



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

CERTIFICATION TEST REPORT

FOR

CDMA/GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS/UNII a/b/g/n/ac & NFC

MODEL NUMBER: LG-H790, LGH790, H790

FCC ID: ZNFH790

IC ID: 2703C-H790

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION: CDMA/GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS/UNII a/b/g/n/ac & NFC
MODEL: LG-H790, LGH790, H790
SERIAL NUMBER: 1ZC51, 1ZC4Z (Conducted) 1ZC50, 1ZC4Y (Radiated)
DATE TESTED: JULY 6-23, 2015

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

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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2. TEST METHODOLOGY

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

Deviation from ANSI C63.10-2009:

Radiated spurious emission above 1GHz was performed with the EUT elevated at 1.5m instead of 0.8m. 1.5m is the required height in ANSI C63.10:2013 as referenced by RSS GEN issue 4.

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:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

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

This EUT is a CDMA/GSM/WCDMA/LTE PHONE + BLUETOOTH, DTS/UNII a/b/g/n/ac & NFC.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Total Output Power (dBm)	Total Output Power (mW)
5180 - 5240	802.11n HT20	16.46	44.26
5260 - 5320	802.11n HT20	16.41	43.75
5500 - 5720	802.11n HT20	16.84	48.31
5745 - 5825	802.11n HT20	16.7	46.77
5190 - 5230	802.11n HT40	15.63	36.56
5270 - 5310	802.11n HT40	15.56	35.97
5510 - 5710	802.11n HT40	15.95	39.36
5755 - 5795	802.11n HT40	15.7	37.15
5180 - 5240	802.11a	17.75	59.57
5260 - 5320	802.11a	17.74	59.43
5500 - 5720	802.11a	18.10	64.57
5745 - 5825	802.11a	17.97	62.66
5210 - 5210	802.11ac HT80	13.93	24.72
5290 - 5290	802.11ac HT80	13.97	24.95
5530 - 5690	802.11ac HT80	14.43	27.73
5775 - 5775	802.11ac HT80	14.12	25.82

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PIF (Planar Inverted) antenna; please refer to section 10.5 for antenna gain information.

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 Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in the Z orientation.

SISO and MIMO modes:

Radiated band edge and harmonics spurious emission preliminary investigation showed that MIMO was worst case mode, therefore only MIMO was tested for these modes.

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

802.11a mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

802.11ac VHT80mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-N04WS	SA560000030	N/A
Earphone	LG	-	-	N/A

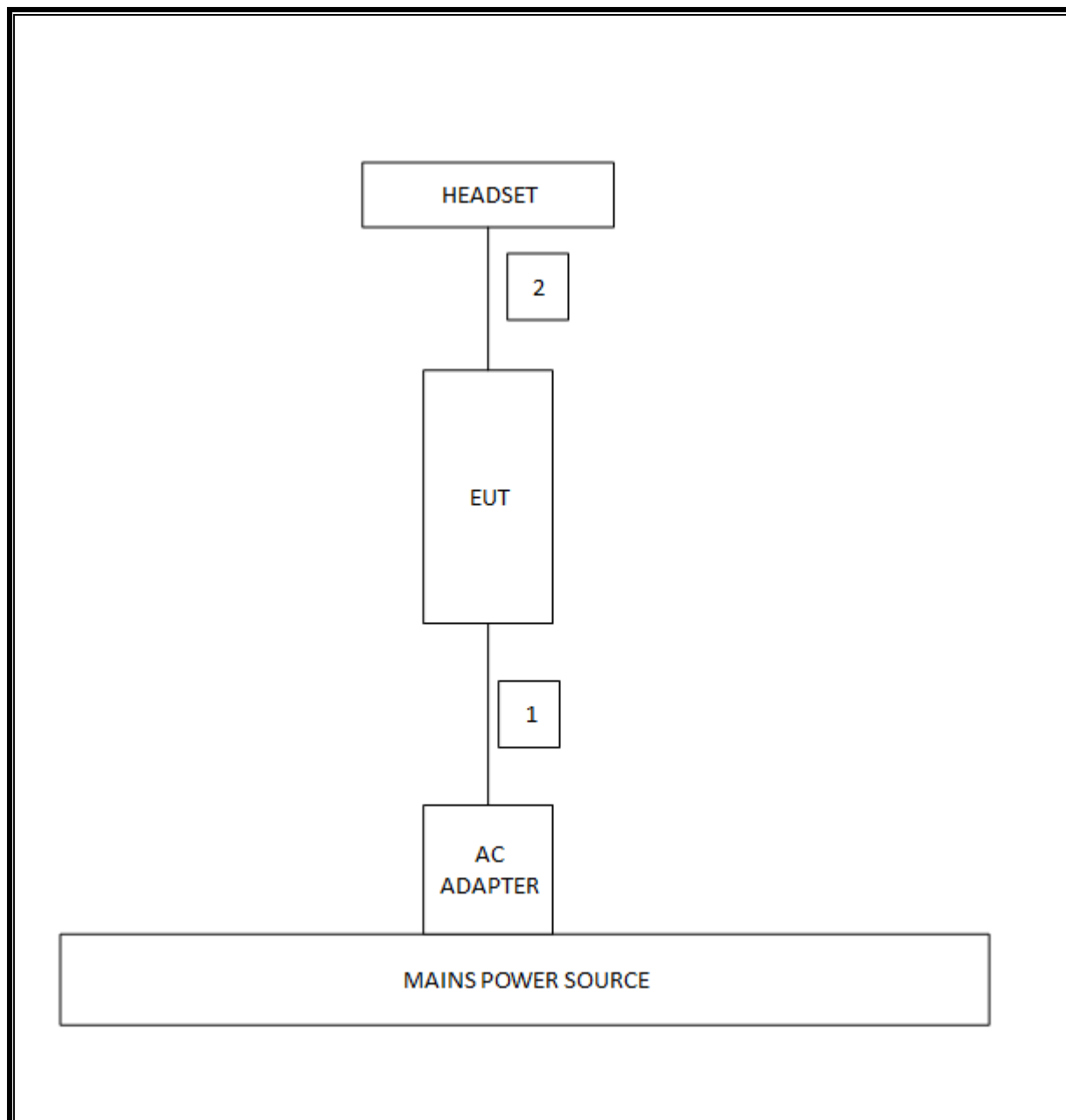
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1.0m	N/A

TEST SETUP

The EUT is setup as a stand-alone device.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15
Spectrum Analyzer, 9KHz-40GHz	HP	8564E	C00986	04/01/16
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/15
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/15
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/15
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/15
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/16
Antenna, Horn, 18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/15
Antenna, Horn, 26-40 GHz	ARA	MWH-2640	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, July 24, 2014	
Conducted Software	UL	UL EMC	Ver 9.5, May 17 2012	
CLT Software	UL	UL RF	Ver 1.0, Feb 2 2015	
Antenna Port Software	UL	UL RF	Ver 2.1.1.1, Jan 20 2015	

7. 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	83.7 MHz
15.407	RSS-247 6.2.4	6dB Band width (5.8Ghz)	500KHz		Pass	14.69 MHz
15.407 (a)(2)	RSS-247 6.2	TX Cond. Power 5.15-2.25, 5.25-5.35 & 5.47-5.725	<24dBm or 11+10Log(OBW)		Pass	14.5 dBm
15.407 (a)(3)	RSS-247 6.2.4	TX Cond. Power 5.725-5.825	< 30dBm or 17+10Log(OBW)		Pass	14.4 dBm
15.407 (a)(5)	RSS-247 6.2	PSD (5.2,5.3,5.5GHz)	<11dBm		Pass	6.67 dBm
15.407 (a)(5)	RSS-247 6.2.4	PSD (5.8GHz)	30dBm per 500kHz			4.20 dBm
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	57.09 dBuV
15.407 (b) & 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass	45.22 dBuV
15.407 (h)(2)	RSS-247 6.3	Dynamic Frequency Selection	N/A	Radiated / Conducted	Pass	N/A

8. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

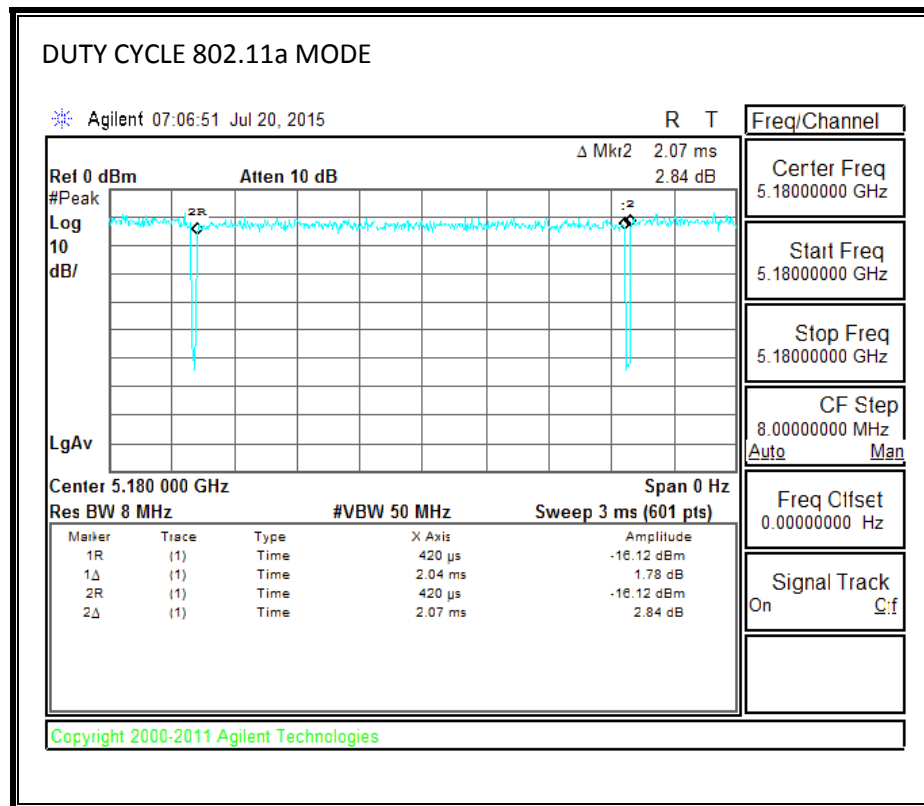
PROCEDURE

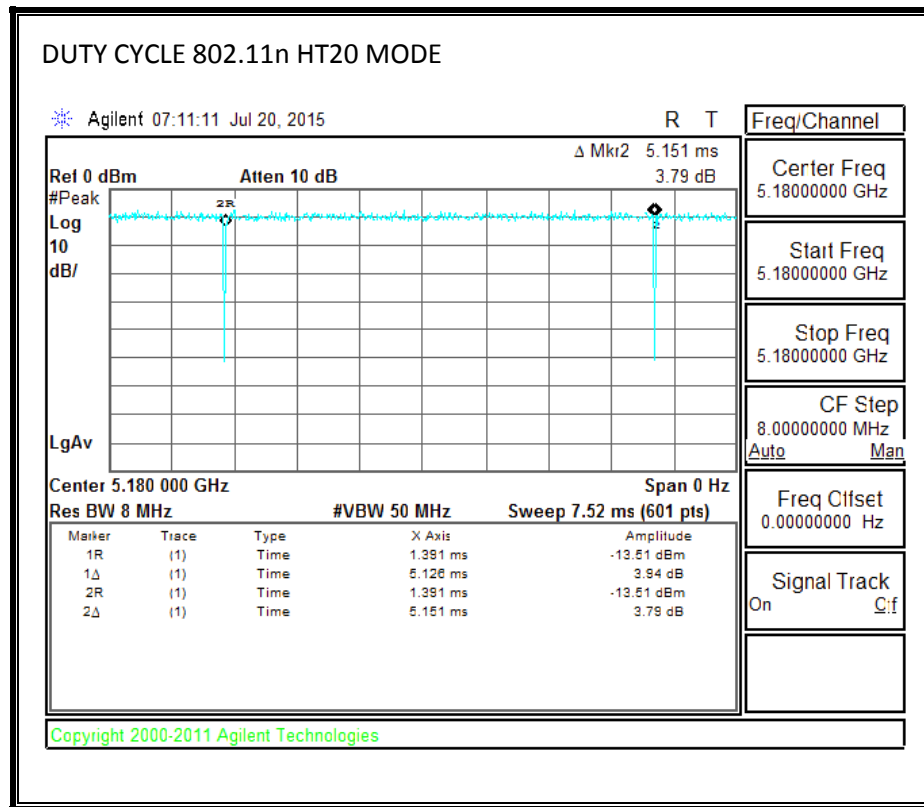
KDB 789033 Zero-Span Spectrum Analyzer Method.

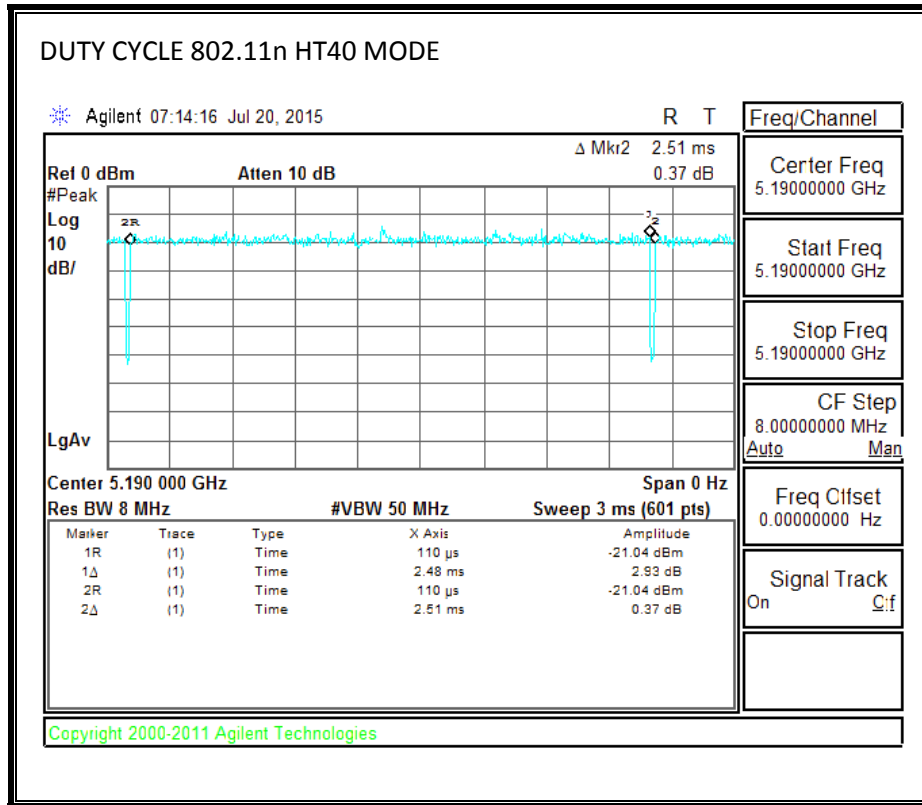
8.1. ON TIME AND DUTY CYCLE RESULTS

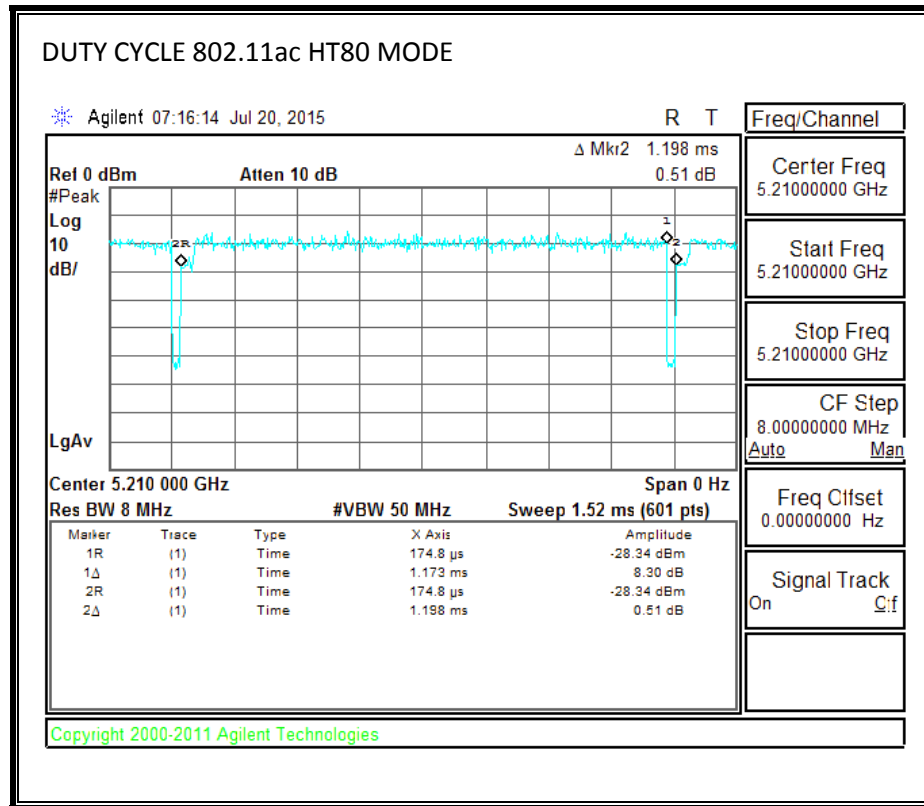
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.04	2.07	0.986	98.6%	0.00	0.010
802.11ac HT80	1.17	1.20	0.979	97.9%	0.09	0.853
802.11n HT20	5.13	5.15	0.996	99.6%	0.00	0.010
802.11n HT40	2.48	2.51	0.988	98.8%	0.00	0.010

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

RSS-247 6.2.4

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	6 dB Bandwidth CHAIN 0	6 dB Bandwidth CHAIN 1	Minimum Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5745	15.05	16.18	0.5
Mid	5785	14.69	16.10	0.5
High	5825	16.30	15.32	0.5
Worst		14.69	15.32	

10.1.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency	6 dB Bandwidth CHAIN 0	6 dB Bandwidth CHAIN 1	Minimum Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5745	17.19	16.65	0.5
Mid	5785	15.24	16.53	0.5
High	5825	17.13	17.52	0.5
Worst		15.24	16.53	

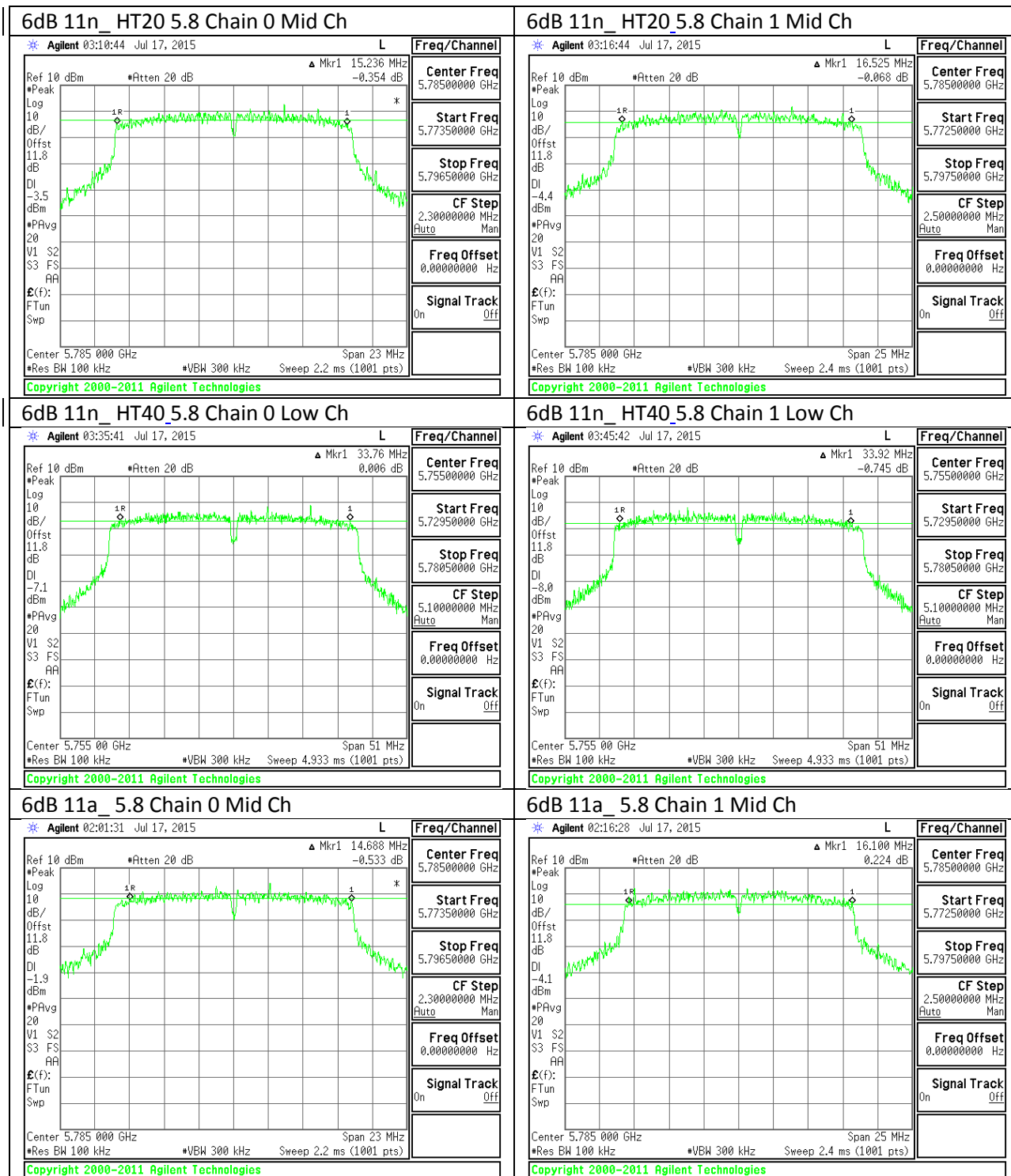
10.1.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND

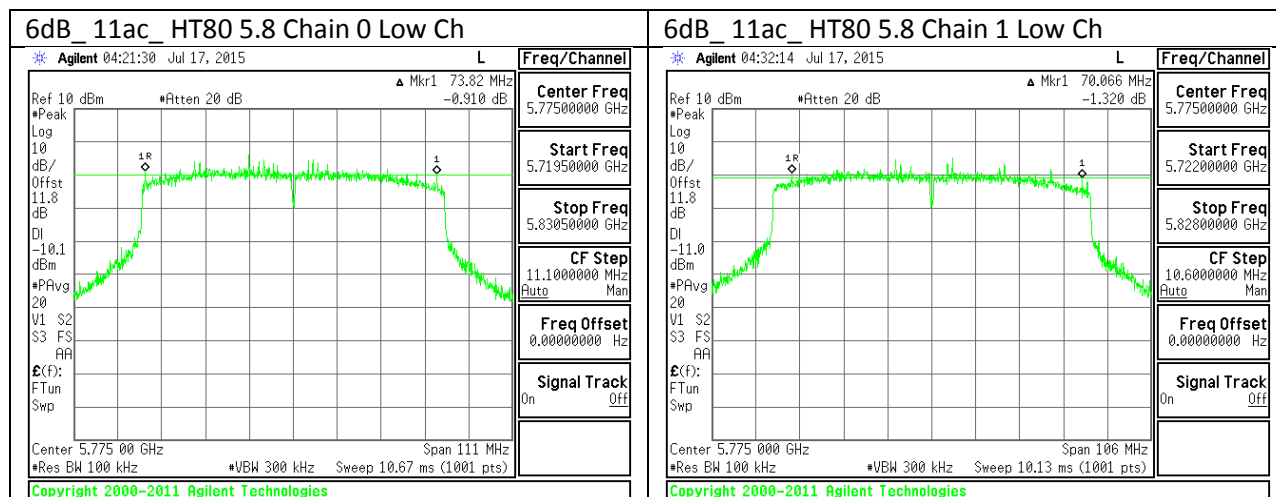
Channel	Frequency	6 dB Bandwidth CHAIN 0	6 dB Bandwidth CHAIN 1	Minimum Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5755	33.76	33.92	0.5
High	5795	35.42	35.37	0.5
Worst		33.76	33.92	0.5

10.1.1. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency	6 dB Bandwidth CHAIN 0	6 dB Bandwidth CHAIN 1	Minimum Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5775	73.82	70.07	0.5

10.1.2. 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 BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5180	20.4	20.2
Mid	5200	20.4	20.9
High	5240	21.1	20.1

10.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5180	20.9	20.2
Mid	5200	20.3	20.6
High	5240	20.4	20.3

10.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5190	41.9	41.2
High	5230	40.7	41.8

10.2.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5210	83.3	82.5

10.2.1. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5260	20.6	20.6
Mid	5300	19.8	20.5
High	5320	21.0	19.8

10.2.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5260	20.9	20.3
Mid	5300	20.4	20.5
High	5320	20.8	20.1

10.2.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5270	41.0	41.2
High	5310	41.2	40.7

10.2.3. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5290	82.3	82.1

10.2.4. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	19.8	20.4
Mid	5580	21.1	20.4
High	5700	20.6	21.0
144	5720	21.3	21.2

10.2.5. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	20.1	21.2
Mid	5580	20.7	20.2
High	5700	20.6	20.7
144	5720	20.5	21.3

10.2.6. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5510	40.7	40.6
Mid	5550	41.2	41.0
High	5670	41.8	40.9
142	5710	41.0	41.6

10.2.7. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5530	83.1	83.7
138	5690	83.7	83.3

10.2.8. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5745	21.1	21.7
Mid	5785	21.6	22.4
High	5825	21.7	23.2

10.2.9. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5745	21.7	21.5
Mid	5785	21.4	21.5
High	5825	21.0	21.9

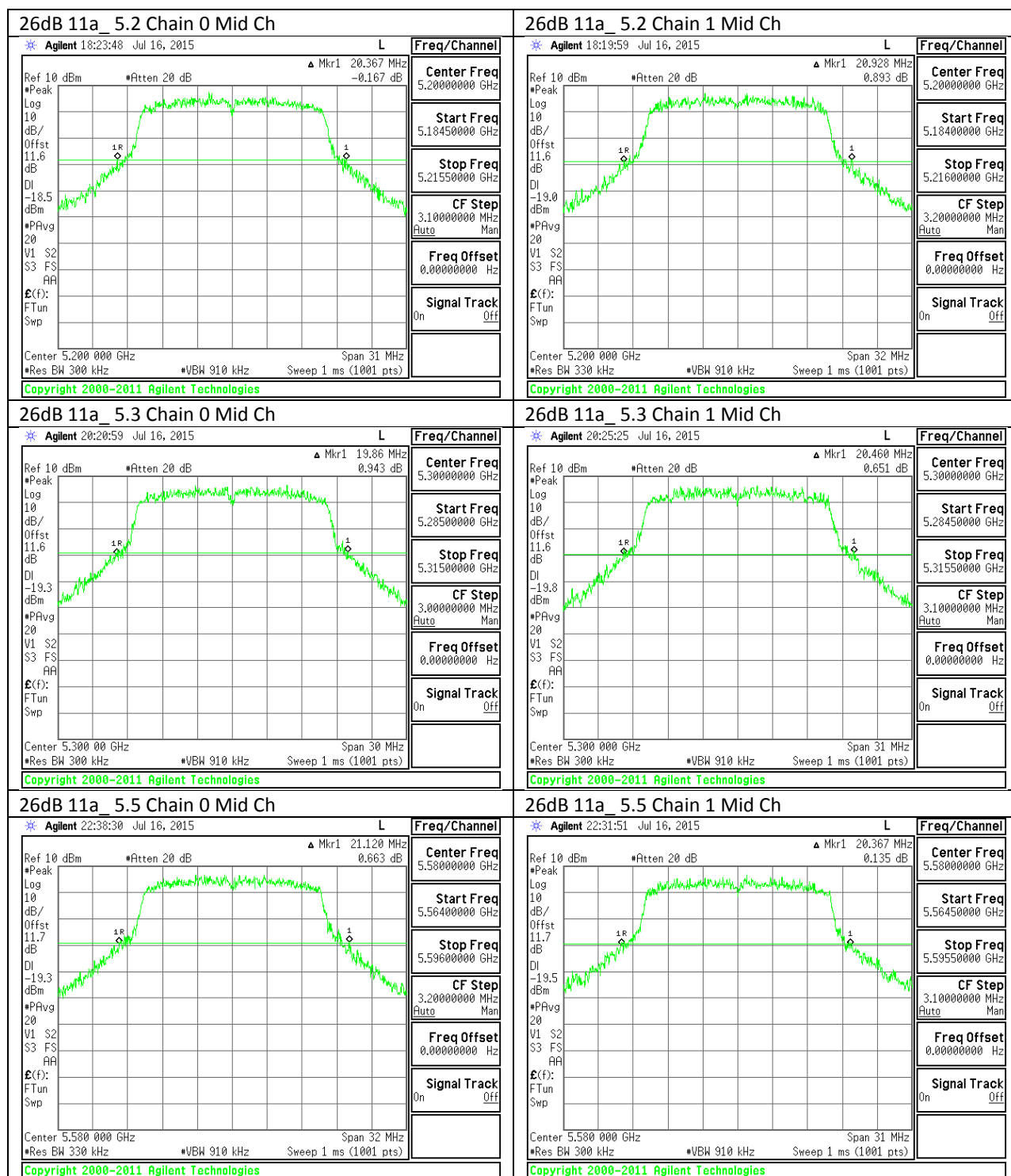
10.2.10. 802.11n HT40 MODE IN THE 5.8 GHz BAND

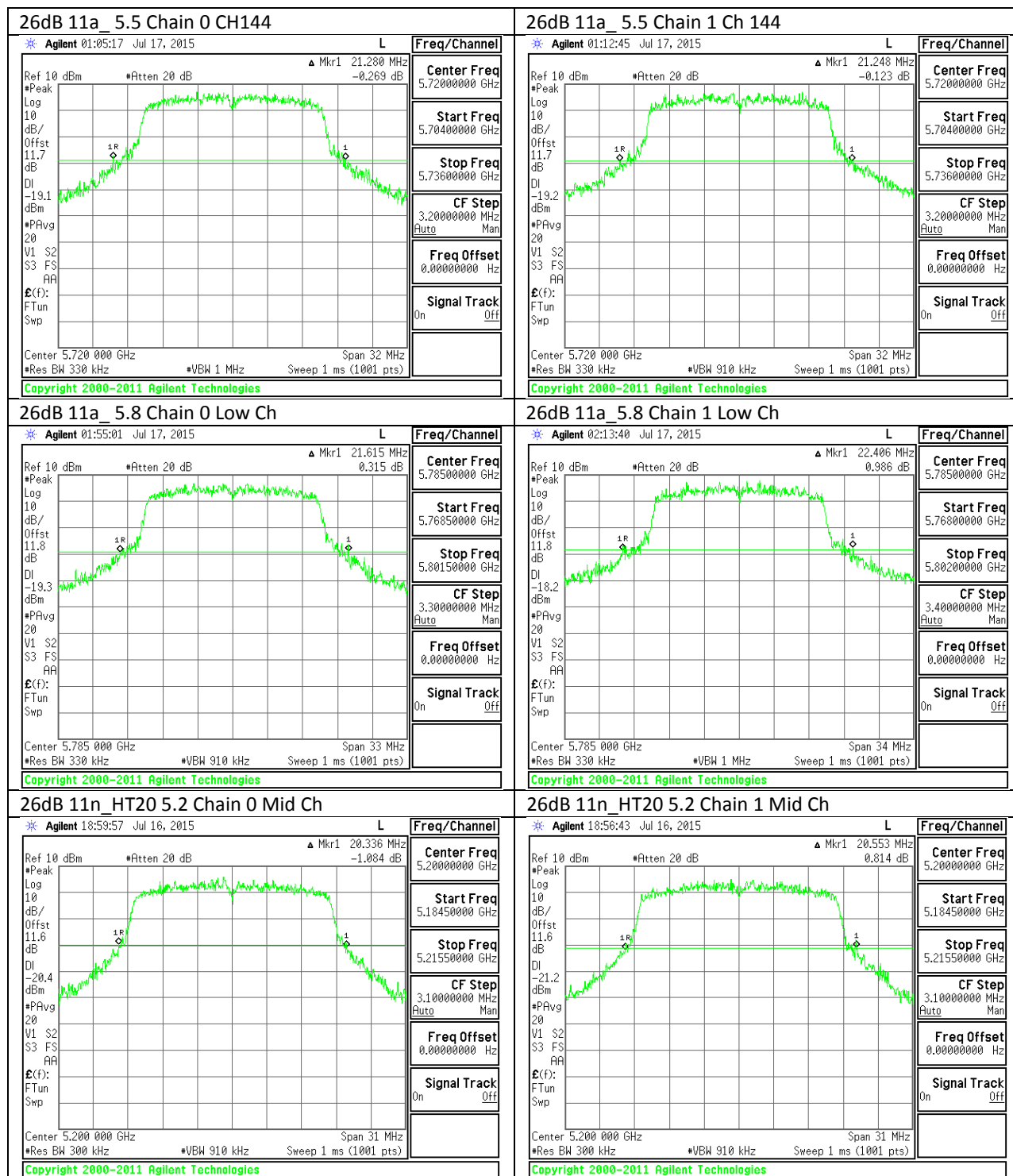
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5755	42.2	41.5
High	5795	40.7	42.1

