



FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

CDMA WATCH + Bluetooth, DTS b/g

MODEL NUMBER: LG-VC110, LGVC110, VC110

FCC ID: ZNFVC110

REPORT NUMBER: 15I21068-E4

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Prepared for

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NVLAP LAB CODE 200065-0

Revision History

Issue			
Rev.	Date	Revisions	Revised By
---	7/27/15	Initial Issue	

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION: CDMA WATCH + Bluetooth, DTS b/g
MODEL: LG-VC110 LGVC110, VC110
SERIAL NUMBER: 1Z822 (Conducted), 1Z821 (Radiated)
DATE TESTED: JUNE 24-JULY 2, 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.

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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 v03r03, ANSI C63.10-2009 for FCC.

ANSI C63.10-2009 Deviation

Radiated spurious emission above 1GHz EUT height is 1.5m not 0.8m.

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(IC: 2324B-1)	☐ Chamber D(IC: 2324B-4)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 2324B-5)
☒ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 2324B-6)
	☐ Chamber G(IC: 2324B-7)
	☐ Chamber H(IC: 2324B-8)

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 18000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is CDMA WATCH + Bluetooth, DTS b/g

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2462	802.11b	6.05	4.03
2412 - 2462	802.11g	4.97	3.14

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an LMA antenna, with a maximum gain of -2.12dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

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

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z it was determined that 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

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	STA-U17WD	DS542312055	N/A

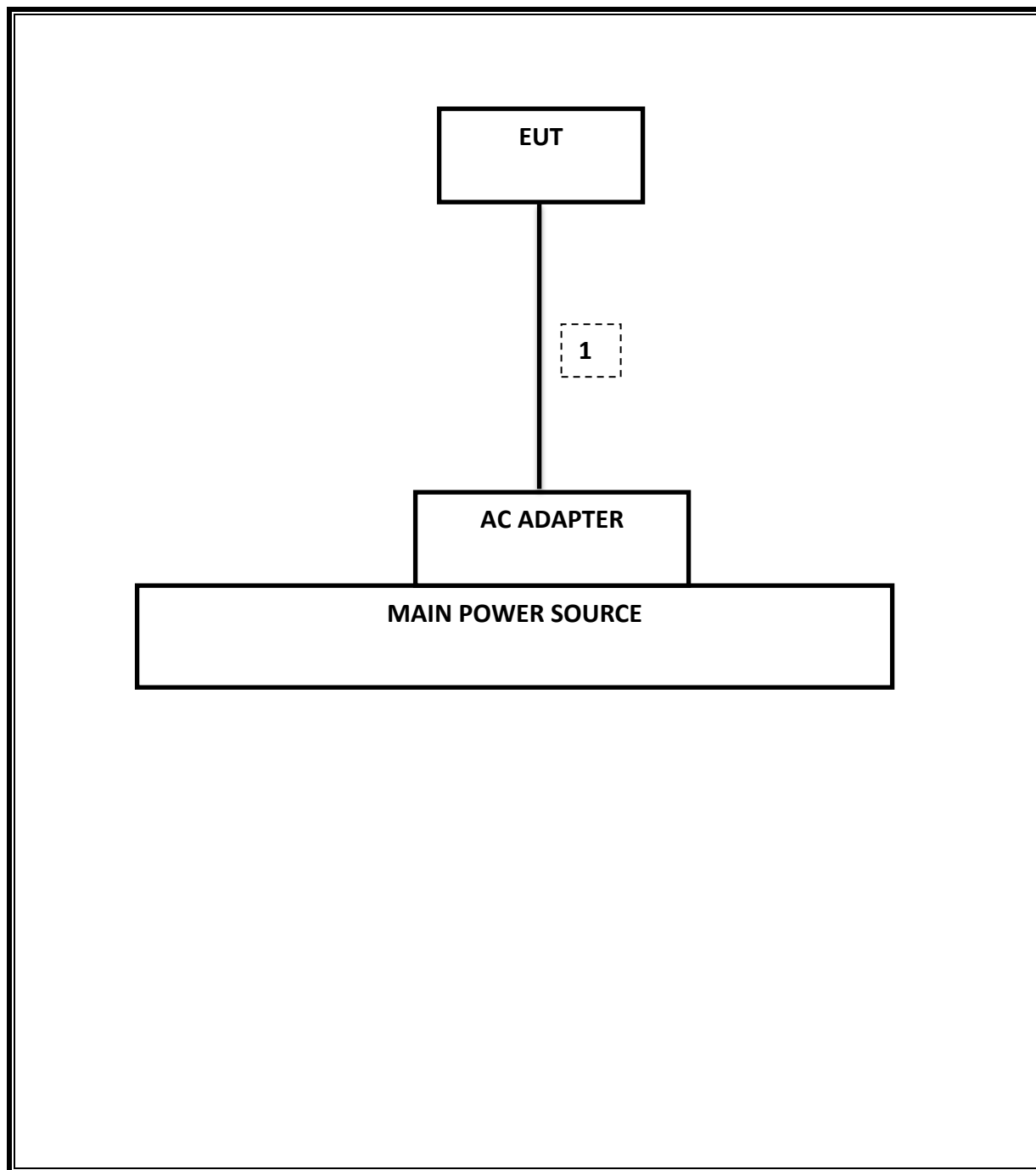
I/O CABLES

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

TEST SETUP

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

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15
Spectrum Analyzer, 9KHz-40GHz	HP	8564E	C00986	04/01/16
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/15
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/15
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/15
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/16
Antenna, Horn, 18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/15
Antenna, Horn, 26-40 GHz	ARA	MWH-2640/B	T446	05/12/16
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	T243	03/06/16
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/16
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/15
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/15
Attenuator / Switch driver	HP	11713A	F00204	CNR
Low Pass Filter 3GHz	Micro-Tronics	LPS17541	F00219	05/23/16
High Pass Filter 5GHz	Micro-Tronics	HPS17542	F00222	05/22/16
High Pass Filter 6GHz	Micro-Tronics	HPM17543	F00224	05/22/16
Radiated Software	UL	UL EMC	Ver 9.5, July 22, 2014	
Conducted Software	UL	UL EMC	Ver 9.5, May 17 2012	
CLT Software	UL	UL RF	Ver 1.0, Feb 2 2015	
Antenna Port Software	UL	UL RF	Ver 2.1.1.1, Jan 20 2015	

7. MEASUREMENT METHODS

KDB 558074 D01 DTS Meas Guidance v03r03: 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. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

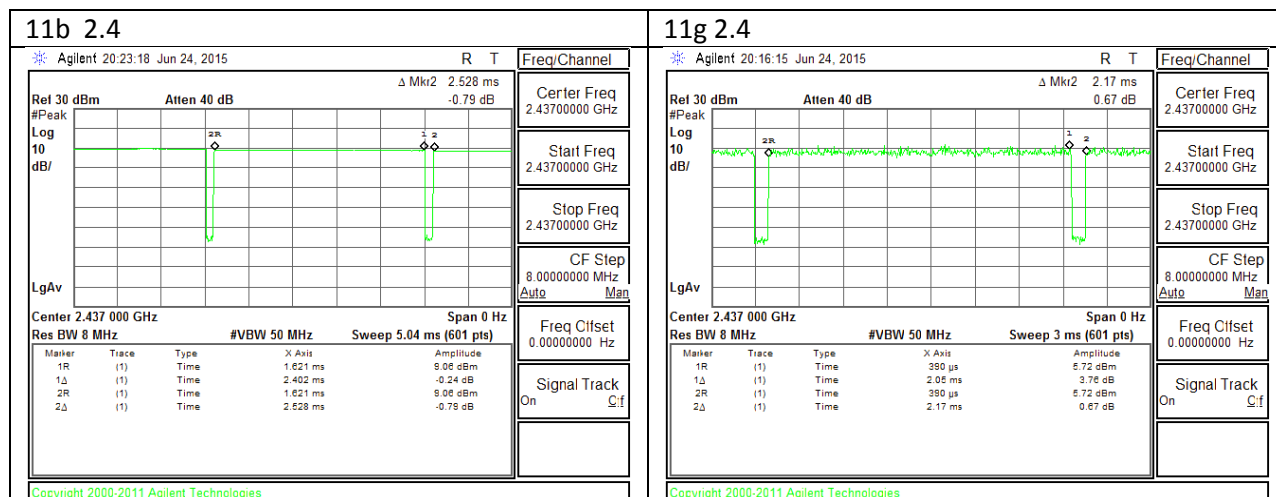
LIMITS

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	2.40	2.53	0.950	95.0%	0.22	0.416
802.11g	2.05	2.17	0.945	94.5%	0.25	0.488



8. 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	8.09 MHz
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	-40.34dBm
15.247	RSS-247 5.4.4	TX conducted output power	<30dBm		Pass	6.05dBm
15.247	RSS-247 5.2.2	PSD	<8dBm		Pass	-16.45 dBm
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	46.67dBuV
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass	42.36dBuV/m

9. ANTENNA PORT TEST RESULTS

9.1. 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 100KHz, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

RESULTS

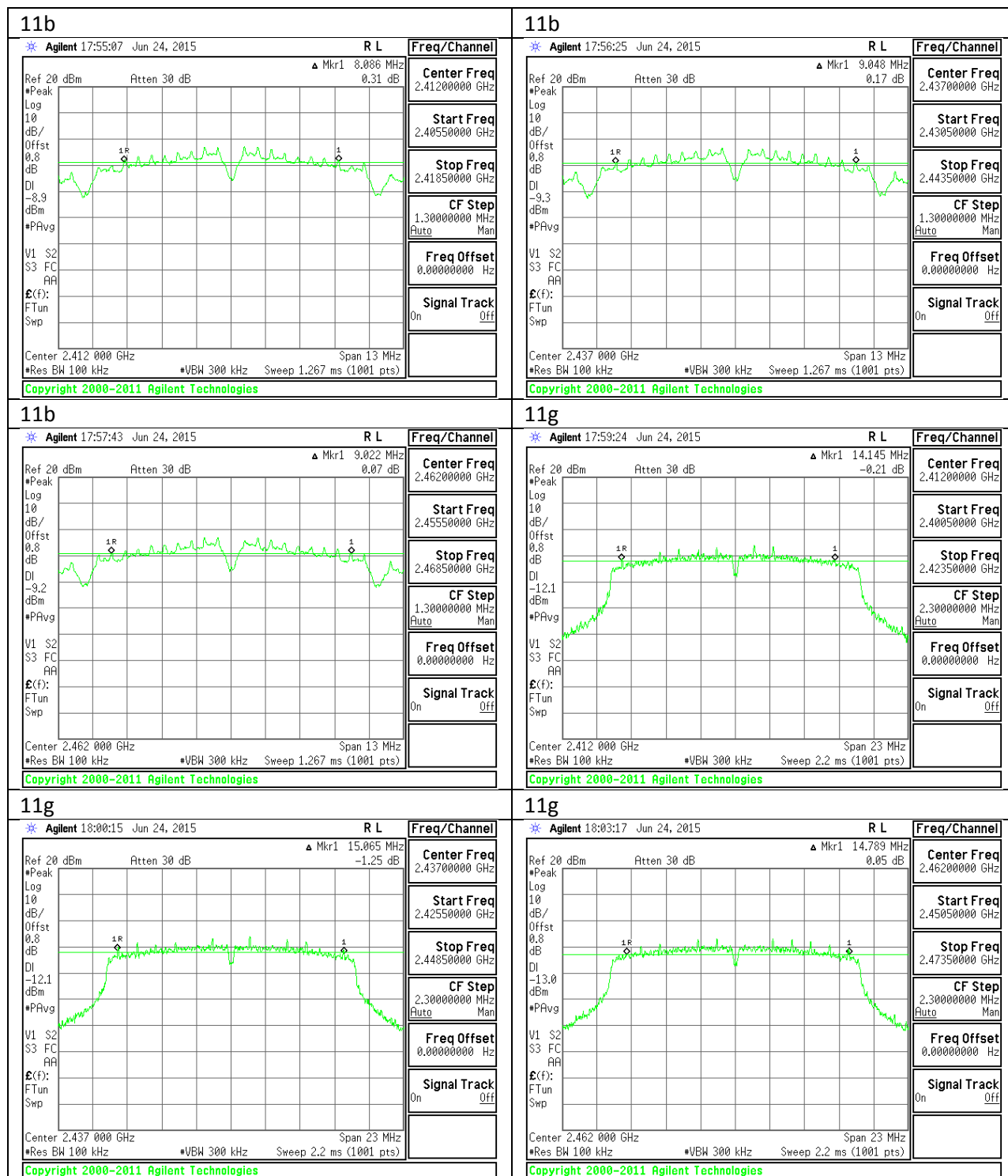
9.1.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	8.09	0.5
Mid	2437	9.05	0.5
High	2462	9.02	0.5
Worst		8.09	

9.1.2. 802.11g MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	14.15	0.5
Mid	2437	15.07	0.5
High	2462	14.79	0.5
Worst		14.15	

9.1.3. 6 dB BANDWIDTH PLOTS



9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

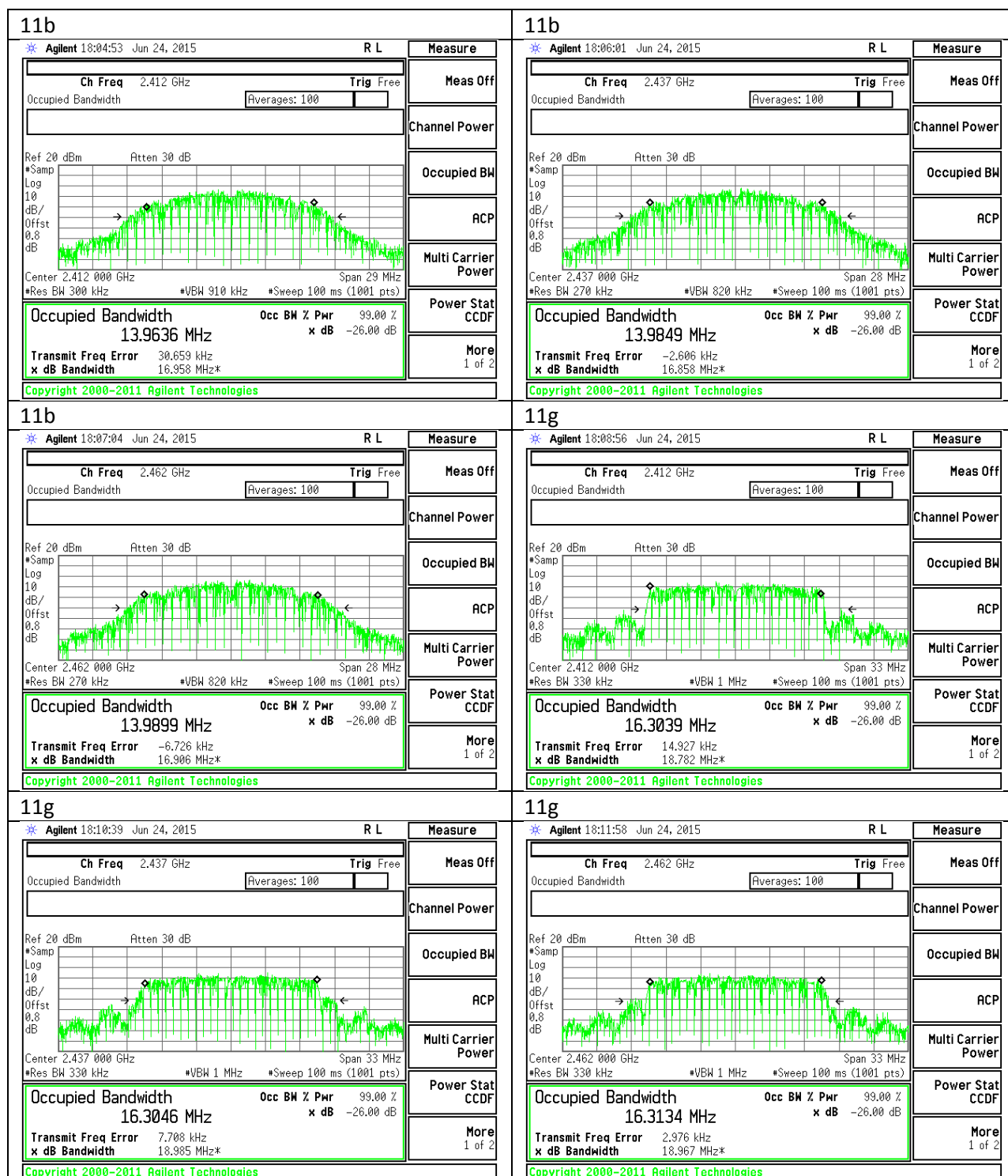
9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	13.96
Mid	2437	13.98
High	2462	13.99
Worst		13.99

9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.30
Mid	2437	16.30
High	2462	16.31
Worst		16.31

9.2.3. 99% BANDWIDTH PLOTS



9.3. 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

9.3.1. 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	-2.12	30.00	30	36	30.00
Mid	2437	-2.12	30.00	30	36	30.00
High	2462	-2.12	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	6.00	6.00	30.00	-24.00
Mid	2437	6.00	6.00	30.00	-24.00
High	2462	6.05	6.05	30.00	-23.95
Worst			6.05		

9.3.2. 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	-2.12	30.00	30	36	30.00
Mid	2437	-2.12	30.00	30	36	30.00
High	2462	-2.12	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	4.68	4.68	30.00	-25.32
Mid	2437	4.97	4.97	30.00	-25.03
High	2462	4.86	4.86	30.00	-25.14
Worst			4.97		

9.4. 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

9.4.1. 802.11b MODE IN THE 2.4 GHz BAND

PSD Results

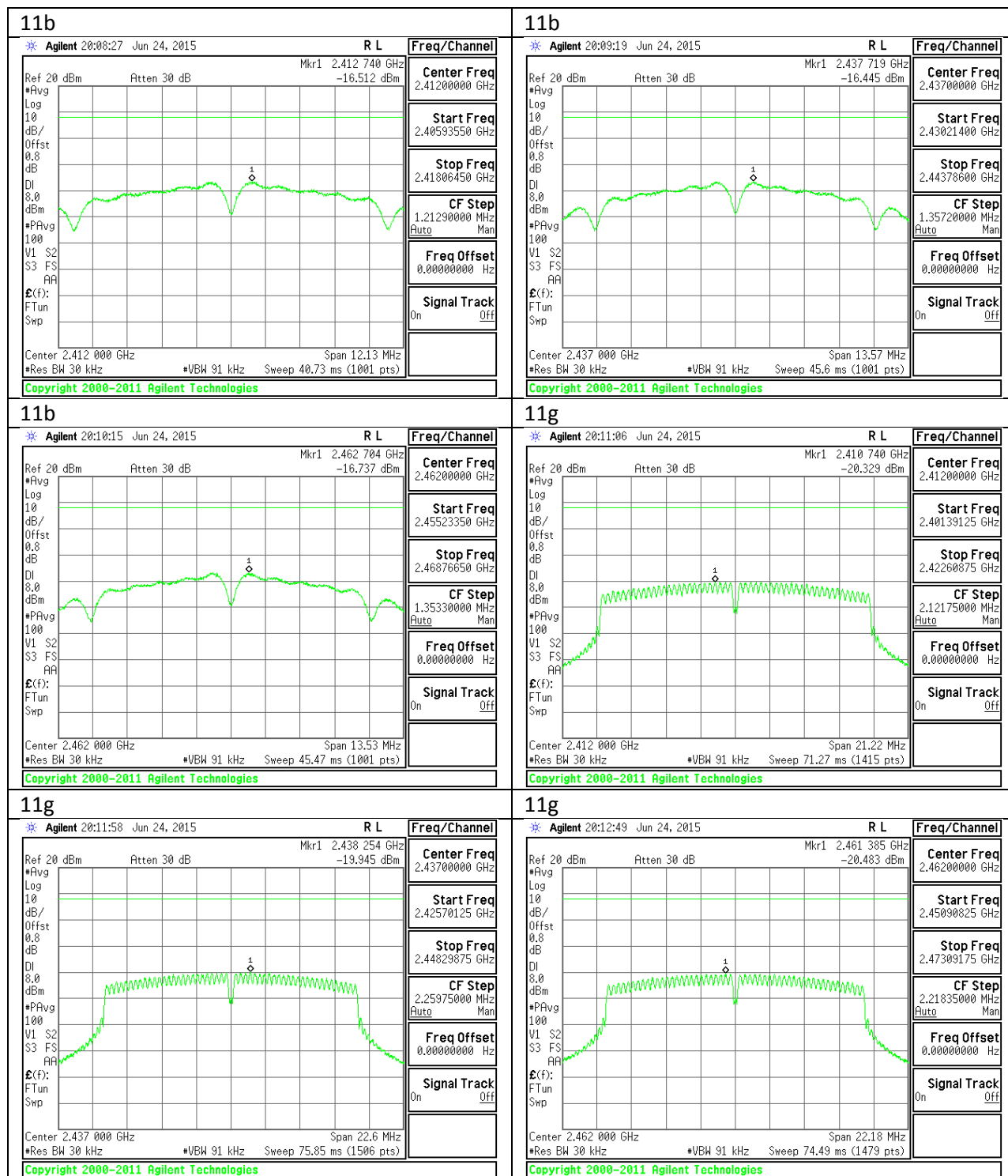
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-16.51	8.0	-24.5
Mid	2437	-16.45	8.0	-24.4
High	2462	-16.74	8.0	-24.7

9.4.2. 802.11g MODE IN THE 2.4 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-20.33	8.0	-28.3
Mid	2437	-19.95	8.0	-27.9
High	2462	-20.48	8.0	-28.5

9.4.3. PSD Chain 0 PLOTS



9.5. 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.

