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FCC TEST REPORT

Under
47 CFR FCC Part 15 Subpart E § 15.407
5150 ~ 5350MHz / 5470 ~ 5725MHz / 5725 ~ 5850 MHz

Prepared For :

Shenzhen Four Seas Global Link Network Technology Co., Ltd.

Room 607-610, Block B, TAOJINDI Electronic Business Incubation Base, Tenglong Road, Longhua District, Shenzhen, China.

FCC ID: OYRCF-912AC
EUT: Wireless Adapter
Model: CF-912AC

December 11, 2015 **Issue Date:**
Original Report **Report Type:**
Eric Guo **Test Engineer:**
 **Review By:** Apollo Liu / Manager

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1. General Information

1. 1 Notes

The test results of this report relate exclusively to the test item specified in 1.5. The KMO Lab does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the KMO Lab.

1. 2 Testing Laboratory

Ke Mei Ou Laboratory Co., Ltd.

ANSI-ASQ National Accreditation Board/ACLASS ISO/IEC 17025 Accredited Lab for telecommunication standards. The Registration Number is AT-1532. The testing quality system meets with ISO/IEC-17025 requirements, This approval results is accepted by MRA of ILAC.
FCC Test Site Registration Number: 962205
IC Test Site Registration Number: 4986A-2
Internet: www.kmolab.com

1. 3 Details of Applicant

Name : Shenzhen Four Seas Global Link Network Technology Co., Ltd.
Address : Room 607-610, Block B, TAOJINDI Electronic Business Incubation Base, Tenglong Road, Longhua District, Shenzhen, China.

1. 4 Application Details

Date of Receipt of Application	: October 28, 2015
Date of Receipt of Test Item	: October 28, 2015
Date of Test	: November 13~December 11, 2015

1. 5 Test Item

Manufacturer	: Shenzhen Four Seas Jialan Electronic Technology Co., Ltd.
Address	: Floor 4, Building 9, Hongxin Industrial Park, Da Bu Xiang Community Guanlan Street, Bao'an District Shenzhen, China
Trade Name	: COMFAST
Model No.(Base)	: CF-912AC
Model No.(Extension)	: N/A
Description	: Wireless Adapter

Additional Information

Product Type	: WLAN (2TX, 2RX)
Radio Type	: Intentional Transceiver
Power Type	: DC 5V(From Host)
Modulation	: see the below table
Data Modulation	: see the below table
Date Rate (Mbps)	: see the below table
Frequency Range	: see the below table
Channel Number	: see the below table
Antenna	: see section 4.4

EUT Specification:

Items	Description	
Modulation	IEEE 802.11a: OFDM IEEE 802.11n/ac: see the below table	
Data Modulation	IEEE 802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) IEEE 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM/ 256QAM)	
Data Rate (Mbps)	IEEE 802.11a: OFDM 6,9,12,18,24,36,48, and 54 Mbps IEEE 802.11ac: MCS 0-9 up to 866.7 Mbps	
Frequency Range	Band 1: 5150 MHz ~ 5250 MHz Band 4: 5725 MHz ~ 5850 MHz	
Channel Number	9 for 20MHz bandwidth ; 4 for 40MHz bandwidth; 2 for 80MHz bandwidth	
Communication Mode	☒IP Based (Load Based)	☐Frame Based
TPC Function	☒With TPC	☐Without TPC
Weather Band	☐With 5600~5650MHz	☒Without 5600~5650MHz
Beamforming Function	☐With beamforming	☒Without beamforming
Operating Mode	☐Outdoor access point	☐Indoor access point
	☐Fixed point-to-point access points	☒Mobile and portable client devices
	☐Master	☐Slave with radar detection
	☐Slave without radar detection	

Antenna	Two (TX)		
Band width Mode	20 MHz	40 MHz	80 MHz
IEEE 802.11a	V	X	X
IEEE 802.11n	V	V	X
IEEE 802.11ac	V	V	V

Protocol	Number of Transmit Chains (NTX)	Data Rate / MCS
802.11n (HT20)	2	MCS 0-15
802.11n (HT40)	2	MCS 0-15
802.11ac (VHT20)	2	MCS 0-9/Nss1-2
802.11ac (VHT40)	2	MCS 0-9/Nss1-2
802.11ac (VHT80)	2	MCS 0-9/Nss1-2

Note 1: IEEE Std. 802.11n modulation consists of HT20 and HT40 (HT: High Throughput).
Then EUT supports HT20 and HT40.
Note 2: IEEE Std. 802.11ac modulation consists of VHT20, VHT40, VHT80 and VHG160 (VHT: Very High Throughput).
Then EUT supports VHT20, VHT40 and VHT80.
Note 3: Modulation modes consist of below configuration:
HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80: IEEE 802.11ac

1. 6 Test Standards

47 CFR FCC Part 15 Subpart E § 15.407

Note: All radiated measurements were made in all three orthogonal planes. The values reported are the maximum values.

2. Technical Test

2. 1 Summary of Test Results

The EUT has been tested according to the following specifications:

FCC Rule	Test Type	Limit	Result	Notes
2.1049 15.403(i)	26dB & 99% Bandwidth	-	PASS	Complies
15.407(e)	6dB Spectrum Bandwidth	>=500 kHz	PASS	Complies
15.407(a)	Maximum Conducted Output Power	FCC<=24 dBm	PASS	Complies
15.407(a)	Power Spectral Density	FCC<=11 dBm	PASS	Complies
15.407(b)	Unwanted Emissions	<=-17,-27 dBm	PASS	Complies.
15.207	AC Conducted Emission	15.207(a)	PASS	Complies.
15.407(g)	Frequency Stability	Within Operation Band	PASS	Complies.
15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	PASS	Complies.
15.203 & 15.407(a)	Antenna Requirement	N/A	PASS	Complies

2. 2 Antenna Requirement

Regulation

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Result

Please refer to section 4.4 in this test report; antenna connector complied with the requirements

3. EUT Modifications

No modification by test lab.

4. Conducted Power Line Test

4. 1 Test Equipment

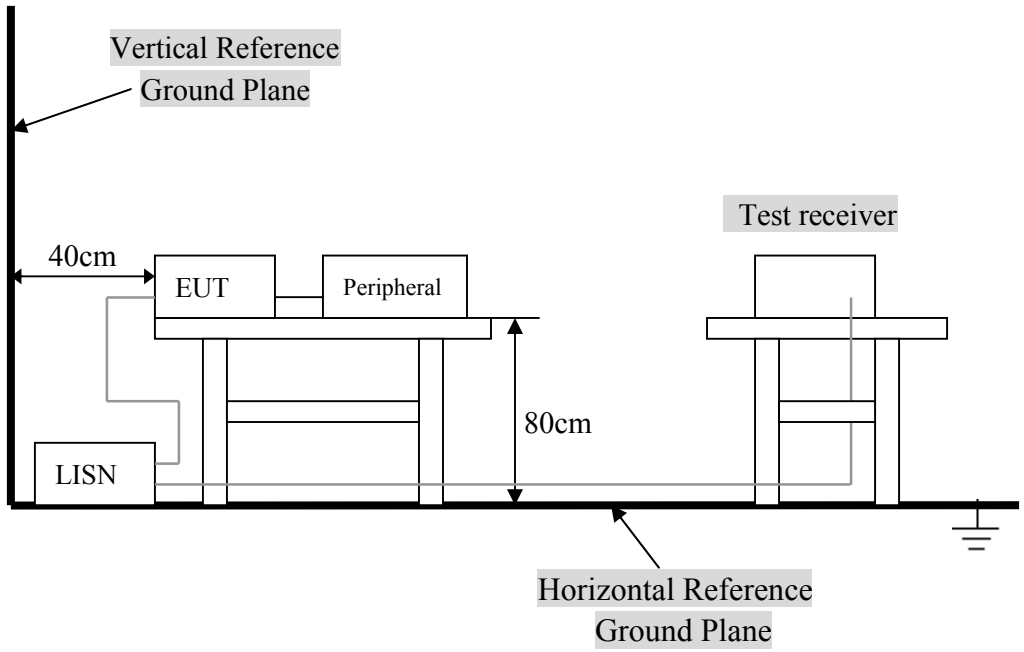
Please refer to Section 10 this report.

4. 2 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission., the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement. Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

4. 3 Test Setup

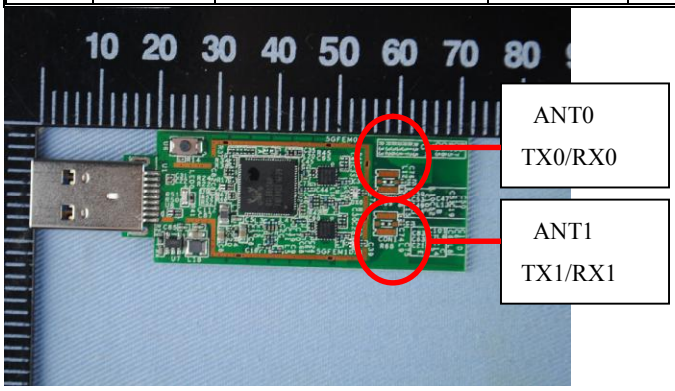


For the actual test configuration, Please refer to the related items – Photos of Testing.

4. 4 Configuration of the EUT

Antenna Specification

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)		
					2.4GHz	5GHz	BT
0	N/A	WIFI PCB Antenna	Internal	N/A	3.5	6.0	N/A
1	N/A	WIFI PCB Antenna	Internal	N/A	3.5	6.0	N/A



Note:
For IEEE 802.11a/n/ac mode (2TX/2RX): Chain 1 and Chain 2 can be used as transmitting/receiving antenna.
Chain 1 and Chain 2 could transmit/receive simultaneously.

Carrier Frequency for 5GHz Band

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz Band 1	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	40	5200 MHz	48	5240 MHz
	42	5210 MHz	-	-
5725~5850 MHz Band 4	149	5745 MHz	157	5785 MHz
	151	5755 MHz	159	5795 MHz
	153	5765 MHz	161	5805 MHz
	155	5775 MHz	165	5825 MHz
There are three bandwidth systems. For 20MHz bandwidth systems, use Channel 36, 40, 44, 48, 149, 153, 157, 161, 165. For 40MHz bandwidth systems, use Channel 38, 46, 151, 159. For 80MHz bandwidth systems, use Channel 42, 155				

Test Modes for 5GHz Band

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode		Data Rate	Channel	Chain
AC Power Conducted Emission	Normal Link		-	-	-
Max. Conducted Output Power	11a/BPSK	Band 1~4	6Mbps	36/40/44/48 /149/157/165	0+1
	11ac VHT20	Band 1~4	MCS0/Nss1	36/40/44/48/ 149/157/165	0+1
	11ac VHT40	Band 1~4	MCS0/Nss1	38/46/ 151/159	0+1
	11ac VHT80	Band 1~4	MCS0/Nss1	42/155	0+1
Power Spectral Density	11a/BPSK	Band 1~4	6Mbps	36/40/44/48 /149/157/165	0+1
	11ac VHT20	Band 1~4	MCS0/Nss1	36/40/44/48/ 149/157/165	0+1
	11ac VHT40	Band 1~4	MCS0/Nss1	38/46/ 151/159	0+1
	11ac VHT80	Band 1~4	MCS0/Nss1	42/155	0+1
26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement	11a/BPSK	Band 1~4	6Mbps	36/40/44/48 /149/157/165	0+1
	11ac VHT20	Band 1~4	MCS0/Nss1	36/40/44/48/ 149/157/165	0+1
	11ac VHT40	Band 1~4	MCS0/Nss1	38/46/ 151/159	0+1
	11ac VHT80	Band 1~4	MCS0/Nss1	42/155	0+1
6dB Spectrum Bandwidth Measurement	11a/BPSK	Band 4	6Mbps	149/157/165	0+1
	11ac VHT20	Band 4	MCS0/Nss1	149/157/165	0+1
	11ac VHT40	Band 4	MCS0/Nss1	151/159	0+1
	11ac VHT80	Band 4	MCS0/Nss1	155	0+1
Band Edge Emission	11a/BPSK	Band 1~4	6Mbps	36/40/44/48 /149/157/165	0+1
	11ac VHT20	Band 1~4	MCS0/Nss1	36/40/44/48/ 149/157/165	0+1
	11ac VHT40	Band 1~4	MCS0/Nss1	38/46/ 151/159	0+1
	11ac VHT80	Band 1~4	MCS0/Nss1	42/155	0+1
Frequency Stability	20 MHz	Band 1~4	-	40/157	0+1
	40 MHz	Band 1~4	-	38/151	0+1
	80 MHz	Band 1~4	-	42//155	0+1
Radiated Emission Above 1GHz	11a/BPSK	Band 1~4	6Mbps	36/40/44/48 /149/157/165	0+1
	11ac VHT20	Band 1~4	MCS0/Nss1	36/40/44/48/ 149/157/165	0+1
	11ac VHT40	Band 1~4	MCS0/Nss1	38/46/ 151/159	0+1
	11ac VHT80	Band 1~4	MCS0/Nss1	42/155	0+1
Radiated Emission Below 1GHz	Normal Link		-	-	-
Note: VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40. The following test modes were performed for all tests:					
For Conducted Emission test: Mode 1 is the worst case, so it was selected to record in this test report.					
Mode 1. EUT X axis - 2.4GHz WLAN Function			Mode 2. EUT X axis - 5GHz WLAN Function		
For Radiated Emission test (Below 1GHz): Mode 2 is the worst case, so it was selected to record in this test report.					
Mode 1. EUT X axis - 2.4GHz WLAN Function			Mode 2. EUT X axis - 5GHz WLAN Function		
For Radiated Emission test (Above 1GHz): Mode 1. EUT X axis					
For Co-location MPE and Radiated Emission Co-location Test: The EUT could be applied with below functions; therefore Co-location Maximum Permissible Exposure for simultaneously transmit.					
Mode 1. EUT X axis - 2.4GHz WLAN Function			Mode 2. EUT X axis - 5GHz WLAN Function		

Internal Devices

Device	Manufacturer	Model #	FCC ID
N/A			

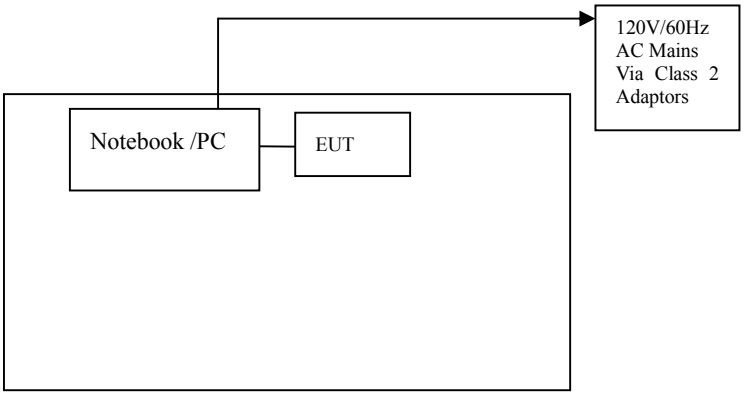
Peripherals

Device	Manufacturer	Model # Serial #	FCC ID/ DoC	Cable
Printer	HP	HP930C	DoC	1.5m unshielded power cord 1.2m unshielded data cable.
Modem	GVC	N/A	DoC	1.5m unshielded power cord 1.2m unshielded data cable.
Notebook	DELL	PP10L	DoC	1.5m unshielded power cord
Wireless ac AP	Netgear	R6300V2	PY313200227	1.5m unshielded power cord

Test Software Version	MPTool											
Mode	Test Frequency (MHz)											
	NCB: 20MHz											
	5180 MHz	5200 MHz	5240 MHz	-	-	-	-	-	-	5745 MHz	5785 MHz	5825 MHz
802.11a	62	65	69							64	80	70
802.11ac MCS0/Nss 1 VHT20	60	65	72							62	80	68
Mode	NCB: 40MHz											
802.11ac MCS0/Nss 1 VHT40	5190 MHz	5230 MHz	-	-	-	-	-	5755 MHz	5795 MHz	-	-	-
	48	69						50	59	-	-	-
Mode	NCB: 80MHz											
802.11ac MCS0/Nss 1 VHT80	5210 MHz	-	-	-	5775 MHz							
	45				50							
During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.												

4. 5 EUT Operating Condition

A. Setup the EUT and simulators as shown on follow.
B. Enable RF signal and confirm EUT active as section 4.4.



4. 6 Conducted Power Line Emission Limits

FCC Part 15 Paragraph 15.207 (dBuV)		
Frequency Range (MHz)	**Class A QP/AV**	**Class B QP/AV**
0.15 – 0.5	79/66	66-56/56-46
0.5 – 5.0	73/60	56/46
5.0 - 30	73/60	60/50

NOTE ：In the above table, the tighter limit applies at the band edges.

4. 7 Conducted Power Line Test Result

Product	: Wireless Adapter	Test Mode	: Normal Link
Test Item	: Conducted Emission Data	Temperature	: 25 ℃
Test Voltage	: DC 5V(From Host)	Humidity	: 56%RH
Test Result	: **PASS**	Adapter Model	:

The frequency spectrum from 0.15 MHz to 30 MHz was investigated. All readings are quasi -peak values with a resolution bandwidth of 9 KHz.

- Temperature ： 26 ℃
- Humidity ： 53 % RH

FCC Part 15 Paragraph 15.207							
Frequency (MHz)	**Emission (dBuV) QP**	**AV**	**LINE/ NEUTRAL**	**Limit (dBuV) QP**	**AV**	**Margin (dB) QP**	**AV**
0.154	46.89	30.31	Line	65.78	55.78	-18.89	-25.47
0.162	45.93	29.34	Neutral	65.36	55.36	-19.43	-26.02
0.182	51.58	38.25	Line	64.39	54.39	-12.81	-16.14
0.178	51.89	40.23	Neutral	64.58	54.58	-12.69	-14.35
0.194	50.16	36.49	Line	63.86	53.86	-13.70	-17.37
0.198	49.55	36.78	Neutral	63.69	53.69	-14.14	-16.91

Note: NF = No Significant Peak was Found.

Note:

1.Uncertainty in conducted emission measured is <+/ -2dB.
2.The emission levels of other frequencies were very low against the limit.
3.All Reading Levels are Quasi-Peak and Average value.
4.Emission = Meter Reading + Factor; Factor = Insertion Loss + Cable Loss.
5.Margin Value = Emission Level - Limit Value.

Conducted Emission

FCC 15.207

Test Specification: LINE&NEUTRAL

Comment:

Date: 16.NOV.2015 13:40:38

5. FCC Part 15.407 Requirements for 802.11a/n/ac Systems

5. 1 Test Equipment

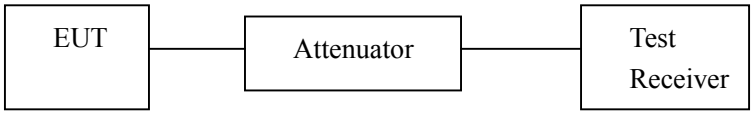
Please refer to Section 10 this report.

5. 2 Test Procedure

<table>
<tr><td colspan="3">26dB Bandwidth and 99% Occupied Bandwidth:</td></tr>
<tr><td>Test Method:</td><td colspan="2">a)The transmitter was radiated to the spectrum analyzer in peak hold mode.
b)Measure the maximum width of the emission that is 26 dB down from the peak of the emission Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.</td></tr>
<tr><td colspan="2">Test Equipment Setting – 26dB Bandwidth:</td><td>Test Equipment Setting – 99%% Bandwidth:</td></tr>
<tr><td colspan="2">a)Attenuation: Auto
b)Span Frequency: > 26dB Bandwidth
c)RBW: Approximately 1% of the emission bandwidth
d)VBW: VBW > RBW
e)Detector: Peak
f)Trace: Max Hold
g)Sweep Time: Auto</td><td>a)Span: 1.5 times to 5.0 times the OBW
b)RBW: 1 % to 5 % of the OBW
c)VBW: ≥ 3 x RBW
d)Detector: Peak
e)Trace: Max Hold</td></tr>
<tr><td colspan="3">6 dB Bandwidth:</td></tr>
<tr><td>Test Method:</td><td colspan="2">a)The transmitter was radiated to the spectrum analyzer in peak hold mode.
b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (C) Emission Bandwidth.
c)Multiple antenna system was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
d)Measured the spectrum width with power higher than 6dB below carrier.</td></tr>
<tr><td colspan="3">Test Equipment Setting:</td></tr>
<tr><td colspan="2">a)Attenuation: Auto
b)Span Frequency: > 6dB Bandwidth
c)RBW: 100kHz
d)VBW: ≥ 3 x RBW</td><td>e)Detector: Peak
f)Trace: Max Hold
g)Sweep Time: Auto</td></tr>
<tr><td colspan="3">Maximum Conducted Output Power Measurement:</td></tr>
<tr><td>Test Method:</td><td colspan="2">a)The transmitter output (antenna port) was connected to the power meter.
b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (E) Maximum conducted output power =>3. Measurement using a Power Meter (PM) =>b) Method PM-G (Measurement using a gated RF average power meter).
c)Multiple antenna systems was performed in accordance with KDB662911 D01 v02r01 Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
d)When measuring maximum conducted output power with multiple antenna systems, add every result of the values by mathematic formula.</td></tr>
<tr><td colspan="3">Test Equipment Setting: Detector - Average</td></tr>
<tr><td colspan="3">Power Spectral Density:</td></tr>
<tr><td>Test Method:</td><td colspan="2">a)The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
b)Test was performed in accordance with KDB789033 D02 v01 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (F) Maximum Power Spectral Density (PSD).
c)Multiple antenna systems was performed in accordance KDB662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements (a) Measure and sum the spectra across the outputs.
d)When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.
e)For 5.725~5.85 GHz, the measured result of PSD level must add 10log(500kHz/RBW) and the final result should ≤ 30 dBm.</td></tr>
<tr><td colspan="3">Test Equipment Setting:</td></tr>
<tr><td colspan="2">a)Attenuation: Auto
b)Span Frequency: Encompass the entire emissions bandwidth (EBW) of the signal
c)RBW: 1000 kHz
d)VBW: 3000 kHz</td><td>e)Detector: RMS
f)Trace: AVERAGE
g)Sweep Time: Auto
h)Trace Average: 100 times</td></tr>
<tr><td colspan="3">Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.</td></tr>
</table>

Frequency Stability Measurement:	
Test Method:	a)The transmitter output (antenna port) was connected to the spectrum analyzer. b)EUT have transmitted absence of modulation signal and fixed channelize. c)Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth. d)Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings. e)fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 106 ppm and the limit is less than ±20ppm (IEEE 802.11nspecification). f)The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value g)Extreme temperature is 0°C~40°C
Test Equipment Setting:	
a)Attenuation: Auto b)Span Frequency: Entire absence of modulation emissions bandwidth c)RBW: 10 kHz d)VBW: 10 kHz	e)Sweep Time: Auto

5. 3 Test Setup



5. 4 Configuration of the EUT

Same as section 4.4 of this report

5. 5 EUT Operating Condition

Same as section 4.5 of this report.

5. 6 Limit

26dB Bandwidth and 99% Occupied Bandwidth:	
Limit:	No restriction limits.
6 dB Bandwidth:	
Limit:	For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz.
Test Equipment Setting:	
a)Attenuation: Auto b)Span Frequency: > 6dB Bandwidth c)RBW: 100kHz d)VBW: ≥ 3 x RBW	e)Detector: Peak f)Trace: Max Hold g)Sweep Time: Auto
Maximum Conducted Output Power Measurement:	
☒5.15~5.25 GHz	
☐Limit of Outdoor access point:	☐Limit of Indoor access point:
The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.
☐Limit of Fixed point-to-point access points:	☒Limit of Mobile and portable client devices:
The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.
☐5.25-5.35 GHz & ☐5.470-5.725 GHz	
The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. 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.	
☒5.725~5.85 GHz	
The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). 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.	
Power Spectral Density	
☒5.15~5.25 GHz	
☐Limit of Outdoor access point: 17 dBm/MHz	☐Limit of Indoor access point: 17 dBm/MHz
☐Limit of Fixed point-to-point access points: 17 dBm/MHz	☒Limit of Mobile and portable client devices: 11 dBm/MHz
☐5.25-5.35 GHz	11 dBm/MHz
☐5.470-5.725 GHz	11 dBm/MHz
☒5.725~5.85 GHz	30 dBm/500kHz
Frequency Stability Measurement:	
Limit:	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification).

5. 7 Test Result

A. 26dB Bandwidth and 99% Occupied Bandwidth

Product	: Wireless Adapter	Test Mode	: See section 4.4
Test Item	: 26dB Bandwidth and 99% Occupied Bandwidth	Temperature	: 25 ℃
Test Voltage	: DC 5V	Humidity	: 56%RH
Test Result	: PASS		

26dB Bandwidth

IEEE 802.11a

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	21.90	--	PASS
High	5240	21.06		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	21.16	--	PASS
High	5825	20.88		PASS

IEEE 802.11n 5G 20MHz Ant.0

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	23.94	--	PASS
High	5240	21.84		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	22.02	--	PASS
High	5825	21.60		PASS

IEEE 802.11n 5G 40MHz Ant.0

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	44.64	--	PASS
High	5230	43.32		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	44.40	--	PASS
High	5795	44.64		PASS

IEEE 802.11ac 20MHz Ant.0

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	24.72	--	PASS
High	5240	22.44		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	22.44	--	PASS
High	5825	22.32		PASS

IEEE 802.11ac 40MHz Ant.0

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	43.20	--	PASS
High	5230	43.68		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz))	FCC Limit (kHz)	Result
Low	5755	44.52	--	PASS
High	5795	43.88		PASS

IEEE 802.11ac 80MHz Ant.0

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	96.24	--	PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	81.84	--	PASS

IEEE 802.11n 5G 20MHz Ant.1

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	22.20	--	PASS
High	5240	22.38		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	22.74	--	PASS
High	5825	22.38		PASS

IEEE 802.11n 5G 40MHz Ant.1

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	43.68	--	PASS
High	5230	46.28		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	44.76	--	PASS
High	5795	45.48		PASS

IEEE 802.11ac 20MHz Ant.1

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	22.74	--	PASS
High	5240	22.98		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	22.98	--	PASS
High	5825	22.98		PASS

IEEE 802.11ac 40MHz Ant.1

Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	44.04	--	PASS
High	5230	45.48		PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz))	FCC Limit (kHz)	Result
Low	5755	44.88	--	PASS
High	5795	45.32		PASS

IEEE 802.11ac 80MHz Ant.1
Band1

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	84.24	--	PASS

Band4

Channel	Frequency (MHz)	26dBBandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	84.24	--	PASS

99% Occupied Bandwidth

IEEE 802.11a
Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	16.86	--	PASS
High	5240	16.92		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	16.86	--	PASS
High	5825	16.86		PASS

IEEE 802.11n 5G 20MHz Ant.0
Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	17.94	--	PASS
High	5240	17.88		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.94	--	PASS
High	5825	17.94		PASS

IEEE 802.11n 5G 40MHz Ant.0
Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.96	--	PASS
High	5230	37.20		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	37.08	--	PASS
High	5795	37.08		PASS

IEEE 802.11ac 20MHz Ant.0
Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	18.00	--	PASS
High	5240	18.12		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	18.12	--	PASS
High	5825	18.06		PASS

IEEE 802.11ac 40MHz Ant.0
Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.84	--	PASS
High	5230	37.32		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	37.20	--	PASS
High	5795	37.08		PASS

IEEE 802.11ac 80MHz Ant.0

Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	76.32	--	PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	74.88	--	PASS

IEEE 802.11n 5G 20MHz Ant.1

Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	18.00	--	PASS
High	5240	18.12		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	18.06	--	PASS
High	5825	18.00		PASS

IEEE 802.11n 5G 40MHz Ant.1

Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.72	--	PASS
High	5230	37.92		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	36.96	--	PASS
High	5795	37.44		PASS

IEEE 802.11ac 20MHz Ant.1

Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	18.24	--	PASS
High	5240	18.30		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	18.18	--	PASS
High	5825	18.18		PASS

IEEE 802.11ac 40MHz Ant.1

Band1

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.60	--	PASS
High	5230	37.92		PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	37.08	--	PASS
High	5795	37.44		PASS

IEEE 802.11ac 80MHz Ant.1

Band1

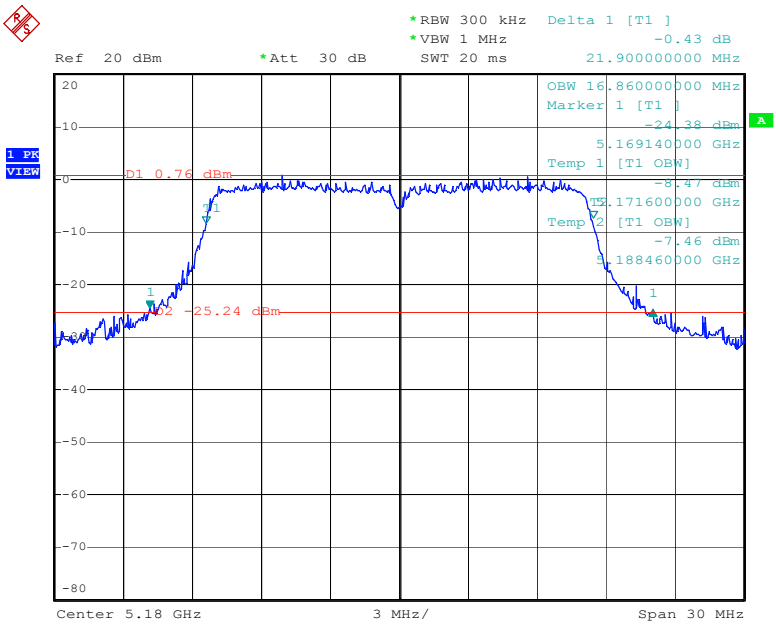
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	76.08	--	PASS

Band4

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	76.32	--	PASS

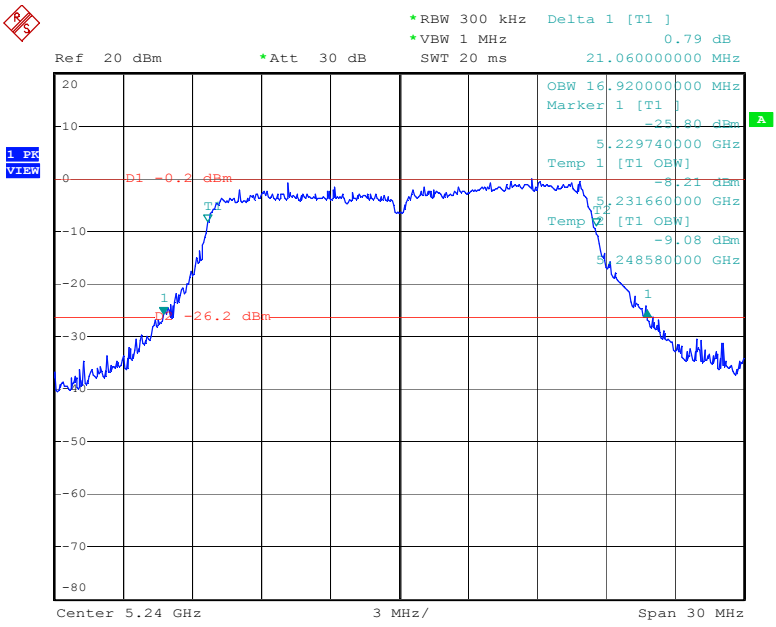
IEEE 802.11a Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 25.NOV.2015 13:27:20

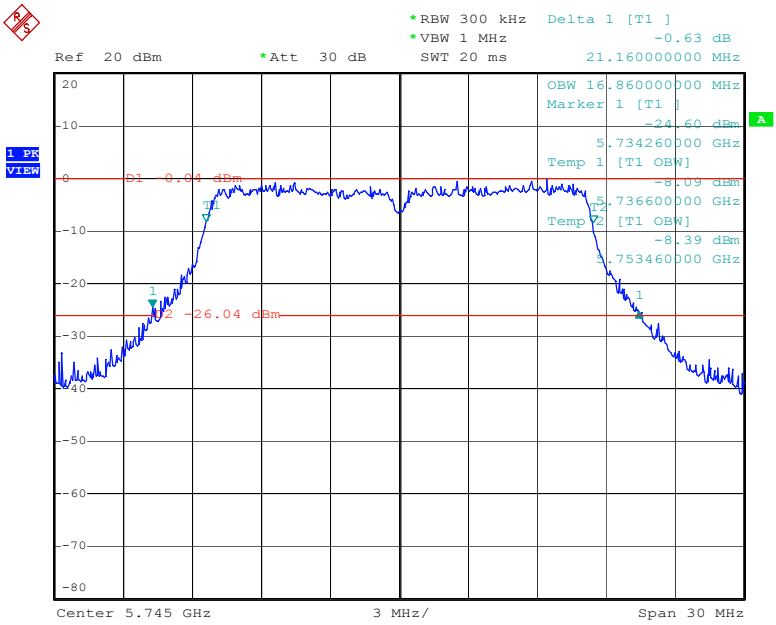
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 25.NOV.2015 13:29:55

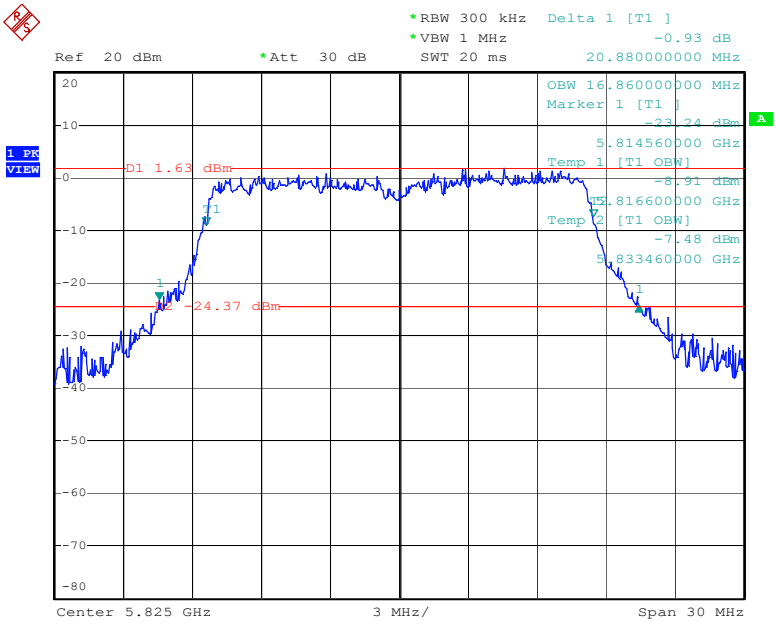
IEEE 802.11a Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 25.NOV.2015 13:31:24

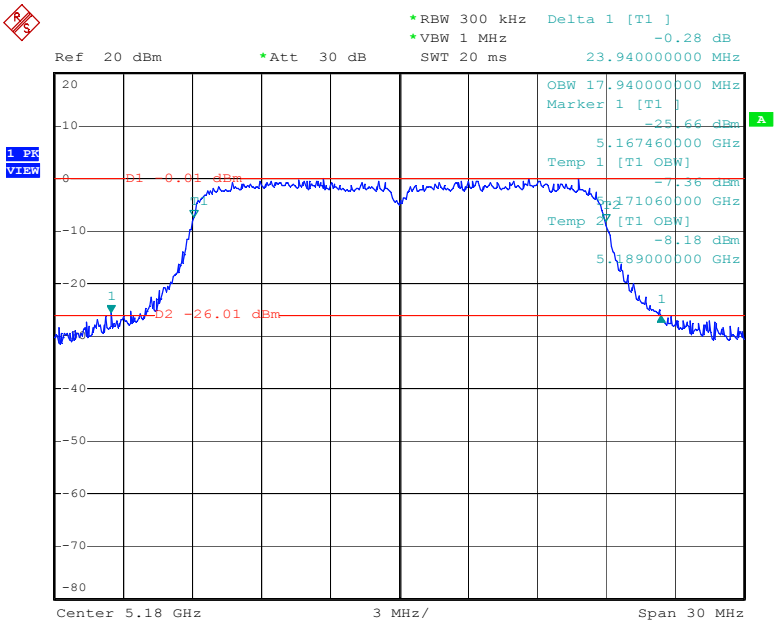
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 25.NOV.2015 13:33:50

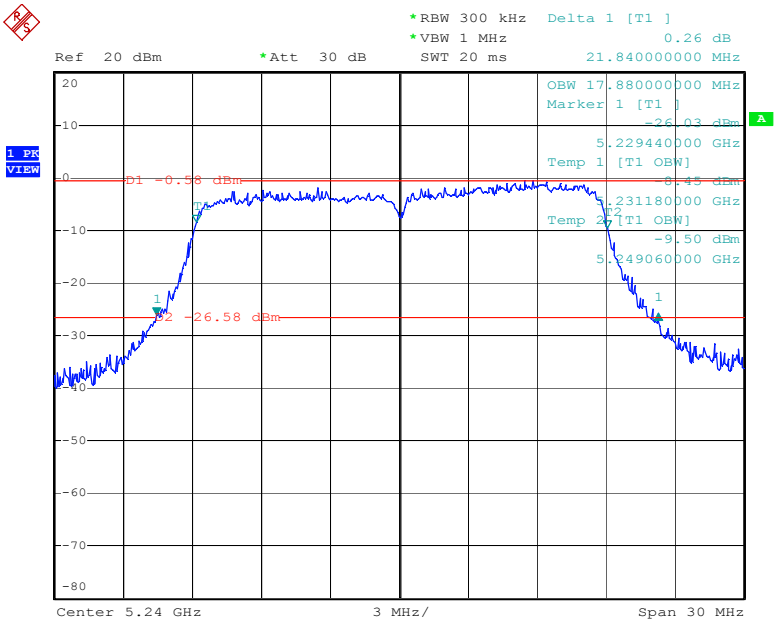
IEEE 802.11n 5G 20MHz Ant.0 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 25.NOV.2015 13:35:45

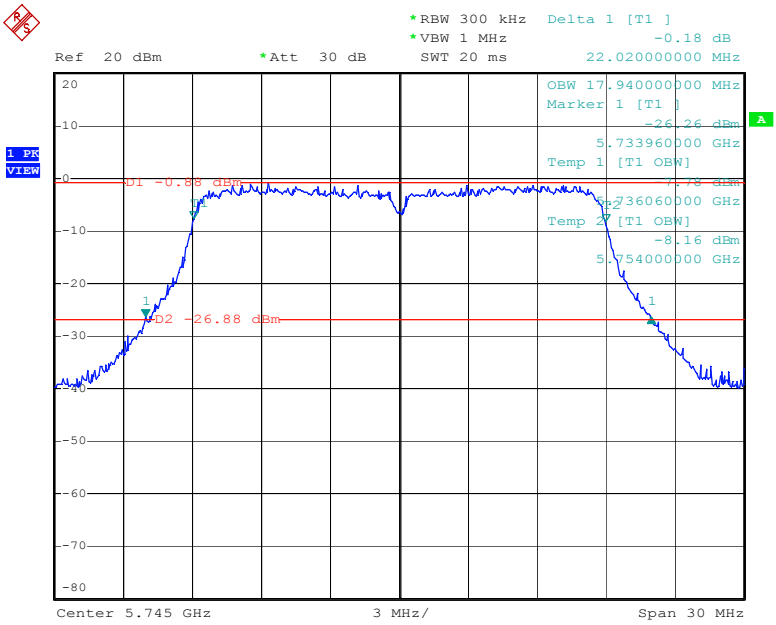
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 25.NOV.2015 13:38:08

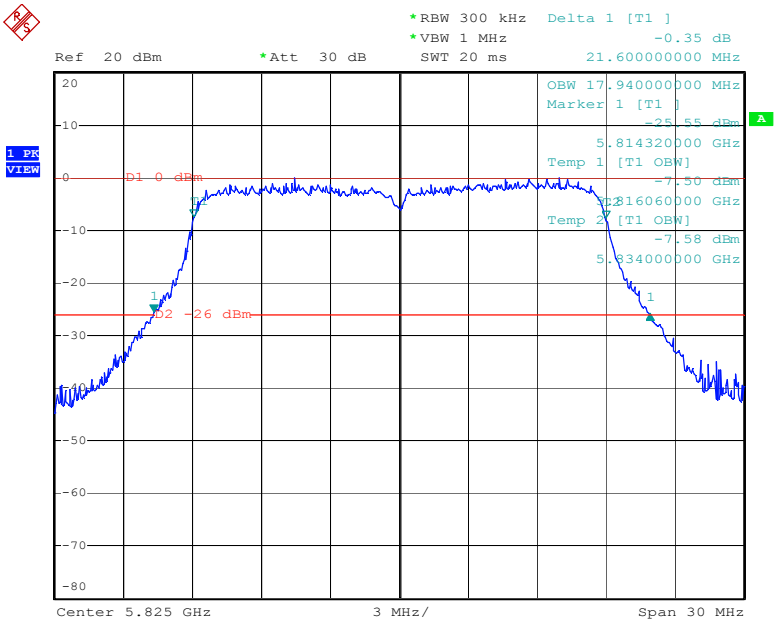
IEEE 802.11n 5G 20MHz Ant.0 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 25.NOV.2015 13:40:32

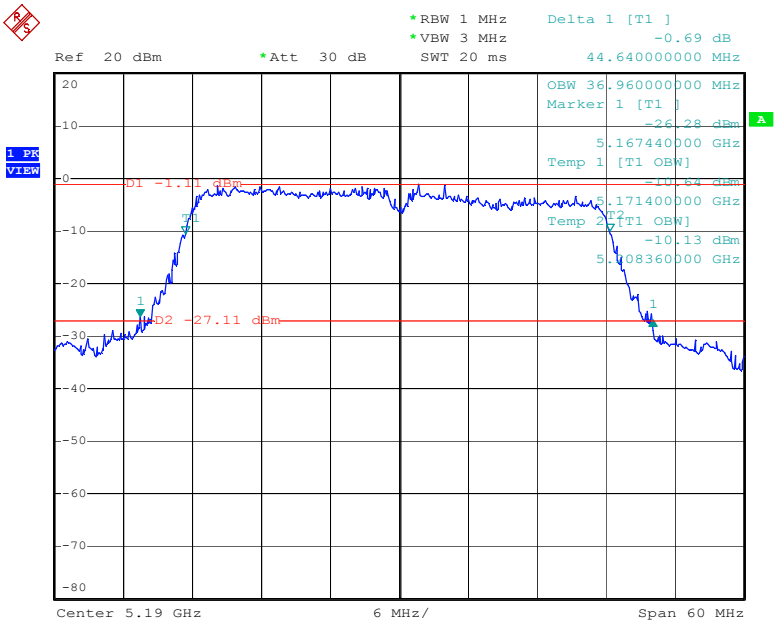
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 25.NOV.2015 13:42:08

