FCC 47 CFR PART 15 SUBPART E

CERTIFICATION TEST REPORT

FOR

BCM94709R-M 802.11 a/n/ac Access Point

MODEL NUMBER: BCM94709R-M

FCC ID: QDS-BRCM1091

REPORT NUMBER: 11533080-E1V4

ISSUE DATE: FEBRUARY 27, 2017

Prepared for
BROADCOM CORPORATION
190 MATHILDA PLACE
SUNNYVALE, CA, 94086, U.S.A

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	1/20/17	Initial Issue	C. Vergonio
V2	02/21/17	Updated Section 8.5.2.	C. Vergonio
V3	02/22/17	Updated Section 5.1, added AP Indoor application only Updated Section 8.5.1 26dB BW plot and procedure. Updated Section 8.5.2 Limits. Updated Section 8.9.2 Limits frequency range.	C. Vergonio
V4	02/27/17	Updated Section 6, test and measurement equipment list. Updated Section 8.5.1 26dB BW plot. Updated Section 8.5.2 Limits and added notes.	C. Vergonio

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BROADCOM CORPORATION
190 MATHILDA PLACE
SUNNYVALE, CA 94086, U.S.A

EUT DESCRIPTION: BCM94709R-M 802.11 a/n/ac Access Point

MODEL: BCM94709R-M

SERIAL NUMBER: 2088989 (Conducted) ; 2088932 (Radiated)

DATE TESTED: December 13, 2016 to February 27, 2017

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

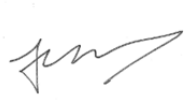
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement 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, or any agency of the U.S. Government.

Approved & Released For
UL Verification Services Inc. By:

CHARLES VERGONIO
PROJECT LEAD
UL Verification Services Inc.

Prepared By:



JASON QIAN
EMC ENGINEER
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, ANSI C63.10-2013.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

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, 9KHz to 0.15 MHz	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance,1000 to 18000 MHz	4.32 dB
Radiated Disturbance,18000 to 26000 MHz	4.45 dB
Radiated Disturbance,26000 to 40000 MHz	5.24 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an BCM94709R-M 802.11 a/n/ac Access Point. The radio module is BCM94366MCM5 802.11 a/n/ac radio as manufactured by Broadcom. Access Point is for indoor application only.

5.2. MAXIMUM OUTPUT POWER

Beamforming Output Power:

The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power. Only TXBF 4TX power needed in report.

The transmitter has a maximum conducted output power as follows:

5.3 GHz BAND

Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Power, Chain 3 (dBm)	Output Power (dBm)	Output Power (mW)
5.3 GHz band, 4TX BF							
5270 - 5310	802.11n HT40 BF	15.21	15.88	15.33	14.72	21.33	135.68

5.6 GHz BAND

Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Power, Chain 3 (dBm)	Output Power (dBm)	Output Power (mW)
5.6 GHz band, 4TX BF							
5510 - 5710	802.11n HT40 BF	17.82	17.54	17.72	17.12	23.58	227.97

CDD Output Power:

The transmitter has a maximum conducted output power as follows:

5.3 GHz BAND

Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Power, Chain 3 (dBm)	Output Power (dBm)	Output Power (mW)
5.2GHz & 5.3GHz, 2TX CDD							
5210	802.11ac HT80+HT80 CDD	15.09	15.46	N/A	N/A	18.29	67.44
5290	802.11ac HT80+HT80 CDD	N/A	N/A	15.64	15.05	18.37	68.63

5.6 GHz BAND

Frequency Range (MHz)	Mode	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Power, Chain 2 (dBm)	Power, Chain 3 (dBm)	Output Power (dBm)	Output Power (mW)
5.6 GHz band, 2TX CDD							
5530	802.11ac HT80+HT80 CDD	15.63	16.32	N/A	N/A	19.00	79.41
5610	802.11ac HT80+HT80 CDD	N/A	N/A	15.87	15.19	18.55	71.67

List of test reduction and modes covering other modes:

5.3 GHz BAND

5250 - 5350 MHz Authorized Frequency Band (Antenna Port Testing)		
Frequency Range (MHz)	**Mode**	**Covered By**
5.3 GHz band, 4TX		
5260 - 5320	802.11n HT20 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11n HT20 4TX BF
5270 - 5310	802.11n HT40 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11n HT40 4TX BF
5290	802.11ac HT80 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11ac HT80 4TX BF

5210-5290 MHz Authorized Frequency Band (Antenna Port Testing)		
Frequency Range (MHz)	**Mode**	**Covered By**
5.2 GHz & 5.3 GHz band, 2TX		
5210	802.11ac HT80+HT80 2TX SDM/STBC	802.11ac HT80+HT80 2TX CDD
5290	802.11ac HT80+HT80 2TX SDM/STBC	802.11ac HT80+HT80 2TX CDD

5.6 GHz BAND

5500 - 5720 MHz Authorized Frequency Band (Antenna Port Testing)		
Frequency Range (MHz)	**Mode**	**Covered By**
5.6 GHz band, 4TX		
5500 - 5720	802.11n HT20 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11n HT20 4TX BF
5510 - 5710	802.11n HT40 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11n HT40 4TX BF
5530 - 5690	802.11ac HT80 1TX, 2TX, 3TX, 4TX CDD/SDM/STBC	802.11ac HT80 4TX BF

5530-5610 MHz Authorized Frequency Band (Antenna Port Testing)		
Frequency Range (MHz)	**Mode**	**Covered By**
5.6 GHz band, 2TX		
5530	802.11ac HT80+HT80 2TX SDM/STBC	802.11ac HT80+HT80 2TX CDD
5610	802.11ac HT80+HT80 2TX SDM/STBC	802.11ac HT80+HT80 2TX CDD

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes 4 WLAN omni-directional antennas, with a maximum gain of 0.3 dBi.

5.4. SOFTWARE AND FIRMWARE

The test utility software used during testing was PuTTY Ver 0.63.0.0.

The test software used during testing was Broadcom REL 7.14.164.301.

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1GHz, above 18GHz, 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 EUT normal position is placed flat on the turn table with all four antennas pointing up. There was no X, Y, Z worst-case positions investigation needed. Please see setup photos.

Worst-case data rates as provided by the client were:

802.11n HT20mode: MCS0
802.11n HT40mode: MCS0
802.11ac HT80mode: MCS0
802.11ac HT80+HT80 mode: MCS0

Radiated emissions for EUT with antenna was performed and passed; therefore, antenna port spurious was not performed.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Monitor	ASUS	VS197	E2LMTF118423	DoC
Support PCB Board	Broadcom	BCM94709R_1	1923041	DoC
Support PCB Board	Broadcom	BCM94709R_2	1839019	DoC
Linux Laptop	GIGABYTE	P105	1517631219	DoC
AC/DC Adapter	FSP GROUP INC	FSP065-REB	-	DoC
Keyboard	DELL	SK-8135	E145614	DoC
Mouse	Logitech	M100	1510HS03JPK8	DoC
Laptop	Lenovo	G560	CB06427441	DoC
AC/DC Adapter	Lenovo	ADP-65YB B	-	DoC

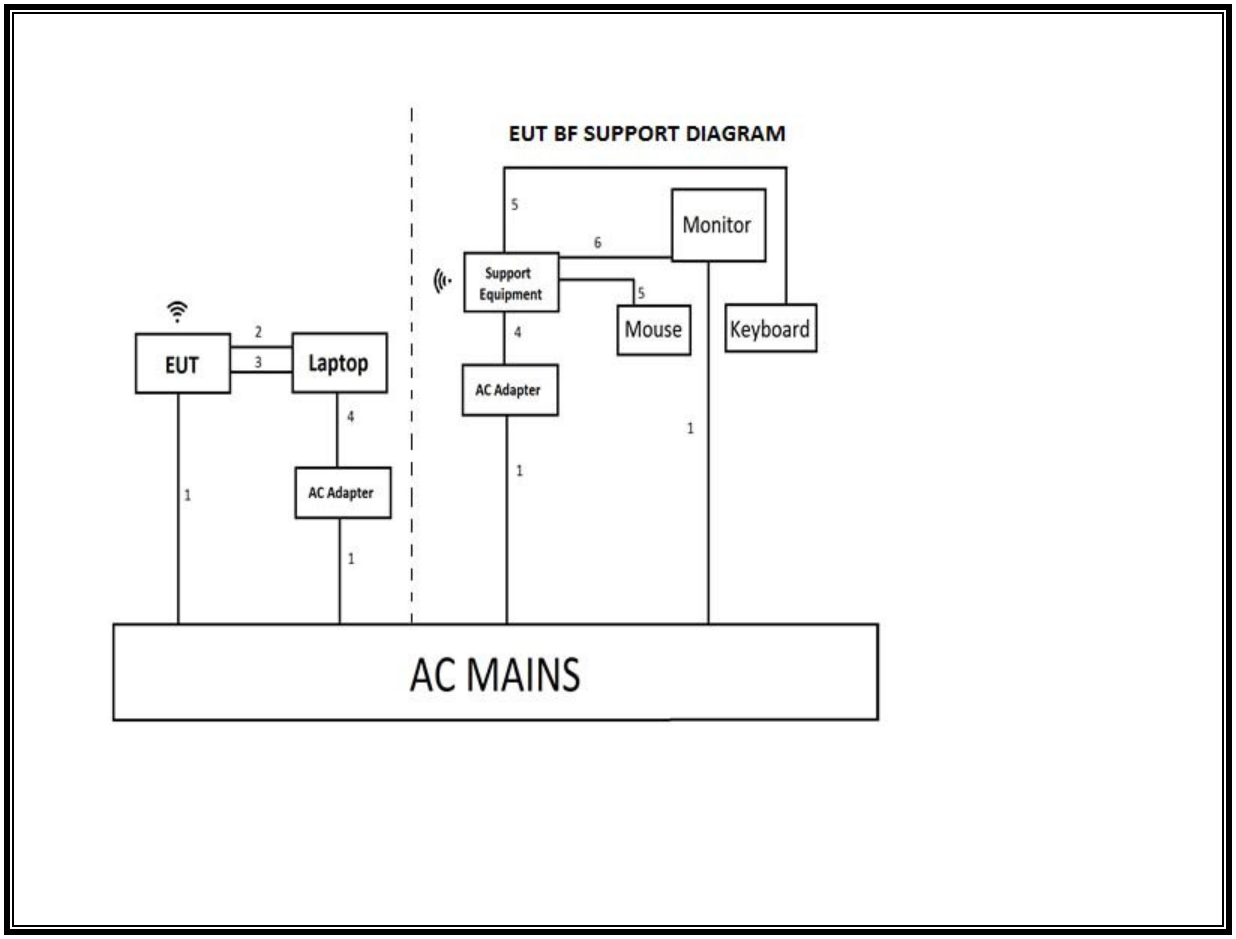
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC Power	4	AC	Unshielded	1	-
2	USB	1	USB-Serial	Shielded	1	EUT to Laptop
3	Ethernet	1	RJ45	Unshielded	1	EUT to Laptop
4	DC Power	2	DC	Unshielded	1	-
5	USB	2	USB	Unshielded	1	-
6	HDMI	1	HDMI	Shielded	1	-

TEST SETUP

The EUT is installed in a support PCB Board, which is connected to a laptop via a USB-Serial cable during the tests. Test software exercised the radio card.

TEST SETUP DIAGRAM



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
Bilog Antenna 30-1000MHz	Sunol	JB1	899	05/26/16	05/26/17
Horn Antenna 1-18GHz	ETS Lindgren	3117	346	02/22/16	02/22/17
Horn Antenna 18-26GHz	ARA	MWH-1826/B	449	05/26/16	05/26/17
Horn Antenna 26.5- 40GHz	ARA	MWH-2640/B	446	05/25/16	05/25/17
Preamp 10kHz-1000MHz	Sonoma	310	300	11/10/16	11/10/17
Preamp 1-8GHz	Miteq	AMF-4D-01000800-30-29P	1170	04/28/16	04/28/17
Preamp 1-18GHz	Miteq	AFS42-00101800-25-2-42	1165	08/01/16	08/01/17
Preamp 1-26.5GHz	Agilent	8449B	404	07/05/16	07/05/17
Amplifier, 26-40GHz	Miteq	NSP4000-SP2	88	04/07/16	04/17/17
Spectrum Analyzer 3kHz - 26.5GH	Agilent	E4440A	199	07/22/16	07/22/17
Spectrum Analyzer 9kHz - 40GHz	Agilent	8564E	106	09/07/16	09/07/17
Coaxial Switchbox	Agilent	SP6T	927	02/25/16	02/25/17
EMI Test Receiver	Rohde & Schwarz	ESR-EMI	1436	11/19/16	11/19/17
Spectrum Analzer 3Hz to 44GHz	Agilent	N9030A	908	04/13/16	04/13/17
P-Series Power Meter	Keysight	N1911A	1264	07/08/16	07/08/17
RF Switch Box	Agilent	BOX #2	927	03/03/16	03/03/17
Attenuator/Switch Driver	Agilent	11713A	745	03/03/16	03/03/17
LISN for Conducted Emission	FCC	50/250-25-2	1310	06/08/16	06/08/17
Power Sensor	Agilent	N1921A	1224	03/22/16	03/22/17
Loop Antenna	EMCO	6502	35	03/24/16	03/24/17
Antenna Port Software	UL	UL RF	Ver 4.2, Mar 7, 2016		
Radiated Software	UL	UL EMC	Ver 9.5, June 24, 2015		
Conducted Software	UL	UL EMC	Ver 9.5, Mar 26, 2015		

7. MEASUREMENT METHODS

On Time and Duty Cycle: KDB 789033 D02 v01r03, Section B.

26 dB Emission BW: KDB 789033 D02 v01r03, Section C and KDB 644545 D03 v01, Section D) 1) a), Section D) 1) b).

Conducted Output Power: KDB 789033 D02 v01r03, Section E.3.b (Method PM-G), KDB 662911 D01 v02r01.

Power Spectral Density: KDB 789033 D02 v01r03, Section F, KDB 662911 D01 v02r01.

Unwanted emissions in restricted bands: KDB 789033 D02 v01r03, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r03, Sections G.3, G.4, and G.5.

Use of IEEE 802.11 channels that straddle the UNII-2C and UNII-3 bands at 5725 MHz: KDB 789033 D02 v01r03, Section III

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

CDD (for conducted)

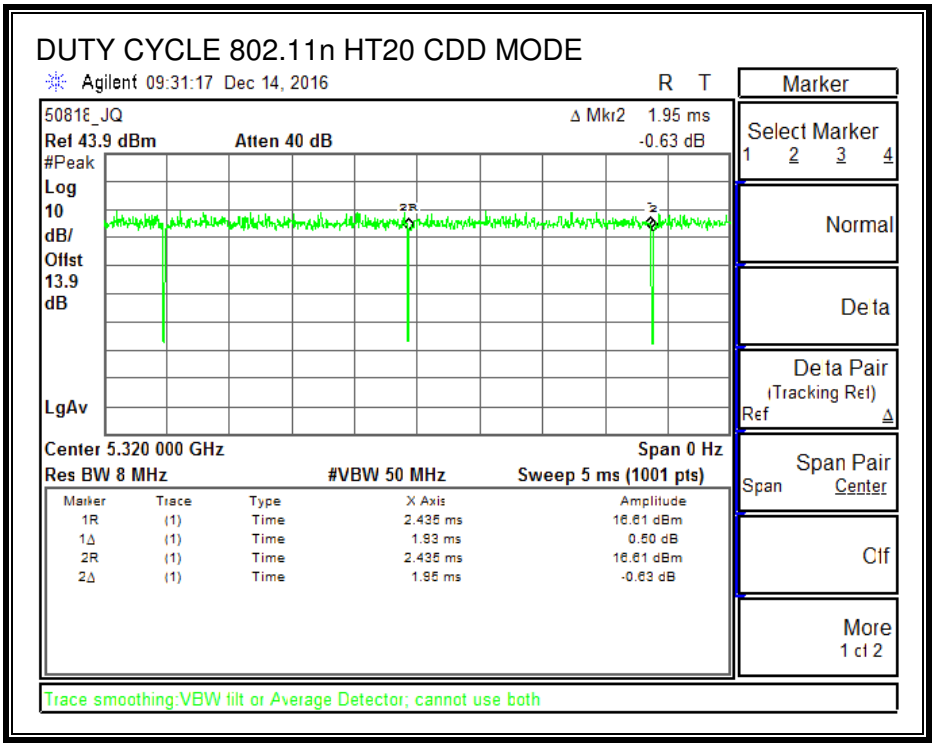
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11n HT20 CDD	1.930	1.950	0.990	98.97%	0.00	0.010
802.11n HT40 CDD	0.9507	0.9721	0.978	97.80%	0.10	1.052
802.11ac HT80 CDD	0.4600	0.4800	0.958	95.83%	0.18	2.174
802.11ac HT80+HT80 CDD	0.2520	0.2720	0.926	92.65%	0.33	3.968

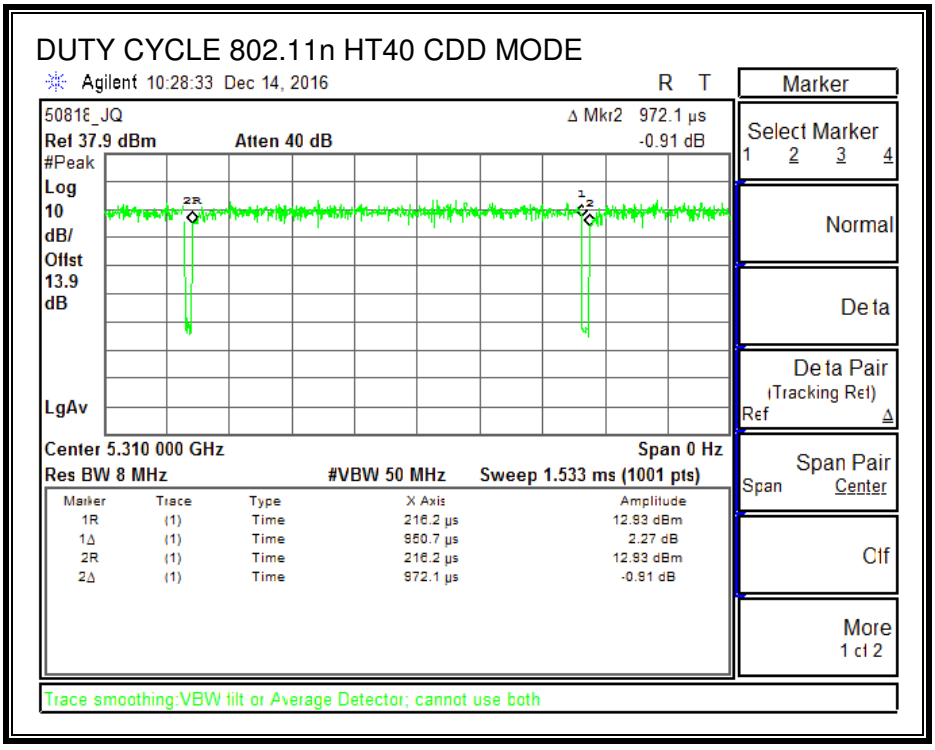
TXBF (for radiated)

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
802.11n HT20 TxBF	3.872	4.180	0.926	92.63%	0.33	0.258
802.11n HT40 TxBF	4.6500	4.9500	0.939	93.94%	0.27	0.215
802.11ac HT80 TxBF	5.1300	5.4000	0.950	95.00%	0.22	0.195
802.11ac HT80+HT80 CDD	0.2520	0.2720	0.926	92.65%	0.33	3.968

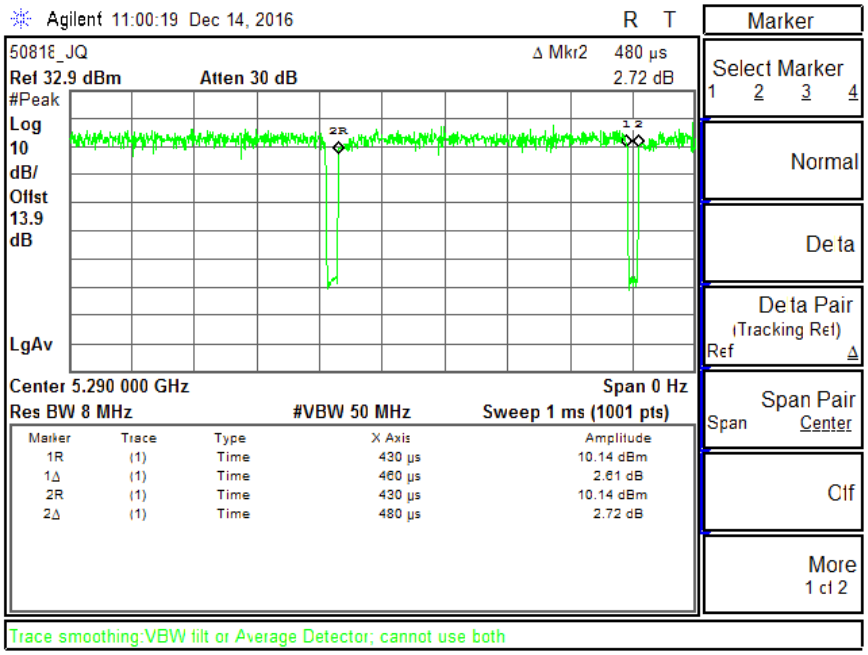
NOTE: The 802.11ac HT80+HT80 does not support TxBF so the duty cycle above is from CDD mode.

DUTY CYCLE PLOTS for CDD





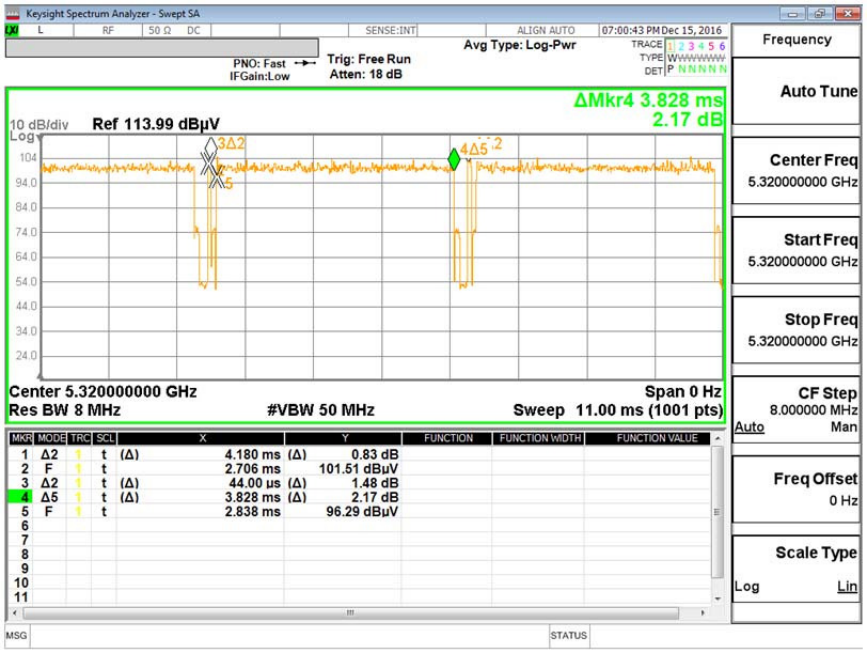
DUTY CYCLE 802.11ac HT80 CDD MODE



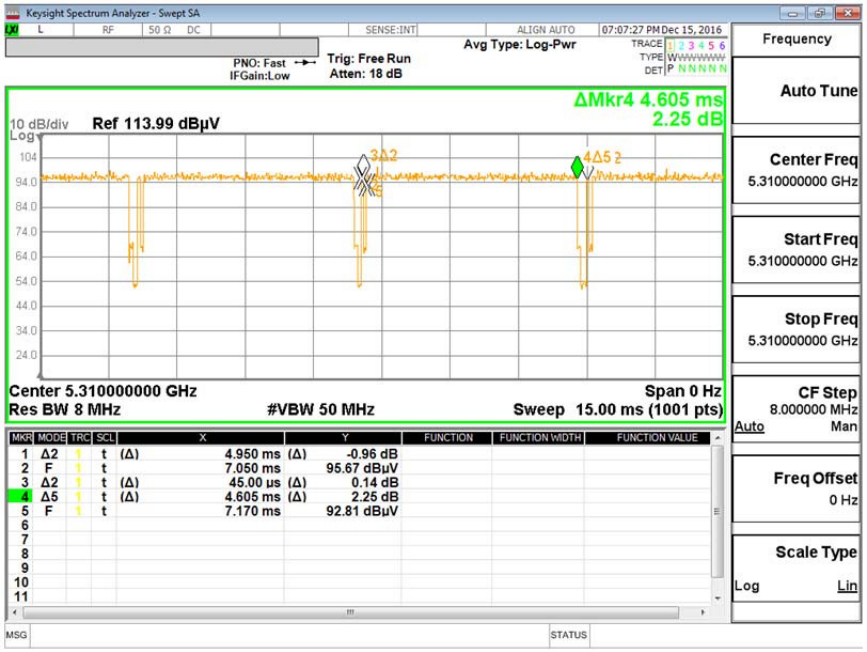
DUTY CYCLE 802.11ac HT80+HT80 CDD MODE

DUTY CYCLE PLOTS for TXBF

DUTY CYCLE 802.11n HT20 TXBF MODE



DUTY CYCLE 802.11n HT40 TXBF MODE



DUTY CYCLE 802.11ac HT80 TXBF MODE

DUTY CYCLE 802.11ac HT80+HT80 CDD MODE

8.2. 802.11n HT20 MODE IN THE 5.3 GHz BAND

8.2.1. 26 dB BANDWIDTH

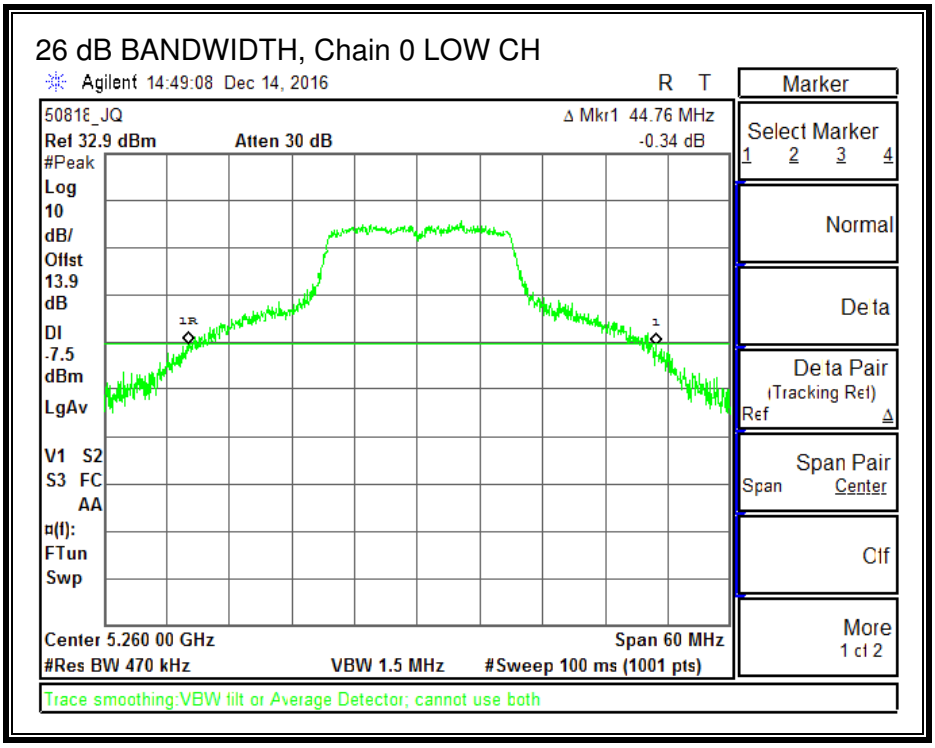
LIMITS

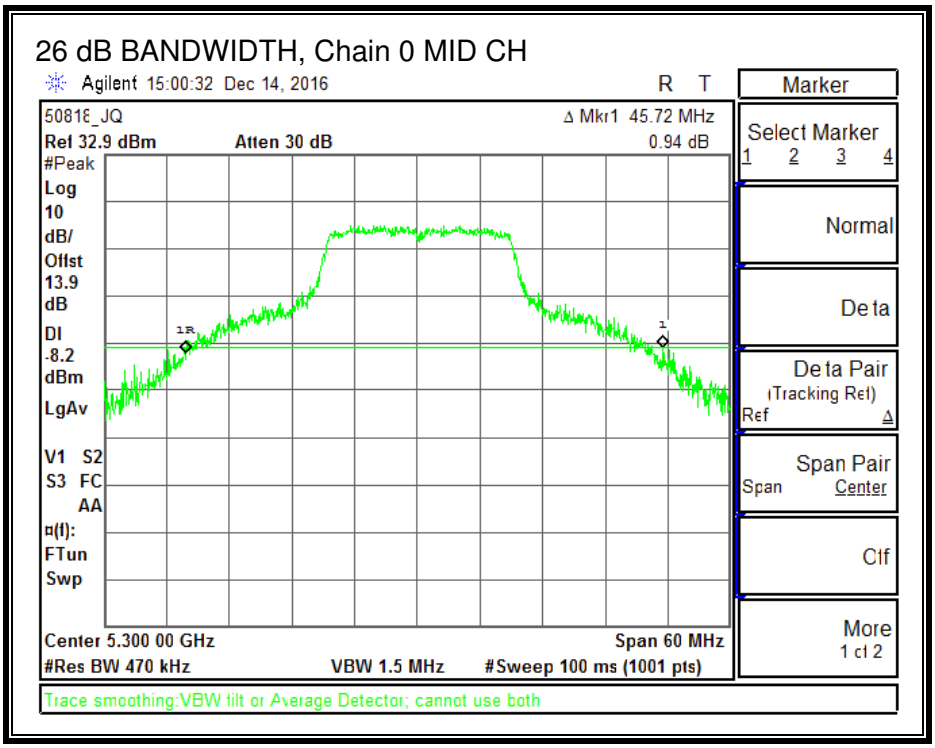
None; for reporting purposes only.

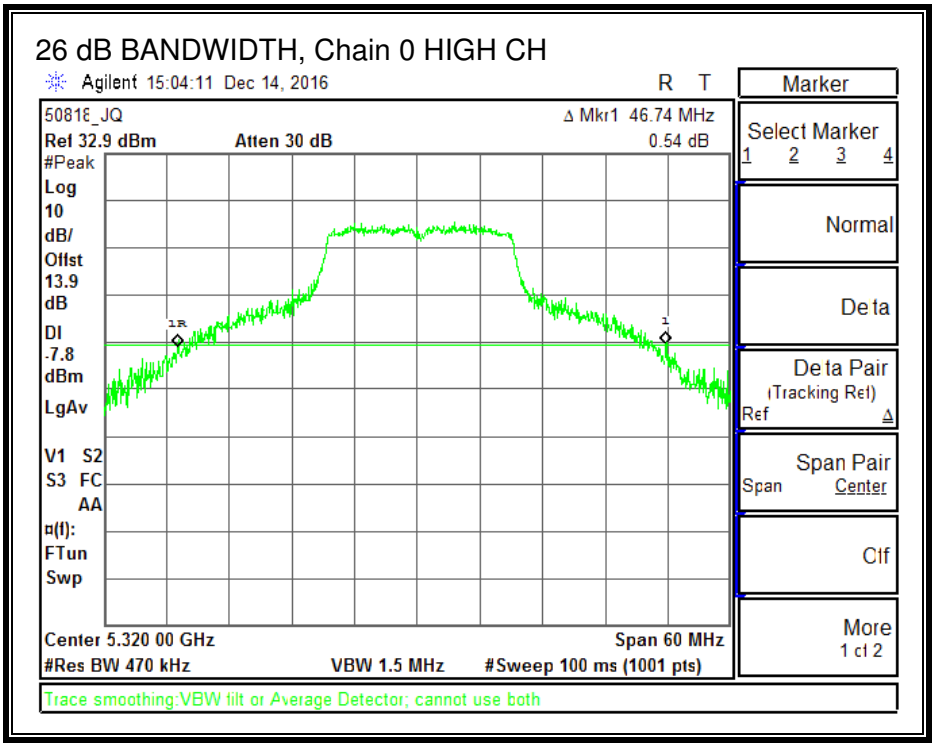
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5260	44.76	43.68	44.52	45.12
Mid	5300	45.72	45.36	43.86	46.92
High	5320	46.74	46.86	45.18	45.78

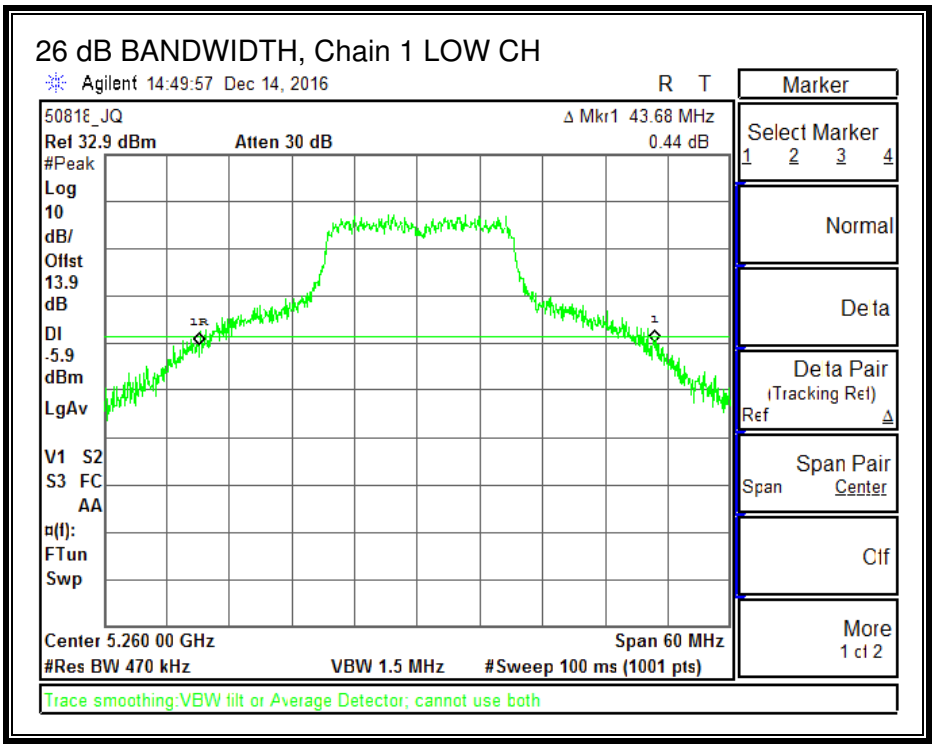
26 dB BANDWIDTH, Chain 0

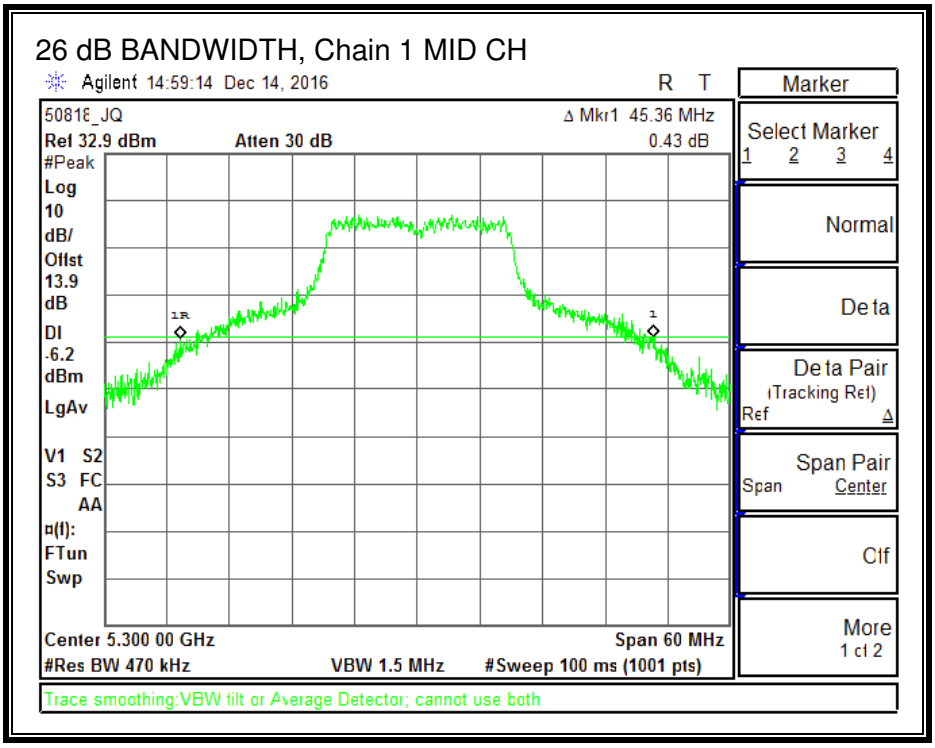


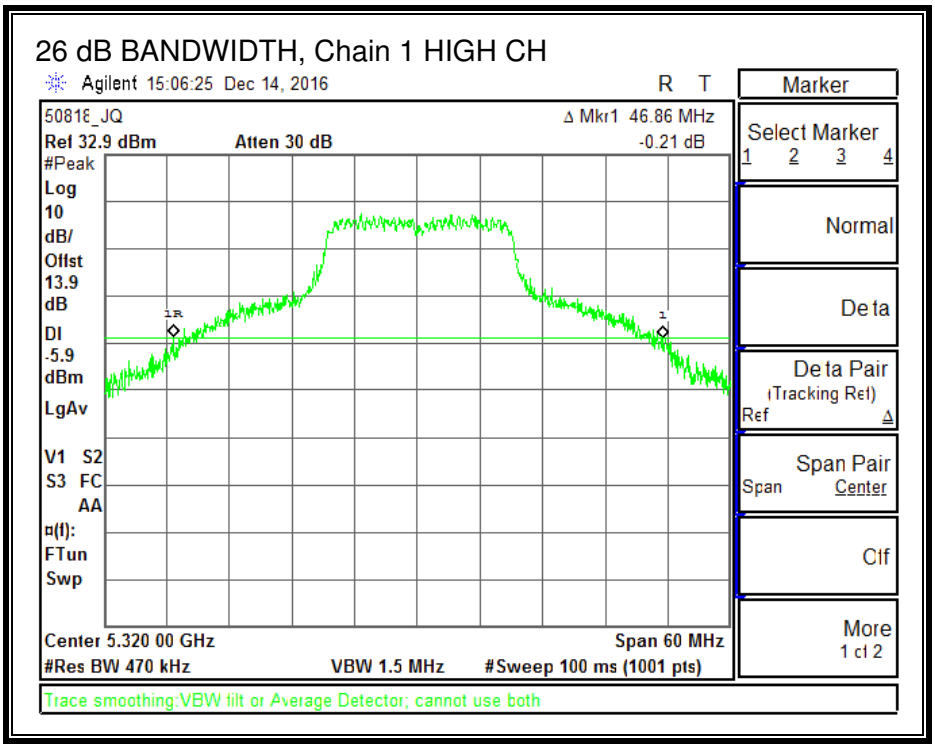




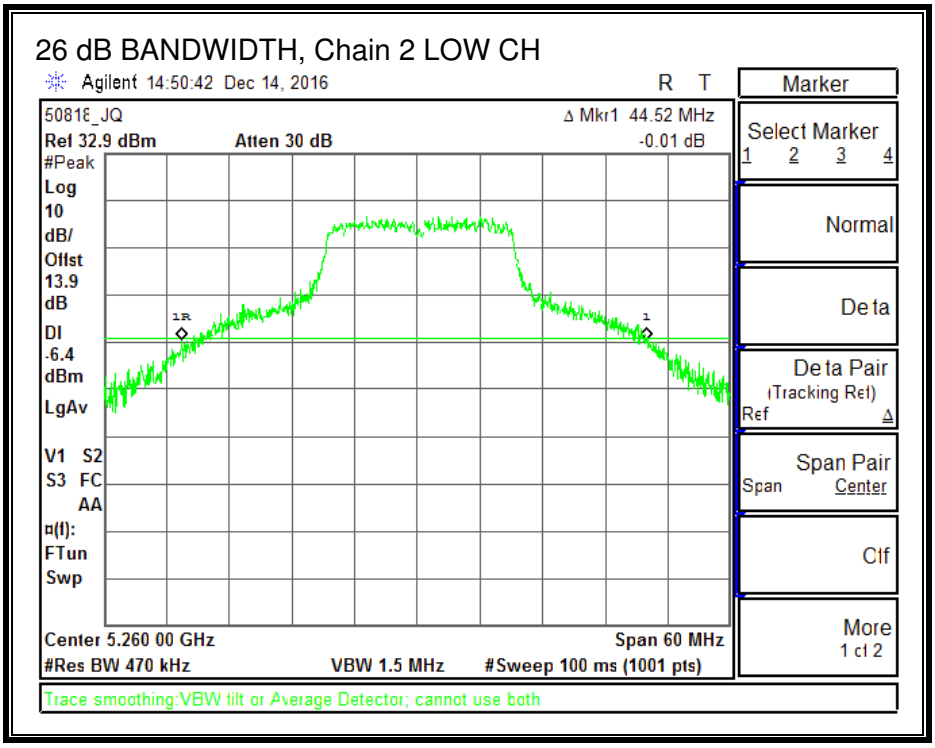
26 dB BANDWIDTH, Chain 1

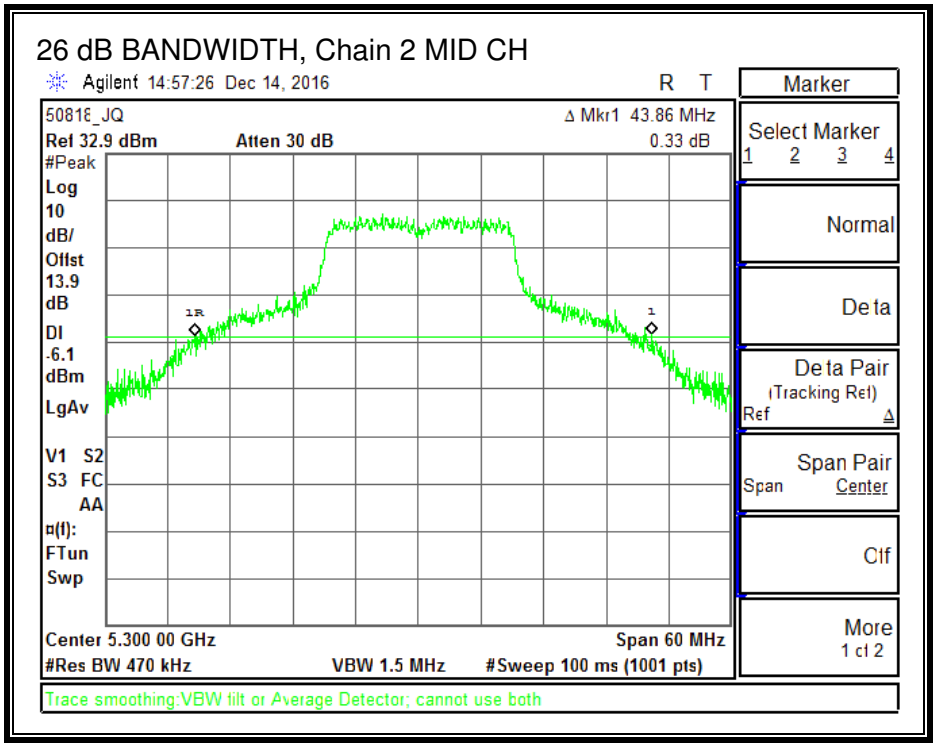


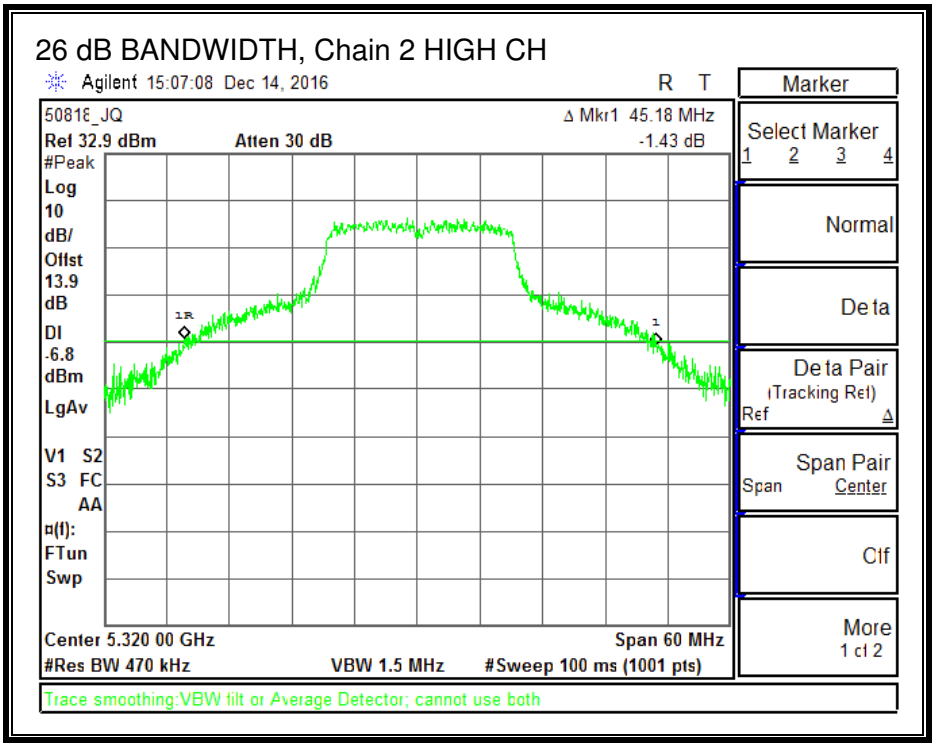




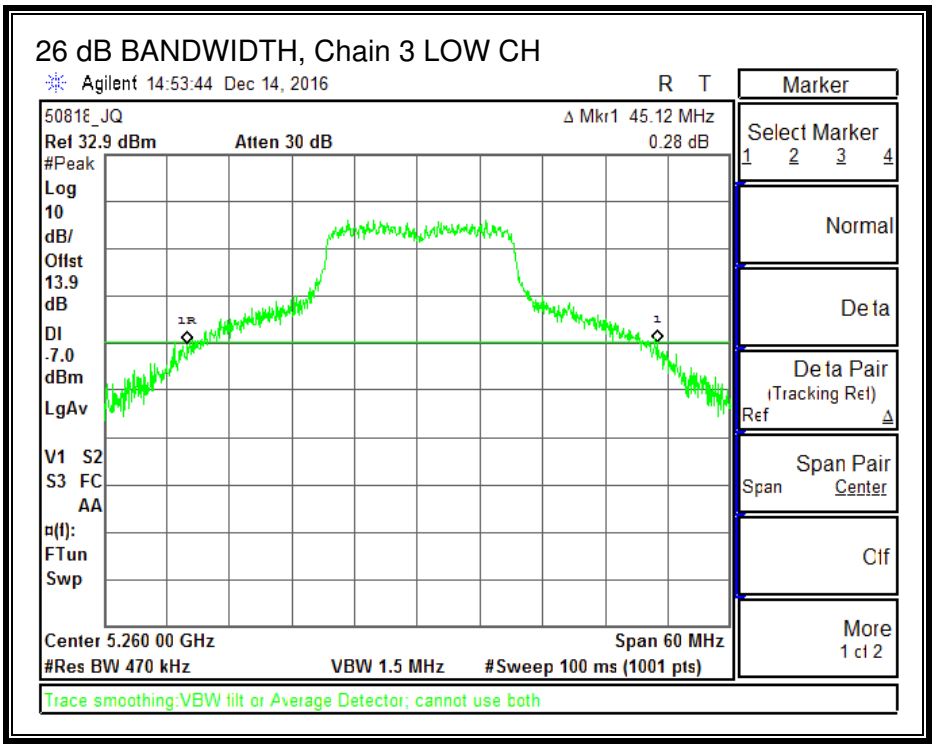
26 dB BANDWIDTH, Chain 2

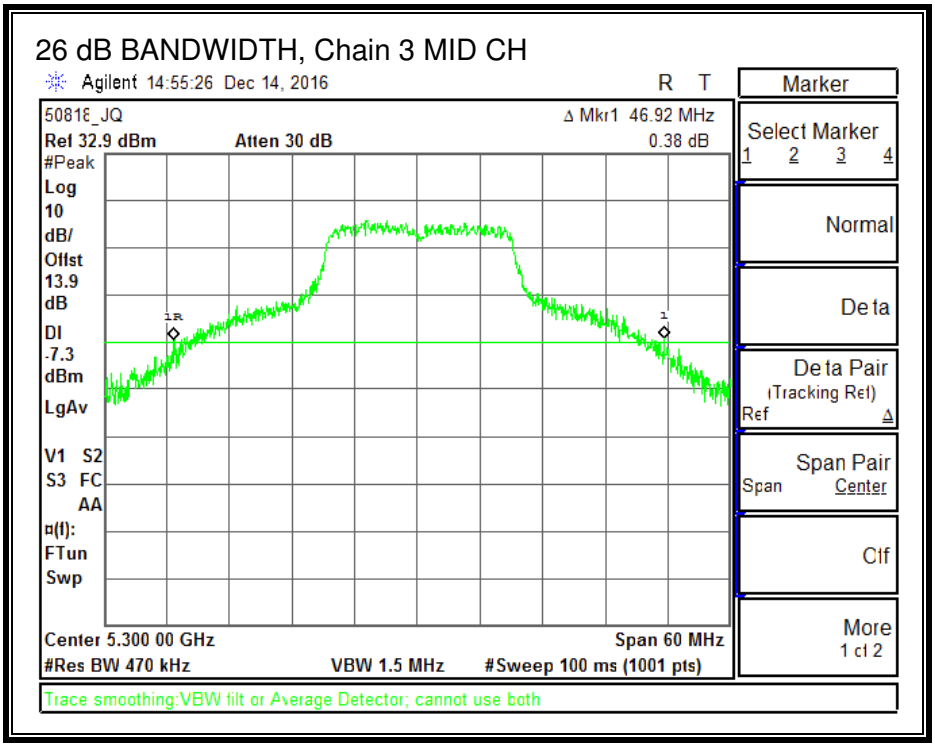


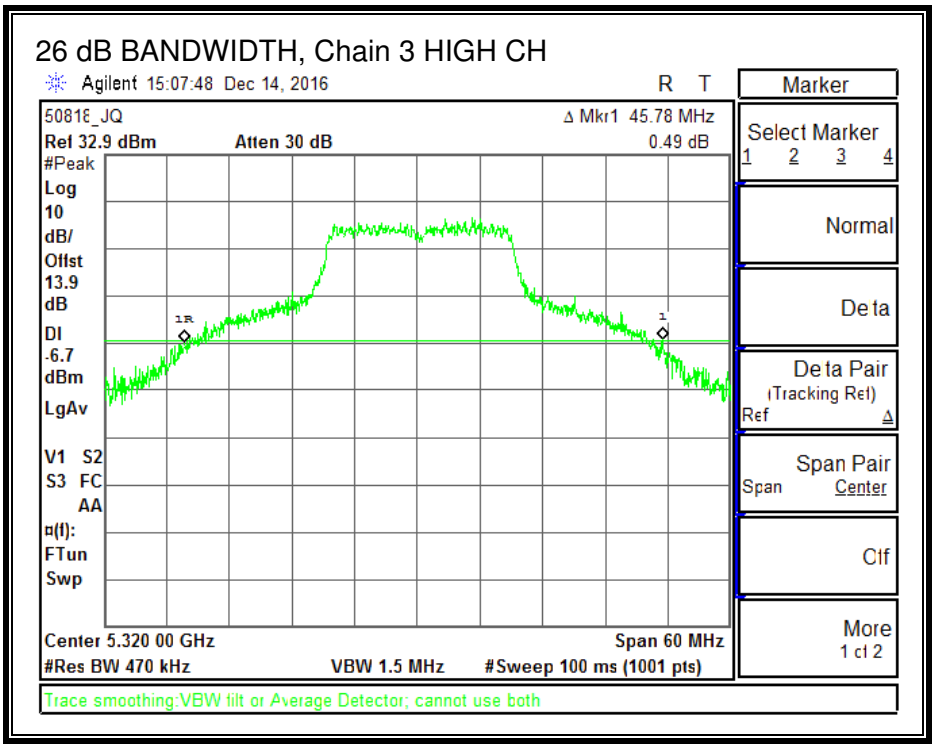




26 dB BANDWIDTH, Chain 3







8.2.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5260	43.68	6.32	6.32	23.68	10.68
Mid	5300	43.86	6.32	6.32	23.68	10.68
High	5320	45.18	6.32	6.32	23.68	10.68

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

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	14.47	14.92	14.87	14.03	20.61	23.68	-3.07
Mid	5300	14.83	15.03	15.25	14.14	20.85	23.68	-2.83
High	5320	14.82	14.97	15.11	14.45	20.86	23.68	-2.82

PSD Results

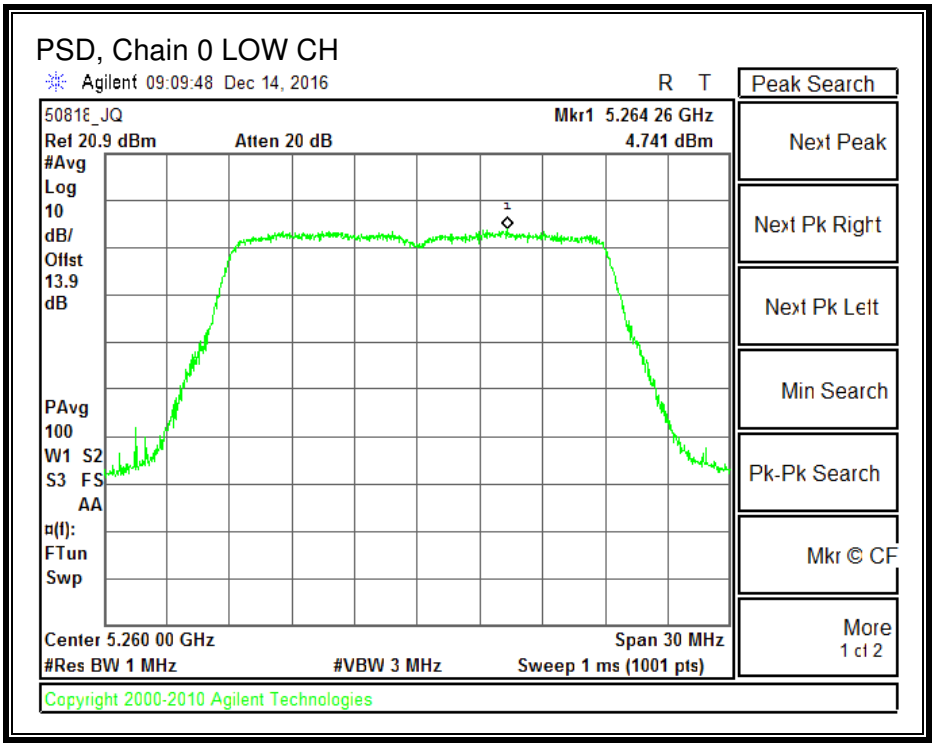
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5260	4.74	4.54	4.95	3.87	10.56	10.68	-0.12
Mid	5300	4.71	4.96	4.92	3.89	10.66	10.68	-0.02
High	5320	4.68	4.42	4.82	4.10	10.53	10.68	-0.15

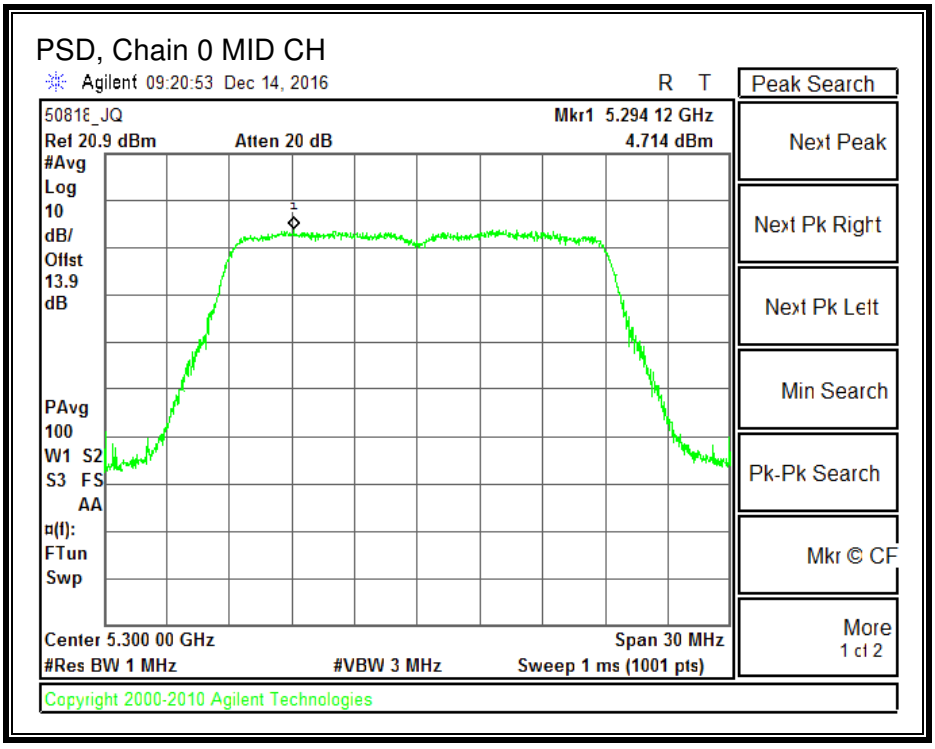
Note:

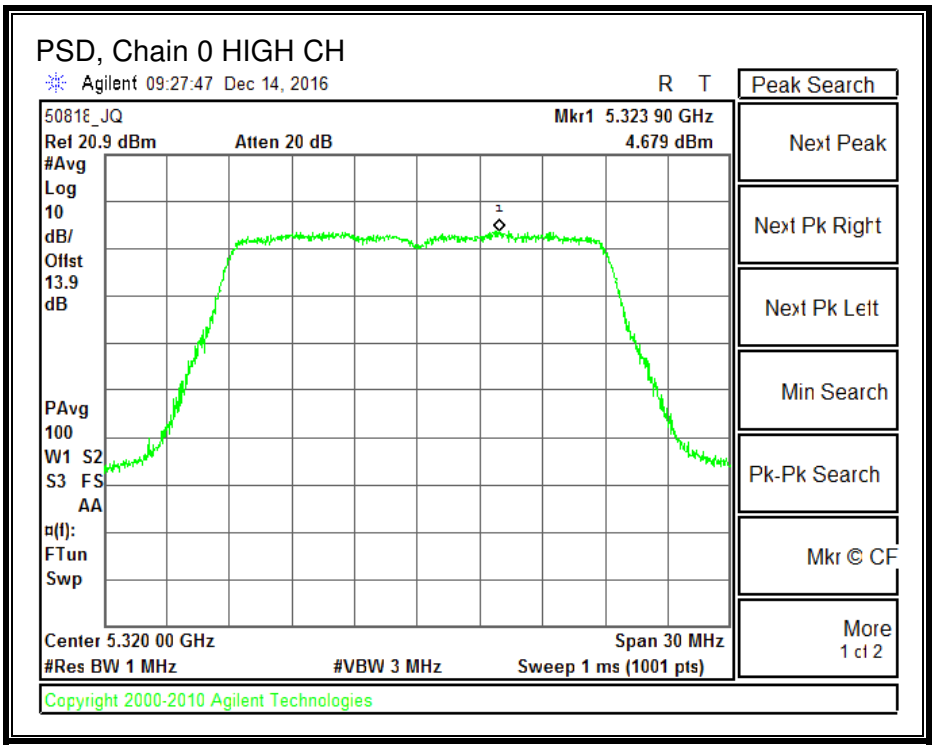
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

