HCT CO., LTD.

CERTIFICATE OF COMPLIANCE

FCC Certification

Applicant Name:
LG Electronics MobileComm U.S.A., Inc.

Address:
1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Date of Issue:
July 31, 2013

Test Site/Location:
HCT CO., LTD., 105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea

Report No.: HCTR1306FR24-2

HCT FRN: 0005866421

FCC ID : ZNFL01F

APPLICANT : LG Electronics MobileComm U.S.A., Inc.

FCC Model(s):	L-01F
EUT Type:	Cellular/PCS GSM/GPRS/WCDMA/HSDPA/HSUPA Phone with Bluetooth, WLAN and NFC(Felica)
Max. RF Output Power:	Wi-Fi 802.11b (21.61 dBm) / Wi-Fi 802.11g (21.27 dBm)/ Wi-Fi 802.11n (2.4 GHz) (20.48 dBm) / Wi-Fi 802.11ac (2.4 GHz) (19.71 dBm) / Wi-Fi 802.11a (5.8 GHz) (19.84 dBm)/ Wi-Fi 802.11n_20 MHz BW (5.8 GHz) (19.05 dBm) / Wi-Fi 802.11n_40 MHz BW (5.8 GHz) (18.53 dBm) / Wi-Fi 802.11ac_20 MHz BW (5.8 GHz) (17.98 dBm) / Wi-Fi 802.11ac_40 MHz BW (5.8 GHz) (17.60 dBm) / Wi-Fi 802.11ac_80 MHz BW (5.8 GHz) (17.82 dBm)
Frequency Range:	2412 MHz - 2462 MHz (2.4 GHz Band) 5745 MHz - 5825 MHz (5.8 GHz Band)_20 MHz BW, 5755 MHz - 5795 MHz (5.8 GHz Band)_40 MHz BW 5775 MHz (5.8 GHz Band)_80 MHz BW
Modulation type	CCK/DSSS/OFDM
FCC Classification:	Digital Transmission System(DTS)
FCC Rule Part(s):	Part 15.247

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)

Report prepared by
: Jae Chul Shin
Test engineer of RF Team

Approved by
: Chang Seok Choi
Manager of RF Team

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCTR1306FR24	July 25, 2013	- First Approval Report
HCTR1306FR24-1	July 30, 2013	- Revised Frequency on Page 40 - Retest 6 dB BW on Page 25, 27 and 28
HCTR1306FR24-2	July 31, 2013	- Revised Frequency on Page 50

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1. GENERAL INFORMATION

Applicant:	LG Electronics MobileComm U.S.A., Inc.
Address:	1000 Sylvan Avenue, Englewood Cliffs NJ 07632
FCC ID:	ZNFL01F
EUT Type:	Cellular/PCS GSM/GPRS/WCDMA/HSDPA/HSUPA Phone with Bluetooth, WLAN and NFC(Felica)
Model name(s):	L-01F
Date(s) of Tests:	June 05, 2013 ~ July 30, 2013
Place of Tests:	HCT Co., Ltd. 105-1, Jangam-ri , Majang-Myeon, Icheon-si, Kyunggi-Do, 467-811, KOREA. (IC Recognition No. : 5944A-3)

2. EUT DESCRIPTION

EUT Type	Cellular/PCS GSM/GPRS/WCDMA/HSDPA/HSUPA Phone with Bluetooth, WLAN and NFC(Felica)	
FCC Model Name	L-01F	
Power Supply	DC 3.8 V	
Battery type	Li-ion Battery(Standard)	
Frequency Range	TX	: 2412 MHz~2462 MHz, 5745 MHz~5825 MHz_20 MHz, 5755 MHz~5795 MHz_40 MHz 5775 MHz_80 MHz
	RX	: 2412 MHz~2462 MHz, 5745 MHz~5825 MHz_20 MHz, 5755 MHz~5795 MHz_40 MHz 5775 MHz_80 MHz
Max. RF Output Power	Peak	Wi-Fi 802.11b (21.61 dBm) / Wi-Fi 802.11g (21.27 dBm)/ Wi-Fi 802.11n (2.4 GHz) (20.48 dBm) / Wi-Fi 802.11ac (2.4 GHz) (19.71 dBm) / Wi-Fi 802.11a (5.8 GHz) (19.84 dBm)/ Wi-Fi 802.11n_20 MHz BW (5.8 GHz) (19.05 dBm) / Wi-Fi 802.11n_40 MHz BW (5.8 GHz) (18.53 dBm) / Wi-Fi 802.11ac_20 MHz BW (5.8 GHz) (17.98 dBm) / Wi-Fi 802.11ac_40 MHz BW (5.8 GHz) (17.60 dBm) / Wi-Fi 802.11ac_80 MHz BW (5.8 GHz) (17.82 dBm)
	Average	Wi-Fi 802.11b (15.49 dBm) / Wi-Fi 802.11g (12.90 dBm)/ Wi-Fi 802.11n (2.4 GHz) (11.97 dBm) / Wi-Fi 802.11ac (2.4 GHz) (11.18 dBm) / Wi-Fi 802.11a (5.8 GHz) (12.40 dBm)/ Wi-Fi 802.11n_20 MHz BW (5.8 GHz) (11.62 dBm) / Wi-Fi 802.11n_40 MHz BW (5.8 GHz) (10.91 dBm) / Wi-Fi 802.11ac_20 MHz BW (5.8 GHz) (10.35 dBm) / Wi-Fi 802.11ac_40 MHz BW (5.8 GHz) (10.17 dBm) / Wi-Fi 802.11ac_80 MHz BW (5.8 GHz) (10.23 dBm)
Modulation Type	DSSS/CCK(802.11b), OFDM(802.11a, 802.11g, 802.11n, 802.11ac)	
Antenna Specification	Manufacturer: acetechnology A Antenna type: Built-in Antenna Peak Gain : -3.57 dBi (2.4 GHz Band), -5.06 dBi (5.8 GHz Band)	

3. TEST METHODOLOGY

FCC KDB 558074 D01 DTS Meas Guidance v03r01 dated April 09, 2013 entitled “Guidance for Performing Compliance Measurements on Digital Transmission Systems(DTS) and the measurement procedure described in the American National Standard for Testing Unlicensed Wireless Devices(ANSI C63.4-2003) Operating Under §15.247” were used in the measurement.

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. (Version :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 3 m away from the receiving antenna, which varied from 1 m to 4 m 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 max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.4. (Version: 2003)

Conducted Antenna Terminal

See Section from 9.1 to 9.2.(KDB 558074)

3.4 DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Channel low, mid and high with highest data rate (worst case) is chosen for full testing.

4. 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 equipments, which is traceable to recognized national standards.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, 467-811, Korea. The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2003) and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated June 21, 2011 (Registration Number: 90661)

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, 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.”

6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antennas of this E.U.T are permanently attached.

*The E.U.T Complies with the requirement of §15.203

7. SUMMARY TEST OF RESULTS

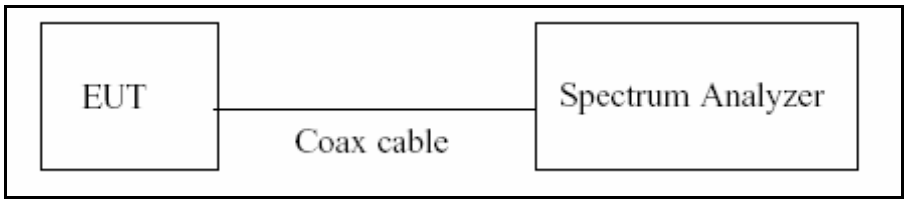
Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
6 dB Bandwidth	§15.247(a)(2)	> 500 kHz	CONDUCTED	PASS
Conducted Maximum Peak Output Power	§15.247(b)(3)	< 1 Watt		PASS
Power Spectral Density	§15.247(e)	< 8 dBm / 3 kHz Band		PASS
Band Edge(Out of Band Emissions)	§15.247(d)	Conducted < 20 dBc		PASS
AC Power line Conducted Emissions	§15.207	cf. Section 8.6		PASS
Radiated Spurious Emissions	§15.205, 15.209	cf. Section 8.5.1	RADIATED	PASS
Radiated Restricted Band Edge	§15.247(d), 15.205, 15.209	cf. Section 8.5.2		PASS

8. TEST RESULT

8.1 DUTY CYCLE(802.11a/b/g/n/ac)

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value. Set VBW ≥ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer. We tested accroding to the zero-span measurement method, 6.0)b) in KDB 558074(issued 04/09/2013)
The largest availble value of RBW is 8 MHz and VBW is 50 MHz. The zero-span method of measuring duty cycle shall not be used if T ≤ 6.25 microseconds. (50/6.25 = 8)
The zero-span method was used because all measured T data are > 6.25 microseconds and both RBW and VBW are > 50/*T*.

1. RBW = 8 MHz (the largest availble value)
2. VBW = 8 MHz (≥ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on}/ T_{total} and Duty Cycle Factor = 10*log(1/Duty Cycle)

▣ Duty Cycle Factor

Mode	Data Rate	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor (dB)
2.4 GHz Band 802.11b	1	12.420	12.510	0.99280576	0.031
	2	6.210	6.300	0.98571429	0.062
	5.5	2.320	2.415	0.96066253	0.174
	11	1.203	1.299	0.92609700	0.333
2.4 GHz Band 802.11g and 5.8 GHz Band 802.11a	6	2.064	2.166	0.95290859	0.209
	9	1.386	1.488	0.93145161	0.308
	12	1.041	1.146	0.90837696	0.417
	18	0.704	0.805	0.87428571	0.583
	24	0.531	0.632	0.83979737	0.758
	36	0.364	0.465	0.78279570	1.064
	48	0.276	0.377	0.73209549	1.354
	54	0.248	0.350	0.70938215	1.491
2.4 GHz Band 802.11n_20 MHz BW and 5.8 GHz Band 802.11n_20 MHz BW	6.5	1.920	2.025	0.94814815	0.231
	13	0.978	1.080	0.90555556	0.431
	19.5	0.664	0.765	0.86772971	0.616
	26	0.508	0.609	0.83415435	0.788
	39	0.351	0.453	0.77483444	1.108
	52	0.272	0.373	0.72961373	1.369
	58.5	0.248	0.351	0.70756063	1.502
	65	0.227	0.329	0.69101979	1.605
5.8 GHz Band 802.11n_40 MHz BW	13.5	0.943	1.042	0.90537428	0.432
	27	0.492	0.591	0.83155758	0.801
	40.5	0.339	0.438	0.77374429	1.114
	54	0.264	0.363	0.72692202	1.385
	81	0.188	0.288	0.65472879	1.839
	108	0.152	0.252	0.60428232	2.188
	121.5	0.140	0.240	0.58573217	2.323
	135	0.128	0.228	0.56389987	2.488
2.4 GHz Band 802.11ac_20 MHz BW	6.5	1.932	2.034	0.94985251	0.223
	13	0.987	1.089	0.90633609	0.427
	19.5	0.672	0.774	0.86821705	0.614
	26	0.516	0.617	0.83630470	0.776
	39	0.355	0.456	0.77850877	1.087
	52	0.280	0.381	0.73490814	1.338
	58.5	0.251	0.352	0.71306818	1.469
	65	0.231	0.333	0.69471154	1.582
	78	0.200	0.302	0.66334992	1.783

Mode	Data Rate	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor (dB)
5.8 GHz Band 802.11ac_20 MHz BW	6.5	1.924	2.031	0.94731659	0.235
	13	0.980	1.088	0.90110294	0.452
	19.5	0.663	0.772	0.85821572	0.664
	26	0.509	0.616	0.82591751	0.831
	39	0.356	0.456	0.78031134	1.077
	52	0.280	0.379	0.73872924	1.315
	58.5	0.253	0.352	0.71822576	1.437
	65	0.233	0.332	0.70123606	1.541
	78	0.200	0.300	0.66666667	1.761
5.8 GHz Band 802.11ac_40 MHz BW	13.5	0.952	1.051	0.90570885	0.430
	27	0.496	0.596	0.83271812	0.795
	40.5	0.343	0.443	0.77396797	1.113
	54	0.269	0.368	0.73048681	1.364
	81	0.192	0.292	0.65786767	1.819
	108	0.156	0.256	0.61039469	2.144
	121.5	0.145	0.244	0.59318555	2.268
	135	0.133	0.232	0.57247627	2.422
	162	0.117	0.216	0.54035250	2.673
	180	0.113	0.212	0.53041018	2.754
5.8 GHz Band 802.11ac_80 MHz BW	29.3	0.460	0.558	0.82449857	0.838
	58.5	0.252	0.351	0.71758336	1.441
	87.8	0.181	0.279	0.64625850	1.896
	117	0.149	0.248	0.60080808	2.213
	175.5	0.112	0.211	0.52960682	2.760
	234	0.097	0.196	0.49544990	3.050
	263.3	0.089	0.188	0.47200000	3.261
	292.5	0.085	0.184	0.46072985	3.366
	351	0.077	0.176	0.43772080	3.588
	390	0.073	0.172	0.42645688	3.701

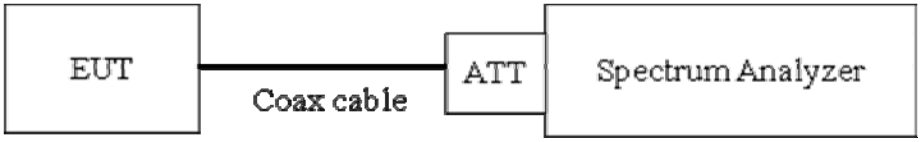
8.2 6dB BANDWIDTH (802.11a/b/g/n/ac)

Test Requirements and limit, §15.247(a)(2)

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the receive antenna while the EUT is operating in transmission mode at the appropriate frequencies.

