



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-247 ISSUE 1**

CERTIFICATION TEST REPORT

FOR

CORE NODE EXTERNAL, WiFi

MODEL NUMBER: CNEX-277W2N, CNEX-480W2N

FCC ID: SXNWYSBMVGX4I

IC ID: 20569-WYSBMVGX4I

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	9/30/15	Initial Issue	
V2	10/12/15	Updated Section 6	D. Corona

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SENSITY SYSTEMS, INC.
EUT DESCRIPTION: CORE NODE EXTERNAL, WiFi
MODEL: CNEX-277W2N, CNEX-480W2N
SERIAL NUMBER: N01334064, N0123155F
DATE TESTED: AUGUST 14-31, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-247 Issue 1	Pass
INDUSTRY CANADA RSS-GEN Issue 4	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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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15 C, and ANSI C63.10-2009 for FCC and ANSI C63.10-2013 for IC, RSS-GEN Issue 4, and RSS-247 Issue 1.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
<input checked="" type="checkbox"/> Chamber A(IC: 2324B-1)	<input type="checkbox"/> Chamber D(IC: 2324B-4)
<input checked="" type="checkbox"/> Chamber B(IC: 2324B-2)	<input type="checkbox"/> Chamber E(IC: 2324B-5)
<input checked="" type="checkbox"/> Chamber C(IC: 2324B-3)	<input type="checkbox"/> Chamber F(IC: 2324B-6)
	<input type="checkbox"/> Chamber G(IC: 2324B-7)
	<input type="checkbox"/> 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:

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

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 Sensity Systems Core Node EX is an integral part of the Sensity NetSense platform - an open architecture-based light sensory network that can be deployed along with LED luminaires. Sensity's NetSense Core Node EX has been designed to instantly convert any lighting manufacturer's LED fixtures into IP-enabled sensory node in a light sensory network that provide both the lighting control and cloud-based IoT services via a standard NEMA socket.

Main Features

- Multi-sensor wireless communication and control
- Directly mounts to the luminaire via existing NEMA photocell socket (Complies with ANSI C136.41)
- Onboard GPS
- Controls power and light output of LED luminaire via LED driver and 0-10V dimming standard
- Measurement and reporting on electrical and sensor data
- Provides auxiliary power to additional devices
- Monitors status of LED luminaire and network
- Embedded antenna
- Measurement and Control

The Core Node EX is connected to incoming AC mains and the LED driver. This direct connection provides on/off control and performance monitoring of the luminaire. Luminaire dimming control follows 0-10VDC dimming standard. Power monitoring and measurement is achieved by an onboard Energy Management IC.

Onboard microcontroller manages data communication, sensor control, fault management and status reporting.

Communication and Security

Communication to the device is achieved by using standard 802.11 a/b/g/n (WiFi version) wireless communication protocols. Highly secure, certification based authentication for every device, TLS 128-bit encryption.

Sensors

Onboard sensors include power and accelerometer sensors. Sensor module includes ambient light, PIR motion, and temperature sensors.

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	15.9	38.90
2412 - 2462	802.11g	14.8	30.20
2412 - 2462	802.11n HT20	13.9	24.55

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an embedded antenna, with a maximum gain of 3.0dBi.

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

802.11n HT20mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC line source	N/A	N/A	N/A	N/A
Laptop	Lenovo	N/A	N/A	N/A

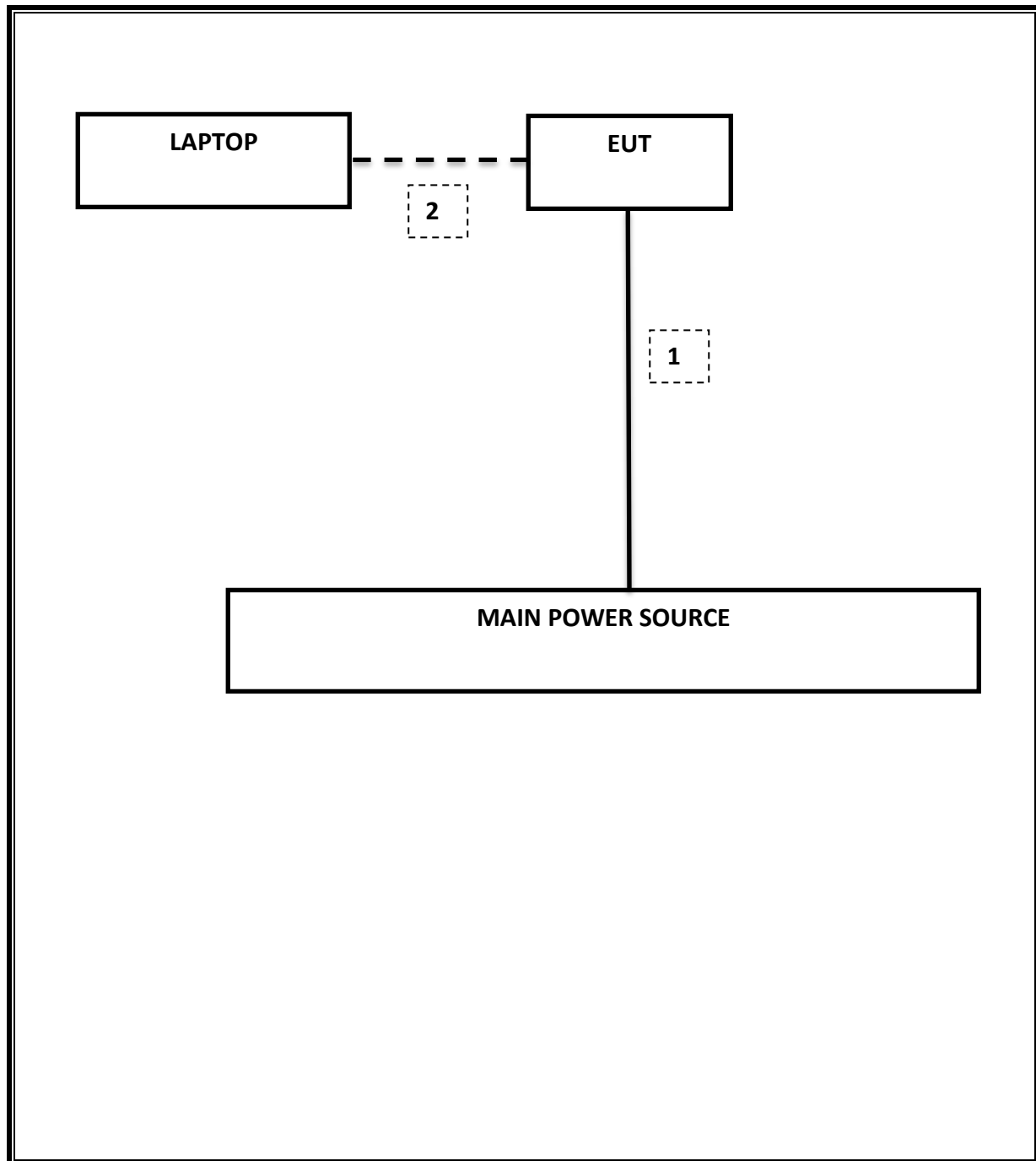
I/O CABLES

I/O Cable List						
Cable No	Port	# of ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	1	NEMA plug (7-pin ANSI C136.41): 3 plugs for AC power Connects to a NEMA receptacle (support equipment)	Non-shielded	1.0	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	08/07/16
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/16
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	C00891	06/28/16
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	T404	06/29/16
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	04/07/16
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, Jul 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 AVGPS-3 is used for power spectral density.

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

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

8. SUMMARY TABLE

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	9.81 MHz
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass	-32.08 dBm
15.247	RSS-247 5.4.4	TX conducted output power	<30dBm		Pass	15.9 dBm
15.247	RSS-247 5.2.2	PSD	<8dBm		Pass	-5.42 dBm
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10		Pass	46.4 dBuV(AV)
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m	Radiated	Pass	45.75 dBuV/m

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

9.1.1. ON TIME AND DUTY CYCLE RESULTS

802.11b/g/n mode duty cycle is 100%

9.2. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-247 5.2.1

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

9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	9.81	0.5
Mid	2437	10.02	0.5
High	2462	10.02	0.5
Worst		9.81	

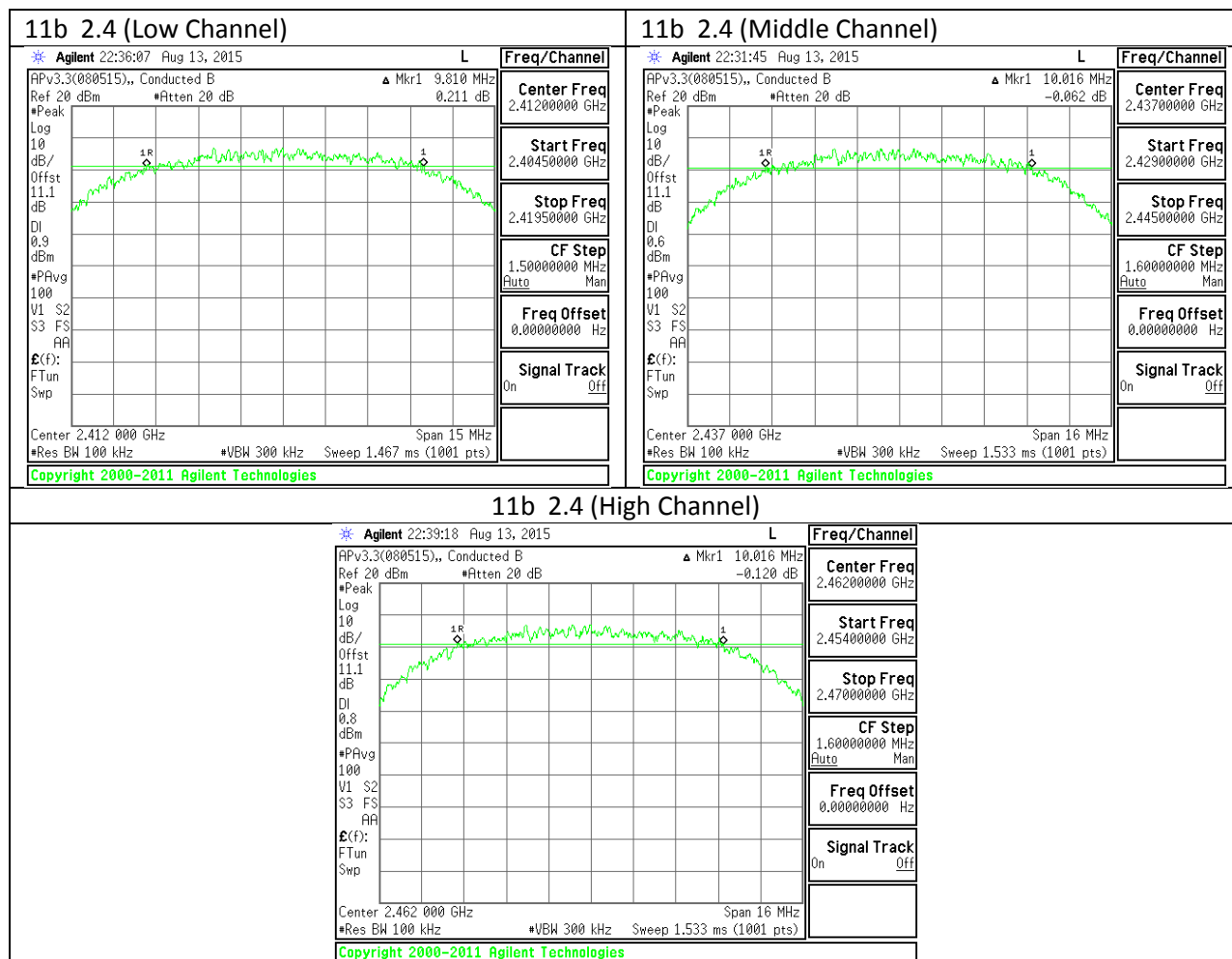
9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

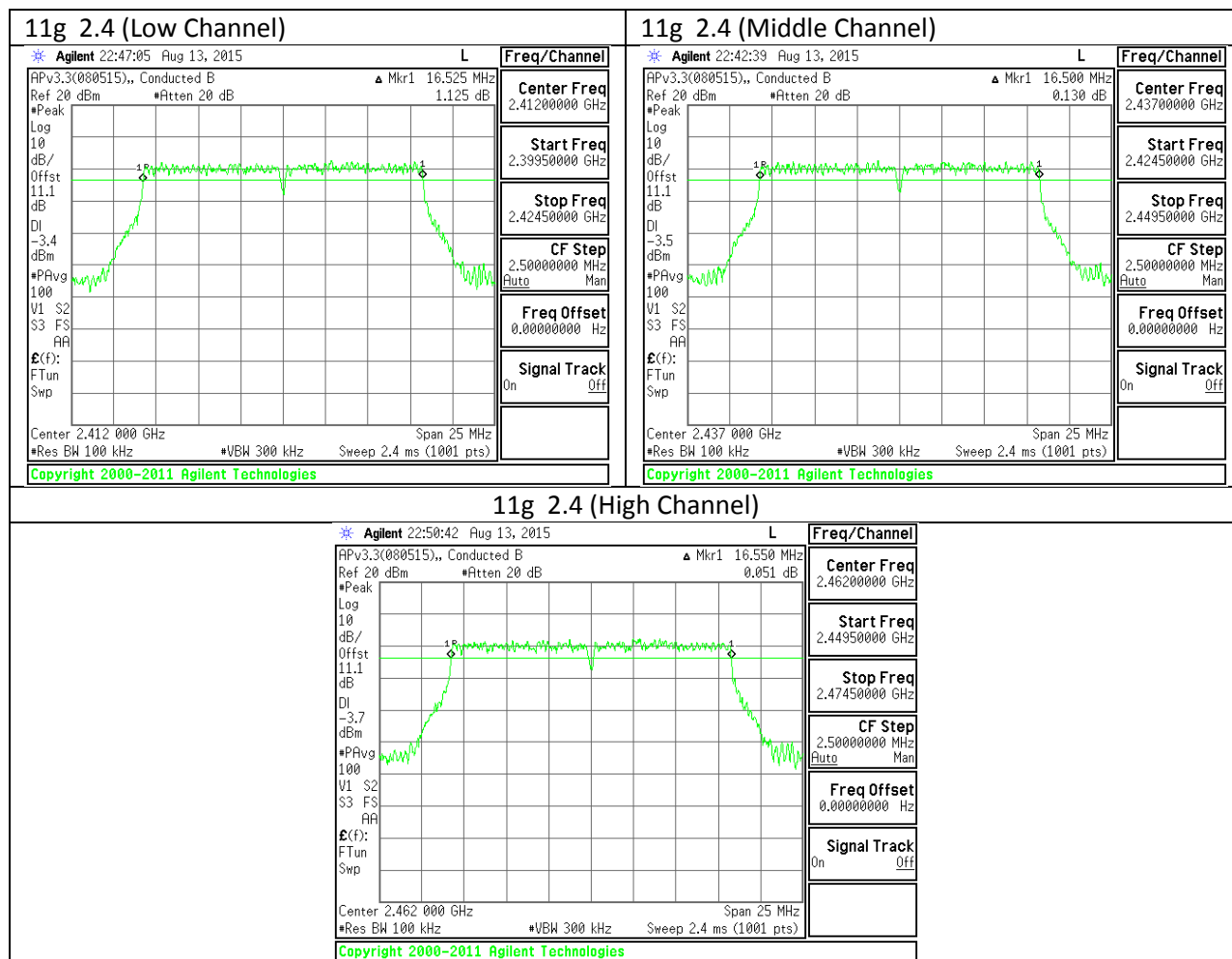
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	16.53	0.5
Mid	2437	16.50	0.5
High	2462	16.55	0.5
Worst		16.50	

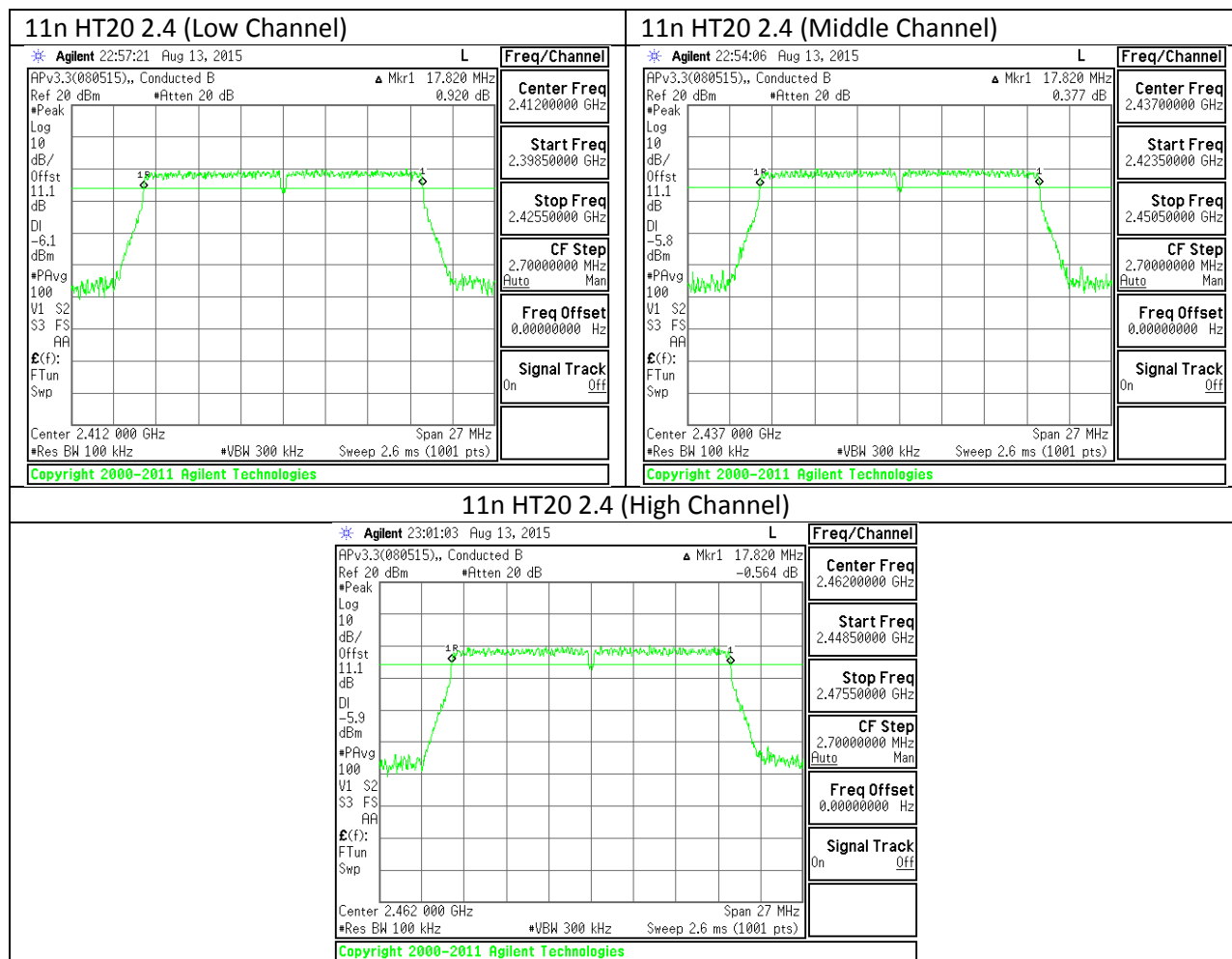
9.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	17.82	0.5
Mid	2437	17.82	0.5
High	2462	17.82	0.5
Worst		17.82	

9.2.4. 6 dB BANDWIDTH PLOTS







9.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

9.3.1. 802.11b MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	13.35
Mid	2437	13.31
High	2462	13.30
Worst		13.35

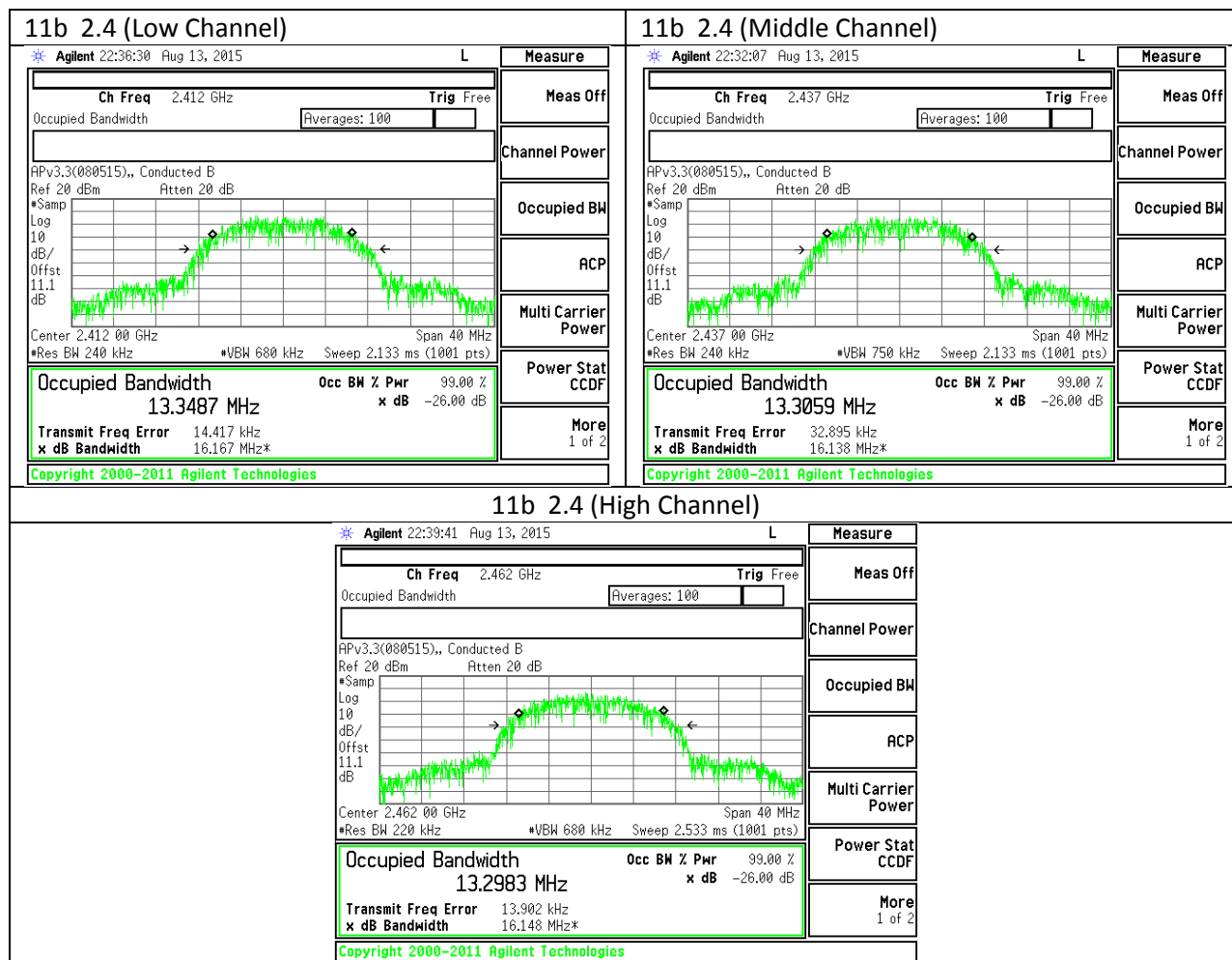
9.3.2. 802.11g MODE IN THE 2.4 GHz BAND

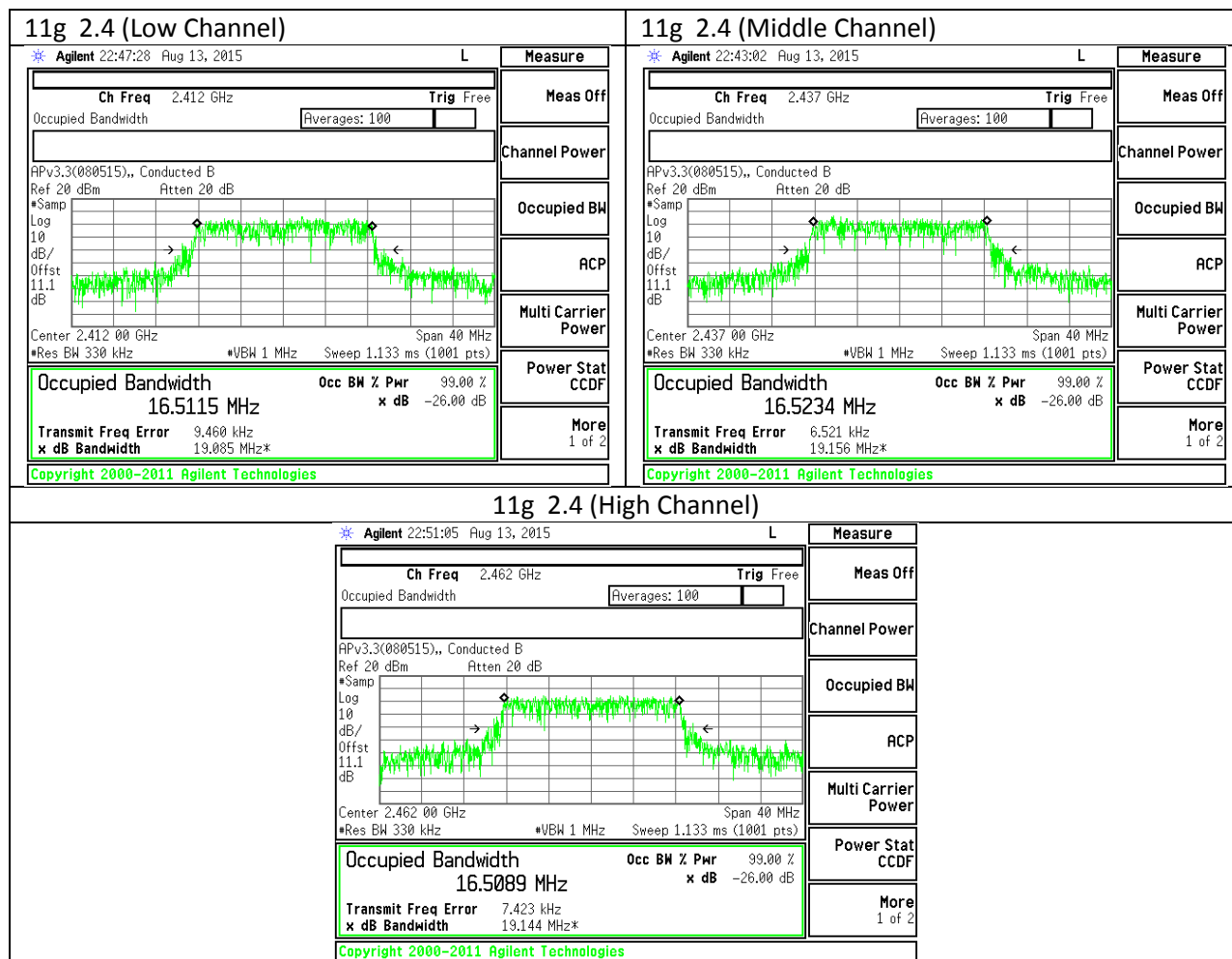
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.51
Mid	2437	16.52
High	2462	16.51
Worst		16.52

