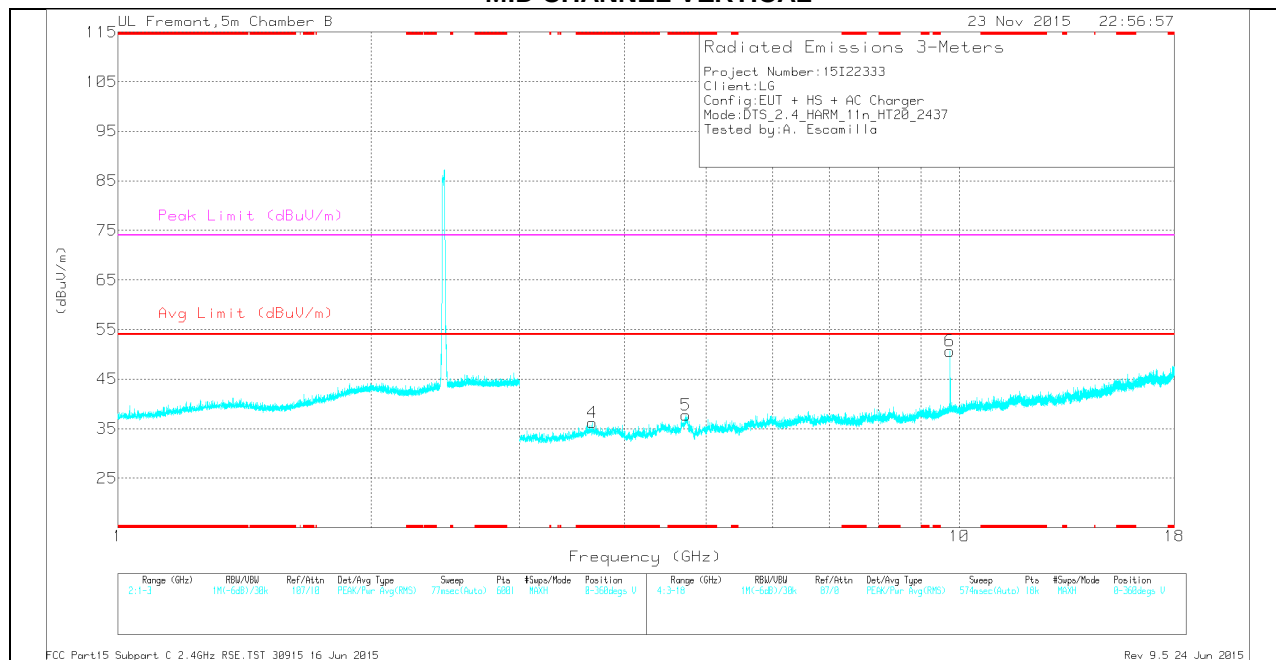
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/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	* 4.745	34.3	Pk	34.3	-30.7	0	37.9	-	-	74	-36.1	0-360	101	H
2	* 8.238	32.22	Pk	35.7	-28.5	0	39.42	-	-	74	-34.58	0-360	199	H
4	* 3.659	35.11	Pk	33.7	-32.6	0	36.21	-	-	74	-37.79	0-360	199	V
5	* 4.727	34.23	Pk	34.3	-30.8	0	37.73	-	-	74	-36.27	0-360	101	V
6	9.747	40.02	Pk	36.9	-26.3	0	50.62	-	-	-	-	0-360	101	V
3	9.748	36.17	Pk	36.9	-26.3	0	46.77	-	-	-	-	0-360	101	H

