TEST REPORT

KCTL Inc.
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 443-390, Korea
TEL: 82-70-5008-1021 FAX: 82-505-299-8311
www.kctl.co.kr

1. Client

- Name : Rayence Co.,Ltd.
- Address : 14, Samsung 1-ro 1-gil, Hwaseong-si, Gyeonggi-do, Korea
- Date of Receipt : 2016-07-20

2. Use of Report : -

3. Name of Product and Model : Wireless LAN Module / RWM001A

4. Manufacturer and Country of Origin : Rayence Co.,Ltd. / Korea

FCC ID : QIIRYRWM001A

IC ID : 10742A-RWM001A

5. Date of Test : 2016-08-19 ~ 2016-09-09

6. Test method used : FCC Part 15 Subpart E, 15.407
RSS-247 Issue 1 May 2015
RSS GEN Issue 4 November 2014

7. Test Results : Refer to the test result in the test report

Affirmation	Tested by Name : Byungwoo Ahn (Signature)	Technical Manager Name : Changmin Kim (Signature)

2016-09-09

KCTL Inc.

REPORT REVISION HISTORY

Date	Revision	Page No
2016-09-09	Originally issued	-

[Contents]

1. Client information

Applicant:	Rayence Co., Ltd.
Address:	14, Samsung 1-ro 1-gil, Hwaseong-si, Gyeonggi-do, Korea
Telephone number:	+82-31-8015-6459
Facsimile number:	+82-31-8015-6394
Contact person:	Namyoung, Ha / namyoung.ha@rayence.com

Manufacturer:	Rayence Co., Ltd.
Address:	14, Samsung 1-ro 1-gil, Hwaseong-si, Gyeonggi-do, Korea

2. Laboratory information

Address

KCTL Inc.
65 Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Korea (443-390)
Telephone Number: +82-70-5008-1016 Facsimile Number: +82-505-299-8311

Certificate

KOLAS No.: KT231
FCC Site Designation No.: KR0040
FCC Site Registration No.: 687132
VCCI Site Registration No.: R-3327, G-198, C-3706, T-1849
IC Site Registration No.:8035A-2

SITE MAP

3. Description of E.U.T.

3.1 Basic description

Applicant	Rayence Co., Ltd.
Address of Applicant	14, Samsung 1-ro 1-gil, Hwaseong-si, Gyeonggi-do, Korea
Manufacturer	Rayence Co., Ltd.
Address of Manufacturer	14, Samsung 1-ro 1-gil, Hwaseong-si, Gyeonggi-do, Korea
Type of equipment	Wireless LAN Module
Basic Model	RWM001A
Serial number	N/A

3.2 General description

Frequency Range	2 412 ㎒ ~ 2 462 ㎒ (802.11b/g/n_HT20) 2 422 ㎒ ~ 2 452 ㎒ (802.11n_HT40) 5 180 ㎒ ~ 5 240 ㎒ (802.11a/n_HT20/ac_VHT20) 5 190 ㎒ ~ 5 230 ㎒ (802.11n_HT40/ac_VHT40) 5 210 ㎒ (802.11ac_VHT80) 5 745 ㎒ ~ 5 825 ㎒ (802.11a/n_HT20/ac_VHT20) 5 755 ㎒ ~ 5 795 ㎒ (802.11n_HT40/ac_VHT40) 5 775 ㎒ (802.11ac_VHT80)
Type of Modulation	802.11b: DSSS, 802.11a/ac/g/n: OFDM
Number of Channels	2.4 ㎓: 11 ch (802.11b/g/n_HT20), 7 ch (802.11n_HT40) 5 ㎓: 5 150 ㎒ Band: 4 (802.11a/n_HT20/ac_VHT20) 5 150 ㎒ Band: 2 (802.11n_HT40/ac_VHT40) 5 150 ㎒ Band: 1 (802.11ac_VHT80) 5 725 ㎒ Band: 4 (802.11a/n_HT20/ac_VHT20) 5 725 ㎒ Band: 2 (802.11n_HT40/ac_VHT40) 5 725 ㎒ Band: 1 (802.11ac_VHT40)
Type of Antenna	PCB Antenna
Antenna Gain	2.4 ㎓: 3.08 dBi (2 400 ㎒ ~ 2 483.5 ㎒) 5 ㎓: 3.12 dBi (5 150 ㎒ ~ 5 725 ㎒) 5.64 dBi (5 725 ㎒ ~ 5 850 ㎒)
Transmit Power	15.87 dBm
Power supply	DC 3.3 V
Product SW/HW version	V1.01 / V1.01
Radio SW/HW version	V1.01 / V1.01
Test SW Version	CPT2 v1043
RF power setting in TEST SW	Default

Note ： The above EUT information was declared by the manufacturer.

3.3 Test frequency

- 802.11a/n/ac_HT20/VHT20

Frequency	Band 1	Band 4
Lowest frequency	5 180 ㎒	5 745 ㎒
Middle frequency	5 200 ㎒	5 785 ㎒
Highest frequency	5 240 ㎒	5 825 ㎒

- 802.11n/ac_HT40/VHT40

Frequency	Band 1	Band 4
Lowest frequency	5 190 ㎒	5 755 ㎒
Middle frequency	-	-
Highest frequency	5 230 ㎒	5 795 ㎒

- 802.11ac_VHT80

Frequency	Band 1	Band 4
Lowest frequency	5 210 ㎒	5 775 ㎒
Middle frequency	-	-
Highest frequency	-	-

3.4 Test Voltage

Mode	Voltage
Nominal Voltage	DC 3.3 V

4. Summary of test results

4.1 Standards & results

FCC Rule	IC Rule	Parameter	Report Section	Test Result
15.203 15.407(a)(1)(2)(3)	-	Antenna Requirement	5.1	C
15.407(a)(1)(2)	RSS-247, 5.4	Maximum Conducted Output Power	5.2	C
15.403(i),15.407(e)	RSS-247, 5.1 RSS-GEN, 6.6	Bandwidth Measurement	5.3	C
15.407(a)(1)(2)(5)	RSS-247, 5.3, (2)	Peak Power Spectral Density	5.4	C
15.205(a), 15.209(a), 15.407(b)(1), 15.407(b)(2), 15.407(b)(3)	RSS-247, 5.5 RSS-GEN, 8.9, 10	Spurious Emission, Band Edge and Restricted bands	5.5	C
15.407(g)	RSS-GEN, 6.11	Frequency Stability	5.6	C
15.207(a)	RSS-GEN, 8.8	Conducted Emissions	5.7	NT
15.407(h)	RSS-247, 6.3	Dynamic Frequency Selection	-	NA
Note: C = complies NC = Not complies NT = Not tested NA = Not Applicable				

Note: The general test methods used to test this device is ANSI C63.10:2013

4.2 Uncertainty

Measurement Item	Expanded Uncertainty U = *k*Uc (*k* = 2)	
Conducted RF power	1.44 dB	
Conducted Spurious Emissions	1.52 dB	
Radiated Spurious Emissions	30 ㎒ ~ 300 ㎒:	+ 4.94 dB, - 5.06 dB
		+ 4.93 dB, - 5.05 dB
	300 ㎒ ~ 1 000 ㎒:	+ 4.97 dB, - 5.08 dB
		+ 4.84 dB, - 4.96 dB
	1 ㎓ ~ 25 ㎓:	+ 6.03 dB, - 6.05 dB
Conducted Emissions	9 ㎑ ~ 150 ㎑:	3.75 dB
	150 ㎑ ~ 30 ㎒:	3.36 dB

5. Test results

5.1 Antenna Requirement

5.1.1 Regulation

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

And according to §15.407(a)(1)(2)(3), If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.1.2 Result

-Complied

The transmitter has an integral PCB antenna and the total directional peak gain of the antenna exceeds 6.0 dBi

	5 150 ㎒ Band	5 725 ㎒ Band
ANT 1 Gain	3.12 dBi	5.64 dBi
ANT 2 Gain	3.12 dBi	5.64 dBi
ANT 3 Gain	3.12 dBi	5.64 dBi

According to KDB 662911 D01 Multiple Transmitter Output v02r01
- Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.
For power measurements on IEEE 802.11 devices

- 5 150 ㎒ Band

In case of 2 Tx MIMO

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/Nss) dB.

Total gain = 6.13 dBi (individual gain(3.12 dBi) + Array gain(3.01 dBi))

For power measurements on IEEE 802.11 devices

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 ㎒ for any N_{ANT};

Array Gain = 5 log(N_{ANT}/Nss) dB or 3 dB, whichever is less, for 20-㎒ channel widths with $N_{ANT} \geq 5$.

Total gain = 3.12 dBi (individual gain(3.12 dBi) + Array gain(0 dBi))

For power measurements on all other devices:

Array Gain = 10 log(N_{ANT}/Nss) dB.

In case of 3 Tx MIMO

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/Nss) dB.

Total gain = 7.89 dBi (individual gain(3.12 dBi) + Array gain(4.77 dBi))

For power measurements on IEEE 802.11 devices

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 ㎒ for any NANT;

Array Gain = 5 log(NANT/Nss) dB or 3 dB, whichever is less, for 20-㎒ channel widths with NANT ≥ 5.

Total gain = 3.12 dBi (individual gain(3.12 dBi) + Array gain(0 dBi))

For power measurements on all other devices:

- Array Gain = 10 log(NANT/Nss) dB.

- 5 725 ㎒ Band

In case of 2 Tx MIMO

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/Nss) dB.

Total gain = 8.65 dBi (individual gain(5.64 dBi) + Array gain(3.01 dBi))

For power measurements on IEEE 802.11 devices

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 ㎒ for any NANT;

Array Gain = 5 log(NANT/Nss) dB or 3 dB, whichever is less, for 20-㎒ channel widths with NANT ≥ 5.

Total gain = 5.64 dBi (individual gain(5.64 dBi) + Array gain(0 dBi))

For power measurements on all other devices:

Array Gain = 10 log(NANT/Nss) dB.

In case of 3 Tx MIMO

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/Nss) dB.

Total gain = 10.41 dBi (individual gain(5.64 dBi) + Array gain(4.77 dBi))

For power measurements on IEEE 802.11 devices

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 ㎒ for any N_{ANT};

Array Gain = 5 log(N_{ANT}/Nss) dB or 3 dB, whichever is less, for 20-㎒ channel widths with $N_{ANT} \geq 5$.

Total gain = 5.64 dBi (individual gain(5.64 dBi) + Array gain(0 dBi))

For power measurements on all other devices:

Array Gain = 10 log(N_{ANT}/Nss) dB.

5.2 Maximum Conducted Output Power

5.2.1 Regulation

According to §15.407(a) (1) (ii) For an indoor access point operating in the band 5.15-5.25 ㎓, the maximumConducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to §15.407(a) (2) For the 5.25-5.35 ㎓ and 5.47-5.725 ㎓ bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 ㎽ or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dBthat the directional gain of the antenna exceeds 6 dBi.

According to §15.407(a) (3) For the band 5.725-5.85 ㎓, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-㎑ band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

5.2.2 Measurement Procedure

These test measurement settings are specified in section C of 789033 D02 General UNII Test Procedures.

5.2.2.1 Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."

(viii) Trace average at least 100 traces in power averaging (rms) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

5.2.2.2 Method SA-2 (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

(i) Measure the duty cycle, x, of the transmitter output signal as described in section II.B.

(ii) Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(iii) Set RBW = 1 MHz.

(iv) Set VBW ≥ 3 MHz.

(v) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(vi) Sweep time = auto.

(vii) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.

(viii) Do not use sweep triggering. Allow the sweep to "free run."

(ix) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.

(x) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

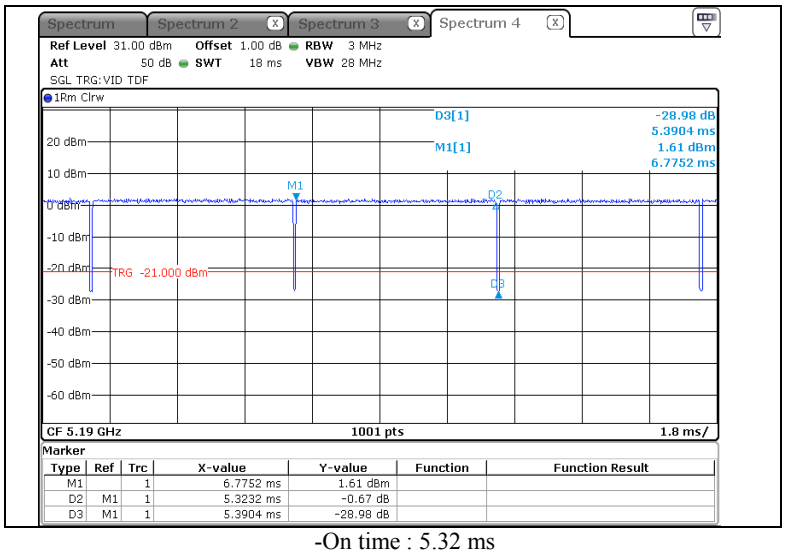
(xi) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is 25 %.

- Duty Cycle Correction Factor

- 5 150 Band

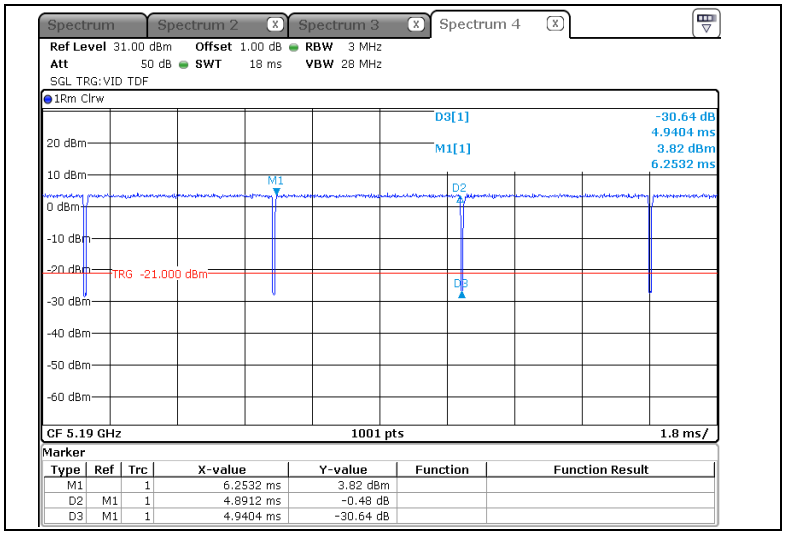
- ANT 1, 2, 3

- 802.11a



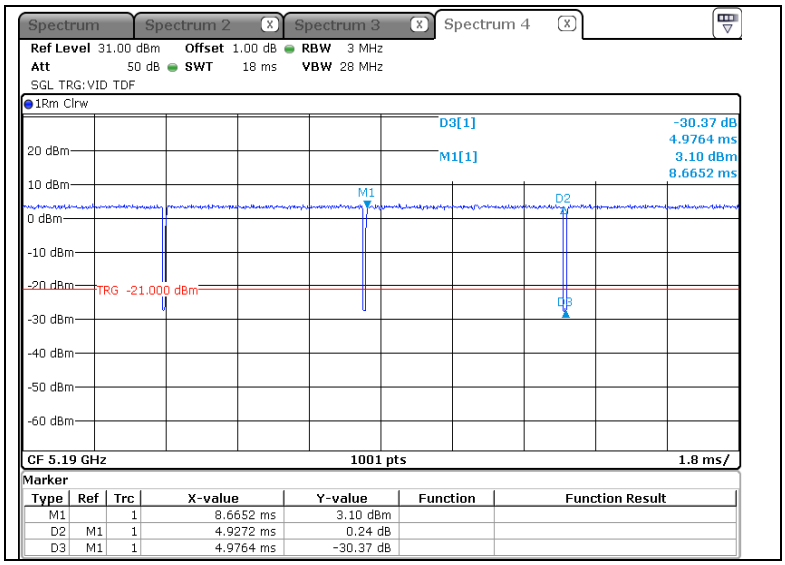
-On time : 5.32 ms
-Period : 5.39 ms
-Duty Cycle : 0.987 5
-D.C.C.F : 0.05 dB

- 802.11n HT20



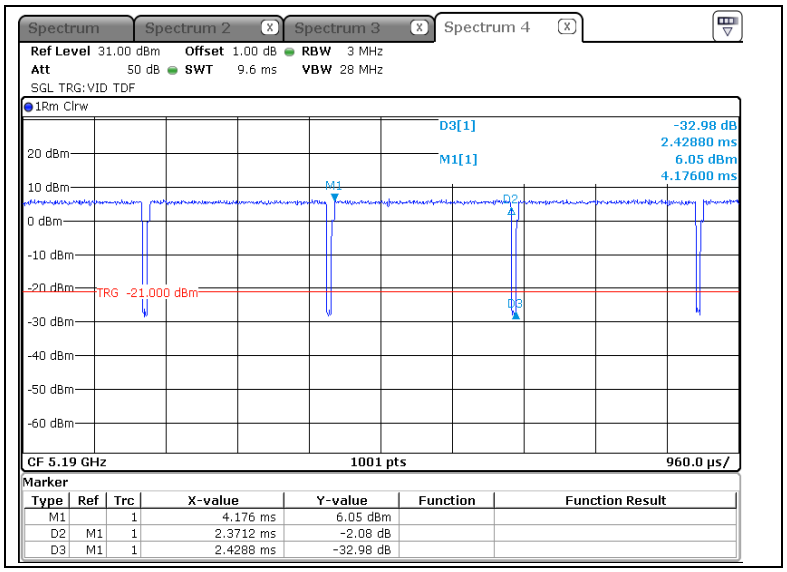
-On time : 4.89 ms
-Period : 4.94 ms
-Duty Cycle : 0.990 0
-D.C.C.F : 0.04 dB

- 802.11ac VHT20



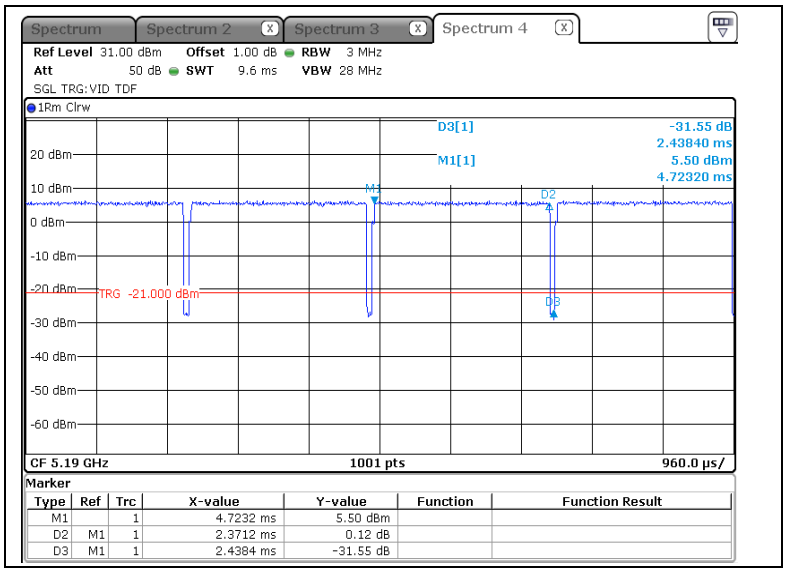
-On time : 4.93 ms
-Period : 4.98 ms
-Duty Cycle : 0.990 1
-D.C.C.F : 0.04 dB

- 802.11n HT40



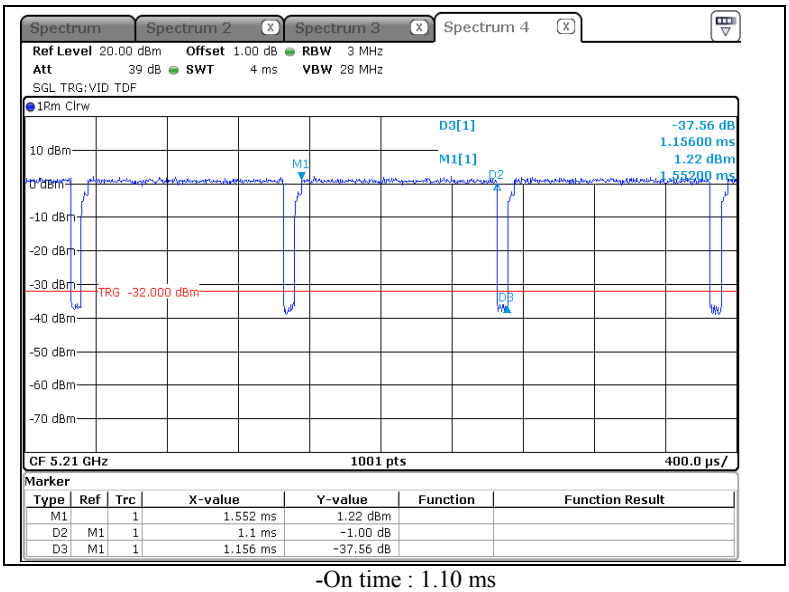
-On time : 2.37 ms
-Period : 2.43 ms
-Duty Cycle : 0.976 3
-D.C.C.F : 0.10 dB

- 802.11ac VHT40



-On time : 2.37 ms
-Period : 2.44 ms
-Duty Cycle : 0.972 4
-D.C.C.F : 0.12 dB

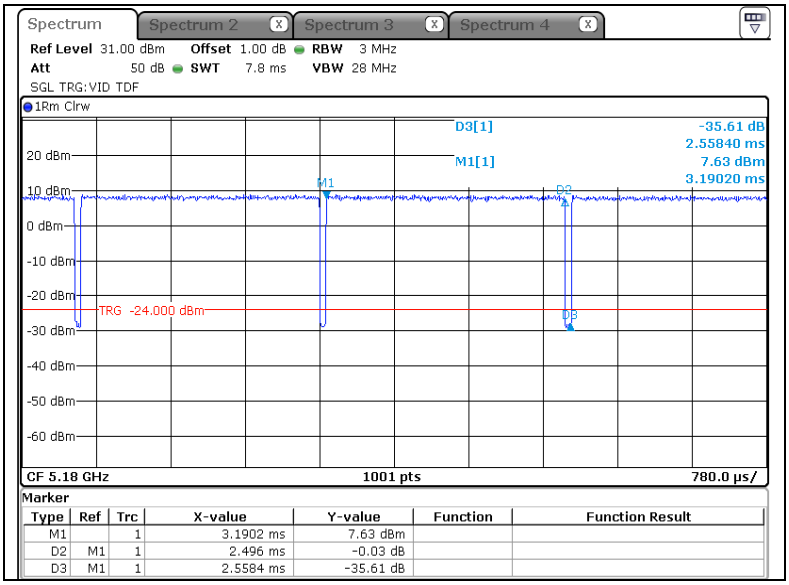
- 802.11ac VHT80



-On time : 1.10 ms
-Period : 1.16 ms
-Duty Cycle : 0.951 6
-D.C.C.F : 0.22 dB

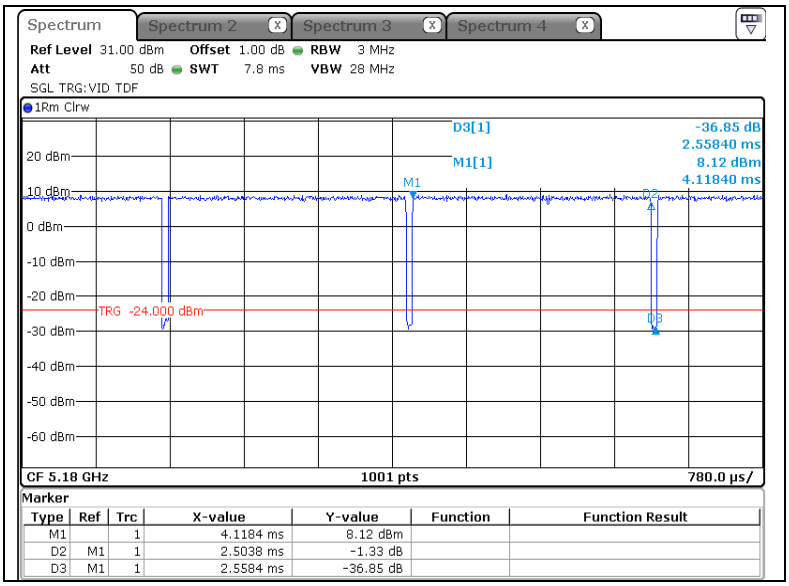
- MIMO (ANT 1+2)

- 802.11n HT20



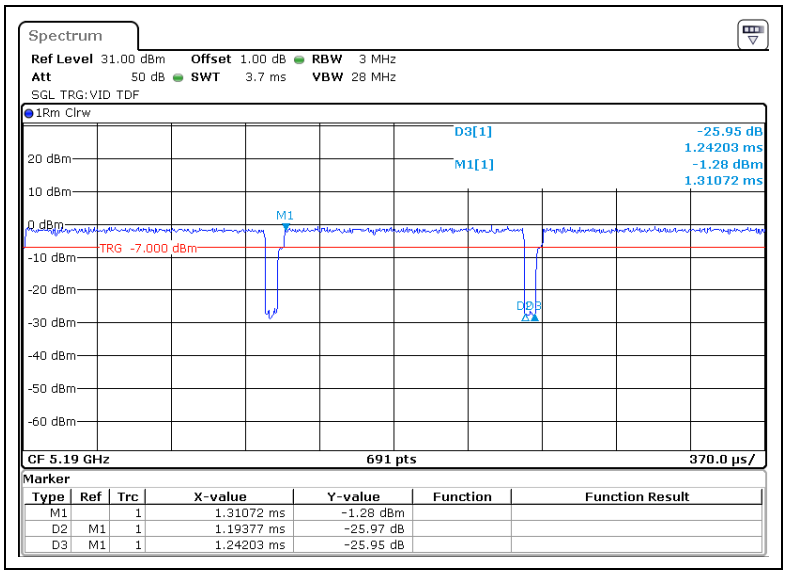
-On time : 2.50 ms
-Period : 2.56 ms
-Duty Cycle : 0.975 6
-D.C.C.F : 0.11 dB

- 802.11ac VHT20



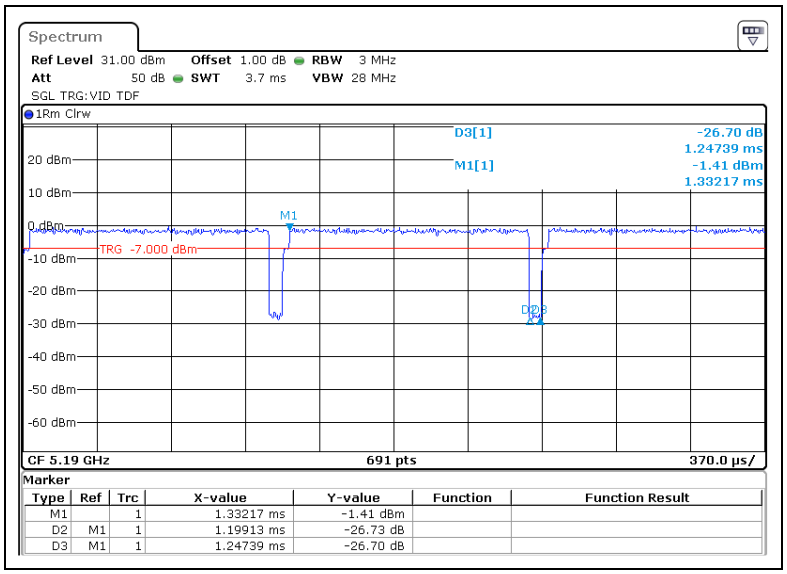
-On time : 2.50 ms
-Period : 2.56 ms
-Duty Cycle : 0.978 7
-D.C.C.F : 0.09 dB

- 802.11n HT40



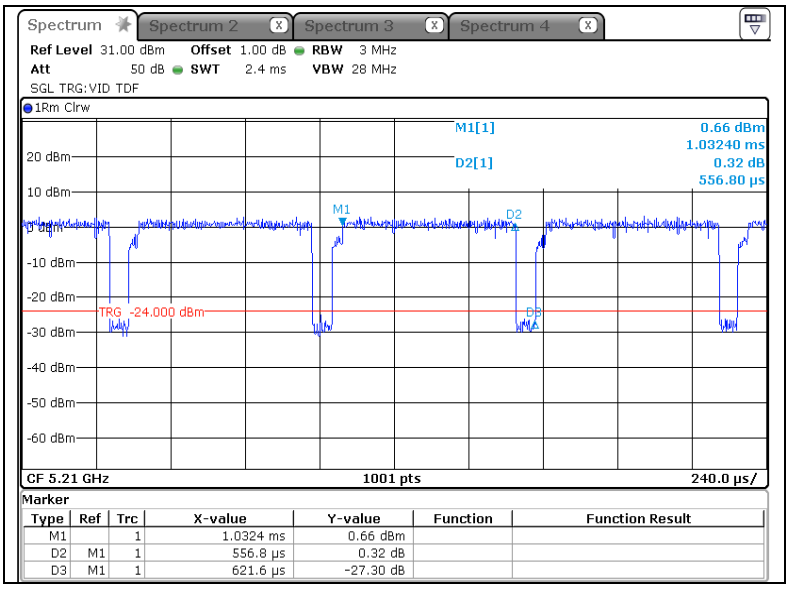
-On time : 1.20 ms
-Period : 1.24 ms
-Duty Cycle : 0.965 7
-D.C.C.F : 0.15 dB

- 802.11ac VHT40



-On time : 1.20 ms
-Period : 1.25 ms
-Duty Cycle : 0.961 3
-D.C.C.F : 0.17 dB

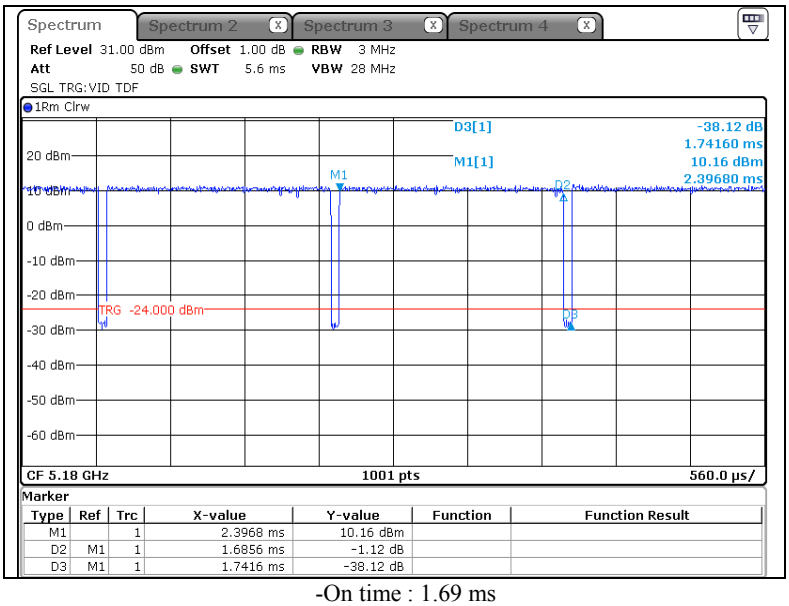
- 802.11ac VHT80



-On time : 0.56 ms
-Period : 0.62 ms
-Duty Cycle : 0.895 8
-D.C.C.F : 0.48 dB

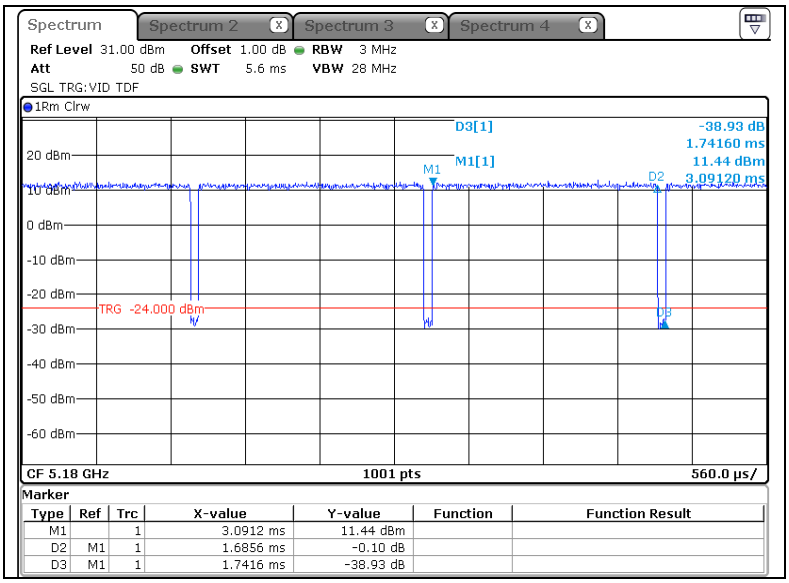
- MIMO (ANT 1+2+3)

- 802.11n HT20



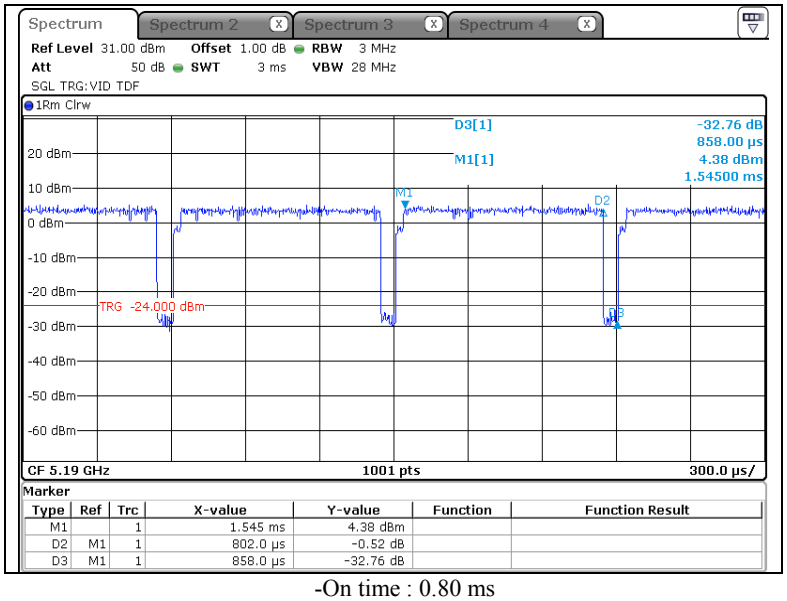
-On time : 1.69 ms
-Period : 1.74 ms
-Duty Cycle : 0.967 8
-D.C.C.F : 0.14 dB