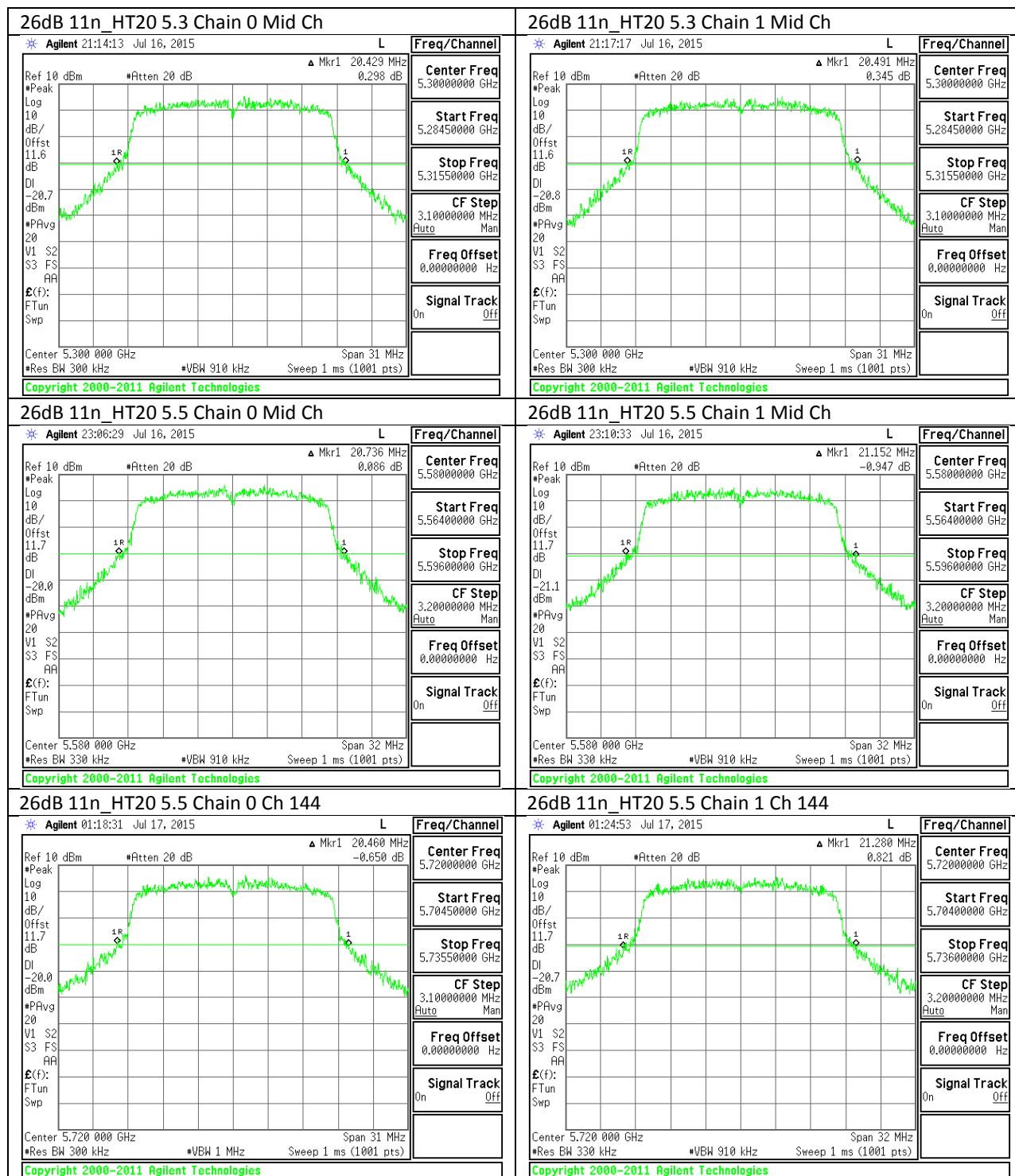
10.2.11. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

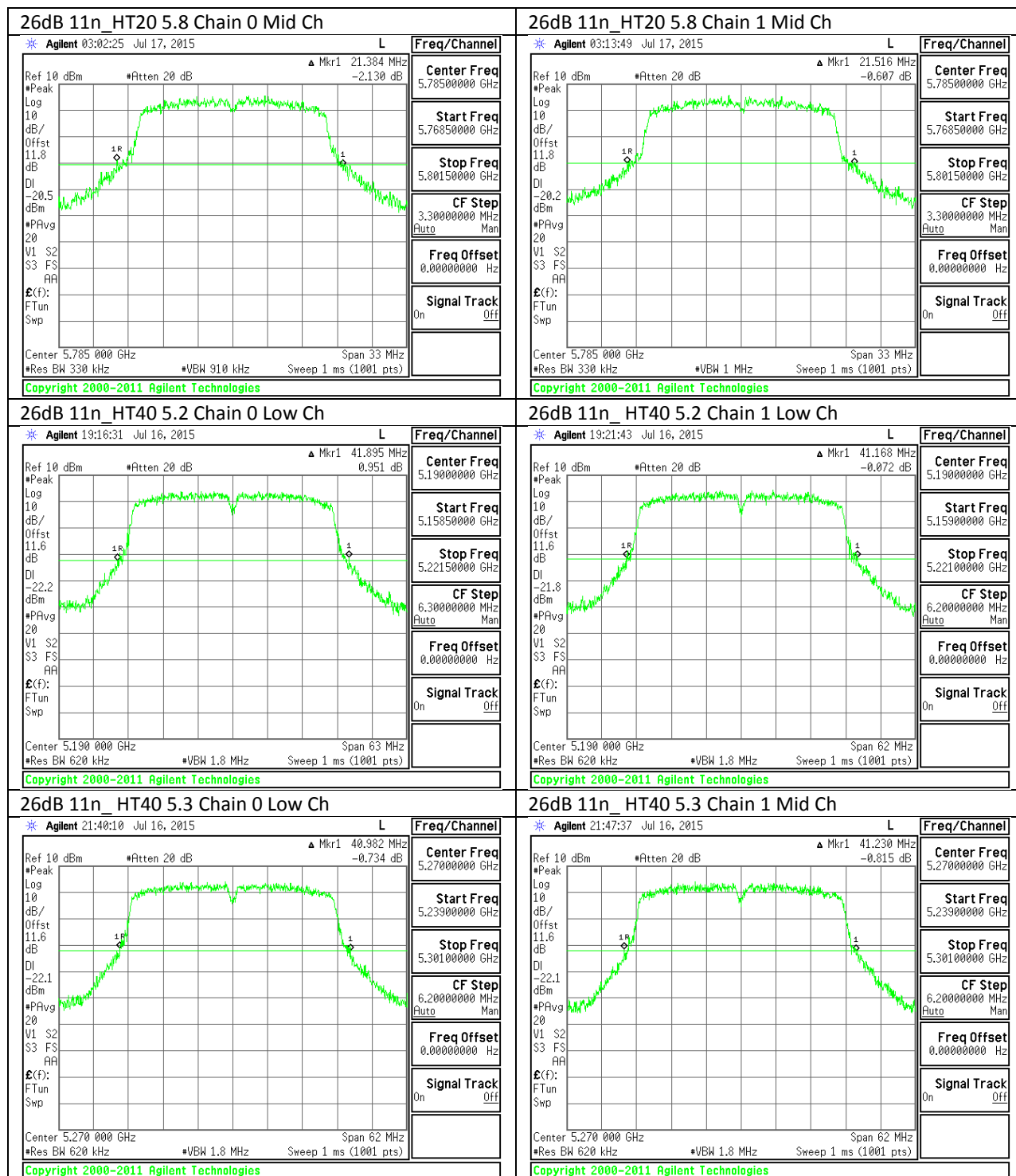
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5775	82.9	83.4

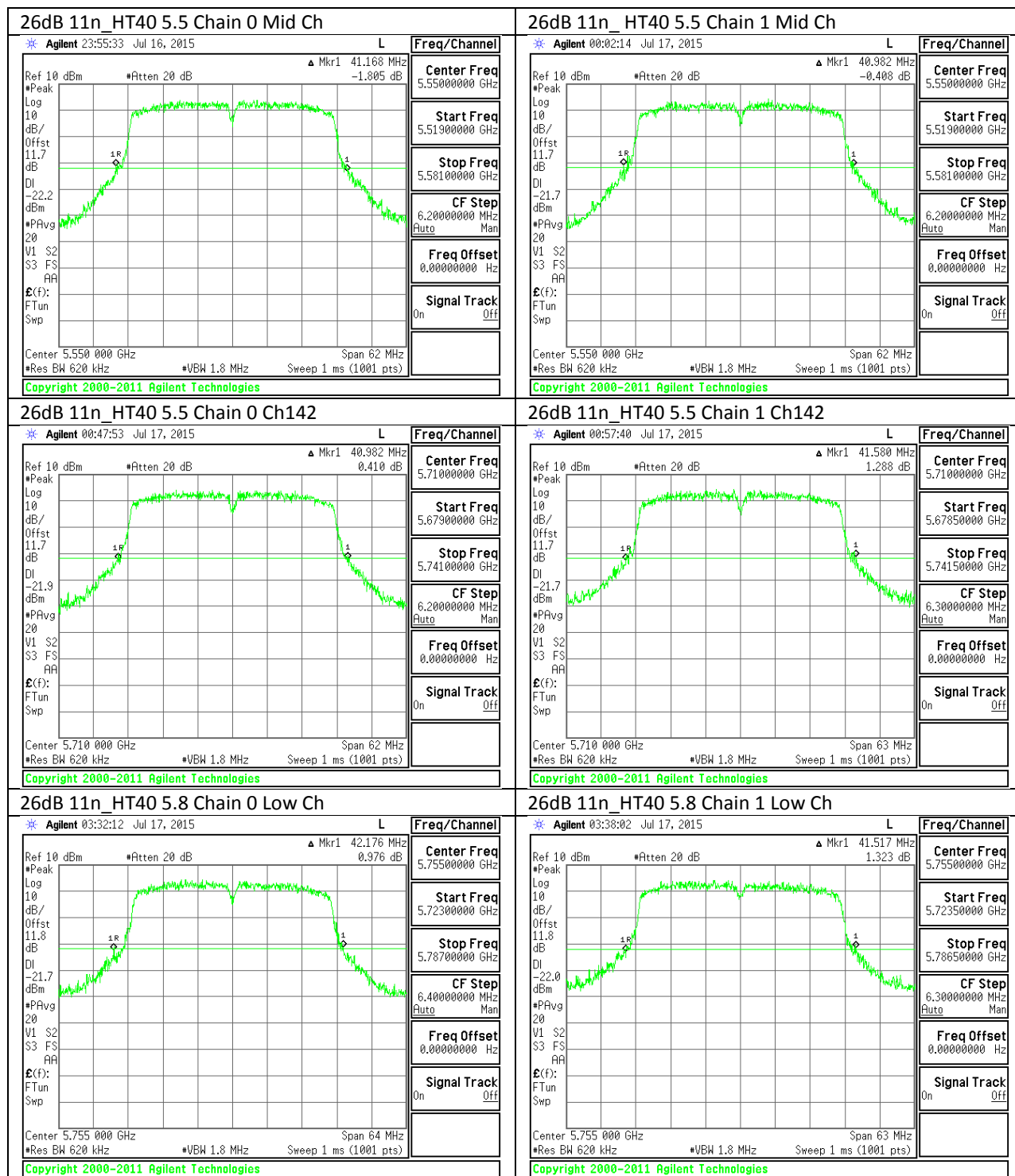
10.2.1. 26 dB BANDWIDTH PLOTS

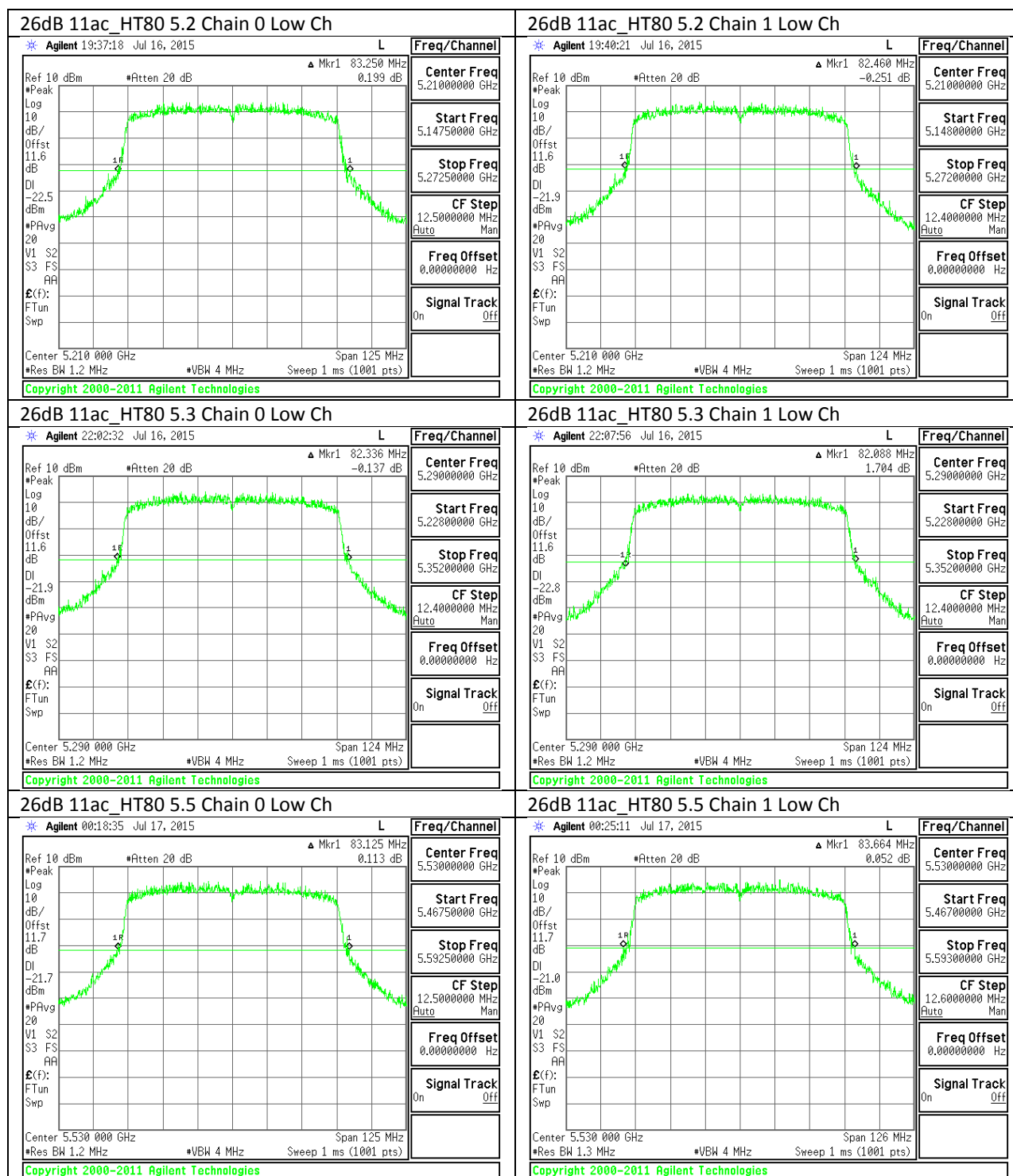


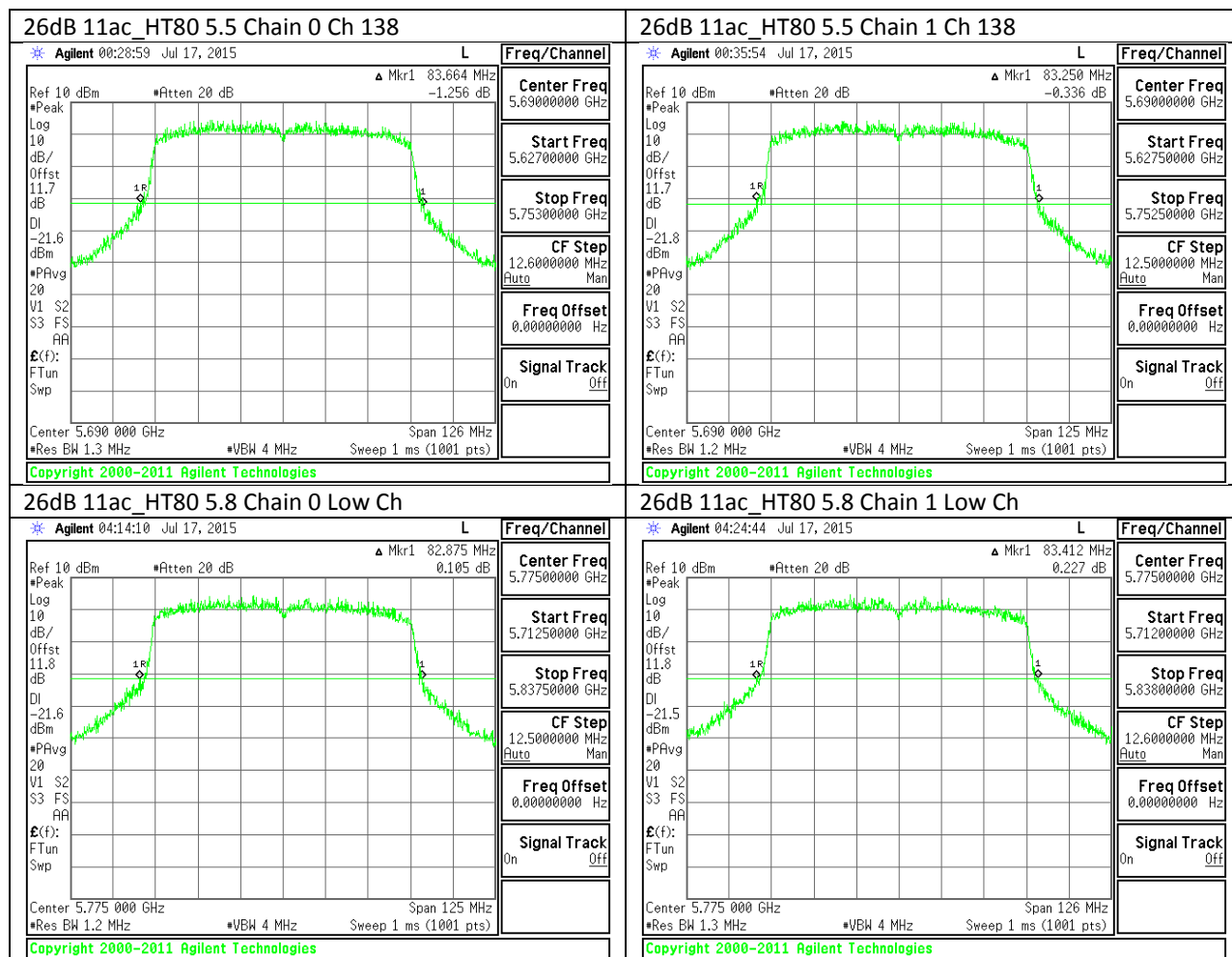












10.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.3.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5180	16.3	16.3
Mid	5200	16.3	16.4
High	5240	16.3	16.3

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5180	17.5	17.5
Mid	5200	17.5	17.5
High	5240	17.5	17.9

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5190	35.9	35.9
High	5230	35.9	36.7

10.3.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5210	73.9	74.8

10.3.5. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5260	16.3	16.3
Mid	5300	16.3	16.4
High	5320	16.3	16.4

10.3.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5260	17.5	17.5
Mid	5300	17.5	17.5
High	5320	17.5	17.5

10.3.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5270	35.9	35.9
High	5310	35.9	35.9

10.3.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5290	74.9	75.0

10.3.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	16.3	16.3
Mid	5580	16.4	16.3
High	5700	16.3	16.4
144	5720	16.3	16.4

10.3.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	17.5	17.5
Mid	5580	17.5	17.5
High	5700	17.5	17.5
144	5720	17.5	17.5

10.3.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	35.9	35.9
Mid	5550	35.9	35.9
High	5670	35.9	35.9
142	5710	35.9	35.9

10.3.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5530	74.9	74.9
138	5690	75.0	74.9

10.3.13. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	16.4	16.4
Mid	5785	16.3	16.4
High	5825	16.4	16.4

10.3.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5745	17.5	17.5
Mid	5785	17.5	17.5
High	5825	17.5	17.5

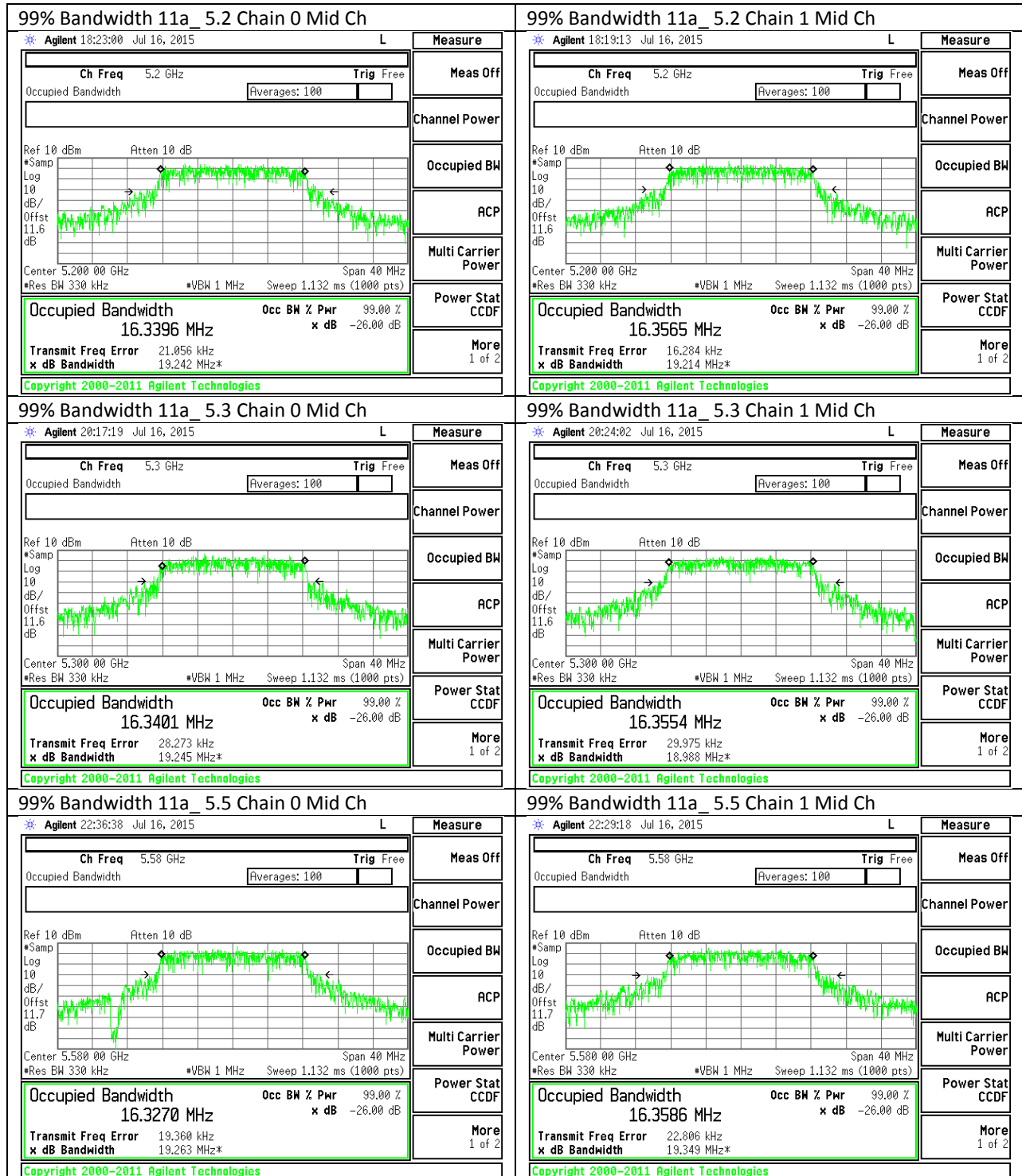
10.3.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

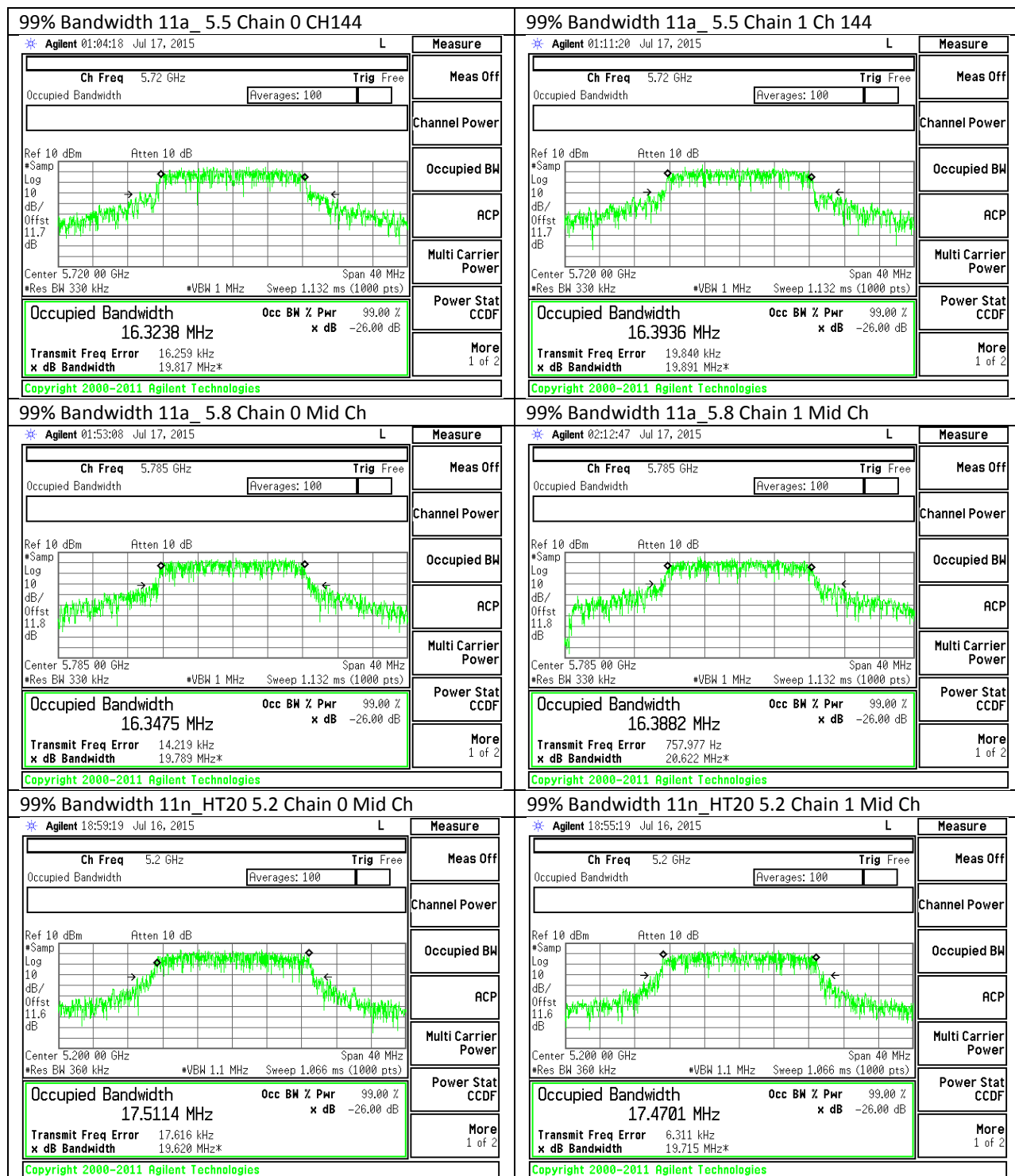
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	35.9	35.9
High	5795	35.9	35.9

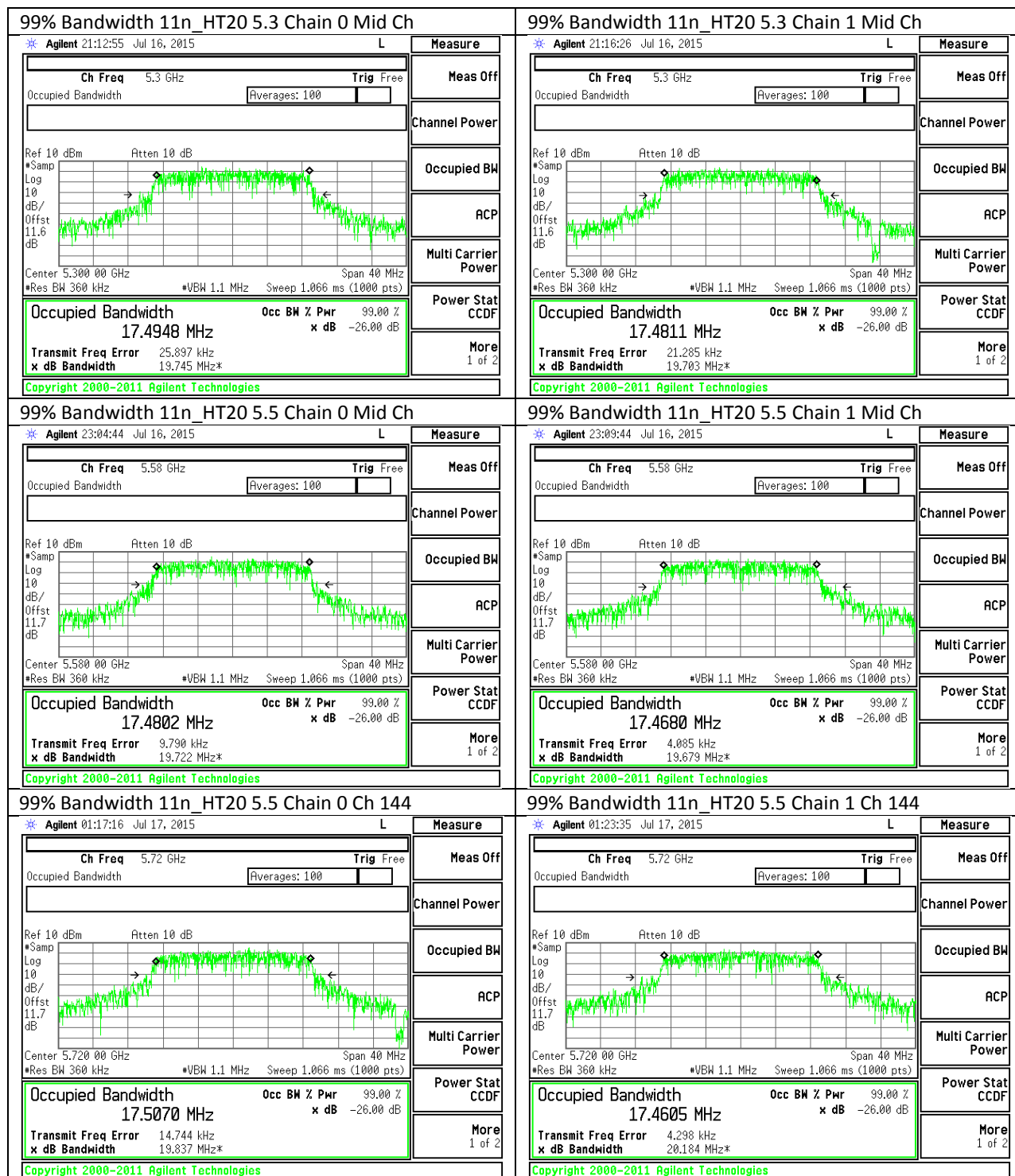
10.3.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

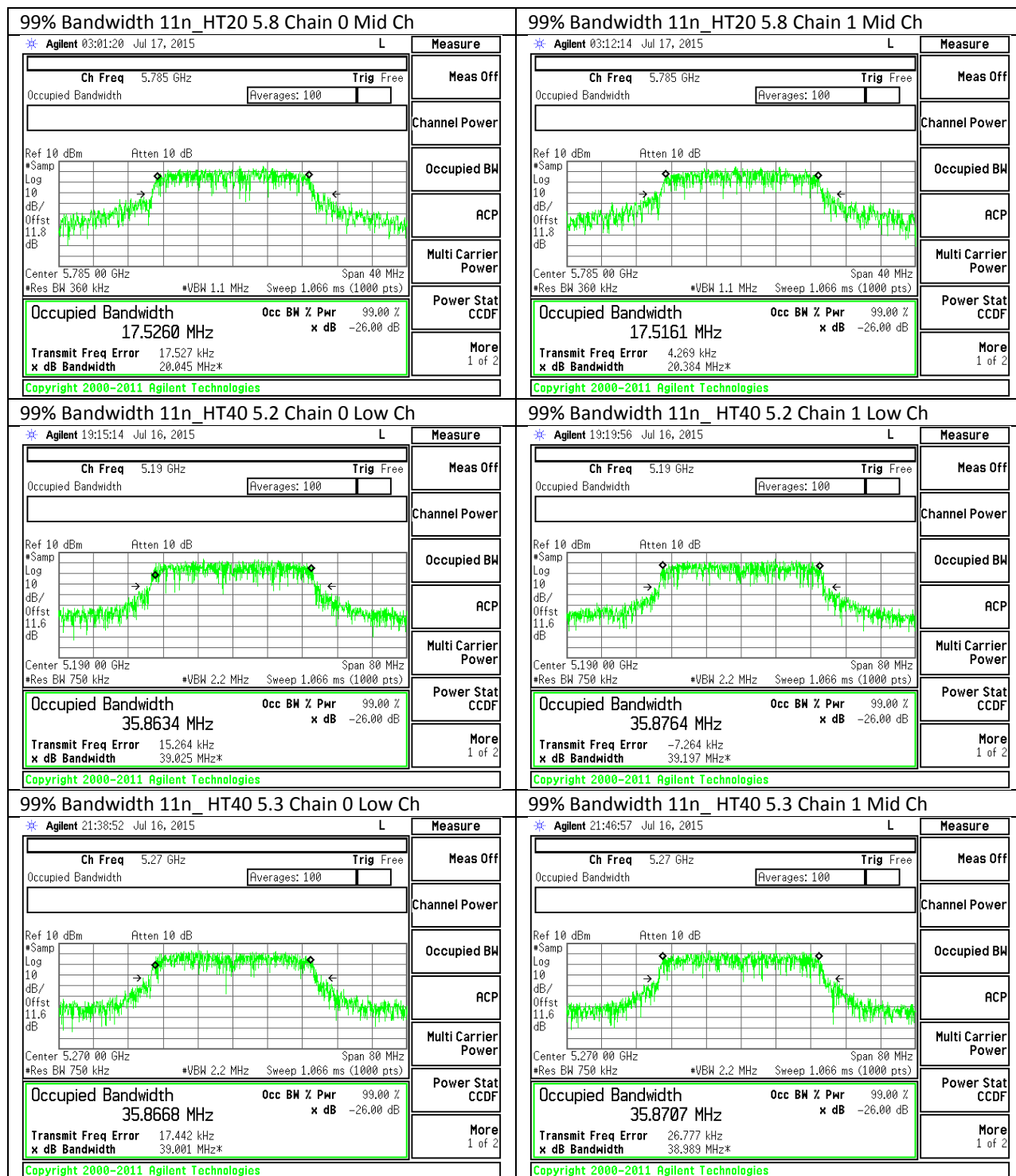
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5775	75.0	75.0