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

Pk - Peak detector

RADIATED EMISSIONS

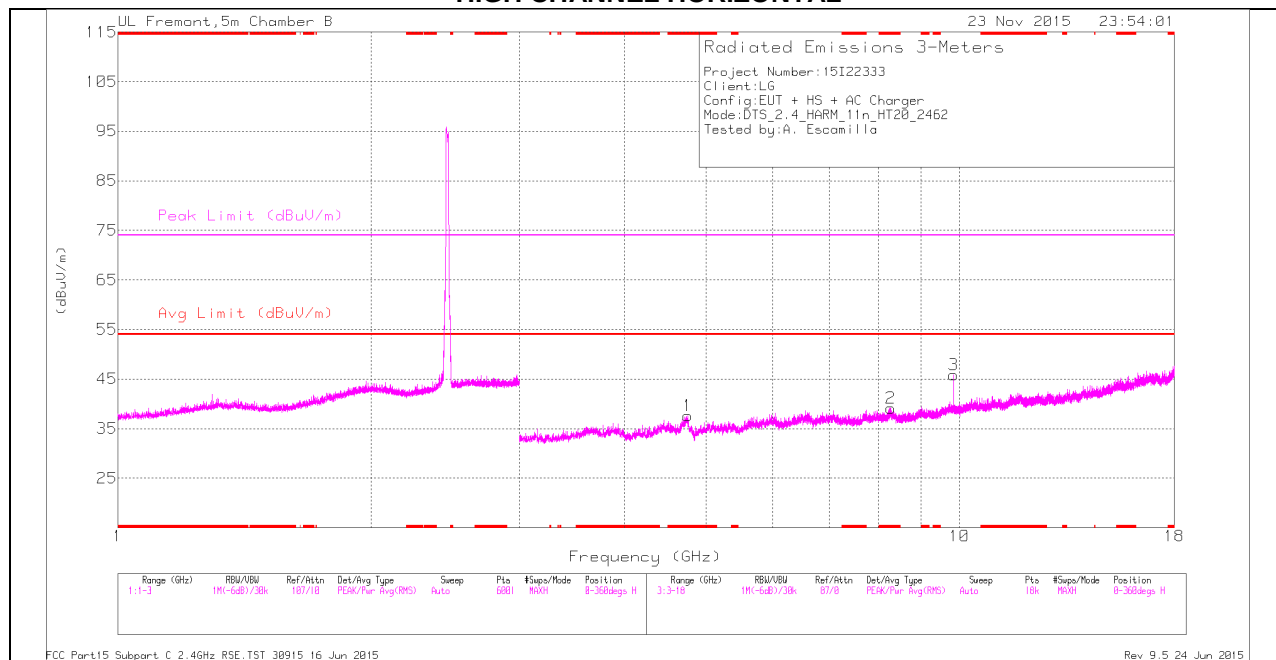
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.744	41.9	PK2	34.3	-30.7	0	45.5	-	-	74	-28.5	234	145	H
* 4.745	30.71	MAv1	34.3	-30.7	.23	34.54	54	-19.46	-	-	234	145	H
* 8.237	39.55	PK2	35.7	-28.5	0	46.75	-	-	74	-27.25	159	165	H
* 8.239	28.04	MAv1	35.7	-28.5	.23	35.47	54	-18.53	-	-	159	165	H
* 3.66	42.56	PK2	33.7	-32.6	0	43.66	-	-	74	-30.34	38	146	V
* 3.659	30.92	MAv1	33.7	-32.6	.23	32.25	54	-21.75	-	-	38	146	V
* 4.727	41.67	PK2	34.3	-30.8	0	45.17	-	-	74	-28.83	235	123	V
* 4.727	30.79	MAv1	34.3	-30.8	.23	34.52	54	-19.48	-	-	235	123	V
9.748	40.83	PK2	36.9	-26.3	0	51.43	-	-	74	-22.57	186	121	H
9.748	43.5	PK2	36.9	-26.3	0	54.1	-	-	74	-19.9	202	111	V