- 802.11ac VHT20



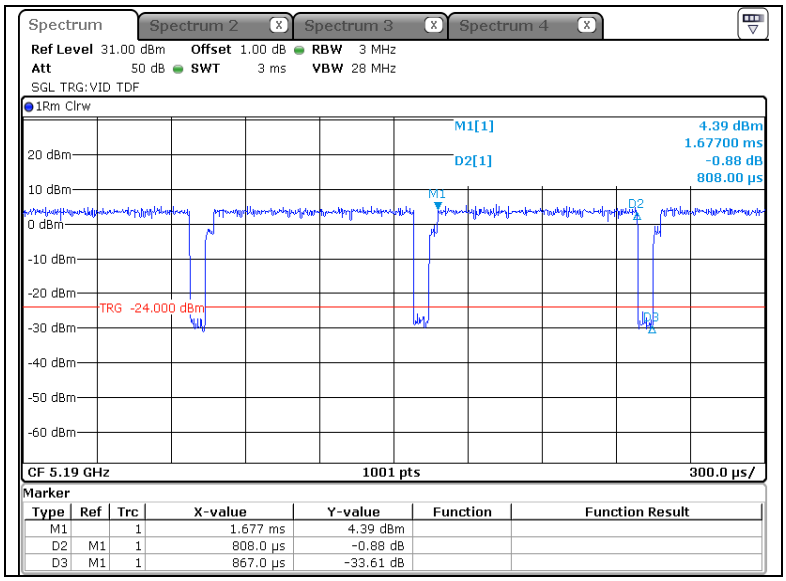
-On time : 1.69 ms
-Period : 1.74 ms
-Duty Cycle : 0.967 8
-D.C.C.F : 0.14 dB

- 802.11n HT40



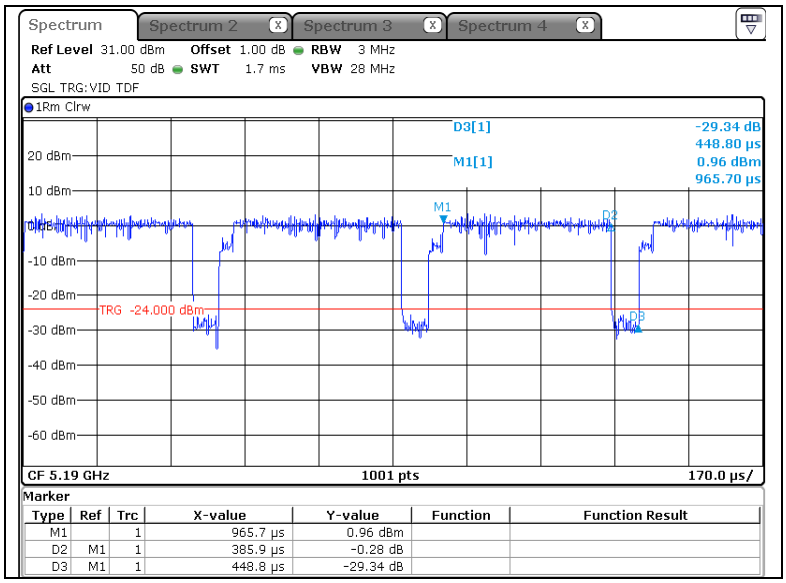
-On time : 0.80 ms
-Period : 0.86 ms
-Duty Cycle : 0.934 7
-D.C.C.F : 0.29 dB

- 802.11ac VHT40



-On time : 0.81 ms
-Period : 0.87 ms
-Duty Cycle : 0.931 9
-D.C.C.F : 0.31 dB

- 802.11ac VHT80

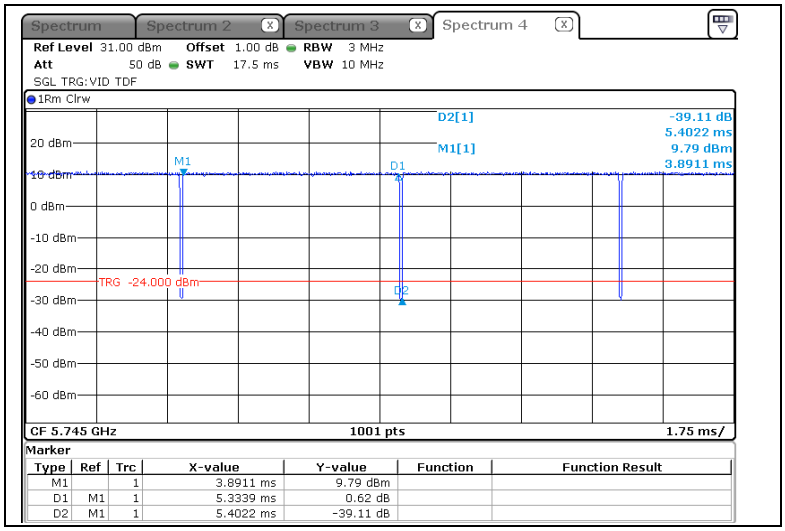


-On time : 0.39 ms
-Period : 0.45 ms
-Duty Cycle : 0.859 8
-D.C.C.F : 0.66 dB

- 5 725 Band

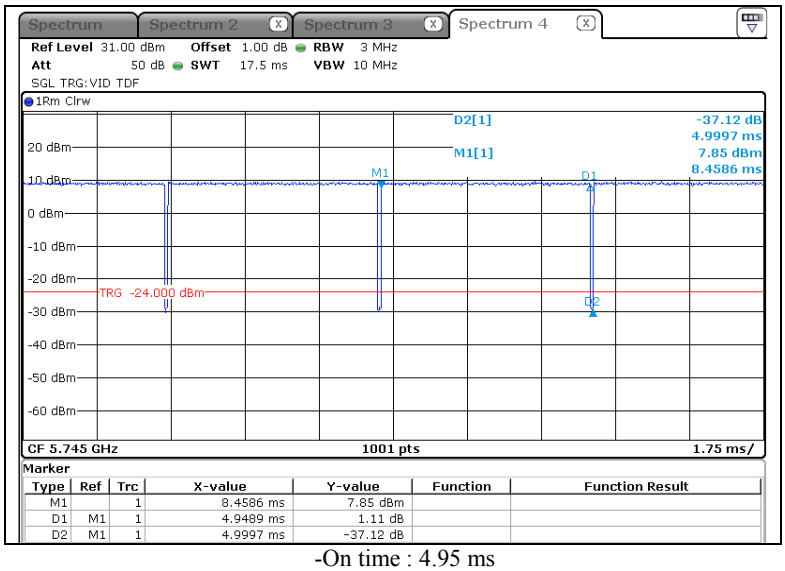
- ANT 1, 2, 3

- 802.11a



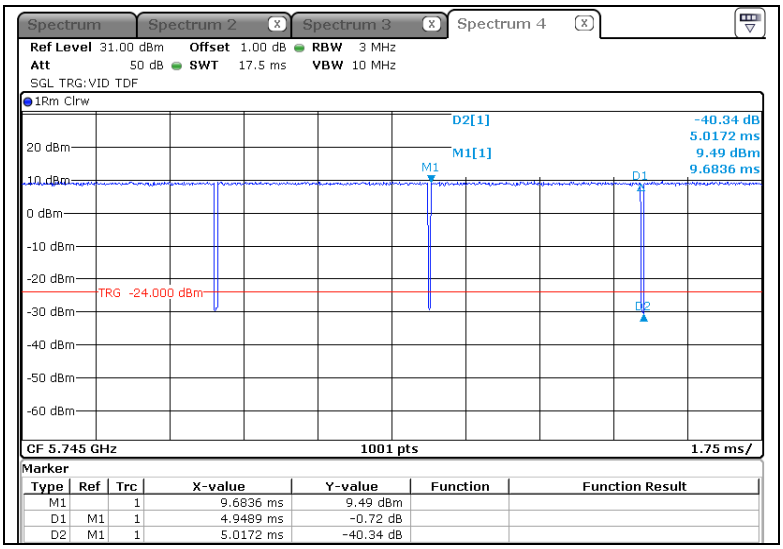
-On time : 5.33 ms
-Period : 5.40 ms
-Duty Cycle : 0.987 4
-D.C.C.F : 0.06 dB

- 802.11n HT20



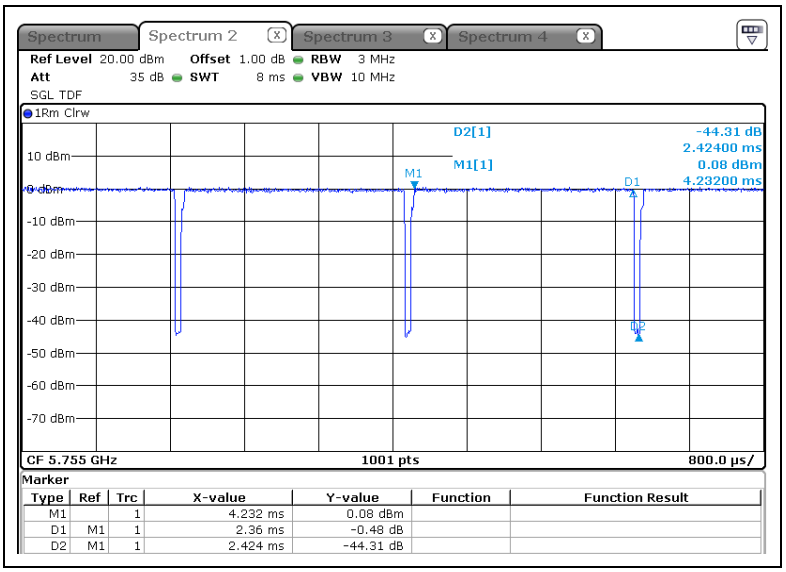
-On time : 4.95 ms
-Period : 5.00 ms
-Duty Cycle : 0.989 8
-D.C.C.F : 0.04 dB

- 802.11ac VHT20



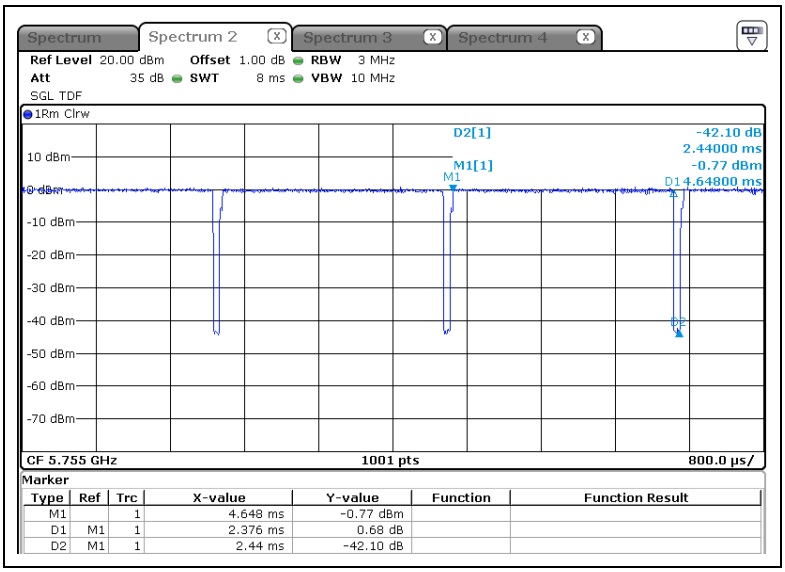
-On time : 4.95 ms
-Period : 5.02 ms
-Duty Cycle : 0.986 4
-D.C.C.F : 0.06 dB

- 802.11n HT40



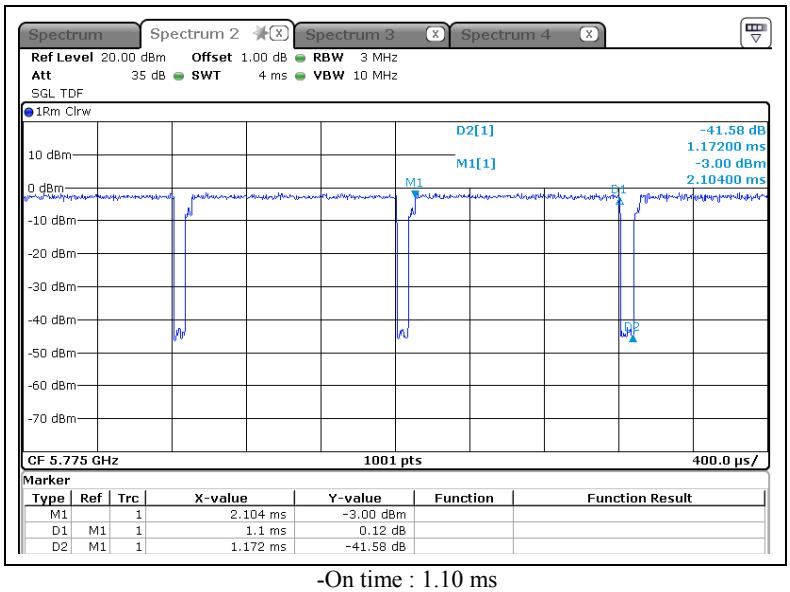
-On time : 2.36 ms
-Period : 2.42 ms
-Duty Cycle : 0.973 6
-D.C.C.F : 0.12 dB

- 802.11ac VHT40



-On time : 2.38 ms
-Period : 2.44 ms
-Duty Cycle : 0.973 8
-D.C.C.F : 0.12 dB

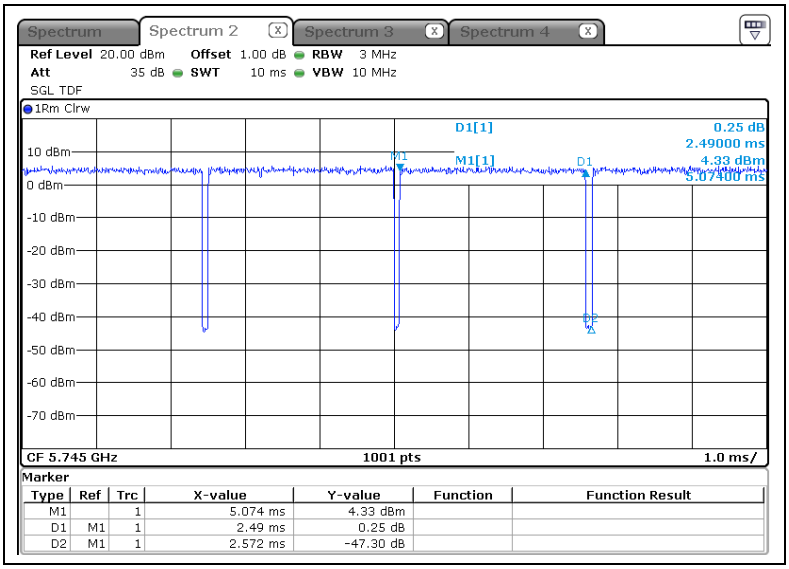
- 802.11ac VHT80



-On time : 1.10 ms
-Period : 1.17 ms
-Duty Cycle : 0.938 6
-D.C.C.F : 0.28 dB

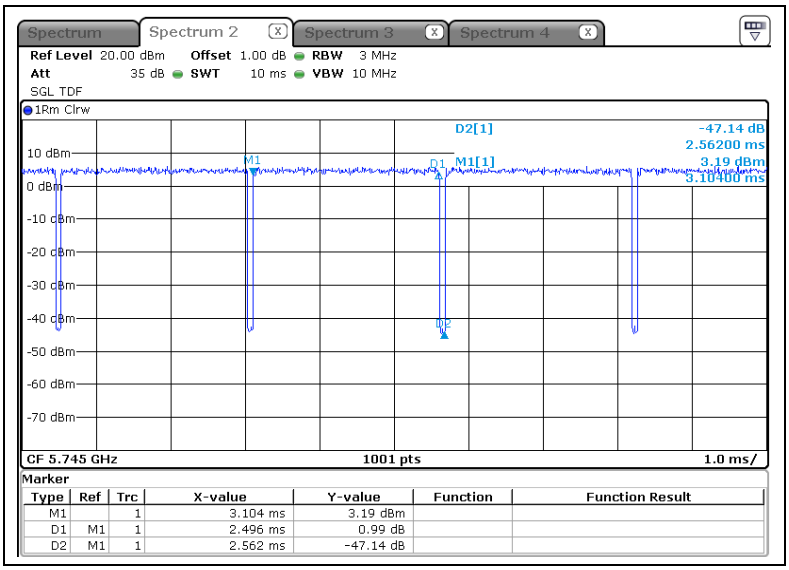
- MIMO (ANT 1+2)

- 802.11n HT20



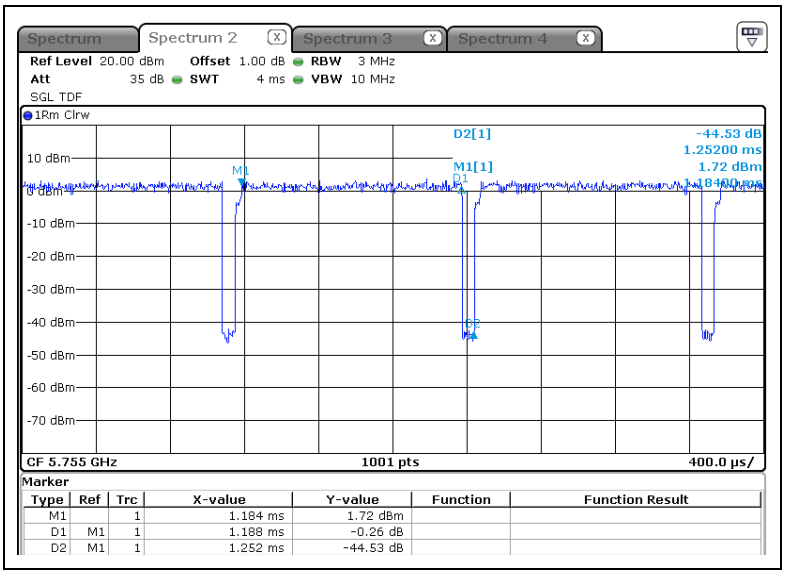
-On time : 2.49 ms
-Period : 2.57 ms
-Duty Cycle : 0.968 1
-D.C.C.F : 0.14 dB

- 802.11ac VHT20



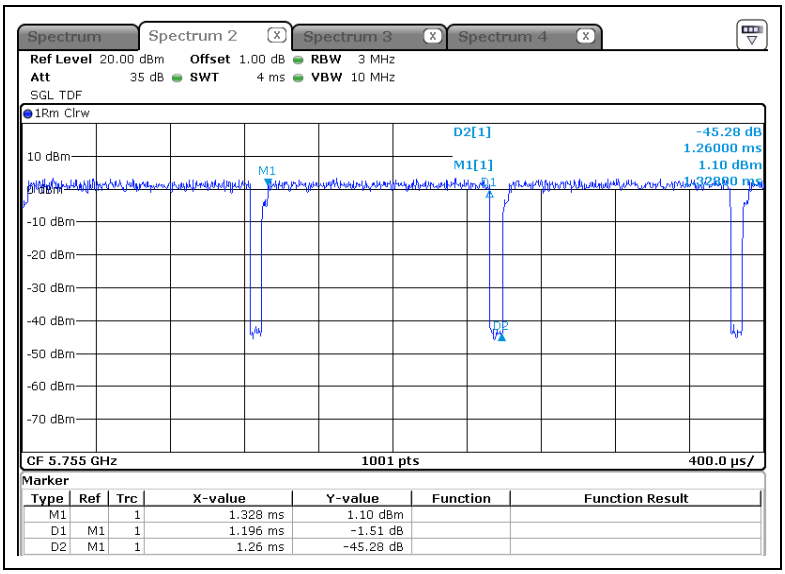
-On time : 2.50 ms
-Period : 2.56 ms
-Duty Cycle : 0.974 2
-D.C.C.F : 0.11 dB

- 802.11n HT40



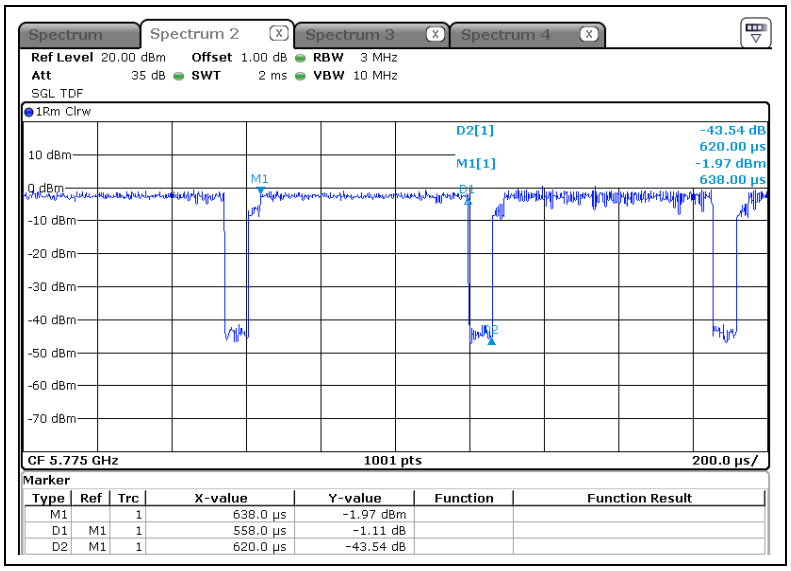
-On time : 1.19 ms
-Period : 1.25 ms
-Duty Cycle : 0.948 9
-D.C.C.F : 0.23 dB

- 802.11ac VHT40



-On time : 1.20 ms
-Period : 1.26 ms
-Duty Cycle : 0.949 2
-D.C.C.F : 0.23 dB

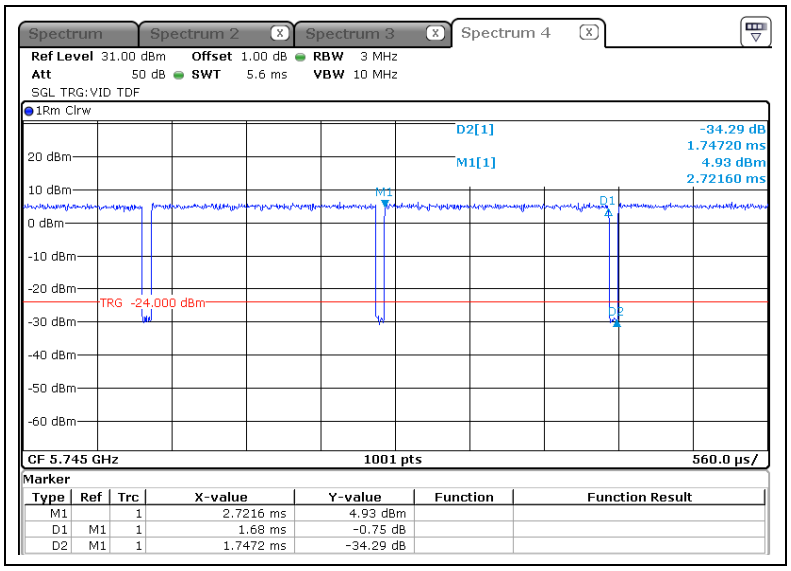
- 802.11ac VHT80



-On time : 0.56 ms
-Period : 0.62 ms
-Duty Cycle : 0.900 0
-D.C.C.F : 0.46 dB

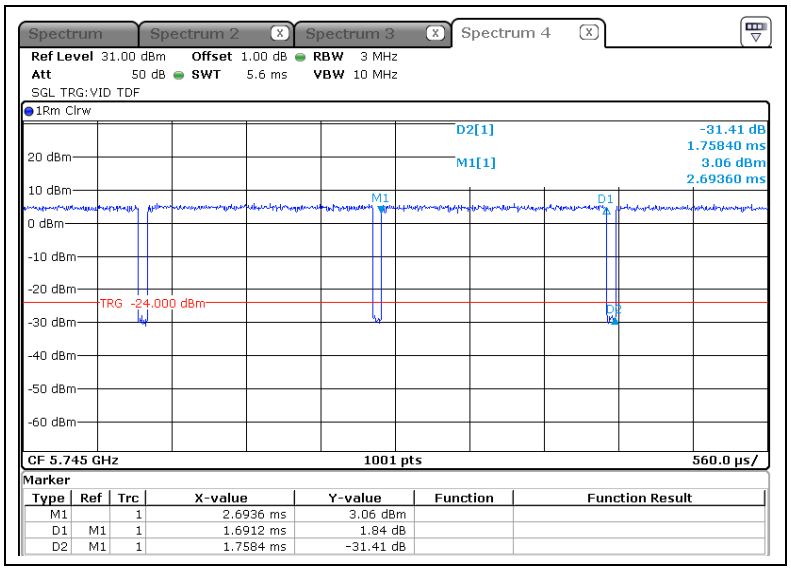
- MIMO (ANT 1+2+3)

- 802.11n HT20



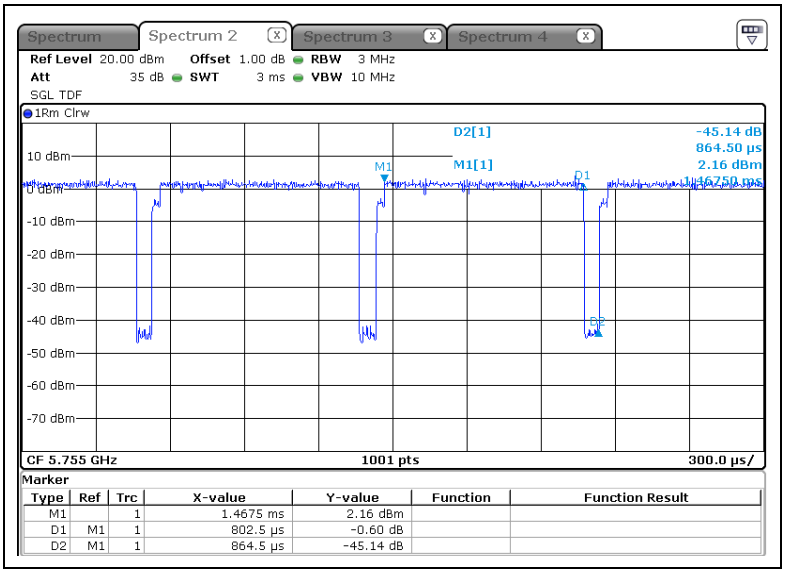
-On time : 1.68 ms
-Period : 1.75 ms
-Duty Cycle : 0.961 5
-D.C.C.F : 0.17 dB

- 802.11ac VHT20



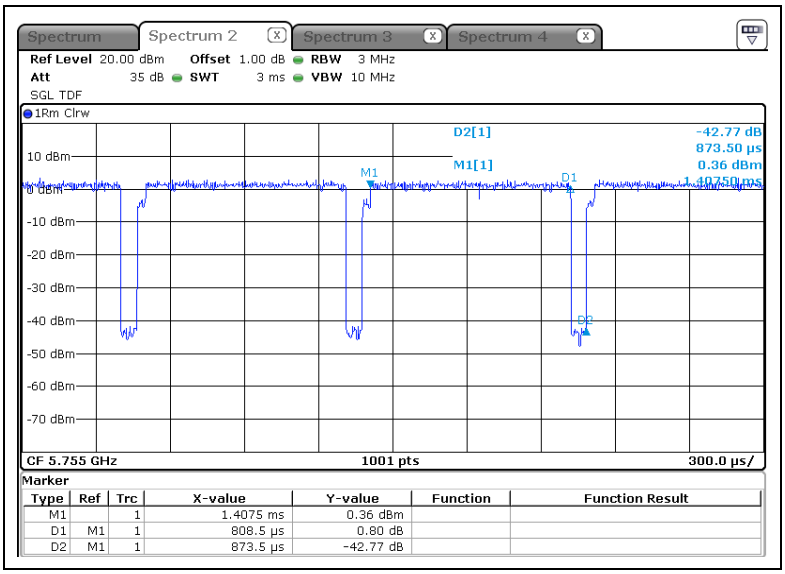
-On time : 1.69 ms
-Period : 1.76 ms
-Duty Cycle : 0.961 8
-D.C.C.F : 0.17 dB

- 802.11n HT40



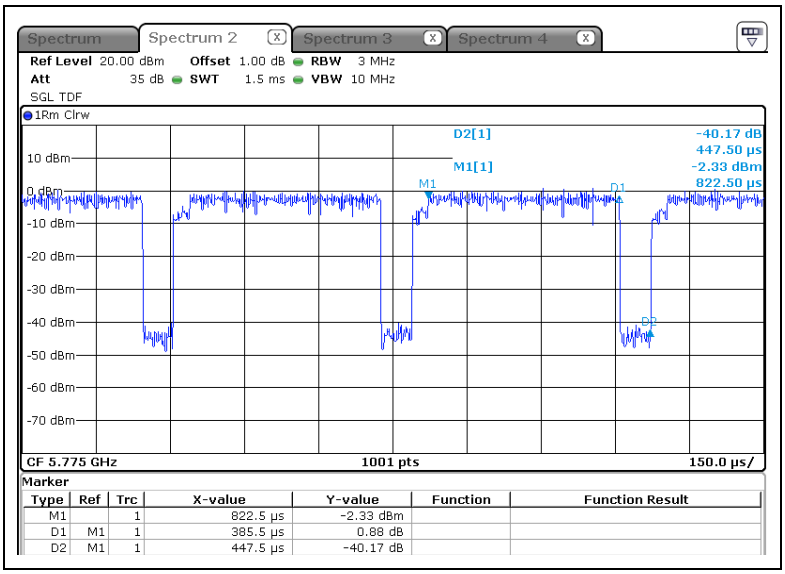
-On time : 0.80 ms
-Period : 0.86 ms
-Duty Cycle : 0.928 3
-D.C.C.F : 0.32 dB

- 802.11ac VHT40



-On time : 0.81 ms
-Period : 0.87 ms
-Duty Cycle : 0.925 6
-D.C.C.F : 0.34 dB

- 802.11ac VHT80



-On time : 0.39 ms
-Period : 0.45 ms
-Duty Cycle : 0.861 5
-D.C.C.F : 0.65 dB

5.2.3 Test Result

-Complied

- 5 150 Band

- Ant 1

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.55	30.00	14.45
5 200	15.50	30.00	14.50
5 240	15.16	30.00	14.84

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.08	30.00	14.92
5 200	14.81	30.00	15.19
5 240	14.88	30.00	15.12

-802.11ac VHT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.07	30.00	14.93
5 200	14.86	30.00	15.14
5 240	14.87	30.00	15.13

-802.11n HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.10	13.13	30.00	16.87
5 230	0.10	13.50	30.00	16.50

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.12	13.17	30.00	16.83
5 230	0.12	12.99	30.00	17.01

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 210	0.22	11.55	30.00	18.45

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- Ant 2

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.85	30.00	14.15
5 200	15.29	30.00	14.71
5 240	15.87	30.00	14.13

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.37	30.00	14.63
5 200	15.15	30.00	14.85
5 240	15.34	30.00	14.66

-802.11ac VTH20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.31	30.00	14.69
5 200	15.27	30.00	14.73
5 240	15.35	30.00	14.65

-802. 11n HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.10	13.31	30.00	16.69
5 230	0.10	13.30	30.00	16.70

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.12	13.25	30.00	16.75
5 230	0.12	13.21	30.00	16.79

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 210	0.22	11.09	30.00	18.91

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- Ant 3

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	15.66	30.00	14.34
5 200	15.54	30.00	14.46
5 240	15.64	30.00	14.36

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	14.85	30.00	15.15
5 200	15.18	30.00	14.82
5 240	15.14	30.00	14.86

-802.11ac VHT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	14.85	30.00	15.15
5 200	15.11	30.00	14.89
5 240	15.04	30.00	14.96

-802. 11n HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.10	13.10	30.00	16.90
5 230	0.10	13.02	30.00	16.98

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	0.12	13.18	30.00	16.82
5 230	0.12	13.06	30.00	16.94

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 210	0.22	11.32	30.00	18.68

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- MIMO (ANT 1+2)

-802.11n HT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	12.24	12.31	0.11	15.39	30.00	14.61
5 200	12.22	12.33	0.11	15.39	30.00	14.61
5 240	12.15	12.49	0.11	15.44	30.00	14.56

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	12.28	12.36	0.09	15.42	30.00	14.58
5 200	12.20	12.37	0.09	15.39	30.00	14.61
5 240	12.10	12.38	0.09	15.35	30.00	14.65

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11n_HT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	9.78	9.91	0.15	13.01	30.00	16.99
5 230	9.91	9.96	0.15	13.10	30.00	16.90

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac_VHT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	9.84	9.81	0.17	13.01	30.00	16.99
5 230	9.83	9.94	0.17	13.07	30.00	16.93

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 210	8.09	8.10	0.48	11.58	30.00	18.42

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- MIMO (ANT 1+2+3)

-802.11n HT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	10.33	10.69	10.29	0.14	15.35	30.00	14.65
5 200	10.38	10.37	10.46	0.14	15.32	30.00	14.68
5 240	10.29	10.49	10.86	0.14	15.47	30.00	14.53

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 180	10.78	10.58	10.48	0.14	15.53	30.00	14.47
5 200	10.54	10.81	10.55	0.14	15.55	30.00	14.45
5 240	10.55	10.85	11.08	0.14	15.75	30.00	14.25

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11n_HT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	8.66	8.52	8.70	0.29	13.69	30.00	16.31
5 230	8.67	8.78	8.95	0.29	13.87	30.00	16.13

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac_VHT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 190	8.13	8.20	8.19	0.31	13.25	30.00	16.75
5 230	8.31	8.36	8.70	0.31	13.54	30.00	16.46

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 210	6.19	5.93	6.20	0.66	11.54	30.00	18.46

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- 5 725 Band

- ANT 1

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	15.67	30.00	14.33
5 785	15.40	30.00	14.60
5 825	15.06	30.00	14.94

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.17	30.00	15.83
5 785	14.02	30.00	15.98
5 825	14.06	30.00	15.94

-802.11ac VHT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.11	30.00	15.89
5 785	14.06	30.00	15.94
5 825	14.09	30.00	15.91

-802.11n_HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.67	30.00	17.33
5 795	0.12	12.63	30.00	17.37

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.33	30.00	17.67
5 795	0.12	12.42	30.00	17.58

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 775	0.28	11.46	30.00	18.54

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- ANT 2

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	15.22	30.00	14.78
5 785	15.07	30.00	14.93
5 825	15.08	30.00	14.92

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.19	30.00	15.81
5 785	14.16	30.00	15.84
5 825	14.09	30.00	15.91

-802.11ac VHT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.13	30.00	15.87
5 785	14.00	30.00	16.00
5 825	14.08	30.00	15.92

-802.11n_HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.64	30.00	17.36
5 795	0.12	12.58	30.00	17.42

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.28	30.00	17.72
5 795	0.12	12.19	30.00	17.81

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 775	0.28	11.50	30.00	18.50

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- ANT 3

-802.11a

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	15.13	30.00	14.87
5 785	15.21	30.00	14.79
5 825	15.11	30.00	14.89

-802.11n HT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.24	30.00	15.76
5 785	14.16	30.00	15.84
5 825	14.20	30.00	15.80

-802.11ac VHT20

Frequency [㎒]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	14.09	30.00	15.91
5 785	14.01	30.00	15.99
5 825	14.15	30.00	15.85

-802.11n_HT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.63	30.00	17.37
5 795	0.12	11.52	30.00	18.48

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT40

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	0.12	12.28	30.00	17.72
5 795	0.12	12.24	30.00	17.76

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 775	0.28	11.49	30.00	18.51

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- MIMO (ANT 1+2)

- 802.11n HT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	10.67	11.33	0.14	14.16	30.00	15.84
5 785	10.28	10.97	0.14	13.79	30.00	16.21
5 825	9.94	10.01	0.14	13.13	30.00	16.87

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- 802.11ac VTH20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	10.40	10.98	0.11	13.82	30.00	16.18
5 785	10.28	10.74	0.11	13.64	30.00	16.36
5 825	9.94	10.20	0.11	13.20	30.00	16.80