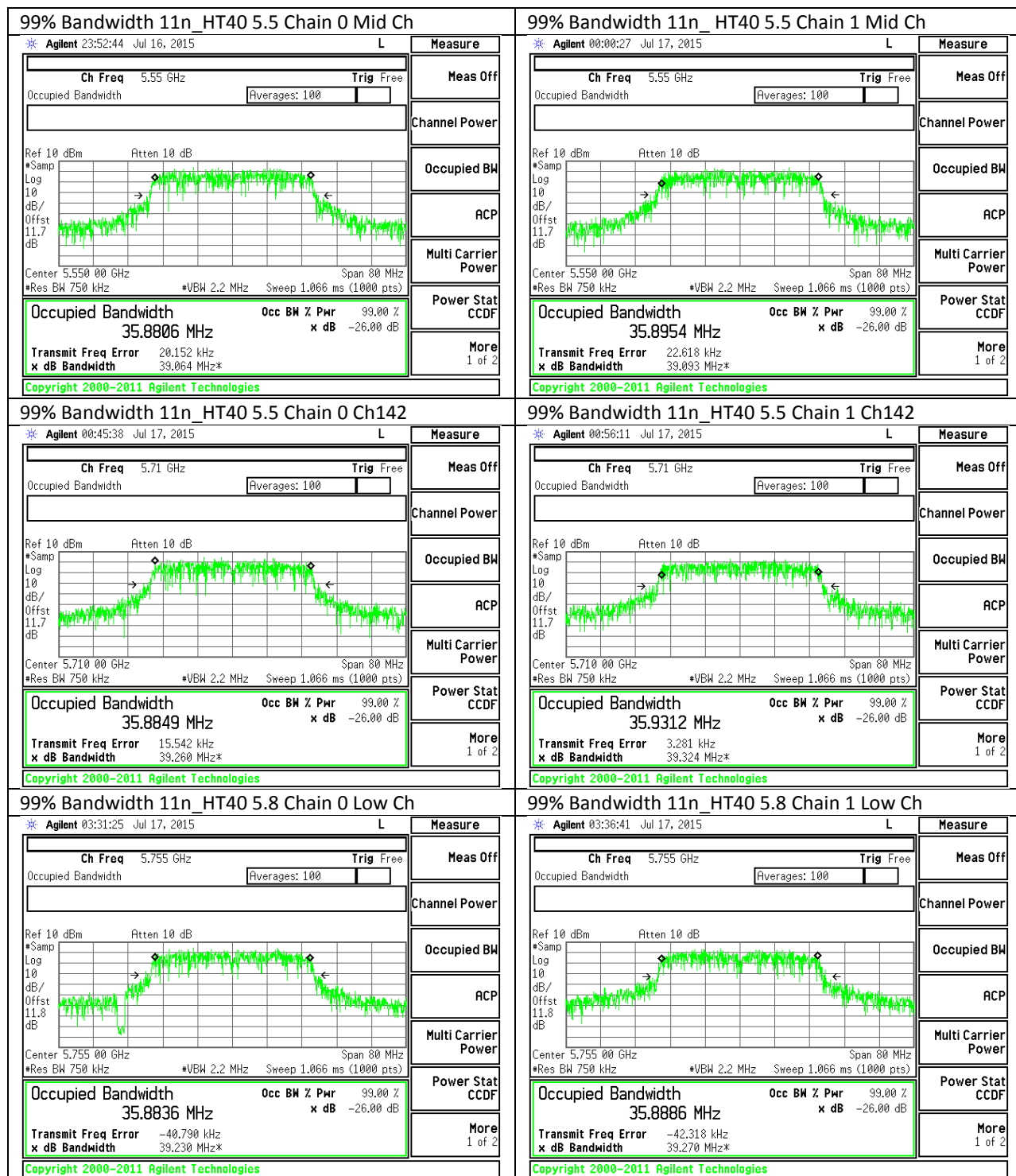
10.3.1. 99% BANDWIDTH PLOTS

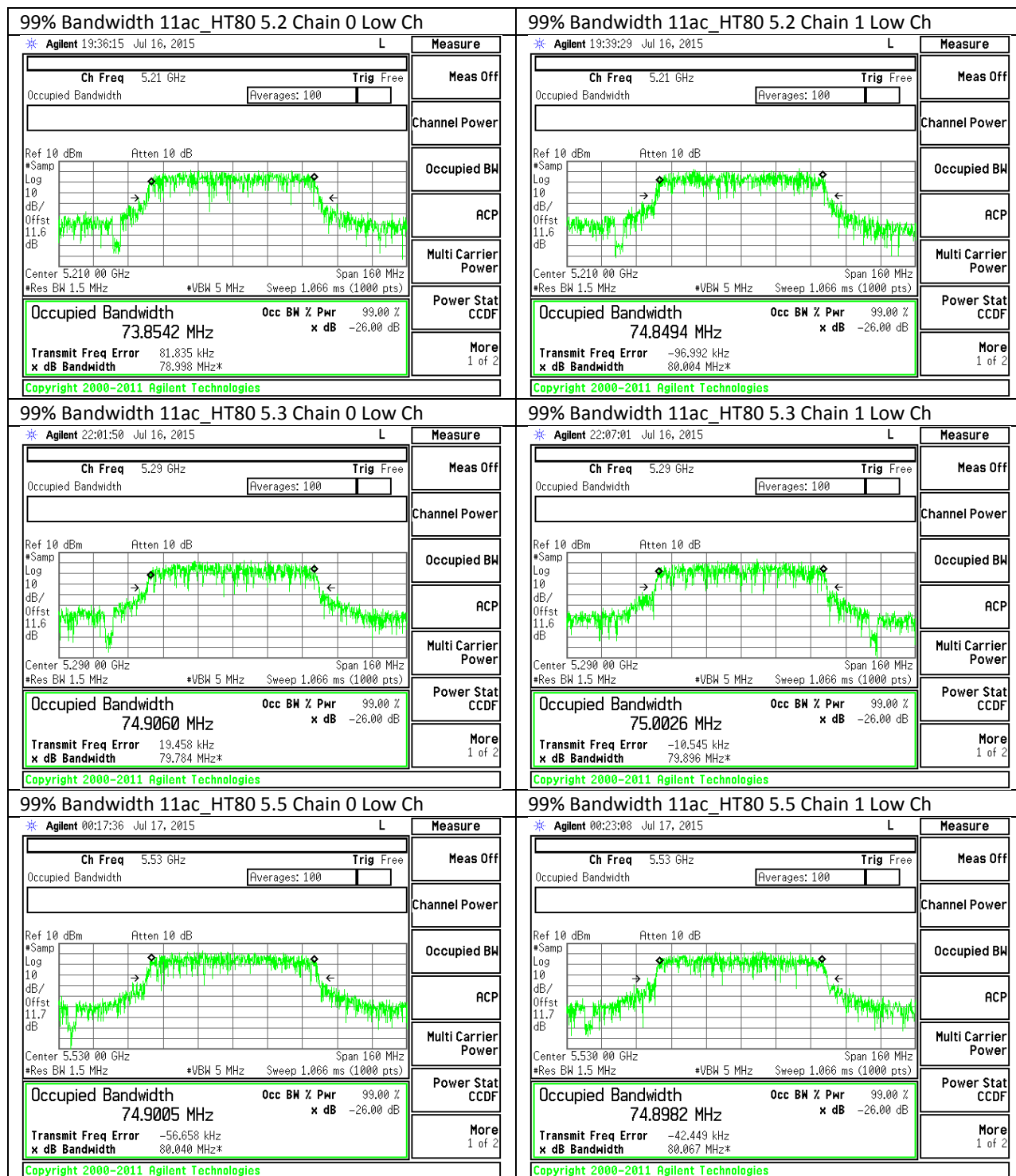


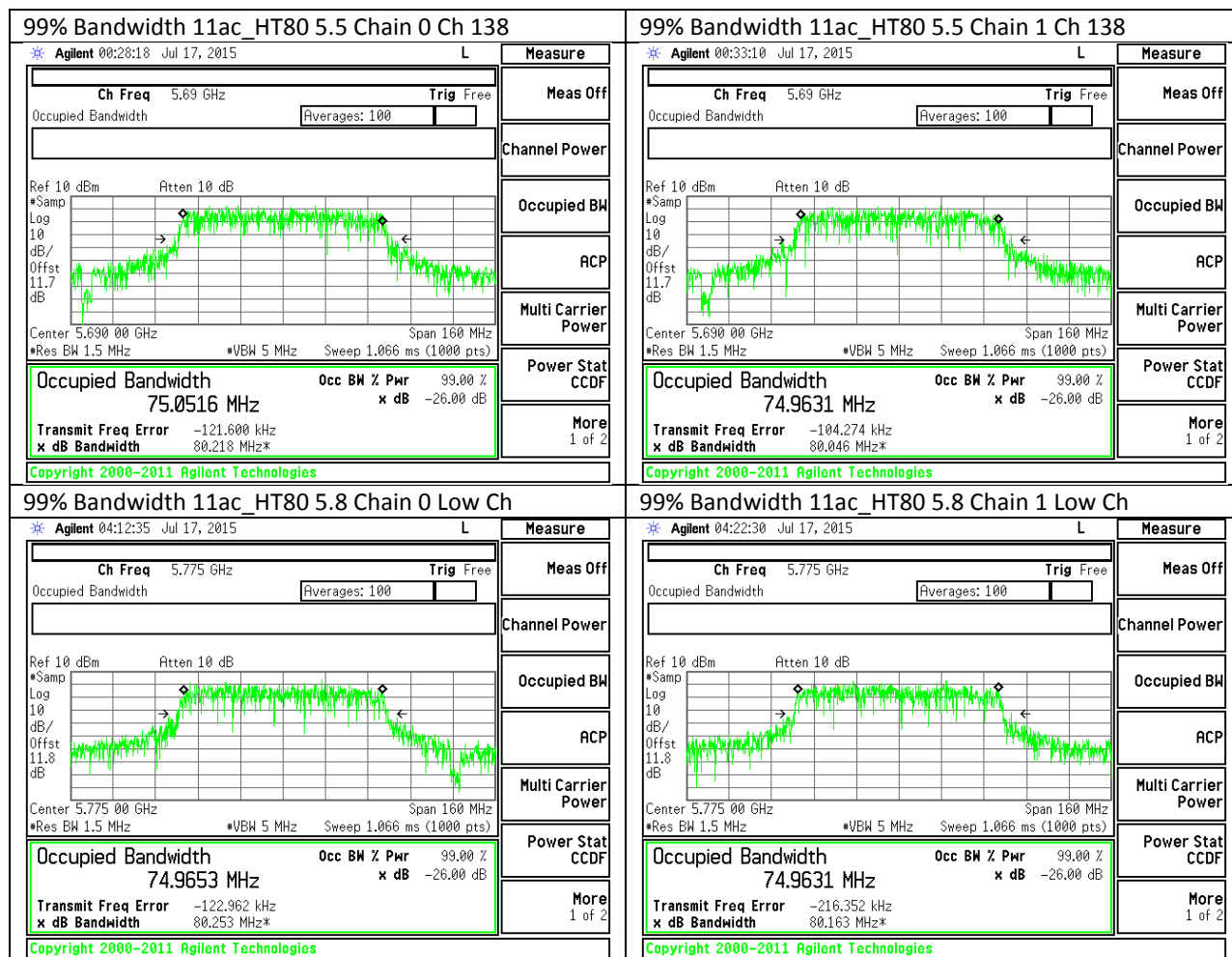












10.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5180	14.0	14.3	17.16
Mid	5200	14.0	14.2	17.11
High	5240	13.8	14.1	16.96

10.4.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5180	12.80	13.00	15.91
Mid	5200	12.80	12.90	15.86
High	5240	12.70	12.70	15.71

10.4.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5190	11.90	12.00	14.96
High	5230	11.90	12.00	14.96

10.4.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5210	10.8	10.8	13.81

10.4.5. 802.11a MODE IN THE 5.3 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5260	13.8	13.9	16.86
Mid	5300	13.9	14.1	17.01
High	5320	14.0	14.1	17.06

10.4.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5260	12.8	12.7	15.76
Mid	5300	12.8	12.9	15.86
High	5320	12.9	12.8	15.86

10.4.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5270	11.9	12.0	14.96
High	5310	11.9	12.0	14.96

10.4.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5290	10.9	10.9	13.91

10.4.9. 802.11a MODE IN THE 5.5 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5500	14.3	14.5	17.41
Mid	5580	14.0	14.1	17.06
High	5700	14.2	14.5	17.36

10.4.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5500	12.9	13.2	16.06
Mid	5580	12.8	12.9	15.86
High	5700	12.9	13.2	16.06

10.4.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5510	12.0	12.0	15.01
Mid	5550	11.9	12.0	14.96
High	5670	12.0	12.0	15.01

10.4.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5530	11.0	11.0	14.01

10.4.13. 802.11a MODE IN THE 5.8 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5745	14.0	14.2	17.11
Mid	5785	13.9	14.4	17.17
High	5825	13.9	14.3	17.11

10.4.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5745	12.9	12.9	15.91
Mid	5785	12.8	13.2	16.01
High	5825	12.8	13.1	15.96

10.4.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5755	11.9	12.0	14.96
High	5795	12.0	12.0	15.01

10.4.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5775	10.8	10.9	13.86

10.5. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

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.

RSS-247

Band 5150-5250 MHz:

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

Band 5250-5350 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.

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-multipointFootnote3 systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

5180-5240

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-1.34	-2.52	-1.89

5260-5320

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.16	-2.22	-1.07

5500-5700

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-0.17	1.06	0.49

5745-5825

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.18	0.03	0.11

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

5180-5240

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-1.34	-2.52	1.10

5260-5300

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.16	-2.22	1.88

5550-5700

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
-0.17	1.06	3.48

5745-5825

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
0.18	0.03	3.12

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 PPSD (dBi)
Low	5180	20.4	16.3	-1.89	1.10
Mid	5200	20.9	16.4	-1.89	1.10
High	5240	21.1	16.3	-1.89	1.10

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	22.12	24.01	24.00	11.00	10.00	8.90
Mid	5200	24.00	22.15	24.04	24.00	11.00	10.00	8.90
High	5240	24.00	22.12	24.01	24.00	11.00	10.00	8.90

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.83	14.64	17.75	24.00	-6.25
Mid	5200	14.78	14.61	17.71	24.00	-6.29
High	5240	14.59	14.27	17.44	24.00	-6.56

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	3.75	3.56	6.67	8.90	-2.23
Mid	5200	3.73	3.55	6.65	8.90	-2.25
High	5240	3.50	3.23	6.38	8.90	-2.52

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	20.9	17.5	-1.89	1.10
Mid	5200	20.6	17.5	-1.89	1.10
High	5240	20.4	17.9	-1.89	1.10

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	22.43	24.32	24.00	11.00	10.00	8.90
Mid	5200	24.00	22.43	24.32	24.00	11.00	10.00	8.90
High	5240	24.00	22.53	24.42	24.00	11.00	10.00	8.90

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	13.60	13.30	16.46	24.00	-7.54
Mid	5200	13.45	13.16	16.32	24.00	-7.68
High	5240	13.38	12.94	16.18	24.00	-7.82

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	2.33	2.05	5.20	8.90	-3.70
Mid	5200	2.23	1.91	5.08	8.90	-3.82
High	5240	2.12	1.72	4.93	8.90	-3.97

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 PPSD (dBi)
Low	5190	41.9	35.9	-1.89	1.10
High	5230	41.8	36.7	-1.89	1.10

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	5190	24.00	23.00	24.89	24.00	11.00	10.00	8.90
High	5230	24.00	23.00	24.89	24.00	11.00	10.00	8.90

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	12.72	12.51	15.63	24.00	-8.37
High	5230	12.53	12.04	15.30	24.00	-8.70

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5190	-1.86	-1.99	1.09	8.90	-7.81
High	5230	-2.03	2.51	3.82	8.90	-5.08

10.5.4. 802.11ac HT80 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	5210	83.3	74.8	-1.89	1.10

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	5210	24.00	23.00	24.89	24.00	11.00	10.00	8.90

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5210	11.02	10.63	13.93	24.00	-10.07

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5210	-6.54	-6.93	-3.63	8.90	-12.53

10.5.5. 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	20.6	16.3	-1.87	1.88
Mid	5300	20.5	16.4	-1.87	1.88
High	5320	21.0	16.4	-1.87	1.88

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	23.12	29.12	23.12	11.00	11.00	11.00
Mid	5300	24.00	23.15	29.15	23.15	11.00	11.00	11.00
High	5320	24.00	23.15	29.15	23.15	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	14.64	14.31	17.49	23.12	-5.63
Mid	5300	14.65	14.57	17.62	23.15	-5.53
High	5320	14.82	14.63	17.74	23.15	-5.41

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	3.60	3.23	6.43	11.00	-4.57
Mid	5300	3.54	3.49	6.53	11.00	-4.47
High	5320	3.70	3.60	6.66	11.00	-4.34

10.5.6. 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	20.9	17.5	-1.87	1.88
Mid	5300	20.5	17.5	-1.87	1.88
High	5320	20.8	17.5	-1.87	1.88

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	23.43	29.43	23.43	11.00	11.00	11.00
Mid	5300	24.00	23.43	29.43	23.43	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)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	13.47	13.06	16.28	23.43	-7.15
Mid	5300	13.52	13.23	16.39	23.43	-7.04
High	5320	13.54	13.26	16.41	23.43	-7.02

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	2.20	1.80	5.01	11.00	-5.99
Mid	5300	2.22	2.04	5.14	11.00	-5.86
High	5320	2.19	2.03	5.12	11.00	-5.88

10.5.7. 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 PPSP (dBi)
Low	5270	41.2	35.9	-1.87	1.88
High	5310	41.2	35.9	-1.87	1.88

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	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)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	12.53	12.12	15.34	24.00	-8.66
High	5310	12.73	12.37	15.56	24.00	-8.44

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Chain 1 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5270	-1.97	-2.44	0.81	11.00	-10.19
High	5310	-1.88	-2.10	1.02	11.00	-9.98

10.5.8. 802.11ac HT80 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	5290	82.3	75.000	-1.87	1.88

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	5290	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5290	10.94	10.79	13.97	24.00	-10.03

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5290	-6.69	-6.75	-3.62	11.00	-14.62

10.5.9. 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 PPSD (dBi)
Low	5500	20.4	16.3	0.49	3.40
Mid	5580	21.1	16.3	0.49	3.40
High	5720	21.0	16.4	0.49	3.40

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	5500	24.00	23.12	29.12	23.12	11.00	11.00	11.00
Mid	5580	24.00	23.12	29.12	23.12	11.00	11.00	11.00
High	5720	24.00	23.15	29.15	23.15	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.20	14.98	18.10	23.12	-5.02
Mid	5580	14.81	14.39	17.62	23.12	-5.51
High	5720	14.93	14.88	17.92	23.15	-5.23

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	4.09	3.98	7.05	11.00	-3.95
Mid	5580	3.73	3.30	6.53	11.00	-4.47
High	5720	3.98	3.78	6.89	11.00	-4.11

10.5.10. 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 PPSD (dBi)
Low	5500	21.2	17.5	0.49	3.40
Mid	5580	20.7	17.5	0.49	3.40
High	5720	20.7	17.5	0.49	3.40

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	5500	24.00	23.43	29.43	23.43	11.00	11.00	11.00
Mid	5580	24.00	23.43	29.43	23.43	11.00	11.00	11.00
High	5720	24.00	23.43	29.43	23.43	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	13.92	13.74	16.84	23.43	-6.59
Mid	5580	13.62	13.83	16.74	23.43	-6.69
High	5720	13.67	13.57	16.63	23.43	-6.80

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	2.62	2.51	5.58	11.00	-5.42
Mid	5580	2.36	1.87	5.13	11.00	-5.87
High	5720	2.41	2.35	5.39	11.00	-5.61

10.5.11. 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 PPSD (dBi)
Low	5510	40.7	35.9	0.49	3.40
Mid	5550	41.2	35.9	0.49	3.40
High	5670	41.8	35.9	0.49	3.40

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	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)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	12.99	12.83	15.92	24.00	-8.08
Mid	5550	12.67	12.26	15.48	24.00	-8.52
High	5670	12.98	12.89	15.95	24.00	-8.05

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-1.50	-1.70	1.41	11.00	-9.59
Mid	5550	-1.86	-2.32	0.93	11.00	-10.07
High	5670	-1.53	-1.56	1.47	11.00	-9.53

10.5.12. 802.11ac HT80 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 PPSD (dBi)
Low	5530	83.7	74.9	0.49	3.40

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	5530	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	11.49	11.16	14.43	24.00	-9.57

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5530	-5.98	-6.43	-3.10	11.00	-14.10

10.5.13. 802.11a MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSP (dBi)
Low	5745	0.11	3.12
Mid	5785	0.11	3.12
High	5825	0.11	3.12

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	Power Limit (dBm)	FCC PPSP Limit (dBm)	IC PSD Limit (dBm)	PPSP 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)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.18	14.73	17.97	30.00	-12.03
Mid	5785	14.65	14.73	17.70	30.00	-12.30
High	5825	14.68	14.66	17.68	30.00	-12.32

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Chain 1 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
Low	5745	1.38	0.99	4.20	30.00	-25.80
Mid	5785	0.85	0.96	3.92	30.00	-26.08
High	5825	0.84	0.98	3.92	30.00	-26.08

10.5.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5745	0.11	3.12
Mid	5785	0.11	3.12
High	5825	0.11	3.12

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)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	13.92	13.44	16.70	30.00	-13.30
Mid	5785	13.66	13.52	16.60	30.00	-13.40
High	5825	13.67	13.44	16.57	30.00	-13.43

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-0.10	-0.65	2.64	30.00	-27.36
Mid	5785	-0.39	-0.56	2.54	30.00	-27.46
High	5825	-0.33	-0.63	2.53	30.00	-27.47

10.5.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5755	0.11	3.12
High	5795	0.11	3.12

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)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	12.90	12.53	15.73	30.00	-14.27
High	5795	12.69	12.69	15.70	30.00	-14.30

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-4.29	-4.64	-1.45	30.00	-31.45
High	5795	-4.58	-4.54	-1.55	30.00	-31.55

10.5.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5775	0.11	3.12

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	5775	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5775	11.26	10.77	14.12	30.00	-15.88

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5775	-8.87	-9.28	-5.97	30.00	-35.97

10.5.17. 802.11a MODE STRADDLE CHANNEL 144 RESULTS

UNII-2C 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)
144	5720	15.62	13.1600	0.11	3.12

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)
144	5720	22.94	22.19	28.19	22.19	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	14.19	13.20	16.73	22.19	-5.46

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
144	5720	3.894	3.514	6.72	11.00	-4.28

UNII-3 BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
144	5720	0.11	3.12

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)
144	5720	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	6.75	6.41	9.59	30.00	-20.41

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
144	5720	3.11	2.88	6.01	30.00	-23.99

10.5.18. 802.11n HT20 MODE STRADDLE CHANNEL 144 RESULTS

UNII-2C 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)
144	5720	15.23	13.75	0.11	3.12

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSPD Limit (dBm)	IC PSD Limit (dBm)	PPSPD Limit (dBm)
144	5720	22.83	22.38	28.38	22.38	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSPD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	12.94	12.52	15.75	22.38	-6.64

PPSPD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSPD (dBm)	Chain 1 Meas PPSPD (dBm)	Total Corr'd PPSPD (dBm)	PPSPD Limit (dBm)	PPSPD Margin (dB)
144	5720	2.50	2.09	5.31	11.00	-5.69

UNII-3 BAND

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
144	5720	0.11	3.12

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)
144	5720	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.93	5.41	8.69	30.00	-21.31

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
144	5720	1.80	1.26	4.55	30.00	-25.45

10.5.19. 802.11n HT40 MODE STRADDLE CHANNEL 142 RESULTS

UNII-2C 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)
144	5720	35.49	32.94	0.11	3.12

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)
144	5720	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	12.50	12.29	15.41	24.00	-8.59

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Chain 1 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
144	5720	-1.72	-1.89	1.21	11.00	-9.79

UNII-3 BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
142	5710	0.11	3.12

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)
142	5710	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
142	5710	-0.18	-0.45	2.70	30.00	-27.30

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
142	5710	-3.67	-3.94	-0.79	30.00	-30.79

10.5.20. 802.11ac HT80 MODE STRADDLE CHANNEL 138 RESULTS

UNII-2C 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)
138	5690	76.60	72.50	0.11	3.12

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)
138	5690	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	11.33	11.16	14.35	24.00	-9.65

PPSP Results

Channel	Frequency (MHz)	Chain 0 Meas PPSP (dBm)	Chain 1 Meas PPSP (dBm)	Total Corr'd PPSP (dBm)	PPSP Limit (dBm)	PPSP Margin (dB)
138	5690	-5.99	-6.12	-2.95	11.00	-13.95

UNII-3 BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
138	5690	0.11	3.12

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)
138	5690	30.00	30.00	30.00	30.00	30.00	30.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PPSD
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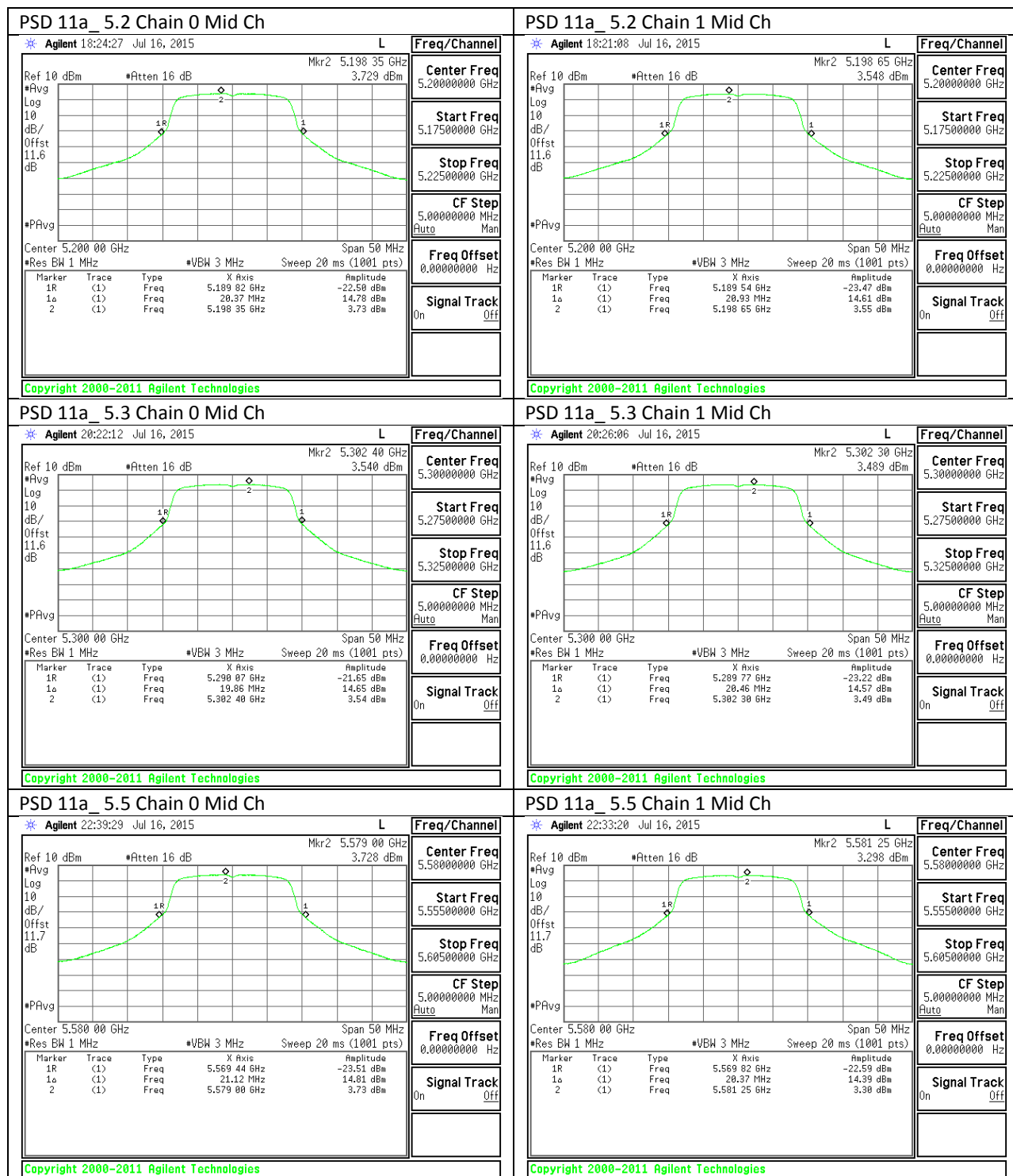
Output Power Results

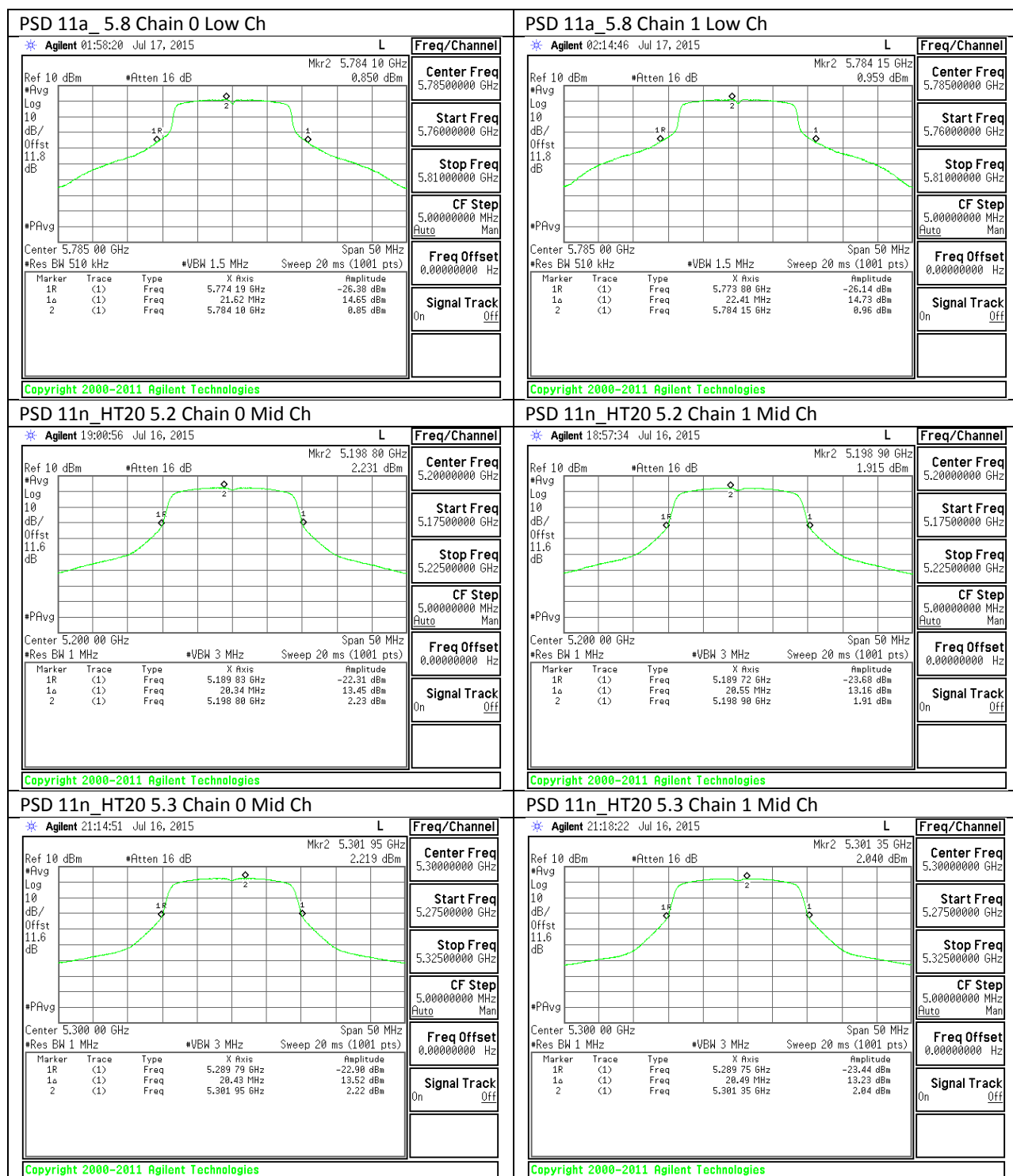
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
138	5690	-6.17	-6.10	-3.03	30.00	-33.03