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

PK2 - KDB558074 Method: Maximum Peak

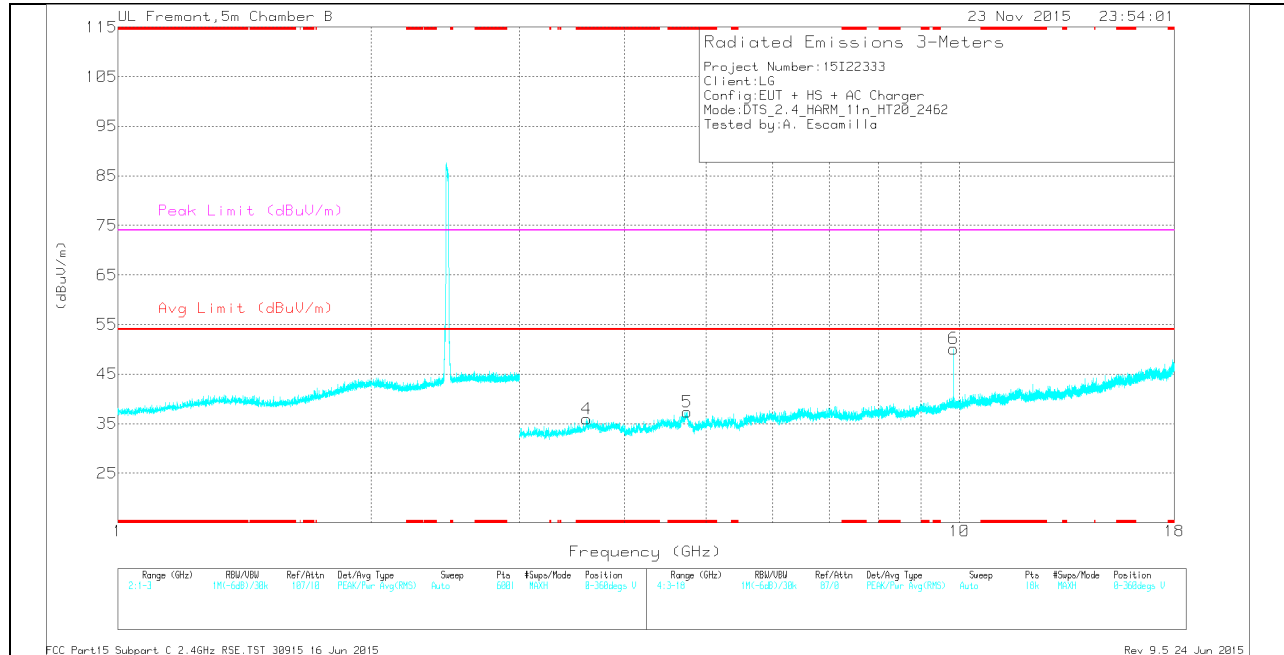
MAv1 - KDB558074 Option 1 Maximum RMS Average

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/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.755	34.01	Pk	34.3	-30.7	0	37.61	-	-	74	-36.39	0-360	200	H
2	* 8.291	30.98	Pk	35.7	-27.5	0	39.18	-	-	74	-34.82	0-360	101	H
4	* 3.607	34.99	Pk	33.8	-32.8	0	35.99	-	-	74	-38.01	0-360	200	V
5	* 4.747	33.77	Pk	34.3	-30.7	0	37.37	-	-	74	-36.63	0-360	101	V
3	9.848	34.63	Pk	37	-25.8	0	45.83	-	-	-	-	0-360	101	H
6	9.848	38.91	Pk	37	-25.8	0	50.11	-	-	-	-	0-360	101	V

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

Pk - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.755	41.47	PK2	34.3	-30.7	0	45.07	-	-	74	-28.93	281	125	H
* 4.753	30.47	MAv1	34.3	-30.7	.23	34.3	54	-19.7	-	-	281	125	H
* 8.292	38.9	PK2	35.7	-27.5	0	47.1	-	-	74	-26.9	225	183	H
* 8.29	27.49	MAv1	35.7	-27.5	.23	35.92	54	-18.08	-	-	225	183	H
* 3.607	42.4	PK2	33.8	-32.8	0	43.4	-	-	74	-30.6	152	131	V
* 3.607	31.08	MAv1	33.8	-32.8	.23	32.31	54	-21.69	-	-	152	131	V
* 4.745	41.85	PK2	34.3	-30.7	0	45.45	-	-	74	-28.55	224	109	V
* 4.746	30.8	MAv1	34.3	-30.7	.23	34.63	54	-19.37	-	-	224	109	V
9.848	40.71	PK2	37	-25.8	0	51.91	-	-	74	-22.09	192	119	H
9.848	41.54	PK2	37	-25.8	0	52.74	-	-	74	-21.26	182	116	V