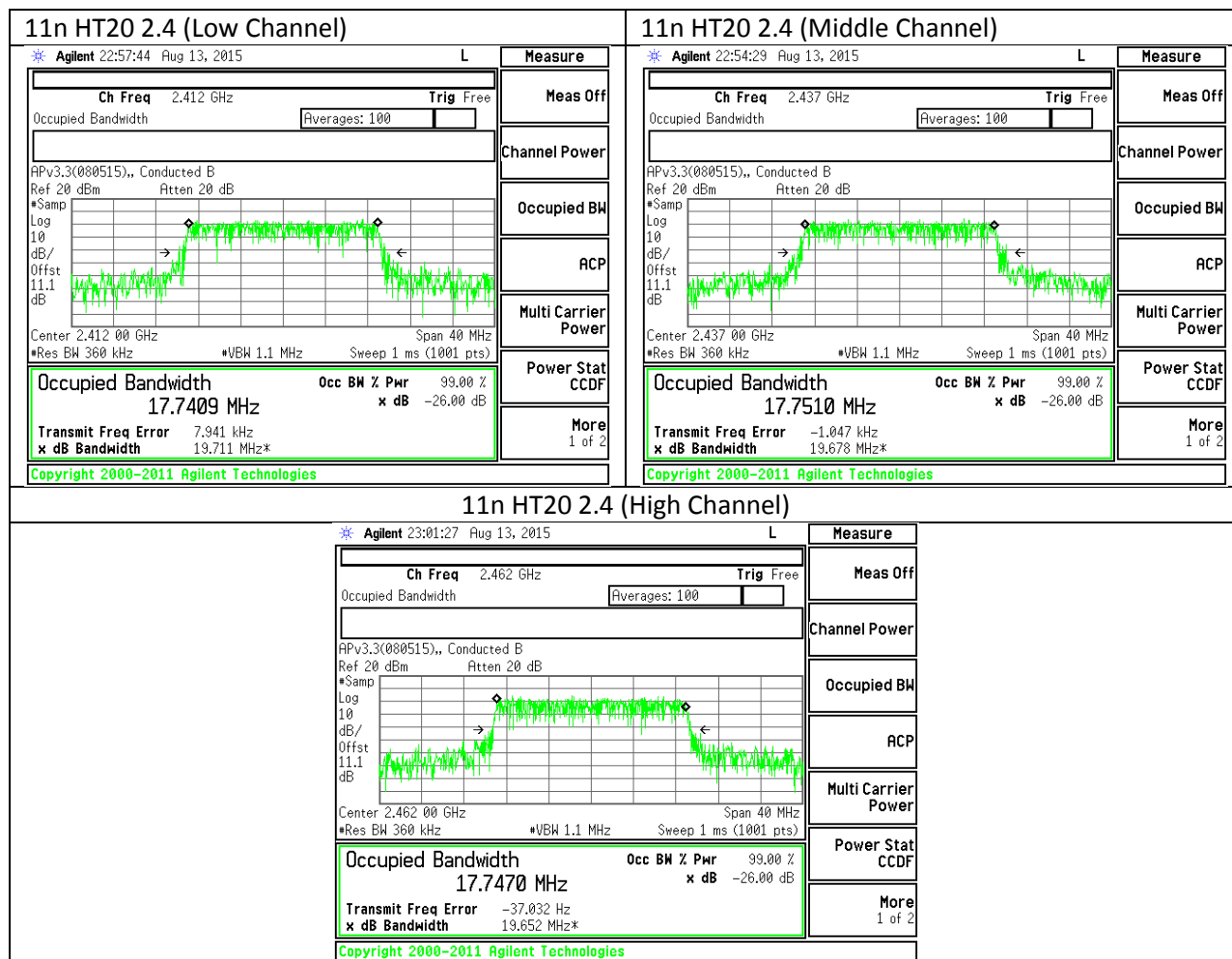
9.3.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	17.74
Mid	2437	17.75
High	2462	17.75
Worst		17.75

9.3.4. 99% BANDWIDTH PLOTS







9.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 5.4.4

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

9.4.1. 802.11b MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	2.50	30.00	30	36	30.00
Mid	2437	2.50	30.00	30	36	30.00
High	2462	2.50	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	15.49	15.49	30.00	-14.51
Mid	2437	15.88	15.88	30.00	-14.12
High	2462	15.76	15.76	30.00	-14.24
Worst			15.88		

9.4.2. 802.11g MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	2.50	30.00	30	36	30.00
Mid	2437	2.50	30.00	30	36	30.00
High	2462	2.50	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	14.75	14.75	30.00	-15.25
Mid	2437	14.65	14.65	30.00	-15.35
High	2462	14.58	14.58	30.00	-15.42
Worst			14.75		

9.4.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	2.50	30.00	30	36	30.00
Mid	2437	2.50	30.00	30	36	30.00
High	2462	2.50	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	13.85	13.85	30.00	-16.15
Mid	2437	13.74	13.74	30.00	-16.26
High	2462	13.60	13.60	30.00	-16.40
Worst			13.85		

9.5. PSD

LIMITS

FCC §15.247

IC RSS-247 5.2.2

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

RESULTS

9.5.1. 802.11b MODE IN THE 2.4 GHz BAND

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-5.51	8.0	-13.5
Mid	2437	-6.29	8.0	-14.3
High	2462	-5.42	8.0	-13.4

9.5.2. 802.11g MODE IN THE 2.4 GHz BAND

PSD Results

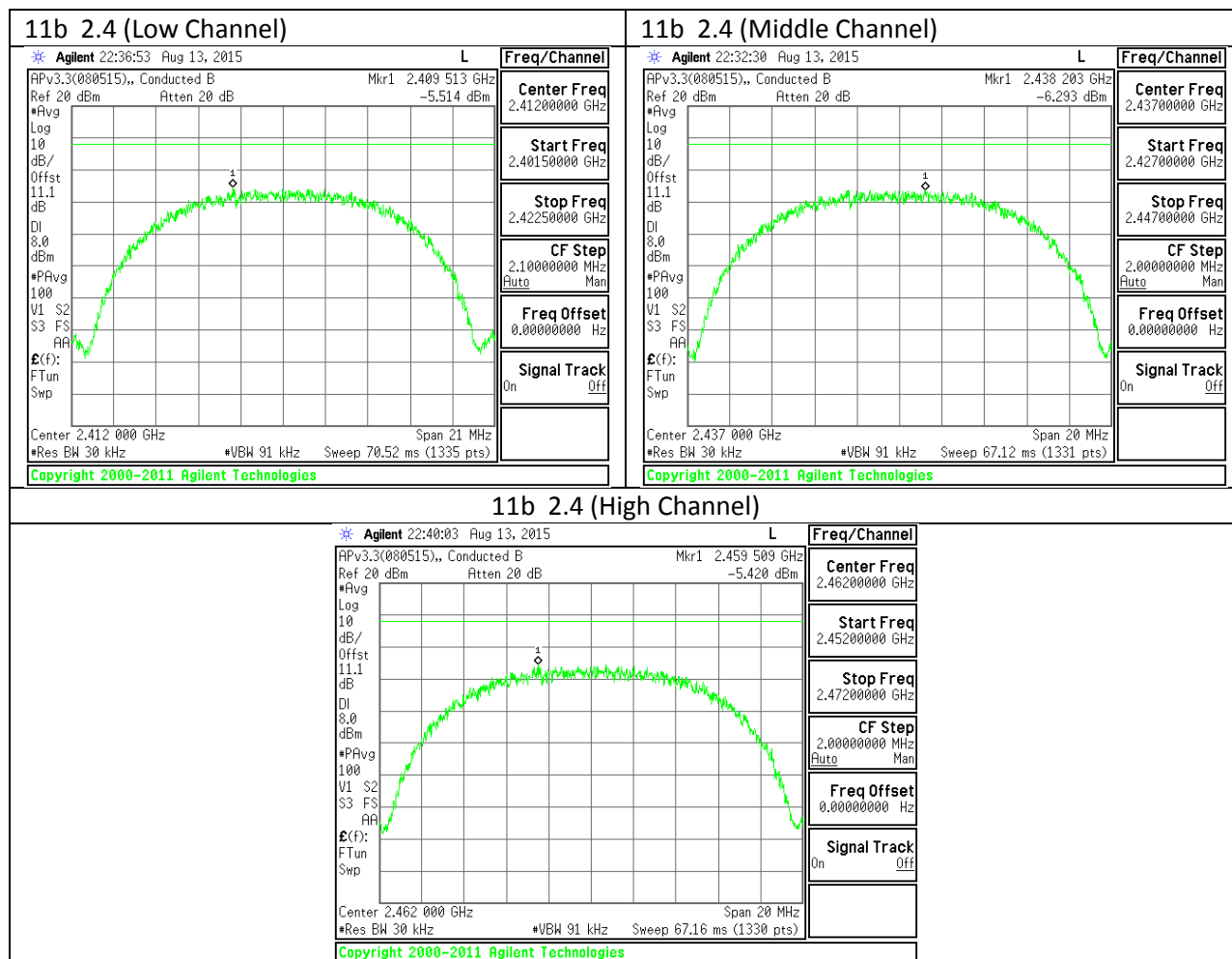
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.33	8.0	-16.3
Mid	2437	-8.58	8.0	-16.6
High	2462	-8.84	8.0	-16.8

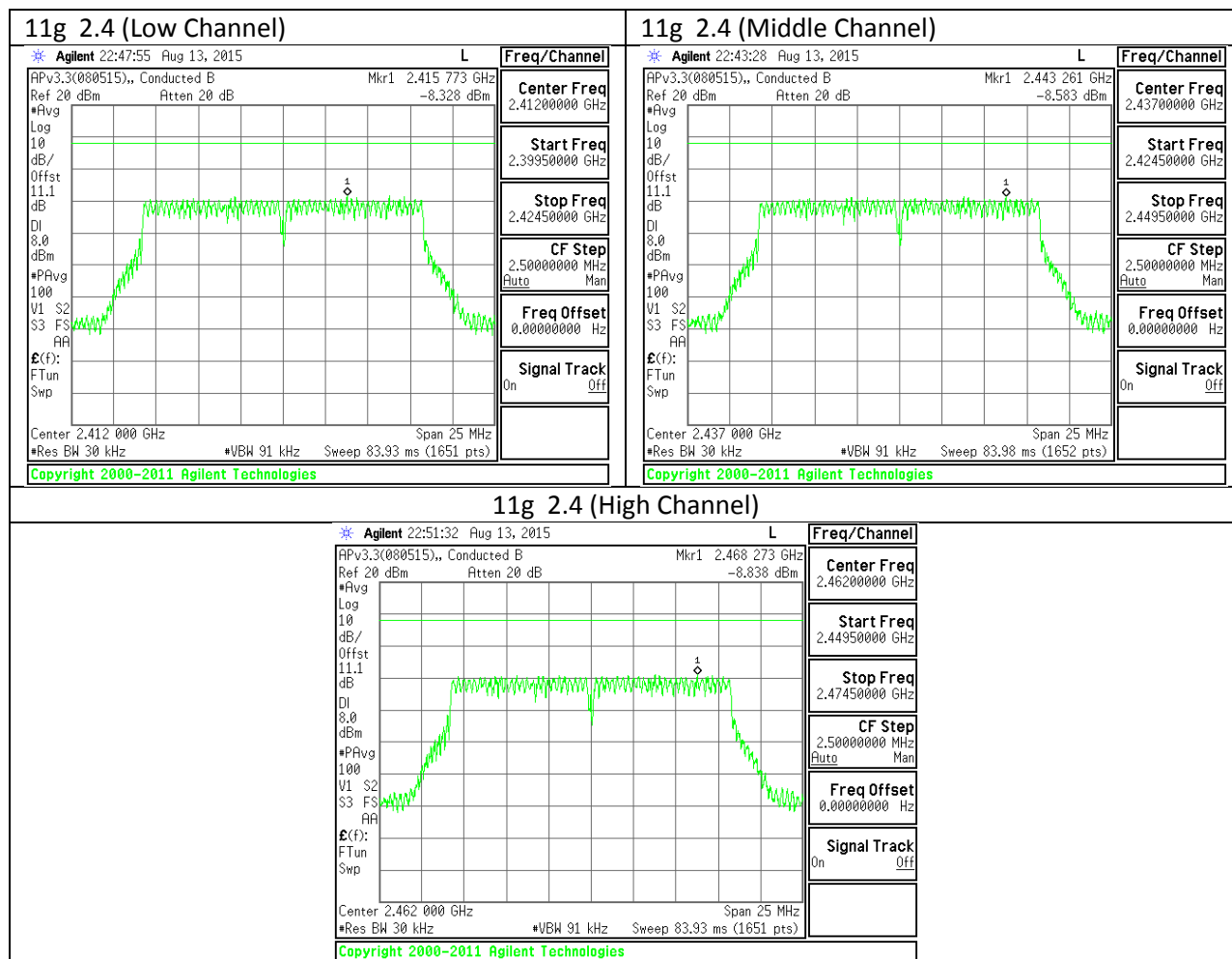
9.5.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

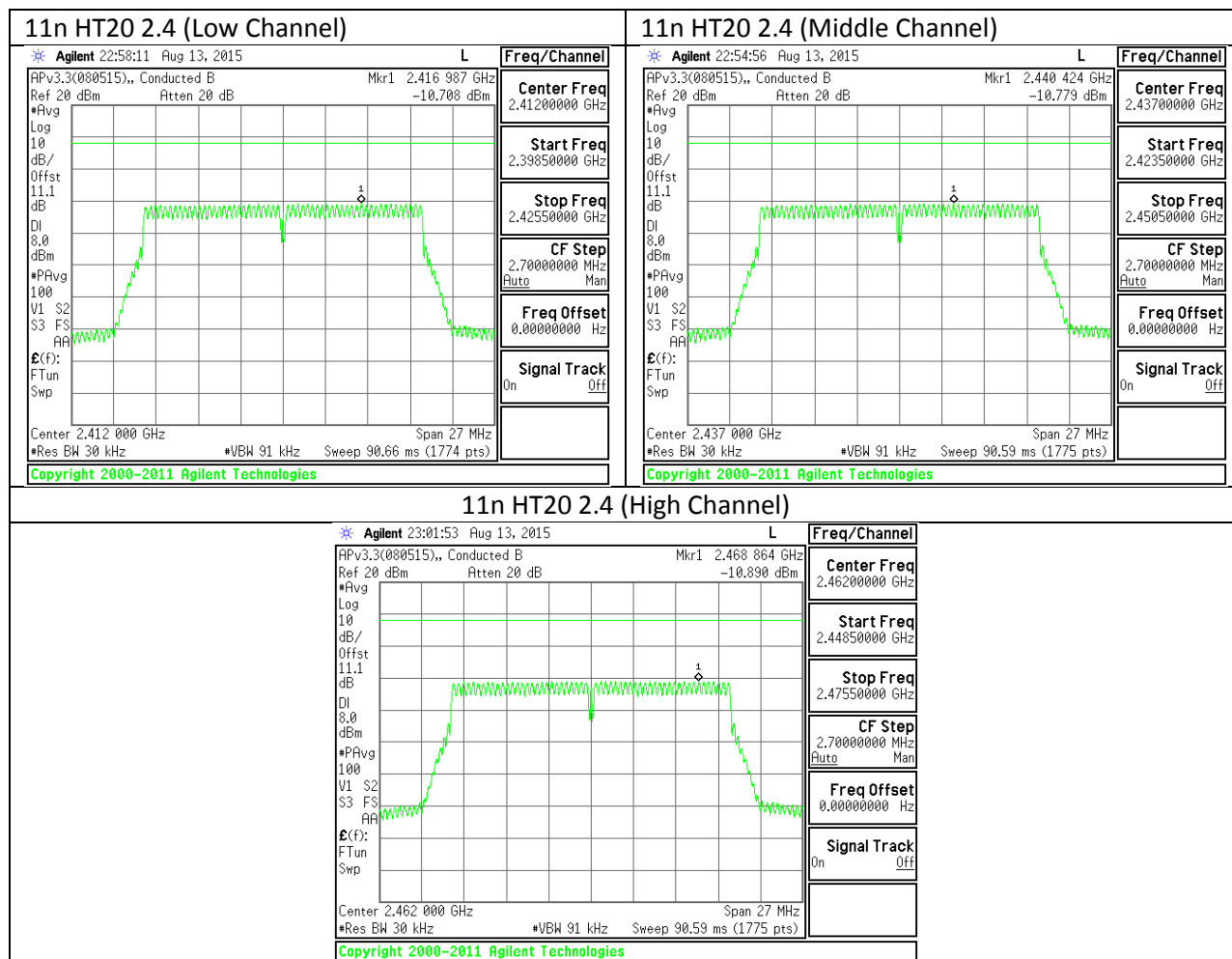
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-10.71	8.0	-18.7
Mid	2437	-10.78	8.0	-18.8
High	2462	-10.89	8.0	-18.9

