



FCC 47 CFR PART 15 SUBPART E

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE PHABLET + BLUETOOTH, DTS/UNII a/b/g/n & NFC

MODEL NUMBER: LG-H740, LGH740, H740

FCC ID: ZNFH740

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--	08/4/15	Initial Issue	
A	08/11/15	Updated Section 14.14	D. Corona
B	08/17/15	Corrected Section from 14.14 to 14.1.4	D. Corona

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC
EUT DESCRIPTION: GSM/WCDMA/LTE PHABLET + BLUETOOTH, DTS/UNII a/b/g/n & NFC
MODEL: LG-H740, LGH740, H740
SERIAL NUMBER: 1ZW89 (RADIATED), 1ZW8C (CONDUCTED)
DATE TESTED: JULY 11-28, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	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 E, and ANSI C63.10-2009.

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:

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

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 a GSM/WCDMA/LTE PHABLET + BLUETOOTH, DTS/UNII a/b/g/n and NFC

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)
5180 - 5240	802.11a	13.96	24.89
5180 - 5240	802.11n HT20	12.91	19.54
5190 - 5230	802.11n HT40	12.19	16.56
5260 - 5320	802.11a	14.24	26.55
5260 - 5320	802.11n HT20	13.17	20.75
5270 - 5310	802.11n HT40	12.09	16.18
5500 - 5700	802.11a	13.78	23.88
5500 - 5700	802.11n HT20	13.03	20.09
5510 - 5670	802.11n HT40	11.91	15.52
5745 - 5825	802.11a	13.85	24.27
5745 - 5825	802.11n HT20	13.05	20.18
5755 - 5795	802.11n HT40	11.78	15.07

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIFA antenna, with a maximum gain of -3.1 dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1GHz 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 the X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in the X orientation.

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

802.11a mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-01WRE	RA560000025	N/A
Earphone	LG	-	-	-

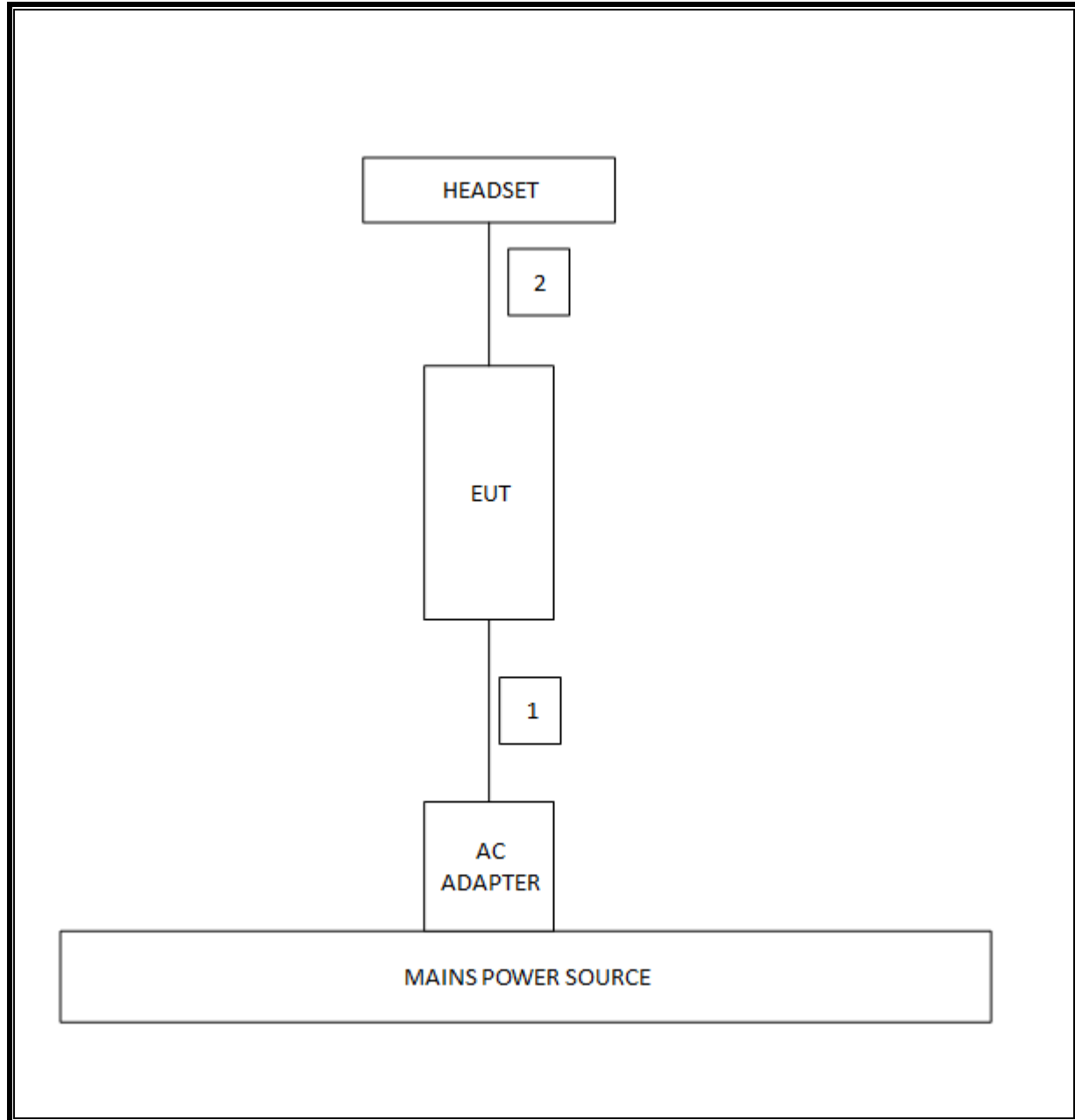
I/O CABLES

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	1.0m	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	T119	01/05/16
Antenna, Horn, 1-18 GHz	ETS	3117	T136	03/03/16
Antenna, Horn, 1-18 GHz	ETS	3117	T345	03/03/16
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	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, June 24, 2015	
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. SUMMARY TABLE

FCC Part Section	RSS Section	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.407 (a)	RSS-247	Occupied Band width (26dB)	N/A	Conducted	Pass	43.84 MHz
15.407	RSS-247 6.2.4	6dB Band width (5.8Ghz)	500KHz		Pass	35.086 MHz
15.407 (a)(1)	RSS-247 6.2	TX Cond. Powe, 5.15-5.25	<24dBm (FCC)/ <23dBm or 10+10Log(OBW) (IC)		Pass	13.96 dBm
15.407 (a)(2)	RSS-247 6.2	TX Cond. Powe, 5.25-5.35 & 5.47-5.725	<24dBm or 11+10Log(OBW)		Pass	14.24 dBm
15.407 (a)(3)	RSS-247 6.2.4	TX Cond. Power 5.725-5.825	< 30dBm		Pass	13.85 dBm
15.407 (a)(1)	RSS-247 6.2	PSD (5.2GHz)	<11dBm (FCC)/ <10dBm(IC)		Pass	2.37 dBm
15.407 (a)(5)	RSS-247 6.2	PSD (5.3,5.5GHz)	<11dBm		Pass	2.72 dBm
15.407 (a)(5)	RSS-247 6.2.4	PSD (5.8GHz)	30dBm per 500kHz		Pass	2.33 dB
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	44.62 dBμV
15.407 (b) & 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass	46.13 dBμV/m (AV)
15.407 (h)(2)	RSS-247 6.3	Dynamic Frequency Selection	N/A	Radiated / Conducted	Pass	N/A

8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

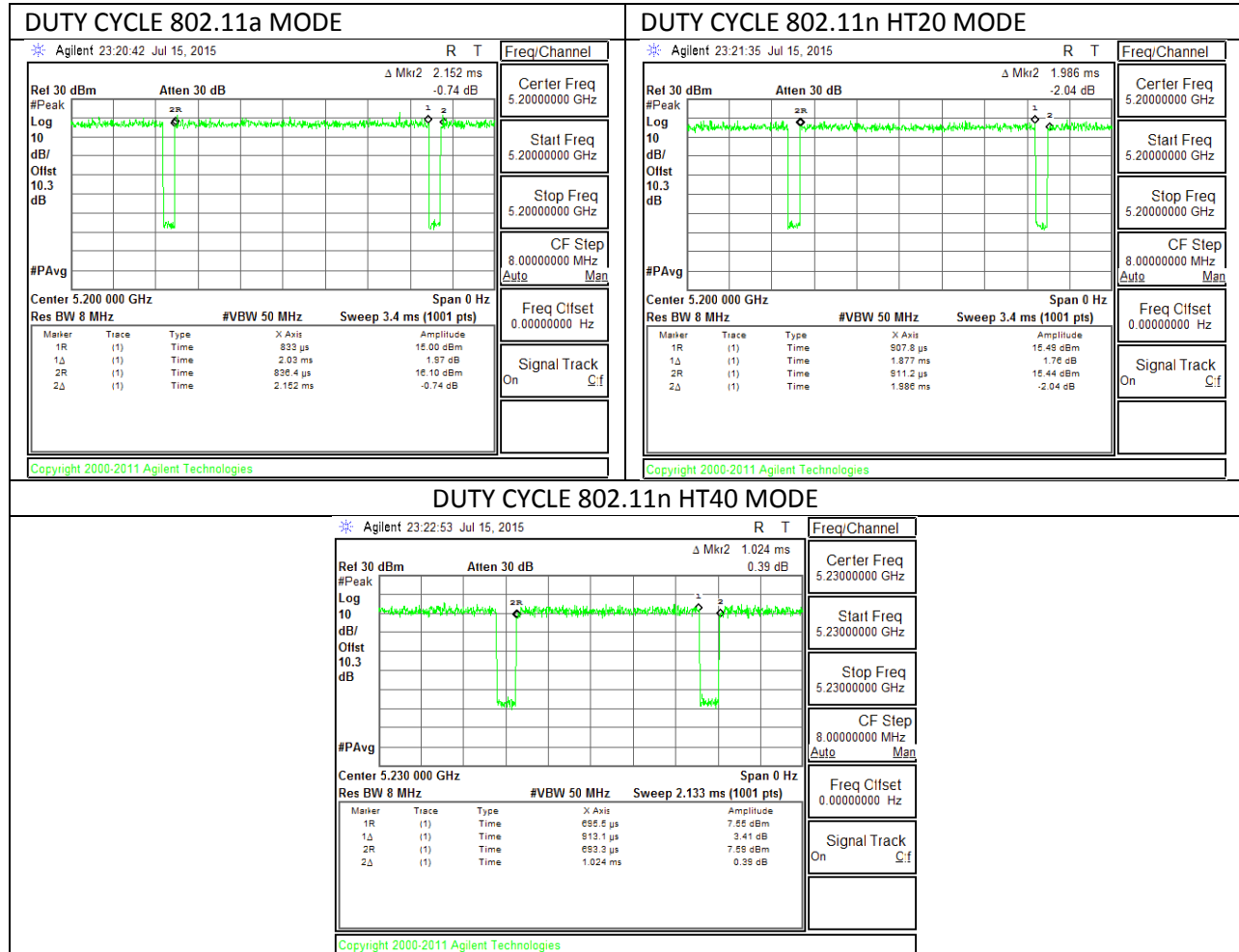
KDB 789033 Zero-Span Spectrum Analyzer Method.

RESULTS

8.1. ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.030	2.152	0.943	94.3%	0.25	0.493
802.11n HT20	1.877	1.986	0.945	94.5%	0.25	0.533
802.11n HT40	0.913	1.024	0.892	89.2%	0.50	1.095

8.2. DUTY CYCLE PLOTS



9. MEASUREMENT METHOD

789033 D02 General UNII Test Procedures New Rules v01

The Duty Cycle is $\geq 98\%$ and consistent; therefore KDB 789033 Method SA-1 is used for power and PPSD.

The Duty Cycle is less than 98% and consistent, KDB 789033 Method SA-2 with Power RMS Averaging and duty cycle correction is used.

10. ANTENNA PORT TEST RESULTS

10.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

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

TEST PROCEDURE

Reference to 789033 D02 General UNII Test Procedures New Rules v01: 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

10.1.1. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.400	0.5
Mid	5785	16.400	0.5
High	5825	16.375	0.5
Worst		16.375	

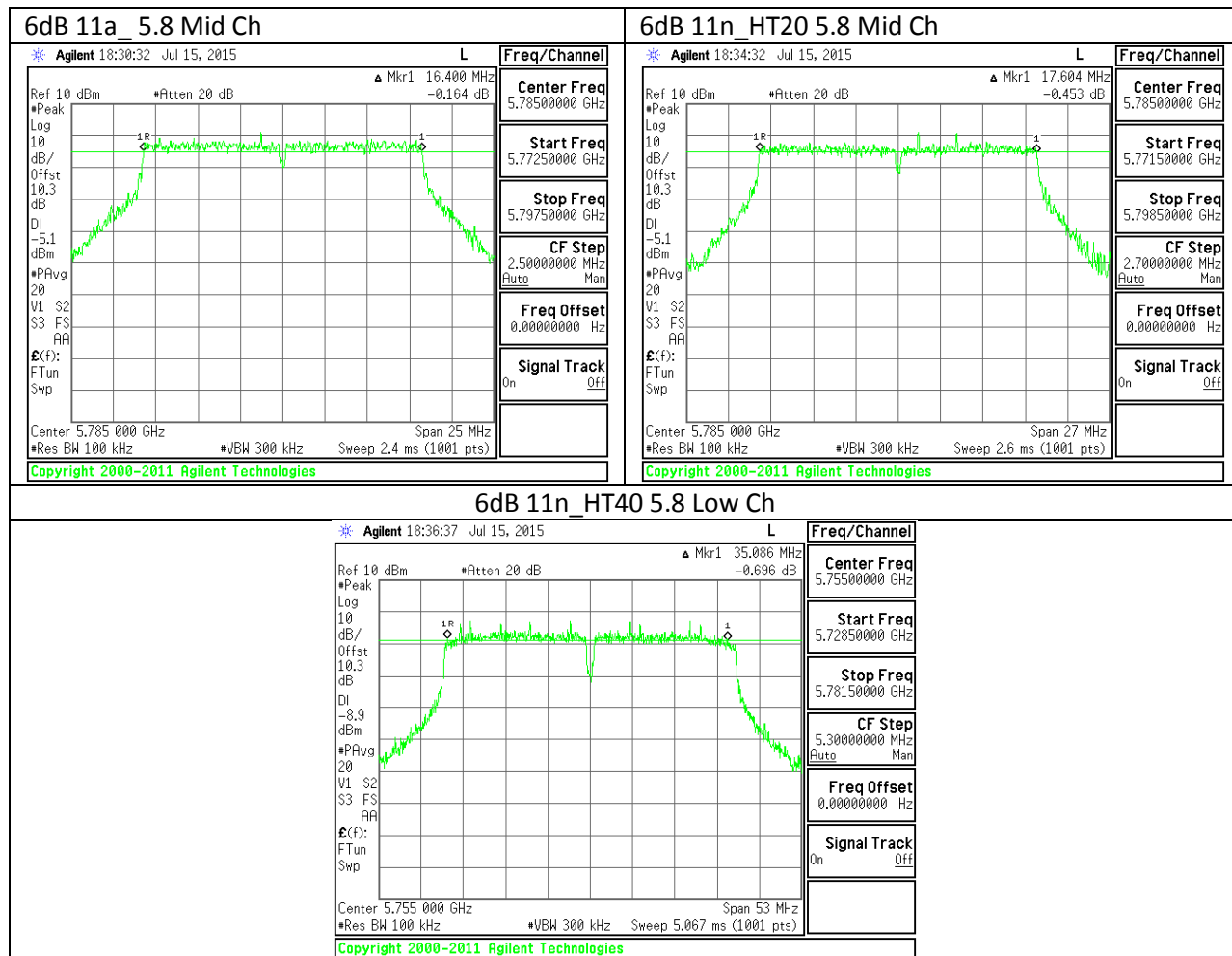
10.1.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.604	0.5
Mid	5785	17.604	0.5
High	5825	17.604	0.5
Worst		17.604	

10.1.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.086	0.5
High	5795	33.860	0.5
Worst		33.860	

10.1.4. 6 dB BANDWIDTH MID CH PLOTS



10.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.2.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	21.912
Mid	5200	21.813
High	5240	21.714

10.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	22.785
Mid	5200	22.134
High	5240	22.610

10.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5190	43.030
Mid	5230	43.840

10.2.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	21.648
Mid	5300	21.879
High	5320	22.134

10.2.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	22.372
Mid	5300	21.897
High	5320	22.134

10.2.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	42.770
High	5310	43.692

10.2.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	21.897
Mid	5580	22.100
High	5700	21.978

10.2.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	22.236
Mid	5580	22.440
High	5700	22.209

10.2.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	43.225
Mid	5550	43.160
High	5670	43.890

10.2.10. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.168
Mid	5785	21.590
High	5825	21.648

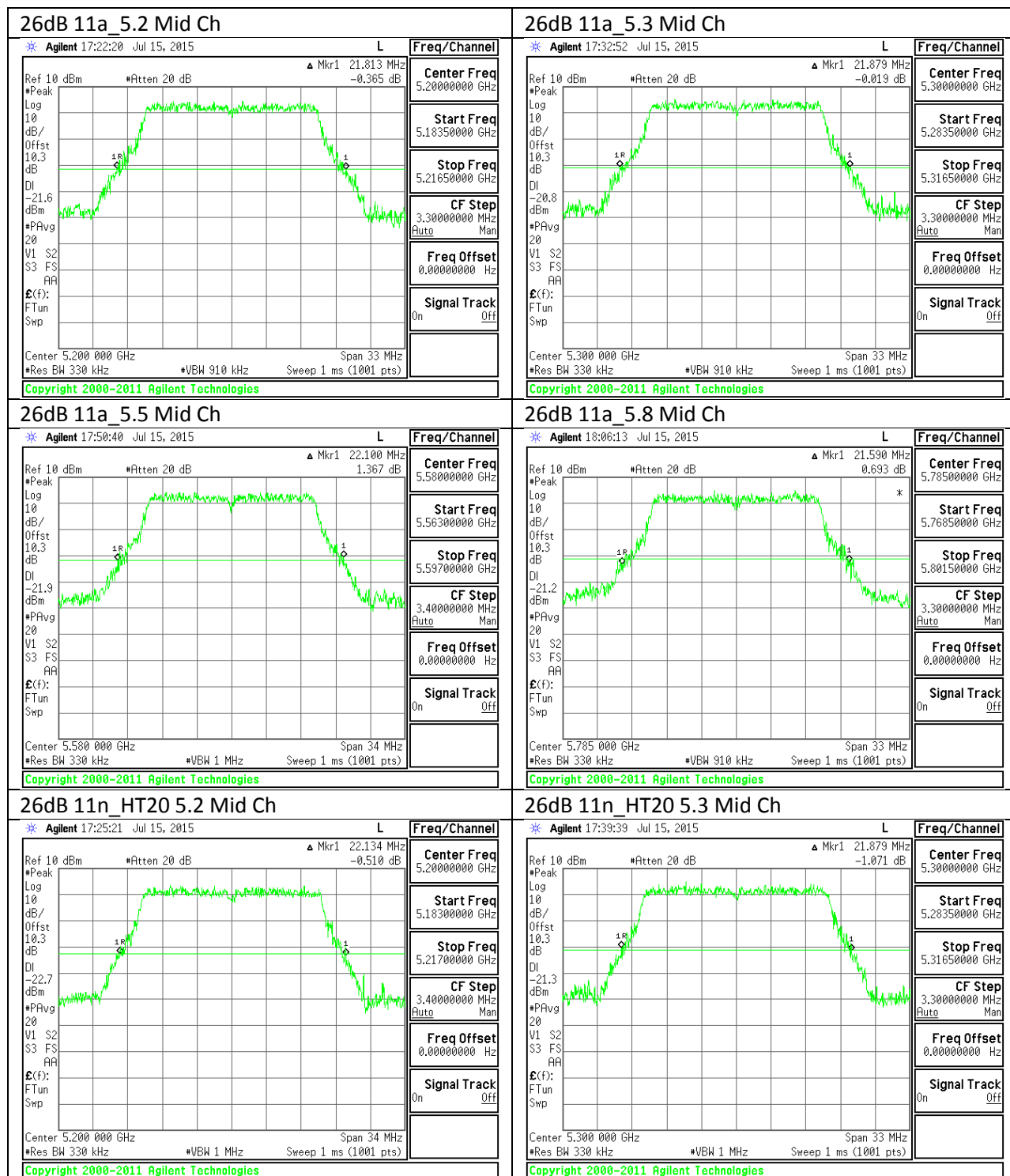
10.2.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

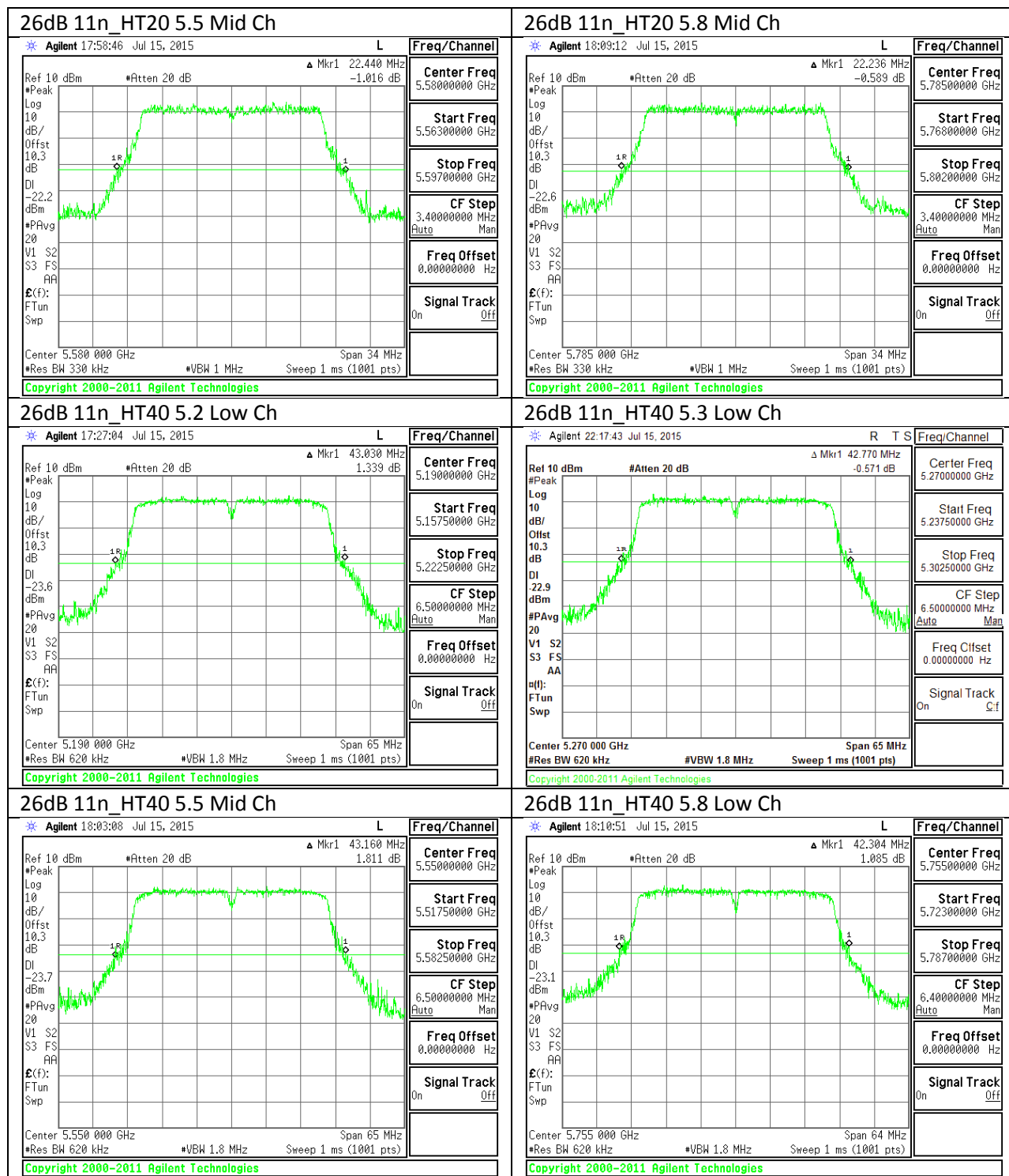
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.474
Mid	5785	22.236
High	5825	21.747

10.2.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	42.304
High	5795	43.032

10.2.1. 26 dB BANDWIDTH PLOTS





10.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.3.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.3982
Mid	5200	16.4430
High	5240	16.4843

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.6189
Mid	5200	17.5797
High	5240	17.5593

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	35.4865
Mid	5230	35.1552

10.3.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.4449
Mid	5300	16.3010
High	5320	16.3856

10.3.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	17.5367
Mid	5300	17.6078
High	5320	17.4855

10.3.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	35.3877
High	5310	35.4030

10.3.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.4014
Mid	5580	16.4079
High	5700	16.4630

10.3.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.5570
Mid	5580	17.5431
High	5700	17.6915

10.3.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	35.0899
Mid	5550	35.3465
High	5670	35.4124

10.3.10. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.3620
Mid	5785	16.4525
High	5825	16.3786

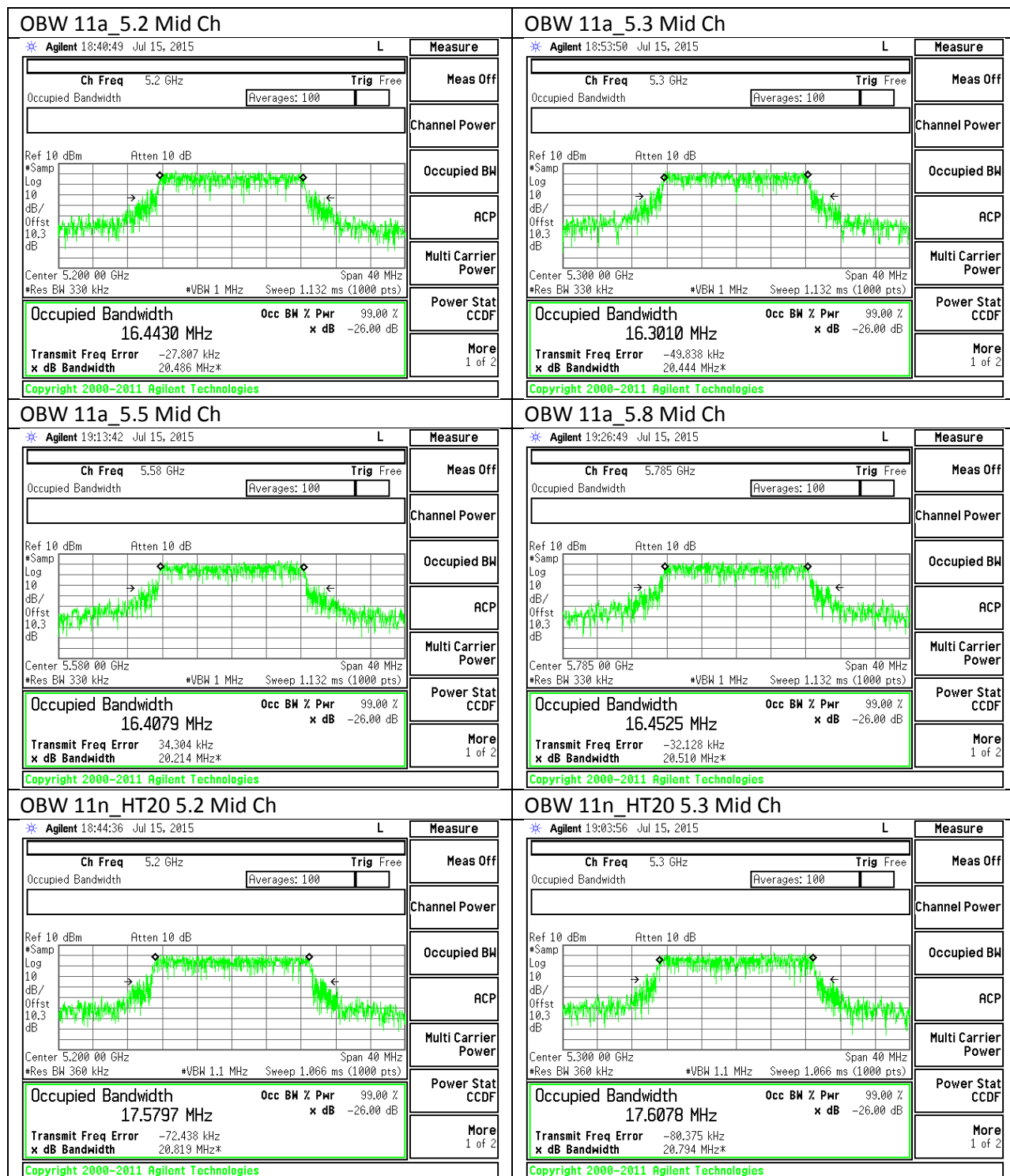
10.3.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

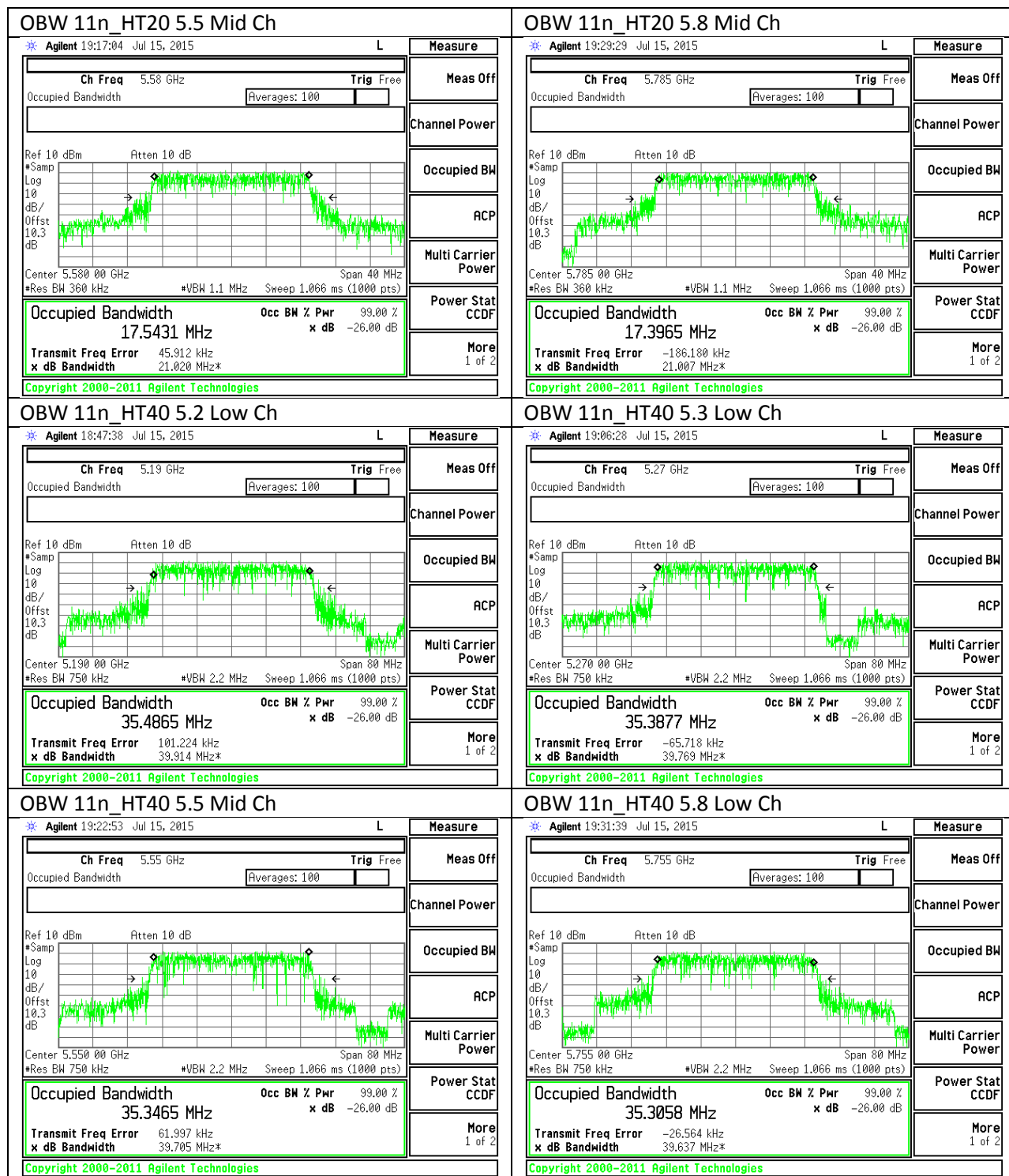
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.6186
Mid	5785	17.3965
High	5825	17.5548

10.3.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	35.3058
High	5795	35.5652

10.3.1. 99% BANDWIDTH PLOTS





10.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.4 dB (including 10 dB pad and 0.4 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

10.4.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	12.70
Mid	5200	12.80
High	5240	13.00
Worst		13.00

10.4.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	11.50
Mid	5200	11.50
High	5240	12.00
Worst		12.00