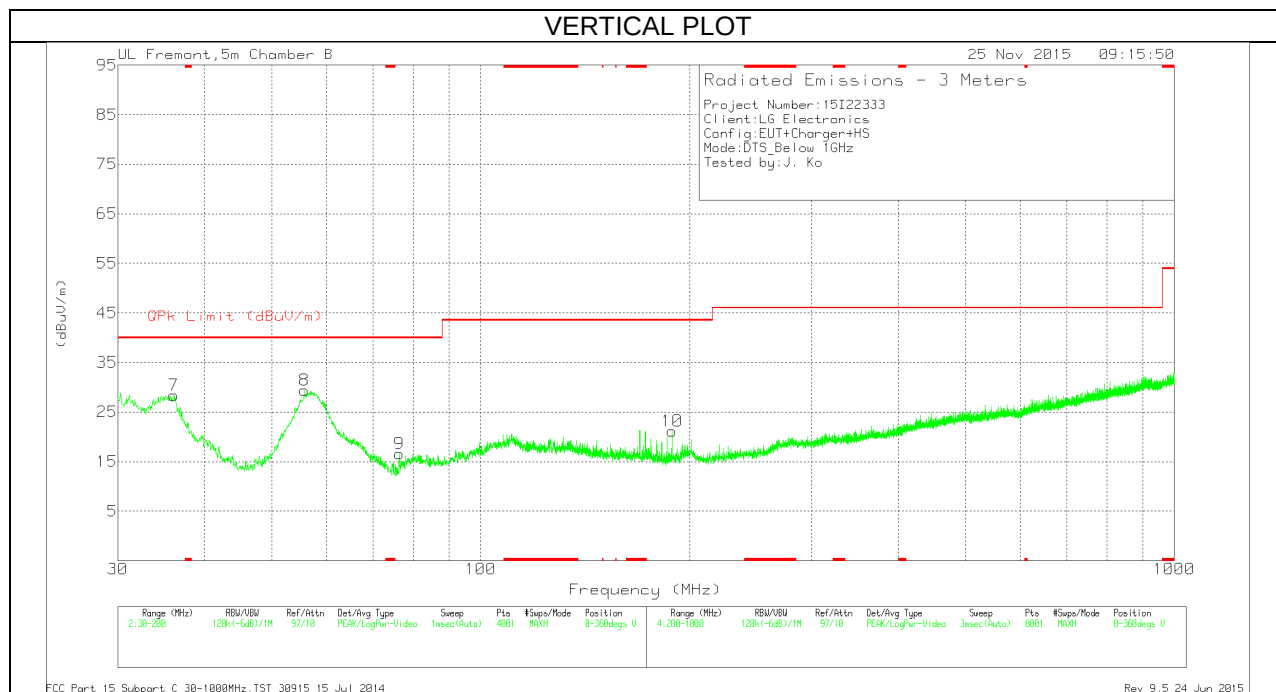
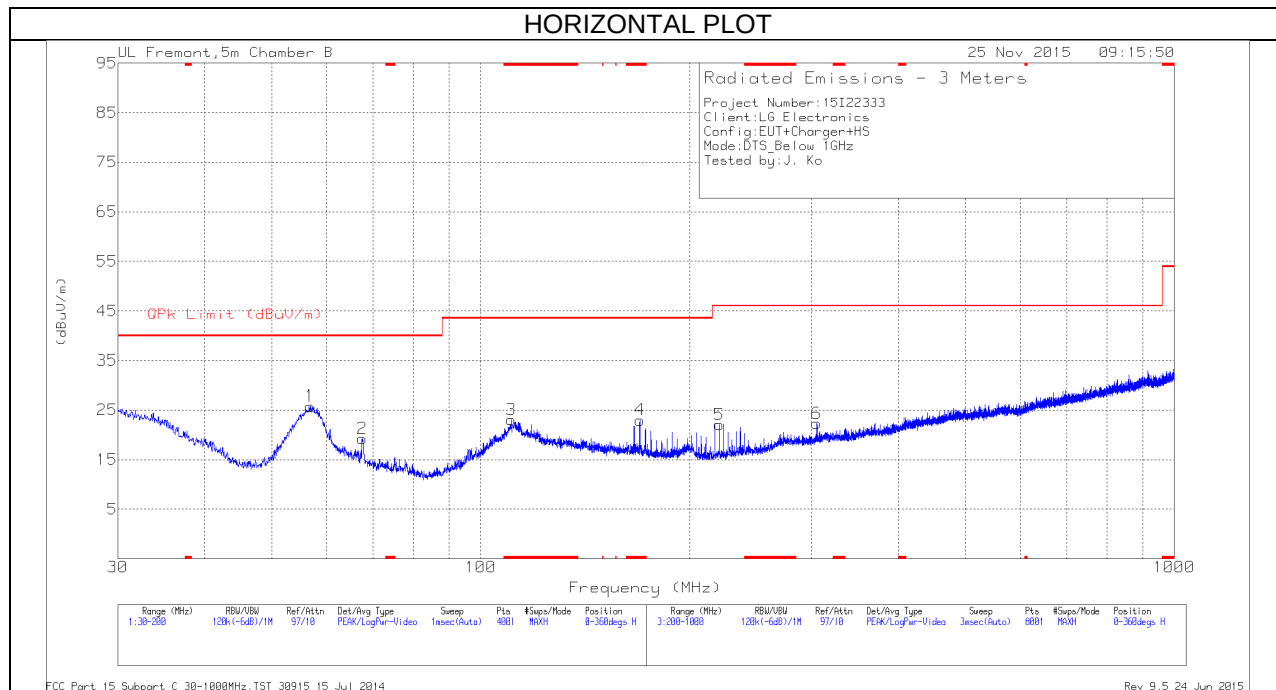
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

