FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

Product Name: Wireless Concurrent Dual-Band PoE Access Point
Brand Name: AIR802
Model No.: AP25N01
Series Model: N/A
Test Report Number:
KS120716A02-RPB

Issued for

AIR802 LLC

424 FORT HILL DRIVE, Suite105 NAPERVILLE ILLINOIS 60540 USA

Issued by

Compliance Certification Services Inc.

Kun shan Laboratory

No.10 Weiye Rd., Innovation park, Eco&Tec,
Development Zone, Kunshan City, Jiangsu, China

TEL: 86-512-57355888

FAX: 86-512-57370818

ACCREDITED
TESTING CERT #2541.01

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1. TEST RESULT CERTIFICATION

Product Name:	Wireless Concurrent Dual-Band PoE Access Point
Trade Name:	AIR802
Model Name.:	AP25N01
Series Model:	N/A
Applicant Discrepancy:	Initial
Device Category:	MOBILE DEVICES
Date of Test:	October 06, 2012~ October 09, 2012
Applicant:	**AIR802 LLC** 424 FORT HILL DRIVE, Suite 105 NAPERVILLE ILLINOIS 60540 USA
Manufacturer:	**AIR802 LLC** 424 FORT HILL DRIVE, Suite 105 NAPERVILLE ILLINOIS 60540 USA
Application Type:	Certification

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
FCC 47 CFR Part 15 Subpart C	No non-compliance noted

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by: ***Tested by:***

Hadiif Hoo
RF Manager
Compliance Certification Service Inc.

Sean Yu
Test Engineer
Compliance Certification Service Inc.

2. EUT DESCRIPTION

Product Name:	Wireless Concurrent Dual-Band PoE Access Point
Brand Name:	AIR802
Model Name:	AP25N01
Series Model:	N/A
Model Discrepancy:	N/A
Frequency Range:	WIFI b/g Mode:2412 ~ 2462 MHz 802.11n(-20MHz): 2412 ~ 2462 MHz 802.11n(-40MHz): 2422 ~ 2452 MHz a Mode:5745 ~ 5825 MHz 802.11n(-20MHz):5745 ~ 5825 MHz 802.11n(-40MHz):5755~ 5795 MHz
Transmit Power:	IEEE 802.11b mode: 25.38dBm (345.14mW) IEEE 802.11g mode: 24.58dBm (287.08mW) 802.11n Standard-20 MHz Channel mode: 26.98 dBm (489.96mW) 802.11n Wide-40 MHz Channel mode: 27.43 dBm (552.85mW) IEEE 802.11a mode: 21.12dBm (129.42 mW) 802.11n Standard-20 MHz Channel mode:23.92 dBm(246.42mW) 802.11n Wide-40 MHz Channel mode: 25.11 dBm (323.99mW) (the EUT transmitting and receiving with two antennas simultaneously working at n mode)
Modulation Technique:	IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mbps) IEEE 802.11g mode: DSSS /OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) IEEE 802.11a mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) 802.11n Standard-20 MHz Channel mode: OFDM (MCS 0~15) 802.11n Wide-40 MHz Channel mode: OFDM (MCS 0~15)
Number of Channels:	IEEE 802.11b/g mode: 11 Channels 802.11n Standard-20 MHz Channel mode: 11 Channels 802.11n Wide-40 MHz Channel mode: 7 Channels IEEE 802.11a mode: 5 Channels 802.11n Standard-20 MHz Channel mode: 5 Channels 802.11n Wide-40 MHz Channel mode: 2 Channels
Antenna Specification:	Dipole antenna

MAX gian

Mode	gian	TX function	numeric antenna gian
802.11a	2dBi	1TX	1.58
802.11b	2dBi	1TX	1.58
802.11g	2dBi	1TX	1.58
802.11n(20MHz)	5.1 dBi	2TX	3.23
802.11n(40MHz)	5.1 dBi	2TX	3.23

Remark:

1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
2. This submittal(s) (test report) is intended for ***FCC ID: V6U- AP25N01*** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.
3. Total gain (dBm) = chain gian+10*log N from KDB 622911

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 2003and FCC CFR 47 15.207, 15.209 and 15.247.

3.1. EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2. EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3. GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 2003 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4 2003.

3.4. FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

[1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

[2] Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

3.5. DESCRIPTION OF TEST MODES

The EUT transmitting and receiving with one (chain 0) antenna working at a/b/g mode, so one antenna working configuration was used for a/b/g mode testing in this report.

The EUT transmitting and receiving with two antennas simultaneously working at n mode, so 2x2 configuration was used for all testing in this report.

The worst-case data rates are determined to be as follows for each mode based on investigation by measuring the average power, peak power and PPSD across all data rates, bandwidths, and modulations.

The worst-case data rates:
IEEE802.11b mode:

Channel Low (2412MHz)

Channel Mid (2437MHz)

Channel High (2462MHz) with 1Mbps data rate were chosen for full testing.

IEEE802.11g mode:

Channel Low (2412MHz)

Channel Mid (2437MHz)

Channel High (2462MHz) with 6Mbps data rate were chosen for full testing.

EEE802.11a:

Channel low(5745MHz),

Channel middle(5785MHz)

Channel high(5805MHz)

with preliminary test 54/48/36/24/18/12/9/6 Mbps, After the preliminary scan , the following test mode 6Mbps data rate (the worst case) are chosen for the final testing.

802.11n Standard-20 MHz Channel mode:

Channel Low (2412MHz)

Channel Mid (2437MHz)

Channel High (2462MHz) with MCS0data rate were chosen for full testing.

802.11n Wide-40 MHz Channel mode:

Channel Low (2422MHz)

Channel Mid (2437MHz)

Channel High (2452MHz) with MCS0 data rate were chosen for full testing.

802.11n Wide-20 MHz Channel mode:

Channel low(5745MHz),

Channel middle(5785MHz)

Channel high(5805MHz) with MCS0 data rate were chosen for full testing.

802.11n Wide-40 MHz Channel mode:

Channel Low (5755MHz),

Channel High (5795MHz) with MCS0 data rate were chosen for full testing.

4. INSTRUMENT CALIBRATION

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

Equipment Used for Emissions Measurement

Conducted Emissions Test Site				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	MY44020154	2013-5-13
DETECTOR NEGATIVE	Agilent	8473B	MY42240176	2013-5-13
OSCILLOSCOPE	Agilent	DSO6104A	MY44002585	2013-3-25
Peak and Avg Power Sensor	Agilent	E9327A	US40441788	2013-3-25
EPM-P Series Power Meter	Agilent	E4416A	GB41292714	2013-5-13
Power SPLITTER	Mini-Circuits	ZN2PD-9G	SF078500430	2013-5-13
DC POWER SUPPLY	GW instek	GPS-3303C	E903131	2013-5-13
Temp. / Humidity Chamber	Kingson	THS-M1	242	2013-3-13
Test Software	EZ-EMC			

977 Chamber				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
Spectrum Analyzer	Agilent	E4446A	MY44020154	2013-5-13
EMI Test Receiver	R&S	ESPI3	101026	2013-3-16
Pre-Amplfier	MINI	ZFL-1000VH2	d041703	2013-5-13
Pre-Amplfier	Miteq	NSP4000-NF	870629	2013-5-13
Bilog Antenna	Sunol	JB1	A110204-2	2013-5-13
Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	2013-6-8
Turn Table	CT	CT123	4165	N.C.R
Antenna Tower	CT	CTERG23	3256	N.C.R
Controller	CT	CT1OO	95637	N.C.R
Test Software	EZ-EMC			

Conducted Emission				
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Due**
EMI TEST RECEIVER	R&S	ESCI3	100781	2013-3-16
V (V-LISN)	Schwarzbeck	NNLK 8129	8129-143	2013-3-16
LISN (EUT)	FCC	FCC-LISN-50/250-50-2-02	SN:05012	2013-3-16
TRANSIENT LIMITER	SCHAFFNER	CFL9206	1710	2013-4-8
Test Software	EZ-EMC			

Remark: *The measurement uncertainty is less than +/- 2.81dB, which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.*

Expanded Uncertainty (95% CONFIDENCE INTERVAL): K=2

5. FACILITIES AND ACCREDITATIONS

5.1. FACILITIES

All measurement facilities used to collect the measurement data are located at
CCS China Kunshan Lab at 10#Weiye Rd, Innovation Park Eco. & Tec. Development Zone

Kunshan city JiangSu, (215300), CHINA.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 2003 and CISPR Publication 22.

5.2. EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

5.3. LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 200581-0 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC5743 for 10m chamber 10m, IC5743 for 10m chamber 3m.

5.4. TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo
USA	A2LA	47 CFR FCC Part 15/18 (using ANSI C63.4 :2003)；VCCI V3; CNS 13438; CNS 13439; CNS 13803; CISPR 11; EN 55011; CISPR 13; EN 55013; CISPR 22:2005; CISPR 22:1997 +A1 :2000+A2 :2002；EN 55022:2006; EN55022 :1998 +A1 :2001+A2 :2003；EN 61000-6-3 (excluding discontinuous interference); EN 61000-6-4; AS/NZS CISPR 22；CAN/CSA-CEI/IEC CISPR 22；EN 61000-3-2；EN 61000-3-3；EN550024； EN 61000-4-2；EN 61000-4-3；EN61000-4-4；EN 61000-4-5； EN 61000-4-6；IEC 61000-4-8；EN 61000-4-11；IEC61000-3-2；IEC61000-3-3；IEC 61000-4-2； IEC 61000-4-3；IEC 61000-4-4； IEC 61000-4-5；IEC 61000-4-6；IEC 61000-4-8；IEC 61000-4-11；EN 300 220-3; EN 300 328; EN 300 330-2; EN 300 440-1; EN 300-440-2; EN 300 893; EN 301 489-01; EN 301 489-3; EN 301 489-07; EN 301 489-17；47 CFR FCC Part 15, 22, 24	ACCREDITED TESTING CERT #2541.01
USA	FCC	3/10 meter Sites to perform FCC Part 15/18 measurements	93105, 90471
Japan	VCCI	3/10 meter Sites and conducted test sites to perform radiated/conducted measurements	VCCI R-1600 C-1707 G-216

** No part of this report may be used to claim or imply product endorsement by A2LA or any agency of the US Government.*

6. SETUP OF EQUIPMENT UNDER TEST

6.1. SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

6.2. SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	FCC ID
1.	**NOTEBOOK**	**IBM**	**62P7043**	**998W21C**	**DOC**

Remark:

1. *All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
2. *Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

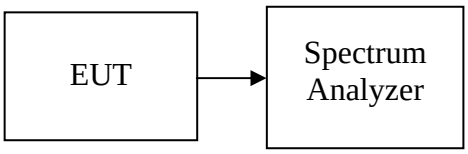
7. FCC PART 15.247 REQUIREMENTS

7.1. 6DB BANDWIDTH

LIMIT

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

Test Configuration



TEST PROCEDURE

KDB 558074 D01 DTS Measurement Guidance V02 dated 10-04-2012.

TEST RESULTS

No non-compliance noted

2.4G Test Data

IEEE 802.11b mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	12.125	>500	PASS
Mid	2437	12.598		PASS
High	2462	12.066		PASS

IEEE 802.11g mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	16.439	>500	PASS
Mid	2437	16.515		PASS
High	2462	16.417		PASS

TRANSMIT CHAIN 0

802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.671	>500	PASS
Mid	2437	17.672		PASS
High	2462	17.656		PASS

802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.397	>500	PASS
Mid	2437	36.384		PASS
High	2452	36.409		PASS

TRANSMIT CHAIN 1

802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2412	17.688	>500	PASS
Mid	2437	17.666		PASS
High	2462	17.646		PASS

802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	2422	36.401	>500	PASS
Mid	2437	36.390		PASS
High	2452	36.400		PASS

5.8G Test data

IEEE 802.11a mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	20.982	>500	PASS
Mid	5785	20.896		PASS
High	5805	21.363		PASS

TRANSMIT CHAIN 0

802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	21.233	>500	PASS
Mid	5785	21.568		PASS
High	5805	21.290		PASS

802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	40.899	>500	PASS
High	5795	40.406		PASS

TRANSMIT CHAIN 1

802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5745	21.547	>500	PASS
Mid	5785	21.989		PASS
High	5805	21.715		PASS

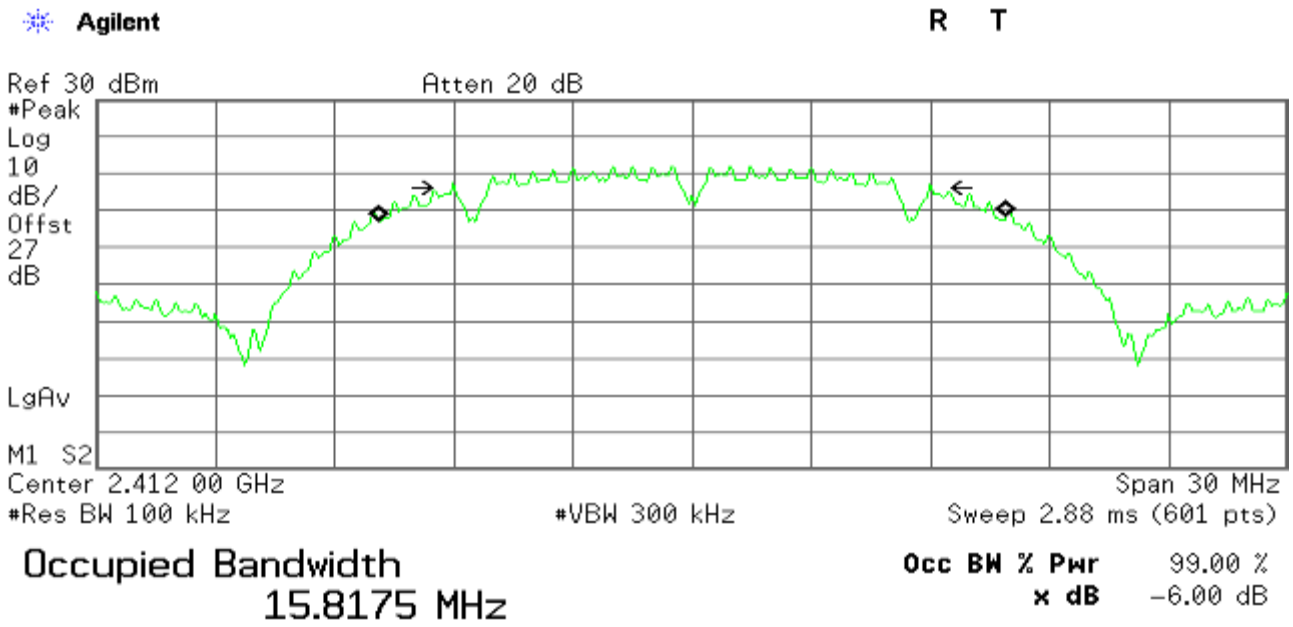
802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Result
Low	5755	40.596	>500	PASS
High	5795	42.561		PASS

Test Plot

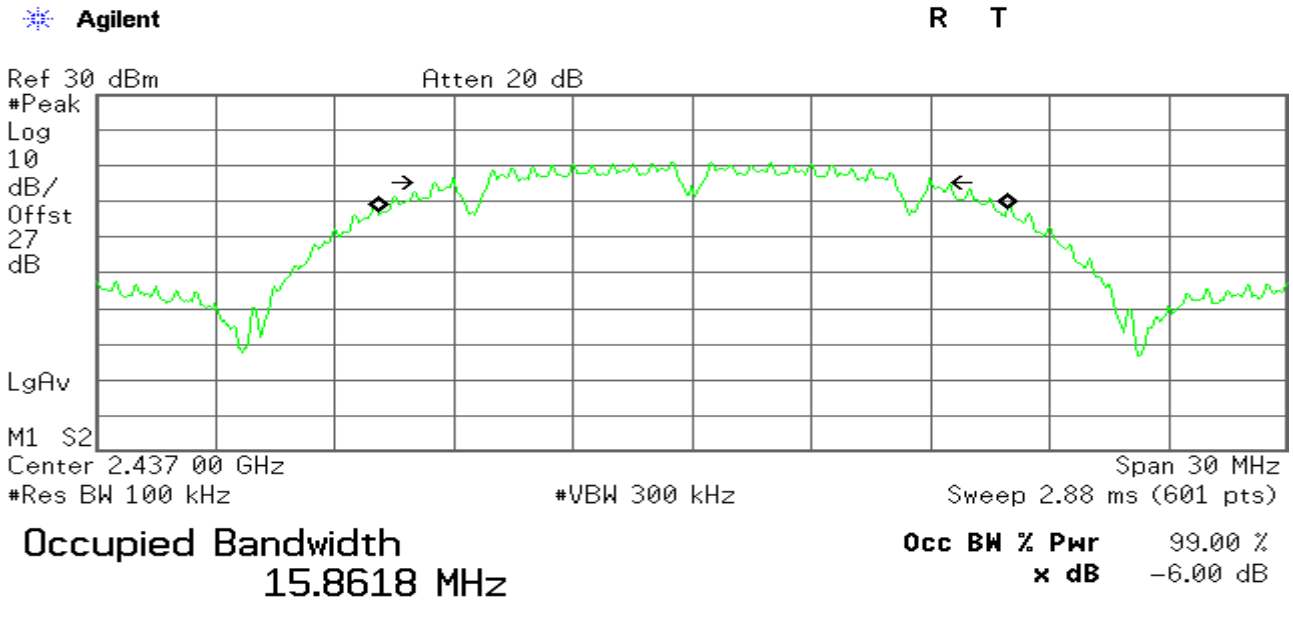
IEEE 802.11b MODE

6dB Bandwidth (CH Low)



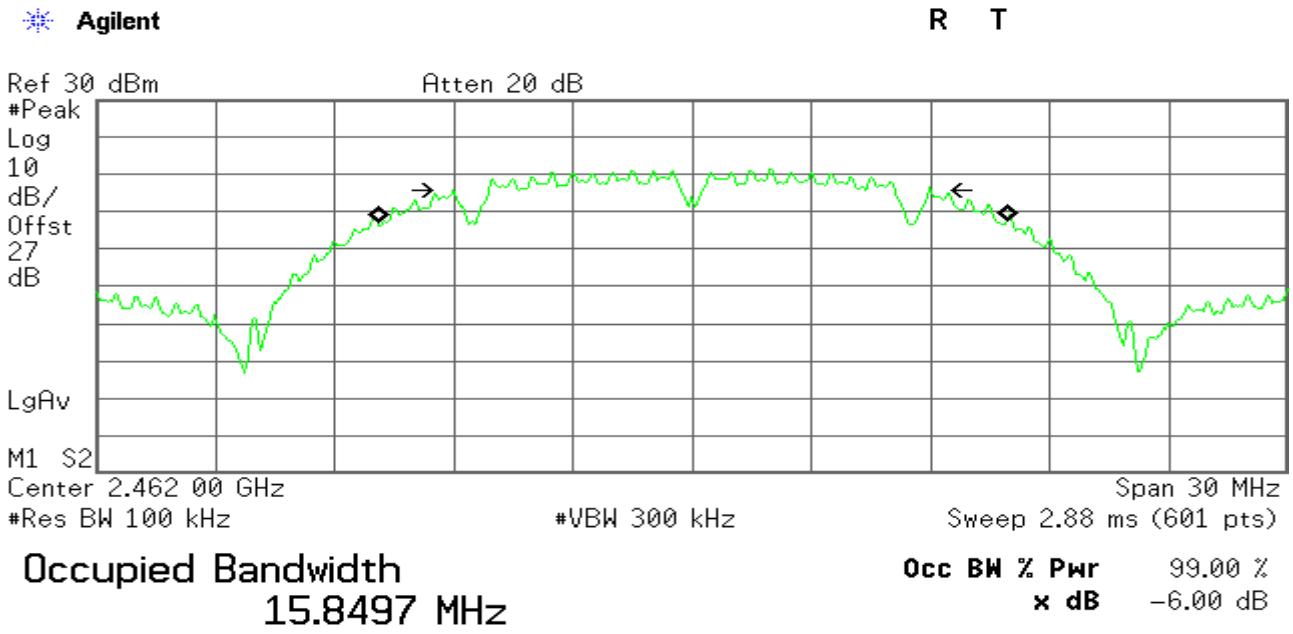
Transmit Freq Error 8.784 kHz
x dB Bandwidth 12.125 MHz

6dB Bandwidth (CH Mid)



Transmit Freq Error 6.295 kHz
x dB Bandwidth 12.589 MHz

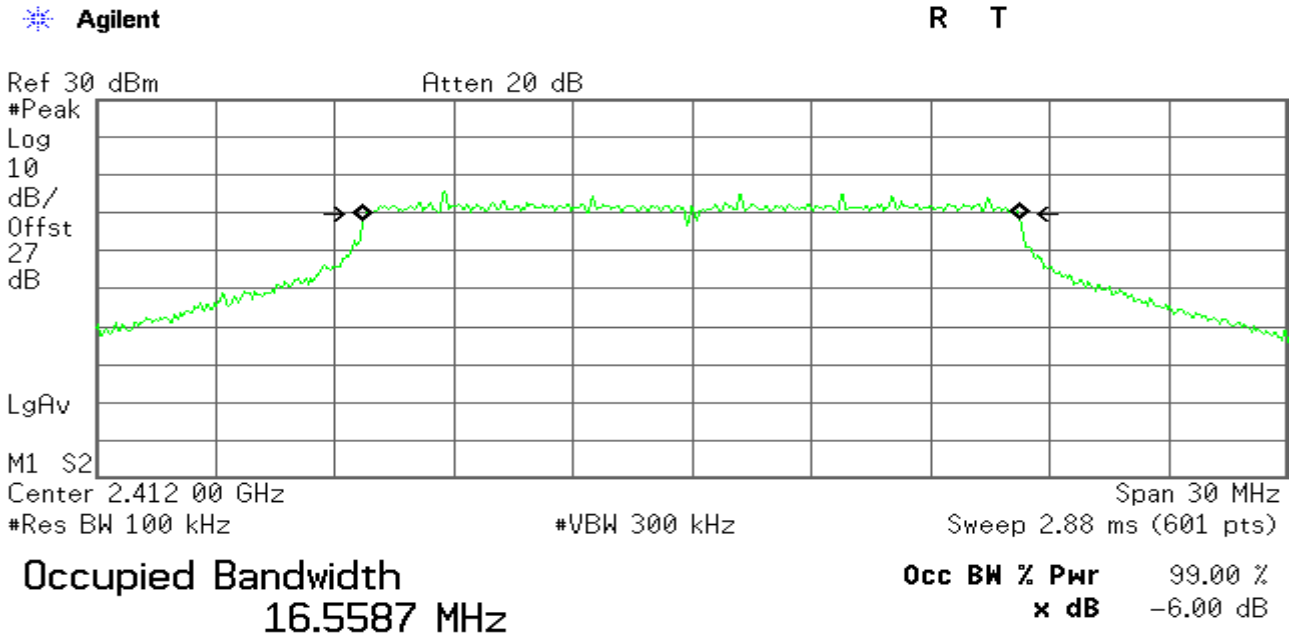
6dB Bandwidth (CH High)



Transmit Freq Error 3.593 kHz
x dB Bandwidth 12.066 MHz

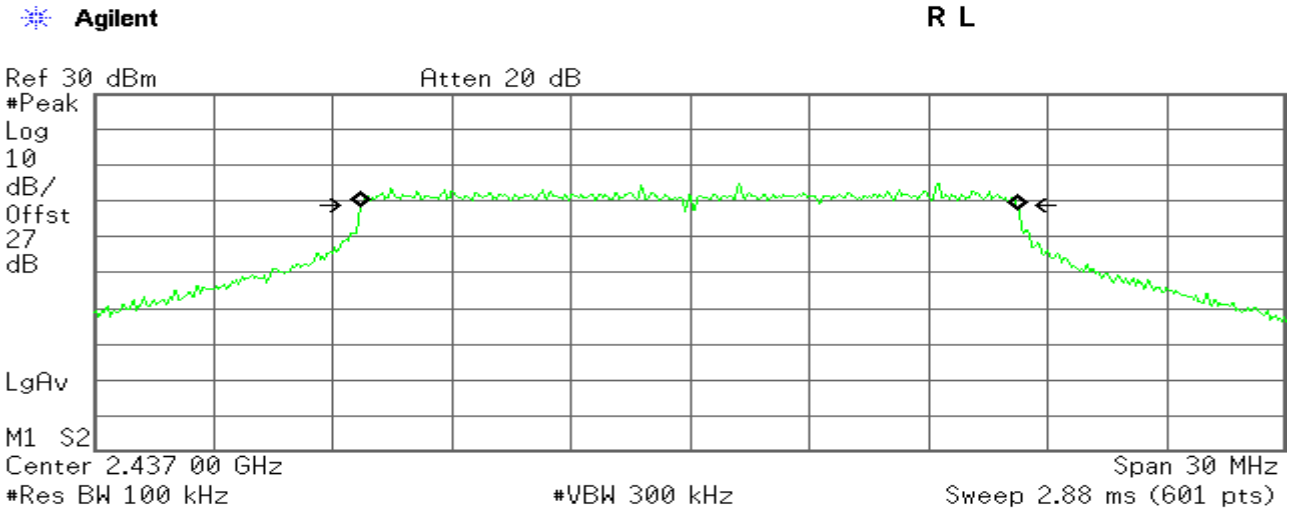
IEEE 802.11g MODE

6dB Bandwidth (CH Low)

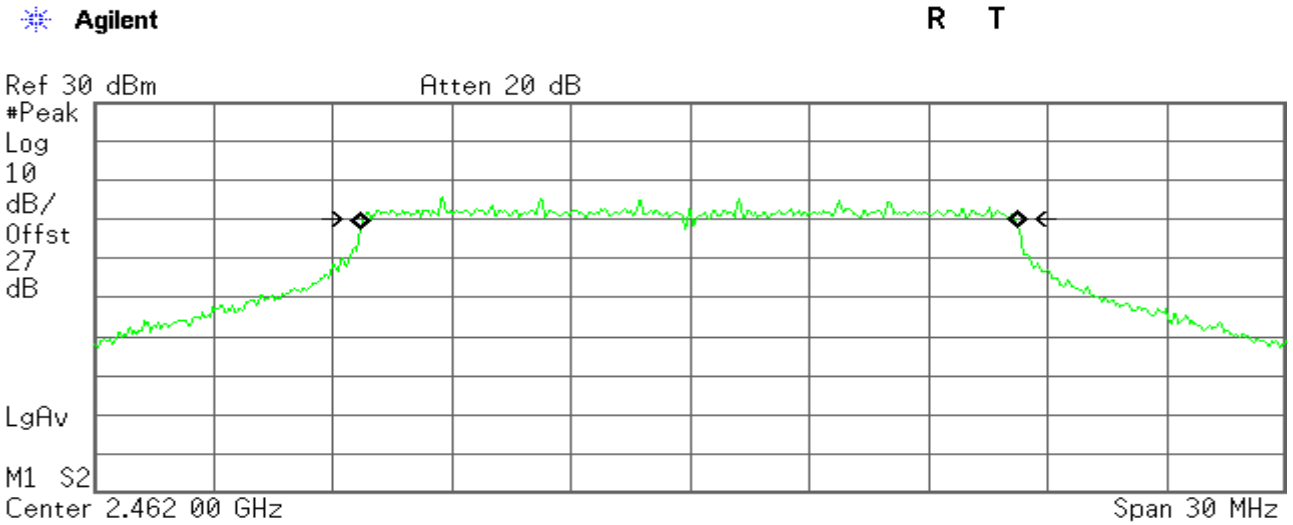


Transmit Freq Error -18.339 kHz
x dB Bandwidth 16.439 MHz

6dB Bandwidth (CH Mid)

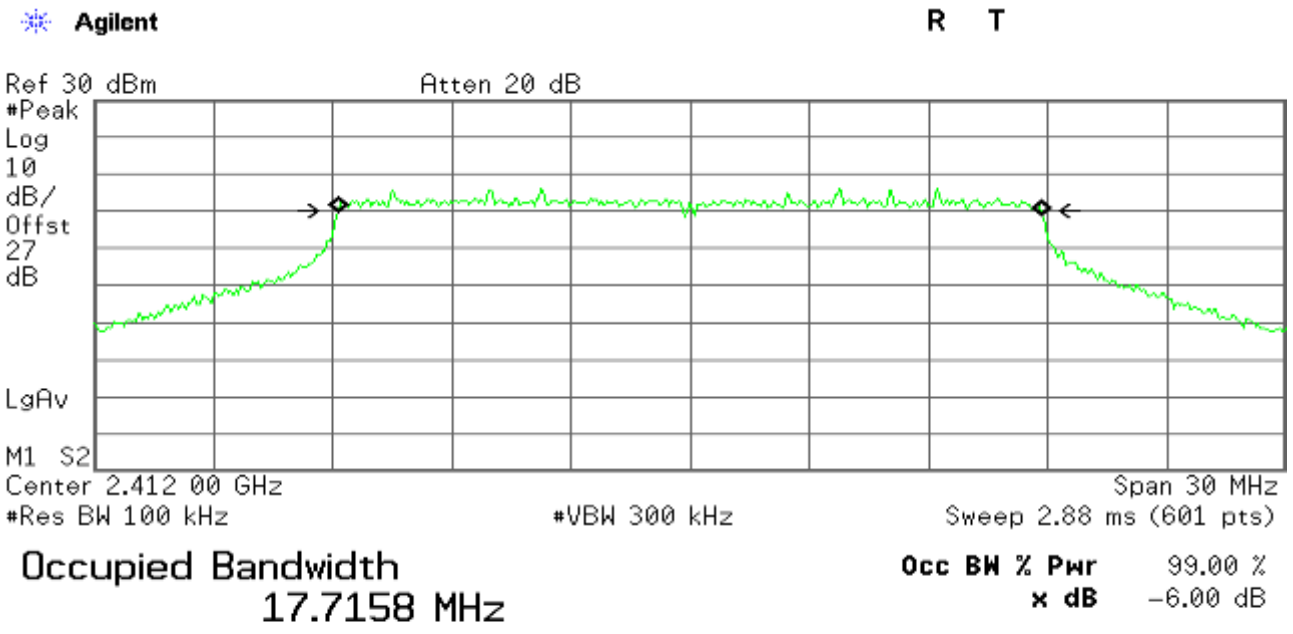


6dB Bandwidth (CH High)



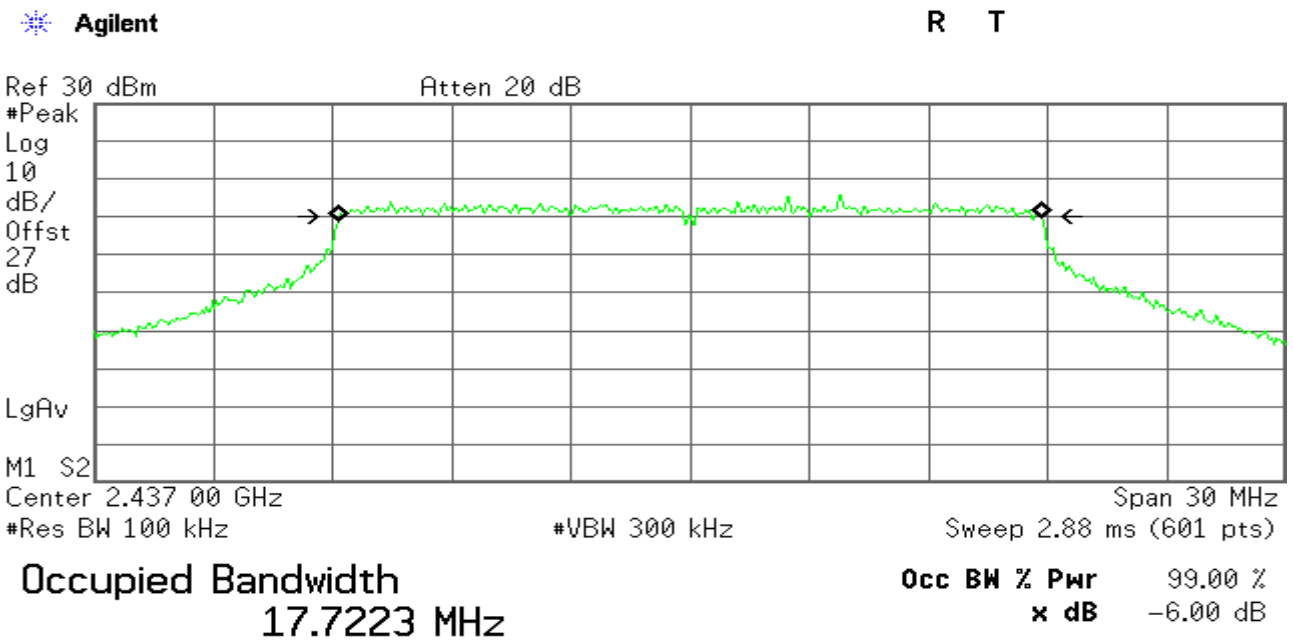
802.11n Standard-20 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)



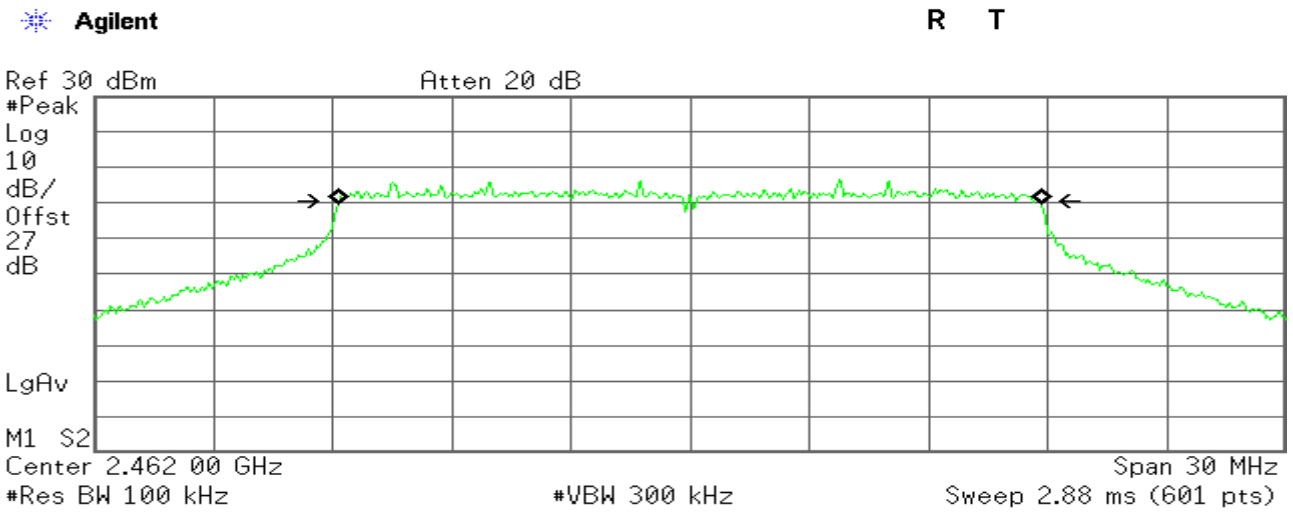
Transmit Freq Error −10.783 kHz
x dB Bandwidth 17.671 MHz

6dB Bandwidth (CH Mid)



Transmit Freq Error 4.461 kHz
x dB Bandwidth 17.672 MHz

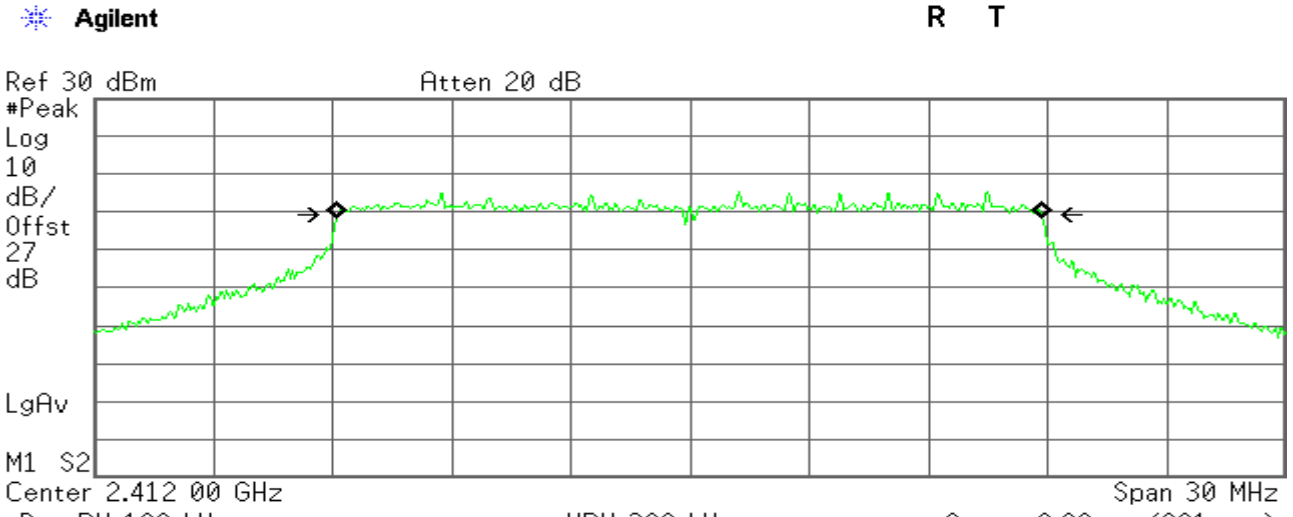
6dB Bandwidth (CH High)



Transmit Freq Error −8.005 kHz
x dB Bandwidth 17.656 MHz

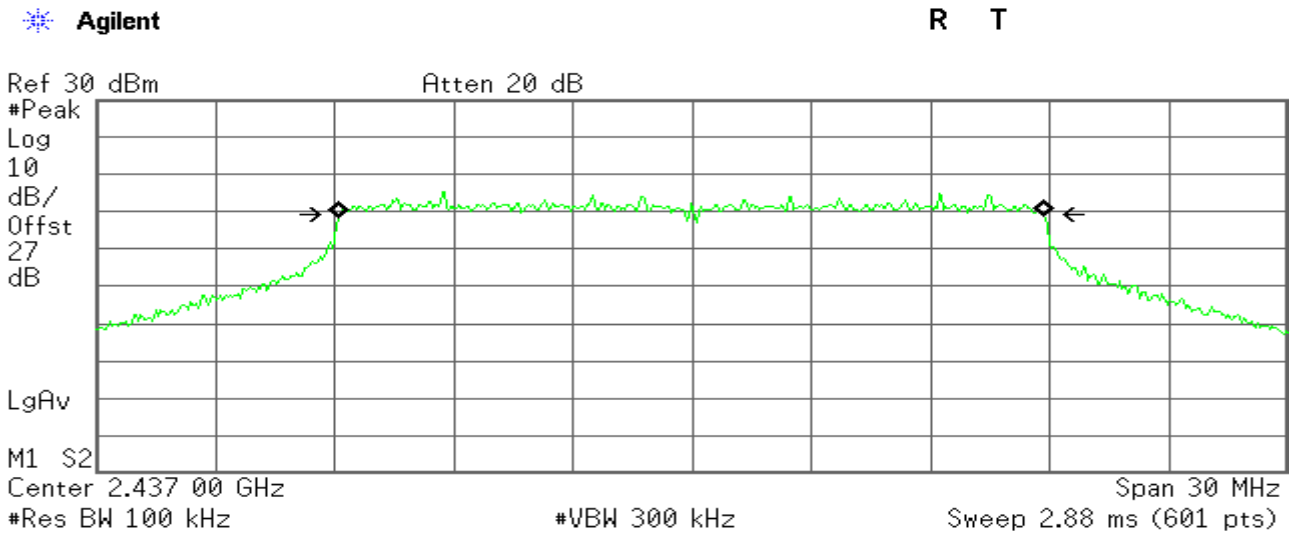
802.11n Standard-20 MHz Channel mode / Chain 1

6dB Bandwidth (CH Low)



Transmit Freq Error −7.040 kHz
x dB Bandwidth 17.688 MHz

6dB Bandwidth (CH Mid)

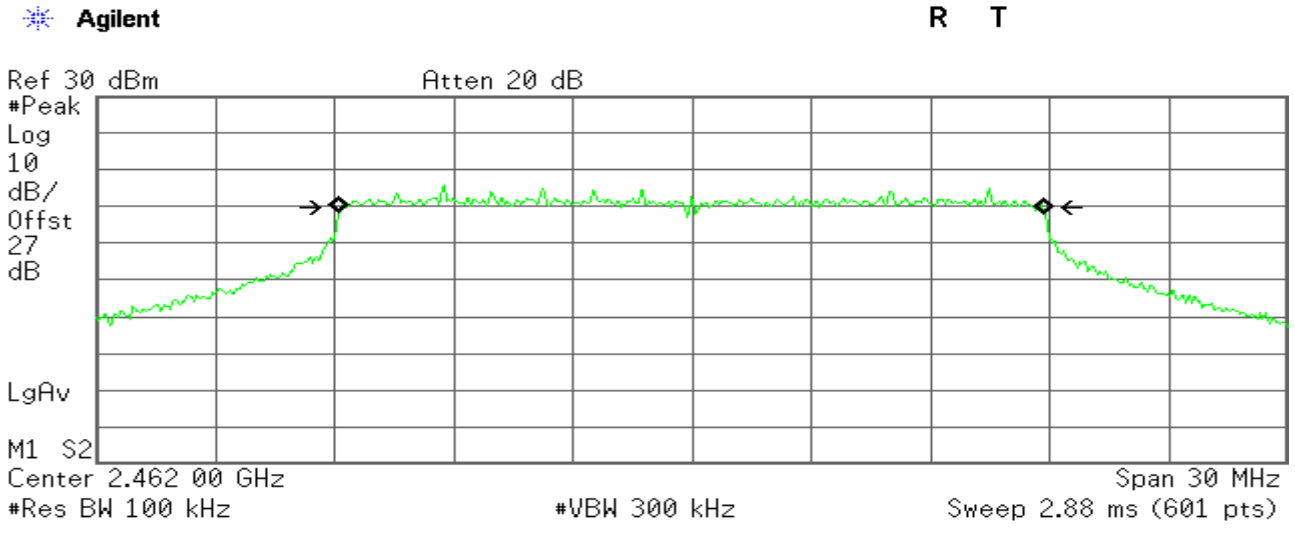


Occupied Bandwidth
17.7588 MHz

Occ BW % Pwr 99.00 %
x dB -6.00 dB

Transmit Freq Error -11.657 kHz
x dB Bandwidth 17.666 MHz

6dB Bandwidth (CH High)



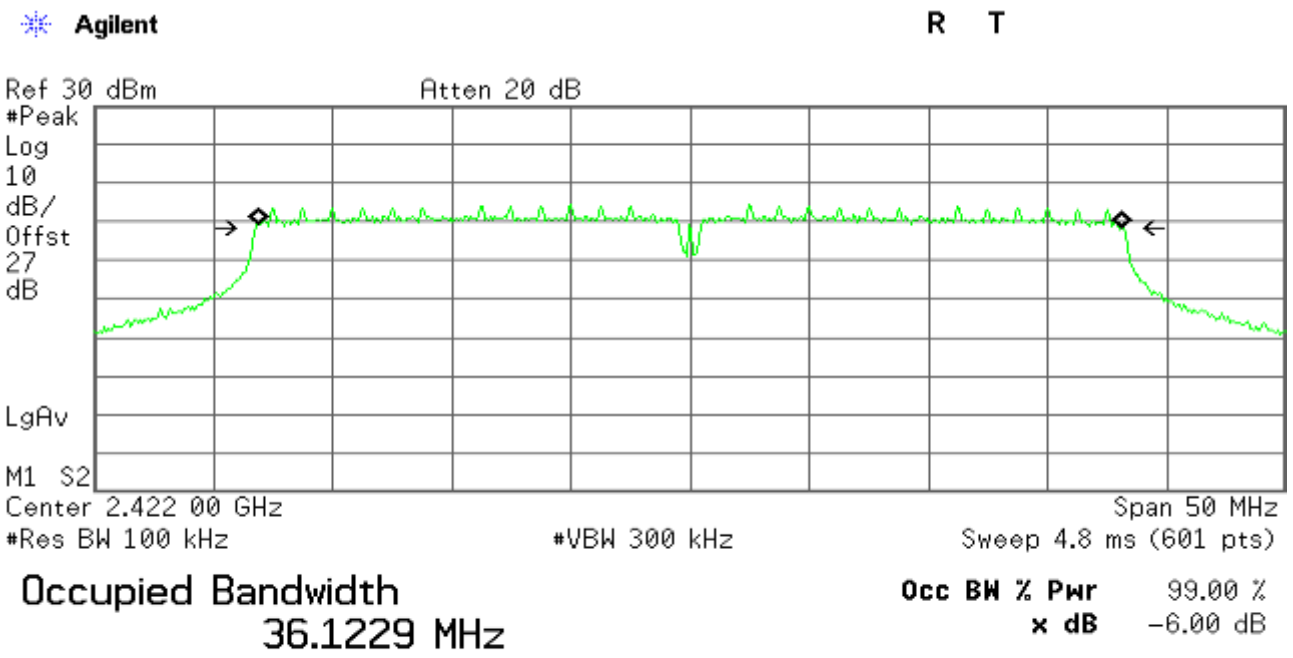
Occupied Bandwidth
17.7416 MHz

Occ BW % Pwr 99.00 %
x dB -6.00 dB

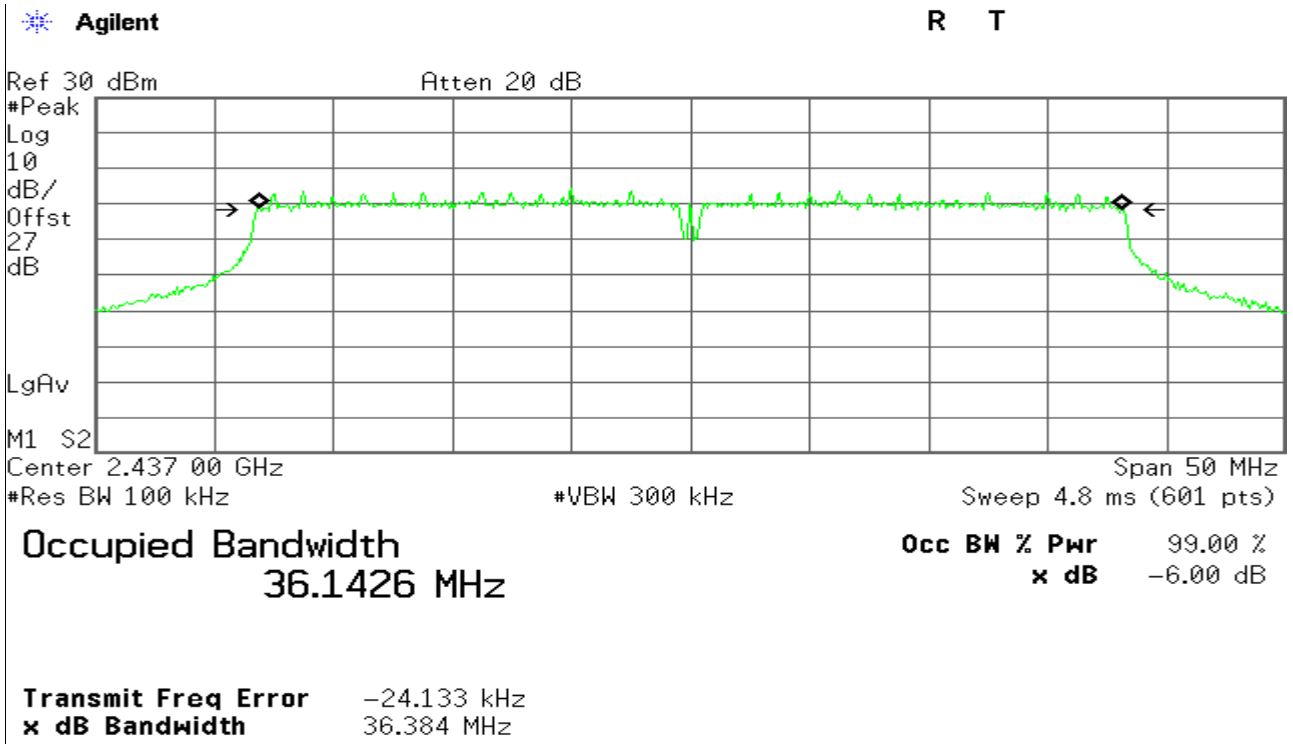
Transmit Freq Error -8.080 kHz
x dB Bandwidth 17.646 MHz

802.11n Wide-40 MHz Channel mode / Chain 0

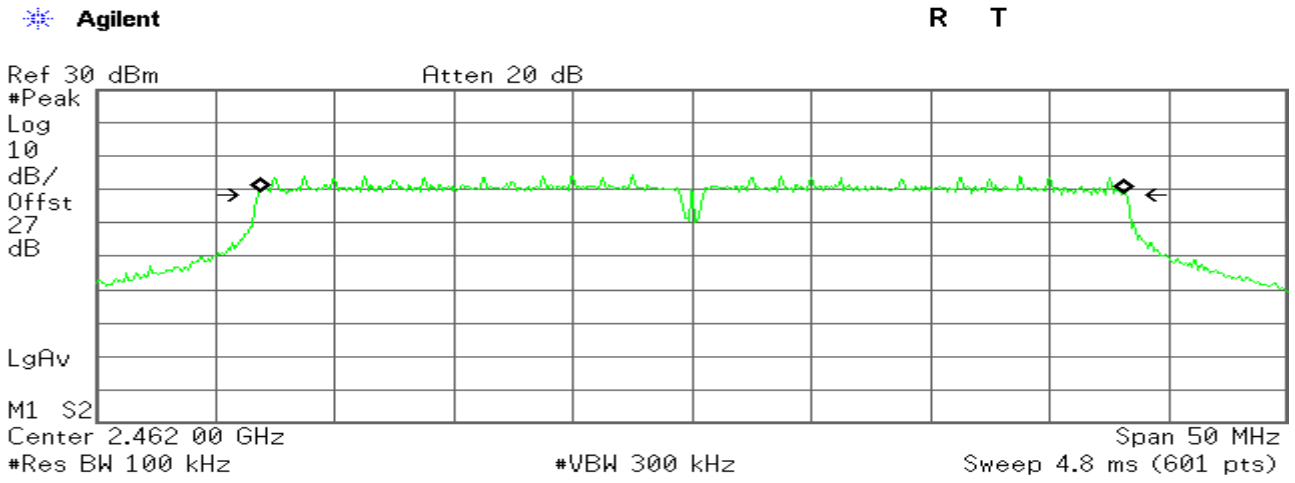
6dB Bandwidth (CH Low)



6dB Bandwidth (CH Mid)



6dB Bandwidth (CH High)



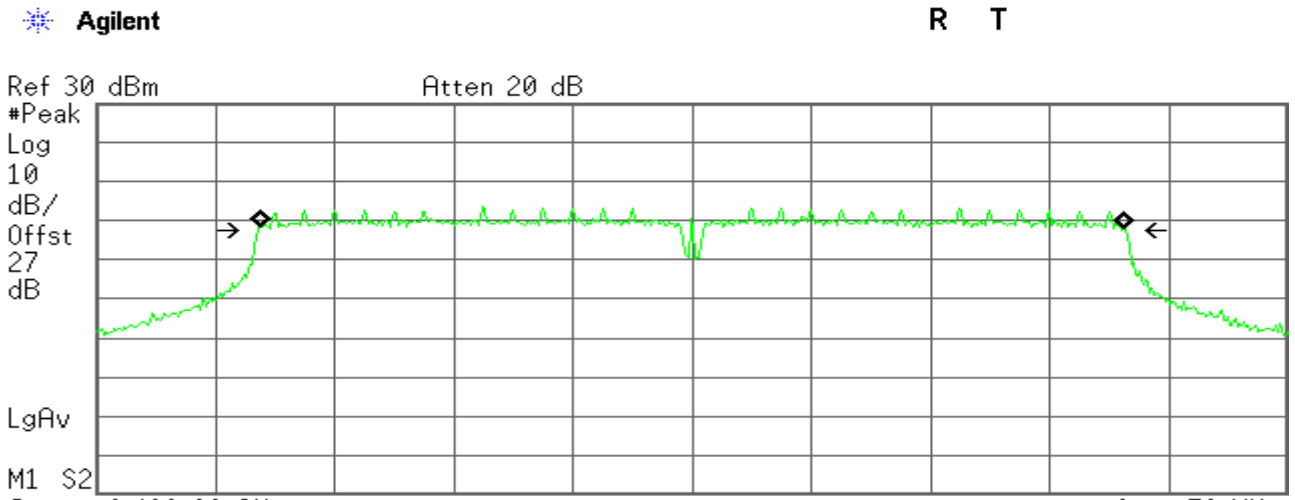
Occupied Bandwidth
36.1377 MHz

Occ BW % Pwr 99.00 %
x dB -6.00 dB

Transmit Freq Error -6.419 kHz
x dB Bandwidth 36.409 MHz

802.11n Wide-40 MHz Channel mode / Chain 1

6dB Bandwidth (CH Low)

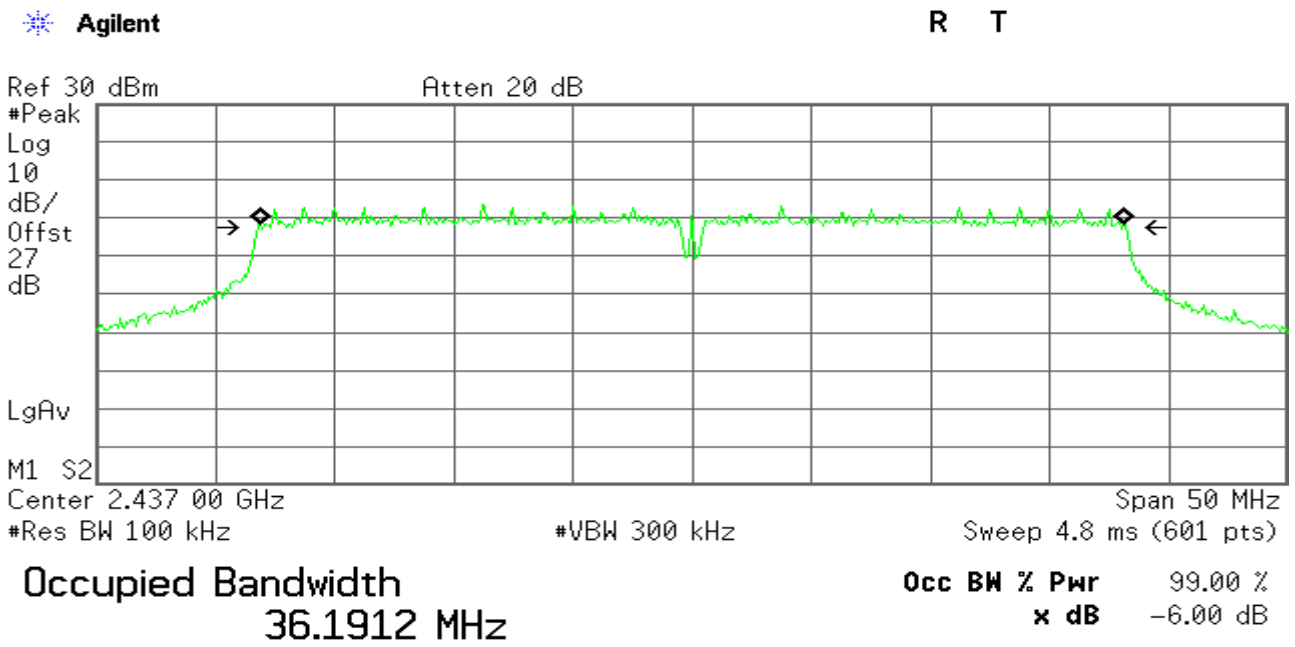


Occupied Bandwidth
36.1646 MHz

Occ BW % Pwr 99.00 %
x dB -6.00 dB

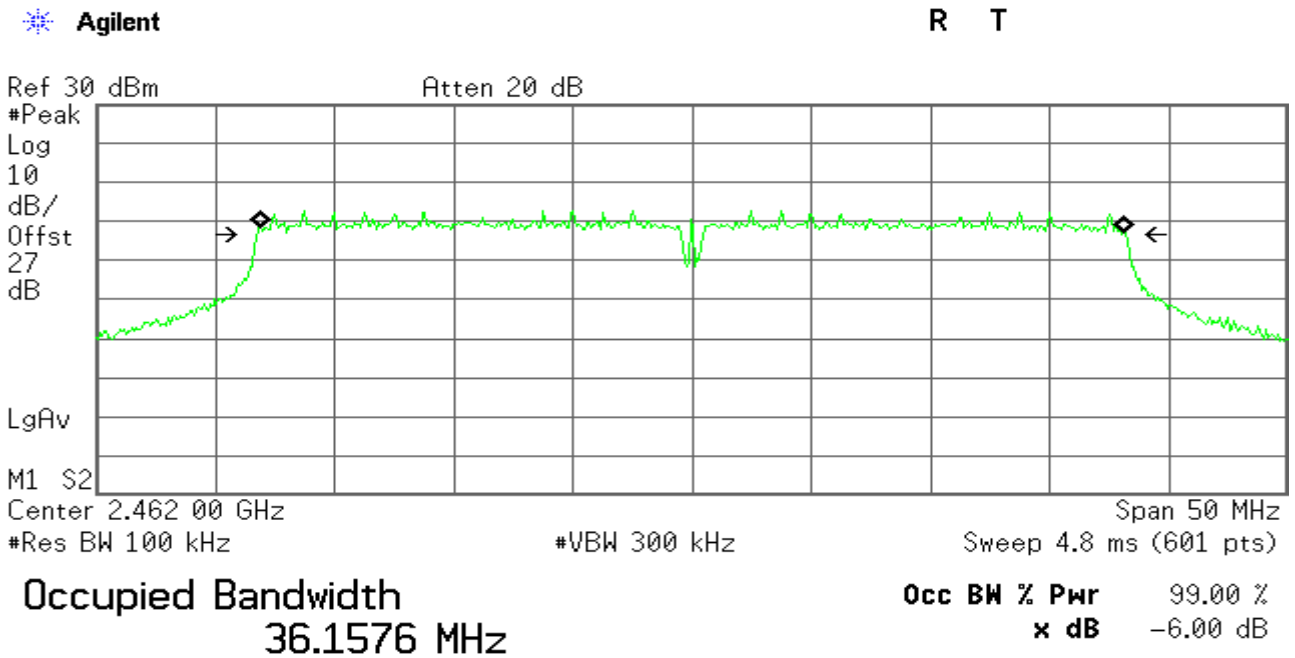
Transmit Freq Error -9.951 kHz
x dB Bandwidth 36.401 MHz

6dB Bandwidth (CH Mid)



Transmit Freq Error −10.091 kHz
x dB Bandwidth 36.390 MHz

6dB Bandwidth (CH High)

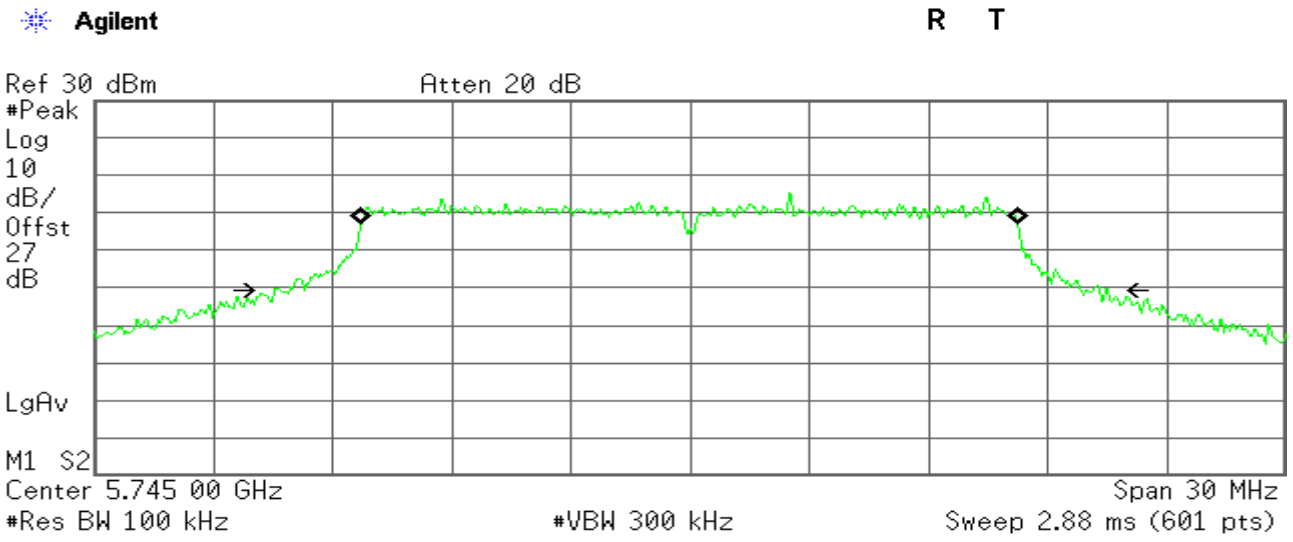


Transmit Freq Error −26.463 kHz
x dB Bandwidth 36.400 MHz

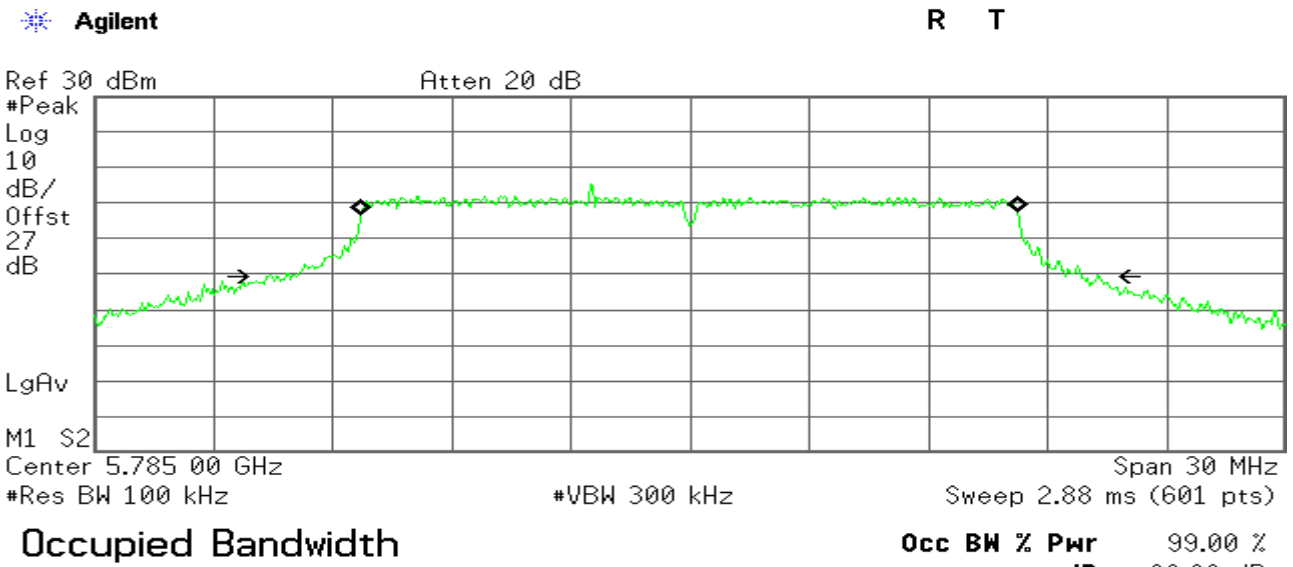
5725MHz-5825MHz

IEEE 802.11a mode

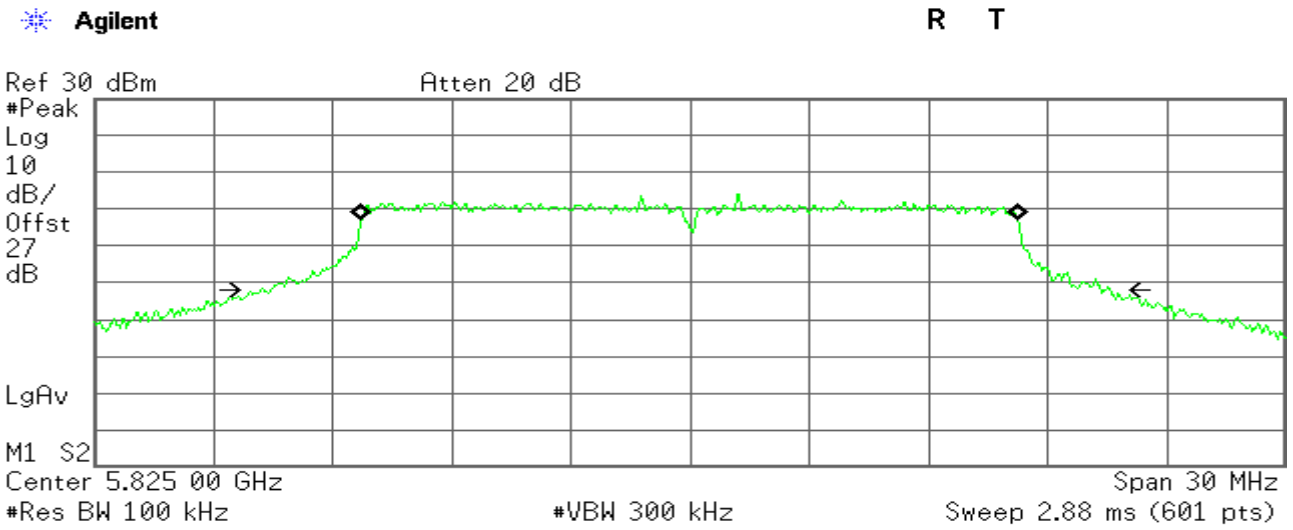
6dB Bandwidth (CH Low)



6dB Bandwidth (CH Mid)



6dB Bandwidth (CH High)