The minimum permissible 6dB bandwidth is 500 kHz.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to (Page 5 in KDB 558074, issued 04/09/2013)

RBW = 100 kHz

VBW ≥ 3 x RBW

Detector = Peak

Trace mode = max hold

Sweep = auto couple

Allow the trace to stabilize

Note : We tested 6 dB bandwidth using the automatic bandwidth measurement capability of a spectrum analyzer. X dB is set 6 dB.

▣ TEST RESULTS

Conducted 6dB Bandwidth Measurements for 802.11b

802.11b Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
2412	1	9.115	0.500	Pass
2437	6	9.571	0.500	Pass
2462	11	9.587	0.500	Pass

Conducted 6dB Bandwidth Measurements for 802.11g

802.11g Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
2412	1	16.380	0.500	Pass
2437	6	16.400	0.500	Pass
2462	11	16.370	0.500	Pass

Conducted 6dB Bandwidth Measurements for 802.11n_20 MHz BW(2.4 GHz Band)

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
2412	1	17.630	0.500	Pass
2437	6	17.640	0.500	Pass
2462	11	17.610	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11ac_20 MHz BW (2.4 GHz Band)

802.11ac Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
2412	1	17.640	0.500	Pass
2437	6	17.640	0.500	Pass
2462	11	17.620	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11a

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Frequency [MHz]			
5745	149	16.380	0.500	Pass
5785	157	16.390	0.500	Pass
5825	165	16.390	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11n_20 MHz BW (5.8 GHz Band)

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5745	149	17.610	0.500	Pass
5785	157	17.620	0.500	Pass
5825	165	17.620	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11n_40 MHz BW(5.8 GHz Band)

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	36.130	0.500	Pass
5795	159	36.140	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11ac_20 MHz BW (5.8 GHz Band)

802.11a Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Frequency [MHz]			
5745	149	17.630	0.500	Pass
5785	157	17.640	0.500	Pass
5825	165	17.640	0.500	Pass

Conducted 6 dB Bandwidth Measurements for 802.11ac_40 MHz BW (5.8 GHz Band)

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5755	151	36.140	0.500	Pass
5795	159	36.080	0.500	Pass

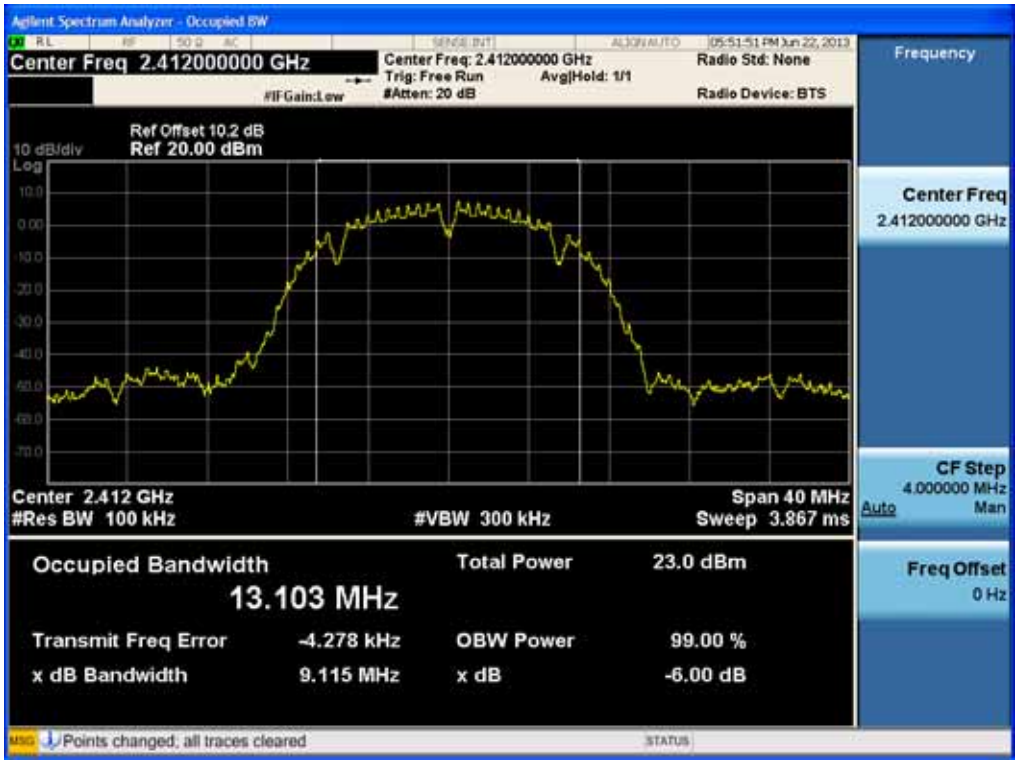
Conducted 6 dB Bandwidth Measurements for 802.11ac_80 MHz BW(5.8 GHz Band)

802.11n Mode		Measured Bandwidth [MHz]	Minimum Bandwidth [MHz]	Pass / Fail
Frequency [MHz]	Channel No.			
5775	151	75.370	0.500	Pass

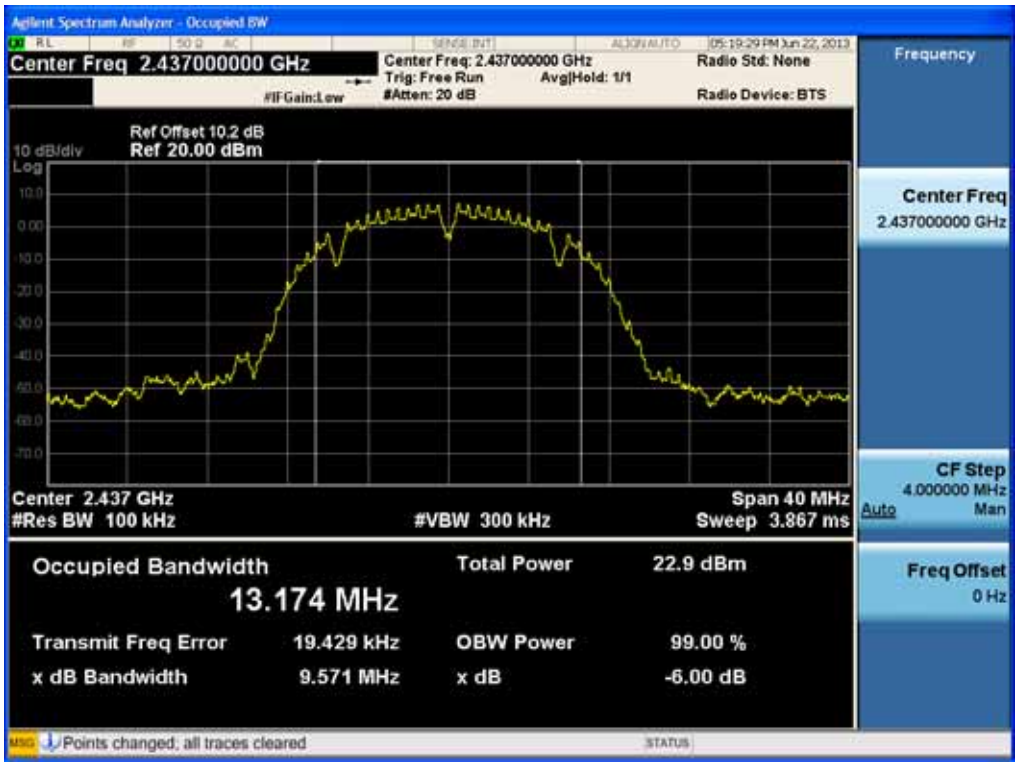
▣ RESULT PLOTS

2.4 GHz Band

6dB Bandwidth plot (802.11b-CH 1)

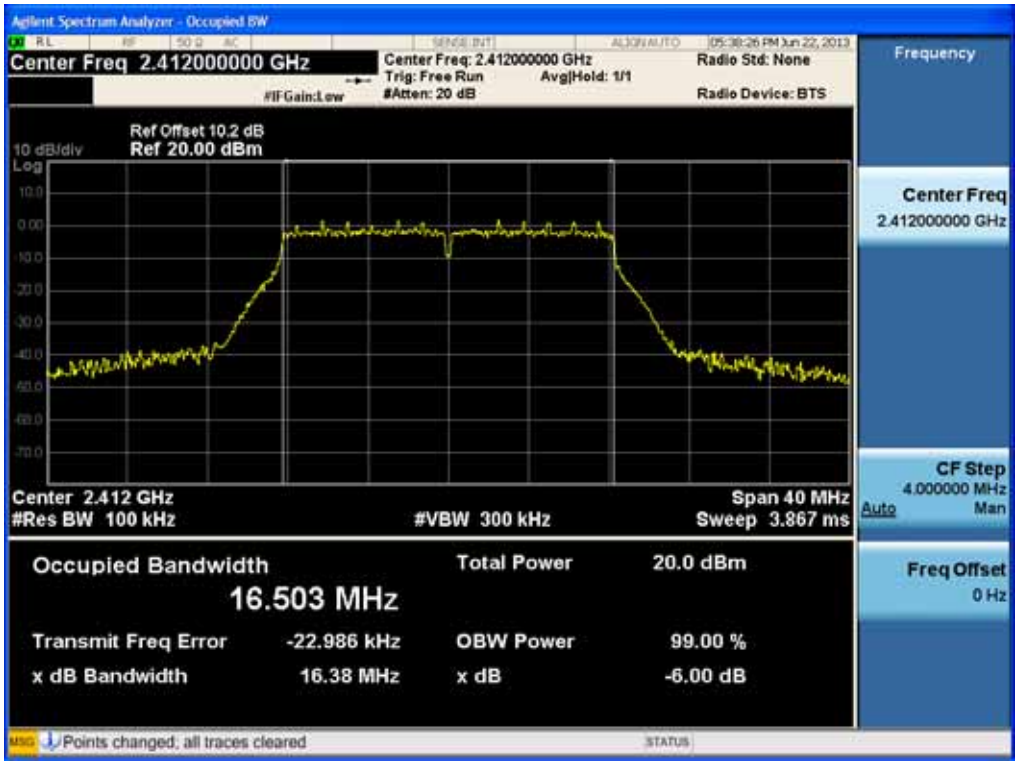


6dB Bandwidth plot (802.11b-CH 6)

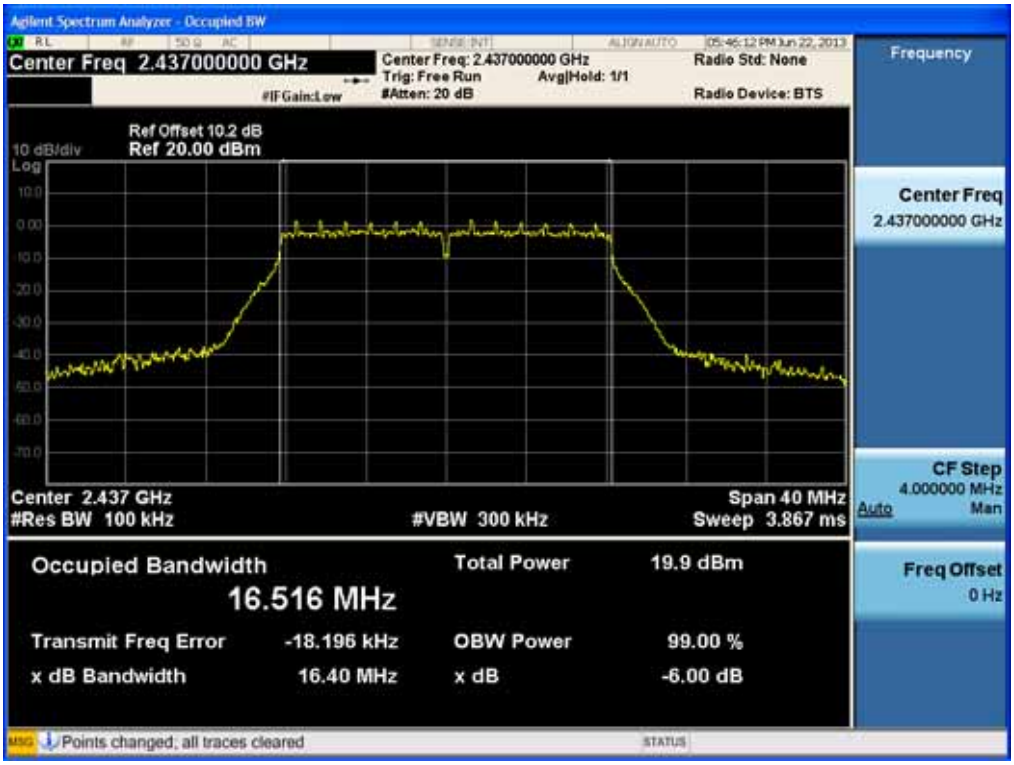


6dB Bandwidth plot (802.11b-CH 11)