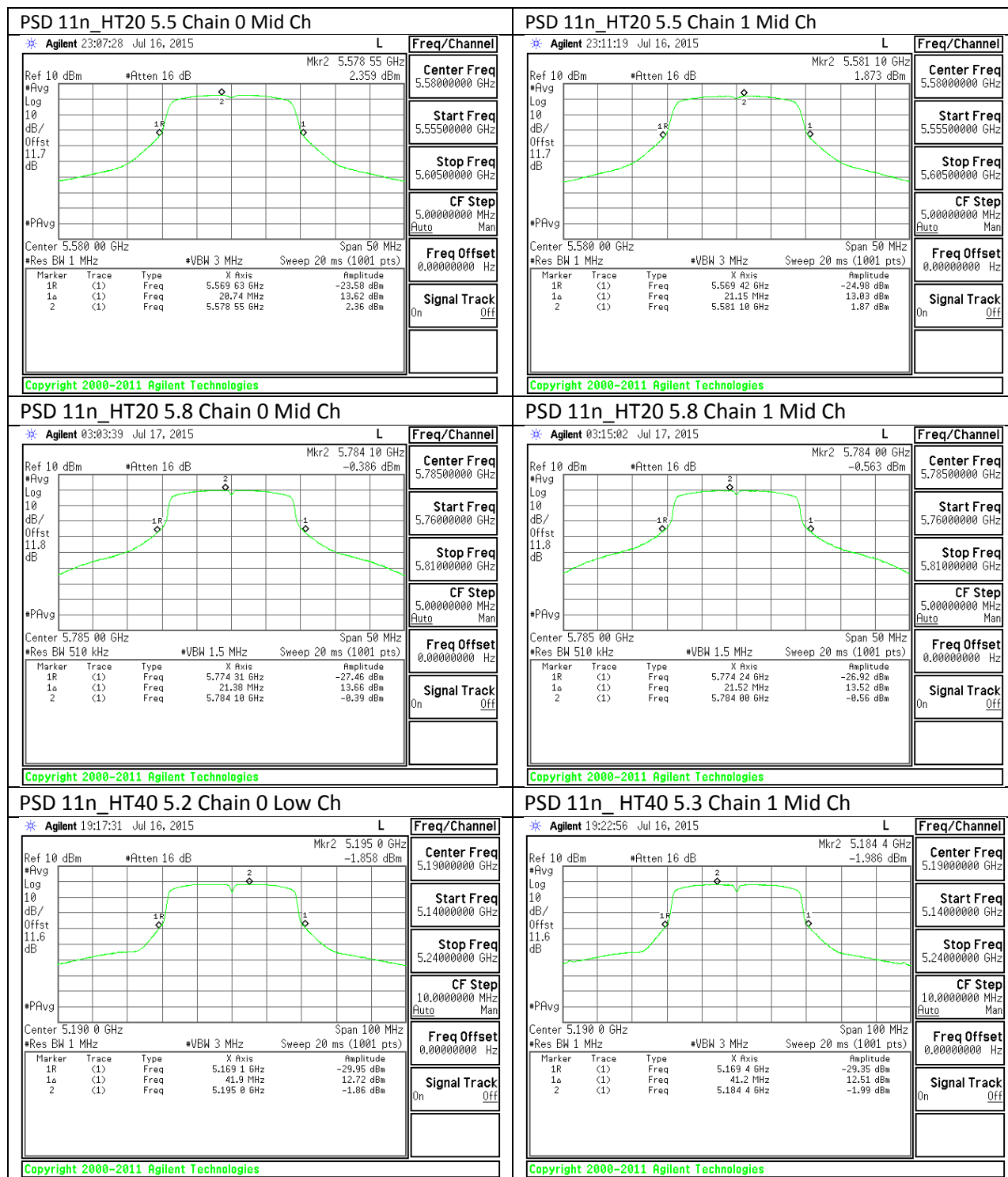
PPSD Results

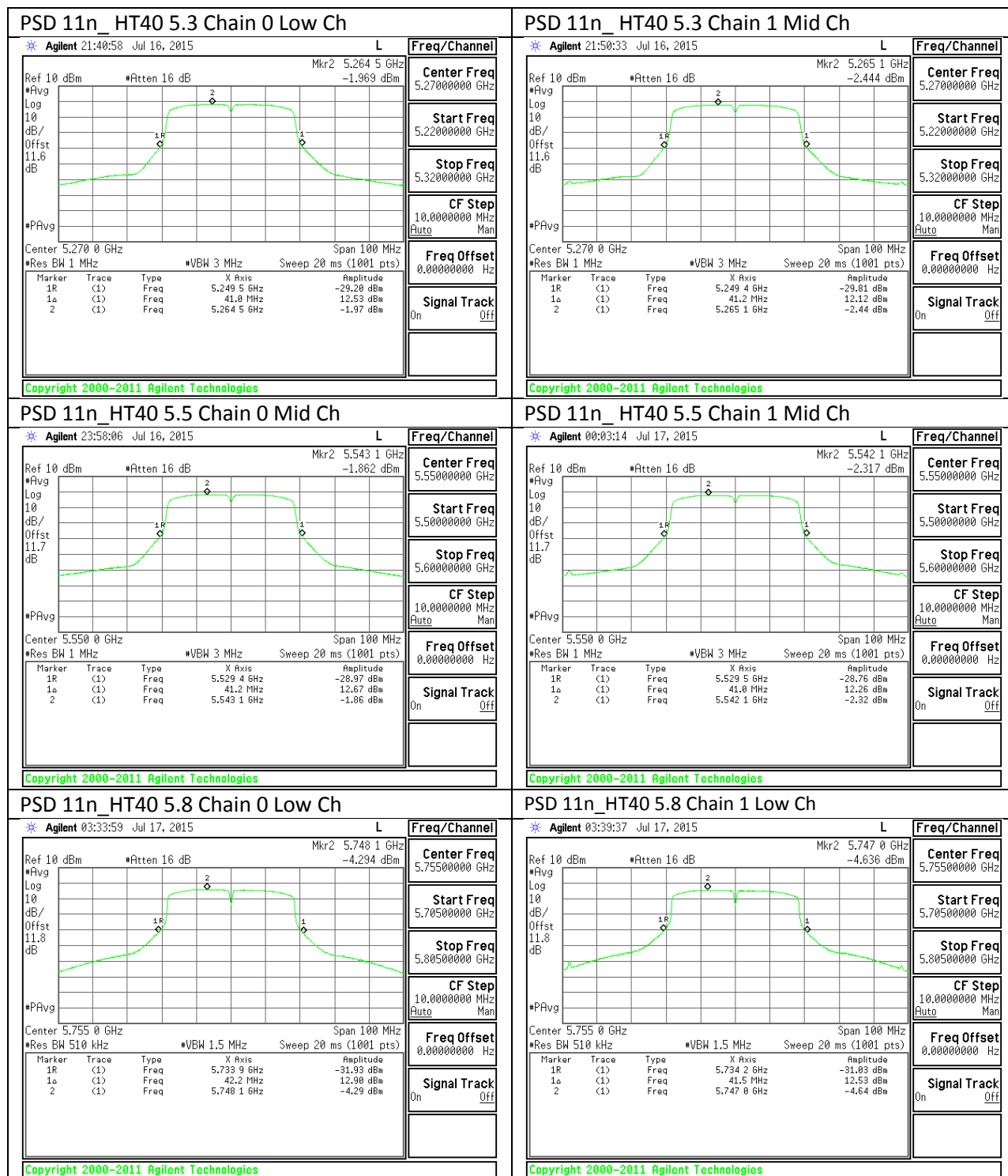
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
138	5690	-9.366	-9.288	-6.23	30.00	-36.23

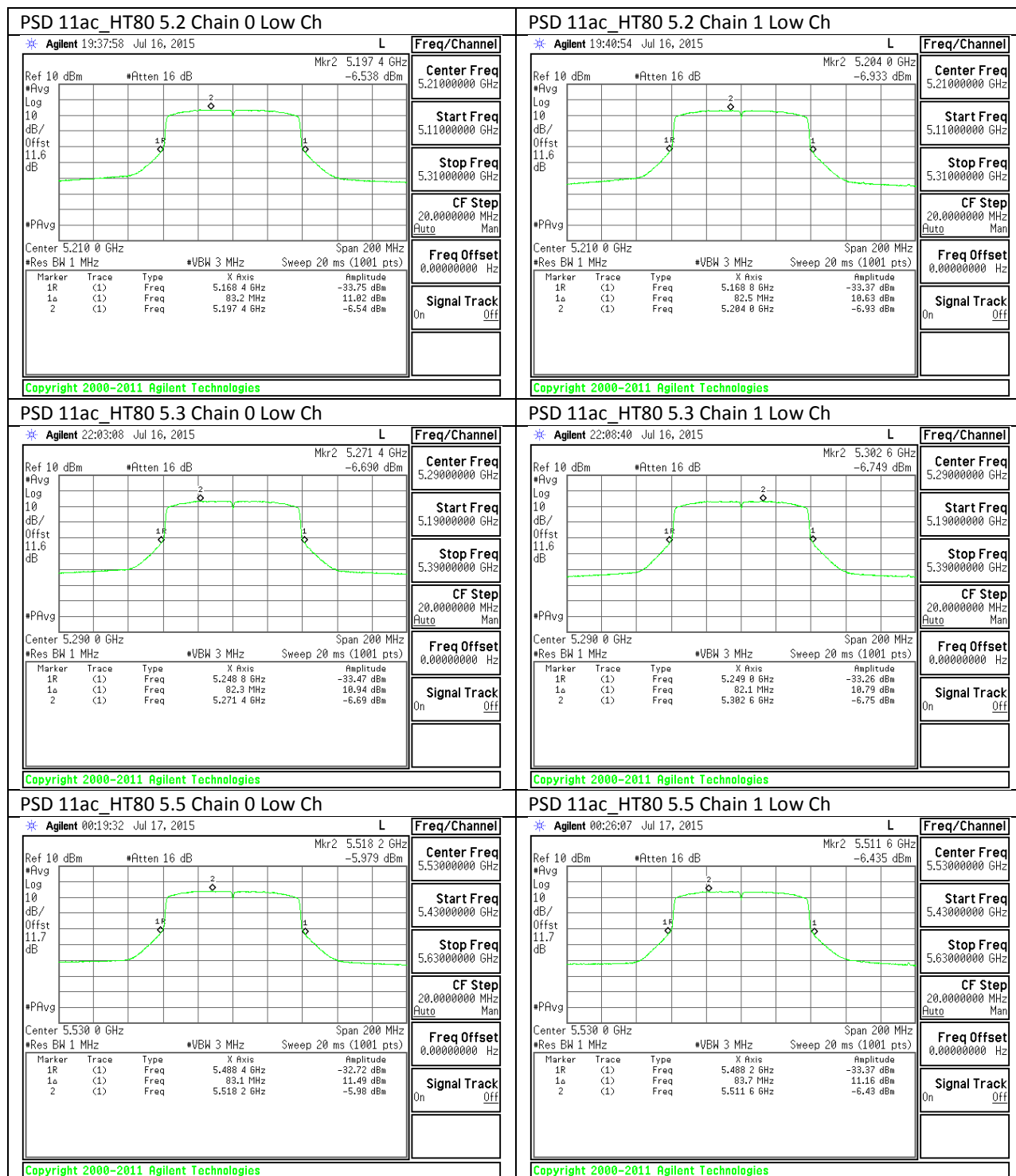
10.5.21. OUTPUT POWER AND PPSD PLOTS

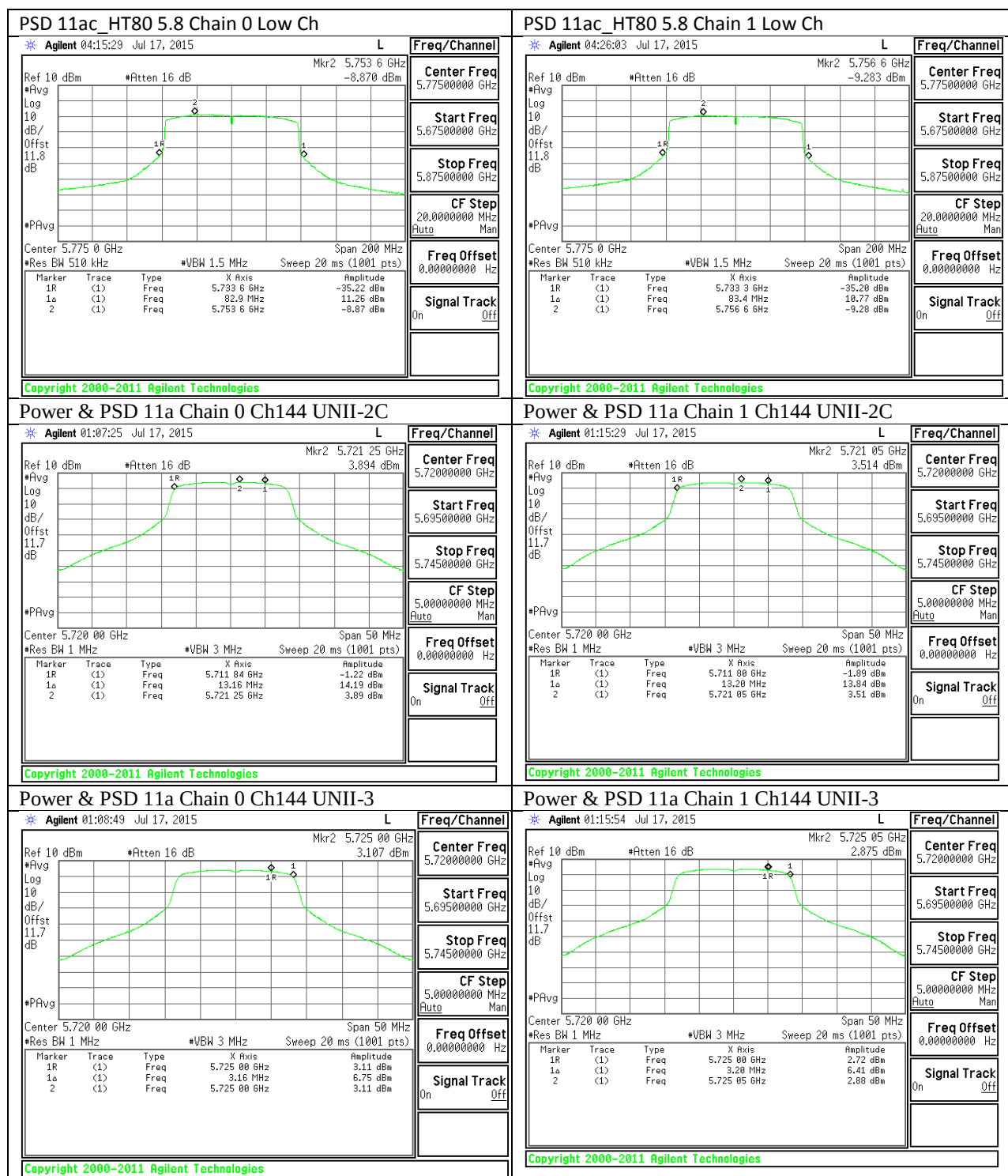


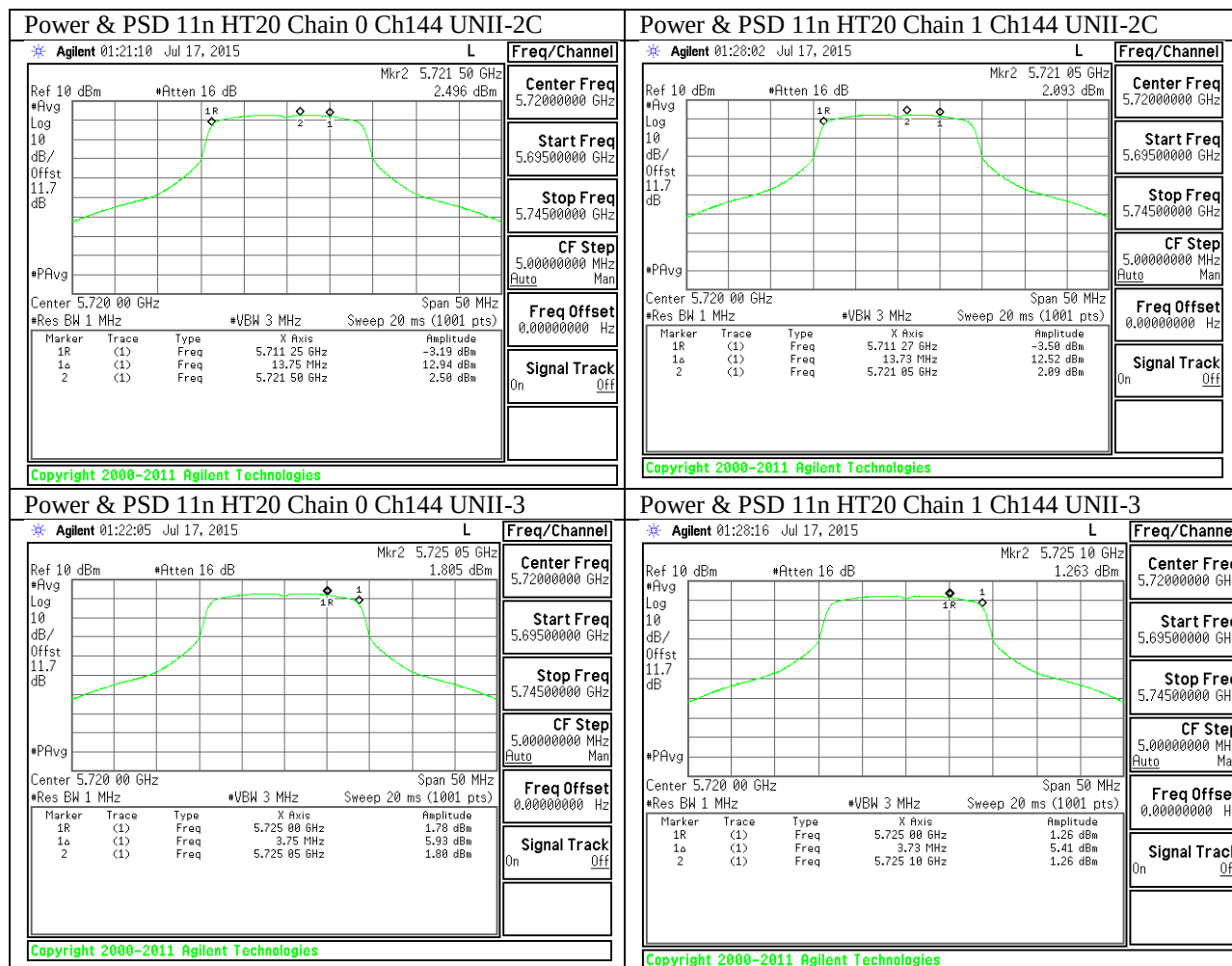


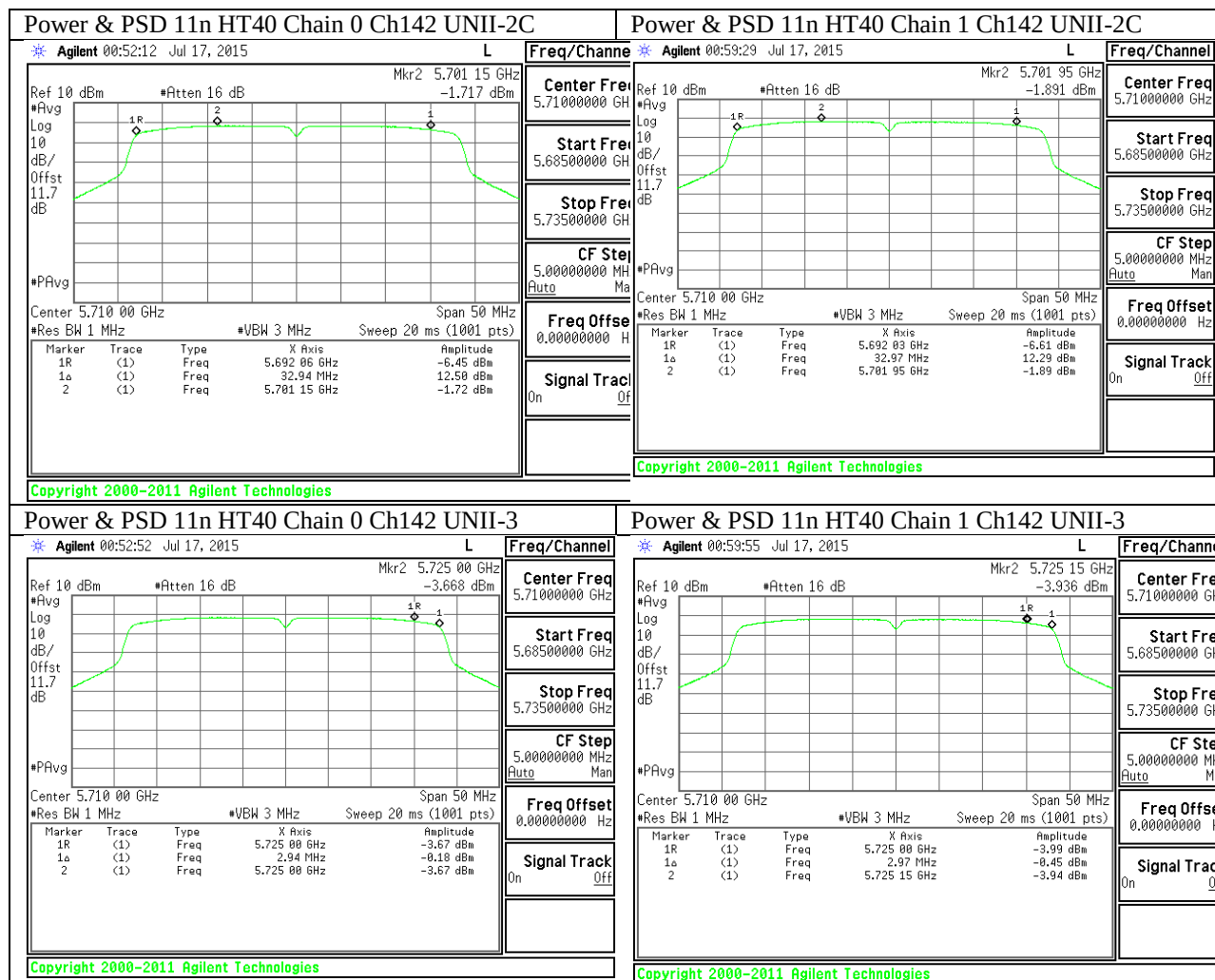


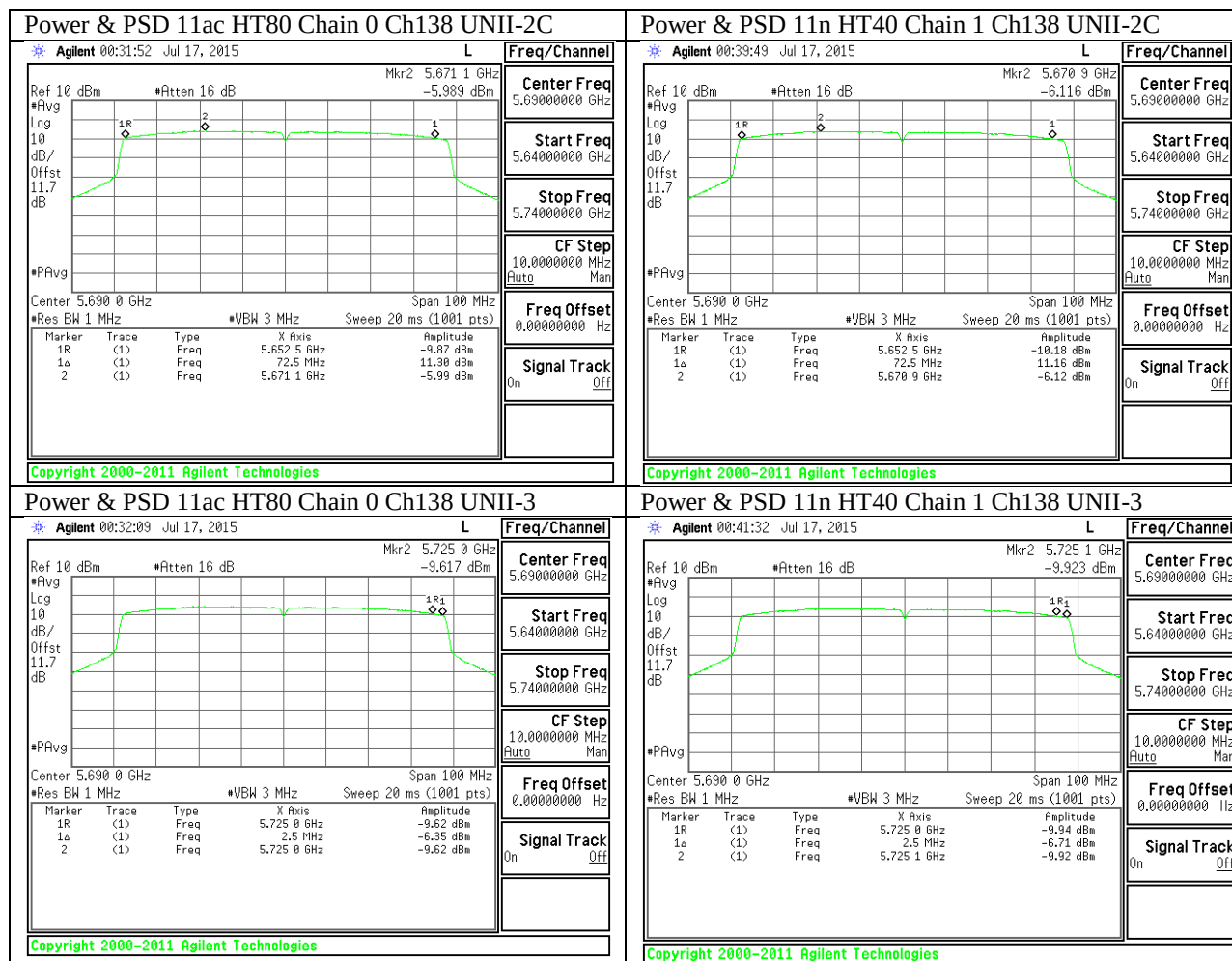












11. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm 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 H) 6) d) Method VB:

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

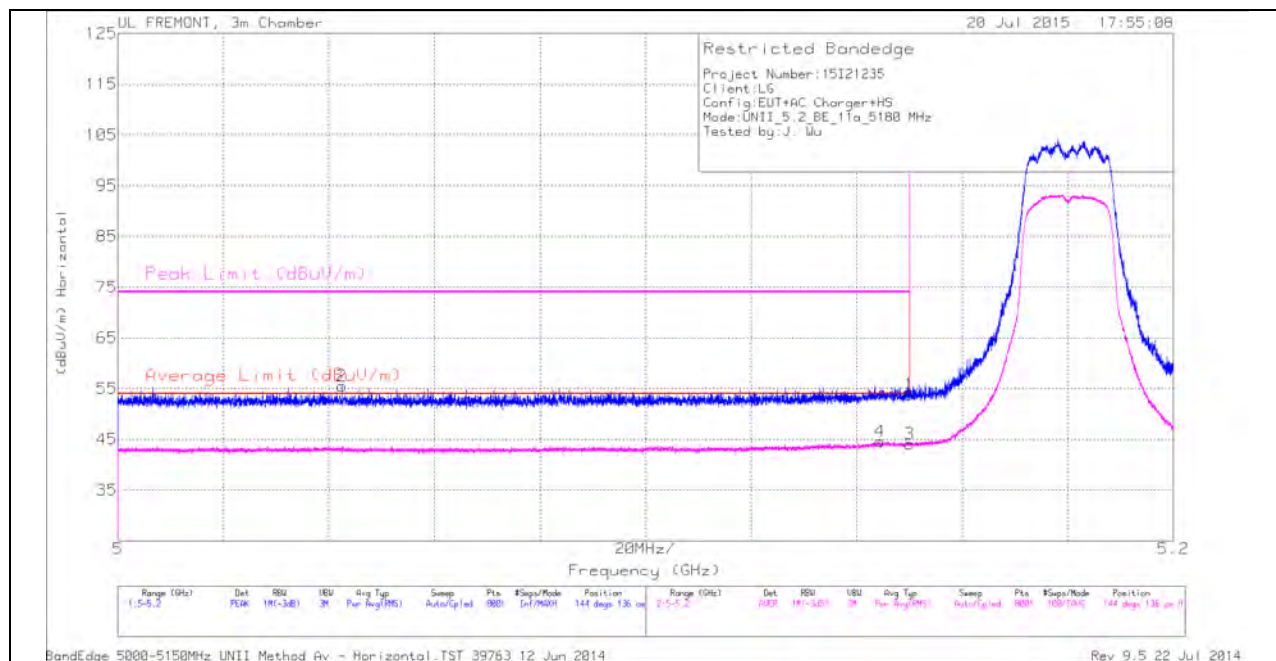
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

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)

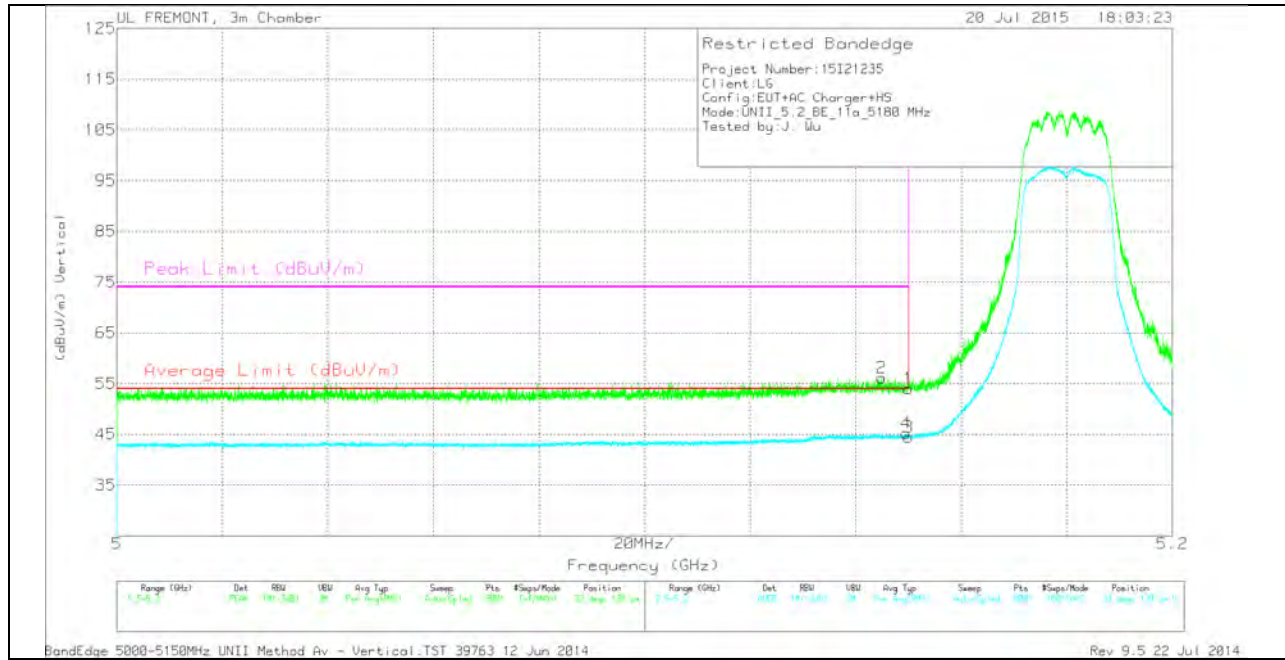
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/Plt 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	5.042	42.06	PK	34.1	-20.6	0	55.56	-	-	74	-18.44	144	136	H
4	5.144	31.08	RMS	34.2	-20.7	0	44.58	54	-9.42	-	-	144	136	H
1	5.15	40.43	PK	34.2	-20.8	0	53.83	-	-	74	-20.17	144	136	H
3	5.15	30.72	RMS	34.2	-20.8	0	44.12	54	-9.88	-	-	144	136	H

