



**FCC PART 15.407
RSS-GEN, ISSUE 4, NOVEMBER 2014
RSS-247, ISSUE 2, FEBRUARY 2017**

TEST REPORT

For

DT Research, Inc.

6F, NO.1, NingPo E. St. Taipei, 100 Taiwan

**FCC ID: YE3801I
IC: 7647A-801I**

Report Type: Original Report	Product Name: Mobile Tablet
Report Number: RDG171205015-00D	
Report Date: 2018-02-08	
Reviewed By: Reviewed By: Jerry Zhang EMC Manager	<i>Jerry Zhang</i>
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan).

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:		Mobile Tablet
EUT Model:		DT301A
FCC ID:		YE3801I
IC:		7647A-801I
Rated Input Voltage:		DC 11.4V from battery or DC 19V from Adapter
Adapter Information	Model:	A11-065N1A
	Input:	100-240V~1.7A, 50/60Hz
	Output:	DC 19V, 3.42A 65W
External Dimension:		Length (28.5cm)*Width (20cm)*High (5.4cm)
Serial Number:		171205015
EUT Received Date:		2017.12.07

Note: The device built in a Qualcomm Atheros module, Model: QCNFA364A, FCC ID:PPD-QCNFA364AH, which support Bluetooth 4.1 standard include BLE and 802.11a/b/g/n/ac.

Objective

This type approval report is prepared on behalf of **DT Research, Inc.** in accordance with Part 2-Subpart J, Part 15-Subparts A, and E of the Federal Communications Commission's rules and RSS-247, Issue 2, February 2017, RSS-Gen Issue 4, November 2014 of the Innovation, Science and Economic Development Canada.

The tests were performed in order to determine compliance with FCC Rules Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules, and RSS-247, Issue 2, February 2017, RSS-Gen Issue 4, November 2014 of the Innovation, Science and Economic Development Canada.

Related Submittal(s)/Grant(s)

FCC Part 15C DTS submissions with FCC ID: YE3801I.

FCC Part 15C DSS submissions with FCC ID: YE3801I.

FCC Part 22H, 24E, 27 PCB submissions with FCC ID: YE3801I.

RSS-247 DSSs, RSS-247 DTS, RSS-130, RSS-132, RSS-133, RSS-139 submissions with IC: 7647A-801I.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. RSS-247, Issue 2, February 2017, RSS-Gen Issue 4, November 2014 of the Innovation, Science and Economic Development Canada. And KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	$\pm 5\%$
RF output power, conducted	$\pm 0.61\text{dB}$
Power Spectral Density, conducted	$\pm 0.61\text{ dB}$
Unwanted Emissions, radiated	30M~200MHz: 4.58 dB for Horizontal, 4.59 dB for Vertical 200M~1GHz: 4.83 dB for Horizontal, 5.85 dB for Vertical 1G~6GHz: 4.45 dB, 6G~40GHz: 5.23 dB
Unwanted Emissions, conducted	$\pm 1.5\text{ dB}$
Temperature	$\pm 1^\circ\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 0.4\%$
Duty Cycle	1%
AC Power Lines Conducted Emission	3.12 dB (150 kHz to 30 MHz)

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The test site has been registered with ISED Canada under ISED Canada Registration Number 3062D.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

The system supports 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80 modes. The modes support SISO and MIMO mode except 802.11a only support SISO mode.

For 5150~5250 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 36, 40 and 48 was tested, for 802.11n ht40, 802.11ac vht40 Channel 38, 46 were tested, for 802.11ac vht 80, channel 42 was tested.

For 5250~5350 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20, Channel 52, 56 and 64 were tested, for 802.11n ht40, 802.11ac vht40 Channel 54, 62 were tested. For 802.11ac vht80, channel 58 was tested.

For 5470~5725 MHz band, 21 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	132	5660
102	5510	118	5590	134	5670
104	5520	120	5600	136	5680
106	5530	122	5610	138	5690
108	5540	124	5620	140	5700
110	5550	126	5630	142	5710
112	5560	128	5640	144	5720

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 100, 116 and 140 were tested, for 802.11n ht40, 802.11ac vht40 Channel 102, 118 and 134 were tested, for 802.11ac vht80, channel 106, 122 were tested. For 802.11ac channel cross the band U-NII 2C to U-NII 3, channel 144 for ac20, 142 for ac40, 138 for ac80 were chosen to test conducted output power and Power Spectral Density for compliance requirement.

For Canada RSS-247, channels 118 to 128 were disabled by software since the frequency occupied the frequency band 5600-5650MHz.

For 5725~5850MHz band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	159	5795
151	5755	161	5805
153	5765	165	5825
155	5775	/	/
157	5785	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 149, 157 and 165 was tested, for 802.11n ht40, 802.11ac vht40 Channel 151, 159 was tested, for 802.11ac vht80, channel 155 was tested.

EUT Exercise Software

The software “QSPR.exe” was used for testing, which was provided by manufacturer. The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all date rates bandwidths, and modulations. The maximum power was configured as below table, that provided by the manufacturer:

SISO:

Band	Mode	Frequency (MHz)	Data rate	Power level	
				Main Chain	Aux Chain
5150-5250 MHz	a	5180	6	16.5	17
		5200	6	16.5	17
		5240	6	16.5	17
	n20	5180	MCS0	16	16.5
		5200	MCS0	16	16.5
		5240	MCS0	16	16.5
	n40	5190	MCS0	15	15.5
		5230	MCS0	16	16.5
	ac20	5180	MCS0	16	16.5
		5200	MCS0	16	16.5
		5240	MCS0	16	16.5
	ac40	5190	MCS0	15	15.5
		5230	MCS0	16	16.5
	ac80	5210	MCS0	14	14.5
5250-5350 MHz	a	5260	6	16.5	16.5
		5280	6	16.5	16.5
		5320	6	16.5	16.5
	n20	5260	MCS0	16	16
		5280	MCS0	16	16
		5320	MCS0	16	16
	n40	5270	MCS0	16	16
		5310	MCS0	15	15
	ac20	5260	MCS0	16	16
		5280	MCS0	16	16
		5320	MCS0	16	16
	ac40	5270	MCS0	16	16
		5310	MCS0	15	15
	ac80	5290	MCS0	14	14

Band	Mode	Frequency (MHz)	Data rate	Power level	
				Main Chain	Aux Chain
5470-5725 MHz	a	5500	6	16.5	17
		5580	6	16.5	17
		5700	6	16.5	17
		5720	6	17	17.5
	n20	5500	MCS0	16	17
		5580	MCS0	16	17
		5700	MCS0	16	17
		5720	MCS0	16.5	17.5
	n40	5510	MCS0	16.5	16.5
		5550	MCS0	16.5	17.5
		5670	MCS0	16.5	17.5
		5710	MCS0	16.5	17.5
	ac20	5500	MCS0	16	17
		5580	MCS0	16	17
		5700	MCS0	16	17
		5720	MCS0	16.5	17.5
	ac40	5510	MCS0	16.5	16.5
		5550	MCS0	16.5	17.5
		5670	MCS0	16.5	17.5
		5710	MCS0	16.5	17.5
	ac80	5530	MCS0	15	15.5
		5610	MCS0	14	15.5
		5690	MCS0	14.5	15.5
5725-5850 MHz	a	5745	6	17.5	18
		5785	6	17.5	18
		5825	6	17.5	18
	n20	5745	MCS0	17	17.5
		5785	MCS0	17	17.5
		5825	MCS0	17	17.5
	n40	5755	MCS0	17	18
		5795	MCS0	17.5	18
	ac20	5745	MCS0	17	17.5
		5785	MCS0	17	17.5
		5825	MCS0	17	17.5
	ac40	5755	MCS0	17	18
		5795	MCS0	17.5	18
	ac80	5775	MCS0	16.5	16.5

MIMO:

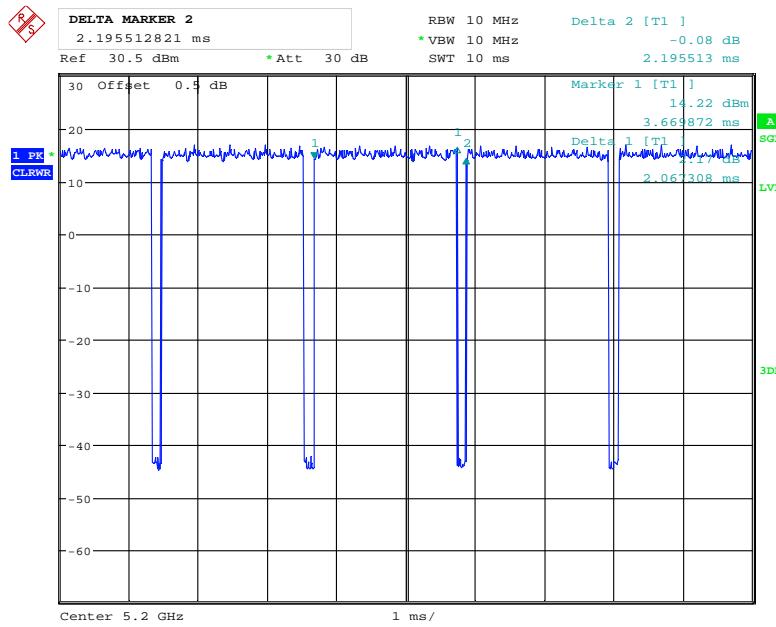
Band	Mode	Frequency (MHz)	Data rate	Power level	
				Main Chain	Aux Chain
5150-5250 MHz	n20	5180	MCS8	13	13
		5200	MCS8	13	13
		5240	MCS8	13	13
	n40	5190	MCS8	7	7
		5230	MCS8	13.5	13.5
	ac20	5180	MCS8	13	13
		5200	MCS8	13	13
		5240	MCS8	13	13
	ac40	5190	MCS8	7	7
		5230	MCS8	13.5	13.5
	ac80	5210	MCS8	11.5	11.5
5250-5350 MHz	n20	5260	MCS8	13	13
		5280	MCS8	13	13
		5320	MCS8	13	13
	n40	5270	MCS8	13	13
		5310	MCS8	12.5	12.5
	ac20	5260	MCS8	13	13
		5280	MCS8	13	13
		5320	MCS8	13	13
	ac40	5270	MCS8	13	13
		5310	MCS8	13	13
	ac80	5290	MCS8	11	11
5470-5725 MHz	n20	5500	MCS8	13.5	13.5
		5580	MCS8	13.5	13.5
		5700	MCS8	13.5	13.5
		5720	MCS8	14	14
	n40	5510	MCS8	14	14
		5550	MCS8	14	14
		5670	MCS8	14	14
		5710	MCS8	14	14
	ac20	5500	MCS8	13.5	13.5
		5580	MCS8	13.5	13.5
		5700	MCS8	13.5	13.5
		5720	MCS8	14	14
	ac40	5510	MCS8	14	14
		5550	MCS8	14	14
		5670	MCS8	14	14
		5710	MCS8	14	14
	ac80	5530	MCS8	12	12
		5610	MCS8	12	12
		5690	MCS8	12	12

Band	Mode	Frequency (MHz)	Data rate	Power level	
				Main Chain	Aux Chain
5725-5850 MHz	n20	5745	MCS8	14	14
		5785	MCS8	14	14
		5825	MCS8	14	14
	n40	5755	MCS8	14.5	14.5
		5795	MCS8	14.5	14.5
	ac20	5745	MCS8	14	14
		5785	MCS8	14	14
		5825	MCS8	14	14
	ac40	5755	MCS8	14.5	14.5
		5795	MCS8	14.5	14.5
	ac80	5775	MCS8	13.5	13.5

The duty cycle as below:

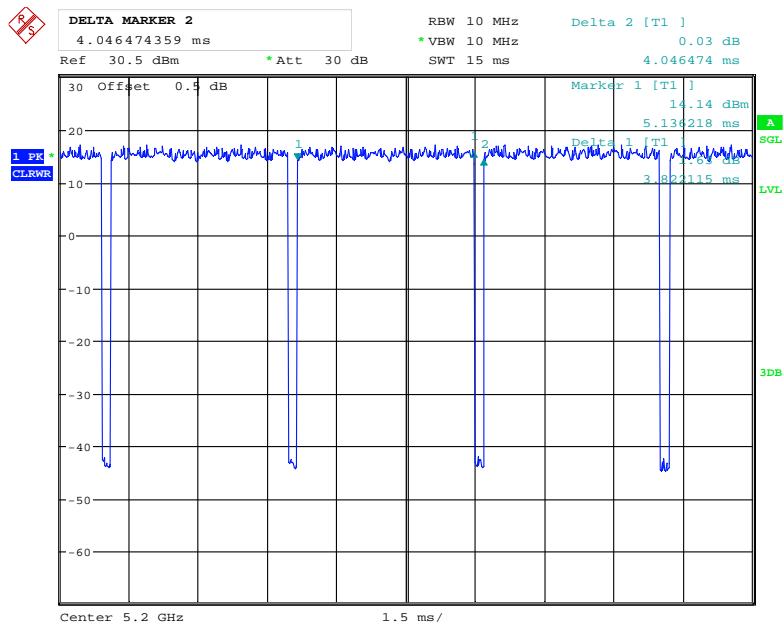
Mode	T _{on} (ms)	T _{on+off} (ms)	Duty Cycle(x) (%)	Duty cycle Factor (10*lg(1/x))
802.11a	2.067	2.196	94.1	0.26
802.11n ht20	3.822	4.046	94.5	0.25
802.11n ht40	1.859	2.099	88.6	0.53
802.11ac20	3.822	4.046	94.5	0.25
802.11ac40	1.875	2.099	89.3	0.49
802.11ac80	0.881	1.090	80.8	0.93

802.11a mode



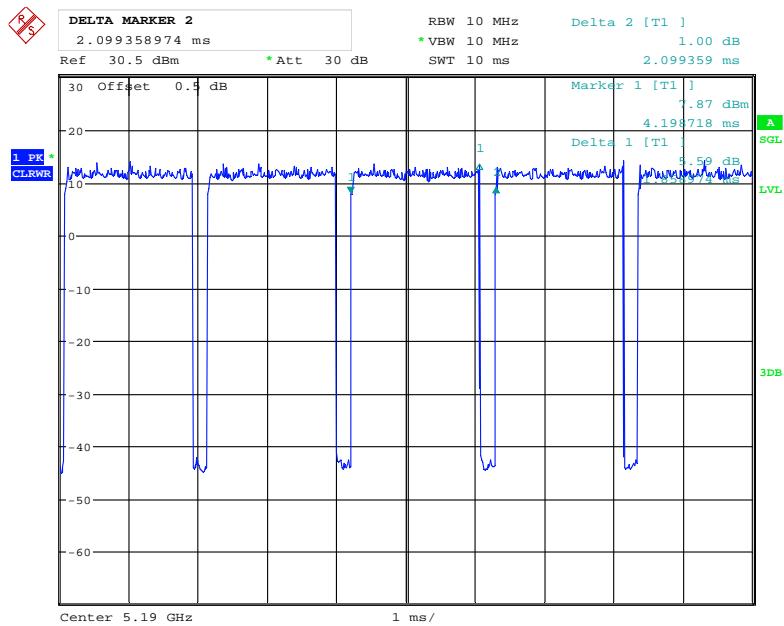
Date: 14.DEC.2017 08:55:22

802.11n ht20 mode



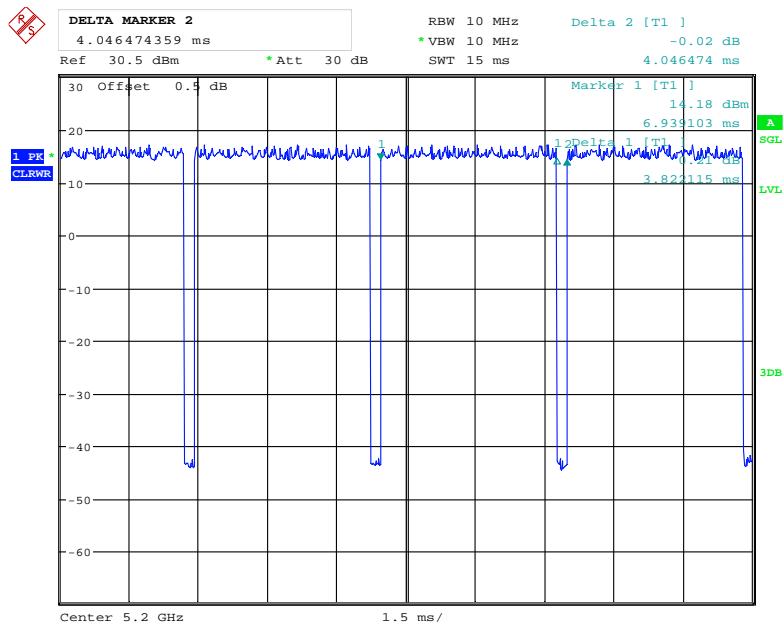
Date: 14.DEC.2017 08:56:16

802.11n ht40 mode



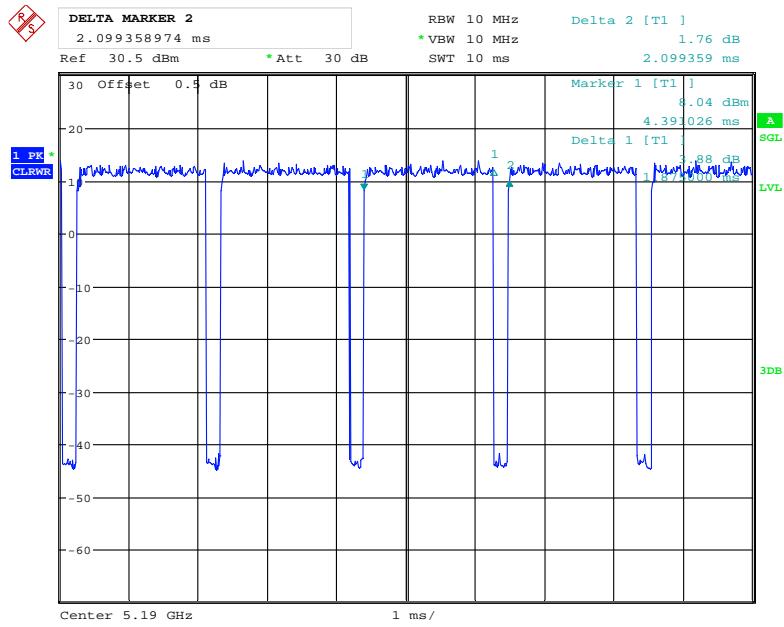
Date: 14.DEC.2017 08:58:55

802.11ac20 mode



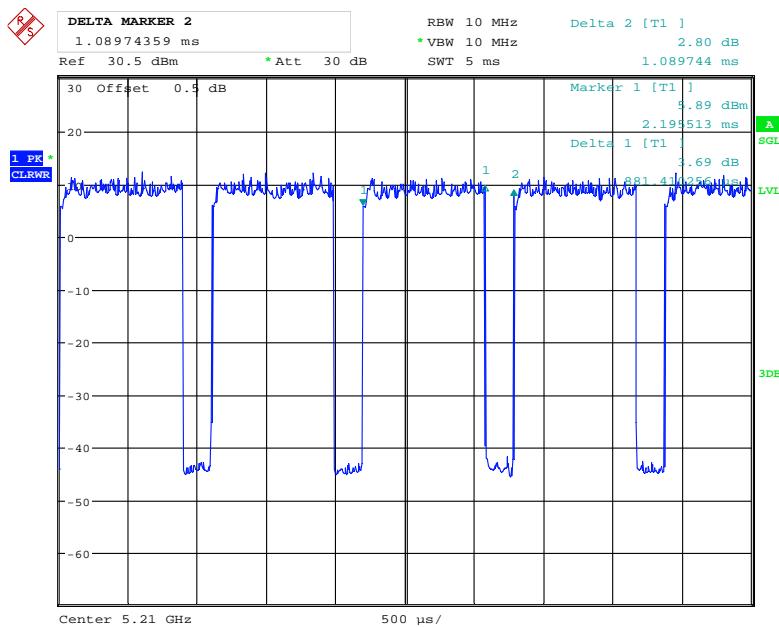
Date: 14.DEC.2017 08:56:57

802.11ac40 mode



Date: 14.DEC.2017 08:59:40

802.11ac80 mode



Date: 14.DEC.2017 09:00:38

Equipment Modifications

No modification was made to the EUT.

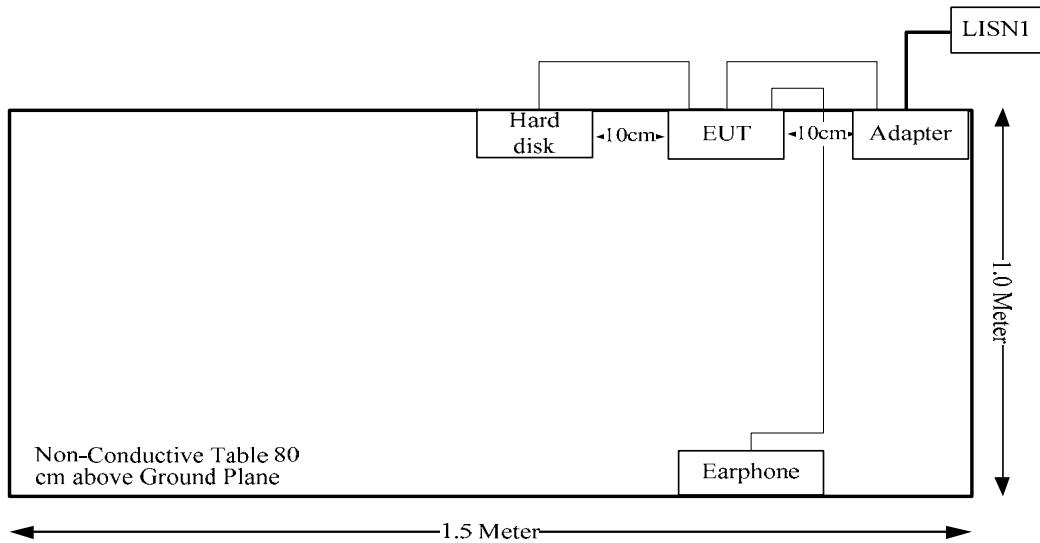
Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Keenion	Earphone	KDM-911	6951812200215
TOSHIBA	HDD	DTP105	247BSYVUSRE8

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Earphone Cable	No	No	1.26	EUT	Earphone
USB Cable	yes	No	1.0	EUT	HDD

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

Rules	Description of Test	Result
FCC §15.407 (f) & §1.1310 & §2.1093, RSS-102 §4	RF Exposure	Compliance
FCC §15.203, RSS-GEN§8.3	Antenna Requirement	Compliance
FCC §15.407(b)(6)& §15.207(a), RSS-Gen §8.8	Conducted Emissions	Compliance
FCC §15.205& §15.209 &§15.407(b), RSS-247§6.2	Undesirable Emission& Restricted Bands	Compliance
FCC §15.407(b), RSS-247§6.2	Out Of Band Emissions	Compliance
§15.407(a) (e), RSS-247 §6.2 RSS-Gen§6.6	Emission Bandwidth	Compliance
FCC §15.407(g)	Frequency Stability	Compliance
FCC §15.407(a), RSS-247 §6.2	Conducted Transmitter Output Power	Compliance
FCC §15.407 (a), RSS-247 §6.2	Power Spectral Density	Compliance
FCC§15.407(H) RSS-247 §6.3	Dynamic Frequency Selection (DFS)	Compliance*

Note:

Compliance*: please refer to the DFS test report: RDG171205015-00E.

FCC §15.407 (f) & §1.1310 & §2.1093 , RSS-102 §4-- RF EXPOSURE**Applicable Standard**

According to §15.407(f) and §1.1310, U-NII devices are subject to the radio frequency radiation exposure requirements specified in §§ 1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

According to RSS-102 Clause 4 Table 3, SAR limits for device used by the general public

Body Region	Average SAR (W/Kg)	Averaging Time (minutes)	Mass Average (g)
Whole Body	0.08	6	Whole Body
Localized Head, Neck and Trunk	1.6	6	1
Localized Limbs	4	6	10

Result

The SAR data please refer to the SAR report, report No.:RDG171205015-20.

FCC §15.203, RSS-GEN §8.3– ANTENNA REQUIREMENT

Applicable Standard

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

And according to FCC 47 CFR section 15.407 (a)(1), if transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to RSS-Gen §8.3, The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.

Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power (e.i.r.p.) limits specified in the applicable standard (RSS) for the licence-exempt apparatus.

Testing shall be performed using the highest gain antenna of each combination of licence-exempt transmitter and antenna type, with the transmitter output power set at the maximum level. When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna manufacturer.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi).

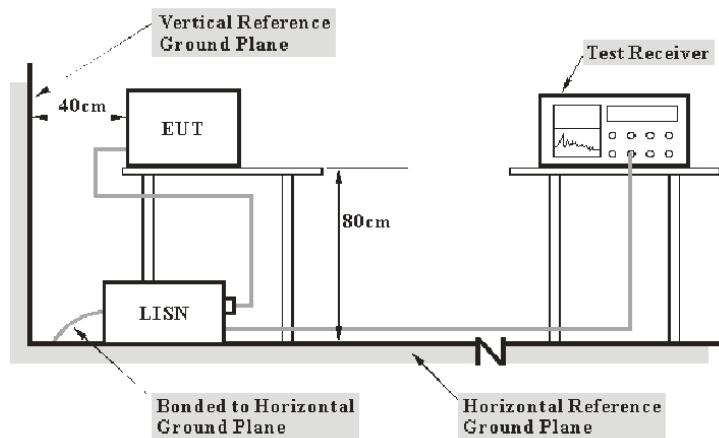
Antenna Connector Construction

The EUT have 2 internal antennas for 5G WLAN, fulfill the requirement of this section. The maximum antenna gain in 5GHz band is 4.98dBi.

Result: Compliance.

FCC §15.407 (b) (6) §15.207 (a) , RSS-GEN CLAUSE 8.8 – CONDUCTED EMISSIONS**Applicable Standard**

FCC §15.207(a), §15.407(b) (6) , RSS-GEN CLAUSE 8.8

EUT Setup

Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits and RSS-Gen clause 8.8 limits.

The spacing between the peripherals was 10 cm.

The adapter was connected to the main lisn with a 120 V/60 Hz AC power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

V_C (cord. Reading): corrected voltage amplitude

V_R : reading voltage amplitude

A_C : attenuation caused by cable loss

VDF: voltage division factor of AMN

C_f : Correction Factor

The “Margin” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2016-12-11	2017-12-11
R&S	L.I.S.N	ESH2-Z5	892107/021	2017-09-25	2018-09-25
R&S	Two-line V-network	ENV 216	3560.6550.12	2016-12-08	2017-12-08
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A
N/A	Coaxial Cable	2m	C0200/01	2017-09-05	2018-09-05

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

During the conducted emission test, the adapter was connected to the first LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Data

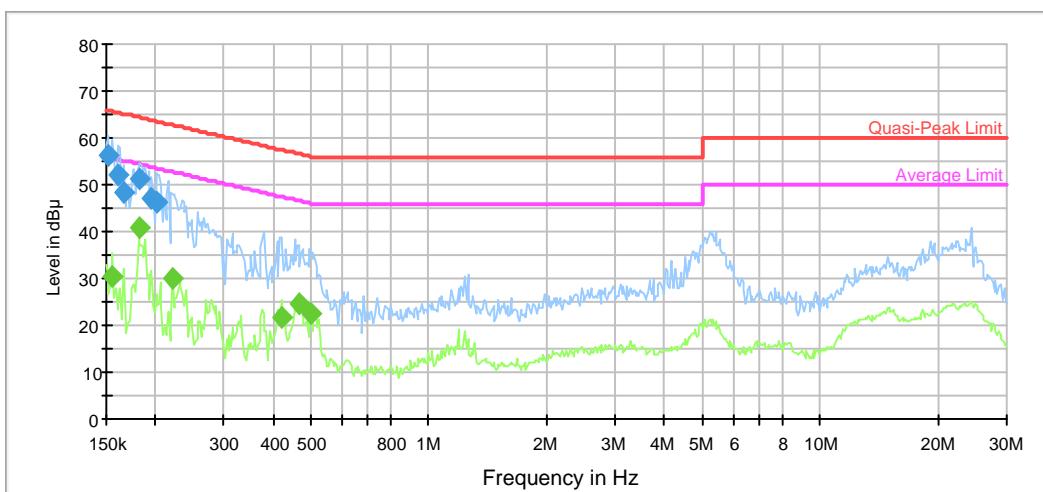
Environmental Conditions

Temperature:	24.8 °C
Relative Humidity:	40 %
ATM Pressure:	101.2 kPa

The testing was performed by Alex You on 2017-12-07.

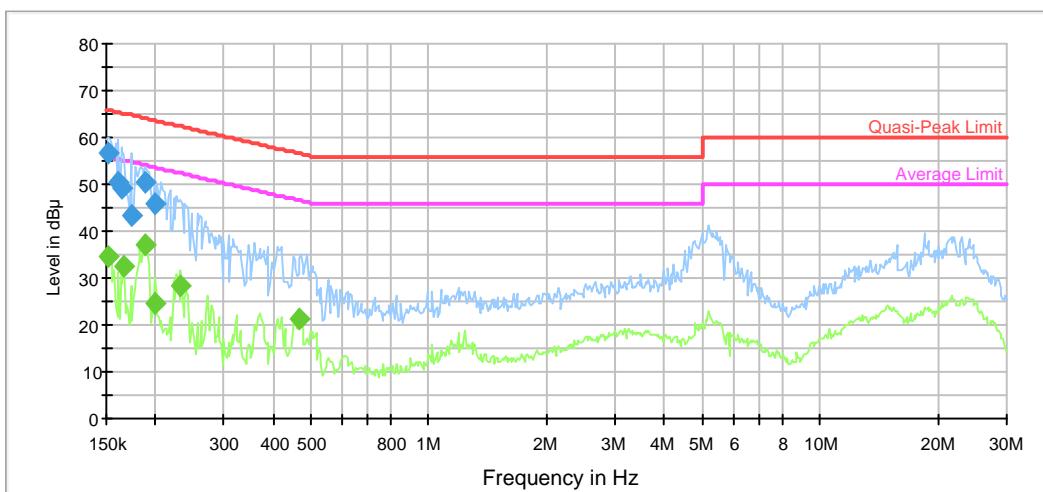
Test Mode: Transmitting

AC120 V, 60 Hz, Line:



Frequency (MHz)	QuasiPeak (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.151200	56.0	9.000	L1	11.2	9.9	65.9	Compliance
0.161152	52.3	9.000	L1	11.0	13.1	65.4	Compliance
0.166371	48.2	9.000	L1	11.0	16.9	65.1	Compliance
0.183065	51.4	9.000	L1	10.8	12.9	64.3	Compliance
0.195114	47.2	9.000	L1	10.7	16.6	63.8	Compliance
0.201433	46.3	9.000	L1	10.6	17.3	63.6	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.156097	30.6	9.000	L1	11.1	25.1	55.7	Compliance
0.181612	40.7	9.000	L1	10.8	13.7	54.4	Compliance
0.221645	30.2	9.000	L1	10.5	22.6	52.8	Compliance
0.422630	21.8	9.000	L1	10.0	25.6	47.4	Compliance
0.465037	24.6	9.000	L1	9.9	22.0	46.6	Compliance
0.499611	22.6	9.000	L1	9.9	23.4	46.0	Compliance

AC120 V, 60 Hz, Neutral:

frequency (MHz)	QuasiPeak (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.151200	56.4	9.000	N	11.2	9.5	65.9	Compliance
0.161152	50.3	9.000	N	11.0	15.1	65.4	Compliance
0.163741	49.3	9.000	N	11.0	16.0	65.3	Compliance
0.173134	43.3	9.000	N	10.9	21.5	64.8	Compliance
0.188994	50.4	9.000	N	10.7	13.7	64.1	Compliance
0.199835	45.9	9.000	N	10.6	17.7	63.6	Compliance

Frequency (MHz)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.152410	34.5	9.000	N	11.1	21.4	55.9	Compliance
0.166371	32.4	9.000	N	10.9	22.7	55.1	Compliance
0.188994	37.0	9.000	N	10.7	17.1	54.1	Compliance
0.199835	24.6	9.000	N	10.6	29.0	53.6	Compliance
0.232499	28.2	9.000	N	10.4	24.2	52.4	Compliance
0.468757	21.3	9.000	N	9.9	25.2	46.5	Compliance

FCC §15.209, §15.205 & §15.407(b), RSS-247 §6.2, RSS-GEN§8.10 – UNWANTED EMISSION**Applicable Standard**

FCC §15.407; §15.209; §15.205;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(7) The provisions of §15.205 apply to intentional radiators operating under this section.

According to RSS-247§6.2

Frequency band 5150-5250 MHz

6.2.1.2 Unwanted emission limits

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency band 5250-5350 MHz

6.2.2.2 Unwanted emission limits

Devices shall comply with the following:

- a) All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or
- b) All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text "for indoor use only."

Frequency bands 5470-5600 MHz and 5650-5725 MHz:

6.2.3.2 Unwanted emission limits

Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

Frequency band 5725-5850 MHz

6.2.4.2 Unwanted emission limits

Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.

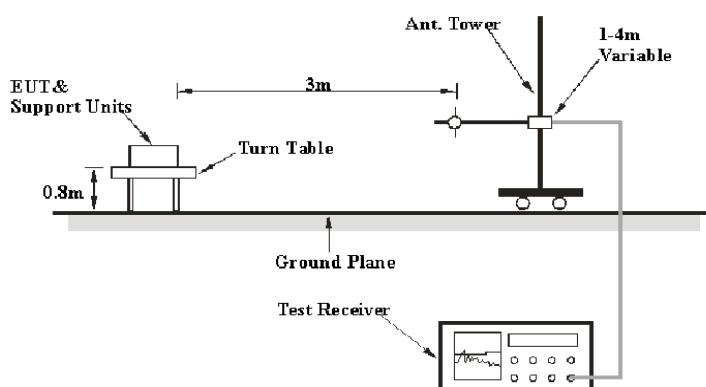
Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.

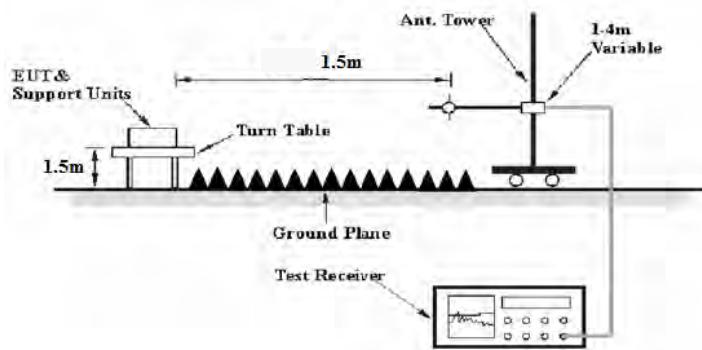
Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

- a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
- b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
- d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

EUT Setup

Below 1 GHz:



Above 1 GHz:

The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.407 limits and RSS-247, RSS-Gen limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
Ave.	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01, emission shall be computed as: $E [dB\mu V/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m
Distance extrapolation factor = $20 \log (\text{specific distance } [3m]/\text{test distance } [1.5m])$ dB= 6.02 dB

Corrected Amplitude & Margin Calculation

For the range 30MHz-1GHz, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

For the range 1GHz-40GHz, Test performed at 1.5m, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading and the Distance extrapolation factor. The basic equation is as follows:

$$\begin{aligned} \text{Corrected Amplitude} \\ = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain} - \text{Distance extrapolation factor} \end{aligned}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corrected Amplitude} - \text{Limit}$$

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2017-09-01	2018-09-01
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2018-11-10
HP	Amplifier	8447D	2727A05902	2017-09-05	2018-09-05
N/A	Coaxial Cable	C-NJNJ-50	C-0400-01	2017-09-05	2018-09-05
N/A	Coaxial Cable	C-NJNJ-50	C-0075-01	2017-09-05	2018-09-05
N/A	Coaxial Cable	C-NJNJ-50	C-1000-01	2017-09-05	2018-09-05
Agilent	Spectrum Analyzer	E4440A	SG43360054	2017-12-08	2018-12-08
ETS-Lindgren	Horn Antenna	3115	000 527 35	2016-01-05	2019-01-05
MITEQ	Amplifier	AFS42-00101800-25-S-42	2001271	2017-09-05	2018-09-05
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2016-11-18	2019-11-18
Ducommun Technologies	Horn Antenna	ARH-2823-02	1007726-01 1302	2016-11-18	2019-11-18
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2017-06-27	2018-06-27
N/A	Coaxial Cable	C-SJSJ-50	C-0800-01	2017-09-05	2018-09-05
R&S	Spectrum Analyzer	FSP 38	100478	2017-12-08	2018-12-08
Chengdu OuLi	Band rejector Filter	5725-5850	005	2017-09-05	2018-09-05
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

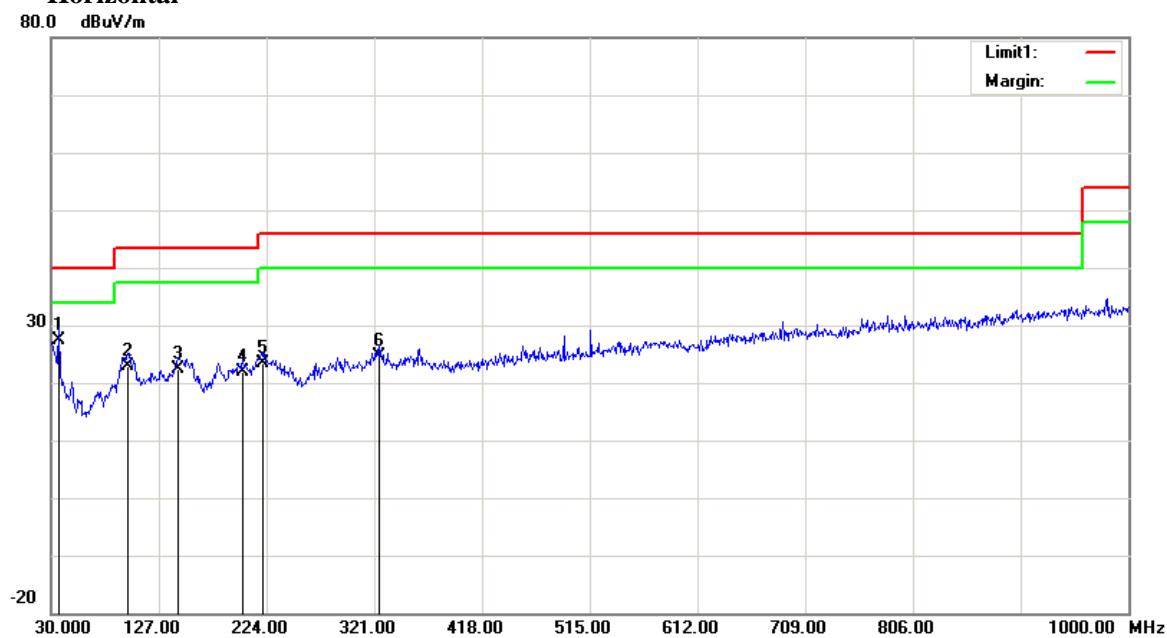
Test Data

Environmental Conditions

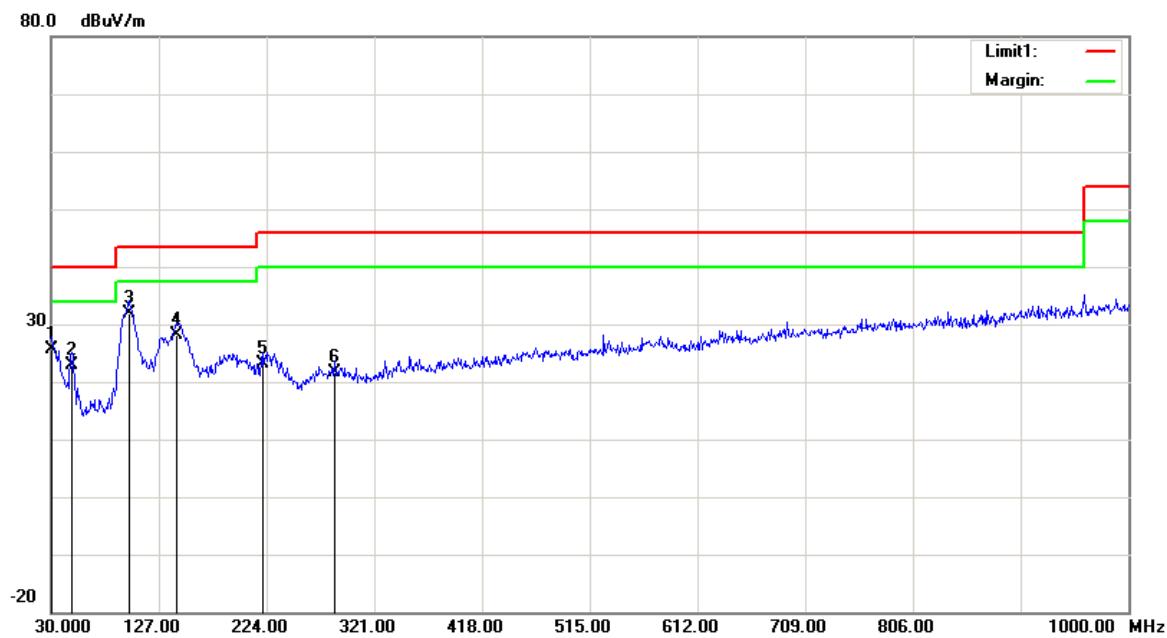
Temperature:	20.1~26.8 °C
Relative Humidity:	30.8~37 %
ATM Pressure:	102~102.2 kPa

* The testing was performed by Sunny Cen & Kakaxi Chen from 2017-12-15 to 2017-12-18.

Test Mode: Transmitting

1) Below 1GHz(802.11n ht20 5785 MHz was the worst):**Horizontal**

Frequency (MHz)	Receiver Reading (dB μ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
36.7900	31.33	QP	-3.83	27.50	40.00	12.50
98.8700	31.65	QP	-8.65	23.00	43.50	20.50
144.4600	28.80	QP	-6.40	22.40	43.50	21.10
202.6600	28.28	QP	-6.28	22.00	43.50	21.50
220.1200	30.20	QP	-6.80	23.40	46.00	22.60
325.8500	28.49	QP	-3.89	24.60	46.00	21.40

Vertical

Frequency (MHz)	Receiver Reading (dB μ V)	Detector	Correction Factor (dB/m)	Cord. Amp. (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
30.9700	25.35	QP	0.35	25.70	40.00	14.30
48.4300	34.09	QP	-11.09	23.00	40.00	17.00
99.8400	40.25	QP	-8.25	32.00	43.50	11.50
143.4900	34.56	QP	-6.36	28.20	43.50	15.30
220.1200	29.90	QP	-6.80	23.10	46.00	22.90
285.1100	25.40	QP	-3.80	21.60	46.00	24.40

1GHz-40GHz:**5150-5250MHz****802.11a(Main chain was the worst)**

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5180 MHz									
5180.00	67.61	PK	H	33.59	3.58	0.00	98.76	N/A	N/A
5180.00	58.14	AV	H	33.59	3.58	0.00	89.29	N/A	N/A
5180.00	74.02	PK	V	33.59	3.58	0.00	105.17	N/A	N/A
5180.00	64.19	AV	V	33.59	3.58	0.00	95.34	N/A	N/A
5150.00	27.02	PK	V	33.54	3.56	0.00	58.10	74.00	15.90
5150.00	15.67	AV	V	33.54	3.56	0.00	46.75	54.00	7.25
10360.00	45.34	PK	V	38.17	6.29	36.85	46.93	74.00	27.07
10360.00	34.78	AV	V	38.17	6.29	36.85	36.37	54.00	17.63
15540.00	44.67	PK	V	38.06	8.85	39.04	46.52	74.00	27.48
15540.00	34.09	AV	V	38.06	8.85	39.04	35.94	54.00	18.06
6908.50	46.20	PK	V	35.02	5.10	36.99	43.31	74.00	30.69
6908.50	34.67	AV	V	35.02	5.10	36.99	31.78	54.00	22.22
Middle Channel: 5200 MHz									
5200.00	68.61	PK	H	33.62	3.60	0.00	99.81	N/A	N/A
5200.00	58.67	AV	H	33.62	3.60	0.00	89.87	N/A	N/A
5200.00	73.76	PK	V	33.62	3.60	0.00	104.96	N/A	N/A
5200.00	63.63	AV	V	33.62	3.60	0.00	94.83	N/A	N/A
10400.00	45.34	PK	V	38.18	6.32	36.86	46.96	74.00	27.04
10400.00	35.78	AV	V	38.18	6.32	36.86	37.40	54.00	16.6
15600.00	44.67	PK	V	38.00	8.83	39.09	46.39	74.00	27.61
15600.00	34.09	AV	V	38.00	8.83	39.09	35.81	54.00	18.19
8995.00	46.59	PK	V	37.70	5.49	36.93	46.83	74.00	27.17
8995.00	35.46	AV	V	37.70	5.49	36.93	35.70	54.00	18.3
6924.00	53.45	PK	V	35.05	5.11	36.99	50.60	74.00	23.4
6924.00	43.37	AV	V	35.05	5.11	36.99	40.52	54.00	13.48
High Channel: 5240 MHz									
5240.00	70.74	PK	H	33.68	3.52	0.00	101.92	N/A	N/A
5240.00	61.02	AV	H	33.68	3.52	0.00	92.20	N/A	N/A
5240.00	74.73	PK	V	33.68	3.52	0.00	105.91	N/A	N/A
5240.00	65.32	AV	V	33.68	3.52	0.00	96.50	N/A	N/A
5350.00	27.36	PK	V	33.86	3.52	0.00	58.72	74.00	15.28
5350.00	14.69	AV	V	33.86	3.52	0.00	46.05	54.00	7.95
10480.00	45.21	PK	V	38.20	6.37	36.88	46.88	74.00	27.12
10480.00	34.26	AV	V	38.20	6.37	36.88	35.93	54.00	18.07
15720.00	45.49	PK	V	37.88	8.79	39.18	46.96	74.00	27.04
15720.00	34.67	AV	V	37.88	8.79	39.18	36.14	54.00	17.86
6987.00	47.69	PK	V	35.17	5.17	36.97	45.04	74.00	28.96
6987.00	36.44	AV	V	35.17	5.17	36.97	33.79	54.00	20.21

802.11n ht20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5180 MHz									
5180.00	75.99	PK	H	33.59	3.58	0.00	107.14	N/A	N/A
5180.00	65.28	AV	H	33.59	3.58	0.00	96.43	N/A	N/A
5180.00	78.37	PK	V	33.59	3.58	0.00	109.52	N/A	N/A
5180.00	68.12	AV	V	33.59	3.58	0.00	99.27	N/A	N/A
5150.00	27.34	PK	V	33.54	3.56	0.00	58.42	74.00	15.58
5150.00	14.44	AV	V	33.54	3.56	0.00	45.52	54.00	8.48
10360.00	45.65	PK	V	38.17	6.29	36.85	47.24	74.00	26.76
10360.00	34.47	AV	V	38.17	6.29	36.85	36.06	54.00	17.94
15540.00	43.57	PK	V	38.06	8.85	39.04	45.42	74.00	28.58
15540.00	33.02	AV	V	38.06	8.85	39.04	34.87	54.00	19.13
9547.00	43.58	PK	V	37.92	5.77	36.63	44.62	74.00	29.38
9547.00	33.28	AV	V	37.92	5.77	36.63	34.32	54.00	19.68
Middle Channel: 5200 MHz									
5200.00	76.06	PK	H	33.62	3.60	0.00	107.26	N/A	N/A
5200.00	66.58	AV	H	33.62	3.60	0.00	97.78	N/A	N/A
5200.00	77.84	PK	V	33.62	3.60	0.00	109.04	N/A	N/A
5200.00	67.57	AV	V	33.62	3.60	0.00	98.77	N/A	N/A
10400.00	44.68	PK	V	38.18	6.32	36.86	46.30	74.00	27.7
10400.00	34.29	AV	V	38.18	6.32	36.86	35.91	54.00	18.09
15600.00	44.57	PK	V	38.00	8.83	39.09	46.29	74.00	27.71
15600.00	34.19	AV	V	38.00	8.83	39.09	35.91	54.00	18.09
7856.00	45.68	PK	V	36.71	4.63	36.97	44.03	74.00	29.97
7856.00	34.87	AV	V	36.71	4.63	36.97	33.22	54.00	20.78
7698.00	44.16	PK	V	36.62	4.49	37.25	42.00	74.00	32
7698.00	34.09	AV	V	36.62	4.49	37.25	31.93	54.00	22.07
High Channel: 5240 MHz									
5240.00	76.41	PK	H	33.68	3.52	0.00	107.59	N/A	N/A
5240.00	66.47	AV	H	33.68	3.52	0.00	97.65	N/A	N/A
5240.00	77.66	PK	V	33.68	3.52	0.00	108.84	N/A	N/A
5240.00	68.45	AV	V	33.68	3.52	0.00	99.63	N/A	N/A
5350.00	27.41	PK	V	33.86	3.52	0.00	58.77	74.00	15.23
5350.00	14.77	AV	V	33.86	3.52	0.00	46.13	54.00	7.87
10480.00	45.47	PK	V	38.20	6.37	36.88	47.14	74.00	26.86
10480.00	34.19	AV	V	38.20	6.37	36.88	35.86	54.00	18.14
15720.00	44.16	PK	V	37.88	8.79	39.18	45.63	74.00	28.37
15720.00	34.02	AV	V	37.88	8.79	39.18	35.49	54.00	18.51
8711.00	43.69	PK	V	37.53	5.31	37.04	43.47	74.00	30.53
8711.00	33.47	AV	V	37.53	5.31	37.04	33.25	54.00	20.75

802.11n ht40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5190 MHz									
5190.00	73.49	PK	H	33.60	3.59	0.00	104.66	N/A	N/A
5190.00	63.79	AV	H	33.60	3.59	0.00	94.96	N/A	N/A
5190.00	74.33	PK	V	33.60	3.59	0.00	105.50	N/A	N/A
5190.00	63.42	AV	V	33.60	3.59	0.00	94.59	N/A	N/A
5150.00	38.79	PK	V	33.54	3.56	0.00	69.87	74.00	4.13
5150.00	18.52	AV	V	33.54	3.56	0.00	49.60	54.00	4.40
10380.00	47.63	PK	V	38.18	6.31	36.85	49.25	74.00	24.75
10380.00	34.58	AV	V	38.18	6.31	36.85	36.20	54.00	17.80
15570.00	46.37	PK	V	38.03	8.84	39.06	48.16	74.00	25.84
15570.00	33.49	AV	V	38.03	8.84	39.06	35.28	54.00	18.72
9355.00	46.52	PK	V	37.84	5.67	36.70	47.31	74.00	26.69
9355.00	33.26	AV	V	37.84	5.67	36.70	34.05	54.00	19.95
High Channel: 5230 MHz									
5230.00	73.42	PK	H	33.67	3.54	0.00	104.61	N/A	N/A
5230.00	53.34	AV	H	33.67	3.54	0.00	84.53	N/A	N/A
5230.00	74.58	PK	V	33.67	3.54	0.00	105.77	N/A	N/A
5230.00	63.92	AV	V	33.67	3.54	0.00	95.11	N/A	N/A
5350.00	28.07	PK	V	33.86	3.52	0.00	59.43	74.00	14.57
5350.00	14.75	AV	V	33.86	3.52	0.00	46.11	54.00	7.89
10460.00	47.64	PK	V	38.19	6.36	36.87	49.30	74.00	24.70
10460.00	34.69	AV	V	38.19	6.36	36.87	36.35	54.00	17.65
15690.00	46.34	PK	V	37.91	8.80	39.15	47.88	74.00	26.12
15690.00	33.56	AV	V	37.91	8.80	39.15	35.10	54.00	18.90
9655.00	46.53	PK	V	37.96	5.84	36.66	47.65	74.00	26.35
9655.00	33.35	AV	V	37.96	5.84	36.66	34.47	54.00	19.53

802.11 ac20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5180 MHz									
5180.00	75.89	PK	H	33.59	3.58	0.00	107.04	N/A	N/A
5180.00	65.47	AV	H	33.59	3.58	0.00	96.62	N/A	N/A
5180.00	78.45	PK	V	33.59	3.58	0.00	109.60	N/A	N/A
5180.00	68.51	AV	V	33.59	3.58	0.00	99.66	N/A	N/A
5150.00	28.23	PK	V	33.54	3.56	0.00	59.31	74.00	14.69
5150.00	16.45	AV	V	33.54	3.56	0.00	47.53	54.00	6.47
10360.00	47.16	PK	V	38.17	6.29	36.85	48.75	74.00	25.25
10360.00	34.44	AV	V	38.17	6.29	36.85	36.03	54.00	17.97
15540.00	47.71	PK	V	38.06	8.85	39.04	49.56	74.00	24.44
15540.00	33.28	AV	V	38.06	8.85	39.04	35.13	54.00	18.87
6907.00	53.57	PK	V	35.01	5.10	36.99	50.67	74.00	23.33
6907.00	45.35	AV	V	35.01	5.10	36.99	42.45	54.00	11.55
Middle Channel: 5200 MHz									
5200.00	76.01	PK	H	33.62	3.60	0.00	107.21	N/A	N/A
5200.00	66.02	AV	H	33.62	3.60	0.00	97.22	N/A	N/A
5200.00	78.01	PK	V	33.62	3.60	0.00	109.21	N/A	N/A
5200.00	68.14	AV	V	33.62	3.60	0.00	99.34	N/A	N/A
10400.00	47.29	PK	V	38.18	6.32	36.86	48.91	74.00	25.09
10400.00	34.54	AV	V	38.18	6.32	36.86	36.16	54.00	17.84
15600.00	47.41	PK	V	38.00	8.83	39.09	49.13	74.00	24.87
15600.00	34.42	AV	V	38.00	8.83	39.09	36.14	54.00	17.86
8995.00	47.42	PK	V	37.70	5.49	36.93	47.66	74.00	26.34
8995.00	33.31	AV	V	37.70	5.49	36.93	33.55	54.00	20.45
6907.00	53.45	PK	V	35.01	5.10	36.99	50.55	74.00	23.45
6907.00	45.36	AV	V	35.01	5.10	36.99	42.46	54.00	11.54
High Channel: 5240 MHz									
5240.00	76.24	PK	H	33.68	3.52	0.00	107.42	N/A	N/A
5240.00	66.51	AV	H	33.68	3.52	0.00	97.69	N/A	N/A
5240.00	77.89	PK	V	33.68	3.52	0.00	109.07	N/A	N/A
5240.00	67.59	AV	V	33.68	3.52	0.00	98.77	N/A	N/A
5350.00	27.02	PK	V	33.86	3.52	0.00	58.38	74.00	15.62
5350.00	14.75	AV	V	33.86	3.52	0.00	46.11	54.00	7.89
10480.00	47.31	PK	V	38.20	6.37	36.88	48.98	74.00	25.02
10480.00	34.27	AV	V	38.20	6.37	36.88	35.94	54.00	18.06
15720.00	47.38	PK	V	37.88	8.79	39.18	48.85	74.00	25.15
15720.00	33.61	AV	V	37.88	8.79	39.18	35.08	54.00	18.92
6907.00	53.41	PK	V	35.01	5.10	36.99	50.51	74.00	23.49
6907.00	45.16	AV	V	35.01	5.10	36.99	42.26	54.00	11.74

802.11 ac40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5190 MHz									
5190.00	73.13	PK	H	33.60	3.59	0.00	104.30	N/A	N/A
5190.00	63.12	AV	H	33.60	3.59	0.00	94.29	N/A	N/A
5190.00	73.35	PK	V	33.60	3.59	0.00	104.52	N/A	N/A
5190.00	63.18	AV	V	33.60	3.59	0.00	94.35	N/A	N/A
5150.00	34.37	PK	V	33.54	3.56	0.00	65.45	74.00	8.55
5150.00	18.46	AV	V	33.54	3.56	0.00	49.54	54.00	4.46
10380.00	47.56	PK	V	38.18	6.31	36.85	49.18	74.00	24.82
10380.00	34.48	AV	V	38.18	6.31	36.85	36.10	54.00	17.90
15570.00	46.54	PK	V	38.03	8.84	39.06	48.33	74.00	25.67
15570.00	33.64	AV	V	38.03	8.84	39.06	35.43	54.00	18.57
9355.00	46.62	PK	V	37.84	5.67	36.70	47.41	74.00	26.59
9355.00	33.38	AV	V	37.84	5.67	36.70	34.17	54.00	19.83
High Channel: 5230 MHz									
5230.00	72.68	PK	H	33.67	3.54	0.00	103.87	N/A	N/A
5230.00	62.54	AV	H	33.67	3.54	0.00	93.73	N/A	N/A
5230.00	73.78	PK	V	33.67	3.54	0.00	104.97	N/A	N/A
5230.00	63.82	AV	V	33.67	3.54	0.00	95.01	N/A	N/A
5350.00	28.46	PK	V	33.86	3.52	0.00	59.82	74.00	14.18
5350.00	14.35	AV	V	33.86	3.52	0.00	45.71	54.00	8.29
10460.00	47.62	PK	V	38.19	6.36	36.87	49.28	74.00	24.72
10460.00	34.43	AV	V	38.19	6.36	36.87	36.09	54.00	17.91
15690.00	46.28	PK	V	37.91	8.80	39.15	47.82	74.00	26.18
15690.00	33.29	AV	V	37.91	8.80	39.15	34.83	54.00	19.17
9655.00	46.48	PK	V	37.96	5.84	36.66	47.60	74.00	26.40
9655.00	33.38	AV	V	37.96	5.84	36.66	34.50	54.00	19.50

802.11 ac80(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Middle Channel: 5210 MHz									
5210.00	68.59	PK	H	33.64	3.58	0.00	99.79	N/A	N/A
5210.00	58.13	AV	H	33.64	3.58	0.00	89.33	N/A	N/A
5210.00	69.38	PK	V	33.64	3.58	0.00	100.58	N/A	N/A
5210.00	58.76	AV	V	33.64	3.58	0.00	89.96	N/A	N/A
5150.00	32.23	PK	V	33.54	3.56	0.00	63.31	74.00	10.69
5150.00	17.68	AV	V	33.54	3.56	0.00	48.76	54.00	5.24
5350.00	28.65	PK	V	33.86	3.52	0.00	60.01	74.00	13.99
5350.00	14.57	AV	V	33.86	3.52	0.00	45.93	54.00	8.07
10420.00	47.85	PK	V	38.18	6.33	36.86	49.48	74.00	24.52
10420.00	34.54	AV	V	38.18	6.33	36.86	36.17	54.00	17.83
15630.00	46.48	PK	V	37.97	8.82	39.11	48.14	74.00	25.86
15630.00	33.52	AV	V	37.97	8.82	39.11	35.18	54.00	18.82
6947.00	52.37	PK	V	35.09	5.13	36.98	49.59	74.00	24.41
6947.00	45.46	AV	V	35.09	5.13	36.98	42.68	54.00	11.32

5250-5350MHz**802.11a(Main chain was the worst)**

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5260 MHz									
5260.00	72.87	PK	H	33.72	3.49	0.00	104.06	N/A	N/A
5260.00	61.54	AV	H	33.72	3.49	0.00	92.73	N/A	N/A
5260.00	68.73	PK	V	33.72	3.49	0.00	99.92	N/A	N/A
5260.00	57.44	AV	V	33.72	3.49	0.00	88.63	N/A	N/A
5150.00	27.59	PK	H	33.54	3.56	0.00	58.67	74.00	15.33
5150.00	14.67	AV	H	33.54	3.56	0.00	45.75	54.00	8.25
10520.00	47.51	PK	H	38.21	6.39	36.89	49.20	74.00	24.80
10520.00	34.58	AV	H	38.21	6.39	36.89	36.27	54.00	17.73
15780.00	46.76	PK	H	37.82	8.76	39.22	48.10	74.00	25.90
15780.00	34.43	AV	H	37.82	8.76	39.22	35.77	54.00	18.23
7018.00	49.82	PK	H	35.25	5.15	36.99	47.21	74.00	26.79
7018.00	35.64	AV	H	35.25	5.15	36.99	33.03	54.00	20.97
Middle Channel: 5280 MHz									
5280.00	73.14	PK	H	33.75	3.45	0.00	104.32	N/A	N/A
5280.00	61.85	AV	H	33.75	3.45	0.00	93.03	N/A	N/A
5280.00	68.67	PK	V	33.75	3.45	0.00	99.85	N/A	N/A
5280.00	57.48	AV	V	33.75	3.45	0.00	88.66	N/A	N/A
10560.00	47.28	PK	H	38.24	6.40	36.90	49.00	74.00	25
10560.00	34.49	AV	H	38.24	6.40	36.90	36.21	54.00	17.79
15840.00	46.47	PK	H	37.76	8.74	39.27	47.68	74.00	26.32
15840.00	34.48	AV	H	37.76	8.74	39.27	35.69	54.00	18.31
8995.00	45.69	PK	H	37.70	5.49	36.93	45.93	74.00	28.07
8995.00	33.44	AV	H	37.70	5.49	36.93	33.68	54.00	20.32
7018.00	48.94	PK	H	35.25	5.15	36.99	46.33	74.00	27.67
7018.00	35.81	AV	H	35.25	5.15	36.99	33.20	54.00	20.8
High Channel: 5320 MHz									
5320.00	72.72	PK	H	33.81	3.45	0.00	103.96	N/A	N/A
5320.00	61.56	AV	H	33.81	3.45	0.00	92.80	N/A	N/A
5320.00	68.59	PK	V	33.81	3.45	0.00	99.83	N/A	N/A
5320.00	57.64	AV	V	33.81	3.45	0.00	88.88	N/A	N/A
5350.00	27.85	PK	H	33.86	3.52	0.00	59.21	74.00	14.79
5350.00	14.32	AV	H	33.86	3.52	0.00	45.68	54.00	8.32
10640.00	47.46	PK	H	38.28	6.43	36.93	49.22	74.00	24.78
10640.00	34.57	AV	H	38.28	6.43	36.93	36.33	54.00	17.67
15960.00	46.74	PK	H	37.64	8.70	39.36	47.70	74.00	26.30
15960.00	34.38	AV	H	37.64	8.70	39.36	35.34	54.00	18.66
7018.00	48.46	PK	H	35.25	5.15	36.99	45.85	74.00	28.15
7018.00	35.51	AV	H	35.25	5.15	36.99	32.90	54.00	21.10

802.11n ht20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5260 MHz									
5260.00	77.31	PK	H	33.72	3.49	0.00	108.50	N/A	N/A
5260.00	66.53	AV	H	33.72	3.49	0.00	97.72	N/A	N/A
5260.00	74.64	PK	V	33.72	3.49	0.00	105.83	N/A	N/A
5260.00	63.49	AV	V	33.72	3.49	0.00	94.68	N/A	N/A
5150.00	27.59	PK	H	33.54	3.56	0.00	58.67	74.00	15.33
5150.00	13.76	AV	H	33.54	3.56	0.00	44.84	54.00	9.16
10520.00	47.79	PK	H	38.21	6.39	36.89	49.48	74.00	24.52
10520.00	34.58	AV	H	38.21	6.39	36.89	36.27	54.00	17.73
15780.00	46.54	PK	H	37.82	8.76	39.22	47.88	74.00	26.12
15780.00	34.41	AV	H	37.82	8.76	39.22	35.75	54.00	18.25
9355.00	45.72	PK	H	37.84	5.67	36.70	46.51	74.00	27.49
9355.00	33.54	AV	H	37.84	5.67	36.70	34.33	54.00	19.67
Middle Channel: 5280 MHz									
5280.00	76.94	PK	H	33.75	3.45	0.00	108.12	N/A	N/A
5280.00	66.27	AV	H	33.75	3.45	0.00	97.45	N/A	N/A
5280.00	74.55	PK	V	33.75	3.45	0.00	105.73	N/A	N/A
5280.00	63.38	AV	V	33.75	3.45	0.00	94.56	N/A	N/A
10560.00	47.39	PK	H	38.24	6.40	36.90	49.11	74.00	24.89
10560.00	34.48	AV	H	38.24	6.40	36.90	36.20	54.00	17.8
15840.00	46.39	PK	H	37.76	8.74	39.27	47.60	74.00	26.4
15840.00	34.56	AV	H	37.76	8.74	39.27	35.77	54.00	18.23
8995.00	45.57	PK	H	37.70	5.49	36.93	45.81	74.00	28.19
8995.00	33.29	AV	H	37.70	5.49	36.93	33.53	54.00	20.47
9352.00	45.88	PK	H	37.84	5.67	36.70	46.67	74.00	27.33
9352.00	34.11	AV	H	37.84	5.67	36.70	34.90	54.00	19.1
High Channel: 5320 MHz									
5320.00	77.68	PK	H	33.81	3.45	0.00	108.92	N/A	N/A
5320.00	66.54	AV	H	33.81	3.45	0.00	97.78	N/A	N/A
5320.00	73.47	PK	V	33.81	3.45	0.00	104.71	N/A	N/A
5320.00	62.33	AV	V	33.81	3.45	0.00	93.57	N/A	N/A
5350.00	28.31	PK	H	33.86	3.52	0.00	59.67	74.00	14.33
5350.00	14.67	AV	H	33.86	3.52	0.00	46.03	54.00	7.97
10640.00	47.69	PK	H	38.28	6.43	36.93	49.45	74.00	24.55
10640.00	34.38	AV	H	38.28	6.43	36.93	36.14	54.00	17.86
15960.00	46.65	PK	H	37.64	8.70	39.36	47.61	74.00	26.39
15960.00	34.67	AV	H	37.64	8.70	39.36	35.63	54.00	18.37
9655.00	45.57	PK	H	37.96	5.84	36.66	46.69	74.00	27.31
9655.00	33.34	AV	H	37.96	5.84	36.66	34.46	54.00	19.54

802.11n ht40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5270 MHz									
5270.00	75.03	PK	H	33.73	3.47	0.00	106.21	N/A	N/A
5270.00	64.36	AV	H	33.73	3.47	0.00	95.54	N/A	N/A
5270.00	72.09	PK	V	33.73	3.47	0.00	103.27	N/A	N/A
5270.00	61.13	AV	V	33.73	3.47	0.00	92.31	N/A	N/A
5150.00	27.86	PK	H	33.54	3.56	0.00	58.94	74.00	15.06
5150.00	13.67	AV	H	33.54	3.56	0.00	44.75	54.00	9.25
10540.00	47.49	PK	H	38.22	6.40	36.89	49.20	74.00	24.80
10540.00	34.25	AV	H	38.22	6.40	36.89	35.96	54.00	18.04
15810.00	46.69	PK	H	37.79	8.75	39.25	47.96	74.00	26.04
15810.00	34.37	AV	H	37.79	8.75	39.25	35.64	54.00	18.36
9355.00	45.64	PK	H	37.84	5.67	36.70	46.43	74.00	27.57
9355.00	33.68	AV	H	37.84	5.67	36.70	34.47	54.00	19.53
High Channel: 5310 MHz									
5310.00	74.79	PK	H	33.80	3.43	0.00	106.00	N/A	N/A
5310.00	63.69	AV	H	33.80	3.43	0.00	94.90	N/A	N/A
5310.00	71.58	PK	V	33.80	3.43	0.00	102.79	N/A	N/A
5310.00	60.63	AV	V	33.80	3.43	0.00	91.84	N/A	N/A
5350.00	37.35	PK	H	33.86	3.52	0.00	68.71	74.00	5.29
5350.00	17.22	AV	H	33.86	3.52	0.00	48.58	54.00	5.42
10620.00	47.51	PK	H	38.27	6.43	36.92	49.27	74.00	24.73
10620.00	34.52	AV	H	38.27	6.43	36.92	36.28	54.00	17.72
15930.00	46.35	PK	H	37.67	8.71	39.34	47.37	74.00	26.63
15930.00	34.18	AV	H	37.67	8.71	39.34	35.20	54.00	18.80
9655.00	45.56	PK	H	37.96	5.84	36.66	46.68	74.00	27.32
9655.00	33.38	AV	H	37.96	5.84	36.66	34.50	54.00	19.50

802.11 ac20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5260 MHz									
5260.00	77.25	PK	H	33.72	3.49	0.00	108.44	N/A	N/A
5260.00	66.39	AV	H	33.72	3.49	0.00	97.58	N/A	N/A
5260.00	74.86	PK	V	33.72	3.49	0.00	106.05	N/A	N/A
5260.00	63.65	AV	V	33.72	3.49	0.00	94.84	N/A	N/A
5150.00	27.73	PK	H	33.54	3.56	0.00	58.81	74.00	15.19
5150.00	13.68	AV	H	33.54	3.56	0.00	44.76	54.00	9.24
10520.00	47.65	PK	H	38.21	6.39	36.89	49.34	74.00	24.66
10520.00	34.48	AV	H	38.21	6.39	36.89	36.17	54.00	17.83
15780.00	46.71	PK	H	37.82	8.76	39.22	48.05	74.00	25.95
15780.00	34.54	AV	H	37.82	8.76	39.22	35.88	54.00	18.12
9355.00	45.62	PK	H	37.84	5.67	36.70	46.41	74.00	27.59
9355.00	33.50	AV	H	37.84	5.67	36.70	34.29	54.00	19.71
Middle Channel: 5280 MHz									
5280.00	77.13	PK	H	33.75	3.45	0.00	108.31	N/A	N/A
5280.00	66.28	AV	H	33.75	3.45	0.00	97.46	N/A	N/A
5280.00	74.36	PK	V	33.75	3.45	0.00	105.54	N/A	N/A
5280.00	63.52	AV	V	33.75	3.45	0.00	94.70	N/A	N/A
10560.00	47.48	PK	H	38.24	6.40	36.90	49.20	74.00	24.8
10560.00	34.46	AV	H	38.24	6.40	36.90	36.18	54.00	17.82
15840.00	46.58	PK	H	37.76	8.74	39.27	47.79	74.00	26.21
15840.00	34.48	AV	H	37.76	8.74	39.27	35.69	54.00	18.31
8995.00	45.52	PK	H	37.70	5.49	36.93	45.76	74.00	28.24
8995.00	33.43	AV	H	37.70	5.49	36.93	33.67	54.00	20.33
9352.00	46.05	PK	H	37.84	5.67	36.70	46.84	74.00	27.16
9352.00	33.92	AV	H	37.84	5.67	36.70	34.71	54.00	19.29
High Channel: 5320 MHz									
5320.00	77.69	PK	H	33.81	3.45	0.00	108.93	N/A	N/A
5320.00	66.57	AV	H	33.81	3.45	0.00	97.81	N/A	N/A
5320.00	74.48	PK	V	33.81	3.45	0.00	105.72	N/A	N/A
5320.00	63.62	AV	V	33.81	3.45	0.00	94.86	N/A	N/A
5350.00	27.84	PK	H	33.86	3.52	0.00	59.20	74.00	14.80
5350.00	14.59	AV	H	33.86	3.52	0.00	45.95	54.00	8.05
10640.00	47.61	PK	H	38.28	6.43	36.93	49.37	74.00	24.63
10640.00	34.36	AV	H	38.28	6.43	36.93	36.12	54.00	17.88
15960.00	46.82	PK	H	37.64	8.70	39.36	47.78	74.00	26.22
15960.00	34.67	AV	H	37.64	8.70	39.36	35.63	54.00	18.37
9655.00	45.54	PK	H	37.96	5.84	36.66	46.66	74.00	27.34
9655.00	33.49	AV	H	37.96	5.84	36.66	34.61	54.00	19.39

802.11 ac40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5270 MHz									
5270.00	75.17	PK	H	33.73	3.47	0.00	106.35	N/A	N/A
5270.00	64.34	AV	H	33.73	3.47	0.00	95.52	N/A	N/A
5270.00	72.08	PK	V	33.73	3.47	0.00	103.26	N/A	N/A
5270.00	61.13	AV	V	33.73	3.47	0.00	92.31	N/A	N/A
5150.00	27.76	PK	H	33.54	3.56	0.00	58.84	74.00	15.16
5150.00	13.57	AV	H	33.54	3.56	0.00	44.65	54.00	9.35
10540.00	47.71	PK	H	38.22	6.40	36.89	49.42	74.00	24.58
10540.00	34.21	AV	H	38.22	6.40	36.89	35.92	54.00	18.08
15810.00	46.72	PK	H	37.79	8.75	39.25	47.99	74.00	26.01
15810.00	34.58	AV	H	37.79	8.75	39.25	35.85	54.00	18.15
9355.00	45.61	PK	H	37.84	5.67	36.70	46.40	74.00	27.60
9355.00	33.31	AV	H	37.84	5.67	36.70	34.10	54.00	19.90
High Channel: 5310 MHz									
5310.00	74.65	PK	H	33.80	3.43	0.00	105.86	N/A	N/A
5310.00	63.82	AV	H	33.80	3.43	0.00	95.03	N/A	N/A
5310.00	71.75	PK	V	33.80	3.43	0.00	102.96	N/A	N/A
5310.00	60.63	AV	V	33.80	3.43	0.00	91.84	N/A	N/A
5350.00	38.29	PK	H	33.86	3.52	0.00	69.65	74.00	4.35
5350.00	17.32	AV	H	33.86	3.52	0.00	48.68	54.00	5.32
10620.00	47.84	PK	H	38.27	6.43	36.92	49.60	74.00	24.40
10620.00	34.31	AV	H	38.27	6.43	36.92	36.07	54.00	17.93
15930.00	46.89	PK	H	37.67	8.71	39.34	47.91	74.00	26.09
15930.00	34.67	AV	H	37.67	8.71	39.34	35.69	54.00	18.31
9655.00	45.56	PK	H	37.96	5.84	36.66	46.68	74.00	27.32
9655.00	33.57	AV	H	37.96	5.84	36.66	34.69	54.00	19.31

802.11 ac80(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Middle Channel: 5290 MHz									
5290.00	72.24	PK	H	33.76	3.43	0.00	103.41	N/A	N/A
5290.00	61.37	AV	H	33.76	3.43	0.00	92.54	N/A	N/A
5290.00	68.65	PK	V	33.76	3.43	0.00	99.82	N/A	N/A
5290.00	57.44	AV	V	33.76	3.43	0.00	88.61	N/A	N/A
5150.00	27.64	PK	H	33.54	3.56	0.00	58.72	74.00	15.28
5150.00	13.57	AV	H	33.54	3.56	0.00	44.65	54.00	9.35
5350.00	28.96	PK	H	33.86	3.52	0.00	60.32	74.00	13.68
5350.00	14.78	AV	H	33.86	3.52	0.00	46.14	54.00	7.86
10580.00	47.42	PK	H	38.25	6.41	36.91	49.15	74.00	24.85
10580.00	34.53	AV	H	38.25	6.41	36.91	36.26	54.00	17.74
15870.00	46.78	PK	H	37.73	8.73	39.29	47.93	74.00	26.07
15870.00	34.06	AV	H	37.73	8.73	39.29	35.21	54.00	18.79
9685.00	45.56	PK	H	37.97	5.86	36.67	46.70	74.00	27.30
9685.00	33.18	AV	H	37.97	5.86	36.67	34.32	54.00	19.68

5470-5725MHz(For Canada RSS-247, channels 118 to 128 were disabled by software since the frequency occupied the frequency band 5600-5650MHz)

802.11a(main chain was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5500 MHz									
5500.00	71.72	PK	H	34.10	3.54	0.00	103.34	N/A	N/A
5500.00	61.07	AV	H	34.10	3.54	0.00	92.69	N/A	N/A
5500.00	70.67	PK	V	34.10	3.54	0.00	102.29	N/A	N/A
5500.00	60.44	AV	V	34.10	3.54	0.00	92.06	N/A	N/A
5470.00	28.79	PK	H	34.05	3.56	0.00	60.38	74.00	13.62
5470.00	15.33	AV	H	34.05	3.56	0.00	46.92	54.00	7.08
11000.00	48.73	PK	H	38.50	6.57	37.06	50.72	74.00	23.28
11000.00	34.96	AV	H	38.50	6.57	37.06	36.95	54.00	17.05
16500.00	47.41	PK	H	38.20	8.63	39.30	48.92	74.00	25.08
16500.00	34.37	AV	H	38.20	8.63	39.30	35.88	54.00	18.12
9355.00	45.44	PK	H	37.84	5.67	36.70	46.23	74.00	27.77
9355.00	33.28	AV	H	37.84	5.67	36.70	34.07	54.00	19.93
Middle Channel: 5580 MHz									
5580.00	73.43	PK	H	34.13	3.56	0.00	105.10	N/A	N/A
5580.00	63.22	AV	H	34.13	3.56	0.00	94.89	N/A	N/A
5580.00	70.83	PK	V	34.13	3.56	0.00	102.50	N/A	N/A
5580.00	60.59	AV	V	34.13	3.56	0.00	92.26	N/A	N/A
11160.00	48.69	PK	H	38.66	6.58	37.16	50.75	74.00	23.25
11160.00	34.59	AV	H	38.66	6.58	37.16	36.65	54.00	17.35
16740.00	47.75	PK	H	39.16	8.67	39.05	50.51	74.00	23.49
16740.00	34.44	AV	H	39.16	8.67	39.05	37.20	54.00	16.8
8995.00	45.56	PK	H	37.70	5.49	36.93	45.80	74.00	28.2
8995.00	33.21	AV	H	37.70	5.49	36.93	33.45	54.00	20.55
9352.00	46.13	PK	H	37.84	5.67	36.70	46.92	74.00	27.08
9352.00	33.87	AV	H	37.84	5.67	36.70	34.66	54.00	19.34
High Channel: 5700 MHz									
5700.00	73.49	PK	H	34.18	3.68	0.00	105.33	N/A	N/A
5700.00	63.58	AV	H	34.18	3.68	0.00	95.42	N/A	N/A
5700.00	70.69	PK	V	34.18	3.68	0.00	102.53	N/A	N/A
5700.00	60.82	AV	V	34.18	3.68	0.00	92.66	N/A	N/A
5725.00	29.54	PK	H	34.19	3.69	0.00	61.40	74.00	12.60
5725.00	16.62	AV	H	34.19	3.69	0.00	48.48	54.00	5.52
11400.00	48.77	PK	H	38.90	6.59	37.30	50.94	74.00	23.06
11400.00	34.68	AV	H	38.90	6.59	37.30	36.85	54.00	17.15
17100.00	47.81	PK	H	40.78	8.75	38.70	52.62	74.00	21.38
17100.00	34.45	AV	H	40.78	8.75	38.70	39.26	54.00	14.74
9655.00	45.43	PK	H	37.96	5.84	36.66	46.55	74.00	27.45
9655.00	33.41	AV	H	37.96	5.84	36.66	34.53	54.00	19.47

802.11n ht20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5500 MHz									
5500.00	77.86	PK	H	34.10	3.54	0.00	109.48	N/A	N/A
5500.00	68.13	AV	H	34.10	3.54	0.00	99.75	N/A	N/A
5500.00	76.77	PK	V	34.10	3.54	0.00	108.39	N/A	N/A
5500.00	66.58	AV	V	34.10	3.54	0.00	98.20	N/A	N/A
5470.00	31.78	PK	H	34.05	3.56	0.00	63.37	74.00	10.63
5470.00	17.96	AV	H	34.05	3.56	0.00	49.55	54.00	4.45
11000.00	48.62	PK	H	38.50	6.57	37.06	50.61	74.00	23.39
11000.00	34.71	AV	H	38.50	6.57	37.06	36.70	54.00	17.30
16500.00	47.71	PK	H	38.20	8.63	39.30	49.22	74.00	24.78
16500.00	34.17	AV	H	38.20	8.63	39.30	35.68	54.00	18.32
9355.00	45.57	PK	H	37.84	5.67	36.70	46.36	74.00	27.64
9355.00	33.27	AV	H	37.84	5.67	36.70	34.06	54.00	19.94
Middle Channel: 5580 MHz									
5580.00	78.11	PK	H	34.13	3.56	0.00	109.78	N/A	N/A
5580.00	68.08	AV	H	34.13	3.56	0.00	99.75	N/A	N/A
5580.00	76.75	PK	V	34.13	3.56	0.00	108.42	N/A	N/A
5580.00	66.91	AV	V	34.13	3.56	0.00	98.58	N/A	N/A
11160.00	48.66	PK	H	38.66	6.58	37.16	50.72	74.00	23.28
11160.00	34.51	AV	H	38.66	6.58	37.16	36.57	54.00	17.43
16740.00	47.67	PK	H	39.16	8.67	39.05	50.43	74.00	23.57
16740.00	34.33	AV	H	39.16	8.67	39.05	37.09	54.00	16.91
8995.00	45.75	PK	H	37.70	5.49	36.93	45.99	74.00	28.01
8995.00	33.36	AV	H	37.70	5.49	36.93	33.60	54.00	20.4
9352.00	45.75	PK	H	37.84	5.67	36.70	46.54	74.00	27.46
9352.00	33.26	AV	H	37.84	5.67	36.70	34.05	54.00	19.95
High Channel: 5700 MHz									
5700.00	77.68	PK	H	34.18	3.68	0.00	109.52	N/A	N/A
5700.00	67.46	AV	H	34.18	3.68	0.00	99.30	N/A	N/A
5700.00	76.92	PK	V	34.18	3.68	0.00	108.76	N/A	N/A
5700.00	66.91	AV	V	34.18	3.68	0.00	98.75	N/A	N/A
5725.00	32.61	PK	H	34.19	3.69	0.00	64.47	74.00	9.53
5725.00	17.73	AV	H	34.19	3.69	0.00	49.59	54.00	4.41
11400.00	48.67	PK	H	38.90	6.59	37.30	50.84	74.00	23.16
11400.00	34.77	AV	H	38.90	6.59	37.30	36.94	54.00	17.06
17100.00	47.84	PK	H	40.78	8.75	38.70	52.65	74.00	21.35
17100.00	34.02	AV	H	40.78	8.75	38.70	38.83	54.00	15.17
9655.00	45.64	PK	H	37.96	5.84	36.66	46.76	74.00	27.24
9655.00	33.27	AV	H	37.96	5.84	36.66	34.39	54.00	19.61