10.4.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5190	11.00
Mid	5230	11.50
Worst		11.50

10.4.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	13.20
Mid	5300	13.20
High	5320	12.90
Worst		13.20

10.4.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	12.00
Mid	5300	12.00
High	5320	11.40
Worst		12.00

10.4.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5270	11.30
High	5310	10.80
Worst		11.30

10.4.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	12.70
Mid	5580	12.70
High	5700	12.90
Worst		12.90

10.4.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	11.60
Mid	5580	11.50
High	5700	11.70
Worst		11.70

10.4.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5510	10.40
Mid	5550	11.40
High	5670	10.50
Worst		11.40

10.4.10. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	12.70
Mid	5785	12.60
High	5825	12.70
Worst		12.70

10.4.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	11.80
Mid	5785	11.70
High	5825	11.80
Worst		11.80

10.4.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5755	10.50
High	5795	10.50
Worst		10.50

10.5. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

Band 5150-5250 MHz:

For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Band 5250-5350 MHz:

The maximum conducted output power shall not exceed 250 mW or $10 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Bands 5470-5600 MHz and 5650-5725 MHz:

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Band 5725-5850 MHz:

The maximum conducted output power shall not exceed 1 W. The power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

10.5.1. 802.11a MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSP (dBi)
Low	5180	21.912	16.3982	-3.10	-3.10
Mid	5200	21.813	16.4430	-3.10	-3.10
High	5240	21.714	16.4843	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSP Limit (dBm)	IC eirp PPSP Limit (dBm)	PPSP Limit (dBm)
Low	5180	24.00	22.15	25.25	24.00	11.00	10.00	11.00
Mid	5200	24.00	22.16	25.26	24.00	11.00	10.00	11.00
High	5240	24.00	22.17	25.27	24.00	11.00	10.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	13.188	13.44	24.00	-10.56
Mid	5200	13.303	13.55	24.00	-10.45
High	5240	13.713	13.96	24.00	-10.04

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5180	1.630	1.88	11.00	-9.12
Mid	5200	1.810	2.06	11.00	-8.94
High	5240	2.120	2.37	11.00	-8.63

10.5.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5180	22.785	17.6189	-3.10	-3.10
Mid	5200	22.134	17.5797	-3.10	-3.10
High	5240	22.610	17.5593	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	24.00	22.46	25.56	24.00	11.00	10.00	11.00
Mid	5200	24.00	22.45	25.55	24.00	11.00	10.00	11.00
High	5240	24.00	22.45	25.55	24.00	11.00	10.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	12.293	12.54	24.00	-11.46
Mid	5200	12.316	12.57	24.00	-11.43
High	5240	12.660	12.91	24.00	-11.09

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	0.410	0.66	11.00	-10.34
Mid	5200	0.520	0.77	11.00	-10.23
High	5240	0.740	0.99	11.00	-10.01

10.5.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSPD (dBi)
Low	5190	43.030	35.4865	-3.10	-3.10
Mid	5230	43.840	35.1552	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSPD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSPD Limit (dBm)
Low	5190	24.00	23.00	26.10	24.00	11.00	10.00	11.00
Mid	5230	24.00	23.00	26.10	24.00	11.00	10.00	11.00
Duty Cycle CF (dB)		0.50	Included in Calculations of Corr'd Power & PPSPD					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.185	11.69	24.00	-12.32
Mid	5230	11.692	12.19	24.00	-11.81

PPSPD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSPD (dBm)	Total Corr'd PPSPD (dBm)	PPSPD Limit (dBm)	PPSPD Margin (dB)
Low	5190	-3.370	-2.87	11.00	-13.87
Mid	5230	-2.980	-2.48	11.00	-13.48

10.5.4. 802.11a MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	21.648	16.4449	-3.10	-3.10
Mid	5300	21.879	16.3010	-3.10	-3.10
High	5320	22.134	16.3856	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.16	29.16	23.16	11.00	11.00	11.00
Mid	5300	24.00	23.12	29.12	23.12	11.00	11.00	11.00
High	5320	24.00	23.14	29.14	23.14	11.00	11.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	13.988	14.24	23.16	-8.92
Mid	5300	13.977	14.23	23.12	-8.90
High	5320	13.408	13.66	23.14	-9.49

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	2.470	2.72	11.00	-8.28
Mid	5300	2.380	2.63	11.00	-8.37
High	5320	1.810	2.06	11.00	-8.94

10.5.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	22.372	17.5367	-3.10	-3.10
Mid	5300	21.897	17.6078	-3.10	-3.10
High	5320	22.134	17.4855	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.44	29.44	23.44	11.00	11.00	11.00
Mid	5300	24.00	23.46	29.46	23.46	11.00	11.00	11.00
High	5320	24.00	23.43	29.43	23.43	11.00	11.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	12.690	12.94	23.44	-10.50
Mid	5300	12.923	13.17	23.46	-10.28
High	5320	12.462	12.71	23.43	-10.71

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	0.770	1.02	11.00	-9.98
Mid	5300	1.040	1.29	11.00	-9.71
High	5320	0.600	0.85	11.00	-10.15

10.5.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5270	42.770	35.3877	-3.10	-3.10
High	5310	43.692	35.4030	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.50	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.589	12.09	24.00	-11.91
High	5310	11.227	11.73	24.00	-12.27

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	-2.980	-2.48	11.00	-13.48
High	5310	-3.370	-2.87	11.00	-13.87

10.5.7. 802.11a MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSP (dBi)
Low	5500	21.897	16.4014	-3.10	-3.10
Mid	5580	22.100	16.4079	-3.10	-3.10
High	5700	21.978	16.4630	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSP Limit (dBm)	IC PSD Limit (dBm)	PPSP Limit (dBm)
Low	5500	24.00	23.15	29.15	23.15	11.00	11.00	11.00
Mid	5580	24.00	23.15	29.15	23.15	11.00	11.00	11.00
High	5700	24.00	23.17	29.17	23.17	11.00	11.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	13.533	13.78	23.15	-9.37
Mid	5580	13.530	13.78	23.15	-9.37
High	5700	13.448	13.70	23.17	-9.47

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5500	1.940	2.19	11.00	-8.81
Mid	5580	1.890	2.14	11.00	-8.86
High	5700	1.900	2.15	11.00	-8.85

10.5.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSP (dBi)
Low	5500	22.236	17.5570	-3.10	-3.10
Mid	5580	22.440	17.5431	-3.10	-3.10
High	5700	22.209	17.6915	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSP Limit (dBm)	IC PPSP Limit (dBm)	PPSP Limit (dBm)
Low	5500	24.00	23.44	29.44	23.44	11.00	11.00	11.00
Mid	5580	24.00	23.44	29.44	23.44	11.00	11.00	11.00
High	5700	24.00	23.48	29.48	23.48	11.00	11.00	11.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	12.362	12.61	23.44	-10.83
Mid	5580	12.782	13.03	23.44	-10.41
High	5700	12.527	12.78	23.48	-10.70

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5500	0.450	0.70	11.00	-10.30
Mid	5580	0.850	1.10	11.00	-9.90
High	5700	0.620	0.87	11.00	-10.13

10.5.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSP (dBi)
Low	5510	43.225	35.0899	-3.10	-3.10
Mid	5550	43.160	35.3465	-3.10	-3.10
High	5670	43.890	35.4124	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSP Limit (dBm)	IC PPSP Limit (dBm)	PPSP Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.50	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	11.282	11.78	24.00	-12.22
Mid	5550	11.327	11.83	24.00	-12.17
High	5670	11.409	11.91	24.00	-12.09

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5510	-3.190	-2.69	11.00	-13.69
Mid	5550	-3.330	-2.83	11.00	-13.83
High	5670	-3.200	-2.70	11.00	-13.70

10.5.10. 802.11a MODE IN THE 5.8 GHz BAND

Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5745	-3.10	-3.10
Mid	5785	-3.10	-3.10
High	5825	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	30.00	30.00	30.00	30.00	30.00
Mid	5785	30.00	30.00	30.00	30.00	30.00	30.00
High	5825	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	13.604	13.85	30.00	-16.15
Mid	5785	13.291	13.54	30.00	-16.46
High	5825	13.338	13.59	30.00	-16.41

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	2.080	2.33	30.00	-27.67
Mid	5785	1.730	1.98	30.00	-28.02
High	5825	1.780	2.03	30.00	-27.97

10.5.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5745	-3.10	-3.10
Mid	5785	-3.10	-3.10
High	5825	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	30.00	30.00	30.00	30.00	30.00
Mid	5785	30.00	30.00	30.00	30.00	30.00	30.00
High	5825	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.25	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	12.721	12.97	30.00	-17.03
Mid	5785	12.371	12.62	30.00	-17.38
High	5825	12.796	13.05	30.00	-16.95

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	0.860	1.11	30.00	-28.89
Mid	5785	0.470	0.72	30.00	-29.28
High	5825	0.960	1.21	30.00	-28.79

10.5.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5755	-3.10	-3.10
High	5795	-3.10	-3.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	30.00	30.00	30.00	30.00	30.00	30.00
High	5795	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.50	Included in Calculations of Corr'd Power & PPSP
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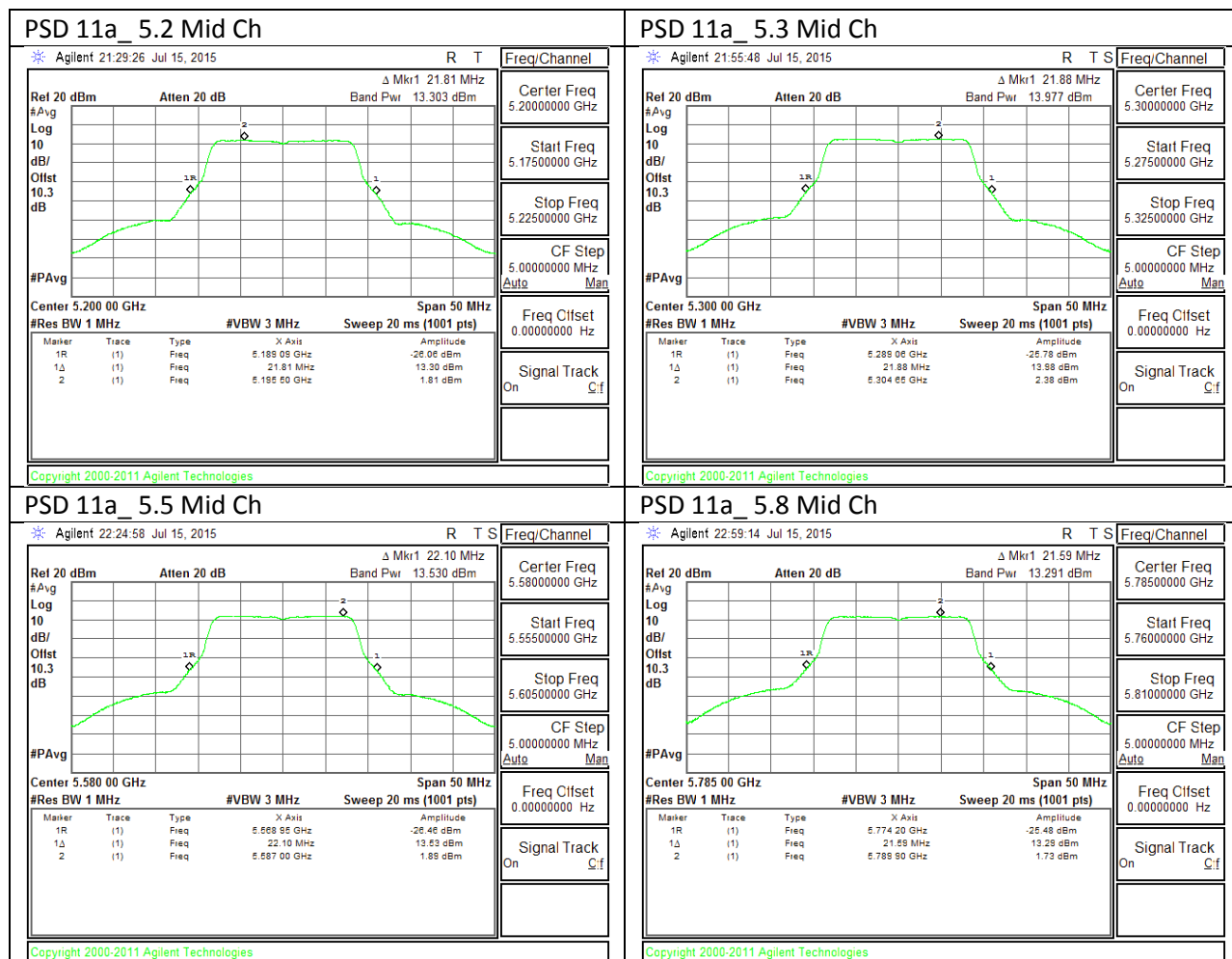
Output Power Results

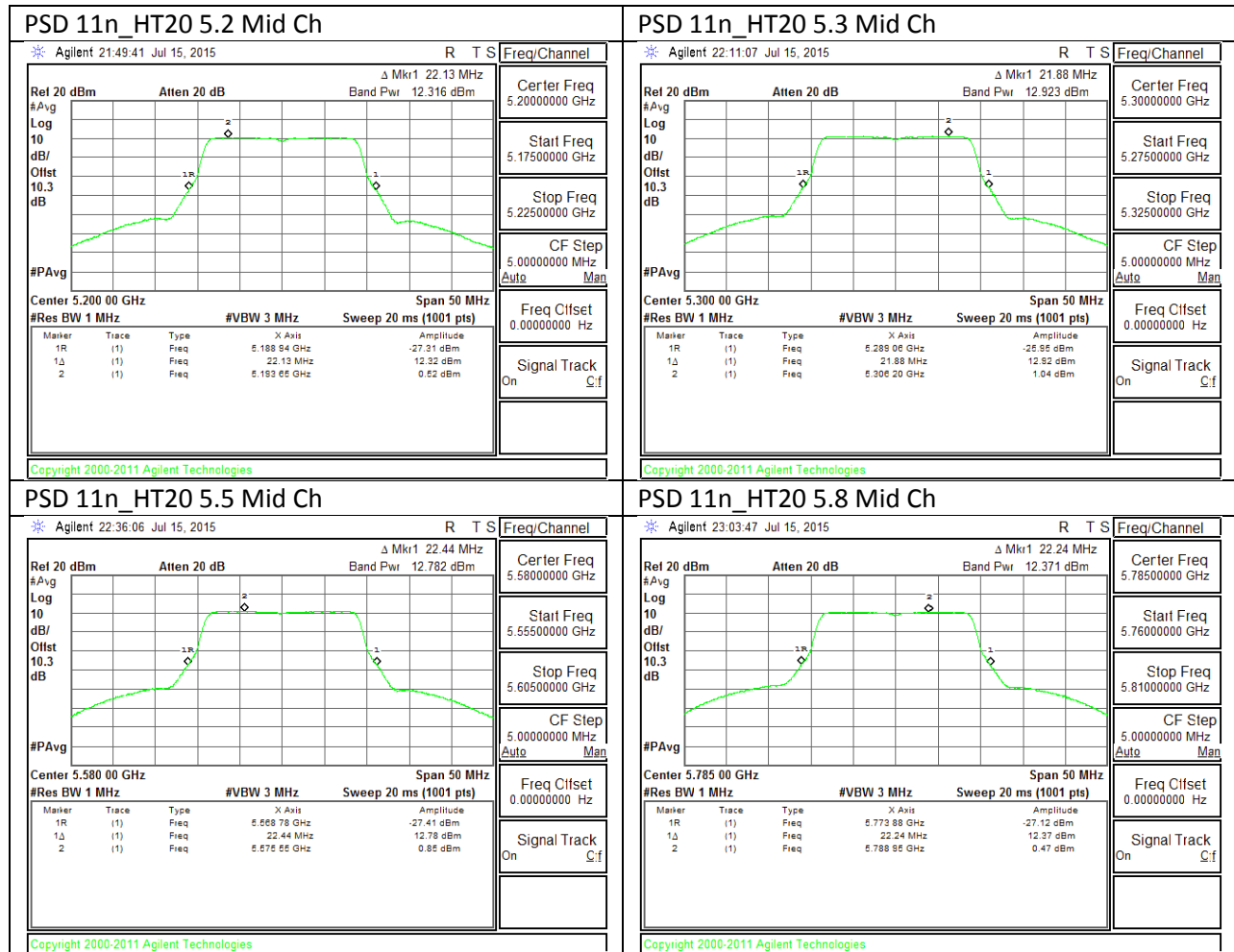
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	11.276	11.78	30.00	-18.22
High	5795	11.125	11.63	30.00	-18.38

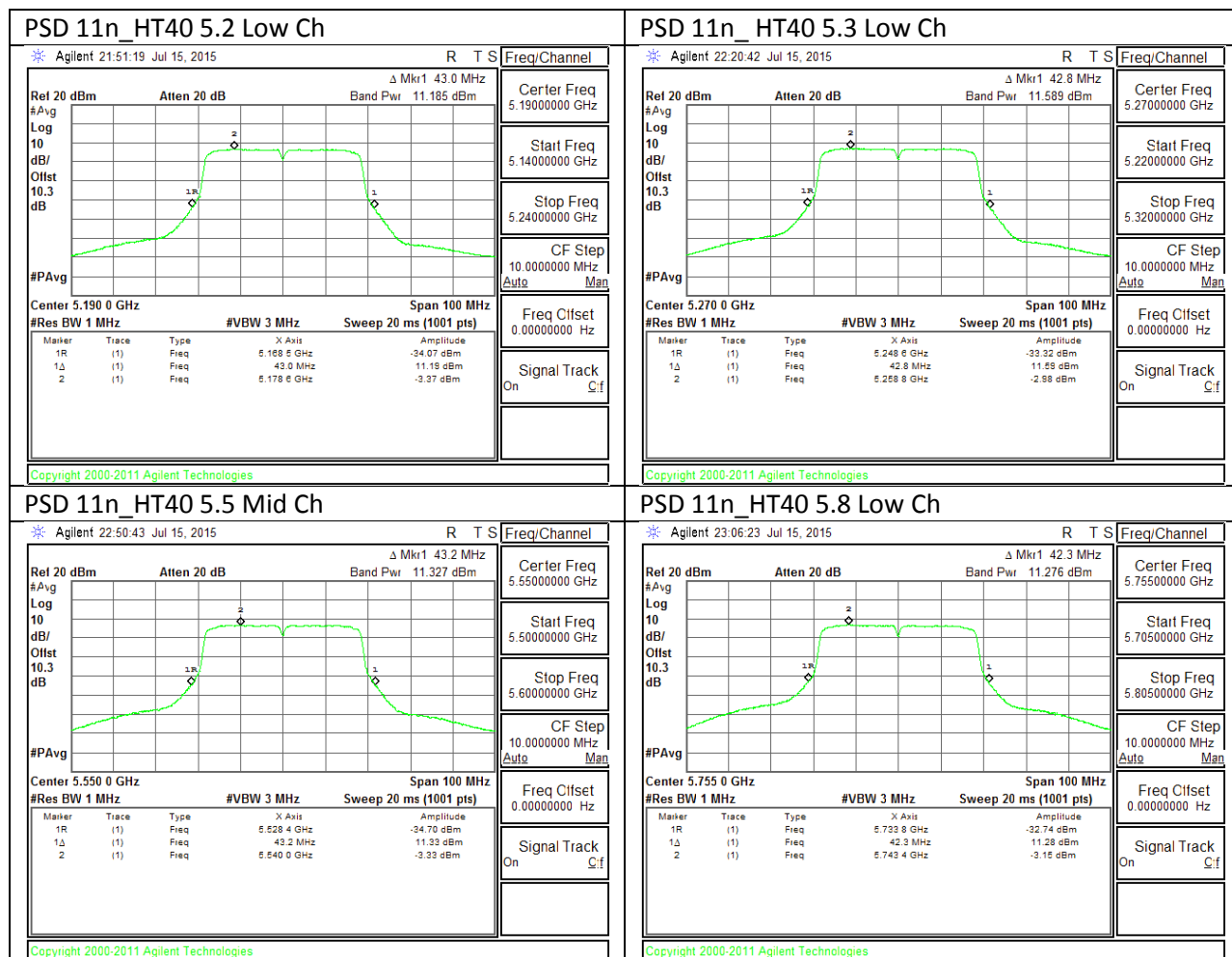
PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-3.150	-2.65	30.00	-32.65
High	5795	-3.540	-3.04	30.00	-33.04

10.5.13. OUTPUT POWER AND PPSD PLOTS, Chain 0







11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150cm for above 1GHz. The antenna to EUT distance is 3 meters.

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.

Reference to KDB 789033 UNII part G) 6) d) Method AD:

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 to the reading offset for average measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

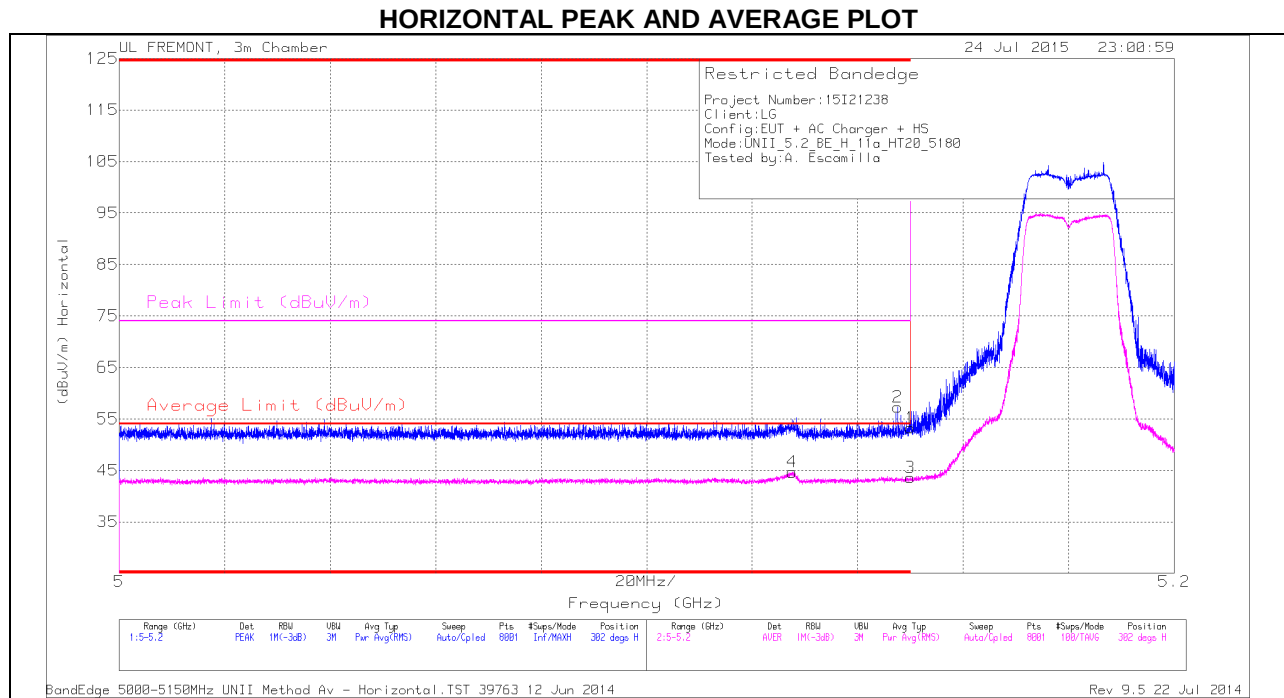
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

RESULTS

11.1. 5.2 GHz

11.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

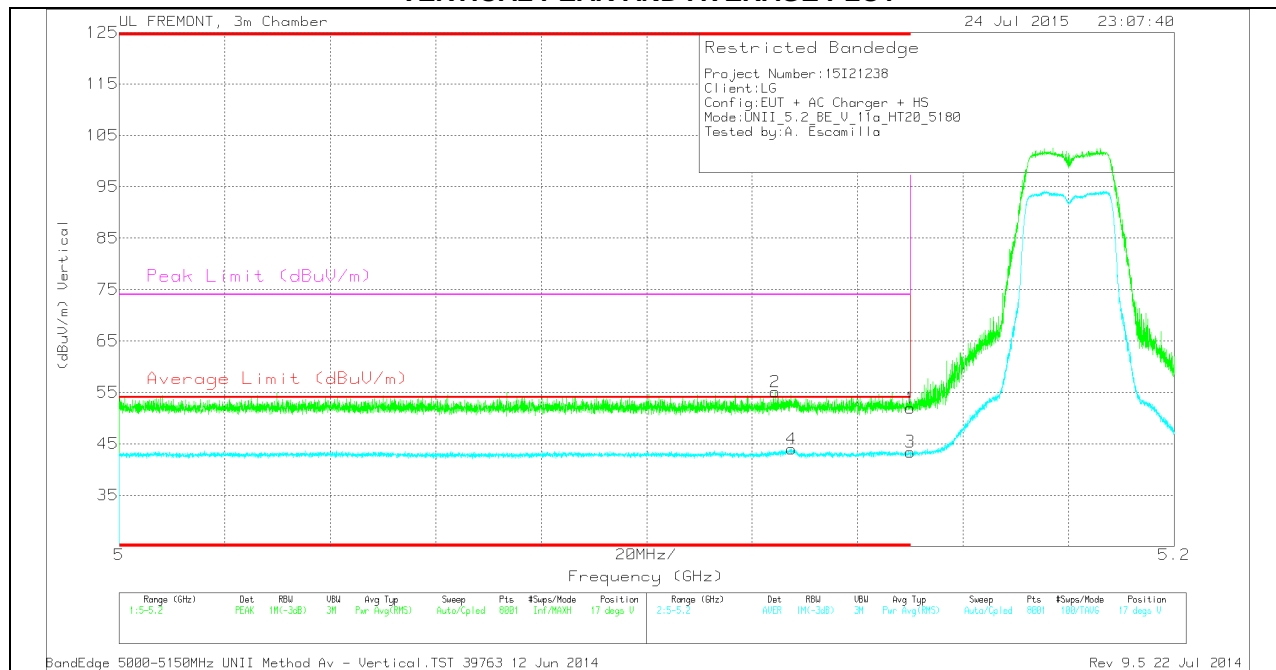
RESTRICTED BANDEDGE (LOW CHANNEL)



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
4	* 5.128	31.11	RMS	34.2	-20.9	.25	44.66	54	-9.34	-	-	302	100	H
2	* 5.148	43.89	PK	34.2	-20.8	0	57.29	-	-	74	-16.71	302	100	H
1	* 5.15	39.84	PK	34.2	-20.8	0	53.24	-	-	74	-20.76	302	100	H
3	* 5.15	29.94	RMS	34.2	-20.8	.25	43.59	54	-10.41	-	-	302	100	H

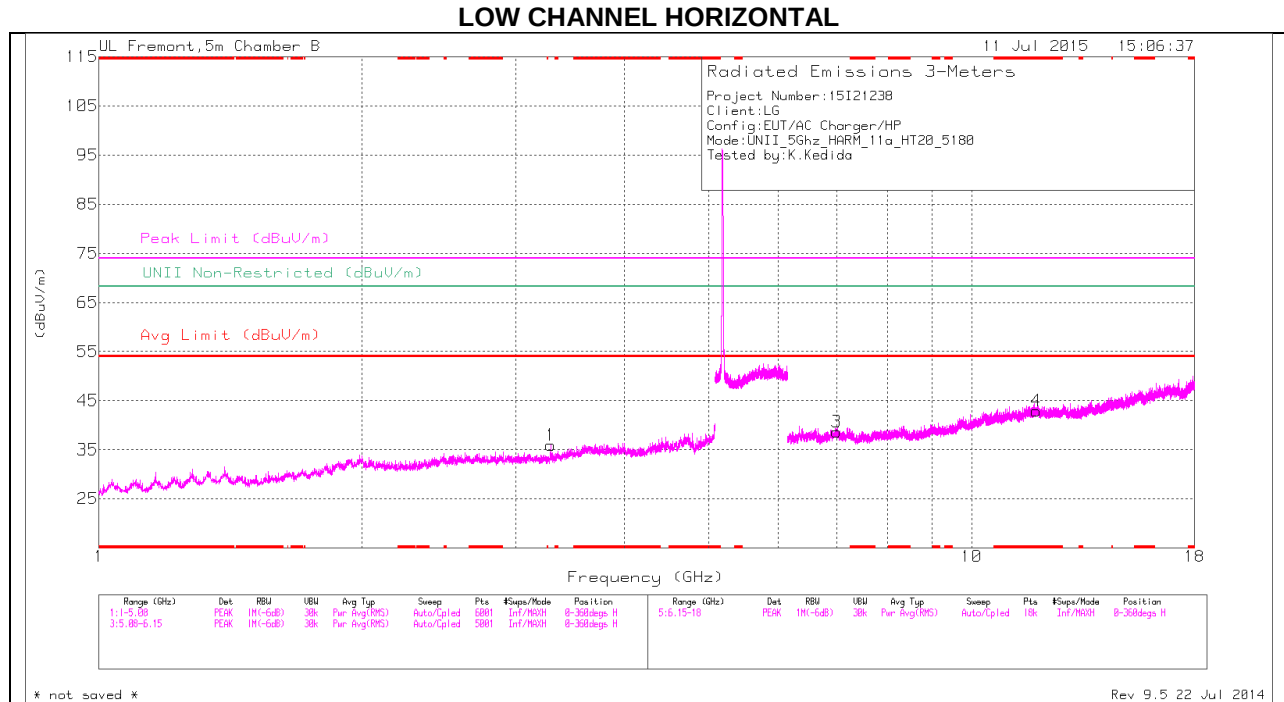
VERTICAL PEAK AND AVERAGE PLOT



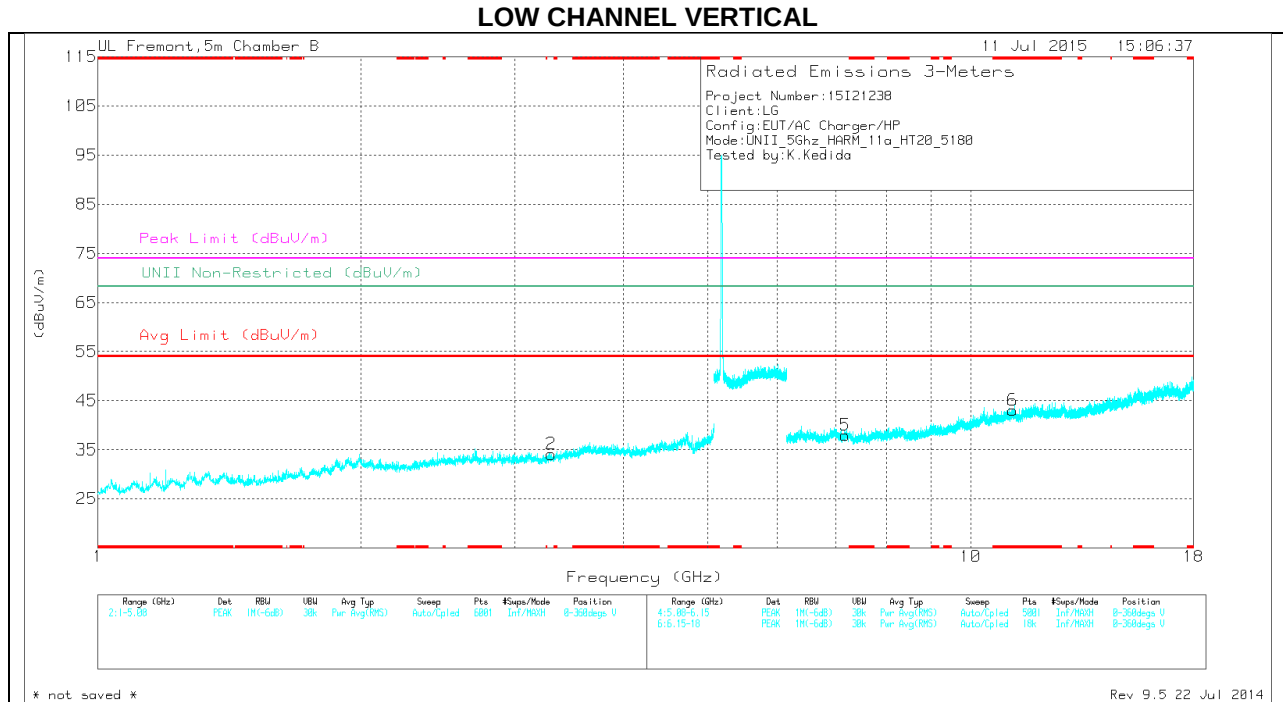
VERTICAL DATA

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	* 5.124	41.77	PK	34.2	-20.9	0	55.07	-	-	74	-18.93	17	233	V
4	* 5.127	30.4	RMS	34.2	-20.9	.25	43.95	54	-10.05	-	-	17	233	V
1	* 5.15	38.49	PK	34.2	-20.8	0	51.89	-	-	74	-22.11	17	233	V
3	* 5.15	29.76	RMS	34.2	-20.8	.25	43.41	54	-10.59	-	-	17	233	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