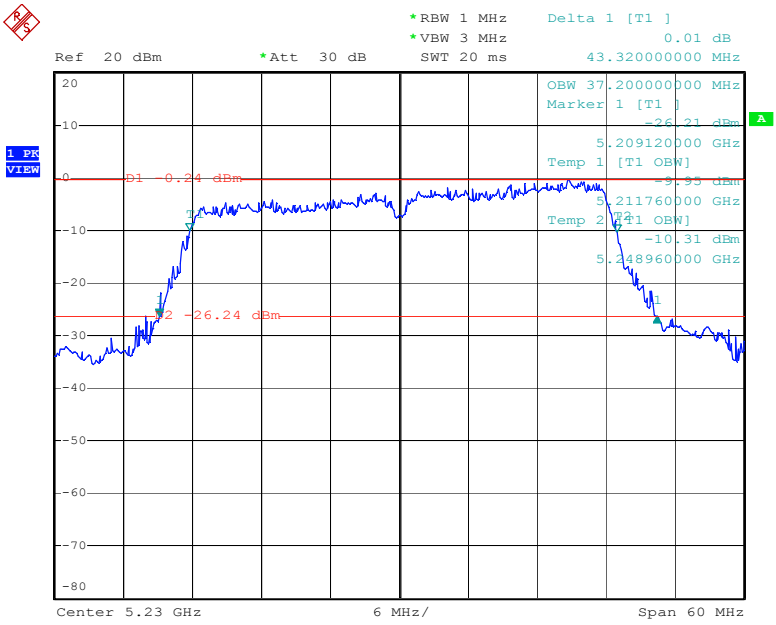
IEEE 802.11n 5G 40MHz Ant.0 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:16:14

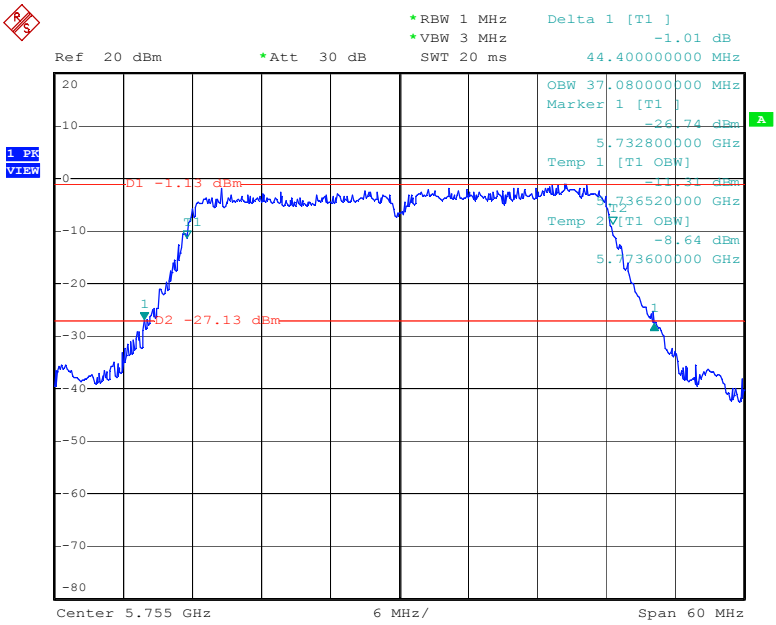
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 09:17:41

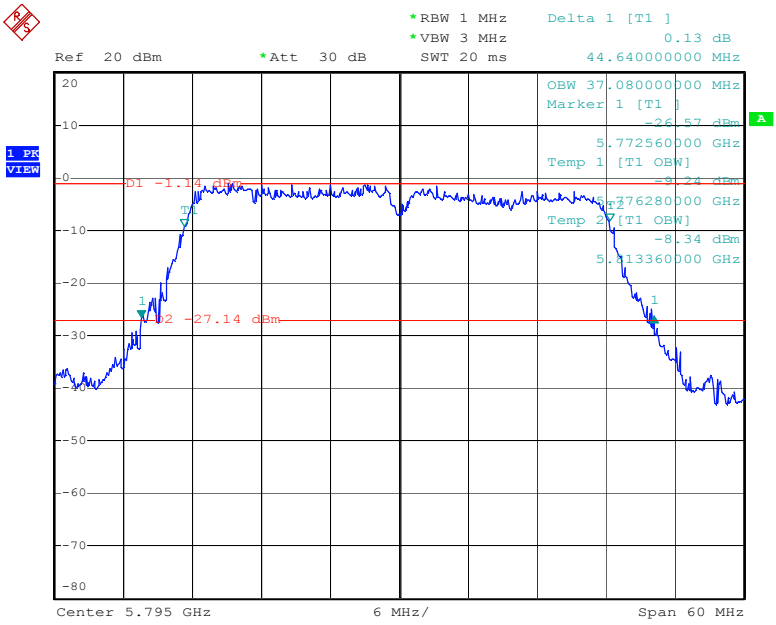
IEEE 802.11n 5G 40MHz Ant.0 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:19:37

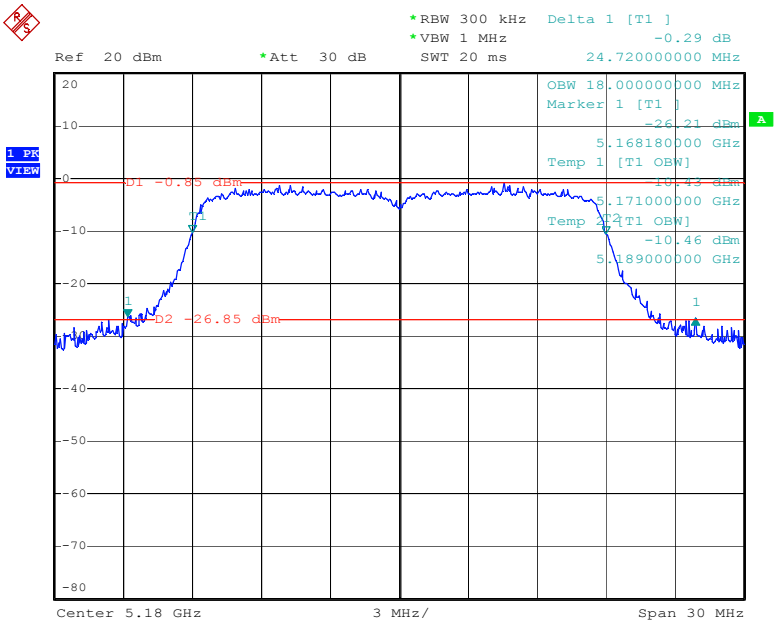
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 09:20:55

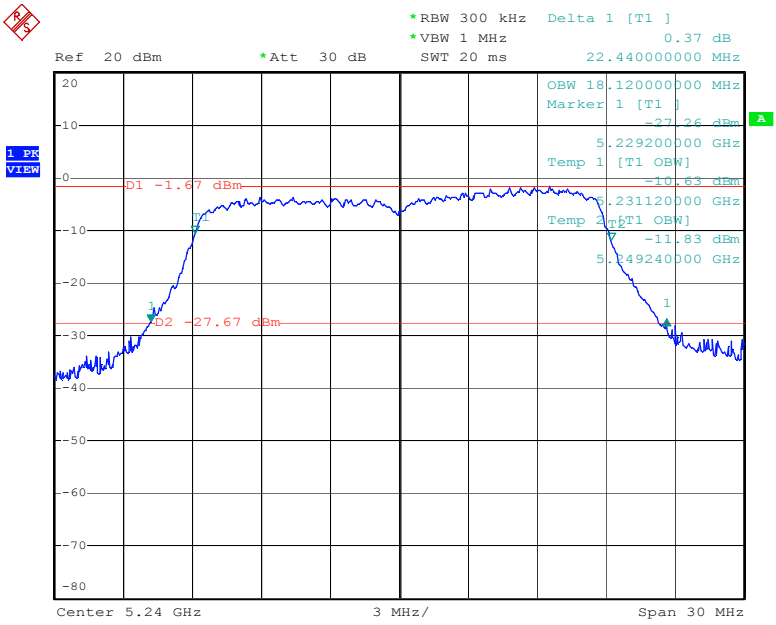
IEEE 802.11ac 20MHz Ant.0 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 25.NOV.2015 13:52:37

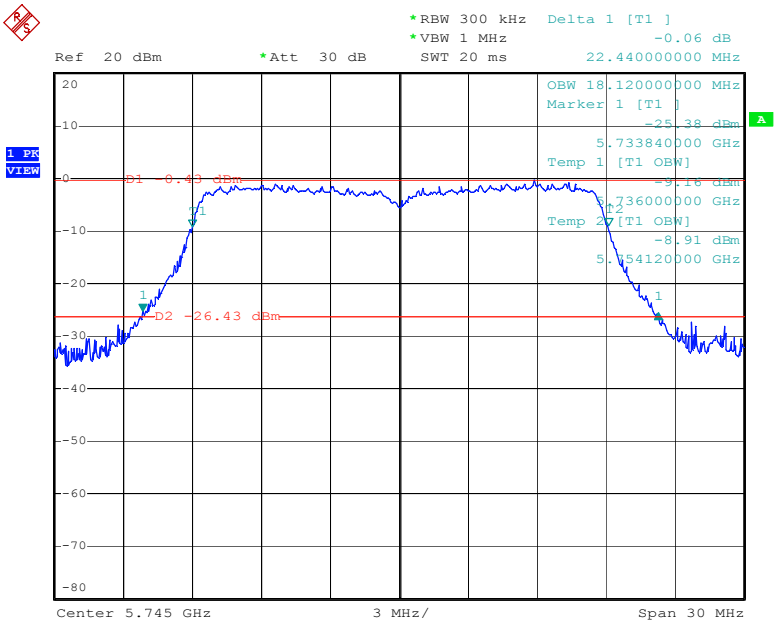
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



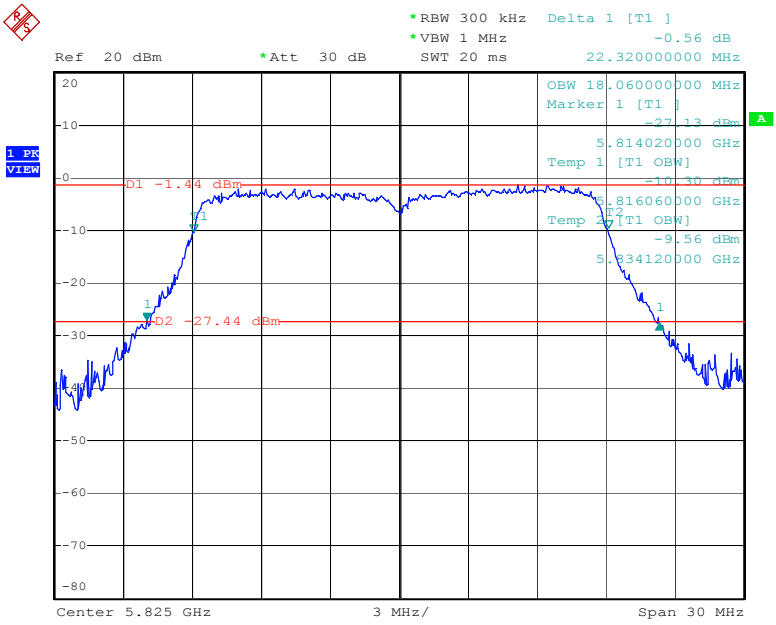
Date: 25.NOV.2015 13:55:37

IEEE 802.11ac 20MHz Ant.0 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)

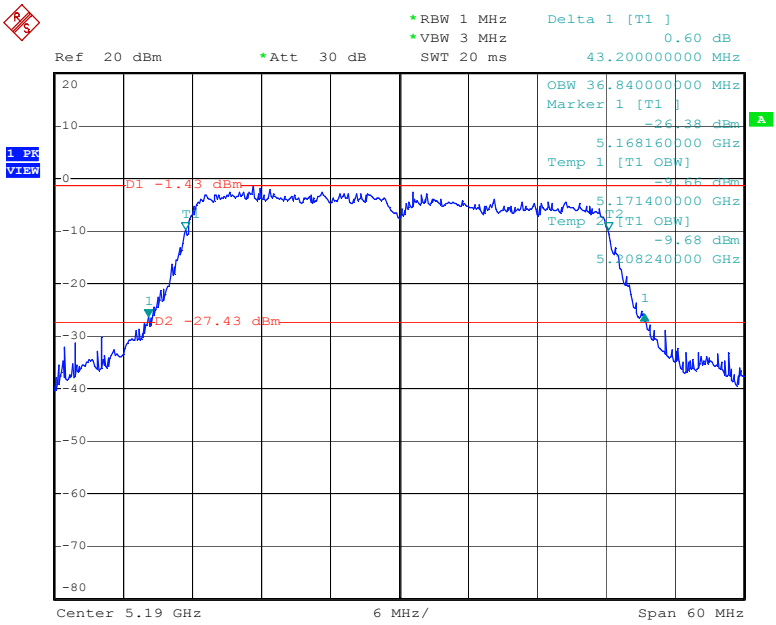


26dB Bandwidth and 99% Occupied Bandwidth (CH High)



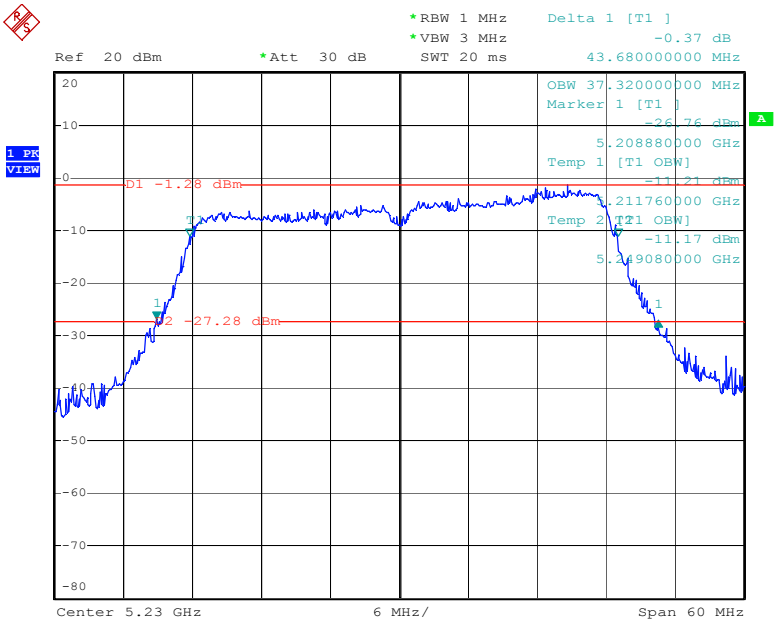
IEEE 802.11ac 40MHz Ant.0 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:23:47

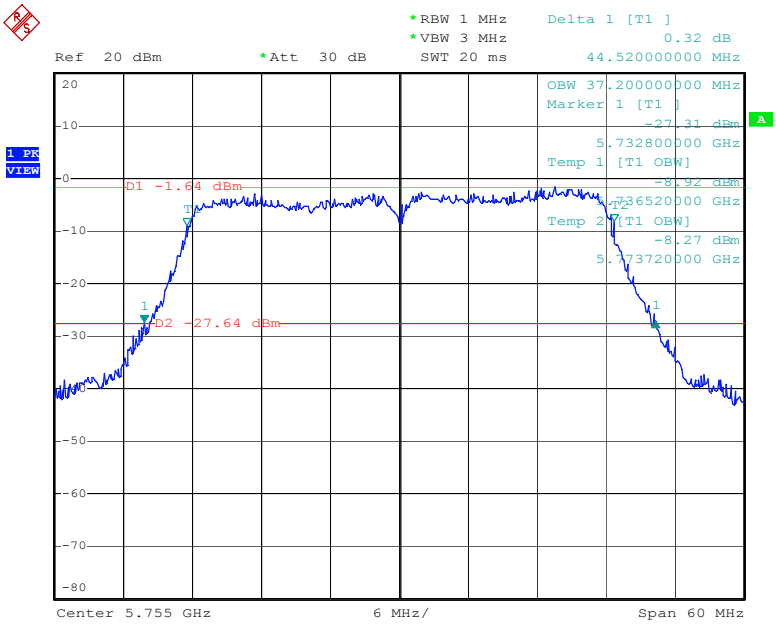
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 09:25:59

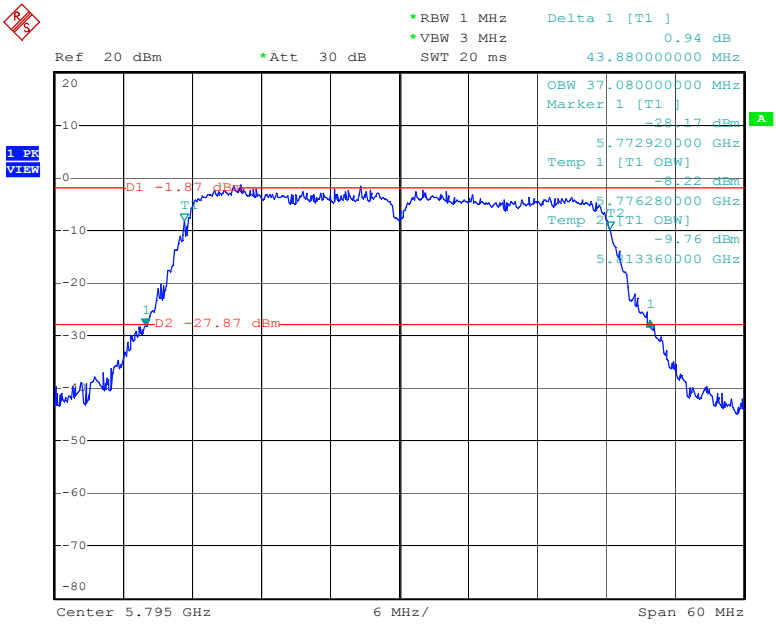
IEEE 802.11ac 40MHz Ant.0 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:27:25

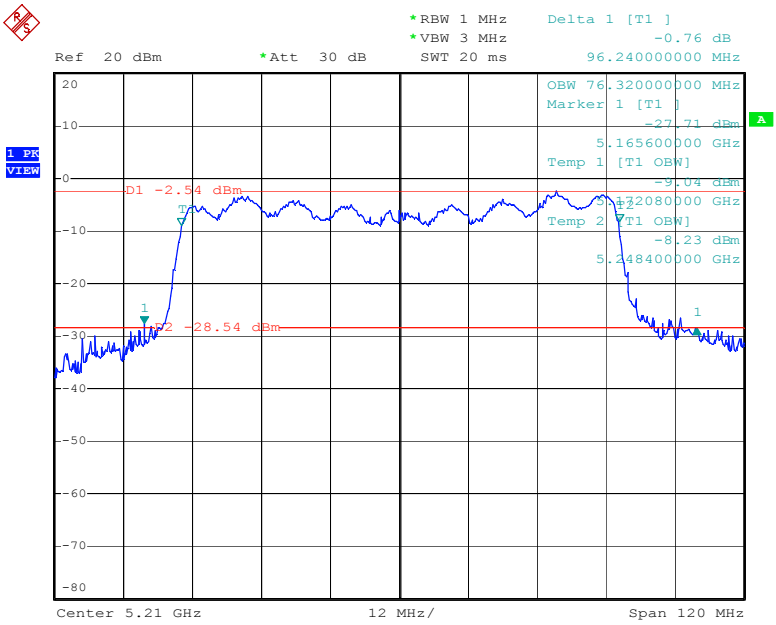
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 09:29:11

IEEE 802.11ac 80MHz Ant.0 Band1

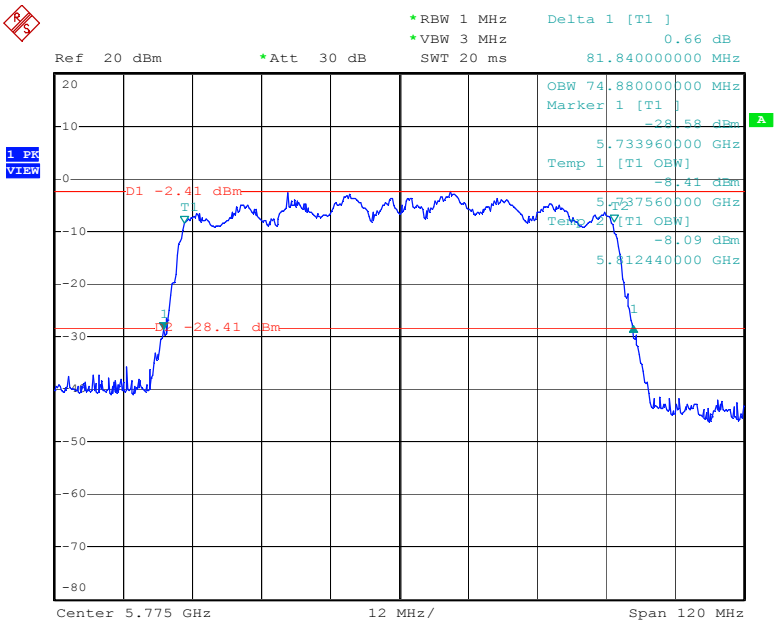
26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:34:31

IEEE 802.11ac 80MHz Ant.0 Band4

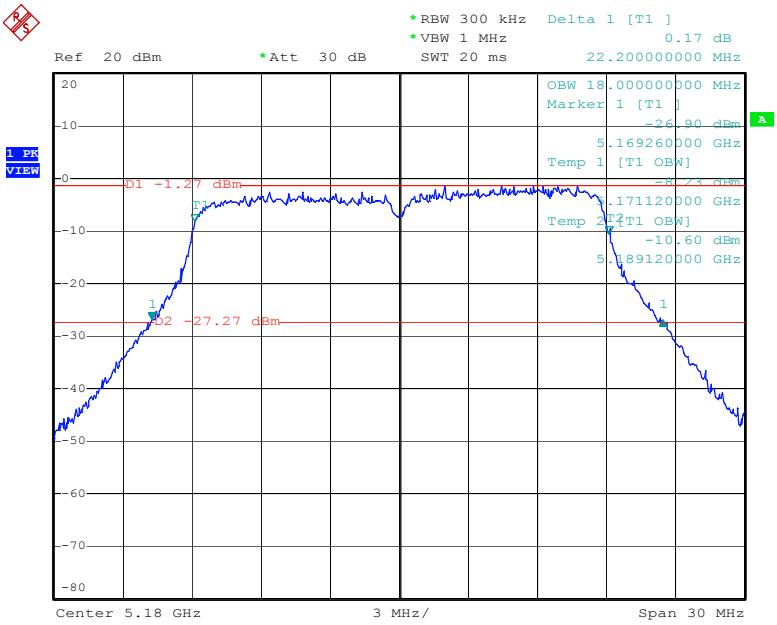
26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:36:08

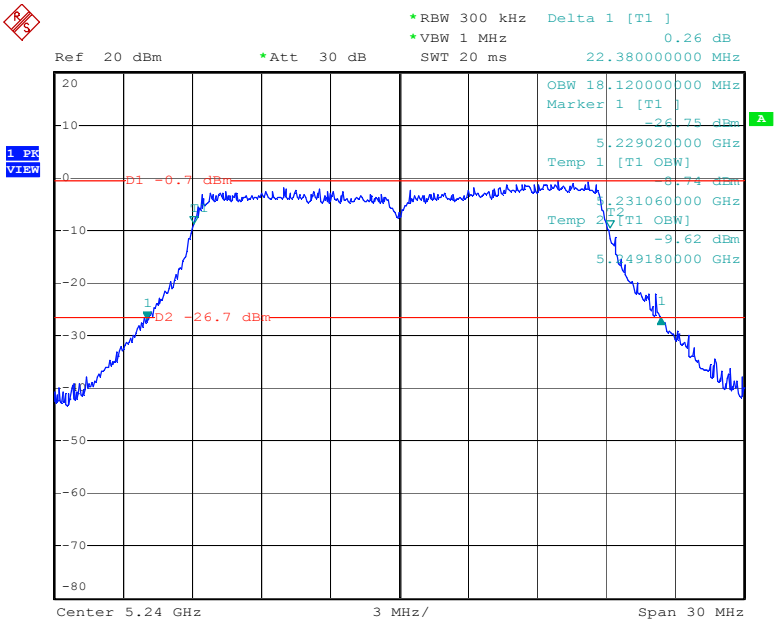
IEEE 802.11n 5G 20MHz Ant.1 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 09:06:24

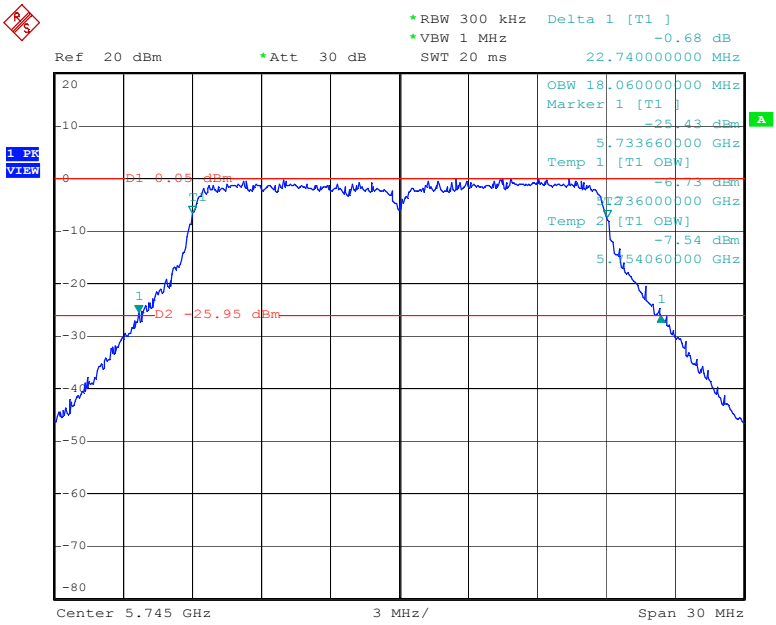
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 26.NOV.2015 09:58:59

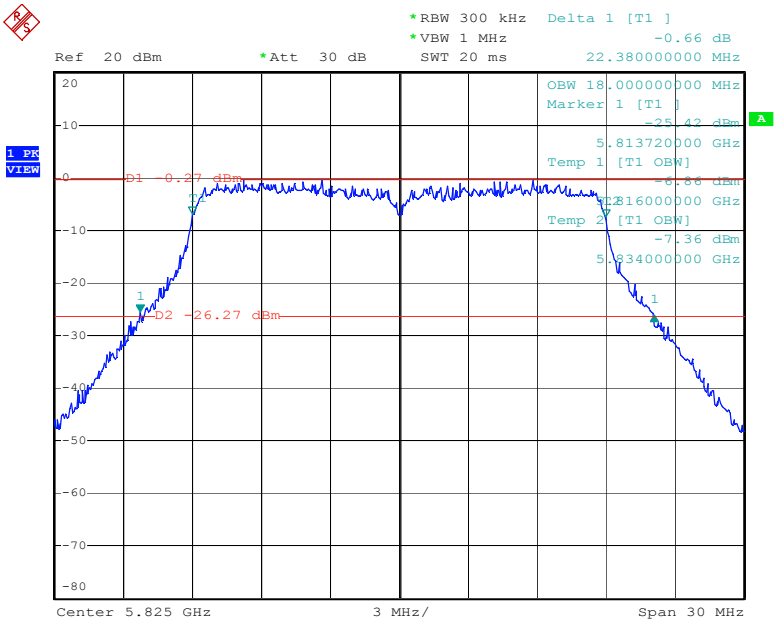
IEEE 802.11n 5G 20MHz Ant.1 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 26.NOV.2015 09:57:29

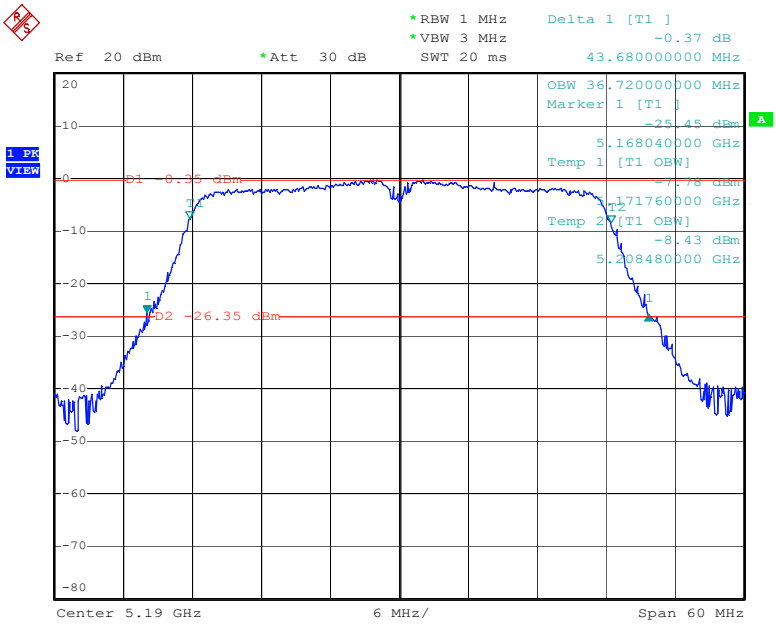
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 26.NOV.2015 10:02:04

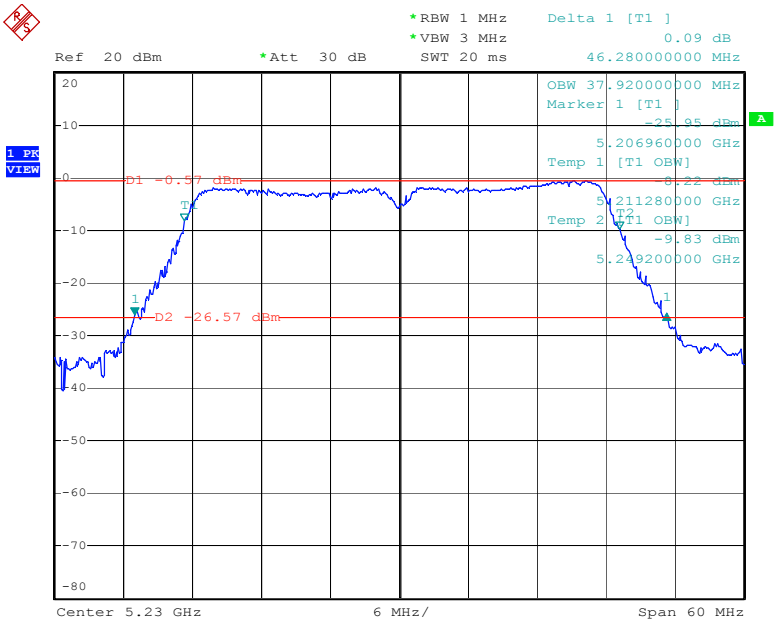
IEEE 802.11n 5G 40MHz Ant.1 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:38:07

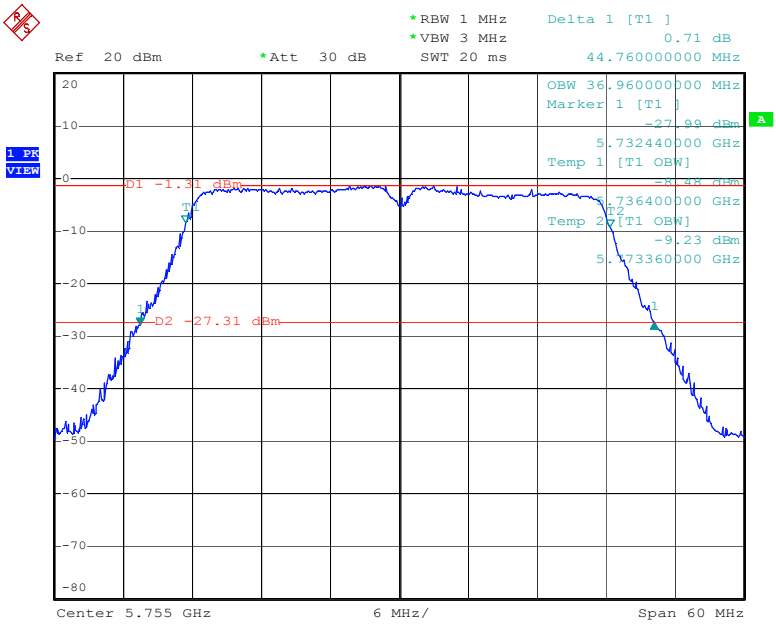
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 10:39:25

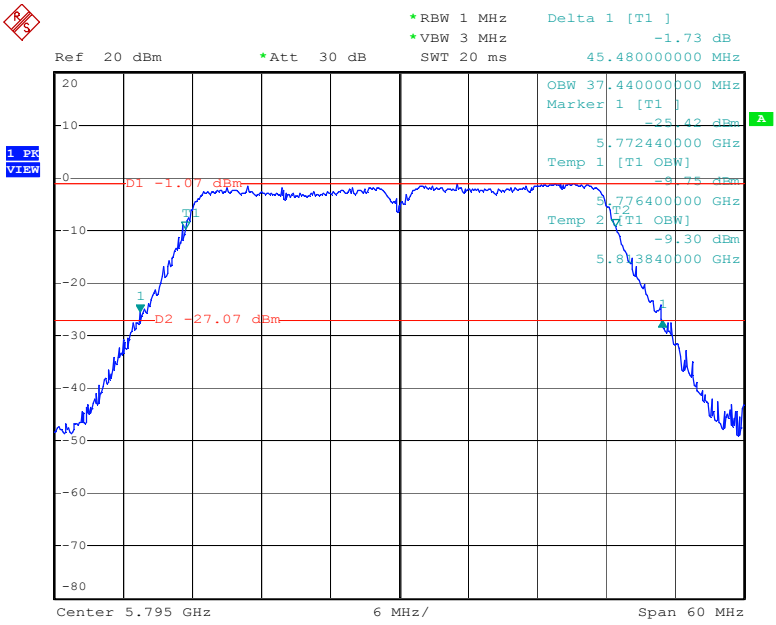
IEEE 802.11n 5G 40MHz Ant.1 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:40:58

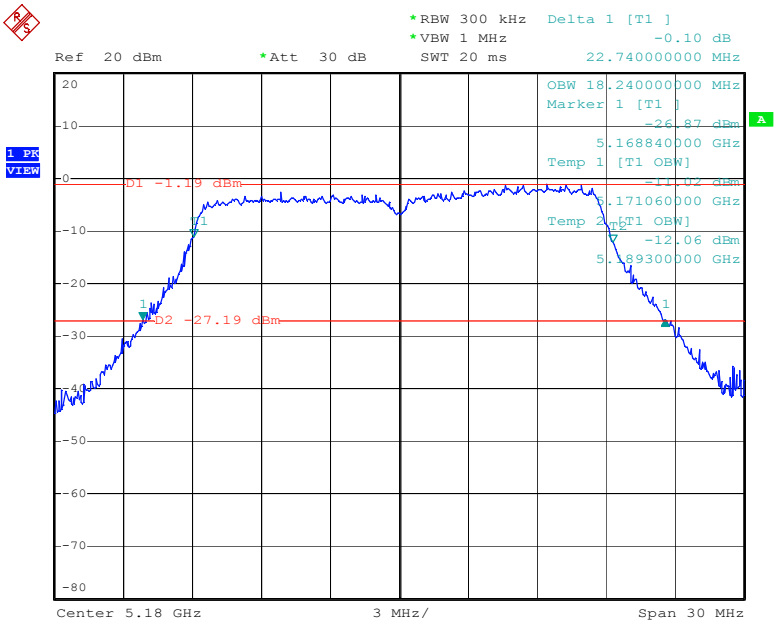
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 10:42:07

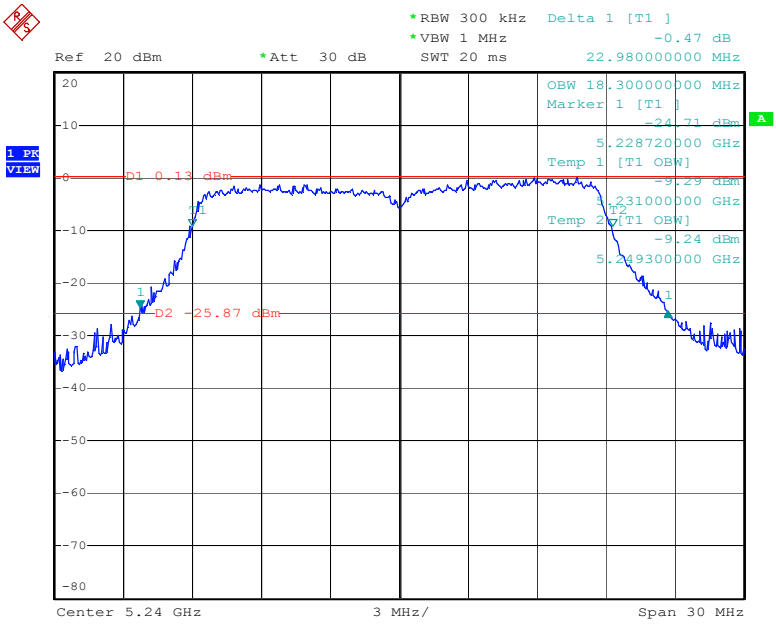
IEEE 802.11ac 20MHz Ant.1 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 26.NOV.2015 10:17:46

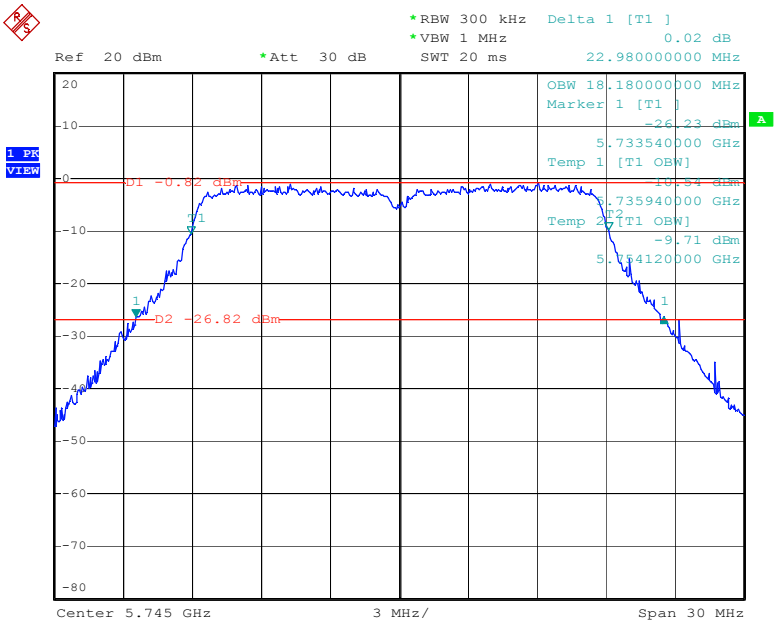
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 26.NOV.2015 10:18:58

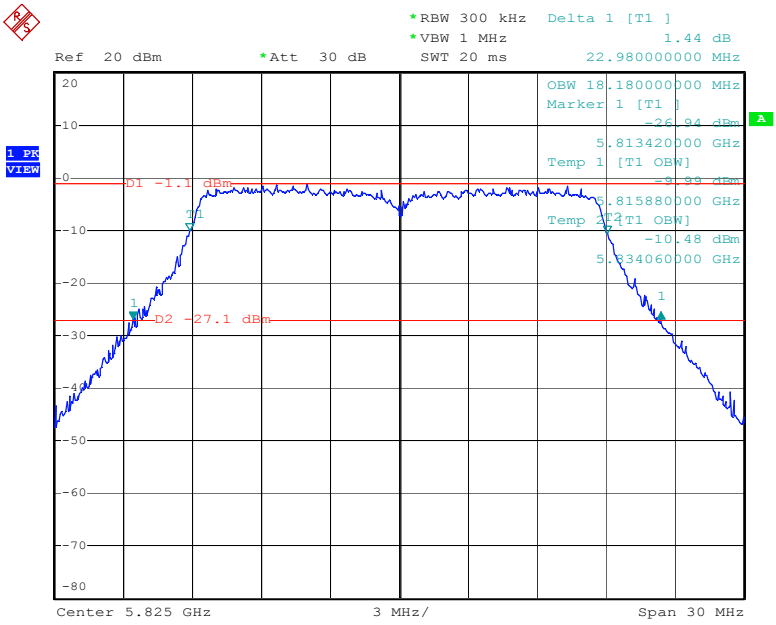
IEEE 802.11ac 20MHz Ant.1 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 26.NOV.2015 10:20:44

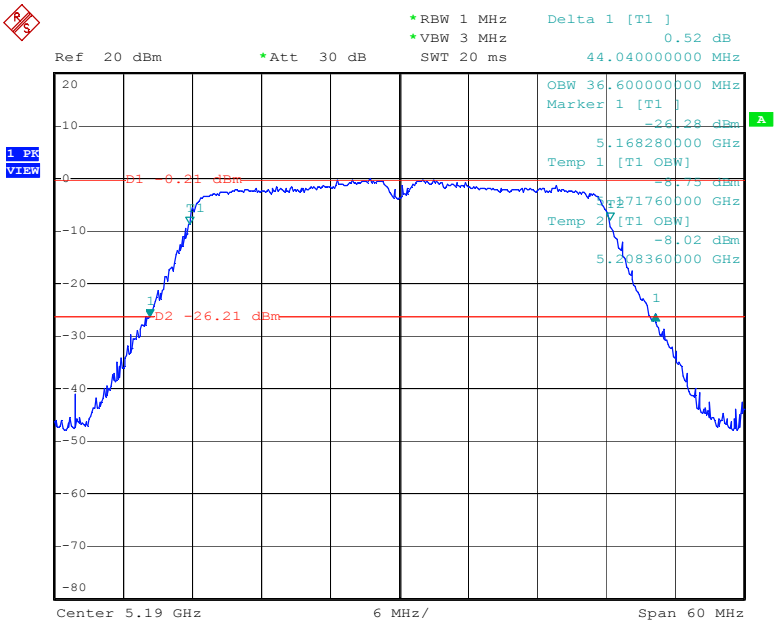
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 26.NOV.2015 10:21:48

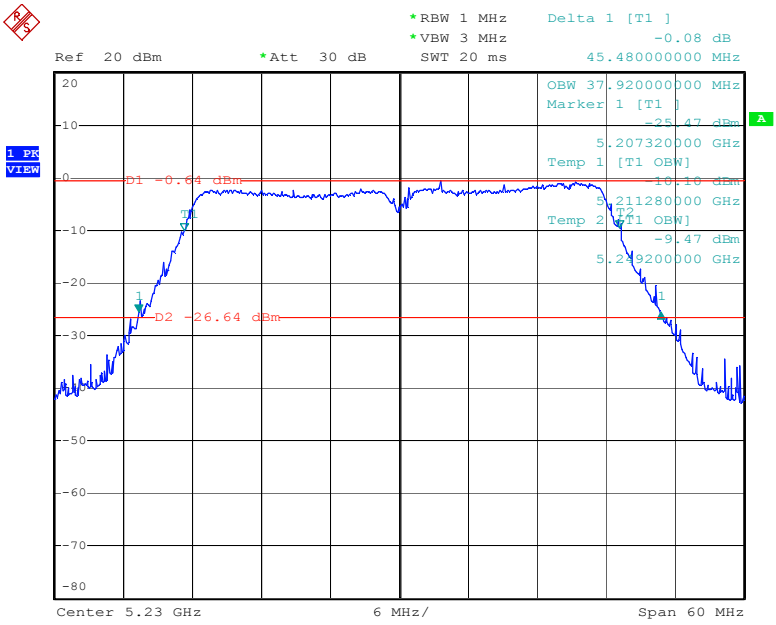
IEEE 802.11ac 40MHz Ant.1 Band1

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:43:26

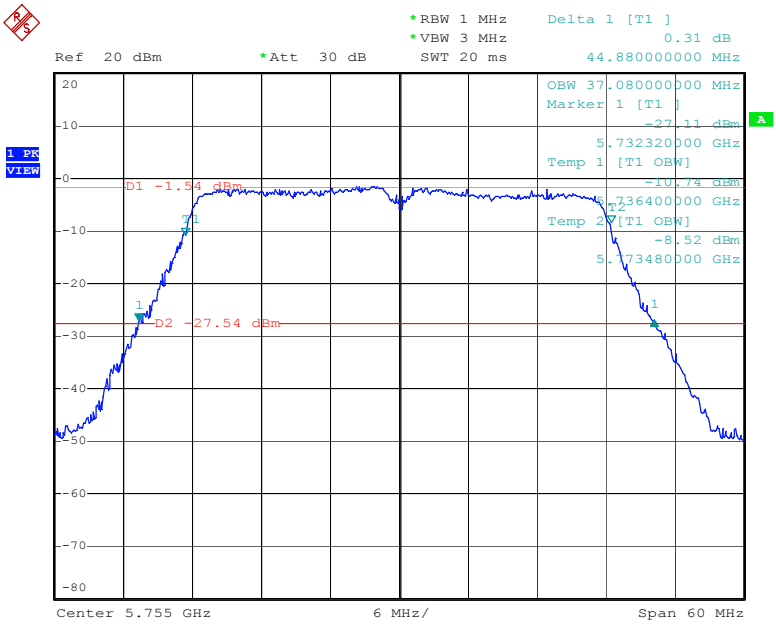
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 10:45:12

