FCC 47 CFR PART 15 SUBPART E

CLASS II PERMISSIVE CHANGE

FOR

802.11a/g/n/ac WLAN + BLUETOOTH PCI-E CUSTOM COMBINATION CARD

MODEL NUMBER: BCM94360CS2

FCC ID: QDS-BRCM1072

REPORT NUMBER: 15U22129–E1V2

ISSUE DATE: JANUARY 6 , 2016

Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	12/23/15	Initial Issue	H. Mustapha
V2	01/06/16	Updated Section 5.6	H. Mustapha

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	BROADCOM CORPORATION 190 MATHILDA PLACE SUNNYVALE, CA 94086, U.S.A.
EUT DESCRIPTION:	802.11a/g/n/ac WLAN + Bluetooth PCI-E Custom Combination Card
MODEL:	BCM94360CS2
SERIAL NUMBER:	C8Y2521000KFC31EQ
DATE TESTED:	November 2 ~ 24, 2015 February 1 ~ 21, 2013

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	Pass

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

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

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FRANK IBRAHIM
PROGRAM MANAGER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, FCC 06-96, FCC KDB 789033 D02 v01 and ANSI C63.10-2013.

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	☐ Chamber D
☒ Chamber B	☐ Chamber E
☐ Chamber C	☐ Chamber F
	☐ Chamber G
	☐ Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

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:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 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 1000 MHz	± 4.94 dB
Radiated Disturbance, 1 to 6 GHz	± 3.86 dB
Radiated Disturbance, 6 to 18 GHz	± 4.23 dB
Radiated Disturbance, 18 to 26 GHz	± 5.30 dB
Radiated Disturbance, 26 to 40 GHz	± 5.23 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an 802.11 a/g/n/ac WLAN + Bluetooth PCI-E Custom Combination Card.

The radio module is manufactured by Broadcom.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Output Power (dBm)	Output Power (mW)
5.8 GHz band, 1TX						
5745-5825	802.11a Legacy	20.60	N/A	N/A	20.60	114.82
5745-5825	802.11n HT20	20.91	N/A	N/A	20.91	123.31
5755-5795	802.11n HT40	19.35	N/A	N/A	19.35	86.10
5775	802.11ac VHT80	13.63	N/A	N/A	13.63	23.07
5.8 GHz band, 2TX						
5745-5825	802.11n HT20 CDD	20.57	20.45	N/A	23.52	224.94
5745-5825	802.11n HT20 TxBF	20.50	20.20	N/A	23.36	216.91
5755-5795	802.11n HT40 CDD	20.20	20.10	N/A	23.16	207.04
5755-5795	802.11n HT40 TxBF	20.20	20.10	N/A	23.16	207.04
5775	802.11ac VHT80 CDD	19.80	19.50	N/A	22.66	184.62
5775	802.11ac VHT80 TxBF	19.80	19.50	N/A	22.66	184.62

5.3. LIST OF TEST REDUCTION AND MODES COVERING OTHER MODES

List of test reduction (Non Beam-Forming modes)

Antenna Port Testing		
Band	**Mode**	**Covered by**
5 GHz bands	802.11a Legacy 1TX	802.11n HT20 CDD 2TX
5 GHz bands	802.11a CDD 2TX	802.11n HT20 CDD 2TX
5 GHz bands	802.11n HT20 CDD 1TX	802.11n HT20 CDD 2TX
5 GHz bands	802.11n HT40 1TX	802.11n HT40 CDD 2TX
5 GHz bands	802.11ac VHT80 1TX	802.11ac VHT80 CDD 2TX

Radiated Testing		
Band	**Mode**	**Covered by**
5 GHz bands	802.11a Legacy 1TX (Harmonics)	802.11n HT20 CDD 2TX (Harmonics)
5 GHz bands	802.11a CDD 2TX	802.11n HT20 CDD 2TX
5 GHz bands	802.11n HT20 CDD 1TX (Harmonics)	802.11n HT20 CDD 2TX (Harmonics)
5 GHz bands	802.11n HT40 1TX (Harmonics)	802.11n HT40 CDD 2TX (Harmonics)
5 GHz bands	802.11ac VHT80 1TX (Harmonics)	802.11ac VHT80 CDD 2TX (Harmonics)

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

No.	Antenna Manufacturer	Antenna Type	Model	Peak gain @ 2412, 2422, 2432MHz,	Peak gain (5150-5250MHz) @5200MHz	Peak gain (5250-5350MHz) @5320MHz	Peak gain (5470-5725MHz) @5500, 5700MHz	Peak gain (5725-5850MHz) @5785, 5805MHz	
1	Amphenol/ Pulse	802.11abgn WLAN/BT Antenna	631-1546 WiFi 1	1.67	5.93	6.12	5.27	4.39	Host 1
1	Amphenol/ Pulse	802.11abgn WLAN Antenna	631-1546 WiFi 2	5.98	5.75	5.57	5.89	5.29	
2	Amphenol/ Pulse	802.11abgn WLAN/BT Antenna	631-1547 WiFi 1	4.97	4.07	4.93	5.77	4.9	Host 2
2	Amphenol/ Pulse	802.11abgn WLAN Antenna	631-1547 WiFi 2	4.87	4.74	5.21	6.61	6.28	
2	Amphenol/ Pulse	802.11abgn WLAN/BT Antenna	631-1547 BT	4.97					

Notes:

- This table includes two sets of antennas, first set is identified by number (1) in the first column, and the second set is identified by number (2) in the first column.
- Red numbers in this table are the highest antenna gain used for SISO antenna port testing as worst-case scenario.
- Blue highlighted cells in this table are the antenna gains that yield the highest composite gain for 2TX modes, these numbers are used for 2TX antenna port testing as worst-case scenario.
- For radiated testing, the antennas with highest gains from first and second sets were selected as worst-case scenario.

5.5. SOFTWARE AND FIRMWARE

The EUT driver software installed during testing was Broadcom, rev. 6.30.118.62.
The test utility software used during testing was BCM Internal, rev. 6.30.RC118.62.

5.6. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

The purpose of this C2PC is to upgrade the device described under section 5.1 of this report to the new rules per KDB 789033 D02 v01.

All data in this report is for operation in the UNII-3 band.

For UNII-1, UNII-2 and UNII-2C bands, we have reviewed the original test report for (report no. 13U14796-6) and are hereby attesting that all the current technical requirements are still met and all applicable test procedures remain the same. Therefore, the original test report is still applicable and no additional testing is done.

5.7. WORST-CASE CONFIGURATION AND MODE

The EUT was tested as an external module installed in a test jig board connected to a host Laptop PC.

Worst-Case data rates, as provided by the client, were as follows:

For 5.8 GHz Band:
802.11a: 6 Mb/s.
802.11n 20MHz: MCS0.
802.11n 40MHz: MCS0.
802.11ac VHT80MHz: MCS0.

Worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was the mode and channel with the highest output power.

For Radiated Band Edge measurements, preliminary testing showed that the worst case was vertical polarization, so final measurements were performed with vertical polarization only.

For all modes with single chain, chain 0 (connector J0, Main port) was selected per the software provided by the client. A preliminary investigation was performed on the two chains and chain 0 was found to be worst-case.

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Lenovo	G560	CBU4473193	DoC
AC Adapter	Lenovo	ADP-65KH B	11S36001646ZZ1001FKY6	DoC
Adapter Board	Catalyst	MINI2EXP	N/A	N/A
Adapter Board	Broadcom	N/A	N/A	N/A

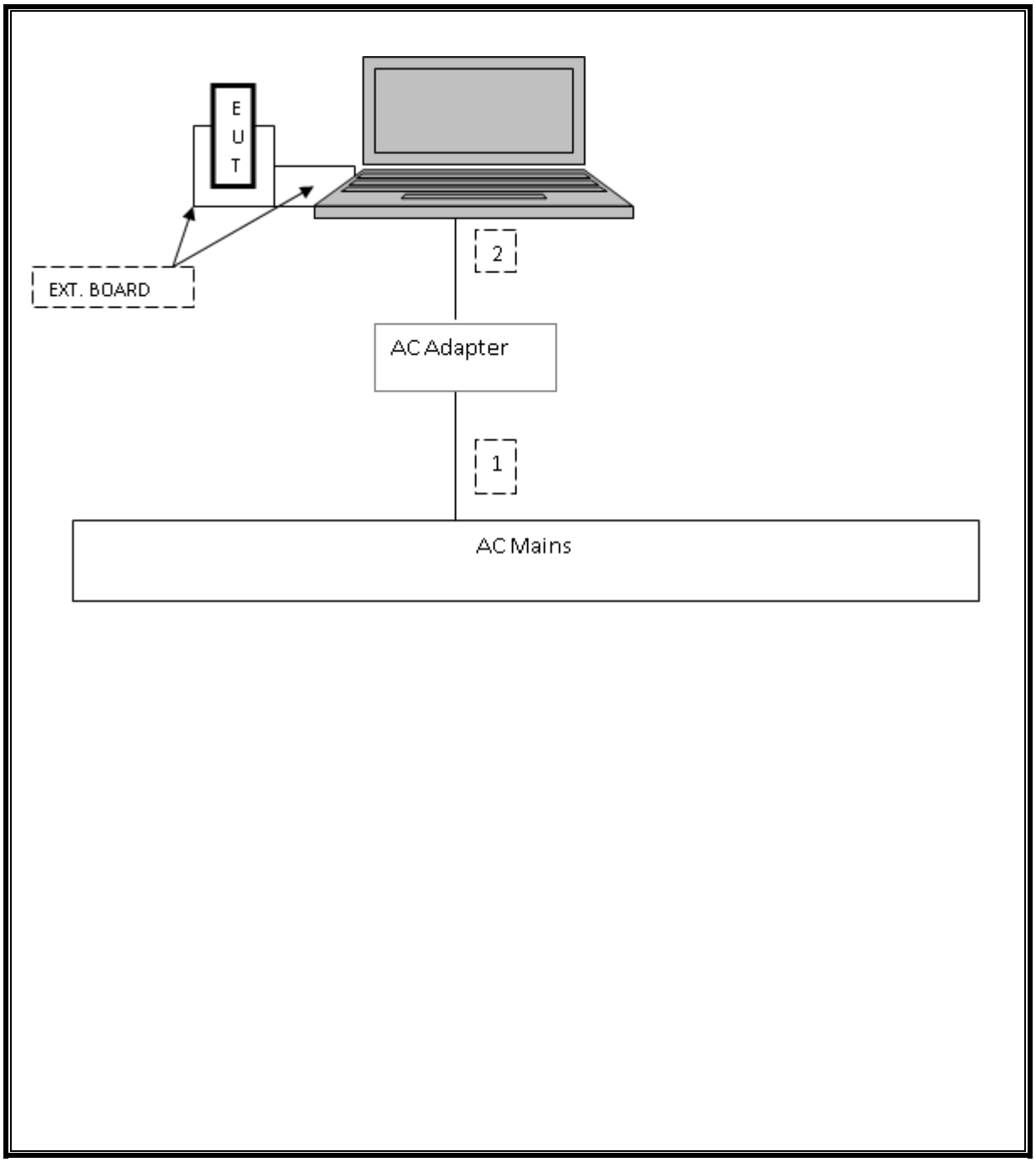
I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	AC	2	US 115V	Unshielded	1	NA
2	DC	2	DC	Unshielded	1.8	Ferrite at laptop's end

TEST SETUP

The EUT is attached to a jig board which is installed in the PCMCI slot of a host laptop computer during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List					
Description	Manufacturer	Model	T No.	Cal Date	Cal Due
Radiated Software	UL	UL EMC	Ver 9.5, June 6, 2015		
Conducted Software	UL	UL EMC	Ver 9.5, May 17 2012		
Horn Antenna 1-18GHz	ETS	3117	136	01/15/15	01/15/16
Horn Antenna 18-26GHz	ARA	SWH-28	98	12/17/14	12/17/15
Horn Antenna 26.5- 40GHz	ARA	MWH-2640/B	90	07/28/15	07/28/16
Preamp 10kHz-1000MHz	HP	8447D	10	01/16/15	01/16/16
Preamp 1-8GHz	Miteq	AMF-4D-01000800-30-29P	782	10/22/15	10/22/16
Preamp 1-26.5GHz	Agilent	8449B	404	04/13/15	04/13/16
Amplifier, 26-40GHz	Miteq	NSP4000-SP2	88	04/07/15	04/07/16
Spectrum Analyzer 3kHz - 44GHz	Agilent	N9030A	907	05/15/15	05/15/16
3GHz HPF	Micro-Tronics	HPM17543	485	01/16/15	01/16/16
5GHz LPF	Micro-Tronics	LPS17541	482	01/16/15	01/16/16
6GHz HPF	Micro-Tronics	HPS17542	483	01/16/15	01/16/16
EMI Test Receiver	Rohde & Schwarz	ECSI 7	1124	09/30/15	09/30/16
Power Meter	Agilent	N1911A	T1268	06/07/15	06/07/16
Power Sensor	Agilent	N1921A	1223	06/07/15	02/06/16
LISN for Conducted Emission	FCC	50/250-25-2	24	01/16/15	01/16/16

7. MEASUREMENT METHODS

On Time and Duty Cycle: KDB 789033 D02 v01, Section B.

6 dB Emission BW: KDB 789033 D02 v01, Section C.2.

Conducted Output Power: KDB 789033 D02 v01, Section E.3.b (Method PM-G), and KDB 662911 D01 v02r01.

Power Spectral Density: KDB 789033 D02 v01, Section F, and KDB 662911 D01 v02r01.

Unwanted emissions in restricted bands: KDB 789033 D02 v01, Sections G.2, G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01, Sections G.2, G.3, G.4, and G.5.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

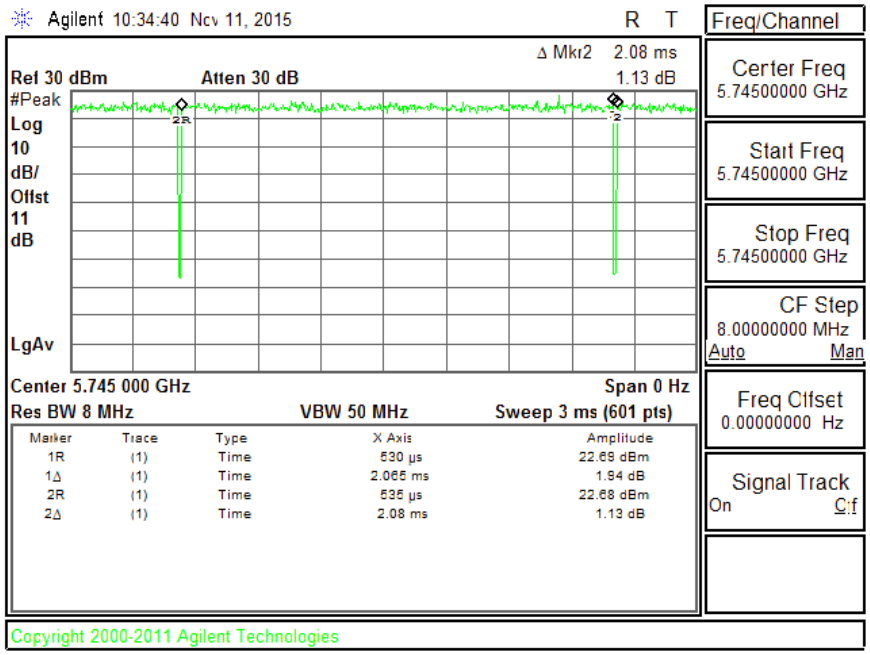
None; for reporting purposes only.

ON TIME AND DUTY CYCLE RESULTS

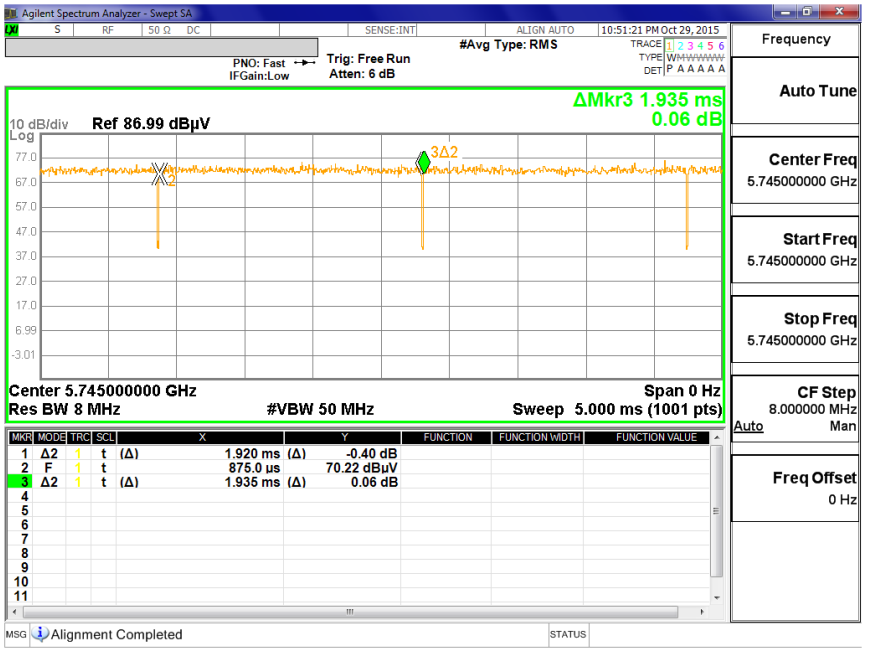
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11a CDD	2.065	2.080	0.993	99.28%	0.00	0.010
802.11n HT20 CDD	1.920	1.935	0.992	99.22%	0.00	0.010
802.11n HT20 TxBF	11.700	13.370	0.875	87.51%	0.58	0.085
802.11n HT40 CDD	0.9449	0.9627	0.982	98.15%	0.00	0.010
802.11n HT40 TxBF	4.860	7.488	0.649	64.90%	1.88	0.206
802.11ac VHT80 CDD	0.4600	0.4769	0.965	96.46%	0.16	2.174
802.11ac VHT80 TxBF	11.5500	31.2500	0.370	36.96%	4.32	0.087

DUTY CYCLE PLOTS

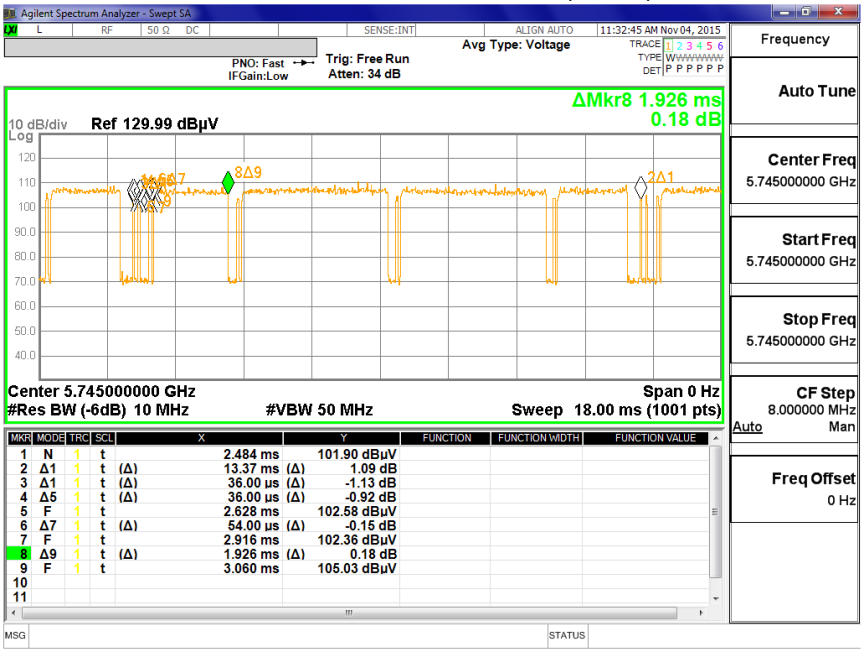
DUTY CYCLE 802.11a MODE



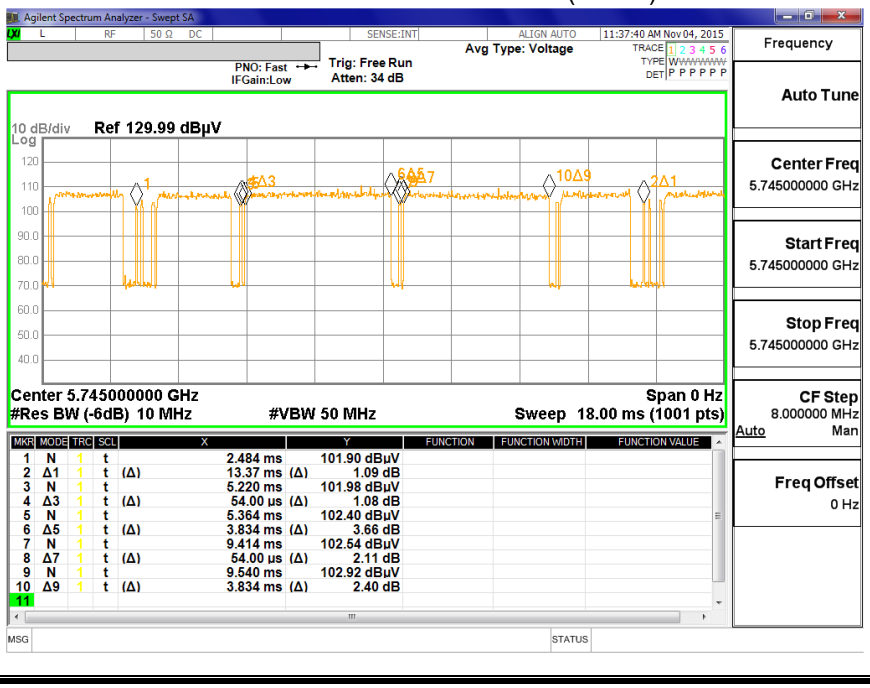
DUTY CYCLE 802.11n HT20 CDD MODE



DUTY CYCLE 802.11n HT20 TxBF MODE (1 of 3)



DUTY CYCLE 802.11n HT20 TxBF MODE (2 of 3)



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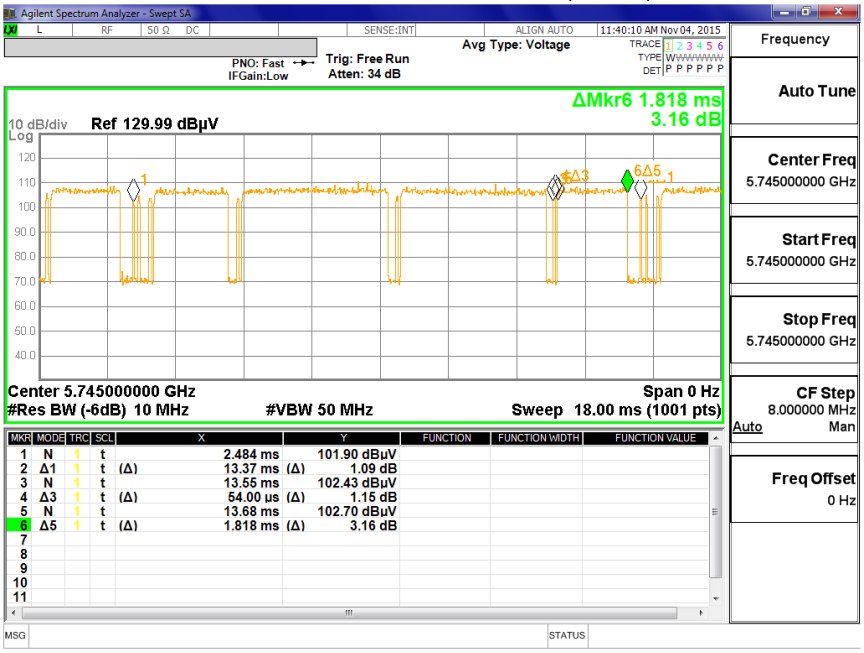
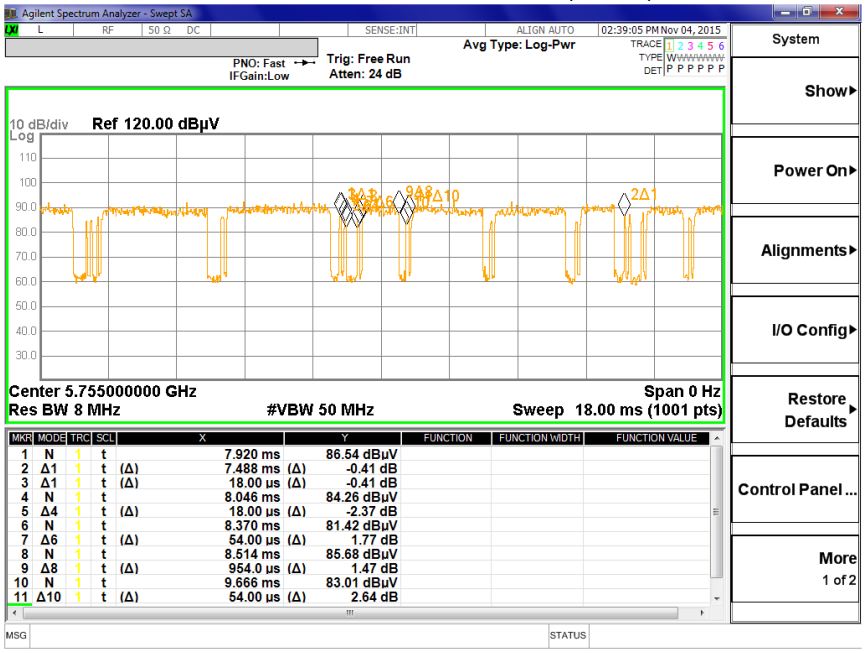


DUTY CYCLE 802.11n HT40 CDD MODE

DUTY CYCLE 802.11n HT40 TxBF MODE (1 of 2)



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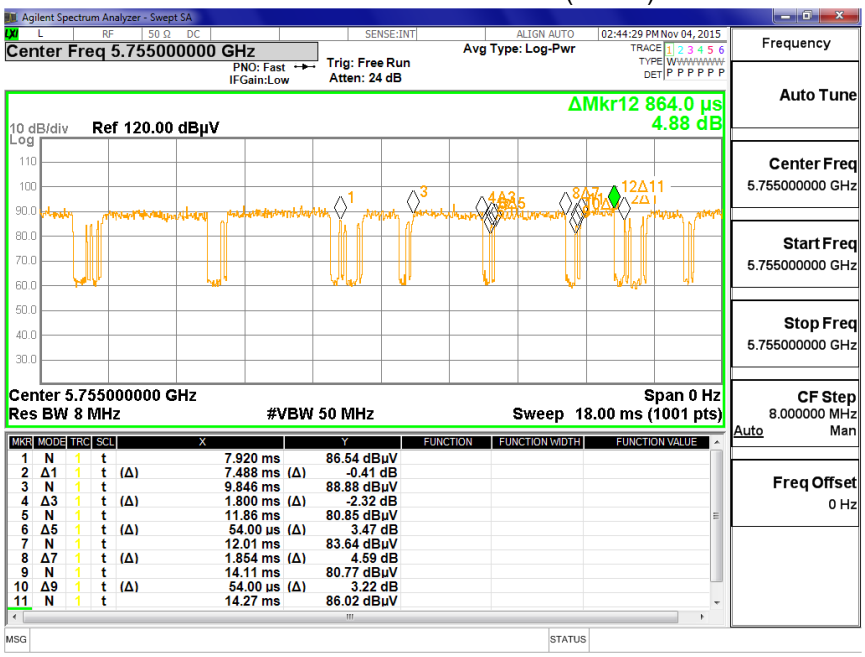
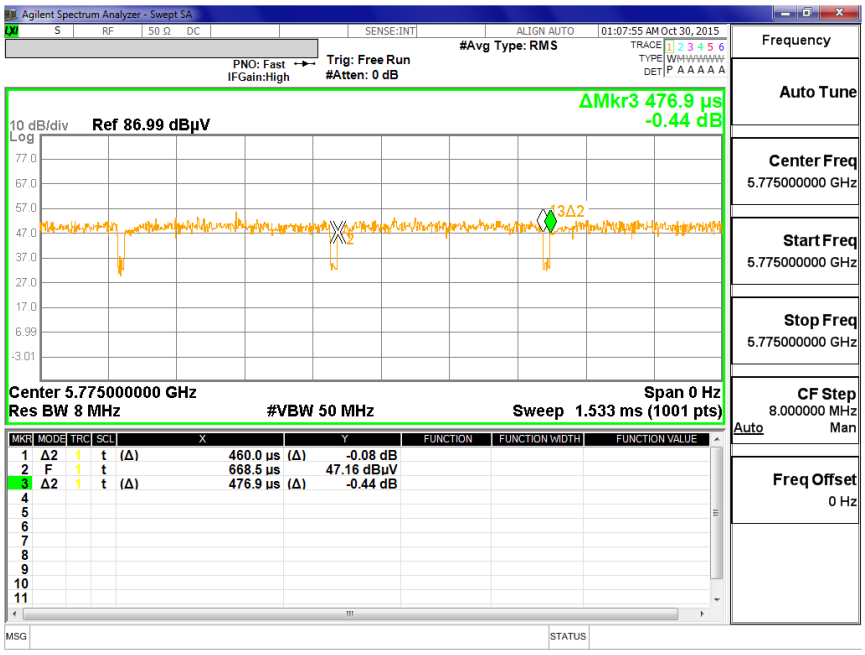


DUTY CYCLE 802.11ac HT80 CDD MODE



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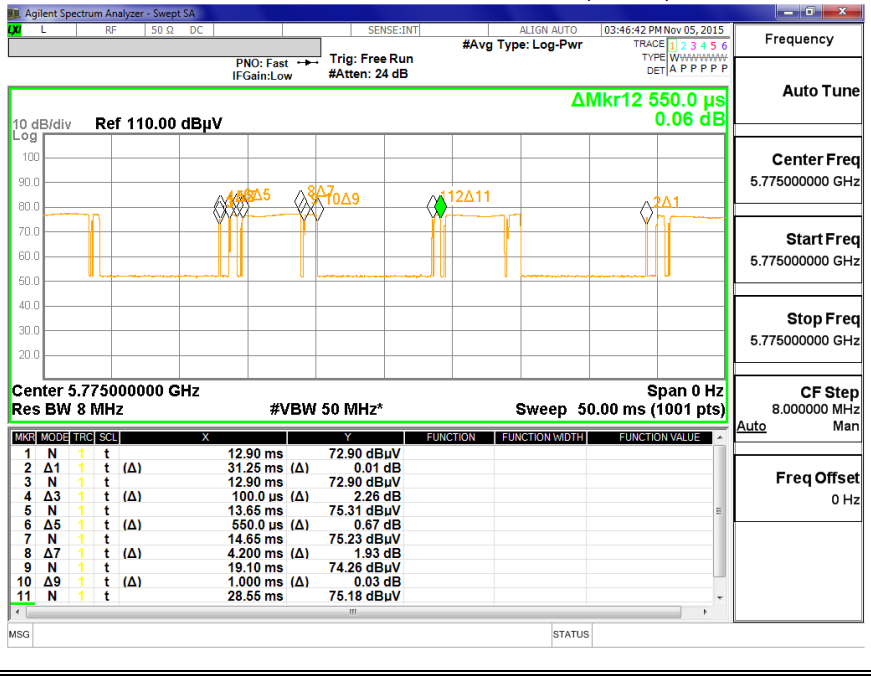