VERTICAL PEAK AND AVERAGE PLOT

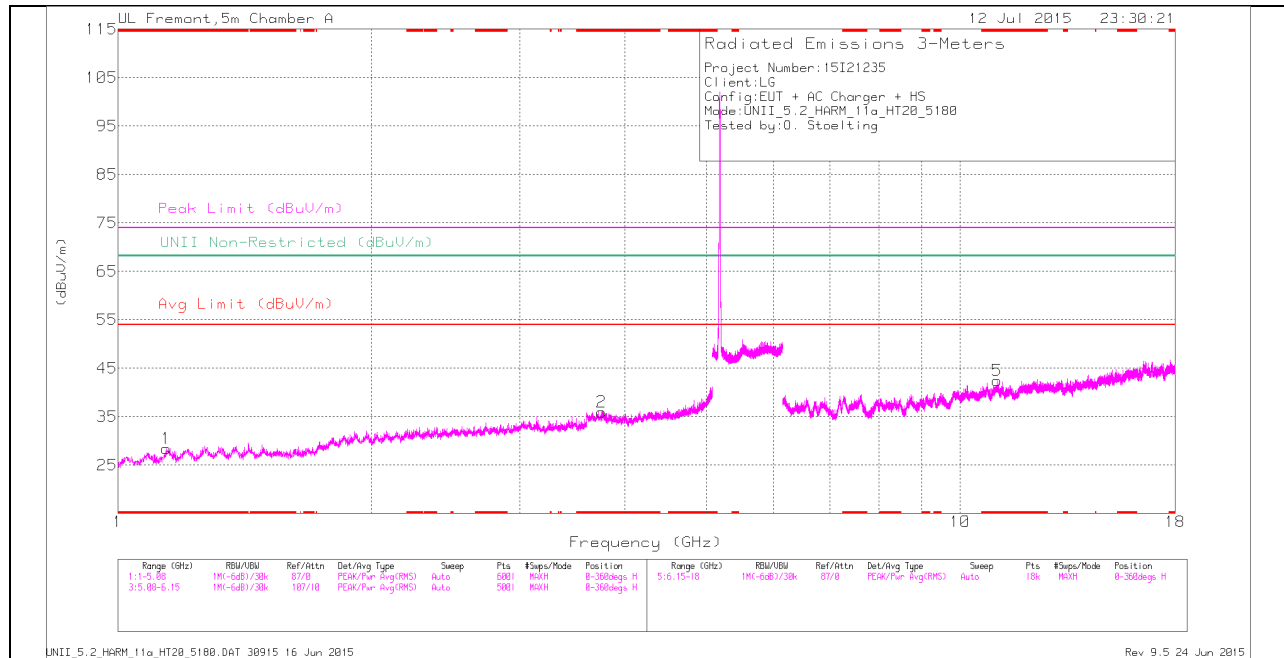


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (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	5.145	42.61	PK	34.2	-20.7	0	56.11	-	-	74	-17.89	33	138	V
1	5.15	40.57	PK	34.2	-20.8	0	53.97	-	-	74	-20.03	33	138	V
3	5.15	31.07	RMS	34.2	-20.8	0	44.47	54	-9.53	-	-	33	138	V
4	5.15	31.85	RMS	34.2	-20.8	0	45.25	54	-8.75	-	-	33	138	V

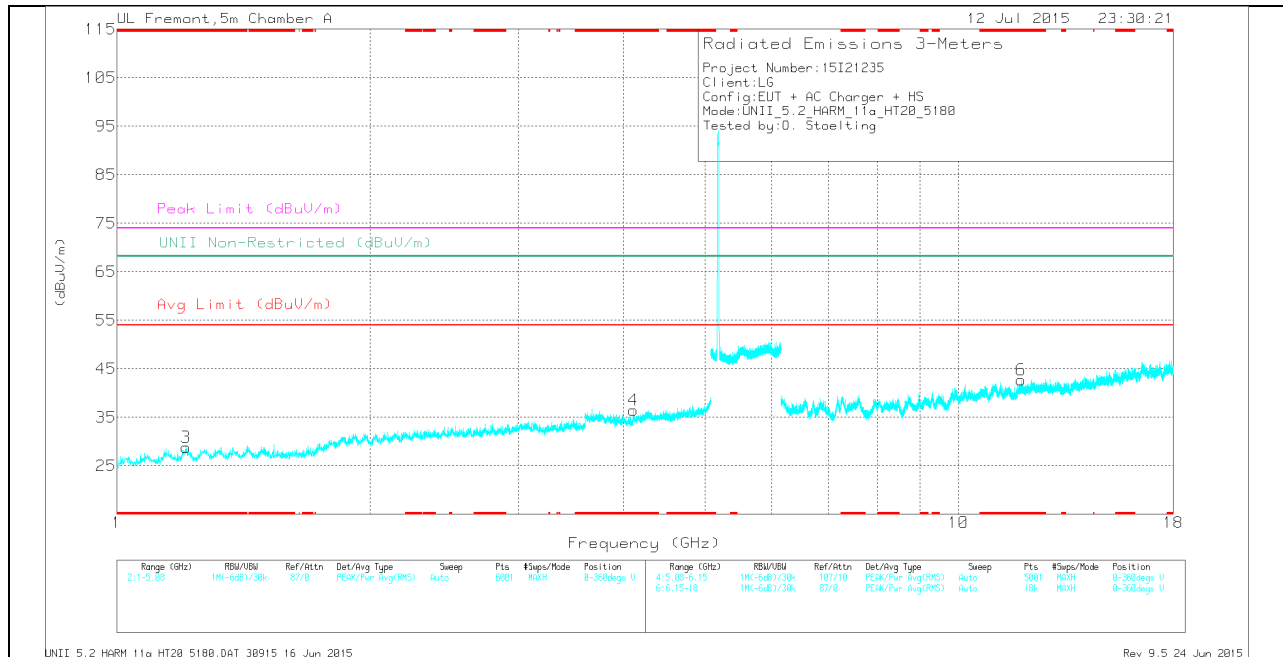
HARMONICS AND SPURIOUS EMISSIONS

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

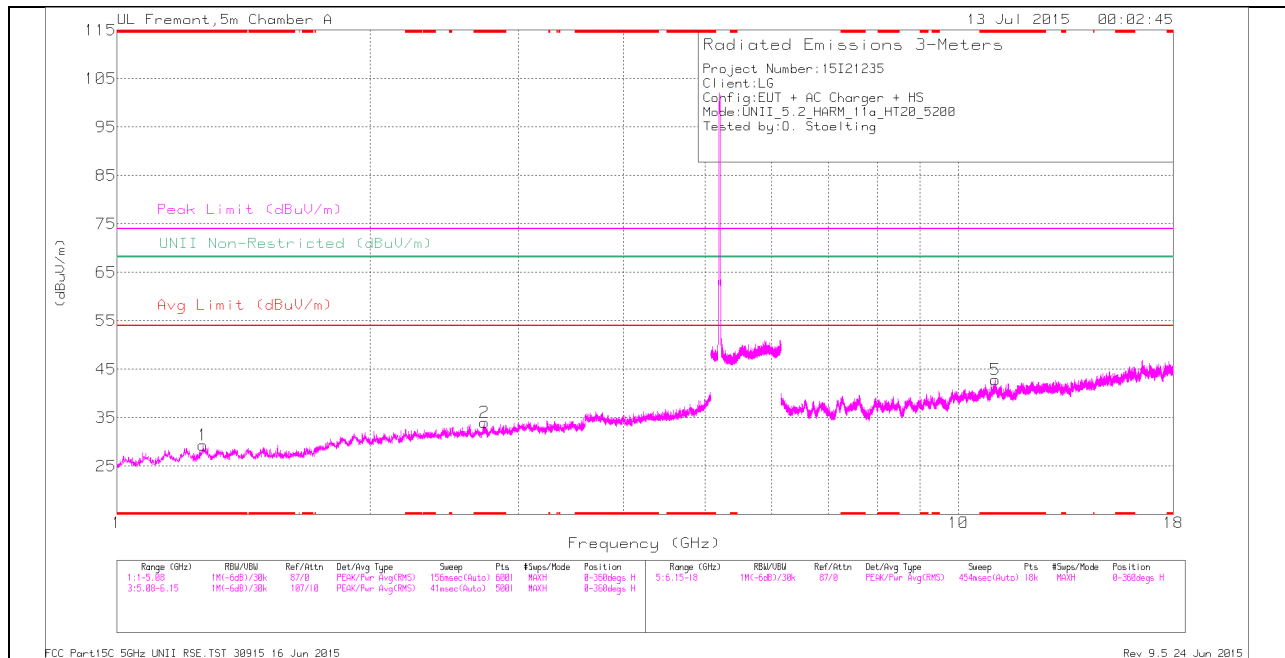
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.141	36.32	Pk	27.5	-35.4	28.42	-	-	74	-45.58	-	-	0-360	100	H
2	* 3.753	34.95	Pk	33.3	-32.3	35.95	-	-	74	-38.05	-	-	0-360	201	H
3	* 1.209	36.22	Pk	28.1	-35.5	28.82	-	-	74	-45.18	-	-	0-360	100	V
4	* 4.112	35.35	Pk	33.3	-32.2	36.45	-	-	74	-37.55	-	-	0-360	100	V
5	* 11.06	27.42	Pk	37.9	-22.9	42.42	-	-	74	-31.58	-	-	0-360	100	H
6	* 11.863	27.31	Pk	38.5	-23.1	42.71	-	-	74	-31.29	-	-	0-360	100	V

PK - Peak detector

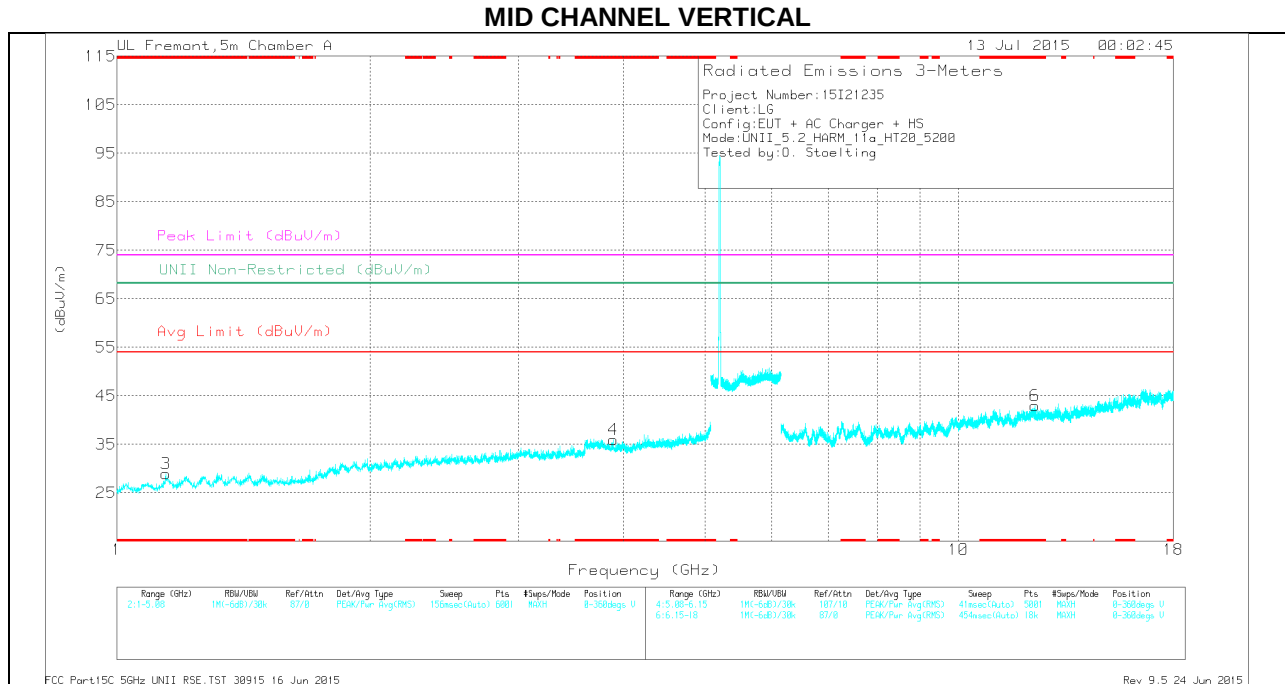
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/FI tr/Pad (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
* 1.142	44.52	PK-U	27.6	-35.4	36.72	-	-	74	-37.28	-	-	1	100	H
* 1.143	32.78	ADR	27.6	-35.4	24.98	54	-29.02	-	-	-	-	1	100	H
* 3.754	42.08	PK-U	33.3	-32.3	43.08	-	-	74	-30.92	-	-	1	202	H
* 3.753	30.74	ADR	33.3	-32.3	31.74	54	-22.26	-	-	-	-	1	202	H
* 1.21	44.4	PK-U	28.1	-35.5	37	-	-	74	-37	-	-	1	100	V
* 1.21	32.78	ADR	28.1	-35.5	25.38	54	-28.62	-	-	-	-	1	100	V
* 4.111	42.13	PK-U	33.3	-32.2	43.23	-	-	74	-30.77	-	-	1	100	V
* 4.111	30.9	ADR	33.3	-32.3	31.9	54	-22.1	-	-	-	-	1	100	V
* 11.061	34.97	PK-U	37.9	-22.9	49.97	-	-	74	-24.03	-	-	1	100	H
* 11.06	23.49	ADR	37.9	-22.9	38.49	54	-15.51	-	-	-	-	1	100	H
* 11.862	34.84	PK-U	38.5	-23.2	50.14	-	-	74	-23.86	-	-	343	166	V
* 11.862	22.58	ADR	38.5	-23.2	37.88	54	-16.12	-	-	-	-	343	166	V

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.



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

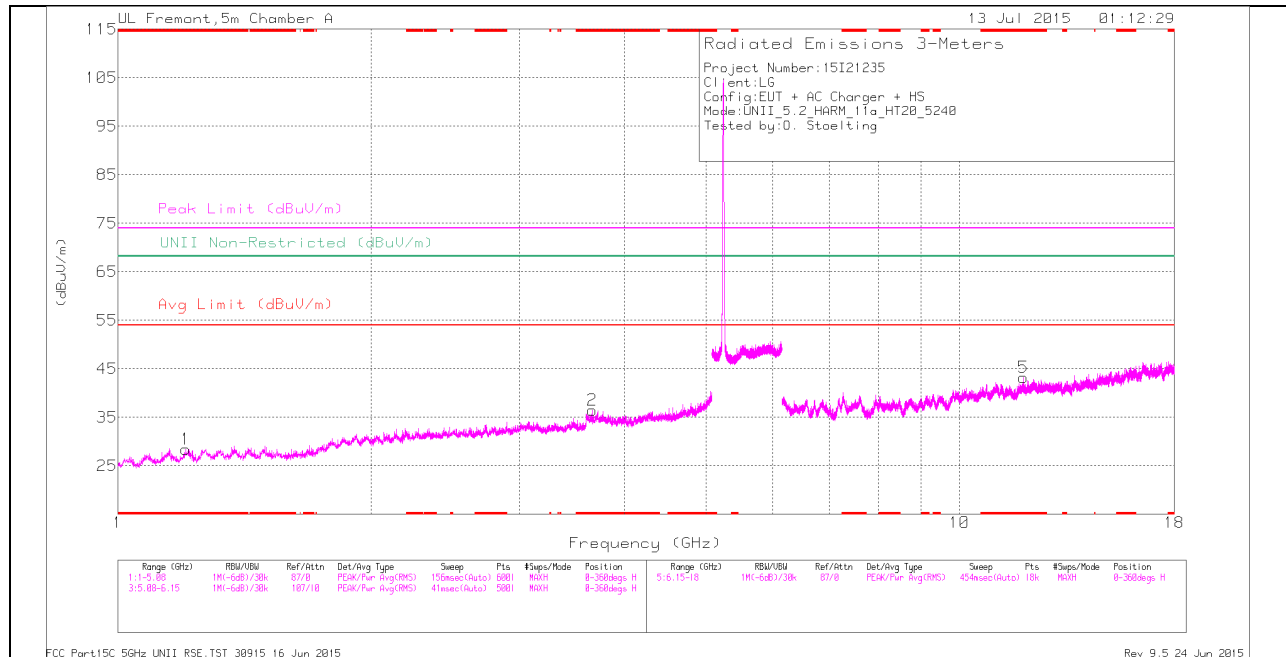
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.266	36.54	Pk	28.6	-35.8	29.34	-	-	74	-44.66	-	-	0-360	100	H
2	* 2.735	35.46	Pk	32.3	-33.8	33.96	-	-	74	-40.04	-	-	0-360	201	H
3	* 1.143	36.77	Pk	27.6	-35.4	28.97	-	-	74	-45.03	-	-	0-360	200	V
4	* 3.888	35.29	Pk	33.5	-32.8	35.99	-	-	74	-38.01	-	-	0-360	200	V
5	* 11.057	27.79	Pk	37.9	-22.9	42.79	-	-	74	-31.21	-	-	0-360	100	H
6	* 12.325	27.37	Pk	39	-23.4	42.97	-	-	74	-31.03	-	-	0-360	200	V

PK - Peak detector

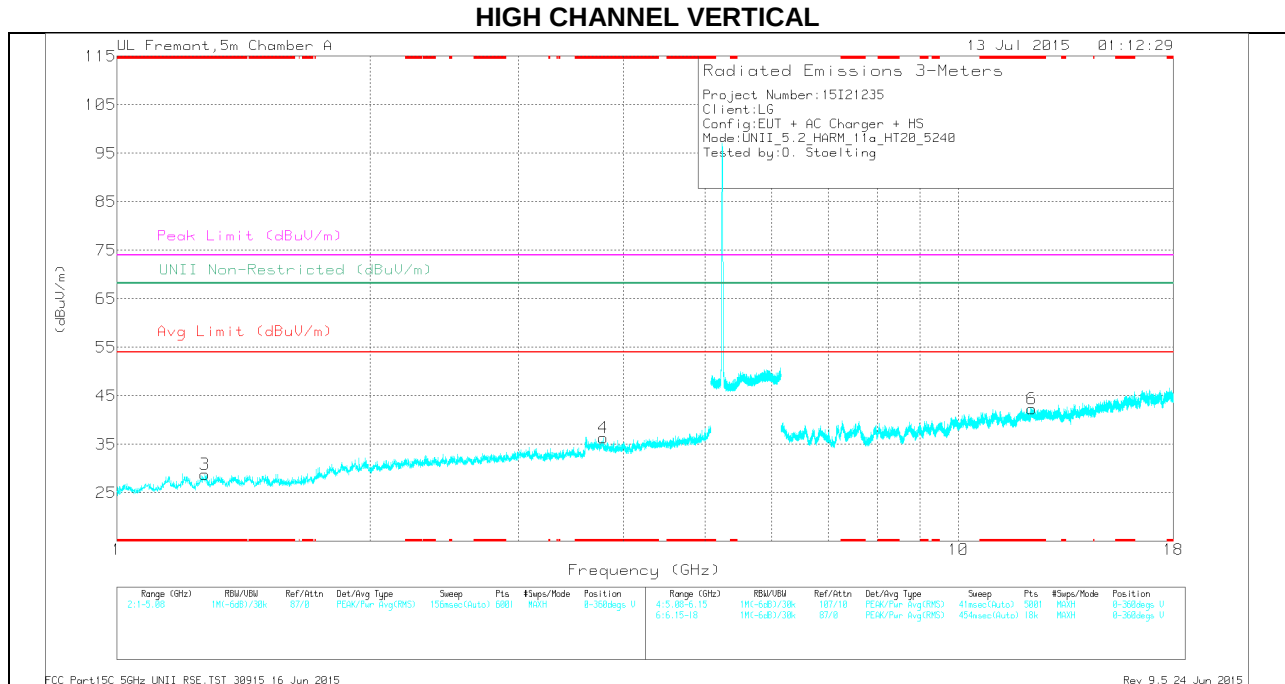
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/FI tr/Pad (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
* 1.267	44.1	PK-U	28.6	-35.9	36.8	-	-	74	-37.2	-	-	360	100	H
* 1.266	32.91	ADR	28.6	-35.9	25.61	54	-28.39	-	-	-	-	360	100	H
* 2.736	42.74	PK-U	32.3	-33.8	41.24	-	-	74	-32.76	-	-	360	202	H
* 2.734	31.24	ADR	32.3	-33.8	29.74	54	-24.26	-	-	-	-	360	202	H
* 1.144	44.55	PK-U	27.6	-35.4	36.75	-	-	74	-37.25	-	-	360	202	V
* 1.145	32.7	ADR	27.6	-35.4	24.9	54	-29.1	-	-	-	-	360	202	V
* 3.889	43.74	PK-U	33.5	-32.8	44.44	-	-	74	-29.56	-	-	360	202	V
* 3.888	31.27	ADR	33.5	-32.8	31.97	54	-22.03	-	-	-	-	360	202	V
* 11.055	34.88	PK-U	37.9	-23	49.78	-	-	74	-24.22	-	-	360	100	H
* 11.055	23.59	ADR	37.9	-23	38.49	54	-15.51	-	-	-	-	360	100	H
* 12.327	34.62	PK-U	39	-23.5	50.12	-	-	74	-23.88	-	-	136	100	V
* 12.325	22.32	ADR	39	-23.4	37.92	54	-16.08	-	-	-	-	136	100	V

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.



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 T136 (dB/m)	Amp/Cbl/Fitr /Pad (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	* 1.204	35.83	Pk	28	-35.4	28.43	-	-	74	-45.57	-	-	0-360	201	H
2	* 3.659	36.34	Pk	33.2	-33	36.54	-	-	74	-37.46	-	-	0-360	201	H
3	* 1.273	36.1	Pk	28.6	-35.9	28.8	-	-	74	-45.2	-	-	0-360	200	V
4	* 3.784	35.03	Pk	33.4	-32.1	36.33	-	-	74	-37.67	-	-	0-360	200	V
5	* 11.909	27.41	Pk	38.6	-22.8	43.21	-	-	74	-30.79	-	-	0-360	201	H
6	* 12.223	26.57	Pk	38.9	-23.1	42.37	-	-	74	-31.63	-	-	0-360	200	V

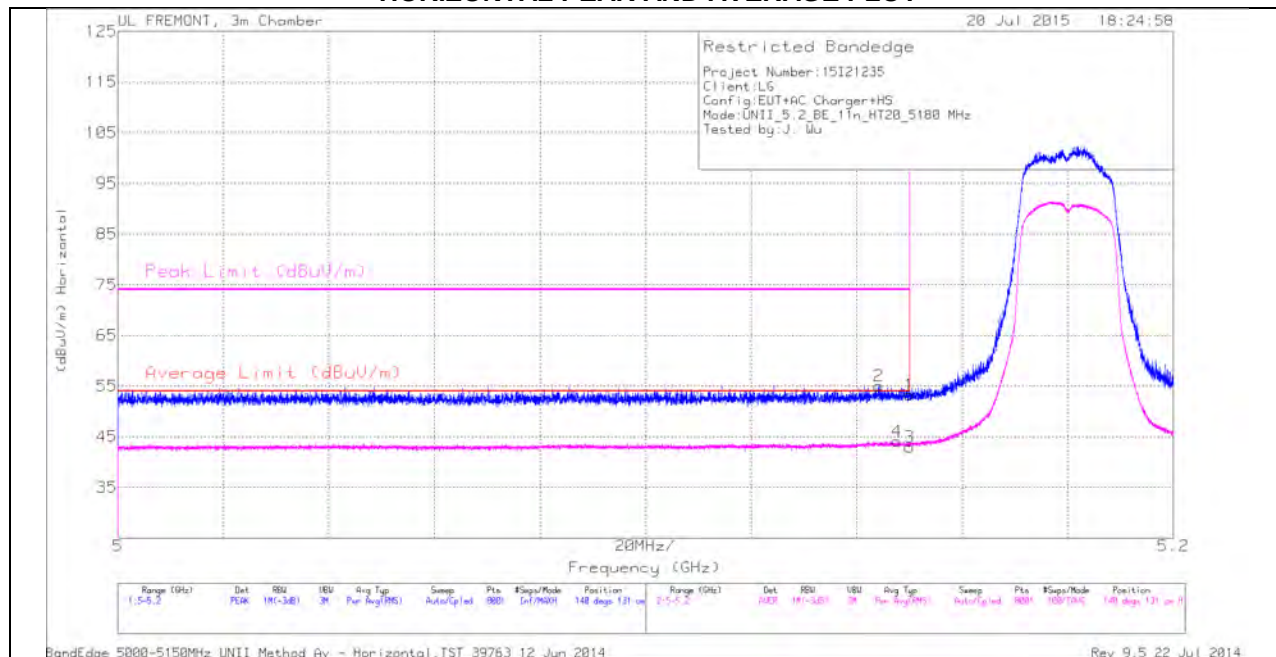
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/FI tr/Pad (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
* 1.206	44.44	PK-U	28.1	-35.4	37.14	-	-	74	-36.86	-	-	1	202	H
* 1.203	32.55	ADR	28	-35.4	25.15	54	-28.85	-	-	-	-	1	202	H
* 3.658	43.49	PK-U	33.2	-33	43.69	-	-	74	-30.31	-	-	1	202	H
* 3.657	31.43	ADR	33.2	-33	31.63	54	-22.37	-	-	-	-	1	202	H
* 1.271	44.25	PK-U	28.6	-35.9	36.95	-	-	74	-37.05	-	-	1	202	V
* 1.271	32.63	ADR	28.6	-35.9	25.33	54	-28.67	-	-	-	-	1	202	V
* 3.785	41.99	PK-U	33.4	-32.1	43.29	-	-	74	-30.71	-	-	1	202	V
* 3.782	30.38	ADR	33.4	-32.1	31.68	54	-22.32	-	-	-	-	1	202	V
* 11.908	34.04	PK-U	38.6	-22.8	49.84	-	-	74	-24.16	-	-	227	287	H
* 11.91	22.14	ADR	38.6	-22.8	37.94	54	-16.06	-	-	-	-	227	287	H
* 12.222	34.3	PK-U	38.9	-23.1	50.1	-	-	74	-23.9	-	-	227	200	V
* 12.223	23.03	ADR	38.9	-23.1	38.83	54	-15.17	-	-	-	-	227	200	V

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

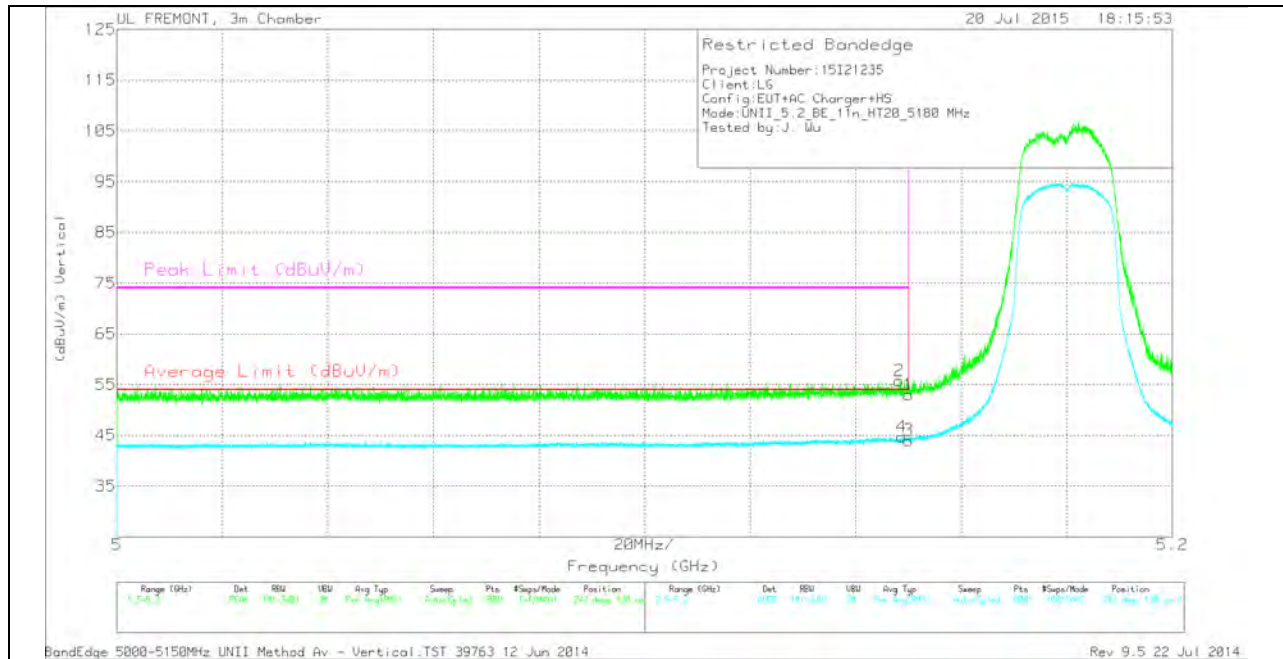
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (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	5.144	41.56	PK	34.2	-20.7	0	55.06	-	-	74	-18.94	140	131	H
4	5.148	30.66	RMS	34.2	-20.8	0	44.06	54	-9.94	-	-	140	131	H
1	5.15	39.85	PK	34.2	-20.8	0	53.25	-	-	74	-20.75	140	131	H
3	5.15	29.59	RMS	34.2	-20.8	0	42.99	54	-11.01	-	-	140	131	H

VERTICAL PEAK AND AVERAGE PLOT

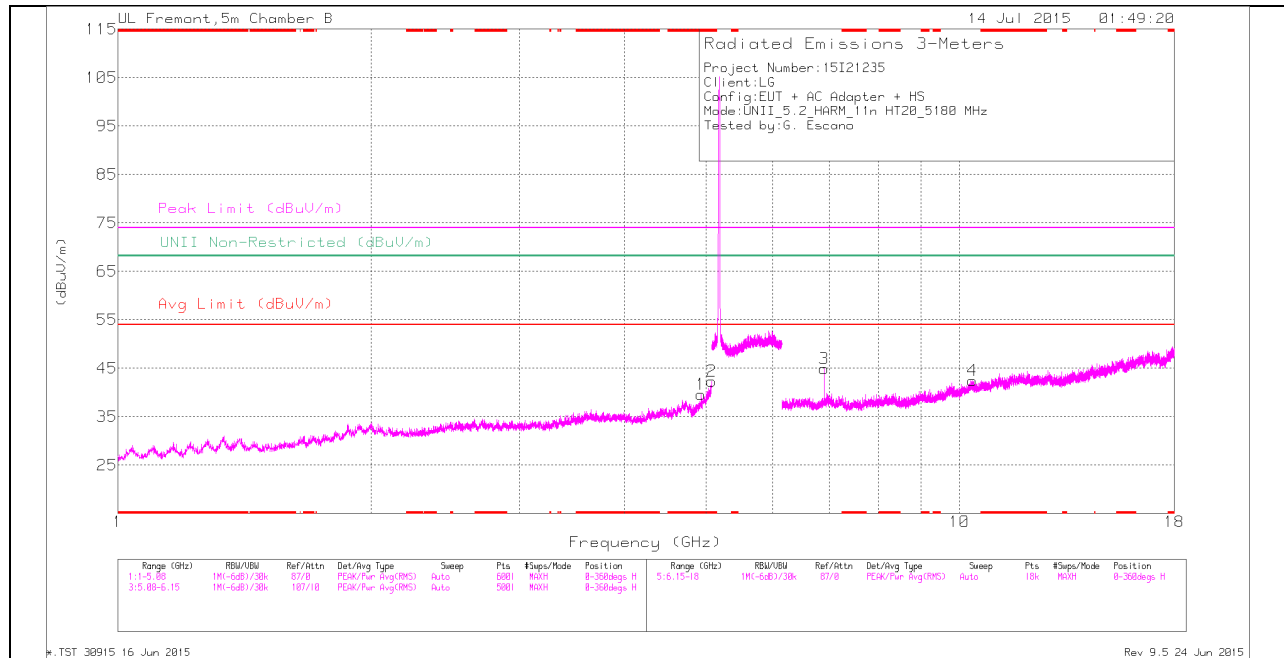


VERTICAL DATA

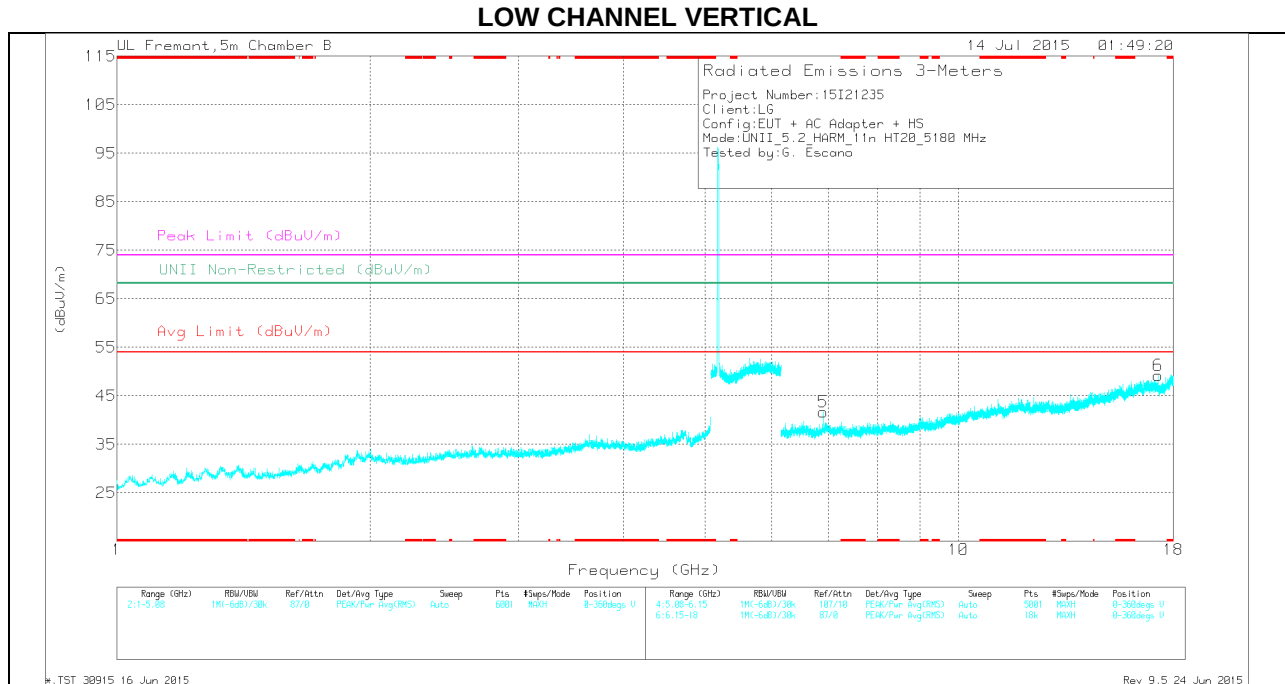
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.148	42.38	PK	34.2	-20.8	0	55.78	-	-	74	-18.22	242	130	V
4	5.149	31.35	RMS	34.2	-20.8	0	44.75	54	-9.25	-	-	242	130	V
1	5.15	39.63	PK	34.2	-20.8	0	53.03	-	-	74	-20.97	242	130	V
3	5.15	30.62	RMS	34.2	-20.8	0	44.02	54	-9.98	-	-	242	130	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.