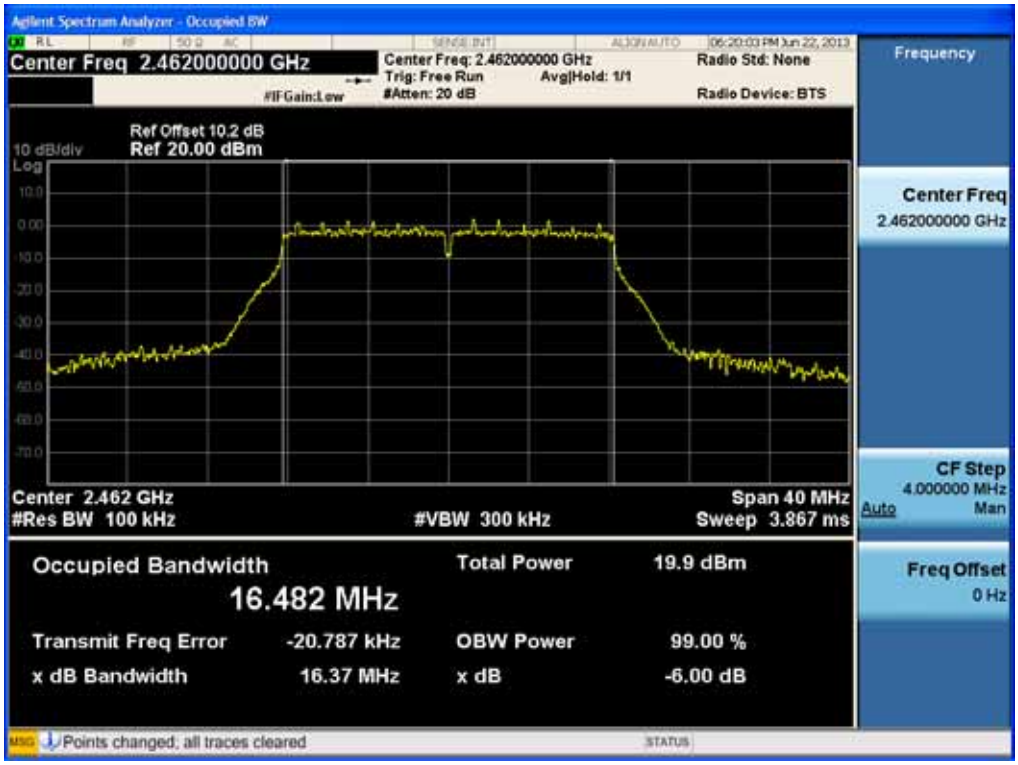
6dB Bandwidth plot (802.11g-CH 1)



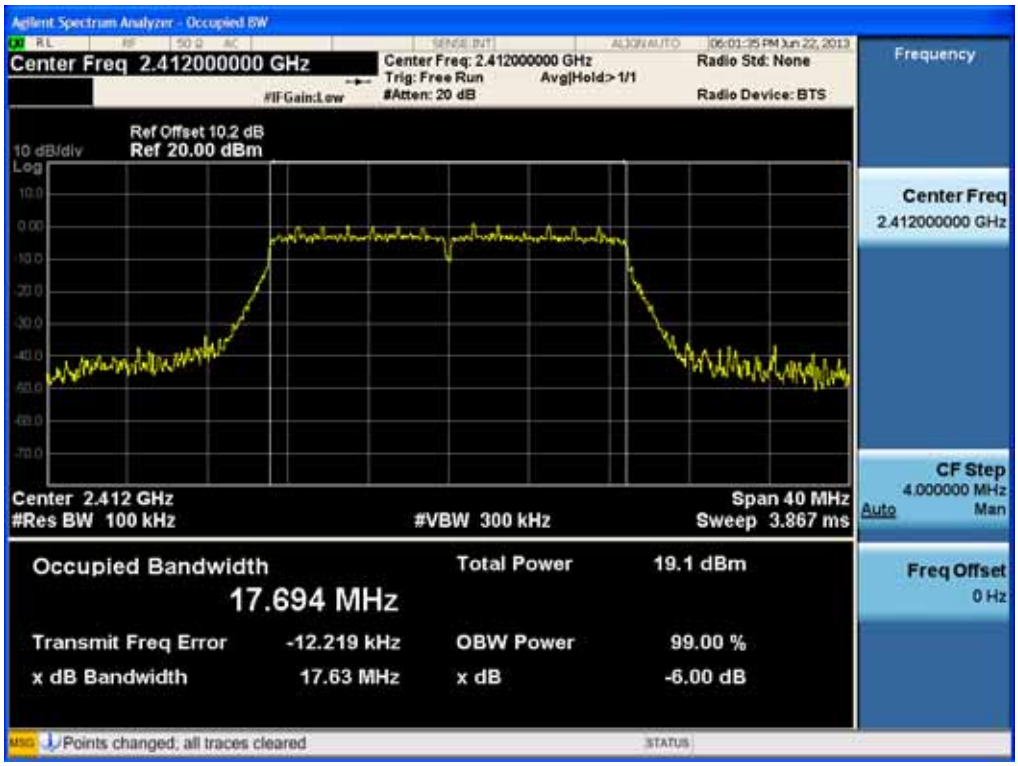
6dB Bandwidth plot (802.11g-CH 6)



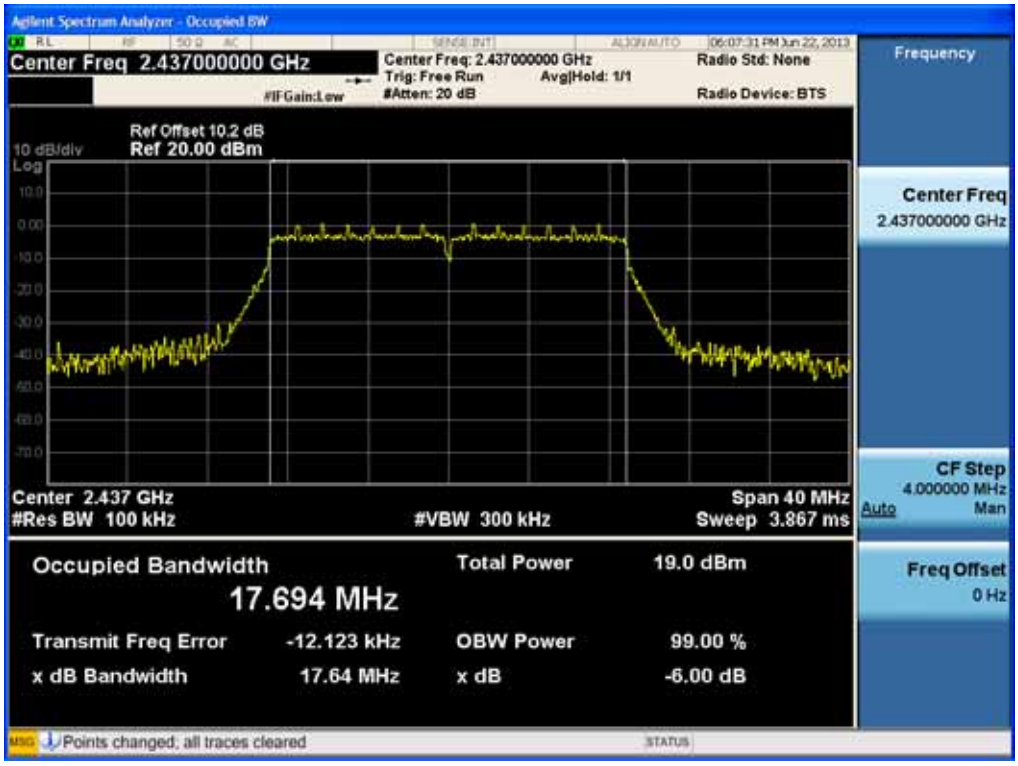
6dB Bandwidth plot (802.11g-CH 11)



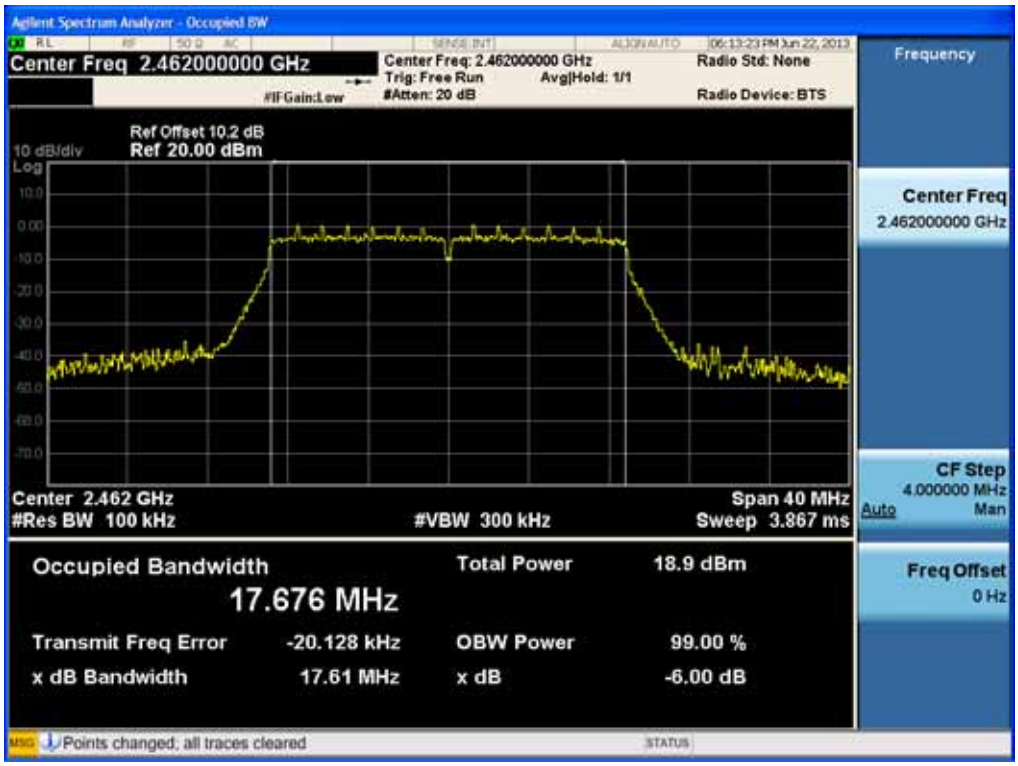
6dB Bandwidth plot (802.11n-CH 1)



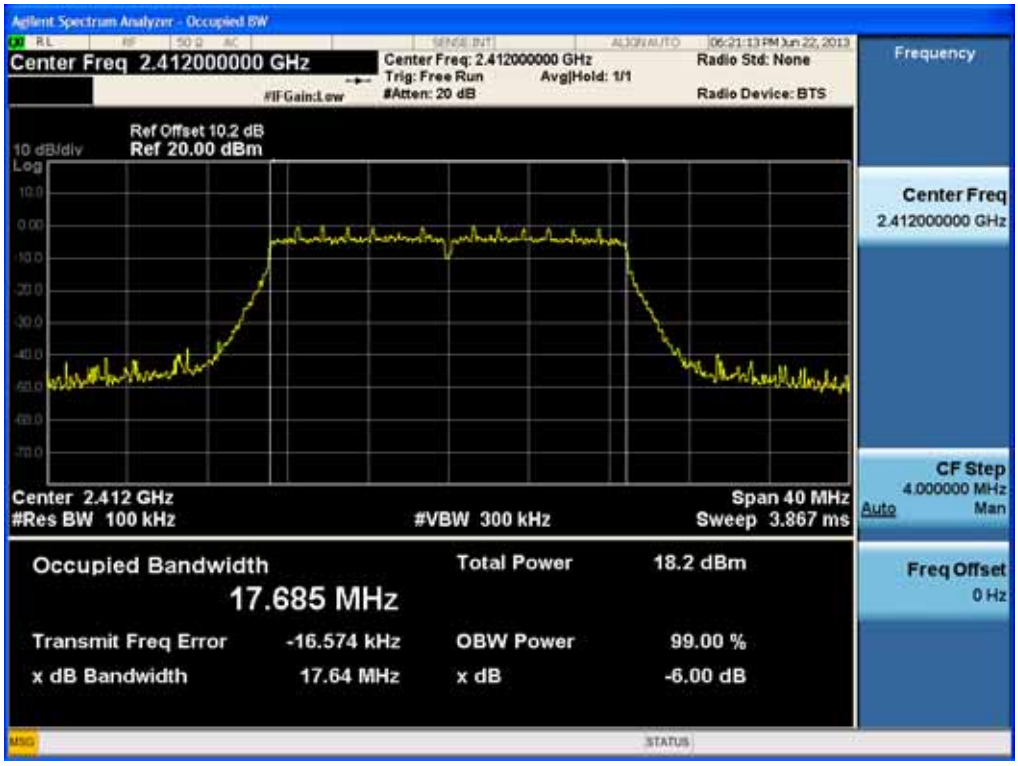
6dB Bandwidth plot (802.11n-CH 6)