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11n_HT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	9.59	9.69	0.23	12.88	30.00	17.12
5 795	9.26	9.29	0.23	12.51	30.00	17.49

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac_VHT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	9.75	9.78	0.23	13.00	30.00	17.00
5 795	9.49	9.67	0.23	12.82	30.00	17.18

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11ac VHT80

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 775	8.65	8.56	0.46	12.07	30.00	17.93

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- MIMO (ANT 1+2+3)

- 802.11n HT20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	9.13	9.20	9.78	0.17	14.32	30.00	15.68
5 785	9.08	9.13	9.88	0.17	14.32	30.00	15.68
5 825	8.80	8.98	9.52	0.17	14.05	30.00	15.95

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- 802.11ac VTH20

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 745	9.12	9.14	9.79	0.17	14.30	30.00	15.70
5 785	8.96	9.14	9.94	0.17	14.31	30.00	15.69
5 825	8.78	8.89	9.50	0.17	14.01	30.00	15.99

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

-802.11n_HT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	7.38	7.38	8.44	0.32	12.86	30.00	17.14
5 795	7.37	7.60	8.39	0.32	12.90	30.00	17.10

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- 802.11ac VHT40

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 755	7.30	7.63	8.79	0.34	13.06	30.00	16.94
5 795	7.04	7.35	8.39	0.34	12.74	30.00	17.26

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

- 802.11ac VHT80

Frequency [㎒]	Average power _ANT 1 [dBm]	Average power _ANT 2 [dBm]	Average power _ANT 3 [dBm]	D.C.C.F [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
5 775	5.91	6.05	6.87	0.65	11.72	30.00	18.28

Note: D.C.C.F = Duty cycle correction factor = 10log(1/Duty Cycle)

5.2.4 Test Plot

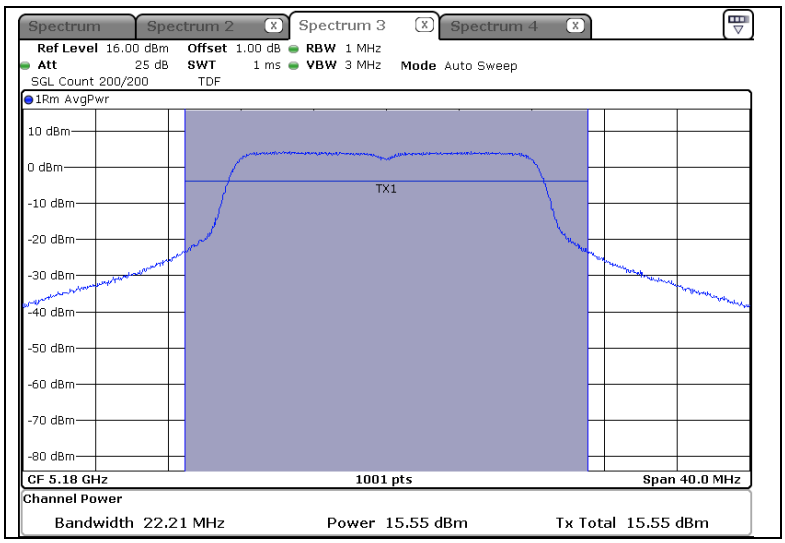
Figure 1. Conducted Output Power

- 5 150 Band

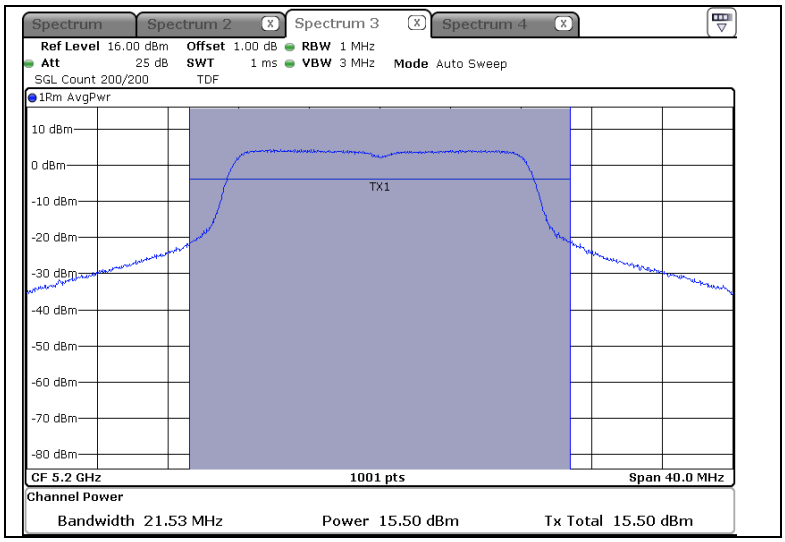
- ANT 1

-802.11a

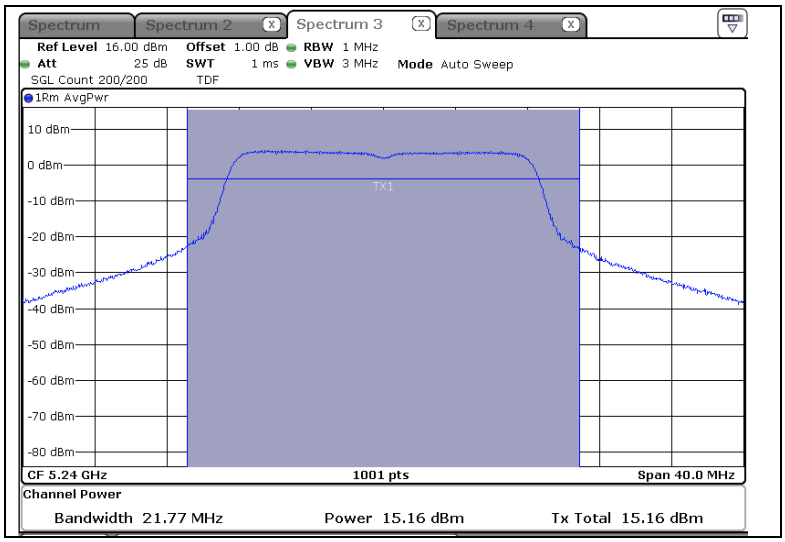
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

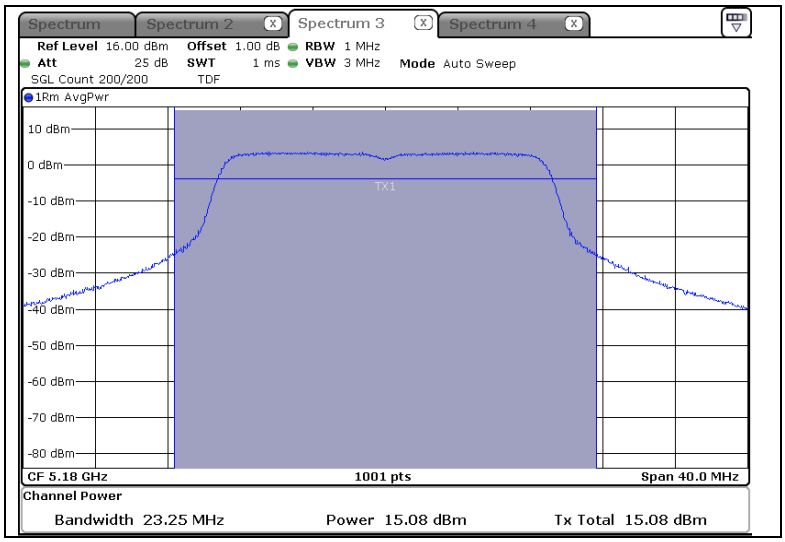


Highest Channel (5 240 ㎒)

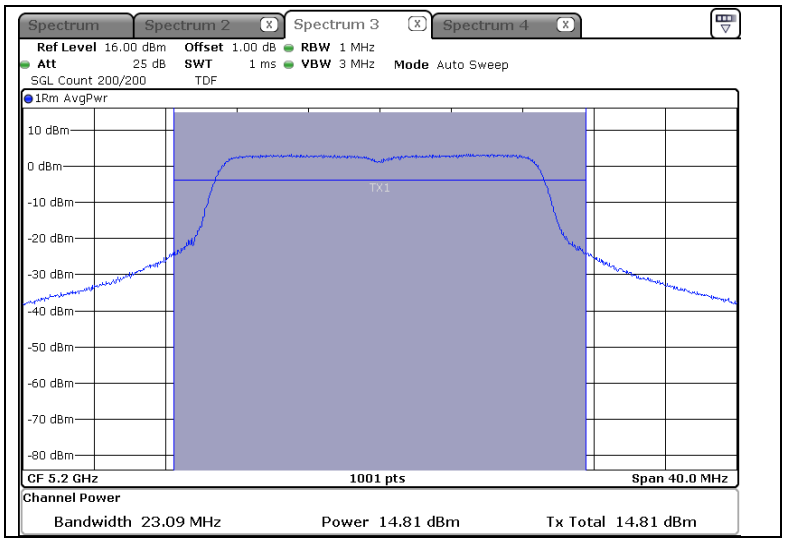


-802.11n HT20

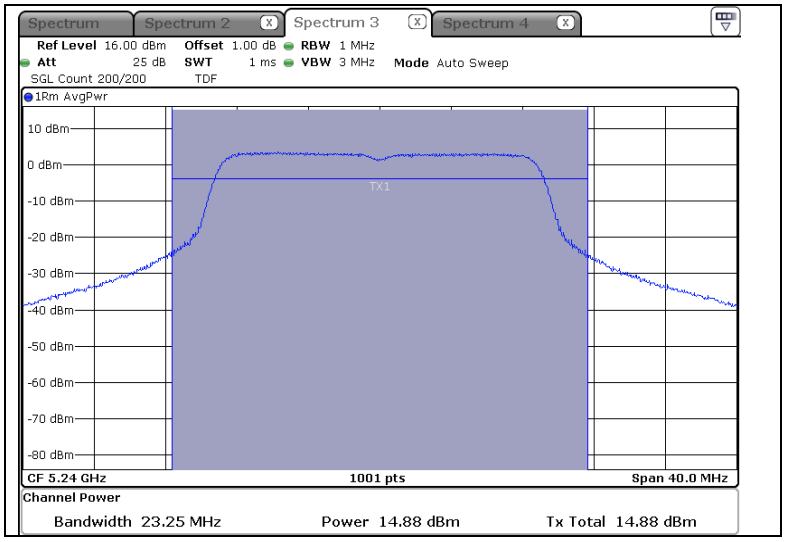
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

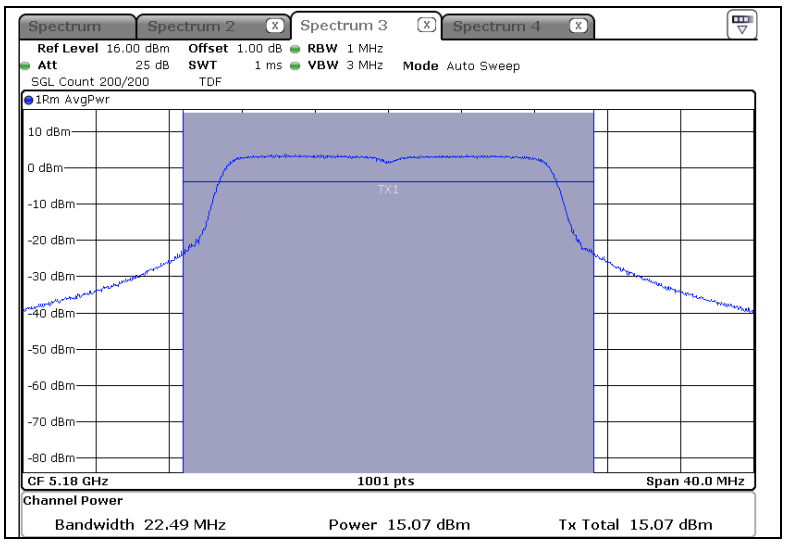


Highest Channel (5 240 ㎒)

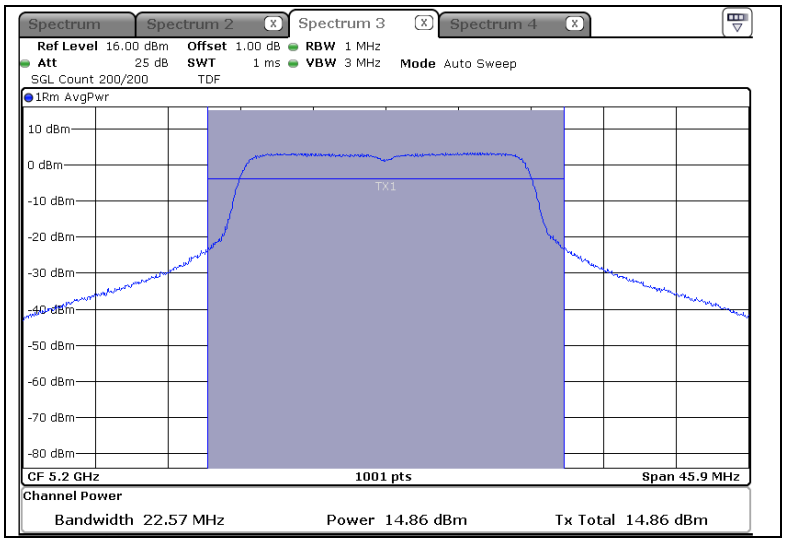


-802.11ac VHT20

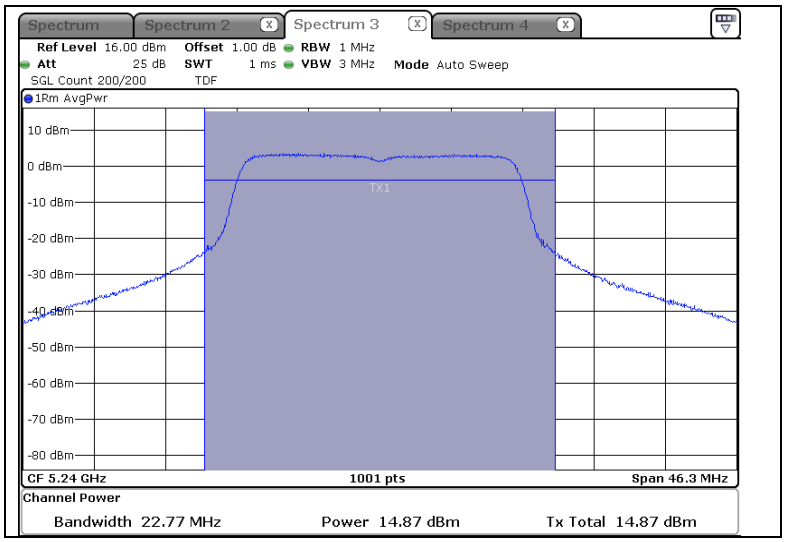
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

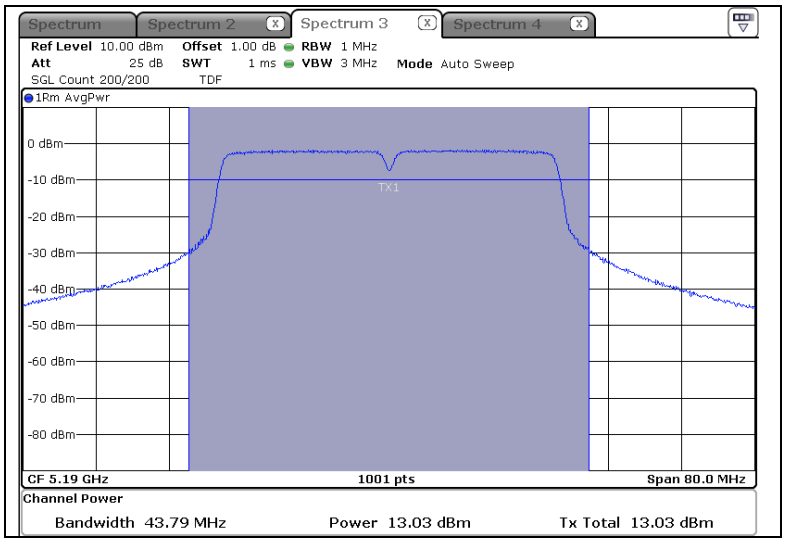


Highest Channel (5 240 ㎒)

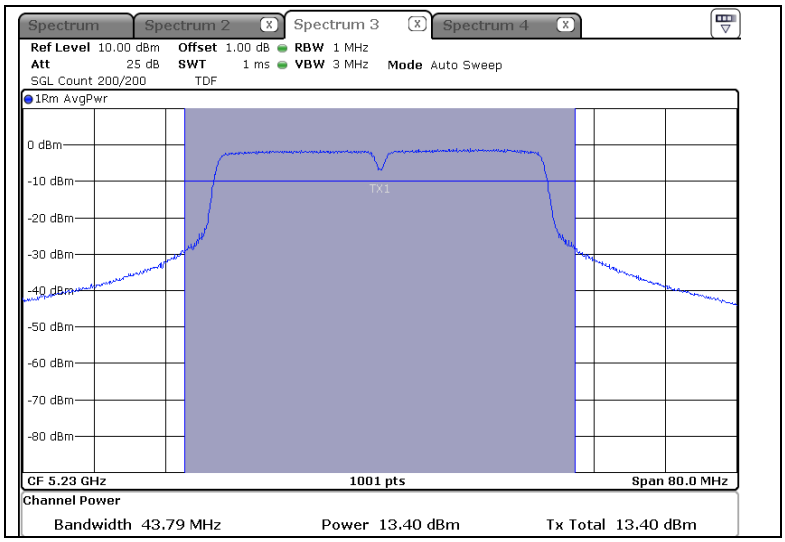


-802.11n_HT40

Lowest Channel (5 190 ㎒)

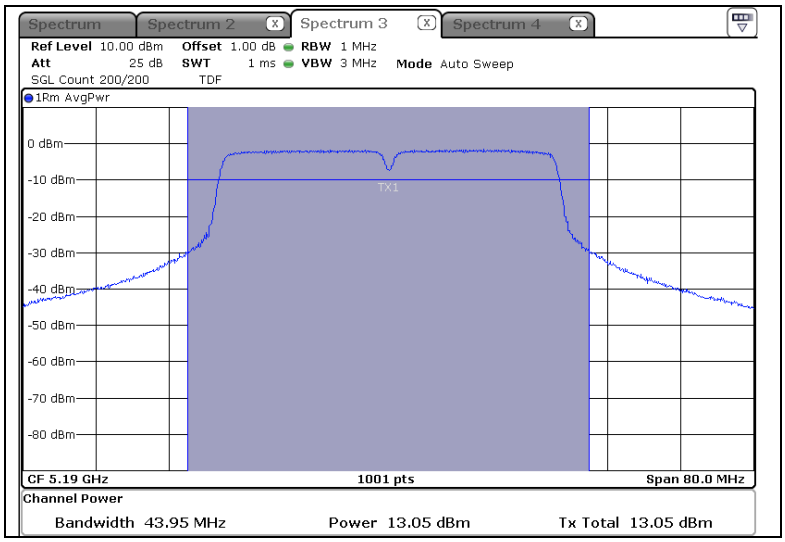


Highest Channel (5 230 ㎒)

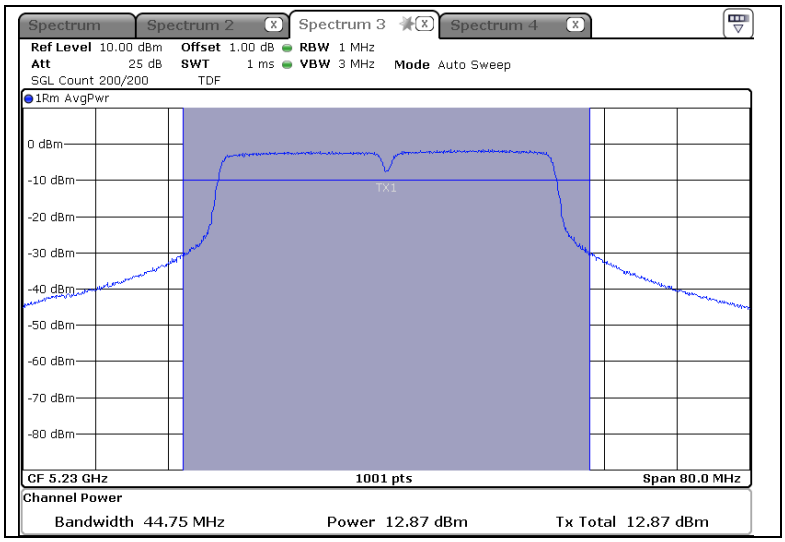


-802.11ac VHT40

Lowest Channel (5 190 ㎒)

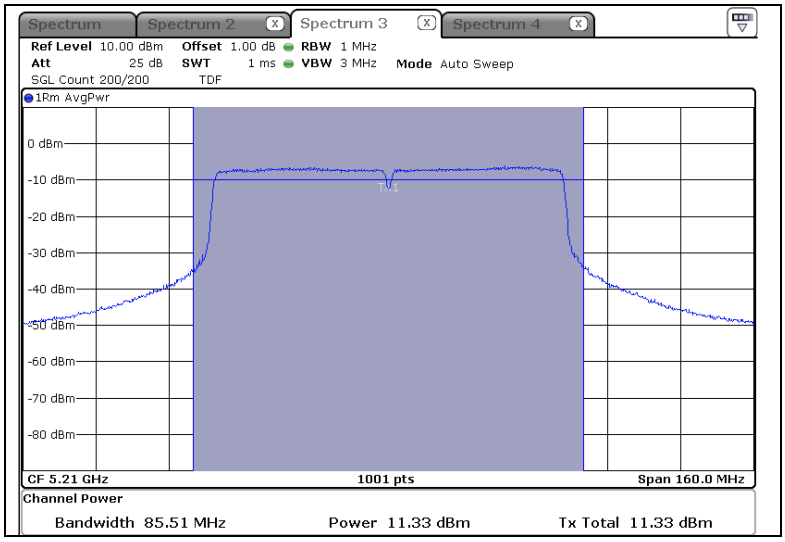


Highest Channel (5 230 ㎒)



-802.11ac VHT80

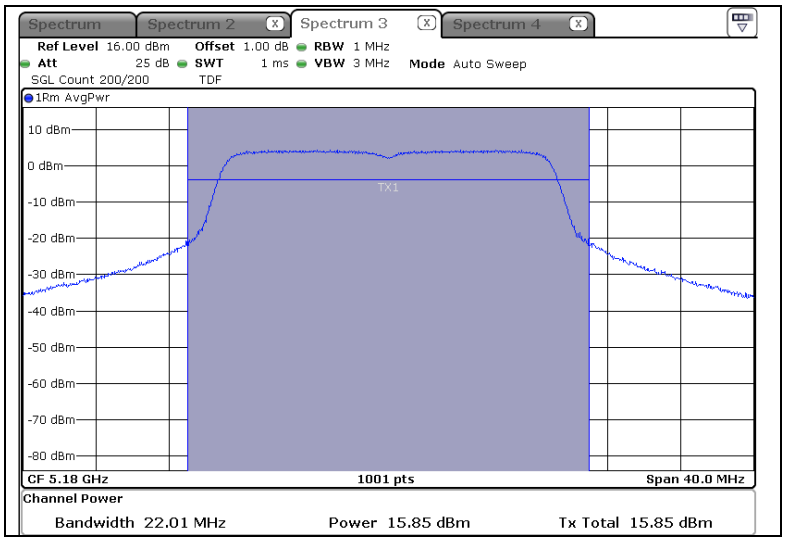
Lowest Channel (5 210 ㎒)



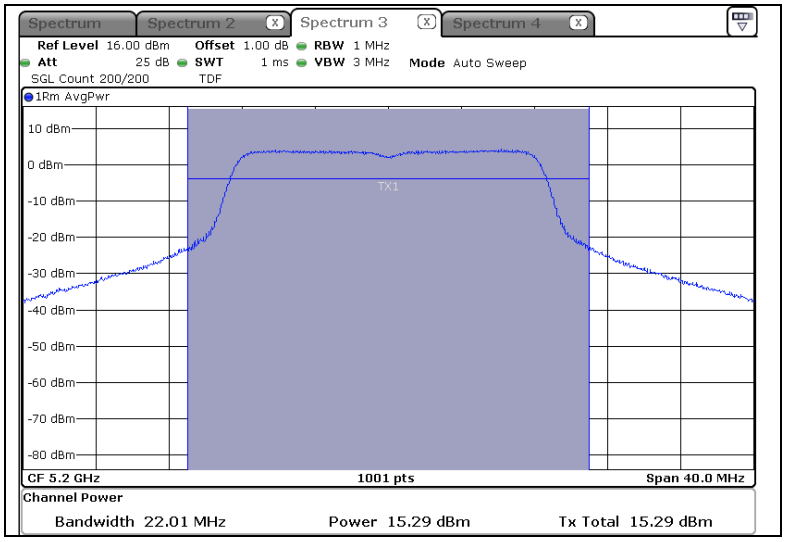
- ANT 2

-802.11a

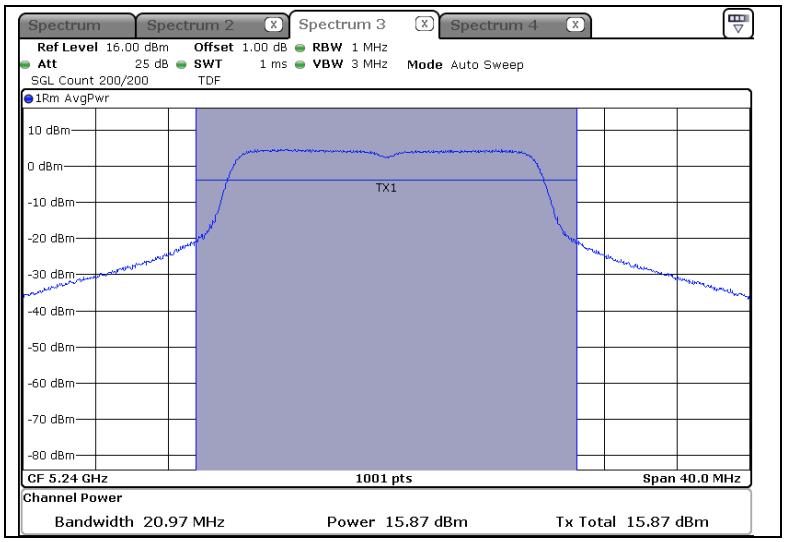
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

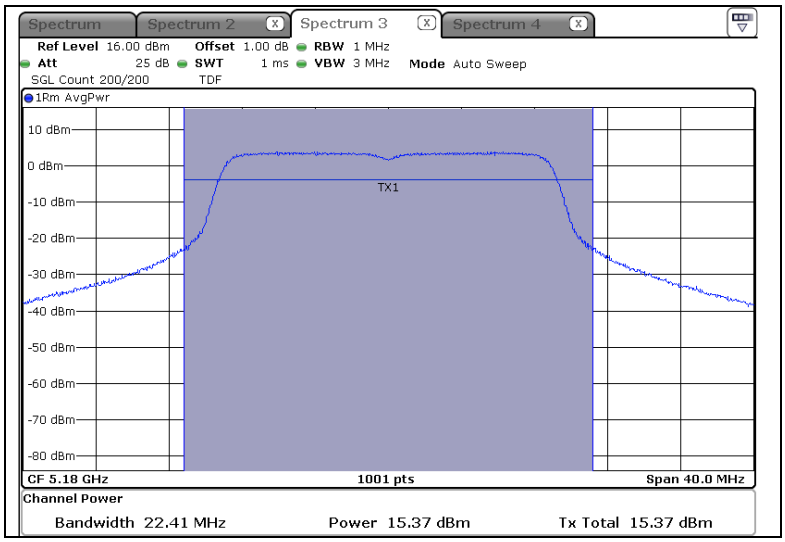


Highest Channel (5 240 ㎒)

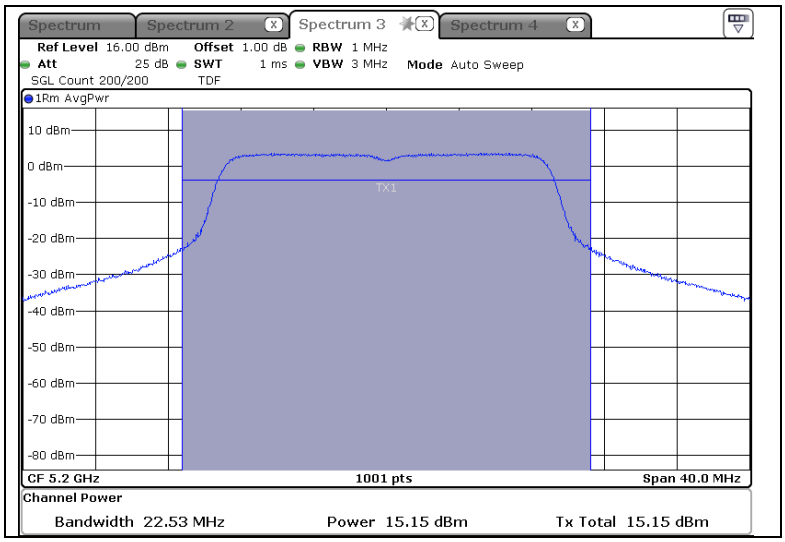


-802.11n HT20

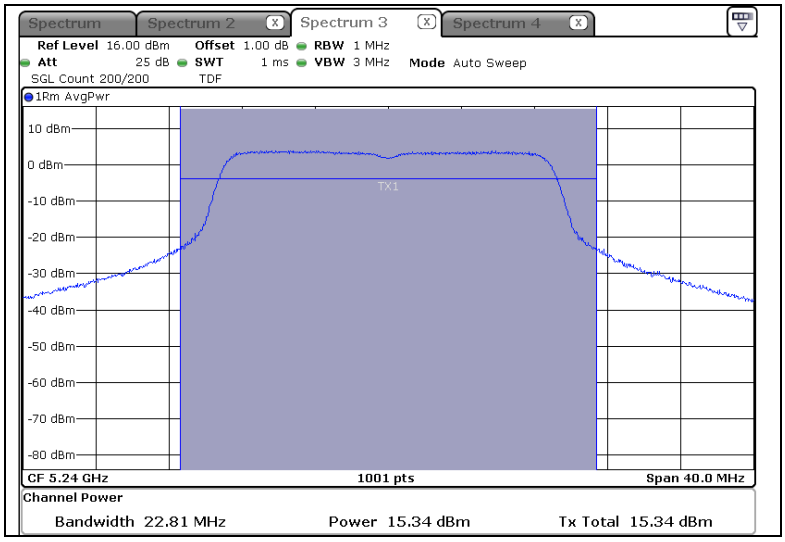
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

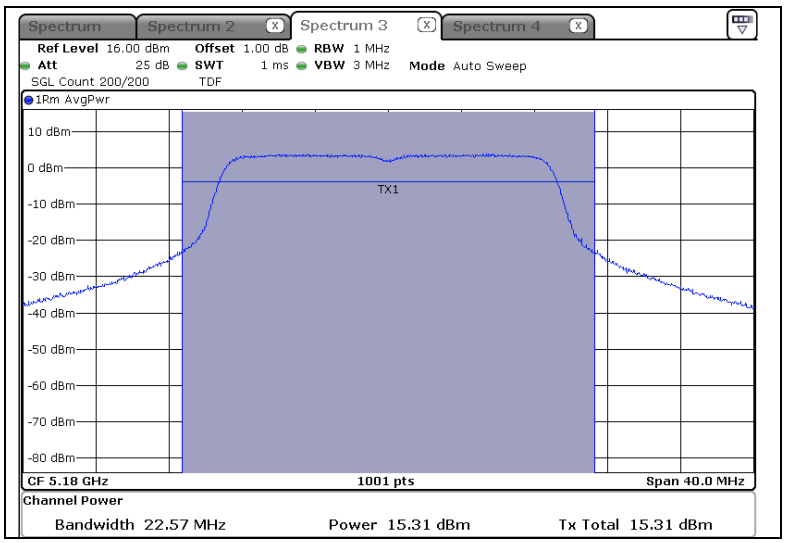


Highest Channel (5 240 ㎒)

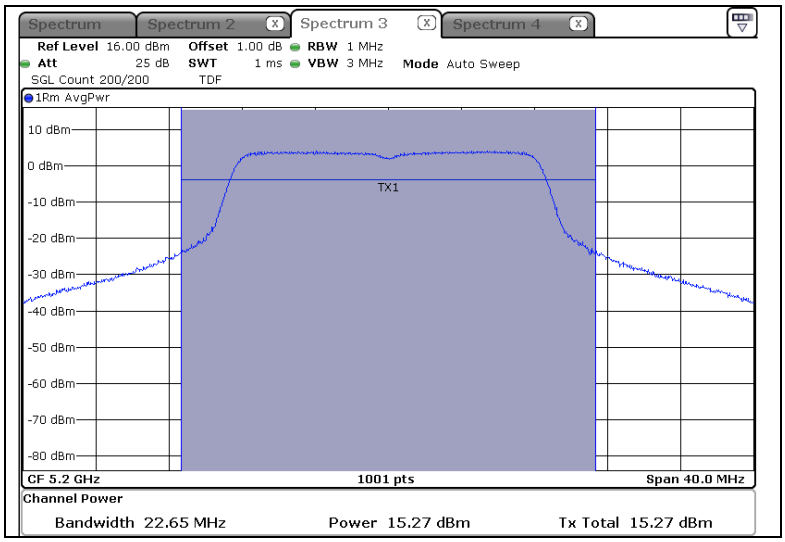


-802.11ac VHT20

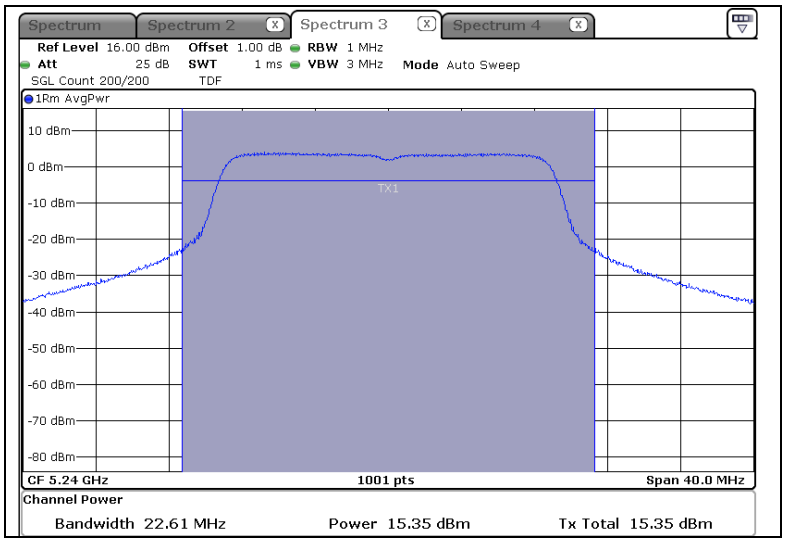
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