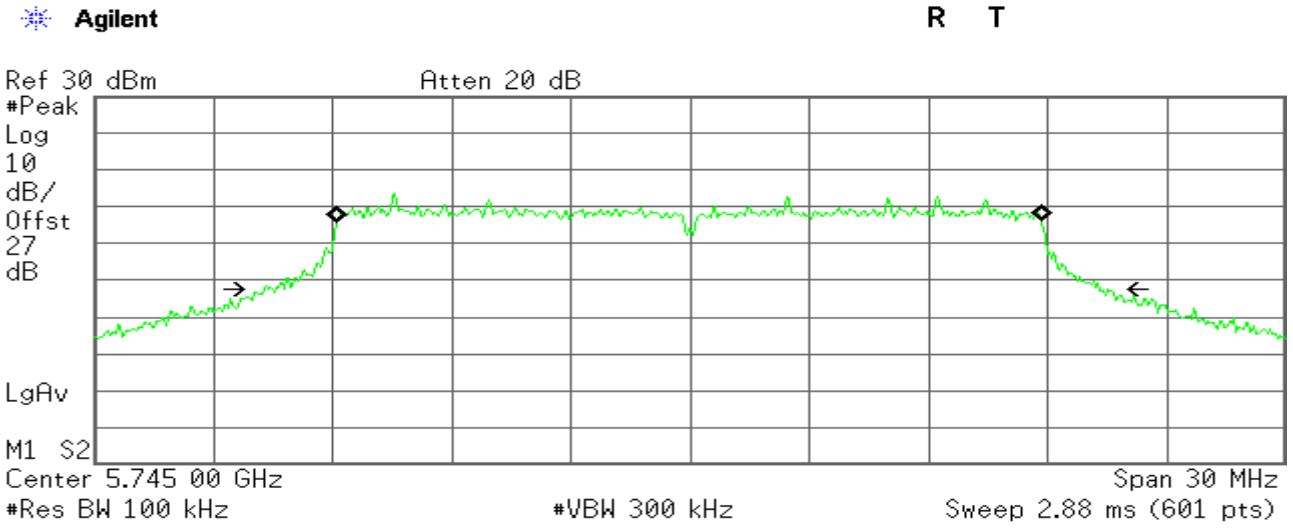
Occupied Bandwidth
16.5219 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

Transmit Freq Error -26.528 kHz
x dB Bandwidth 21.363 MHz

802.11an Standard-20 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)

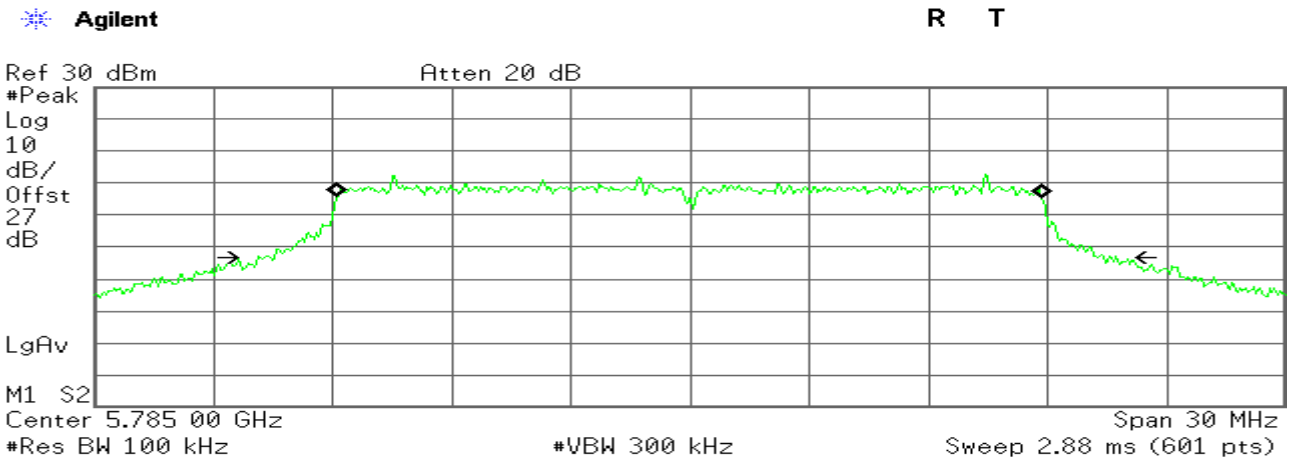


Occupied Bandwidth
17.7063 MHz

Occ BW % Pwr 99.00 %
x dB -26.00 dB

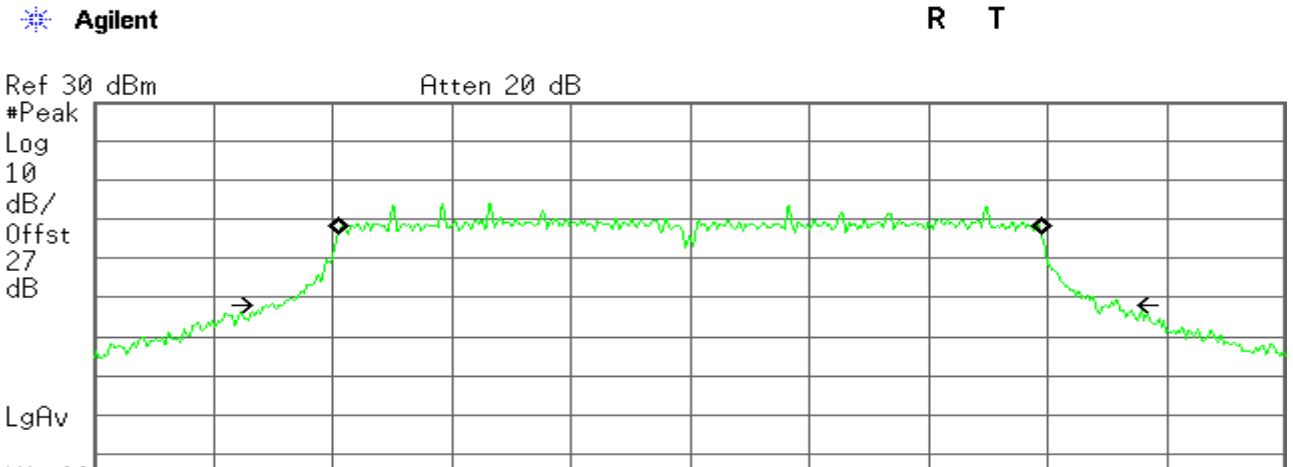
Transmit Freq Error -22.911 kHz
x dB Bandwidth 21.233 MHz

6dB Bandwidth (CH Mid)



Transmit Freq Error −22.472 kHz
x dB Bandwidth 21.568 MHz

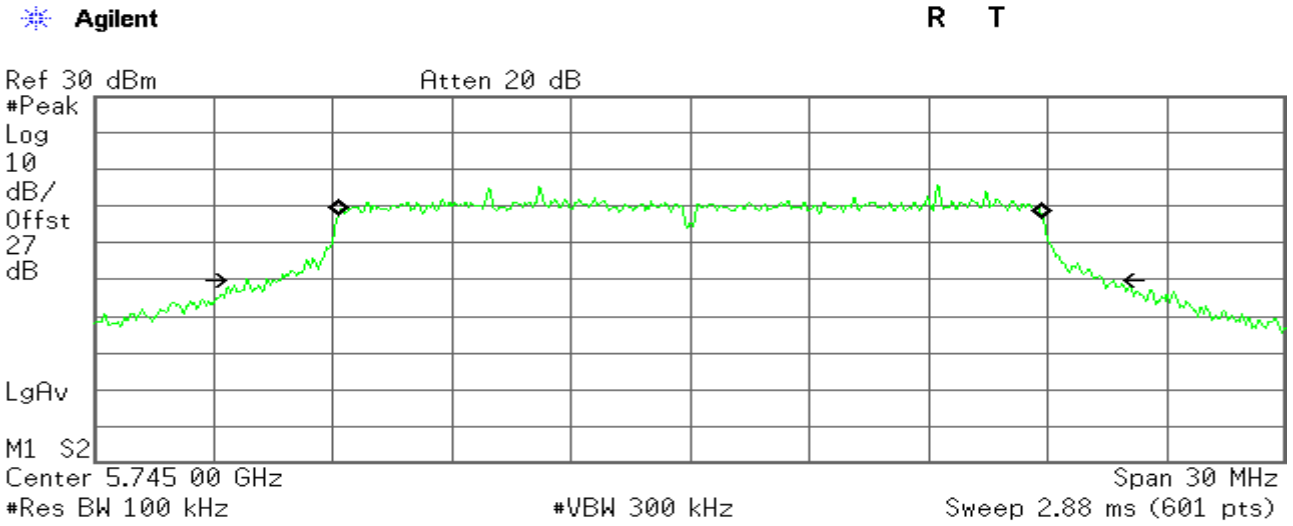
6dB Bandwidth (CH High)



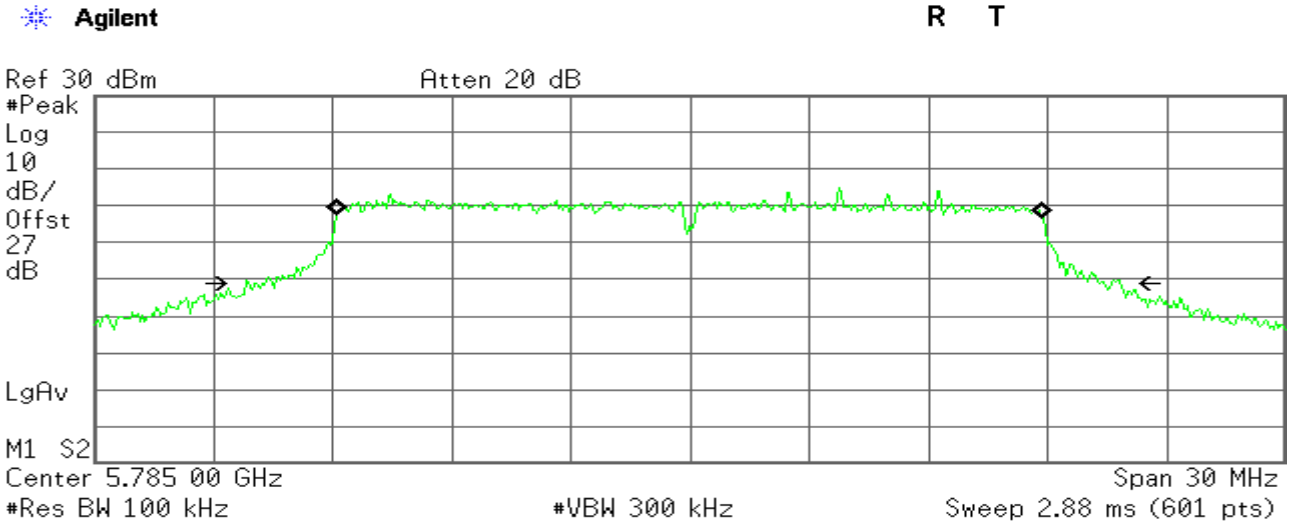
Transmit Freq Error −17.570 kHz
x dB Bandwidth 21.290 MHz

802.11an Standard-20 MHz Channel mode / Chain 1

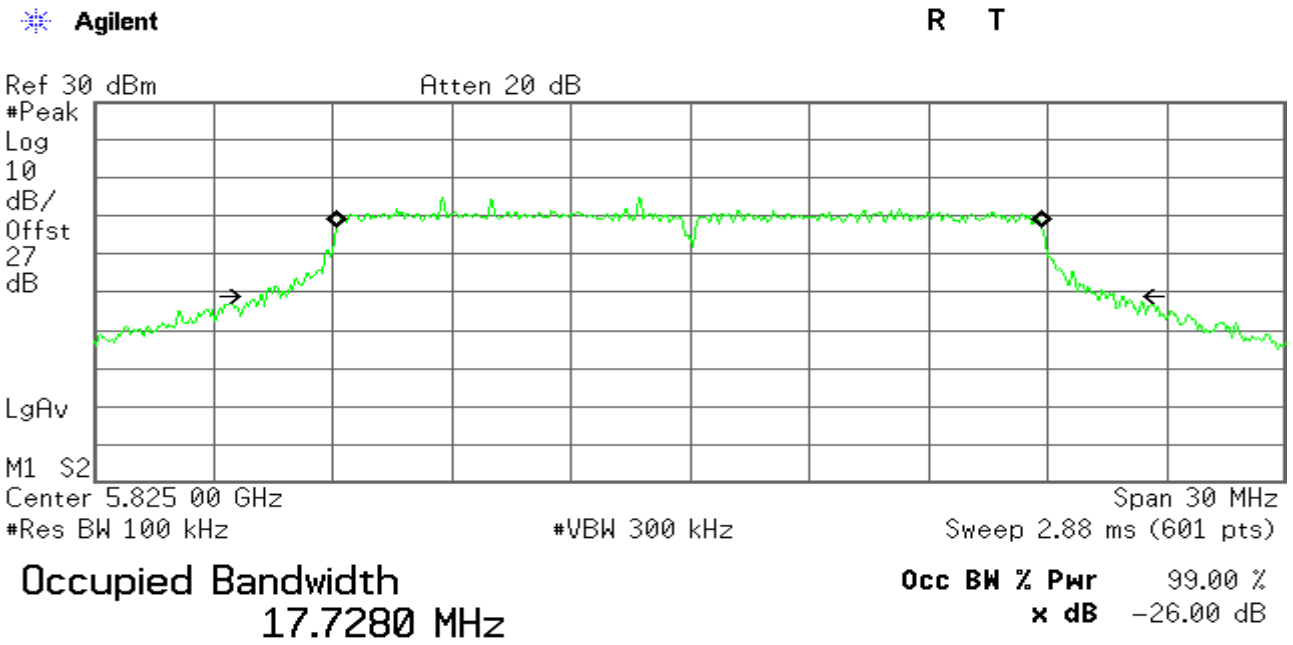
6dB Bandwidth (CH Low)



6dB Bandwidth (CH Mid)



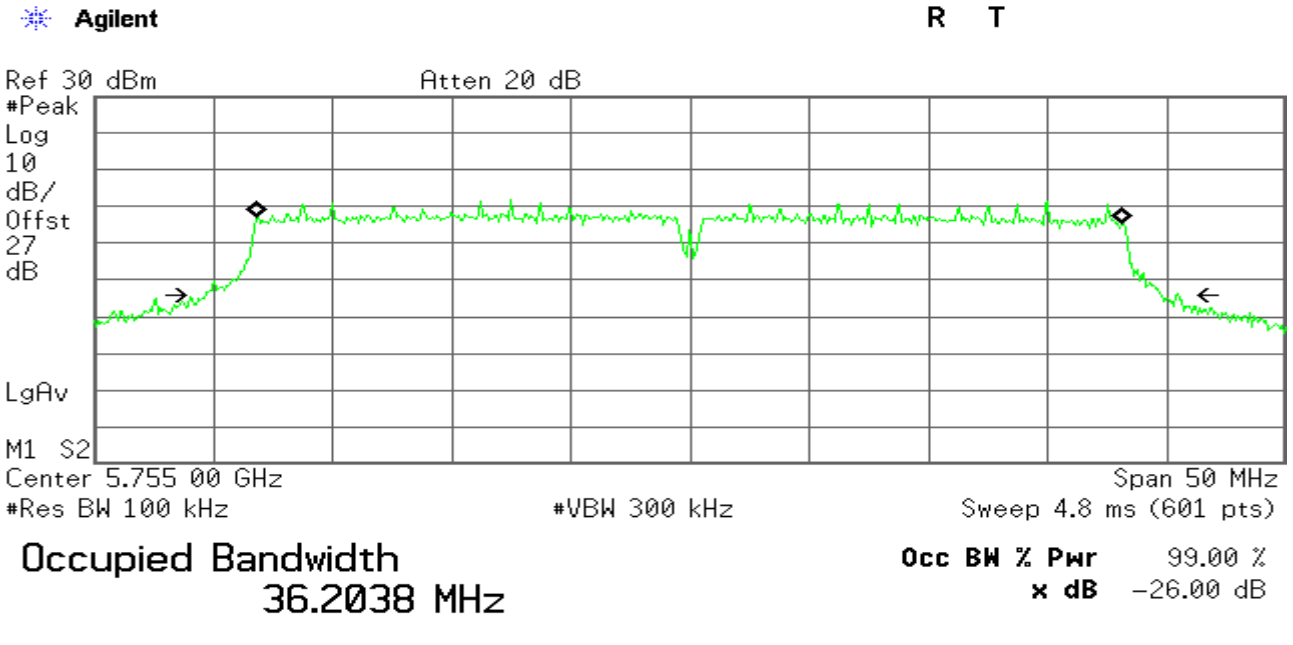
6dB Bandwidth (CH High)



Transmit Freq Error −22.882 kHz
x dB Bandwidth 21.715 MHz

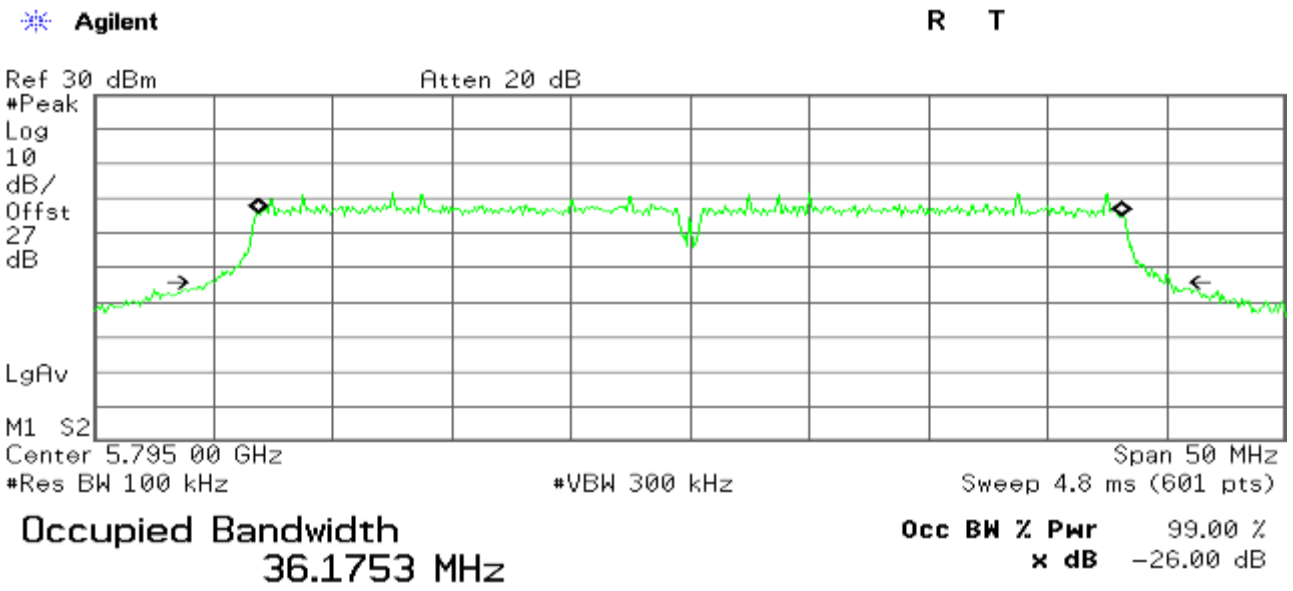
802.11an Standard-40 MHz Channel mode / Chain 0

6dB Bandwidth (CH Low)



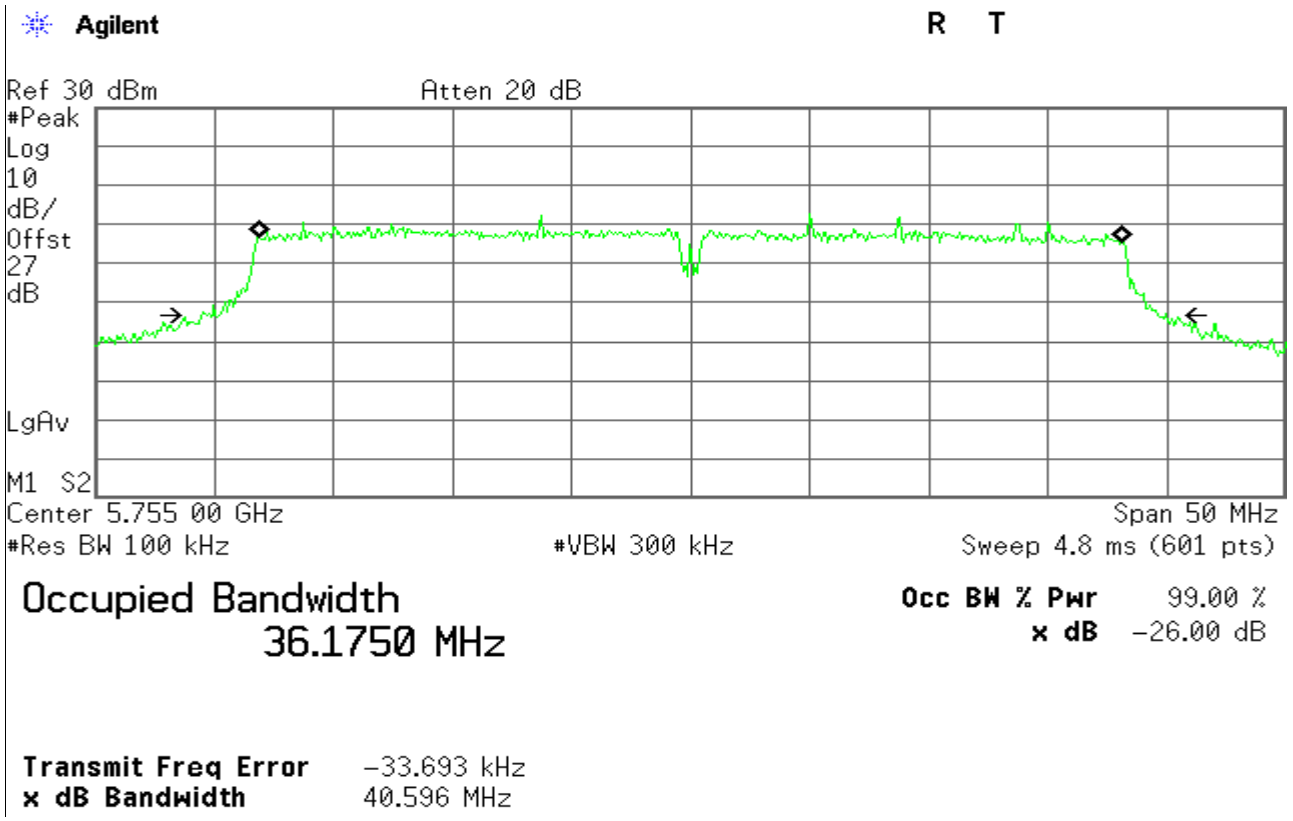
Transmit Freq Error −28.101 kHz
x dB Bandwidth 40.899 MHz

6dB Bandwidth (CH High)

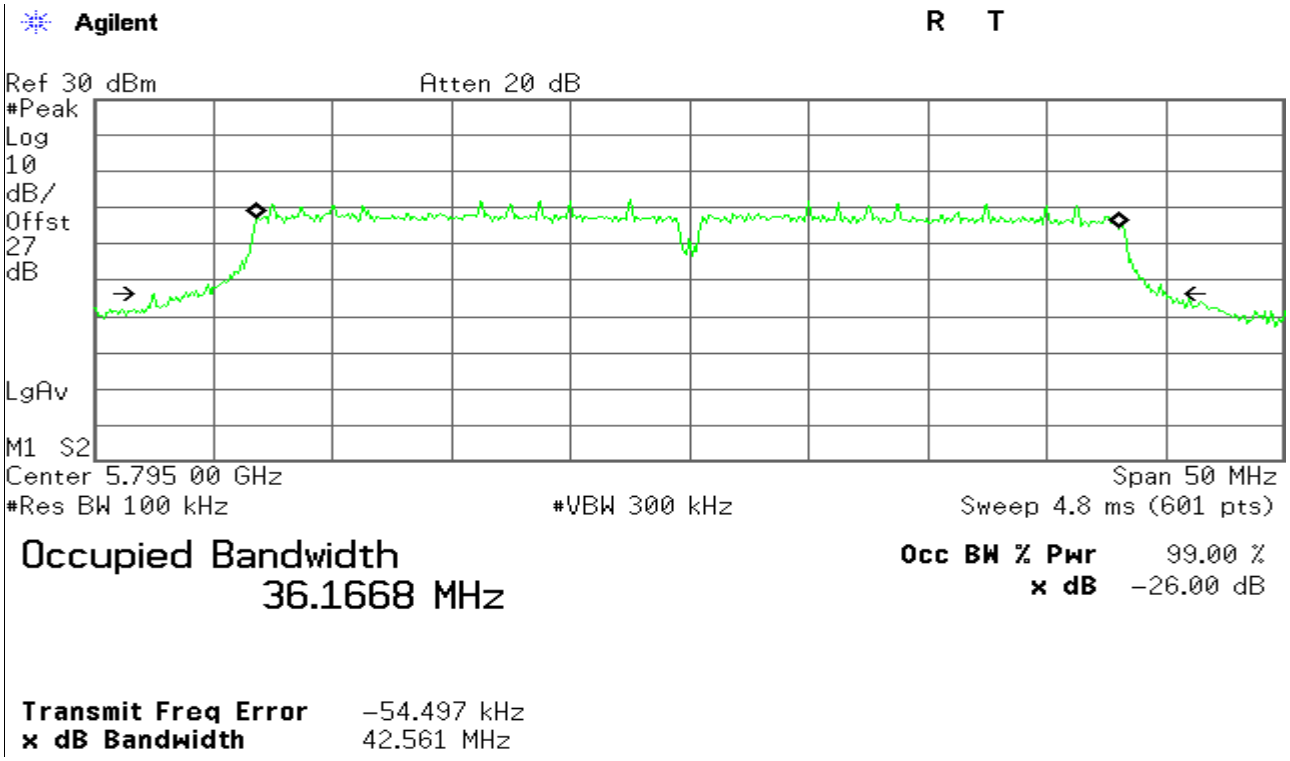


802.11an Standard-40 MHz Channel mode / Chain 1

6dB Bandwidth (CH Low)



6dB Bandwidth (CH High)



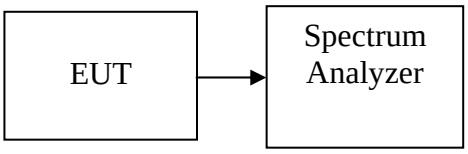
7.2. POWER OUTPUT

LIMIT

The maximum peak output power of the intentional radiator shall not exceed the following:

1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Configuration



TEST PROCEDURE

KDB 558074 D01 DTS Measurement Guidance V02 dated 10-04-2012.

TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (mw)	Limit	Result
Low	2412	**25.38**	**345.14**		PASS
Mid	2437	24.84	304.79		PASS
High	2462	25.08	322.11	30dBm	PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (mw)	Limit	Result
Low	2412	24.40	275.42		PASS
Mid	2437	24.34	271.64		PASS
High	2462	**24.58**	287.08	30dBm	PASS

Test mode: 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Output Power (dBm)	Output Power (mW)	Limit	Result
Low	2412	24.32	23.59	**26.98**	498.96		PASS
Mid	2437	24.19	23.02	26.65	462.87		PASS
High	2462	24.5	23.37	26.98	499.11	30dBm	PASS

Test mode: 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Output Power (dBm)	Output Power (mW)	Limit	Result
Low	2422	24.72	23.8	27.29	536.37		PASS
Mid	2437	24.56	23.9	27.25	531.23		PASS
High	2452	24.77	24.03	**27.43**	552.85	30dBm	PASS

Test mode: IEEE 802.11a mode

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (mw)	Limit	Result
Low	5745	20.51	112.46		PASS
Mid	5785	21.03	126.77		PASS
High	5825	**21.12**	**129.42**	30dBm	PASS

Test mode: 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Output Power (dBm)	Output Power (mW)	Limit	Result
Low	5745	20.71	20.78	23.76	237.43		PASS
Mid	5785	21.02	20.79	23.92	246.42		PASS
High	5825	20.9	20.9	23.91	246.05	30dBm	PASS

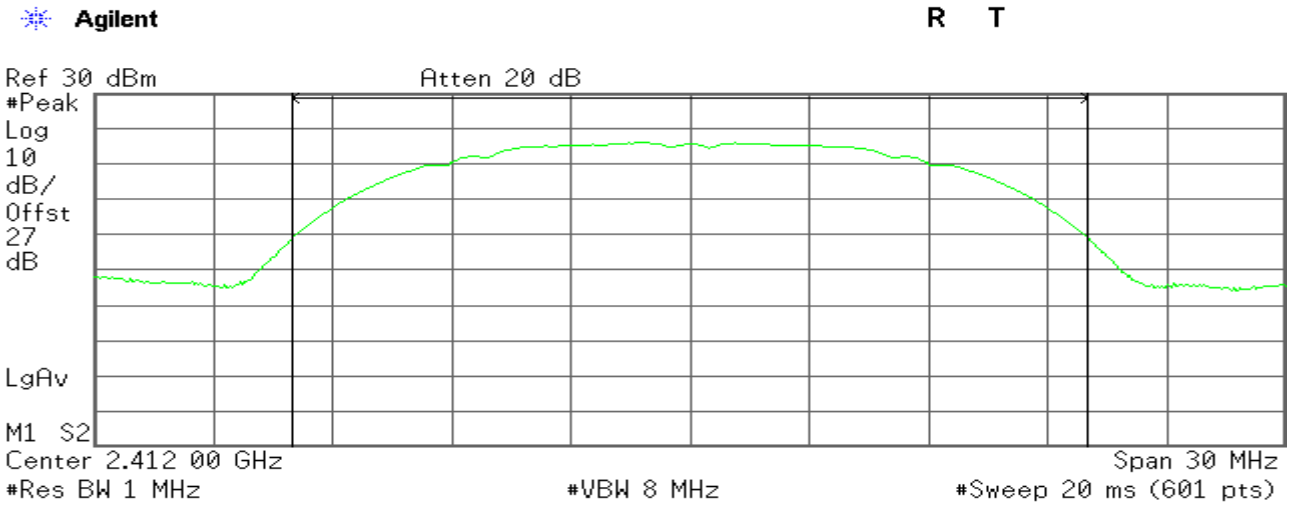
Test mode: 802.11an Wide-40 MHz Channel mode

Channel	Frequency (MHz)	Chain 0 Output Power (dBm)	Chain 1 Output Power (dBm)	Output Power (dBm)	Output Power (mW)	Limit	Result
Low	5755	22.00	22.04	25.03	318.45		PASS
High	5795	22.09	22.1	**25.11**	323.99	30dBm	PASS

Test Plot

IEEE 802.11b mode

Peak Power (CH Low)



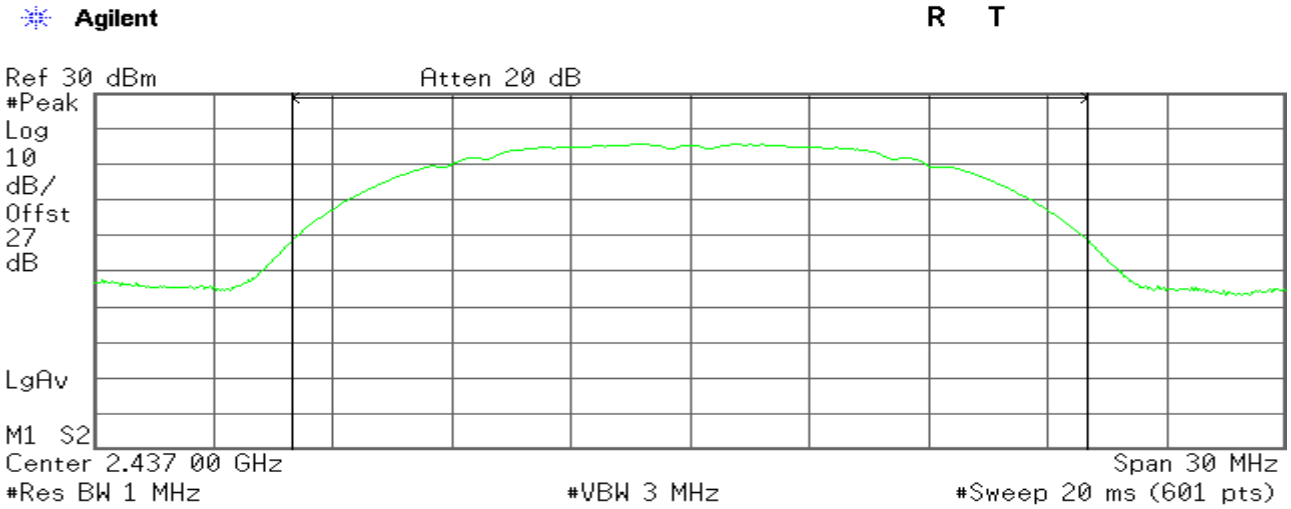
Channel Power

25.38 dBm /20.0000 MHz

Power Spectral Density

-47.63 dBm/Hz

Peak Power (CH Mid)



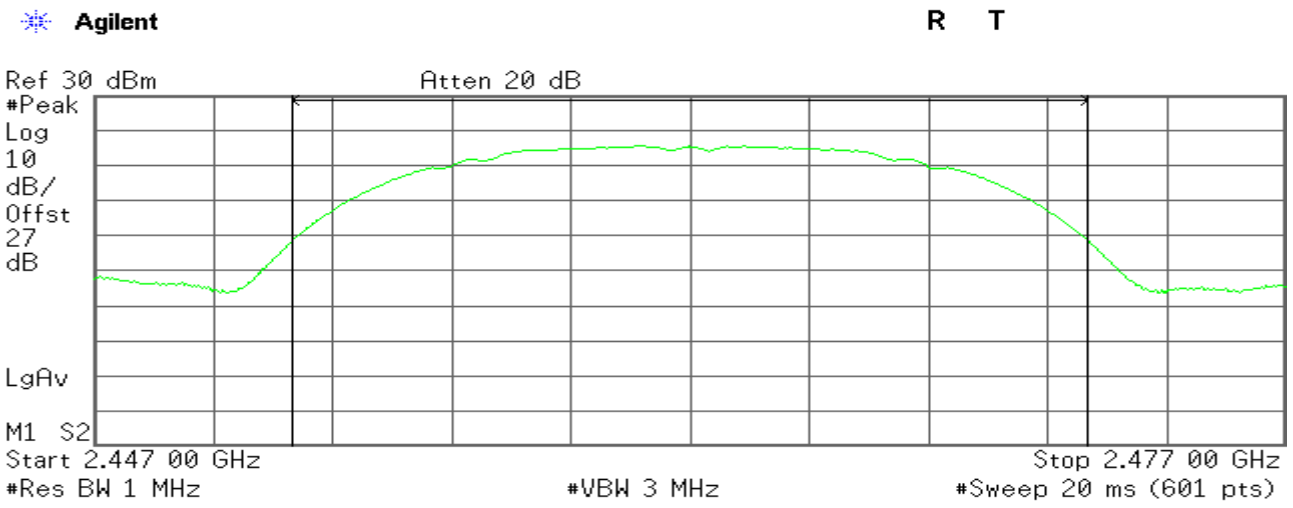
Channel Power

24.84 dBm /20.0000 MHz

Power Spectral Density

-48.17 dBm/Hz

Peak Power (CH High)

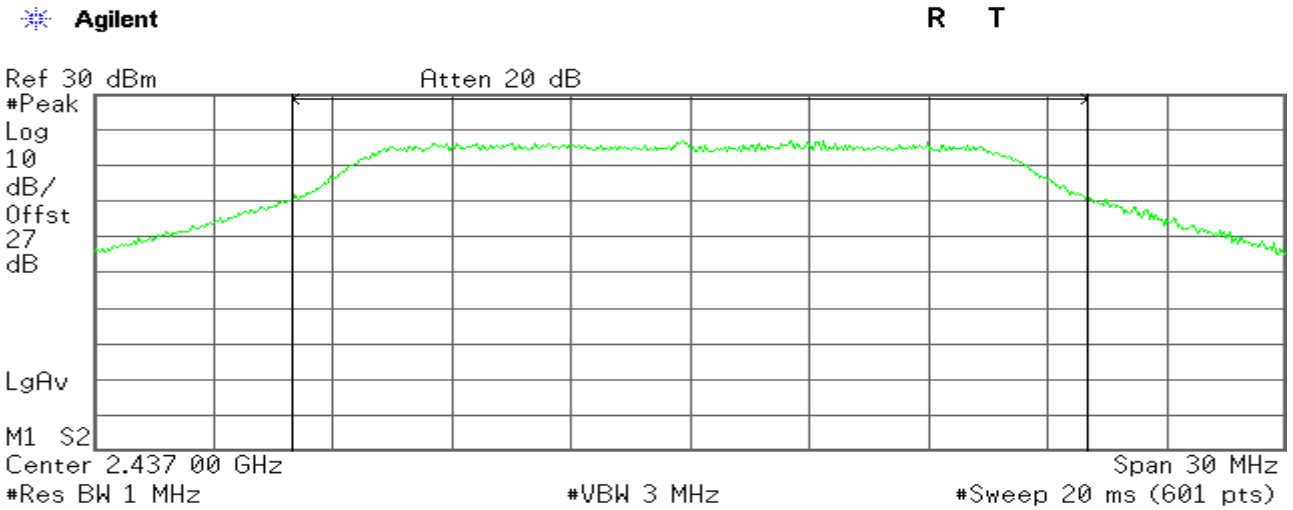


Channel Power
25.08 dBm /20.0000 MHz

Power Spectral Density
-47.93 dBm/Hz

IEEE 802.11g mode

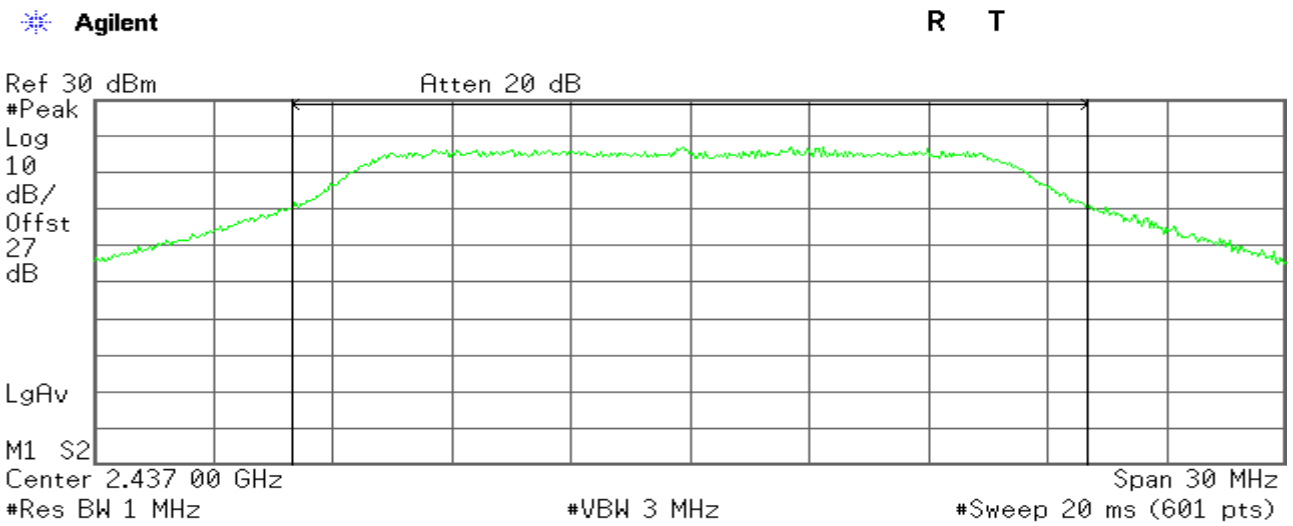
Peak Power (CH Low)



Channel Power
24.34 dBm /20.0000 MHz

Power Spectral Density
-48.67 dBm/Hz

Peak Power (CH Mid)



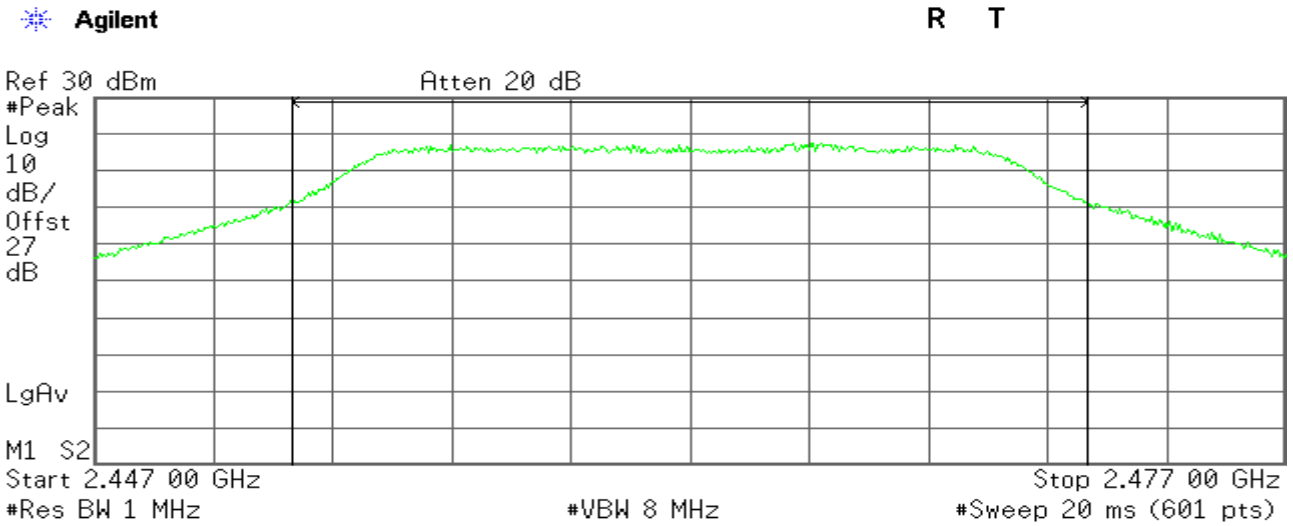
Channel Power

24.34 dBm /20.0000 MHz

Power Spectral Density

-48.67 dBm/Hz

Peak Power (CH High)



Channel Power

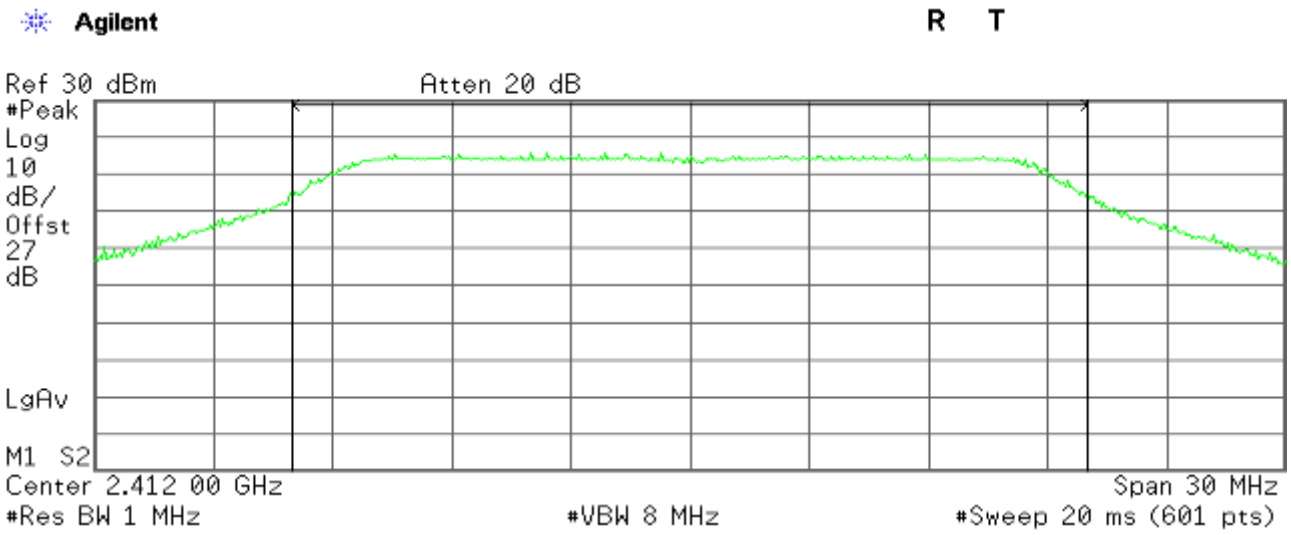
24.58 dBm /20.0000 MHz

Power Spectral Density

-48.43 dBm/Hz

802.11n Standard-20 MHz Channel mode / Chain 0

Peak Power (CH Low)



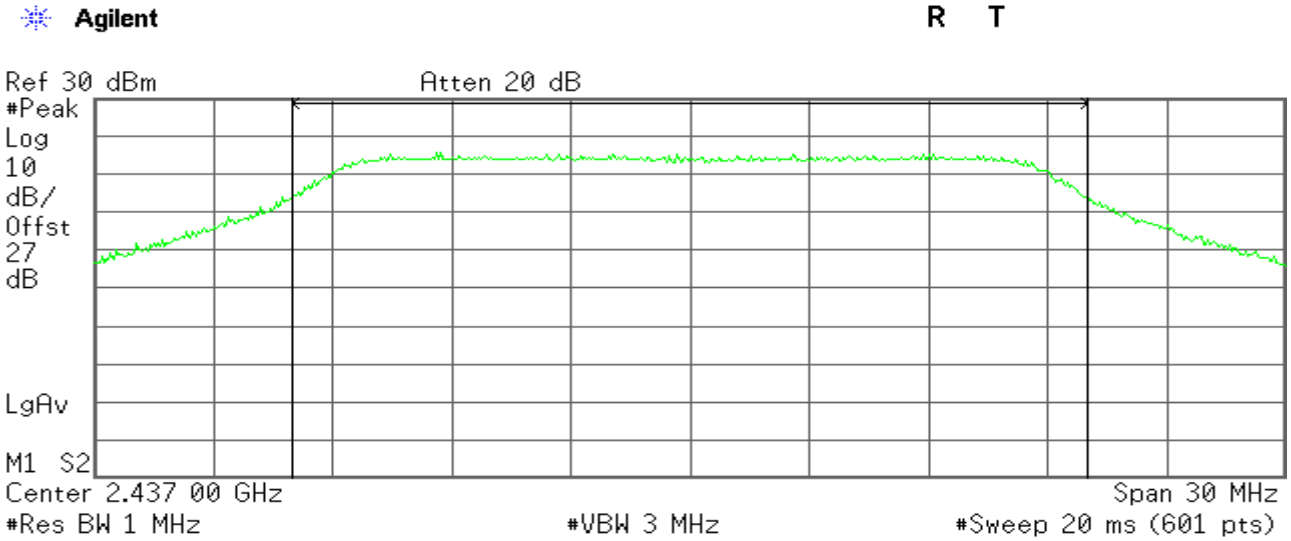
Channel Power

24.32 dBm /20.0000 MHz

Power Spectral Density

-48.69 dBm/Hz

Peak Power (CH Mid)



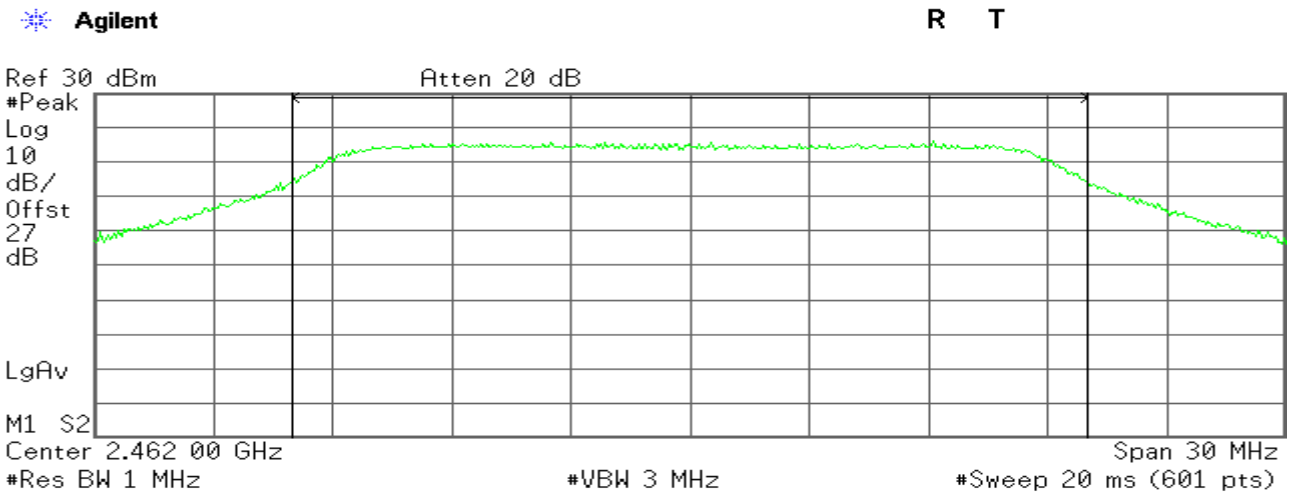
Channel Power

24.19 dBm /20.0000 MHz

Power Spectral Density

-48.82 dBm/Hz

Peak Power (CH High)

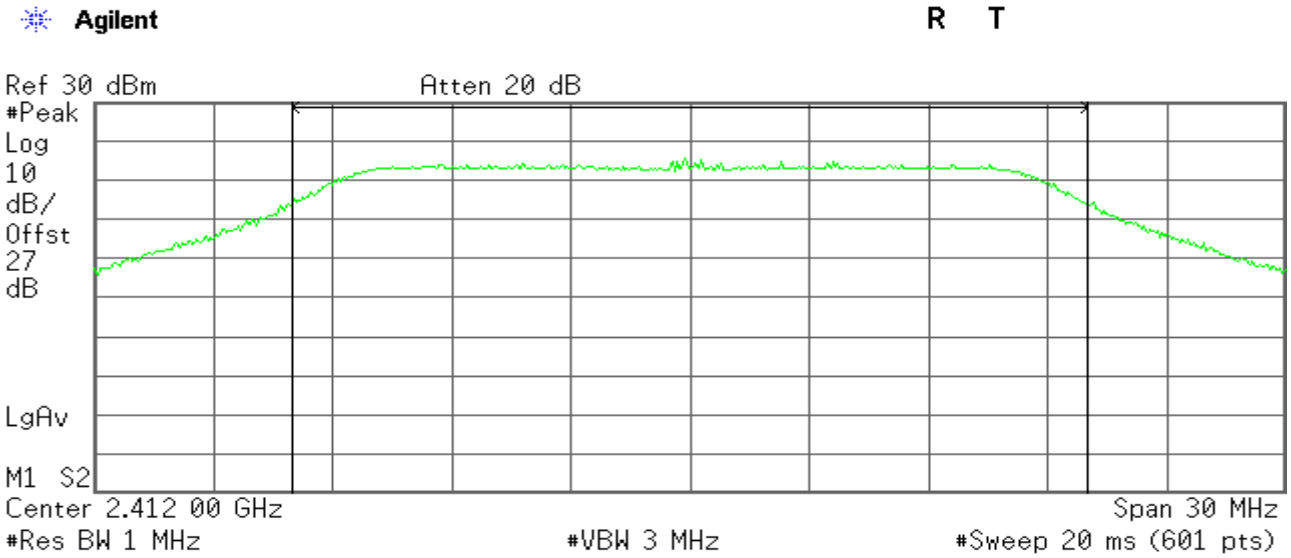


Channel Power
24.50 dBm /20.0000 MHz

Power Spectral Density
-48.51 dBm/Hz

802.11n Standard-20 MHz Channel mode / Chain 1

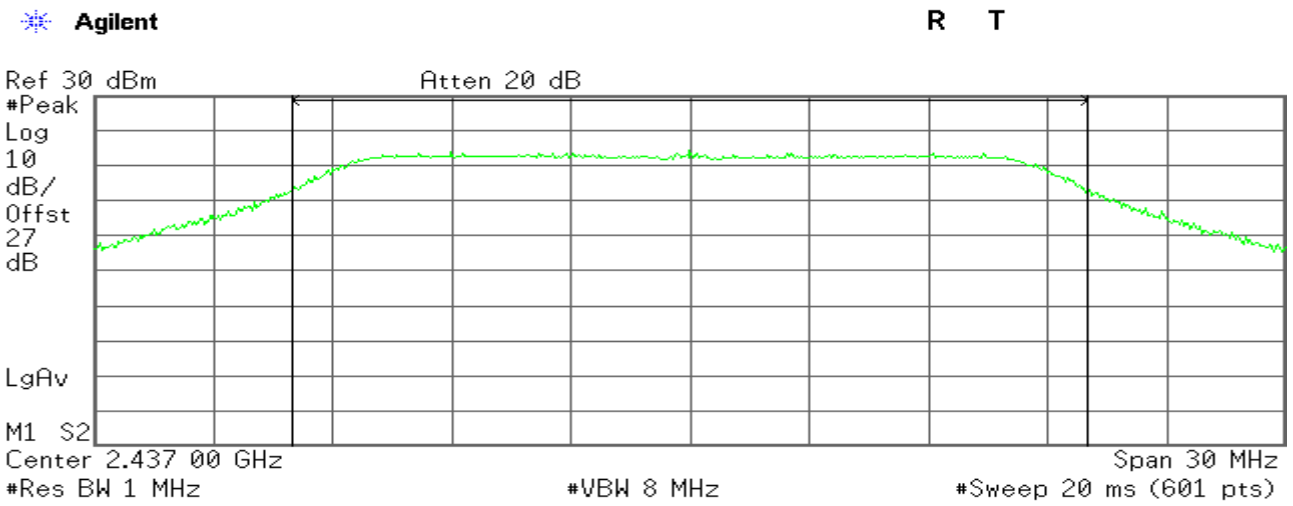
Peak Power (CH Low)



Channel Power
23.59 dBm /20.0000 MHz

Power Spectral Density
-49.42 dBm/Hz

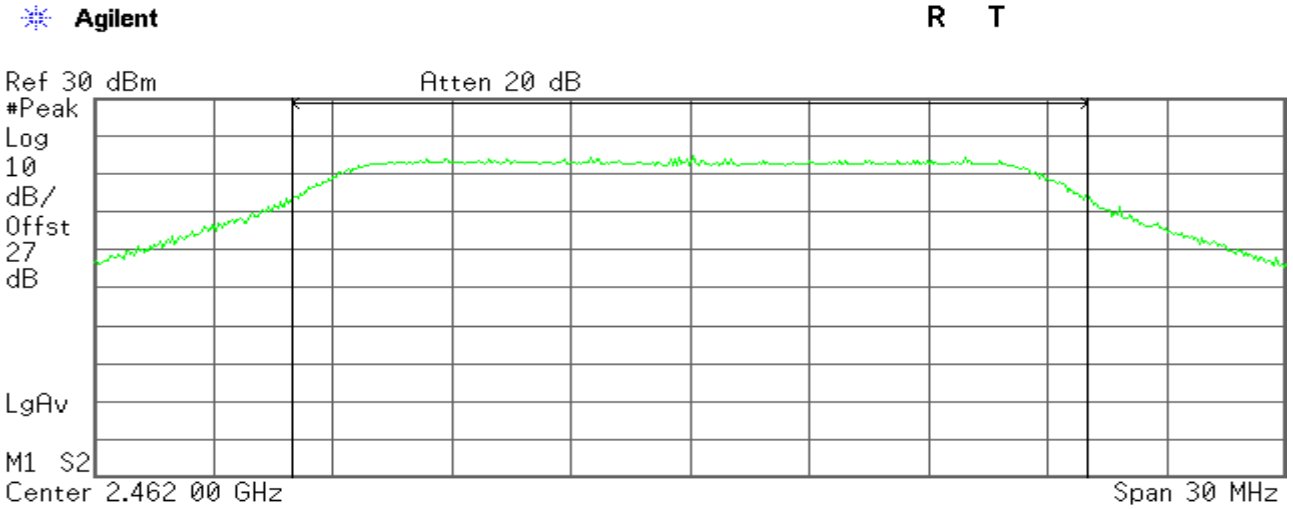
Peak Power (CH Mid)



Channel Power
23.02 dBm /20.0000 MHz

Power Spectral Density
-49.99 dBm/Hz

Peak Power (CH High)

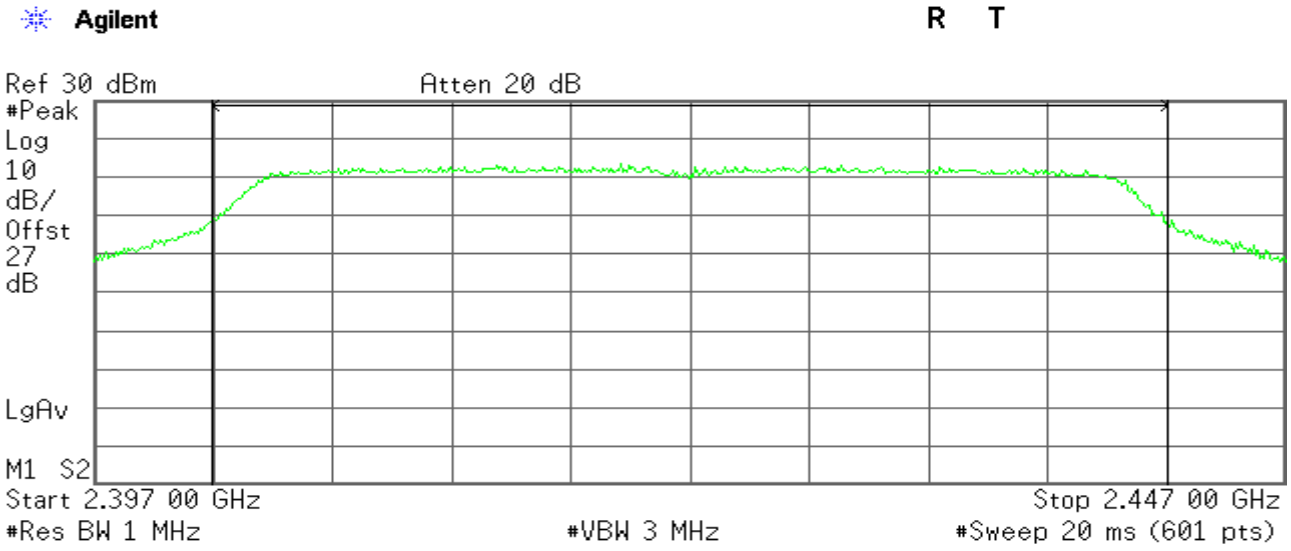


Channel Power
23.37 dBm /20.0000 MHz

Power Spectral Density
-49.64 dBm/Hz

802.11n Wide-40 MHz Channel mode / Chain 0

Peak Power (CH Low)



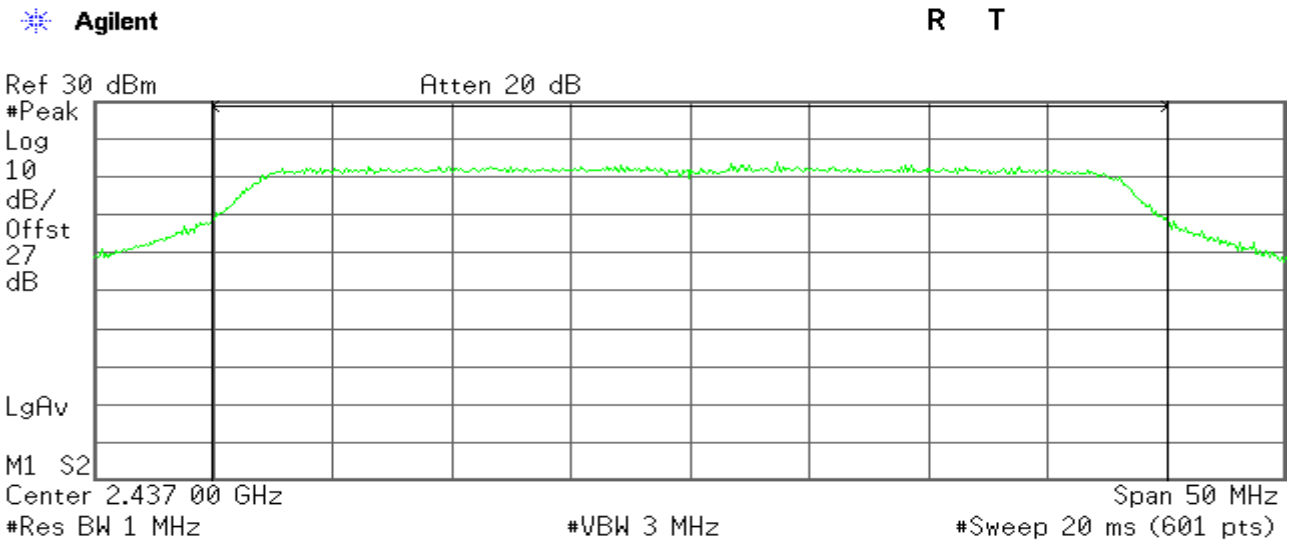
Channel Power

24.72 dBm /40.0000 MHz

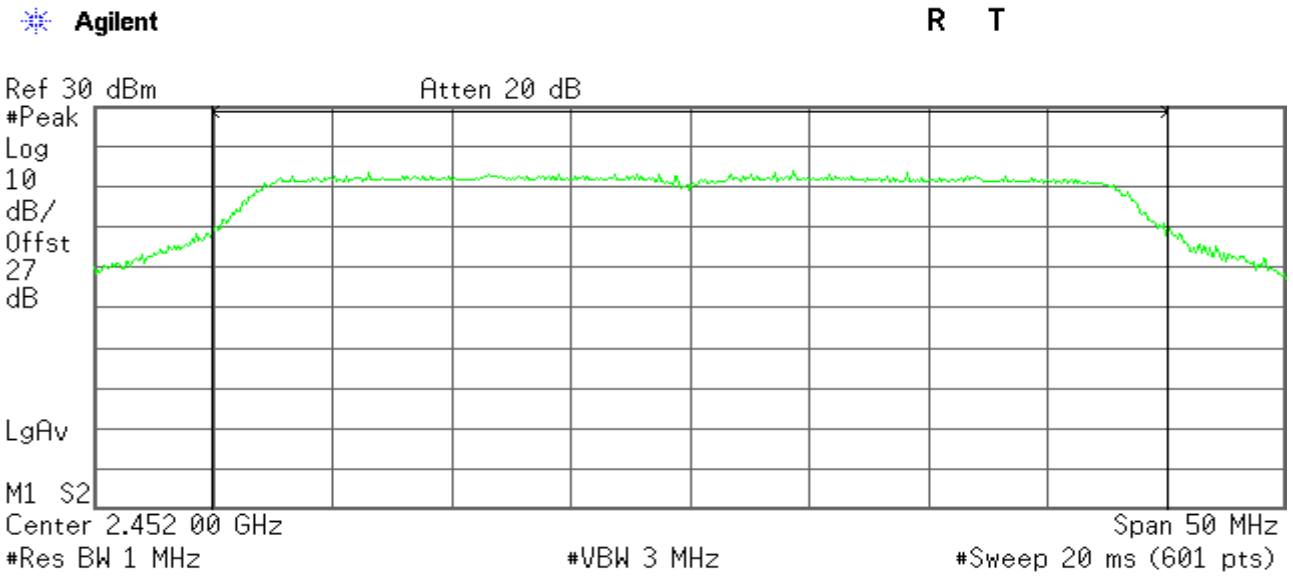
Power Spectral Density

-51.30 dBm/Hz

Peak Power (CH Mid)

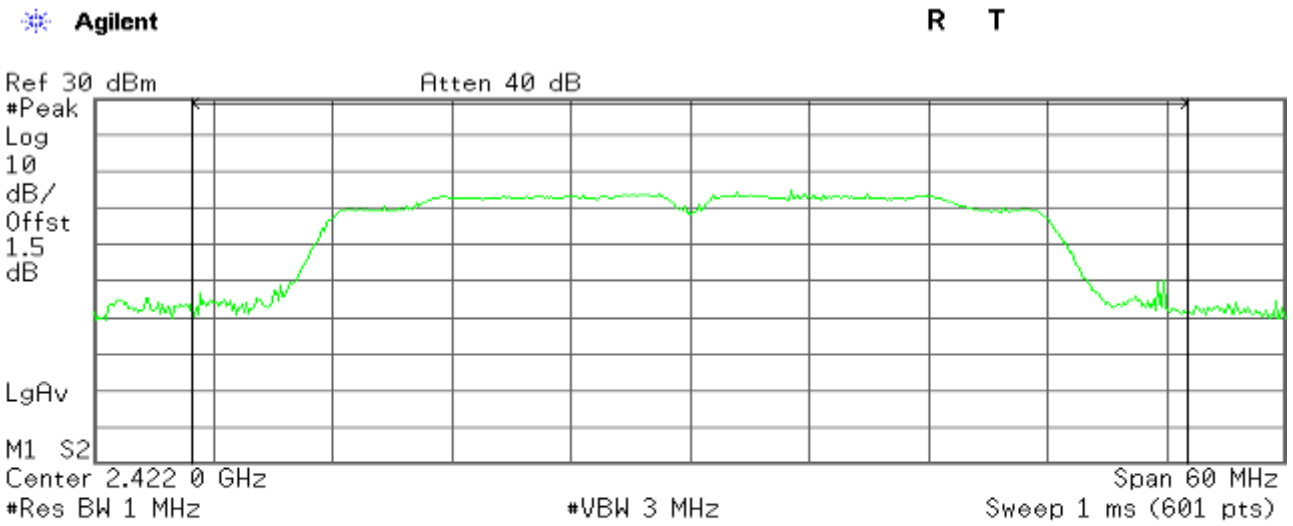


Peak Power (CH High)



802.11n Wide-40 MHz Channel mode / Chain 1

Peak Power (CH Low)



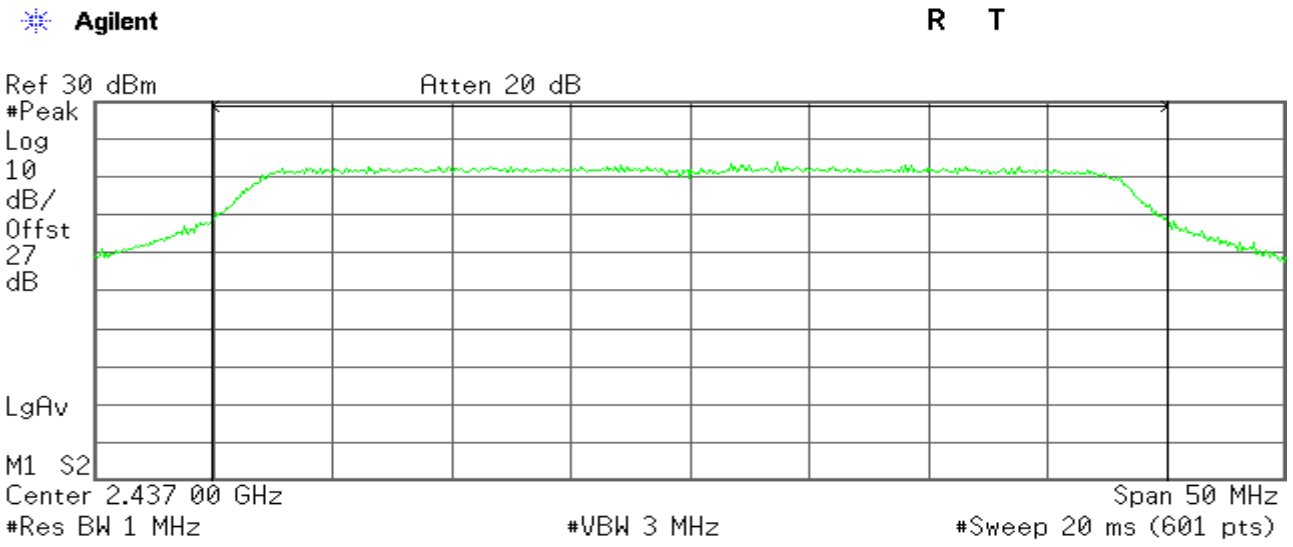
Channel Power

12.90 dBm /50.0000 MHz

Power Spectral Density

-64.09 dBm/Hz

Peak Power (CH Mid)