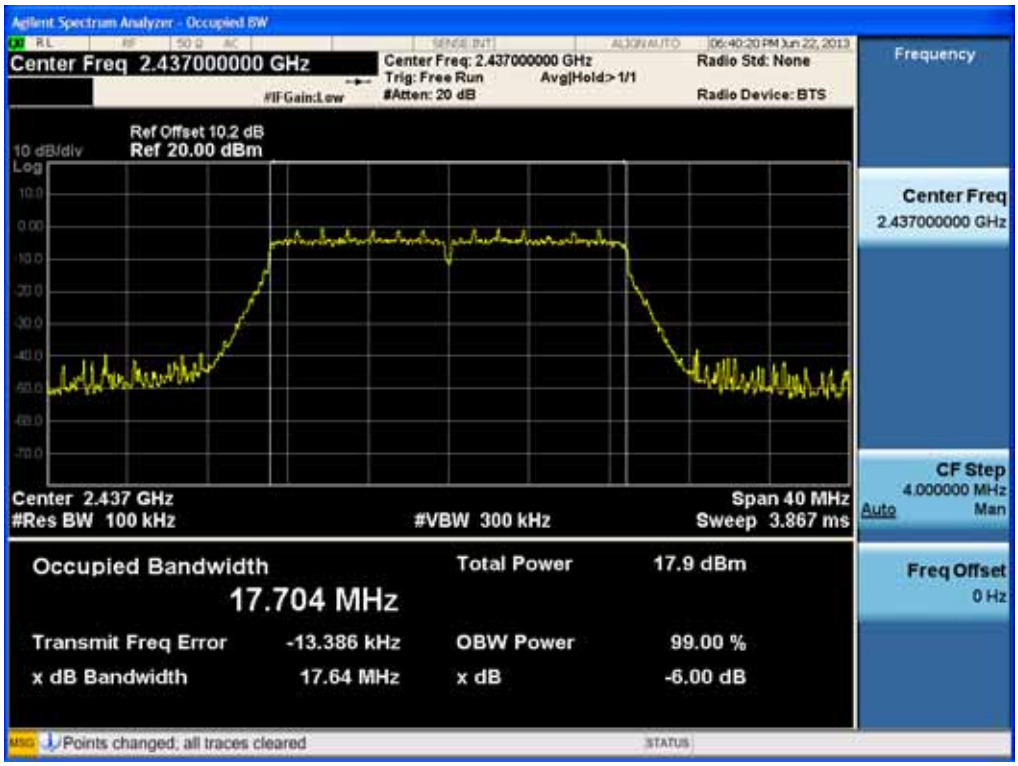
6dB Bandwidth plot (802.11n-CH 11)



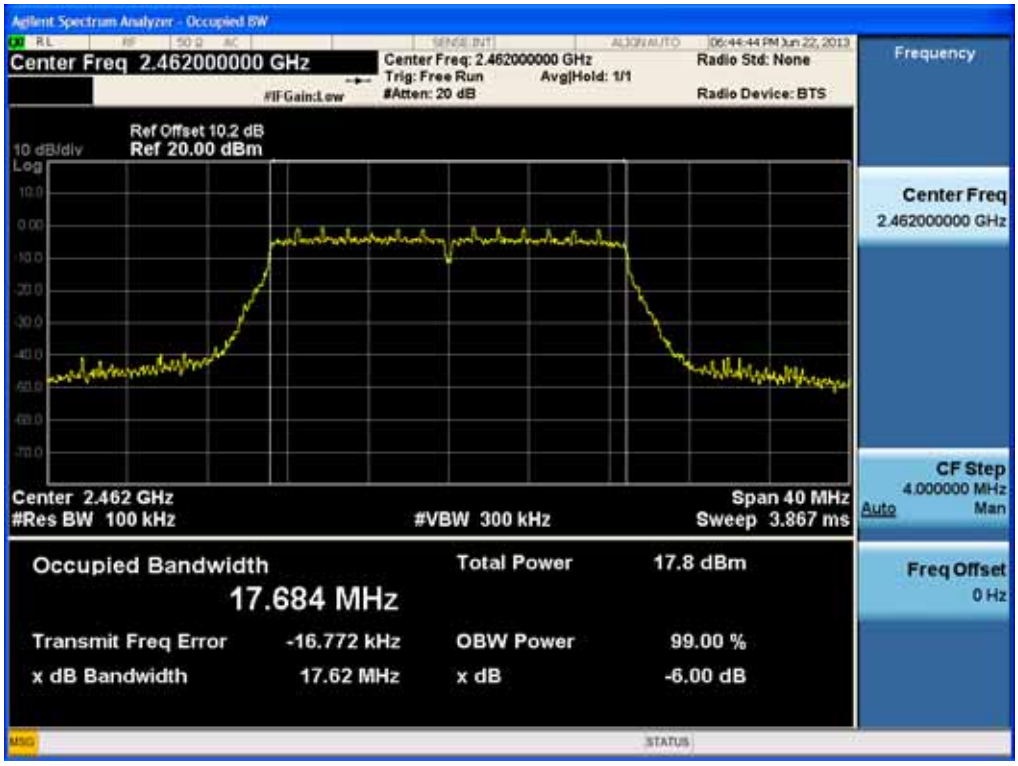
Conducted Output Power (802.11ac-CH 1)



Conducted Output Power (802.11ac-CH 6)

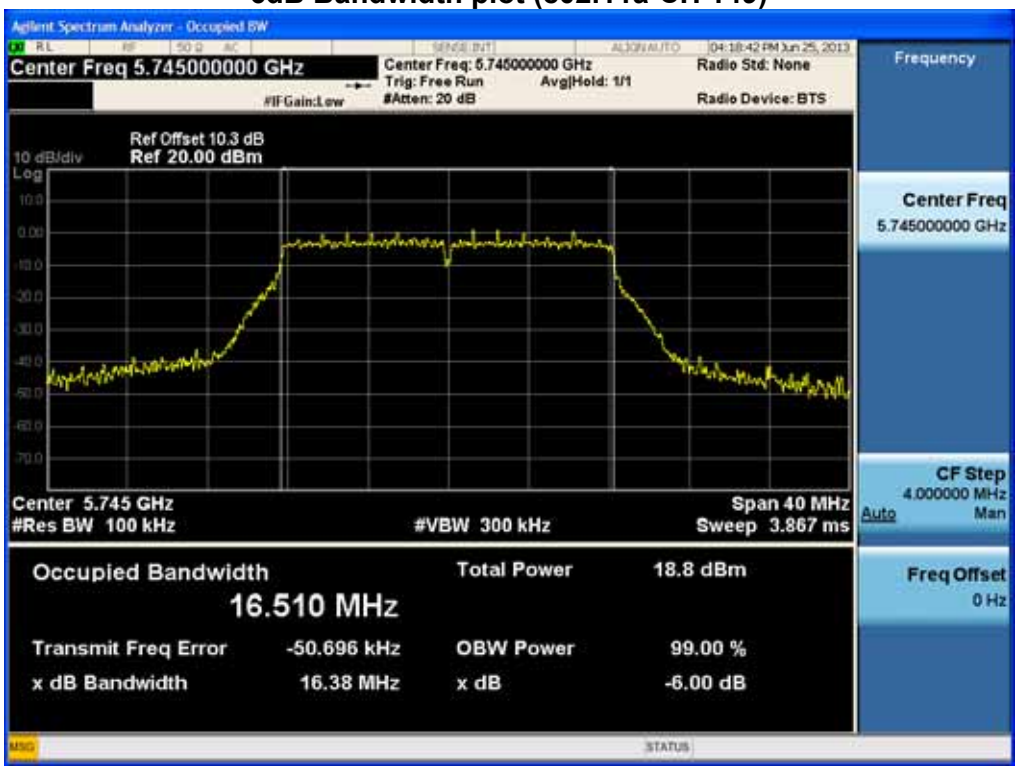


Conducted Output Power (802.11ac-CH 11)

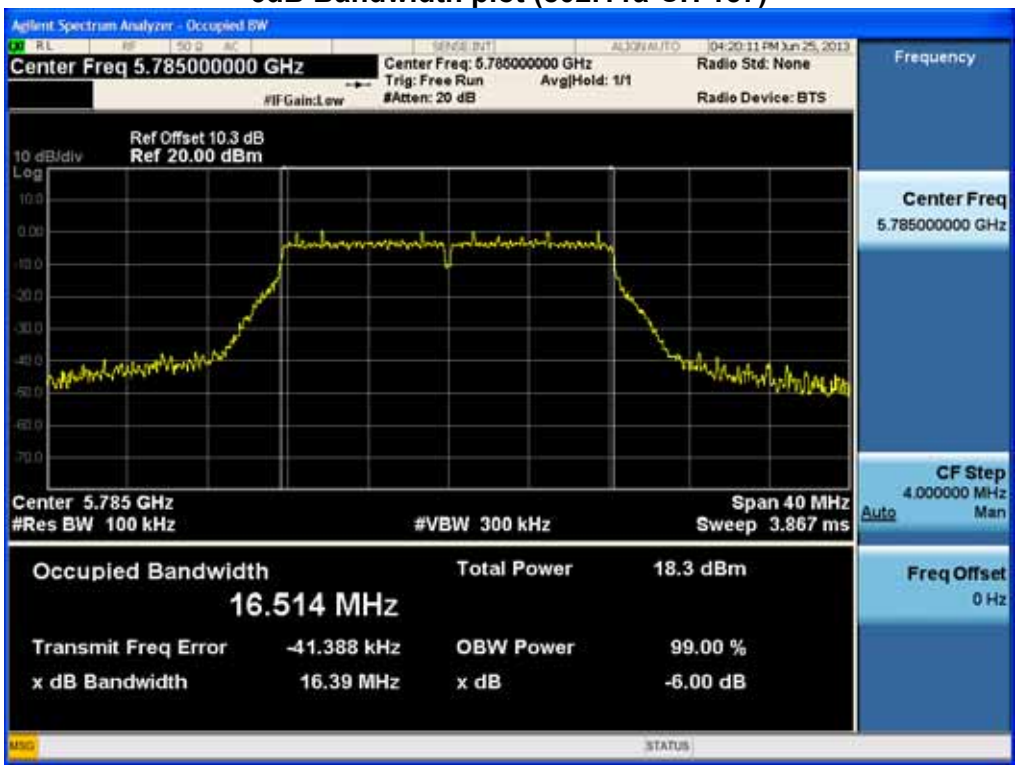


5.8 GHz Band

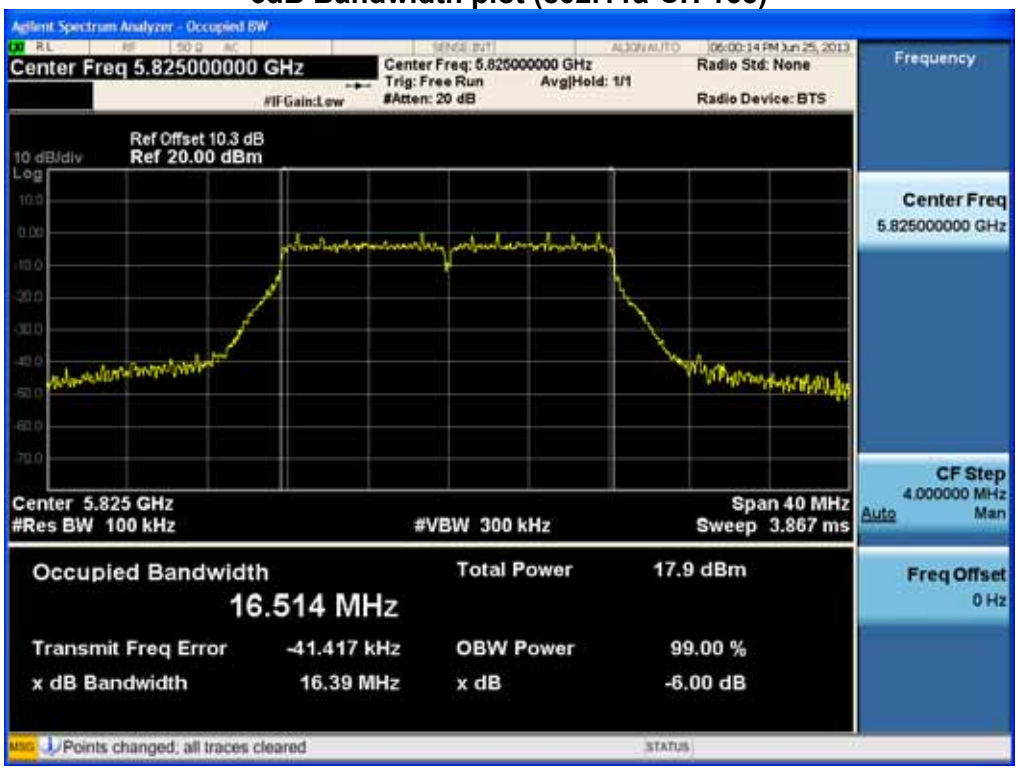
6dB Bandwidth plot (802.11a-CH 149)