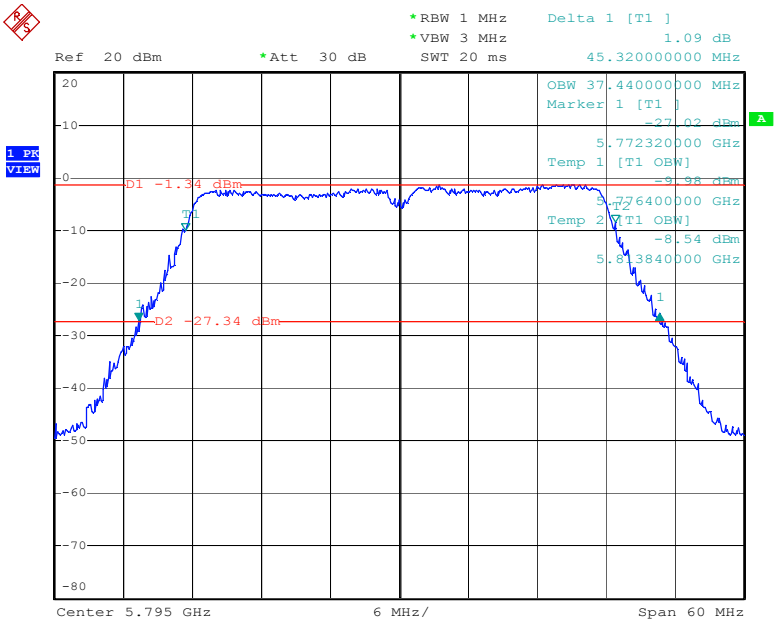
IEEE 802.11ac 40MHz Ant.1 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:46:20

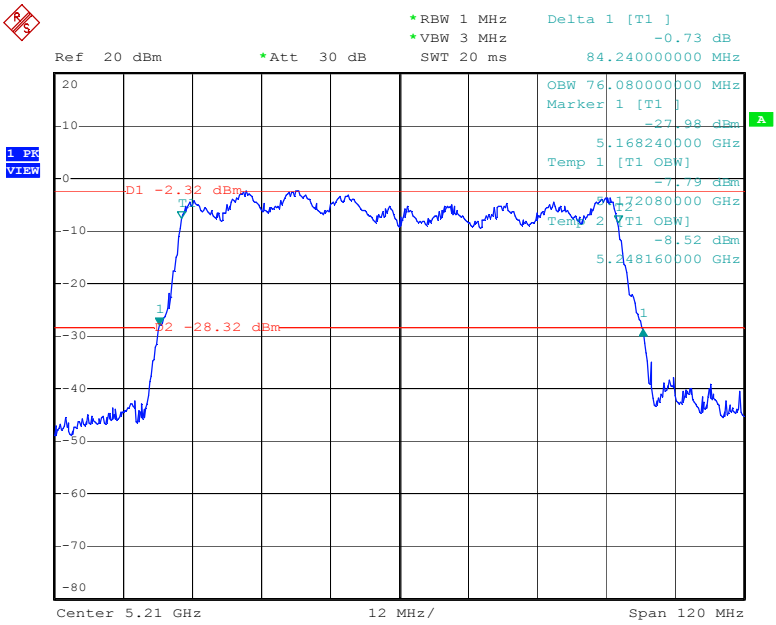
26dB Bandwidth and 99% Occupied Bandwidth (CH High)



Date: 27.NOV.2015 10:47:20

IEEE 802.11ac 80MHz Ant.1 Band1

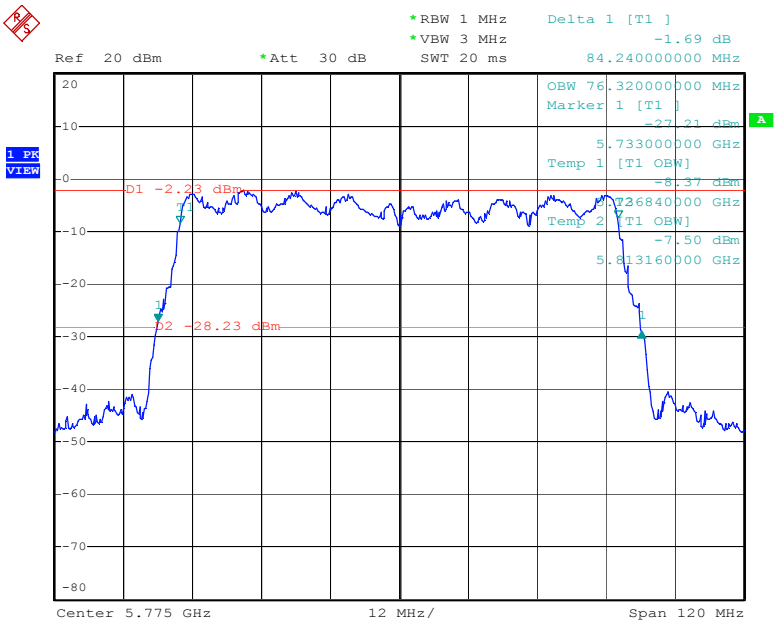
26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:53:33

IEEE 802.11ac 80MHz Ant.1 Band4

26dB Bandwidth and 99% Occupied Bandwidth (CH Low)



Date: 27.NOV.2015 10:52:19

B. 6 dB Bandwidth

Product	: Wireless Adapter	Test Mode	: See Section 4.4
Test Item	: 6 dB BW	Temperature	: 25 ℃
Test Voltage	: DC 5V (From Host)	Humidity	: 56%RH
Test Result	: PASS		

IEEE 802.11a
Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	16.44	>500 kHz	PASS
High	5240	16.48		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	16.48	>500 kHz	PASS
High	5825	16.52		PASS

IEEE 802.11n 5G 20MHz Ant.0
Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	17.64	>500 kHz	PASS
High	5240	17.32		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.76	>500 kHz	PASS
High	5825	17.72		PASS

IEEE 802.11n 5G 40MHz Ant.0
Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.40	>500 kHz	PASS
High	5230	35.76		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	36.08	>500 kHz	PASS
High	5795	36.08		PASS

IEEE 802.11ac 20MHz Ant.0
Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.60	>500 kHz	PASS
High	5825	17.28		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.72	>500 kHz	PASS
High	5825	17.72		PASS

IEEE 802.11ac 40MHz Ant.0
Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	36.24	>500 kHz	PASS
High	5230	35.76		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	35.84	>500 kHz	PASS
High	5795	35.84		PASS

IEEE 802.11ac 80MHz Ant.0

Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	75.20	>500 kHz	PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	75.20	>500 kHz	PASS

IEEE 802.11n 5G 20MHz Ant.1

Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5180	17.64	>500 kHz	PASS
High	5240	17.60		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.72	>500 kHz	PASS
High	5825	17.68		PASS

IEEE 802.11n 5G 40MHz Ant.1

Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	35.20	>500 kHz	PASS
High	5230	36.32		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	36.00	>500 kHz	PASS
High	5795	36.00		PASS

IEEE 802.11ac 20MHz Ant.1

Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.12	>500 kHz	PASS
High	5825	17.28		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5745	17.40	>500 kHz	PASS
High	5825	17.36		PASS

IEEE 802.11ac 40MHz Ant.1

Band1

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5190	35.52	>500 kHz	PASS
High	5230	35.92		PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
Low	5755	36.40	>500 kHz	PASS
High	5795	36.40		PASS

IEEE 802.11ac 80MHz Ant.1
Band1

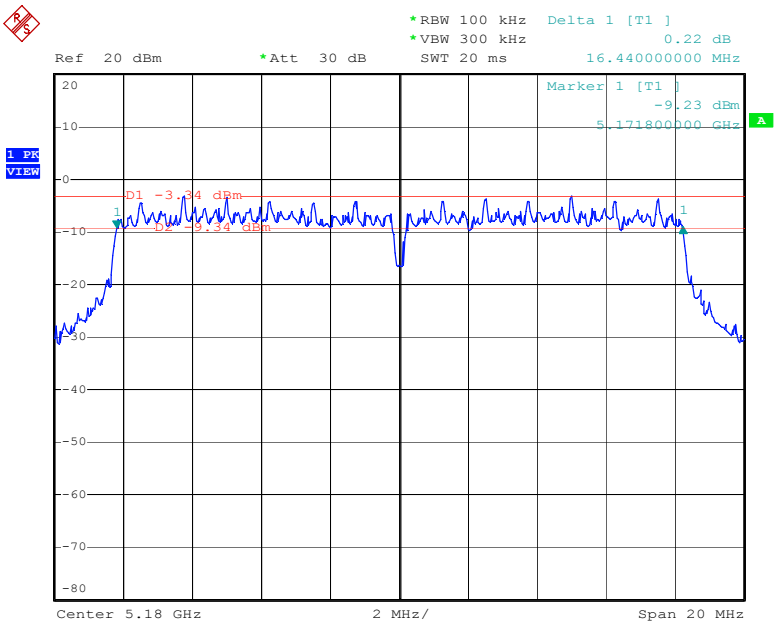
Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5210	75.20	>500 kHz	PASS

Band4

Channel	Frequency (MHz)	Bandwidth (MHz)	FCC Limit (kHz)	Result
High	5775	75.52	>500 kHz	PASS

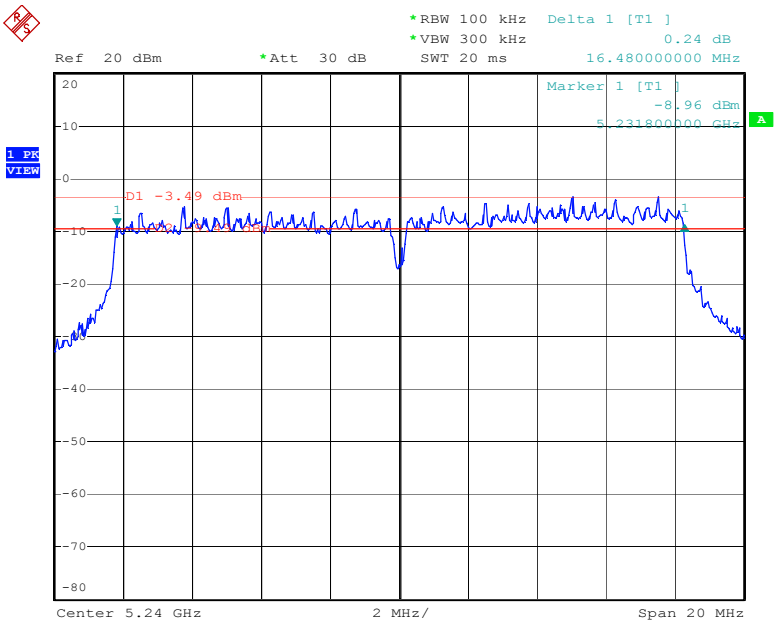
IEEE 802.11a Band1

6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:37:55

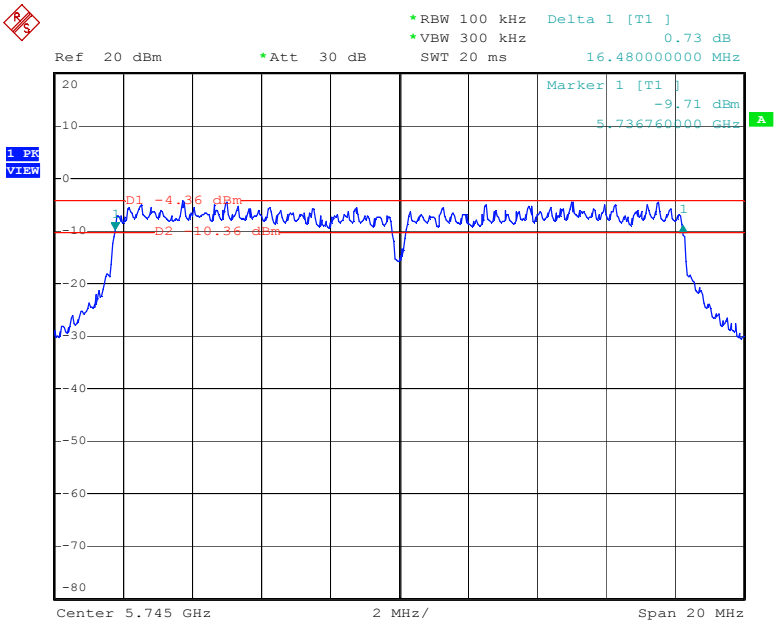
6dB Bandwidth (CH High)



Date: 25.NOV.2015 10:39:10

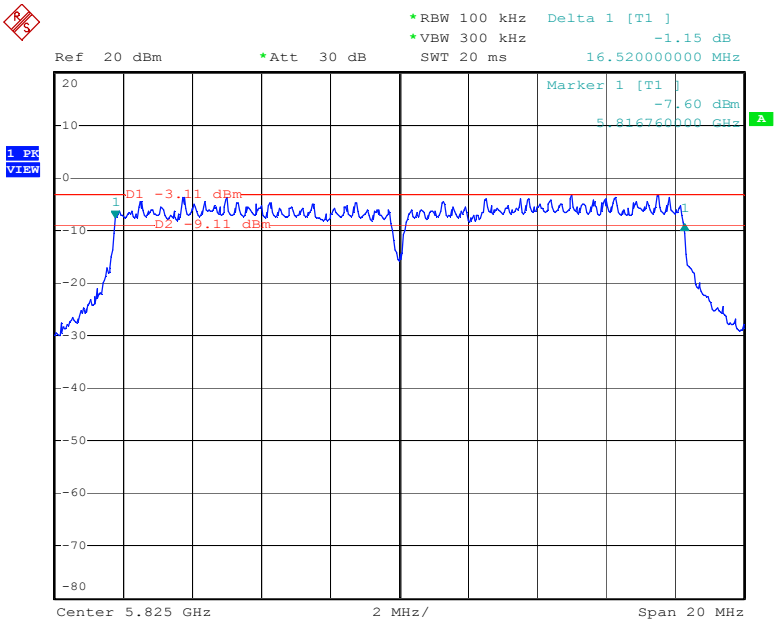
IEEE 802.11a Band4

6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:13:34

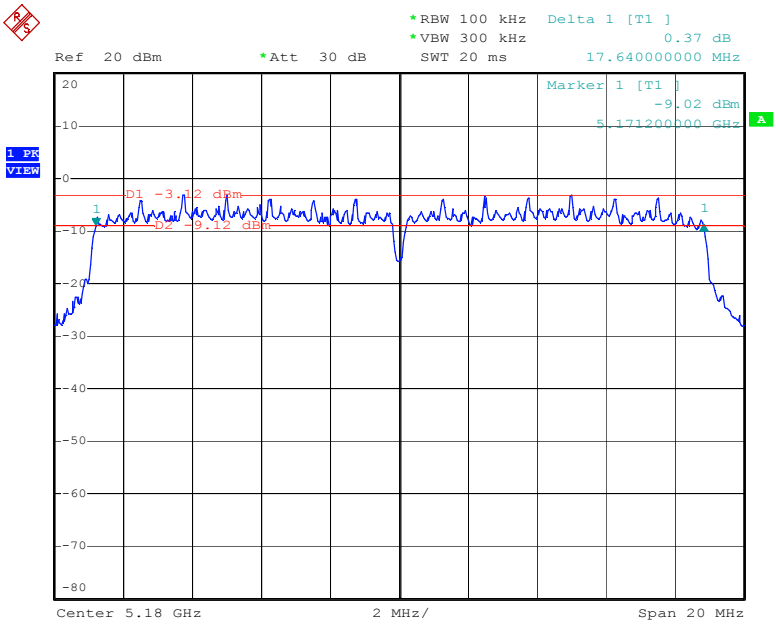
6dB Bandwidth (CH High)



Date: 20.NOV.2015 14:16:40

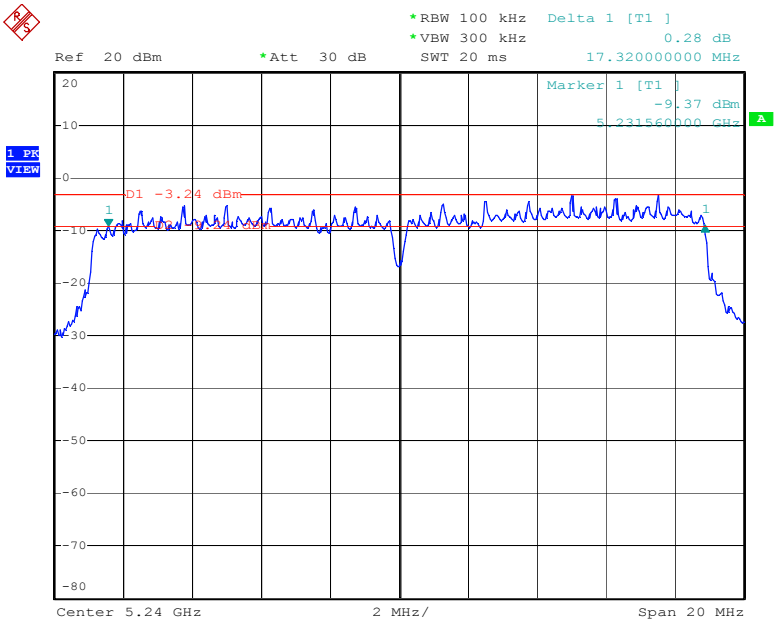
IEEE 802.11n 5G 20MHz Ant.0 Band1

6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:41:32

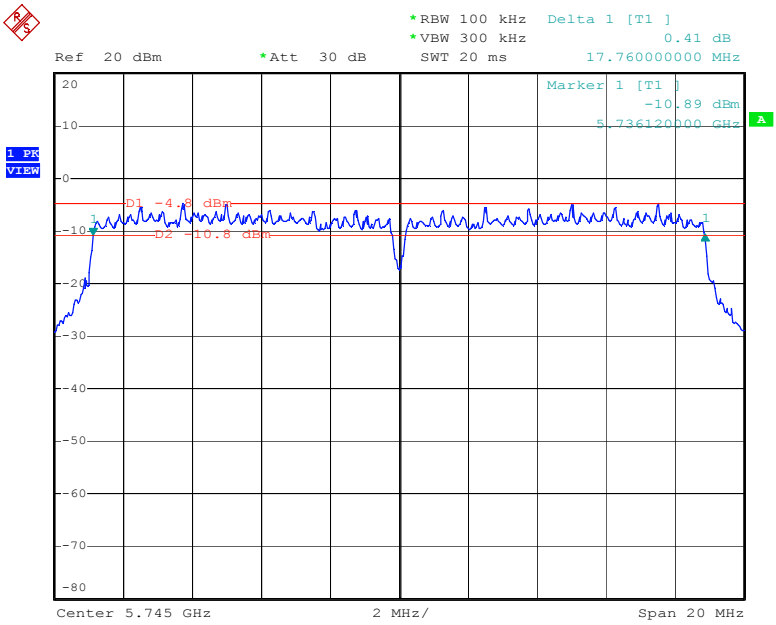
6dB Bandwidth (CH High)



Date: 25.NOV.2015 10:43:11

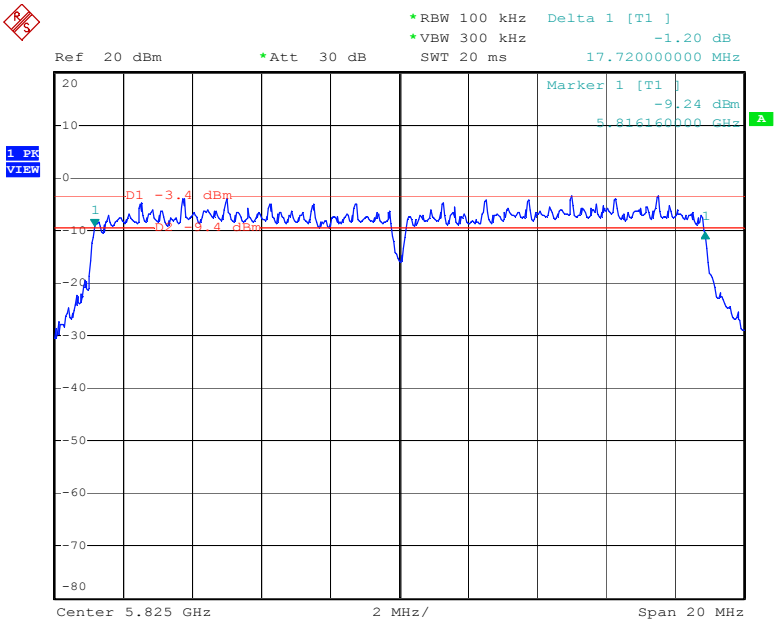
IEEE 802.11n 5G 20MHz Ant.0 Band4

6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:23:26

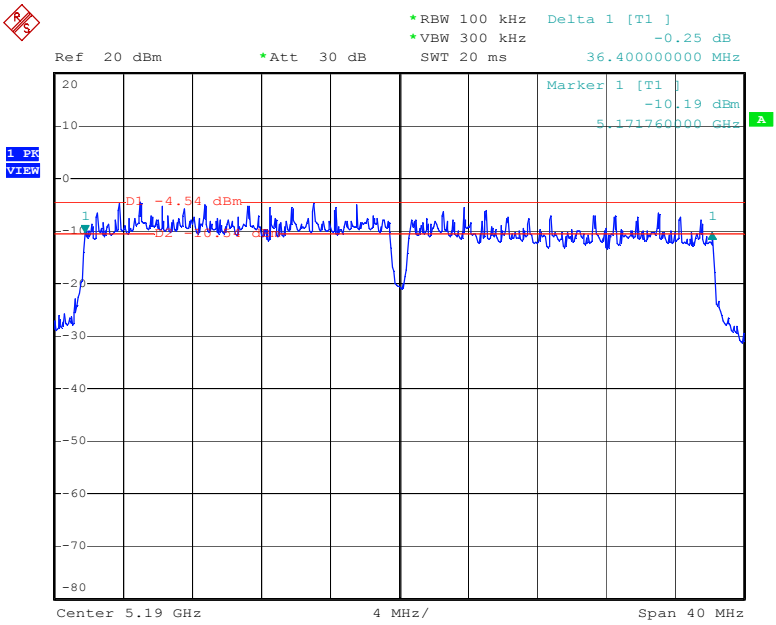
6dB Bandwidth (CH High)



Date: 20.NOV.2015 14:19:41

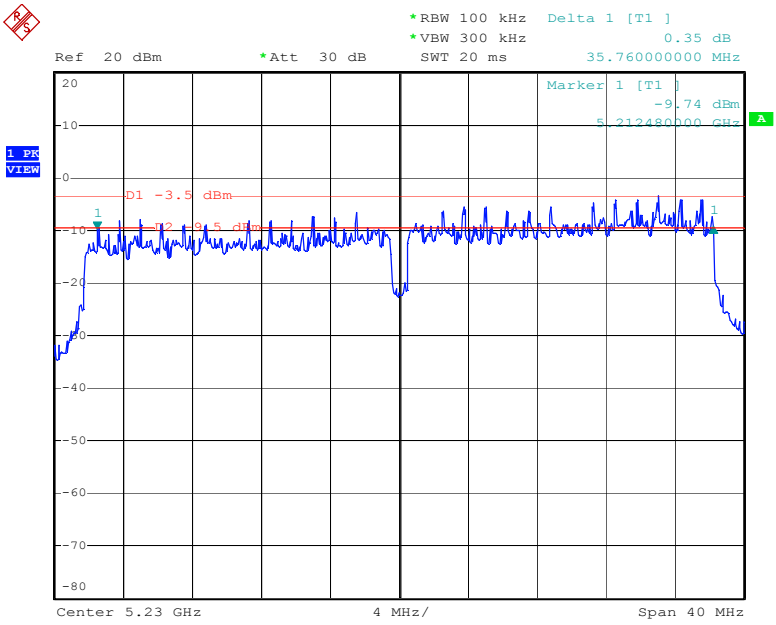
IEEE 802.11n 5G 40MHz Ant.0 Band1

6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:46:37

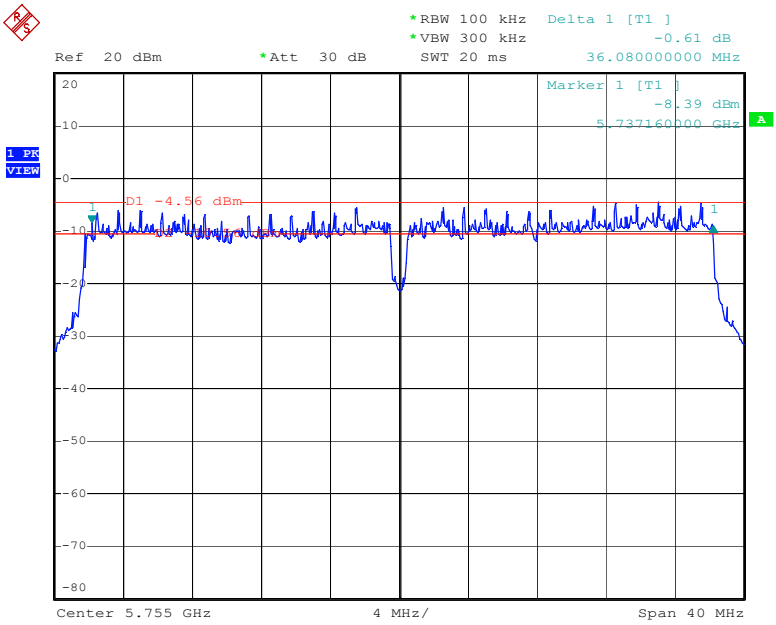
6dB Bandwidth (CH High)



Date: 25.NOV.2015 10:47:57

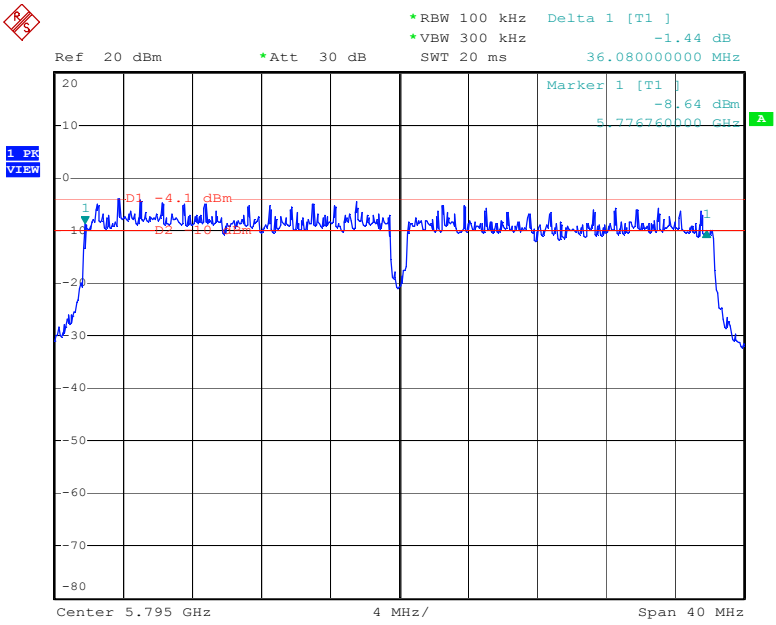
IEEE 802.11n 5G 40MHz Ant.0 Band4

6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:31:10

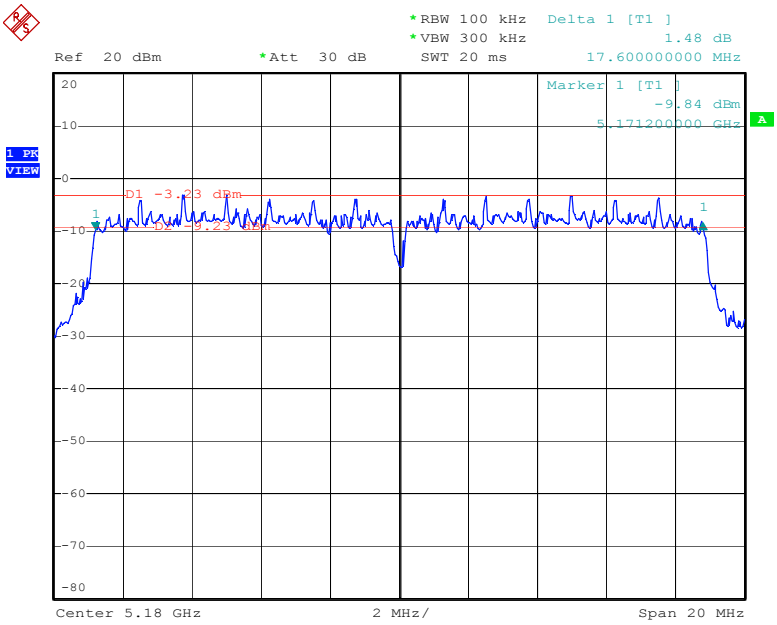
6dB Bandwidth (CH High)



Date: 20.NOV.2015 14:33:46

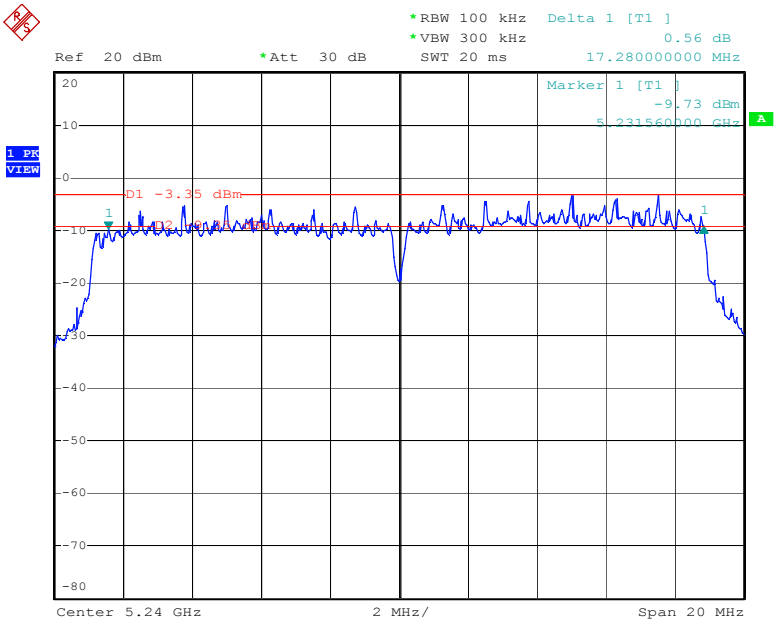
IEEE 802.11ac 20MHz Ant.0 Band1

6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:50:25

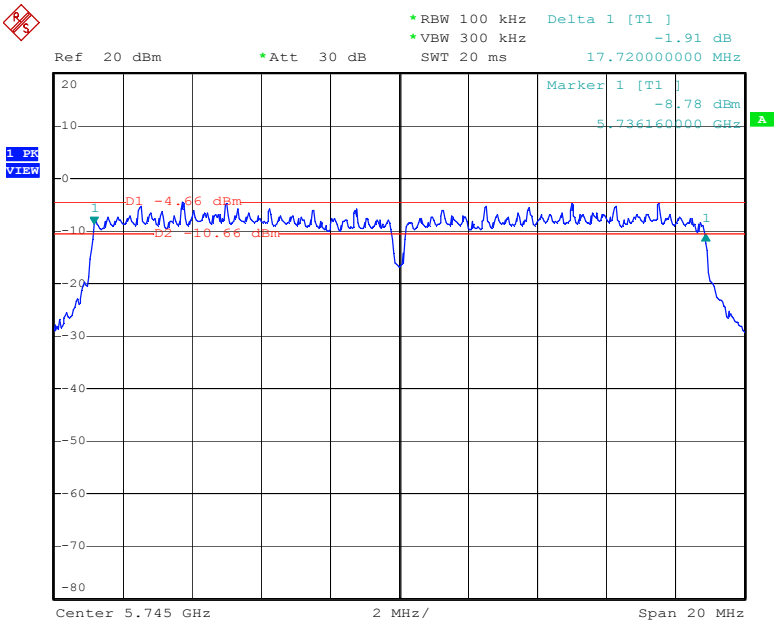
6dB Bandwidth (CH High)



Date: 25.NOV.2015 10:51:22

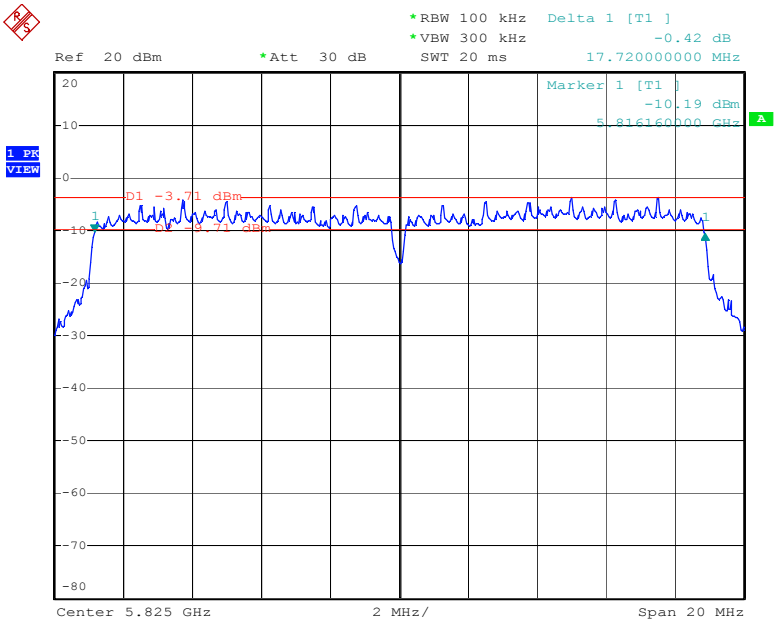
IEEE 802.11ac 20MHz Ant.0 Band4

6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:38:47

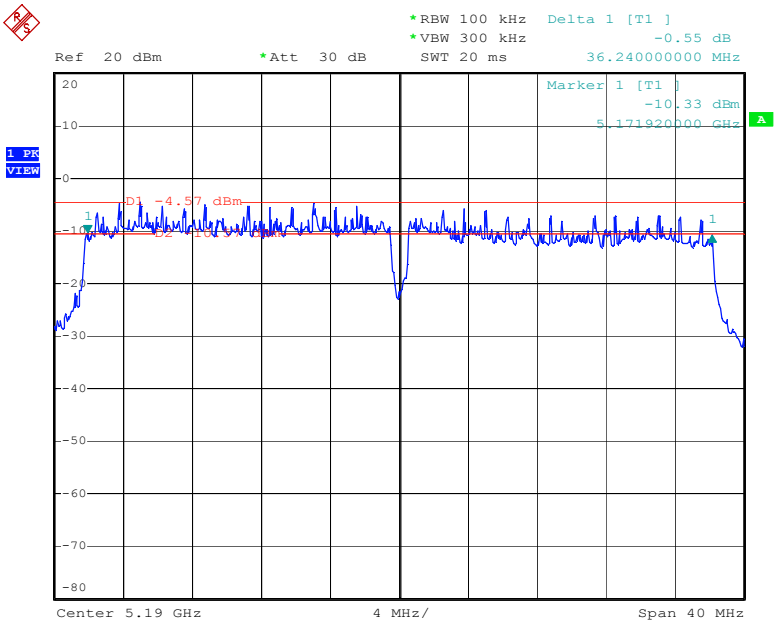
6dB Bandwidth (CH High)



Date: 20.NOV.2015 14:40:39

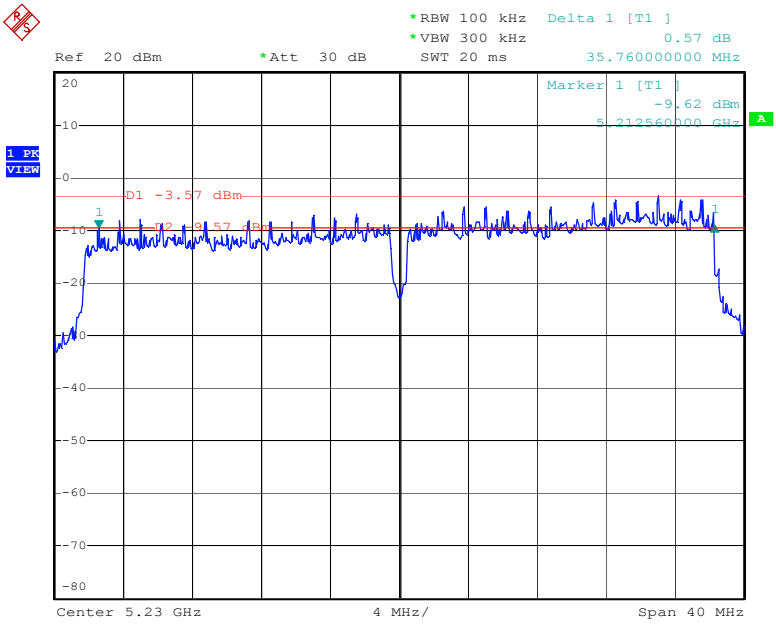
IEEE 802.11ac 40MHz Ant.0 Band1

6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:54:03

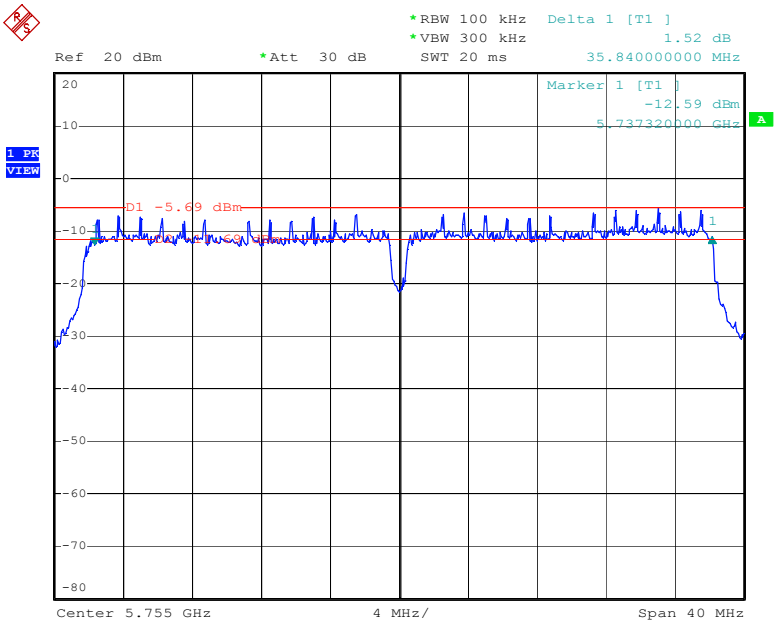
6dB Bandwidth (CH High)



Date: 25.NOV.2015 10:55:41

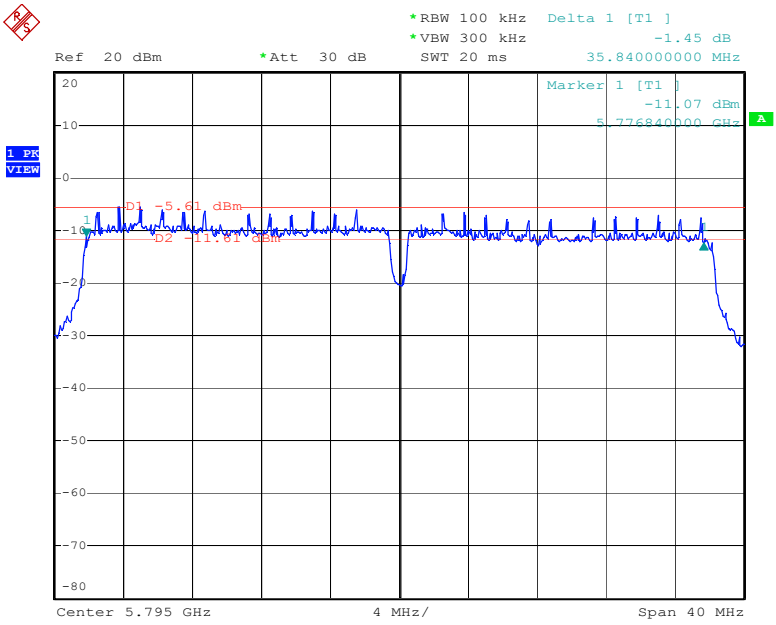
IEEE 802.11ac 40MHz Ant.0 Band4

6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:44:17

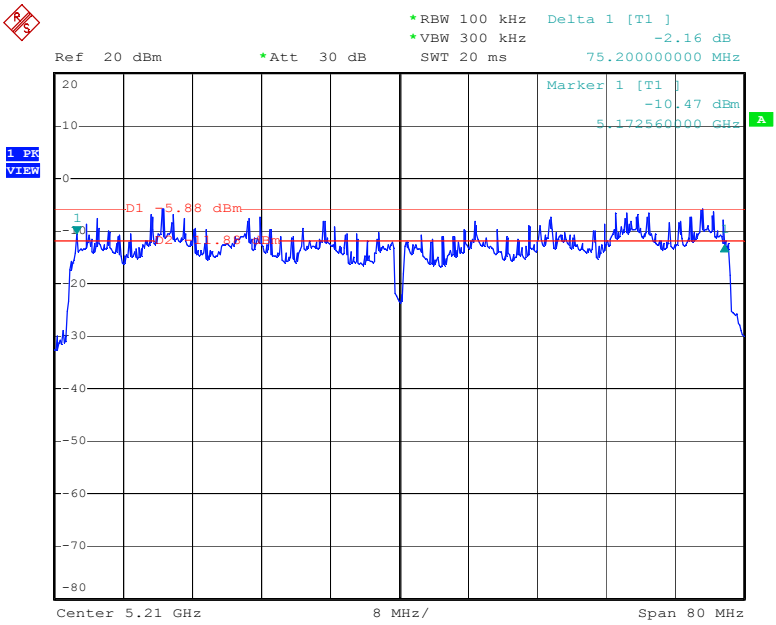
6dB Bandwidth (CH High)