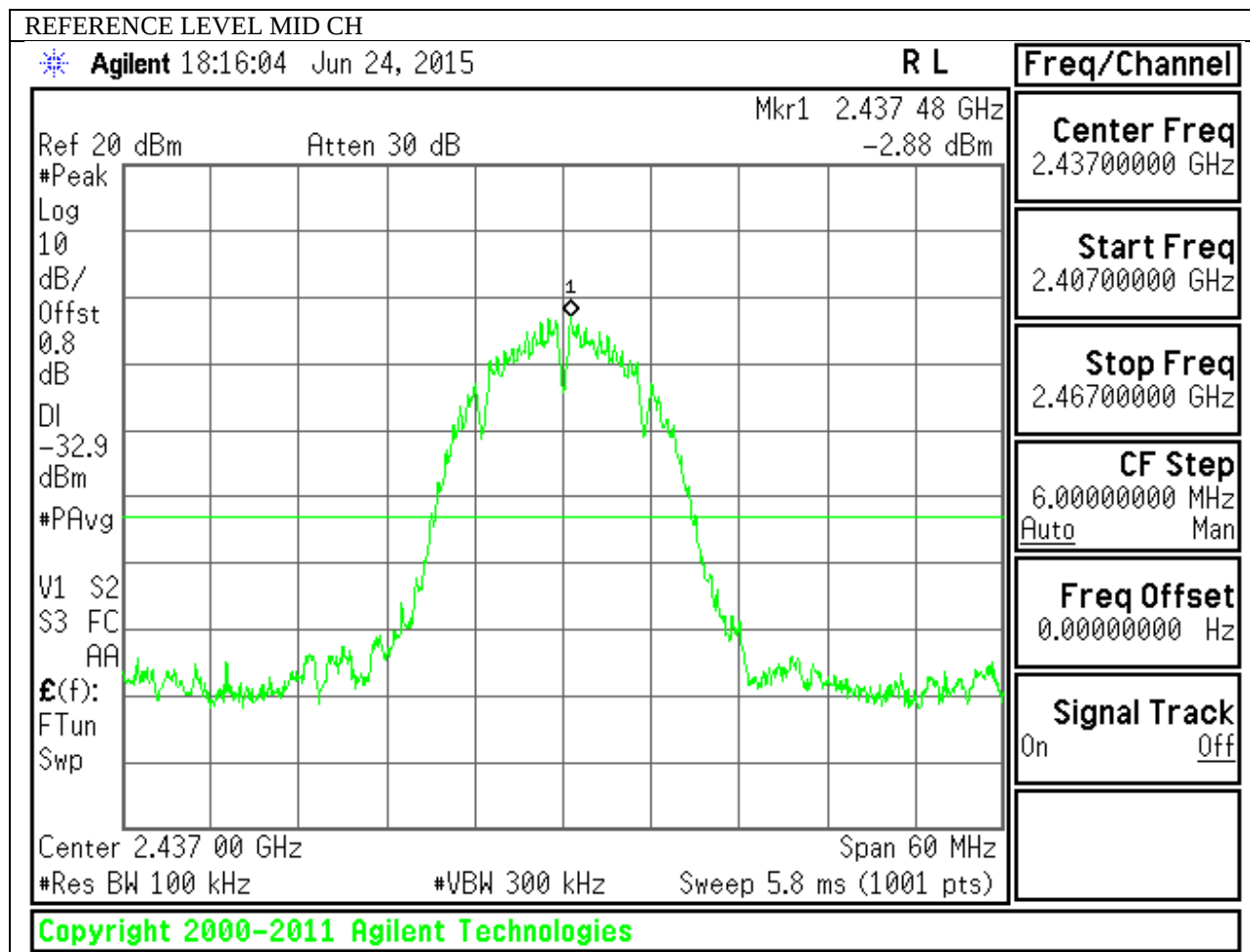
TEST PROCEDURE

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.