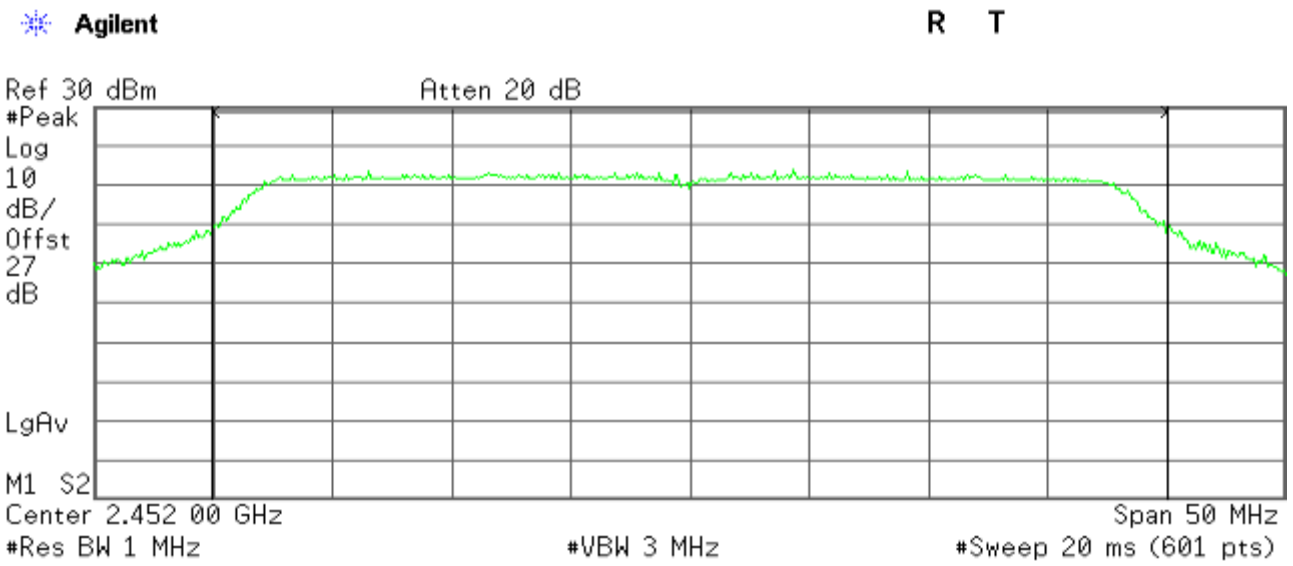
Channel Power

24.56 dBm /40.0000 MHz

Power Spectral Density

-51.46 dBm/Hz

Peak Power (CH High)



Channel Power

24.77 dBm /40.0000 MHz

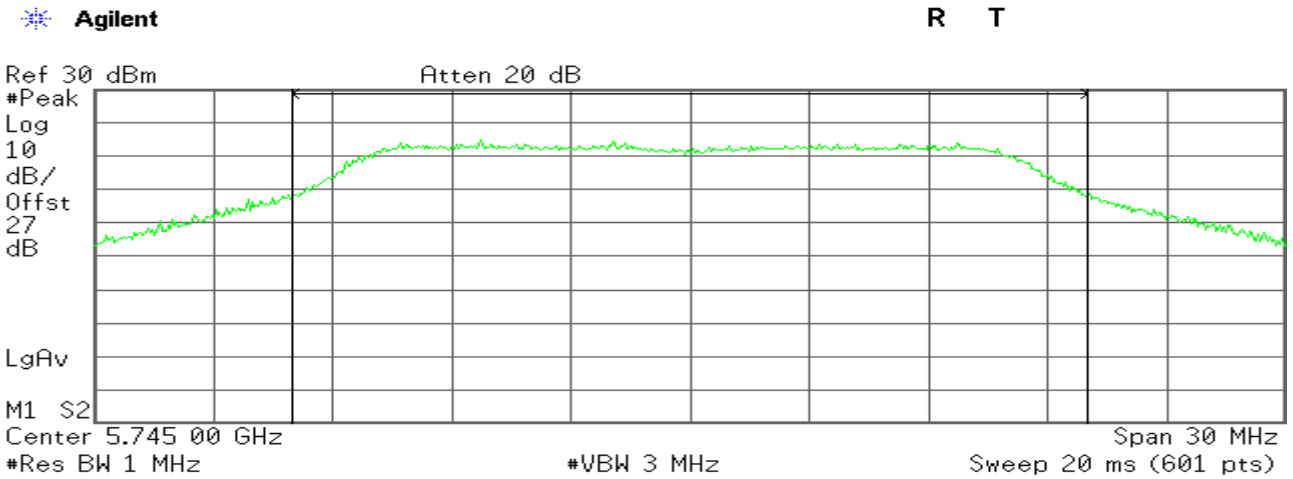
Power Spectral Density

-51.25 dBm/Hz

5725-5825

IEEE 802.11a mode

Peak Power (CH Low)



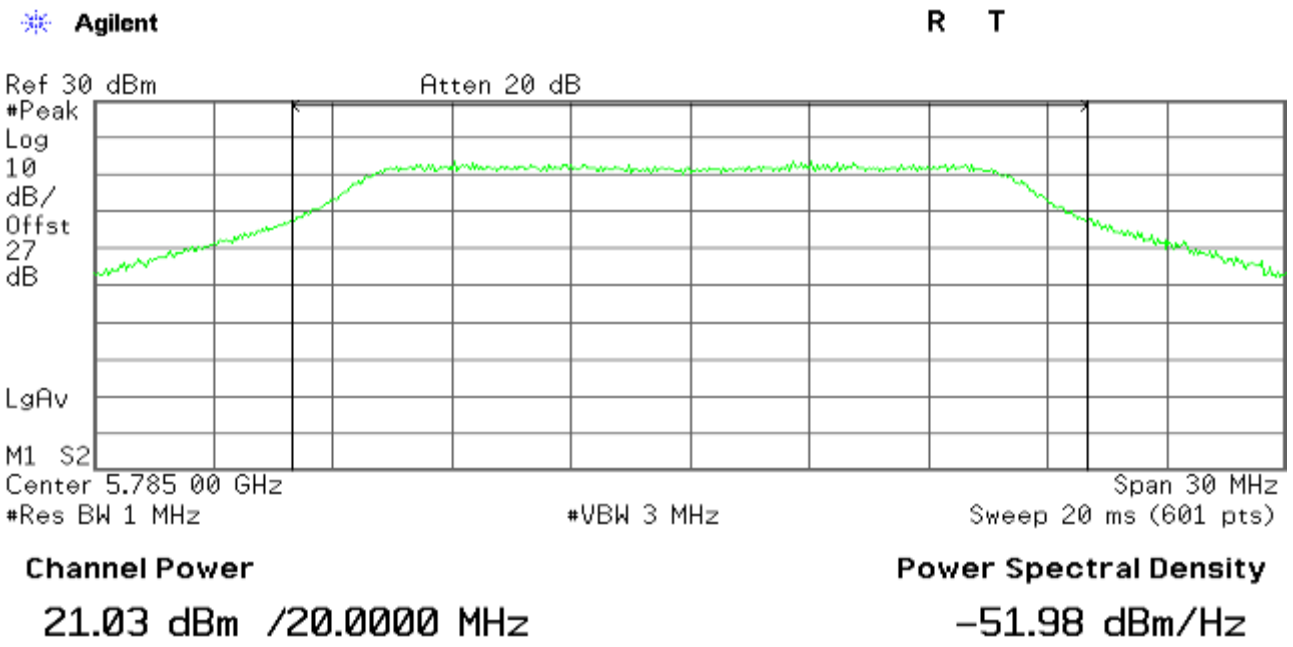
Channel Power

20.51 dBm /20.0000 MHz

Power Spectral Density

-52.50 dBm/Hz

Peak Power (CH Mid)



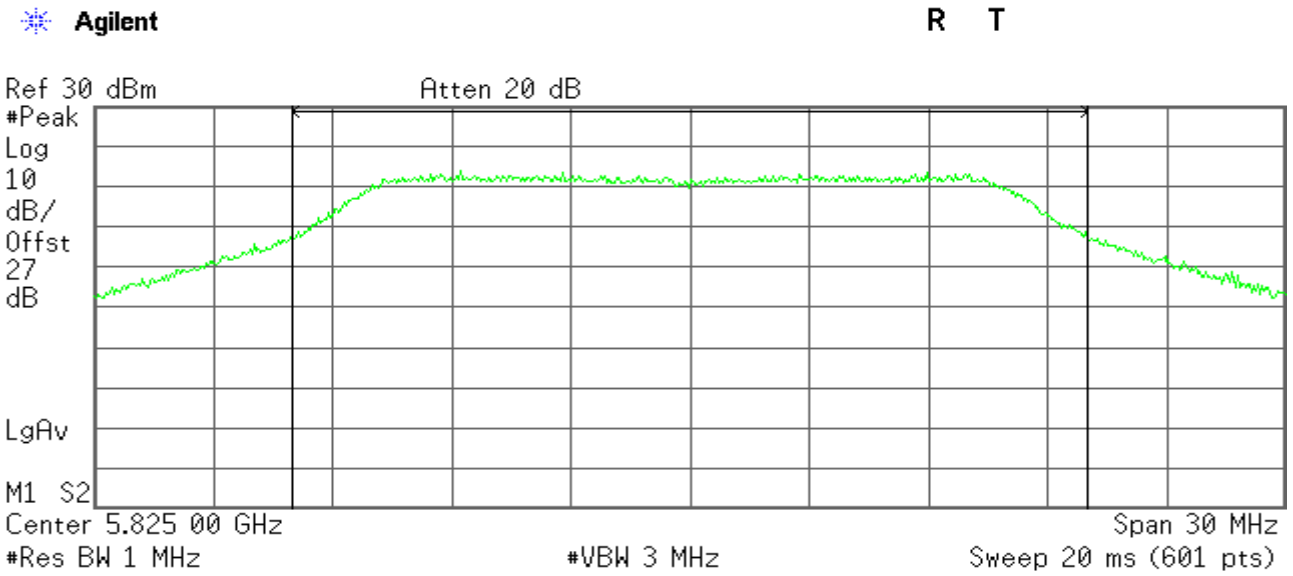
Channel Power

21.03 dBm /20.0000 MHz

Power Spectral Density

-51.98 dBm/Hz

Peak Power (CH Hgih)



Channel Power

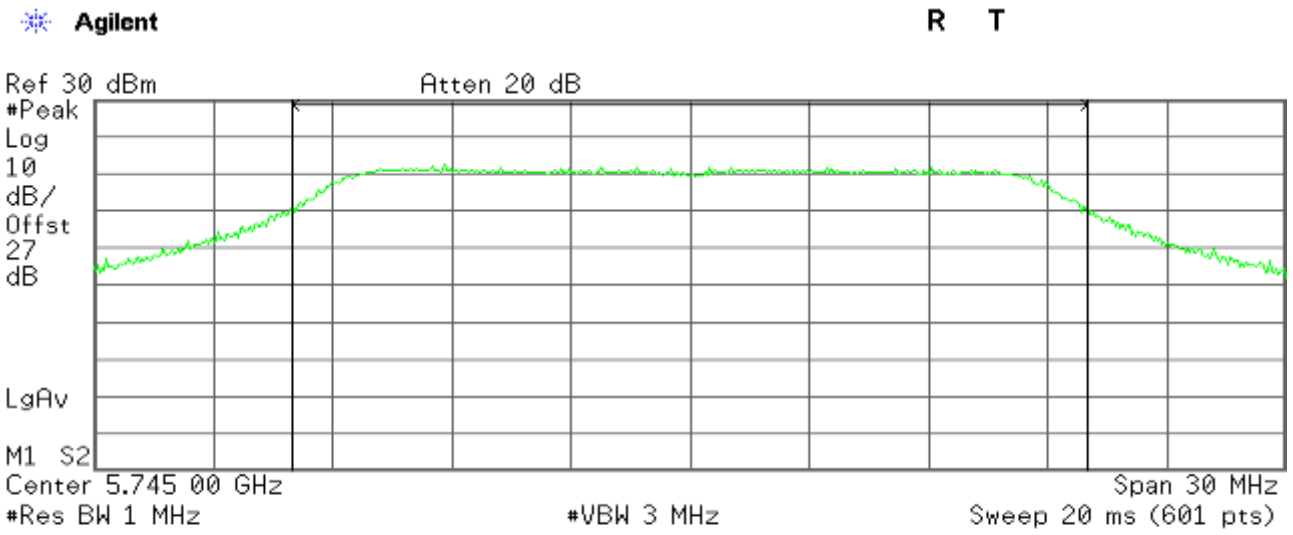
21.12 dBm /20.0000 MHz

Power Spectral Density

-51.89 dBm/Hz

802.11an Standard-20 MHz Channel mode / Chain 0

Peak Power (CH Low)



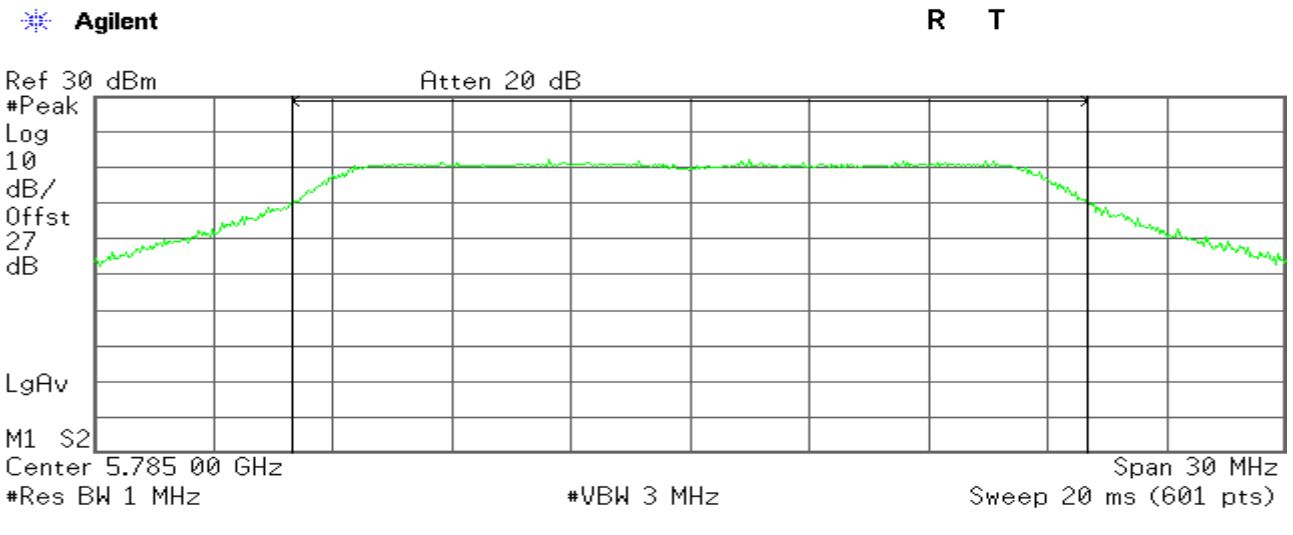
Channel Power

20.71 dBm /20.0000 MHz

Power Spectral Density

-52.30 dBm/Hz

Peak Power (CH Mid)



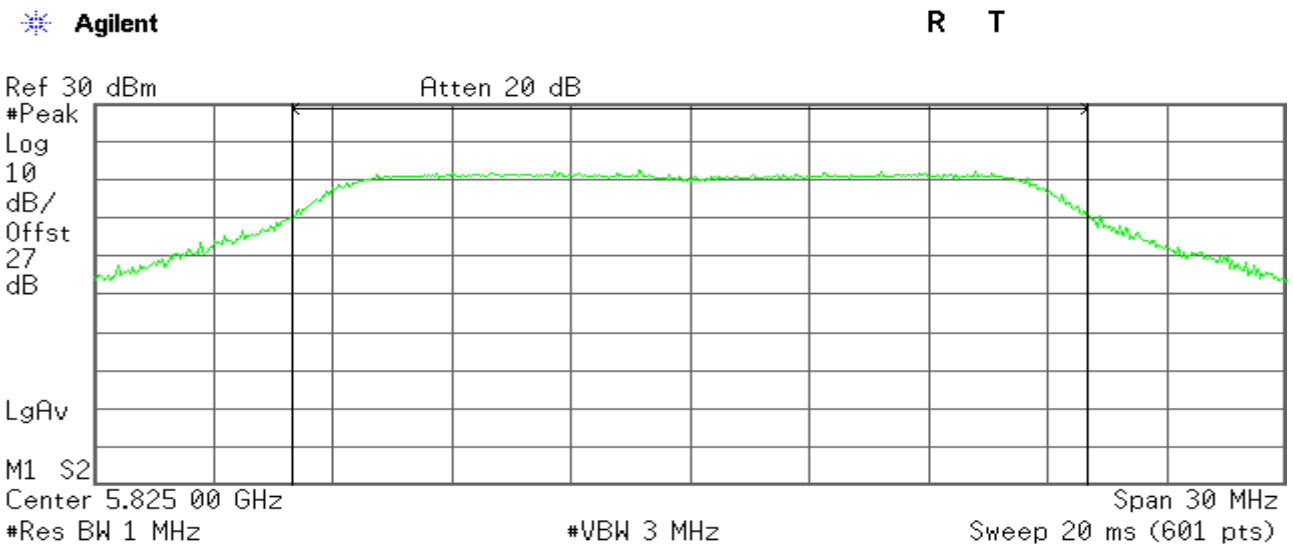
Channel Power

21.02 dBm /20.0000 MHz

Power Spectral Density

-51.99 dBm/Hz

Peak Power (CH High)

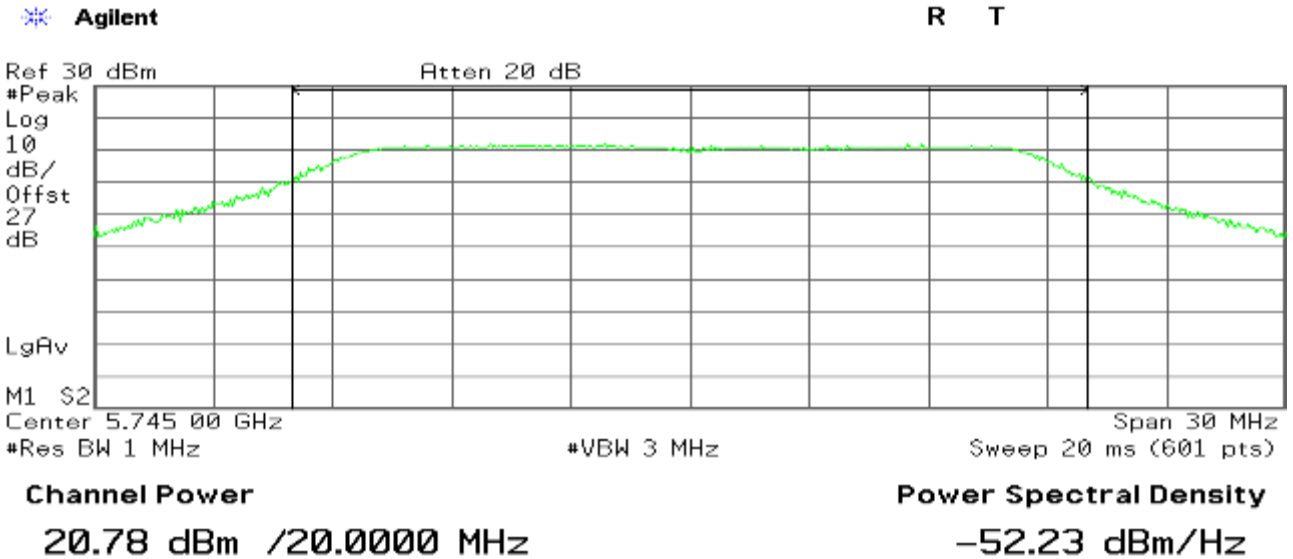


Channel Power
20.90 dBm /20.0000 MHz

Power Spectral Density
-52.11 dBm/Hz

802.11an Standard-20 MHz Channel mode / Chain 1

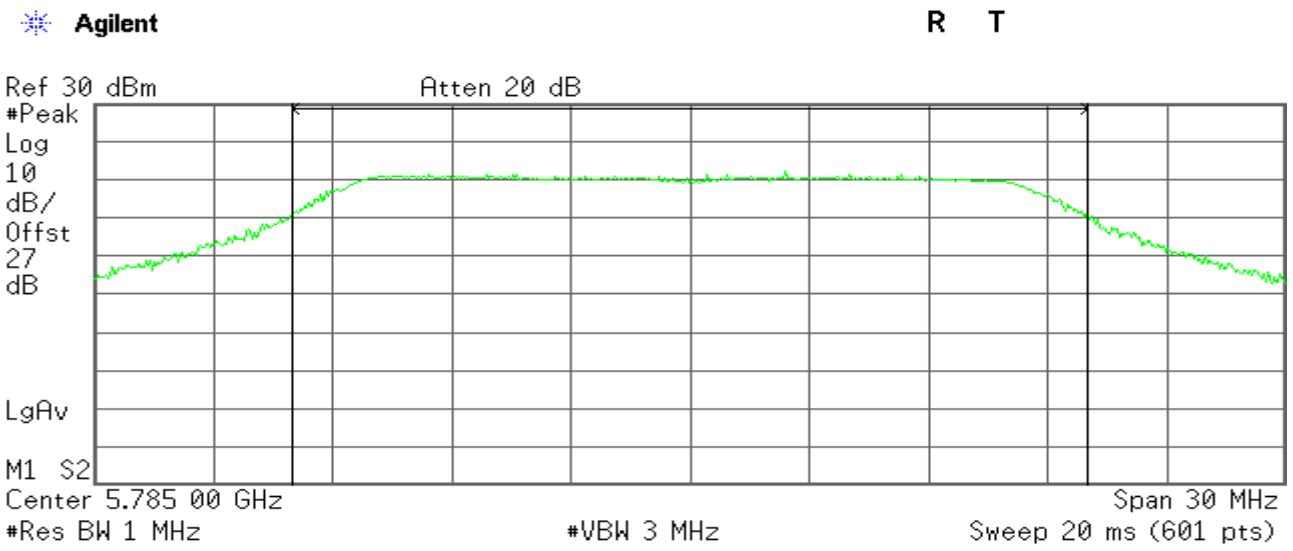
Peak Power (CH Low)



Channel Power
20.78 dBm /20.0000 MHz

Power Spectral Density
-52.23 dBm/Hz

Peak Power (CH Mid)



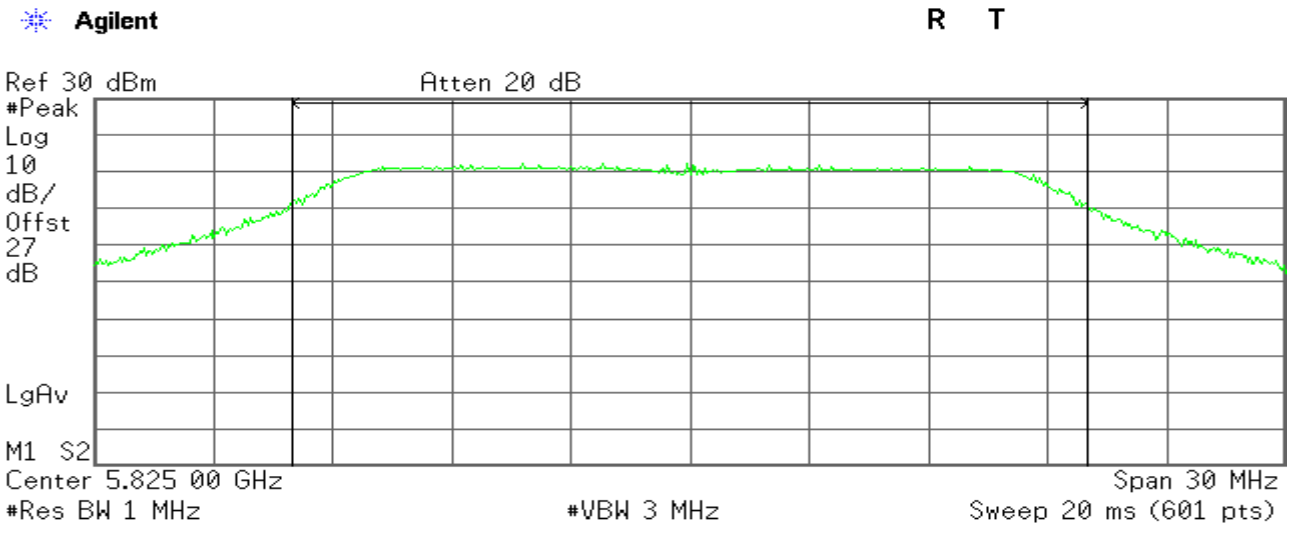
Channel Power

20.79 dBm /20.0000 MHz

Power Spectral Density

-52.22 dBm/Hz

Peak Power (CH High)



Channel Power

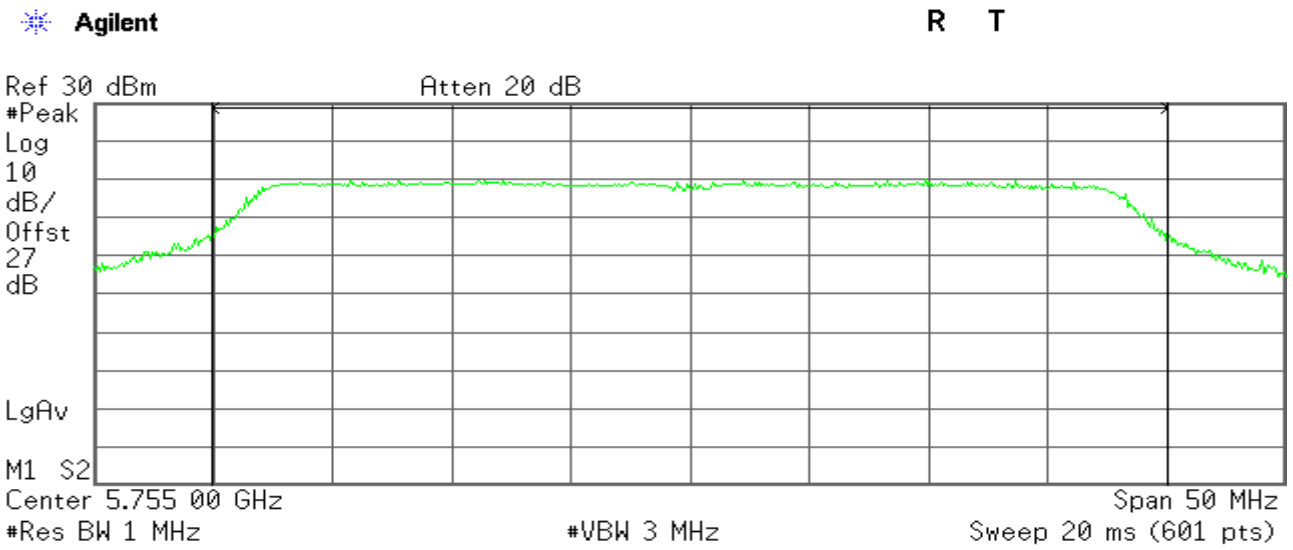
20.90 dBm /20.0000 MHz

Power Spectral Density

-52.11 dBm/Hz

802.11an Standard-40 MHz Channel mode / Chain 0

Peak Power (CH Low)



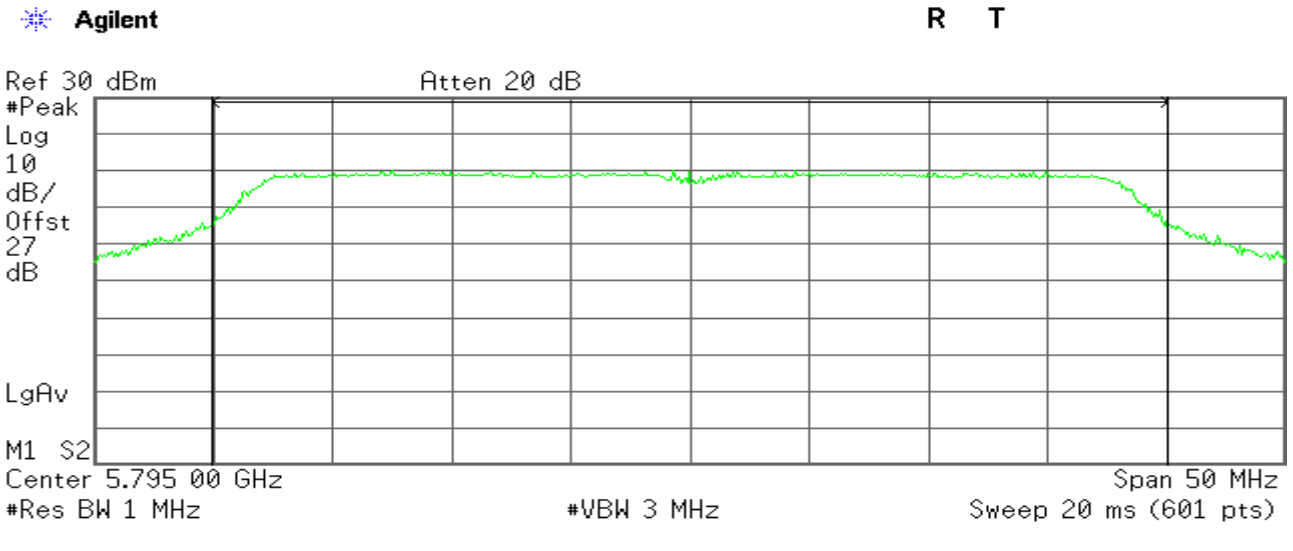
Channel Power

22.00 dBm /40.0000 MHz

Power Spectral Density

-54.02 dBm/Hz

Peak Power (CH High)



Channel Power

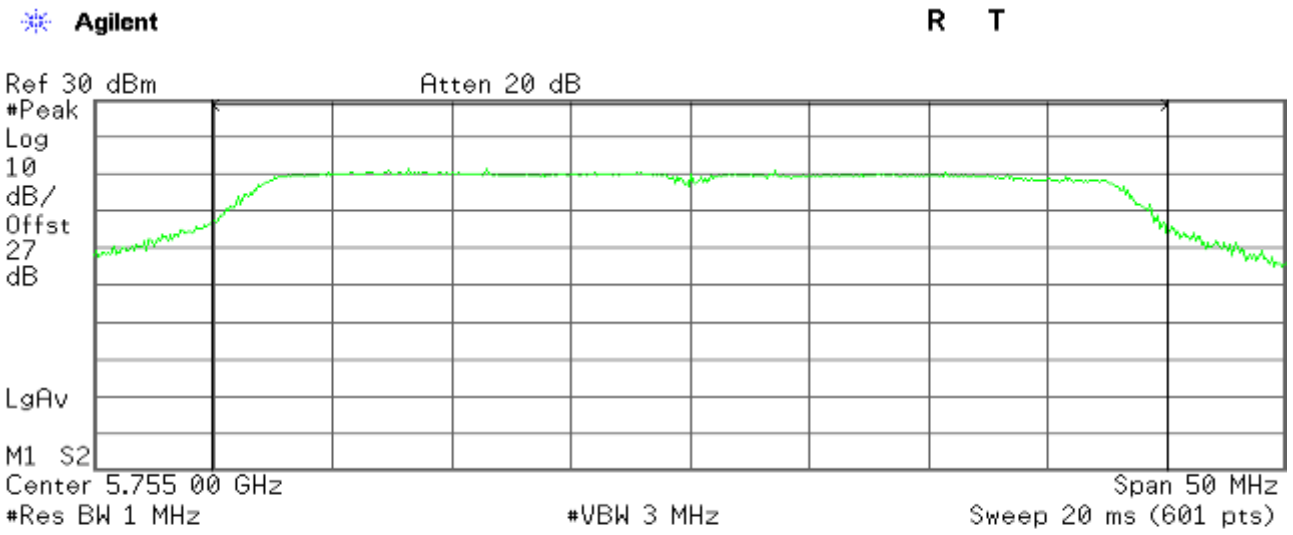
22.09 dBm /40.0000 MHz

Power Spectral Density

-53.93 dBm/Hz

802.11an Standard-40 MHz Channel mode / Chain 1

Peak Power (CH Low)



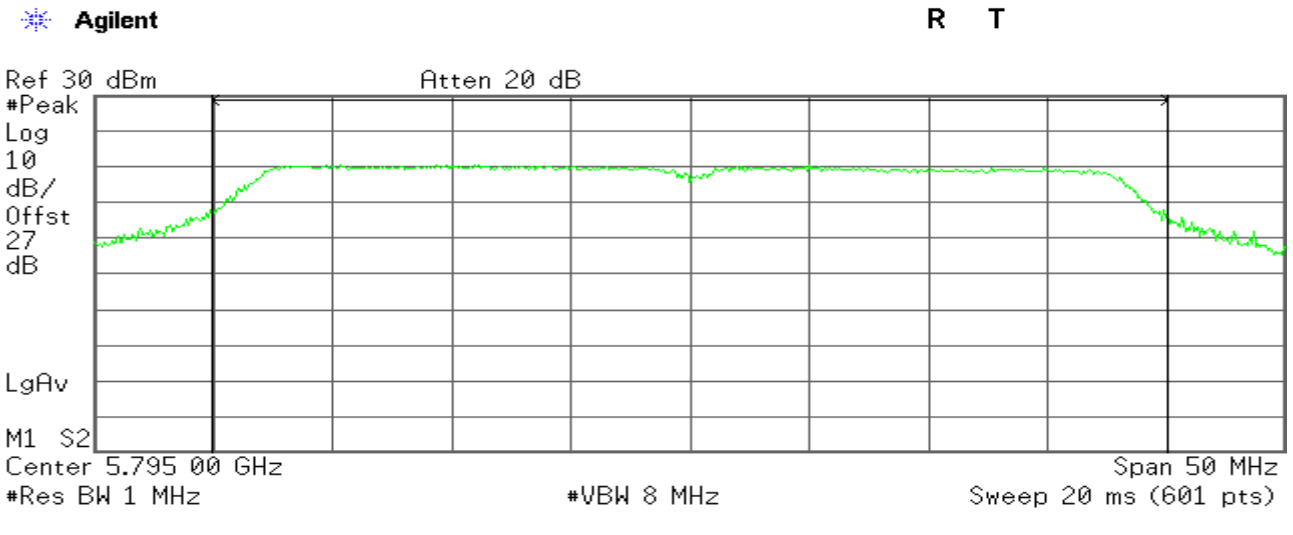
Channel Power

22.84 dBm /40.0000 MHz

Power Spectral Density

-53.18 dBm/Hz

Peak Power (CH High)



Channel Power

22.70 dBm /40.0000 MHz

Power Spectral Density

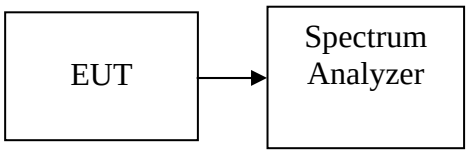
-53.32 dBm/Hz

7.3. PEAK POWER SPECTRAL DENSITY

LIMIT

1. According to §15.247(e), for digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.
2. According to §15.247(f), the digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

Test Configuration



TEST PROCEDURE

KDB 558074 D01 DTS Measurement Guidance V02 dated 10-04-2012.

TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11b mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	-3.48	8	PASS
Mid	2437	-3.29	8	PASS
High	2462	-1.93	8	PASS

Test mode: IEEE 802.11g mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	2412	1.63	8	PASS
Mid	2437	1.06	8	PASS
High	2462	0.08	8	PASS

Test mode: 802.11n Standard-20 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2412	-0.32	-1.19	2.28	8	PASS
Mid	2437	-0.83	0.09	2.66	8	PASS
High	2462	-0.03	0.23	3.11	8	PASS

Remark: *Total PPSD (dBm) = 10*LOG(10^(Chain 0 PPSD / 10)+10^(Chain 1 PPSD /10))*

Test mode: 802.11n Wide-40 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	2422	-0.76	-1.01	2.13	8	PASS
Mid	2437	-0.5	-0.05	2.74	8	PASS
High	2452	-1.52	-0.76	1.89	8	PASS

Remark: *Total PPSD (dBm) = 10*LOG(10^(Chain 0 PPSD / 10)+10^(Chain 1 PPSD /10))*

Test mode: IEEE 802.11a mode

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Result
Low	5745	-8.15	8	PASS
Mid	5785	-8.4	8	PASS
High	5825	-9.32	8	PASS

Test mode: 802.11an Standard-20 MHz Channel mode

Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5745	-1.88	-8.23	-0.97	8	PASS
Mid	5785	-1.19	-9.79	-0.63	8	PASS
High	5825	-2.76	-10.08	-2.02	8	PASS

Remark: *Total PPSD (dBm) = 10*LOG(10^(Chain 0 PPSD / 10)+10^(Chain 1 PPSD /10))*

Test mode: 802.11an Wide-40 MHz Channel mode

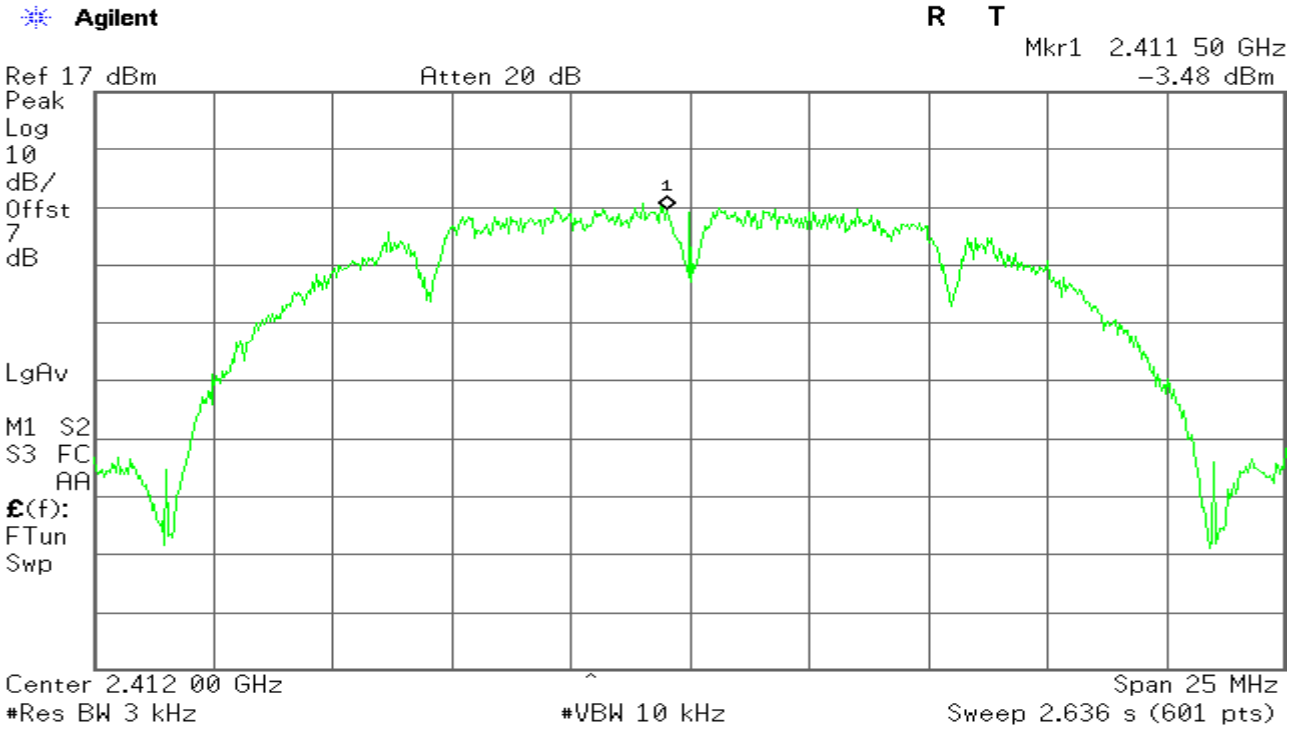
Channel	Frequency (MHz)	PPSD Chain 0 (dBm)	PPSD Chain 1 (dBm)	PPSD Total (dBm)	Limit (dBm)	Result
Low	5755	-9.49	-9.12	-6.29	8	PASS
High	5795	-9.75	-9.71	-6.72	8	PASS

Remark: *Total PPSD (dBm) = 10*LOG(10^(Chain 0 PPSD / 10)+10^(Chain 1 PPSD /10))*

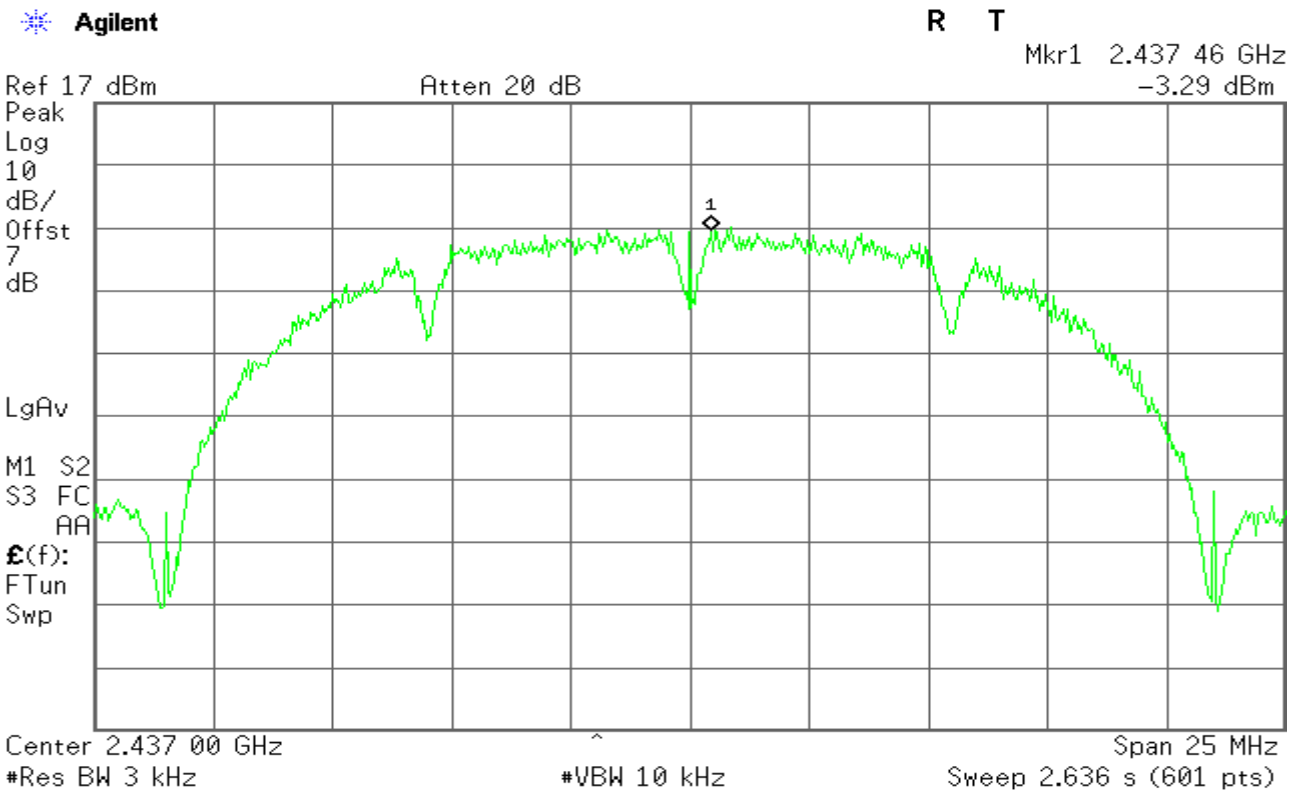
Test Plot

IEEE 802.11b mode

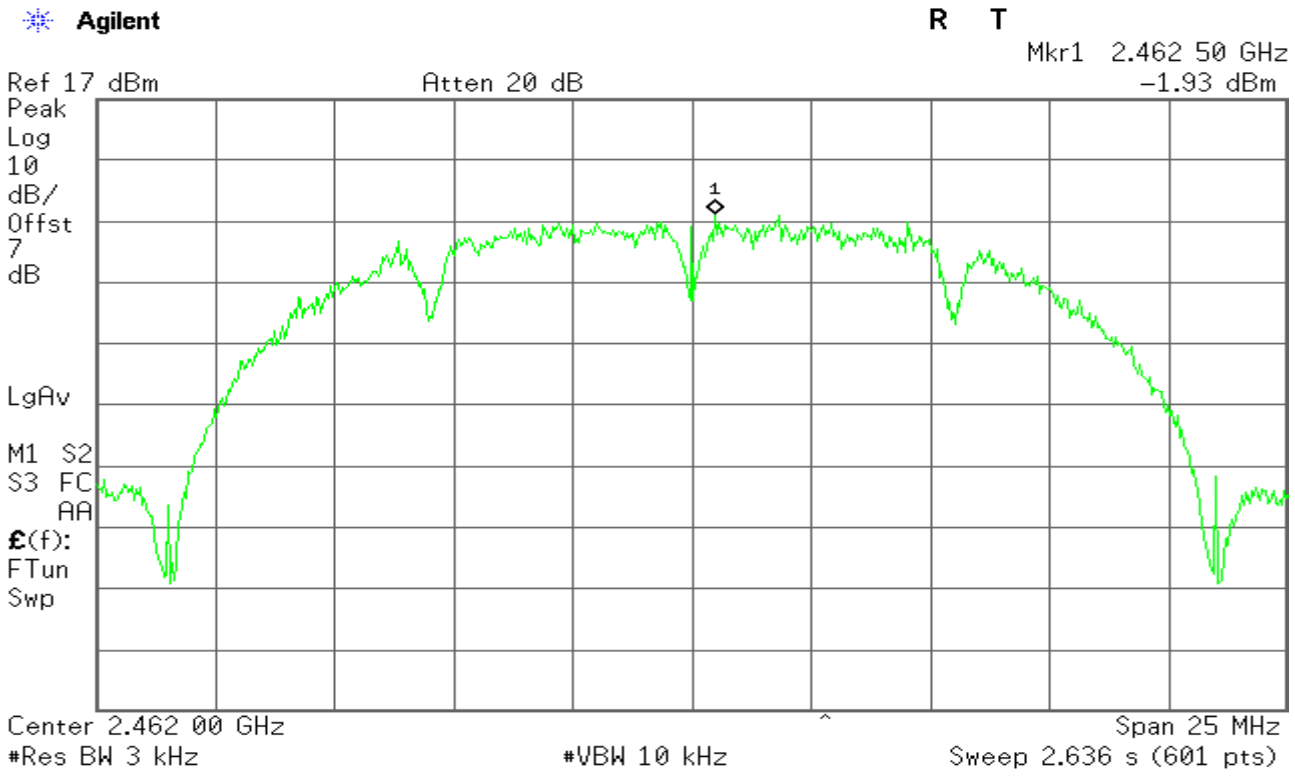
PPSD (CH Low)



PPSD (CH Mid)

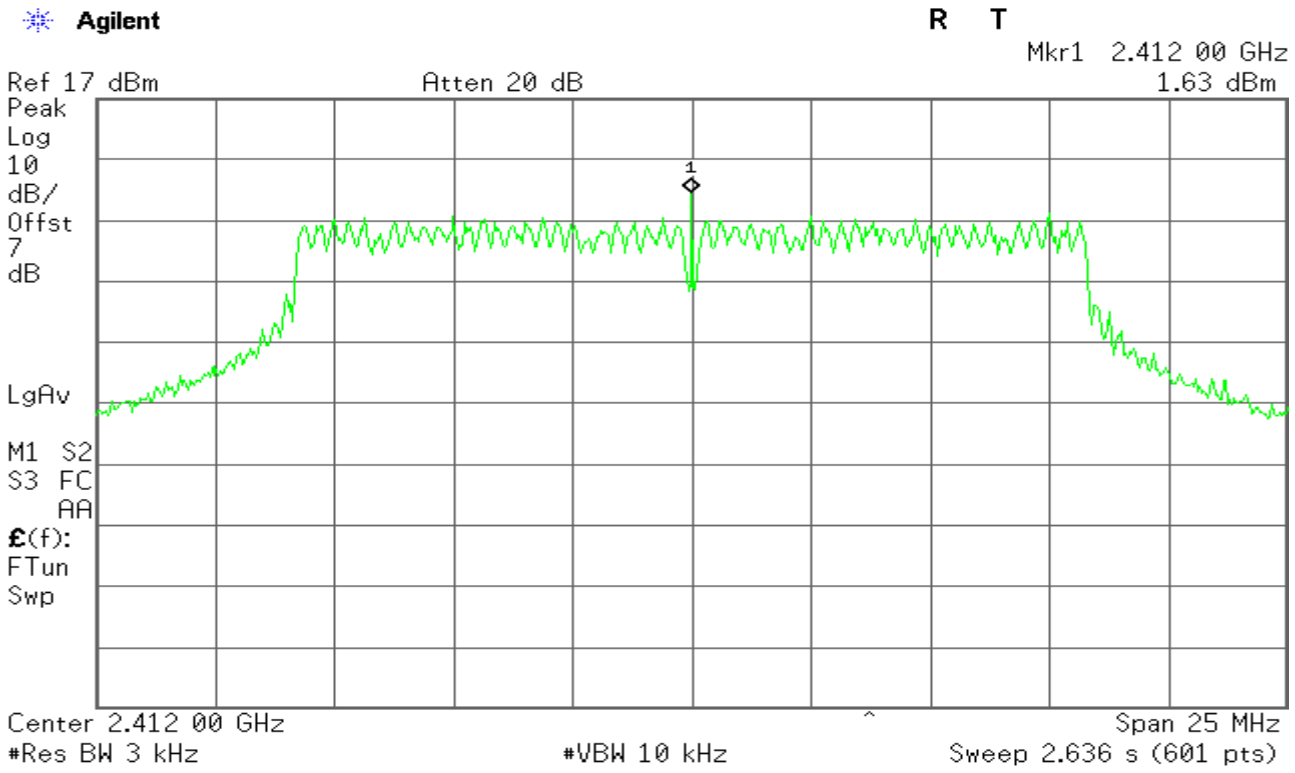


PPSD (CH High)

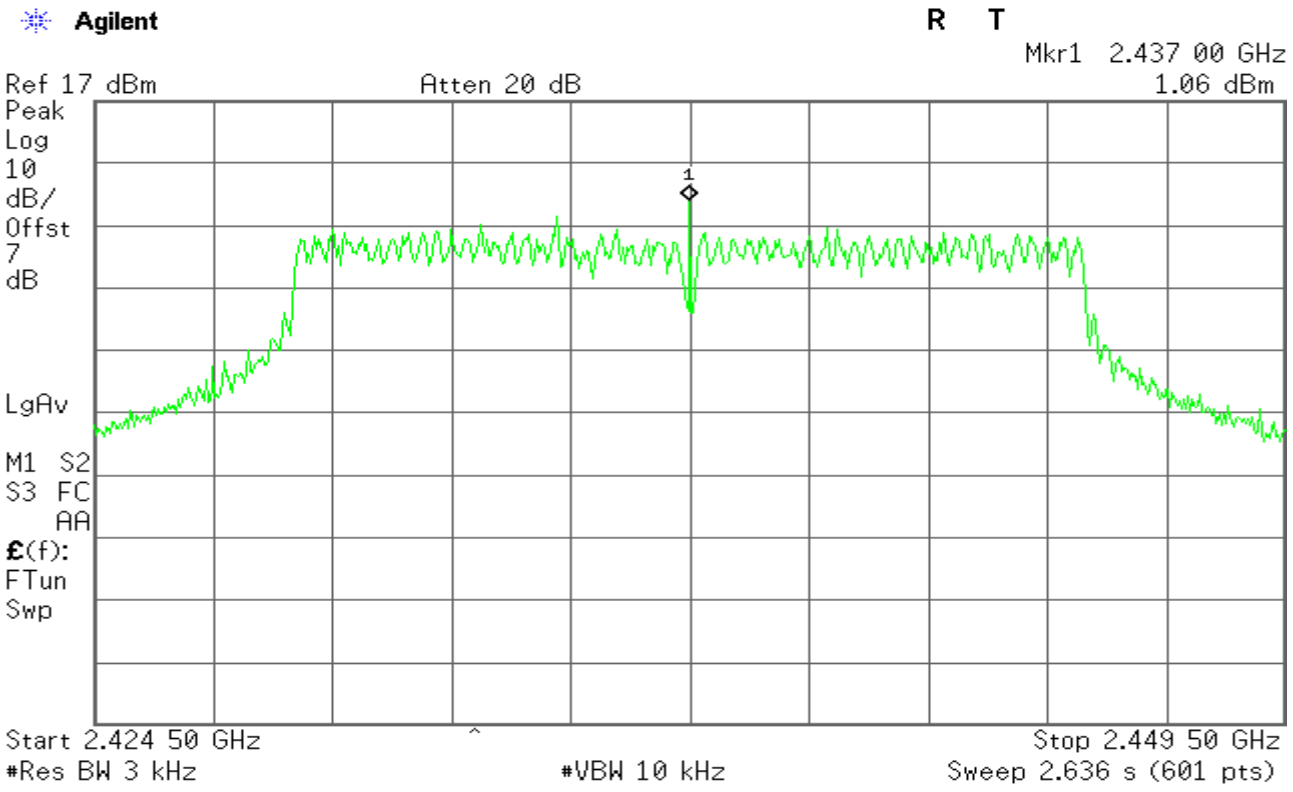


IEEE 802.11g mode

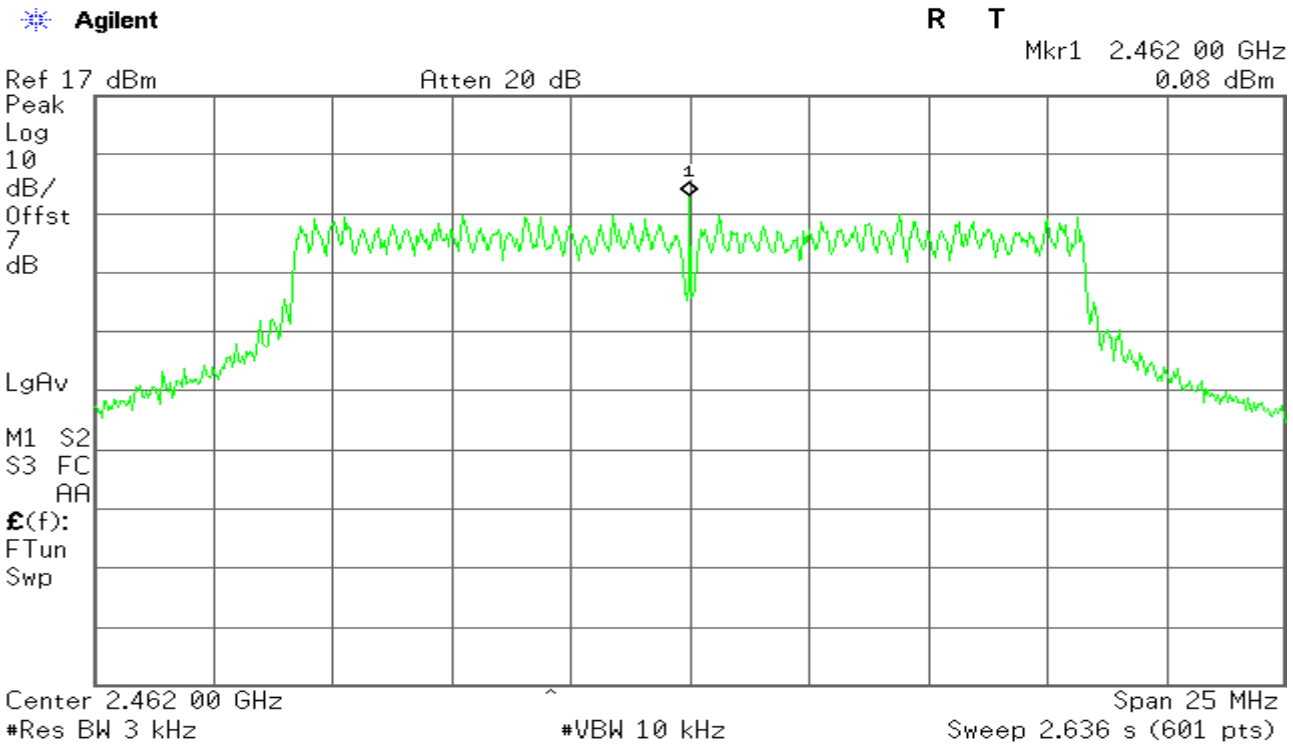
PPSD (CH Low)



PPSD (CH Mid)

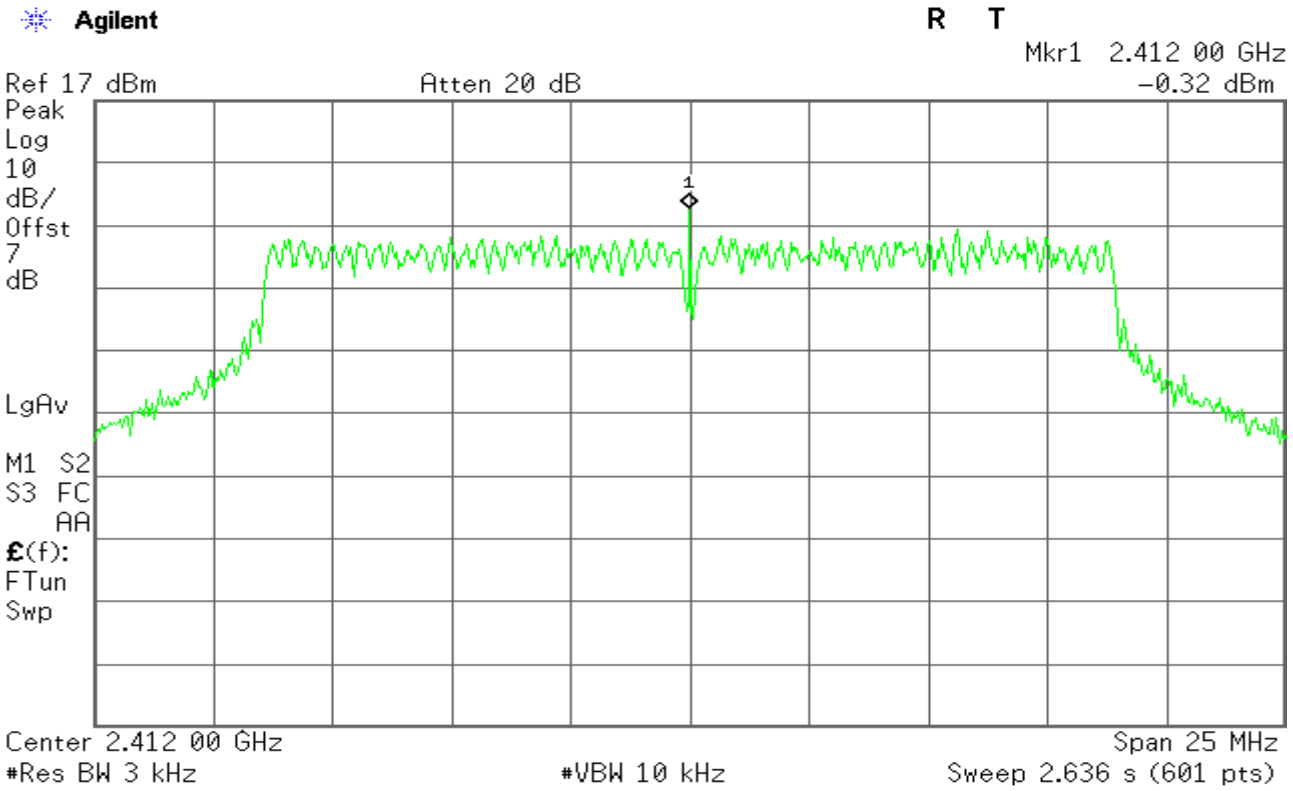


PPSD (CH High)

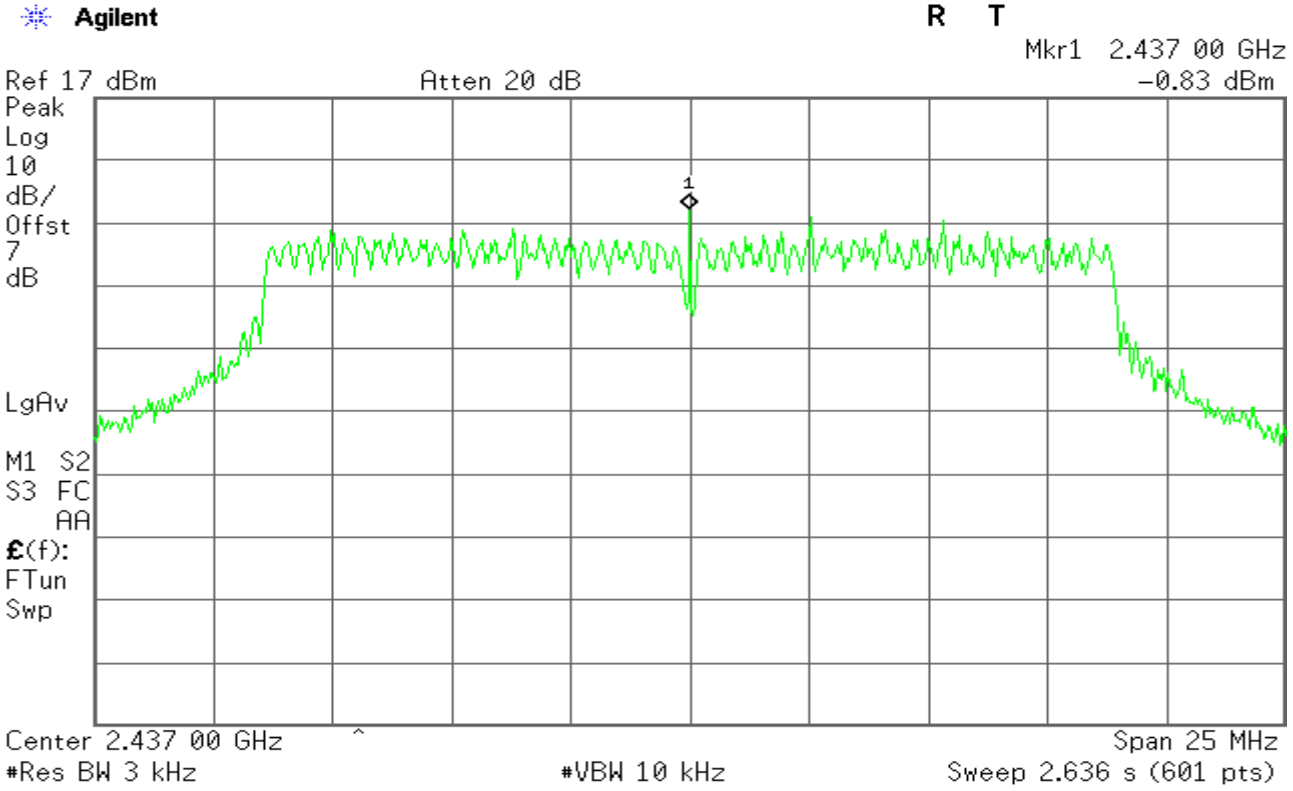


802.11n Standard-20 MHz Channel mode / Chain 0

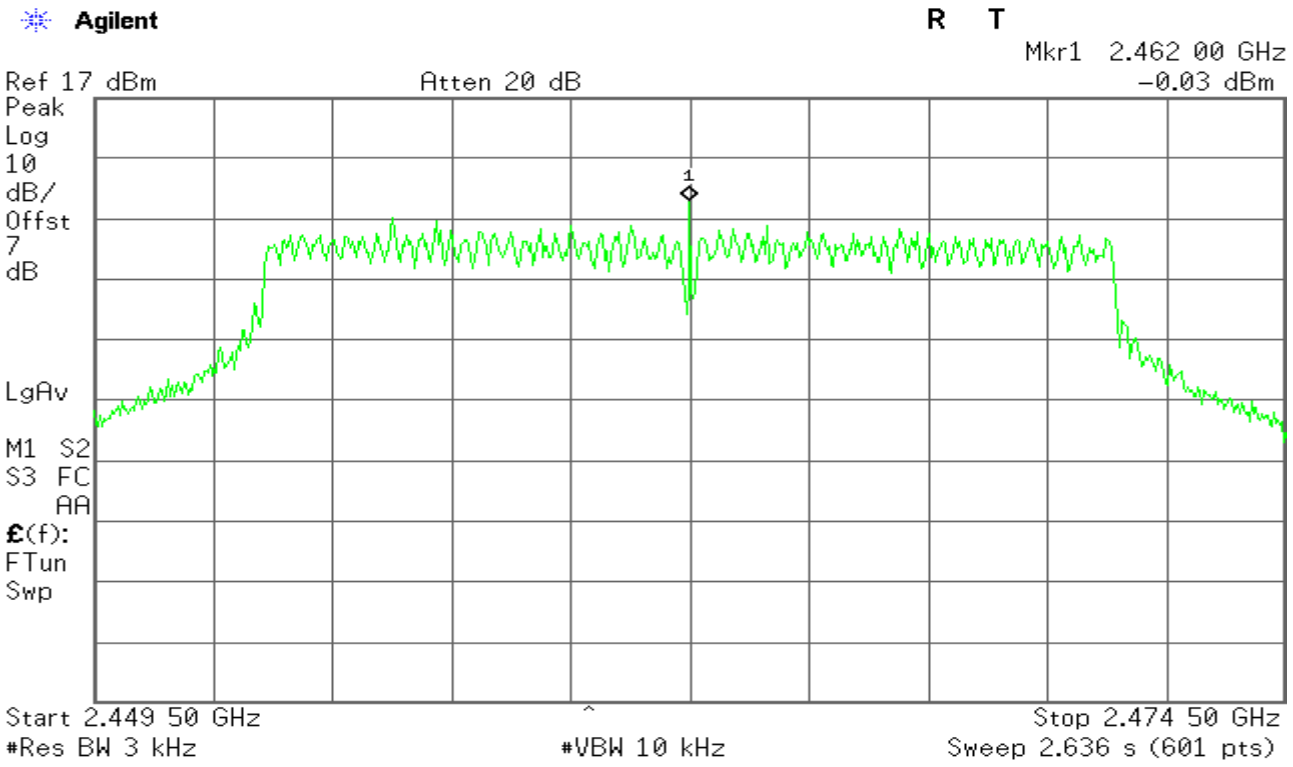
PPSD (CH Low)