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LOW CHANNEL DATA

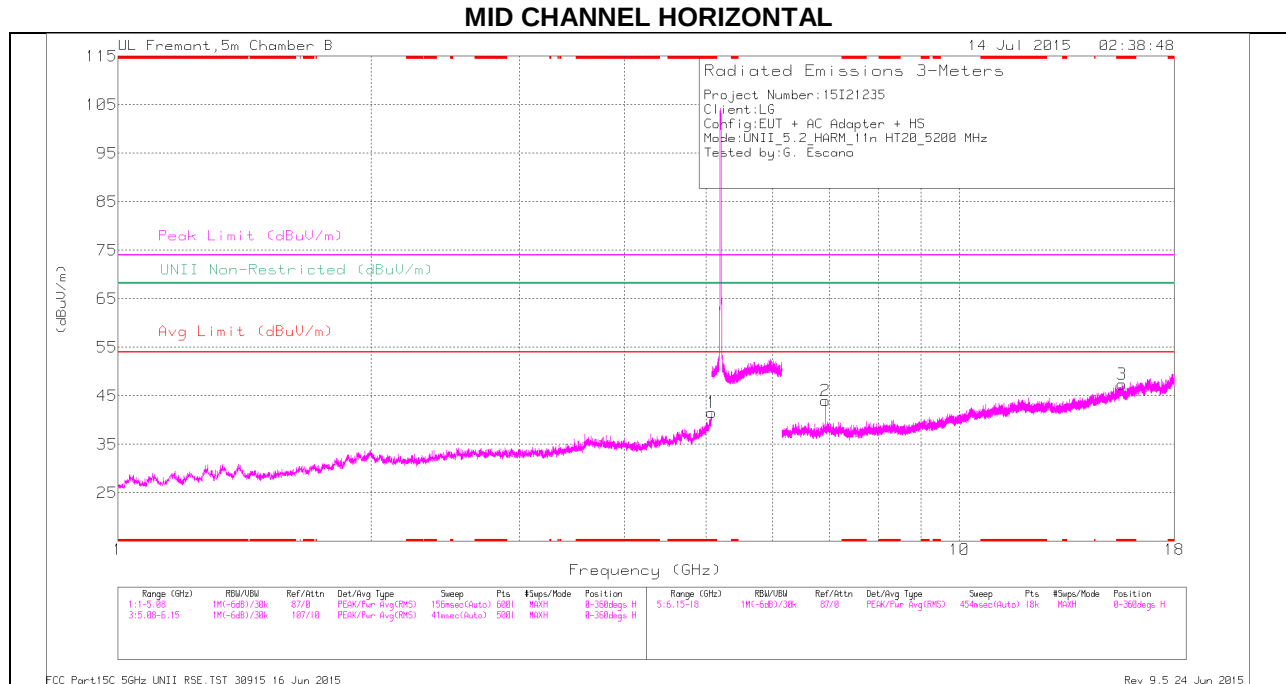
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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	* 4.928	34.1	Pk	34.1	-28.6	0	39.6	-	-	74	-34.4	-	-	0-360	100	H
2	* 5.075	33.57	Pk	34	-25.2	0	42.37	-	-	74	-31.63	-	-	0-360	100	H
3	6.906	36.11	Pk	36.1	-27.3	0	44.91	-	-	-	-	68.2	-23.29	0-360	101	H
5	6.906	32.93	Pk	36.1	-27.3	0	41.73	-	-	-	-	68.2	-26.47	0-360	199	V
4	10.362	27.31	Pk	37.4	-22.2	0	42.51	-	-	-	-	68.2	-25.69	0-360	199	H
6	17.26	26.45	Pk	41	-18.2	0	49.25	-	-	-	-	68.2	-18.95	0-360	199	V

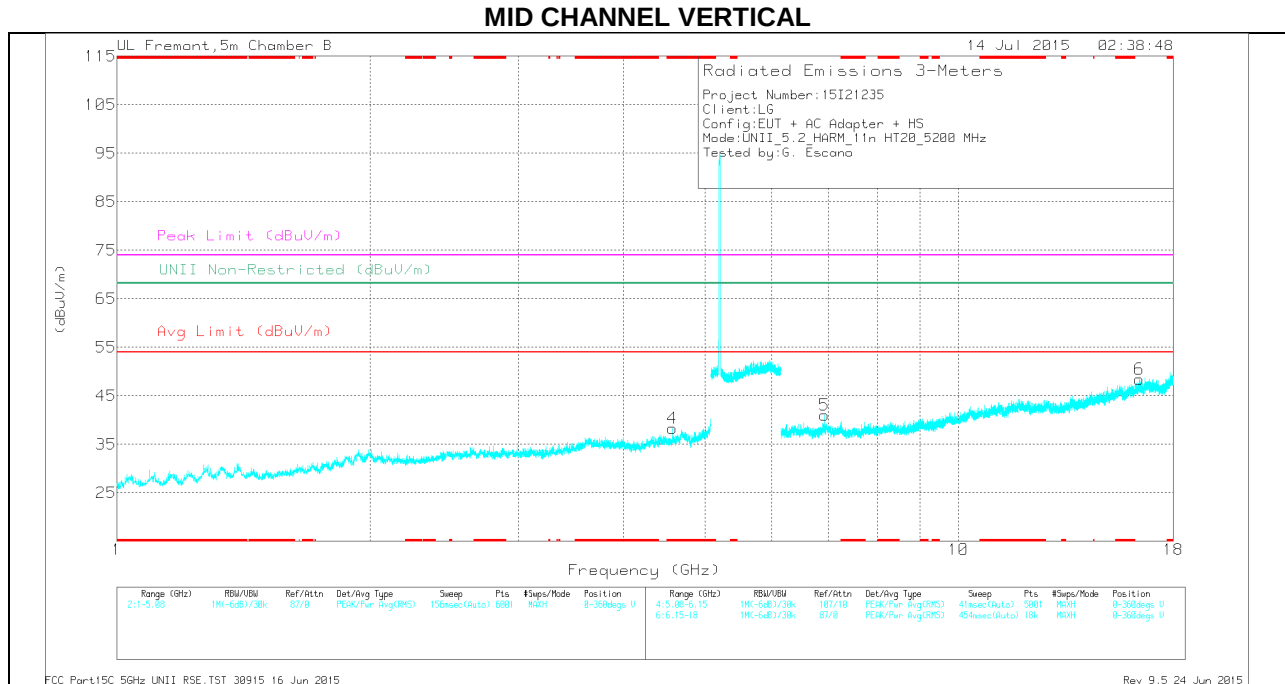
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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
* 4.928	42.71	PK-U	34.1	-28.6	0	48.21	-	-	74	-25.79	-	-	7	275	H
* 4.928	31.63	ADR	34.1	-28.6	0	37.13	54	-16.87	-	-	-	-	7	275	H
* 5.075	43.2	PK-U	34	-25.2	0	52	-	-	74	-22	-	-	9	105	H
* 5.075	31.49	ADR	34	-25.3	0	40.19	54	-13.81	-	-	-	-	9	105	H
6.906	40.73	PK-U	36.1	-27.3	0	49.53	-	-	-	-	68.2	-18.67	46	322	V
6.907	42.2	PK-U	36.1	-27.2	0	51.1	-	-	-	-	68.2	-17.1	156	110	H
10.361	34.66	PK-U	37.4	-22.2	0	49.86	-	-	-	-	68.2	-18.34	249	210	H
17.261	33.03	PK-U	41	-18.2	0	55.83	-	-	-	-	68.2	-12.37	219	125	V



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

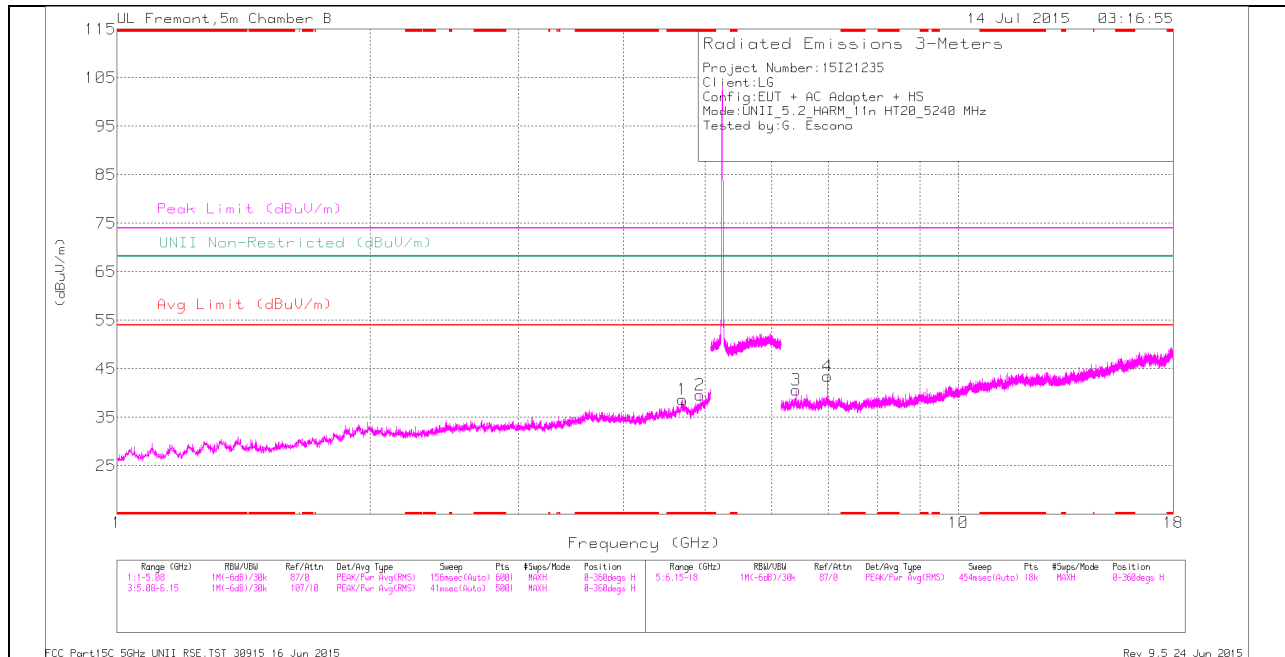
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (dB/m)	Amp/Chl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.077	32.56	Pk	34	-25	0	41.56	-	-	74	-32.44	-	-	0-360	101	H
4	* 4.572	33.71	Pk	34	-29.4	0	38.31	-	-	74	-35.69	-	-	0-360	101	V
3	* 15.612	25.86	Pk	40.8	-19.3	0	47.36	-	-	74	-26.64	-	-	0-360	101	H
2	6.933	34.51	Pk	36.1	-26.6	0	44.01	-	-	-	-	68.2	-24.19	0-360	101	H
5	6.933	31.55	Pk	36.1	-26.6	0	41.05	-	-	-	-	68.2	-27.15	0-360	101	V
6	16.388	26.17	Pk	41.2	-18.9	0	48.47	-	-	-	-	68.2	-19.73	0-360	101	V

PK - Peak detector

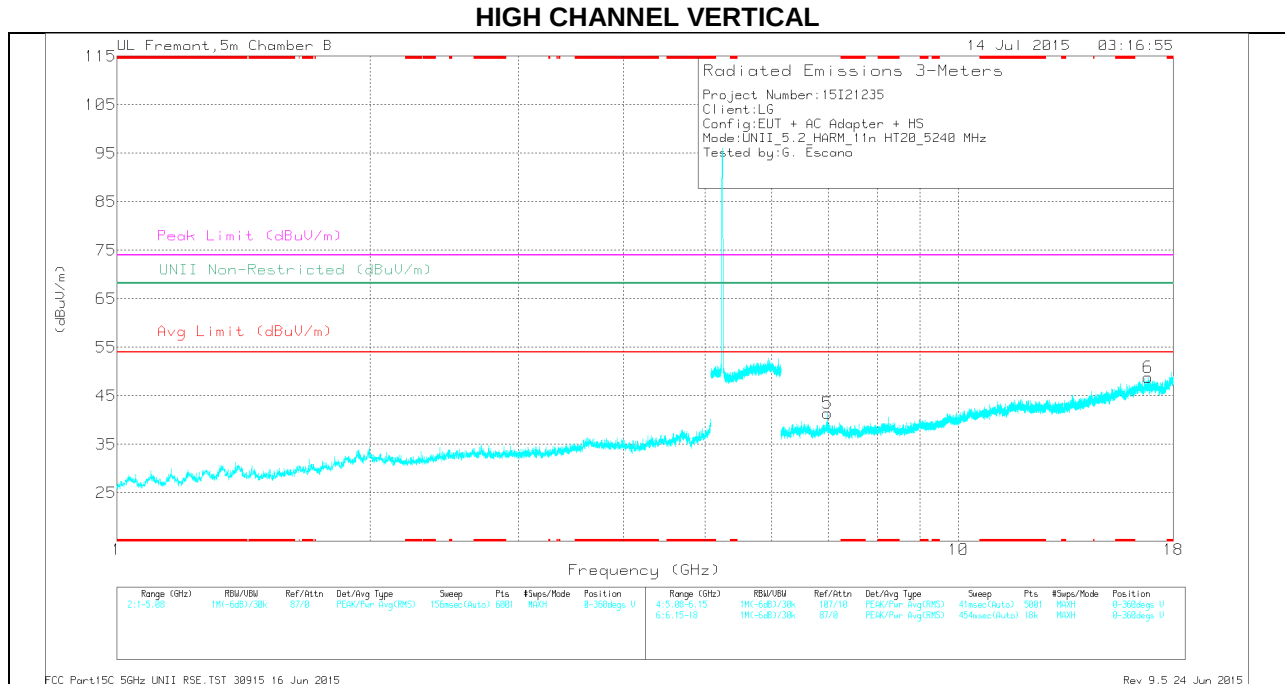
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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
* 5.077	42.74	PK-U	34	-25	0	51.74	-	-	74	-22.26	-	-	354	107	H
* 5.076	30.21	ADR	34	-25.1	0	39.11	54	-14.89	-	-	-	-	354	107	H
* 4.573	40.56	PK-U	34	-29.3	0	45.26	-	-	74	-28.74	-	-	190	287	V
* 4.573	28.52	ADR	34	-29.3	0	33.22	54	-20.78	-	-	-	-	190	287	V
* 15.611	33.72	PK-U	40.8	-19.4	0	55.12	-	-	74	-18.88	-	-	67	132	H
* 15.611	22.13	ADR	40.8	-19.4	0	43.53	54	-10.47	-	-	-	-	67	132	H
6.933	40.11	PK-U	36.1	-26.6	0	49.61	-	-	-	-	68.2	-18.59	145	113	H
6.933	39.39	PK-U	36.1	-26.6	0	48.89	-	-	-	-	68.2	-19.31	159	101	V
16.389	32.4	PK-U	41.2	-18.9	0	54.7	-	-	-	-	68.2	-13.5	12	134	V

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.



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 T34S (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	* 4.7	33.96	Pk	34.2	-29.5	0	38.66	-	-	74	-35.34	-	-	0-360	101	H
2	* 4.928	34.1	Pk	34.1	-28.6	0	39.6	-	-	74	-34.4	-	-	0-360	101	H
3	6.411	32.48	Pk	35.7	-27.6	0	40.58	-	-	-	-	68.2	-27.62	0-360	101	H
4	6.987	33.75	Pk	36	-26.3	0	43.45	-	-	-	-	68.2	-24.75	0-360	101	H
5	6.987	31.77	Pk	36	-26.3	0	41.47	-	-	-	-	68.2	-26.73	0-360	101	V
6	16.788	25.77	Pk	41.8	-18.7	0	48.87	-	-	-	-	68.2	-19.33	0-360	101	V

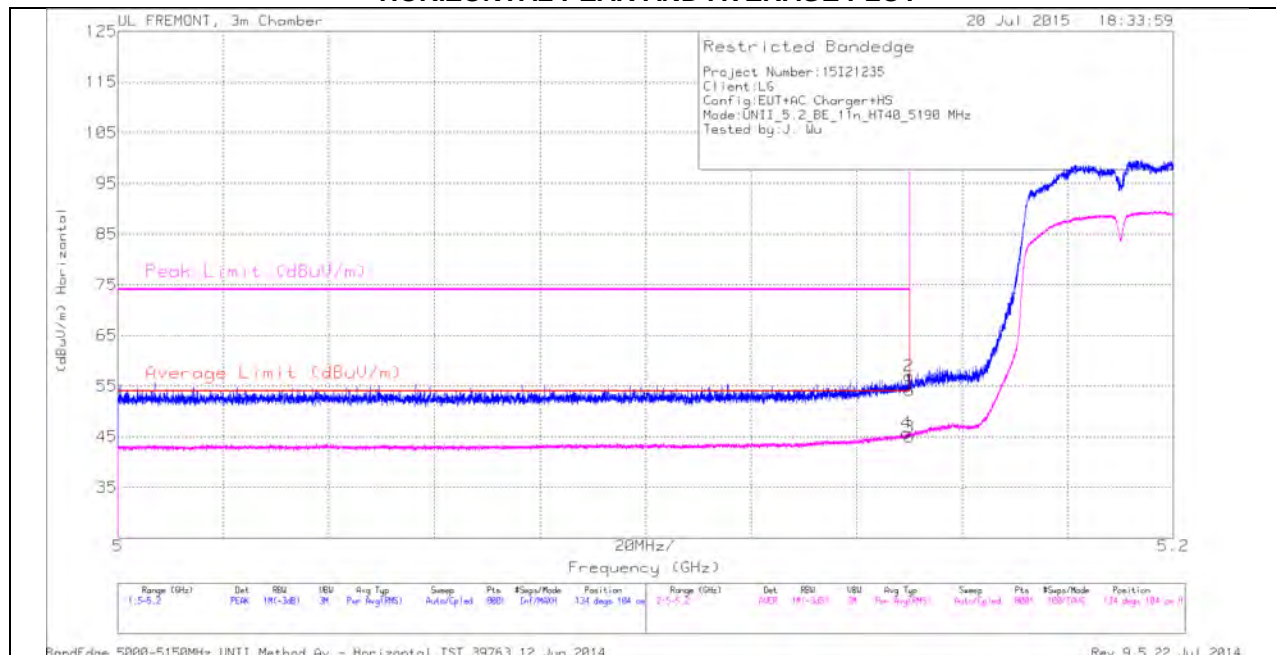
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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
* 4.7	41.73	PK-U	34.2	-29.5	0	46.43	-	-	74	-27.57	-	-	8	276	H
* 4.701	29.45	ADR	34.2	-29.5	0	34.15	54	-19.85	-	-	-	-	8	276	H
* 4.928	43.07	PK-U	34.1	-28.6	0	48.57	-	-	74	-25.43	-	-	353	156	H
* 4.928	31.51	ADR	34.1	-28.6	0	37.01	54	-16.99	-	-	-	-	353	156	H
6.41	39.03	PK-U	35.7	-27.6	0	47.13	-	-	-	-	68.2	-21.07	344	222	H
6.987	40.53	PK-U	36	-26.3	0	50.23	-	-	-	-	68.2	-17.97	145	110	H
6.987	39.22	PK-U	36	-26.3	0	48.92	-	-	-	-	68.2	-19.28	161	103	V
16.787	32.52	PK-U	41.8	-18.8	0	55.52	-	-	-	-	68.2	-12.68	9	131	V

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

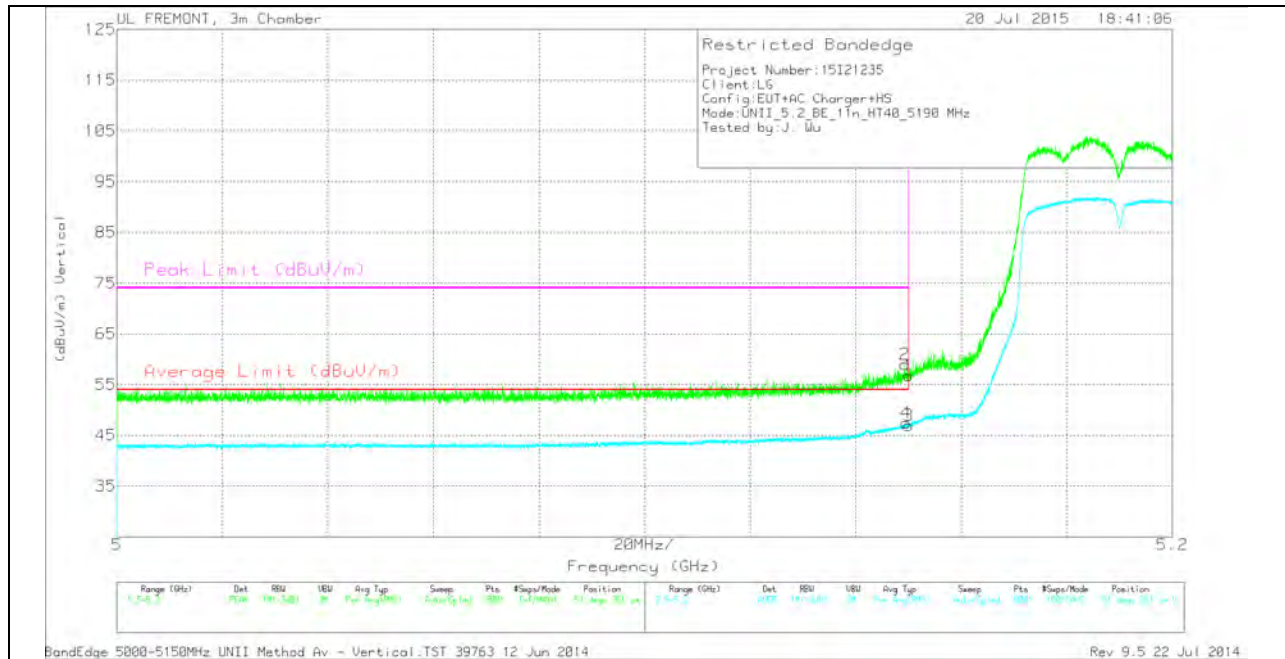
HORIZONTAL PEAK AND AVERAGE PLOT



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
4	5.149	32.25	RMS	34.2	-20.8	0	45.65	54	-8.35	-	-	134	104	H
1	5.15	40.74	PK	34.2	-20.8	0	54.14	-	-	74	-19.86	134	104	H
2	5.15	43.55	PK	34.2	-20.8	0	56.95	-	-	74	-17.05	134	104	H
3	5.15	31.51	RMS	34.2	-20.8	0	44.91	54	-9.09	-	-	134	104	H

VERTICAL PEAK AND AVERAGE PLOT

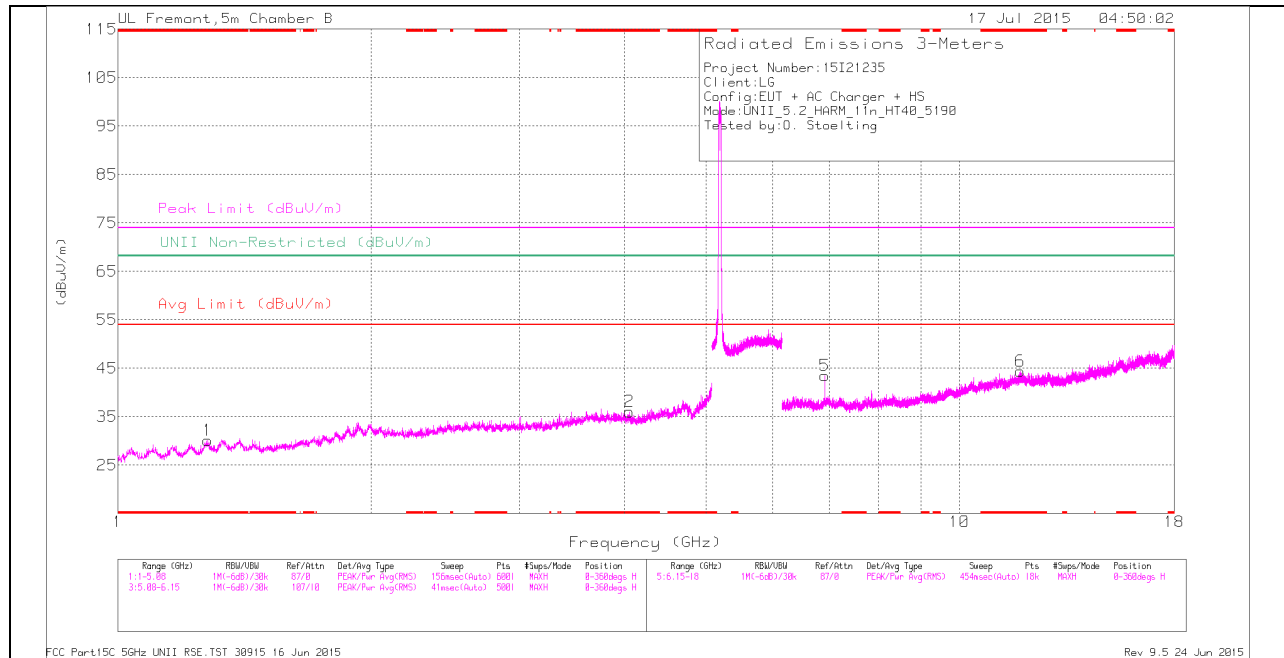


VERTICAL DATA

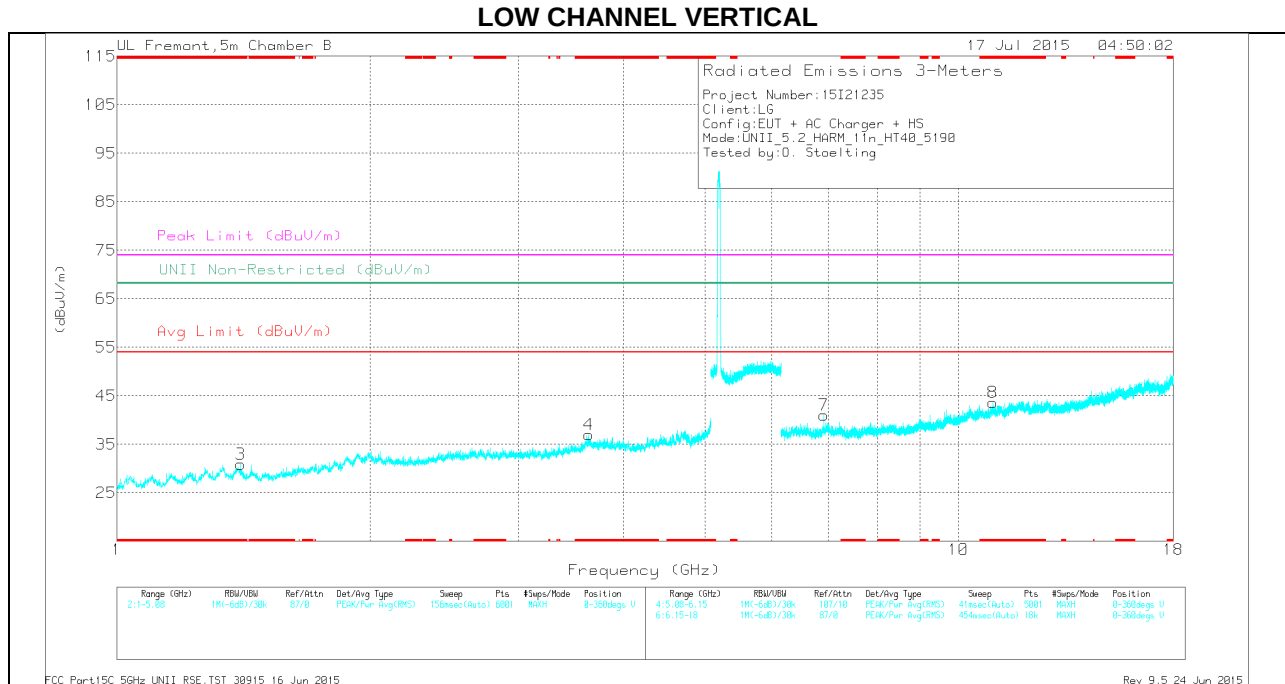
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.149	45.54	PK	34.2	-20.8	0	58.94	-	-	74	-15.06	51	361	V
1	5.15	43.3	PK	34.2	-20.8	0	56.7	-	-	74	-17.3	51	361	V
3	5.15	33.59	RMS	34.2	-20.8	0	46.99	54	-7.01	-	-	51	361	V
4	5.15	34.04	RMS	34.2	-20.8	0	47.44	54	-6.56	-	-	51	361	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.