9.5.4. PSD PLOTS







9.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-247 5.5

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

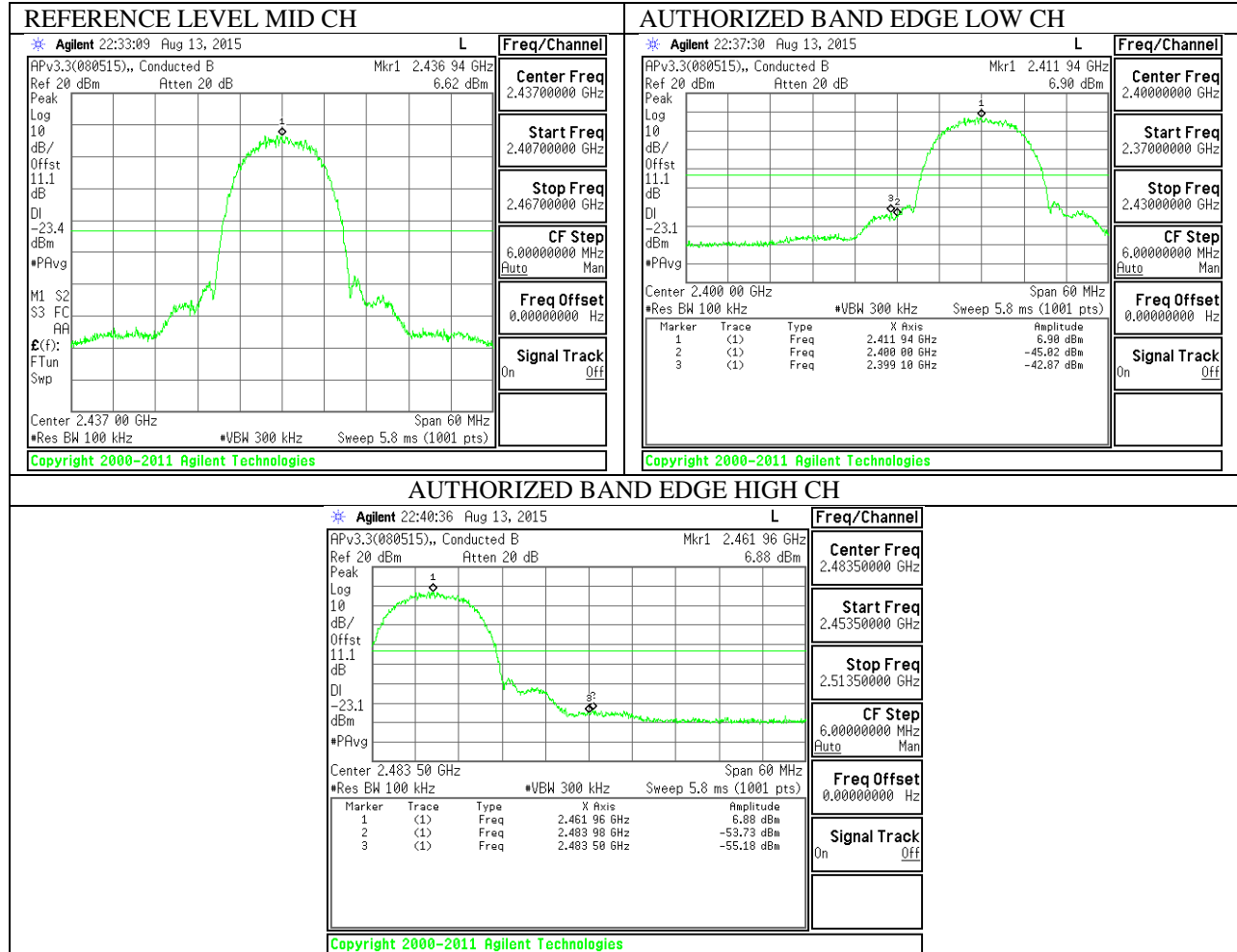
TEST PROCEDURE

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

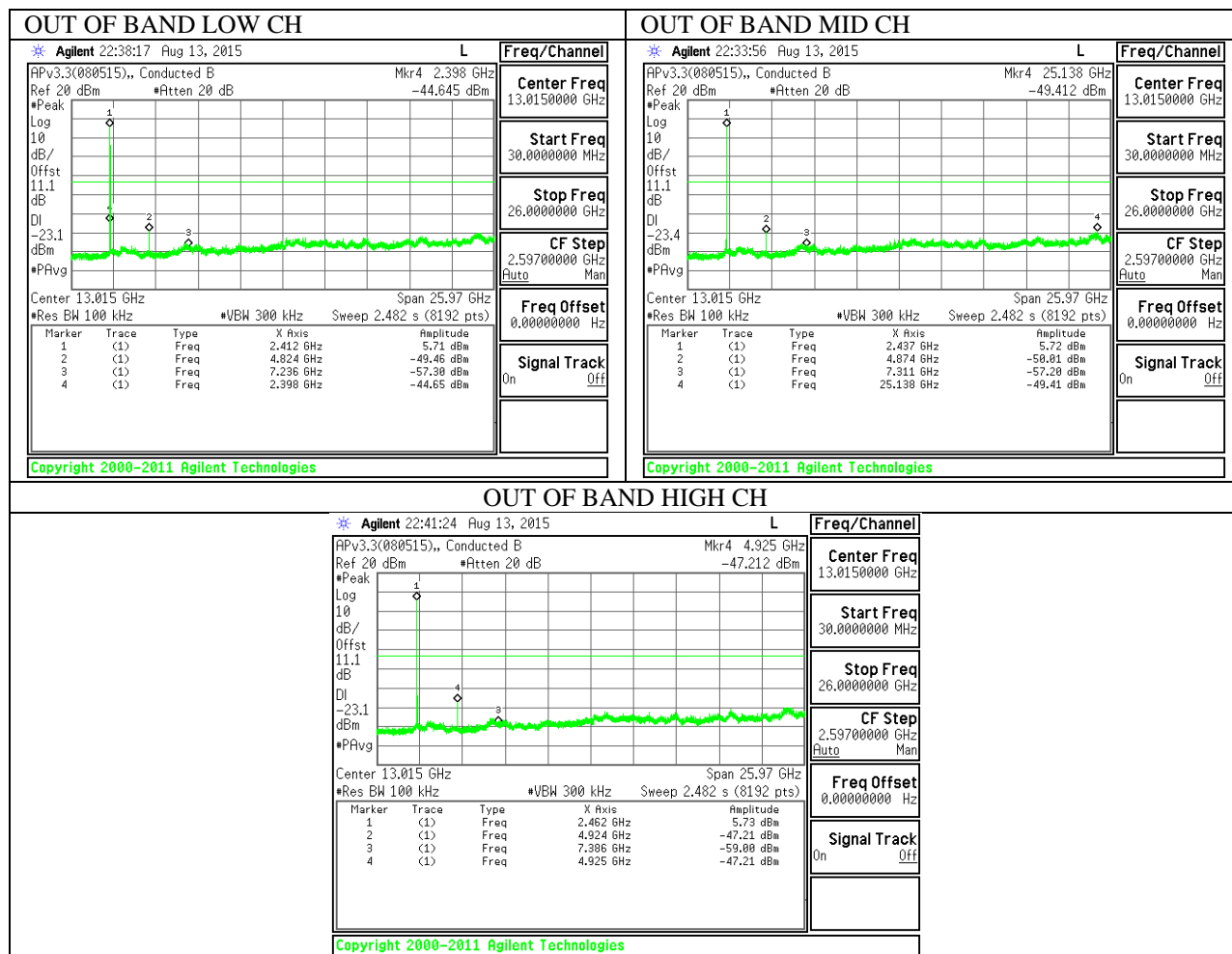
RESULTS

9.6.1. 802.11b MODE IN THE 2.4 GHz BAND

IN-BAND REFERENCE LEVEL

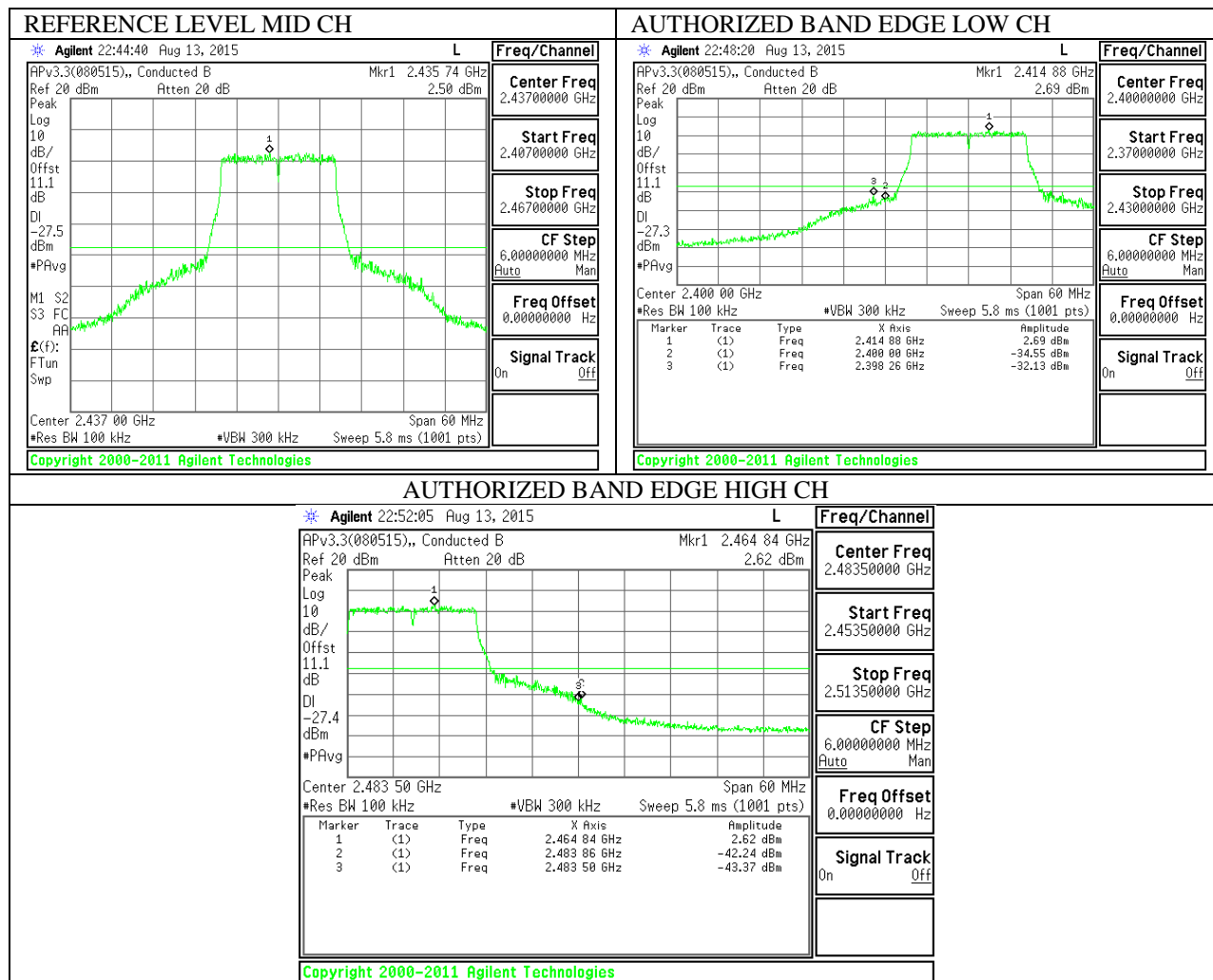


OUT-OF-BAND EMISSIONS

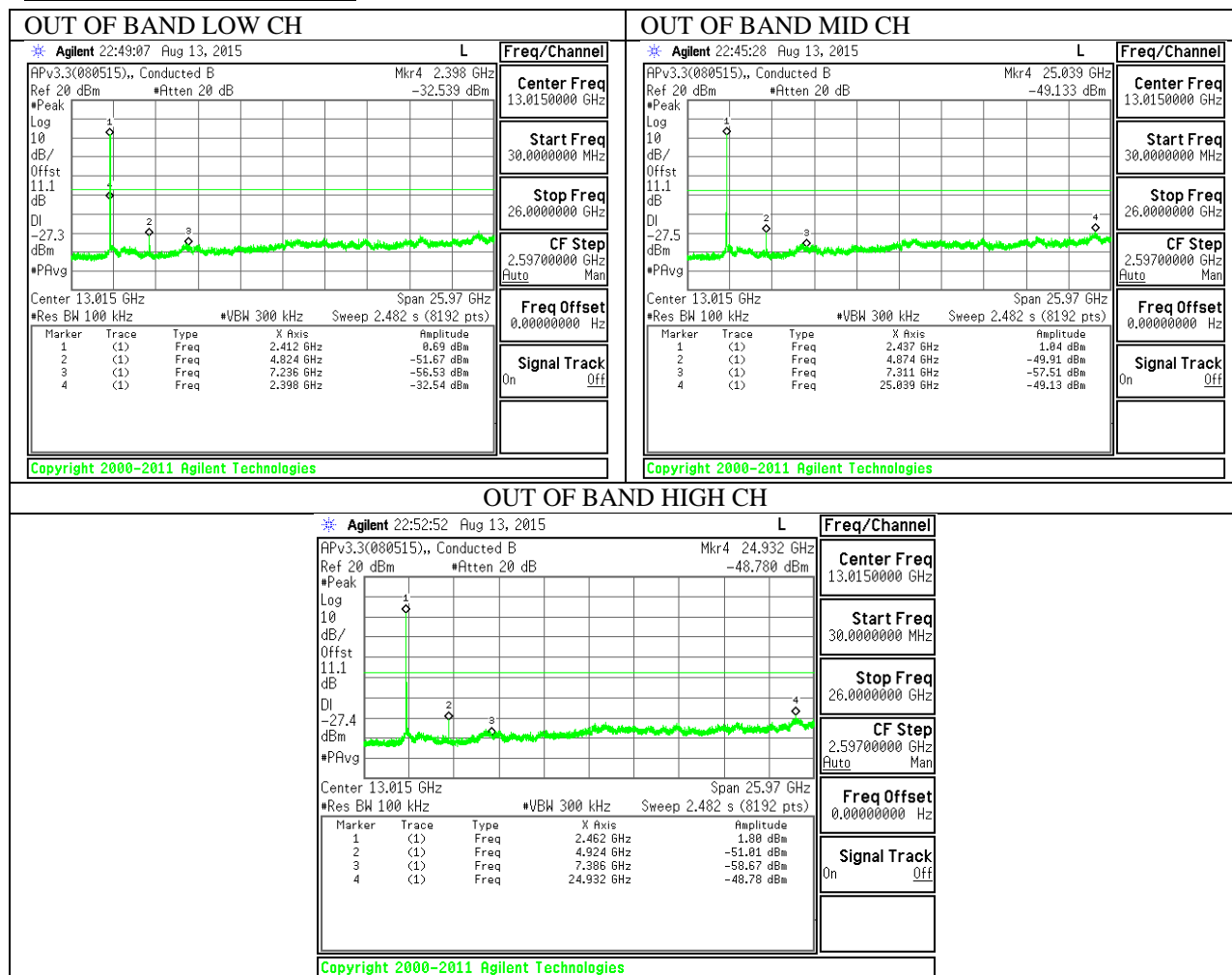


9.6.2. 802.11g MODE IN THE 2.4 GHz BAND

IN-BAND REFERENCE LEVEL

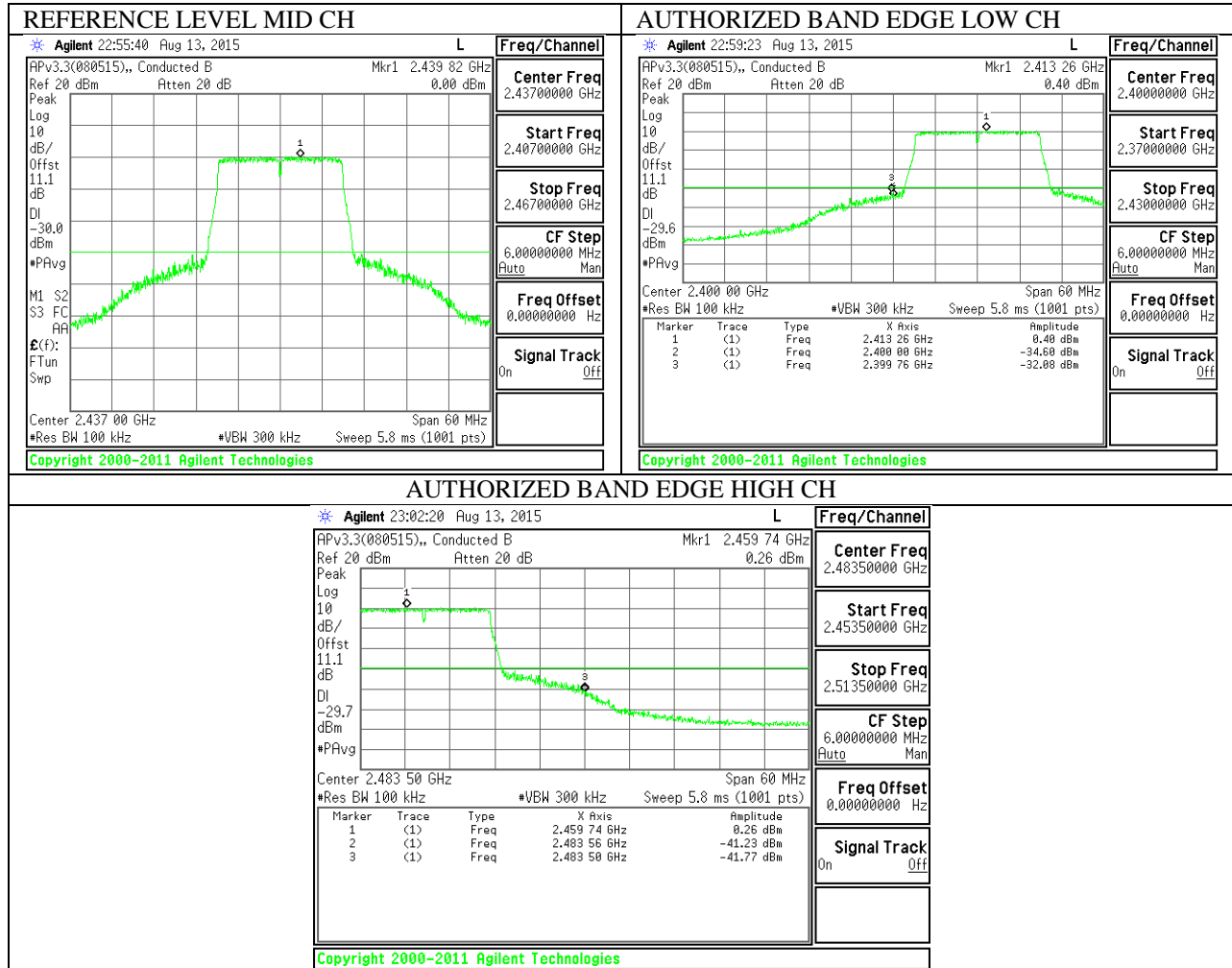


OUT-OF-BAND EMISSIONS

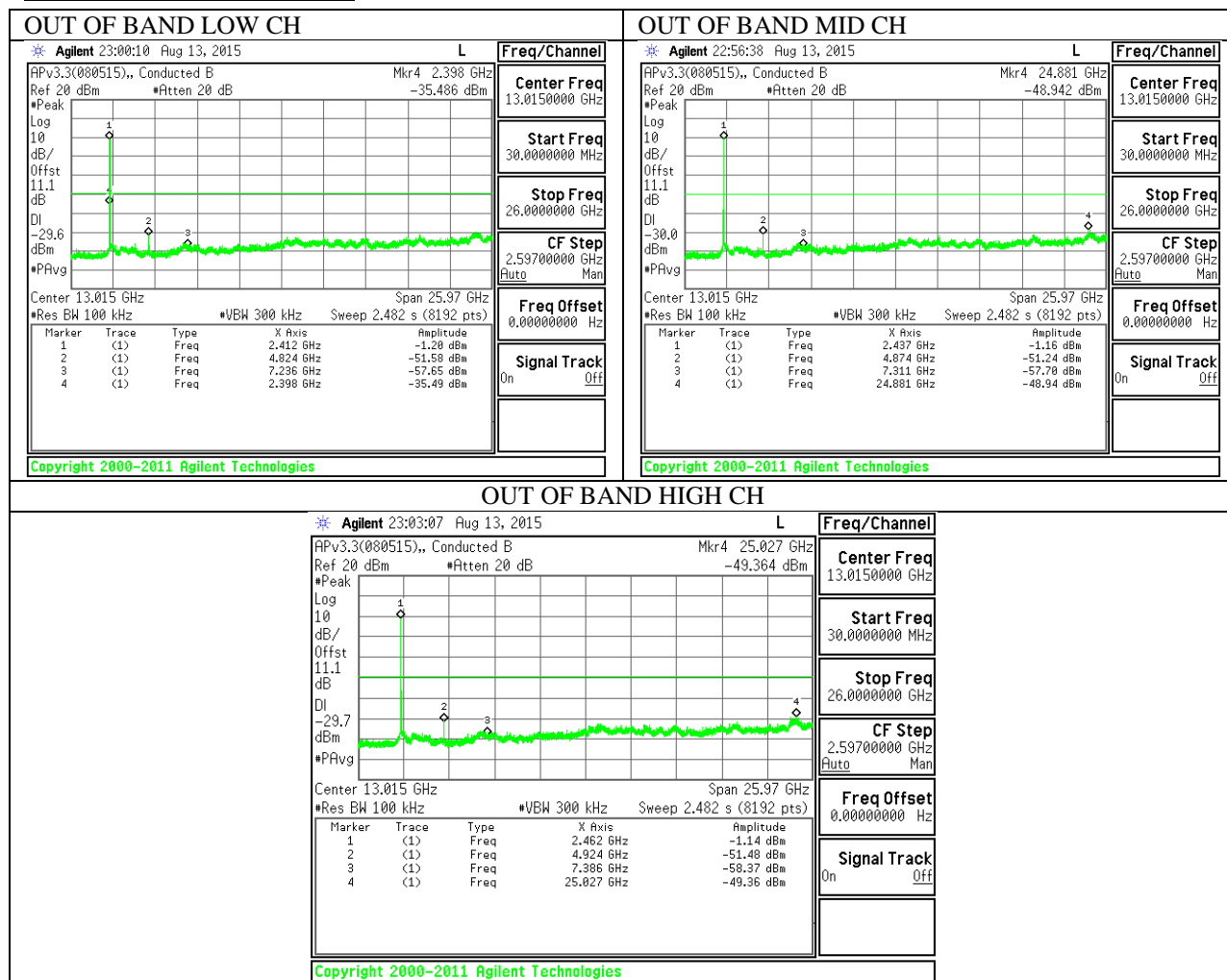


9.6.3. 802.11n HT20 MODE IN THE 2.4 GHZ BAND

IN-BAND REFERENCE LEVEL



OUT-OF-BAND EMISSIONS



10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

IC RSS-GEN Clause 7 (Receiver)

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 for below 1GHz and 150cm for above 1GHz. 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 = 0.0dB; N mode = 0.0dB.

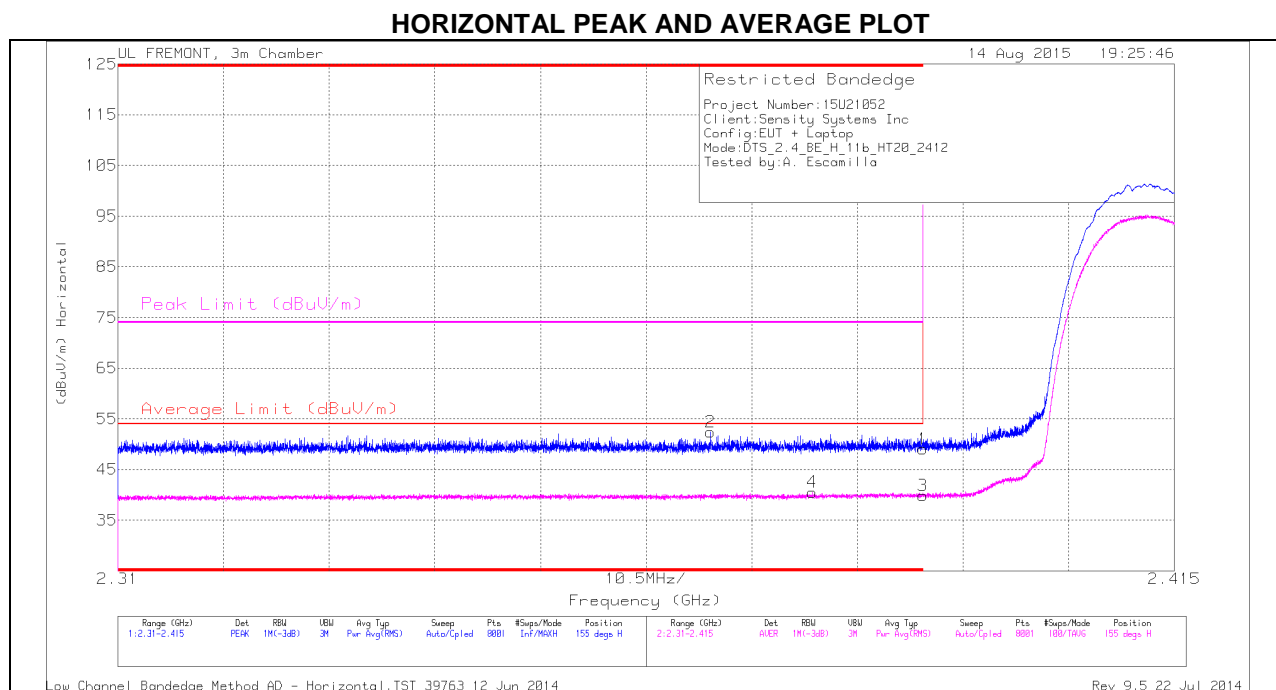
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

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

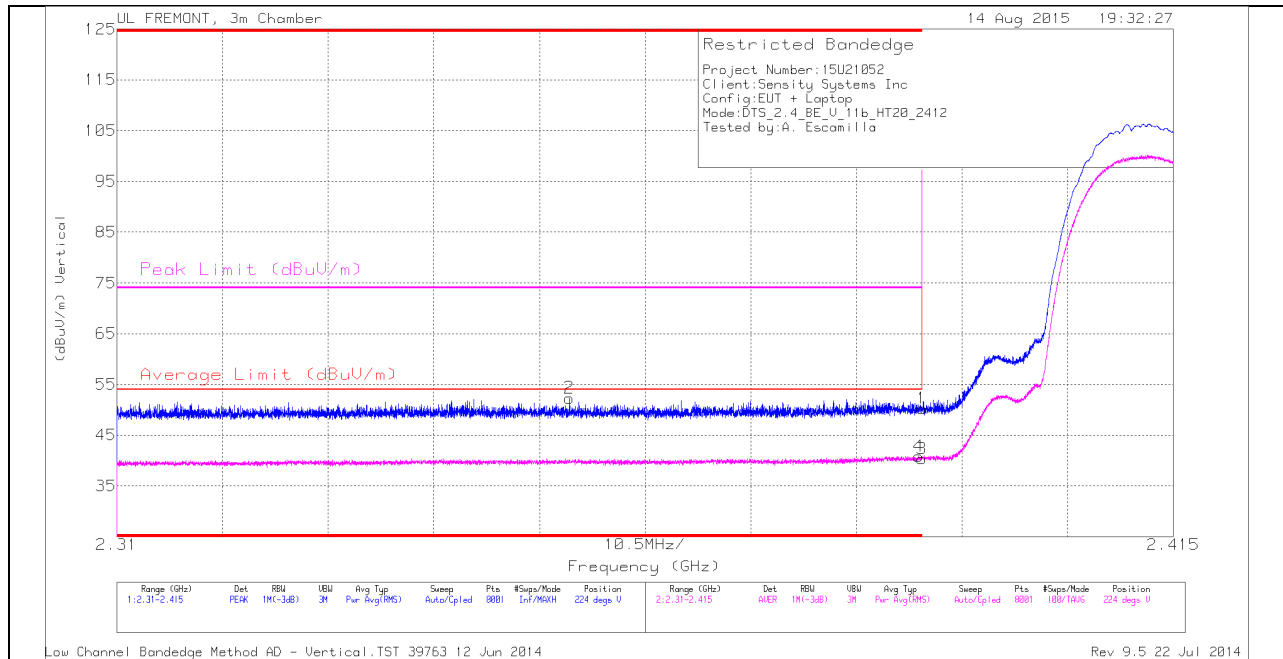
RESTRICTED BANDEDGE (LOW CHANNEL)



HORIZONTAL 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	* 2.39	39.4	PK	32	-22.4	0	49	-	-	74	-25	155	106	H
2	* 2.369	42.92	PK	31.9	-22.4	0	52.42	-	-	74	-21.58	155	106	H
3	* 2.39	30.26	RMS	32	-22.4	0	39.86	54	-14.14	-	-	155	106	H
4	* 2.379	31.04	RMS	31.9	-22.4	0	40.54	54	-13.46	-	-	155	106	H