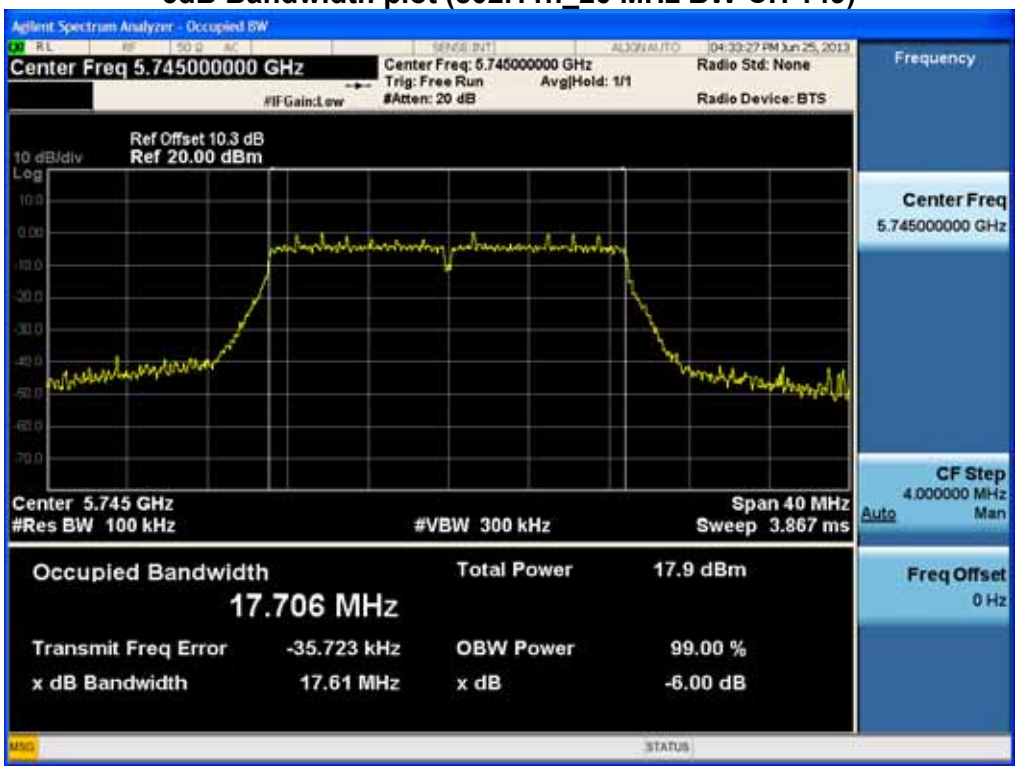
6dB Bandwidth plot (802.11a-CH 157)



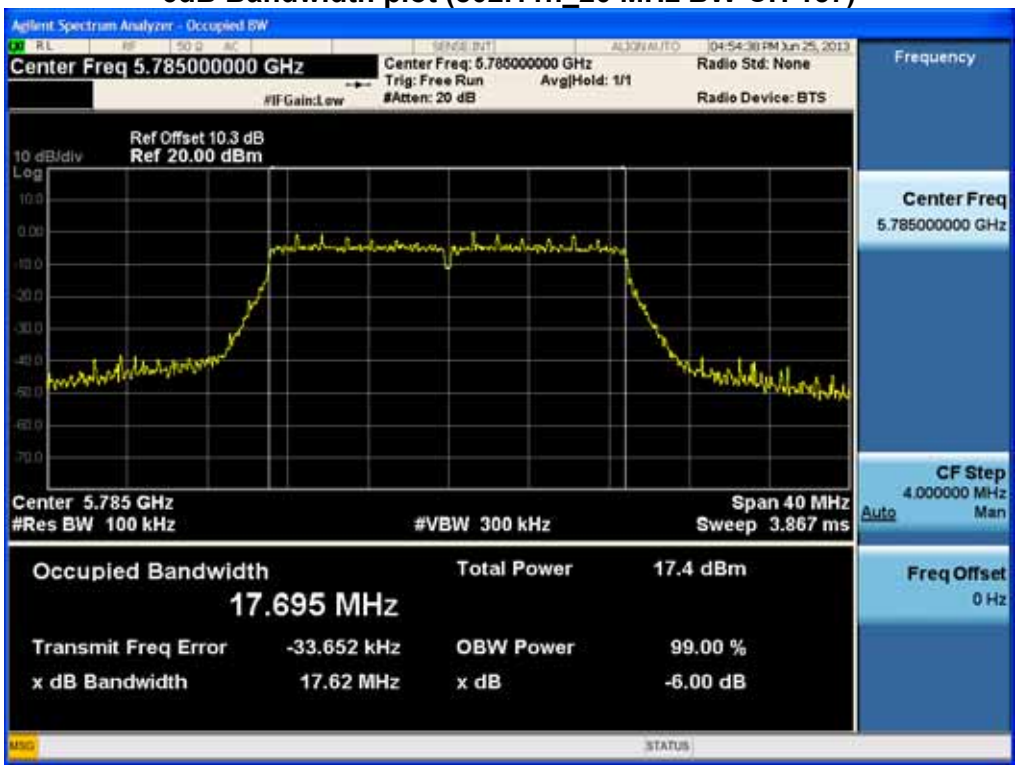
6dB Bandwidth plot (802.11a-CH 165)



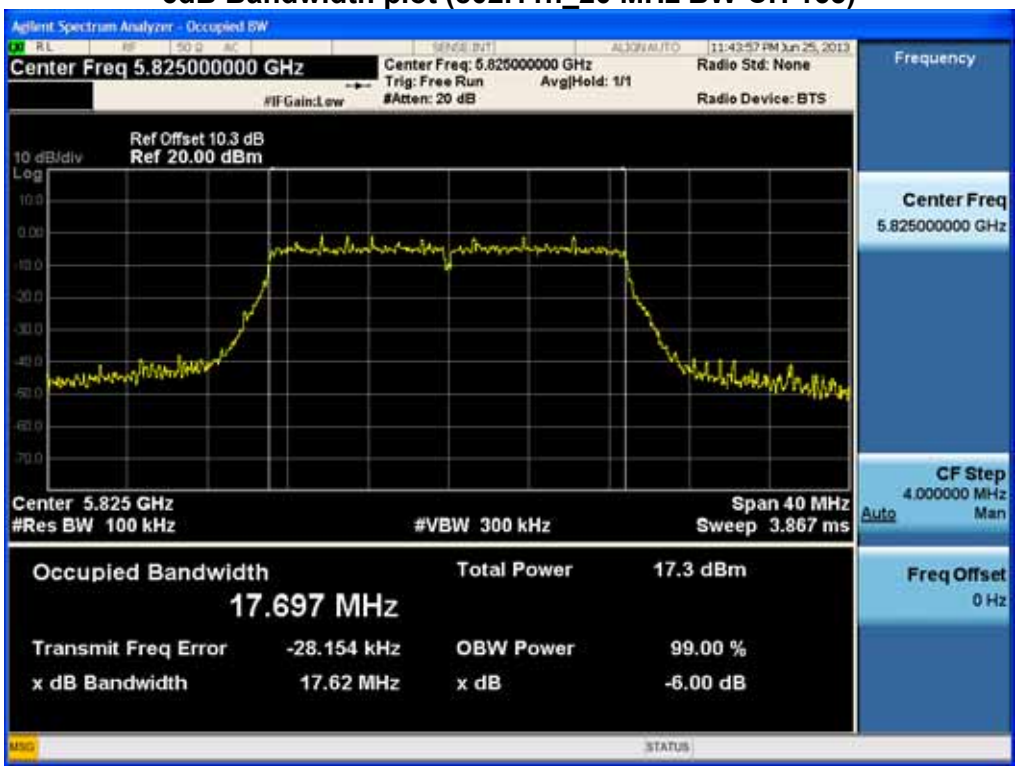
6dB Bandwidth plot (802.11n_20 MHz BW-CH 149)



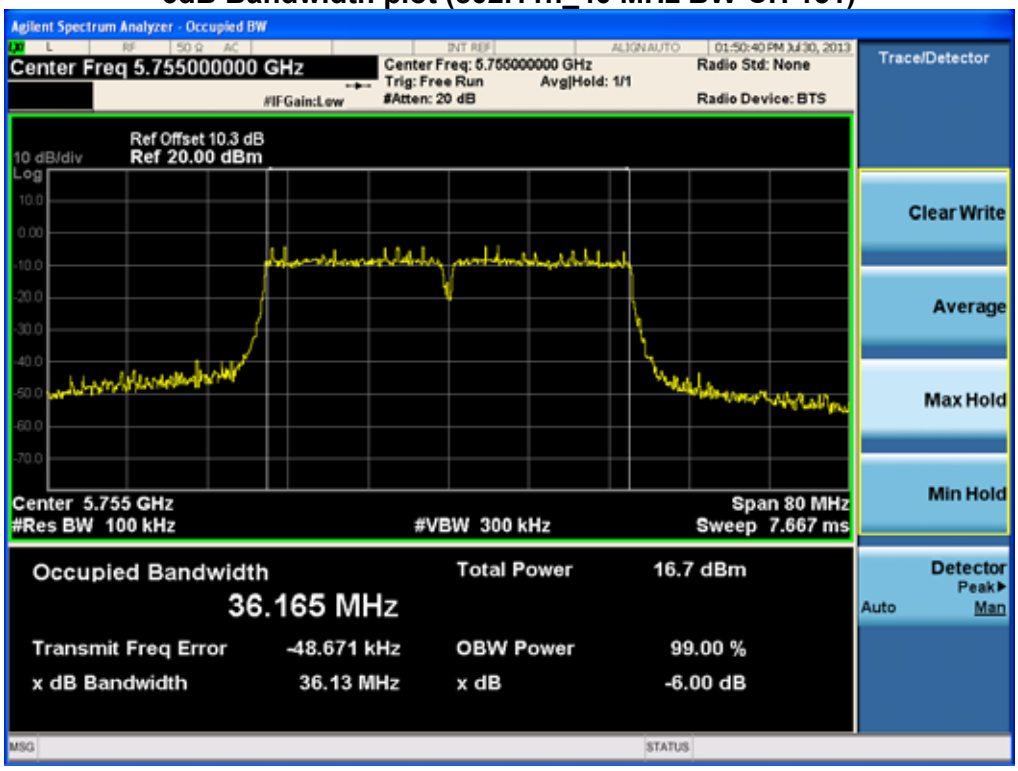
6dB Bandwidth plot (802.11n_20 MHz BW-CH 157)



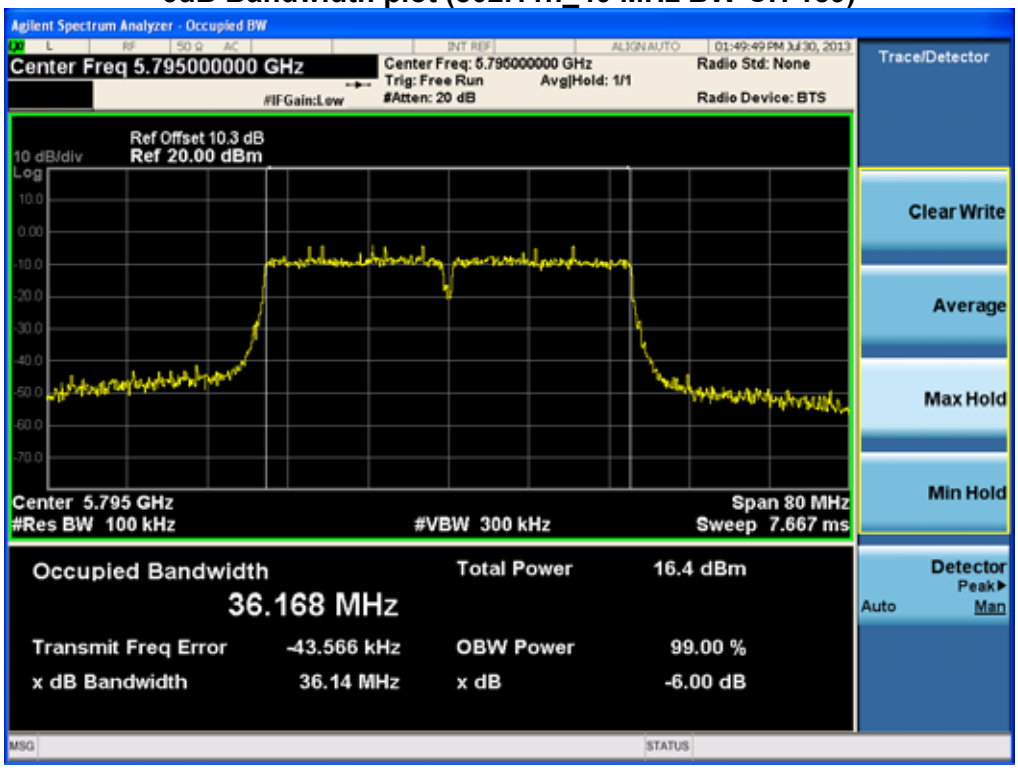
6dB Bandwidth plot (802.11n_20 MHz BW-CH 165)