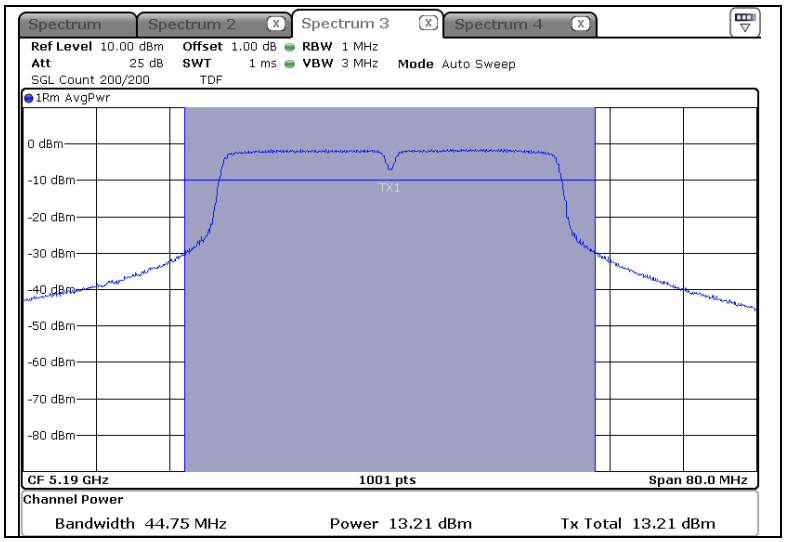


Highest Channel (5 240 ㎒)

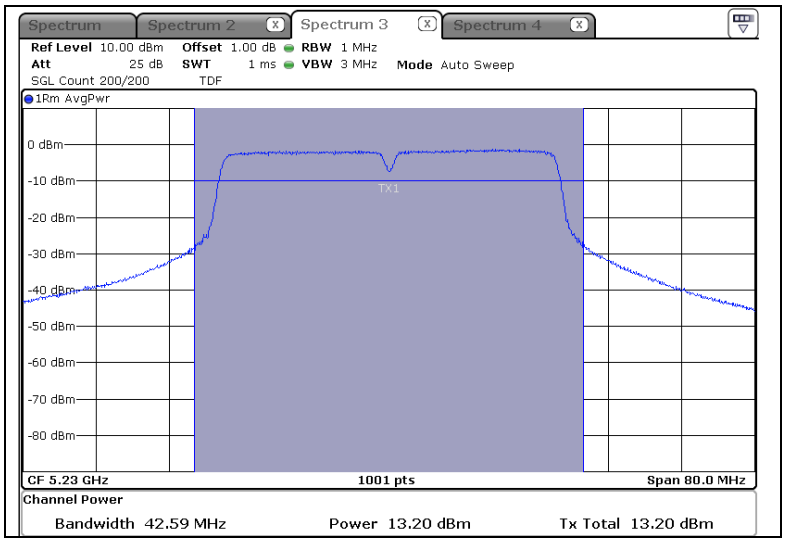


-802.11n_HT40

Lowest Channel (5 190 ㎒)

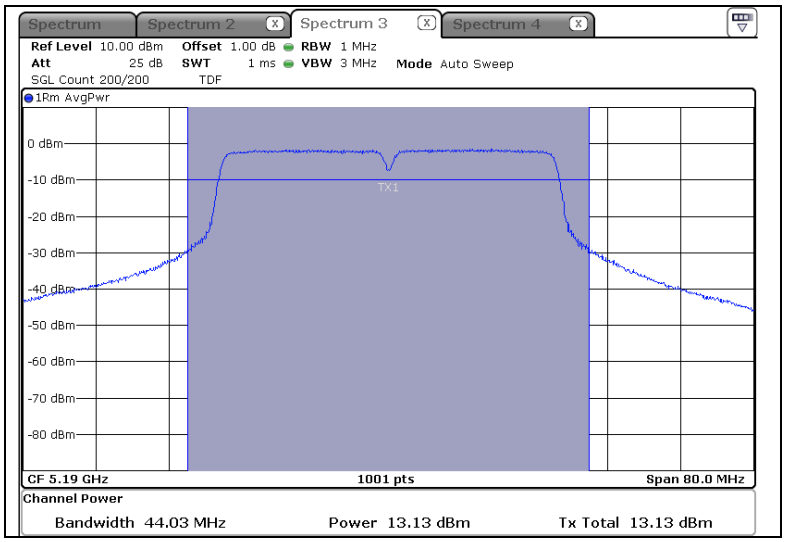


Highest Channel (5 230 ㎒)

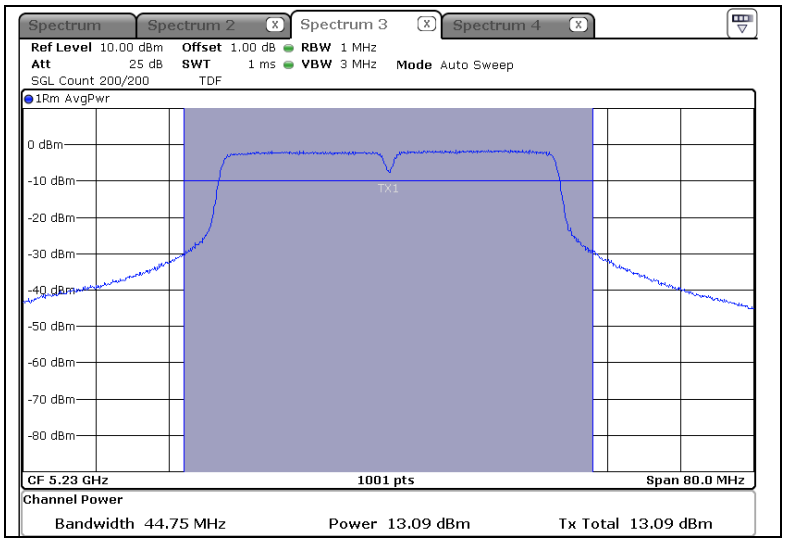


-802.11ac VHT40

Lowest Channel (5 190 ㎒)

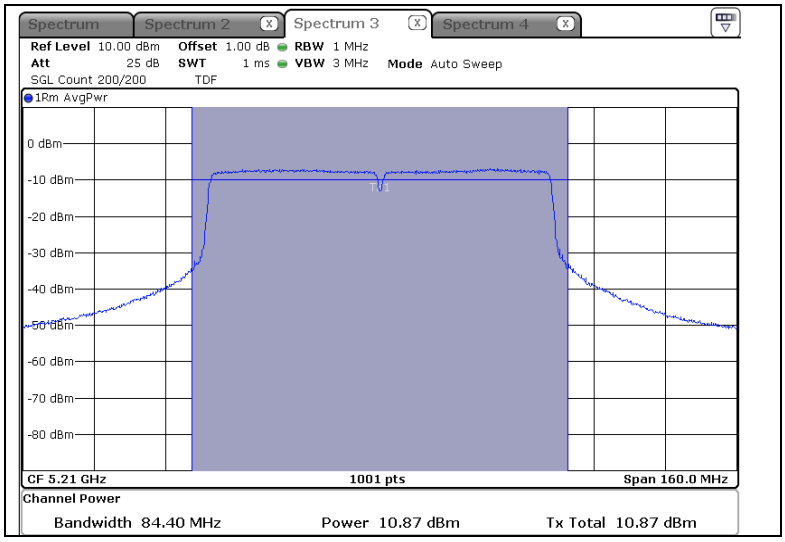


Highest Channel (5 230 ㎒)



-802.11ac VHT80

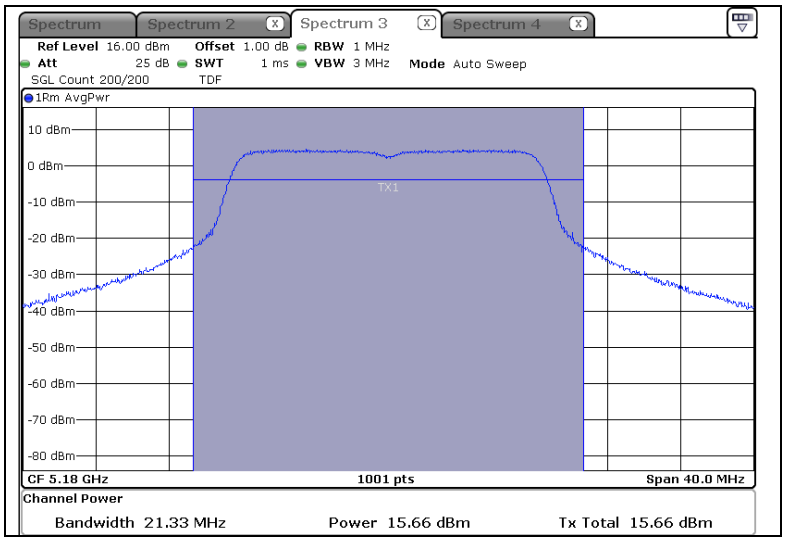
Lowest Channel (5 210 ㎒)



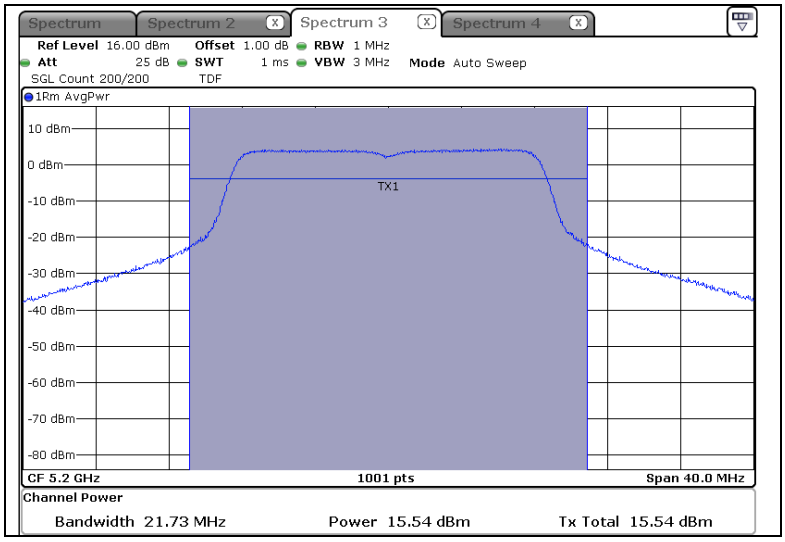
- ANT 3

-802.11a

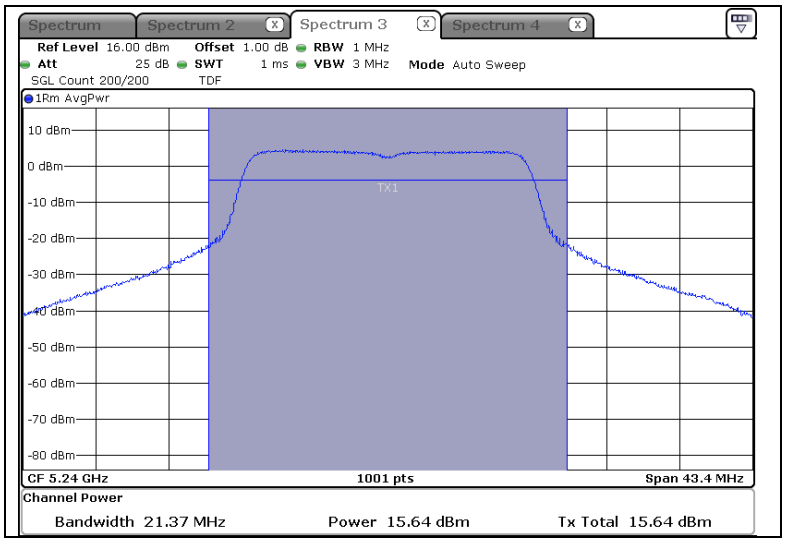
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

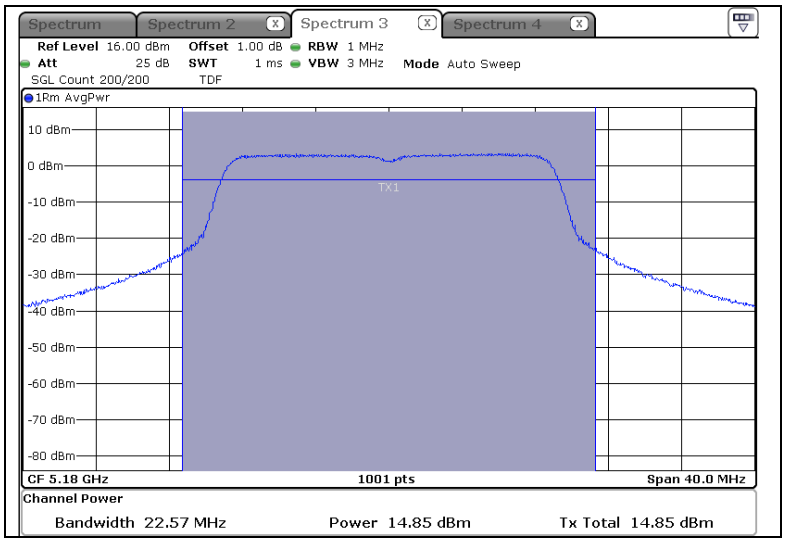


Highest Channel (5 240 ㎒)

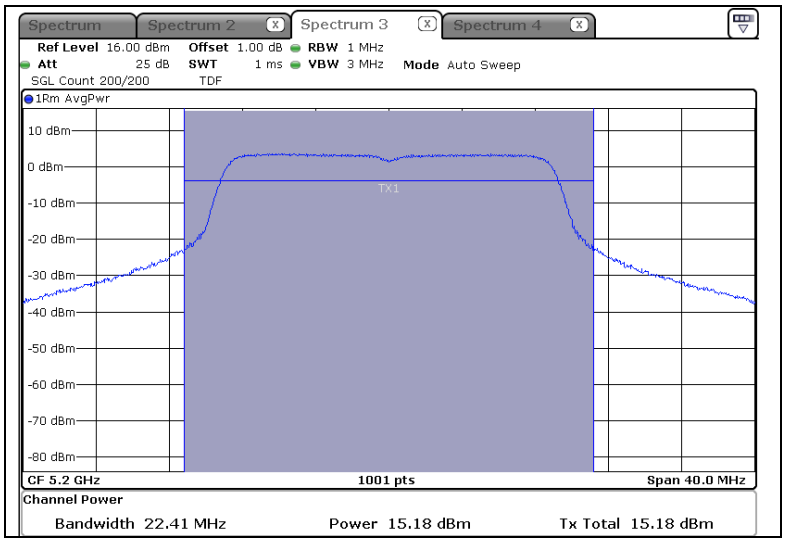


-802.11n HT20

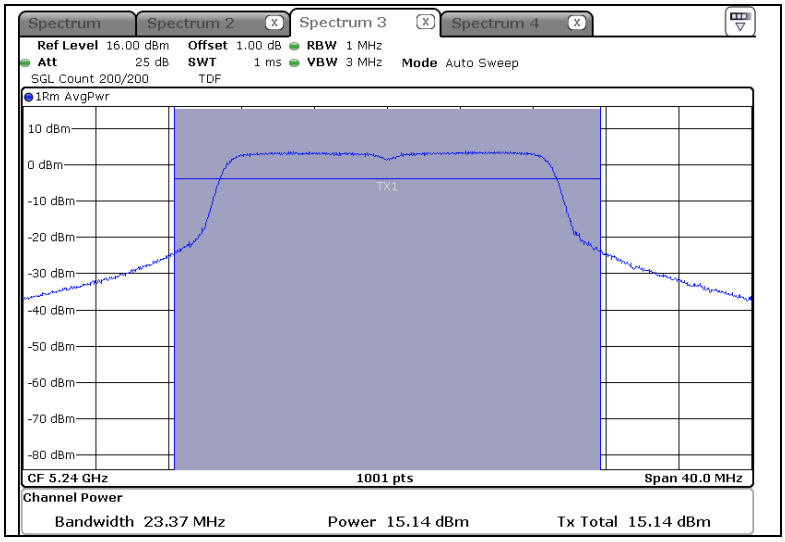
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

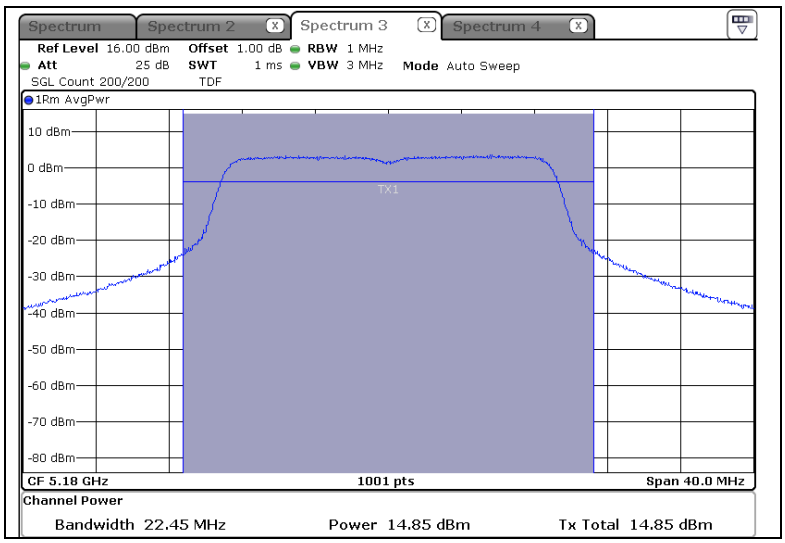


Highest Channel (5 240 ㎒)

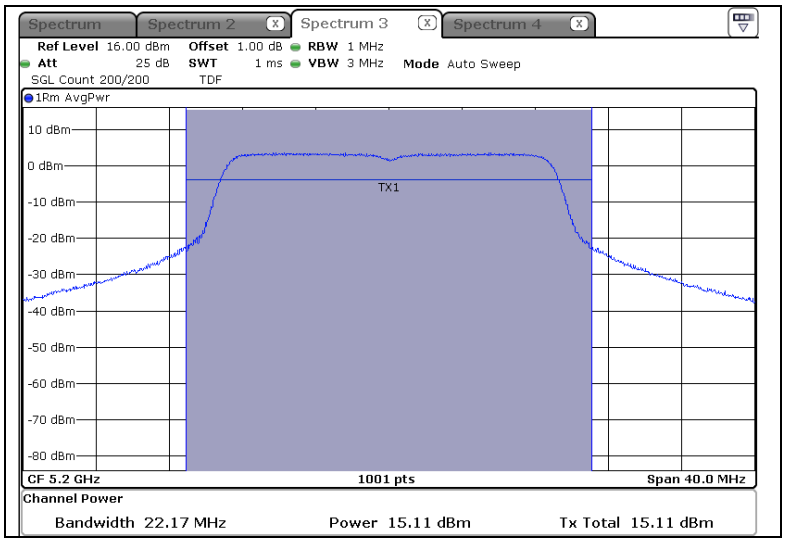


-802.11ac VHT20

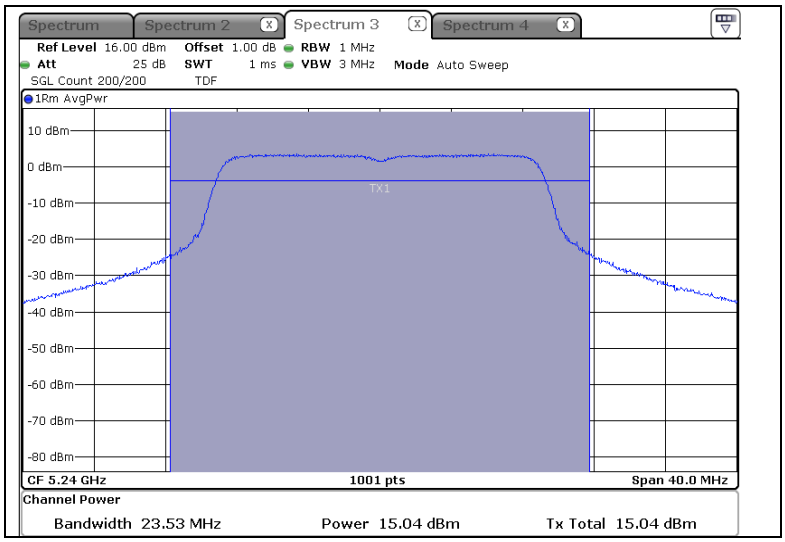
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

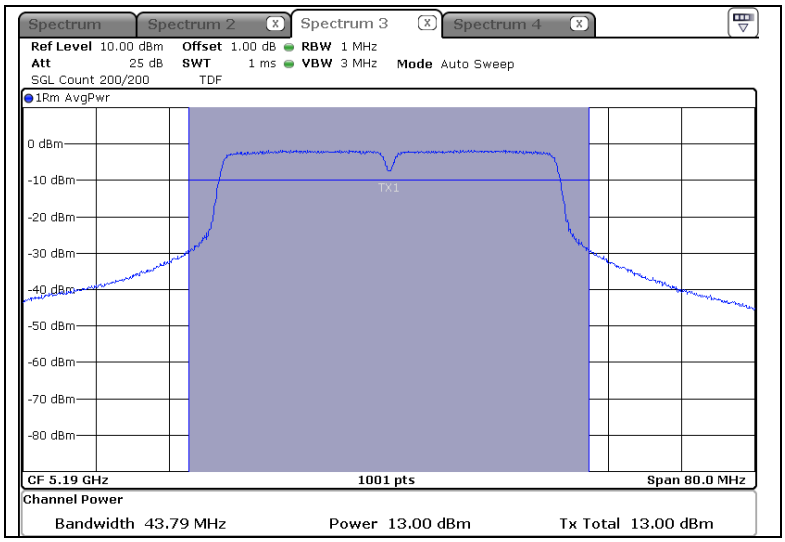


Highest Channel (5 240 ㎒)

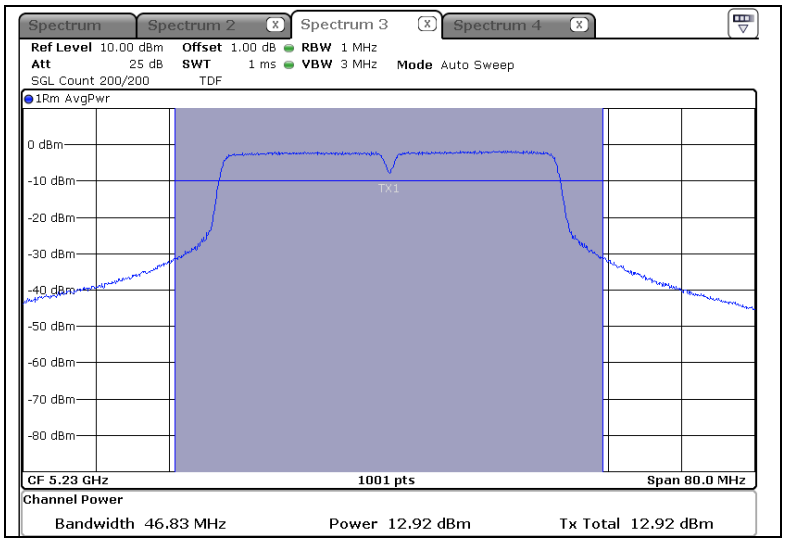


-802.11n_HT40

Lowest Channel (5 190 ㎒)

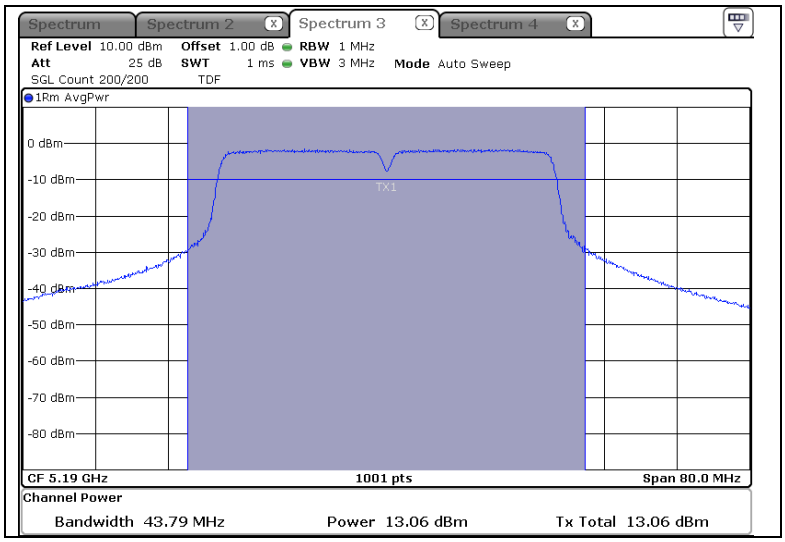


Highest Channel (5 230 ㎒)

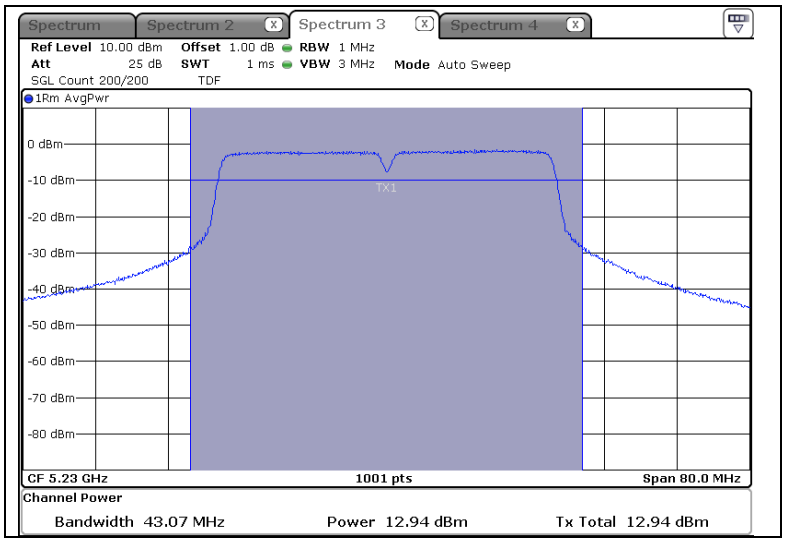


-802.11ac VHT40

Lowest Channel (5 190 ㎒)

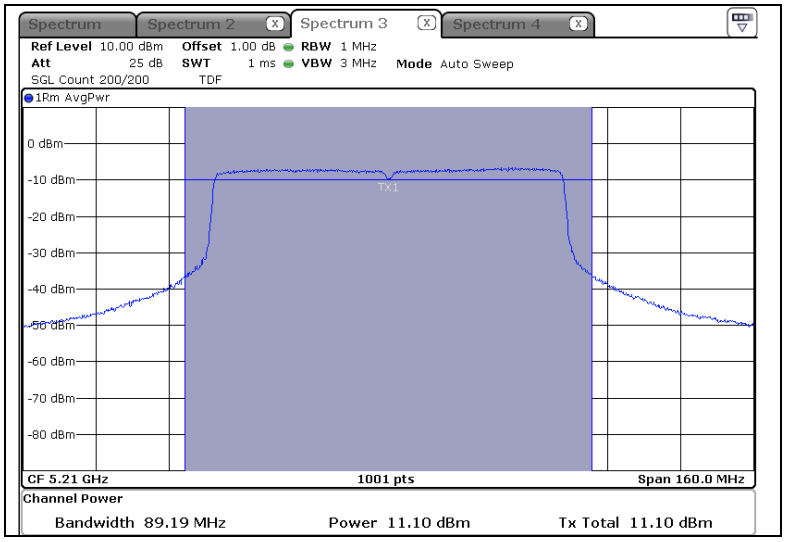


Highest Channel (5 230 ㎒)



-802.11ac VHT80

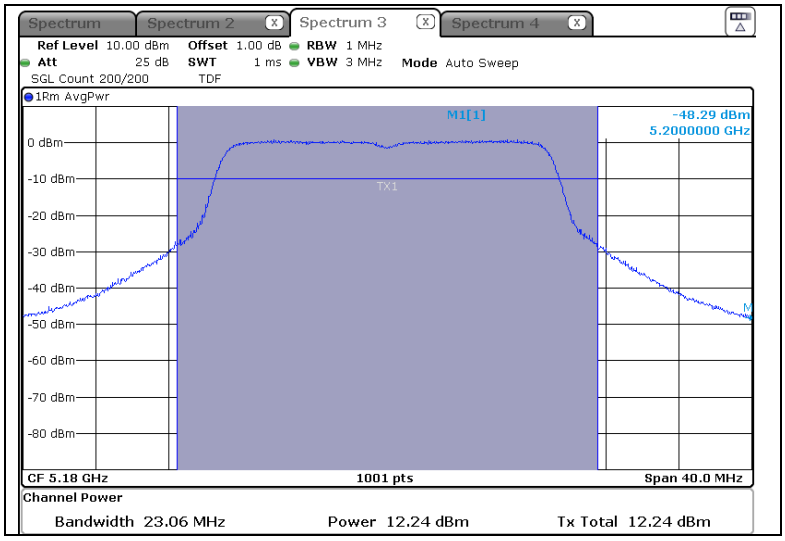
Lowest Channel (5 210 ㎒)



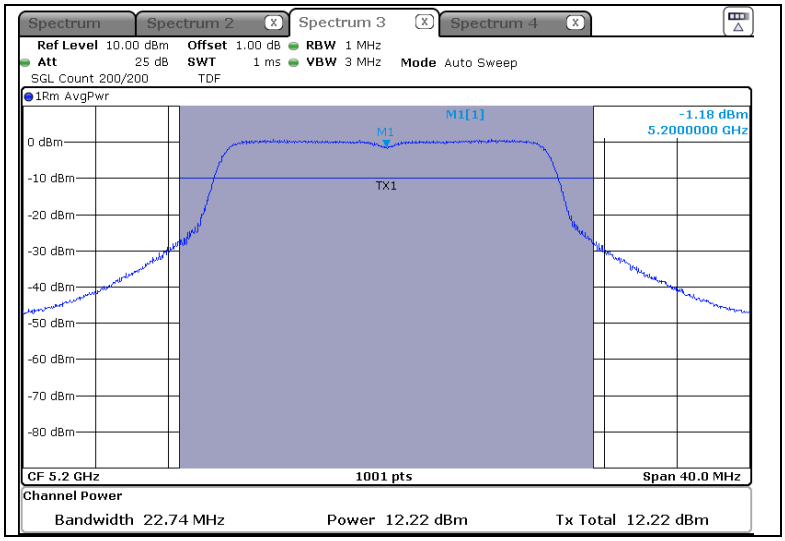
- MIMO 2Tx (ANT 1)

-802.11n HT20

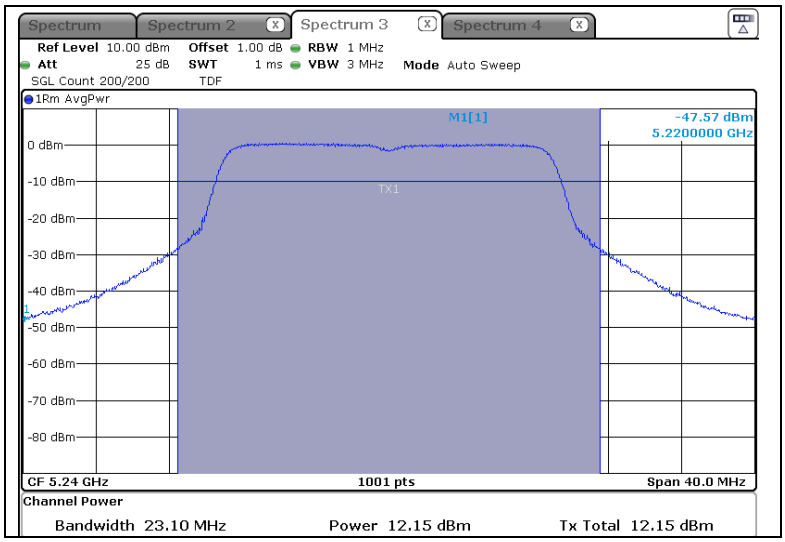
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

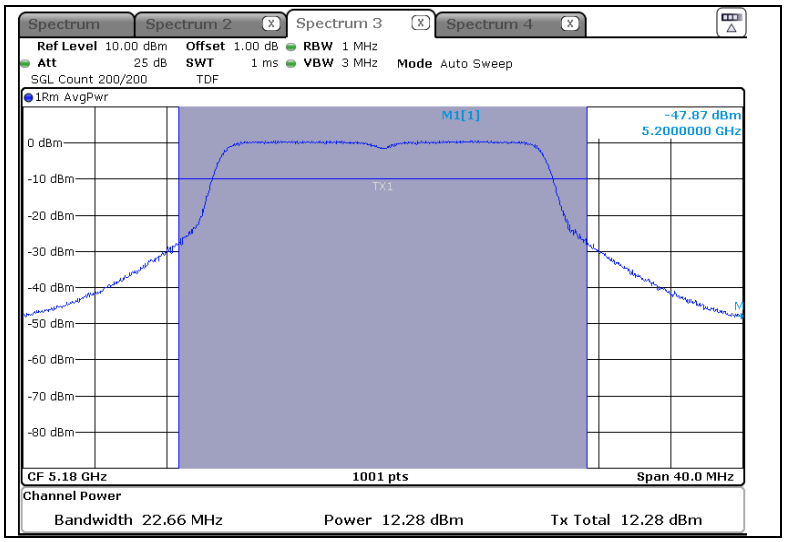


Highest Channel (5 240 ㎒)

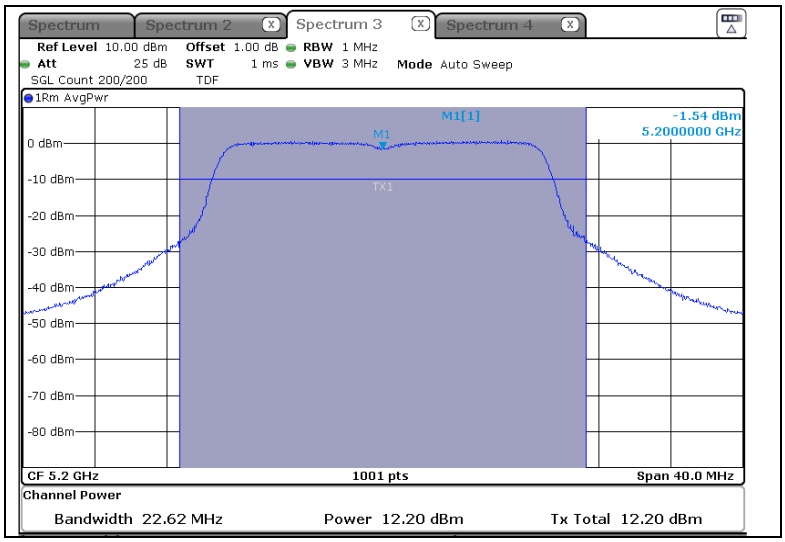


-802.11ac VHT20

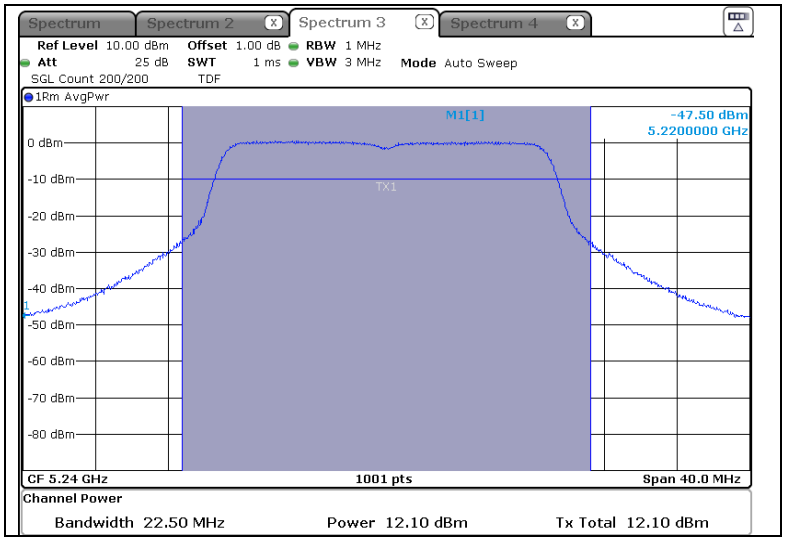
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