802.11n ht40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5510 MHz									
5510.00	74.93	PK	H	34.10	3.54	0.00	106.55	N/A	N/A
5510.00	64.88	AV	H	34.10	3.54	0.00	96.50	N/A	N/A
5510.00	72.83	PK	V	34.10	3.54	0.00	104.45	N/A	N/A
5510.00	62.77	AV	V	34.10	3.54	0.00	94.39	N/A	N/A
5470.00	35.42	PK	H	34.05	3.56	0.00	67.01	74.00	6.99
5470.00	19.65	AV	H	34.05	3.56	0.00	51.24	54.00	2.76
11020.00	48.92	PK	H	38.52	6.57	37.07	50.92	74.00	23.08
11020.00	34.82	AV	H	38.52	6.57	37.07	36.82	54.00	17.18
16530.00	47.48	PK	H	38.32	8.64	39.27	49.15	74.00	24.85
16530.00	34.29	AV	H	38.32	8.64	39.27	35.96	54.00	18.04
9355.00	45.57	PK	H	37.84	5.67	36.70	46.36	74.00	27.64
9355.00	33.29	AV	H	37.84	5.67	36.70	34.08	54.00	19.92
Middle Channel: 5550 MHz									
5550.00	75.73	PK	H	34.12	3.56	0.00	107.39	N/A	N/A
5550.00	65.99	AV	H	34.12	3.56	0.00	97.65	N/A	N/A
5550.00	73.99	PK	V	34.12	3.56	0.00	105.65	N/A	N/A
5550.00	63.74	AV	V	34.12	3.56	0.00	95.40	N/A	N/A
11100.00	48.68	PK	H	38.60	6.57	37.12	50.71	74.00	23.29
11100.00	34.69	AV	H	38.60	6.57	37.12	36.72	54.00	17.28
16650.00	47.59	PK	H	38.80	8.66	39.14	49.89	74.00	24.11
16650.00	34.46	AV	H	38.80	8.66	39.14	36.76	54.00	17.24
8995.00	45.77	PK	H	37.70	5.49	36.93	46.01	74.00	27.99
8995.00	33.48	AV	H	37.70	5.49	36.93	33.72	54.00	20.28
9352.00	45.82	PK	H	37.84	5.67	36.70	46.61	74.00	27.39
9352.00	33.69	AV	H	37.84	5.67	36.70	34.48	54.00	19.52
High Channel: 5670 MHz									
5670.00	74.91	PK	H	34.17	3.65	0.00	106.71	N/A	N/A
5670.00	65.03	AV	H	34.17	3.65	0.00	96.83	N/A	N/A
5670.00	72.78	PK	V	34.17	3.65	0.00	104.58	N/A	N/A
5670.00	62.59	AV	V	34.17	3.65	0.00	94.39	N/A	N/A
5725.00	35.28	PK	H	34.19	3.69	0.00	67.14	74.00	6.86
5725.00	19.57	AV	H	34.19	3.69	0.00	51.43	54.00	2.57
11340.00	48.63	PK	H	38.84	6.58	37.26	50.77	74.00	23.23
11340.00	34.49	AV	H	38.84	6.58	37.26	36.63	54.00	17.37
17010.00	47.58	PK	H	40.26	8.72	38.76	51.78	74.00	22.22
17010.00	34.17	AV	H	40.26	8.72	38.76	38.37	54.00	15.63
9655.00	45.69	PK	H	37.96	5.84	36.66	46.81	74.00	27.19
9655.00	33.18	AV	H	37.96	5.84	36.66	34.30	54.00	19.70

802.11 ac20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5500 MHz									
5500.00	77.93	PK	H	34.10	3.54	0.00	109.55	N/A	N/A
5500.00	67.97	AV	H	34.10	3.54	0.00	99.59	N/A	N/A
5500.00	76.94	PK	V	34.10	3.54	0.00	108.56	N/A	N/A
5500.00	66.56	AV	V	34.10	3.54	0.00	98.18	N/A	N/A
5470.00	31.84	PK	H	34.05	3.56	0.00	63.43	74.00	10.57
5470.00	18.09	AV	H	34.05	3.56	0.00	49.68	54.00	4.32
11000.00	48.96	PK	H	38.50	6.57	37.06	50.95	74.00	23.05
11000.00	34.78	AV	H	38.50	6.57	37.06	36.77	54.00	17.23
16500.00	47.37	PK	H	38.20	8.63	39.30	48.88	74.00	25.12
16500.00	34.14	AV	H	38.20	8.63	39.30	35.65	54.00	18.35
9355.00	45.81	PK	H	37.84	5.67	36.70	46.60	74.00	27.40
9355.00	33.38	AV	H	37.84	5.67	36.70	34.17	54.00	19.83
Middle Channel: 5580 MHz									
5580.00	77.94	PK	H	34.13	3.56	0.00	109.61	N/A	N/A
5580.00	67.98	AV	H	34.13	3.56	0.00	99.65	N/A	N/A
5580.00	76.75	PK	V	34.13	3.56	0.00	108.42	N/A	N/A
5580.00	67.04	AV	V	34.13	3.56	0.00	98.71	N/A	N/A
11160.00	48.59	PK	H	38.66	6.58	37.16	50.65	74.00	23.35
11160.00	34.66	AV	H	38.66	6.58	37.16	36.72	54.00	17.28
16740.00	47.73	PK	H	39.16	8.67	39.05	50.49	74.00	23.51
16740.00	34.45	AV	H	39.16	8.67	39.05	37.21	54.00	16.79
8995.00	45.82	PK	H	37.70	5.49	36.93	46.06	74.00	27.94
8995.00	33.21	AV	H	37.70	5.49	36.93	33.45	54.00	20.55
9352.00	45.39	PK	H	37.84	5.67	36.70	46.18	74.00	27.82
9352.00	33.25	AV	H	37.84	5.67	36.70	34.04	54.00	19.96
High Channel: 5700 MHz									
5700.00	77.75	PK	H	34.18	3.68	0.00	109.59	N/A	N/A
5700.00	67.38	AV	H	34.18	3.68	0.00	99.22	N/A	N/A
5700.00	76.75	PK	V	34.18	3.68	0.00	108.59	N/A	N/A
5700.00	66.92	AV	V	34.18	3.68	0.00	98.76	N/A	N/A
5725.00	32.62	PK	H	34.19	3.69	0.00	64.48	74.00	9.52
5725.00	17.56	AV	H	34.19	3.69	0.00	49.42	54.00	4.58
11400.00	48.63	PK	H	38.90	6.59	37.30	50.80	74.00	23.20
11400.00	34.75	AV	H	38.90	6.59	37.30	36.92	54.00	17.08
17100.00	47.74	PK	H	40.78	8.75	38.70	52.55	74.00	21.45
17100.00	34.26	AV	H	40.78	8.75	38.70	39.07	54.00	14.93
9655.00	45.61	PK	H	37.96	5.84	36.66	46.73	74.00	27.27
9655.00	33.32	AV	H	37.96	5.84	36.66	34.44	54.00	19.56

802.11 ac40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5510 MHz									
5510.00	74.87	PK	H	34.10	3.54	0.00	106.49	N/A	N/A
5510.00	64.75	AV	H	34.10	3.54	0.00	96.37	N/A	N/A
5510.00	72.65	PK	V	34.10	3.54	0.00	104.27	N/A	N/A
5510.00	62.84	AV	V	34.10	3.54	0.00	94.46	N/A	N/A
5470.00	35.45	PK	H	34.05	3.56	0.00	67.04	74.00	6.96
5470.00	19.83	AV	H	34.05	3.56	0.00	51.42	54.00	2.58
11020.00	49.07	PK	H	38.52	6.57	37.07	51.07	74.00	22.93
11020.00	34.81	AV	H	38.52	6.57	37.07	36.81	54.00	17.19
16530.00	47.28	PK	H	38.32	8.64	39.27	48.95	74.00	25.05
16530.00	34.45	AV	H	38.32	8.64	39.27	36.12	54.00	17.88
9355.00	45.84	PK	H	37.84	5.67	36.70	46.63	74.00	27.37
9355.00	33.19	AV	H	37.84	5.67	36.70	33.98	54.00	20.02
Middle Channel: 5550 MHz									
5550.00	75.49	PK	H	34.12	3.56	0.00	107.15	N/A	N/A
5550.00	65.62	AV	H	34.12	3.56	0.00	97.28	N/A	N/A
5550.00	74.56	PK	V	34.12	3.56	0.00	106.22	N/A	N/A
5550.00	64.67	AV	V	34.12	3.56	0.00	96.33	N/A	N/A
11100.00	48.59	PK	H	38.60	6.57	37.12	50.62	74.00	23.38
11100.00	34.78	AV	H	38.60	6.57	37.12	36.81	54.00	17.19
16650.00	47.55	PK	H	38.80	8.66	39.14	49.85	74.00	24.15
16650.00	34.56	AV	H	38.80	8.66	39.14	36.86	54.00	17.14
8995.00	45.71	PK	H	37.70	5.49	36.93	45.95	74.00	28.05
8995.00	33.43	AV	H	37.70	5.49	36.93	33.67	54.00	20.33
9352.00	45.26	PK	H	37.84	5.67	36.70	46.05	74.00	27.95
9352.00	33.48	AV	H	37.84	5.67	36.70	34.27	54.00	19.73
High Channel: 5670 MHz									
5670.00	75.11	PK	H	34.17	3.65	0.00	106.91	N/A	N/A
5670.00	64.75	AV	H	34.17	3.65	0.00	96.55	N/A	N/A
5670.00	72.65	PK	V	34.17	3.65	0.00	104.45	N/A	N/A
5670.00	62.72	AV	V	34.17	3.65	0.00	94.52	N/A	N/A
5725.00	35.45	PK	H	34.19	3.69	0.00	67.31	74.00	6.69
5725.00	19.77	AV	H	34.19	3.69	0.00	51.63	54.00	2.37
11340.00	48.63	PK	H	38.84	6.58	37.26	50.77	74.00	23.23
11340.00	34.77	AV	H	38.84	6.58	37.26	36.91	54.00	17.09
17010.00	47.69	PK	H	40.26	8.72	38.76	51.89	74.00	22.11
17010.00	34.31	AV	H	40.26	8.72	38.76	38.51	54.00	15.49
9655.00	45.87	PK	H	37.96	5.84	36.66	46.99	74.00	27.01
9655.00	33.48	AV	H	37.96	5.84	36.66	34.60	54.00	19.40

802.11 ac80(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5530 MHz									
5530.00	71.75	PK	H	34.11	3.55	0.00	103.39	N/A	N/A
5530.00	61.69	AV	H	34.11	3.55	0.00	93.33	N/A	N/A
5530.00	69.46	PK	V	34.11	3.55	0.00	101.10	N/A	N/A
5530.00	59.57	AV	V	34.11	3.55	0.00	91.21	N/A	N/A
5470.00	32.34	PK	H	34.05	3.56	0.00	63.93	74.00	10.07
5470.00	18.72	AV	H	34.05	3.56	0.00	50.31	54.00	3.69
5725.00	28.65	PK	H	34.19	3.69	0.00	60.51	74.00	13.49
5725.00	14.38	AV	H	34.19	3.69	0.00	46.24	54.00	7.76
11060.00	48.77	PK	H	38.56	6.57	37.10	50.78	74.00	23.22
11060.00	34.62	AV	H	38.56	6.57	37.10	36.63	54.00	17.37
16590.00	47.55	PK	H	38.56	8.65	39.20	49.54	74.00	24.46
16590.00	34.33	AV	H	38.56	8.65	39.20	36.32	54.00	17.68
9685.00	45.68	PK	H	37.97	5.86	36.67	46.82	74.00	27.18
9685.00	33.32	AV	H	37.97	5.86	36.67	34.46	54.00	19.54
High Channel: 5610 MHz									
5610.00	71.89	PK	H	34.14	3.58	0.00	103.59	N/A	N/A
5610.00	61.74	AV	H	34.14	3.58	0.00	93.44	N/A	N/A
5610.00	69.48	PK	V	34.14	3.58	0.00	101.18	N/A	N/A
5610.00	59.69	AV	V	34.14	3.58	0.00	91.39	N/A	N/A
5470.00	29.68	PK	H	34.05	3.56	0.00	61.27	74.00	12.73
5470.00	16.54	AV	H	34.05	3.56	0.00	48.13	54.00	5.87
5725.00	29.65	PK	H	34.19	3.69	0.00	61.51	74.00	12.49
5725.00	16.28	AV	H	34.19	3.69	0.00	48.14	54.00	5.86
11220.00	48.74	PK	H	38.72	6.58	37.19	50.83	74.00	23.17
11220.00	34.46	AV	H	38.72	6.58	37.19	36.55	54.00	17.45
16830.00	47.49	PK	H	39.52	8.69	38.95	50.73	74.00	23.27
16830.00	34.22	AV	H	39.52	8.69	38.95	37.46	54.00	16.54
9685.00	45.73	PK	H	37.97	5.86	36.67	46.87	74.00	27.13
9685.00	33.52	AV	H	37.97	5.86	36.67	34.66	54.00	19.34

5725-5850MHz:**802.11a(Main chain was the worst)**

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5745MHz									
5745.00	79.38	PK	H	34.20	3.69	0.00	111.25	N/A	N/A
5745.00	68.54	AV	H	34.20	3.69	0.00	100.41	N/A	N/A
5745.00	78.62	PK	V	34.20	3.69	0.00	110.49	N/A	N/A
5745.00	67.39	AV	V	34.20	3.69	0.00	99.26	N/A	N/A
5725.00	38.16	PK	H	34.19	3.69	0.00	70.02	122.20	52.18
5720.00	30.42	PK	H	34.19	3.69	0.00	62.28	110.80	48.52
5700.00	28.76	PK	H	34.18	3.68	0.00	60.60	105.20	44.60
5650.00	26.53	PK	H	34.16	3.63	0.00	58.30	68.20	9.90
11490.00	47.84	PK	H	38.99	6.59	37.35	50.05	74.00	23.95
11490.00	34.83	AV	H	38.99	6.59	37.35	37.04	54.00	16.96
17235.00	46.29	PK	H	41.56	8.78	38.61	52.00	74.00	22.00
17235.00	33.74	AV	H	41.56	8.78	38.61	39.45	54.00	14.55
8966.00	45.44	PK	H	37.68	5.47	36.94	45.63	74.00	28.37
8966.00	33.24	AV	H	37.68	5.47	36.94	33.43	54.00	20.57
Middle Channel: 5785 MHz									
5785.00	78.54	PK	H	34.21	3.71	0.00	110.44	N/A	N/A
5785.00	68.23	AV	H	34.21	3.71	0.00	100.13	N/A	N/A
5785.00	77.67	PK	V	34.21	3.71	0.00	109.57	N/A	N/A
5785.00	67.14	AV	V	34.21	3.71	0.00	99.04	N/A	N/A
11570.00	48.06	PK	H	39.00	6.61	37.44	50.21	74.00	23.79
11570.00	34.52	AV	H	39.00	6.61	37.44	36.67	54.00	17.33
17355.00	46.06	PK	H	42.26	8.81	38.52	52.59	74.00	21.41
17355.00	33.67	AV	H	42.26	8.81	38.52	40.20	54.00	13.80
9855.00	45.43	PK	H	38.04	5.97	36.72	46.70	74.00	27.30
9855.00	33.3	AV	H	38.04	5.97	36.72	34.57	54.00	19.43
9677.00	46.52	PK	H	37.97	5.86	36.67	47.66	74.00	26.34
9677.00	33.34	AV	H	37.97	5.86	36.67	34.48	54.00	19.52
High Channel: 5825 MHz									
5825.00	78.42	PK	H	34.23	3.73	0.00	110.36	N/A	N/A
5825.00	68.36	AV	H	34.23	3.73	0.00	100.30	N/A	N/A
5825.00	77.34	PK	V	34.23	3.73	0.00	109.28	N/A	N/A
5825.00	67.29	AV	V	34.23	3.73	0.00	99.23	N/A	N/A
5850.00	30.36	PK	H	34.24	3.75	0.00	62.33	122.20	59.87
5855.00	29.52	PK	H	34.24	3.75	0.00	61.49	110.80	49.31
5875.00	28.34	PK	H	34.25	3.77	0.00	60.34	105.20	44.86
5925.00	26.49	PK	H	34.27	3.80	0.00	58.54	68.20	9.66
11650.00	47.85	PK	H	39.00	6.64	37.53	49.94	74.00	24.06
11650.00	34.58	AV	H	39.00	6.64	37.53	36.67	54.00	17.33
17475.00	46.42	PK	H	42.96	8.84	38.44	53.76	74.00	20.24
17475.00	33.83	AV	H	42.96	8.84	38.44	41.17	54.00	12.83
8966.00	45.48	PK	H	37.68	5.47	36.94	45.67	74.00	28.33
8966.00	33.58	AV	H	37.68	5.47	36.94	33.77	54.00	20.23

802.11n ht20(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5745MHz									
5745.00	78.16	PK	H	34.20	3.69	0.00	110.03	N/A	N/A
5745.00	68.56	AV	H	34.20	3.69	0.00	100.43	N/A	N/A
5745.00	77.55	PK	V	34.20	3.69	0.00	109.42	N/A	N/A
5745.00	67.72	AV	V	34.20	3.69	0.00	99.59	N/A	N/A
5725.00	38.36	PK	H	34.19	3.69	0.00	70.22	122.20	51.98
5720.00	33.02	PK	H	34.19	3.69	0.00	64.88	110.80	45.92
5700.00	27.78	PK	H	34.18	3.68	0.00	59.62	105.20	45.58
5650.00	27.34	PK	H	34.16	3.63	0.00	59.11	68.20	9.09
11490.00	47.94	PK	H	38.99	6.59	37.35	50.15	74.00	23.85
11490.00	34.83	AV	H	38.99	6.59	37.35	37.04	54.00	16.96
17235.00	46.45	PK	H	41.56	8.78	38.61	52.16	74.00	21.84
17235.00	33.91	AV	H	41.56	8.78	38.61	39.62	54.00	14.38
8966.00	45.74	PK	H	37.68	5.47	36.94	45.93	74.00	28.07
8966.00	33.56	AV	H	37.68	5.47	36.94	33.75	54.00	20.25
Middle Channel: 5785 MHz									
5785.00	78.37	PK	H	34.21	3.71	0.00	110.27	N/A	N/A
5785.00	68.48	AV	H	34.21	3.71	0.00	100.38	N/A	N/A
5785.00	77.52	PK	V	34.21	3.71	0.00	109.42	N/A	N/A
5785.00	67.73	AV	V	34.21	3.71	0.00	99.63	N/A	N/A
11570.00	47.88	PK	H	39.00	6.61	37.44	50.03	74.00	23.97
11570.00	34.45	AV	H	39.00	6.61	37.44	36.60	54.00	17.40
17355.00	46.03	PK	H	42.26	8.81	38.52	52.56	74.00	21.44
17355.00	33.72	AV	H	42.26	8.81	38.52	40.25	54.00	13.75
9855.00	45.67	PK	H	38.04	5.97	36.72	46.94	74.00	27.06
9855.00	33.06	AV	H	38.04	5.97	36.72	34.33	54.00	19.67
9677.00	46.22	PK	H	37.97	5.86	36.67	47.36	74.00	26.64
9677.00	33.24	AV	H	37.97	5.86	36.67	34.38	54.00	19.62
High Channel: 5825 MHz									
5825.00	78.63	PK	H	34.23	3.73	0.00	110.57	N/A	N/A
5825.00	68.57	AV	H	34.23	3.73	0.00	100.51	N/A	N/A
5825.00	77.48	PK	V	34.23	3.73	0.00	109.42	N/A	N/A
5825.00	67.33	AV	V	34.23	3.73	0.00	99.27	N/A	N/A
5850.00	30.48	PK	H	34.24	3.75	0.00	62.45	122.20	59.75
5855.00	29.37	PK	H	34.24	3.75	0.00	61.34	110.80	49.46
5875.00	27.68	PK	H	34.25	3.77	0.00	59.68	105.20	45.52
5925.00	27.15	PK	H	34.27	3.80	0.00	59.20	68.20	9.00
11650.00	47.75	PK	H	39.00	6.64	37.53	49.84	74.00	24.16
11650.00	34.71	AV	H	39.00	6.64	37.53	36.80	54.00	17.20
17475.00	46.55	PK	H	42.96	8.84	38.44	53.89	74.00	20.11
17475.00	33.97	AV	H	42.96	8.84	38.44	41.31	54.00	12.69
8966.00	45.48	PK	H	37.68	5.47	36.94	45.67	74.00	28.33
8966.00	33.58	AV	H	37.68	5.47	36.94	33.77	54.00	20.23

802.11n ht40(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5755MHz									
5755.00	76.14	PK	H	34.20	3.70	0.00	108.02	N/A	N/A
5755.00	65.66	AV	H	34.20	3.70	0.00	97.54	N/A	N/A
5755.00	75.32	PK	V	34.20	3.70	0.00	107.20	N/A	N/A
5755.00	65.58	AV	V	34.20	3.70	0.00	97.46	N/A	N/A
5725.00	42.37	PK	H	34.19	3.69	0.00	74.23	122.20	47.97
5720.00	38.98	PK	H	34.19	3.69	0.00	70.84	110.80	39.96
5700.00	34.83	PK	H	34.18	3.68	0.00	66.67	105.20	38.53
5650.00	30.09	PK	H	34.16	3.63	0.00	61.86	68.20	6.34
11510.00	47.78	PK	H	39.00	6.59	37.37	49.98	74.00	24.02
11510.00	34.54	AV	H	39.00	6.59	37.37	36.74	54.00	17.26
17265.00	46.25	PK	H	41.74	8.79	38.58	52.18	74.00	21.82
17265.00	33.81	AV	H	41.74	8.79	38.58	39.74	54.00	14.26
8966.00	45.41	PK	H	37.68	5.47	36.94	45.60	74.00	28.40
8966.00	33.57	AV	H	37.68	5.47	36.94	33.76	54.00	20.24
High Channel: 5795 MHz									
5795.00	75.76	PK	H	34.22	3.71	0.00	107.67	N/A	N/A
5795.00	65.42	AV	H	34.22	3.71	0.00	97.33	N/A	N/A
5795.00	74.66	PK	V	34.22	3.71	0.00	106.57	N/A	N/A
5795.00	65.23	AV	V	34.22	3.71	0.00	97.14	N/A	N/A
5850.00	34.87	PK	H	34.24	3.75	0.00	66.84	122.20	55.36
5855.00	34.38	PK	H	34.24	3.75	0.00	66.35	110.80	44.45
5875.00	30.36	PK	H	34.25	3.77	0.00	62.36	105.20	42.84
5925.00	28.78	PK	H	34.27	3.80	0.00	60.83	68.20	7.37
11590.00	47.69	PK	H	39.00	6.62	37.46	49.83	74.00	24.17
11590.00	34.62	AV	H	39.00	6.62	37.46	36.76	54.00	17.24
17385.00	46.53	PK	H	42.43	8.82	38.50	53.26	74.00	20.74
17385.00	34.05	AV	H	42.43	8.82	38.50	40.78	54.00	13.22
8966.00	45.64	PK	H	37.68	5.47	36.94	45.83	74.00	28.17
8966.00	33.28	AV	H	37.68	5.47	36.94	33.47	54.00	20.53

802.11 ac20(MIMO was the worst)

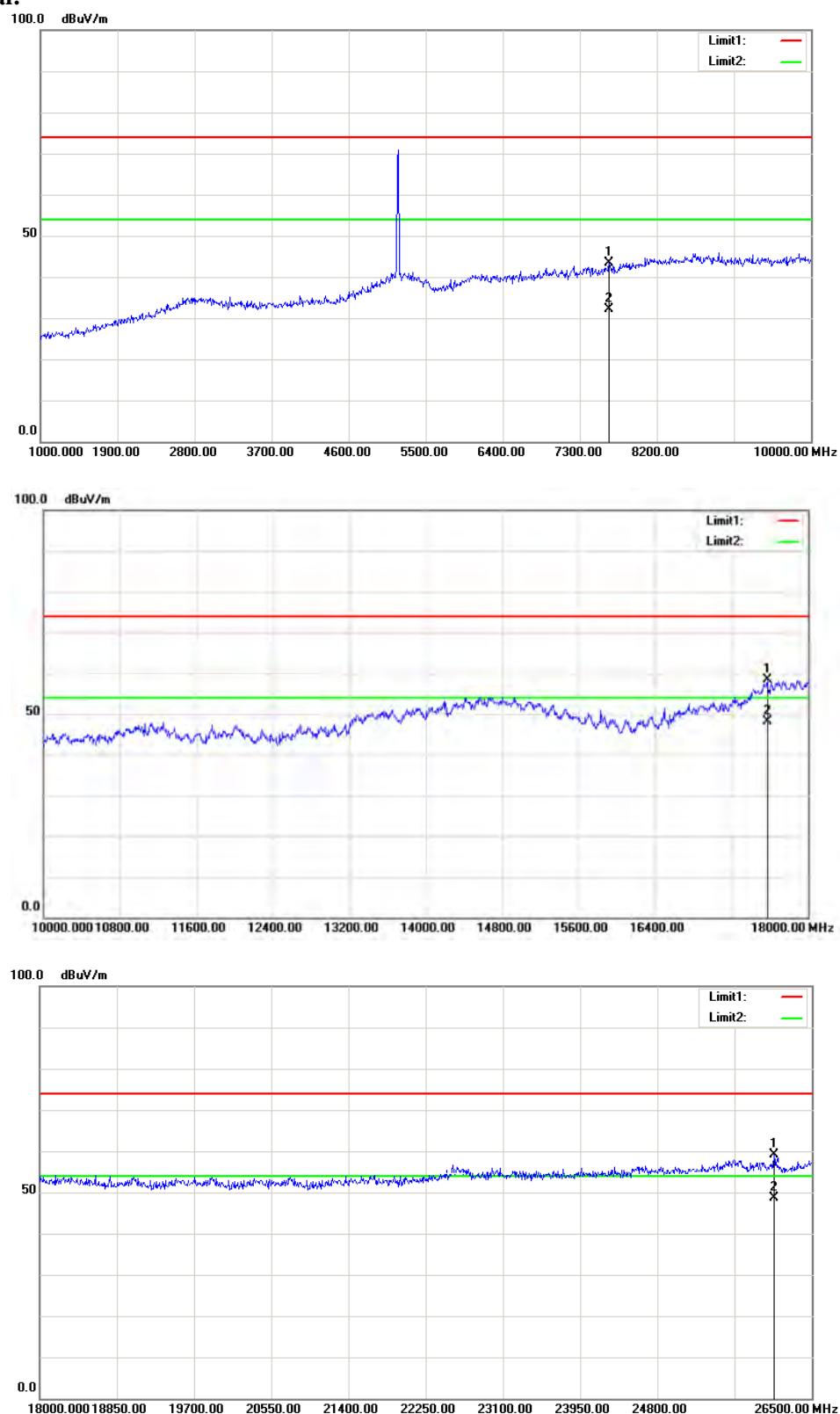
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5745MHz									
5745.00	78.36	PK	H	34.20	3.69	0.00	110.23	N/A	N/A
5745.00	68.48	AV	H	34.20	3.69	0.00	100.35	N/A	N/A
5745.00	77.35	PK	V	34.20	3.69	0.00	109.22	N/A	N/A
5745.00	67.72	AV	V	34.20	3.69	0.00	99.59	N/A	N/A
5725.00	38.24	PK	H	34.19	3.69	0.00	70.10	122.20	52.10
5720.00	32.87	PK	H	34.19	3.69	0.00	64.73	110.80	46.07
5700.00	27.69	PK	H	34.18	3.68	0.00	59.53	105.20	45.67
5650.00	27.42	PK	H	34.16	3.63	0.00	59.19	68.20	9.01
11490.00	47.75	PK	H	38.99	6.59	37.35	49.96	74.00	24.04
11490.00	34.71	AV	H	38.99	6.59	37.35	36.92	54.00	17.08
17235.00	46.56	PK	H	41.56	8.78	38.61	52.27	74.00	21.73
17235.00	34.01	AV	H	41.56	8.78	38.61	39.72	54.00	14.28
8966.00	45.58	PK	H	37.68	5.47	36.94	45.77	74.00	28.23
8966.00	33.42	AV	H	37.68	5.47	36.94	33.61	54.00	20.39
Middle Channel: 5785 MHz									
5785.00	78.26	PK	H	34.21	3.71	0.00	110.16	N/A	N/A
5785.00	68.34	AV	H	34.21	3.71	0.00	100.24	N/A	N/A
5785.00	77.15	PK	V	34.21	3.71	0.00	109.05	N/A	N/A
5785.00	67.22	AV	V	34.21	3.71	0.00	99.12	N/A	N/A
11570.00	47.84	PK	H	39.00	6.61	37.44	49.99	74.00	24.01
11570.00	34.57	AV	H	39.00	6.61	37.44	36.72	54.00	17.28
17355.00	46.11	PK	H	42.26	8.81	38.52	52.64	74.00	21.36
17355.00	33.56	AV	H	42.26	8.81	38.52	40.09	54.00	13.91
9855.00	45.35	PK	H	38.04	5.97	36.72	46.62	74.00	27.38
9855.00	33.06	AV	H	38.04	5.97	36.72	34.33	54.00	19.67
9677.00	46.33	PK	H	37.97	5.86	36.67	47.47	74.00	26.53
9677.00	33.27	AV	H	37.97	5.86	36.67	34.41	54.00	19.59
High Channel: 5825 MHz									
5825.00	78.39	PK	H	34.23	3.73	0.00	110.33	N/A	N/A
5825.00	68.44	AV	H	34.23	3.73	0.00	100.38	N/A	N/A
5825.00	76.95	PK	V	34.23	3.73	0.00	108.89	N/A	N/A
5825.00	67.02	AV	V	34.23	3.73	0.00	98.96	N/A	N/A
5850.00	29.37	PK	H	34.24	3.75	0.00	61.34	122.20	60.86
5855.00	28.49	PK	H	34.24	3.75	0.00	60.46	110.80	50.34
5875.00	27.64	PK	H	34.25	3.77	0.00	59.64	105.20	45.56
5925.00	26.33	PK	H	34.27	3.80	0.00	58.38	68.20	9.82
11650.00	48.21	PK	H	39.00	6.64	37.53	50.30	74.00	23.70
11650.00	34.84	AV	H	39.00	6.64	37.53	36.93	54.00	17.07
17475.00	46.62	PK	H	42.96	8.84	38.44	53.96	74.00	20.04
17475.00	34.23	AV	H	42.96	8.84	38.44	41.57	54.00	12.43
8966.00	45.77	PK	H	37.68	5.47	36.94	45.96	74.00	28.04
8966.00	33.53	AV	H	37.68	5.47	36.94	33.72	54.00	20.28

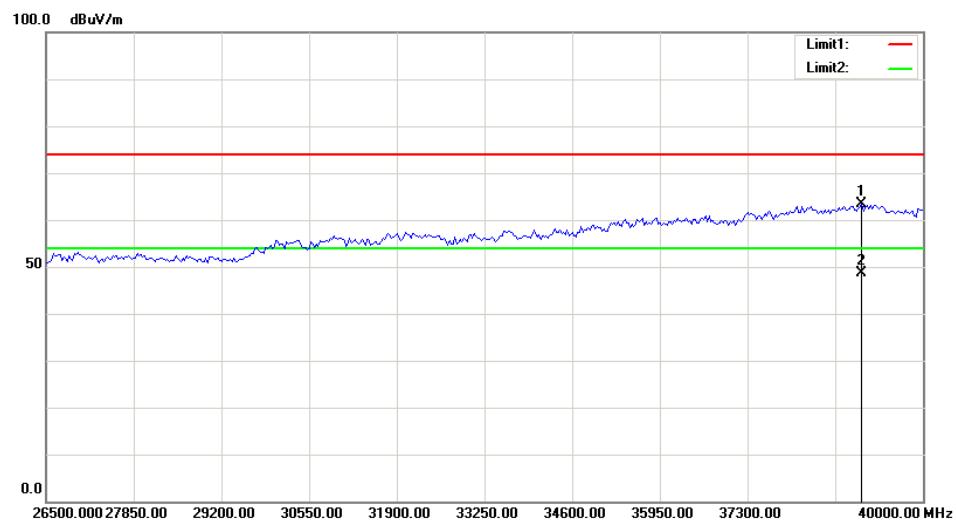
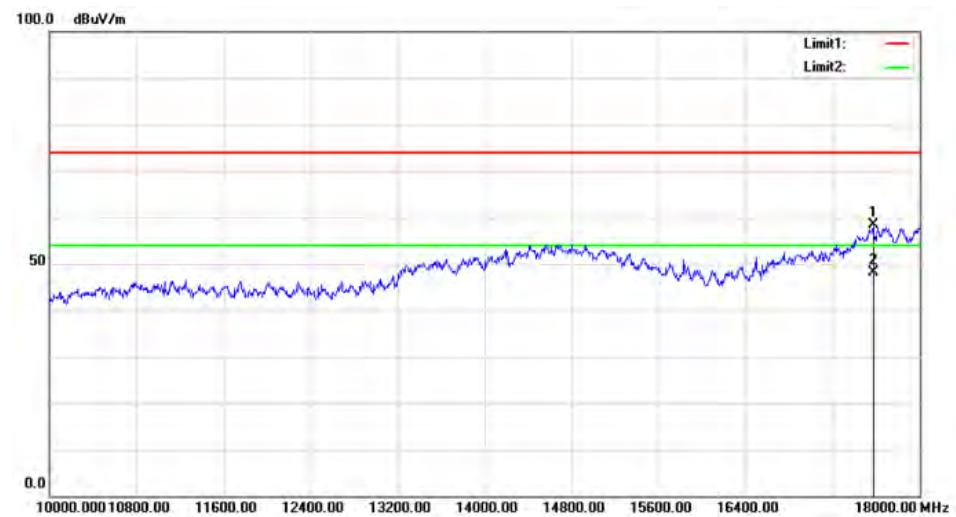
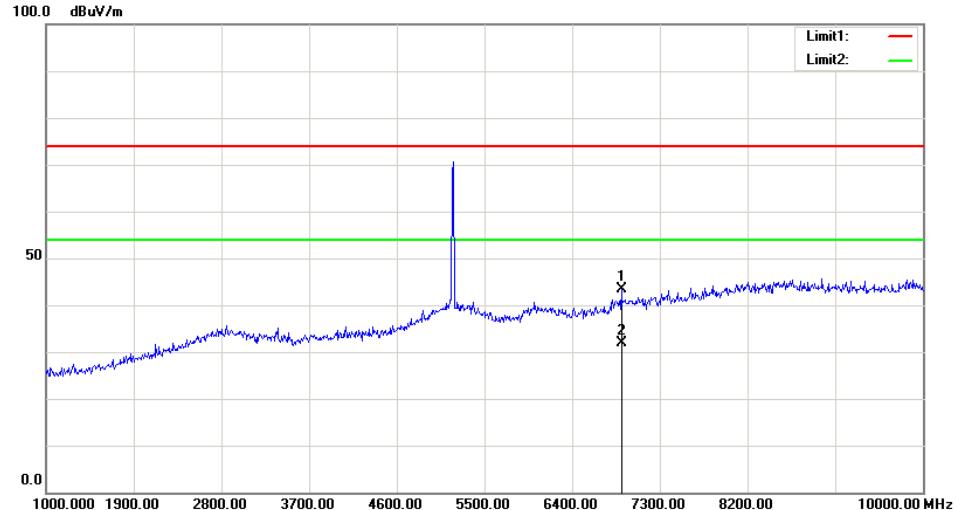
802.11 ac40(MIMO was the worst)

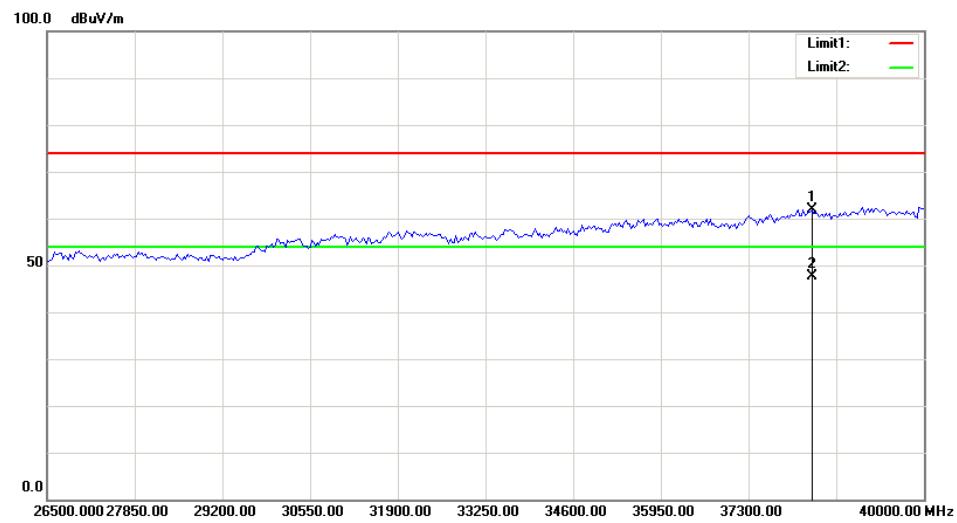
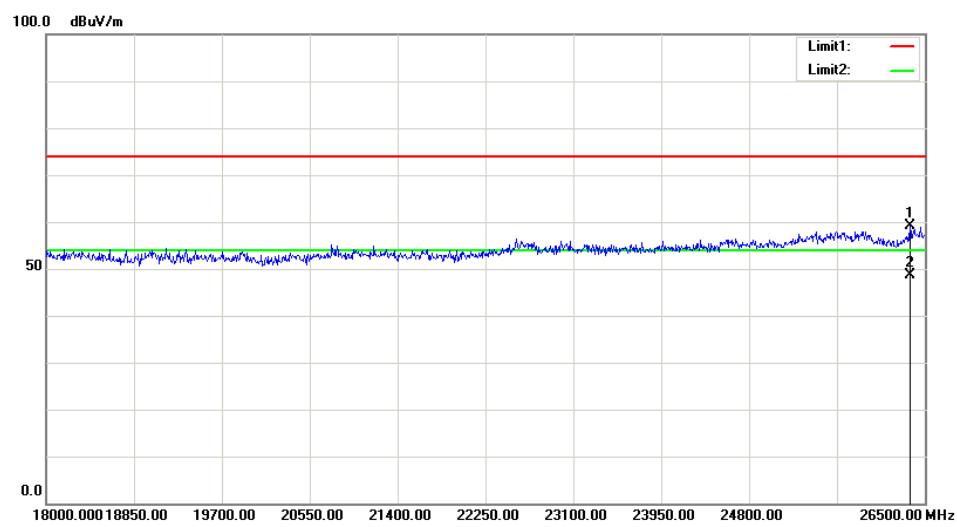
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Low Channel: 5755MHz									
5755.00	75.97	PK	H	34.20	3.70	0.00	107.85	N/A	N/A
5755.00	65.84	AV	H	34.20	3.70	0.00	97.72	N/A	N/A
5755.00	75.26	PK	V	34.20	3.70	0.00	107.14	N/A	N/A
5755.00	65.48	AV	V	34.20	3.70	0.00	97.36	N/A	N/A
5725.00	42.35	PK	H	34.19	3.69	0.00	74.21	122.20	47.99
5720.00	38.79	PK	H	34.19	3.69	0.00	70.65	110.80	40.15
5700.00	34.75	PK	H	34.18	3.68	0.00	66.59	105.20	38.61
5650.00	30.19	PK	H	34.16	3.63	0.00	61.96	68.20	6.24
11510.00	48.03	PK	H	39.00	6.59	37.37	50.23	74.00	23.77
11510.00	34.61	AV	H	39.00	6.59	37.37	36.81	54.00	17.19
17265.00	46.48	PK	H	41.74	8.79	38.58	52.41	74.00	21.59
17265.00	34.15	AV	H	41.74	8.79	38.58	40.08	54.00	13.92
8966.00	45.72	PK	H	37.68	5.47	36.94	45.91	74.00	28.09
8966.00	33.64	AV	H	37.68	5.47	36.94	33.83	54.00	20.17
High Channel: 5795 MHz									
5795.00	75.59	PK	H	34.22	3.71	0.00	107.50	N/A	N/A
5795.00	65.46	AV	H	34.22	3.71	0.00	97.37	N/A	N/A
5795.00	74.83	PK	V	34.22	3.71	0.00	106.74	N/A	N/A
5795.00	65.14	AV	V	34.22	3.71	0.00	97.05	N/A	N/A
5850.00	34.96	PK	H	34.24	3.75	0.00	66.93	122.20	55.27
5855.00	34.28	PK	H	34.24	3.75	0.00	66.25	110.80	44.55
5875.00	30.46	PK	H	34.25	3.77	0.00	62.46	105.20	42.74
5925.00	28.75	PK	H	34.27	3.80	0.00	60.80	68.20	7.40
11590.00	47.75	PK	H	39.00	6.62	37.46	49.89	74.00	24.11
11590.00	34.81	AV	H	39.00	6.62	37.46	36.95	54.00	17.05
17385.00	46.35	PK	H	42.43	8.82	38.50	53.08	74.00	20.92
17385.00	34.06	AV	H	42.43	8.82	38.50	40.79	54.00	13.21
8966.00	45.63	PK	H	37.68	5.47	36.94	45.82	74.00	28.18
8966.00	33.34	AV	H	37.68	5.47	36.94	33.53	54.00	20.47

802.11 ac80(MIMO was the worst)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB/m)					
Middle Channel: 5775 MHz									
5775.00	72.65	PK	H	34.21	3.70	0.00	104.54	N/A	N/A
5775.00	62.37	AV	H	34.21	3.70	0.00	94.26	N/A	N/A
5775.00	71.28	PK	V	34.21	3.70	0.00	103.17	N/A	N/A
5775.00	61.33	AV	V	34.21	3.70	0.00	93.22	N/A	N/A
5725.00	38.89	PK	H	34.19	3.69	0.00	70.75	122.20	51.45
5720.00	38.24	PK	H	34.19	3.69	0.00	70.10	110.80	40.70
5700.00	34.65	PK	H	34.18	3.68	0.00	66.49	105.20	38.71
5650.00	28.67	PK	H	34.16	3.63	0.00	60.44	68.20	7.76
5850.00	31.88	PK	H	34.24	3.75	0.00	63.85	122.20	58.35
5855.00	30.56	PK	H	34.24	3.75	0.00	62.53	110.80	48.27
5875.00	29.43	PK	H	34.25	3.77	0.00	61.43	105.20	43.77
5925.00	28.15	PK	H	34.27	3.80	0.00	60.20	68.20	8.00
11550.00	47.92	PK	H	39.00	6.61	37.42	50.09	74.00	23.91
11550.00	34.53	AV	H	39.00	6.61	37.42	36.70	54.00	17.30
17325.00	46.35	PK	H	42.09	8.80	38.54	52.68	74.00	21.32
17325.00	33.94	AV	H	42.09	8.80	38.54	40.27	54.00	13.73
8966.00	45.53	PK	H	37.68	5.47	36.94	45.72	74.00	28.28
8966.00	33.63	AV	H	37.68	5.47	36.94	33.82	54.00	20.18

Test Plots(For worst mode 802.11a 5200MHz main chain was the worst)**Horizontal:**

**Vertical:**



FCC §15.407(b) & RSS-247 §6.2 –OUT- OF-BAND EMISSIONS**Applicable Standard**

FCC §15.407

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

According to RSS-247§6.2

Frequency band 5150-5250 MHz

6.2.1.2 Unwanted emission limits

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Frequency band 5250-5350 MHz

6.2.2.2 Unwanted emission limits

Devices shall comply with the following:

- a) All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.; or
- b) All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

Frequency bands 5470-5600 MHz and 5650-5725 MHz:

6.2.3.2 Unwanted emission limits

Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, devices with bandwidth overlapping the band edge of 5725 MHz can meet the emission limit of -27 dBm/MHz e.i.r.p. at 5850 MHz instead of 5725 MHz.

Frequency band 5725-5850 MHz

6.2.4.2 Unwanted emission limits

Devices operating in the band 5725-5850 MHz with antenna gain greater than 10 dBi can have unwanted emissions that comply with either the limits in this section or in section 5.5 until six (6) months after the publication date of this standard for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2018.

Devices operating in the band 5725-5850 MHz with antenna gain of 10 dBi or less can have unwanted emissions that comply with either the limits in this section or in section 5.5 until April 1, 2018 for certification. Certified devices that do not comply with emission limits in this section shall not be manufactured, imported, distributed, leased, offered for sale or sold after April 1, 2020.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

- a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
- b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
- d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

Test Procedure

According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2017-01-04	2018-01-04
N/A	Coaxial Cable	C-SJ00-0010	C0010/04	Each Time	/

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data**Environmental Conditions**

Temperature:	23.4~24.8°C
Relative Humidity:	35~42 %
ATM Pressure:	101.3~101.7kPa

The testing was performed by Nami Quan from 2017-12-08 to 2017-12-11.

Test Result: Pass.

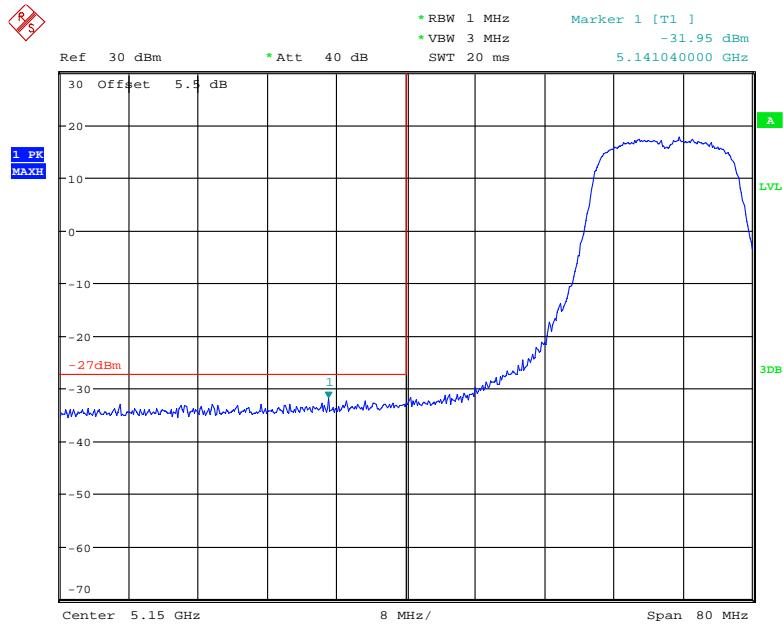
Please refer to the following plots.

SISO(the antenna gain was offset in the display):

5150-5250MHz

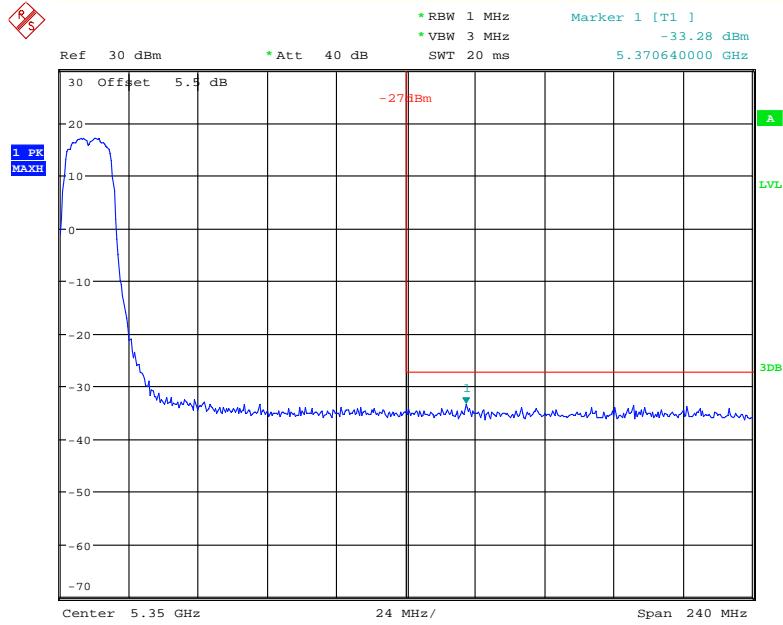
Main chain:

802.11a Low Channel

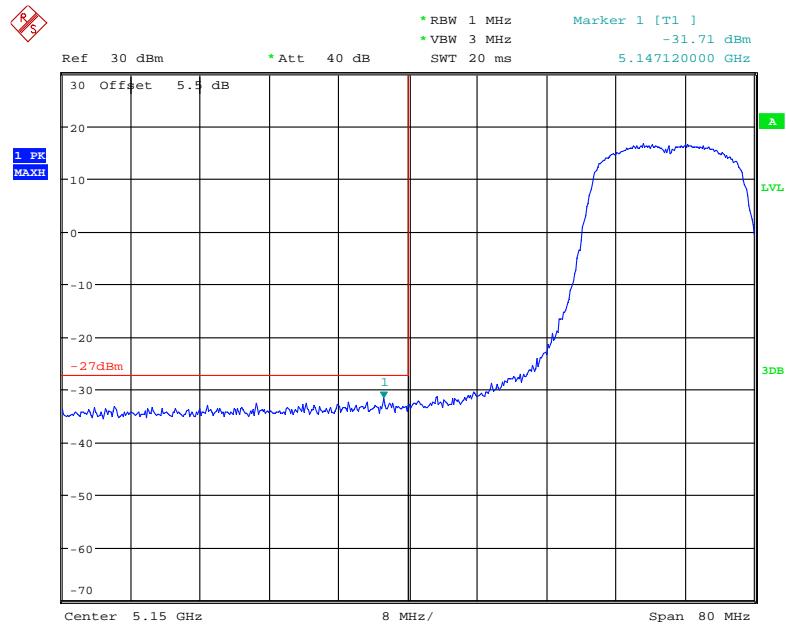


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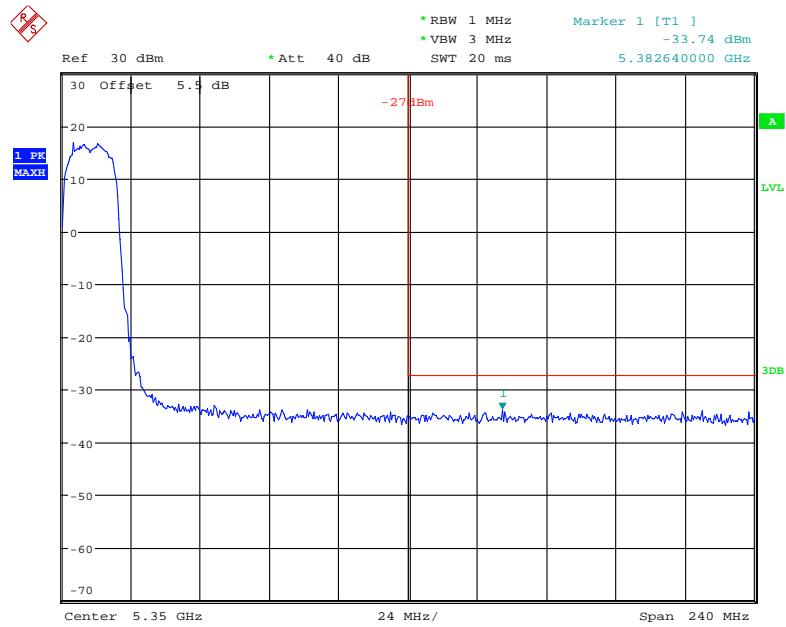
802.11a High Channel



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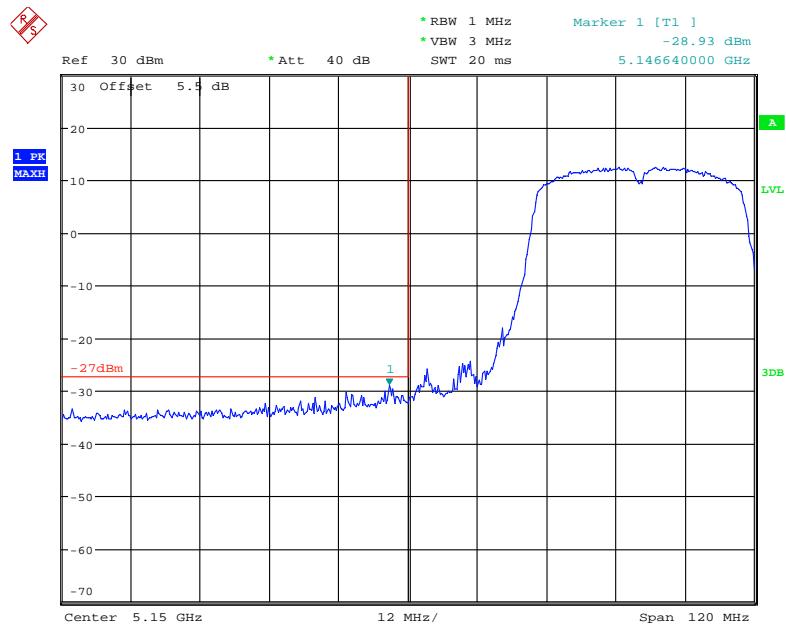
802.11n ht20 Low Channel

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802.11n ht20 High Channel

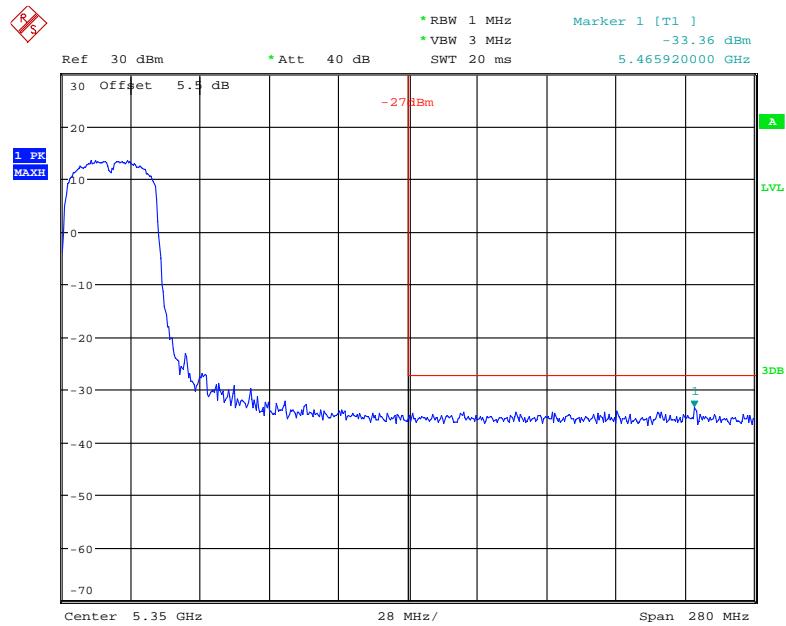
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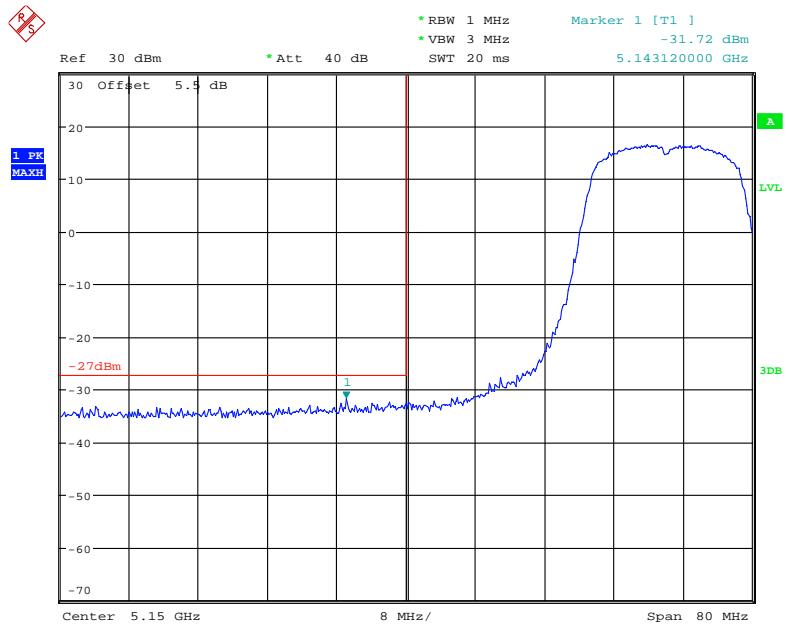


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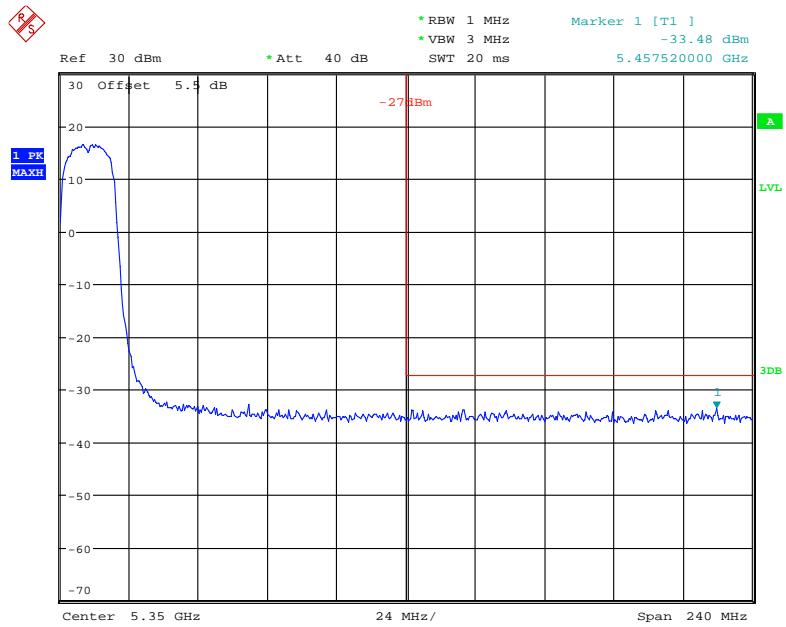
802.11n ht40 High Channel



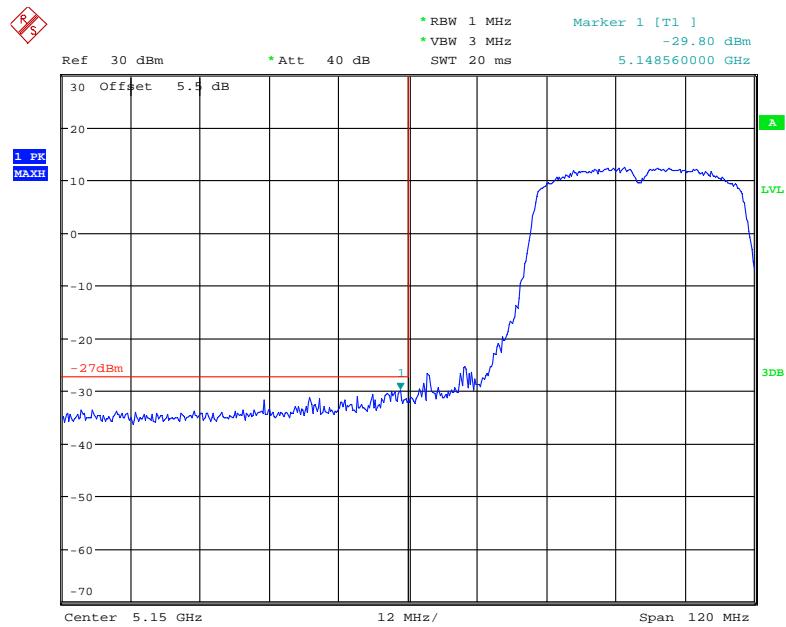
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802.11n ac20 Low Channel

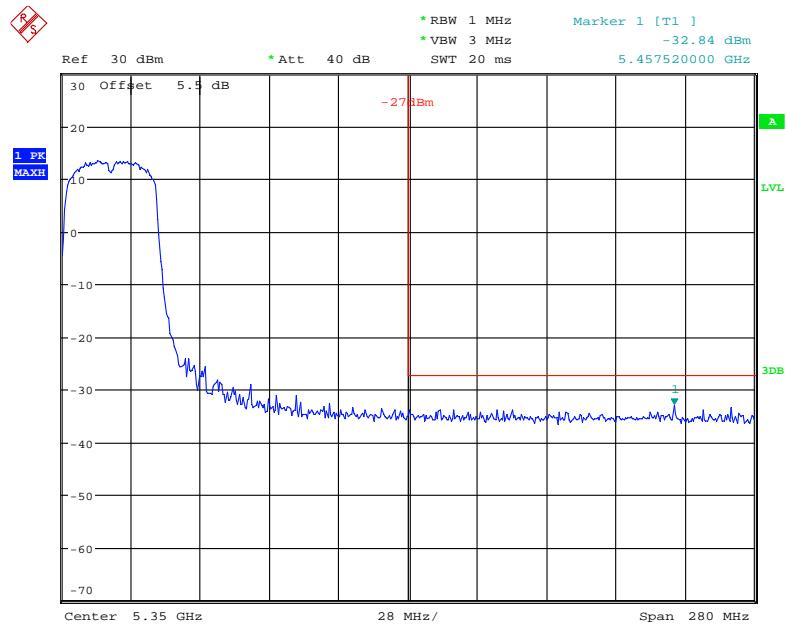
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802.11n ac20 High Channel

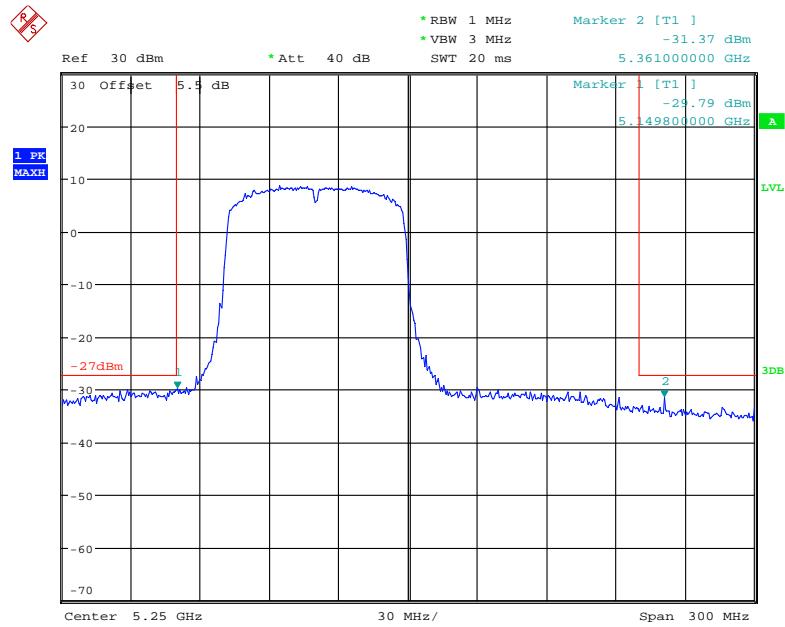
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802.11n ac40 Low Channel

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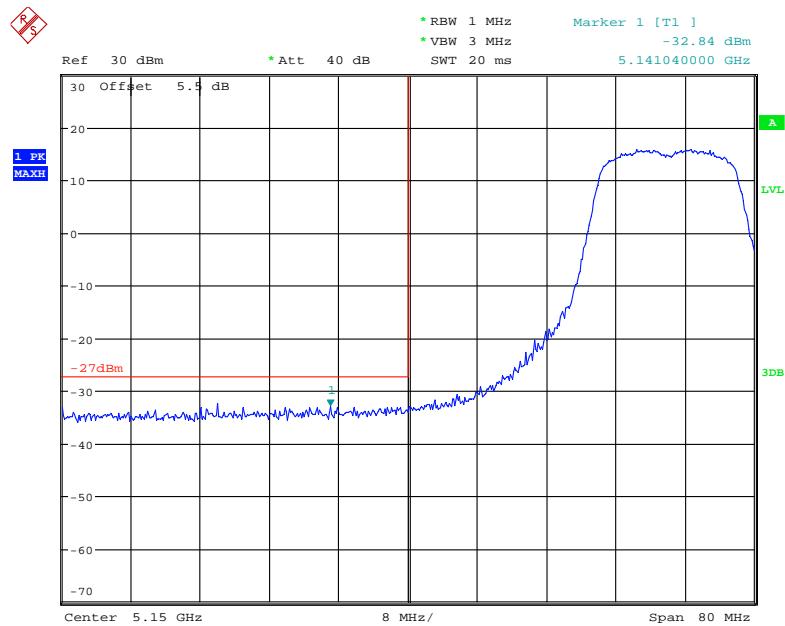
802.11n ac40 High Channel

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802.11n ac80 Middle Channel

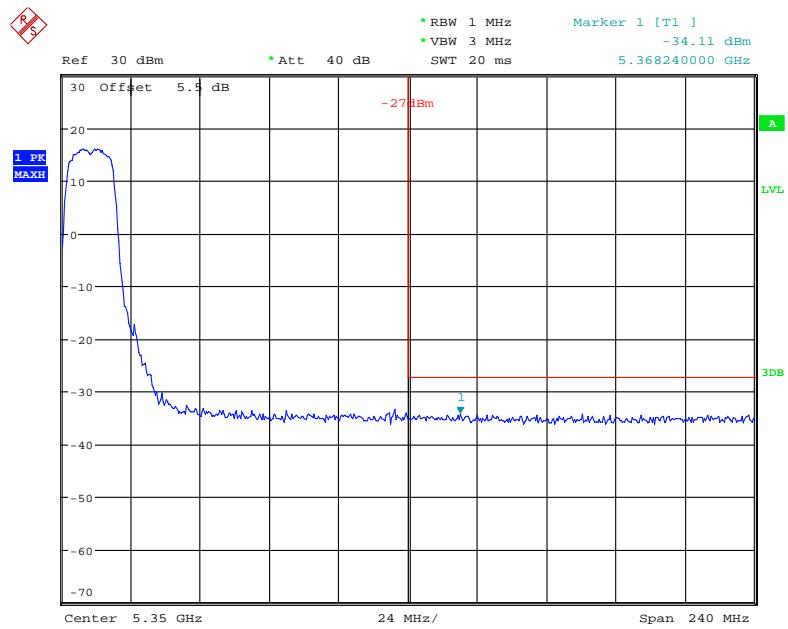
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Aux chain:

802.11a Low Channel

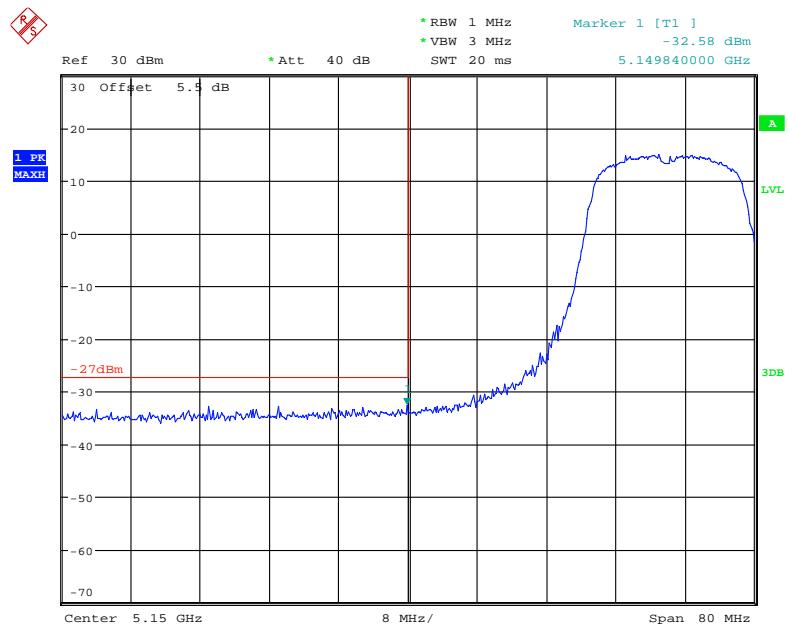
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802.11a High Channel



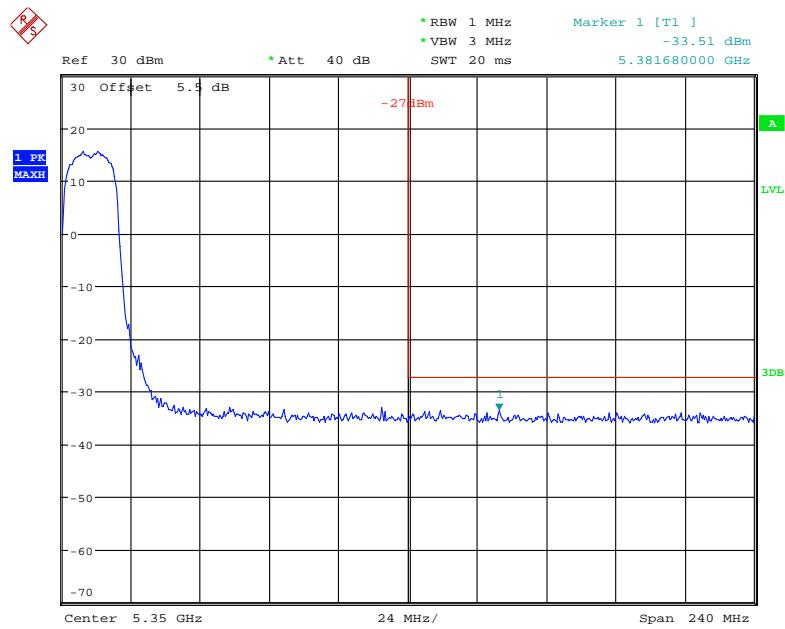
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802.11n ht20 Low Channel



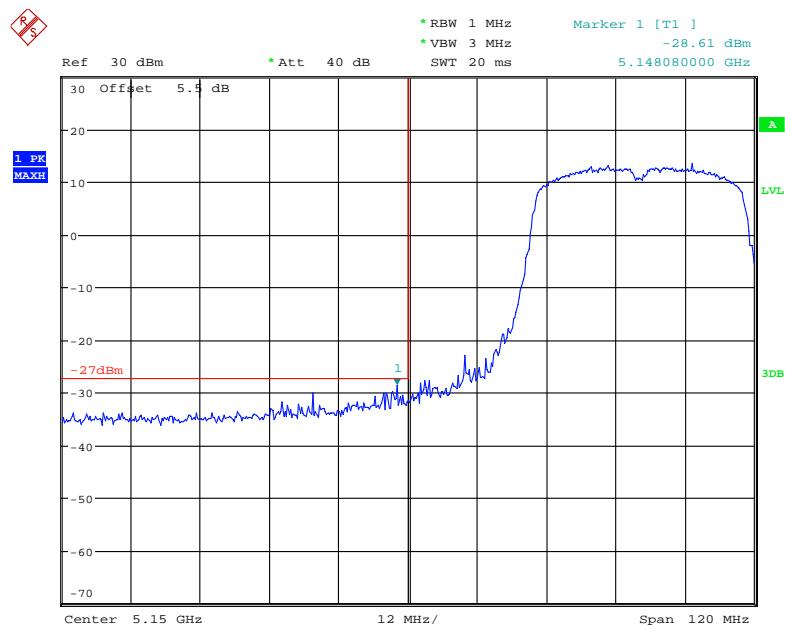
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802.11n ht20 High Channel

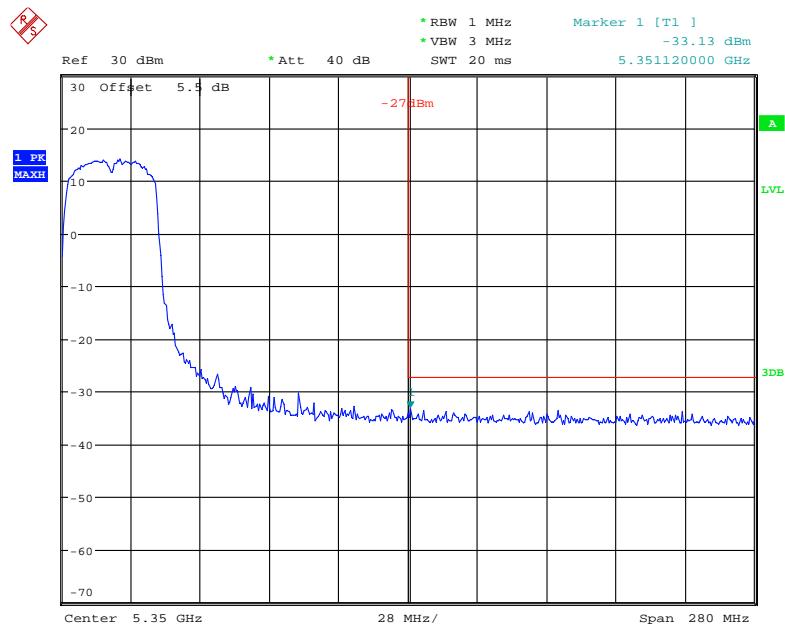


Date: 8.DEC.2017 15:36:18

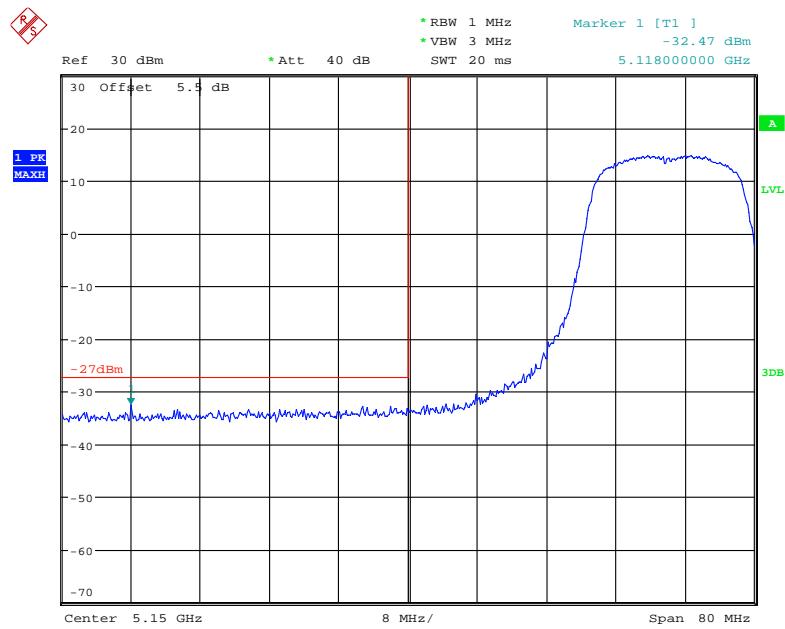
802.11n ht40 Low Channel



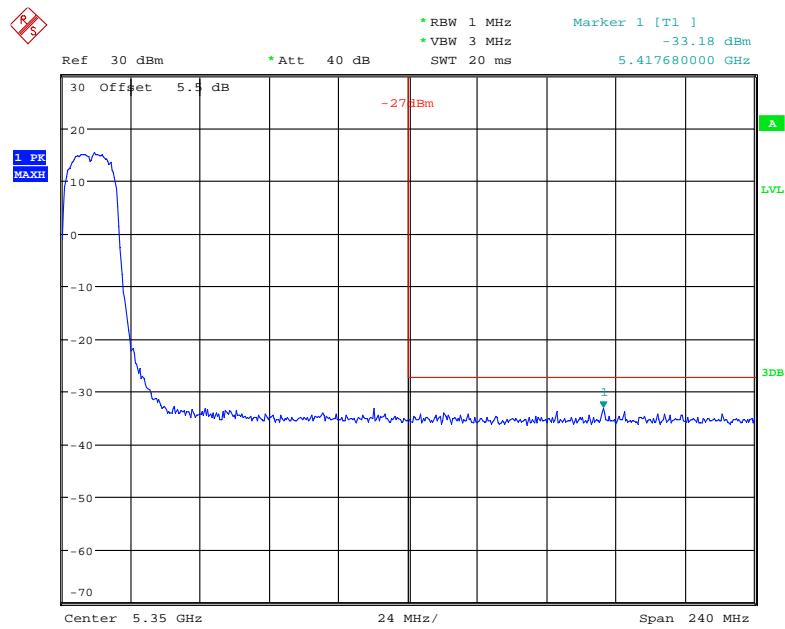
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802.11n ht40 High Channel

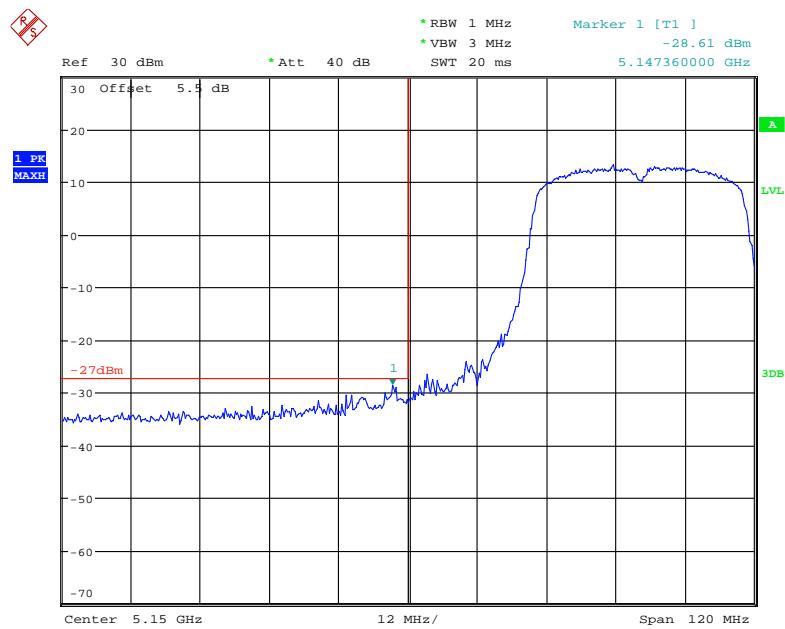
Date: 8.DEC.2017 16:09:29

802.11n ac20 Low Channel

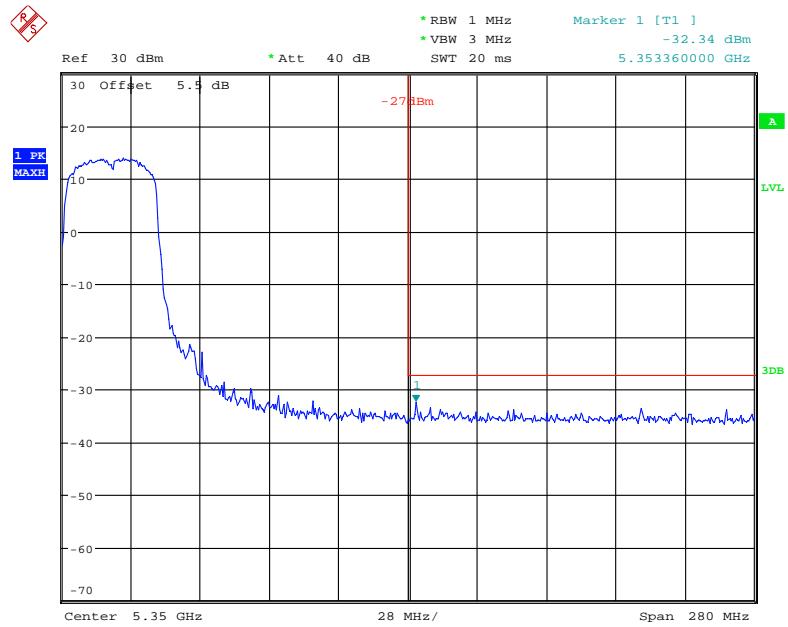
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802.11n ac20 High Channel