PPSD (CH Mid)

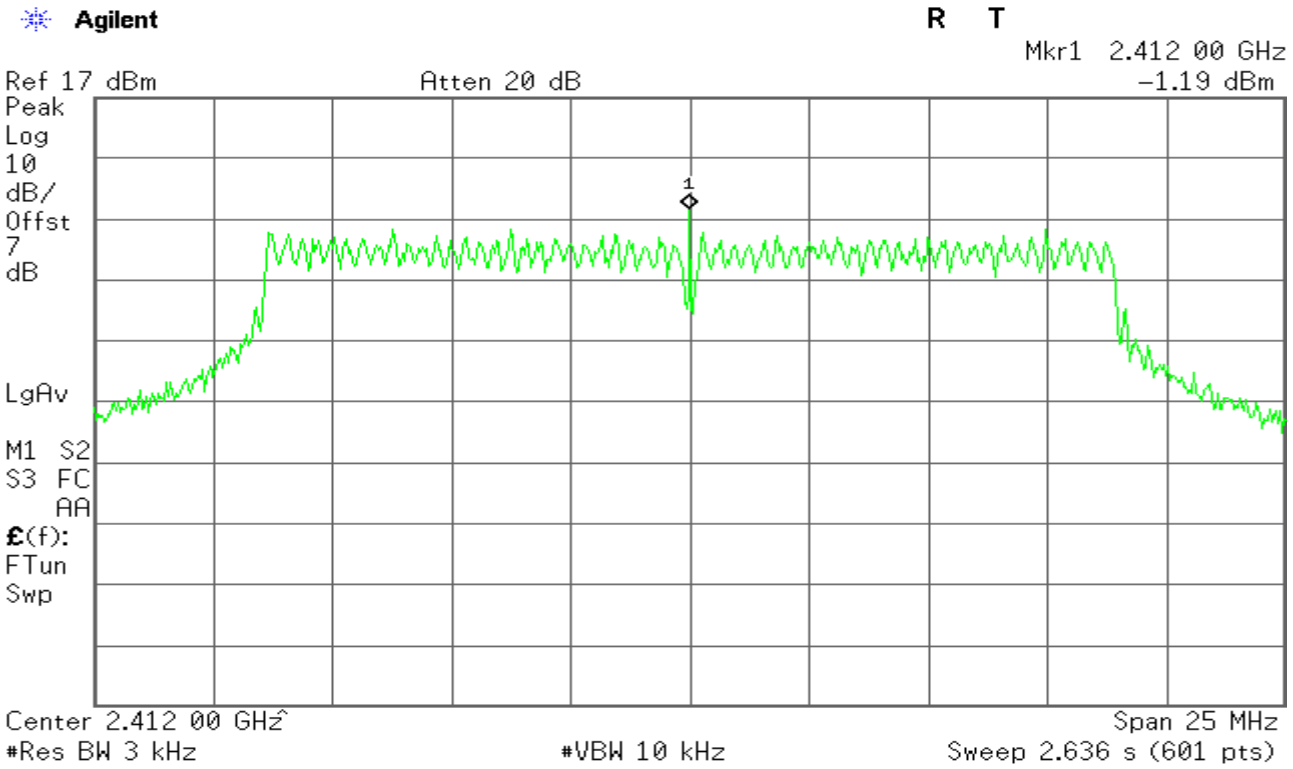


PPSD (CH High)

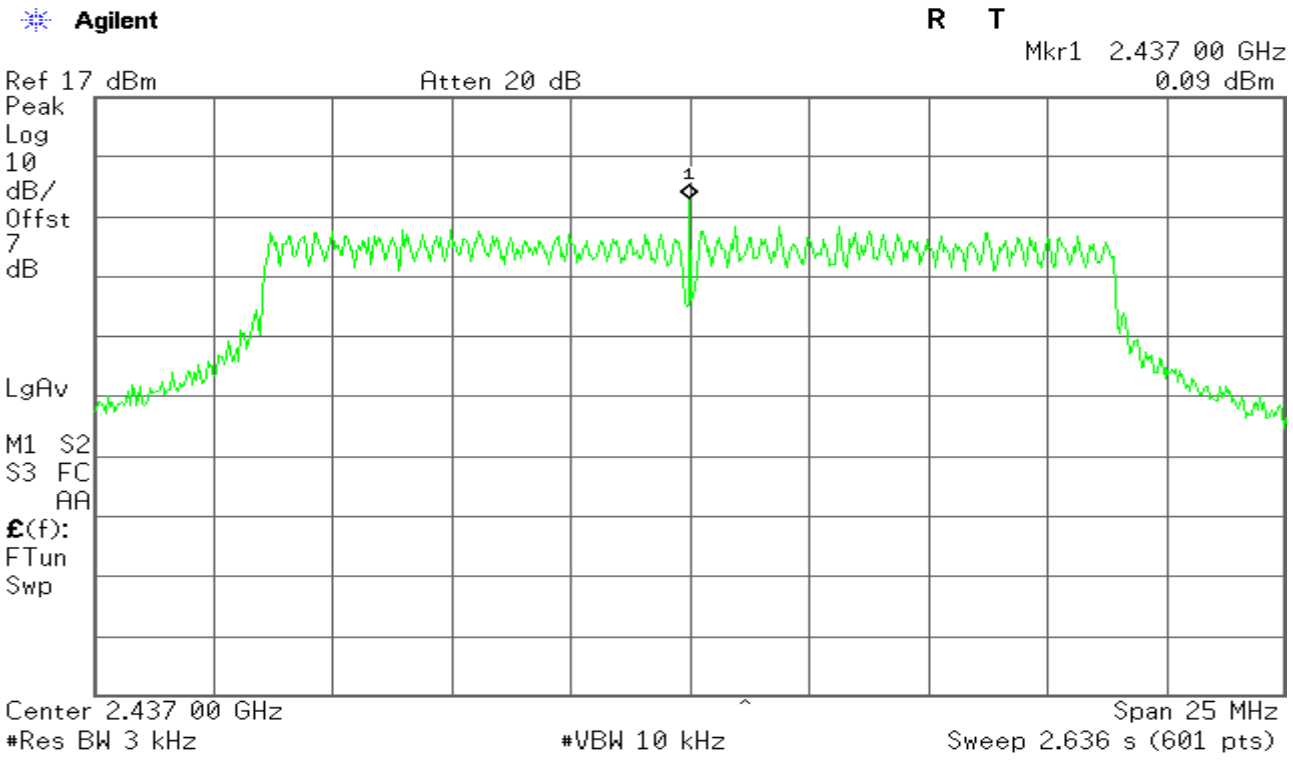


802.11n Standard-20 MHz Channel mode / Chain 1

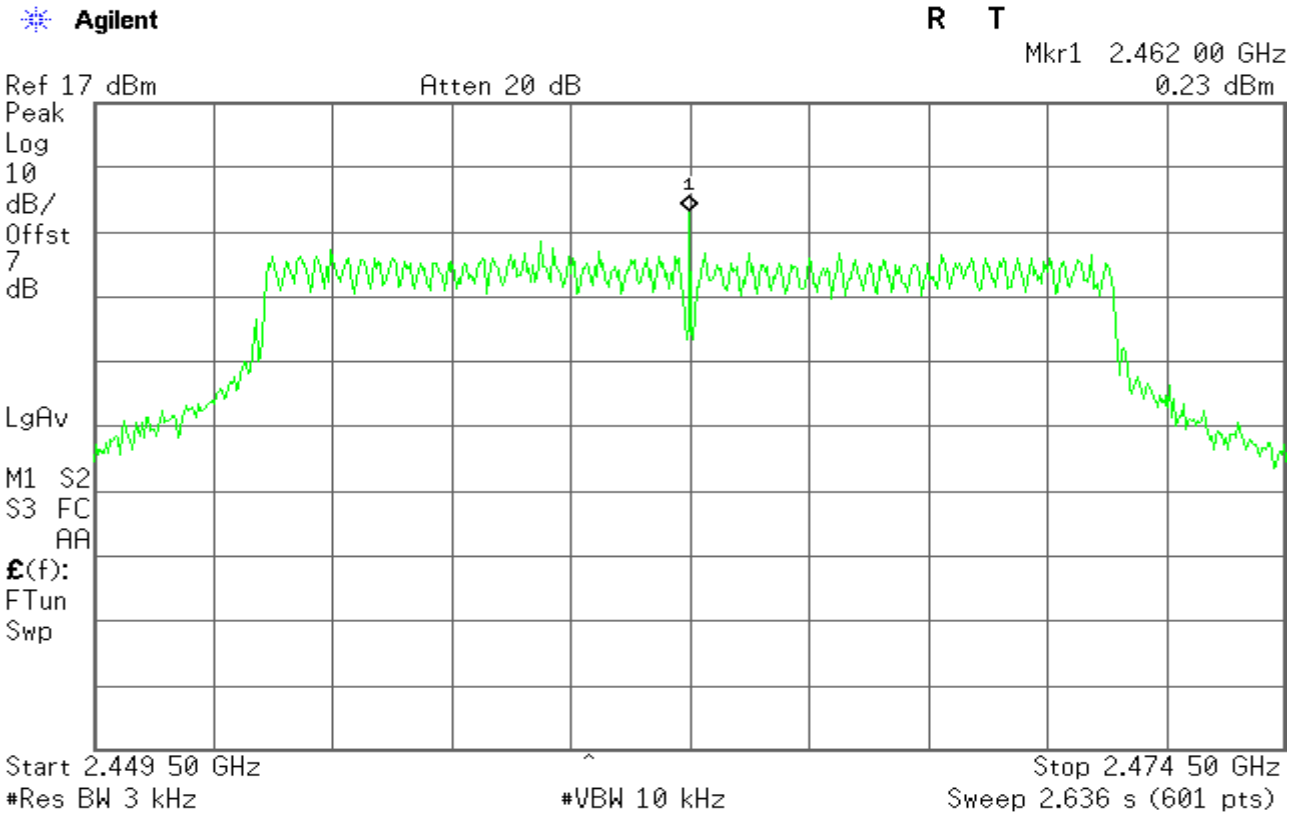
PPSD (CH Low)



PPSD (CH Mid)

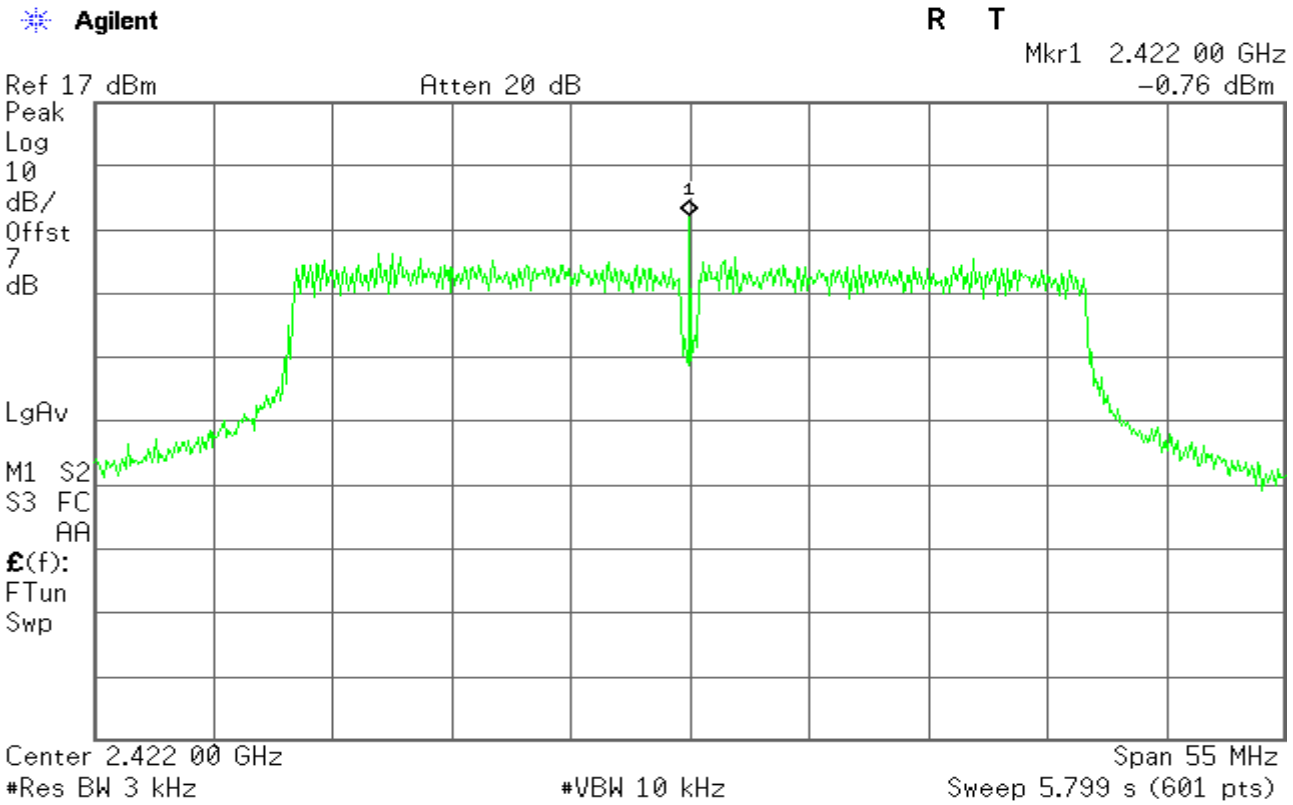


PPSD (CH High)

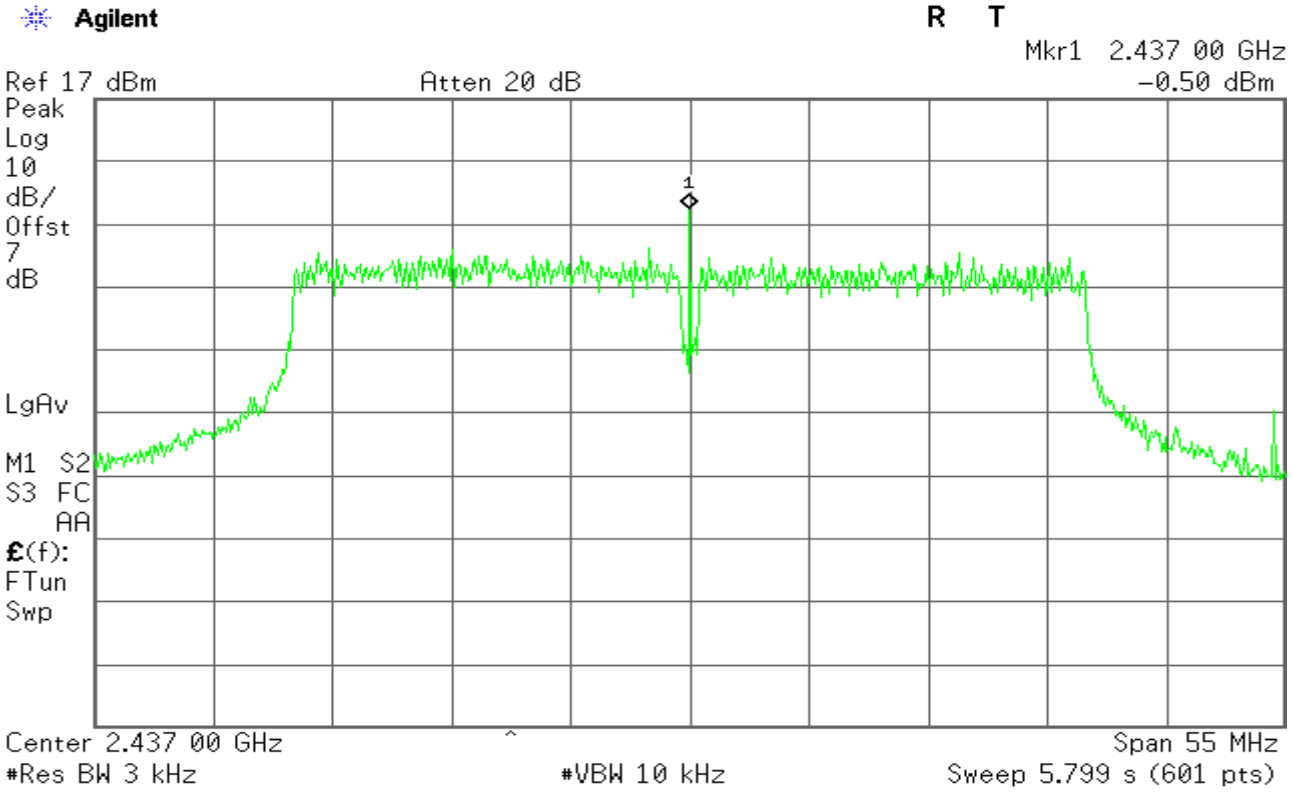


802.11n Wide-40 MHz Channel mode / Chain 0

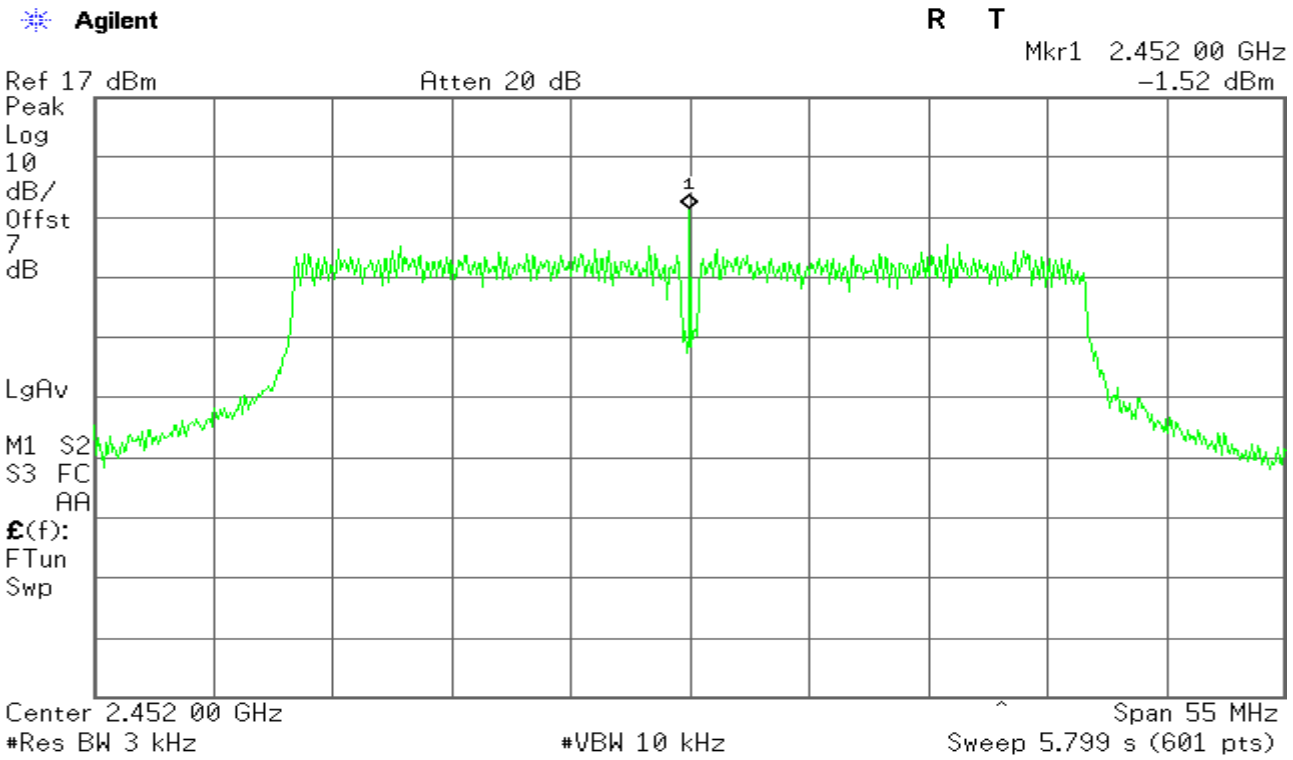
PPSD (CH Low)



PPSD (CH Mid)

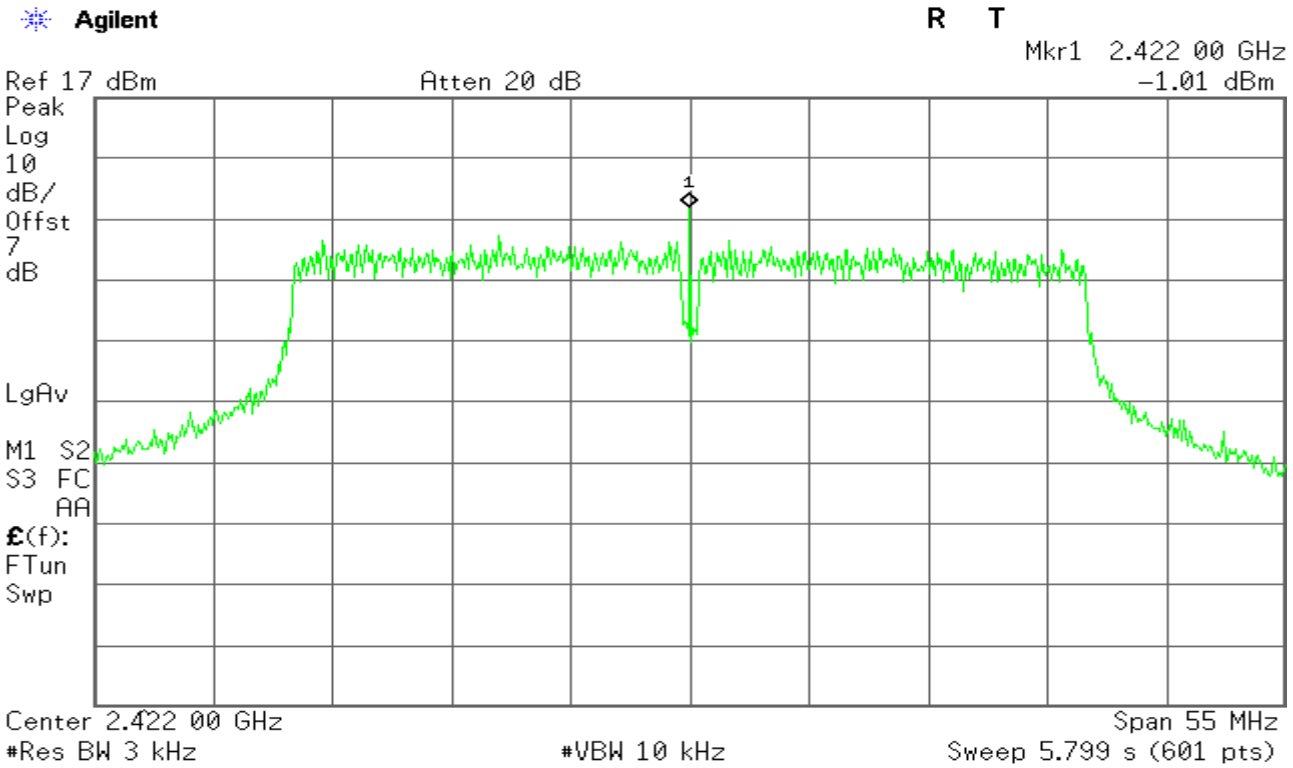


PPSD (CH High)

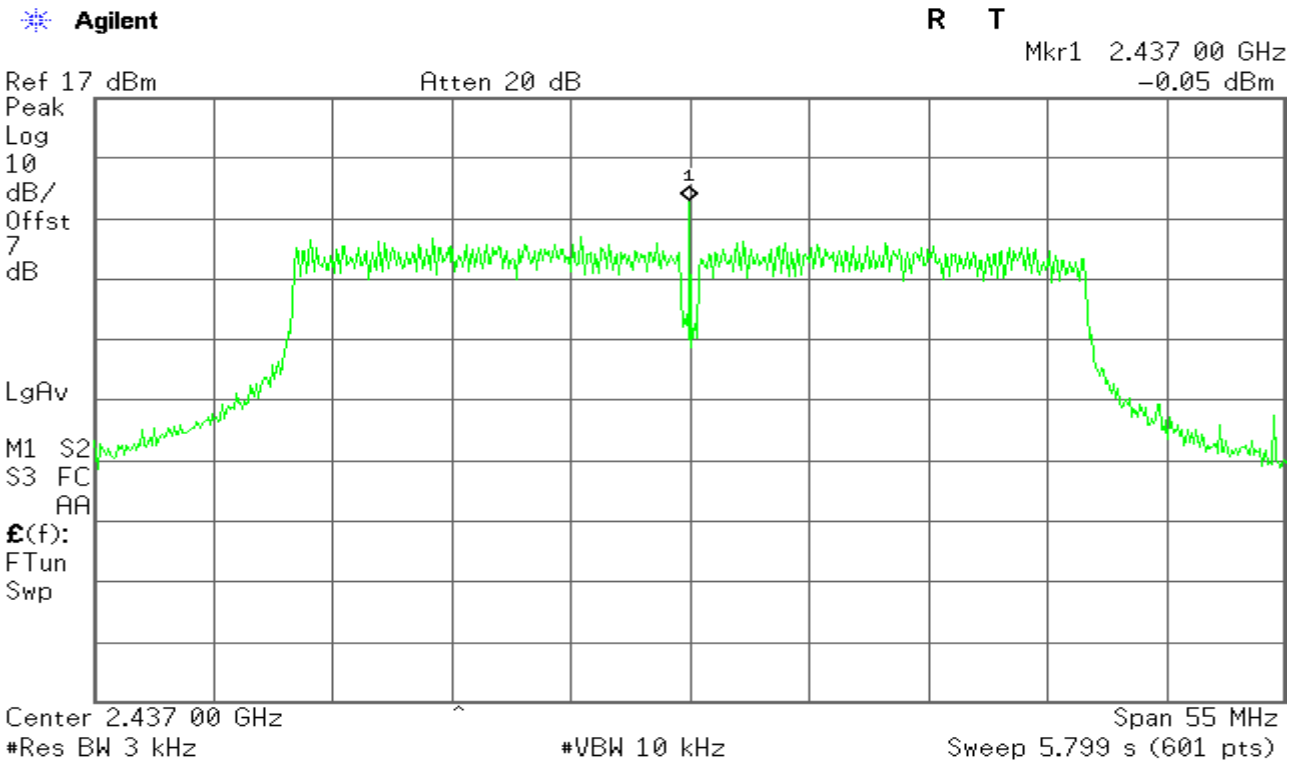


802.11n Wide-40 MHz Channel mode / Chain 1

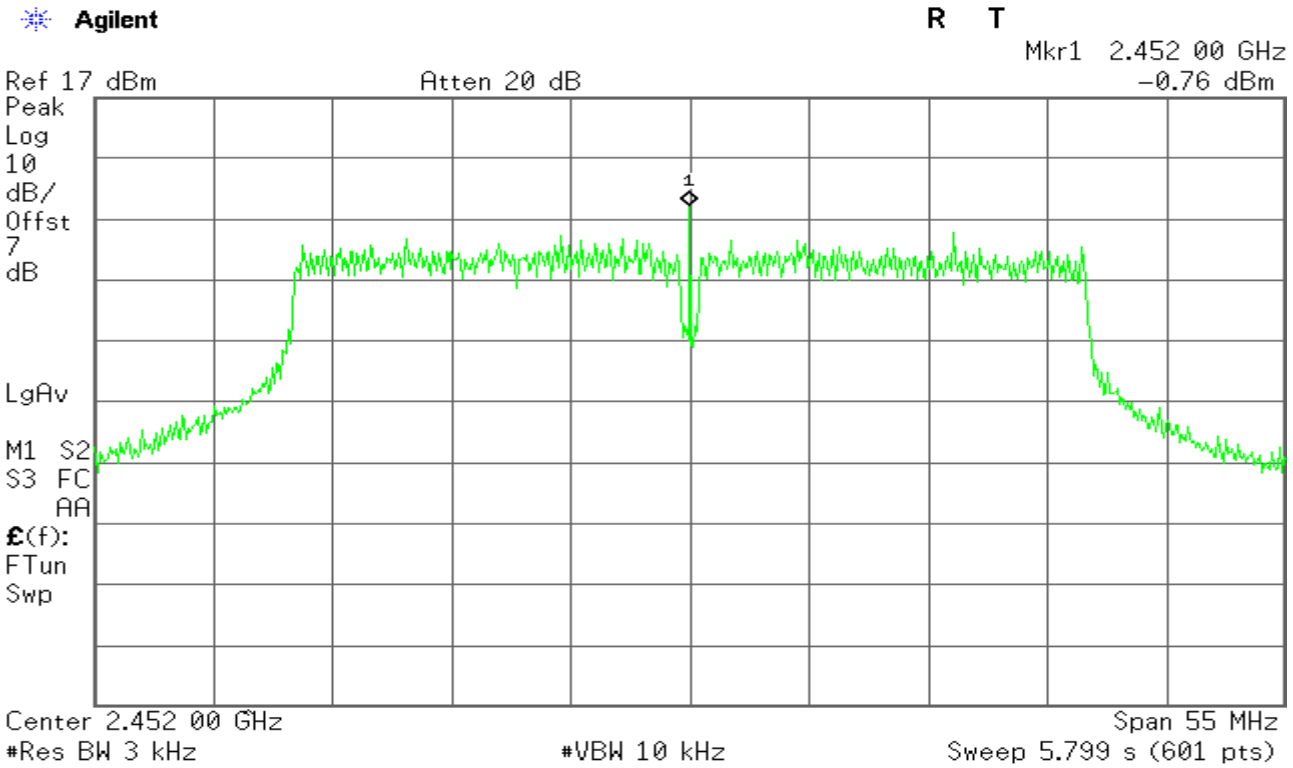
PPSD (CH Low)



PPSD (CH Mid)



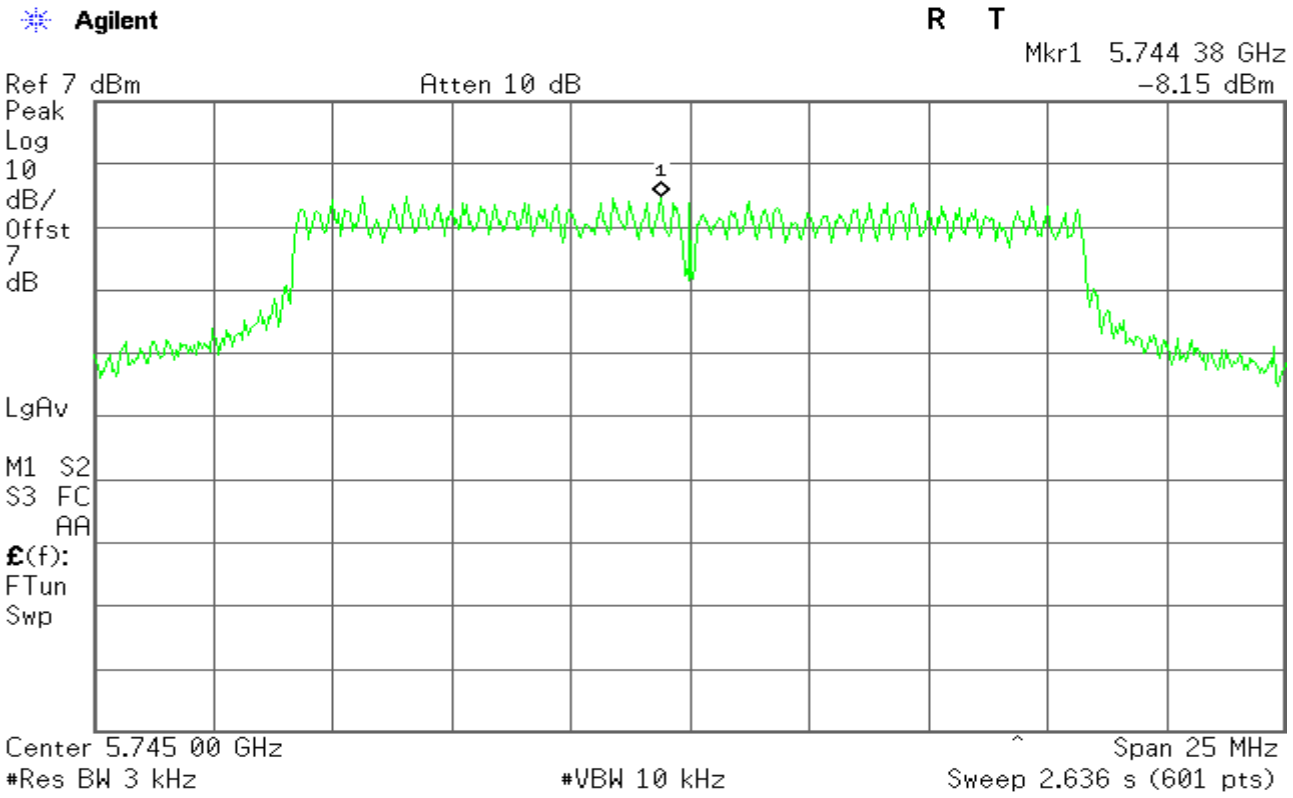
PPSD (CH High)



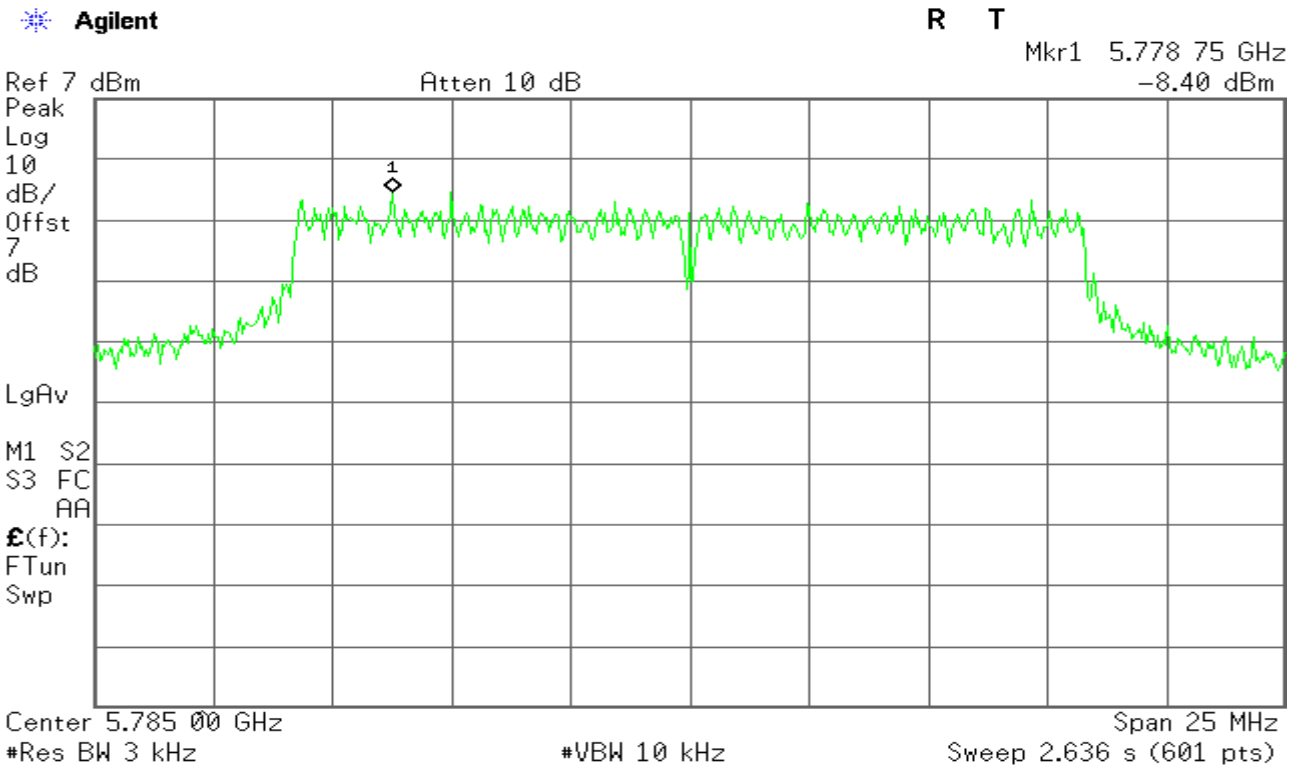
5725-5825

IEEE 802.11a mode

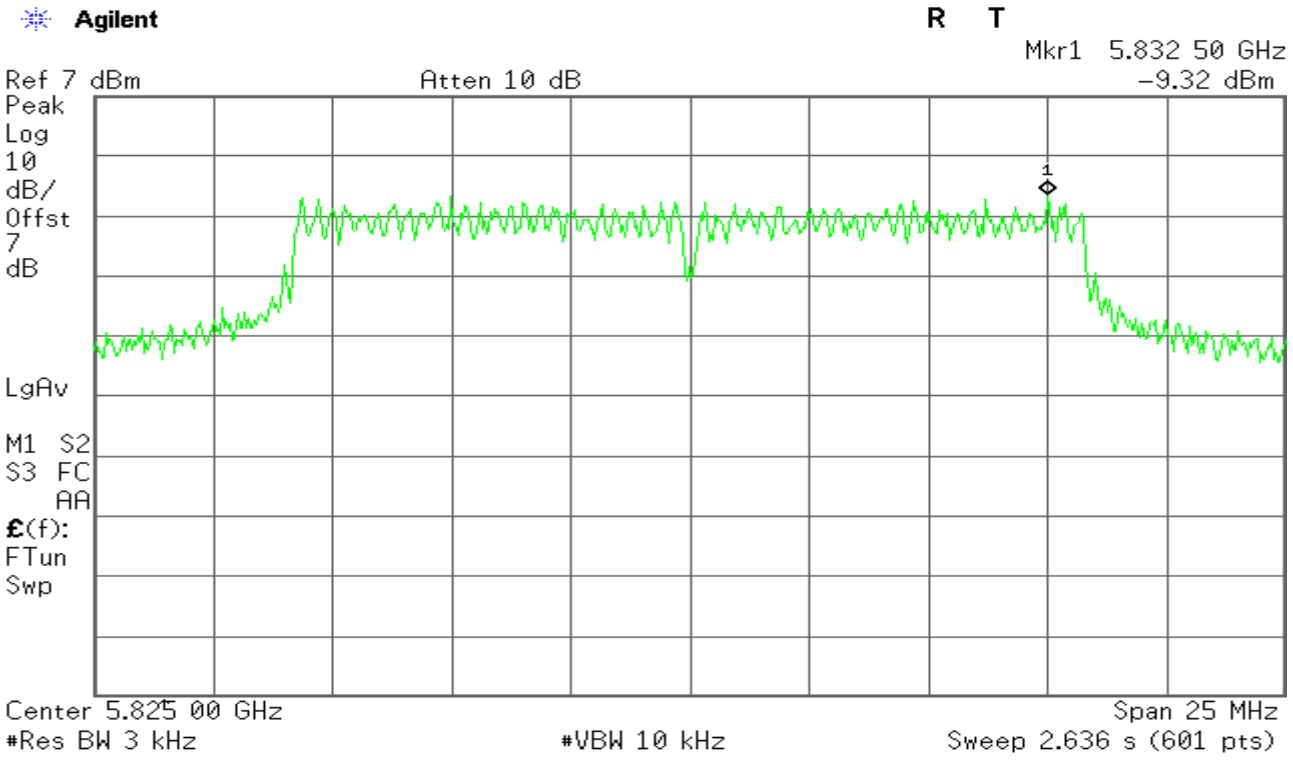
PPSD (CH Low)



PPSD (CH Mid)

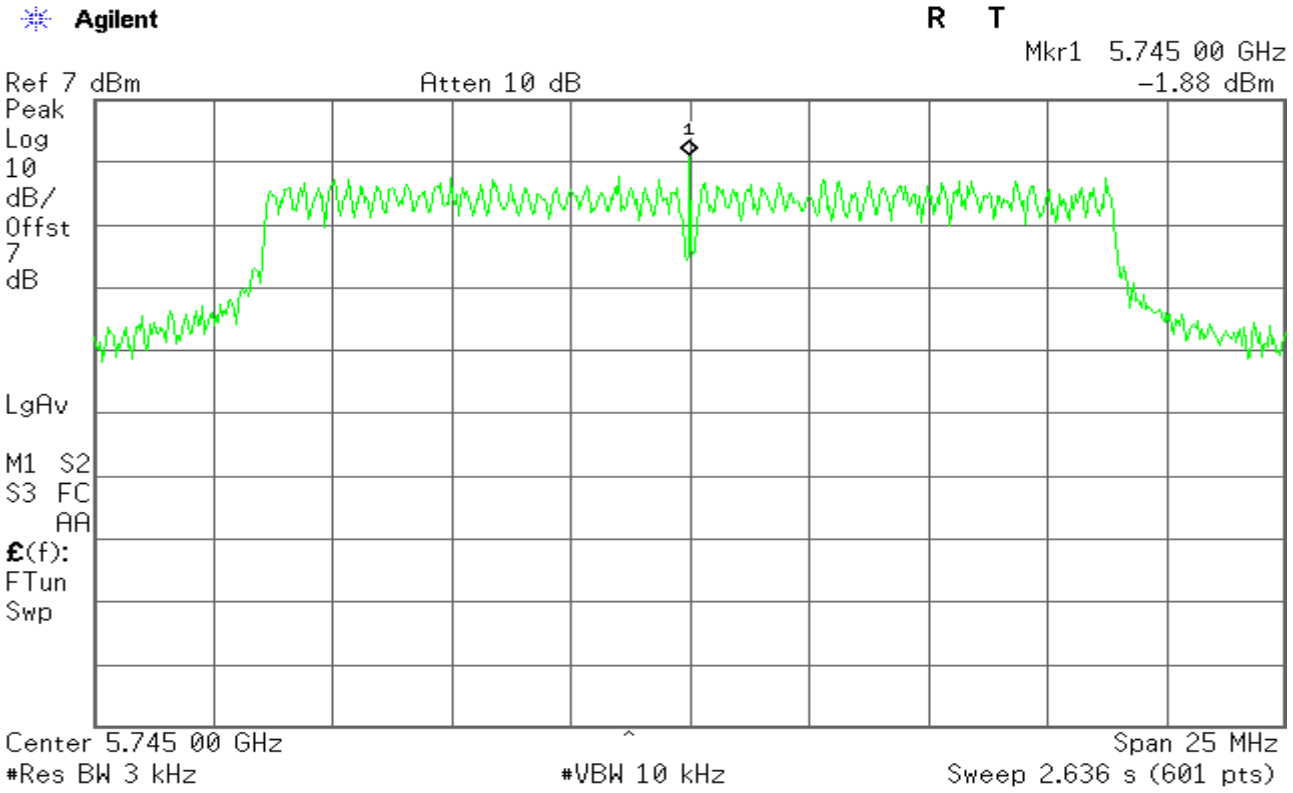


PPSD (CH High)

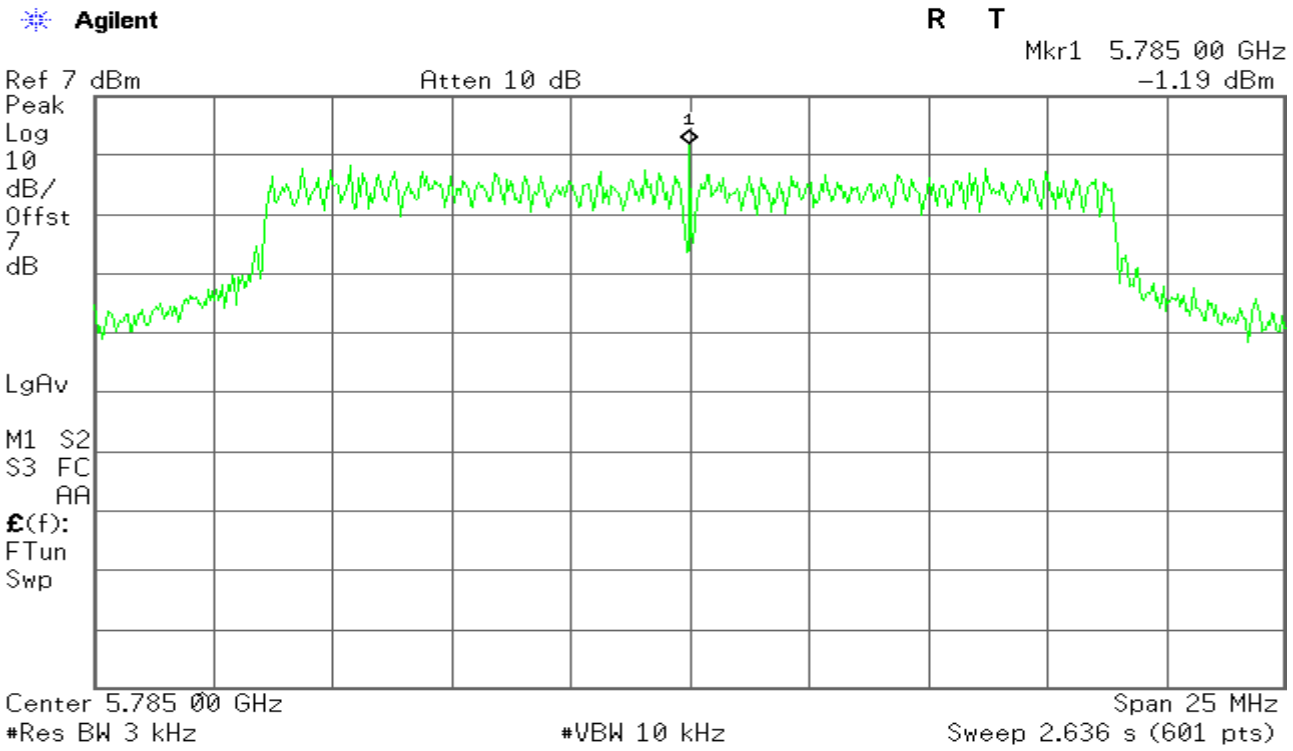


802.11an Standard-20 MHz Channel mode / Chain 0

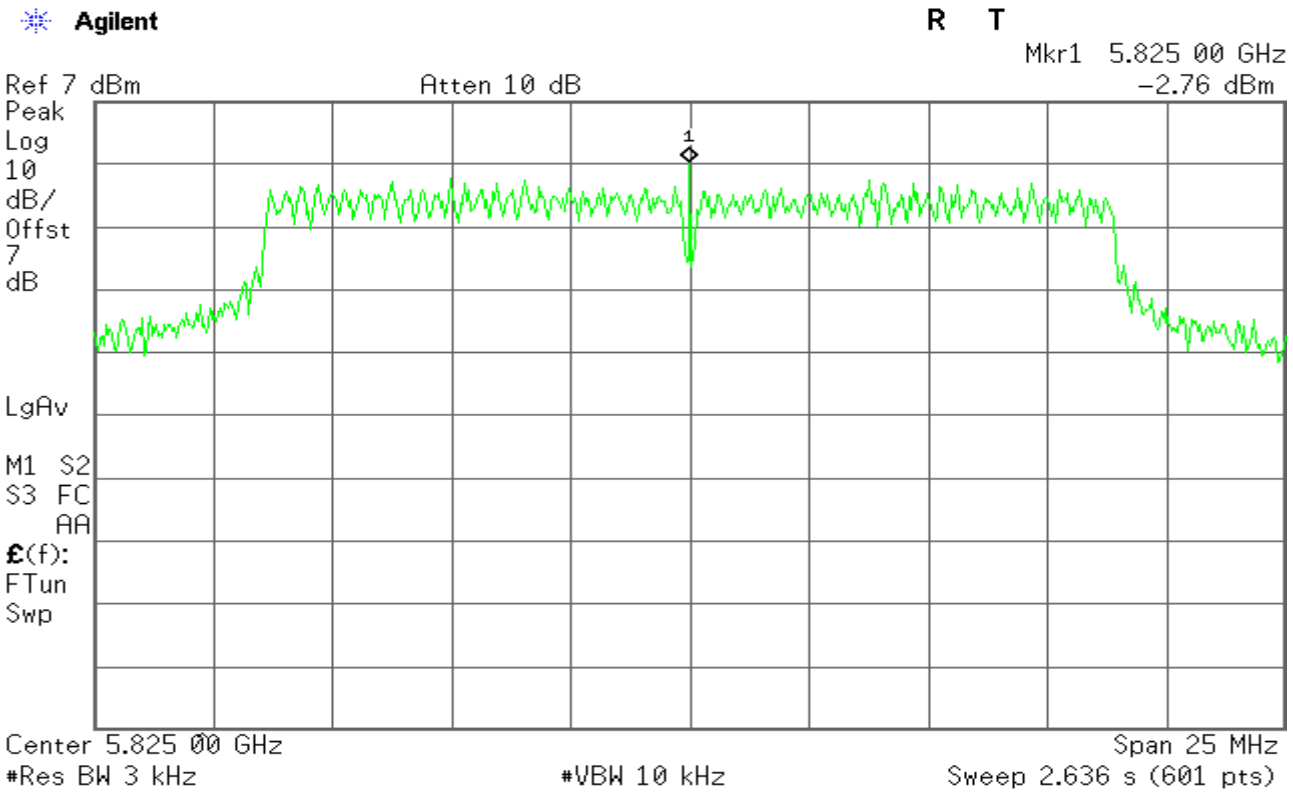
PPSD (CH Low)



PPSD (CH Mid)

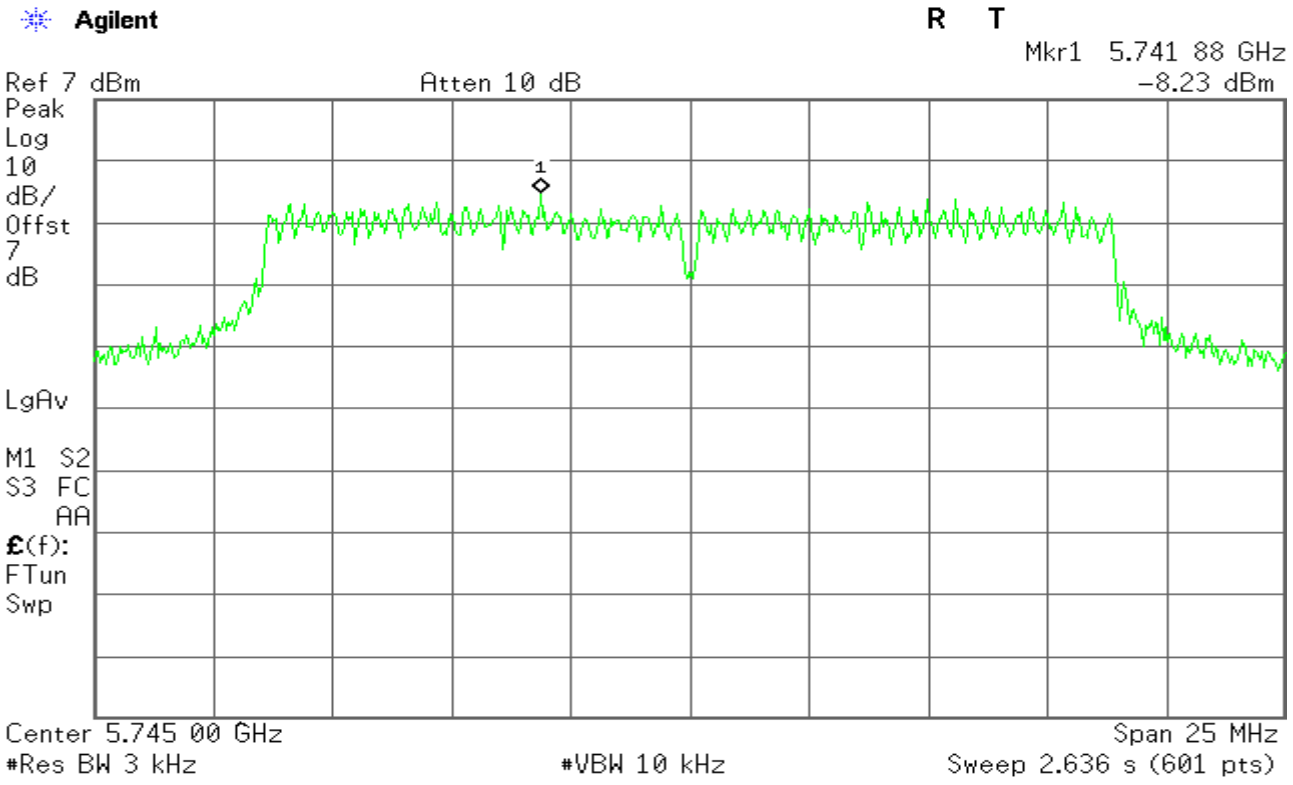


PPSD (CH High)

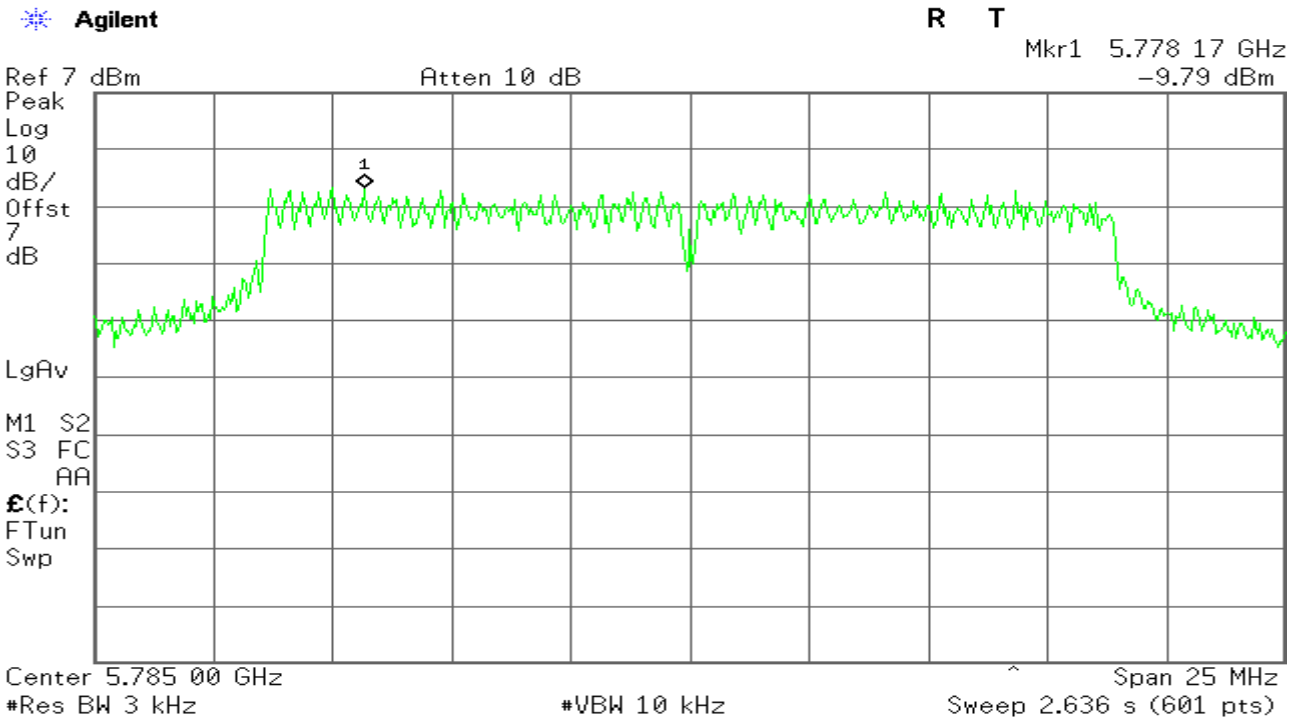


802.11an Standard-20 MHz Channel mode / Chain 1

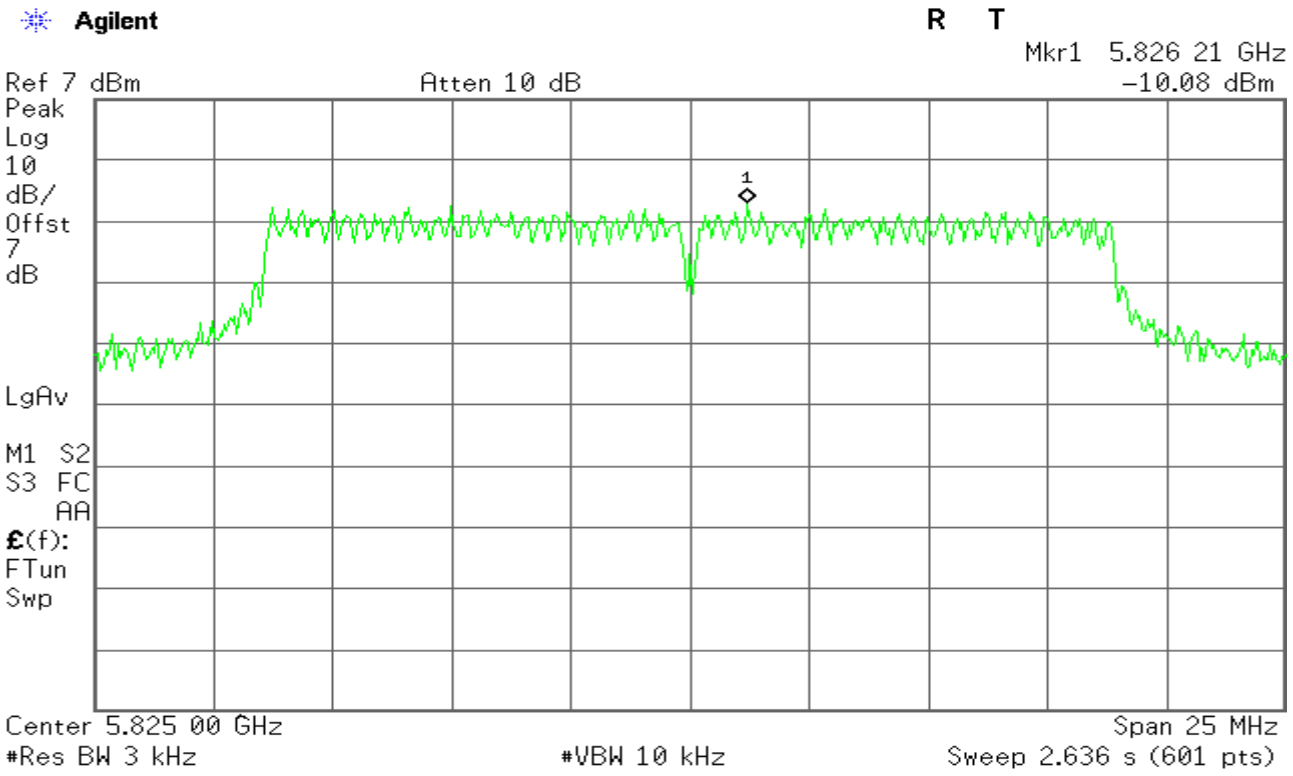
PPSD (CH Low)



PPSD (CH Mid)

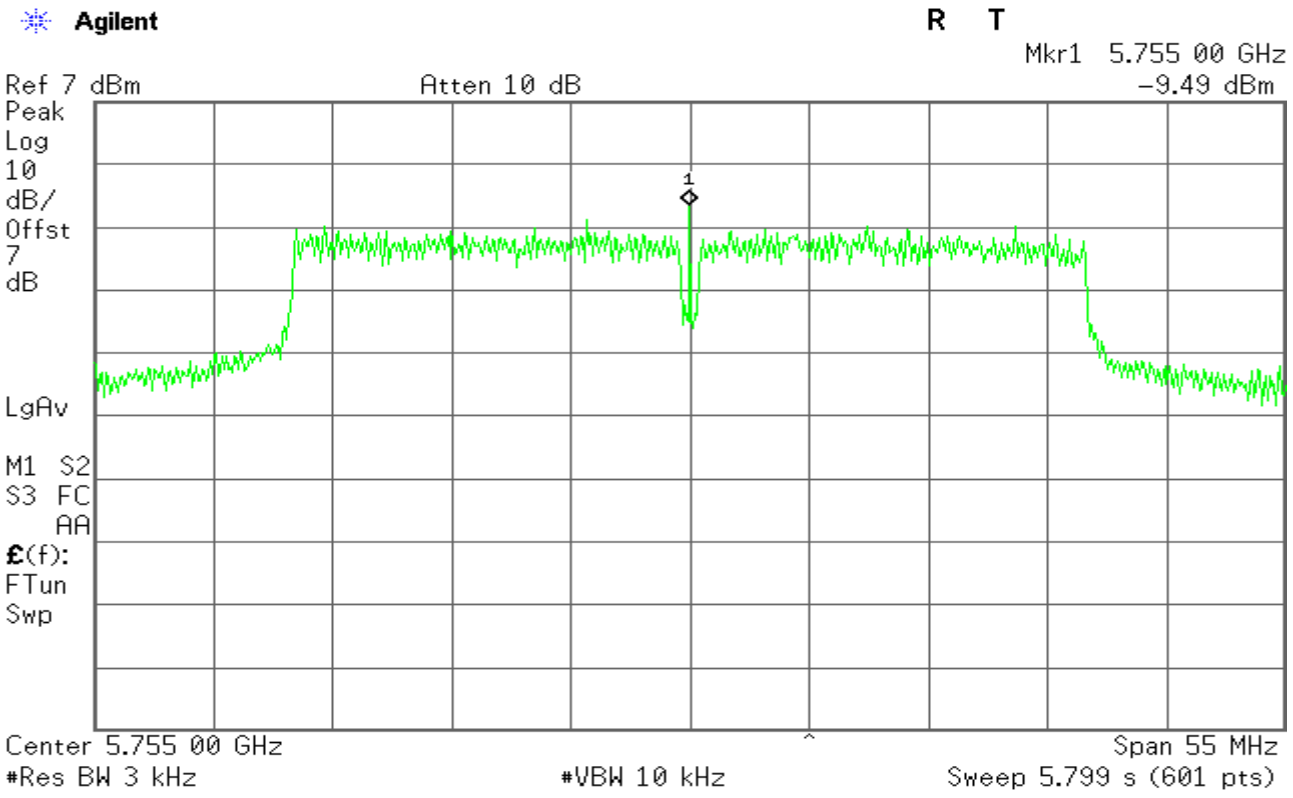


PPSD (CH High)

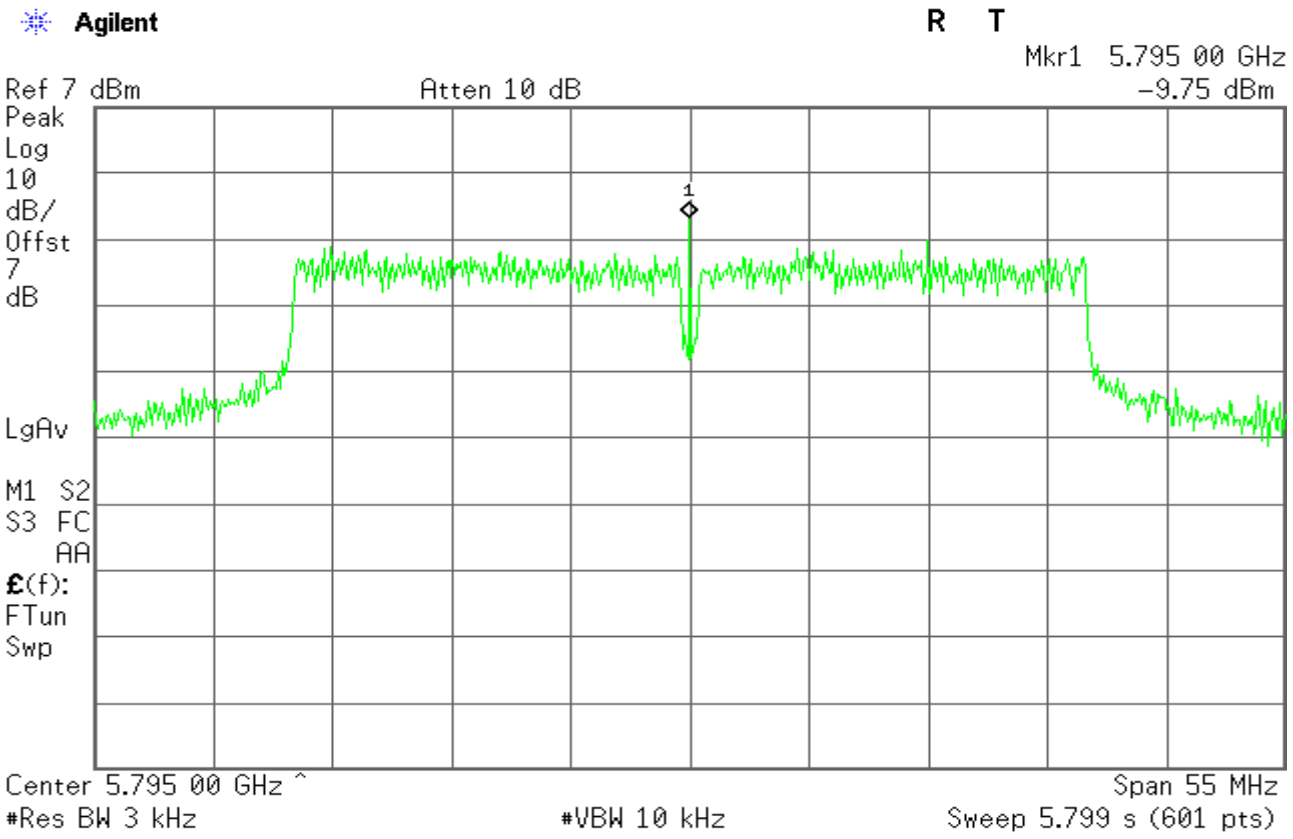


802.11an Standard-40 MHz Channel mode / Chain 0

PPSD (CH Low)

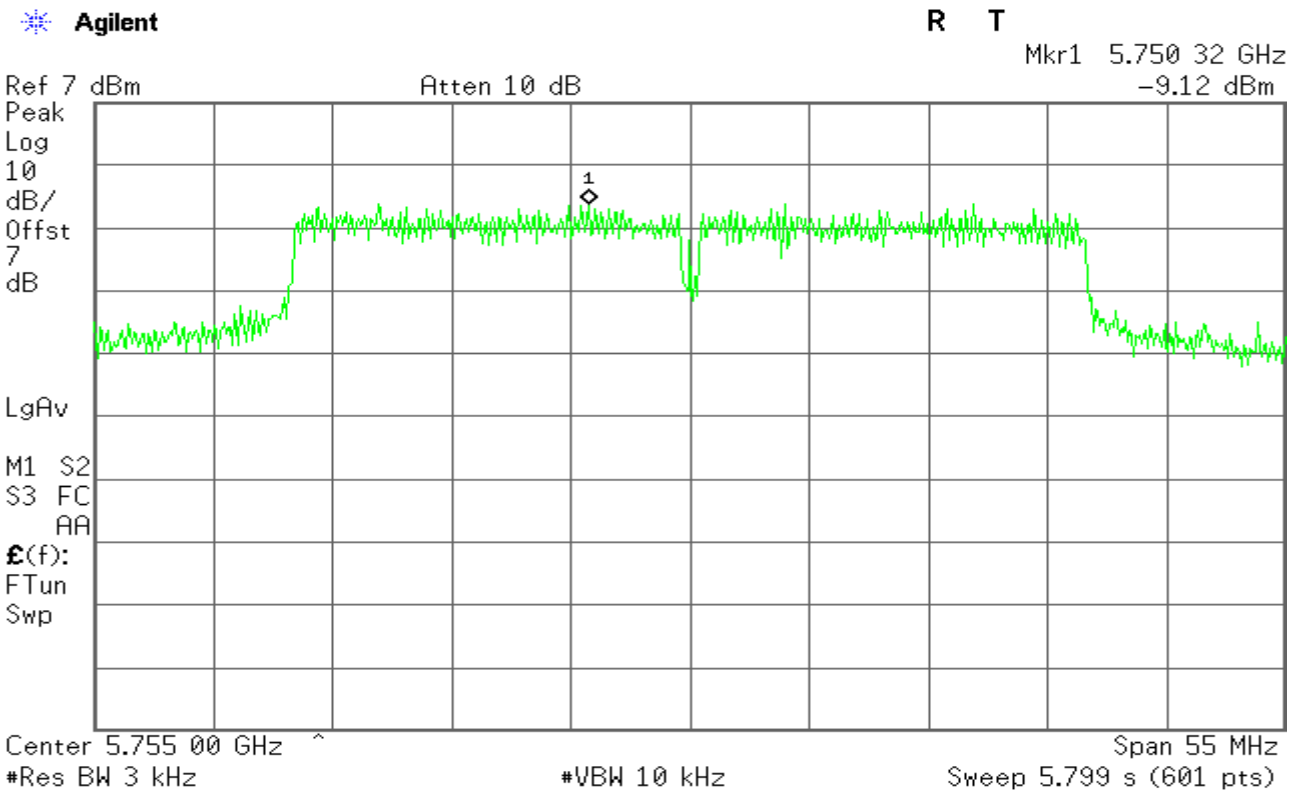


PPSD (CH High)

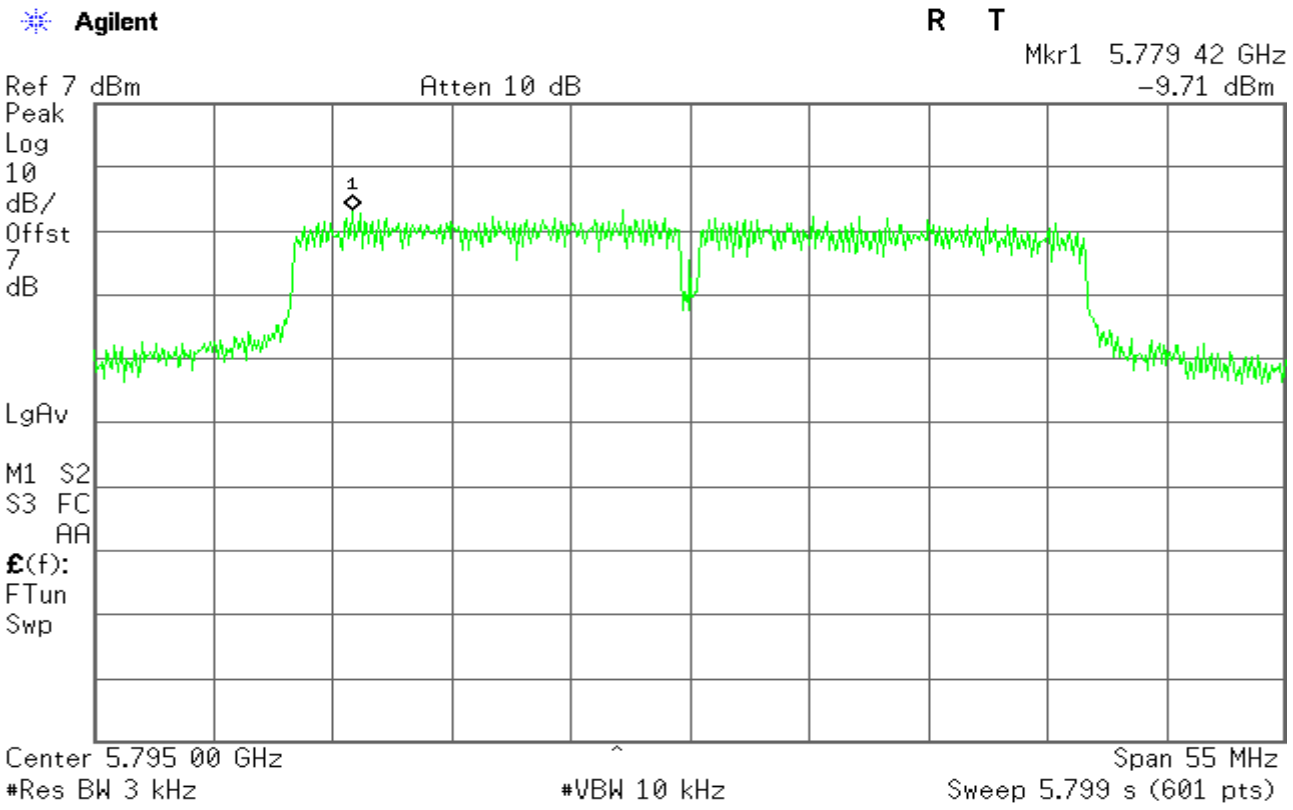


802.11an Standard-40 MHz Channel mode / Chain 1

PPSD (CH Low)



PPSD (CH High)



7.4. SPURIOUS EMISSIONS

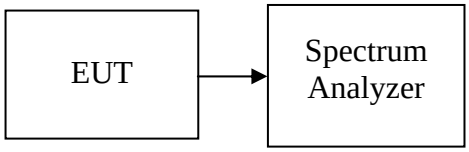
1.1.1. CONDUCTED MEASUREMENT

LIMIT

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

Conducted power was measured based on the use of RMS averaging over a time interval,therefore the required attenuntion is 30 dB.