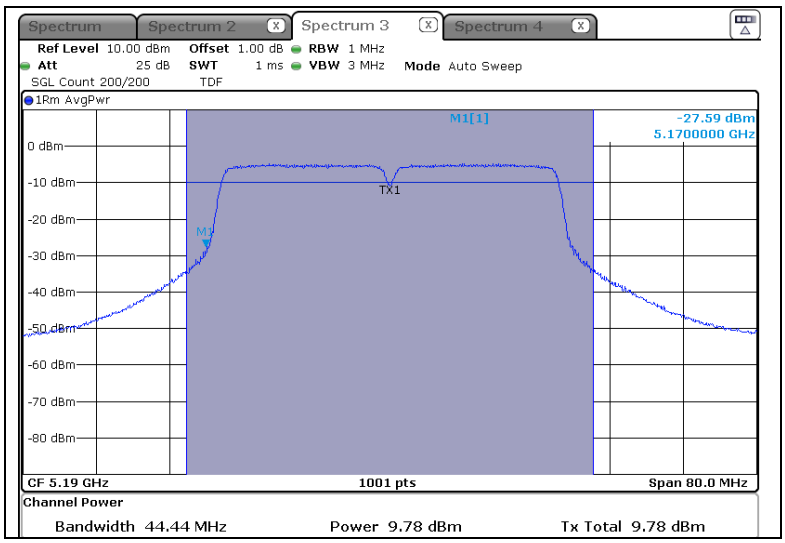


Highest Channel (5 240 ㎒)

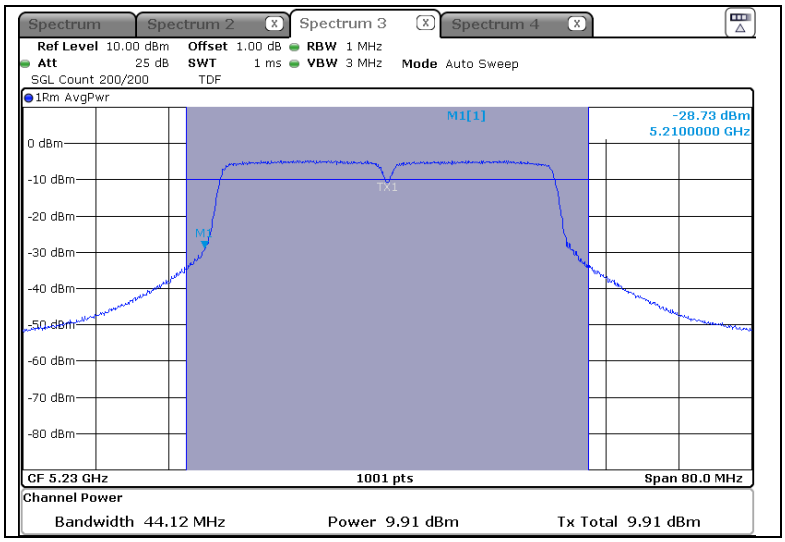


-802.11n_HT40

Lowest Channel (5 190 ㎒)

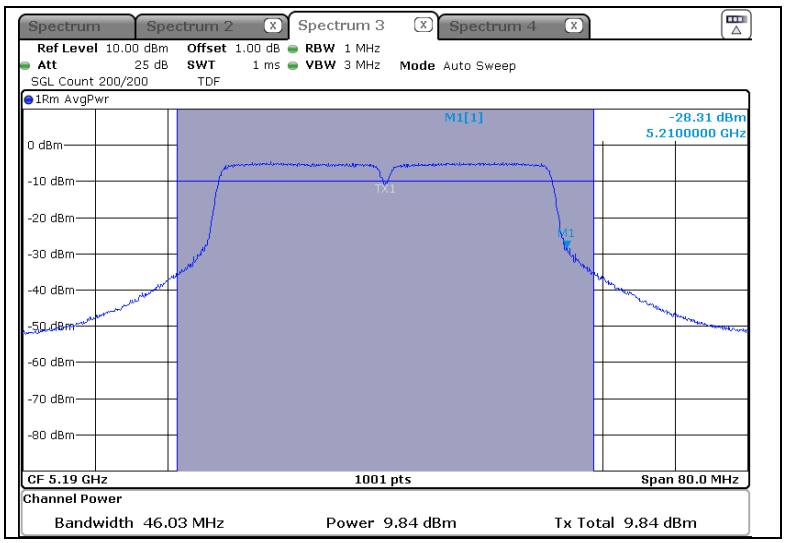


Highest Channel (5 230 ㎒)

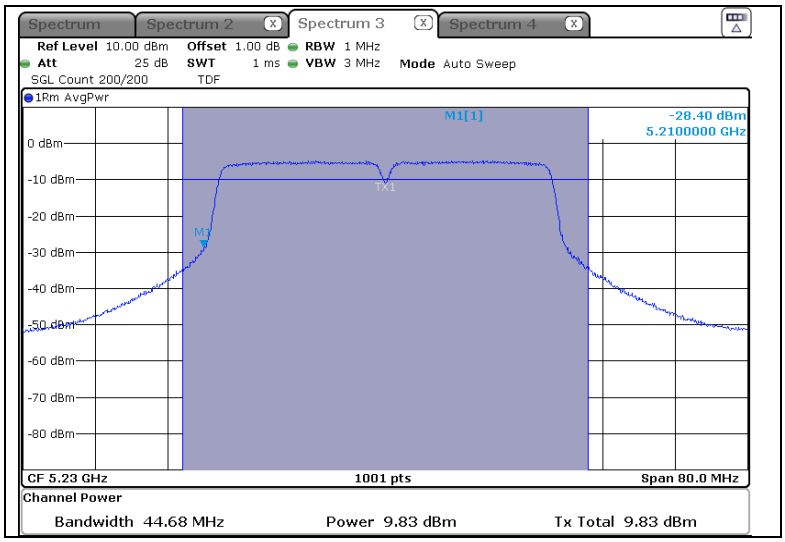


-802.11ac_VHT40

Lowest Channel (5 190 ㎒)

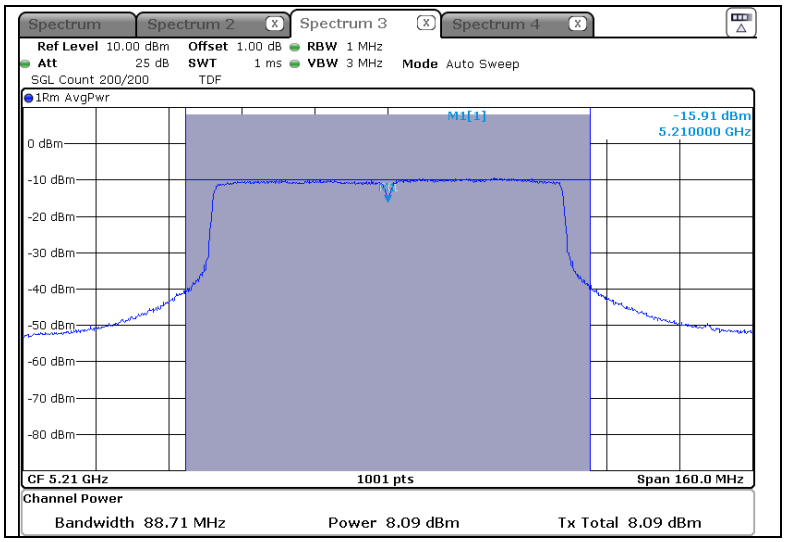


Highest Channel (5 230 ㎒)



-802.11ac VHT80

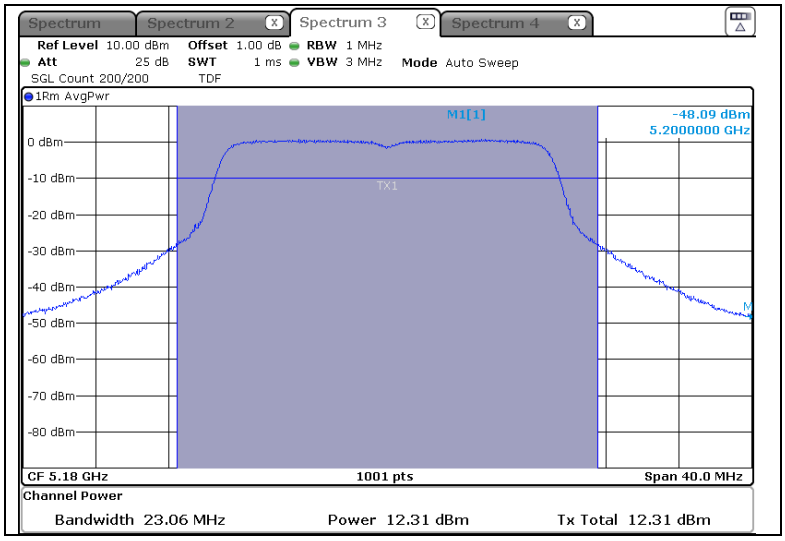
Lowest Channel (5 210 ㎒)



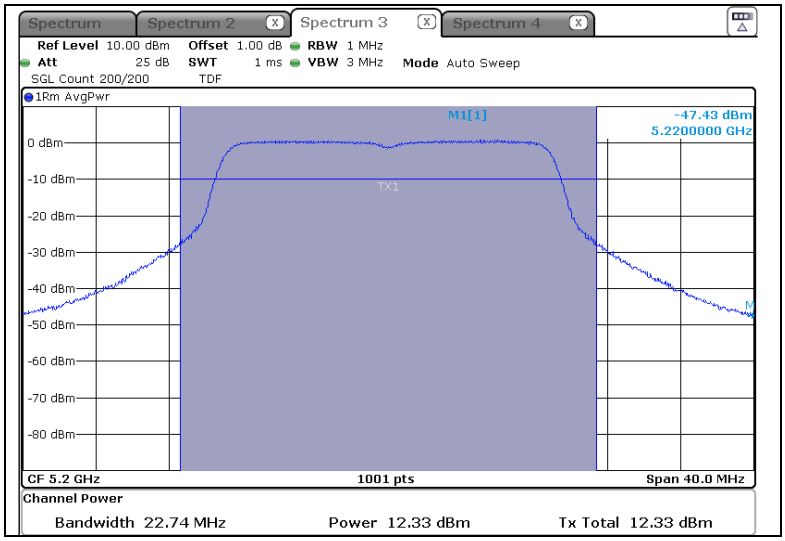
- MIMO 2Tx (ANT 2)

-802.11n HT20

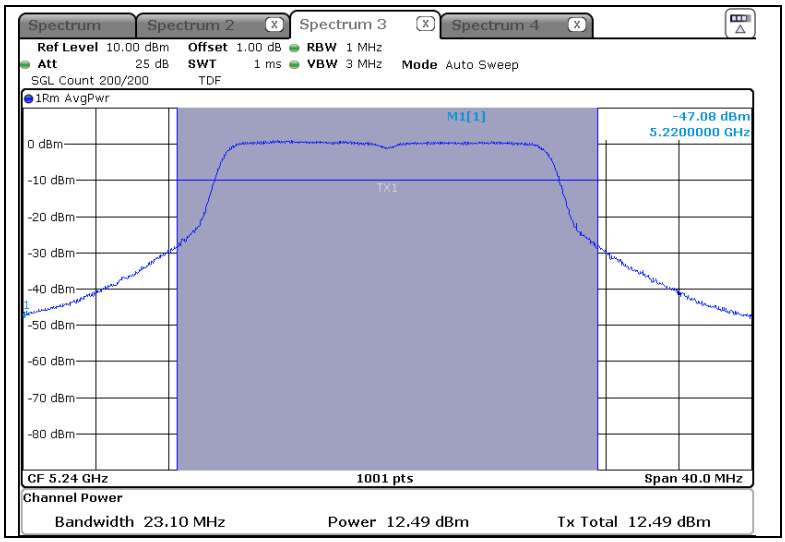
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

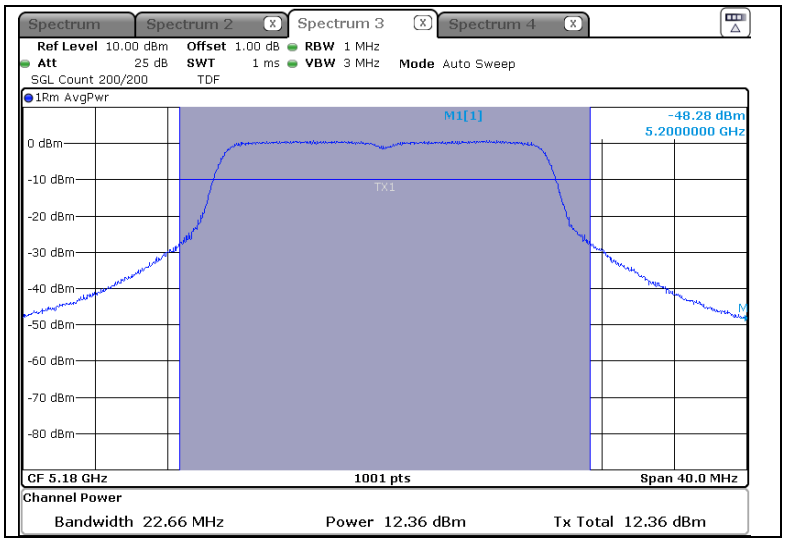


Highest Channel (5 240 ㎒)

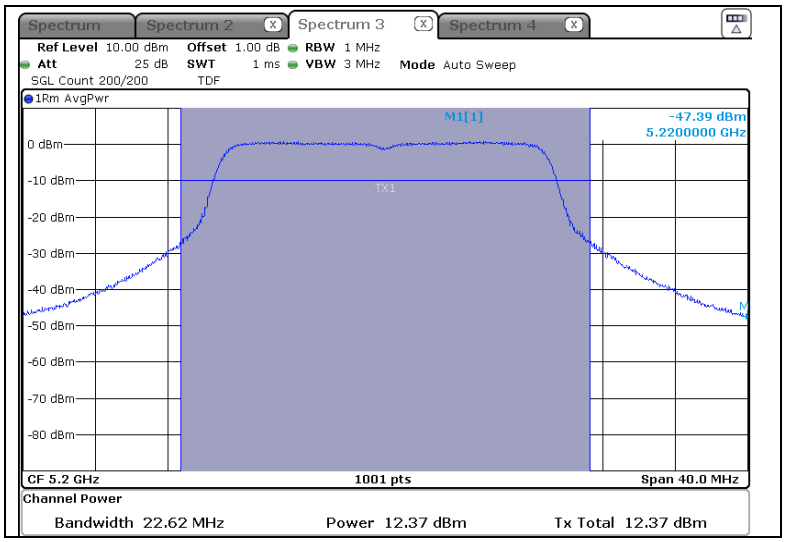


-802.11ac VHT20

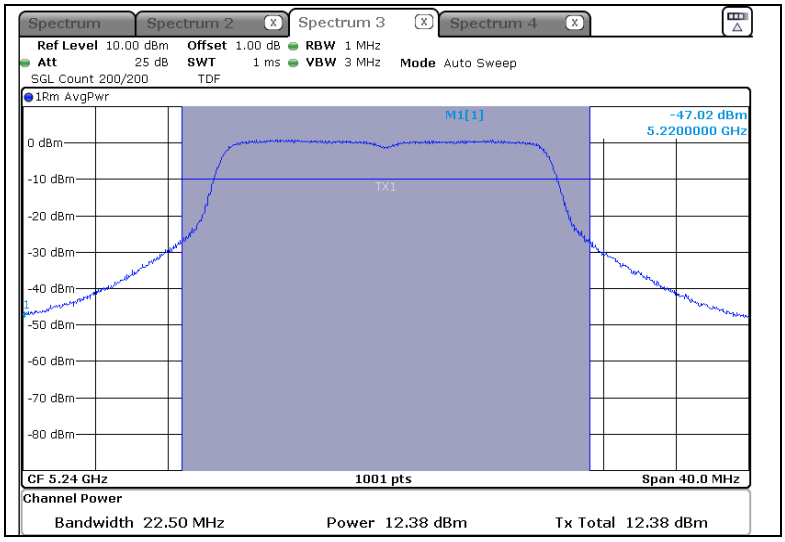
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

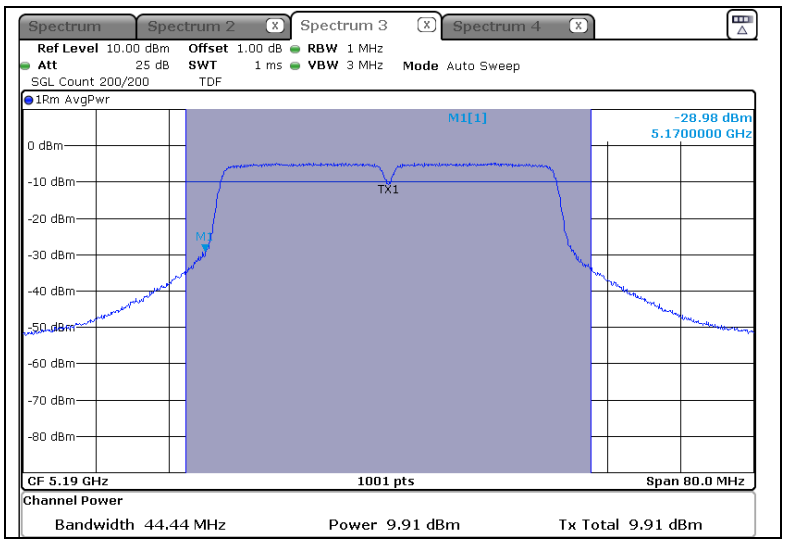


Highest Channel (5 240 ㎒)

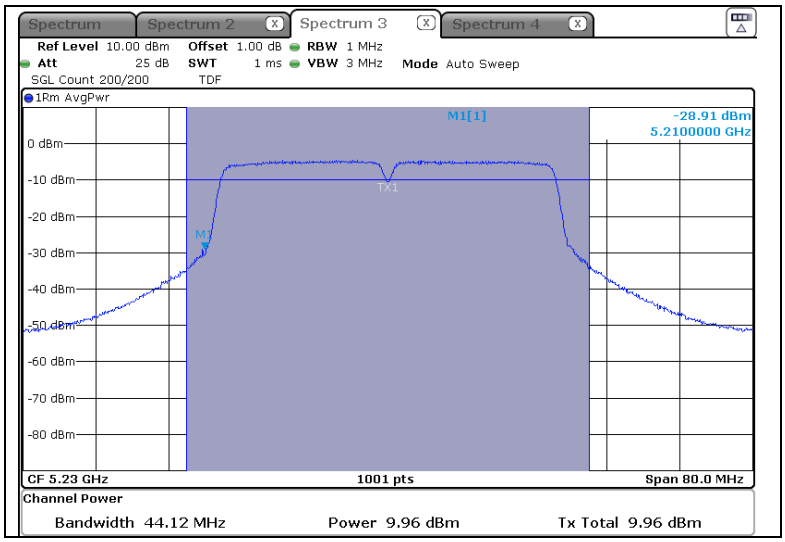


-802.11n_HT40

Lowest Channel (5 190 ㎒)

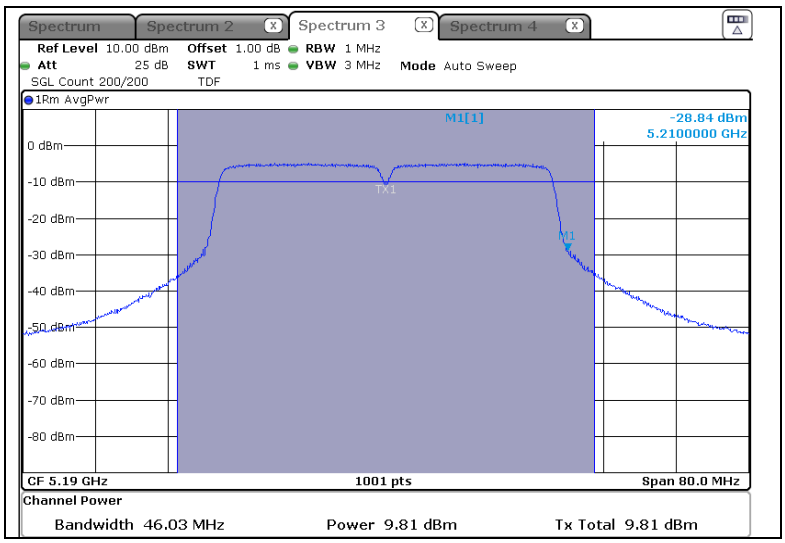


Highest Channel (5 230 ㎒)

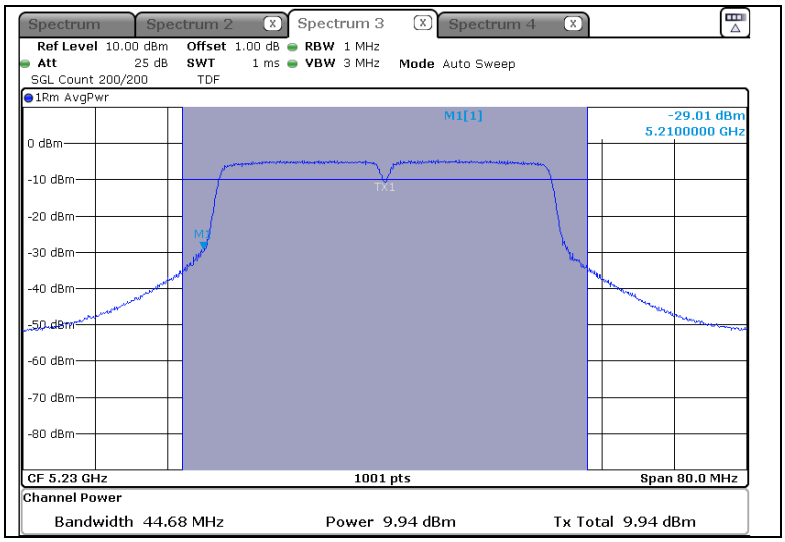


-802.11ac_VHT40

Lowest Channel (5 190 ㎒)

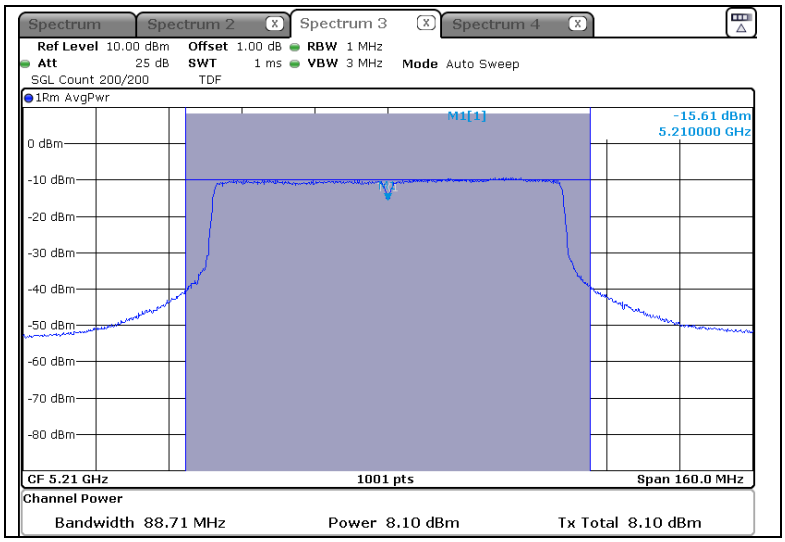


Highest Channel (5 230 ㎒)



-802.11ac VHT80

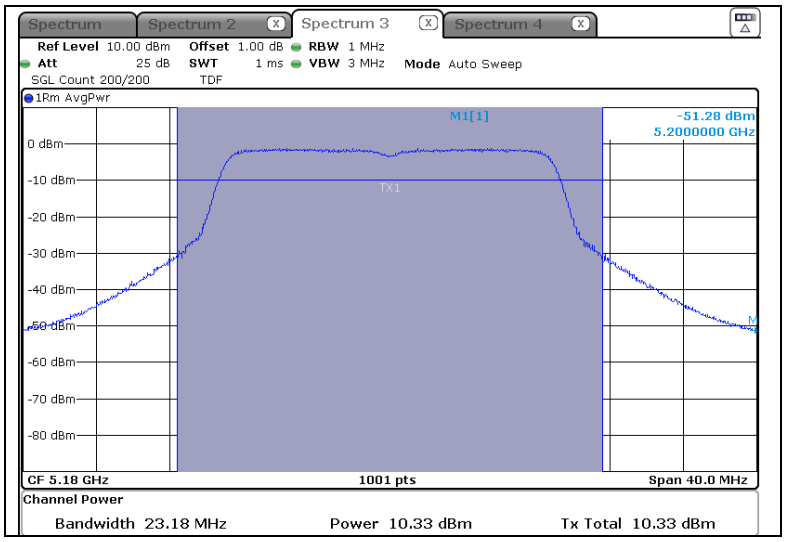
Lowest Channel (5 210 ㎒)



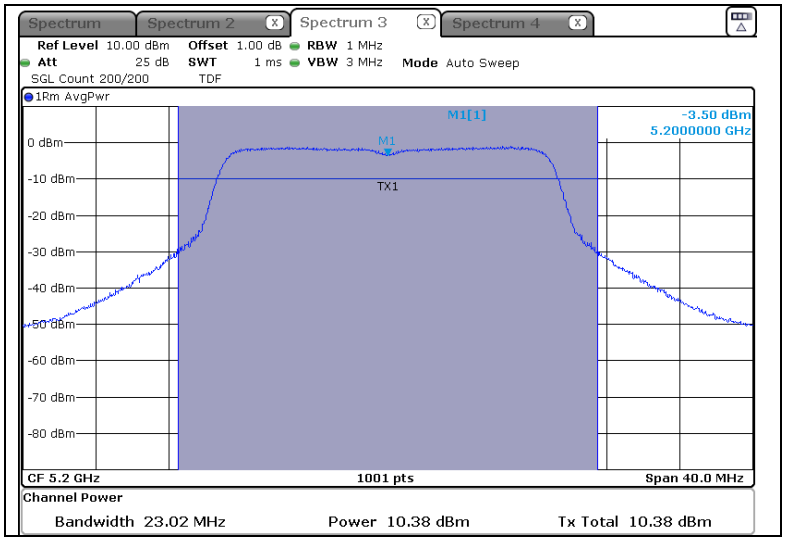
- MIMO 3Tx (ANT 1)

-802.11n HT20

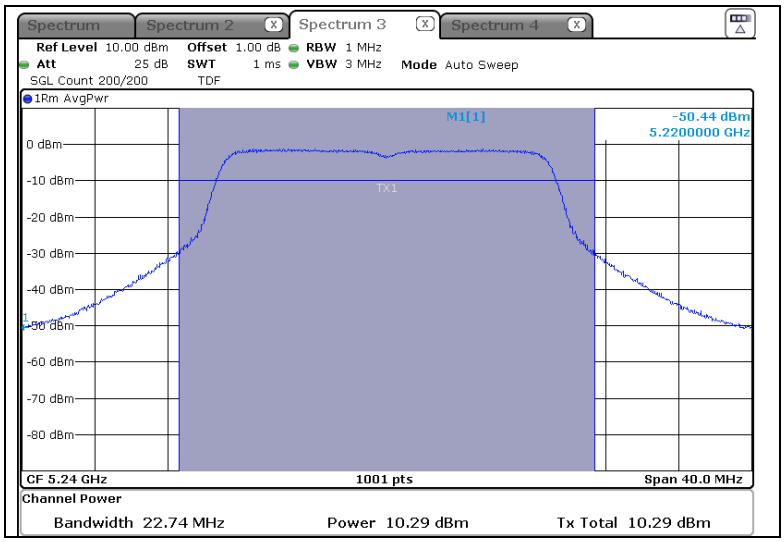
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

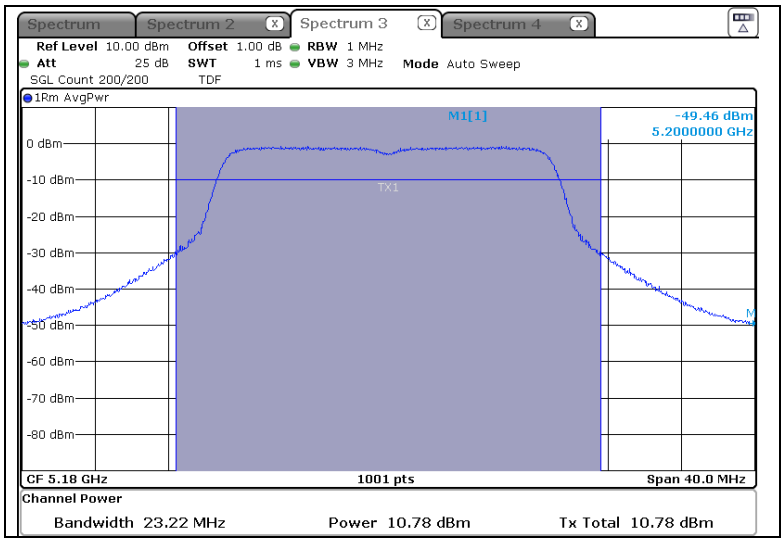


Highest Channel (5 240 ㎒)

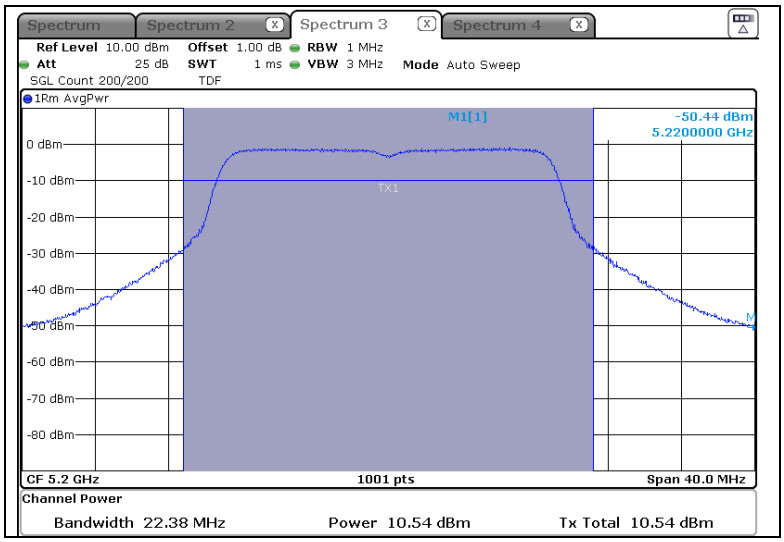


-802.11ac VHT20

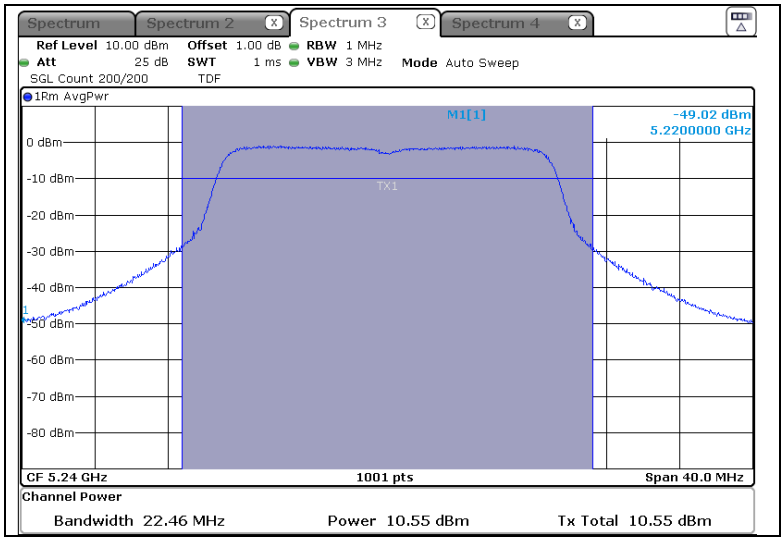
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

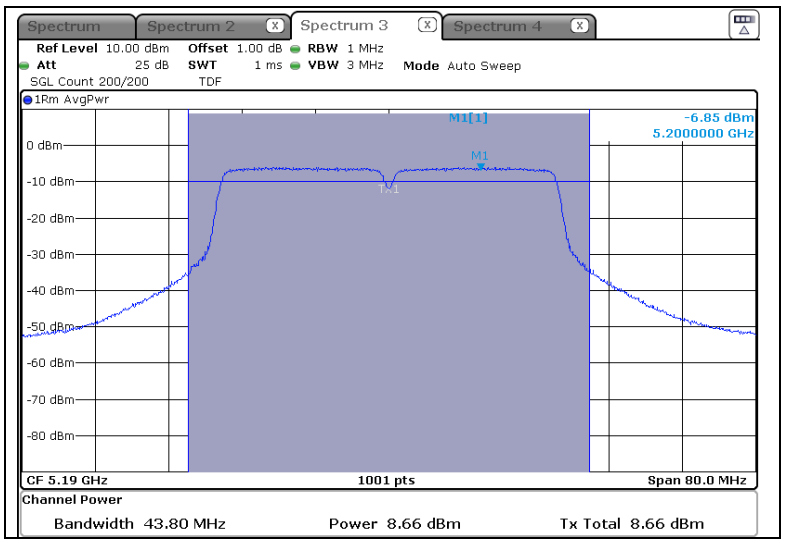


Highest Channel (5 240 ㎒)

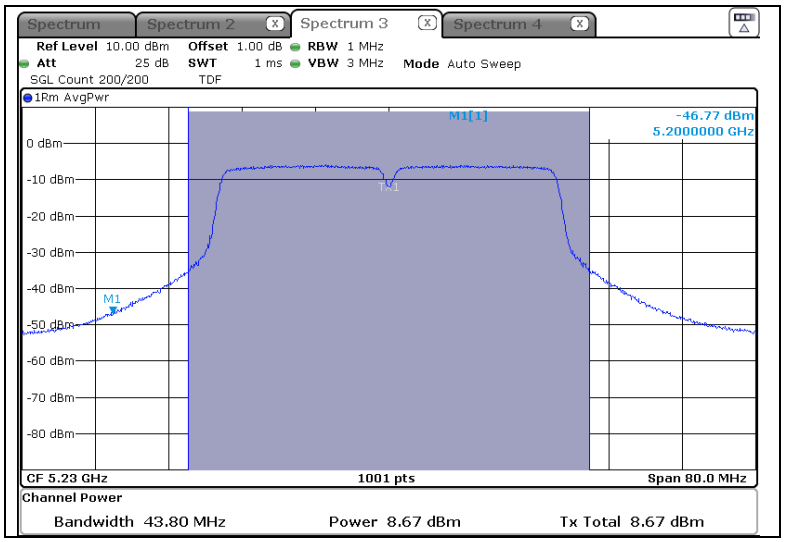


-802.11n_HT40

Lowest Channel (5 190 ㎒)