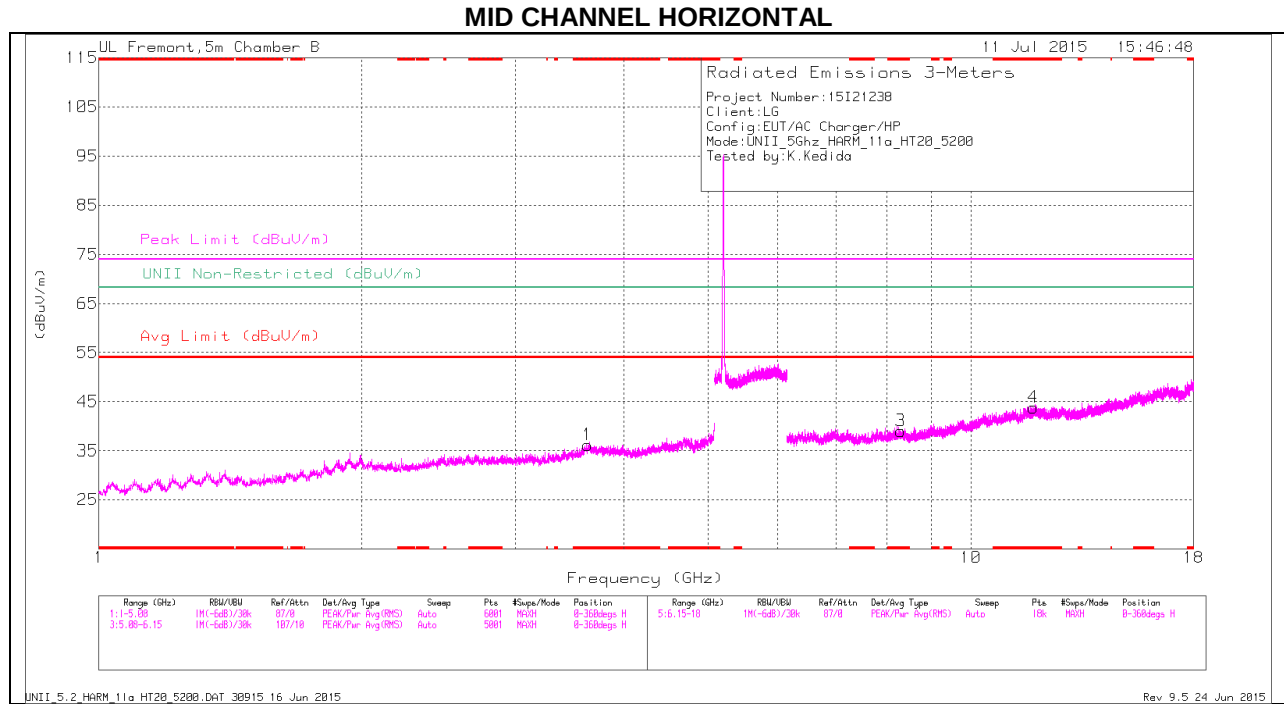
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fil tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 11.848	25.56	Pk	38.6	-21.3	0	42.86	-	-	74	-31.14	-	-	0-360	101	H
6	* 11.171	26.42	Pk	37.8	-21.2	0	43.02	-	-	74	-30.98	-	-	0-360	200	V
1	3.294	34.04	Pk	32.7	-30.8	0	35.94	-	-	-	-	68.2	-32.26	0-360	199	H
2	3.307	31.98	Pk	32.8	-30.7	0	34.08	-	-	-	-	68.2	-34.12	0-360	101	V
3	7.004	29.27	Pk	36	-26.6	0	38.67	-	-	-	-	68.2	-29.53	0-360	101	H
5	7.18	29.07	Pk	35.4	-26.5	0	37.97	-	-	-	-	68.2	-30.23	0-360	101	V

PK - Peak detector

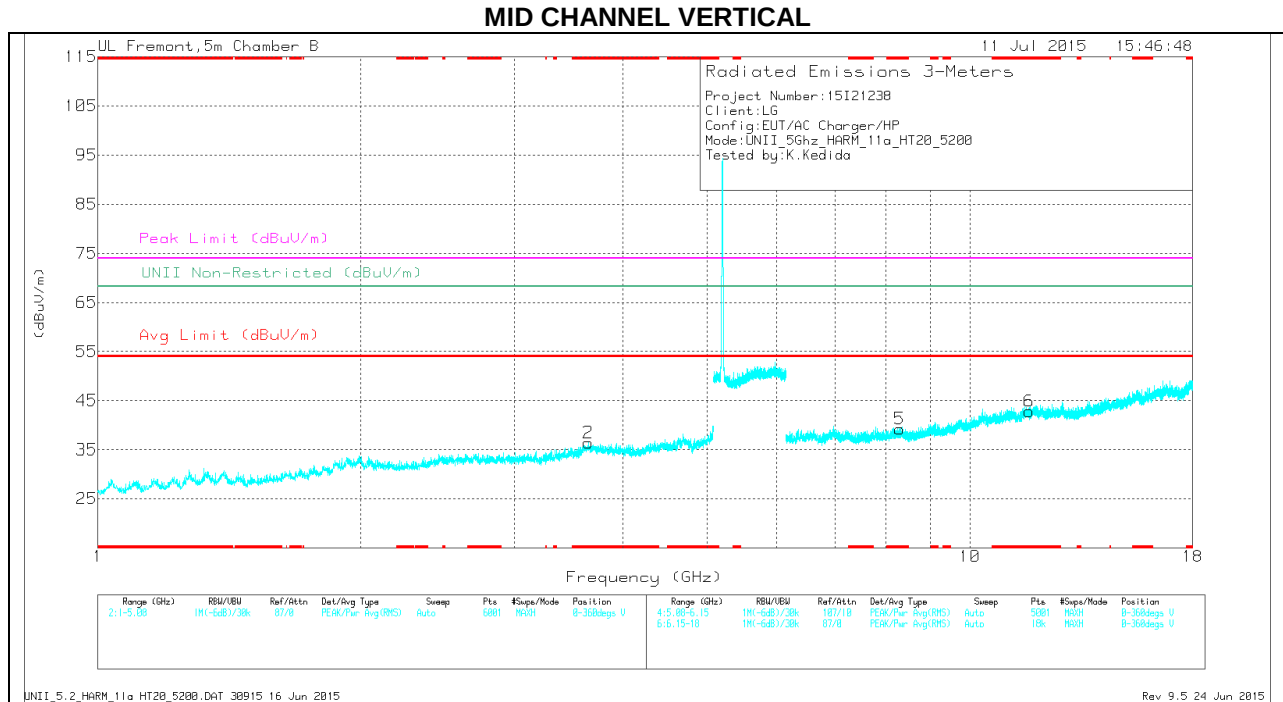
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fil tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.846	34.54	PK-U	38.6	-21.3	0	51.84	-	-	74	-22.16	-	-	0	102	H
* 11.849	22.87	ADR	38.6	-21.3	.25	40.42	54	-13.58	-	-	-	-	0	102	H
* 11.171	34.35	PK-U	37.8	-21.2	0	50.95	-	-	74	-23.05	-	-	0	200	V
* 11.17	23.29	ADR	37.8	-21.2	.25	40.14	54	-13.86	-	-	-	-	0	200	V
3.292	28.86	ADR	32.7	-30.8	.25	31.01	-	-	-	-	-	-	0	199	H
3.294	40.54	PK-U	32.7	-30.8	0	42.44	-	-	-	-	68.2	-25.76	0	199	H
3.307	41.2	PK-U	32.8	-30.7	0	43.3	-	-	-	-	68.2	-24.9	0	102	V
7.005	37.68	PK-U	36	-26.6	0	47.08	-	-	-	-	68.2	-21.12	0	102	H
7.182	37.63	PK-U	35.4	-26.4	0	46.63	-	-	-	-	68.2	-21.57	0	102	V

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Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

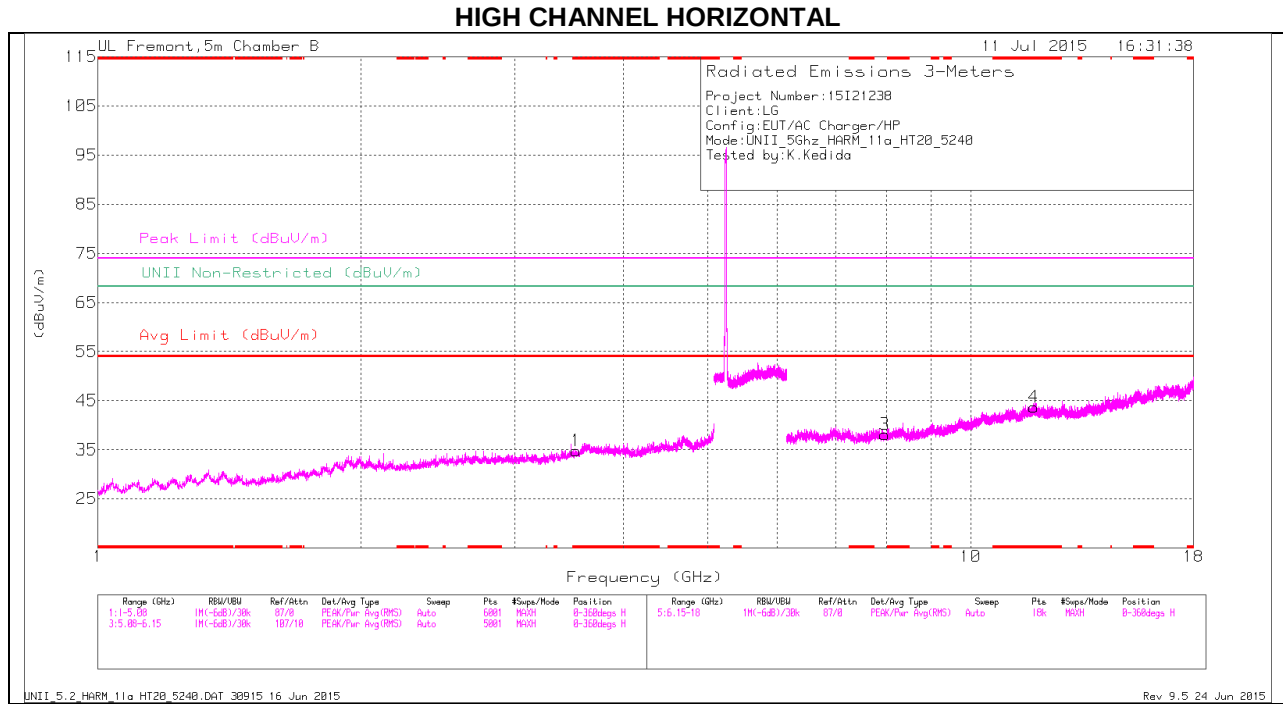
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.635	32.85	Pk	33.8	-30.5	0	36.15	-	-	74	-37.85	-	-	0-360	199	H
2	* 3.651	33.01	Pk	33.7	-30.3	0	36.41	-	-	74	-37.59	-	-	0-360	101	V
3	* 8.309	28.62	Pk	35.7	-25.3	0	39.02	-	-	74	-34.98	-	-	0-360	200	H
4	* 11.787	26.3	Pk	38.6	-21.1	0	43.8	-	-	74	-30.2	-	-	0-360	200	H
5	* 8.311	28.9	Pk	35.7	-25.4	0	39.2	-	-	74	-34.8	-	-	0-360	200	V
6	* 11.686	26.01	Pk	38.5	-21.7	0	42.81	-	-	74	-31.19	-	-	0-360	200	V

PK - Peak detector

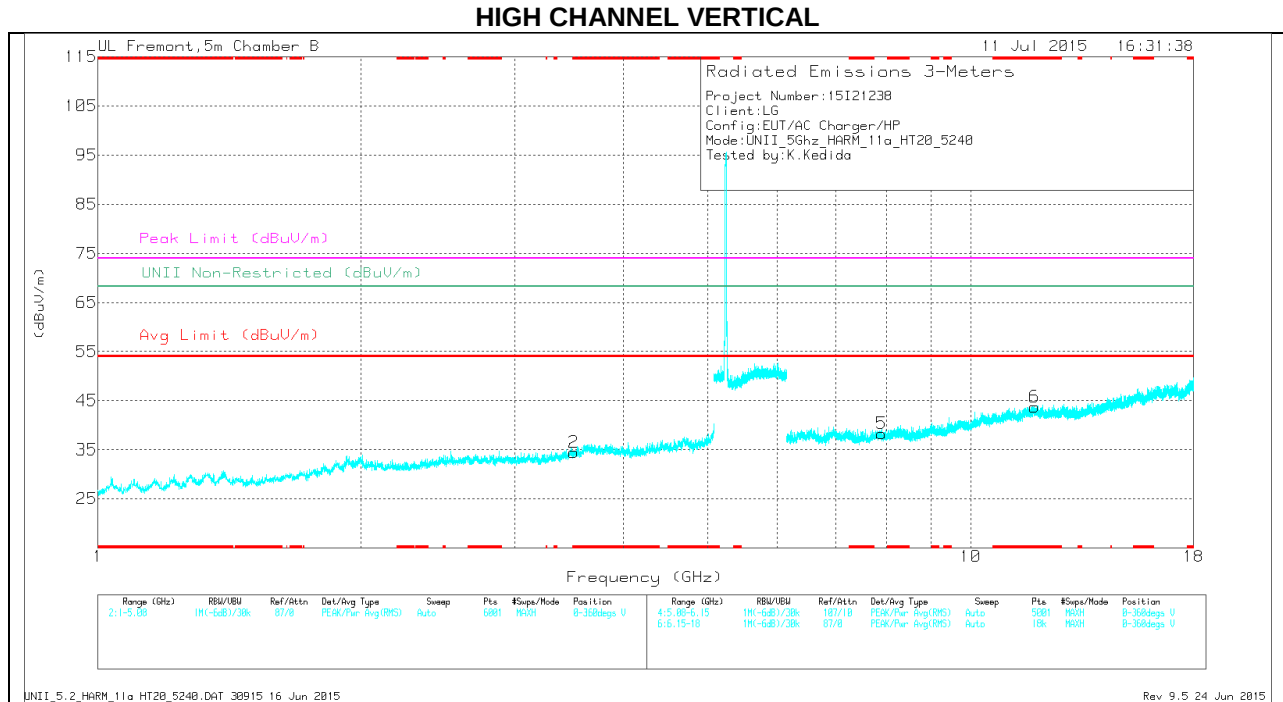
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.637	40.1	PK-U	33.8	-30.5	0	43.4	-	-	74	-30.6	-	-	1	199	H
* 3.634	29.16	ADR	33.8	-30.5	.25	32.71	54	-21.29	-	-	-	-	1	199	H
* 3.653	41.32	PK-U	33.7	-30.3	0	44.72	-	-	74	-29.28	-	-	1	102	V
* 3.651	29.21	ADR	33.7	-30.3	.25	32.86	54	-21.14	-	-	-	-	1	102	V
* 8.31	37.03	PK-U	35.7	-25.4	0	47.33	-	-	74	-26.67	-	-	1	199	H
* 8.309	25.58	ADR	35.7	-25.3	.25	36.23	54	-17.77	-	-	-	-	1	199	H
* 11.788	34.6	PK-U	38.6	-21.1	0	52.1	-	-	74	-21.9	-	-	1	199	H
* 11.785	23.24	ADR	38.6	-21.1	.25	40.99	54	-13.01	-	-	-	-	1	199	H
* 8.31	36.73	PK-U	35.7	-25.4	0	47.03	-	-	74	-26.97	-	-	1	199	V
* 8.31	25.62	ADR	35.7	-25.4	.25	36.17	54	-17.83	-	-	-	-	1	199	V
* 11.687	33.91	PK-U	38.5	-21.7	0	50.71	-	-	74	-23.29	-	-	1	199	V
* 11.685	23.27	ADR	38.5	-21.7	.25	40.32	54	-13.68	-	-	-	-	1	199	V

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Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.53	32.19	Pk	33.6	-31	0	34.79	-	-	74	-39.21	-	-	0-360	101	H
2	* 3.506	31.69	Pk	33.6	-30.8	0	34.49	-	-	74	-39.51	-	-	0-360	101	V
4	* 11.805	26.16	Pk	38.6	-21.1	0	43.66	-	-	74	-30.34	-	-	0-360	200	H
6	* 11.828	26.43	Pk	38.6	-21.3	0	43.73	-	-	74	-30.27	-	-	0-360	101	V
5	7.902	28.47	Pk	35.6	-25.8	0	38.27	-	-	-	-	68.2	-29.93	0-360	101	V
3	7.973	28.58	Pk	35.6	-26.1	0	38.08	-	-	-	-	68.2	-30.12	0-360	101	H

PK - Peak detector

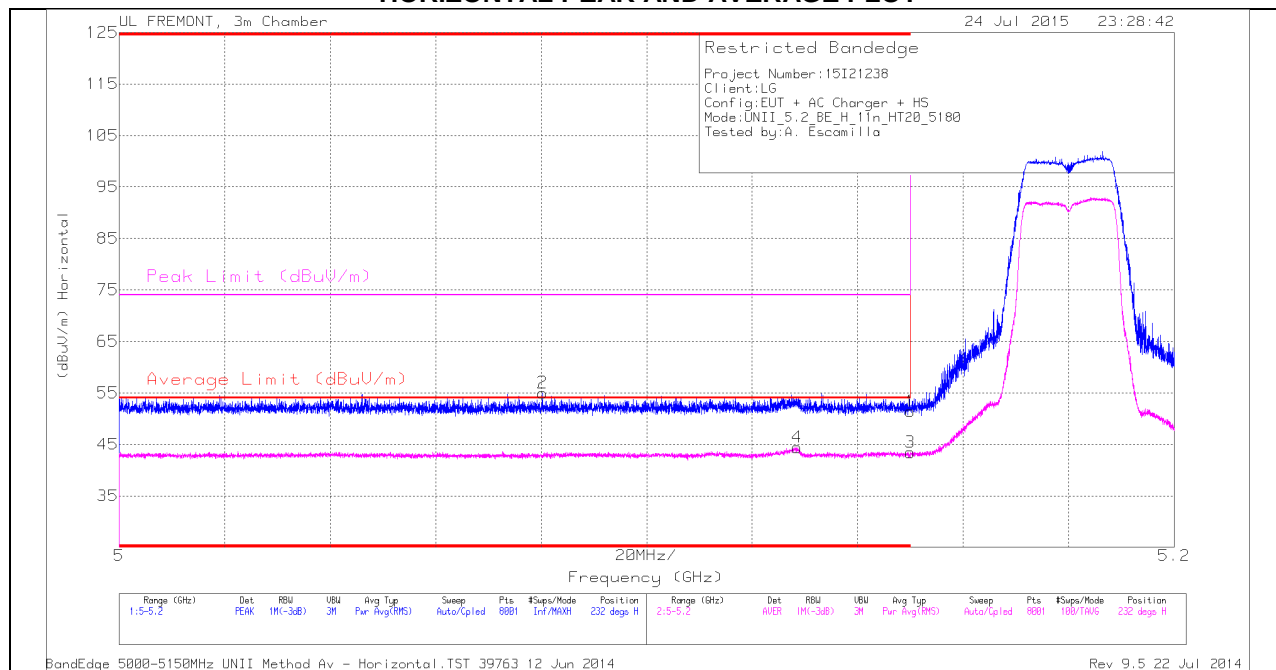
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.53	40.85	PK-U	33.7	-31	0	43.55	-	-	74	-30.45	-	-	1	101	H
* 3.528	28.94	ADR	33.6	-31.1	.25	31.69	54	-22.31	-	-	-	-	1	101	H
* 3.507	40.46	PK-U	33.6	-30.8	0	43.26	-	-	74	-30.74	-	-	1	101	V
* 3.508	28.64	ADR	33.6	-30.8	.25	31.69	54	-22.31	-	-	-	-	1	101	V
* 11.687	33.91	PK-U	38.5	-21.7	0	50.71	-	-	74	-23.29	-	-	1	199	V
* 11.685	23.27	ADR	38.5	-21.7	.25	40.32	54	-13.68	-	-	-	-	1	199	V
7.903	36.57	PK-U	35.6	-25.9	0	46.27	-	-	-	-	68.2	-21.93	1	101	V
7.972	37.17	PK-U	35.6	-26.1	0	46.67	-	-	-	-	68.2	-21.53	1	101	H
7.975	37.42	PK-U	35.6	-26.2	0	46.82	-	-	-	-	68.2	-21.38	1	101	H

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11.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

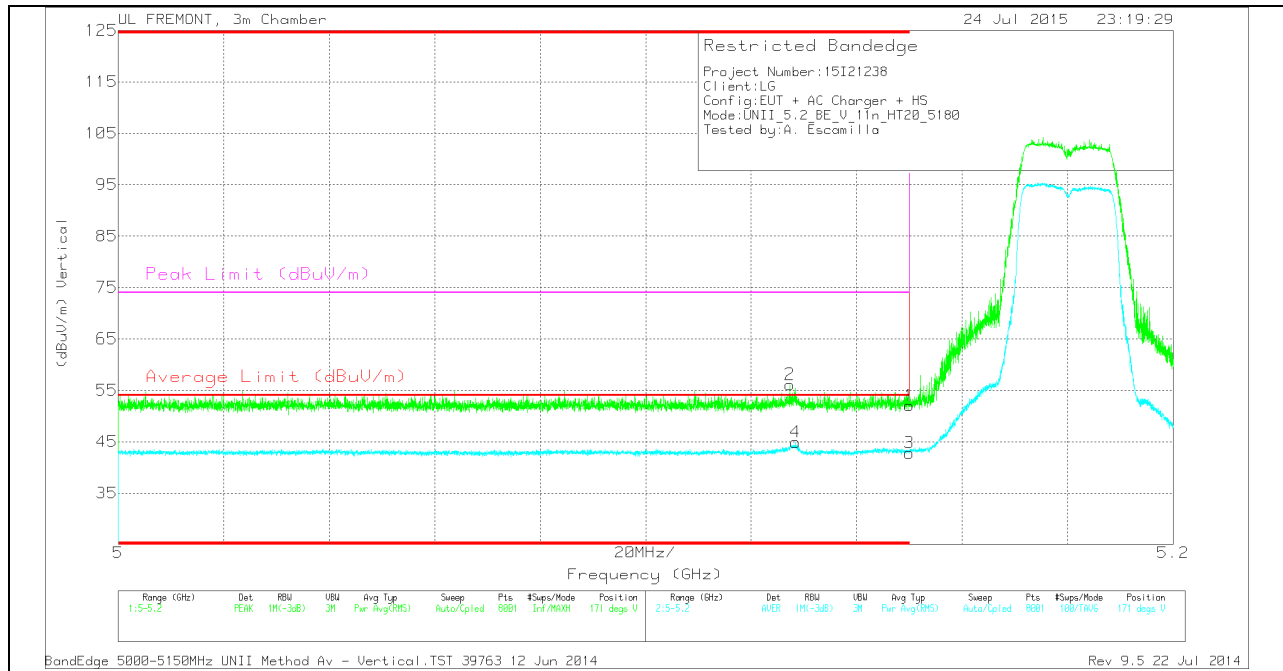
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/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	* 5.08	41.61	PK	34.1	-20.7	0	55.01	-	-	74	-18.99	232	301	H
4	* 5.129	30.76	RMS	34.2	-20.8	.25	44.41	54	-9.59	-	-	232	301	H
1	* 5.15	38.03	PK	34.2	-20.8	0	51.43	-	-	74	-22.57	232	301	H
3	* 5.15	29.79	RMS	34.2	-20.8	.25	43.44	54	-10.56	-	-	232	301	H

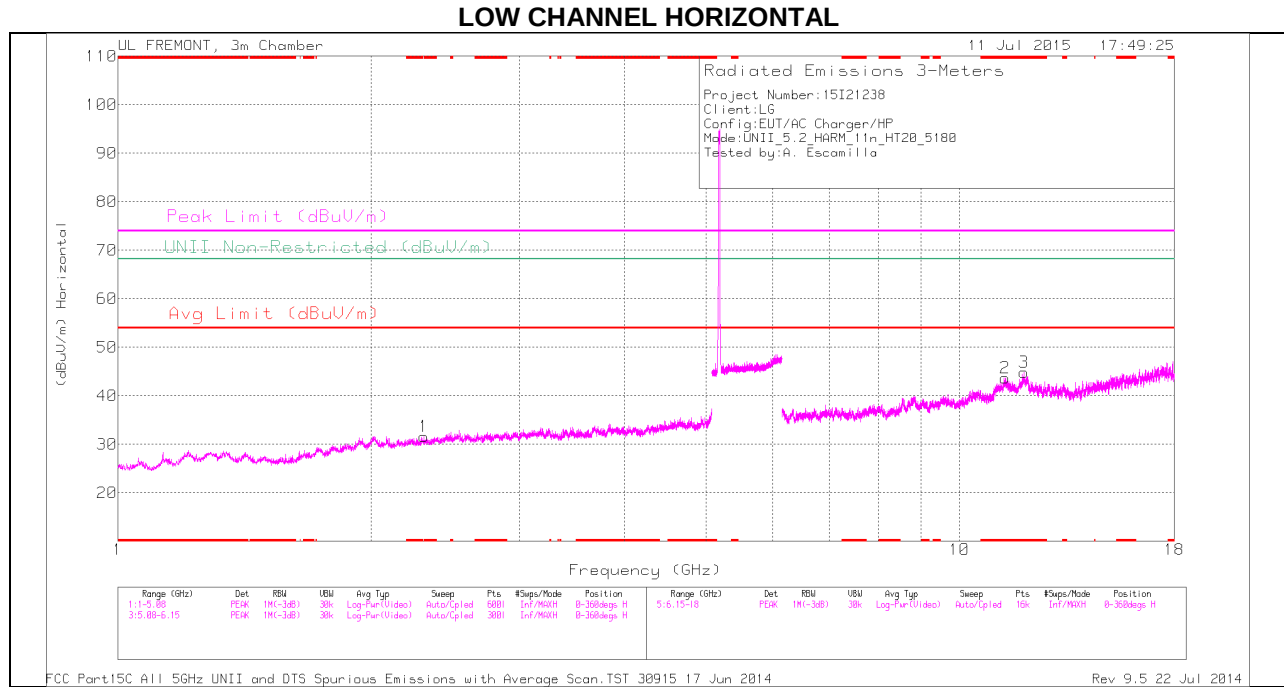
VERTICAL PEAK AND AVERAGE PLOT



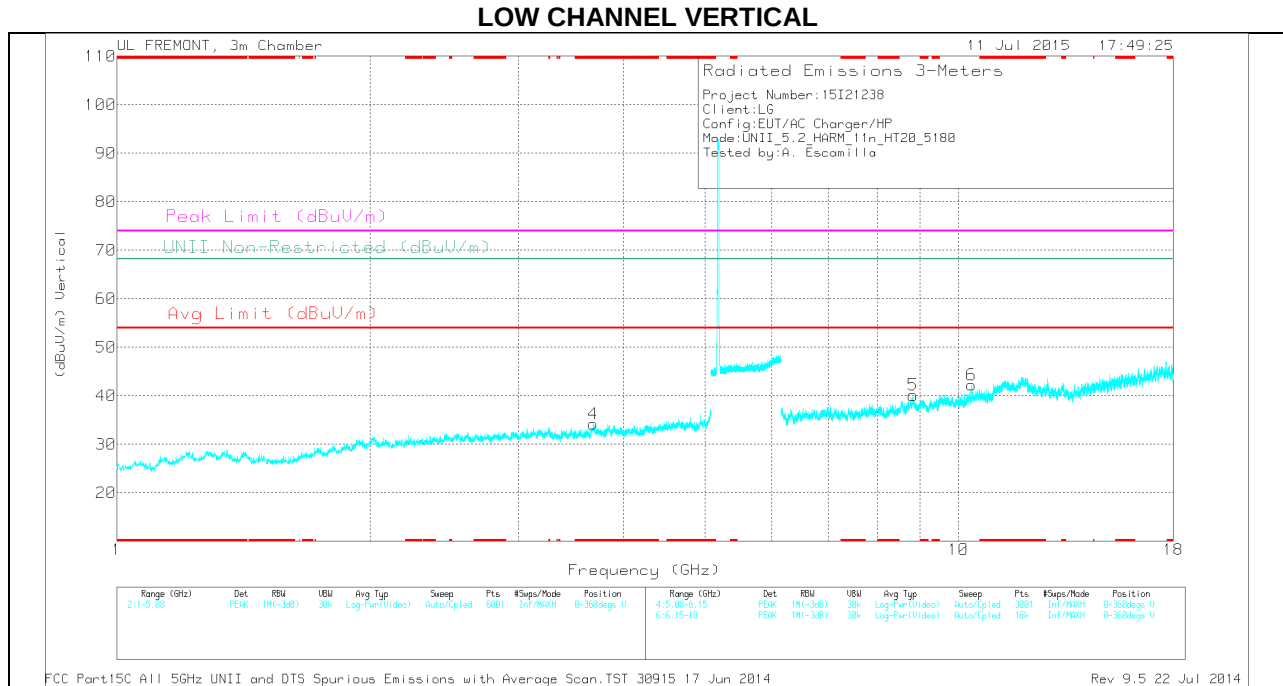
VERTICAL DATA

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	* 5.15	38.62	PK	34.2	-20.8	0	52.02	-	-	74	-21.98	171	377	V
2	* 5.127	42.8	PK	34.2	-20.9	0	56.1	-	-	74	-17.9	171	377	V
3	* 5.15	29.17	RMS	34.2	-20.8	.25	42.82	54	-11.18	-	-	171	377	V
4	* 5.128	31.25	RMS	34.2	-20.8	.25	44.9	54	-9.1	-	-	171	377	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

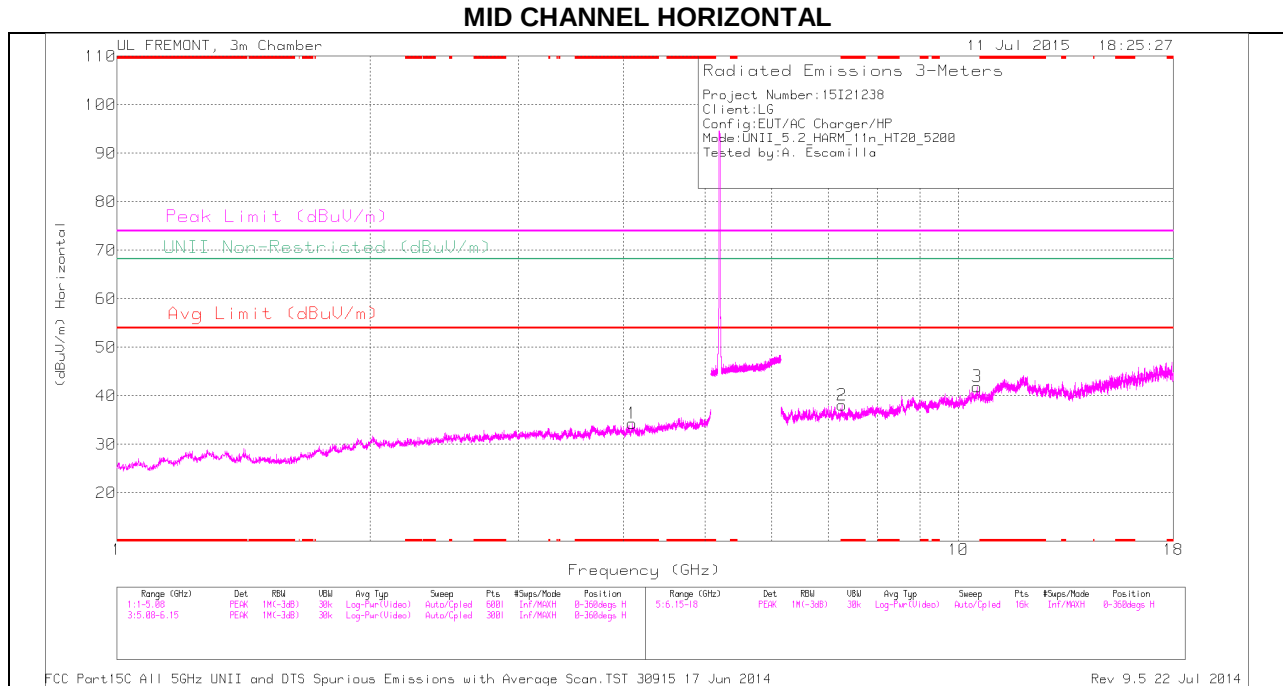
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.31	31.85	PK	31.7	-31.9	0	31.65	-	-	74	-42.35	-	-	0-360	100	H
4	* 3.683	30.89	PK	33	-29.7	0	34.19	-	-	74	-39.81	-	-	0-360	100	V
2	* 11.338	28.28	PK	38.1	-22.7	0	43.68	-	-	74	-30.32	-	-	0-360	100	H
3	* 11.935	29.32	PK	39.1	-23.6	0	44.82	-	-	74	-29.18	-	-	0-360	100	H
5	8.83	28.52	PK	35.9	-24.3	0	40.12	-	-	-	-	68.2	-28.08	0-360	200	V
6	10.359	29.04	PK	37.2	-24	0	42.24	-	-	-	-	68.2	-25.96	0-360	100	V