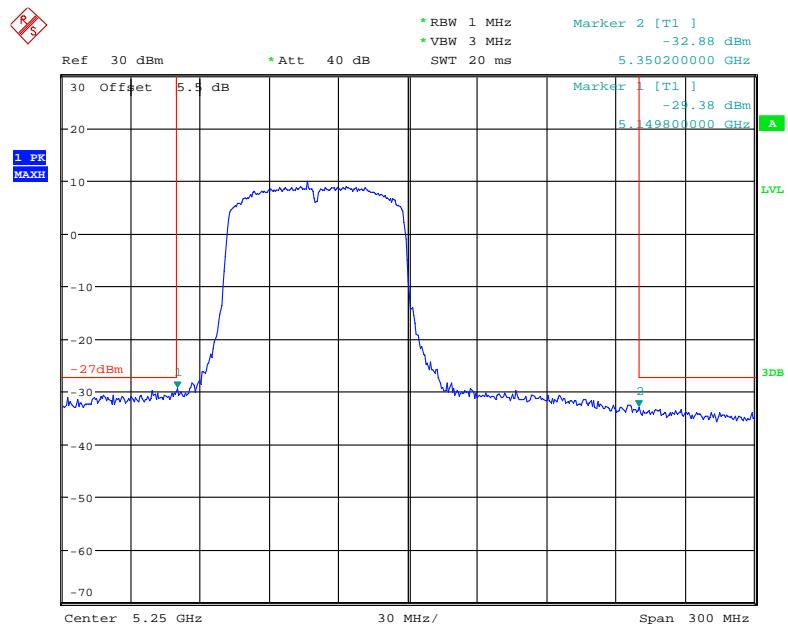
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802.11n ac40 Low Channel

Date: 8.DEC.2017 16:01:01

802.11n ac40 High Channel

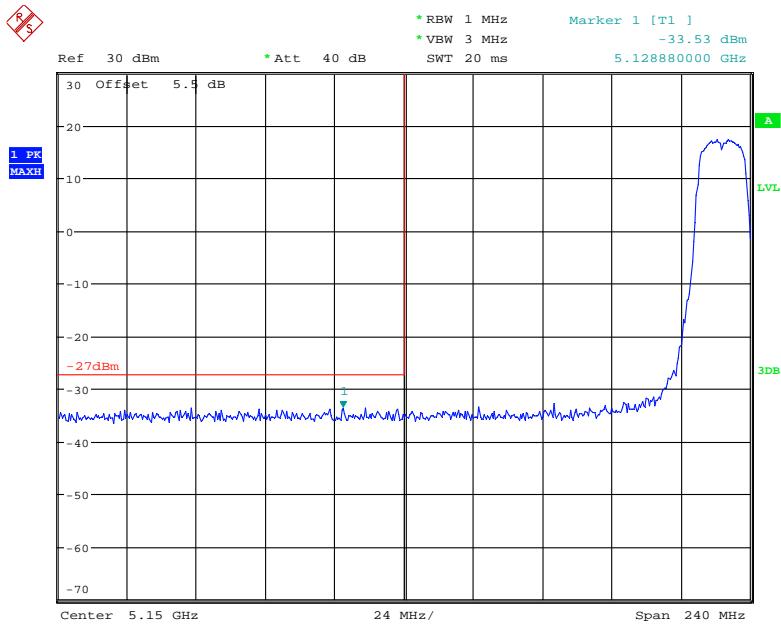
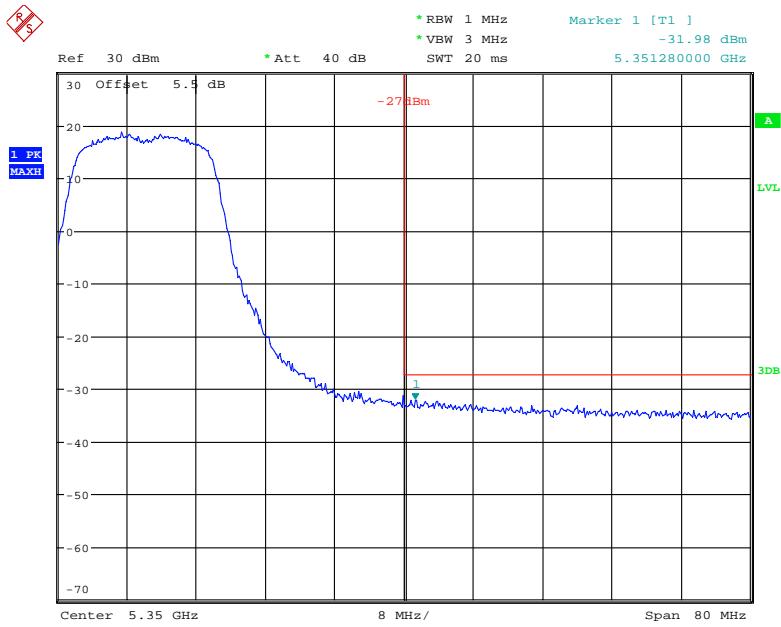
Date: 8.DEC.2017 16:11:06

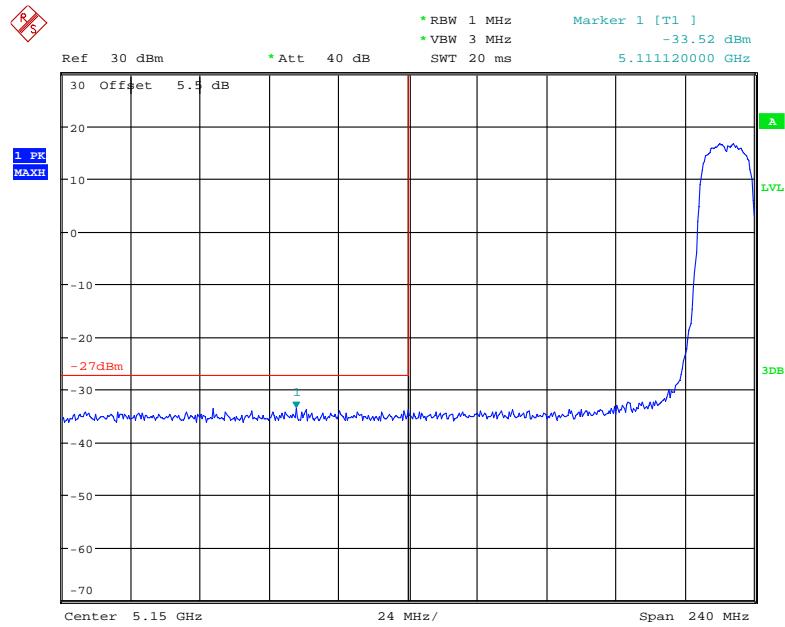
802.11n ac80 Middle Channel

Date: 8.DEC.2017 16:12:57

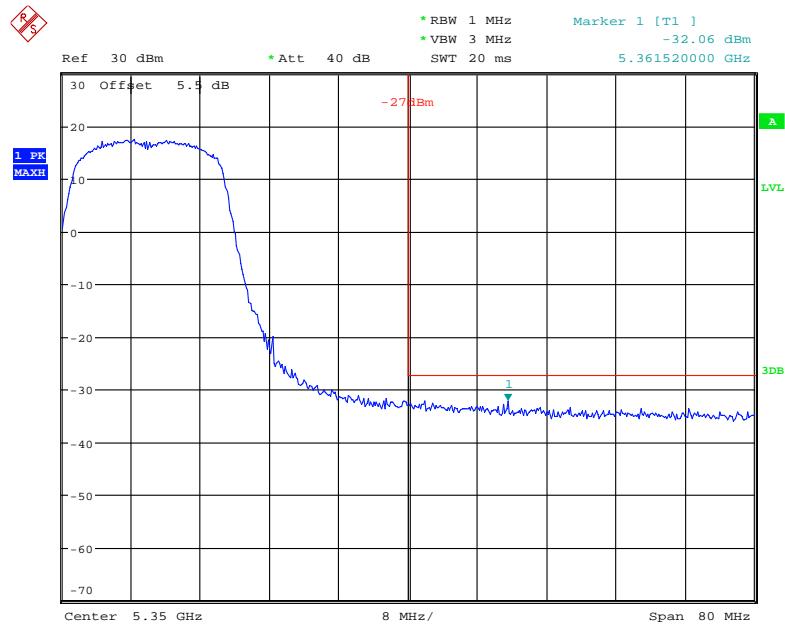
5250-5350MHz

Main Chain:

802.11a Low Channel**802.11a High Channel**

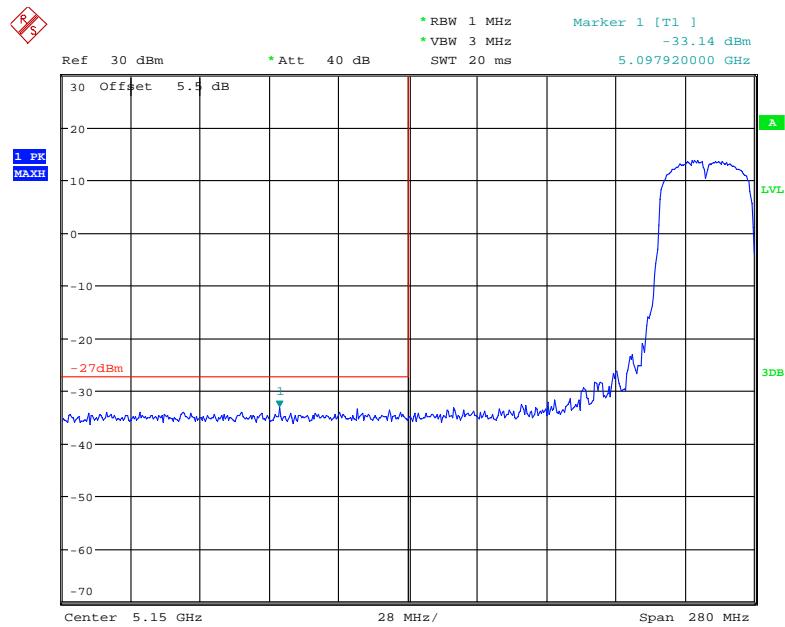
802.11n ht20 Low Channel

Date: 8.DEC.2017 13:15:14

802.11n ht20 High Channel

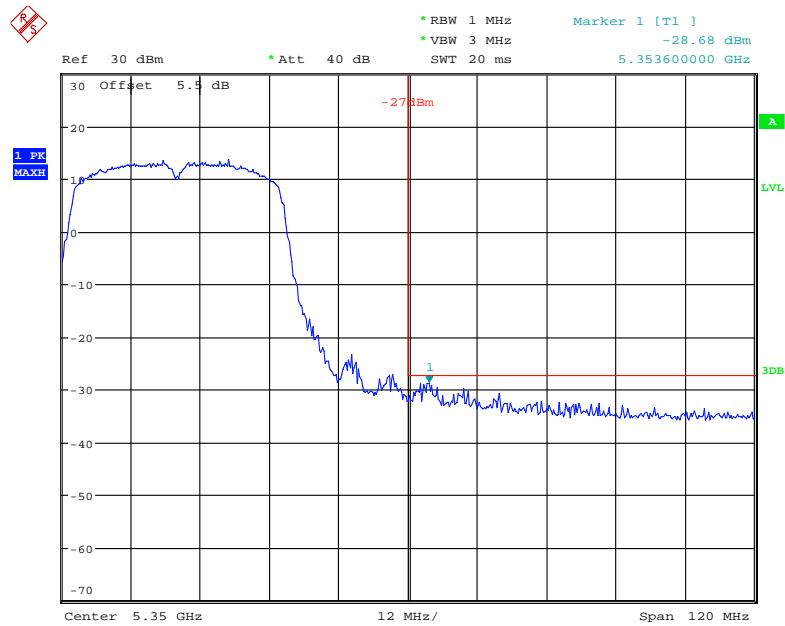
Date: 8.DEC.2017 13:12:45

802.11n ht40 Low Channel

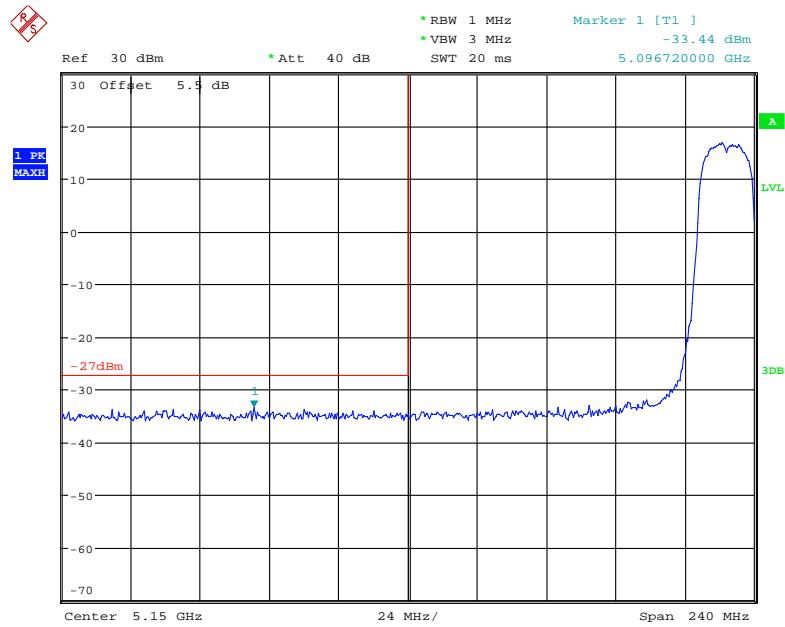


Date: 8.DEC.2017 13:20:59

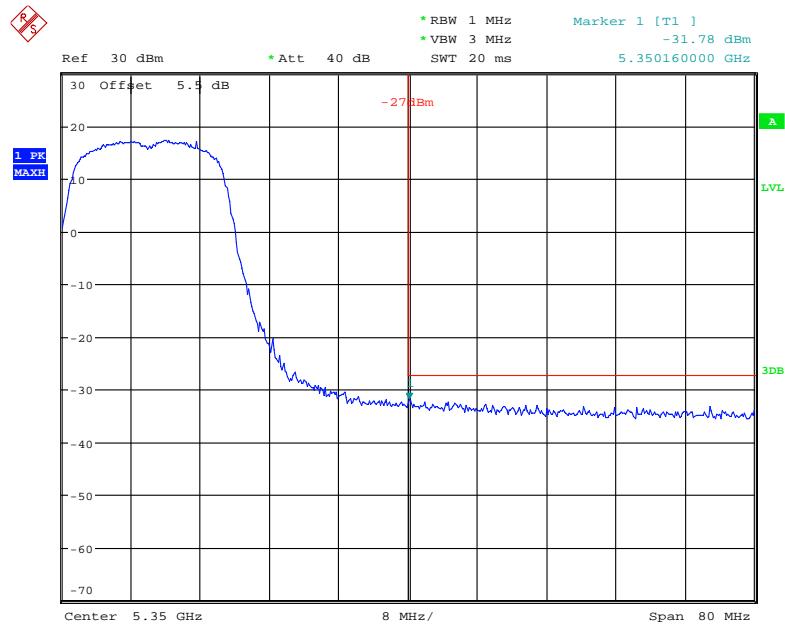
802.11n ht40 High Channel



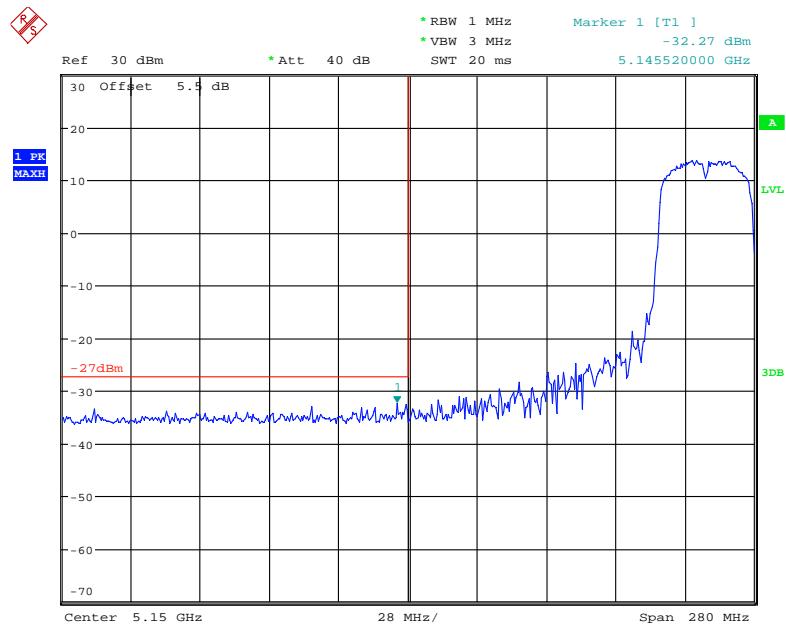
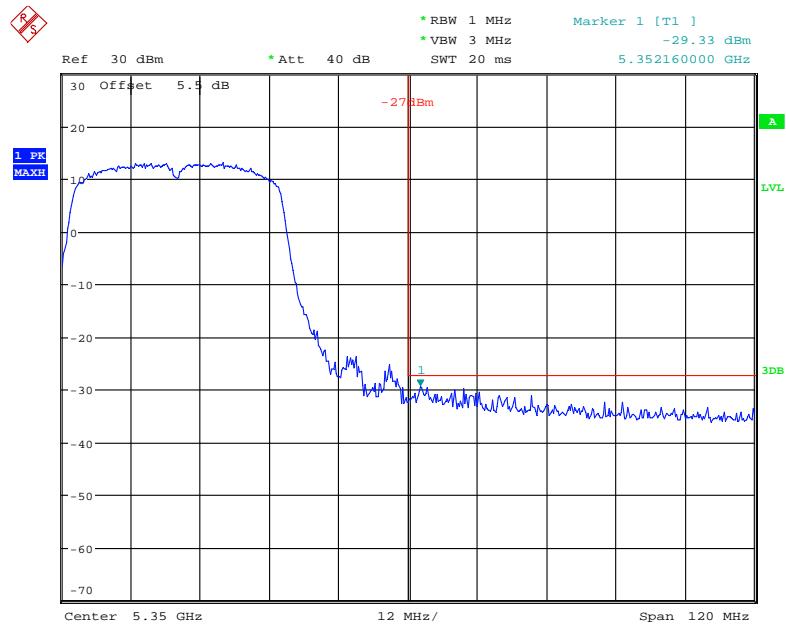
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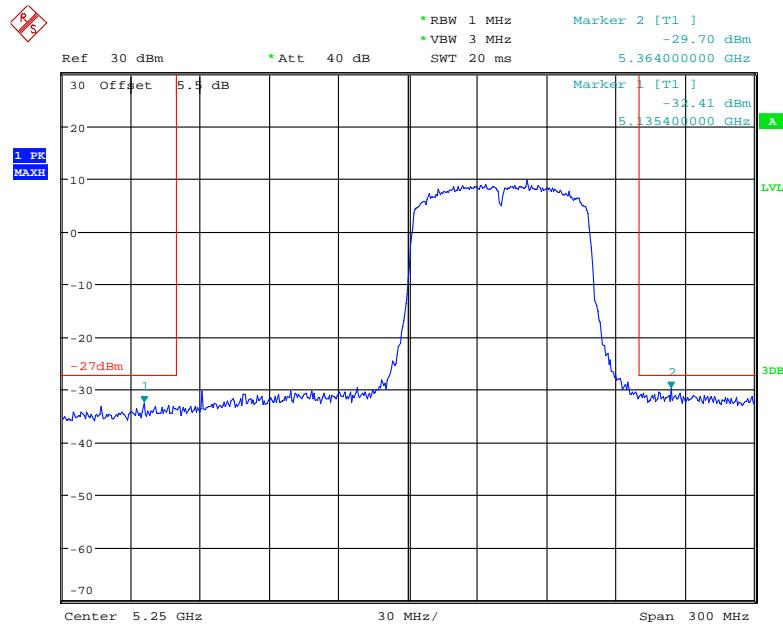
802.11n ac20 Low Channel

Date: 8.DEC.2017 13:16:56

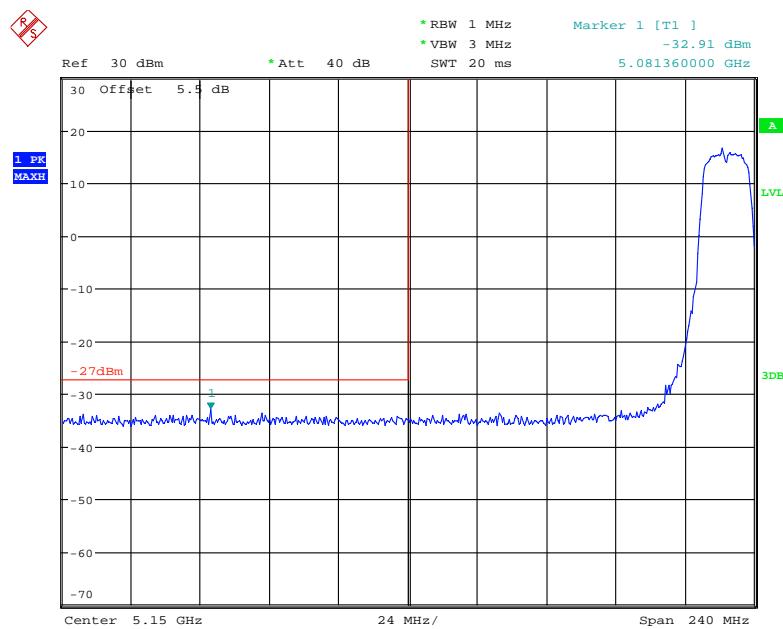
802.11n ac20 High Channel

Date: 8.DEC.2017 13:19:13

802.11n ac40 Low Channel**802.11n ac40 High Channel**

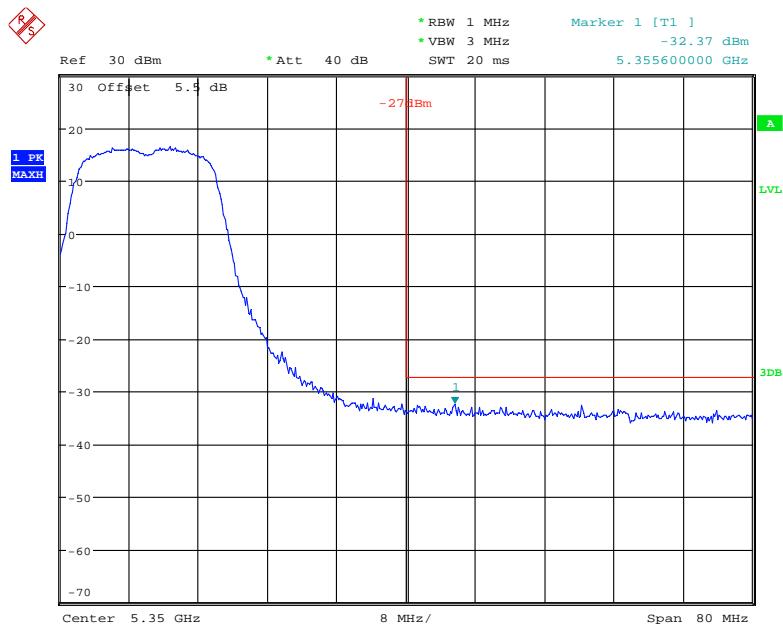
802.11n ac80 Middle Channel

Date: 8.DEC.2017 13:06:40

Aux chain:**802.11a Low Channel**

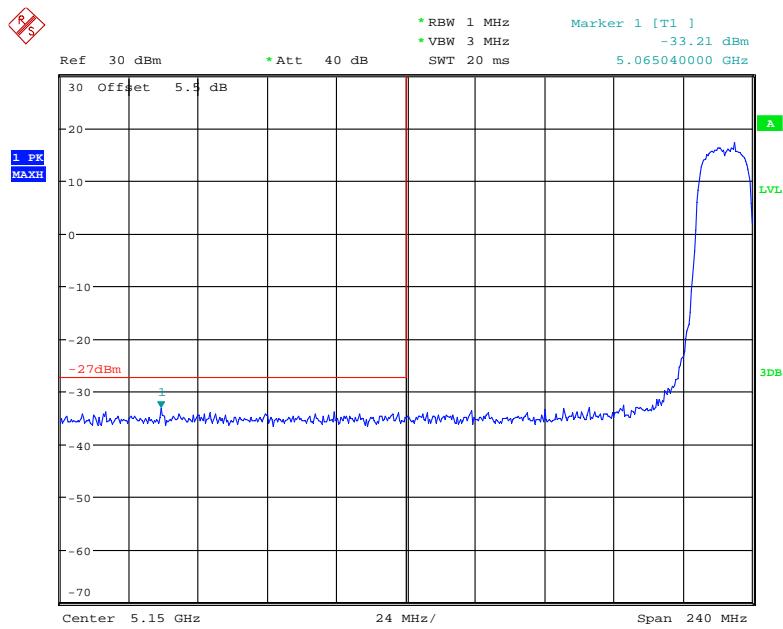
Date: 8.DEC.2017 15:41:20

802.11a High Channel

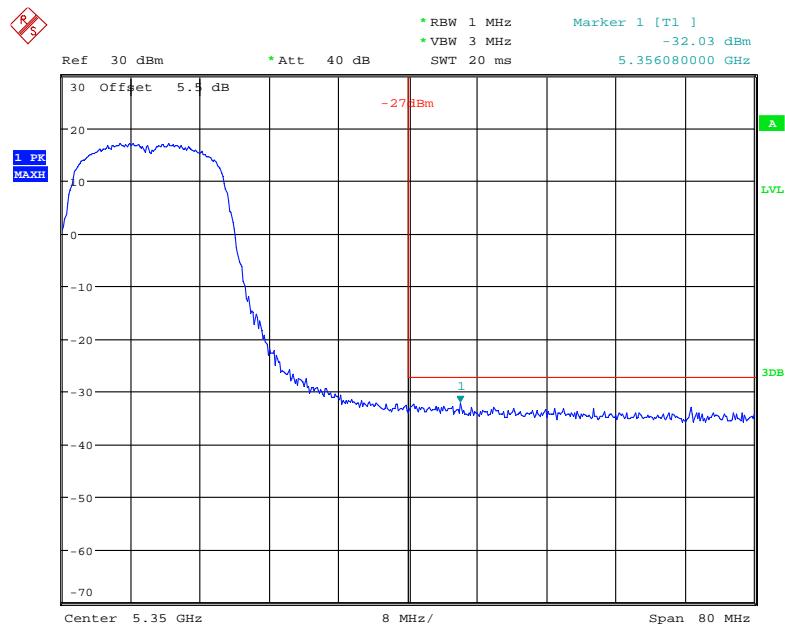


Date: 8.DEC.2017 15:43:46

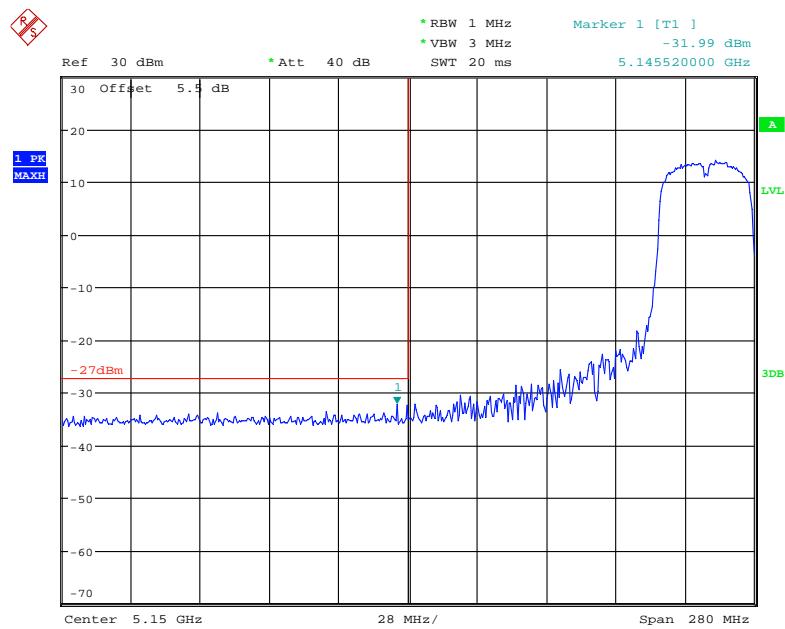
802.11n ht20 Low Channel



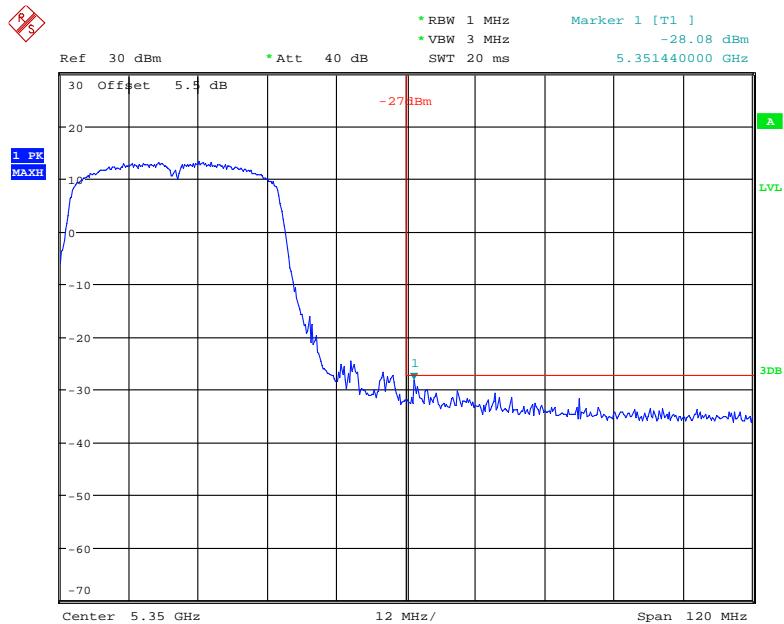
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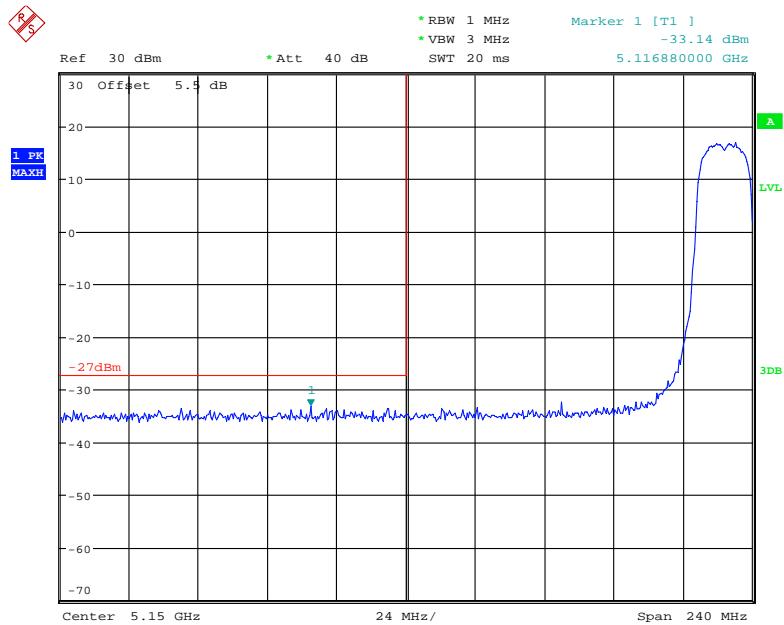
Date: 8.DEC.2017 15:48:08

802.11n ht40 Low Channel

Date: 8.DEC.2017 15:53:34

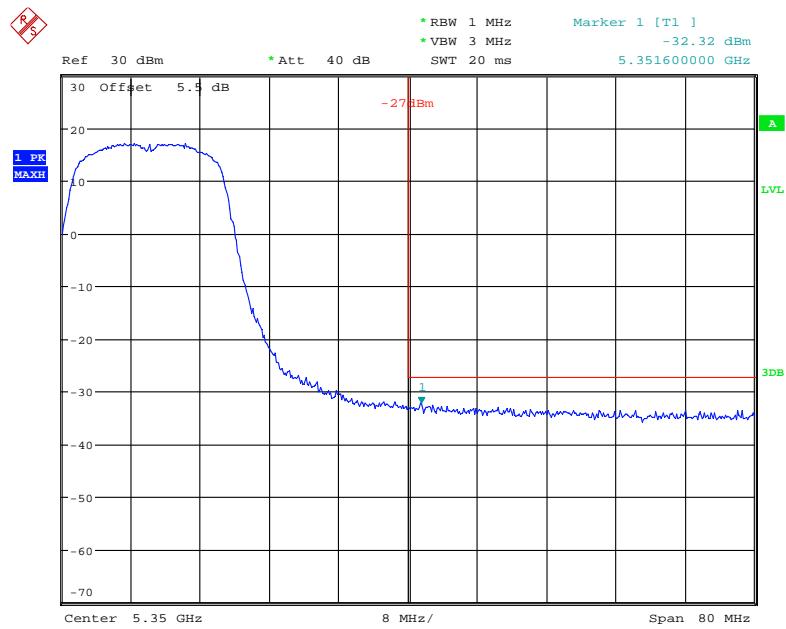
802.11n ht40 High Channel

Date: 8.DEC.2017 15:55:01

802.11n ac20 Low Channel

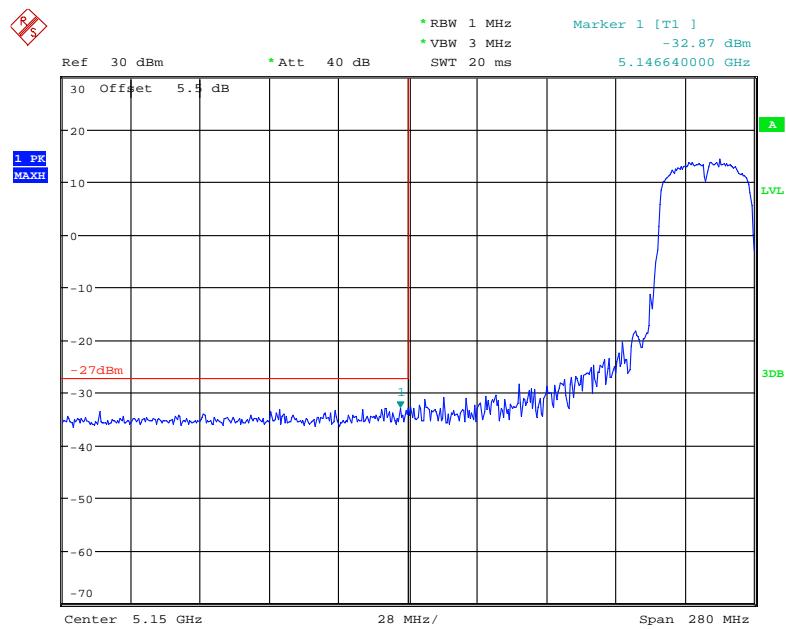
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802.11n ac20 High Channel

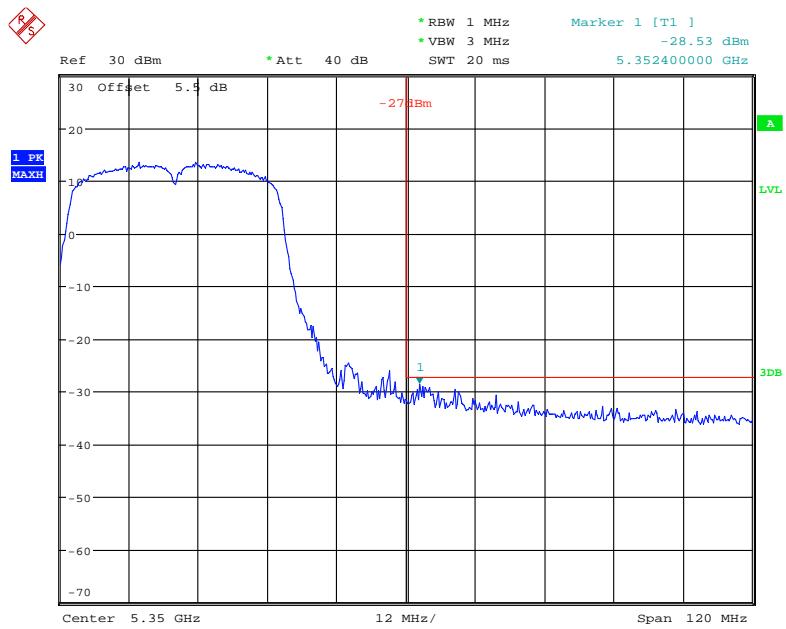
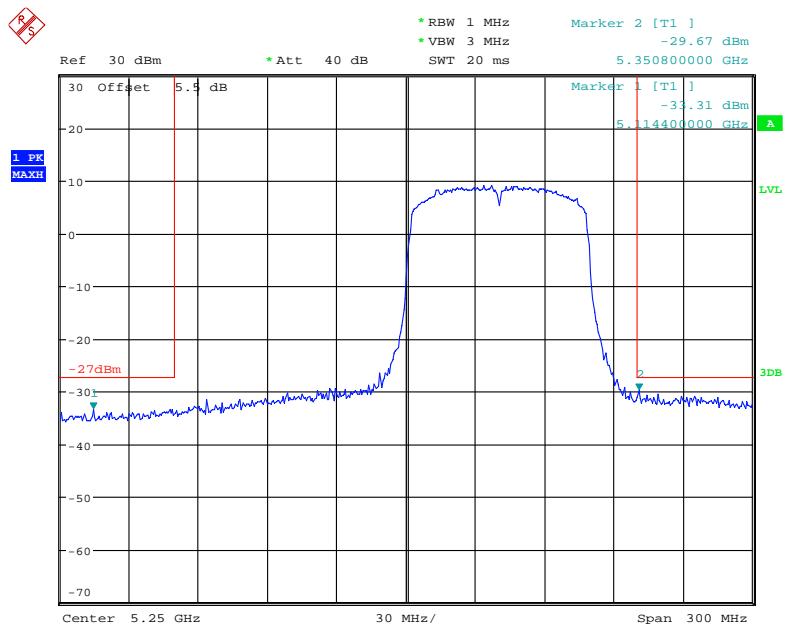


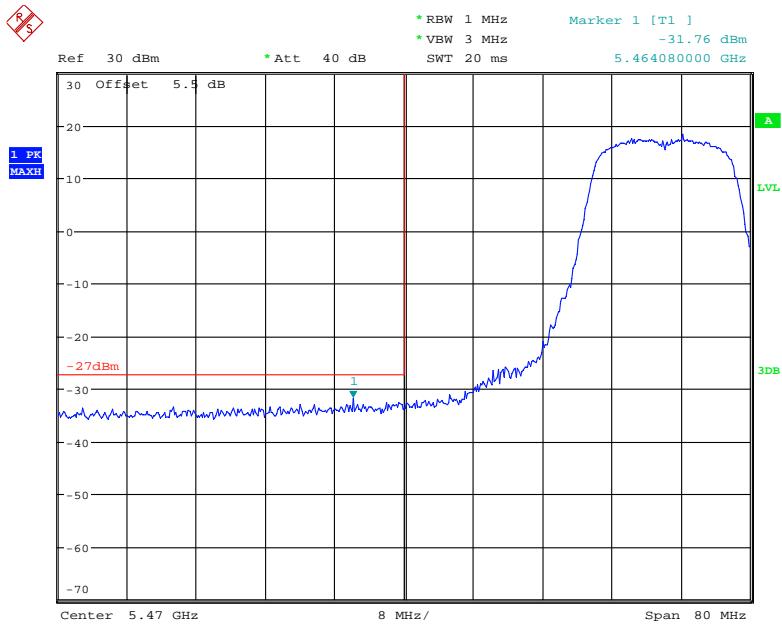
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802.11n ac40 Low Channel

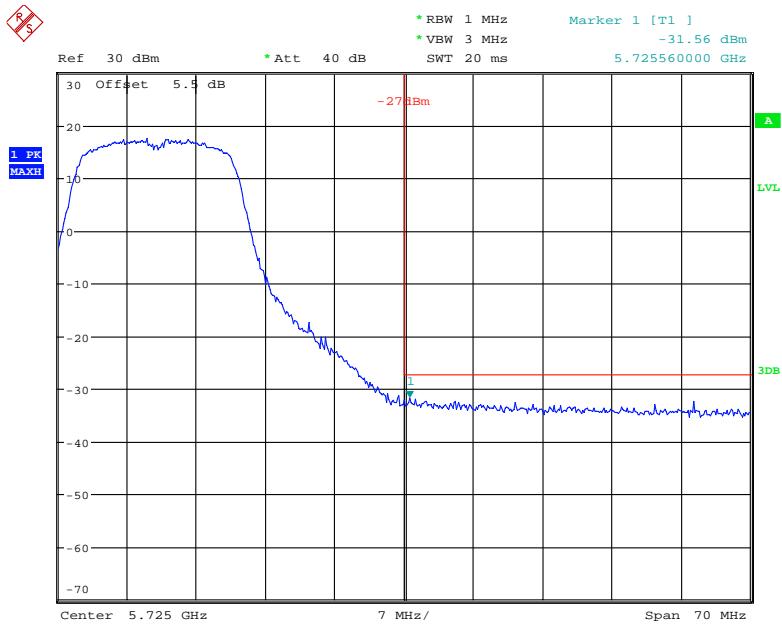


Date: 8.DEC.2017 15:57:53

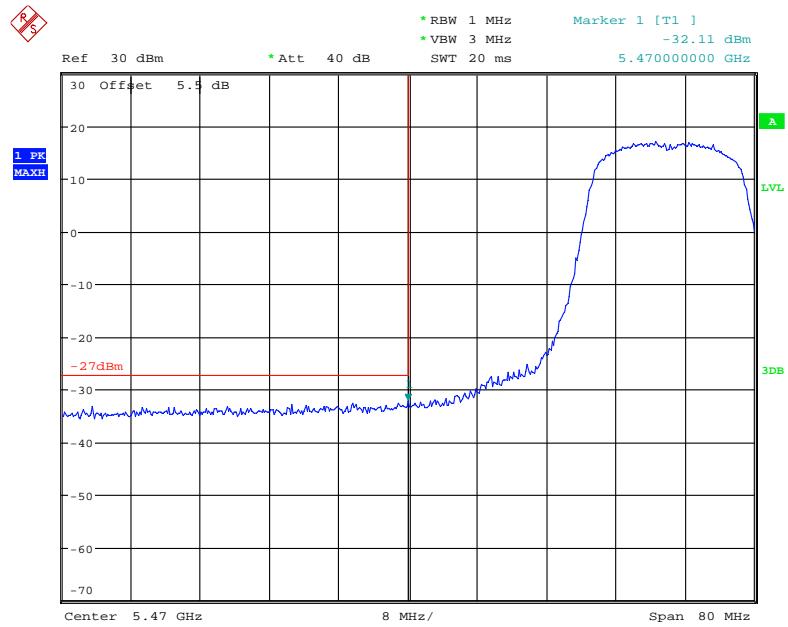
802.11n ac40 High Channel**802.11n ac80 Middle Channel**

5470-5725MHz**Main Chain:****802.11a Low Channel**

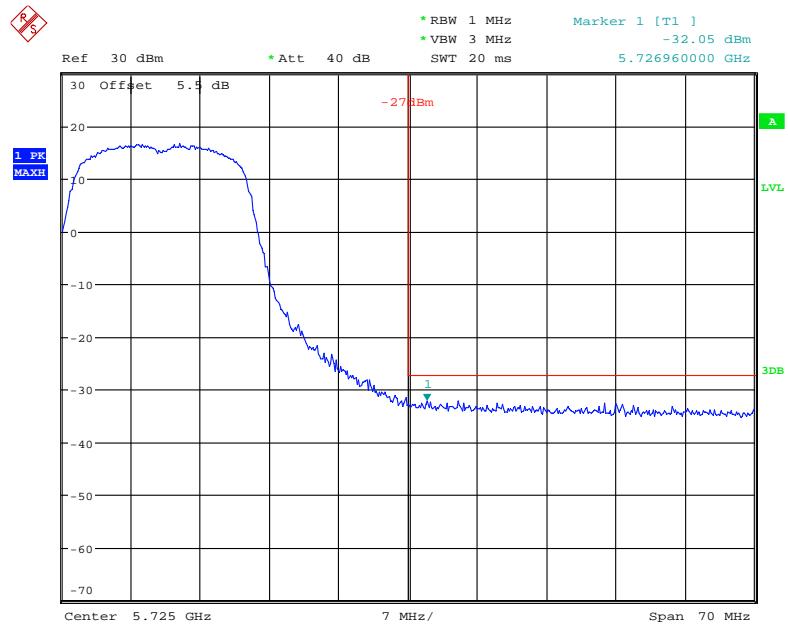
Date: 8.DEC.2017 13:44:45

802.11a High Channel

Date: 8.DEC.2017 13:47:17

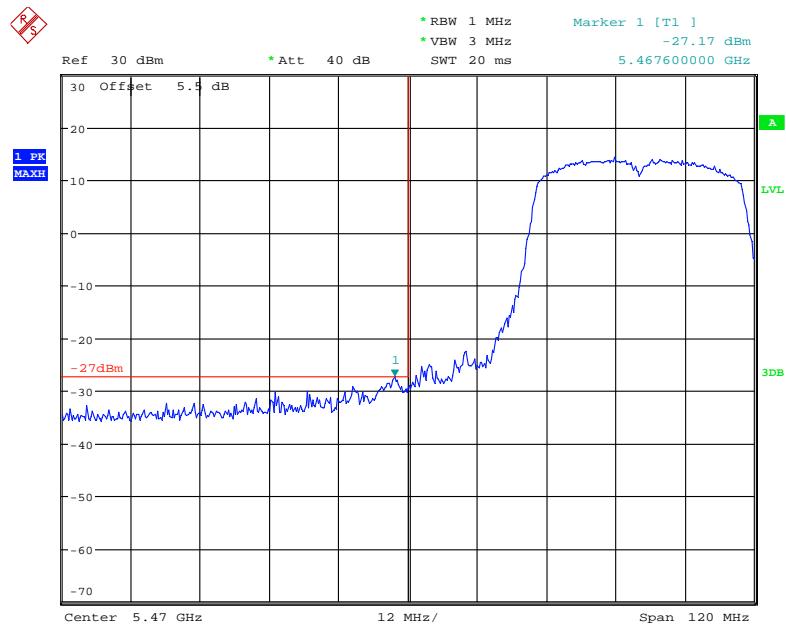
802.11n ht20 Low Channel

Date: 8.DEC.2017 13:52:49

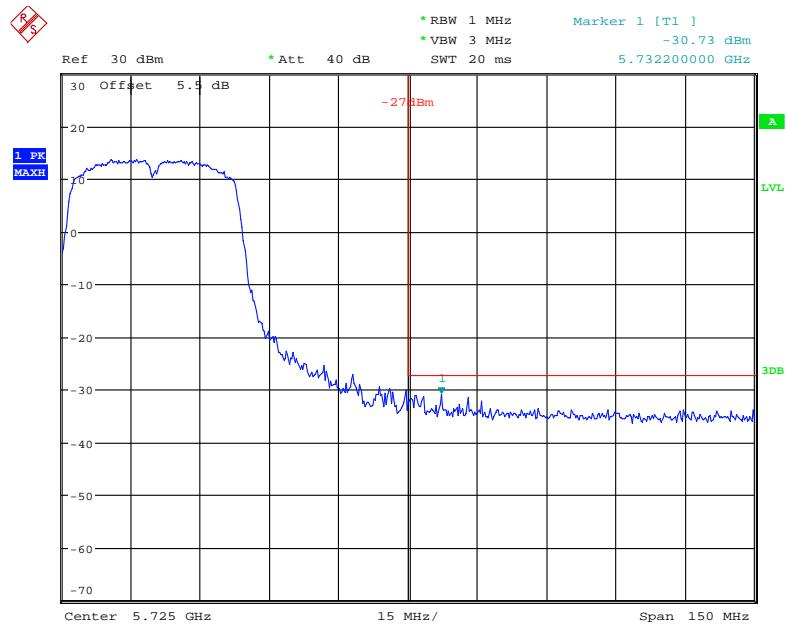
802.11n ht20 High Channel

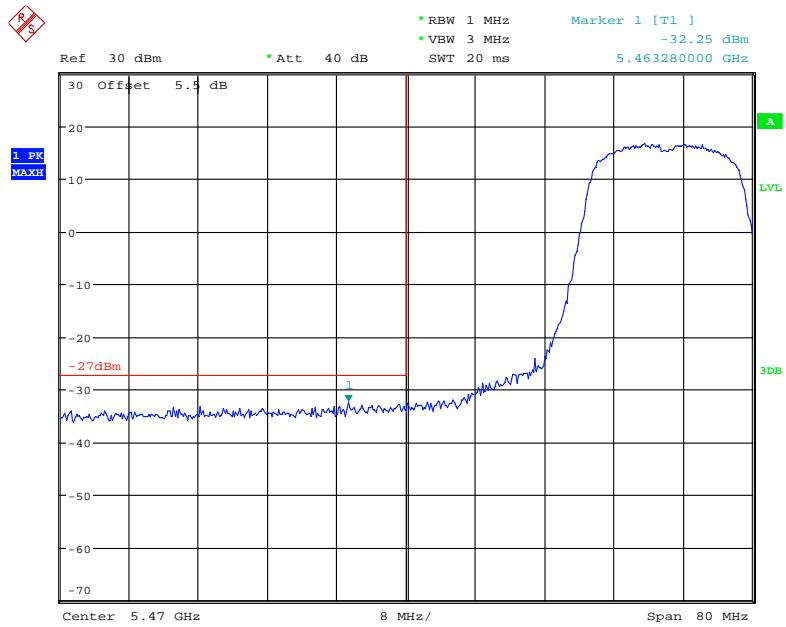
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802.11n ht40 Low Channel

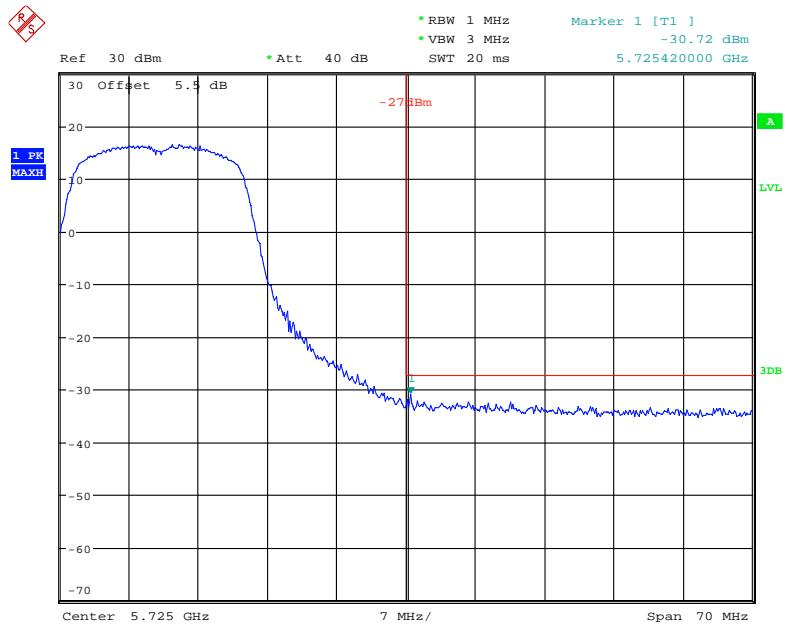


802.11n ht40 High Channel



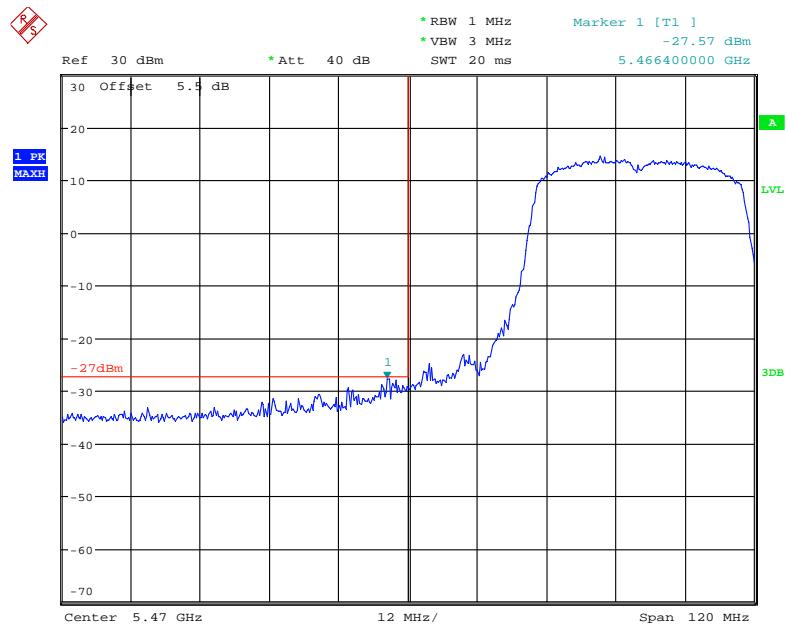
802.11n ac20 Low Channel

Date: 8.DEC.2017 13:54:23

802.11n ac20 High Channel

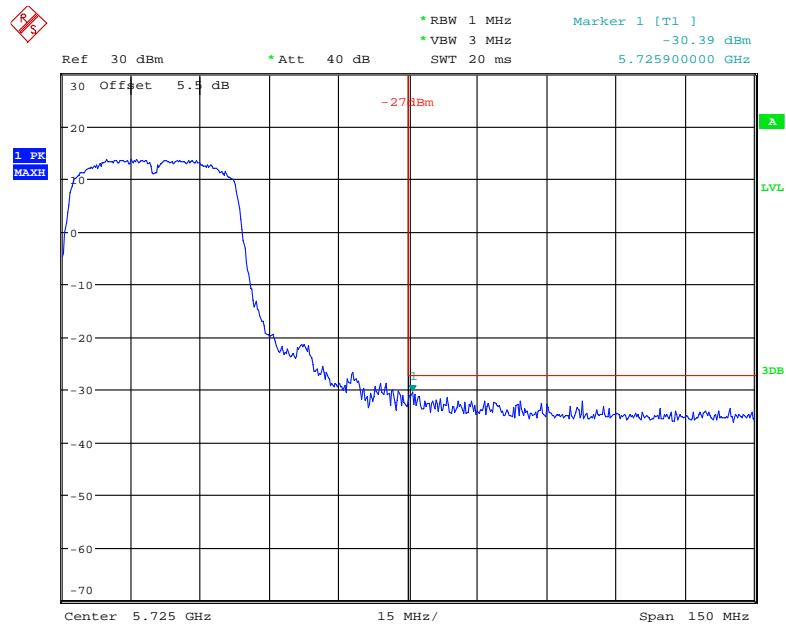
Date: 8.DEC.2017 13:56:58

802.11n ac40 Low Channel

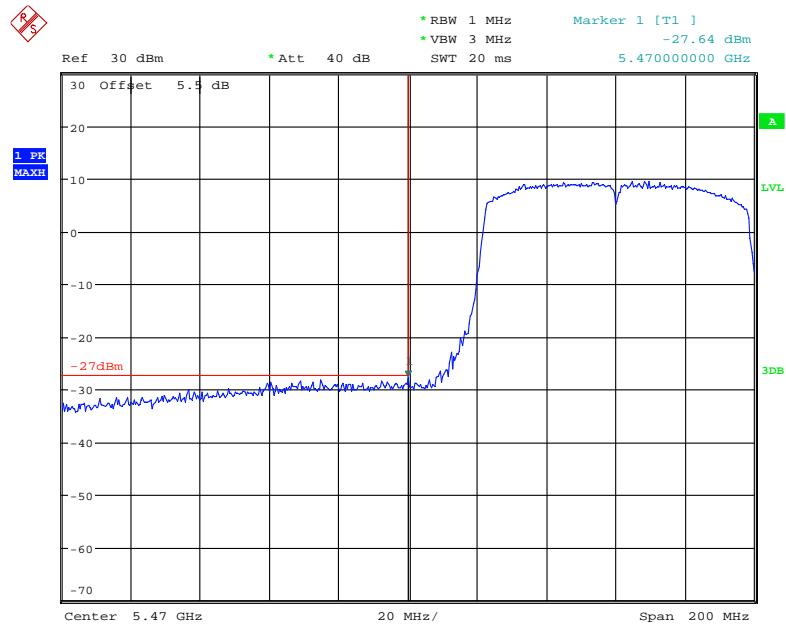


Date: 8.DEC.2017 14:09:34

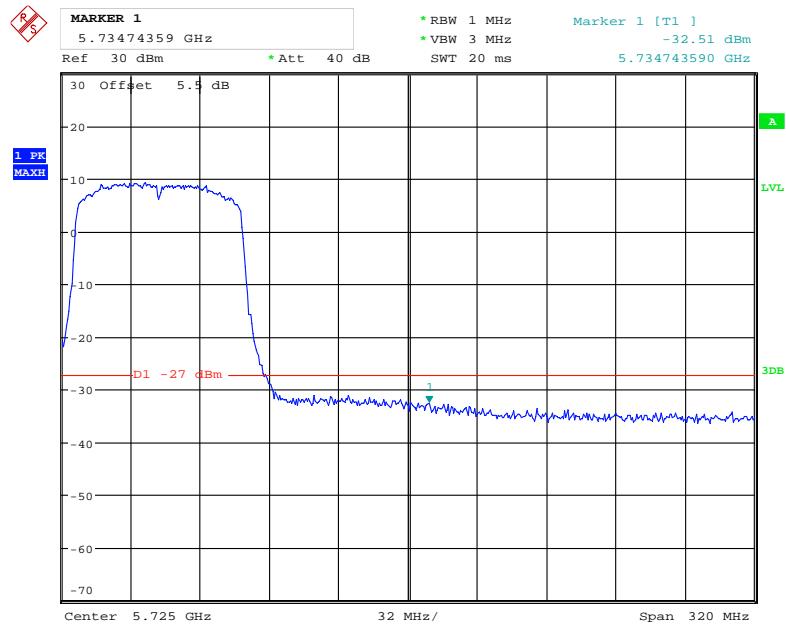
802.11n ac40 High Channel



Date: 8.DEC.2017 14:07:20

802.11n ac80 Low Channel

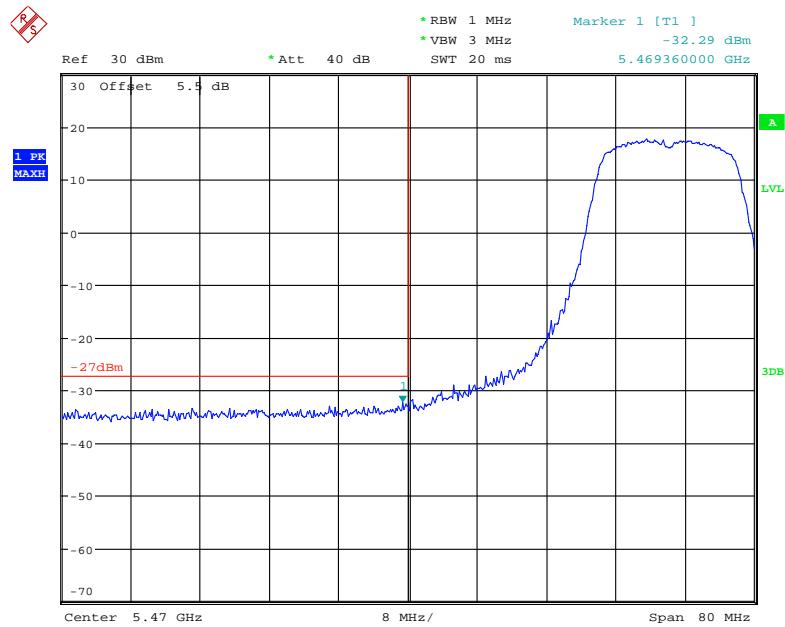
Date: 8.DEC.2017 14:12:34

802.11n ac80 High Channel

Date: 9.DEC.2017 10:37:13

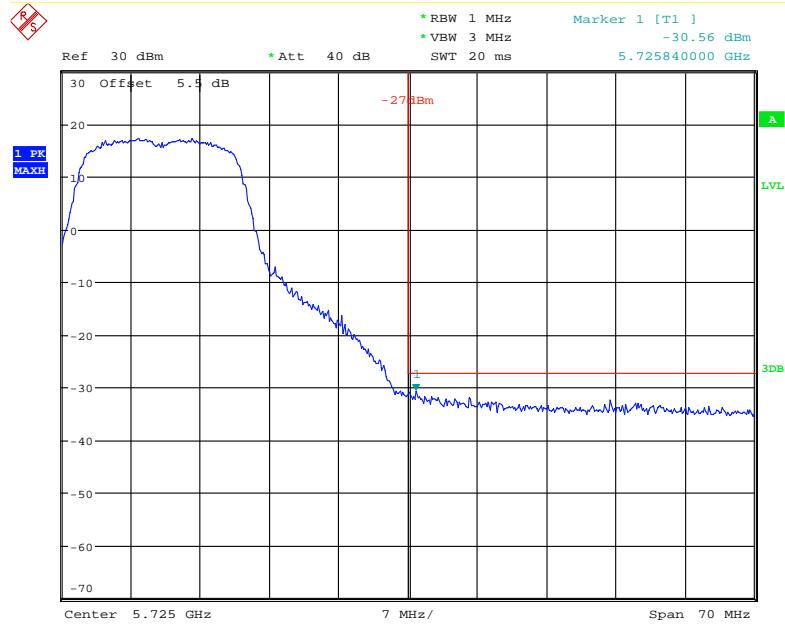
Aux Chain:

802.11a Low Channel

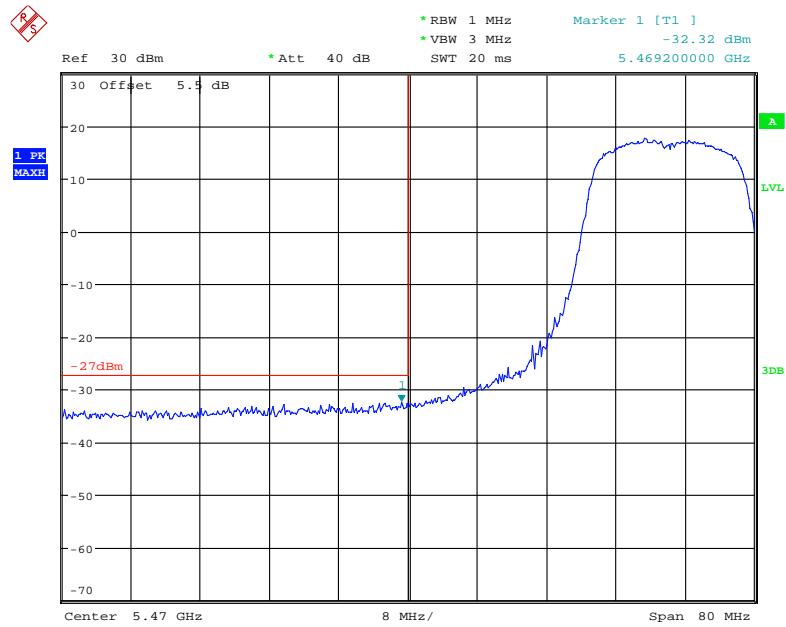


Date: 8.DEC.2017 16:21:13

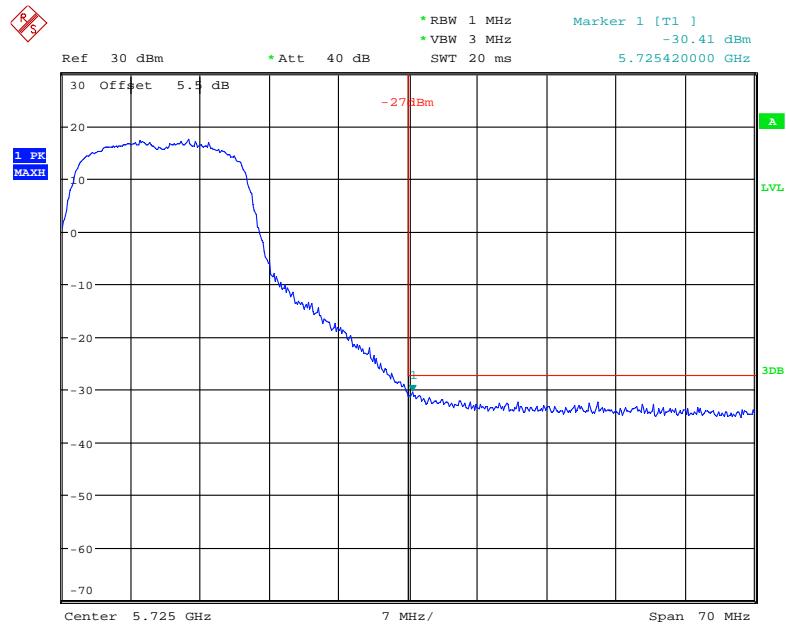
802.11a High Channel



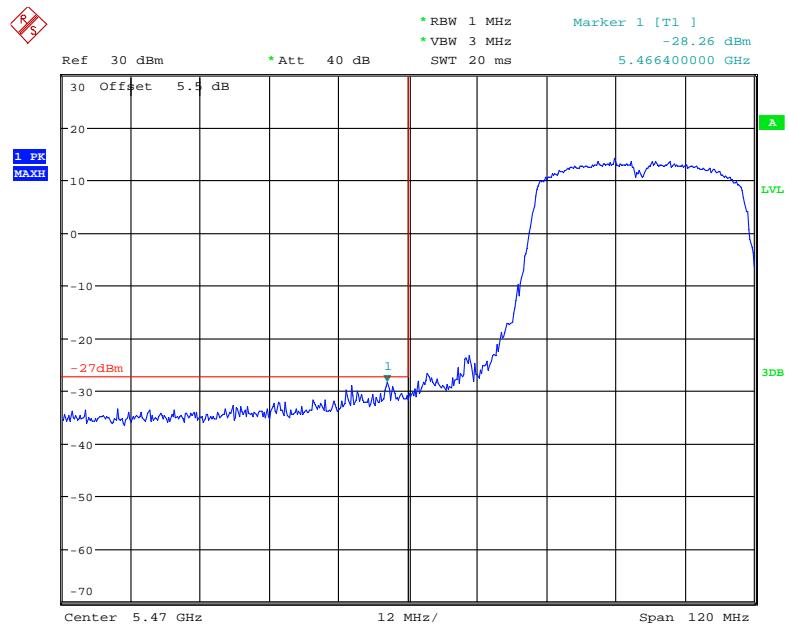
Date: 8.DEC.2017 16:23:33

802.11n ht20 Low Channel

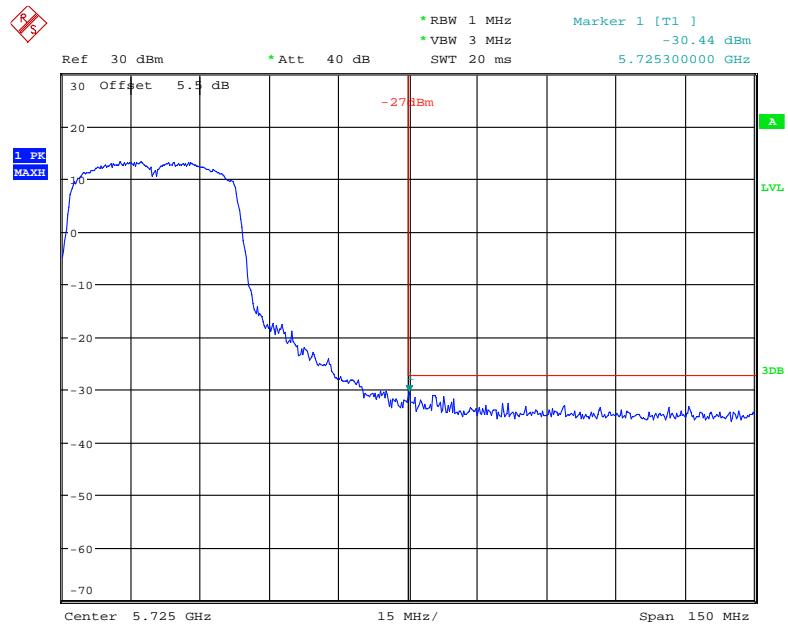
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802.11n ht20 High Channel

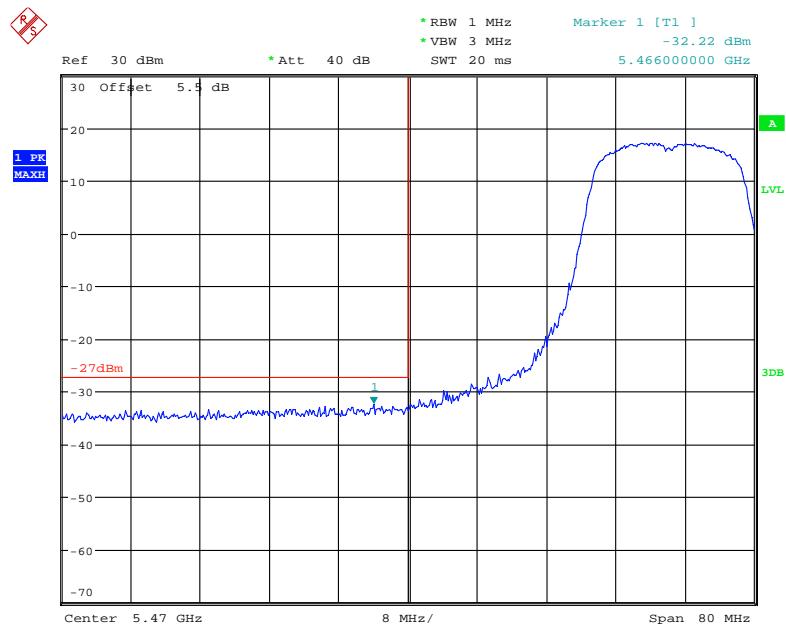
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802.11n ht40 Low Channel

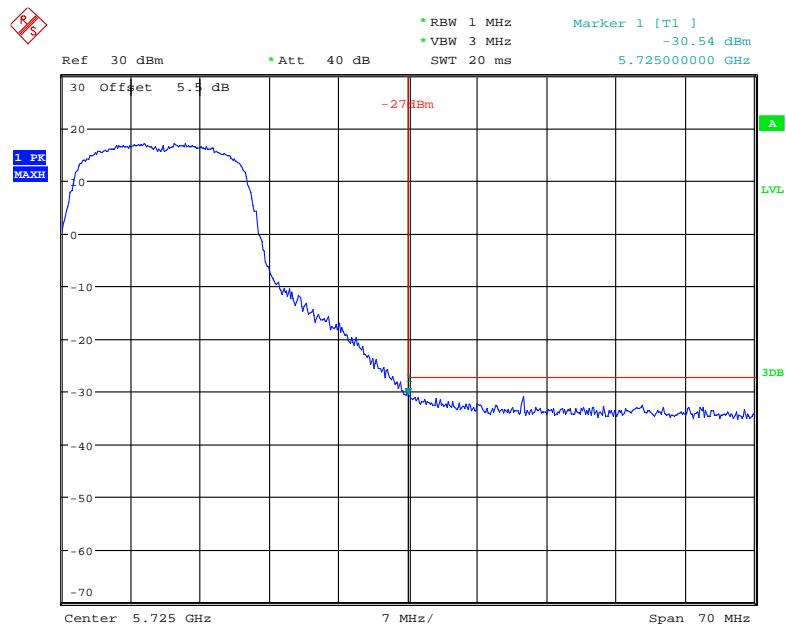
Date: 8.DEC.2017 16:39:21

802.11n ht40 High Channel

Date: 8.DEC.2017 16:50:14

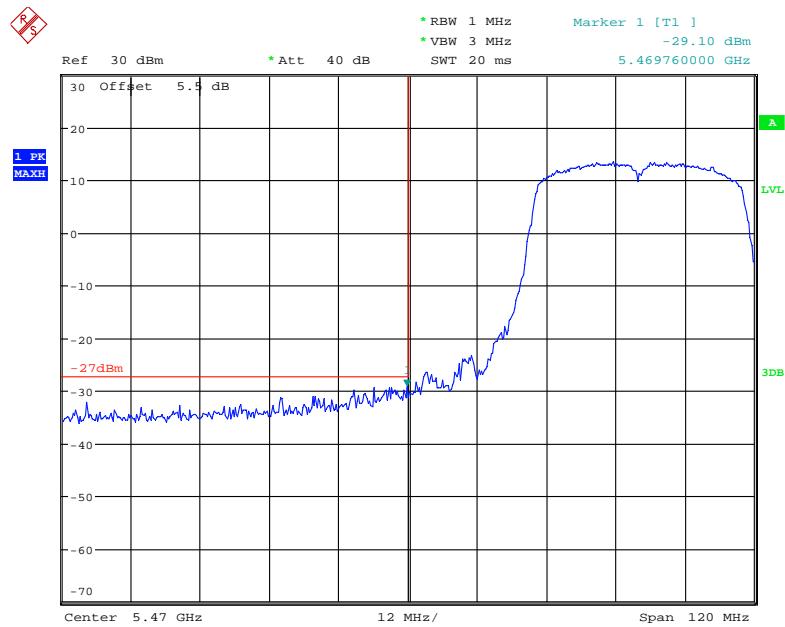
802.11n ac20 Low Channel

Date: 8.DEC.2017 16:33:14

802.11n ac20 High Channel

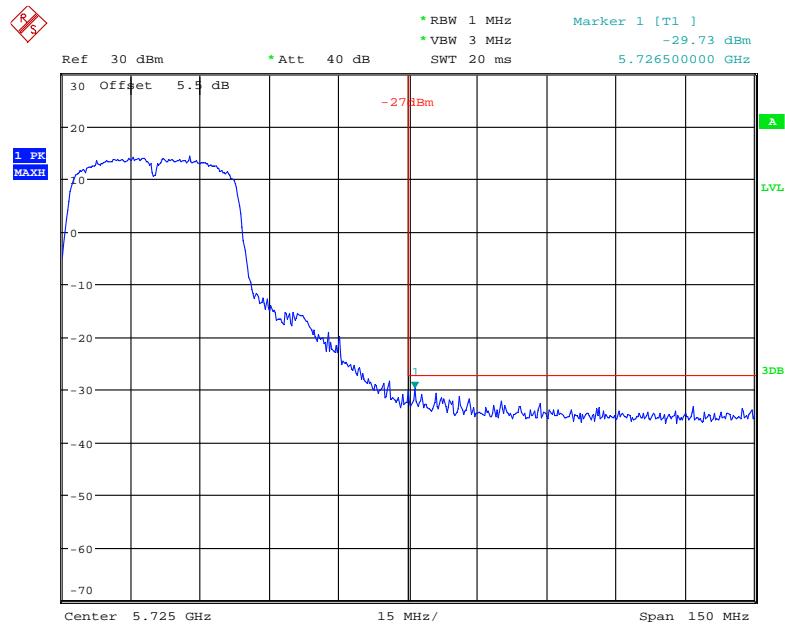
Date: 8.DEC.2017 16:35:44

802.11n ac40 Low Channel

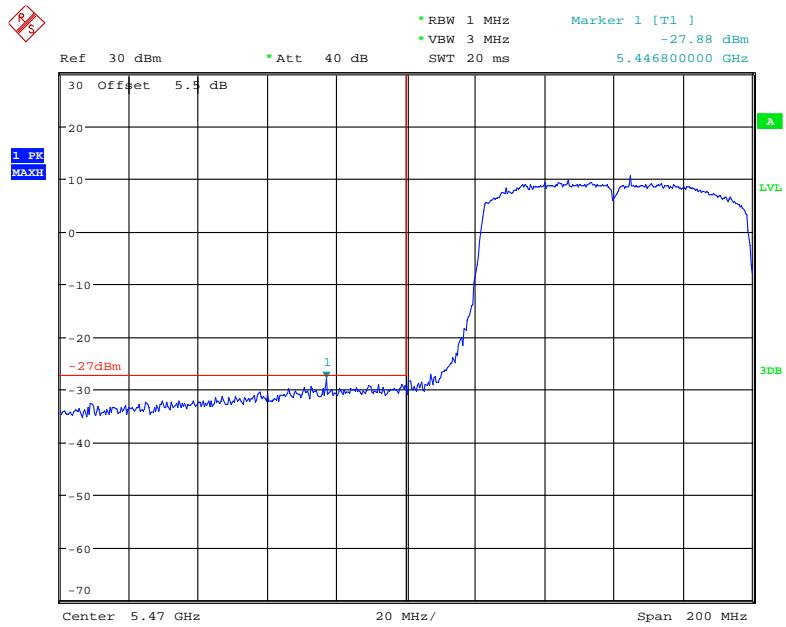


Date: 8.DEC.2017 16:41:09

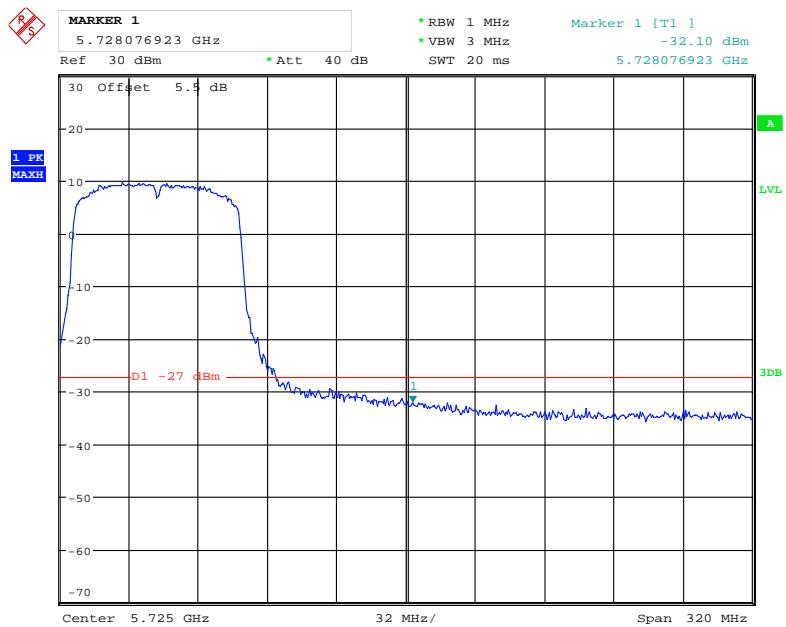
802.11n ac40 High Channel



Date: 8.DEC.2017 16:43:56

802.11n ac80 Low Channel

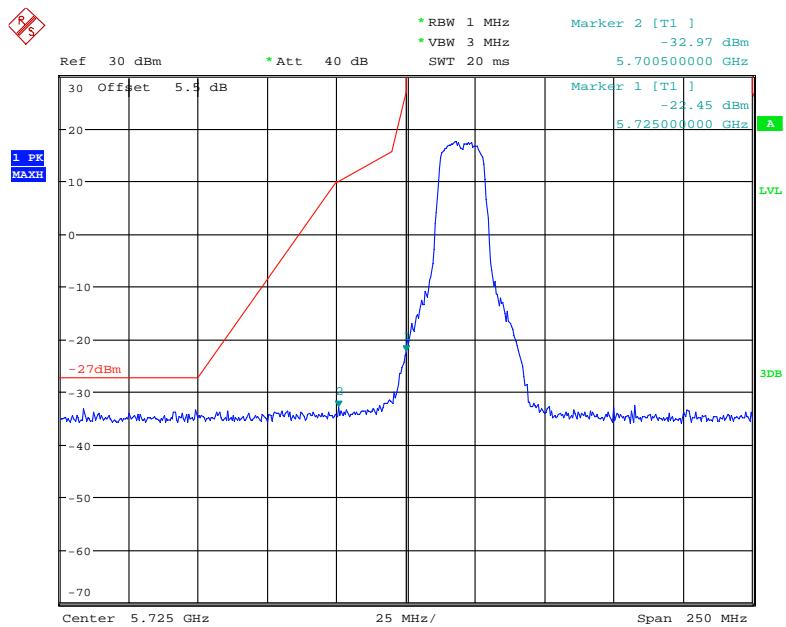
Date: 8.DEC.2017 16:52:19

802.11n ac80 High Channel

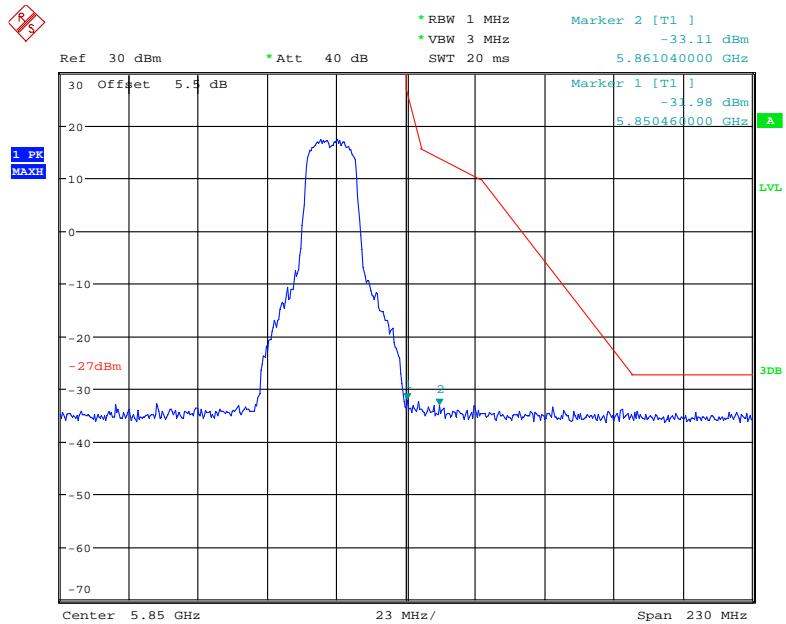
Date: 9.DEC.2017 10:33:42

5725-5850MHz

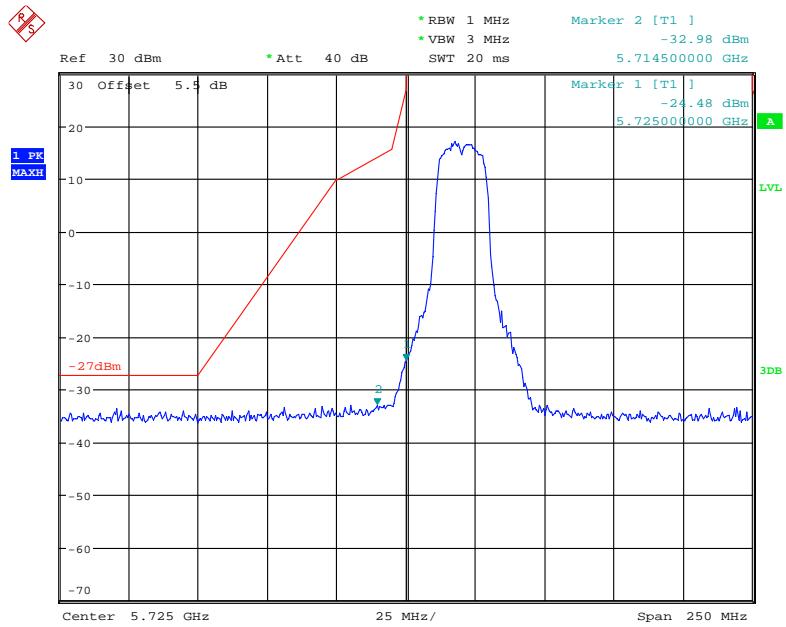
Main Chain:

802.11a Low Channel

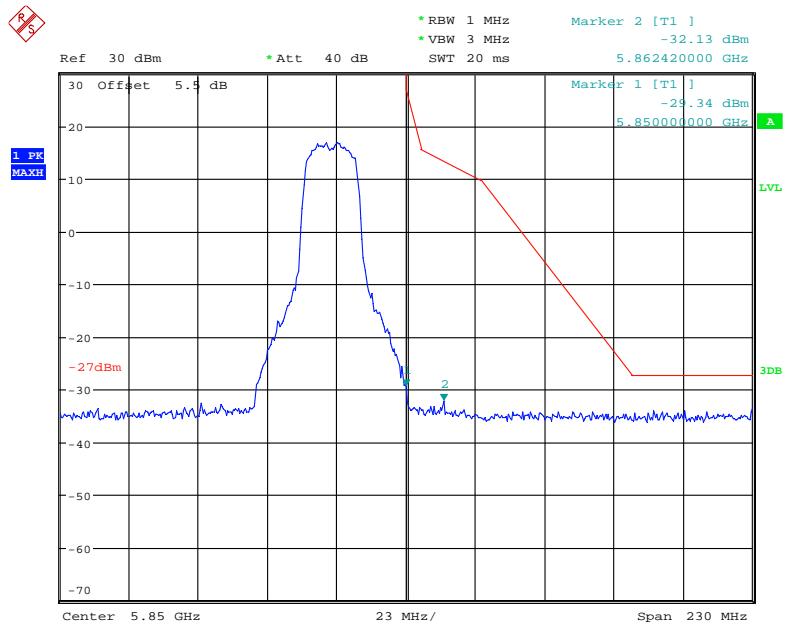
Date: 8.DEC.2017 14:34:25

802.11a High Channel

Date: 8.DEC.2017 14:38:53

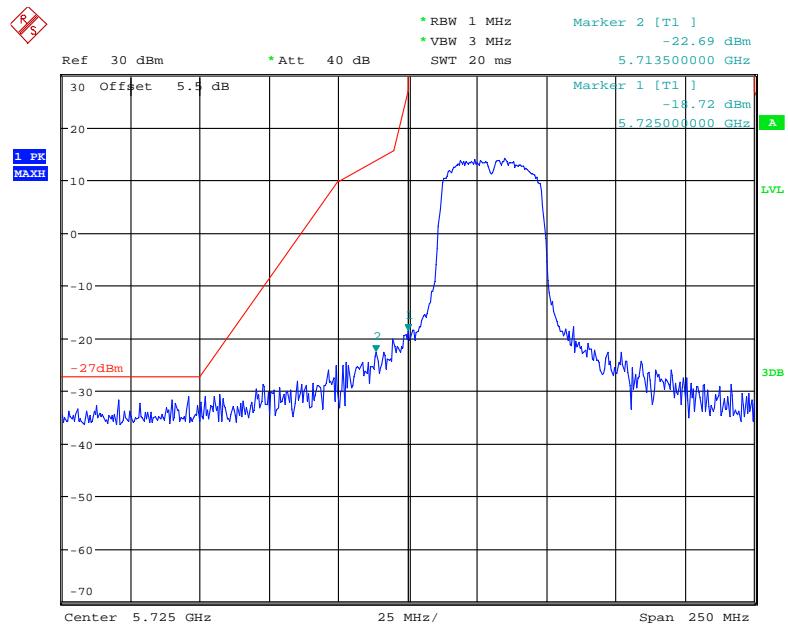
802.11n ht20 Low Channel

Date: 8.DEC.2017 14:41:08

802.11n ht20 High Channel

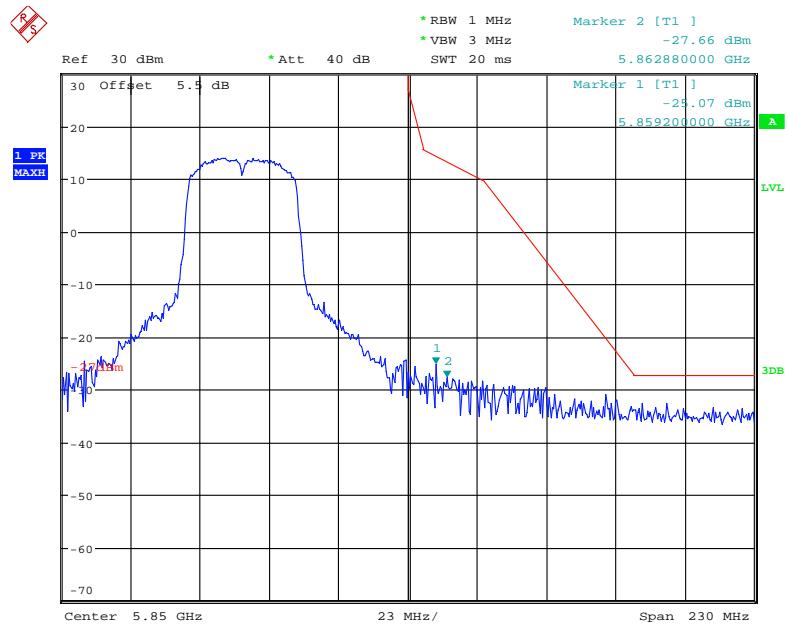
Date: 8.DEC.2017 14:45:17

802.11n ht40 Low Channel

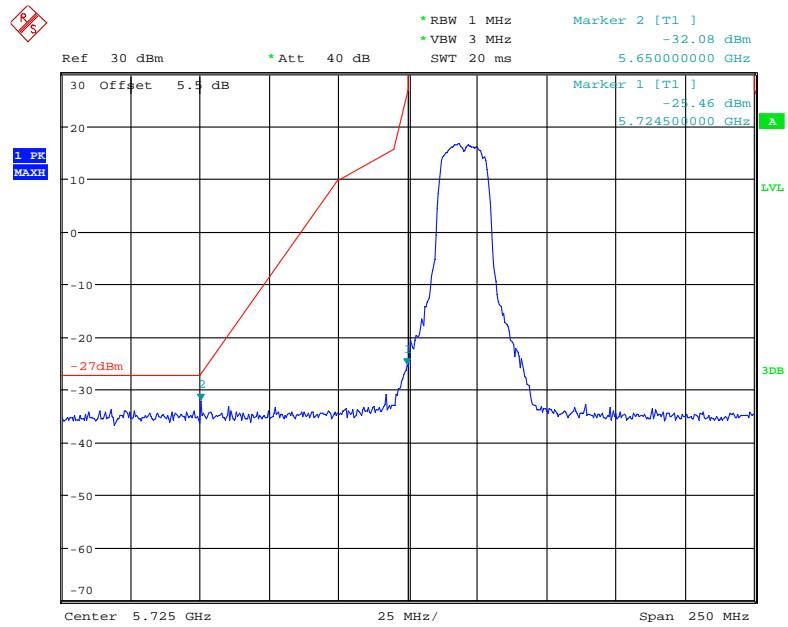


Date: 11.DEC.2017 13:27:12

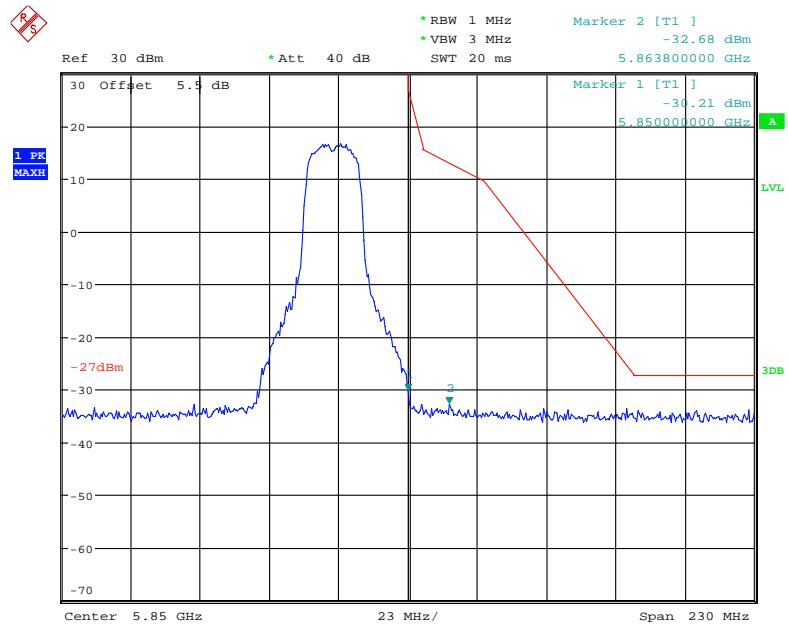
802.11n ht40 High Channel



Date: 8.DEC.2017 15:06:39

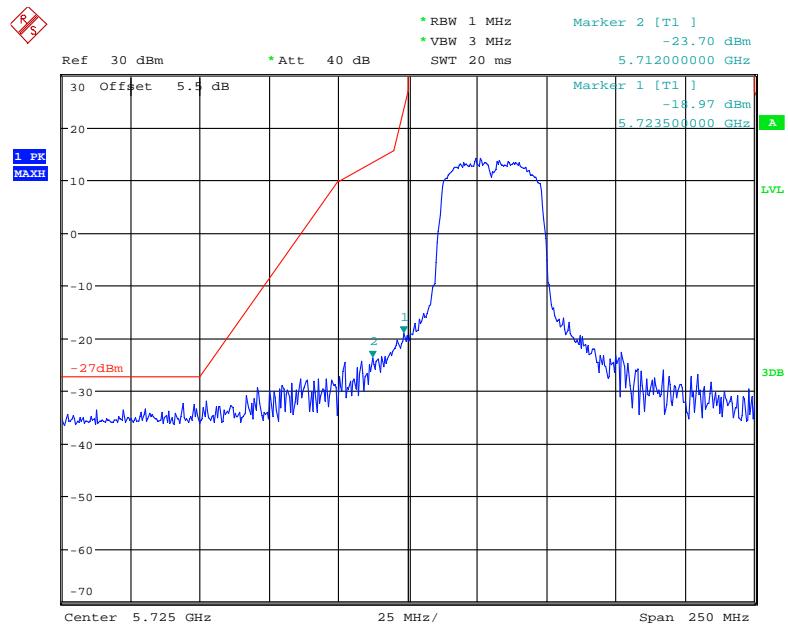
802.11n ac20 Low Channel

Date: 8.DEC.2017 14:50:28

802.11n ac20 High Channel

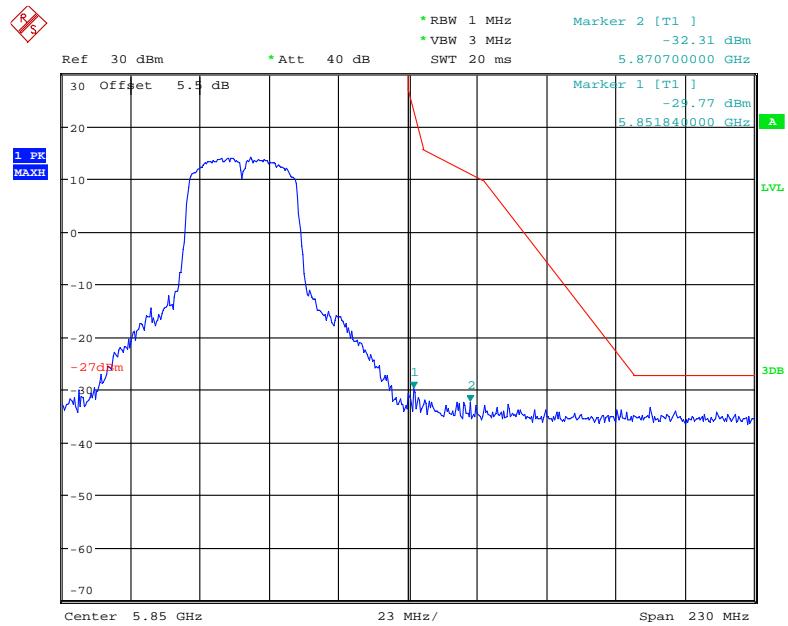
Date: 8.DEC.2017 14:47:24

802.11n ac40 Low Channel



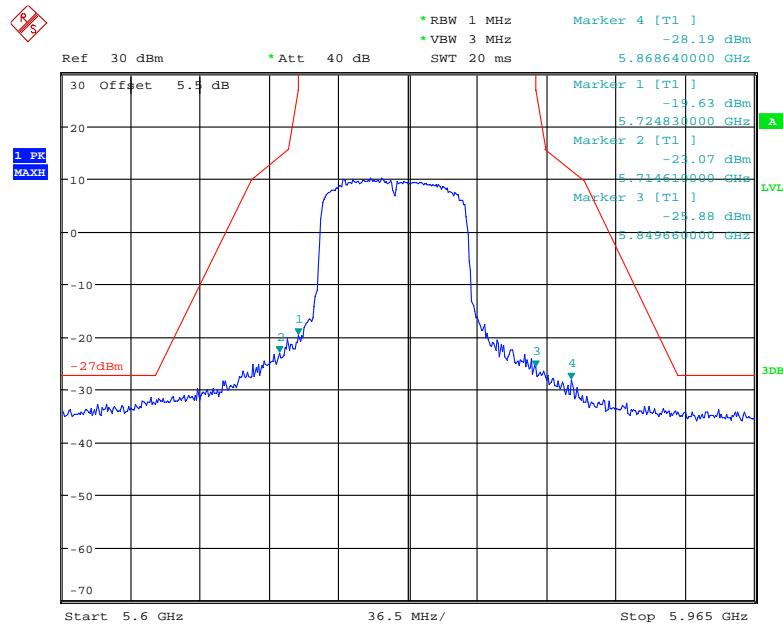
Date: 11.DEC.2017 13:25:13

802.11n ac40 High Channel



Date: 8.DEC.2017 15:08:36

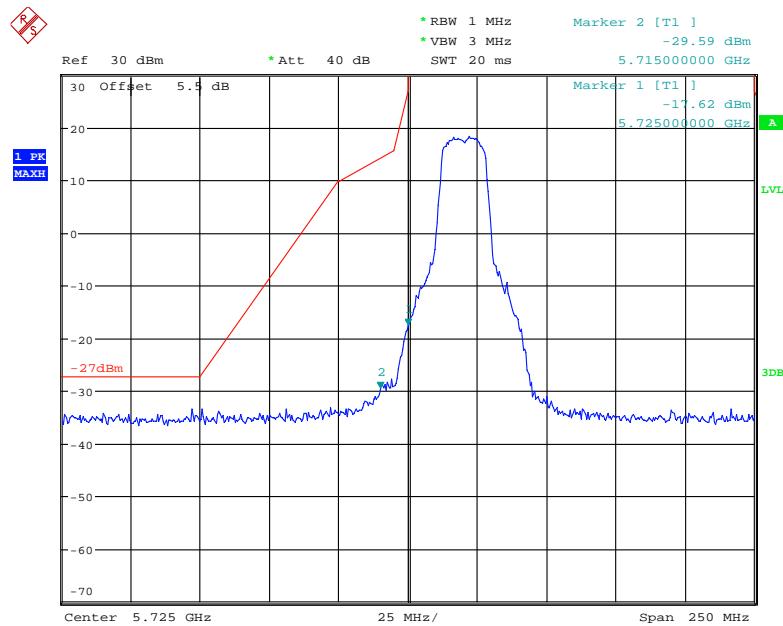
802.11n ac80 Middle Channel



Date: 8.DEC.2017 15:20:13

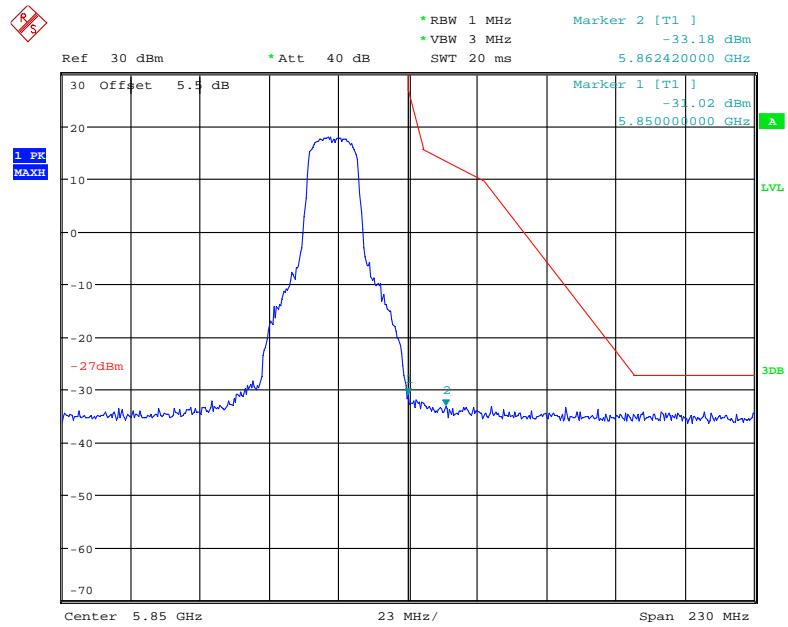
Aux Chain:

802.11a Low Channel



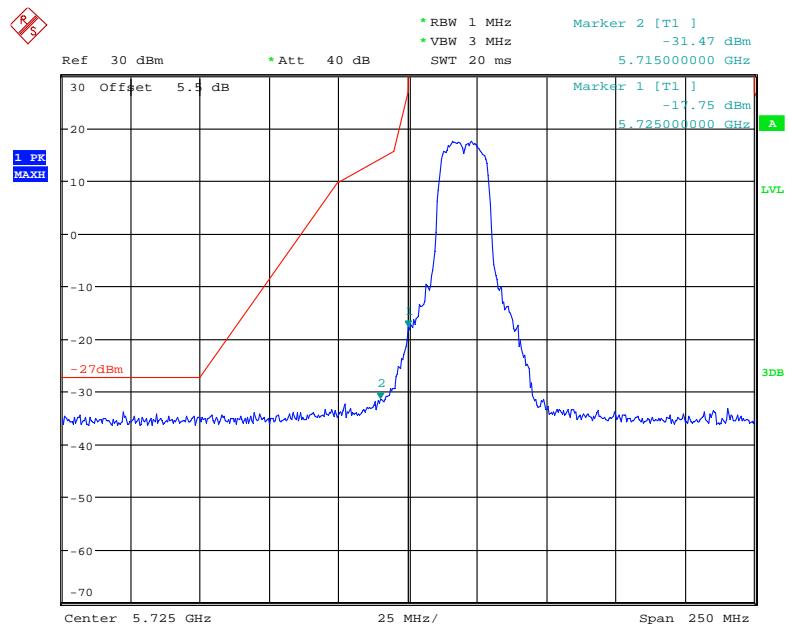
Date: 9.DEC.2017 09:21:14

802.11a High Channel

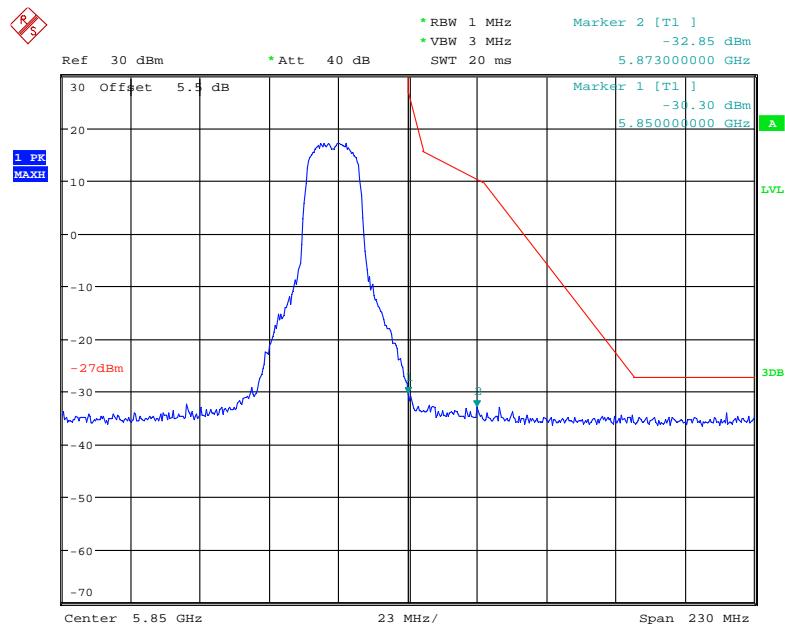


Date: 9.DEC.2017 09:24:33

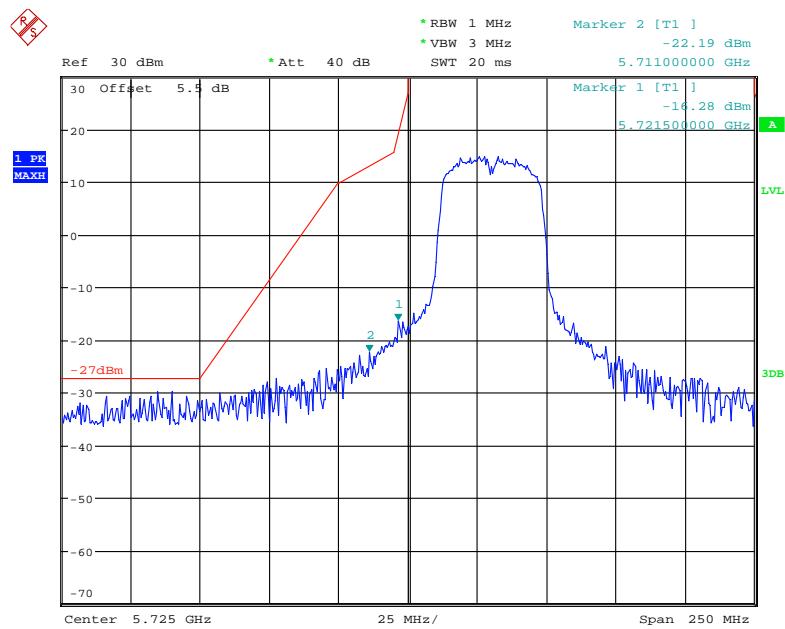
802.11n ht20 Low Channel



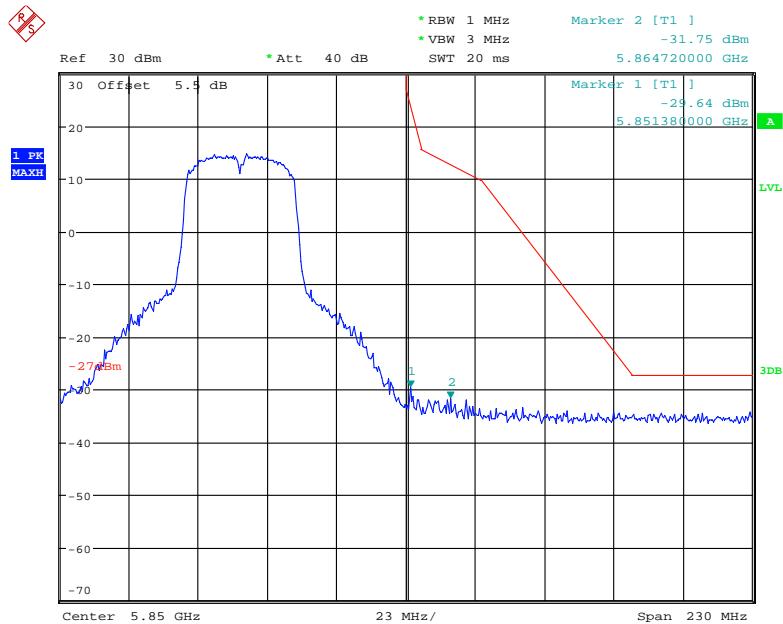
Date: 9.DEC.2017 09:29:50

802.11n ht20 High Channel

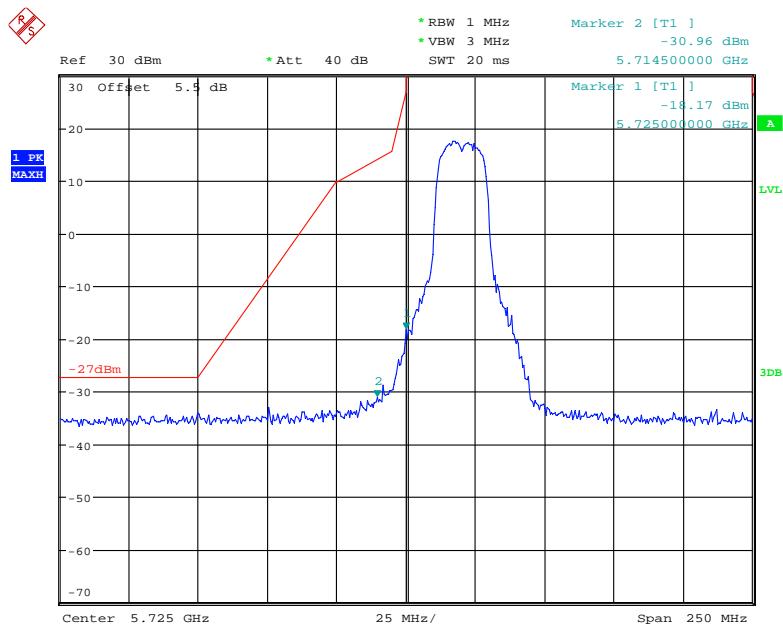
Date: 9.DEC.2017 09:26:42

802.11n ht40 Low Channel

Date: 11.DEC.2017 13:30:06

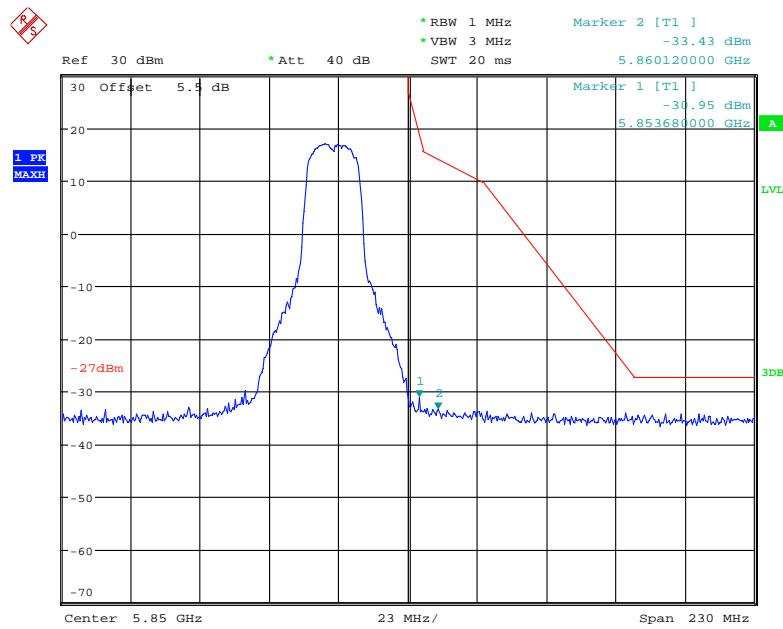
802.11n ht40 High Channel

Date: 9.DEC.2017 09:48:07

802.11n ac20 Low Channel

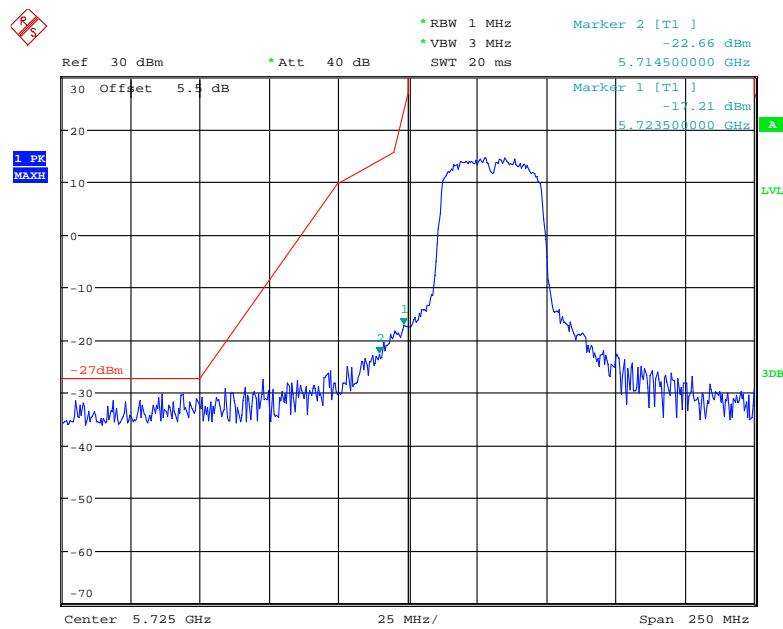
Date: 9.DEC.2017 09:31:43

802.11n ac20 High Channel



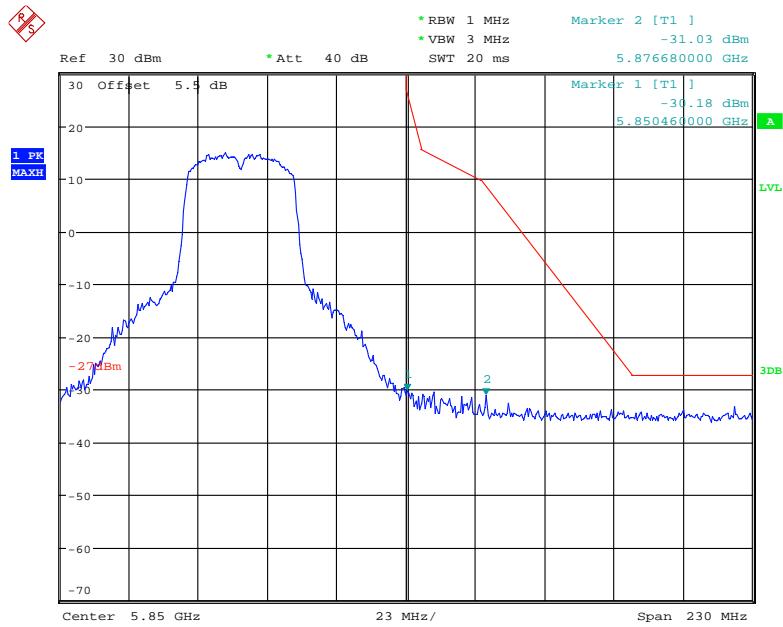
Date: 9.DEC.2017 09:34:46

802.11n ac40 Low Channel



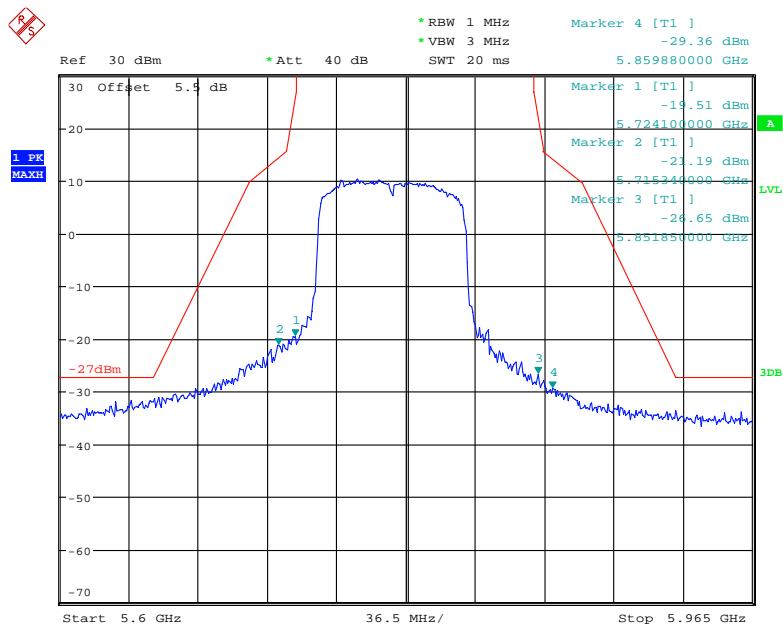
Date: 11.DEC.2017 13:32:03

802.11n ac40 High Channel



Date: 9.DEC.2017 09:46:09

802.11n ac80 Middle Channel

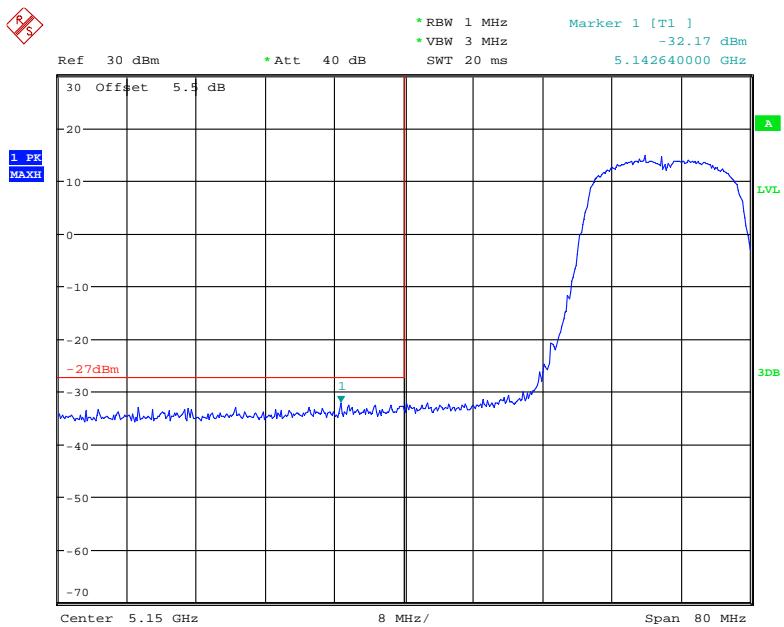


Date: 9.DEC.2017 09:50:16

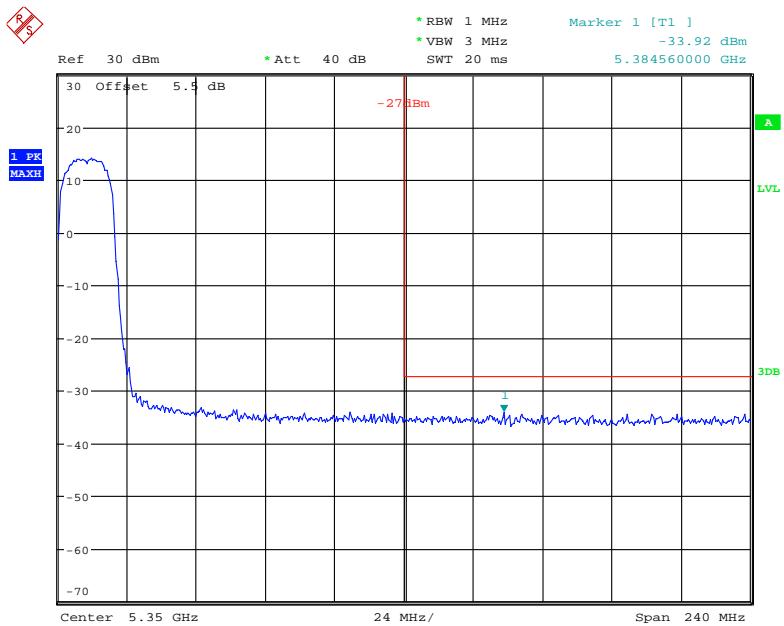
MIMO:

5150-5250MHz(the antenna gain was offset in the display, all emission under limit more than 3dBc, so 2TX mode also compliance the requirement):

Main Chain:

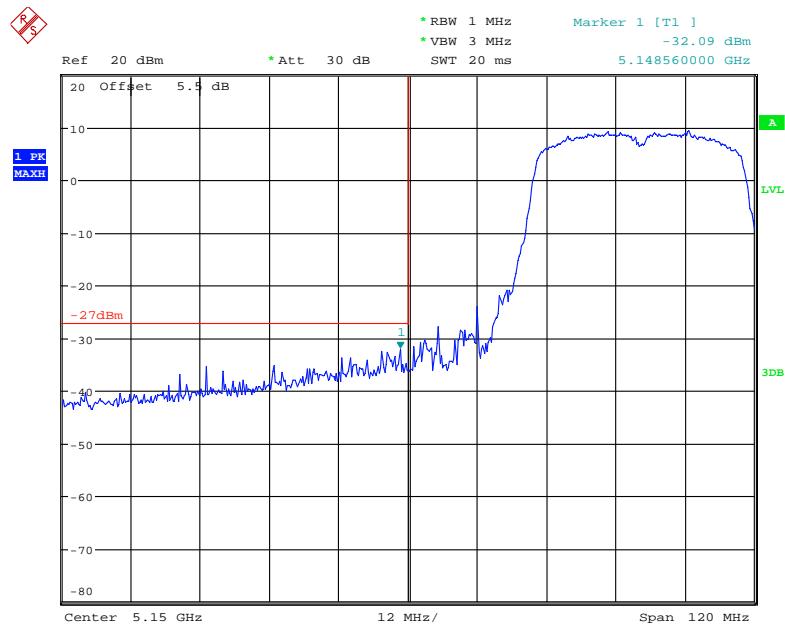
802.11n ht20 Low Channel

Date: 9.DEC.2017 11:25:03

802.11n ht20 High Channel

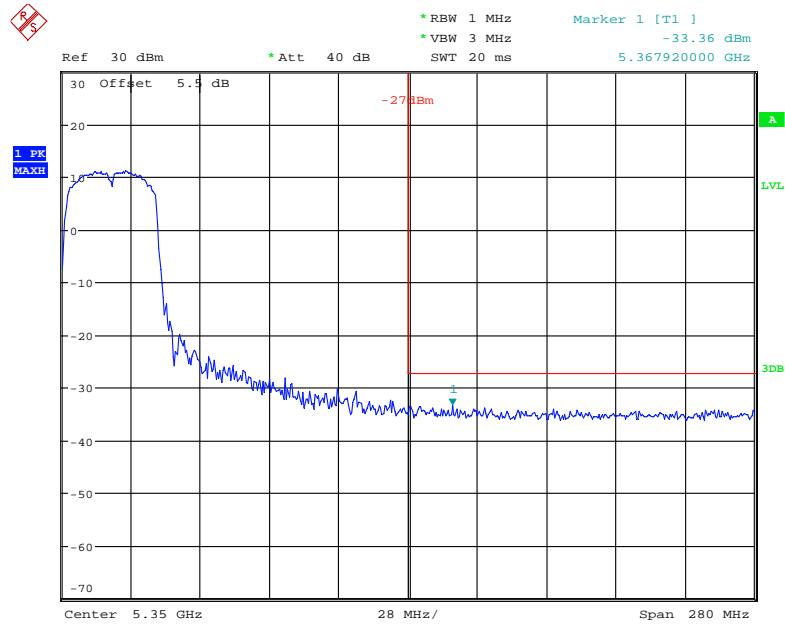
Date: 9.DEC.2017 11:27:41

802.11n ht40 Low Channel

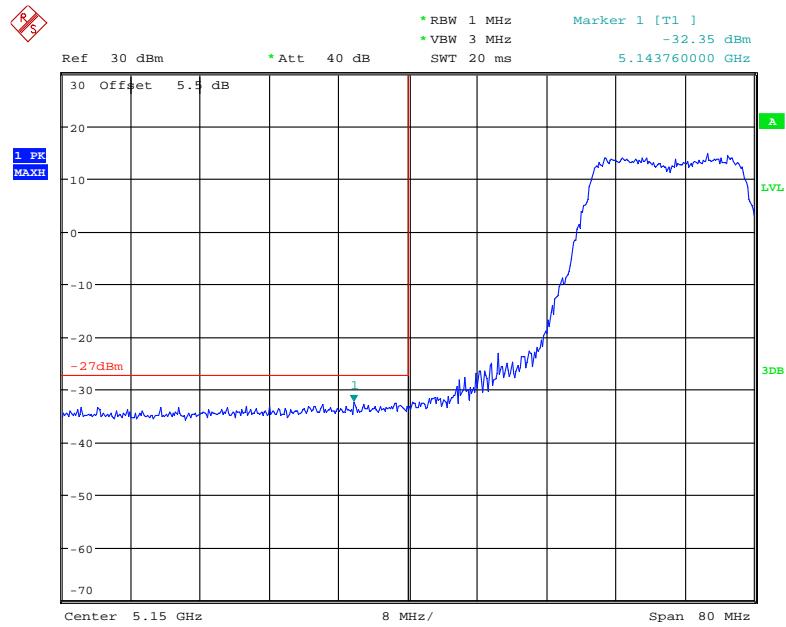


Date: 11.DEC.2017 10:19:57

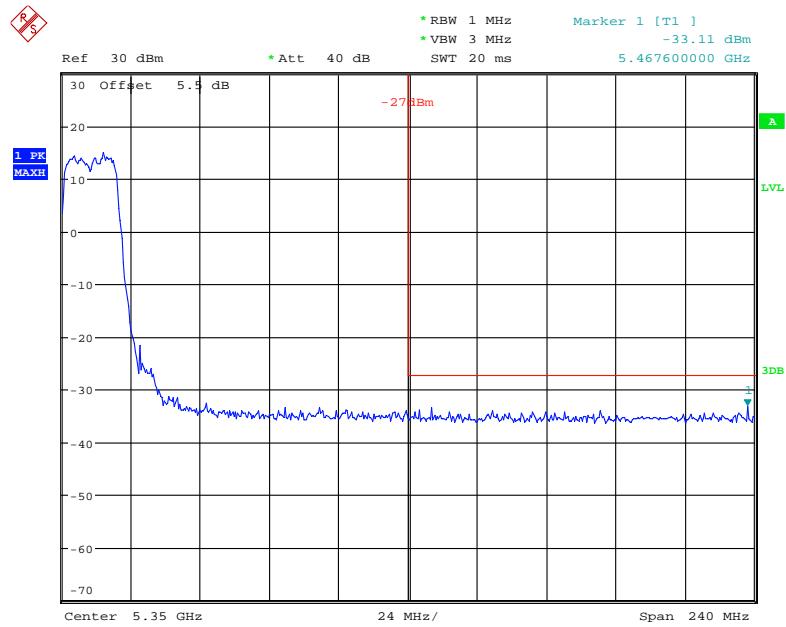
802.11n ht40 High Channel



Date: 9.DEC.2017 15:33:14

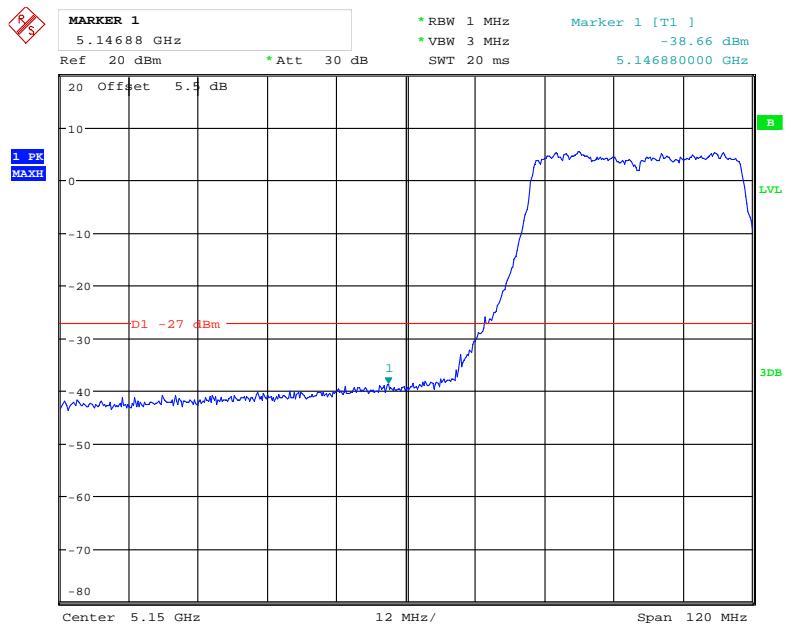
802.11n ac20 Low Channel

Date: 9.DEC.2017 11:29:28

802.11n ac20 High Channel

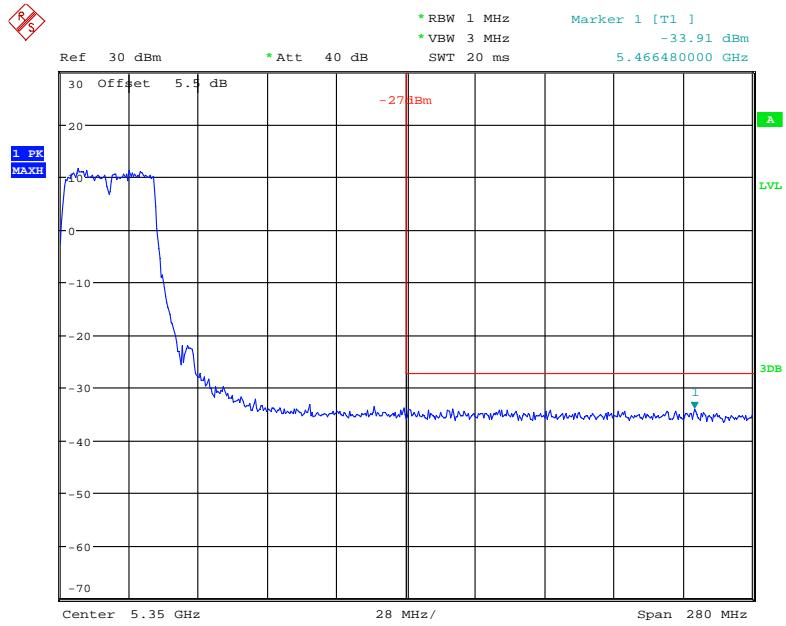
Date: 9.DEC.2017 13:14:41

802.11n ac40 Low Channel

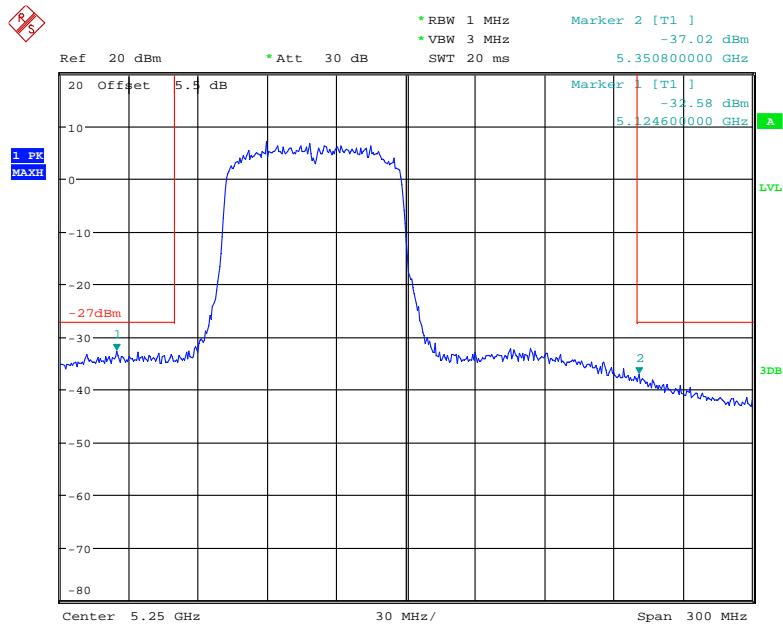


Date: 11.DEC.2017 10:41:19

802.11n ac40 High Channel

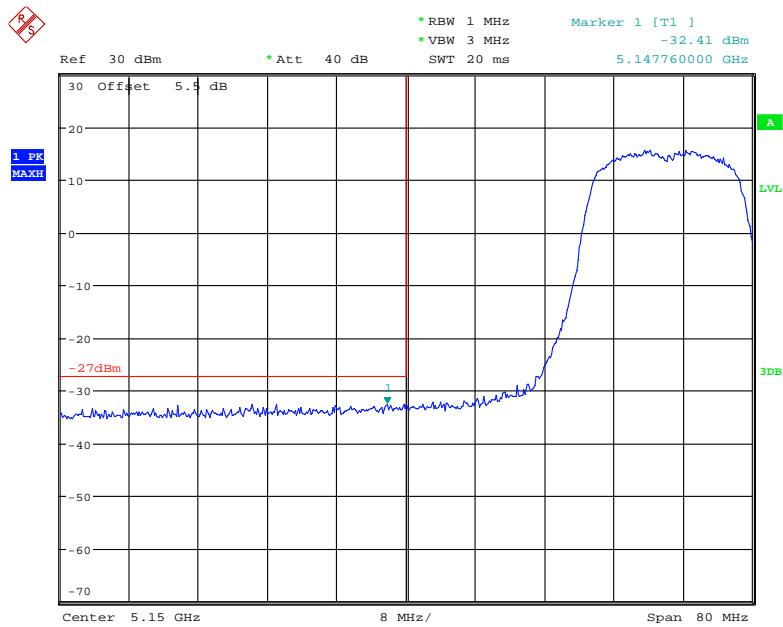


Date: 9.DEC.2017 15:38:51

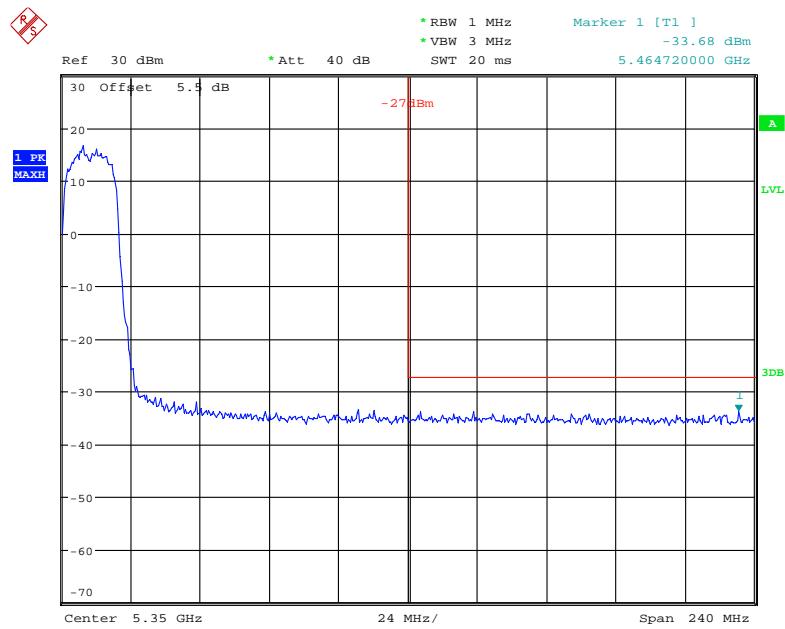
802.11n ac80 Middle Channel

Date: 11.DEC.2017 10:18:43

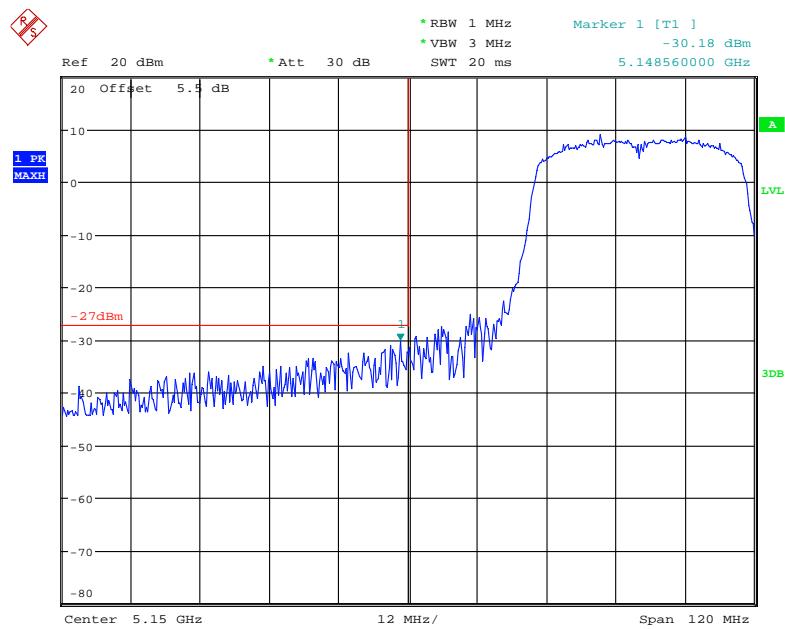
Aux Chain:

802.11n ht20 Low Channel

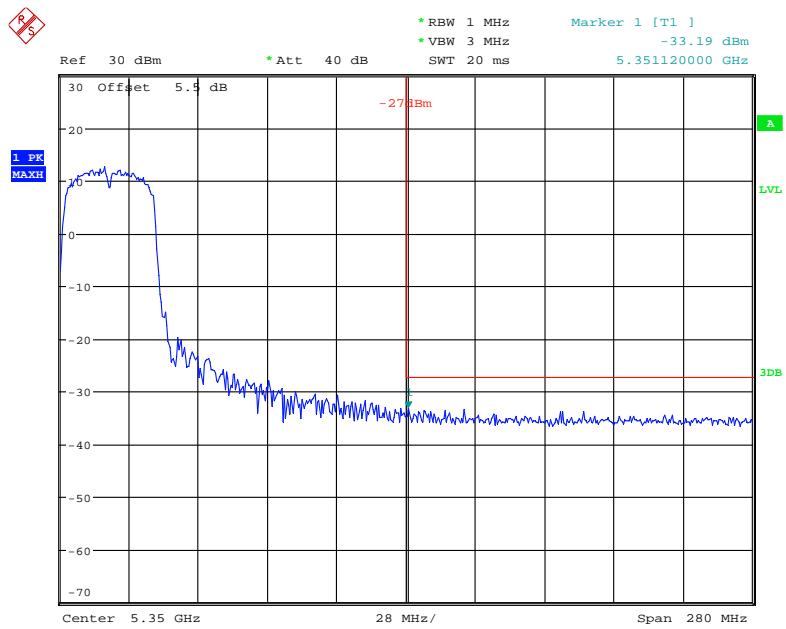
Date: 9.DEC.2017 13:20:34

802.11n ht20 High Channel

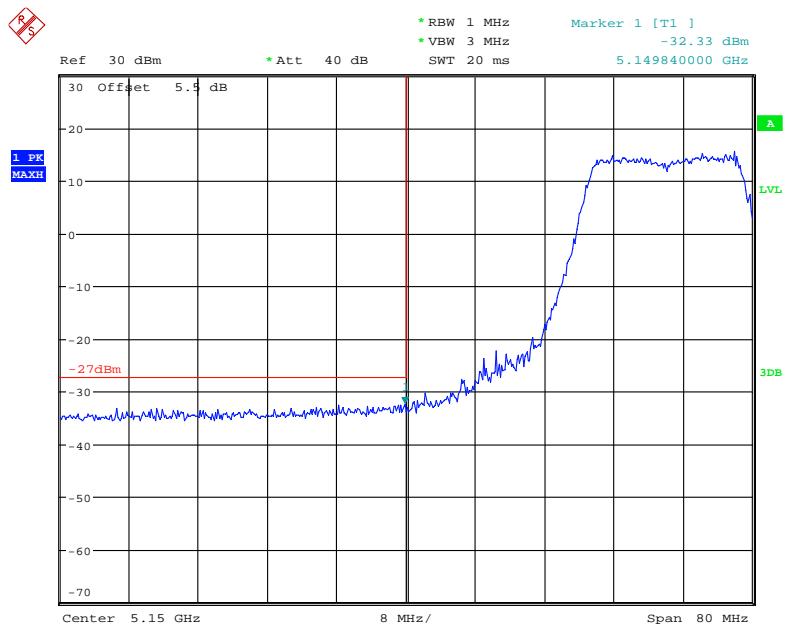
Date: 9.DEC.2017 13:22:54

802.11n ht40 Low Channel

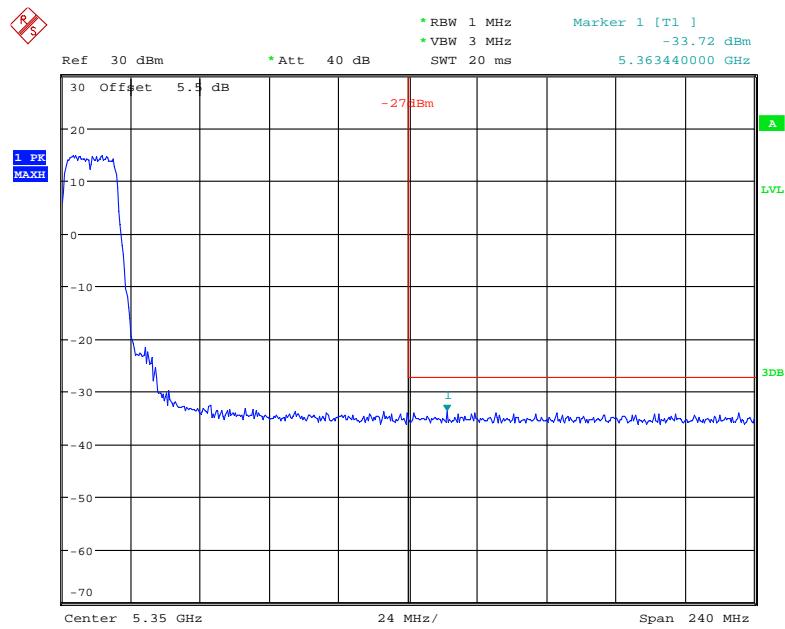
Date: 11.DEC.2017 10:25:11

802.11n ht40 High Channel

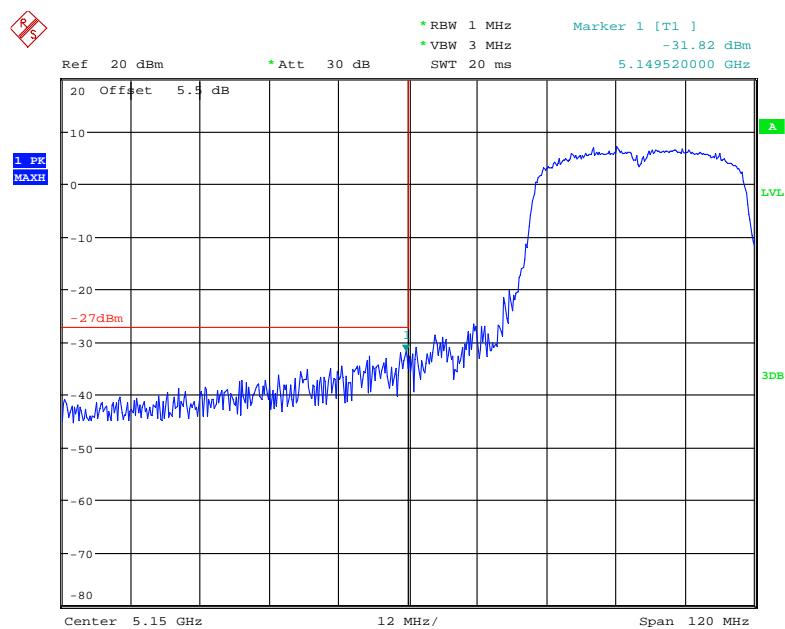
Date: 9.DEC.2017 14:50:22

802.11n ac20 Low Channel

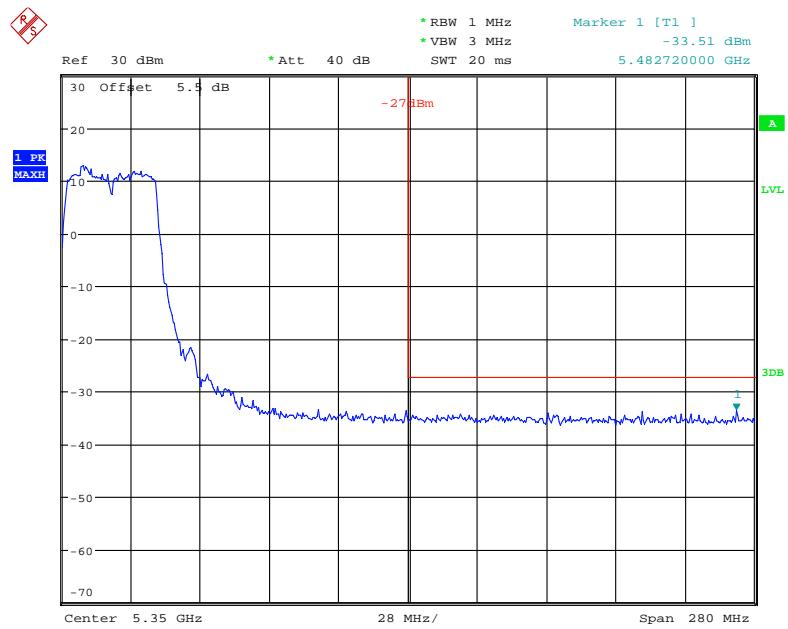
Date: 9.DEC.2017 13:19:00

802.11n ac20 High Channel

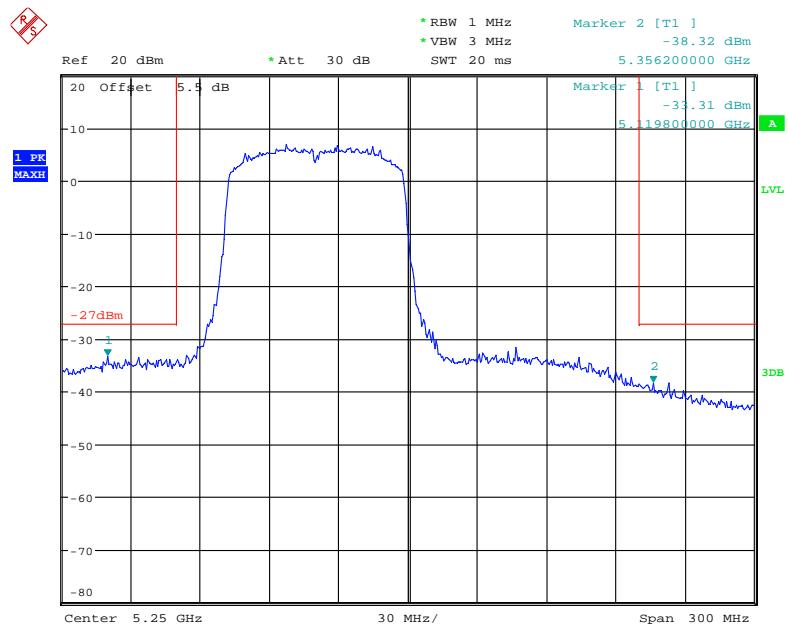
Date: 9.DEC.2017 13:16:29

802.11n ac40 Low Channel

Date: 11.DEC.2017 10:28:57

802.11n ac40 High Channel

Date: 9.DEC.2017 14:52:14

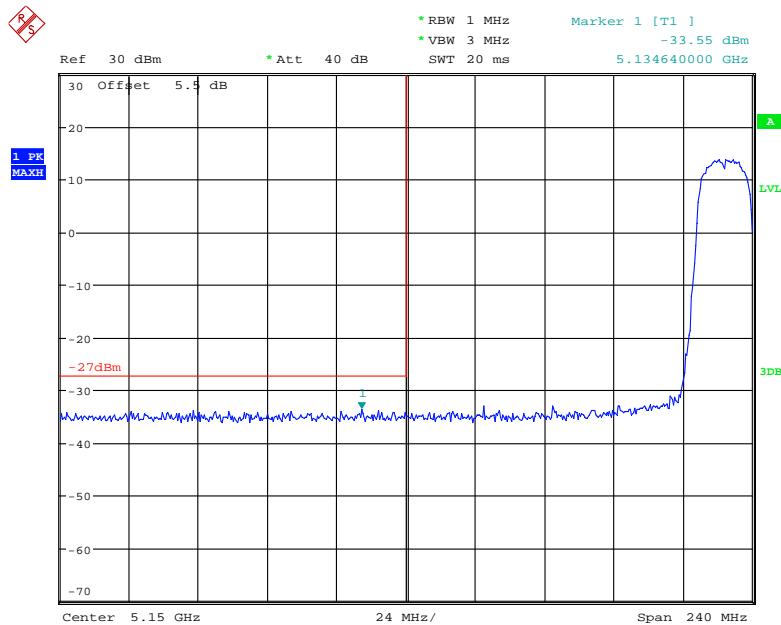
802.11n ac80 Middle Channel

Date: 11.DEC.2017 10:06:06

5250-5350MHz(the antenna gain was offset in the display, all emission under limit more than 3dBc, so 2TX mode also compliance the requirement)

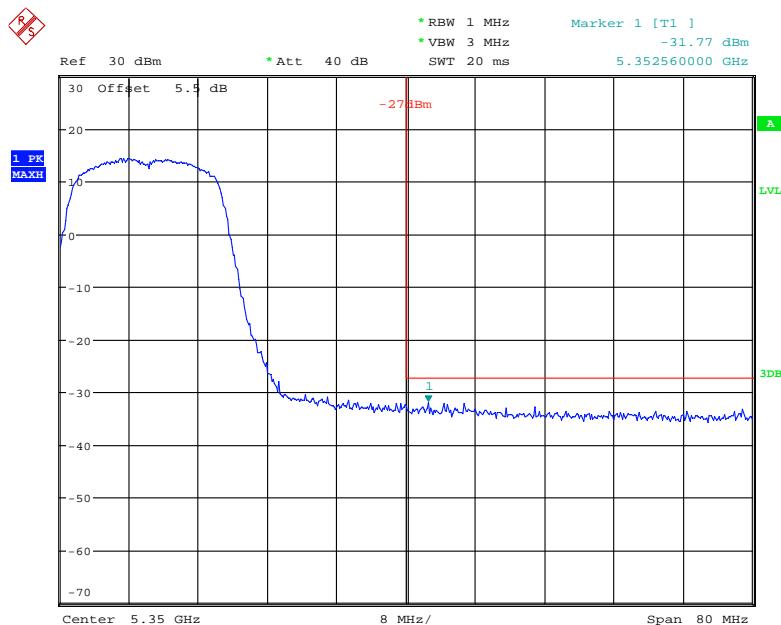
Main Chain:

802.11n ht20 Low Channel



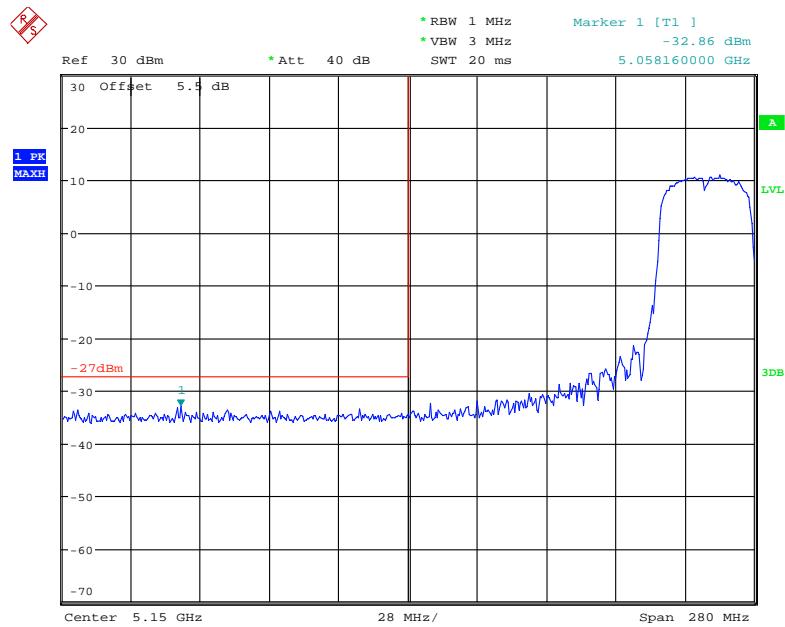
Date: 9.DEC.2017 13:47:55

802.11n ht20 High Channel



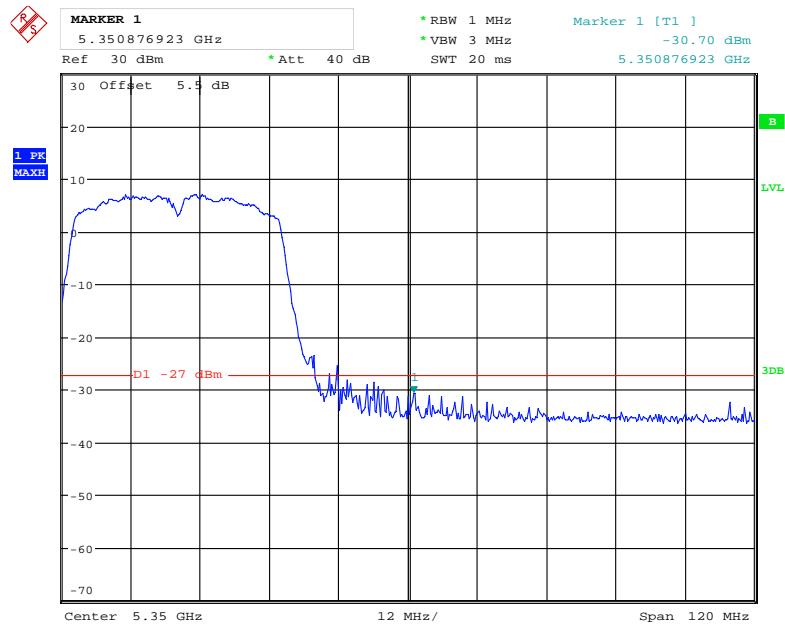
Date: 9.DEC.2017 13:44:17

802.11n ht40 Low Channel

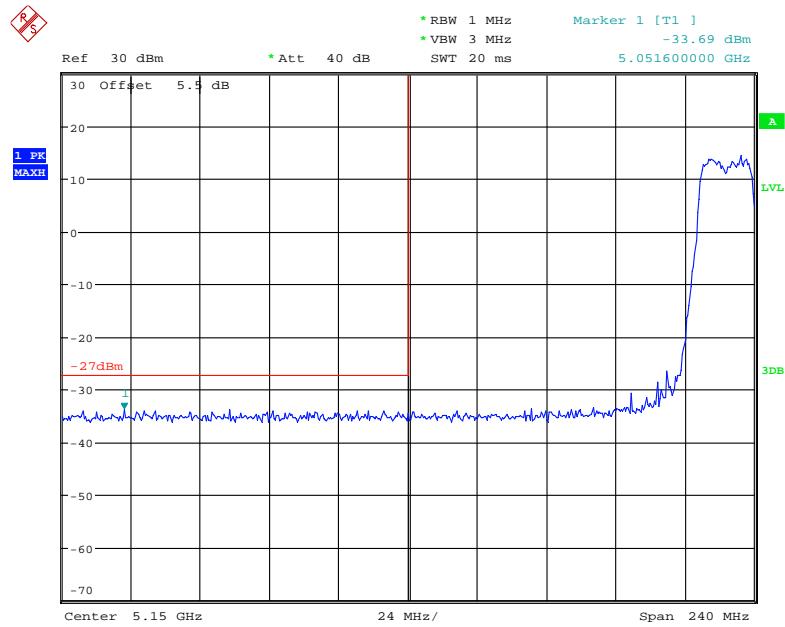


Date: 9.DEC.2017 15:34:59

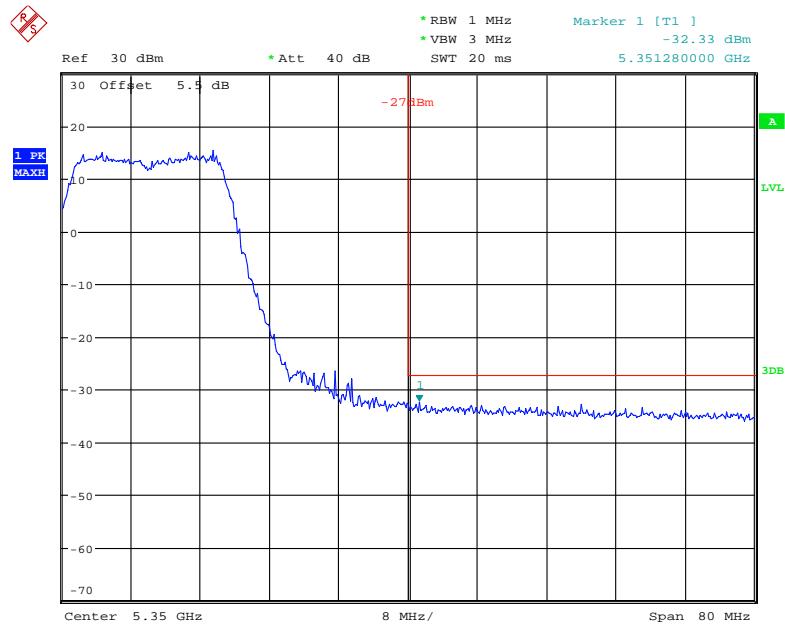
802.11n ht40 High Channel



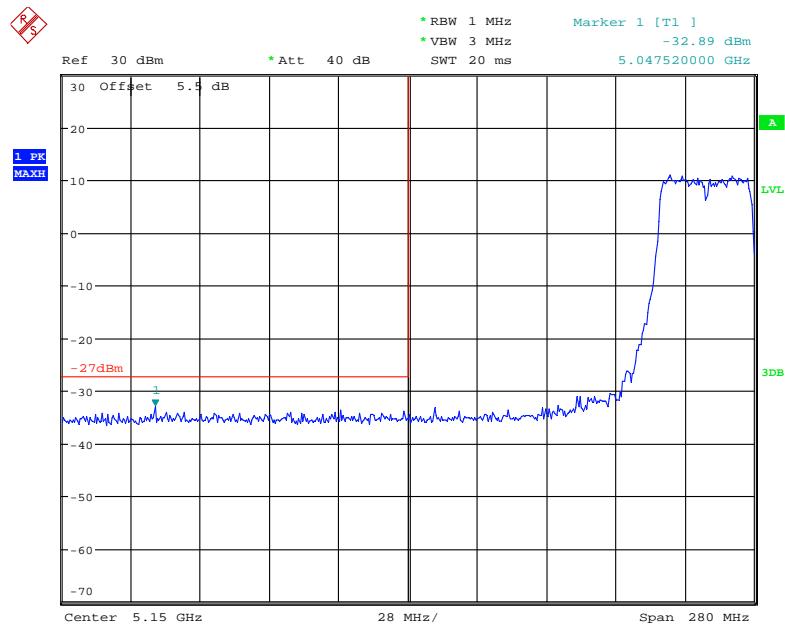
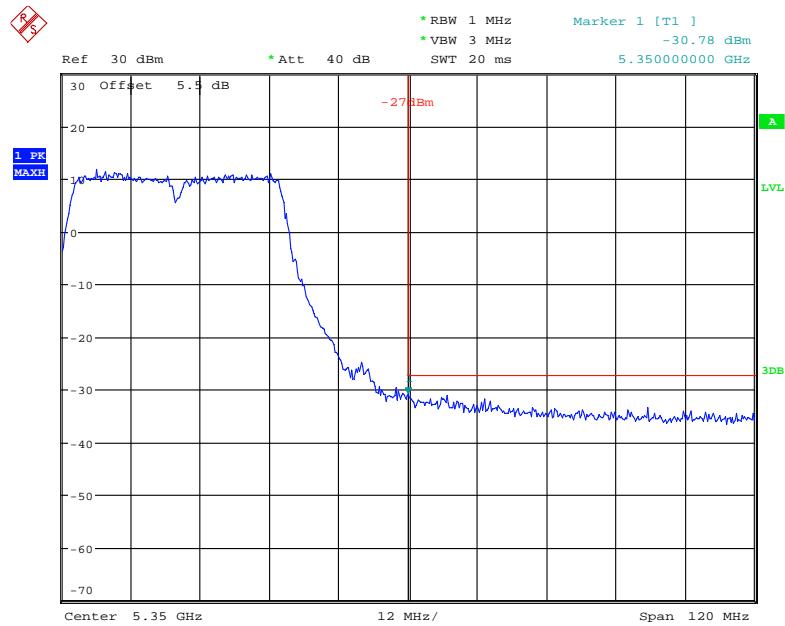
Date: 9.DEC.2017 16:08:58