Test Configuration



TEST PROCEDURE

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

Measurements are made over the 30MHz to 40GHz range with the transmitter set to the lowest, middle, and highest channels.

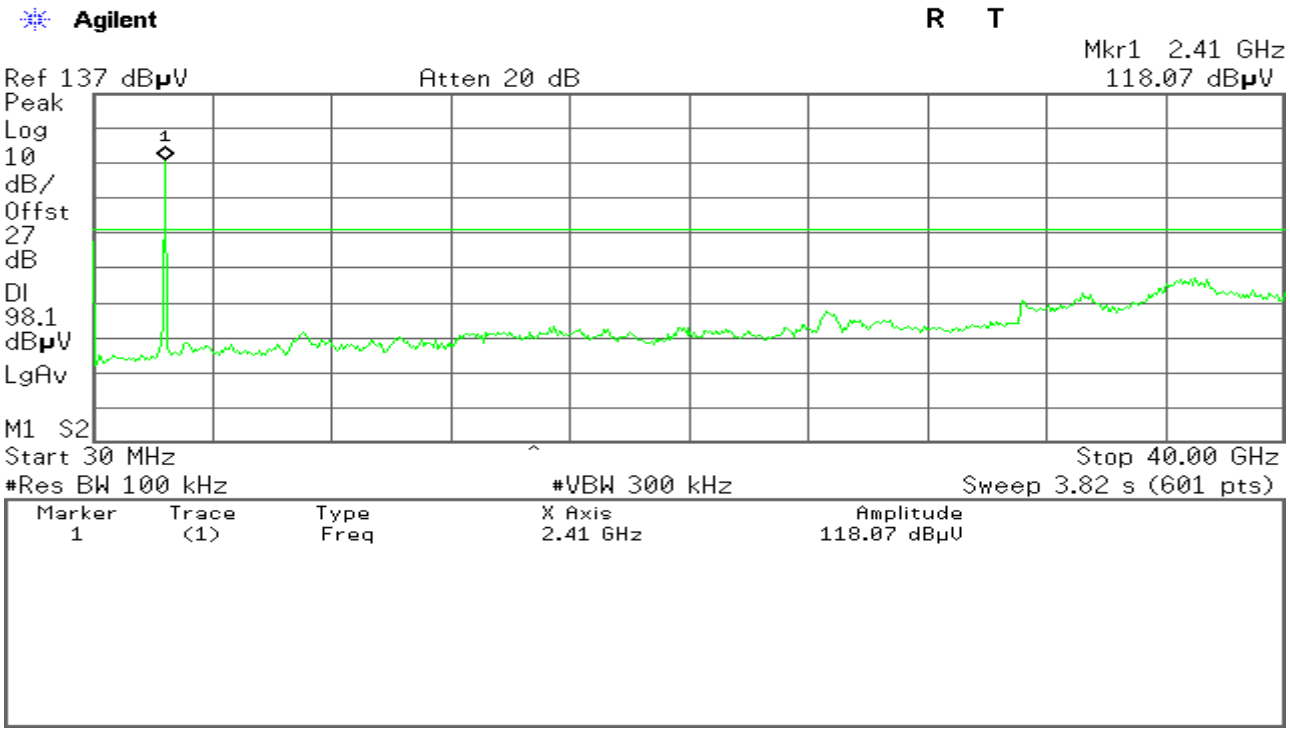
TEST RESULTS

No non-compliance noted

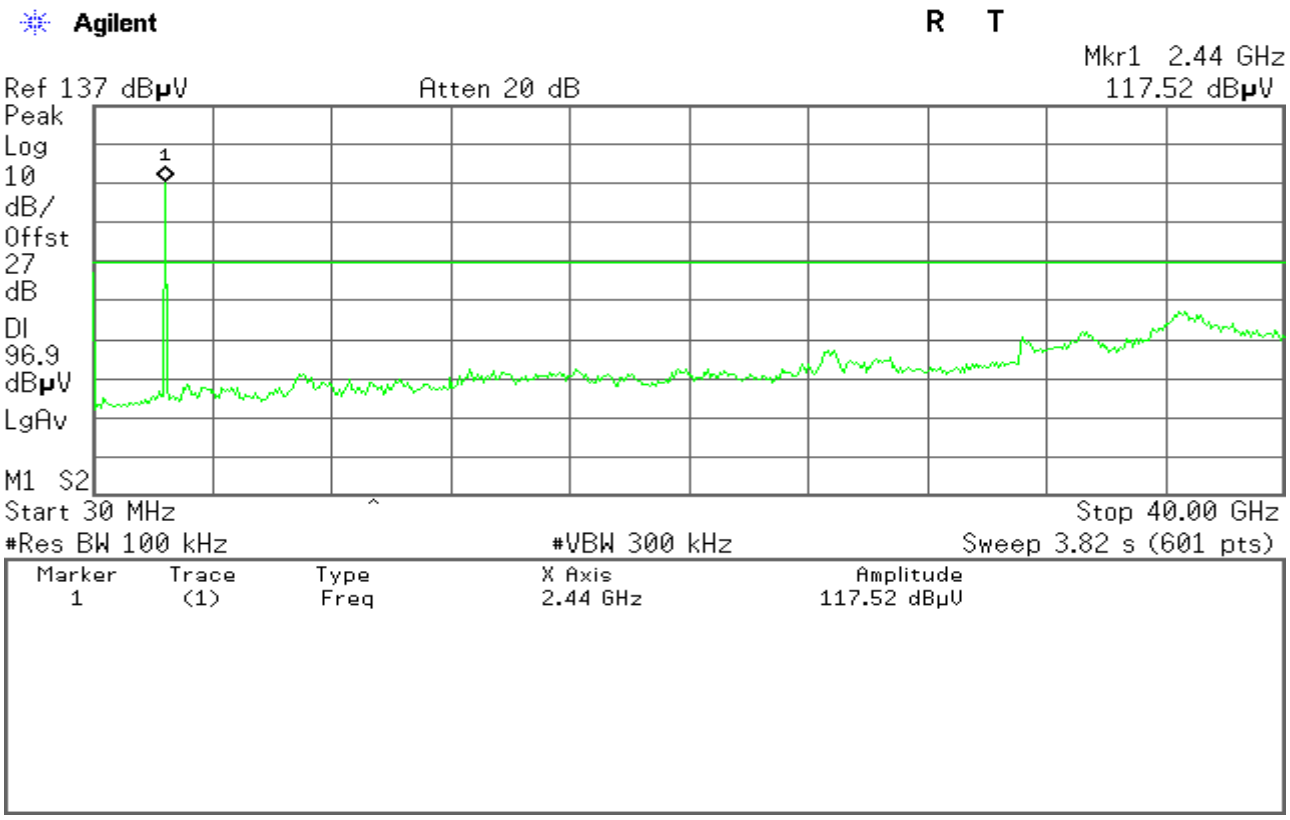
Test Plot

IEEE 802.11b mode

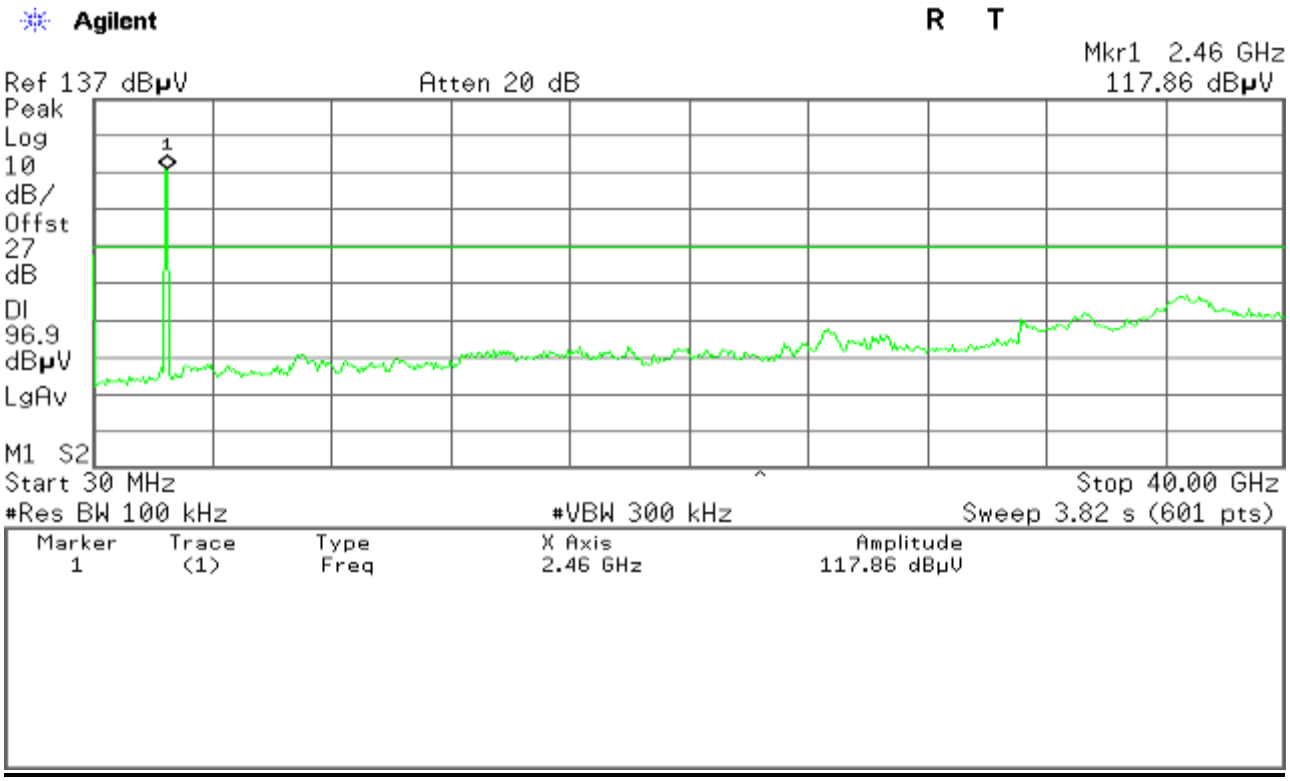
CH Low



CH Mid

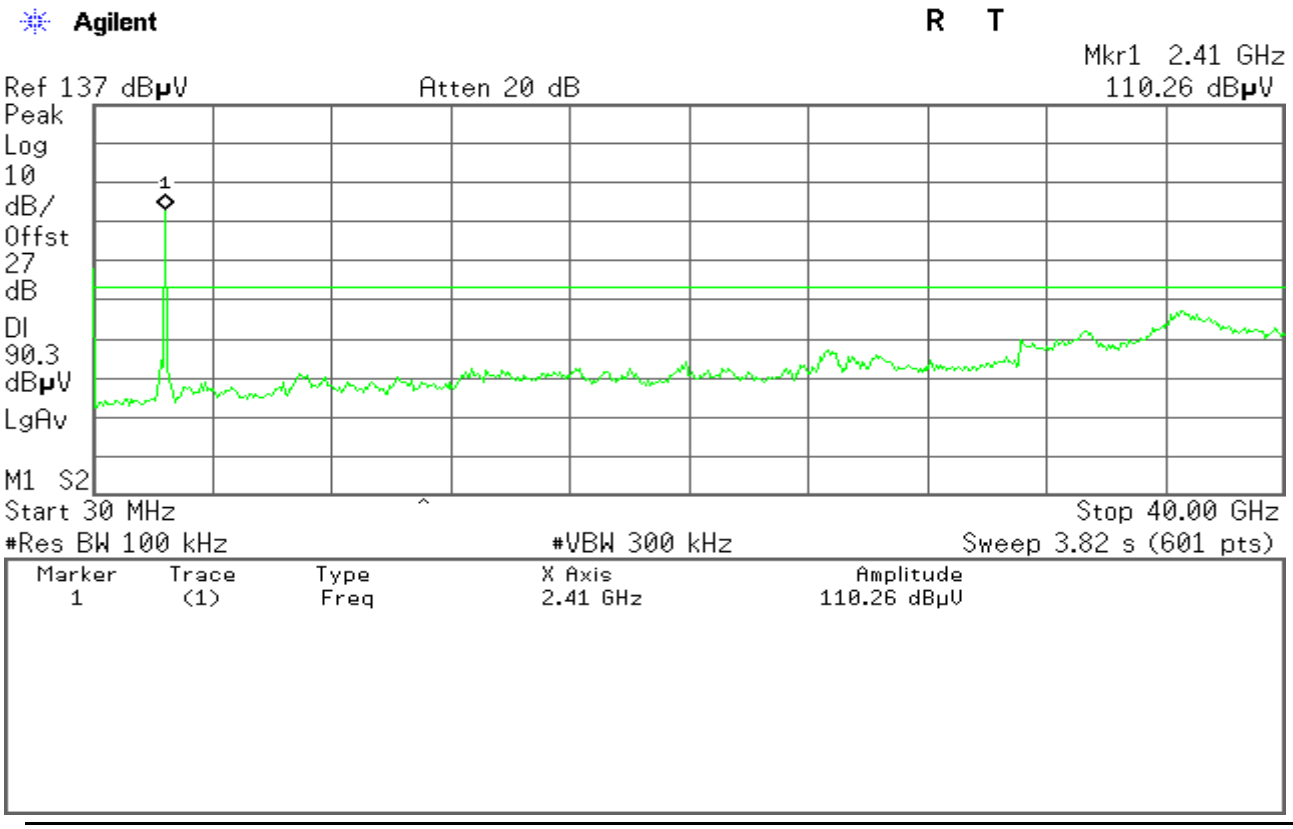


CH High

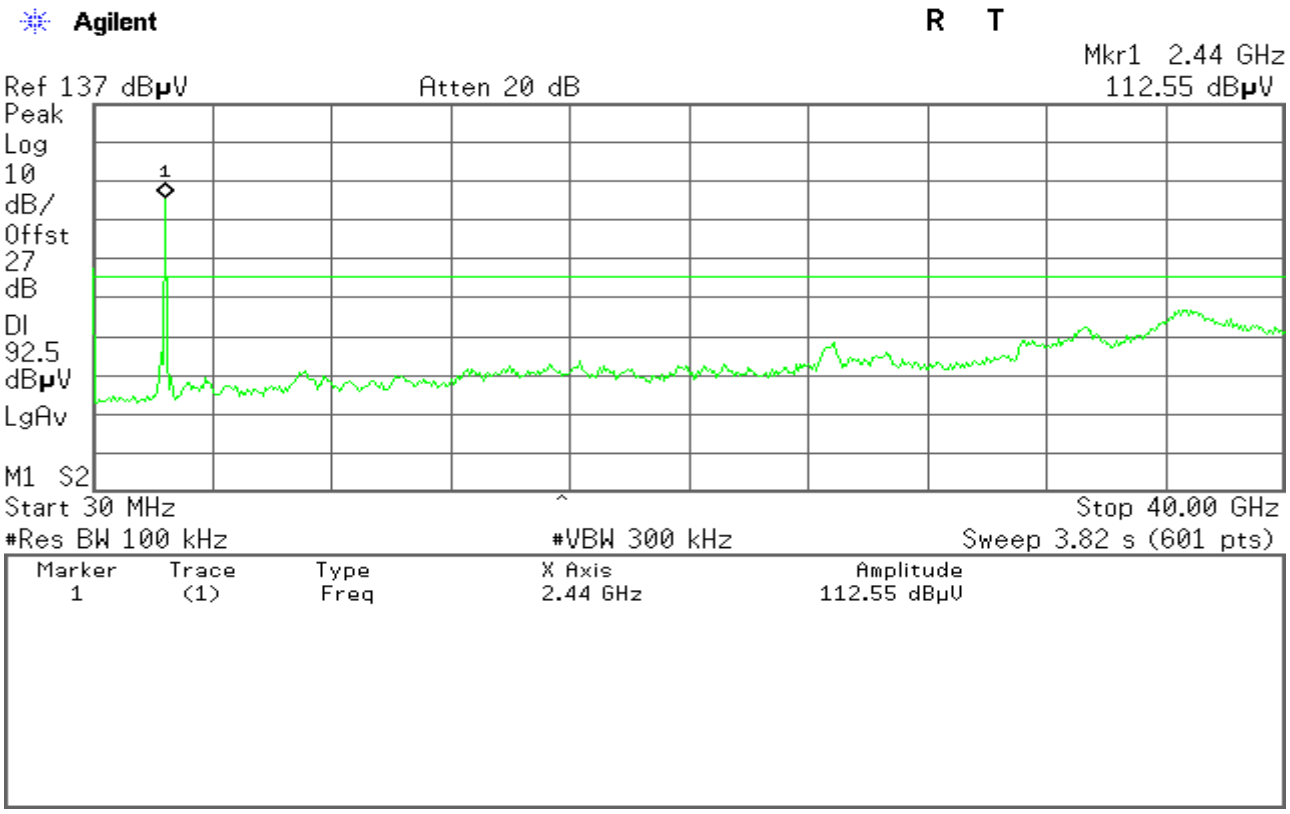


IEEE 802.11g mode

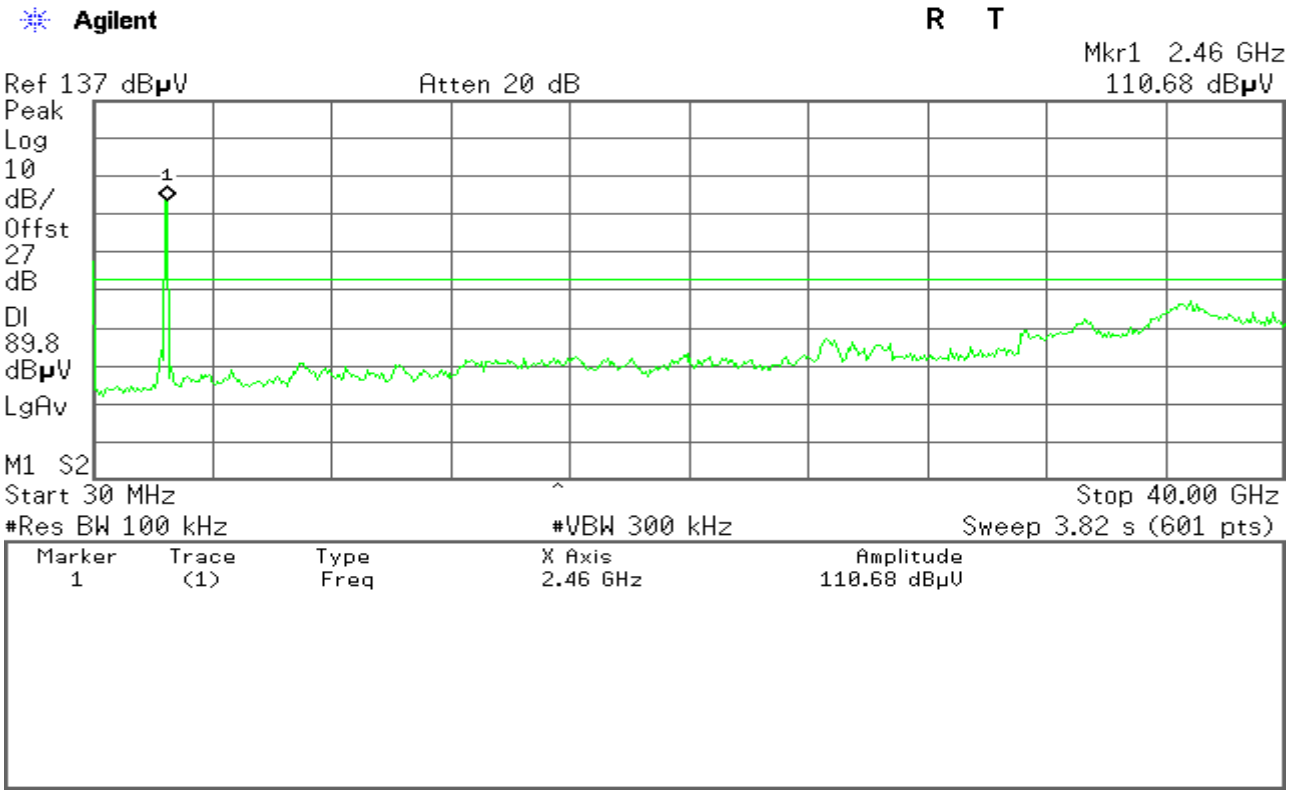
CH Low



CH Mid



CH High



802.11n Standard-20 MHz Channel mode / Chain 0

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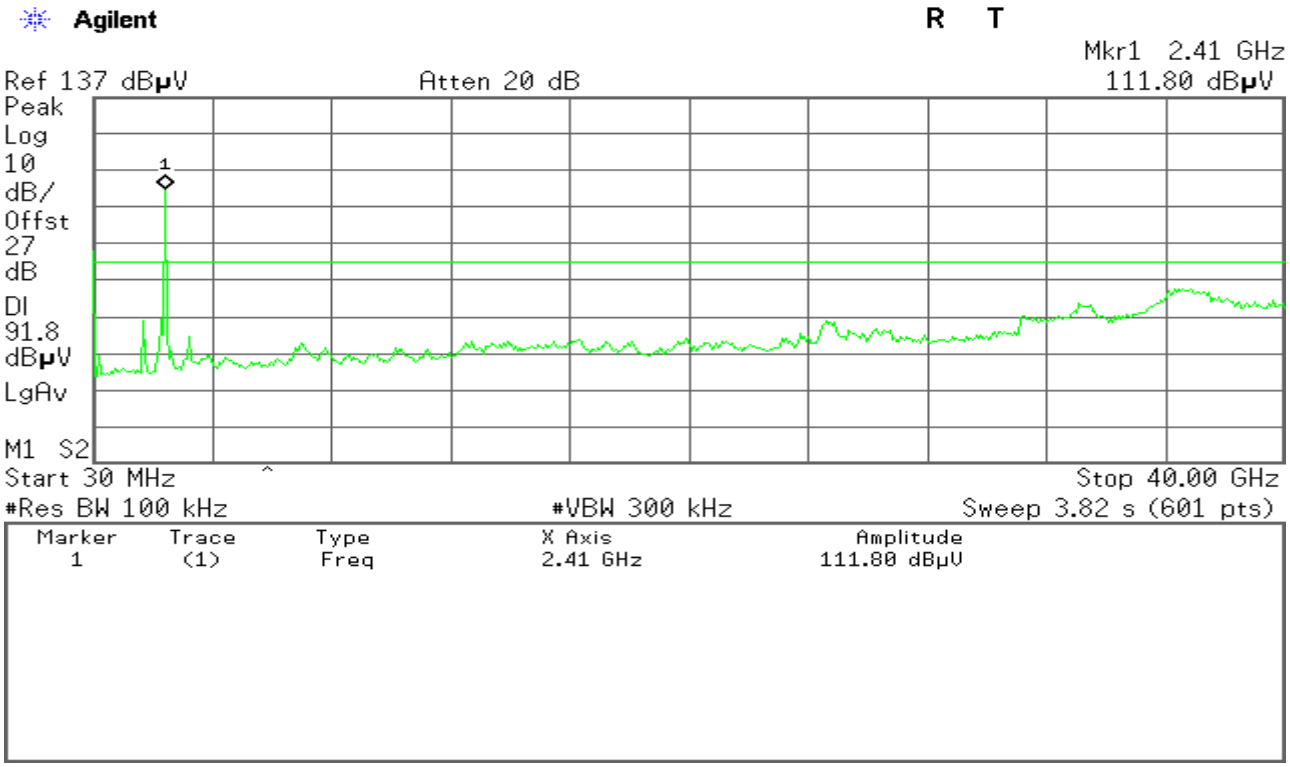

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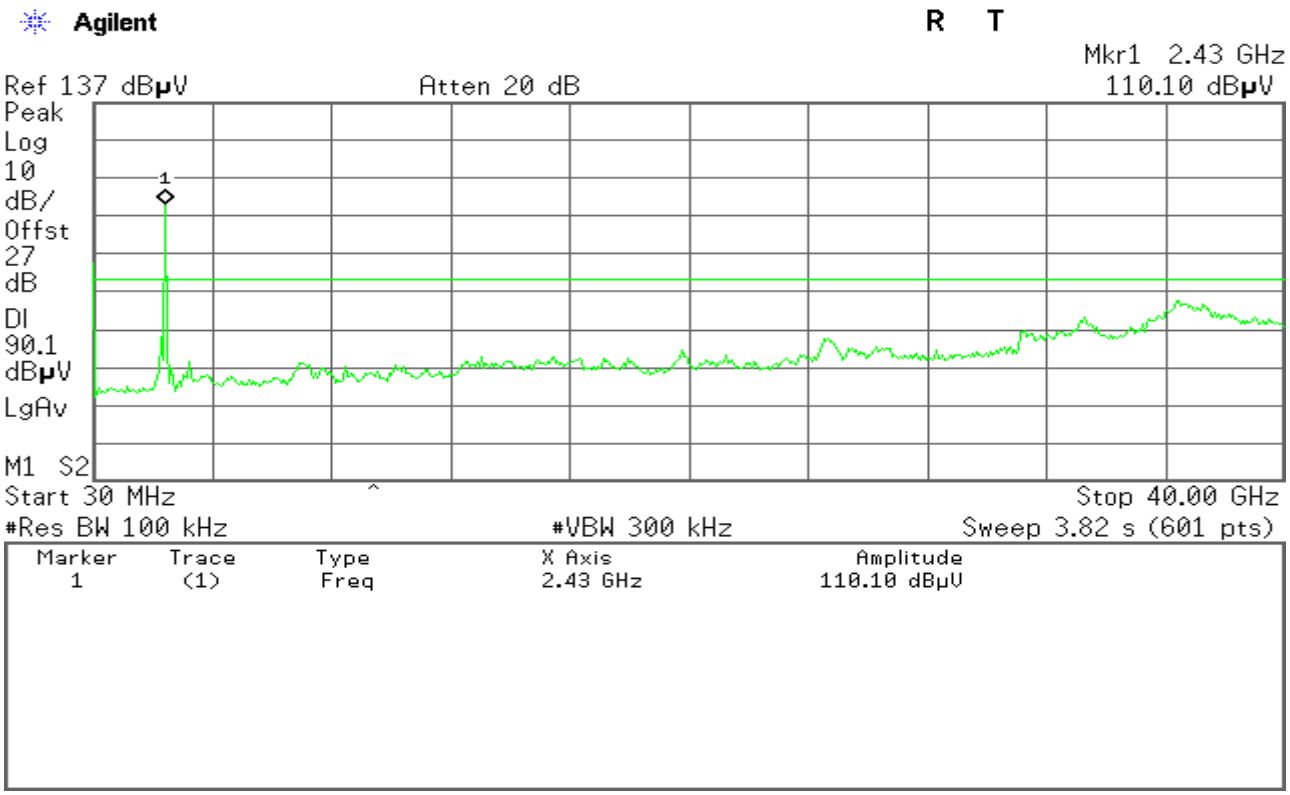

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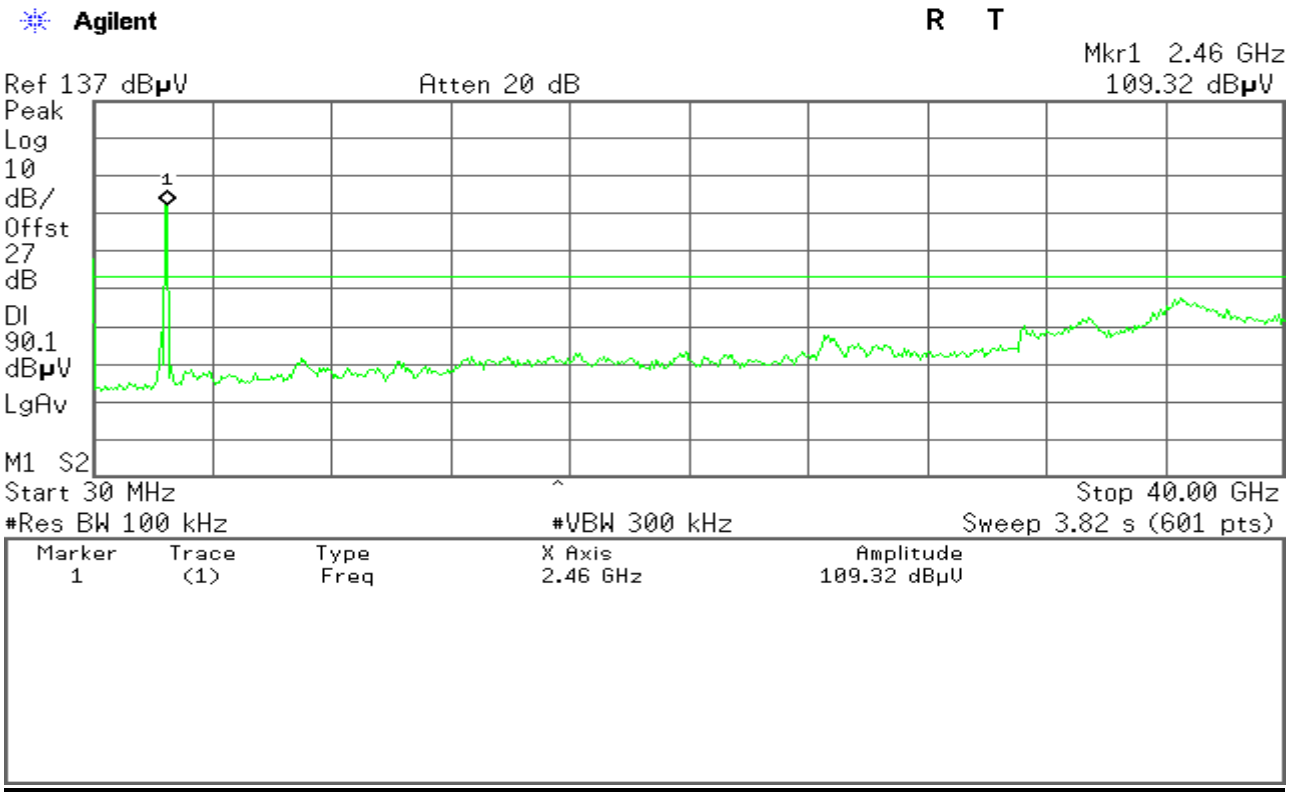

802.11n Standard-20 MHz Channel mode / Chain 1

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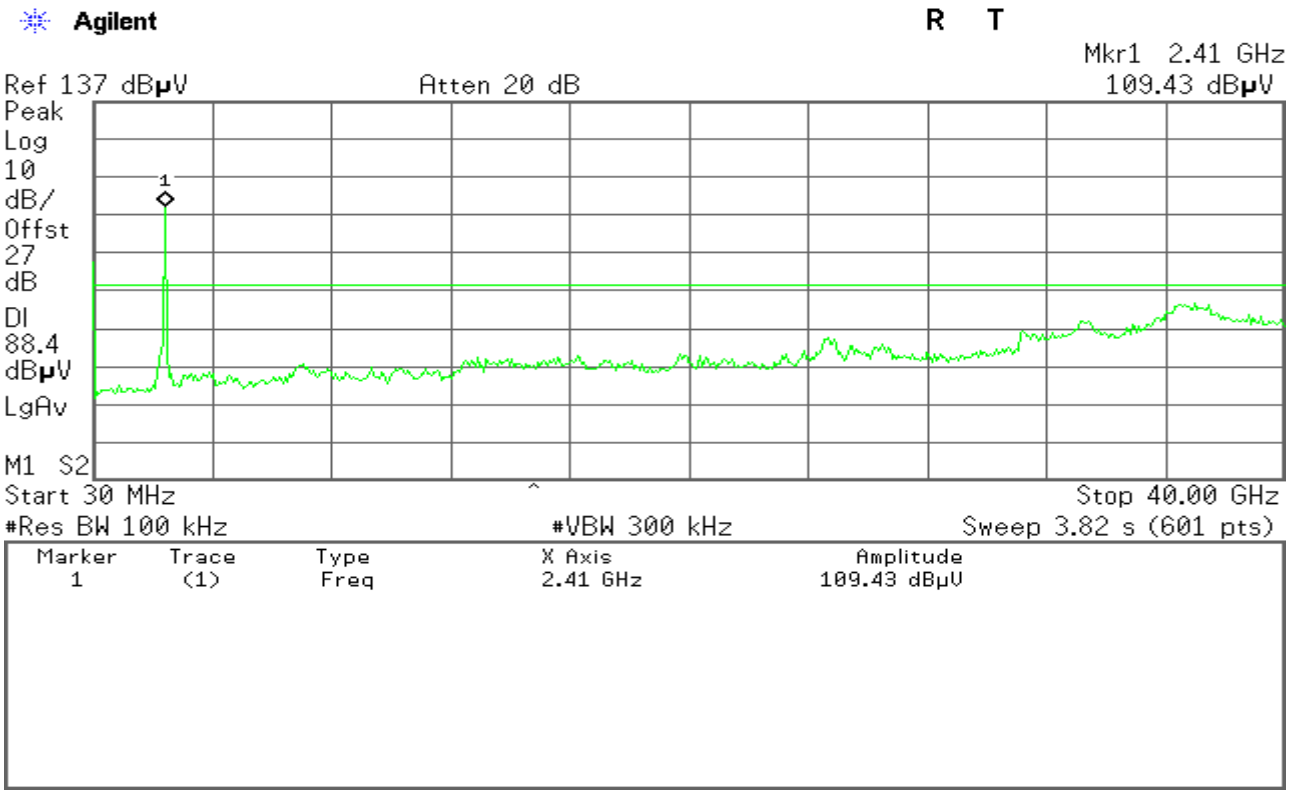

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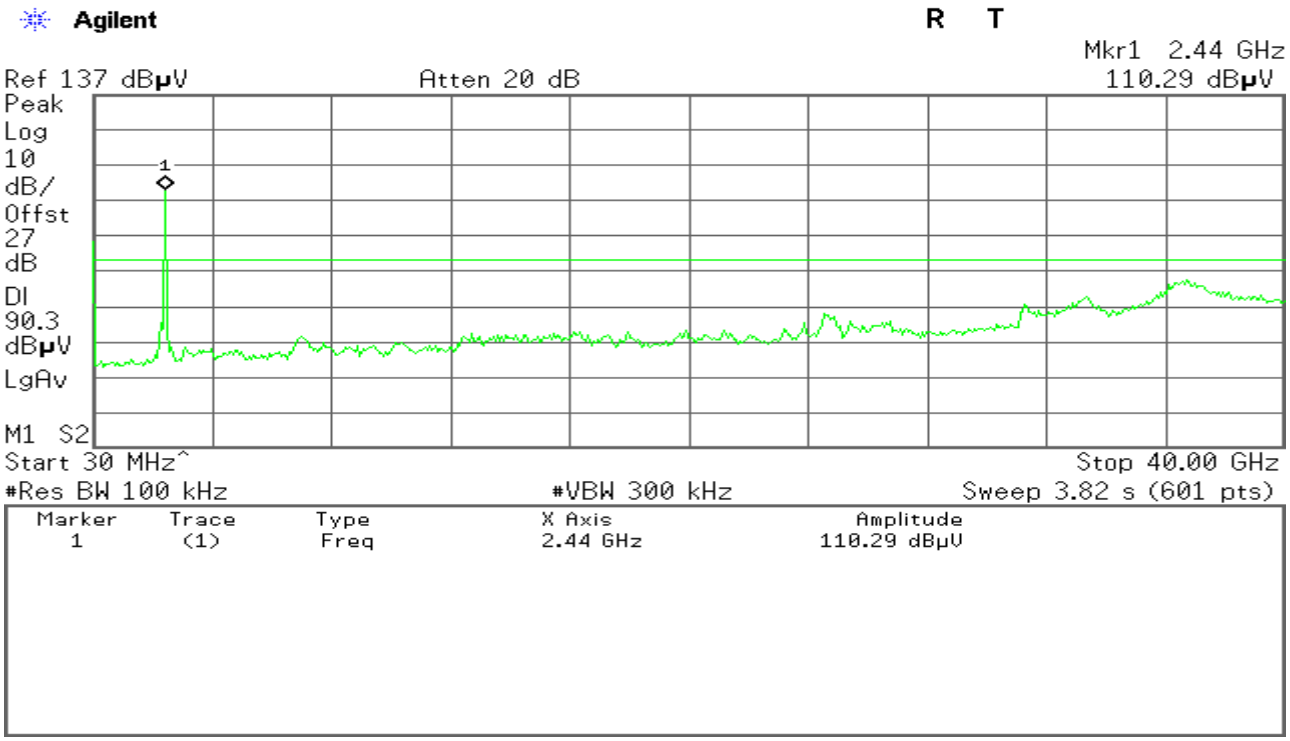
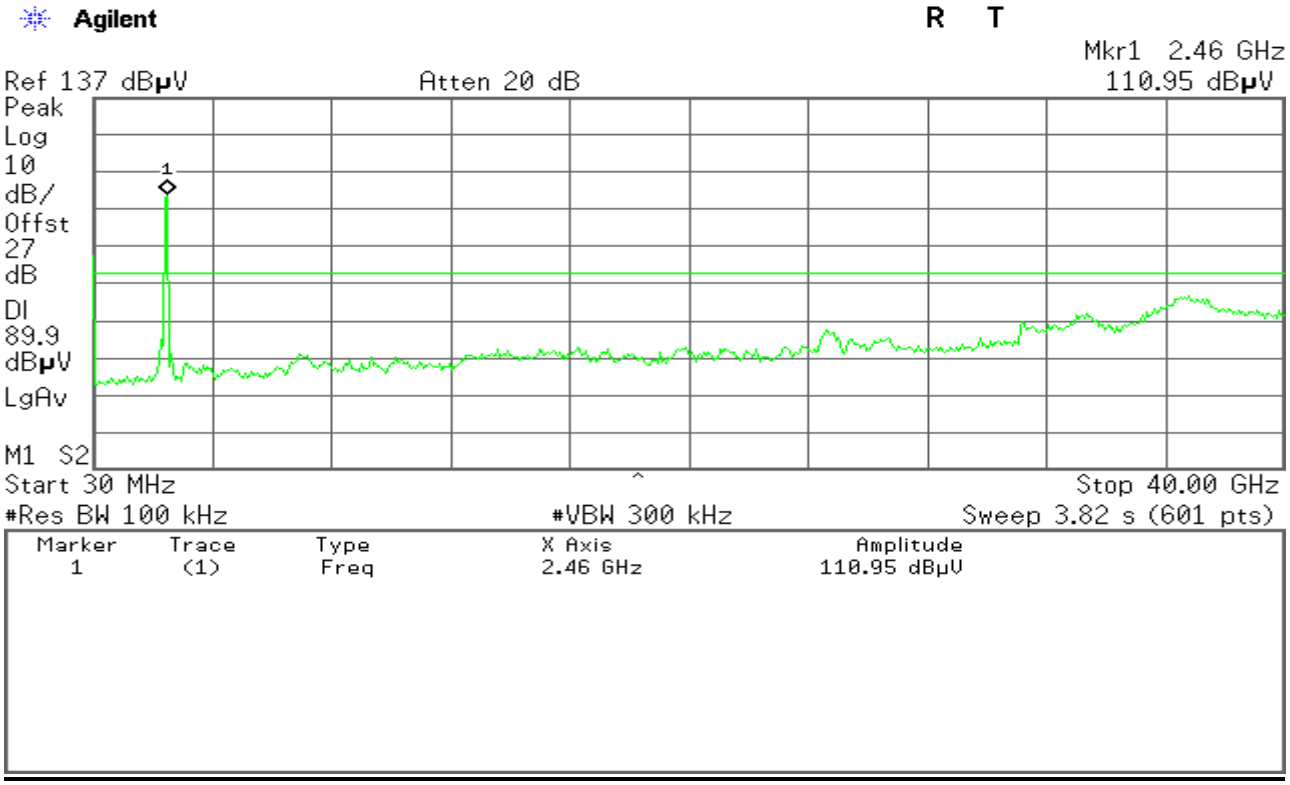
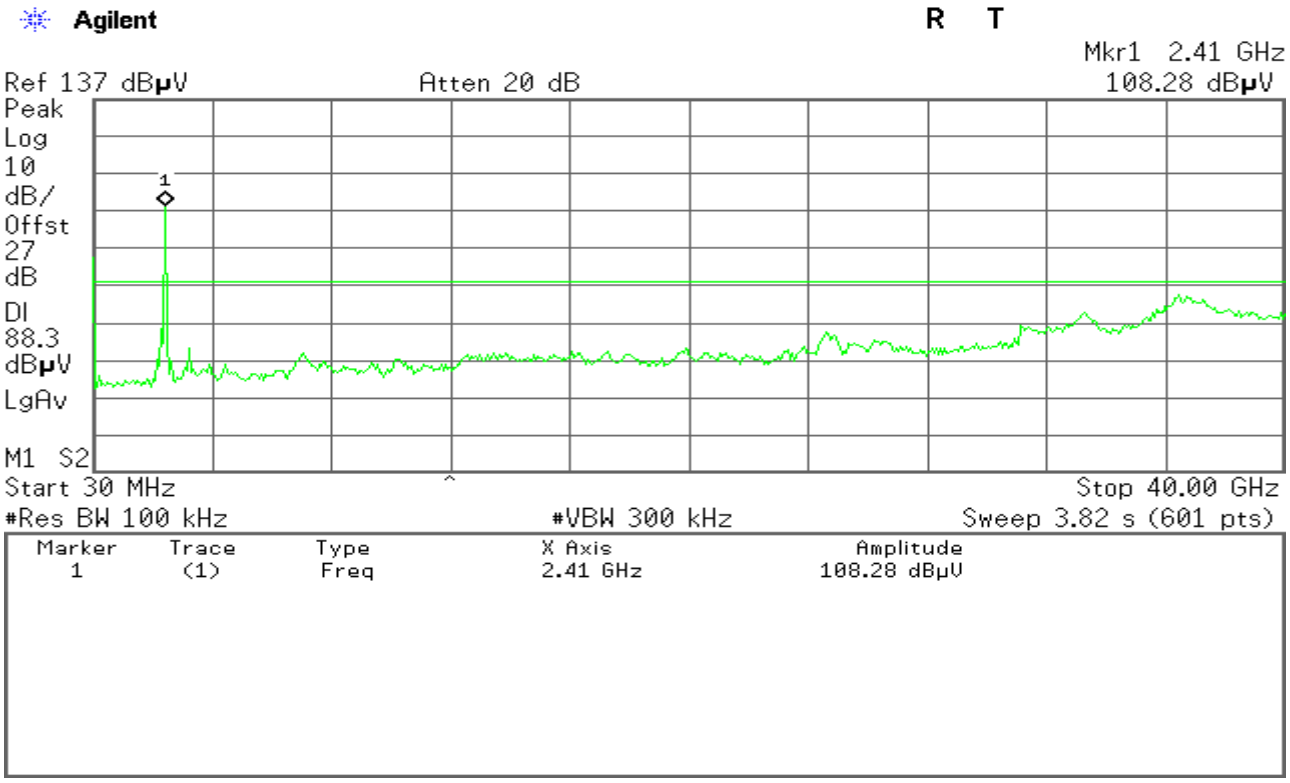