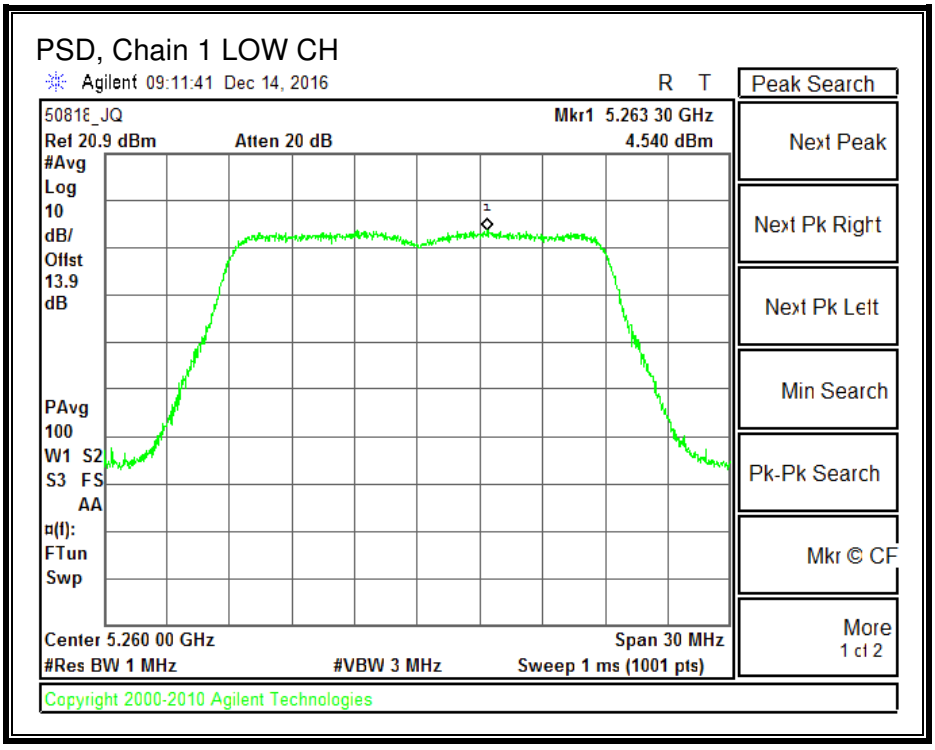
PSD, Chain 0



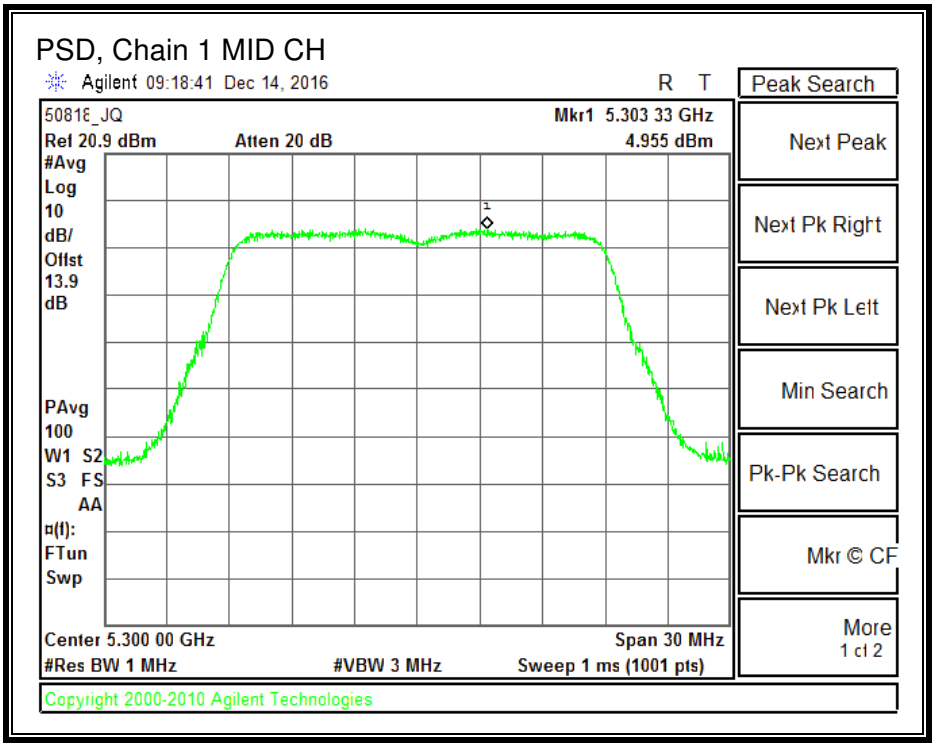




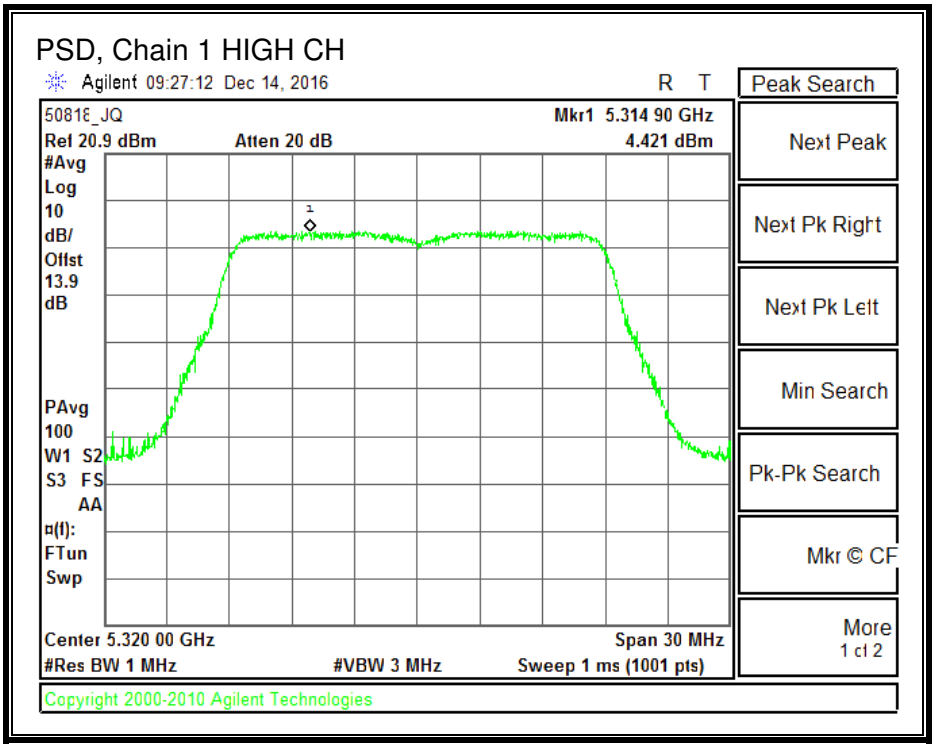
PSD, Chain 1



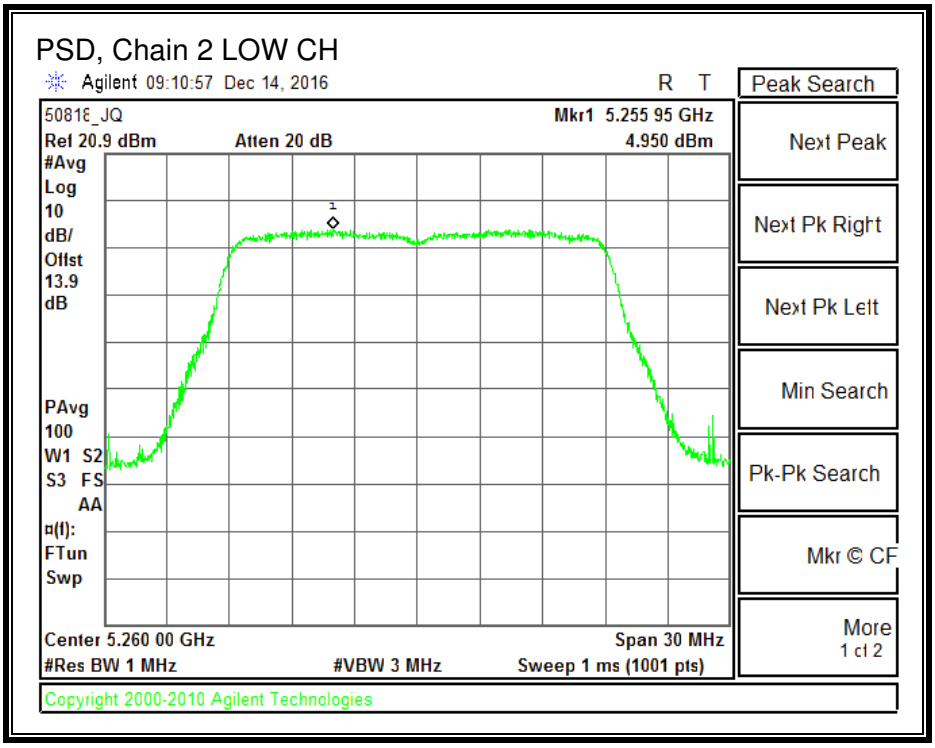
PSD, Chain 1 MID CH

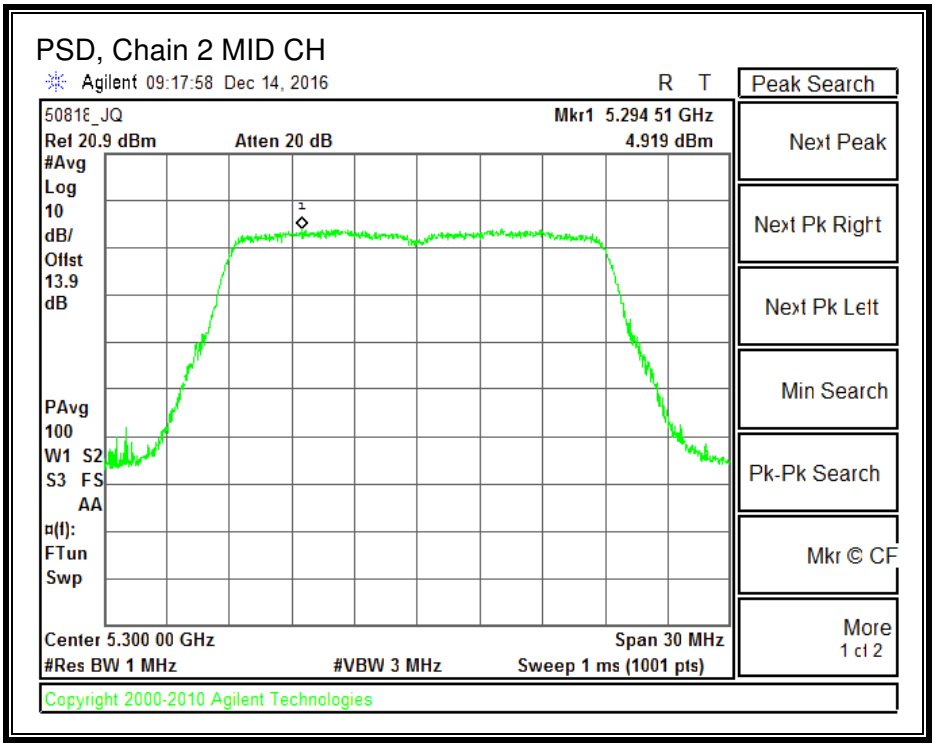


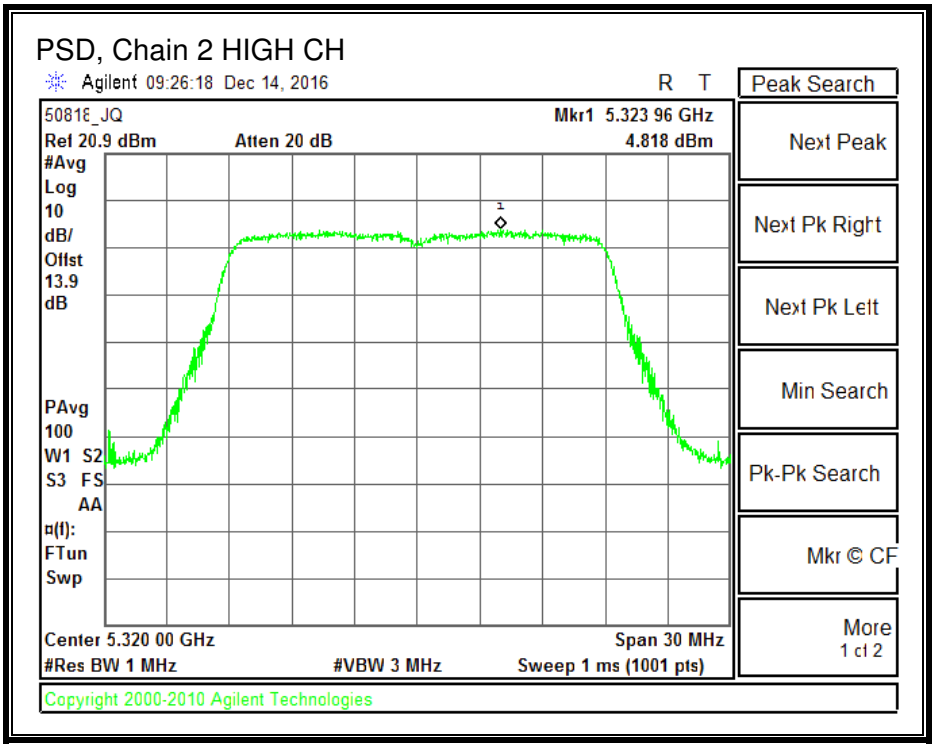
PSD, Chain 1 HIGH CH



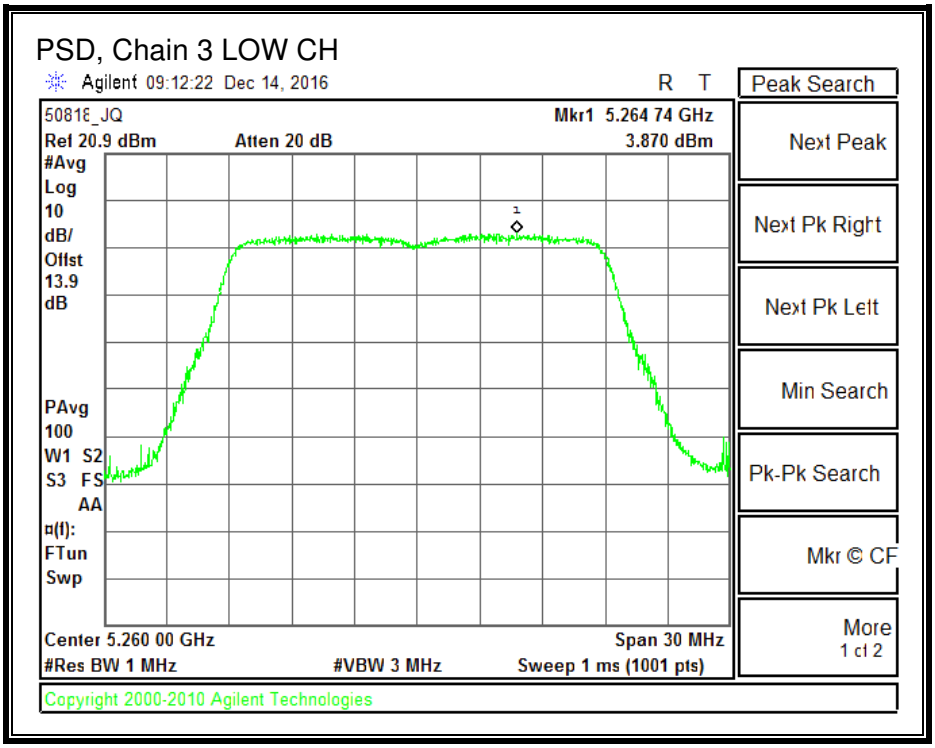
PSD, Chain 2



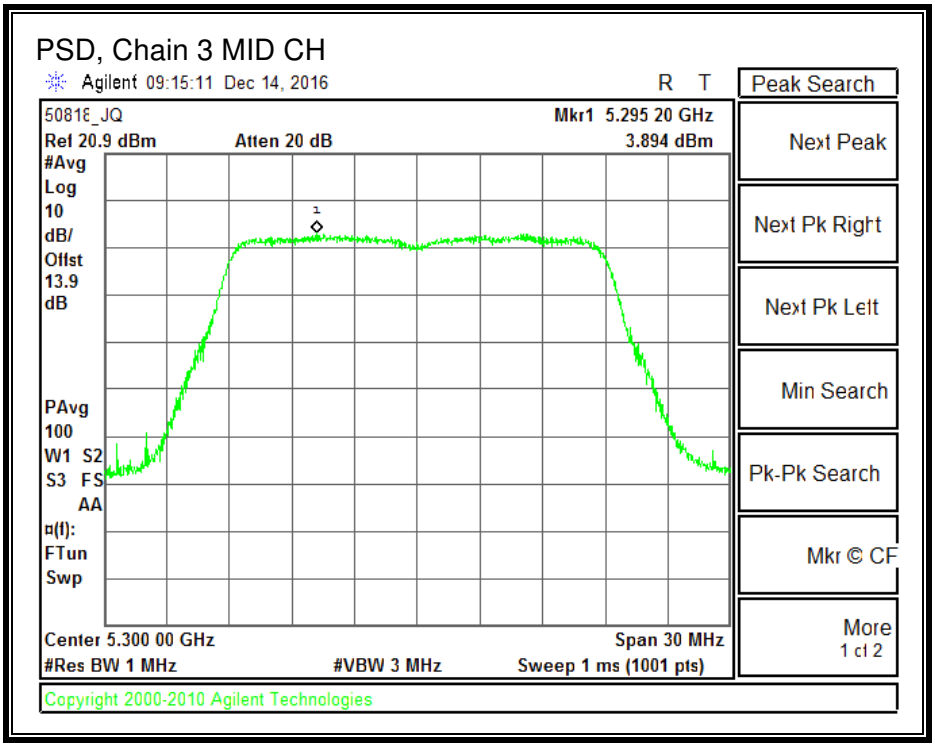




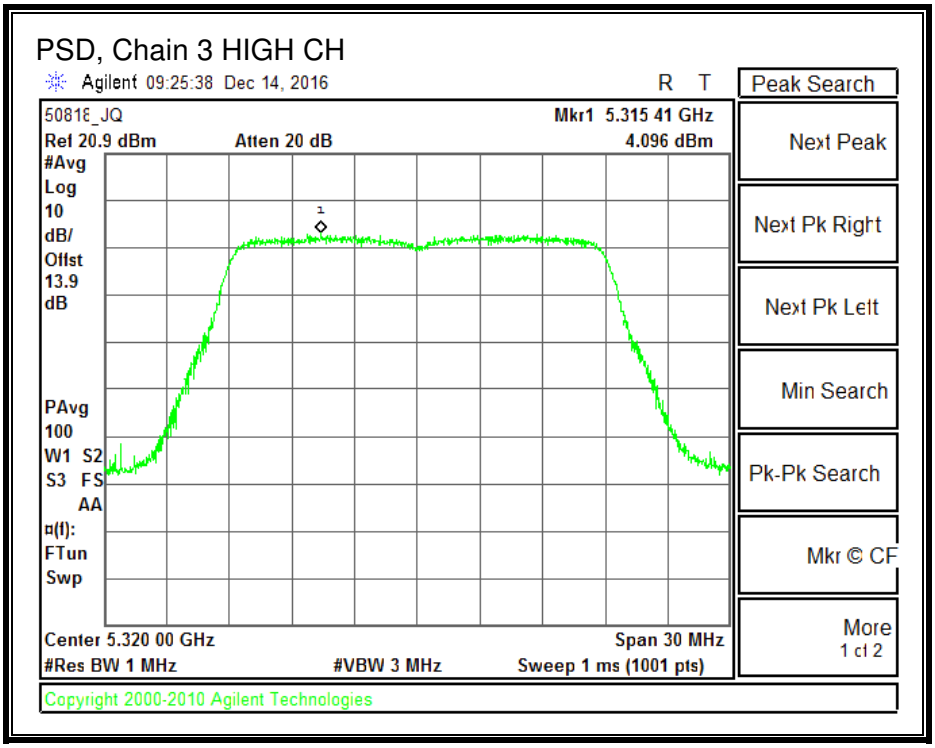
PSD, Chain 3



PSD, Chain 3 MID CH



PSD, Chain 3 HIGH CH



8.3. 802.11n HT40 MODE IN THE 5.3 GHz BAND

8.3.1. 26 dB BANDWIDTH

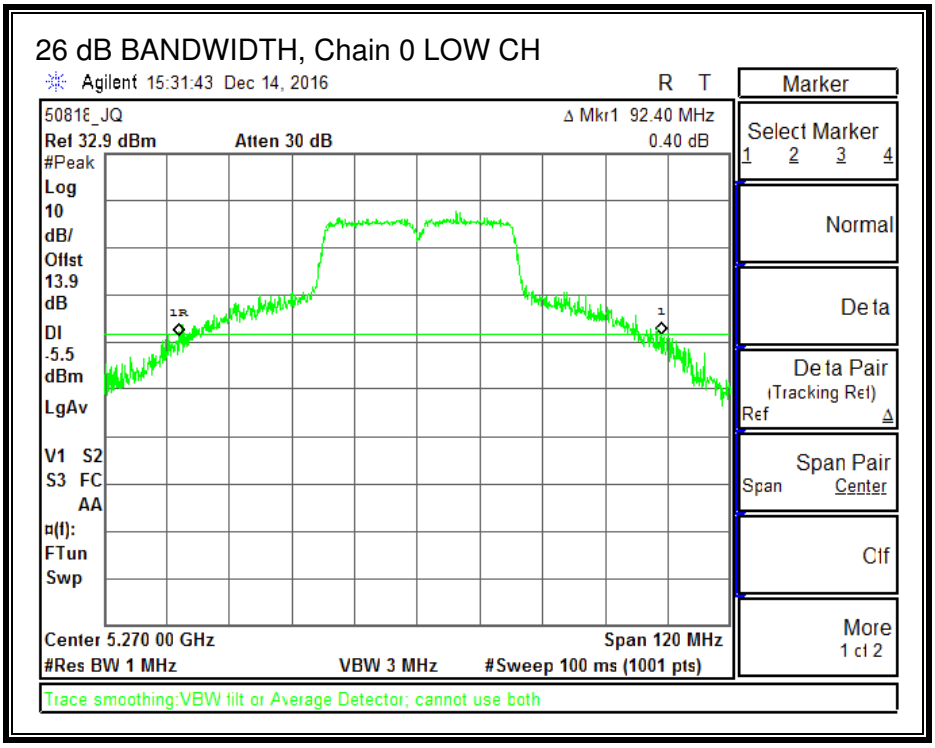
LIMITS

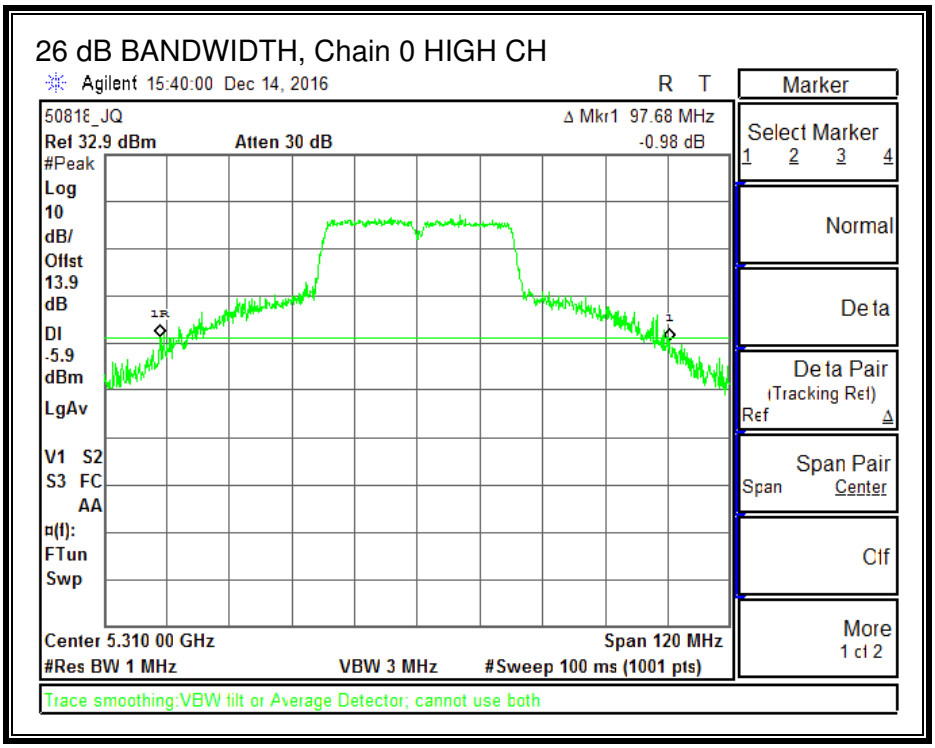
None; for reporting purposes only.

RESULTS

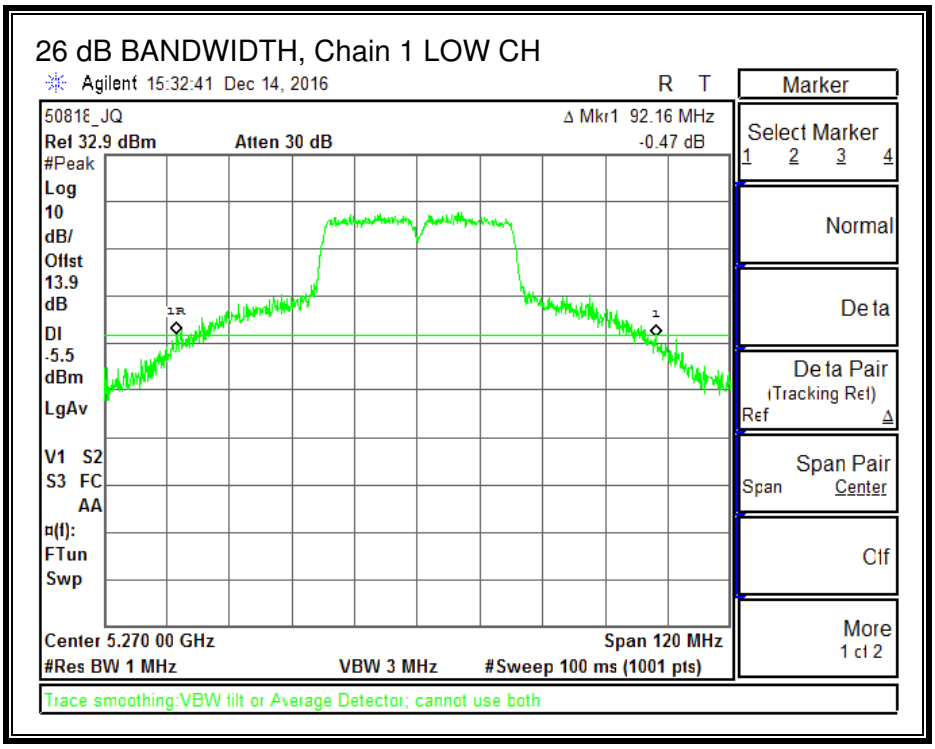
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5270	92.40	92.16	92.76	92.52
High	5310	97.68	98.28	94.32	98.40

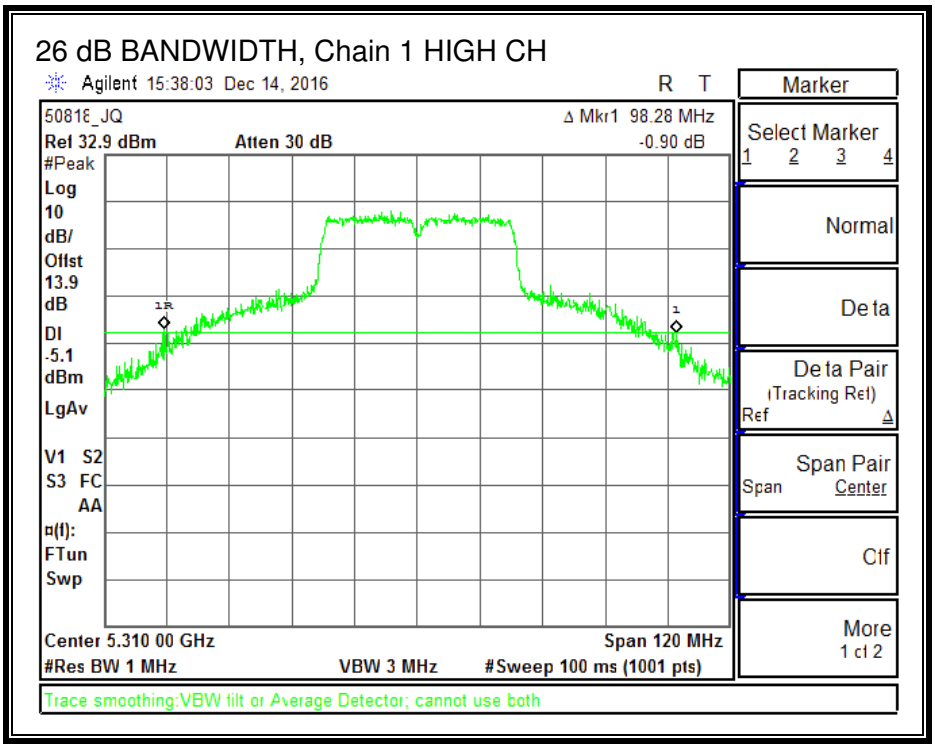
26 dB BANDWIDTH, Chain 0



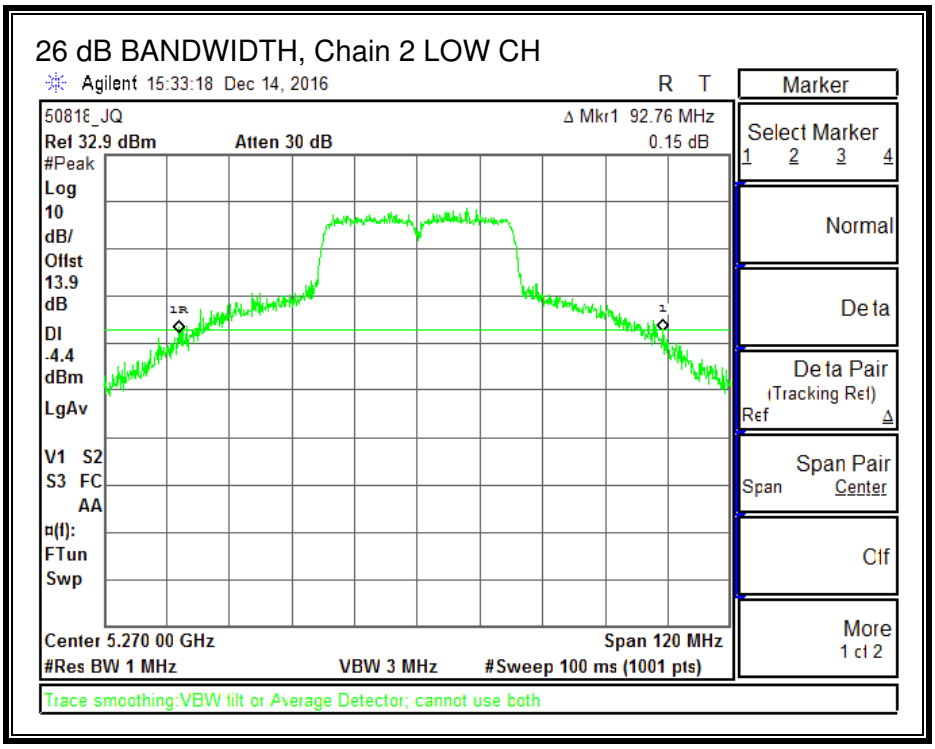


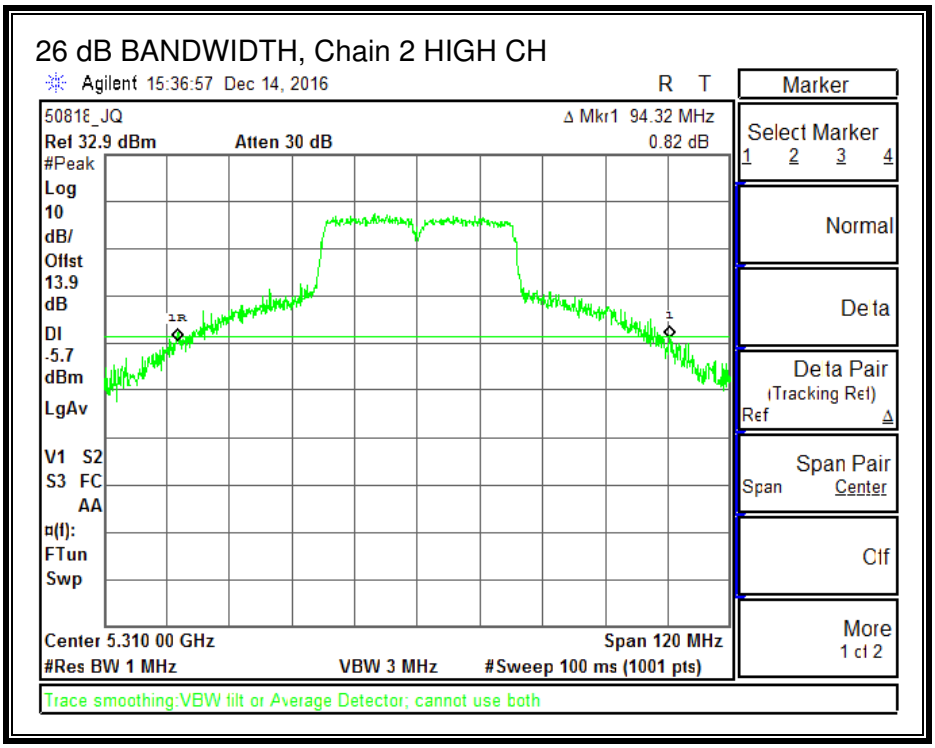
26 dB BANDWIDTH, Chain 1



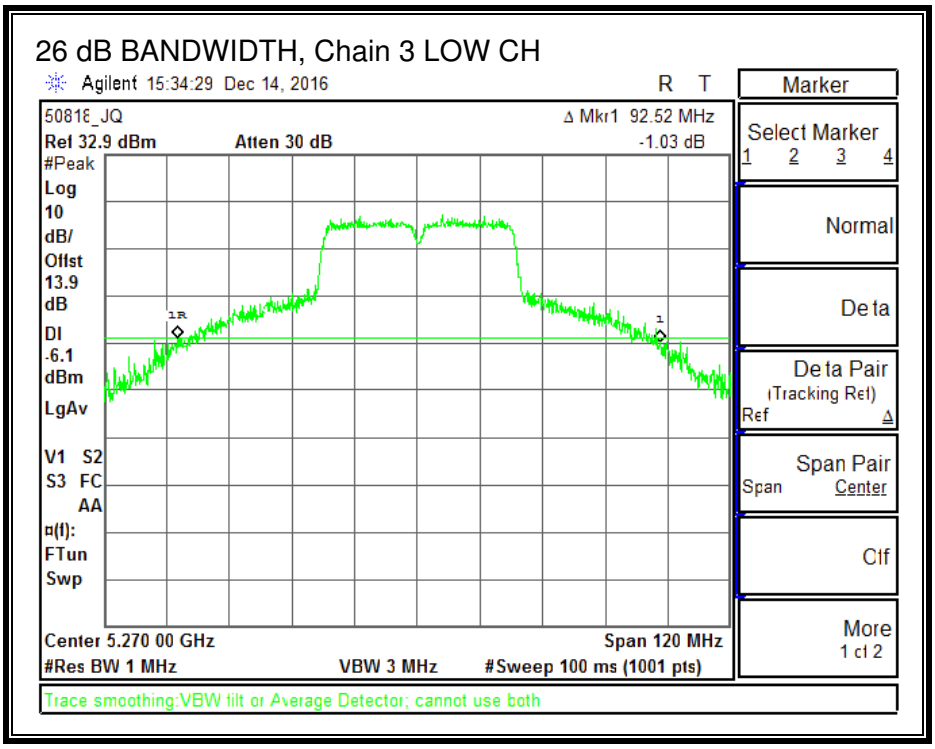


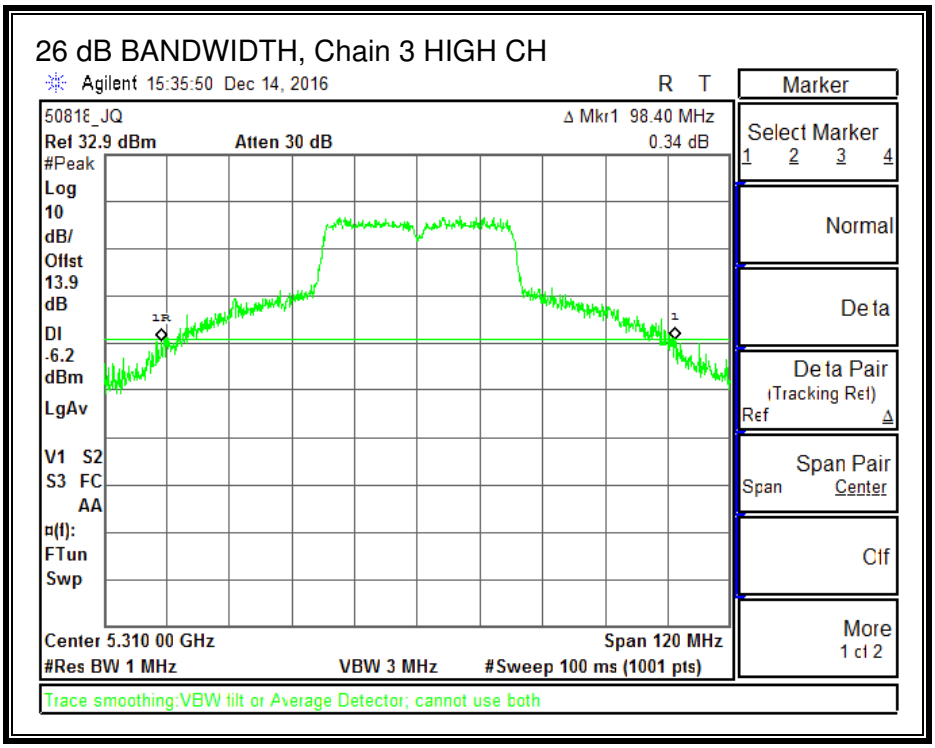
26 dB BANDWIDTH, Chain 2





26 dB BANDWIDTH, Chain 3





8.3.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5270	92.16	6.32	6.32	23.68	10.68
High	5310	94.32	6.32	6.32	23.68	10.68

Duty Cycle CF (dB)	0.10	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	15.21	15.88	15.33	14.72	21.33	23.68	-2.35
High	5310	13.65	13.96	13.77	13.03	19.64	23.68	-4.04

PSD Results

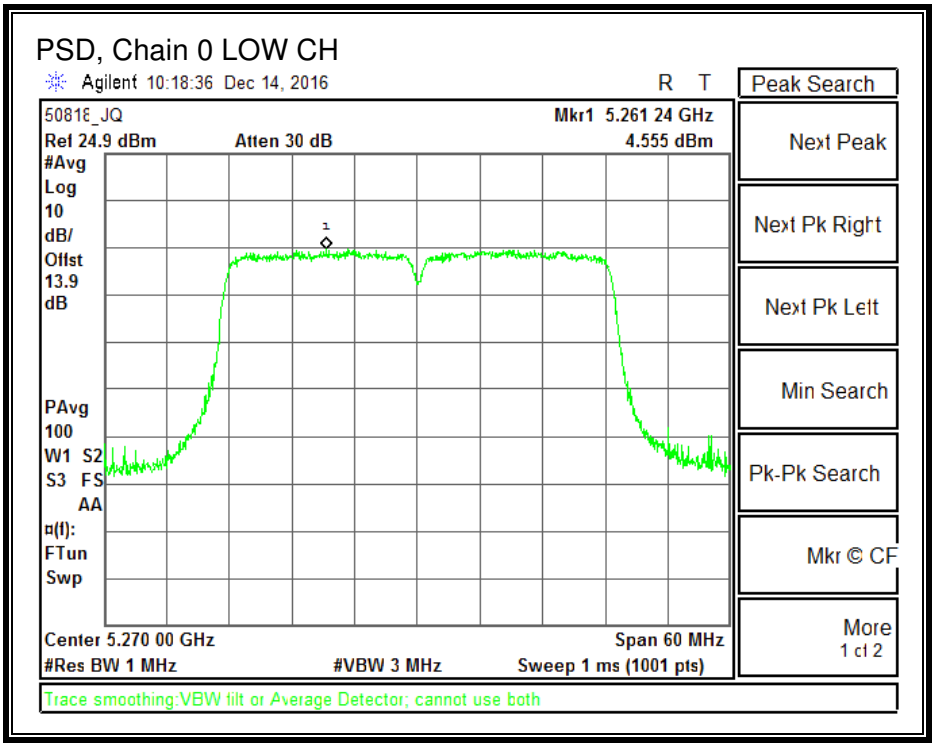
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	4.56	4.79	4.73	3.90	10.63	10.68	-0.05
High	5310	4.15	4.88	4.65	3.58	10.46	10.68	-0.22

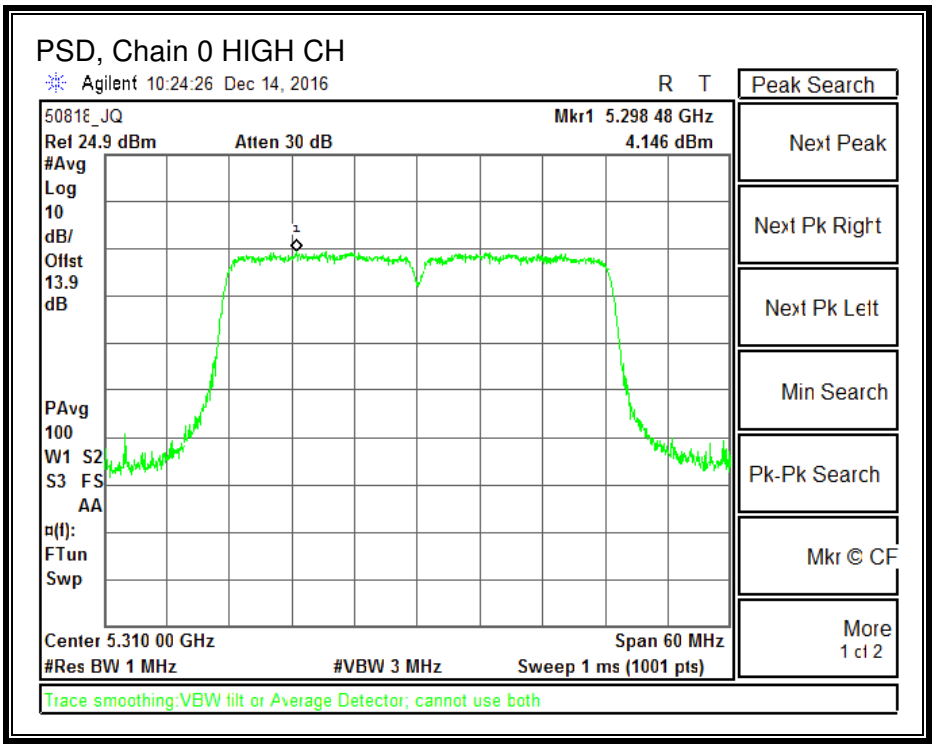
Note:

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

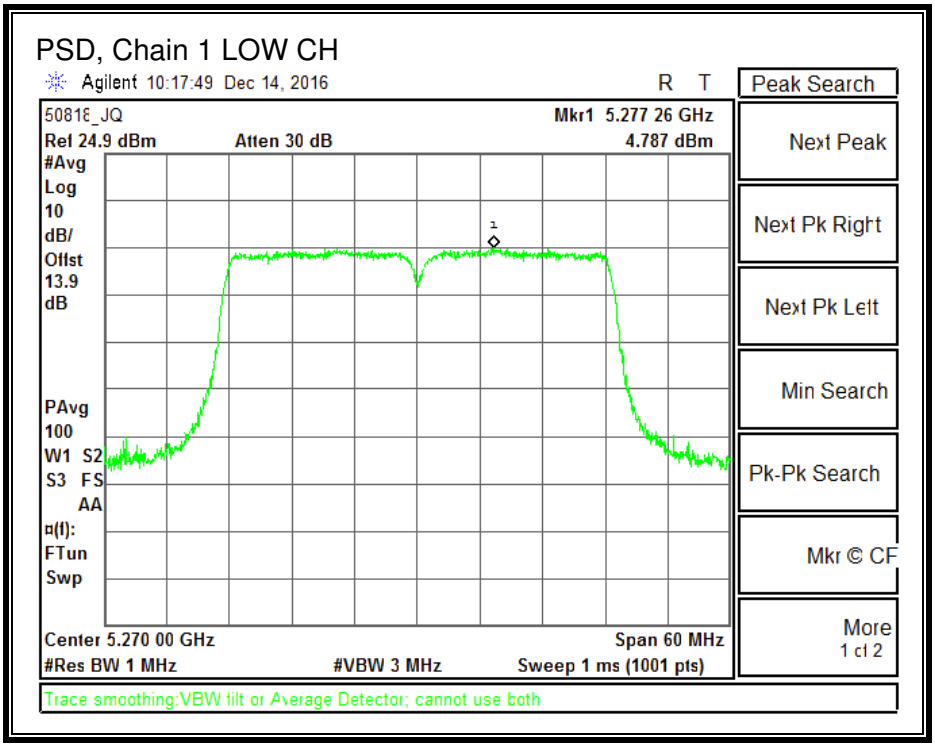
_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

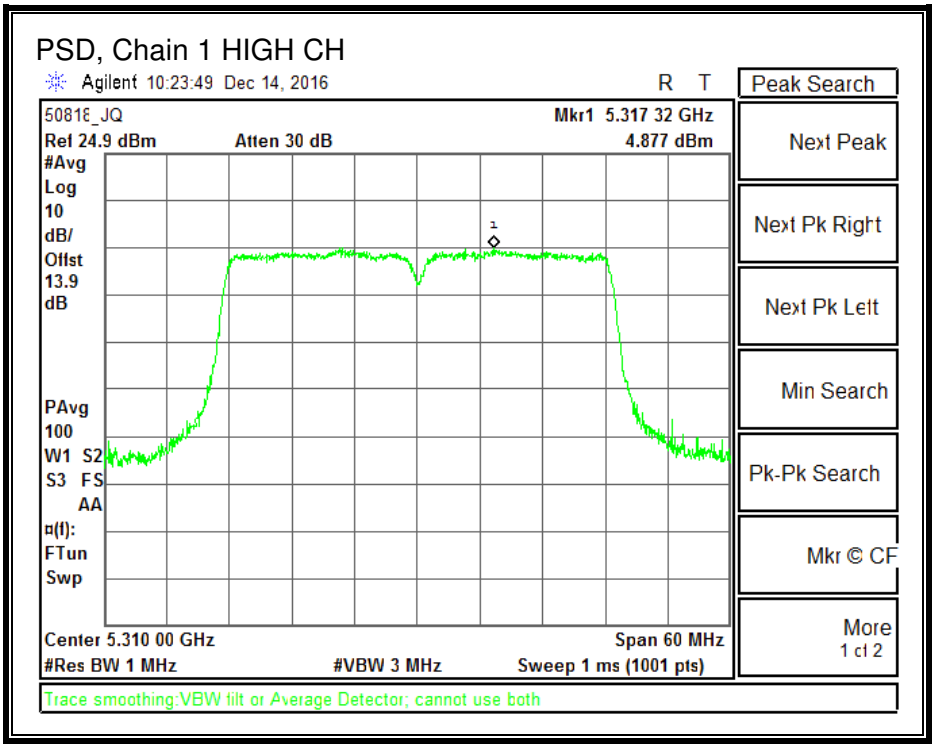
PSD, Chain 0



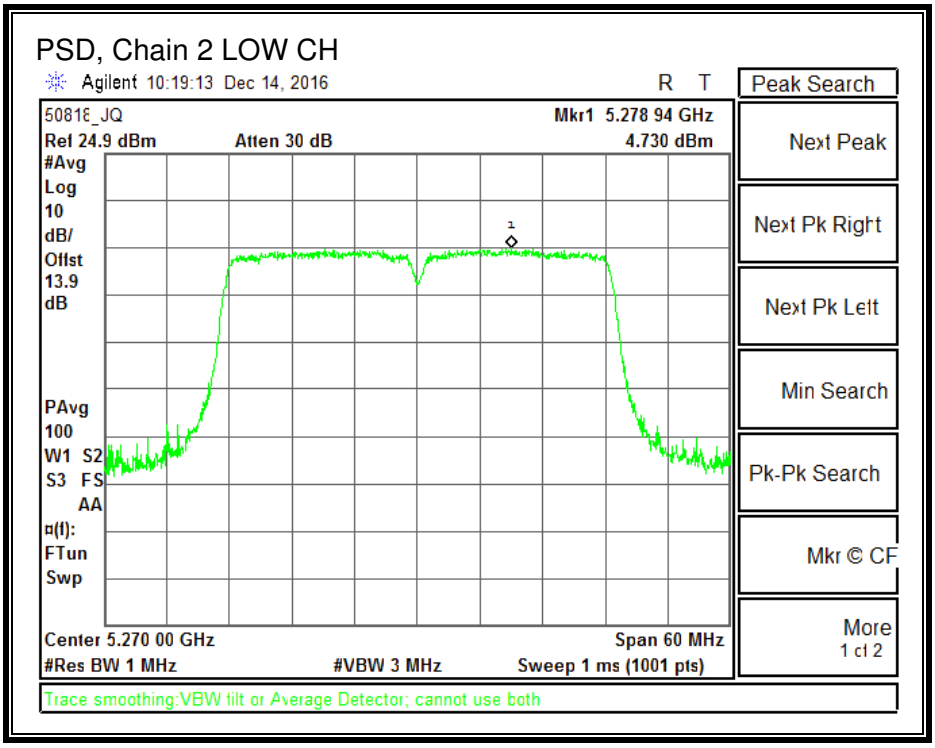


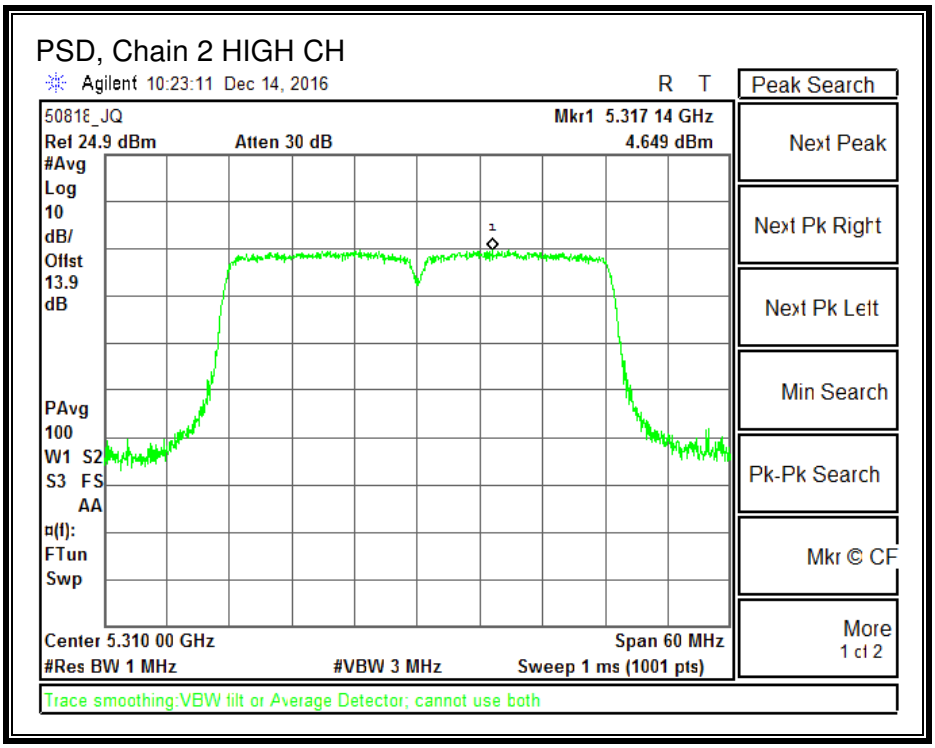
PSD, Chain 1



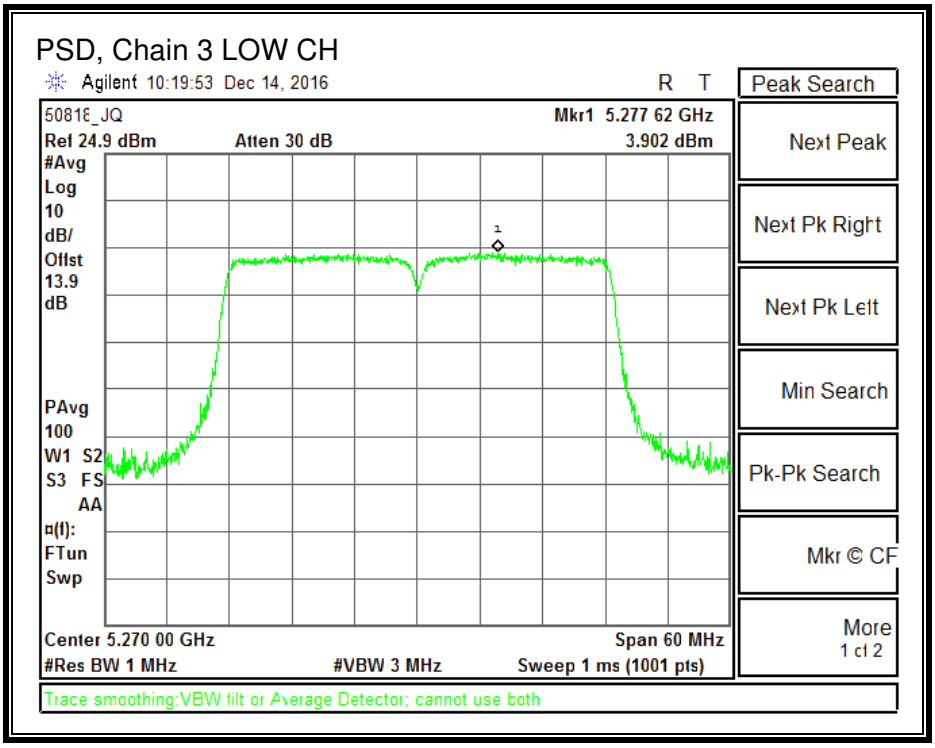


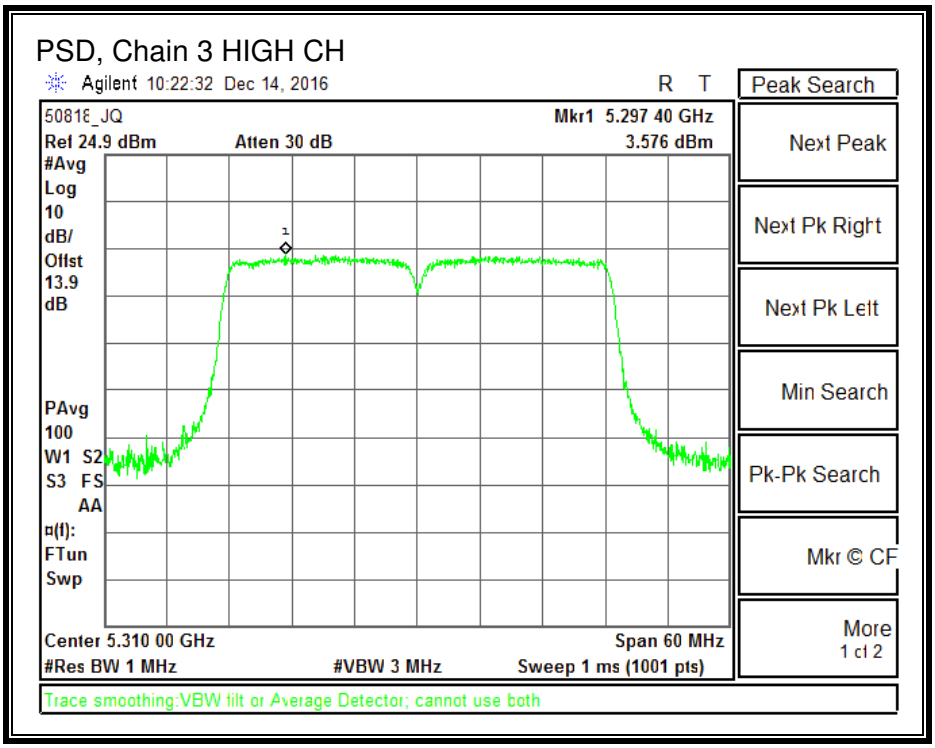
PSD, Chain 2





PSD, Chain 3





8.4. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

8.4.1. 26 dB BANDWIDTH

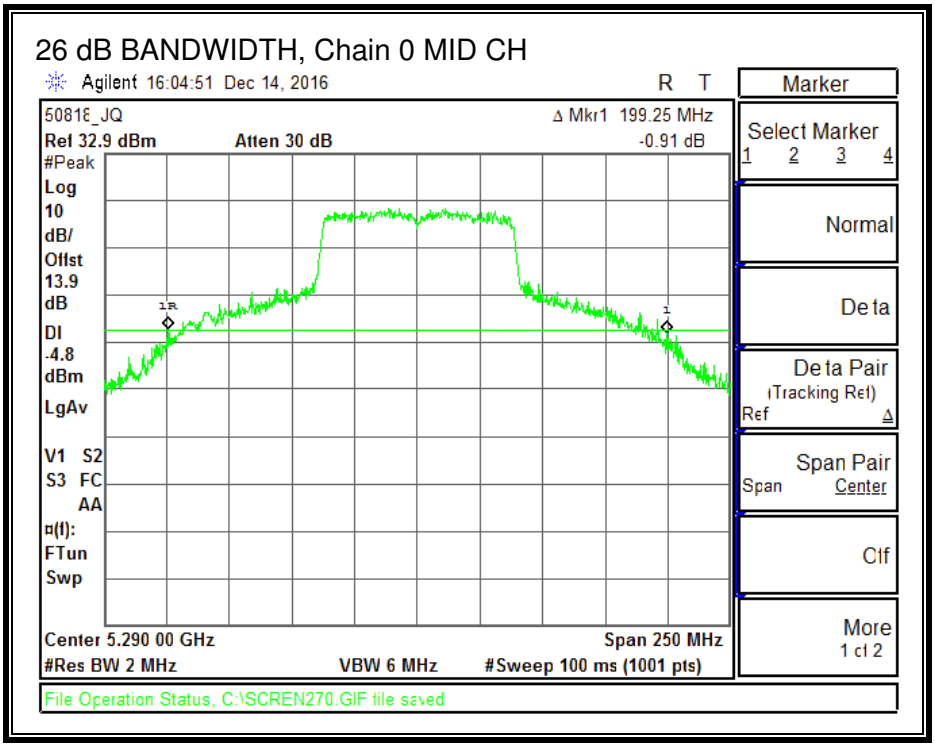
LIMITS

None; for reporting purposes only.