PK - Peak detector

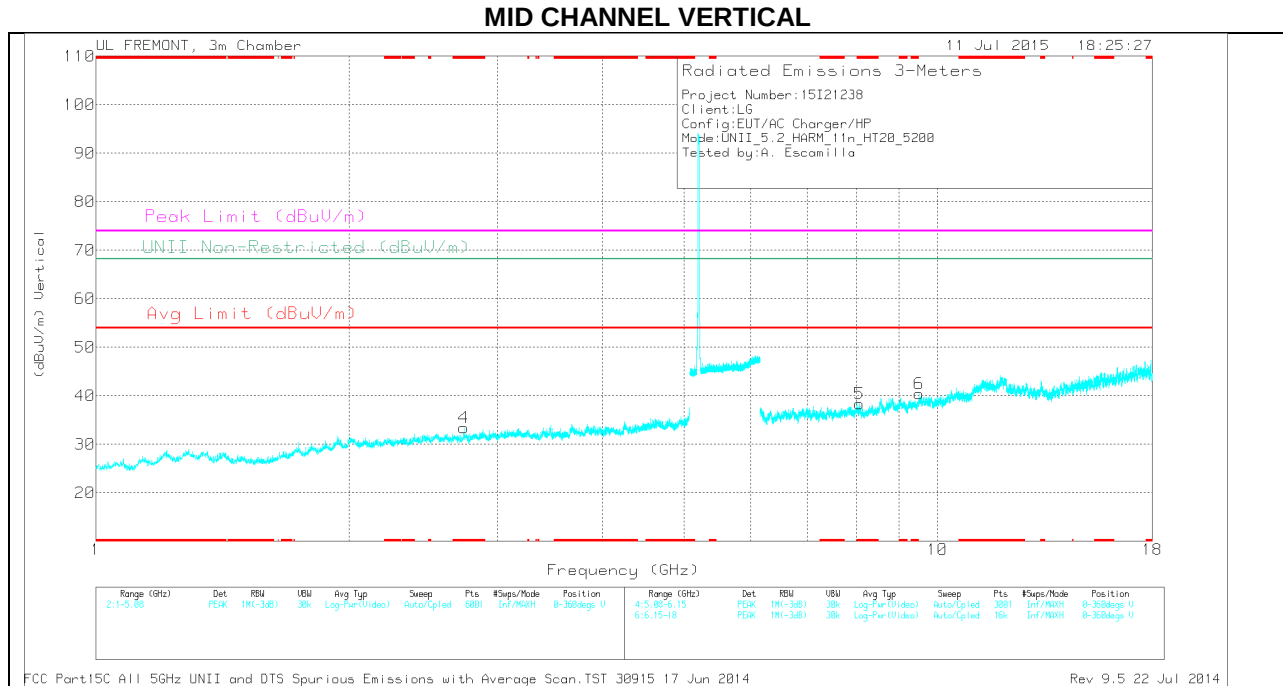
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.311	40.67	PK1	31.7	-31.9	0	40.47	-	-	74	-33.53	-	-	344	138	H
* 2.31	29.57	AD1	31.7	-31.9	.25	29.62	54	-24.38	-	-	-	-	344	138	H
* 3.684	40.24	PK1	33	-29.8	0	43.44	-	-	74	-30.56	-	-	162	163	V
* 3.682	28.8	AD1	33	-29.7	.25	32.35	54	-21.65	-	-	-	-	162	163	V
* 11.338	37.04	PK1	38.1	-22.7	0	52.44	-	-	74	-21.56	-	-	302	163	H
* 11.339	25.4	AD1	38.1	-22.7	.25	41.05	54	-12.95	-	-	-	-	302	163	H
* 11.934	37.45	PK1	39.1	-23.6	0	52.95	-	-	74	-21.05	-	-	299	207	H
* 11.933	26	AD1	39.1	-23.6	.25	41.75	54	-12.25	-	-	-	-	299	207	H
8.829	37.11	PK1	35.9	-24.3	0	48.71	-	-	-	-	68.2	-19.49	79	212	V
10.36	36.99	PK1	37.2	-24	0	50.19	-	-	-	-	68.2	-18.01	47	187	V

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

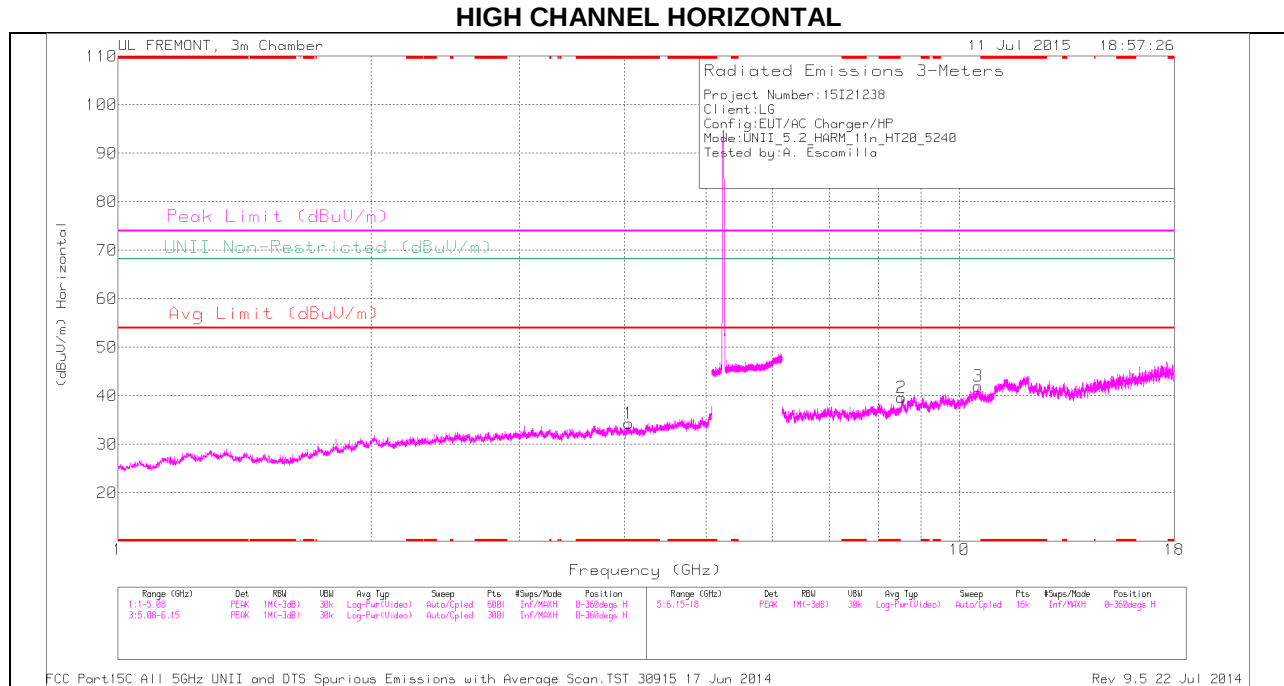
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.093	31.37	PK	33.3	-30.3	0	34.37	-	-	74	-39.63	-	-	0-360	200	H
4	* 2.736	32.59	PK	32.4	-31.6	0	33.39	-	-	74	-40.61	-	-	0-360	100	V
2	* 7.27	30.85	PK	35.6	-28.4	0	38.05	-	-	74	-35.95	-	-	0-360	200	H
5	* 8.073	29.18	PK	35.7	-26.5	0	38.38	-	-	74	-35.62	-	-	0-360	100	V
6	9.513	27.76	PK	36.6	-23.9	0	40.46	-	-	-	-	68.2	-27.74	0-360	100	V
3	10.53	27.73	PK	37.5	-23.3	0	41.93	-	-	-	-	68.2	-26.27	0-360	100	H

PK - Peak detector

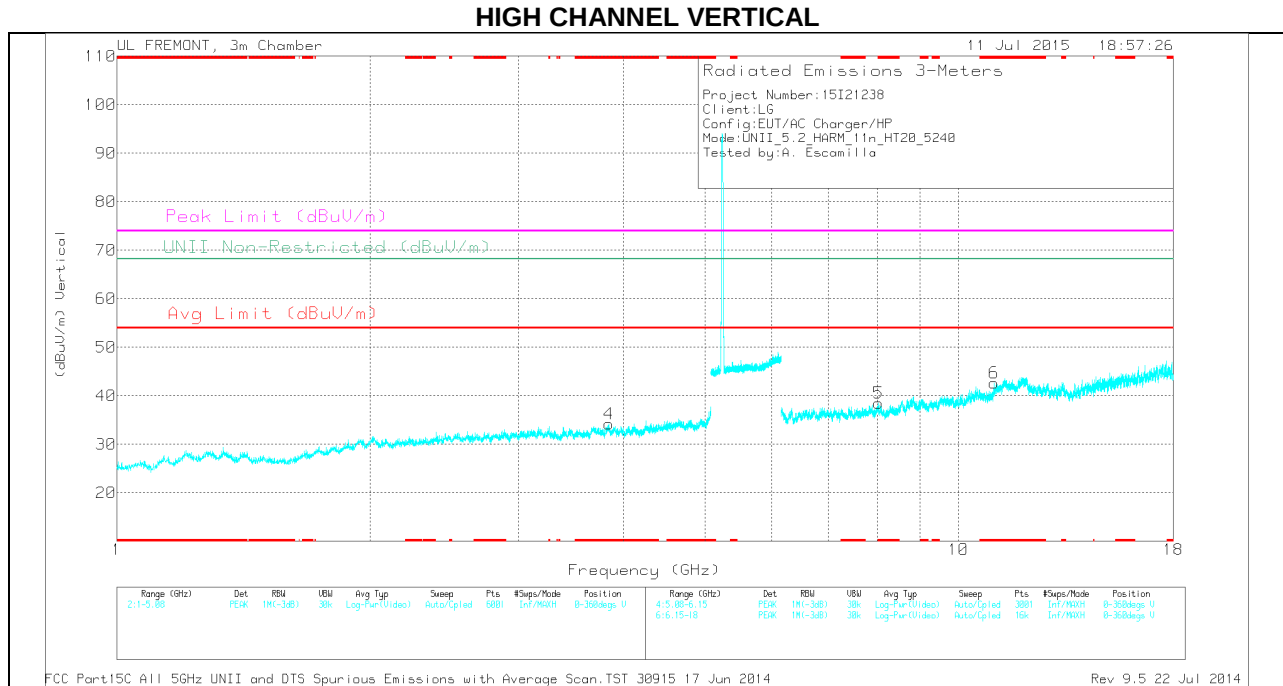
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.092	40.27	PK1	33.3	-30.3	0	43.27	-	-	74	-30.73	-	-	11	206	H
* 4.091	28.68	AD1	33.3	-30.3	.25	31.93	54	-22.07	-	-	-	-	11	206	H
* 2.736	41.07	PK1	32.4	-31.6	0	41.87	-	-	74	-32.13	-	-	109	189	V
* 2.734	29.28	AD1	32.4	-31.6	.25	30.33	54	-23.67	-	-	-	-	109	189	V
* 7.27	38.85	PK1	35.6	-28.4	0	46.05	-	-	74	-27.95	-	-	45	208	H
* 7.272	27.66	AD1	35.6	-28.4	.25	35.11	54	-18.89	-	-	-	-	45	208	H
* 8.072	37.76	PK1	35.7	-26.5	0	46.96	-	-	74	-27.04	-	-	189	219	V
* 8.074	26.52	AD1	35.7	-26.4	.25	36.07	54	-17.93	-	-	-	-	189	219	V
9.515	35.99	PK1	36.6	-23.9	0	48.69	-	-	-	-	68.2	-19.51	245	195	V
10.53	35.81	PK1	37.5	-23.3	0	50.01	-	-	-	-	68.2	-18.19	77	160	H

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.046	31.4	PK	33.3	-30.4	0	34.3	-	-	74	-39.7	-	-	0-360	200	H
4	* 3.842	31.28	PK	33.1	-30.2	0	34.18	-	-	74	-39.82	-	-	0-360	100	V
5	* 8.033	29.4	PK	35.7	-26.6	0	38.5	-	-	74	-35.5	-	-	0-360	200	V
6	* 11.018	27.67	PK	37.9	-22.9	0	42.67	-	-	74	-31.33	-	-	0-360	200	V
2	8.535	29.61	PK	35.8	-25.7	0	39.71	-	-	-	-	68.2	-28.49	0-360	100	H
3	10.527	27.77	PK	37.5	-23.3	0	41.97	-	-	-	-	68.2	-26.23	0-360	100	H

PK - Peak detector

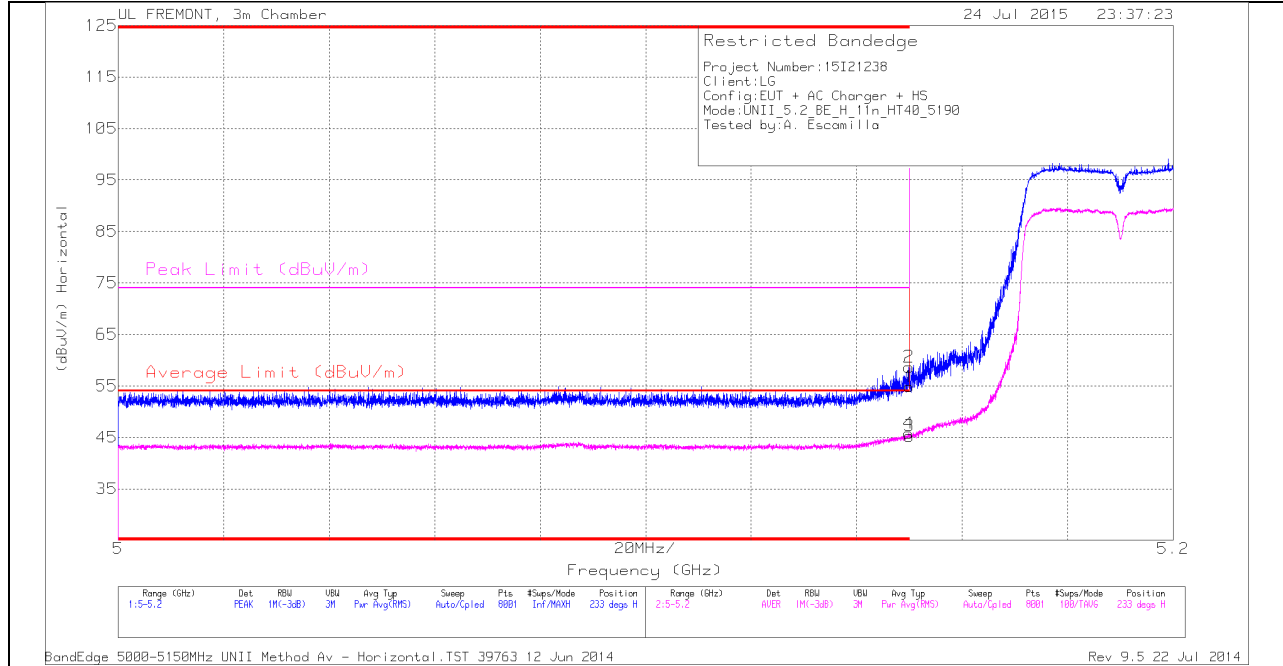
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.047	40.49	PK1	33.3	-30.4	0	43.39	-	-	74	-30.61	-	-	333	200	H
* 4.047	28.92	AD1	33.3	-30.4	.23	32.07	54	-21.93	-	-	-	-	333	200	H
* 3.842	41.02	PK1	33.1	-30.2	0	43.92	-	-	74	-30.08	-	-	175	216	V
* 3.84	28.9	AD1	33.1	-30.2	.23	32.05	54	-21.95	-	-	-	-	175	216	V
* 8.034	37.88	PK1	35.7	-26.5	0	47.08	-	-	74	-26.92	-	-	90	261	V
* 8.034	26.58	AD1	35.7	-26.5	.23	36.03	54	-17.97	-	-	-	-	90	261	V
* 11.019	36.54	PK1	37.9	-22.9	0	51.54	-	-	74	-22.46	-	-	55	178	V
* 11.019	25.05	AD1	37.9	-22.9	.23	40.3	54	-13.7	-	-	-	-	55	178	V
8.534	37.23	PK1	35.8	-25.7	0	47.33	-	-	-	-	68.2	-20.87	307	189	H
10.528	36.04	PK1	37.5	-23.3	0	50.24	-	-	-	-	68.2	-17.96	237	132	H

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014

11.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

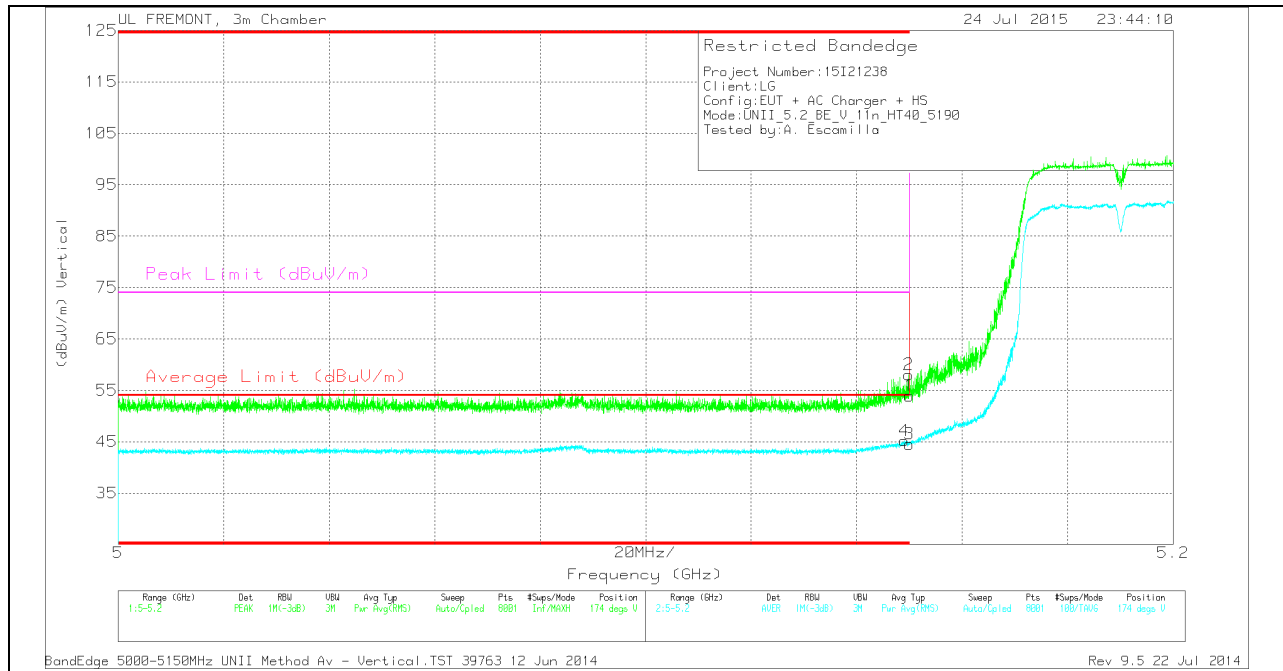
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/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	* 5.15	41.42	PK	34.2	-20.8	0	54.82	-	-	74	-19.18	233	317	H
2	* 5.15	45.28	PK	34.2	-20.8	0	58.68	-	-	74	-15.32	233	317	H
3	* 5.15	31.37	RMS	34.2	-20.8	.5	45.27	54	-8.73	-	-	233	317	H
4	* 5.15	31.91	RMS	34.2	-20.8	.5	45.81	54	-8.19	-	-	233	317	H

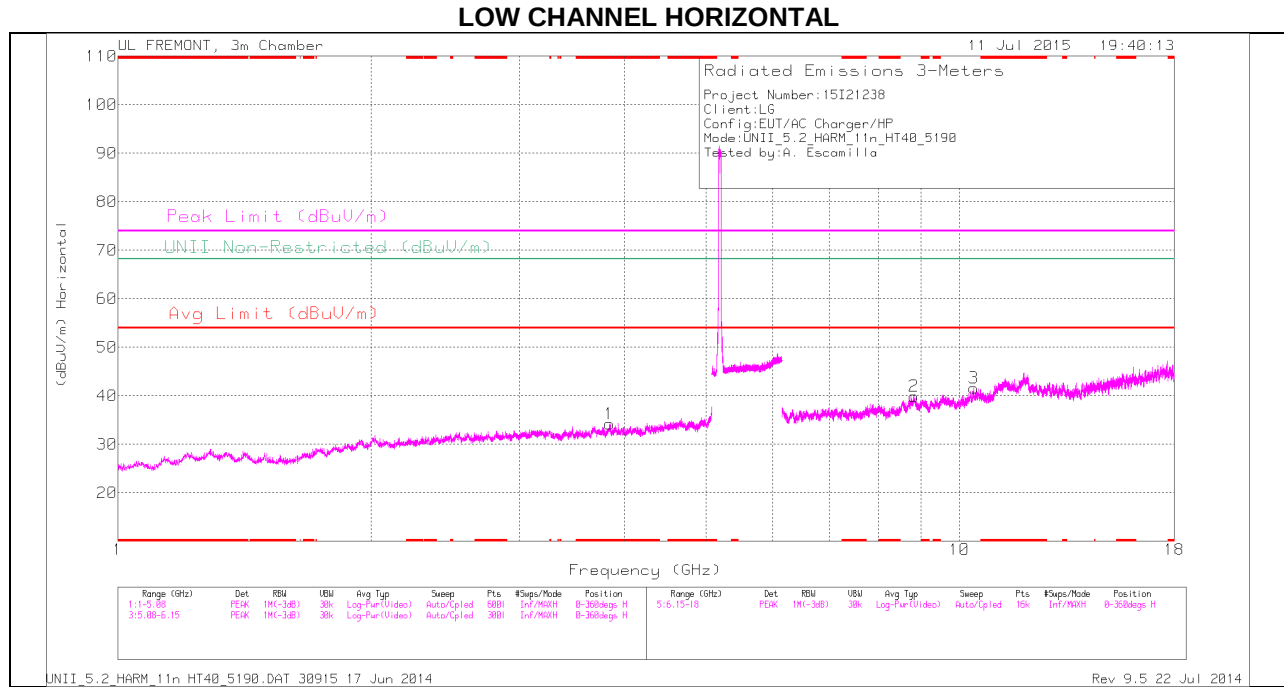
VERTICAL PEAK AND AVERAGE PLOT



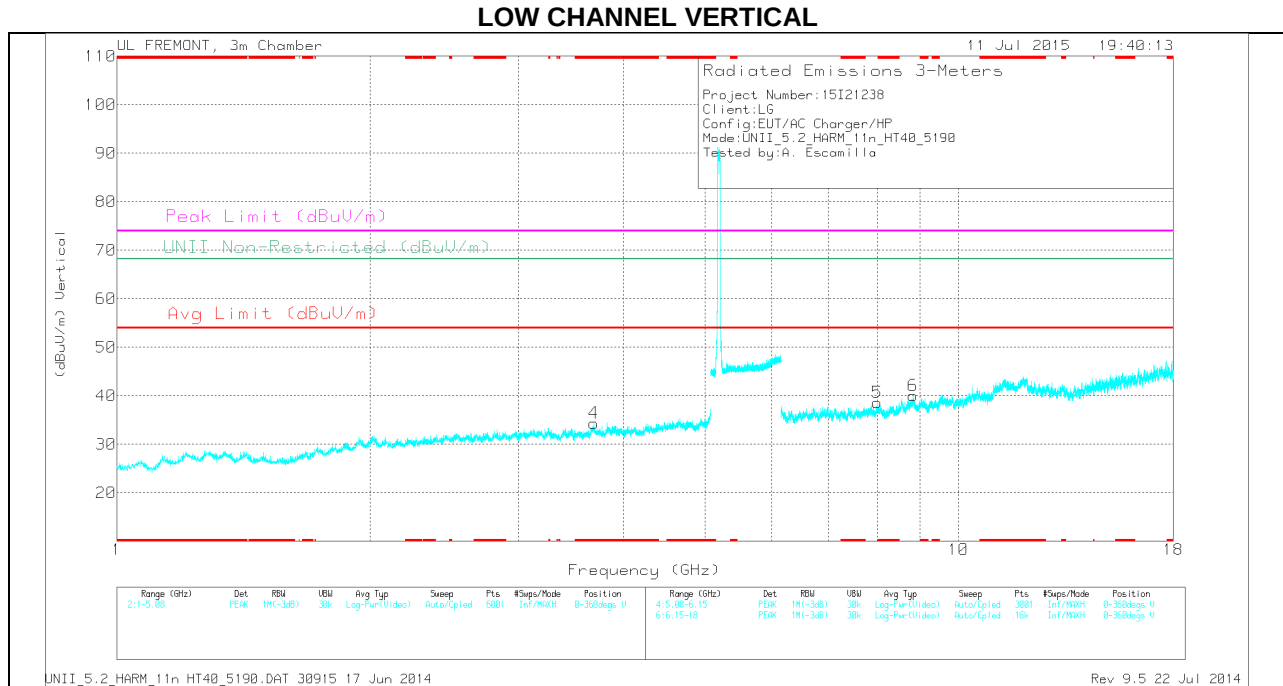
VERTICAL DATA

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
4	* 5.149	31.3	RMS	34.2	-20.8	.5	45.2	54	-8.8	-	-	174	374	V
1	* 5.15	40.54	PK	34.2	-20.8	0	53.94	-	-	74	-20.06	174	374	V
2	* 5.15	44.64	PK	34.2	-20.8	0	58.04	-	-	74	-15.96	174	374	V
3	* 5.15	30.63	RMS	34.2	-20.8	.5	44.53	54	-9.47	-	-	174	374	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

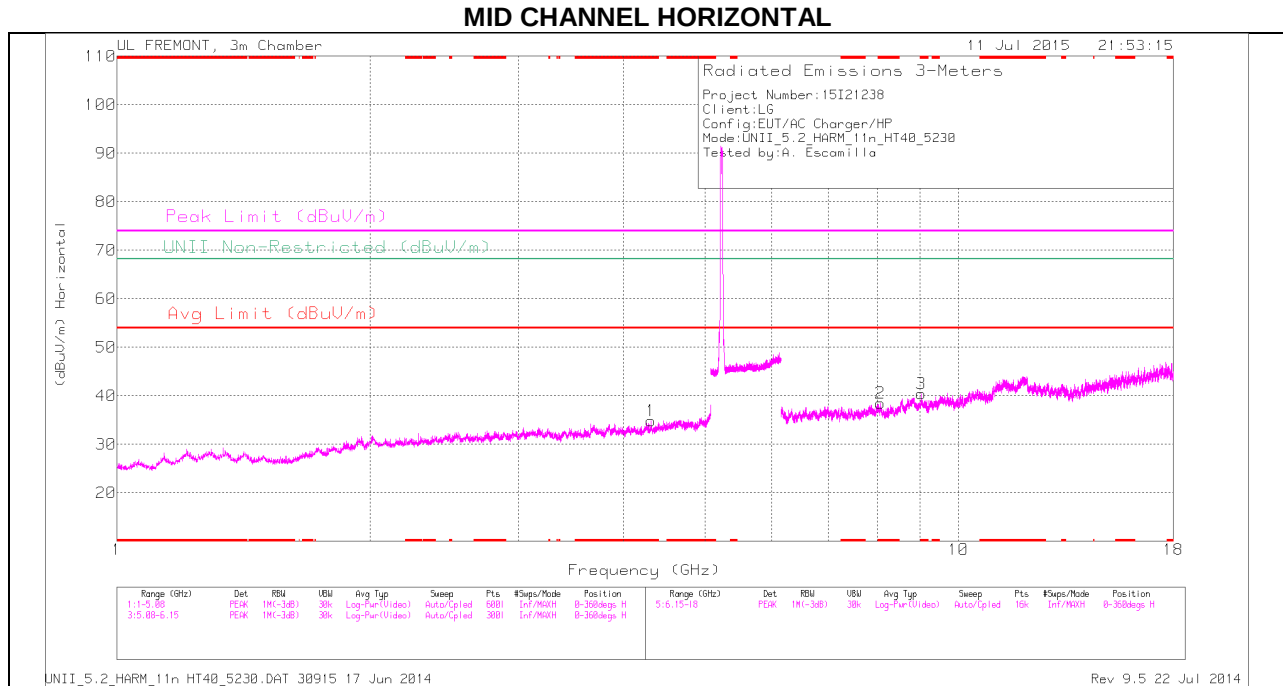
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.839	31.35	PK	33.1	-30.2	0	34.25	-	-	74	-39.75	-	-	0-360	200	H
4	* 3.687	31.3	PK	33	-29.9	0	34.4	-	-	74	-39.6	-	-	0-360	100	V
5	8.013	29.72	PK	35.8	-26.9	0	38.62	-	-	-	-	68.2	-29.58	0-360	100	V
2	8.83	28.33	PK	35.9	-24.3	0	39.93	-	-	-	-	68.2	-28.27	0-360	100	H
6	8.83	28.43	PK	35.9	-24.3	0	40.03	-	-	-	-	68.2	-28.17	0-360	100	V
3	10.4	28.65	PK	37.3	-24.3	0	41.65	-	-	-	-	68.2	-26.55	0-360	100	H

PK - Peak detector

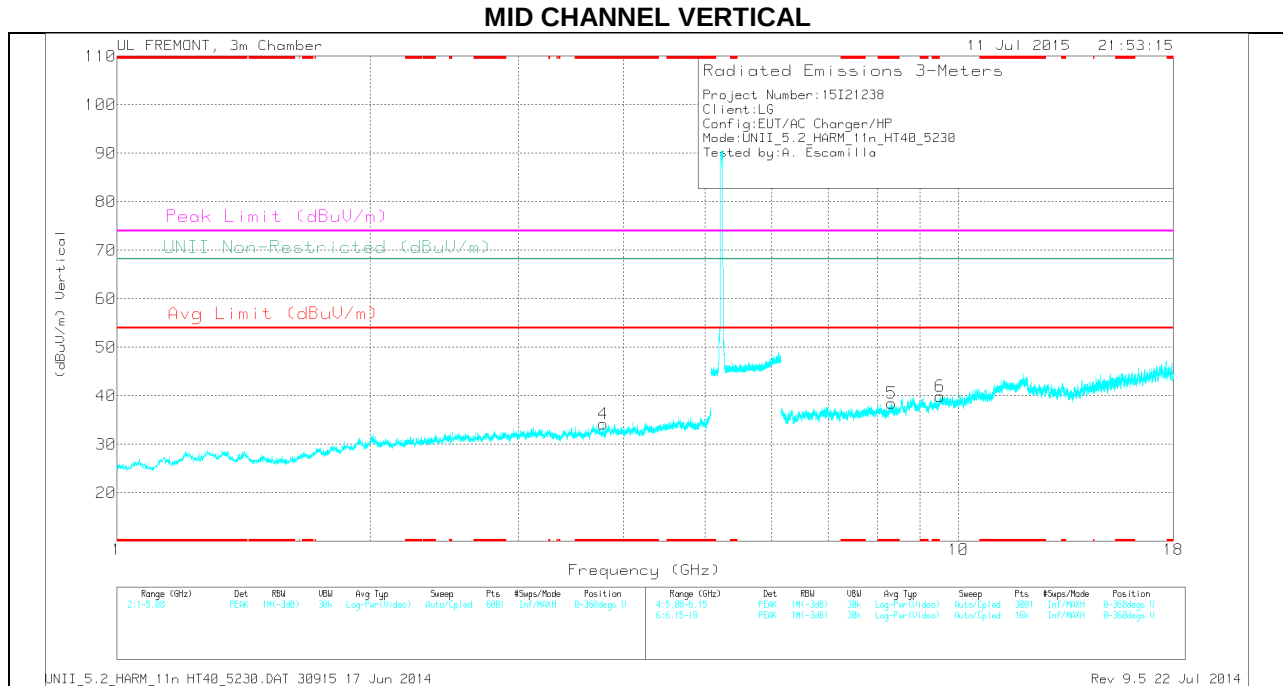
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.839	40.24	PK1	33.1	-30.2	0	43.14	-	-	74	-30.86	-	-	13	200	H
* 3.84	28.74	AD1	33.1	-30.2	.5	32.14	54	-21.86	-	-	-	-	13	200	H
* 3.687	40.43	PK1	33	-29.9	0	43.53	-	-	74	-30.47	-	-	108	209	V
* 3.686	28.48	AD1	33	-29.9	.5	32.14	54	-21.92	-	-	-	-	108	209	V
8.014	38.74	PK1	35.8	-26.9	0	47.64	-	-	-	-	68.2	-20.56	141	186	V
8.831	36.6	PK1	35.9	-24.3	0	48.2	-	-	-	-	68.2	-20	45	184	H
8.831	36.77	PK1	35.9	-24.3	0	48.37	-	-	-	-	68.2	-19.83	245	199	V
10.402	36.48	PK1	37.3	-24.3	0	49.48	-	-	-	-	68.2	-18.72	80	158	H