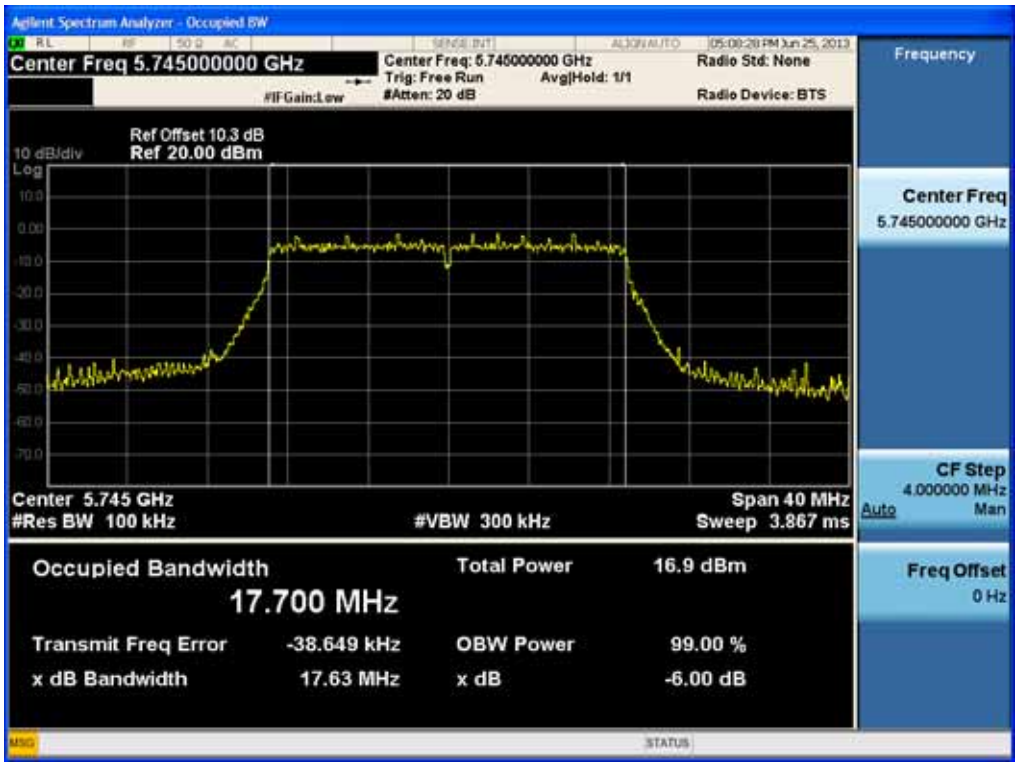
6dB Bandwidth plot (802.11n_40 MHz BW-CH 151)



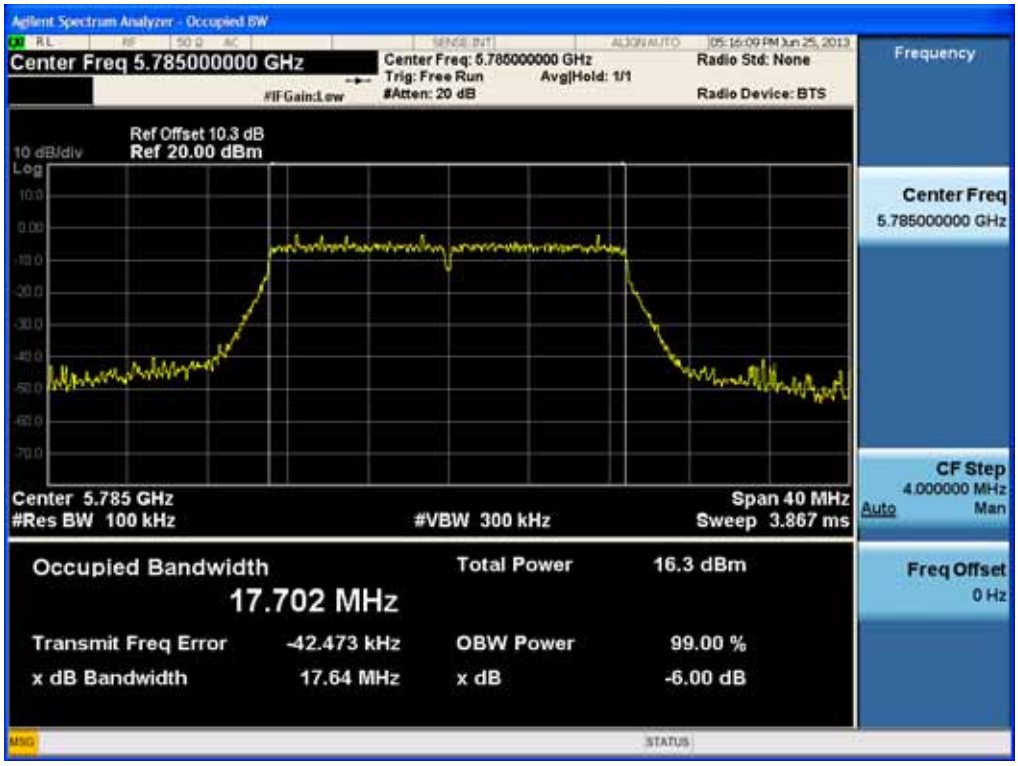
6dB Bandwidth plot (802.11n_40 MHz BW-CH 159)



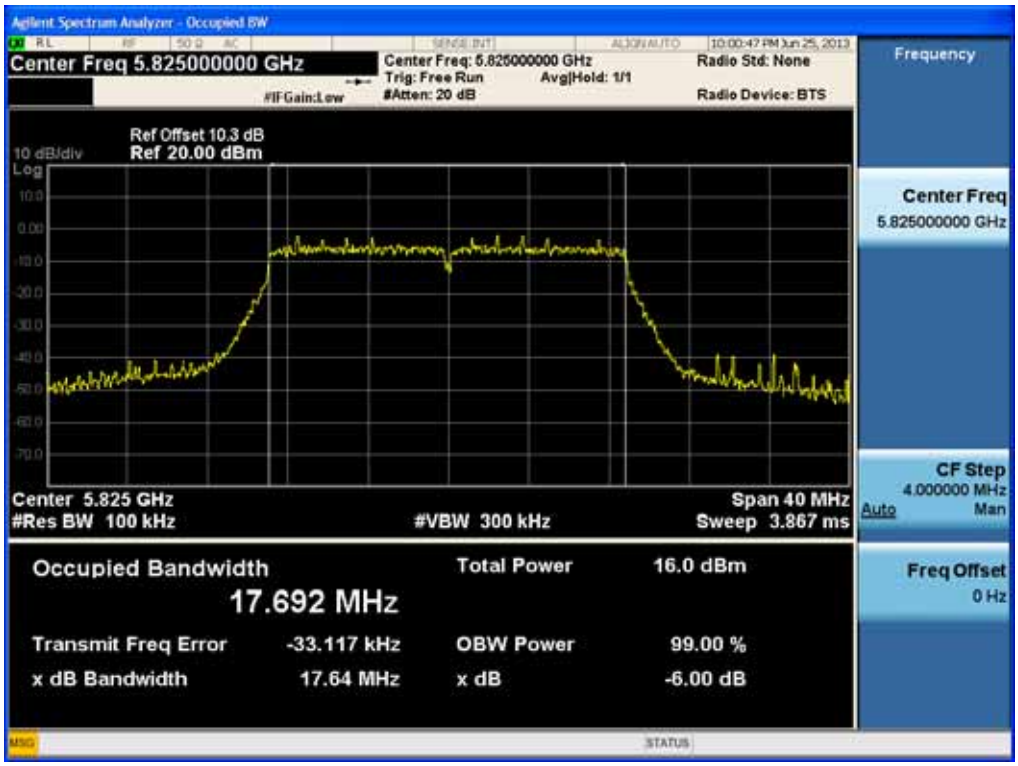
Conducted Output Power (802.11ac_20 MHz BW-CH 149)



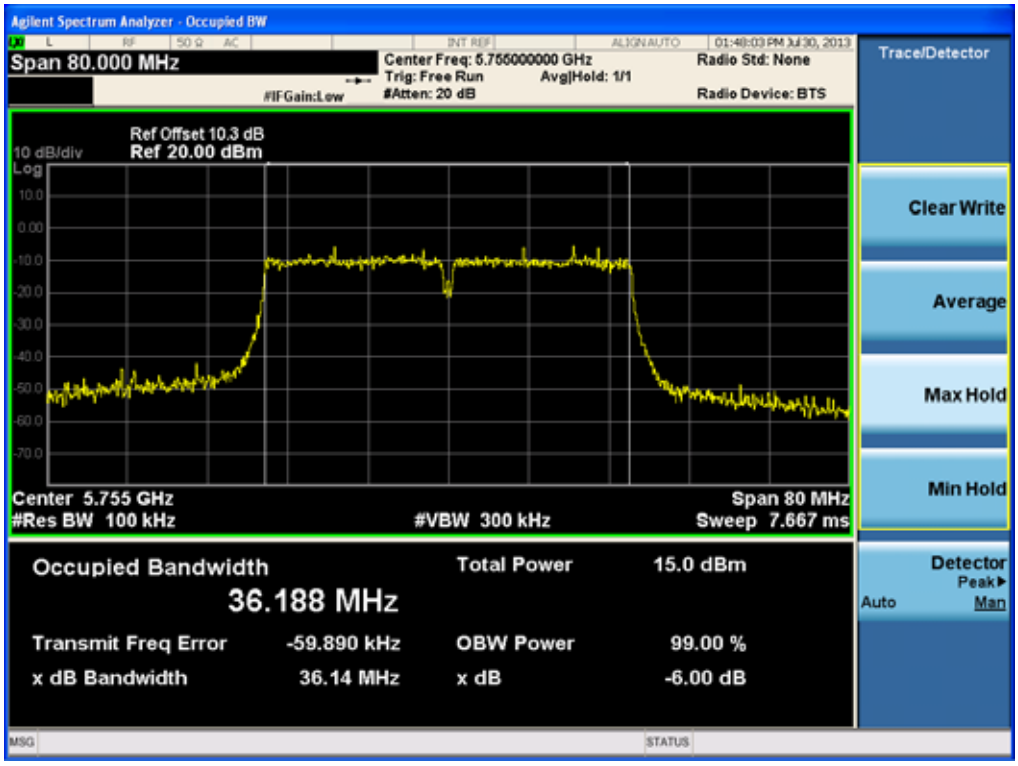
Conducted Output Power (802.11ac_20 MHz BW-CH 157)



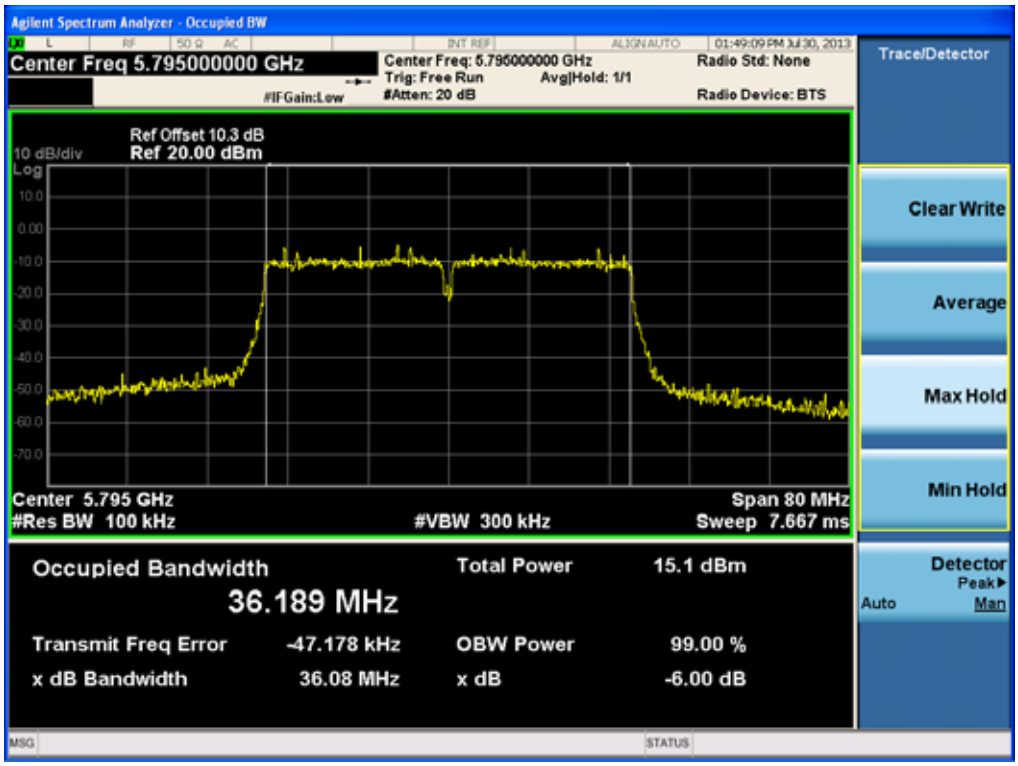
Conducted Output Power (802.11ac_20 MHz BW-CH 165)



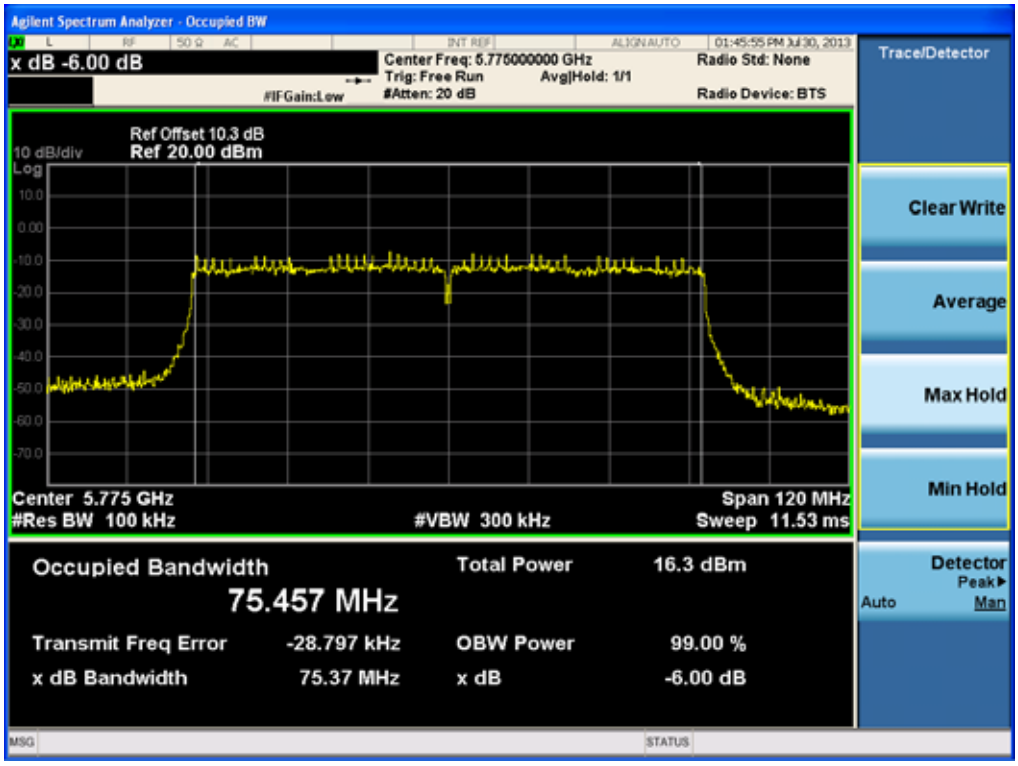
Conducted Output Power (802.11ac_40 MHz BW-CH 151)