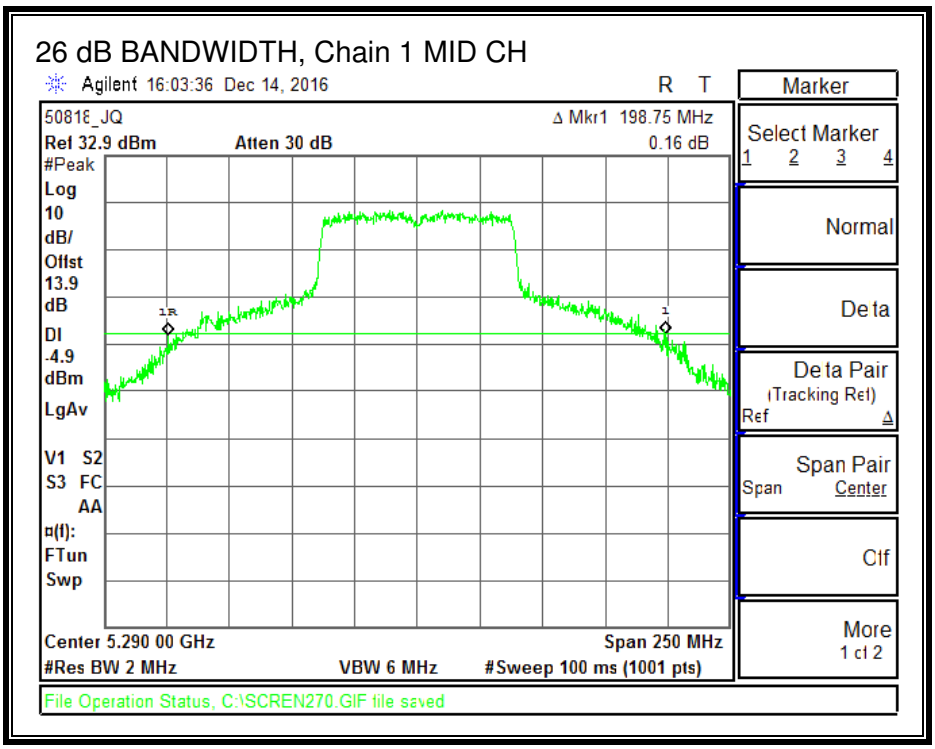
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Mid	5290	199.25	198.75	197.75	199.50

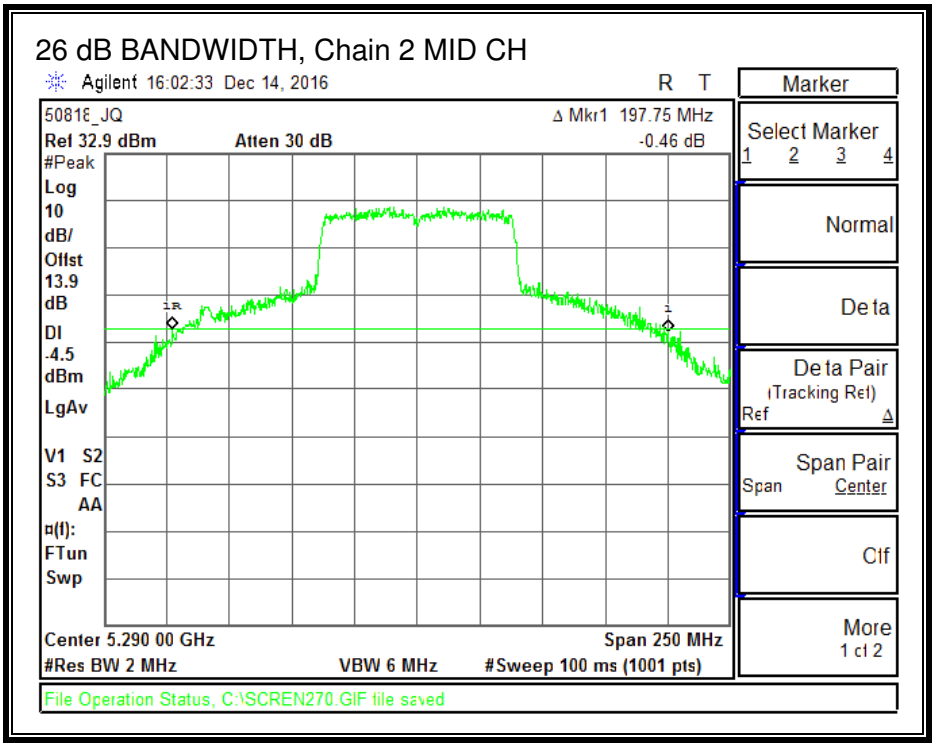
26 dB BANDWIDTH, Chain 0



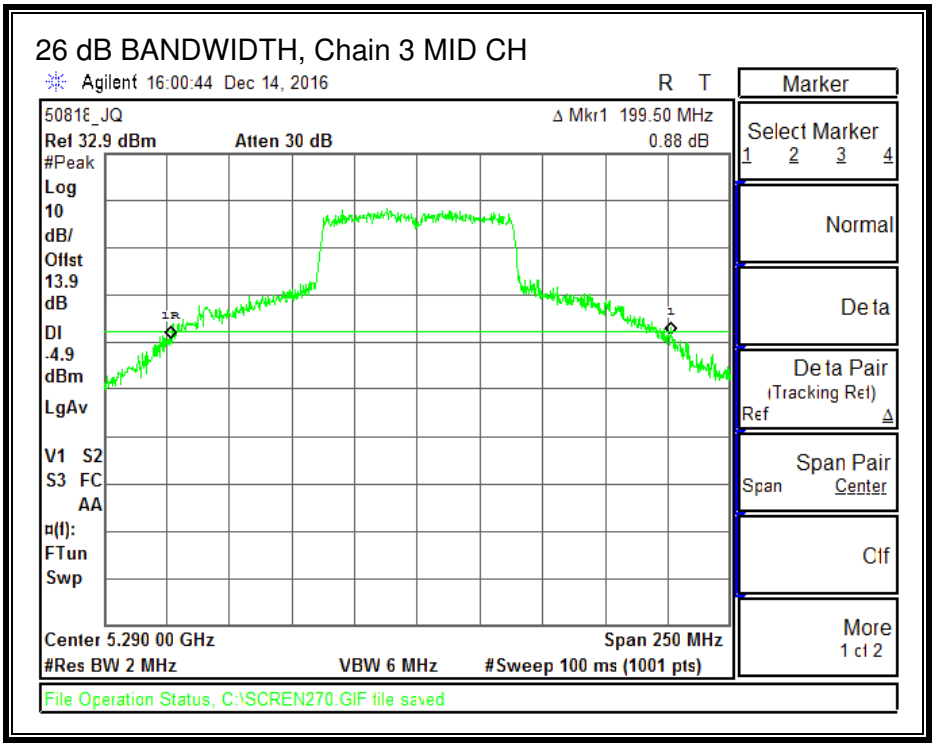
26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



26 dB BANDWIDTH, Chain 3



8.4.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5290	197.75	6.32	6.32	23.68	10.68

Duty Cycle CF (dB)	0.18	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	13.07	13.30	13.17	12.71	19.09	23.68	-4.59

PSD Results

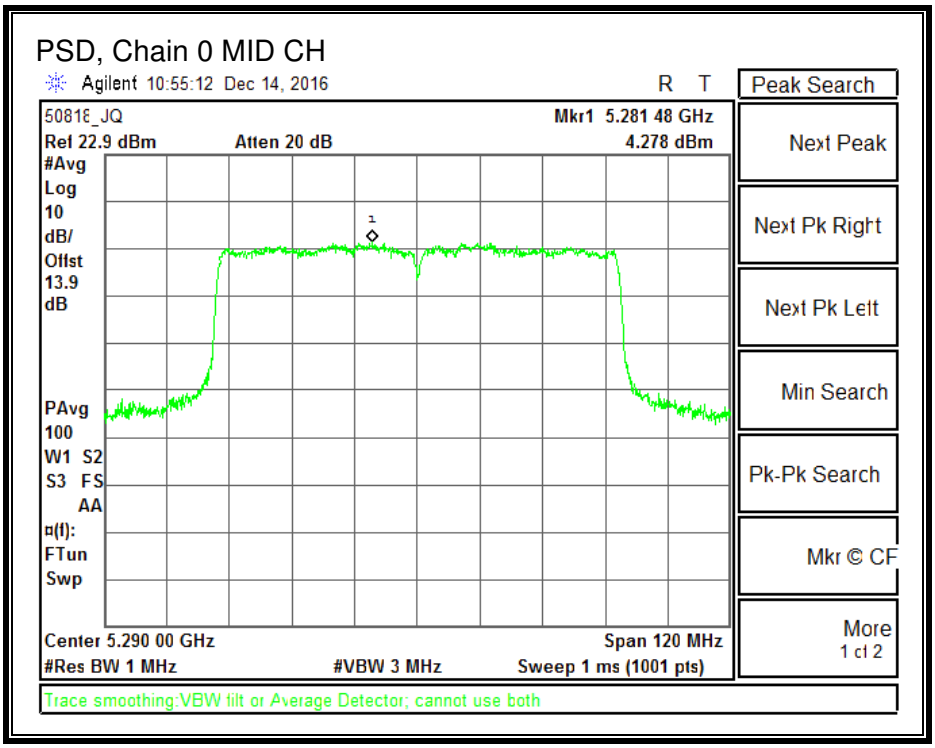
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	4.28	4.47	4.55	3.63	10.45	10.68	-0.23

Note:

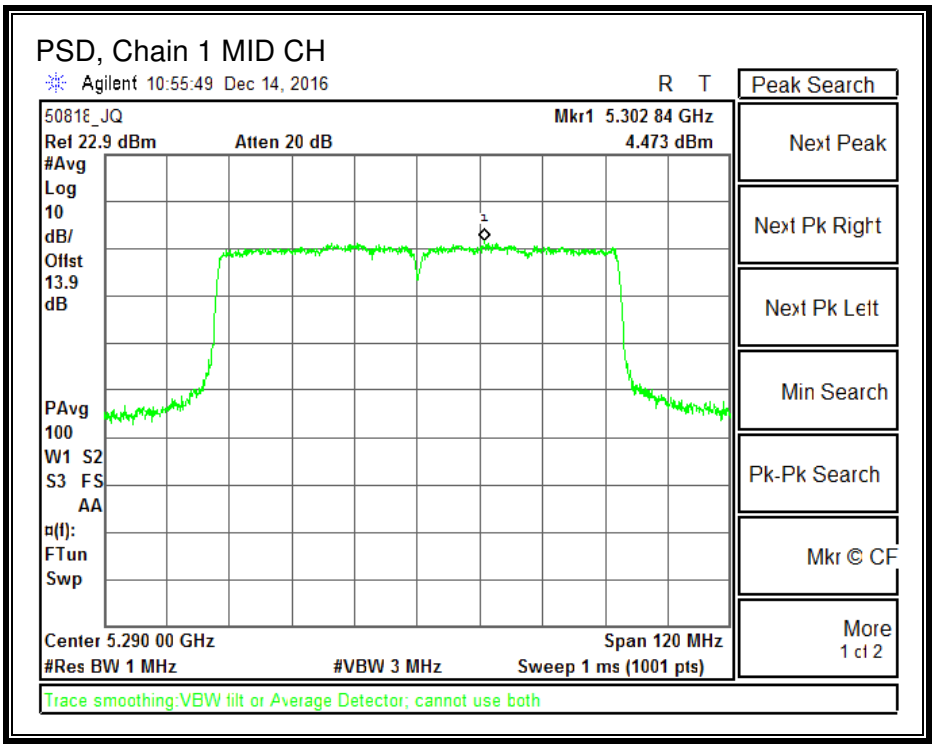
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

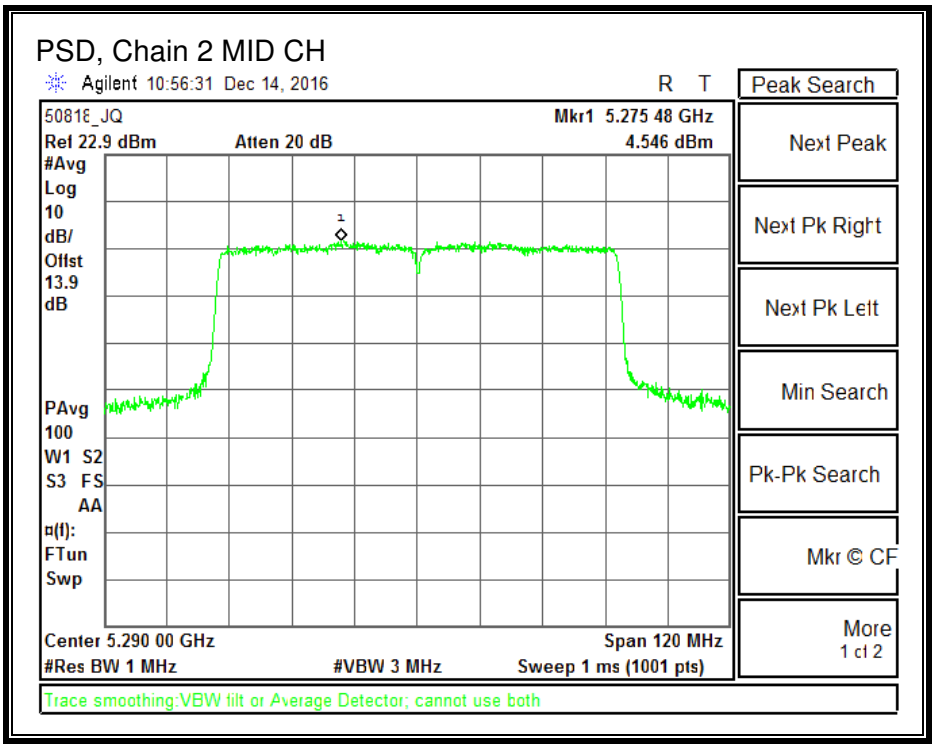
PSD, Chain 0



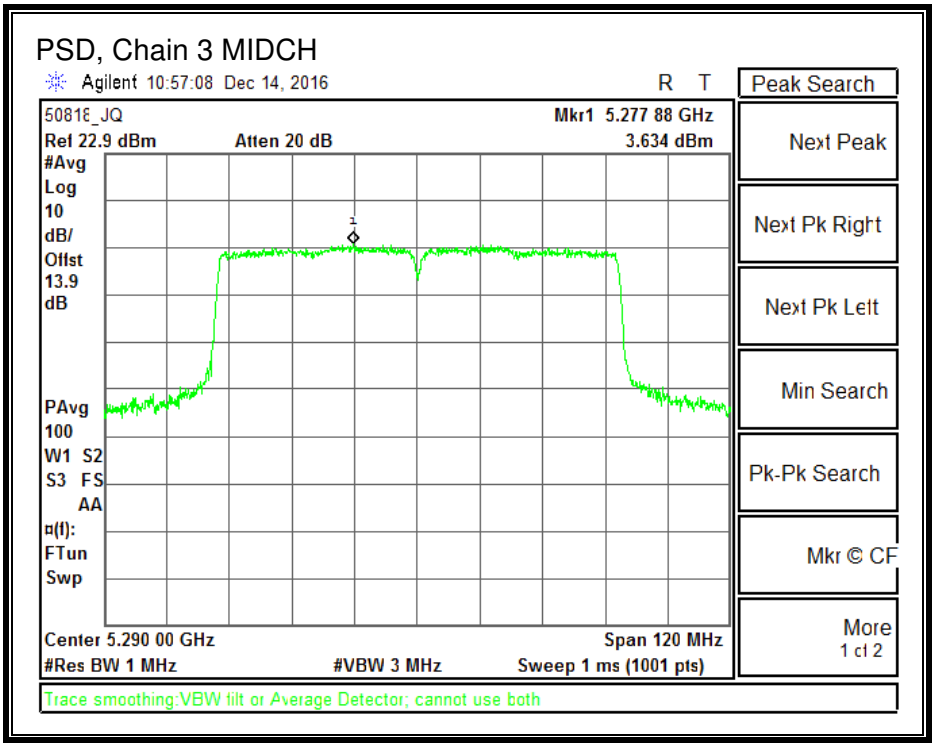
PSD, Chain 1



PSD, Chain 2



PSD, Chain 3



8.5. 802.11ac HT80+HT80 MODE IN THE 5.2 & 5.3 GHz BANDS

8.5.1. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

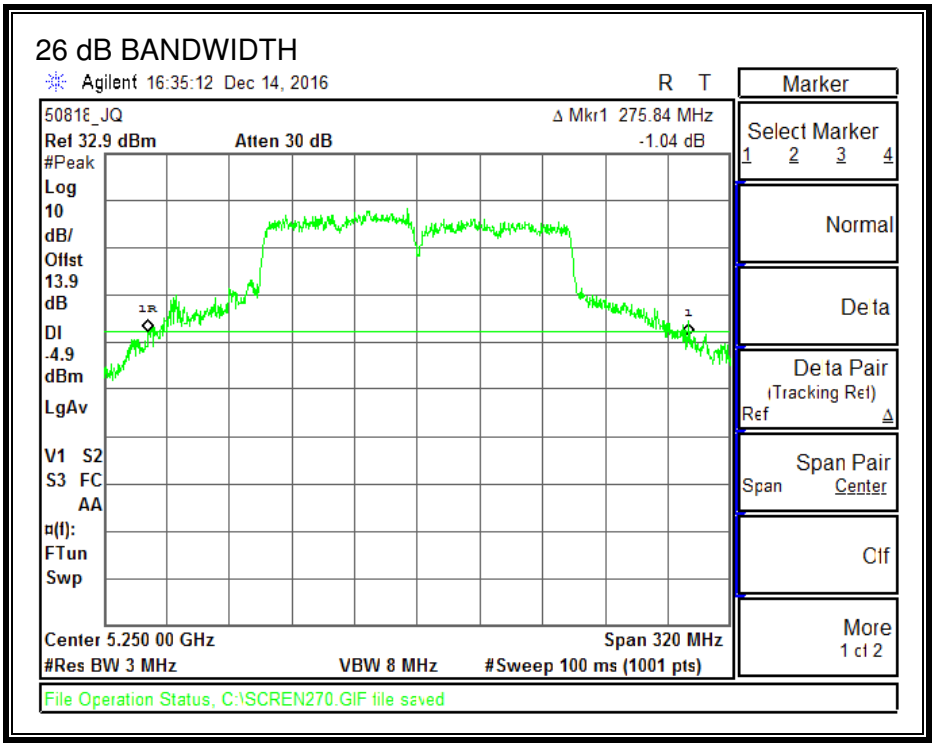
KDB 644545 D03 D)1)a)i) ; D)1)b)

RESULTS

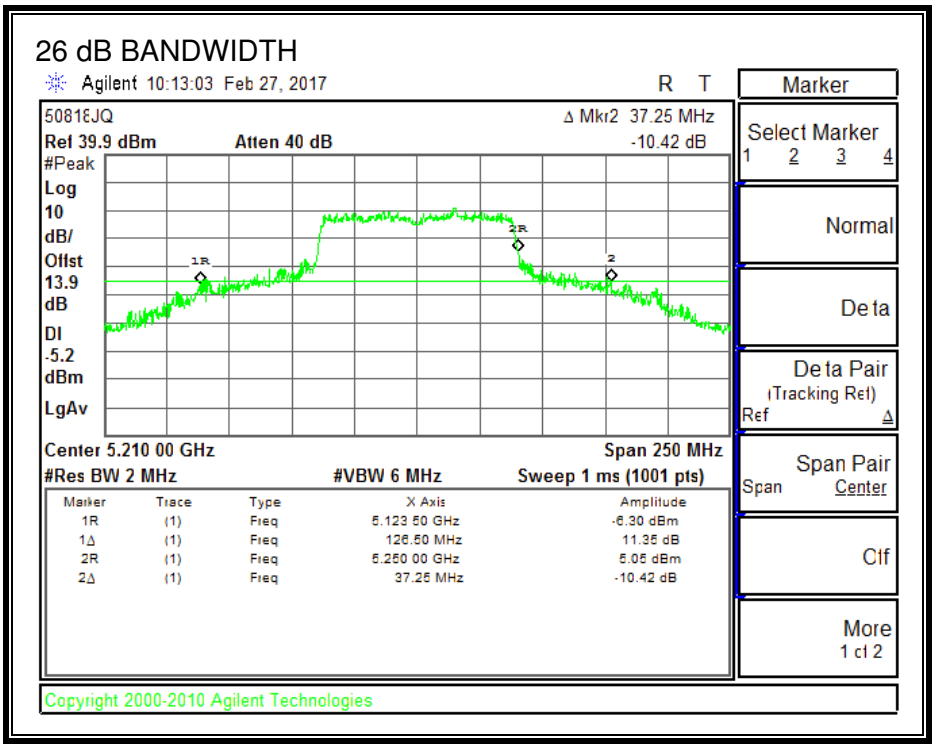
Channel	Frequency (MHz)	26 dB BW (MHz)
Mid	5250	289.92
42	5210	37.25
58	5290	146.50

26 dB BANDWIDTH

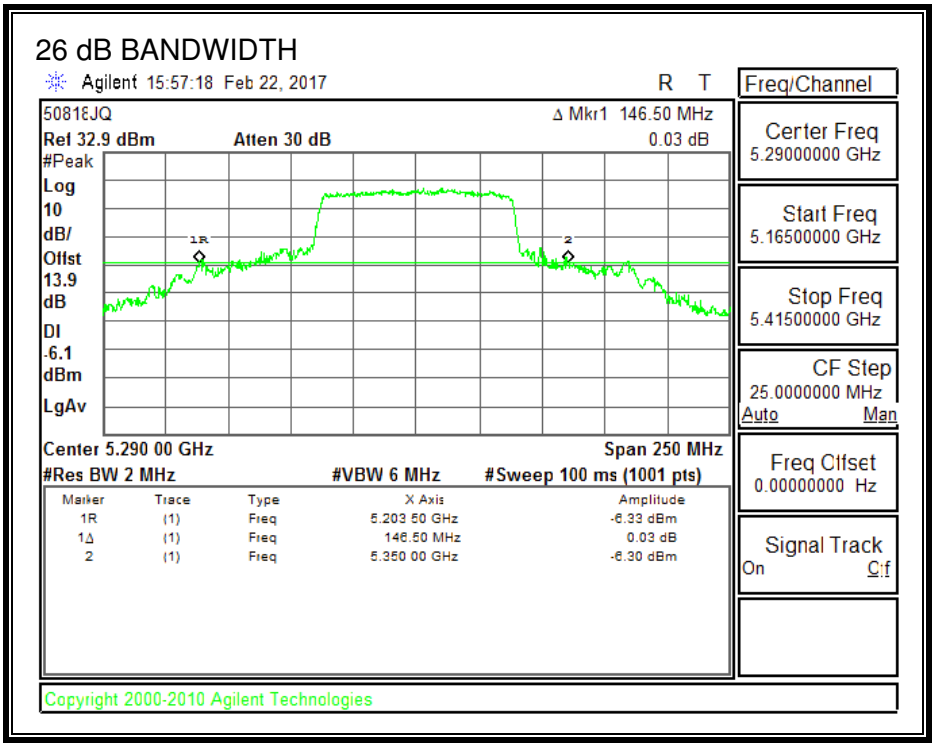
Mid Channel



Channel 42



Channel 58



8.5.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

For output power, the TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.30	0.30	0.30

For PSD, the TX chains are correlated and the antenna gain is the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (2 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	3.01	3.31

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5250	289.92	0.30	3.31	24.00	11.00
42	5210	37.25	0.30	3.31	24.00	11.00
58	5290	146.50	0.30	3.31	24.00	11.00

Duty Cycle CF (dB)	0.33	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
42	5210	15.09	15.46	N/A	N/A	18.29	30.00	-11.71
58	5290	N/A	N/A	15.64	15.05	18.37	24.00	-5.63

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
42	5210	7.62	7.44	N/A	N/A	10.87	17.00	-6.13
58	5290	N/A	N/A	7.76	6.67	10.59	11.00	-0.41

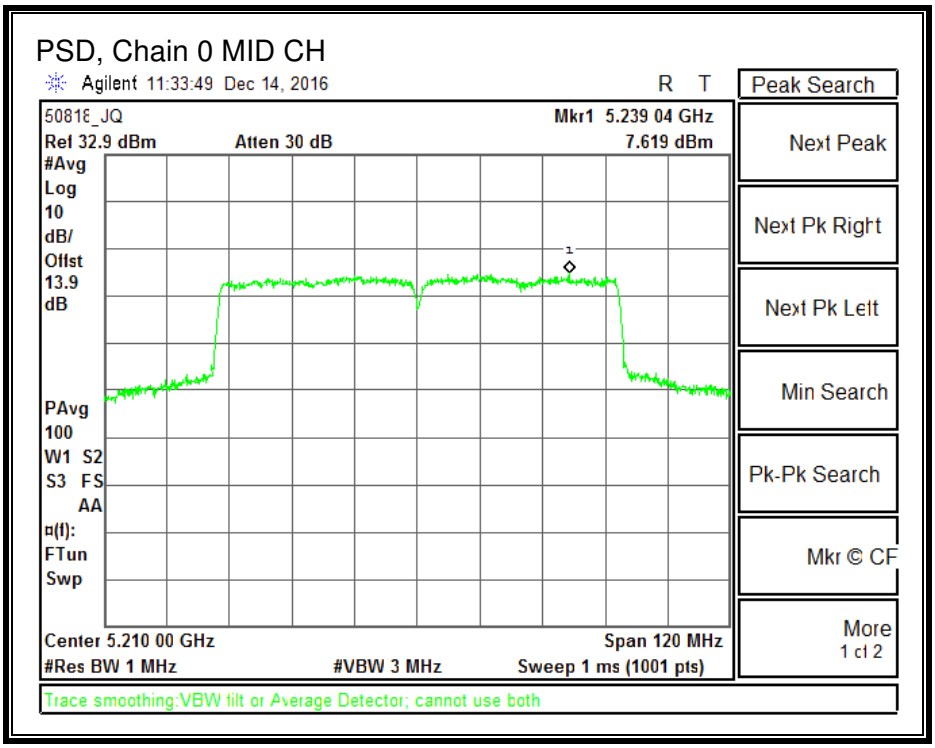
Note:

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

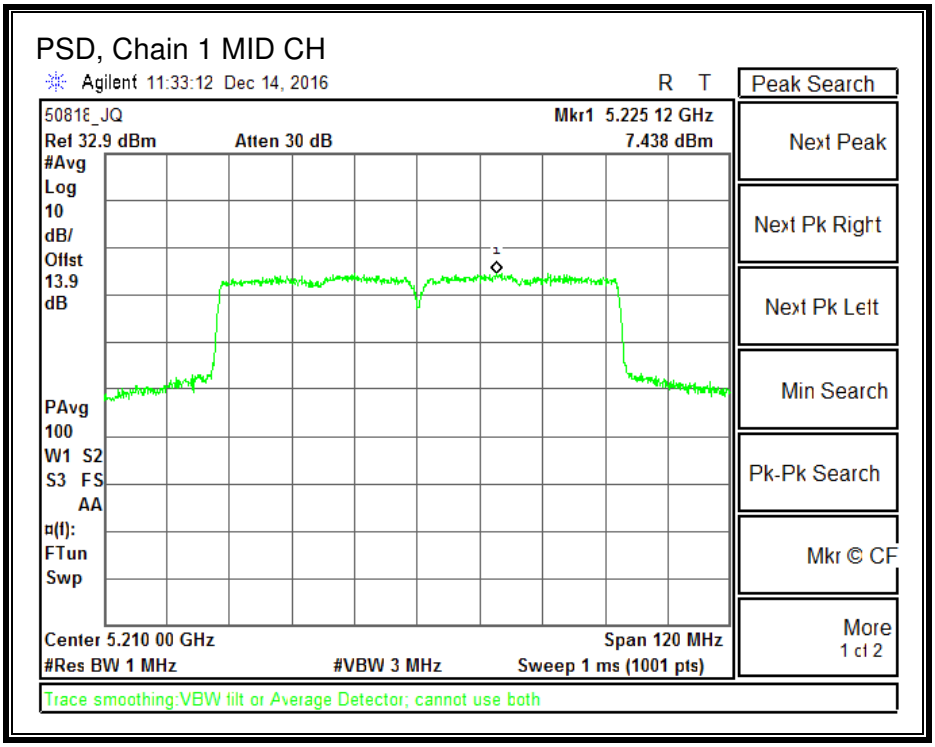
_The PSD results represents the worst case in 802.11ac HT80+HT80 mode.

_The 26dB bandwidth that falls inside the 5250-5350 MHz band is > 20MHz, therefore the power limit is 24dBm.

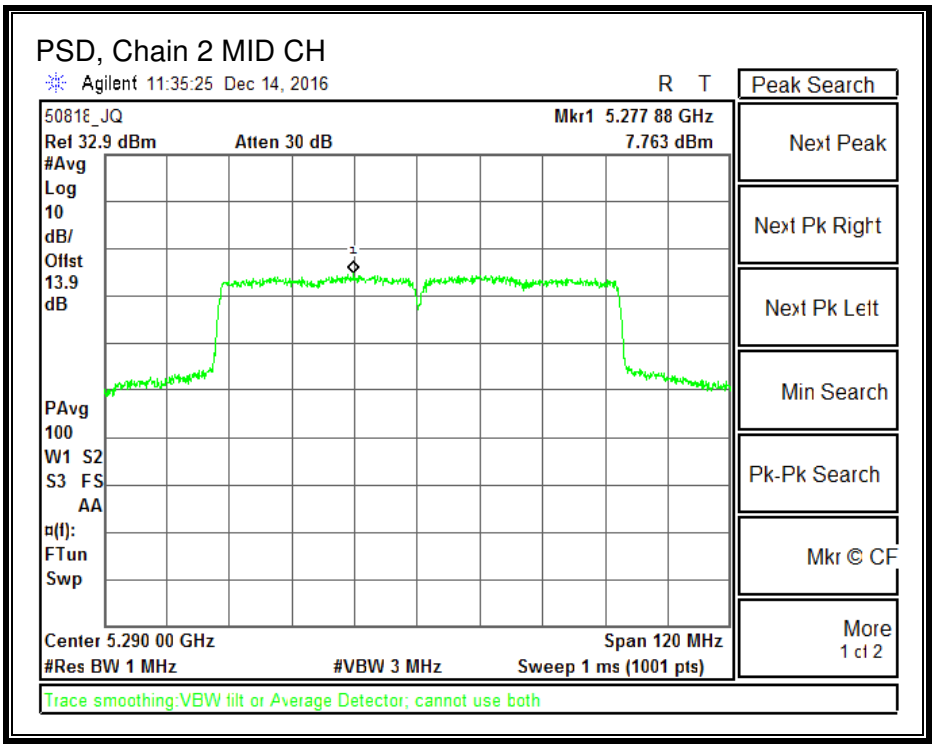
PSD, Chain 0



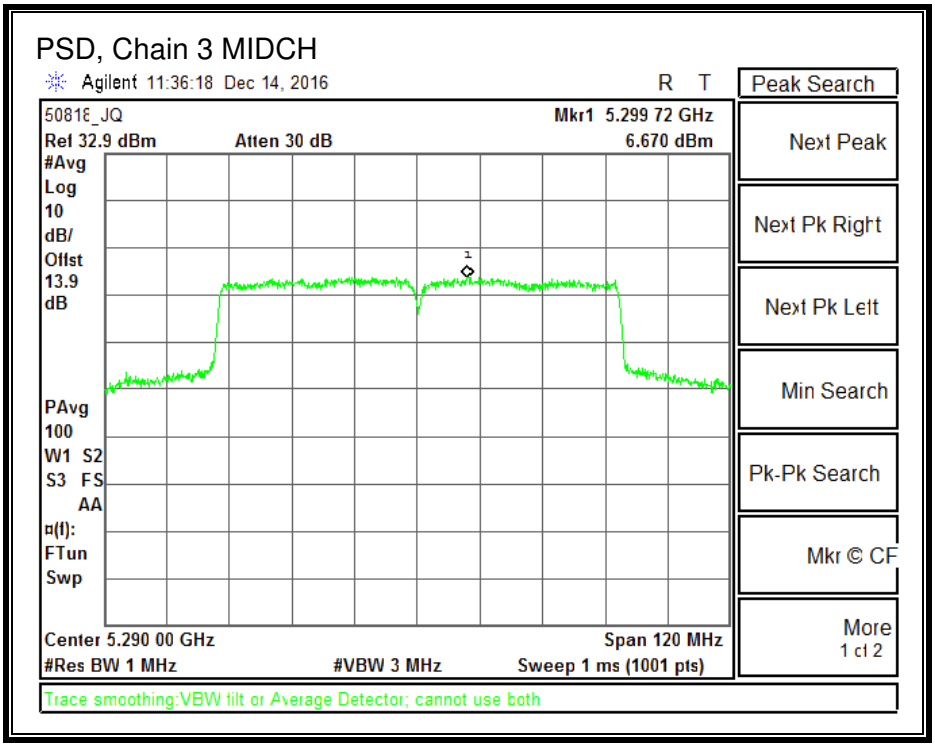
PSD, Chain 1



PSD, Chain 2



PSD, Chain 3



8.6. 802.11n HT20 MODE IN THE 5.6 GHz BAND

8.6.1. 26 dB BANDWIDTH

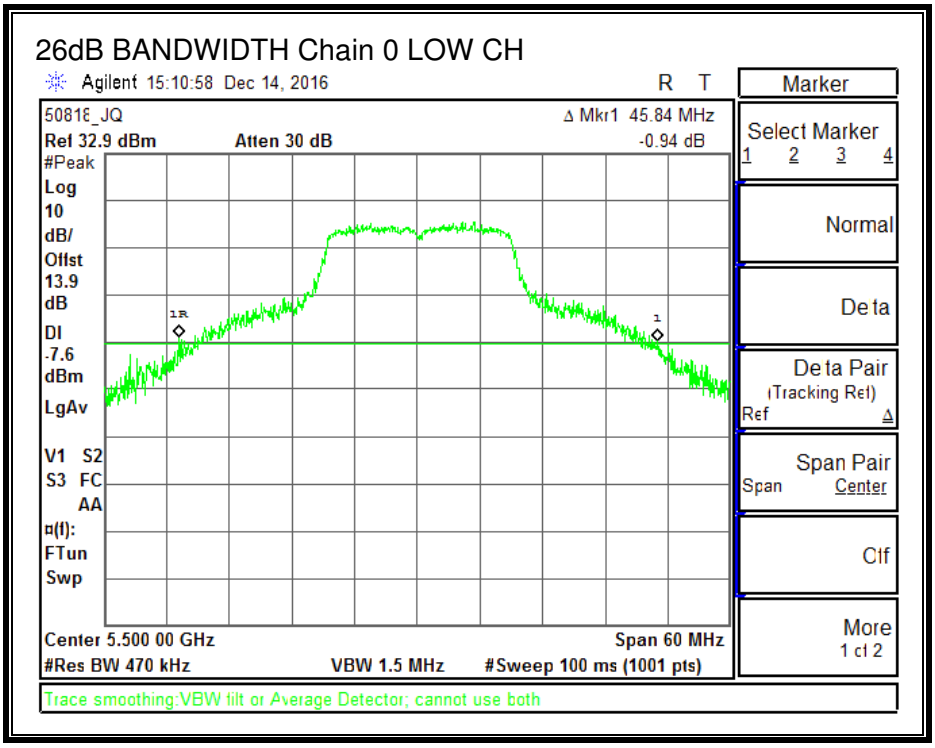
LIMITS

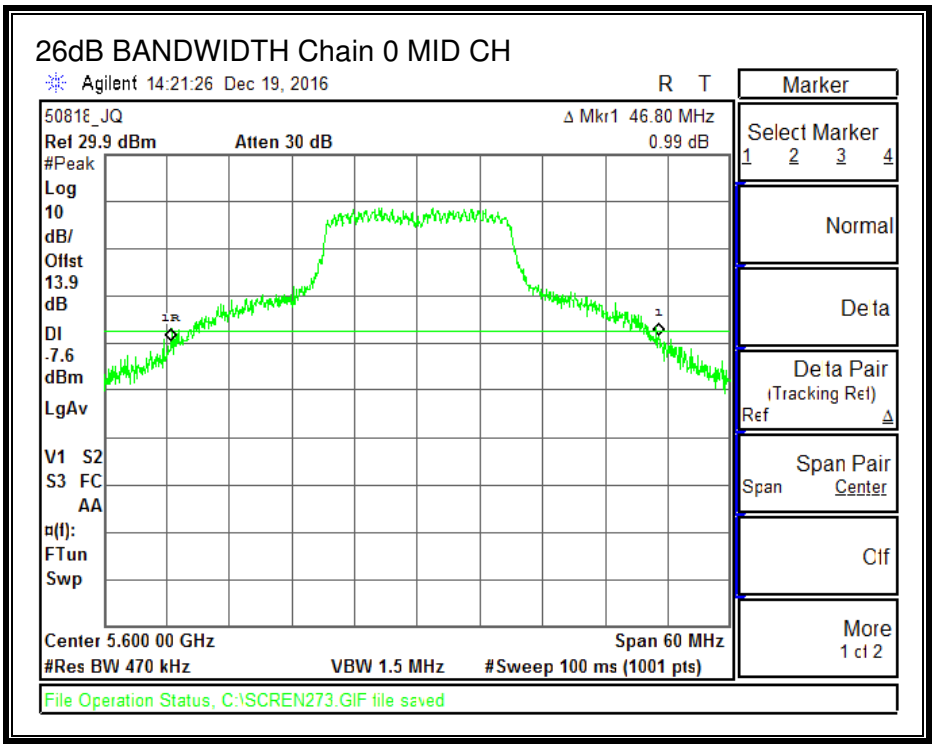
None; for reporting purposes only.

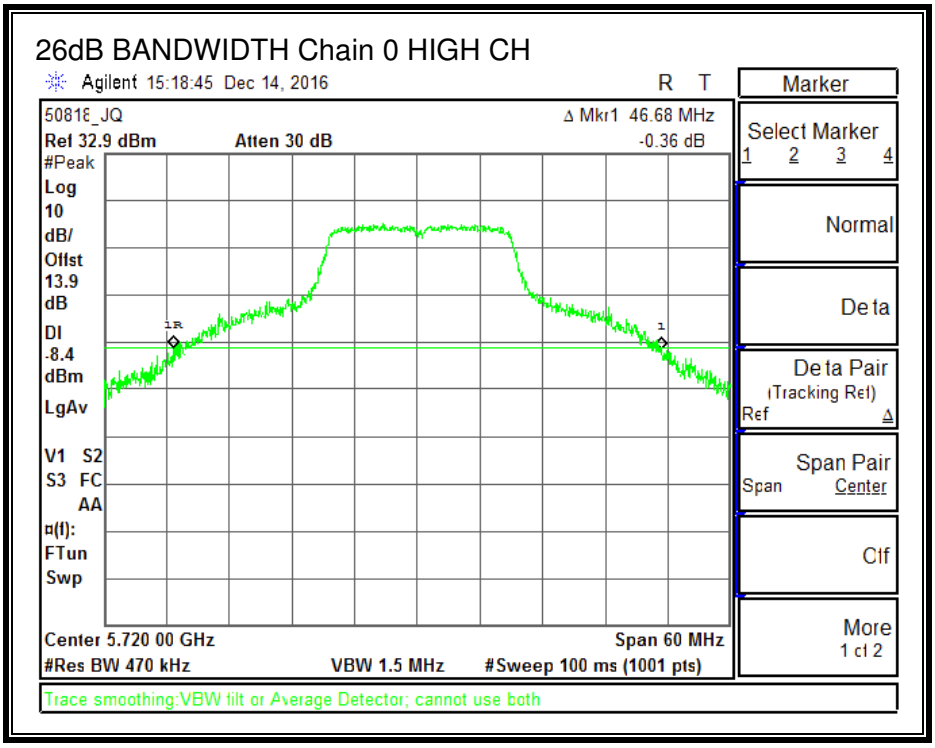
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5500	45.84	46.14	46.08	45.00
Mid	5600	46.80	45.78	46.74	42.72
High	5720	46.68	44.28	44.28	46.86

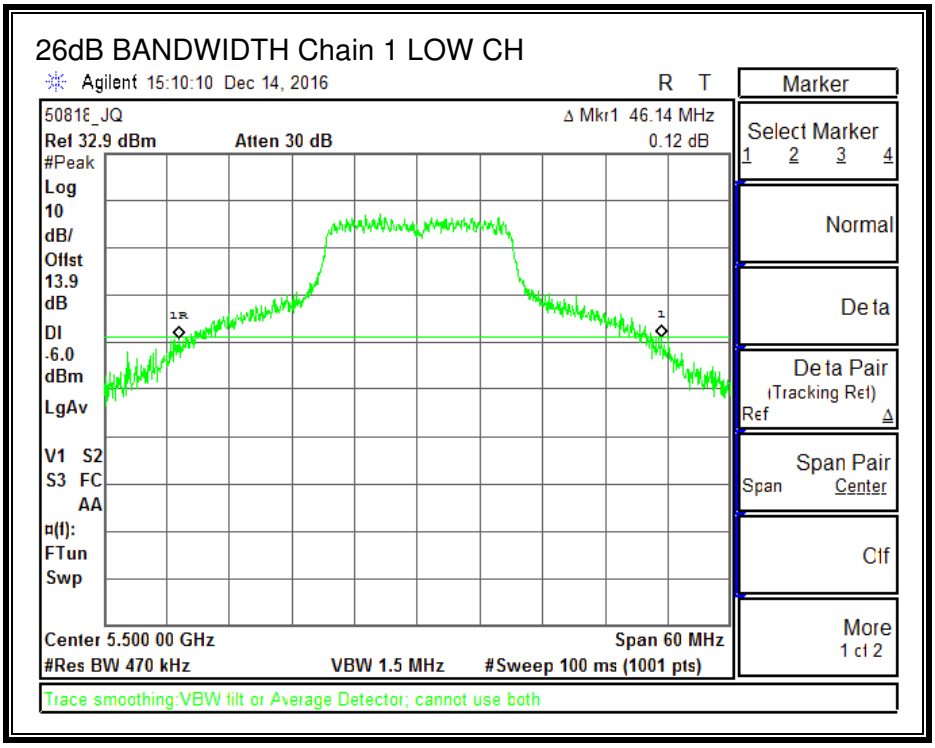
26 dB BANDWIDTH, Chain 0

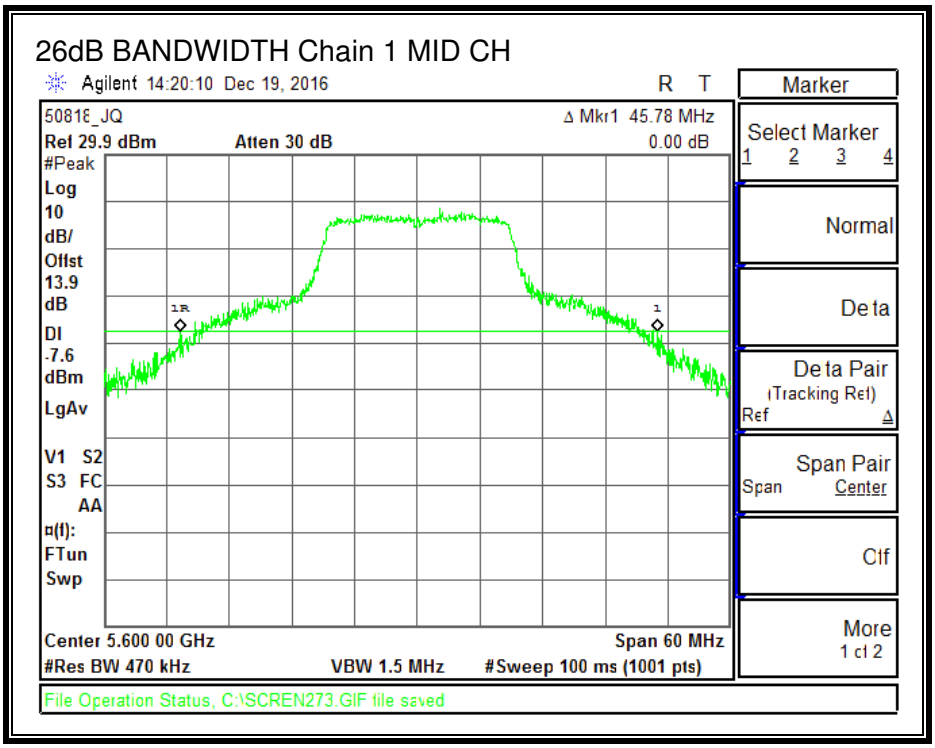


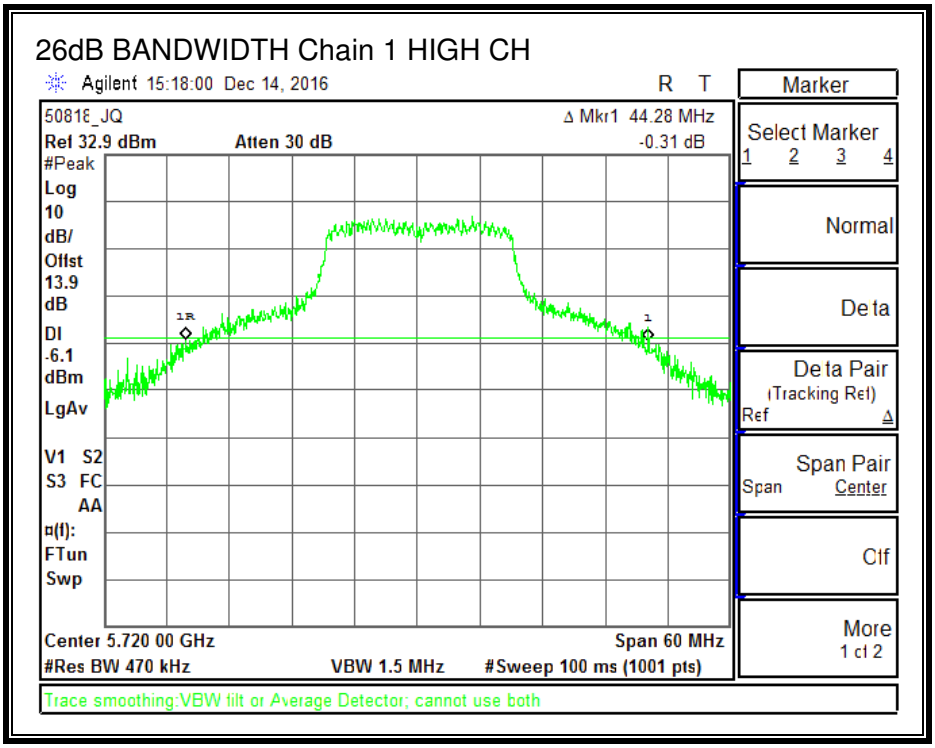




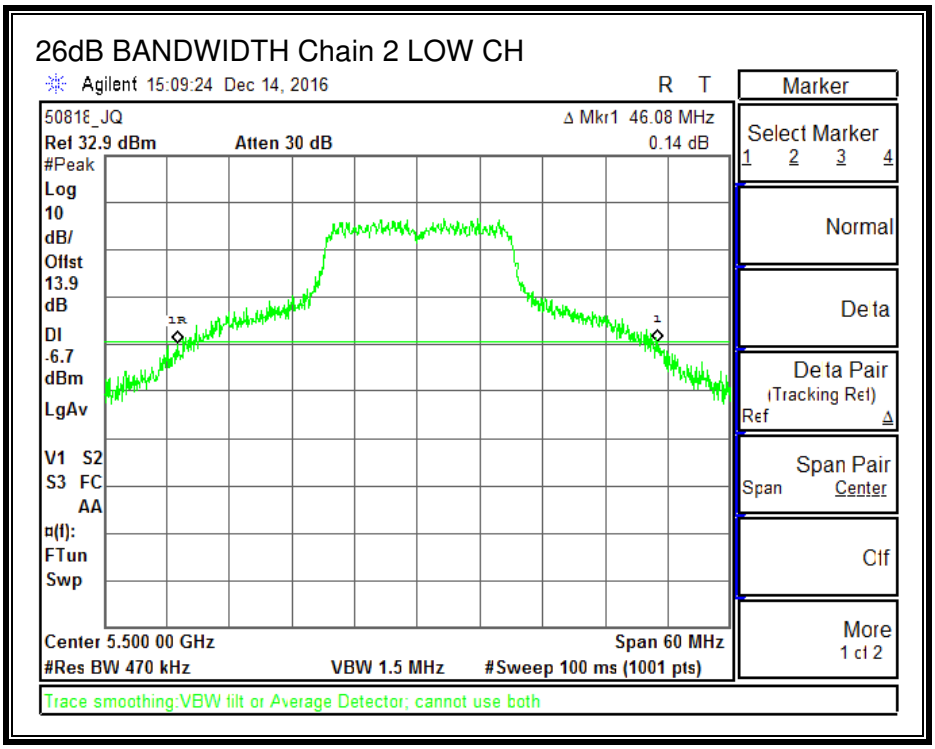
26 dB BANDWIDTH, Chain 1

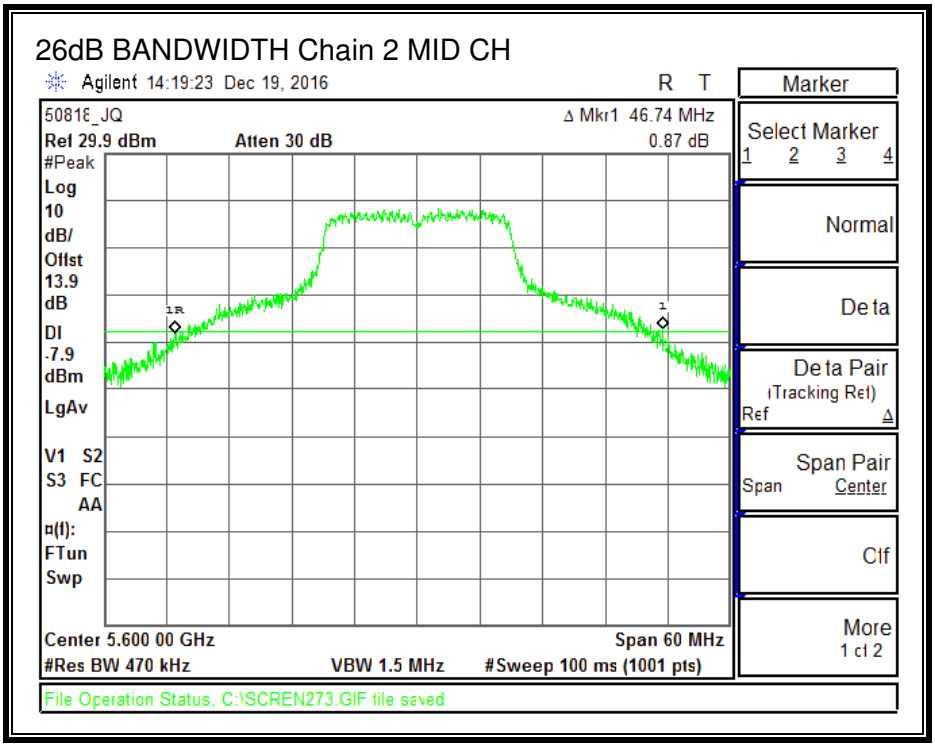


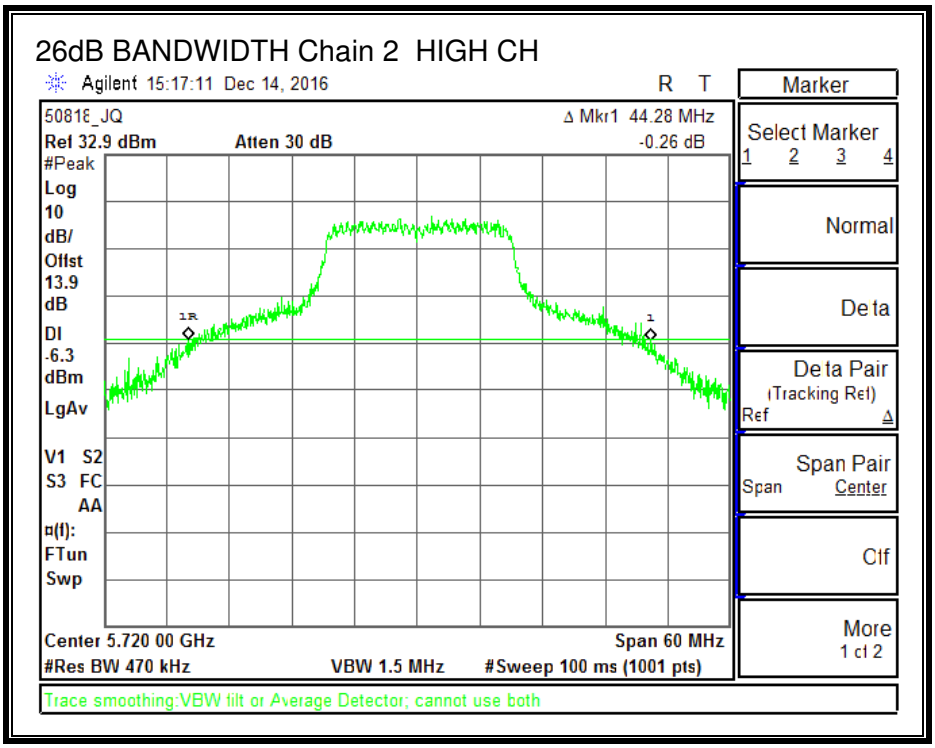




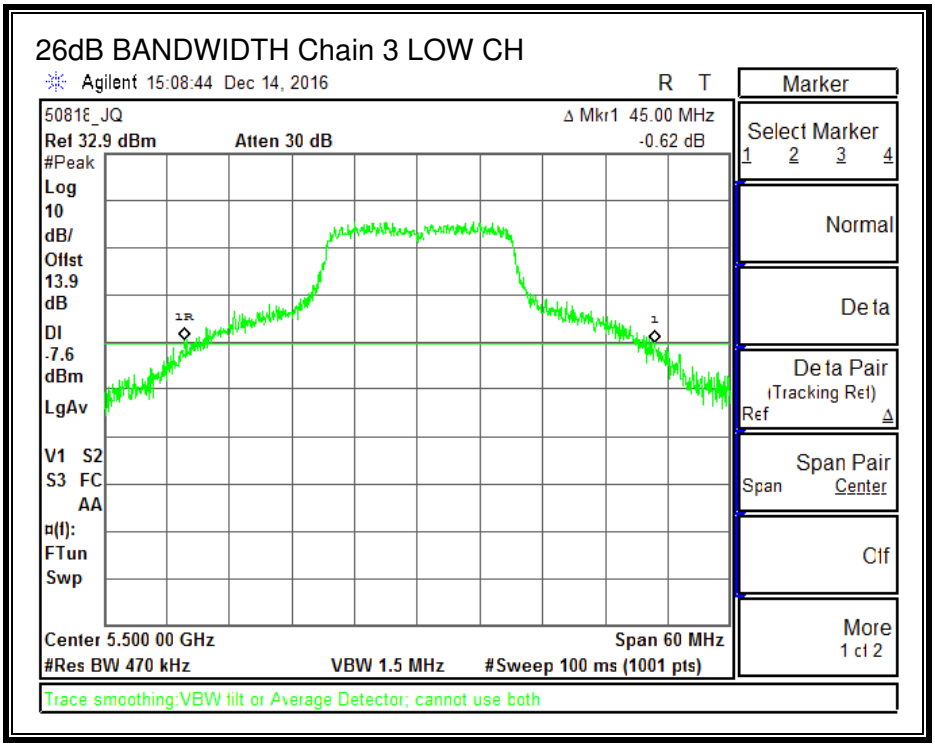
26 dB BANDWIDTH, Chain 2

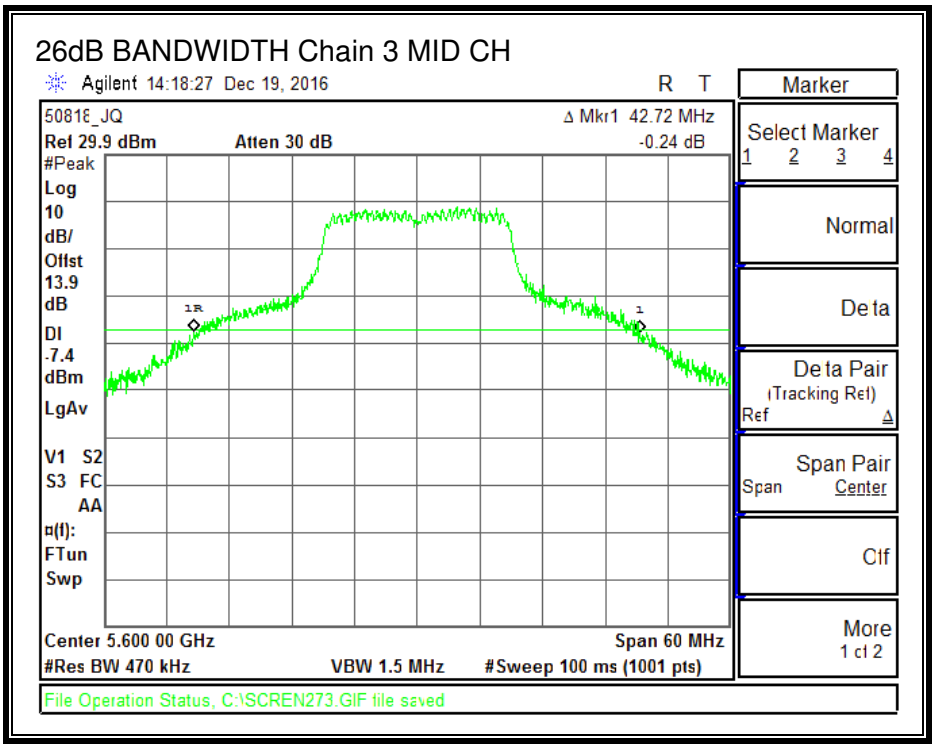


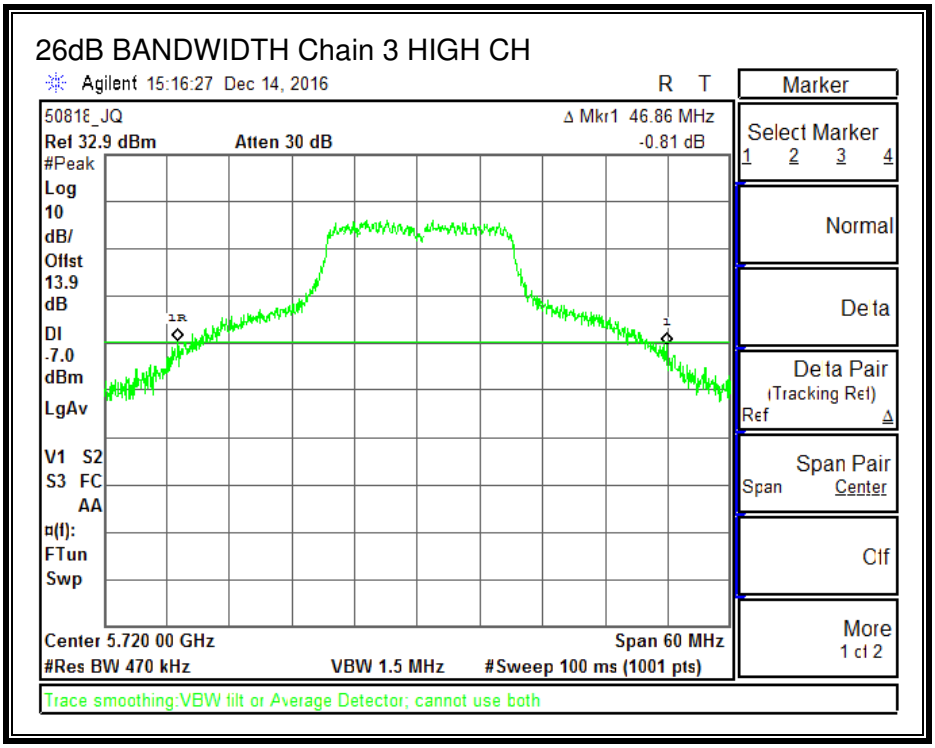




26 dB BANDWIDTH, Chain 3







8.6.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	45.00	6.32	6.32	23.68	10.68
Mid	5600	42.72	6.32	6.32	23.68	10.68
High	5720	44.28	6.32	6.32	23.68	10.68

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

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.02	15.01	15.32	14.02	20.89	23.68	-2.79
Mid	5600	13.88	14.76	13.91	13.52	20.06	23.68	-3.62
High	5720	15.08	14.89	15.12	14.43	20.91	23.68	-2.77