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; 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/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.311	30.75	PK	33.5	-29.4	0	34.85	-	-	74	-39.15	-	-	0-360	100	H
4	* 3.781	32.15	PK	33.1	-31	0	34.25	-	-	74	-39.75	-	-	0-360	200	V
2	* 8.072	29.33	PK	35.7	-26.5	0	38.53	-	-	74	-35.47	-	-	0-360	100	H
3	* 9.037	28.04	PK	36.1	-23.7	0	40.44	-	-	74	-33.56	-	-	0-360	100	H
5	* 8.323	28.43	PK	35.8	-25.7	0	38.53	-	-	74	-35.47	-	-	0-360	200	V
6	9.506	27.19	PK	36.6	-23.9	0	39.89	-	-	-	-	68.2	-28.31	0-360	200	V

PK - Peak detector

RADIATED EMISSIONS

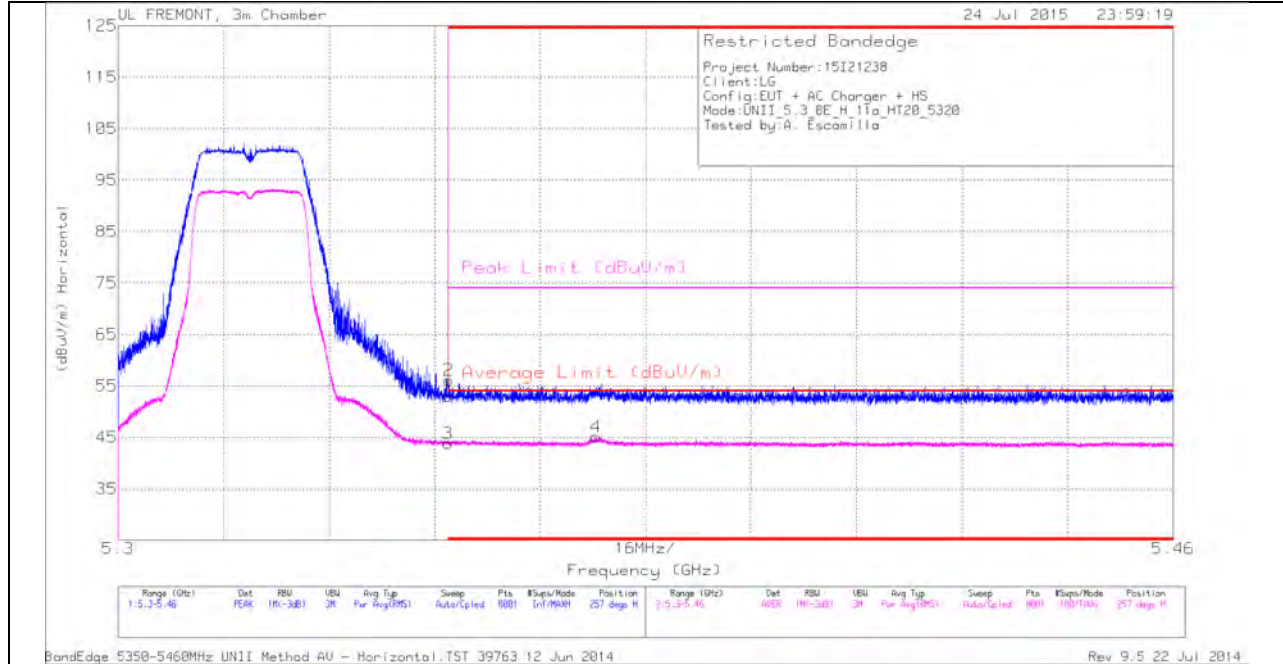
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.309	39.71	PK1	33.5	-29.4	0	43.81	-	-	74	-30.19	-	-	339	155	H
* 4.312	27.67	AD1	33.5	-29.4	.5	32.27	54	-21.73	-	-	-	-	339	155	H
* 3.783	40.15	PK1	33.1	-31	0	42.25	-	-	74	-31.75	-	-	194	197	V
* 3.78	28.75	AD1	33.1	-30.9	.5	31.48	54	-22.55	-	-	-	-	194	197	V
* 8.074	37.69	PK1	35.7	-26.5	0	46.89	-	-	74	-27.11	-	-	294	139	H
* 8.074	26.16	AD1	35.7	-26.5	.5	35.86	54	-18.14	-	-	-	-	294	139	H
* 9.038	36.32	PK1	36.1	-23.7	0	48.72	-	-	74	-25.28	-	-	227	161	H
* 9.036	24.98	AD1	36.1	-23.7	.5	37.88	54	-16.12	-	-	-	-	227	161	H
* 8.323	37.45	PK1	35.8	-25.7	0	47.55	-	-	74	-26.45	-	-	143	184	V
* 8.322	25.97	AD1	35.8	-25.7	.5	36.57	54	-17.43	-	-	-	-	143	184	V
9.506	36.16	PK1	36.6	-23.9	0	48.86	-	-	-	-	68.2	-19.34	85	213	V

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11.2. 5.3 GHz

11.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

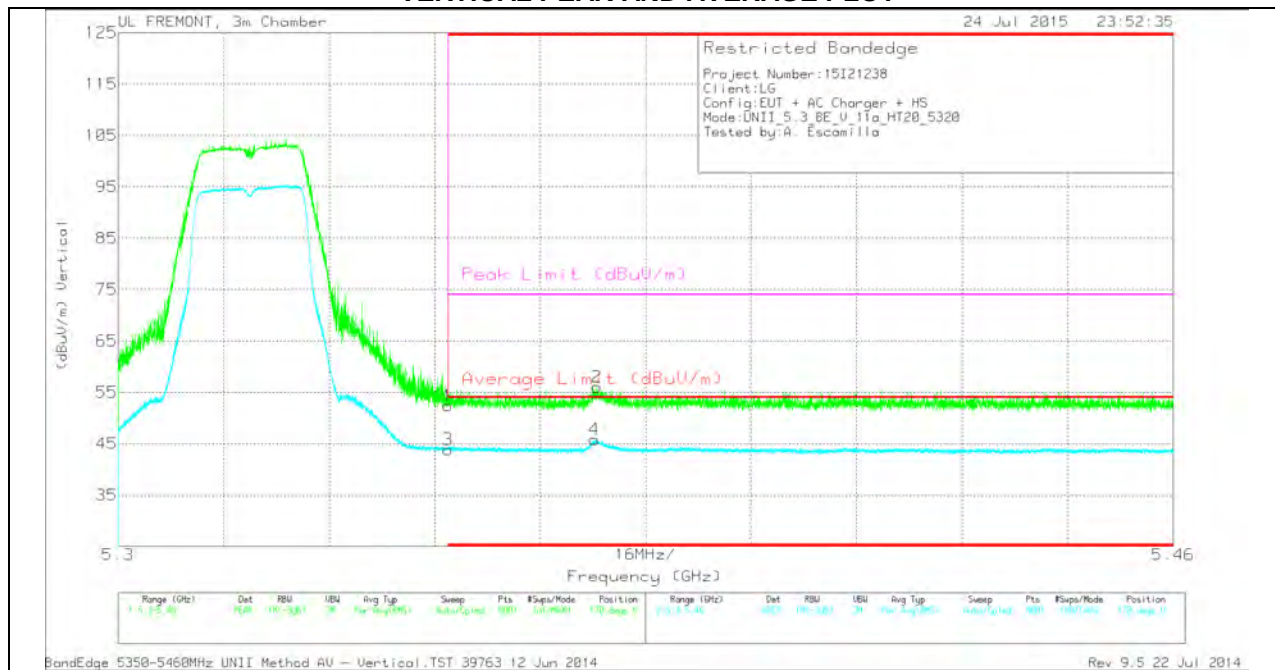
HORIZONTAL PEAK AND AVERAGE PLOT



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	* 5.35	38.99	PK	34.5	-20.5	0	52.99	-	-	74	-21.01	257	334	H
2	* 5.35	42.09	PK	34.5	-20.5	0	56.09	-	-	74	-17.91	257	334	H
3	* 5.35	29.59	RMS	34.5	-20.5	.25	43.84	54	-10.16	-	-	257	334	H
4	* 5.372	30.81	RMS	34.6	-20.6	.25	45.06	54	-8.94	-	-	257	334	H

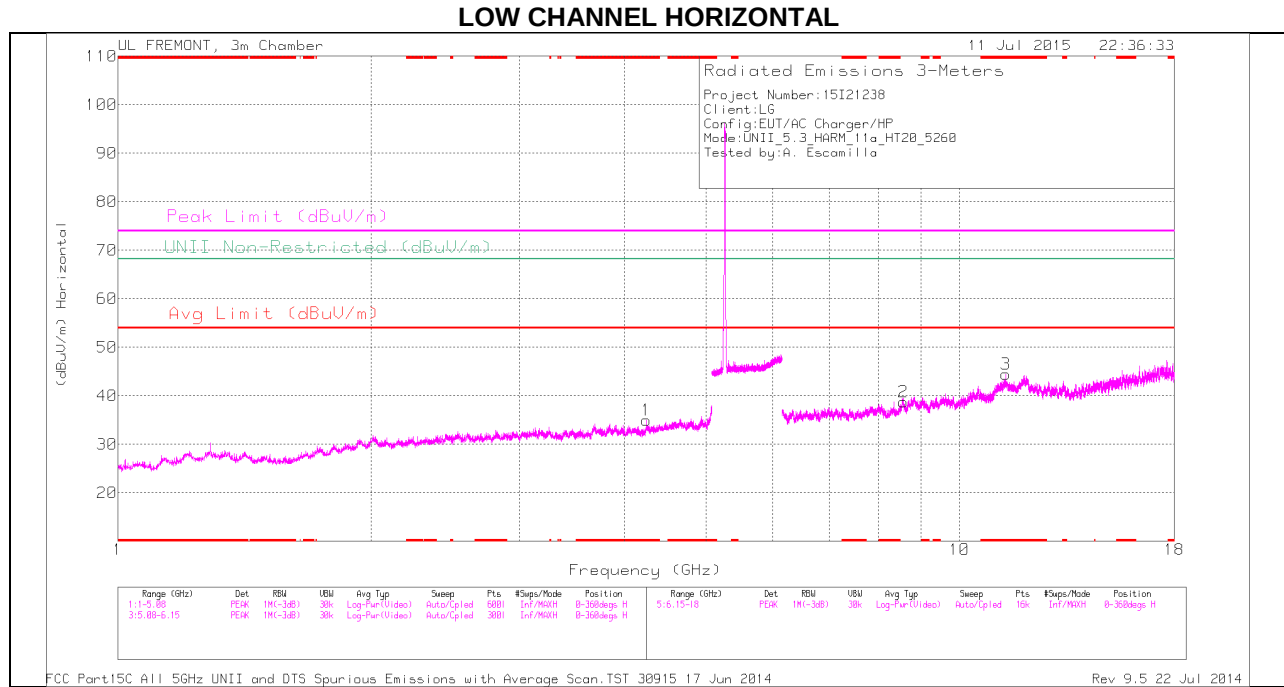
VERTICAL PEAK AND AVERAGE PLOT



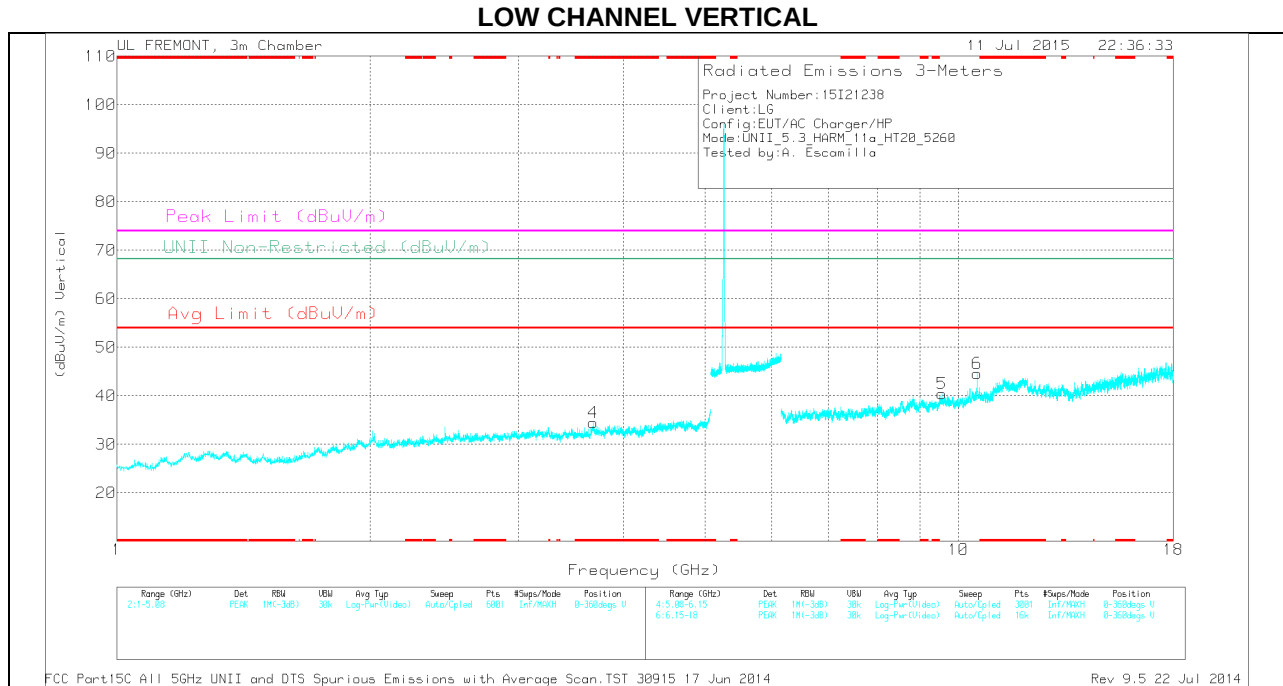
VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Ftr/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	* 5.35	38.42	PK	34.5	-20.5	0	52.42	-	-	74	-21.58	170	337	V
2	* 5.373	42.03	PK	34.6	-20.6	0	56.03	-	-	74	-17.97	170	337	V
3	* 5.35	29.63	RMS	34.5	-20.5	.25	43.88	54	-10.12	-	-	170	337	V
4	* 5.372	31.58	RMS	34.6	-20.6	.25	45.83	54	-8.17	-	-	170	337	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

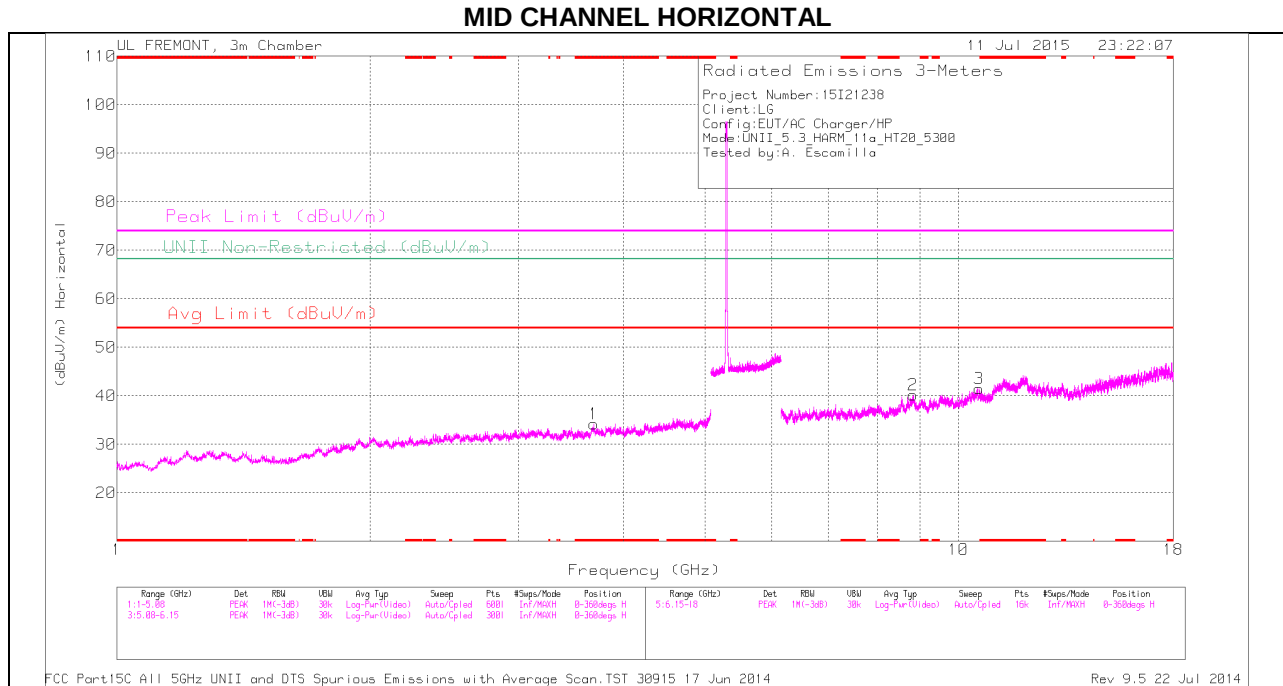
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.243	31.74	PK	33.4	-30.2	0	34.94	-	-	74	-39.06	-	-	0-360	100	H
4	* 3.681	31.18	PK	33	-29.7	0	34.48	-	-	74	-39.52	-	-	0-360	200	V
3	* 11.343	29.09	PK	38.1	-22.7	0	44.49	-	-	74	-29.51	-	-	0-360	100	H
2	8.58	27.94	PK	35.8	-25	0	38.74	-	-	-	-	68.2	-29.46	0-360	100	H
5	9.563	27.27	PK	36.7	-23.5	0	40.47	-	-	-	-	68.2	-27.73	0-360	100	V
6	10.521	30.48	PK	37.5	-23.4	0	44.58	-	-	-	-	68.2	-23.62	0-360	100	V

PK - Peak detector

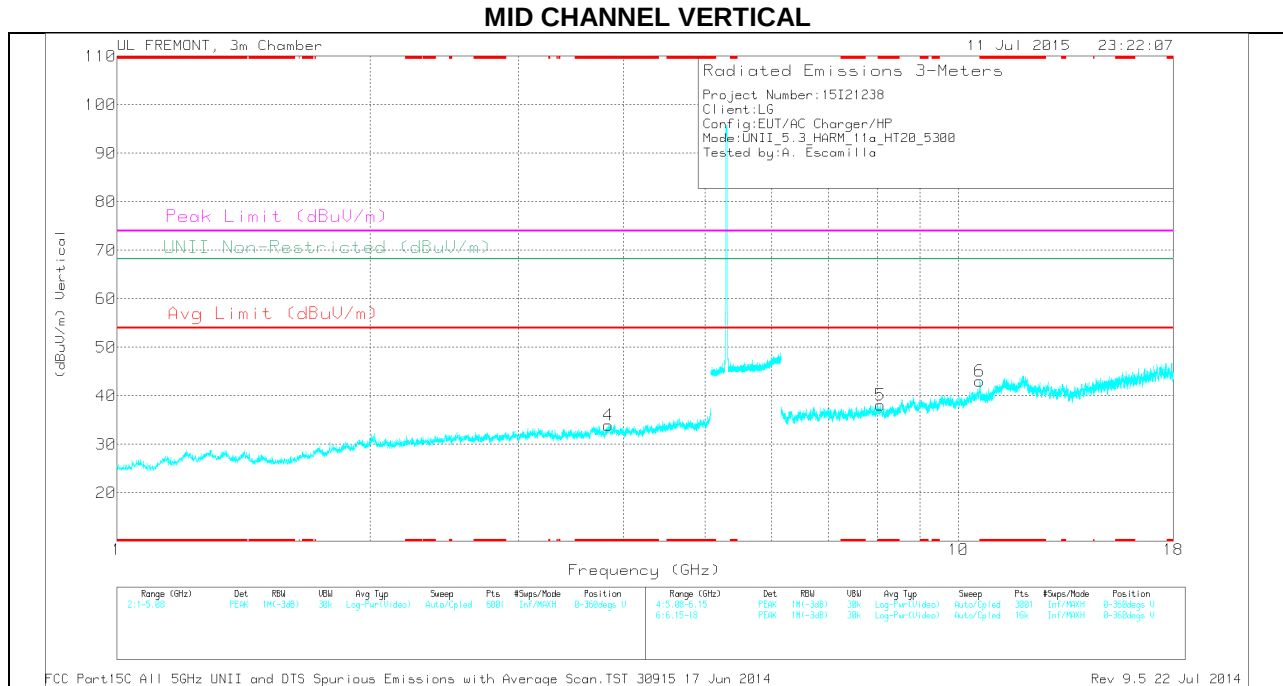
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.243	39.95	PK1	33.4	-30.2	0	43.15	-	-	74	-30.85	-	-	11	154	H
* 4.245	28.72	AD1	33.4	-30.2	.2	32.12	54	-21.88	-	-	-	-	11	154	H
* 3.683	40.43	PK1	33	-29.7	0	43.73	-	-	74	-30.27	-	-	91	226	V
* 3.683	28.58	AD1	33	-29.7	.2	32.08	54	-21.92	-	-	-	-	91	226	V
* 11.342	36.69	PK1	38.1	-22.7	0	52.09	-	-	74	-21.91	-	-	55	194	H
* 11.345	25.45	AD1	38.1	-22.8	.2	40.95	54	-13.05	-	-	-	-	55	194	H
8.579	37.36	PK1	35.8	-24.9	0	48.26	-	-	-	-	68.2	-19.94	31	154	H
9.564	36.16	PK1	36.7	-23.4	0	49.46	-	-	-	-	68.2	-18.74	125	170	V
10.521	36.5	PK1	37.5	-23.4	0	50.6	-	-	-	-	68.2	-17.6	85	150	V

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

TRACE MARKERS

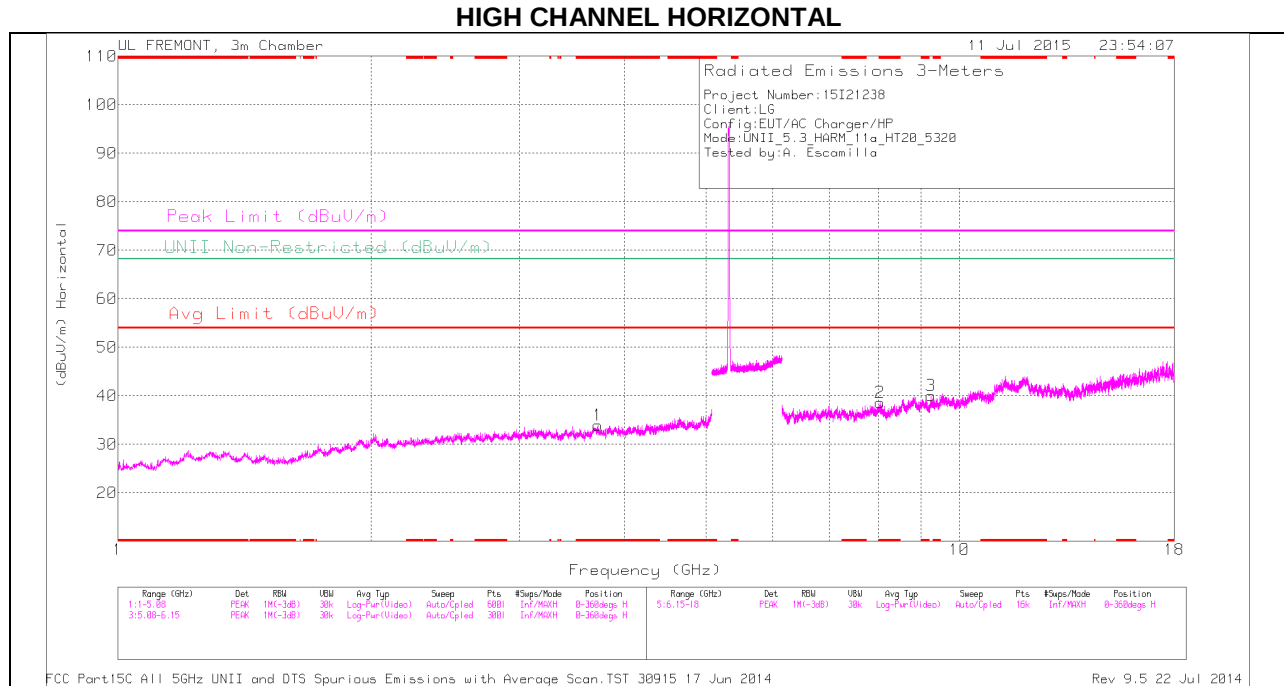
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.689	31.22	PK	33	-30	0	34.22	-	-	74	-39.78	-	-	0-360	100	H
4	* 3.837	30.93	PK	33.1	-30.1	0	33.93	-	-	74	-40.07	-	-	0-360	200	V
5	* 8.072	28.88	PK	35.7	-26.5	0	38.08	-	-	74	-35.92	-	-	0-360	100	V
2	8.829	28.6	PK	35.9	-24.3	0	40.2	-	-	-	-	68.2	-28	0-360	100	H
3	10.573	26.9	PK	37.6	-23	0	41.5	-	-	-	-	68.2	-26.7	0-360	100	H
6	10.598	28.65	PK	37.6	-23.2	0	43.05	-	-	-	-	68.2	-25.15	0-360	100	V

PK - Peak detector

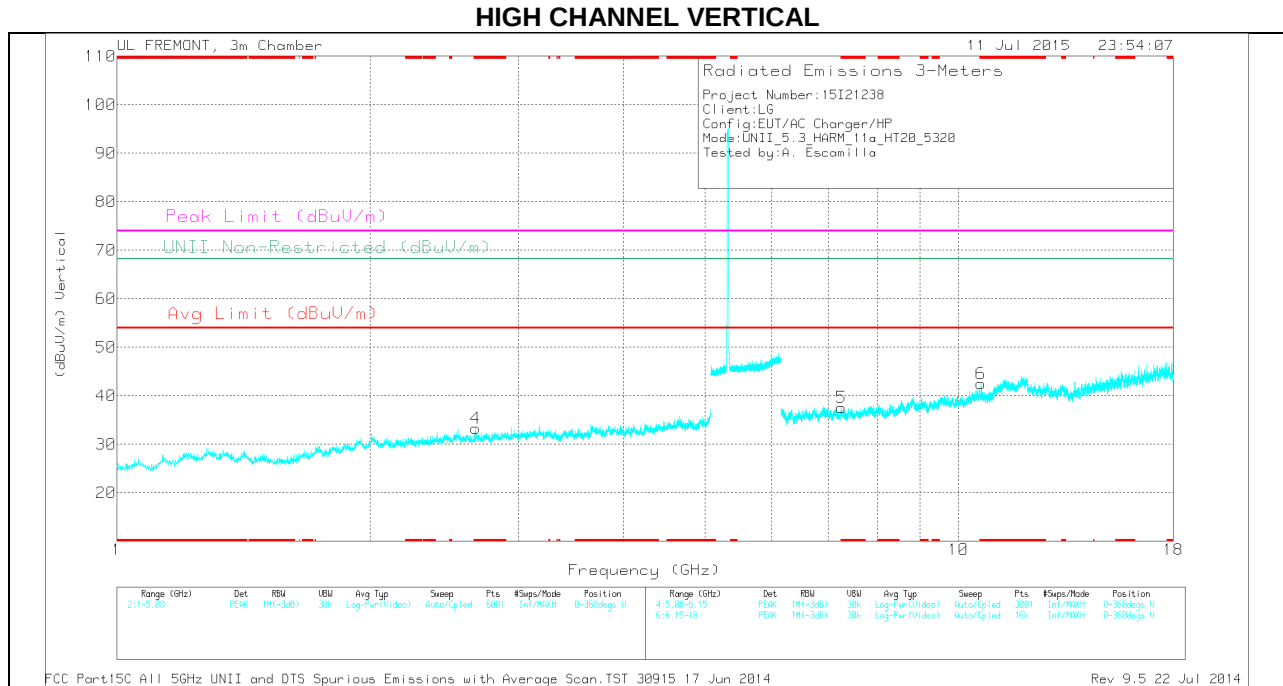
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.687	39.75	PK1	33	-29.9	0	42.85	-	-	74	-31.15	-	-	24	134	H
* 3.69	28.44	AD1	33	-30	.25	31.69	54	-22.31	-	-	-	-	24	134	H
* 3.837	40.04	PK1	33.1	-30.1	0	43.04	-	-	74	-30.96	-	-	76	200	V
* 3.838	28.78	AD1	33.1	-30.1	.25	32.03	54	-21.97	-	-	-	-	76	200	V
* 8.07	38	PK1	35.7	-26.6	0	47.1	-	-	74	-26.9	-	-	103	150	V
* 8.073	26.5	AD1	35.7	-26.5	.25	35.95	54	-18.05	-	-	-	-	103	150	V
8.831	36.83	PK1	35.9	-24.3	0	48.43	-	-	-	-	68.2	-19.77	58	181	H
10.575	35.5	PK1	37.6	-22.9	0	50.2	-	-	-	-	68.2	-18	93	158	H
10.599	37.64	PK1	37.6	-23.3	0	51.94	-	-	-	-	68.2	-16.26	169	176	V

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Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.716	31.25	PK	33	-30.3	0	33.95	-	-	74	-40.05	-	-	0-360	200	H
4	* 2.669	32.64	PK	32.3	-31.6	0	33.34	-	-	74	-40.66	-	-	0-360	200	V
2	* 8.044	29.31	PK	35.7	-26.4	0	38.61	-	-	74	-35.39	-	-	0-360	200	H
5	* 7.255	30.03	PK	35.6	-28	0	37.63	-	-	74	-36.37	-	-	0-360	100	V
6	* 10.641	28.45	PK	37.7	-23.6	0	42.55	-	-	74	-31.45	-	-	0-360	100	V
3	9.251	28.27	PK	36.3	-24.5	0	40.07	-	-	-	-	68.2	-28.13	0-360	100	H

PK - Peak detector

RADIATED EMISSIONS

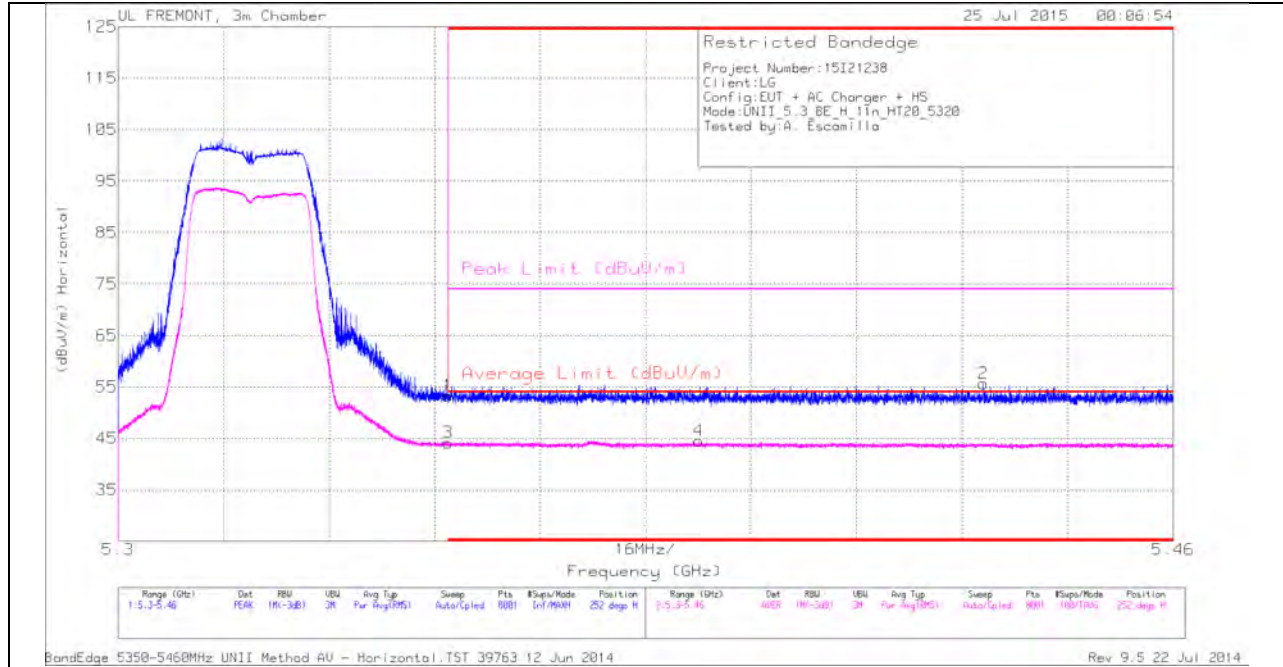
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.717	39.67	PK1	33	-30.3	0	42.37	-	-	74	-31.63	-	-	0	202	H
* 3.717	28.31	AD1	33	-30.3	.25	31.26	54	-22.74	-	-	-	-	0	202	H
* 2.669	40.96	PK1	32.3	-31.6	0	41.66	-	-	74	-32.34	-	-	93	207	V
* 2.671	29.33	AD1	32.3	-31.6	.25	30.28	54	-23.72	-	-	-	-	93	207	V
* 8.042	37.18	PK1	35.7	-26.4	0	46.48	-	-	74	-27.52	-	-	17	218	H
* 8.046	25.95	AD1	35.7	-26.4	.25	35.5	54	-18.5	-	-	-	-	17	218	H
* 7.256	39.23	PK1	35.6	-28	0	46.83	-	-	74	-27.17	-	-	139	217	V
* 7.256	27.67	AD1	35.6	-28	.25	35.52	54	-18.48	-	-	-	-	139	217	V
* 10.642	38.16	PK1	37.7	-23.6	0	52.26	-	-	74	-21.74	-	-	173	234	V
* 10.642	25.63	AD1	37.7	-23.6	.25	39.98	54	-14.02	-	-	-	-	173	234	V
9.251	37.06	PK1	36.3	-24.5	0	48.86	-	-	-	-	68.2	-19.34	54	159	H