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 1G Data

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
3	* 110.665	34.29	Pk	16.7	-27.9	23.09	43.52	-20.43	0-360	299	H
4	* 169.6125	34.7	Pk	15.7	-27.4	23	43.52	-20.52	0-360	101	H
7	36.12	36.3	Pk	20.9	-28.8	28.4	40	-11.6	0-360	101	V
8	55.7125	46.92	Pk	11.1	-28.6	29.42	40	-10.58	0-360	101	V
1	56.8175	43.19	Pk	11.2	-28.6	25.79	40	-14.21	0-360	399	H
2	67.485	35.67	Pk	12	-28.4	19.27	40	-20.73	0-360	101	H
9	76.325	33.18	Pk	11.8	-28.4	16.58	40	-23.42	0-360	101	V
10	188.78	33.02	Pk	15.2	-27.1	21.12	43.52	-22.4	0-360	101	V
5	220.8	34.14	Pk	14.7	-26.8	22.04	46.02	-23.98	0-360	101	H
6	305.3	30.86	Pk	17.5	-26.1	22.26	46.02	-23.76	0-360	101	H

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

Pk - Peak detector

Radiated Emissions

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
57.3085	42.67	Qp	11.2	-28.5	25.37	40	-14.63	29	114	V

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

Qp - Quasi-Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

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 C63.10.