PSD Results

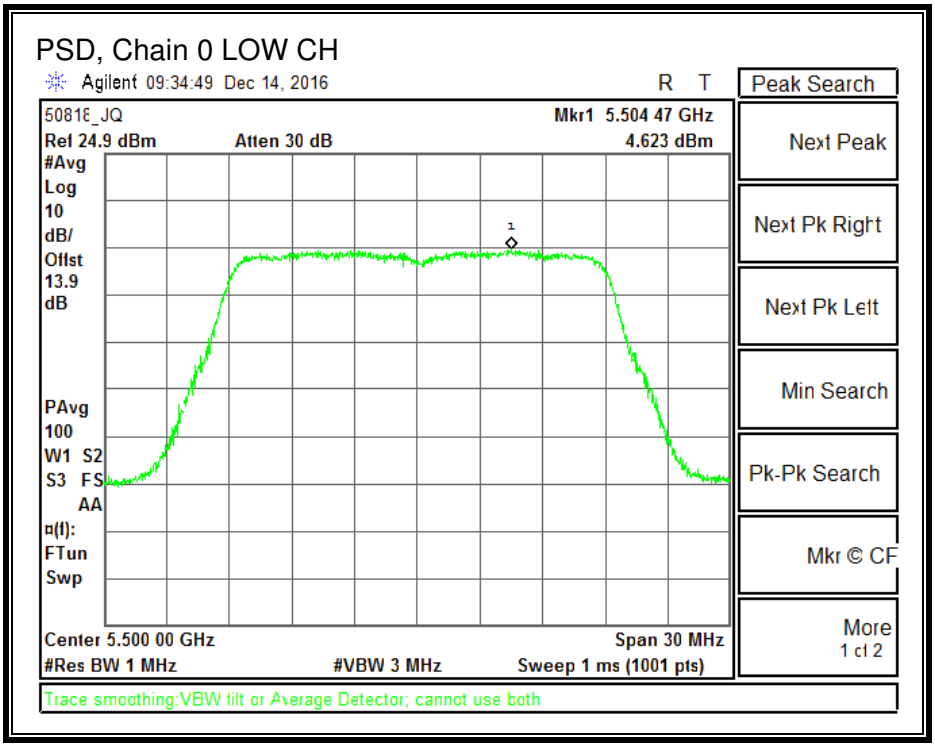
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	4.62	4.46	4.80	3.77	10.45	10.68	-0.23
Mid	5600	4.82	4.50	4.87	3.90	10.56	10.68	-0.12
High	5720	4.81	4.52	4.79	4.21	10.61	10.68	-0.07

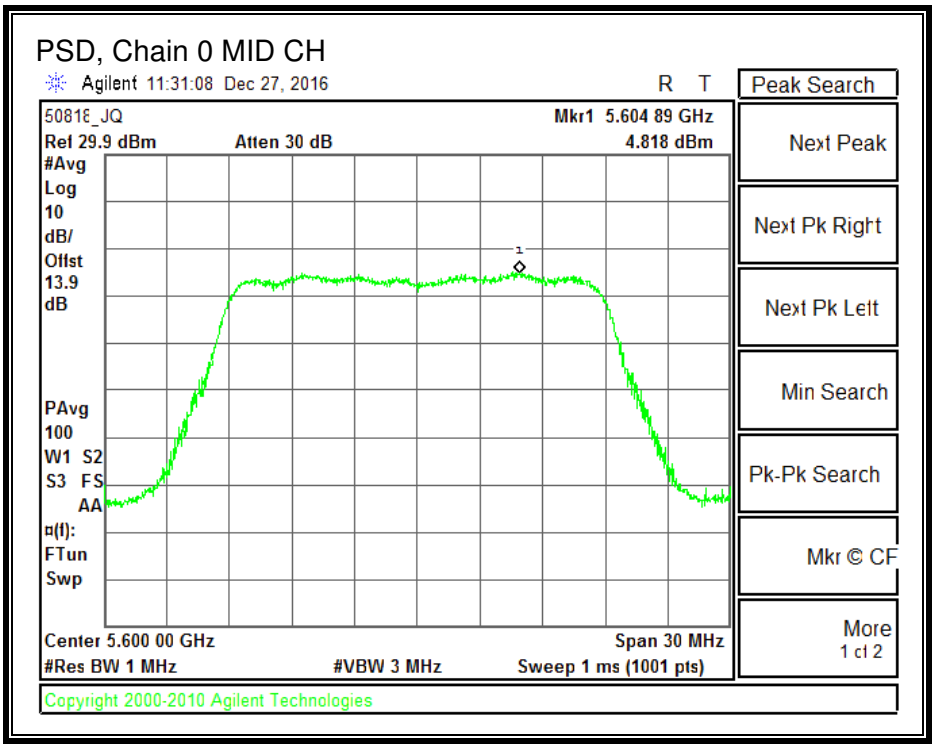
Note:

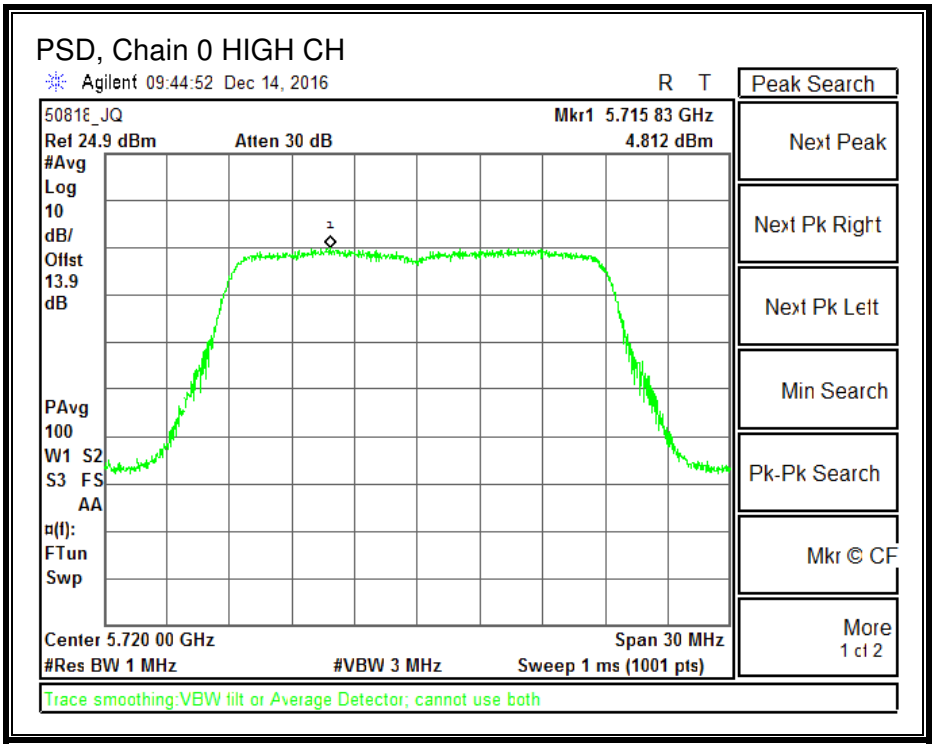
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

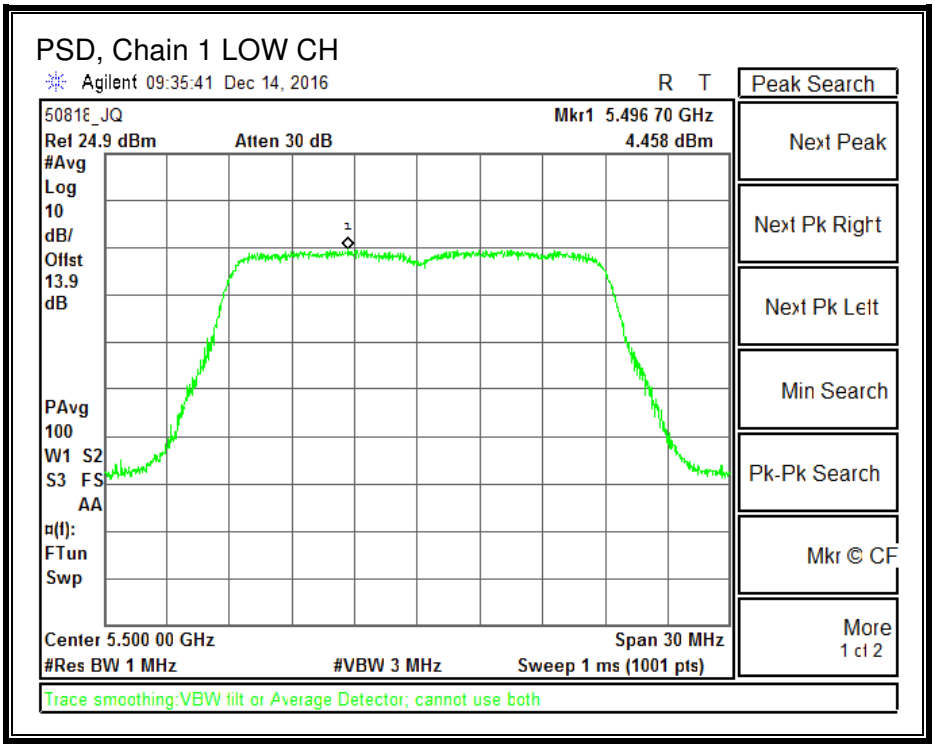
PSD, Chain 0

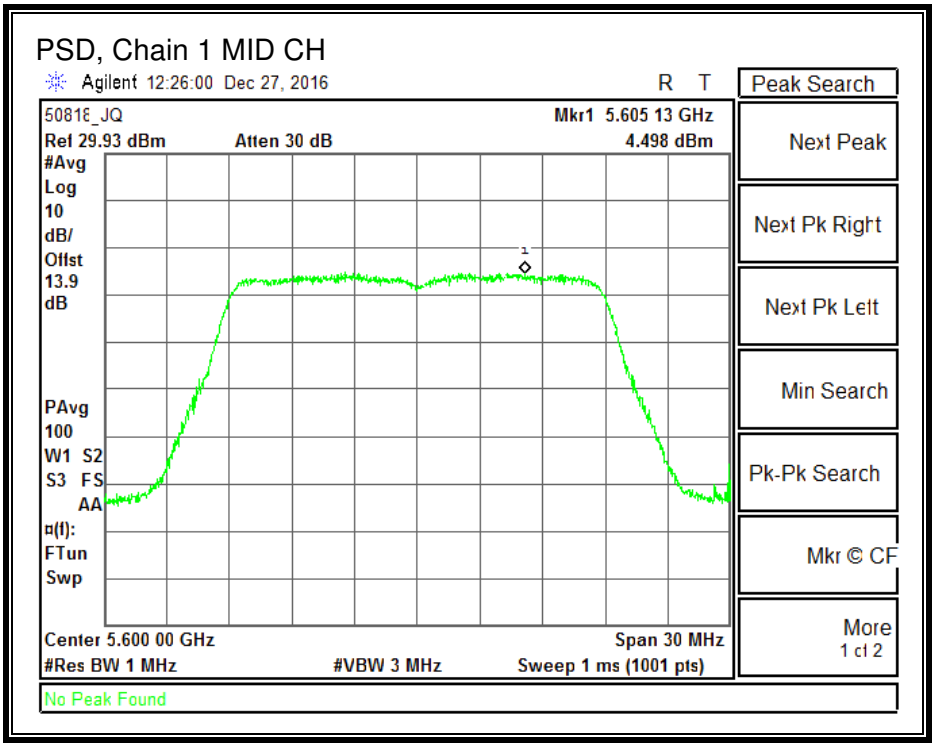


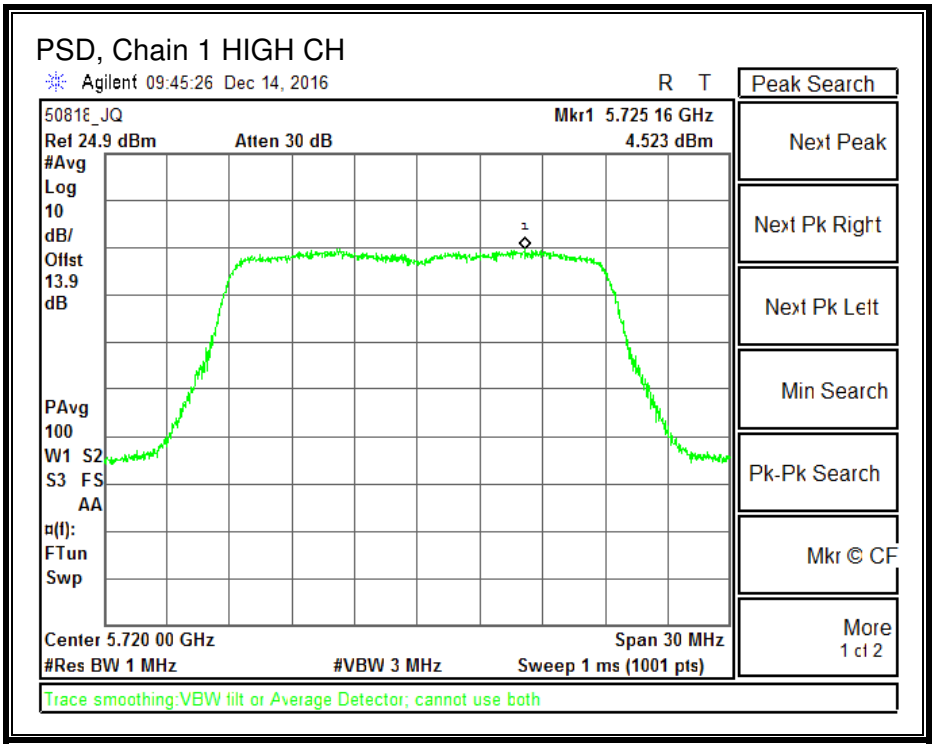




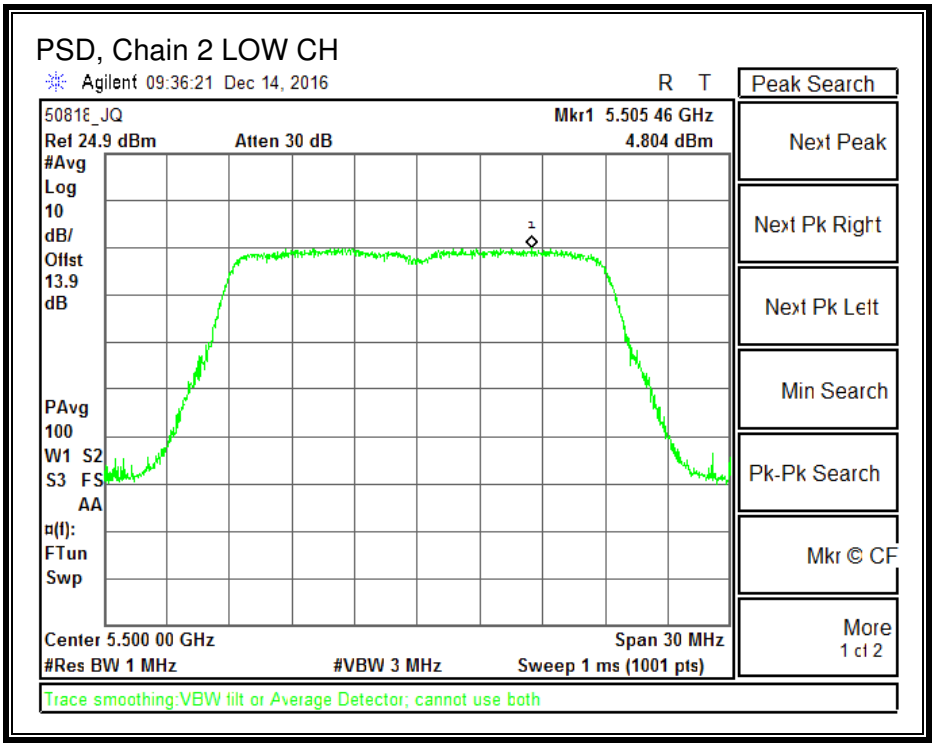
PSD, Chain 1

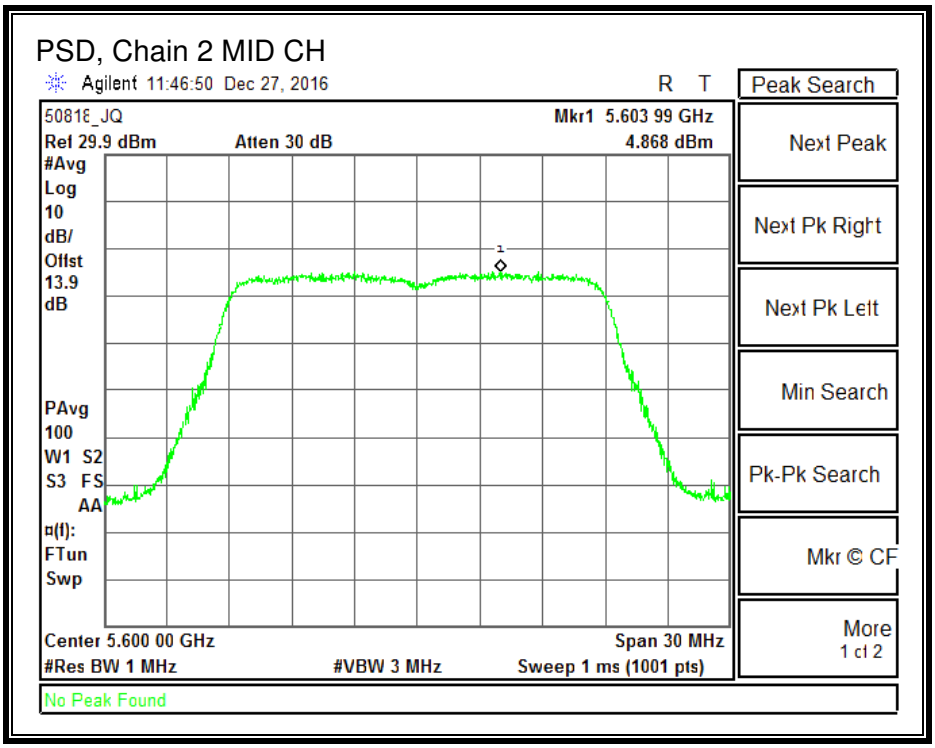


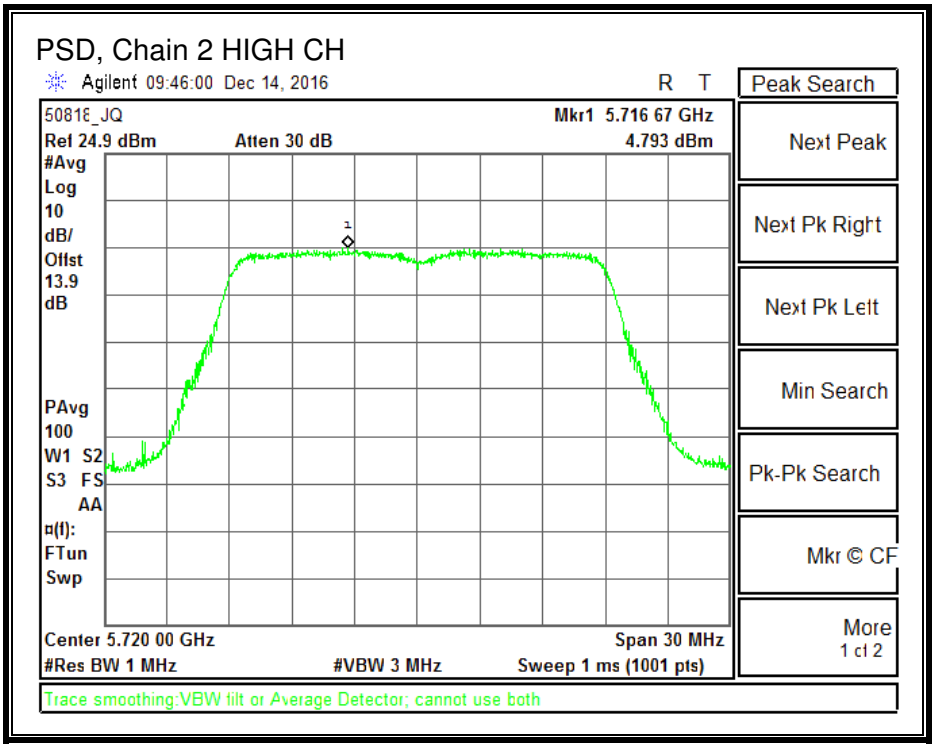




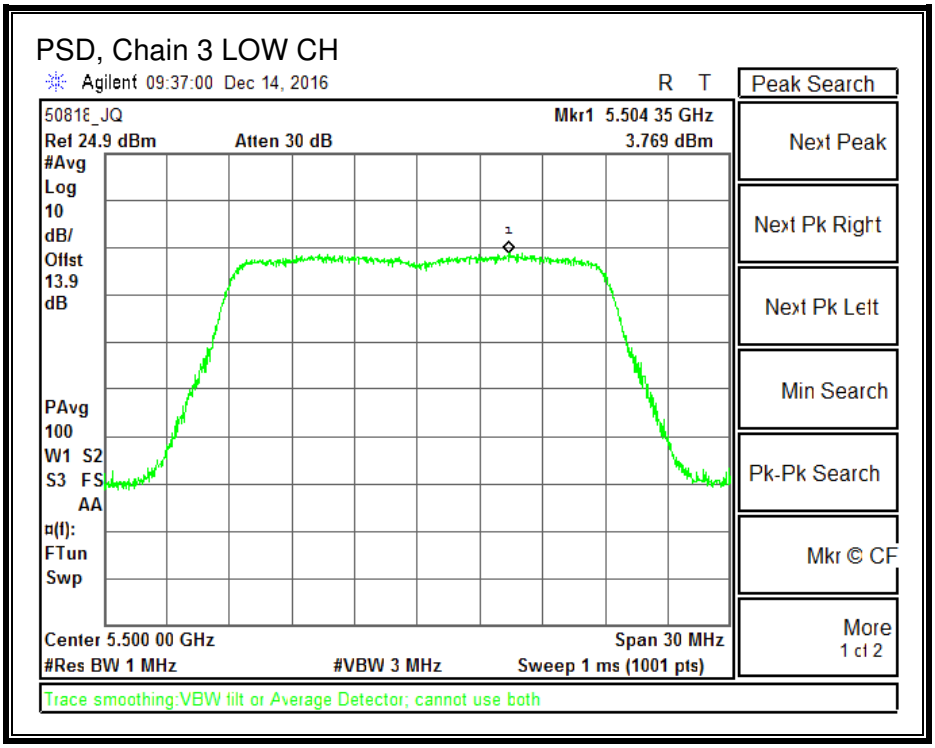
PSD, Chain 2

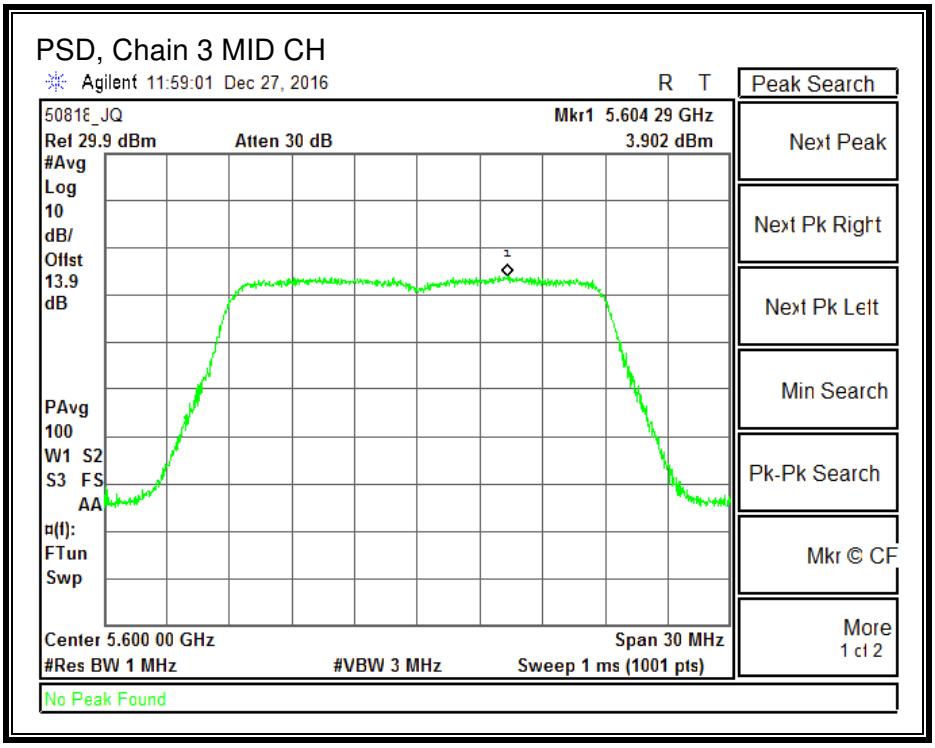


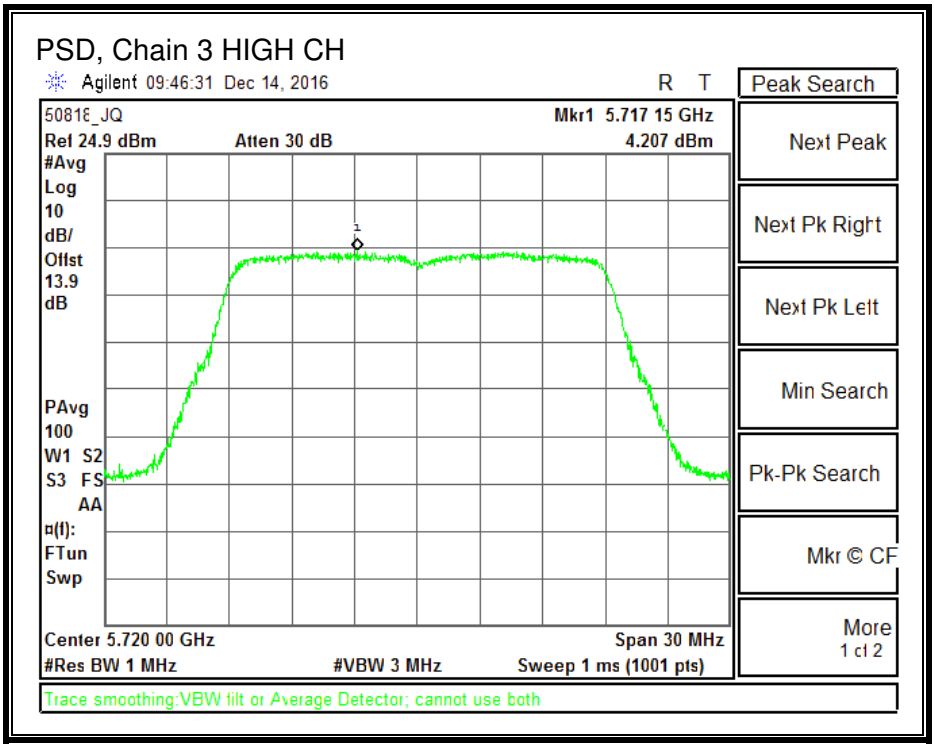




PSD, Chain 3







8.7. 802.11n HT40 MODE IN THE 5.6 GHz BAND

8.7.1. 26 dB BANDWIDTH

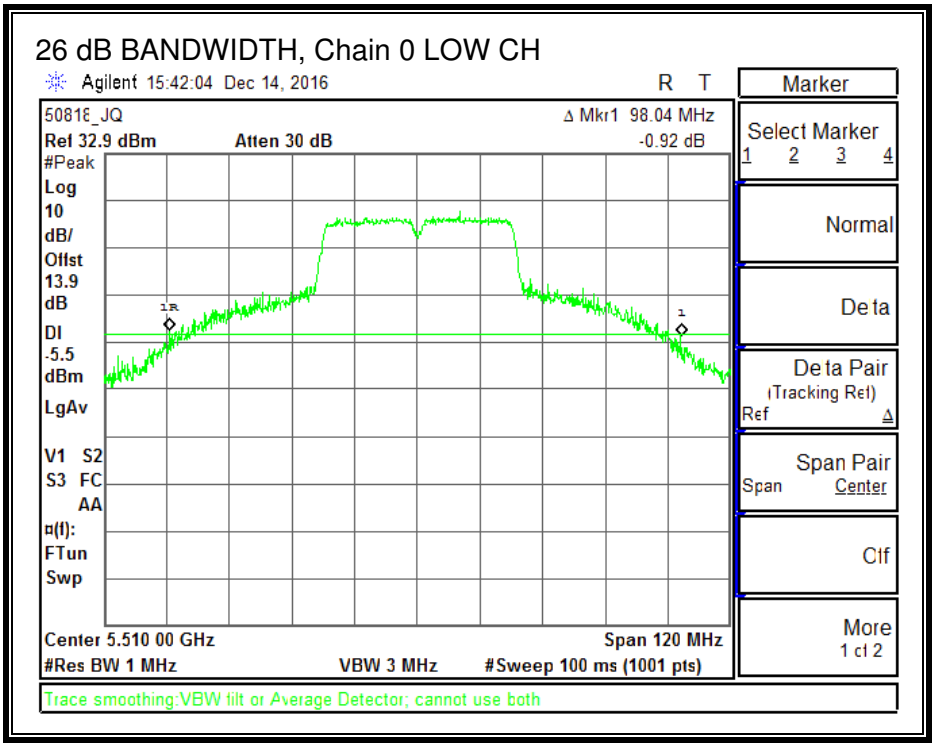
LIMITS

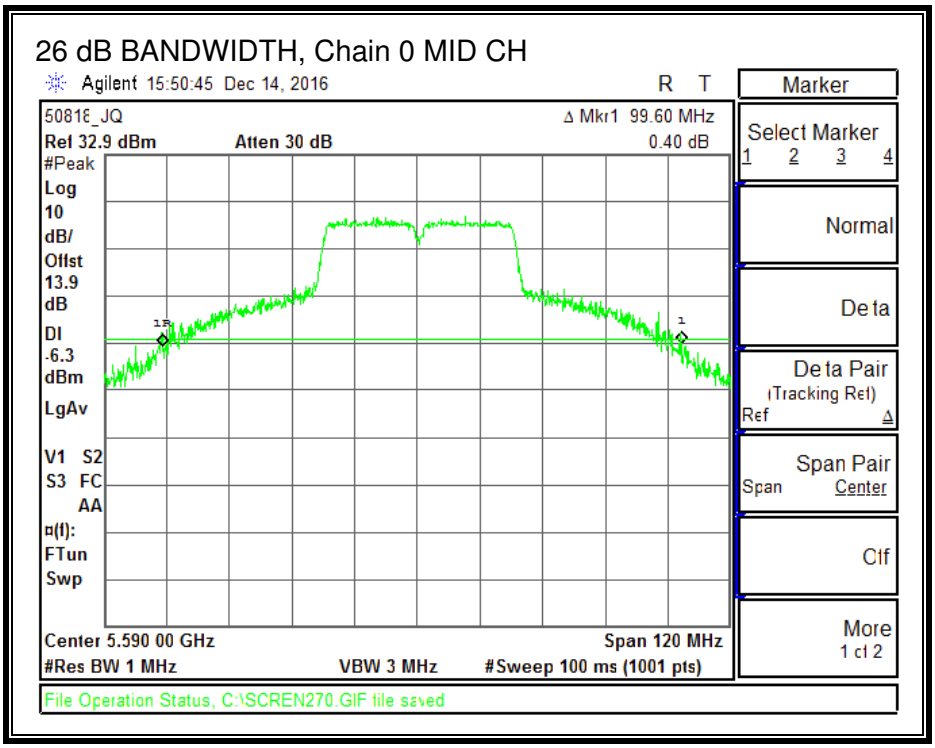
None; for reporting purposes only.

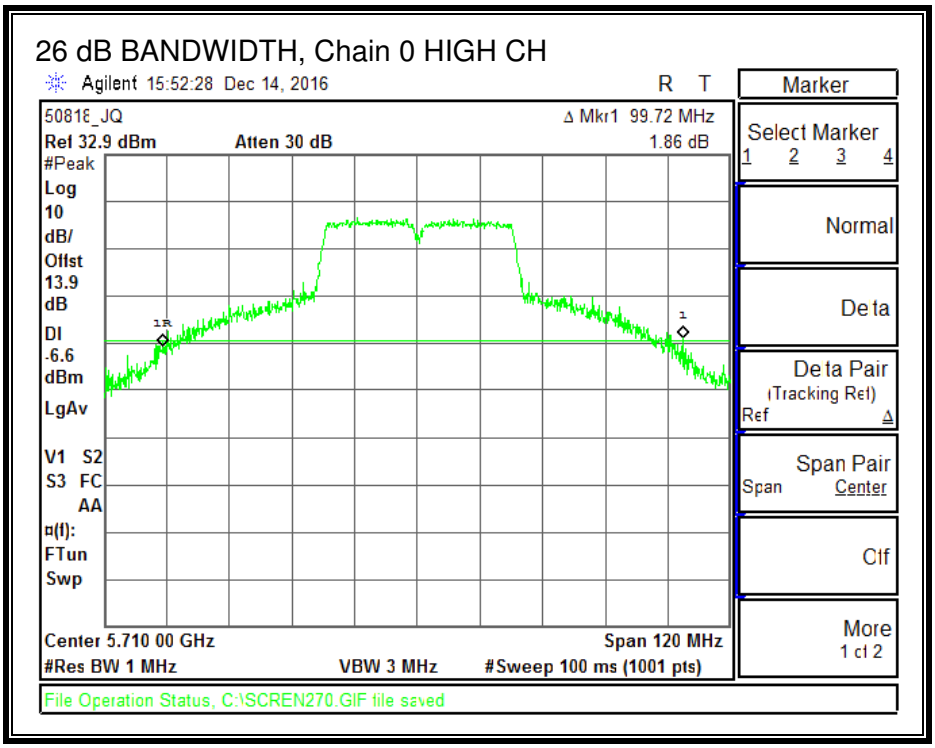
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5510	98.04	99.36	99.36	94.92
Mid	5590	99.60	99.84	99.48	94.20
High	5710	99.72	98.28	99.36	99.84

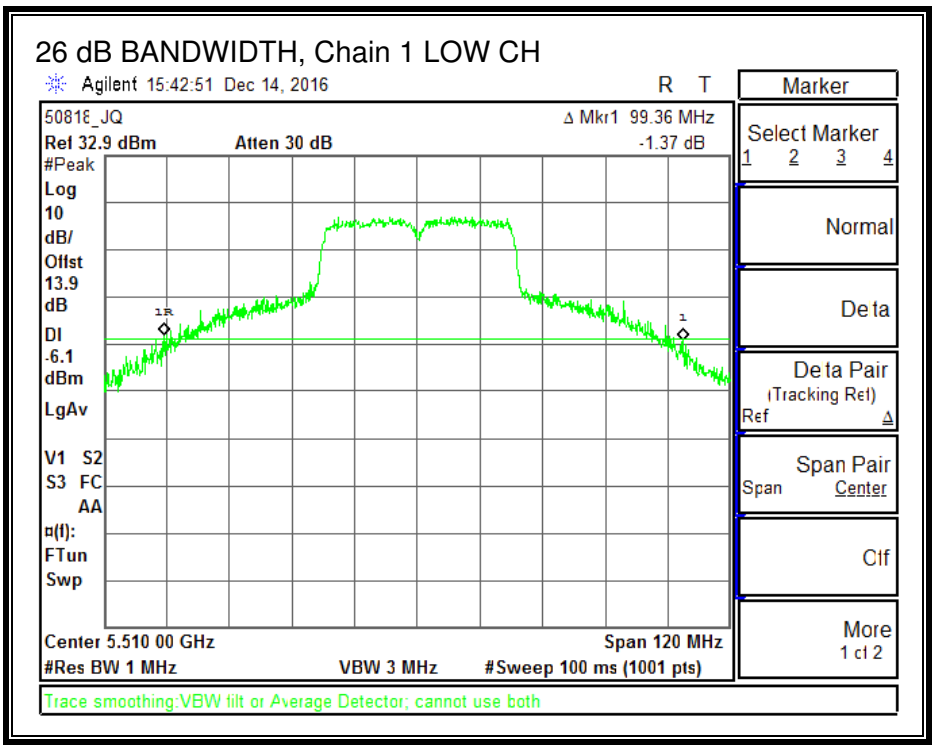
26 dB BANDWIDTH, Chain 0

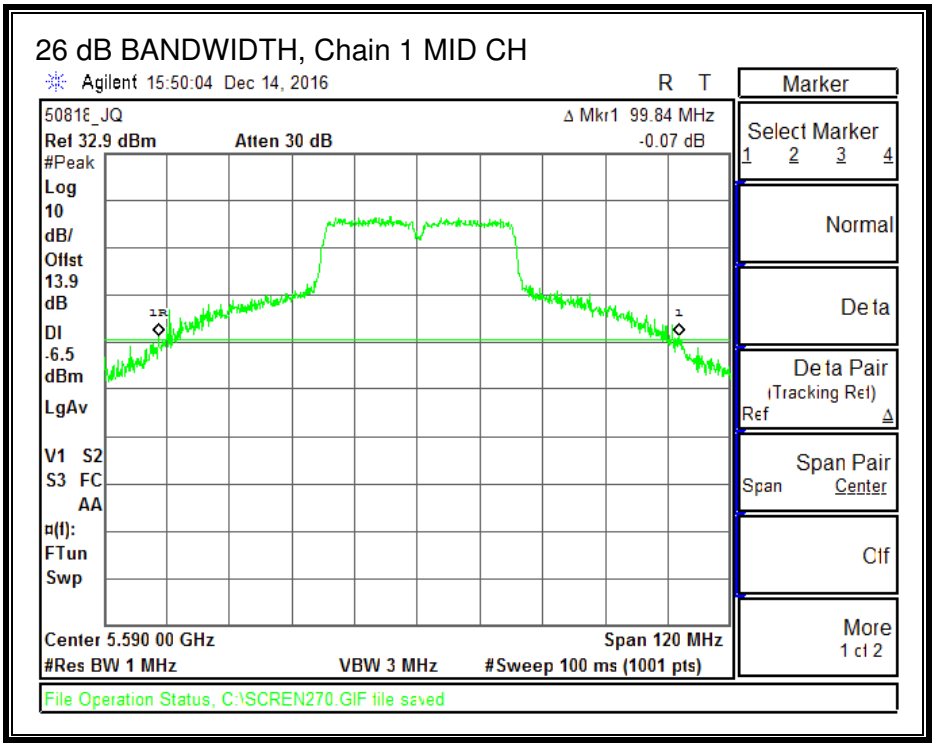


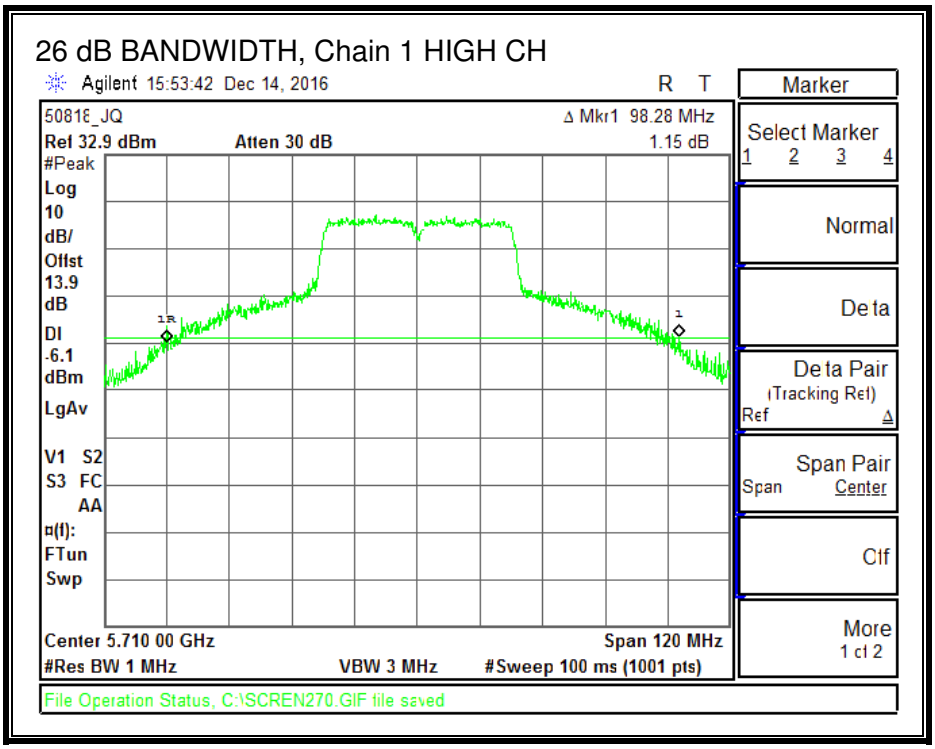




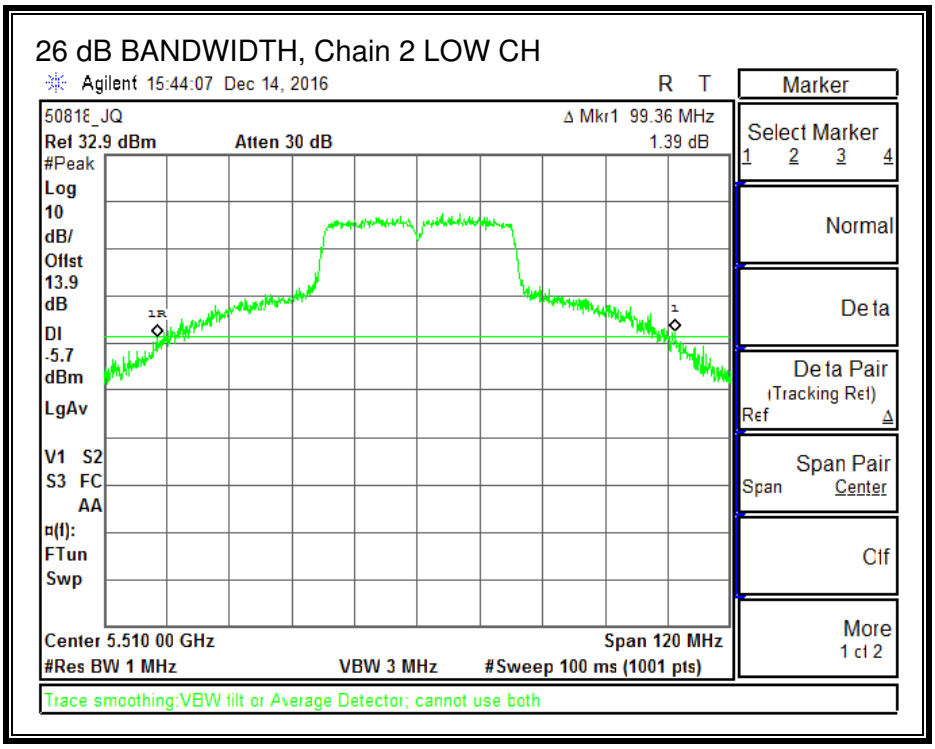
26 dB BANDWIDTH, Chain 1

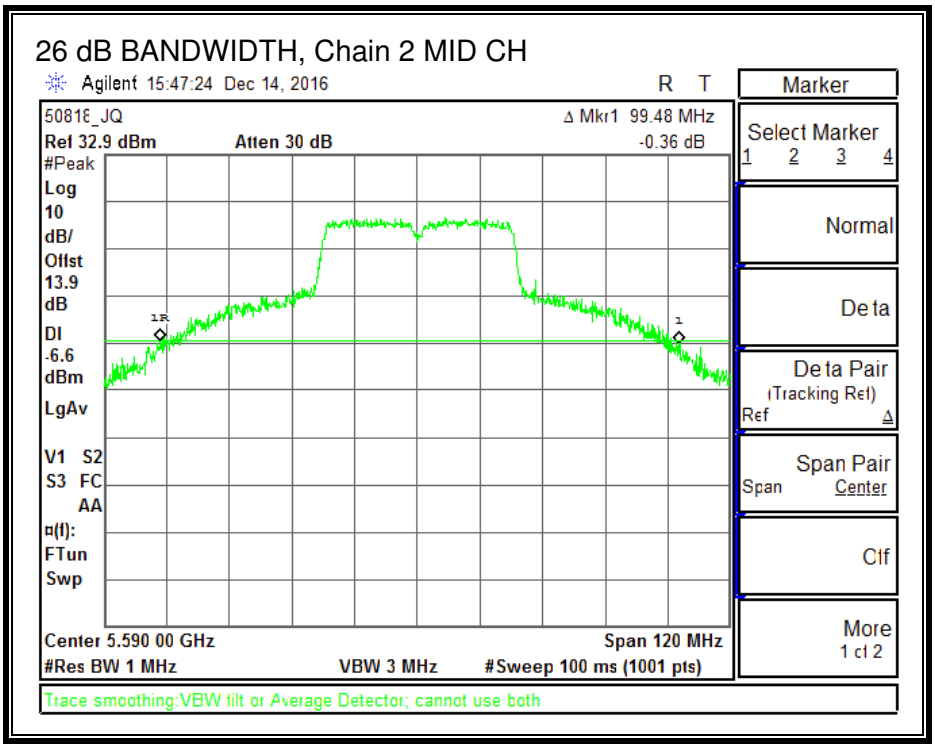


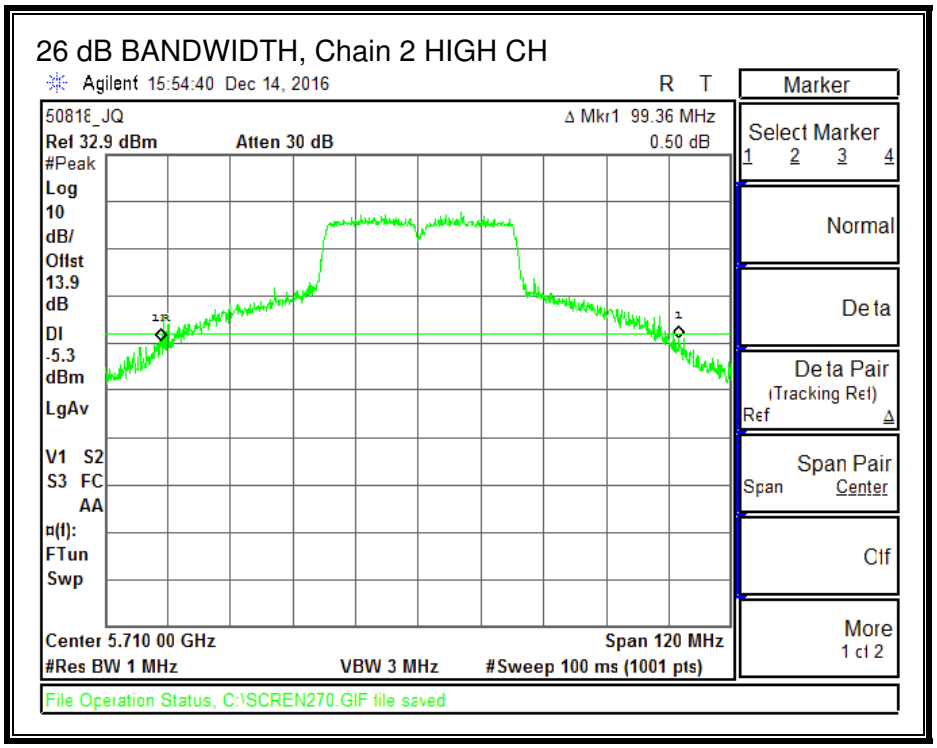




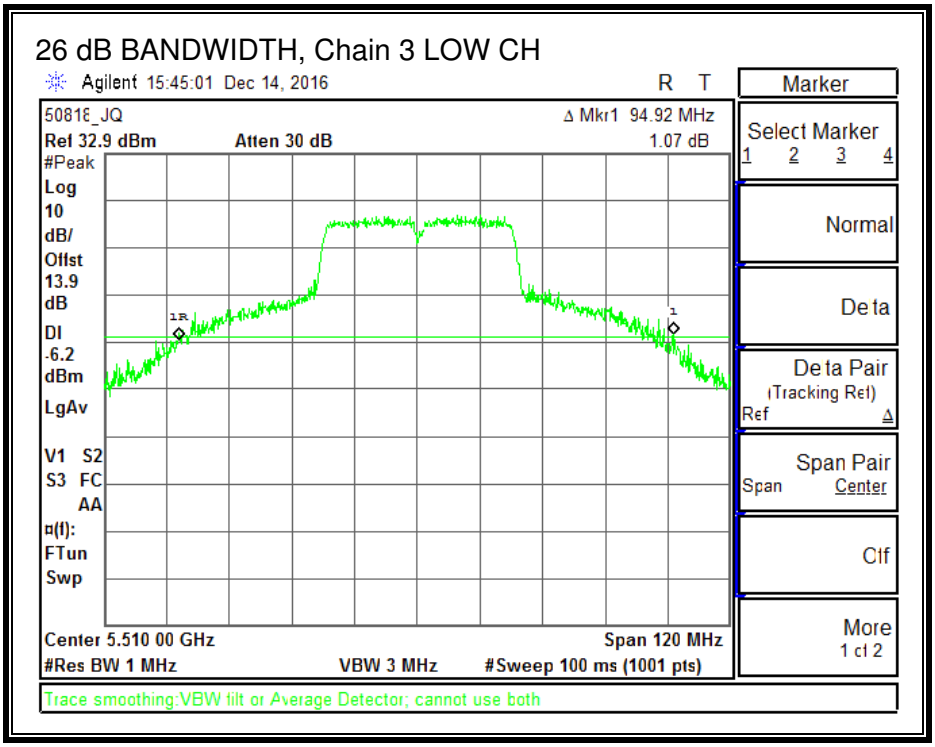
26 dB BANDWIDTH, Chain 2

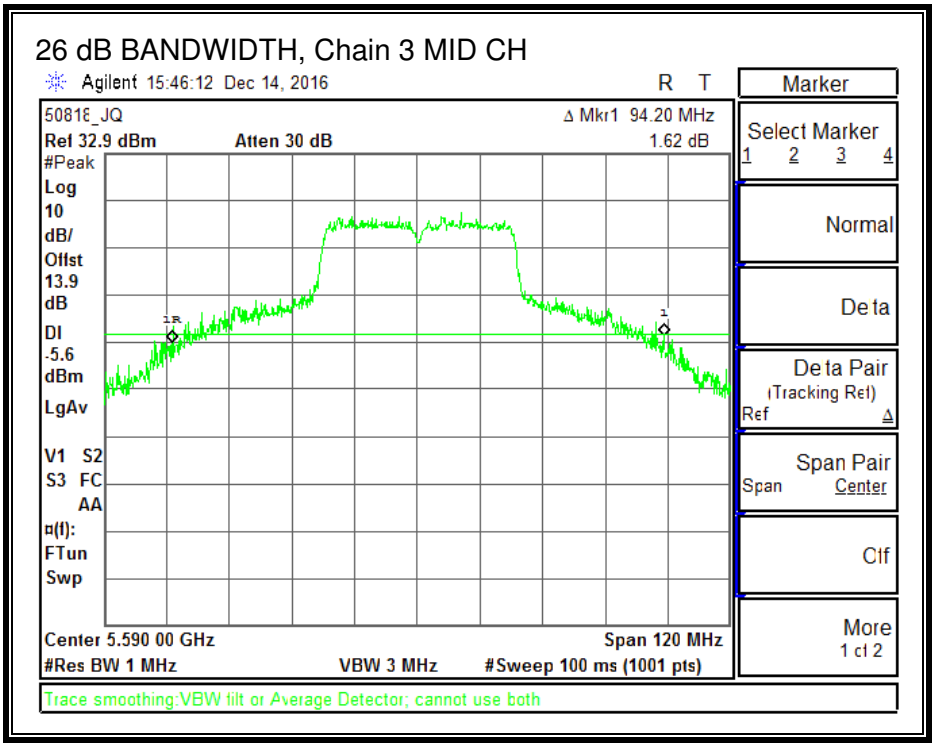


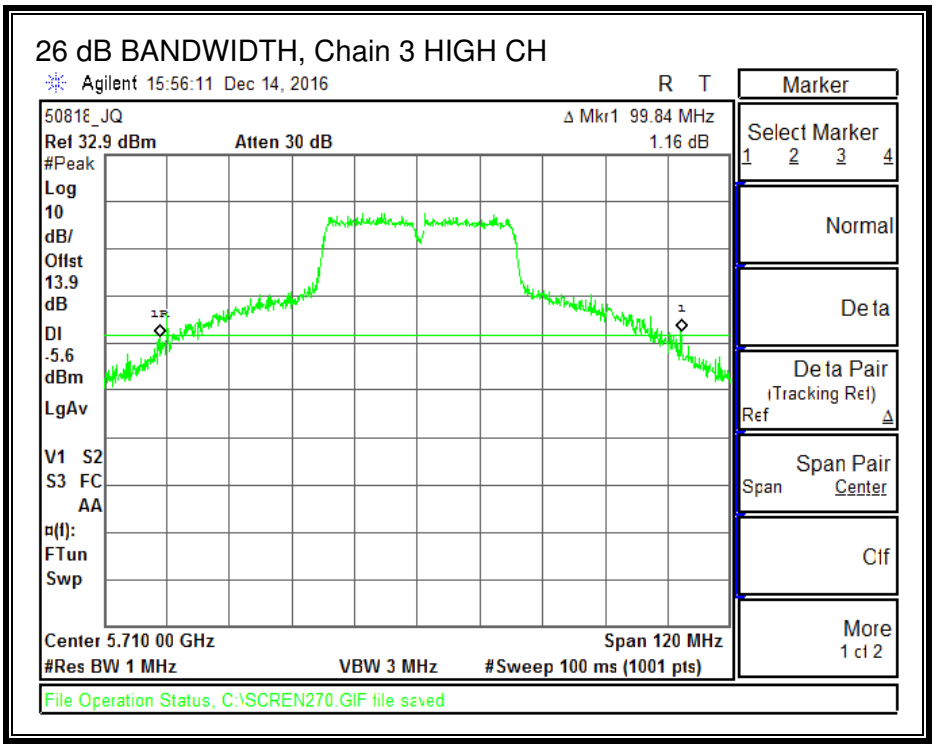




26 dB BANDWIDTH, Chain 3







8.7.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5510	94.82	6.32	6.32	23.68	10.68
Mid	5590	94.20	6.32	6.32	23.68	10.68
High	5710	98.28	6.32	6.32	23.68	10.68

Duty Cycle CF (dB)	0.10	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	13.38	14.42	13.89	13.45	19.83	23.68	-3.85
Mid	5590	15.01	15.03	14.96	14.33	20.86	23.68	-2.82
High	5710	17.82	17.54	17.72	17.12	23.58	23.68	-0.10

PSD Results

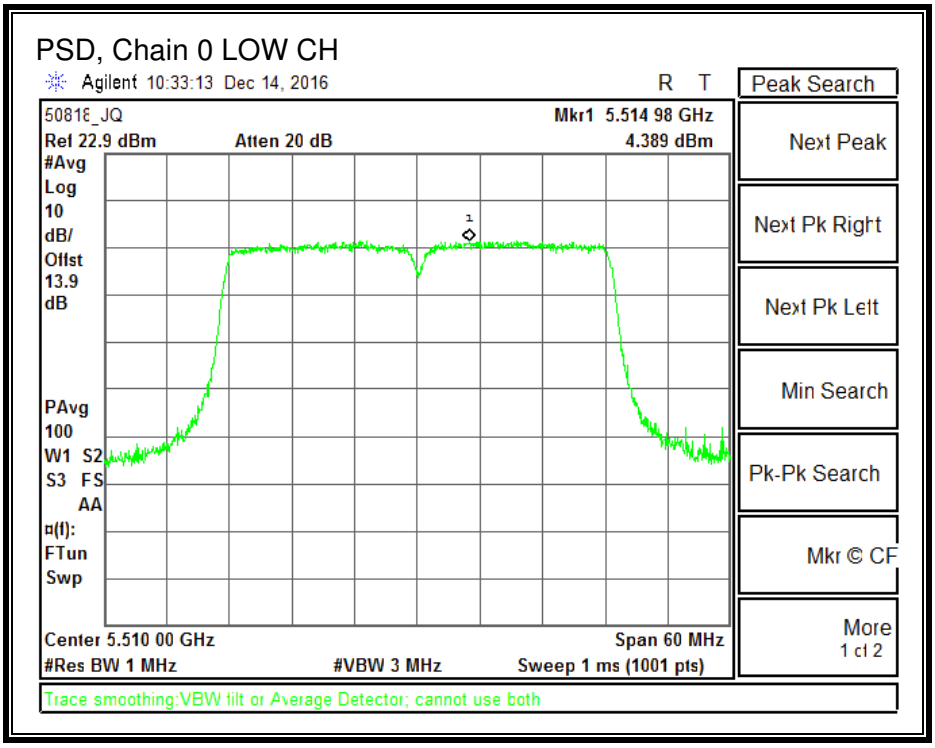
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	4.39	4.40	4.46	3.66	10.36	10.68	-0.32
Mid	5590	4.59	4.28	4.84	3.72	10.50	10.68	-0.18
High	5710	4.78	4.24	4.19	3.96	10.42	10.68	-0.26

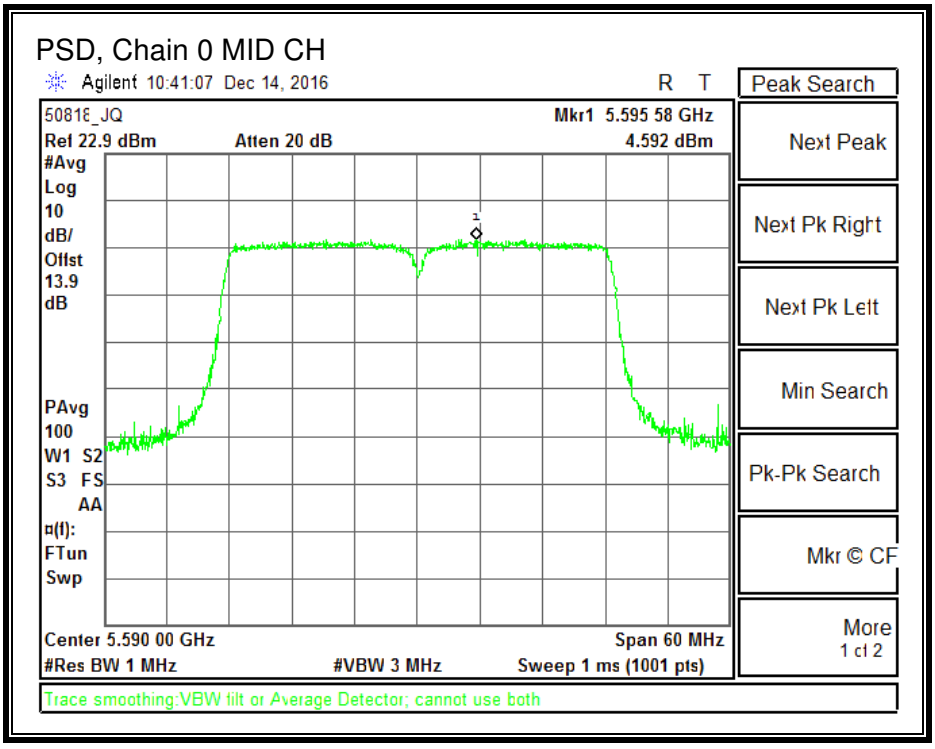
Note:

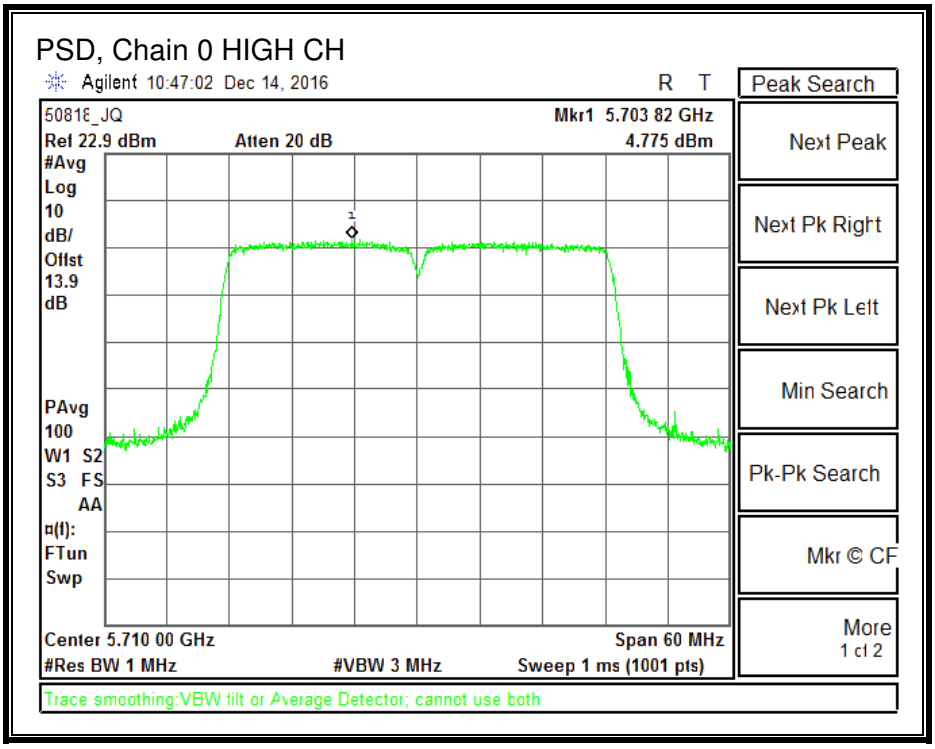
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