VERTICAL PEAK AND AVERAGE PLOT

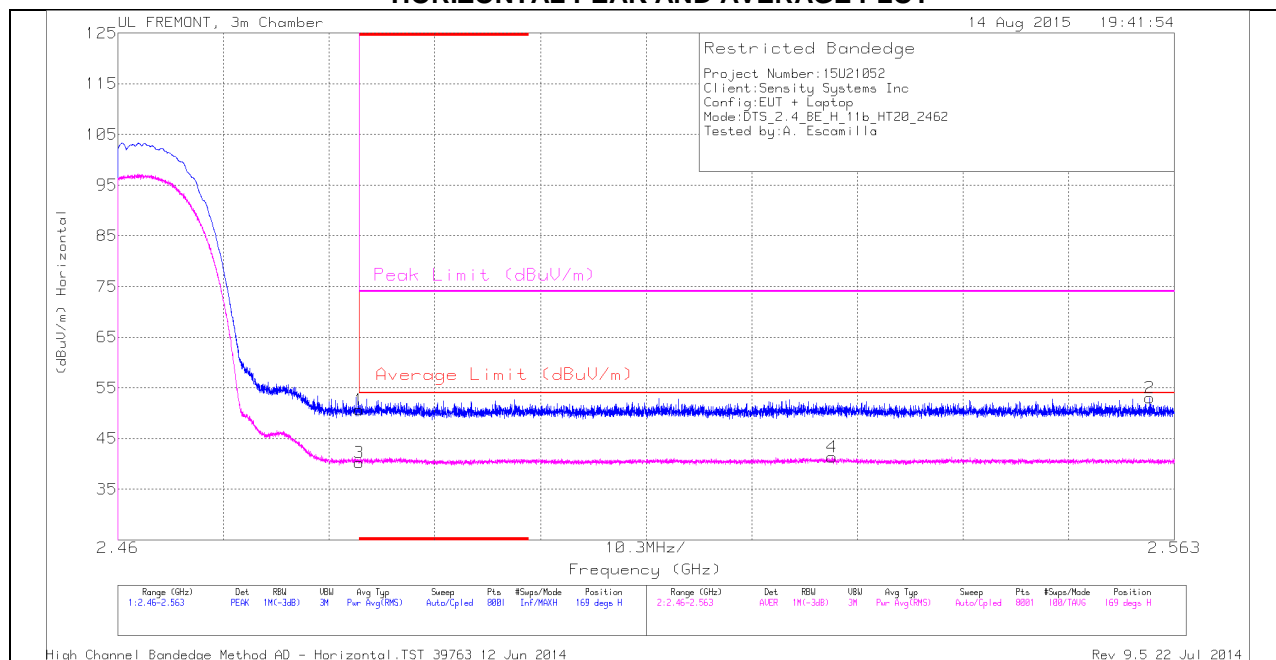


VERTICAL DATA

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	* 2.355	42.94	PK	31.8	-22.4	0	52.34	-	-	74	-21.66	224	237	V
1	* 2.39	40.69	PK	32	-22.4	0	50.29	-	-	74	-23.71	224	237	V
3	* 2.39	30.77	RMS	32	-22.4	0	40.37	54	-13.63	-	-	224	237	V
4	* 2.39	31.3	RMS	32	-22.4	0	40.9	54	-13.1	-	-	224	237	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

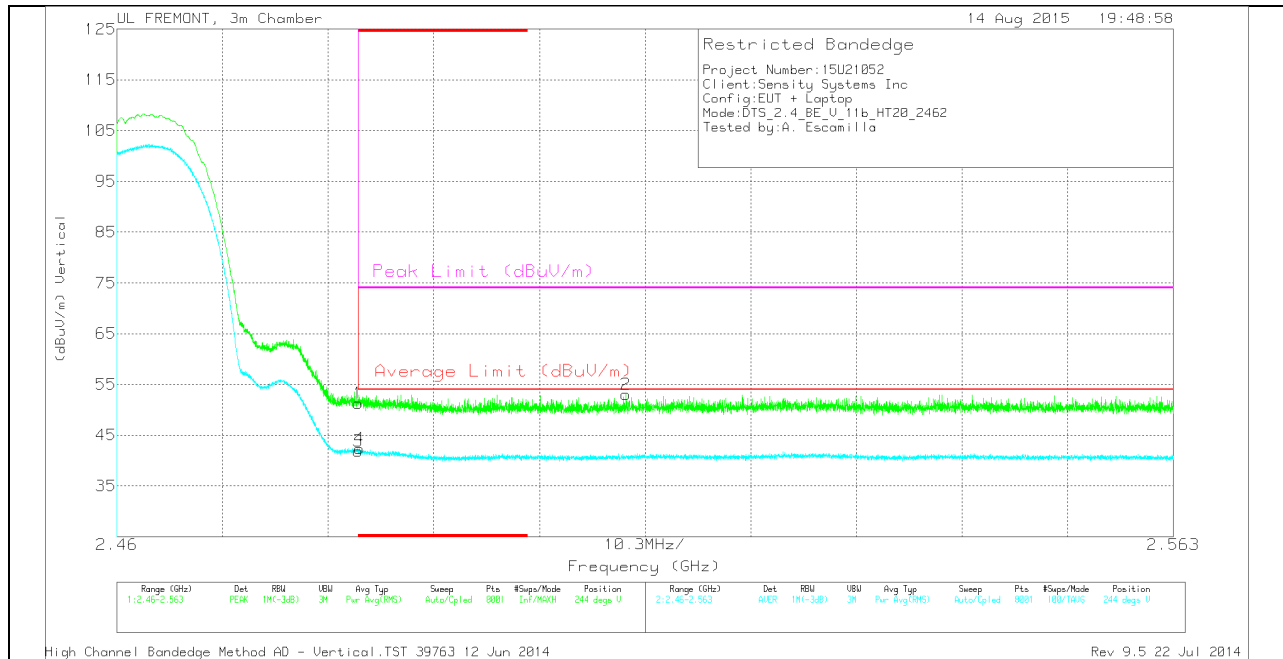
HORIZONTAL PEAK AND AVERAGE PLOT



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	40.43	PK	32.3	-22.1	0	50.63	-	-	74	-23.37	169	231	H
3	* 2.484	30.02	RMS	32.3	-22.1	0	40.22	54	-13.78	-	-	169	231	H
4	2.53	30.93	RMS	32.4	-22	0	41.33	54	-12.67	-	-	169	231	H
2	2.561	42.67	PK	32.4	-22	0	53.07	-	-	74	-20.93	169	231	H

VERTICAL PEAK AND AVERAGE PLOT

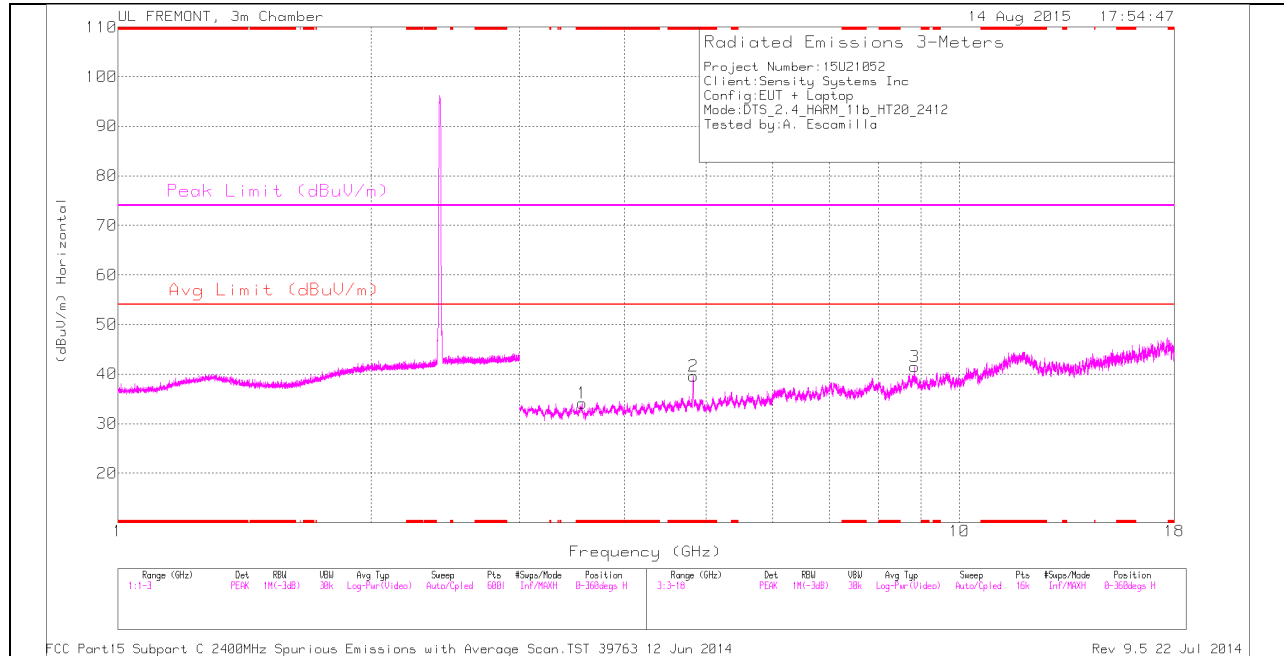


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (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	41.12	PK	32.3	-22.1	0	51.32	-	-	74	-22.68	244	221	V
3	* 2.484	31.66	RMS	32.3	-22.1	0	41.86	54	-12.14	-	-	244	221	V
4	* 2.484	32.19	RMS	32.3	-22.1	0	42.39	54	-11.61	-	-	244	221	V
2	2.51	42.87	PK	32.3	-22.1	0	53.07	-	-	74	-20.93	244	221	V

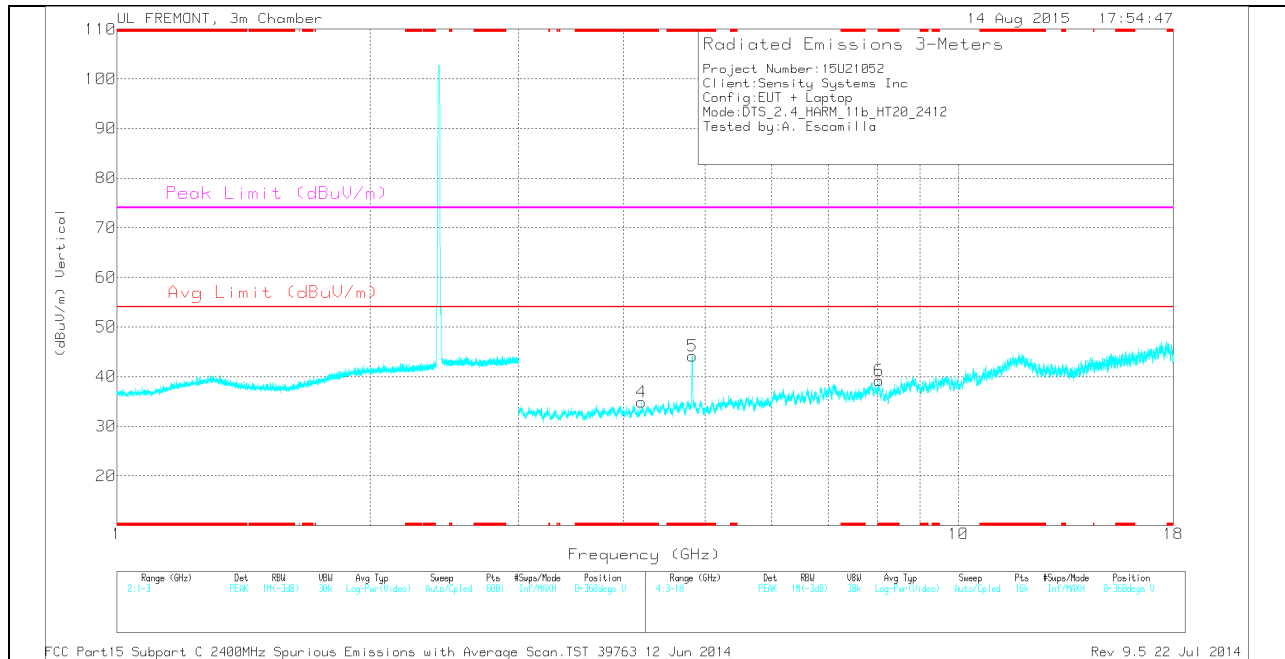
HARMONICS AND SPURIOUS EMISSIONS

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

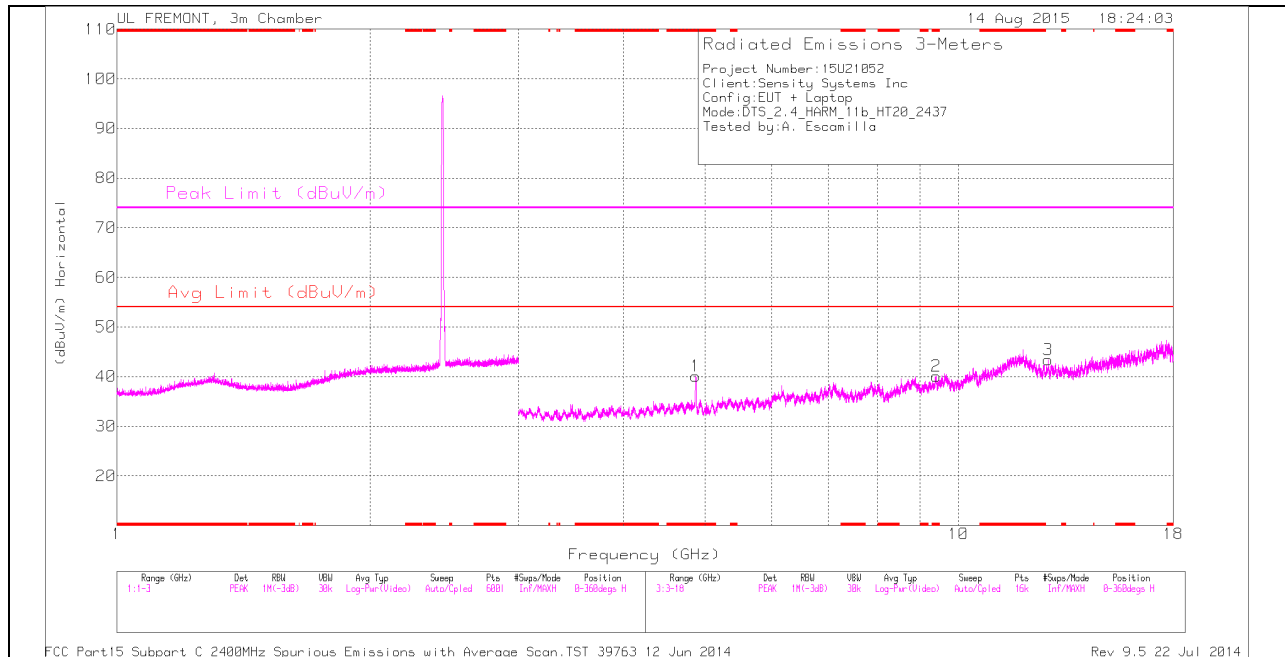
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.564	31.98	PK	32.8	-30.6	0	34.18	-	-	74	-39.82	0-360	200	H
2	* 4.827	35.02	PK	34	-29.4	0	39.62	-	-	74	-34.38	0-360	100	H
4	* 4.202	31.57	PK	33.3	-30	0	34.87	-	-	74	-39.13	0-360	100	V
5	* 4.826	39.55	PK	34	-29.4	0	44.15	-	-	74	-29.85	0-360	200	V
6	* 8.046	30.22	PK	35.7	-26.7	0	39.22	-	-	74	-34.78	0-360	100	V
3	8.849	30.57	PK	35.9	-25	0	41.47	-	-	-	-	0-360	100	H

PK - Peak detector

RADIATED EMISSIONS

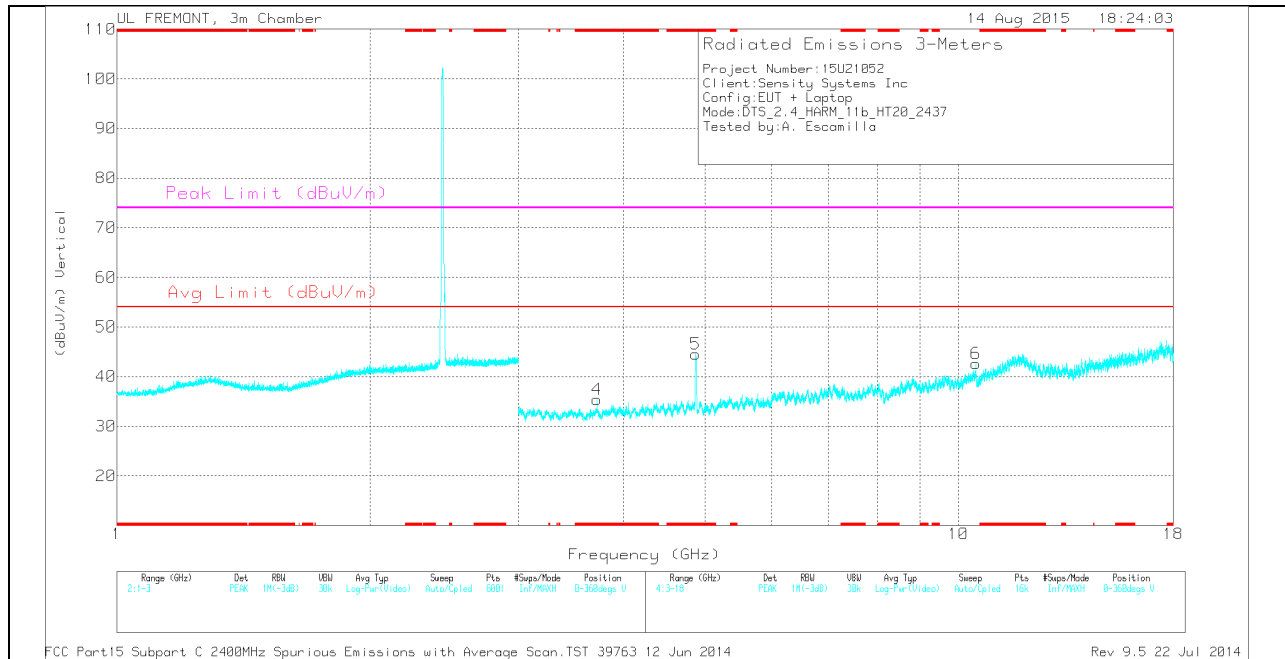
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.565	40.87	PK2	32.8	-30.6	0	43.07	-	-	74	-30.93	27	174	H
* 3.563	29.15	MAV1	32.8	-30.5	0	31.45	54	-22.55	-	-	27	174	H
* 4.825	44.86	PK2	34	-29.4	0	49.46	-	-	74	-24.54	13	361	H
* 4.826	34.56	MAV1	34	-29.4	0	39.16	54	-14.84	-	-	13	361	H
* 4.202	40.3	PK2	33.3	-30	0	43.6	-	-	74	-30.4	125	291	V
* 4.201	28.76	MAV1	33.3	-30	0	32.06	54	-21.94	-	-	125	291	V
* 4.824	51.64	PK2	34	-29.4	0	56.24	-	-	74	-17.76	130	292	V
* 4.824	40.97	MAV1	34	-29.4	0	45.57	54	-8.43	-	-	130	292	V
* 8.048	39.27	PK2	35.7	-26.8	0	48.17	-	-	74	-25.83	180	223	V
* 8.046	27.51	MAV1	35.7	-26.7	0	36.51	54	-17.49	-	-	180	223	V
8.849	37.36	PK2	35.9	-25	0	48.26	-	-	-	-	61	337	H
8.85	25.85	MAV1	35.9	-25	0	36.75	-	-	-	-	61	337	H

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

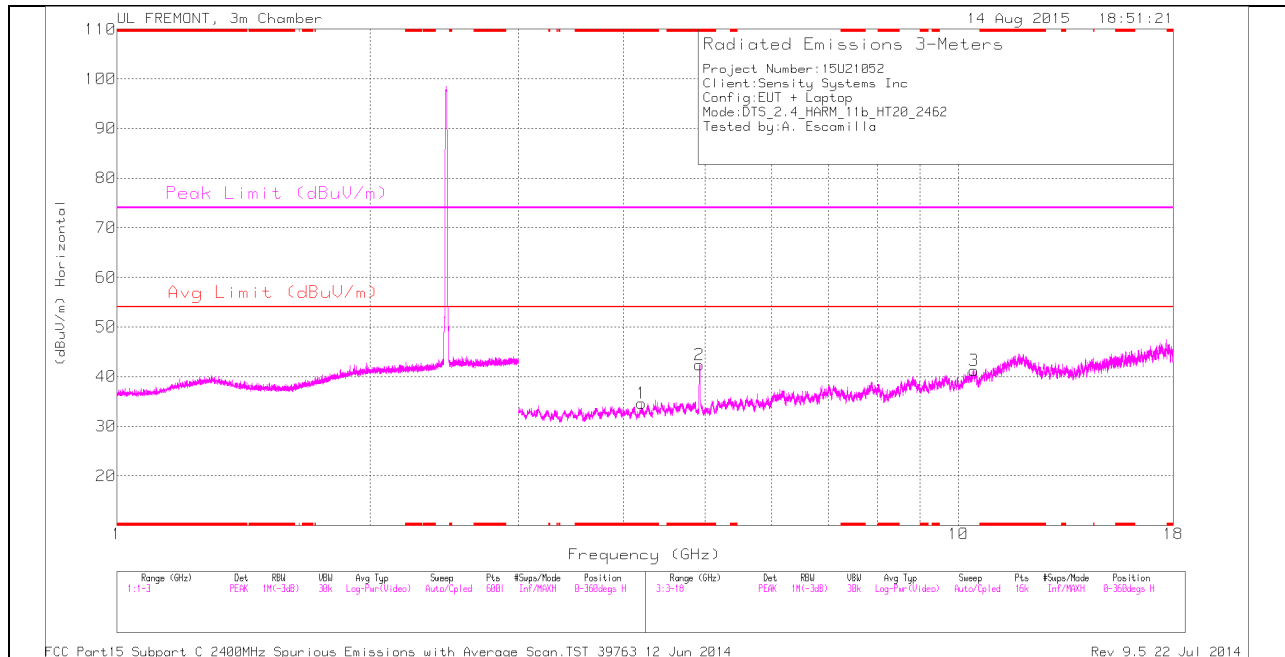
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.869	35.19	PK	34	-29.1	0	40.09	-	-	74	-33.91	0-360	200	H
2	* 9.406	27.76	PK	36.4	-24.1	0	40.06	-	-	74	-33.94	0-360	100	H
4	* 3.721	32.32	PK	33	-29.9	0	35.42	-	-	74	-38.58	0-360	100	V
5	* 4.872	39.6	PK	34	-29.1	0	44.5	-	-	74	-29.5	0-360	200	V
6	10.492	29.07	PK	37.5	-23.9	0	42.67	-	-	-	-	0-360	100	V
3	12.778	29.97	PK	39.1	-25.7	0	43.37	-	-	-	-	0-360	100	H

PK - Peak detector

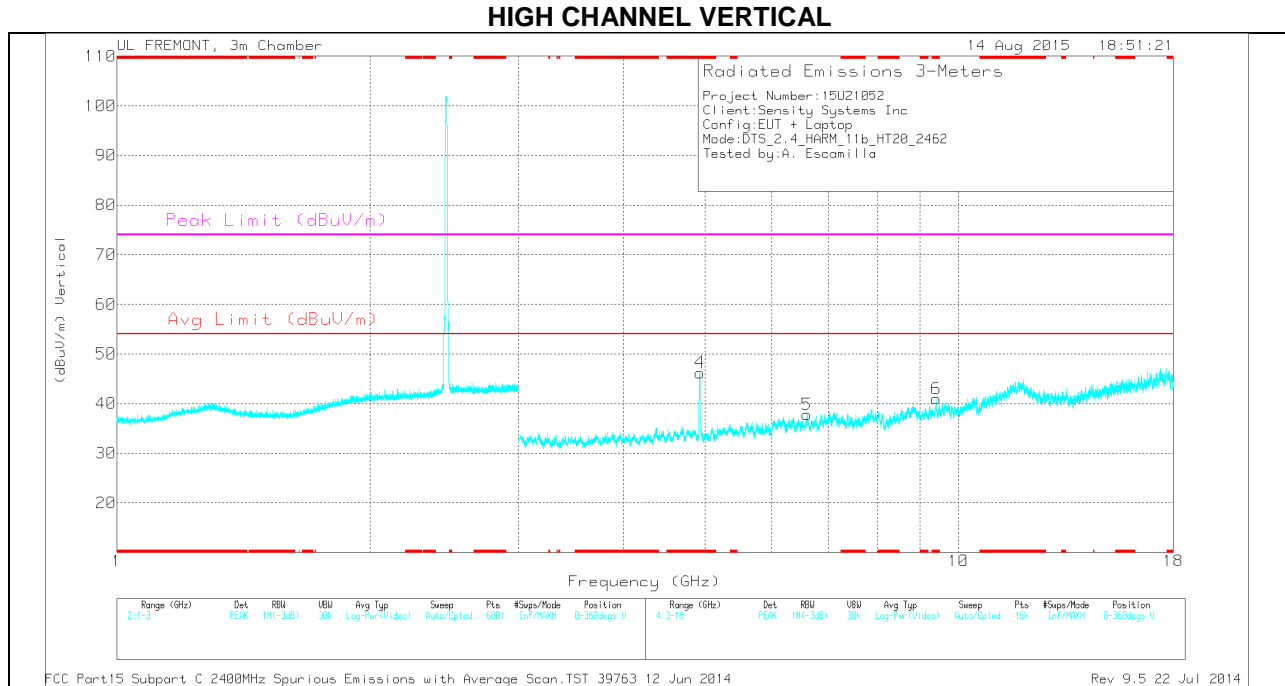
RADIATED EMISSIONS

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
* 4.869	46.06	PK2	34	-29.1	0	50.96	-	-	74	-23.04	17	284	H
* 4.871	35.07	MAV1	34	-29.1	0	39.97	54	-14.03	-	-	17	284	H
* 9.408	37.33	PK2	36.4	-24.1	0	49.63	-	-	74	-24.37	49	183	H
* 9.408	25.47	MAV1	36.4	-24.1	0	37.77	54	-16.23	-	-	49	183	H
* 3.721	40.23	PK2	33	-29.9	0	43.33	-	-	74	-30.67	12	192	V
* 3.72	28.92	MAV1	33	-29.9	0	32.02	54	-21.98	-	-	12	192	V
* 4.874	50.25	PK2	34	-29.1	0	55.15	-	-	74	-18.85	348	267	V
* 4.872	39.32	MAV1	34	-29.1	0	44.22	54	-9.78	-	-	348	267	V
10.493	36.19	PK2	37.5	-23.9	0	49.79	-	-	-	-	359	244	V
10.494	25.31	MAV1	37.5	-24	0	38.81	-	-	-	-	359	244	V
12.778	38.01	PK2	39.1	-25.7	0	51.41	-	-	-	-	36	164	H
12.779	26.6	MAV1	39.1	-25.7	0	40	-	-	-	-	36	164	H