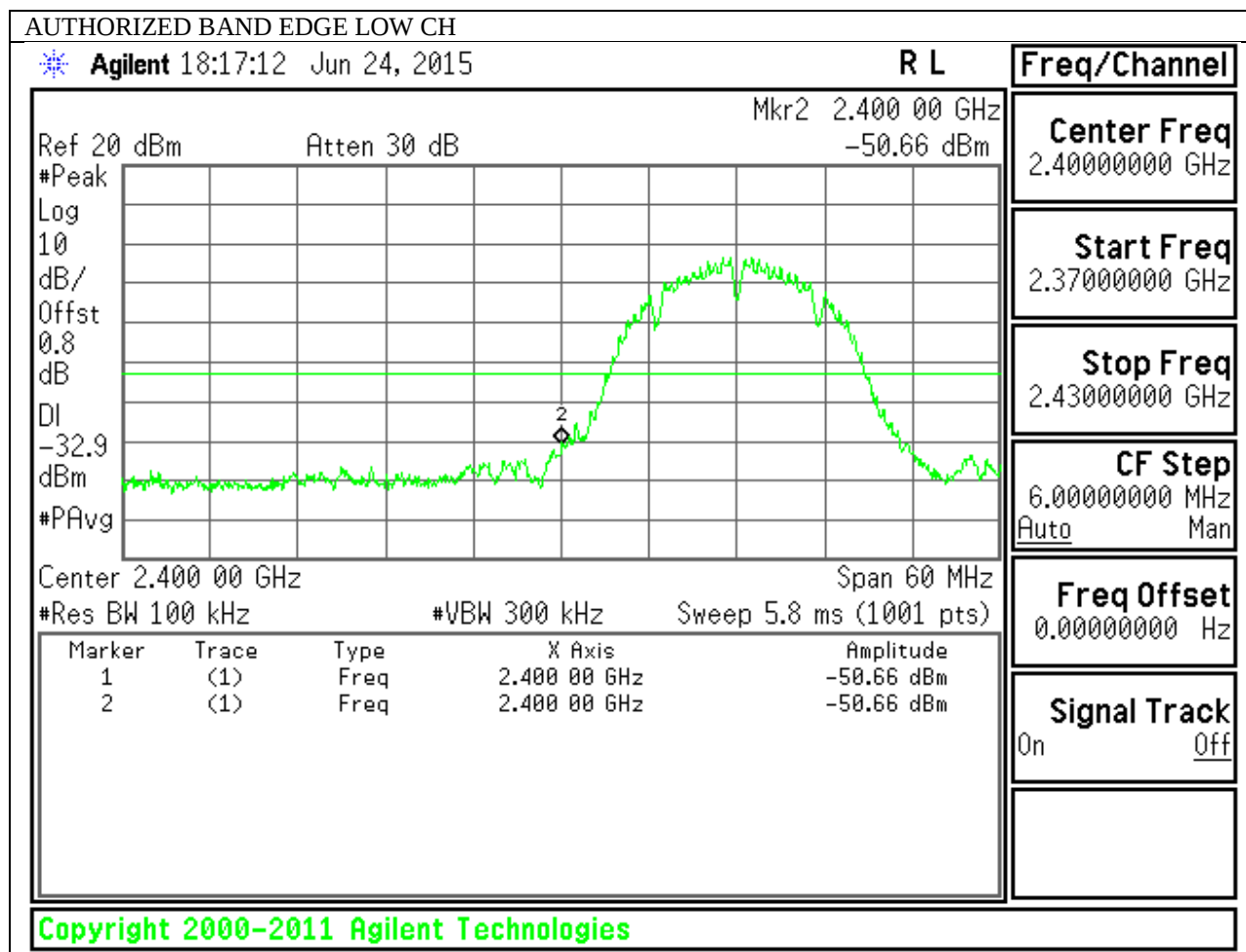
RESULTS

9.5.1. 802.11b MODE IN THE 2.4 GHz BAND

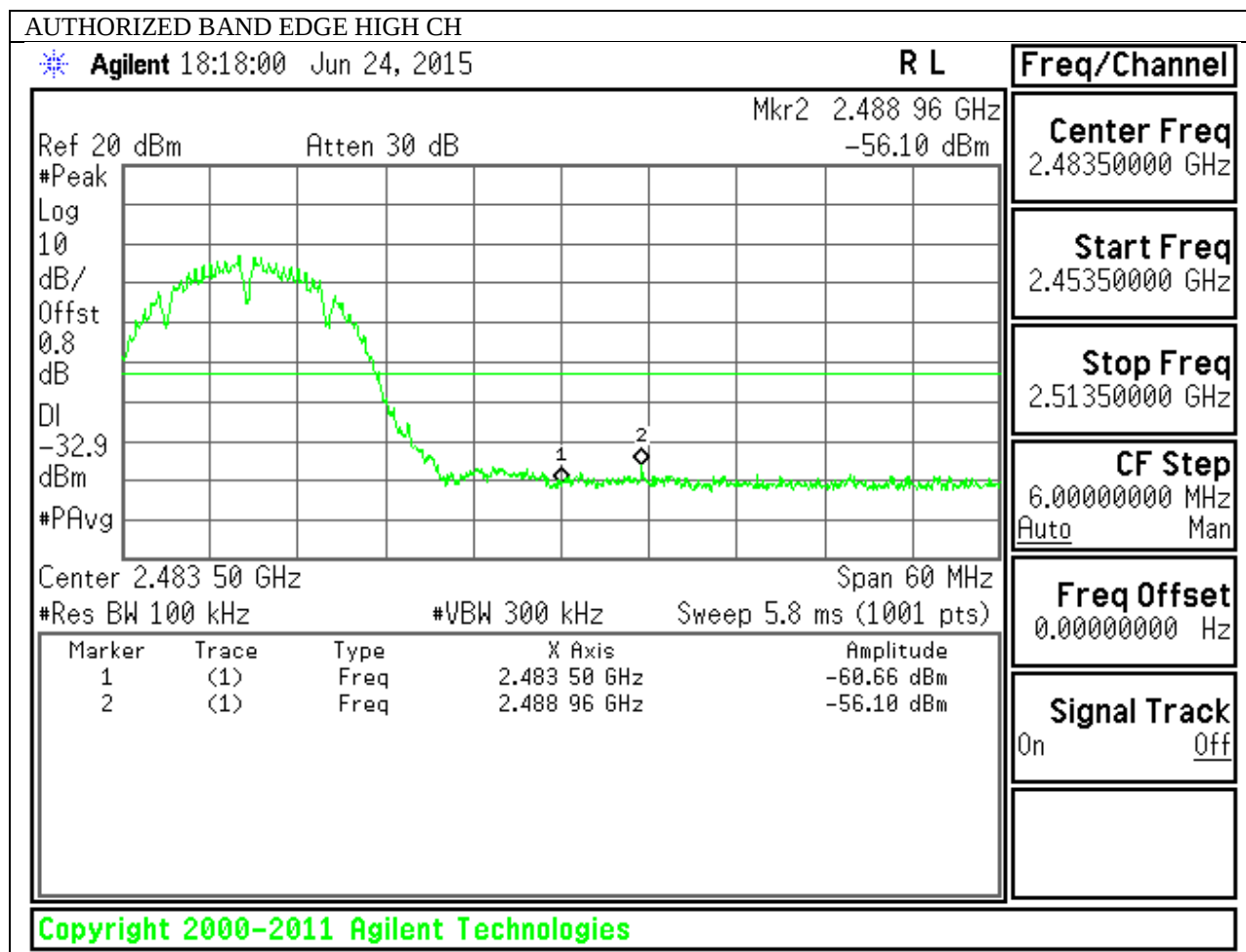
IN-BAND REFERENCE LEVEL



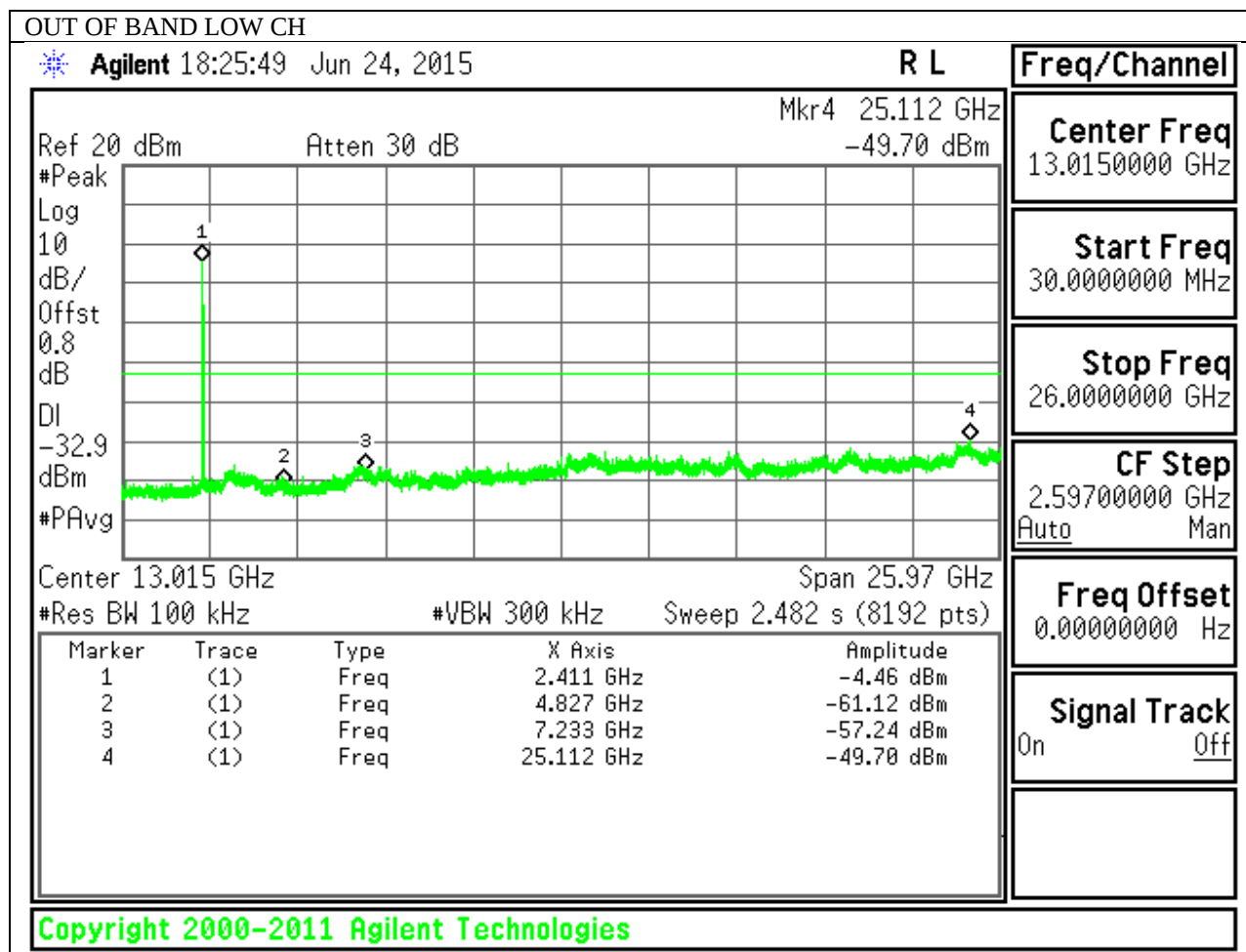
LOW CHANNEL BANDEDGE

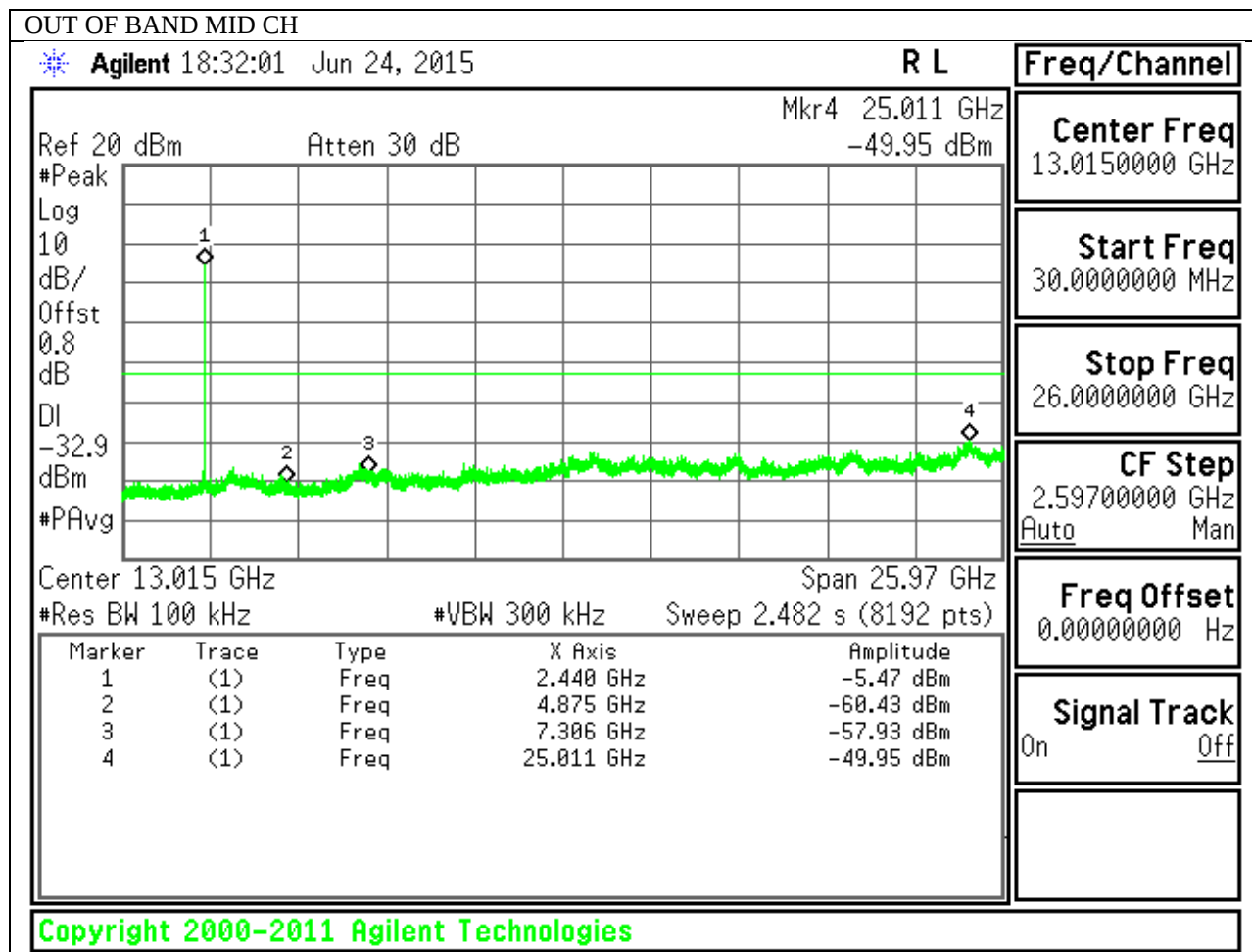


HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS



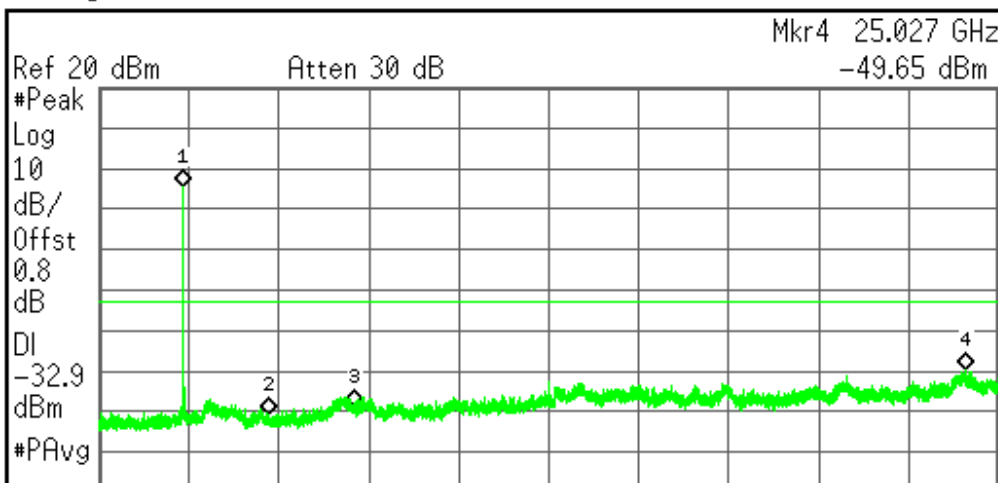


OUT OF BAND HIGH CH

Agilent 18:33:43 Jun 24, 2015

R L

Freq/Channel



Center Freq
13.0150000 GHz

Start Freq
30.0000000 MHz

Stop Freq
26.0000000 GHz

CF Step
2.59700000 GHz
Auto Man

Freq Offset
0.00000000 Hz

Center 13.015 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 300 kHz Sweep 2.482 s (8192 pts)

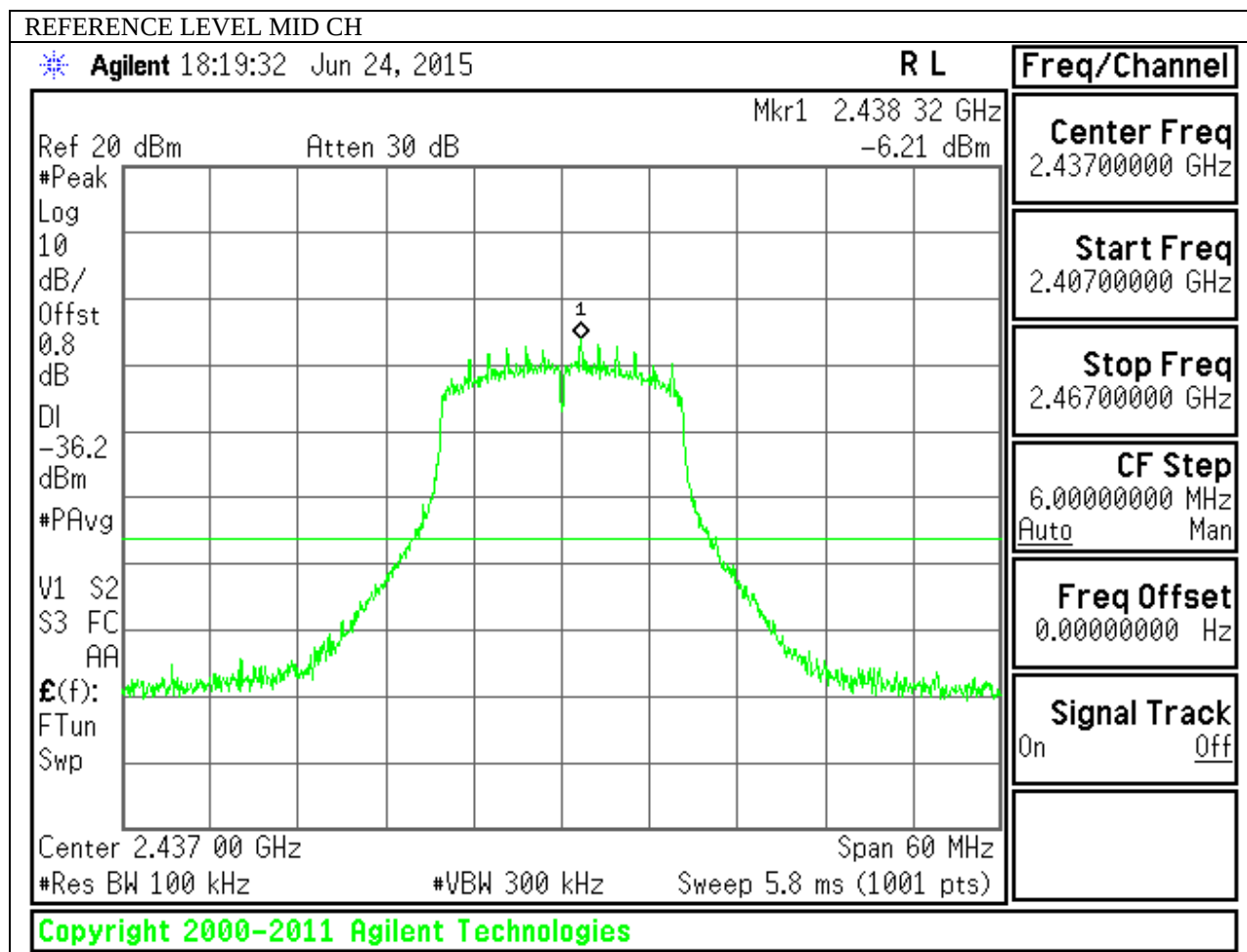
Marker	Trace	Type	X Axis	Amplitude
1	(1)	Freq	2.462 GHz	-4.47 dBm
2	(1)	Freq	4.929 GHz	-60.69 dBm
3	(1)	Freq	7.386 GHz	-58.89 dBm
4	(1)	Freq	25.027 GHz	-49.65 dBm

Signal Track
On Off

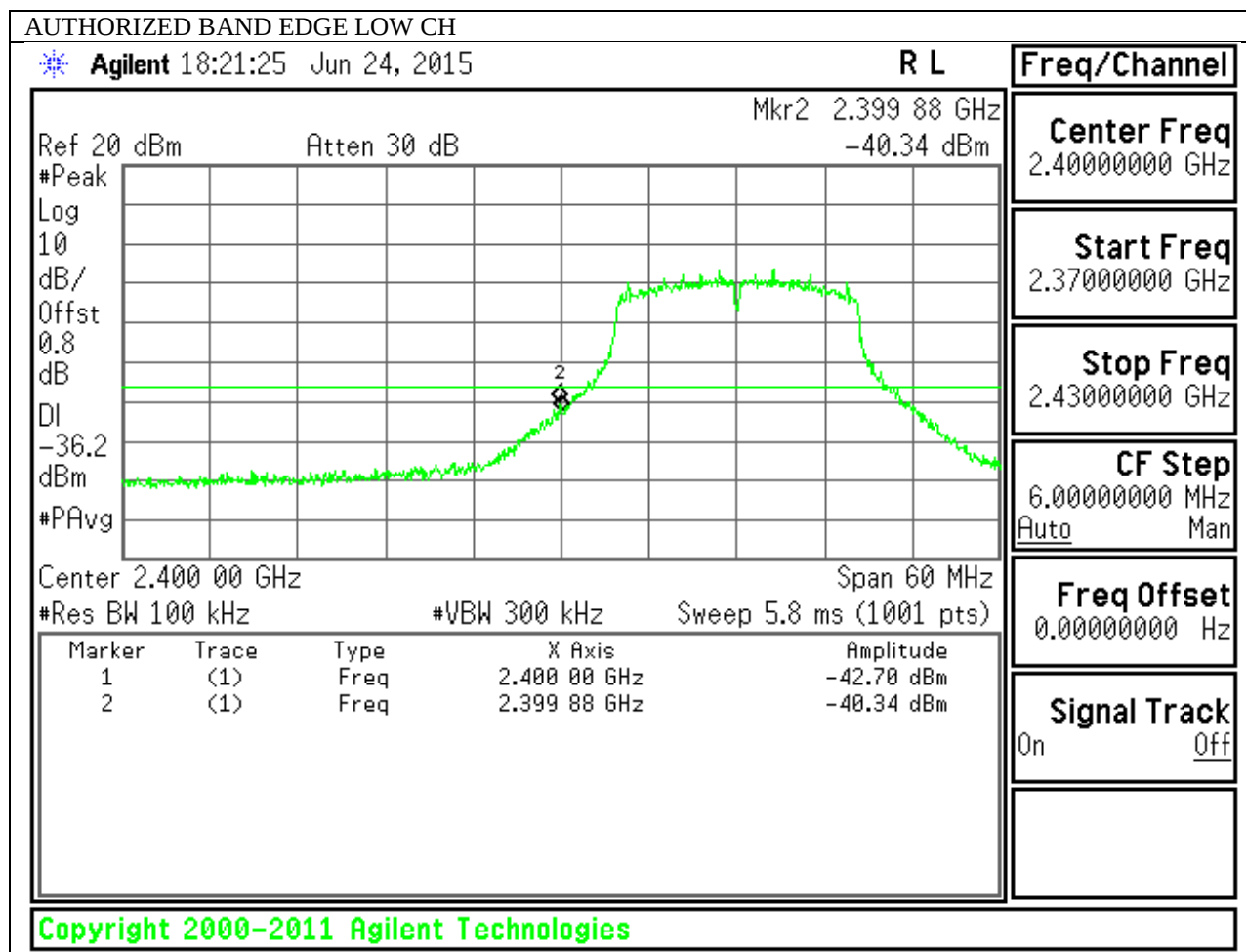
Copyright 2000-2011 Agilent Technologies