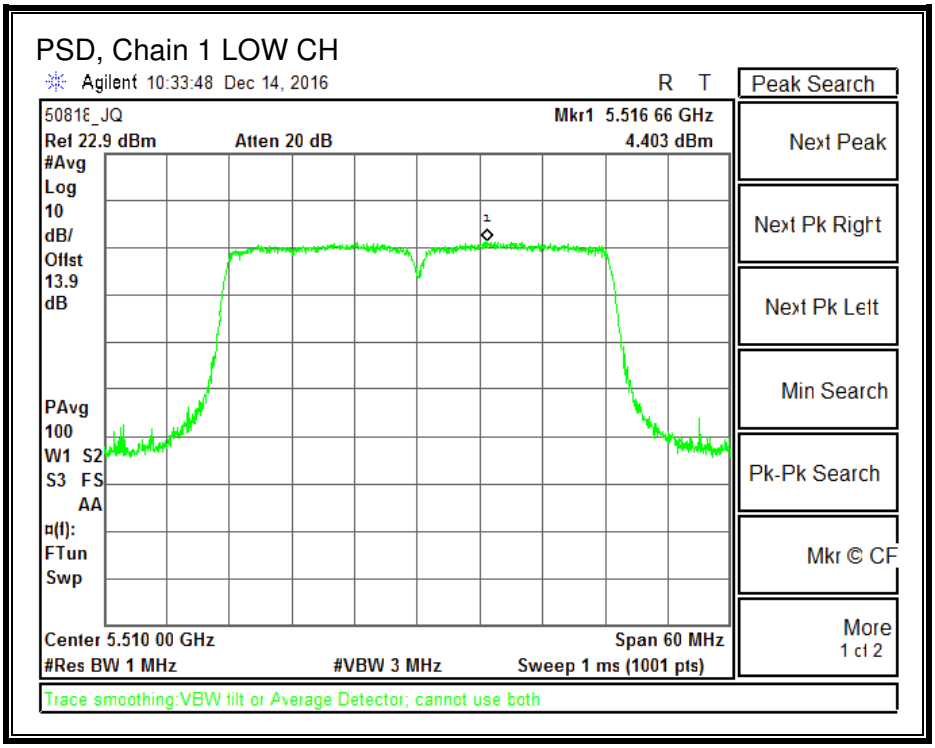
PSD, Chain 0

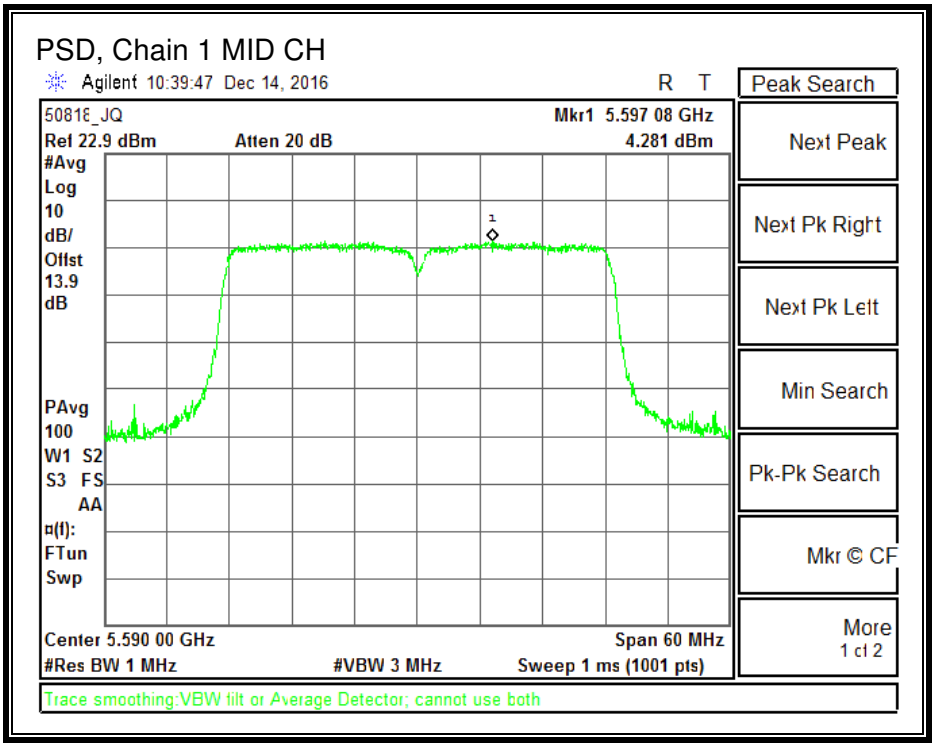


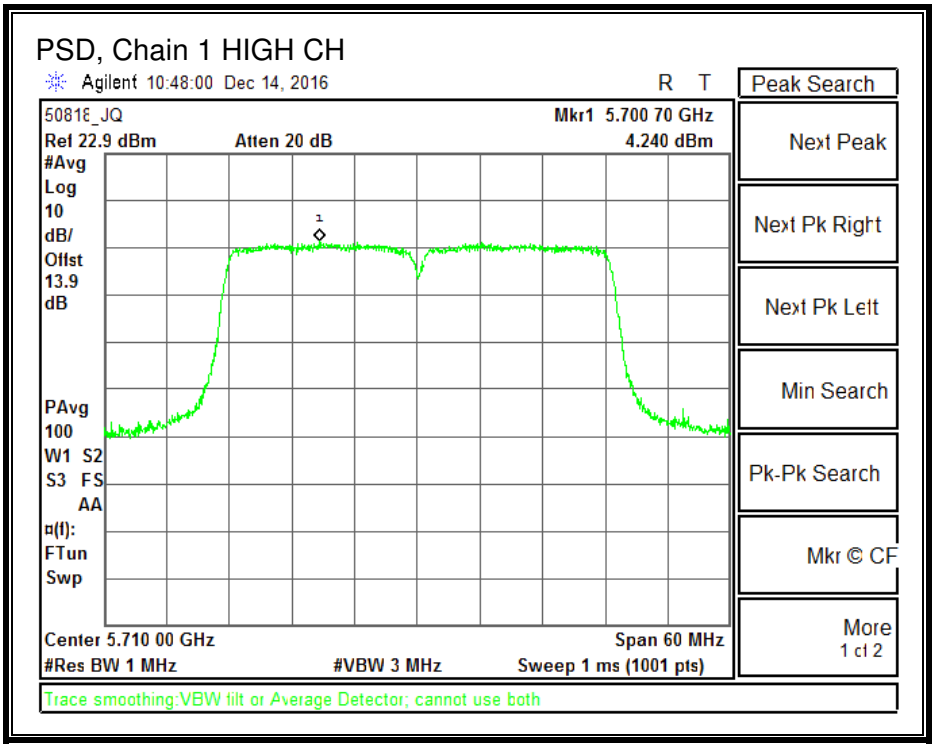




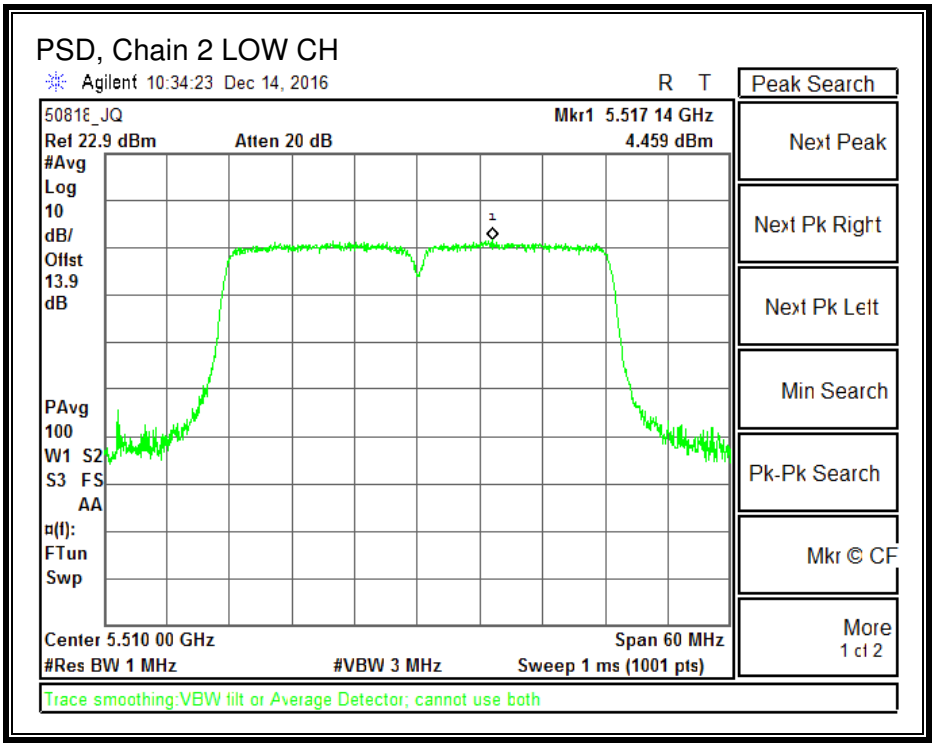
PSD, Chain 1

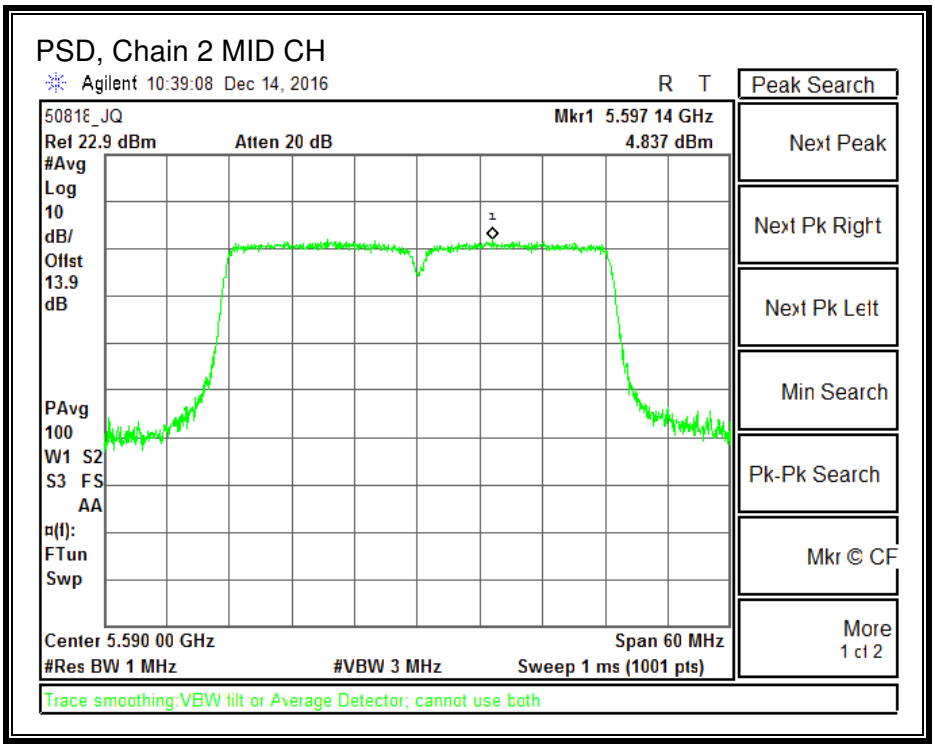


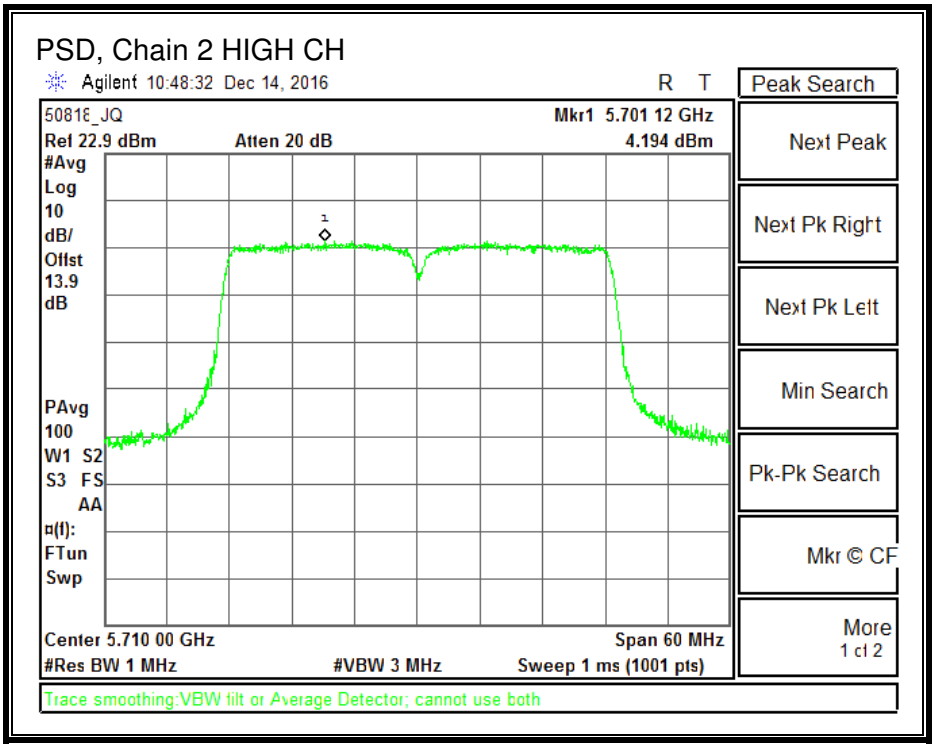




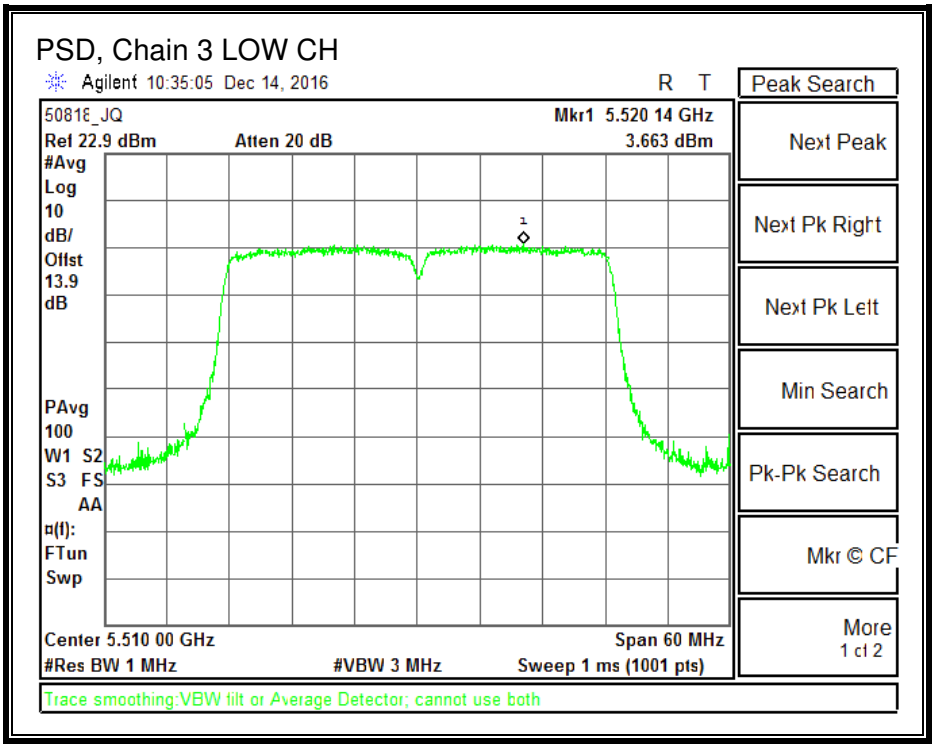
PSD, Chain 2



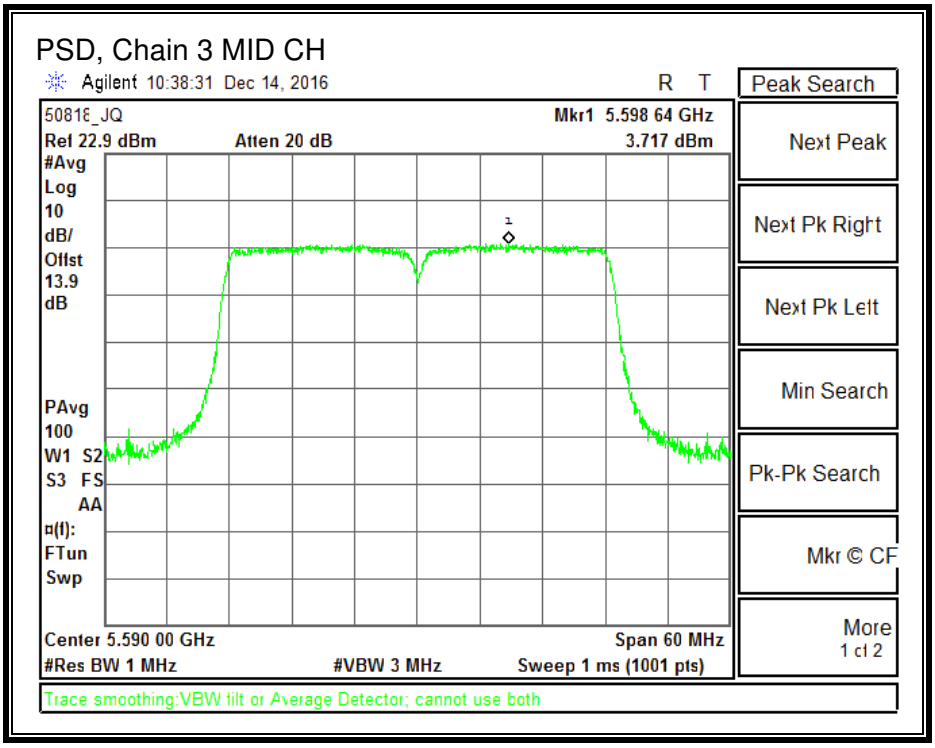




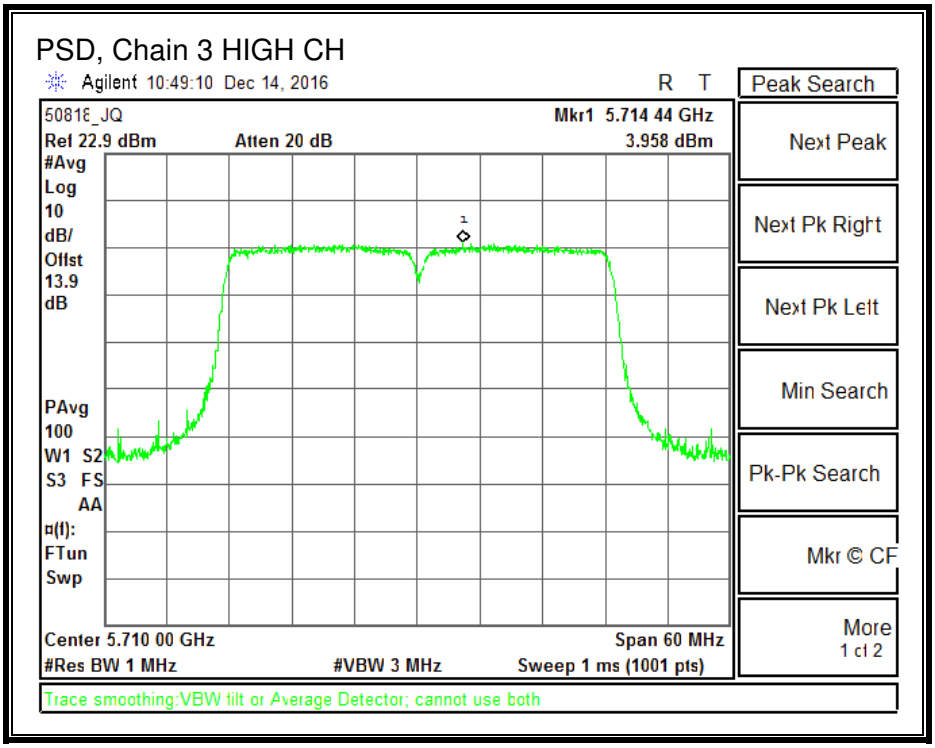
PSD, Chain 3



PSD, Chain 3 MID CH



PSD, Chain 3 HIGH CH



8.8. 802.11ac HT80 MODE IN THE 5.6 GHz BAND

8.8.1. 26 dB BANDWIDTH

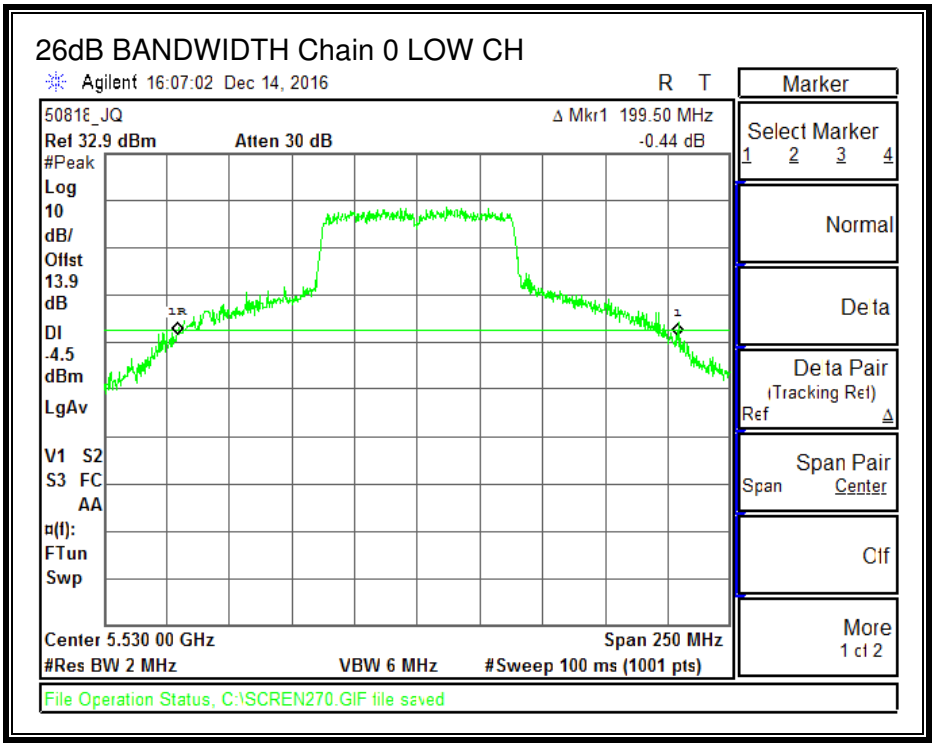
LIMITS

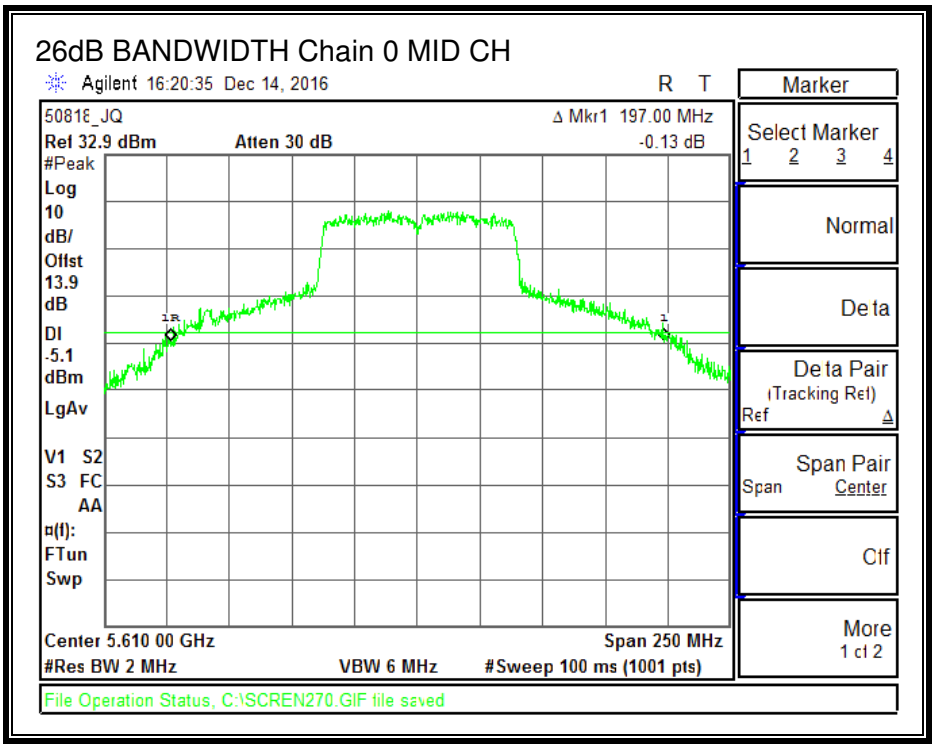
None; for reporting purposes only.

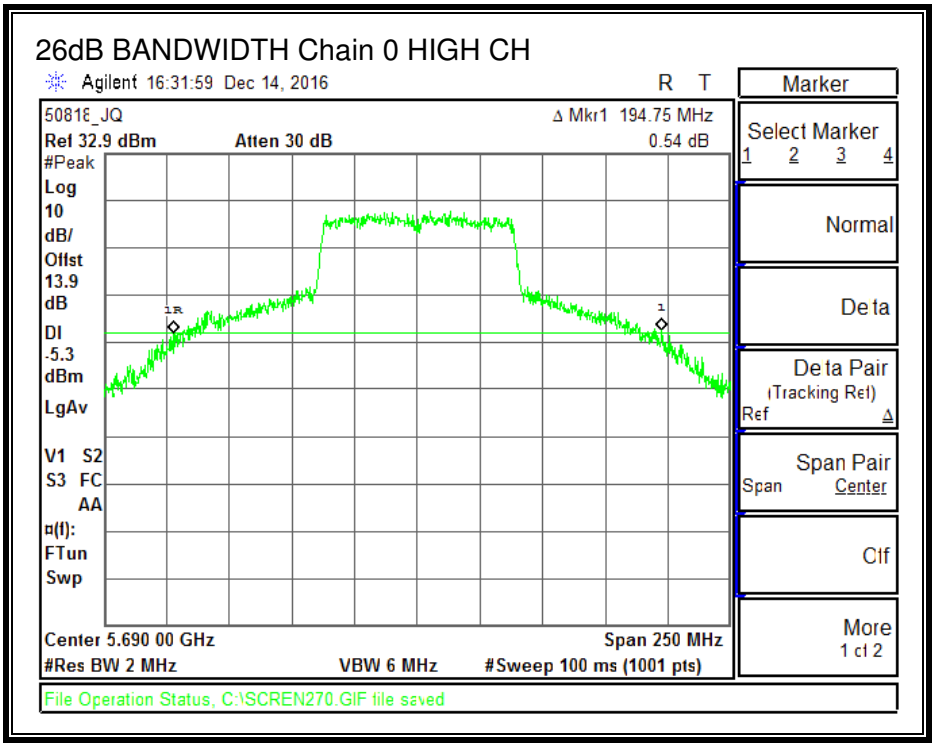
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5530	199.50	199.75	198.75	193.75
Mid	5610	197.00	199.50	200.00	198.00
High	5690	194.75	193.00	199.75	196.75

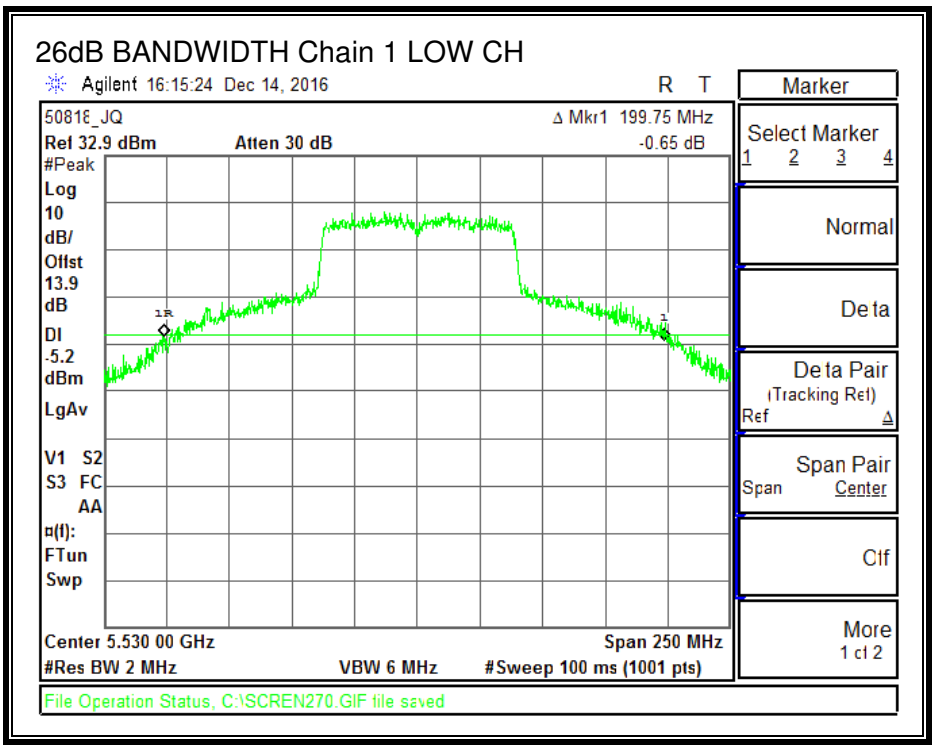
26 dB BANDWIDTH, Chain 0



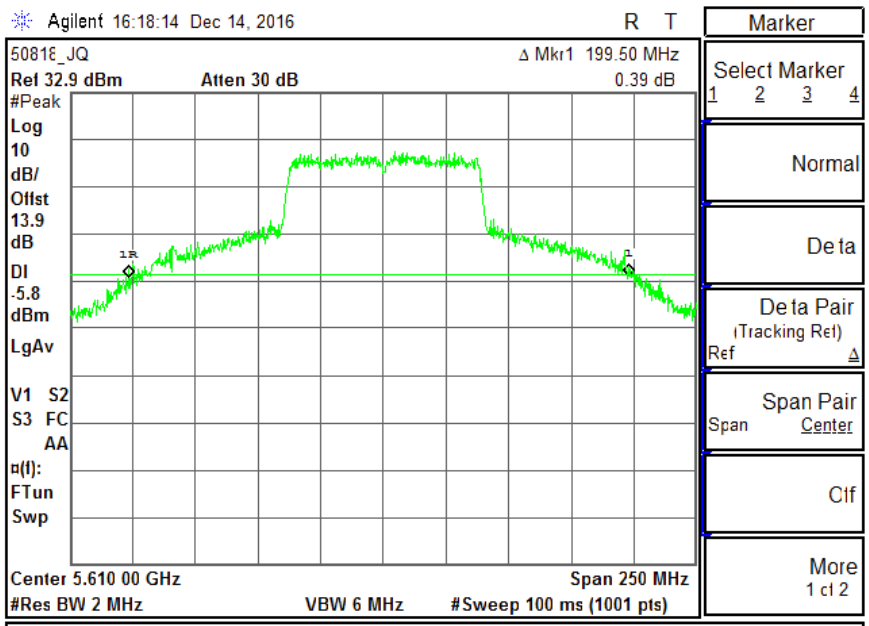




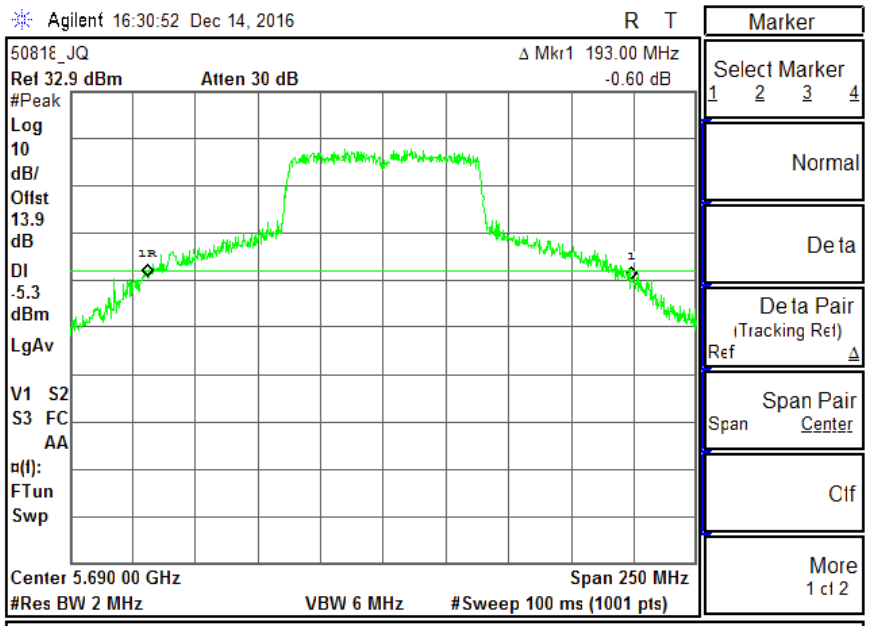
26 dB BANDWIDTH, Chain 1



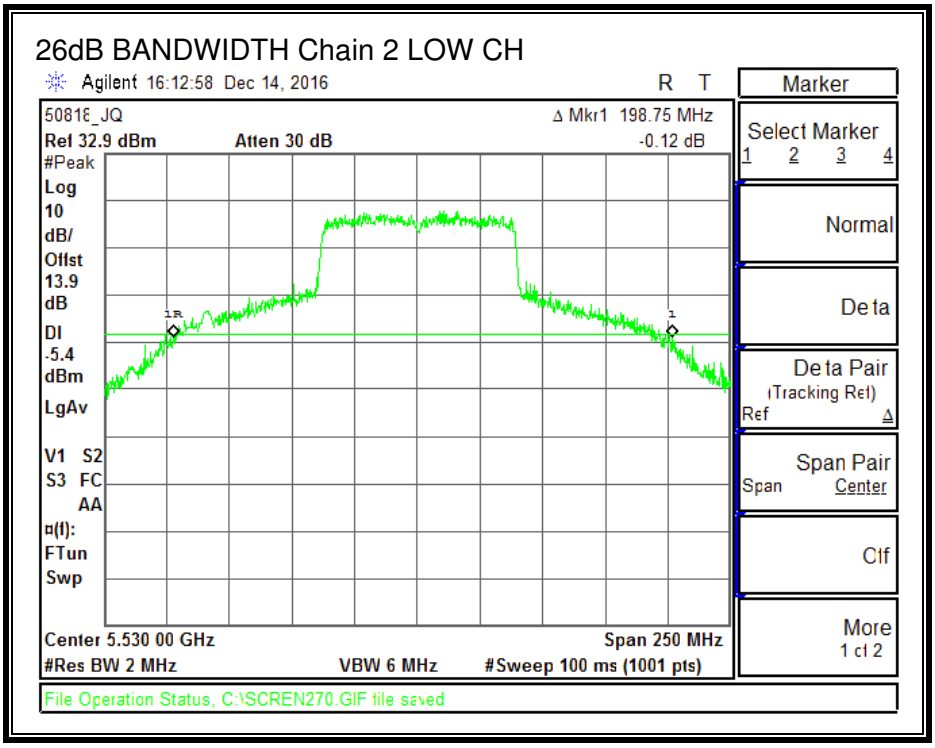
26dB BANDWIDTH Chain 1 MID CH

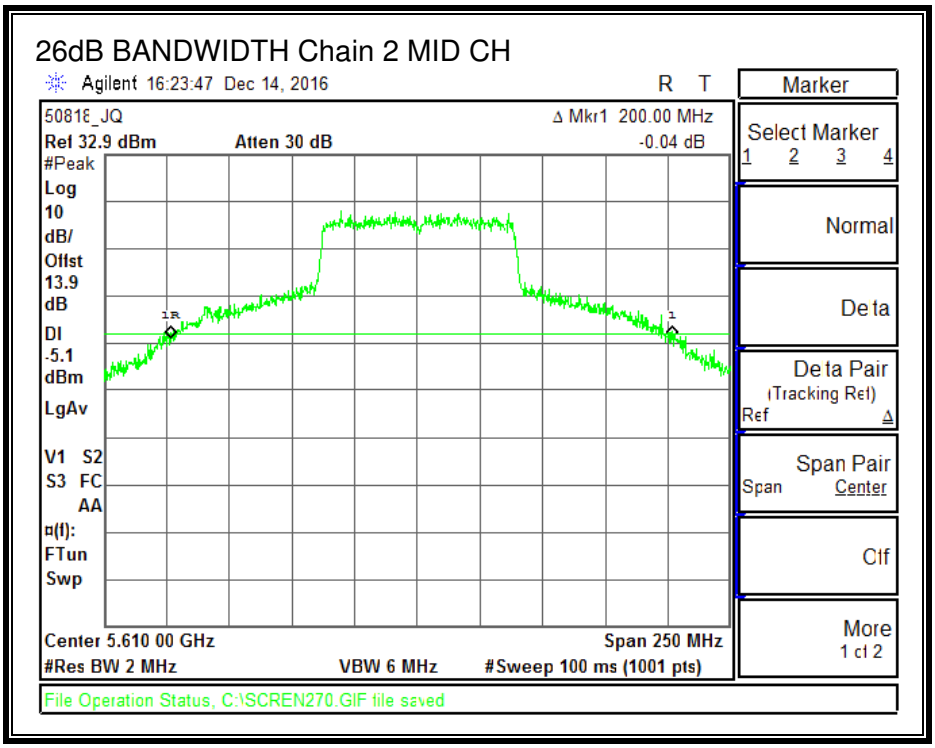


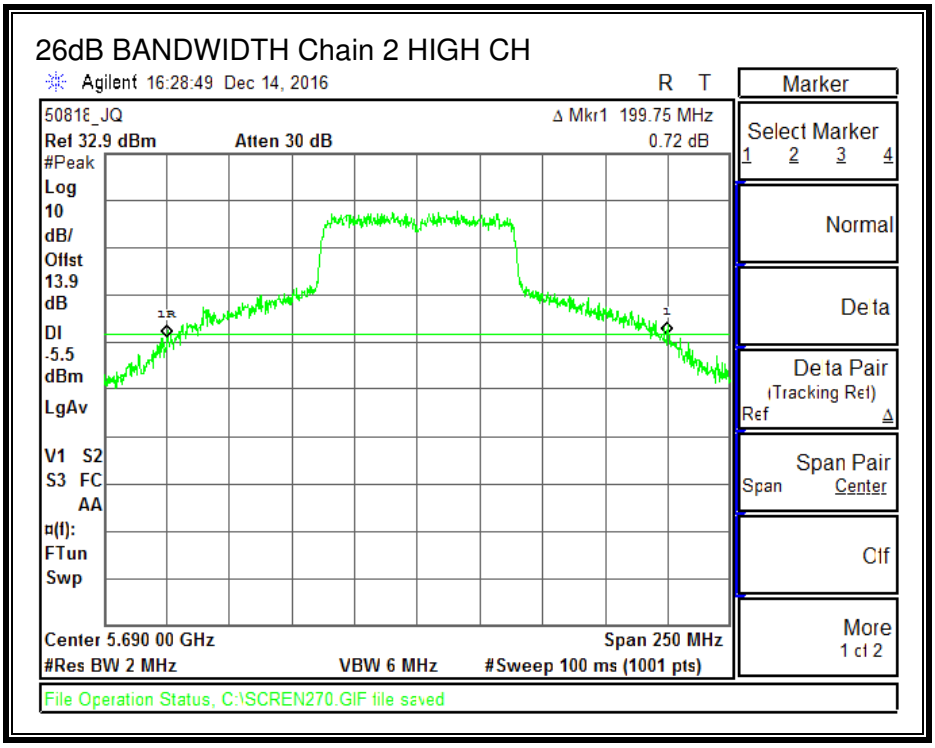
26dB BANDWIDTH Chain 1 HIGH CH



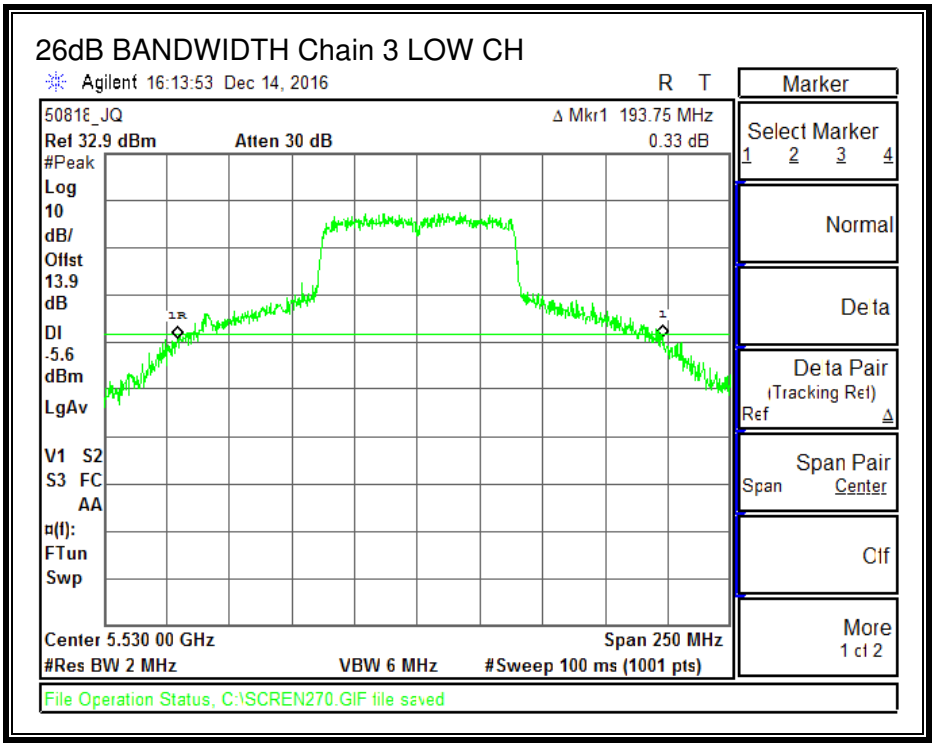
26 dB BANDWIDTH, Chain 2

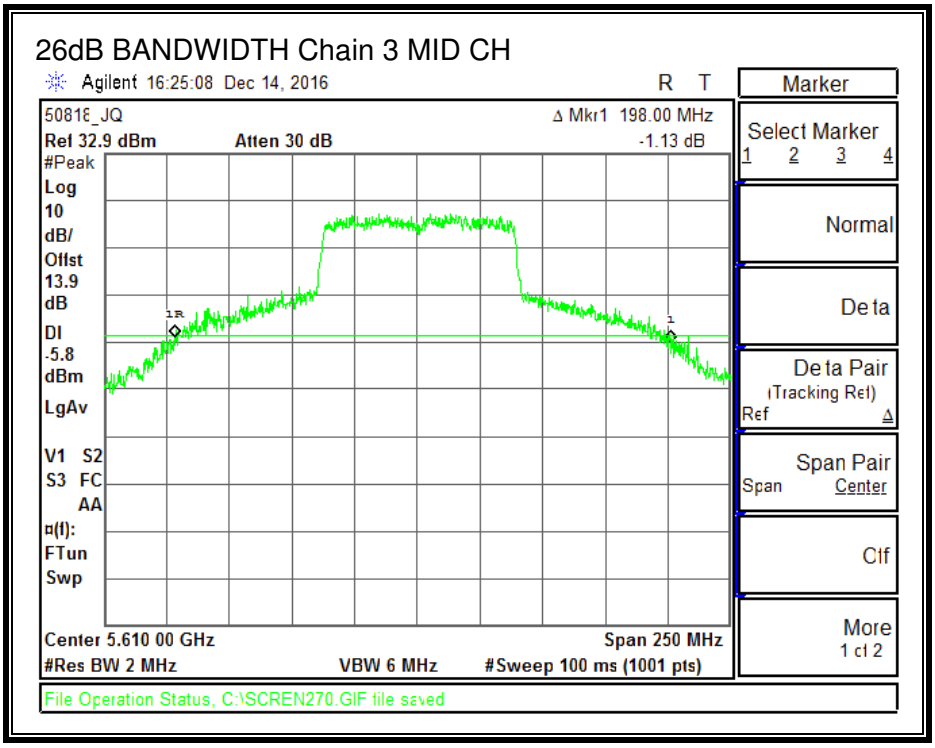


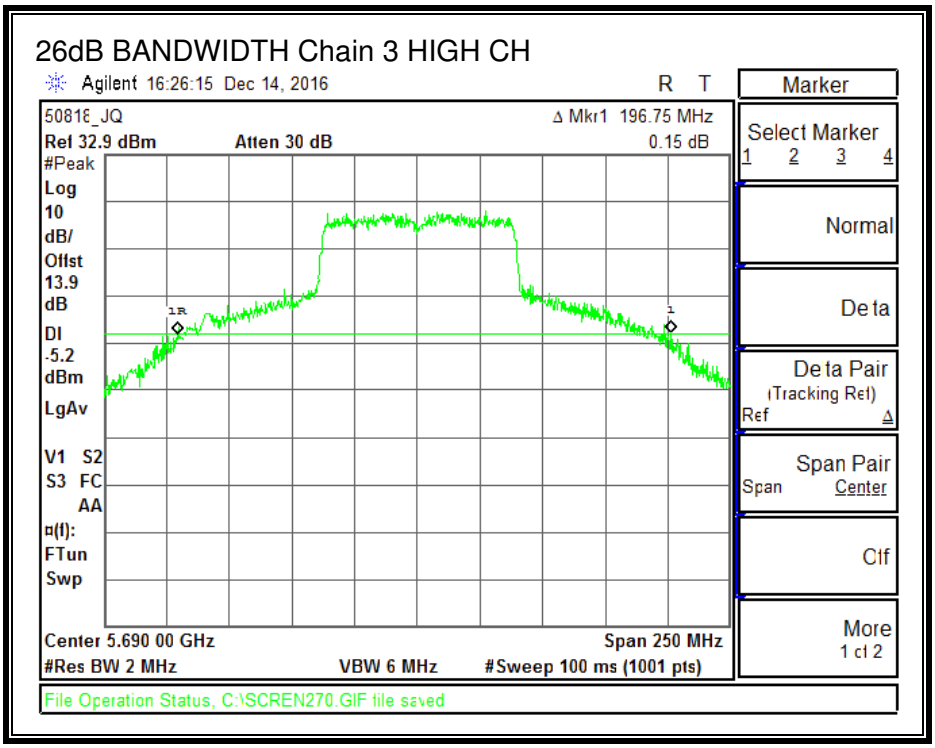




26 dB BANDWIDTH, Chain 3







8.8.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak 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 the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	6.02	6.32

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5530	193.75	6.32	6.32	23.68	10.68
Mid	5610	197.00	6.32	6.32	23.68	10.68
High	5690	193.00	6.32	6.32	23.68	10.68

Duty Cycle CF (dB)	0.18	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	14.14	14.67	14.62	13.76	20.33	23.68	-3.35
Mid	5610	16.03	15.91	15.81	15.25	21.78	23.68	-1.90
High	5690	17.87	17.39	17.82	17.05	23.57	23.68	-0.11

PSD Results

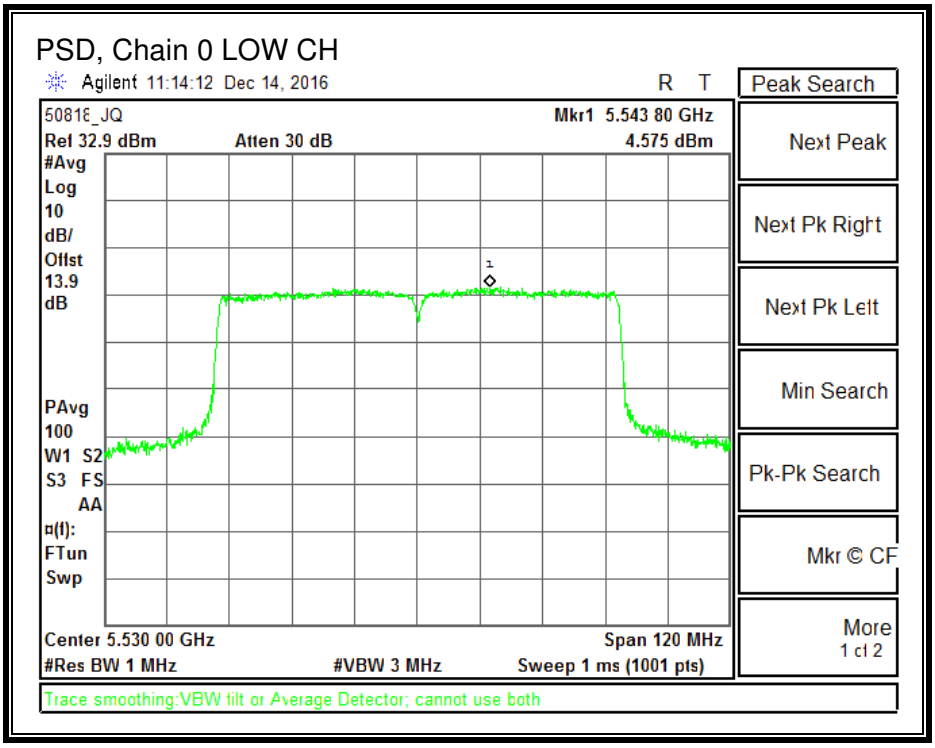
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5530	4.58	4.40	4.24	3.46	10.39	10.68	-0.29
Mid	5610	4.43	4.12	4.32	3.93	10.41	10.68	-0.27
High	5690	4.59	4.09	4.35	4.06	10.48	10.68	-0.20

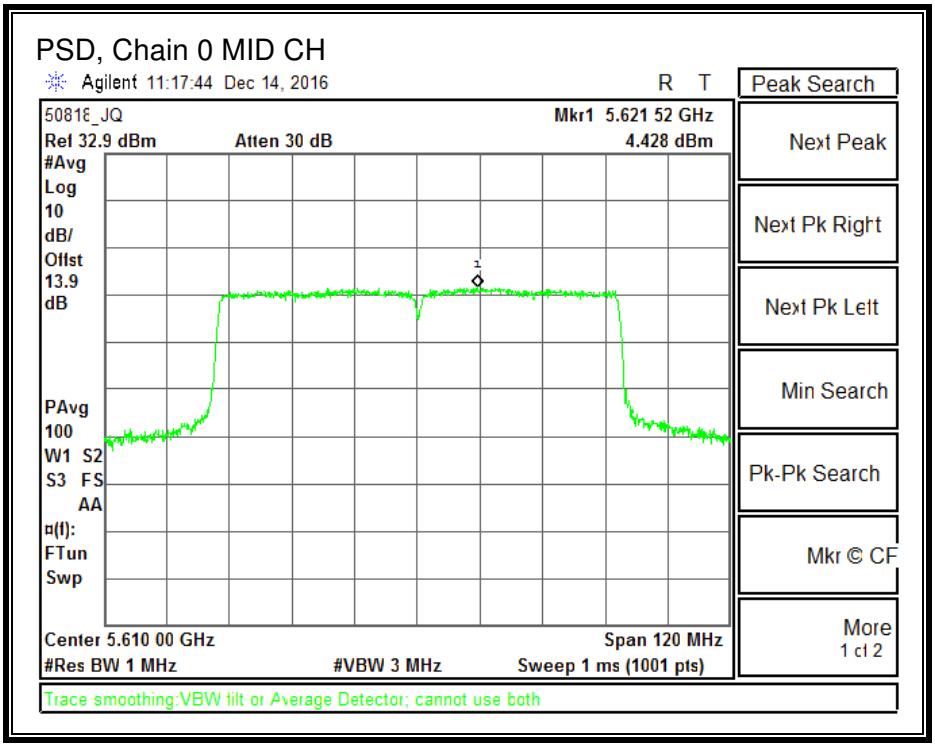
Note:

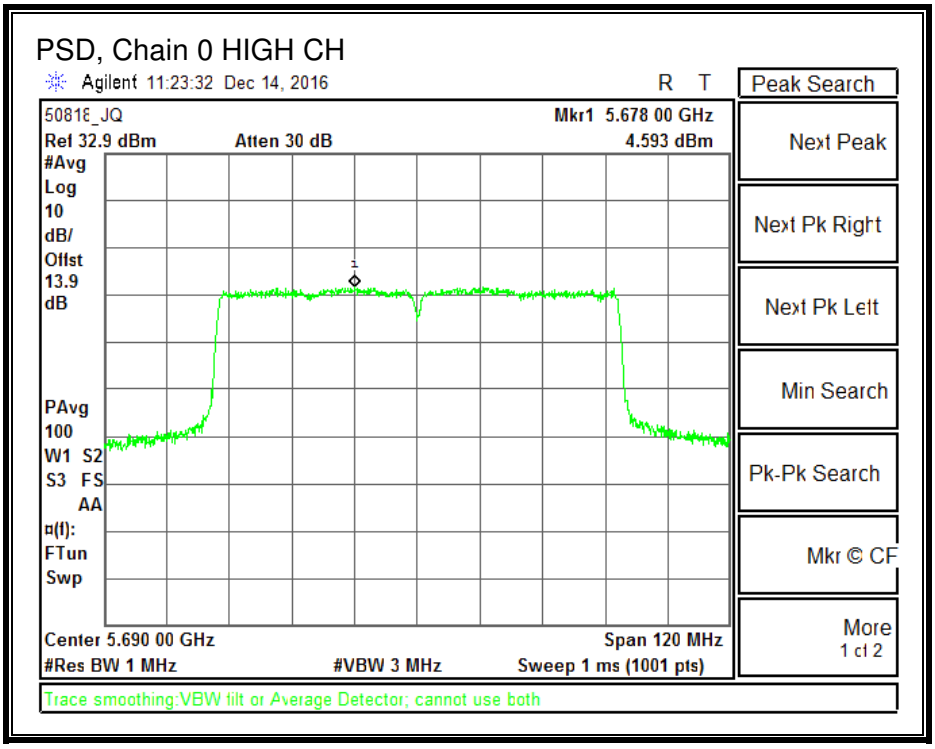
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The CDD power was measured, the TXBF antenna array gain needs to be taken into account and this measurement used to define TXBF conducted power.