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/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	* 4.204	31.36	PK	33.3	-30	0	34.66	-	-	74	-39.34	0-360	200	H
2	* 4.926	38.01	PK	34	-29.6	0	42.41	-	-	74	-31.59	0-360	200	H
4	* 4.927	41.85	PK	34	-29.6	0	46.25	-	-	74	-27.75	0-360	200	V
6	* 9.405	28.64	PK	36.4	-24	0	41.04	-	-	74	-32.96	0-360	100	V
5	6.601	29.87	PK	35.6	-27.7	0	37.77	-	-	-	-	0-360	200	V
3	10.432	27.54	PK	37.3	-23.6	0	41.24	-	-	-	-	0-360	200	H

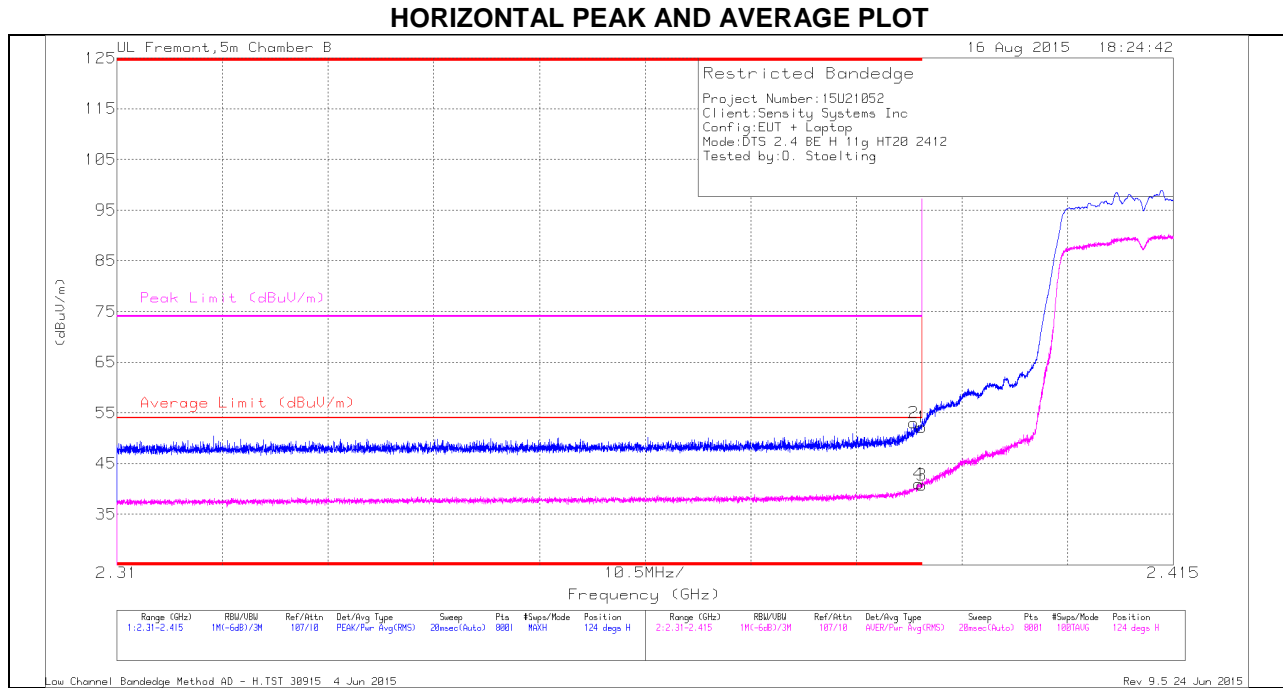
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
* 4.203	40.25	PK2	33.3	-30	0	43.55	-	-	74	-30.45	347	198	H
* 4.203	28.73	MAV1	33.3	-30	0	32.03	54	-21.97	-	-	347	198	H
* 4.924	49.64	PK2	34	-29.6	0	54.04	-	-	74	-19.96	27	214	H
* 4.924	37.98	MAV1	34	-29.6	0	42.38	54	-11.62	-	-	27	214	H
* 4.929	51.98	PK2	34	-29.6	0	56.38	-	-	74	-17.62	342	212	V
* 4.926	41.35	MAV1	34	-29.6	0	45.75	54	-8.25	-	-	342	212	V
* 9.404	37.46	PK2	36.4	-24	0	49.86	-	-	74	-24.14	354	134	V
* 9.406	25.64	MAV1	36.4	-24	0	38.04	54	-15.96	-	-	354	134	V
6.599	39.6	PK2	35.6	-27.7	0	47.5	-	-	-	-	330	216	V
6.6	27.59	MAV1	35.6	-27.7	0	35.49	-	-	-	-	330	216	V
10.434	35.94	PK2	37.3	-23.7	0	49.54	-	-	-	-	13	211	H
10.434	24.51	MAV1	37.3	-23.7	0	38.11	-	-	-	-	13	211	H

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

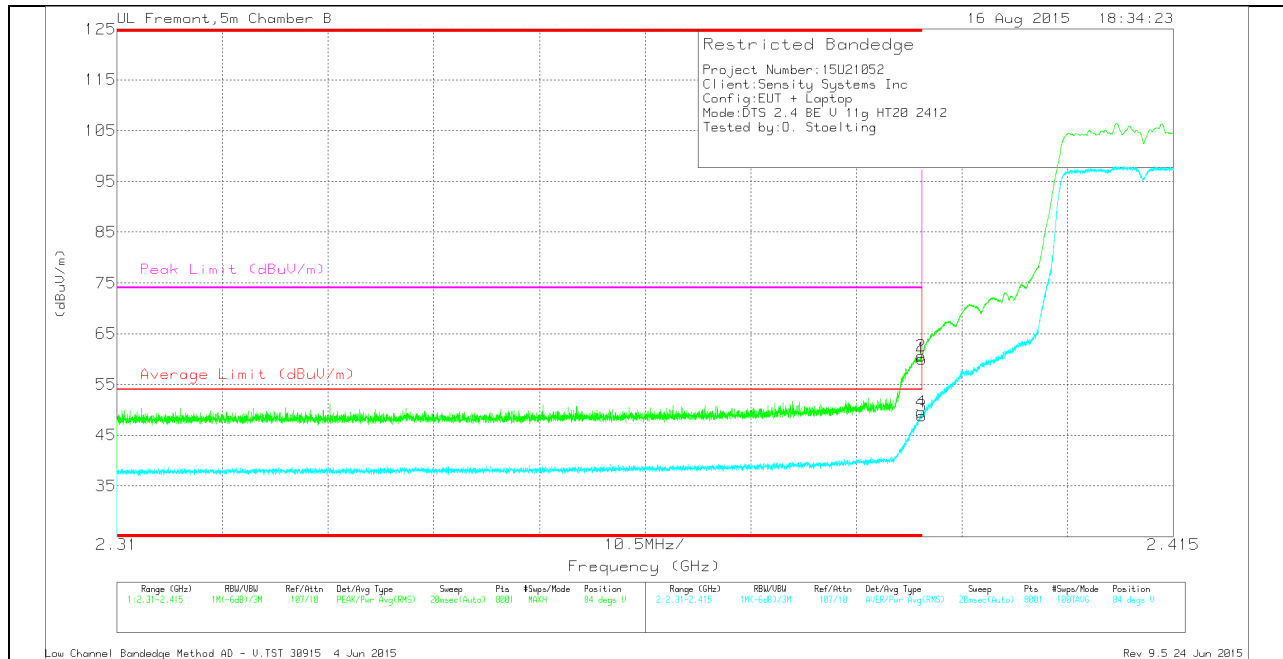
RESTRICTED BANDEDGE (LOW CHANNEL)



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 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	44.3	Pk	32	-24.1	0	52.2	-	-	74	-21.8	124	102	H
2	* 2.389	45.12	Pk	32	-24.1	0	53.02	-	-	74	-20.98	124	102	H
3	* 2.39	32.82	RMS	32	-24.1	0	40.72	-	-	-	-	124	102	H
4	* 2.39	33.09	RMS	32	-24.1	0	40.99	-	-	-	-	124	102	H

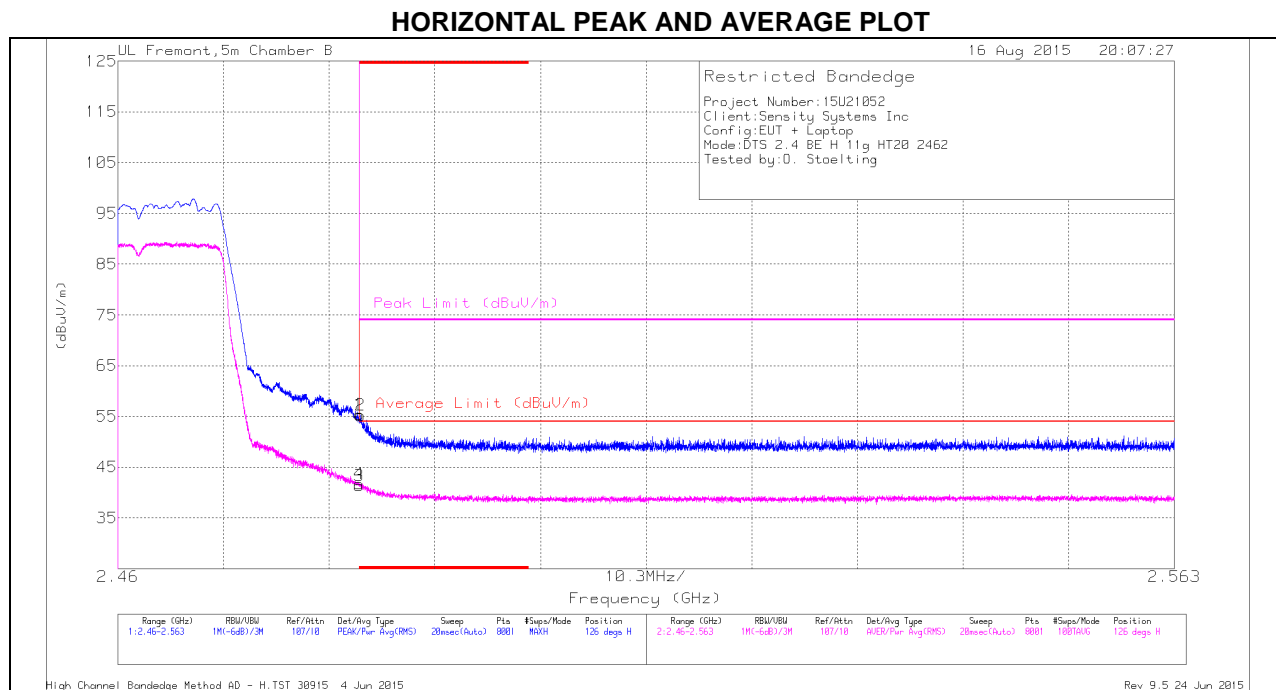
VERTICAL PEAK AND AVERAGE PLOT



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	* 2.39	52.14	Pk	32	-24.1	0	60.04	-	-	74	-13.96	84	110	V
2	* 2.39	52.67	Pk	32	-24.1	0	60.57	-	-	74	-13.43	84	110	V
3	* 2.39	40.9	RMS	32	-24.1	0	48.8	-	-	-	-	84	110	V
4	* 2.39	41.59	RMS	32	-24.1	0	49.49	-	-	-	-	84	110	V

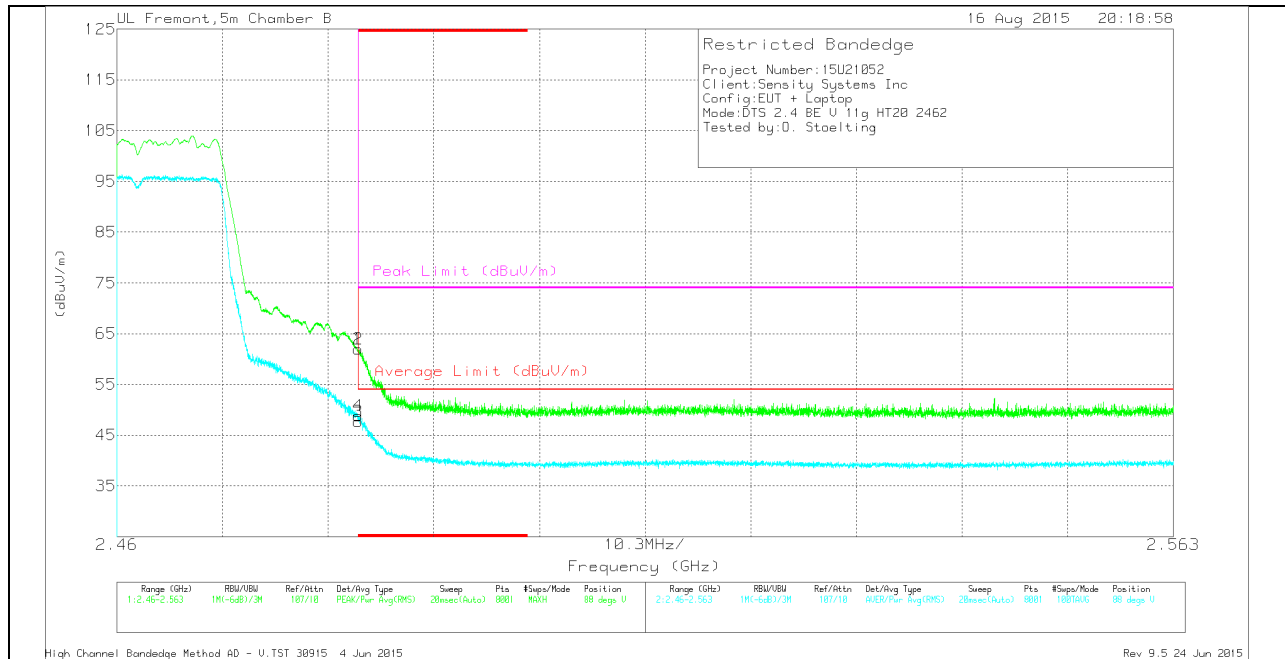
AUTHORIZED BANDEDGE (HIGH CHANNEL)



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	46.9	Pk	32.5	-24	0	55.4	-	-	74	-18.6	126	133	H
2	* 2.484	46.7	Pk	32.5	-24	0	55.2	-	-	74	-18.8	126	133	H
3	* 2.484	32.86	RMS	32.5	-24	0	41.36	-	-	-	-	126	133	H
4	* 2.484	33.24	RMS	32.5	-24	0	41.74	-	-	-	-	126	133	H

VERTICAL PEAK AND AVERAGE PLOT

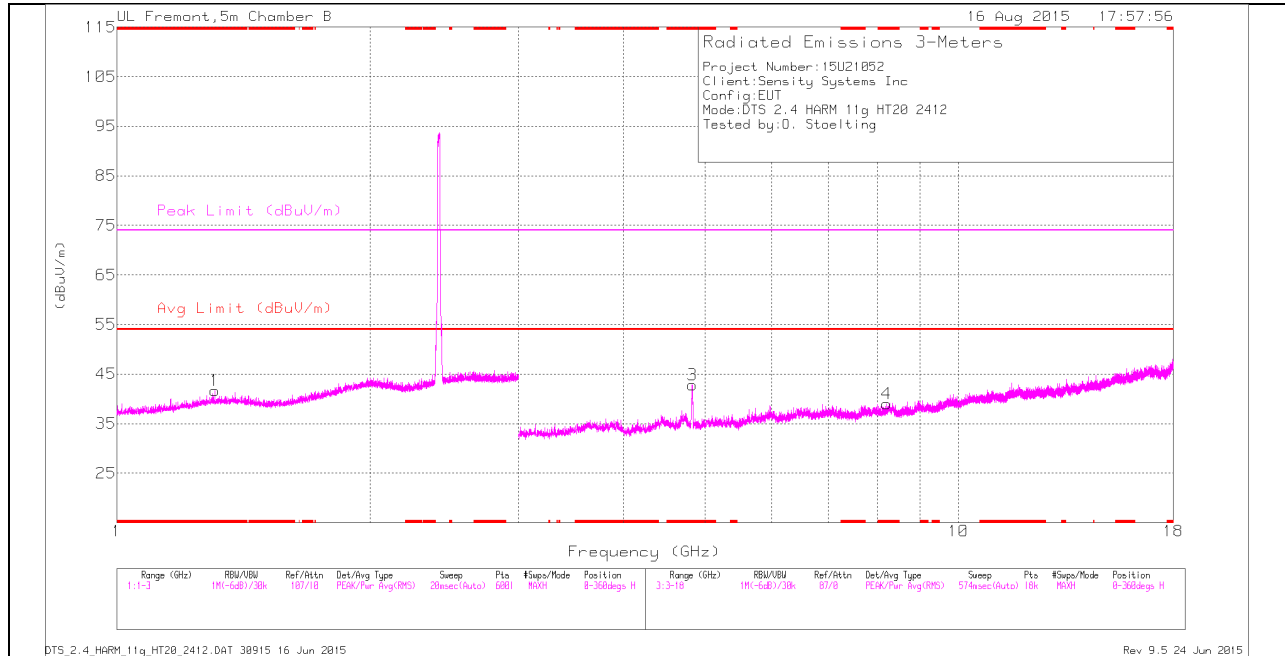


VERTICAL DATA

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	53.42	Pk	32.5	-24	0	61.92	-	-	74	-12.08	88	106	V
2	* 2.484	53.43	Pk	32.5	-24	0	61.93	-	-	74	-12.07	88	106	V
3	* 2.484	39.24	RMS	32.5	-24	0	47.74	-	-	-	-	88	106	V
4	* 2.484	40.25	RMS	32.5	-24	0	48.75	-	-	-	-	88	106	V

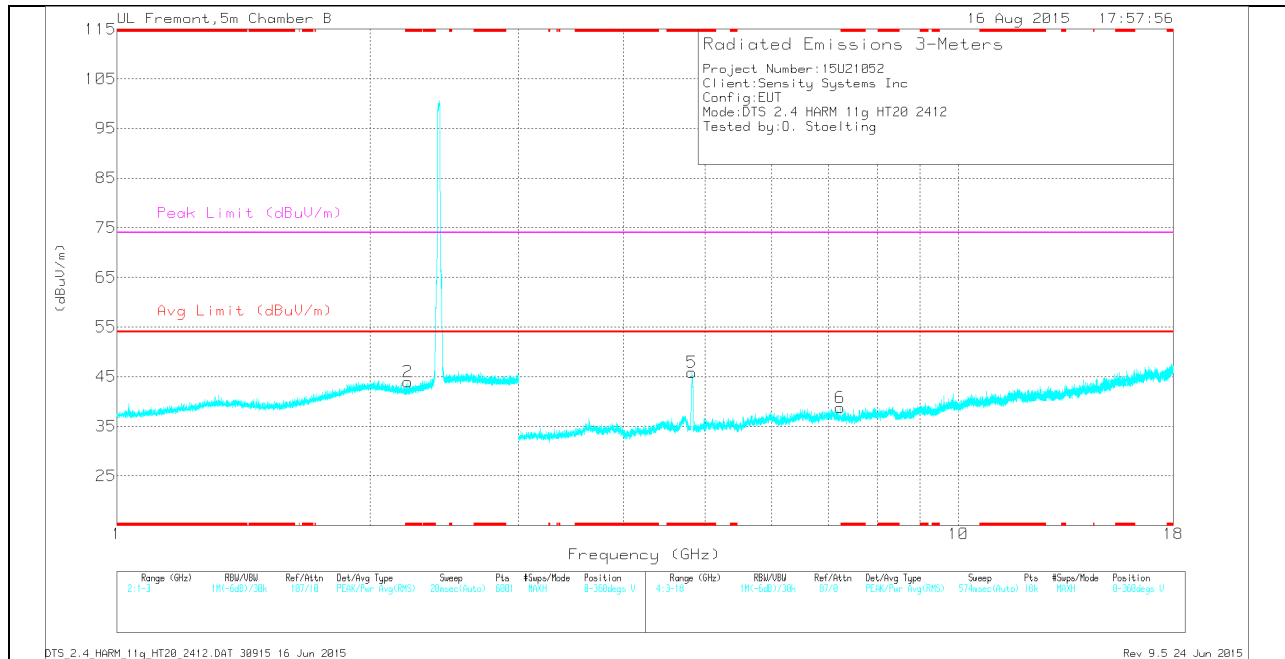
HARMONICS AND SPURIOUS EMISSIONS

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

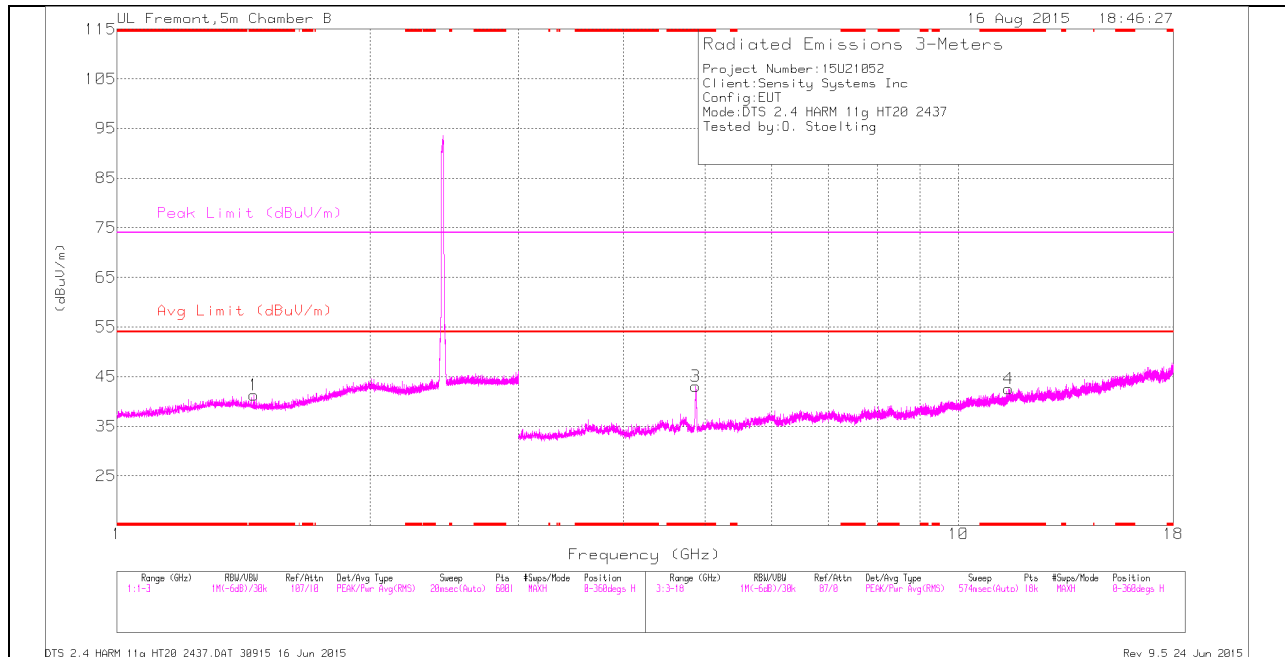
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.307	37.62	Pk	29.4	-25.4	0	41.62	-	-	74	-32.38	0-360	101	H
2	* 2.216	37.11	Pk	31.1	-24.3	0	43.91	-	-	74	-30.09	0-360	101	V
3	* 4.827	40.18	Pk	34.3	-31.7	0	42.78	-	-	74	-31.22	0-360	101	H
4	* 8.221	31.95	Pk	35.7	-28.6	0	39.05	-	-	74	-34.95	0-360	101	H
5	* 4.825	43.2	Pk	34.3	-31.6	0	45.9	-	-	74	-28.1	0-360	199	V
6	7.235	33.24	Pk	35.3	-29.8	0	38.74	-	-	-	-	0-360	199	V