CH High

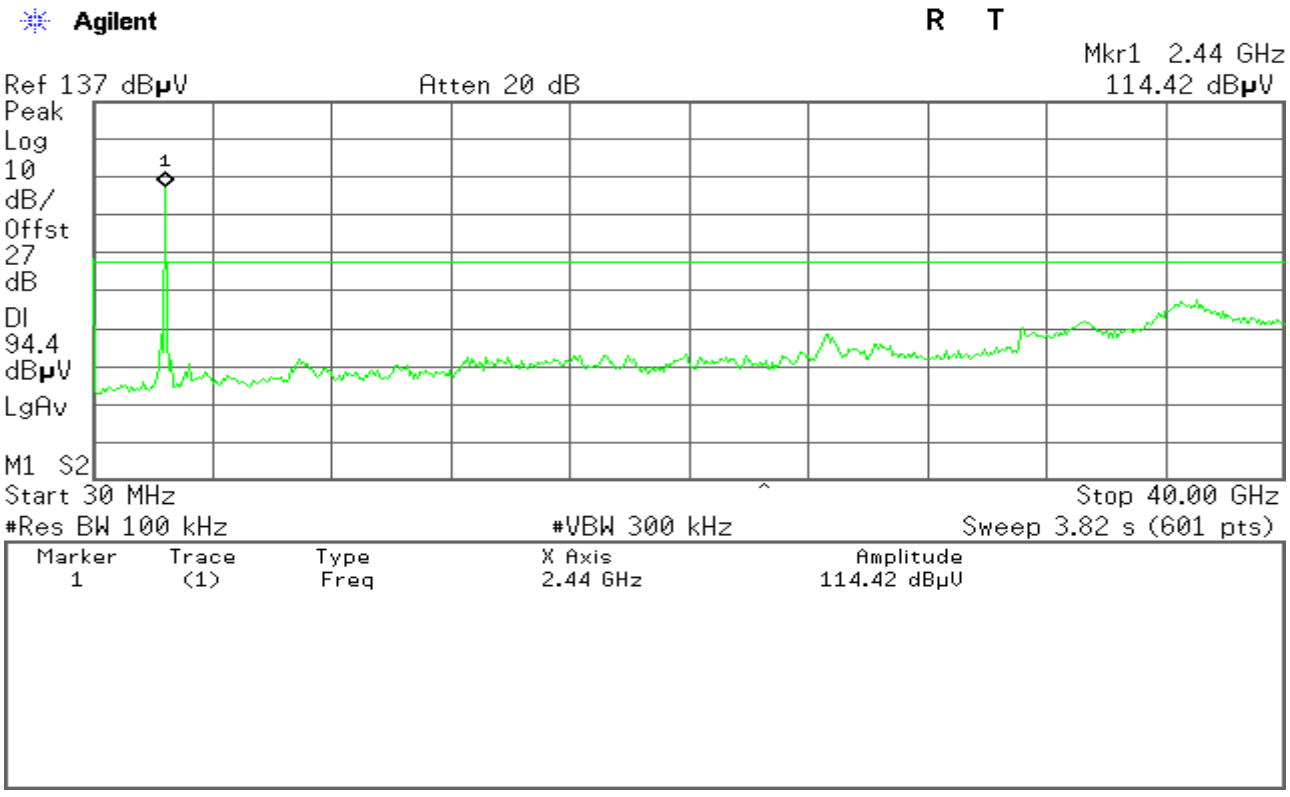


802.11n Standard-20 MHz Channel mode / Chain 0+ Chain 1

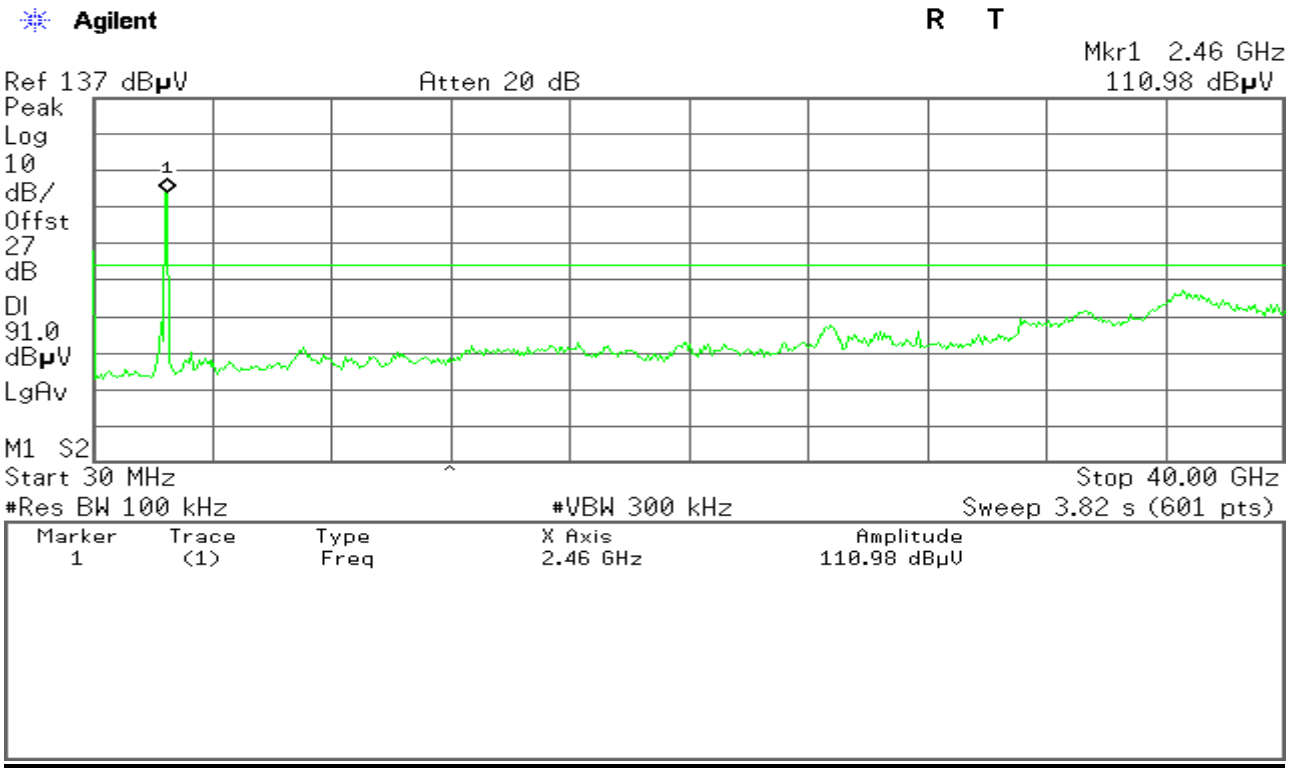
CH Low



CH Mid

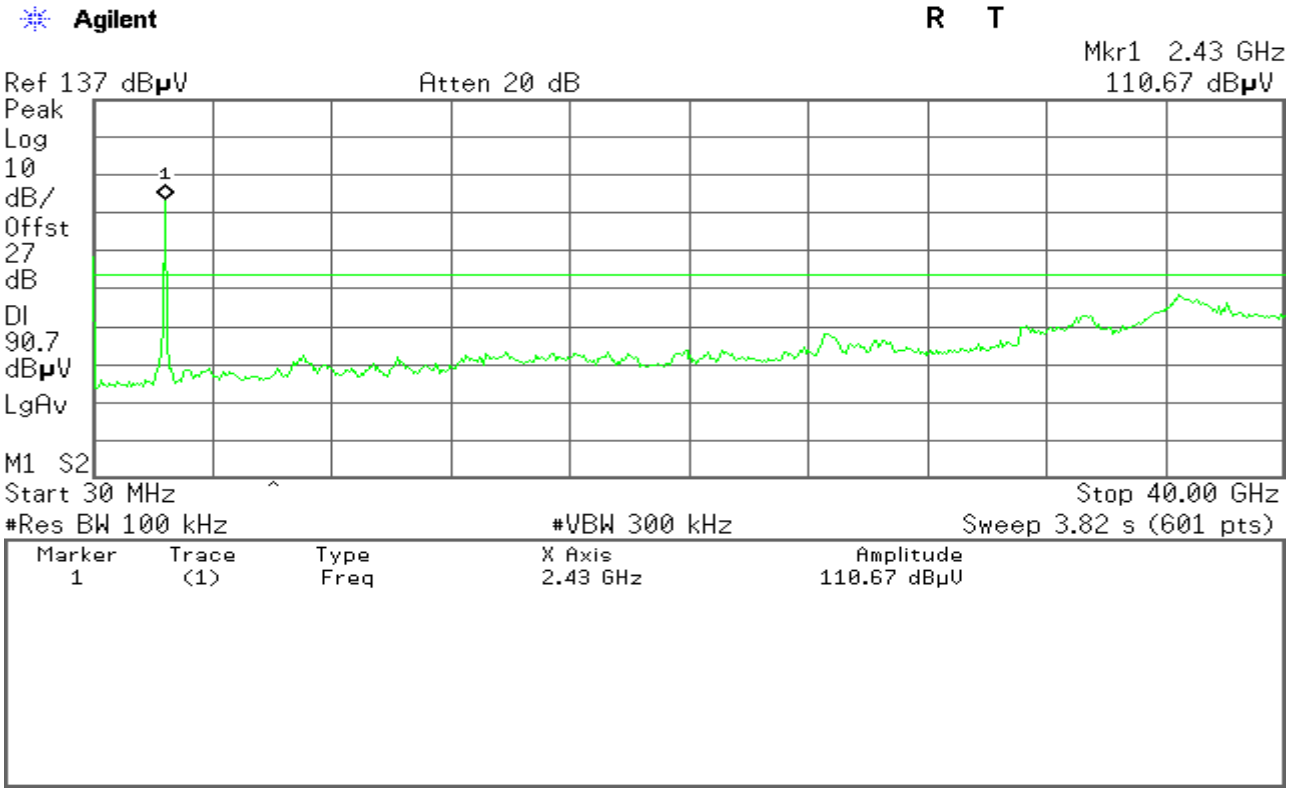


CH High

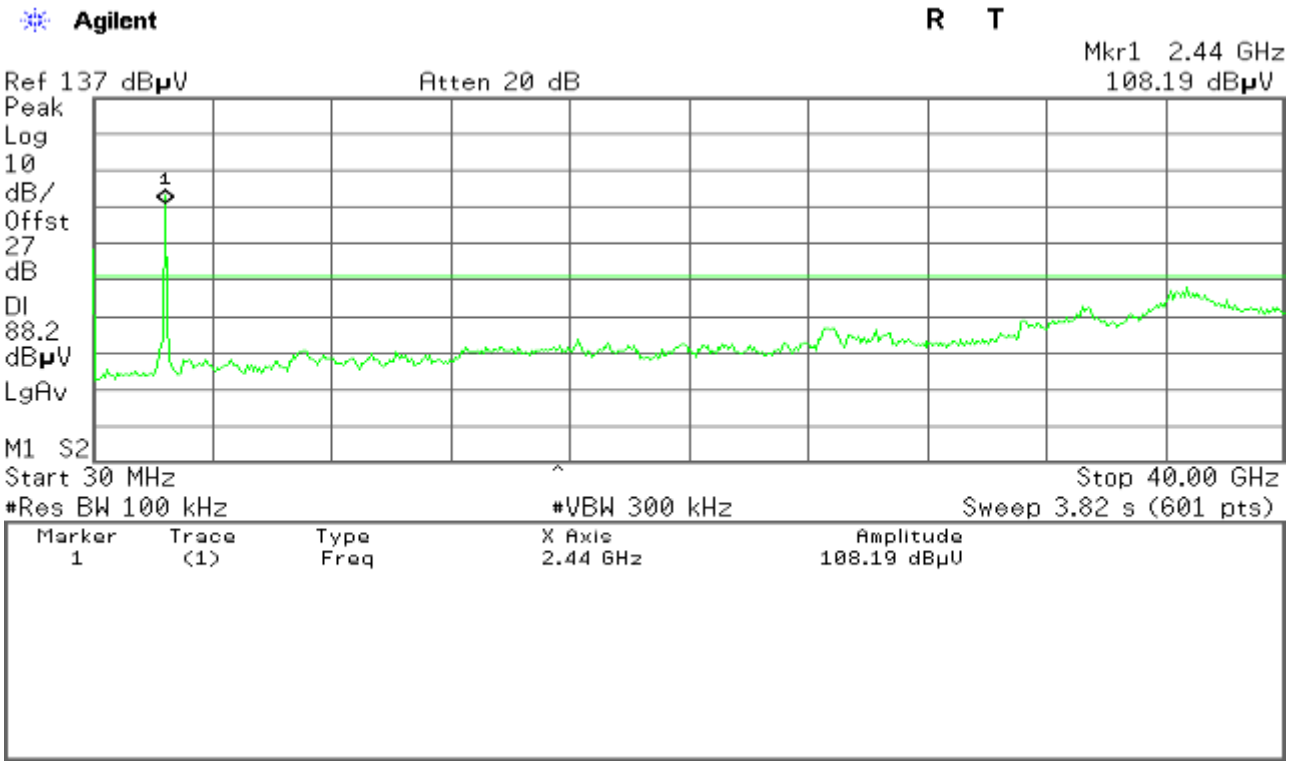


802.11n Wide-40 MHz Channel mode / Chain 0

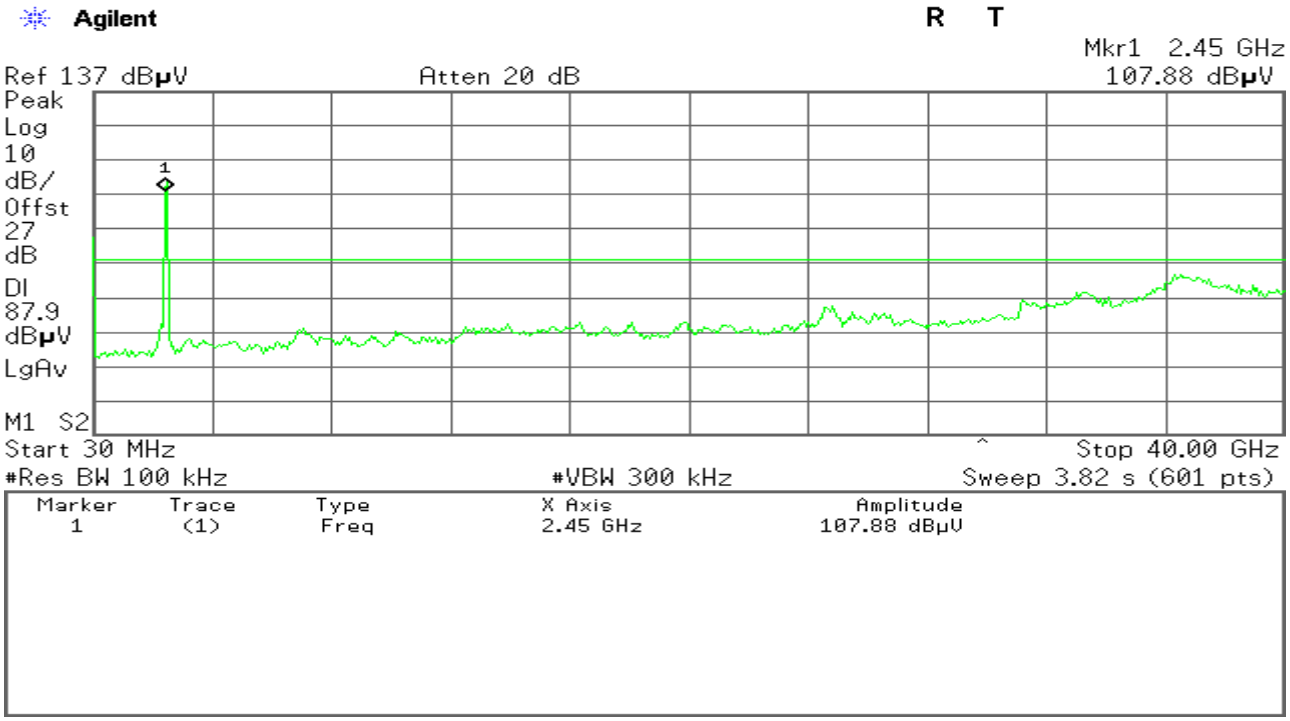
CH Low



CH Mid

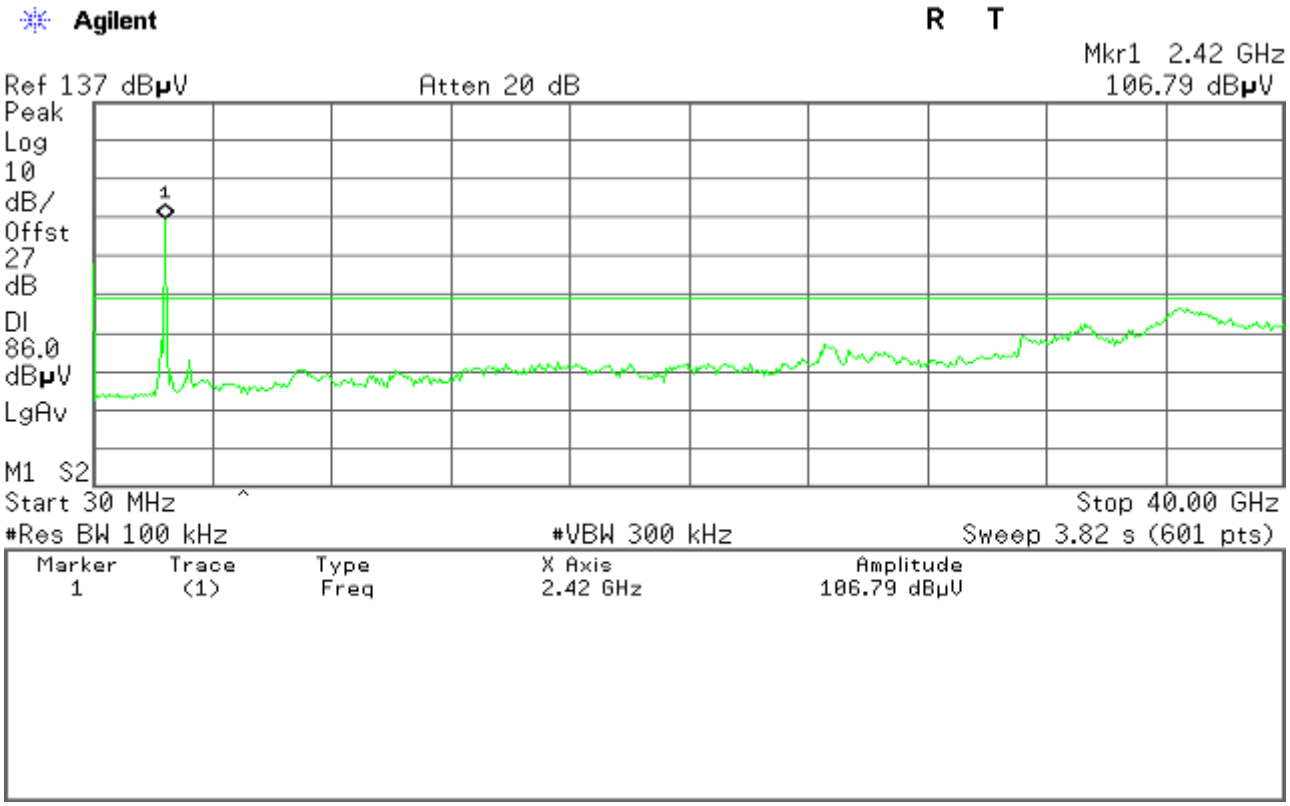


CH High

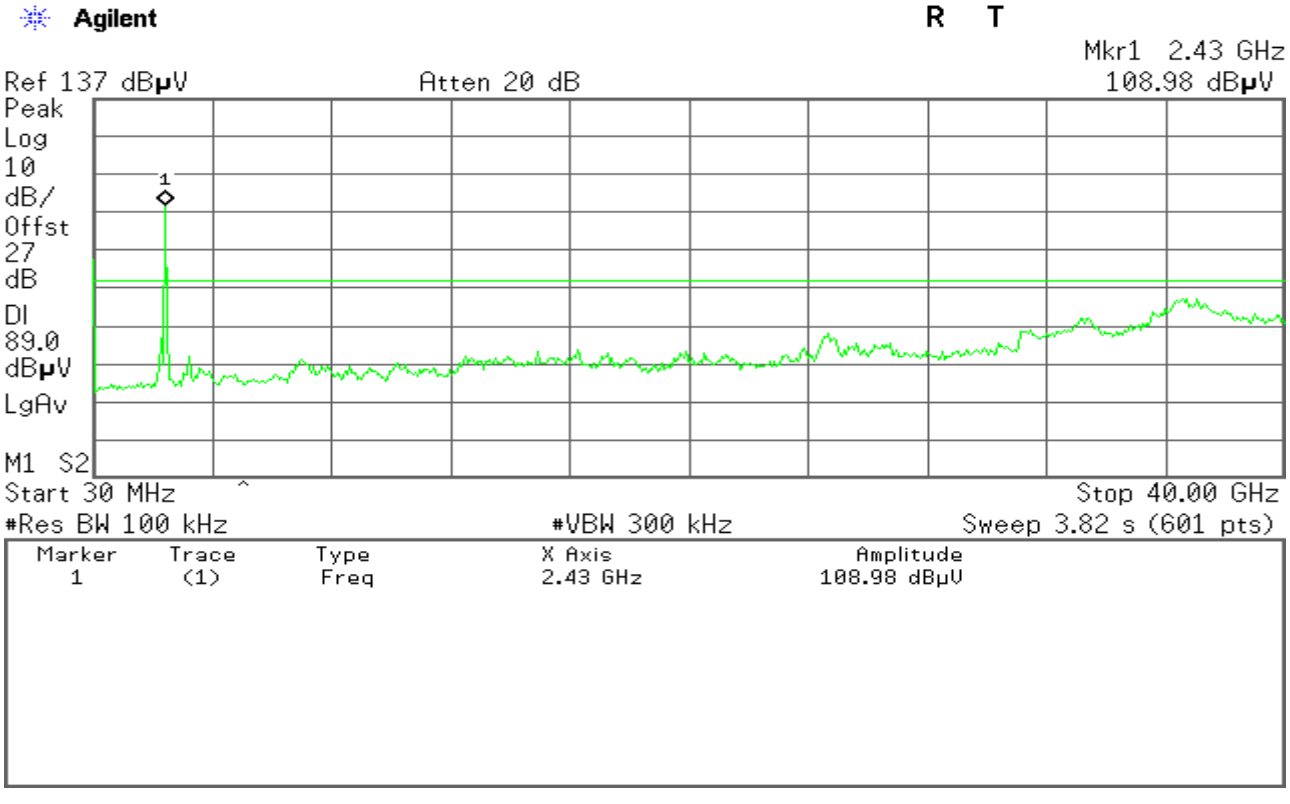


802.11n Wide-40 MHz Channel mode / Chain 1

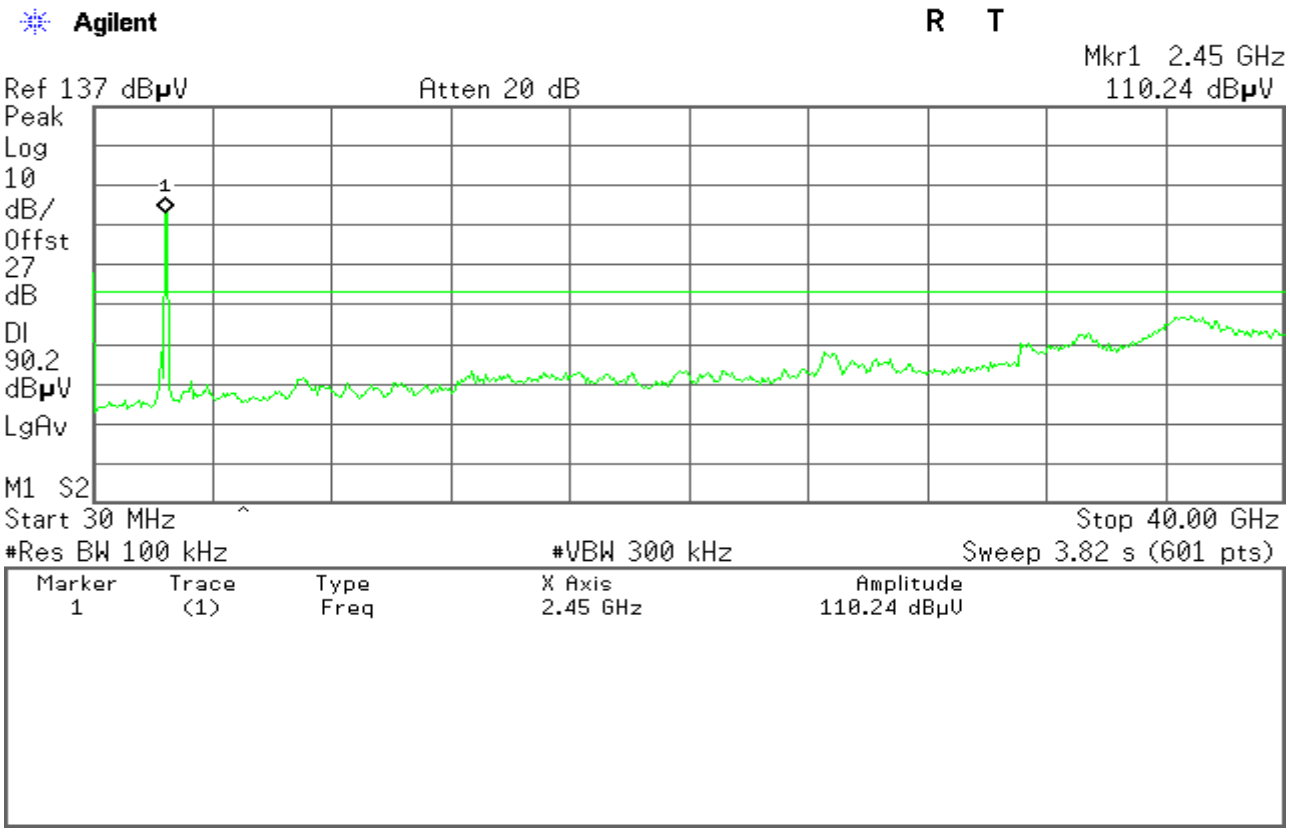
CH Low



CH Mid

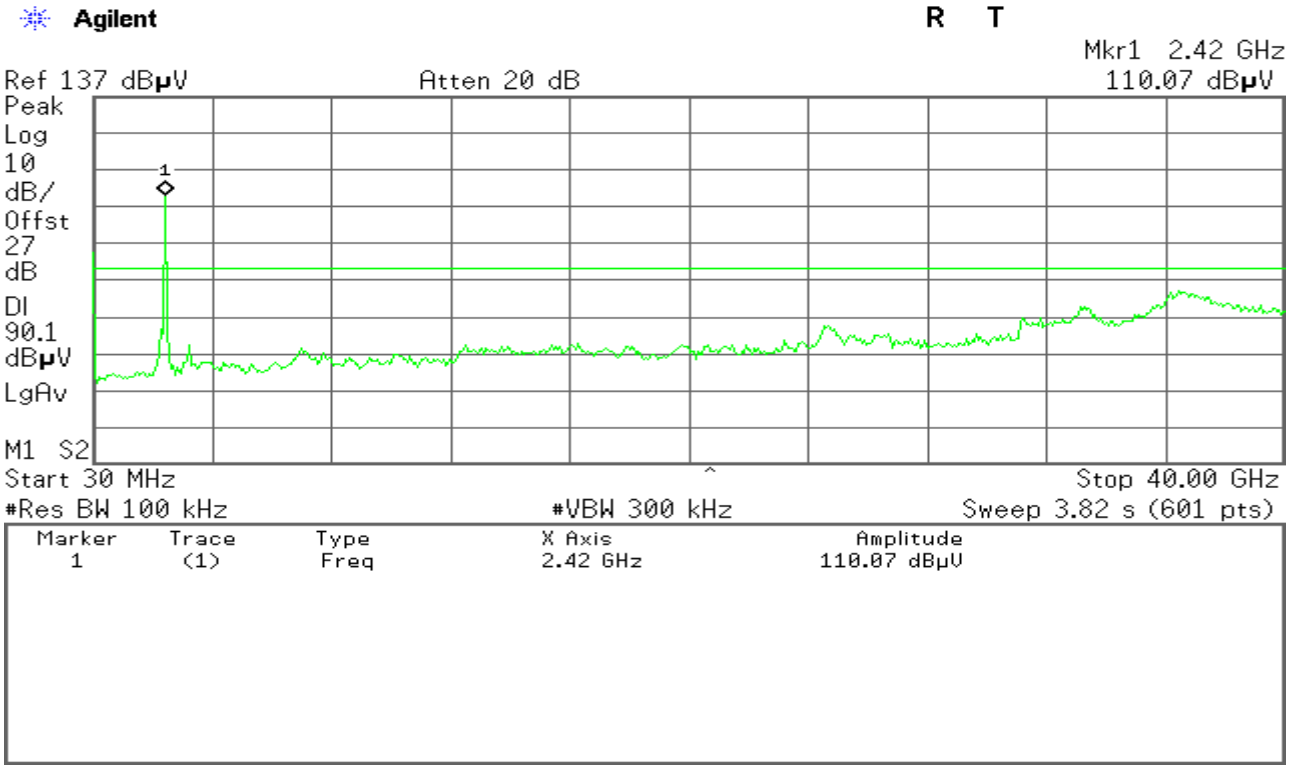


CH High

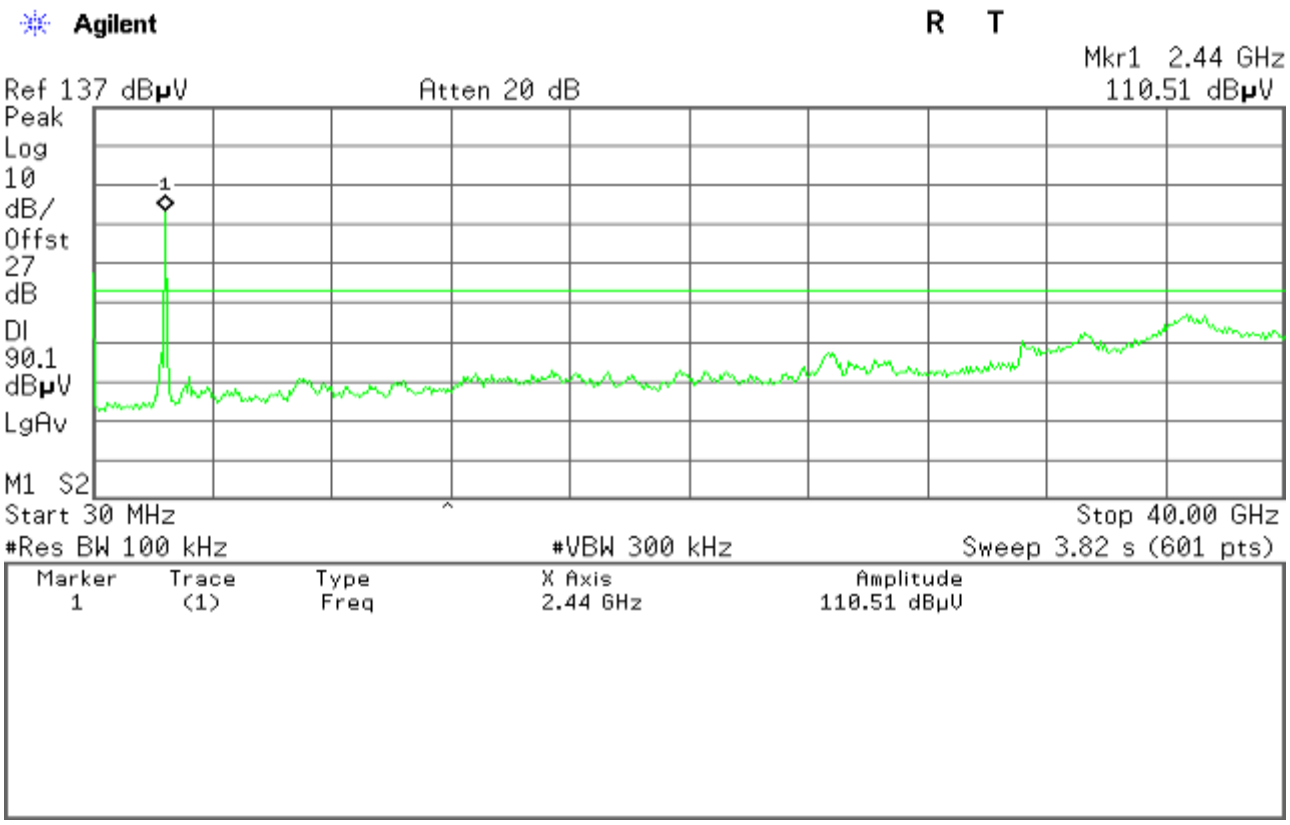


802.11n Wide-40 MHz Channel mode / Chain 0+ Chain 1

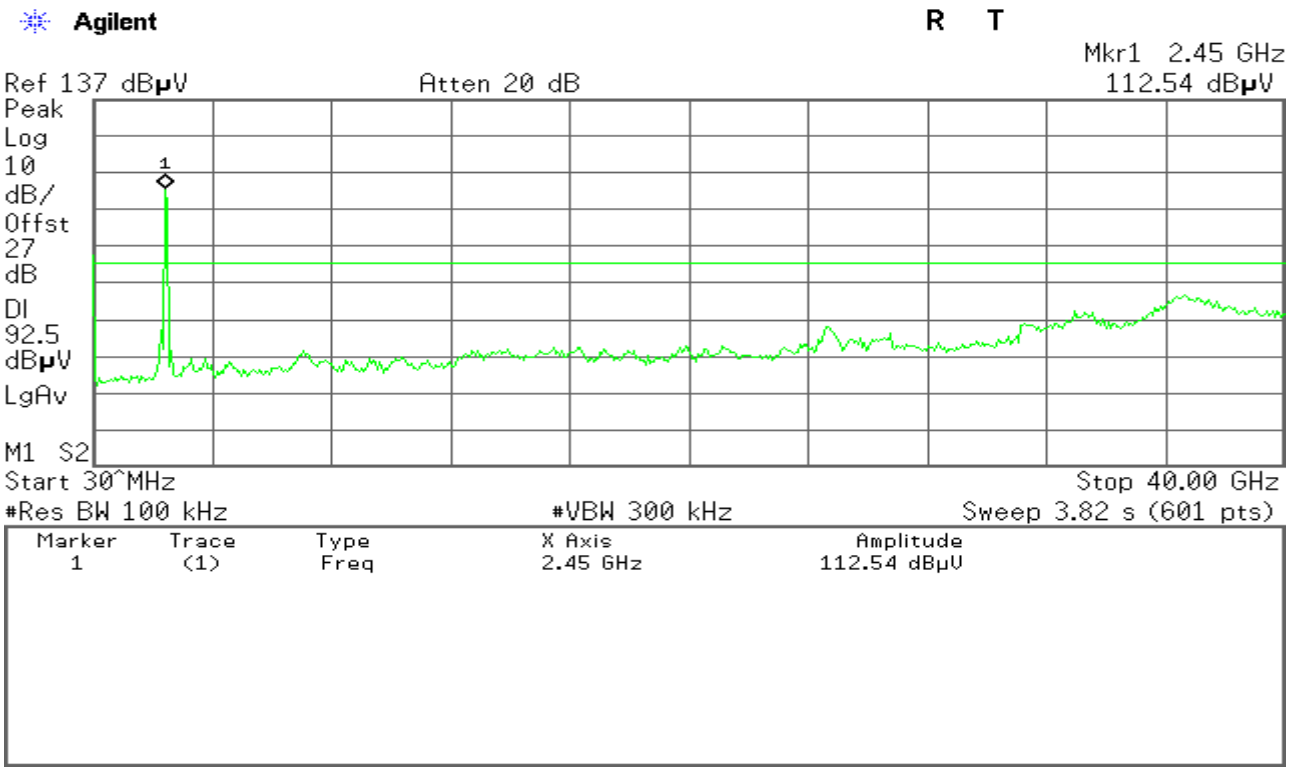
CH Low



CH Mid



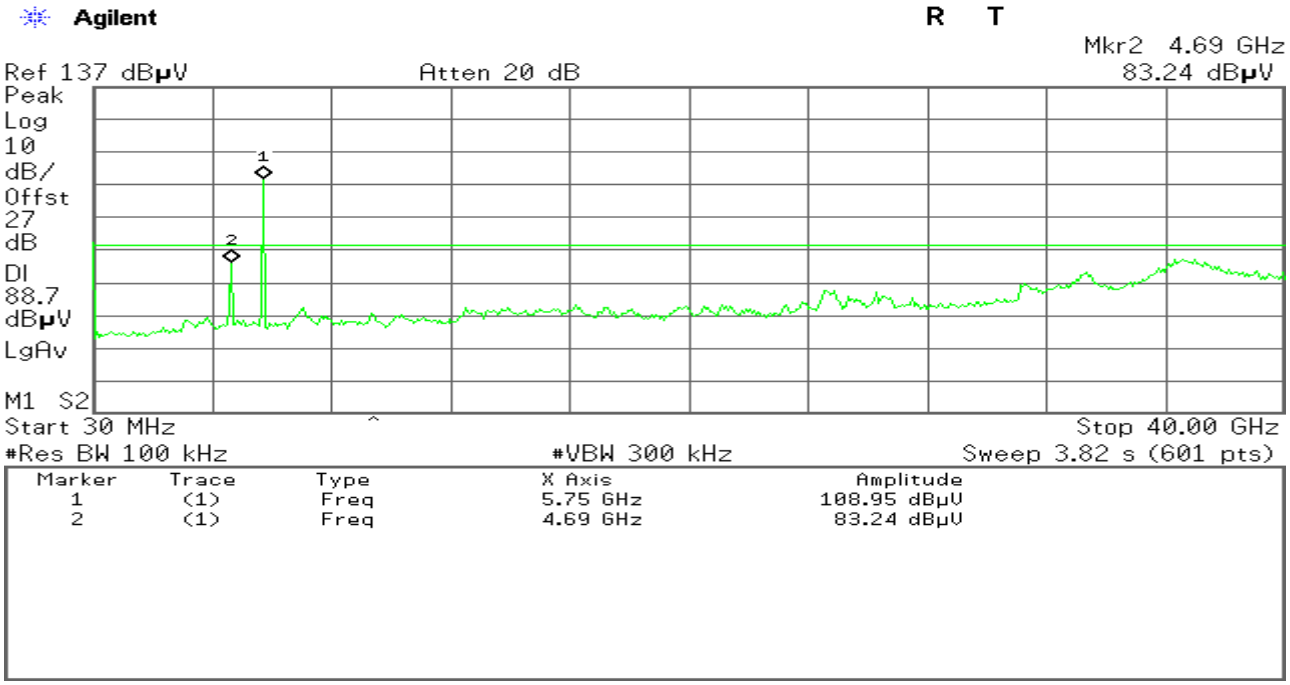
CH High



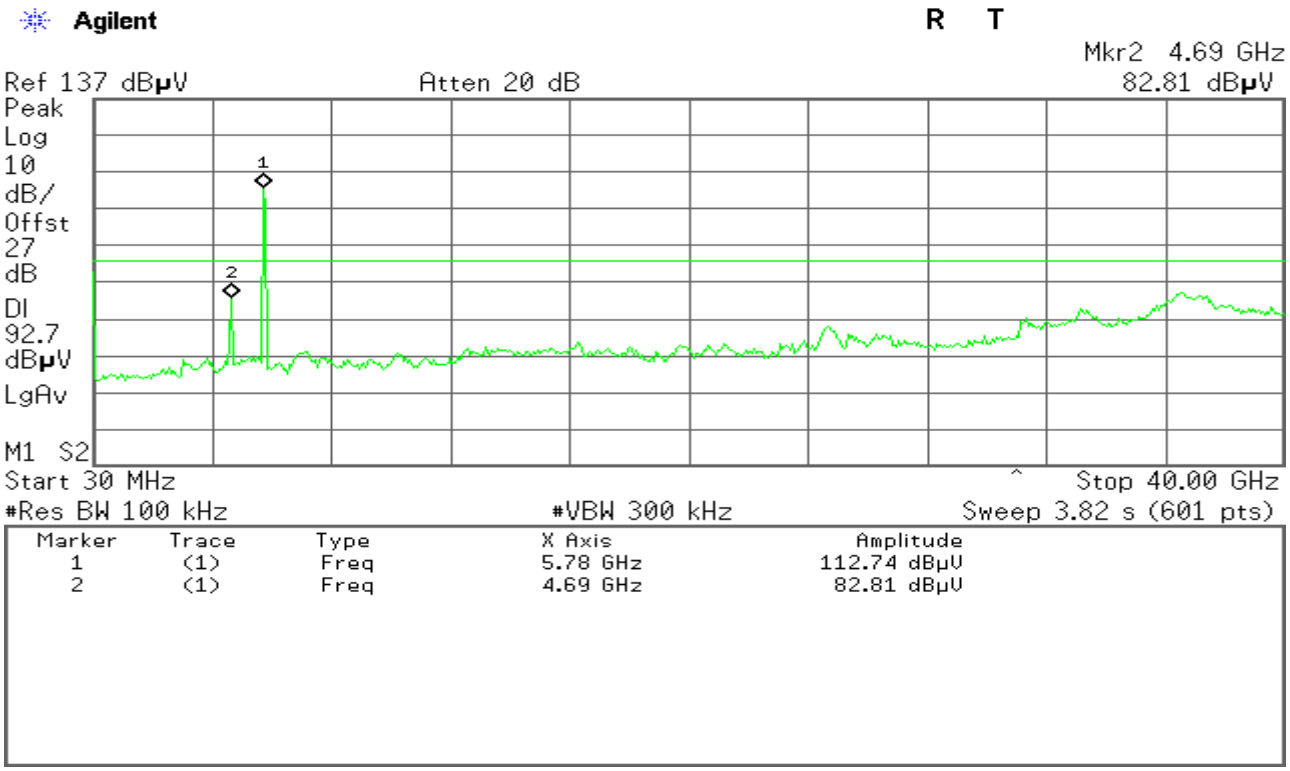
5725-5825

IEEE 802.11a mode

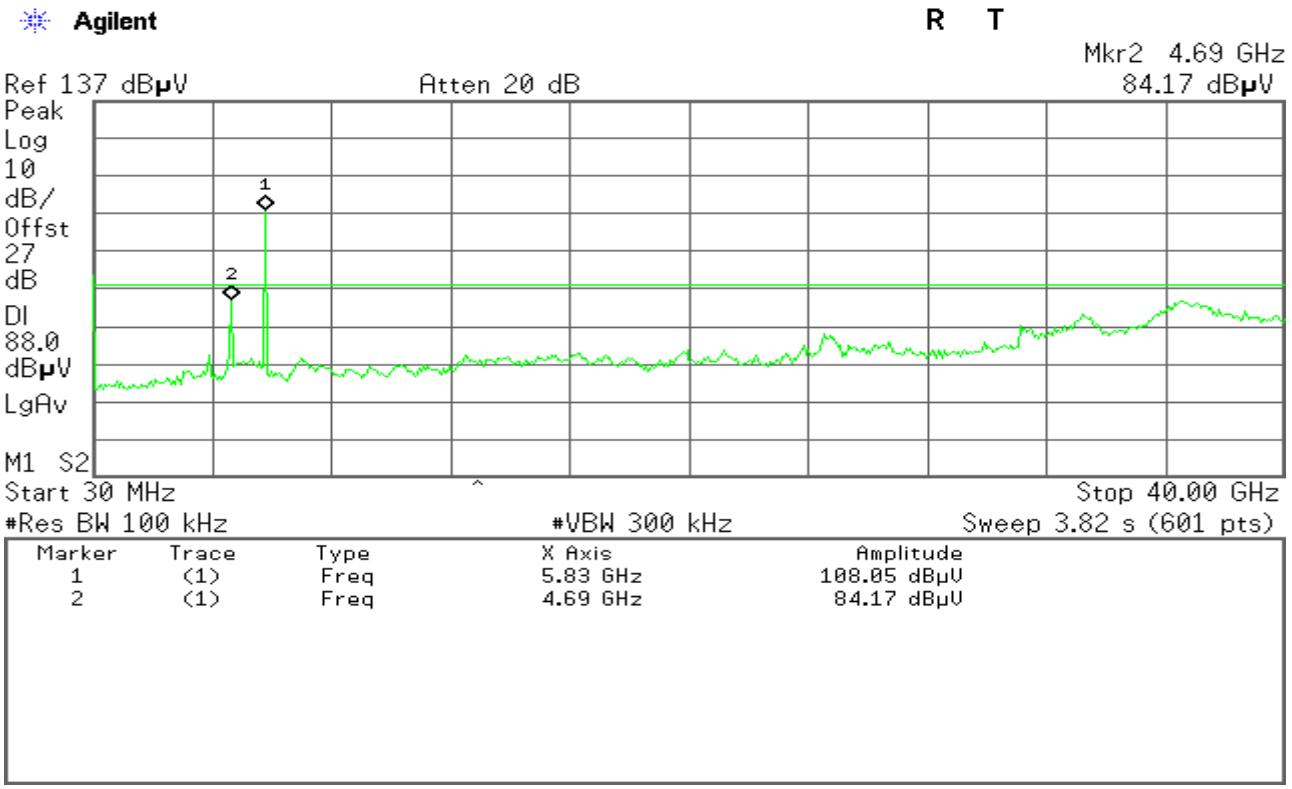
CH Low



CH Mid

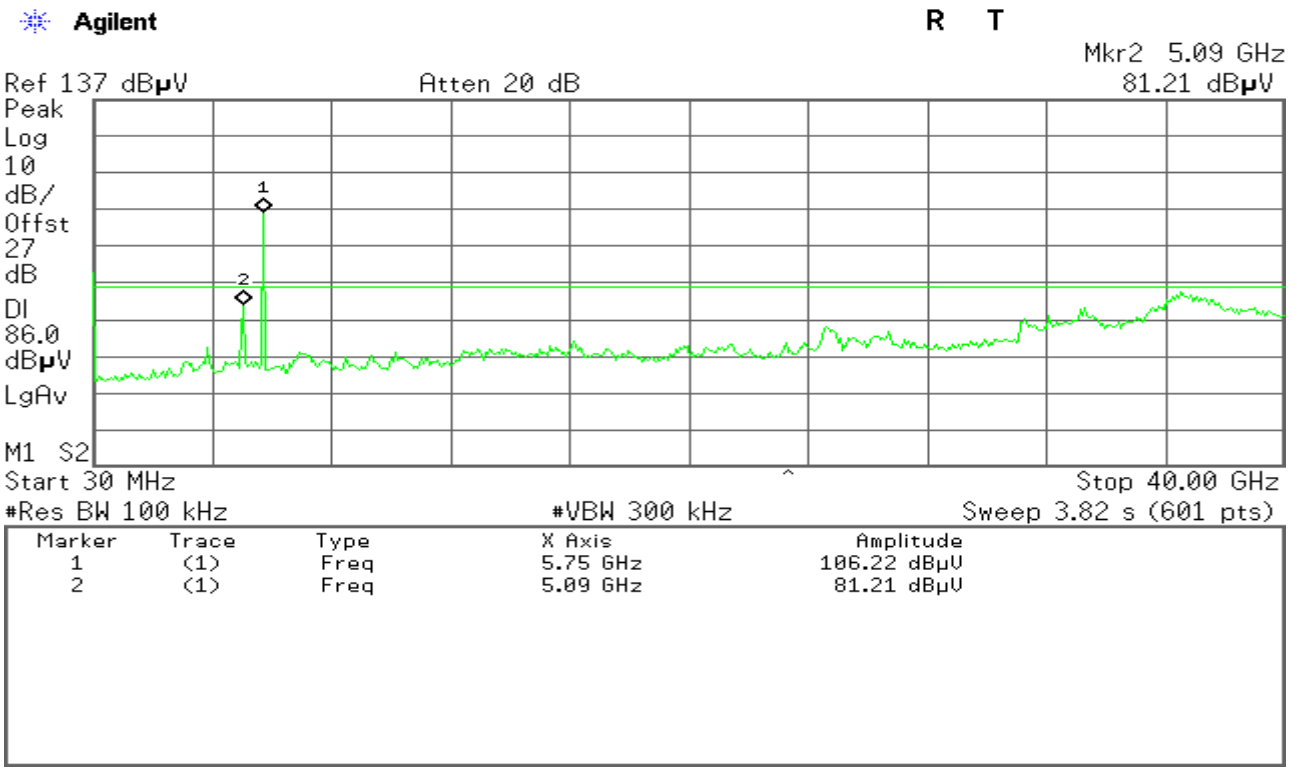


CH High



802.11an Standard-20 MHz Channel mode / Chain 0

CH Low



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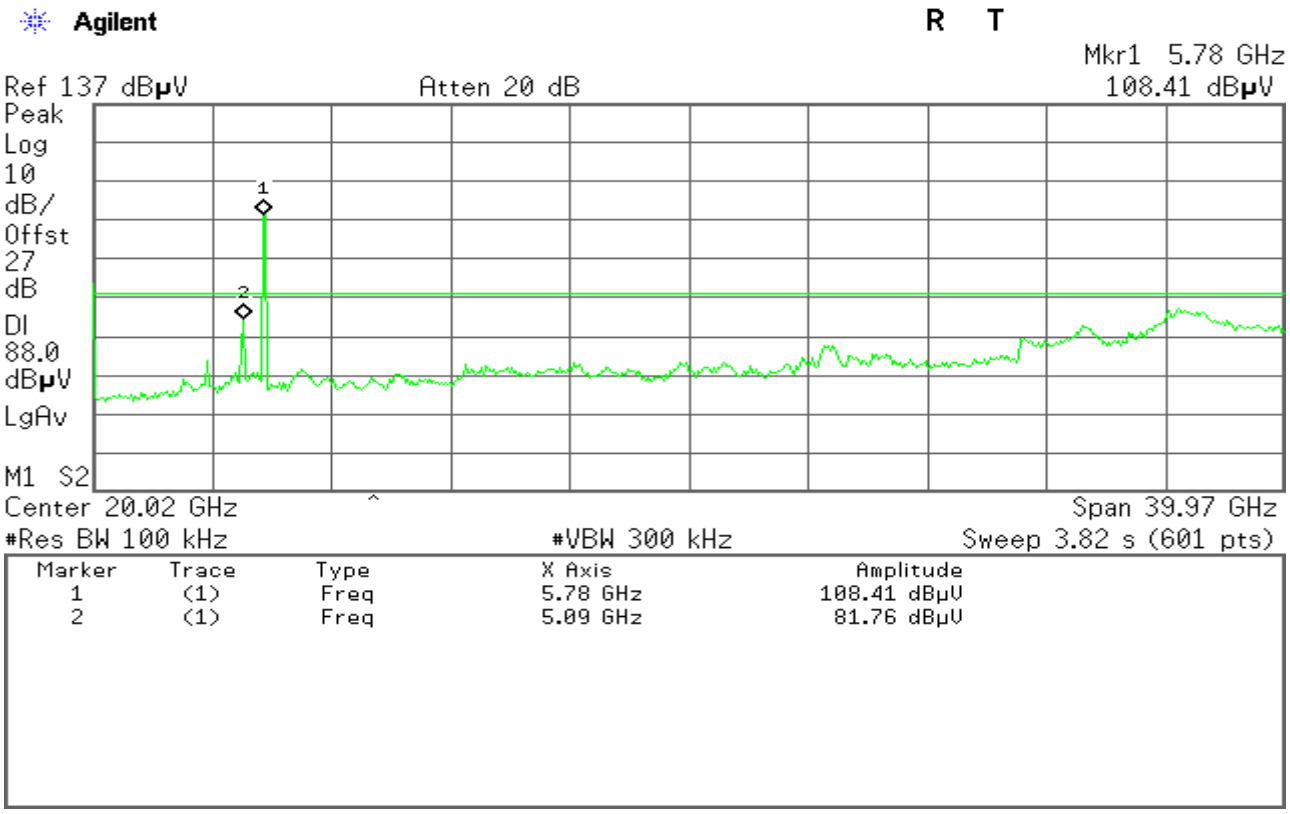

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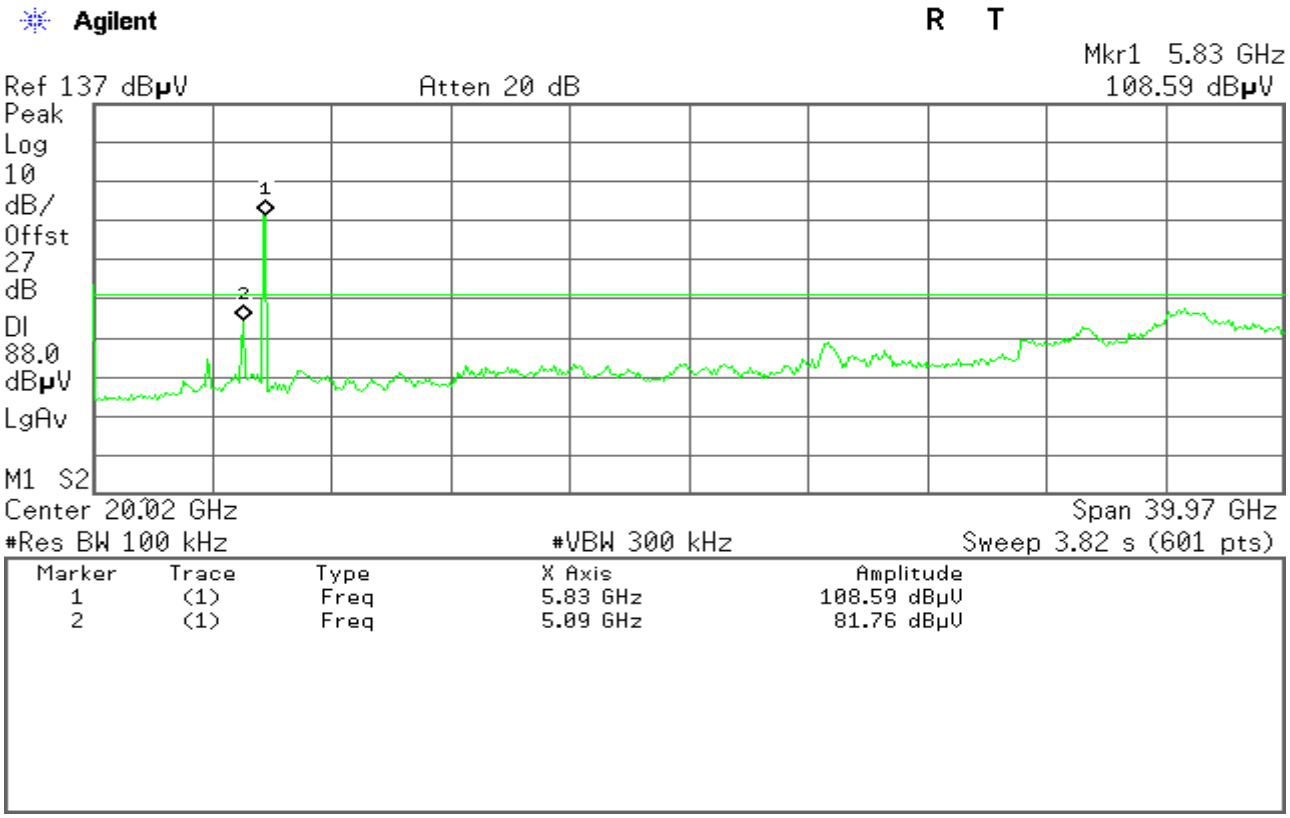
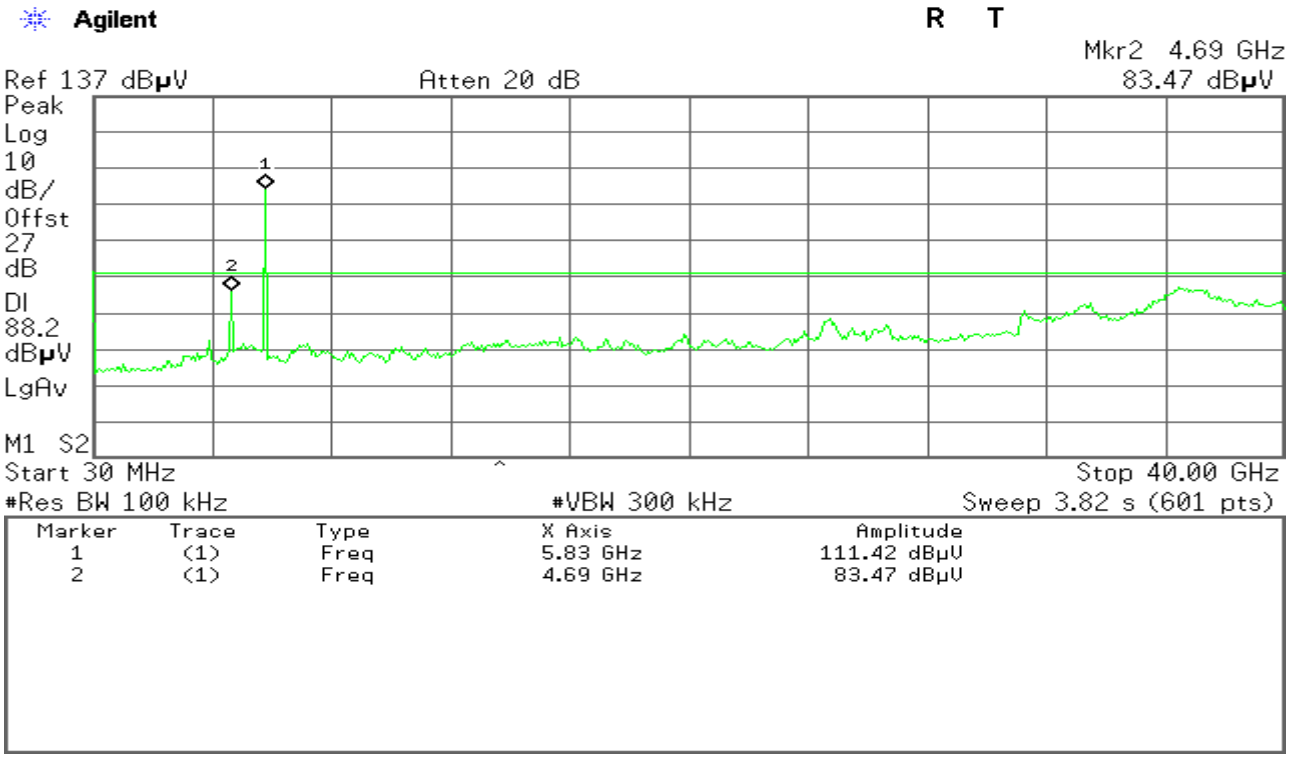


802.11an Standard-20 MHz Channel mode / Chain 1

CH Low



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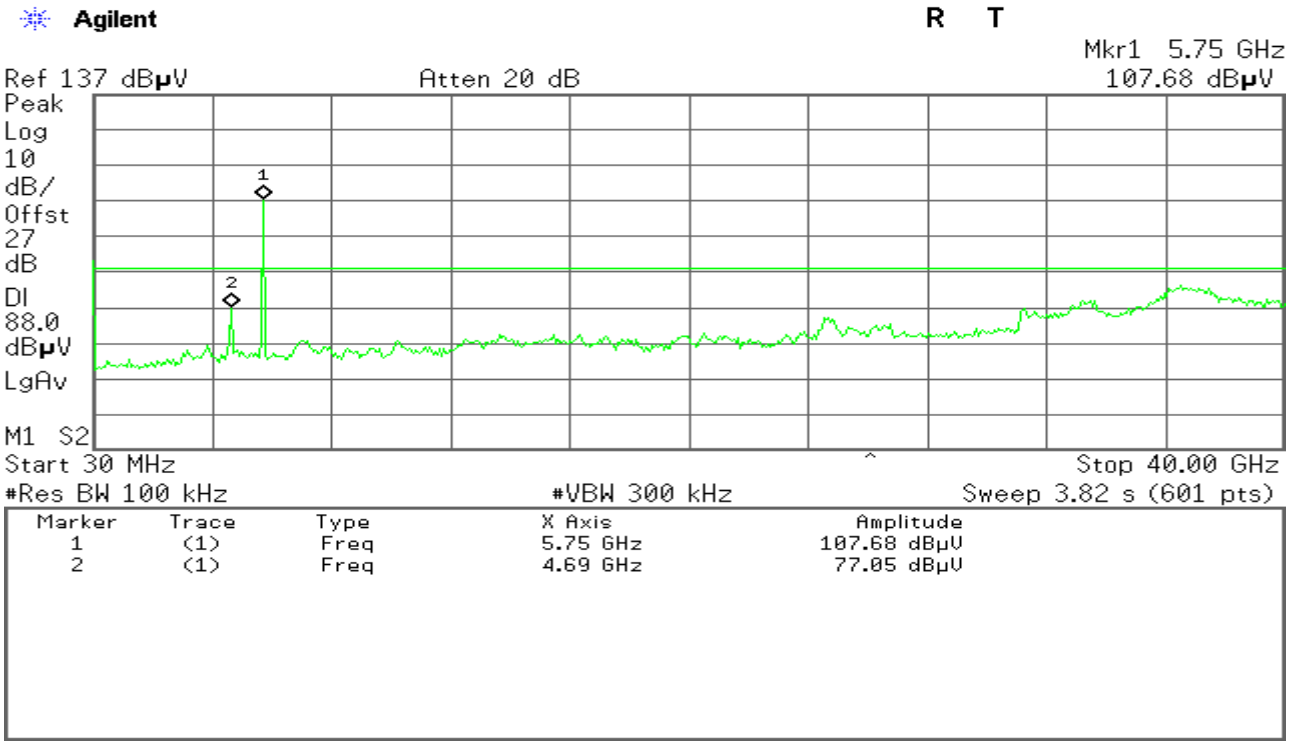
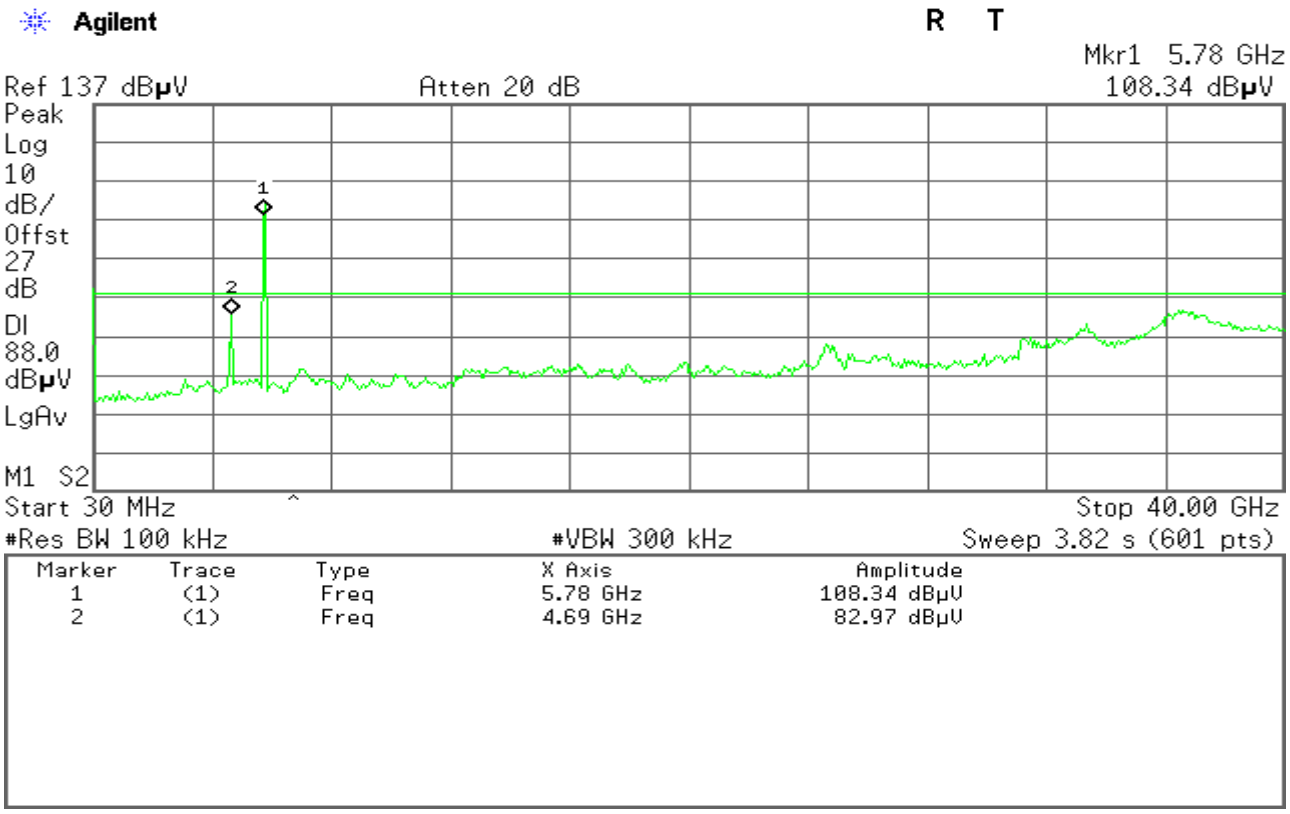
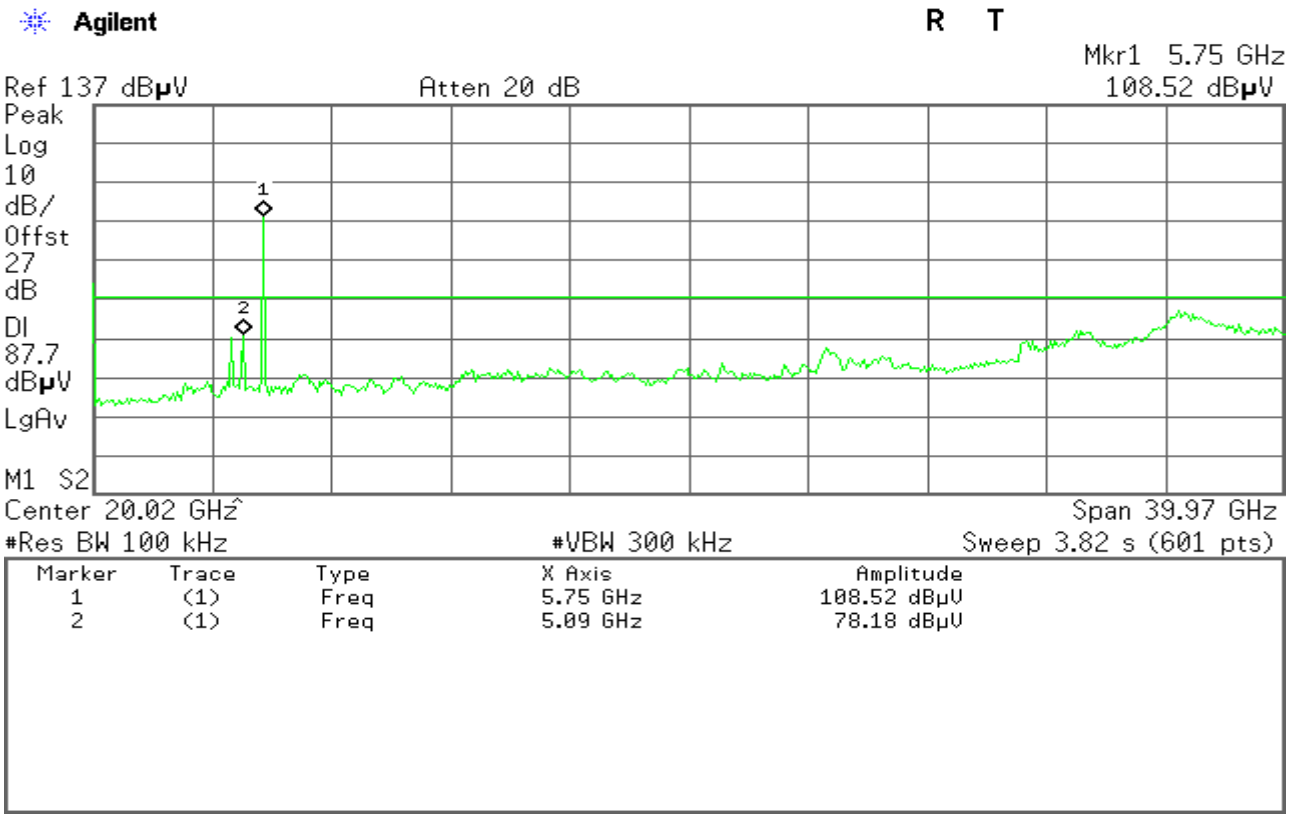


CH High

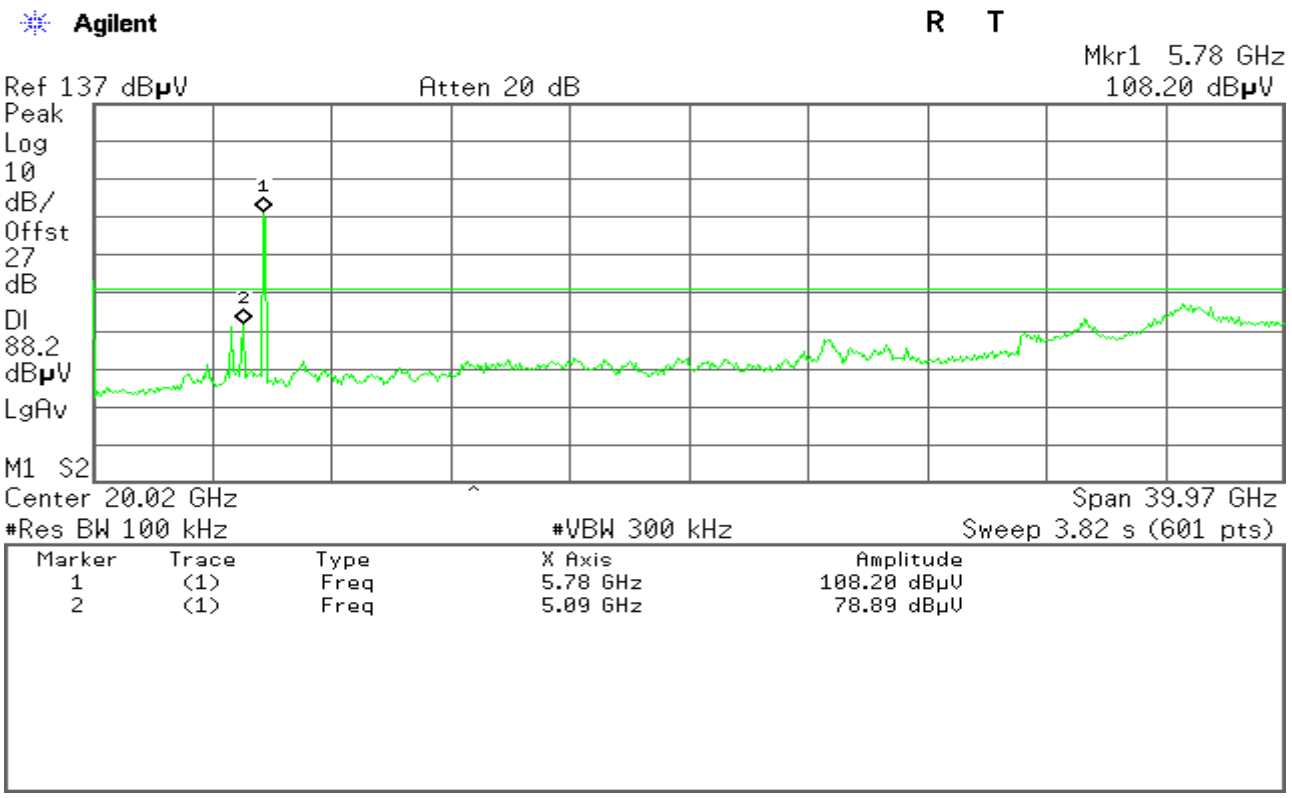


802.11an Standard-20 MHz Channel mode / Chain 0+ Chain 1

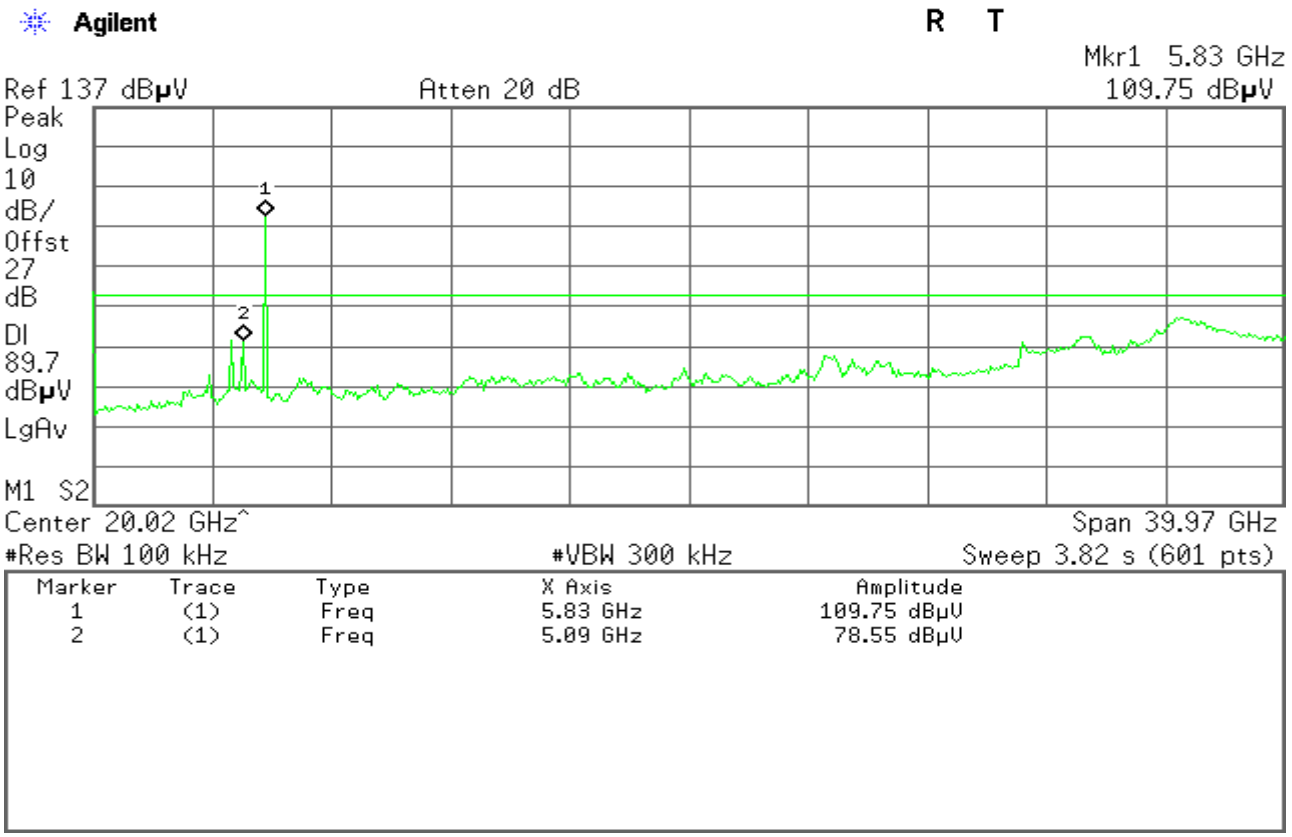
CH Low



CH Mid

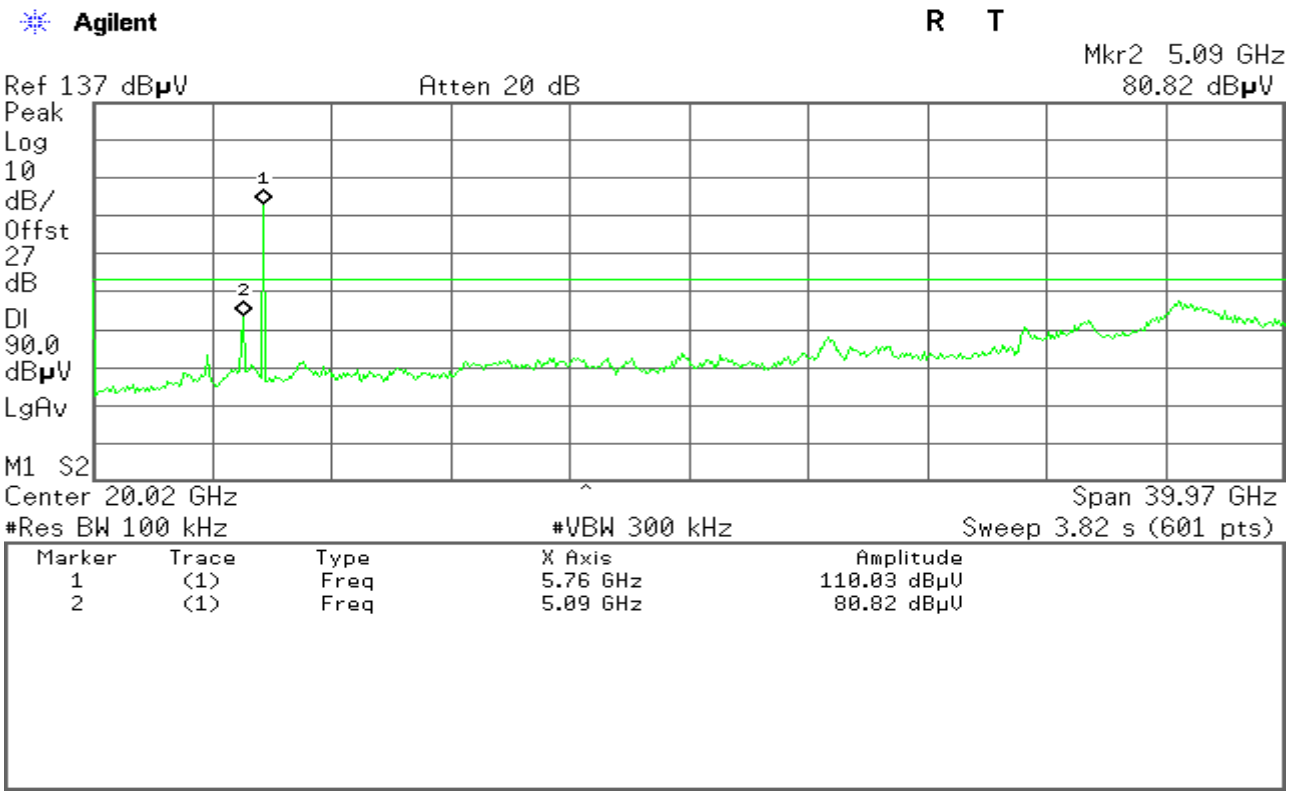


CH High



802.11an Standard-40 MHz Channel mode / Chain 0

CH Low



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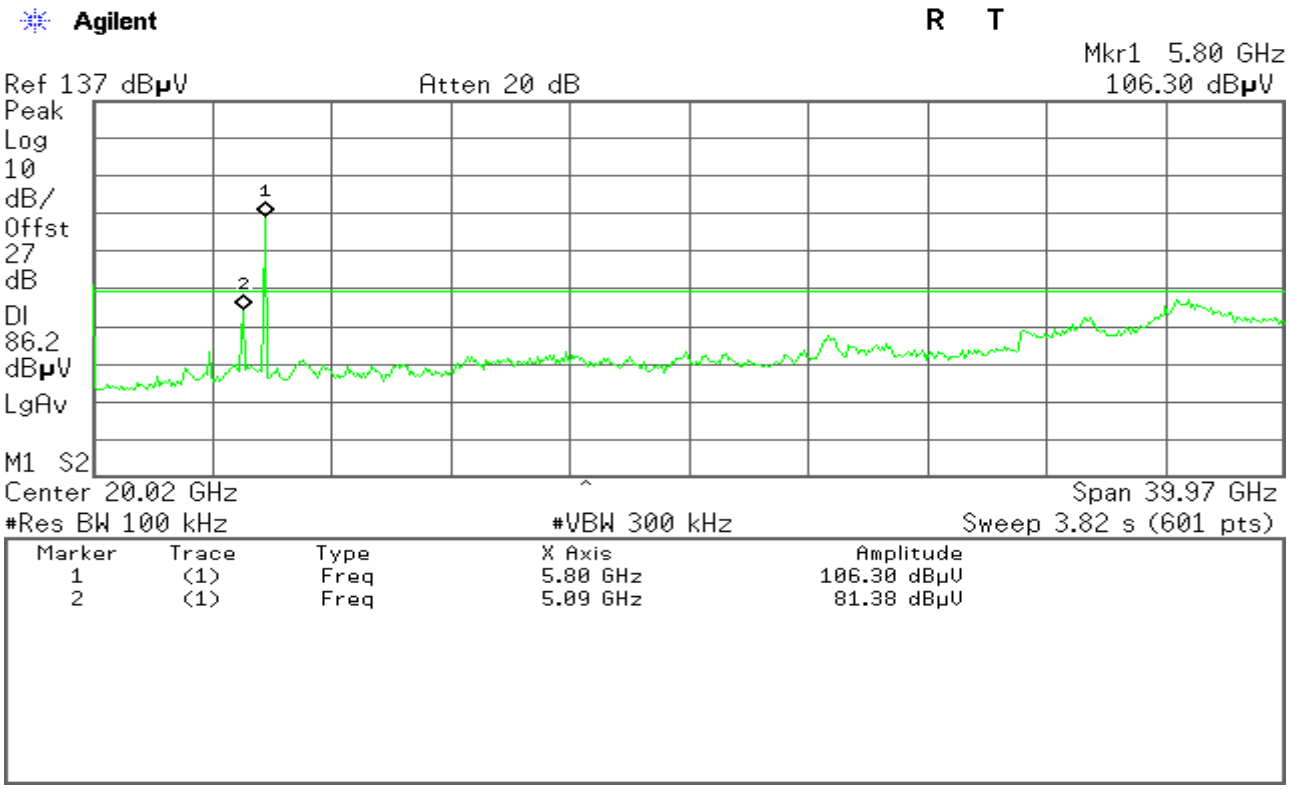
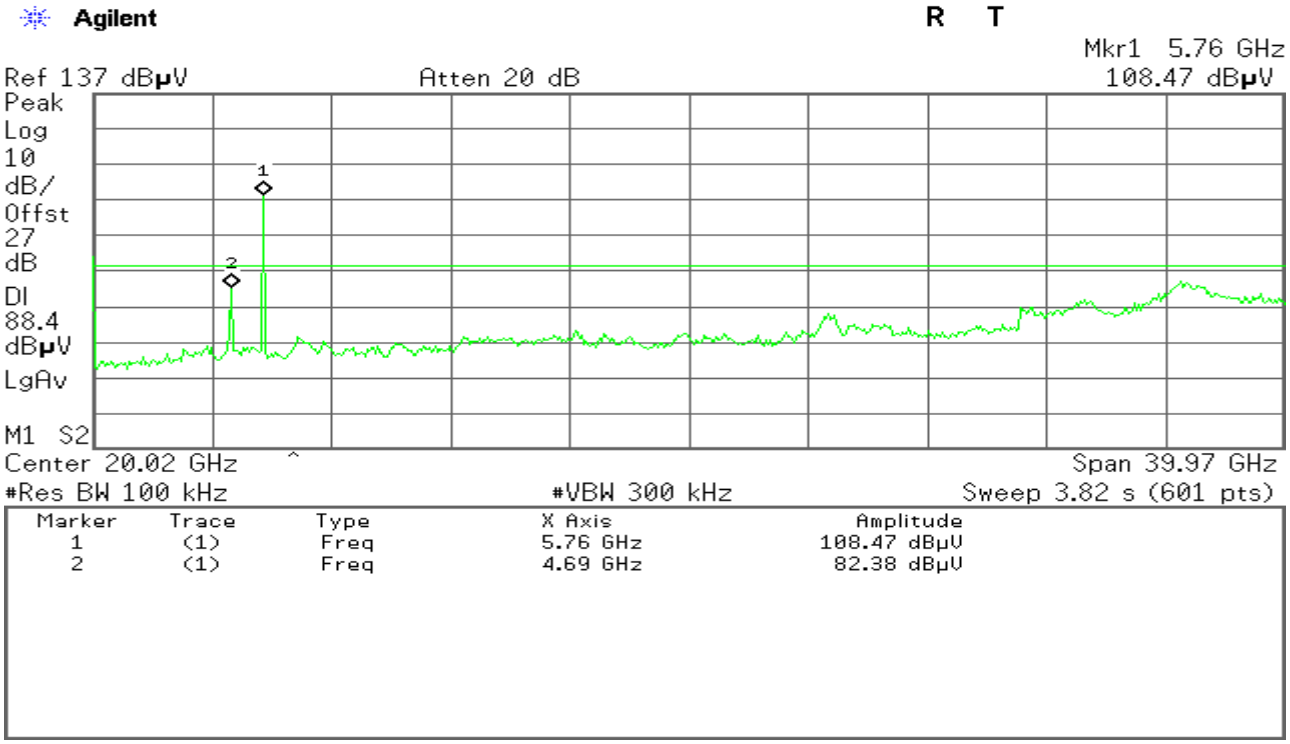
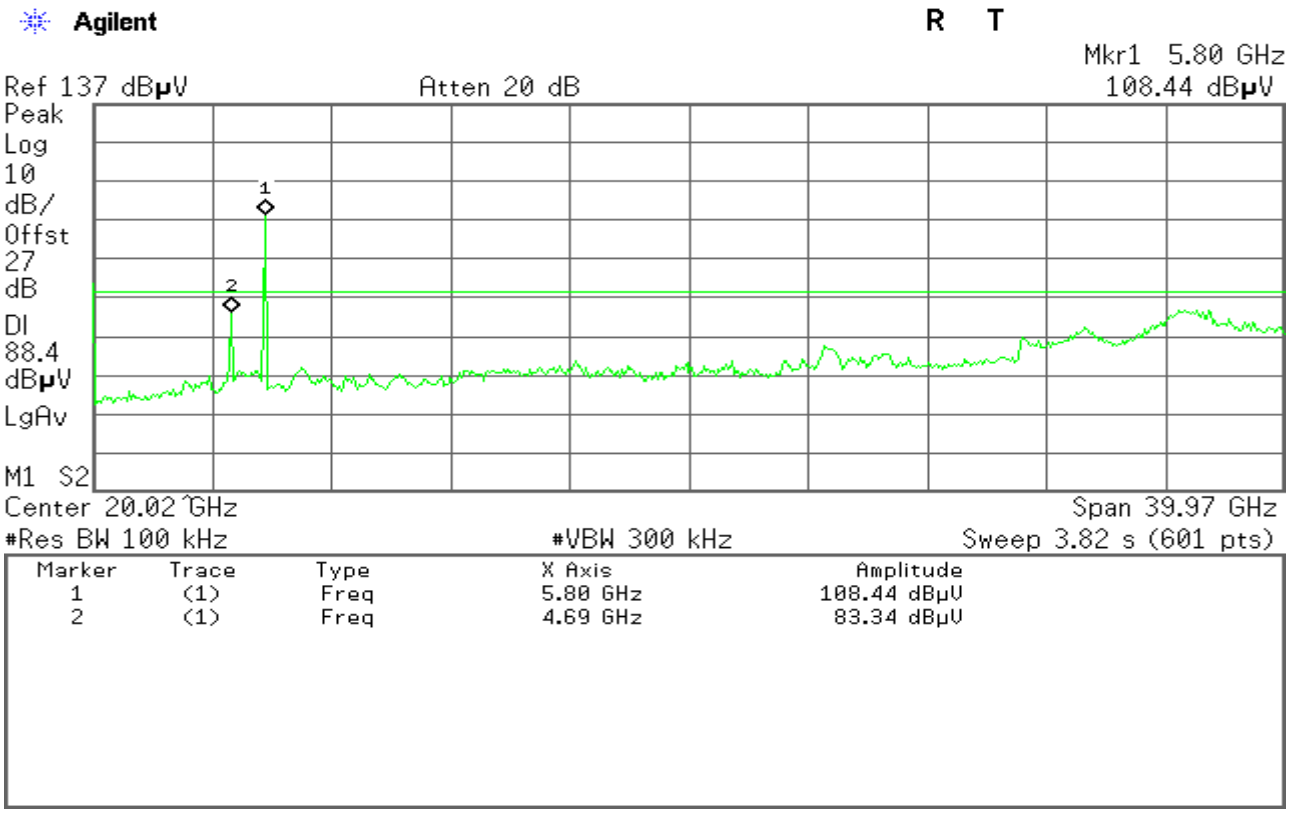