Conducted Output Power (802.11ac_40 MHz BW-CH 159)



Conducted Output Power (802.11ac_80 MHz BW-CH 155)



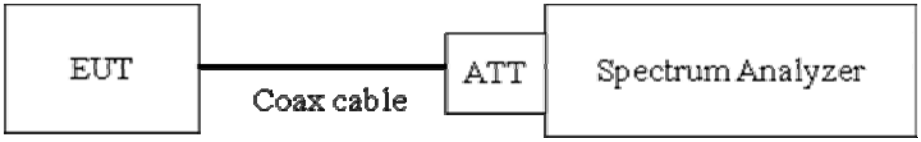
8.3 OUTPUT POWER (802.11a/b/g/n/ac)

Test Requirements and limit, §15.247(b)(3)

A transmitter antenna terminal of EUT is connected to the input of a Spectrum Analyzer. Measurement is made while the EUT is operating in transmission mode at the appropriate frequencies.

The maximum permissible conducted output power is 1 Watt.

▣ TEST CONFIGURATION



▣ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer. We use the spectrum analyzer's integrated band power measurement function.

The Spectrum Analyzer is set to

▪ Peak Power (Procedure 9.1.2 in KDB 558074, issued 04/09/2013)

RBW = 1 MHz

VBW ≥ 3 x RBW

SPAN ≥ 1.5 x DTS bandwidth

Detector Mode = Peak

Sweep = auto couple

Trace Mode = max hold

Allow trace to fully stabilize.

Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select peak detector).

▪ Average Power (Procedure 9.2.2.4 in KDB 558074, issued 04/09/2013)

Measure the duty cycle

Set span to at least 1.5 times the OBW

RBW = 1-5 % of the OBW, not to exceed 1 MHz.

VBW ≥ 3 x RBW.

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

Sweep time = auto.

Detector = RMS(i.e., power averaging)

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

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

Compute power by integrating the spectrum across the OBW of the signal using the instrument's band

power measurement function with band limits set equal to the OBW band edges.

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.

▣ Sample Calculation

Output Power = Reading Value + ATT loss + Cable loss(1 ea) + Duty Cycle Factor

Output Power = 10 dBm + 10 dB + 0.8 dB + 0.2 dB = 21.0 dBm

Note :

1. Spectrum reading values are not plot data. The power results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset = Attenuator loss + Cable loss
3. We apply to the offset in the 2.4 GHz and 5.8 GHz range that was rounded off to the closest tenth dB. So, 10.2 dB is offset for 2.4 GHz Band and 10.3 dB is offset for 5.8 GHz Band.

   Actual value of loss for the attenuator and cable combination is below table.

Band	Frequency(MHz)	Loss(dB)
2.4 GHz	2412	10.21
	2437	10.24
	2462	10.24
5.8 GHz	5745	10.31
	5755	10.30
	5785	10.29
	5795	10.26
	5825	10.28

(Actual value of loss for the attenuator and cable combination)

▣ TEST RESULTS-Peak

Conducted Output Power Measurements (802.11b Mode)

802.11b Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
2412	1	1 Mbps	18.16	30
		2 Mbps	18.43	30
		5.5 Mbps	19.71	30
		11 Mbps	21.59	30
2437	6	1 Mbps	18.06	30
		2 Mbps	18.44	30
		5.5 Mbps	19.72	30
		11 Mbps	21.61	30
2462	11	1 Mbps	18.21	30
		2 Mbps	18.32	30
		5.5 Mbps	19.64	30
		11 Mbps	21.50	30

Conducted Output Power Measurements (802.11g Mode)

802.11g Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
2412	1	6 Mbps	20.61	30
		9 Mbps	20.80	30
		12 Mbps	20.65	30
		18 Mbps	20.77	30
		24 Mbps	21.03	30
		36 Mbps	21.21	30
		48 Mbps	21.27	30
		54 Mbps	21.21	30
2437	6	6 Mbps	20.43	30
		9 Mbps	20.52	30
		12 Mbps	20.45	30
		18 Mbps	20.47	30
		24 Mbps	20.68	30
		36 Mbps	20.79	30
		48 Mbps	20.87	30
		54 Mbps	20.89	30
2462	11	6 Mbps	20.43	30
		9 Mbps	20.62	30
		12 Mbps	20.56	30
		18 Mbps	20.63	30
		24 Mbps	20.89	30
		36 Mbps	21.09	30
		48 Mbps	21.21	30
		54 Mbps	21.16	30

Conducted Output Power Measurements (802.11n Mode)

802.11n Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
2412	1	6.5 Mbps	19.73	30
		13 Mbps	19.79	30
		19.5 Mbps	19.83	30
		26 Mbps	20.37	30
		39 Mbps	20.40	30
		52 Mbps	20.40	30
		58.5 Mbps	20.48	30
		65 Mbps	20.44	30
2437	6	6.5 Mbps	19.55	30
		13 Mbps	19.73	30
		19.5 Mbps	19.81	30
		26 Mbps	20.19	30
		39 Mbps	20.27	30
		52 Mbps	20.24	30
		58.5 Mbps	20.35	30
		65 Mbps	20.31	30
2462	11	6.5 Mbps	19.49	30
		13 Mbps	19.85	30
		19.5 Mbps	19.75	30
		26 Mbps	20.33	30
		39 Mbps	20.27	30
		52 Mbps	20.34	30
		58.5 Mbps	20.40	30
		65 Mbps	20.28	30

Conducted Output Power Measurements (802.11ac Mode)

802.11ac Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
2412	1	6.5 Mbps	18.87	30
		13 Mbps	18.96	30
		19.5 Mbps	18.85	30
		26 Mbps	19.46	30
		39 Mbps	19.38	30
		52 Mbps	19.52	30
		58.5 Mbps	19.55	30
		65 Mbps	19.57	30
		78 Mbps	19.71	30
2437	6	6.5 Mbps	18.44	30
		13 Mbps	19.02	30
		19.5 Mbps	18.87	30
		26 Mbps	19.34	30
		39 Mbps	19.40	30
		52 Mbps	19.37	30
		58.5 Mbps	19.47	30
		65 Mbps	19.36	30
		78 Mbps	19.47	30
2462	11	6.5 Mbps	18.45	30
		13 Mbps	18.76	30
		19.5 Mbps	19.02	30
		26 Mbps	19.54	30
		39 Mbps	19.44	30
		52 Mbps	19.54	30
		58.5 Mbps	19.60	30
		65 Mbps	19.41	30
		78 Mbps	19.58	30

Conducted Output Power Measurements (802.11a Mode: 5745~5825)

802.11a Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5745	149	6 Mbps	19.68	30
		9 Mbps	19.67	30
		12 Mbps	19.48	30
		18 Mbps	19.48	30
		24 Mbps	19.69	30
		36 Mbps	19.70	30
		48 Mbps	19.84	30
		54 Mbps	19.73	30
5785	157	6 Mbps	19.31	30
		9 Mbps	19.27	30
		12 Mbps	19.05	30
		18 Mbps	19.13	30
		24 Mbps	19.30	30
		36 Mbps	19.37	30
		48 Mbps	19.61	30
		54 Mbps	19.47	30
5825	165	6 Mbps	18.96	30
		9 Mbps	18.95	30
		12 Mbps	18.67	30
		18 Mbps	18.79	30
		24 Mbps	18.93	30
		36 Mbps	19.05	30
		48 Mbps	19.29	30
		54 Mbps	19.10	30

Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5745~5825)

802.11n Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5745	149	6.5 Mbps	18.79	30
		13 Mbps	18.52	30
		19.5 Mbps	18.55	30
		26 Mbps	19.05	30
		39 Mbps	18.85	30
		52 Mbps	18.86	30
		58.5 Mbps	18.89	30
		65 Mbps	18.95	30
5785	157	6.5 Mbps	18.24	30
		13 Mbps	18.01	30
		19.5 Mbps	17.99	30
		26 Mbps	18.57	30
		39 Mbps	18.37	30
		52 Mbps	18.41	30
		58.5 Mbps	18.39	30
		65 Mbps	18.31	30
5825	165	6.5 Mbps	18.09	30
		13 Mbps	17.91	30
		19.5 Mbps	17.97	30
		26 Mbps	18.17	30
		39 Mbps	18.31	30
		52 Mbps	18.15	30
		58.5 Mbps	18.30	30
		65 Mbps	18.28	30

Conducted Output Power Measurements (802.11n_40 MHz BW Mode: 5755~5795)

802.11n Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5755	151	13.5 Mbps	18.35	30
		27 Mbps	17.96	30
		40.5 Mbps	18.17	30
		54 Mbps	18.53	30
		81 Mbps	18.49	30
		108 Mbps	18.43	30
		121.5 Mbps	18.42	30
		135 Mbps	18.42	30
5795	159	13.5 Mbps	17.88	30
		27 Mbps	17.58	30
		40.5 Mbps	18.19	30
		54 Mbps	18.44	30
		81 Mbps	18.46	30
		108 Mbps	17.81	30
		121.5 Mbps	17.75	30
		135 Mbps	17.70	30

Conducted Output Power Measurements (802.11ac_20 MHz BW Mode: 5745~5825)

802.11ac Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5745	149	6.5	17.79	30
		13	17.50	30
		19.5	17.44	30
		26	17.98	30
		39	17.90	30
		52	17.92	30
		58.5	17.95	30
		65	17.86	30
		78	17.82	30
5785	157	6.5	17.37	30
		13	17.09	30
		19.5	17.14	30
		26	17.62	30
		39	17.59	30
		52	17.58	30
		58.5	17.69	30
		65	17.46	30
		78	17.48	30
5825	165	6.5	16.95	30
		13	16.72	30
		19.5	16.73	30
		26	17.25	30
		39	17.16	30
		52	17.22	30
		58.5	17.21	30
		65	17.14	30
		78	16.97	30

Conducted Output Power Measurements (802.11ac_40 MHz BW Mode: 5755~5795)

802.11ac Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5755	151	13.5	17.60	30
		27	17.37	30
		40.5	17.22	30
		54	17.60	30
		81	17.40	30
		108	17.44	30
		121.5	17.40	30
		135	17.49	30
		162	17.42	30
		180	17.39	30
5795	159	13.5	17.08	30
		27	17.26	30
		40.5	16.77	30
		54	17.10	30
		81	17.03	30
		108	16.99	30
		121.5	17.46	30
		135	17.04	30
		162	17.33	30
		180	16.92	30

Conducted Output Power Measurements (802.11ac_80 MHz BW Mode: 5775)

802.11ac Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
5775	155	29.3	17.82	30
		58.5	17.54	30
		87.8	17.26	30
		117	17.62	30
		175.5	17.34	30
		234	17.46	30
		263.3	17.30	30
		292.5	17.35	30
		351	17.42	30
		390	17.27	30

▣ TEST RESULTS-Average

Conducted Output Power Measurements (802.11b Mode)

802.11b Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
2412	1	1 Mbps	15.36	0.031	15.39	30
		2 Mbps	15.27	0.062	15.33	30
		5.5 Mbps	15.20	0.174	15.38	30
		11 Mbps	15.15	0.333	15.49	30
2437	6	1 Mbps	15.23	0.031	15.26	30
		2 Mbps	15.16	0.062	15.22	30
		5.5 Mbps	15.18	0.174	15.35	30
		11 Mbps	14.99	0.333	15.32	30
2462	11	1 Mbps	15.32	0.031	15.35	30
		2 Mbps	15.25	0.062	15.31	30
		5.5 Mbps	15.19	0.174	15.37	30
		11 Mbps	14.93	0.333	15.26	30

Conducted Output Power Measurements (802.11g Mode)