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11.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

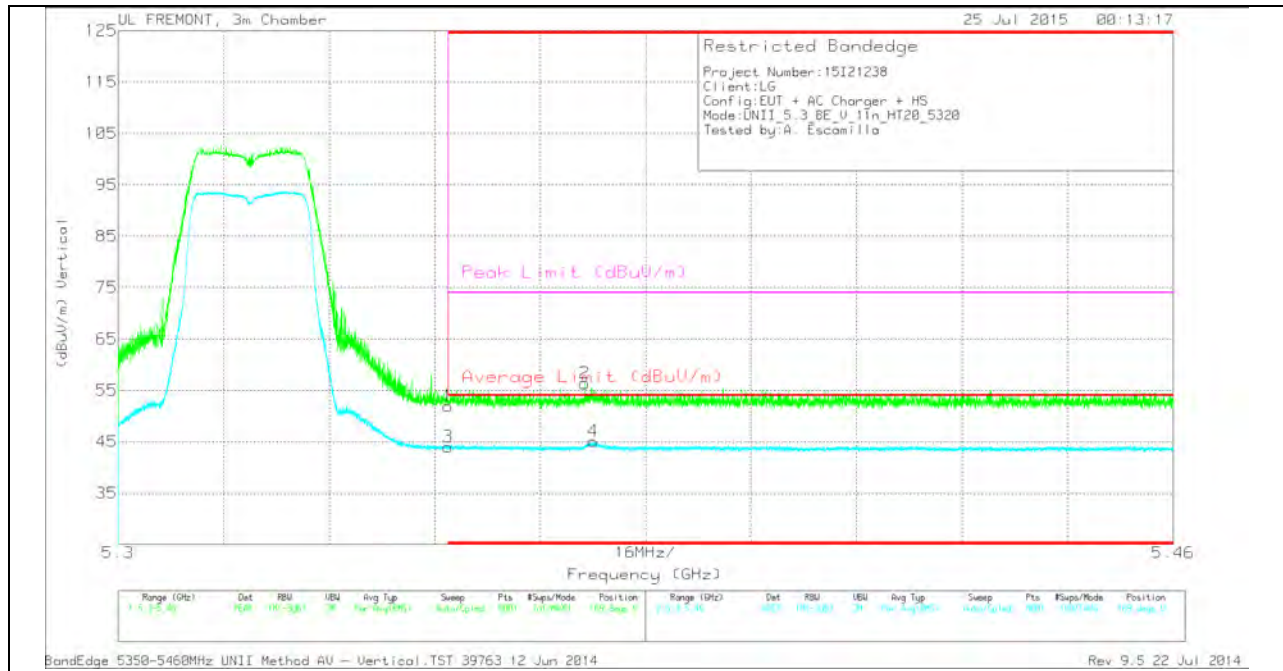
HORIZONTAL PEAK AND AVERAGE PLOT



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	* 5.35	39.3	PK	34.5	-20.5	0	53.3	-	-	74	-20.7	252	390	H
3	* 5.35	29.9	RMS	34.5	-20.5	.25	44.15	54	-9.85	-	-	252	390	H
4	* 5.388	30.26	RMS	34.6	-20.6	.25	44.51	54	-9.49	-	-	252	390	H
2	* 5.431	41.76	PK	34.6	-20.7	0	55.66	-	-	74	-18.34	252	390	H

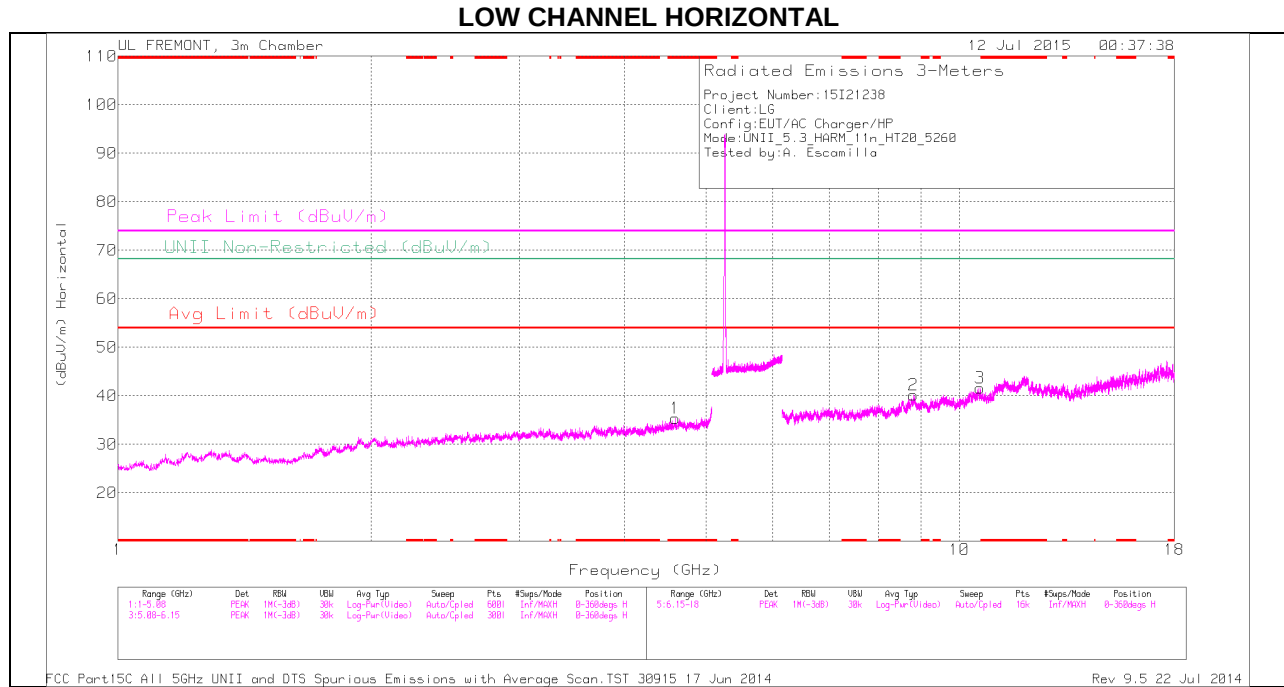
VERTICAL PEAK AND AVERAGE PLOT



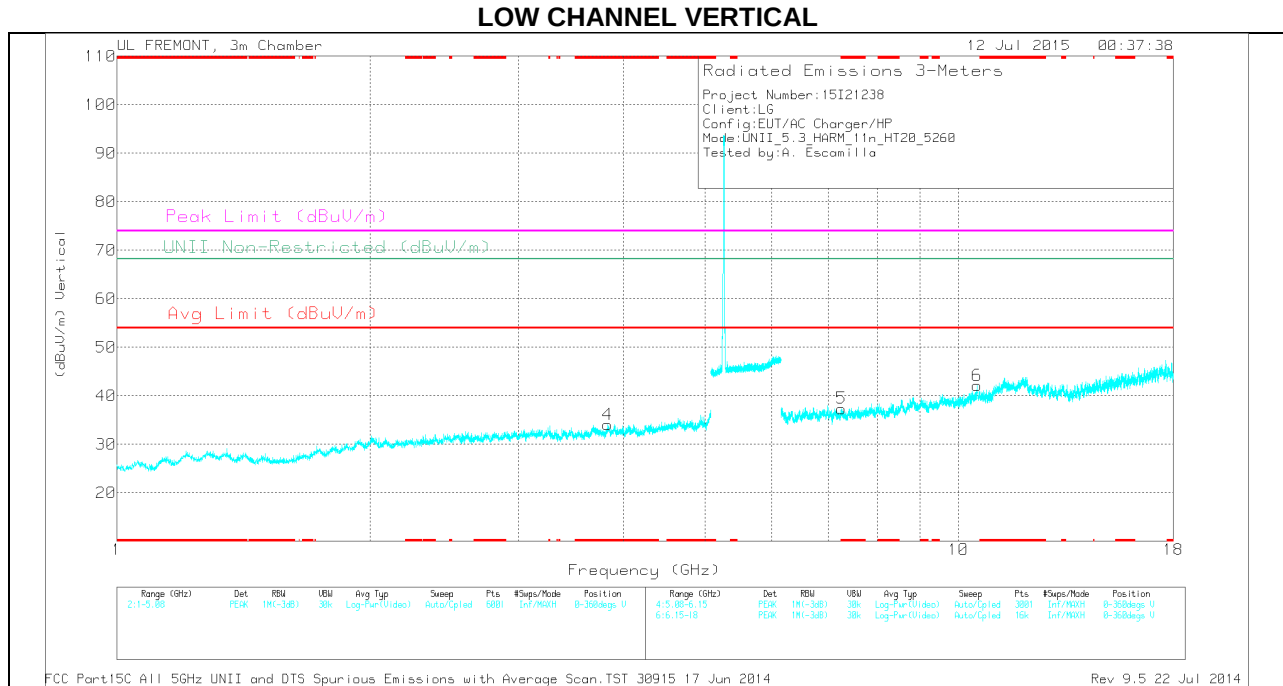
VERTICAL DATA

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	* 5.35	37.96	PK	34.5	-20.5	0	51.96	-	-	74	-22.04	169	398	V
3	* 5.35	29.76	RMS	34.5	-20.5	.25	44.01	54	-9.99	-	-	169	398	V
2	* 5.371	42.5	PK	34.6	-20.7	0	56.4	-	-	74	-17.6	169	398	V
4	* 5.372	30.85	RMS	34.6	-20.6	.25	45.1	54	-8.9	-	-	169	398	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

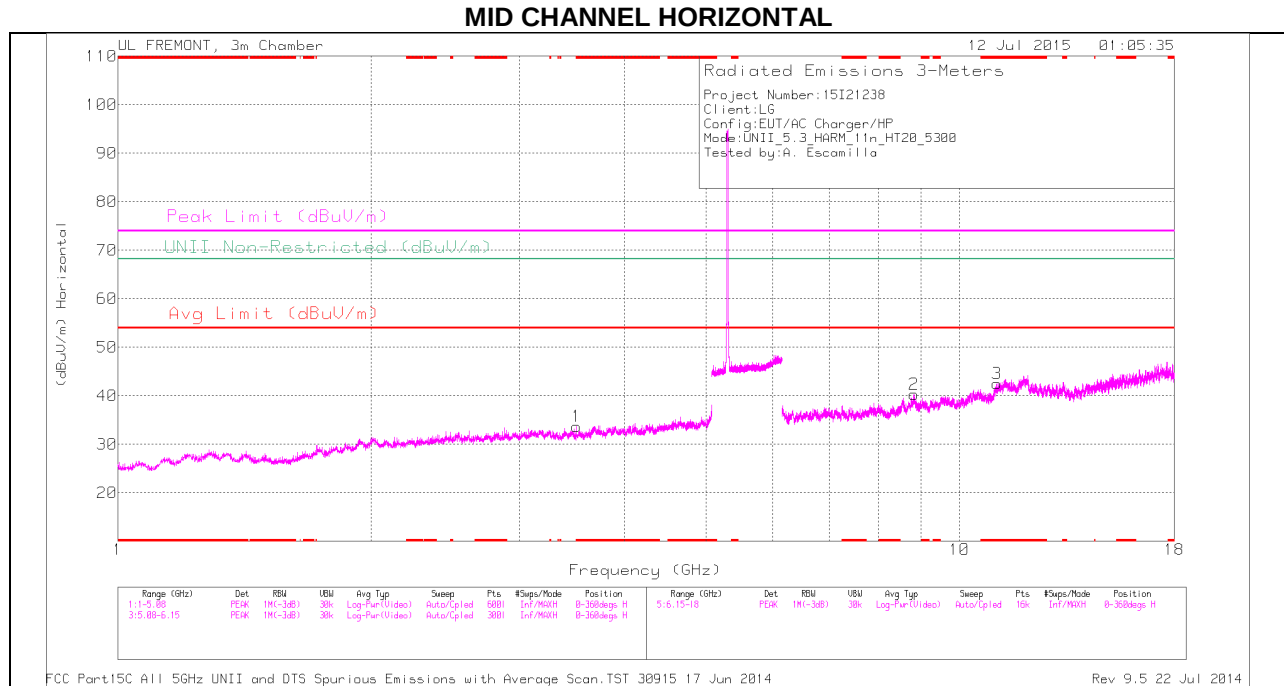
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.592	31.31	PK	33.9	-29.8	0	35.41	-	-	74	-38.59	-	-	0-360	200	H
4	* 3.827	31.22	PK	33.1	-30.2	0	34.12	-	-	74	-39.88	-	-	0-360	200	V
5	* 7.254	29.79	PK	35.6	-28	0	37.39	-	-	74	-36.61	-	-	0-360	200	V
2	8.817	28.48	PK	35.9	-24.2	0	40.18	-	-	-	-	68.2	-28.02	0-360	100	H
6	10.525	27.98	PK	37.5	-23.3	0	42.18	-	-	-	-	68.2	-26.02	0-360	100	V
3	10.579	26.76	PK	37.6	-22.7	0	41.66	-	-	-	-	68.2	-26.54	0-360	100	H

PK - Peak detector

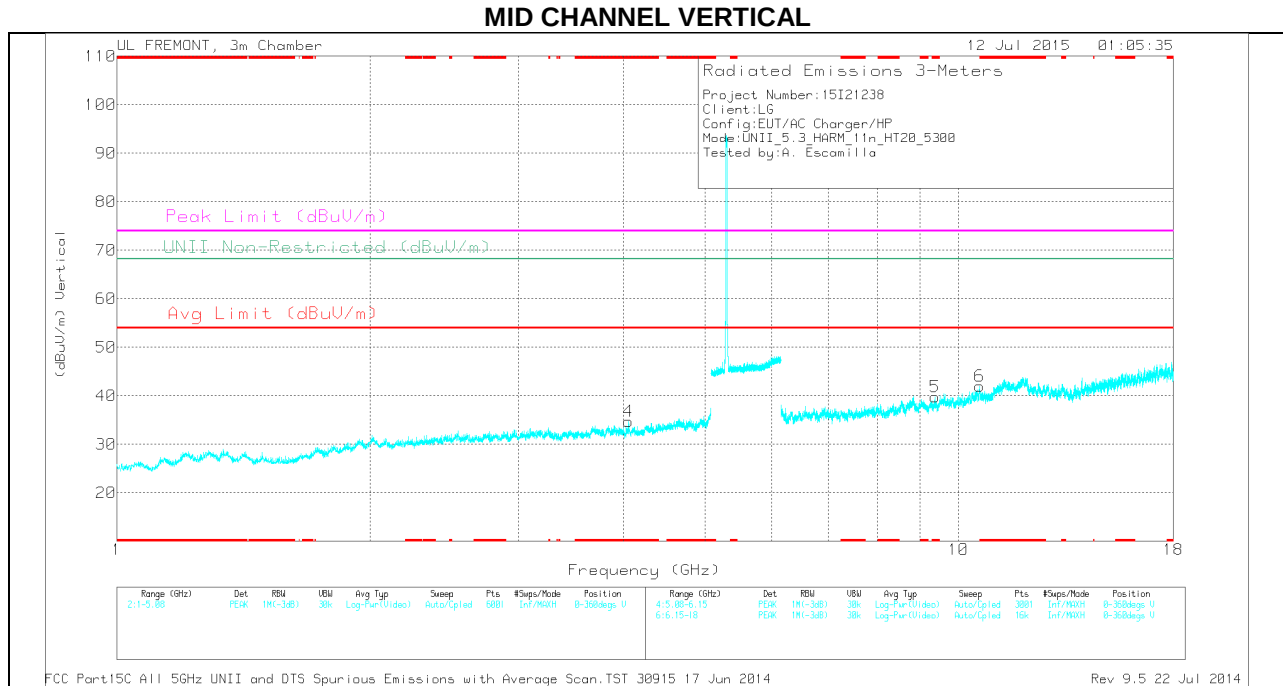
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.592	39.86	PK1	33.9	-29.8	0	43.96	-	-	74	-30.04	-	-	7	200	H
* 4.594	28.41	AD1	33.9	-29.7	.25	32.86	54	-21.14	-	-	-	-	7	200	H
* 3.829	40.41	PK1	33.1	-30.2	0	43.31	-	-	74	-30.69	-	-	112	190	V
* 3.829	28.51	AD1	33.1	-30.2	.25	31.66	54	-22.34	-	-	-	-	112	190	V
* 7.256	39.07	PK1	35.6	-28	0	46.67	-	-	74	-27.33	-	-	108	224	V
* 7.256	27.65	AD1	35.6	-28	.25	35.5	54	-18.5	-	-	-	-	108	224	V
8.816	36.56	PK1	35.9	-24.3	0	48.16	-	-	-	-	68.2	-20.04	39	181	H
10.525	37.15	PK1	37.5	-23.3	0	51.35	-	-	-	-	68.2	-16.85	209	205	V
10.58	35.47	PK1	37.6	-22.7	0	50.37	-	-	-	-	68.2	-17.83	80	158	H

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MID CHANNEL DATA

TRACE MARKERS

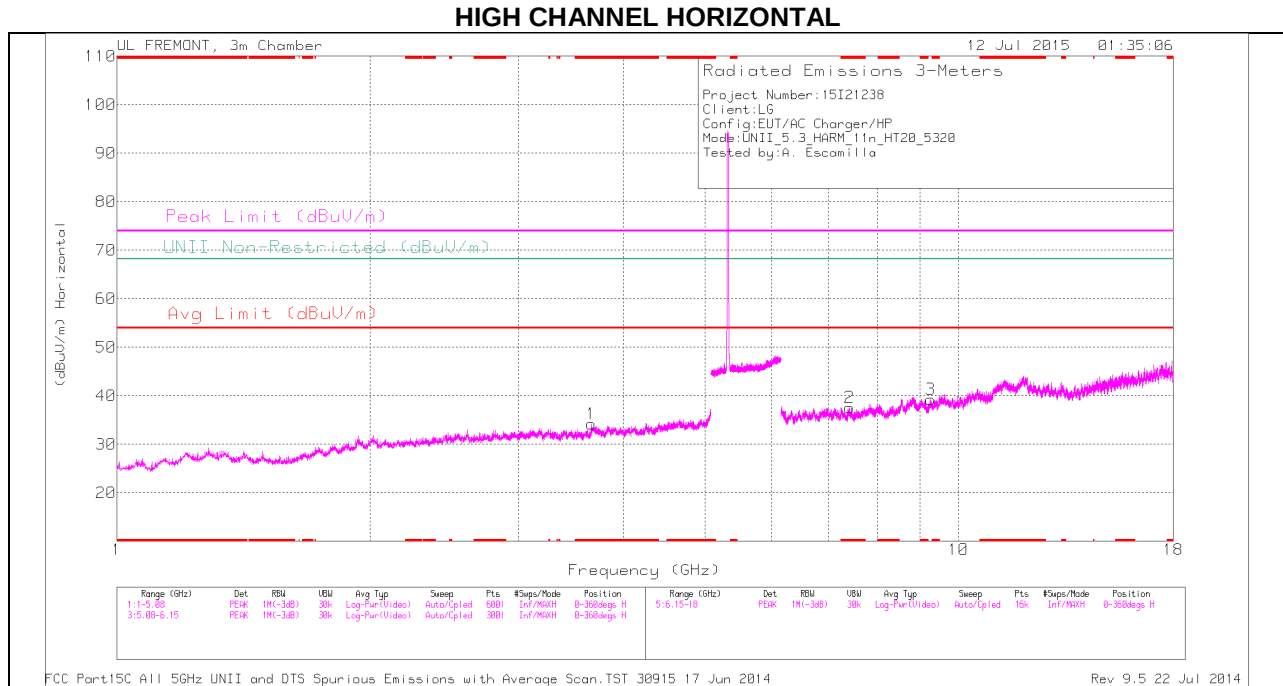
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.506	31.59	PK	32.8	-30.7	0	33.69	-	-	74	-40.31	-	-	0-360	100	H
4	* 4.055	31.54	PK	33.3	-30.1	0	34.74	-	-	74	-39.26	-	-	0-360	200	V
3	* 11.085	27.87	PK	37.8	-23.2	0	42.47	-	-	74	-31.53	-	-	0-360	200	H
5	* 9.38	28.07	PK	36.4	-24.7	0	39.77	-	-	74	-34.23	-	-	0-360	100	V
6	* 10.6	27.82	PK	37.6	-23.4	0	42.02	-	-	74	-31.98	-	-	0-360	100	V
2	8.832	28.67	PK	35.9	-24.3	0	40.27	-	-	-	-	68.2	-27.93	0-360	100	H

PK - Peak detector

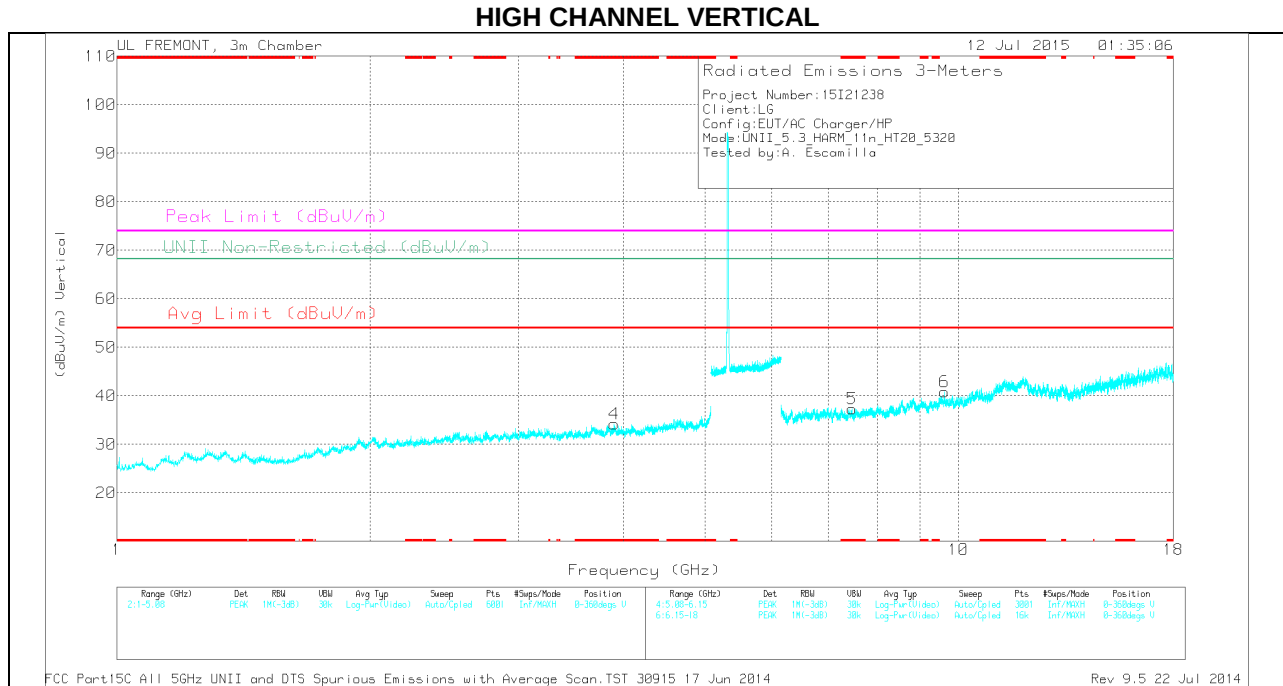
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.507	40.48	PK1	32.8	-30.6	0	42.68	-	-	74	-31.32	-	-	351	204	H
* 3.507	28.41	AD1	32.8	-30.6	.25	30.86	54	-23.14	-	-	-	-	351	204	H
* 4.055	40.26	PK1	33.3	-30.1	0	43.46	-	-	74	-30.54	-	-	277	212	V
* 4.057	28.74	AD1	33.3	-30.2	.25	32.09	54	-21.91	-	-	-	-	277	212	V
* 11.086	35.98	PK1	37.8	-23.2	0	50.58	-	-	74	-23.42	-	-	294	180	H
* 11.087	24.98	AD1	37.8	-23.3	.25	39.73	54	-14.27	-	-	-	-	294	180	H
* 9.381	37.6	PK1	36.4	-24.8	0	49.2	-	-	74	-24.8	-	-	228	169	V
* 9.379	25.33	AD1	36.4	-24.7	.25	37.28	54	-16.72	-	-	-	-	228	169	V
* 10.6	37.36	PK1	37.6	-23.4	0	51.56	-	-	74	-22.44	-	-	200	167	V
* 10.6	25.92	AD1	37.6	-23.4	.25	40.37	54	-13.63	-	-	-	-	200	167	V
8.834	36.67	PK1	35.9	-24.4	0	48.17	-	-	-	-	68.2	-20.03	311	162	H

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.659	31.39	PK	32.9	-30.1	0	34.19	-	-	74	-39.81	-	-	0-360	100	H
4	* 3.899	31.11	PK	33.2	-30.1	0	34.21	-	-	74	-39.79	-	-	0-360	100	V
2	* 7.417	29.44	PK	35.6	-27.4	0	37.64	-	-	74	-36.36	-	-	0-360	100	H
5	* 7.471	29.22	PK	35.7	-27.6	0	37.32	-	-	74	-36.68	-	-	0-360	100	V
3	9.266	27.48	PK	36.3	-24.5	0	39.28	-	-	-	-	68.2	-28.92	0-360	100	H
6	9.623	27.92	PK	36.7	-23.8	0	40.82	-	-	-	-	68.2	-27.38	0-360	100	V

PK - Peak detector

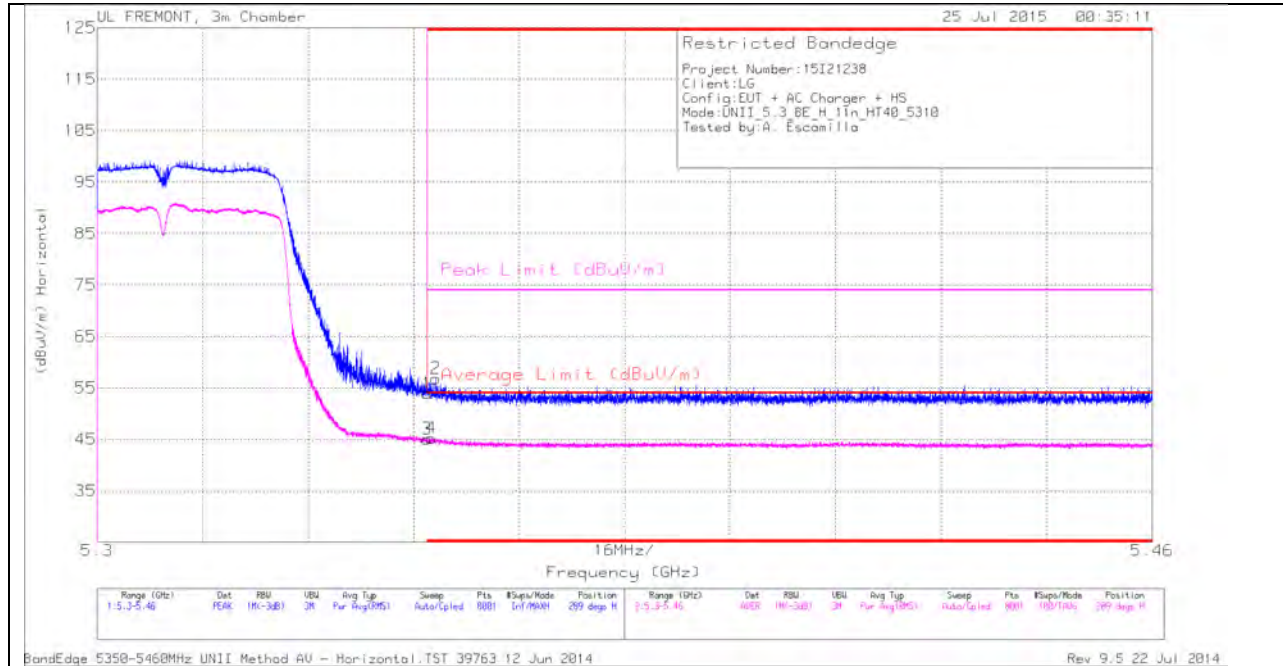
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.661	40.25	PK1	32.9	-30	0	43.15	-	-	74	-30.85	-	-	341	238	H
* 3.66	28.19	AD1	32.9	-30	.25	31.34	54	-22.66	-	-	-	-	341	238	H
* 3.898	40.42	PK1	33.2	-30	0	43.62	-	-	74	-30.38	-	-	254	144	V
* 3.899	28.84	AD1	33.2	-30.1	.25	32.19	54	-21.81	-	-	-	-	254	144	V
* 7.418	38.51	PK1	35.6	-27.5	0	46.61	-	-	74	-27.39	-	-	321	219	H
* 7.415	27.09	AD1	35.6	-27.5	.25	35.44	54	-18.56	-	-	-	-	321	219	H
* 7.471	38.51	PK1	35.7	-27.6	0	46.61	-	-	74	-27.39	-	-	291	238	V
* 7.472	27.33	AD1	35.7	-27.6	.25	35.68	54	-18.32	-	-	-	-	291	238	V
9.265	37.32	PK1	36.3	-24.5	0	49.12	-	-	-	-	68.2	-19.08	293	187	H
9.622	35.99	PK1	36.7	-23.8	0	48.89	-	-	-	-	68.2	-19.31	302	168	V

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014

11.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

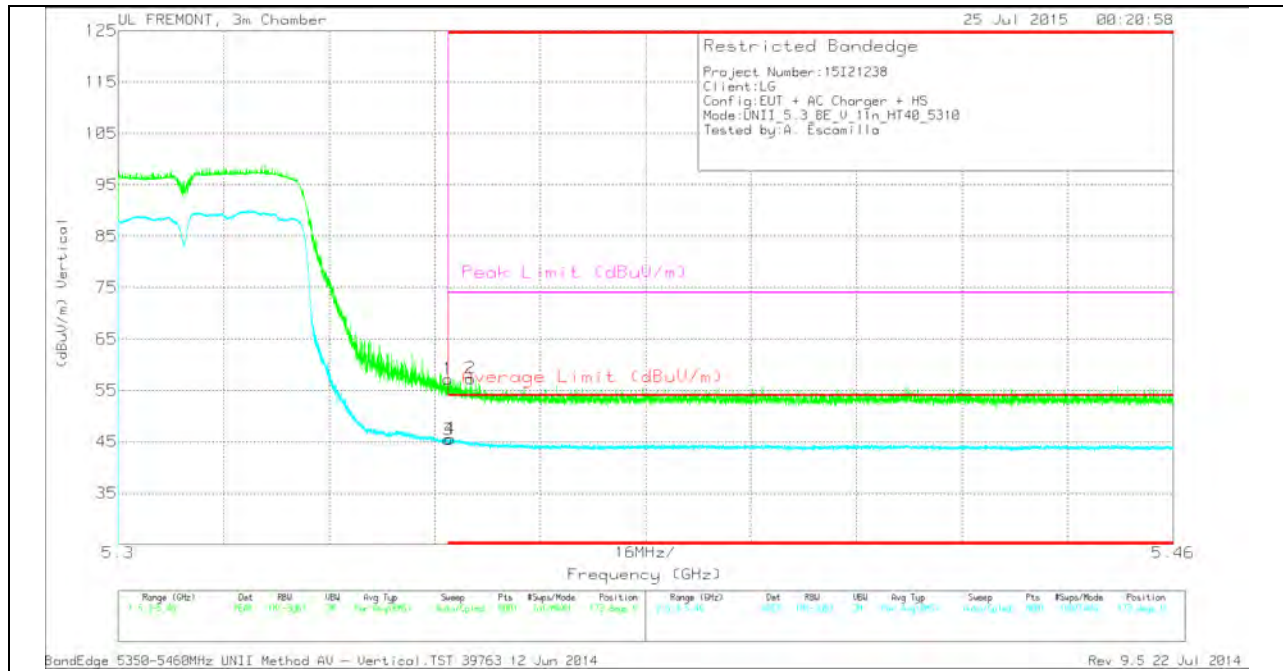
HORIZONTAL PEAK AND AVERAGE PLOT



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	* 5.35	39.96	PK	34.5	-20.5	0	53.96	-	-	74	-20.04	289	390	H
3	* 5.35	30.59	RMS	34.5	-20.5	.5	45.09	54	-8.91	-	-	289	390	H
2	* 5.351	42.83	PK	34.5	-20.5	0	56.83	-	-	74	-17.17	289	390	H
4	* 5.351	30.76	RMS	34.5	-20.5	.5	45.26	54	-8.74	-	-	289	390	H