9.5.2. 802.11g MODE IN THE 2.4 GHz BAND

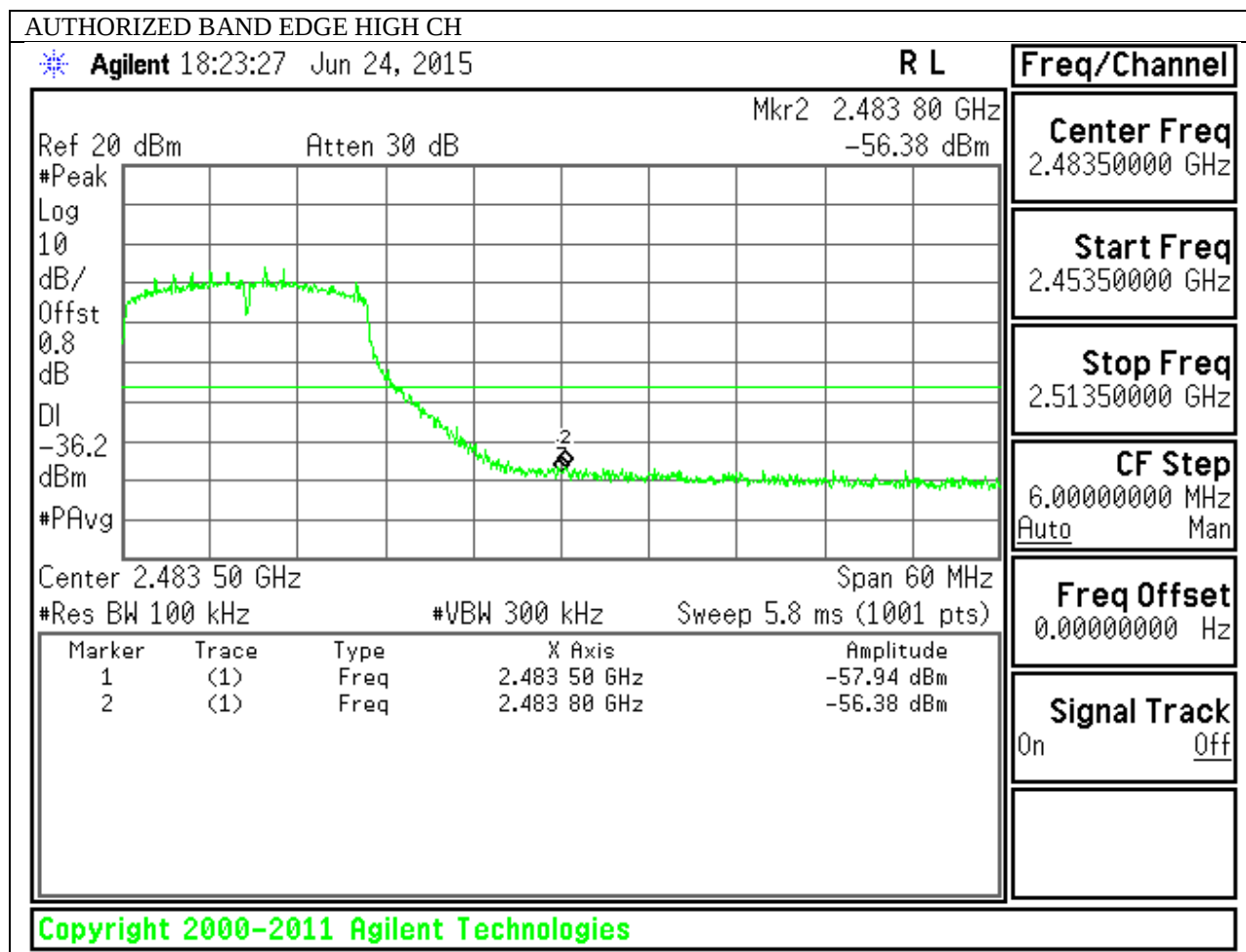
IN-BAND REFERENCE LEVEL



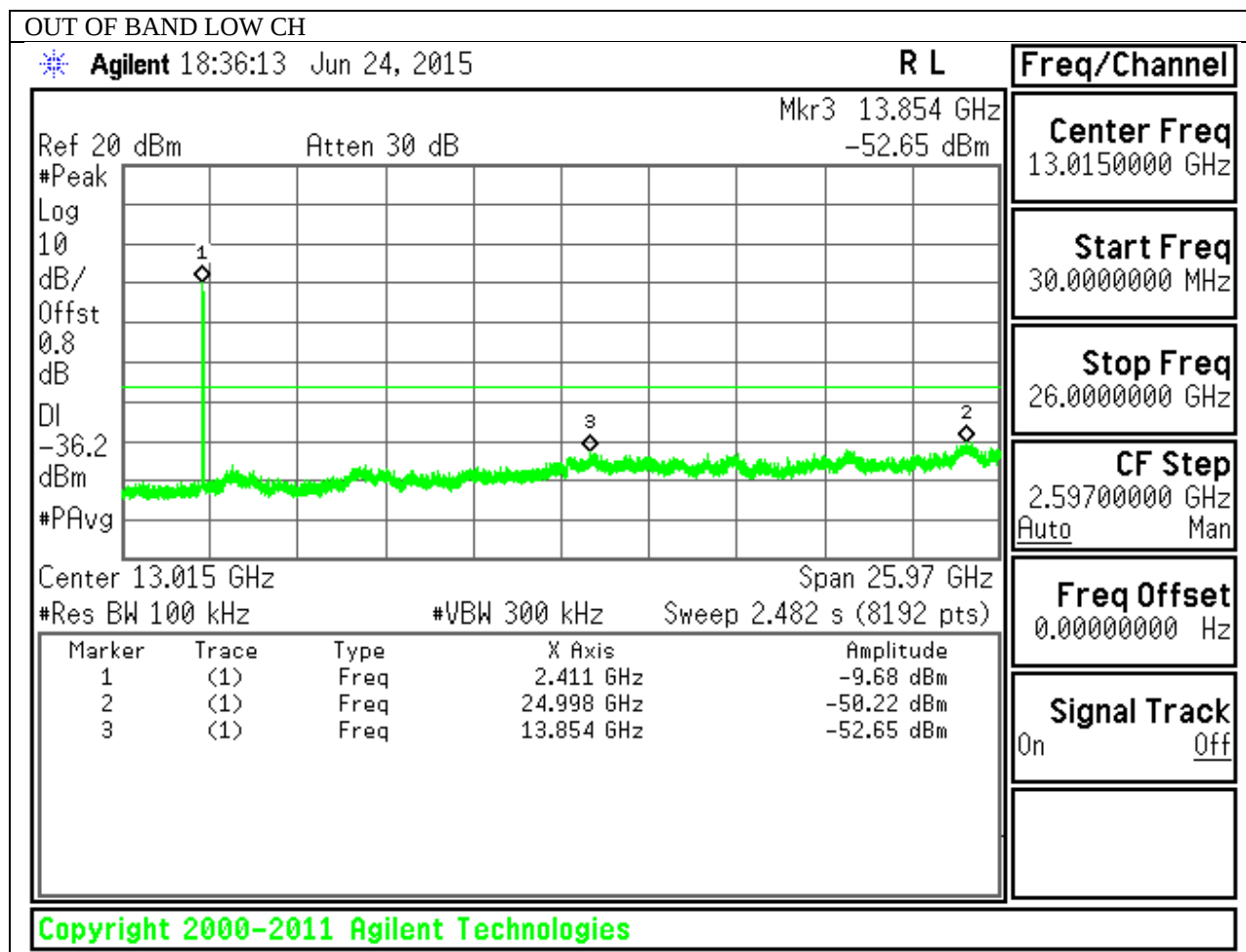
LOW CHANNEL BANDEDGE

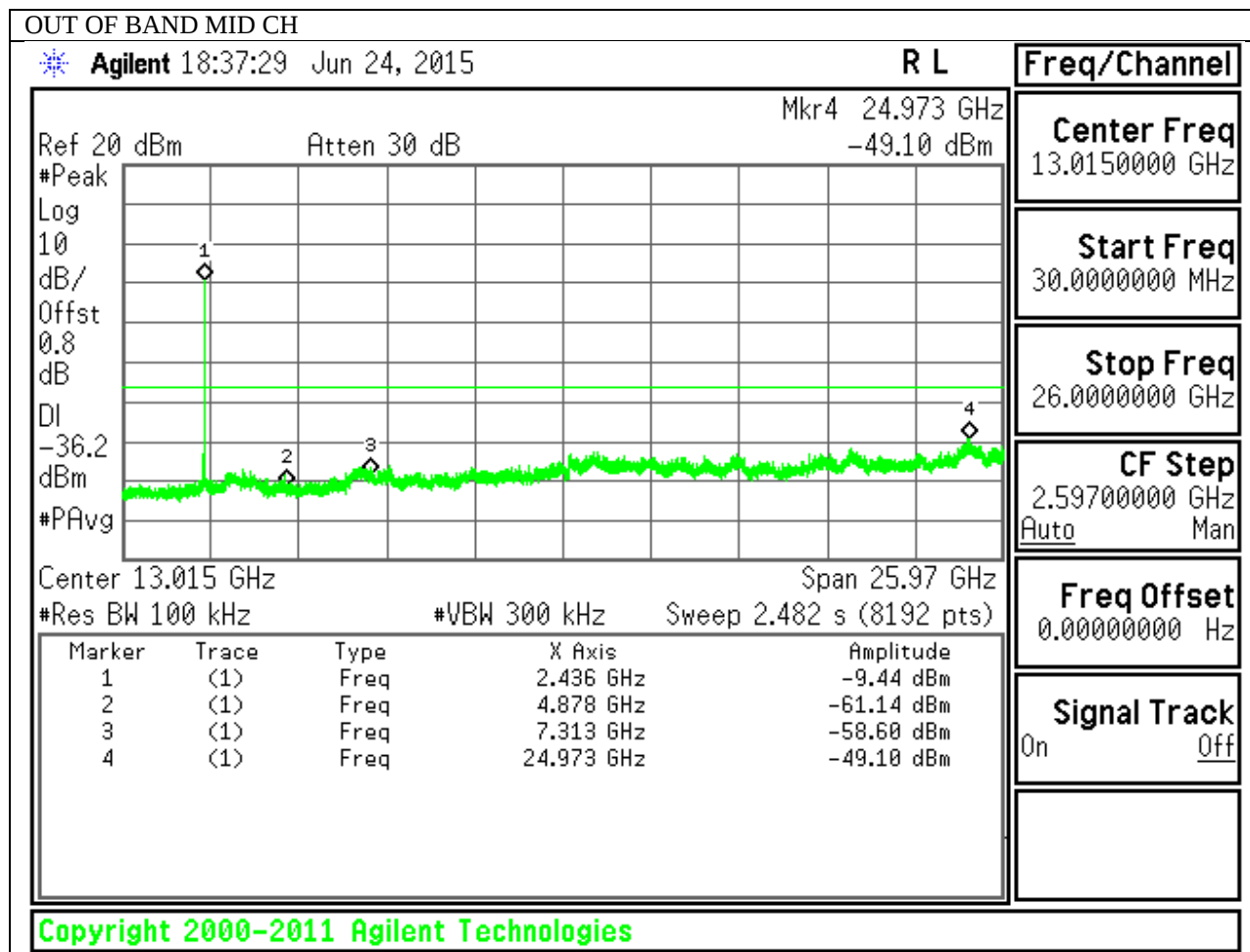


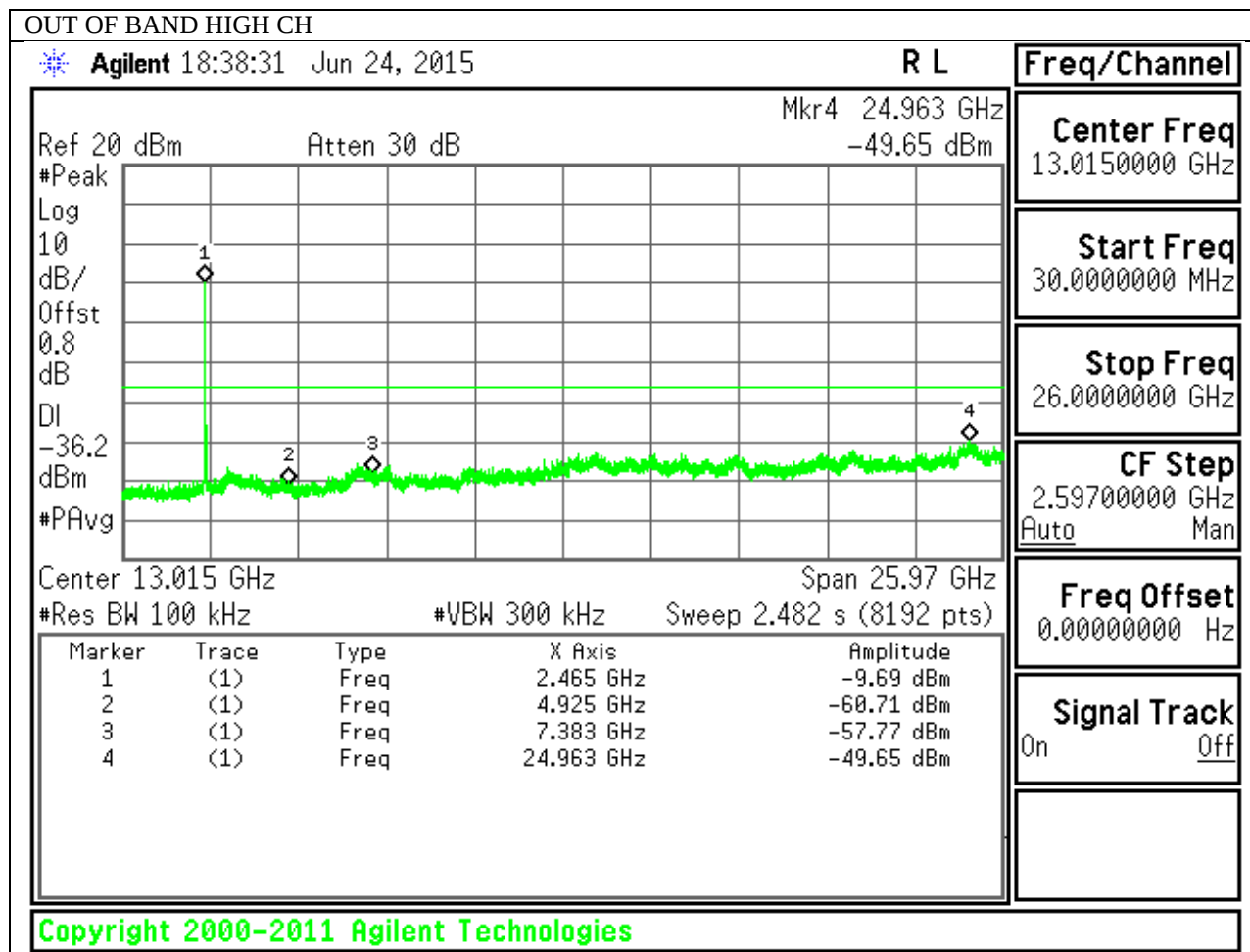
HIGH CHANNEL BANDEDGE



OUT-OF-BAND EMISSIONS







10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit ($\mu\text{V}/\text{m}$) at 3 m	Field Strength Limit (dB $\mu\text{V}/\text{m}$) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor = $10\log(1/x)$. For this sample B mode = 0dB (duty cycle >98%); G mode = 0.31dB; N mode = 0.33dB.

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

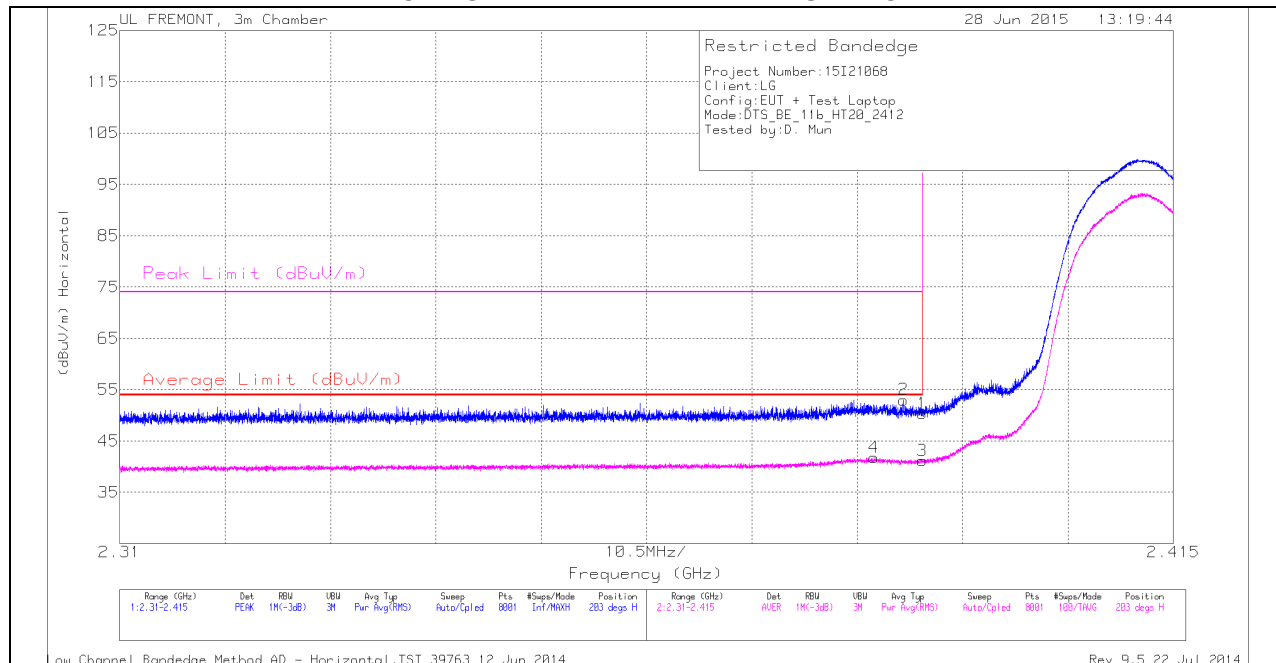
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.2. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

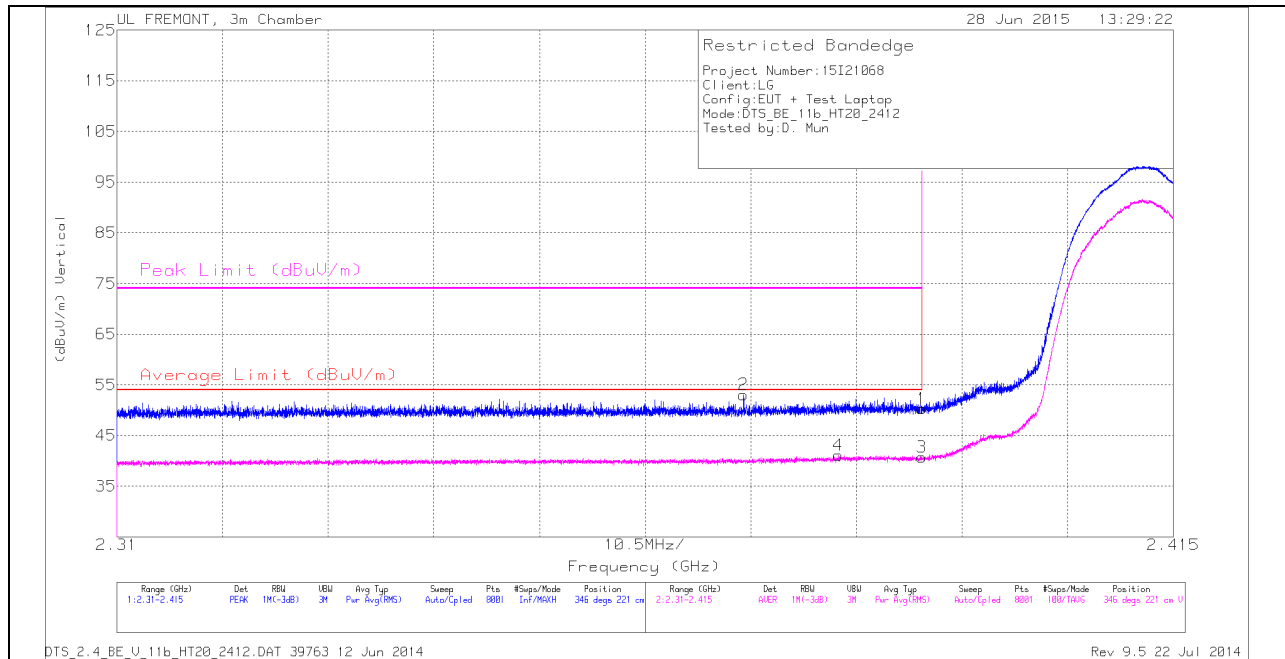
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Filt 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
4	2.385	31.96	RMS	32	-22.4	.22	41.78	54	-12.22	-	-	203	144	H
2	2.388	43.41	PK	32	-22.4	0	53.01	-	-	74	-20.99	203	144	H
1	2.39	40.79	PK	32	-22.4	0	50.39	-	-	74	-23.61	203	144	H
3	2.39	31.32	RMS	32	-22.4	.22	41.14	54	-12.86	-	-	203	144	H

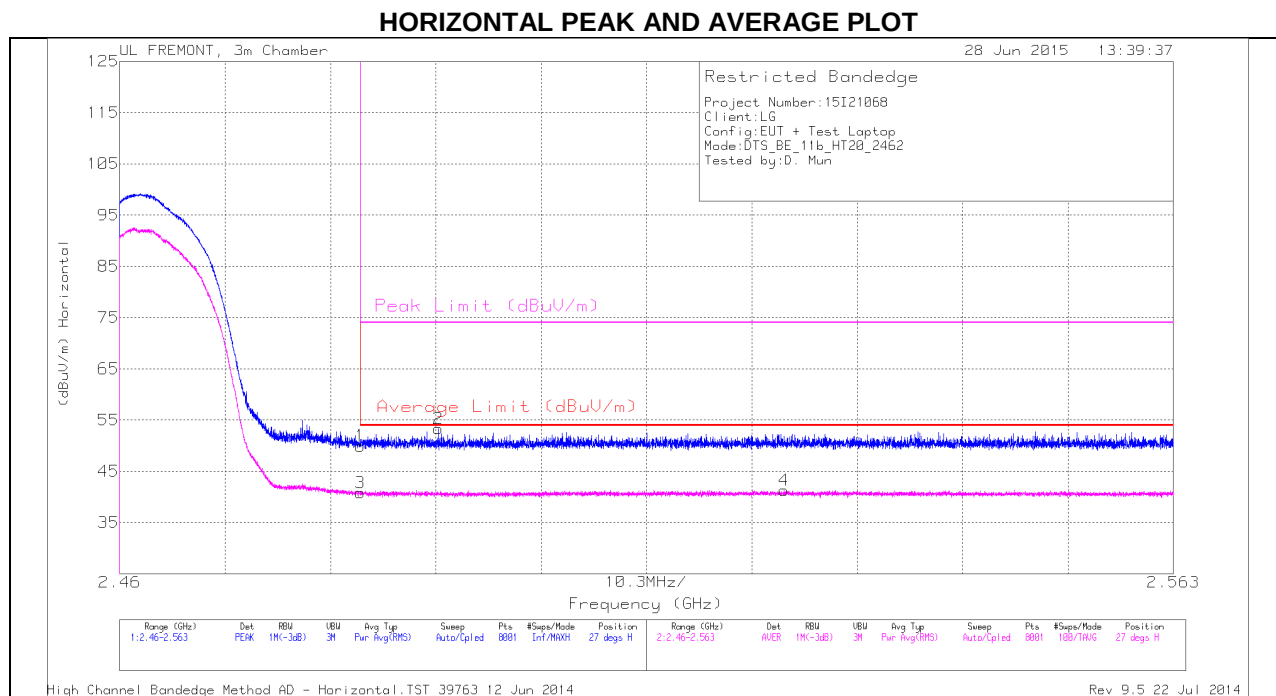
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	2.372	43.58	PK	31.9	-22.4	0	53.08	-	-	74	-20.92	346	221	V
4	2.382	31.29	RMS	32	-22.4	.22	41.11	54	-12.89	-	-	346	221	V
1	2.39	40.68	PK	32	-22.4	0	50.28	-	-	74	-23.72	346	221	V
3	2.39	30.88	RMS	32	-22.4	.22	40.7	54	-13.3	-	-	346	221	V