802.11g Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
2412	1	6 Mbps	12.40	0.209	12.61	30
		9 Mbps	12.40	0.308	12.71	30
		12 Mbps	12.35	0.417	12.77	30
		18 Mbps	12.28	0.583	12.87	30
		24 Mbps	11.92	0.758	12.68	30
		36 Mbps	11.76	1.064	12.82	30
		48 Mbps	11.54	1.354	12.90	30
		54 Mbps	11.28	1.491	12.77	30
2437	6	6 Mbps	12.51	0.209	12.72	30
		9 Mbps	12.44	0.308	12.75	30
		12 Mbps	12.16	0.417	12.58	30
		18 Mbps	12.11	0.583	12.69	30
		24 Mbps	12.00	0.758	12.75	30
		36 Mbps	11.57	1.064	12.63	30
		48 Mbps	11.52	1.354	12.87	30
		54 Mbps	11.22	1.491	12.71	30
2462	11	6 Mbps	12.36	0.209	12.57	30
		9 Mbps	12.31	0.308	12.62	30
		12 Mbps	12.26	0.417	12.68	30
		18 Mbps	12.11	0.583	12.69	30
		24 Mbps	12.00	0.758	12.76	30
		36 Mbps	11.56	1.064	12.63	30
		48 Mbps	11.47	1.354	12.83	30
		54 Mbps	11.36	1.491	12.86	30

Conducted Output Power Measurements (802.11n Mode)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
2412	1	6.5 Mbps	11.44	0.231	11.67	30
		13 Mbps	11.19	0.431	11.62	30
		19.5 Mbps	11.14	0.616	11.75	30
		26 Mbps	10.94	0.788	11.73	30
		39 Mbps	10.80	1.108	11.91	30
		52 Mbps	10.51	1.369	11.88	30
		58.5 Mbps	10.47	1.502	11.97	30
		65 Mbps	10.27	1.605	11.88	30
2437	6	6.5 Mbps	11.46	0.231	11.69	30
		13 Mbps	11.06	0.431	11.49	30
		19.5 Mbps	11.06	0.616	11.68	30
		26 Mbps	10.77	0.788	11.56	30
		39 Mbps	10.64	1.108	11.75	30
		52 Mbps	10.29	1.369	11.66	30
		58.5 Mbps	10.23	1.502	11.73	30
		65 Mbps	10.17	1.605	11.78	30
2462	11	6.5 Mbps	11.24	0.231	11.47	30
		13 Mbps	11.14	0.431	11.57	30
		19.5 Mbps	11.01	0.616	11.62	30
		26 Mbps	10.85	0.788	11.64	30
		39 Mbps	10.60	1.108	11.71	30
		52 Mbps	10.46	1.369	11.83	30
		58.5 Mbps	10.31	1.502	11.81	30
		65 Mbps	10.08	1.605	11.69	30

Conducted Output Power Measurements (802.11ac Mode)

802.11ac Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
2412	1	6.5 Mbps	10.61	0.223	10.83	30
		13 Mbps	10.17	0.427	10.60	30
		19.5 Mbps	10.17	0.614	10.79	30
		26 Mbps	10.06	0.776	10.84	30
		39 Mbps	9.64	1.087	10.73	30
		52 Mbps	9.46	1.338	10.79	30
		58.5 Mbps	9.40	1.469	10.87	30
		65 Mbps	9.49	1.582	11.07	30
		78 Mbps	9.19	1.783	10.98	30
2437	6	6.5 Mbps	10.36	0.223	10.58	30
		13 Mbps	10.35	0.427	10.78	30
		19.5 Mbps	10.17	0.614	10.78	30
		26 Mbps	10.07	0.776	10.85	30
		39 Mbps	9.89	1.087	10.98	30
		52 Mbps	9.50	1.338	10.83	30
		58.5 Mbps	9.39	1.469	10.86	30
		65 Mbps	9.42	1.582	11.00	30
		78 Mbps	9.01	1.783	10.79	30
2462	11	6.5 Mbps	10.27	0.223	10.50	30
		13 Mbps	10.13	0.427	10.56	30
		19.5 Mbps	10.23	0.614	10.84	30
		26 Mbps	10.22	0.776	11.00	30
		39 Mbps	9.75	1.087	10.84	30
		52 Mbps	9.64	1.338	10.98	30
		58.5 Mbps	9.71	1.469	11.18	30
		65 Mbps	9.22	1.582	10.80	30
		78 Mbps	9.09	1.783	10.87	30

Conducted Output Power Measurements (802.11a Mode: 5745~5825)

802.11a Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5745	149	6 Mbps	12.02	0.218	12.24	30
		9 Mbps	11.86	0.328	12.19	30
		12 Mbps	11.86	0.431	12.29	30
		18 Mbps	11.63	0.636	12.26	30
		24 Mbps	11.47	0.819	12.29	30
		36 Mbps	11.15	1.149	12.30	30
		48 Mbps	10.93	1.470	12.40	30
		54 Mbps	10.73	1.614	12.34	30
5785	157	6 Mbps	11.43	0.218	11.65	30
		9 Mbps	11.47	0.328	11.80	30
		12 Mbps	11.40	0.431	11.83	30
		18 Mbps	11.33	0.636	11.97	30
		24 Mbps	11.12	0.819	11.94	30
		36 Mbps	10.80	1.149	11.95	30
		48 Mbps	10.52	1.470	11.99	30
		54 Mbps	10.35	1.614	11.96	30
5825	165	6 Mbps	11.09	0.218	11.30	30
		9 Mbps	11.04	0.328	11.37	30
		12 Mbps	11.07	0.431	11.50	30
		18 Mbps	11.00	0.636	11.63	30
		24 Mbps	10.72	0.819	11.54	30
		36 Mbps	10.31	1.149	11.46	30
		48 Mbps	10.18	1.470	11.65	30
		54 Mbps	10.03	1.614	11.64	30

Conducted Output Power Measurements (802.11n_20 MHz BW Mode: 5745~5825)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5745	149	6.5 Mbps	10.86	0.243	11.11	30
		13 Mbps	10.93	0.456	11.39	30
		19.5 Mbps	10.84	0.658	11.50	30
		26 Mbps	10.75	0.872	11.62	30
		39 Mbps	10.14	1.186	11.32	30
		52 Mbps	9.84	1.484	11.32	30
		58.5 Mbps	9.70	1.628	11.33	30
		65 Mbps	9.64	1.729	11.37	30
5785	157	6.5 Mbps	10.47	0.243	10.71	30
		13 Mbps	10.32	0.456	10.78	30
		19.5 Mbps	10.09	0.658	10.75	30
		26 Mbps	9.97	0.872	10.84	30
		39 Mbps	9.79	1.186	10.98	30
		52 Mbps	9.40	1.484	10.88	30
		58.5 Mbps	9.30	1.628	10.93	30
		65 Mbps	9.08	1.729	10.81	30
5825	165	6.5 Mbps	10.25	0.243	10.50	30
		13 Mbps	10.27	0.456	10.72	30
		19.5 Mbps	9.98	0.658	10.64	30
		26 Mbps	9.83	0.872	10.70	30
		39 Mbps	9.62	1.186	10.81	30
		52 Mbps	9.33	1.484	10.81	30
		58.5 Mbps	9.07	1.628	10.69	30
		65 Mbps	8.97	1.729	10.70	30

Conducted Output Power Measurements (802.11n_40 MHz BW Mode: 5755~5795)

802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5755	151	13.5 Mbps	10.26	0.432	10.69	30
		27 Mbps	9.80	0.801	10.60	30
		40.5 Mbps	9.69	1.114	10.80	30
		54 Mbps	9.39	1.385	10.77	30
		81 Mbps	8.98	1.839	10.82	30
		108 Mbps	8.72	2.188	10.90	30
		121.5 Mbps	8.39	2.323	10.72	30
		135 Mbps	8.25	2.488	10.74	30
5795	159	13.5 Mbps	9.74	0.432	10.17	30
		27 Mbps	9.45	0.801	10.26	30
		40.5 Mbps	9.80	1.114	10.91	30
		54 Mbps	9.33	1.385	10.71	30
		81 Mbps	8.97	1.839	10.81	30
		108 Mbps	8.01	2.188	10.20	30
		121.5 Mbps	7.86	2.323	10.18	30
		135 Mbps	7.69	2.488	10.18	30

Conducted Output Power Measurements (802.11ac_20 MHz BW Mode: 5745~5825)

802.11ac Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5745	149	6.5	9.92	0.235	10.15	30
		13	9.77	0.452	10.23	30
		19.5	9.62	0.664	10.29	30
		26	9.52	0.831	10.35	30
		39	9.15	1.077	10.23	30
		52	8.91	1.315	10.22	30
		58.5	8.75	1.437	10.19	30
		65	8.68	1.541	10.22	30
		78	8.55	1.761	10.31	30
5785	157	6.5	9.47	0.235	9.71	30
		13	9.56	0.452	10.01	30
		19.5	9.28	0.664	9.94	30
		26	9.23	0.831	10.06	30
		39	8.90	1.077	9.98	30
		52	8.63	1.315	9.95	30
		58.5	8.60	1.437	10.04	30
		65	8.49	1.541	10.03	30
		78	8.19	1.761	9.96	30
5825	165	6.5	9.09	0.235	9.32	30
		13	9.06	0.452	9.52	30
		19.5	9.02	0.664	9.68	30
		26	8.78	0.831	9.61	30
		39	8.43	1.077	9.50	30
		52	8.06	1.315	9.38	30
		58.5	8.09	1.437	9.53	30
		65	7.91	1.541	9.45	30
		78	7.79	1.761	9.55	30

Conducted Output Power Measurements (802.11ac_40 MHz BW Mode: 5755~5795)

802.11ac Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5755	151	13.5	9.52	0.430	9.95	30
		27	9.37	0.795	10.17	30
		40.5	8.88	1.113	9.99	30
		54	8.57	1.364	9.93	30
		81	8.05	1.819	9.87	30
		108	7.73	2.144	9.88	30
		121.5	7.59	2.268	9.85	30
		135	7.56	2.422	9.98	30
		162	7.23	2.673	9.90	30
		180	7.33	2.754	10.08	30
5795	159	13.5	8.99	0.430	9.42	30
		27	9.11	0.795	9.90	30
		40.5	8.38	1.113	9.49	30
		54	8.03	1.364	9.40	30
		81	7.61	1.819	9.43	30
		108	7.27	2.144	9.41	30
		121.5	7.62	2.268	9.89	30
		135	7.01	2.422	9.43	30
		162	7.09	2.673	9.77	30
		180	6.59	2.754	9.34	30

Conducted Output Power Measurements (802.11ac_80 MHz BW Mode: 5775)

802.11ac Mode		Rate (Mbps)	Measured Power(dBm)	Duty Cycle Factor	Measured Power(dBm) + Duty Cycle Factor	Limit (dBm)
Frequency [MHz]	Channel No.					
5775	155	29.3	9.39	0.838	10.23	30
		58.5	8.70	1.441	10.14	30
		87.8	8.24	1.896	10.13	30
		117	7.84	2.213	10.05	30
		175.5	7.34	2.760	10.10	30
		234	6.95	3.050	10.00	30
		263.3	6.71	3.261	9.97	30
		292.5	6.70	3.366	10.06	30
		351	6.44	3.588	10.03	30
		390	6.30	3.701	10.00	30

▣ RESULT PLOTS-Peak

Conducted Output Power (802.11b-CH 1) 1Mbps

Conducted Output Power (802.11b-CH 1) 2Mbps

Conducted Output Power (802.11b-CH 1) 5.5Mbps

Conducted Output Power (802.11b-CH 1) 11Mbps

Conducted Output Power (802.11b-CH 6) 1Mbps

Conducted Output Power (802.11b-CH 6) 2Mbps

Conducted Output Power (802.11b-CH 6) 5.5Mbps

Conducted Output Power (802.11b-CH 6) 11Mbps

Conducted Output Power (802.11b-CH 11) 1Mbps

Conducted Output Power (802.11b-CH 11) 2Mbps

Conducted Output Power (802.11b-CH 11) 5.5Mbps

Conducted Output Power (802.11b-CH 11) 11Mbps

Conducted Output Power (802.11g-CH 1) 6Mbps

Conducted Output Power (802.11g-CH 1) 9Mbps

Conducted Output Power (802.11g-CH 1) 12Mbps

Conducted Output Power (802.11g-CH 1) 18Mbps

Conducted Output Power (802.11g-CH 1) 24Mbps

Conducted Output Power (802.11g-CH 1) 36Mbps

Conducted Output Power (802.11g-CH 1) 48Mbps

Conducted Output Power (802.11g-CH 1) 54Mbps

Conducted Output Power (802.11g-CH 6) 6Mbps

Conducted Output Power (802.11g-CH 6) 9Mbps

Conducted Output Power (802.11g-CH 6) 12Mbps

Conducted Output Power (802.11g-CH 6) 18Mbps

Conducted Output Power (802.11g-CH 6) 24Mbps

Conducted Output Power (802.11g-CH 6) 36Mbps

Conducted Output Power (802.11g-CH 6) 48Mbps

Conducted Output Power (802.11g-CH 6) 54Mbps

Conducted Output Power (802.11g-CH 11) 6Mbps

Conducted Output Power (802.11g-CH 11) 9Mbps

Conducted Output Power (802.11g-CH 11) 12Mbps

Conducted Output Power (802.11g-CH 11) 18Mbps

Conducted Output Power (802.11g-CH 11) 24Mbps

Conducted Output Power (802.11g-CH 11) 36Mbps

Conducted Output Power (802.11g-CH 11) 48Mbps

Conducted Output Power (802.11g-CH 11) 54Mbps

Conducted Output Power (802.11n-CH 1) 6.5Mbps

Conducted Output Power (802.11n-CH 1) 13Mbps

Conducted Output Power (802.11n-CH 1) 19.5Mbps

Conducted Output Power (802.11n-CH 1) 26Mbps

Conducted Output Power (802.11n-CH 1) 39Mbps

Conducted Output Power (802.11n-CH 1) 52Mbps