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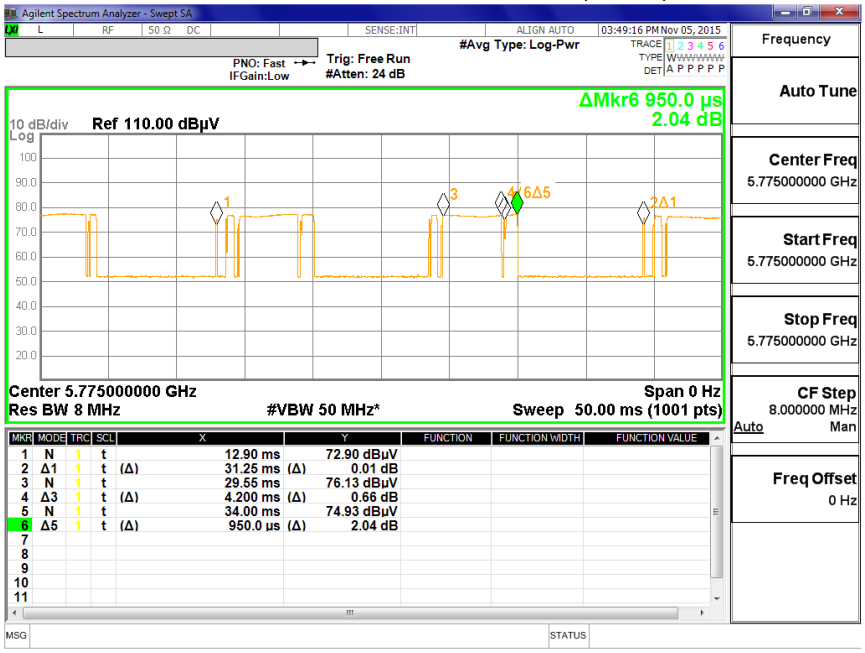


8.2. 802.11a SISO MODE IN THE 5.8 GHz BAND

8.2.1. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

This is SISO mode, AG is the highest (worst-case) = 6.28 dBi

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	6.28	29.72
Mid	5765	6.28	29.72
High	5825	6.28	29.72

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	17.55	17.55	29.72	-12.17
153	5765	19.90	19.90	29.72	-9.82
High	5825	20.60	20.60	29.72	-9.12

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

8.3. 802.11n HT20 CDD SISO MODE IN THE 5.8 GHz BAND

8.3.1. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

This is SISO mode, AG is the highest (worst-case) = 6.28 dBi

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	6.28	29.72
Mid	5765	6.28	29.72
High	5825	6.28	29.72

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.27	16.27	29.72	-13.45
High	5825	20.91	20.91	29.72	-8.81

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

8.4. 802.11n HT20 CDD 2Tx MODE IN THE 5.8 GHz BAND

8.4.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

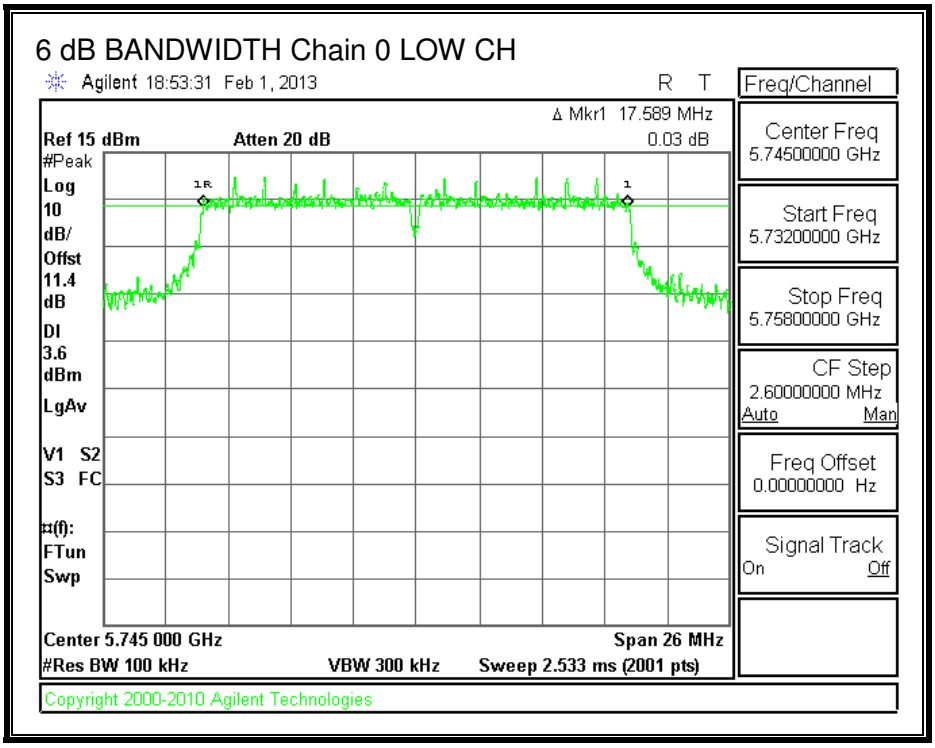
IC RSS-210 A8.2 (a)

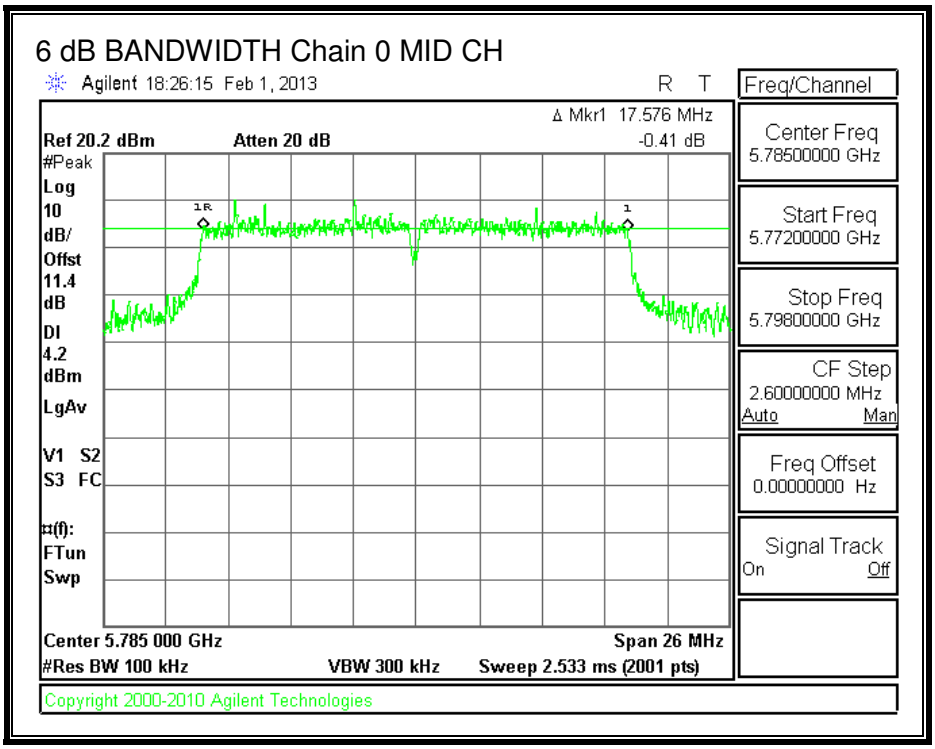
The minimum 6 dB bandwidth shall be at least 500 kHz.

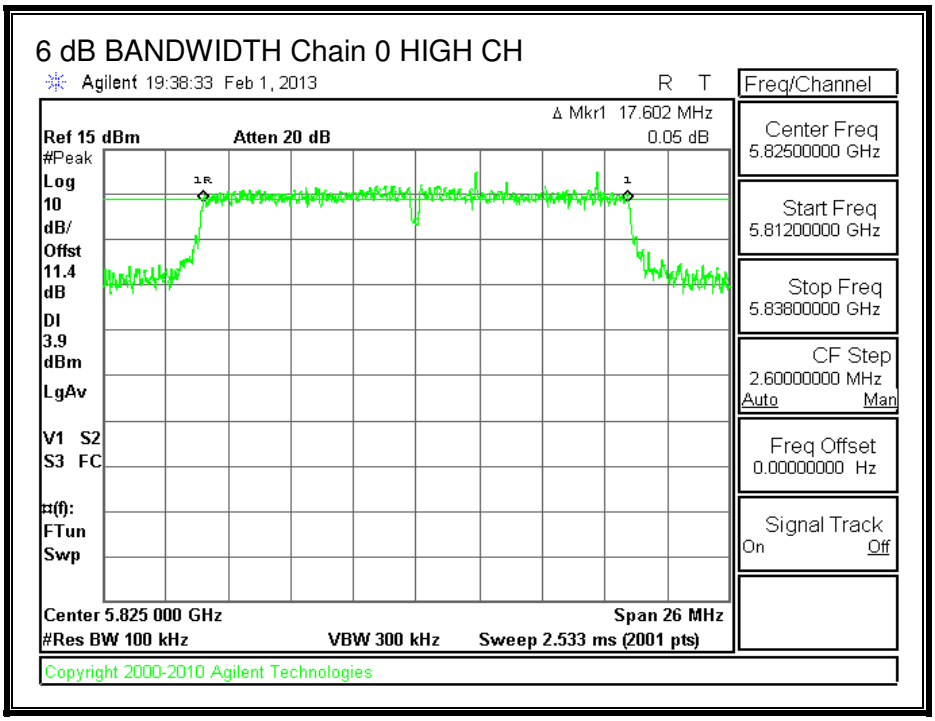
RESULTS

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5745	17.589	17.589	0.5
Mid	5785	17.576	17.537	0.5
High	5825	17.602	17.537	0.5

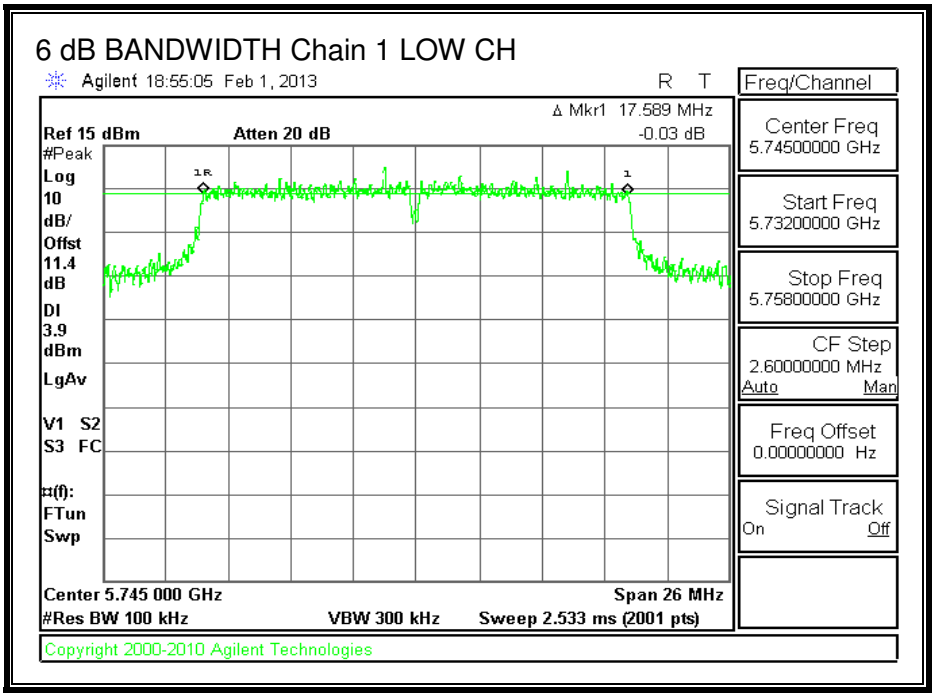
6 dB BANDWIDTH, Chain 0

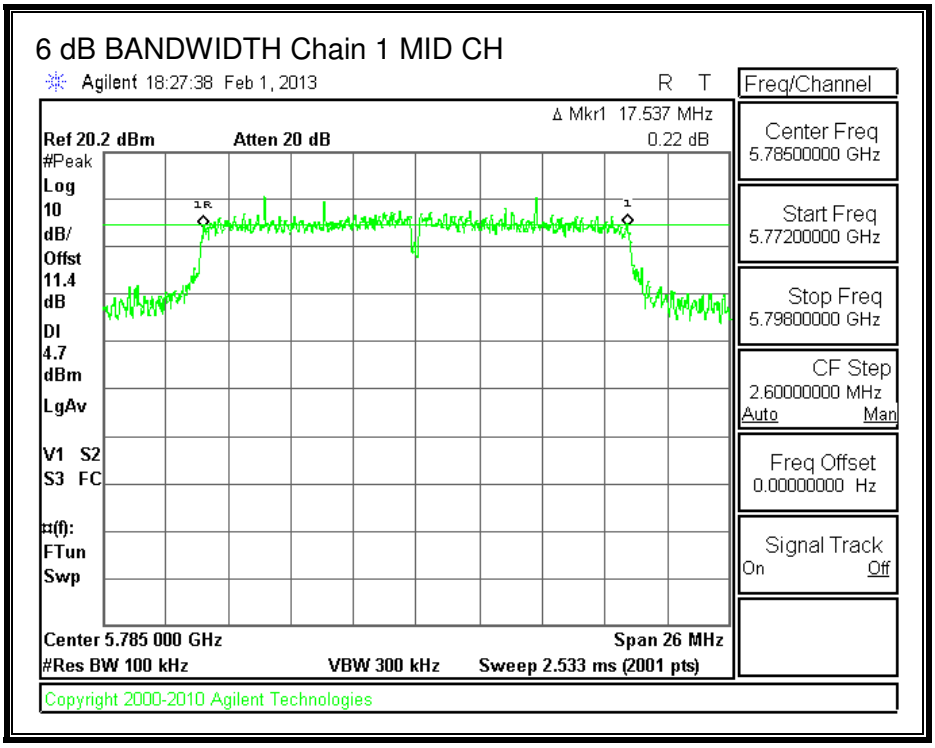


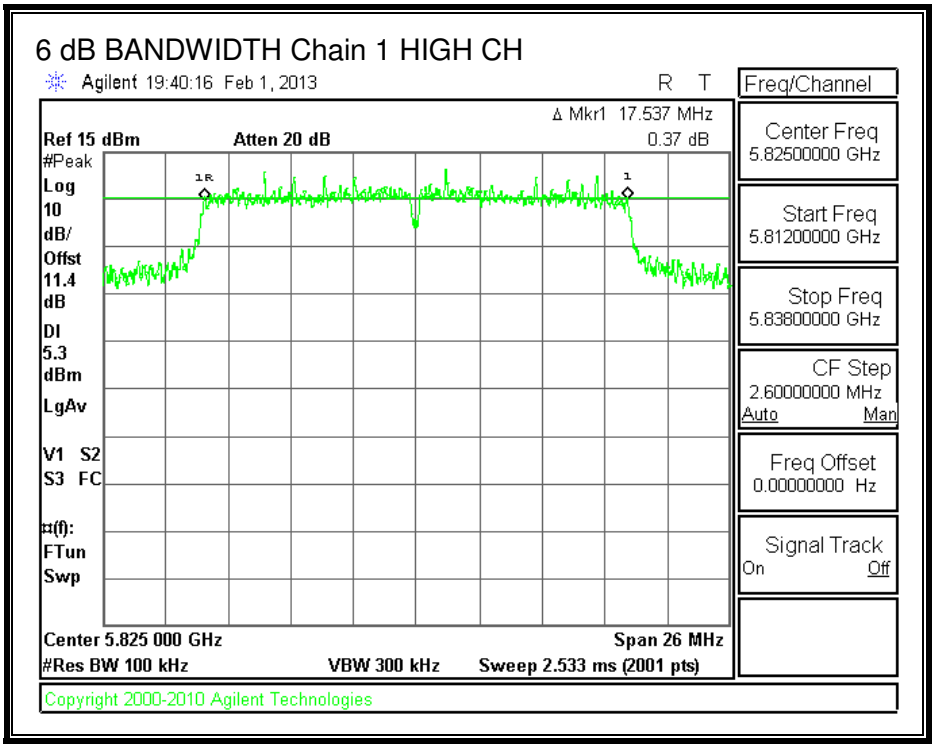




6 dB BANDWIDTH, Chain 1







8.4.2. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	6.28	5.64

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	5.64	30.00
Mid	5785	5.64	30.00
High	5825	5.64	30.00

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	15.80	16.22	19.03	30.00	-10.97
Mid	5785	20.57	20.45	23.52	30.00	-6.48
High	5825	18.98	19.18	22.09	30.00	-7.91

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

8.4.3. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5745	8.63	27.37
Mid	5785	8.63	27.37
High	5825	8.63	27.37

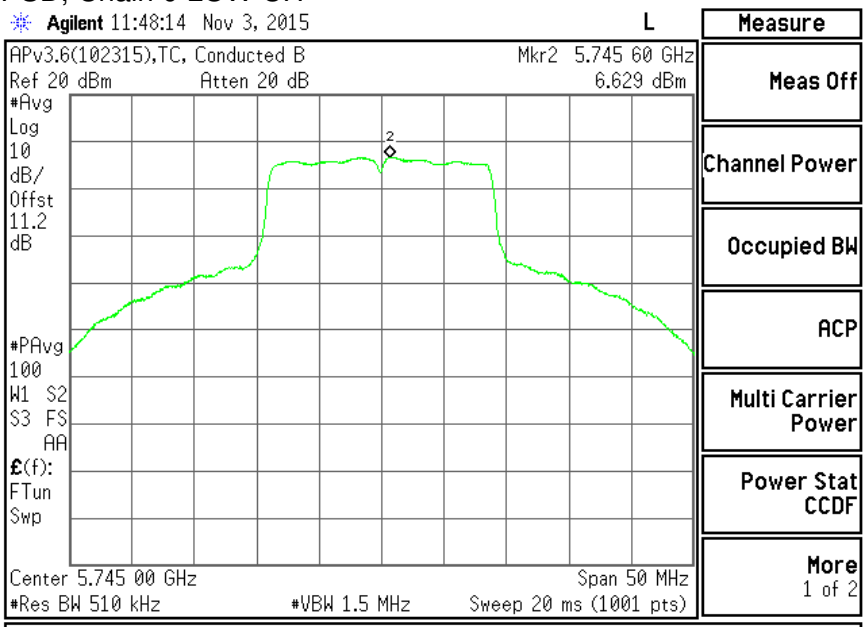
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

PSD Results

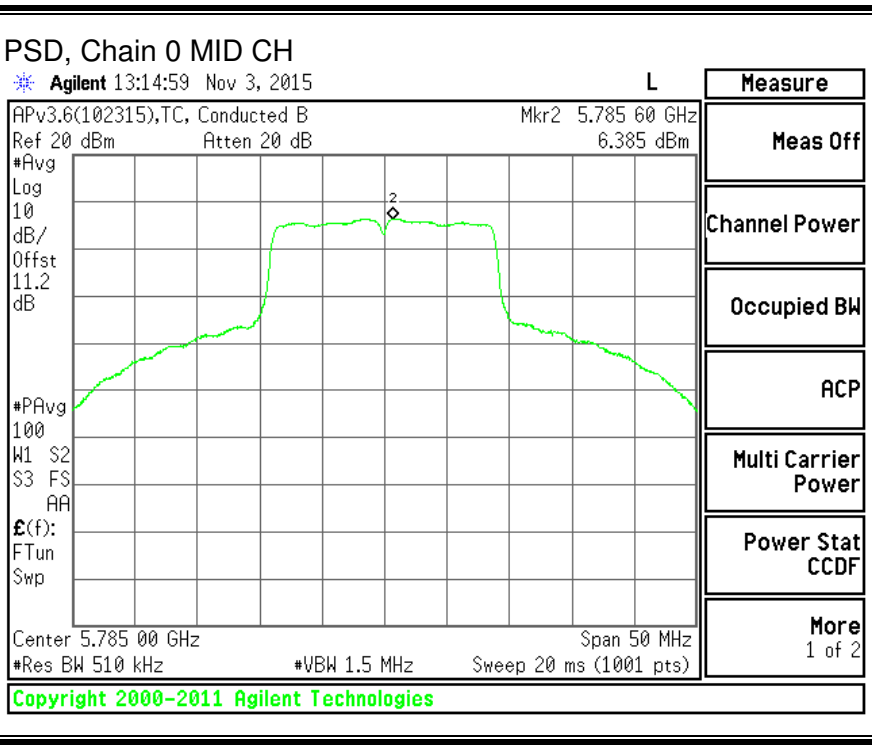
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5745	6.629	8.226	10.51	27.37	-16.86
Mid	5785	6.385	9.198	11.03	27.37	-16.34
High	5825	6.445	7.941	10.27	27.37	-17.10

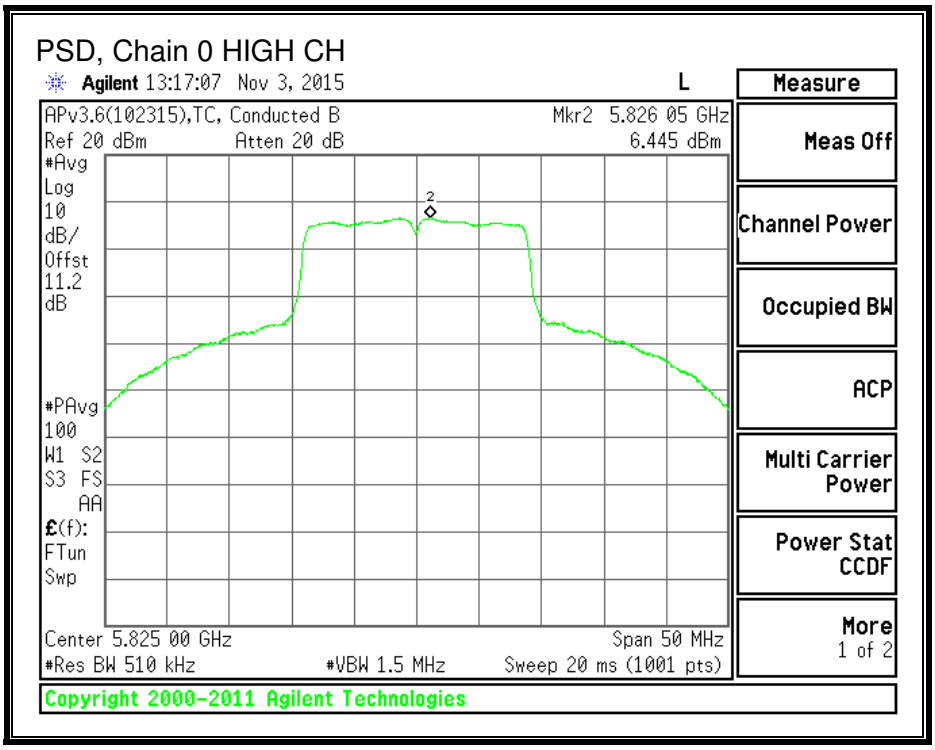
PSD, Chain 0

PSD, Chain 0 LOW CH

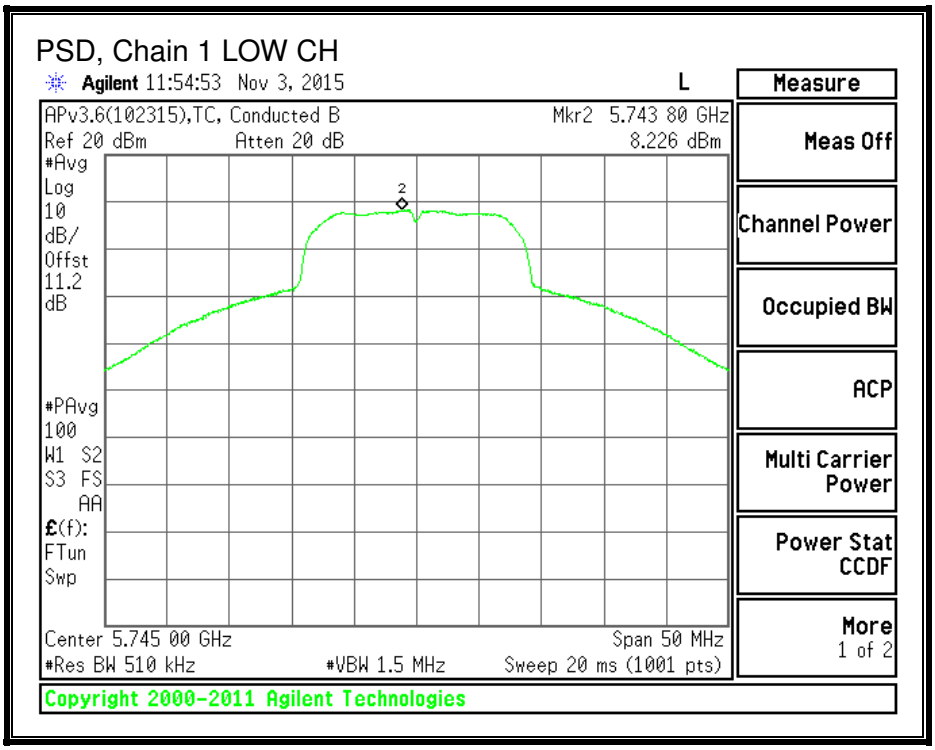


PSD, Chain 0 MID CH

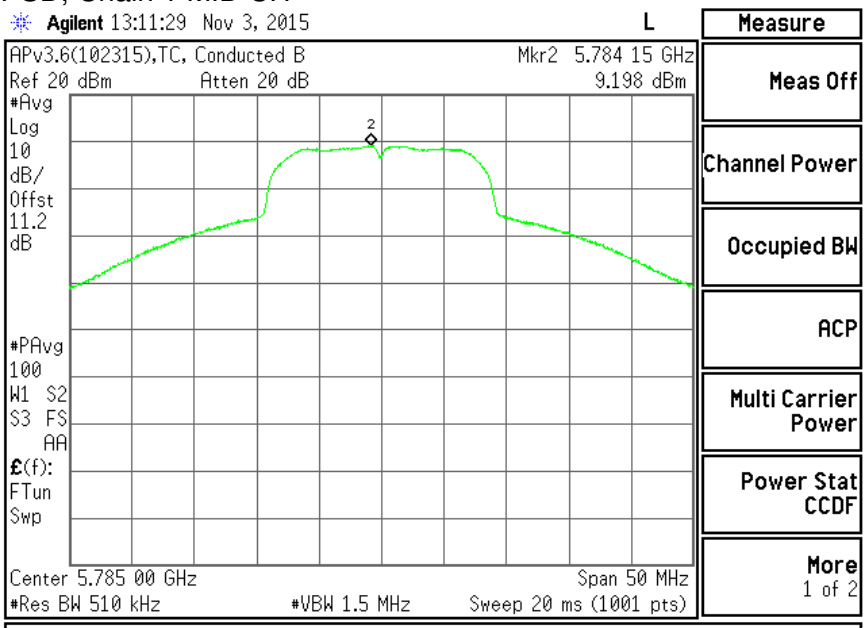




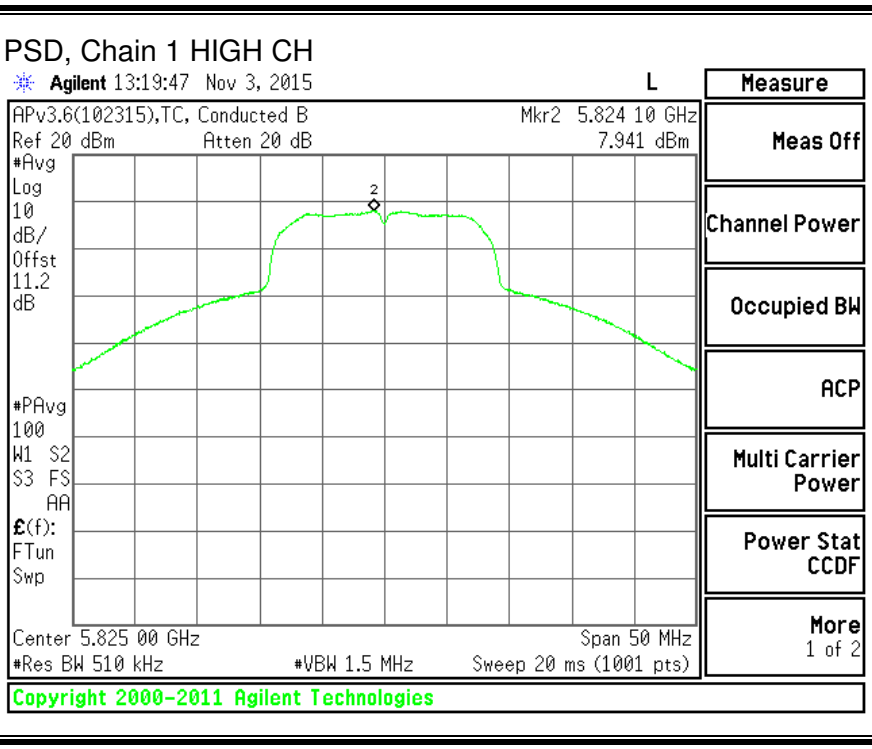
PSD, Chain 1



PSD, Chain 1 MID CH



PSD, Chain 1 HIGH CH



8.5. 802.11n HT20 TxBF CDD 2Tx MODE IN THE 5.8 GHz BAND

8.5.1. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	6.28	5.64

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5745	5.64	30.00
Mid	5785	5.64	30.00
High	5825	5.64	30.00

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	14.90	14.65	17.79	30.00	-12.21
Mid	5785	19.90	19.70	22.81	30.00	-7.19
High	5825	17.35	17.15	20.26	30.00	-9.74

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

8.6. 802.11n HT40 SISO MODE IN THE 5.8 GHz BAND

8.6.1. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

This is SISO mode, AG is the highest (worst-case) = 6.28 dBi

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	6.28	29.72
High	5795	6.28	29.72

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	14.72	14.72	29.72	-15.00
High	5795	19.35	19.35	29.72	-10.37

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

8.7. 802.11n HT40 CDD 2Tx MODE IN THE 5.8 GHz BAND

8.7.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

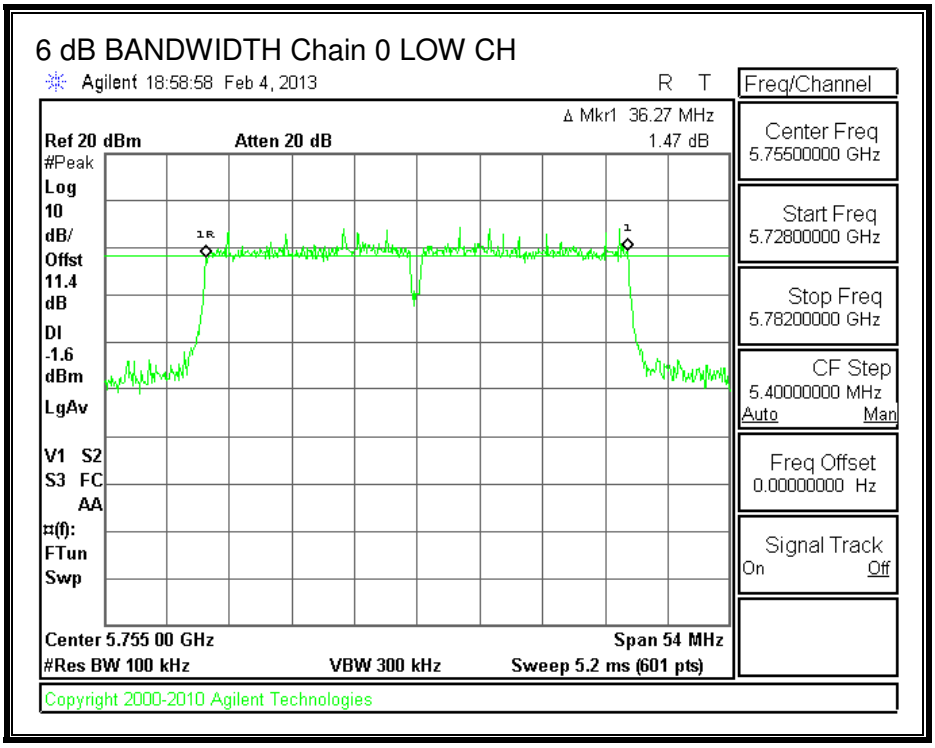
IC RSS-210 A8.2 (a)