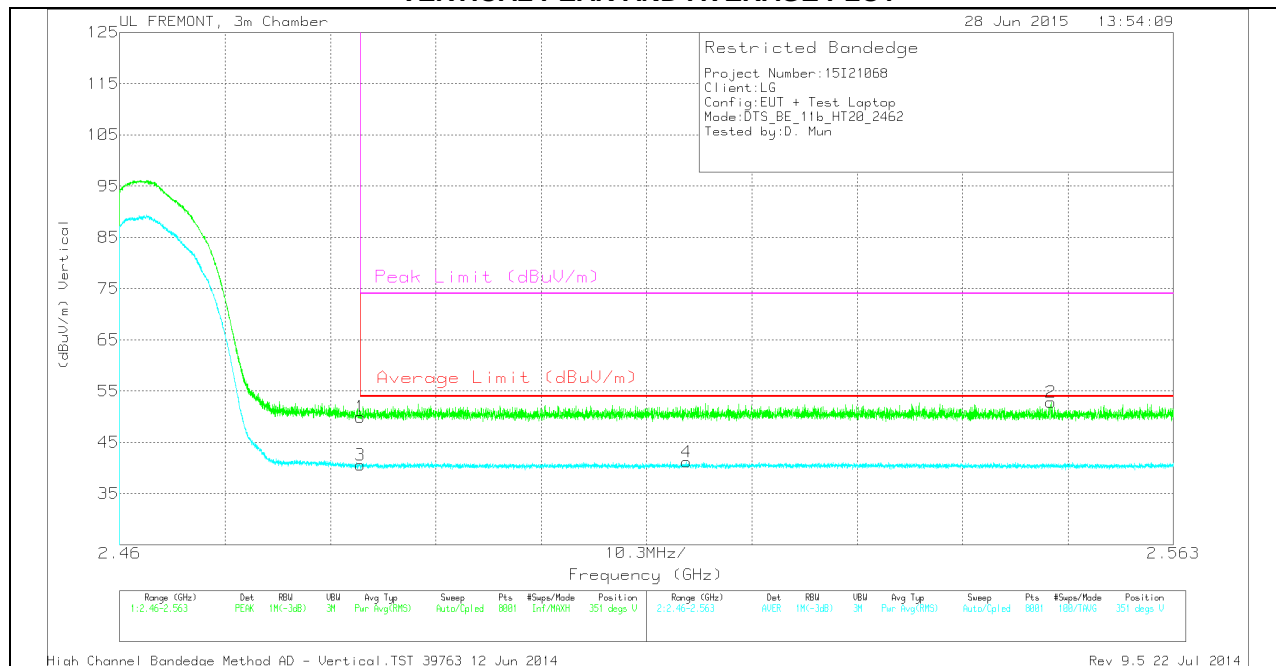
AUTHORIZED BANDEDGE (HIGH CHANNEL)



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	39.73	PK	32.3	-22.1	0	49.93	-	-	74	-24.07	27	223	H
3	2.484	30.4	RMS	32.3	-22.1	.22	40.82	54	-13.18	-	-	27	223	H
2	2.491	43.22	PK	32.3	-22.2	0	53.32	-	-	74	-20.68	27	223	H
4	2.525	30.7	RMS	32.4	-22	.22	41.32	54	-12.68	-	-	27	223	H

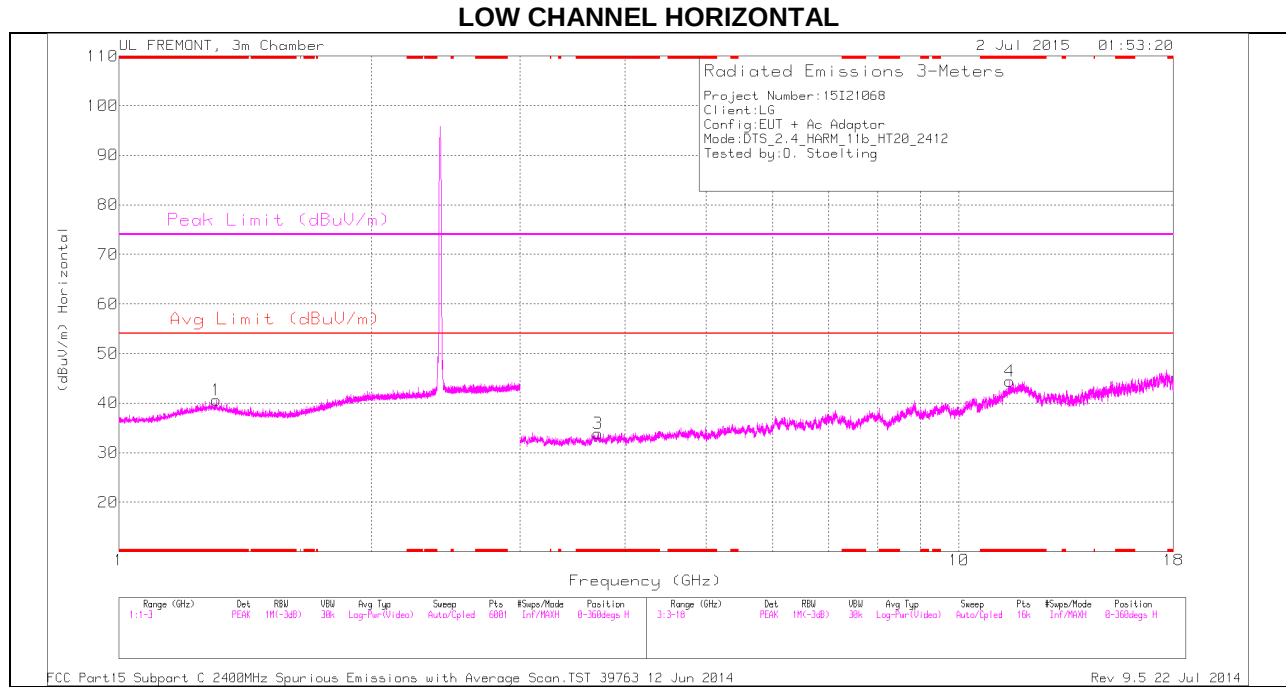
VERTICAL PEAK AND AVERAGE PLOT



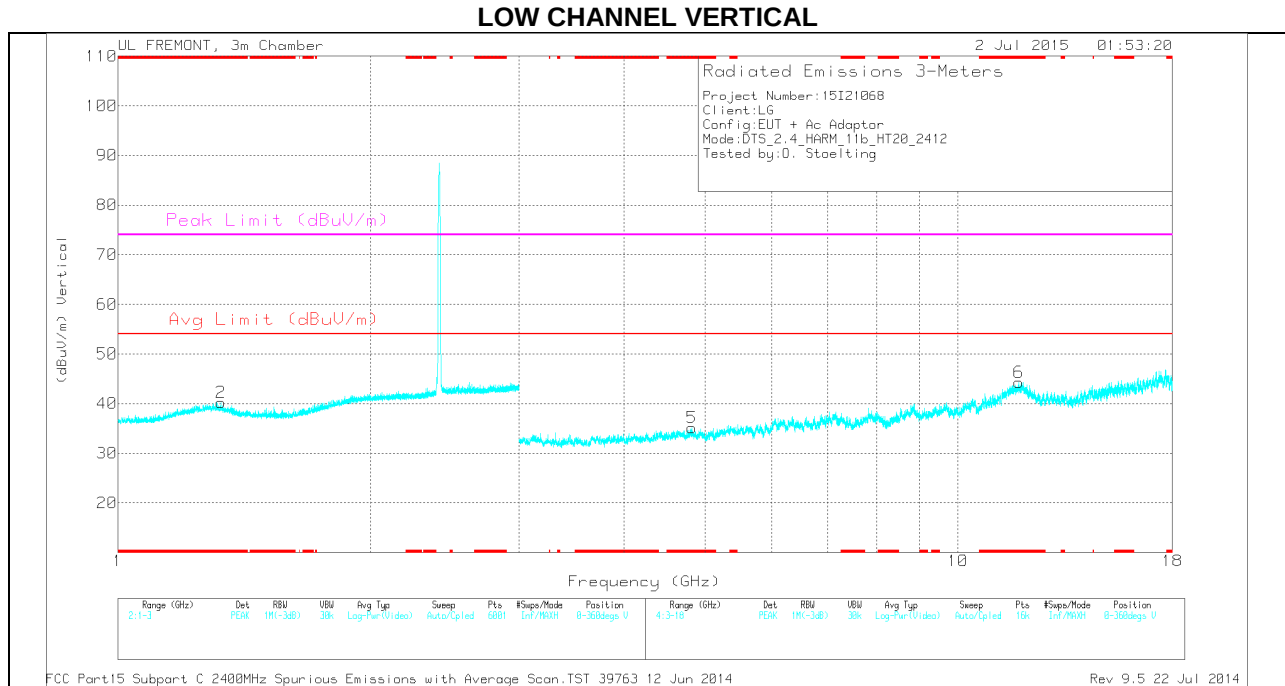
VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	39.77	PK	32.3	-22.1	49.97	-	-	74	-24.03	351	175	V
3	2.484	30.33	RMS	32.3	-22.1	40.53	54	-13.47	-	-	351	175	V
4	2.515	30.9	RMS	32.3	-22	41.2	54	-12.8	-	-	351	175	V
2	2.551	42.43	PK	32.4	-22	52.83	-	-	74	-21.17	351	175	V

HARMONICS AND SPURIOUS EMISSIONS



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



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

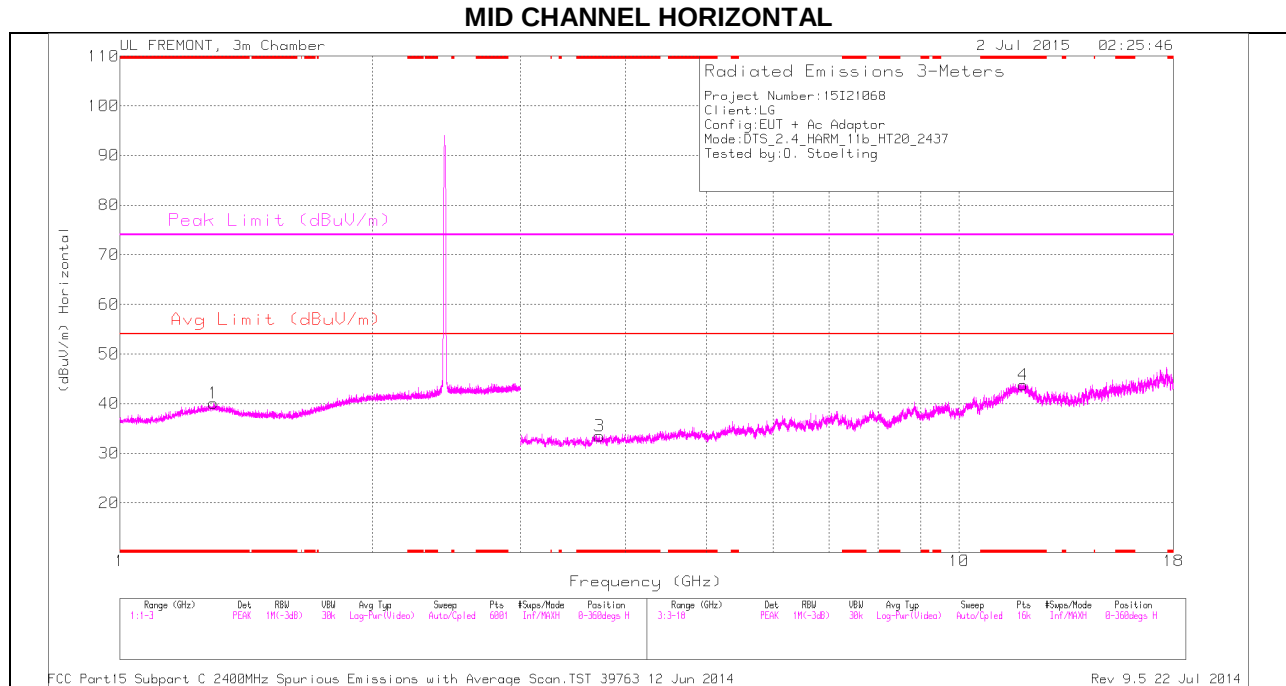
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.306	33.86	PK	29.8	-23.1	0	40.56	-	-	74	-33.44	0-360	200	H
2	* 1.327	33.8	PK	29.6	-23.2	0	40.2	-	-	74	-33.8	0-360	200	V
3	* 3.715	30.88	PK	33	-30	0	33.88	-	-	74	-40.12	0-360	100	H
4	* 11.497	27.96	PK	38.4	-22	0	44.36	-	-	74	-29.64	0-360	100	H
5	* 4.821	30.6	PK	34	-29.4	0	35.2	-	-	74	-38.8	0-360	100	V
6	* 11.804	27.76	PK	39	-22.5	0	44.26	-	-	74	-29.74	0-360	200	V

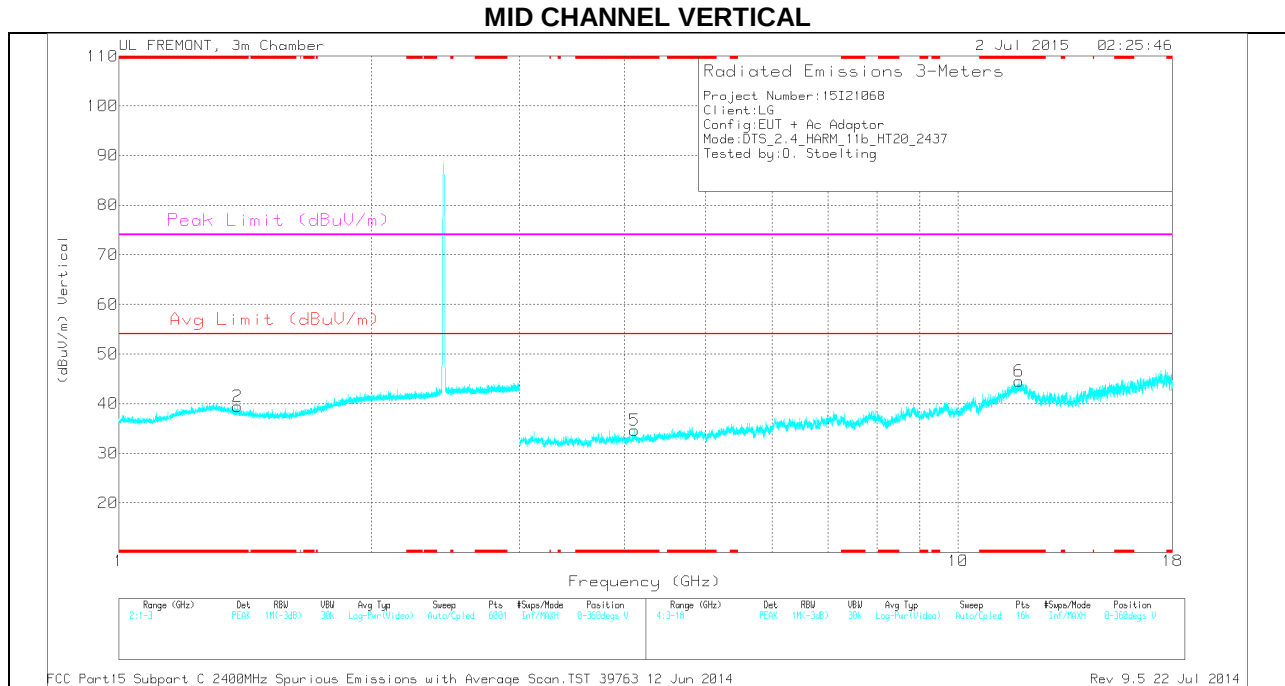
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
* 1.308	42.22	PK2	29.8	-23.1	0	48.92	-	-	74	-25.08	281	200	H
* 1.304	30.88	MAV1	29.8	-23.1	.22	37.8	54	-16.2	-	-	281	200	H
* 1.328	42.79	PK2	29.5	-23.2	0	49.09	-	-	74	-24.91	281	200	V
* 1.325	31.08	MAV1	29.6	-23.2	.22	37.7	54	-16.3	-	-	281	200	V
* 11.498	36.44	PK2	38.4	-22	0	52.84	-	-	74	-21.16	281	100	H
* 11.498	24.62	MAV1	38.4	-22	.22	41.24	54	-12.76	-	-	281	100	H
* 3.714	39.92	PK2	33	-30	0	42.92	-	-	74	-31.08	281	100	H
* 3.714	28.47	MAV1	33	-30	.22	31.69	54	-22.31	-	-	281	100	H
* 11.803	37.1	PK2	39	-22.5	0	53.6	-	-	74	-20.4	281	388	V
* 11.803	25.38	MAV1	39	-22.5	.22	42.1	54	-11.9	-	-	281	388	V
* 4.821	39.88	PK2	34	-29.4	0	44.48	-	-	74	-29.52	281	100	V
* 4.822	28.51	MAV1	34	-29.4	.22	33.33	54	-20.67	-	-	281	100	V



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



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

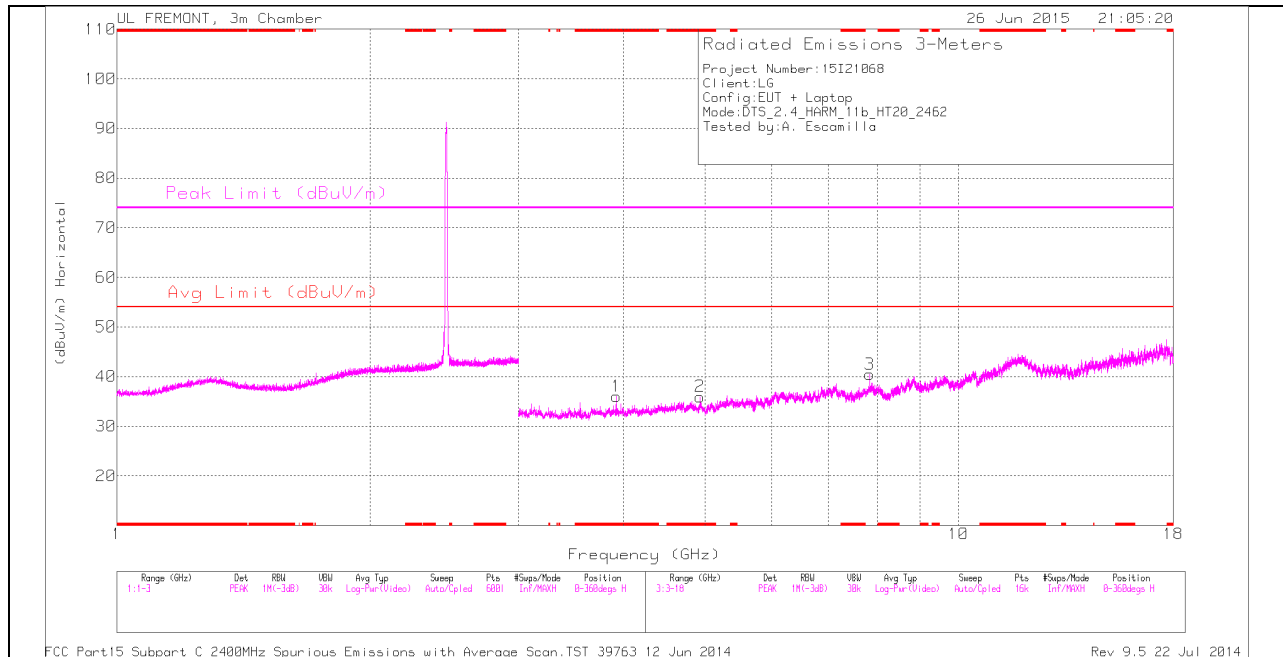
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.292	33.43	PK	29.8	-23.1	0	40.13	-	-	74	-33.87	0-360	100	H
2	* 1.384	33.72	PK	28.8	-23.1	0	39.42	-	-	74	-34.58	0-360	200	V
3	* 3.727	30.54	PK	33	-30	0	33.54	-	-	74	-40.46	0-360	200	H
4	* 11.907	27.37	PK	39.1	-22.7	0	43.77	-	-	74	-30.23	0-360	100	H
5	* 4.113	31.78	PK	33.3	-30.4	0	34.68	-	-	74	-39.32	0-360	200	V
6	* 11.806	28.01	PK	39	-22.5	0	44.51	-	-	74	-29.49	0-360	200	V