Date: 20.NOV.2015 14:51:48

IEEE 802.11ac 80MHz Ant.0 Band1

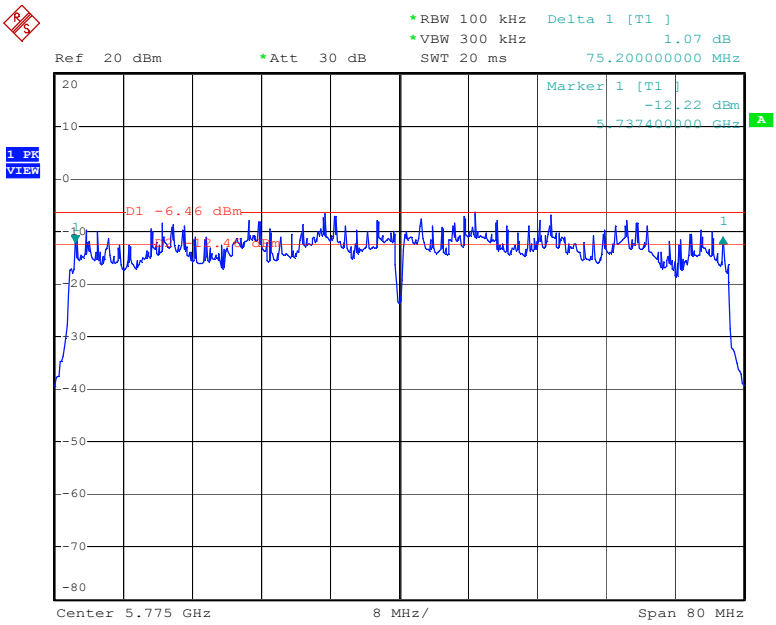
6dB Bandwidth (CH Low)



Date: 25.NOV.2015 10:58:48

IEEE 802.11ac 80MHz Ant.0 Band4

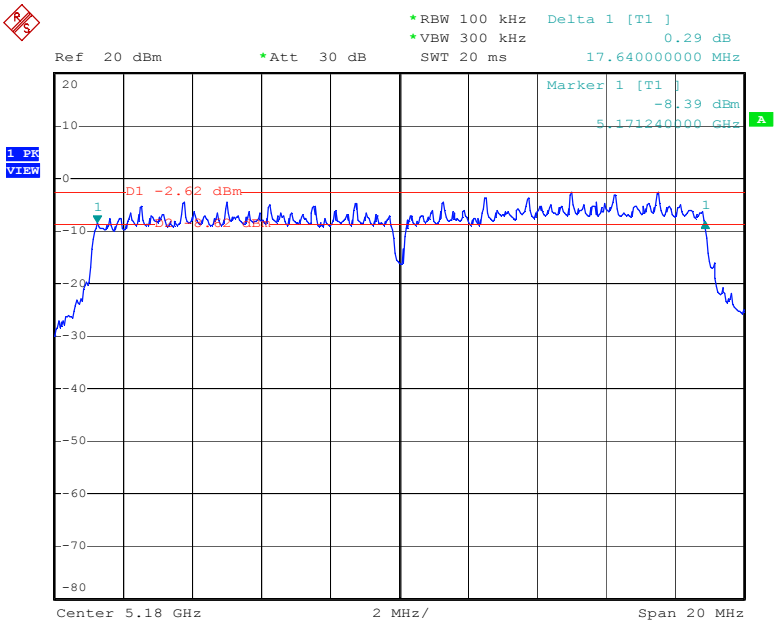
6dB Bandwidth (CH Low)



Date: 20.NOV.2015 14:54:09

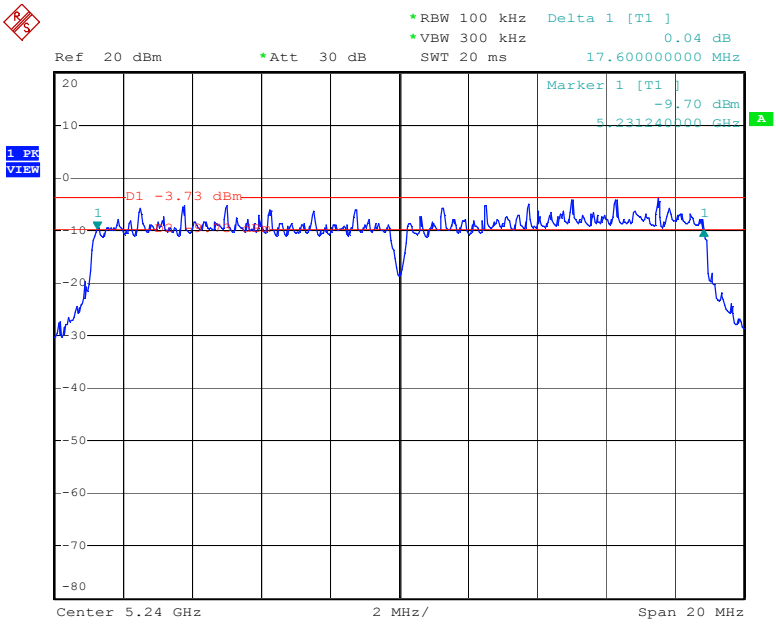
IEEE 802.11n 5G 20MHz Ant.1 Band1

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 10:58:48

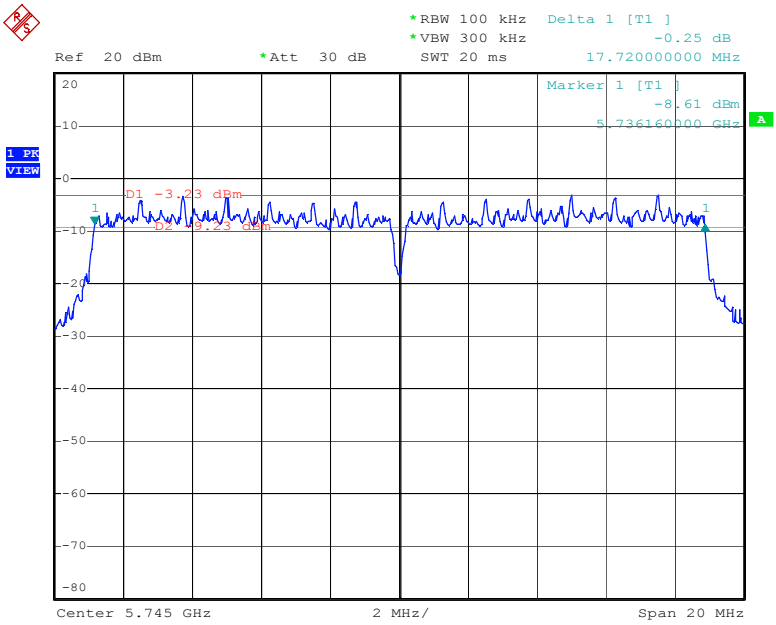
6dB Bandwidth (CH High)



Date: 26.NOV.2015 11:00:11

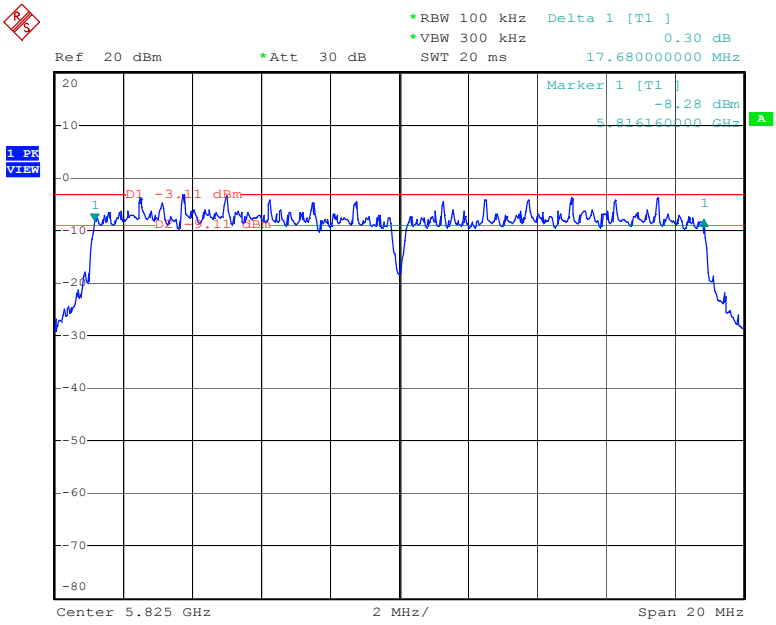
IEEE 802.11n 5G 20MHz Ant.1 Band4

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 11:01:23

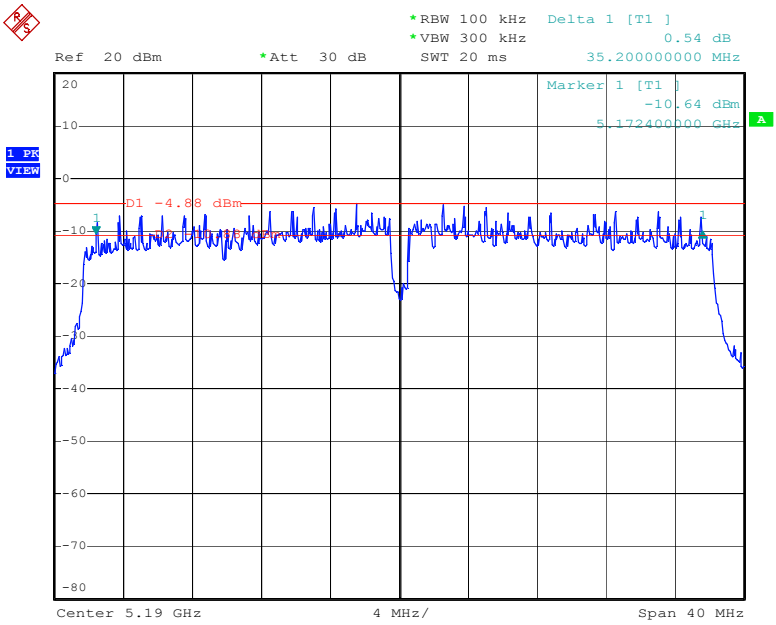
6dB Bandwidth (CH High)



Date: 26.NOV.2015 11:02:20

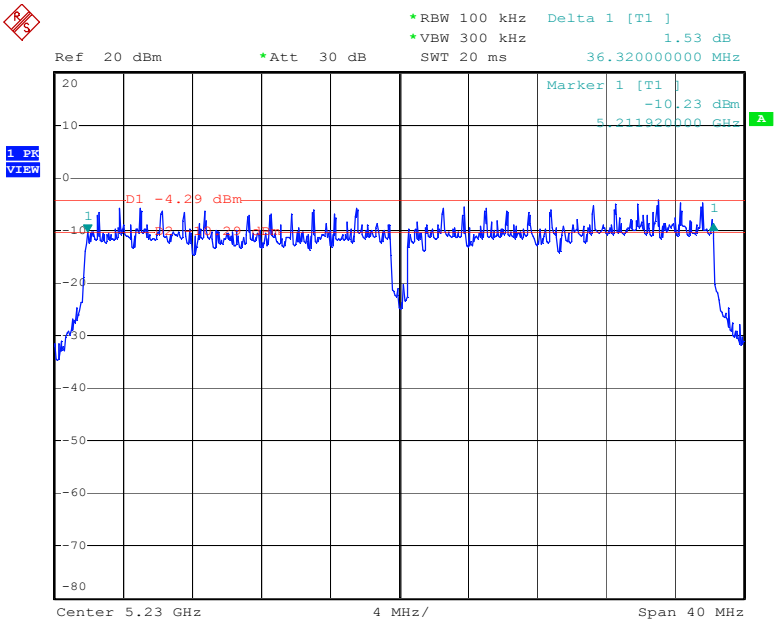
IEEE 802.11n 5G 40MHz Ant.1 Band1

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 11:03:33

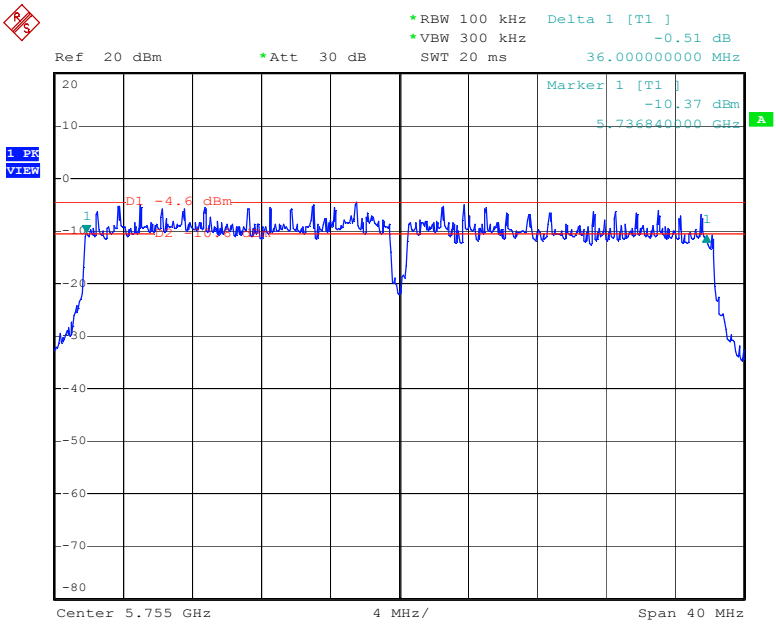
6dB Bandwidth (CH High)



Date: 26.NOV.2015 11:04:38

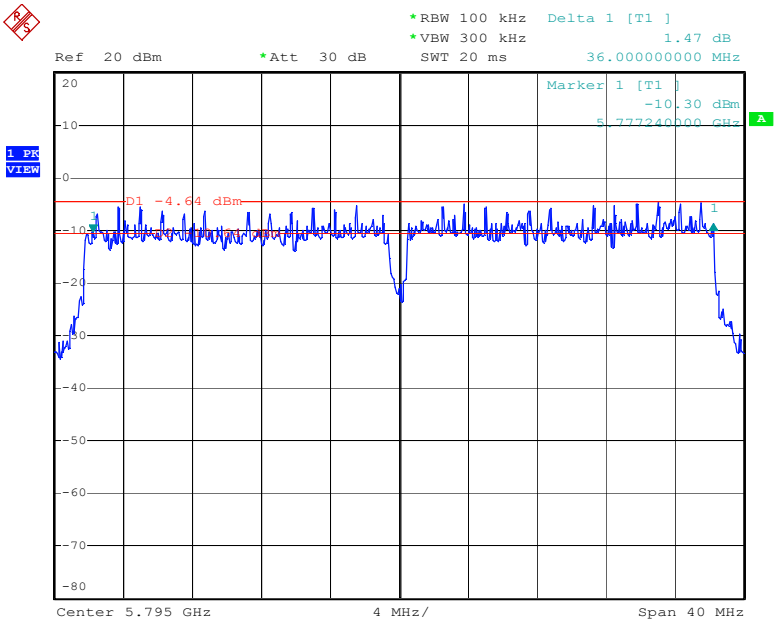
IEEE 802.11n 5G 40MHz Ant.1 Band4

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 11:07:45

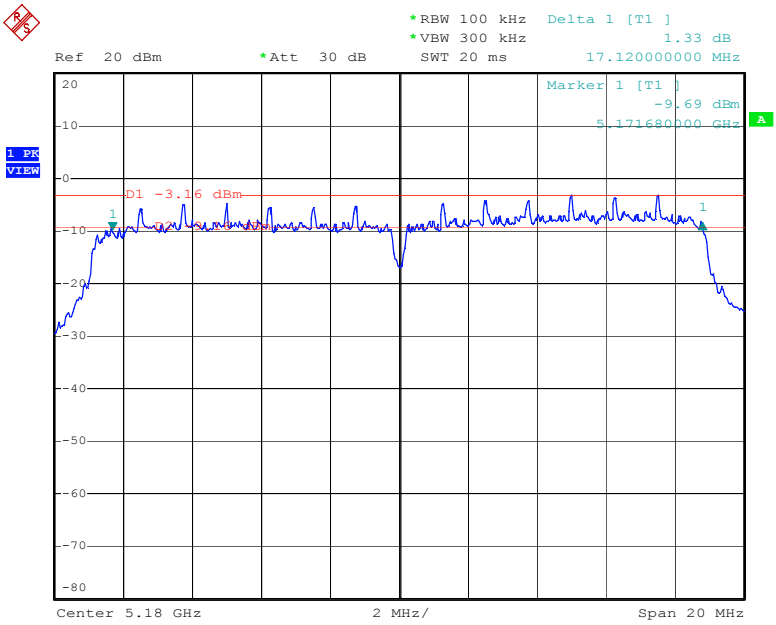
6dB Bandwidth (CH High)



Date: 26.NOV.2015 11:10:33

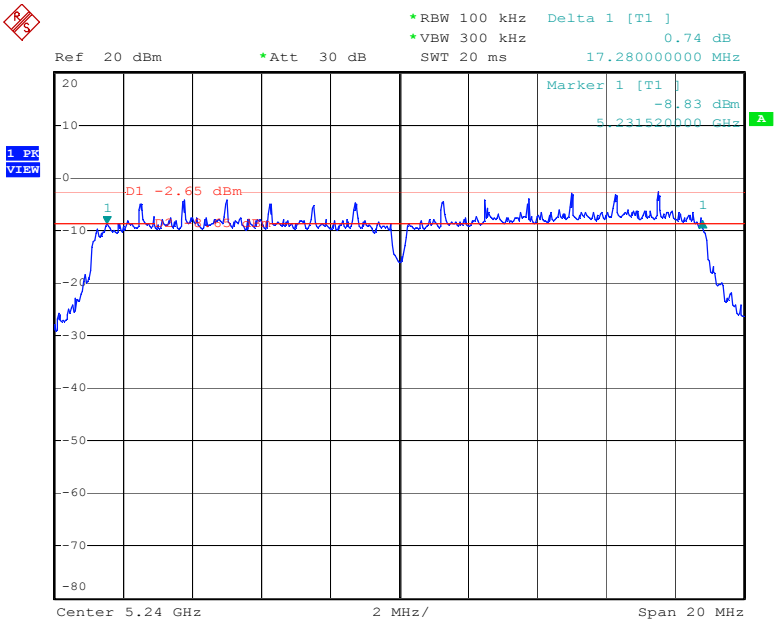
IEEE 802.11ac 20MHz Ant.1 Band1

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 12:54:49

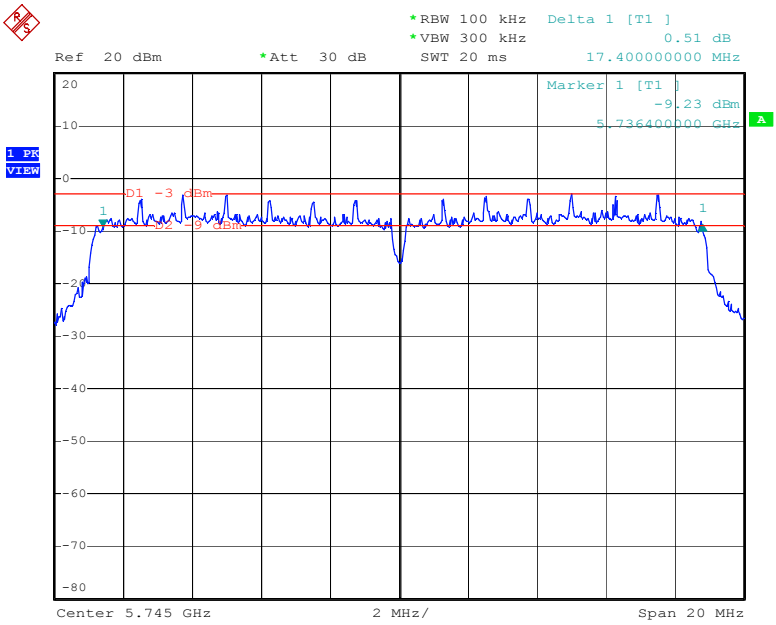
6dB Bandwidth (CH High)



Date: 26.NOV.2015 12:56:29

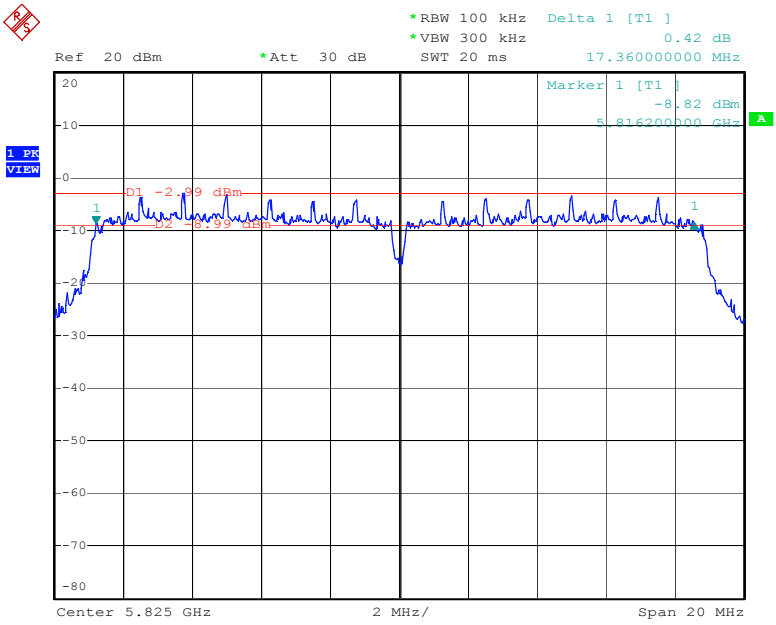
IEEE 802.11ac 20MHz Ant.1 Band4

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 12:57:50

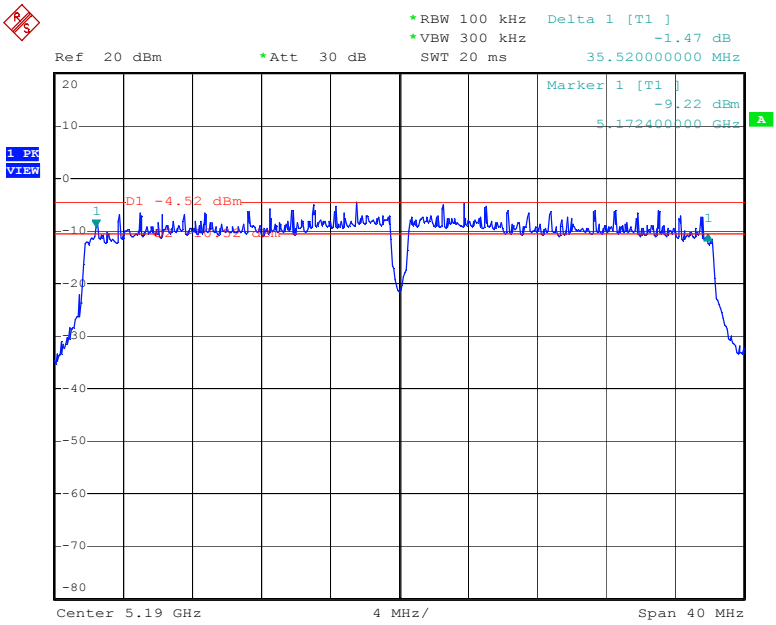
6dB Bandwidth (CH High)



Date: 26.NOV.2015 12:58:56

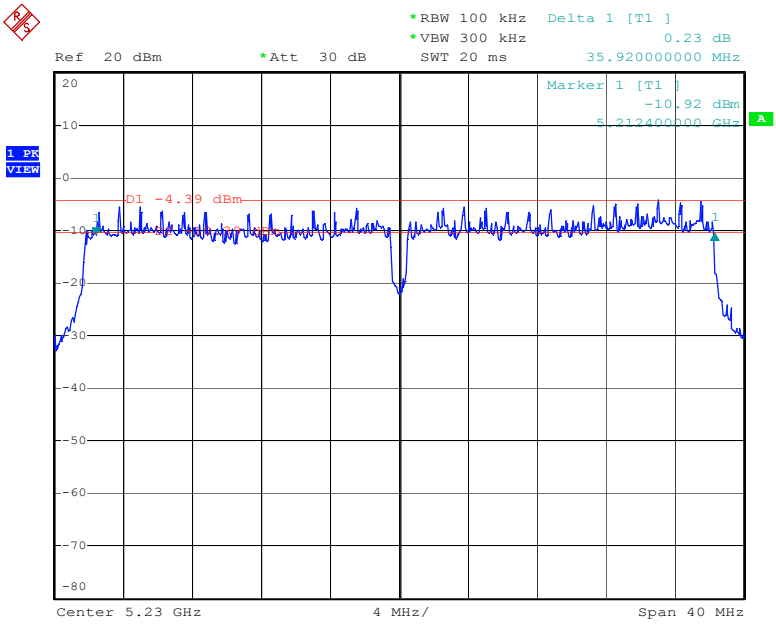
IEEE 802.11ac 40MHz Ant.1 Band1

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 13:02:45

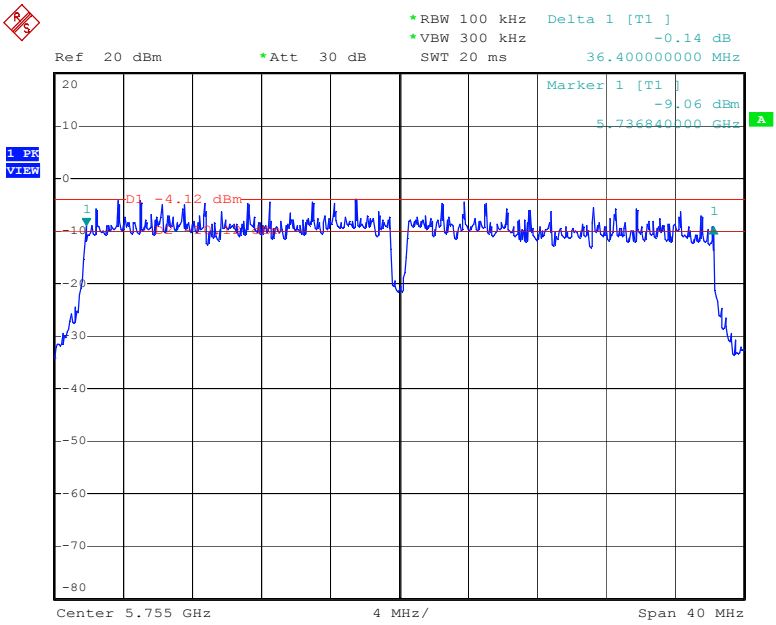
6dB Bandwidth (CH High)



Date: 26.NOV.2015 13:04:17

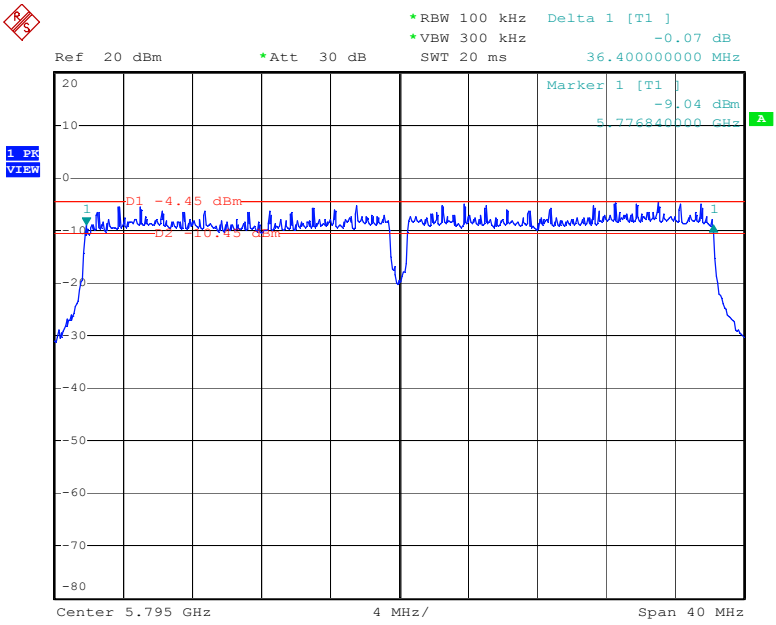
IEEE 802.11ac 40MHz Ant.1 Band4

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 13:06:31

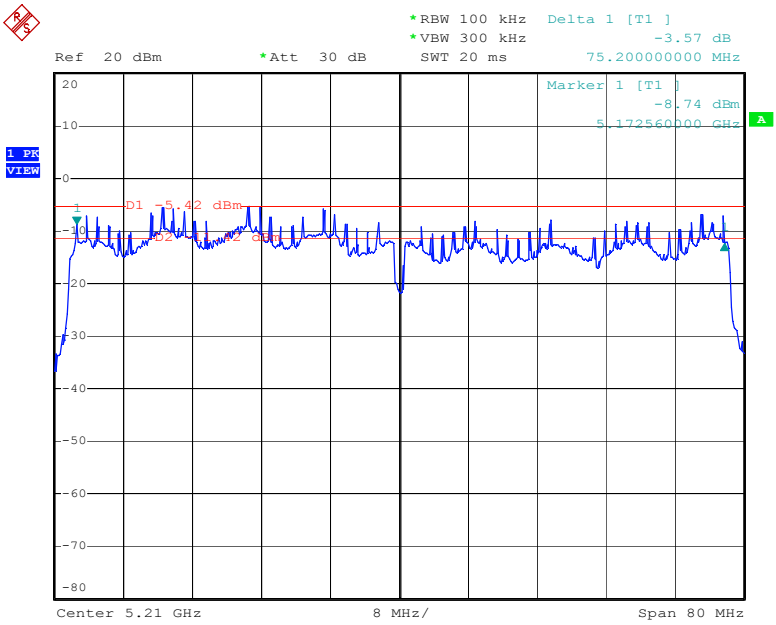
6dB Bandwidth (CH High)



Date: 26.NOV.2015 13:15:52

IEEE 802.11ac 80MHz Ant.1 Band1

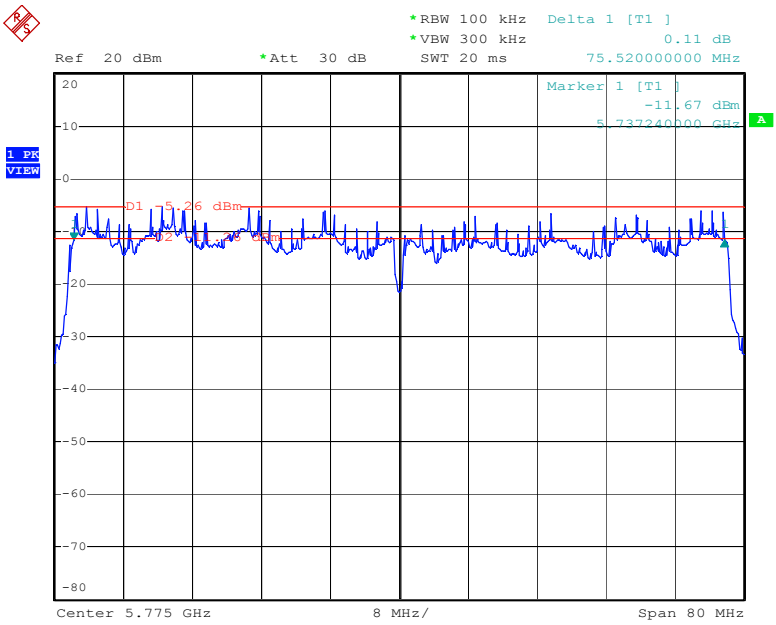
6dB Bandwidth (CH Low)



Date: 26.NOV.2015 13:18:54

IEEE 802.11ac 80MHz Ant.1 Band4

6dB Bandwidth (CH Low)



Date: 26.NOV.2015 13:20:35

C. Peak Power

Product	: Wireless Adapter	Test Mode	: See Section 4.4
Test Item	: Peak Power	Temperature	: 25 ℃
Test Voltage	: DC 5V (From Host)	Humidity	: 56%RH
Test Result	: PASS		

IEEE 802.11a Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	3.25	0.25/24.00	PASS
High	5240	3.66		PASS

IEEE 802.11a Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	3.11	1.00/30.00	PASS
High	5825	3.47		PASS

IEEE 802.11n 5G 20MHz Ant.0 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	0.45	0.25/24.00	PASS
High	5240	0.52		PASS

IEEE 802.11n 5G 20MHz Ant.0 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	0.47	1.00/30.00	PASS
High	5825	0.59		PASS

IEEE 802.11n 5G 40MHz Ant.0 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	0.22	0.25/24.00	PASS
High	5230	0.07		PASS

IEEE 802.11n 5G 40MHz Ant.0 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	0.24	1.00/30.00	PASS
High	5795	0.16		PASS

IEEE 802.11ac 20MHz Ant.0 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	0.72	0.25/24.00	PASS
High	5240	0.61		PASS

IEEE 802.11ac 20MHz Ant.0 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	0.38	1.00/30.00	PASS
High	5825	0.64		PASS

IEEE 802.11ac 40MHz Ant.0 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	0.18	0.25/24.00	PASS
High	5230	0.31		PASS

IEEE 802.11ac 40MHz Ant.0 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	0.29	1.00/30.00	PASS
High	5795	0.31		PASS

IEEE 802.11ac 80MHz Ant.0 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5210	-0.51	0.25/24.00	PASS

IEEE 802.11ac 80MHz Ant.0 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5775	-0.59	1.00/30.00	PASS

IEEE 802.11n 5G 20MHz Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	0.25	0.25/24.00	PASS
High	5240	0.44		PASS

IEEE 802.11n 5G 20MHz Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	0.58	1.00/30.00	PASS
High	5825	0.36		PASS

IEEE 802.11n 5G 40MHz Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	0.26	0.25/24.00	PASS
High	5230	0.14		PASS

IEEE 802.11n 5G 40MHz Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	0.18	1.00/30.00	PASS
High	5795	0.23		PASS

IEEE 802.11ac 20MHz Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	0.51	0.25/24.00	PASS
High	5240	0.43		PASS

IEEE 802.11ac 20MHz Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	0.55	1.00/30.00	PASS
High	5825	0.37		PASS

IEEE 802.11ac 40MHz Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	0.22	0.25/24.00	PASS
High	5230	0.05		PASS

IEEE 802.11ac 40MHz Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	0.14	1.00/30.00	PASS
High	5795	0.24		PASS

IEEE 802.11ac 80MHz Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5210	-0.66	0.25/24.00	PASS

IEEE 802.11ac 80MHz Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5775	-0.72	1.00/30.00	PASS

IEEE 802.11n 5G 20MHz Ant.0+Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	3.36	0.25/24.00	PASS
High	5240	3.49		PASS

IEEE 802.11n 5G 20MHz Ant.0+Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	3.54	1.00/30.00	PASS
High	5825	3.49		PASS

IEEE 802.11n 5G 40MHz Ant.0+Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	3.25	0.25/24.00	PASS
High	5230	3.12		PASS

IEEE 802.11n 5G 40MHz Ant.0+Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	3.22	1.00/30.00	PASS
High	5795	3.21		PASS

IEEE 802.11ac 20MHz Ant.0+Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5180	3.63	0.25/24.00	PASS
High	5240	3.53		PASS

IEEE 802.11ac 20MHz Ant.0+Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5745	3.48	1.00/30.00	PASS
High	5825	3.52		PASS

IEEE 802.11ac 40MHz Ant.0+Ant.1 Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5190	3.21	0.25/24.00	PASS
High	5230	3.19		PASS

IEEE 802.11ac 40MHz Ant.0+Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5755	3.23	1.00/30.00	PASS
High	5795	3.29		PASS

IEEE 802.11ac 80MHz Ant.0+Ant.1Band1

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5210	2.43	0.25/24.00	PASS

IEEE 802.11ac 80MHz Ant.0+Ant.1 Band4

Channel	Frequency (MHz)	Output Power (dBm)	FCC Limit (W/dBm)	Result
Low	5775	2.36	1.00/30.00	PASS

D. Peak Power Spectral Density

Product	: Wireless Adapter	Test Mode	: See Section 4.4
Test Item	: Peak Power Spectral Density	Temperature	: 25 ℃
Test Voltage	: DC 5V (From Host)	Humidity	: 56%RH
Test Result	: PASS		

IEEE 802.11a
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5180	-3.46	11dBm/MHz	PASS
High	5240	-3.33		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-3.69	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-2.34		PASS

IEEE 802.11n 5G 20MHz Ant.0
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5180	-8.50	11dBm/MHz	PASS
High	5240	-8.01		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-7.95	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-7.73		PASS

IEEE 802.11n 5G 40MHz Ant.0
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-10.09	11dBm/MHz	PASS
High	5230	-9.09		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-10.01	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-9.80		PASS

IEEE 802.11ac 20MHz Ant.0
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-8.87	11dBm/MHz	PASS
High	5825	-8.53		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-8.29	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-8.36		PASS

IEEE 802.11ac 40MHz Ant.0
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-11.12	11dBm/MHz	PASS
High	5230	-11.45		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-11.16	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-10.70		PASS

IEEE 802.11ac 80MHz Ant.0

Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5210	-11.90	11dBm/MHz	PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5775	-11.52	30dBm/500 kHz (26.99dBm/MHz)	PASS

IEEE 802.11n 5G 20MHz Ant.1

Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5180	-7.03	11dBm/MHz	PASS
High	5240	-7.37		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-7.27	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-7.32		PASS

IEEE 802.11n 5G 40MHz Ant.1

Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-7.75	11dBm/MHz	PASS
High	5230	-7.69		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-8.49	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-7.45		PASS

IEEE 802.11ac 20MHz Ant.1

Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-7.19	11dBm/MHz	PASS
High	5825	-7.42		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-7.59	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-7.76		PASS

IEEE 802.11ac 40MHz Ant.1

Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-7.43	11dBm/MHz	PASS
High	5230	-7.72		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-7.67	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-8.35		PASS

IEEE 802.11ac 80MHz Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5210	-8.35	11dBm/MHz	PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5775	-9.07	30dBm/500 kHz (26.99dBm/MHz)	PASS

IEEE 802.11n 5G 20MHz Ant.0+Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5180	-4.69	11dBm/MHz	PASS
High	5240	-4.67		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-4.59	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-4.51		PASS

IEEE 802.11n 5G 40MHz Ant.0+Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-5.75	11dBm/MHz	PASS
High	5230	-5.32		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-6.17	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-5.46		PASS

IEEE 802.11ac 20MHz Ant.0+Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-4.94	11dBm/MHz	PASS
High	5825	-4.93		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5745	-4.92	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5825	-5.04		PASS

IEEE 802.11ac 40MHz Ant.0+Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5190	-5.88	11dBm/MHz	PASS
High	5230	-6.19		PASS

Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
Low	5755	-6.06	30dBm/500 kHz (26.99dBm/MHz)	PASS
High	5795	-6.36		PASS

IEEE 802.11ac 80MHz Ant.0+Ant.1
Band1

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5210	-6.76	11dBm/MHz	PASS

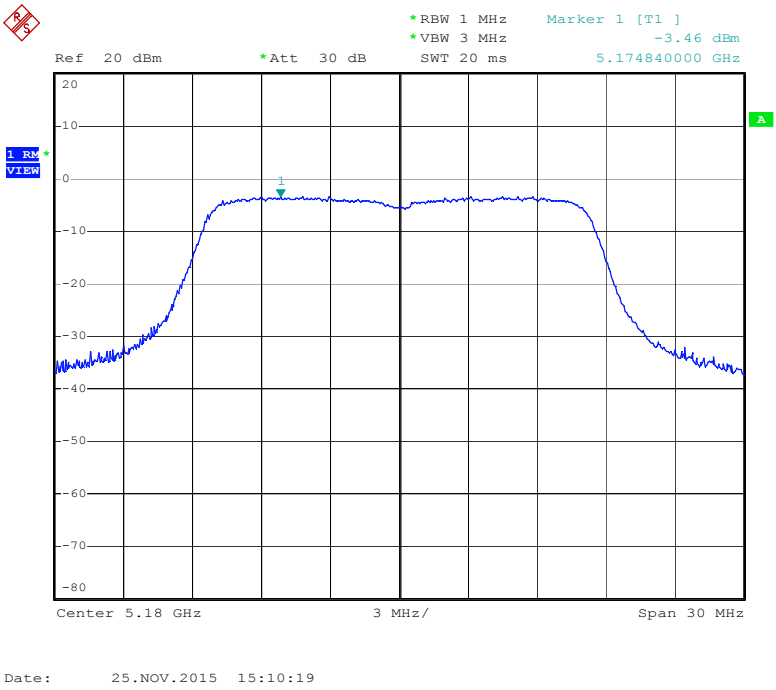
Band4

Channel	Frequency (MHz)	PPSD (dBm)	FCC Limit (kHz)	Result
High	5775	-7.11	30dBm/500 kHz (26.99dBm/MHz)	PASS

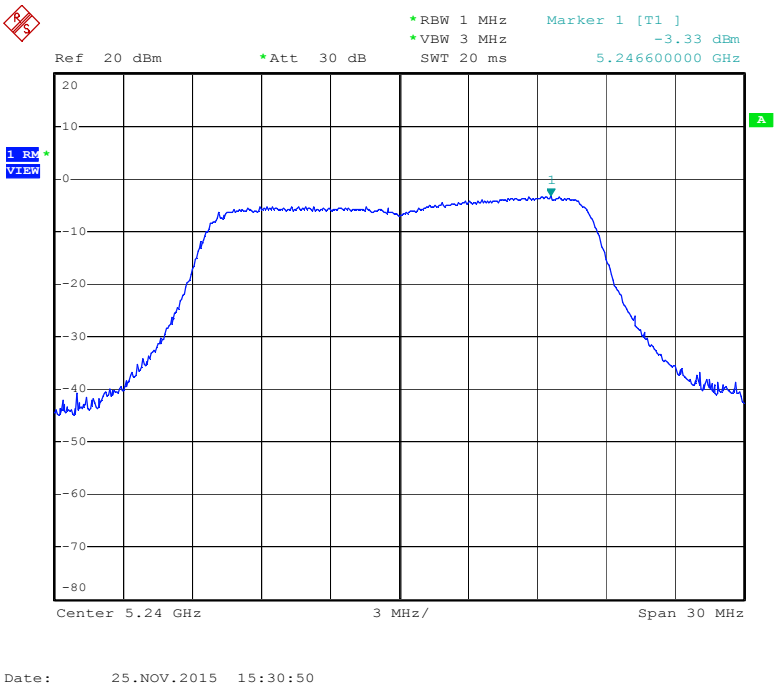
Note: For 5.725~5.85GHz (Band4): Power Density (dBm/500kHz)= Power Density (dBm/MHz)- 10log(500kHz/RBW) (dB)

IEEE 802.11a Band1

PPSD (CH Low)

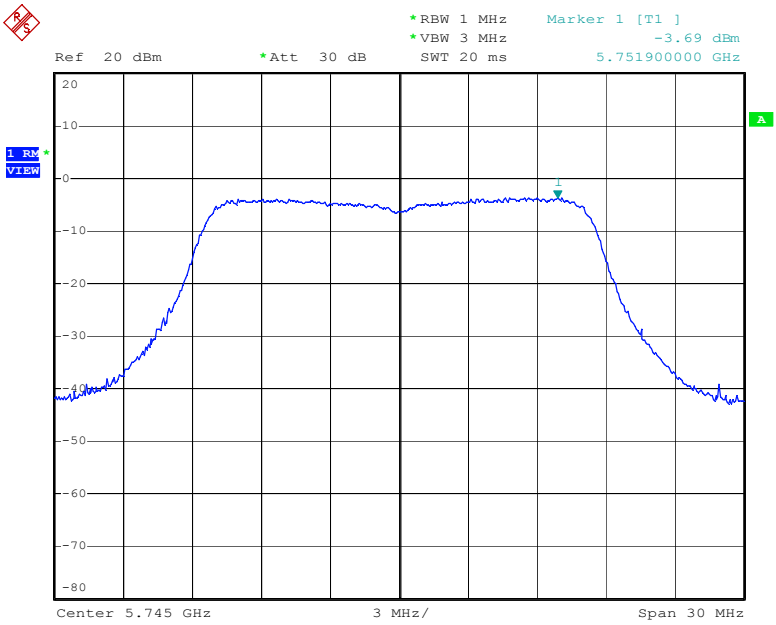


PPSD (CH High)