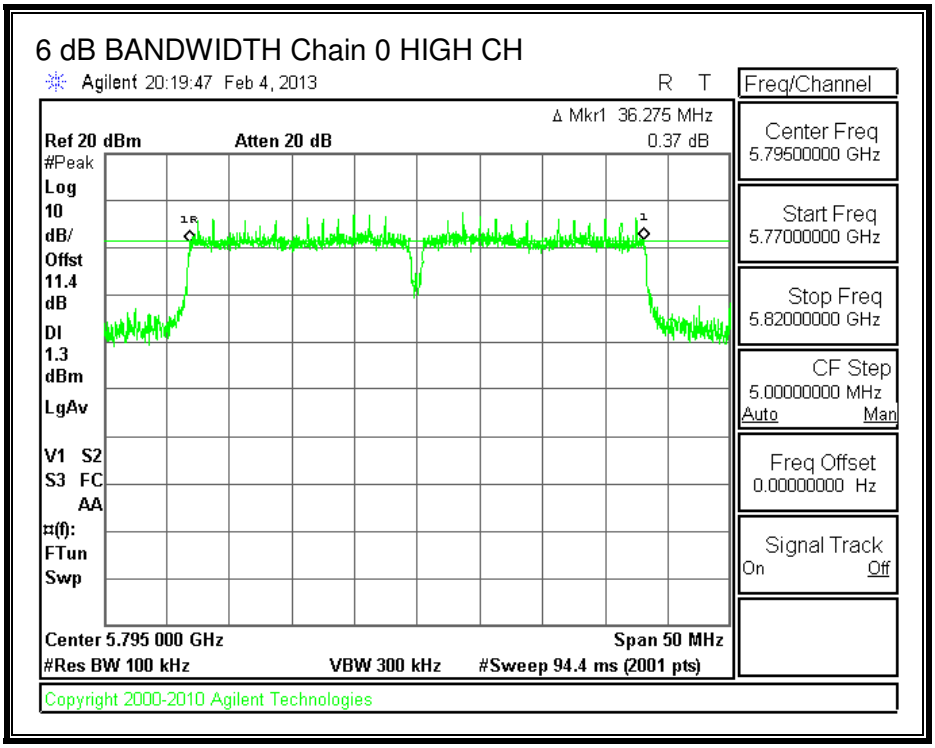
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

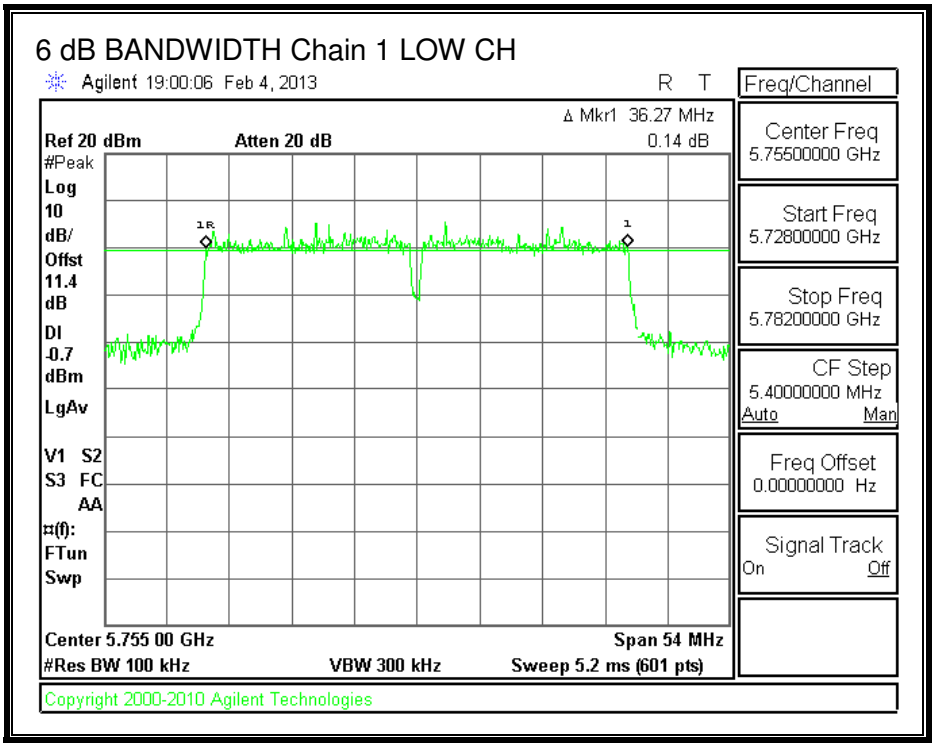
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	36.270	36.270	0.5
High	5795	36.275	36.075	0.5

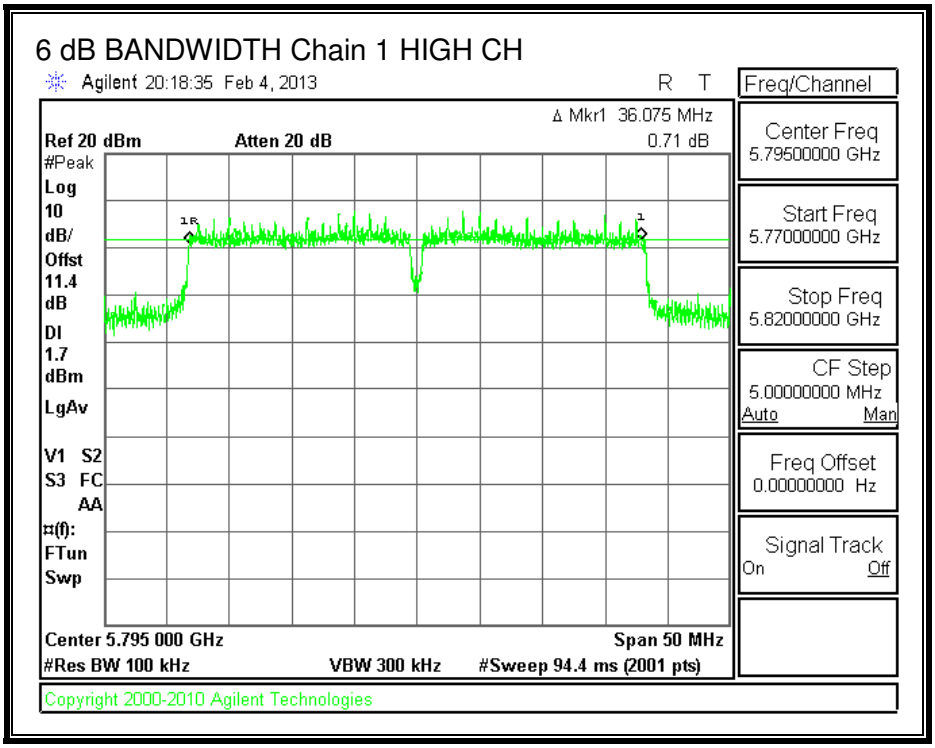
6 dB BANDWIDTH, Chain 0





6 dB BANDWIDTH, Chain 1





8.7.2. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	6.28	5.64

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	5.64	30.00
High	5795	5.64	30.00

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	13.81	14.53	17.20	30.00	-12.80
High	5795	18.18	18.55	21.38	30.00	-8.62

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

8.7.3. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

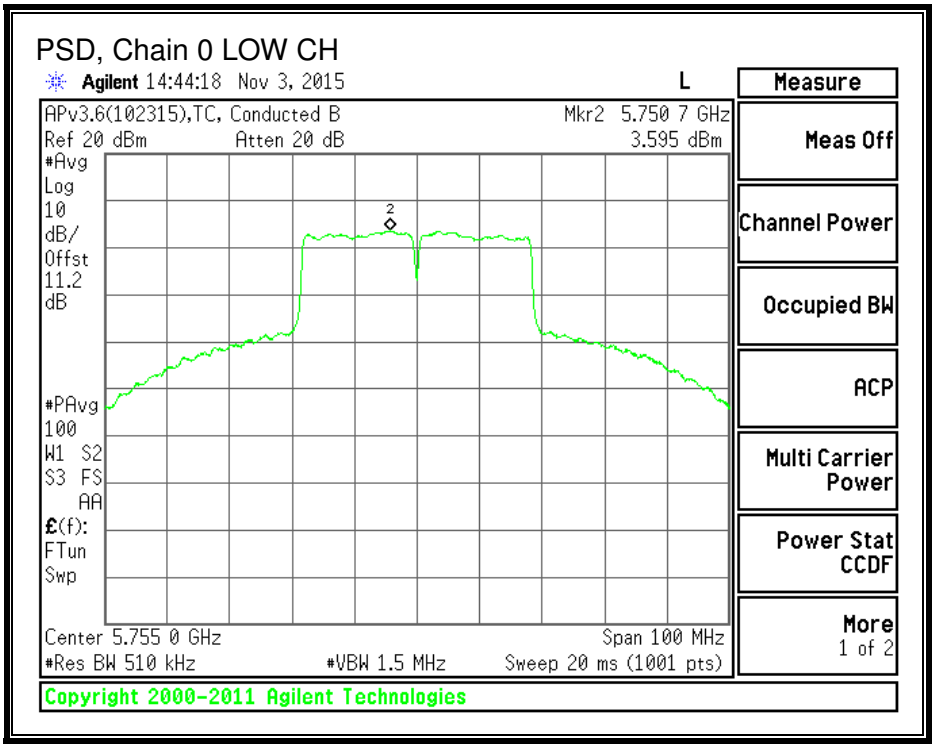
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	8.63	27.37
High	5795	8.63	27.37

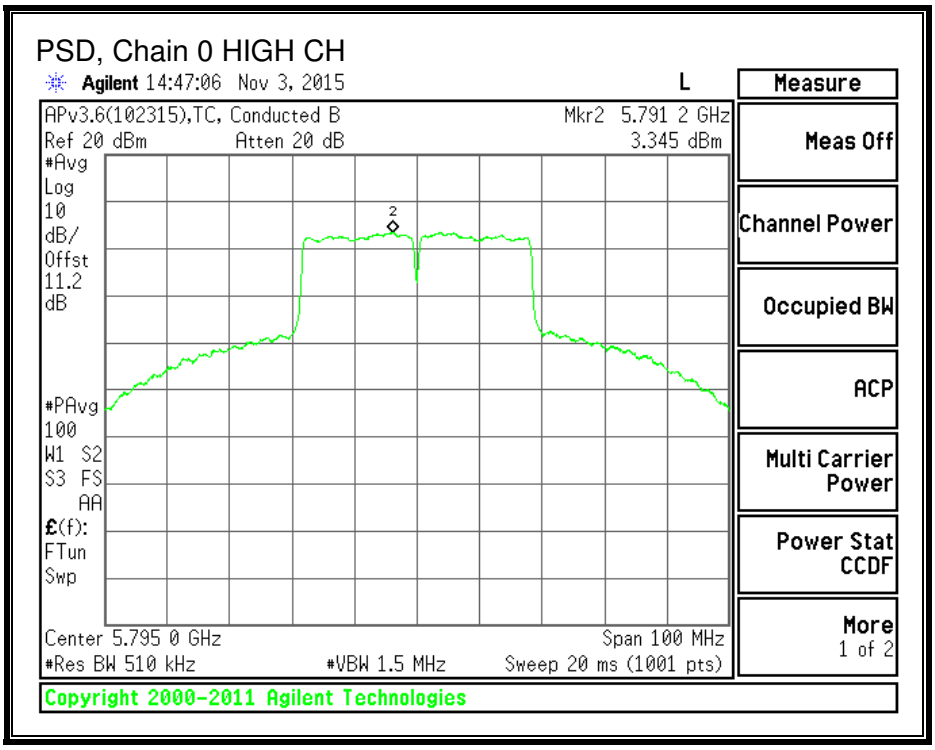
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

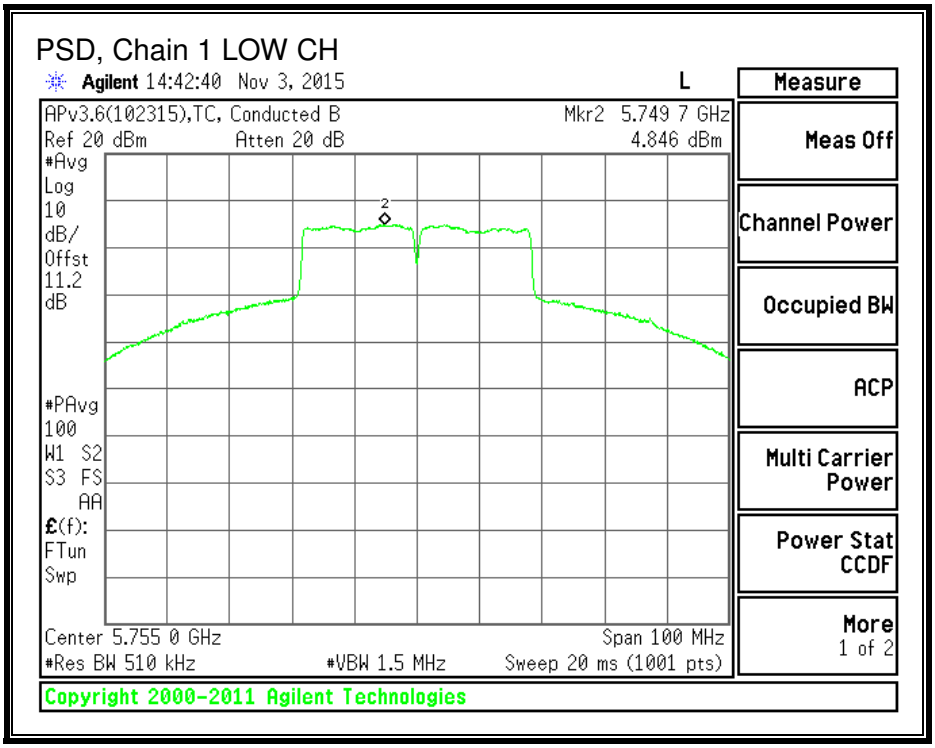
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	3.595	4.846	7.28	27.37	-20.09
High	5795	3.345	4.387	6.91	27.37	-20.46

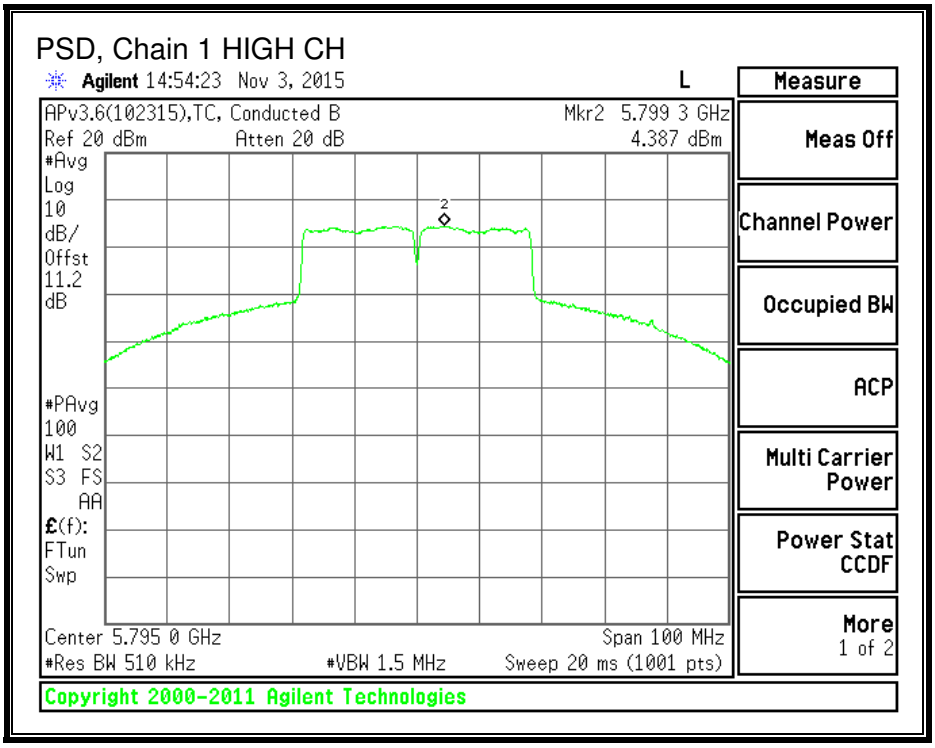
PSD, Chain 0





PSD, Chain 1





8.8. 802.11n HT40 TxBF CDD 2Tx MODE IN THE 5.8 GHz BAND

8.8.1. 6 dB BANDWIDTH

Covered by testing 11n HT40 CDD 2TX at the same power level.

8.8.2. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5755	8.63	27.37
High	5795	8.63	27.37

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	14.35	14.10	17.24	27.37	-10.13
High	5795	19.80	19.50	22.66	27.37	-4.71

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

8.8.3. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

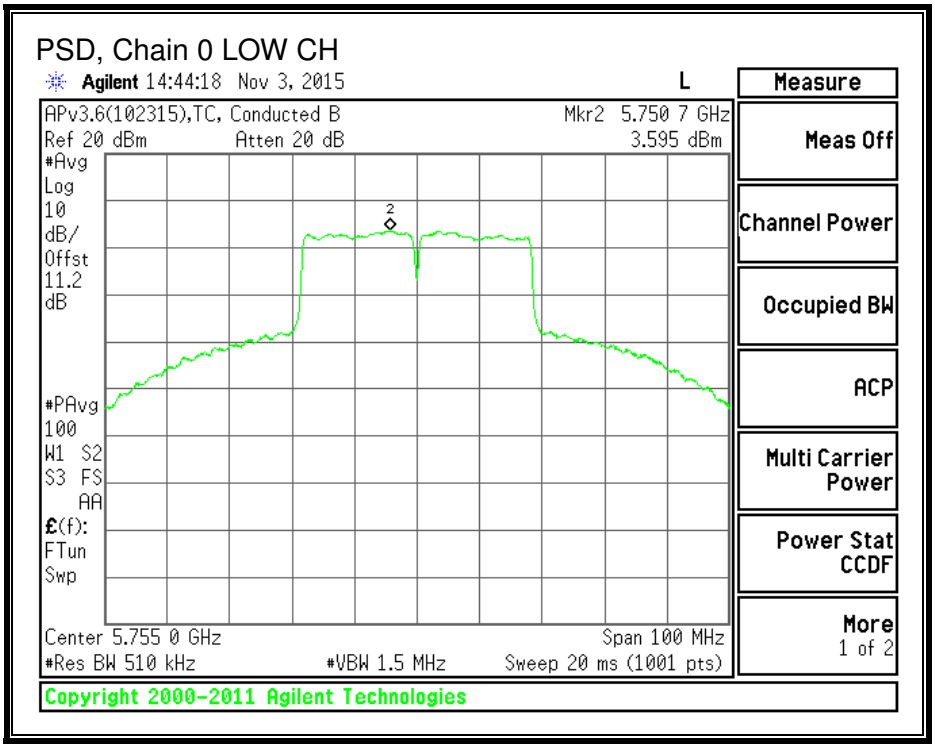
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5755	8.63	27.37
High	5795	8.63	27.37

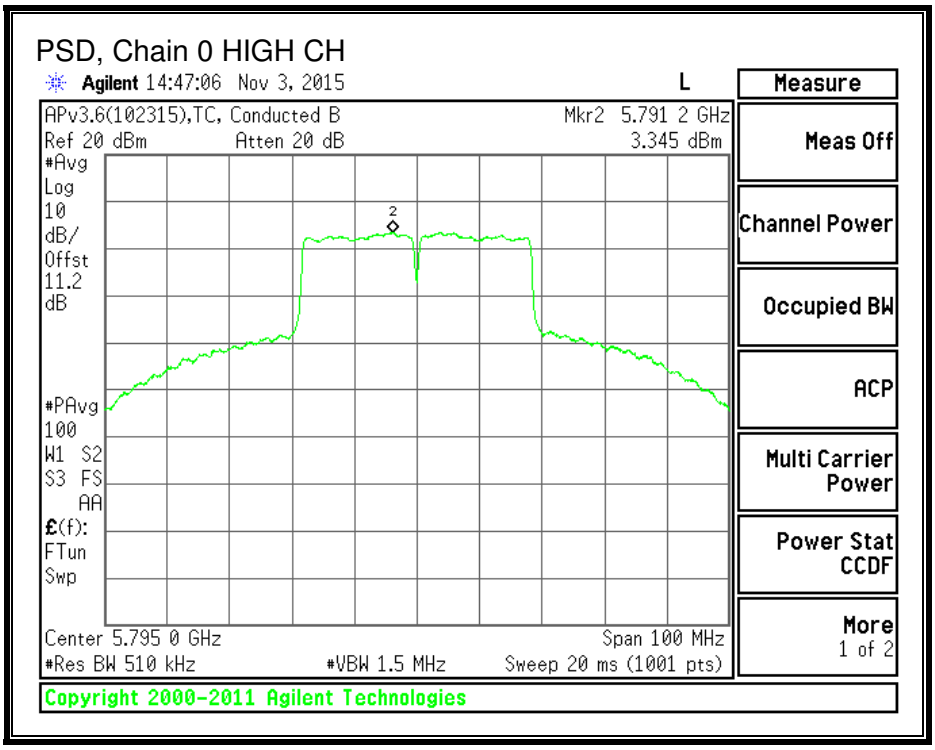
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

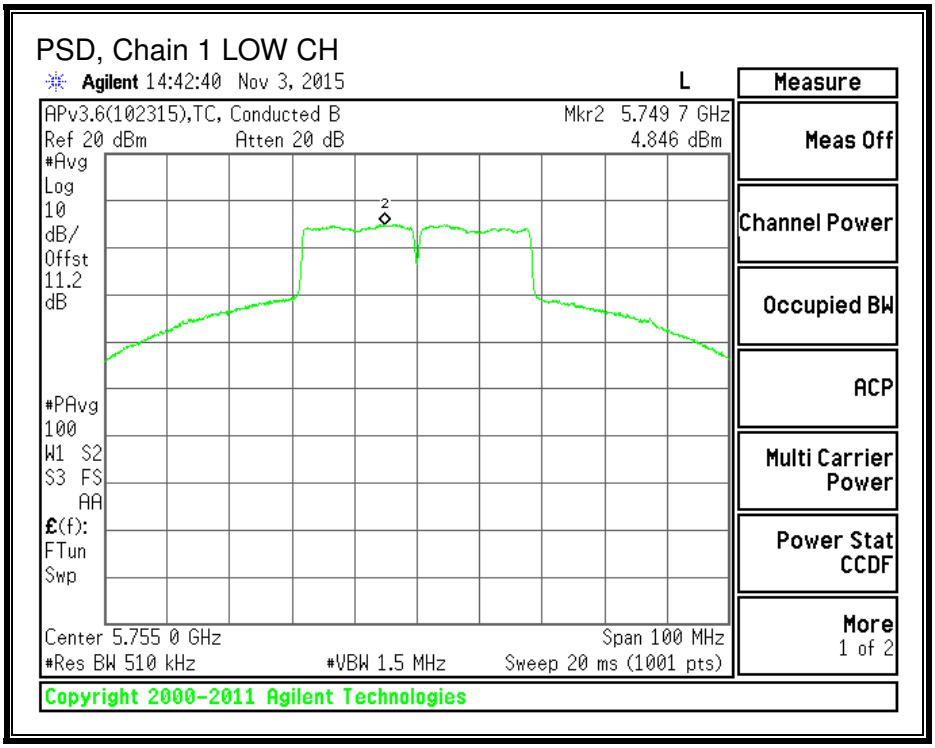
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	3.595	4.846	7.28	27.37	-20.09
High	5795	3.345	4.387	6.91	27.37	-20.46

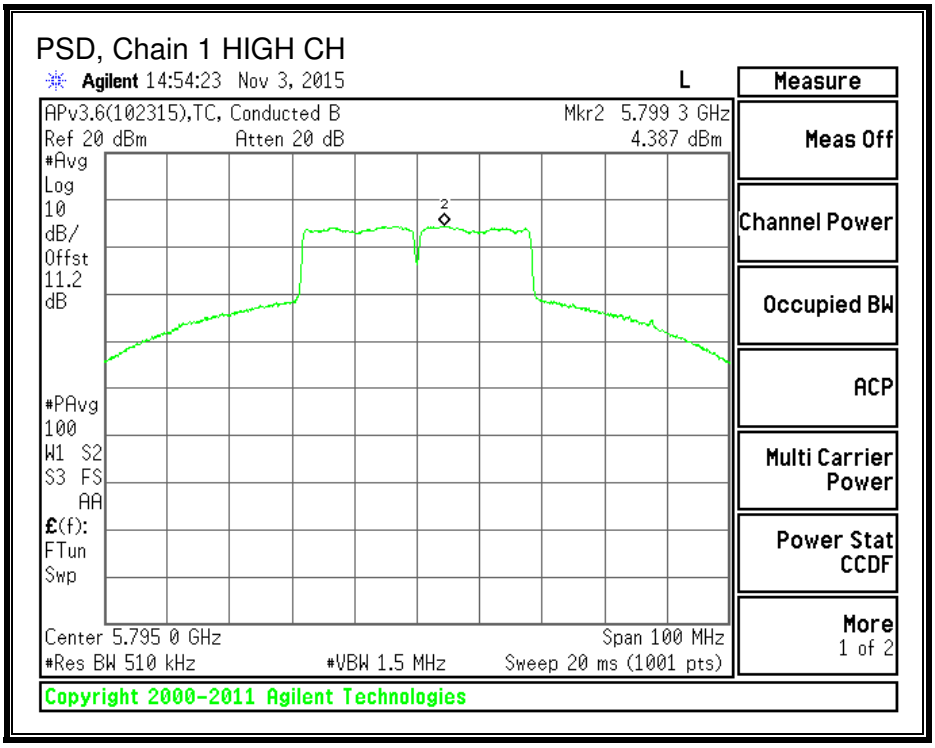
PSD, Chain 0





PSD, Chain 1





8.9. 802.11ac HT80 SISO MODE IN THE 5.8 GHz BAND

8.9.1. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

This is SISO mode, AG is the highest (worst-case) = 6.28 dBi

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Mid	5775	6.28	29.72

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	13.63	13.63	29.72	-16.09

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

8.10. 802.11n HT80 CDD 2Tx MODE IN THE 5.8 GHz BAND

8.10.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

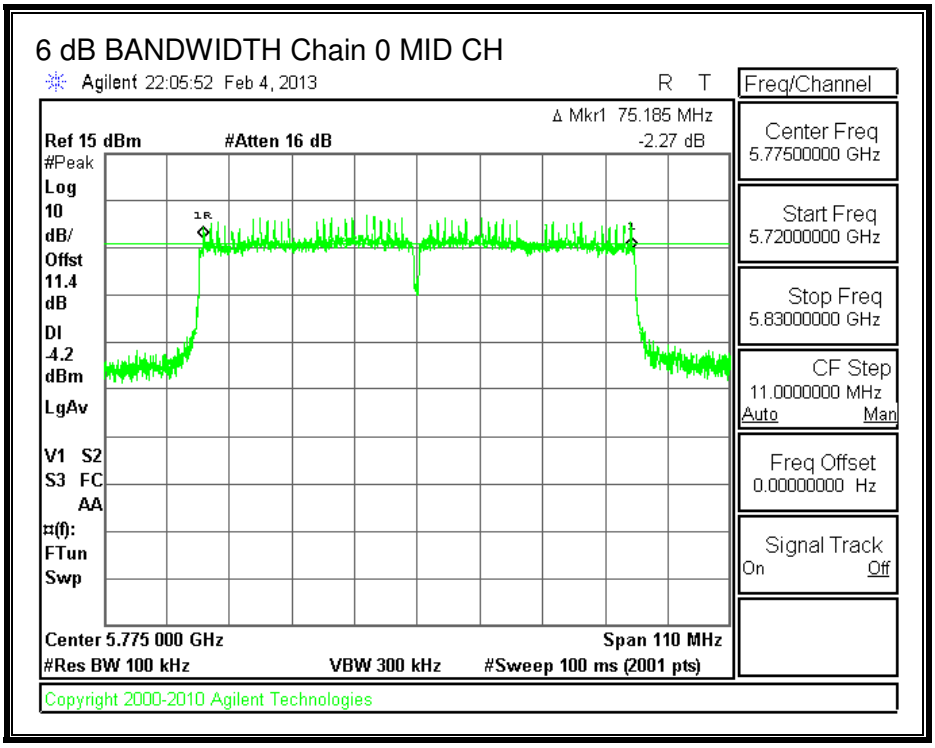
IC RSS-210 A8.2 (a)

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

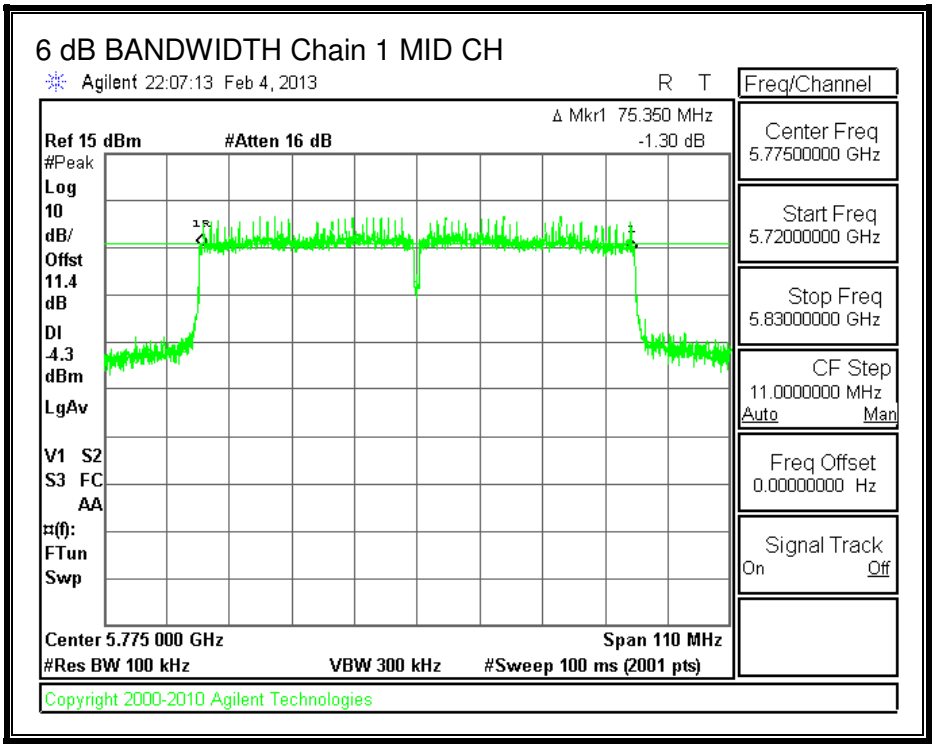
RESULTS

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Mid	5775	75.185	75.350	0.5

6 dB BANDWIDTH, Chain 0



6 dB BANDWIDTH, Chain 1



8.10.2. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	6.28	5.64

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5775	5.64	30.00

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	12.90	13.70	16.33	30.00	-13.67