802.11an Standard-40 MHz Channel mode / Chain 1

CH Low

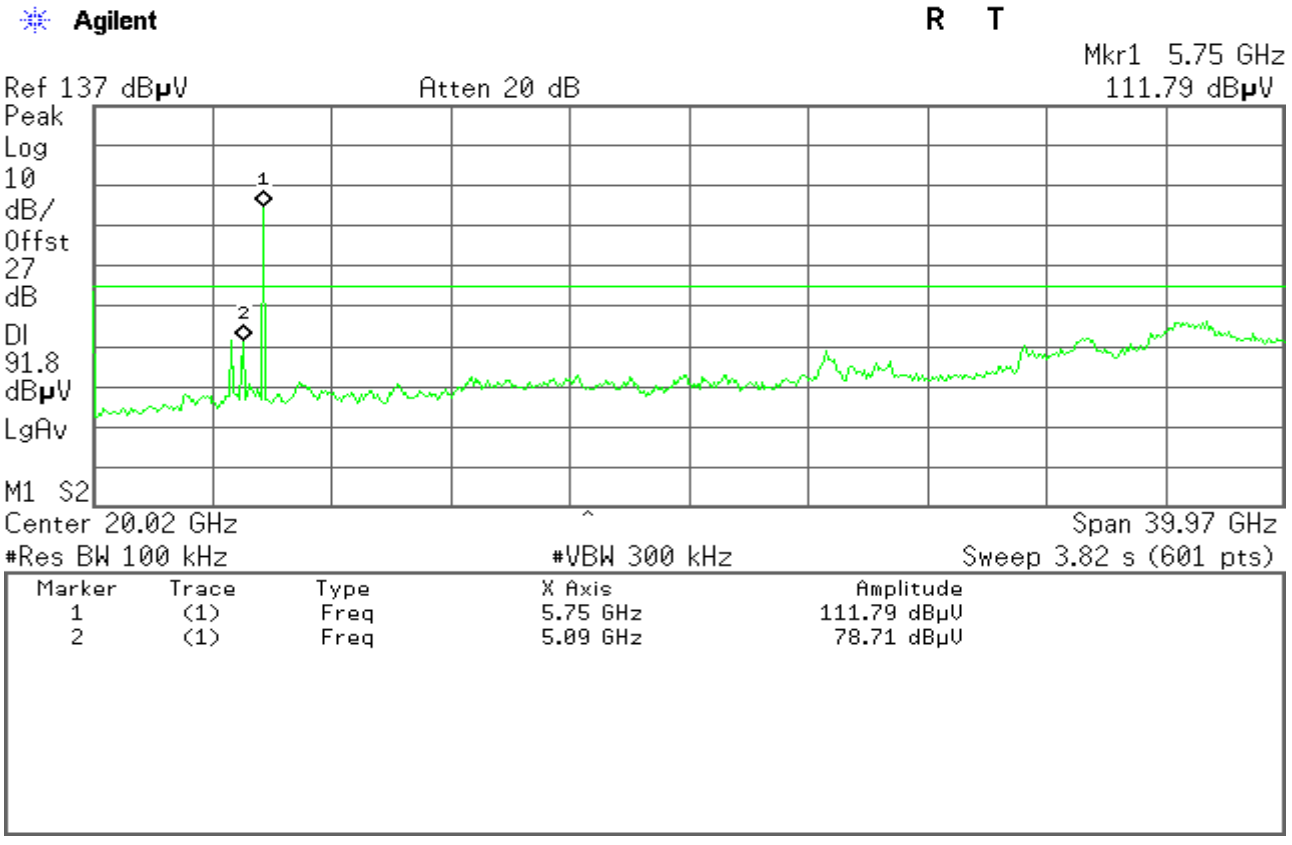


CH High

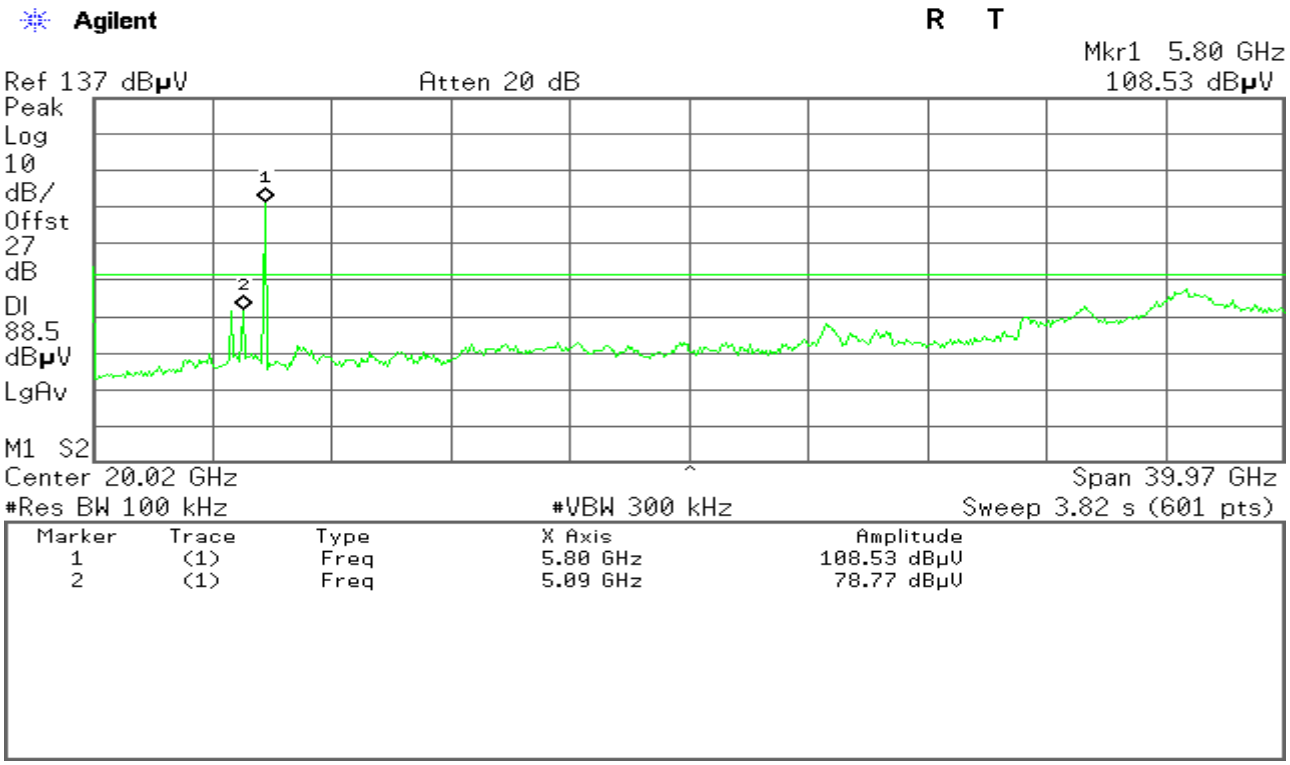


802.11an Standard-40 MHz Channel mode / Chain 0+ Chain 1

CH Low



CH High



7.5. RADIATED EMISSIONS

LIMIT

1. According to §15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

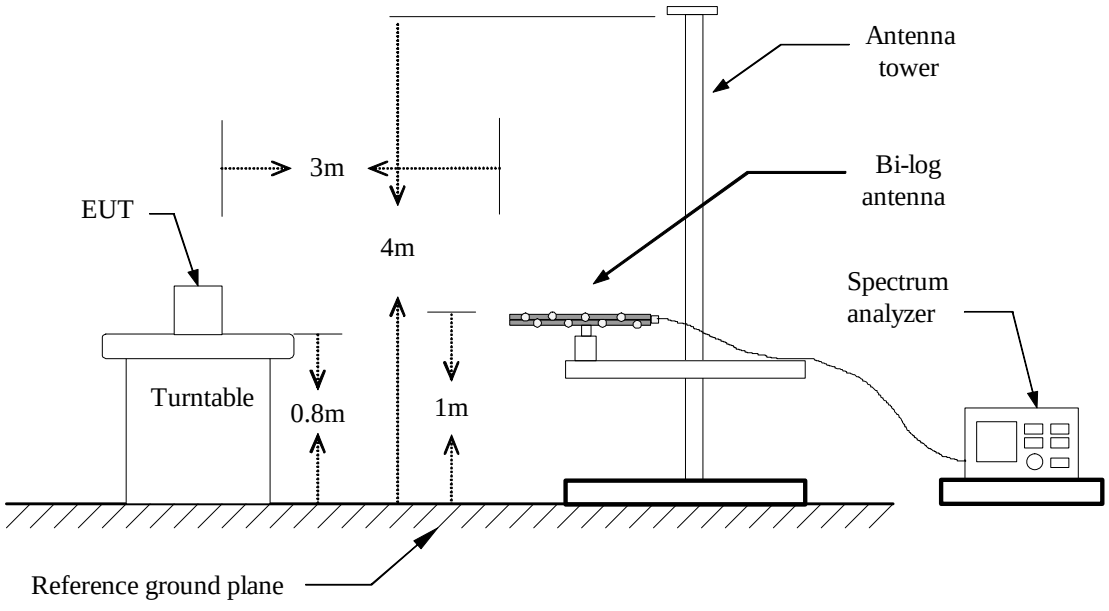
Remark: *Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

2. In the emission table above, the tighter limit applies at the band edges.

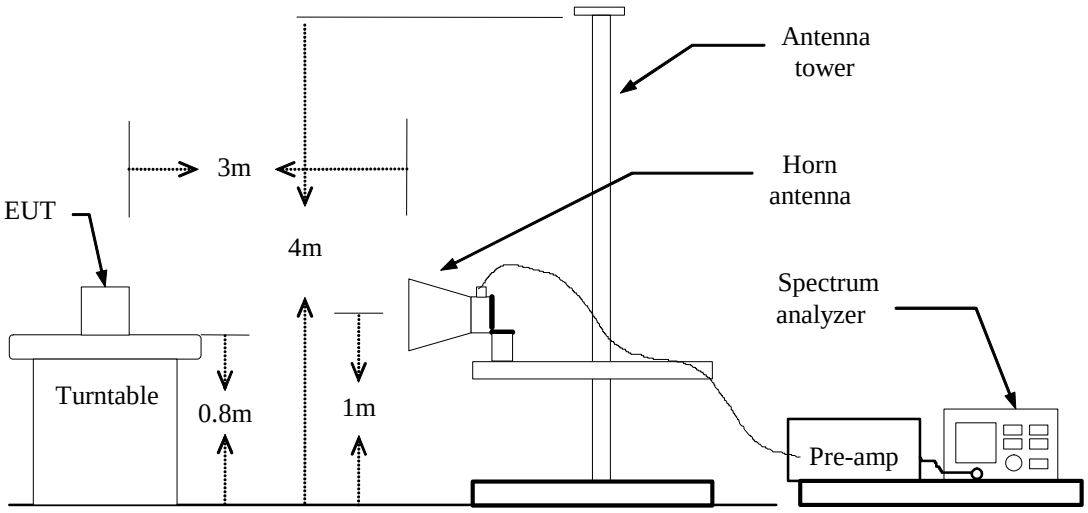
Frequency (MHz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

Below 1 GHz



Above 1 GHz



TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:

   Below 1GHz:

   RBW=100kHz / VBW=300kHz / Sweep=AUTO

   Above 1GHz:

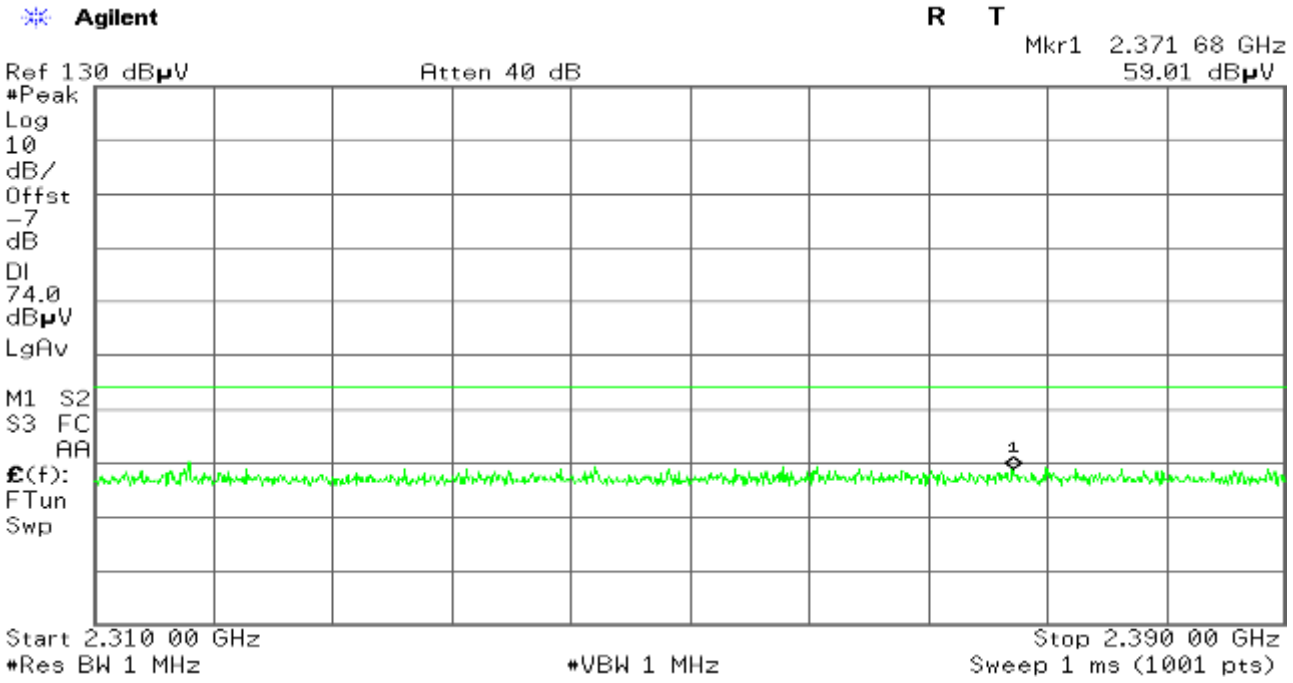
   (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

   (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

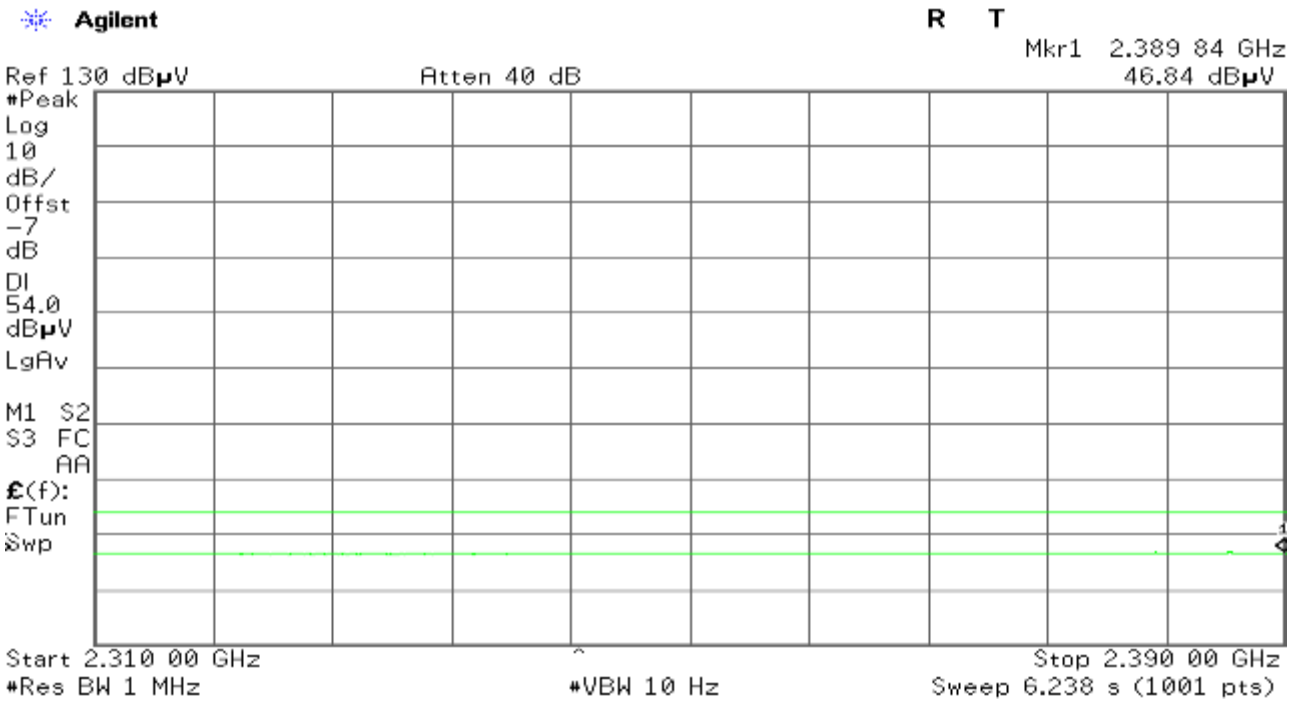
TEST RESULTS

RESTRICTED BANDEDGE (b Mode, Low Channel, Horizontal)

PEAK

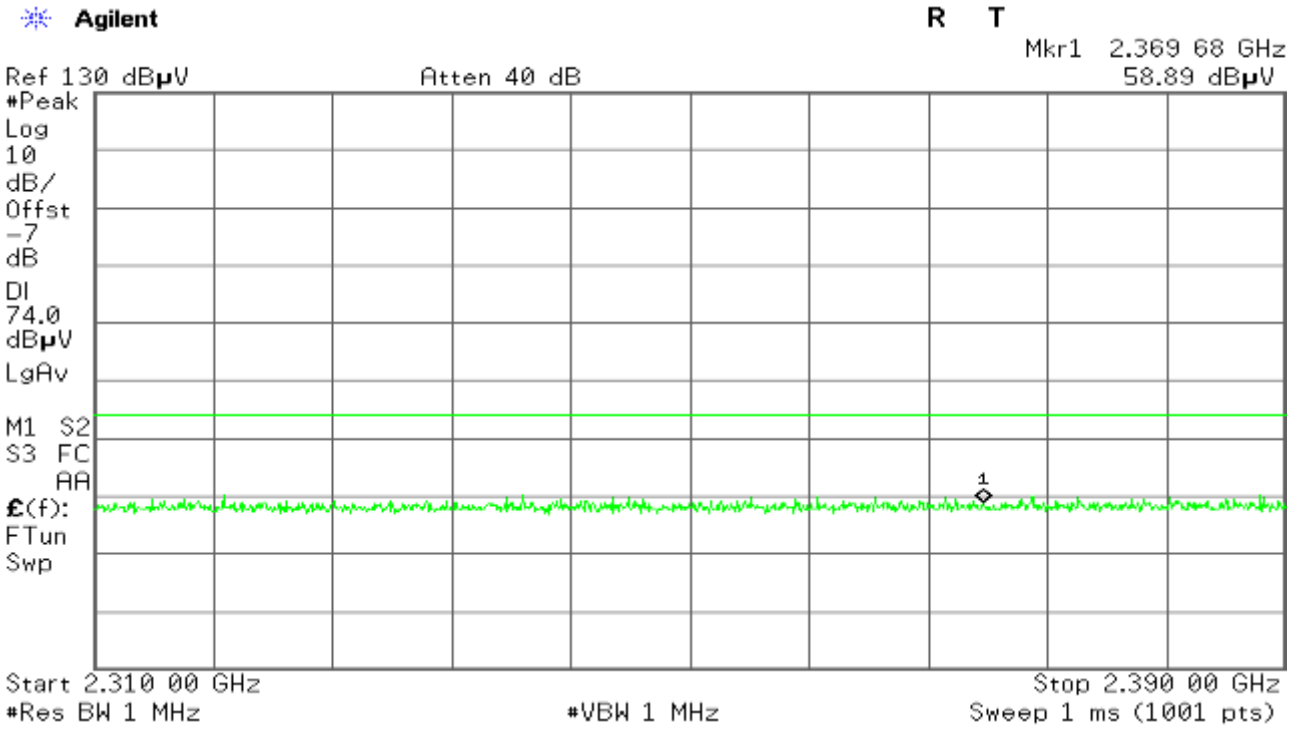


AVG

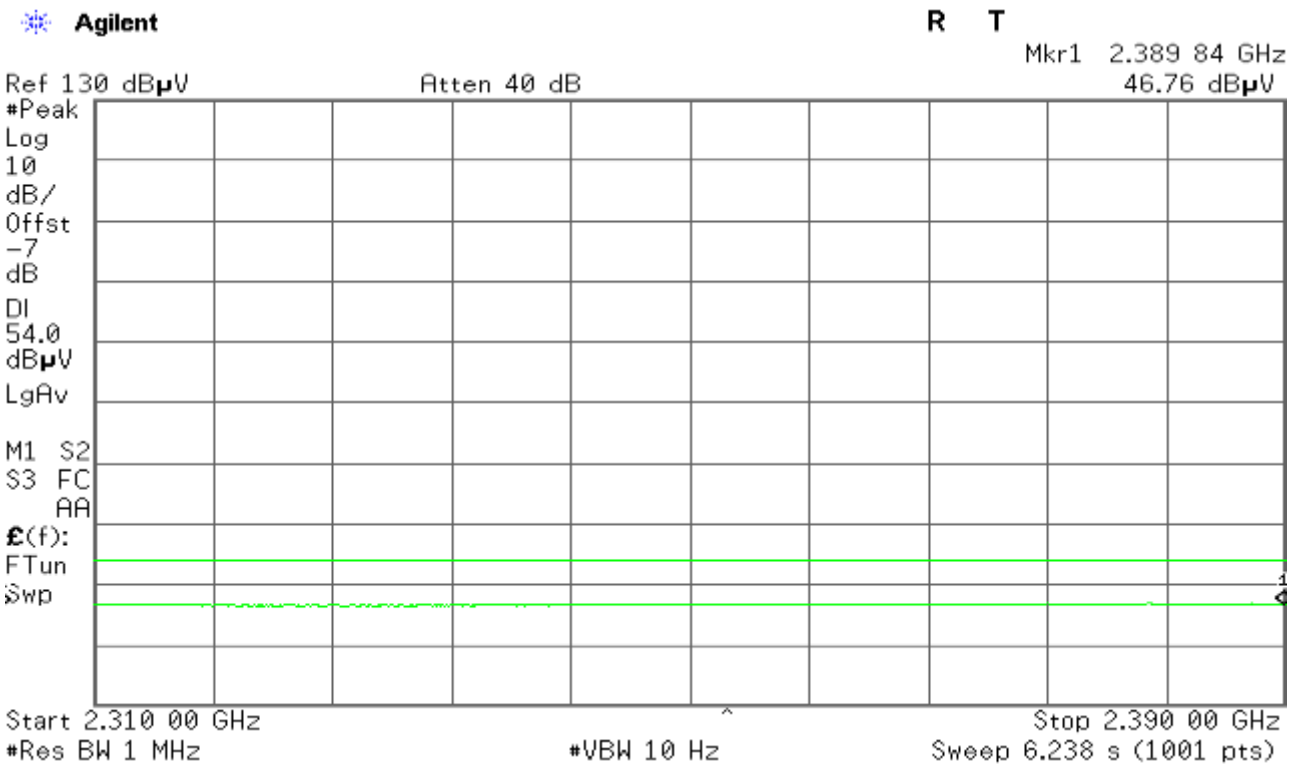


RESTRICTED BANDEDGE (b Mode, Low Channel, Vertical)

PEAK

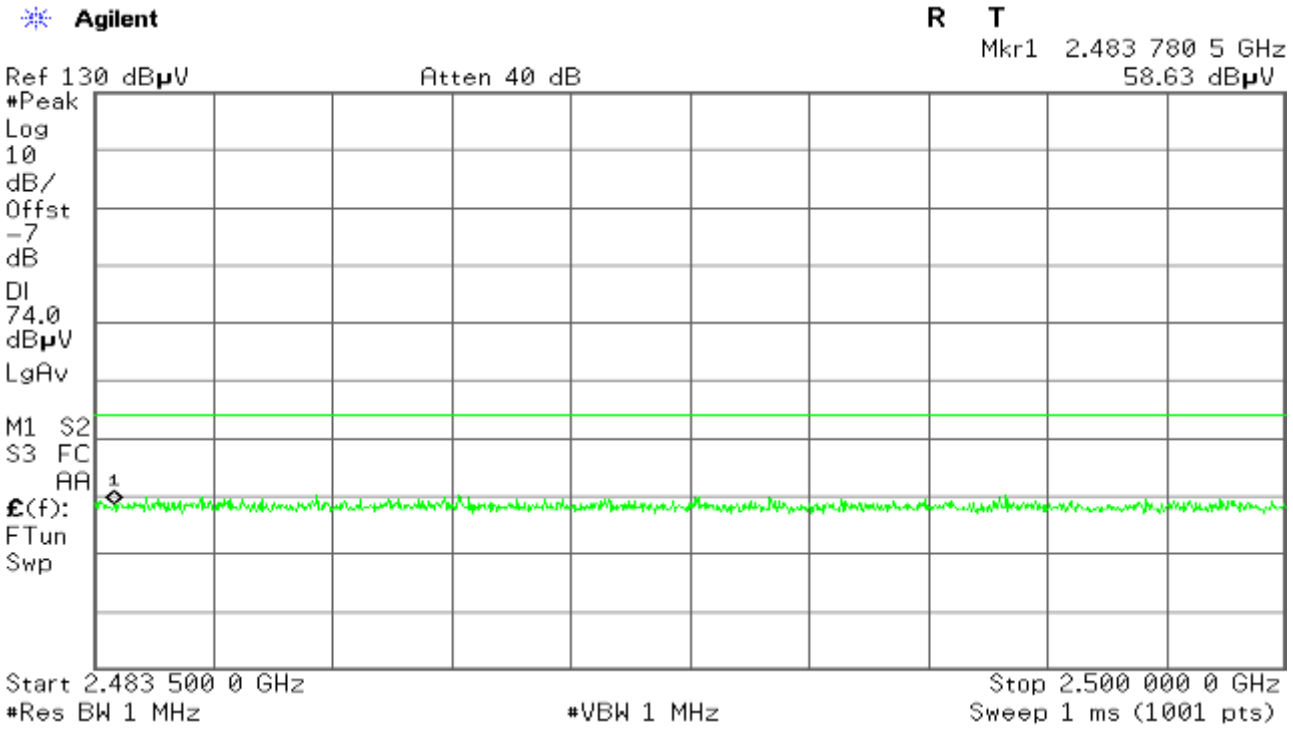


AVG

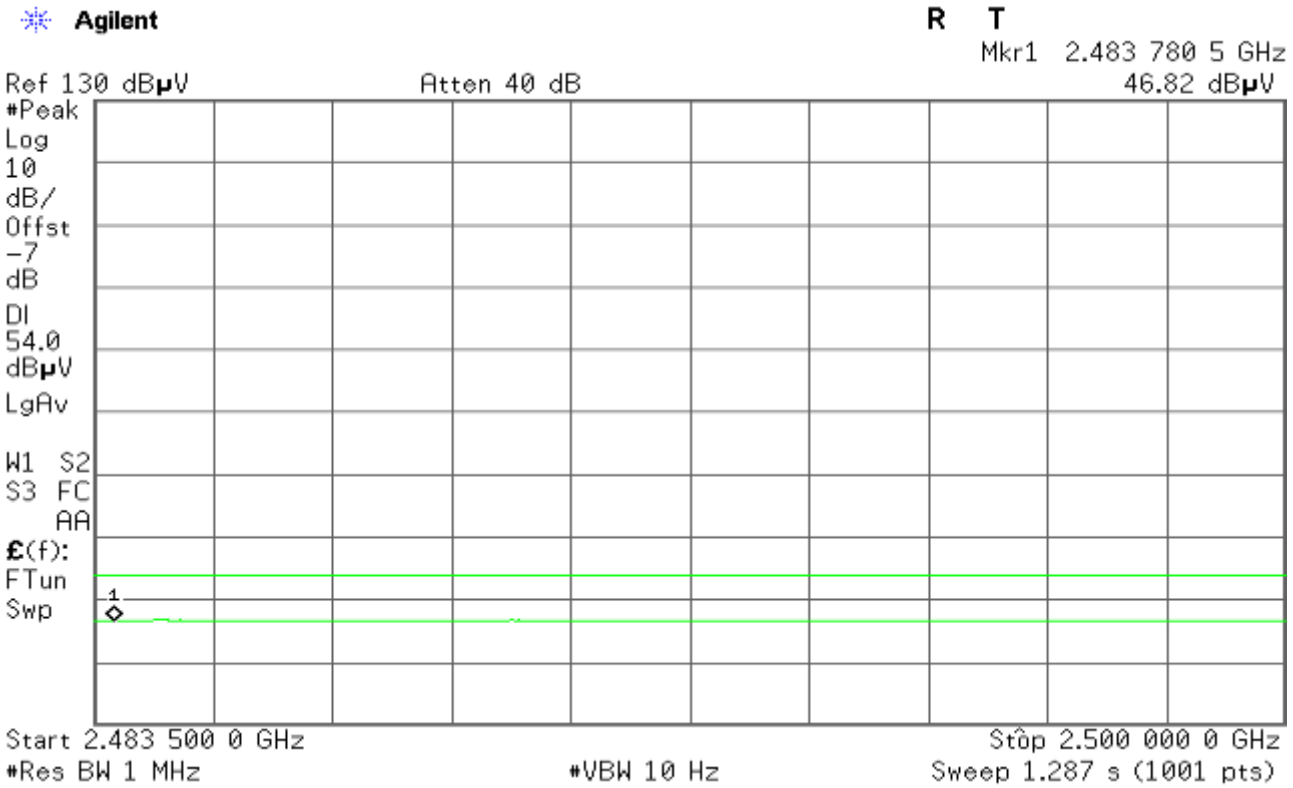


RESTRICTED BANDEDGE (b Mode, High Channel, Horizontal)

PEAK

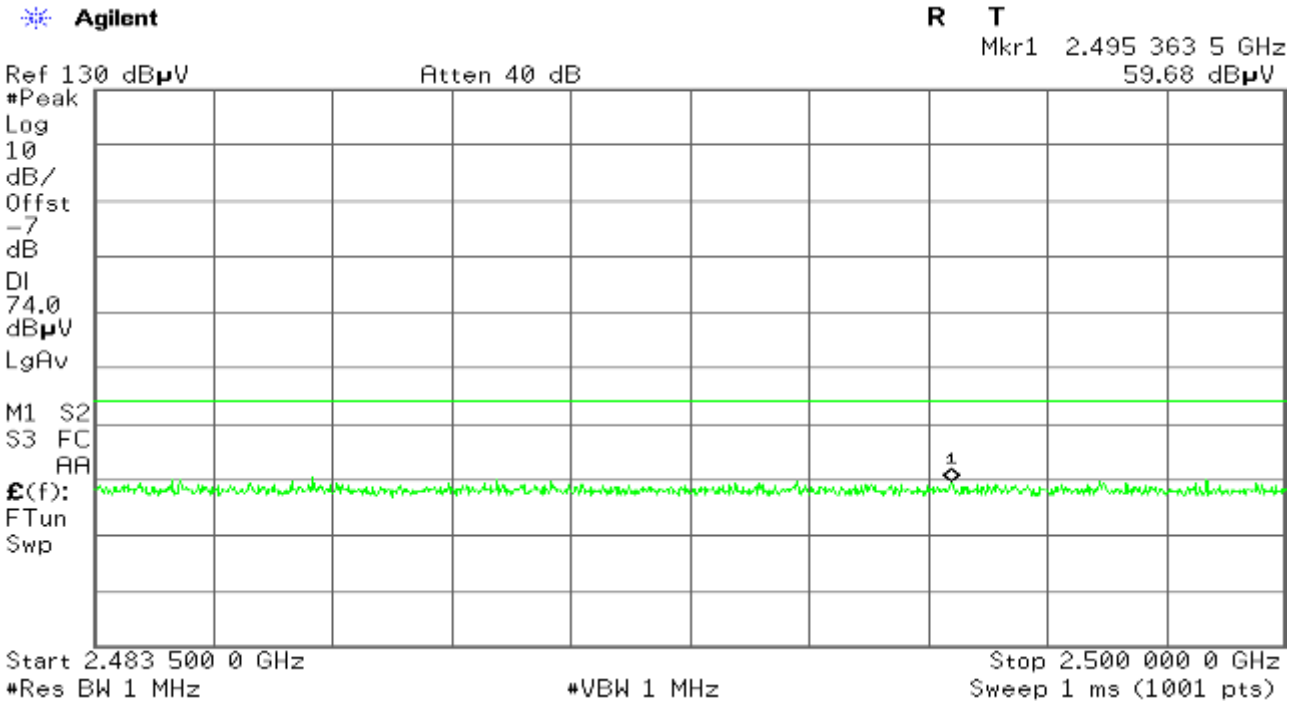


AVG

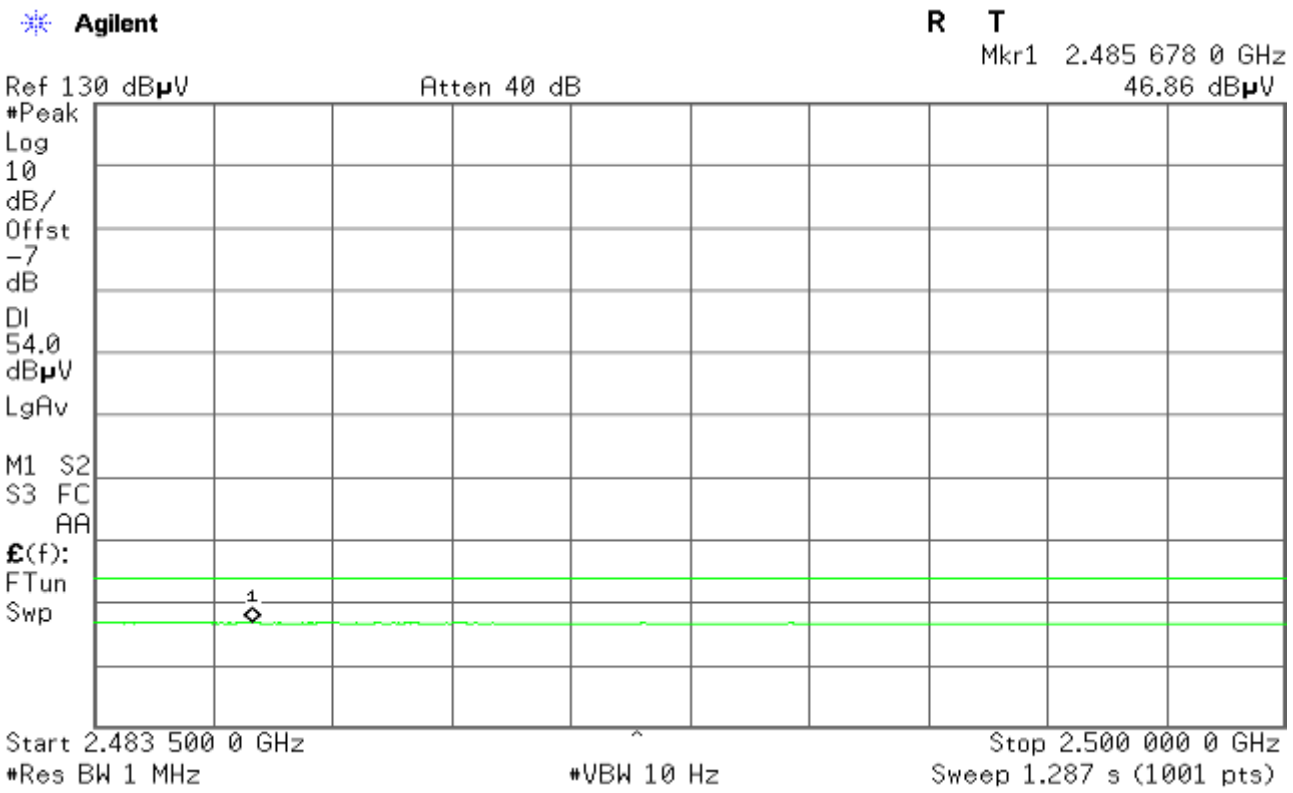


RESTRICTED BANDEDGE (b Mode, High Channel, Vertical)

PEAK

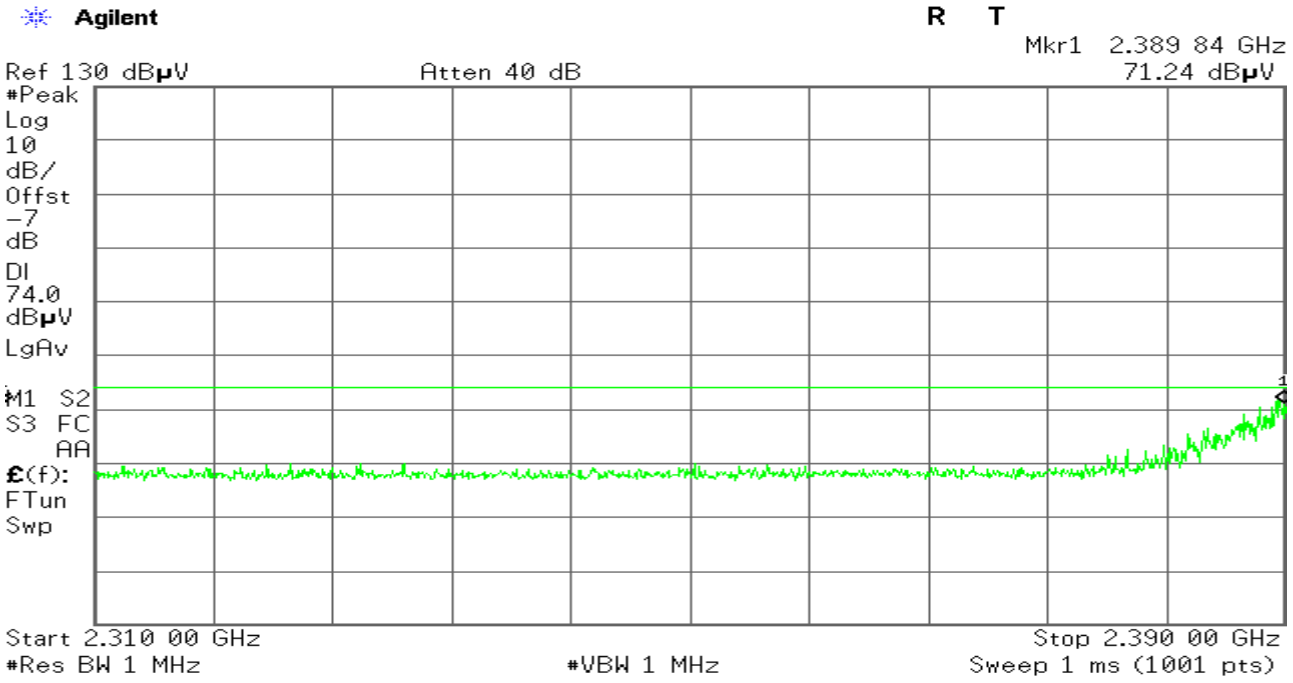


AVG

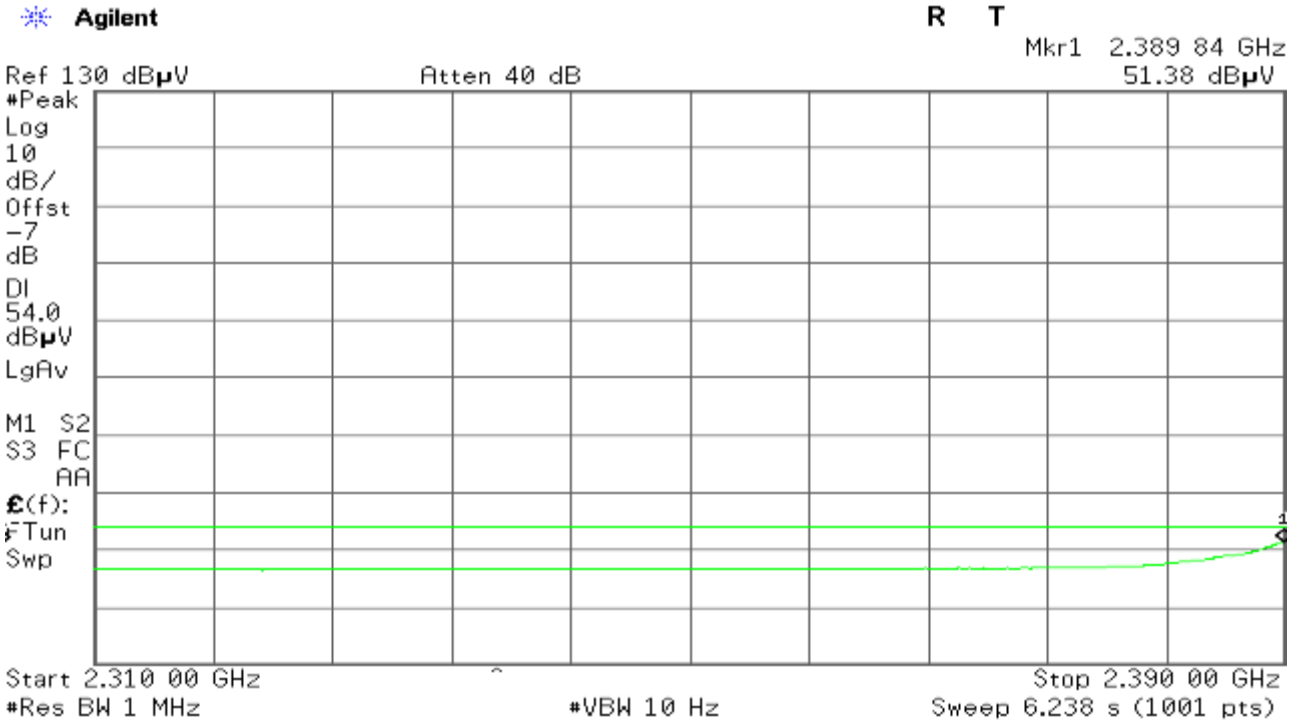


RESTRICTED BANDEDGE (g Mode, Low Channel, Horizontal)

PEAK

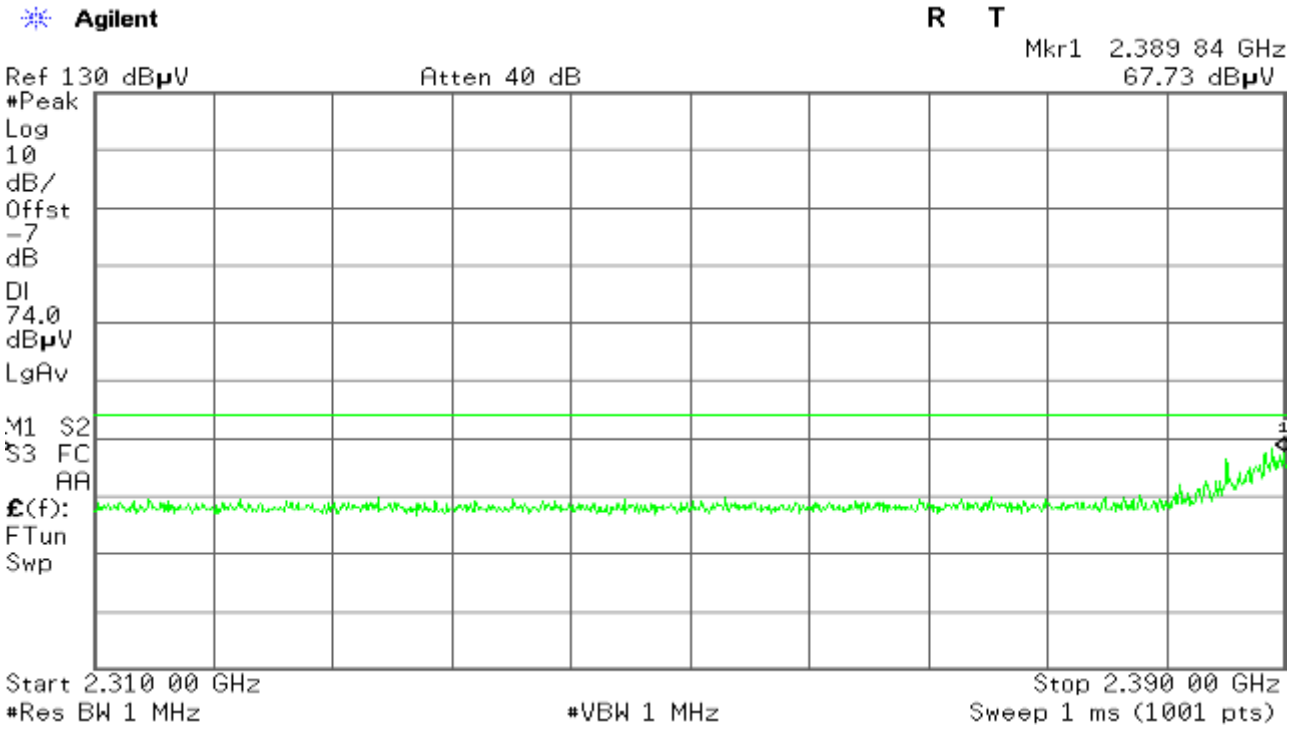


AVG

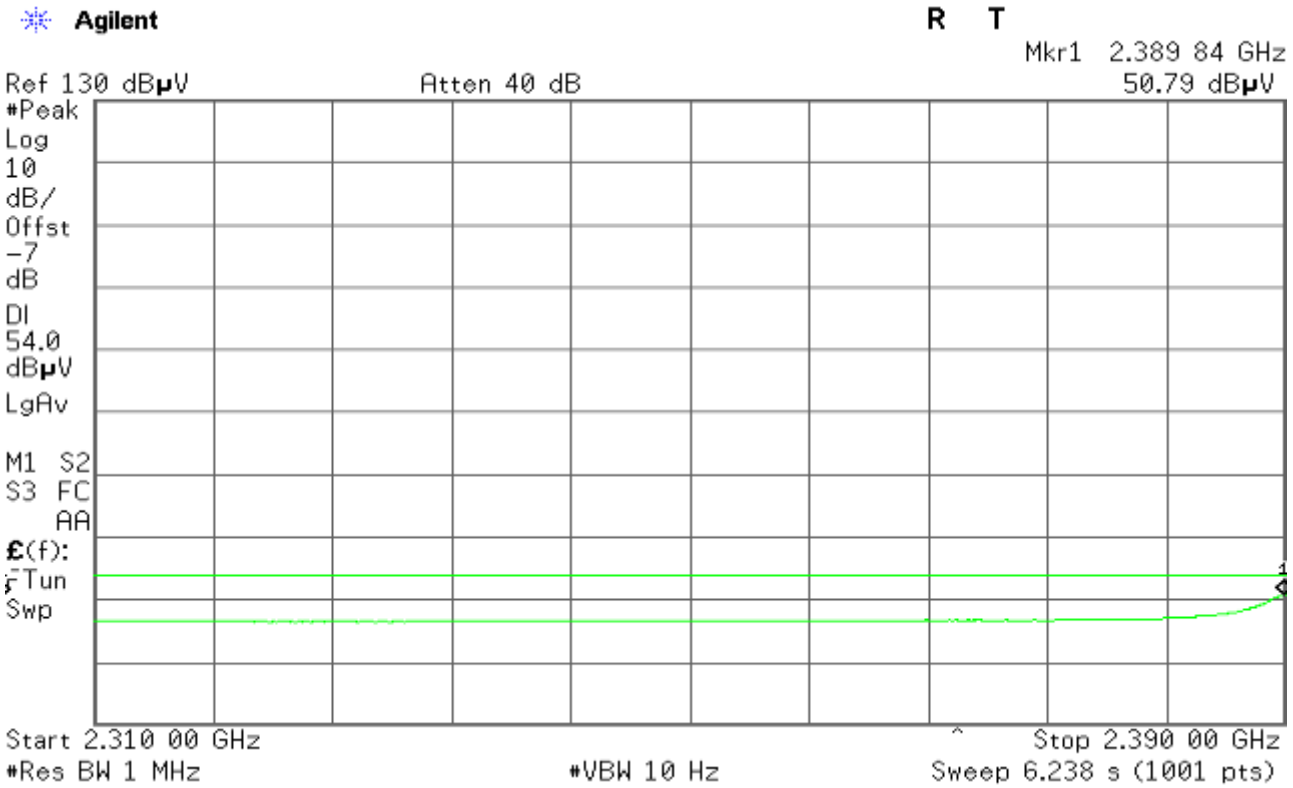


RESTRICTED BANDEDGE (g Mode, Low Channel, Vertical)

PEAK

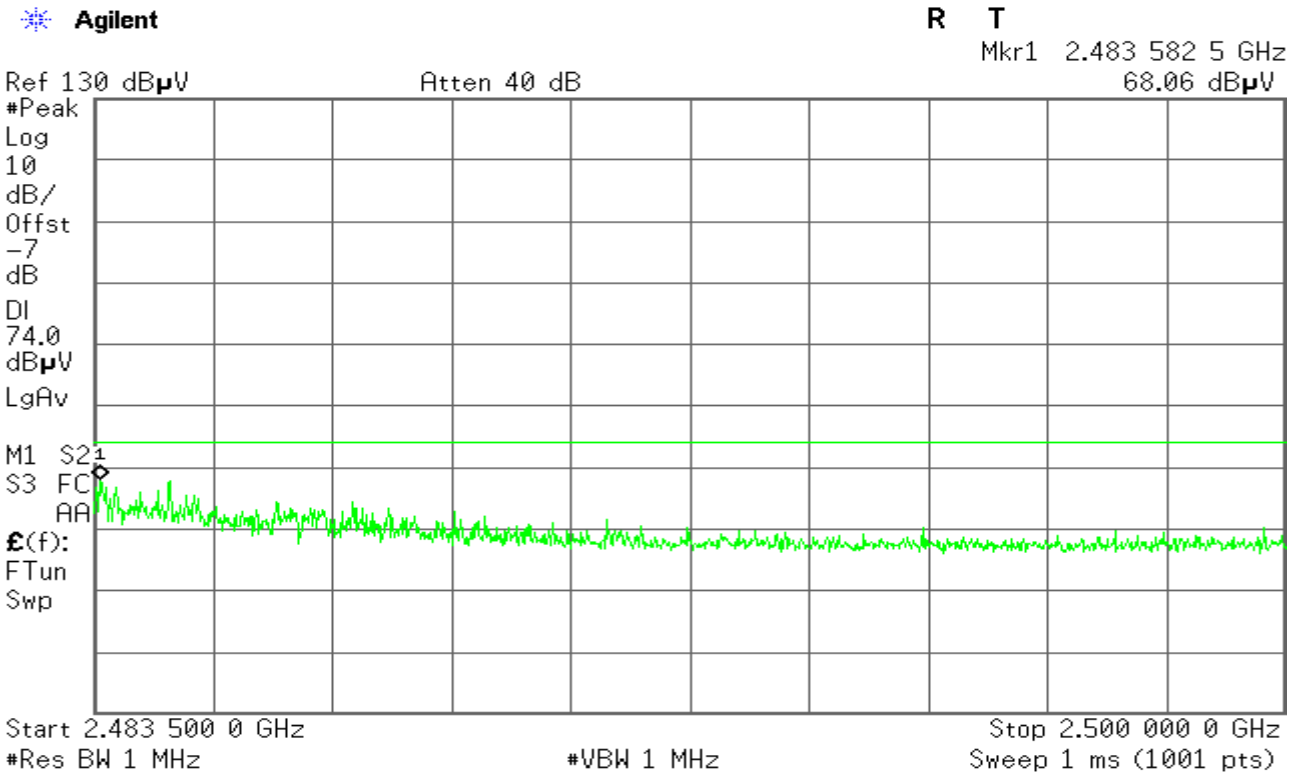


AVG

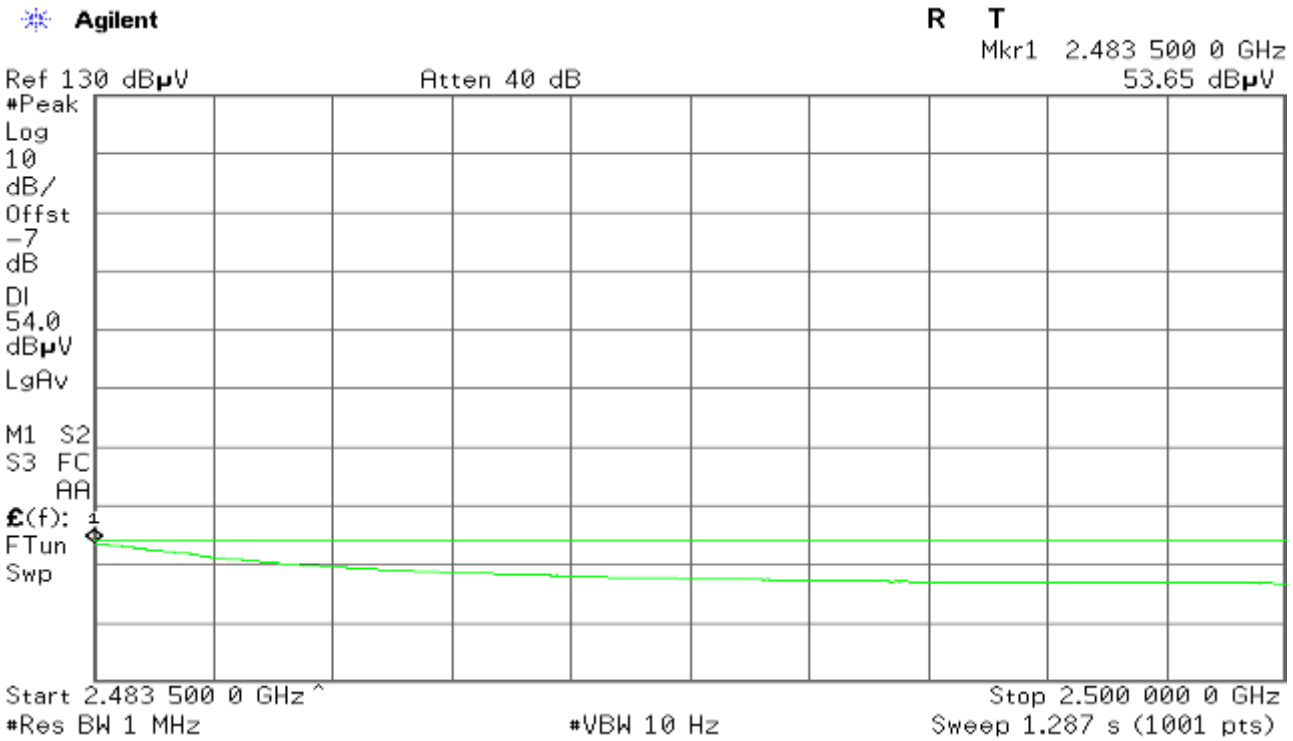


RESTRICTED BANDEDGE (g Mode, High Channel, Horizontal)

PEAK

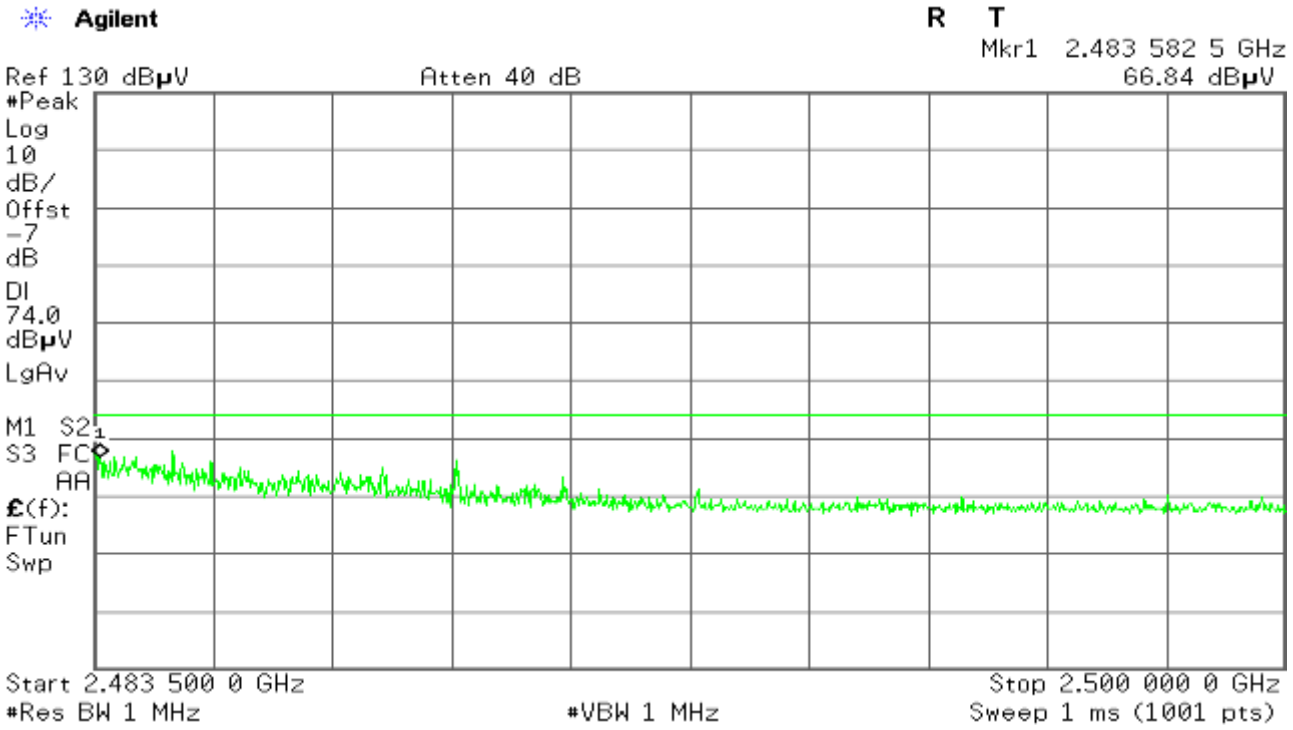


AVG

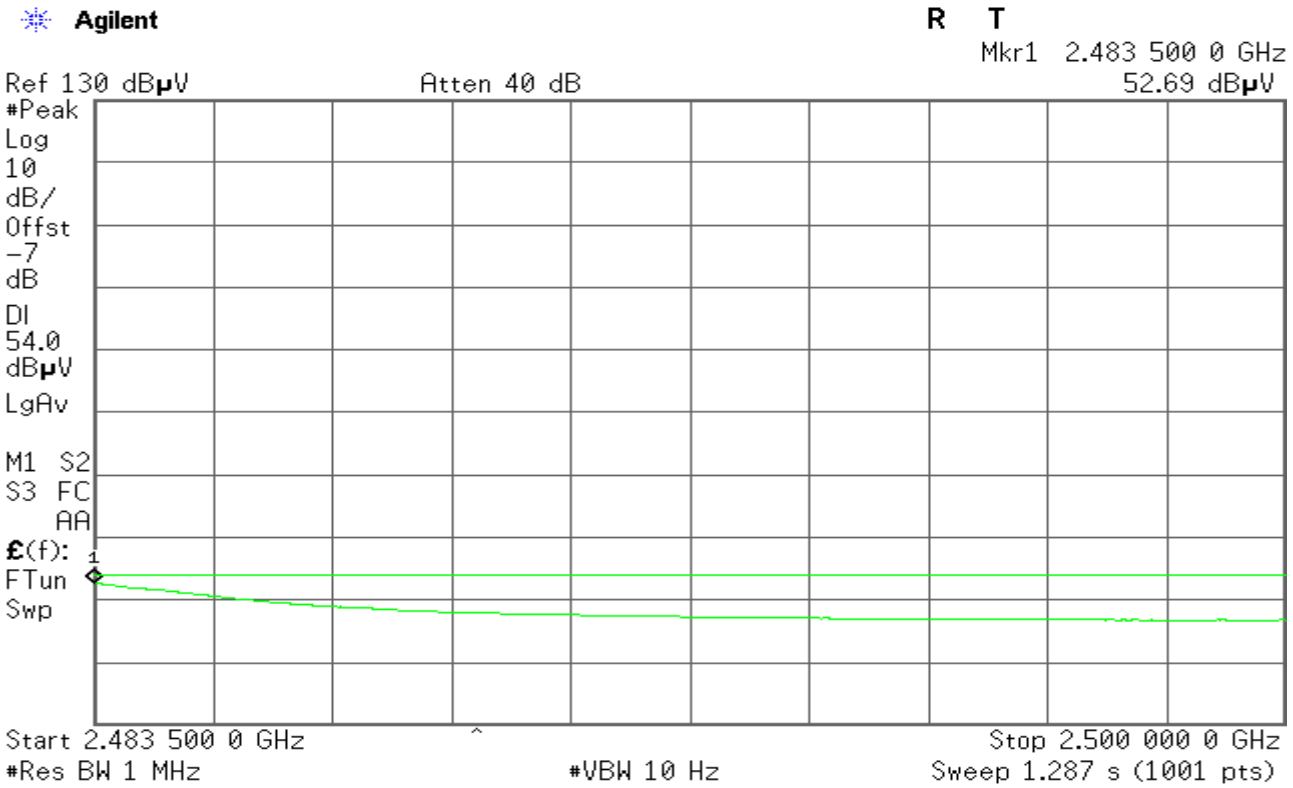


RESTRICTED BANDEDGE (g Mode, High Channel, Vertical)