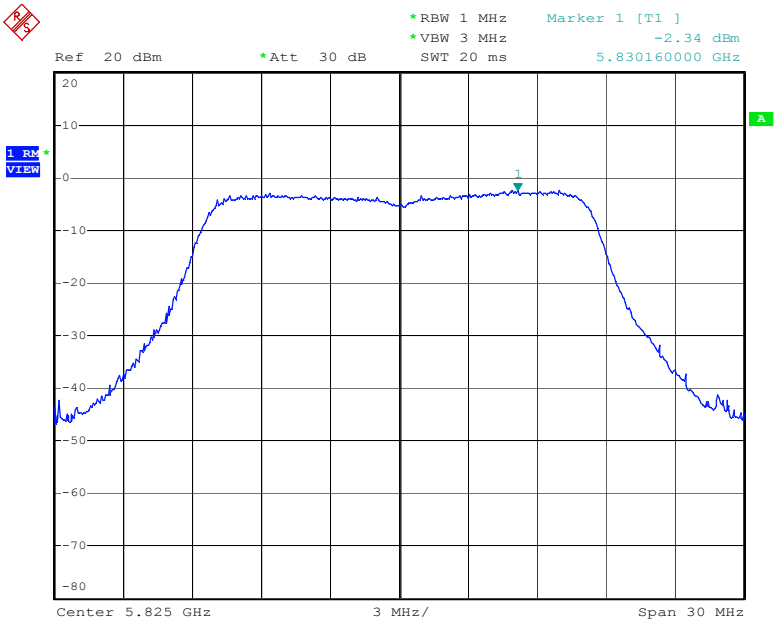
IEEE 802.11a Band4

PPSD (CH Low)



Date: 25.NOV.2015 15:31:38

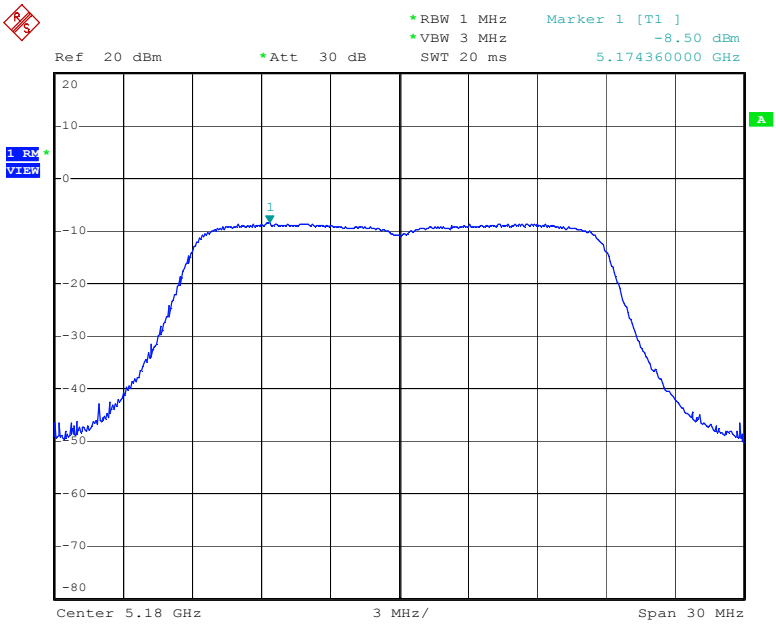
PPSD (CH High)



Date: 25.NOV.2015 15:32:46

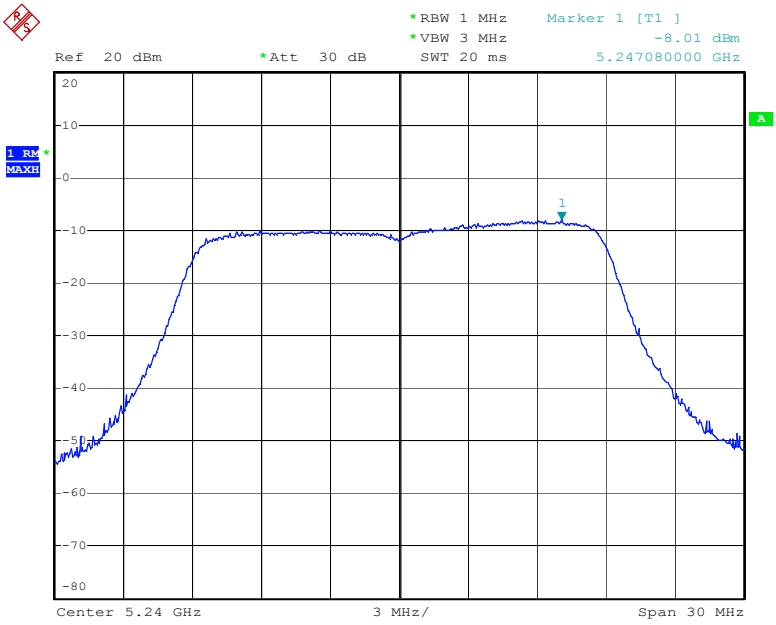
IEEE 802.11n 5G 20MHz Ant.0 Band1

PPSD (CH Low)



Date: 27.NOV.2015 09:44:35

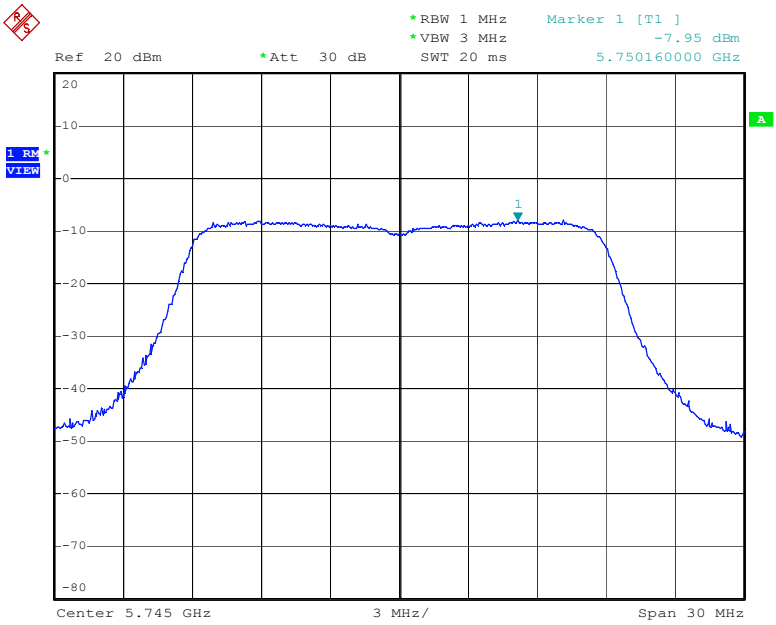
PPSD (CH High)



Date: 27.NOV.2015 09:46:03

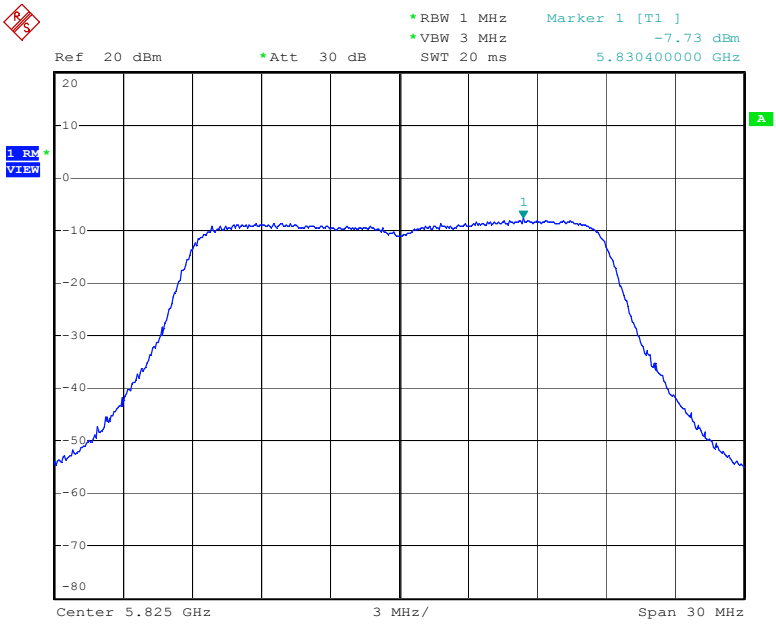
IEEE 802.11n 5G 20MHz Ant.0 Band4

PPSD (CH Low)



Date: 27.NOV.2015 09:47:32

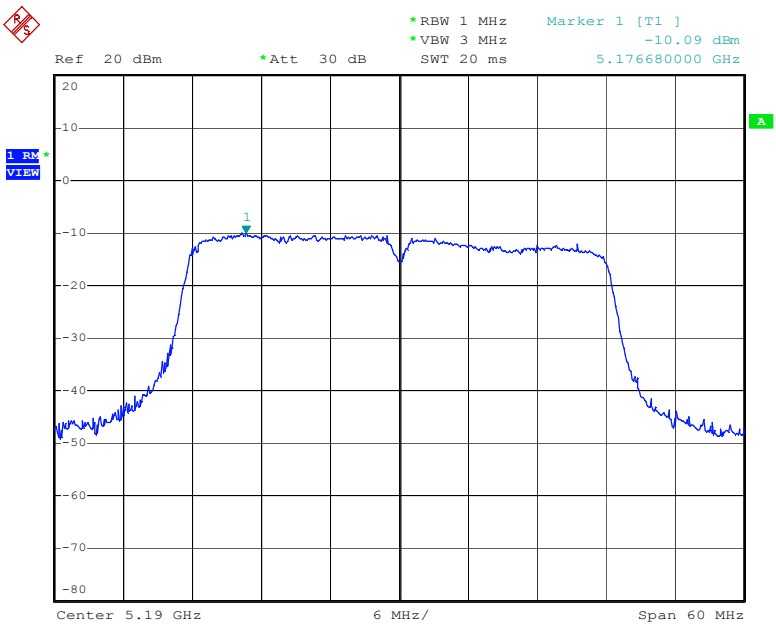
PPSD (CH High)



Date: 27.NOV.2015 09:48:50

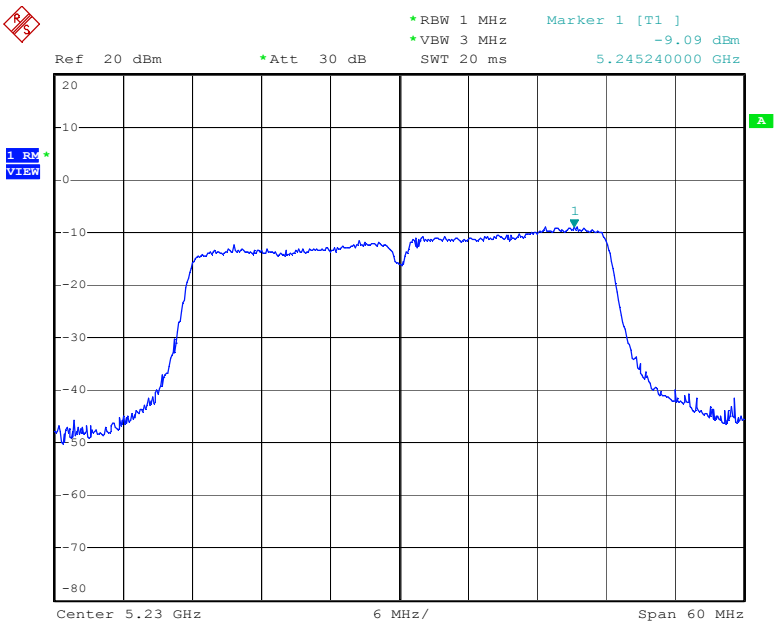
IEEE 802.11n 5G 40MHz Ant.0 Band1

PPSD (CH Low)



Date: 27.NOV.2015 09:49:48

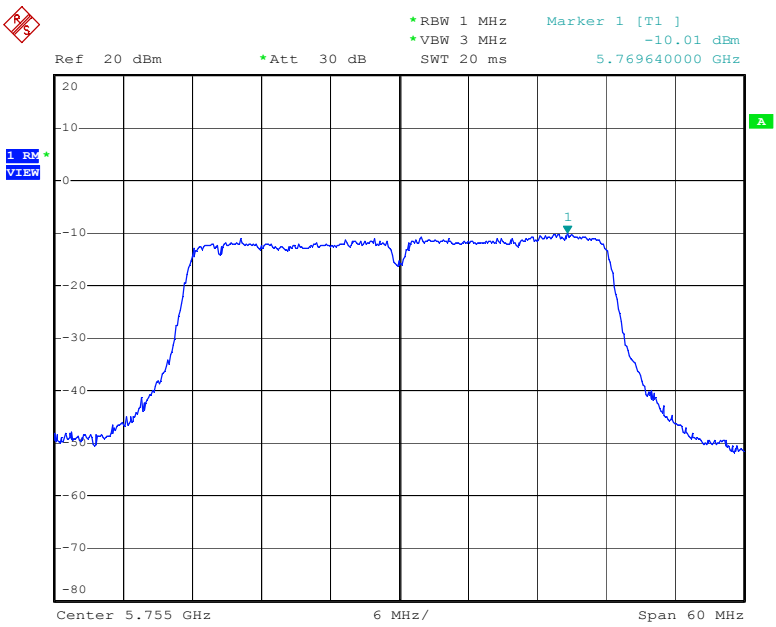
PPSD (CH High)



Date: 27.NOV.2015 09:50:33

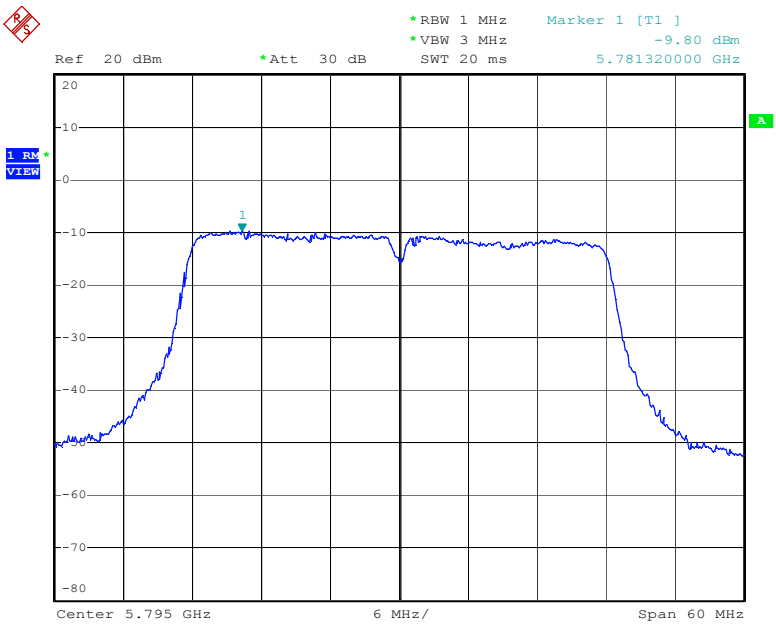
IEEE 802.11n 5G 40MHz Ant.0 Band4

PPSD (CH Low)



Date: 27.NOV.2015 09:51:20

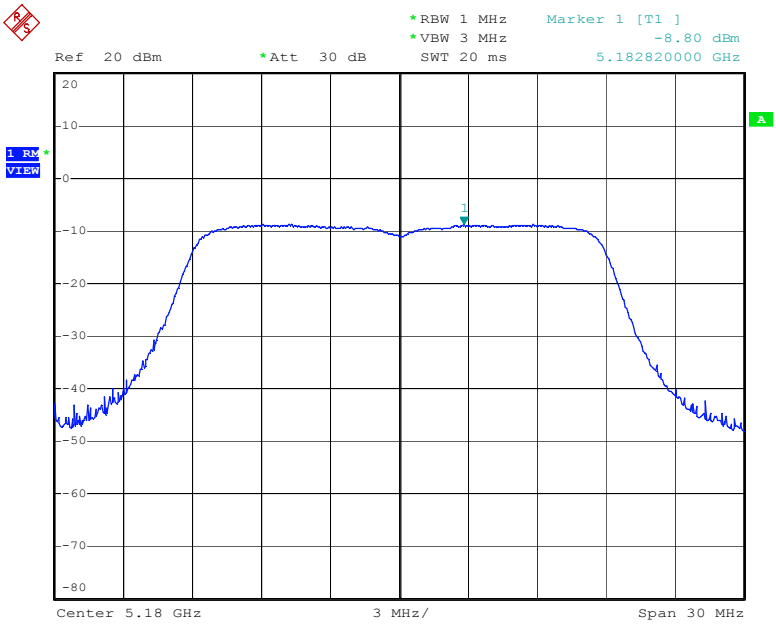
PPSD (CH High)



Date: 27.NOV.2015 09:53:19

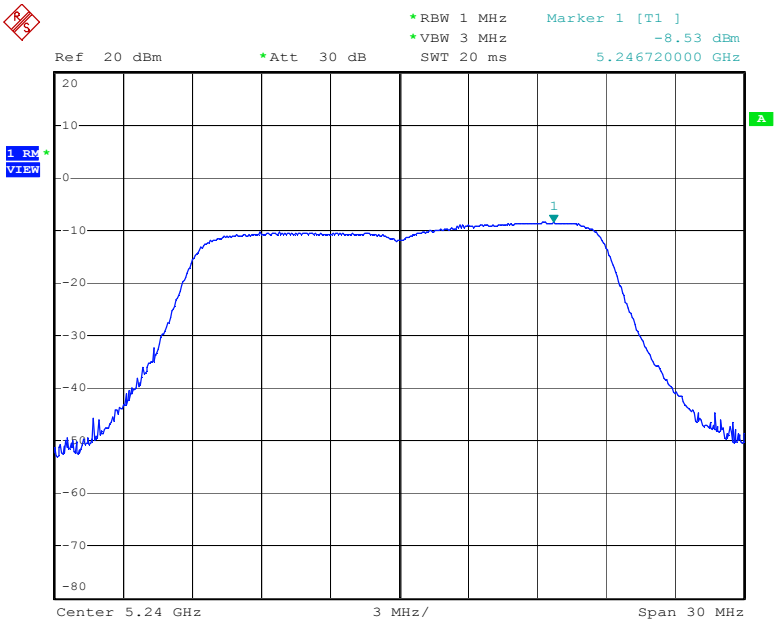
IEEE 802.11ac 20MHz Ant.0 Band1

PPSD (CH Low)



Date: 27.NOV.2015 09:57:51

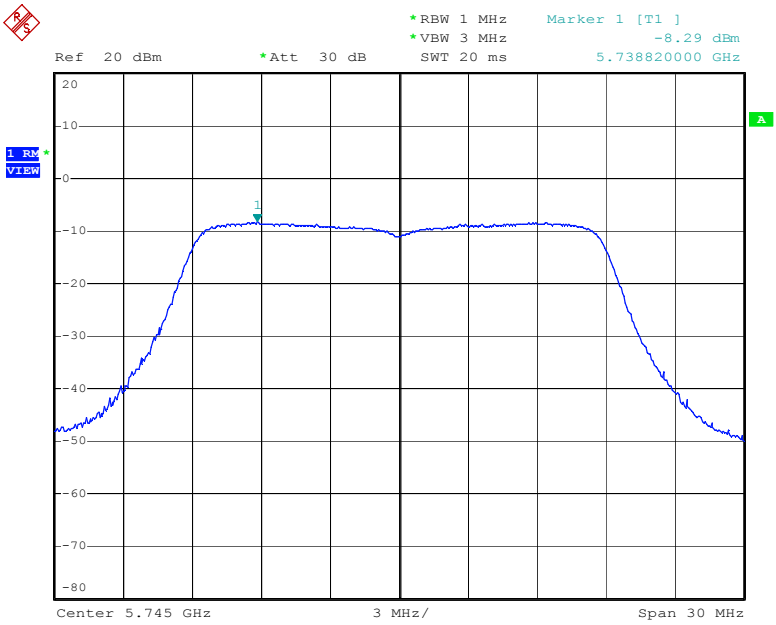
PPSD (CH High)



Date: 27.NOV.2015 09:55:04

IEEE 802.11ac 20MHz Ant.0 Band4

PPSD (CH Low)



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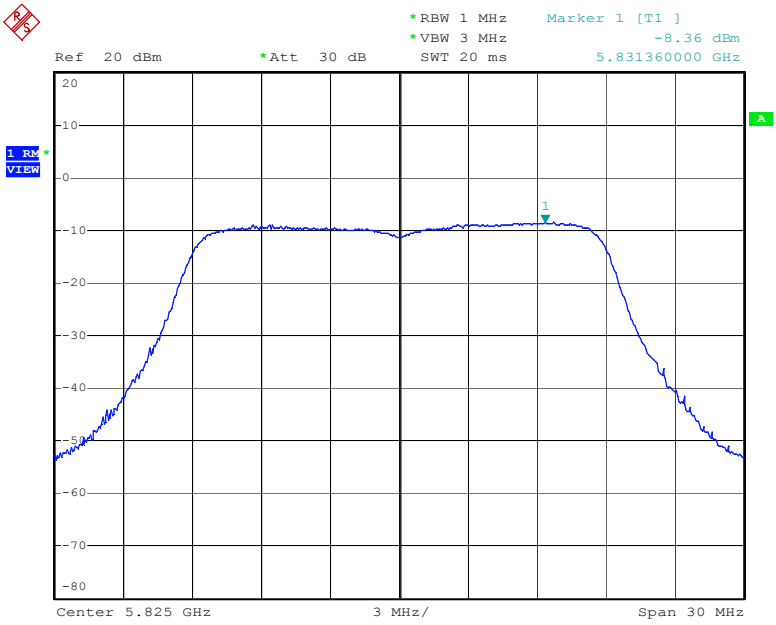
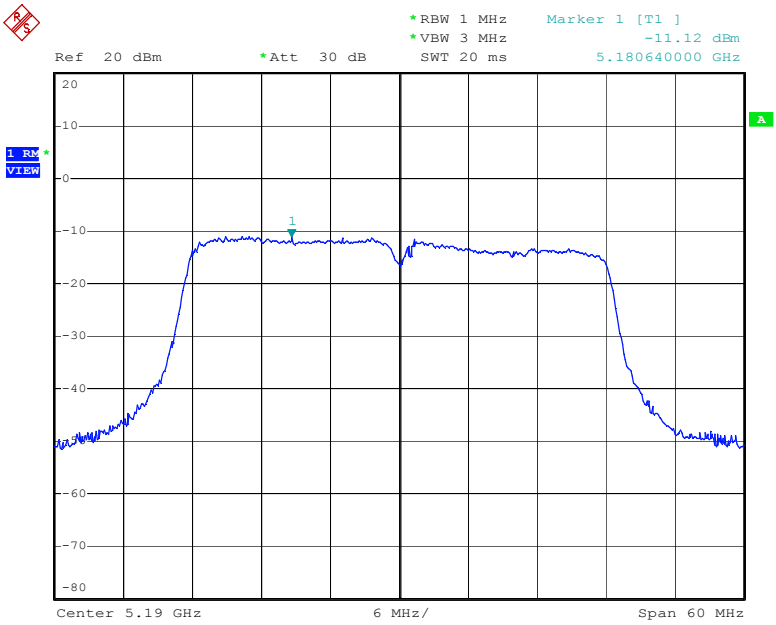


Date: 27.NOV.2015 10:02:21

IEEE 802.11ac 40MHz Ant.0 Band1

PPSD (CH Low)



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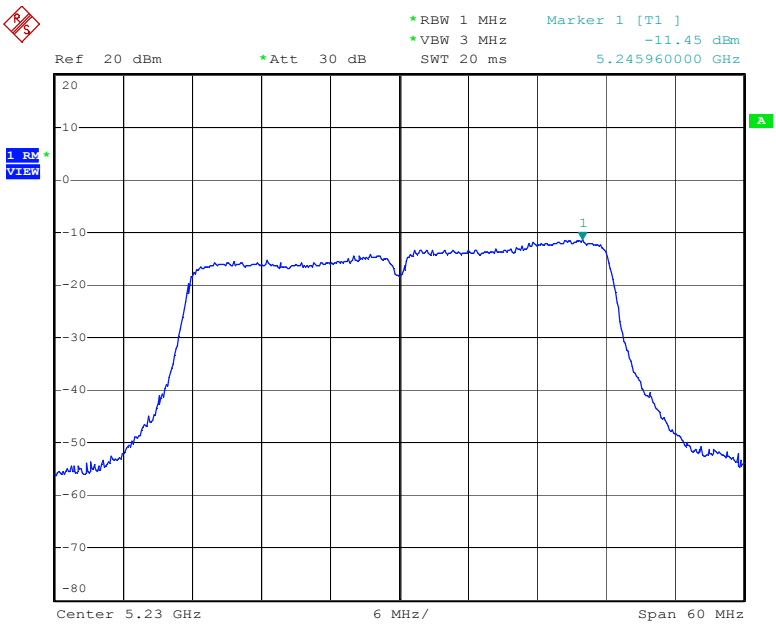

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IEEE 802.11ac 40MHz Ant.0 Band4

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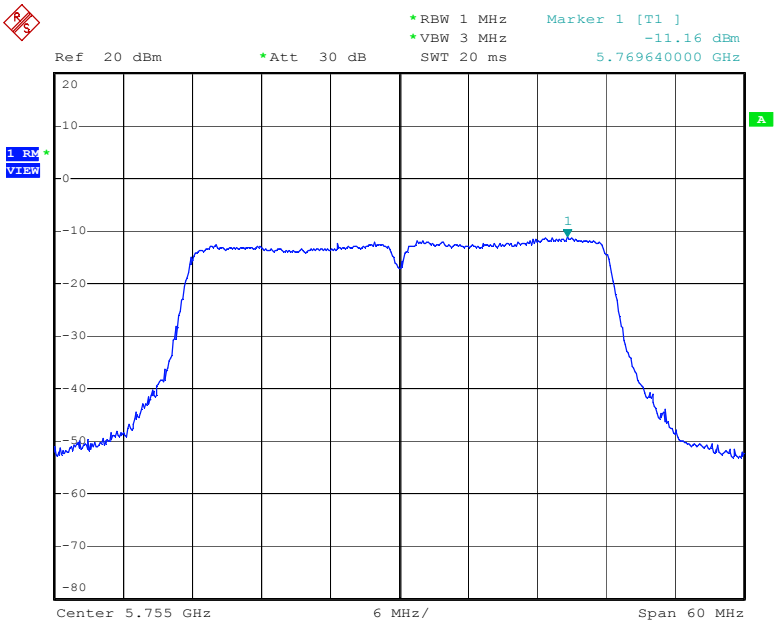

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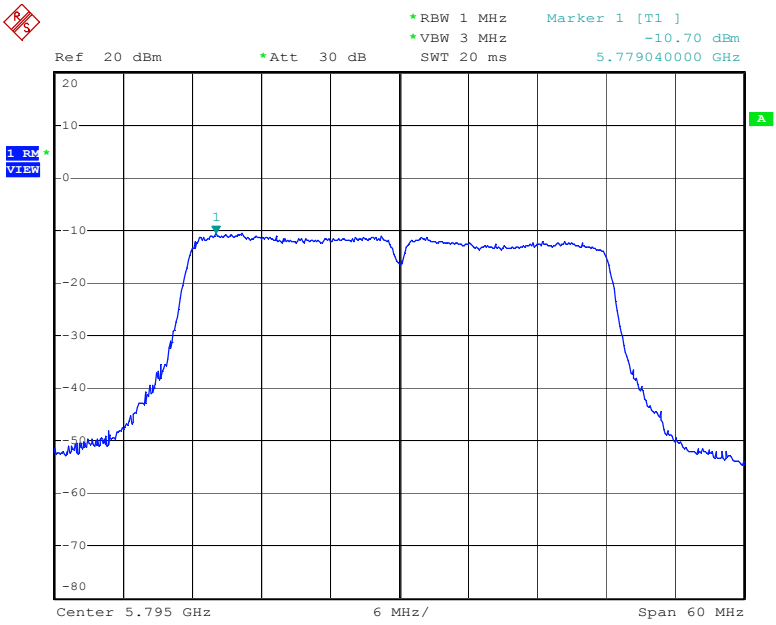

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IEEE 802.11ac 80MHz Ant.0 Band1

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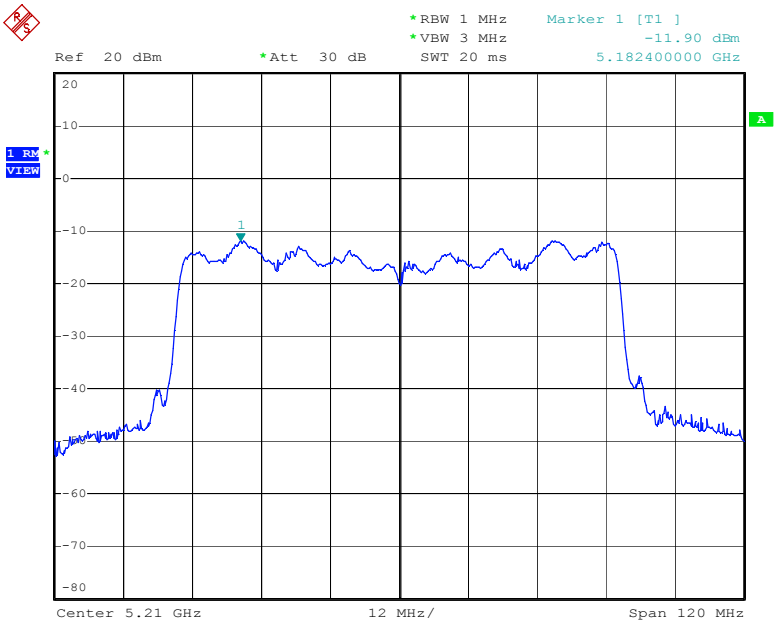

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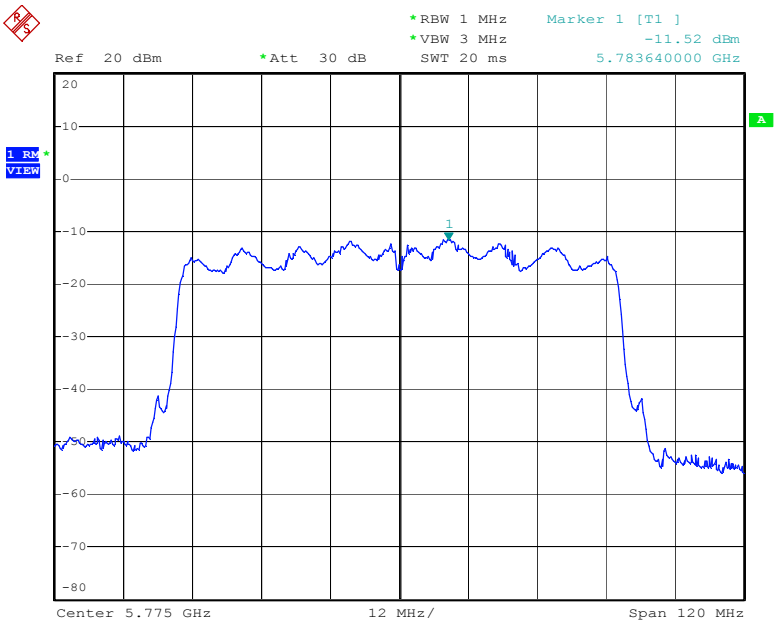
IEEE 802.11ac 80MHz Ant.0 Band4

PPSD (CH Low)



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IEEE 802.11n 5G 20MHz Ant.1 Band1

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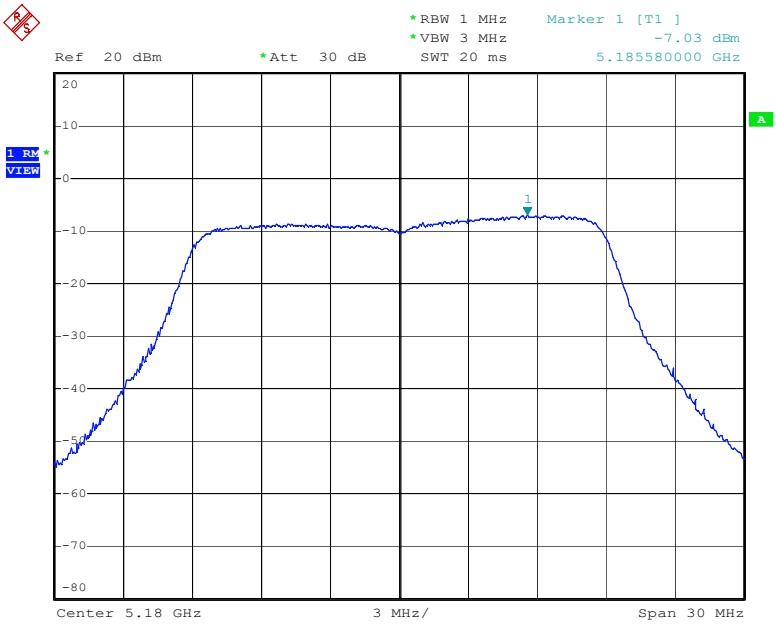

Date: 27.NOV.2015 10:14:26

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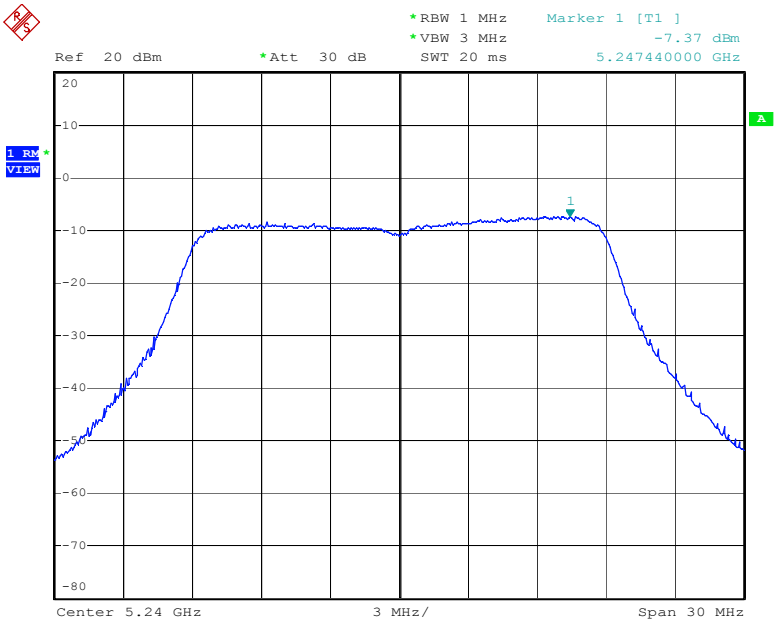

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IEEE 802.11n 5G 20MHz Ant.1 Band4

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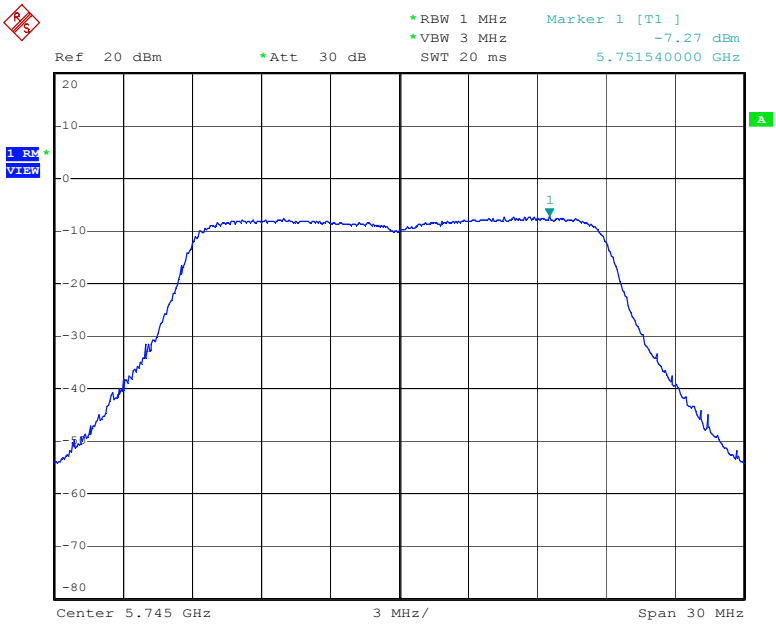
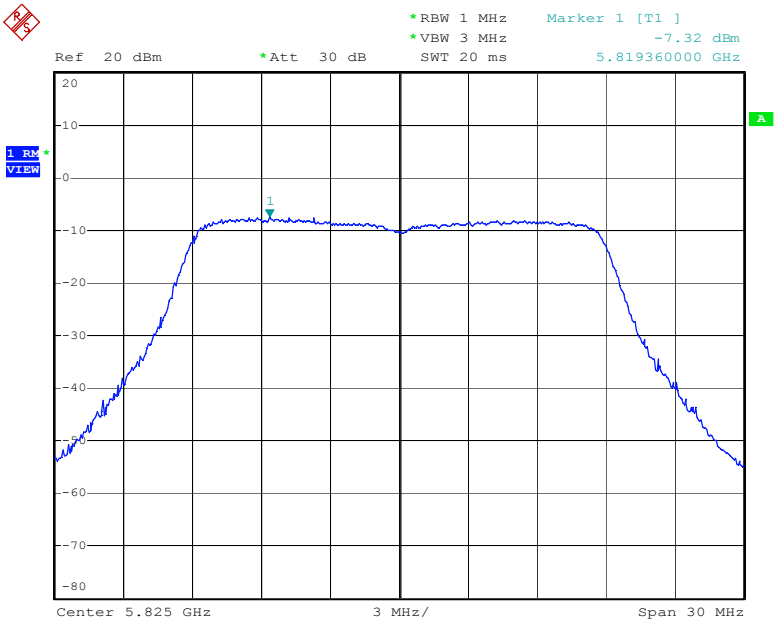


Date: 27.NOV.2015 10:16:29

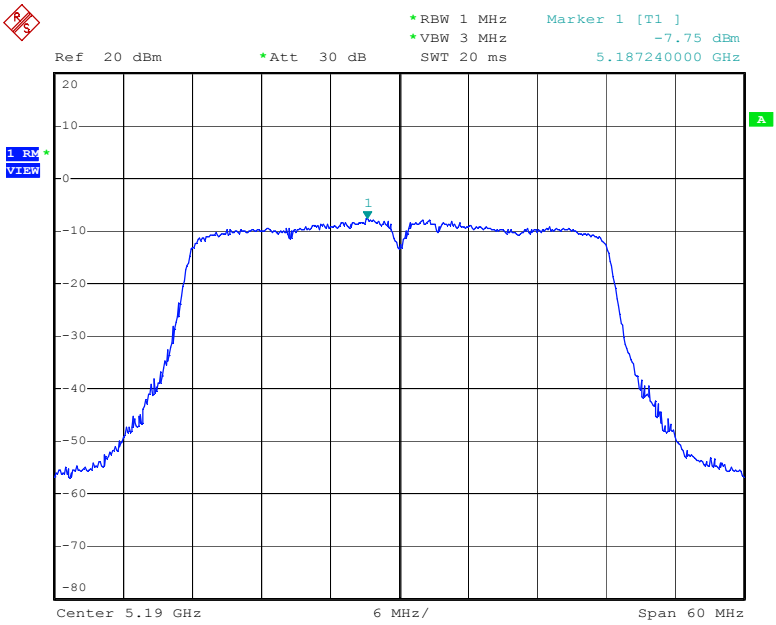
PPSD (CH High)



Date: 27.NOV.2015 10:17:04

IEEE 802.11n 5G 40MHz Ant.1 Band1

PPSD (CH Low)



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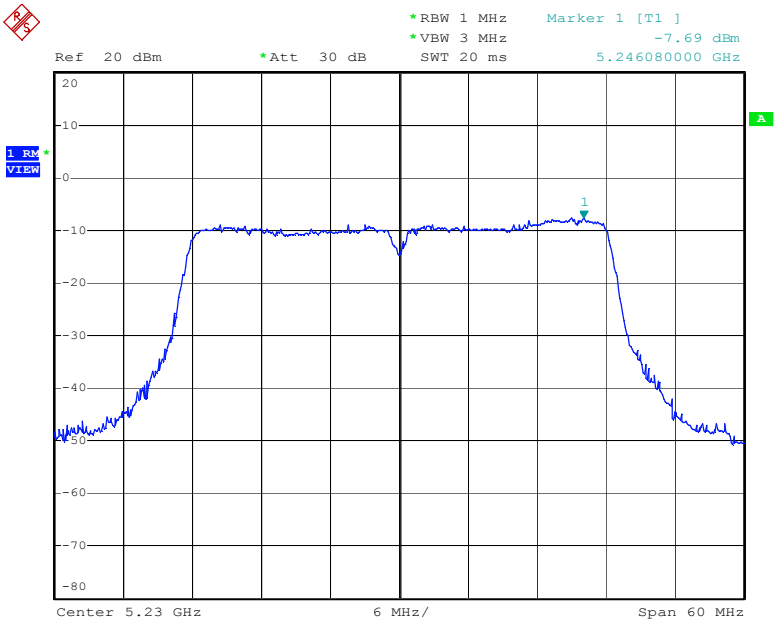
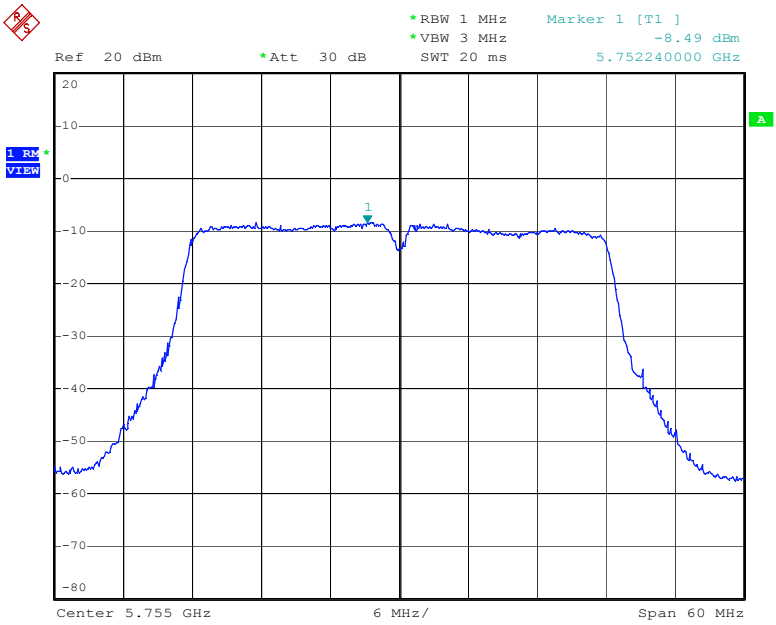
PPSD (CH High)