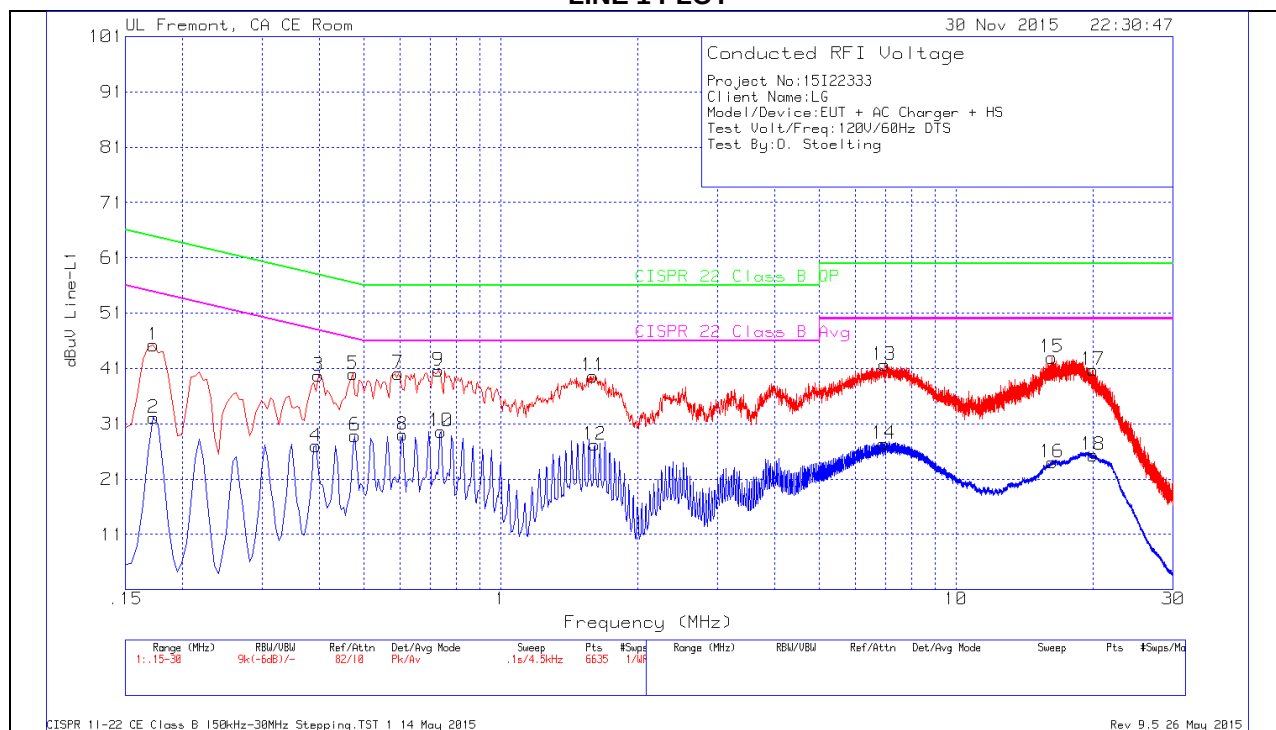
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT