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LOW CHANNEL DATA

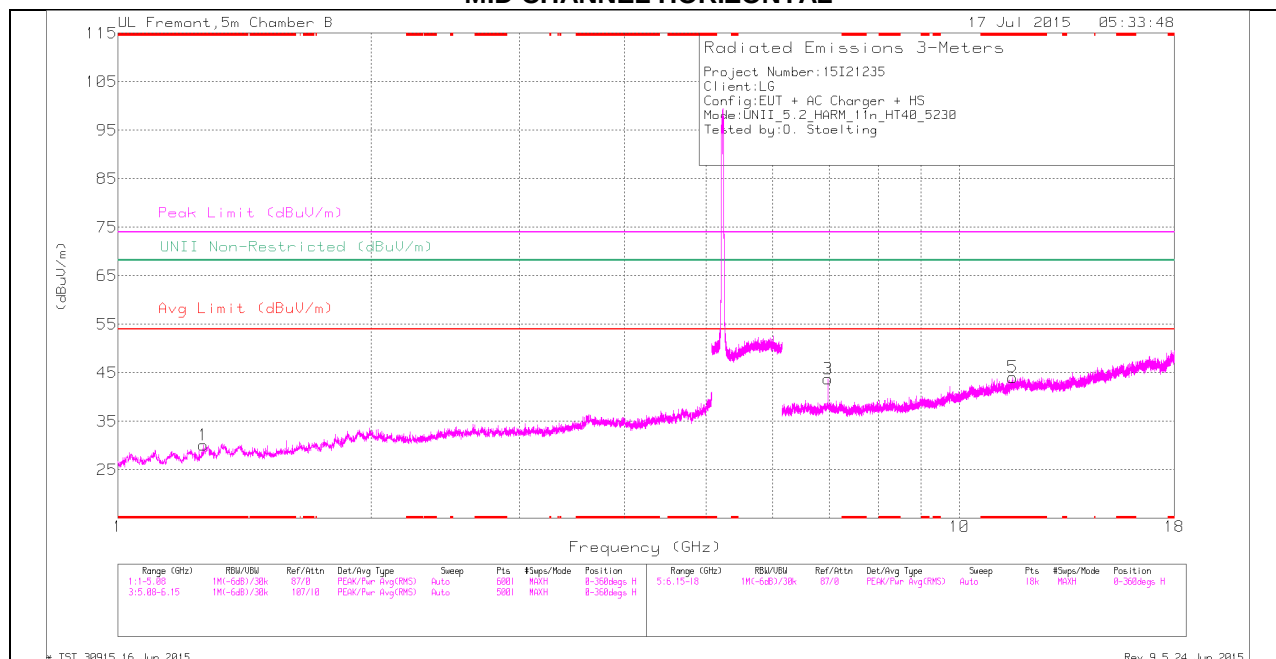
TRACE MARKERS

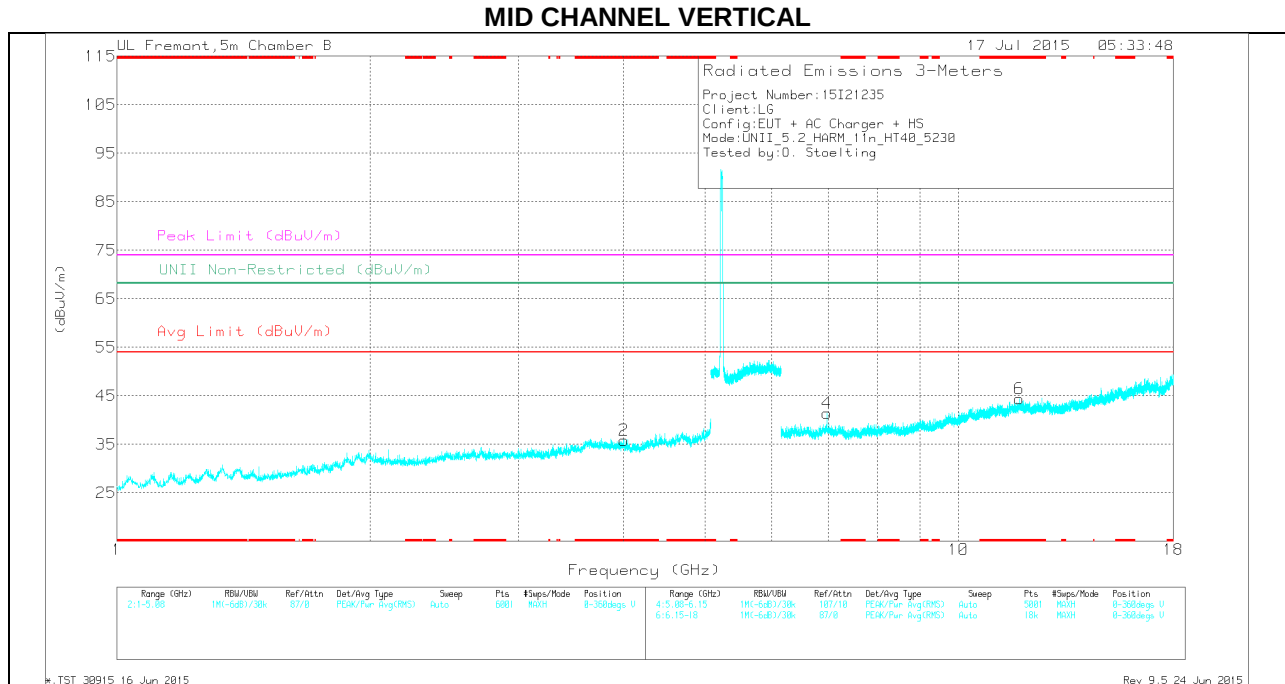
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.278	34.3	Pk	29.2	-33.4	0	30.1	-	-	74	-43.9	-	-	0-360	101	H
2	* 4.056	31.93	Pk	33.3	-29.2	0	36.03	-	-	74	-37.97	-	-	0-360	200	H
3	* 1.402	34.49	Pk	29.3	-32.9	0	30.89	-	-	74	-43.11	-	-	0-360	200	V
4	* 3.637	33.7	Pk	33.8	-30.5	0	37	-	-	74	-37	-	-	0-360	101	V
6	* 11.808	26.88	Pk	38.6	-21.1	0	44.38	-	-	74	-29.62	-	-	0-360	101	H
8	* 10.979	26.89	Pk	37.7	-21	0	43.59	-	-	74	-30.41	-	-	0-360	101	V
5	6.92	34.08	Pk	36.1	-26.7	0	43.48	-	-	-	-	68.2	-24.72	0-360	101	H
7	6.92	31.67	Pk	36.1	-26.7	0	41.07	-	-	-	-	68.2	-27.13	0-360	101	V

PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.28	42.64	PK-U	29.2	-33.3	0	38.54	-	-	74	-35.46	-	-	359	101	H
* 1.276	31.22	ADR	29.2	-33.5	0	26.92	54	-27.08	-	-	-	-	359	101	H
* 4.055	39.67	PK-U	33.3	-29.2	0	43.77	-	-	74	-30.23	-	-	359	200	H
* 4.055	28.08	ADR	33.3	-29.2	0	32.18	54	-21.82	-	-	-	-	359	200	H
* 1.404	41.94	PK-U	29.3	-32.9	0	38.34	-	-	74	-35.66	-	-	359	200	V
* 1.401	30.51	ADR	29.3	-32.9	0	26.91	54	-27.09	-	-	-	-	359	200	V
* 3.638	40.3	PK-U	33.8	-30.4	0	43.7	-	-	74	-30.3	-	-	359	102	V
* 3.639	29.12	ADR	33.8	-30.4	0	32.52	54	-21.48	-	-	-	-	359	102	V
* 11.808	34.57	PK-U	38.6	-21.1	0	52.07	-	-	74	-21.93	-	-	42	292	H
* 11.81	22.53	ADR	38.6	-21.1	0	40.03	54	-13.97	-	-	-	-	42	292	H
* 10.978	34.01	PK-U	37.7	-21	0	50.71	-	-	74	-23.29	-	-	82	322	V
* 10.98	22.53	ADR	37.7	-21	0	39.23	54	-14.77	-	-	-	-	82	322	V
6.92	39.96	PK-U	36.1	-26.7	0	49.36	-	-	-	-	68.2	-18.84	325	143	H
6.92	32.04	ADR	36.1	-26.7	0	41.44	-	-	-	-	-	-	325	143	H
6.92	39.22	PK-U	36.1	-26.7	0	48.62	-	-	-	-	68.2	-19.58	343	101	V
6.92	31.02	ADR	36.1	-26.7	0	40.42	-	-	-	-	-	-	343	101	V





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 T345 (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	* 1.262	34.52	Pk	29.1	-33.5	0	30.12	-	-	74	-43.88	-	-	0-360	101	H
2	* 4.003	31.67	Pk	33.3	-29.1	0	35.87	-	-	74	-38.13	-	-	0-360	199	V
5	* 11.559	26.68	Pk	38.4	-21	0	44.08	-	-	74	-29.92	-	-	0-360	199	H
6	* 11.801	26.99	Pk	38.6	-21.2	0	44.39	-	-	74	-29.61	-	-	0-360	199	V
3	6.974	33.99	Pk	36	-26.2	0	43.79	-	-	-	-	68.2	-24.41	0-360	101	H
4	6.974	31.56	Pk	36	-26.2	0	41.36	-	-	-	-	68.2	-26.84	0-360	101	V

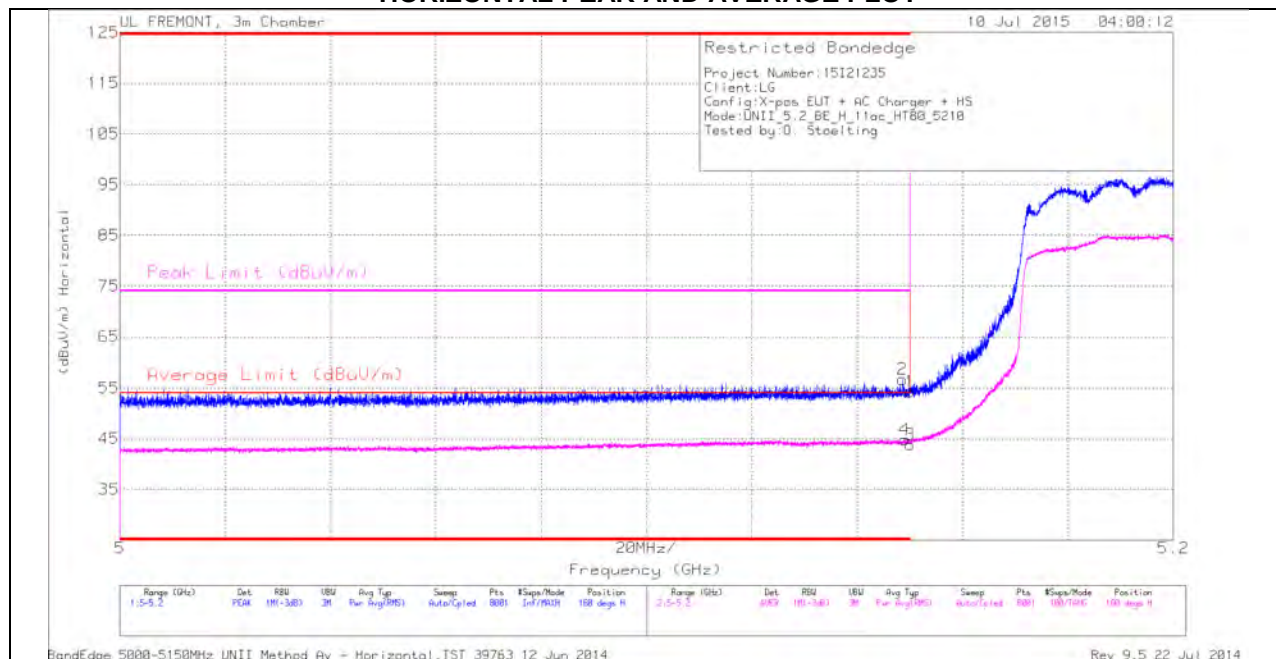
PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
* 1.264	41.78	PK-U	29.1	-33.5	0	37.38	-	-	74	-36.62	-	-	1	101	H
* 1.264	30.71	ADR	29.1	-33.5	0	26.31	54	-27.69	-	-	-	-	1	101	H
* 4.001	39.78	PK-U	33.3	-29.1	0	43.98	-	-	74	-30.02	-	-	1	199	V
* 4.003	28.16	ADR	33.3	-29.1	0	32.36	54	-21.64	-	-	-	-	1	199	V
* 11.558	33.99	PK-U	38.4	-21	0	51.39	-	-	74	-22.61	-	-	114	244	H
* 11.558	22.5	ADR	38.4	-21	0	39.9	54	-14.1	-	-	-	-	114	244	H
* 11.8	34.05	PK-U	38.6	-21.2	0	51.45	-	-	74	-22.55	-	-	345	198	V
* 11.801	23.14	ADR	38.6	-21.2	0	40.54	54	-13.46	-	-	-	-	345	198	V
6.973	40.43	PK-U	36	-26.2	0	50.23	-	-	-	-	68.2	-17.97	328	115	H
6.973	33.26	ADR	36	-26.2	0	43.06	-	-	-	-	-	-	328	115	H
6.973	39.32	PK-U	36	-26.2	0	49.12	-	-	-	-	68.2	-19.08	345	106	V
6.973	31.59	ADR	36	-26.2	0	41.39	-	-	-	-	-	-	345	106	V

11.1.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

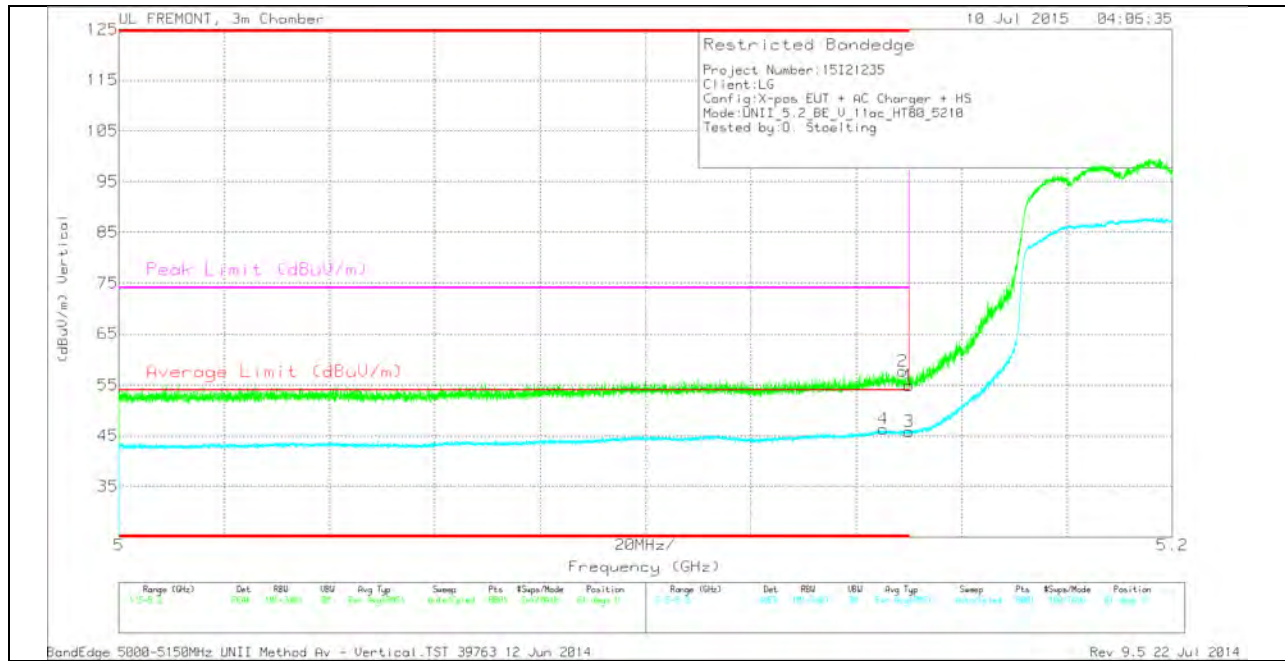
HORIZONTAL PEAK AND AVERAGE PLOT



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
1	* 5.15	40.81	PK	34.2	-20.8	0	54.21	-	-	74	-19.79	160	298	H
2	* 5.149	43.29	PK	34.2	-20.8	0	56.69	-	-	74	-17.31	160	298	H
3	* 5.15	30.38	RMS	34.2	-20.8	.09	43.87	54	-10.13	-	-	160	298	H
4	* 5.149	31.35	RMS	34.2	-20.8	.09	44.84	54	-9.16	-	-	160	298	H

VERTICAL PEAK AND AVERAGE PLOT

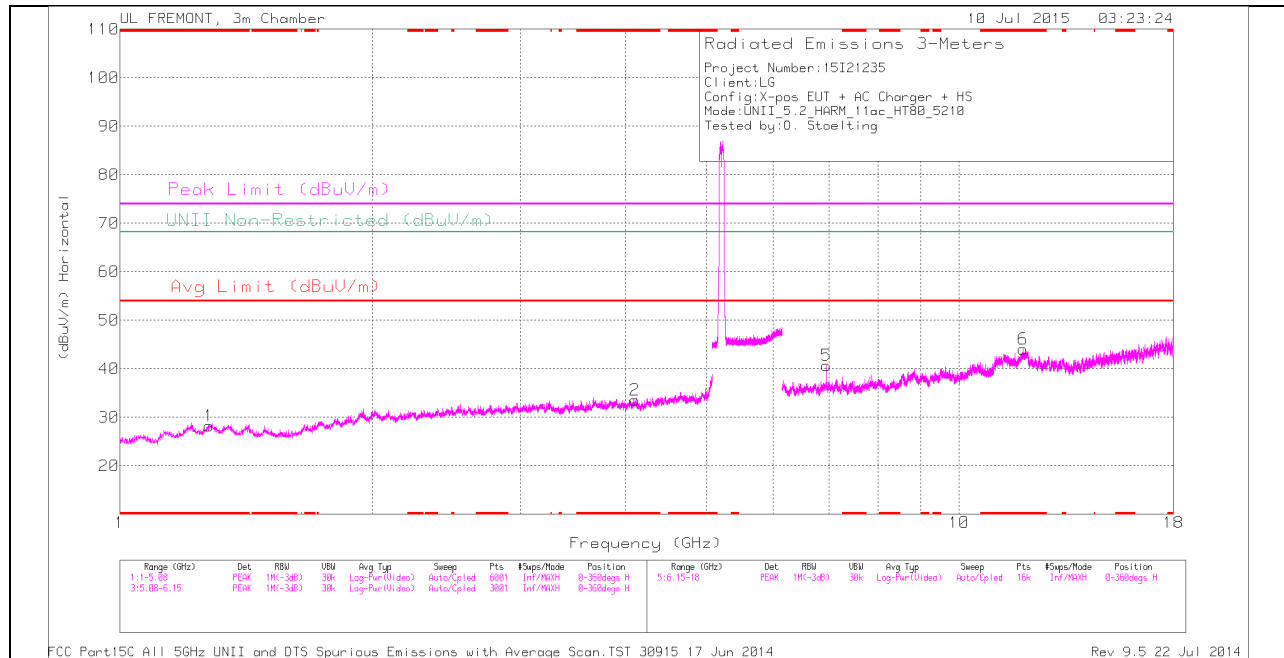


VERTICAL DATA

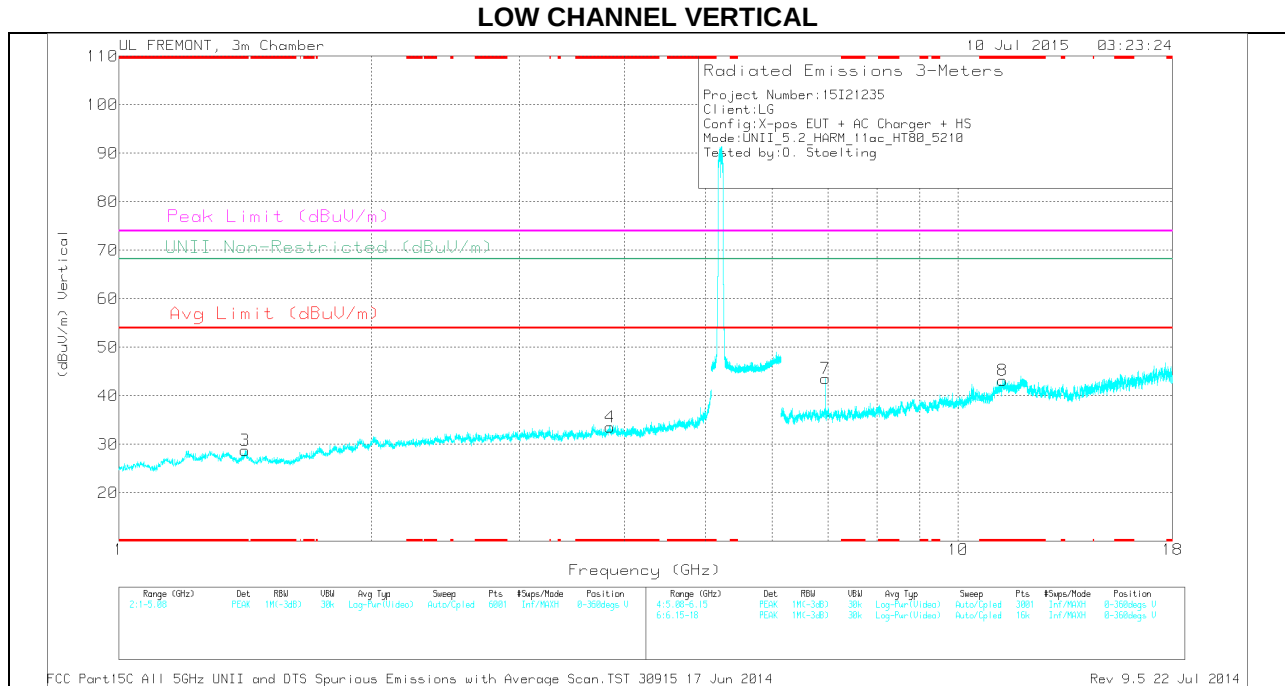
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.145	32.74	RMS	34.2	-20.7	.09	46.33	54	-7.67	-	-	61	103	V
2	* 5.149	44.37	PK	34.2	-20.8	0	57.77	-	-	74	-16.23	61	103	V
1	* 5.15	41.54	PK	34.2	-20.8	0	54.94	-	-	74	-19.06	61	103	V
3	* 5.15	32.33	RMS	34.2	-20.8	.09	45.82	54	-8.18	-	-	61	103	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.



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	* 1.277	31.57	PK	29.7	-33	0	28.27	-	-	74	-45.73	-	-	0-360	100	H
3	* 1.414	32.32	PK	28.5	-32.1	0	28.72	-	-	74	-45.28	-	-	0-360	200	V
8	* 11.299	27.71	PK	38.1	-22.7	0	43.11	-	-	74	-30.89	-	-	0-360	200	V
6	* 11.911	28.61	PK	39.1	-23.6	0	44.11	-	-	74	-29.89	-	-	0-360	100	H
4	* 3.85	30.56	PK	33.1	-30.1	0	33.56	-	-	74	-40.44	-	-	0-360	100	V
2	* 4.107	30.6	PK	33.3	-30.3	0	33.6	-	-	74	-40.4	-	-	0-360	100	H
5	6.947	32.66	PK	35.6	-27.5	0	40.76	-	-	-	-	68.2	-27.44	0-360	100	H
7	6.947	35.43	PK	35.6	-27.5	0	43.53	-	-	-	-	68.2	-24.67	0-360	100	V

PK - Peak detector

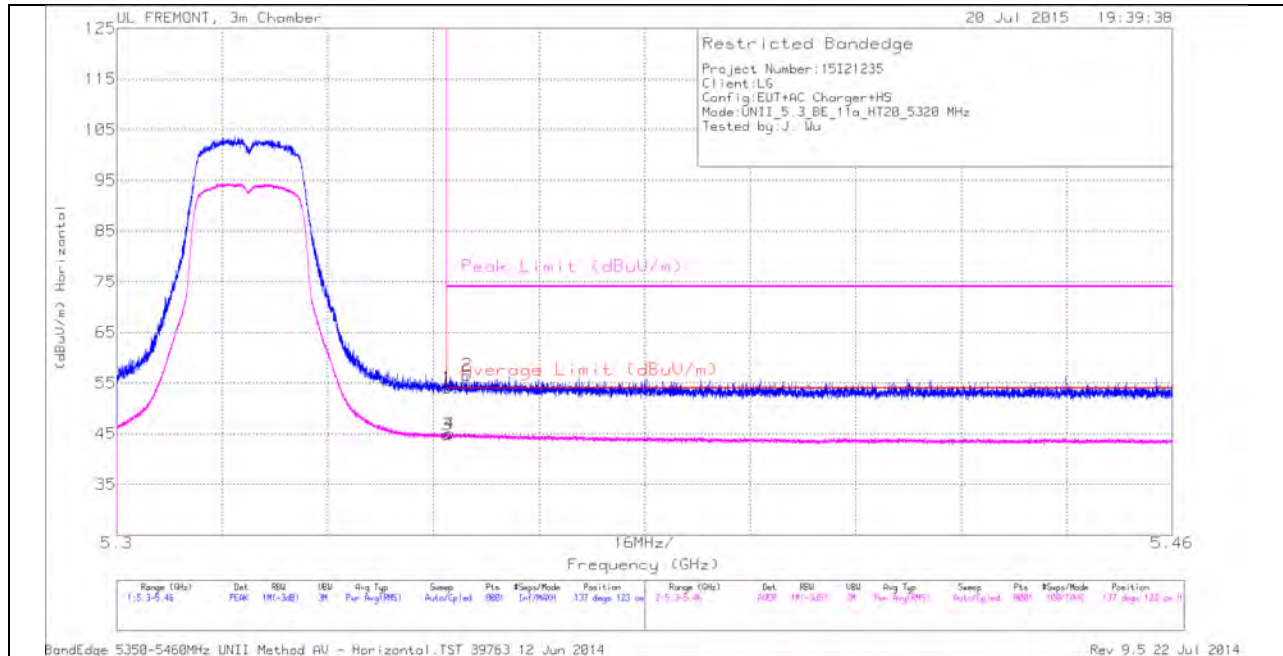
RADIATED EMISSIONS

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
* 1.277	41.24	PK1	29.7	-33	0	37.94	-	-	74	-36.06	-	-	306	100	H
* 1.279	29.95	AD1	29.7	-33	.09	26.74	54	-27.26	-	-	-	-	306	100	H
* 4.106	40.23	PK1	33.3	-30.2	0	43.33	-	-	74	-30.67	-	-	306	100	H
* 4.105	28.85	AD1	33.3	-30.2	.09	32.04	54	-21.96	-	-	-	-	306	100	H
* 1.414	41.71	PK1	28.5	-32.1	0	38.11	-	-	74	-35.89	-	-	306	200	V
* 1.415	29.88	AD1	28.5	-32.1	.09	26.37	54	-27.63	-	-	-	-	306	200	V
* 3.849	40.26	PK1	33.1	-30.2	0	43.16	-	-	74	-30.84	-	-	306	100	V
* 3.848	28.5	AD1	33.1	-30.2	.09	31.49	54	-22.51	-	-	-	-	306	100	V
* 11.911	37.03	PK1	39.1	-23.6	0	52.53	-	-	74	-21.47	-	-	328	100	H
* 11.91	25.55	AD1	39.1	-23.5	.09	41.24	54	-12.76	-	-	-	-	328	100	H
* 11.299	36.92	PK1	38.1	-22.7	0	52.32	-	-	74	-21.68	-	-	99	100	V
* 11.3	24.75	AD1	38.1	-22.8	.09	40.14	54	-13.86	-	-	-	-	99	100	V
6.946	40.42	PK1	35.6	-27.5	0	48.52	-	-	-	-	68.2	-19.68	328	105	H
6.947	32.56	AD1	35.6	-27.5	.09	40.75	-	-	-	-	-	-	328	105	H
6.947	41.93	PK1	35.6	-27.5	0	50.03	-	-	-	-	68.2	-18.17	312	117	V
6.947	35.2	AD1	35.6	-27.5	.09	43.39	-	-	-	-	-	-	312	117	V

11.1. 5.3 GHz

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

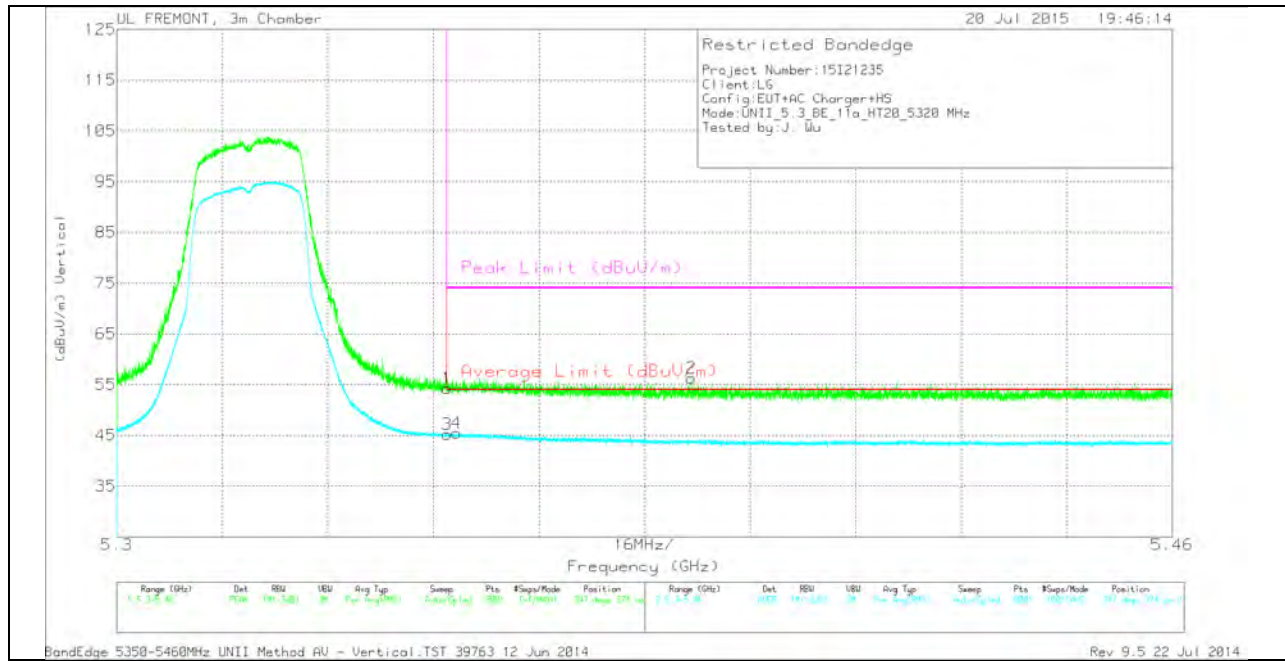
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/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	39.98	PK	34.5	-20.5	0	53.98	-	-	74	-20.02	137	123	H
3	5.35	30.88	RMS	34.5	-20.5	0	44.88	54	-9.12	-	-	137	123	H
4	5.35	31.1	RMS	34.5	-20.5	0	45.1	54	-8.9	-	-	137	123	H
2	5.353	42.66	PK	34.5	-20.6	0	56.56	-	-	74	-17.44	137	123	H

VERTICAL PEAK AND AVERAGE PLOT

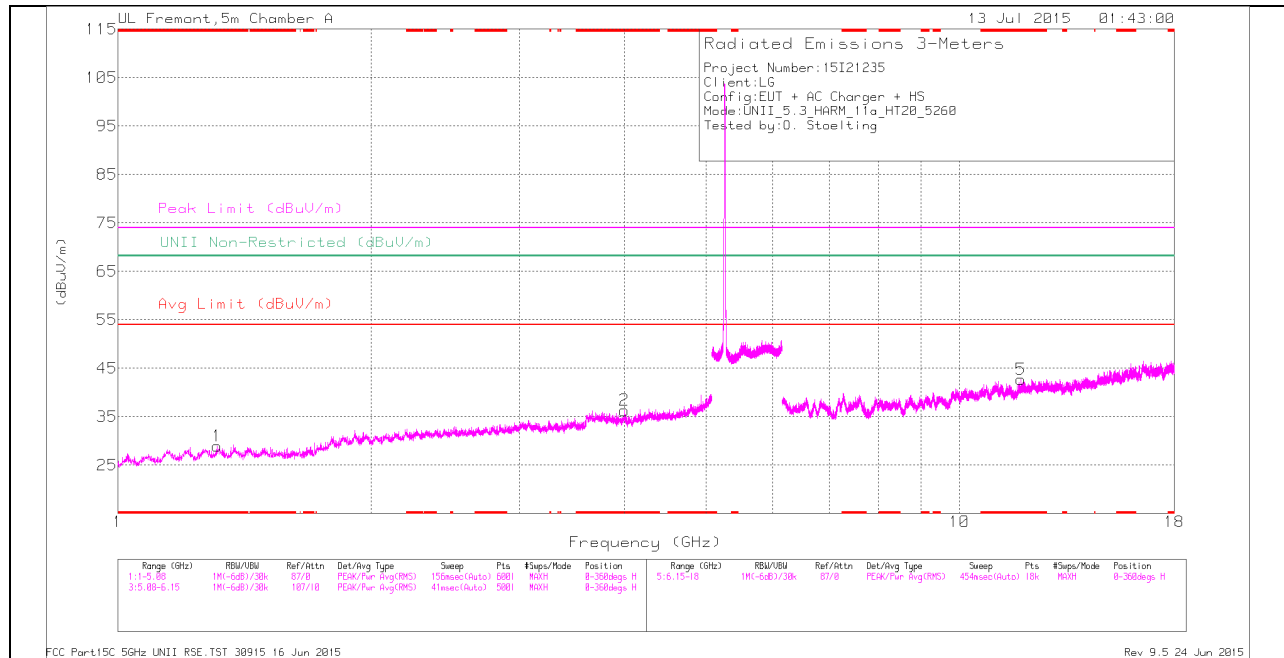


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/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	40.26	PK	34.5	-20.5	0	54.26	-	-	74	-19.74	347	374	V
3	5.35	31.16	RMS	34.5	-20.5	0	45.16	54	-8.84	-	-	347	374	V
4	5.352	31.46	RMS	34.5	-20.5	0	45.46	54	-8.54	-	-	347	374	V
2	5.387	42.3	PK	34.6	-20.6	0	56.3	-	-	74	-17.7	347	374	V

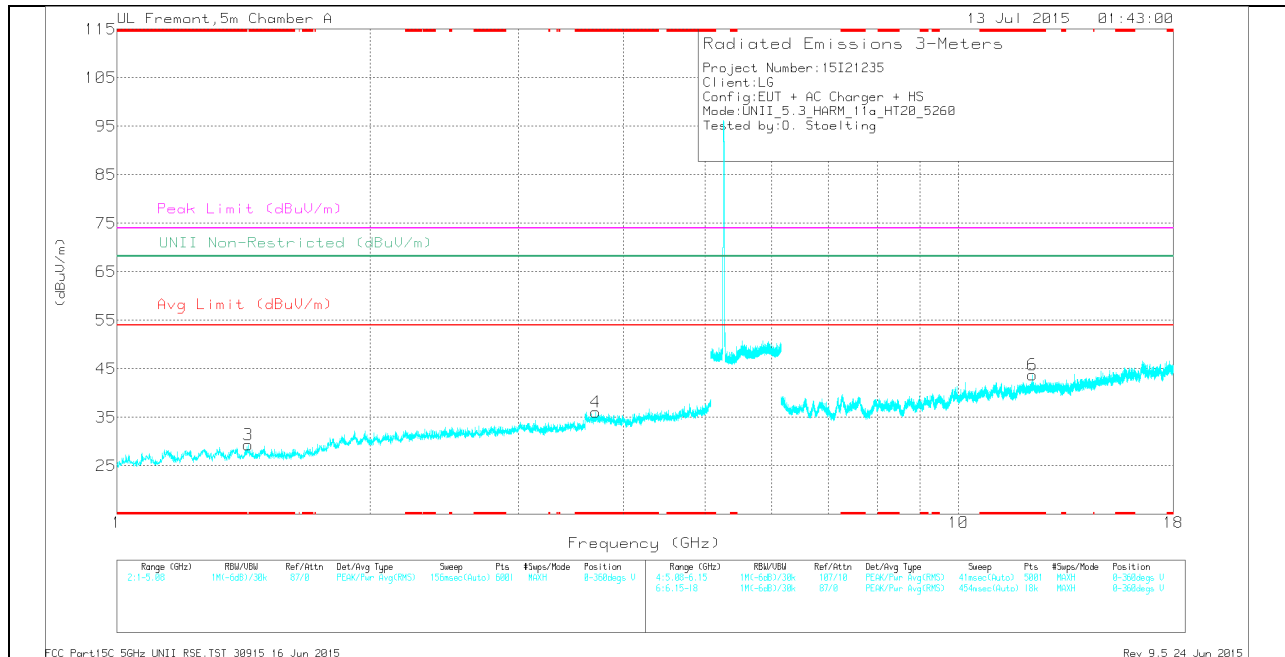
HARMONICS AND SPURIOUS EMISSIONS

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

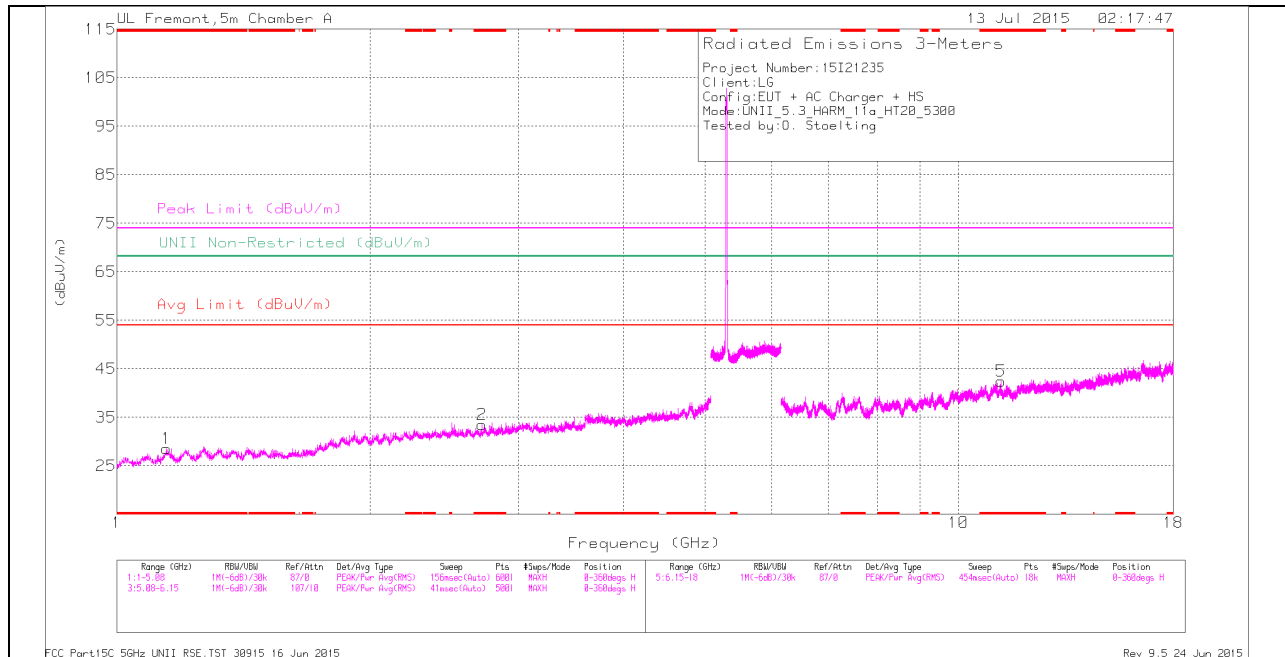
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.312	36.14	Pk	28.8	-36	28.94	-	-	74	-45.06	-	-	0-360	201	H
2	* 3.997	34.49	Pk	33.3	-31.5	36.29	-	-	74	-37.71	-	-	0-360	201	H
4	* 3.704	35.65	Pk	33.2	-32.8	36.05	-	-	74	-37.95	-	-	0-360	100	V
5	* 11.826	27.42	Pk	38.4	-23.1	42.72	-	-	74	-31.28	-	-	0-360	100	H
6	* 12.252	27.81	Pk	38.9	-22.9	43.81	-	-	74	-30.19	-	-	0-360	200	V
3	1.432	36.3	Pk	28.4	-35.4	29.3	-	-	-	-	68.2	-38.9	0-360	100	V