PK - Peak detector

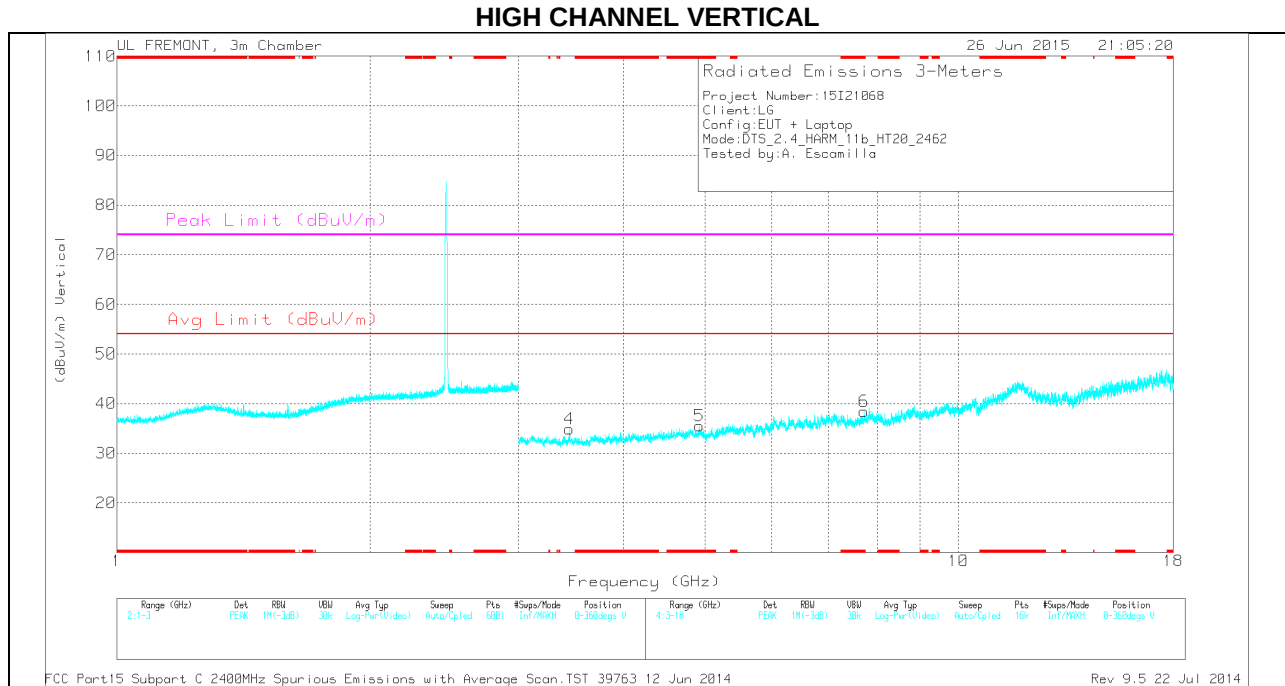
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/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
* 1.293	42.3	PK2	29.8	-23.1	0	49	-	-	74	-25	299	100	H
* 1.294	30.96	MAV1	29.8	-23.2	.22	37.78	54	-16.22	-	-	299	100	H
* 1.383	43.08	PK2	28.8	-23.1	0	48.78	-	-	74	-25.22	299	200	V
* 1.383	30.91	MAV1	28.8	-23.1	.22	36.83	54	-17.17	-	-	299	200	V
* 11.905	37.08	PK2	39.1	-22.7	0	53.48	-	-	74	-20.52	299	100	H
* 11.907	25.72	MAV1	39.1	-22.8	.22	42.24	54	-11.76	-	-	299	100	H
* 3.728	39.57	PK2	33	-30	0	42.57	-	-	74	-31.43	299	200	H
* 3.725	28.16	MAV1	33	-29.9	.22	31.48	54	-22.52	-	-	299	200	H
* 11.807	36.99	PK2	39	-22.5	0	53.49	-	-	74	-20.51	299	153	V
* 11.804	25.34	MAV1	39	-22.5	.22	42.06	54	-11.94	-	-	299	153	V
* 4.115	41.38	PK2	33.3	-30.4	0	44.28	-	-	74	-29.72	299	200	V
* 4.112	29.13	MAV1	33.3	-30.4	.22	32.25	54	-21.75	-	-	299	200	V

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.



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 T119 (dB/m)	Amp/Cbl/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	* 3.92	33.35	PK	33.2	-30.5	0	36.05	-	-	74	-37.95	0-360	100	H
2	* 4.932	31.67	PK	34	-29.7	0	35.97	-	-	74	-38.03	0-360	200	H
5	* 4.921	31.09	PK	34	-29.6	0	35.49	-	-	74	-38.51	0-360	200	V
6	* 7.728	30.8	PK	35.8	-28.1	0	38.5	-	-	74	-35.5	0-360	100	V
4	3.45	32.65	PK	32.7	-30.5	0	34.85	-	-	-	-	0-360	100	V
3	7.84	31.11	PK	35.8	-26.4	0	40.51	-	-	-	-	0-360	200	H

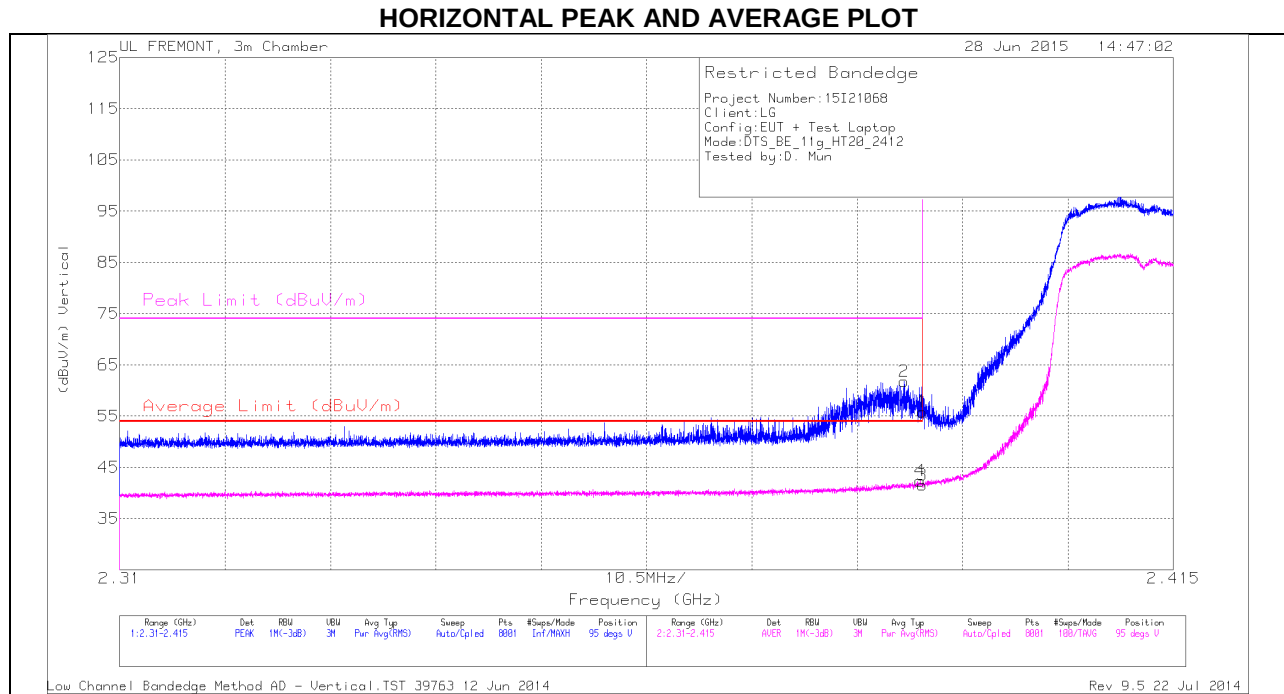
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/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
* 3.92	40.78	PK2	33.2	-30.5	0	43.48	-	-	74	-30.52	212	124	H
* 3.919	28.25	MAV1	33.2	-30.5	.22	31.17	54	-22.83	-	-	212	124	H
* 4.933	40.62	PK2	34	-29.7	0	44.92	-	-	74	-29.08	116	198	H
* 4.933	28.93	MAV1	34	-29.7	.22	33.45	54	-20.55	-	-	116	198	H
* 4.921	40.33	PK2	34	-29.6	0	44.73	-	-	74	-29.27	37	200	V
* 4.919	28.6	MAV1	34	-29.5	.22	33.32	54	-20.68	-	-	37	200	V
* 7.727	39.54	PK2	35.8	-28	0	47.34	-	-	74	-26.66	33	153	V
* 7.728	28	MAV1	35.8	-28.1	.22	35.92	54	-18.08	-	-	33	153	V
3.448	40.39	PK2	32.7	-30.5	0	42.59	-	-	-	-	51	137	V
3.448	29.19	MAV1	32.7	-30.5	.22	31.61	-	-	-	-	51	137	V
7.838	26.35	MAV1	35.8	-26.4	.22	35.97	-	-	-	-	127	213	H
7.839	37.91	PK2	35.8	-26.4	0	47.31	-	-	-	-	127	213	H

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

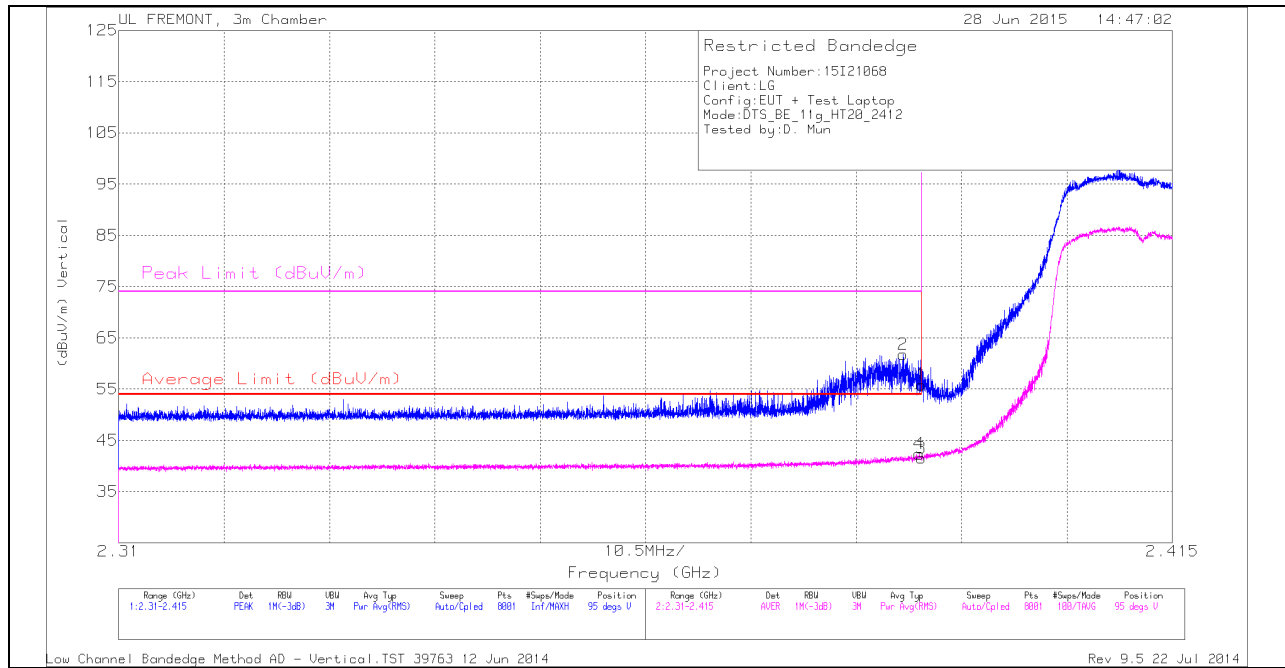
RESTRICTED BANDEDGE (LOW CHANNEL)



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	2.387	53.07	PK	32	-22.4	0	62.67	-	-	74	-11.33	128	210	H
6	2.387	53.07	PK	32	-22.4	0	62.67	-	-	74	-11.33	128	210	H
1	2.39	45.38	PK	32	-22.4	0	54.98	-	-	74	-19.02	128	210	H
5	2.39	45.38	PK	32	-22.4	0	54.98	-	-	74	-19.02	128	210	H

VERTICAL PEAK AND AVERAGE PLOT

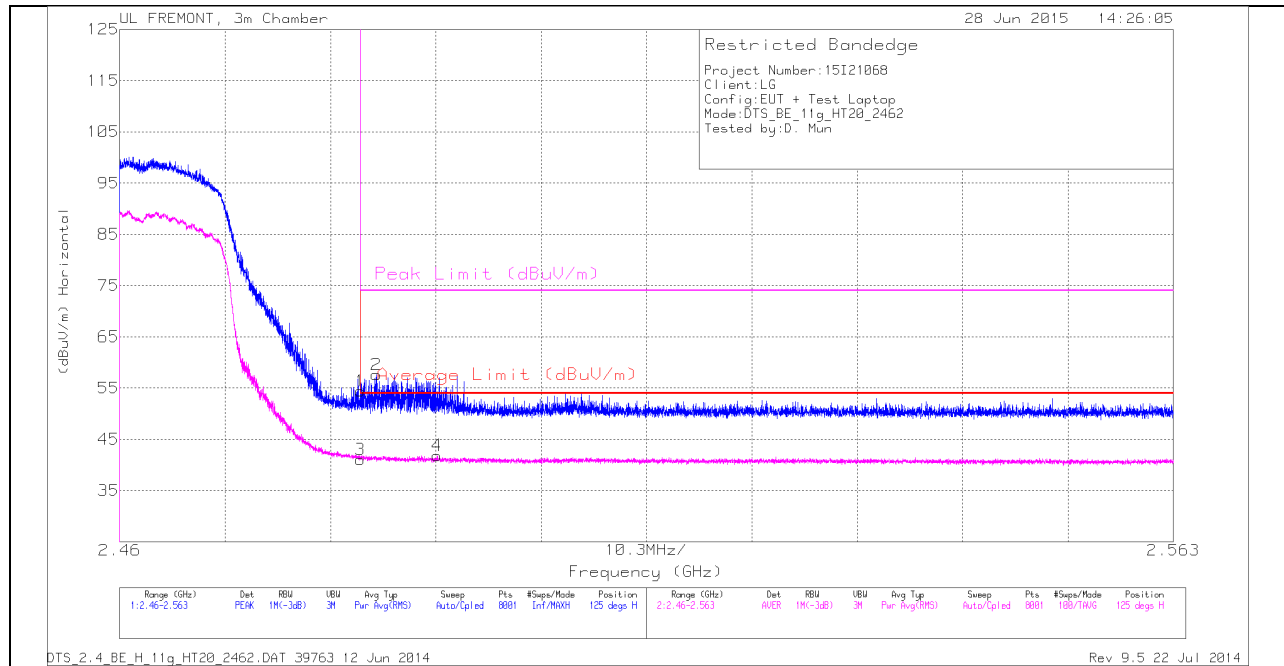


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	2.388	52.16	PK	32	-22.4	0	61.76	-	-	74	-12.24	95	265	V
1	2.39	46.21	PK	32	-22.4	0	55.81	-	-	74	-18.19	95	265	V
3	2.39	31.7	RMS	32	-22.4	.25	41.55	54	-12.45	-	-	95	265	V
4	2.39	32.51	RMS	32	-22.4	.25	42.36	54	-11.64	-	-	95	265	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

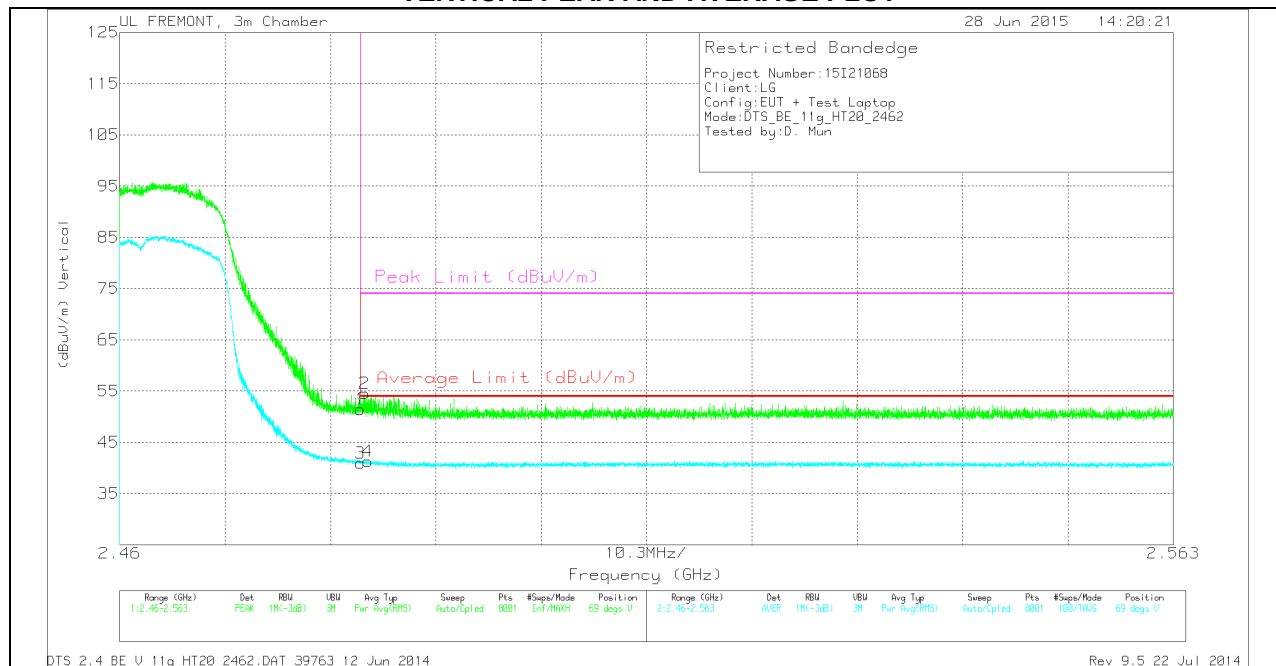
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	44.2	PK	32.3	-22.1	0	54.4	-	-	74	-19.6	125	172	H
3	2.484	30.66	RMS	32.3	-22.1	.25	41.11	54	-12.89	-	-	125	172	H
2	2.485	47.38	PK	32.3	-22.1	0	57.58	-	-	74	-16.42	125	172	H
4	2.491	31.5	RMS	32.3	-22.2	.25	41.85	54	-12.15	-	-	125	172	H