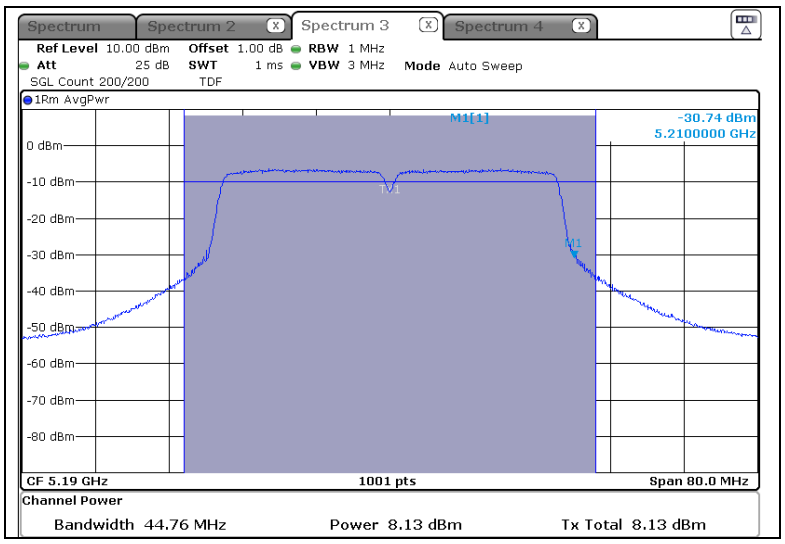


Highest Channel (5 230 ㎒)

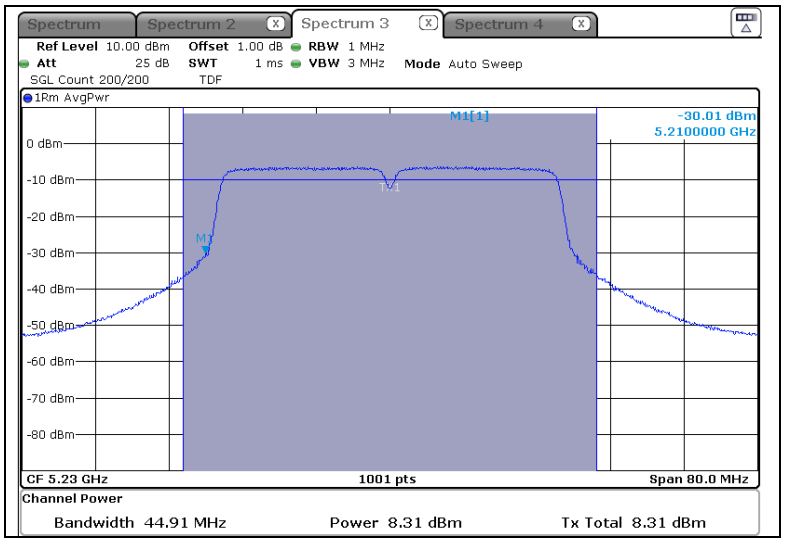


-802.11ac_VHT40

Lowest Channel (5 190 ㎒)

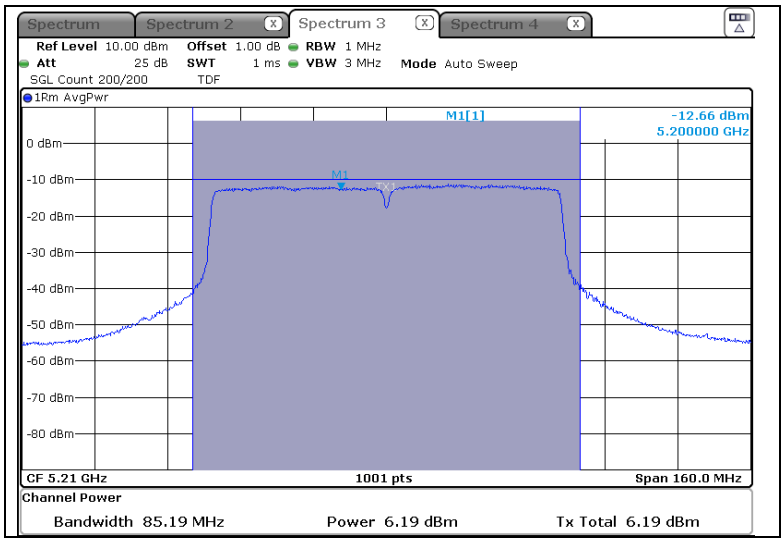


Highest Channel (5 230 ㎒)



-802.11ac VHT80

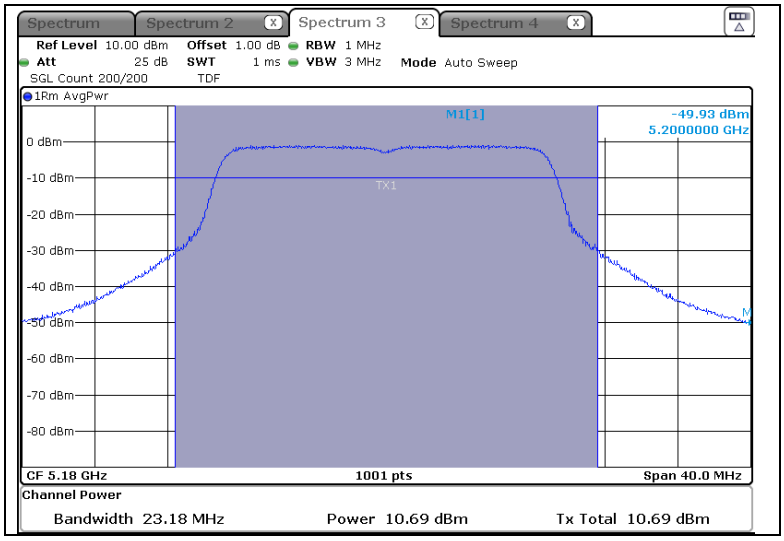
Lowest Channel (5 210 ㎒)



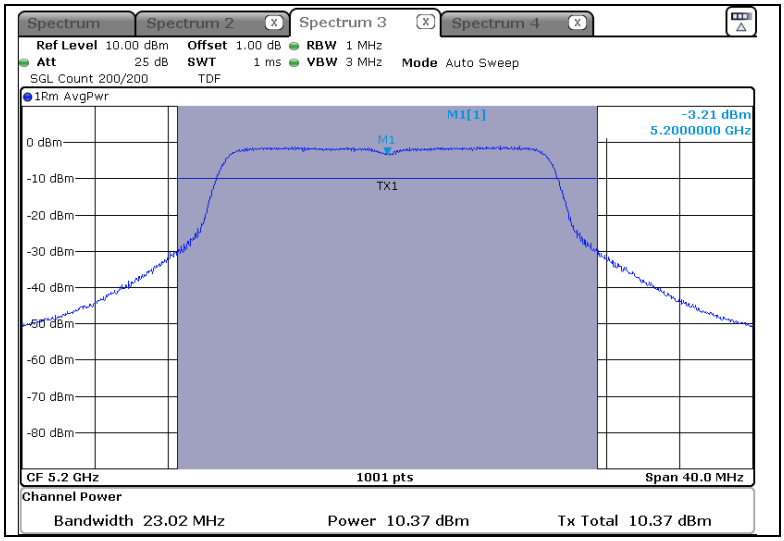
- MIMO 3Tx (ANT 2)

-802.11n HT20

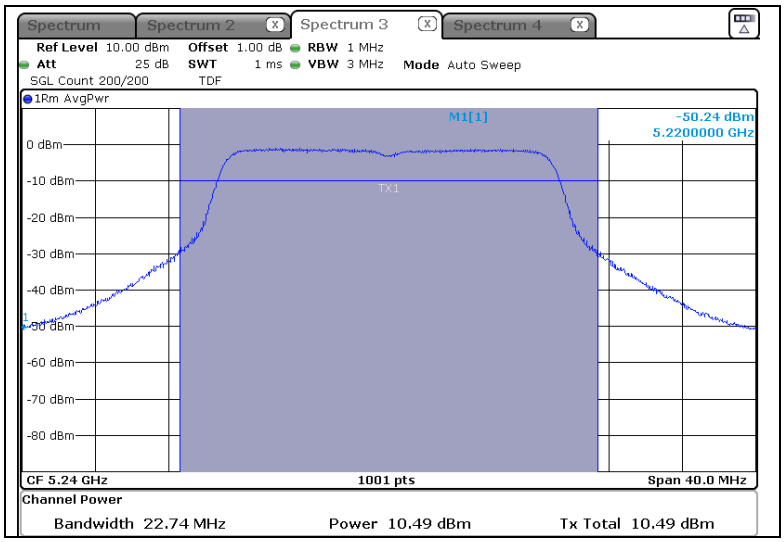
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

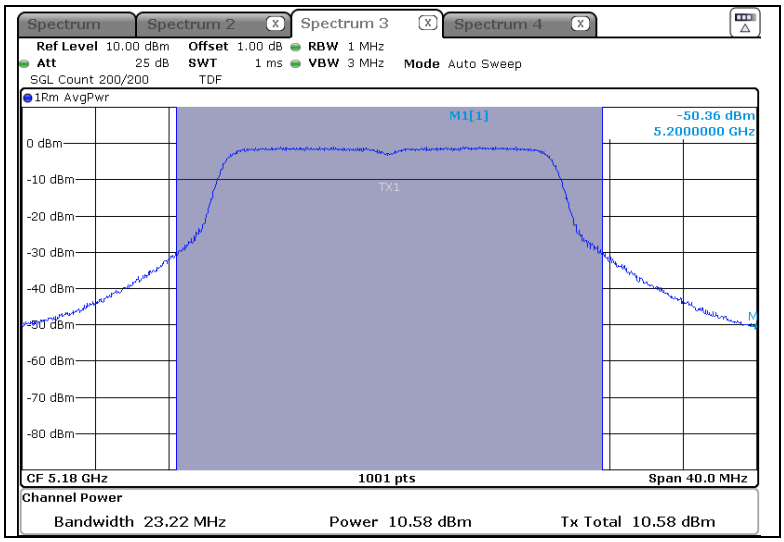


Highest Channel (5 240 ㎒)

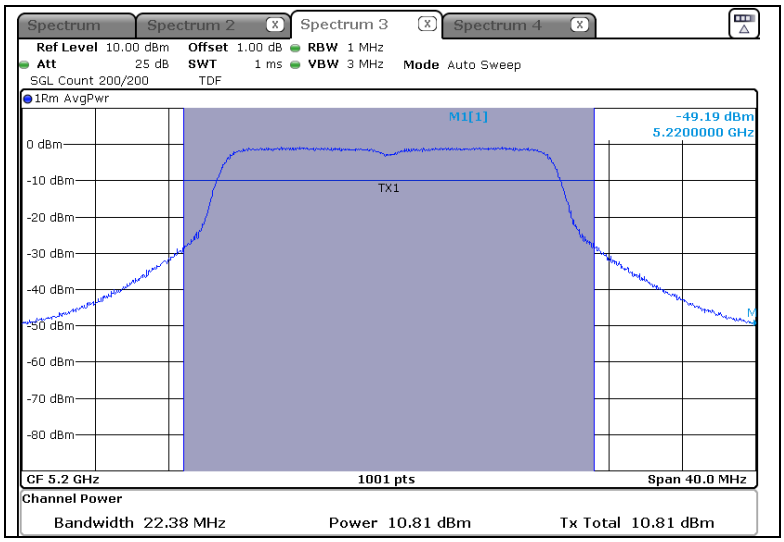


-802.11ac VHT20

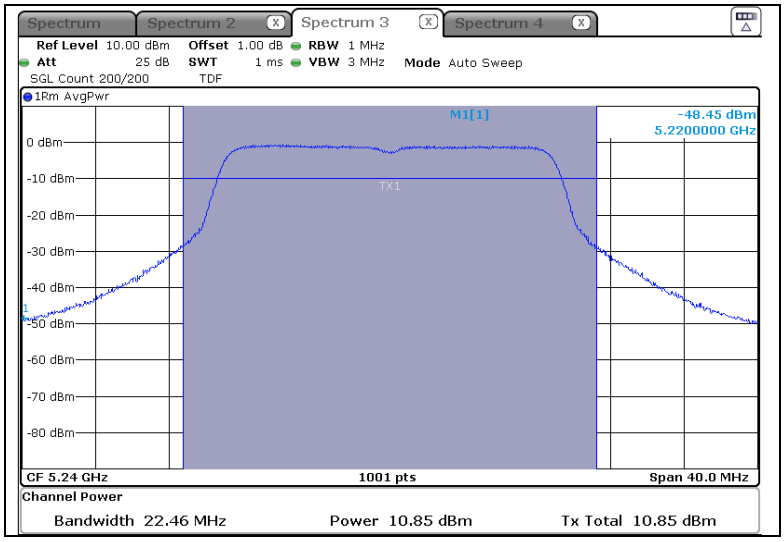
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

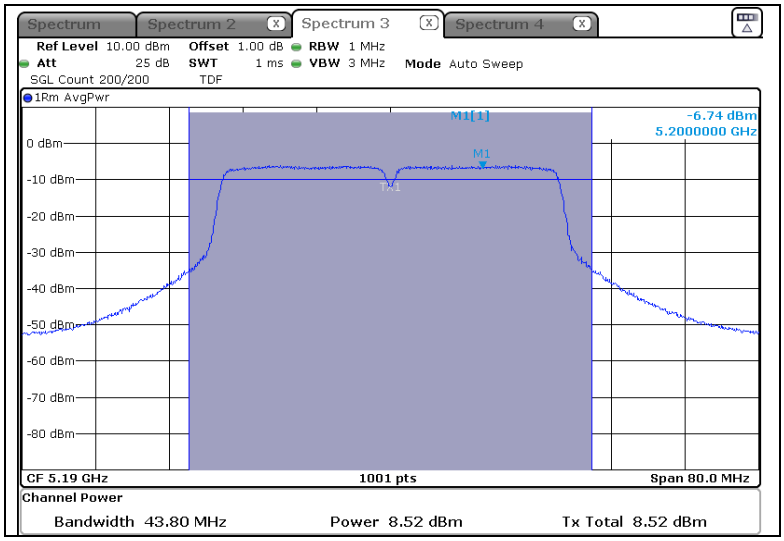


Highest Channel (5 240 ㎒)

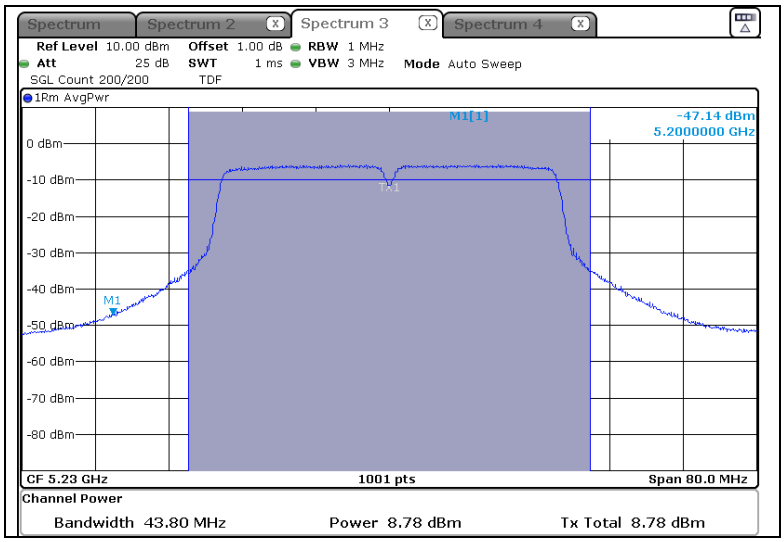


-802.11n_HT40

Lowest Channel (5 190 ㎒)

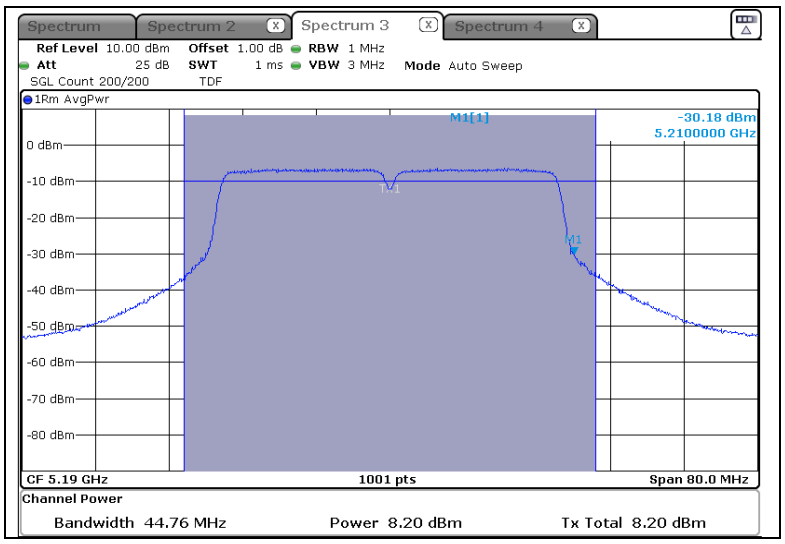


Highest Channel (5 230 ㎒)

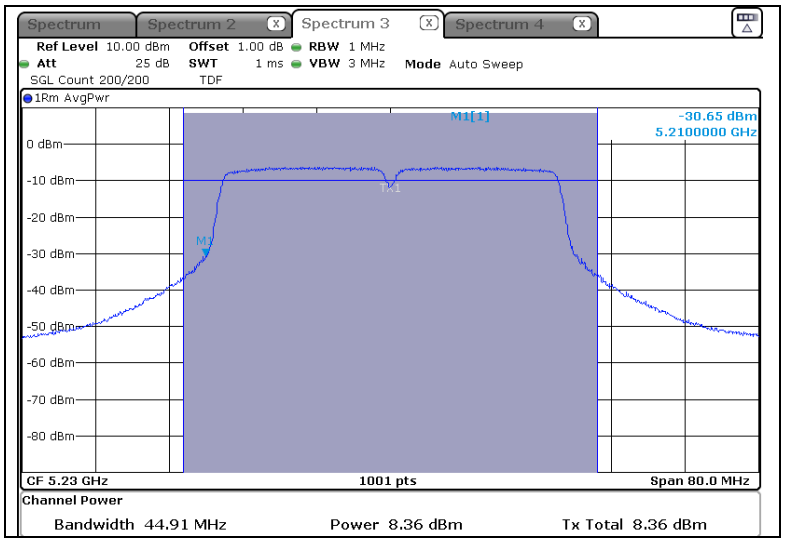


-802.11ac_VHT40

Lowest Channel (5 190 ㎒)

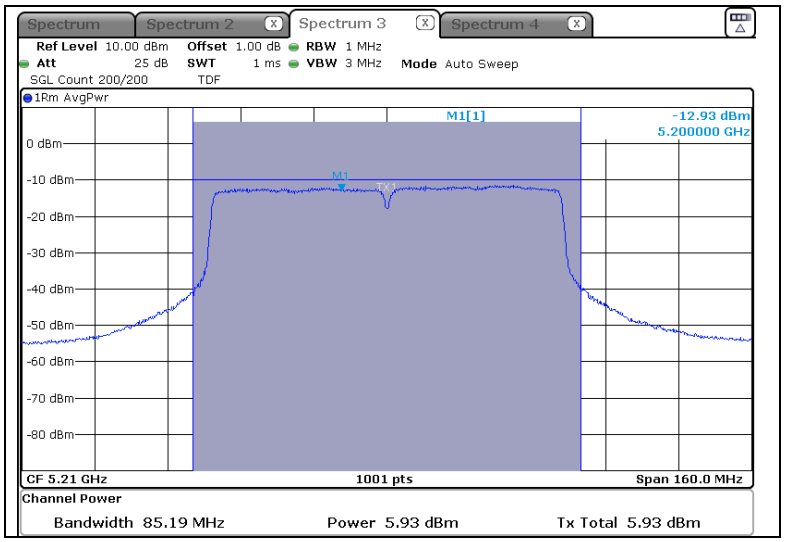


Highest Channel (5 230 ㎒)



-802.11ac VHT80

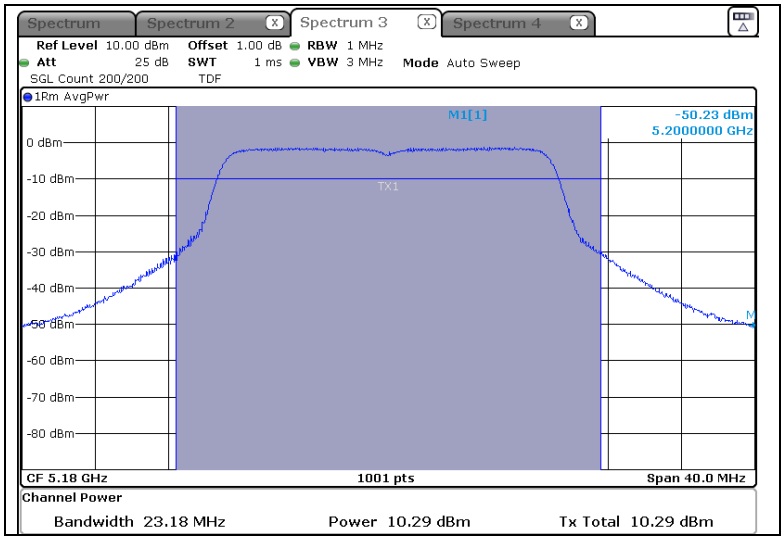
Lowest Channel (5 210 ㎒)



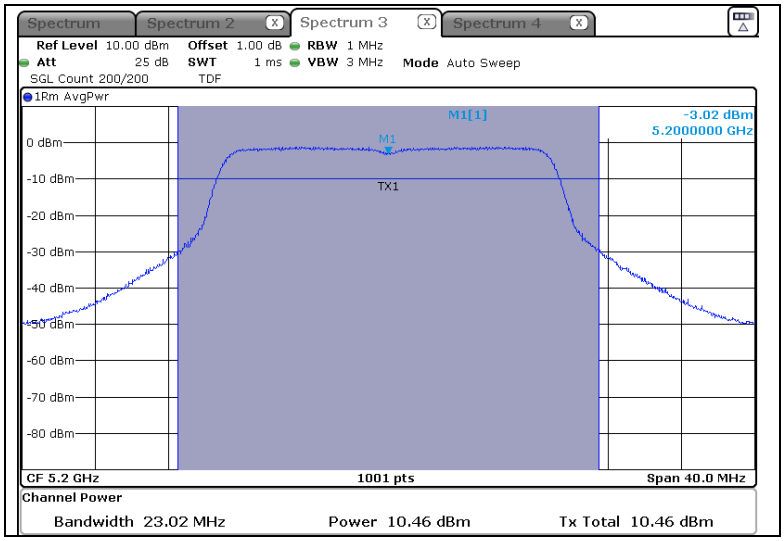
- MIMO 3Tx (ANT 3)

-802.11n HT20

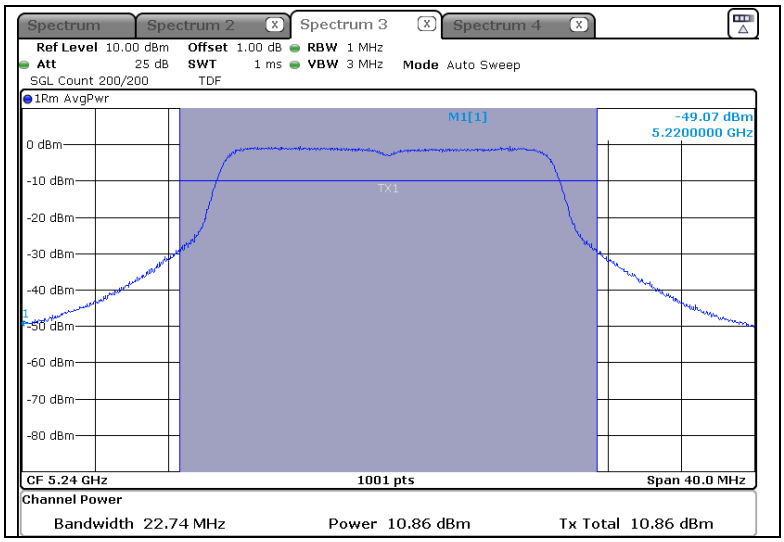
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

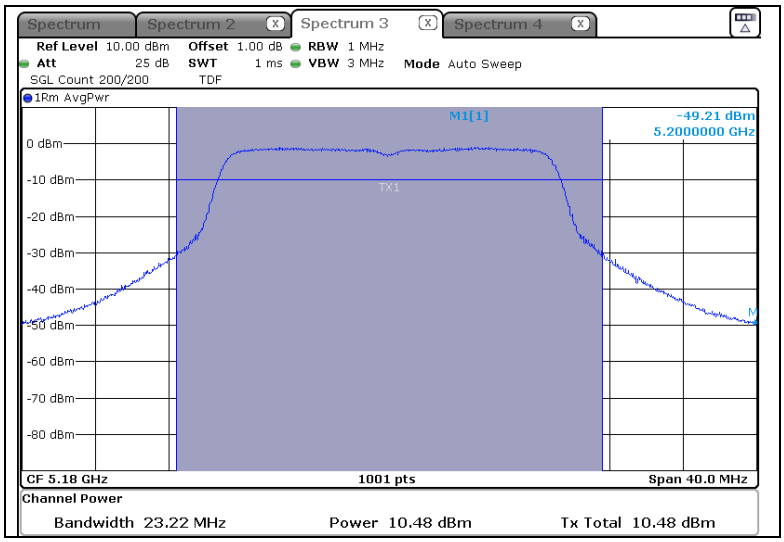


Highest Channel (5 240 ㎒)

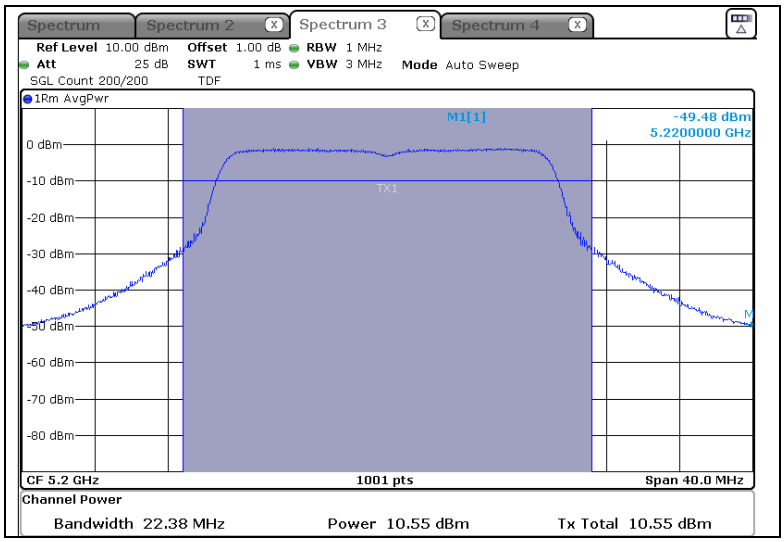


-802.11ac VHT20

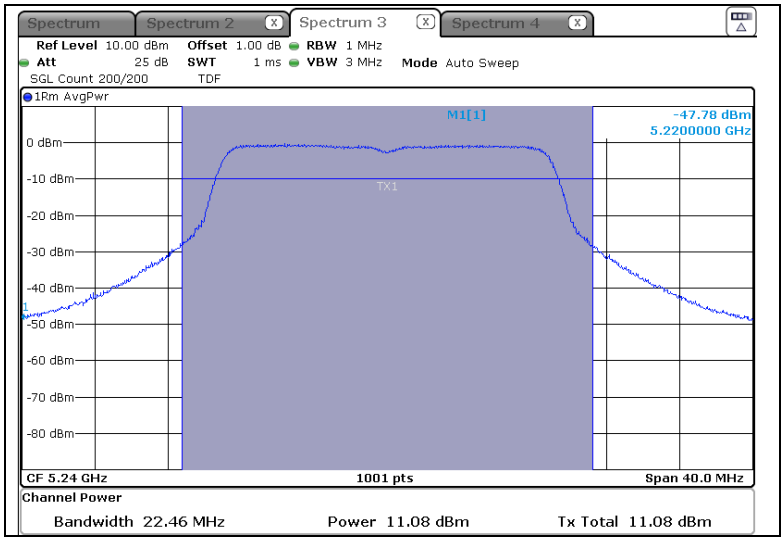
Lowest Channel (5 180 ㎒)



Middle Channel (5 200 ㎒)

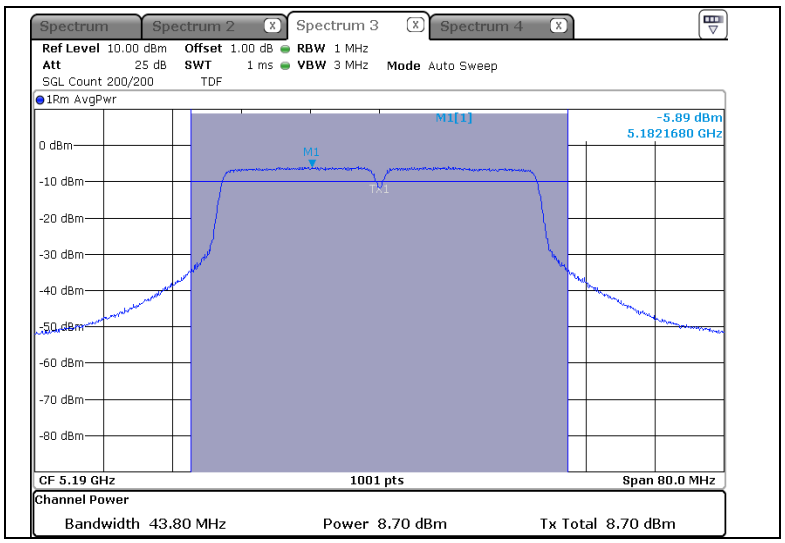


Highest Channel (5 240 ㎒)

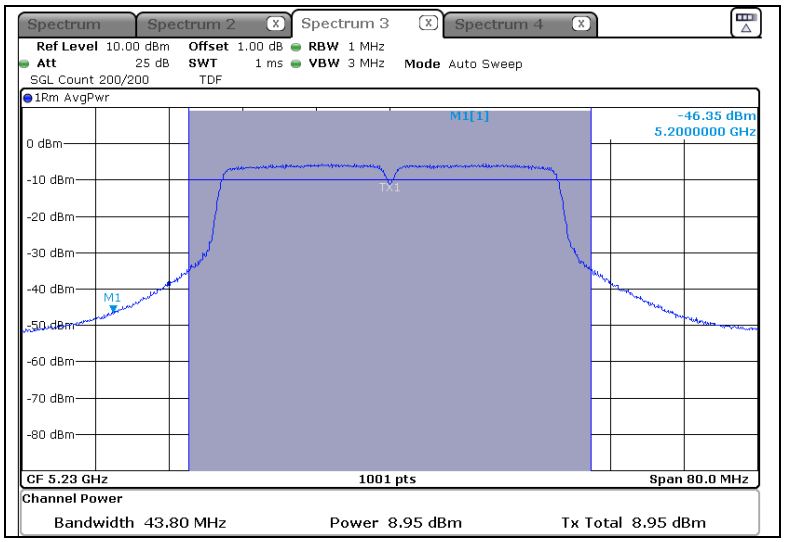


-802.11n_HT40

Lowest Channel (5 190 ㎒)

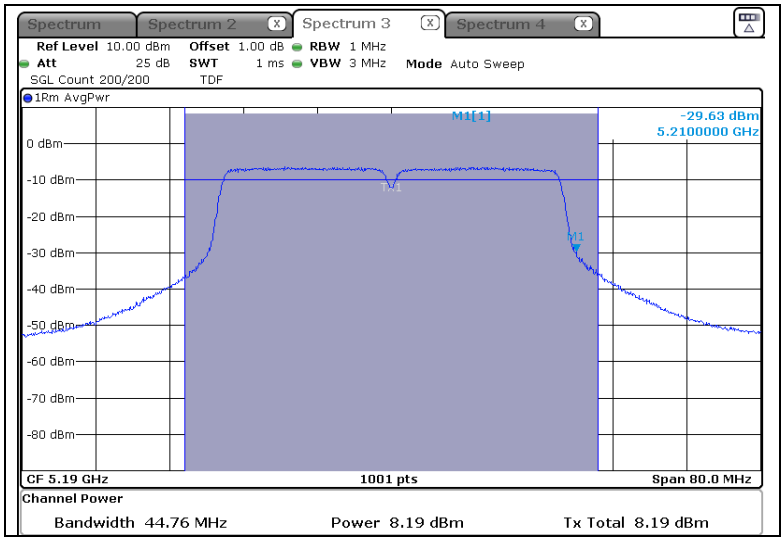


Highest Channel (5 230 ㎒)

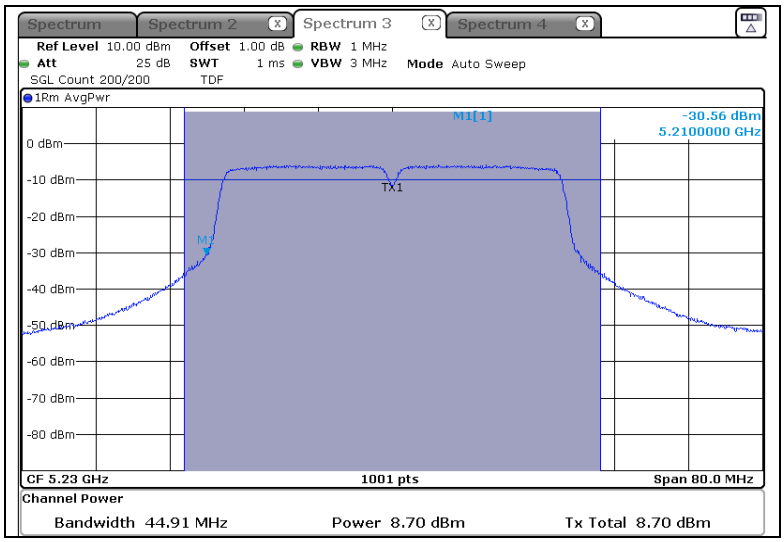


-802.11ac_VHT40

Lowest Channel (5 190 ㎒)