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

8.10.3. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

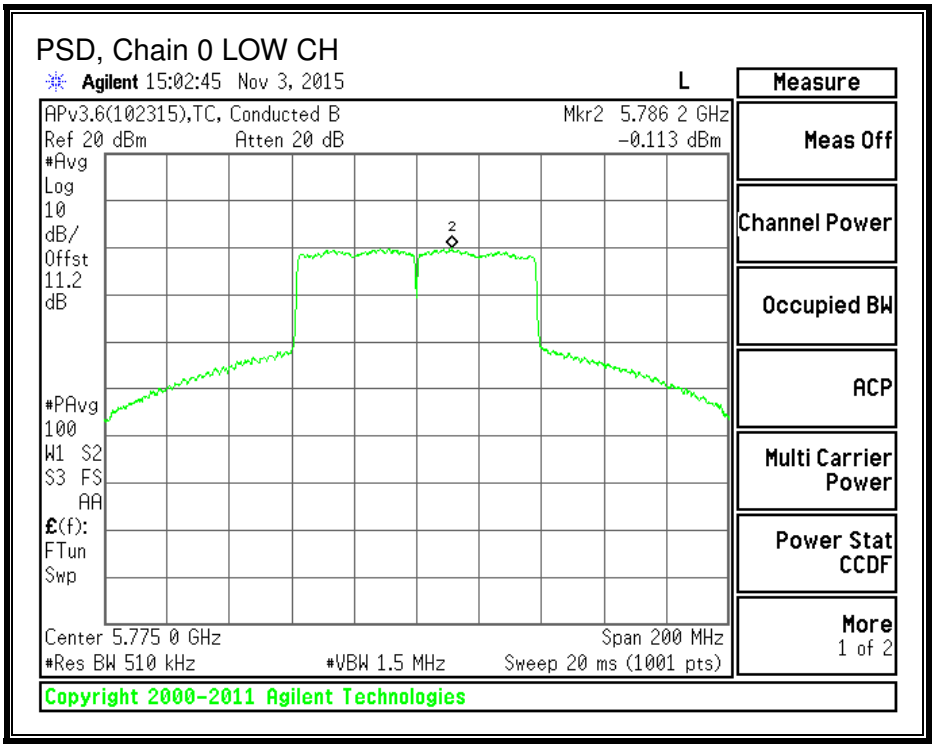
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5775	8.63	27.37

Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd PSD

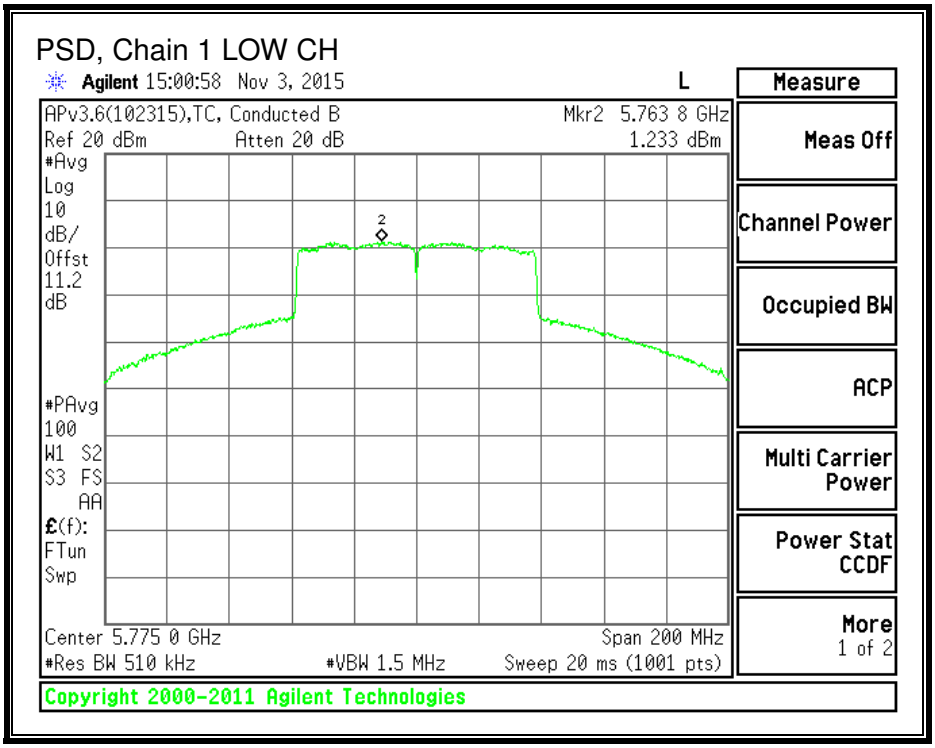
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5775	-0.113	1.233	3.78	27.37	-23.59

PSD, Chain 0



PSD, Chain 1



8.11. 802.11n HT80 TxBF CDD 2Tx MODE IN THE 5.8 GHz BAND

8.11.1. 6 dB BANDWIDTH

Covered by testing 11ac VHT80 CDD 2TX at the same power level.

8.11.2. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)
Low	5775	8.63	27.37

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	14.75	14.50	17.64	27.37	-9.73

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

8.11.3. MAXIMUM POWER SPECTRAL DENSITY (PSD)

LIMITS

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum 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 maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	6.28	8.63

RESULTS

Antenna Gain and Limit

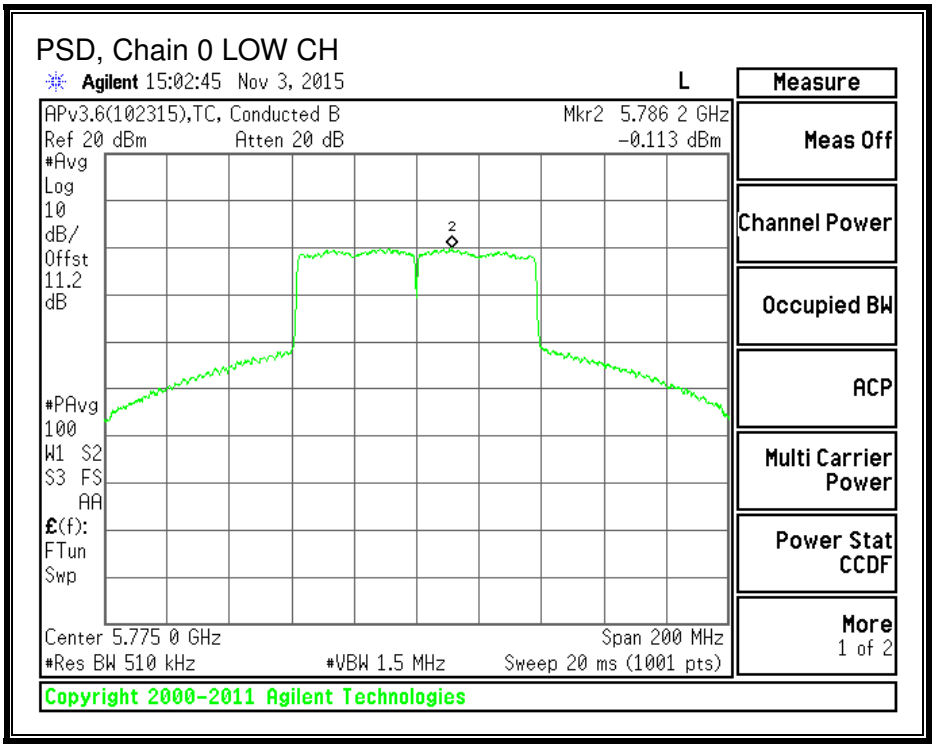
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5775	8.63	27.37

Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd PSD

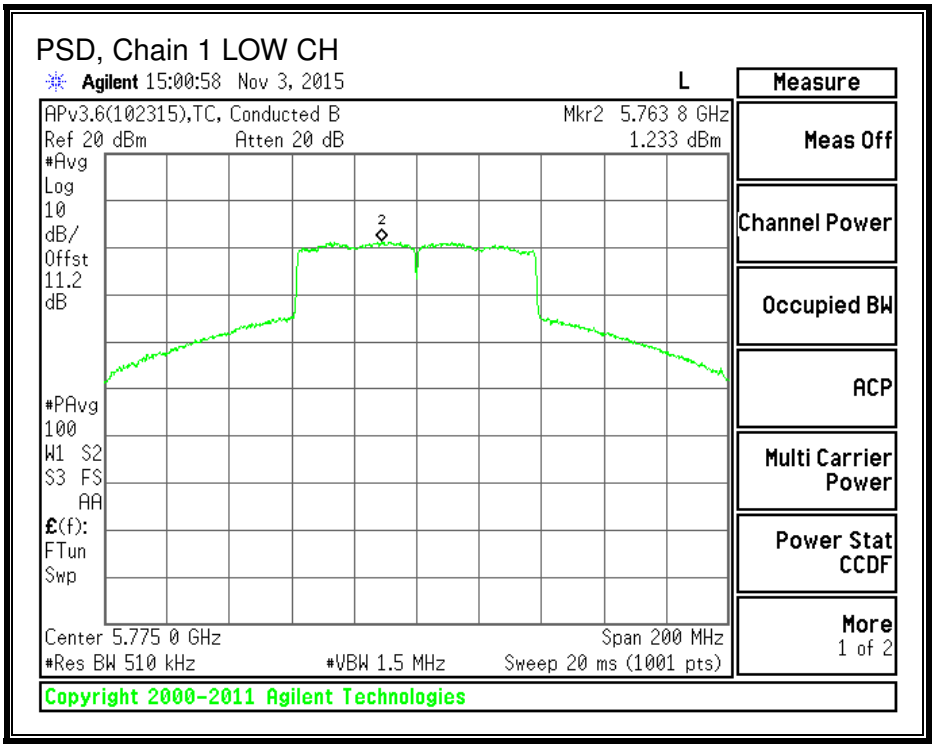
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5775	-0.113	1.233	3.78	27.37	-23.59

PSD, Chain 0



PSD, Chain 1



9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

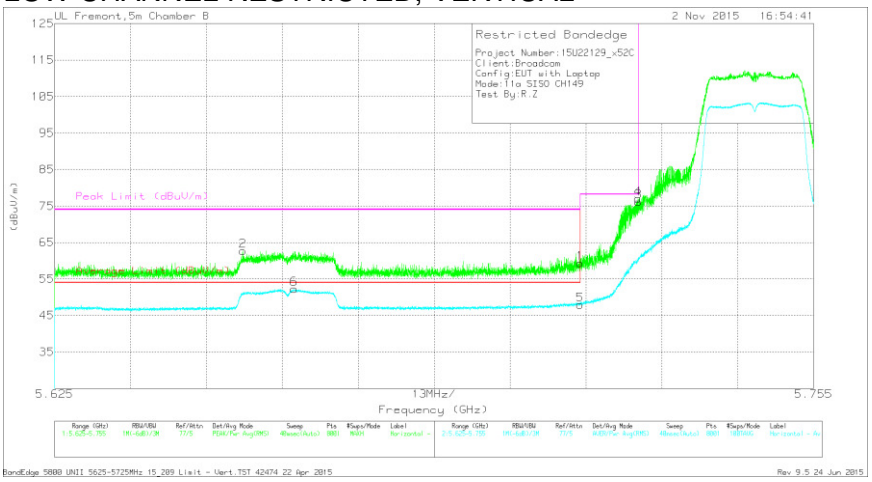
FCC §15.205 and §15.209

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

9.2. TX ABOVE 1 GHz 802.11a MODE SISO IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

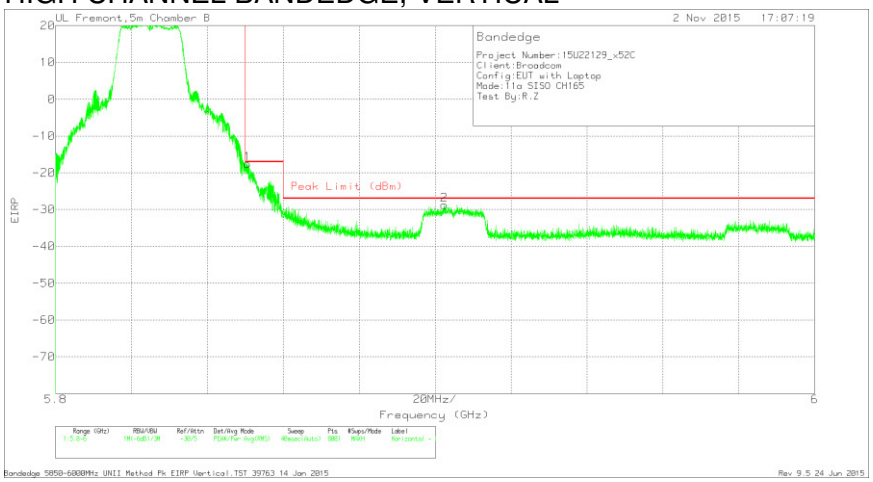
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.657	20.56	Pk	34.9	7.3	62.76	-	-	74	-11.24	250	285	V
6	5.666	10.11	RMS	34.9	7.3	52.31	54	-1.69	-	-	250	285	V
1	5.715	17	Pk	35	7.3	59.3	-	-	74	-14.7	250	285	V
5	5.715	5.67	RMS	35	7.3	47.97	54	-6.03	-	-	250	285	V
3	5.725	33.78	Pk	35	7.4	76.18	-	-	78.2	-2.02	250	285	V
4	5.725	34.53	Pk	35	7.4	76.93	-	-	78.2	-1.27	250	285	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

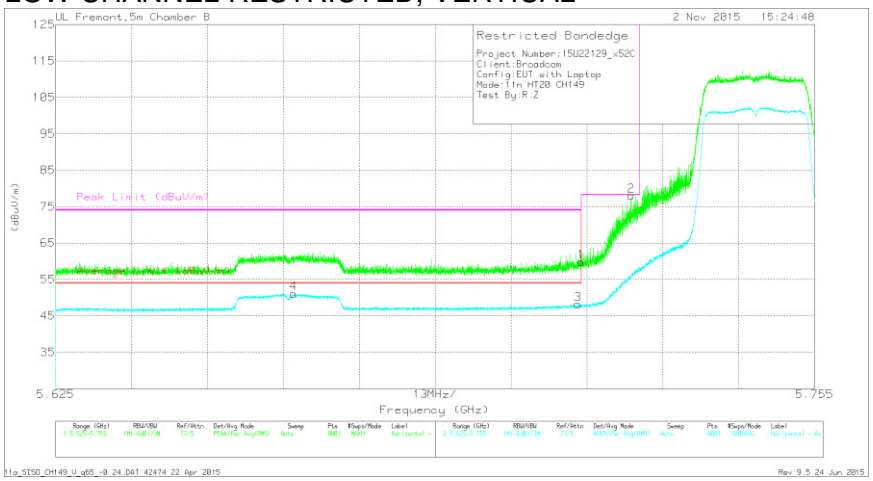
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Bypass (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.851	-72.2	Pk	35.4	7.5	11.8	-17.5	-17	-.5	248	296	V
2	5.902	-83.51	Pk	35.5	7.5	11.8	-28.71	-27	-1.71	248	296	V

Pk - Peak detector

9.3. TX ABOVE 1 GHz 802.11n HT20 MODE 1Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

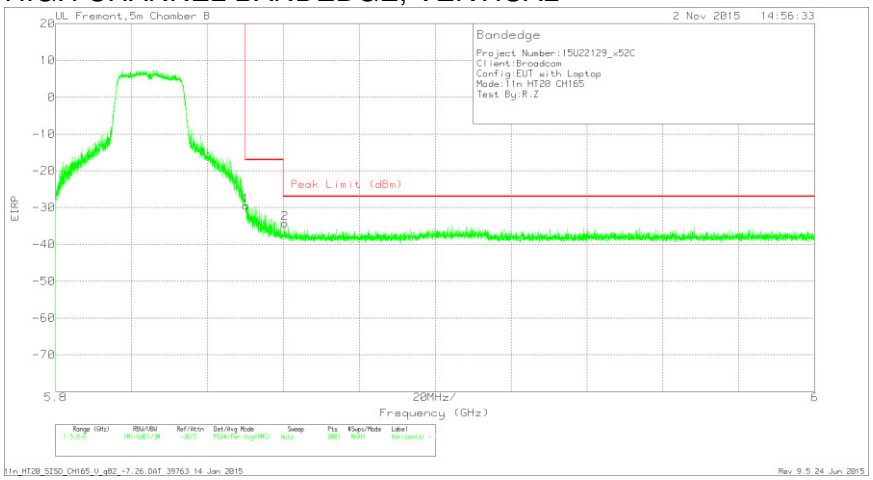
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	5.666	8.9	RMS	34.9	7.3	51.1	54	-2.9	-	-	250	259	V
3	5.714	5.87	RMS	35	7.3	48.17	54	-5.83	-	-	250	259	V
1	5.715	17.6	Pk	35	7.3	59.9	-	-	74	-14.1	250	259	V
2	5.724	35.56	Pk	35	7.4	77.96	-	-	78.2	-.24	250	259	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

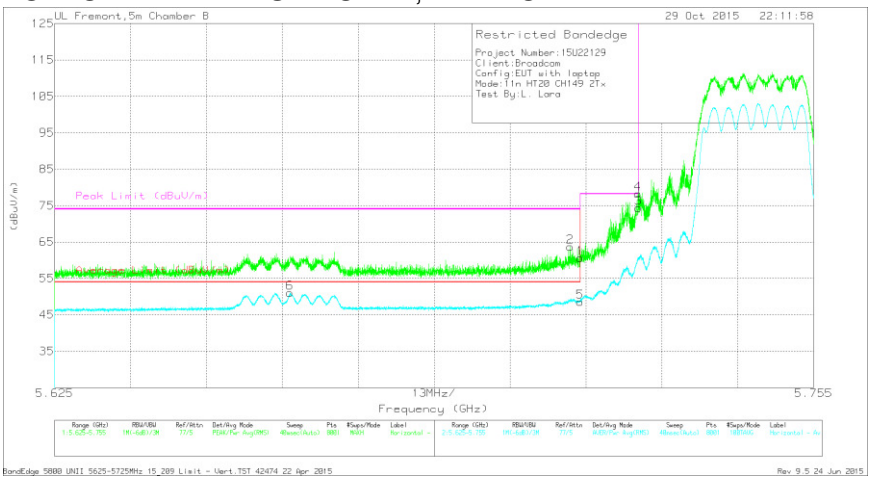
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Bypass (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-84.19	Pk	35.4	7.5	11.8	-29.49	-17	-12.49	0	336	V
2	5.86	-88.99	Pk	35.4	7.5	11.8	-34.29	-27	-7.29	0	336	V

Pk - Peak detector

9.4. TX ABOVE 1 GHz 802.11n HT20 MODE 2Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

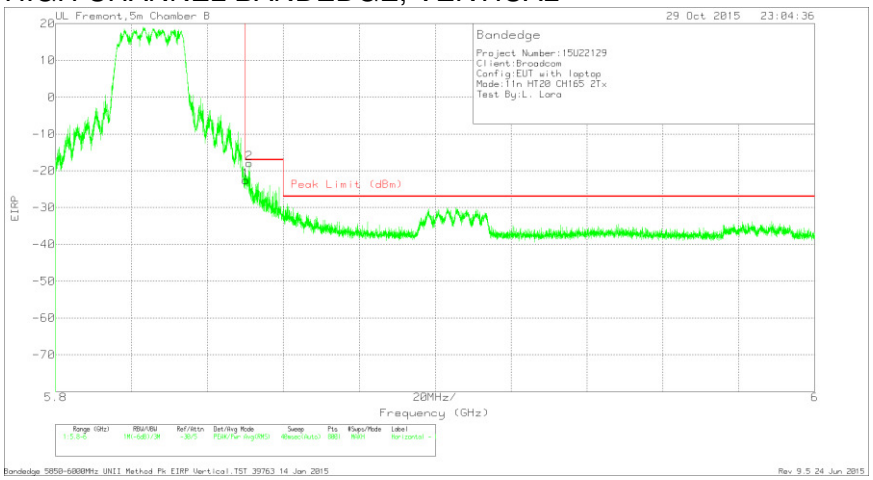
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	5.665	8.81	RMS	34.9	7.3	51.01	54	-2.99	-	-	63	278	V
2	5.713	21.44	Pk	35	7.3	63.74	-	-	74	-10.26	63	278	V
1	5.715	18.32	Pk	35	7.3	60.62	-	-	74	-13.38	63	278	V
5	5.715	6.31	RMS	35	7.3	48.61	54	-5.39	-	-	63	278	V
3	5.725	31.93	Pk	35	7.4	74.33	-	-	78.2	-3.87	63	278	V
4	5.725	35.79	Pk	35	7.4	78.19	-	-	78.2	-.01	63	278	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



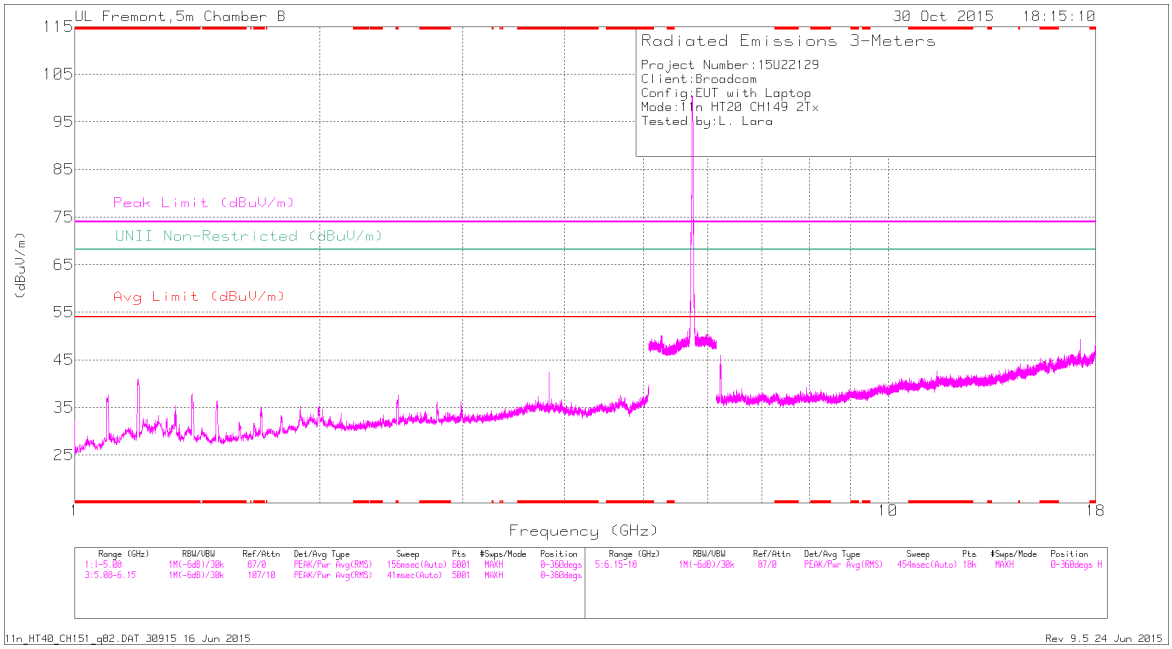
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Bypass (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-77.24	Pk	35.4	7.5	11.8	-22.54	-17	-5.54	61	293	V
2	5.851	-72.57	Pk	35.4	7.5	11.8	-17.87	-17	-.87	61	293	V

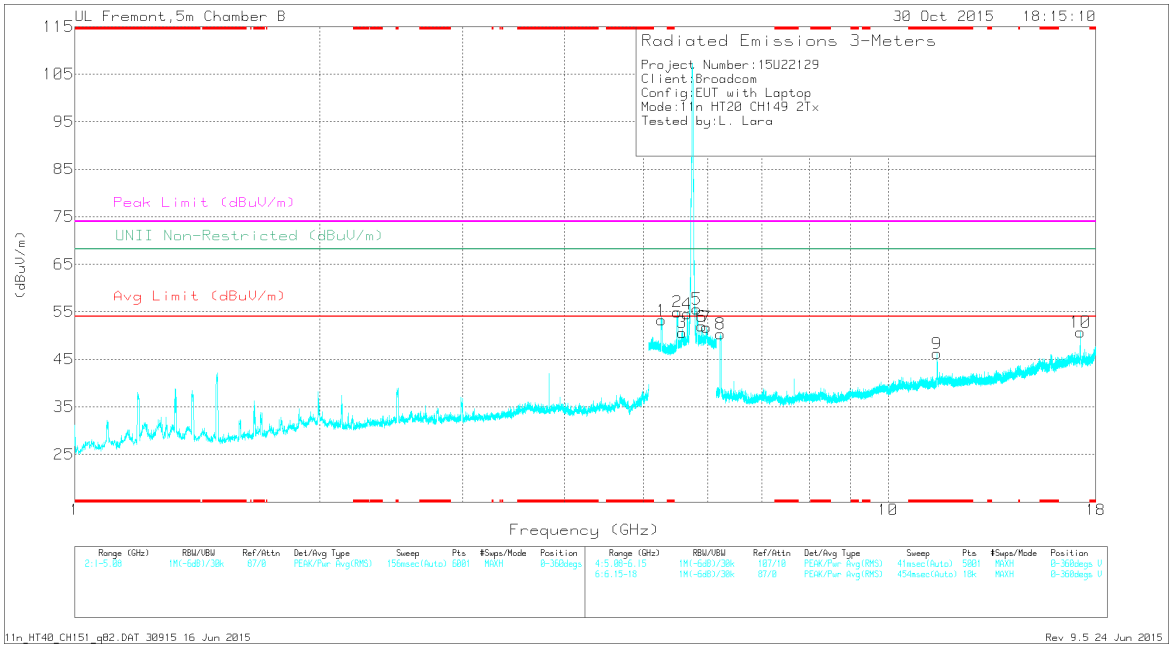
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /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
9	* 11.491	40.77	PK-U	38.3	-25.4	53.67	-	-	74	-20.33	-	-	234	400	V
	* 11.489	29.28	ADR	38.3	-25.4	42.18	54	-11.82	-	-	-	-	234	400	V
1	5.264	52.56	PK-U	34.3	-21.9	64.96	-	-	-	-	68.2	-3.24	249	308	V
2	5.508	54.07	PK-U	34.5	-22.1	66.47	-	-	-	-	68.2	-1.73	248	267	V
3	5.589	48.21	PK-U	34.7	-22	60.91	-	-	-	-	68.2	-7.29	266	304	V
4	**5.664	41.58	Pk	34.9	-21.9	54.58	-	-	-	-	68.2	-13.62	0-360	101	V
5	***5.82	42	Pk	35.3	-21.7	55.6	-	-	-	-	-	-	0-360	101	V
6	5.908	48.41	PK-U	35.5	-21.6	62.31	-	-	-	-	68.2	-5.89	248	301	V
7	5.983	48.8	PK-U	35.6	-21.6	62.8	-	-	-	-	68.2	-5.4	247	309	V
8	6.225	57.66	PK-U	35.5	-31.5	61.66	-	-	-	-	68.2	-6.54	247	301	V
10	17.234	43.39	PK-U	41.1	-21.7	62.79	-	-	-	-	68.2	-5.41	304	249	V

* - indicates frequency in CFR15.205 Restricted Band

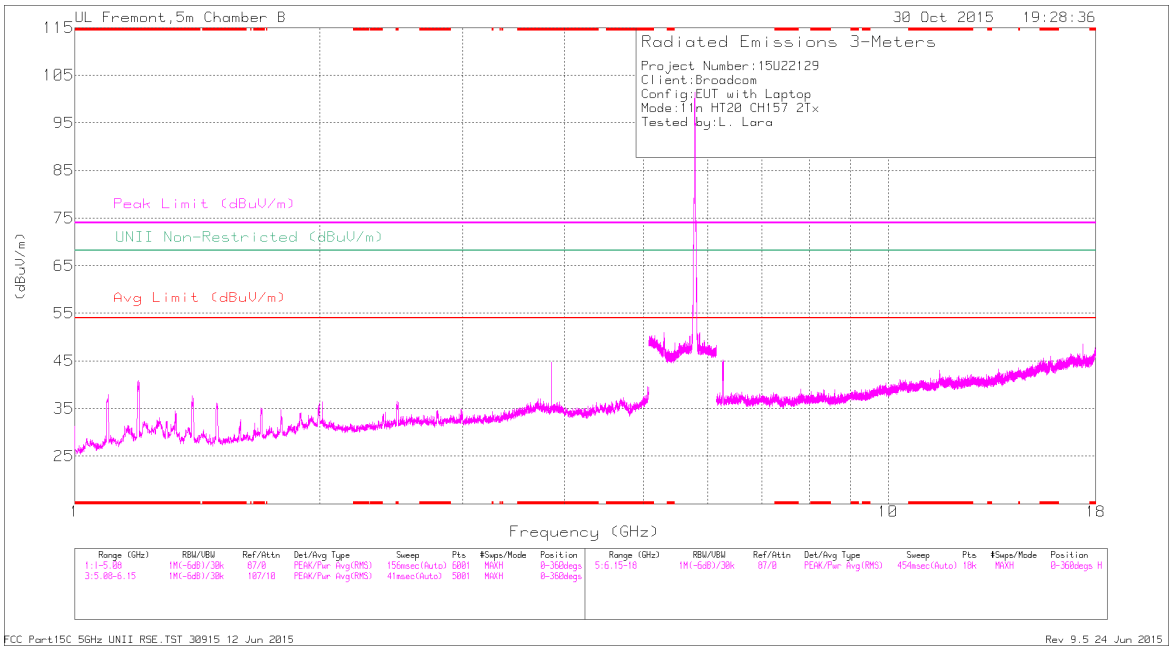
** - indicates frequency covered by the radiated band edge