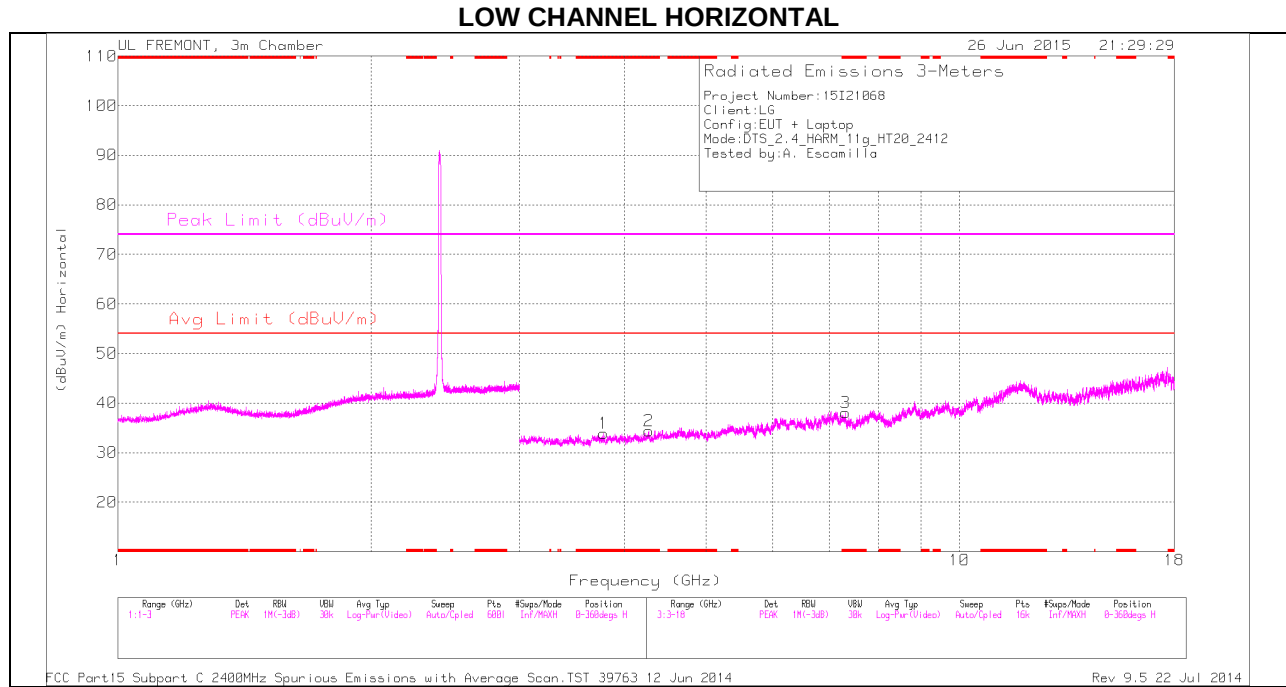
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

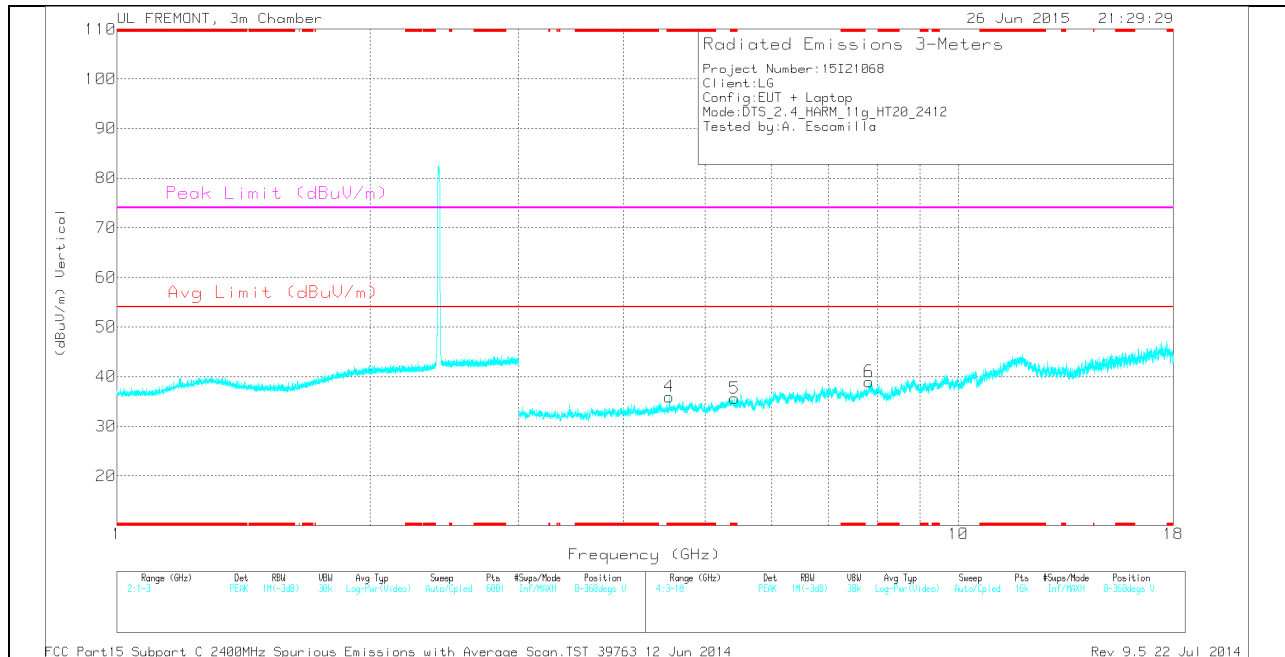
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	41.23	PK	32.3	-22.1	0	51.43	-	-	74	-22.57	69	175	V
2	2.484	44.36	PK	32.3	-22.1	0	54.56	-	-	74	-19.44	69	175	V
3	2.484	30.7	RMS	32.3	-22.1	.25	41.15	54	-12.85	-	-	69	175	V
4	2.484	31.11	RMS	32.3	-22.1	.25	41.56	54	-12.44	-	-	69	175	V

HARMONICS AND SPURIOUS EMISSIONS



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

LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

TRACE MARKERS

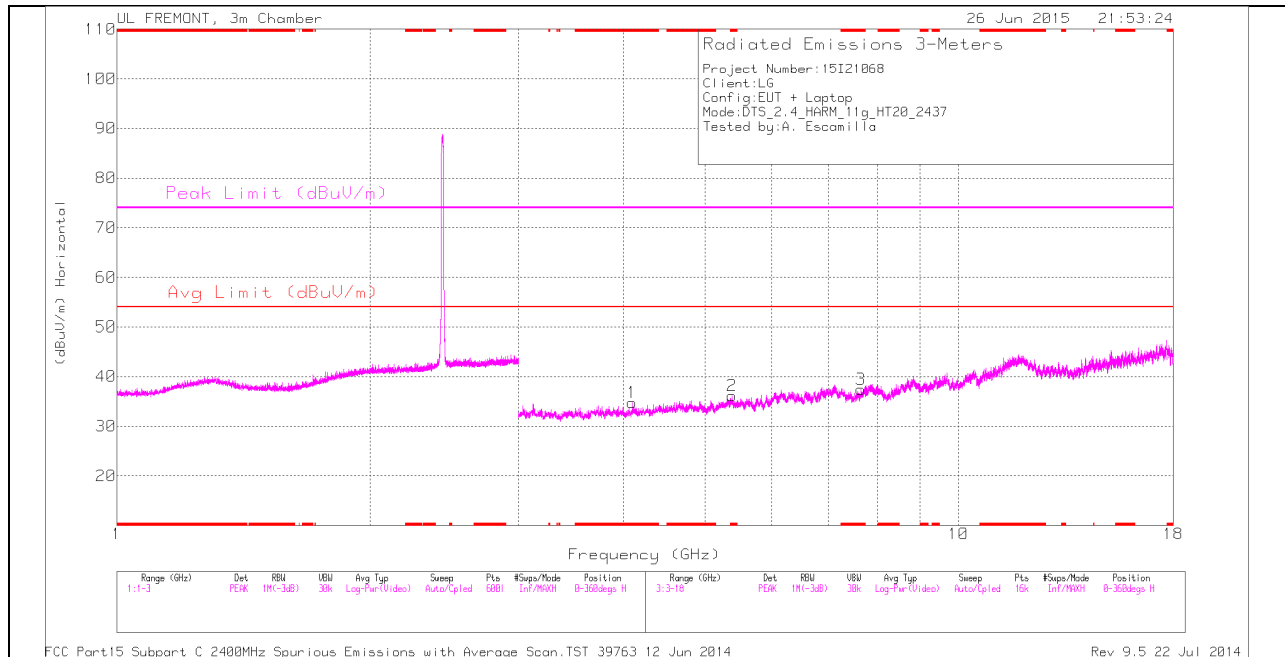
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.779	31.03	PK	33.1	-30.2	0	33.93	-	-	74	-40.07	0-360	100	H
2	* 4.271	31.43	PK	33.4	-30.4	0	34.43	-	-	74	-39.57	0-360	200	H
3	* 7.32	29.66	PK	35.6	-27.2	0	38.06	-	-	74	-35.94	0-360	100	H
4	* 4.536	32.77	PK	33.8	-30.6	0	35.97	-	-	74	-38.03	0-360	200	V
5	* 5.421	31.1	PK	34.6	-30	0	35.7	-	-	74	-38.3	0-360	200	V
6	7.83	29.61	PK	35.8	-26.4	0	39.01	-	-	-	-	0-360	100	V

PK - Peak detector

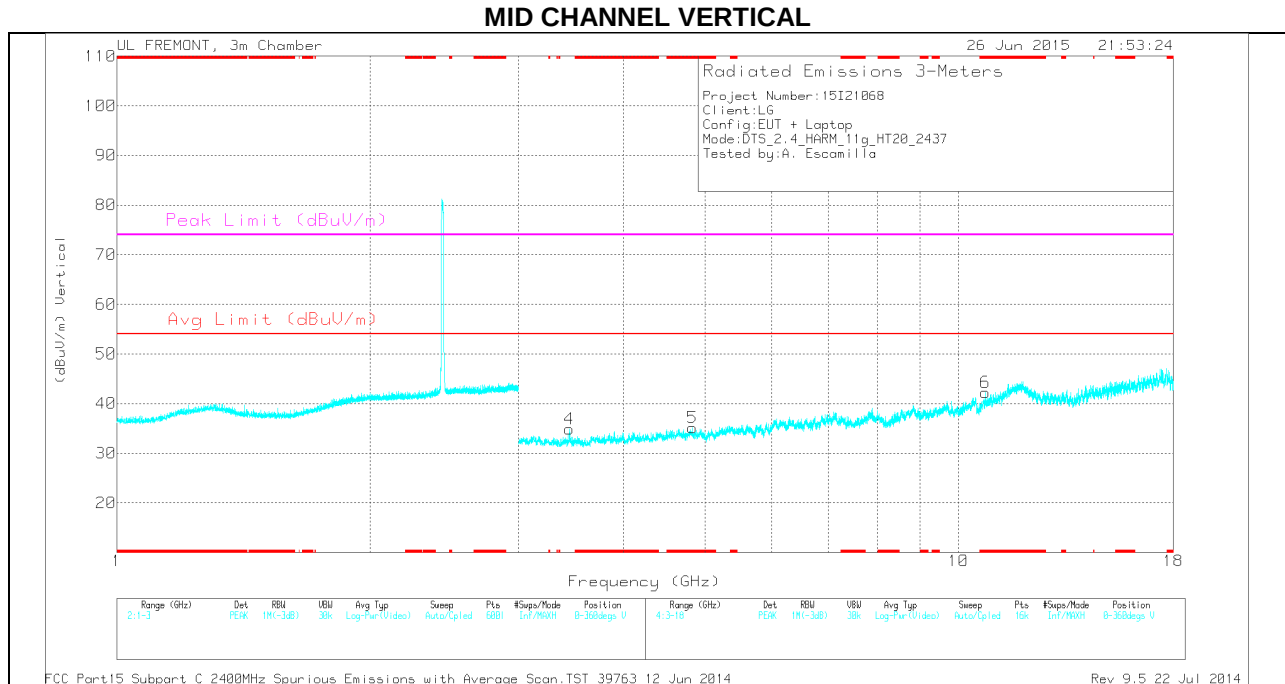
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
* 3.779	40.09	PK2	33.1	-30.2	0	42.99	-	-	74	-31.01	18	222	H
* 3.779	28.62	MAV1	33.1	-30.2	.25	31.77	54	-22.23	-	-	18	222	H
* 4.27	40.37	PK2	33.4	-30.4	0	43.37	-	-	74	-30.63	32	200	H
* 4.271	28.98	MAV1	33.4	-30.4	.25	32.23	54	-21.77	-	-	32	200	H
* 7.322	37.64	PK2	35.6	-27.1	0	46.14	-	-	74	-27.86	51	239	H
* 7.322	26.41	MAV1	35.6	-27.1	.25	35.16	54	-18.84	-	-	51	239	H
* 4.536	40.65	PK2	33.8	-30.6	0	43.85	-	-	74	-30.15	109	215	V
* 4.537	29.11	MAV1	33.8	-30.6	.25	32.56	54	-21.44	-	-	109	215	V
* 5.42	39.74	PK2	34.6	-30	0	44.34	-	-	74	-29.66	141	255	V
* 5.421	28.43	MAV1	34.6	-30	.25	33.28	54	-20.72	-	-	141	255	V
7.829	38.68	PK2	35.8	-26.5	0	47.98	-	-	-	-	223	194	V
7.829	26.55	MAV1	35.8	-26.5	.25	36.1	-	-	-	-	223	194	V

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.



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

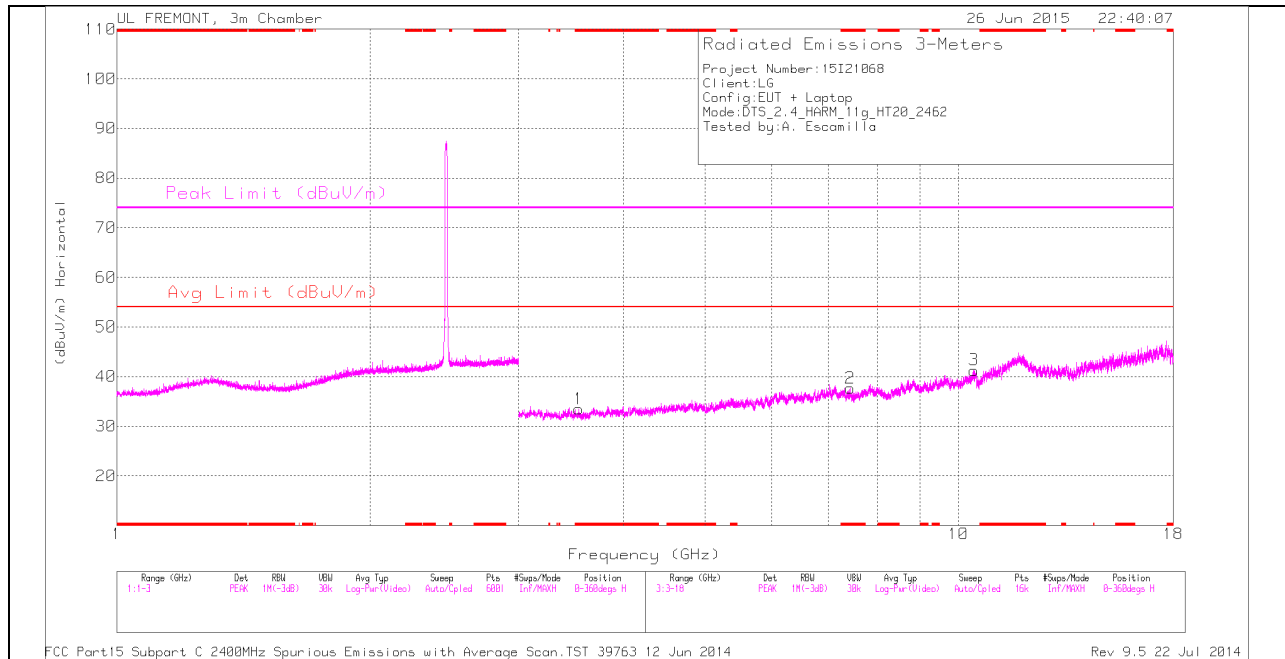
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.093	32.06	PK	33.3	-30.6	0	34.76	-	-	74	-39.24	0-360	100	H
2	* 5.381	31.11	PK	34.6	-29.5	0	36.21	-	-	74	-37.79	0-360	200	H
3	* 7.662	28.68	PK	35.8	-27.1	0	37.38	-	-	74	-36.62	0-360	200	H
5	* 4.83	30.48	PK	34	-29.3	0	35.18	-	-	74	-38.82	0-360	100	V
6	* 10.765	27.42	PK	37.9	-23.1	0	42.22	-	-	74	-31.78	0-360	200	V
4	3.45	32.67	PK	32.7	-30.5	0	34.87	-	-	-	-	0-360	200	V

PK - Peak detector

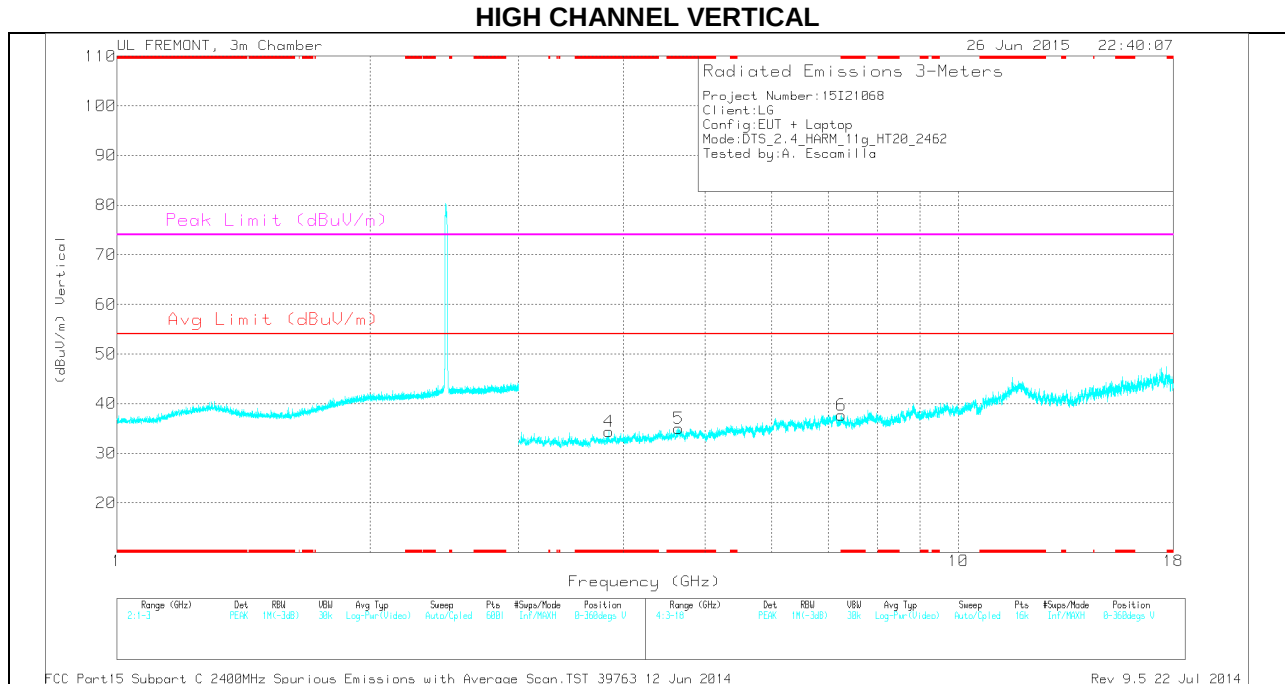
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/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
* 4.092	40.97	PK2	33.3	-30.7	0	43.57	-	-	74	-30.43	128	117	H
* 4.091	28.62	MAV1	33.3	-30.7	.25	31.47	54	-22.53	-	-	128	117	H
* 4.093	40.82	PK2	33.3	-30.6	0	43.52	-	-	74	-30.48	128	117	H
* 4.092	28.6	MAV1	33.3	-30.7	.25	31.45	54	-22.55	-	-	128	117	H
* 5.379	39.88	PK2	34.6	-29.5	0	44.98	-	-	74	-29.02	139	200	H
* 5.383	28.58	MAV1	34.6	-29.6	.25	33.83	54	-20.17	-	-	139	200	H
* 7.66	38.63	PK2	35.8	-27.1	0	47.33	-	-	74	-26.67	155	165	H
* 7.66	26.79	MAV1	35.8	-27.1	.25	35.74	54	-18.26	-	-	155	165	H
* 4.83	40.39	PK2	34	-29.3	0	45.09	-	-	74	-28.91	339	154	V
* 4.83	28.3	MAV1	34	-29.3	.25	33.25	54	-20.75	-	-	339	154	V
* 10.765	35.87	PK2	37.9	-23.1	0	50.67	-	-	74	-23.33	354	217	V
* 10.765	24.72	MAV1	37.9	-23.1	.25	39.77	54	-14.23	-	-	354	217	V
3.448	29.13	MAV1	32.7	-30.5	.25	31.58	-	-	-	-	171	177	V
3.449	40.32	PK2	32.7	-30.5	0	42.52	-	-	-	-	171	177	V

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.