Date: 27.NOV.2015 10:19:59

IEEE 802.11n 5G 40MHz Ant.1 Band4

PPSD (CH Low)



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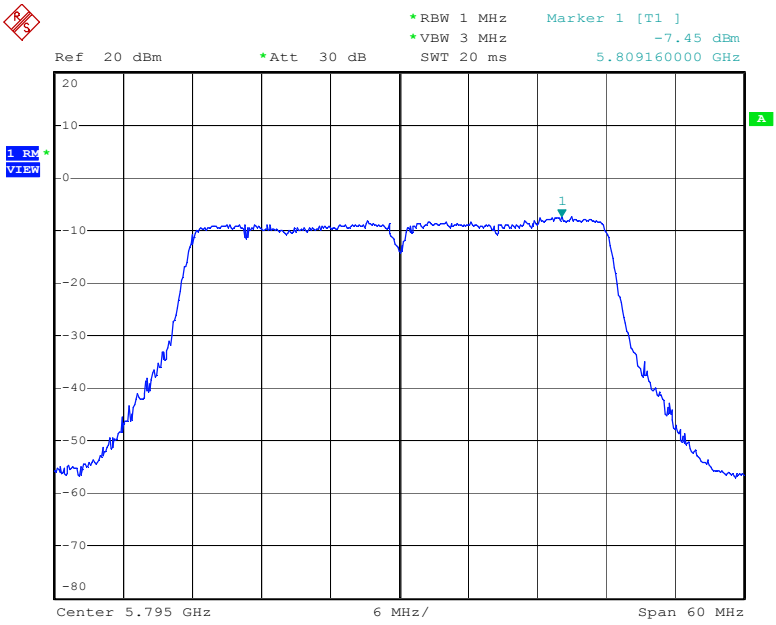
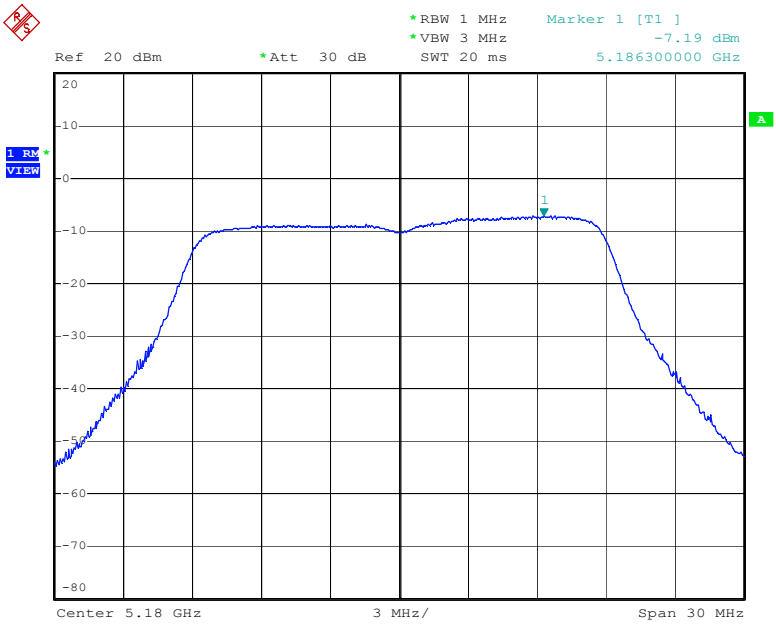
PPSD (CH High)



Date: 27.NOV.2015 10:21:42

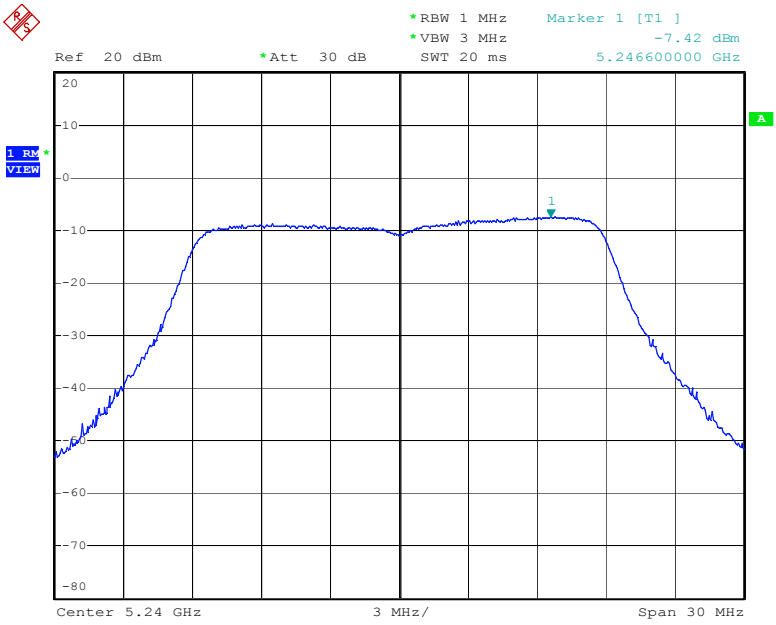
IEEE 802.11ac 20MHz Ant.1 Band1

PPSD (CH Low)



Date: 27.NOV.2015 10:23:12

PPSD (CH High)



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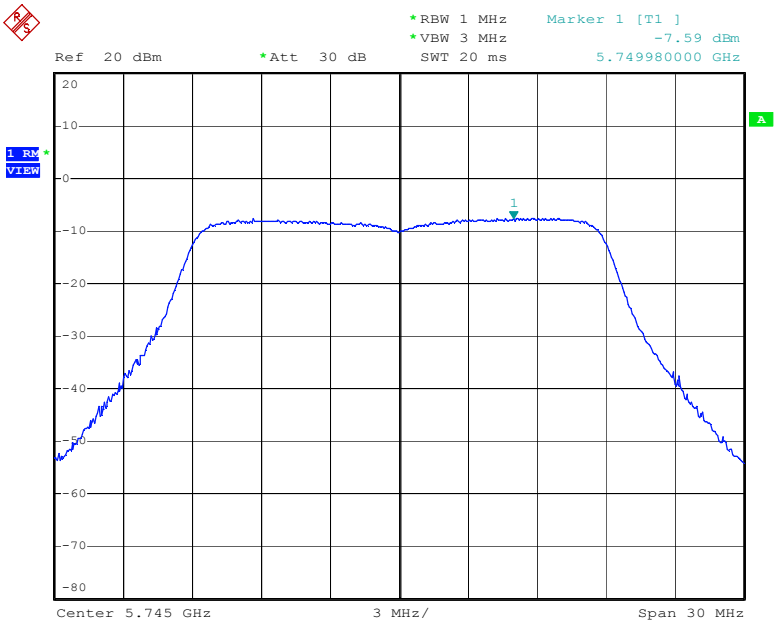
IEEE 802.11ac 20MHz Ant.1 Band4

PPSD (CH Low)



Date: 27.NOV.2015 10:24:35

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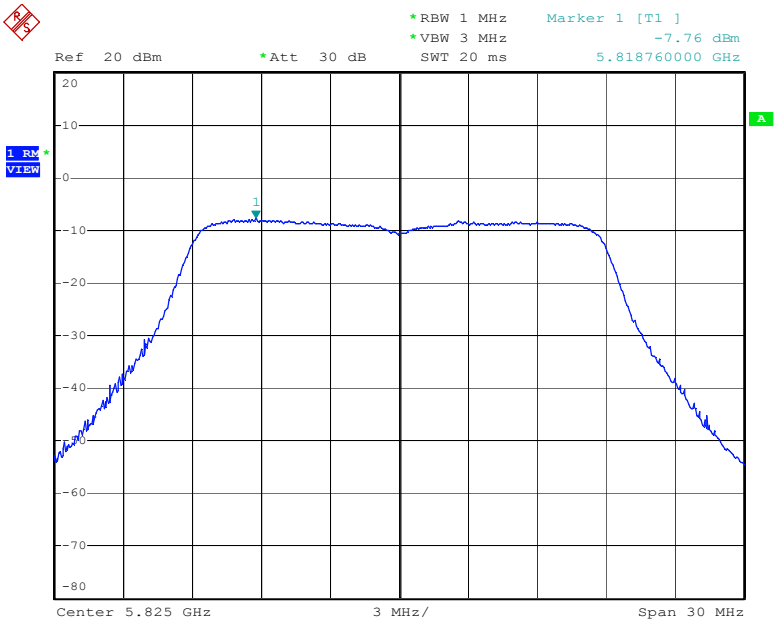
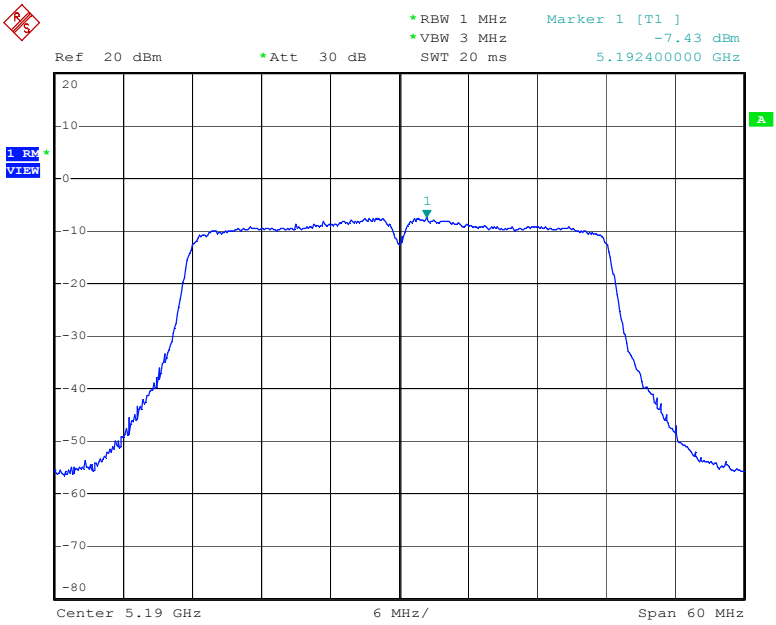


Date: 27.NOV.2015 10:25:12

IEEE 802.11ac 40MHz Ant.1 Band1

PPSD (CH Low)



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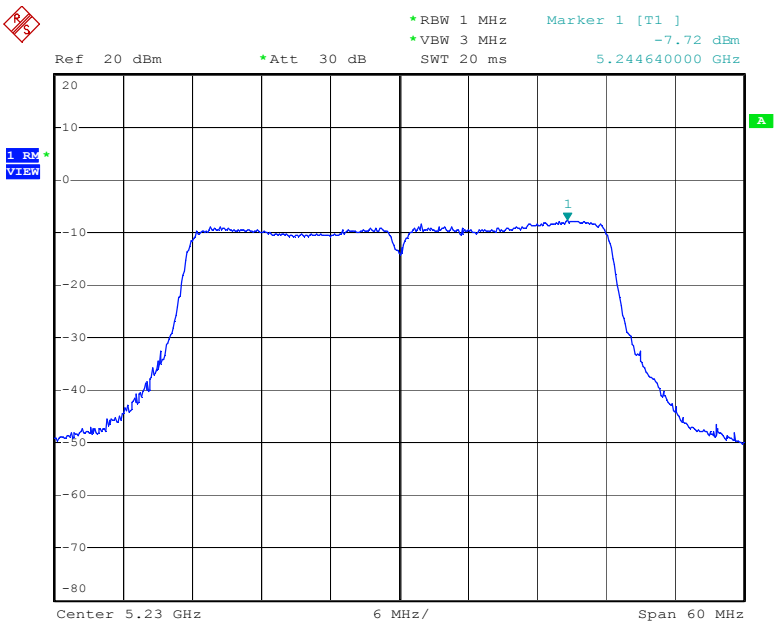
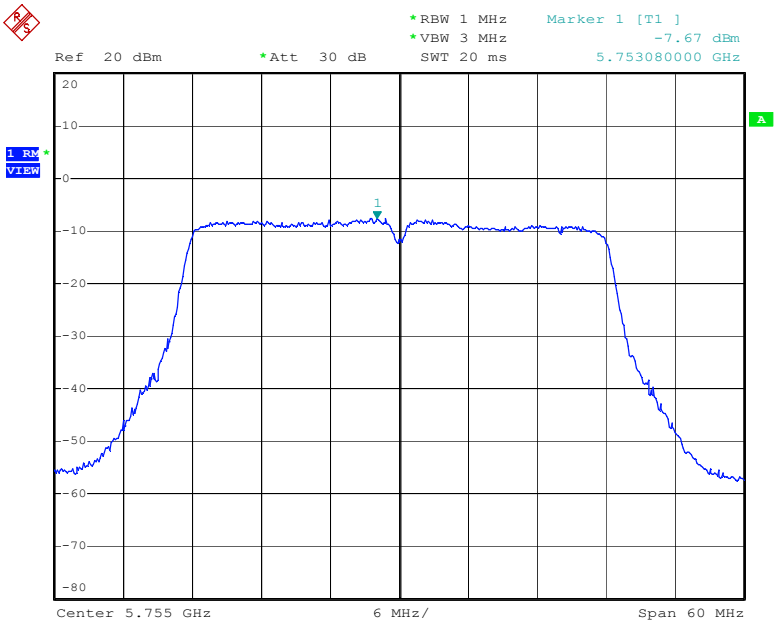


Date: 27.NOV.2015 10:28:00

IEEE 802.11ac 40MHz Ant.1 Band4

PPSD (CH Low)



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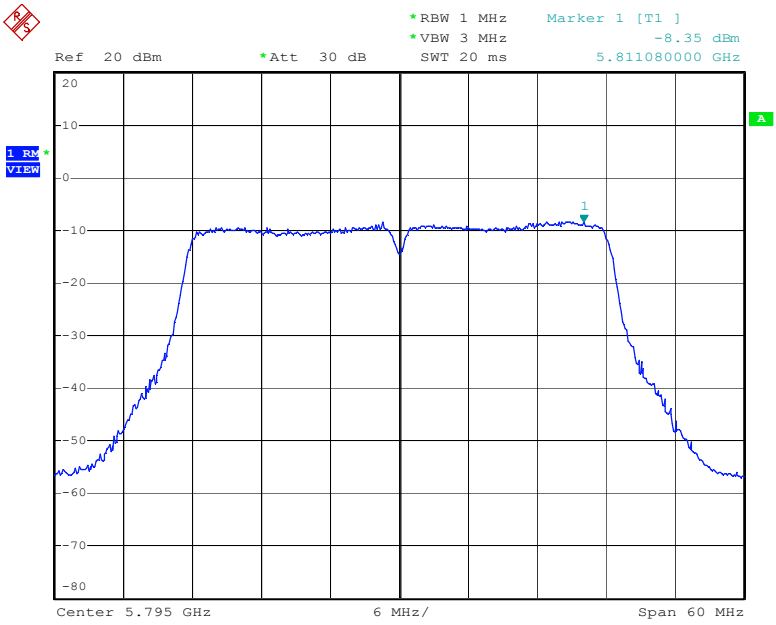
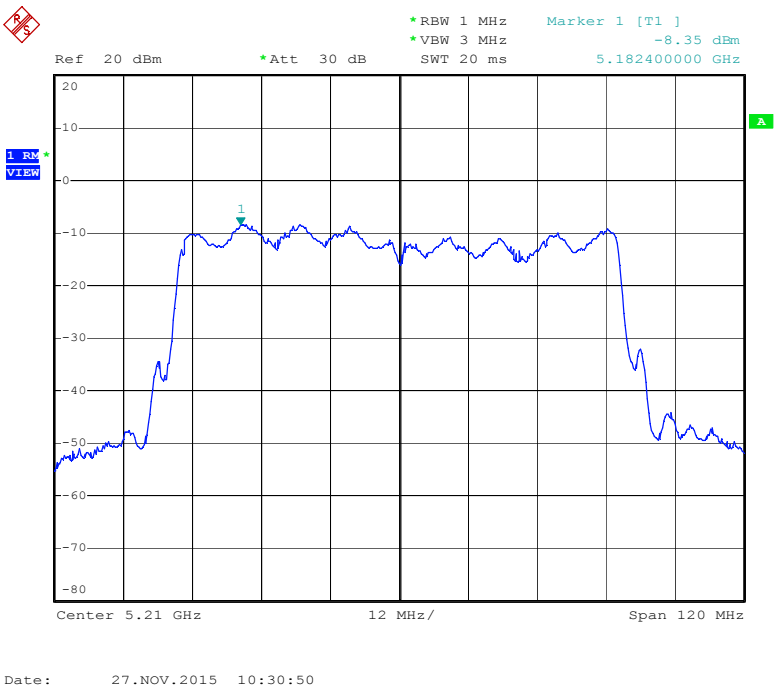


Date: 27.NOV.2015 10:29:47

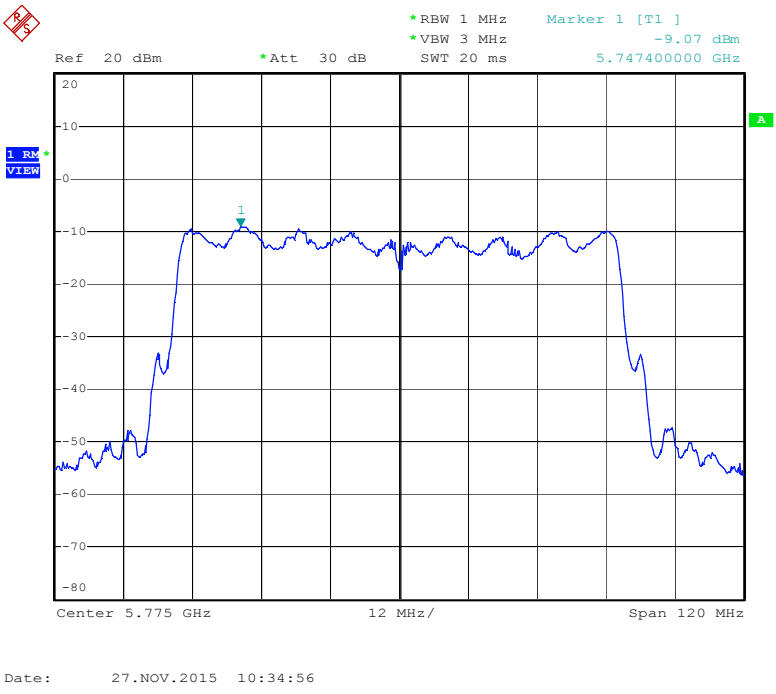
IEEE 802.11ac 80MHz Ant.1 Band1

PPSD (CH Low)



IEEE 802.11ac 80MHz Ant.1 Band4

PPSD (CH Low)



E. Frequency Stability

Product:	Wireless Adapter	Test Mode:	Mode: 20 MHz
Test Item:	Frequency Stability	Temperature:	25 ℃
Test Voltage:	DC 5V(From Host)	Humidity:	56%RH
Test Result:	PASS		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5180 MHz	5240 MHz	5745 MHz	5825 MHz
126.50	5179.9488	5239.9206	5744.9168	5824.9134
110.00	5179.9488	5239.9206	5744.9168	5824.9134
93.50	5179.9488	5239.9206	5744.9168	5824.9134
Max. Deviation (MHz)	0.0512	0.0794	0.0832	0.0866
Max. Deviation (ppm)	9.88	15.15	14.48	14.87

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5180 MHz	5240 MHz	5745 MHz	5825 MHz
0	5179.9494	5239.9202	5744.9156	5824.9132
10	5179.9494	5239.9202	5744.9156	5824.9132
20	5179.9494	5239.9202	5744.9156	5824.9132
30	5179.9494	5239.9202	5744.9156	5824.9132
40	5179.9494	5239.9202	5744.9156	5824.9132
Max. Deviation (MHz)	0.0506	0.0792	0.0844	0.0868
Max. Deviation (ppm)	9.77	15.11	15.42	14.90

Product:	Wireless Adapter	Test Mode:	Mode: 40 MHz
Test Item:	Frequency Stability	Temperature:	25 ℃
Test Voltage:	DC 5V(From Host)	Humidity:	56%RH
Test Result:	PASS		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz	5230 MHz	5755 MHz	5795 MHz
126.50	5189.9348	5229.9214	5744.9162	5794.9124
110.00	5189.9348	5229.9214	5744.9162	5794.9124
93.50	5189.9348	5229.9214	5744.9162	5794.9124
Max. Deviation (MHz)	0.0652	0.0786	0.0838	0.0876
Max. Deviation (ppm)	12.56	15.03	14.56	15.12

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz	5230 MHz	5755 MHz	5795 MHz
0	5189.9344	5229.9210	5754.9162	5794.9128
10	5189.9344	5229.9210	5754.9162	5794.9128
20	5189.9344	5229.9210	5754.9162	5794.9128
30	5189.9344	5229.9210	5754.9162	5794.9128
40	5189.9344	5229.9210	5754.9162	5794.9128
Max. Deviation (MHz)	0.0656	0.0790	0.0838	0.0872
Max. Deviation (ppm)	12.64	15.11	14.56	15.05

Product:	Wireless Adapter	Test Mode:	Mode: 80 MHz
Test Item:	Frequency Stability	Temperature:	25 ℃
Test Voltage:	DC 5V(From Host)	Humidity:	56%RH
Test Result:	PASS		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz	5775 MHz	-	-
126.50	5209.9228	5774.9206		
110.00	5209.9228	5774.9206		
93.50	5209.9228	5774.9206		
Max. Deviation (MHz)	0.0772	0.0794		
Max. Deviation (ppm)	14.82	13.75		

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz	5775 MHz	-	-
0	5209.9231	5774.9212		
10	5209.9231	5774.9212		
20	5209.9231	5774.9210		
30	5209.9232	5774.9212		
40	5209.9232	5774.9210		
Max. Deviation (MHz)	0.0769	0.0788		
Max. Deviation (ppm)	14.76	13.65		

6. Transmitter Spurious Radiated Emission & Band Edge Emissions

6. 1 Test Equipment

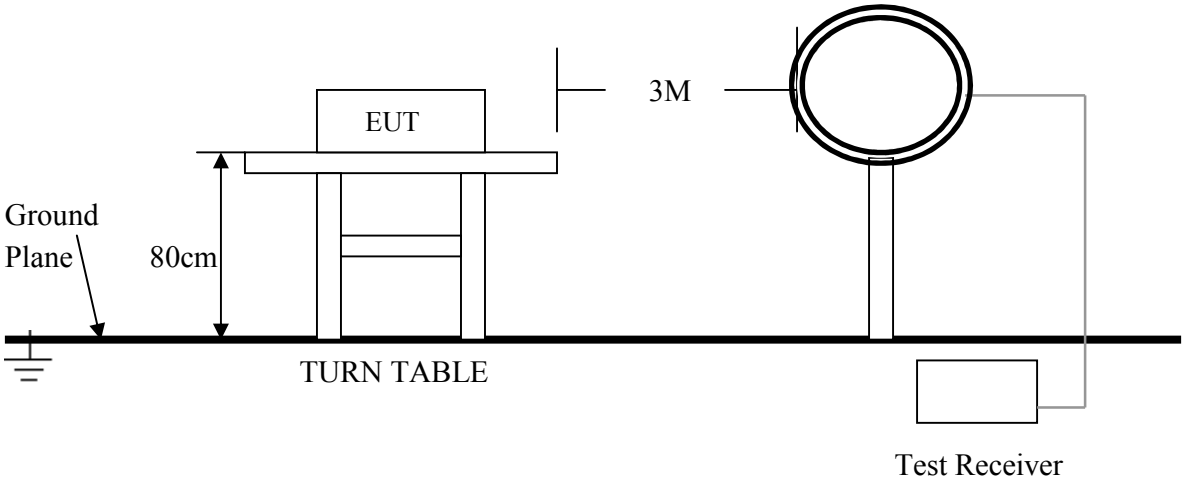
Please refer to Section 10 this report.

6. 2 Test Procedure

Spurious Radiated Emission & Band Edge Emissions Measurement:	
Test Method:	a.)The EUT was tested according to ANSI C63.10. b)The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10. c)The frequency spectrum from 9 kHz to 40 GHz was investigated. All readings from 9 kHz to 150 kHz are quasi-peak values with a resolution bandwidth of 200 Hz. All readings from 150 kHz to 30 MHz are quasi-peak values with a resolution bandwidth of 9 KHz. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 KHz. All readings are above 1 GHz , peak values with a resolution bandwidth of 1 MHz . Measurements were made at 3 meters. d)The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. The Receiving antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency. Emissions below 30MHz were measured with a loop antenna while emission above 30MHz were measured using a broadband E-field antenna. e) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "**QP**" in the data table. f)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 transmitter(EUT) was rotated through three orthogonal axes according to the requirements in Section 8 and 13 of ANSI C63.10.
Radiated Emissions Measurement:	
Test Equipment Setting:	
a)Attenuation: Auto b)Start Frequency: 1000 MHz c)Stop Frequency: 40GHz d)RBW/VBW (Emission in restricted band): 1MHz / 3MHz for Peak, 1MHz / 1/T for Average	e)RBW/VBW(Emission in non-restricted band) 1MHz / 3MHz for peak
Band Edge Emissions Measurement:	
Test Equipment Setting:	
a)Attenuation: Auto b)Span Frequency: 100 MHz c)RBW/VBW (Emission in restricted band): 1MHz / 3MHz for Peak, 1MHz / 1/T for Average	d)RBW/VBW(Emission in non-restricted band) 1MHz / 3MHz for peak

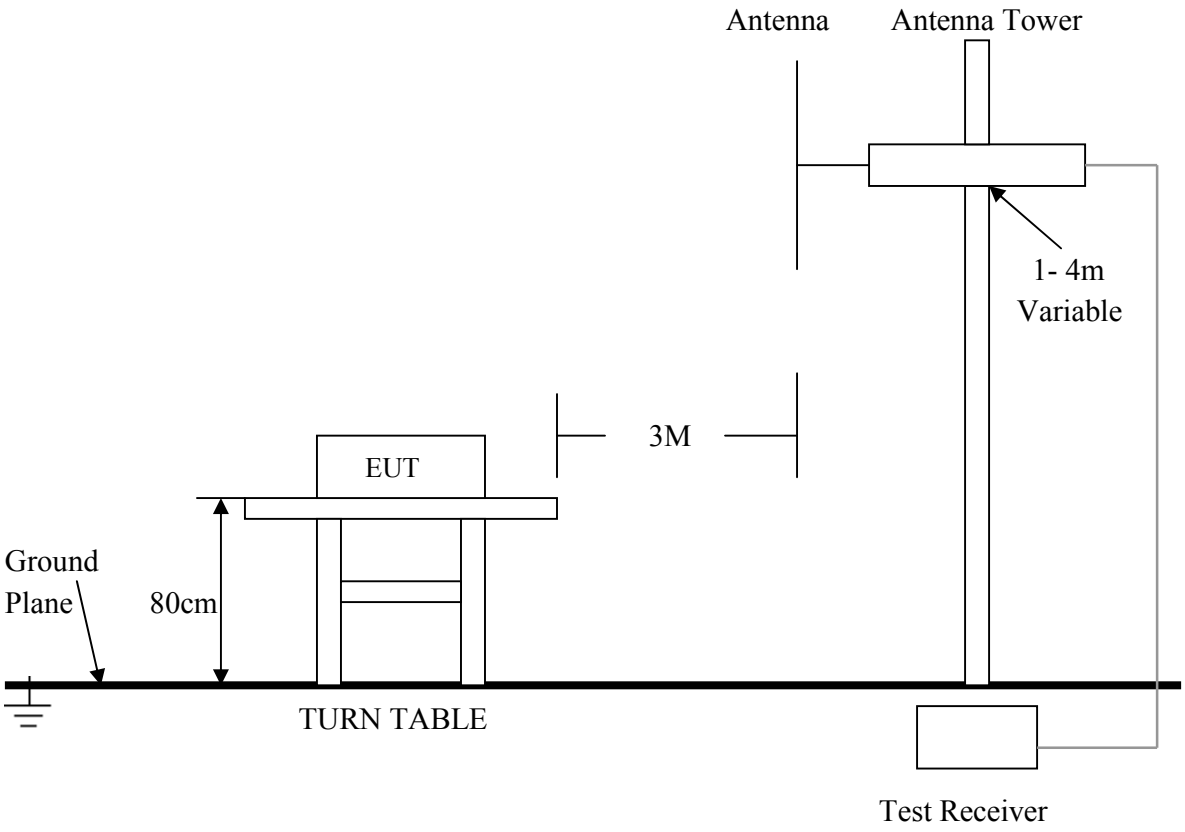
6. 3 Test Setup

For Frequencies below 30 MHz



For the actual test configuration , please refer to the related items – Photos of Testing

For Frequencies above 30 MHz



For the actual test configuration , please refer to the related items – Photos of Testing

6. 4 Configuration of the EUT

Same as section 4.4 of this report

6. 5 EUT Operating Condition

Same as section 4.5 of this report.

6. 6 Limit

Spurious Radiated Emission & Band Edge Emissions Measurement:	
Band	Limit
5.150-5.250 GHz	e.i.r.p. of −27 dBm [68.2dBuV/m@3m]
5.250-5.350 GHz	e.i.r.p. of −27 dBm [68.2dBuV/m@3m]
5.470-5.725 GHz	e.i.r.p. of −27 dBm [68.2dBuV/m@3m]
5.725-5.850 GHz	5.715- 5.725 GHz: e.i.r.p. of -17 dBm [78.2dBuV/m@3m] 5.850 -5.860 GHz: e.i.r.p. of -17 dBm [78.2dBuV/m@3m] Other un-restricted band: e.i.r.p. of −27 dBm [68.2dBuV/m@3m]
In any 100 KHz bandwidth outside the operating frequency band, the radio frequency power that is produced by modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either at least 20 dB below that in any 100 KHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in section 15.209(a), which lesser attenuation. All other emissions inside restricted bands specified in section 15.205(a) shall not exceed the general radiated emission limits specified in section 15.209(a)	
Note: Applies to harmonics/spurious emissions that fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209. 47 CFR § 15.237(c): The emission limits as specified above are based on measurement instrument employing an average detector. The provisions in section 15.35 for limiting peak emissions apply.	

FCC CFR 47, Part 15, Subpart C, Para, 15.205(a) – Restricted Frequency Bands

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

[1] Until February 1, 1999, this restricted band shall be 0.490–0.510 MHz.
[2] Above 38.6

FCC 47 CFR, Part 15.209(a) – Field Strength Limits within Restricted Frequency Bands

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100**	3
88–216	150**	3
216–960	200**	3
Above 960	500	3

6. 7 Test Result

Spurious Radiated Emissions

Product:	Wireless Adapter	Test Mode:	IEEE 802.11a/n 5G/ac
Test Item:	Spurious Radiated Emissions	Temperature:	25 ℃
Test Voltage:	DC 5V (From Host)	Humidity:	56%RH
Test Result:	PASS		

IEEE 802.11a

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10359.960	45.13	HORZ	74.0 / 54.0	-28.87
10359.960	41.56	VERT	74.0 / 54.0	-32.44
15539.920	42.66	HORZ	74.0 / 54.0	-31.34
15539.920	40.32	VERT	74.0 / 54.0	-33.68
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.
Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

IEEE 802.11n HT20 5GHz Ant.0+Ant.1

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10359.960	46.95	HORZ	74.0 / 54.0	-27.05
10359.960	43.68	VERT	74.0 / 54.0	-30.32
15539.920	43.63	HORZ	74.0 / 54.0	-30.37
15539.920	42.39	VERT	74.0 / 54.0	-31.61
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.
Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

IEEE 802.11n HT40 5GHz Ant.0+Ant.1

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10379.920	45.36	HORZ	74.0 / 54.0	-28.64
10379.920	43.62	VERT	74.0 / 54.0	-30.38
15539.920	43.26	HORZ	74.0 / 54.0	-30.74
15570.040	42.61	VERT	74.0 / 54.0	-31.39
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.
Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

IEEE 802.11ac HT20 Ant.0+Ant.1

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10359.960	45.23	HORZ	74.0 / 54.0	-28.77
10359.960	42.78	VERT	74.0 / 54.0	-31.22
15539.920	43.12	HORZ	74.0 / 54.0	-30.88
15539.920	41.26	VERT	74.0 / 54.0	-32.74
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.
Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

IEEE 802.11n HT40 Ant.0+Ant.1

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10379.920	41.90	HORZ	74.0 / 54.0	-32.10
10379.920	40.02	VERT	74.0 / 54.0	33.98
15570.040	40.82	HORZ	74.0 / 54.0	-33.18
15570.040	40.21	VERT	74.0 / 54.0	-33.79
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.

Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

IEEE 802.11ac HT80 Ant.0+Ant.1

Freq. (MHz)	Emission (dBuV/m) Peak Detector	HORIZ / VERT	Limits (dBuV/m) Peak / Average	Margin (dB)
10420.060	46.28	HORZ	74.0 / 54.0	-32.10
10420.060	43.63	VERT	74.0 / 54.0	-33.98
15629.920	44.76	HORZ	74.0 / 54.0	-29.18
15629.920	42.65	VERT	74.0 / 54.0	-33.79
-	-	HORZ	74.0 / 54.0	-
-	-	VERT	74.0 / 54.0	-

Note: NF = No Significant Peak was Found.

Note: Scan form 30MHz to 40GHz, find the maximum radiation frequency to measure.

General Radiated Emission Data

Product:	Wireless Adapter	Test Mode:	IEEE 802.11a/n 5G/ac
Test Item:	Spurious Radiated Emissions	Temperature:	25 ℃
Test Voltage:	DC 5V (From Host)	Humidity:	56%RH
Test Result:	**PASS**		

For Frequency below 30MHz

Freq. (MHz)	Emission (dBuV/m) QP Detector	HORIZ / VERT	Limits (dBuV/m)	Margin (dB)
N/A				
N/A				
N/A				
N/A				
N/A				

Note: (1) All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
(2) "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
(3) Emission Level = Reading Level + Probe Factor + Cable Loss.

For Frequency from 30MHz to 1GHz

Freq. (MHz)	Emission (dBuV/m) QP Detector	HORIZ / VERT	Limits (dBuV/m)	Margin (dB)
240.000	29.69	HORZ	46.0	-16.31
33.120	28.65	VERT	40.0	-11.35
283.360	27.24	HORZ	46.0	-18.76
277.640	25.20	VERT	46.0	-20.80
722.360	32.52	HORZ	46.0	-13.48
283.200	24.36	VERT	46.0	-21.64

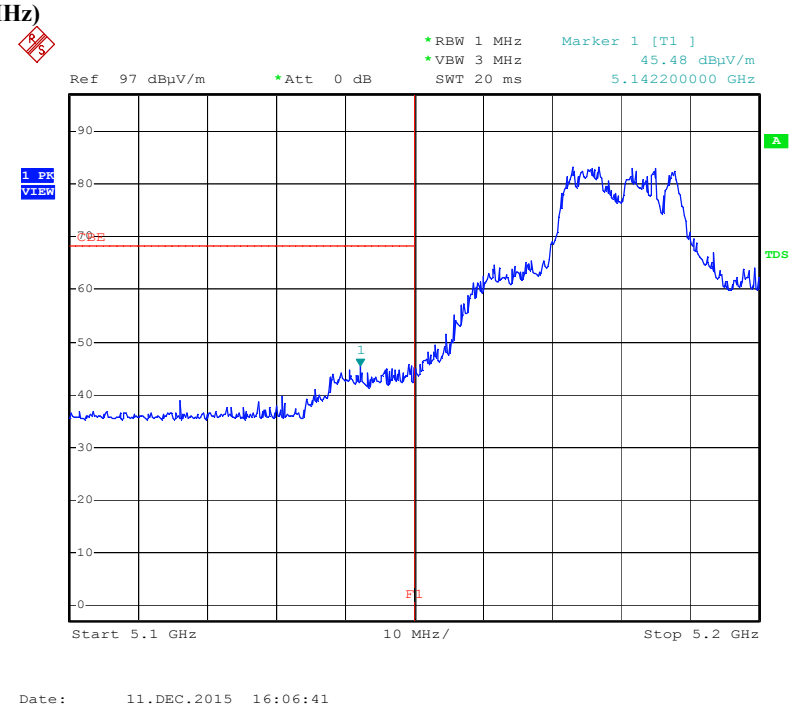
Note: (1) All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
(2) "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
(3) Emission Level = Reading Level + Probe Factor + Cable Loss.

Band Edge and Fundamental Emissions

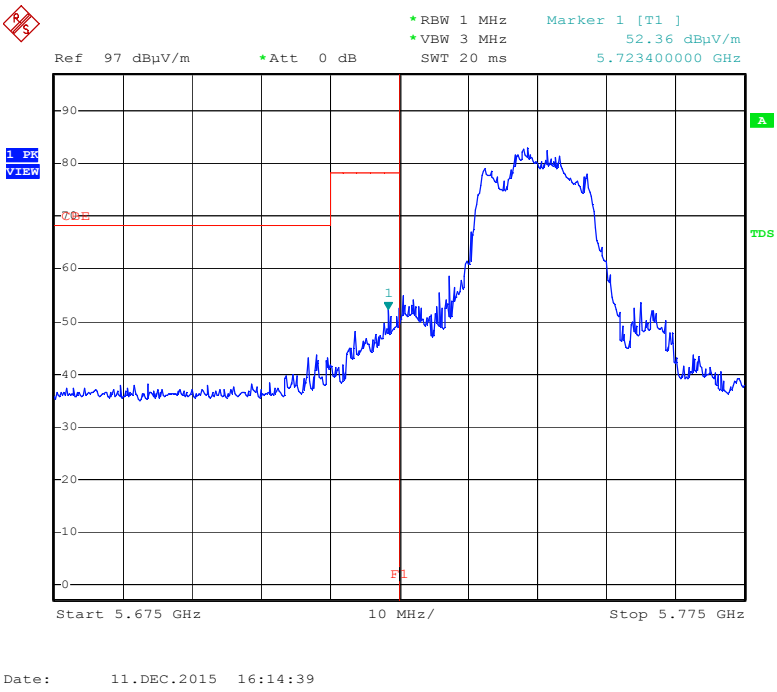
Product:	Wireless Adapter	Test Mode:	IEEE 802.11a/n 5G/ac
Test Item:	Band Edge and Fundamental Emissions	Temperature:	25 ℃
Test Voltage:	DC 5V (From Host)	Humidity:	56%RH
Test Result:	PASS		

IEEE 802.11a Horizontal

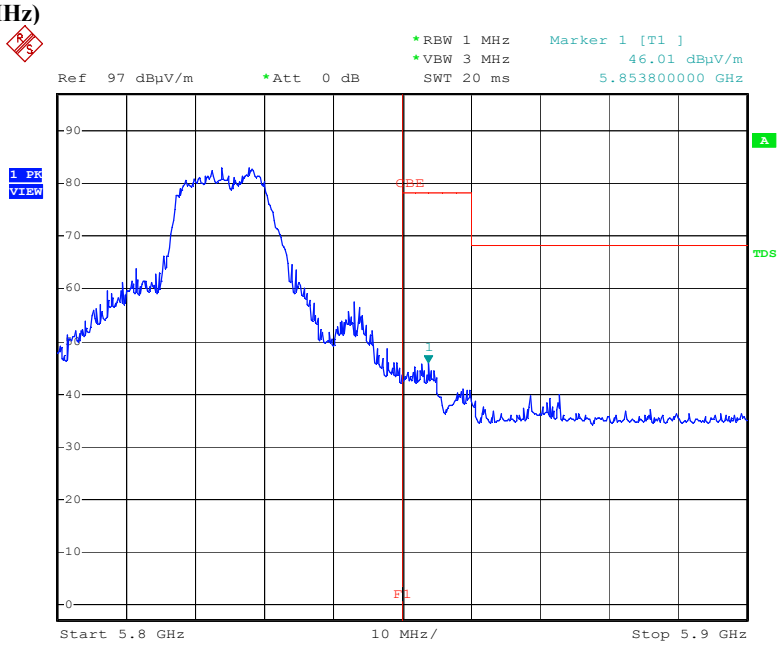
Channel 36 (5180MHz)



Channel 149 (5745MHz)

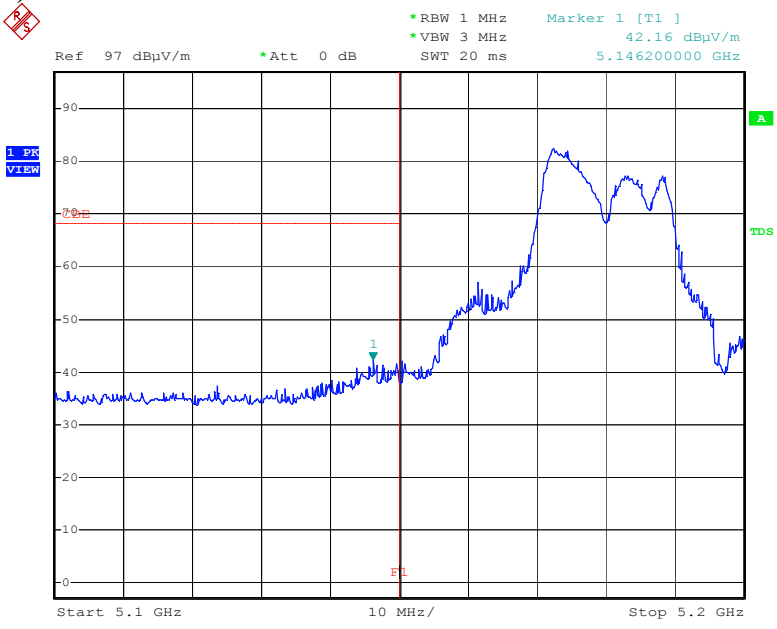


Channel 165 (5825MHz)