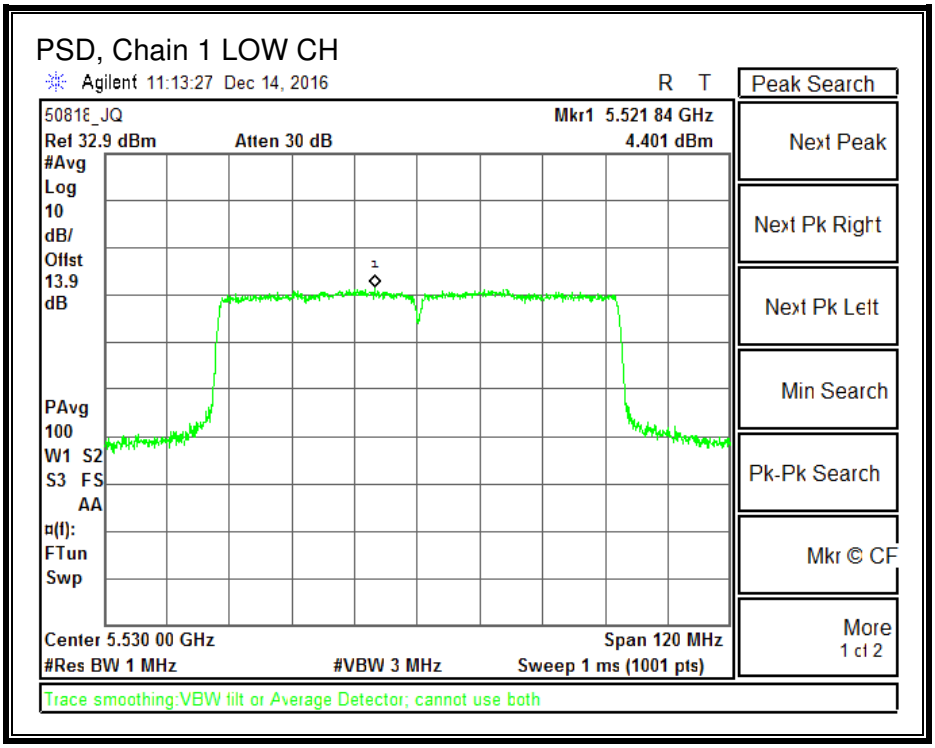
PSD, Chain 0



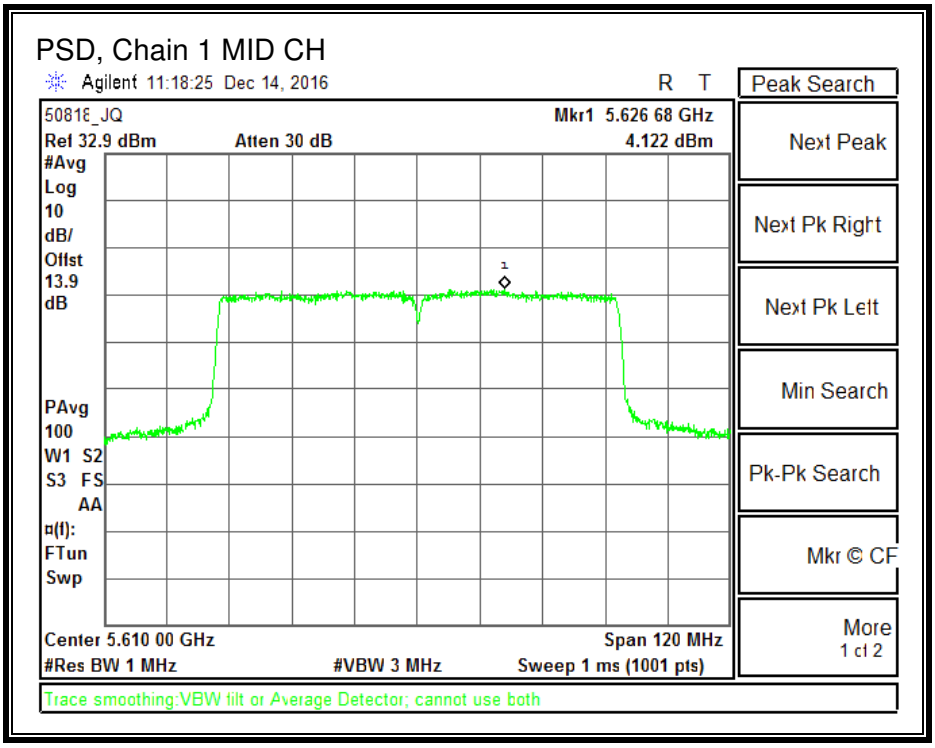




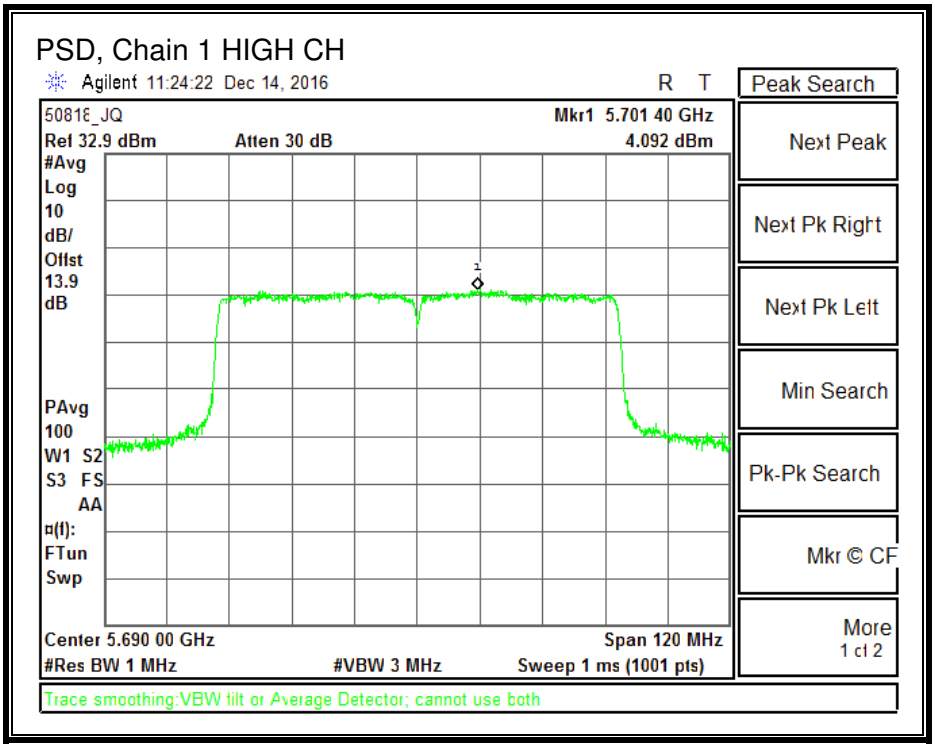
PSD, Chain 1



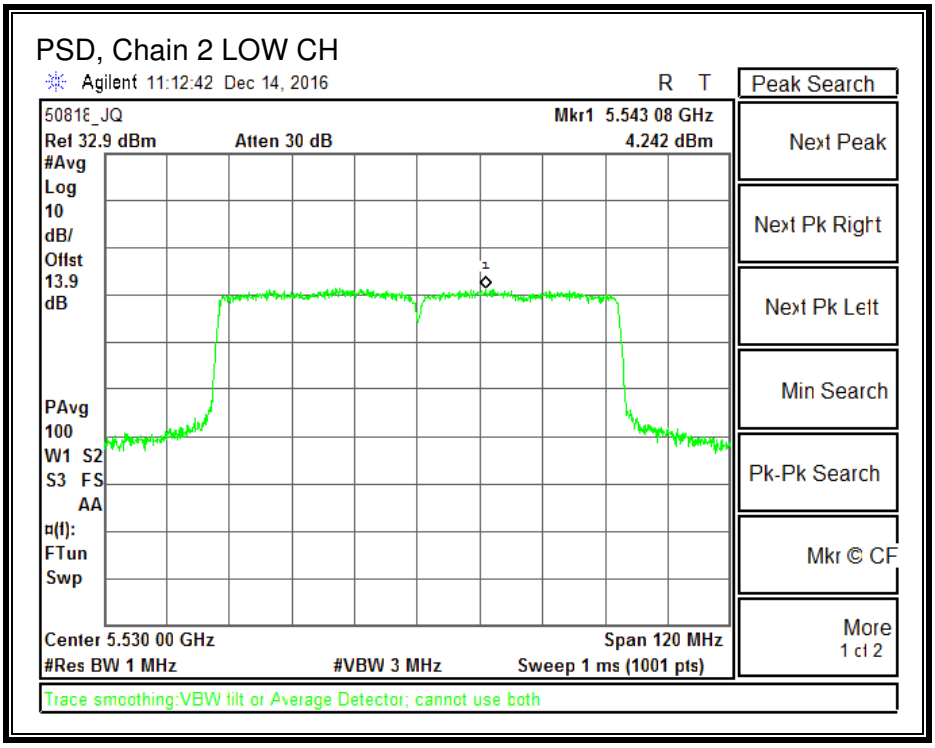
PSD, Chain 1 MID CH

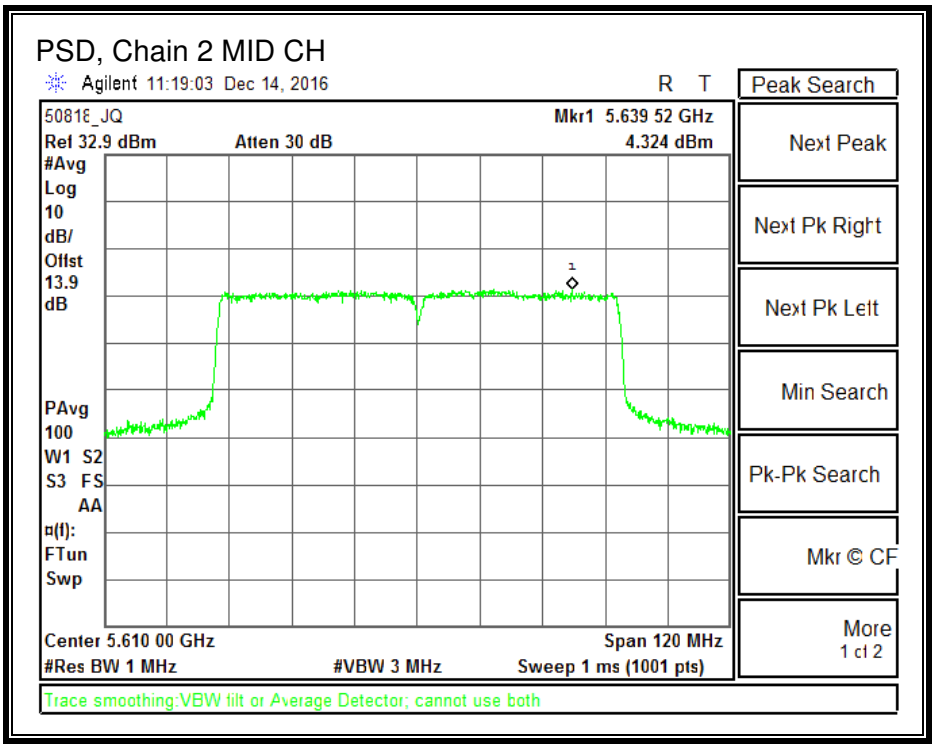


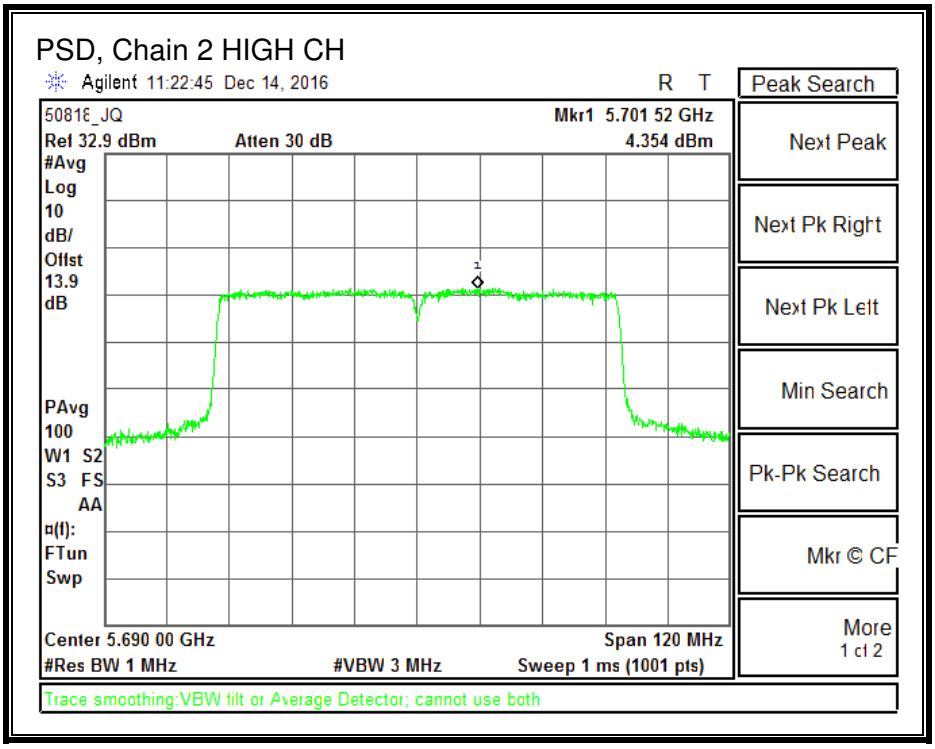
PSD, Chain 1 HIGH CH



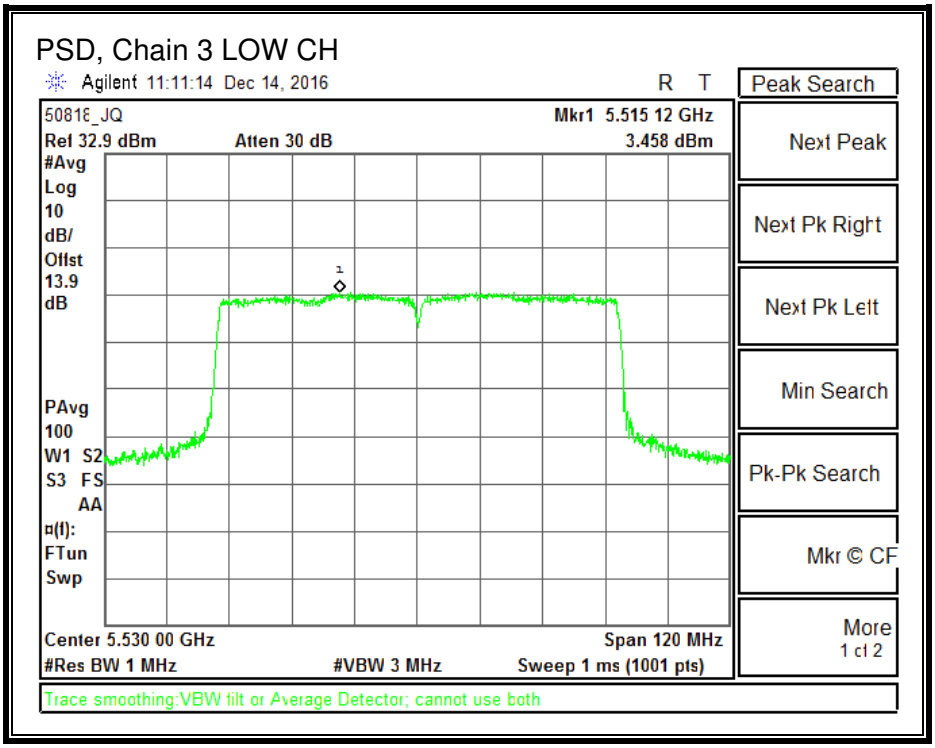
PSD, Chain 2



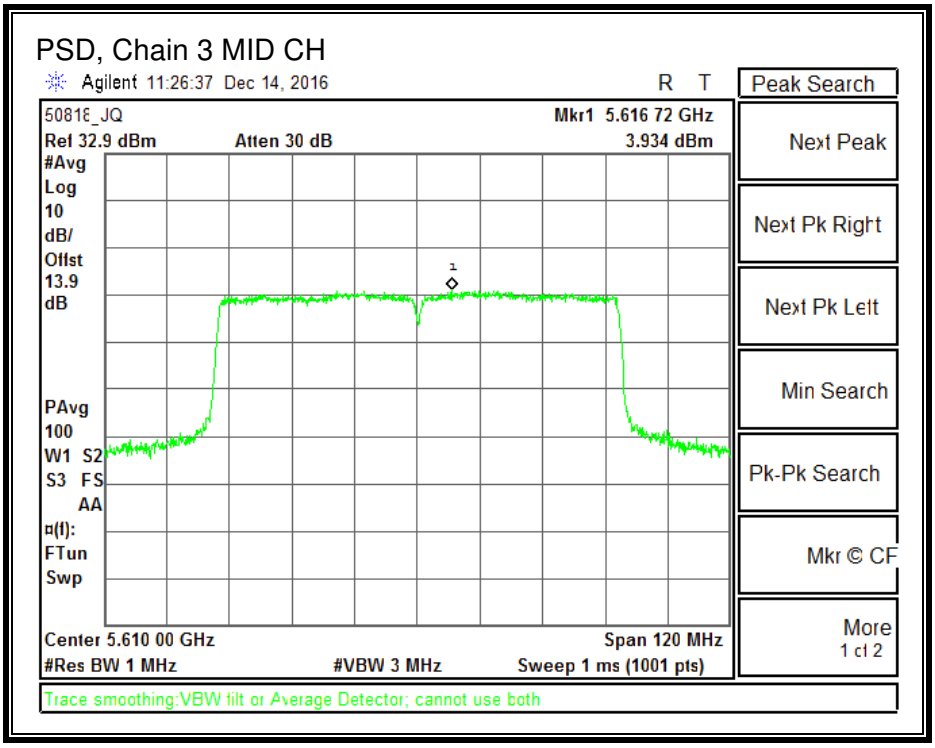




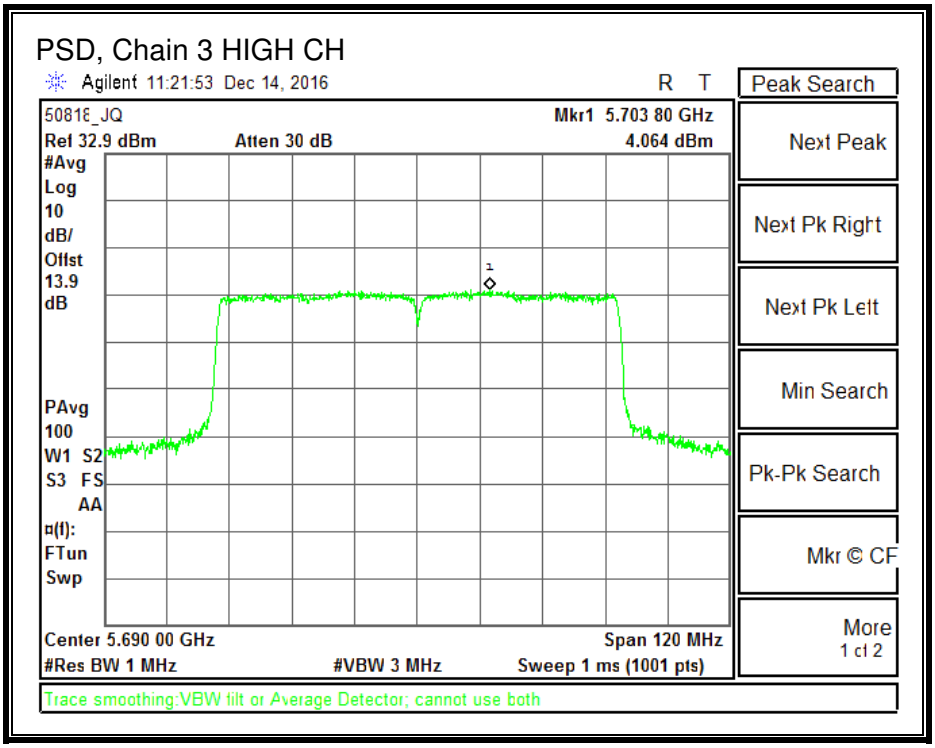
PSD, Chain 3



PSD, Chain 3 MID CH



PSD, Chain 3 HIGH CH



8.9. 802.11ac HT80+HT80 MODE IN THE 5.6 GHz BAND

8.9.1. 26 dB BANDWIDTH

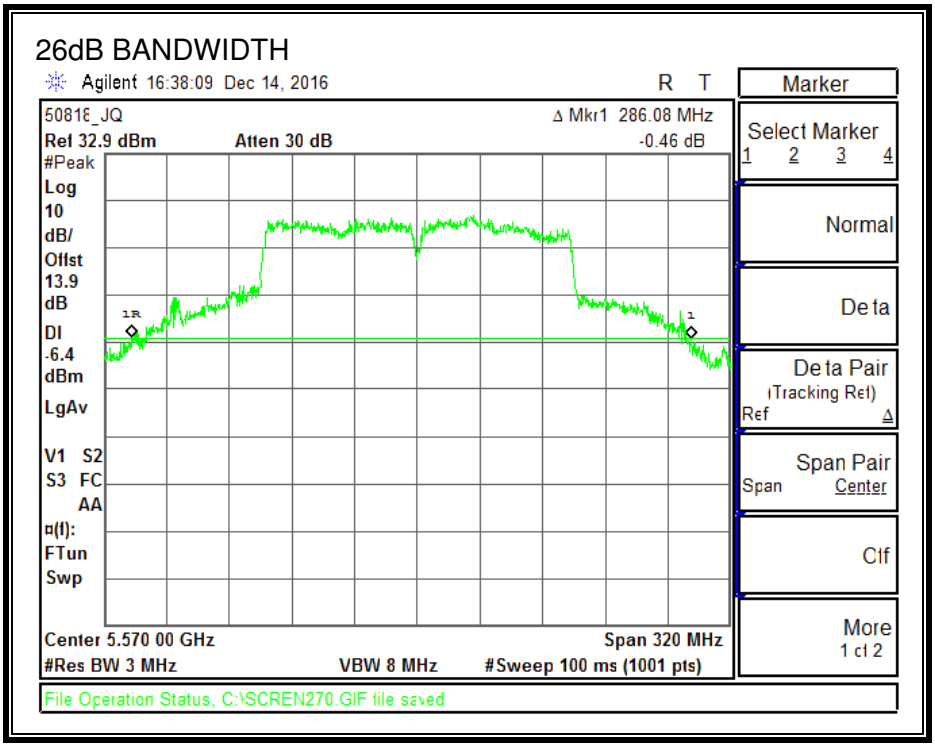
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW (MHz)
CH114	5570	286.08

26 dB BANDWIDTH



8.9.2. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

For output power, the TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
0.30	0.30	0.30

For PSD, the TX chains are correlated and the antenna gain is the same for each chain. The directional gain is:

Antenna Gain (dBi)	10 * Log (2 chains) (dB)	Correlated Chains Directional Gain (dBi)
0.30	3.01	3.31

RESULTS

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Mid	5570	286.08	0.30	3.31	24.00	11.00

Duty Cycle CF (dB)	0.33	Included in Calculations of PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
106	5530	15.63	16.32	N/A	N/A	19.00	24.00	-5.00
122	5610	N/A	N/A	15.87	15.19	18.55	24.00	-5.45

PSD Results

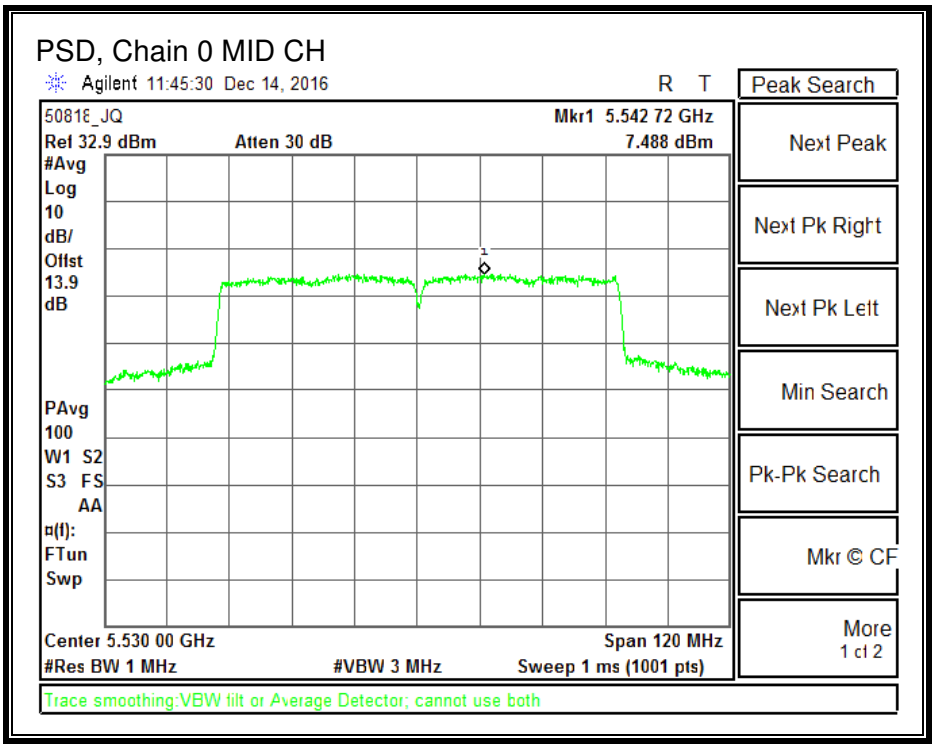
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
106	5530	7.276	7.658	N/A	N/A	10.81	11.00	-0.19
122	5610	N/A	N/A	7.17	7.70	10.78	11.00	-0.22

Note:

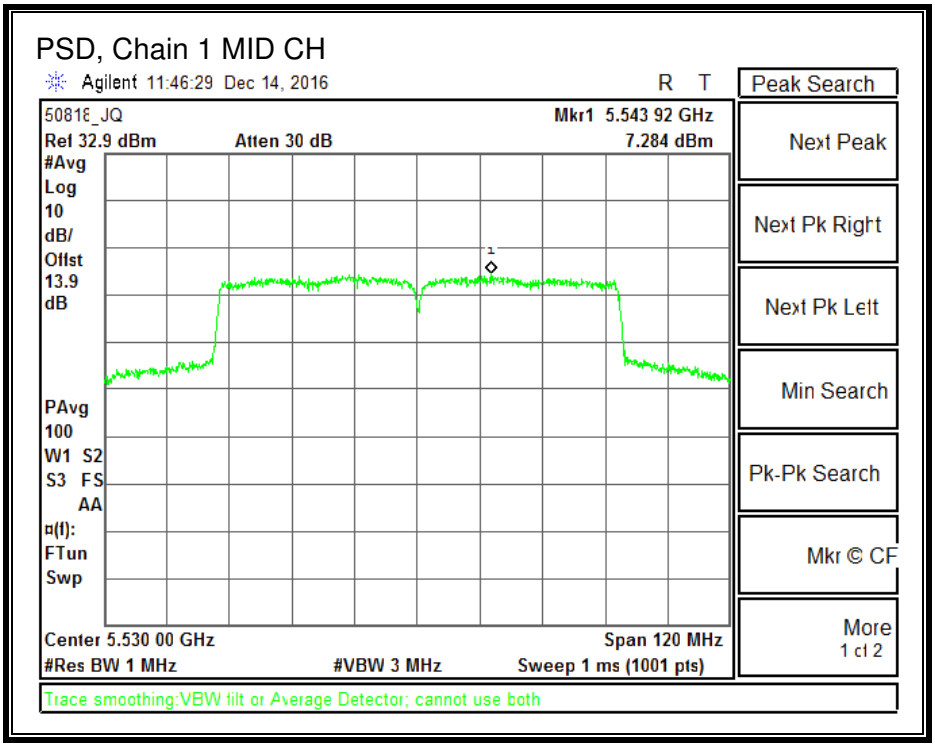
_The Output power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

_The PSD results represents the worst case in 802.11ac HT80+HT80 mode.

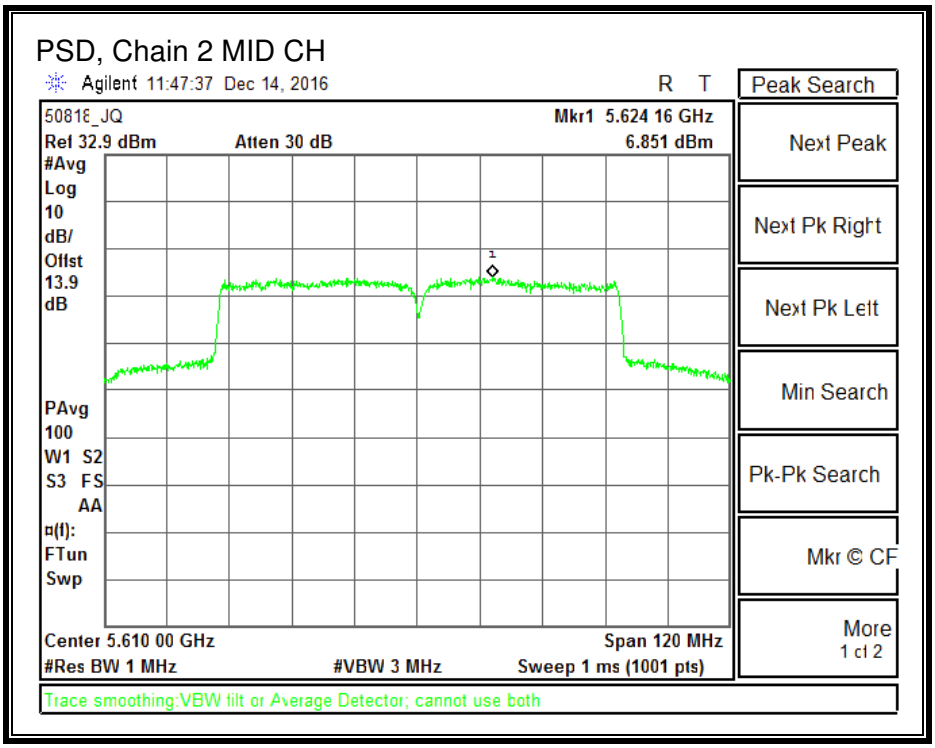
PSD, Chain 0



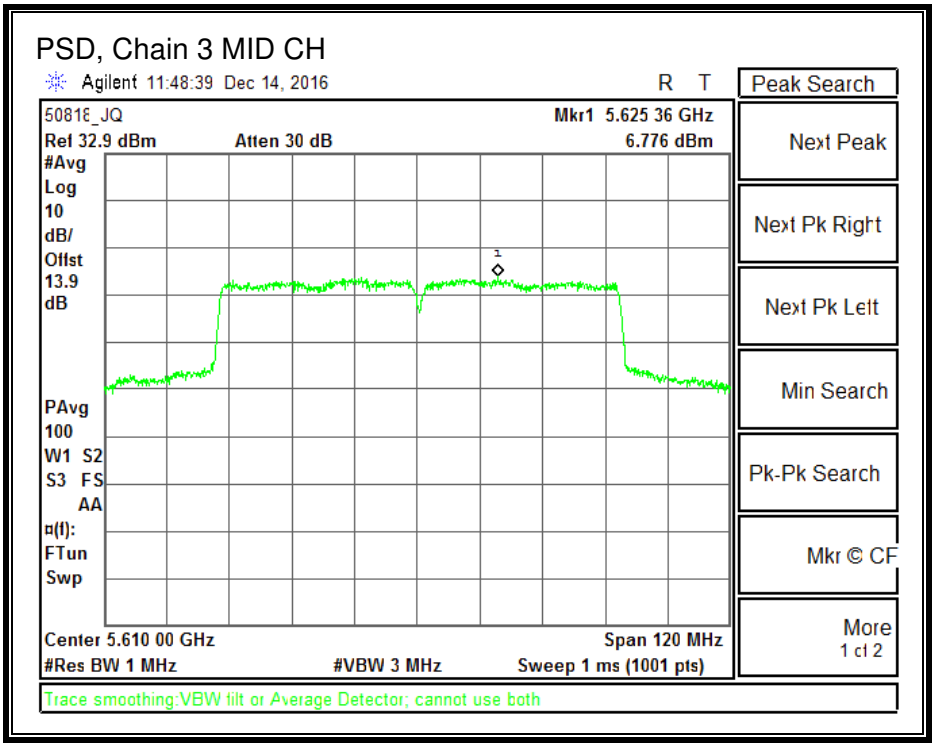
PSD, Chain 1



PSD, Chain 2



PSD, Chain 3



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
0.009 – 0.490	2400/F (kHz)	2400/F (kHz)
0.490 – 1.705	24000/F (kHz)	24000/F (kHz)
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 measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements for the 30-1000 MHz range, 9 kHz for peak detection measurements or 9 kHz for quasi-peak detection measurements for the 0.15-30 MHz range and 200 Hz for peak detection measurements or 200 Hz for quasi-peak detection measurements for the 9 to 150 kHz range. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements. For this evaluation, RMS Power Averaging was used and the resolution/video bandwidth settings were 1MHz/3MHz. Note: The pre-scan measurements above 1GHz the VBW is set to 30 kHz.

The spectrum from 9 kHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

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

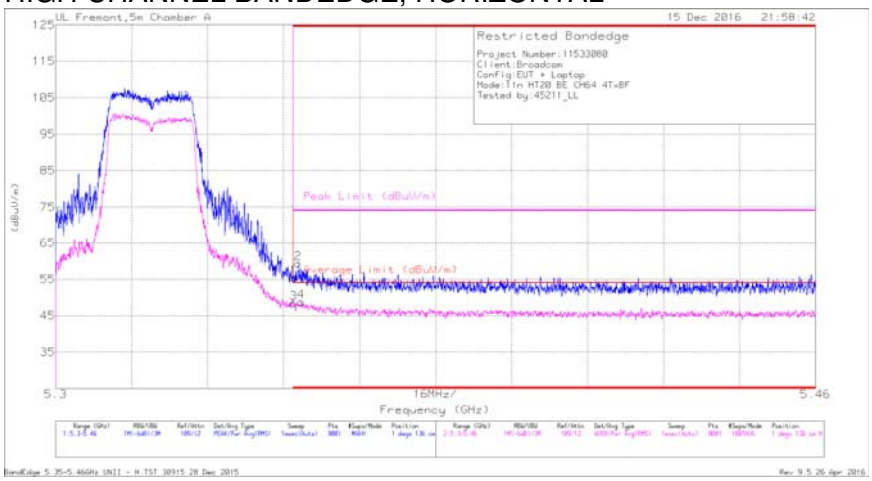
RESULTS

Compliance at band edges has been demonstrated via the Vertical polarity as the worst-case scenario.

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, HORIZONTAL

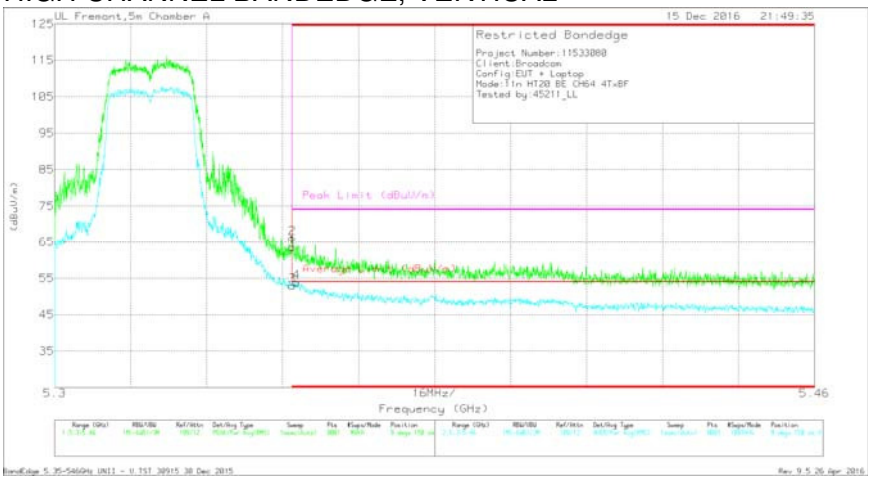


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/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	39.54	Pk	34.8	-18.9	0	55.44	-	-	74	-18.56	1	136	H
2	* 5.351	43.44	Pk	34.8	-18.9	0	59.34	-	-	74	-14.66	1	136	H
3	* 5.35	32.25	RMS	34.8	-18.9	.33	48.48	54	-5.52	-	-	1	136	H
4	* 5.352	32.56	RMS	34.8	-18.9	.33	48.79	54	-5.21	-	-	1	136	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

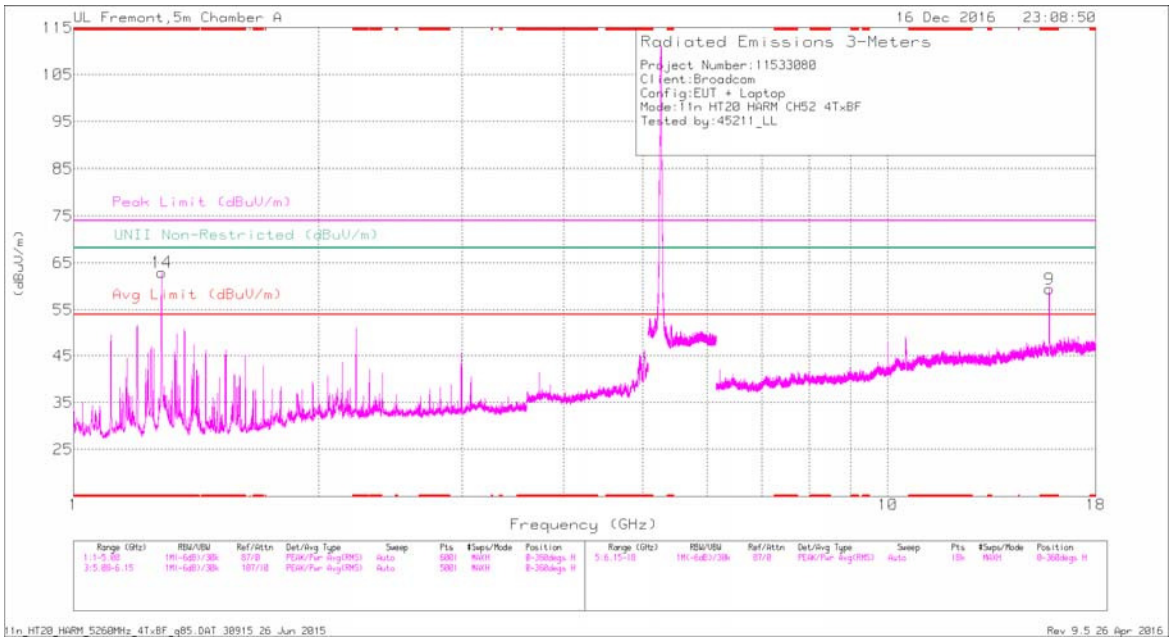
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	47.68	Pk	34.8	-18.9	0	63.58	-	-	74	-10.42	8	150	V
2	* 5.35	50.28	Pk	34.8	-18.9	0	66.18	-	-	74	-7.82	8	150	V
3	* 5.35	36.74	RMS	34.8	-18.9	.33	52.97	54	-1.03	-	-	8	150	V
4	* 5.351	37.67	RMS	34.8	-18.9	.33	53.9	54	-.1	-	-	8	150	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

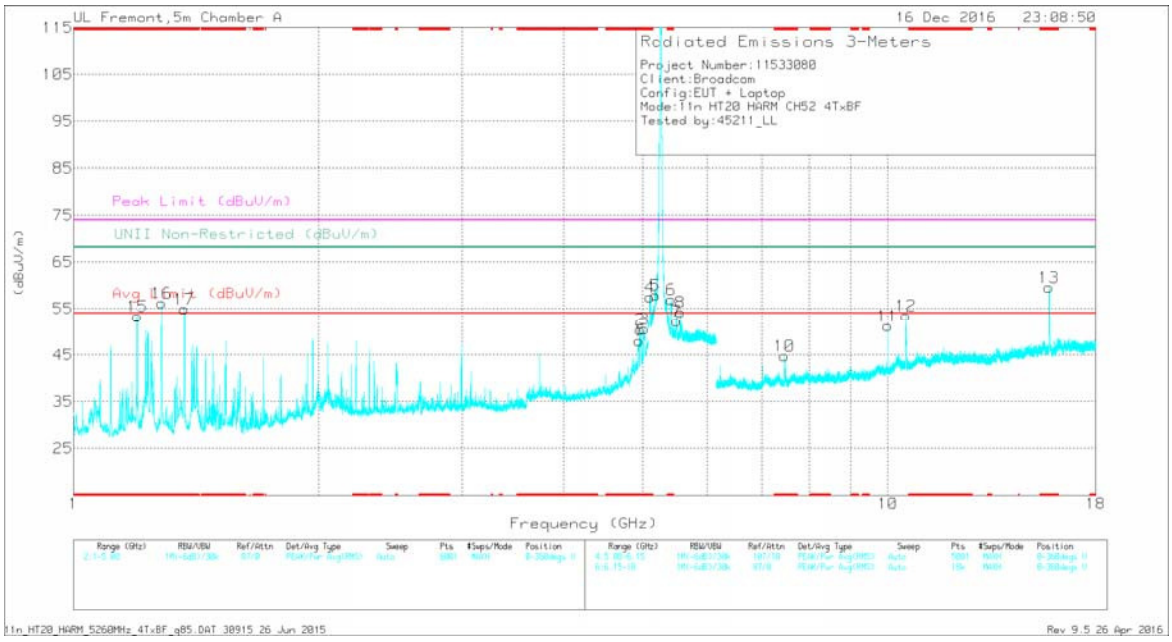
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
14	**** 1.283	68.23	Pk	28.8	-34	0	63.03	-	-	74	-10.97	-	-	0-360	101	H
1	* 4.946	41.74	Pk	34.3	-28	0	48.04	-	-	74	-25.96	-	-	0-360	101	V
2	* 4.96	44.14	Pk	34.3	-27.9	0	50.54	-	-	74	-23.46	-	-	0-360	101	V
3	* 5.028	43.44	Pk	34.3	-27.1	0	50.64	-	-	74	-23.36	-	-	0-360	101	V
15	**** 1.197	59.52	Pk	28.3	-34.4	0	53.42	-	-	74	-20.58	-	-	0-360	199	V
16	**** 1.283	61.47	Pk	28.8	-34	0	56.27	-	-	74	-17.73	-	-	0-360	199	V
17	**** 1.368	59.47	Pk	29	-33.5	0	54.97	-	-	74	-19.03	-	-	0-360	101	V
4	* 5.105	41.77	Pk	34.3	-18.5	0	57.57	-	-	74	-16.43	-	-	0-360	101	V
6	* 5.422	41.01	Pk	34.8	-18.8	0	57.01	-	-	74	-16.99	-	-	0-360	199	V
9	* 15.784	39.14	Pk	40.4	-20.1	0	59.44	-	-	74	-14.56	-	-	0-360	199	H
10	* 7.467	33.77	Pk	35.8	-24.8	0	44.77	-	-	74	-29.23	-	-	0-360	101	V
13	* 15.776	39.55	Pk	40.4	-20.3	0	59.65	-	-	74	-14.35	-	-	0-360	101	V
5	***5.179	42.03	Pk	34.6	-18.7	0	57.93	-	-	-	-	68.2	-10.27	0-360	101	V
7	5.506	36.43	Pk	34.8	-18.9	0	52.33	-	-	-	-	68.2	-15.87	0-360	199	V
8	5.559	38.66	Pk	34.7	-19.1	0	54.26	-	-	-	-	68.2	-13.94	0-360	199	V
11	10	35.43	Pk	37	-21.2	0	51.23	-	-	-	-	68.2	-16.97	0-360	199	V
12	10.517	36.68	Pk	37.5	-20.7	0	53.48	-	-	-	-	68.2	-14.72	0-360	101	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
**** - indicates emission generated by the support equipment
Pk - Peak detector

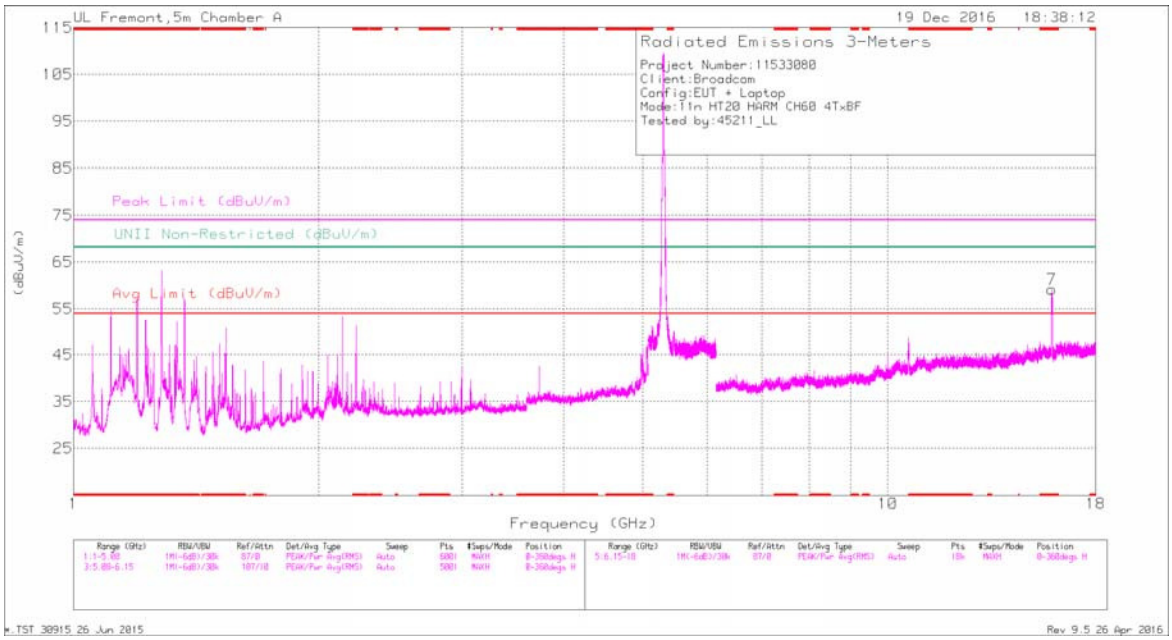
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.946	46.67	PK-U	34.3	-28	0	52.97	-	-	74	-21.03	-	-	340	110	V
* 4.948	35.49	ADR	34.3	-28	.33	42.12	54	-11.88	-	-	-	-	340	110	V
* 4.962	49.92	PK-U	34.3	-27.8	0	56.42	-	-	74	-17.58	-	-	164	198	V
* 4.961	39.53	ADR	34.3	-27.9	.33	46.26	54	-7.74	-	-	-	-	164	198	V
* 5.024	50.56	PK-U	34.3	-27.2	0	57.66	-	-	74	-16.34	-	-	135	101	V
* 5.017	40.55	ADR	34.3	-27.4	.33	47.78	54	-6.22	-	-	-	-	135	101	V
* 5.096	45.45	PK-U	34.3	-18.4	0	61.35	-	-	74	-12.65	-	-	132	102	V
* 5.105	35.7	ADR	34.3	-18.5	.33	51.83	54	-2.17	-	-	-	-	132	102	V
* 5.416	43.04	PK-U	34.8	-18.9	0	58.94	-	-	74	-15.06	-	-	206	238	V
* 5.412	32.38	ADR	34.8	-18.9	.33	48.61	54	-5.39	-	-	-	-	206	238	V
* 15.785	43.59	PK-U	40.4	-20.1	0	63.89	-	-	74	-10.11	-	-	262	242	H
* 15.777	29.08	ADR	40.4	-20.3	.33	49.51	54	-4.49	-	-	-	-	262	242	H
* 15.785	46.76	PK-U	40.4	-20.1	0	67.06	-	-	74	-6.94	-	-	141	312	V
* 15.786	32.89	ADR	40.4	-20.1	.33	53.52	54	-.48	-	-	-	-	141	312	V
* 7.467	34.89	PK-U	35.8	-24.8	0	45.89	-	-	74	-28.11	-	-	288	112	V
* 7.467	24.73	ADR	35.8	-24.8	.33	36.06	54	-17.94	-	-	-	-	288	112	V
5.497	41.35	PK-U	34.8	-18.8	0	57.35	-	-	-	-	68.2	-10.85	215	213	V
5.561	44.56	PK-U	34.7	-19.1	0	60.16	-	-	-	-	68.2	-8.04	307	232	V
10	38.87	PK-U	37	-21.2	0	54.67	-	-	-	-	68.2	-13.53	161	289	V
10.527	42.27	PK-U	37.5	-20.7	0	59.07	-	-	-	-	68.2	-9.13	300	318	V

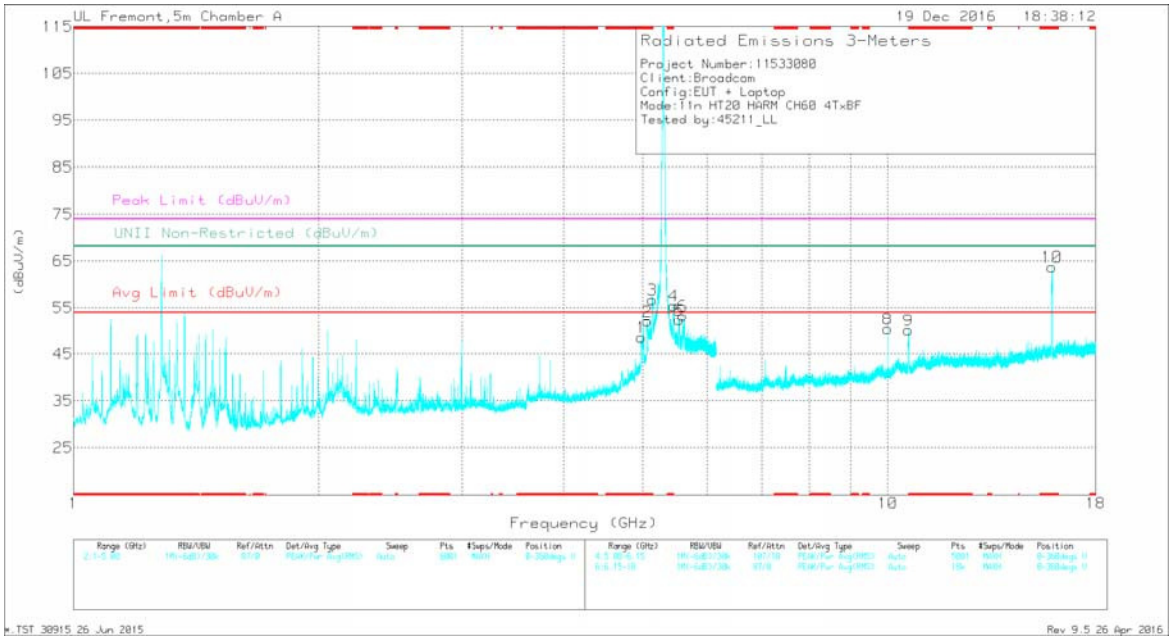
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

MID CHANNEL

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 4.984	41.27	Pk	34.3	-27	0	48.57	-	-	74	-25.43	-	-	0-360	101	V
2	* 5.064	43.23	Pk	34.3	-25.5	0	52.03	-	-	74	-21.97	-	-	0-360	199	V
3	* 5.137	40.96	Pk	34.4	-18.6	0	56.76	-	-	74	-17.24	-	-	0-360	101	V
4	* 5.455	39.43	Pk	34.8	-18.8	0	55.43	-	-	74	-18.57	-	-	0-360	199	V
7	* 15.897	39.29	Pk	40.4	-20.5	0	59.19	-	-	74	-14.81	-	-	0-360	199	H
10	* 15.91	43.89	Pk	40.4	-20.6	0	63.69	-	-	74	-10.31	-	-	0-360	199	V
5	5.538	36.57	Pk	34.8	-19.1	0	52.27	-	-	-	-	68.2	-15.93	0-360	199	V
6	5.601	37.53	Pk	34.7	-19	0	53.23	-	-	-	-	68.2	-14.97	0-360	199	V
8	10	34.53	Pk	37	-21.2	0	50.33	-	-	-	-	68.2	-17.87	0-360	199	V
9	10.592	32.96	Pk	37.6	-20.4	0	50.16	-	-	-	-	68.2	-18.04	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

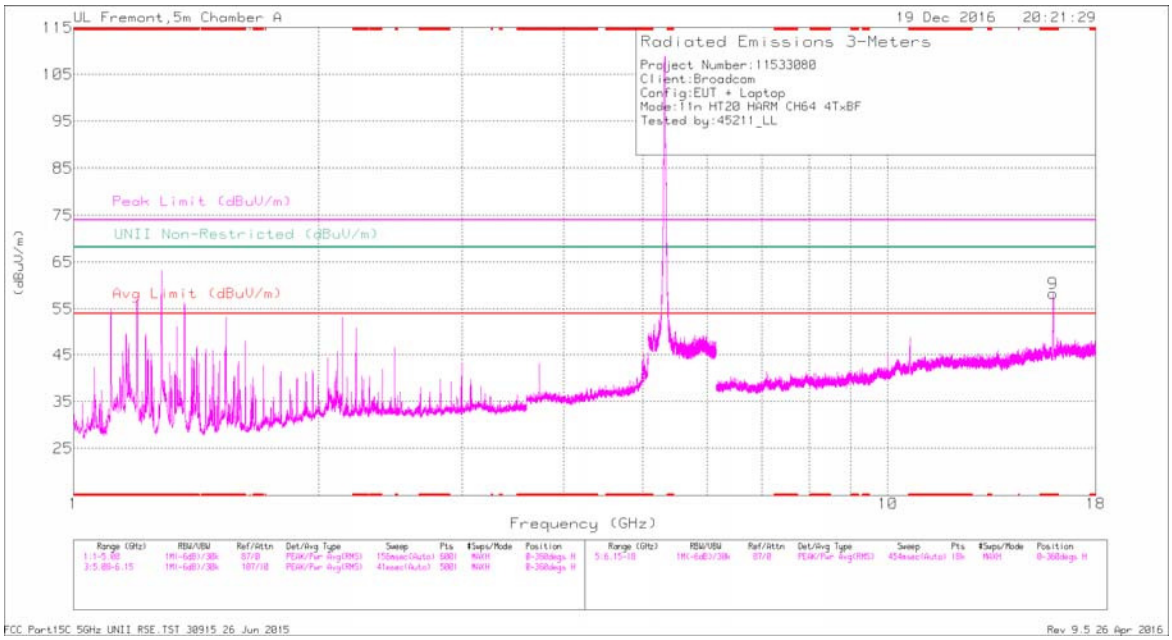
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.984	46.49	PK-U	34.3	-27	0	53.79	-	-	74	-20.21	-	-	331	104	V
* 4.986	34.99	ADR	34.3	-27	.33	42.62	54	-11.38	-	-	-	-	331	104	V
* 5.067	46.66	PK-U	34.3	-25.4	0	55.56	-	-	74	-18.44	-	-	157	226	V
* 5.066	37.48	ADR	34.3	-25.4	.33	46.71	54	-7.29	-	-	-	-	157	226	V
* 5.142	48.05	PK-U	34.4	-18.6	0	63.85	-	-	74	-10.15	-	-	306	100	V
* 5.144	36.31	ADR	34.4	-18.6	.33	52.44	54	-1.56	-	-	-	-	306	100	V
* 5.35	45.57	PK-U	34.8	-18.9	0	61.47	-	-	74	-12.53	-	-	7	152	V
* 5.379	33.23	ADR	34.8	-18.8	.33	49.56	54	-4.44	-	-	-	-	7	152	V
* 15.908	43.54	PK-U	40.4	-20.5	0	63.44	-	-	74	-10.56	-	-	258	296	H
* 15.903	30.02	ADR	40.4	-20.5	.33	50.25	54	-3.75	-	-	-	-	258	296	H
* 15.903	32.98	ADR	40.4	-20.5	.33	53.21	54	-.79	-	-	-	-	223	341	V
* 15.908	45.82	PK-U	40.4	-20.5	0	65.72	-	-	74	-8.28	-	-	223	341	V
5.534	43.68	PK-U	34.8	-19	0	59.48	-	-	-	-	68.2	-8.72	180	199	V
5.6	42.06	PK-U	34.7	-19	0	57.76	-	-	-	-	68.2	-10.44	293	212	V
10	36.97	PK-U	37	-21.2	0	52.77	-	-	-	-	68.2	-15.43	328	230	V
10.589	41.61	PK-U	37.6	-20.4	0	58.81	-	-	-	-	68.2	-9.39	272	218	V

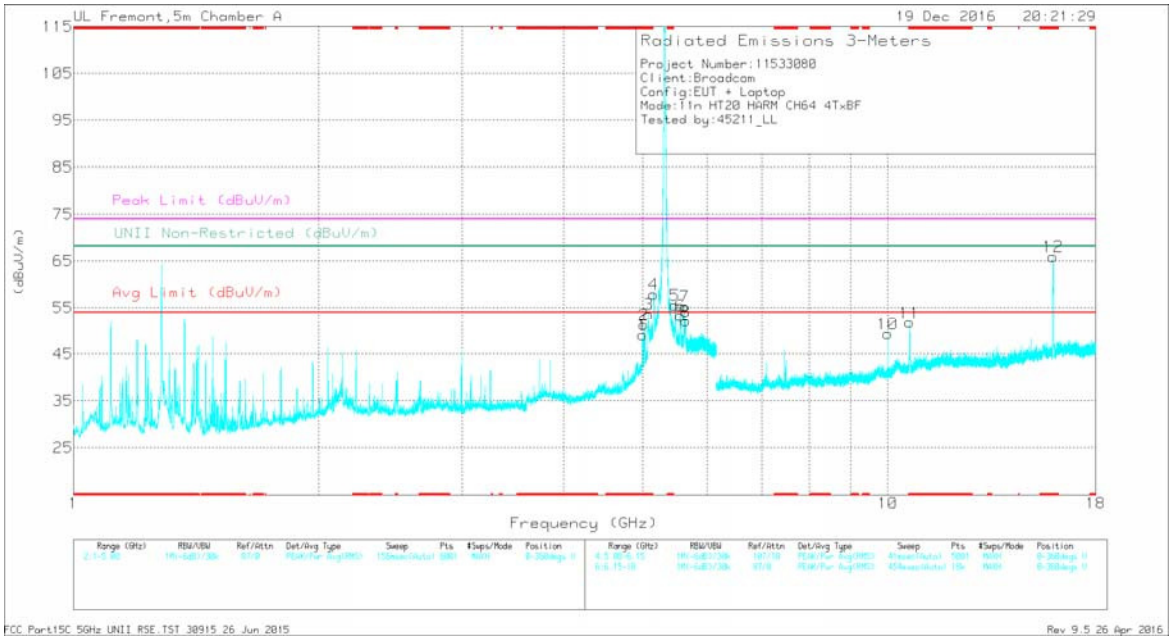
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 5	42.31	Pk	34.3	-27.5	0	49.11	-	-	74	-24.89	-	-	0-360	199	V
2	* 5.018	44.43	Pk	34.3	-27.4	0	51.33	-	-	74	-22.67	-	-	0-360	199	V
3	* 5.088	37.66	Pk	34.3	-18.4	0	53.56	-	-	74	-20.44	-	-	0-360	101	V
9	* 15.961	38.25	Pk	40.5	-20.5	0	58.25	-	-	74	-15.75	-	-	0-360	199	H
11	* 10.639	34.82	Pk	37.6	-20.6	0	51.82	-	-	74	-22.18	-	-	0-360	199	V
12	* 15.967	45.99	Pk	40.5	-20.5	0	65.99	-	-	74	-8.01	-	-	0-360	199	V
4	5.159	42.06	Pk	34.5	-18.6	0	57.96	-	-	-	-	68.2	-10.24	0-360	101	V
5	5.477	39.52	Pk	34.8	-18.8	0	55.52	-	-	-	-	68.2	-12.68	0-360	199	V
6	5.561	37.6	Pk	34.7	-19	0	53.3	-	-	-	-	68.2	-14.9	0-360	101	V
7	5.624	39.55	Pk	34.7	-19	0	55.25	-	-	-	-	68.2	-12.95	0-360	199	V
8	5.646	36.27	Pk	34.8	-19	0	52.07	-	-	-	-	68.2	-16.13	0-360	199	V
10	10	33.57	Pk	37	-21.2	0	49.37	-	-	-	-	68.2	-18.83	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

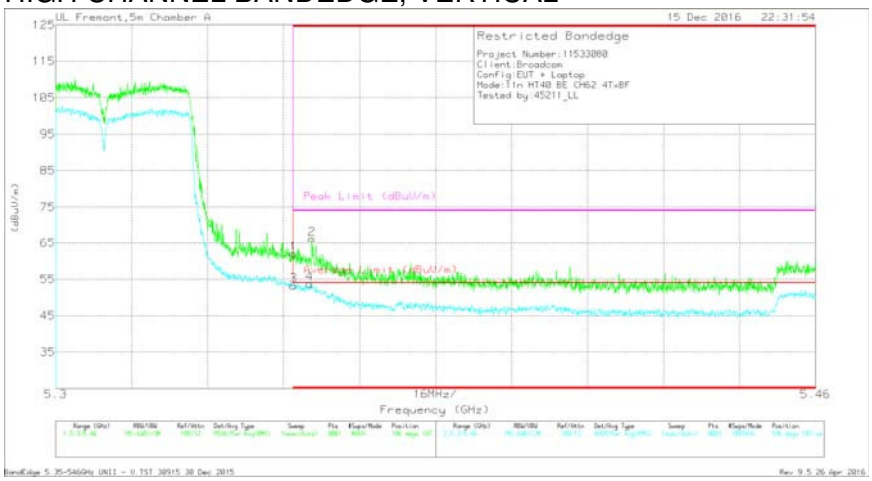
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5.008	42.46	PK-U	34.3	-27.6	0	49.16	-	-	74	-24.84	-	-	207	109	V
* 5.007	32.79	ADR	34.3	-27.6	.33	39.82	54	-14.18	-	-	-	-	207	109	V
* 5.028	48.83	PK-U	34.3	-27.1	0	56.03	-	-	74	-17.97	-	-	156	209	V
* 5.029	39.47	ADR	34.3	-27	.33	47.1	54	-6.9	-	-	-	-	156	209	V
* 5.088	42.64	PK-U	34.3	-18.4	0	58.54	-	-	74	-15.46	-	-	302	101	V
* 5.086	31.56	ADR	34.3	-18.4	.33	47.79	54	-6.21	-	-	-	-	302	101	V
* 15.955	39.16	PK-U	40.5	-20.7	0	58.96	-	-	74	-15.04	-	-	255	228	H
* 15.953	25.13	ADR	40.5	-20.8	.33	45.16	54	-8.84	-	-	-	-	255	228	H
* 15.965	32.86	ADR	40.5	-20.5	.33	53.19	54	-.81	-	-	-	-	213	206	V
* 15.967	49.22	PK-U	40.5	-20.5	0	69.22	-	-	74	-4.78	-	-	213	206	V
* 10.639	37.69	PK-U	37.6	-20.6	0	54.69	-	-	74	-19.31	-	-	15	183	V
* 10.64	26.99	ADR	37.6	-20.6	.33	44.32	54	-9.68	-	-	-	-	15	183	V
5.475	44.95	PK-U	34.8	-18.8	0	60.95	-	-	-	-	68.2	-7.25	178	193	V
5.567	41.3	PK-U	34.7	-18.9	0	57.1	-	-	-	-	68.2	-11.1	352	101	V
5.622	42.23	PK-U	34.7	-19	0	57.93	-	-	-	-	68.2	-10.27	257	209	V
5.648	42.81	PK-U	34.8	-19	0	58.61	-	-	-	-	68.2	-9.59	14	217	V
10	38.32	PK-U	37	-21.2	0	54.12	-	-	-	-	68.2	-14.08	329	235	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

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

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

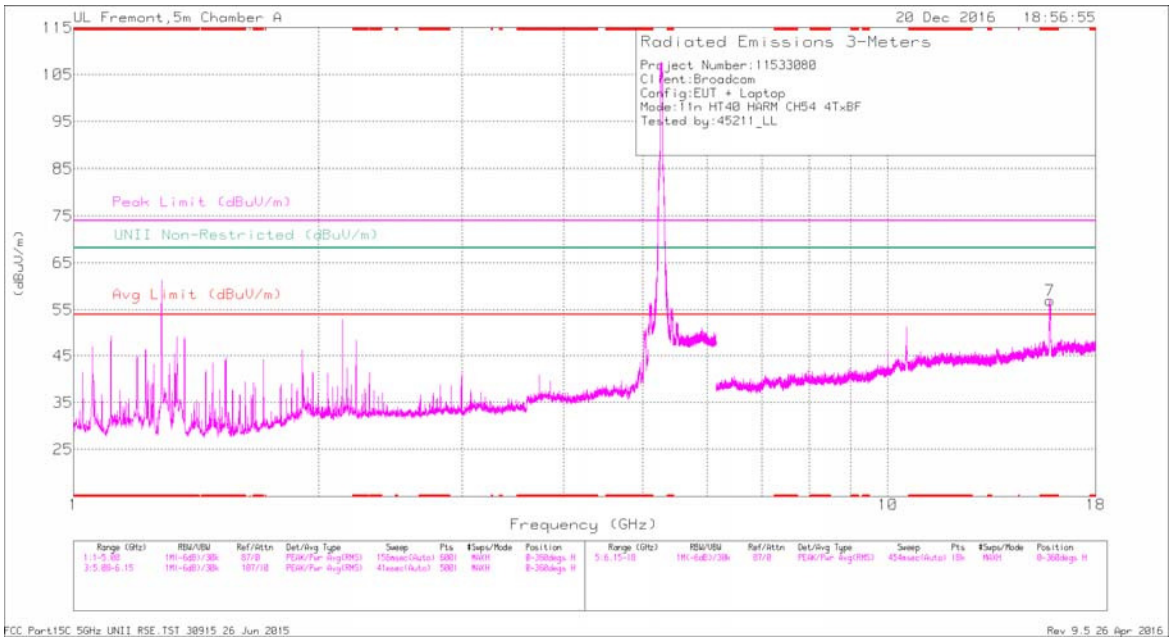
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.14	Pk	34.8	-18.9	0	62.04	-	-	74	-11.96	186	187	V
2	* 5.354	50.18	Pk	34.8	-18.8	0	66.18	-	-	74	-7.82	186	187	V
3	* 5.35	37.16	RMS	34.8	-18.9	.27	53.33	54	-.67	-	-	186	187	V
4	* 5.354	37.48	RMS	34.8	-18.8	.27	53.75	54	-.25	-	-	186	187	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