PK - Peak detector

RADIATED EMISSIONS

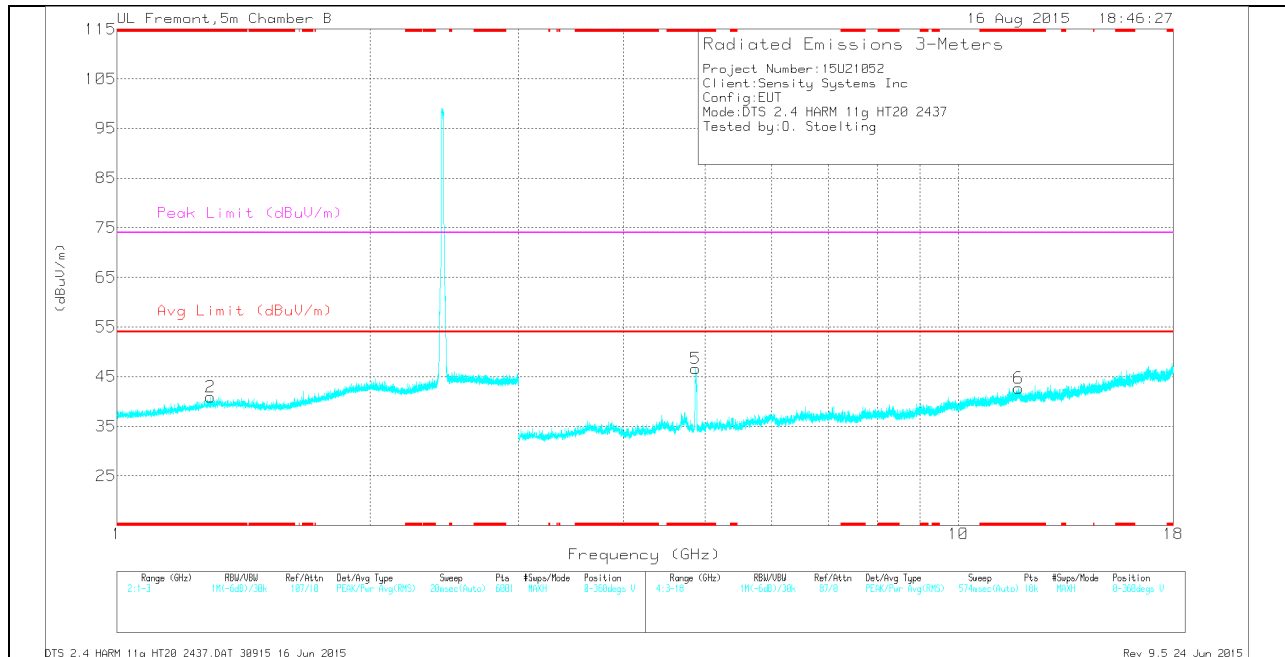
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.308	44.15	PK2	29.4	-25.4	0	48.15	-	-	74	-25.85	320	102	H
* 1.307	32.8	MAV1	29.4	-25.4	0	36.8	54	-17.2	-	-	320	102	H
* 2.215	44.38	PK2	31.1	-24.3	0	51.18	-	-	74	-22.82	320	102	V
* 2.216	32.26	MAV1	31.2	-24.3	0	39.16	54	-14.84	-	-	320	102	V
* 4.825	47.17	PK2	34.3	-31.6	0	49.87	-	-	74	-24.13	283	357	H
* 4.825	36.23	MAV1	34.3	-31.6	0	38.93	54	-15.07	-	-	283	357	H
* 8.221	39.31	PK2	35.7	-28.6	0	46.41	-	-	74	-27.59	283	102	H
* 8.22	28.08	MAV1	35.7	-28.6	0	35.18	54	-18.82	-	-	283	102	H
* 4.825	50.75	PK2	34.3	-31.6	0	53.45	-	-	74	-20.55	355	210	V
* 4.825	39.55	MAV1	34.3	-31.6	0	42.25	54	-11.75	-	-	355	210	V
7.233	39.73	PK2	35.3	-29.8	0	45.23	-	-	-	-	355	200	V
7.237	28.67	MAV1	35.3	-29.9	0	34.07	54	-19.93	-	-	355	200	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.

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

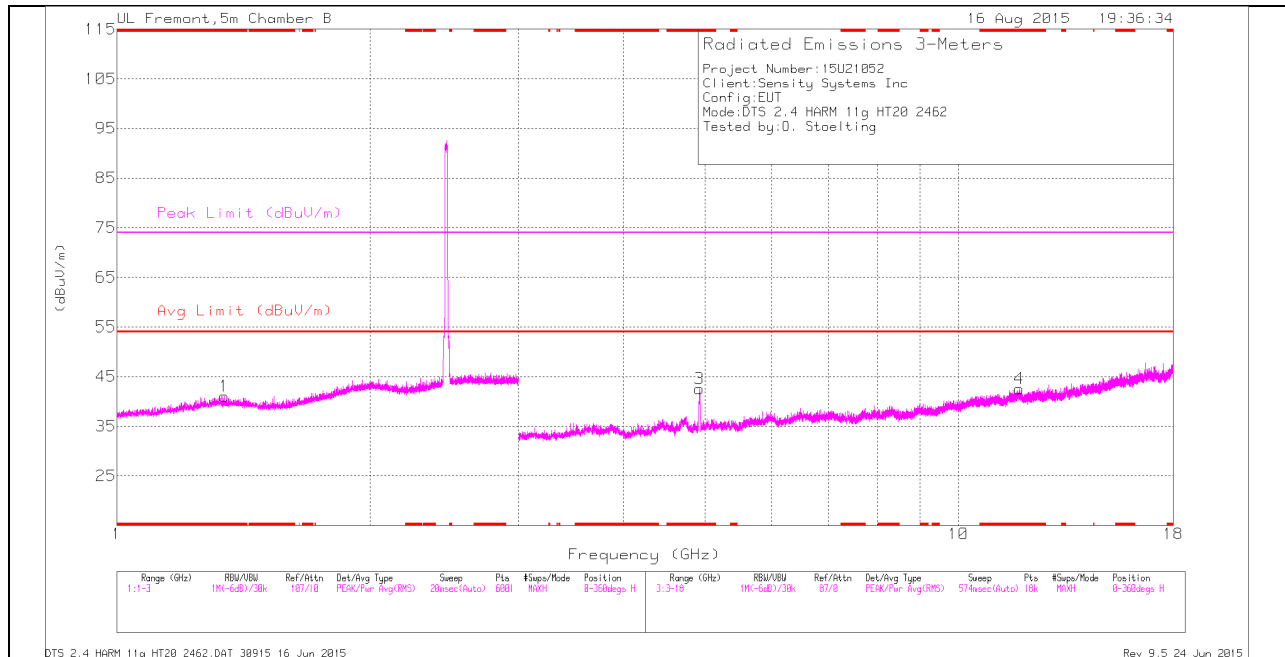
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.454	37.44	Pk	29	-25.2	0	41.24	-	-	74	-32.76	0-360	102	H
2	* 1.292	36.89	Pk	29.4	-25.4	0	40.89	-	-	74	-33.11	0-360	101	V
3	* 4.874	41.31	Pk	34.2	-32.4	0	43.11	-	-	74	-30.89	0-360	199	H
4	* 11.476	28.9	Pk	38.2	-24.6	0	42.5	-	-	74	-31.5	0-360	199	H
5	* 4.874	44.86	Pk	34.2	-32.4	0	46.66	-	-	74	-27.34	0-360	199	V
6	* 11.797	28.43	Pk	38.6	-24.3	0	42.73	-	-	74	-31.27	0-360	101	V

PK - Peak detector

RADIATED EMISSIONS

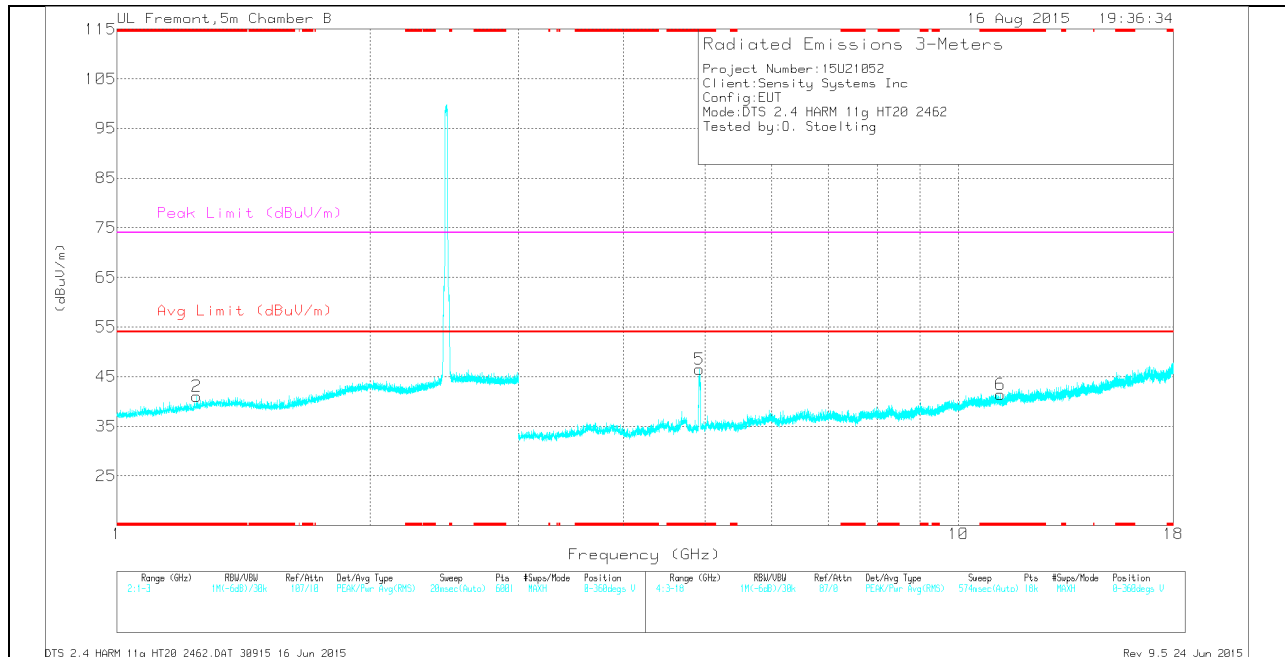
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Fitr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.452	44.25	PK2	29	-25.2	0	48.05	-	-	74	-25.95	355	103	H
* 1.455	32.5	MAV1	29	-25.2	0	36.3	54	-17.7	-	-	355	103	H
* 1.29	44.27	PK2	29.3	-25.4	0	48.17	-	-	74	-25.83	355	103	V
* 1.29	32.61	MAV1	29.3	-25.4	0	36.51	54	-17.49	-	-	355	103	V
* 4.875	48.27	PK2	34.2	-32.4	0	50.07	-	-	74	-23.93	343	147	H
* 4.875	37.16	MAV1	34.2	-32.4	0	38.96	54	-15.04	-	-	343	147	H
* 11.477	35.71	PK2	38.2	-24.6	0	49.31	-	-	74	-24.69	343	198	H
* 11.477	24.8	MAV1	38.2	-24.6	0	38.4	54	-15.6	-	-	343	198	H
* 4.875	49.61	PK2	34.2	-32.4	0	51.41	-	-	74	-22.59	195	187	V
* 4.874	39.13	MAV1	34.2	-32.4	0	40.93	54	-13.07	-	-	195	187	V
* 11.796	35.15	PK2	38.6	-24.3	0	49.45	-	-	74	-24.55	195	102	V
* 11.799	24.5	MAV1	38.6	-24.3	0	38.8	54	-15.2	-	-	195	102	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.

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	* 1.341	36.99	Pk	29.4	-25.4	0	40.99	-	-	74	-33.01	0-360	199	H
2	* 1.245	37.68	Pk	28.9	-25.5	0	41.08	-	-	74	-32.92	0-360	101	V
3	* 4.925	40.97	Pk	34.1	-32.5	0	42.57	-	-	74	-31.43	0-360	200	H
4	* 11.81	28.01	Pk	38.6	-24.1	0	42.51	-	-	74	-31.49	0-360	101	H
5	* 4.925	44.86	Pk	34.1	-32.5	0	46.46	-	-	74	-27.54	0-360	200	V
6	* 11.21	28.76	Pk	37.8	-25.1	0	41.46	-	-	74	-32.54	0-360	200	V

PK - Peak detector

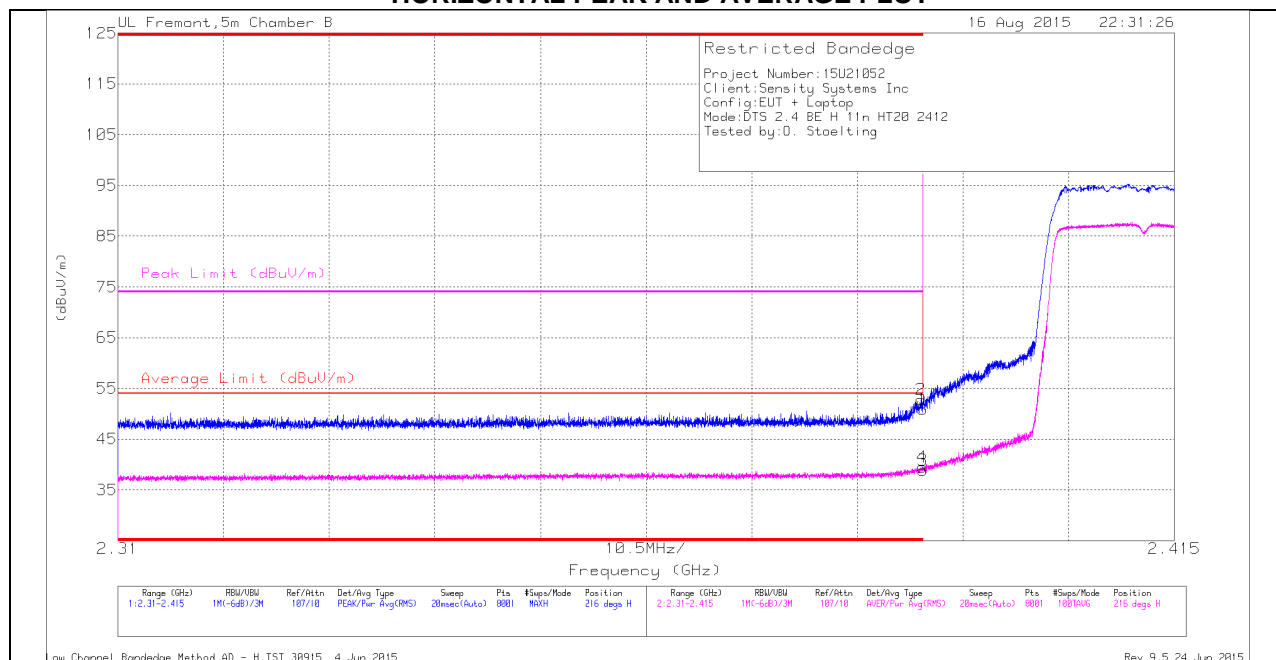
RADIATED EMISSIONS

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
* 1.339	44.09	PK2	29.4	-25.4	0	48.09	-	-	74	-25.91	195	199	H
* 1.341	32.59	MAV1	29.4	-25.4	0	36.59	54	-17.41	-	-	195	199	H
* 1.243	44.57	PK2	28.9	-25.5	0	47.97	-	-	74	-26.03	195	102	V
* 1.243	32.77	MAV1	28.9	-25.5	0	36.17	54	-17.83	-	-	195	102	V
* 4.925	49.92	PK2	34.1	-32.5	0	51.52	-	-	74	-22.48	340	206	H
* 4.925	38.91	MAV1	34.1	-32.5	0	40.51	54	-13.49	-	-	340	206	H
* 11.811	35.63	PK2	38.6	-24.1	0	50.13	-	-	74	-23.87	340	102	H
* 11.811	24.43	MAV1	38.6	-24.1	0	38.93	54	-15.07	-	-	340	102	H
* 4.925	52.65	PK2	34.1	-32.5	0	54.25	-	-	74	-19.75	200	211	V
* 4.925	41.77	MAV1	34.1	-32.5	0	43.37	54	-10.63	-	-	200	211	V
* 11.209	35.98	PK2	37.8	-25.1	0	48.68	-	-	74	-25.32	200	201	V
* 11.211	24.91	MAV1	37.8	-25.1	0	37.61	54	-16.39	-	-	200	201	V
* 11.799	24.5	MAV1	38.6	-24.3	0	38.8	54	-15.2	-	-	195	102	V

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

RESTRICTED BANDEDGE (LOW CHANNEL)

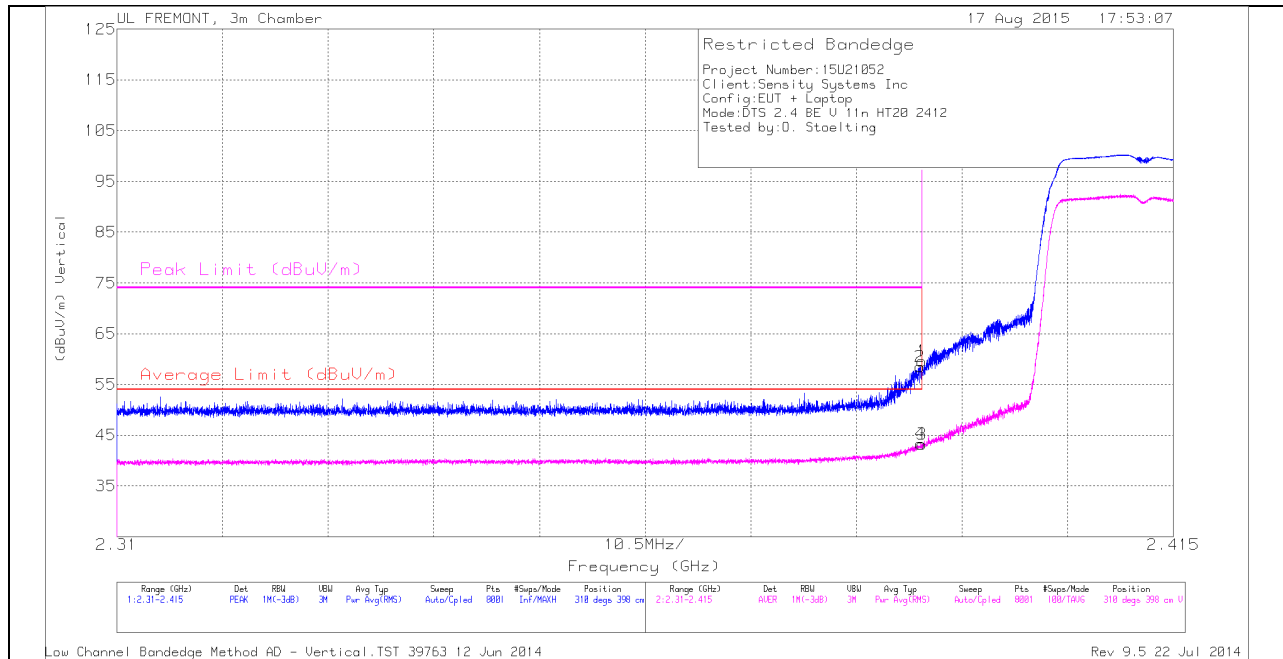
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/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	43.02	Pk	32	-24.1	0	50.92	-	-	74	-23.08	216	198	H
2	* 2.39	44.86	Pk	32	-24.1	0	52.76	-	-	74	-21.24	216	198	H
3	* 2.39	30.99	RMS	32	-24.1	0	38.89	-	-	-	-	216	198	H
4	* 2.39	31.56	RMS	32	-24.1	0	39.46	-	-	-	-	216	198	H

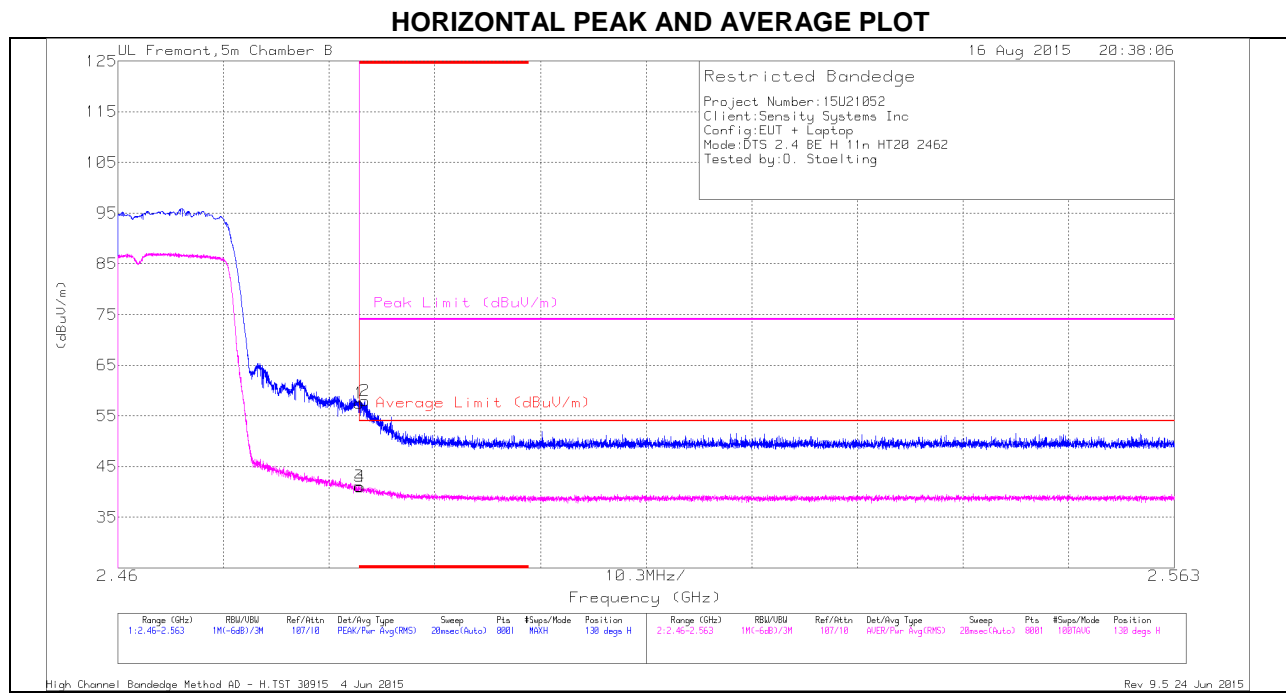
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (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	50.05	PK	32	-22.4	0	59.65	-	-	74	-14.35	310	398	V
2	2.39	48.83	PK	32	-22.4	0	58.43	-	-	74	-15.57	310	398	V
3	2.39	33.65	RMS	32	-22.4	0	43.25	54	-10.75	-	-	310	398	V
4	2.39	33.68	RMS	32	-22.4	0	43.28	54	-10.72	-	-	310	398	V

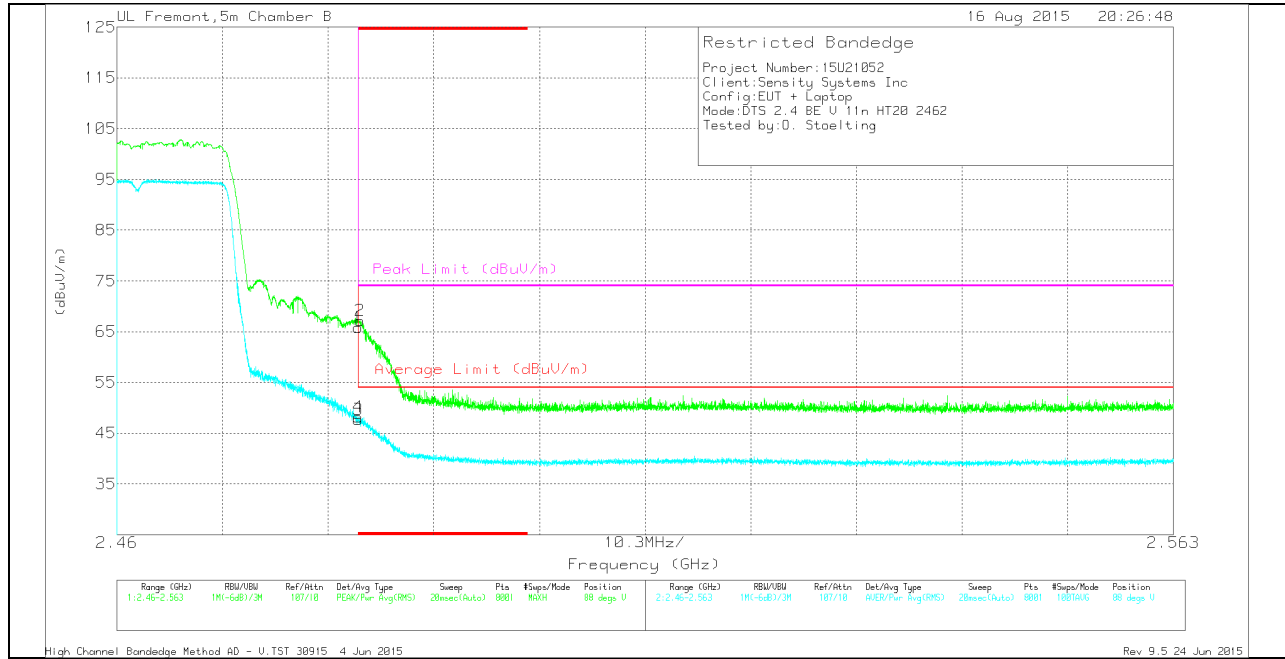
AUTHORIZED BANDEDGE (HIGH CHANNEL)