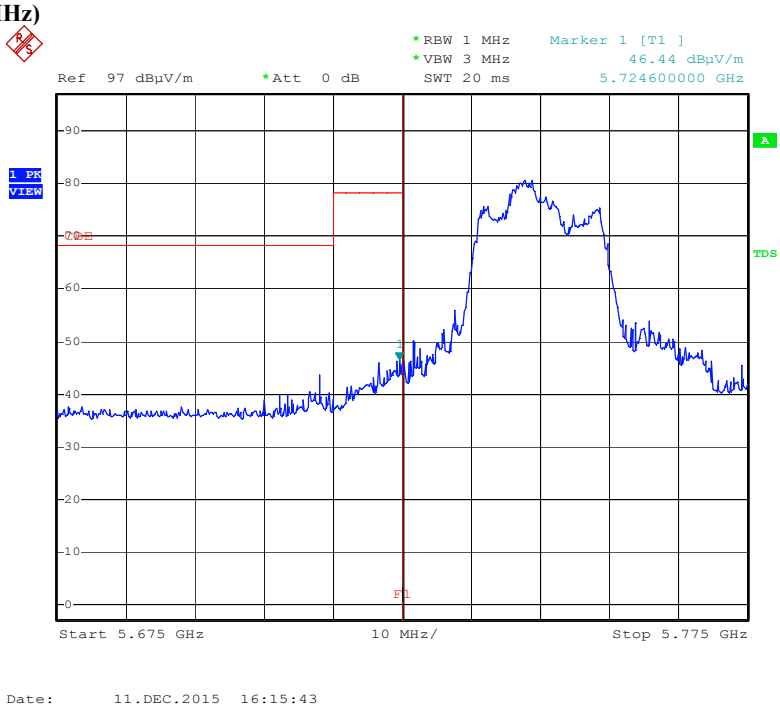


IEEE 802.11n 5GHz 20MHz Ant0+Ant.1 Horizontal

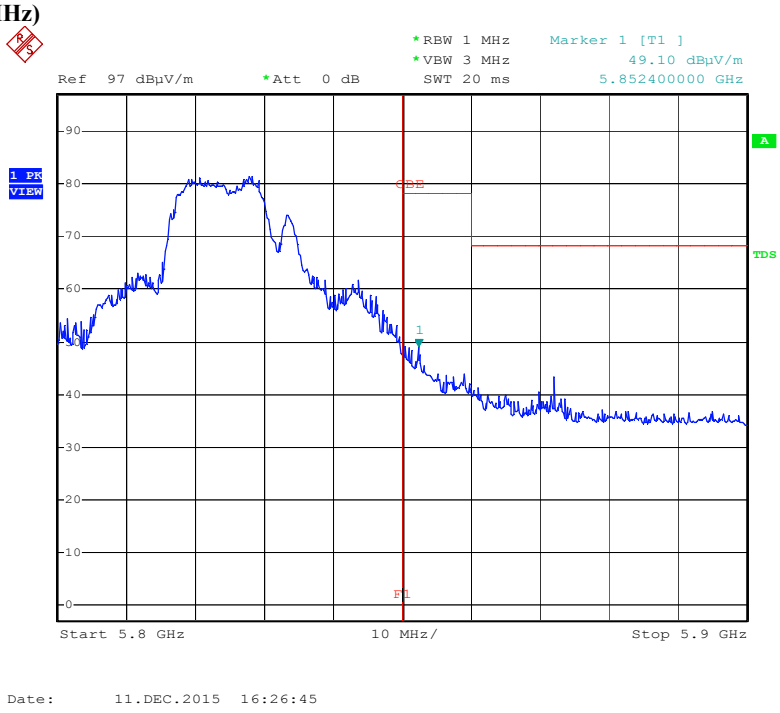
Channel 36 (5180MHz)



Channel 149 (5745MHz)

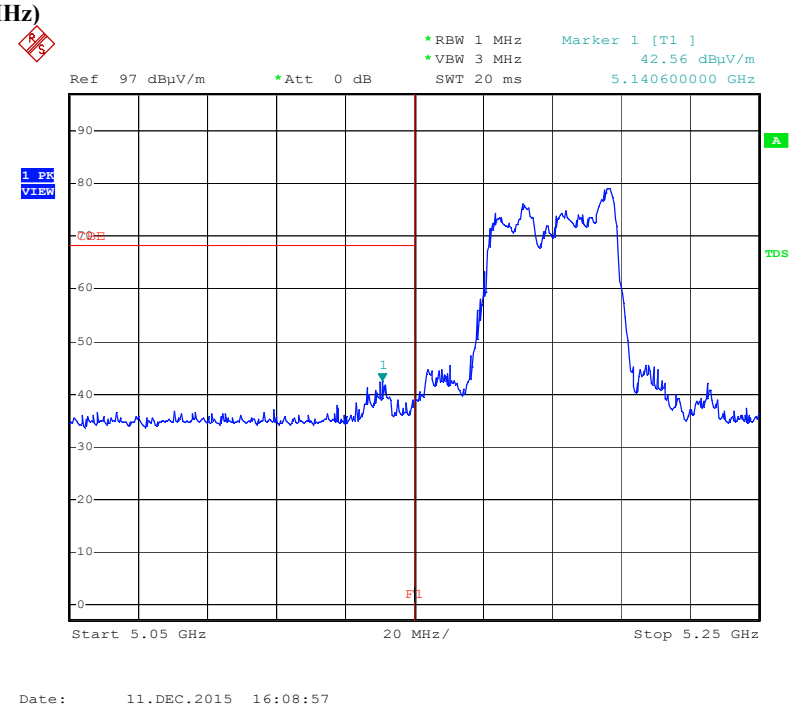


Channel 165 (5825MHz)

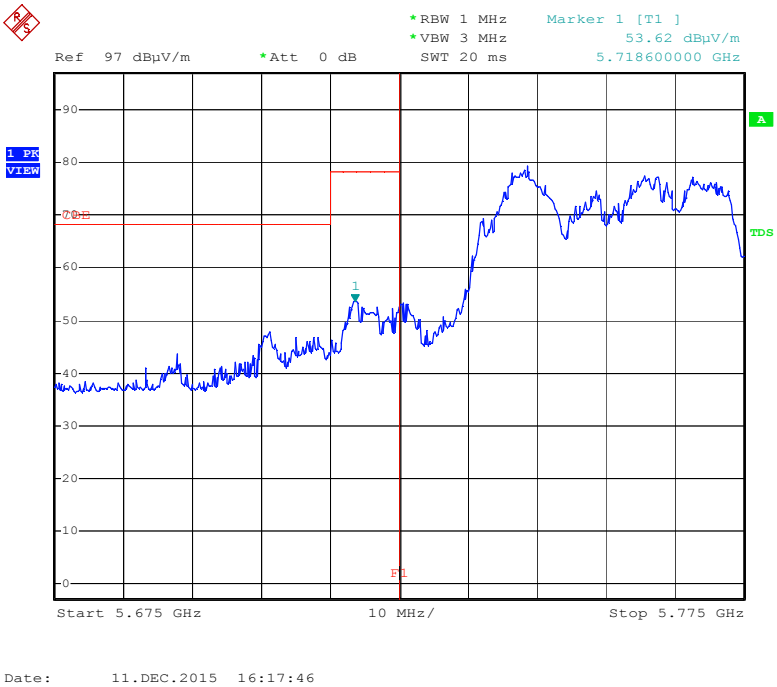


IEEE 802.11n 5GHz 40MHz Ant0+Ant.1 Horizontal

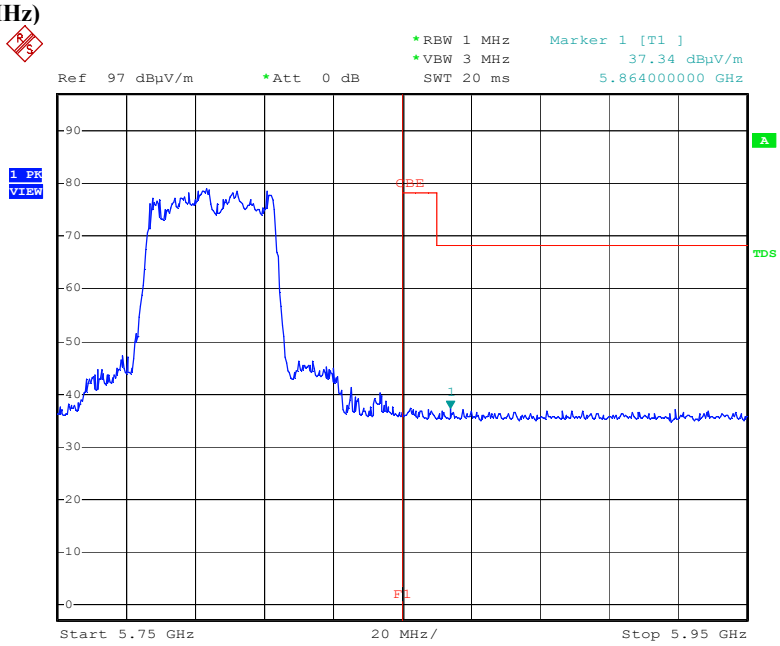
Channel 38 (5190MHz)



Channel 151 (5755MHz)

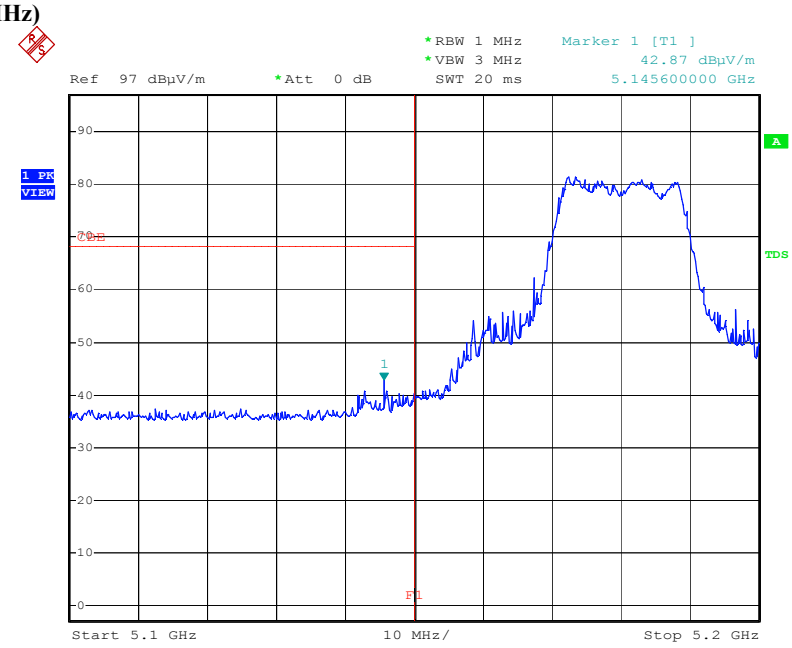


Channel 159 (5795MHz)

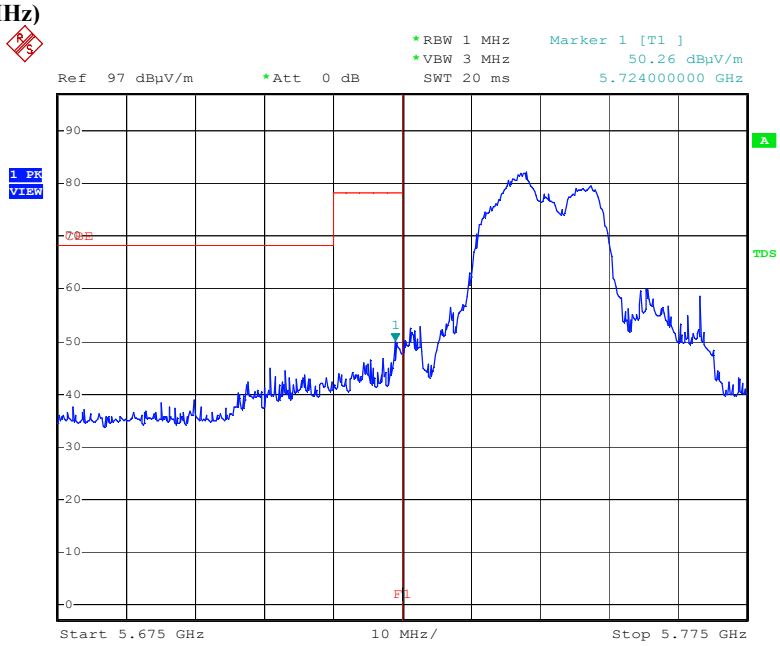


IEEE 802.11ac 20MHz Ant0+Ant.1 Horizontal

Channel 36 (5180MHz)

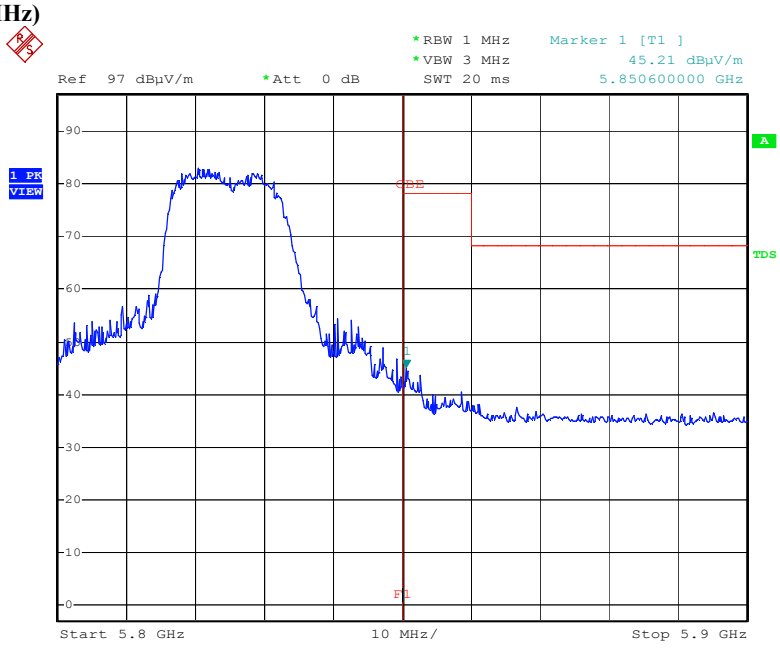


Channel 149 (5745MHz)



Date: 11.DEC.2015 16:19:40

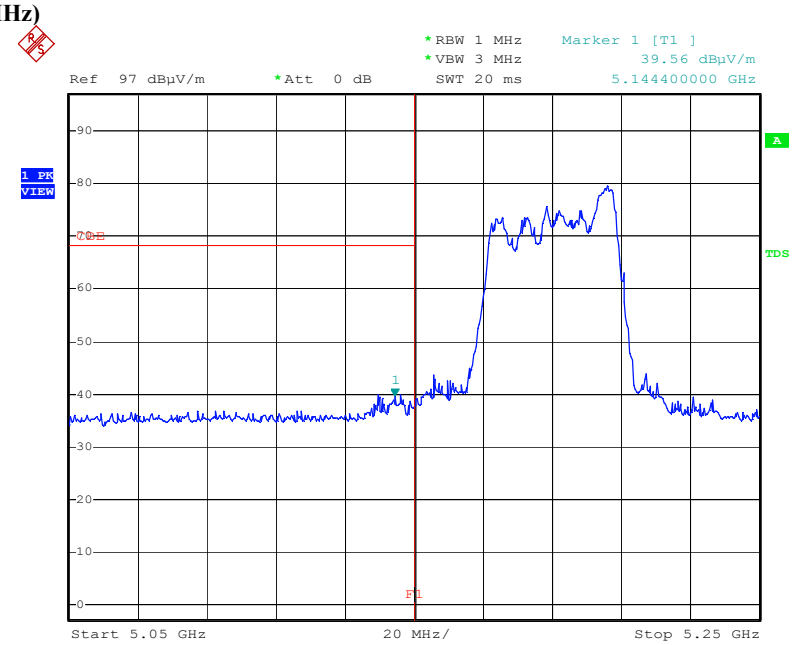
Channel 165 (5825MHz)



Date: 11.DEC.2015 16:32:15

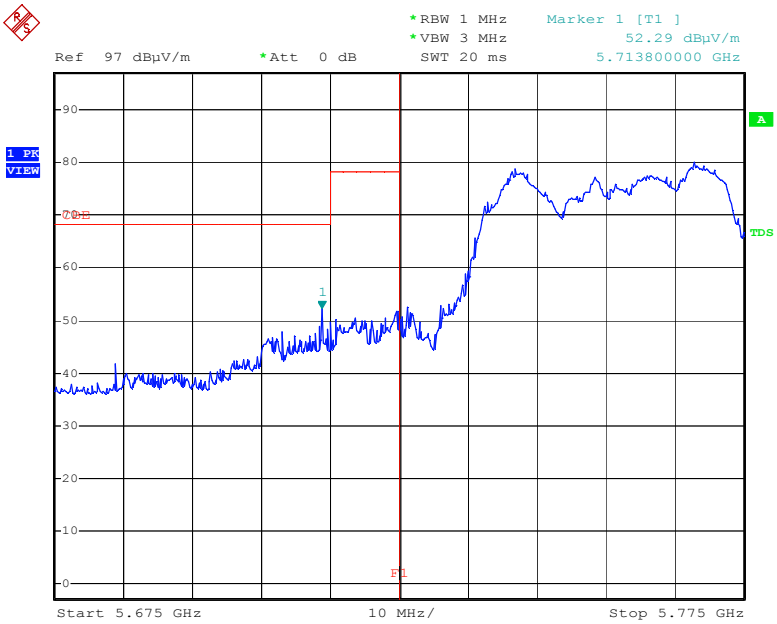
IEEE 802.11ac 40MHz Ant0+Ant.1 Horizontal

Channel 38 (5190MHz)



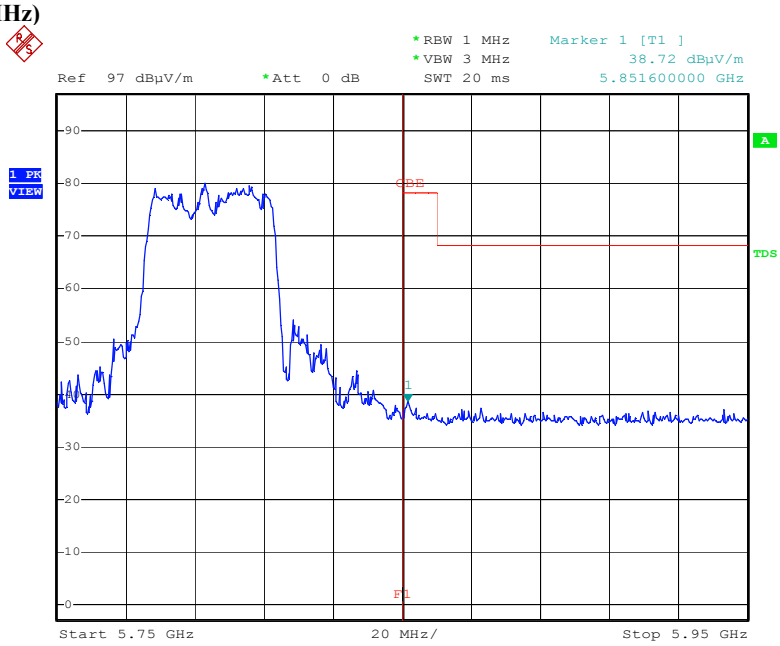
Date: 11.DEC.2015 16:10:08

Channel 151 (5755MHz)



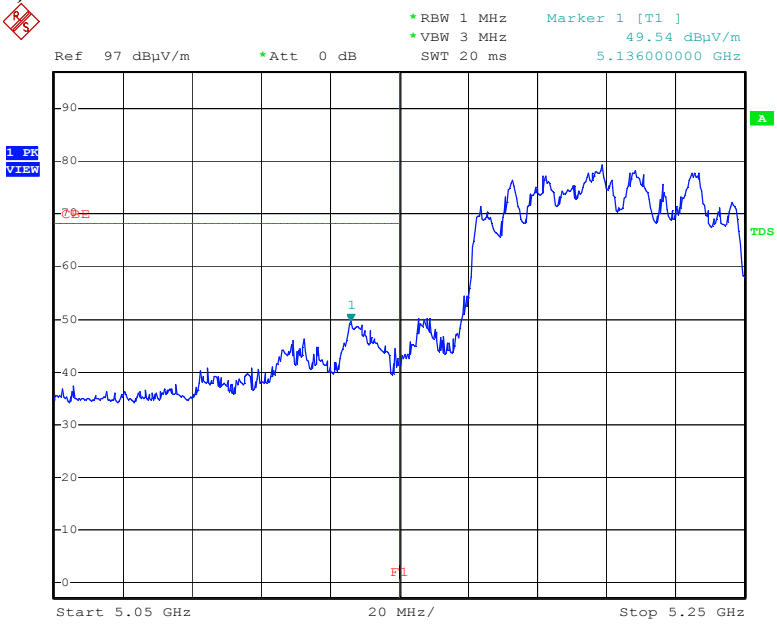
Date: 11.DEC.2015 16:20:47

Channel 159 (5795MHz)

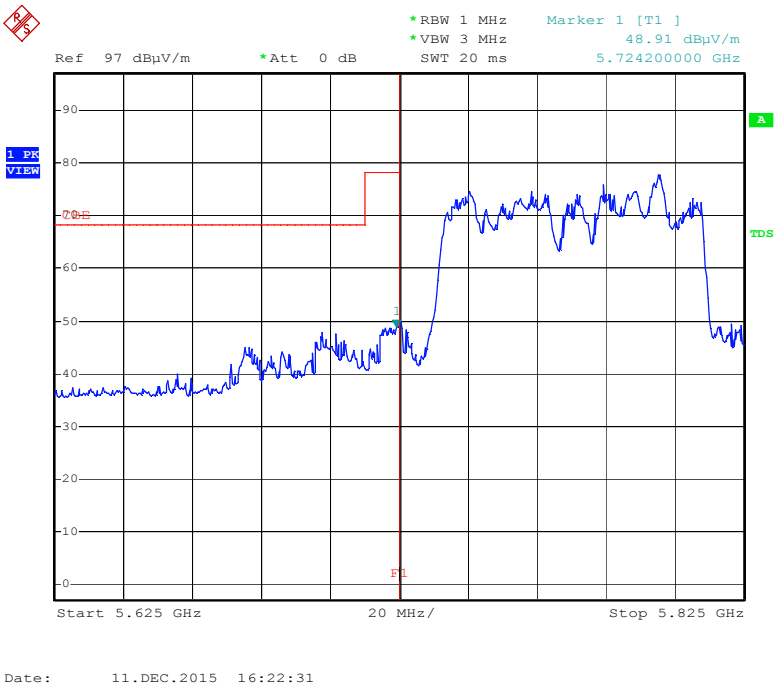


IEEE 802.11ac 80MHz Ant0+Ant.1 Horizontal

Channel 42 (5210MHz)

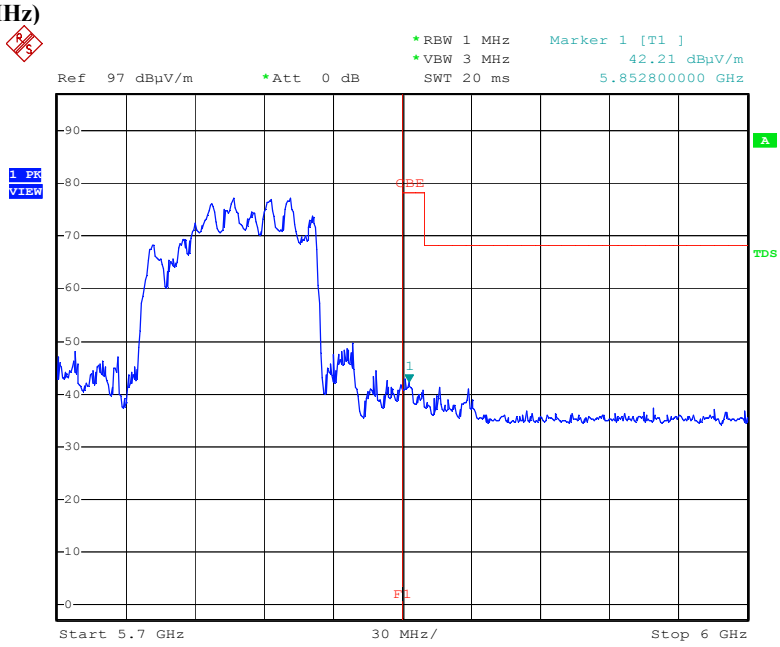


Channel 155 (5775MHz)



Date: 11.DEC.2015 16:22:31

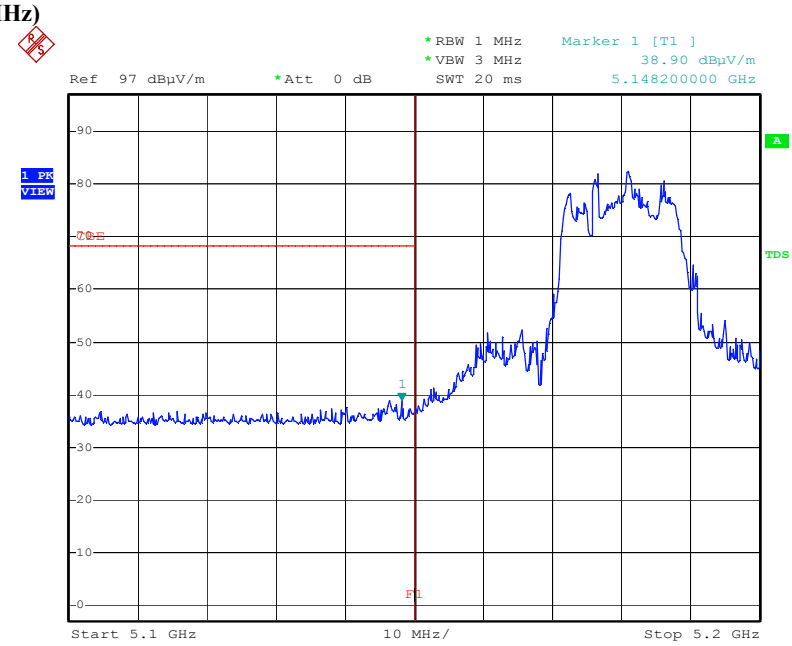
Channel 155 (5775MHz)



Date: 11.DEC.2015 16:31:16

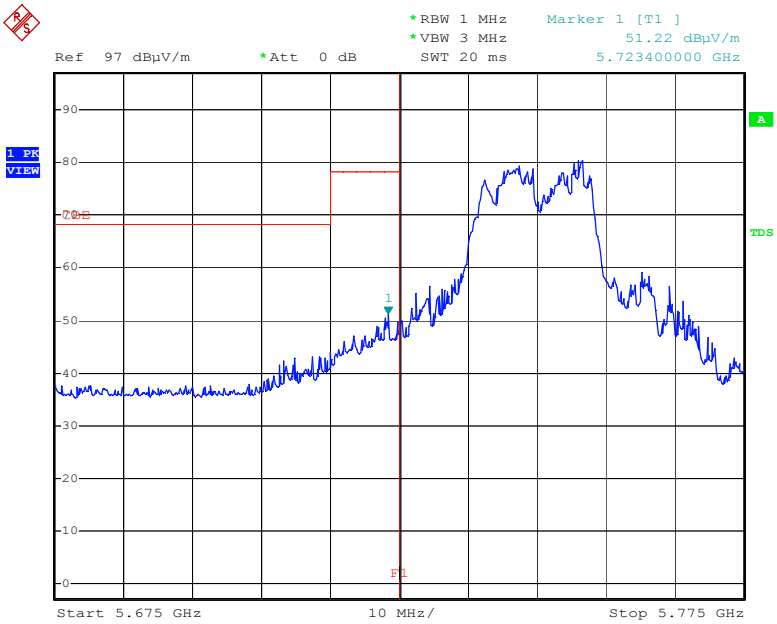
IEEE 802.11a Vertical

Channel 36 (5180MHz)



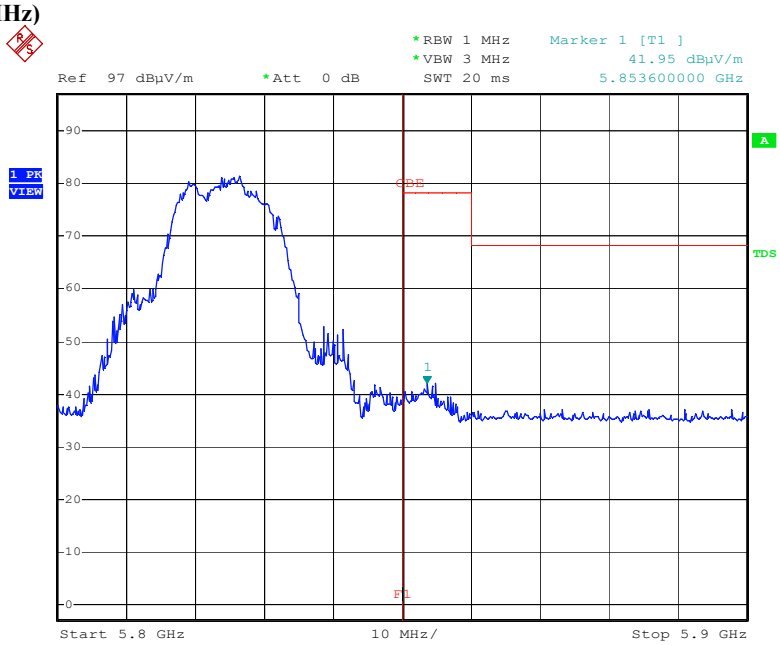
Date: 11.DEC.2015 16:59:17

Channel 149 (5745MHz)



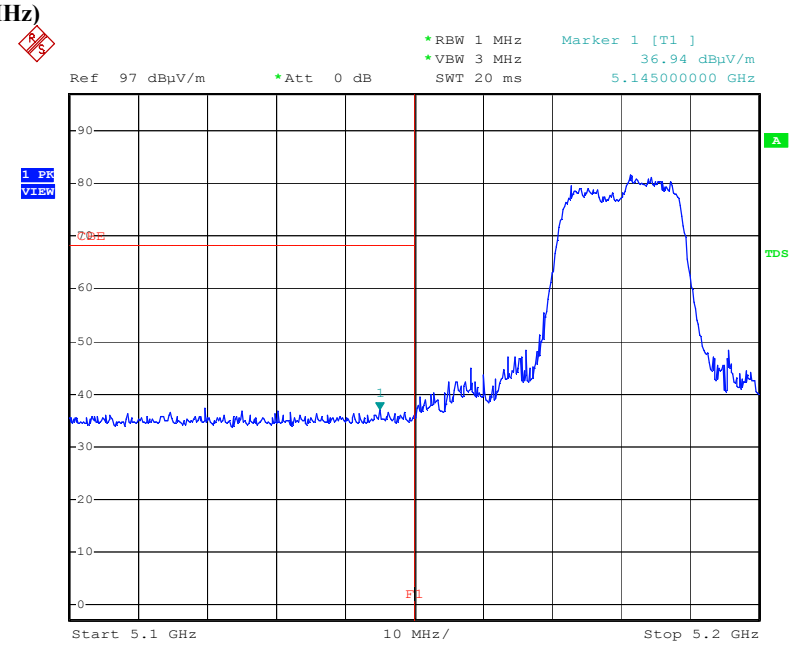
Date: 11.DEC.2015 17:08:59

Channel 165 (5825MHz)

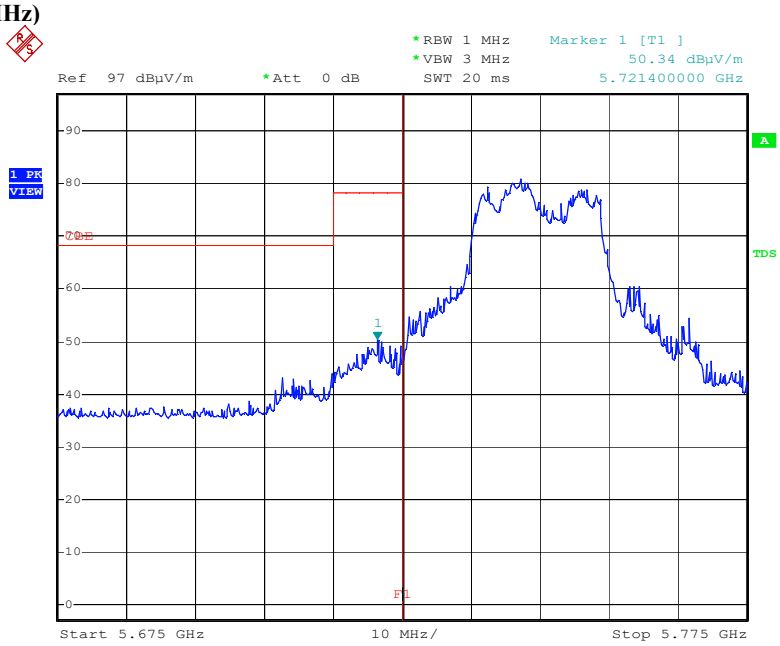


IEEE 802.11n 5GHz 20MHz Ant0+Ant.1 Vertical

Channel 36 (5180MHz)

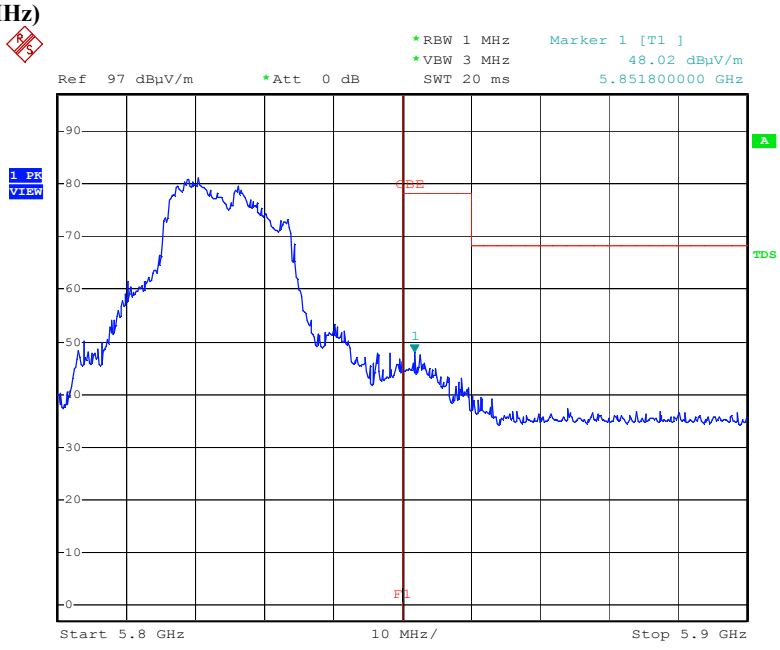


Channel 149 (5745MHz)



Date: 11.DEC.2015 17:09:44

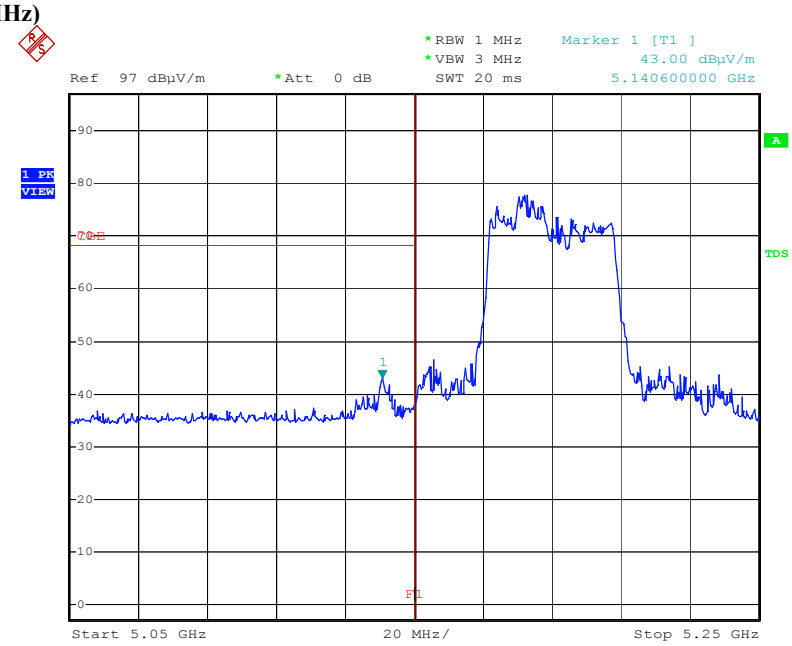
Channel 165 (5825MHz)



Date: 11.DEC.2015 16:51:25

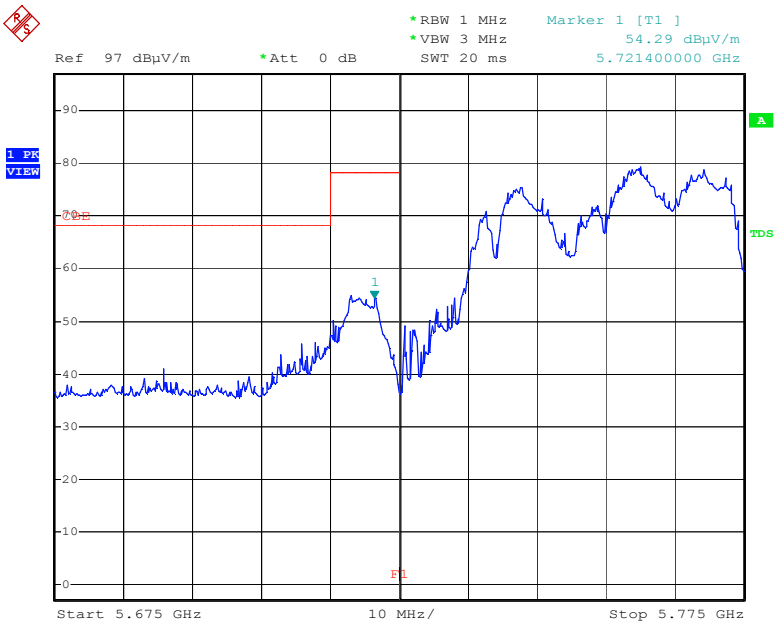
IEEE 802.11n 5GHz 40MHz Ant0+Ant.1 Vertical

Channel 38 (5190MHz)



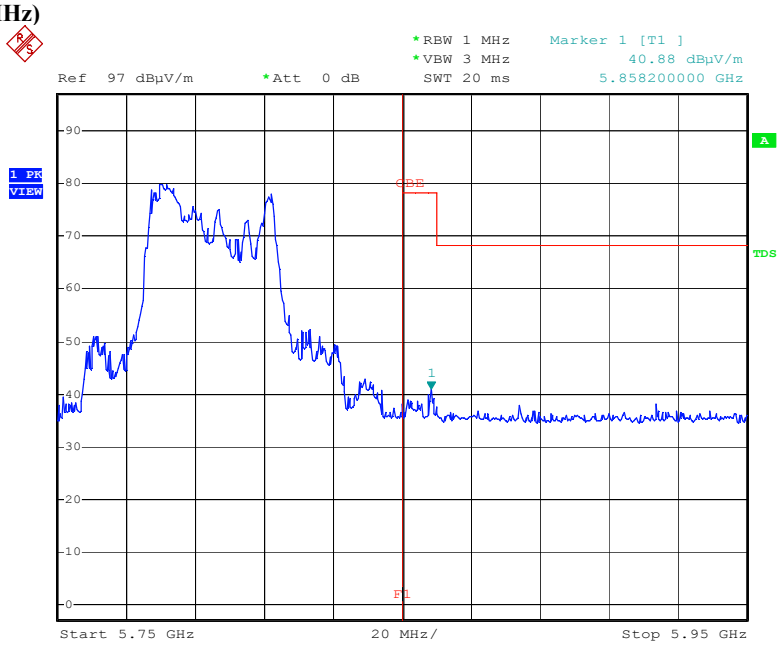
Date: 11.DEC.2015 17:02:32

Channel 151 (5755MHz)



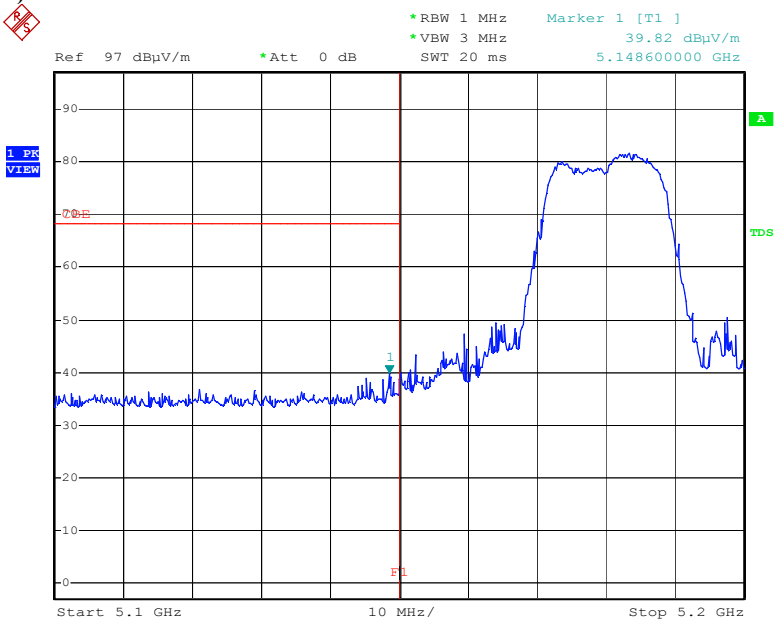
Date: 11.DEC.2015 17:12:15

Channel 159 (5795MHz)

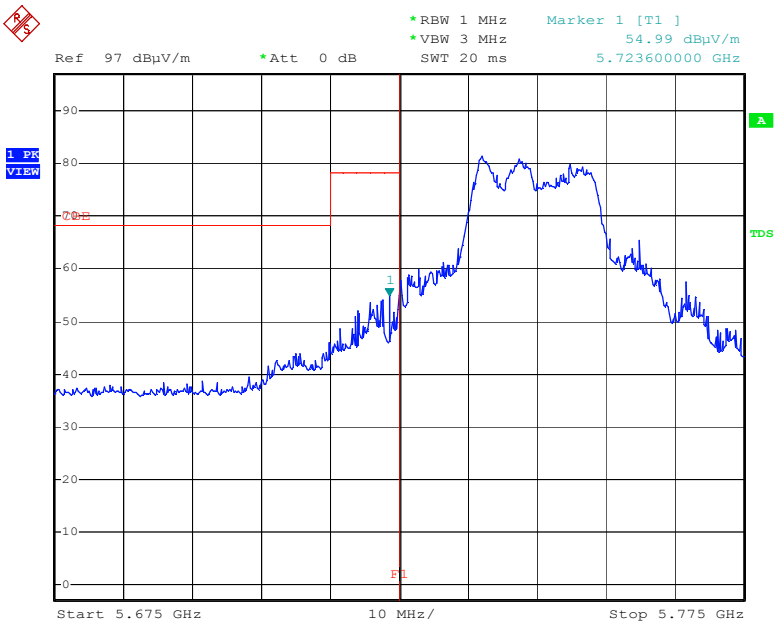


IEEE 802.11ac 20MHz Ant0+Ant.1 Vertical

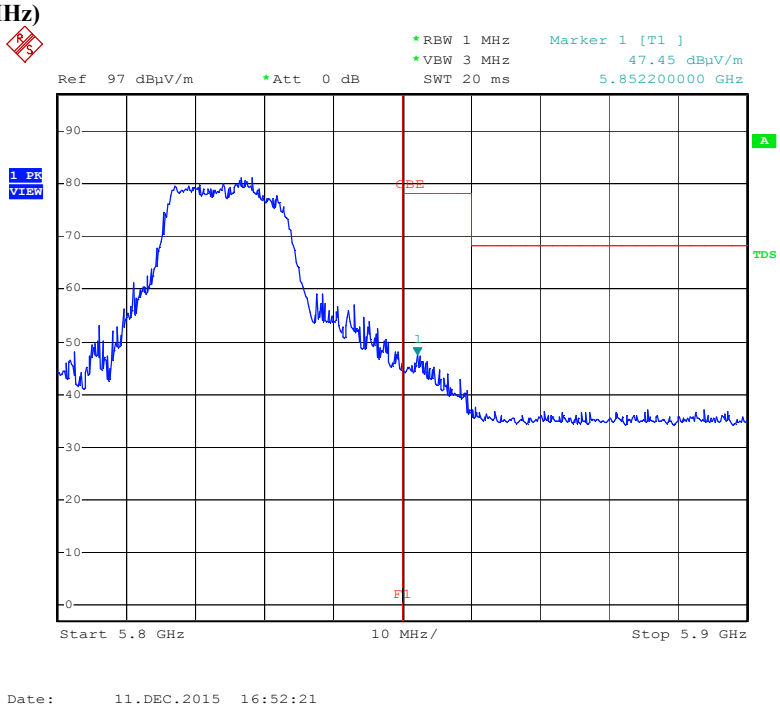
Channel 36 (5180MHz)