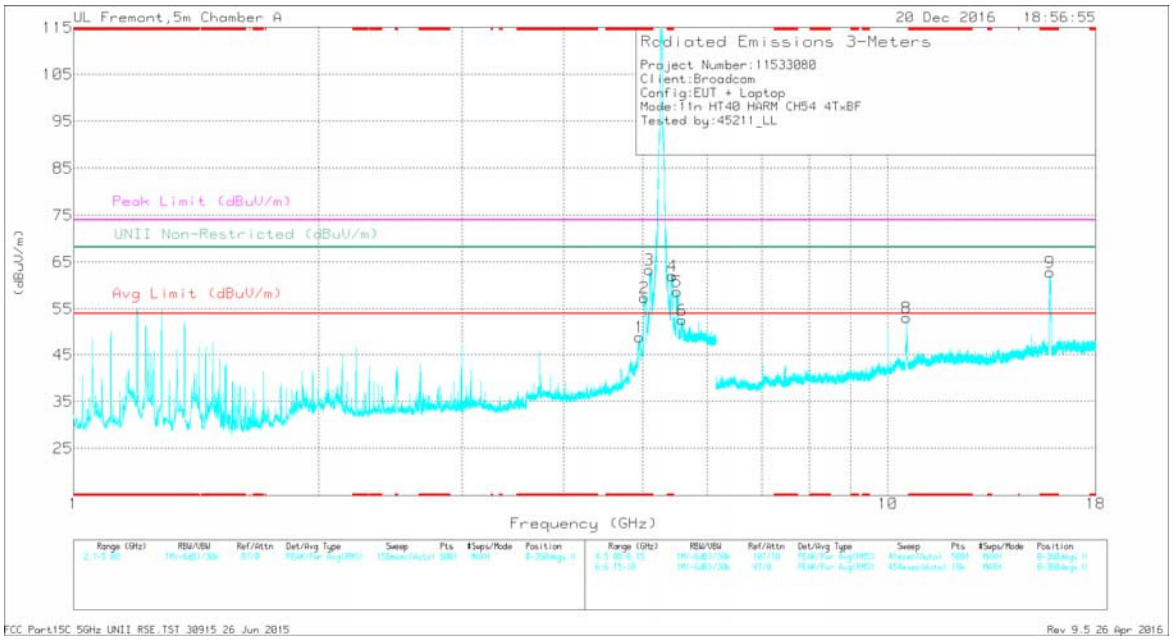
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 4.958	42.39	Pk	34.3	-27.9	0	48.79	-	-	74	-25.21	-	-	0-360	101	V
2	* 5.023	50.37	Pk	34.3	-27.3	0	57.37	-	-	74	-16.63	-	-	0-360	101	V
3	* 5.097	47.59	Pk	34.3	-18.5	0	63.39	-	-	74	-10.61	-	-	0-360	101	V
4	* 5.434	46.03	Pk	34.8	-18.8	0	62.03	-	-	74	-11.97	-	-	0-360	199	V
7	* 15.813	36.09	Pk	40.4	-19.5	0	56.99	-	-	74	-17.01	-	-	0-360	199	H
9	* 15.818	42.06	Pk	40.4	-19.6	0	62.86	-	-	74	-11.14	-	-	0-360	199	V
5	5.517	43.01	Pk	34.8	-19.1	0	58.71	-	-	-	-	68.2	-9.49	0-360	199	V
6	5.593	36.89	Pk	34.7	-19	0	52.59	-	-	-	-	68.2	-15.61	0-360	199	V
8	10.54	36.14	Pk	37.5	-20.6	0	53.04	-	-	-	-	68.2	-15.16	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

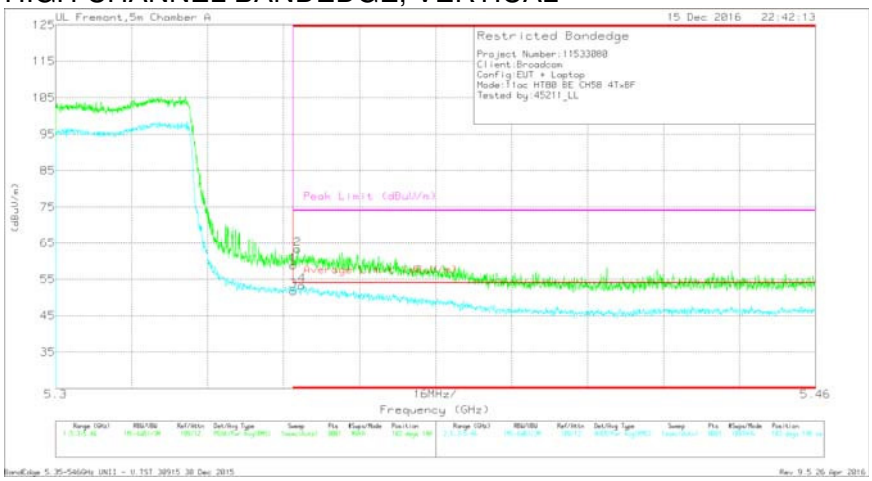
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 4.957	43.39	PK-U	34.3	-28	0	49.69	-	-	74	-24.31	-	-	146	101	V
* 4.967	33.66	ADR	34.3	-27.7	.27	40.53	54	-13.47	-	-	-	-	146	101	V
* 5.027	49.19	PK-U	34.3	-27.1	0	56.39	-	-	74	-17.61	-	-	337	108	V
* 5.02	38.77	ADR	34.3	-27.3	.27	46.04	54	-7.96	-	-	-	-	337	108	V
* 5.438	46.37	PK-U	34.8	-18.7	0	62.47	-	-	74	-11.53	-	-	18	195	V
* 5.435	37.7	ADR	34.8	-18.8	.27	53.97	54	-.03	-	-	-	-	18	195	V
* 5.12	46.65	PK-U	34.4	-18.6	0	62.45	-	-	74	-11.55	-	-	204	101	V
* 5.114	37.48	ADR	34.4	-18.6	.27	53.55	54	-.45	-	-	-	-	204	101	V
* 15.852	33.45	PK-U	40.4	-19.5	0	54.35	-	-	74	-19.65	-	-	355	286	H
* 15.7	22.59	ADR	40.3	-21.1	.27	42.06	54	-11.94	-	-	-	-	355	286	H
* 15.804	32.6	PK-U	40.4	-19.8	0	53.2	-	-	74	-20.8	-	-	130	303	V
* 15.786	23.07	ADR	40.4	-20.1	.27	43.64	54	-10.36	-	-	-	-	130	303	V
5.528	41.73	PK-U	34.8	-19.1	0	57.43	-	-	-	-	68.2	-10.77	357	116	V
5.606	40.03	PK-U	34.7	-19.1	0	55.63	-	-	-	-	68.2	-12.57	18	252	V
10.54	36.87	PK-U	37.5	-20.6	0	53.77	-	-	-	-	68.2	-14.43	323	280	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.3. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

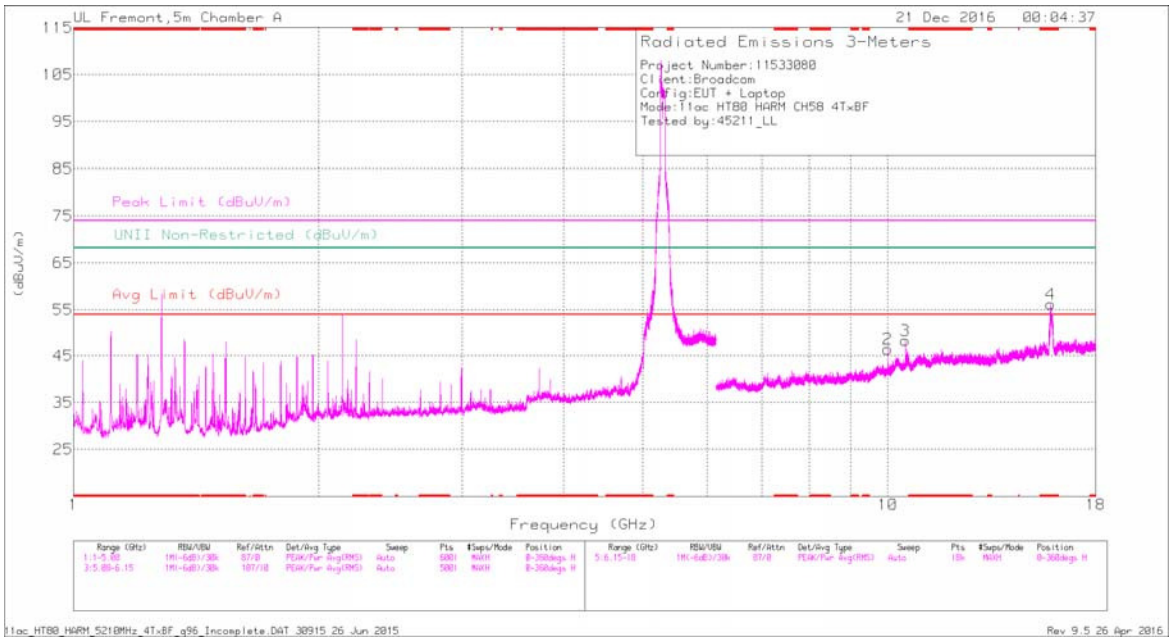
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.95	Pk	34.8	-18.9	0	58.85	-	-	74	-15.15	183	148	V
2	* 5.351	47.46	Pk	34.8	-18.9	0	63.36	-	-	74	-10.64	183	148	V
3	* 5.35	35.62	RMS	34.8	-18.9	.22	51.74	54	-2.26	-	-	183	148	V
4	* 5.352	37.12	RMS	34.8	-18.9	.22	53.24	54	-.76	-	-	183	148	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

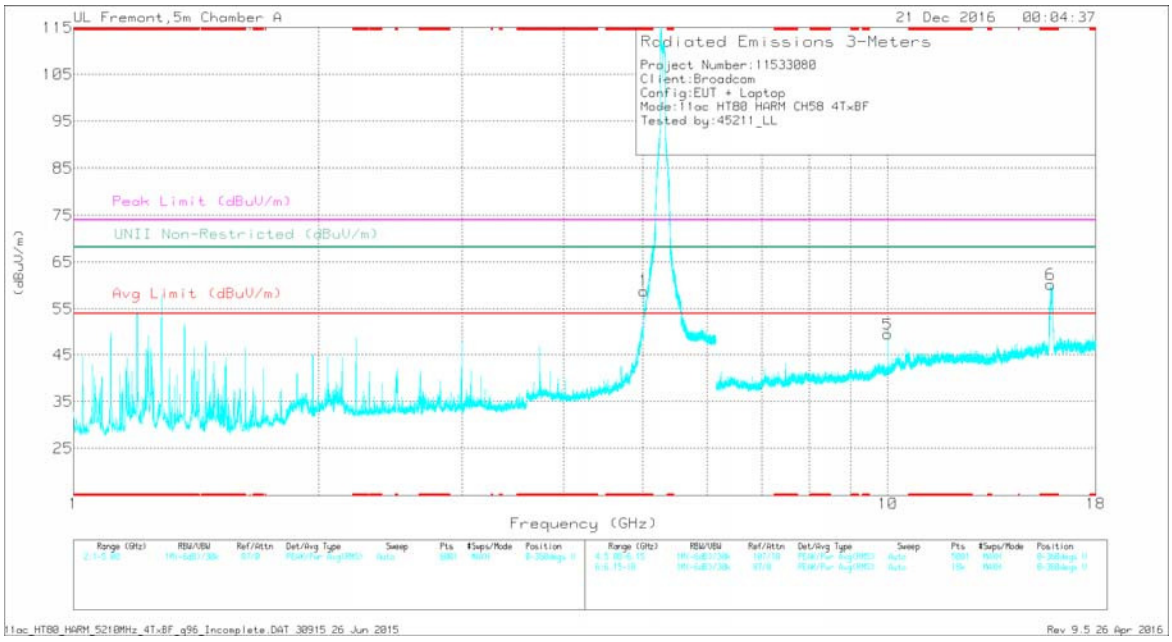
HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 5.018	51.98	Pk	34.3	-27.4	0	58.88	-	-	74	-15.12	-	-	0-360	101	V
4	* 15.849	35.34	Pk	40.4	-19.5	0	56.24	-	-	74	-17.76	-	-	0-360	199	H
6	* 15.857	39.39	Pk	40.4	-19.6	0	60.19	-	-	74	-13.81	-	-	0-360	199	V
2	10	30.62	Pk	37	-21.2	0	46.42	-	-	-	-	68.2	-21.78	0-360	101	H
5	10	33.63	Pk	37	-21.2	0	49.43	-	-	-	-	68.2	-18.77	0-360	199	V
3	10.514	31.59	Pk	37.5	-20.8	0	48.29	-	-	-	-	68.2	-19.91	0-360	199	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

Radiated Emissions

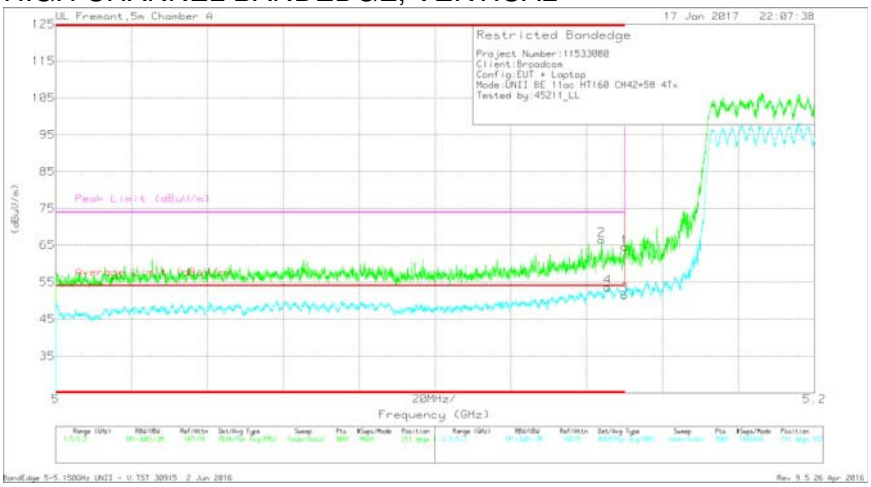
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 5.019	52.14	PK-U	34.3	-27.3	0	59.14	-	-	74	-14.86	-	-	135	114	V
* 5.02	41.66	ADR	34.3	-27.3	.22	48.88	54	-5.12	-	-	-	-	135	114	V
* 15.925	41.74	PK-U	40.5	-20.6	0	61.64	-	-	74	-12.36	-	-	199	300	H
* 15.915	28.97	ADR	40.5	-20.6	.22	49.09	54	-4.91	-	-	-	-	199	300	H
* 15.788	44.33	PK-U	40.4	-20	0	64.73	-	-	74	-9.27	-	-	219	341	V
* 15.851	32.58	ADR	40.4	-19.5	.22	53.7	54	-.3	-	-	-	-	219	341	V
10	37.69	PK-U	37	-21.2	0	53.49	-	-	-	-	68.2	-14.71	137	317	H
10	38.22	PK-U	37	-21.2	0	54.02	-	-	-	-	68.2	-14.18	331	234	V
10.514	32.55	PK-U	37.5	-20.8	0	49.25	-	-	-	-	68.2	-18.95	122	338	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.4. TX ABOVE 1 GHz 802.11ac HT80+HT80 MODE IN THE 5.2 & 5.3 GHz BAND

AUTHORIZED BANDEDGE (LOW CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL

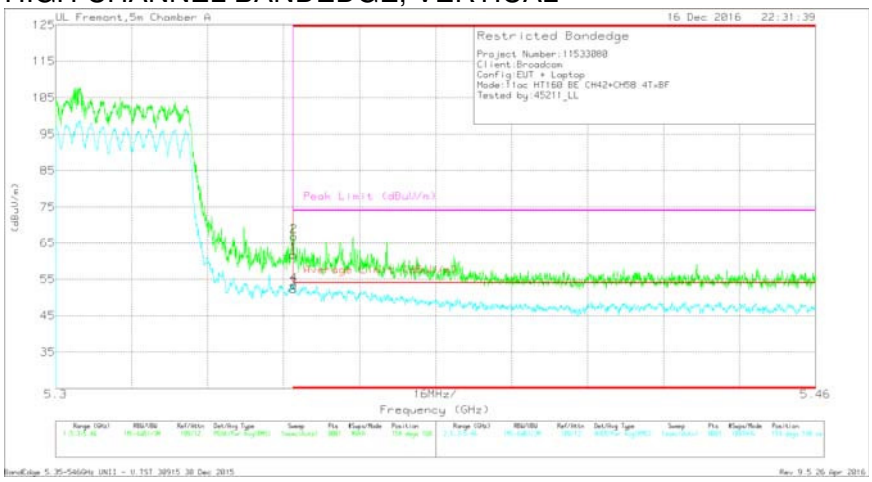


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.144	50.7	Pk	34.4	-18.6	0	66.5	-	-	74	-7.5	211	152	V
4	* 5.146	37.5	RMS	34.4	-18.6	.33	53.63	54	-.37	-	-	211	152	V
1	5.15	48.7	Pk	34.5	-18.7	0	64.5	-	-	74	-9.5	211	152	V
3	5.15	35.31	RMS	34.5	-18.7	.33	51.44	54	-2.56	-	-	211	152	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

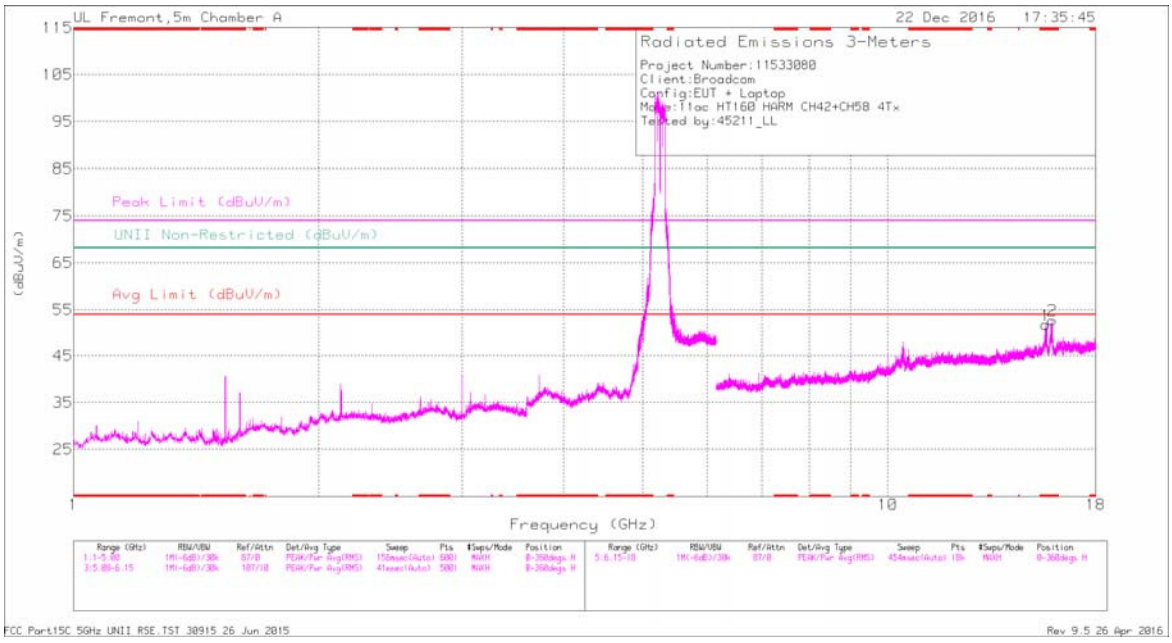
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.84	Pk	34.8	-18.9	0	61.74	-	-	74	-12.26	154	168	V
2	* 5.35	51.06	Pk	34.8	-18.9	0	66.96	-	-	74	-7.04	154	168	V
3	* 5.35	36.09	RMS	34.8	-18.9	.33	52.32	54	-1.68	-	-	154	168	V
4	* 5.35	37.2	RMS	34.8	-18.9	.33	53.43	54	-.57	-	-	154	168	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

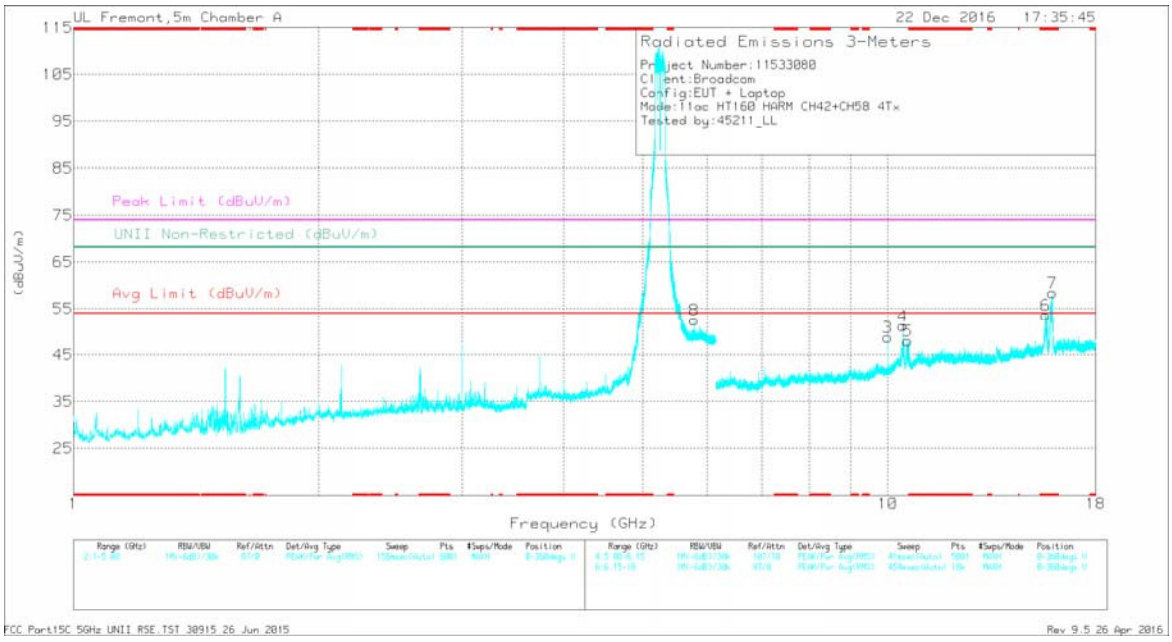
HARMONICS AND SPURIOUS EMISSIONS

CHANNEL 42+CHANNEL 58

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 15.624	31.72	Pk	40.3	-20.4	0	51.62	-	-	74	-22.38	-	-	0-360	199	H
2	* 15.922	32.8	Pk	40.5	-20.6	0	52.7	-	-	74	-21.3	-	-	0-360	101	H
6	* 15.637	33.79	Pk	40.3	-20.5	0	53.59	-	-	74	-20.41	-	-	0-360	199	V
7	* 15.916	38.49	Pk	40.5	-20.6	0	58.39	-	-	74	-15.61	-	-	0-360	101	V
8	5.789	36.53	Pk	34.9	-18.8	0	52.63	-	-	-	-	68.2	-15.57	0-360	199	V
3	10	33.04	Pk	37	-21.2	0	48.84	-	-	-	-	68.2	-19.36	0-360	199	V
4	10.438	34.62	Pk	37.4	-20.7	0	51.32	-	-	-	-	68.2	-16.88	0-360	199	V
5	10.578	30.89	Pk	37.6	-20.5	0	47.99	-	-	-	-	68.2	-20.21	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

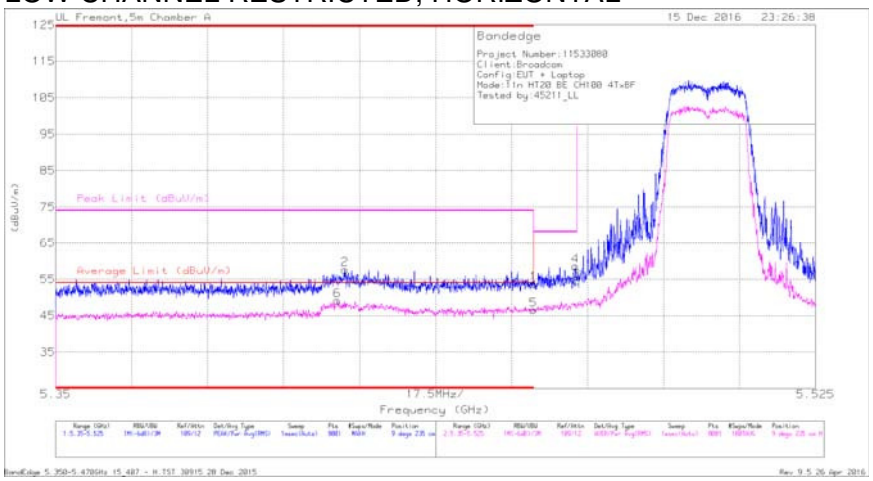
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 15.632	38.08	PK-U	40.3	-20.5	0	57.88	-	-	74	-16.12	-	-	16	197	H
* 15.644	27.11	ADR	40.3	-20.6	.33	47.14	54	-6.86	-	-	-	-	16	197	H
* 15.915	39.63	PK-U	40.5	-20.6	0	59.53	-	-	74	-14.47	-	-	279	102	H
* 15.902	26.39	ADR	40.4	-20.5	.33	46.62	54	-7.38	-	-	-	-	279	102	H
* 15.634	38.42	PK-U	40.3	-20.5	0	58.22	-	-	74	-15.78	-	-	29	218	V
* 15.631	28.88	ADR	40.3	-20.5	.33	49.01	54	-4.99	-	-	-	-	29	218	V
* 15.915	45.86	PK-U	40.5	-20.6	0	65.76	-	-	74	-8.24	-	-	329	208	V
* 15.883	33.07	ADR	40.4	-20.2	.33	53.6	54	-.4	-	-	-	-	329	208	V
5.789	41.95	PK-U	34.9	-18.9	0	57.95	-	-	-	-	68.2	-10.25	231	200	V
10	37.47	PK-U	37	-21.2	0	53.27	-	-	-	-	68.2	-14.93	187	202	V
10.439	37.28	PK-U	37.4	-20.7	0	53.98	-	-	-	-	68.2	-14.22	93	202	V
10.583	37.15	PK-U	37.6	-20.4	0	54.35	-	-	-	-	68.2	-13.85	284	209	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.5. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.6 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, HORIZONTAL

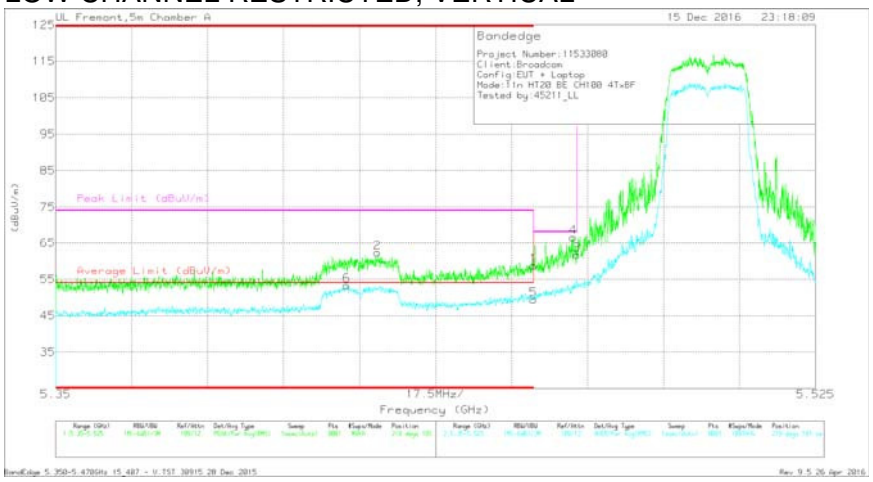


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	37.86	Pk	34.8	-18.9	0	53.76	-	-	74	-20.24	9	235	H
2	* 5.417	41.78	Pk	34.8	-18.9	0	57.68	-	-	74	-16.32	9	235	H
5	* 5.46	30.33	RMS	34.8	-18.9	.33	46.56	54	-7.44	-	-	9	235	H
6	* 5.415	32.79	RMS	34.8	-18.8	.33	49.12	54	-4.88	-	-	9	235	H
3	5.47	38.37	Pk	34.8	-18.7	0	54.47	-	-	68.2	-13.73	9	235	H
4	5.47	42.54	Pk	34.8	-18.7	0	58.64	-	-	68.2	-9.56	9	235	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



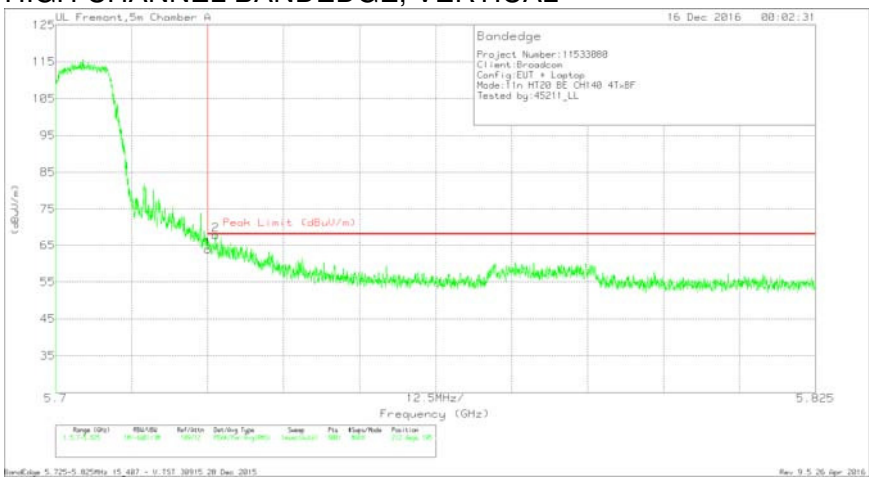
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	42.85	Pk	34.8	-18.9	0	58.75	-	-	74	-15.25	219	181	V
2	* 5.424	46.33	Pk	34.8	-18.8	0	62.33	-	-	74	-11.67	219	181	V
5	* 5.46	33.21	RMS	34.8	-18.9	.33	49.44	54	-4.56	-	-	219	181	V
6	* 5.417	37.06	RMS	34.8	-18.9	.33	53.29	54	-.71	-	-	219	181	V
4	5.469	50.54	Pk	34.8	-18.7	0	66.64	-	-	68.2	-1.56	219	181	V
3	5.47	45.66	Pk	34.8	-18.7	0	61.76	-	-	68.2	-6.44	219	181	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

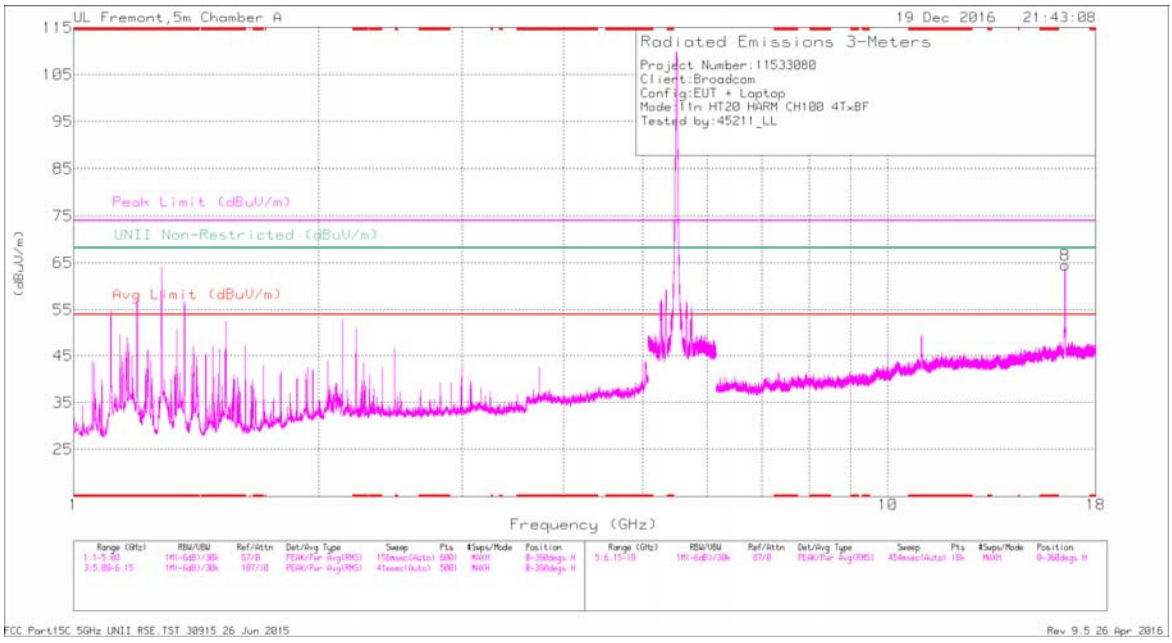
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	48.03	Pk	34.9	-19	63.93	68.2	-4.27	212	195	V
2	5.726	51.99	Pk	34.9	-19	67.89	68.2	-.31	212	195	V

Pk - Peak detector

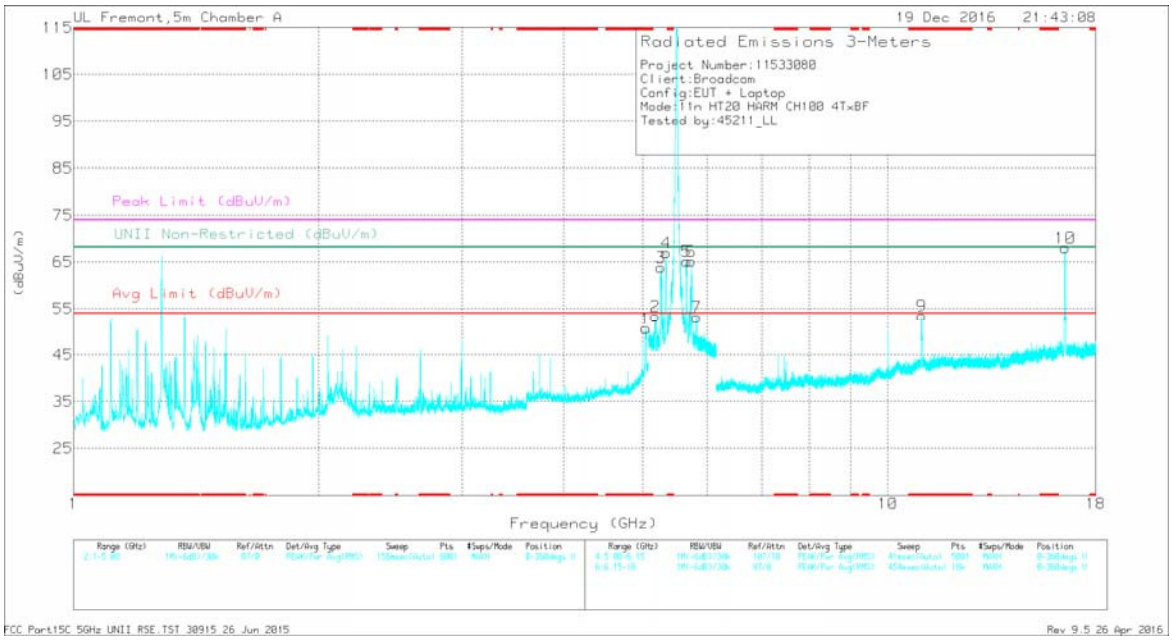
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 5.046	42.32	Pk	34.3	-25.9	0	50.72	-	-	74	-23.28	-	-	0-360	101	V
9	* 10.998	35.79	Pk	37.9	-20.2	0	53.49	-	-	74	-20.51	-	-	0-360	199	V
2	5.182	37.48	Pk	34.6	-18.7	0	53.38	-	-	-	-	68.2	-14.82	0-360	199	V
3	5.263	48.08	Pk	34.7	-18.9	0	63.88	-	-	-	-	68.2	-4.32	0-360	199	V
4	5.345	51.13	Pk	34.8	-18.9	0	67.03	-	-	-	-	68.2	-1.17	0-360	199	V
5	5.655	49.4	Pk	34.8	-19	0	65.2	-	-	-	-	68.2	-3	0-360	199	V
6	5.738	49.3	Pk	34.9	-19	0	65.2	-	-	-	-	68.2	-3	0-360	199	V
7	5.825	36.87	Pk	35	-18.7	0	53.17	-	-	-	-	68.2	-15.03	0-360	199	V
8	16.5	43.96	Pk	41.2	-20.6	0	64.56	-	-	-	-	68.2	-3.64	0-360	199	H
10	16.502	47.59	Pk	41.2	-20.7	0	68.09	-	-	-	-	68.2	-.11	0-360	101	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

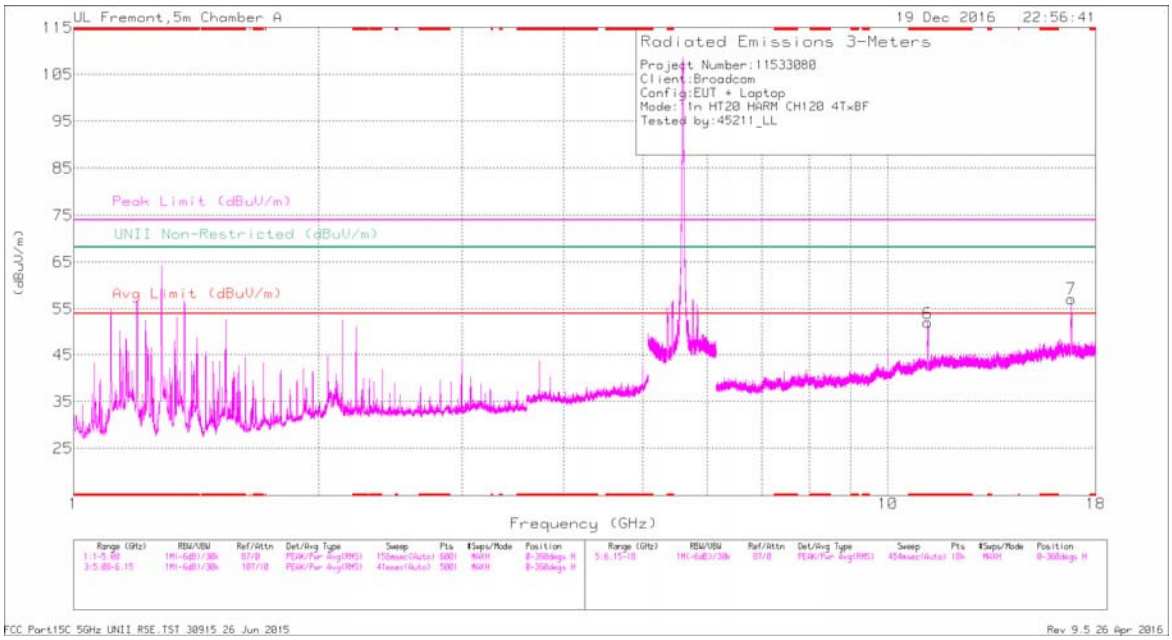
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5.036	47.95	PK-U	34.3	-26.7	0	55.55	-	-	74	-18.45	-	-	310	101	V
* 5.035	39.37	ADR	34.3	-26.7	.33	47.3	54	-6.7	-	-	-	-	310	101	V
* 11.003	42.79	PK-U	37.9	-20.2	0	60.49	-	-	74	-13.51	-	-	284	218	V
* 11	30.81	ADR	37.9	-20.2	.33	48.84	54	-5.16	-	-	-	-	284	218	V
5.183	41.67	PK-U	34.6	-18.7	0	57.57	-	-	-	-	68.2	-10.63	152	200	V
5.263	49.43	PK-U	34.7	-18.9	0	65.23	-	-	-	-	68.2	-2.97	163	190	V
5.346	52.27	PK-U	34.8	-18.9	0	68.17	-	-	-	-	68.2	-.03	221	178	V
5.736	52.19	PK-U	34.9	-19	0	68.09	-	-	-	-	68.2	-.11	13	221	V
5.827	42.83	PK-U	35	-18.5	0	59.33	-	-	-	-	68.2	-8.87	25	214	V
16.504	46.64	PK-U	41.2	-20.7	0	67.14	-	-	-	-	68.2	-1.06	273	130	V
16.513	47.21	PK-U	41.2	-20.8	0	67.61	-	-	-	-	68.2	-.59	201	210	H

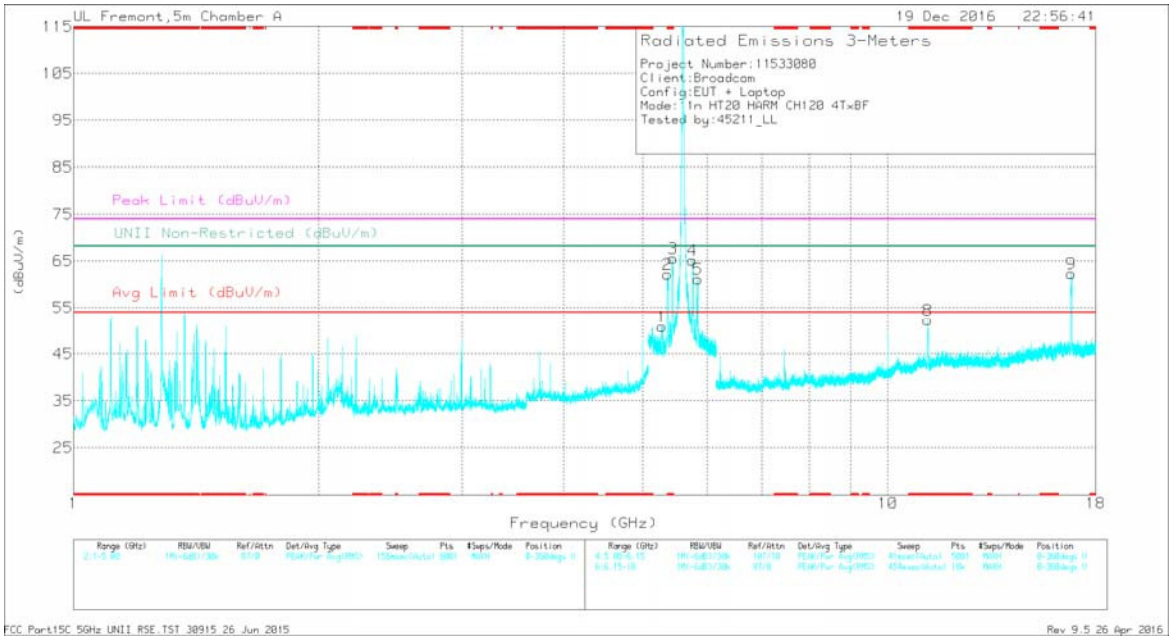
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

MID CHANNEL

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
2	* 5.364	46.11	Pk	34.8	-18.7	0	62.21	-	-	74	-11.79	-	-	0-360	199	V
3	* 5.446	49.53	Pk	34.8	-18.8	0	65.53	-	-	74	-8.47	-	-	0-360	199	V
6	* 11.199	34.06	Pk	37.9	-20	0	51.96	-	-	74	-22.04	-	-	0-360	101	H
8	* 11.197	34.38	Pk	37.9	-20	0	52.28	-	-	74	-21.72	-	-	0-360	199	V
1	5.278	34.92	Pk	34.7	-18.7	0	50.92	-	-	-	-	68.2	-17.28	0-360	101	V
4	5.755	49.22	Pk	34.9	-18.9	0	65.22	-	-	-	-	68.2	-2.98	0-360	199	V
5	5.842	44.84	Pk	35	-18.7	0	61.14	-	-	-	-	68.2	-7.06	0-360	199	V
9	16.805	41.84	Pk	41.6	-21.1	0	62.34	-	-	-	-	68.2	-5.86	0-360	199	V
7	16.806	36.69	Pk	41.6	-21.1	0	57.19	-	-	-	-	68.2	-11.01	0-360	199	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

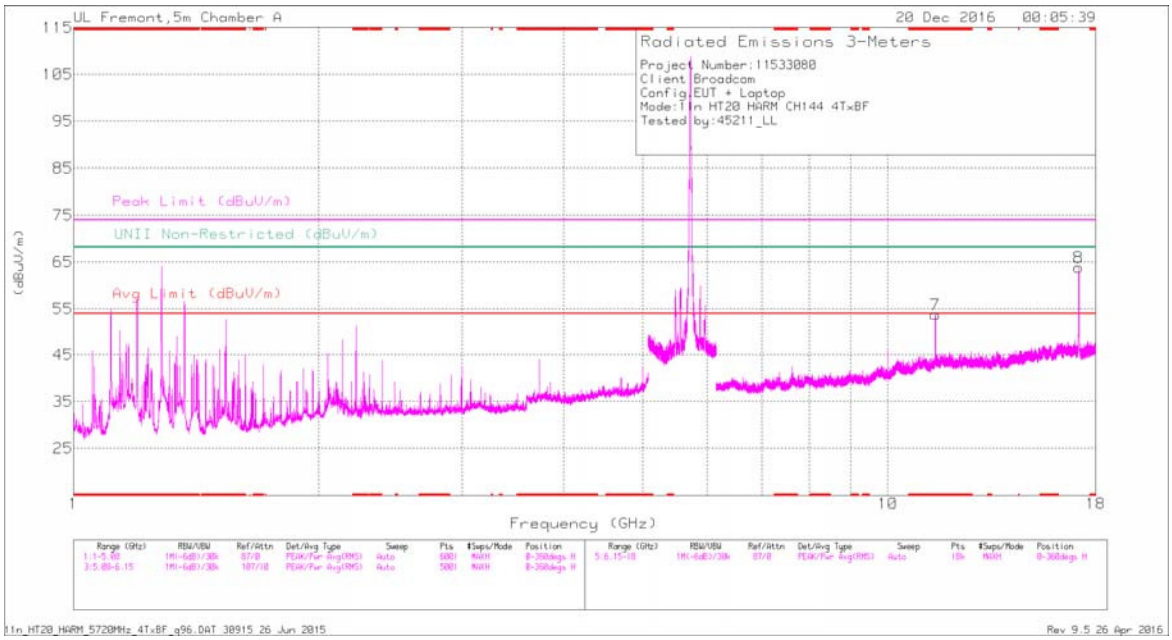
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5.446	46.61	PK-U	34.8	-18.8	0	62.61	-	-	74	-11.39	-	-	0	161	V
* 5.448	37.38	ADR	34.8	-18.9	.33	53.61	54	-.39	-	-	-	-	0	161	V
* 5.352	43.66	PK-U	34.8	-18.8	0	59.66	-	-	74	-14.34	-	-	140	206	V
* 5.353	34.79	ADR	34.8	-18.8	.33	51.12	54	-2.88	-	-	-	-	140	206	V
* 11.196	32.99	PK-U	37.9	-20	0	50.89	-	-	74	-23.11	-	-	258	124	H
* 11.194	21.75	ADR	37.9	-20	.33	39.98	54	-14.02	-	-	-	-	258	124	H
* 11.202	37.05	PK-U	38	-20	0	55.05	-	-	74	-18.95	-	-	312	268	V
* 11.2	25.81	ADR	37.9	-20	.33	44.04	54	-9.96	-	-	-	-	312	268	V
5.286	38.58	PK-U	34.7	-18.8	0	54.48	-	-	-	-	68.2	-13.72	337	117	V
5.756	48.39	PK-U	34.9	-18.9	0	64.39	-	-	-	-	68.2	-3.81	24	199	V
5.836	43.86	PK-U	35	-18.8	0	60.06	-	-	-	-	68.2	-8.14	51	218	V
16.796	34.26	PK-U	41.6	-20.9	0	54.96	-	-	-	-	68.2	-13.24	304	120	V
16.801	33.41	PK-U	41.6	-21	0	54.01	-	-	-	-	68.2	-14.19	211	217	H

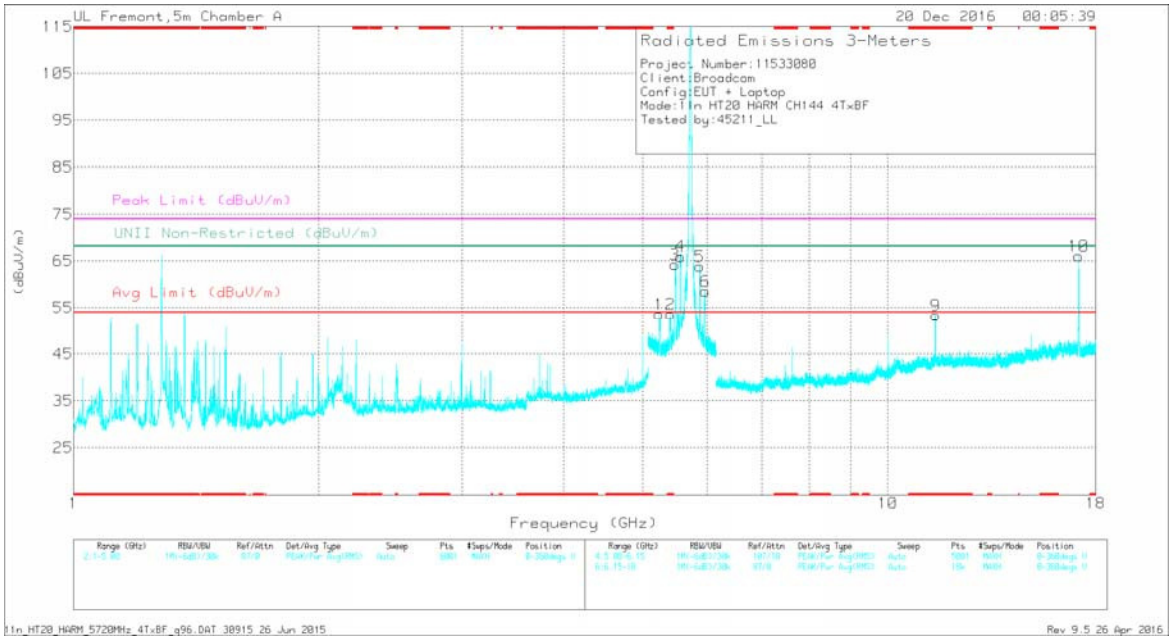
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
2	* 5.406	37.74	Pk	34.8	-18.9	0	53.64	-	-	74	-20.36	-	-	0-360	101	V
7	* 11.439	35.51	Pk	38.1	-19.8	0	53.81	-	-	74	-20.19	-	-	0-360	199	H
9	* 11.44	35.01	Pk	38.1	-19.8	0	53.31	-	-	74	-20.69	-	-	0-360	101	V
1	5.239	37.67	Pk	34.7	-18.8	0	53.57	-	-	-	-	68.2	-14.63	0-360	199	V
3	***5.477	48.21	Pk	34.8	-18.8	0	64.21	-	-	-	-	68.2	-3.99	0-360	101	V
4	***5.558	50.42	Pk	34.7	-19.1	0	66.02	-	-	-	-	68.2	-2.18	0-360	101	V
5	5.877	47.31	Pk	35.2	-18.6	0	63.91	-	-	-	-	68.2	-4.29	0-360	101	V
6	5.964	41.85	Pk	35.2	-18.5	0	58.55	-	-	-	-	68.2	-9.65	0-360	101	V
10	17.156	45.73	Pk	41.1	-20.7	0	66.13	-	-	-	-	68.2	-2.07	0-360	199	V
8	17.163	43.57	Pk	41.1	-20.8	0	63.87	-	-	-	-	68.2	-4.33	0-360	199	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
*** - indicates frequency in the operating band
Pk - Peak detector

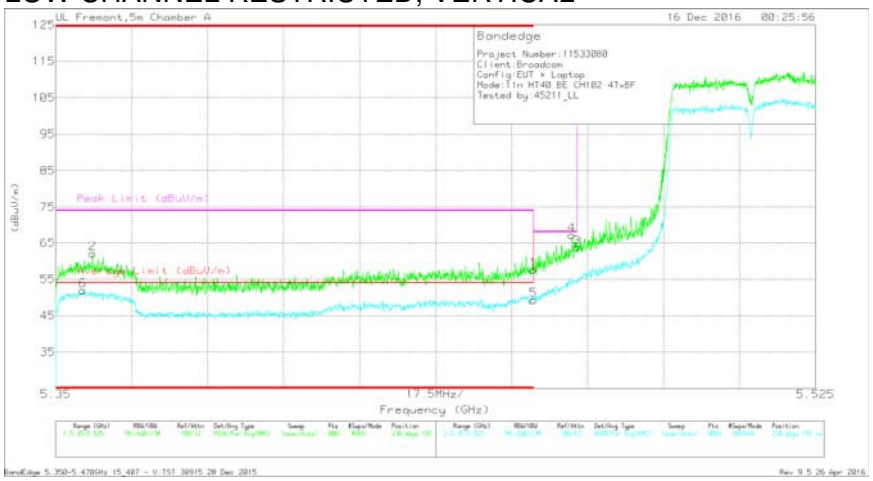
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5.398	41.67	PK-U	34.8	-18.9	0	57.57	-	-	74	-16.43	-	-	254	102	V
* 5.402	32.55	ADR	34.8	-18.9	.33	48.78	54	-5.22	-	-	-	-	254	102	V
* 11.428	40.72	PK-U	38.1	-19.8	0	59.02	-	-	74	-14.98	-	-	267	190	H
* 11.432	29.83	ADR	38.1	-19.8	.33	48.46	54	-5.54	-	-	-	-	267	190	H
* 11.436	39.41	PK-U	38.1	-19.8	0	57.71	-	-	74	-16.29	-	-	297	321	V
* 11.44	29.15	ADR	38.1	-19.8	.33	47.78	54	-6.22	-	-	-	-	297	321	V
5.241	41.75	PK-U	34.7	-18.8	0	57.65	-	-	-	-	68.2	-10.55	119	206	V
5.877	51.14	PK-U	35.2	-18.6	0	67.74	-	-	-	-	68.2	-.46	81	236	V
5.966	44.89	PK-U	35.2	-18.6	0	61.49	-	-	-	-	68.2	-6.71	44	197	V
17.162	41.58	PK-U	41.1	-20.7	0	61.98	-	-	-	-	68.2	-6.22	273	398	H
17.167	46.54	PK-U	41.1	-20.8	0	66.84	-	-	-	-	68.2	-1.36	291	388	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.6. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.6 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



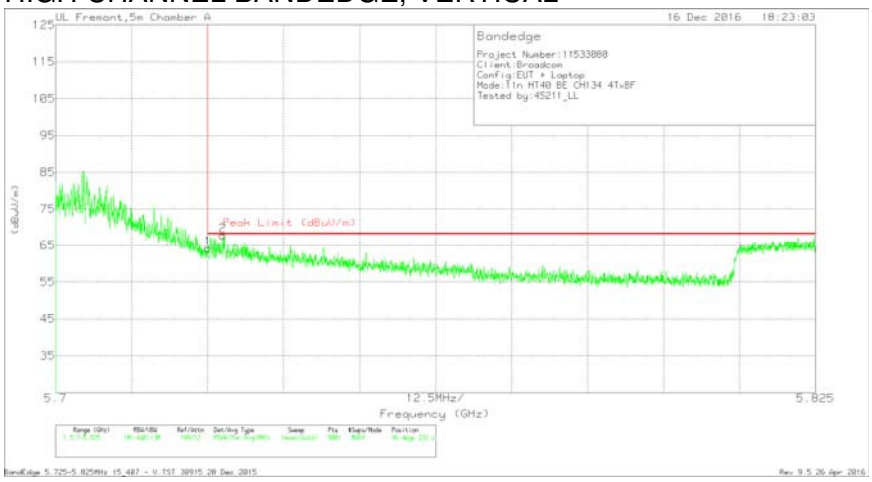
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.77	Pk	34.8	-18.9	0	57.67	-	-	74	-16.33	230	191	V
2	* 5.358	46.07	Pk	34.8	-18.8	0	62.07	-	-	74	-11.93	230	191	V
5	* 5.46	33.13	RMS	34.8	-18.9	.27	49.3	54	-4.7	-	-	230	191	V
6	* 5.356	35.63	RMS	34.8	-18.8	.27	51.9	54	-2.1	-	-	230	191	V
4	5.469	51.15	Pk	34.8	-18.7	0	67.25	-	-	68.2	-.95	230	191	V
3	5.47	47.78	Pk	34.8	-18.7	0	63.88	-	-	68.2	-4.32	230	191	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

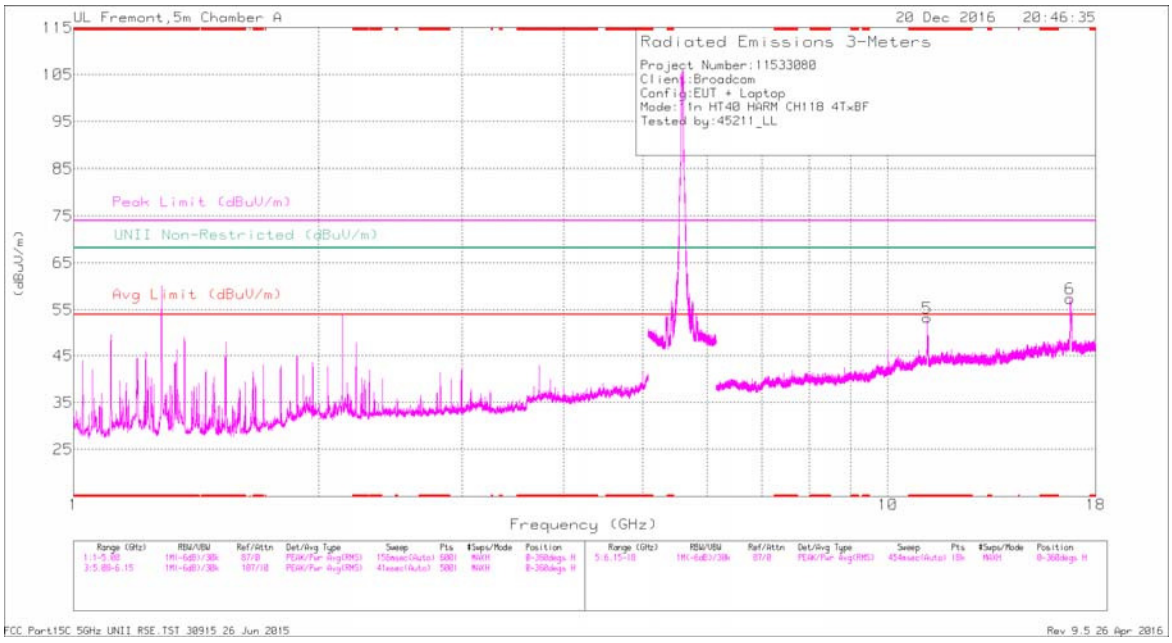
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	48.32	Pk	34.9	-19	64.22	68.2	-3.98	46	232	V
2	5.728	51.87	Pk	34.9	-19	67.77	68.2	-.43	46	232	V