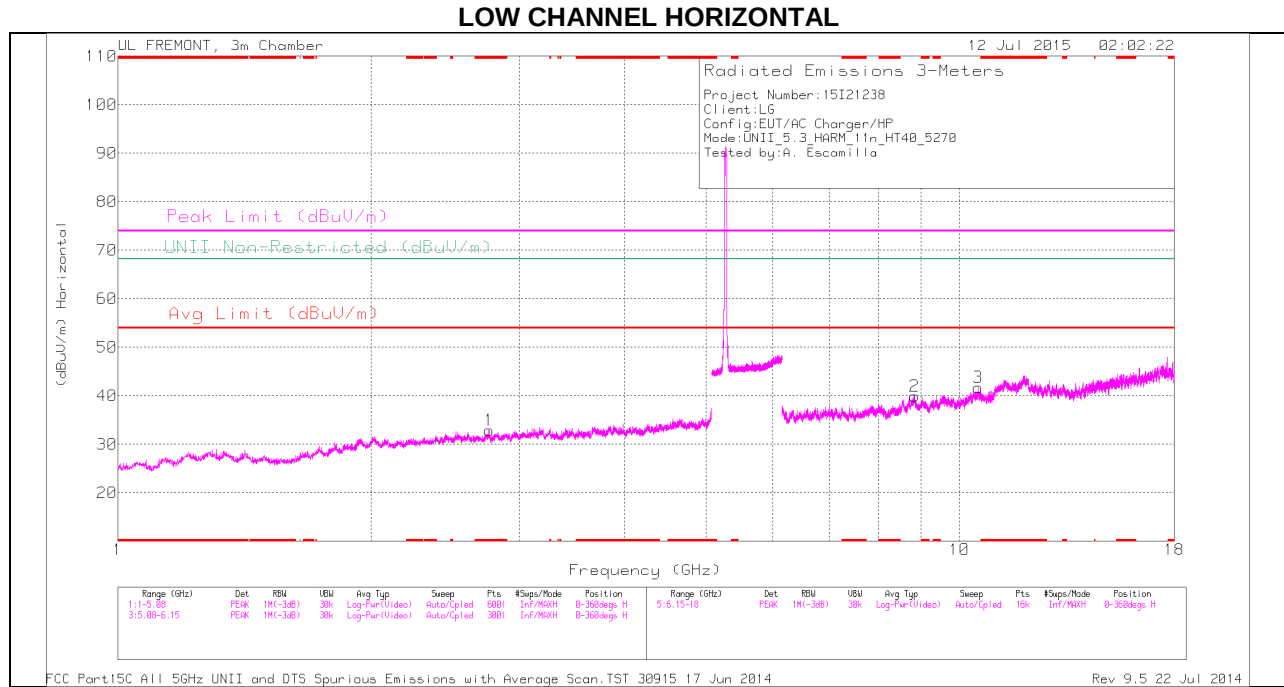
VERTICAL PEAK AND AVERAGE PLOT



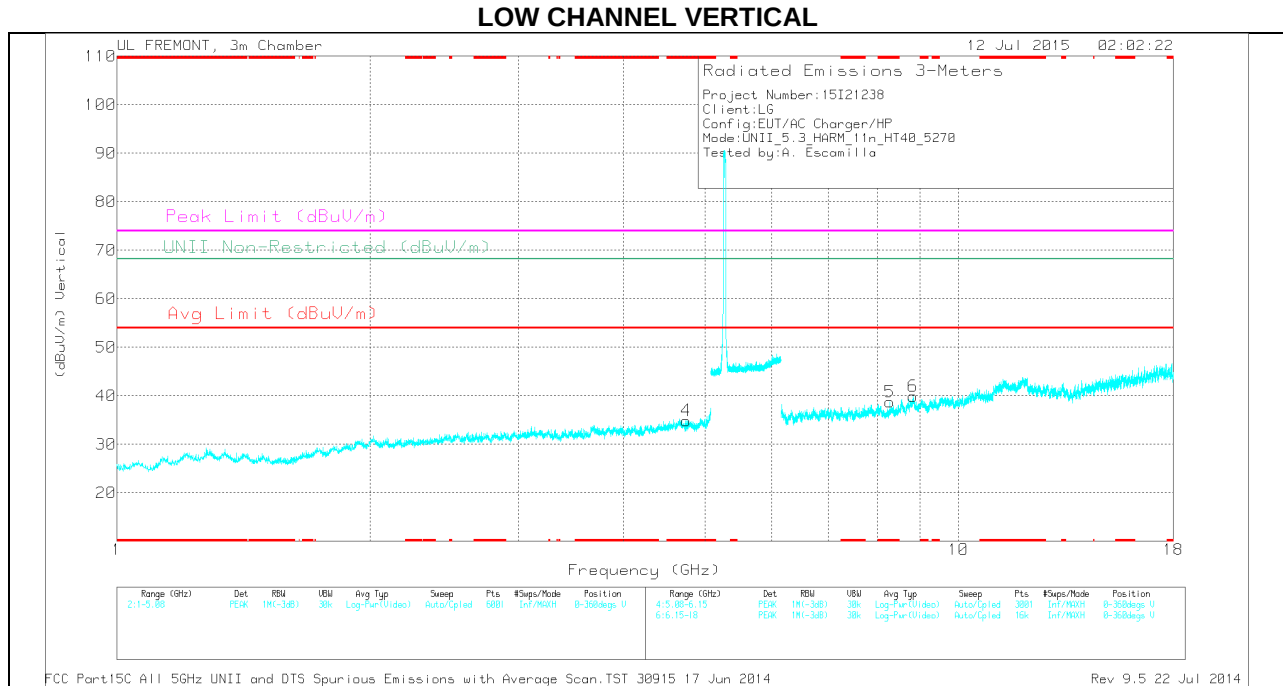
VERTICAL DATA

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	* 5.35	43.23	PK	34.5	-20.5	0	57.23	-	-	74	-16.77	173	374	V
3	* 5.35	30.95	RMS	34.5	-20.5	.5	45.45	54	-8.55	-	-	173	374	V
4	* 5.35	31.1	RMS	34.5	-20.5	.5	45.6	54	-8.4	-	-	173	374	V
2	* 5.354	43.45	PK	34.5	-20.6	0	57.35	-	-	74	-16.65	173	374	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

TRACE MARKERS

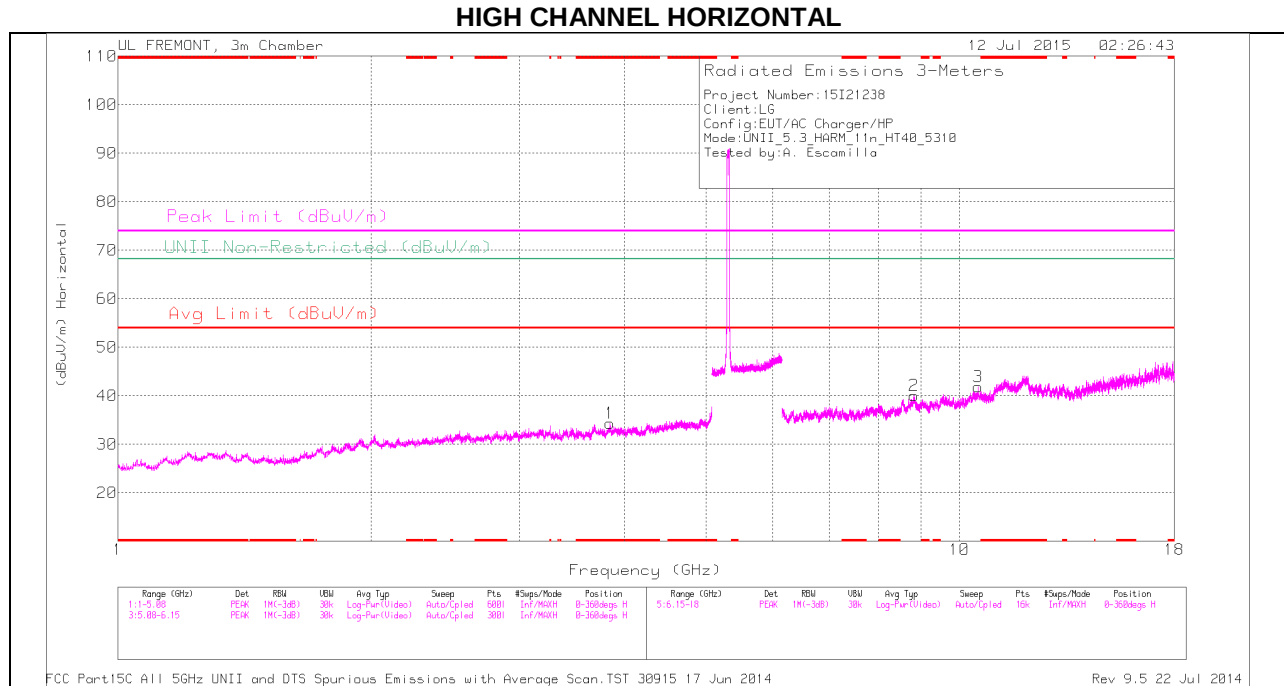
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.762	32.02	PK	32.5	-31.6	0	32.92	-	-	74	-41.08	-	-	0-360	200	H
4	* 4.745	30.82	PK	34	-29.9	0	34.92	-	-	74	-39.08	-	-	0-360	200	V
5	* 8.289	28.76	PK	35.8	-25.8	0	38.76	-	-	74	-35.24	-	-	0-360	100	V
6	8.827	28.28	PK	35.9	-24.3	0	39.88	-	-	-	-	68.2	-28.32	0-360	200	V
2	8.849	28.94	PK	35.9	-24.9	0	39.94	-	-	-	-	68.2	-28.26	0-360	100	H
3	10.519	27.75	PK	37.5	-23.5	0	41.75	-	-	-	-	68.2	-26.45	0-360	100	H

PK - Peak detector

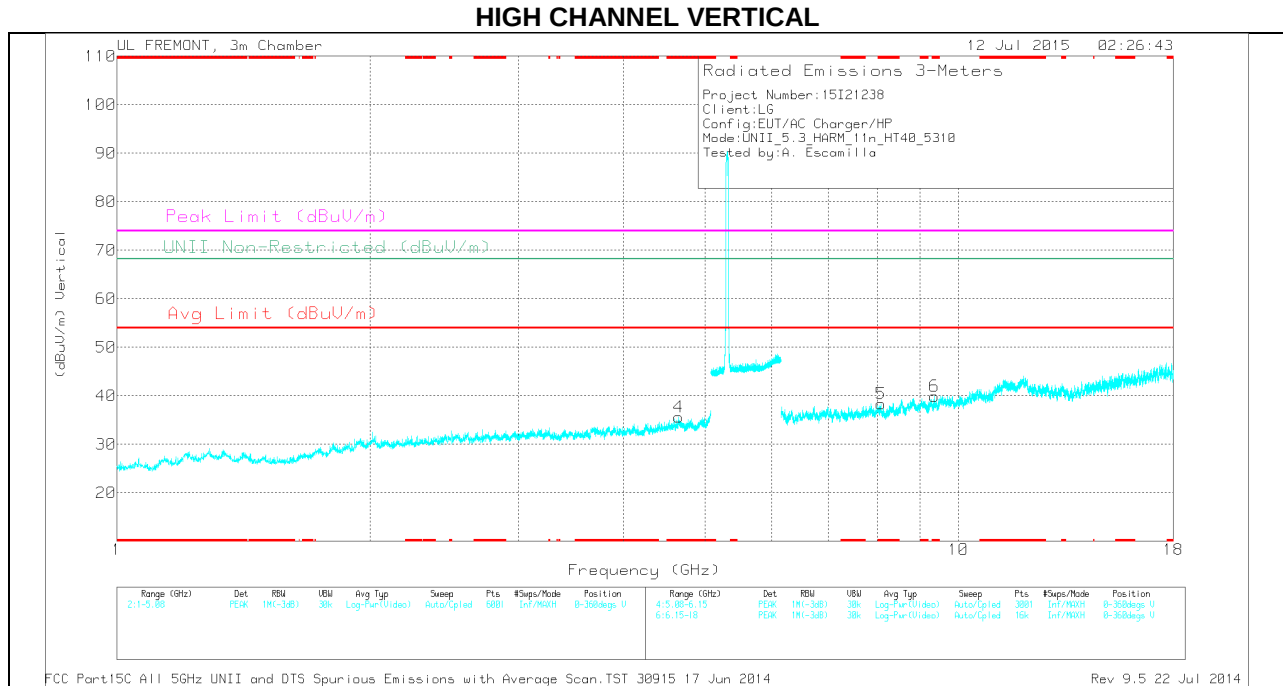
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.761	40.73	PK1	32.5	-31.6	0	41.63	-	-	74	-32.37	-	-	345	235	H
* 2.761	29.13	AD1	32.5	-31.6	.5	30.56	54	-23.44	-	-	-	-	345	235	H
* 4.745	40.17	PK1	34	-29.9	0	44.27	-	-	74	-29.73	-	-	178	224	V
* 4.744	28.48	AD1	34	-29.9	.5	33.11	54	-20.89	-	-	-	-	178	224	V
* 8.287	37.72	PK1	35.8	-25.9	0	47.62	-	-	74	-26.38	-	-	143	132	V
* 8.287	26.26	AD1	35.8	-25.9	.5	36.69	54	-17.31	-	-	-	-	143	132	V
8.829	38.14	PK1	35.9	-24.3	0	49.74	-	-	-	-	68.2	-18.46	112	173	V
8.851	37.34	PK1	35.9	-25	0	48.24	-	-	-	-	68.2	-19.96	305	211	H
10.517	36.04	PK1	37.5	-23.6	0	49.94	-	-	-	-	68.2	-18.26	276	192	H

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HIGH CHANNEL DATA

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.842	31.41	PK	33.1	-30.2	0	34.31	-	-	74	-39.69	-	-	0-360	100	H
4	* 4.648	31.25	PK	34	-29.6	0	35.65	-	-	74	-38.35	-	-	0-360	200	V
5	* 8.09	28.91	PK	35.7	-26.2	0	38.41	-	-	74	-35.59	-	-	0-360	200	V
6	* 9.357	27.79	PK	36.4	-24.3	0	39.89	-	-	74	-34.11	-	-	0-360	200	V
2	8.828	28.44	PK	35.9	-24.3	0	40.04	-	-	-	-	68.2	-28.16	0-360	100	H
3	10.526	27.62	PK	37.5	-23.3	0	41.82	-	-	-	-	68.2	-26.38	0-360	200	H

PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.842	40.39	PK1	33.1	-30.2	0	43.29	-	-	74	-30.71	-	-	10	216	H
* 3.842	28.64	AD1	33.1	-30.2	.5	32.04	54	-21.96	-	-	-	-	10	216	H
* 4.649	40.33	PK1	34	-29.6	0	44.73	-	-	74	-29.27	-	-	100	232	V
* 4.647	28.53	AD1	34	-29.6	.5	33.43	54	-20.57	-	-	-	-	100	232	V
* 8.09	37.42	PK1	35.7	-26.2	0	46.92	-	-	74	-27.08	-	-	39	194	V
* 8.092	25.92	AD1	35.7	-26.2	.5	35.92	54	-18.08	-	-	-	-	39	194	V
* 9.356	36.45	PK1	36.4	-24.2	0	48.65	-	-	74	-25.35	-	-	26	206	V
* 9.359	24.85	AD1	36.4	-24.3	.5	37.48	54	-16.52	-	-	-	-	26	206	V
8.83	36.89	PK1	35.9	-24.3	0	48.49	-	-	-	-	68.2	-19.71	45	198	H
10.528	36.07	PK1	37.5	-23.3	0	50.27	-	-	-	-	68.2	-17.93	69	200	H

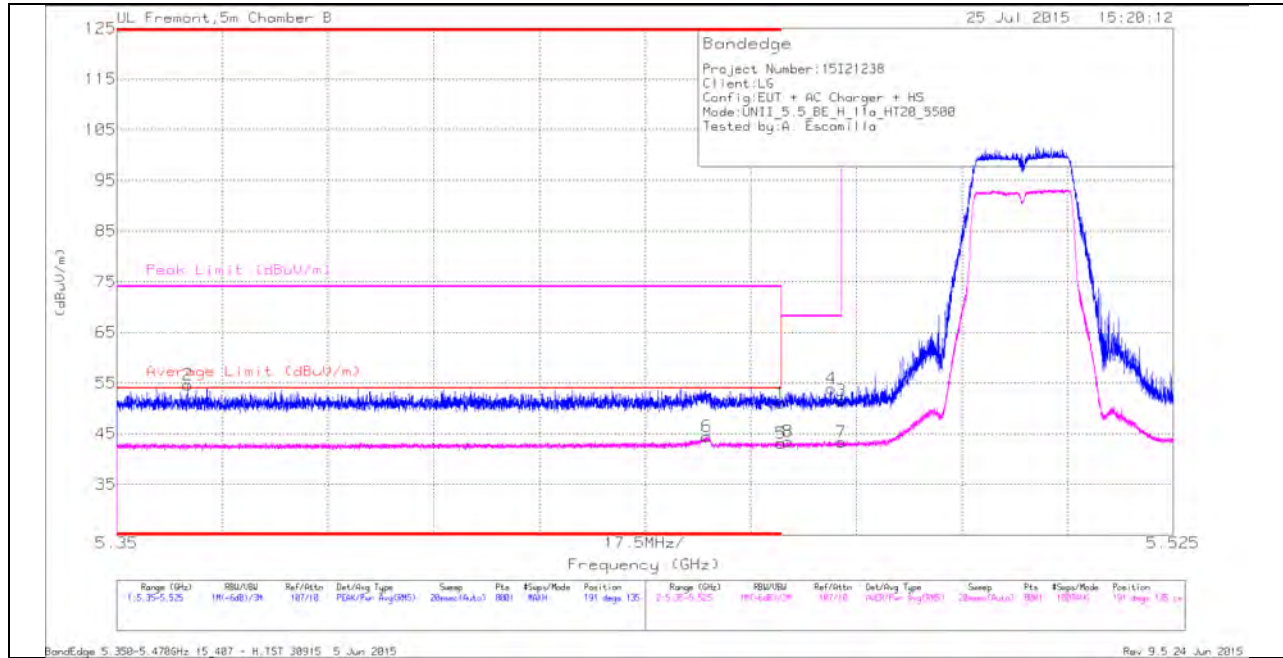
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11.3. 5.5-5.6 GHz

11.3.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

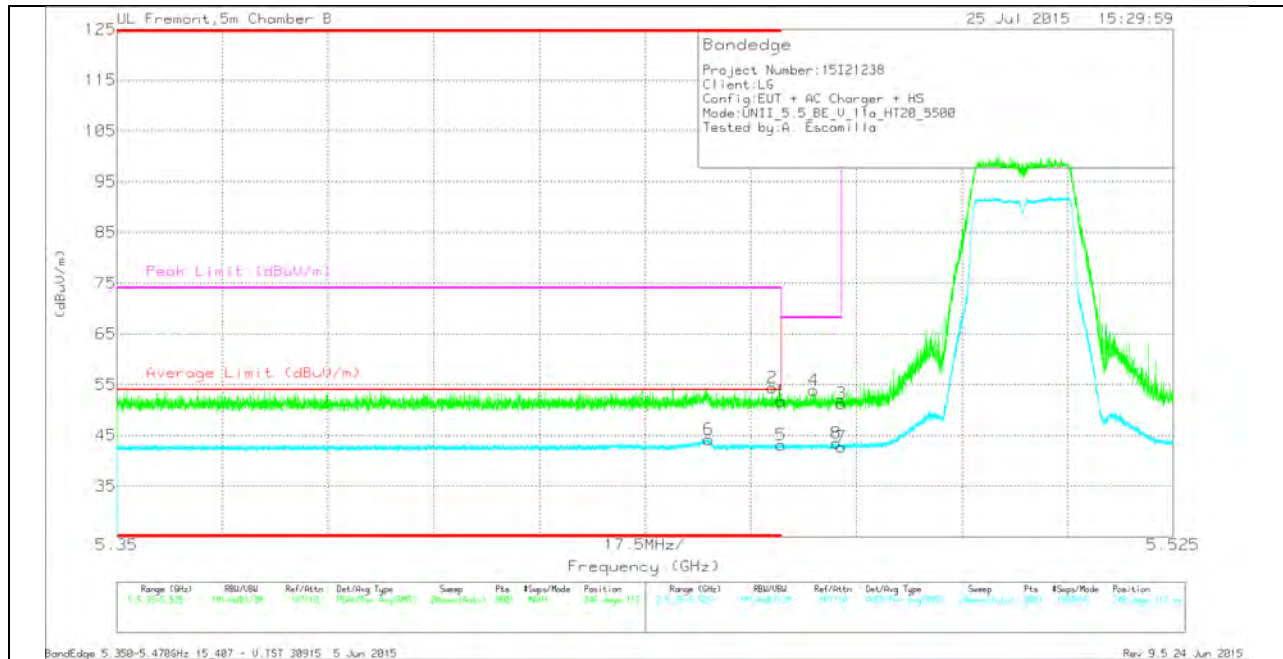
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/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
1	* 5.46	38.55	Pk	34.5	-22	0	51.05	-	-	74	-22.95	191	135	H
2	* 5.362	42.35	Pk	34.4	-22.1	0	54.65	-	-	74	-19.35	191	135	H
5	* 5.46	30.32	RMS	34.5	-22	.25	43.07	-	-	-	-	191	135	H
6	* 5.448	31.73	RMS	34.5	-22	.25	44.48	-	-	-	-	191	135	H
8	5.461	30.75	RMS	34.5	-22	.25	43.5	-	-	-	-	191	135	H
4	5.468	41.54	Pk	34.5	-22.1	0	53.94	-	-	68.2	-14.26	191	135	H
3	5.47	39.12	Pk	34.5	-22.1	0	51.52	-	-	68.2	-16.68	191	135	H
7	5.47	30.73	RMS	34.5	-22.1	.25	43.38	-	-	-	-	191	135	H

VERTICAL PEAK AND AVERAGE PLOT

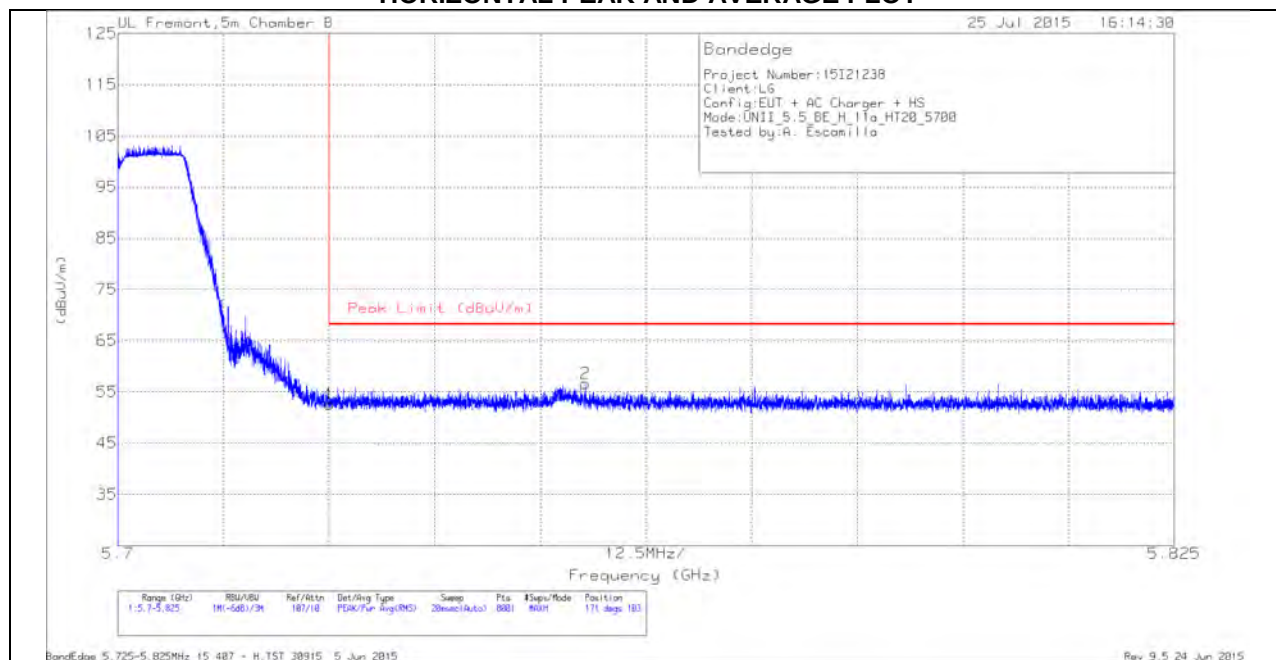


VERTICAL DATA

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
6	* 5.448	31.51	RMS	34.5	-22	.25	44.26	-	-	-	-	246	112	V
2	* 5.459	41.94	Pk	34.5	-22	0	54.44	-	-	74	-19.56	246	112	V
1	* 5.46	39.22	Pk	34.5	-22	0	51.72	-	-	74	-22.28	246	112	V
5	* 5.46	30.29	RMS	34.5	-22	.25	43.04	-	-	-	-	246	112	V
4	5.465	41.36	Pk	34.5	-22	0	53.86	-	-	68.2	-14.34	246	112	V
8	5.469	30.85	RMS	34.5	-22.1	.25	43.5	-	-	-	-	246	112	V
3	5.47	38.87	Pk	34.5	-22.1	0	51.27	-	-	68.2	-16.93	246	112	V
7	5.47	30.09	RMS	34.5	-22.1	.25	42.74	-	-	-	-	246	112	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

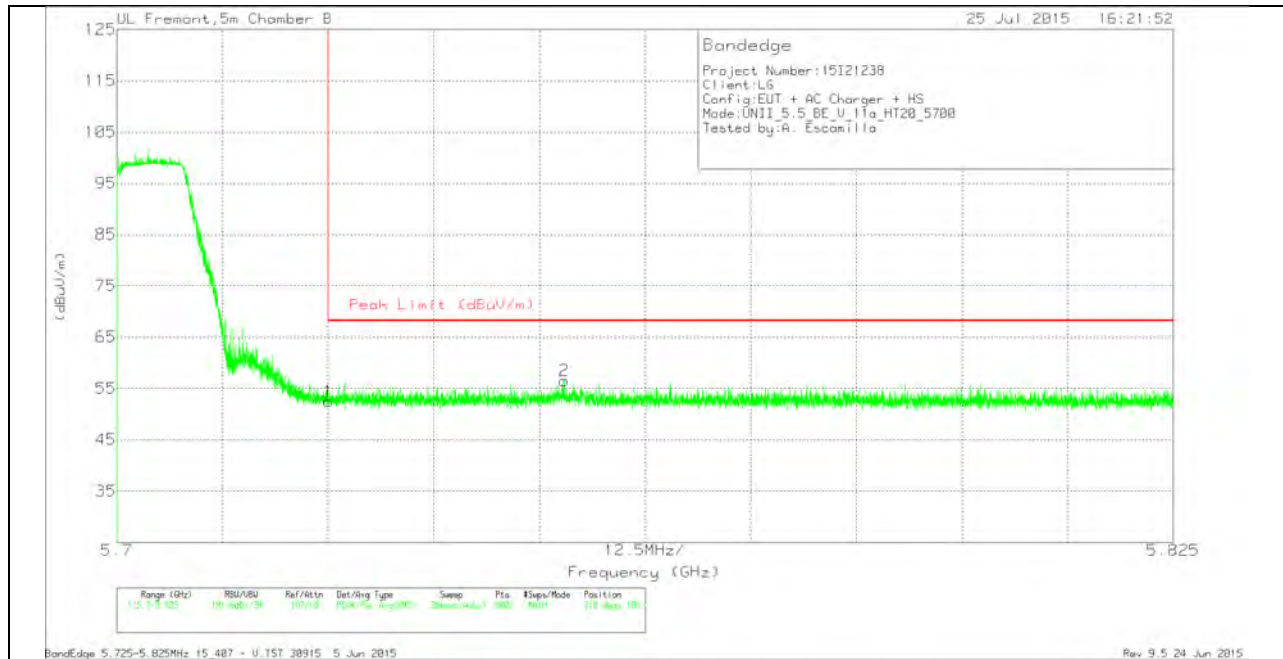
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.31	Pk	35	-21.7	0	52.61	68.2	-15.59	171	103	H
2	5.755	43.28	Pk	35.1	-21.7	0	56.68	68.2	-11.52	171	103	H

VERTICAL PEAK AND AVERAGE PLOT

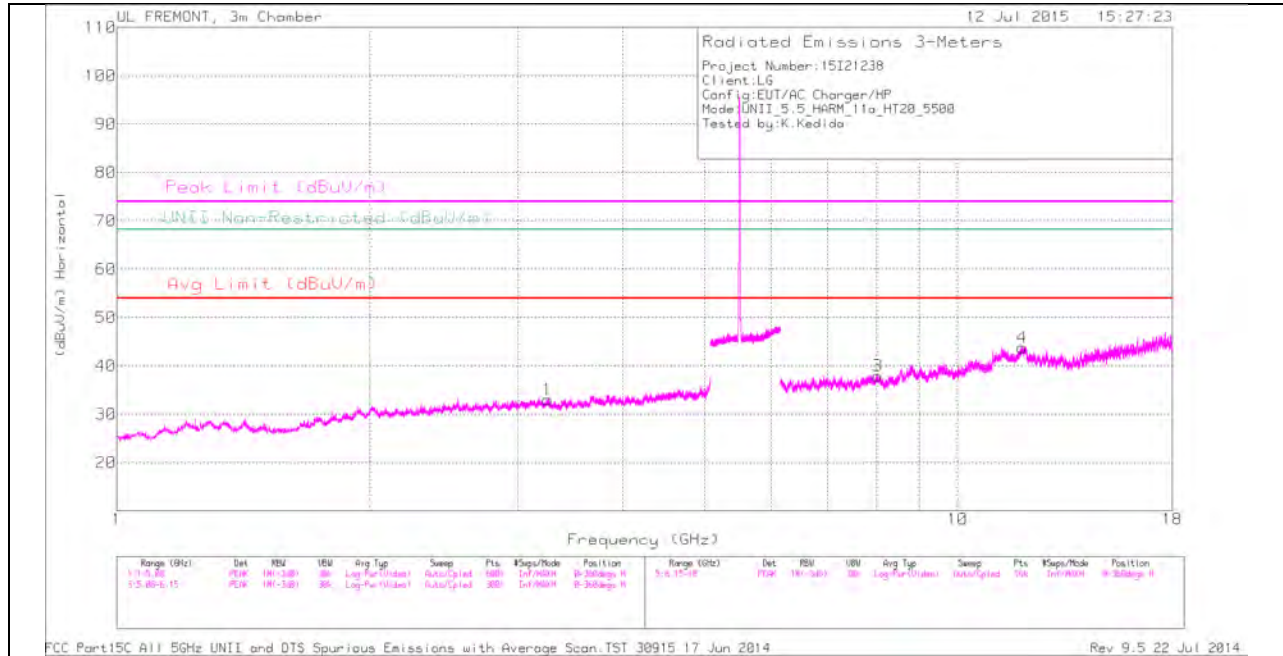


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.14	Pk	35	-21.7	0	52.44	68.2	-15.76	218	108	V
2	5.753	43.11	Pk	35.1	-21.7	0	56.51	68.2	-11.69	218	108	V

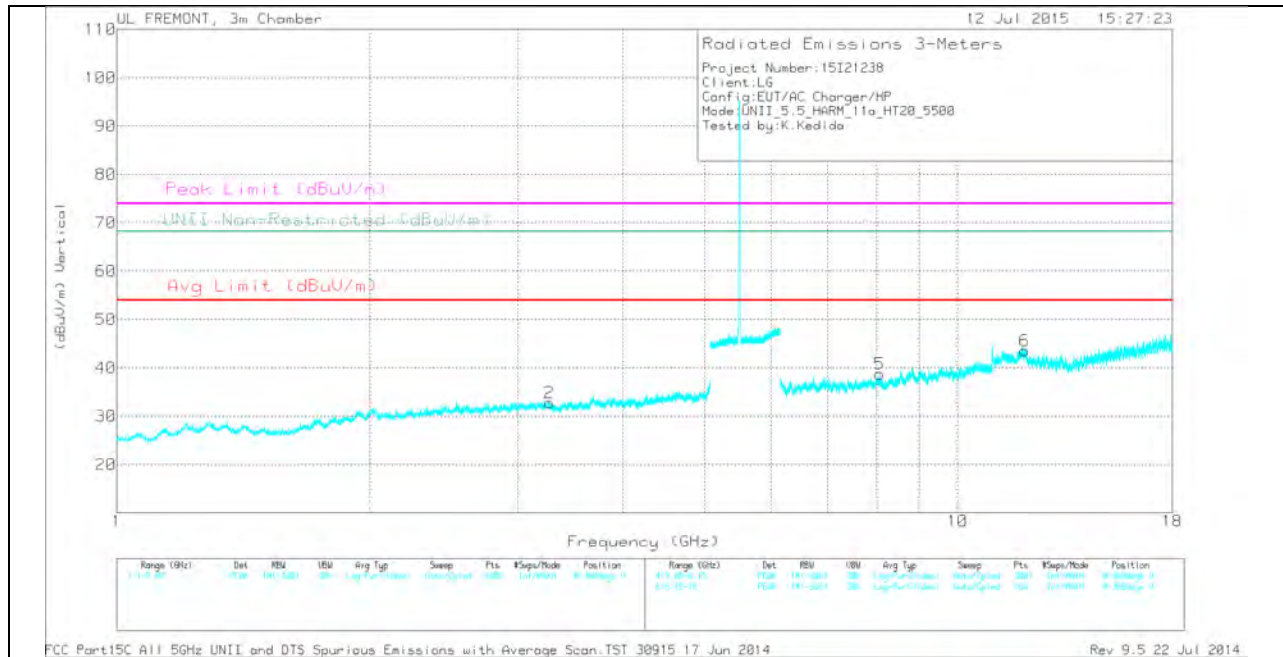
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; 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 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.255	31.37	PK	32.6	-30.9	0	33.07	-	-	-	-	68.2	-35.13	0-360	100	H
2	3.266	31.38	PK	32.6	-31.2	0	32.78	-	-	74	-41.22	-	-	0-360	200	V
3	8.032	28.9	PK	35.7	-26.6	0	38	-	-	74	-36	-	-	0-360	100	H
5	8.078	29.39	PK	35.7	-26.3	0	38.79	-	-	74	-35.21	-	-	0-360	200	V
4	11.922	28.36	PK	39.1	-23.6	0	43.86	-	-	74	-30.14	-	-	0-360	200	H
6	12.012	27.98	PK	39.1	-23.5	0	43.58	-	-	74	-30.42	-	-	0-360	100	V