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	49.04	Pk	32.5	-24	0	57.54	-	-	74	-16.46	130	132	H
2	* 2.484	49.54	Pk	32.5	-24	0	58.04	-	-	74	-15.96	130	132	H
3	* 2.484	32.55	RMS	32.5	-24	0	41.05	-	-	-	-	130	132	H
4	* 2.484	32.46	RMS	32.5	-24	0	40.96	-	-	-	-	130	132	H

VERTICAL PEAK AND AVERAGE PLOT

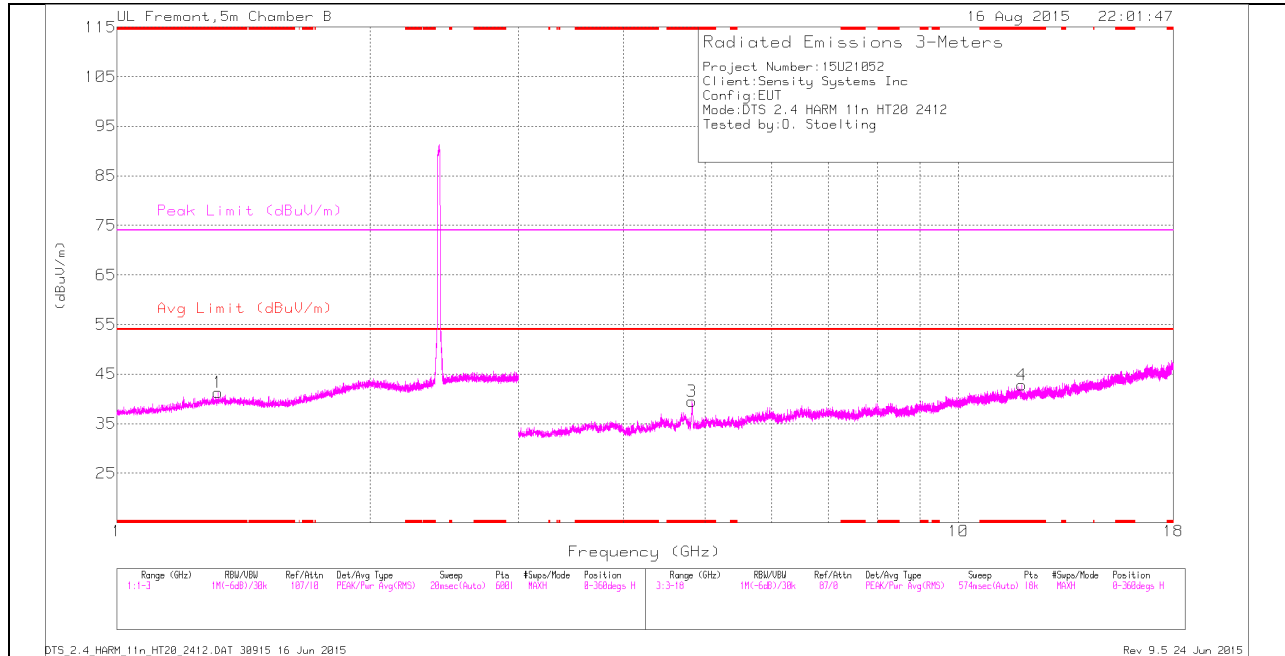


VERTICAL DATA

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	57.35	Pk	32.5	-24	0	65.85	-	-	74	-8.15	88	106	V
2	* 2.484	58.69	Pk	32.5	-24	0	67.19	-	-	74	-6.81	88	106	V
3	* 2.484	39.2	RMS	32.5	-24	0	47.7	-	-	-	-	88	106	V
4	* 2.484	39.7	RMS	32.5	-24	0	48.2	-	-	-	-	88	106	V

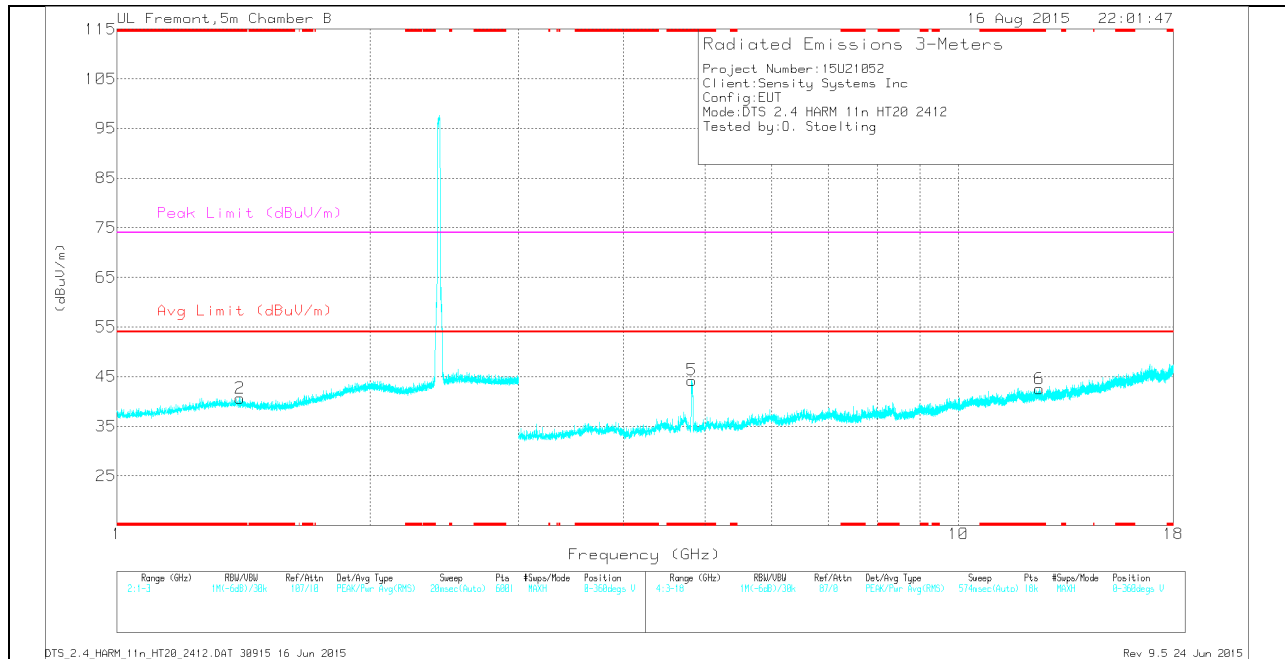
HARMONICS AND SPURIOUS EMISSIONS

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

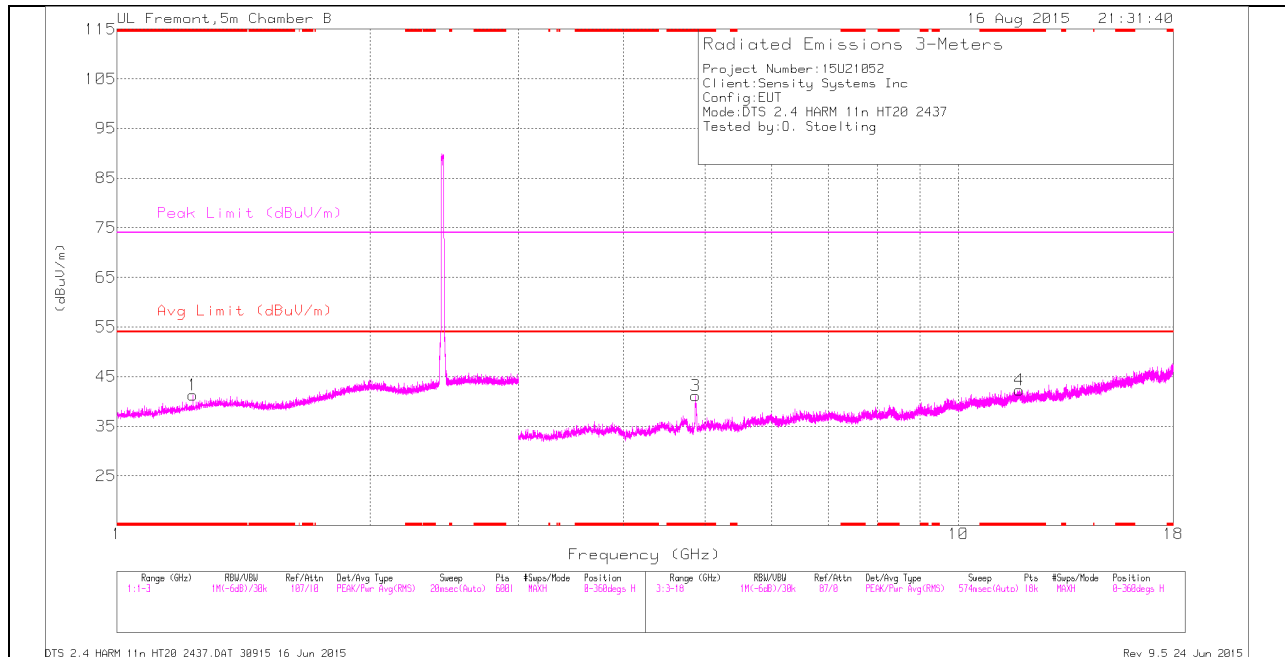
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.318	37.27	Pk	29.4	-25.4	0	41.27	-	-	74	-32.73	0-360	199	H
2	* 1.401	36.66	Pk	29.3	-25.3	0	40.66	-	-	74	-33.34	0-360	199	V
3	* 4.823	36.75	Pk	34.3	-31.6	0	39.45	-	-	74	-34.55	0-360	101	H
4	* 11.892	29.1	Pk	38.6	-24.9	0	42.8	-	-	74	-31.2	0-360	101	H
5	* 4.825	41.57	Pk	34.3	-31.6	0	44.27	-	-	74	-29.73	0-360	101	V
6	* 12.472	28.5	Pk	38.7	-24.6	0	42.6	-	-	74	-31.4	0-360	199	V

PK - Peak detector

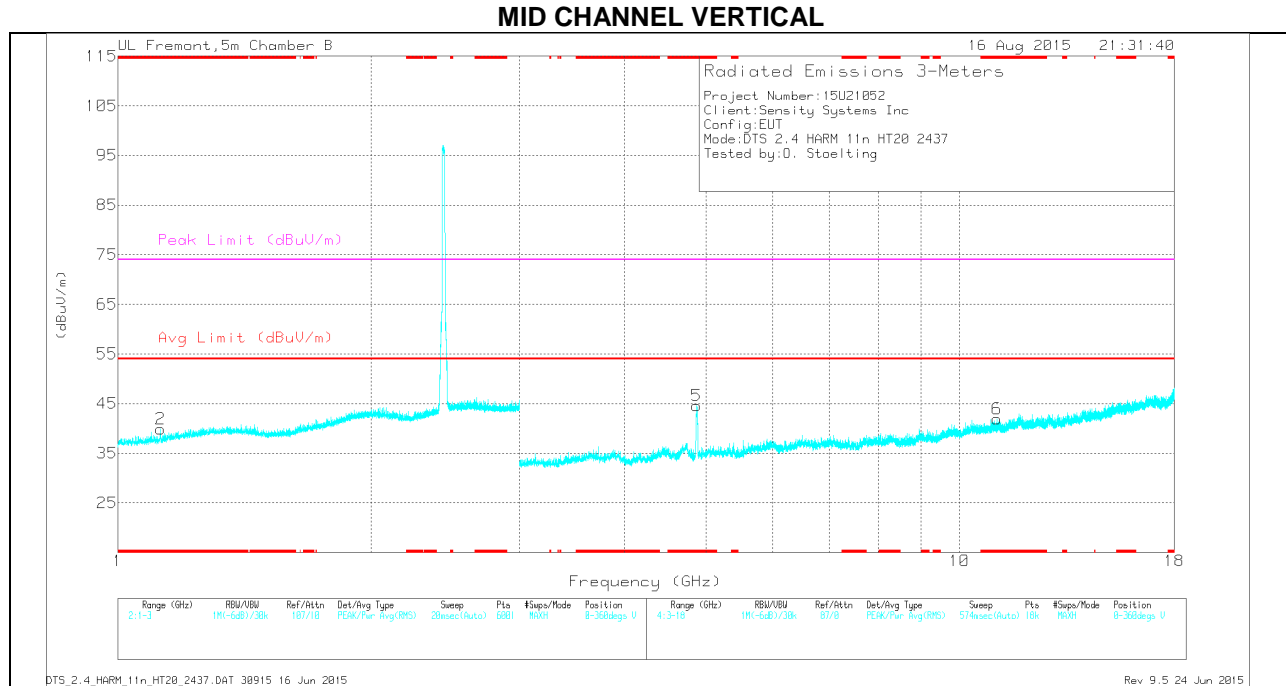
RADIATED EMISSIONS

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
* 1.316	44.57	PK2	29.4	-25.4	0	48.57	-	-	74	-25.43	200	201	H
* 1.319	32.71	MAV1	29.4	-25.4	0	36.71	54	-17.29	-	-	200	201	H
* 1.401	44.82	PK2	29.3	-25.3	0	48.82	-	-	74	-25.18	200	201	V
* 1.399	32.57	MAV1	29.4	-25.3	0	36.67	54	-17.33	-	-	200	201	V
* 4.823	46.35	PK2	34.3	-31.6	0	49.05	-	-	74	-24.95	340	101	H
* 4.825	33.94	MAV1	34.3	-31.6	0	36.64	54	-17.36	-	-	340	101	H
* 11.894	35.7	PK2	38.6	-24.9	0	49.4	-	-	74	-24.6	340	101	H
* 11.89	24.72	MAV1	38.6	-24.9	0	38.42	54	-15.58	-	-	340	101	H
* 4.824	50.11	PK2	34.3	-31.6	0	52.81	-	-	74	-21.19	352	217	V
* 4.824	37.43	MAV1	34.3	-31.6	0	40.13	54	-13.87	-	-	352	217	V
* 12.471	35.97	PK2	38.7	-24.6	0	50.07	-	-	74	-23.93	352	200	V
* 12.472	24.71	MAV1	38.7	-24.6	0	38.81	54	-15.19	-	-	352	200	V
* 11.799	24.5	MAV1	38.6	-24.3	0	38.8	54	-15.2	-	-	195	102	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

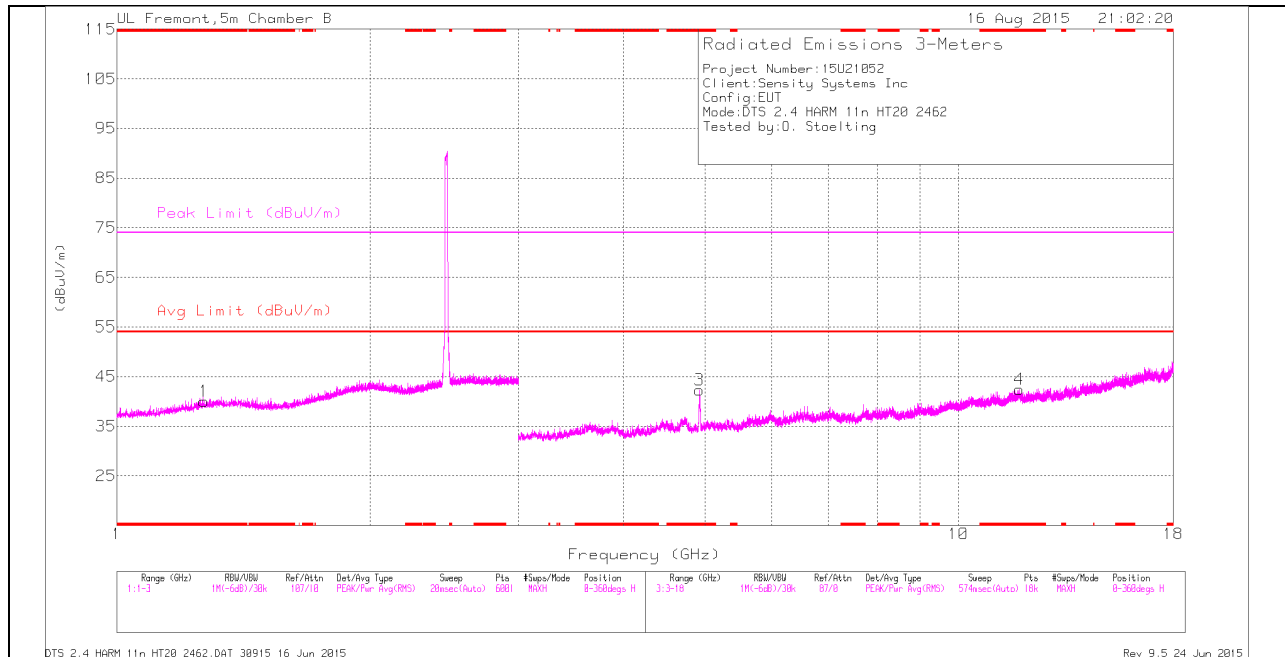
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.231	37.97	Pk	28.8	-25.5	0	41.27	-	-	74	-32.73	0-360	199	H
2	* 1.123	37.66	Pk	27.8	-25.6	0	39.86	-	-	74	-34.14	0-360	101	V
3	* 4.872	39.39	Pk	34.2	-32.4	0	41.19	-	-	74	-32.81	0-360	200	H
4	* 11.807	27.77	Pk	38.6	-24.1	0	42.27	-	-	74	-31.73	0-360	200	H
5	* 4.872	42.82	Pk	34.2	-32.4	0	44.62	-	-	74	-29.38	0-360	101	V
6	* 11.078	29.42	Pk	37.8	-25.3	0	41.92	-	-	74	-32.08	0-360	200	V

PK - Peak detector

RADIATED EMISSIONS

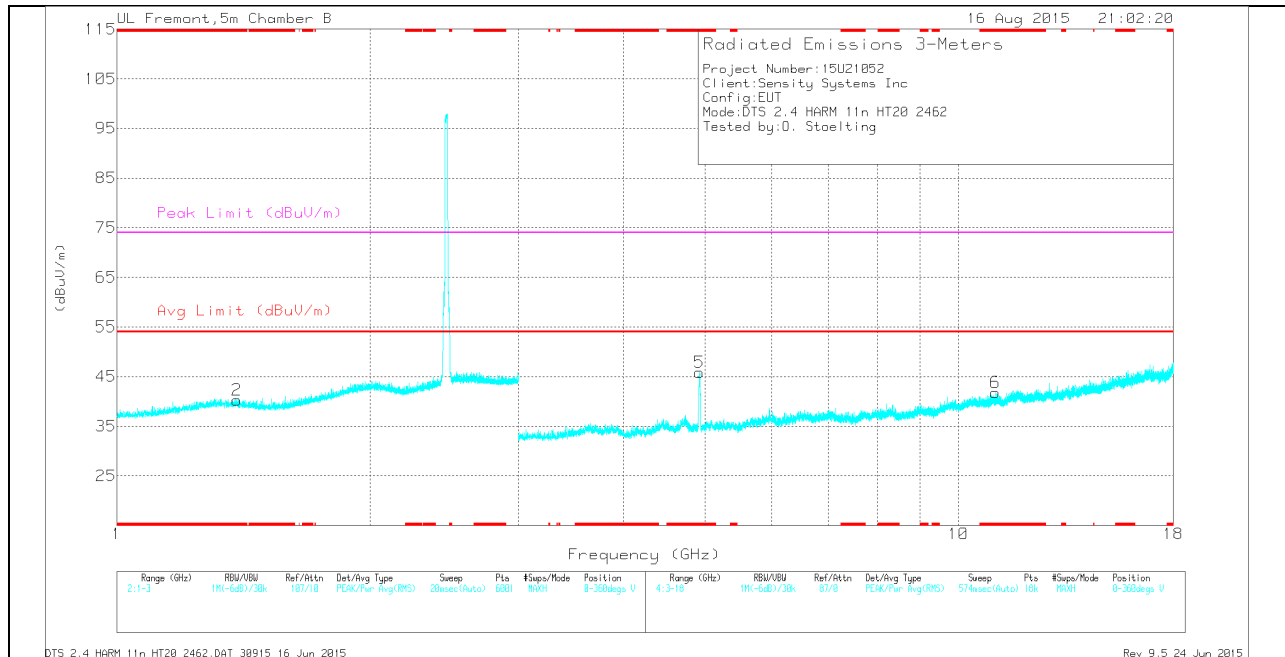
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.231	44.36	PK2	28.8	-25.5	0	47.66	-	-	74	-26.34	352	200	H
* 1.231	32.7	MAV1	28.8	-25.5	0	36	54	-18	-	-	352	200	H
* 1.122	44.68	PK2	27.8	-25.6	0	46.88	-	-	74	-27.12	352	102	V
* 1.124	32.8	MAV1	27.8	-25.6	0	35	54	-19	-	-	352	102	V
* 4.873	48.49	PK2	34.2	-32.4	0	50.29	-	-	74	-23.71	342	157	H
* 4.873	36.04	MAV1	34.2	-32.4	0	37.84	54	-16.16	-	-	342	157	H
* 11.807	35.56	PK2	38.6	-24.1	0	50.06	-	-	74	-23.94	342	200	H
* 11.806	24.6	MAV1	38.6	-24.1	0	39.1	54	-14.9	-	-	342	200	H
* 4.873	50.13	PK2	34.2	-32.4	0	51.93	-	-	74	-22.07	205	124	V
* 4.874	37.61	MAV1	34.2	-32.4	0	39.41	54	-14.59	-	-	205	124	V
* 11.078	36.41	PK2	37.8	-25.3	0	48.91	-	-	74	-25.09	205	200	V
* 11.079	25.42	MAV1	37.8	-25.3	0	37.92	54	-16.08	-	-	205	200	V
* 11.799	24.5	MAV1	38.6	-24.3	0	38.8	54	-15.2	-	-	195	102	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.