*** - indicates frequency in the authorized band

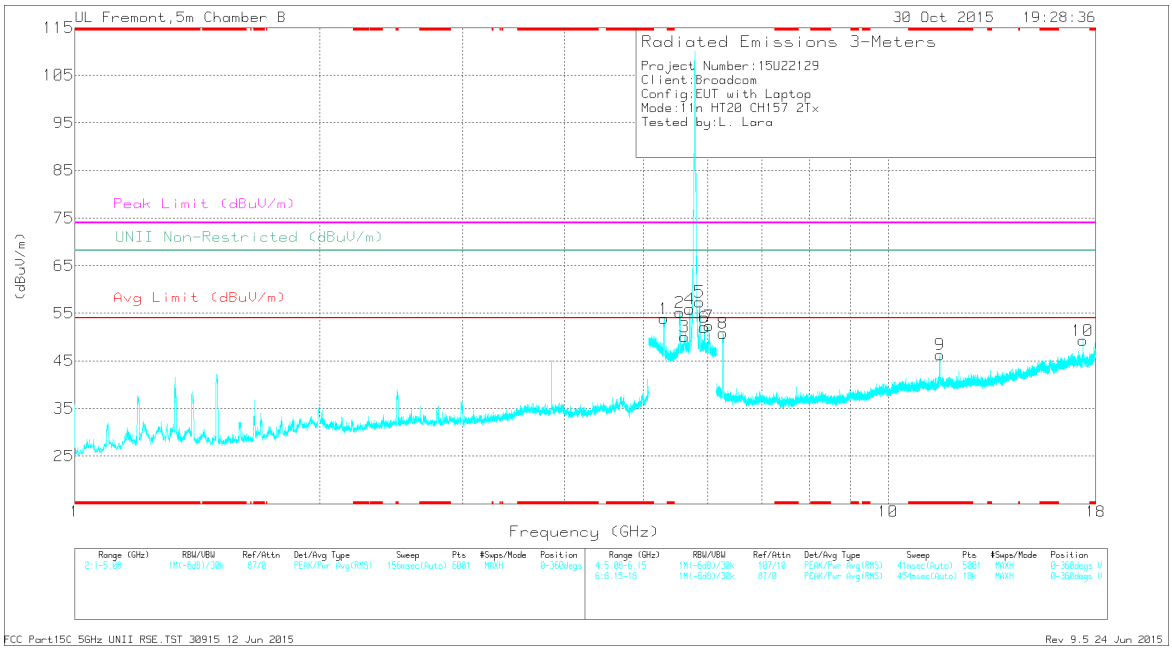
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Trace Markers

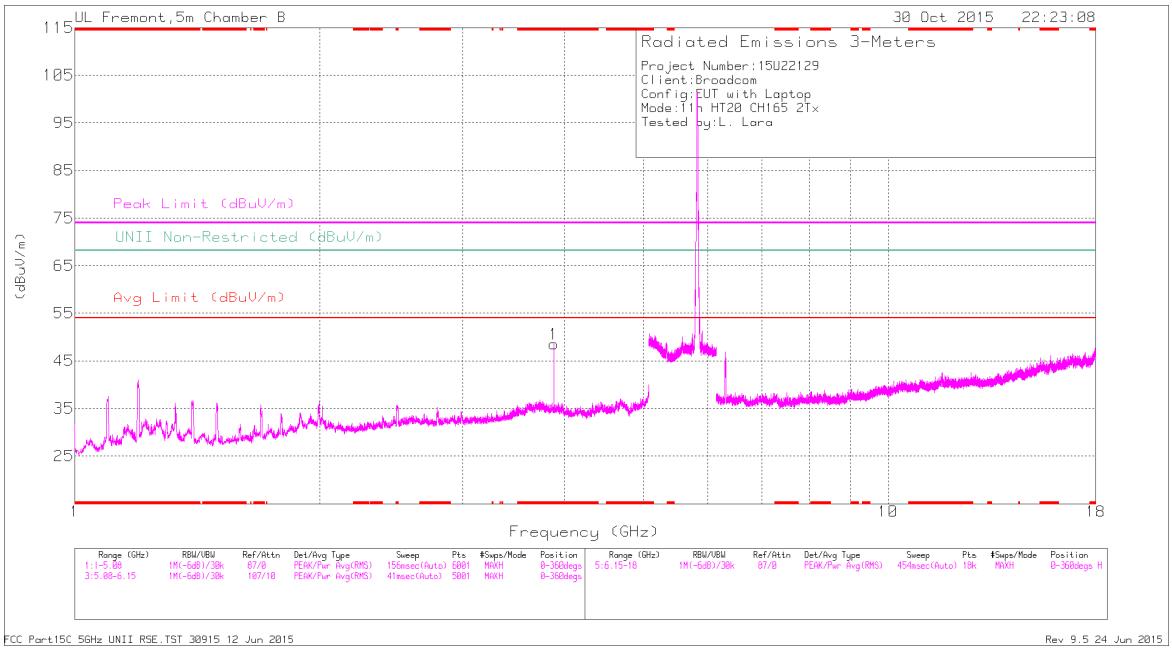
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9	* 11.569	43.08	PK-U	38.4	-24.6	56.88	-	-	74	-17.12	-	-	277	200	V
	* 11.571	30.16	ADR	38.4	-24.6	43.96	54	-10.04	-	-	-	-	277	200	V
1	5.301	51.09	PK-U	34.4	-19.7	65.79	-	-	-	-	68.2	-2.41	246	288	V
2	5.543	53.59	PK-U	34.6	-20.4	67.79	-	-	-	-	68.2	-.41	248	292	V
3	5.628	47.61	PK-U	34.8	-20.7	61.71	-	-	-	-	68.2	-6.49	251	269	V
4	5.707	50.96	PK-U	35	-21	64.96	-	-	-	-	68.2	-3.24	268	294	V
5	5.867	50.26	PK-U	35.4	-20.9	64.76	-	-	-	-	68.2	-3.44	267	120	V
6	5.94	45.21	PK-U	35.6	-20.9	59.91	-	-	-	-	68.2	-8.29	266	272	V
7	6.027	47.98	PK-U	35.6	-20.7	62.88	-	-	-	-	68.2	-5.32	256	292	V
8	6.265	57.46	PK-U	35.5	-31.5	61.46	-	-	-	-	68.2	-6.74	246	269	V
10	17.352	41.84	PK-U	40.8	-21.3	61.34	-	-	-	-	68.2	-6.86	303	247	V

* - indicates frequency in CFR15.205 Restricted Band

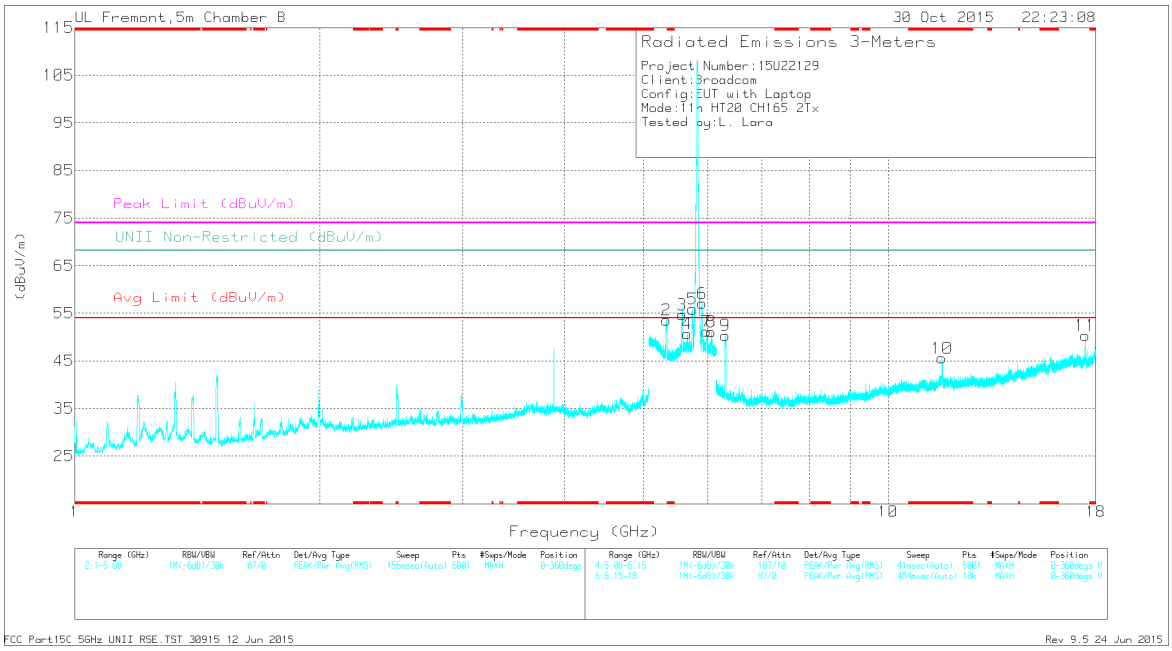
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /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	* 3.883	52.61	PK-U	33.5	-32.6	53.51	-	-	74	-20.49	-	-	308	327	H
	* 3.883	48.92	ADR	33.5	-32.6	49.82	54	-4.18	-	-	-	-	308	327	H
10	* 11.652	39.47	PK-U	38.5	-24.9	53.07	-	-	74	-20.93	-	-	351	194	V
	* 11.65	27.95	ADR	38.5	-24.8	41.65	54	-12.35	-	-	-	-	351	194	V
2	5.342	50.76	PK-U	34.4	-19.6	65.56	-	-	-	-	68.2	-2.64	249	283	V
3	5.579	50.42	PK-U	34.7	-21	64.12	-	-	-	-	68.2	-4.08	269	289	V
4	5.661	45.86	PK-U	34.9	-20.9	59.86	-	-	-	-	68.2	-8.34	268	326	V
5	***5.747	41.81	Pk	35.1	-21	55.91	-	-	-	-	-	-	0-360	101	V
6	**5.91	42.38	Pk	35.5	-20.8	57.08	-	-	-	-	68.2	-11.12	0-360	101	V
7	**5.984	36.43	Pk	35.6	-20.8	51.23	-	-	-	-	68.2	-16.97	0-360	101	V
8	6.069	46.91	PK-U	35.5	-20.5	61.91	-	-	-	-	68.2	-6.29	249	295	V
9	6.308	56.74	PK-U	35.6	-31.3	61.04	-	-	-	-	68.2	-7.16	249	280	V
11	17.475	37.97	PK-U	40.7	-21.1	57.57	-	-	-	-	68.2	-10.63	44	351	V

* - indicates frequency in CFR15.205 Restricted Band

** - indicates frequency covered by the radiated band edge

*** - indicates frequency within the authorized band

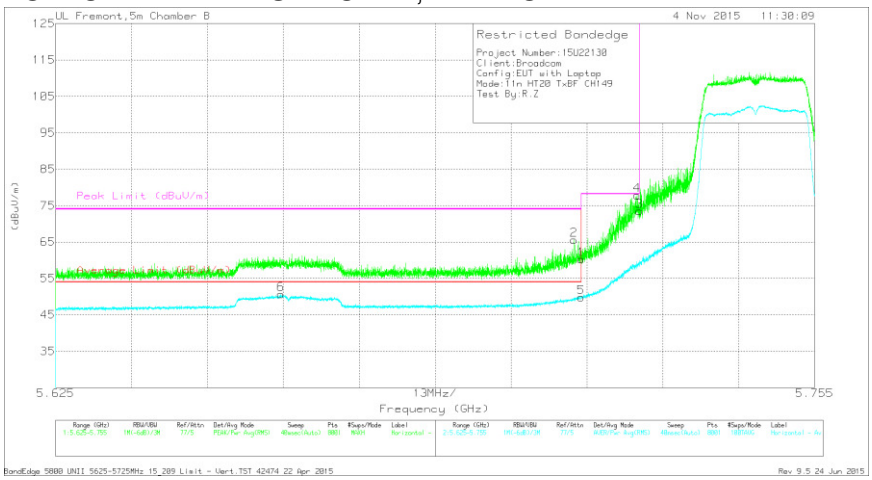
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.5. TX ABOVE 1 GHz 802.11n HT20 MODE TxBF IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

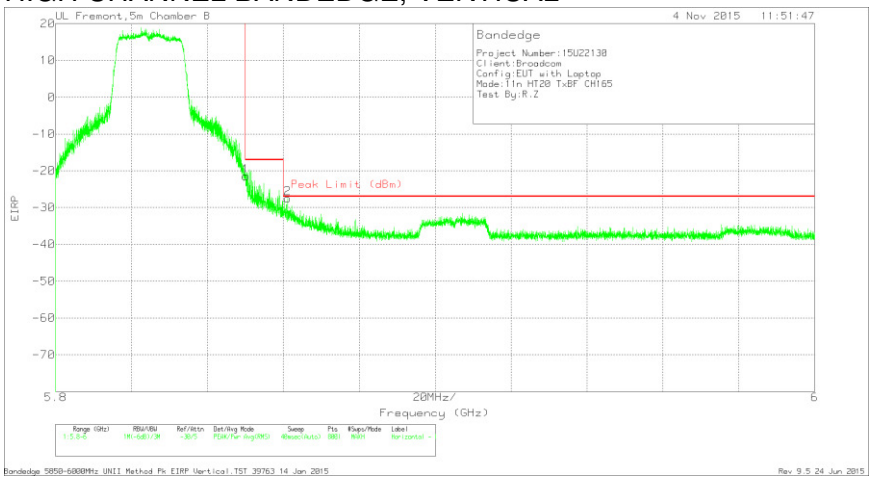
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	5.664	7.85	RMS	34.9	7.3	.58	50.63	54	-3.37	-	-	206	250	V
2	5.714	23.26	Pk	35	7.3	0	65.56	-	-	74	-8.44	206	250	V
1	5.715	17.89	Pk	35	7.3	0	60.19	-	-	74	-13.81	206	250	V
5	5.715	6.89	RMS	35	7.3	.58	49.77	54	-4.23	-	-	206	250	V
3	5.725	31.16	Pk	35	7.4	0	73.56	-	-	78.2	-4.64	206	250	V
4	5.725	35.48	Pk	35	7.4	0	77.88	-	-	78.2	-.32	206	250	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



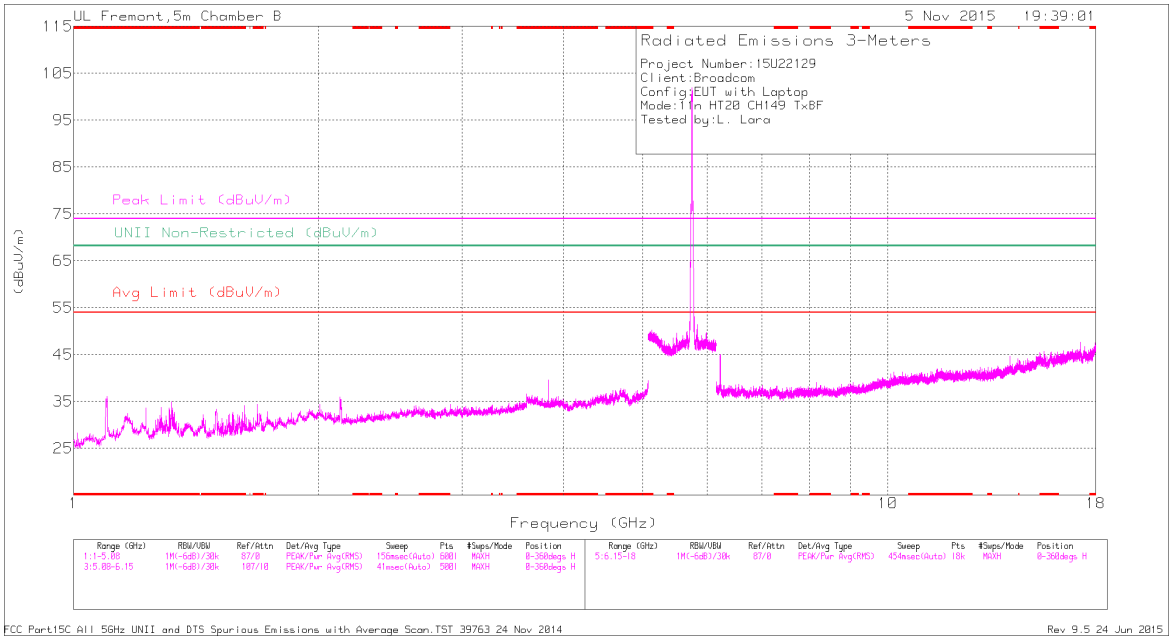
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Bypass (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-76.2	Pk	35.4	7.5	11.8	0	-21.5	-17	-4.5	196	226	V
2	5.861	-82.15	Pk	35.4	7.5	11.8	0	-27.45	-27	-.45	196	226	V

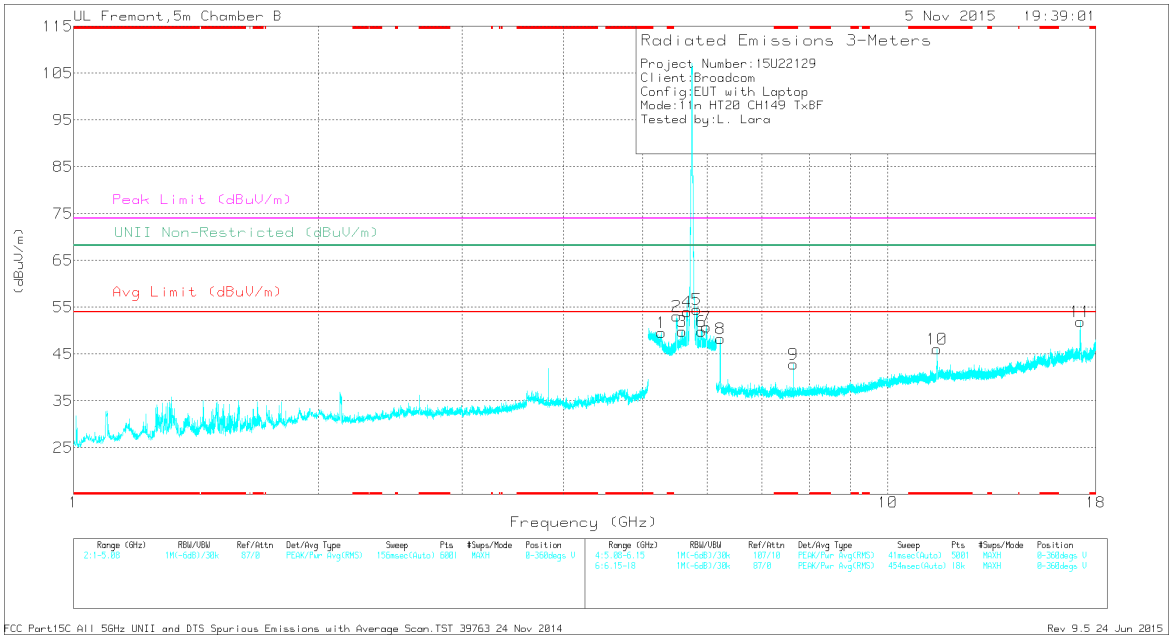
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /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
9	* 7.66	42.91	PK-U	35.4	-29.9	0	48.41	-	-	74	-25.59	-	-	133	103	V
	* 7.66	36.27	ADR	35.4	-29.9	.58	42.35	54	-11.65	-	-	-	-	133	103	V
10	* 11.489	44.78	PK-U	38.3	-25.4	0	57.68	-	-	74	-16.32	-	-	266	344	V
	* 11.489	33.28	ADR	38.3	-25.4	.58	46.76	54	-7.24	-	-	-	-	266	344	V
1	5.267	44	PK-U	34.3	-19.4	0	58.9	-	-	-	-	68.2	-9.3	176	112	V
2	5.5	47.72	PK-U	34.5	-20.5	0	61.72	-	-	-	-	68.2	-6.48	33	103	V
3	5.587	45.58	PK-U	34.7	-20.7	0	59.58	-	-	-	-	68.2	-8.62	152	110	V
4	**5.665	40.06	Pk	34.9	-20.9	0	54.06	-	-	-	-	68.2	-14.14	0-360	101	V
5	***5.828	40.12	Pk	35.3	-20.9	0	54.52	-	-	-	-	-	-	0-360	101	V
6	5.899	45.36	PK-U	35.5	-20.8	0	60.06	-	-	-	-	68.2	-8.14	192	117	V
7	5.986	43.96	PK-U	35.6	-20.7	0	58.86	-	-	-	-	68.2	-9.34	143	106	V
8	6.225	51.85	PK-U	35.5	-31.5	0	55.85	-	-	-	-	68.2	-12.35	113	103	V
11	17.239	47.32	PK-U	41.1	-21.6	0	66.82	-	-	-	-	68.2	-1.38	269	274	V

* - indicates frequency in CFR15.205 Restricted Band

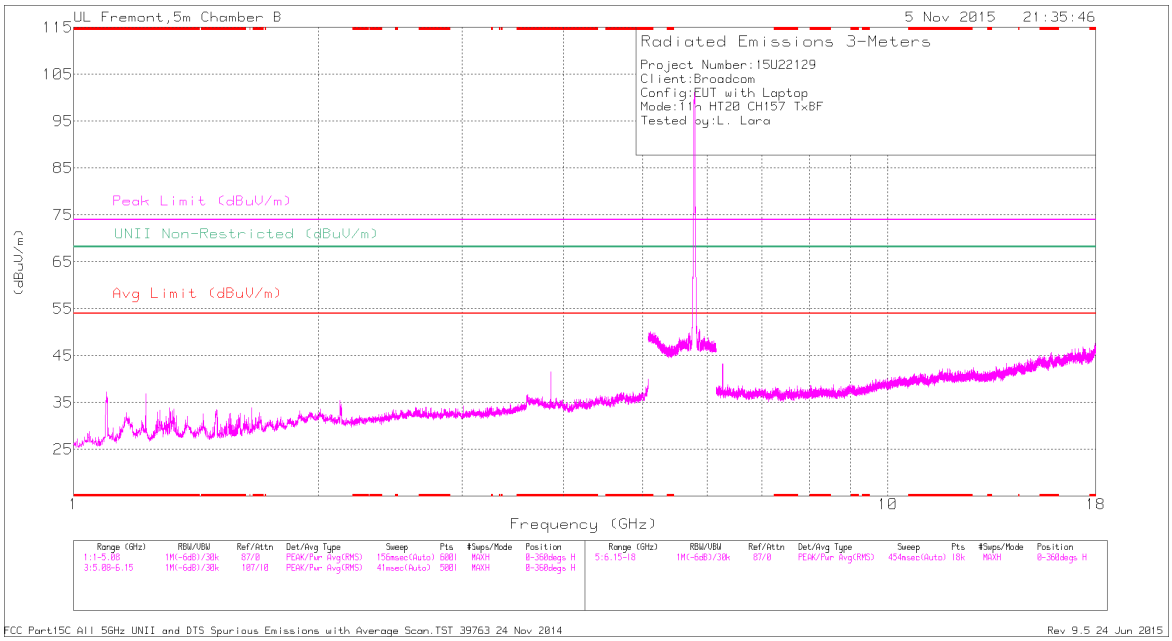
** - indicates frequency covered by the radiated band edge

*** - indicates frequency within the authorized band

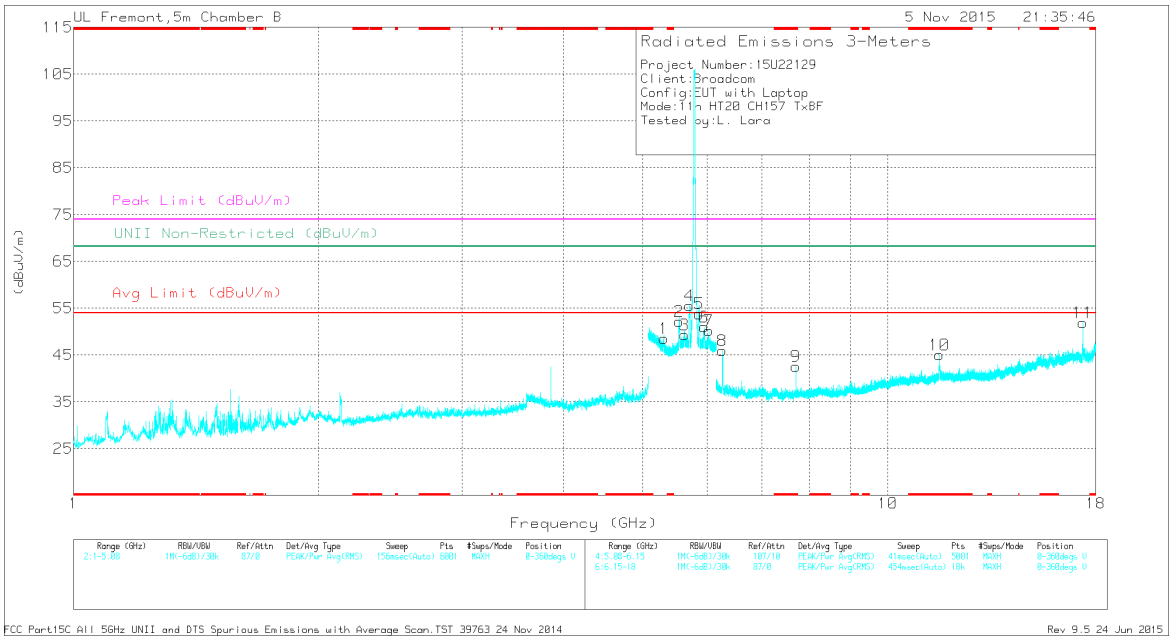
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Trace Markers

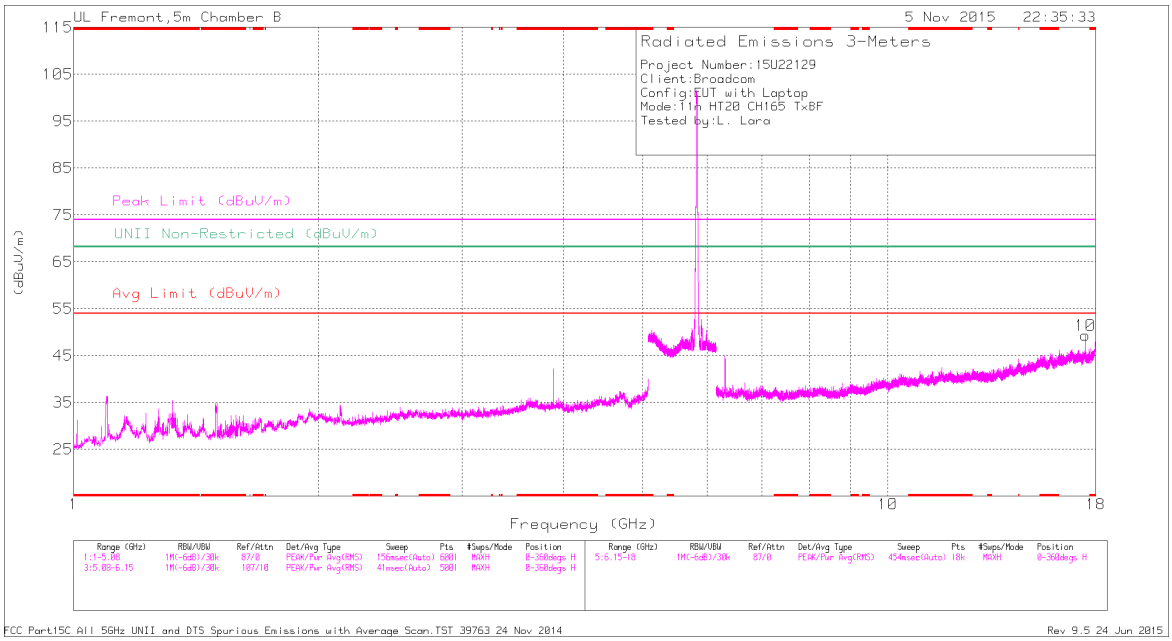
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9	* 7.713	41.78	PK-U	35.5	-29.4	0	47.88	-	-	74	-26.12	-	-	133	102	V
	* 7.713	34.33	ADR	35.5	-29.4	.58	41.01	54	-12.99	-	-	-	-	133	102	V
10	* 11.571	42.58	PK-U	38.4	-24.6	0	56.38	-	-	74	-17.62	-	-	269	358	V
	* 11.569	30.08	ADR	38.4	-24.6	.58	44.46	54	-9.54	-	-	-	-	269	358	V
1	5.304	43.82	PK-U	34.4	-19.5	0	58.72	-	-	-	-	68.2	-9.48	176	112	V
2	5.544	47.09	PK-U	34.6	-20.5	0	61.19	-	-	-	-	68.2	-7.01	148	101	V
3	5.628	45.13	PK-U	34.8	-20.7	0	59.23	-	-	-	-	68.2	-8.97	152	103	V
4	5.711	50.47	PK-U	35	-21.1	0	64.37	-	-	-	-	68.2	-3.83	194	127	V
5	5.863	49.05	PK-U	35.4	-20.7	0	63.75	-	-	-	-	68.2	-4.45	150	103	V
6	5.943	44.69	PK-U	35.6	-20.7	0	59.59	-	-	-	-	68.2	-8.61	193	115	V
7	6.019	43.58	PK-U	35.6	-20.7	0	58.48	-	-	-	-	68.2	-9.72	150	101	V
8	6.265	49.91	PK-U	35.5	-31.5	0	53.91	-	-	-	-	68.2	-14.29	222	102	V
11	17.352	44.18	PK-U	40.8	-21.4	0	63.58	-	-	-	-	68.2	-4.62	262	271	V

* - indicates frequency in CFR15.205 Restricted Band

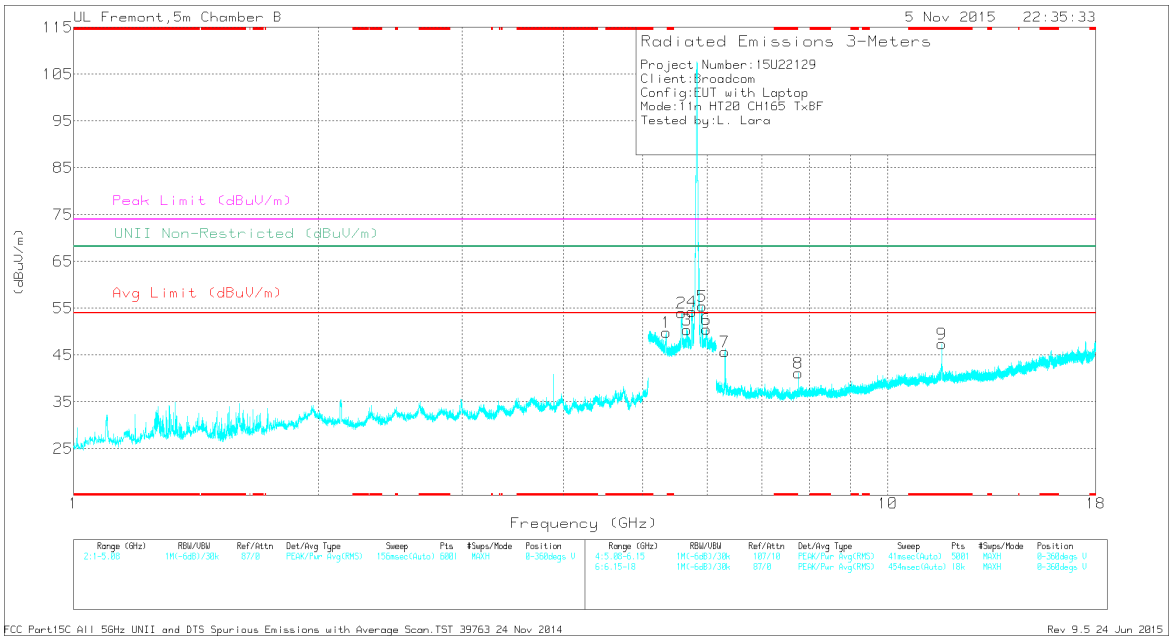
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/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
9	* 11.647	43.15	PK-U	38.5	-24.8	0	56.85	-	-	74	-17.15	-	-	159	264	V
	* 11.649	30.54	ADR	38.5	-24.8	.58	44.82	54	-9.18	-	-	-	-	159	264	V
1	5.336	43.92	PK-U	34.4	-19.4	0	58.92	-	-	-	-	68.2	-9.28	176	101	V
2	5.585	50.56	PK-U	34.7	-20.7	0	64.56	-	-	-	-	68.2	-3.64	149	282	V
3	5.666	45.83	PK-U	34.9	-20.8	0	59.93	-	-	-	-	68.2	-8.27	155	120	V
4	***5.747	40.29	Pk	35.1	-21.1	0	54.29	-	-	-	-	-	-	0-360	101	V
5	**5.912	40.77	Pk	35.5	-20.8	0	55.47	-	-	-	-	68.2	-12.73	0-360	101	V
6	**5.988	35.83	Pk	35.6	-20.9	0	50.53	-	-	-	-	68.2	-17.67	0-360	101	V
7	6.318	50.71	PK-U	35.6	-31.3	0	55.01	-	-	-	-	68.2	-13.19	250	303	V
8	7.767	40.98	PK-U	35.5	-29.1	0	47.38	-	-	-	-	68.2	-20.82	133	101	V
10	17.478	40.68	PK-U	40.7	-21.1	0	60.28	-	-	-	-	68.2	-7.92	282	364	H