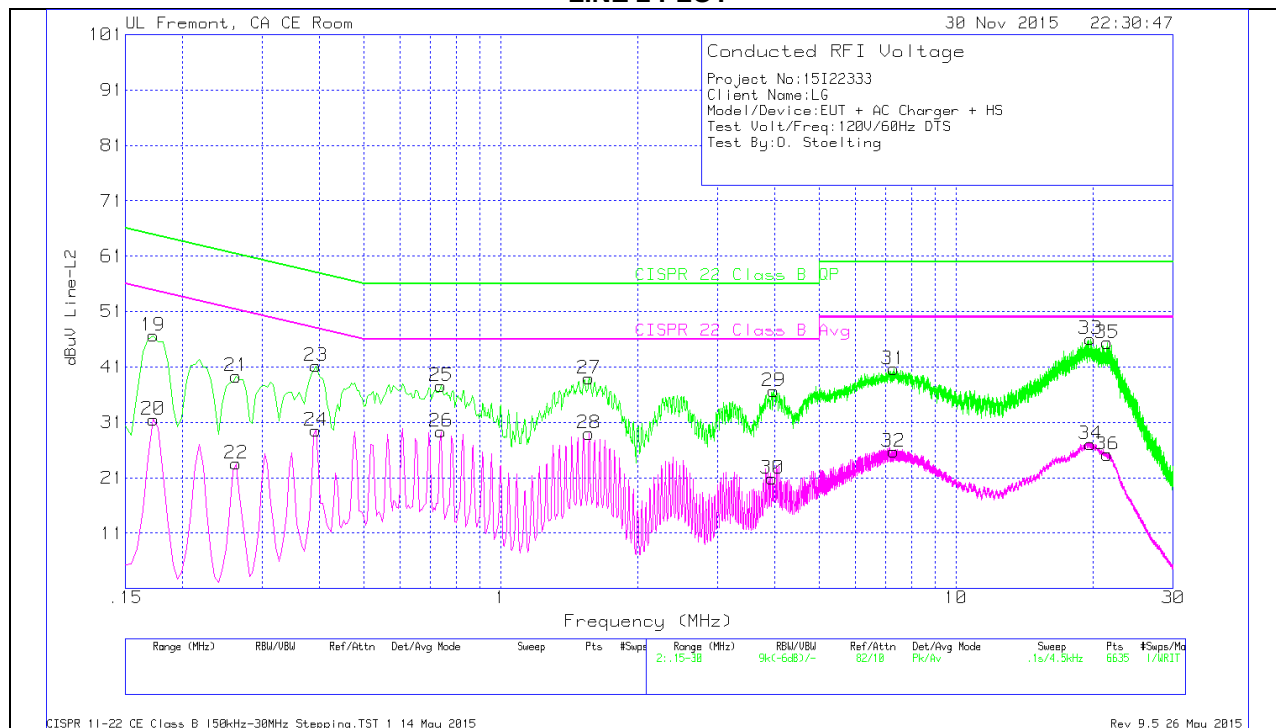


LINE 1 RESULTS

Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.1725	44.13	Pk	1.1	0	45.23	64.84	-19.61		
2	.1725	31.01	Av	1.1	0	32.11	-	-	54.84	-22.73
3	.3975	39.33	Pk	.4	0	39.73	57.91	-18.18		
4	.393	26.59	Av	.4	0	26.99	-	-	48	-21.01
5	.474	39.65	Pk	.4	0	40.05	56.44	-16.39		
6	.4785	28.44	Av	.4	0	28.84	-	-	46.37	-17.53
7	.5955	39.77	Pk	.3	0	40.07	56	-15.93		
8	.609	28.71	Av	.3	0	29.01	-	-	46	-16.99
9	.7305	40.35	Pk	.3	0	40.65	56	-15.35		
10	.7395	29.31	Av	.3	0	29.61	-	-	46	-16.39
11	1.5945	39.32	Pk	.2	.1	39.62	56	-16.38		
12	1.608	26.92	Av	.2	.1	27.22	-	-	46	-18.78
13	6.9585	41.38	Pk	.2	.1	41.68	60	-18.32		
14	6.9405	27.11	Av	.2	.1	27.41	-	-	50	-22.59
15	16.2285	42.46	Pk	.3	.2	42.96	60	-17.04		
16	16.2555	23.55	Av	.3	.2	24.05	-	-	50	-25.95
17	20.0085	40.25	Pk	.3	.2	40.75	60	-19.25		
18	20.0085	24.84	Av	.3	.2	25.34	-	-	50	-24.66

LINE 2 PLOT



LINE 2 RESULTS

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
19	.1725	45.44	Pk	1.2	0	46.64	64.84	-18.2		
20	.1725	30.32	Av	1.2	0	31.52	-	-	54.84	-23.32
21	.2625	38.63	Pk	.7	0	39.33	61.35	-22.02		
22	.2625	22.88	Av	.7	0	23.58	-	-	51.35	-27.77
23	.393	40.81	Pk	.4	0	41.21	58	-16.79		
24	.393	29.16	Av	.4	0	29.56	-	-	48	-18.44
25	.7395	37.3	Pk	.3	0	37.6	56	-18.4		
26	.7395	29.06	Av	.3	0	29.36	-	-	46	-16.64
27	1.563	38.65	Pk	.2	.1	38.95	56	-17.05		
28	1.563	28.7	Av	.2	.1	29	-	-	46	-17
29	3.9795	36.37	Pk	.2	.1	36.67	56	-19.33		
30	3.948	20.6	Av	.2	.1	20.9	-	-	46	-25.1
31	7.2915	40.36	Pk	.2	.1	40.66	60	-19.34		
32	7.2915	25.42	Av	.2	.1	25.72	-	-	50	-24.28
33	19.7205	45.55	Pk	.3	.2	46.05	60	-13.95		
34	19.752	26.58	Av	.3	.2	27.08	-	-	50	-22.92
35	21.4845	44.87	Pk	.3	.2	45.37	60	-14.63		
36	21.4845	24.67	Av	.3	.2	25.17	-	-	50	-24.83