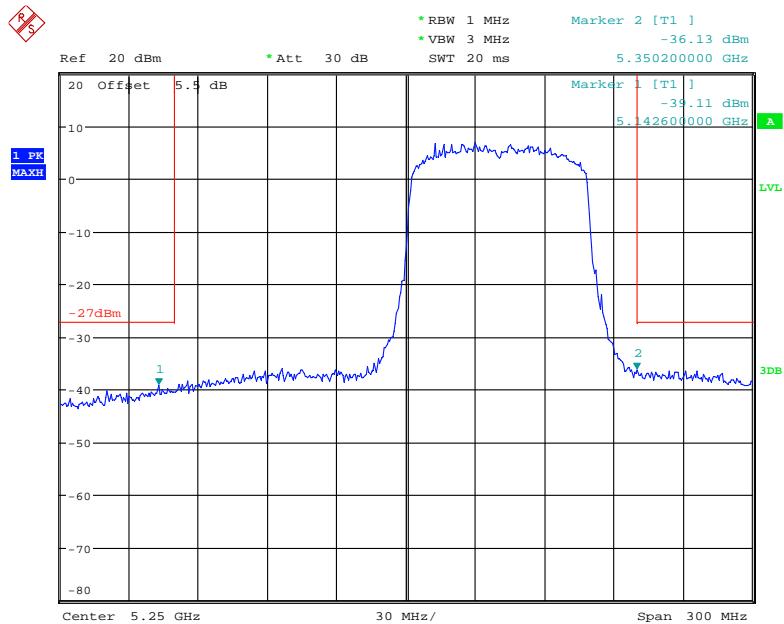
802.11n ac20 Low Channel

Date: 9.DEC.2017 13:39:00

802.11n ac20 High Channel

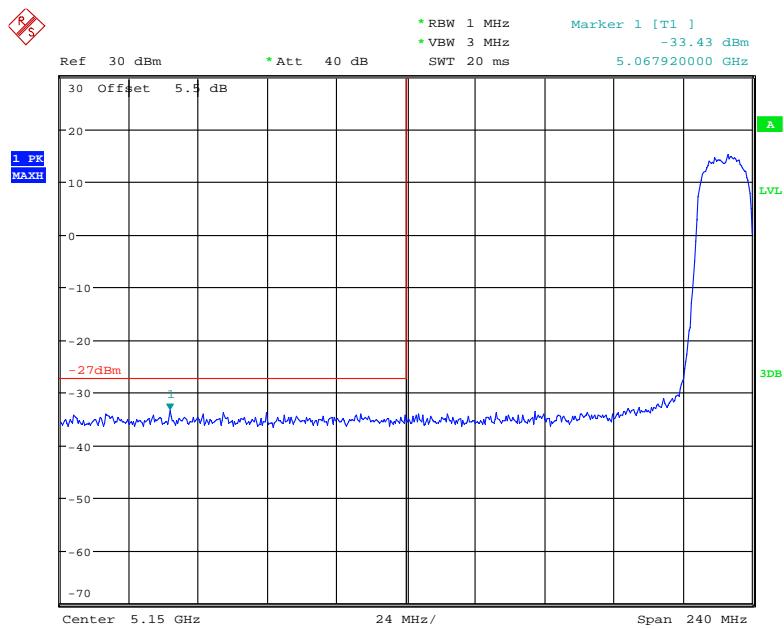
Date: 9.DEC.2017 13:42:20

802.11n ac40 Low Channel**802.11n ac40 High Channel**

802.11n ac80 Middle Channel

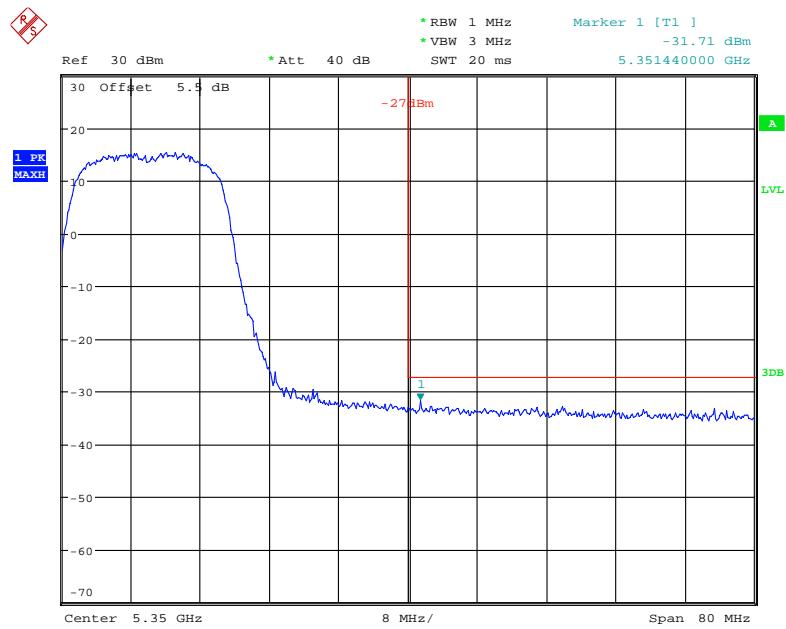
Date: 11.DEC.2017 10:16:35

Aux chain:

802.11n ht20 Low Channel

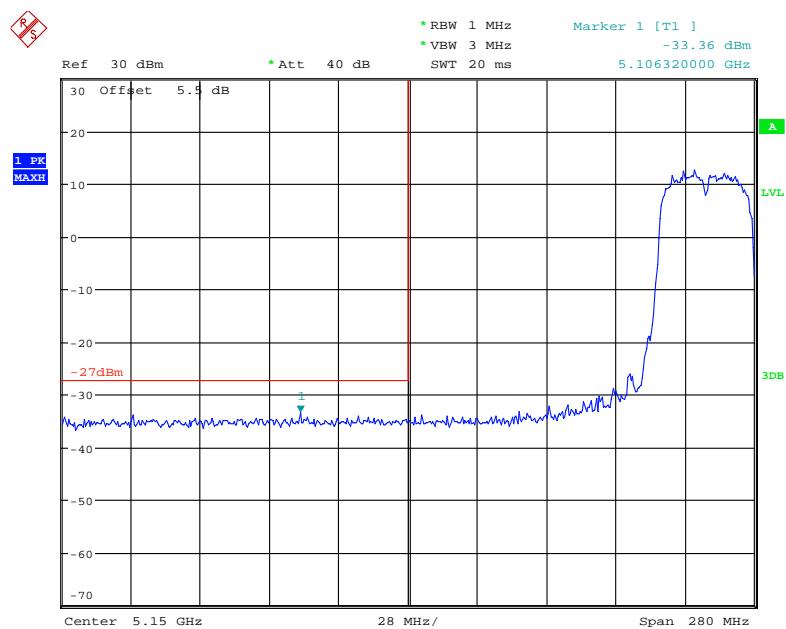
Date: 9.DEC.2017 13:29:05

802.11n ht20 High Channel

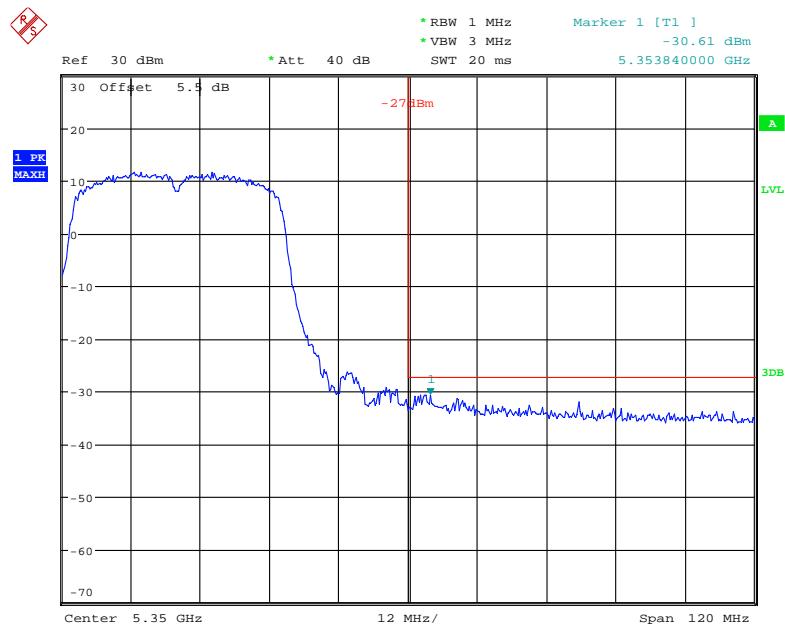


Date: 9.DEC.2017 13:32:41

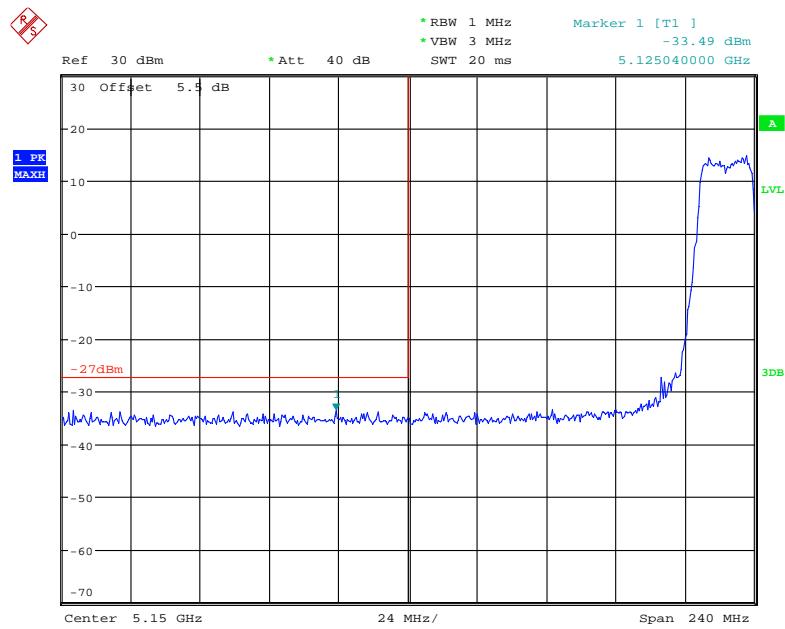
802.11n ht40 Low Channel



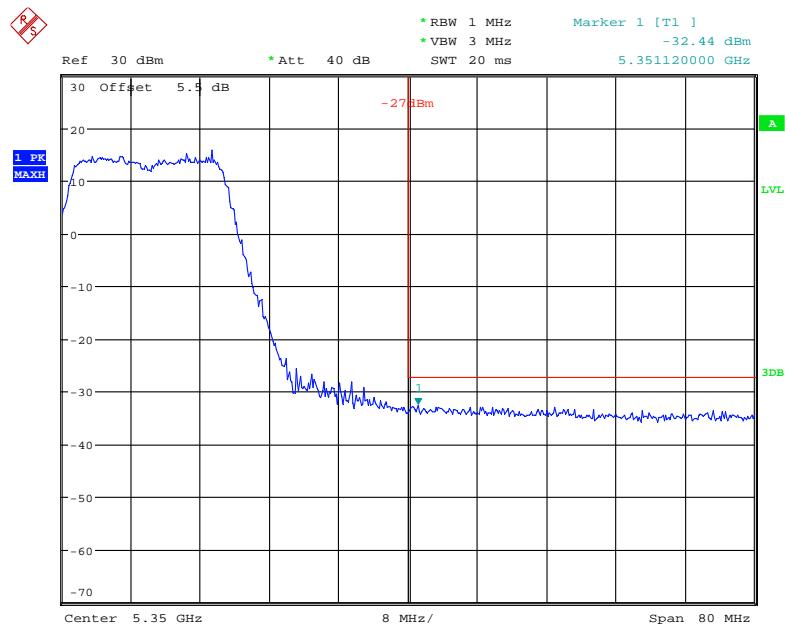
Date: 9.DEC.2017 14:56:17

802.11n ht40 High Channel

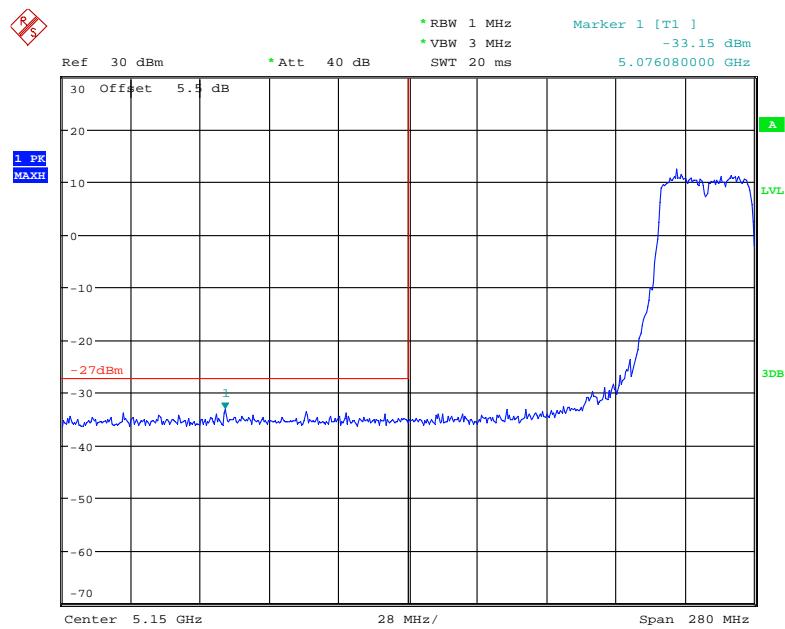
Date: 9.DEC.2017 16:06:53

802.11n ac20 Low Channel

Date: 9.DEC.2017 13:36:51

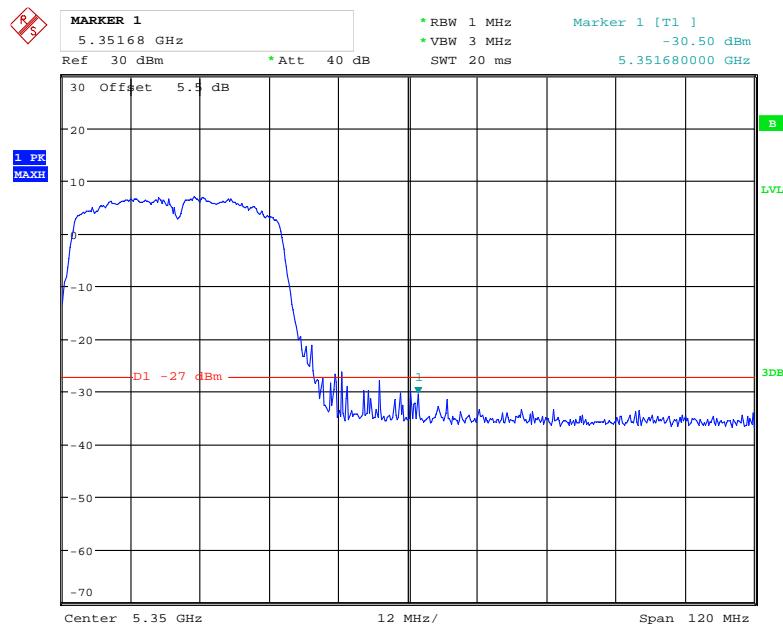
802.11n ac20 High Channel

Date: 9.DEC.2017 13:34:26

802.11n ac40 Low Channel

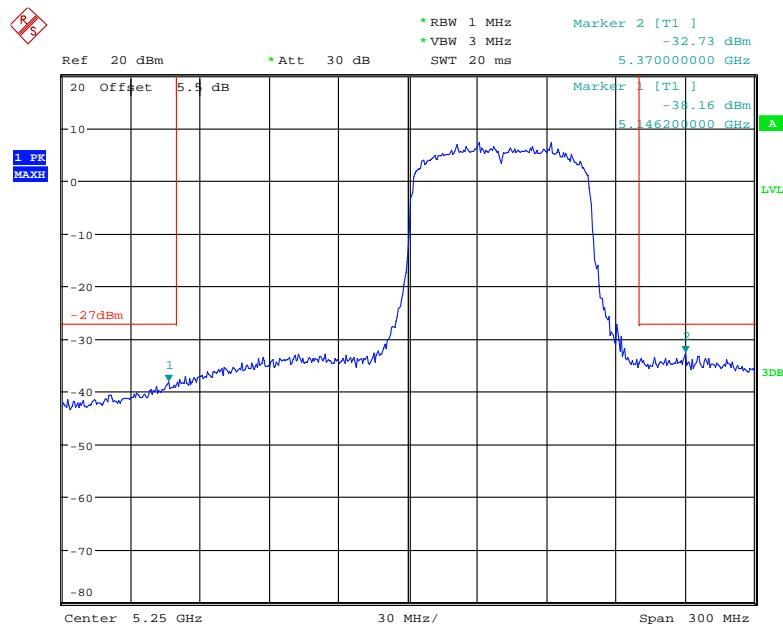
Date: 9.DEC.2017 14:54:34

802.11n ac40 High Channel



Date: 9.DEC.2017 16:02:59

802.11n ac80 Middle Channel

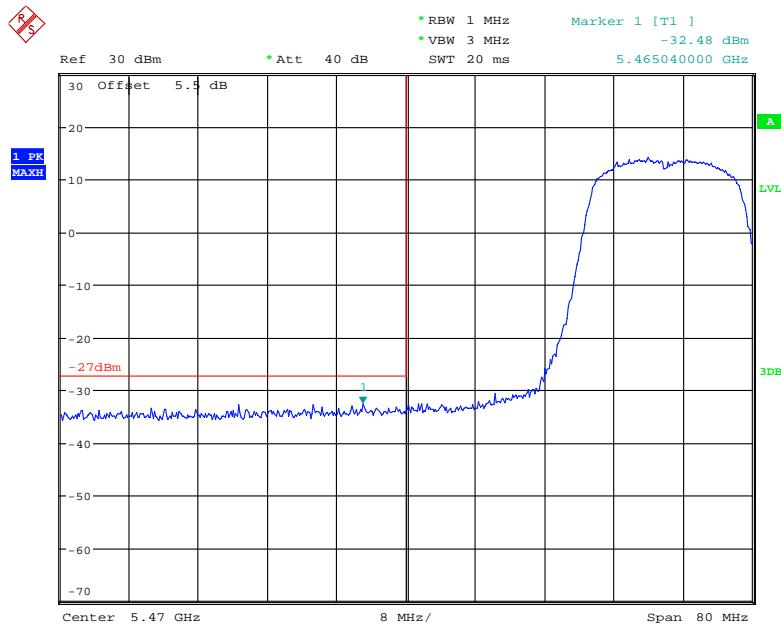


Date: 11.DEC.2017 10:10:42

5470-5725MHz(the antenna gain was offset in the display, all emission under limit more than 3dBc, so 2TX mode also compliance the requirement)

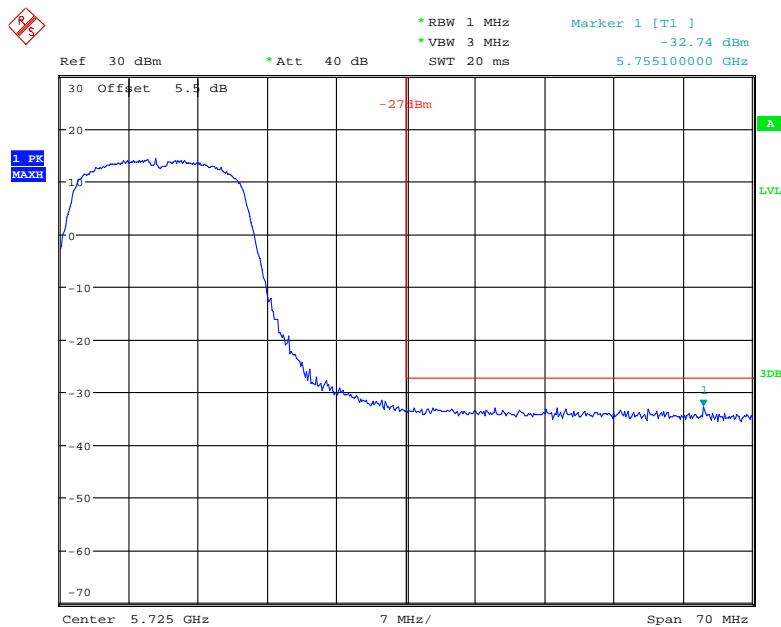
Main Chain:

802.11n ht20 Low Channel

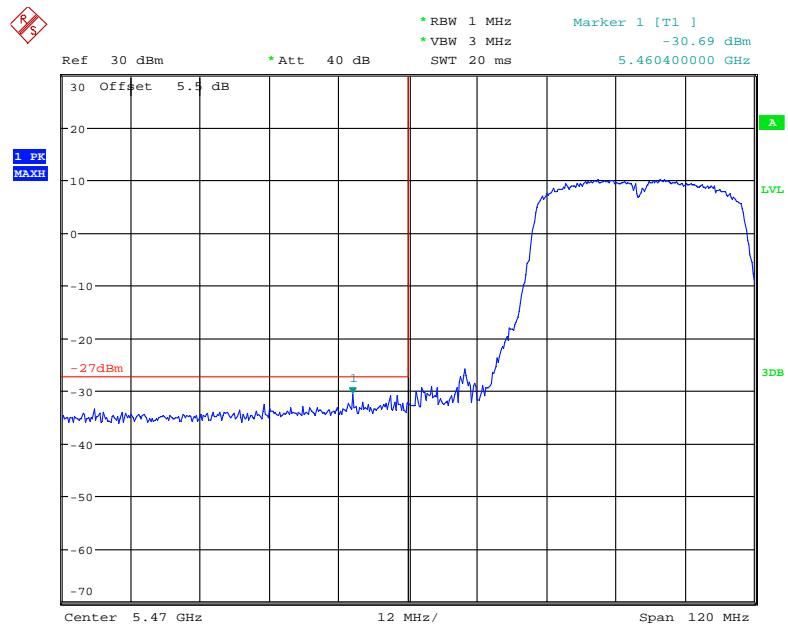


Date: 9.DEC.2017 13:50:58

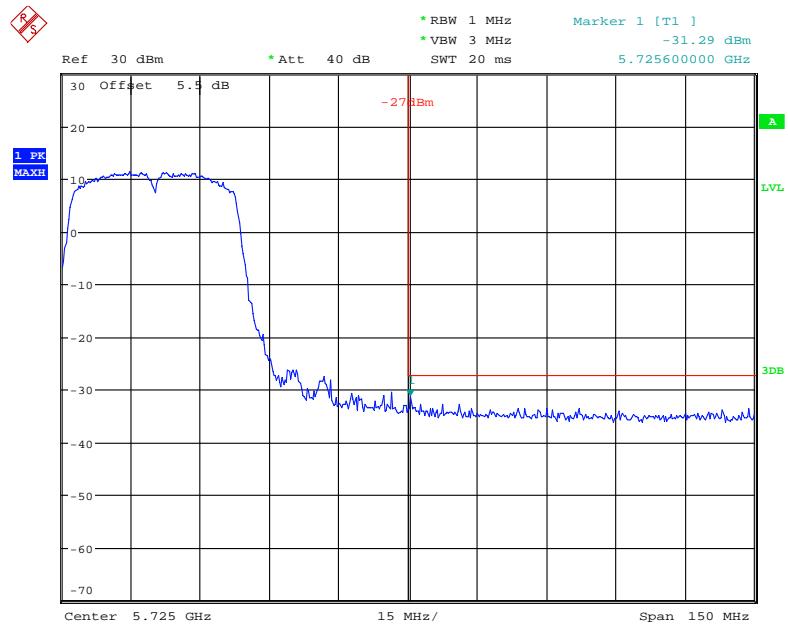
802.11n ht20 High Channel



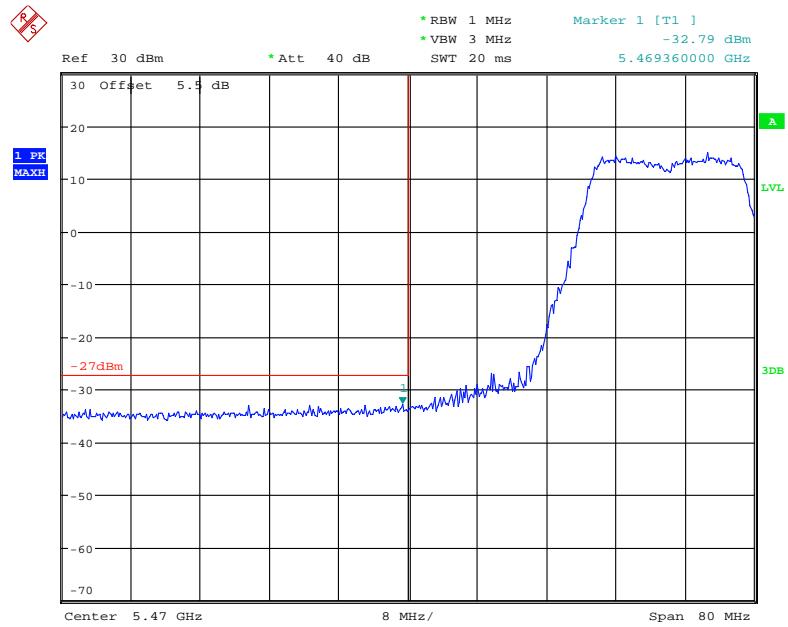
Date: 9.DEC.2017 13:54:03

802.11n ht40 Low Channel

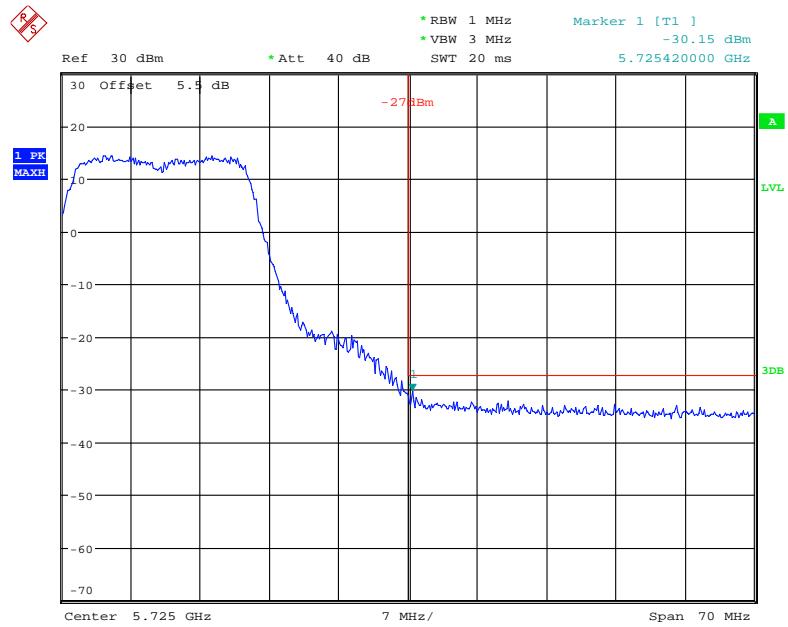
Date: 9.DEC.2017 16:48:47

802.11n ht40 High Channel

Date: 9.DEC.2017 16:33:28

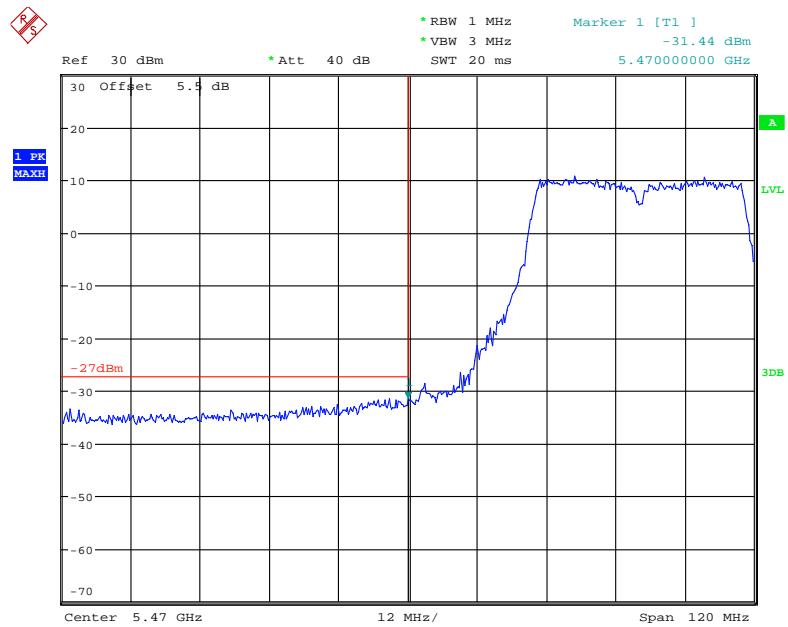
802.11n ac20 Low Channel

Date: 9.DEC.2017 13:59:22

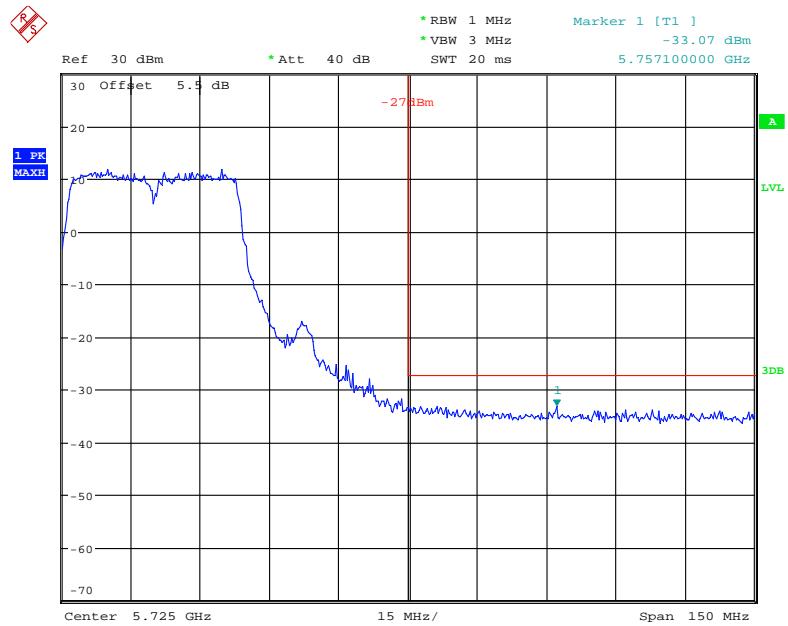
802.11n ac20 High Channel

Date: 9.DEC.2017 13:55:58

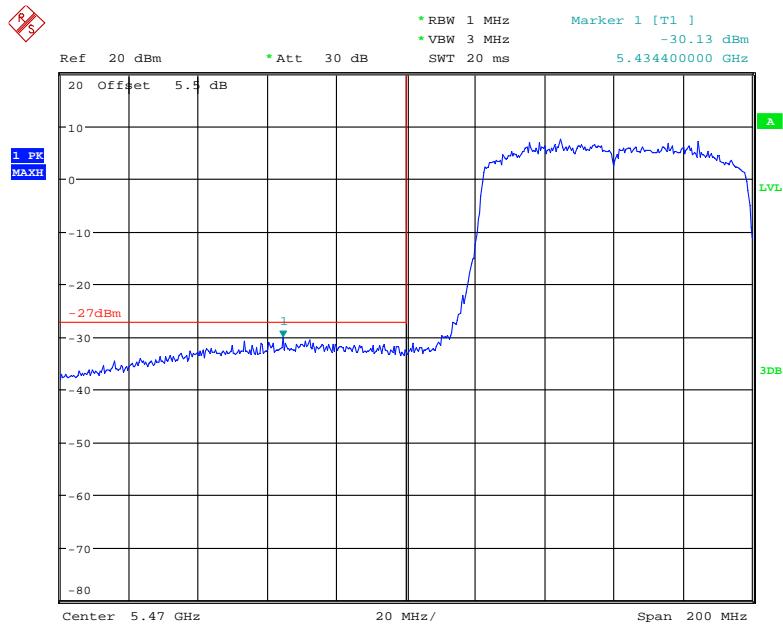
802.11n ac40 Low Channel



802.11n ac40 High Channel

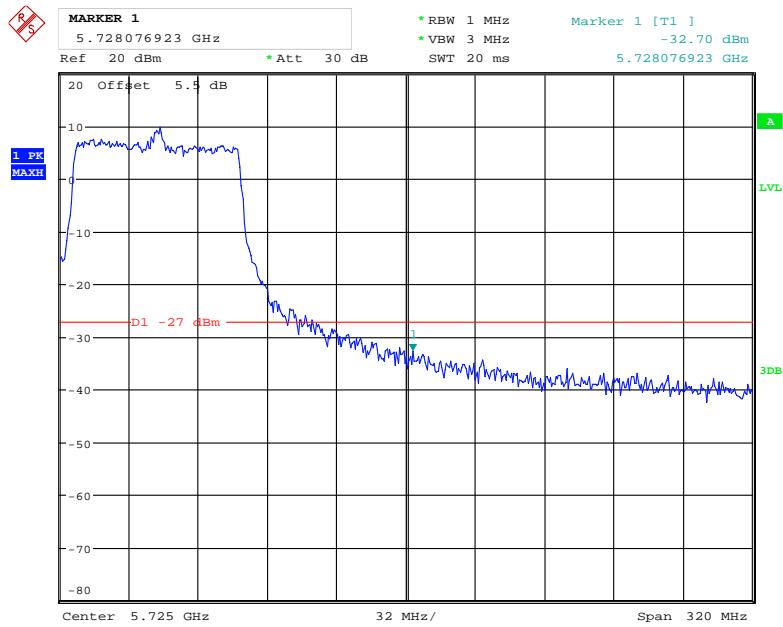


802.11n ac80 Low Channel



Date: 11.DEC.2017 10:15:26

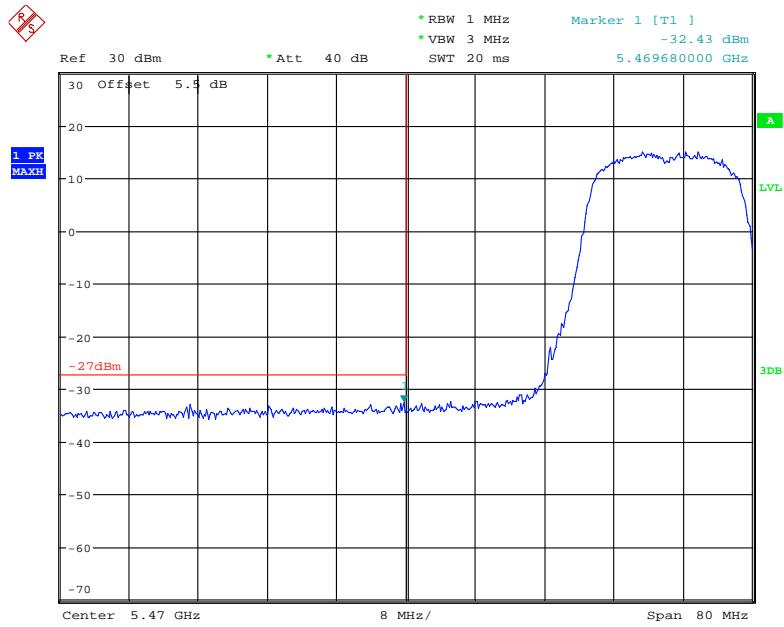
802.11n ac80 High Channel



Date: 11.DEC.2017 08:38:46

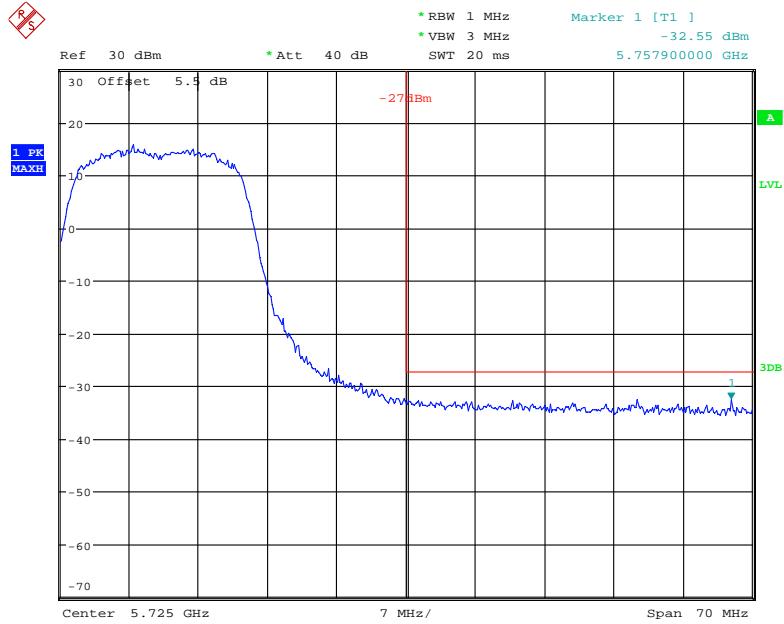
Aux Chain:

802.11n ht20 Low Channel



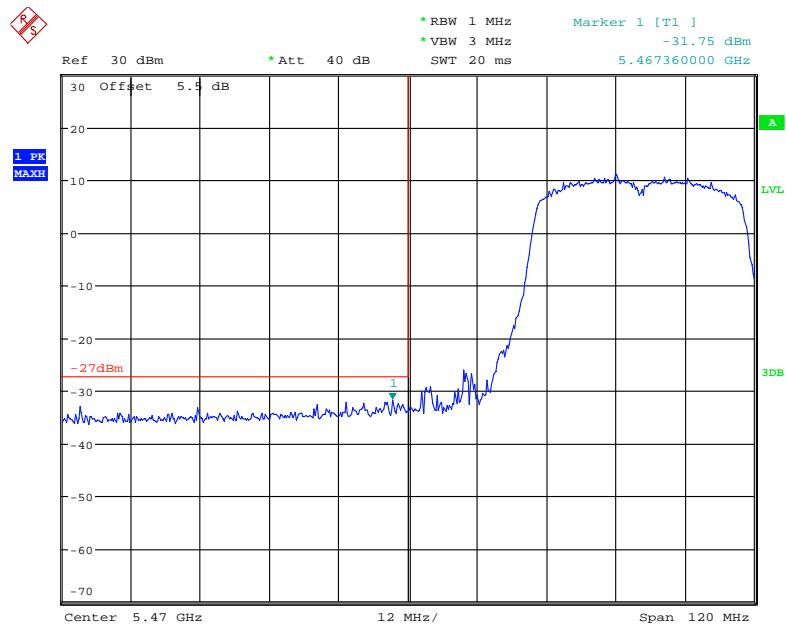
Date: 9.DEC.2017 15:30:03

802.11n ht20 High Channel

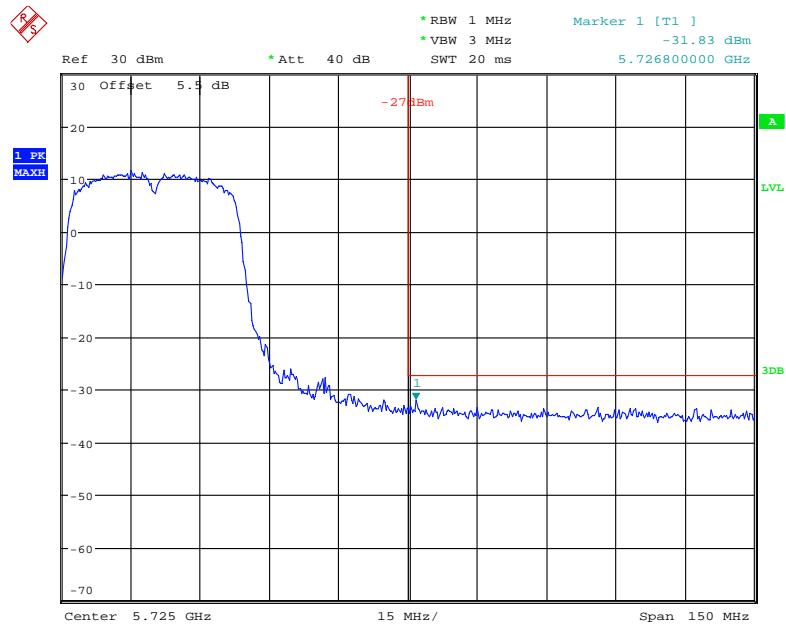


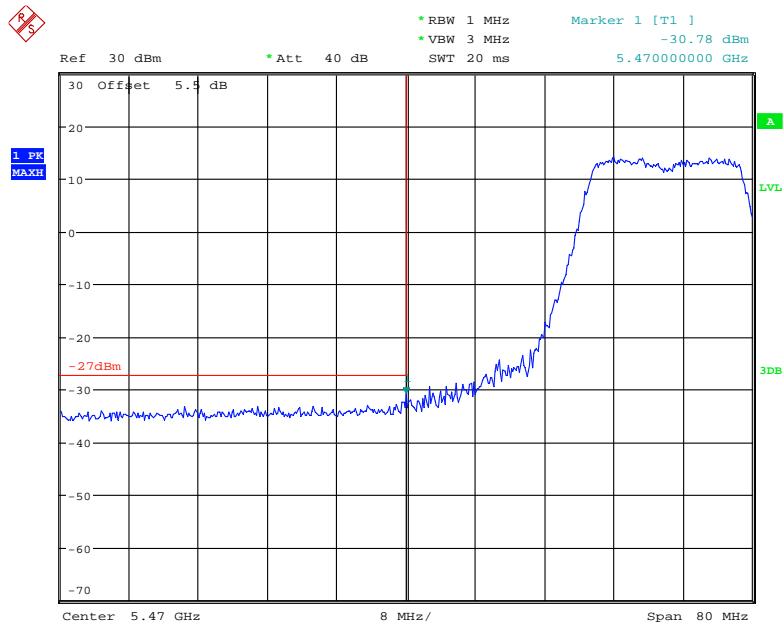
Date: 9.DEC.2017 14:45:28

802.11n ht40 Low Channel

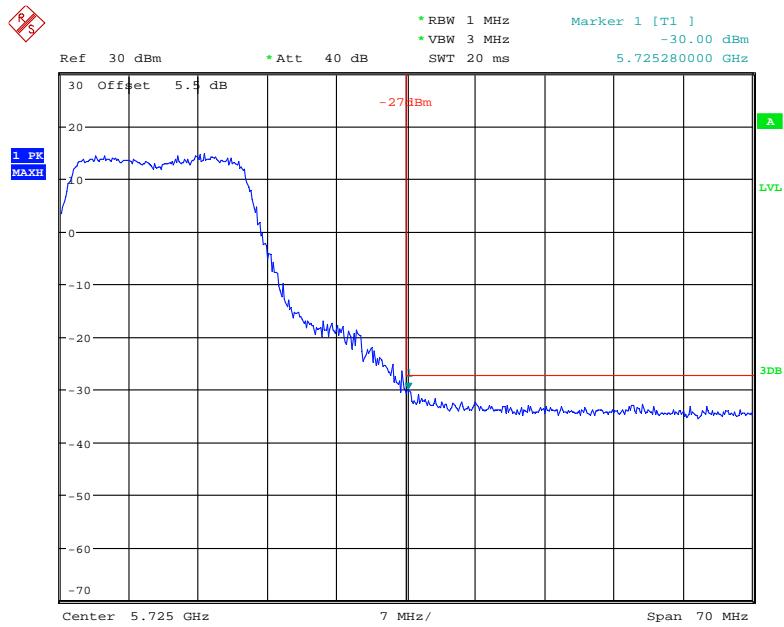


802.11n ht40 High Channel



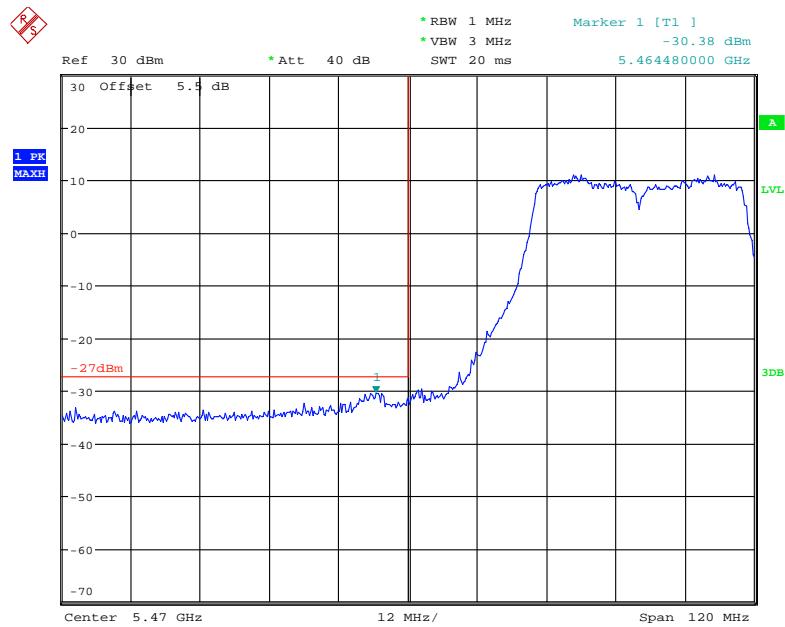
802.11n ac20 Low Channel

Date: 9.DEC.2017 14:34:07

802.11n ac20 High Channel

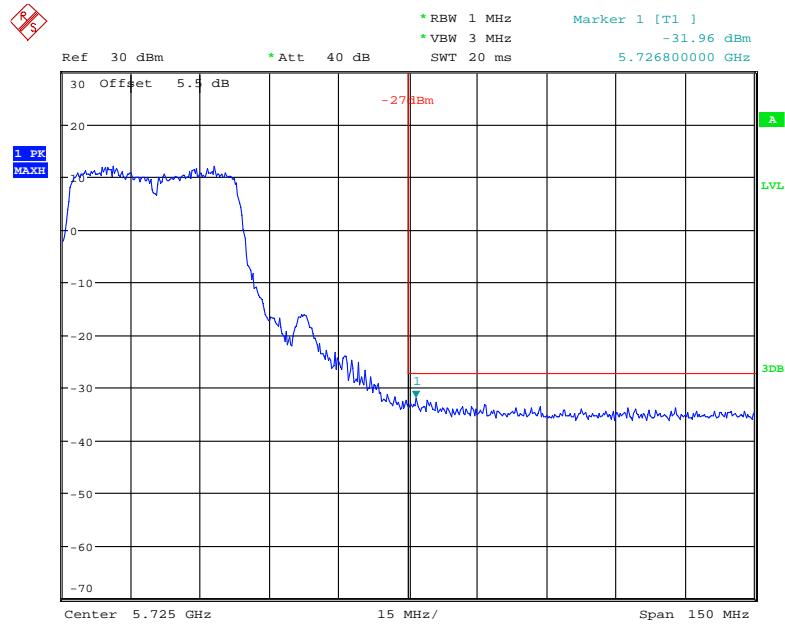
Date: 9.DEC.2017 14:38:06

802.11n ac40 Low Channel

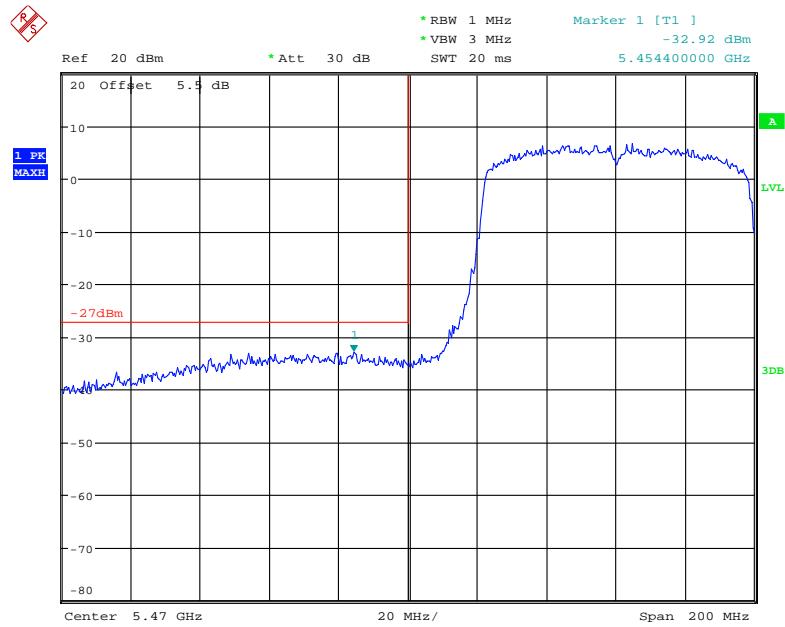


Date: 9.DEC.2017 16:44:50

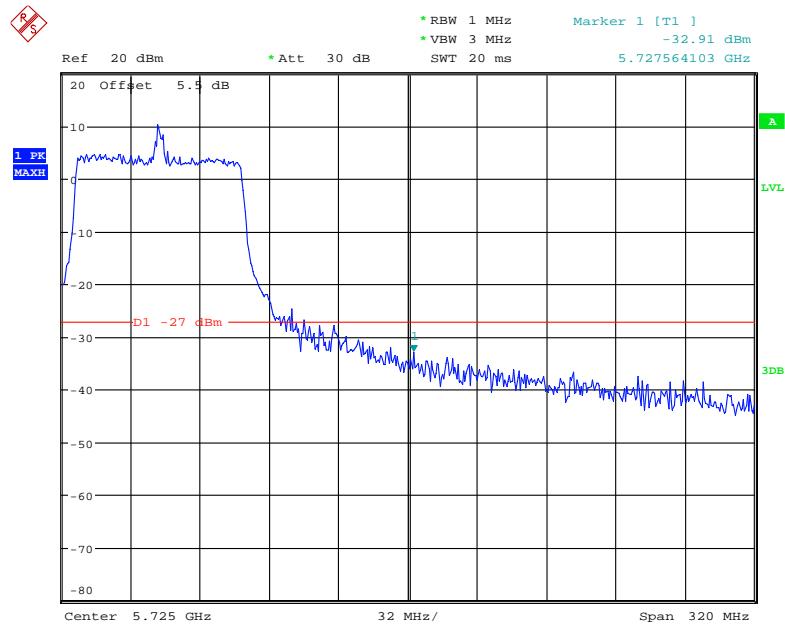
802.11n ac40 High Channel



Date: 9.DEC.2017 16:40:24

802.11n ac80 Low Channel

Date: 11.DEC.2017 10:11:45

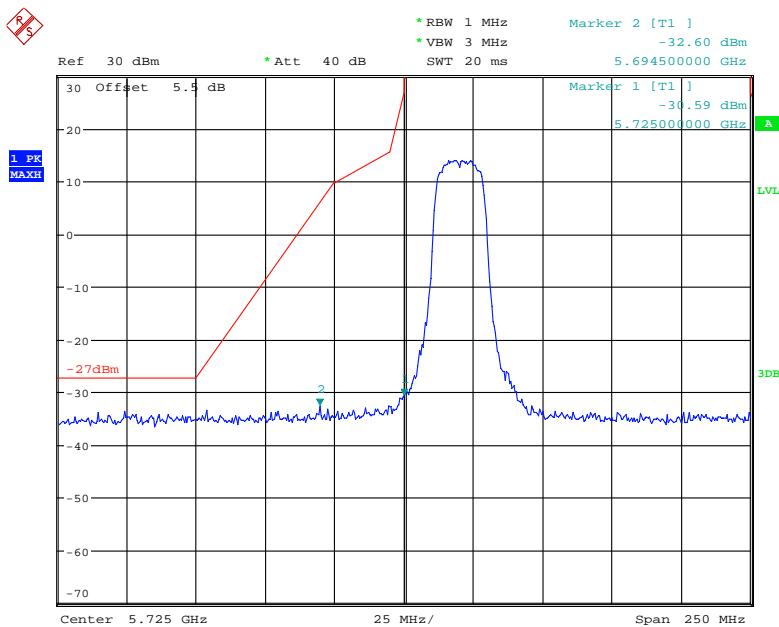
802.11n ac80 High Channel

Date: 11.DEC.2017 08:38:14

5725-5850MHz(the antenna gain was offset in the display, all emission under limit more than 3dBc, so 2TX mode also compliance the requirement)

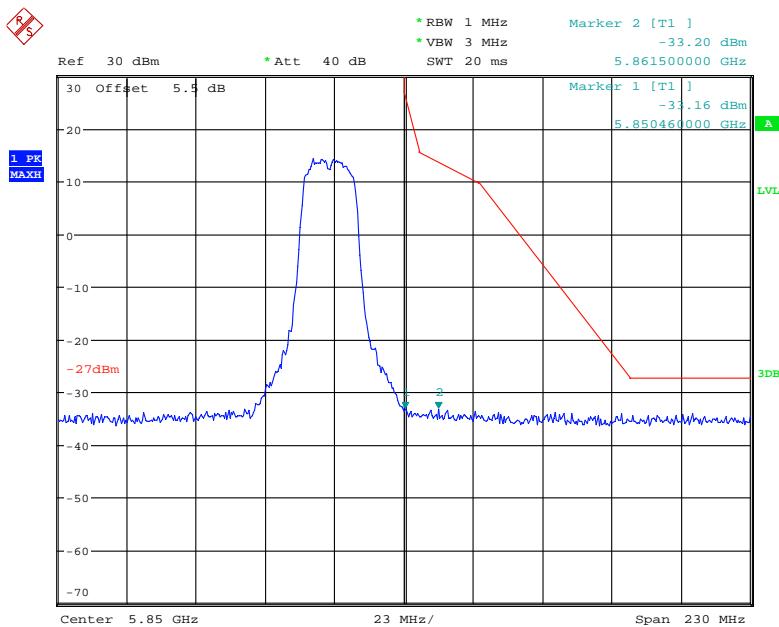
Main chain:

802.11n ht20 Low Channel



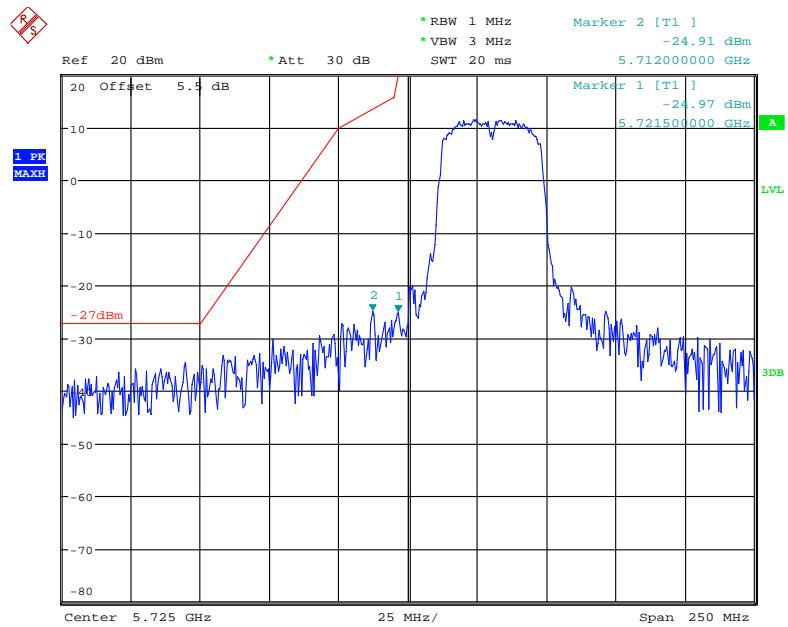
Date: 9.DEC.2017 14:18:16

802.11n ht20 High Channel



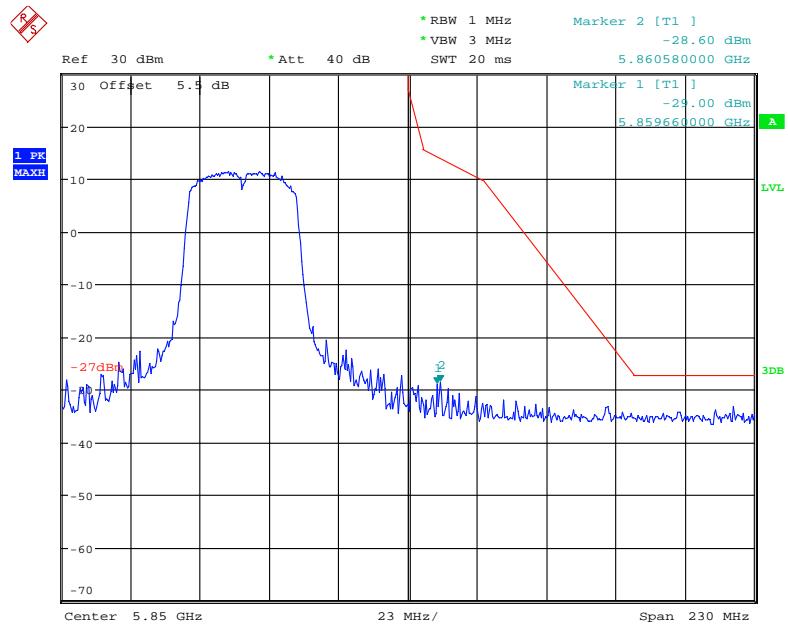
Date: 9.DEC.2017 14:21:18

802.11n ht40 Low Channel

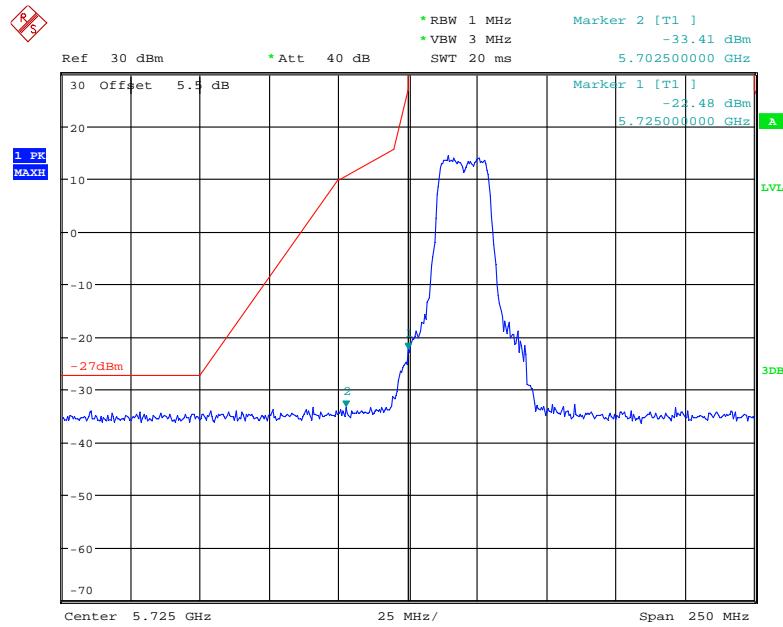


Date: 11.DEC.2017 13:17:48

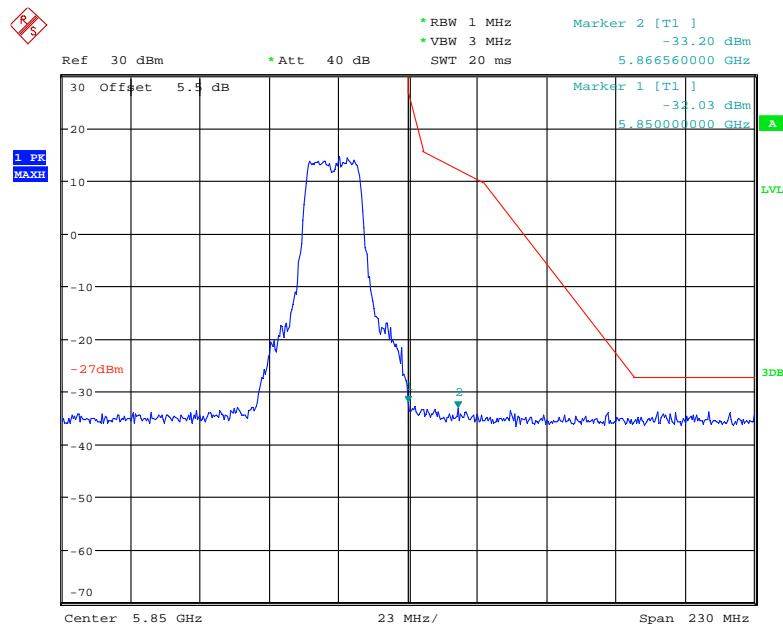
802.11n ht40 High Channel



Date: 9.DEC.2017 17:21:57

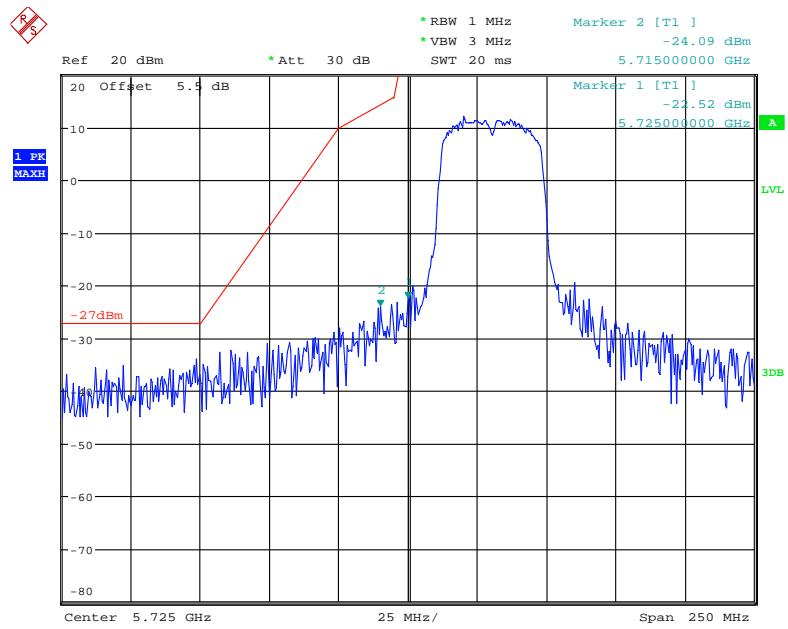
802.11n ac20 Low Channel

Date: 9.DEC.2017 14:02:18

802.11n ac20 High Channel

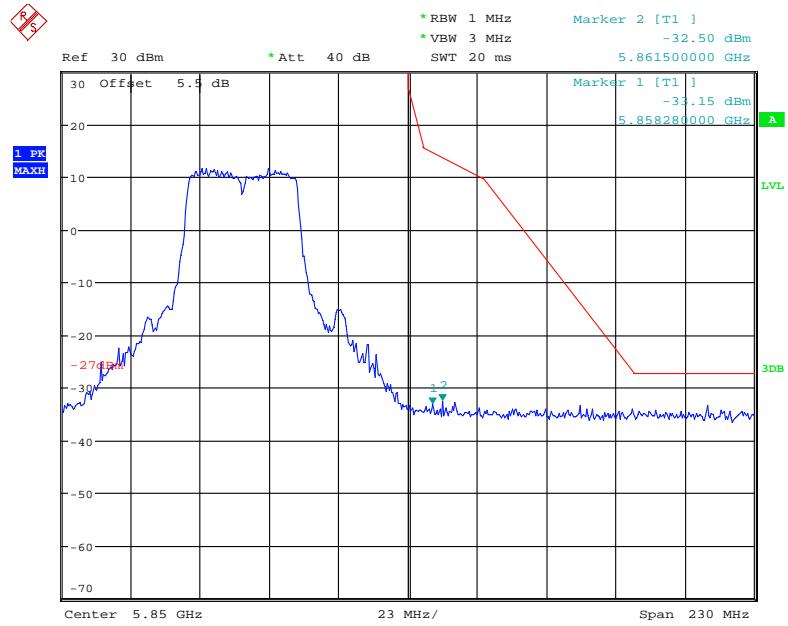
Date: 9.DEC.2017 14:07:31

802.11n ac40 Low Channel



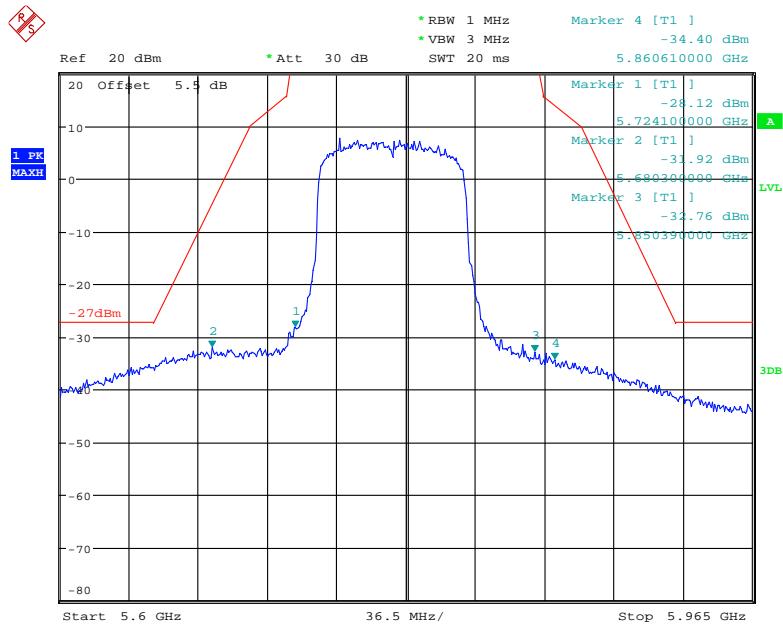
Date: 11.DEC.2017 13:18:52

802.11n ac40 High Channel



Date: 9.DEC.2017 17:24:44

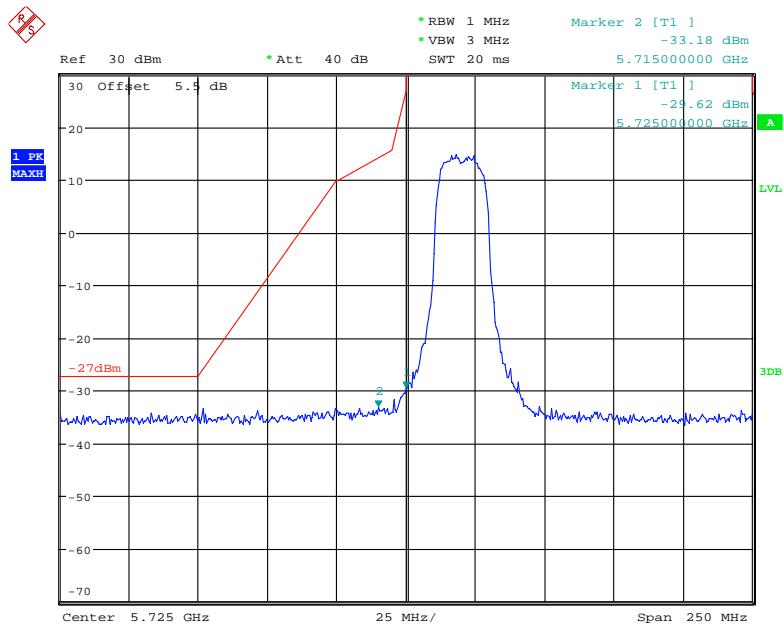
802.11n ac80 Middle Channel



Date: 11.DEC.2017 10:14:28

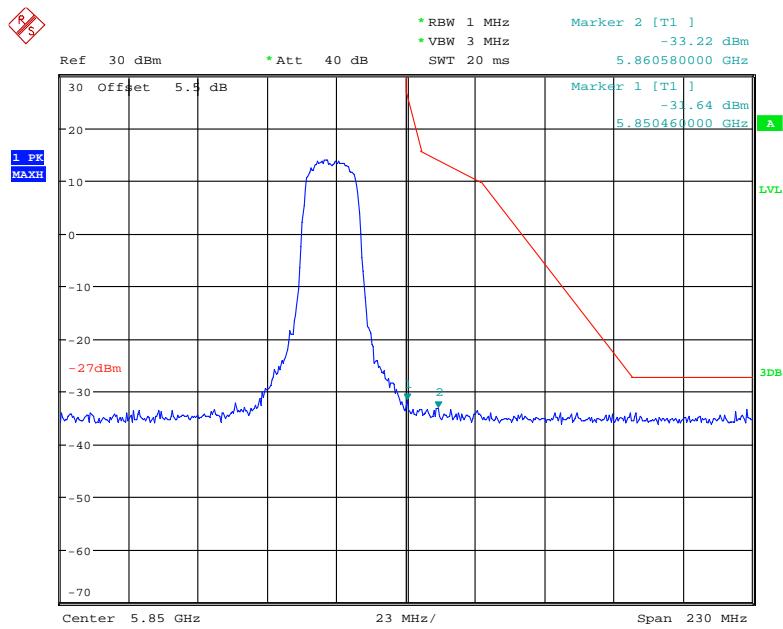
Aux Chain:

802.11n ht20 Low Channel



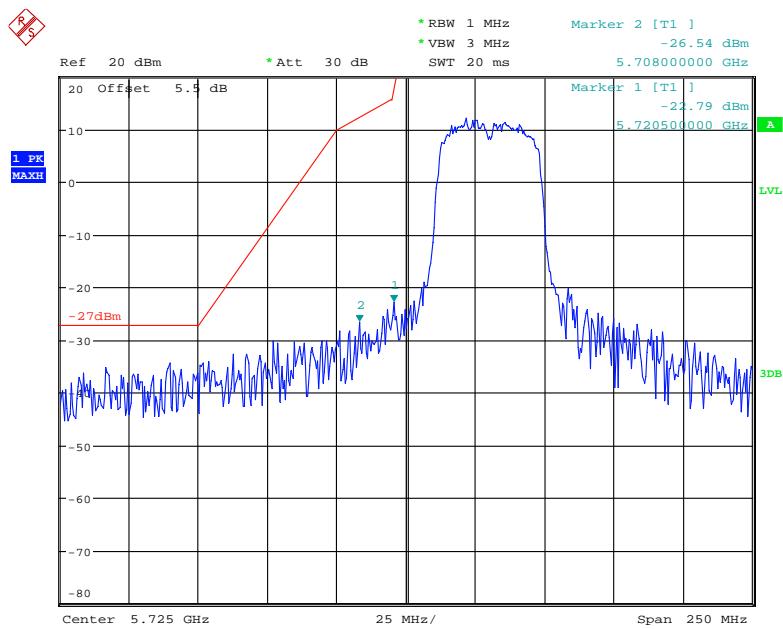
Date: 9.DEC.2017 14:26:46

802.11n ht20 High Channel

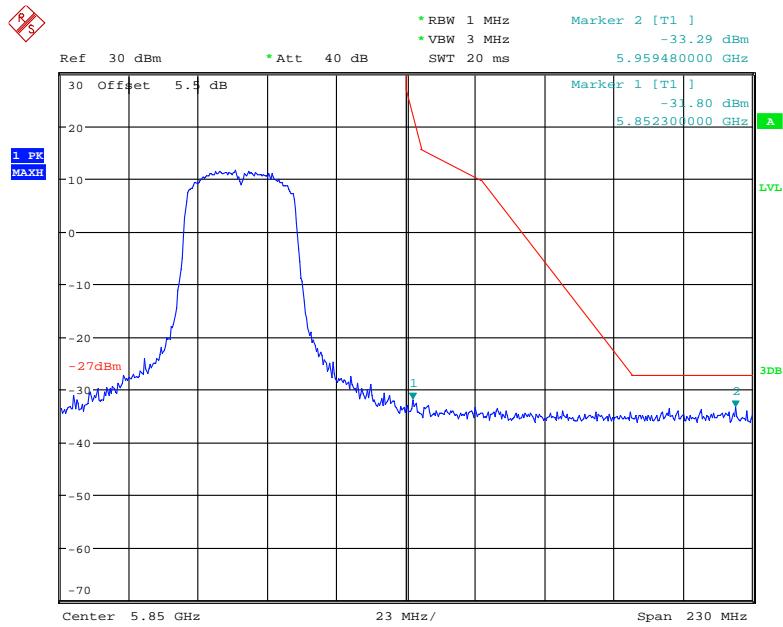


Date: 9.DEC.2017 14:23:25

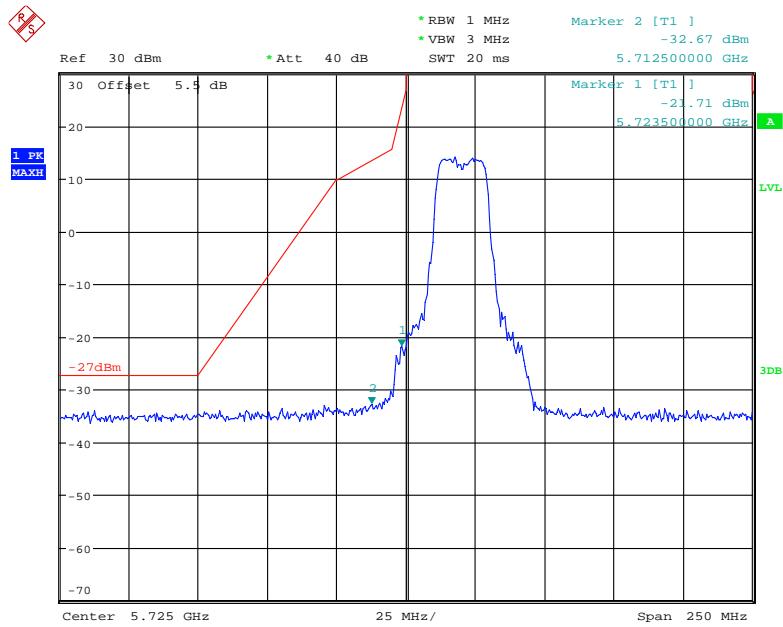
802.11n ht40 Low Channel



Date: 11.DEC.2017 13:16:43

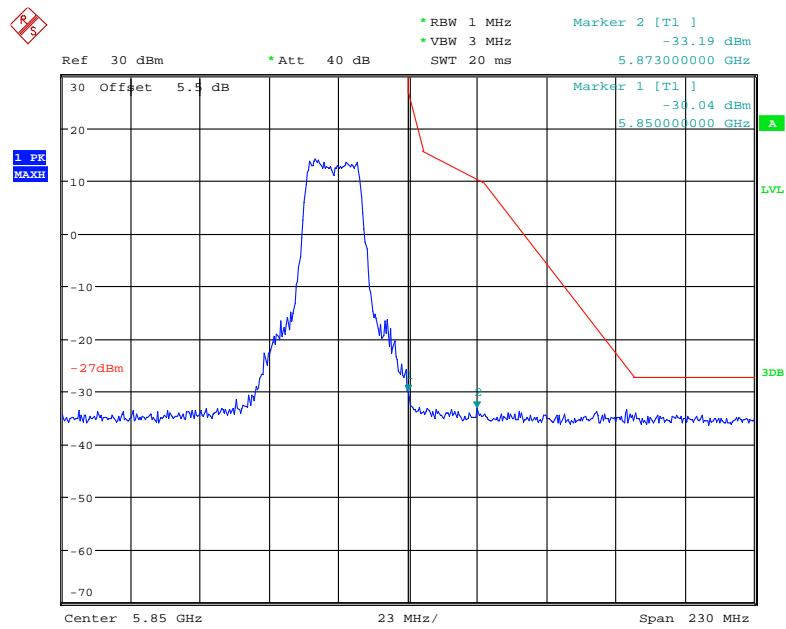
802.11n ht40 High Channel

Date: 9.DEC.2017 17:28:58

802.11n ac20 Low Channel

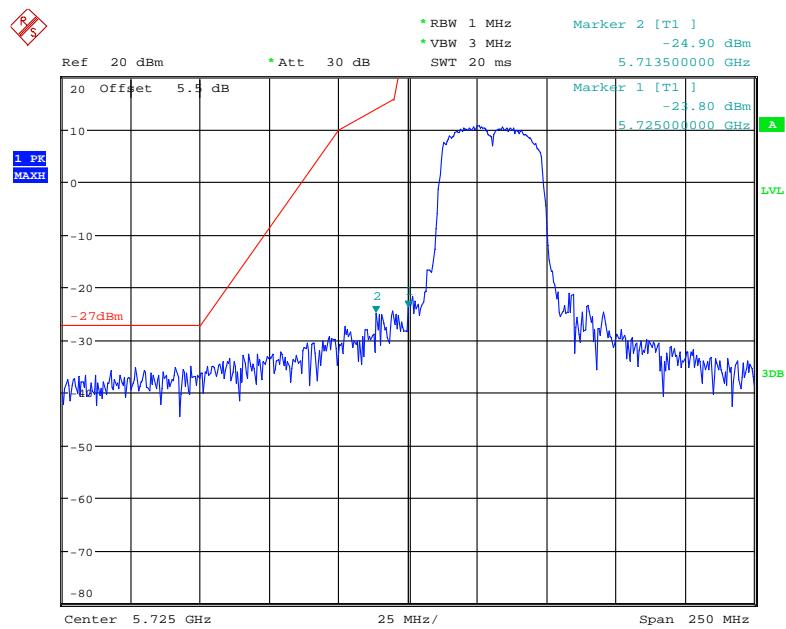
Date: 9.DEC.2017 14:28:52

802.11n ac20 High Channel



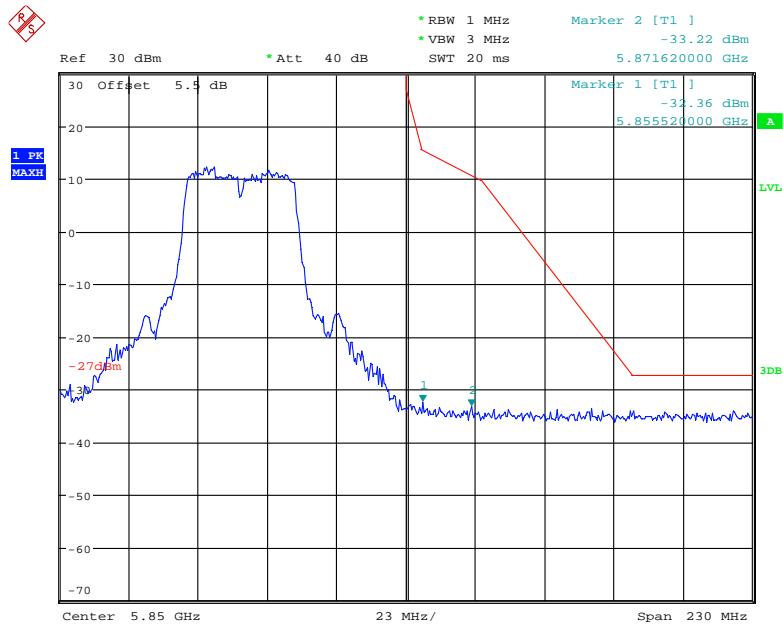
Date: 9.DEC.2017 14:32:01

802.11n ac40 Low Channel



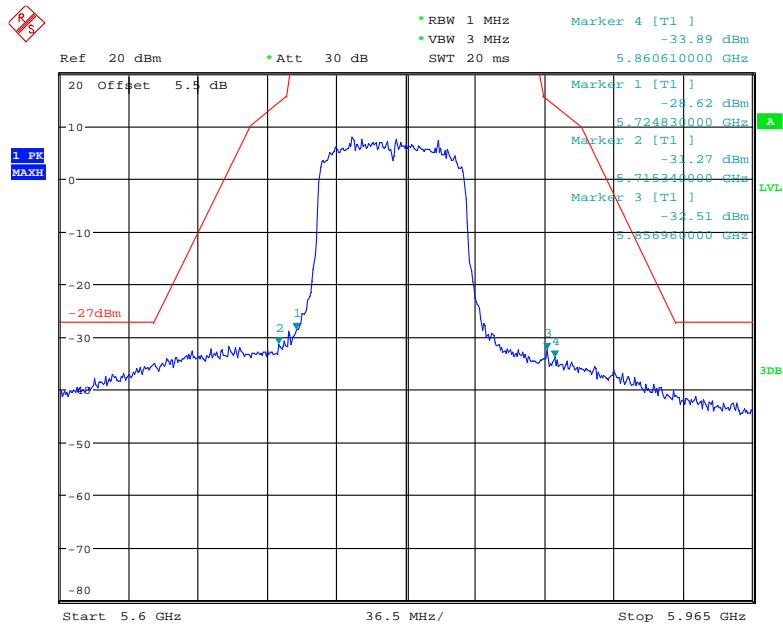
Date: 11.DEC.2017 13:15:40

802.11n ac40 High Channel



Date: 9.DEC.2017 17:27:04

802.11n ac80 Middle Channel



Date: 11.DEC.2017 10:13:46

**FCC §15.407(a)(e) & RSS-247 §6.2,RSS-Gen §6.6 – EMISSION
BANDWIDTH AND OCCUPIED BANDWIDTH****Applicable Standard**

15.407(a) (e), RSS-247 §6.2 and RSS-Gen §6.6

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2017-01-04	2018-01-04
N/A	Coaxial Cable	C-SJ00-0010	C0010/04	Each Time	/

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

Test Data**Environmental Conditions**

Temperature:	23.4~25.4°C
Relative Humidity:	35~42 %
ATM Pressure:	101.3~102kPa

The testing was performed by Nami Quan from 2017-12-08 to 2017-12-11.

Test Result: Pass.

Please refer to the following tables and plots.