Channel 149 (5745MHz)

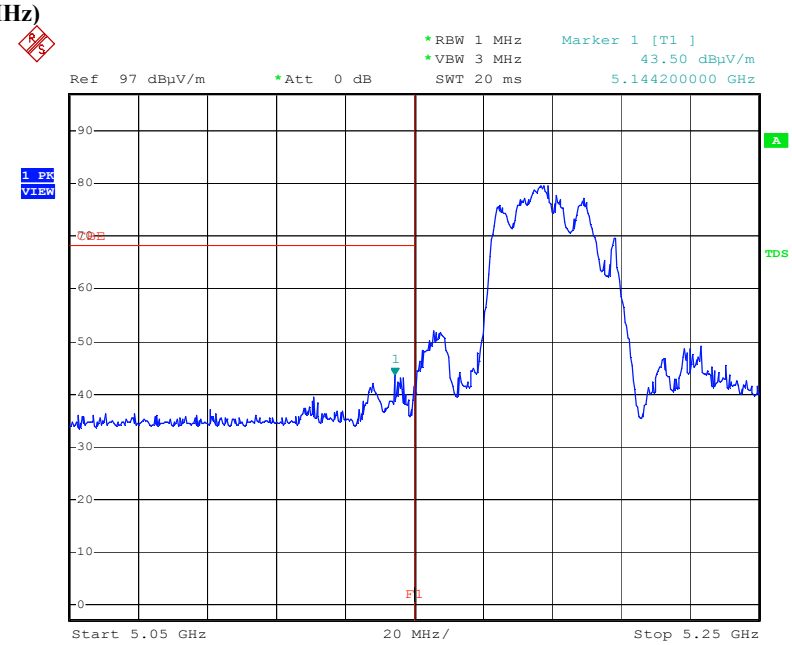


Channel 165 (5825MHz)



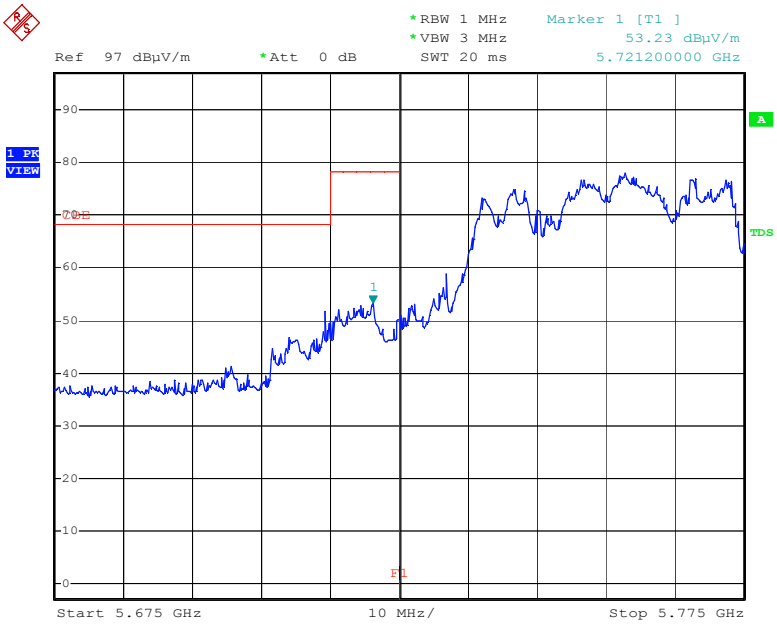
IEEE 802.11ac 40MHz Ant0+Ant.1 Vertical

Channel 38 (5190MHz)



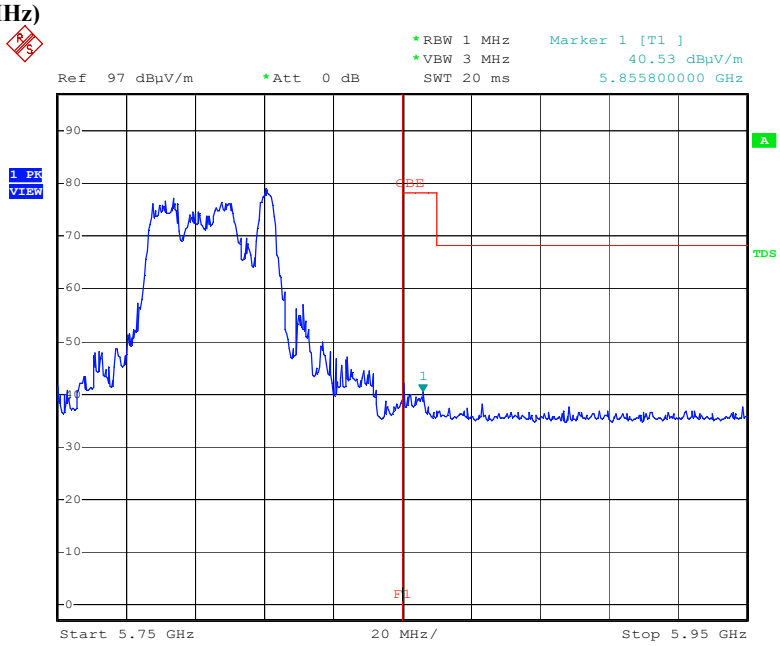
Date: 11.DEC.2015 17:04:27

Channel 151 (5755MHz)



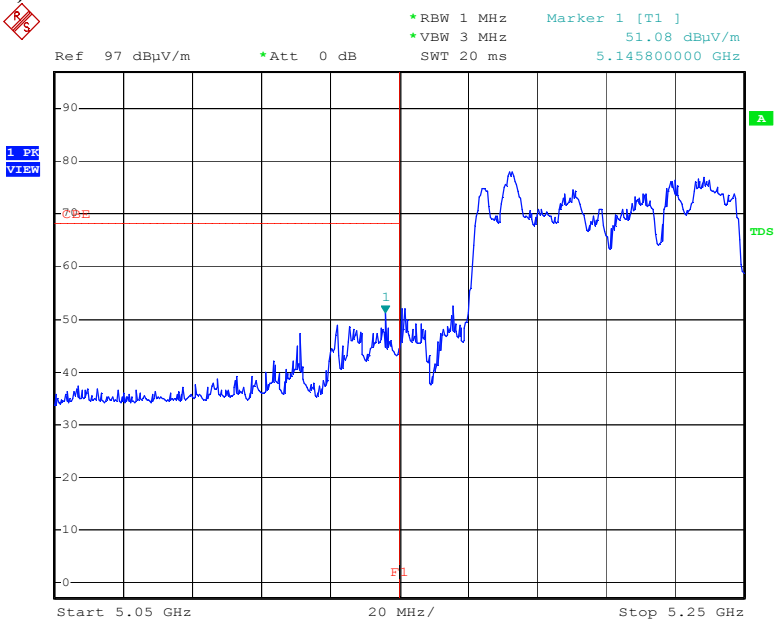
Date: 11.DEC.2015 17:13:06

Channel 159 (5795MHz)

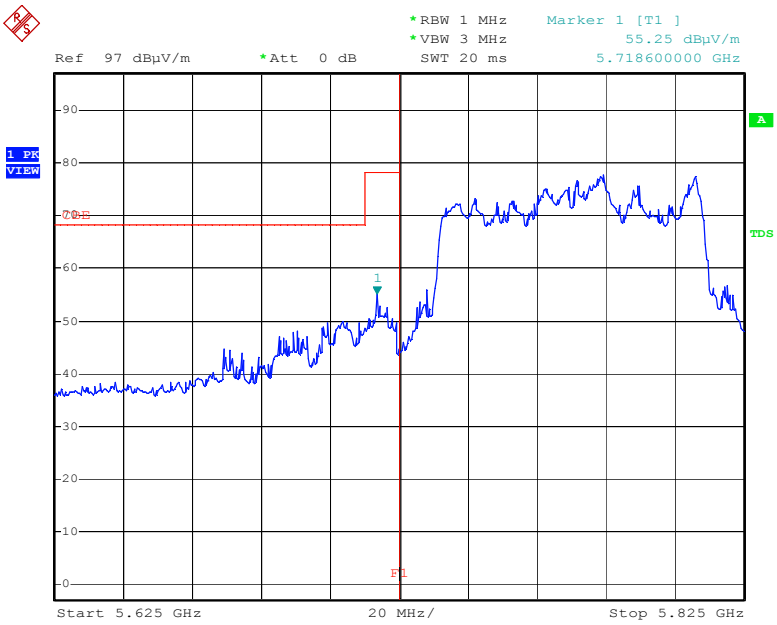


IEEE 802.11ac 80MHz Ant0+Ant.1 Vertical

Channel 42 (5210MHz)

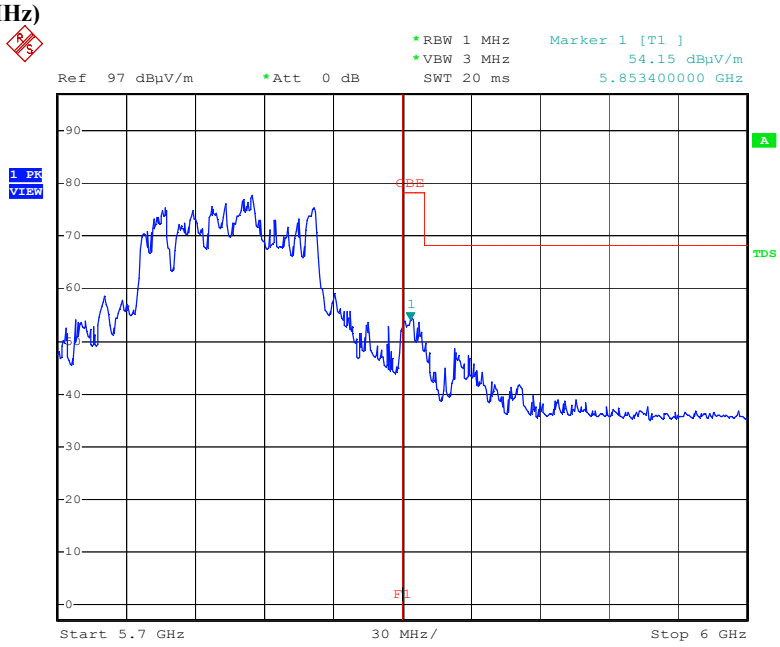


Channel 155 (5775MHz)



Date: 11.DEC.2015 17:07:42

Channel 155 (5775MHz)



Date: 11.DEC.2015 16:57:05

7. RF Exposure Requirements

7. 1 Test Equipment

Please refer to Section 10 this report.

7. 2 Limit

According to FCC 15.407 and FCC 1.1307(b)(1), Systems operating under provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commissions guidelines.
According to KDB 447498 D01 General RF Exposure v05, section 4.3.1
SAR Test Exclusion Thresholds for 100 MHz-6GHz and <=5mm

Frequency Range		Maximum measured transmitter power frequency(MHz)	SAR Limitation (mW)
Low Frequency(MHz)	High Frequency(MHz)		
5180	5825	5240	10

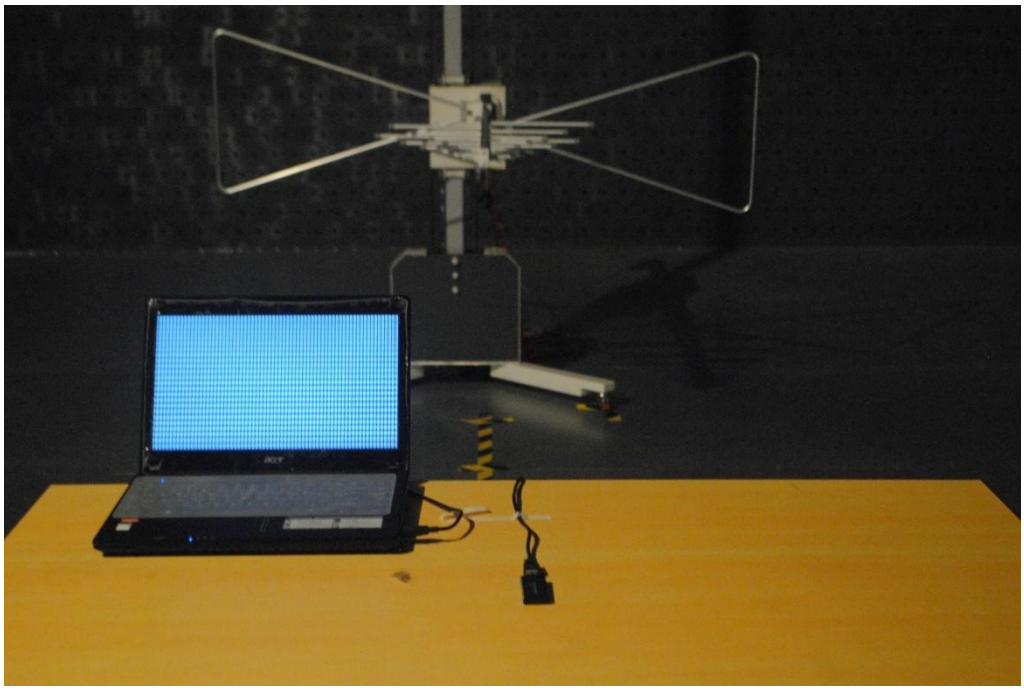
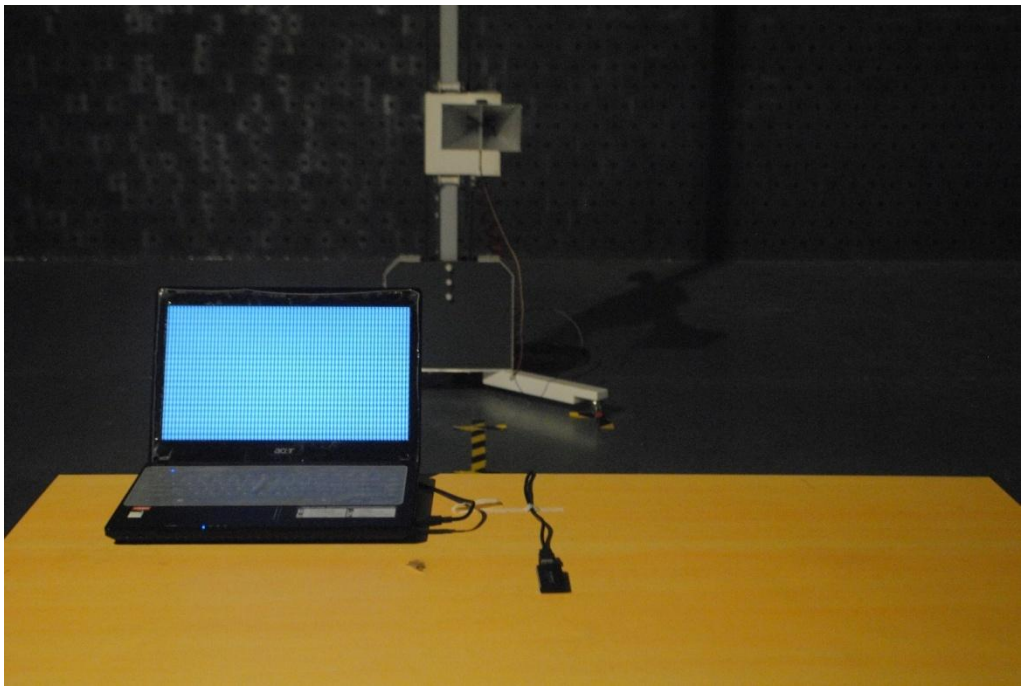
7. 3 Test Result

Product	: Wireless Adapter	Test Mode	: IEEE 802.11a/n/ac
Test Item	: RF Exposure	Temperature	: 25 ℃
Test Voltage	: DC 5V (From Host)	Humidity	: 56%RH
Test Result	: **PASS**		

Evaluation of RF Exposure Compliance Requirements MPE Prediction of MPE according to equation from page 19 of OET Bulletin 65, Edition 97-01	
RF Exposure Requirements	**Compliance with FCC Rules**
S=PG/4∏R2 Where: S=Power density P=Power input to antenna G=Power gain of the antenna relative to an isotropic radiator R=Distance to the center of radiation of the antenna	Maximum output power at antenna input terminal: 3.66dBm =2.32mW (802.11a, 5240MHz) 3.54dBm = 2.26mW (802.11n 5G, 5745MHz) 3.63dBm = 2.30mW (802.11ac, 5180MHz) Prediction distance: <=5mm Antenna gain : 6.0 dBi SAR Test Exclusion Threshold is 10 mW (802.11a, 5240MHz):9.25 mW (802.11n 5G, 5745MHz):8.99 mW (802.11ac, 5180MHz):9.18 mW The max. output power E.I.R.P < 10 mW Conclusion: No SAR is required.

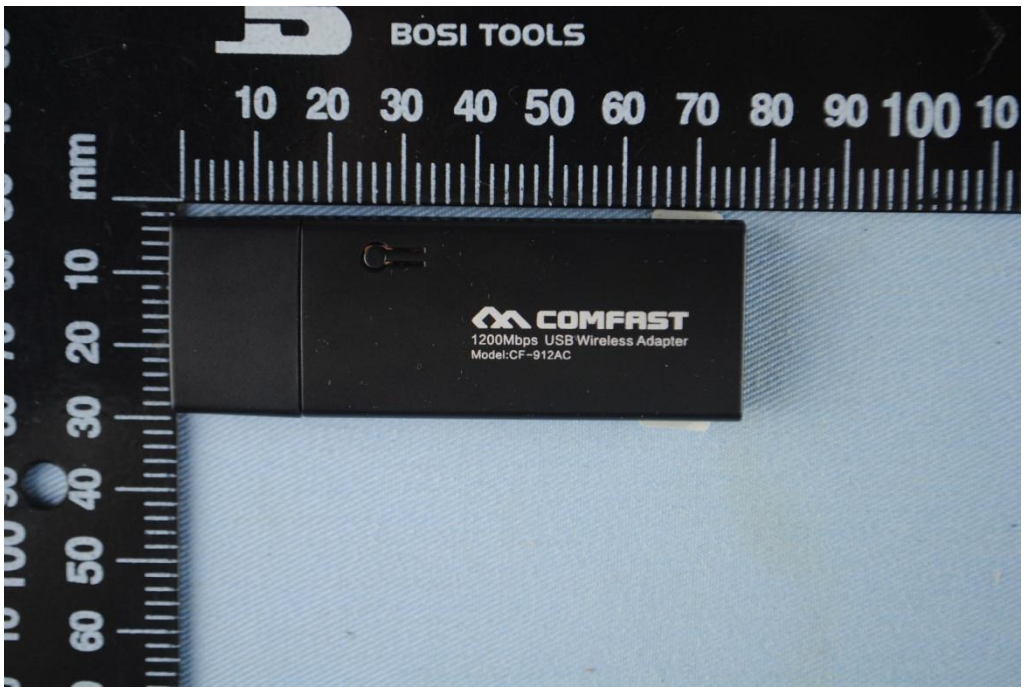
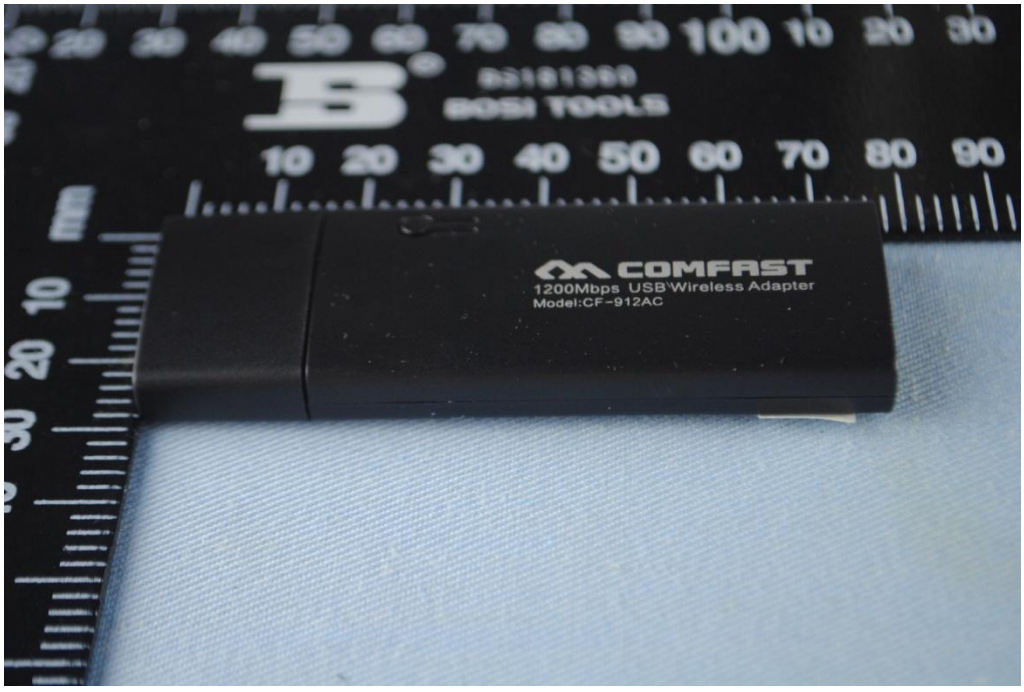
8. Photos of Testing

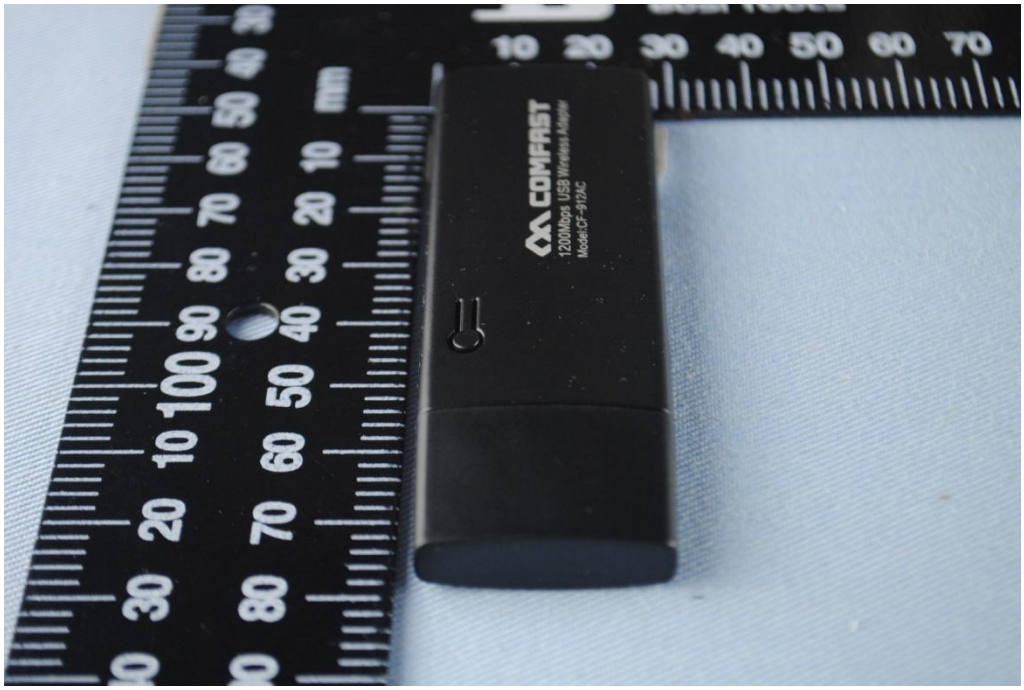
8. 1 EUT Test Photographs

Radiated Emission test view



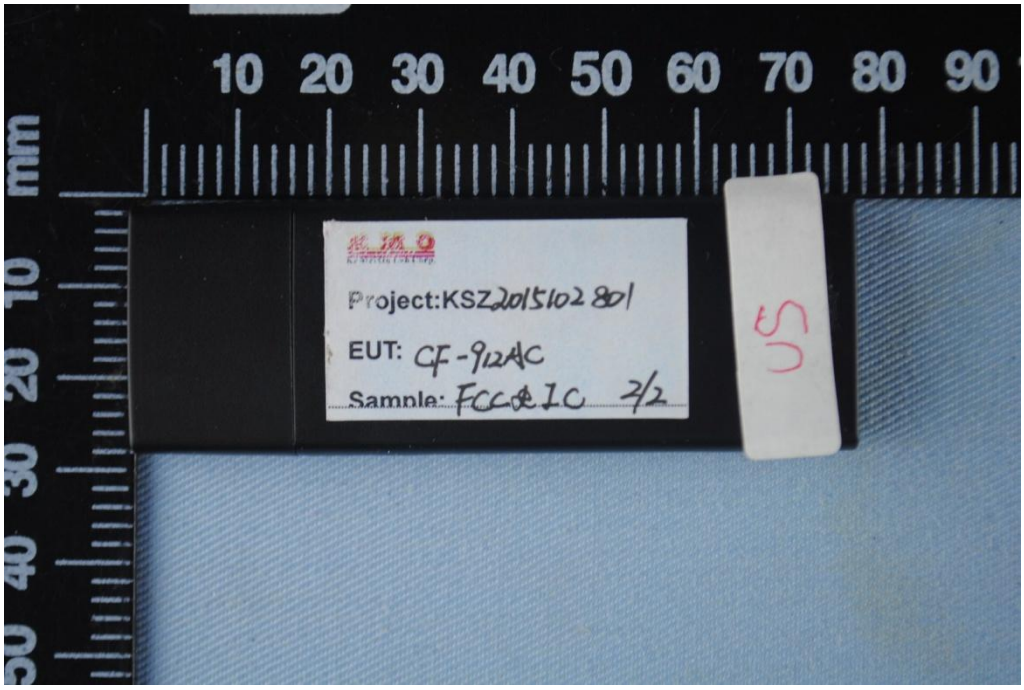
Conducted Emission test view

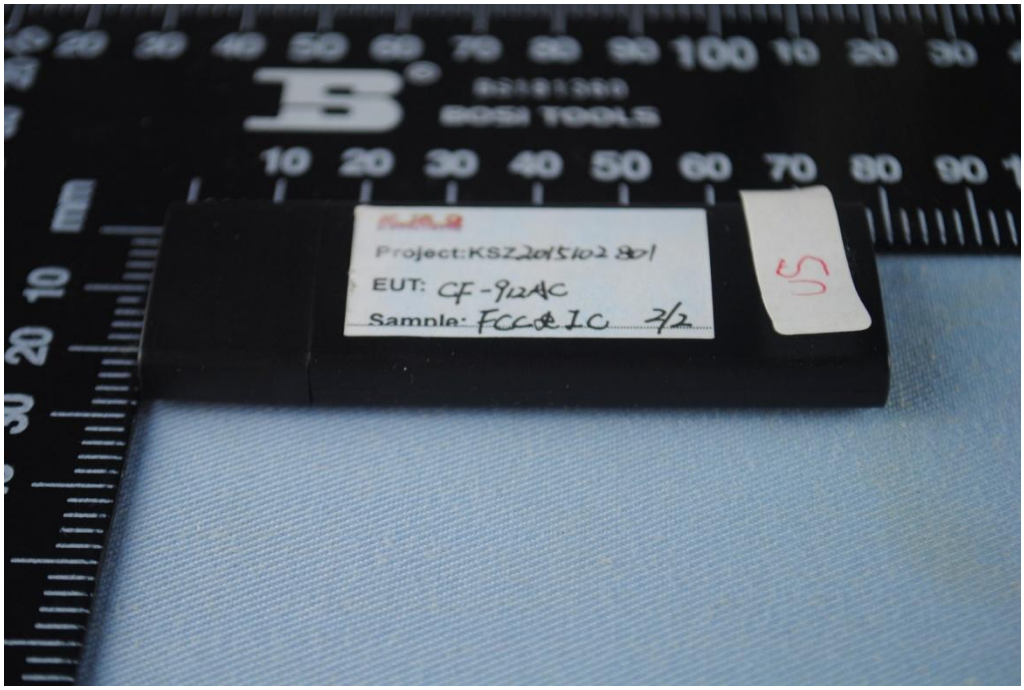

8. 2 EUT Detailed Photographs

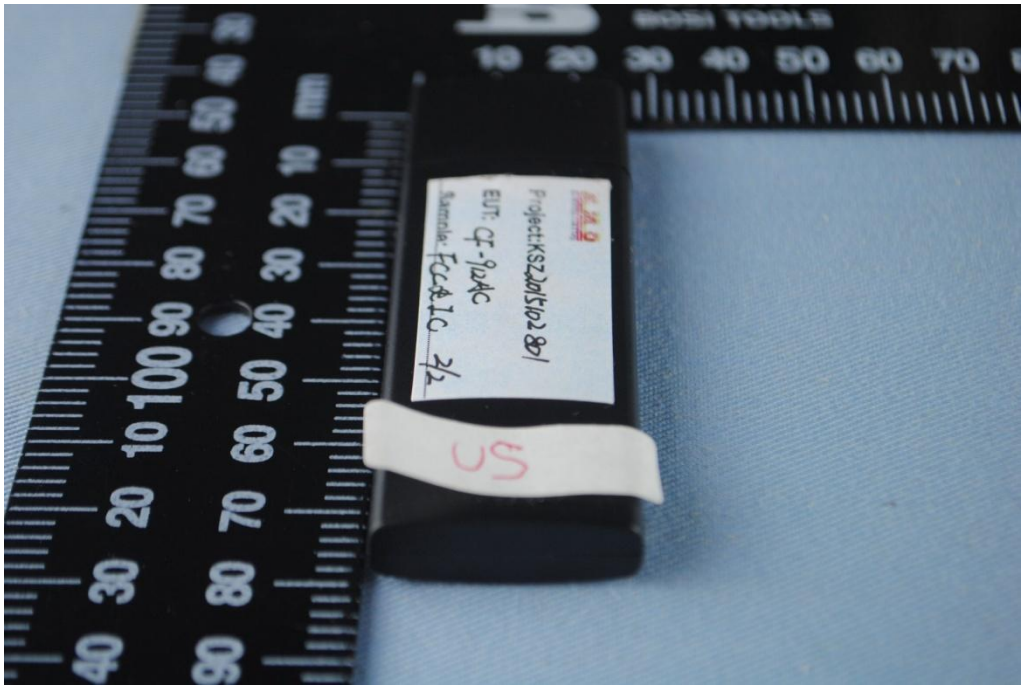
EUT top view





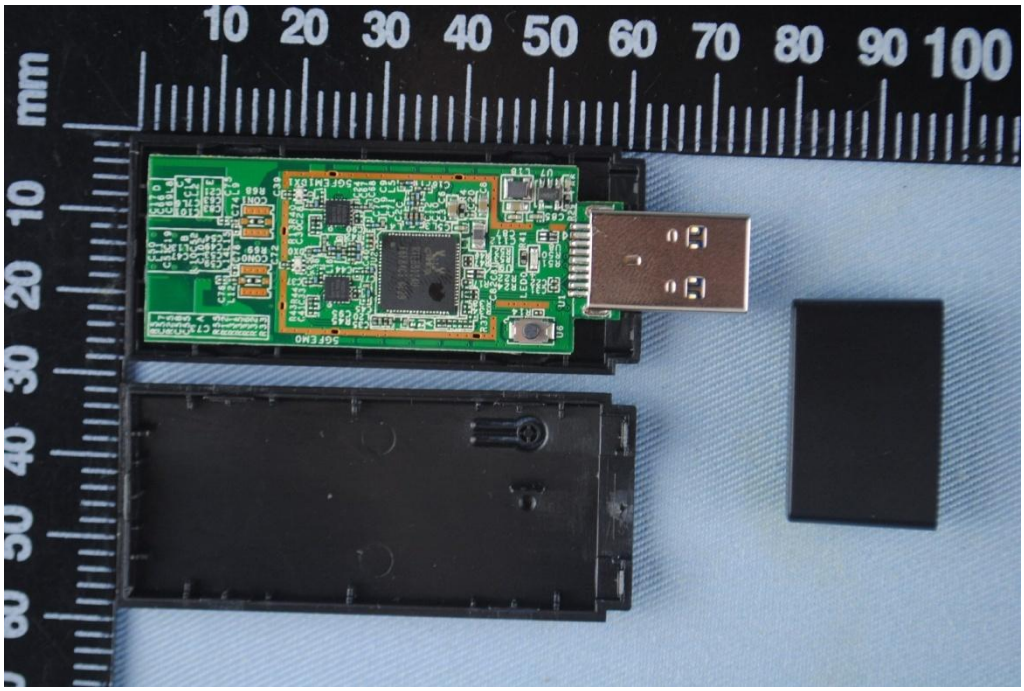
EUT bottom view



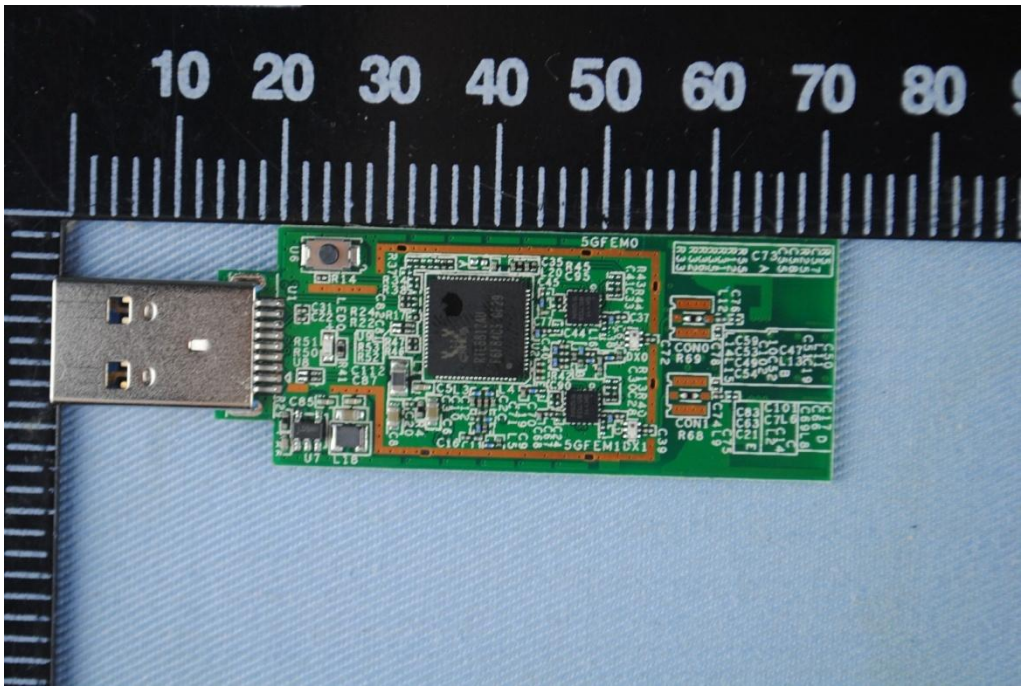

Project:KSZ2015102801
EUT: CF-912AC
Sample: FCC&IC 2/2
5

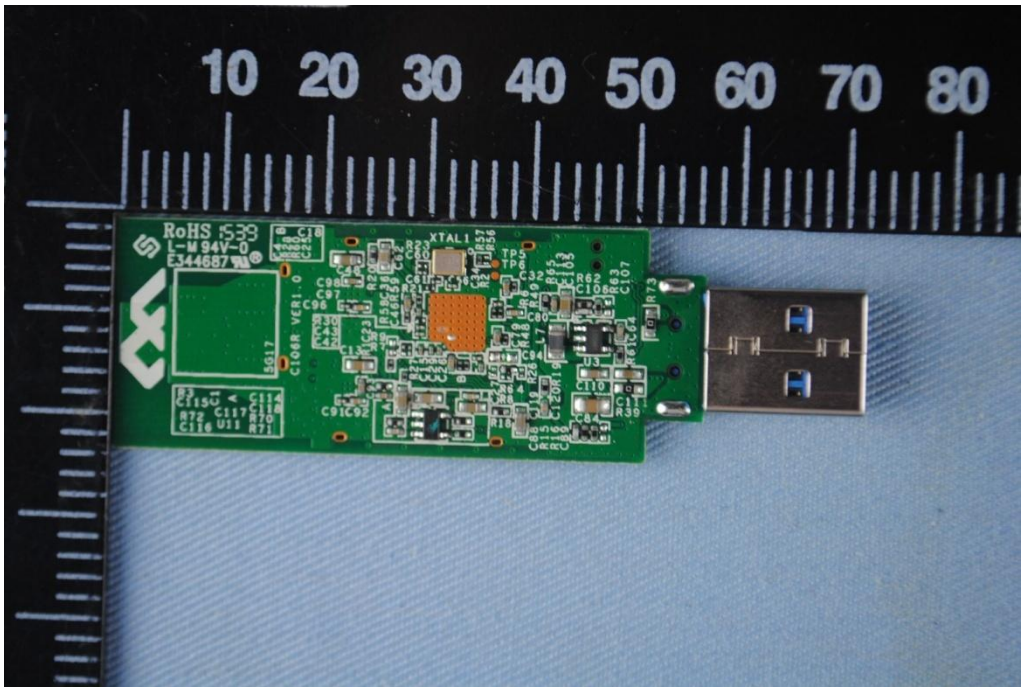

Project:KSZ2015102801
EUT: CF-912AC
Sample: FCC&IC 2/2
5

EUT inside whole view



Main board component side



Main board solder side


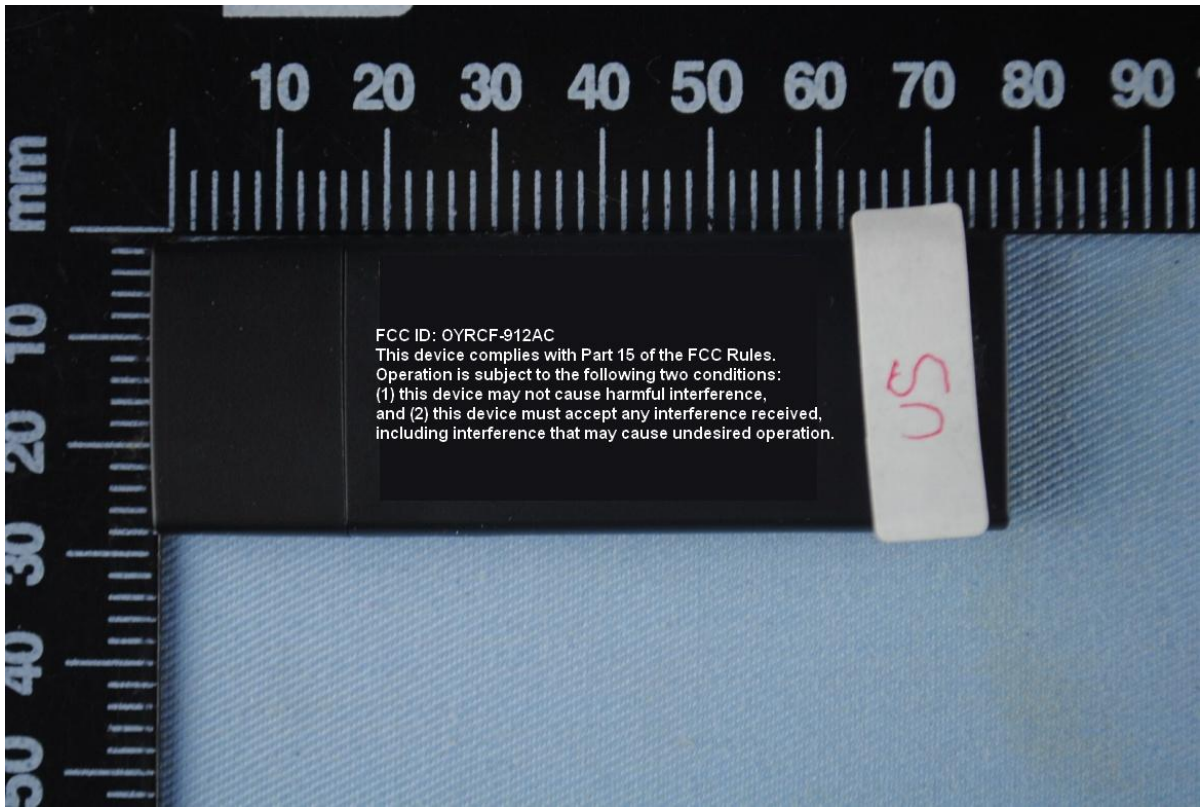
9. FCC ID Label

FCC ID: OYRCF-912AC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Label must not be a stick-on paper label. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT



10. Test Equipment

The following test equipments were used during the radiated & conducted emission test:

Equipment/ Facilities	Manufacturer	Model #	Serial No.	Due Date
Turntable	Innco systems GmbH	CT-0801	KMO-SZ114	NCR
Antenna Tower	Innco systems GmbH	MM4000-PP	KMO-SZ115	NCR
Controller	Innco systems GmbH	CO2000	KMO-SZ116	NCR
Pre-Amplifier	Agilent	87405C	KMO-SZ155	Dec.6, 2016
Pre-Amplifier	Com-Power	PAM-840	KMO-SZ156	Dec.6, 2016
Horn Antenna	Com-Power	AH-840	KMO-SZ157	Dec.6, 2016
EMI Test Receiver	Rohde & Schwarz	ESPI7	KMO-SZ002	June 27, 2016
Spectrum Analyzer	Rohde & Schwarz	FSP40	KMO-SZ003	June 27, 2016
Signal Generator	FLUKE	PM5418+Y/C	KMO-SZ020	May 27, 2016
Loop Antenna	Rohde & Schwarz	HFH2-Z2	KMO-SZ004	August 19, 2018
Trilog-Super Broadband Antenna	SCHWARZBECK	VULB9161	KMO-SZ005	August 27, 2018
Trilog-Super Broadband Antenna	SCHWARZBECK	VULB9161	KMO-SZ006	August 19, 2018
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120D	KMO-SZ007	August 19, 2018
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120D	KMO-SZ008	August 19, 2018
AMN	Rohde & Schwarz	ESH3-Z5	KMO-SZ009	June 27, 2016
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	KMO-SZ077	Nov.29, 2016
ISN	SCHWARZBECK	NTFM 8158 CAT3	KMO-SZ070	Nov.19, 2016
ISN	SCHWARZBECK	NTFM 8158 CAT5	KMO-SZ071	Nov.19, 2016
ISN	SCHWARZBECK	NTFM 8158 CAT6	KMO-SZ072	Nov.19, 2016
KMO Shielded Room	KMO	KMO-001	KMO-SZ036	NCR
Coaxial Cable with N-Connectors	SCHWARZBECK	AK9515H	KMO-SZ037	Sep.18, 2016
AC Power Source / Analyzer	Agilent	6813B	KMO-SZ166	July 22, 2016
Power Meter	Rohde & Schwarz	OSP-B157	KMO-HK015	Nov.6, 2016
Digital Radio Communication Tester	Rohde & Schwarz	CMD60	KMO-SZ169	April 10, 2016
Universal Radio Communication Tester	Rohde & Schwarz	CMU200	KMO-SZ170	April 10, 2016
Regulatory Test System 30 MHz to 40 GHz	Rohde & Schwarz	TS8997	KMO-HK015	Nov.6, 2016
Program Control Telephone Exchanger	Excelltel	CDX8000-M	KMO-SZ221	NCR
3m Anechoic Chamber	KMO	KMO-3AC	KMO-3AC-1	Nov.12, 2016
Temperature Chamber	TABAI	PSL-4GTW	N/A	Feb.10, 2016