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

** - indicates frequency covered by the radiated band edge

*** - indicates frequency within the authorized band

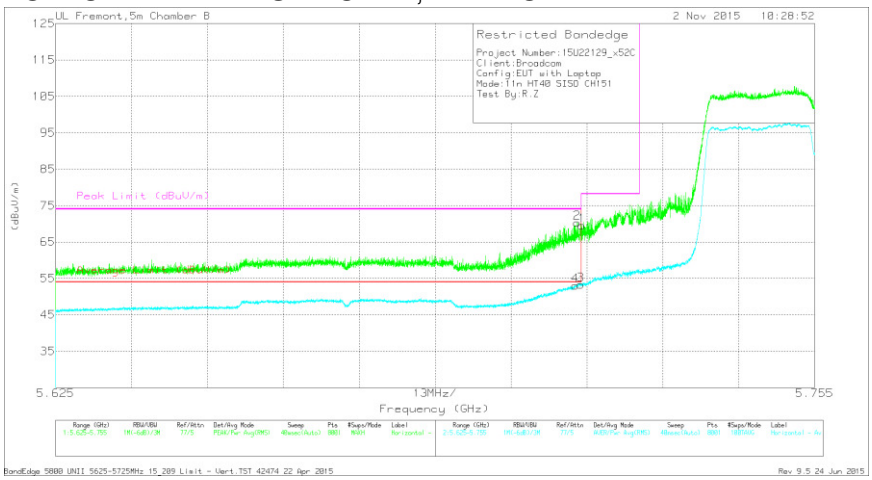
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.6. TX ABOVE 1 GHz 802.11n HT40 MODE 1Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

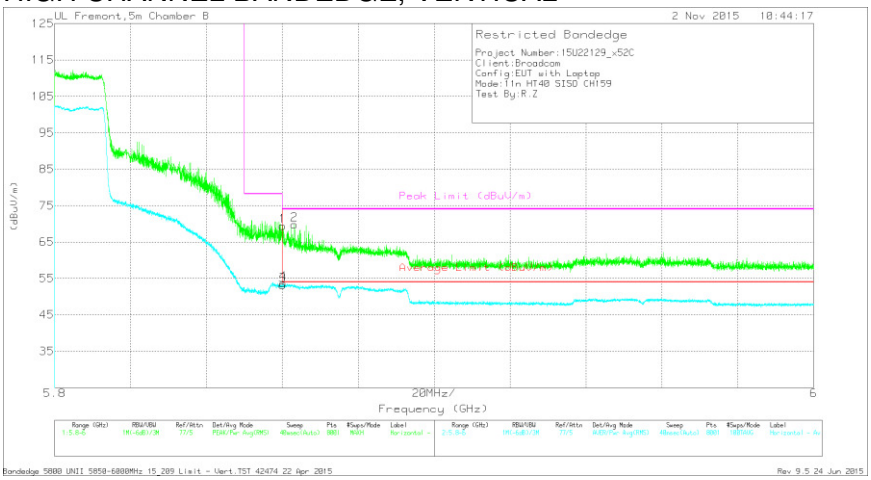
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.714	28.02	Pk	35	7.3	0	70.32	-	-	74	-3.68	247	295	V
4	5.714	10.68	RMS	35	7.3	0	52.98	54	-1.02	-	-	247	295	V
1	5.715	27.23	Pk	35	7.3	0	69.53	-	-	78.2	-8.67	247	295	V
3	5.715	10.92	RMS	35	7.3	0	53.22	54	-.78	-	-	247	295	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (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	5.86	26.54	Pk	35.4	7.5	0	69.44	-	-	74	-4.56	251	269	V
3	5.86	10.05	RMS	35.4	7.5	0	52.95	54	-1.05	-	-	251	269	V
4	5.86	10.45	RMS	35.4	7.5	0	53.35	54	-0.65	-	-	251	269	V
2	5.863	26.84	Pk	35.4	7.5	0	69.74	-	-	74	-4.26	251	269	V

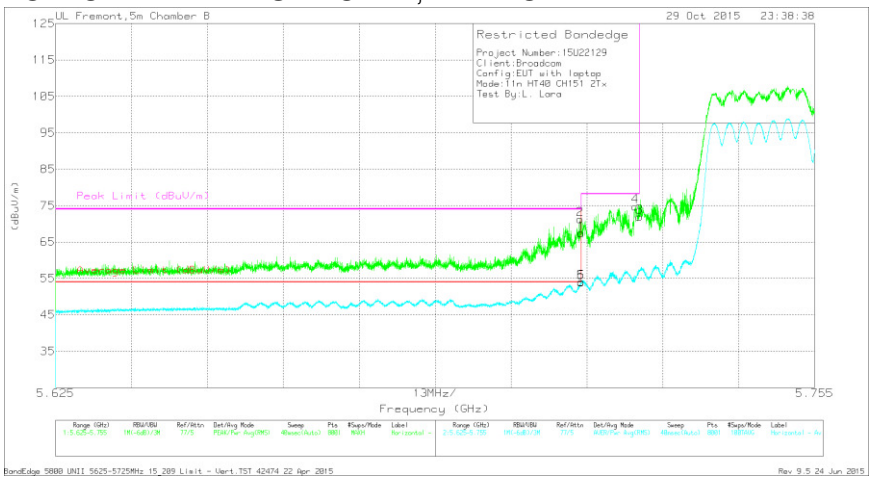
Pk - Peak detector

RMS - RMS detection

9.7. TX ABOVE 1 GHz 802.11n HT40 MODE 2Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

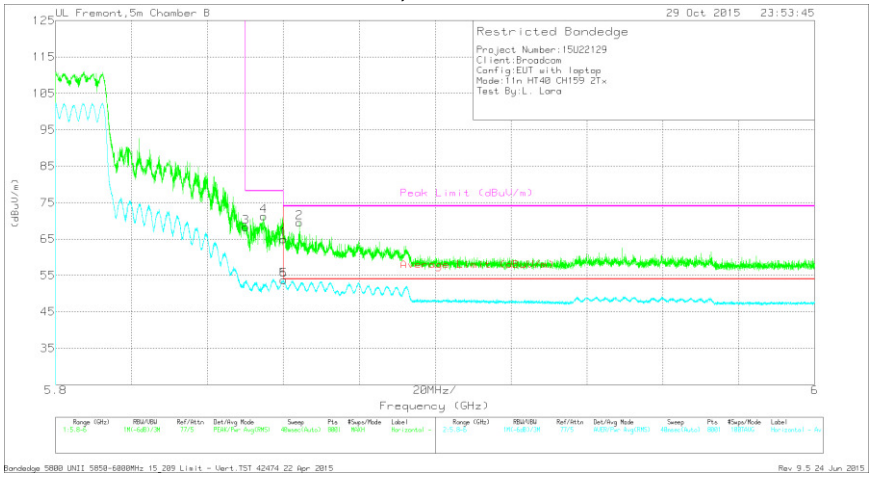
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.715	25.14	Pk	35	7.3	67.44	-	-	74	-6.56	65	269	V
2	5.715	28.98	Pk	35	7.3	71.28	-	-	74	-2.72	65	269	V
5	5.715	11.58	RMS	35	7.3	53.88	54	-.12	-	-	65	269	V
6	5.715	11.69	RMS	35	7.3	53.99	54	-.01	-	-	65	269	V
4	5.724	32.41	Pk	35	7.4	74.81	-	-	78.2	-3.39	65	269	V
3	5.725	29.45	Pk	35	7.4	71.85	-	-	78.2	-6.35	65	269	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

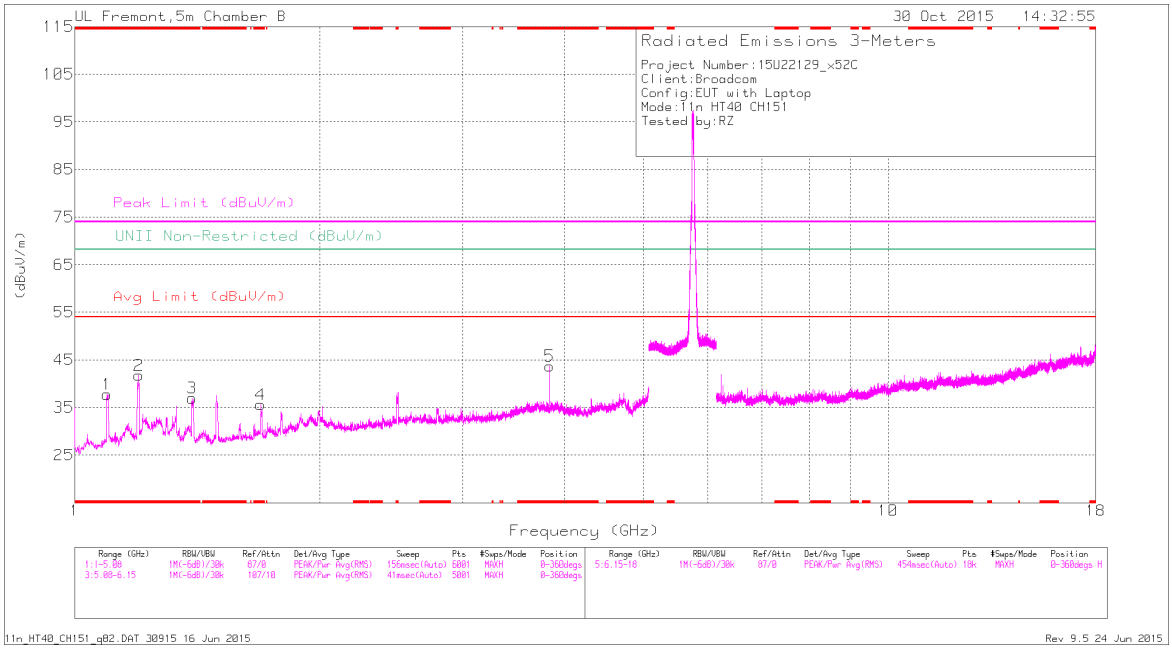
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	5.85	25.38	Pk	35.4	7.5	68.28	-	-	78.2	-9.92	74	282	V
4	5.855	28.48	Pk	35.4	7.4	71.28	-	-	78.2	-6.92	74	282	V
1	5.86	22.04	Pk	35.4	7.5	64.94	-	-	74	-9.06	74	282	V
5	5.86	10.86	RMS	35.4	7.5	53.76	54	-.24	-	-	74	282	V
6	5.86	10.87	RMS	35.4	7.5	53.77	54	-.23	-	-	74	282	V
2	5.864	26.67	Pk	35.4	7.5	69.57	-	-	74	-4.43	74	282	V

Pk - Peak detector

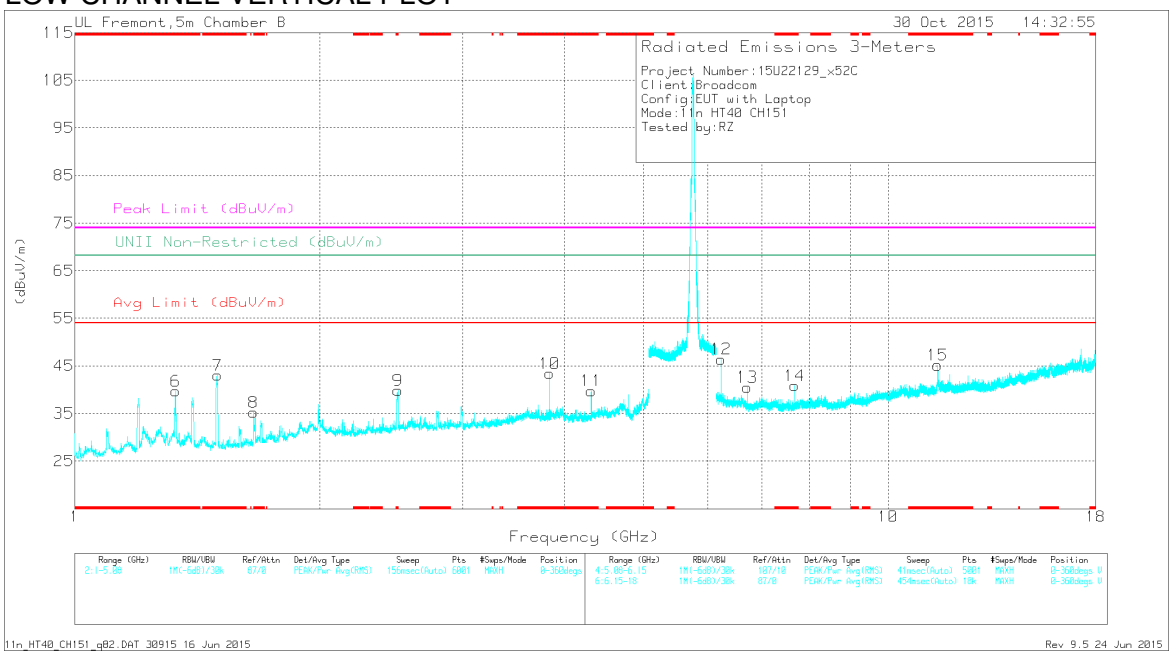
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

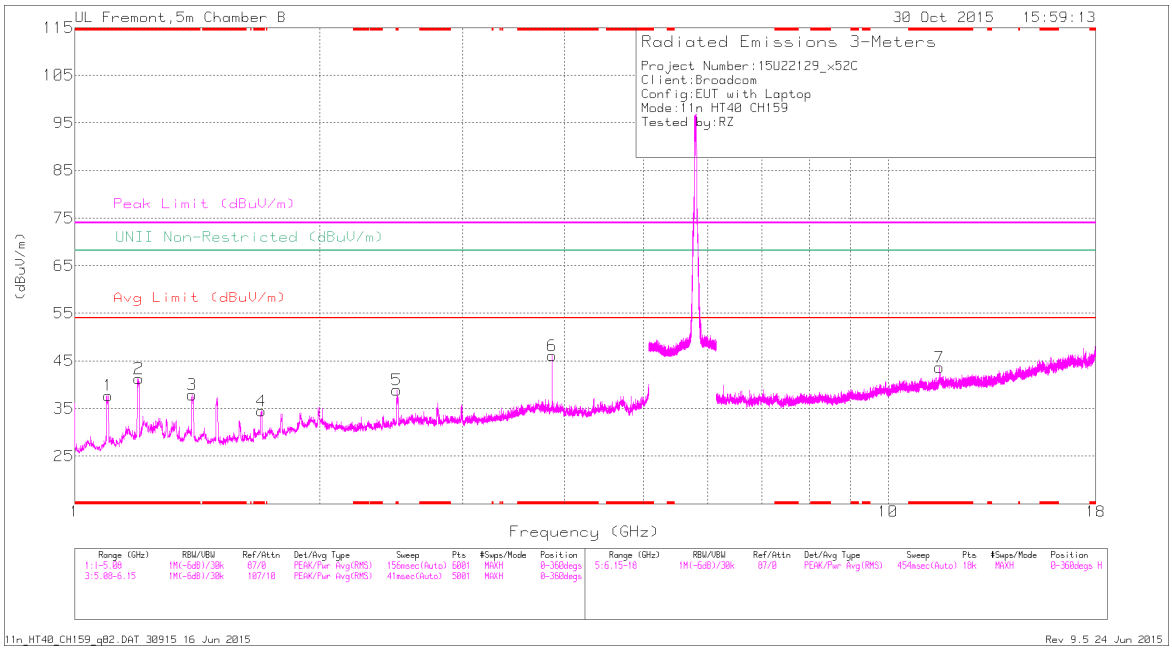
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.096	52.08	PK-U	27.6	-35.6	44.08	-	-	74	-29.92	-	-	81	285	H
	* 1.097	42.41	ADR	27.6	-35.6	34.41	54	-19.59	-	-	-	-	81	285	H
2	* 1.198	47.91	PK-U	28.5	-35.7	40.71	-	-	74	-33.29	-	-	81	102	H
	* 1.198	36.5	ADR	28.5	-35.7	29.3	54	-24.7	-	-	-	-	81	102	H
3	* 1.394	50.08	PK-U	29.4	-34.7	44.78	-	-	74	-29.22	-	-	130	133	H
	* 1.395	38.45	ADR	29.4	-34.7	33.15	54	-20.85	-	-	-	-	130	133	H
4	* 1.692	48.14	PK-U	29.7	-34.2	43.64	-	-	74	-30.36	-	-	73	136	H
	* 1.694	35.79	ADR	29.7	-34.3	31.19	54	-22.81	-	-	-	-	73	136	H
5	* 3.837	49.9	PK-U	33.4	-33	50.3	-	-	74	-23.7	-	-	310	319	H
	* 3.837	45.69	ADR	33.4	-33	46.09	54	-7.91	-	-	-	-	310	319	H
6	* 1.329	54.16	PK-U	29.4	-35.2	48.36	-	-	74	-25.64	-	-	277	205	V
	* 1.329	33.9	ADR	29.4	-35.2	28.1	54	-25.9	-	-	-	-	277	205	V
7	* 1.498	55.15	PK-U	28.6	-35.5	48.25	-	-	74	-25.75	-	-	192	102	V
	* 1.498	45.04	ADR	28.7	-35.5	38.24	54	-15.76	-	-	-	-	192	102	V
9	* 2.499	51.99	PK-U	32.5	-34.1	50.39	-	-	74	-23.61	-	-	197	106	V
	* 2.497	36.24	ADR	32.5	-34.1	34.64	54	-19.36	-	-	-	-	197	106	V
10	* 3.837	47.51	PK-U	33.4	-33	47.91	-	-	74	-26.09	-	-	349	119	V
	* 3.837	42.31	ADR	33.4	-33	42.71	54	-11.29	-	-	-	-	349	119	V
11	* 4.316	48.19	PK-U	33.7	-32.5	49.39	-	-	74	-24.61	-	-	249	277	V
	* 4.316	41.2	ADR	33.7	-32.5	42.4	54	-11.6	-	-	-	-	249	277	V
14	* 7.726	41.32	PK-U	35.5	-29.3	47.52	-	-	74	-26.48	-	-	109	106	V
	* 7.726	33.35	ADR	35.5	-29.3	39.55	54	-14.45	-	-	-	-	109	106	V
15	* 11.586	39.08	PK-U	38.4	-24.6	52.88	-	-	74	-21.12	-	-	320	397	V
	* 11.586	27.35	ADR	38.4	-24.6	41.15	54	-12.85	-	-	-	-	320	397	V
8	1.659	44	PK-U	29.4	-34.6	38.8	-	-	-	-	68.2	-29.4	192	199	V
12	6.278	49.29	PK-U	35.5	-31.6	53.19	-	-	-	-	68.2	-15.01	253	287	V
13	6.761	42.66	PK-U	35.9	-30.9	47.66	-	-	-	-	68.2	-20.54	255	241	V

* - indicates frequency in CFR15.205 Restricted Band

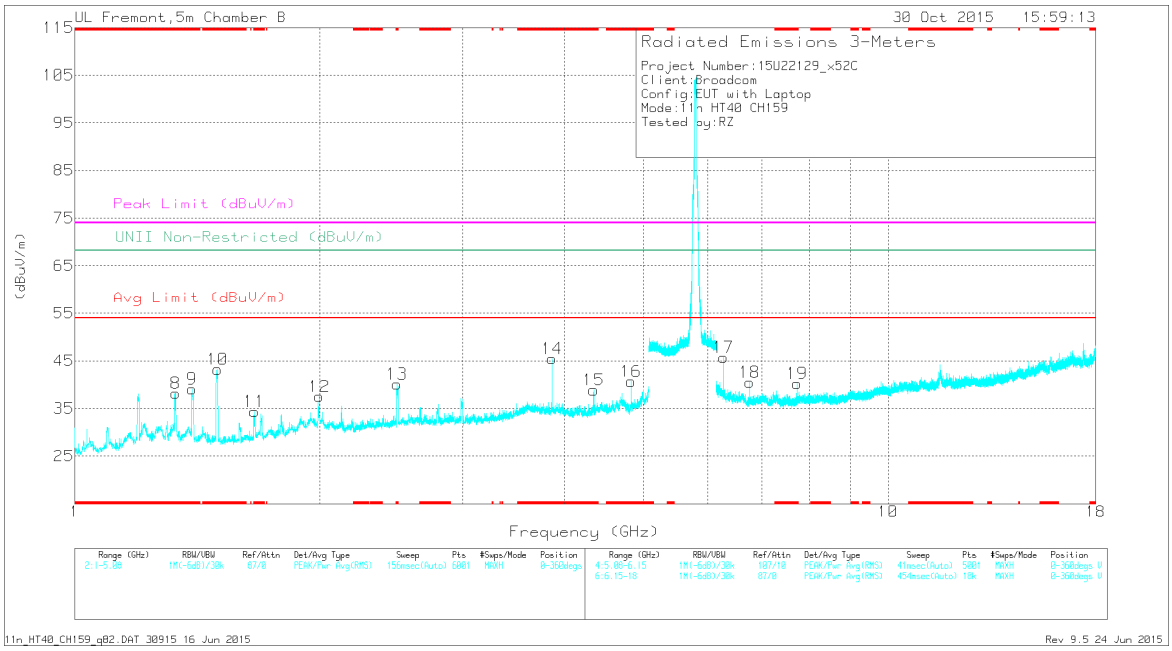
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /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	* 1.098	53.39	PK-U	27.6	-35.5	45.49	-	-	74	-28.51	-	-	70	287	H
	* 1.099	43.02	ADR	27.6	-35.5	35.12	54	-18.88	-	-	-	-	70	287	H
2	* 1.199	55.05	PK-U	28.5	-35.7	47.85	-	-	74	-26.15	-	-	43	255	H
	* 1.199	45.07	ADR	28.5	-35.7	37.87	54	-16.13	-	-	-	-	43	255	H
3	* 1.395	49.96	PK-U	29.4	-34.7	44.66	-	-	74	-29.34	-	-	164	189	H
	* 1.394	38.7	ADR	29.4	-34.7	33.4	54	-20.6	-	-	-	-	164	189	H
4	* 1.697	46.08	PK-U	29.7	-34.3	41.48	-	-	74	-32.52	-	-	164	198	H
	* 1.696	33.45	ADR	29.7	-34.3	28.85	54	-25.15	-	-	-	-	164	198	H
5	* 2.49	47.86	PK-U	32.5	-34	46.36	-	-	74	-27.64	-	-	350	280	H
	* 2.491	35.05	ADR	32.5	-34	33.55	54	-20.45	-	-	-	-	350	280	H
6	* 3.863	49.79	PK-U	33.4	-32.8	50.39	-	-	74	-23.61	-	-	304	289	H
	* 3.863	45.46	ADR	33.4	-32.8	46.06	54	-7.94	-	-	-	-	304	289	H
8	* 1.33	49.49	PK-U	29.4	-35.2	43.69	-	-	74	-30.31	-	-	243	319	V
	* 1.328	35.82	ADR	29.4	-35.2	30.02	54	-23.98	-	-	-	-	243	319	V
9	* 1.393	50.75	PK-U	29.4	-34.7	45.45	-	-	74	-28.55	-	-	246	310	V
	* 1.394	39.64	ADR	29.4	-34.7	34.34	54	-19.66	-	-	-	-	246	310	V
10	* 1.498	54.84	PK-U	28.6	-35.5	47.94	-	-	74	-26.06	-	-	200	101	V
	* 1.497	44.87	ADR	28.7	-35.5	38.07	54	-15.93	-	-	-	-	200	101	V
11	* 1.663	51.85	PK-U	29.4	-34.5	46.75	-	-	74	-27.25	-	-	132	123	V
	* 1.661	33.12	ADR	29.4	-34.5	28.02	54	-25.98	-	-	-	-	132	123	V
13	* 2.494	49.38	PK-U	32.5	-34	47.88	-	-	74	-26.12	-	-	60	200	V
	* 2.491	36.48	ADR	32.5	-34	34.98	54	-19.02	-	-	-	-	60	200	V
14	* 4.346	45.47	PK-U	33.8	-32.2	47.07	-	-	74	-26.93	-	-	215	316	V
	* 4.346	38.38	ADR	33.8	-32.2	39.98	54	-14.02	-	-	-	-	215	316	V
15	* 4.829	45.08	PK-U	34.3	-32.1	47.28	-	-	74	-26.72	-	-	230	251	V
	* 4.829	36.23	ADR	34.3	-32.1	38.43	54	-15.57	-	-	-	-	230	251	V
16	* 1.33	49.49	PK-U	29.4	-35.2	43.69	-	-	74	-30.31	-	-	243	319	V
	* 1.328	35.82	ADR	29.4	-35.2	30.02	54	-23.98	-	-	-	-	243	319	V
7	* 11.586	39.08	PK-U	38.4	-24.6	52.88	-	-	74	-21.12	-	-	320	397	H
	* 11.586	27.35	ADR	38.4	-24.6	41.15	54	-12.85	-	-	-	-	320	397	H
19	* 7.726	41.32	PK-U	35.5	-29.3	47.52	-	-	74	-26.48	-	-	109	106	V
	* 7.726	33.35	ADR	35.5	-29.3	39.55	54	-14.45	-	-	-	-	109	106	V
12	1.997	48.05	PK-U	32.3	-34	46.35	-	-	-	-	68.2	-21.85	182	221	V
17	6.278	49.29	PK-U	35.5	-31.6	53.19	-	-	-	-	68.2	-15.01	253	287	V
18	6.761	42.66	PK-U	35.9	-30.9	47.66	-	-	-	-	68.2	-20.54	255	241	V

* - indicates frequency in CFR15.205 Restricted Band

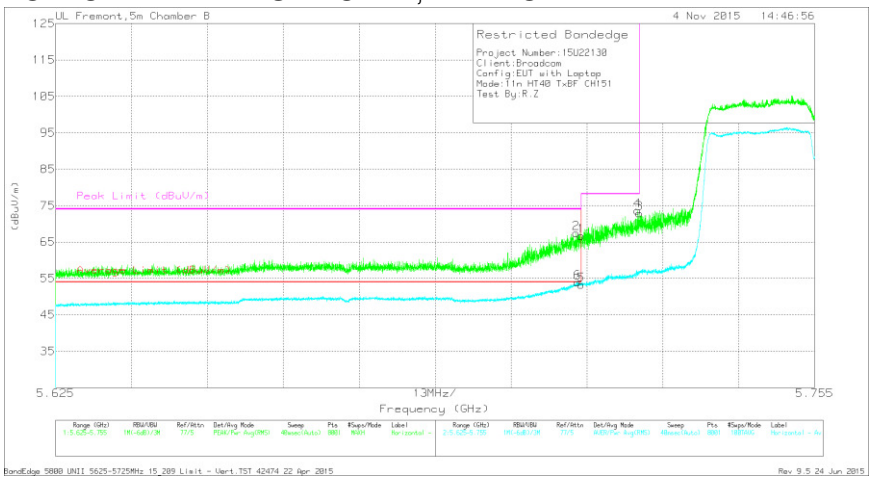
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.8. TX ABOVE 1 GHz 802.11n HT40 MODE TxBF IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

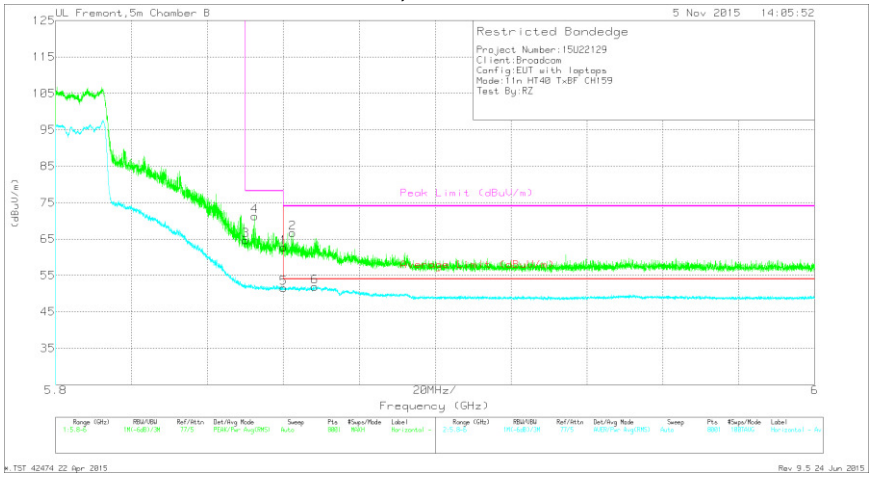
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.714	25.17	Pk	35	7.3	0	67.47	-	-	74	-6.53	217	325	V
6	5.714	9.74	RMS	35	7.3	1.88	53.92	54	-.08	-	-	217	325	V
1	5.715	24.35	Pk	35	7.3	0	66.65	-	-	74	-7.35	217	325	V
5	5.715	9.13	RMS	35	7.3	1.88	53.31	54	-.69	-	-	217	325	V
3	5.725	30.47	Pk	35	7.4	0	72.87	-	-	78.2	-5.33	217	325	V
4	5.725	31.27	Pk	35	7.4	0	73.67	-	-	78.2	-4.53	217	325	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