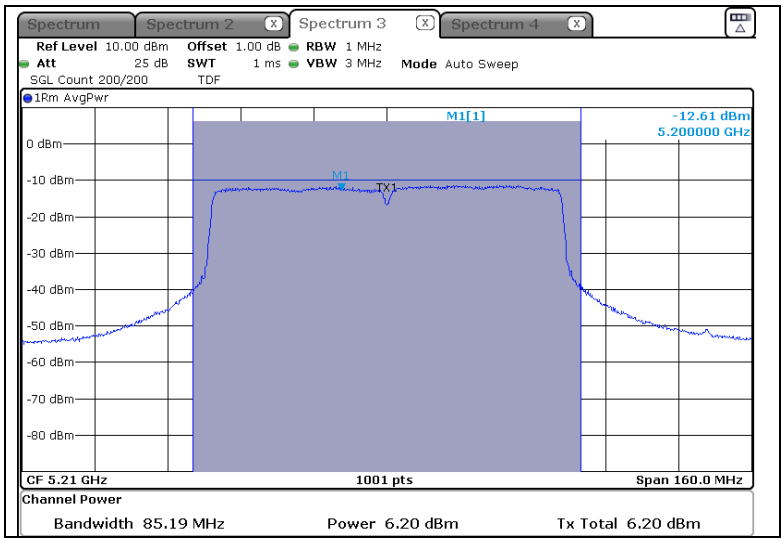


Highest Channel (5 230 ㎒)



-802.11ac VHT80

Lowest Channel (5 210 ㎒)

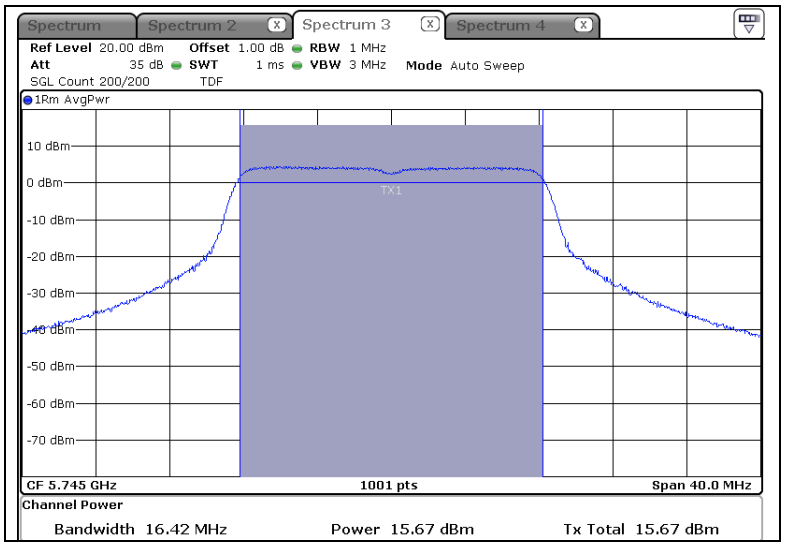


- 5 725 Band

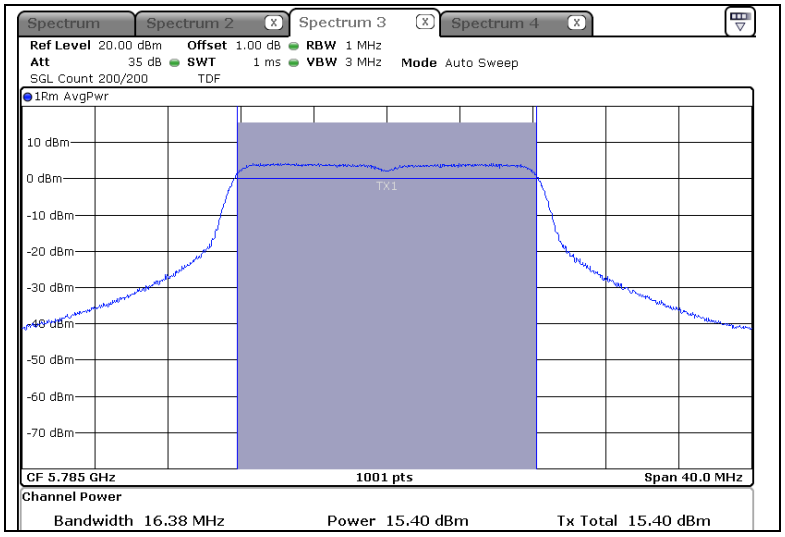
- ANT 1

-802.11a

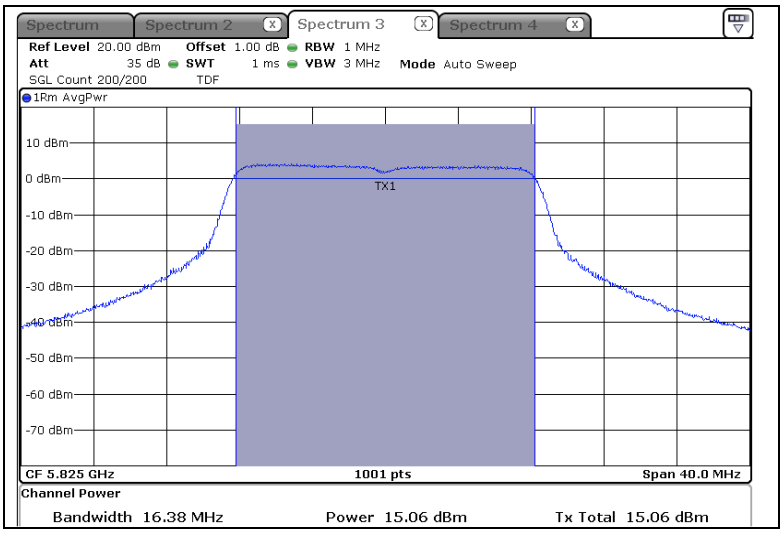
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

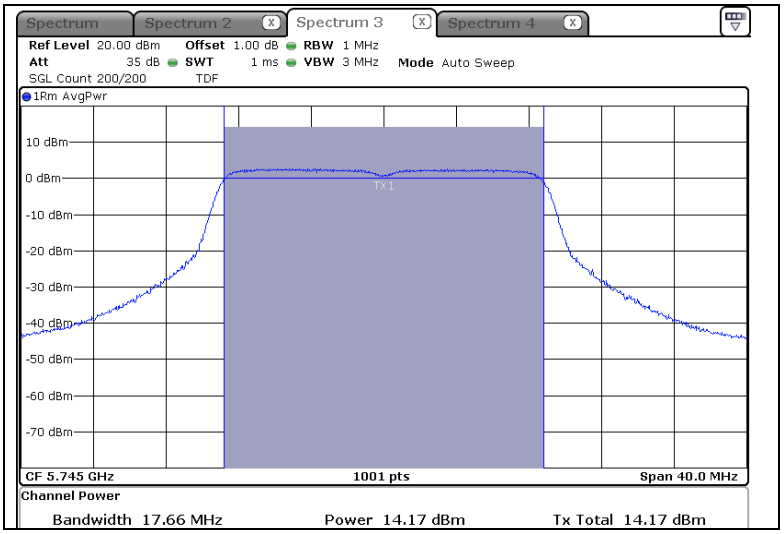


Highest Channel (5 825 ㎒)

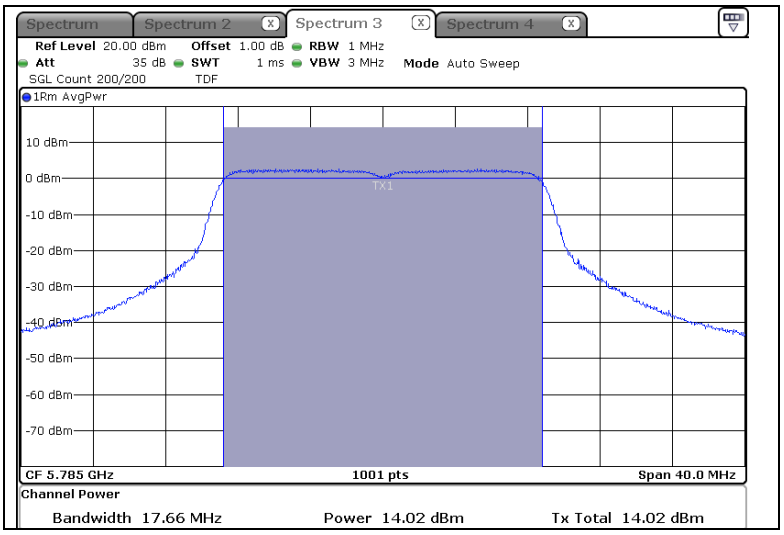


-802.11n HT20

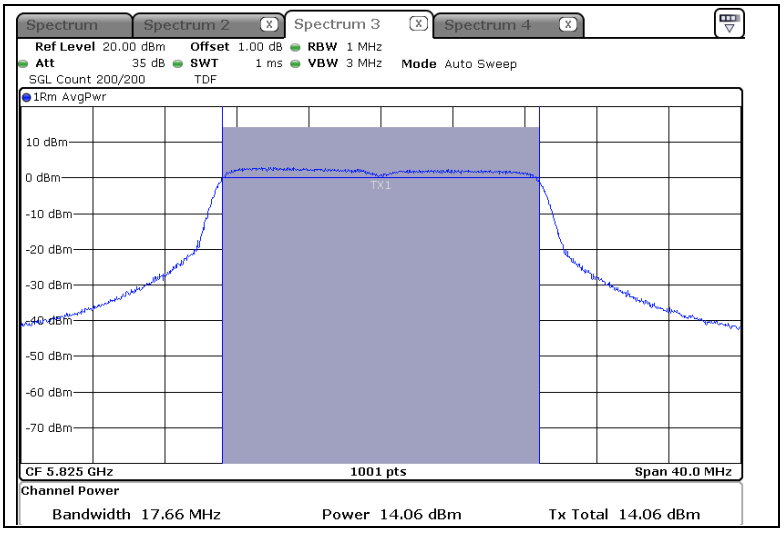
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

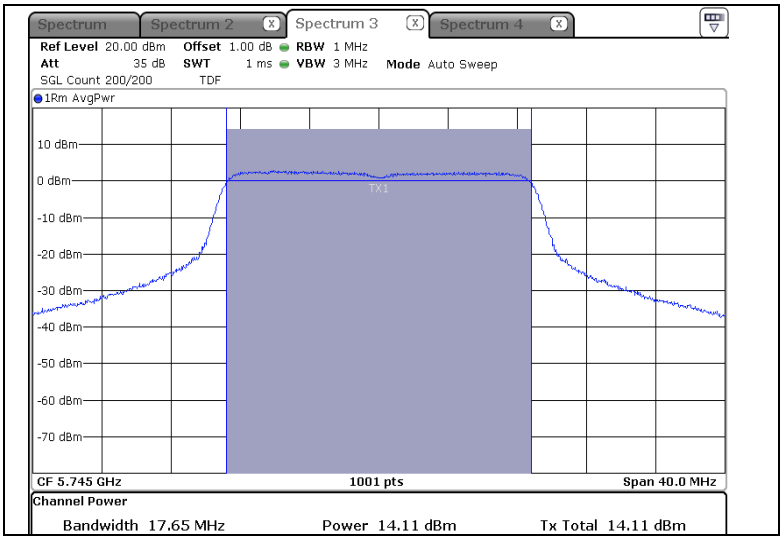


Highest Channel (5 825 ㎒)

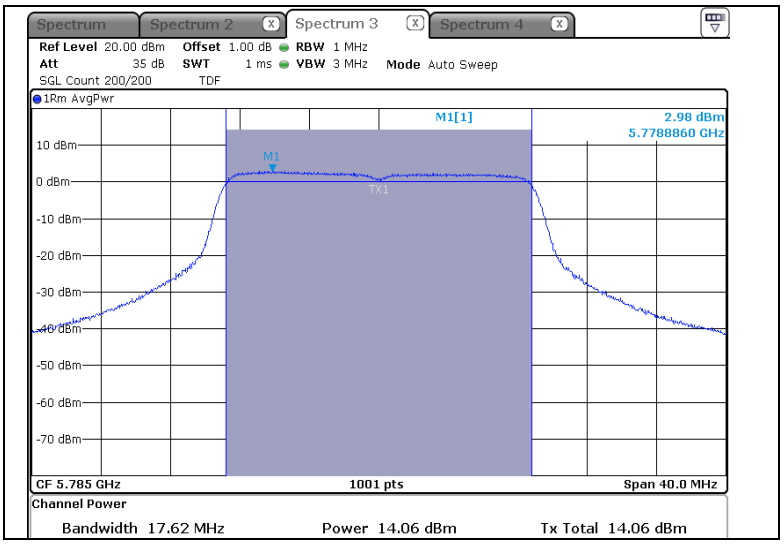


-802.11ac VHT20

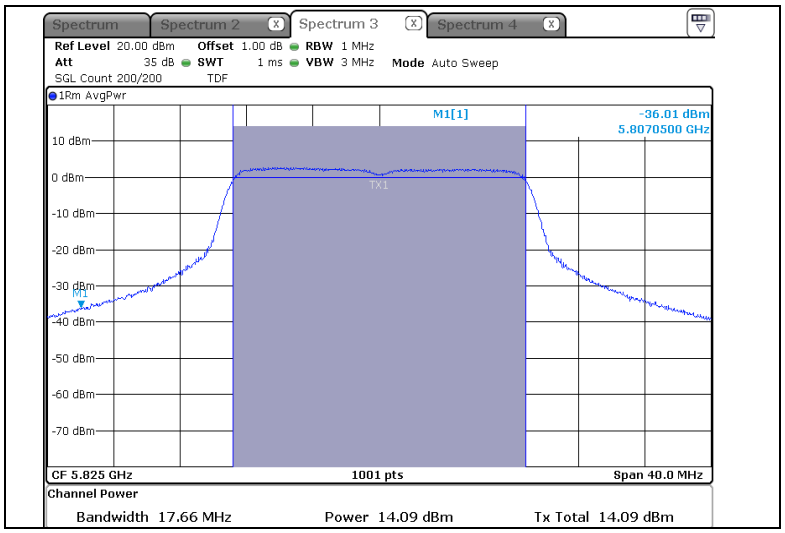
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

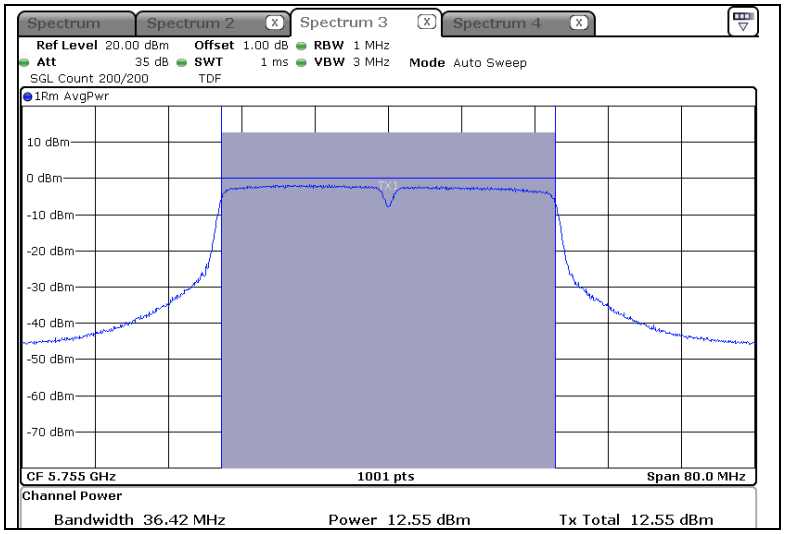


Highest Channel (5 825 ㎒)

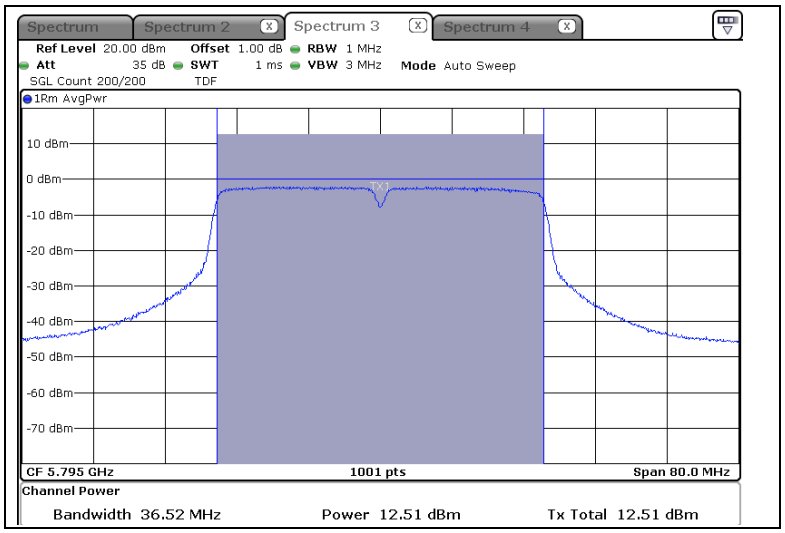


-802.11n_HT40

Lowest Channel (5 755 ㎒)

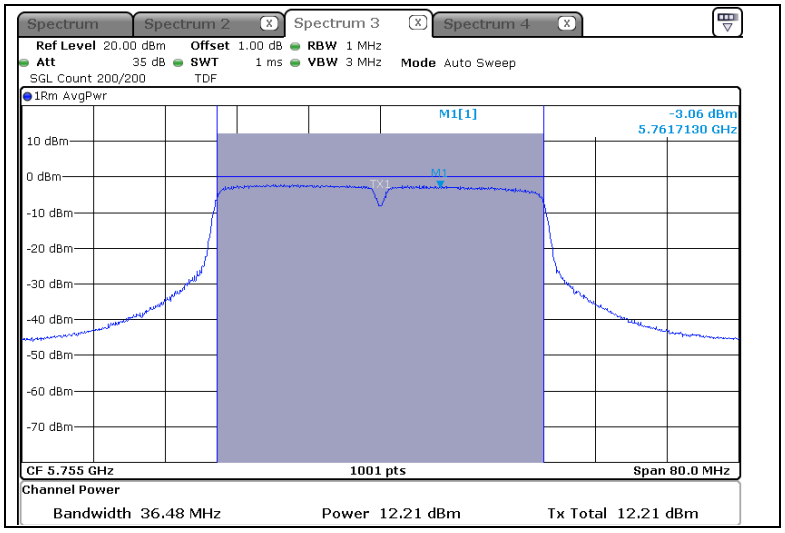


Highest Channel (5 795 ㎒)

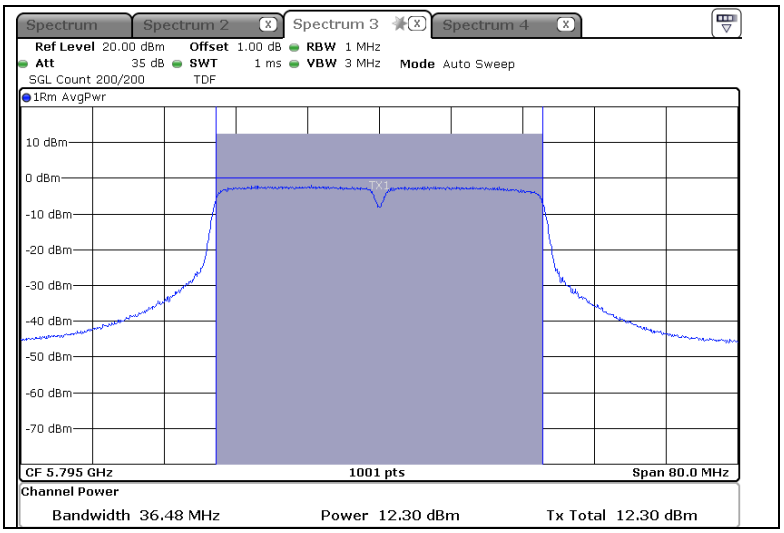


-802.11ac VHT40

Lowest Channel (5 755 ㎒)

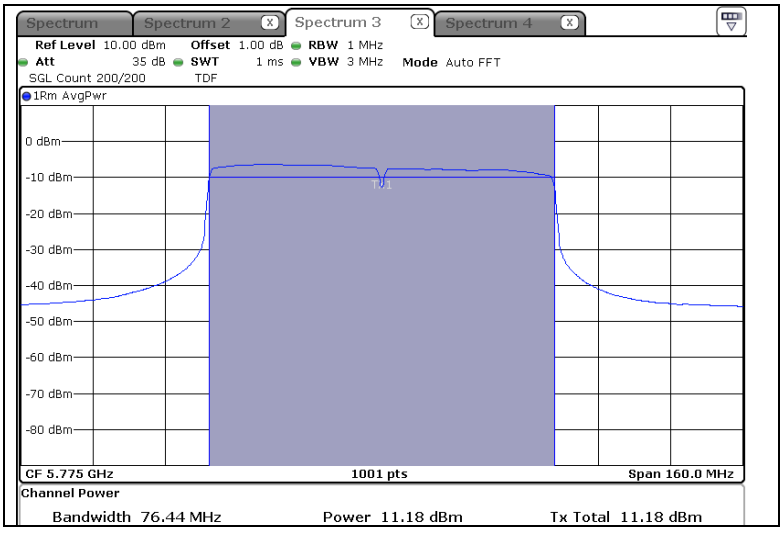


Highest Channel (5 795 ㎒)



-802.11ac VHT80

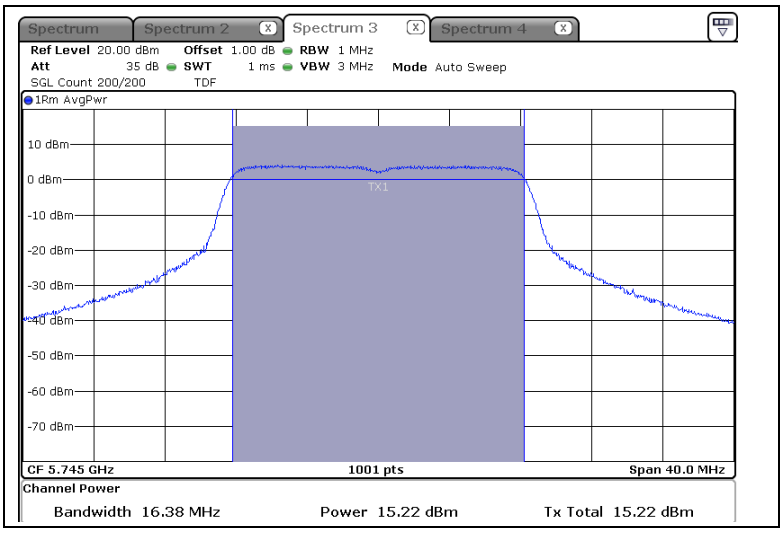
Lowest Channel (5 775 ㎒)



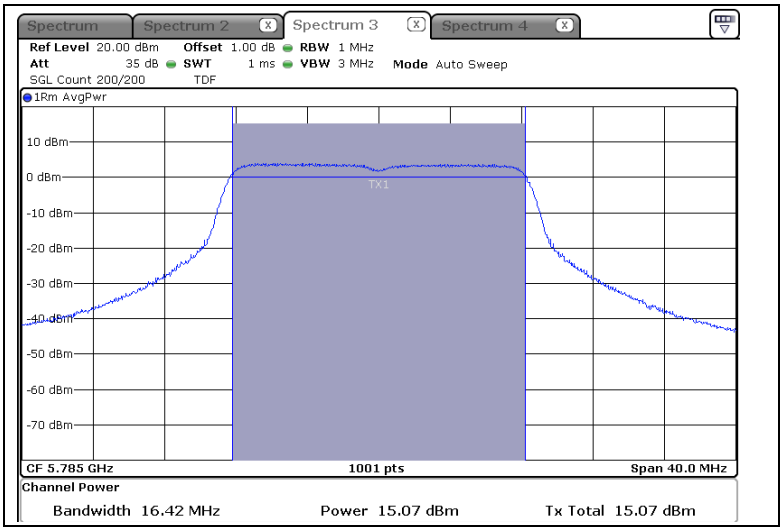
- ANT 2

-802.11a

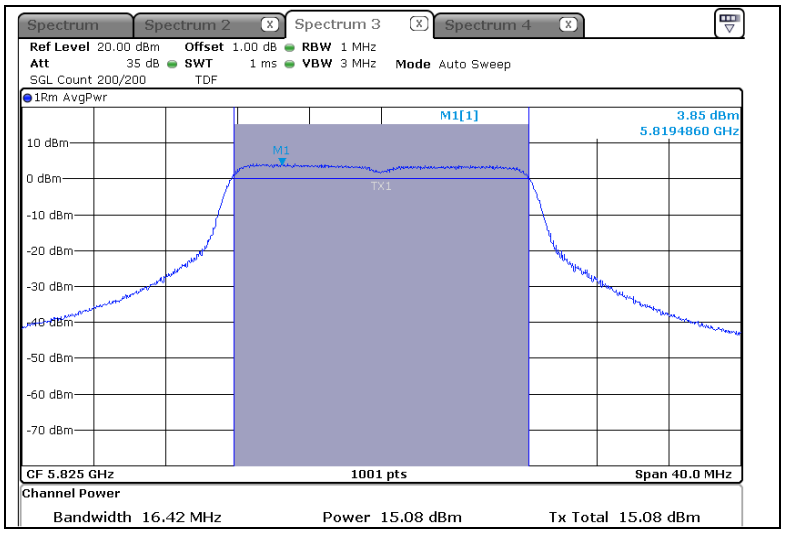
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

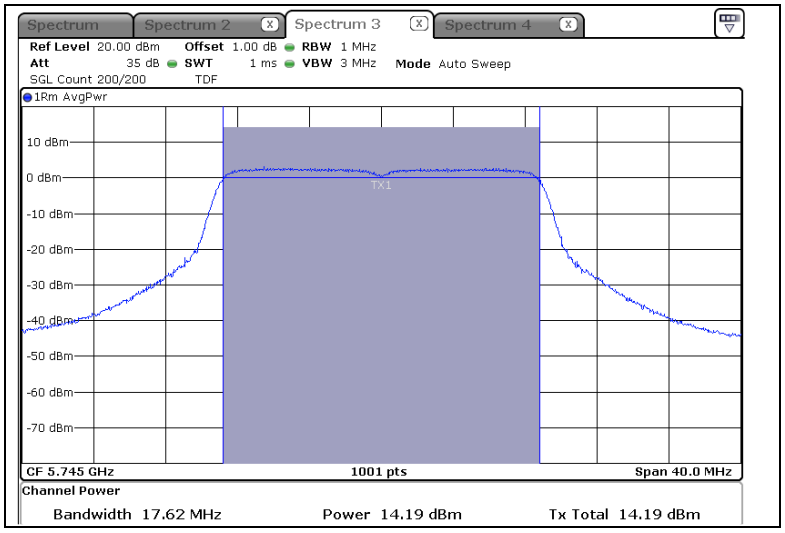


Highest Channel (5 825 ㎒)

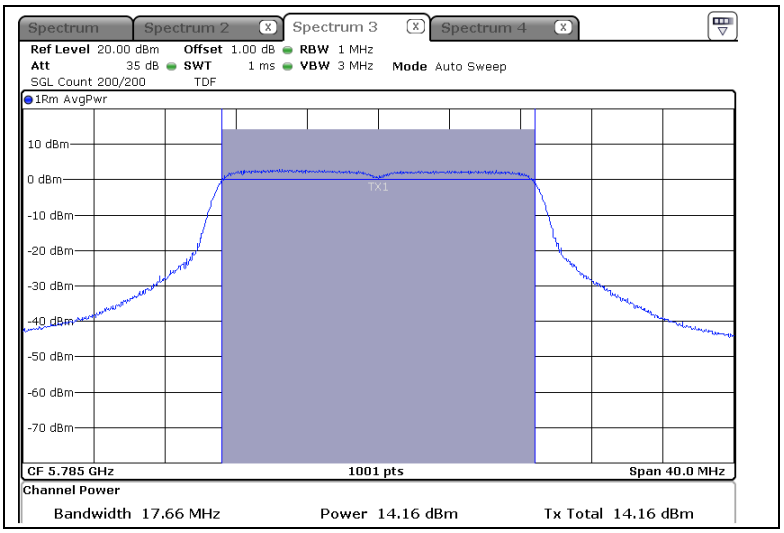


-802.11n HT20

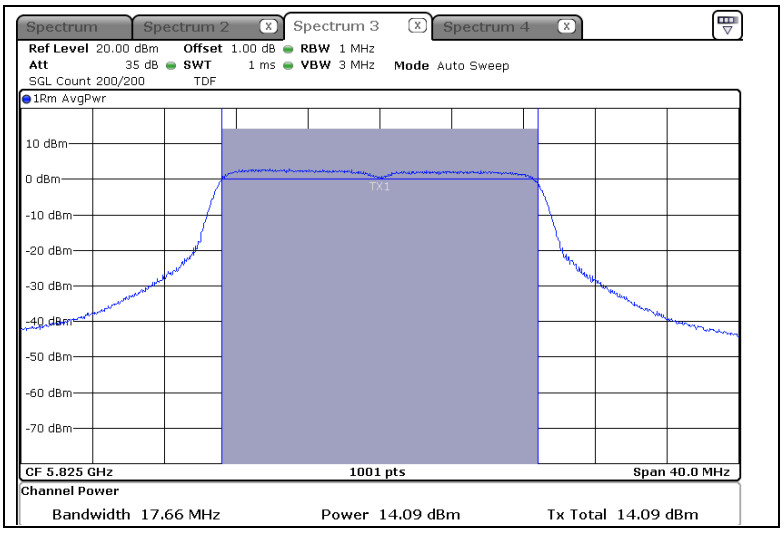
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

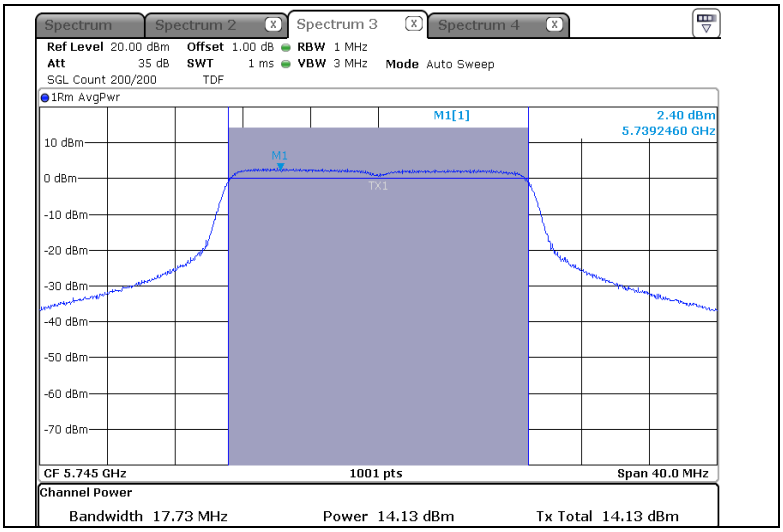


Highest Channel (5 825 ㎒)

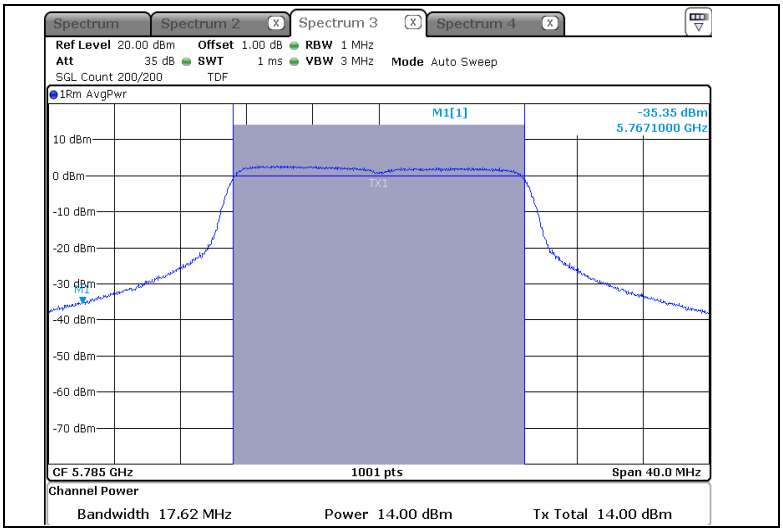


-802.11ac VHT20

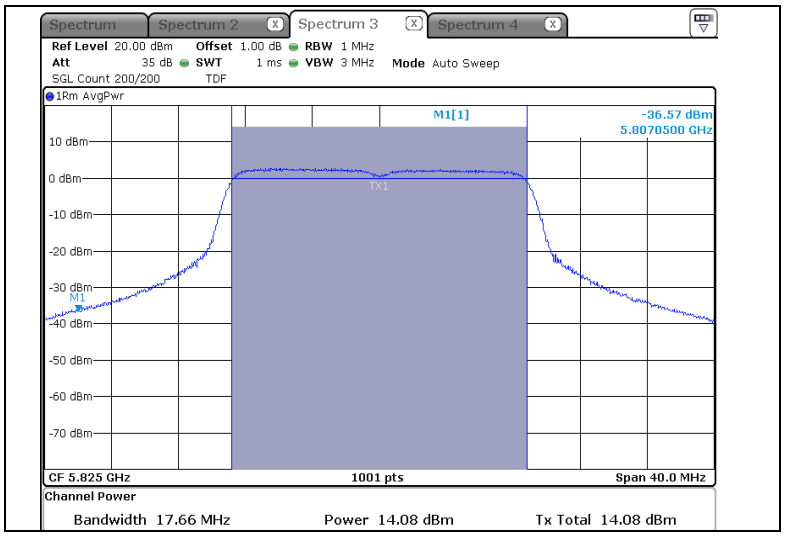
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

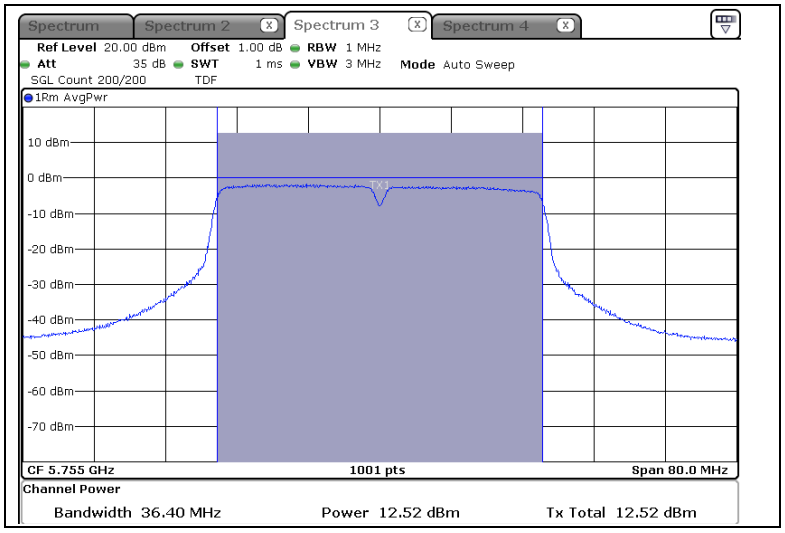


Highest Channel (5 825 ㎒)