Test mode: Transmitting (Test only performed at main chain in SISO mode)

UNII Band	Mode	Frequency (MHz)	26 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5150-5250 MHz	802.11a	5180	19.72	16.32
		5200	19.88	16.4
		5240	19.96	16.4
	802.11n ht20	5180	20.44	17.44
		5200	20.52	17.44
		5240	20.52	17.44
	802.11n ht40	5190	40.56	36.16
		5230	40.24	36.16
	802.11 ac20	5180	20.44	17.44
		5200	20.28	17.44
		5240	20.92	17.44
	802.11 ac40	5190	39.92	36.16
		5230	41.04	36.16
	802.11 ac80	5210	84.01	75.2
5250-5350 MHz	802.11a	5260	19.72	16.4
		5280	19.8	16.4
		5320	19.72	16.40
	802.11n ht20	5260	20.6	17.44
		5280	20.44	17.44
		5320	20.2	17.44
	802.11n ht40	5270	39.92	36.16
		5310	40.24	36.16
	802.11 ac20	5260	20.36	17.52
		5280	20.6	17.44
		5320	20.36	17.44
	802.11 ac40	5270	40.4	36.16
		5310	40.24	36.32
	802.11 ac80	5290	83.05	75.2
5470-5725 MHz	802.11a	5500	19.4	16.4
		5580	20.04	16.4
		5700	19.88	16.4
	802.11n ht20	5500	20.44	17.44
		5580	20.28	17.52
		5700	20.44	17.52
	802.11n ht40	5510	40.24	36.32
		5550	40.24	36.16
		5670	40.4	36.16
	802.11 ac20	5500	20.28	17.52
		5580	20.52	17.52
		5700	20.76	17.52
	802.11 ac40	5510	40.56	36.16
		5550	40.08	36.16
		5670	40.56	36.32
	802.11 ac80	5530	84.01	75.2
		5610	81.96	75.2

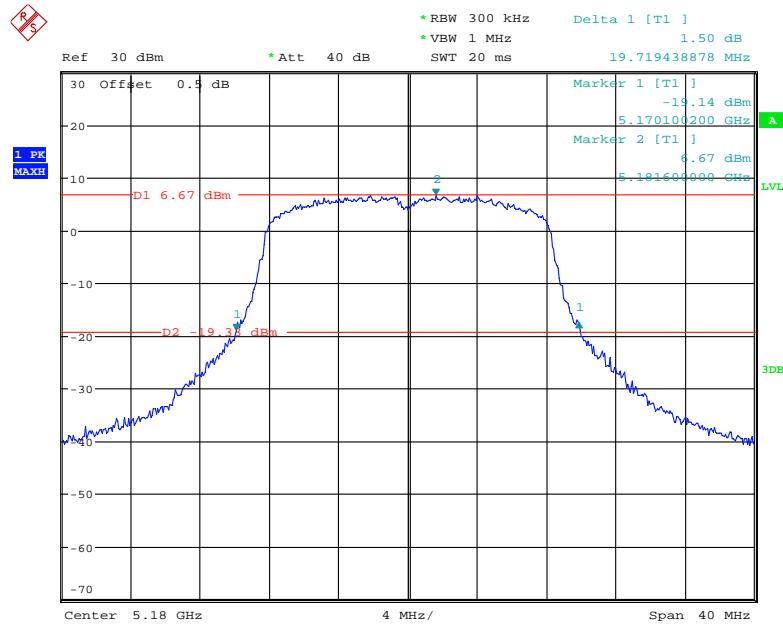
Note: For 5150-5250MHz band, the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz.

For Canada RSS-247, channels 118 to 128 were disabled by software since the frequency occupied the frequency band 5600-5650MHz.

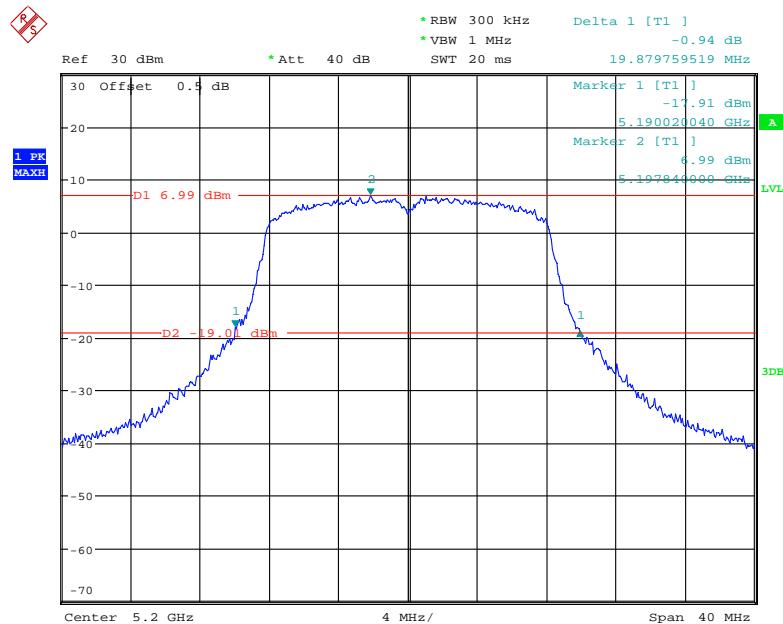
5725-5850MHz:

Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11 a	Low	5745	15.07	16.48
	Middle	5785	15.15	16.48
	High	5825	15.15	16.56
802.11 n20	Low	5745	15.31	17.52
	Middle	5785	14.99	17.6
	High	5825	15.07	17.6
802.11 n40	Low	5755	35.11	36.32
	High	5795	35.11	36.32
802.11 ac20	Low	5745	15.07	17.6
	Middle	5785	14.99	17.52
	High	5825	15.23	17.6
802.11 ac40	Low	5755	34.95	36.16
	High	5795	34.79	36.32
802.11 ac80	Middle	5775	75.35	75.2

Note: For 5725-5850MHz band, the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz.

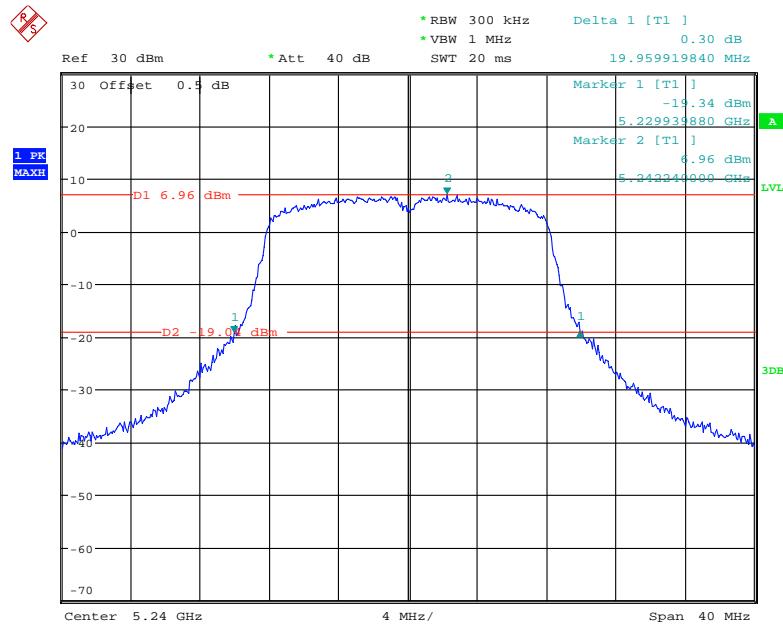
26dB Emission Bandwidth:**5150-5250MHz:****802.11a Low Channel**

Date: 8.DEC.2017 11:35:54

802.11a Middle Channel

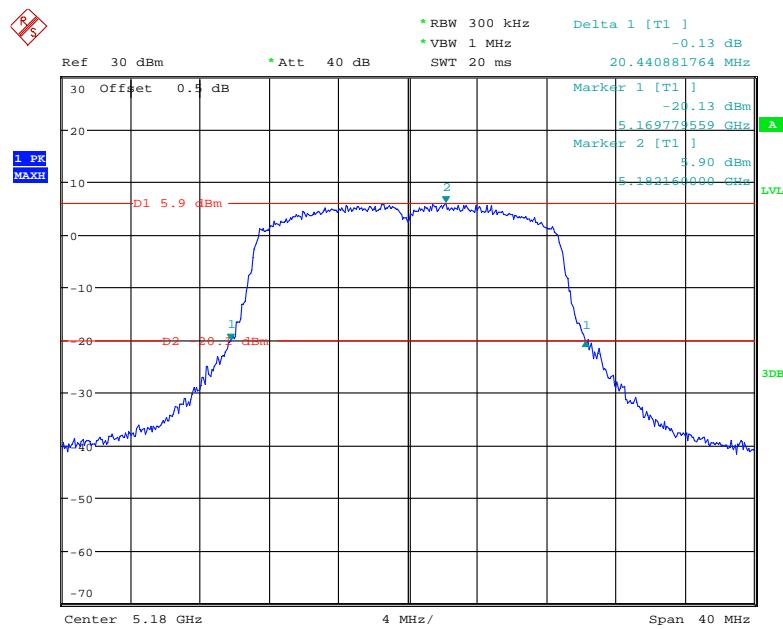
Date: 8.DEC.2017 11:34:50

802.11a High Channel



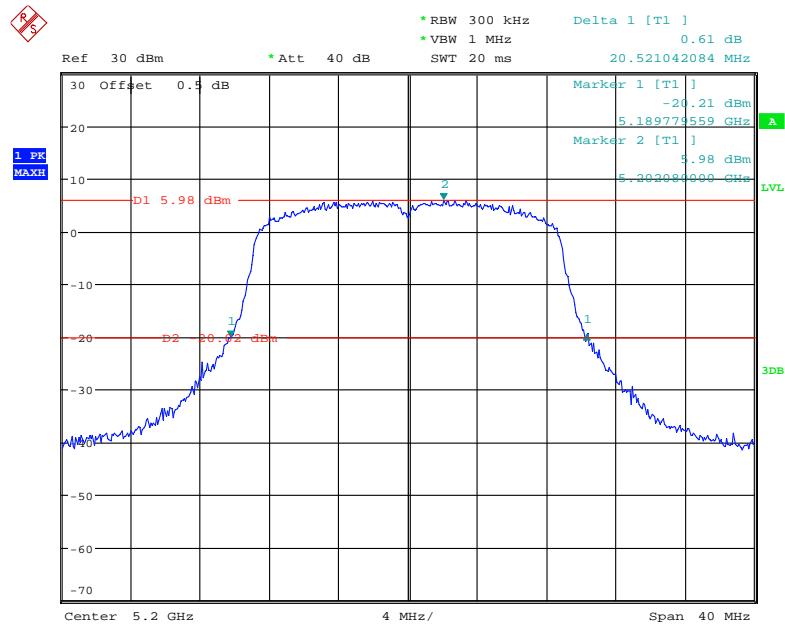
Date: 8.DEC.2017 11:33:20

802.11n ht20 Low Channel



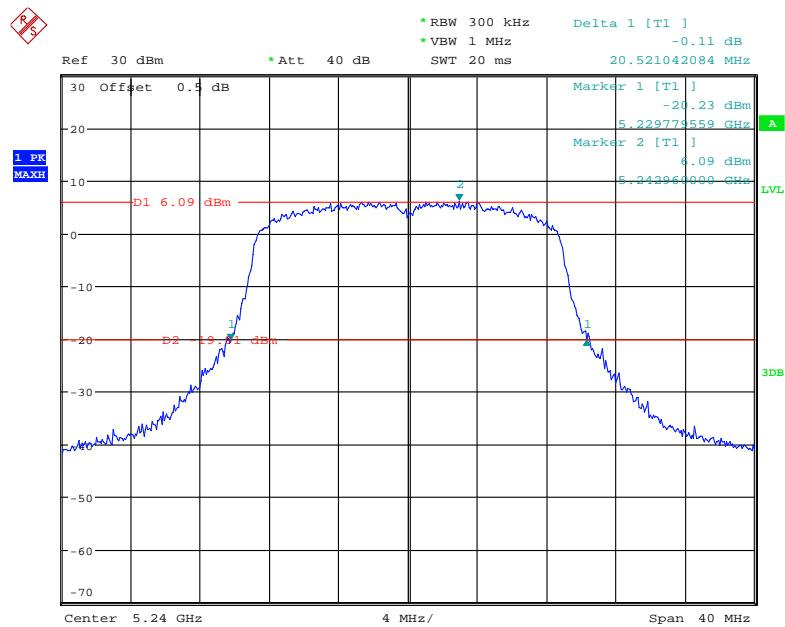
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802.11n ht20 Middle Channel



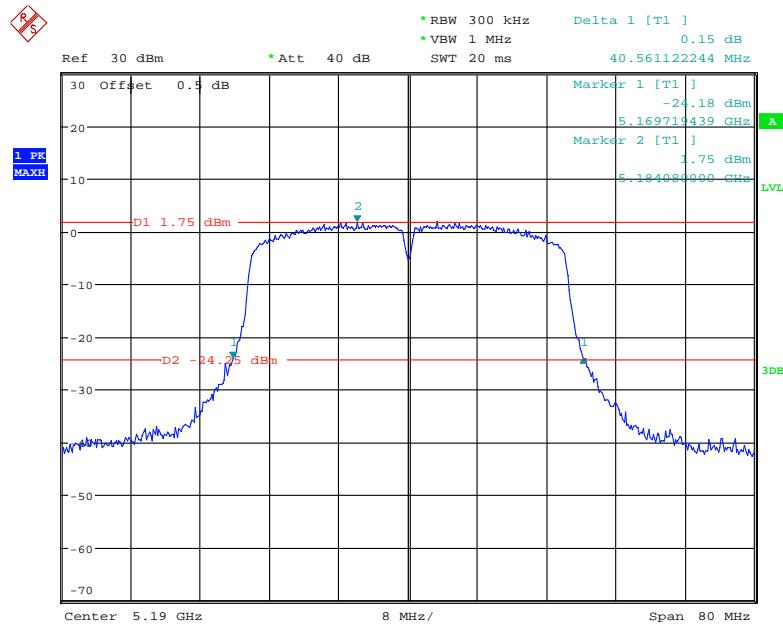
Date: 8.DEC.2017 11:39:05

802.11n ht20 High Channel



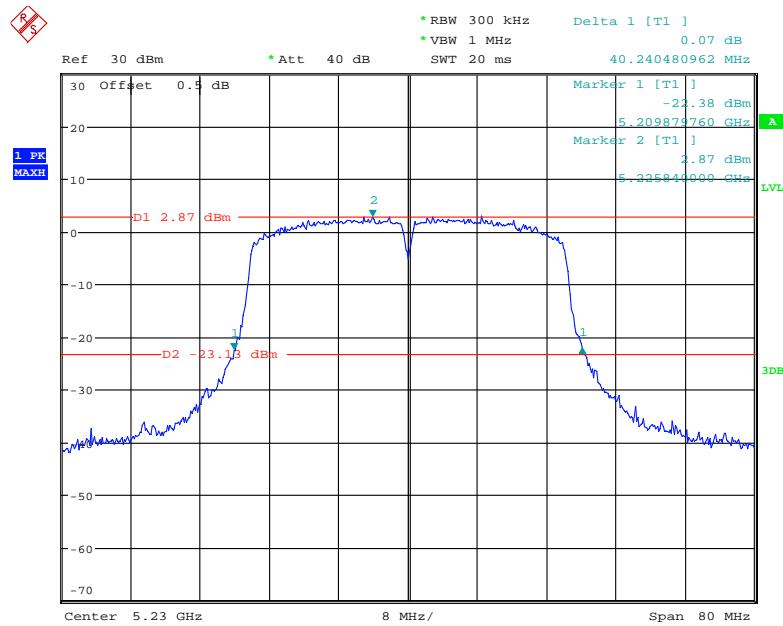
Date: 8.DEC.2017 11:40:08

802.11n ht40 Low Channel

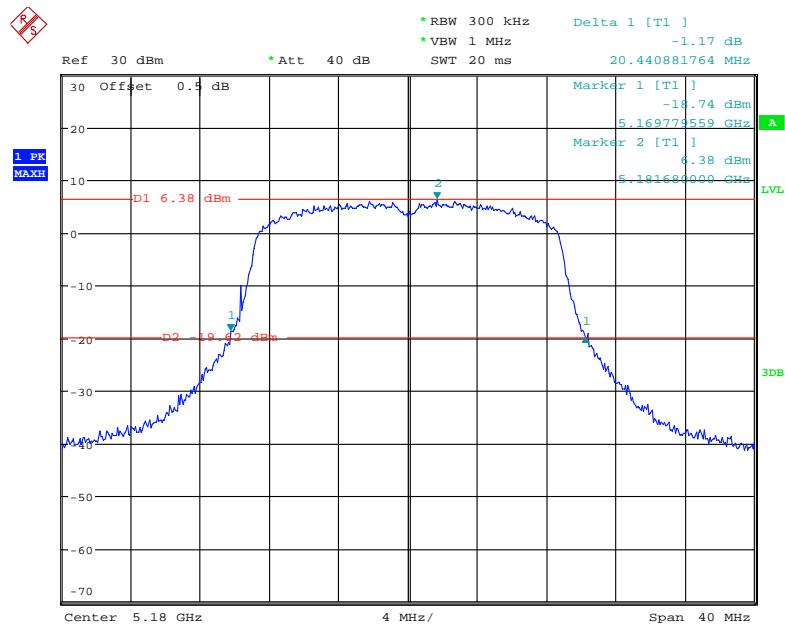


Date: 8.DEC.2017 13:38:52

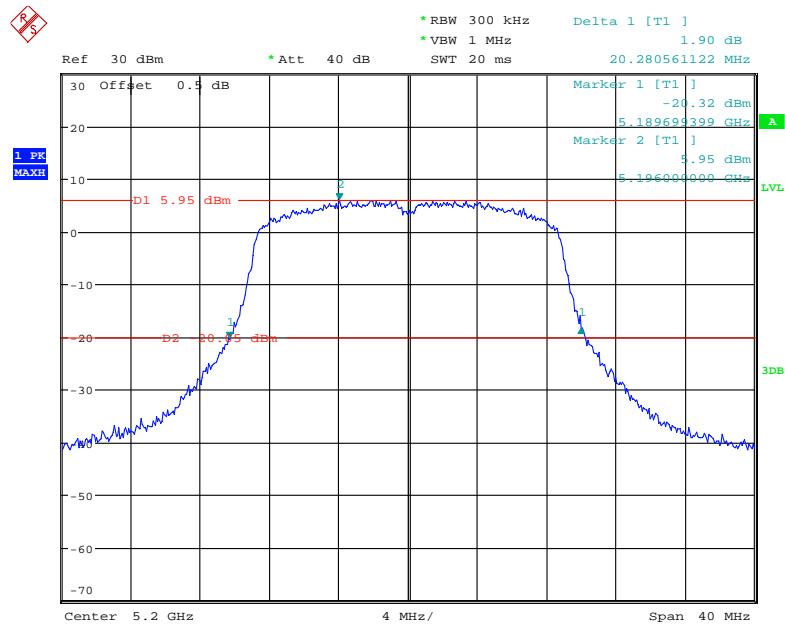
802.11n ht40 High Channel



Date: 8.DEC.2017 11:55:24

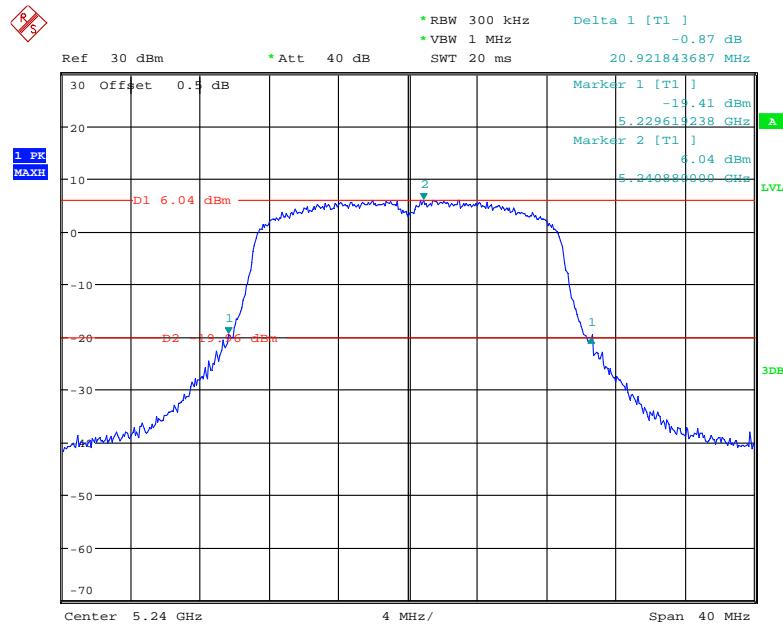
802.11n ac20 Low Channel

Date: 8.DEC.2017 11:43:58

802.11n ac20 Middle Channel

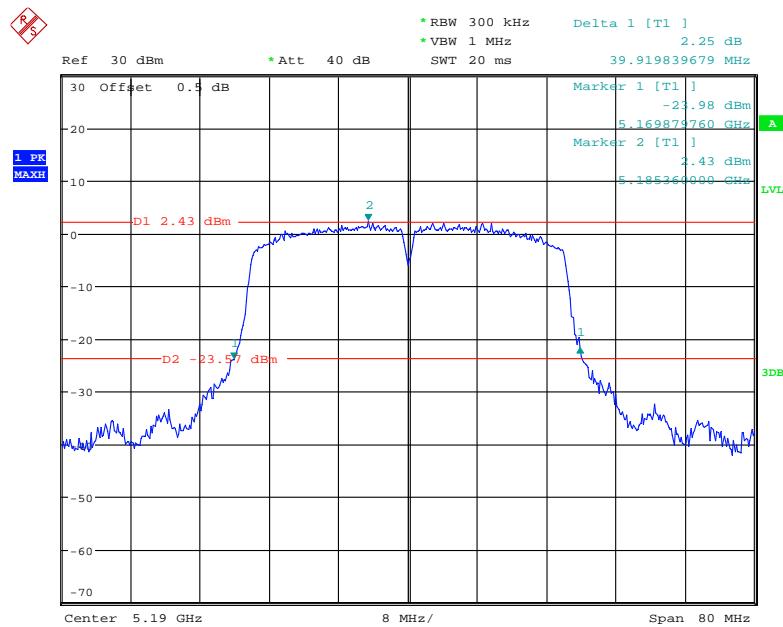
Date: 8.DEC.2017 11:43:03

802.11n ac20 High Channel



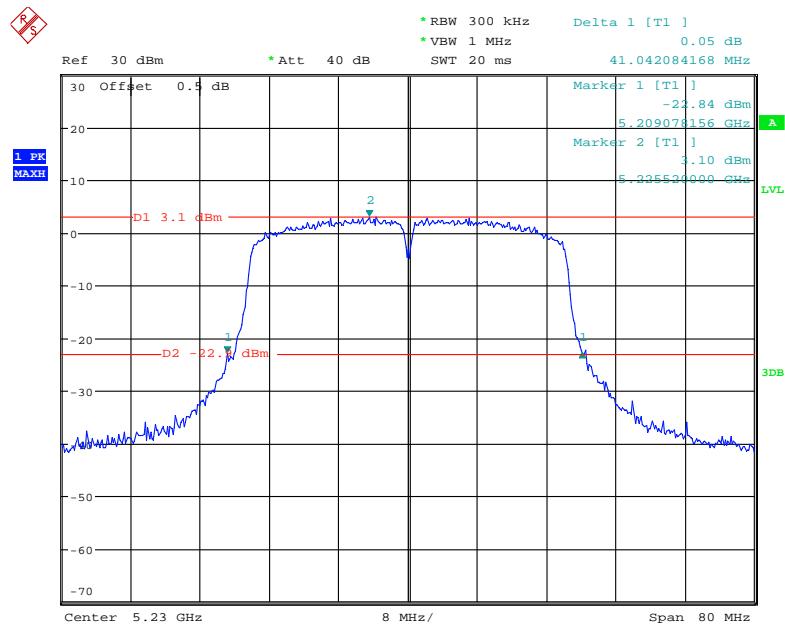
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802.11n ac40 Low Channel



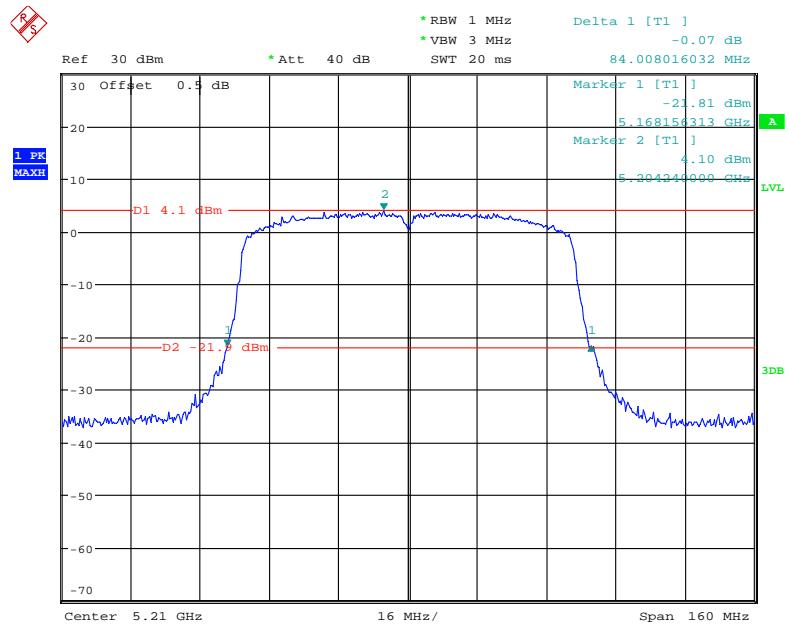
Date: 8.DEC.2017 13:40:23

802.11n ac40 High Channel



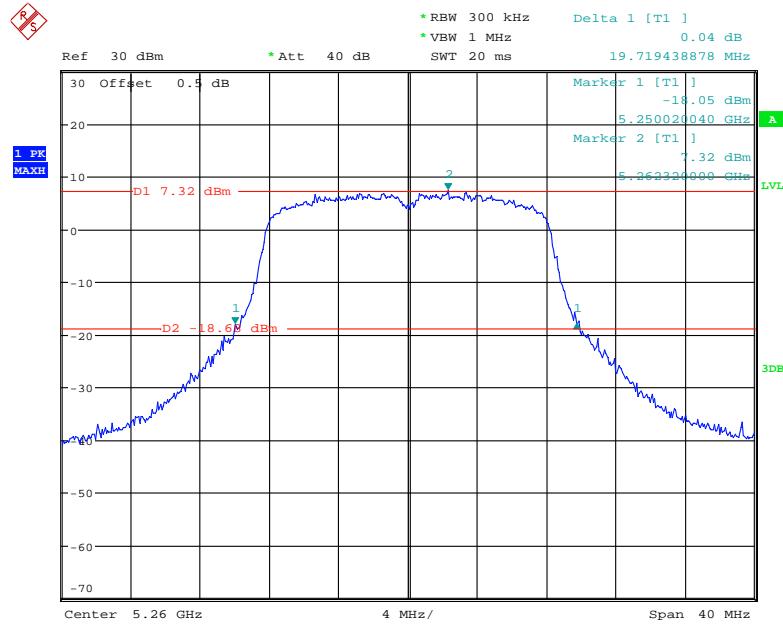
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802.11n ac80 Middle Channel

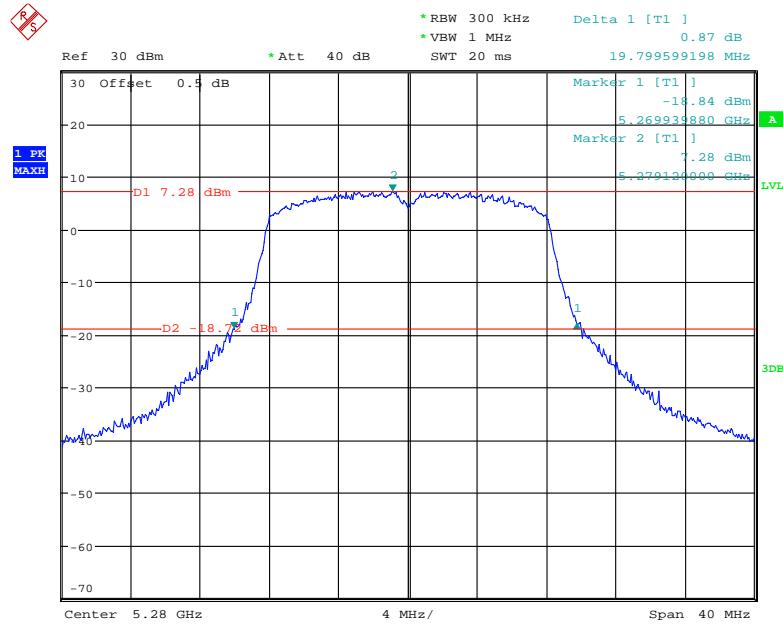


Date: 8.DEC.2017 13:03:53

5250-5350MHz:

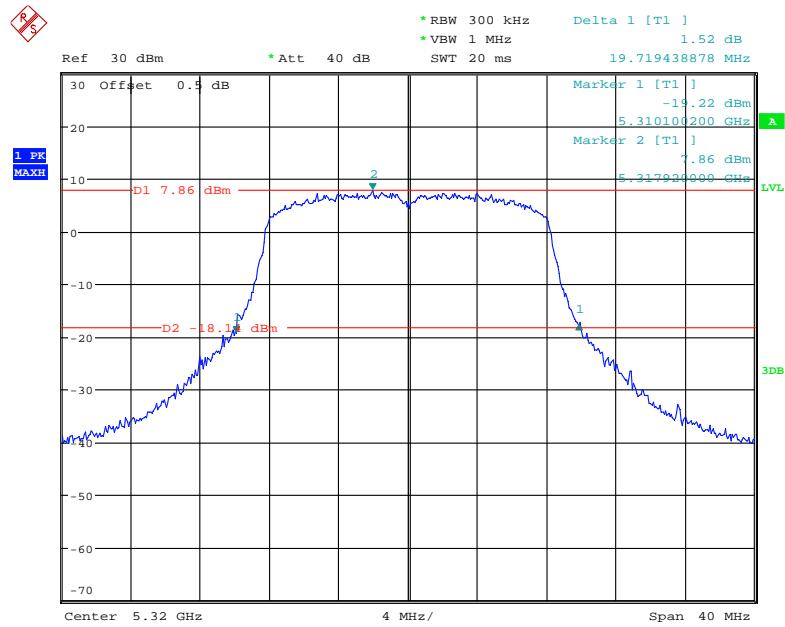
802.11a Low Channel

Date: 8.DEC.2017 13:07:52

802.11a Middle Channel

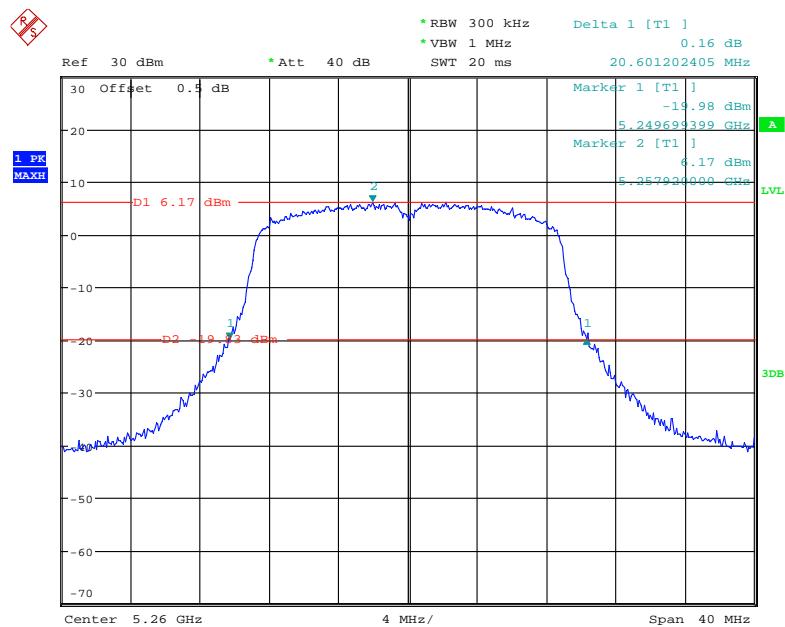
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802.11a High Channel



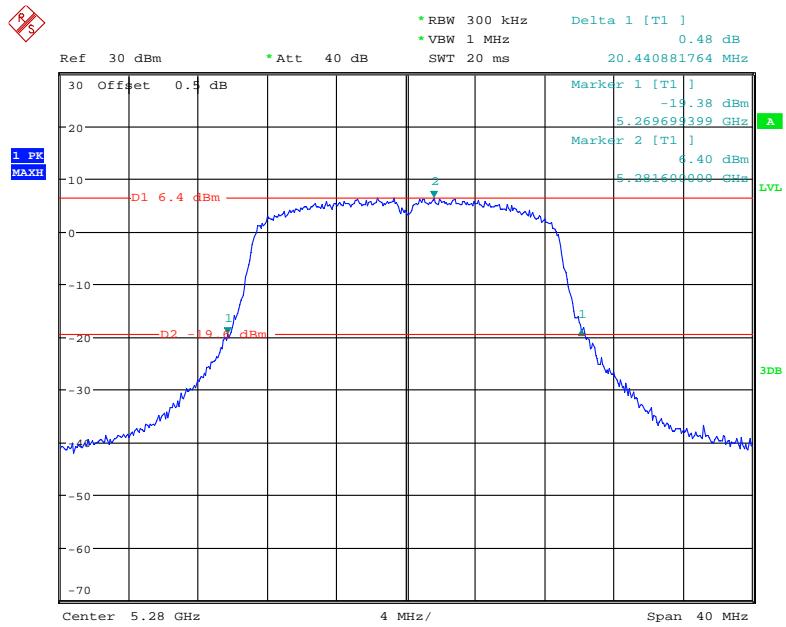
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802.11n ht20 Low Channel



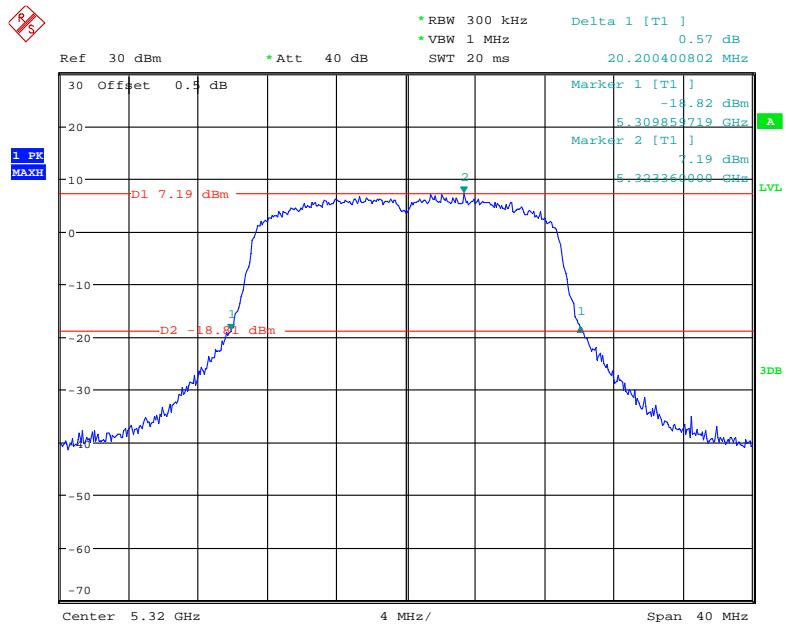
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802.11n ht20 Middle Channel



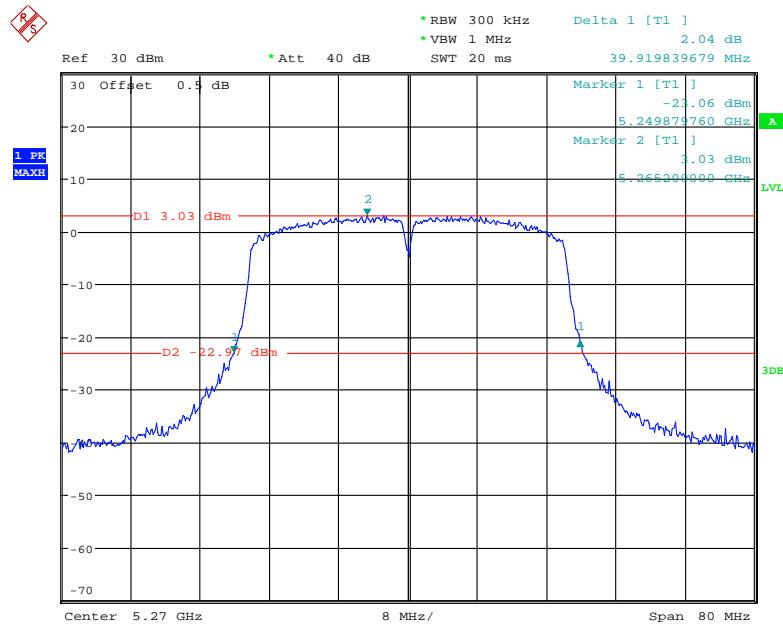
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802.11n ht20 High Channel



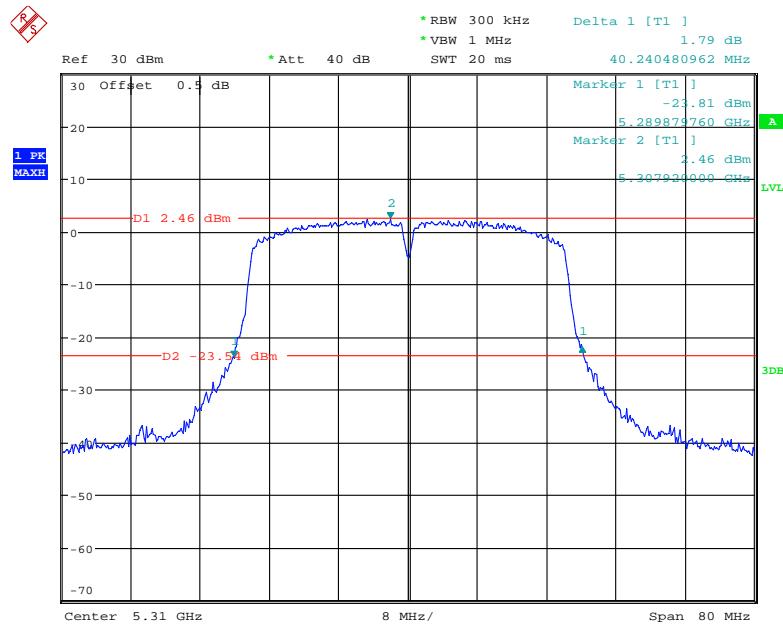
Date: 8.DEC.2017 13:12:06

802.11n ht40 Low Channel



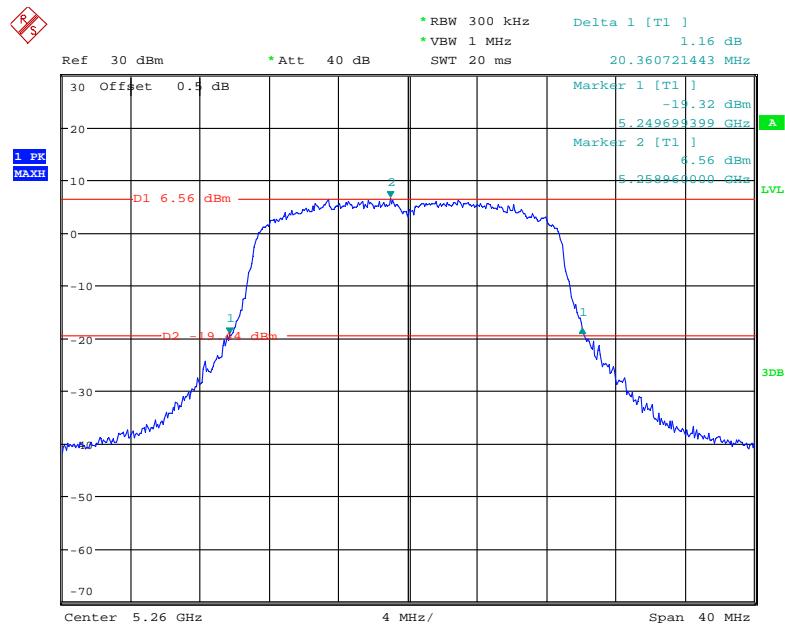
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802.11n ht40 High Channel



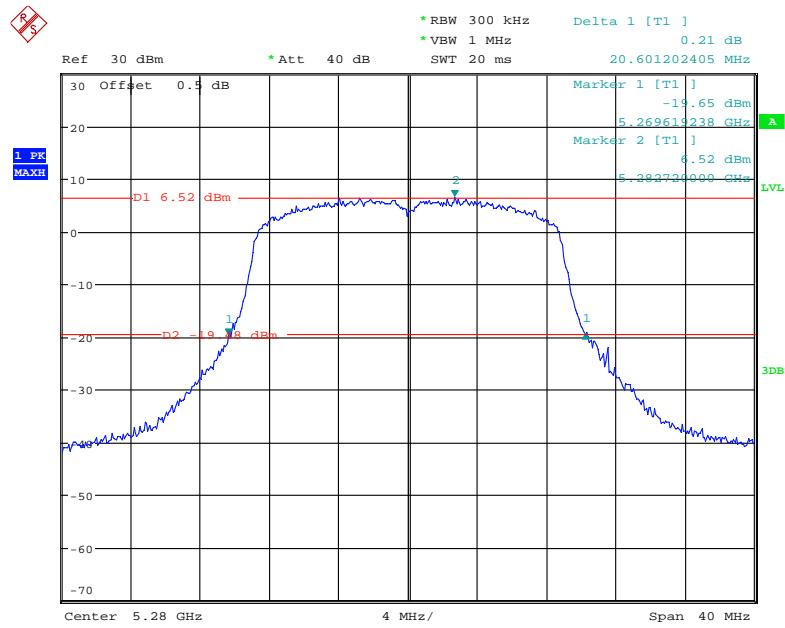
Date: 8.DEC.2017 13:36:50

802.11n ac20 Low Channel



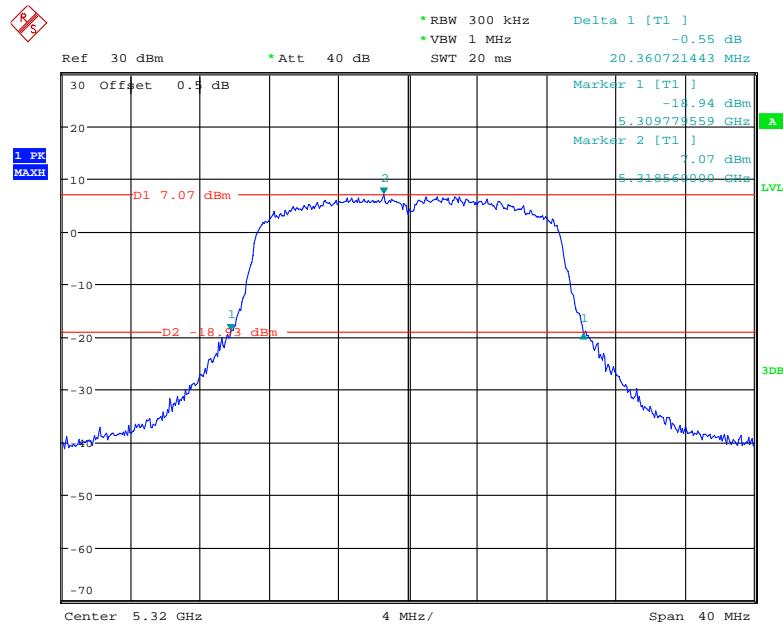
Date: 8.DEC.2017 13:16:04

802.11n ac20 Middle Channel



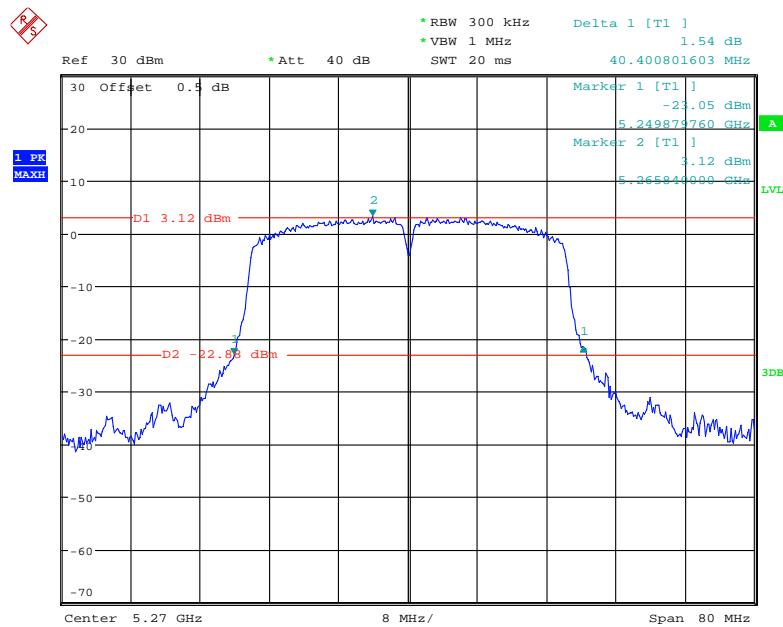
Date: 8.DEC.2017 13:17:32

802.11n ac20 High Channel



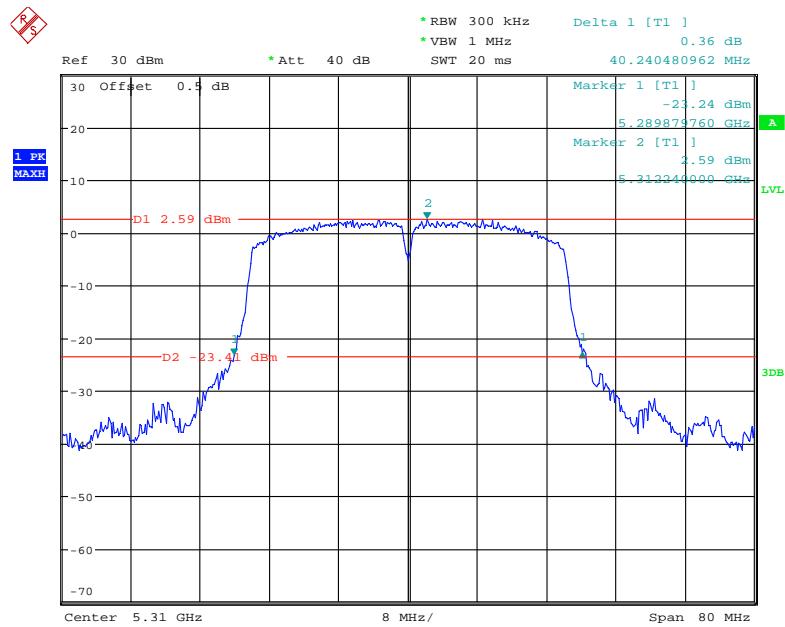
Date: 8.DEC.2017 13:18:28

802.11n ac40 Low Channel



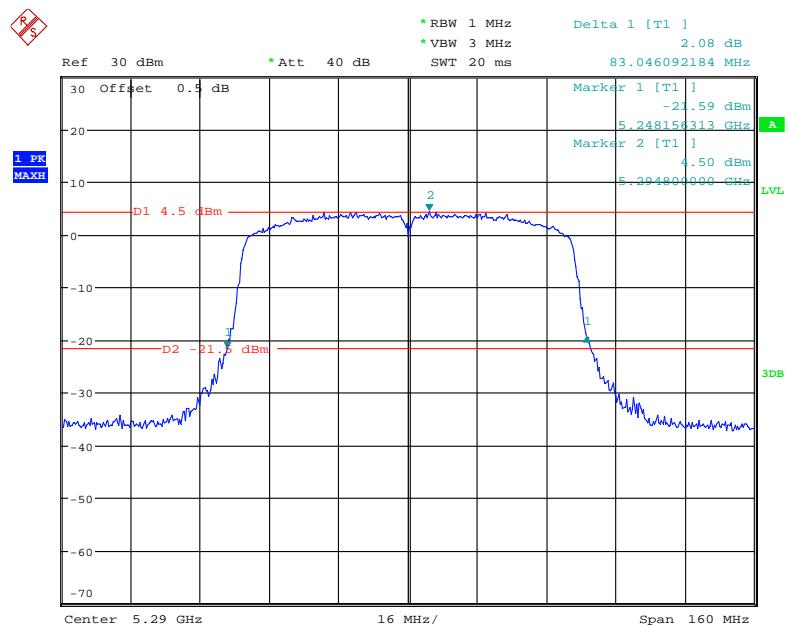
Date: 8.DEC.2017 13:32:56

802.11n ac40 High Channel



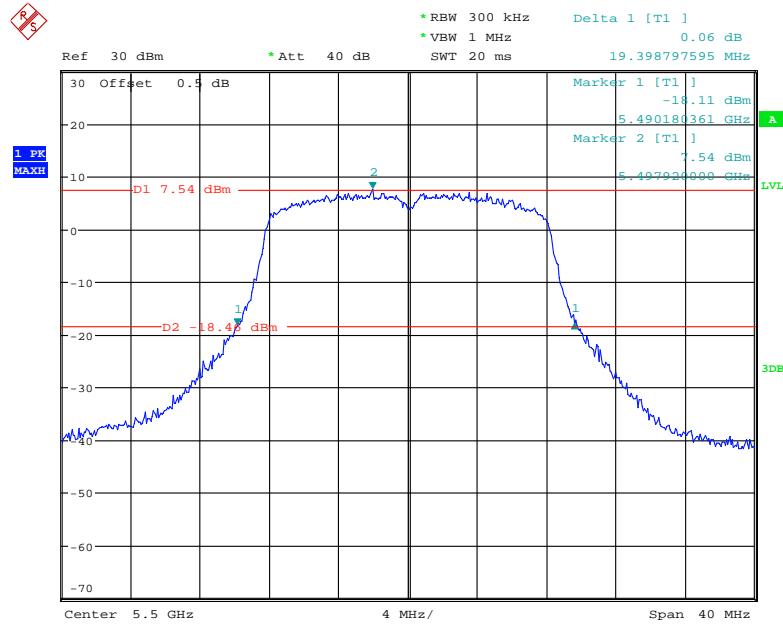
Date: 8.DEC.2017 13:34:32

802.11n ac80 Middle Channel

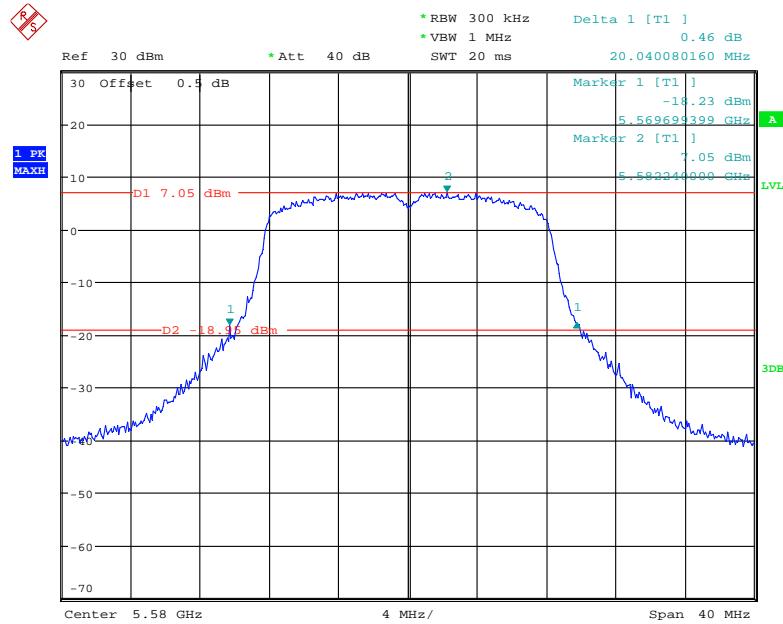


Date: 8.DEC.2017 13:05:59

5470-5725MHz:

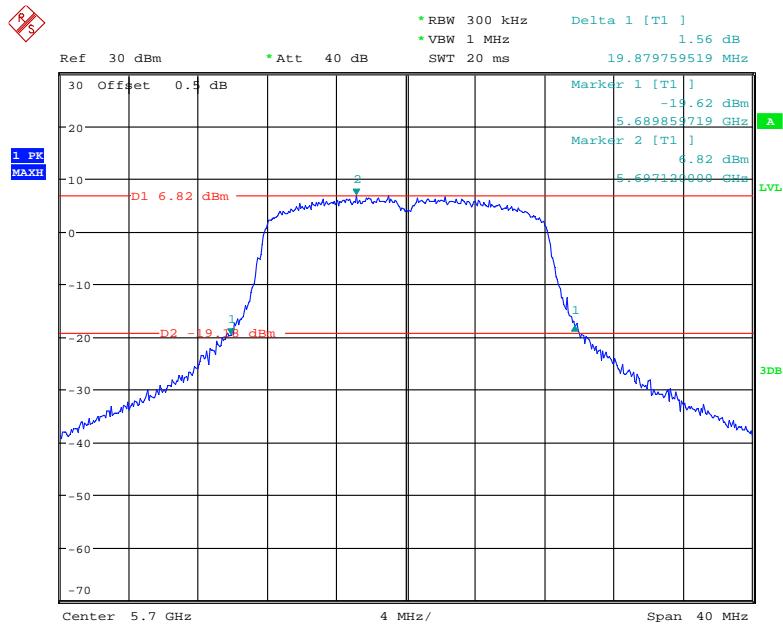
802.11a Low Channel

Date: 8.DEC.2017 13:44:04

802.11a Middle Channel

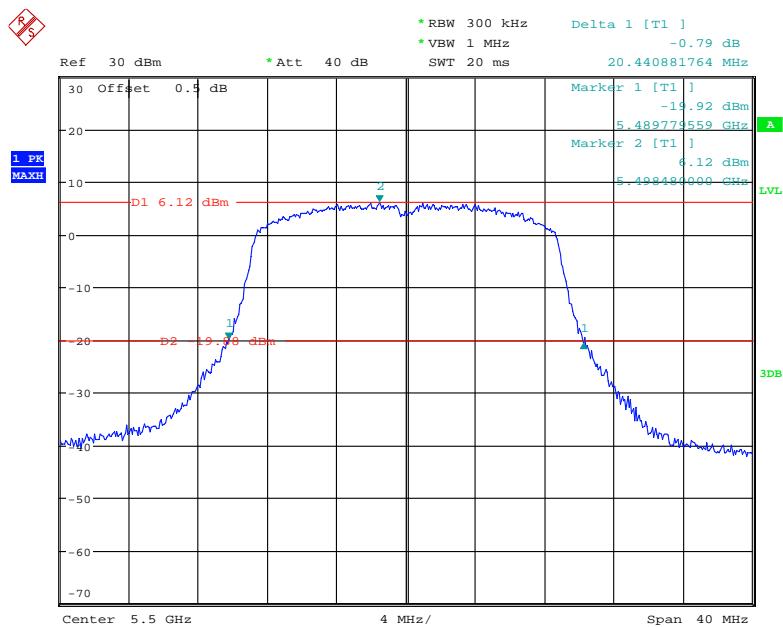
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802.11a High Channel



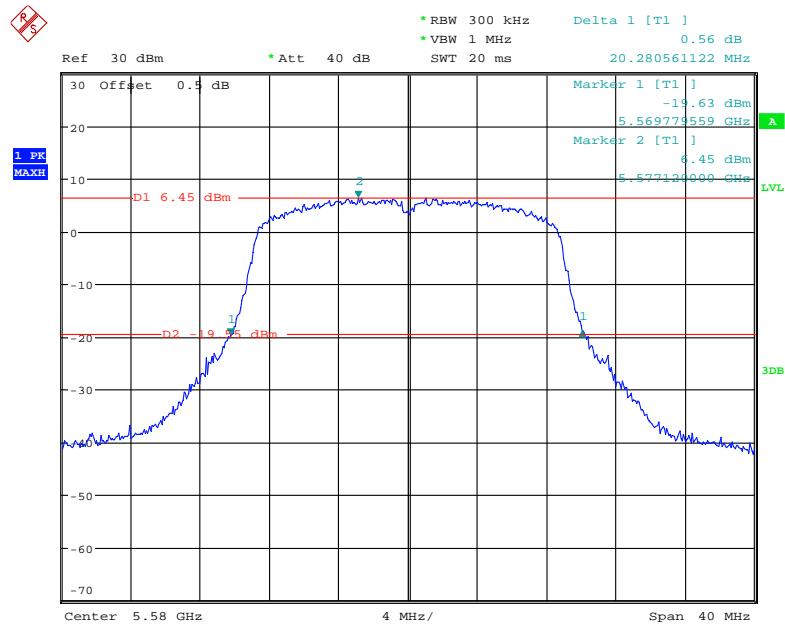
Date: 8.DEC.2017 13:46:32

802.11n ht20 Low Channel



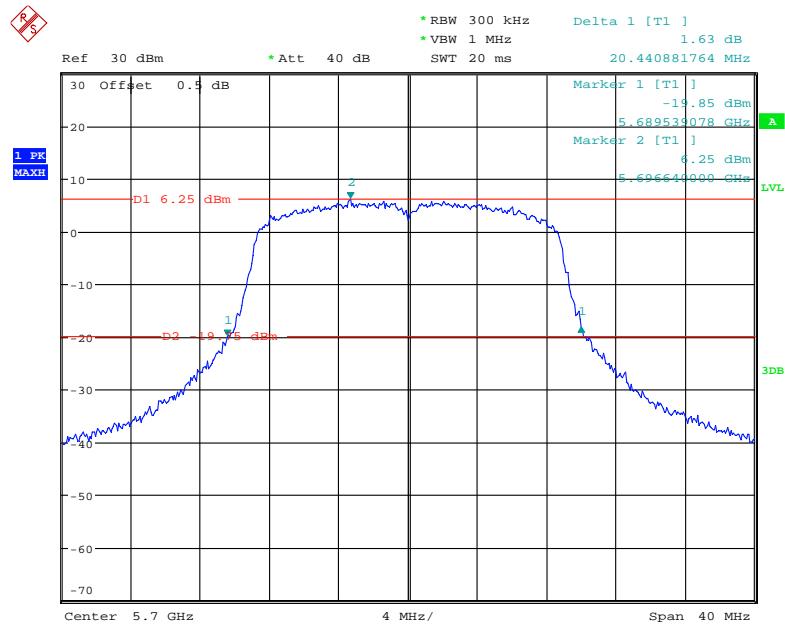
Date: 8.DEC.2017 13:51:52

802.11n ht20 Middle Channel



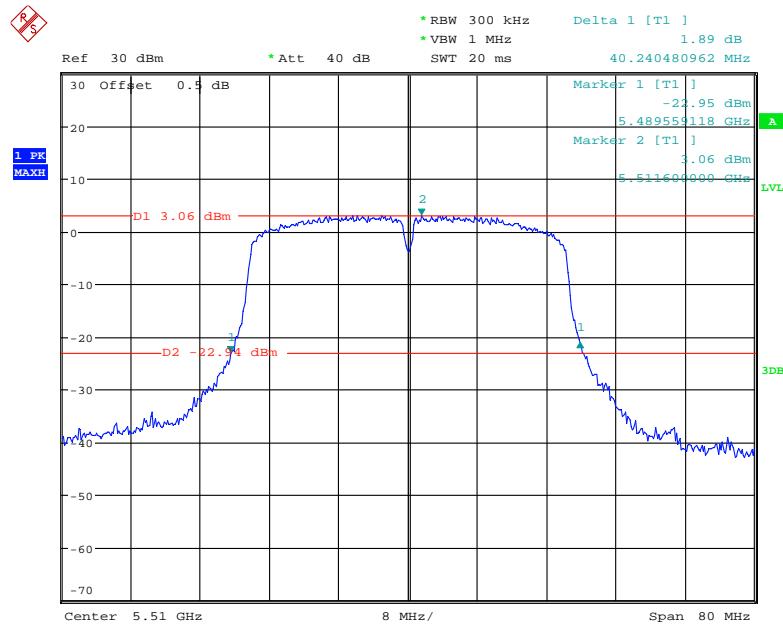
Date: 8.DEC.2017 13:50:30

802.11n ht20 High Channel



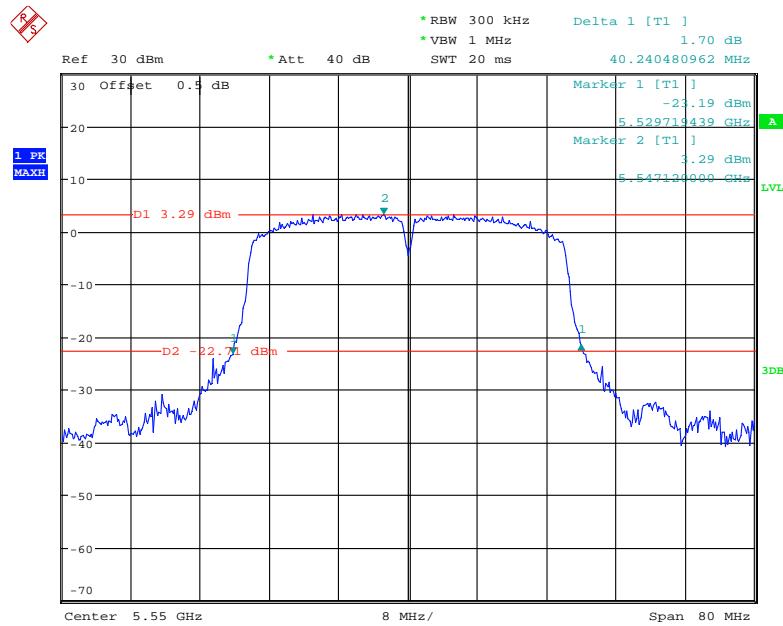
Date: 8.DEC.2017 13:48:54

802.11n ht40 Low Channel



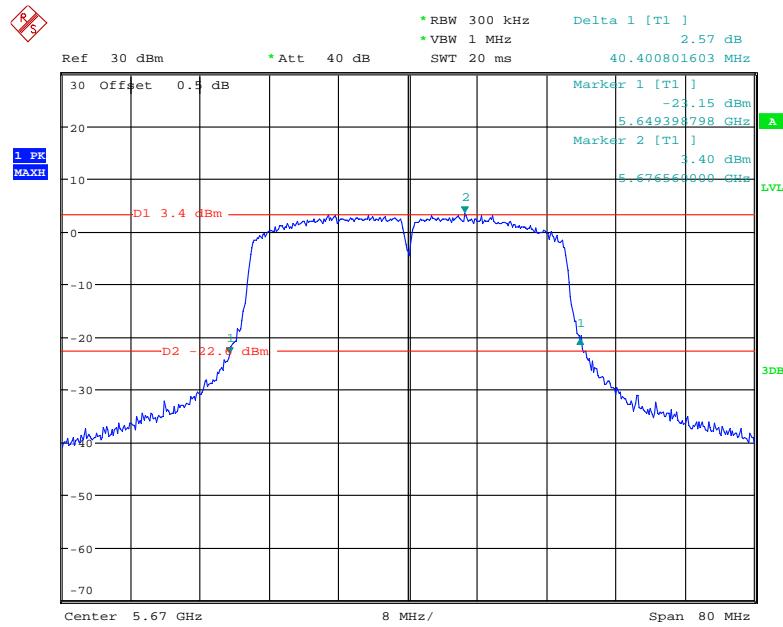
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802.11n ht40 Middle Channel



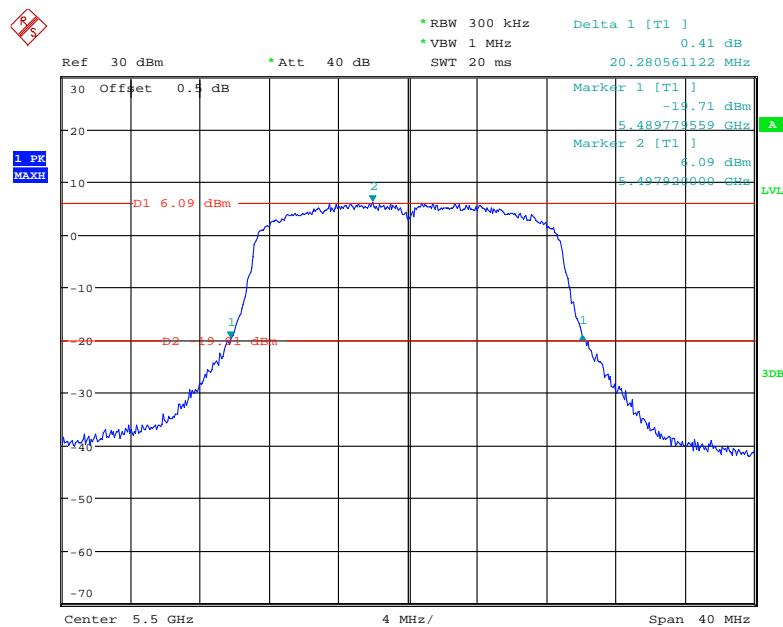
Date: 8.DEC.2017 14:02:36

802.11n ht40 High Channel



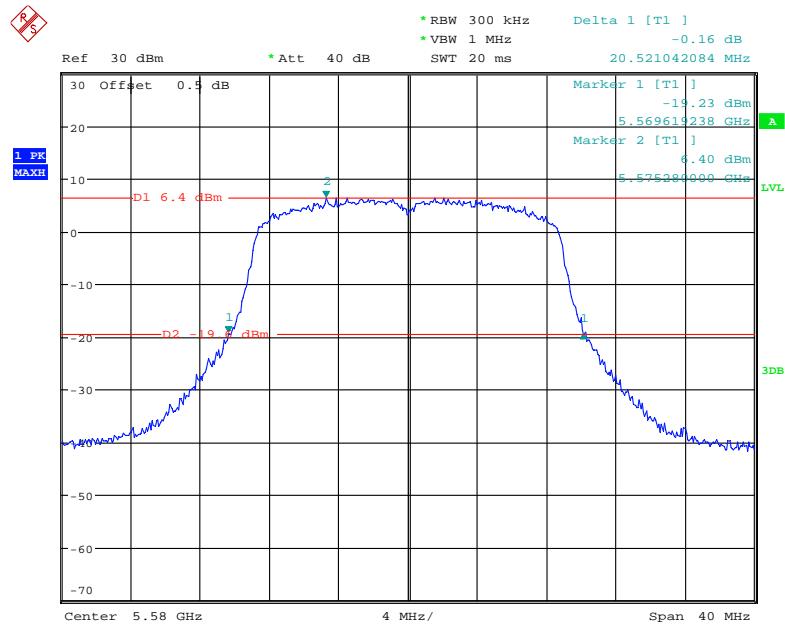
Date: 8.DEC.2017 14:03:45

802.11n ac20 Low Channel



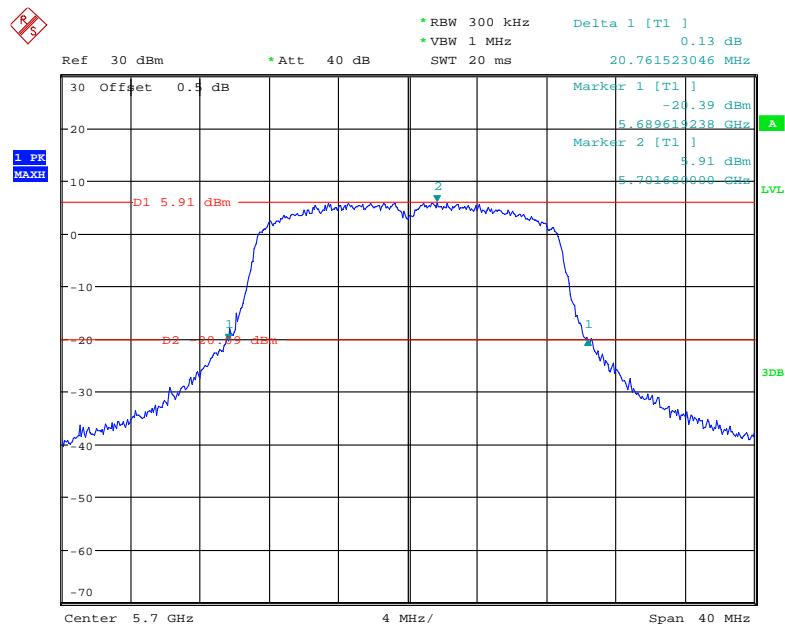
Date: 8.DEC.2017 13:53:43

802.11n ac20 Middle Channel



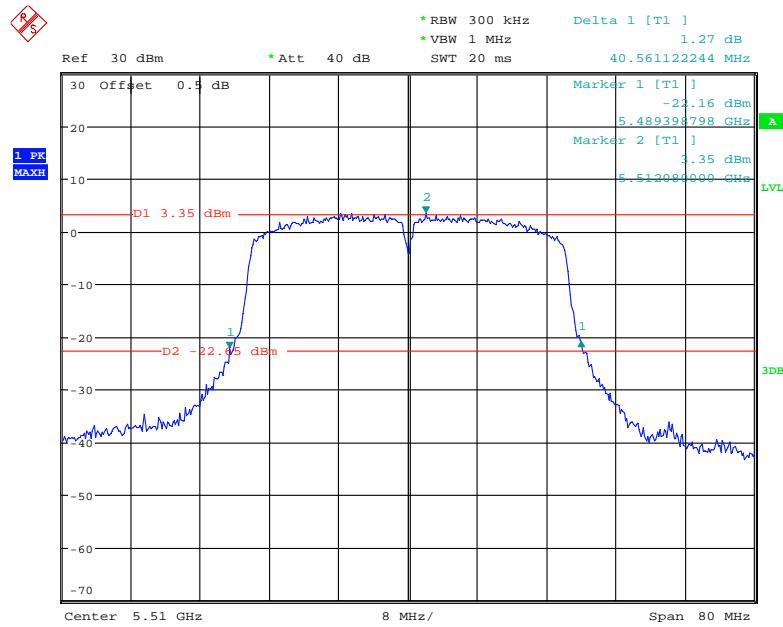
Date: 8.DEC.2017 13:55:04

802.11n ac20 High Channel



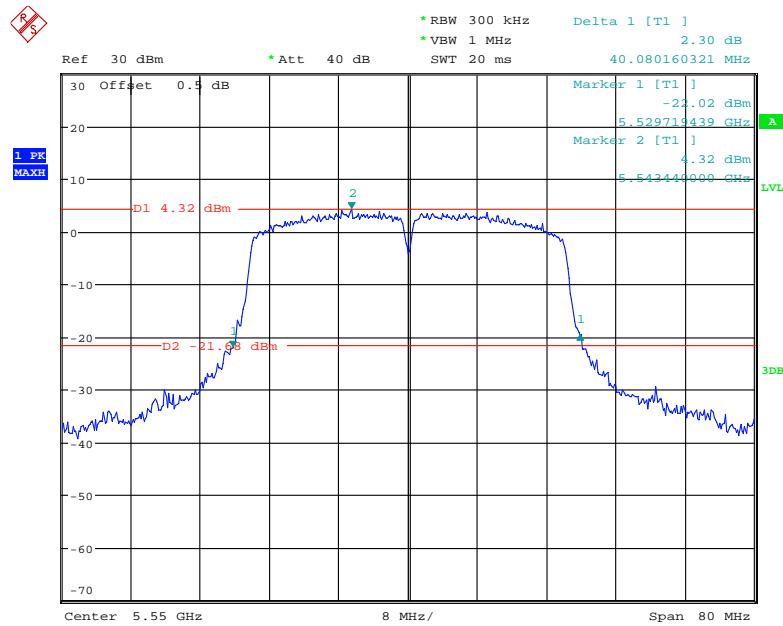
Date: 8.DEC.2017 13:56:12

802.11n ac40 Low Channel



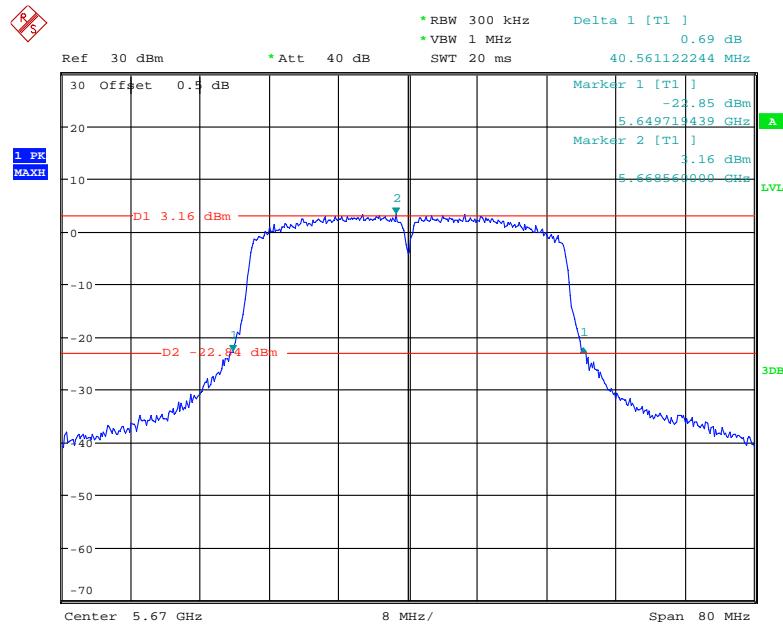
Date: 8.DEC.2017 14:10:11

802.11n ac40 Middle Channel



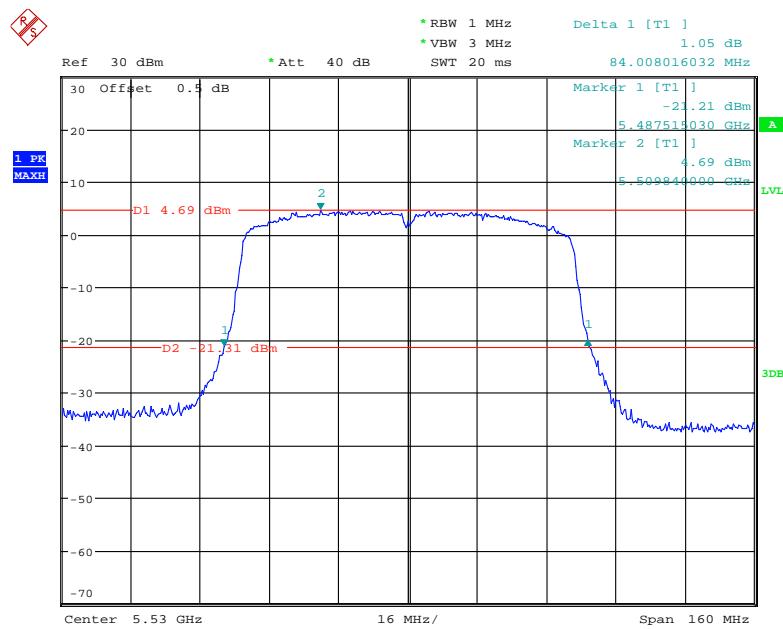
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802.11n ac40 High Channel

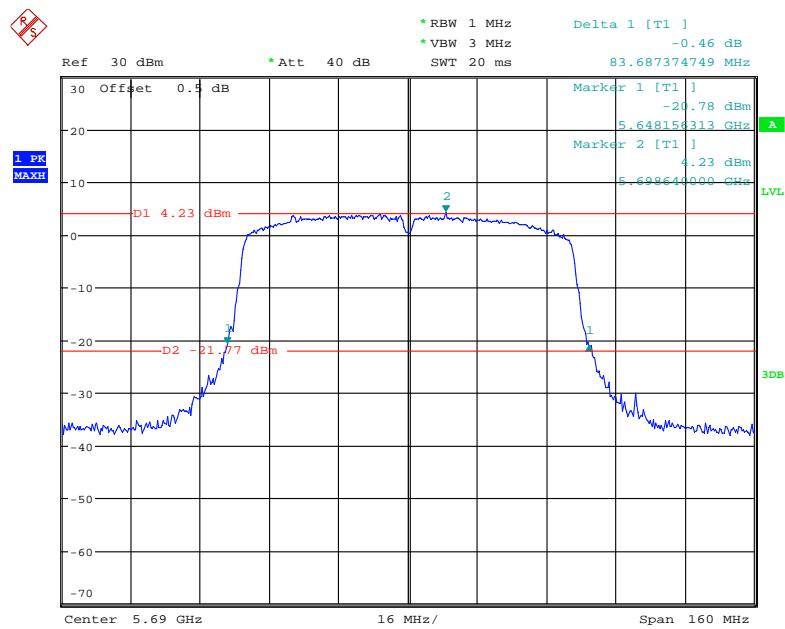


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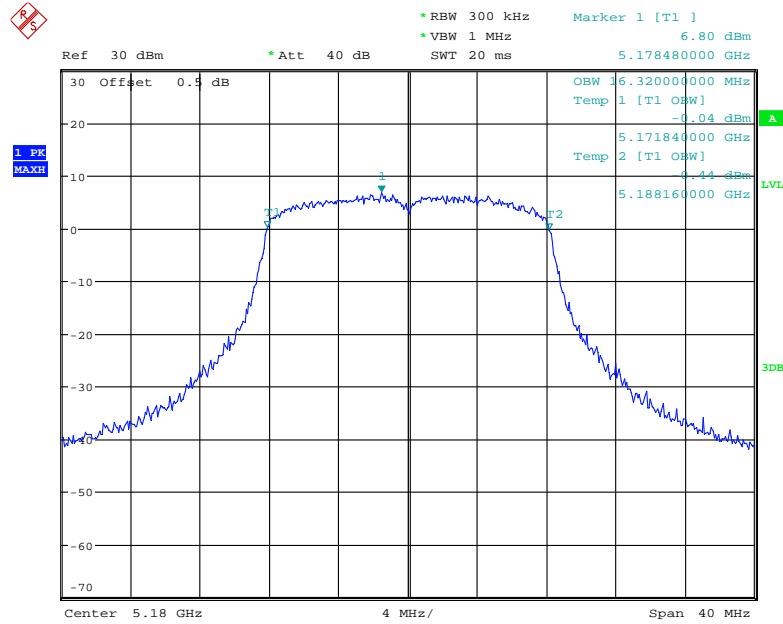
802.11n ac80 Low Channel



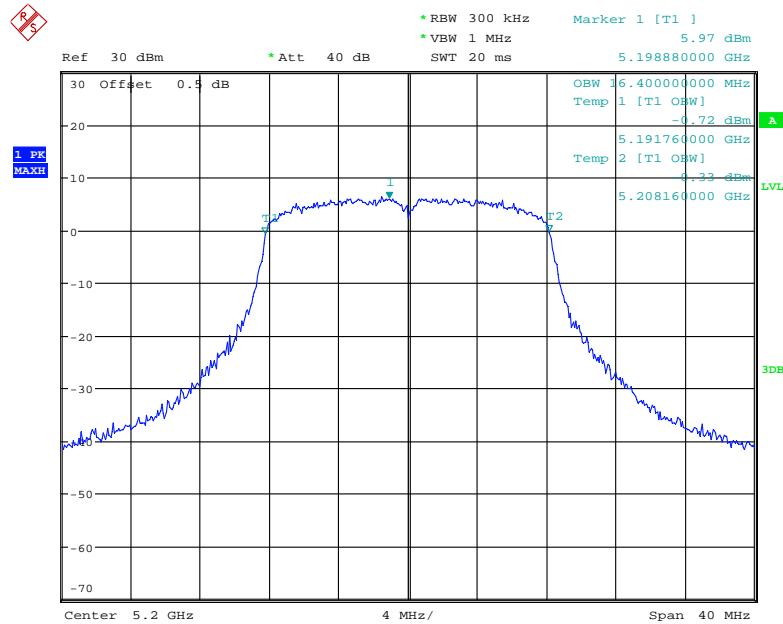
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802.11n ac80 High Channel

Date: 8.DEC.2017 14:13:51

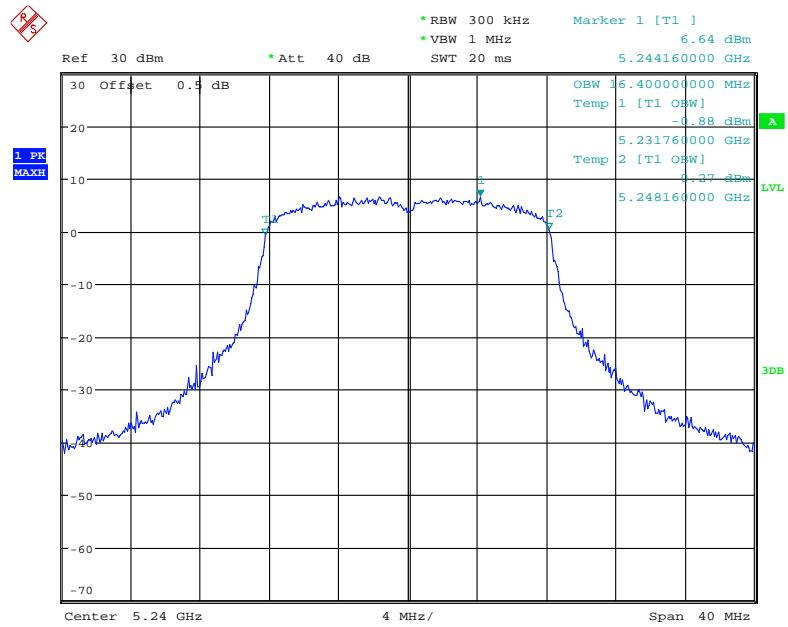
99% Occupied Bandwidth:**5150-5250MHz:****802.11a Low Channel**