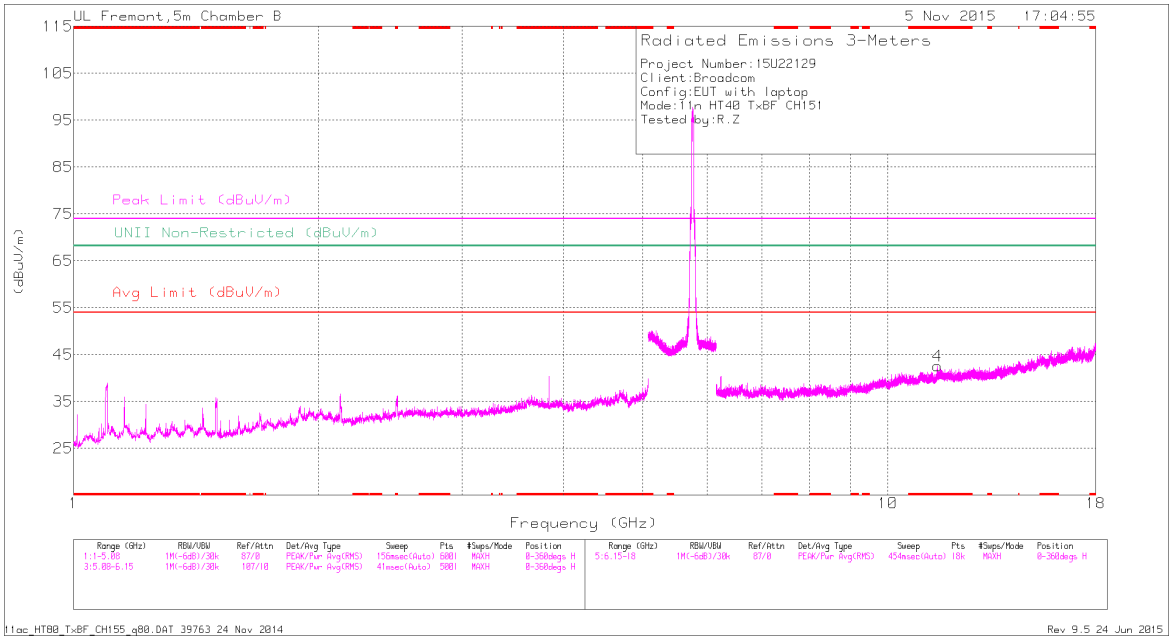
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	5.85	21.84	Pk	35.4	7.5	0	64.74	-	-	78.2	-13.46	46	103	V
4	5.852	28.53	Pk	35.4	7.4	0	71.33	-	-	78.2	-6.87	46	103	V
1	5.86	19.76	Pk	35.4	7.5	0	62.66	-	-	74	-11.34	46	103	V
5	5.86	6.71	RMS	35.4	7.5	1.88	51.49	54	-2.51	-	-	46	103	V
2	5.862	23.74	Pk	35.4	7.5	0	66.64	-	-	74	-7.36	46	103	V
6	5.868	7.17	RMS	35.4	7.5	1.88	51.95	54	-2.05	-	-	46	103	V

Pk - Peak detector

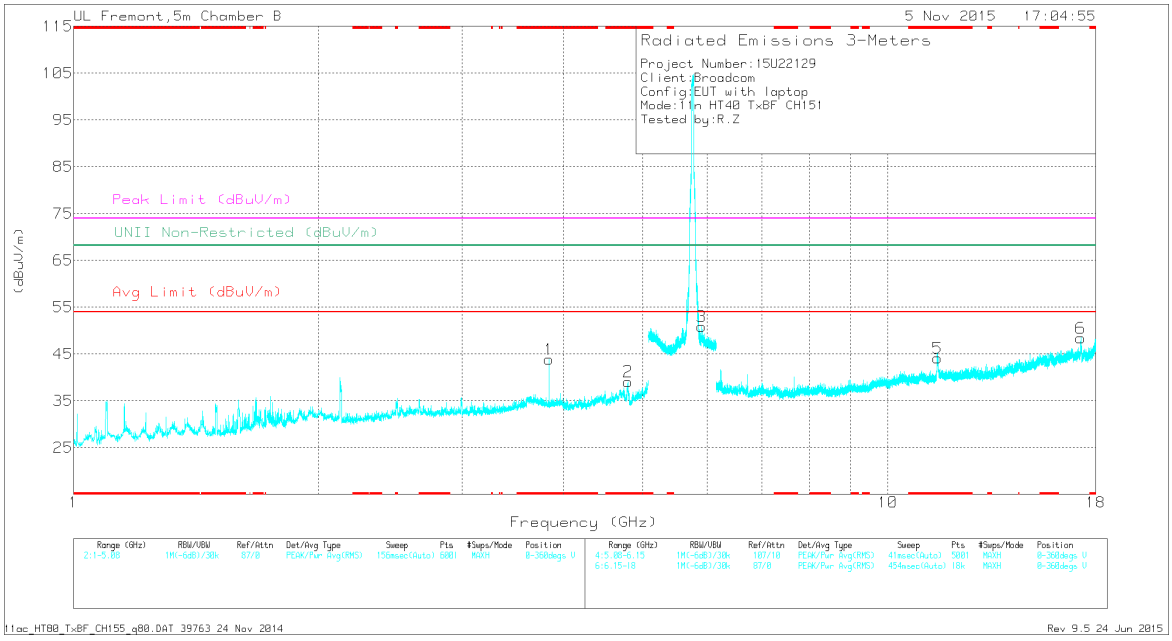
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

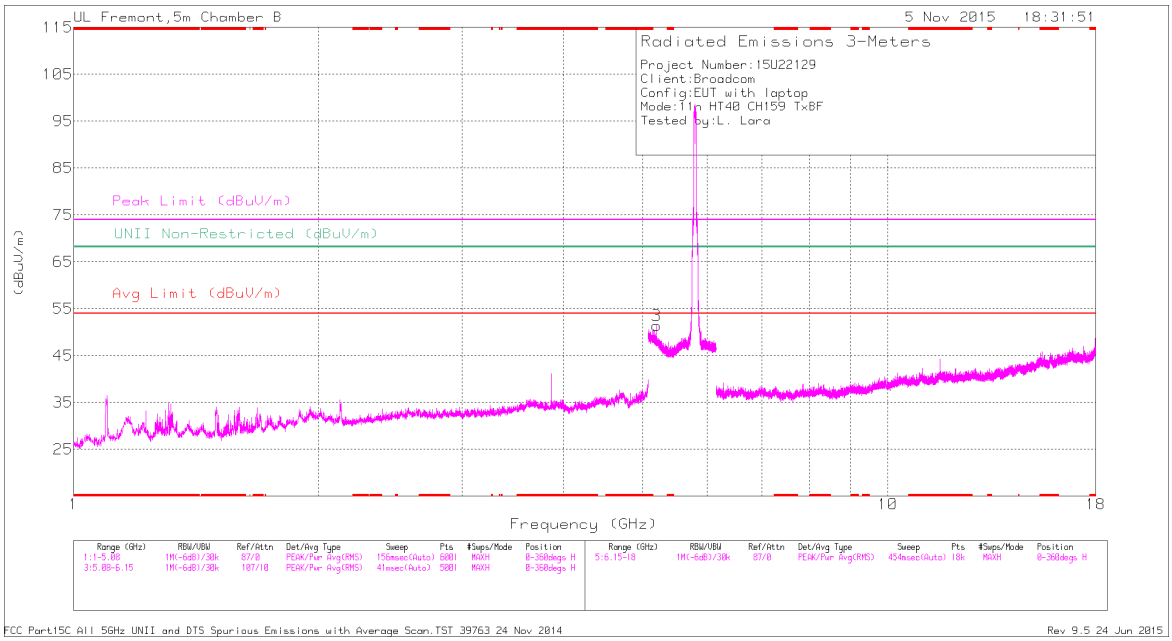
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.837	46.16	PK-U	33.4	-33	0	46.56	-	-	74	-27.44	-	-	63	141	V
	* 3.837	39.43	ADR	33.4	-33	1.88	41.71	54	-12.29	-	-	-	-	63	141	V
2	* 4.802	44.46	PK-U	34.3	-31.9	0	46.86	-	-	74	-27.14	-	-	197	156	V
	* 4.796	33.79	ADR	34.3	-31.7	1.88	38.27	54	-15.73	-	-	-	-	197	156	V
4	* 11.509	39.62	PK-U	38.3	-25.3	0	52.62	-	-	74	-21.38	-	-	108	374	H
	* 11.511	27.09	ADR	38.3	-25.2	1.88	42.07	54	-11.93	-	-	-	-	108	374	H
5	* 11.496	40.25	PK-U	38.3	-25.3	0	53.25	-	-	74	-20.75	-	-	189	398	V
	* 11.491	28.16	ADR	38.3	-25.4	1.88	42.94	54	-11.06	-	-	-	-	189	398	V
3	5.93	44	PK-U	35.6	-20.9	0	58.7	-	-	-	-	68.2	-9.5	189	142	V
6	17.247	41.61	PK-U	41	-21.6	0	61.01	-	-	-	-	68.2	-7.19	270	273	V

* - indicates frequency in CFR15.205 Restricted Band

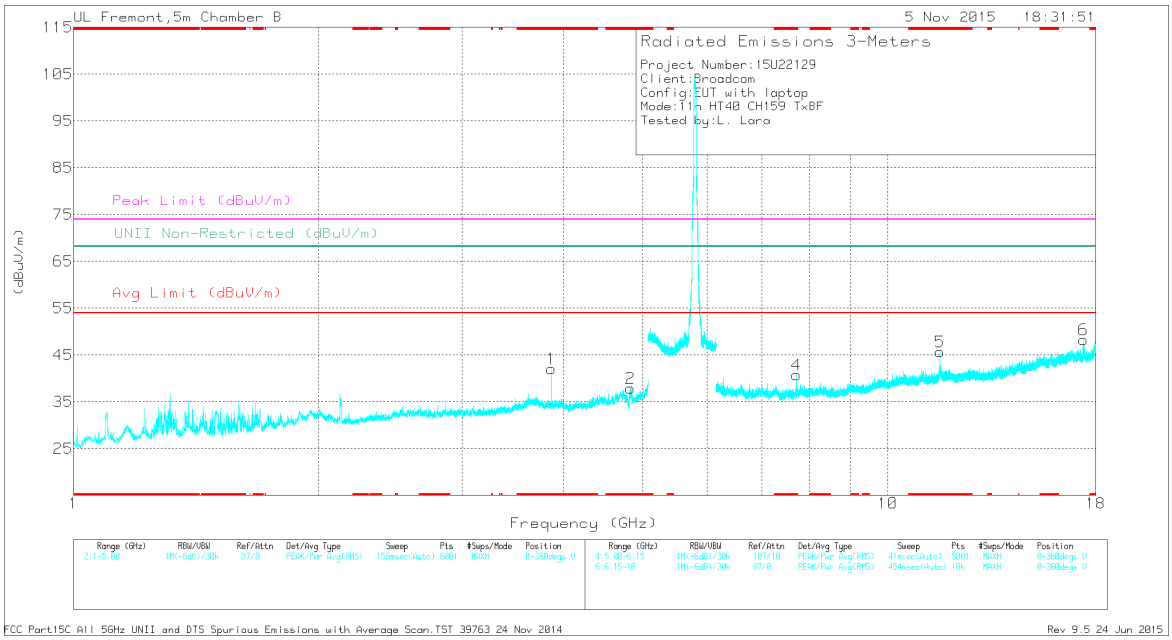
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.863	47.48	PK-U	33.4	-32.8	0	48.08	-	-	74	-25.92	-	-	62	144	V
	* 3.863	41.29	ADR	33.4	-32.8	1.88	43.77	54	-10.23	-	-	-	-	62	144	V
2	* 4.829	43.46	PK-U	34.3	-32.1	0	45.66	-	-	74	-28.34	-	-	154	101	V
	* 4.829	34.54	ADR	34.3	-32.1	1.88	38.62	54	-15.38	-	-	-	-	154	101	V
4	* 7.726	41.45	PK-U	35.5	-29.3	0	47.65	-	-	74	-26.35	-	-	133	103	V
	* 7.727	33.21	ADR	35.5	-29.3	1.88	41.29	54	-12.71	-	-	-	-	133	103	V
5	* 11.588	39.48	PK-U	38.4	-24.7	0	53.18	-	-	74	-20.82	-	-	194	288	V
	* 11.578	27.21	ADR	38.4	-24.5	1.88	42.99	54	-11.01	-	-	-	-	194	288	V
3	5.197	41.74	PK-U	34.3	-19.2	0	56.84	-	-	-	-	68.2	-11.36	5	141	H
6	17.378	42.9	PK-U	40.8	-20.7	0	63	-	-	-	-	68.2	-5.2	267	266	V

* - indicates frequency in CFR15.205 Restricted Band

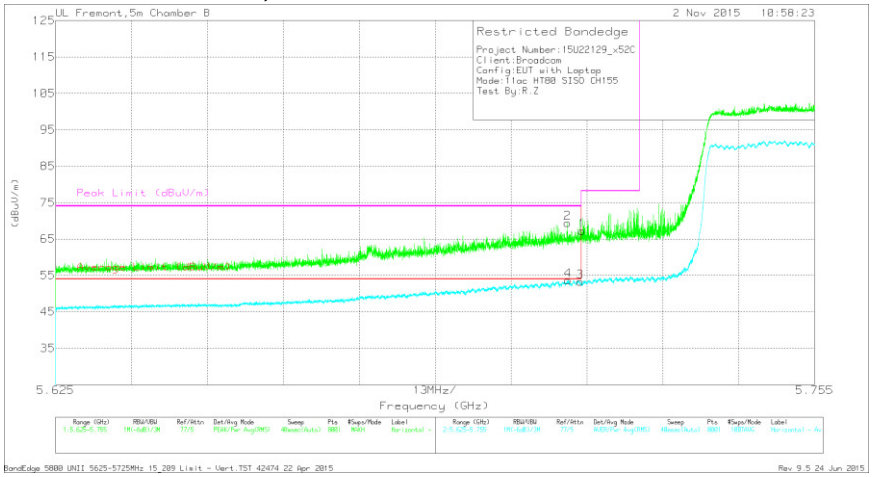
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.9. TX ABOVE 1 GHz 802.11ac HT80 MODE 1Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW EDGE)

CH155 LOW EDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (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	5.713	27.1	Pk	35	7.3	0	69.4	-	-	74	-4.6	249	252	V
4	5.713	11.24	RMS	35	7.3	.16	53.70	54	-.30	-	-	249	252	V
1	5.715	24.94	Pk	35	7.3	0	67.24	-	-	78.2	-10.96	249	252	V
3	5.715	10.77	RMS	35	7.3	.16	53.23	54	-.79	-	-	249	252	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH EDGE)

CH155 HIGH EDGE, VERTICAL

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (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	5.86	16.23	Pk	35.4	7.5	0	59.13	-	-	78.2	-19.07	0	402	V
3	5.86	4.58	RMS	35.4	7.5	.16	47.64	54	-6.36	-	-	0	402	V
2	5.872	17.32	Pk	35.4	7.5	0	60.22	-	-	74	-13.78	0	402	V
4	5.879	4.68	RMS	35.5	7.4	.16	47.74	54	-6.26	-	-	0	402	V

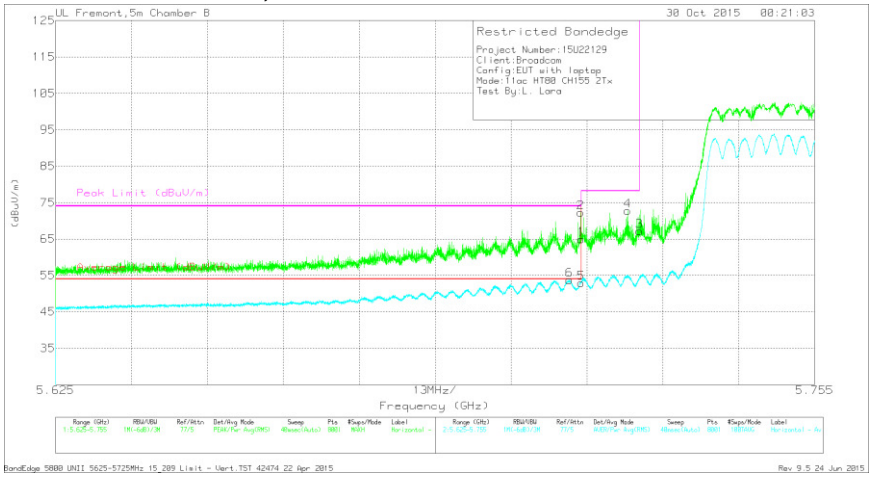
Pk - Peak detector

RMS - RMS detection

9.10. TX ABOVE 1 GHz 802.11ac HT80 MODE 2Tx IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW EDGE)

CH155 LOW EDGE, VERTICAL



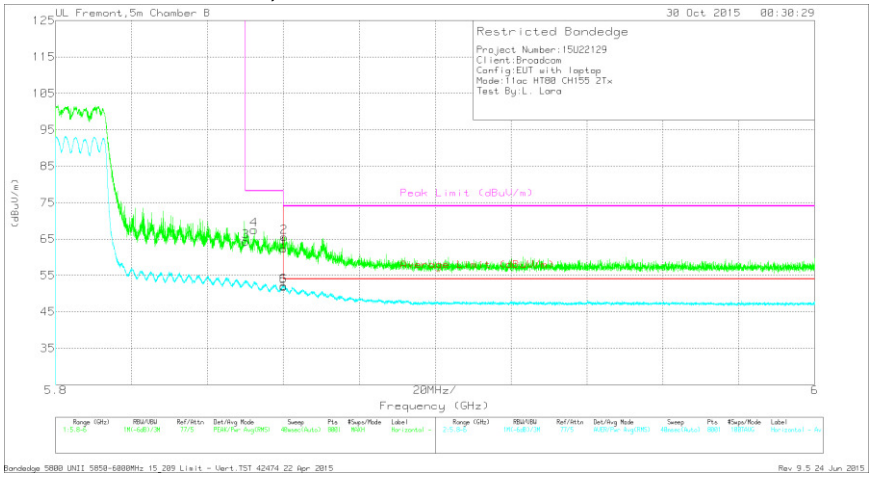
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	5.713	11.25	RMS	35	7.3	.16	53.71	54	-.29	-	-	66	296	V
1	5.715	22.7	Pk	35	7.3	0	65	-	-	74	-9	66	296	V
2	5.715	30.02	Pk	35	7.3	0	72.32	-	-	74	-1.68	66	296	V
5	5.715	10.42	RMS	35	7.3	.16	52.88	54	-1.12	-	-	66	296	V
4	5.723	30.4	Pk	35	7.4	0	72.8	-	-	78.2	-5.4	66	296	V
3	5.725	24.72	Pk	35	7.4	0	67.12	-	-	78.2	-11.08	66	296	V

Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH EDGE)

CH155 HIGH EDGE, VERTICAL



Trace Markers

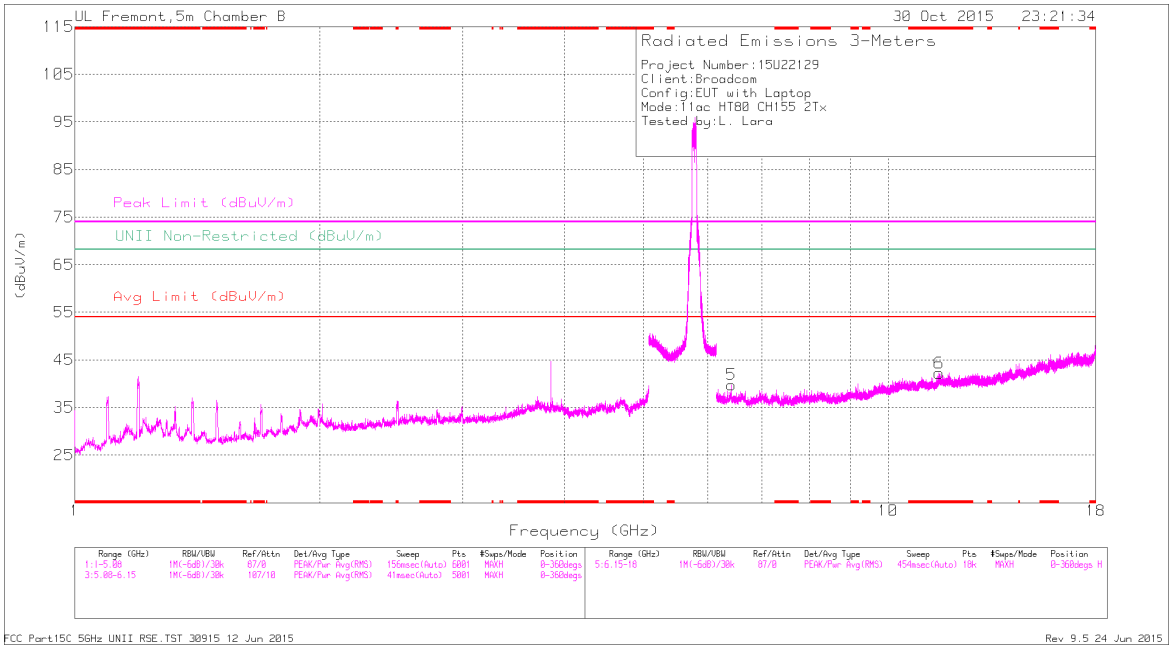
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	5.85	21.4	Pk	35.4	7.5	0	64.3	-	-	78.2	-13.9	69	302	V
4	5.852	24.69	Pk	35.4	7.4	0	67.49	-	-	78.2	-10.71	69	302	V
1	5.86	19.42	Pk	35.4	7.5	0	62.32	-	-	74	-11.68	69	302	V
2	5.86	22.64	Pk	35.4	7.5	0	65.54	-	-	74	-8.46	69	302	V
5	5.86	8.99	RMS	35.4	7.5	.16	52.05	54	-1.95	-	-	69	302	V
6	5.86	9.21	RMS	35.4	7.5	.16	52.27	54	-1.73	-	-	69	302	V

Pk - Peak detector

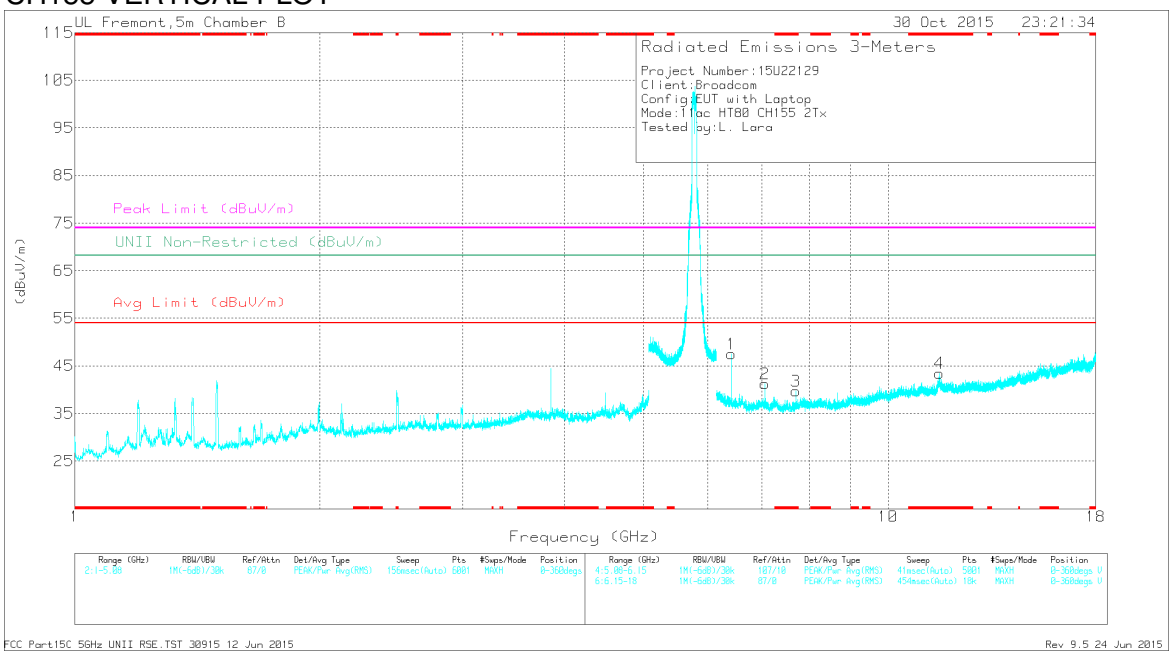
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

CH155 HORIZONTAL PLOT



CH155 VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/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
6	* 11.552	37.66	PK-U	38.3	-24.7	0	51.26	-	-	74	-22.74	-	-	127	398	H
	* 11.542	25.81	ADR	38.3	-24.8	.16	39.47	54	-14.53	-	-	-	-	127	398	H
3	* 7.7	40.84	PK-U	35.5	-29.5	0	46.84	-	-	74	-27.16	-	-	108	101	V
	* 7.7	32.98	ADR	35.5	-29.5	.16	39.14	54	-14.86	-	-	-	-	108	101	V
4	* 11.569	38.6	PK-U	38.4	-24.6	0	52.4	-	-	74	-21.6	-	-	276	204	V
	* 11.559	26.27	ADR	38.4	-24.6	.16	40.23	54	-13.77	-	-	-	-	276	204	V
5	6.417	44.56	PK-U	35.7	-29.9	0	50.36	-	-	-	-	68.2	-17.84	305	387	H
1	6.417	48.9	PK-U	35.7	-29.9	0	54.7	-	-	-	-	68.2	-13.5	245	280	V
2	7.058	43.26	PK-U	35.8	-29.9	0	49.16	-	-	-	-	68.2	-19.04	228	307	V

* - indicates frequency in CFR15.205 Restricted Band

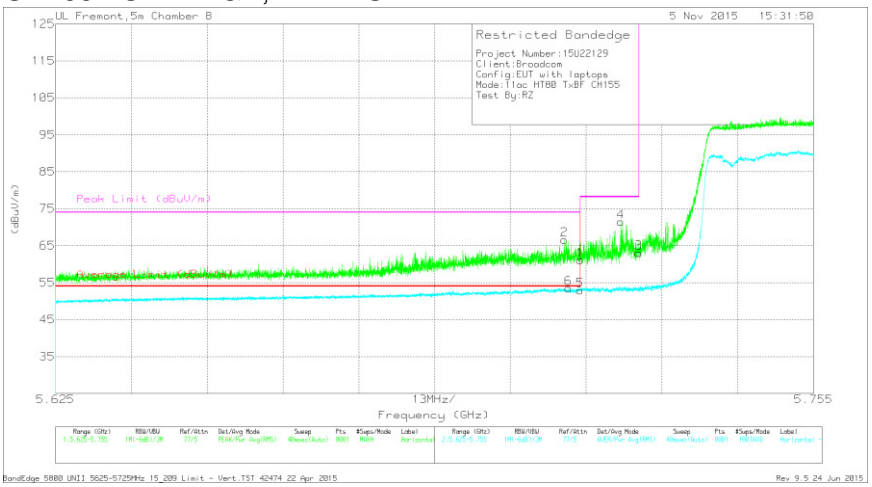
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.11. TX ABOVE 1 GHz 802.11ac HT80 MODE TxBF IN THE 5.8 GHz BAND

RESTRICTED BANDEDGE (LOW EDGE)

CH155 LOW EDGE, VERTICAL



Trace Markers

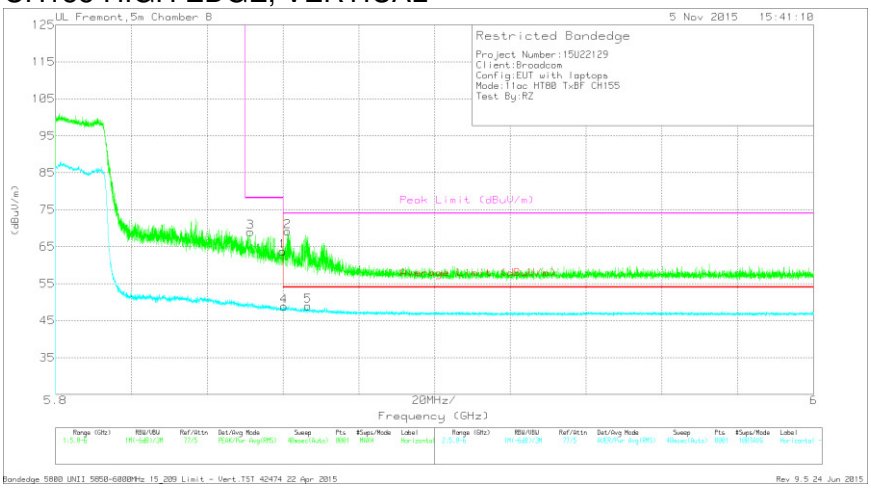
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.712	24.32	Pk	35	7.3	0	66.62	-	-	74	-7.38	189	279	V
6	5.713	6.86	RMS	35	7.3	4.32	53.48	54	-.52	-	-	189	279	V
1	5.715	18.85	Pk	35	7.3	0	61.15	-	-	74	-12.85	189	279	V
5	5.715	6.32	RMS	35	7.3	4.32	52.94	54	-1.06	-	-	189	279	V
4	5.722	29.04	Pk	35	7.4	0	71.44	-	-	78.2	-6.76	189	279	V
3	5.725	20.68	Pk	35	7.4	0	63.08	-	-	78.2	-15.12	189	279	V

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH EDGE)

CH155 HIGH EDGE, VERTICAL



Trace Markers

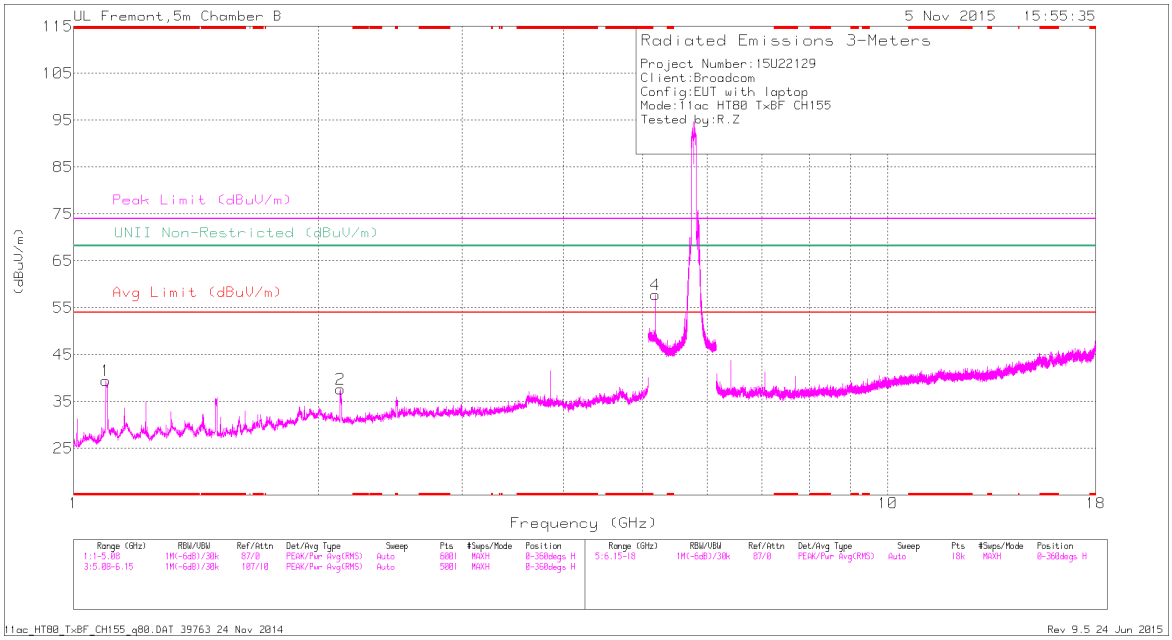
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Bypass (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	5.851	26.08	Pk	35.4	7.5	0	68.98	-	-	78.2	-9.22	223	360	V
1	5.86	20.81	Pk	35.4	7.5	0	63.71	-	-	78.2	-14.49	223	360	V
4	5.86	5.91	RMS	35.4	7.5	4.32	53.13	54	-0.87	-	-	223	360	V
2	5.861	26.22	Pk	35.4	7.5	0	69.12	-	-	74	-4.88	223	360	V
5	5.867	6.03	RMS	35.4	7.5	4.32	53.25	54	-0.75	-	-	223	360	V