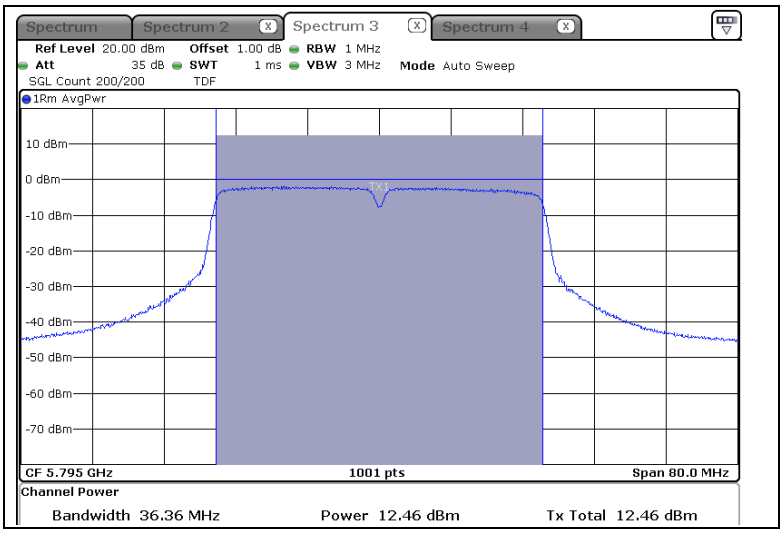


-802.11n_HT40

Lowest Channel (5 755 ㎒)

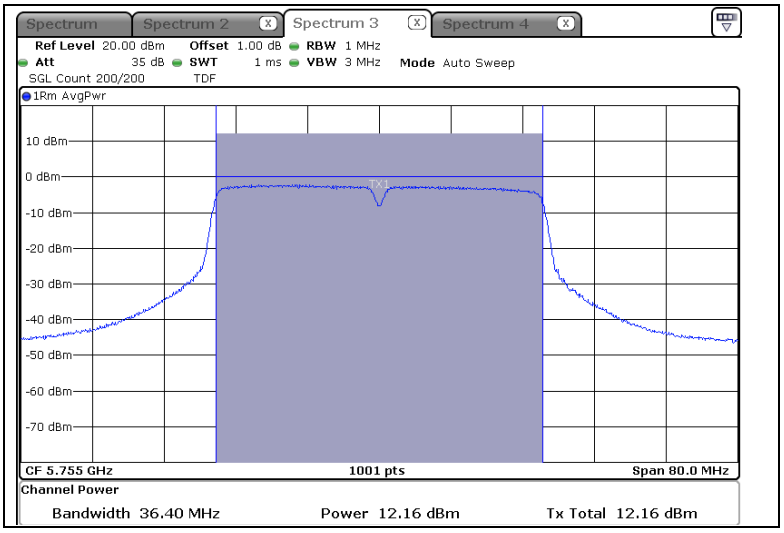


Highest Channel (5 795 ㎒)

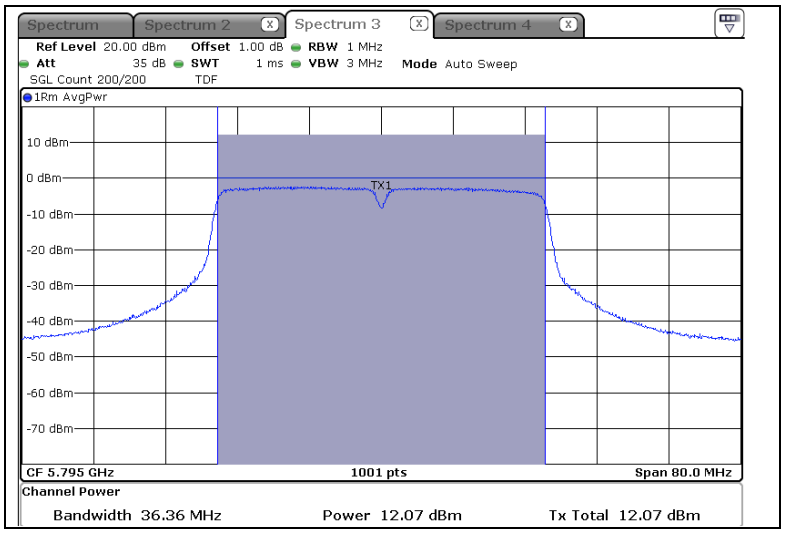


-802.11ac VHT40

Lowest Channel (5 755 ㎒)

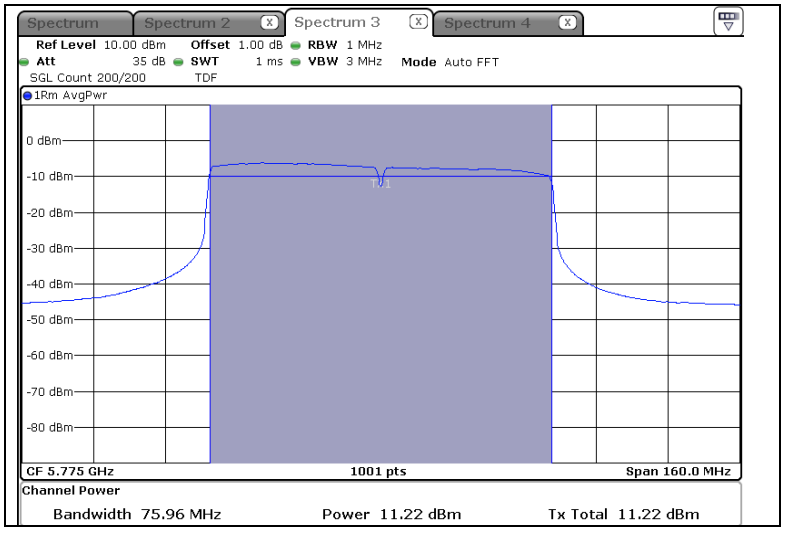


Highest Channel (5 795 ㎒)



-802.11ac VHT80

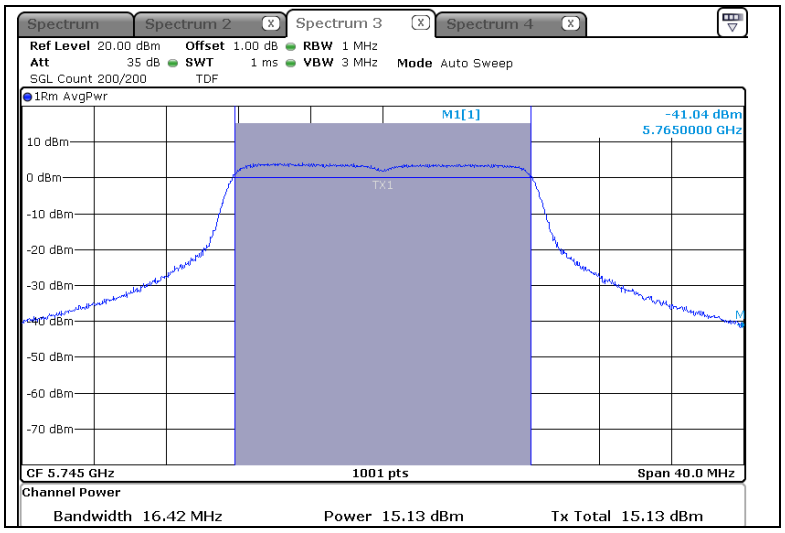
Lowest Channel (5 775 ㎒)



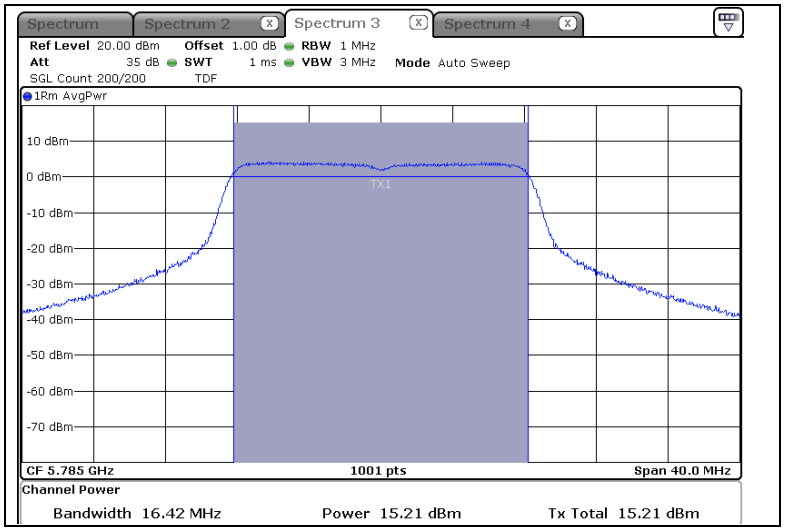
- ANT 3

-802.11a

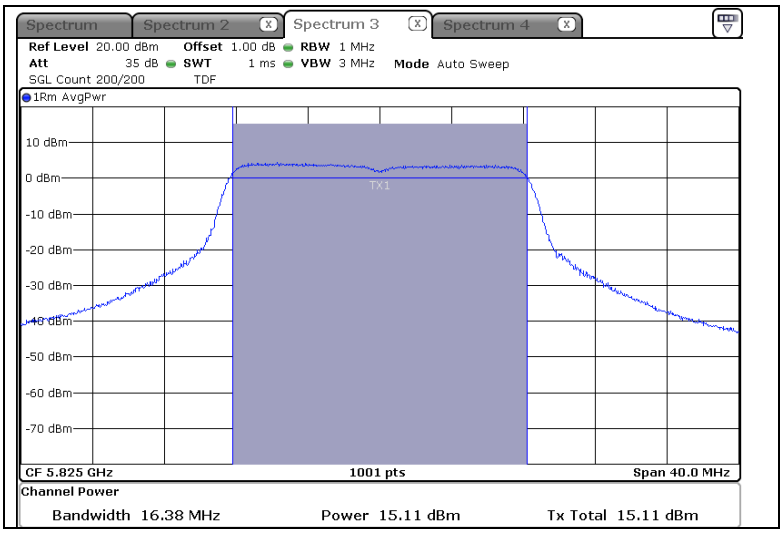
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

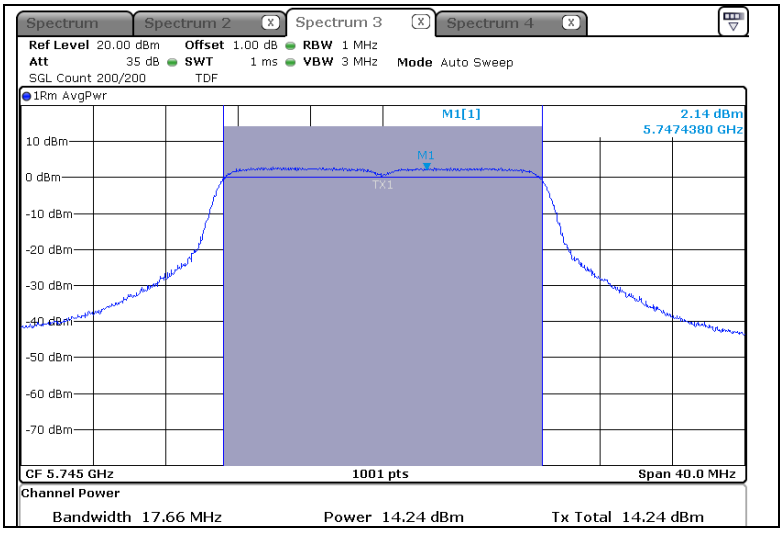


Highest Channel (5 825 ㎒)

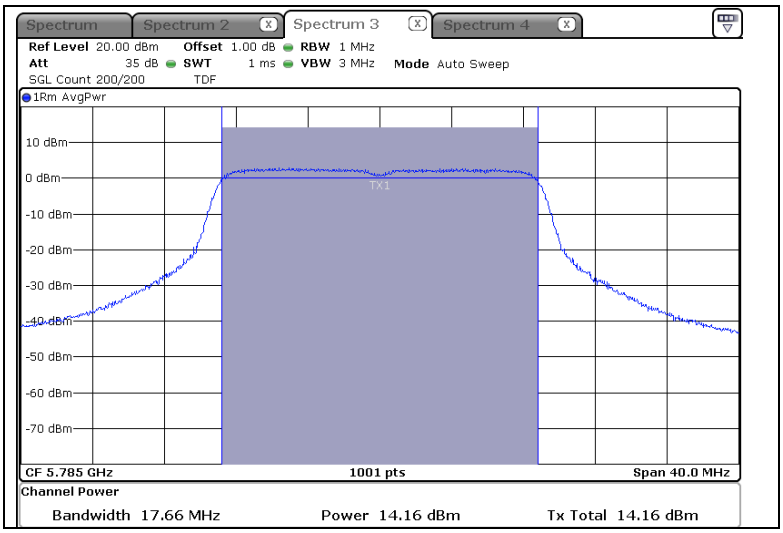


-802.11n HT20

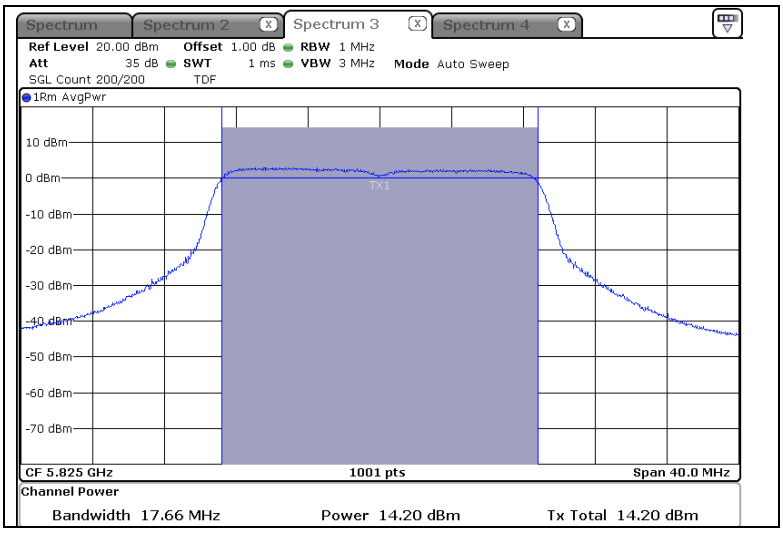
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

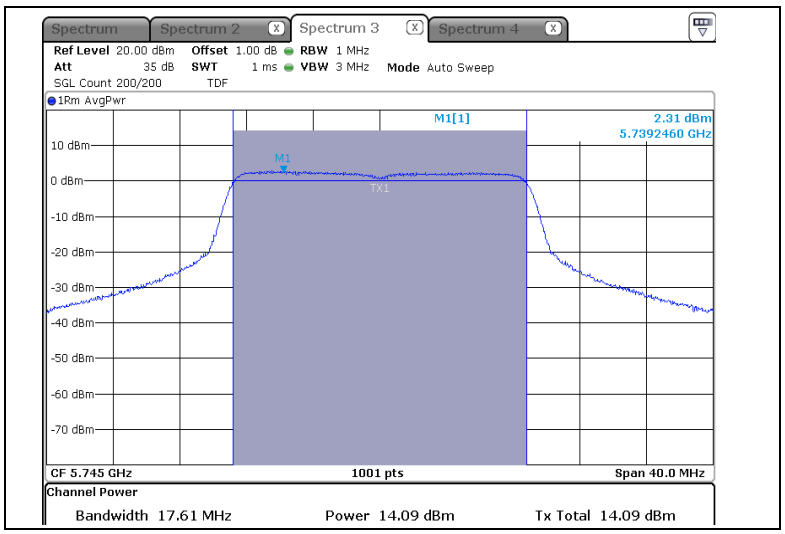


Highest Channel (5 825 ㎒)

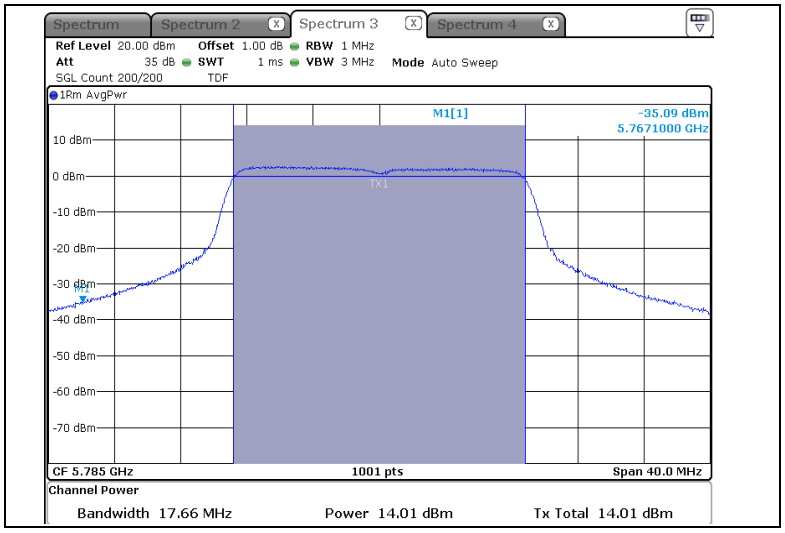


-802.11ac VHT20

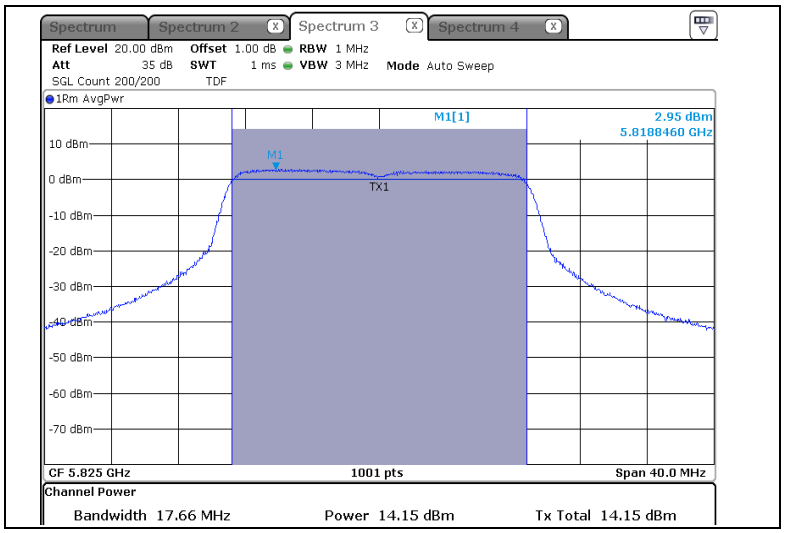
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

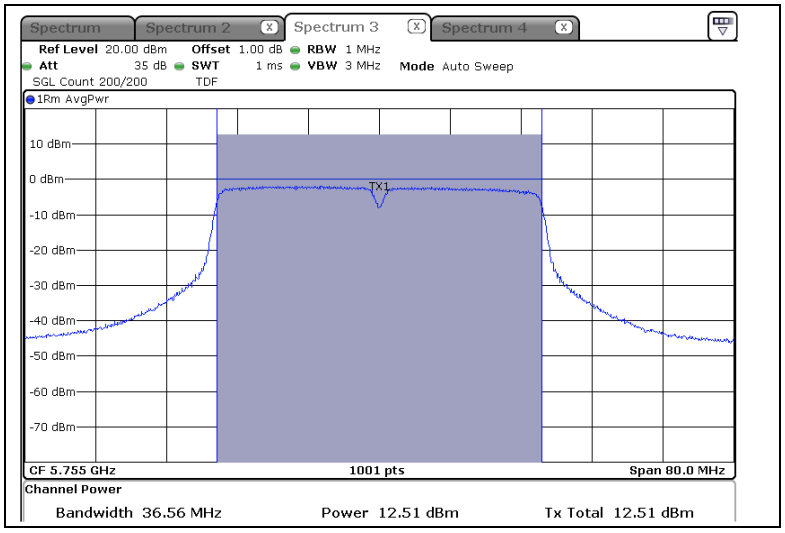


Highest Channel (5 825 ㎒)

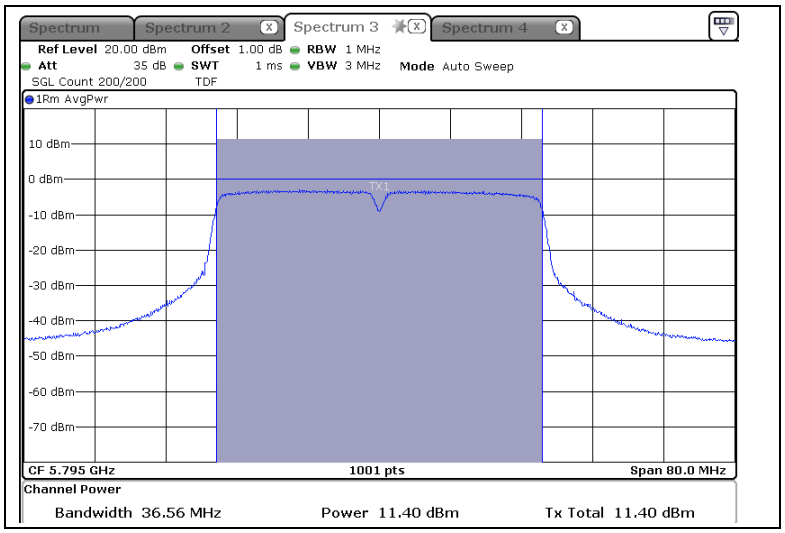


-802.11n_HT40

Lowest Channel (5 755 ㎒)

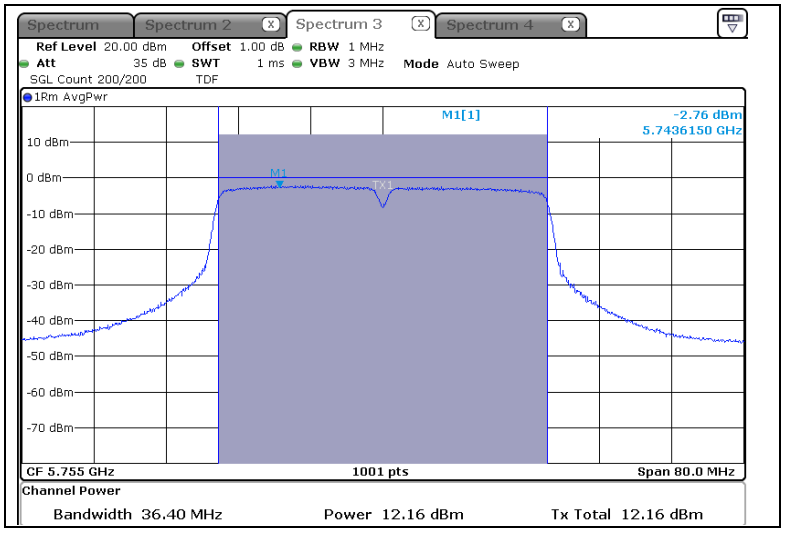


Highest Channel (5 795 ㎒)

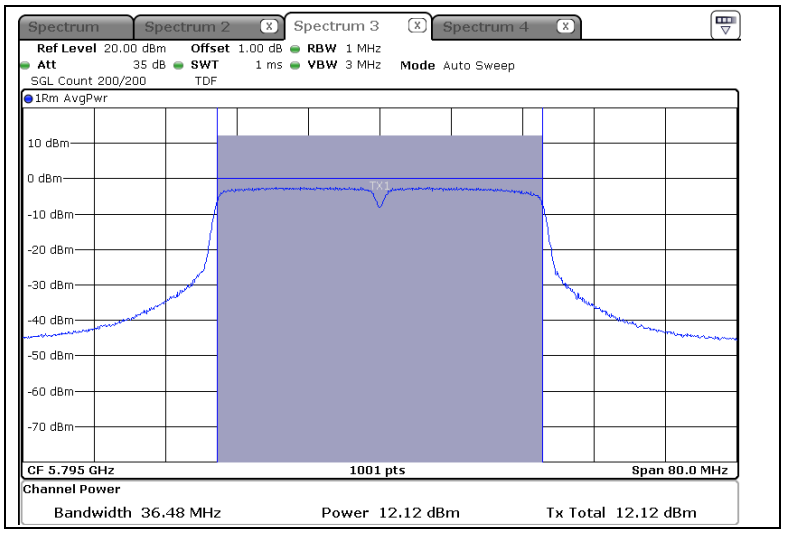


-802.11ac VHT40

Lowest Channel (5 755 ㎒)

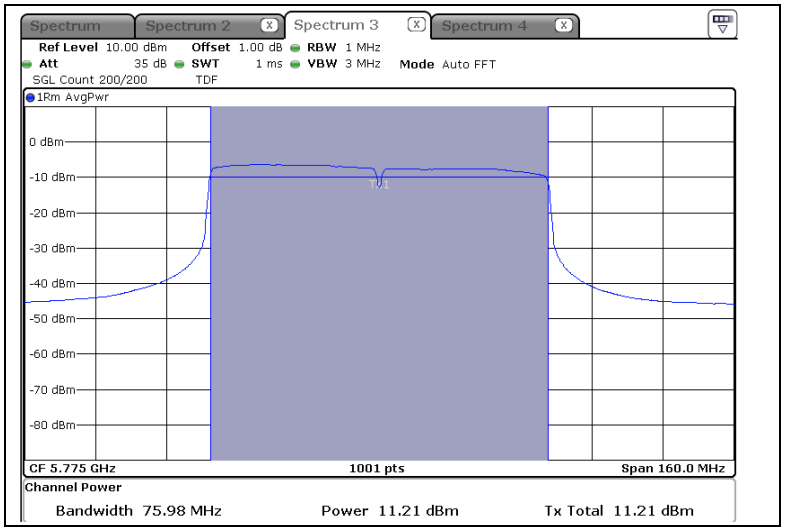


Highest Channel (5 795 ㎒)



-802.11ac VHT80

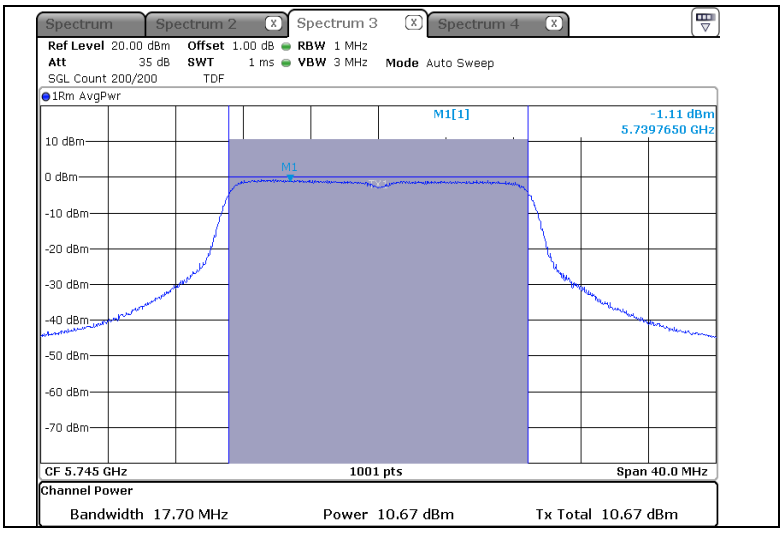
Lowest Channel (5 775 ㎒)



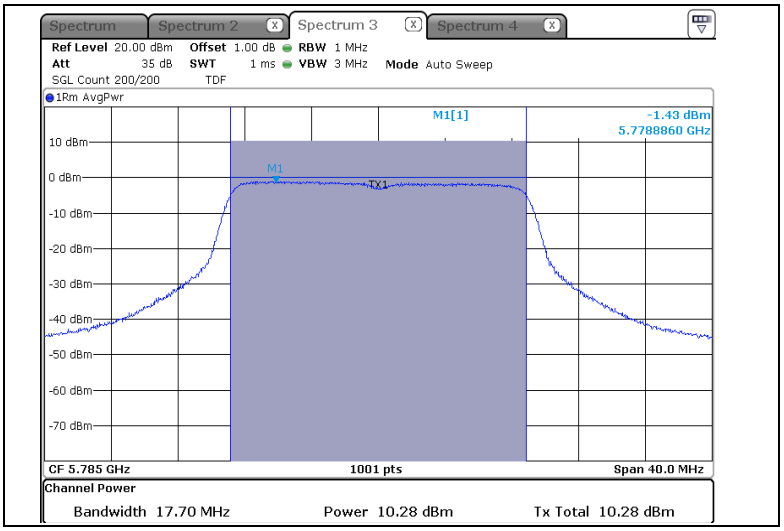
- MIMO 2Tx (ANT 1)

-802.11n HT20

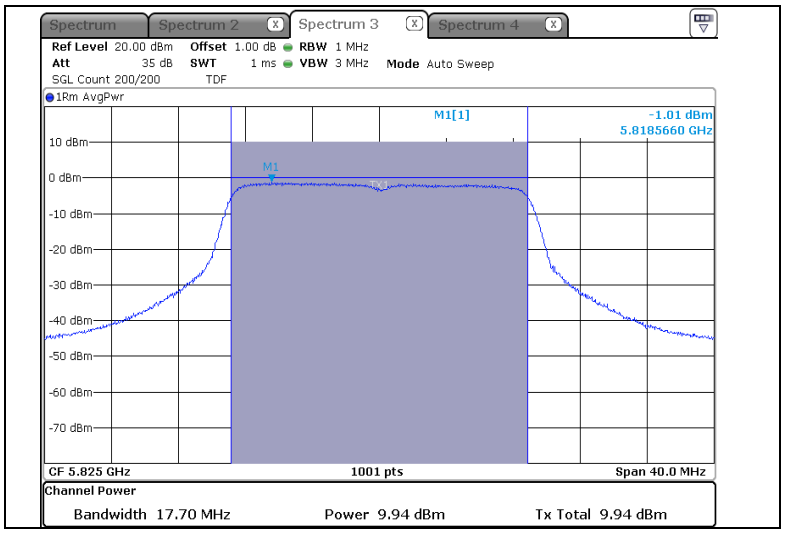
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

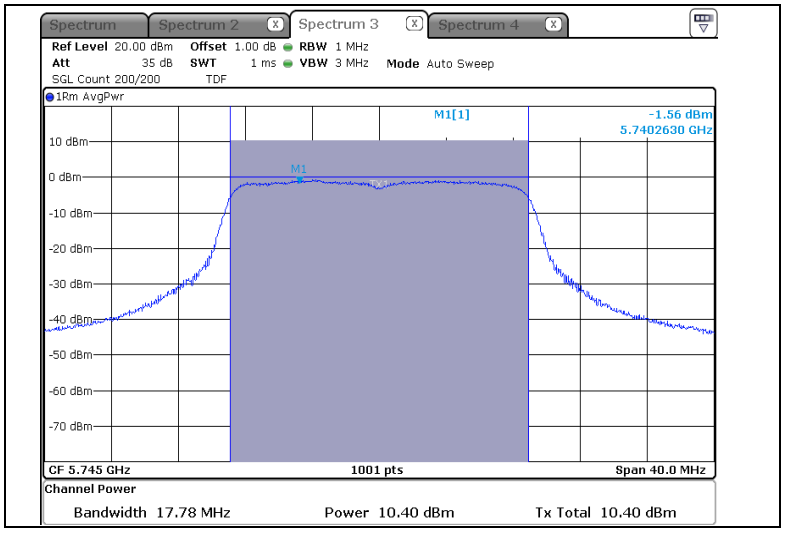


Highest Channel (5 825 ㎒)

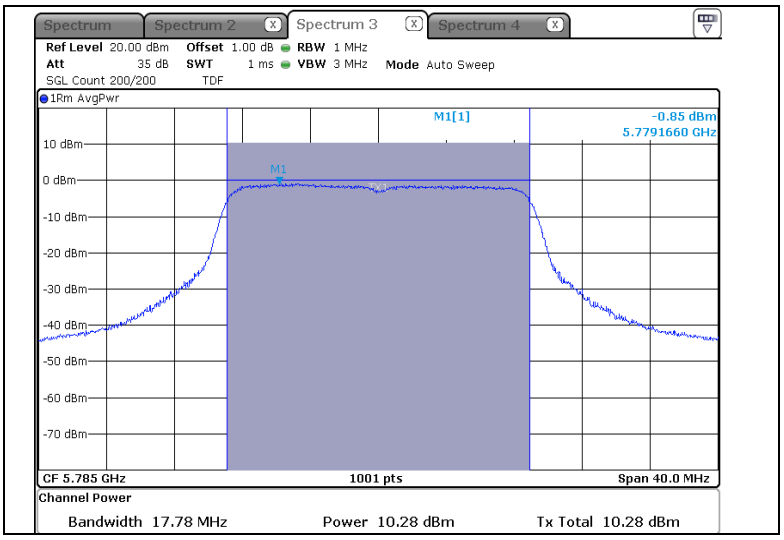


- 802.11ac VTH20

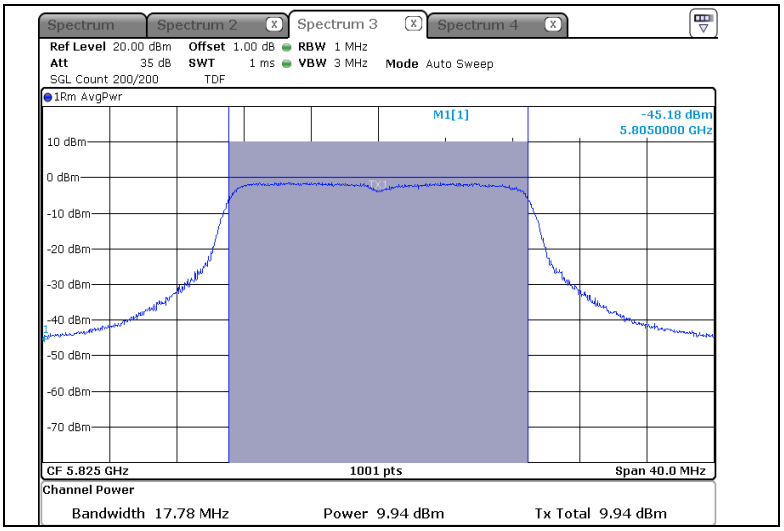
Lowest Channel (5 745 ㎒)



Middle Channel (5 785 ㎒)

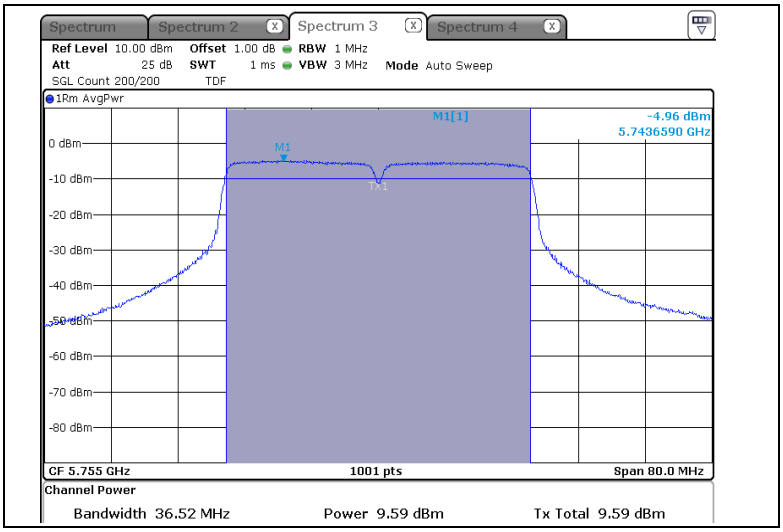


Highest Channel (5 825 ㎒)



- 802.11n HT40

Lowest Channel (5 755 ㎒)



High Channel (5 795 ㎒)