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 T119 (dB/m)	Amp/Cbl/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	* 3.536	31.22	PK	32.8	-30.5	0	33.52	-	-	74	-40.48	0-360	100	H
2	* 7.433	29.53	PK	35.7	-27.6	0	37.63	-	-	74	-36.37	0-360	200	H
4	* 3.84	31.54	PK	33.1	-30.3	0	34.34	-	-	74	-39.66	0-360	200	V
5	* 4.654	31.06	PK	34	-30	0	35.06	-	-	74	-38.94	0-360	100	V
6	* 7.255	30.5	PK	35.6	-28.4	0	37.7	-	-	74	-36.3	0-360	200	V
3	10.429	27.5	PK	37.3	-23.5	0	41.3	-	-	-	-	0-360	100	H

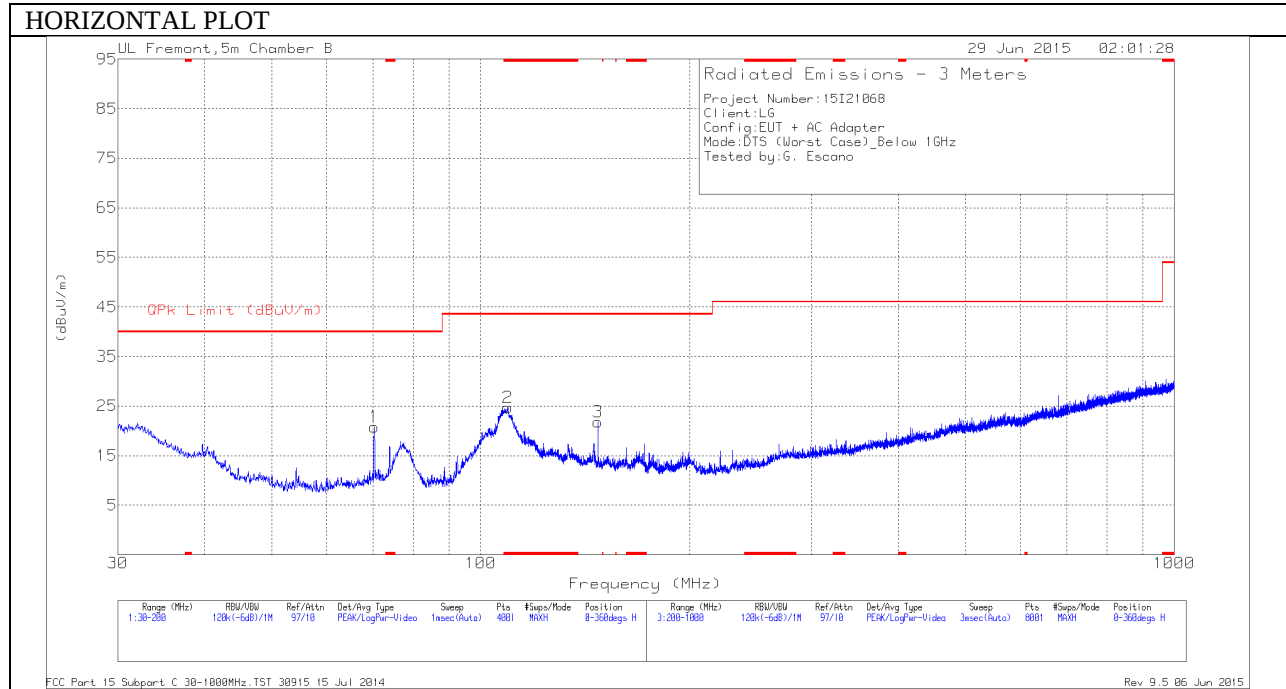
PK - Peak detector

RADIATED EMISSIONS

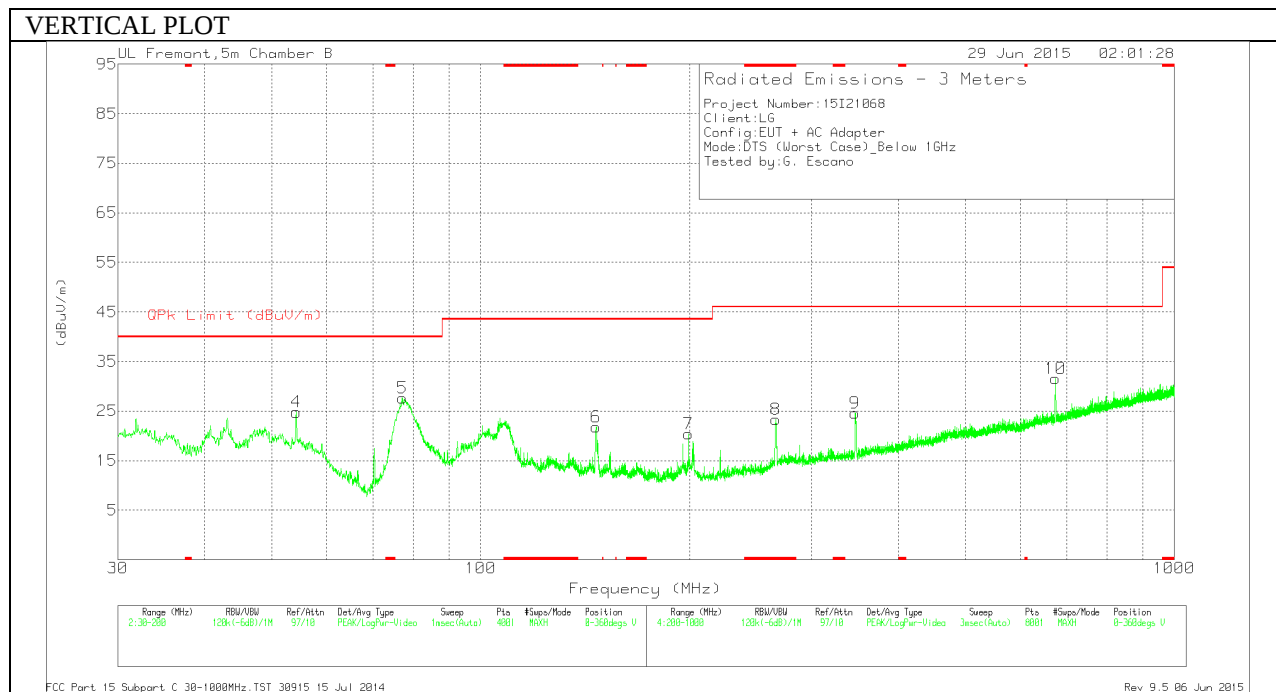
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.537	40.48	PK2	32.8	-30.5	0	42.78	-	-	74	-31.22	347	168	H
* 3.537	28.72	MAV1	32.8	-30.4	.25	31.37	54	-22.63	-	-	347	168	H
* 7.435	39.25	PK2	35.7	-27.6	0	47.35	-	-	74	-26.65	329	215	H
* 7.434	27.34	MAV1	35.7	-27.6	.25	35.69	54	-18.31	-	-	329	215	H
* 3.841	40.63	PK2	33.1	-30.4	0	43.33	-	-	74	-30.67	261	171	V
* 3.84	28.97	MAV1	33.1	-30.4	.25	31.92	54	-22.08	-	-	261	171	V
* 4.653	40.29	PK2	34	-30	0	44.29	-	-	74	-29.71	67	173	V
* 4.653	28.88	MAV1	34	-30	.25	33.13	54	-20.87	-	-	67	173	V
* 7.257	39.48	PK2	35.6	-28.4	0	46.68	-	-	74	-27.32	10	209	V
* 7.257	28.14	MAV1	35.6	-28.4	.25	35.59	54	-18.41	-	-	10	209	V
10.431	35.43	PK2	37.3	-23.6	0	49.13	-	-	-	-	301	223	H
10.431	24.13	MAV1	37.3	-23.6	.25	38.08	-	-	-	-	301	223	H

10.3. WORST-CASE BELOW 1 GHz

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



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



Below 1G Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 109.4325	40.14	Pk	12.5	-27.9	24.74	43.52	-18.78	0-360	299	H
8	* 266.4	36.42	Pk	13	-26.1	23.32	46.02	-22.7	0-360	199	V
4	54.1825	45.88	Pk	7.4	-28.5	24.78	40	-15.22	0-360	101	V
1	70.2475	41.04	Pk	8.1	-28.3	20.84	40	-19.16	0-360	101	H
5	77.09	48.14	Pk	7.8	-28.3	27.64	40	-12.36	0-360	101	V
6	146.8325	36.63	Pk	12.6	-27.4	21.83	43.52	-21.69	0-360	101	V
3	147.64	36.55	Pk	12.6	-27.4	21.75	43.52	-21.77	0-360	199	H
7	199.2775	34.64	Pk	12.6	-26.9	20.34	43.52	-23.18	0-360	101	V
9	346.8	36.04	Pk	14.2	-25.7	24.54	46.02	-21.48	0-360	101	V
10	673.6	36.22	Pk	19.9	-24.6	31.52	46.02	-14.5	0-360	101	V

11. 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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

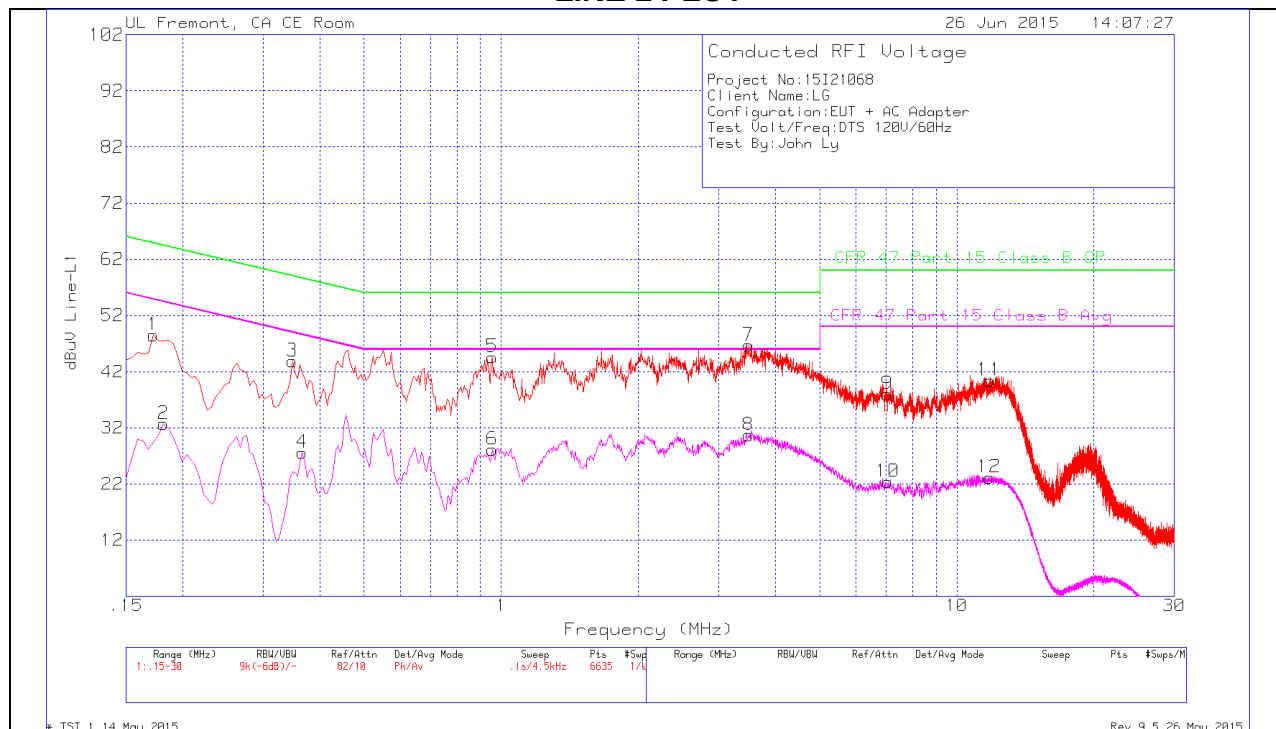
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

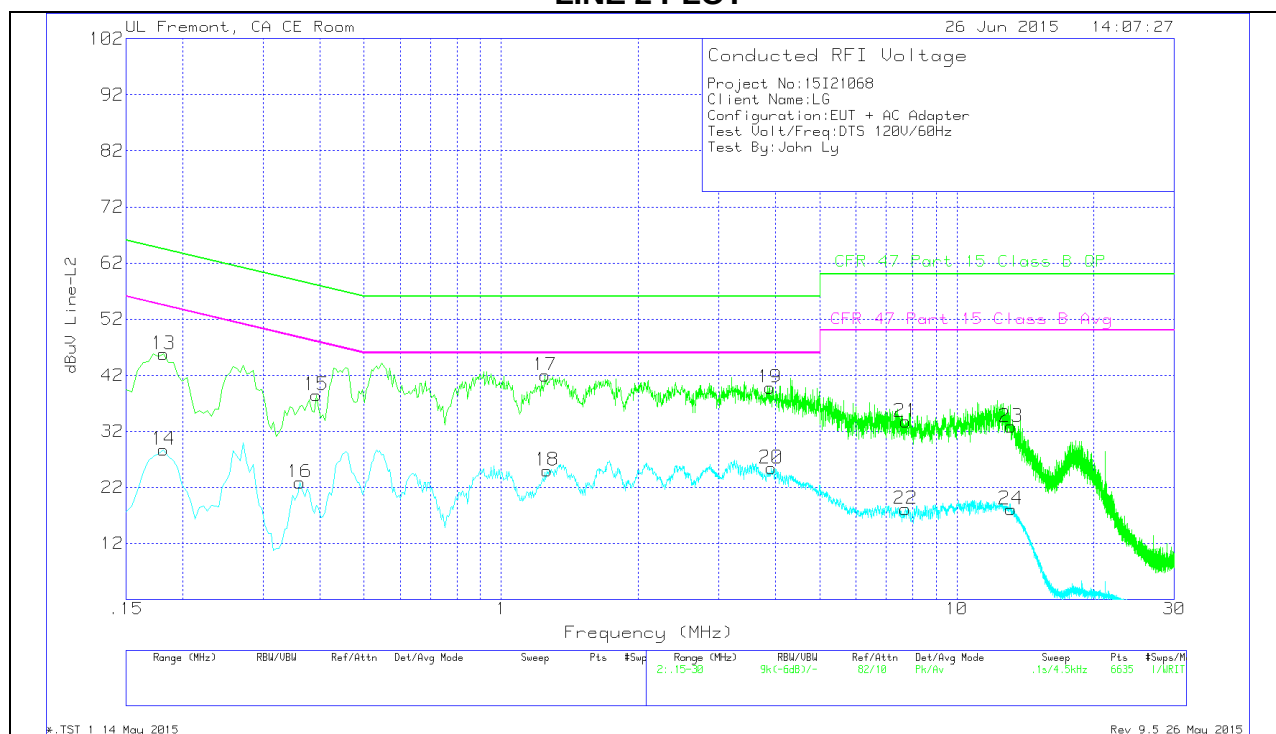
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	Margin (dB)	CFR 47 Part 15 Class B Avg	Margin (dB)
1	.1725	47.37	Pk	1.1	0	48.47	64.84	-16.37		
2	.1815	31.6	Av	1.1	0	32.7	-	-	54.42	-21.72
3	.348	43.34	Pk	.5	0	43.84	59.01	-15.17		
4	.366	27.07	Av	.5	0	27.57	-	-	48.59	-21.02
5	.9555	44.17	Pk	.3	.1	44.57	56	-11.43		
6	.9555	27.72	Av	.3	.1	28.12	-	-	46	-17.88
7	3.489	46.37	Pk	.2	.1	46.67	56	-9.33		
8	3.489	30.38	Av	.2	.1	30.68	-	-	46	-15.32
9	7.044	37.71	Pk	.2	.1	38.01	60	-21.99		
10	7.0575	22.05	Av	.2	.1	22.35	-	-	50	-27.65
11	11.8005	40.03	Pk	.2	.2	40.43	60	-19.57		
12	11.7735	22.77	Av	.2	.2	23.17	-	-	50	-26.83

Pk - Peak detector

Av - Average detection

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	CFR 47 Part 15 Class B QP	Margin (dB)	CFR 47 Part 15 Class B Avg	Margin (dB)
13	.1815	44.56	Pk	1.2	0	45.76	64.42	-18.66		
14	.1815	27.5	Av	1.2	0	28.7	-	-	54.42	-25.72
15	.393	38.05	Pk	.4	0	38.45	58	-19.55		
16	.3615	22.39	Av	.5	0	22.89	-	-	48.69	-25.8
17	1.248	41.77	Pk	.2	0	41.97	56	-14.03		
18	1.2615	24.69	Av	.2	.1	24.99	-	-	46	-21.01
19	3.8895	39.47	Pk	.2	.1	39.77	56	-16.23		
20	3.9165	25.1	Av	.2	.1	25.4	-	-	46	-20.6
21	7.7235	33.43	Pk	.2	.1	33.73	60	-26.27		
22	7.719	17.82	Av	.2	.1	18.12	-	-	50	-31.88
23	13.1595	32.43	Pk	.2	.2	32.83	60	-27.17		
24	13.1505	17.69	Av	.2	.2	18.09	-	-	50	-31.91

Pk - Peak detector

Av - Average detection