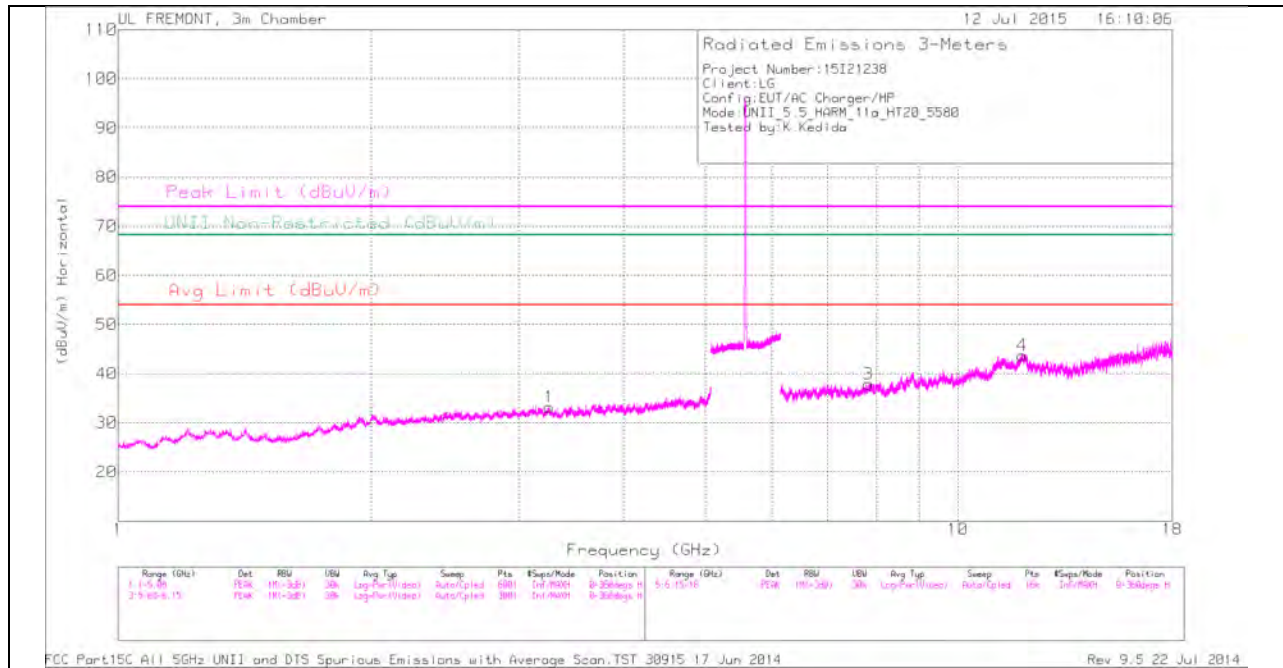
PK - Peak detector

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.261	29.52	AD1	32.6	-31	.25	31.37	54	-22.63	-	-	-	-	360	200	H
* 3.261	41.08	PK1	32.6	-31	0	42.68	-	-	74	-31.32	-	-	360	200	V
* 11.932	37.39	PK1	39.1	-23.6	0	52.89	-	-	74	-21.11	-	-	360	100	H
* 11.934	26.17	AD1	39.1	-23.6	.25	41.92	54	-12.08	-	-	-	-	360	100	H
* 11.16	38.31	PK1	37.9	-23.5	0	52.71	-	-	74	-21.29	-	-	360	100	V
* 11.16	26.34	AD1	37.9	-23.5	.25	40.99	54	-13.01	-	-	-	-	360	100	V
3.26	41.42	PK1	32.6	-31	0	43.02	-	-	-	-	68.2	-25.18	360	200	H
7.801	38.45	PK1	35.7	-27.7	0	46.45	-	-	-	-	68.2	-21.75	360	100	V
7.825	38.19	PK1	35.8	-26.8	0	47.19	-	-	-	-	68.2	-21.01	360	100	H

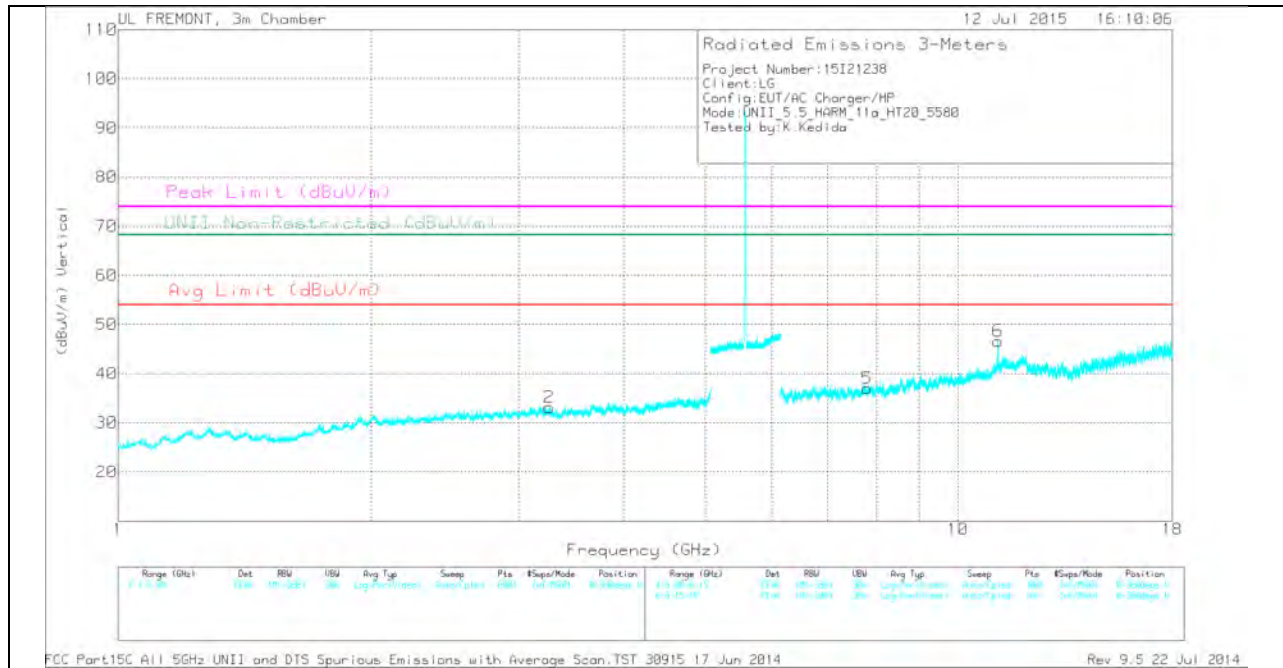
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MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; 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 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*3.26	31.54	PK	32.6	-31	0	33.14	-	-	74	-40.86	-	-	0-360	200	V
1	*3.262	31.59	PK	32.6	-31	0	33.19	-	-	74	-40.81	-	-	0-360	200	H
5	7.801	28.99	PK	35.7	-27.7	0	36.99	-	-	-	-	68.2	-31.21	0-360	100	V
3	7.825	28.87	PK	35.8	-26.8	0	37.87	-	-	-	-	68.2	-30.33	0-360	100	H
6	*11.161	32.23	PK	37.9	-23.5	0	46.63	-	-	74	-27.37	-	-	0-360	100	V
4	*11.932	28.19	PK	39.1	-23.6	0	43.69	-	-	74	-30.31	-	-	0-360	100	H

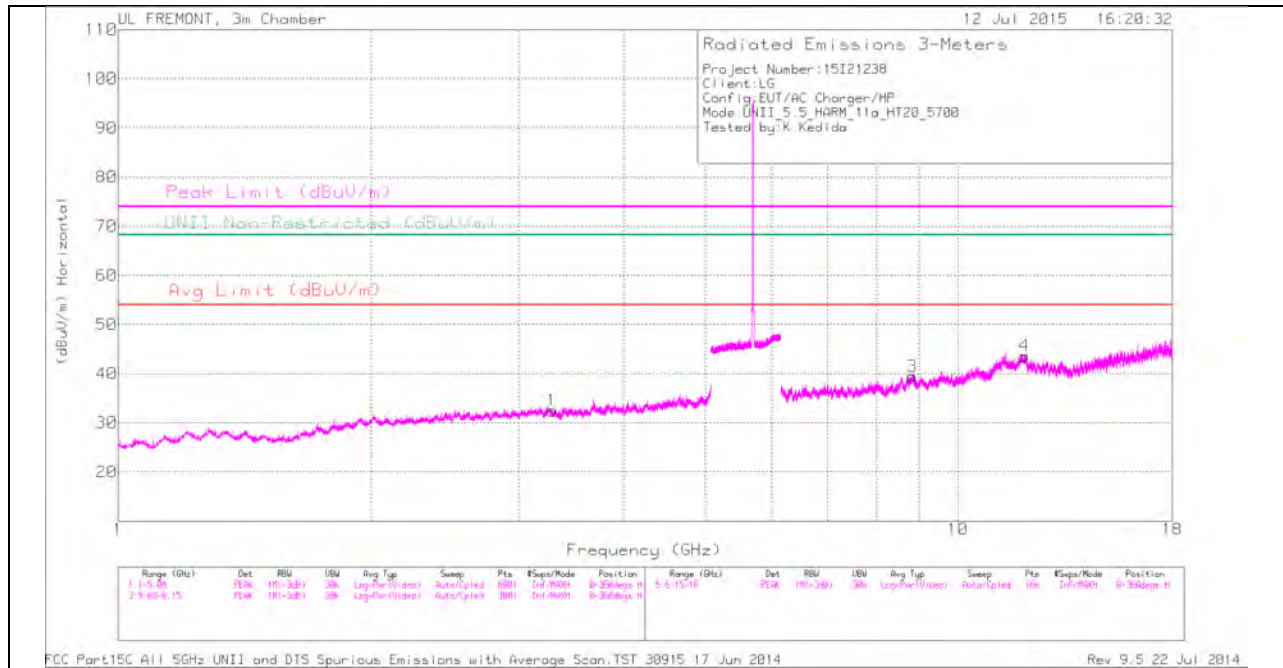
PK - Peak detector

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*3.26	41.42	PK1	32.6	-31	0	43.02	-	-	74	-31.98	68.2	-25.18	360	200	H
*3.26	29.37	AD1	32.6	-31	.25	31.22	54	-22.78	-	-	-	-	360	200	V
*3.261	29.52	AD1	32.6	-31	.25	31.37	54	-22.66	-	-	-	-	360	200	H
*3.261	41.08	PK1	32.6	-31	0	42.68	-	-	74	-31.32	-	-	360	200	V
7.801	38.45	PK1	35.7	-27.7	0	46.45	-	-	-	-	68.2	-21.75	360	100	V
7.825	38.19	PK1	35.8	-26.8	0	47.19	-	-	-	-	68.2	-21.01	360	100	H
*11.16	38.31	PK1	37.9	-23.5	0	52.71	-	-	74	-21.29	-	-	360	100	V
*11.16	26.34	AD1	37.9	-23.5	.25	40.99	54	-13.01	-	-	-	-	360	100	V
*11.932	37.39	PK1	39.1	-23.6	0	52.89	-	-	74	-21.11	-	-	360	100	H
*11.934	26.17	AD1	39.1	-23.6	.25	41.92	54	-12.08	-	-	-	-	360	100	H

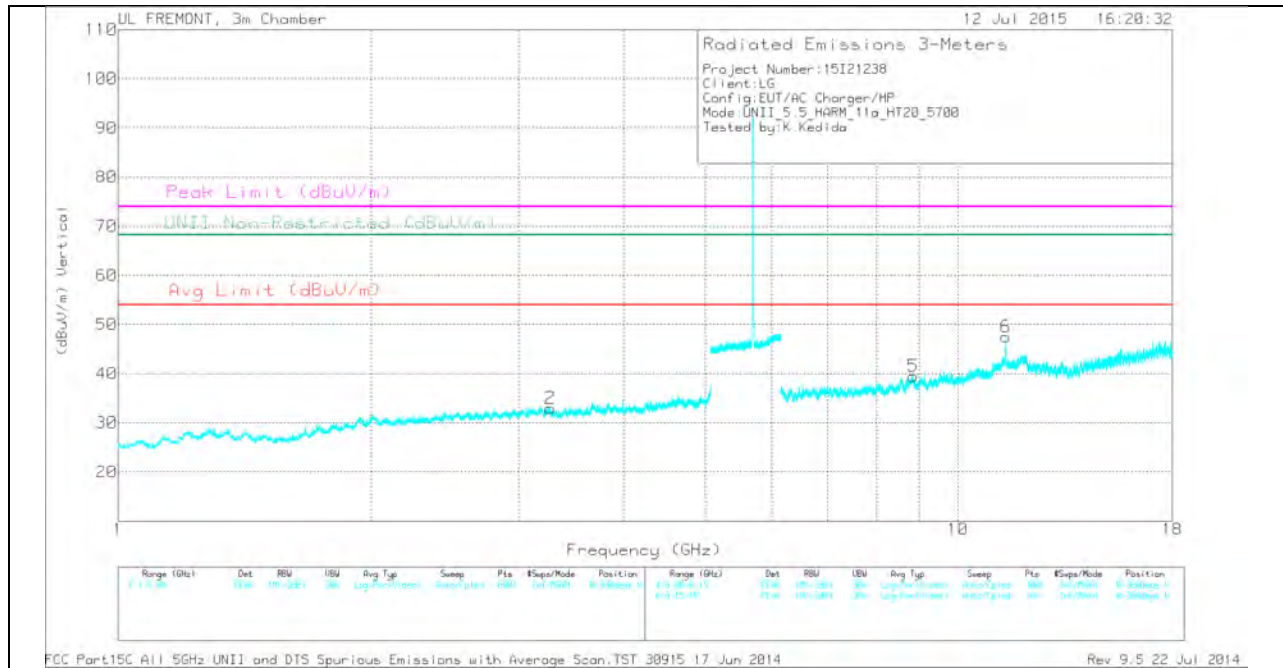
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; 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 40GHz; 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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 11.999	27.9	Pk	39.1	-23.4	0	43.6	-	-	74	-30.4	-	-	0-360	200	H
6	* 11.4	32.42	Pk	38.2	-23.1	0	47.52	-	-	74	-26.48	-	-	0-360	100	V
2	3.271	31.67	Pk	32.6	-31.3	0	32.97	-	-	-	-	68.2	-35.23	0-360	100	V
1	3.288	31.31	Pk	32.6	-31.4	0	32.51	-	-	-	-	68.2	-35.69	0-360	100	H
3	8.822	27.72	Pk	35.9	-24.2	0	39.42	-	-	-	-	68.2	-28.78	0-360	100	H
5	8.847	28.4	Pk	35.9	-24.8	0	39.5	-	-	-	-	68.2	-28.7	0-360	200	V

PK - Peak detector

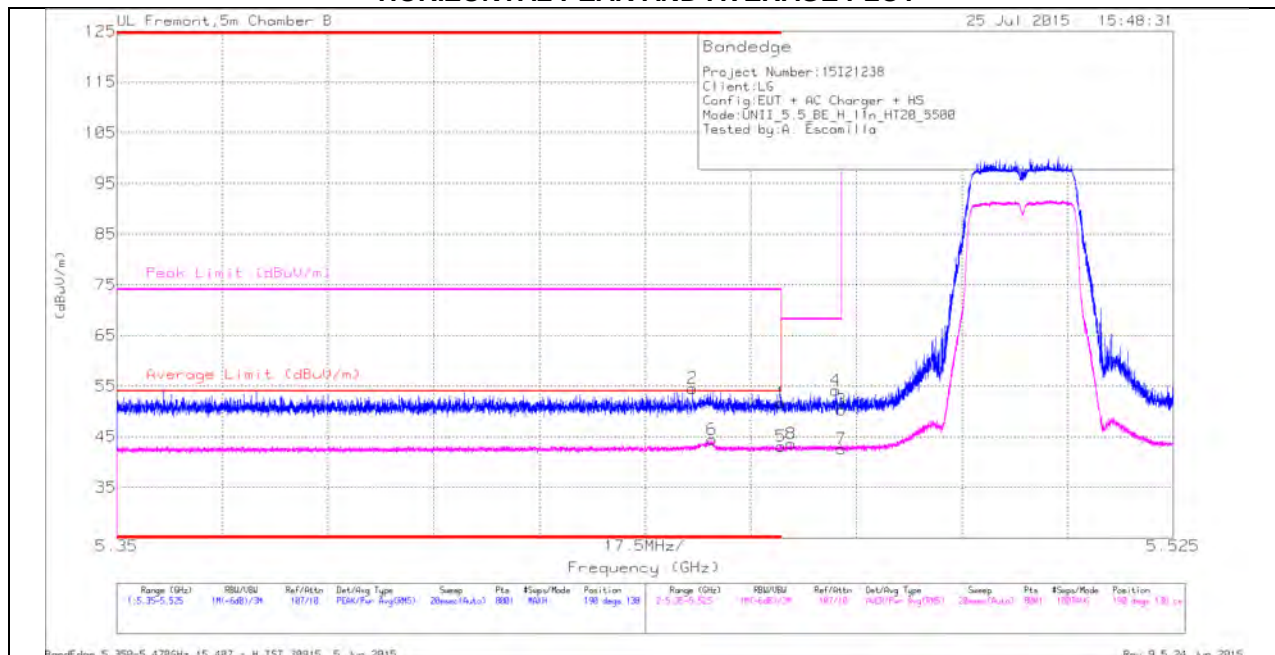
RADIATED EMISSIONS

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)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.999	36.41	PK1	39.1	-23.4	0	52.11	-	-	74	-21.89	-	-	360	200	H
* 11.997	24.87	AD1	39.1	-23.4	.25	40.82	54	-13.18	-	-	-	-	360	200	H
* 11.4	42.57	PK1	38.2	-23.1	0	57.67	-	-	74	-16.33	-	-	335	136	V
* 11.4	28.64	AD1	38.2	-23.1	.25	43.99	54	-10.01	-	-	-	-	335	136	V
3.271	40.75	PK1	32.6	-31.3	0	42.05	-	-	-	-	68.2	-26.15	360	100	V
3.289	41.07	PK1	32.6	-31.4	0	42.27	-	-	-	-	68.2	-25.93	360	100	H
8.823	36.77	PK1	35.9	-24.2	0	48.47	-	-	-	-	68.2	-19.73	360	100	H
8.848	37.04	PK1	35.9	-24.8	0	48.14	-	-	-	-	68.2	-20.06	360	200	V

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 17 Jun 2014

11.3.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

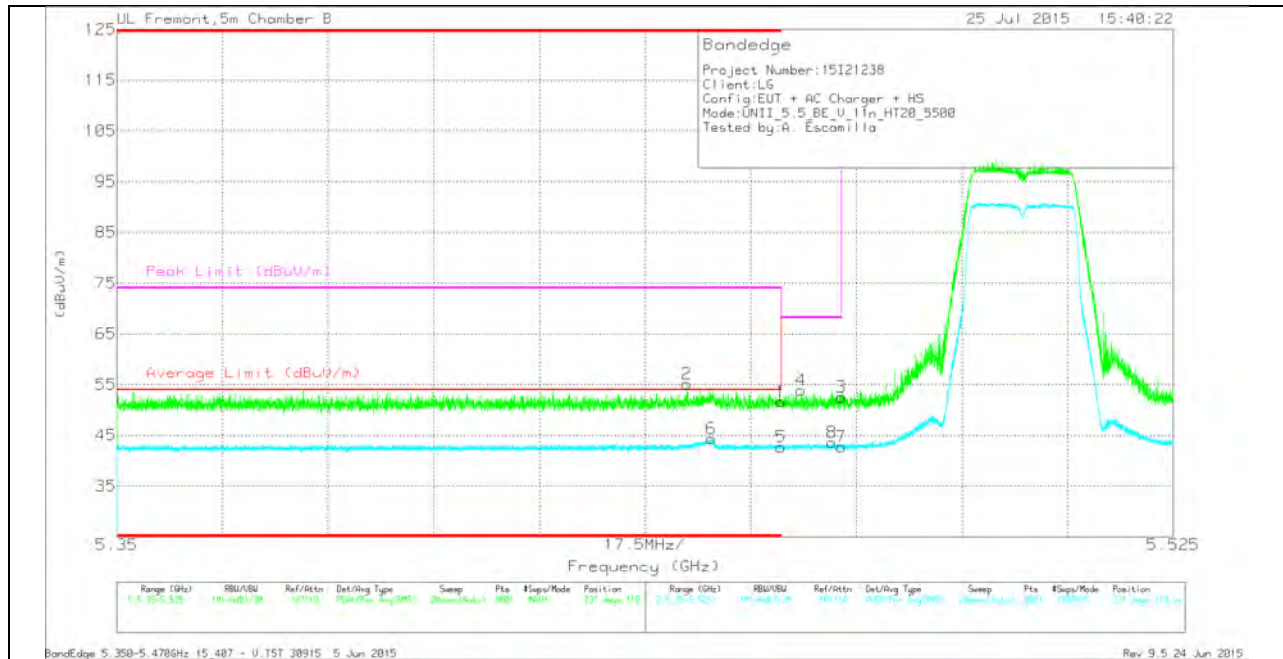
HORIZONTAL PEAK AND AVERAGE PLOT



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
2	* 5.445	42.07	Pk	34.5	-22	0	54.57	-	-	74	-19.43	190	138	H
6	* 5.449	31.79	RMS	34.5	-22.1	.25	44.44	-	-	-	-	190	138	H
1	* 5.46	39.13	Pk	34.5	-22	0	51.63	-	-	74	-22.37	190	138	H
5	* 5.46	30.3	RMS	34.5	-22	.25	43.05	-	-	-	-	190	138	H
8	5.462	30.88	RMS	34.5	-22	.25	43.63	-	-	-	-	190	138	H
4	5.469	41.76	Pk	34.5	-22.1	0	54.16	-	-	68.2	-14.04	190	138	H
3	5.47	37.85	Pk	34.5	-22.1	0	50.25	-	-	68.2	-17.95	190	138	H
7	5.47	29.98	RMS	34.5	-22.1	.25	42.63	-	-	-	-	190	138	H

VERTICAL PEAK AND AVERAGE PLOT

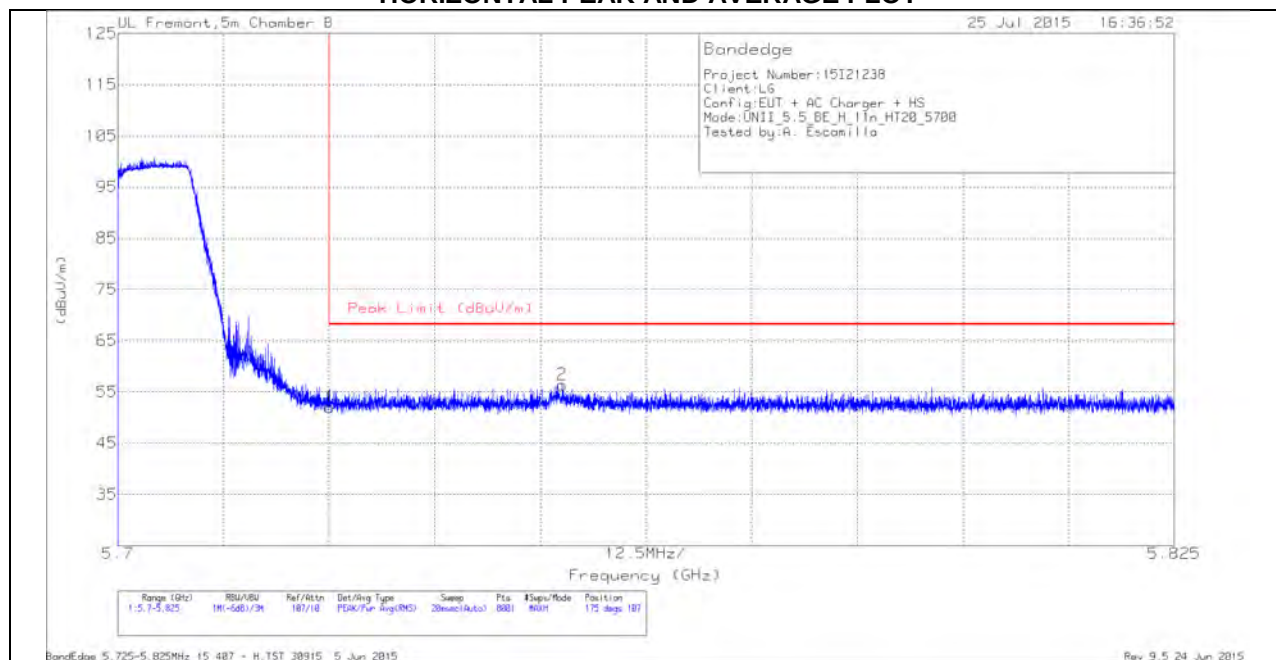


VERTICAL DATA

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
2	* 5.444	42.68	Pk	34.5	-22	0	55.18	-	-	74	-18.82	231	110	V
6	* 5.448	31.68	RMS	34.5	-22.1	.25	44.33	-	-	-	-	231	110	V
1	* 5.46	39.2	Pk	34.5	-22	0	51.7	-	-	74	-22.3	231	110	V
5	* 5.46	30	RMS	34.5	-22	.25	42.75	-	-	-	-	231	110	V
4	5.463	41.42	Pk	34.5	-22	0	53.92	-	-	68.2	-14.28	231	110	V
8	5.468	30.91	RMS	34.5	-22.1	.25	43.56	-	-	-	-	231	110	V
3	5.47	40.09	Pk	34.5	-22.1	0	52.49	-	-	68.2	-15.71	231	110	V
7	5.47	30.06	RMS	34.5	-22.1	.25	42.71	-	-	-	-	231	110	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

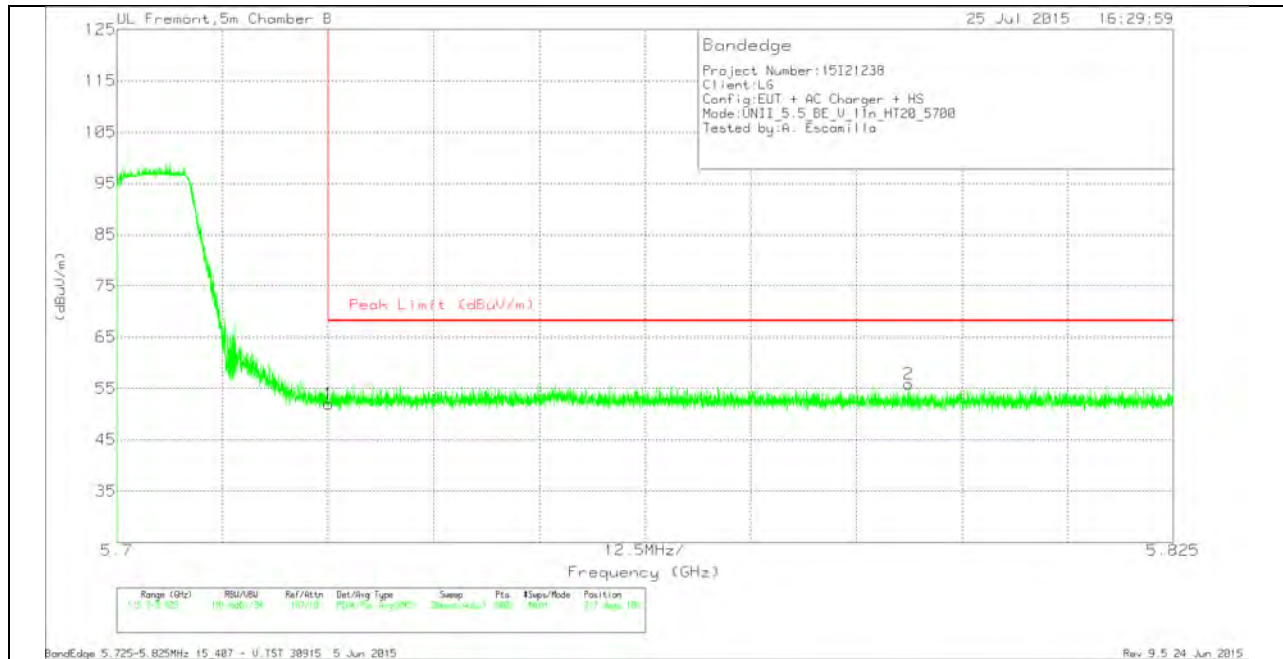
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.67	Pk	35	-21.7	0	51.97	68.2	-16.23	175	107	H
2	5.753	43.04	Pk	35.1	-21.7	0	56.44	68.2	-11.76	175	107	H

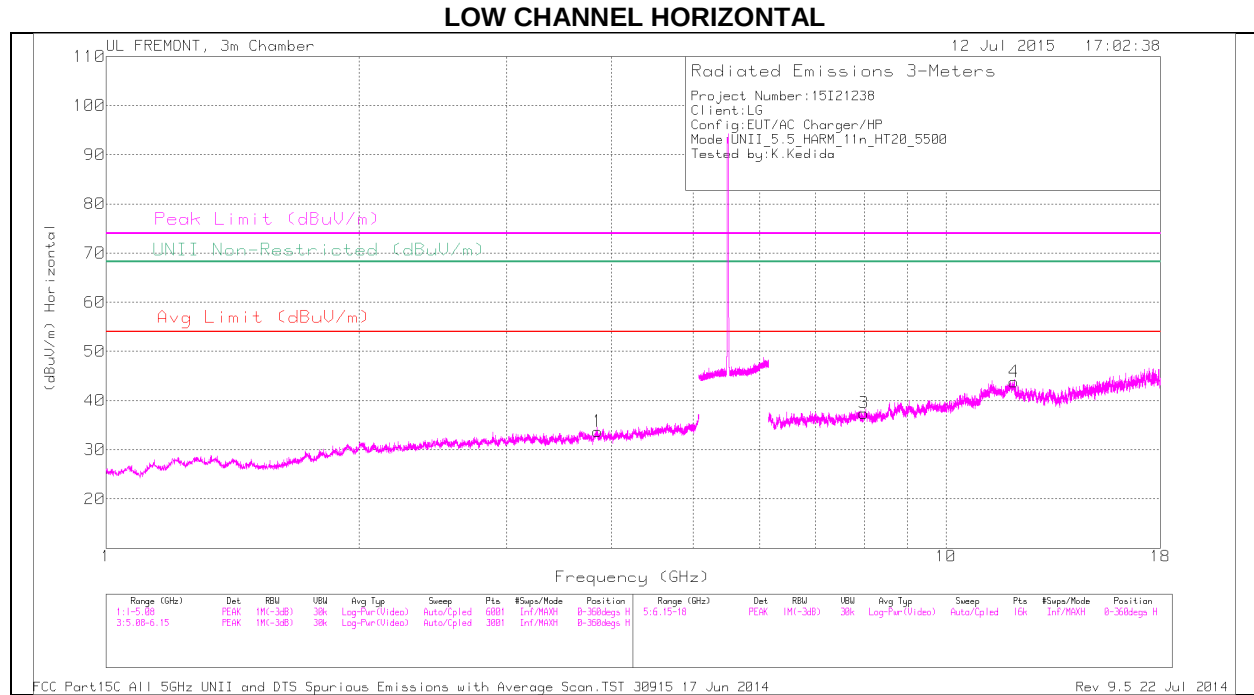
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.68	Pk	35	-21.7	0	51.98	68.2	-16.22	217	108	V
2	5.794	42.37	Pk	35.2	-21.7	0	55.87	68.2	-12.33	217	108	V

HARMONICS AND SPURIOUS EMISSIONS



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.