PEAK

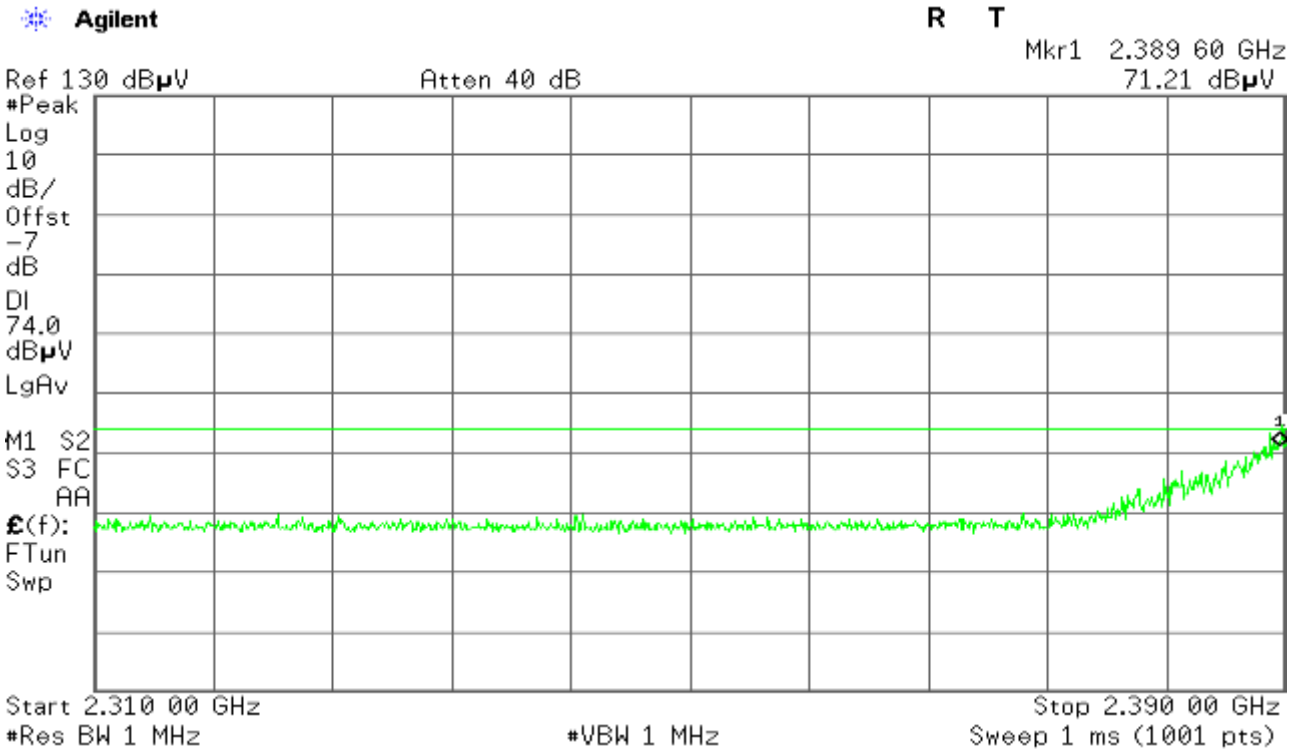


AVG

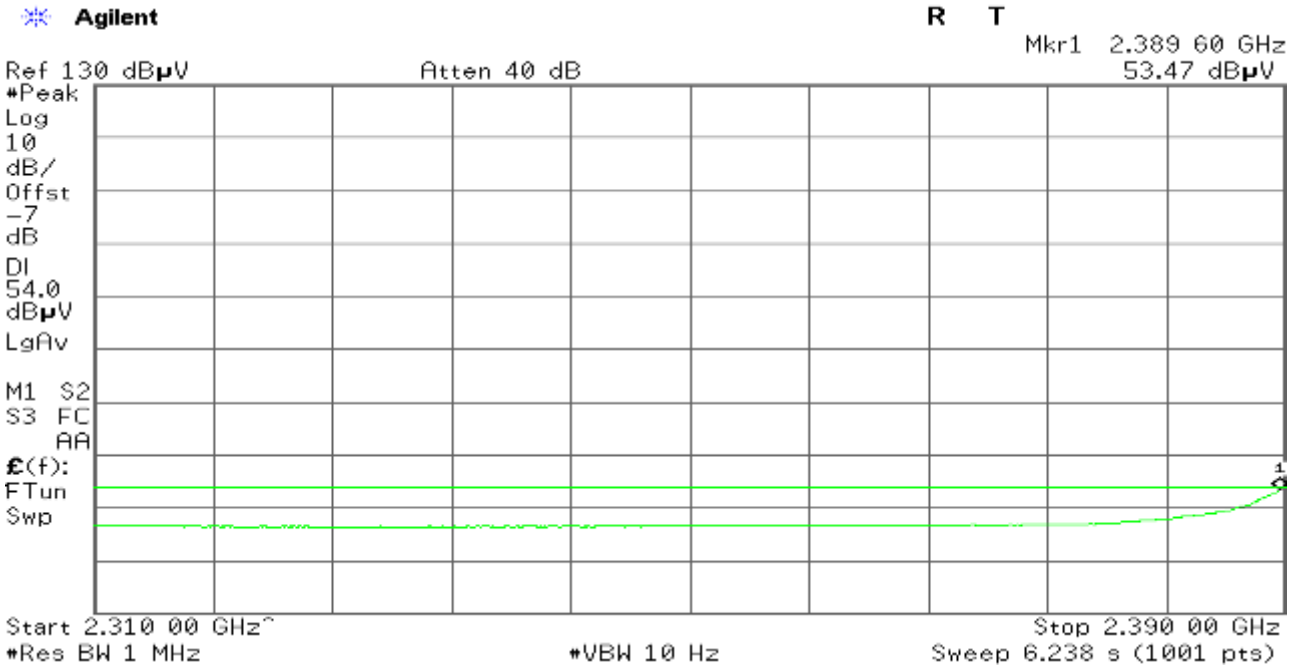


RESTRICTED BANDEDGE (802.11n Standard-20 MHz Channel mode, Low Channel, Horizontal)

PEAK

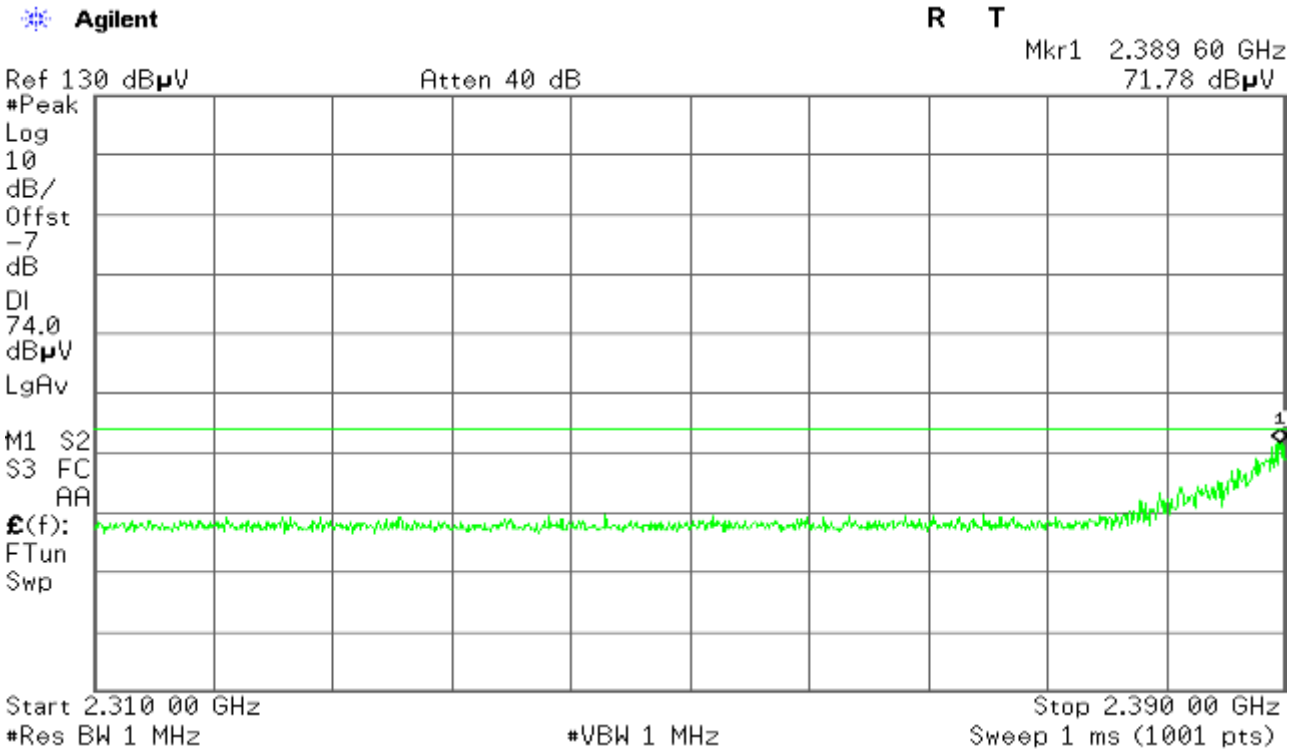


AVG

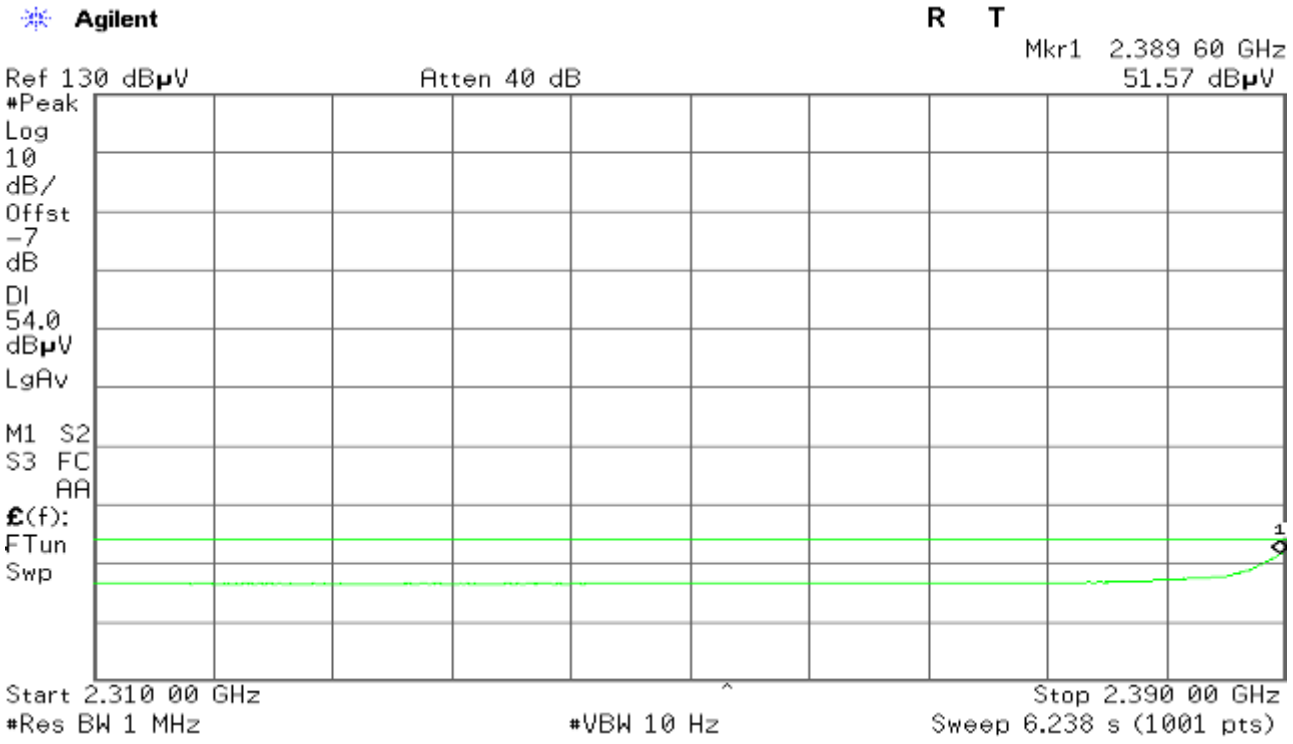


RESTRICTED BANDEDGE (802.11n Standard-20 MHz Channel mode, Low Channel, Vertical)

PEAK

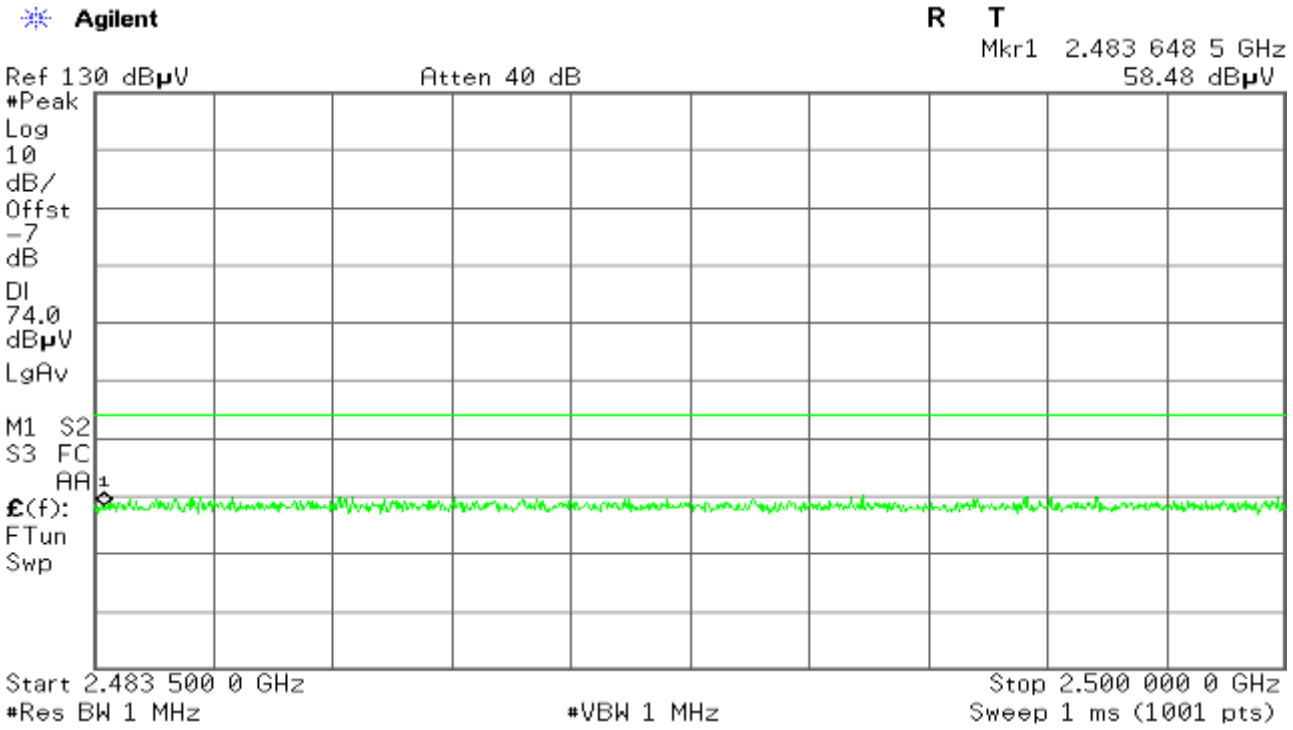


AVG

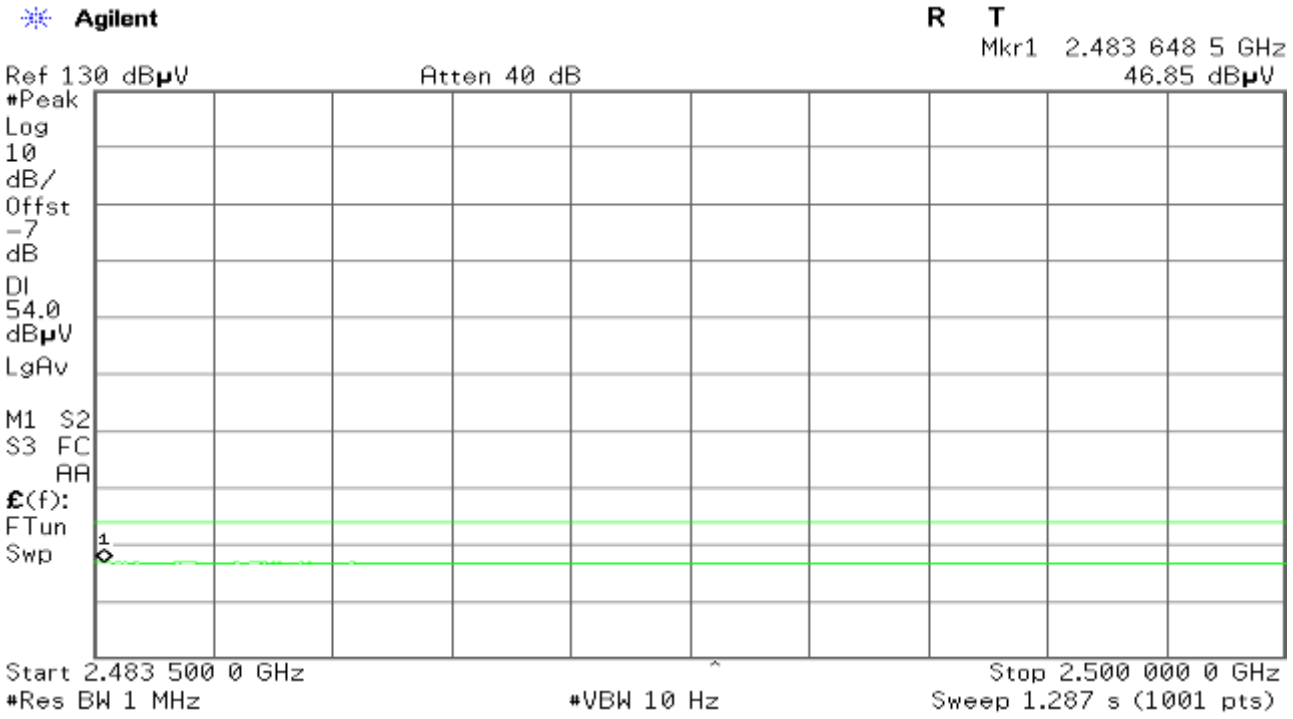


RESTRICTED BANDEDGE (802.11n Standard-20 MHz Channel mode, High Channel, Horizontal)

PEAK

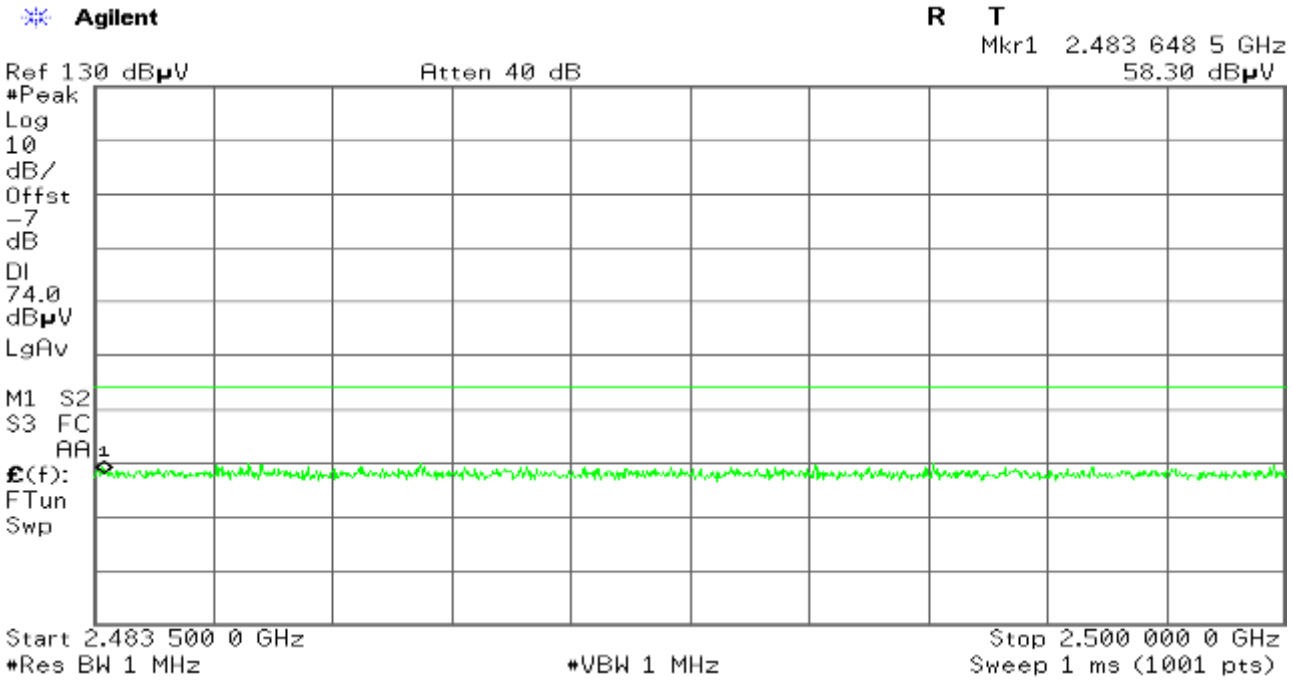


AVG

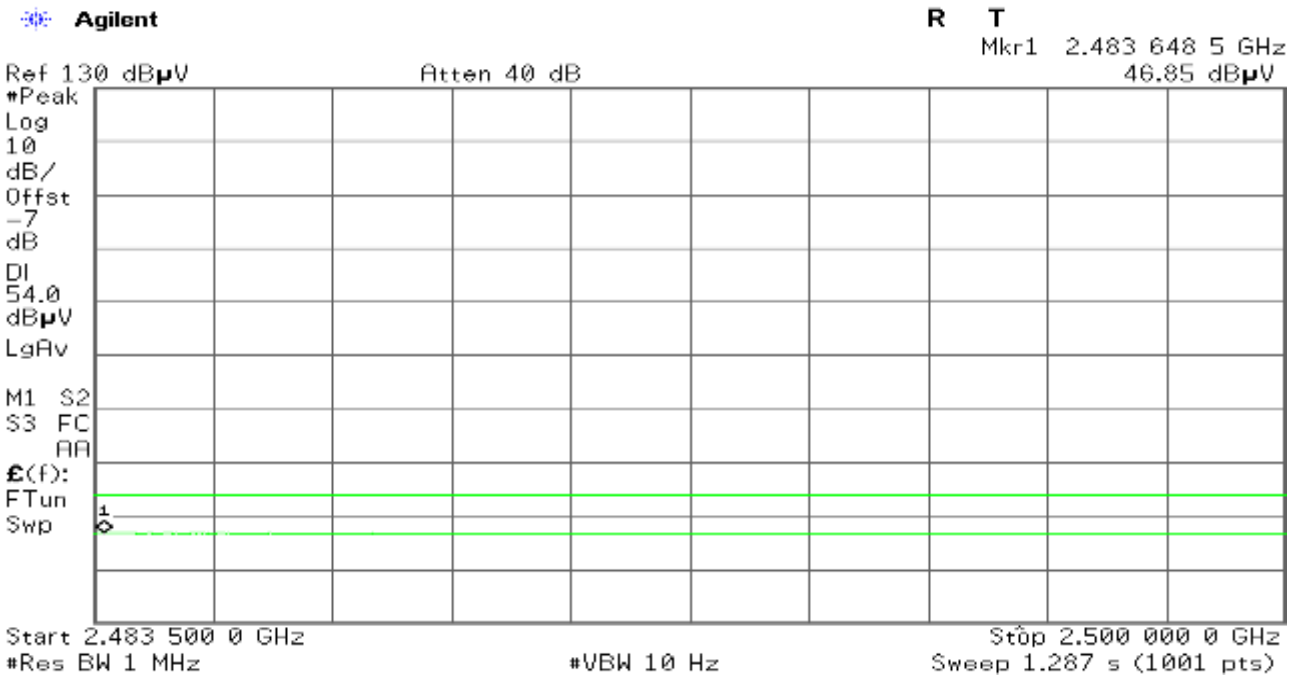


RESTRICTED BANDEDGE (802.11n Standard-20 MHz Channel mode, High Channel, Vertical)

PEAK

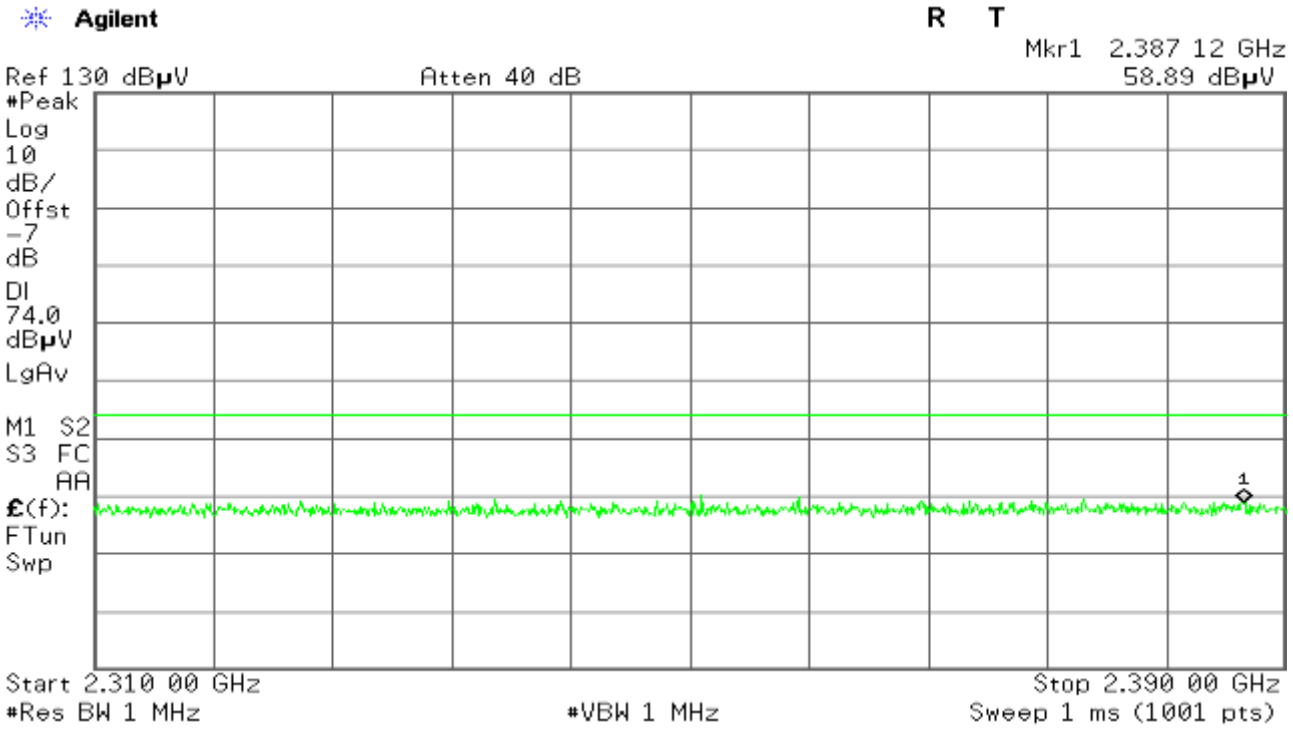


AVG

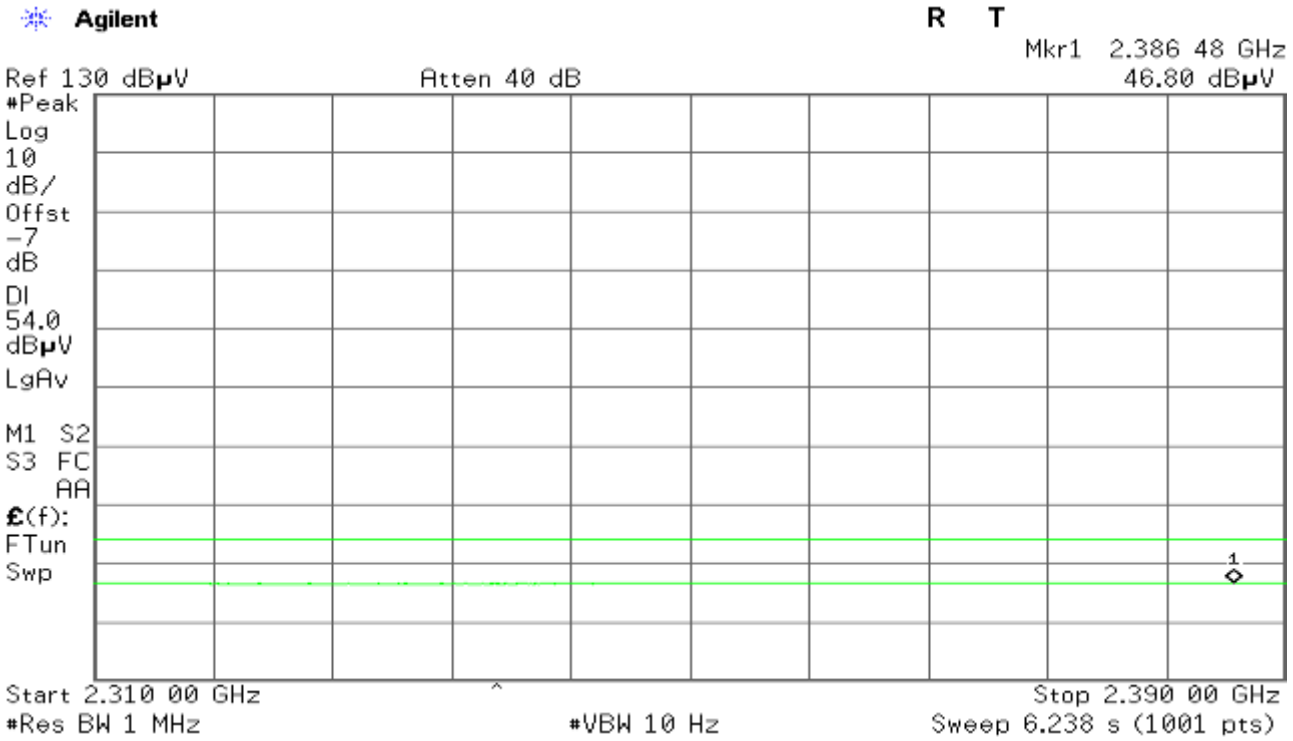


RESTRICTED BANDEDGE (802.11n Wide -40 MHz Channel mode, Low Channel, Horizontal)

PEAK

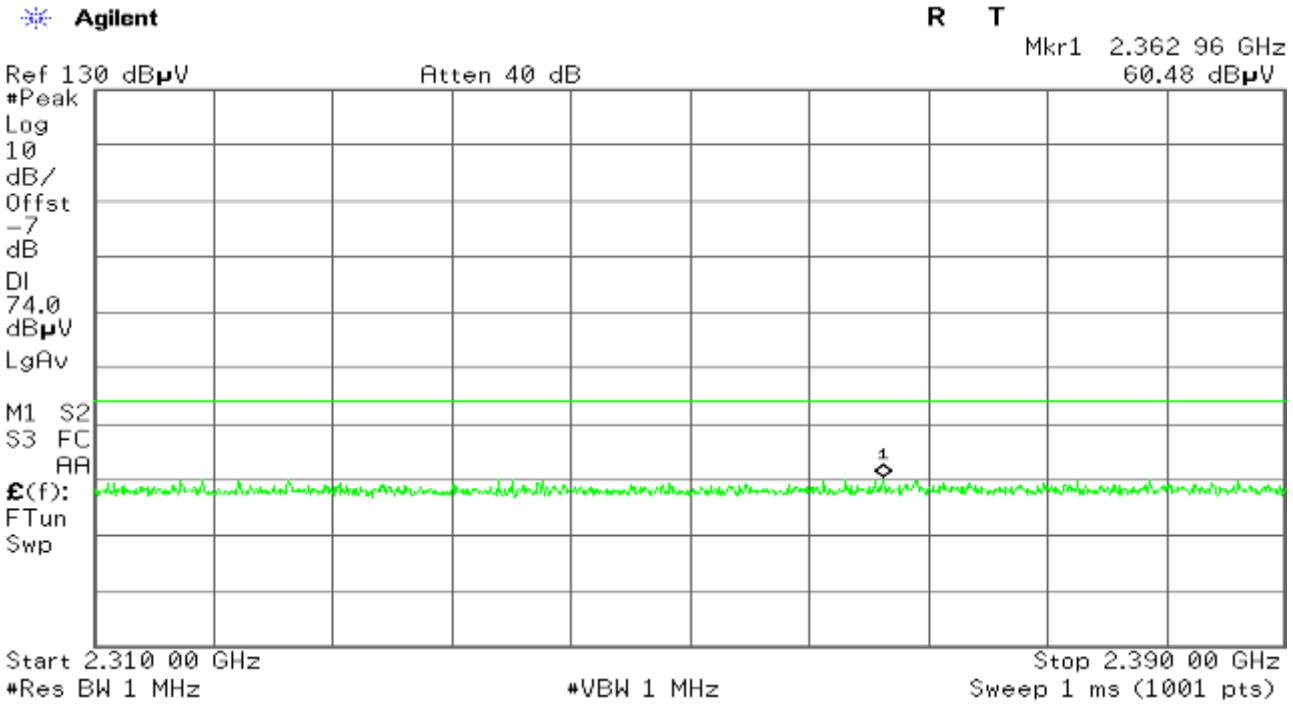


AVG

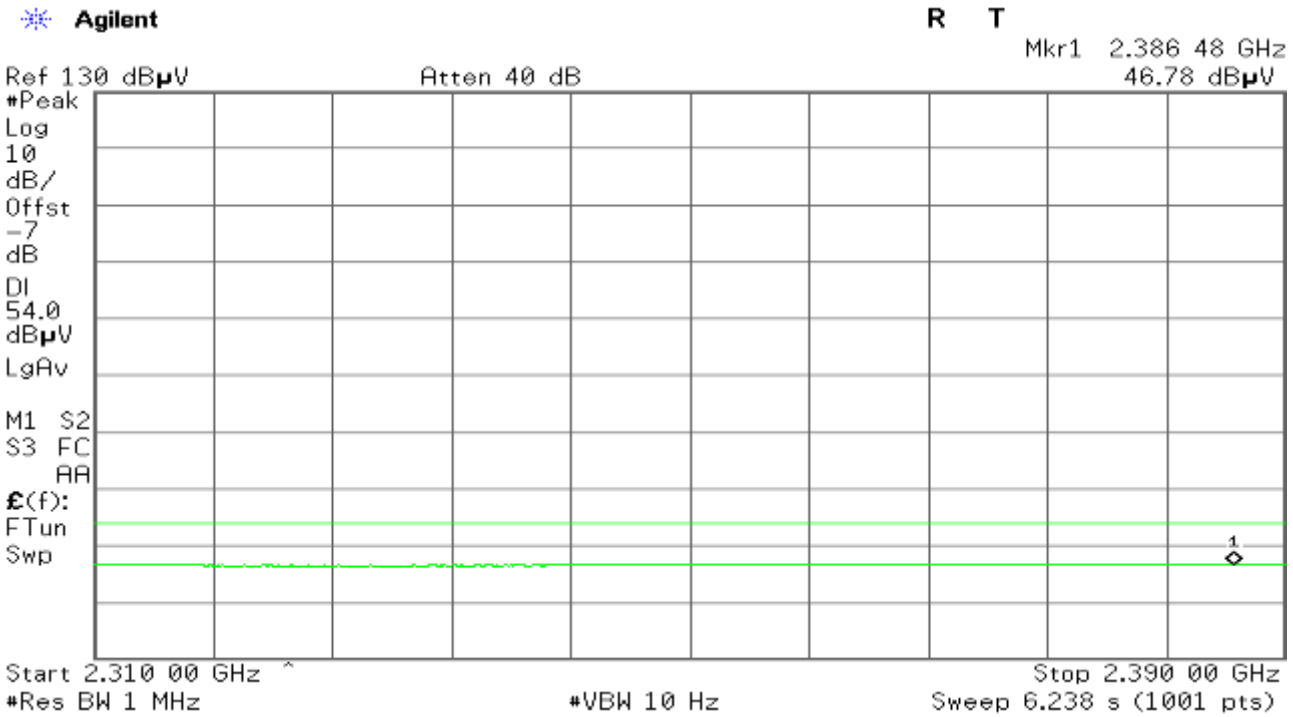


RESTRICTED BANDEDGE (802.11n Wide -40 MHz Channel mode, Low Channel, Vertical)

PEAK

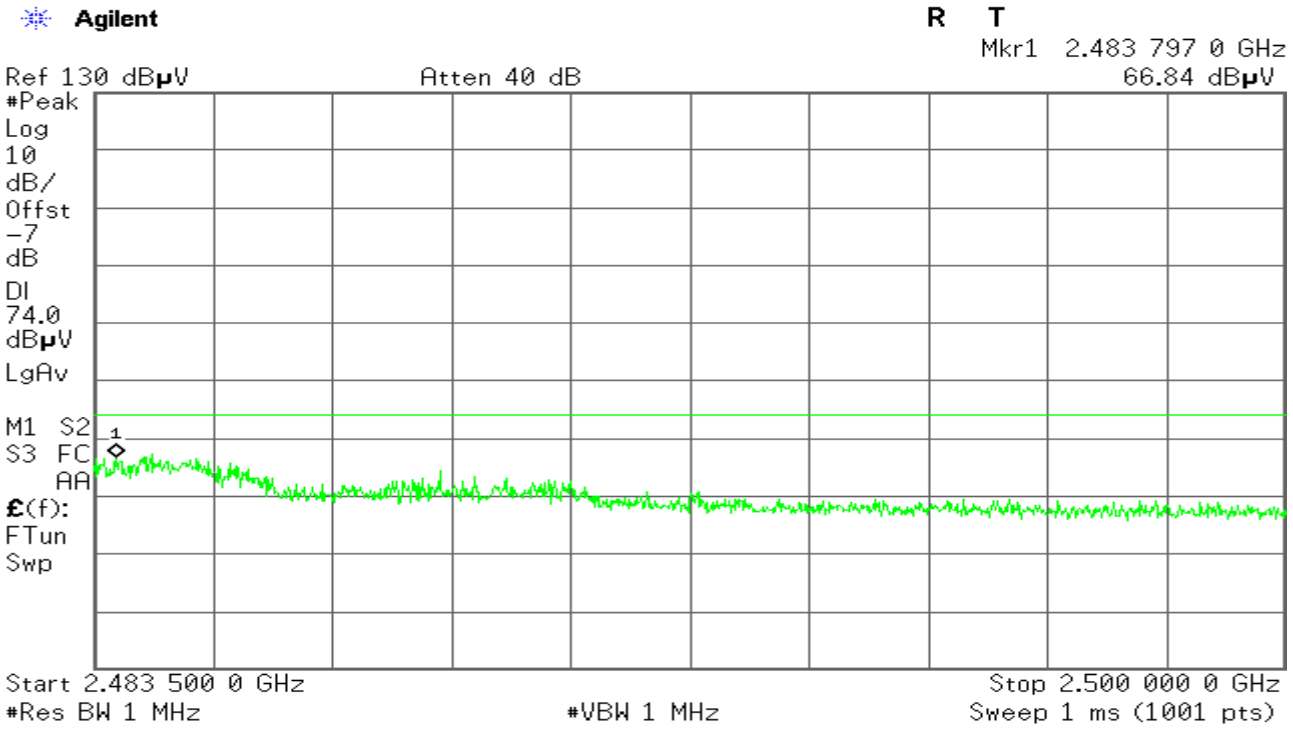


AVG

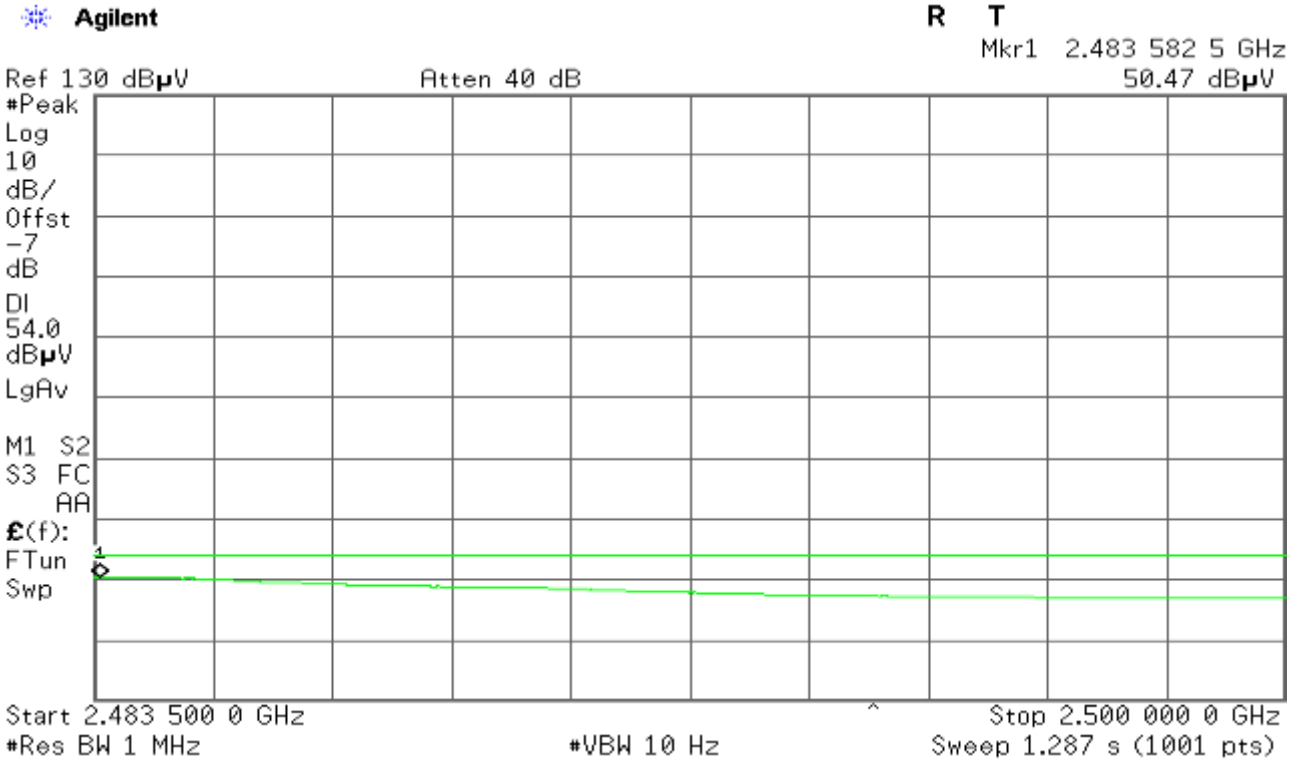


RESTRICTED BANDEDGE (802.11n Wide -40 MHz Channel mode, High Channel, Horizontal)

PEAK

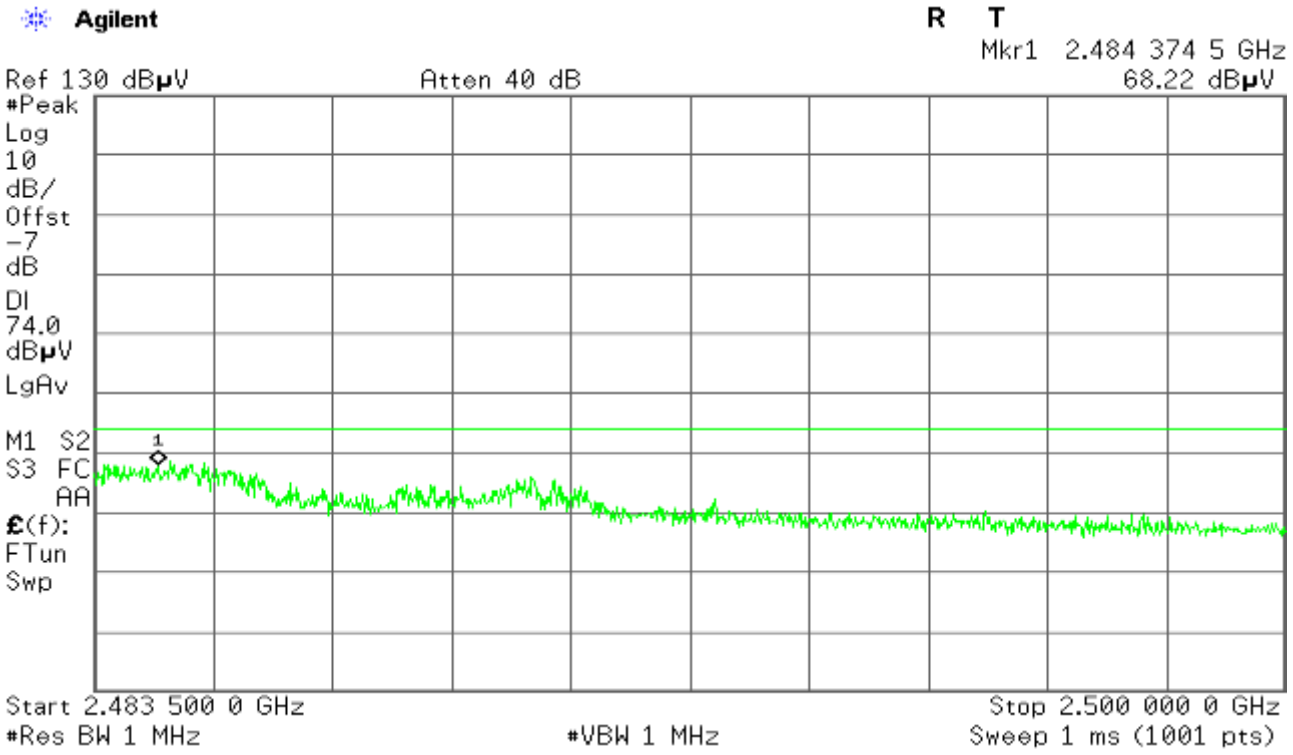


AVG

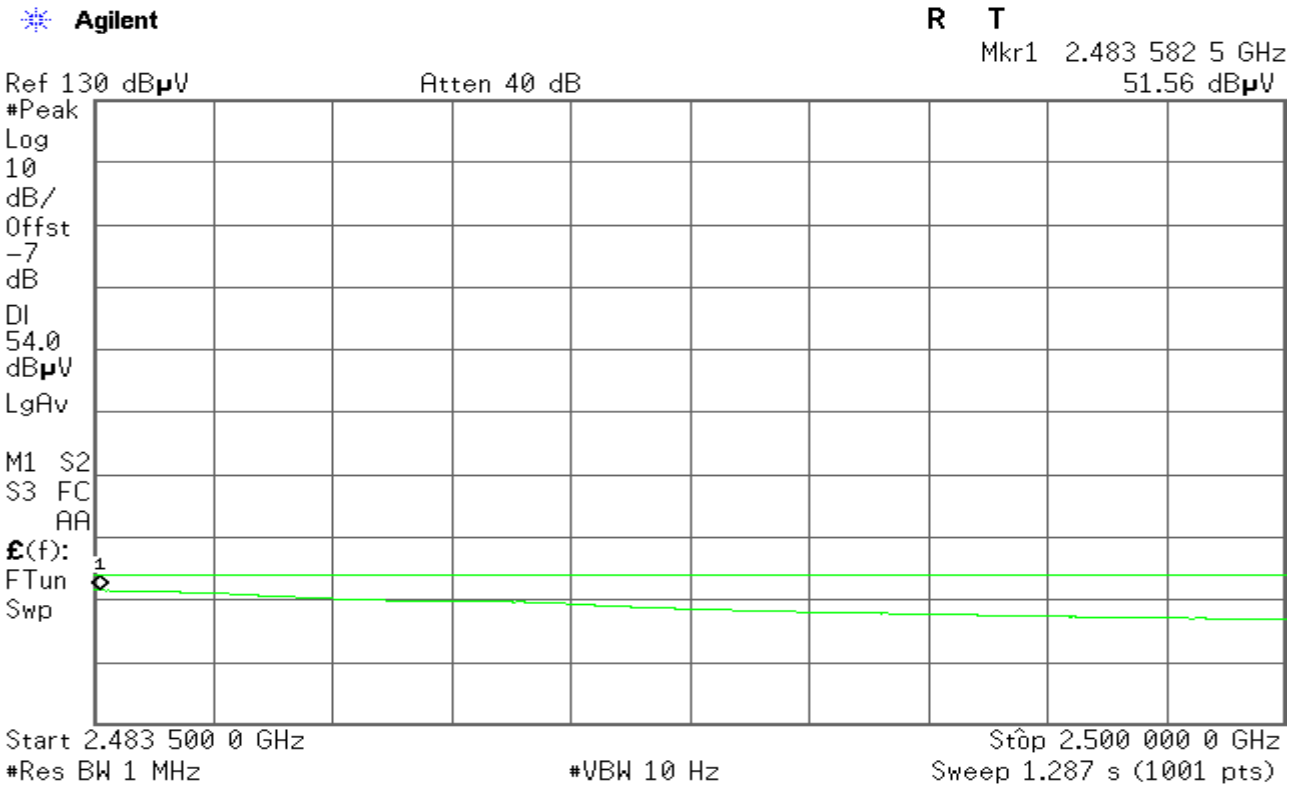


RESTRICTED BANDEDGE (802.11n Wide -40 MHz Channel mode, High Channel, Vertical)

PEAK



AVG



Below 1GHz

Operation Mode: Normal Link **Test Date:** October 09,2012

Temperature: 22°C **Tested by:** Sean Yu

Humidity: 48% RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
73.6500	V	66.90	-26.10	40.80	40.00	0.80	peak
74.0550	V	55.70	-26.08	29.62	40.00	-10.38	QP
175.5000	V	59.57	-21.57	38.00	43.50	-5.50	peak
801.1500	V	50.89	-9.16	41.73	46.00	-4.27	peak
820.5500	V	50.37	-8.74	41.63	46.00	-4.37	peak
866.6250	V	50.68	-7.63	43.05	46.00	-2.95	peak
90.6250	H	62.25	-25.34	36.91	43.50	-6.59	peak
185.2000	H	62.65	-21.43	41.22	43.50	-2.28	peak
185.2000	H	55.63	-21.43	34.20	43.50	-9.30	QP
801.1500	H	53.88	-9.16	44.72	46.00	-1.28	peak
818.1250	H	51.72	-8.80	42.92	46.00	-3.08	peak
866.6250	H	53.01	-7.63	45.38	46.00	-0.62	peak

Remark:

1. *Measuring frequencies from 30 MHz to the 1GHz (No emission found between lowest internal used/generated frequency to 30 MH).*
2. *Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.*
3. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
4. *Margin (dB) = Result (dBuV/m) – Limit (dBuV/m).*

Above 1 GHz

Operation Mode: TX / IEEE 802.11b / CH Low **Test Date:** October 09,2012

Temperature: 22°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4865.26	V	36.59	28.16	12.41	49	40.57	74	54	-25	-13.43
7307.16	V	38.35	27.26	15.48	53.83	42.74	74	54	-20.17	-11.26
4866.29	H	34.26	28.26	12.41	46.67	40.67	74	54	-27.33	-13.33
7321.26	H	38.16	27.25	15.48	53.64	42.73	74	54	-20.36	-11.27
N/A										

Operation Mode: TX / IEEE 802.11b / CH Mid **Test Date:** October 09,2012

Temperature: 22°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4865.69	V	36.16	28.26	12.11	48.27	40.37	74	54	-25.73	-13.63
7307.16	V	38.26	27.22	13.62	51.88	40.84	74	54	-22.12	-13.16
4866.27	H	34.28	28.16	12.11	46.39	40.27	74	54	-27.61	-13.73
7321.29	H	38.29	27.26	13.62	51.91	40.88	74	54	-22.09	-13.12
N/A										

Operation Mode: TX / IEEE 802.11b / CH High **Test Date:** October 09,2012

Temperature: 22°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4921.29	V	36.29	28.66	12.93	49.22	41.59	74	54	-24.78	-12.41
7378.26	V	38.26	27.59	15.82	54.08	43.41	74	54	-19.92	-10.59
4923.26	H	34.36	28.69	12.93	47.29	41.62	74	54	-26.71	-12.38
7380.16	H	38.23	27.34	15.82	54.05	43.16	74	54	-19.95	-10.84
N/A										

Operation Mode: TX / IEEE 802.11g / CH Low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4819.23	V	36.49	28.21	12.41	48.9	40.62	74	54	-25.1	-13.38
7233.46	V	38.12	25.36	15.48	53.6	40.84	74	54	-20.4	-13.16
4820.36	H	34.78	28.23	12.41	47.19	40.64	74	54	-26.81	-13.36
7238.23	H	38.29	27.74	15.48	53.77	43.22	74	54	-20.23	-10.78
N/A										

Operation Mode: TX / IEEE 802.11g / CH Mid **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4876.35	V	36.75	28.62	12.68	49.43	41.3	74	54	-24.57	-12.7
7320.26	V	38.35	27.26	15.76	54.11	43.02	74	54	-19.89	-10.98
4875.29	H	34.49	28.55	12.68	47.17	41.23	74	54	-26.83	-12.77
7318.52	H	38.16	27.26	15.74	53.9	43	74	54	-20.1	-11
N/A										

Operation Mode: TX / IEEE 802.11g / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4935.49	V	36.65	28.26	12.94	49.59	41.2	74	54	-24.41	-12.8
7391.25	V	38.16	27.11	15.82	53.98	42.93	74	54	-20.02	-11.07
4925.19	H	34.24	28.26	12.93	47.17	41.19	74	54	-26.83	-12.81
7389.25	H	38.26	27.29	15.82	54.08	43.11	74	54	-19.92	-10.89
N/A										

Operation Mode: TX / 802.11n Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH Low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4832.55	V	36.26	28.26	12.21	48.47	40.47	74	54	-25.53	-13.53
7230.62	V	38.16	27.16	15.22	53.38	42.38	74	54	-20.62	-11.62
4824.42	H	34.62	28.24	12.21	46.83	40.45	74	54	-27.17	-13.55
7212.16	H	38.16	27.26	15.22	53.38	42.48	74	54	-20.62	-11.52
N/A										

Operation Mode: TX / 802.11n Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH Mid **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4876.22	V	36.19	28.26	12.68	48.87	40.94	74	54	-25.13	-13.06
7321.44	V	38.29	27.34	15.76	54.05	43.1	74	54	-19.95	-10.9
4875.26	H	34.49	28.19	11.02	45.51	39.21	74	54	-28.49	-14.79
7316.29	H	38.29	27.27	15.72	54.01	42.99	74	54	-19.99	-11.01
N/A										

Operation Mode: TX / 802.11n Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4930.59	V	36.26	28.29	12.01	48.27	40.3	74	54	-25.73	-13.7
7387.49	V	38.16	27.46	15.26	53.42	42.72	74	54	-20.58	-11.28
4924.29	H	34.29	28.29	12.26	46.55	40.55	74	54	-27.45	-13.45
7384.46	H	38.16	27.16	15.26	53.42	42.42	74	54	-20.58	-11.58
N/A										

Operation Mode: TX / 802.11n Wide-40 MHz Channel mode (Chain 0 + Chain 1) / CH Low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4844.26	V	35.54	28.35	12.41	47.95	40.76	74	54	-26.05	-13.24
7382.45	V	39.69	27.59	15.48	55.17	43.07	74	54	-18.83	-10.93
4850.26	H	34.79	28.25	12.41	47.2	40.66	74	54	-26.8	-13.34
7382.46	H	38.35	27.46	15.48	53.83	42.94	74	54	-20.17	-11.06
N/A										

Operation Mode: TX / 802.11n Wide-40 MHz Channel mode (Chain 0 + Chain 1) / CH Mid **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4874.47	V	33.46	28.68	12.68	46.14	41.36	74	54	-27.86	-12.64
7313.35	V	36.69	27.24	15.71	52.4	42.95	74	54	-21.6	-11.05
4874.12	H	32.25	28.34	12.68	44.93	41.02	74	54	-29.07	-12.98
7314.65	H	36.45	27.69	15.71	52.16	43.4	74	54	-21.84	-10.6
N/A										

Operation Mode: TX / 802.11n Wide-40 MHz Channel mode (Chain 0 + Chain 1) / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4915.35	V	33.12	28.58	12.54	45.66	41.12	74	54	-28.34	-12.88
7360.42	V	36.45	27.15	15.21	51.66	42.36	74	54	-22.34	-11.64
4915.25	H	32.24	28.25	12.24	44.48	40.49	74	54	-29.52	-13.51
7359.65	H	36.16	27.74	15.36	51.52	43.1	74	54	-22.48	-10.9
N/A										

Operation Mode: TX / IEEE 802.11a / CH low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4915.78	V	33.58	28.69	12.93	46.51	41.62	74	54	-27.49	-12.38
7360.58	V	36.46	27.46	15.83	52.29	43.29	74	54	-21.71	-10.71
4915.69	H	32.96	28.35	12.93	45.89	41.28	74	54	-28.11	-12.72
7359.49	H	36.56	27.25	15.82	52.38	43.07	74	54	-21.62	-10.93
N/A										

Operation Mode: TX / IEEE 802.11a / CH Mid **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11570.87	V	33.74	28.42	2.4	36.14	30.82	74	54	-37.86	-23.18
11570.65	H	32.75	28.24	2.4	35.15	30.64	74	54	-38.85	-23.36
N/A										

Operation Mode: TX / IEEE 802.11a / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11611.54	V	32.36	28.42	3.56	35.92	31.98	74	54	-38.08	-22.02
11615.68	H	33.52	28.24	3.56	37.08	31.8	74	54	-36.92	-22.2
N/A										

Operation Mode: TX / 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH Low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
4915.33	V	33.74	28.42	12.93	46.67	41.35	74	54	-27.33	-12.65
7360.67	V	36.77	27.24	15.83	52.6	43.07	74	54	-21.4	-10.93
4915.67	H	32.75	28.24	12.93	45.68	41.17	74	54	-28.32	-12.83
7359.33	H	36.26	27.46	15.82	52.08	43.28	74	54	-21.92	-10.72
N/A										

Operation Mode: TX / 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH Mid **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11495.33	V	33.74	28.42	3.26	37	31.68	74	54	-37	-22.32
11495.02	H	32.75	28.24	3.26	36.01	31.5	74	54	-37.99	-22.5
N/A										

Operation Mode: TX / 802.11an Standard-20 MHz Channel mode (Chain 0 + Chain 1) / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11572.67	V	33.74	28.42	3.62	37.36	32.04	74	54	-36.64	-21.96
11572.67	H	32.75	28.24	3.62	36.37	31.86	74	54	-37.63	-22.14
N/A										

Operation Mode: TX / 802.11an Wide-40 MHz Channel mode (Chain 0 + Chain 1) / CH Low **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11611.36	V	33.74	28.42	3.69	37.43	32.11	74	54	-36.57	-21.89
11611.33	H	32.75	28.24	3.69	36.44	31.93	74	54	-37.56	-22.07
N/A										

Operation Mode: TX / 802.11an Wide-40 MHz Channel mode (Chain 0 + Chain 1) / CH High **Test Date:** October 09,2012

Temperature: 24°C **Tested by:** Sean Yu

Humidity: 48 % RH **Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin Peak(dB)	Margin AVG(dB)
11590.00	V	33.74	28.42	3.56	37.3	31.98	74	54	-36.7	-22.02
11591.00	H	32.75	28.24	3.56	36.31	31.8	74	54	-37.69	-22.2
N/A										

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit or as required by the applicant.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

7.6. POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

** Decreases with the logarithm of the frequency.*

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

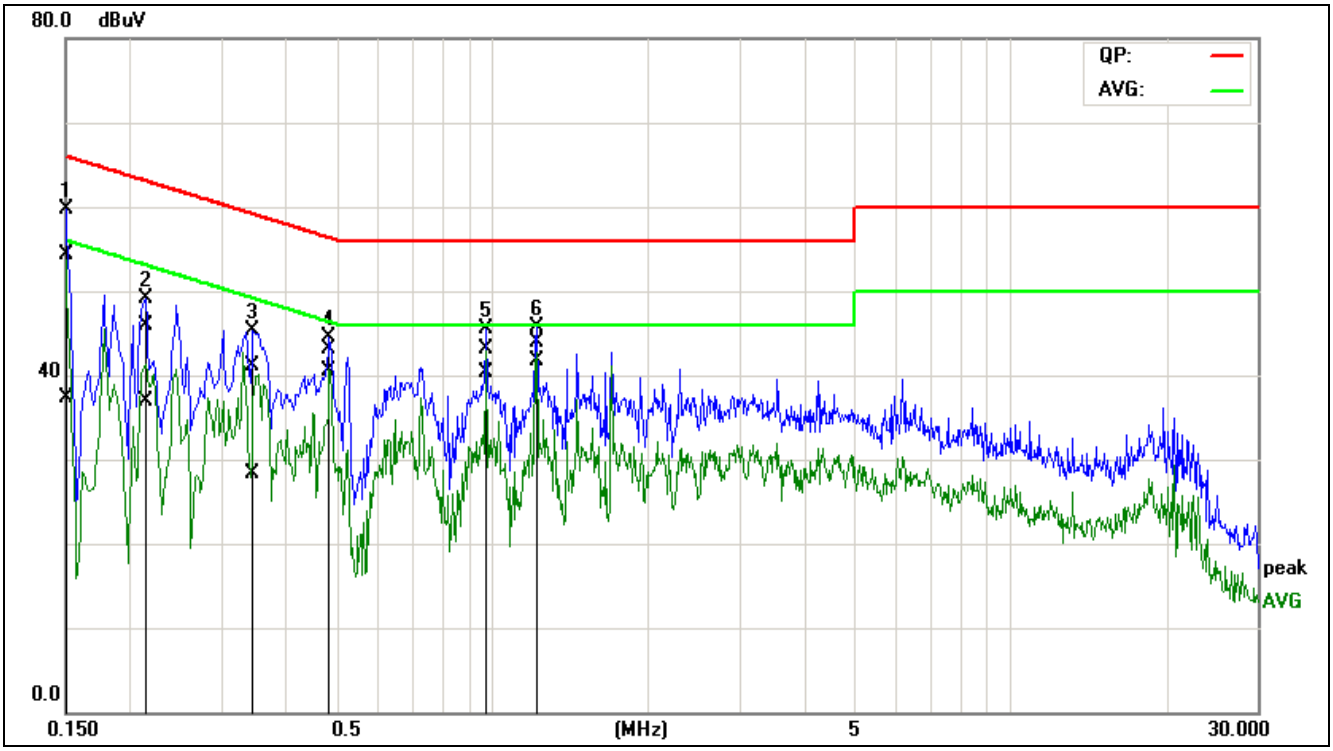
1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Test Data

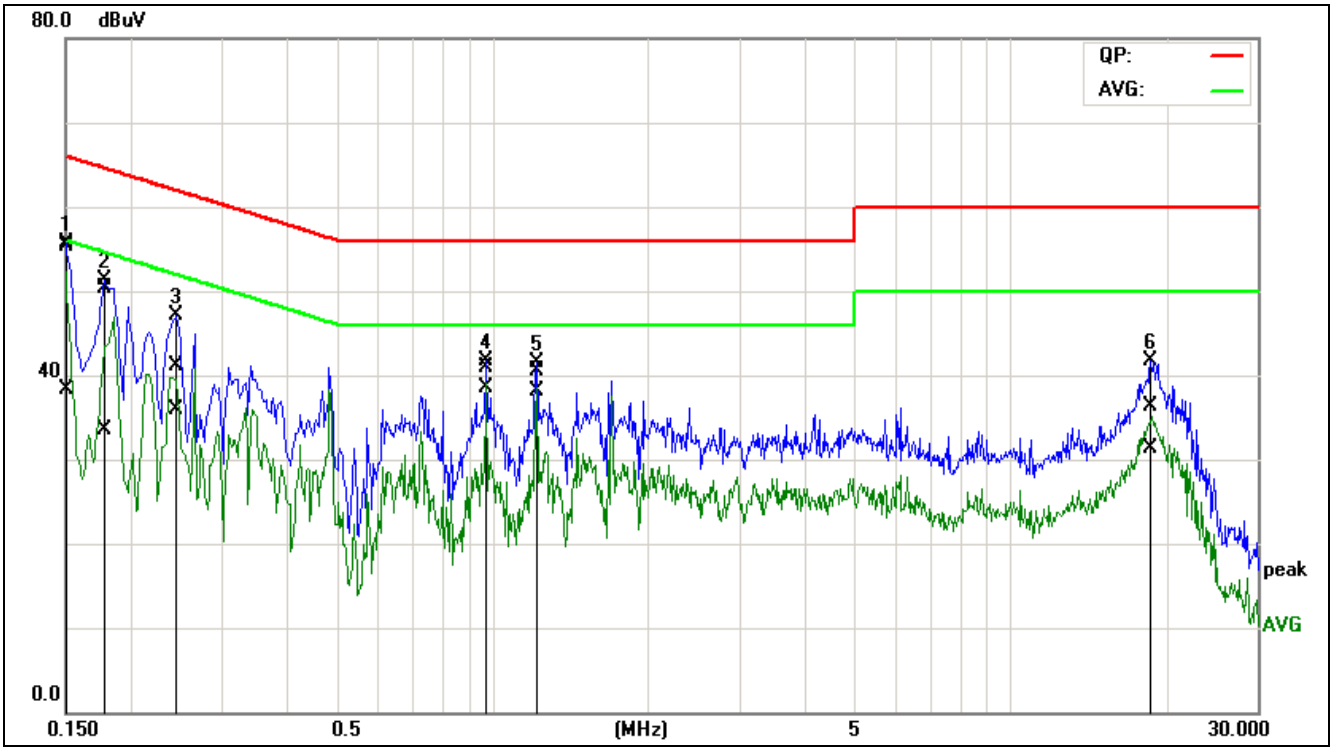
Job No.:	KS120716A02	Date:	2012-10-08
Company:	AIR802	Time:	15:32:29
Standard:	FCC Class B	Temp.(C)/Hum.(%):	22(C)/48%
Test item:	Conduction test	Test By:	Jarry.xu
Line:	L1	Test Voltage:	AC 120V/60Hz
Model:	AP25N01	Description:	Mode 1



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1513	44.05	27.09	10.25	54.30	37.34	65.93	55.93	-11.63	-18.59	Pass
2	0.2147	35.82	26.76	10.18	46.00	36.94	63.02	53.02	-17.02	-16.08	Pass
3	0.3439	30.87	18.04	10.29	41.16	28.33	59.11	49.11	-17.95	-20.78	Pass
4	0.4866	32.73	30.26	10.29	43.02	40.55	56.23	46.23	-13.21	-5.68	Pass
5	0.9713	32.77	29.99	10.25	43.02	40.24	56.00	46.00	-12.98	-5.76	Pass
6*	1.2165	33.72	31.45	10.24	43.96	41.69	56.00	46.00	-12.04	-4.31	Pass

Note: 1. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

Job No.:	KS120716A02	Date:	2012-10-08
Company:	AIR802	Time:	15:36:59
Standard:	FCC Class B	Temp.(C)/Hum.(%):	22(C)/48%
Test item:	Conduction test	Test By:	Jarry.xu
Line:	L2	Test Voltage:	AC 120V/60Hz
Model:	AP25N01	Description:	Mode 1



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1507	44.83	27.88	10.49	55.32	38.37	65.96	55.96	-10.64	-17.59	Pass
2	0.1760	39.93	23.20	10.39	50.32	33.59	64.67	54.67	-14.35	-21.08	Pass
3	0.2459	30.69	25.55	10.39	41.08	35.94	61.89	51.89	-20.81	-15.95	Pass
4*	0.9747	30.07	27.65	10.87	40.94	38.52	56.00	46.00	-15.06	-7.48	Pass
5	1.2174	29.52	27.20	10.89	40.41	38.09	56.00	46.00	-15.59	-7.91	Pass
6	18.6918	25.70	20.74	10.56	36.26	31.30	60.00	50.00	-23.74	-18.70	Pass

Note: 1. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).