Date: 8.DEC.2017 11:36:05

802.11a Middle Channel

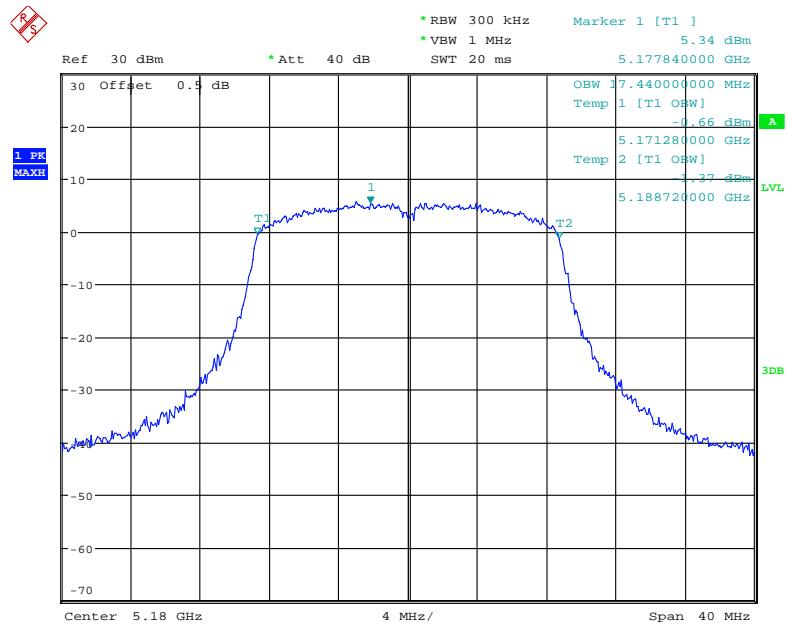
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802.11a High Channel



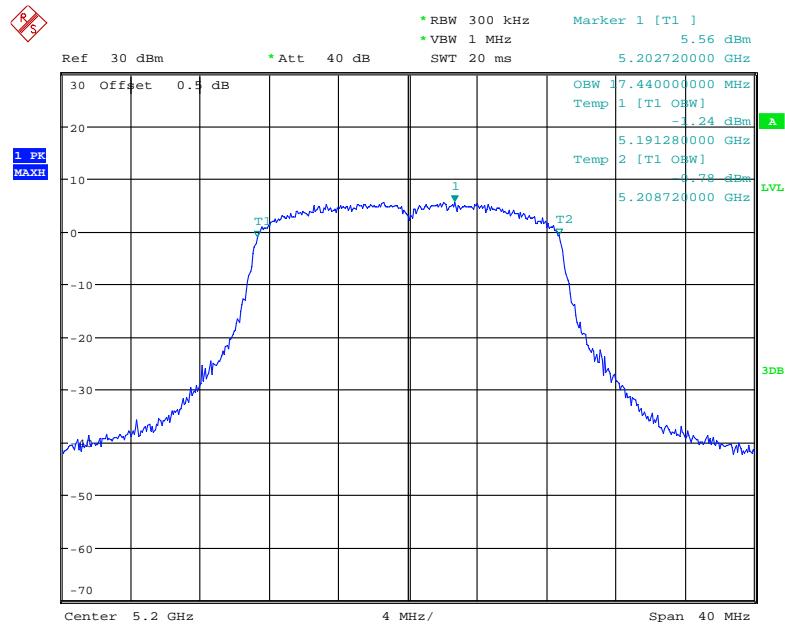
Date: 8.DEC.2017 11:33:34

802.11n ht20 Low Channel



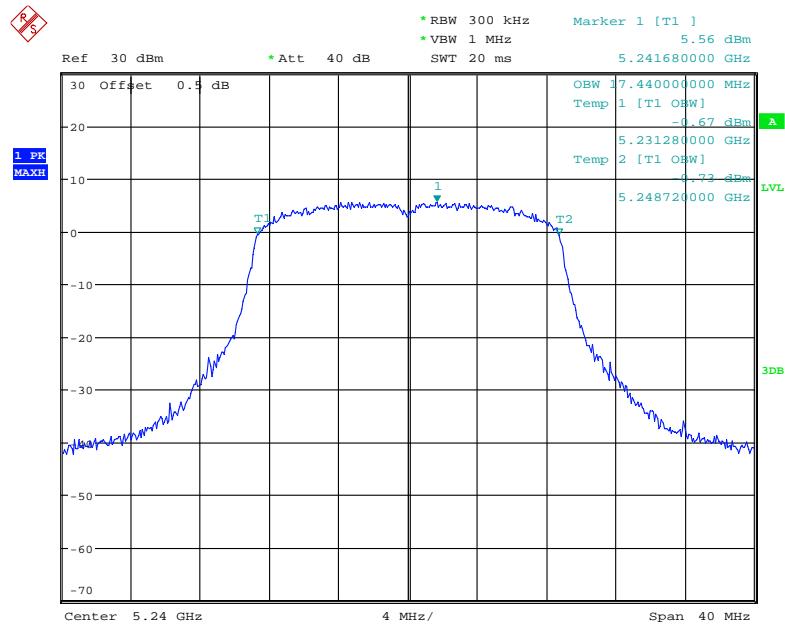
Date: 8.DEC.2017 11:37:49

802.11n ht20 Middle Channel

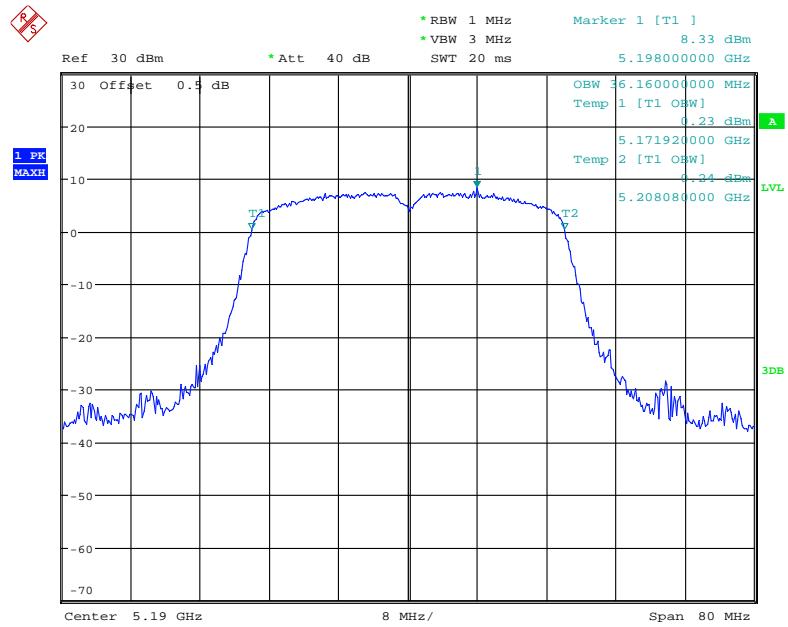


Date: 8.DEC.2017 11:39:18

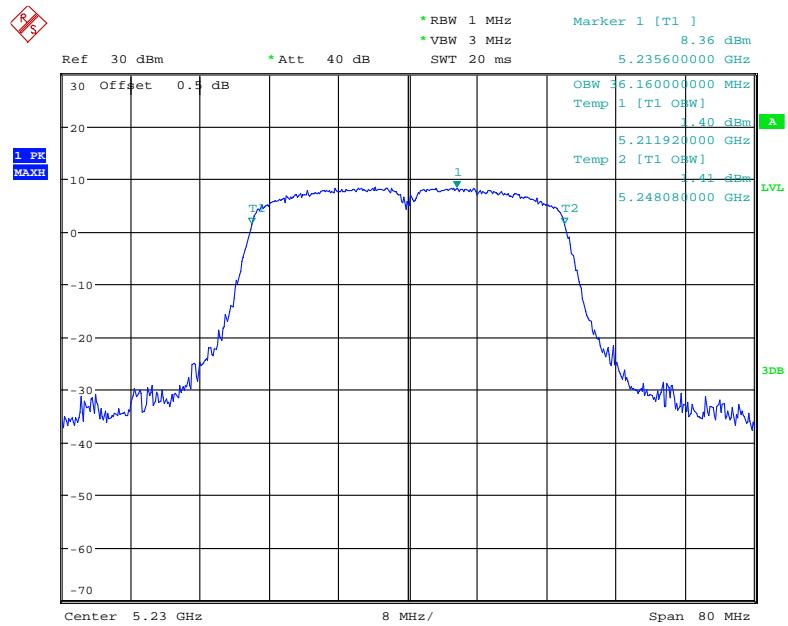
802.11n ht20 High Channel



Date: 8.DEC.2017 11:40:23

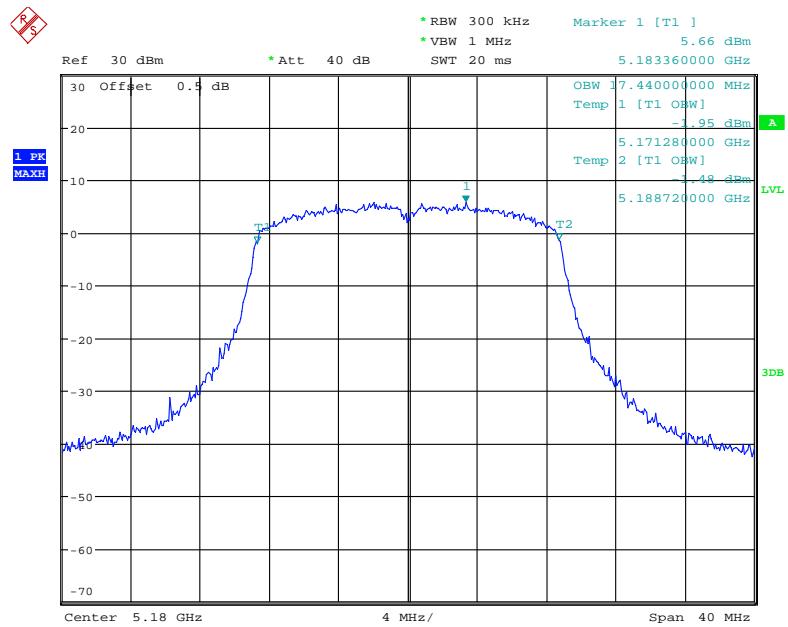
802.11n ht40 Low Channel

Date: 8.DEC.2017 13:39:05

802.11n ht40 High Channel

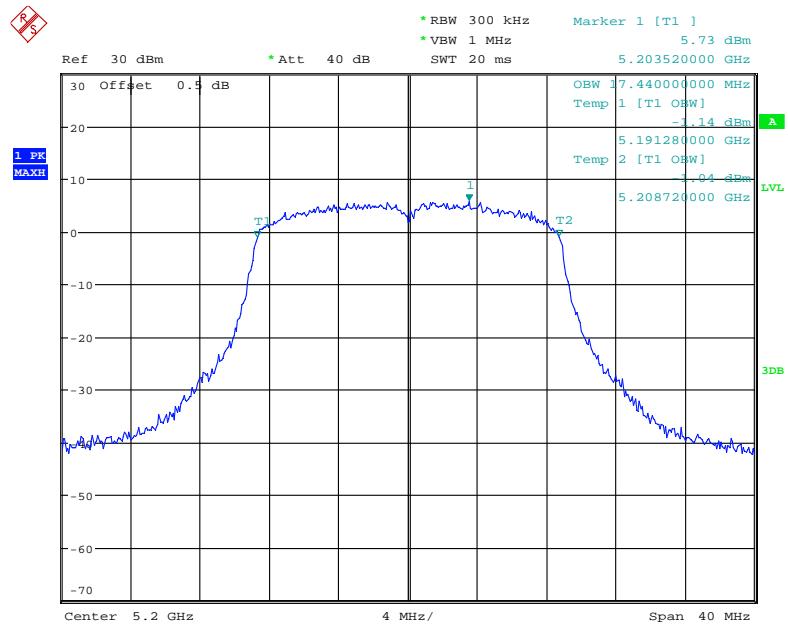
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802.11n ac20 Low Channel



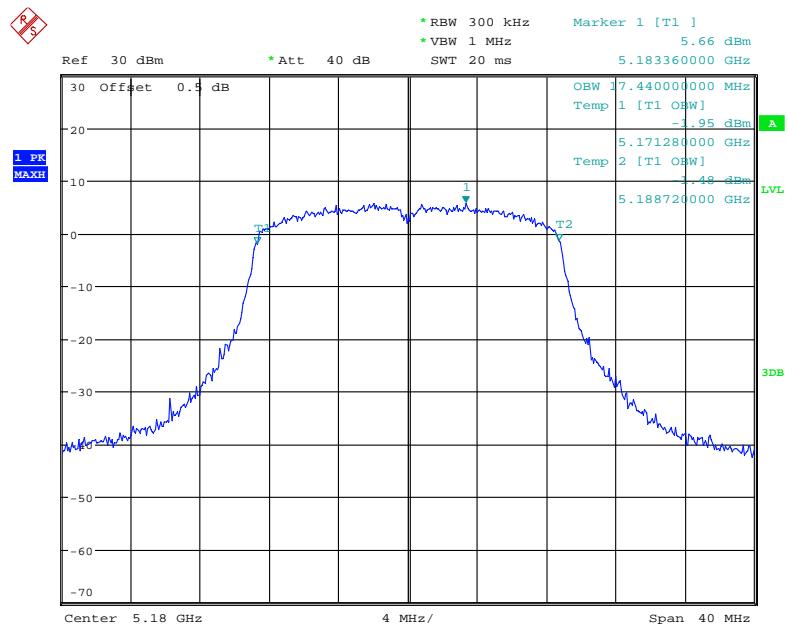
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802.11n ac20 Middle Channel



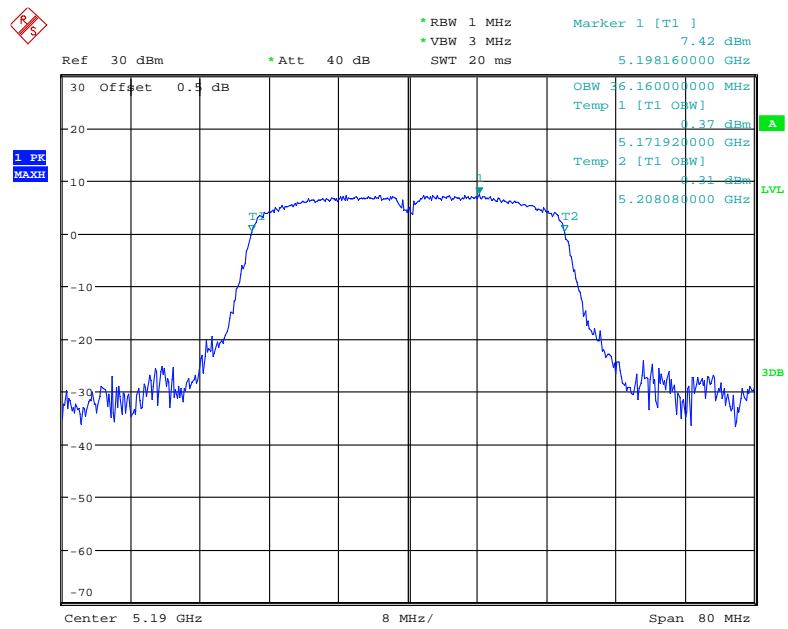
Date: 8.DEC.2017 11:43:15

802.11n ac20 High Channel



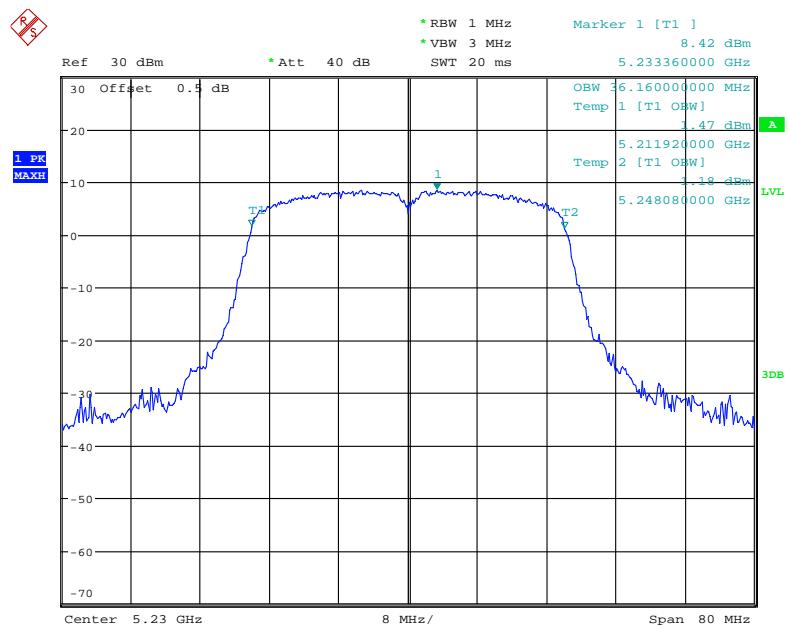
Date: 8.DEC.2017 11:44:10

802.11n ac40 Low Channel



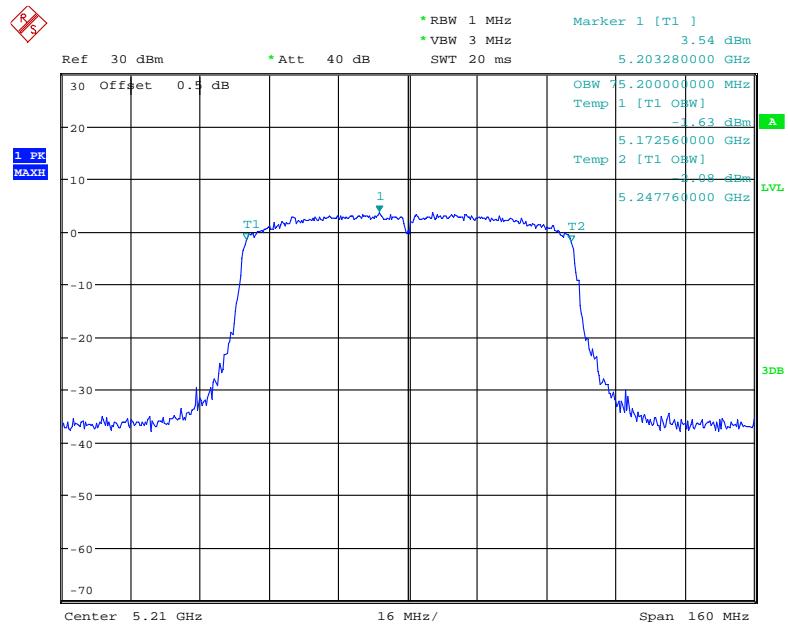
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802.11n ac40 High Channel



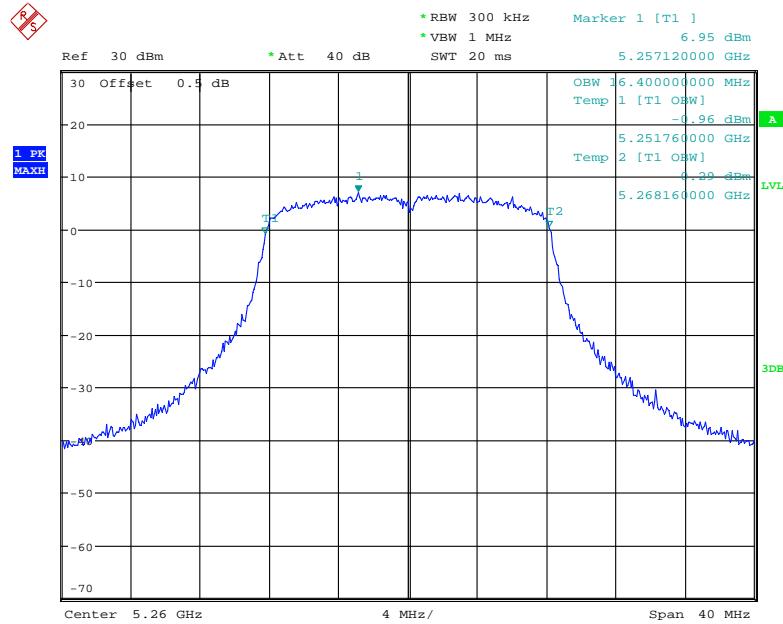
Date: 8.DEC.2017 11:57:54

802.11n ac80 Middle Channel

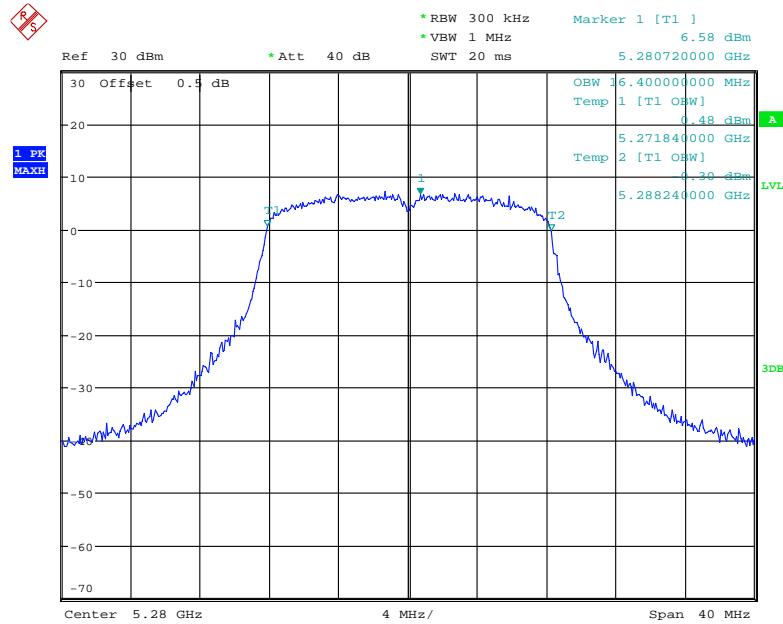


Date: 8.DEC.2017 13:04:05

5250-5350MHz:

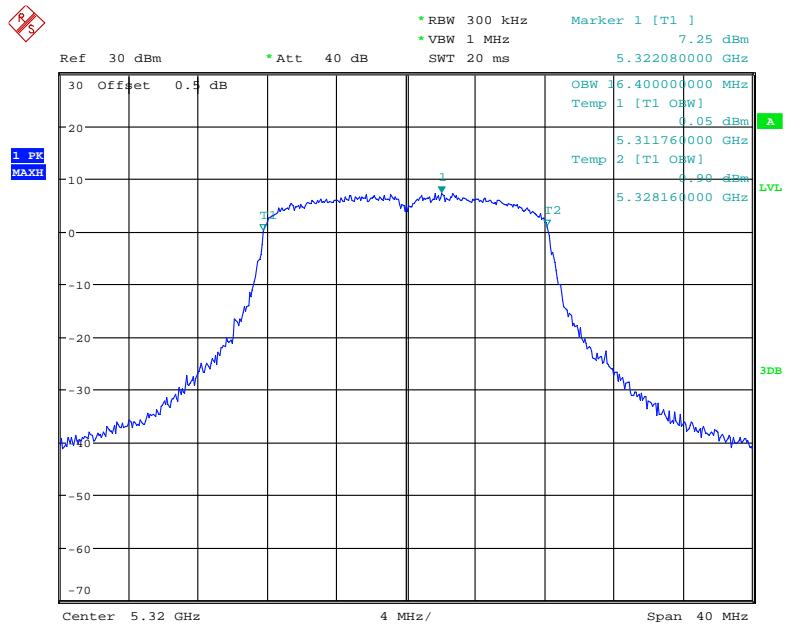
802.11a Low Channel

Date: 8.DEC.2017 13:08:04

802.11a Middle Channel

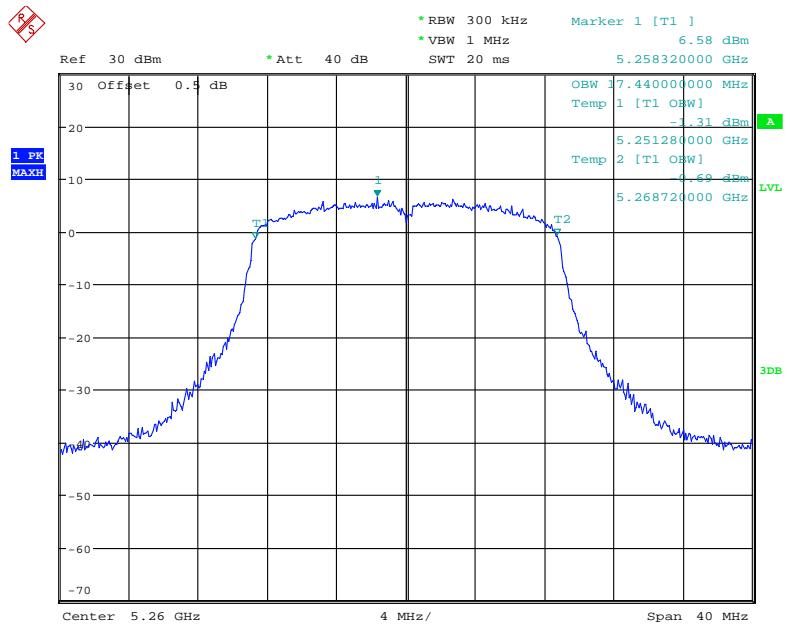
Date: 8.DEC.2017 13:09:29

802.11a High Channel



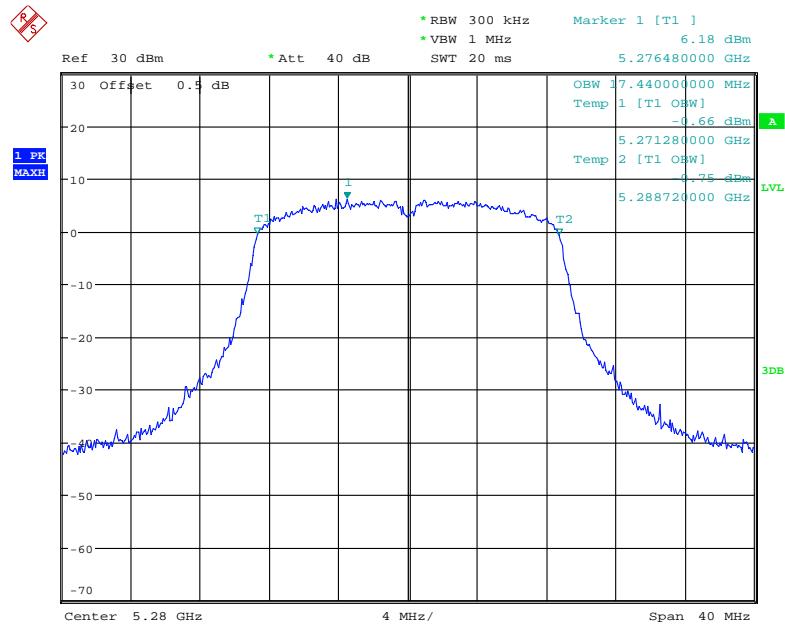
Date: 8.DEC.2017 13:10:33

802.11n ht20 Low Channel



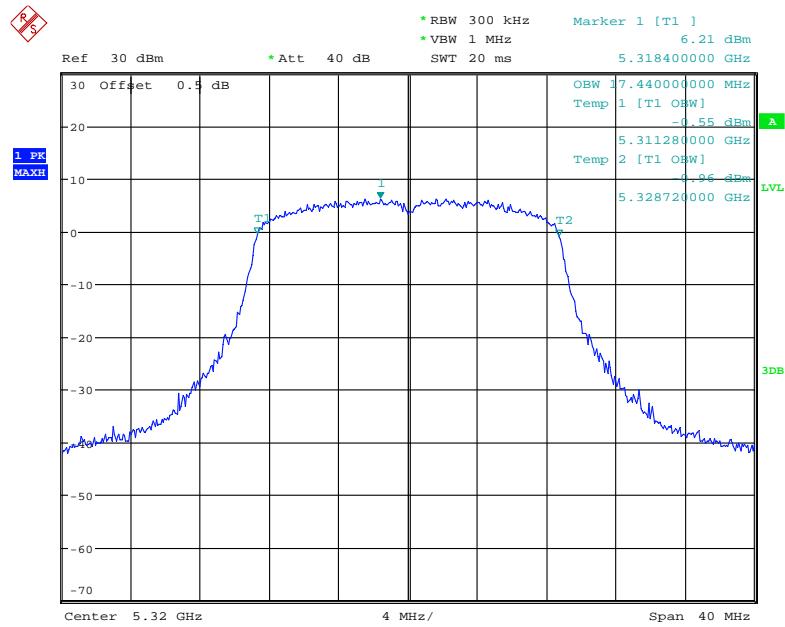
Date: 8.DEC.2017 13:14:41

802.11n ht20 Middle Channel

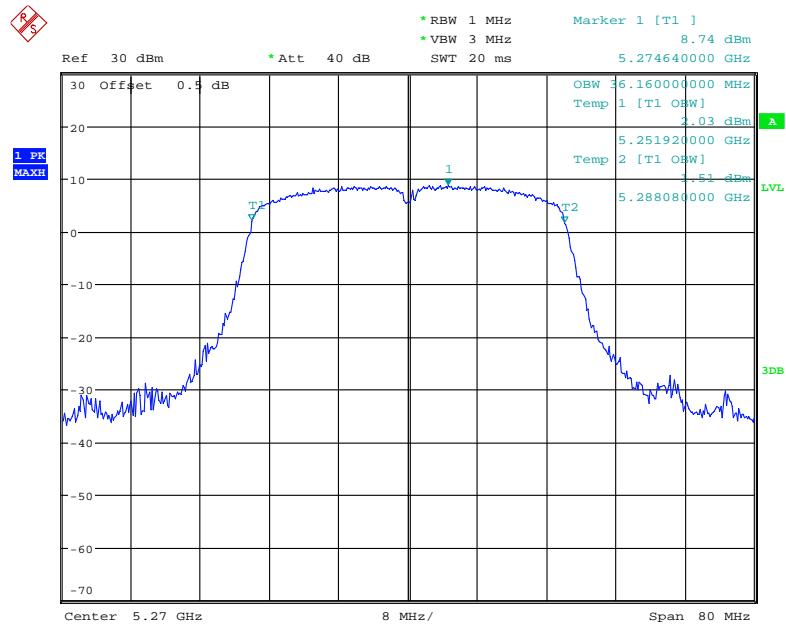


Date: 8.DEC.2017 13:13:42

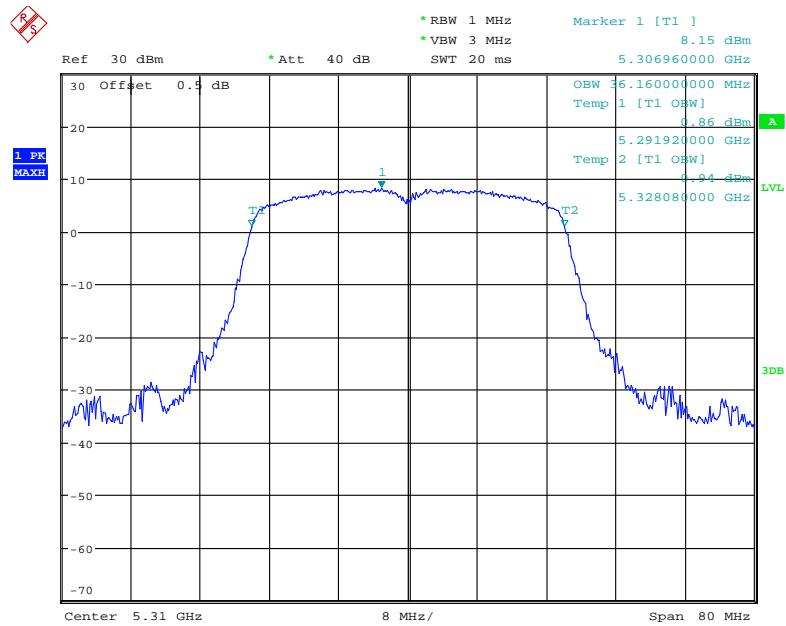
802.11n ht20 High Channel



Date: 8.DEC.2017 13:12:18

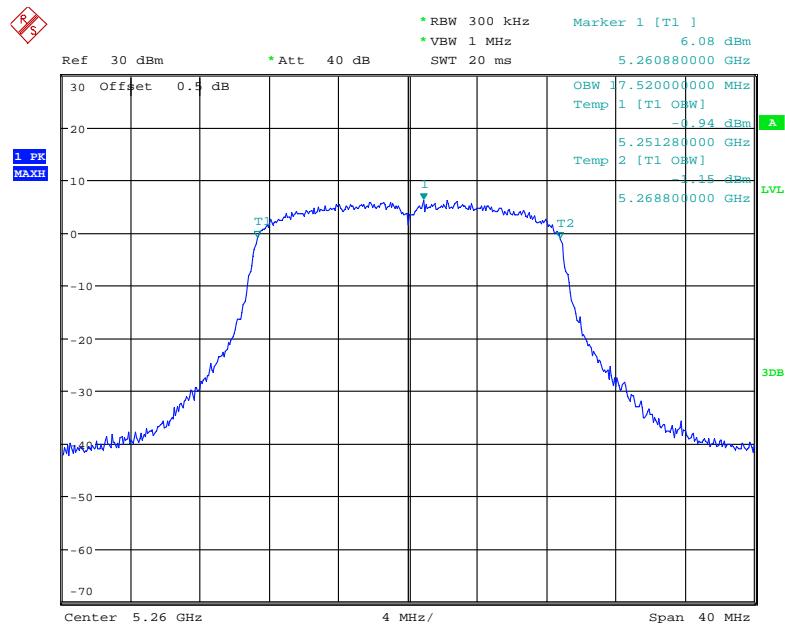
802.11n ht40 Low Channel

Date: 8.DEC.2017 13:20:26

802.11n ht40 High Channel

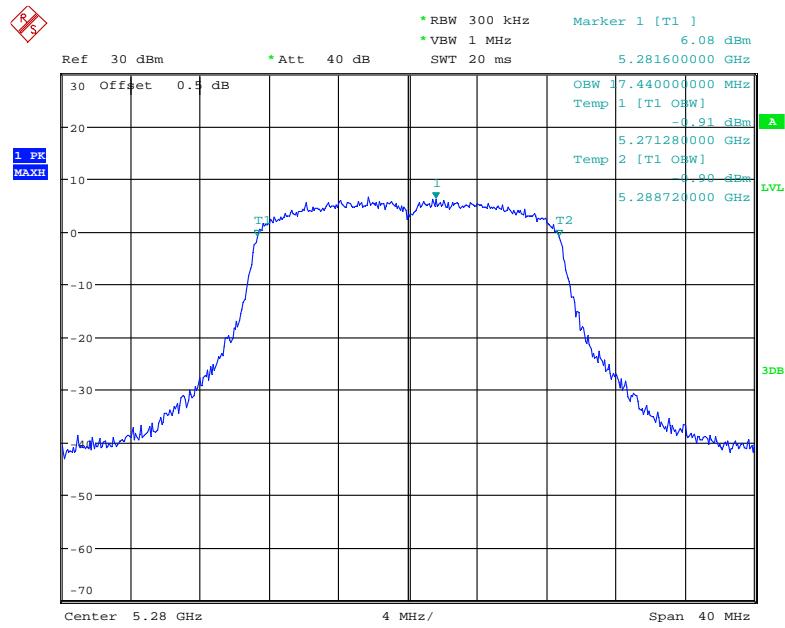
Date: 8.DEC.2017 13:37:04

802.11n ac20 Low Channel



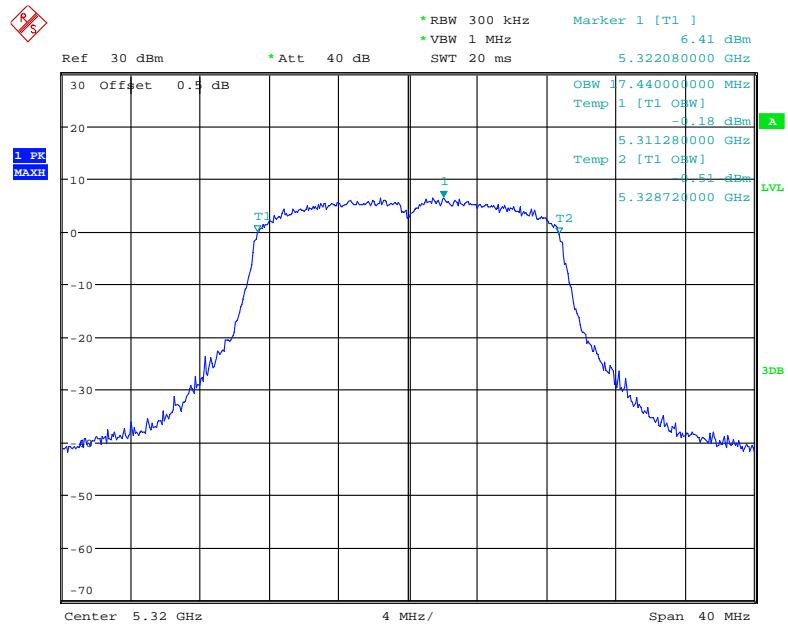
Date: 8.DEC.2017 13:16:16

802.11n ac20 Middle Channel



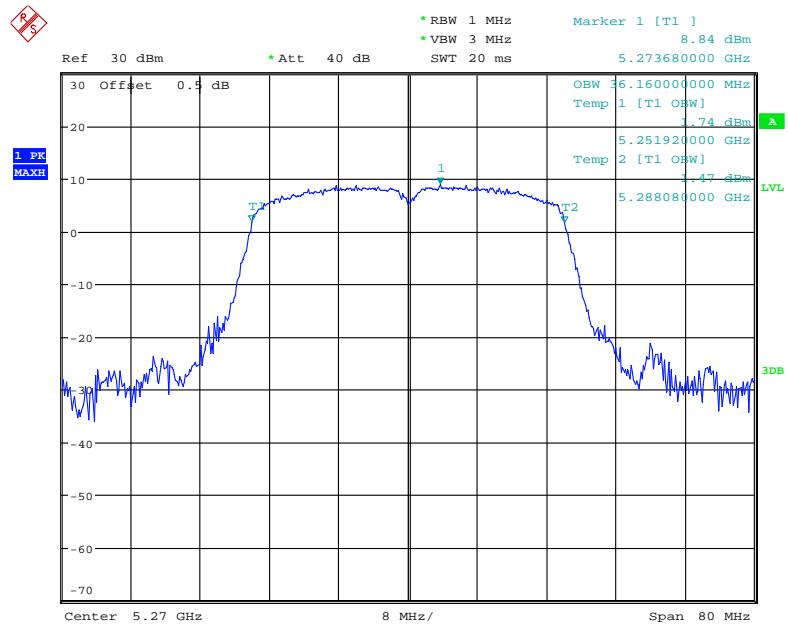
Date: 8.DEC.2017 13:17:44

802.11n ac20 High Channel



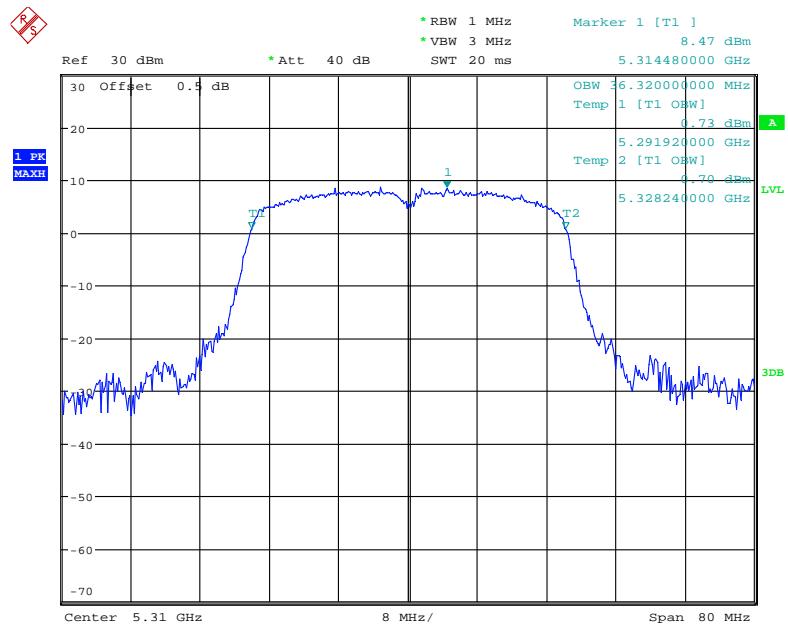
Date: 8.DEC.2017 13:18:40

802.11n ac40 Low Channel



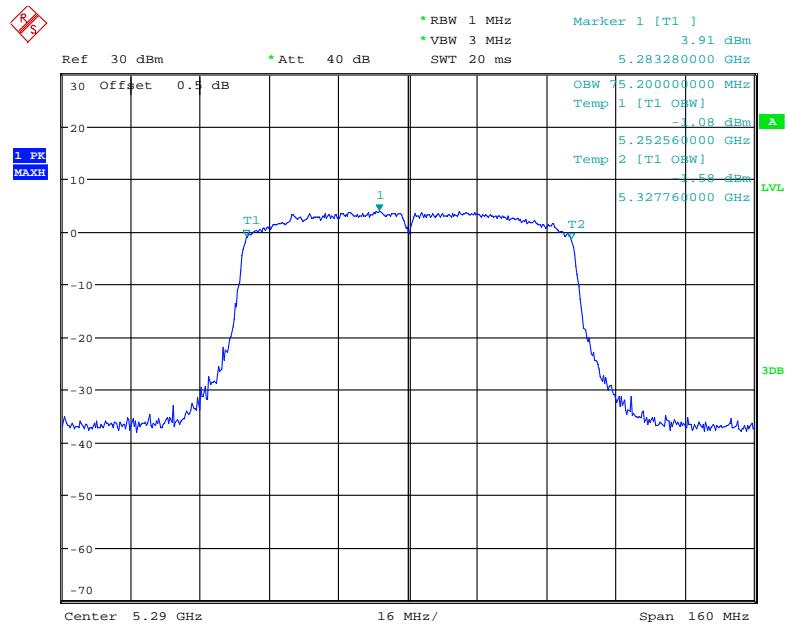
Date: 8.DEC.2017 13:33:08

802.11n ac40 High Channel



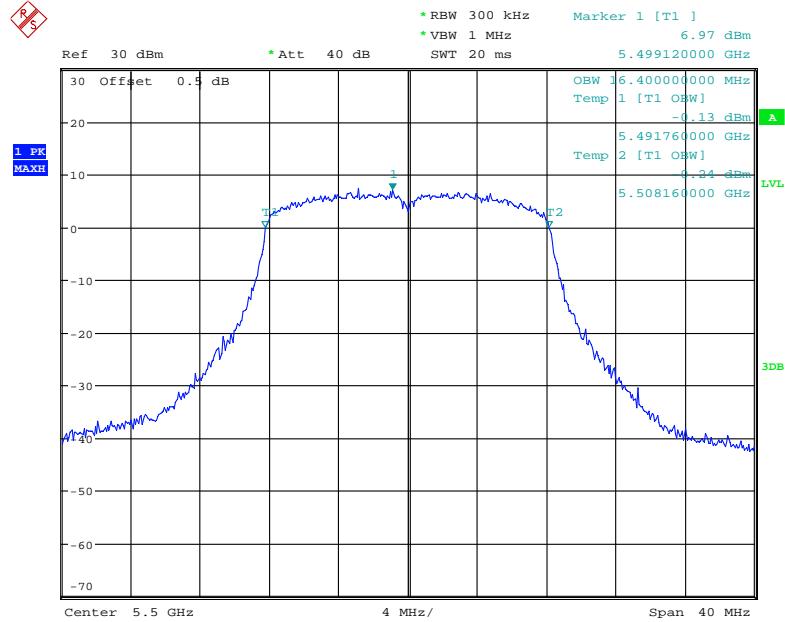
Date: 8.DEC.2017 13:34:45

802.11n ac80 Middle Channel

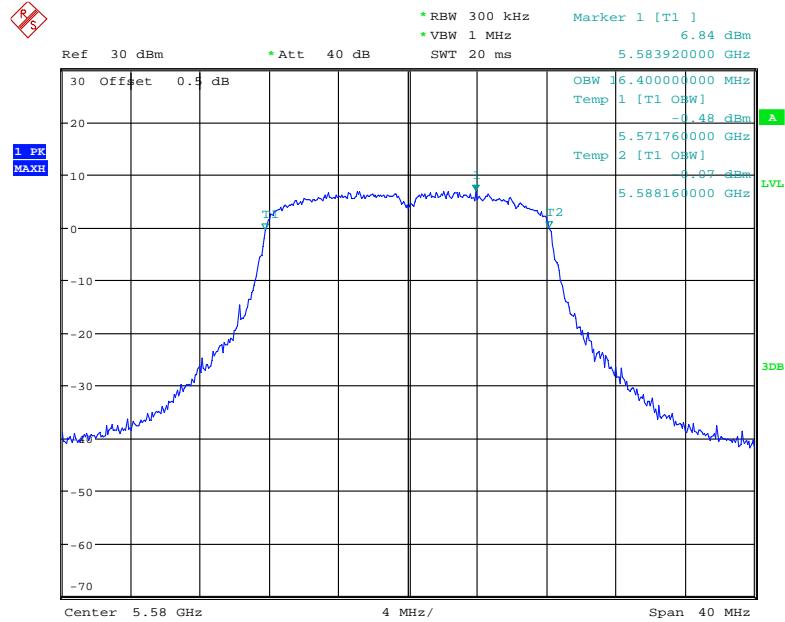


Date: 8.DEC.2017 13:06:12

5470-5725MHz:

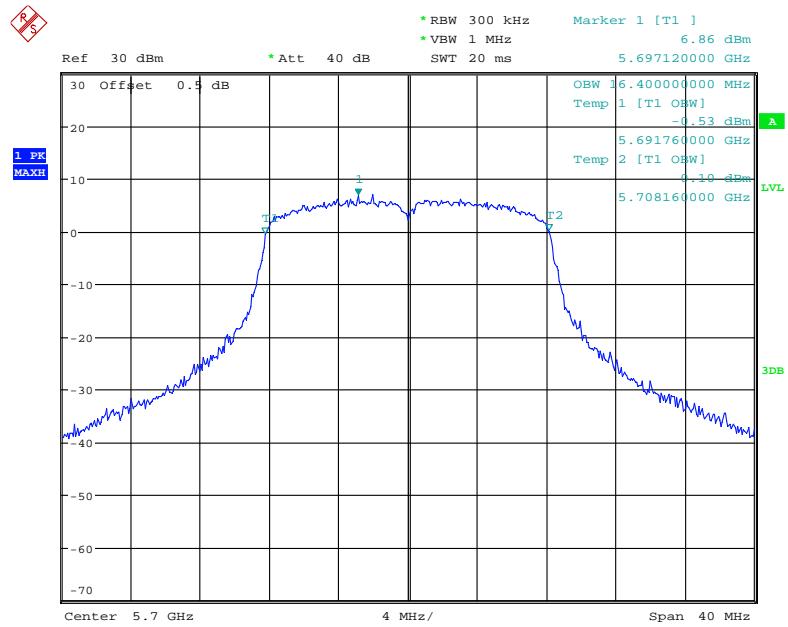
802.11a Low Channel

Date: 8.DEC.2017 13:44:18

802.11a Middle Channel

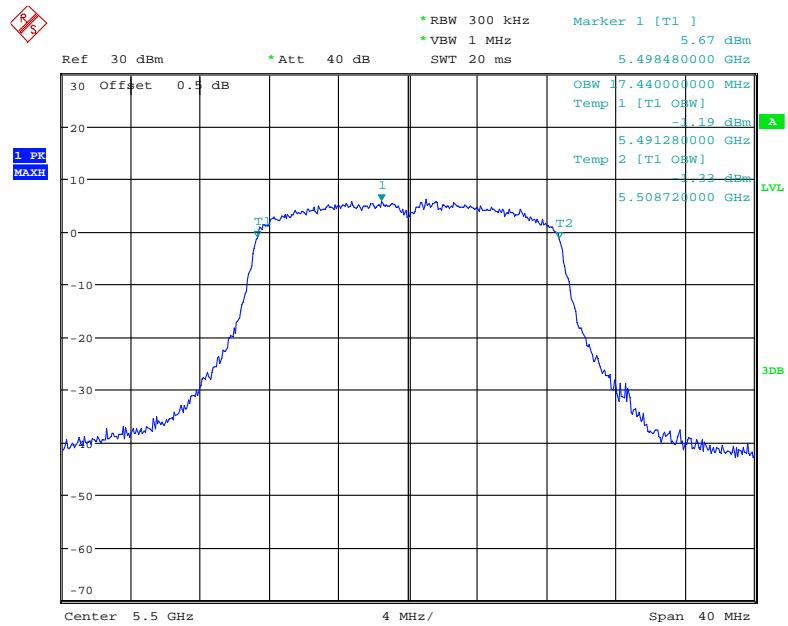
Date: 8.DEC.2017 13:45:38

802.11a High Channel



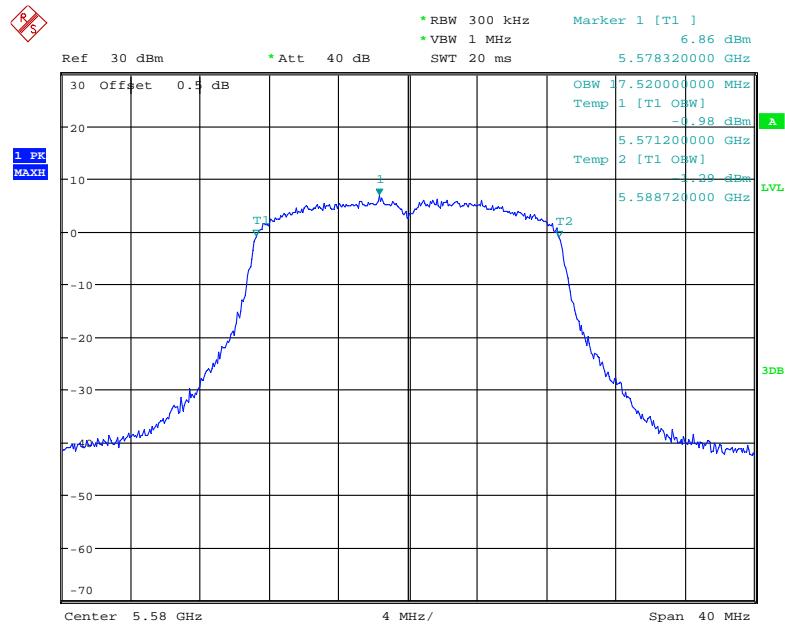
Date: 8.DEC.2017 13:46:44

802.11n ht20 Low Channel



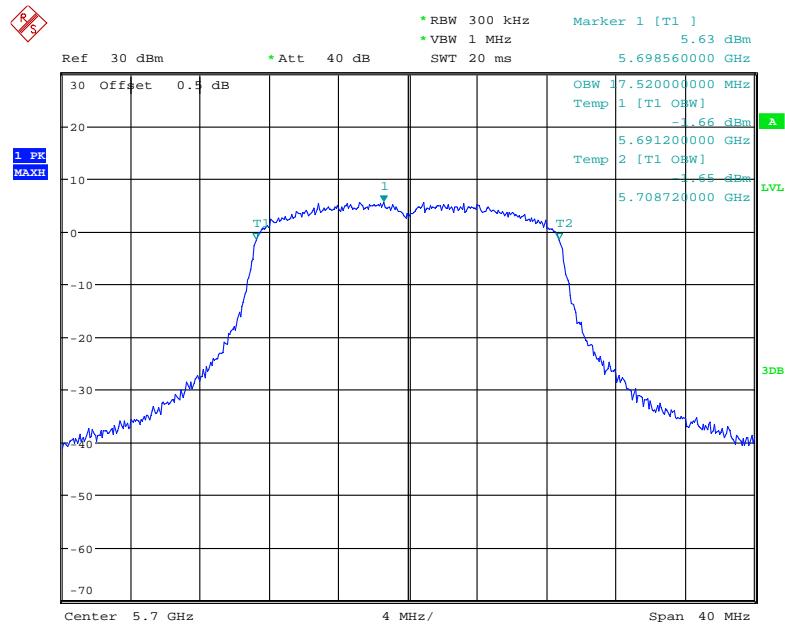
Date: 8.DEC.2017 13:52:04

802.11n ht20 Middle Channel

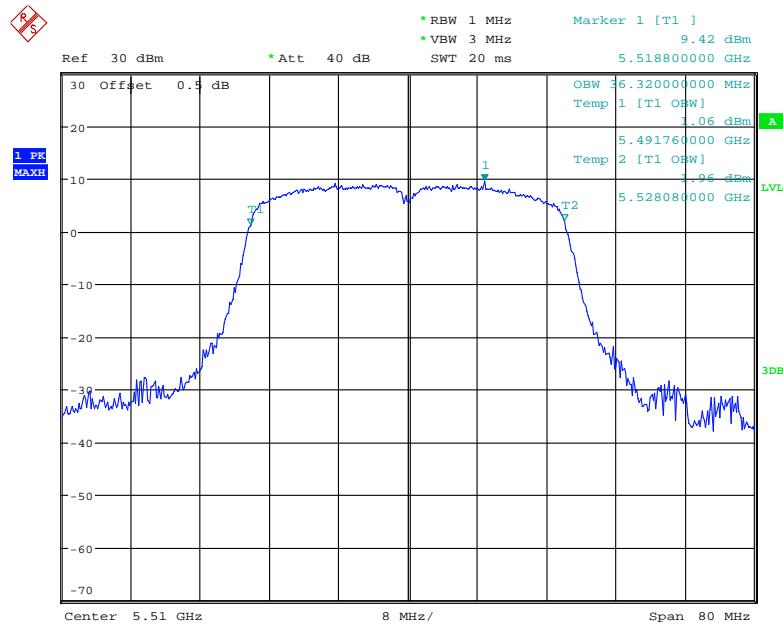


Date: 8.DEC.2017 13:50:43

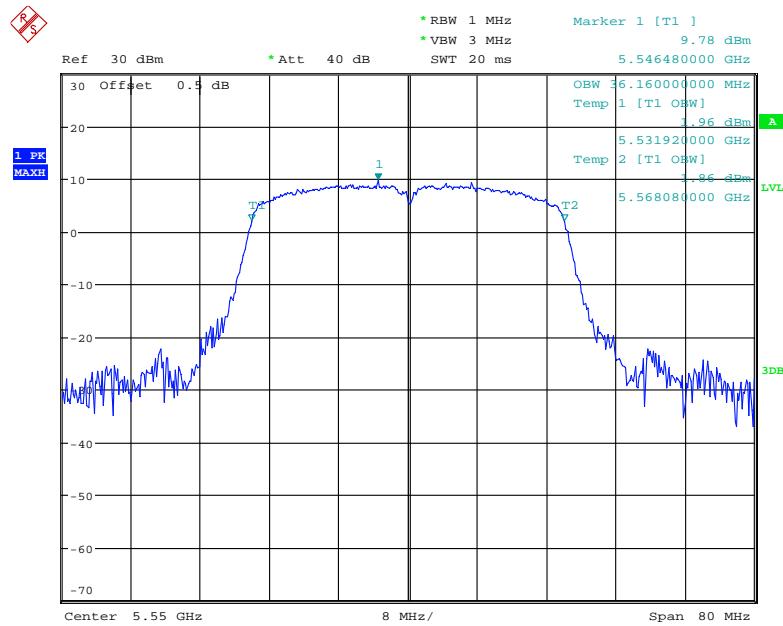
802.11n ht20 High Channel



Date: 8.DEC.2017 13:49:06

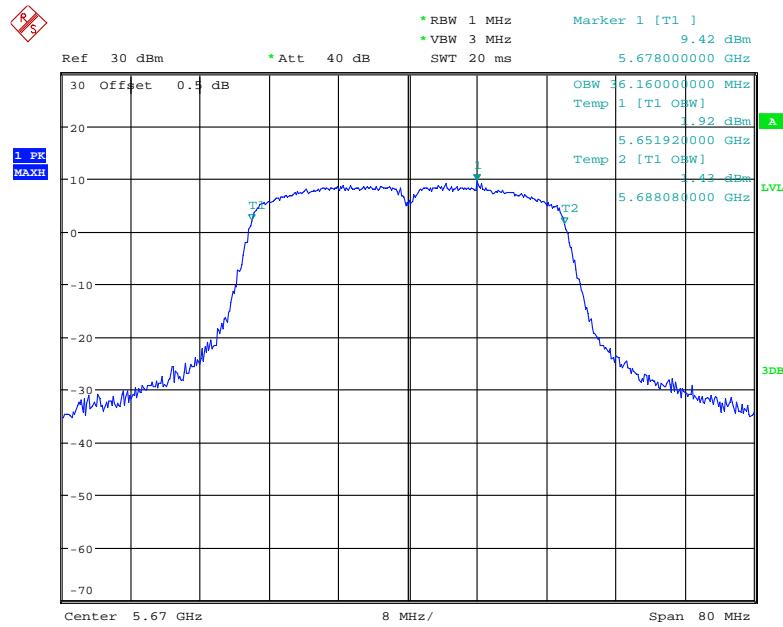
802.11n ht40 Low Channel

Date: 8.DEC.2017 14:01:25

802.11n ht40 Middle Channel

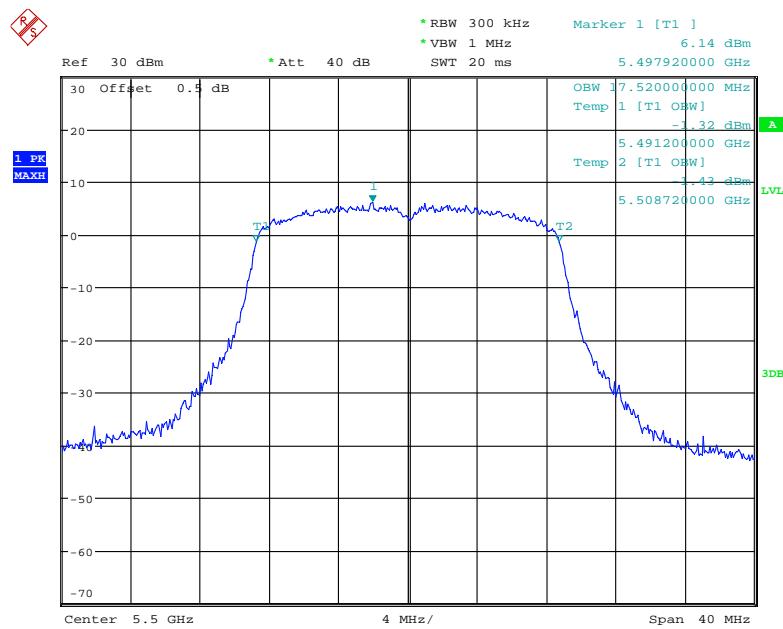
Date: 8.DEC.2017 14:02:49

802.11n ht40 High Channel



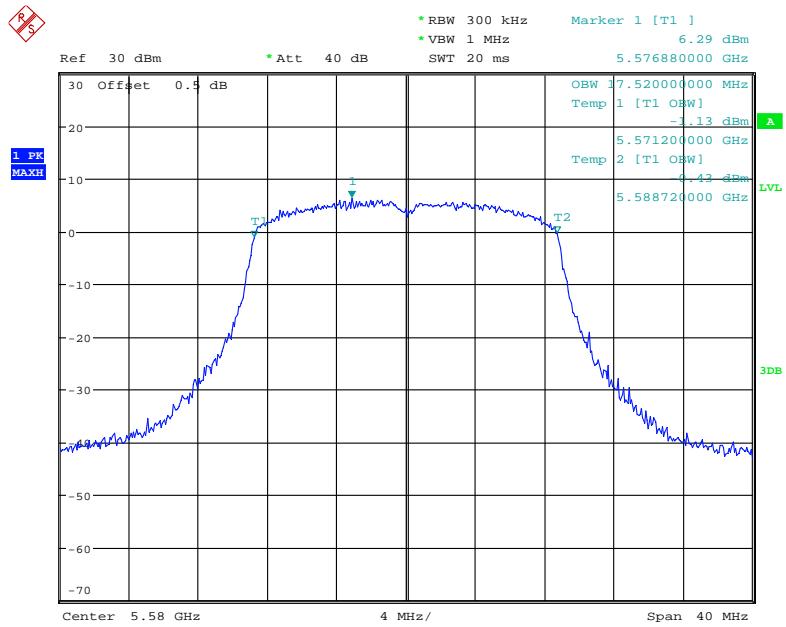
Date: 8.DEC.2017 14:03:57

802.11n ac20 Low Channel



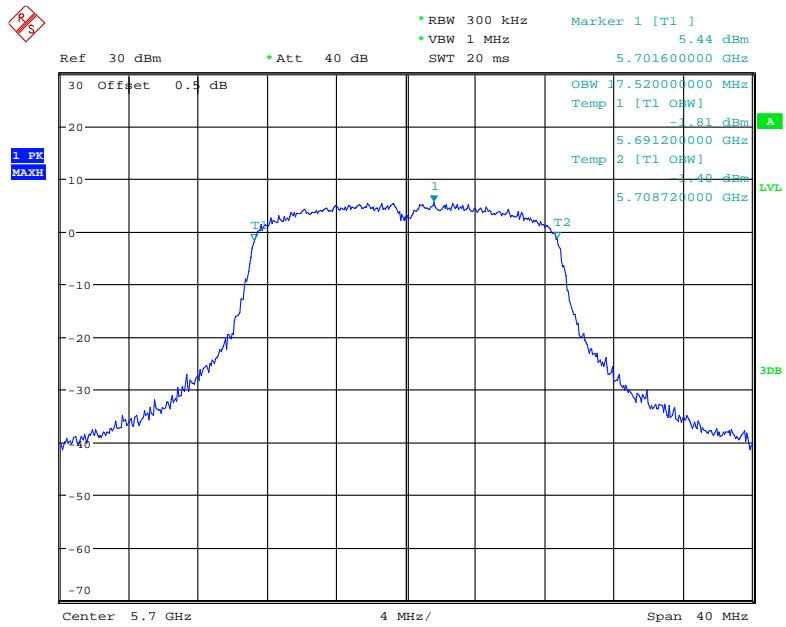
Date: 8.DEC.2017 13:53:55

802.11n ac20 Middle Channel



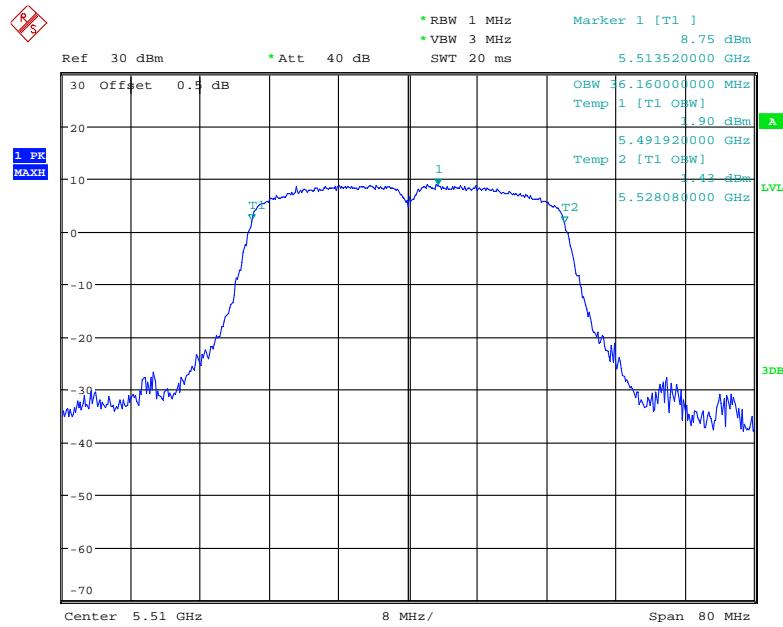
Date: 8.DEC.2017 13:55:16

802.11n ac20 High Channel



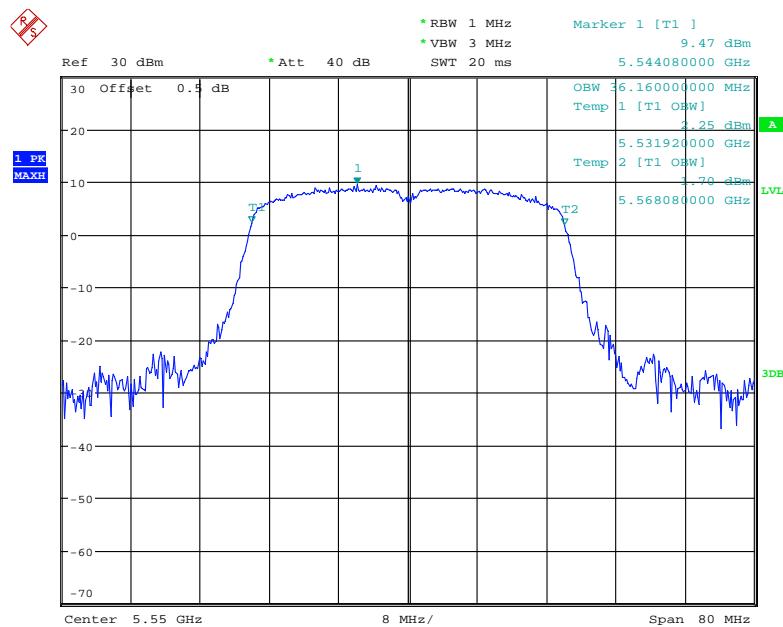
Date: 8.DEC.2017 13:56:24

802.11n ac40 Low Channel



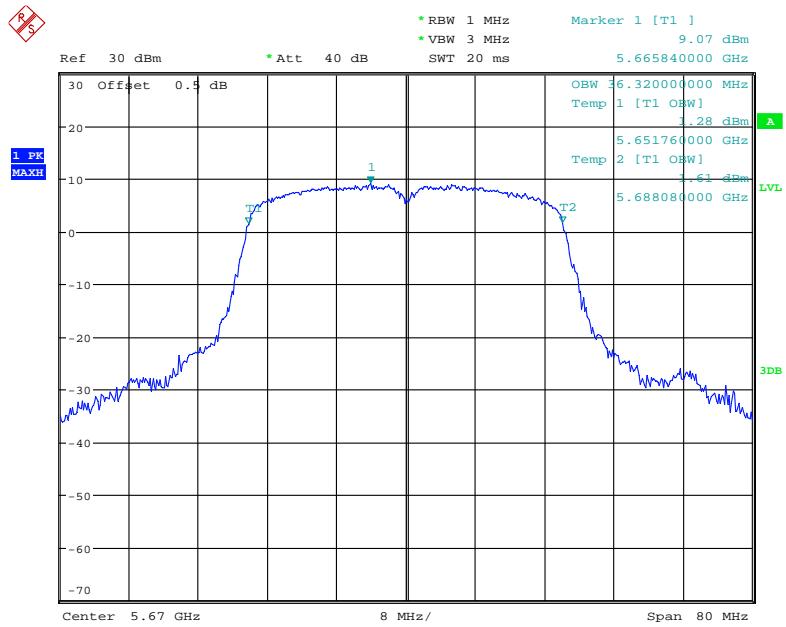
Date: 8.DEC.2017 14:10:24

802.11n ac40 Middle Channel



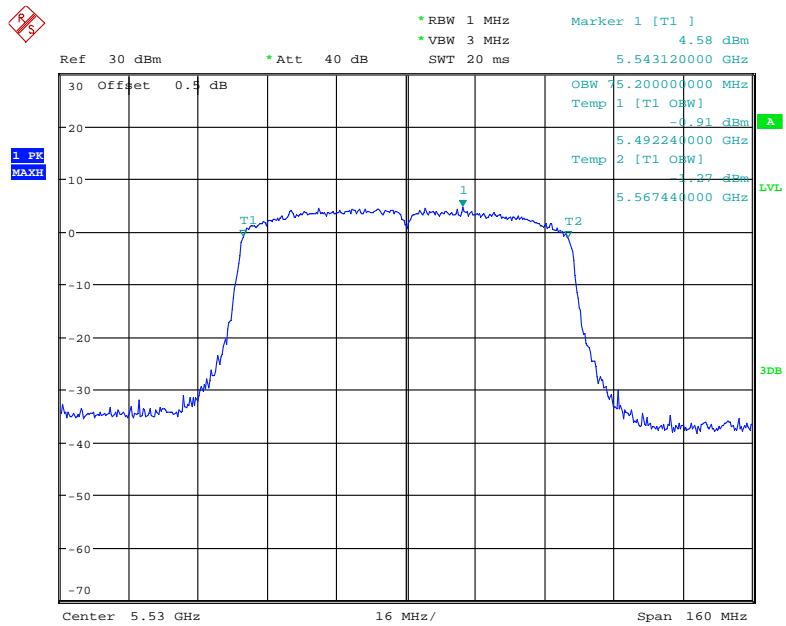
Date: 8.DEC.2017 14:08:20

802.11n ac40 High Channel

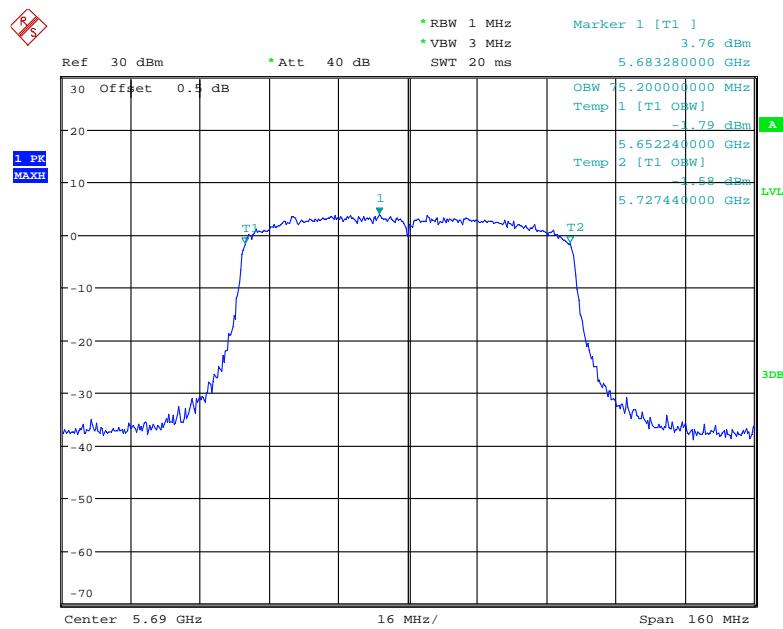


Date: 8.DEC.2017 14:06:46

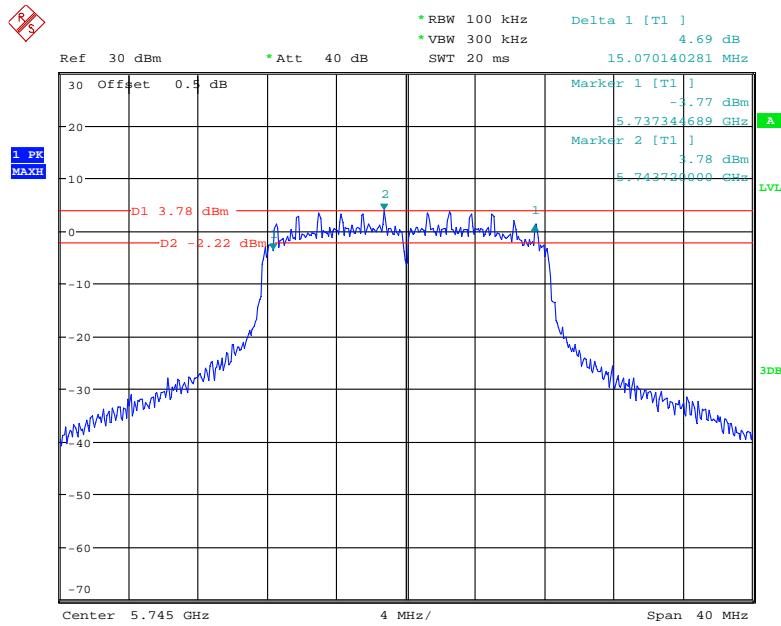
802.11n ac80 Low Channel



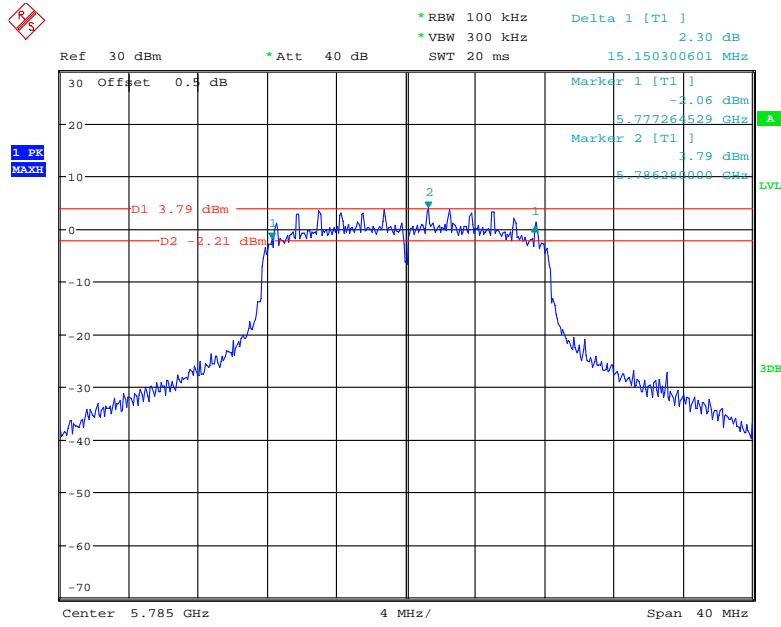
Date: 8.DEC.2017 14:12:07

802.11n ac80 High Channel

Date: 8.DEC.2017 14:14:05

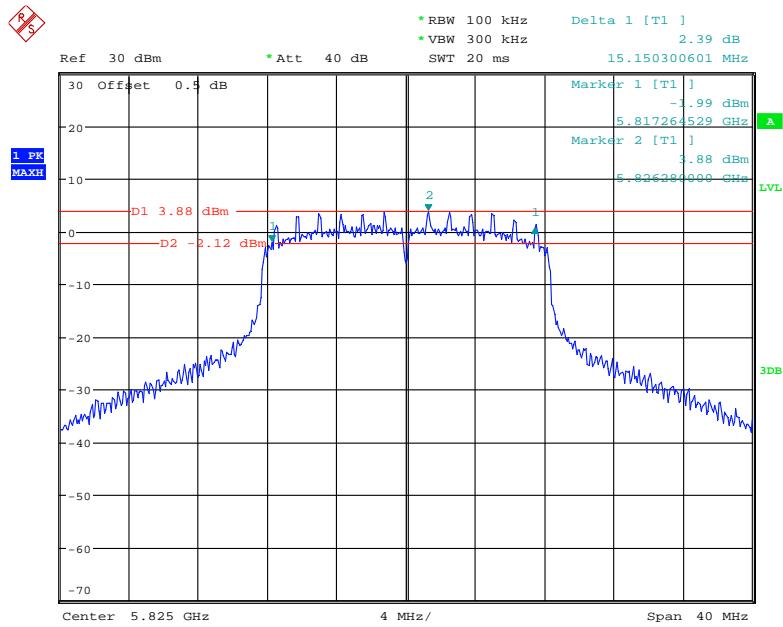
5725-5850MHz**6dB Minimum Emission Bandwidth:****802.11a Low Channel**