Pk - Peak detector

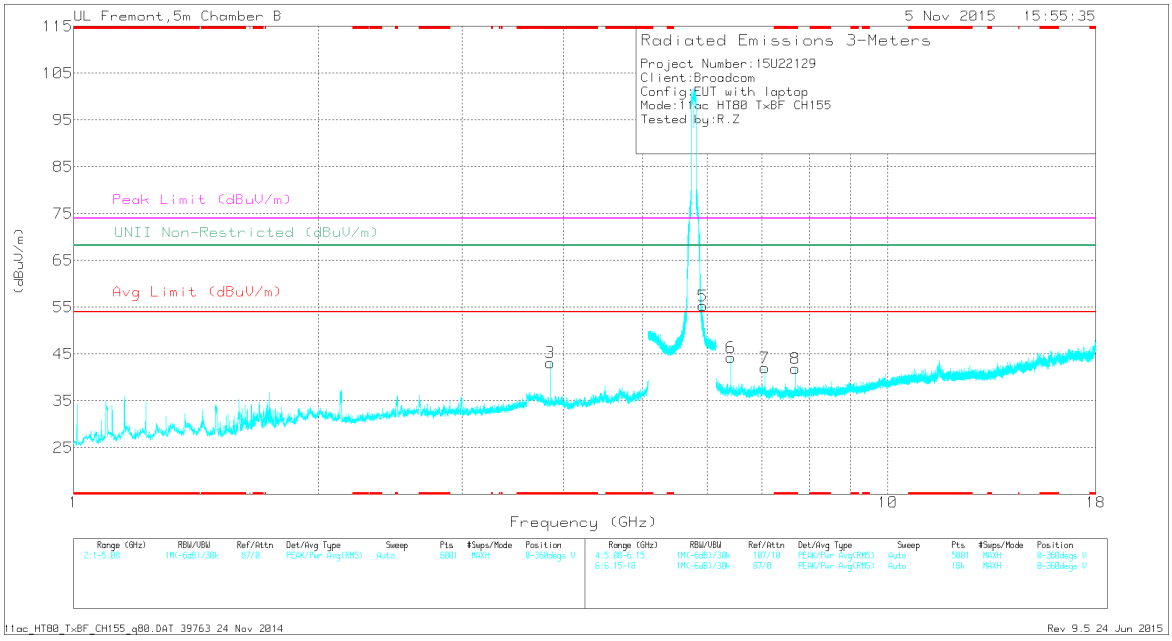
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

CH155 HORIZONTAL PLOT



CH155 VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/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	* 1.095	52.48	PK-U	27.6	-35.6	0	44.48	-	-	74	-29.52	-	-	89	398	H
	* 1.095	40.78	ADR	27.6	-35.6	4.32	37.1	54	-16.9	-	-	-	-	89	398	H
3	* 3.85	46.65	PK-U	33.4	-33	0	47.05	-	-	74	-26.95	-	-	125	293	V
	* 3.85	37.34	ADR	33.4	-33	4.32	42.06	54	-11.94	-	-	-	-	125	293	V
8	* 7.7	41.61	PK-U	35.5	-29.5	0	47.61	-	-	74	-26.39	-	-	135	177	V
	* 7.7	31.11	ADR	35.5	-29.5	4.32	41.43	54	-12.57	-	-	-	-	135	177	V
2	2.125	47.76	PK-U	31.6	-35	0	44.36	-	-	-	-	68.2	-23.84	89	200	H
4	5.185	42.35	PK-U	34.2	-19.2	0	57.35	-	-	-	-	68.2	-10.85	156	259	H
5	5.931	48.66	PK-U	35.6	-20.9	0	63.36	-	-	-	-	68.2	-4.84	156	102	V
6	6.416	42.92	PK-U	35.7	-29.9	0	48.72	-	-	-	-	68.2	-19.48	156	102	V
7	7.058	39.93	PK-U	35.8	-29.9	0	45.83	-	-	-	-	68.2	-22.37	156	199	V

* - indicates frequency in CFR15.205 Restricted Band

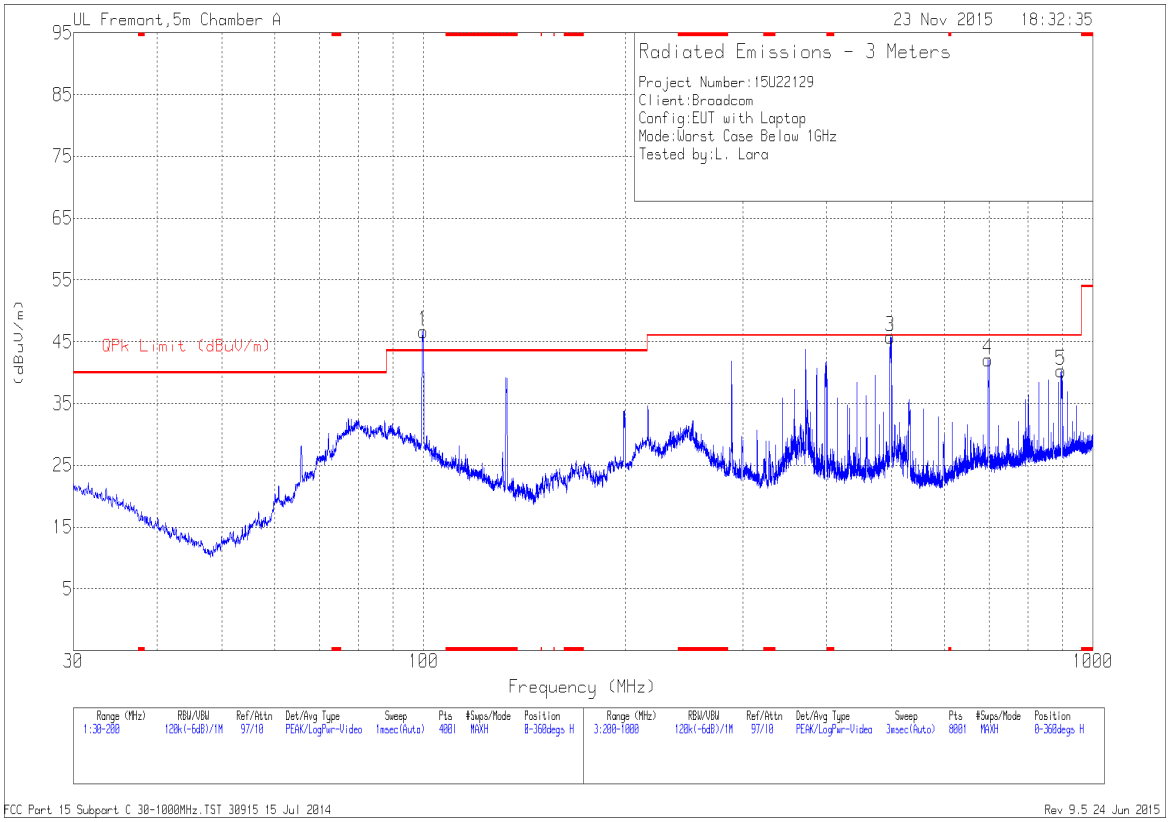
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.12. WORST-CASE BELOW 1 GHz

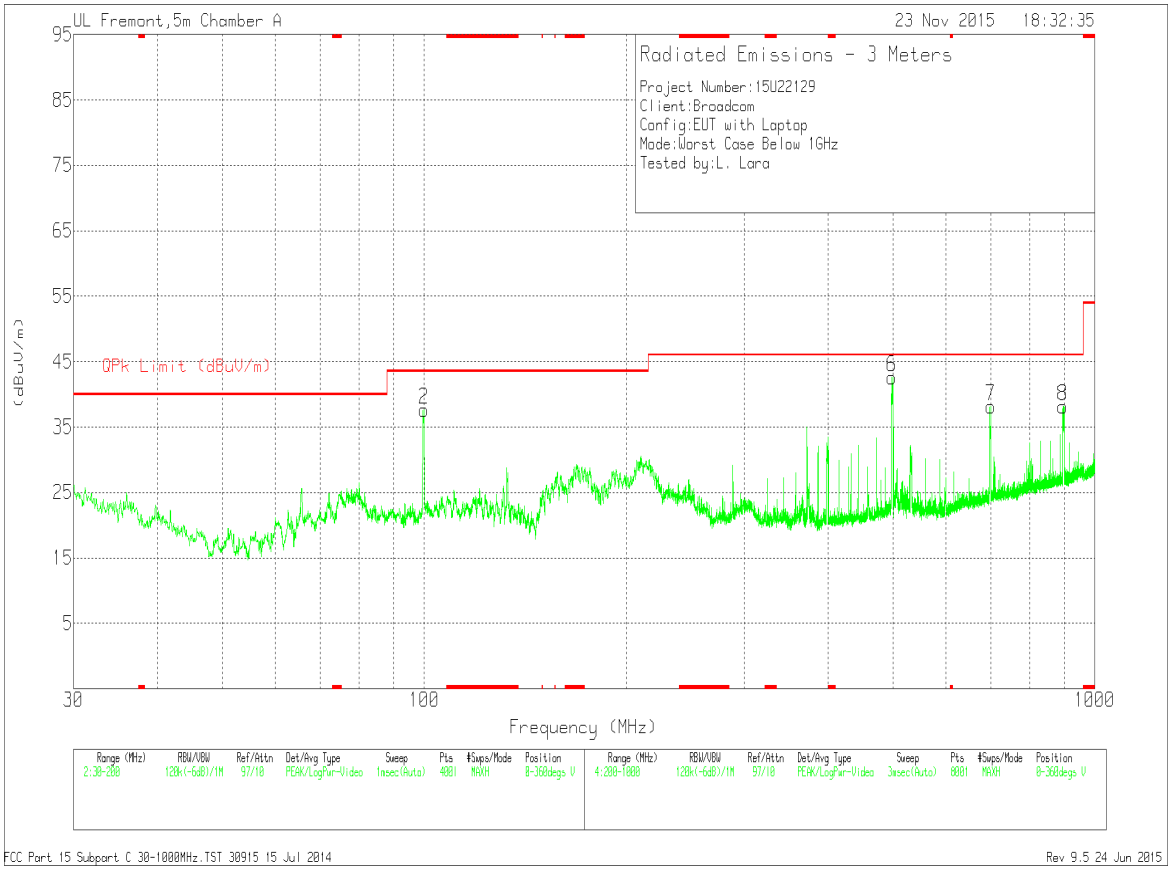
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	*99.9125	54.1	Pk	14.2	-30.6	37.7	-	-	0-360	101	V
1	*99.955	63.02	Pk	14.2	-30.6	46.62	-	-	0-360	299	H
3	499.6432	47.02	Qp	21.7	-28.7	40.02	46.02	-6	296	181	V
6	499.7251	52.53	Qp	21.7	-28.7	45.53	46.02	-.49	265	161	H
4	699.2424	41.02	Qp	24.2	-28.3	36.92	46.02	-9.1	276	103	H
7	699.6	42.3	Pk	24.2	-28.3	38.2	46.02	-7.82	0-360	199	V
5	895.9539	37.62	Qp	26.2	-27.4	36.42	46.02	-9.6	333	103	H
8	896	39.42	Pk	26.2	-27.4	38.22	46.02	-7.8	0-360	101	V

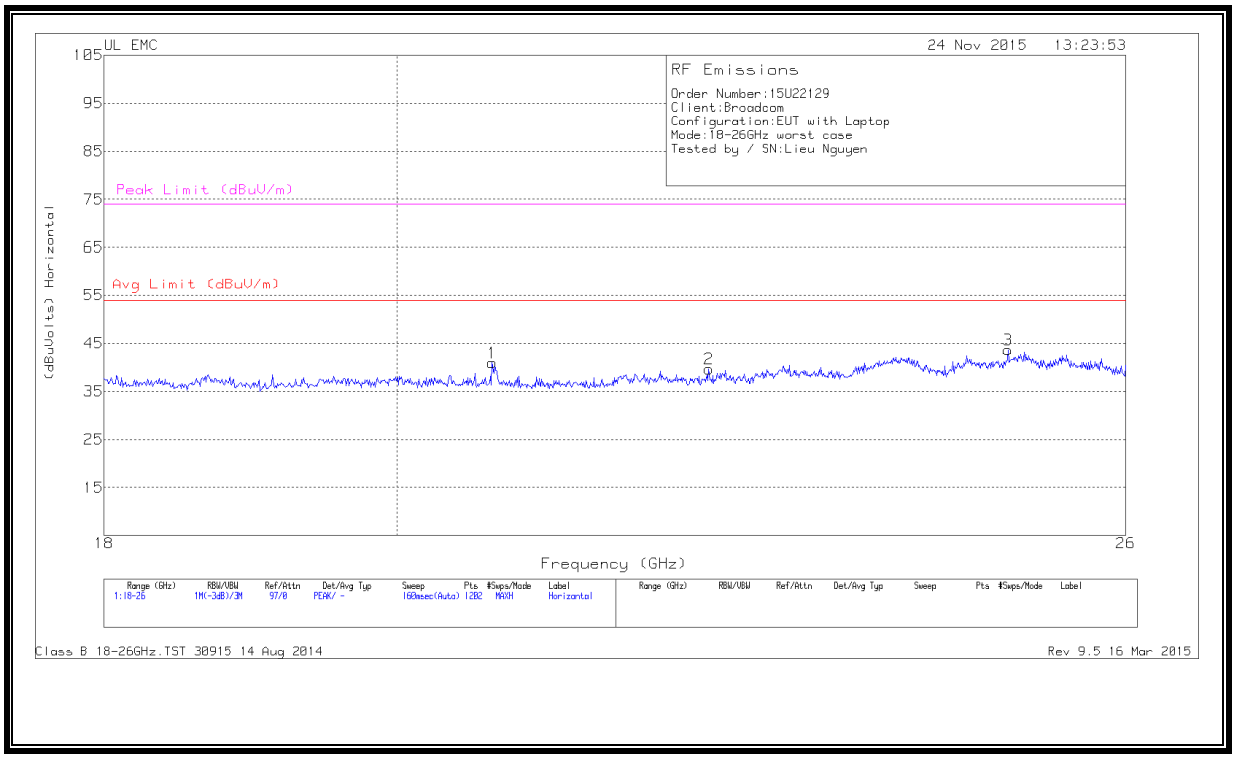
Pk - Peak detector
Qp - Quasi-Peak detector

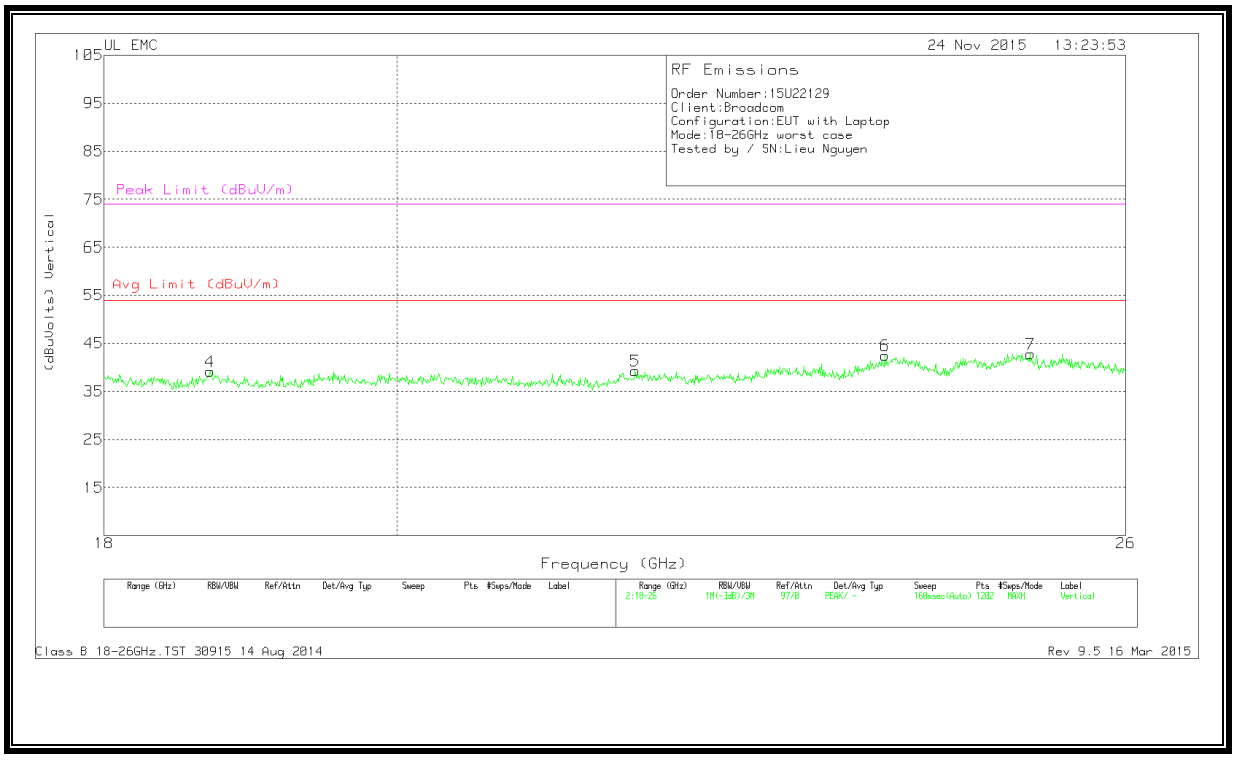
* - frequency determined to be coming from the support equipment

FCC Part 15 Subpart C 30-1000MHz.TST 30915 15 Jul 2014
Rev 9.5 24 Jun 2015

9.13. WORST-CASE ABOVE 18GHz

SPURIOUS EMISSIONS 18 – 26GHz



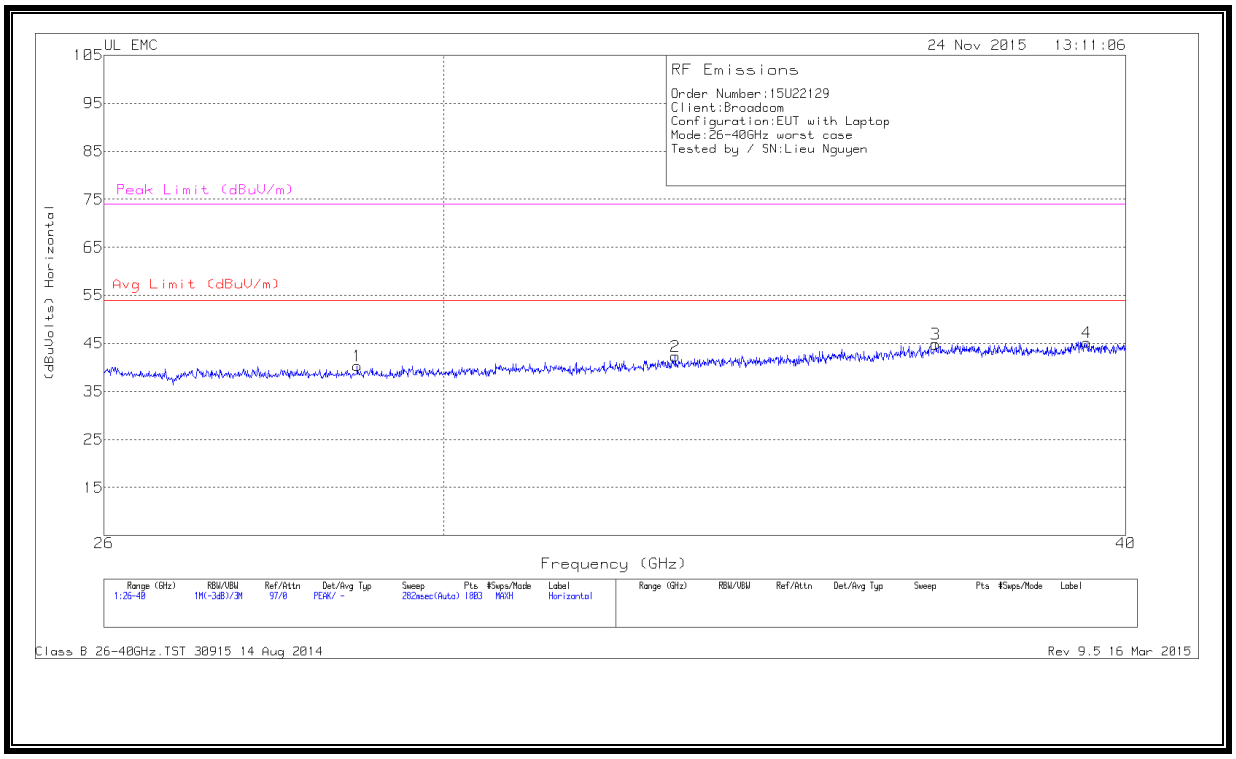


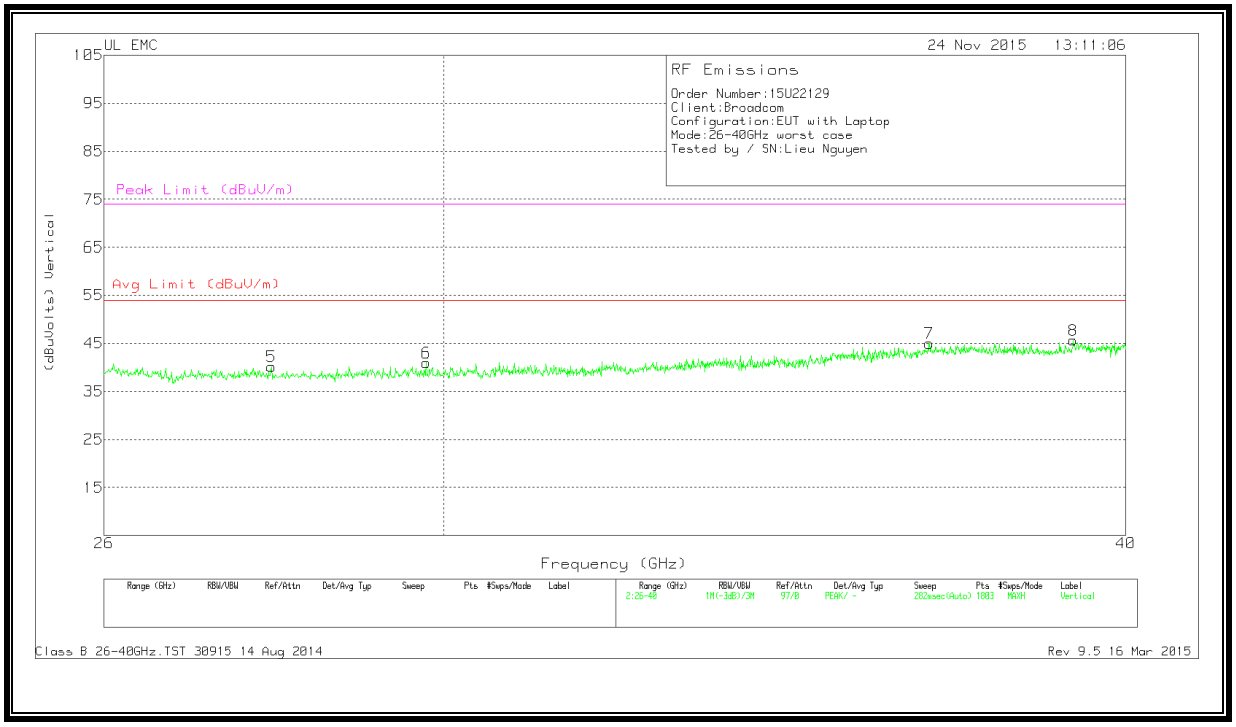
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	20.698	42.8	Pk	32.8	-25.1	-9.5	41	54	-13	74	-33
2	22.376	40.97	Pk	33.1	-24.9	-9.5	39.66	54	-14.33	74	-34.33
3	24.921	43.27	Pk	34.1	-24.2	-9.5	43.66	54	-10.33	74	-30.33
4	18.699	40.37	Pk	32.5	-24.2	-9.5	39.16	54	-14.83	74	-34.83
5	21.79	40.33	Pk	33.3	-24.8	-9.5	39.33	54	-14.66	74	-34.66
6	23.842	42.7	Pk	33.6	-24.3	-9.5	42.5	54	-11.5	74	-31.5
7	25.121	43.03	Pk	33.9	-24.6	-9.5	42.83	54	-11.16	74	-31.16

Pk - Peak detector
Class B 18-26GHz.TST 30915 14 Aug 2014
Rev 9.5 16 Mar 2015

SPURIOUS EMISSIONS 26 – 40GHz





Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	28.929	45.93	Pk	35.9	-32	-9.5	40.33	54	-13.66	74	-33.66
2	33.078	47.83	Pk	36.8	-32.8	-9.5	42.33	54	-11.66	74	-31.66
3	36.916	50.13	Pk	37.2	-33	-9.5	44.83	54	-9.166	74	-29.16
4	39.347	48.67	Pk	38.1	-32.1	-9.5	45.16	54	-8.833	74	-28.83
5	27.903	45.57	Pk	35.8	-31.7	-9.5	40.16	54	-13.83	74	-33.83
6	29.784	47	Pk	36.1	-32.6	-9.5	41	54	-13	74	-33
7	36.819	50.3	Pk	37.1	-32.9	-9.5	45	54	-9	74	-29
8	39.122	49.27	Pk	37.9	-32	-9.5	45.66	54	-8.33	74	-28.33

Pk - Peak detector
Class B 26-40GHz.TST 30915 14 Aug 2014
Rev 9.5 16 Mar 2015

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

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

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

RESULTS

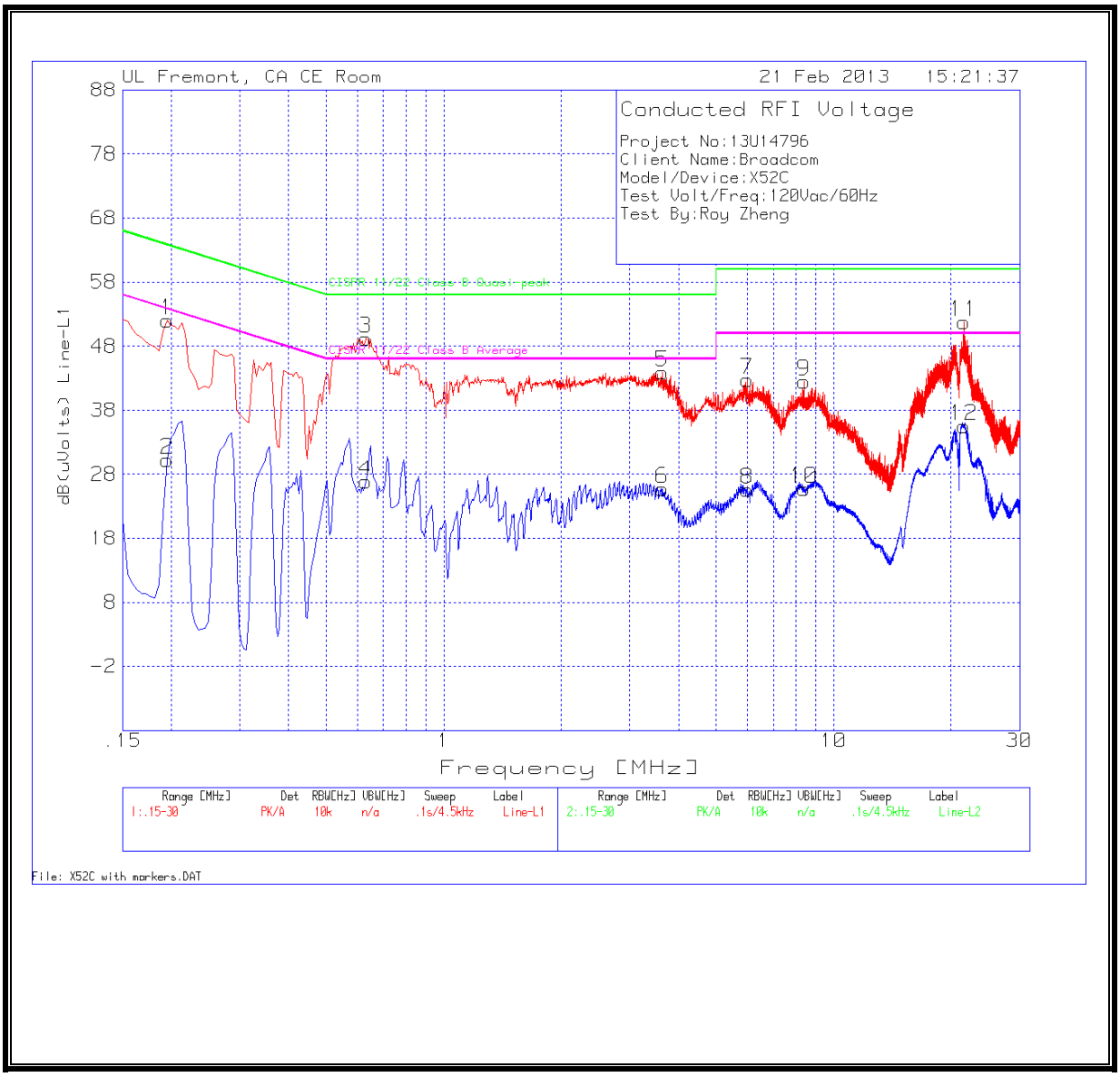
6 WORST EMISSIONS

Project No:	13U14796
Client Name:	Broadcom
Model/Device:	BCM94360CS2
Test Volt/Freq:	120Vac/60Hz
Test By:	Roy Zheng

Test Frequency	Meter Reading	Detector	T24 IL L1.TXT (dB)	LC Cables 1&3.TXT (dB)	dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin	CISPR 11/22 Class B Average	Margin
Line-L1 .15 - 30MHz									
0.195	51.88	PK	0.1	0	51.98	63.8	-11.82	-	-
0.195	30.16	Av	0.1	0	30.26	-	-	53.8	-23.54
0.6315	49.11	PK	0.1	0	49.21	56	-6.79	-	-
0.6315	26.73	Av	0.1	0	26.83	-	-	46	-19.17
3.6375	43.58	PK	0.2	0.1	43.88	56	-12.12	-	-
3.6375	25.42	Av	0.2	0.1	25.72	-	-	46	-20.28
6.0045	42.6	PK	0.1	0.1	42.8	60	-17.2	-	-
6.0045	25.42	Av	0.1	0.1	25.62	-	-	50	-24.38
8.394	42.24	PK	0.1	0.1	42.44	60	-17.56	-	-
8.394	25.52	Av	0.1	0.1	25.72	-	-	50	-24.28
21.5655	51.23	PK	0.3	0.2	51.73	60	-8.27	-	-
21.5655	35.07	Av	0.3	0.2	35.57	-	-	50	-14.43
Line-L2 .15 - 30MHz									
0.195	49.4	PK	0.1	0	49.5	63.8	-14.3	-	-
0.195	27.74	Av	0.1	0	27.84	-	-	53.8	-25.96
0.5055	48.99	PK	0.1	0	49.09	56	-6.91	-	-
0.5055	31.69	Av	0.1	0	31.79	-	-	46	-14.21
0.9375	45.71	PK	0.1	0	45.81	56	-10.19	-	-
0.9375	30.11	Av	0.1	0	30.21	-	-	46	-15.79
3.534	43.72	PK	0.1	0.1	43.92	56	-12.08	-	-
3.534	24.45	Av	0.1	0.1	24.65	-	-	46	-21.35
8.907	42.59	PK	0.1	0.1	42.79	60	-17.21	-	-
8.907	26.6	Av	0.1	0.1	26.8	-	-	50	-23.2
21.759	47.25	PK	0.3	0.2	47.75	60	-12.25	-	-
21.759	27.99	Av	0.3	0.2	28.49	-	-	50	-21.51

PK - Peak detector
QP - Quasi-Peak detector
Av - Average detector

LINE 1 RESULTS



LINE 2 RESULTS