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/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	* 1.269	36.35	Pk	29.1	-25.4	0	40.05	-	-	74	-33.95	0-360	101	H
2	* 1.388	36.18	Pk	29.4	-25.3	0	40.28	-	-	74	-33.72	0-360	101	V
3	* 4.924	40.73	Pk	34.1	-32.5	0	42.33	-	-	74	-31.67	0-360	101	H
4	* 11.813	27.87	Pk	38.6	-24.1	0	42.37	-	-	74	-31.63	0-360	199	H
5	* 4.926	44.25	Pk	34.1	-32.5	0	45.85	-	-	74	-28.15	0-360	199	V
6	* 11.058	29.34	Pk	37.8	-25.3	0	41.84	-	-	74	-32.16	0-360	199	V

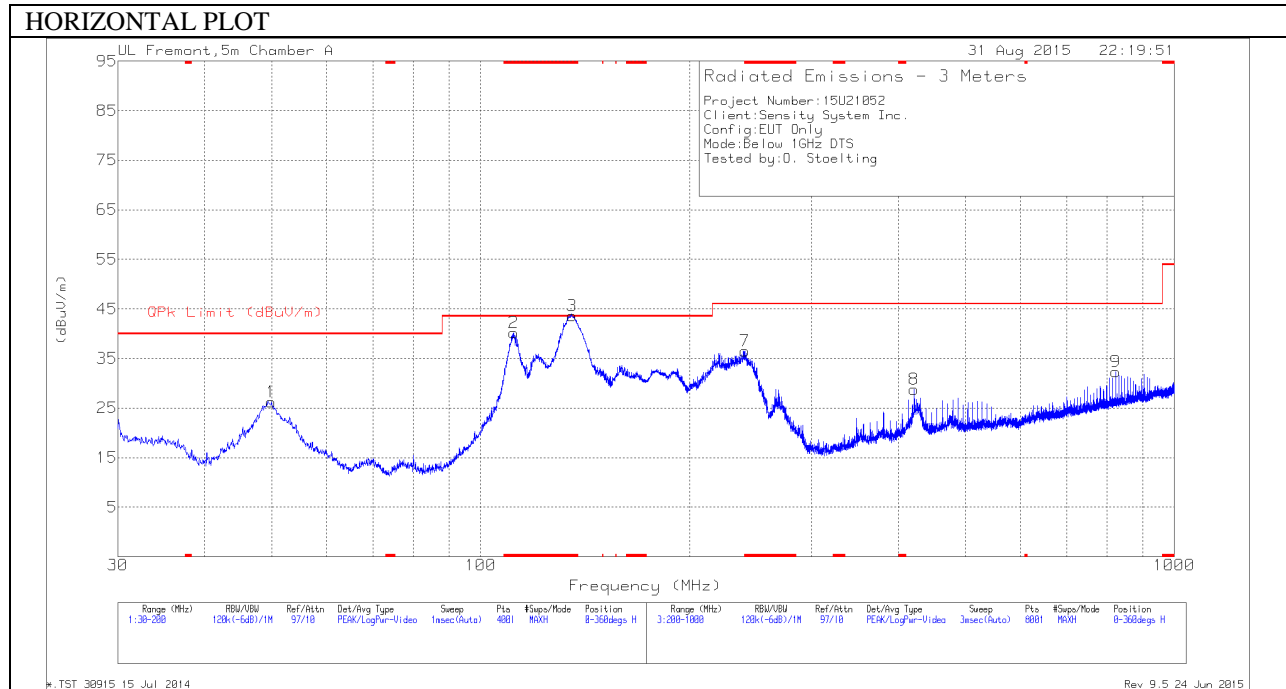
PK - Peak detector

RADIATED EMISSIONS

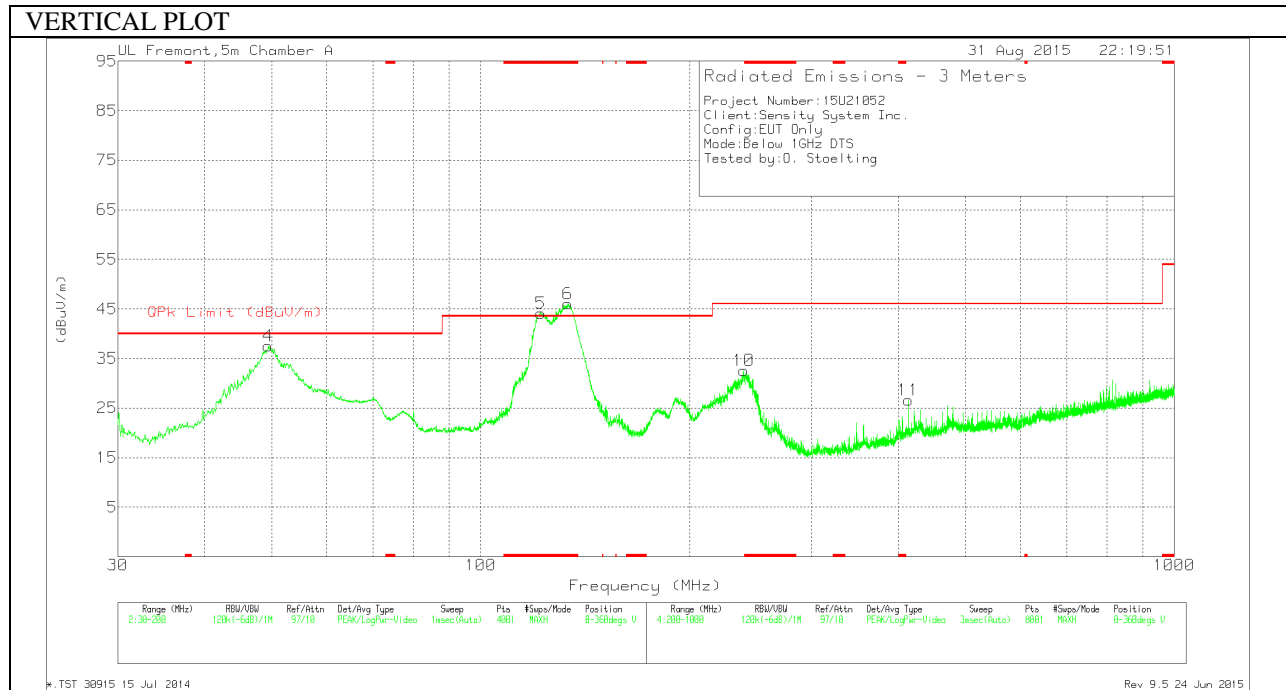
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.269	44.97	PK2	29.1	-25.4	0	48.67	-	-	74	-25.33	205	102	H
* 1.27	32.78	MAV1	29.2	-25.4	0	36.58	54	-17.42	-	-	205	102	H
* 1.388	44.43	PK2	29.4	-25.3	0	48.53	-	-	74	-25.47	205	102	V
* 1.388	32.57	MAV1	29.4	-25.3	0	36.67	54	-17.33	-	-	205	102	V
* 4.925	49.39	PK2	34.1	-32.5	0	50.99	-	-	74	-23.01	61	103	H
* 4.923	36.88	MAV1	34.1	-32.5	0	38.48	54	-15.52	-	-	61	103	H
* 11.815	35.92	PK2	38.6	-24.2	0	50.32	-	-	74	-23.68	61	199	H
* 11.812	24.61	MAV1	38.6	-24.1	0	39.11	54	-14.89	-	-	61	199	H
* 4.924	51.27	PK2	34.1	-32.5	0	52.87	-	-	74	-21.13	200	277	V
* 4.924	39.16	MAV1	34.1	-32.5	0	40.76	54	-13.24	-	-	200	277	V
* 11.057	36.9	PK2	37.7	-25.3	0	49.3	-	-	74	-24.7	200	200	V
* 11.059	25.44	MAV1	37.8	-25.3	0	37.94	54	-16.06	-	-	200	200	V
* 11.799	24.5	MAV1	38.6	-24.3	0	38.8	54	-15.2	-	-	195	102	V

10.3. WORST-CASE BELOW 1 GHz

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



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



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 111.515	53.91	Pk	16.8	-30.5	40.21	43.52	-3.31	0-360	299	H
3	* 135.6338	56.58	Pk	17.3	-30.3	43.58	43.52	.06	0-360	199	H
5	* 122.1825	56.81	Pk	17.7	-30.4	44.11	43.52	.59	0-360	101	V
6	* 133.6575	58.95	Pk	17.4	-30.3	46.05	43.52	2.53	0-360	101	V
7	* 240.7	50.76	Pk	15.5	-29.7	36.56	46.02	-9.46	0-360	101	H
4	49.4225	56.48	Pk	12	-31	37.48	40	-2.52	0-360	101	V
1	49.89	45.39	Pk	11.8	-31	26.19	40	-13.81	0-360	399	H
10	239.3	46.81	Pk	15.5	-29.7	32.61	46.02	-13.41	0-360	199	V
11	413.7	35.52	Pk	20.1	-29	26.62	46.02	-19.4	0-360	100	V
8	421.9	37.33	Pk	20.3	-28.9	28.73	46.02	-17.29	0-360	101	H
9	823.3	34.59	Pk	25.6	-27.9	32.29	46.02	-13.73	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 T477 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 111.4131	48.88	Qp	16.8	-30.4	35.28	43.52	-8.24	249	297	H
* 135.5245	54.59	Qp	17.3	-30.3	41.59	43.52	-1.93	221	225	H
* 122.0671	53.01	Qp	17.7	-30.4	40.31	43.52	-3.21	213	102	V
* 133.3507	54.85	Qp	17.5	-30.3	42.05	43.52	-1.47	229	102	V
* 240.717	44.05	Qp	15.5	-29.7	29.85	46.02	-16.17	229	102	H
49.6049	53.06	Qp	12	-31	34.06	40	-5.94	347	108	V
49.8862	38.85	Qp	11.8	-31	19.65	40	-20.35	0	398	H
239.2659	32.28	Qp	15.5	-29.7	18.08	46.02	-27.94	229	198	V
413.6975	31.65	Qp	20.1	-29	22.75	46.02	-23.27	229	101	V
421.8854	34.67	Qp	20.3	-28.9	26.07	46.02	-19.95	229	102	H
823.2928	28.28	Qp	25.6	-27.9	25.98	46.02	-20.04	229	102	H

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

Qp - Quasi-Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

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.

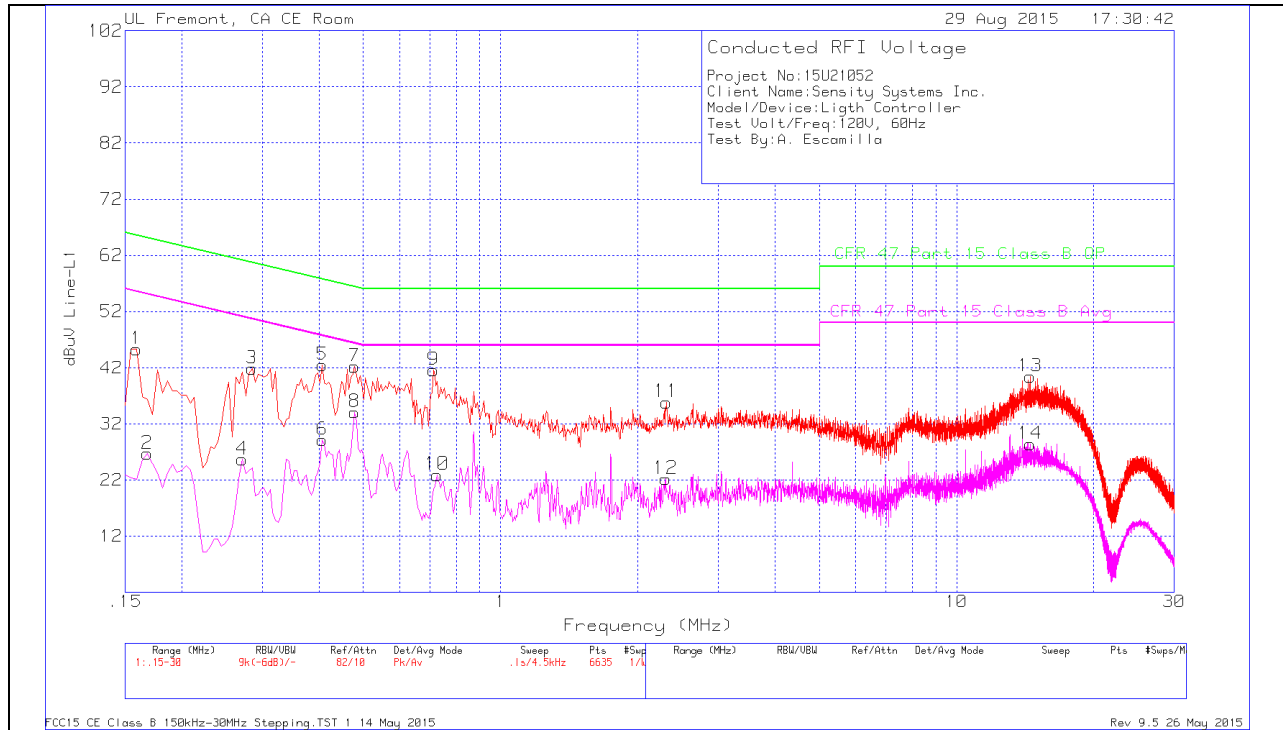
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 1 RESULTS

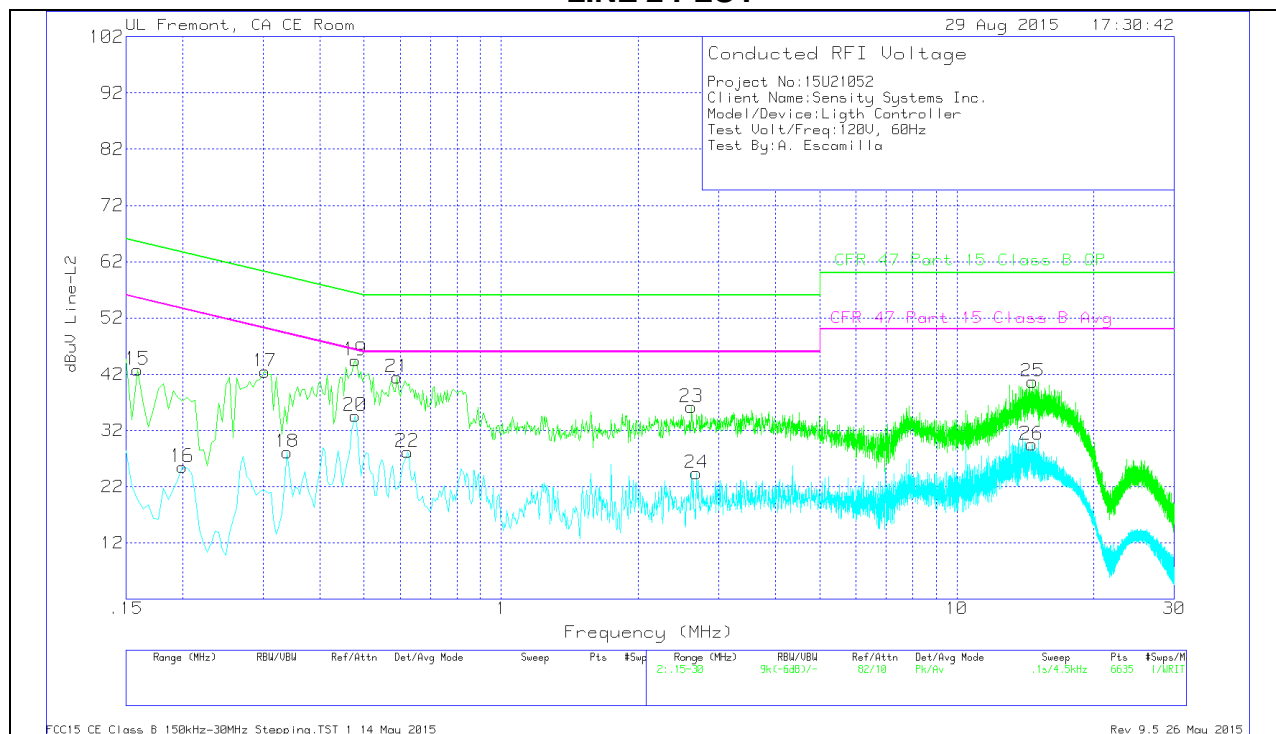
Range 1: Line-L1 .15 - 30MHz

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	.159	43.99	Pk	1.3	0	45.29	65.52	-20.23	-	-
2	.168	25.48	Av	1.2	0	26.68	-	-	55.06	-28.38
3	.285	41.23	Pk	.6	0	41.83	60.67	-18.84	-	-
4	.2715	25.06	Av	.6	0	25.66	-	-	51.07	-25.41
5	.4065	42.07	Pk	.4	0	42.47	57.72	-15.25	-	-
6	.4065	28.74	Av	.4	0	29.14	-	-	47.72	-18.58
7	.4785	41.81	Pk	.4	0	42.21	56.37	-14.16	-	-
8	.4785	33.67	Av	.4	0	34.07	-	-	46.37	-12.3
9	.7125	41.26	Pk	.3	0	41.56	56	-14.44	-	-
10	.726	22.62	Av	.3	0	22.92	-	-	46	-23.08
11	2.31	35.56	Pk	.2	.1	35.86	56	-20.14	-	-
12	2.301	21.89	Av	.2	.1	22.19	-	-	46	-23.81
13	14.505	40.05	Pk	.2	.2	40.45	60	-19.55	-	-
14	14.505	27.99	Av	.2	.2	28.39	-	-	50	-21.61

Pk - Peak detector

Av - Average detection

LINE 2 PLOT



LINE 2 RESULTS

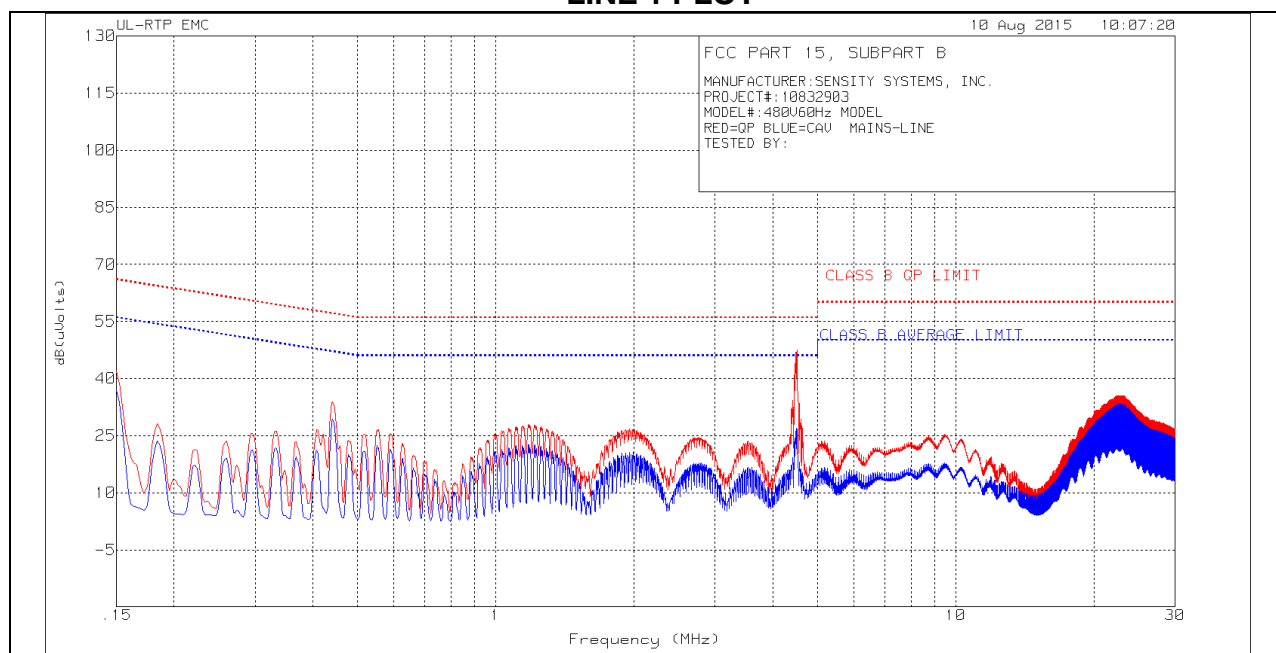
Range 2: Line-L2 .15 - 30MHz

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)
15	.159	41.4	Pk	1.4	0	42.8	65.52	-22.72	-	-
16	.1995	24.5	Av	1	0	25.5	-	-	53.63	-28.13
17	.303	41.89	Pk	.6	0	42.49	60.16	-17.67	-	-
18	.339	27.65	Av	.5	0	28.15	-	-	49.23	-21.08
19	.4785	44.05	Pk	.4	0	44.45	56.37	-11.92	-	-
20	.4785	34.19	Av	.4	0	34.59	-	-	46.37	-11.78
21	.591	41.18	Pk	.3	0	41.48	56	-14.52	-	-
22	.6225	27.88	Av	.3	0	28.18	-	-	46	-17.82
23	2.616	35.86	Pk	.2	.1	36.16	56	-19.84	-	-
24	2.6835	24.1	Av	.2	.1	24.4	-	-	46	-21.6
25	14.6715	40.28	Pk	.2	.2	40.68	60	-19.32	-	-
26	14.595	29.11	Av	.2	.2	29.51	-	-	50	-20.49

Pk - Peak detector

Av - Average detection

LINE 1 PLOT



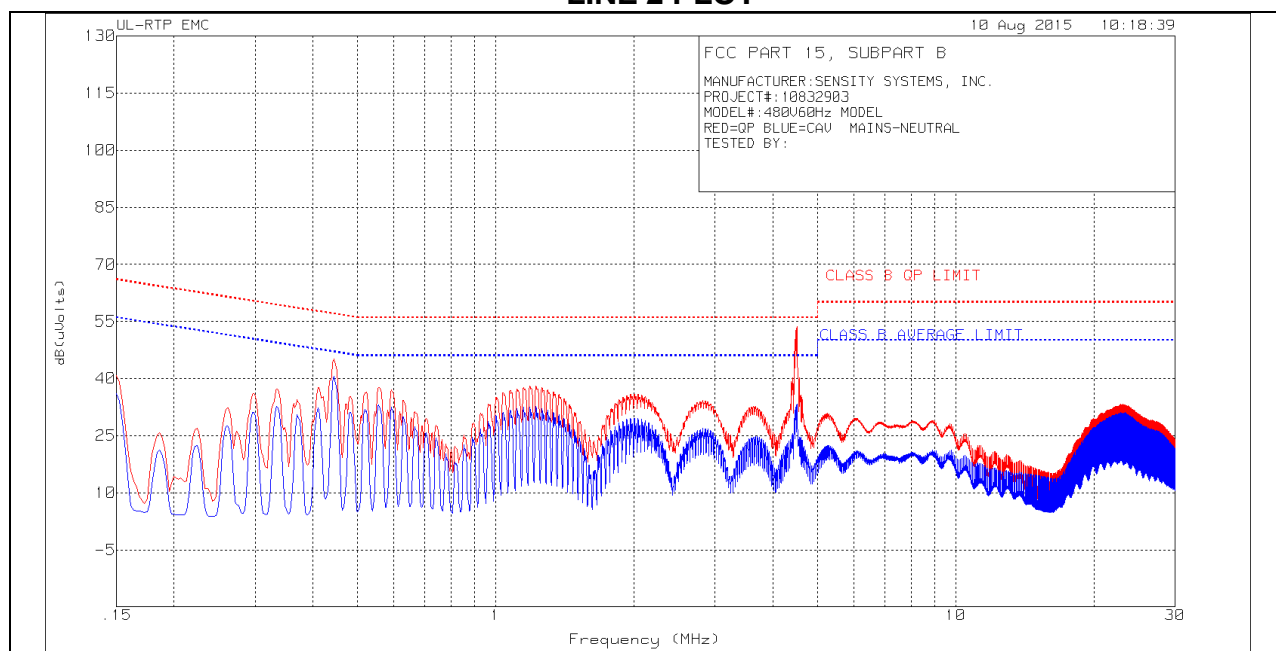
LINE 1 RESULTS

Range 1: Range: 2 .15 - 30MHz									
Frequency (MHz)	Meter Reading (dBuV)	Det	LISN002-003_Due 2015-09-30	ATA508 & 509 DUE 2016-07-31	Corrected Reading dB(uVolts)	CLASS B QP LIMIT	Margin (dB)	CLASS B AVERAGE LIMIT	Margin (dB)
.15225	29.13	Qp	.4	9.3	38.83	65.88	-27.05	-	-
.15225	24.06	Ca	.4	9.3	33.76	-	-	55.88	-22.12
.18375	18.45	Qp	.3	9.3	28.05	64.31	-36.26	-	-
.18375	13.91	Ca	.3	9.3	23.51	-	-	54.31	-30.8
.4425	24.42	Qp	.1	9.4	33.92	57.01	-23.09	-	-
.4425	19.75	Ca	.1	9.4	29.25	-	-	47.01	-17.76
1.17825	18.47	Qp	0	9.4	27.87	56	-28.13	-	-
1.17825	13.26	Ca	0	9.4	22.66	-	-	46	-23.34
4.515	38.03	Qp	.1	9.3	47.43	56	-8.57	-	-
4.51275	17.71	Ca	.1	9.2	27.01	-	-	46	-18.99
22.84688	25.86	Qp	.3	9.4	35.56	60	-24.44	-	-
22.84575	23.68	Ca	.3	9.4	33.38	-	-	50	-16.62

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 PLOT



LINE 2 RESULTS

Range 1: Range: 2 .15 - 30MHz									
Frequency (MHz)	Meter Reading (dBuV)	Det	LISN002-003_Due 2015-09-30	ATA508 & 509 DUE 2016-07-31	Corrected Reading dB(uVolts)	CLASS B QP LIMIT	Margin (dB)	CLASS B AVERAGE LIMIT	Margin (dB)
.15225	29.31	Qp	.4	9.3	39.01	65.88	-26.87	-	-
.15225	24.31	Ca	.4	9.3	34.01	-	-	55.88	-21.87
.44475	35.68	Qp	.1	9.4	45.18	56.97	-11.79	-	-
.44475	31.05	Ca	.1	9.4	40.55	-	-	46.97	-6.42
.55725	28.3	Qp	.1	9.3	37.7	56	-18.3	-	-
.55725	23.67	Ca	.1	9.3	33.07	-	-	46	-12.93
1.2615	28.16	Qp	0	9.4	37.56	56	-18.44	-	-
1.25925	22.65	Ca	0	9.4	32.05	-	-	46	-13.95
4.515	44.22	Qp	.1	9.3	53.62	56	-2.38	-	-
4.51725	23.95	Ca	.1	9.3	33.35	-	-	46	-12.65
23.3115	23.32	Qp	.3	9.4	33.02	60	-26.98	-	-
23.3115	21.33	Ca	.3	9.4	31.03	-	-	50	-18.97

Qp - Quasi-Peak detector

Ca - CISPR average detection