Pk - Peak detector

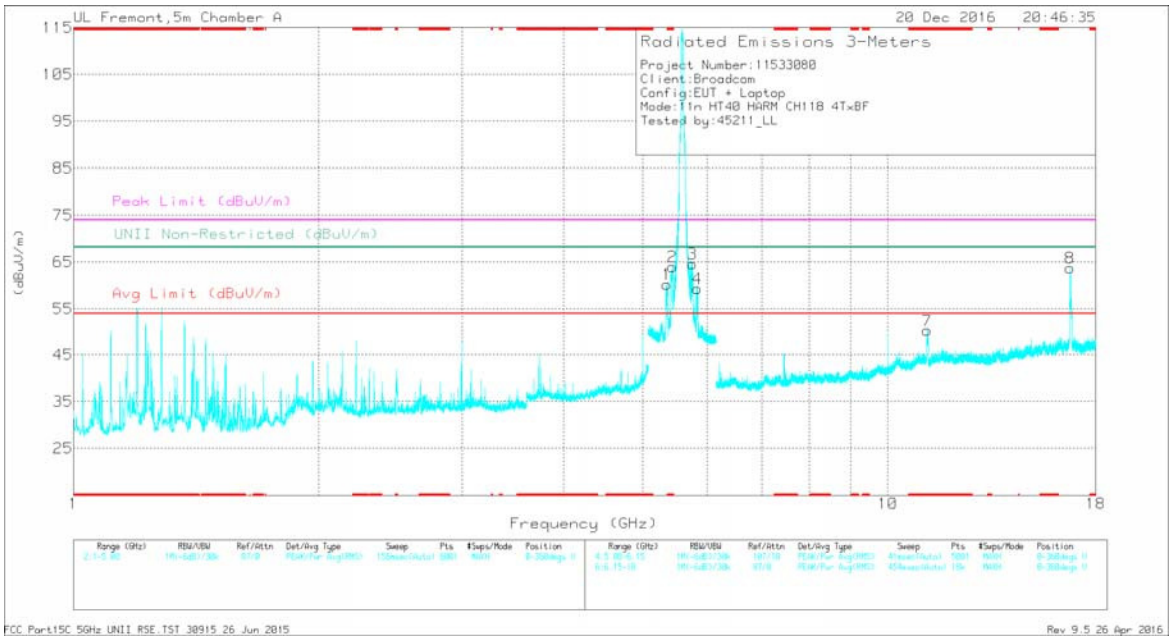
HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 5.354	44.28	Pk	34.8	-18.8	0	60.28	-	-	74	-13.72	-	-	0-360	199	V
2	* 5.435	48.04	Pk	34.8	-18.8	0	64.04	-	-	74	-9.96	-	-	0-360	199	V
5	* 11.18	35.44	Pk	37.9	-20.1	0	53.24	-	-	74	-20.76	-	-	0-360	101	H
7	* 11.18	32.44	Pk	37.9	-20.1	0	50.24	-	-	74	-23.76	-	-	0-360	199	V
3	5.757	48.62	Pk	34.9	-18.9	0	64.62	-	-	-	-	68.2	-3.58	0-360	199	V
4	5.831	42.97	Pk	35	-18.6	0	59.37	-	-	-	-	68.2	-8.83	0-360	199	V
6	16.745	36.94	Pk	41.6	-21.1	0	57.44	-	-	-	-	68.2	-10.76	0-360	199	H
8	16.753	43.13	Pk	41.6	-21	0	63.73	-	-	-	-	68.2	-4.47	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

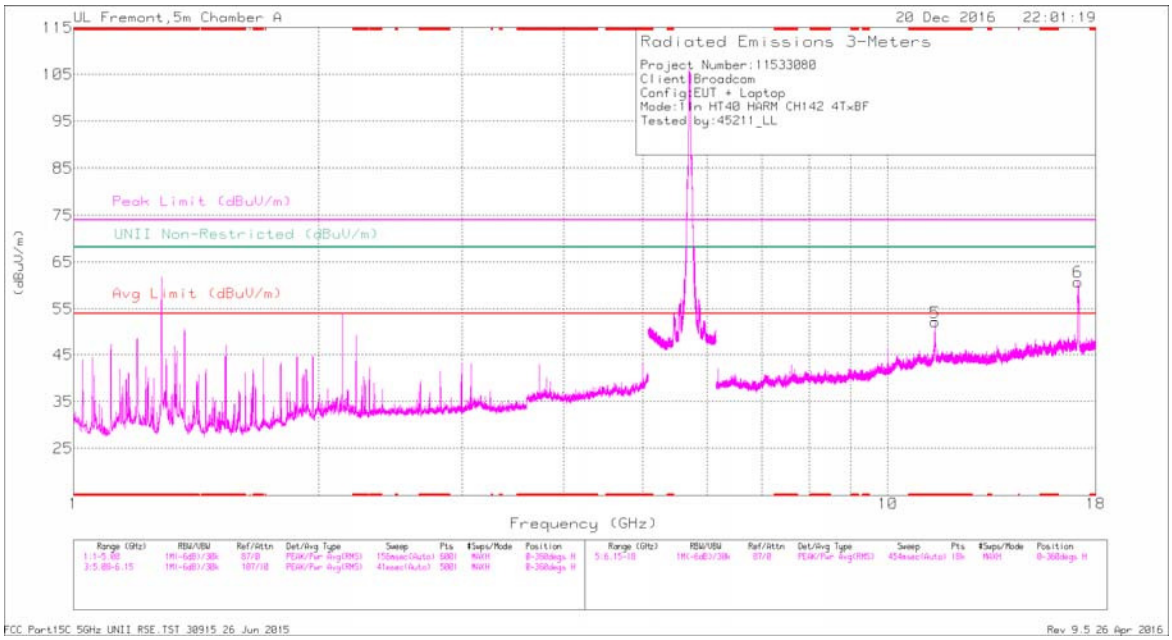
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5.421	46.9	PK-U	34.8	-18.9	0	62.8	-	-	74	-11.2	-	-	226	180	V
* 5.423	37.37	ADR	34.8	-18.8	.27	53.64	54	-.36	-	-	-	-	226	180	V
* 11.177	32.2	PK-U	37.9	-20.1	0	50	-	-	74	-24	-	-	311	106	H
* 11.179	22.59	ADR	37.9	-20.1	.27	40.66	54	-13.34	-	-	-	-	311	106	H
* 11.193	32.58	PK-U	37.9	-20	0	50.48	-	-	74	-23.52	-	-	308	333	V
* 11.193	22.57	ADR	37.9	-20	.27	40.74	54	-13.26	-	-	-	-	308	333	V
5.338	42.27	PK-U	34.8	-19	0	58.07	-	-	-	-	68.2	-10.13	63	197	V
5.343	33.17	ADR	34.8	-18.9	.27	49.34	-	-	-	-	-	-	63	197	V
5.733	48.43	PK-U	34.9	-19	0	64.33	-	-	-	-	68.2	-3.87	21	228	V
5.821	44.82	PK-U	35	-18.8	0	61.02	-	-	-	-	68.2	-7.18	13	190	V
16.762	33.92	PK-U	41.6	-20.9	0	54.62	-	-	-	-	68.2	-13.58	274	257	H
16.865	32.03	PK-U	41.5	-21.2	0	52.33	-	-	-	-	68.2	-15.87	258	197	V

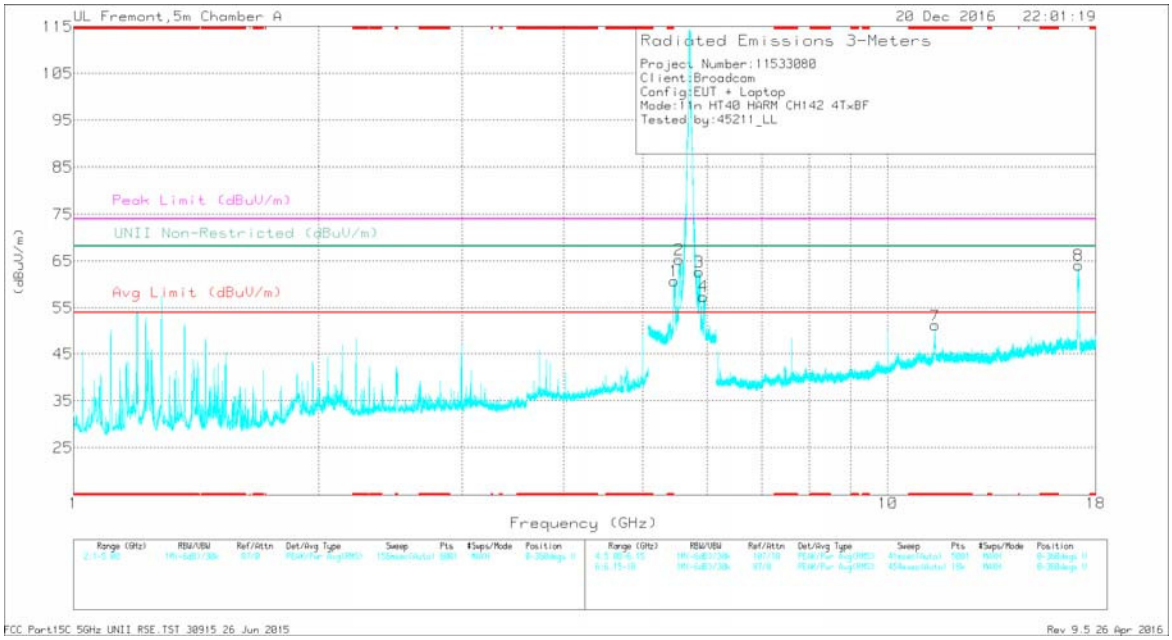
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

HIGH CHANNEL

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
5	* 11.422	33.72	Pk	38.1	-19.7	0	52.12	-	-	74	-21.88	-	-	0-360	199	H
7	* 11.42	32.81	Pk	38.1	-19.7	0	51.21	-	-	74	-22.79	-	-	0-360	199	V
1	5.464	44.71	Pk	34.8	-18.8	0	60.71	-	-	-	-	68.2	-7.49	0-360	199	V
2	***5.546	49.58	Pk	34.8	-19.1	0	65.28	-	-	-	-	68.2	-2.92	0-360	101	V
3	5.865	46.35	Pk	35.1	-18.7	0	62.75	-	-	-	-	68.2	-5.45	0-360	199	V
4	5.935	40.85	Pk	35.2	-18.6	0	57.45	-	-	-	-	68.2	-10.75	0-360	199	V
6	17.118	40.07	Pk	41.2	-20.5	0	60.77	-	-	-	-	68.2	-7.43	0-360	199	H
8	17.153	43.79	Pk	41.1	-20.7	0	64.19	-	-	-	-	68.2	-4.01	0-360	199	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
*** - indicates frequency in the operating band
Pk - Peak detector

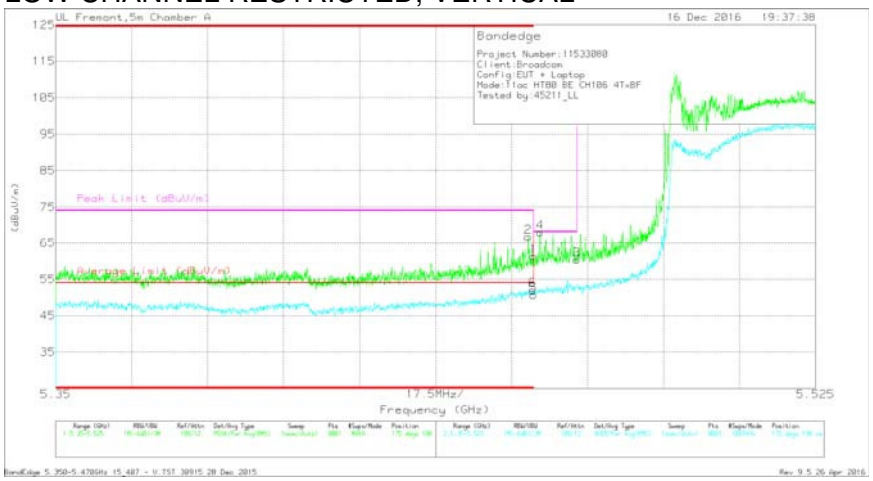
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 11.427	35.7	PK-U	38.1	-19.7	0	54.1	-	-	74	-19.9	-	-	267	334	H
* 11.421	25.59	ADR	38.1	-19.7	.27	44.26	54	-9.74	-	-	-	-	267	334	H
* 11.421	42.95	PK-U	38.1	-19.7	0	61.35	-	-	74	-12.65	-	-	6	281	V
* 11.42	31.68	ADR	38.1	-19.7	.27	50.35	54	-3.65	-	-	-	-	6	281	V
5.464	50.12	PK-U	34.8	-18.8	0	66.12	-	-	-	-	68.2	-2.08	183	190	V
5.855	51.22	PK-U	35.1	-18.7	0	67.62	-	-	-	-	68.2	-.58	299	173	V
5.944	43.33	PK-U	35.2	-18.5	0	60.03	-	-	-	-	68.2	-8.17	13	239	V
17.103	43.99	PK-U	41.2	-20.6	0	64.59	-	-	-	-	68.2	-3.61	290	193	H
17.148	47.39	PK-U	41.1	-20.6	0	67.89	-	-	-	-	68.2	-.31	265	190	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.7. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.6 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	45.4	Pk	34.8	-18.9	0	61.3	-	-	74	-12.7	175	198	V
2	* 5.459	50.96	Pk	34.8	-18.9	0	66.86	-	-	74	-7.14	175	198	V
5	* 5.46	34.57	RMS	34.8	-18.9	.22	50.69	54	-3.31	-	-	175	198	V
6	* 5.46	35.93	RMS	34.8	-18.9	.22	52.05	54	-1.95	-	-	175	198	V
4	5.462	52.18	Pk	34.8	-18.9	0	68.08	-	-	68.2	-.12	175	198	V
3	5.47	44.29	Pk	34.8	-18.7	0	60.39	-	-	68.2	-7.81	175	198	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL

Trace Markers

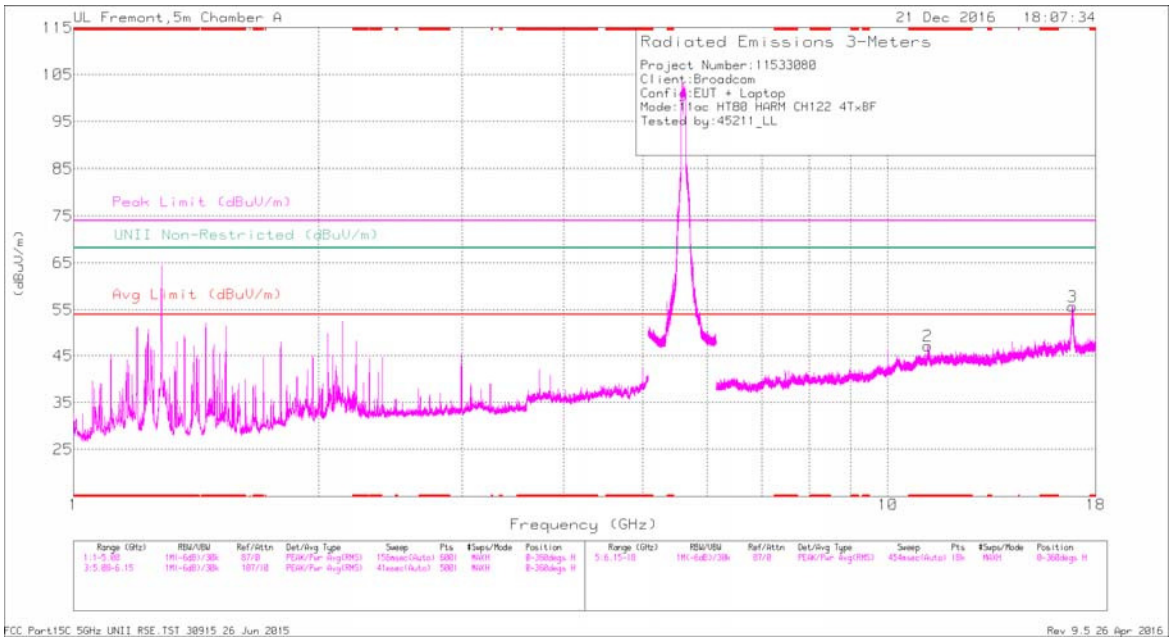
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.42	Pk	34.9	-19	57.32	68.2	-10.88	41	169	V
2	5.735	46.86	Pk	34.9	-19	62.76	68.2	-5.44	41	169	V

Pk - Peak detector

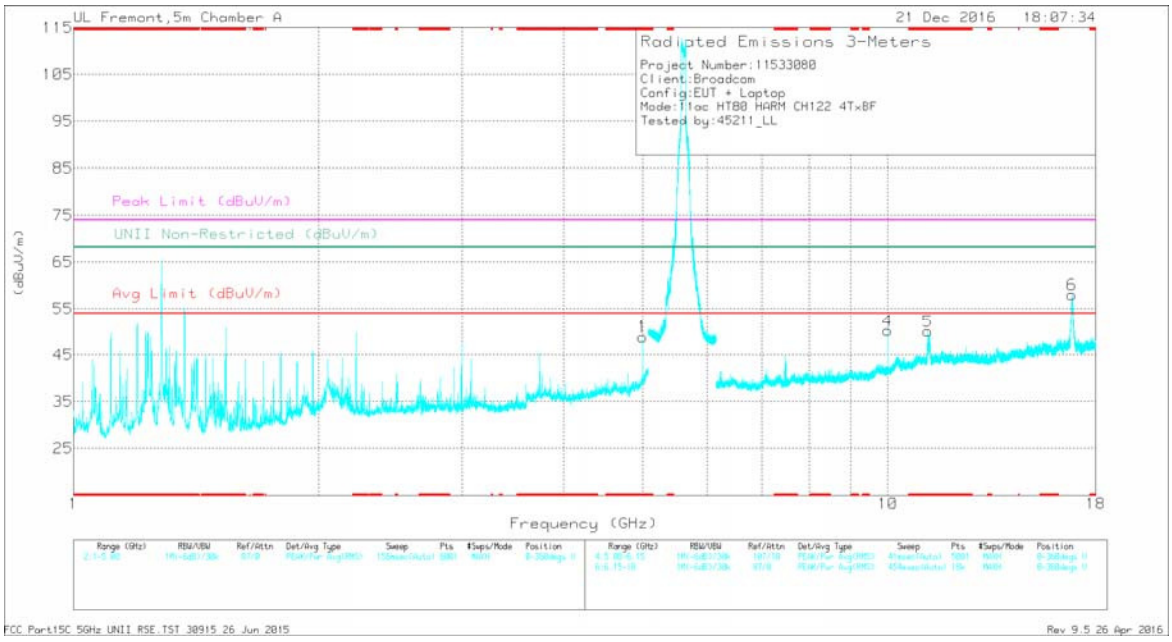
HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 5	42.08	Pk	34.3	-27.5	0	48.88	-	-	74	-25.12	-	-	0-360	199	V
2	* 11.193	29.25	Pk	37.9	-20	0	47.15	-	-	74	-26.85	-	-	0-360	199	H
5	* 11.202	32.16	Pk	38	-20	0	50.16	-	-	74	-23.84	-	-	0-360	199	V
4	10	34.39	Pk	37	-21.2	0	50.19	-	-	-	-	68.2	-18.01	0-360	199	V
6	16.83	37.7	Pk	41.5	-21.2	0	58	-	-	-	-	68.2	-10.2	0-360	101	V
3	16.849	35.44	Pk	41.5	-21.2	0	55.74	-	-	-	-	68.2	-12.46	0-360	199	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

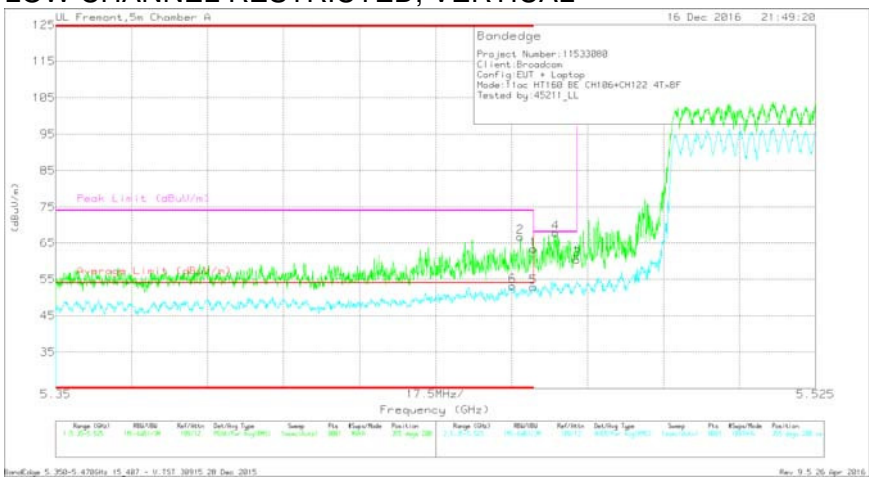
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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
* 5	46.41	PK-U	34.3	-27.5	0	53.21	-	-	74	-20.79	-	-	341	260	V
* 5	41.63	ADR	34.3	-27.5	.22	48.65	54	-5.35	-	-	-	-	341	260	V
* 11.206	36.68	PK-U	38	-19.9	0	54.78	-	-	74	-19.22	-	-	337	215	H
* 11.201	25.21	ADR	38	-20	.22	43.43	54	-10.57	-	-	-	-	337	215	H
* 11.199	36.78	PK-U	37.9	-20	0	54.68	-	-	74	-19.32	-	-	280	383	V
* 11.195	24.23	ADR	37.9	-20	.22	42.35	54	-11.65	-	-	-	-	280	383	V
10	38.65	PK-U	37	-21.2	0	54.45	-	-	-	-	68.2	-13.75	331	241	V
16.836	43.75	PK-U	41.5	-21.2	0	64.05	-	-	-	-	68.2	-4.15	347	282	V
16.839	37.58	PK-U	41.5	-21.2	0	57.88	-	-	-	-	68.2	-10.32	188	207	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

9.2.8. TX ABOVE 1 GHz 802.11ac HT80+HT80 MODE IN THE 5.6 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	47.41	Pk	34.8	-18.9	0	63.31	-	-	74	-10.69	355	200	V
2	* 5.457	50.84	Pk	34.8	-18.8	0	66.84	-	-	74	-7.16	355	200	V
5	* 5.46	36.66	RMS	34.8	-18.9	.33	52.89	54	-1.11	-	-	355	200	V
6	* 5.455	36.83	RMS	34.8	-18.8	.33	53.16	54	-.84	-	-	355	200	V
4	5.465	51.86	Pk	34.8	-18.7	0	67.96	-	-	68.2	-.24	355	200	V
3	5.47	44.22	Pk	34.8	-18.7	0	60.32	-	-	68.2	-7.88	355	200	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, VERTICAL

Trace Markers

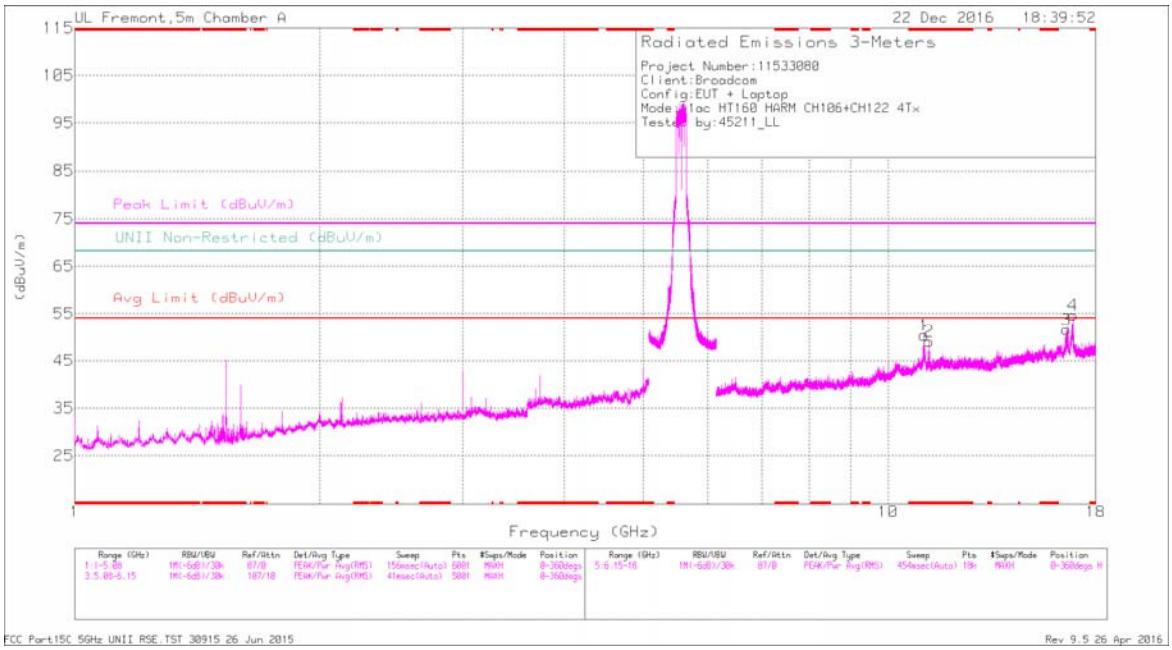
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	41.6	Pk	34.9	-19	57.5	68.2	-10.7	78	218	V
2	5.725	45.73	Pk	34.9	-19	61.63	68.2	-6.57	78	218	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

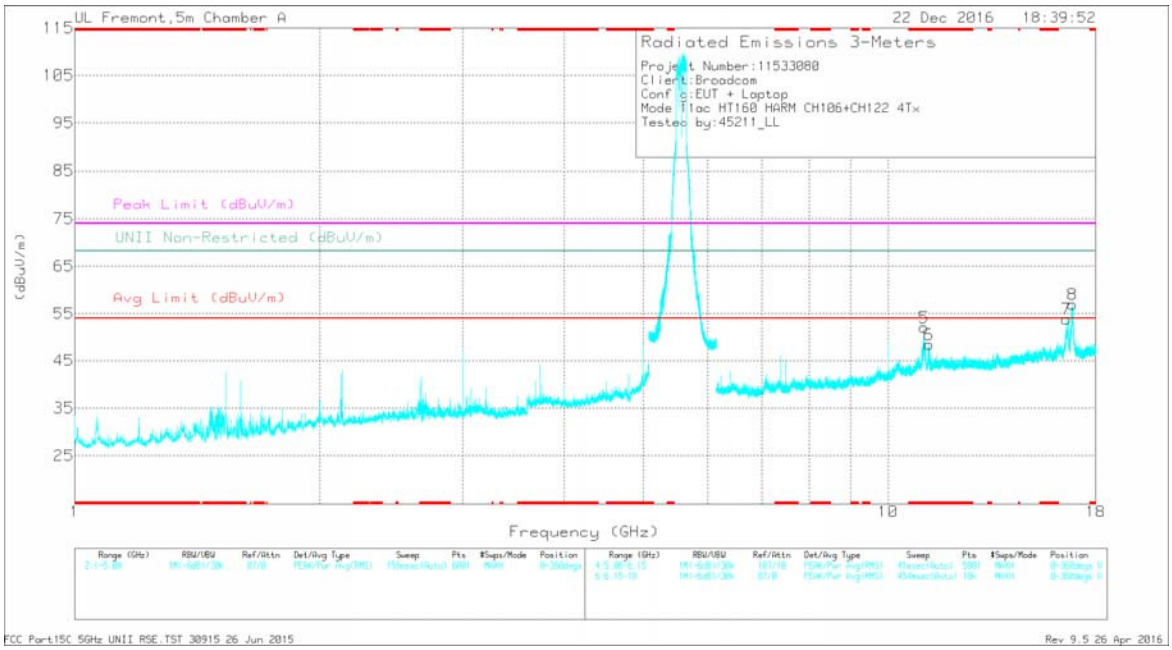
HARMONICS AND SPURIOUS EMISSIONS

CHANNEL 106+CHANNEL 122

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	* 11.074	32.31	Pk	37.9	-19.8	0	50.41	-	-	74	-23.59	-	-	0-360	199	H
2	* 11.231	31.1	Pk	38	-20	0	49.1	-	-	74	-24.9	-	-	0-360	101	H
5	* 11.079	33.84	Pk	37.9	-19.7	0	52.04	-	-	74	-21.96	-	-	0-360	199	V
6	* 11.229	30.39	Pk	38	-20	0	48.39	-	-	74	-25.61	-	-	0-360	199	V
7	16.577	33.26	Pk	41.4	-20.8	0	53.86	-	-	-	-	68.2	-14.34	0-360	199	V
3	16.578	31	Pk	41.4	-20.8	0	51.6	-	-	-	-	68.2	-16.6	0-360	199	H
8	16.857	36.68	Pk	41.5	-21.2	0	56.98	-	-	-	-	68.2	-11.22	0-360	199	V
4	16.875	34.2	Pk	41.5	-21	0	54.7	-	-	-	-	68.2	-13.5	0-360	101	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Pk - Peak detector

Radiated Emissions

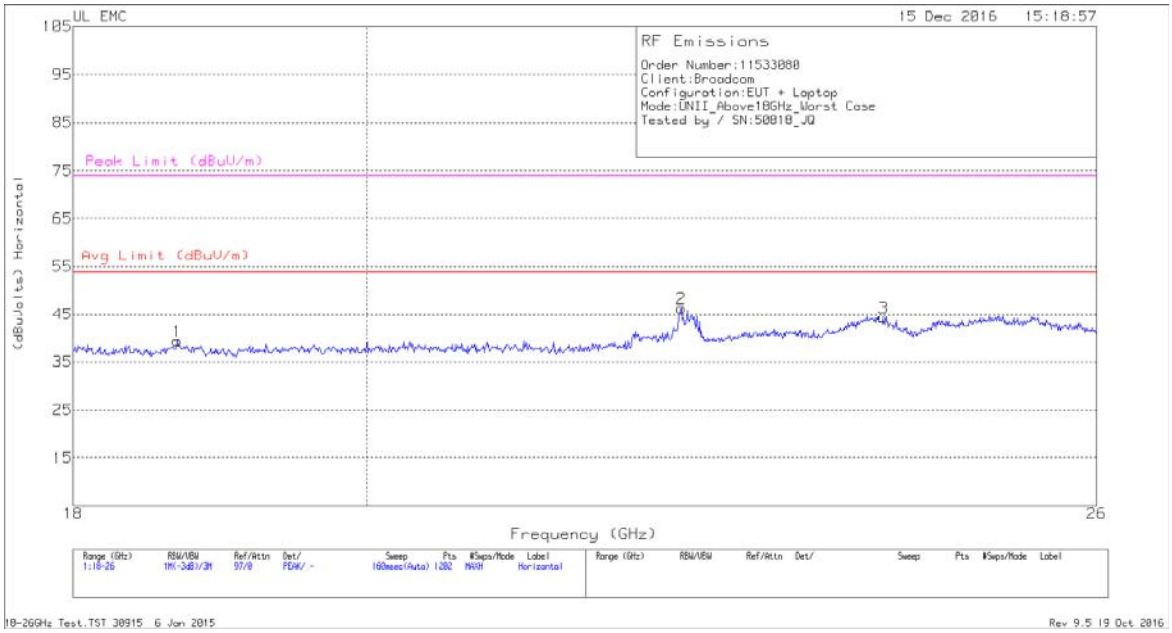
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.059	37.92	PK-U	37.9	-19.9	0	55.92	-	-	74	-18.08	-	-	157	205	H
* 11.079	27.6	ADR	37.9	-19.7	.33	46.13	54	-7.87	-	-	-	-	157	205	H
* 11.177	34.53	PK-U	37.9	-20.1	0	52.33	-	-	74	-21.67	-	-	229	102	H
* 11.215	25.12	ADR	38	-20	.33	43.45	54	-10.55	-	-	-	-	229	102	H
* 11.076	37.48	PK-U	37.9	-19.7	0	55.68	-	-	74	-18.32	-	-	177	223	V
* 11.069	28.39	ADR	37.9	-19.8	.33	46.82	54	-7.18	-	-	-	-	177	223	V
* 11.064	36.63	PK-U	37.9	-19.9	0	54.63	-	-	74	-19.37	-	-	358	221	V
* 11.074	26.95	ADR	37.9	-19.8	.33	45.38	54	-8.62	-	-	-	-	358	221	V
16.568	37.8	PK-U	41.3	-21	0	58.1	-	-	-	-	68.2	-10.1	19	163	V
16.571	35.07	PK-U	41.3	-20.9	0	55.47	-	-	-	-	68.2	-12.73	177	177	H
16.875	41.82	PK-U	41.5	-21	0	62.32	-	-	-	-	68.2	-5.88	136	199	V
16.876	39.5	PK-U	41.5	-21	0	60	-	-	-	-	68.2	-8.2	321	115	H

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
PK-U - U-NII: Maximum Peak
ADR - U-NII AD primary method, RMS average

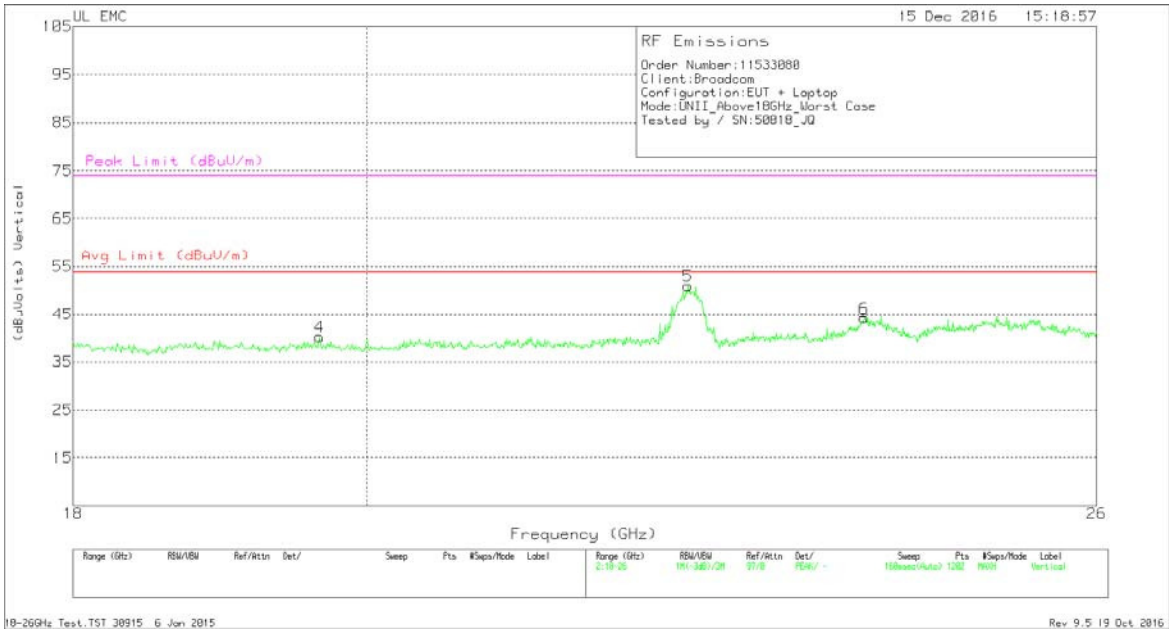
9.3. WORST-CASE ABOVE 18 GHz

SPURIOUS EMISSIONS 18 - 26 GHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



DATA

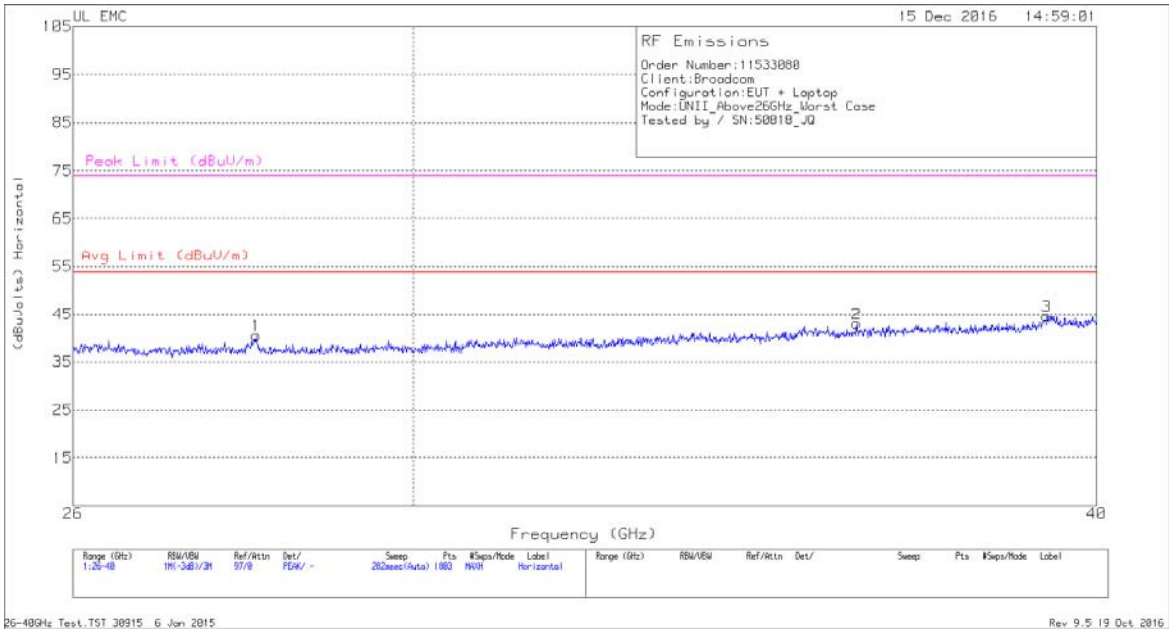
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	18.686	40.83	Pk	32.4	-24.4	-9.5	39.33	54	-14.67	74	-34.67
2	22.396	47.23	Pk	33.5	-24.9	-9.5	46.33	54	-7.67	74	-27.67
3	24.082	44.13	Pk	34	-24.3	-9.5	44.33	54	-9.67	74	-29.67
4	19.665	41.87	Pk	32.7	-24.9	-9.5	40.17	54	-13.83	74	-33.83
5	22.45	51.6	Pk	33.5	-24.6	-9.5	51	54	-3	74	-23
6	23.915	43.57	Pk	34	-23.9	-9.5	44.17	54	-9.83	74	-29.83

Trace Markers

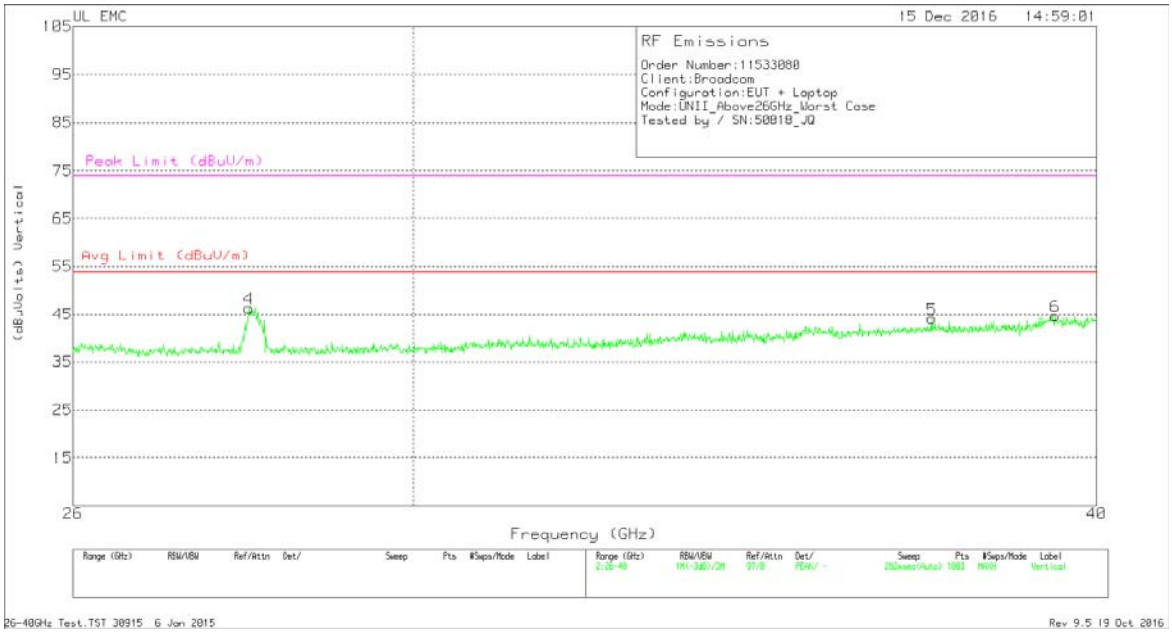
Pk - Peak detector

SPURIOUS EMISSIONS 26 - 40 GHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



DATA
Trace Markers

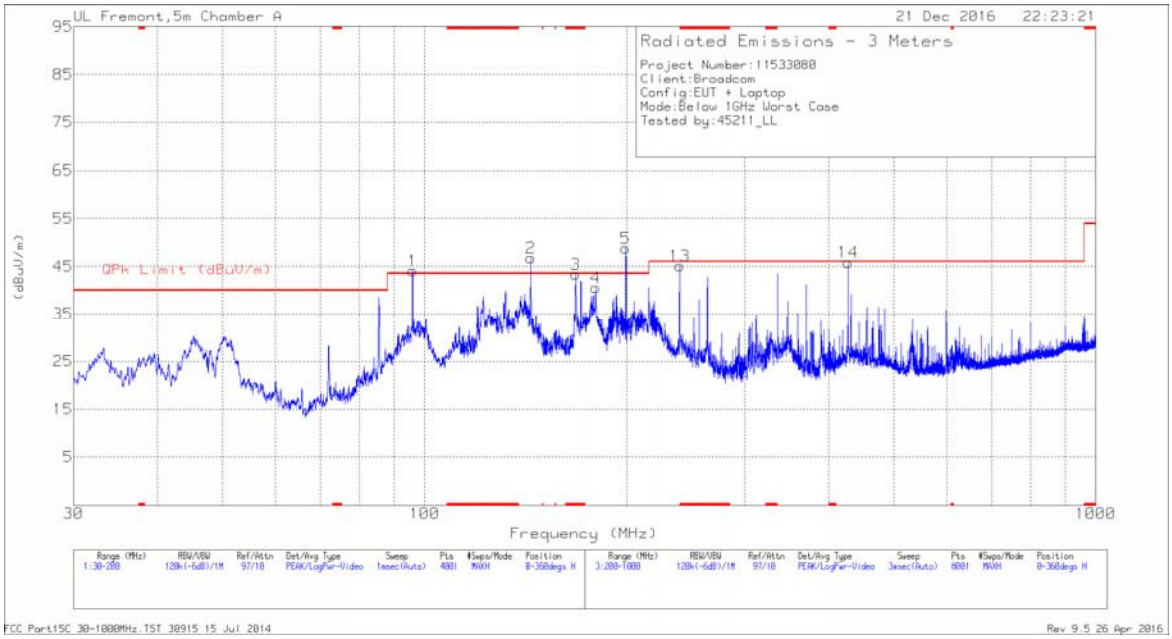
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	28.082	46.3	Pk	35.8	-32.1	-9.5	40.5	54	-13.5	74	-33.5
2	36.154	49.9	Pk	37.2	-34.6	-9.5	43	54	-11	74	-31
3	39.169	48.57	Pk	38.2	-32.6	-9.5	44.67	54	-9.33	74	-29.33
4	27.997	52.13	Pk	35.8	-32.1	-9.5	46.33	54	-7.67	74	-27.67
5	37.32	50.6	Pk	37.3	-34.4	-9.5	44	54	-10	74	-30
6	39.309	48.27	Pk	38.3	-32.4	-9.5	44.67	54	-9.33	74	-29.33

Pk - Peak detector

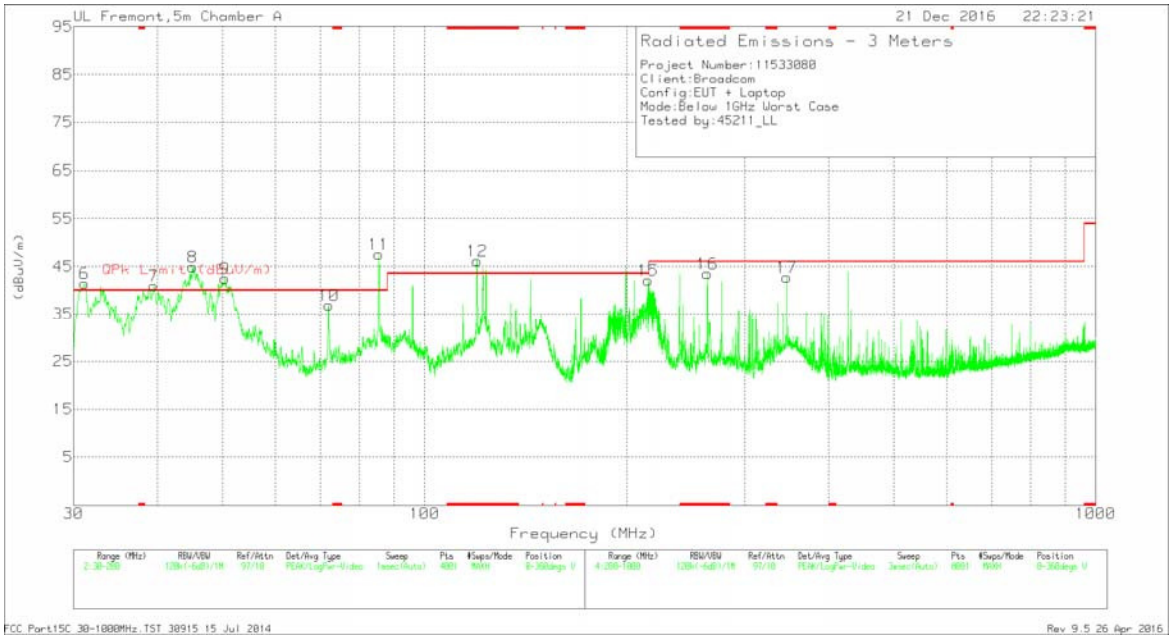
9.4. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	** 167.9125	57.6	Pk	15.9	-30.1	43.4	43.52	-.12	0-360	200	H
12	** 119.7175	58.73	Pk	17.8	-30.4	46.13	-	-	0-360	100	V
16	** 263.9	56.51	Pk	16.6	-29.6	43.51	46.02	-2.51	0-360	200	V
6	**31.1475	49.63	Pk	23	-31.2	41.43	-	-	0-360	100	V
7	**39.52	53.64	Pk	18.4	-31.1	40.94	-	-	0-360	100	V
8	**45.13	62.05	Pk	13.9	-31.1	44.85	-	-	0-360	100	V
9	**50.4425	61.99	Pk	11.5	-31	42.49	-	-	0-360	100	V
10	**71.99	55.17	Pk	12.5	-30.8	36.87	40	-3.13	0-360	100	V
11	**85.505	66.81	Pk	11.4	-30.7	47.51	-	-	0-360	100	V
1	**95.96	61.68	Pk	13.1	-30.6	44.18	-	-	0-360	300	H
2	**143.9425	60.17	Pk	16.9	-30.3	46.77	-	-	0-360	200	H
4	179.8975	55.36	Pk	15.3	-30.1	40.56	43.52	-2.96	0-360	200	H
5	**199.49	62.01	Pk	16.7	-29.9	48.81	-	-	0-360	100	H
15	215.5	57.43	Pk	14.6	-29.9	42.13	43.52	-1.39	0-360	200	V
13	**239.9	59.29	Pk	15.6	-29.7	45.19	46.02	-.83	0-360	100	H
17	346.4	53.74	Pk	18.2	-29.2	42.74	46.02	-3.28	0-360	200	V
14	**427.5	54.25	Pk	20.6	-29	45.85	46.02	-.17	0-360	300	H

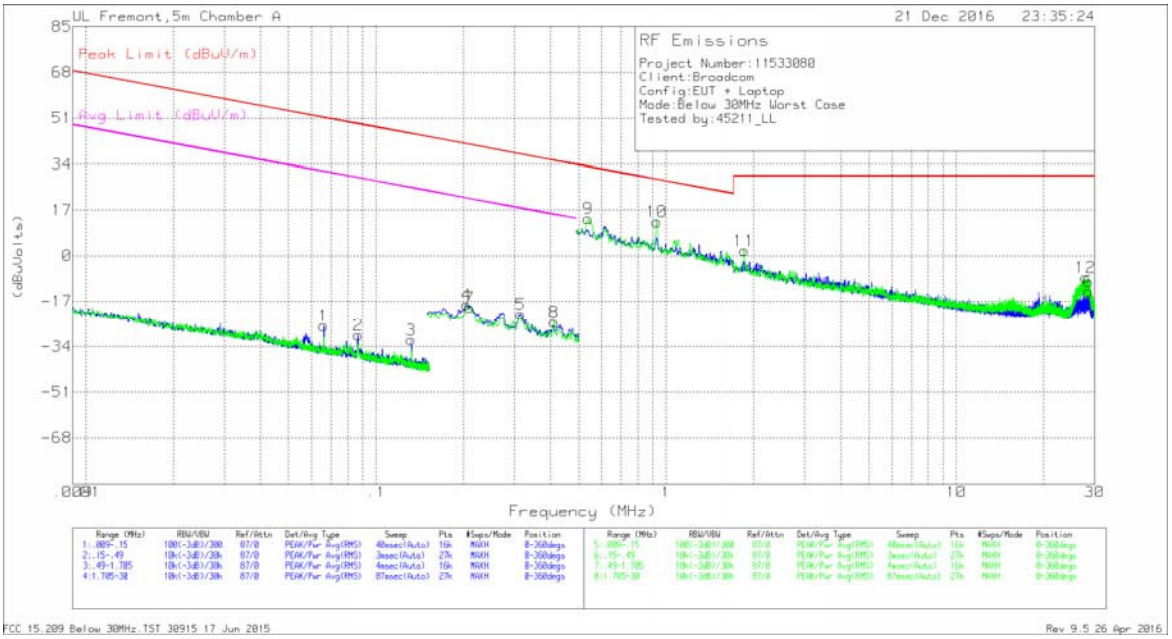
* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
** - indicates emissions generated by the support equipment
Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
179.9465	52.17	Qp	15.3	-30.1	37.37	43.52	-6.15	275	173	H
215.9282	54.19	Qp	14.6	-29.9	38.89	43.52	-4.63	191	186	V
346.3962	47.51	Qp	18.2	-29.2	36.51	46.02	-9.51	356	184	V

* - indicates frequency in CFR15.205/IC8.10 RSS-Restricted Band
Qp - Quasi-Peak detector

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



Note: The anechoic chamber has been properly calibrated so that the measurement results correspond to what would be obtained from an open field sites.

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.06614	42.71	Pk	11	.1	-80	-26.19	51.19	-77.38	31.19	-57.38	0-360
2	.08674	39.4	Pk	10.9	.1	-80	-29.6	48.84	-78.44	28.84	-58.44	0-360
3	.13248	37.64	Pk	10.8	.1	-80	-31.46	45.16	-76.62	25.16	-56.62	0-360
4	.20475	50.96	Pk	10.8	.1	-80	-18.14	41.38	-59.52	21.38	-39.52	0-360
7	.2102	49.75	Pk	10.8	.1	-80	-19.35	41.15	-60.5	21.15	-40.5	0-360
5	.31541	47.33	Pk	10.7	.1	-80	-21.87	37.63	-59.5	17.63	-39.5	0-360
8	.41103	44.44	Pk	10.7	.1	-80	-24.76	35.33	-60.09	15.33	-40.09	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
9	.53853	43.13	Pk	10.6	.1	-40	13.83	32.98	-19.15	-	-	0-360
10	.92844	41.87	Pk	10.7	.1	-40	12.67	28.25	-15.58	-	-	0-360
11	1.85644	30.88	Pk	10.8	.2	-40	1.88	29.54	-27.66	-	-	0-360
12	27.86832	22.69	Pk	8.5	.8	-40	-8.01	29.54	-37.55	-	-	0-360
6	28.57834	17.62	Pk	8.3	.8	-40	-13.28	29.54	-42.82	-	-	0-360

Pk - Peak detector

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

ANSI C63.10

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

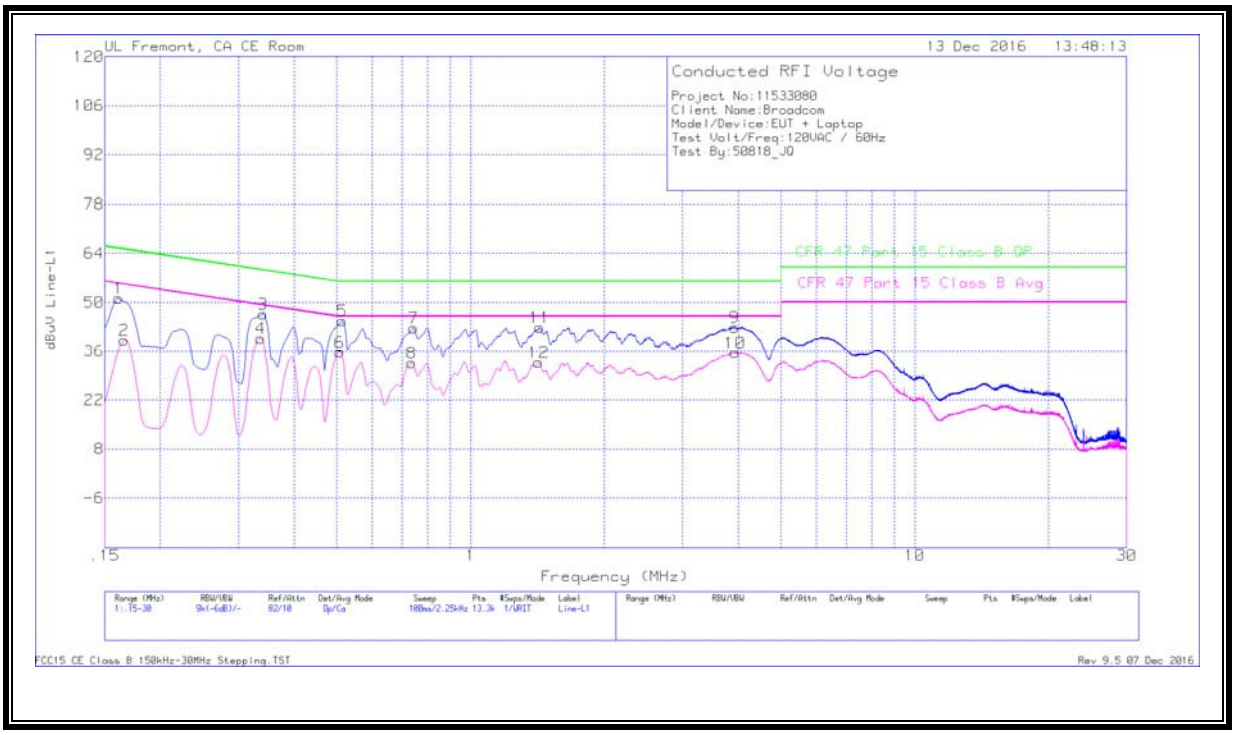
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

LINE 1 RESULTS

Trace Markers

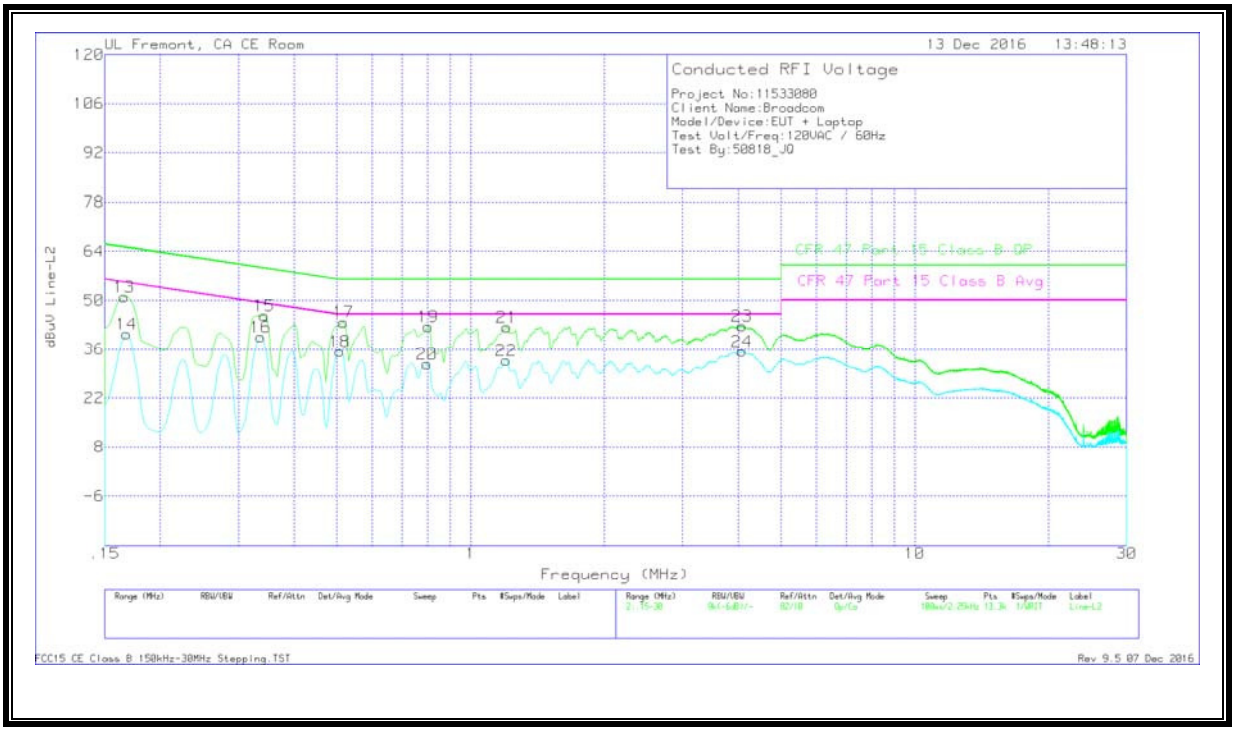


Range 1: Line-L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables 1&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.16125	41.05	Qp	0	0	10.1	51.15	65.4	-14.25	-	-
2	.16575	29.2	Ca	0	0	10.1	39.3	-	-	55.17	-15.87
3	.34125	36.61	Qp	0	0	10.1	46.71	59.17	-12.46	-	-
4	.33675	29.66	Ca	0	0	10.1	39.76	-	-	49.28	-9.52
5	.5145	34.63	Qp	0	0	10.1	44.73	56	-11.27	-	-
6	.50775	25.71	Ca	0	0	10.1	35.81	-	-	46	-10.19
7	.744	32.52	Qp	0	0	10.1	42.62	56	-13.38	-	-
8	.73725	22.49	Ca	0	0	10.1	32.59	-	-	46	-13.41
9	3.9345	32.63	Qp	0	.1	10.1	42.83	56	-13.17	-	-
10	3.93675	25.41	Ca	0	.1	10.1	35.61	-	-	46	-10.39
11	1.4325	32.62	Qp	0	.1	10.1	42.82	56	-13.18	-	-
12	1.4235	22.61	Ca	0	.1	10.1	32.81	-	-	46	-13.19

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS

Trace Markers



Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
13	.16575	40.99	Qp	0	0	10.1	51.09	65.17	-14.08	-	-
14	.168	30.32	Ca	0	0	10.1	40.42	-	-	55.06	-14.64
15	.3435	35.63	Qp	0	0	10.1	45.73	59.12	-13.39	-	-
16	.33675	29.4	Ca	0	0	10.1	39.5	-	-	49.28	-9.78
17	.51675	33.73	Qp	0	0	10.1	43.83	56	-12.17	-	-
18	.50775	25.25	Ca	0	0	10.1	35.35	-	-	46	-10.65
19	.8025	32.48	Qp	0	0	10.1	42.58	56	-13.42	-	-
20	.798	21.71	Ca	0	0	10.1	31.81	-	-	46	-14.19
21	1.2075	32.24	Qp	0	0	10.1	42.34	56	-13.66	-	-
22	1.20188	22.63	Ca	0	.1	10.1	32.83	-	-	46	-13.17
23	4.0875	32.56	Qp	0	.1	10.1	42.76	56	-13.24	-	-
24	4.0875	25.16	Ca	0	.1	10.1	35.36	-	-	46	-10.64

Qp - Quasi-Peak detector
Ca - CISPR average detection