PK - Peak detector

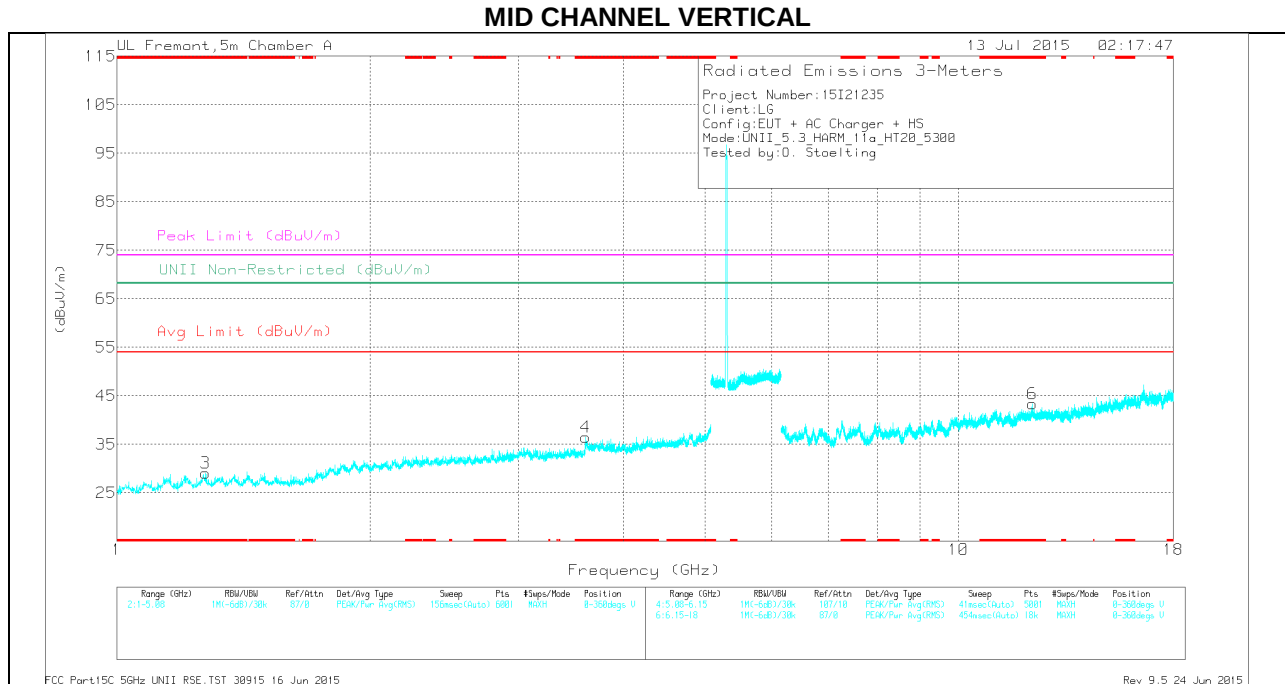
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fitr /Pad (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
* 1.311	43.82	PK-U	28.8	-36	36.62	-	-	74	-37.38	-	-	360	202	H
* 1.314	32.22	ADR	28.8	-36	25.02	54	-28.98	-	-	-	-	360	202	H
* 3.998	41.33	PK-U	33.3	-31.5	43.13	-	-	74	-30.87	-	-	360	202	H
* 3.999	30.39	ADR	33.3	-31.5	32.19	54	-21.81	-	-	-	-	360	202	H
* 3.705	42.48	PK-U	33.2	-32.7	42.98	-	-	74	-31.02	-	-	360	100	V
* 3.706	31.41	ADR	33.2	-32.7	31.91	54	-22.09	-	-	-	-	360	100	V
* 11.826	34.07	PK-U	38.4	-23.1	49.37	-	-	74	-24.63	-	-	360	100	H
* 11.827	23.19	ADR	38.4	-23.1	38.49	54	-15.51	-	-	-	-	360	100	H
* 12.25	33.71	PK-U	38.9	-23	49.61	-	-	74	-24.39	-	-	33	267	V
* 12.252	22.38	ADR	38.9	-22.9	38.38	54	-15.62	-	-	-	-	33	267	V
1.431	44.69	PK-U	28.4	-35.4	37.69	-	-	-	-	68.2	-30.51	360	100	V
1.434	32.44	ADR	28.4	-35.4	25.44	-	-	-	-	-	-	360	100	V

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.



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

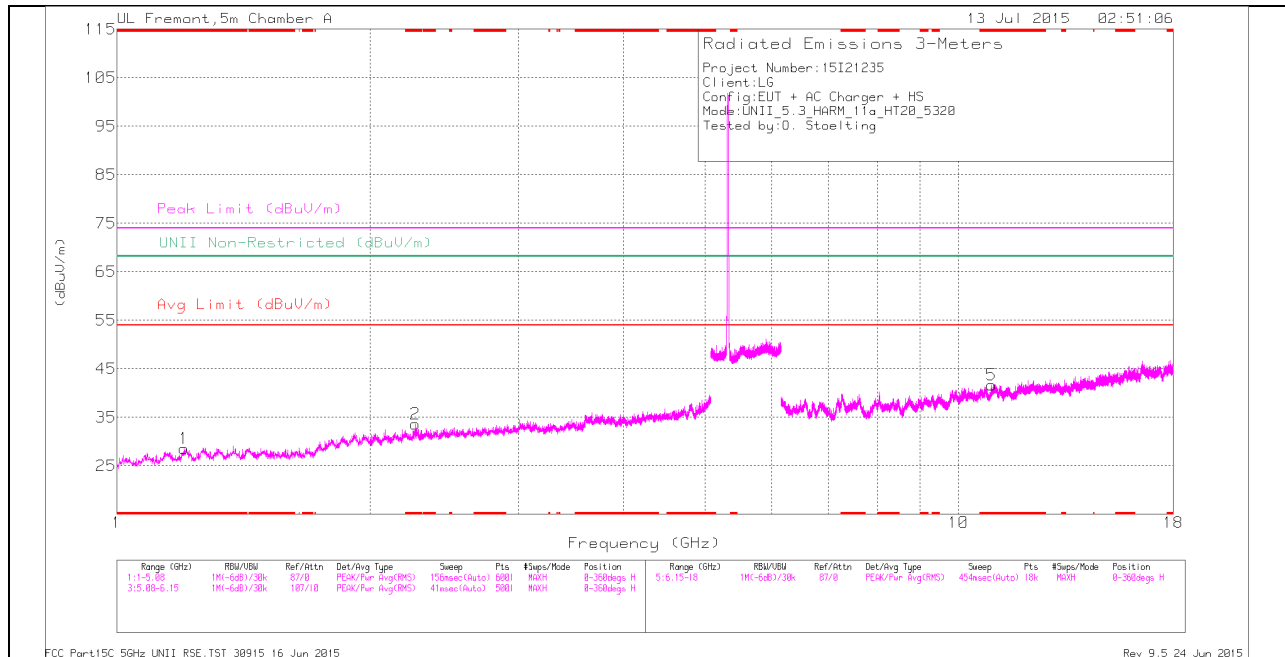
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.145	36.36	Pk	27.6	-35.4	28.56	-	-	74	-45.44	-	-	0-360	100	H
2	* 2.714	35.2	Pk	32.2	-33.9	33.5	-	-	74	-40.5	-	-	0-360	100	H
3	* 1.275	36.43	Pk	28.6	-35.9	29.13	-	-	74	-44.87	-	-	0-360	200	V
4	* 3.608	36.34	Pk	33.1	-33	36.44	-	-	74	-37.56	-	-	0-360	200	V
5	* 11.231	27.32	Pk	37.8	-22.7	42.42	-	-	74	-31.58	-	-	0-360	201	H
6	* 12.25	27.48	Pk	38.9	-23	43.38	-	-	74	-30.62	-	-	0-360	200	V

PK - Peak detector

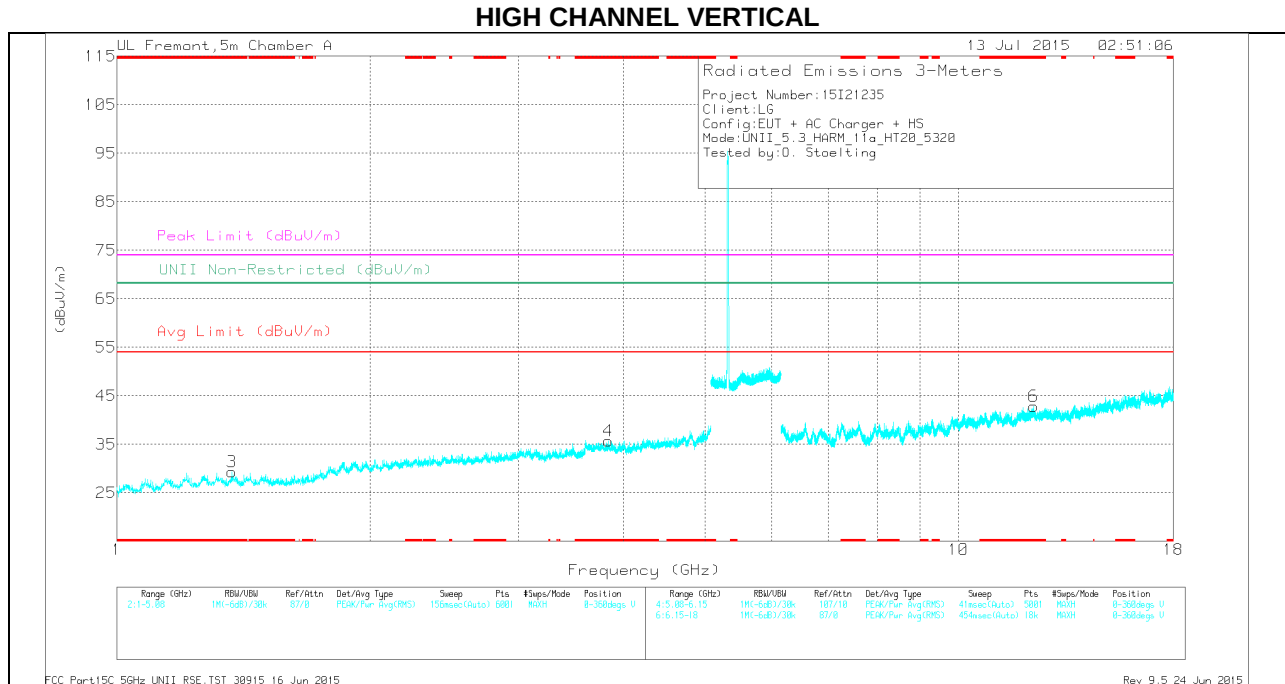
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Ftr /Pad (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
* 1.144	44.21	PK-U	27.6	-35.4	36.41	-	-	74	-37.59	-	-	1	100	H
* 1.144	32.77	ADR	27.6	-35.4	24.97	54	-29.03	-	-	-	-	1	100	H
* 2.714	42.14	PK-U	32.2	-33.9	40.44	-	-	74	-33.56	-	-	1	100	H
* 2.715	30.95	ADR	32.2	-33.9	29.25	54	-24.75	-	-	-	-	1	100	H
* 1.275	43.79	PK-U	28.6	-35.9	36.49	-	-	74	-37.51	-	-	1	201	V
* 1.273	32.57	ADR	28.6	-35.9	25.27	54	-28.73	-	-	-	-	1	201	V
* 3.609	43.34	PK-U	33.1	-33	43.44	-	-	74	-30.56	-	-	1	201	V
* 3.608	31.39	ADR	33.1	-33	31.49	54	-22.51	-	-	-	-	1	201	V
* 11.232	34.19	PK-U	37.8	-22.7	49.29	-	-	74	-24.71	-	-	1	201	H
* 11.229	22.8	ADR	37.8	-22.8	37.8	54	-16.2	-	-	-	-	1	201	H
* 12.248	34.35	PK-U	38.9	-23	50.25	-	-	74	-23.75	-	-	233	246	V
* 12.25	22.37	ADR	38.9	-23	38.27	54	-15.73	-	-	-	-	233	246	V

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.



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 T136 (dB/m)	Amp/Cbl/Fitr /Pad (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	* 1.201	35.96	Pk	28	-35.4	28.56	-	-	74	-45.44	-	-	0-360	201	H
2	* 2.264	36.09	Pk	31.7	-34.2	33.59	-	-	74	-40.41	-	-	0-360	100	H
3	* 1.369	36.68	Pk	28.6	-35.9	29.38	-	-	74	-44.62	-	-	0-360	200	V
4	* 3.834	34.59	Pk	33.4	-32.3	35.69	-	-	74	-38.31	-	-	0-360	100	V
5	* 10.944	27.31	Pk	37.8	-23.4	41.71	-	-	74	-32.29	-	-	0-360	201	H
6	* 12.285	27.29	Pk	38.9	-23.3	42.89	-	-	74	-31.11	-	-	0-360	200	V

PK - Peak detector

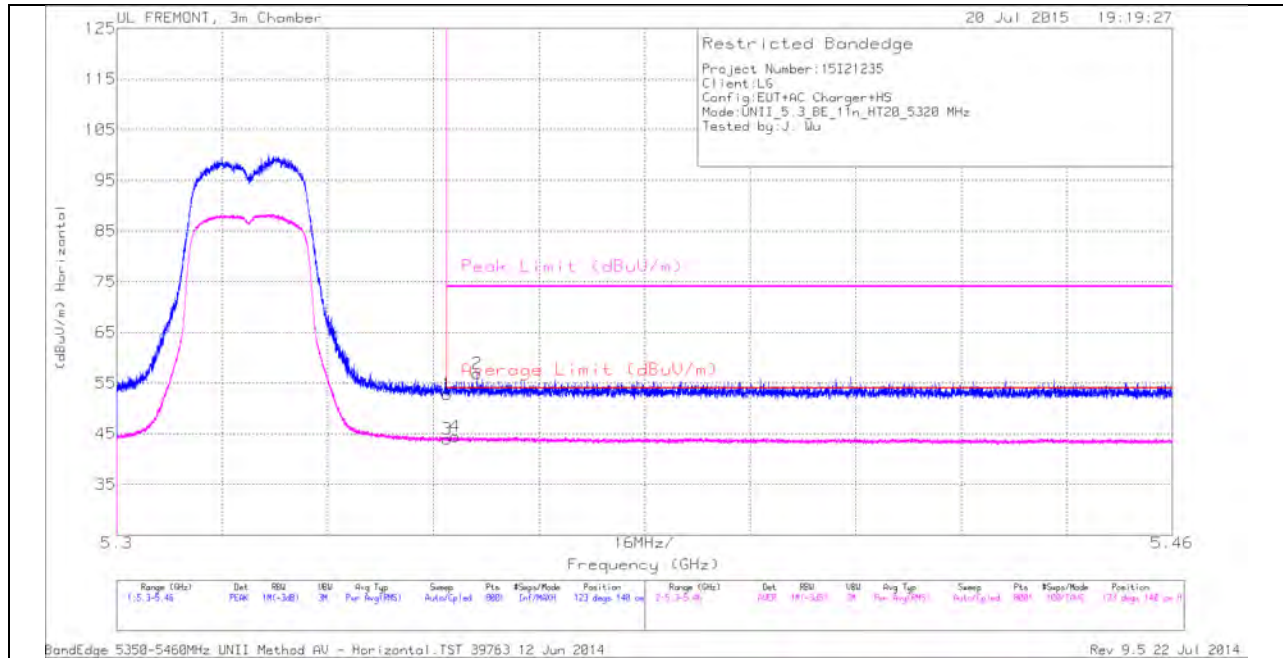
RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/FI tr/Pad (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
* 1.201	43.81	PK-U	28	-35.4	36.41	-	-	74	-37.59	-	-	360	202	H
* 1.203	32.53	ADR	28	-35.4	25.13	54	-28.87	-	-	-	-	360	202	H
* 2.264	43	PK-U	31.7	-34.2	40.5	-	-	74	-33.5	-	-	360	100	H
* 2.266	31.44	ADR	31.7	-34.2	28.94	54	-25.06	-	-	-	-	360	100	H
* 1.371	44.23	PK-U	28.6	-35.9	36.93	-	-	74	-37.07	-	-	360	201	V
* 1.37	32.46	ADR	28.6	-35.9	25.16	54	-28.84	-	-	-	-	360	201	V
* 3.833	42.34	PK-U	33.4	-32.3	43.44	-	-	74	-30.56	-	-	360	100	V
* 3.836	31.2	ADR	33.4	-32.3	32.3	54	-21.7	-	-	-	-	360	100	V
* 10.946	34.11	PK-U	37.8	-23.4	48.51	-	-	74	-25.49	-	-	360	202	H
* 10.946	23.51	ADR	37.8	-23.4	37.91	54	-16.09	-	-	-	-	360	202	H
* 12.285	34.3	PK-U	38.9	-23.3	49.9	-	-	74	-24.1	-	-	4	203	V
* 12.287	22.55	ADR	38.9	-23.3	38.15	54	-15.85	-	-	-	-	4	203	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL)

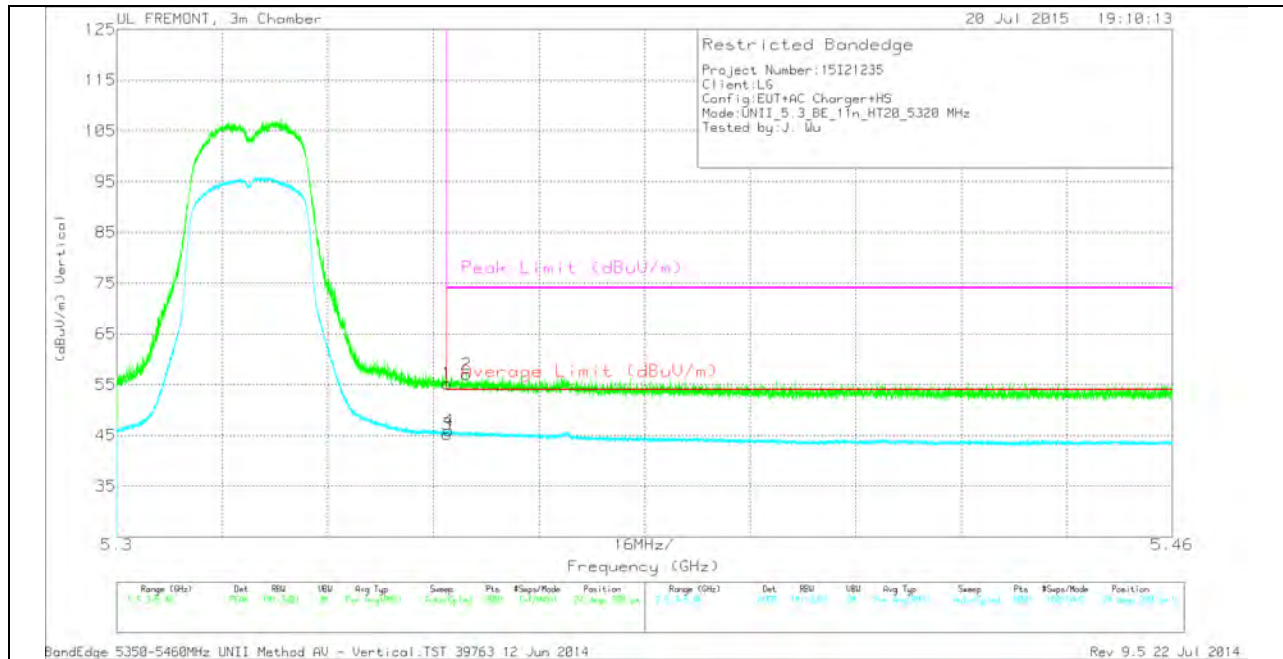
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fitter/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	38.76	PK	34.5	-20.5	0	52.76	-	-	74	-21.24	123	140	H
3	5.35	29.92	RMS	34.5	-20.5	0	43.92	54	-10.08	-	-	123	140	H
4	5.351	30.43	RMS	34.5	-20.5	0	44.43	54	-9.57	-	-	123	140	H
2	5.355	42.93	PK	34.5	-20.6	0	56.83	-	-	74	-17.17	123	140	H

VERTICAL PEAK AND AVERAGE PLOT

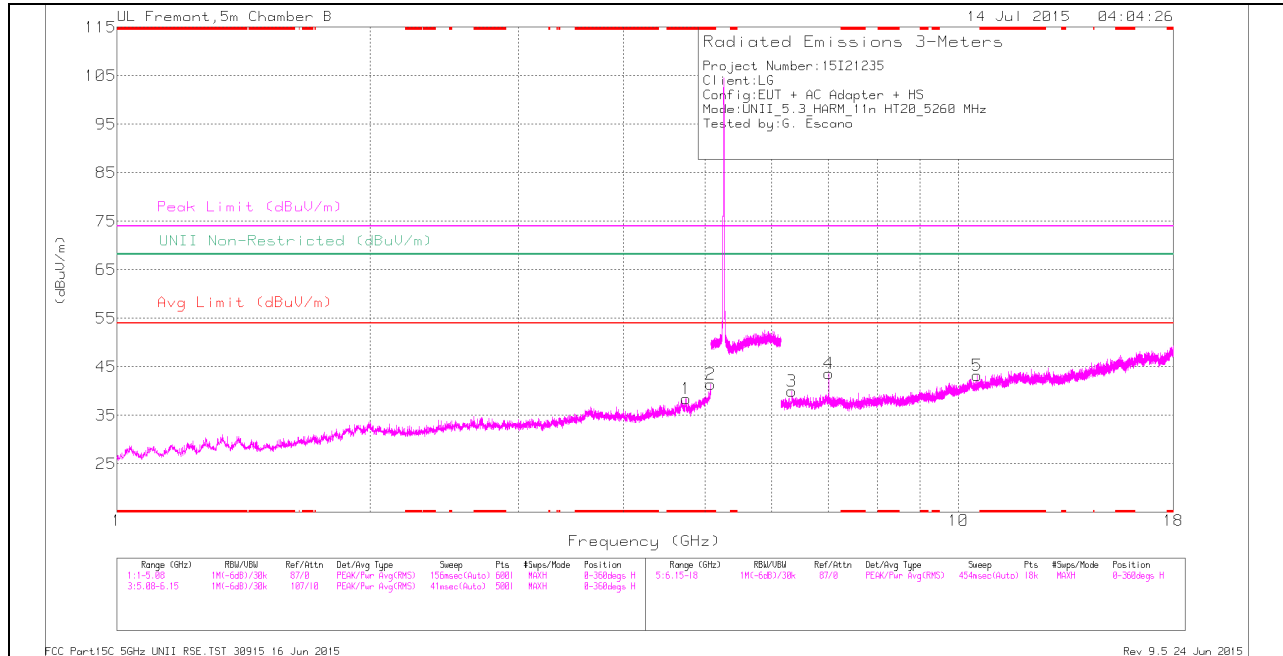


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Chl/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	41.2	PK	34.5	-20.5	0	55.2	-	-	74	-18.8	24	390	V
3	5.35	31.22	RMS	34.5	-20.5	0	45.22	54	-8.78	-	-	24	390	V
4	5.35	31.9	RMS	34.5	-20.5	0	45.9	54	-8.1	-	-	24	390	V
2	5.353	43.15	PK	34.5	-20.6	0	57.05	-	-	74	-16.95	24	390	V

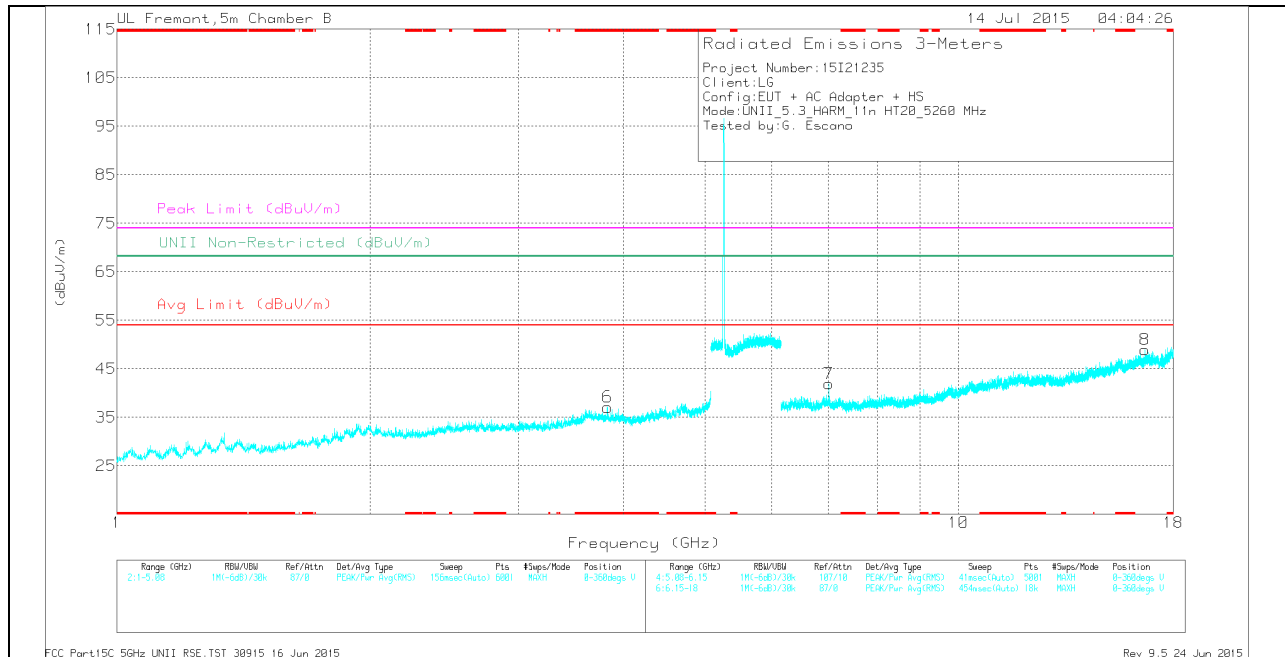
HARMONICS AND SPURIOUS EMISSIONS

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

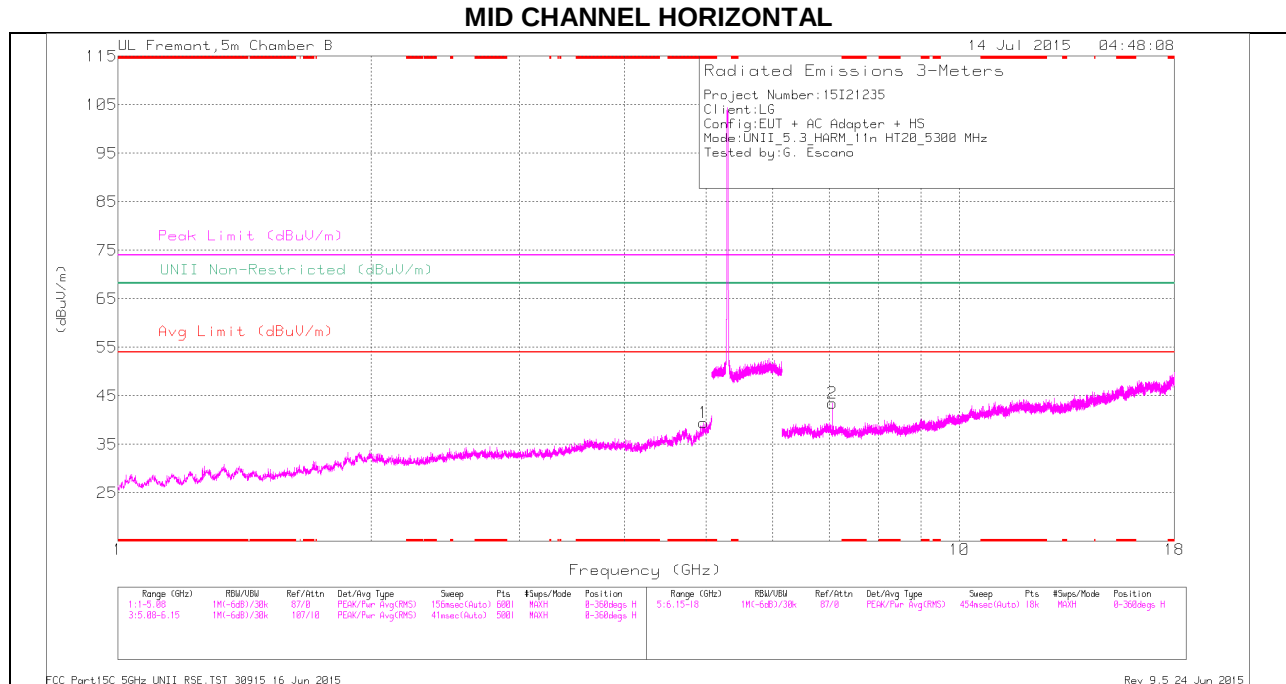
TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (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	* 4.747	33.1	Pk	34.3	-29	0	38.4	-	-	74	-35.6	-	-	0-360	199	H
2	* 5.079	32.07	Pk	34	-24.6	0	41.47	-	-	74	-32.53	-	-	0-360	199	H
6	* 3.826	33.87	Pk	33.4	-30.2	0	37.07	-	-	74	-36.93	-	-	0-360	199	V
3	6.337	31.57	Pk	35.6	-27.2	0	39.97	-	-	-	-	68.2	-28.23	0-360	199	H
4	7.013	34.45	Pk	36	-26.8	0	43.65	-	-	-	-	68.2	-24.55	0-360	101	H
7	7.013	32.72	Pk	36	-26.8	0	41.92	-	-	-	-	68.2	-26.28	0-360	101	V
5	10.532	28.24	Pk	37.5	-22.5	0	43.24	-	-	-	-	68.2	-24.96	0-360	101	H
8	16.642	25.99	Pk	41.4	-18.5	0	48.89	-	-	-	-	68.2	-19.31	0-360	199	V

PK - Peak detector

RADIATED EMISSIONS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T34S (dB/m)	Amp/Chl/FI 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
* 4.747	41.63	PK-U	34.3	-29	0	46.93	-	-	74	-27.07	-	-	283	160	H
* 4.747	29.16	ADR	34.3	-29	0	34.46	54	-19.54	-	-	-	-	283	160	H
* 5.079	41.12	PK-U	34	-24.5	0	50.62	-	-	74	-23.38	-	-	352	131	H
* 5.078	29.02	ADR	34	-24.8	0	38.22	54	-15.78	-	-	-	-	352	131	H
* 3.825	41.38	PK-U	33.4	-30.2	0	44.58	-	-	74	-29.42	-	-	228	135	V
* 3.826	29.05	ADR	33.4	-30.2	0	32.25	54	-21.75	-	-	-	-	228	135	V
6.338	38.7	PK-U	35.6	-27.1	0	47.2	-	-	-	-	68.2	-21	133	195	H
7.013	41.56	PK-U	36	-26.8	0	50.76	-	-	-	-	68.2	-17.44	147	101	H
7.013	39.69	PK-U	36	-26.8	0	48.89	-	-	-	-	68.2	-19.31	157	105	V
10.532	35.52	PK-U	37.5	-22.5	0	50.52	-	-	-	-	68.2	-17.68	34	101	H
16.644	33.24	PK-U	41.4	-18.4	0	56.24	-	-	-	-	68.2	-11.96	13	162	V



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