Date: 8.DEC.2017 14:33:30

802.11a Middle Channel

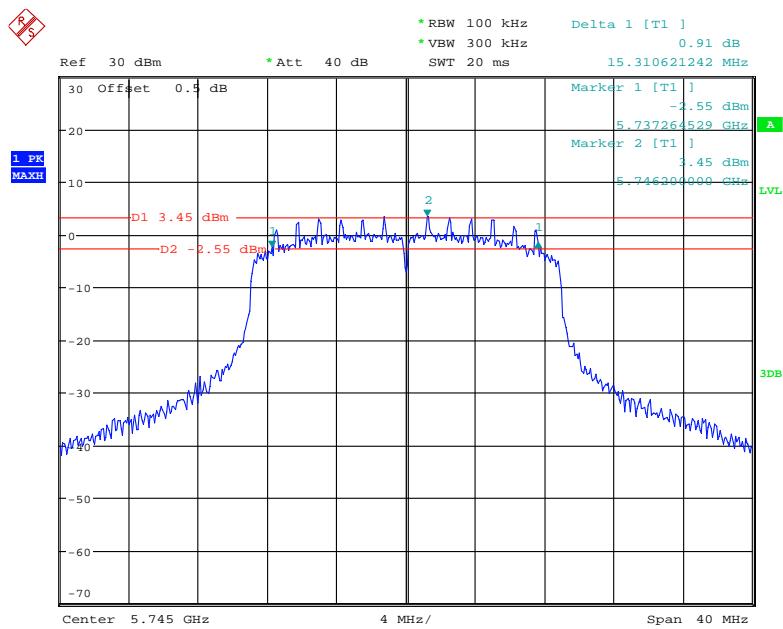
Date: 8.DEC.2017 14:36:38

802.11a High Channel



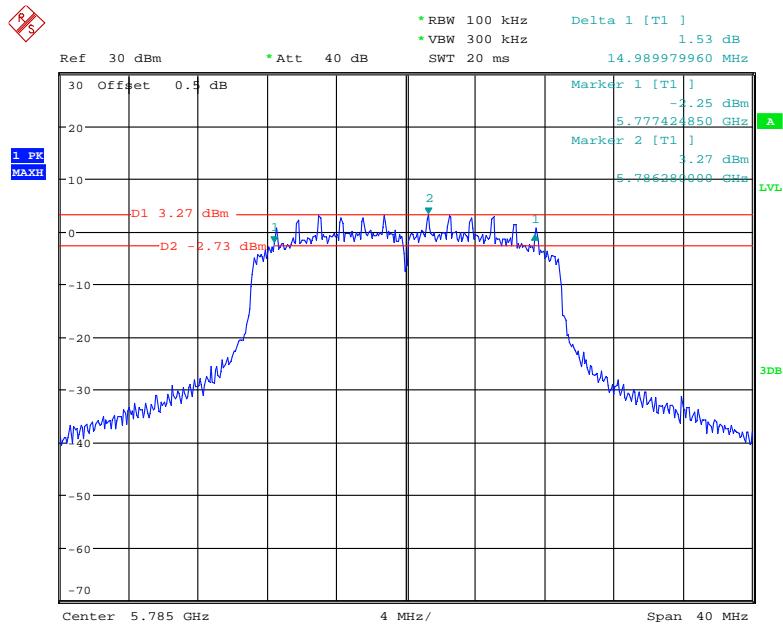
Date: 8.DEC.2017 14:38:13

802.11n ht20 Low Channel



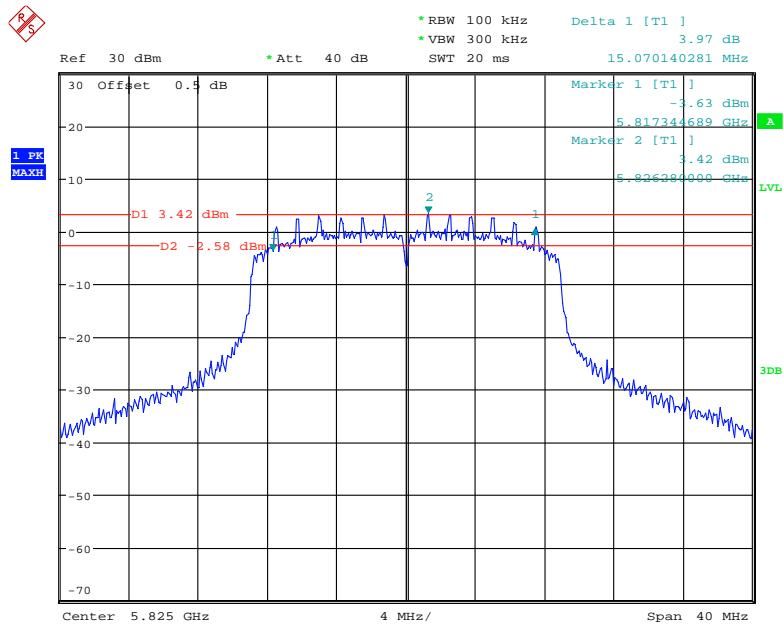
Date: 8.DEC.2017 14:40:27

802.11n ht20 Middle Channel



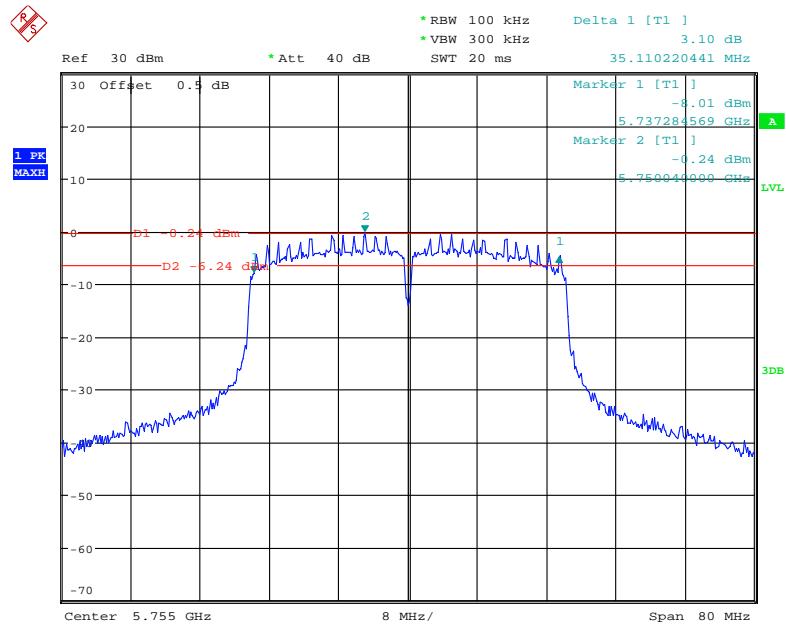
Date: 8.DEC.2017 14:43:26

802.11n ht20 High Channel



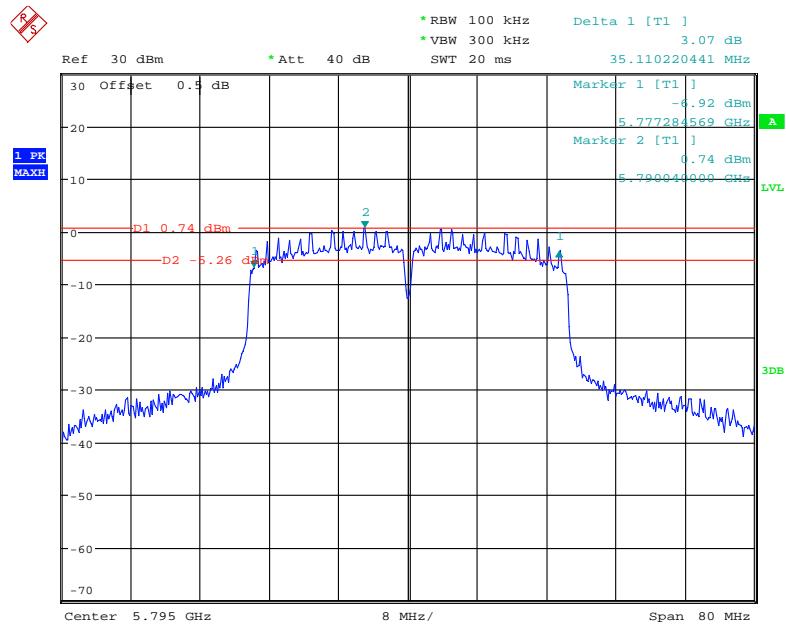
Date: 8.DEC.2017 14:44:31

802.11n ht40 Low Channel



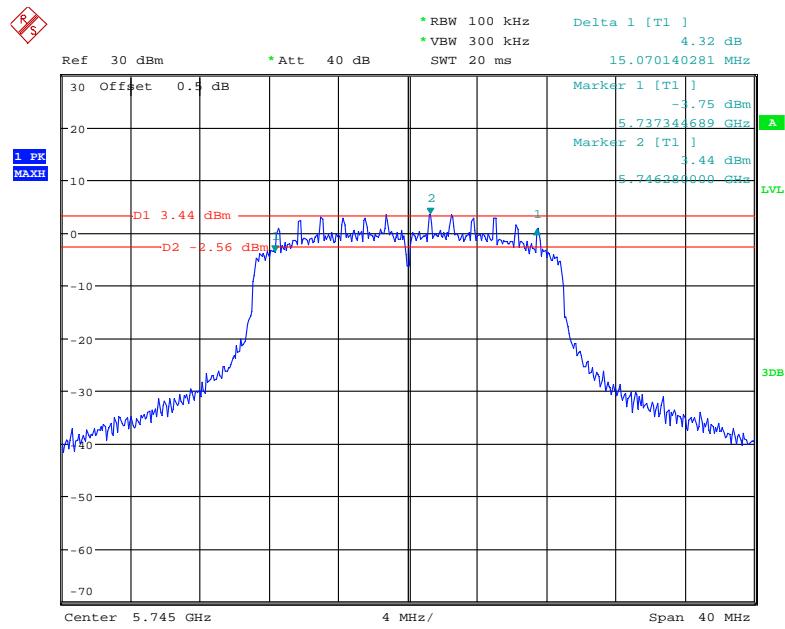
Date: 11.DEC.2017 13:26:25

802.11n ht40 High Channel



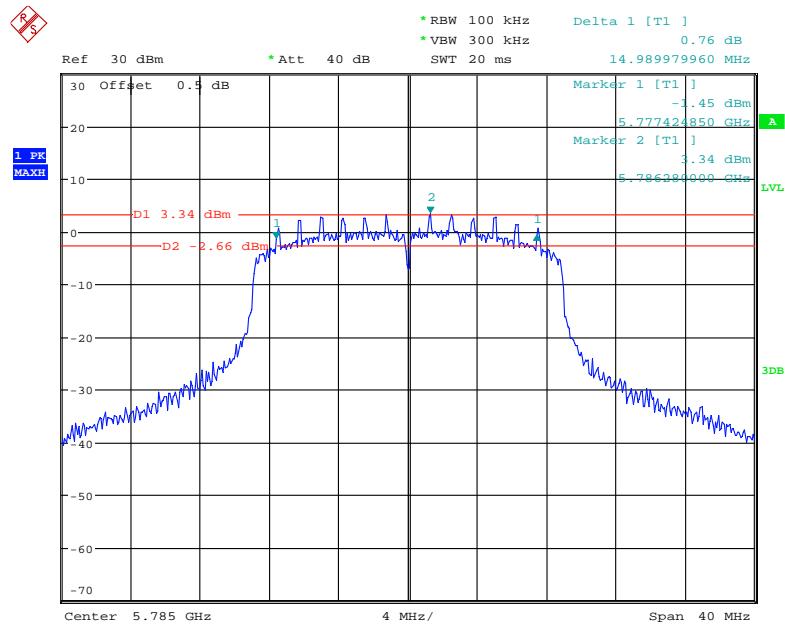
Date: 8.DEC.2017 15:05:59

802.11n ac20 Low Channel



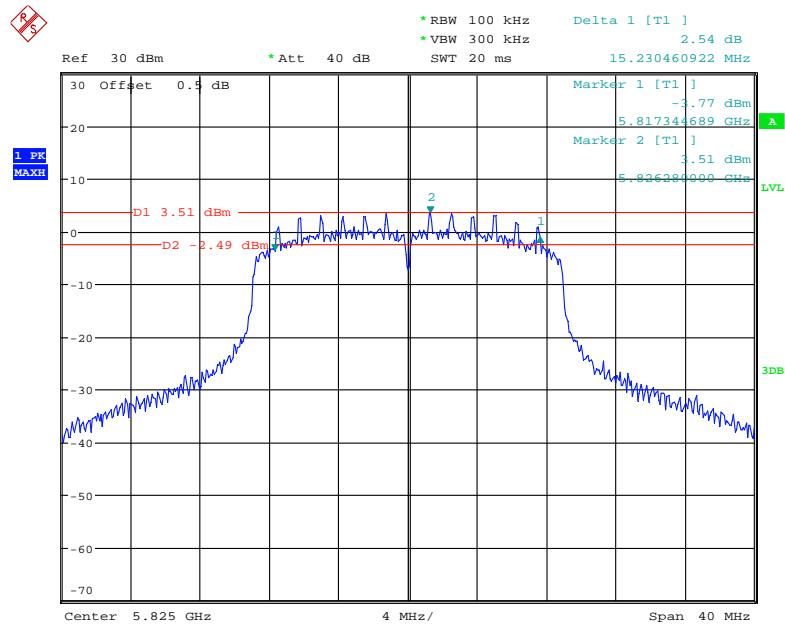
Date: 8.DEC.2017 14:49:42

802.11n ac20 Middle Channel



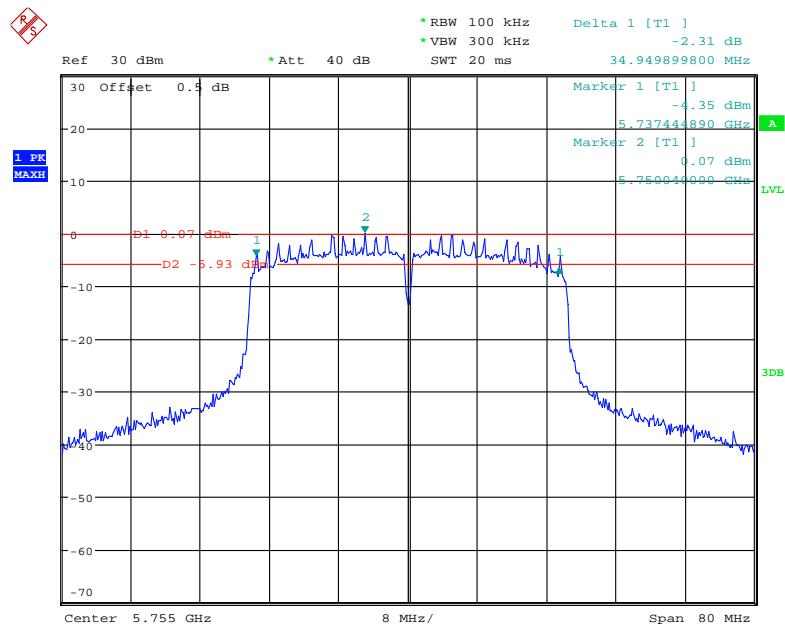
Date: 8.DEC.2017 14:48:23

802.11n ac20 High Channel



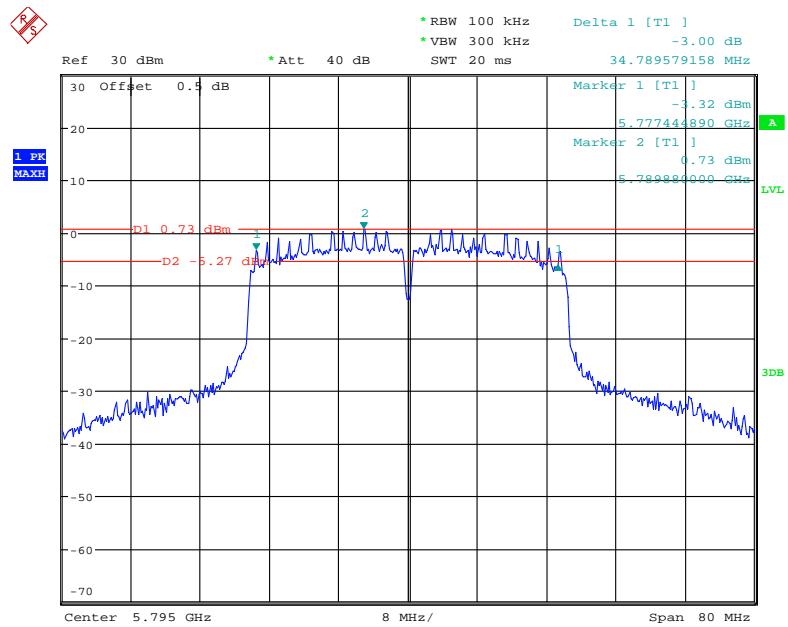
Date: 8.DEC.2017 14:46:38

802.11n ac40 Low Channel



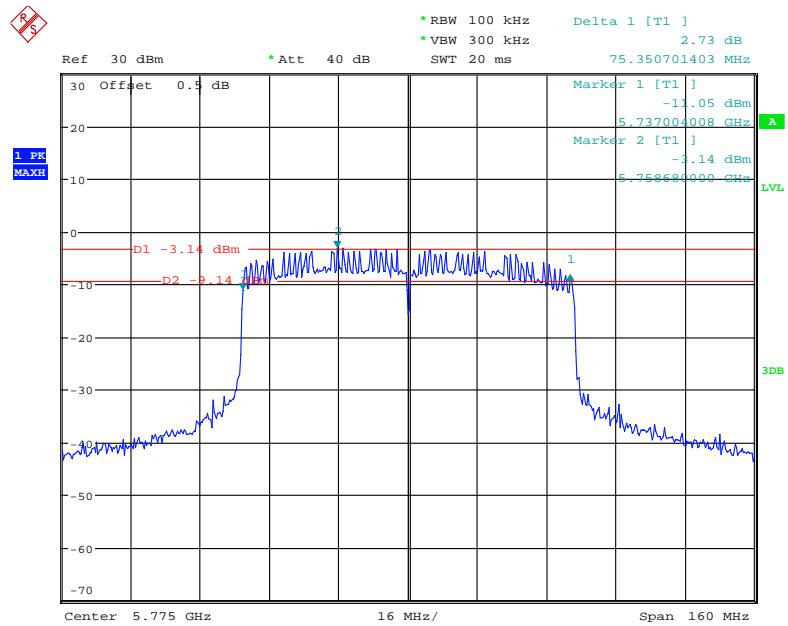
Date: 11.DEC.2017 13:24:28

802.11n ac40 High Channel

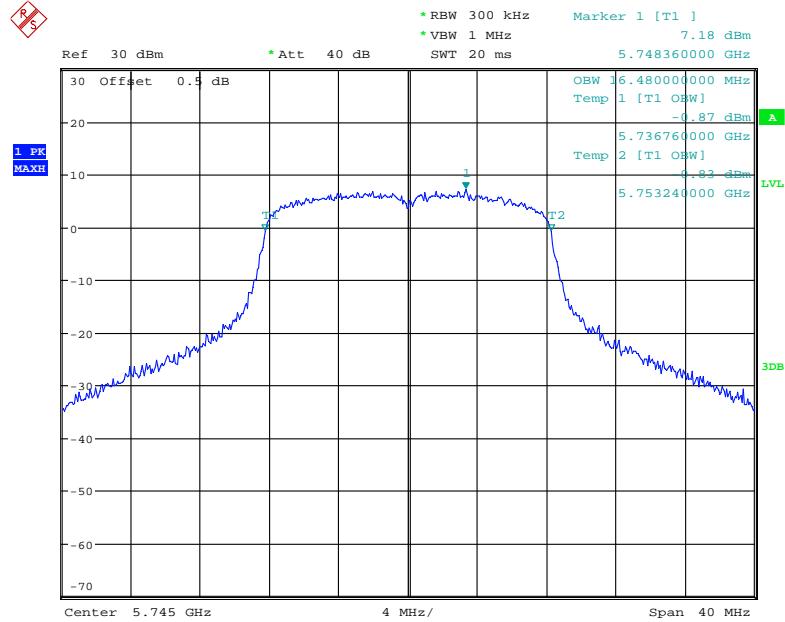


Date: 8.DEC.2017 15:07:56

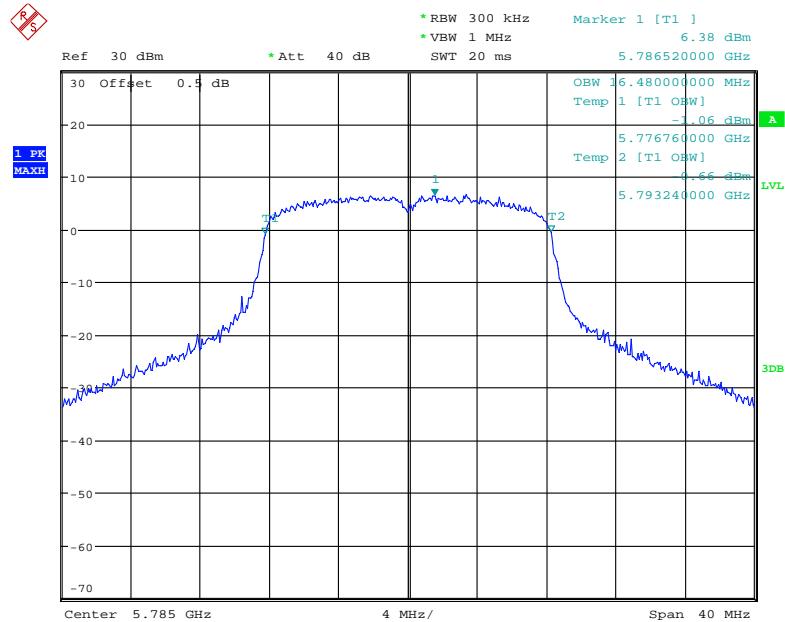
802.11n ac80 Middle Channel



Date: 8.DEC.2017 15:21:03

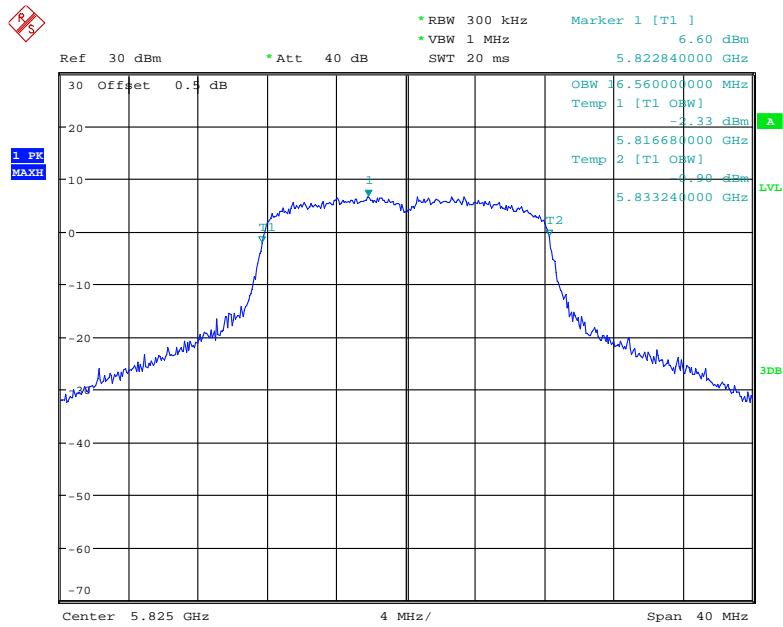
99% Occupied Bandwidth:**802.11a Low Channel**

Date: 8.DEC.2017 14:33:43

802.11a Middle Channel

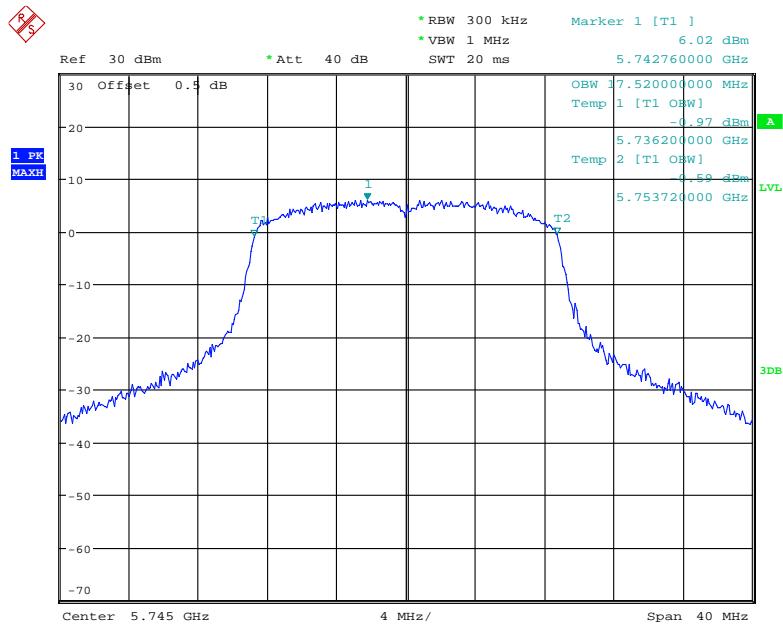
Date: 8.DEC.2017 14:36:50

802.11a High Channel



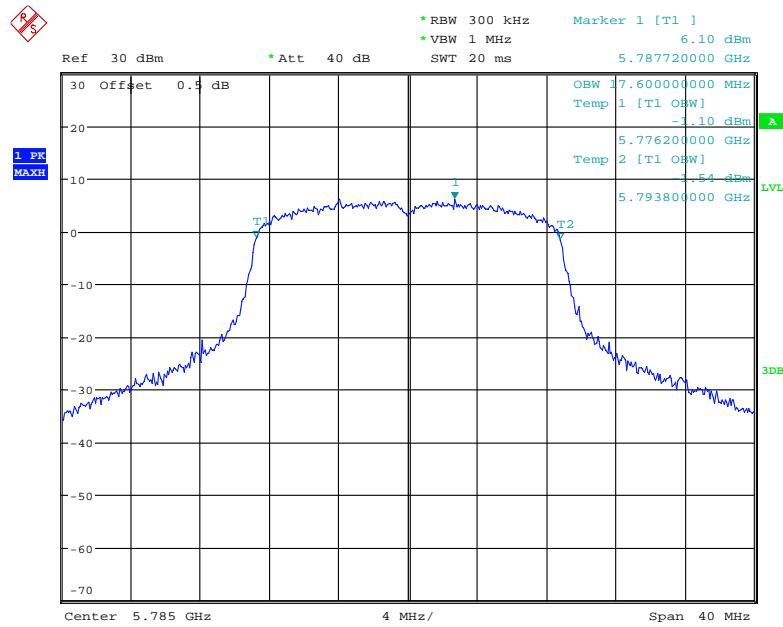
Date: 8.DEC.2017 14:38:25

802.11ht20 Low Channel



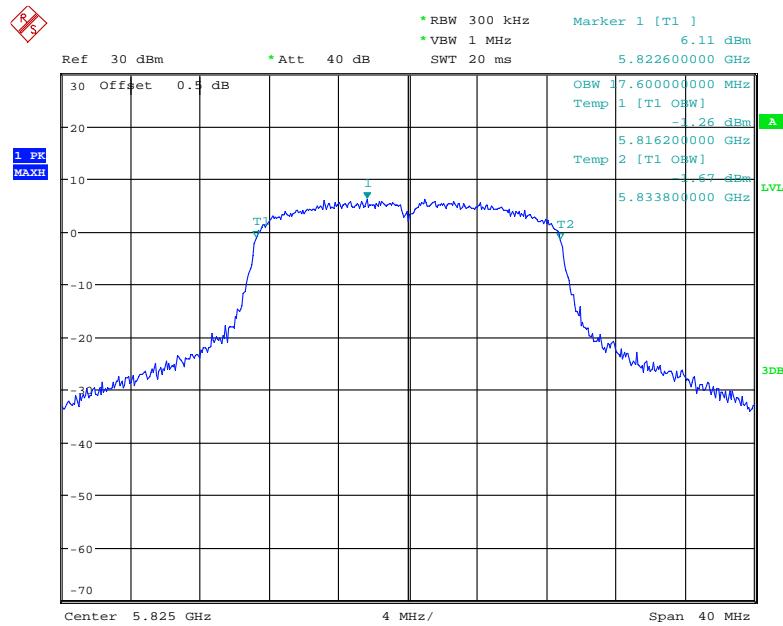
Date: 8.DEC.2017 14:40:39

802.11ht20 Middle Channel



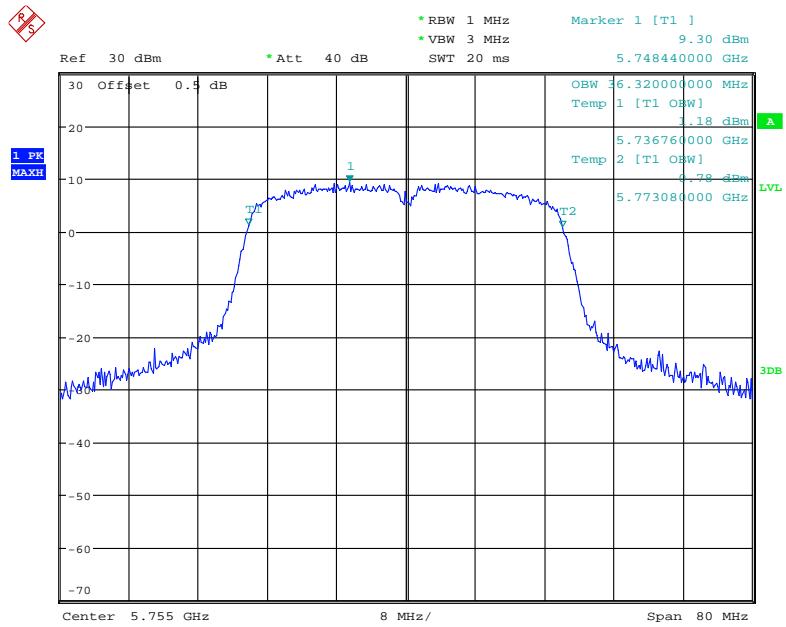
Date: 8.DEC.2017 14:42:47

802.11ht20 High Channel



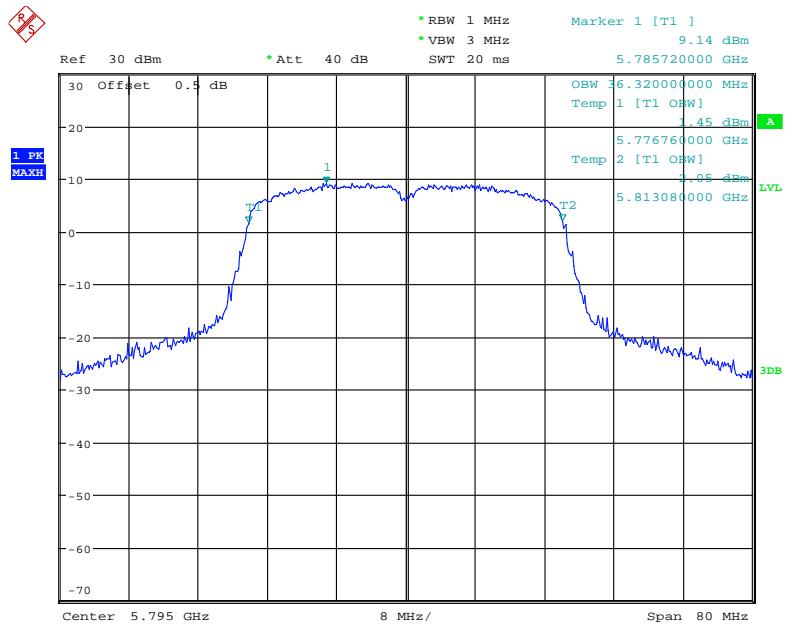
Date: 8.DEC.2017 14:44:43

802.11ht40 Low Channel



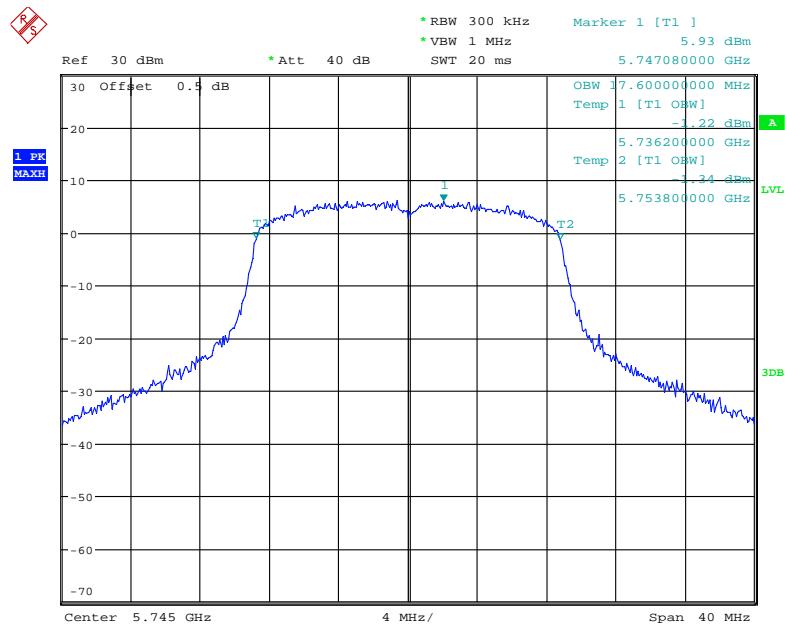
Date: 11.DEC.2017 13:26:38

802.11ht40 High Channel



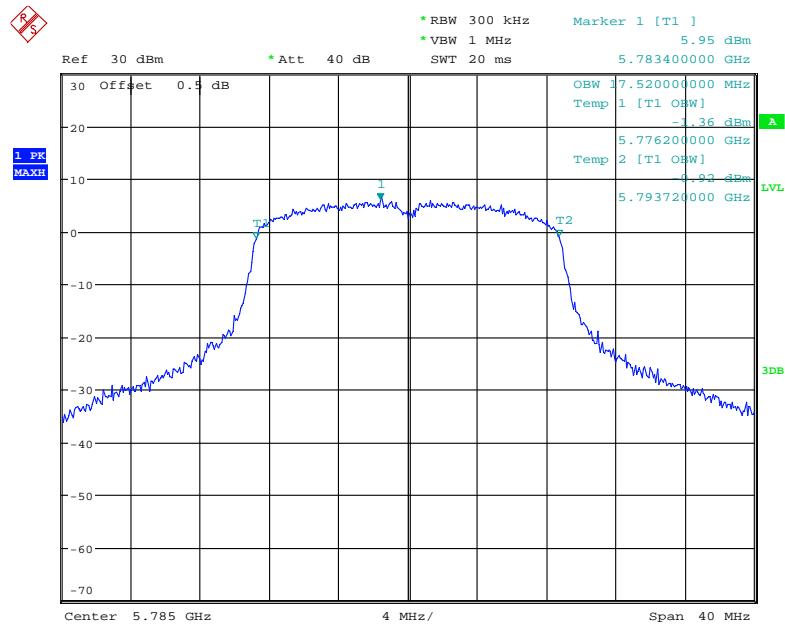
Date: 8.DEC.2017 15:06:11

802.11 ac20 Low Channel



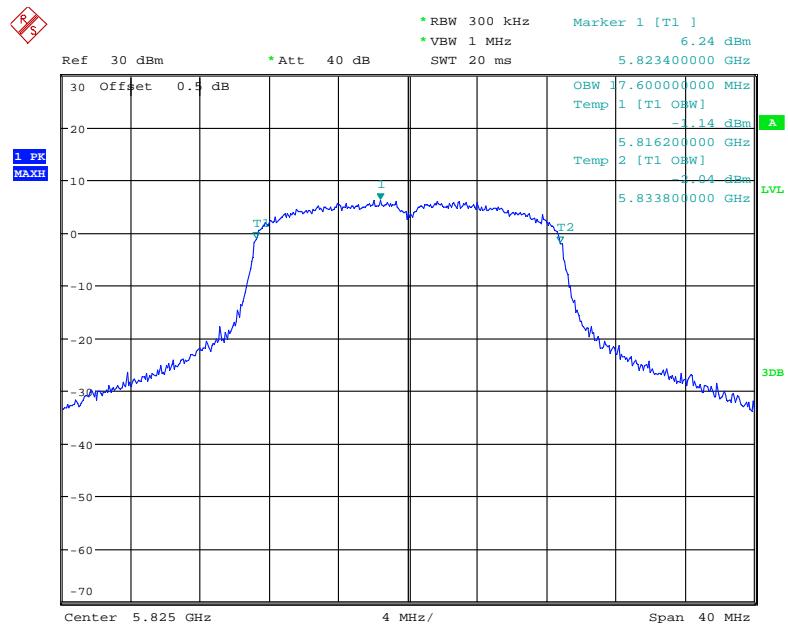
Date: 8.DEC.2017 14:49:54

802.11 ac20 Middle Channel



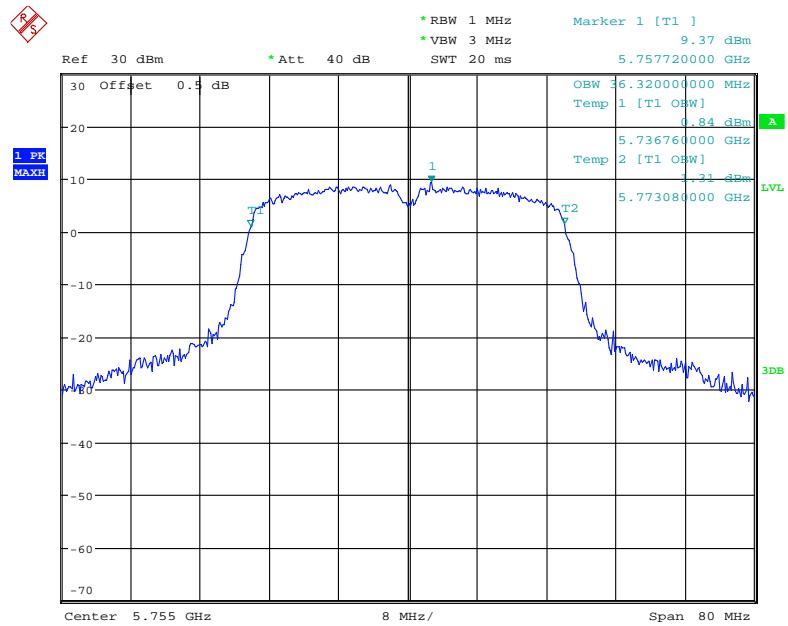
Date: 8.DEC.2017 14:48:35

802.11 ac20 High Channel



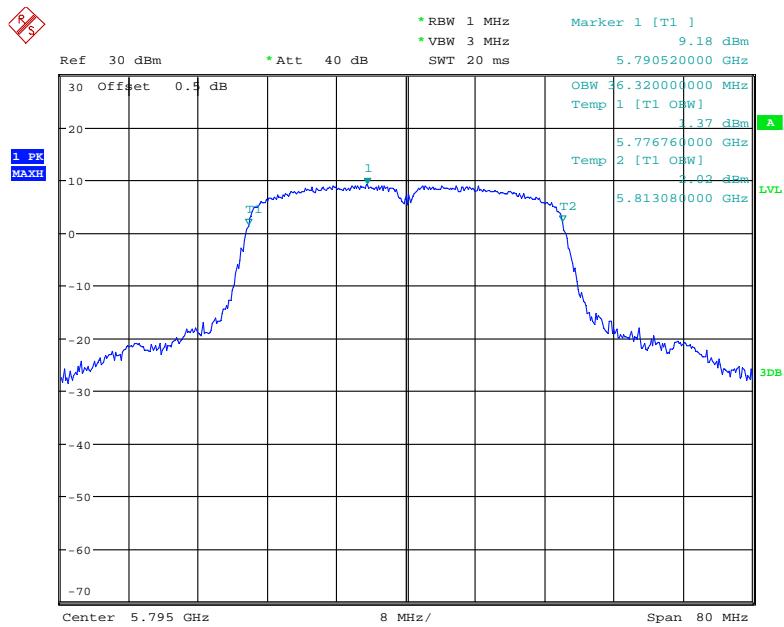
Date: 8.DEC.2017 14:46:51

802.11 ac40 Low Channel



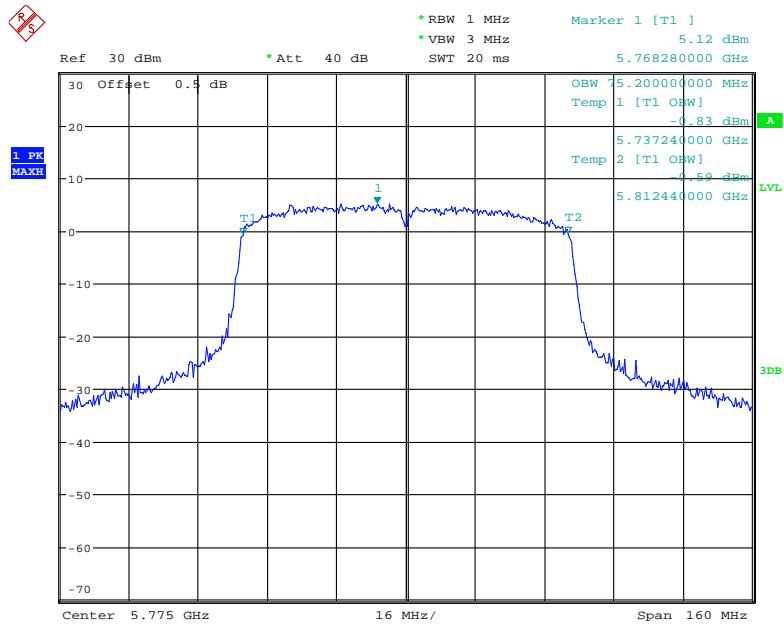
Date: 11.DEC.2017 13:24:39

802.11 ac40 High Channel



Date: 8.DEC.2017 15:08:08

802.11ac80 Middle Channel



Date: 8.DEC.2017 15:21:15

FCC §15.407(g)–FREQUENCY STABILITY

Applicable Standard

FCC §15.407(g)

(g) Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Test Procedure

According to ANSI C63.10-2013 “American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices”.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2018-01-04	2019-01-04
N/A	Coaxial Cable	C-SJ00-0010	C0010/04	Each Time	/
UNI-T	Multimeter	UT39A	M130199938	2017-05-09	2018-05-09
Dongzhixu	High Temperature Test Chamber	DP1000	201105083-4	2017-08-28	2018-08-28

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	25.4°C
Relative Humidity:	43%
ATM Pressure:	100.8kPa

The testing was performed by Nami Quan on 2018-01-08

Test Mode: Transmitting(Test was performed at Main Chain)

Test Result: Pass.

5150-5250MHz:

802.11a

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5171.85	5248.36	f _L and f _H Within 5150~5250MHz range
10		5171.91	5248.16	
20		5171.84	5248.16	
30		5171.7	5248.09	
40		5171.97	5248.39	
25		5172.09	5247.88	
25	8.25	5171.67	5247.88	
25	13.05			

802.11n ht20:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5171.5	5248.81	f _L and f _H Within 5150~5250MHz range
10		5171.42	5248.66	
20		5171.28	5248.72	
30		5171.44	5248.44	
40		5171.54	5248.79	
25	8.25	5171.09	5248.55	
25	13.05	5171.56	5248.55	

802.11n ht40:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5172.06	5247.856	f _L and f _H Within 5150~5250MHz range
10		5171.77	5247.906	
20		5171.95	5248.086	
30		5172.24	5248.176	
40		5171.97	5248.386	
25	8.25	5172.12	5248.026	
25	13.05	5172.1	5248.066	

802.11n ac20:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5171.47	5248.76	f _L and f _H Within 5150~5250MHz range
10		5171.34	5248.49	
20		5171.28	5248.72	
30		5171.51	5248.93	
40		5171.46	5248.59	
25	8.25	5171.23	5248.88	
25	13.05	5171.47	5248.73	

802.11n ac40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5171.9	5247.94	f _L and f _H Within 5150~5250MHz range
10		5172.16	5247.8	
20		5171.92	5248.08	
30		5171.64	5248.21	
40		5171.75	5248.27	
25		5171.72	5247.87	
25	8.25	5171.7	5248.36	

802.11n ac80:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5172.47	5247.87	f _L and f _H Within 5150~5250MHz range
10		5172.42	5247.67	
20		5172.56	5247.76	
30		5172.57	5247.74	
40		5172.43	5247.7	
25		5172.56	5247.62	
25	8.25	5172.56	5247.7	
25	13.05	5172.56	5247.7	

5250-5350MHz:

802.11a

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5251.79	5328.36	f _L and f _H Within 5250~5350MHz range
10		5251.52	5328.17	
20		5251.76	5328.16	
30		5251.96	5328.06	
40		5251.95	5328.36	
25		5251.76	5328.31	
25	8.25	5251.94	5327.86	

802.11n ht20:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5251.27	5328.49	f _L and f _H Within 5250~5350MHz range
10		5251.24	5328.68	
20		5251.28	5328.72	
30		5251.55	5328.71	
40		5251.52	5328.78	
25		5251.54	5328.9	
25	8.25	5251.5	5328.64	

802.11n ht40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5252.04	5328.341	f _L and f _H Within 5250~5350MHz range
10		5251.68	5328.301	
20		5251.92	5328.081	
30		5251.89	5328.261	
40		5252.09	5328.111	
25		5252.04	5327.851	
25	13.05	5251.69	5328.221	

802.11n ac20:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5250.98	5328.491	f _L and f _H Within 5250~5350MHz range
10		5251.27	5328.451	
20		5251.28	5328.721	
30		5251.23	5328.871	
40		5251.14	5328.981	
25		5251.02	5328.771	
25	13.05	5251.14	5328.811	

802.11n ac40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5251.62	5328.12	f _L and f _H Within 5250~5350MHz range
10		5252.03	5328.26	
20		5251.92	5328.24	
30		5251.66	5328.46	
40		5252.11	5328.44	
25		5251.93	5328.2	
25	13.05	5251.69	5328.01	

802.11n ac80:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5252.572	5327.86	f _L and f _H Within 5250~5350MHz range
10		5252.402	5327.54	
20		5252.562	5327.76	
30		5252.822	5328.05	
40		5252.442	5327.61	
25		5252.682	5327.6	
25	13.05	5252.362	5327.77	

5470-5725MHz:

802.11a

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5491.94	5708.24	f _L and f _H Within 5470~5725MHz range
10		5491.52	5708.39	
20		5491.76	5708.16	
30		5491.53	5708.33	
40		5491.51	5708.43	
25	8.25	5491.65	5708.16	
25	13.05	5491.76	5708.27	

802.11n ht20:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5491.43	5708.68	f _L and f _H Within 5470~5725MHz range
10		5490.98	5708.53	
20		5491.28	5708.72	
30		5491.26	5708.63	
40		5491.01	5708.92	
25	8.25	5491.56	5708.75	
25	13.05	5491.5	5708.62	

802.11n ht40:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5491.65	5687.8	f _L and f _H Within 5470~5725MHz range
10		5491.55	5687.93	
20		5491.76	5688.08	
30		5491.81	5688.03	
40		5491.5	5687.82	
25	8.25	5491.96	5688.36	
25	13.05	5491.67	5688.37	

802.11n ac20:

Temperature	Voltage	f_L at Low Test Channel	F_H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5490.95	5708.48	f _L and f _H Within 5470~5725MHz range
10		5491.42	5708.54	
20		5491.2	5708.72	
30		5491.47	5708.95	
40		5491.24	5708.66	
25	8.25	5491.39	5708.85	
25	13.05	5491.48	5708.78	

802.11n ac40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5492.061	5688.024	f _L and f _H Within 5470~5725MHz range
10		5491.861	5688.324	
20		5491.921	5688.084	
30		5491.671	5688.124	
40		5491.981	5687.924	
25	8.25	5492.121	5688.134	
25	13.05	5491.891	5687.894	

802.11n ac80:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5492.42	5647.52	f _L and f _H Within 5470~5725MHz range
10		5492.25	5647.55	
20		5492.24	5647.44	
30		5492.37	5647.27	
40		5492.26	5647.5	
25	8.25	5492.44	5647.15	
25	13.05	5491.99	5647.41	

Note: the f_L and f_H determined by 99% Occupied bandwidth low edge at Low test channel and High edge at High test channel.

5725-5850MHz:

802.11a

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5736.68	5832.95	f _L and f _H Within 5725~5850MHz range
10		5737.02	5833.32	
20		5736.76	5833.24	
30		5736.81	5833.1	
40		5736.78	5833.36	
25	8.25	5736.94	5833.43	
25	13.05	5736.56	5833.01	

802.11n ht20:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5736.23	5833.86	f _L and f _H Within 5725~5850MHz range
10		5736.1	5833.79	
20		5736.2	5833.8	
30		5736.38	5833.53	
40		5736.08	5833.81	
25	8.25	5735.93	5833.63	
25	13.05	5736.09	5833.97	

802.11n ht40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5736.49	5813.36	f _L and f _H Within 5725~5850MHz range
10		5736.74	5813.1	
20		5736.76	5813.08	
30		5736.92	5813.01	
40		5737	5812.85	
25	8.25	5736.73	5813	
25	13.05	5737.01	5813.32	

802.11n ac20:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5736.42	5833.64	f _L and f _H Within 5725~5850MHz range
10		5736.28	5833.56	
20		5736.2	5833.8	
30		5736.1	5833.6	
40		5736.17	5833.67	
25	8.25	5736.04	5833.91	
25	13.05	5736.41	5833.74	

802.11n ac40:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5736.85	5813.27	f _L and f _H Within 5725~5850MHz range
10		5736.87	5813.04	
20		5736.76	5813.08	
30		5736.73	5812.95	
40		5736.74	5813.04	
25	8.25	5736.75	5813.2	
25	13.05	5736.63	5813.3	

802.11n ac80:

Temperature	Voltage	f _L at Low Test Channel	F _H at High Test Channel	Limit
°C	V _{dc}	MHz	MHz	
0	11.4	5737.11	5812.69	f _L and f _H Within 5725~5850MHz range
10		5737.53	5812.66	
20		5737.24	5812.44	
30		5736.96	5812.5	
40		5737.11	5812.51	
25	8.25	5737.38	5812.7	
25	13.05	5737.13	5812.69	

Note: the f_L and f_H determined by 99% Occupied bandwidth low edge at Low test channel and High edge at High test channel.

FCC §15.407(a) & RSS-247 §6.2 –MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

According to FCC §15.407(a)

(a) Power limits:

(1) For the band 5.15-5.25 GHz.

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

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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. 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. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

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

(4) The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

According to RSS-247 §6.2:

Frequency band 5150-5250 MHz

6.2.1.1 Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10}B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

Frequency band 5250-5350 MHz

6.2.2.1 Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

- a) The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;
- b) The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Frequency bands 5470-5600 MHz and 5650-5725 MHz

6.2.3.1 Power limits

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Frequency band 5725-5850 MHz

6.2.4.1 Power limits

For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output 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 devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint³ systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Wideband Power Sensor	N1921A	MY54210016	2017-11-03	2018-11-03
Agilent	Wideband Power Sensor	N1921A	MY54170013	2017-11-03	2018-11-03
Agilent	P-Series Power Meter	N1912A	MY5000448	2017-11-03	2018-11-03
N/A	Coaxial Cable	C-SJ00-0010	C0010/04	Each Time	/

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

Test Data**Environmental Conditions**

Temperature:	23.4~24.8°C
Relative Humidity:	35~42 %
ATM Pressure:	101.3~101.7kPa

The testing was performed by Nami Quan on 2017-12-09 &2017-12-10

Test Mode: Transmitting(The test result including duty cycle factor)

5150-5250MHz:

SISO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power(dBm)			EIRP (dBm)		
		Main Chain	Aux Chain	Limit for FCC	Main Chain	Aux Chain	Limit for RSS-247
802.11 a	5180	14.4	14.23	24	19.38	19.21	22.13
	5200	14.42	14.21	24	19.4	19.19	22.15
	5240	14.23	13.97	24	19.21	18.95	22.15
802.11 n20	5180	13.81	13.64	24	18.79	18.62	22.42
	5200	13.8	13.68	24	18.78	18.66	22.42
	5240	13.68	13.29	24	18.66	18.27	22.42
802.11 n40	5190	12.48	13	24	17.46	17.98	23.00
	5230	13.46	13.7	24	18.44	18.68	23.00
802.11 ac20	5180	13.79	13.67	24	18.77	18.65	22.42
	5200	13.78	13.67	24	18.76	18.65	22.42
	5240	13.64	13.39	24	18.62	18.37	22.42
802.11 ac40	5190	12.46	13.05	24	17.44	18.03	23.00
	5230	13.42	13.72	24	18.4	18.7	23.00
802.11 ac80	5210	11.16	11.44	24	16.14	16.42	23.00

MIMO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power(dBm)				EIRP (dBm)	
		Main Chain	Aux Chain	Total	Limit for FCC	Total	Limit for RSS-247
802.11 n20	5180	9.47	9.44	12.47	24	17.45	22.42
	5200	9.56	9.74	12.66	24	17.64	22.42
	5240	9.65	9.58	12.63	24	17.61	22.42
802.11 n40	5190	4.84	4.68	7.77	24	12.75	23.00
	5230	10.6	10.34	13.48	24	18.46	23.00
802.11 ac20	5180	9.44	9.74	12.60	24	17.58	22.42
	5200	9.58	9.64	12.62	24	17.6	22.42
	5240	9.28	9.67	12.49	24	17.47	22.42
802.11 ac40	5190	4.79	4.65	7.73	24	12.71	23.00
	5230	10.61	10.49	13.56	24	18.54	23.00
802.11 ac80	5210	8.24	8.01	11.14	24	16.12	23.00

Note:

For RSS-247, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10}B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz, the Maximum antenna gain is 4.98dBi.

The device is a client device. the 2 antenna maximum antenna gains are 4.98 dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

Directional gain = GANT + Array Gain = 4.98dBi < 6dBi

The power limit need reduce 0dB.

5250-5350 MHz:
SISO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)				EIRP (dBm)		
		Main Chain	Aux Chain	Limit for FCC	Limit for RSS-247	Main Chain	Aux Chain	Limit for RSS-247
802.11 a	5260	13.99	14.25	24.00	23.15	18.97	19.23	29.15
	5280	13.88	13.97	24.00	23.15	18.86	18.95	29.15
	5320	13.7	13.89	24.00	23.15	18.68	18.87	29.15
802.11 n20	5260	13.39	13.45	24.00	23.42	18.37	18.43	29.42
	5280	13.29	13.29	24.00	23.42	18.27	18.27	29.42
	5320	13.19	13.21	24.00	23.42	18.17	18.19	29.42
802.11 n40	5270	13.14	13.19	24.00	24.00	18.12	18.17	30.00
	5310	11.99	12.89	24.00	24.00	16.97	17.87	30.00
802.11 ac20	5260	13.39	13.42	24.00	23.44	18.37	18.4	29.44
	5280	13.3	13.21	24.00	23.42	18.28	18.19	29.42
	5320	13.21	13.19	24.00	23.42	18.19	18.17	29.42
802.11 ac40	5270	13.16	13.13	24.00	24.00	18.14	18.11	30.00
	5310	13.12	12.92	24.00	24.00	18.1	17.9	30.00
802.11 ac80	5290	11.16	11.22	24.00	24.00	16.14	16.2	30.00

MIMO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)					EIRP (dBm)	
		Main Chain	Aux Chain	Total	Limit for FCC	Limit for RSS-247	Total	Limit for RSS-247
802.11 n20	5260	10.23	10.09	13.17	24.00	23.42	18.15	29.42
	5280	10.28	10.09	13.2	24.00	23.42	18.18	29.42
	5320	10.59	10.26	13.44	24.00	23.42	18.42	29.42
802.11 n40	5270	10.62	10.38	13.51	24.00	24.00	18.49	30.00
	5310	10.23	10.02	13.14	24.00	24.00	18.12	30.00
802.11 ac20	5260	10.26	10.11	13.2	24.00	23.44	18.18	29.44
	5280	10.29	10.13	13.22	24.00	23.42	18.2	29.42
	5320	10.6	10.28	13.45	24.00	23.42	18.43	29.42
802.11 ac40	5270	10.6	10.36	13.49	24.00	24.00	18.47	30.00
	5310	10.32	10.01	13.18	24.00	24.00	18.16	30.00
802.11 ac80	5290	8.32	8.08	11.21	24.00	24.00	16.19	30.00

Note:

For FCC, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm $10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For RSS-247, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. The antenna gain is 4.98dBi.

The device is a client device. the 2 antenna maximum antenna gains are 4.98 dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

Directional gain = $GANT + \text{Array Gain} = 4.98\text{dBi} < 6\text{dBi}$

The power limit need reduce 0dB.

5470-5725 MHz (For Canada RSS-247, channels 118 to 128 were disabled by software since the frequency occupied the frequency band 5600-5650MHz):

SISO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)				EIRP (dBm)		
		Main Chain	Aux Chain	Limit for FCC	Limit for RSS-247	Main Chain	Aux Chain	Limit for RSS-247
802.11 a	5500	14.12	14.02	24	23.15	19.1	19	29.15
	5580	14.39	14.12	24	23.15	19.37	19.1	29.15
	5700	13.79	14.06	24	23.15	18.77	19.04	29.15
	5720	14.12	14.34	24	23.15	19.1	19.32	29.15
802.11 n20	5500	13.61	13.5	24	23.42	18.59	18.48	29.42
	5580	13.69	13.5	24	23.44	18.67	18.48	29.44
	5700	13.08	13.21	24	23.44	18.06	18.19	29.44
	5720	13.25	13.56	24	23.44	18.23	18.54	29.44
802.11 n40	5510	13.51	12.41	24	24.00	18.49	17.39	30.00
	5590	13.76	13.56	24	24.00	18.74	18.54	30.00
	5670	13.44	13.48	24	24.00	18.42	18.46	30.00
	5710	13.41	13.58	24	24.00	18.39	18.56	30.00
802.11 ac20	5500	13.63	13.24	24	23.44	18.61	18.22	29.44
	5580	13.68	13.52	24	23.44	18.66	18.5	29.44
	5700	13.09	13.23	24	23.44	18.07	18.21	29.44
	5720	13.27	13.46	24	23.44	18.25	18.44	29.44
802.11 ac40	5510	13.5	12.4	24	24.00	18.48	17.38	30.00
	5590	13.69	13.45	24	24.00	18.67	18.43	30.00
	5670	13.41	13.47	24	24.00	18.39	18.45	30.00
	5710	13.46	13.64	24	24.00	18.44	18.62	30.00
802.11 ac80	5530	11.76	11.11	24	24.00	16.74	16.09	30.00
	5610	11.13	11.34	24	24.00	16.11	16.32	30.00
	5690	11.32	11.24	24	24.00	16.3	16.22	30.00

MIMO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)					EIRP (dBm)	
		Main Chain	Aux Chain	Total	Limit for FCC	Limit for RSS-247	Total	Limit for RSS-247
802.11 n20	5500	10.54	10.32	13.44	24	23.42	18.42	29.42
	5580	10.89	10.56	13.74	24	23.44	18.72	29.44
	5700	10.48	10.27	13.39	24	23.44	18.37	29.44
	5720	10.32	10.16	13.25	24	23.44	18.23	29.44
802.11 n40	5510	10.22	10.08	13.16	24	24.00	18.14	30.00
	5550	10.35	10.26	13.32	24	24.00	18.3	30.00
	5670	10.47	10.21	13.35	24	24.00	18.33	30.00
	5710	10.35	10.19	13.28	24	24.00	18.26	30.00
802.11 ac20	5500	10.58	10.33	13.47	24	23.44	18.45	29.44
	5580	10.87	10.56	13.73	24	23.44	18.71	29.44
	5700	10.51	10.25	13.39	24	23.44	18.37	29.44
	5720	10.34	10.18	13.27	24	23.44	18.25	29.44
802.11 ac40	5510	10.15	10.01	13.09	24	24.00	18.07	30.00
	5550	10.32	10.24	13.29	24	24.00	18.27	30.00
	5670	10.35	10.26	13.32	24	24.00	18.3	30.00
	5710	10.32	10.2	13.27	24	24.00	18.25	30.00
802.11 ac80	5530	8.38	8.12	11.26	24	24.00	16.24	30.00
	5610	8.26	8.16	11.22	24	24.00	16.2	30.00
	5690	8.26	8.09	11.19	24	24.00	16.17	30.00

Note:

For FCC, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm $10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For RSS-247, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. The antenna gain is 4.98dBi.

The device is a client device. the 2 antenna maximum antenna gains are 4.98 dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

Directional gain = GANT + Array Gain = 4.98dBi < 6dBi

The power limit need reduce 0dB.

5725-5850MHz**SISO mode:**

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)		Limit (dBm)
		Main Chain	Aux Chain	
802.11 a	5745	14.33	14.12	30
	5785	13.99	14.06	30
	5825	14.15	13.99	30
802.11 n20	5745	13.65	13.3	30
	5785	13.43	13.32	30
	5825	13.65	13.43	30
802.11 n40	5755	13.44	13.34	30
	5795	13.79	13.35	30
802.11 ac20	5745	13.64	13.21	30
	5785	13.41	13.21	30
	5825	13.64	13.42	30
802.11 ac40	5755	13.48	13.33	30
	5795	13.76	13.36	30
802.11 ac80	5775	11.82	11.35	30

MIMO Mode:

Mode	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)			Limit (dBm)
		Main Chain	Aux Chain	Total	
802.11 n20	5745	10.75	10.41	13.59	30
	5785	10.58	10.23	13.42	30
	5825	10.73	10.39	13.57	30
802.11 n40	5755	10.67	10.37	13.53	30
	5795	10.73	10.41	13.58	30
802.11 ac20	5745	10.71	10.38	13.56	30
	5785	10.56	10.21	13.4	30
	5825	10.71	10.38	13.56	30
802.11 ac40	5755	10.65	10.36	10.52	30
	5795	10.72	10.41	13.58	30
802.11 ac80	5775	8.55	8.35	11.46	30

Note: the device is a client device. the 2 antenna maximum antenna gains are 4.98 dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

Directional gain = GANT + Array Gain = 4.98dBi < 6dBi

The power limit need reduce 0dB.

FCC §15.407(a) & RSS-247 §6.2 - POWER SPECTRAL DENSITY

Applicable Standard

According to FCC §15.407(a)

(a) Power limits:

(1) For the band 5.15-5.25 GHz.

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

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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. 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. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

According to RSS-247 §6.2:

Frequency band 5150-5250 MHz

6.2.1.1 Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less stringent. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10}B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

Frequency band 5250-5350 MHz

6.2.2.1 Power limits

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10}B$, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

- a) The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;
- b) The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Frequency bands 5470-5600 MHz and 5650-5725 MHz

6.2.3.1 Power limits

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10}B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10}B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Frequency band 5725-5850 MHz

6.2.4.1 Power limits

For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output 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 devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint³ systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

Test Procedure

According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU 26	200256	2017-01-04	2018-01-04
R&S	Spectrum Analyzer	FSU 26	200256	2018-01-04	2019-01-04
N/A	Coaxial Cable	C-SJ00-0010	C0010/04	Each Time	/

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	23.4~25.4°C
Relative Humidity:	35~42 %
ATM Pressure:	101.3~102kPa

The testing was performed by Nami Quan from 2017-12-08 to 2018-02-08.

Test Result:Compliance

Test Mode: Transmitting

5150-5250MHz:
SISO:

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Conducted Power Spectral Density (dBm/MHz)			EIRP Power Spectral Density (dBm/MHz)		
		Main Chain	Aux Chain		Main Chain	Aux Chain	FCC limits	Main Chain	Aux Chain	RSS-247 Limits
802.11 a	5180	3.89	4.31	0.26	4.15	4.57	11.0	9.13	9.55	10.0
	5200	3.98	4.3	0.26	4.24	4.56	11.0	9.22	9.54	10.0
	5240	4.06	3.86	0.26	4.32	4.12	11.0	9.3	9.1	10.0
802.11 n20	5180	3.45	3.42	0.25	3.7	3.67	11.0	8.68	8.65	10.0
	5200	3.37	3.43	0.25	3.62	3.68	11.0	8.6	8.66	10.0
	5240	3.6	3.4	0.25	3.85	3.65	11.0	8.83	8.63	10.0
802.11 n40	5190	-0.85	-0.15	0.53	-0.32	0.38	11.0	4.66	5.36	10.0
	5230	0.05	0.52	0.53	0.58	1.05	11.0	5.56	6.03	10.0
802.11 ac20	5180	3.29	3.66	0.25	3.54	3.91	11.0	8.52	8.89	10.0
	5200	3.46	3.41	0.25	3.71	3.66	11.0	8.69	8.64	10.0
	5240	3.45	3.76	0.25	3.7	4.01	11.0	8.68	8.99	10.0
802.11 ac40	5190	-1	-0.88	0.49	-0.51	-0.39	11.0	4.47	4.59	10.0
	5230	0.06	0.52	0.49	0.55	1.01	11.0	5.53	5.99	10.0
802.11 ac80	5210	-4.24	-4.04	0.93	-3.31	-3.11	11.0	1.67	1.87	10.0

Note: the device is a client device, the 2 antenna maximum antenna gain are 4.98dBi.

MIMO:

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Conducted Power Spectral Density (dBm/MHz)		EIRP Power Spectral Density (dBm/MHz)	
		Main Chain	Aux Chain		Total	FCC limits	Total	RSS-247 Limits
802.11 n20	5180	-1.73	-2.03	0.25	1.38	9.02	9.36	10.0
	5200	-1.96	-1.85	0.25	1.36	9.02	9.34	10.0
	5240	-2.02	-2.42	0.25	1.04	9.02	9.02	10.0
802.11 n40	5190	-4.38	-5.13	0.53	-1.20	9.02	6.78	10.0
	5230	-1.29	-2.08	0.53	1.87	9.02	9.85	10.0
802.11 ac20	5180	-1.65	-1.74	0.25	1.57	9.02	9.55	10.0
	5200	-1.98	-2.11	0.25	1.22	9.02	9.20	10.0
	5240	-2.2	-2.22	0.25	1.05	9.02	9.03	10.0
802.11 ac40	5190	-4.65	-6.8	0.49	-2.09	9.02	5.89	10.0
	5230	-1.62	-2.15	0.49	1.62	9.02	9.6	10.0
802.11 ac80	5210	-6.41	-6.86	0.93	-2.69	9.02	5.29	10.0

Note: the device is a client device, the 2 antenna maximum antenna gain are 4.98dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(\text{NANT}/\text{NSS}) \text{ dB.}$$

So:

$$\text{Directional gain} = \text{GANT} + \text{Array Gain} = 4.98 + 10 * \log(2) = 7.98 \text{ dB}$$

The Conducted Power density Limits for FCC was reduced 1.98dB

5250-5350MHz:**SISO:**

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Conducted Power Spectral Density (dBm/MHz)		
		Main Chain	Aux Chain		Main Chain	Aux Chain	FCC/RSS-247 limits
802.11 a	5260	4.27	3.96	0.26	4.53	4.22	11.0
	5280	4.5	3.21	0.26	4.76	3.47	11.0
	5320	4.76	3.77	0.26	5.02	4.03	11.0
802.11 n20	5260	3.63	3.26	0.25	3.88	3.51	11.0
	5280	3.86	3.86	0.25	4.11	4.11	11.0
	5320	4.29	4.07	0.25	4.54	4.32	11.0
802.11 n40	5270	0.25	0.56	0.53	0.78	1.09	11.0
	5310	-0.3	-0.13	0.53	0.23	0.4	11.0
802.11 ac20	5260	3.58	3.82	0.25	3.83	4.07	11.0
	5280	3.65	3.92	0.25	3.9	4.17	11.0
	5320	3.97	3.93	0.25	4.22	4.18	11.0
802.11 ac40	5270	0.19	0.68	0.49	0.68	1.17	11.0
	5310	-0.35	-0.31	0.49	0.14	0.18	11.0
802.11 ac80	5290	-4.18	-3.85	0.93	-3.25	-2.92	11.0

Note: the device is a client device, the 2 antenna maximum antenna gain are 4.98dBi.

MIMO:

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Conducted Power Spectral Density (dBm/MHz)	
		Main Chain	Aux Chain		Total	FCC/RSS-247 limits
802.11 n20	5260	1.49	0.98	0.25	4.50	9.02
	5280	1.5	0.92	0.25	4.48	9.02
	5320	1.45	1.29	0.25	4.63	9.02
802.11 n40	5270	-1.72	-2.58	0.53	1.41	9.02
	5310	-2.4	-2.73	0.53	0.98	9.02
802.11 ac20	5260	1.02	0.3	0.25	3.94	9.02
	5280	0.89	0.69	0.25	4.05	9.02
	5320	0.76	0.71	0.25	4.00	9.02
802.11 ac40	5270	-1.79	-2.62	0.49	1.32	9.02
	5310	-2.07	-2.05	0.49	1.44	9.02
802.11 ac80	5290	-6.5	-7.09	0.93	-2.84	9.02

Note: the device is a client device. the 2 antenna maximum antenna gain are 4.98dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(\text{NANT}/\text{NSS}) \text{ dB.}$$

So:

$$\text{Directional gain} = \text{GANT} + \text{Array Gain} = 4.98 + 10 * \log(2) = 7.98 \text{ dB}$$

The Conducted Power density Limits was reduce 1.98dB

5470-5725MHz(For Canada RSS-247, channels 118 to 128 were disabled by software since the frequency occupied the frequency band 5600-5650MHz):
SISO:

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)		
		Main Chain	Aux Chain		Main Chain	Aux Chain	FCC/RSS-247 limits
802.11 a	5500	4.22	4.3	0.26	4.48	4.56	11.0
	5580	4.41	3.95	0.26	4.67	4.21	11.0
	5700	3.89	4.1	0.26	4.15	4.36	11.0
	5720	4.53	4.91	0.26	4.79	5.17	11.0
802.11 n20	5500	3.56	4.15	0.25	3.81	4.4	11.0
	5580	3.81	3.98	0.25	4.06	4.23	11.0
	5700	3.71	4.27	0.25	3.96	4.52	11.0
	5720	4.39	4.99	0.25	4.64	5.24	11.0
802.11 n40	5510	0.41	0.13	0.53	0.94	0.66	11.0
	5550	0.66	0.94	0.53	1.19	1.47	11.0
	5670	0.45	-0.07	0.53	0.98	0.46	11.0
	5710	0.6	1.54	0.53	1.13	2.07	11.0
802.11 ac20	5500	3.53	4.03	0.25	3.78	4.28	11.0
	5580	3.76	4.05	0.25	4.01	4.3	11.0
	5700	3.22	4.02	0.25	3.47	4.27	11.0
	5720	4.34	4.74	0.25	4.59	4.99	11.0
802.11 ac40	5510	0.49	0.24	0.49	0.98	0.73	11.0
	5550	0.75	0.8	0.49	1.24	1.29	11.0
	5670	0.83	0.75	0.49	1.32	1.24	11.0
	5710	0.58	1.42	0.49	1.07	1.91	11.0
802.11 ac80	5530	-3.3	-2.62	0.93	-2.37	-1.69	11.0
	5610	-3.57	-3.21	0.93	-2.64	-2.28	11.0
	5690	-4.12	-3.28	0.93	-3.19	-2.35	11.0

Note: the device is a client device, the 2 antenna maximum antenna gain are 4.98dBi.

MIMO:

Mode	Frequency (MHz)	Reading (dBm/MHz)		Duty cycle factor (dB)	Power Spectral Density (dBm/MHz)	
		Main Chain	Aux Chain		Main Chain	FCC/RSS- 247 limits
802.11 n20	5500	0.95	0.94	0.25	4.21	9.02
	5580	1.46	0.82	0.25	4.41	9.02
	5700	1.22	1.21	0.25	4.48	9.02
	5720	0.97	-0.29	0.25	3.65	9.02
802.11 n40	5510	-3.27	-3.32	0.53	0.25	9.02
	5550	-1.84	-1.95	0.53	1.65	9.02
	5670	-1.7	-1.57	0.53	1.91	9.02
	5710	-1.58	-3.12	0.53	1.26	9.02
802.11 ac20	5500	0.48	0.24	0.25	3.62	9.02
	5580	1.09	0.31	0.25	3.98	9.02
	5700	0.58	0.62	0.25	3.86	9.02
	5720	0.46	-0.9	0.25	3.09	9.02
802.11 ac40	5510	-3.1	-3.46	0.49	0.22	9.02
	5550	-1.55	-2.23	0.49	1.62	9.02
	5670	-1.65	-2.08	0.49	1.64	9.02
	5710	-1.96	-3.24	0.49	0.95	9.02
802.11 ac80	5530	-6.48	-6.65	0.93	-2.62	9.02
	5690	-6.76	-6.58	0.93	-2.73	9.02
	5610	-5.77	-7.29	0.93	-2.52	9.02

Note: the device is a client device. the 2 antenna maximum antenna gain are 4.98dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(\text{NANT}/\text{NSS}) \text{ dB.}$$

So:

$$\text{Directional gain} = \text{GANT} + \text{Array Gain} = 4.98 + 10 * \log(2) = 7.98 \text{ dBi}$$

The Conducted Power density Limits was reduce 1.98dB

5725-5850MHz:**SISO:**

Mode	Frequency (MHz)	Reading (dBm/300kHz)		Duty cycle factor (dB)	Power Spectral Density (dBm/500kHz)		Limit (dBm/500kHz)
		Main Chain	Aux Chain		Main Chain	Aux Chain	
802.11 a	5745	0.09	1.49	0.26	2.57	3.97	30.0
	5785	0.15	1.17	0.26	2.63	3.65	30.0
	5825	0.84	1.52	0.26	3.32	4.00	30.0
802.11 n20	5745	0.91	1.24	0.25	3.38	3.71	30.0
	5785	0.59	1.11	0.25	3.06	3.58	30.0
	5825	1.08	1.5	0.25	3.55	3.97	30.0
802.11 n40	5755	-6.55	-5.28	0.53	-3.80	-2.53	30.0
	5795	-2.87	-2.03	0.53	-0.12	0.72	30.0
802.11 ac20	5745	1.23	1.5	0.25	3.70	3.97	30.0
	5785	0.5	0.84	0.25	2.97	3.31	30.0
	5825	1.07	1.22	0.25	3.54	3.69	30.0
802.11 ac40	5755	-3.03	-5.25	0.49	-0.32	-2.54	30.0
	5795	-2.26	-2.22	0.49	0.45	0.49	30.0
802.11 ac80	5775	-6.47	-6.74	0.93	-3.32	-3.59	30.0

Note: According to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01, the test value for 5725-5850 MHz should add $10 \log(500\text{kHz}/\text{RBW})$ to the measured result.

MIMO:

Mode	Frequency (MHz)	Reading (dBm/300kHz)		Duty cycle Factor (dB)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)
		Main Chain	Aux Chain			
802.11 n20	5745	-1.6	-1.48	0.25	3.94	28.02
	5785	-1.88	-1.77	0.25	3.66	28.02
	5825	-1.51	-2.16	0.25	3.66	28.02
802.11 n40	5755	-5.92	-5.8	0.53	-0.10	28.02
	5795	-4.84	-4.26	0.53	1.22	28.02
802.11 ac20	5745	-2.62	-2.33	0.25	3.01	28.02
	5785	-2.85	-2.71	0.25	2.70	28.02
	5825	-2.59	-2.81	0.25	2.78	28.02
802.11 ac40	5755	-5.58	-5.92	0.49	-0.03	28.02
	5795	-5.2	-5.19	0.49	0.53	28.02
802.11 ac80	5775	-9.12	-9.4	0.93	-3.10	28.02

Note 1: According to KDB789033 D02 General U-NII Test Procedures New Rules v01r02, the test value for 5725-5850 MHz should add $10 \log(500\text{kHz}/\text{RBW})$ to the measured result.

Note 2: Note: the device is a client device. the 2 antenna maximum antenna gain are 4.98dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

$$\text{Array Gain} = 10 \log(\text{NANT}/\text{NSS}) \text{ dB}$$

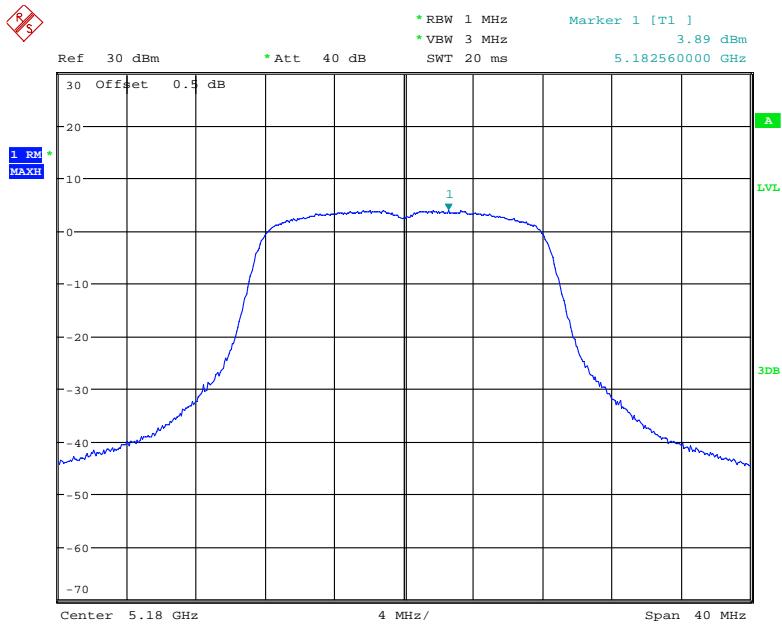
So:

$$\text{Directional gain} = \text{GANT} + \text{Array Gain} = 4.98 + 10 \log(2) = 7.98 \text{ dB}$$

The Power density Limits was reduce 1.98dB

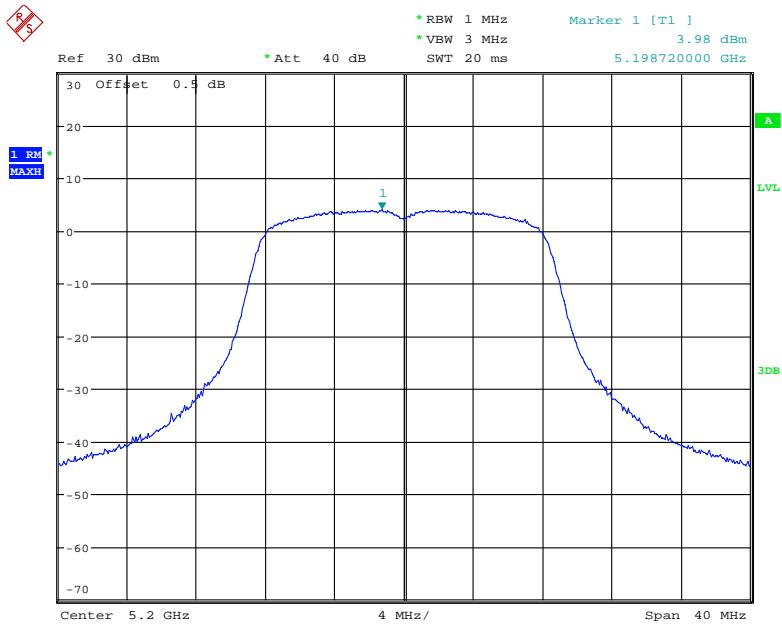
SISO:
5150-5250MHz:

Main Chain: Power Spectral Density, 802.11a Low Channel

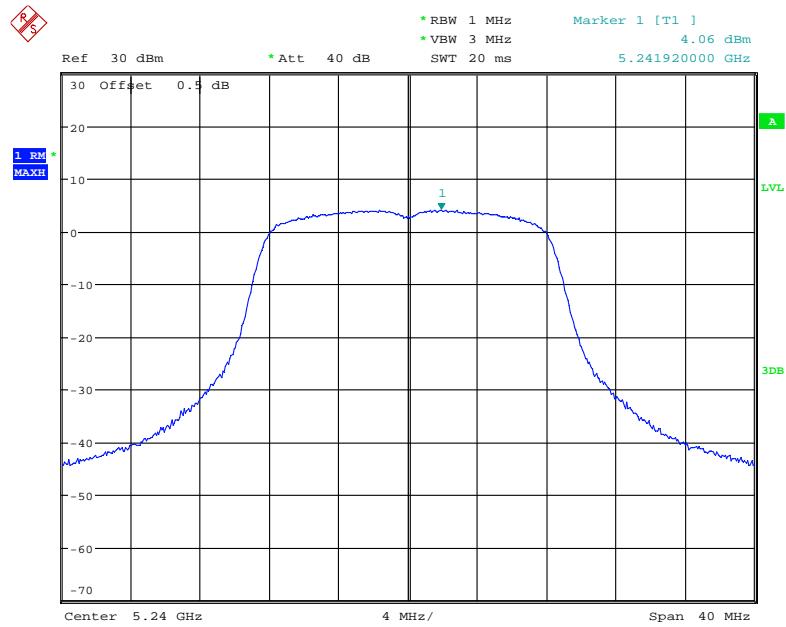


Date: 8.DEC.2017 11:36:15

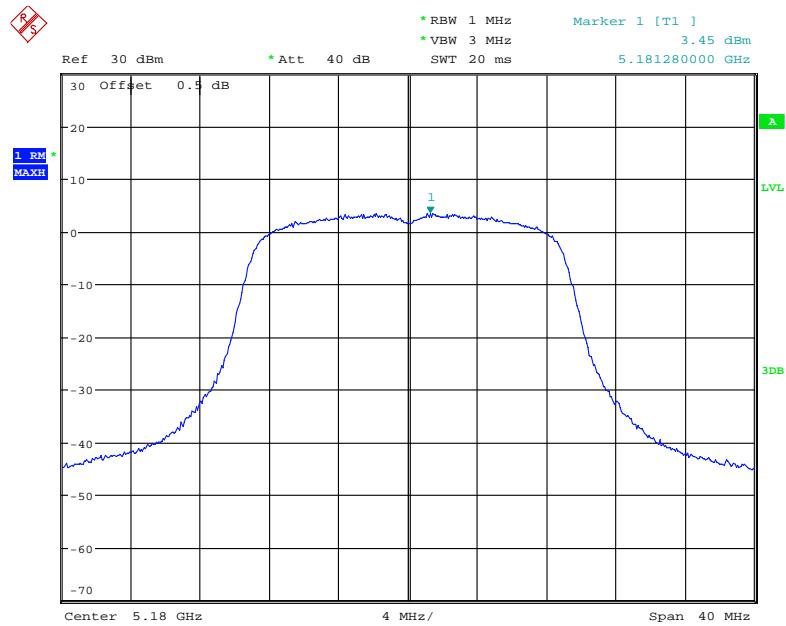
Main Chain: Power Spectral Density, 802.11a Middle Channel



Date: 8.DEC.2017 11:35:12

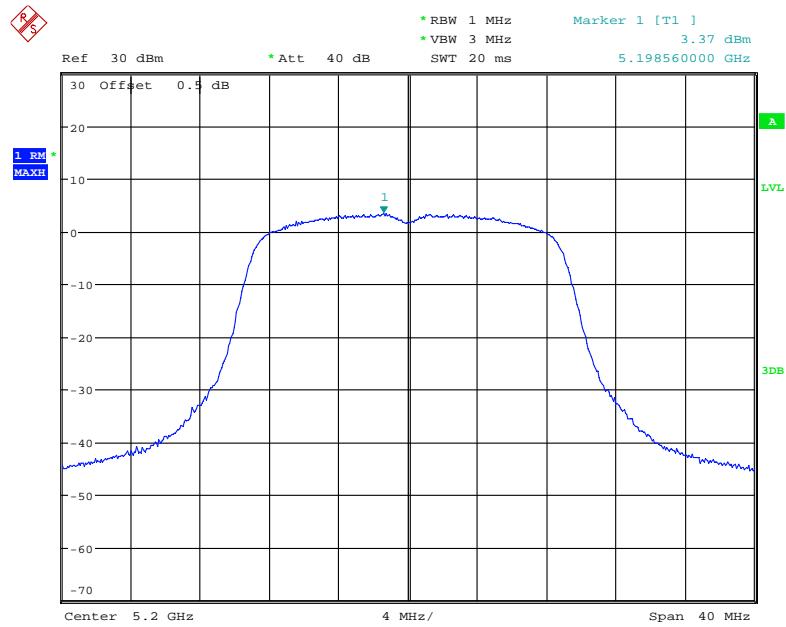
Main Chain: Power Spectral Density, 802.11a High Channel

Date: 8.DEC.2017 11:33:44

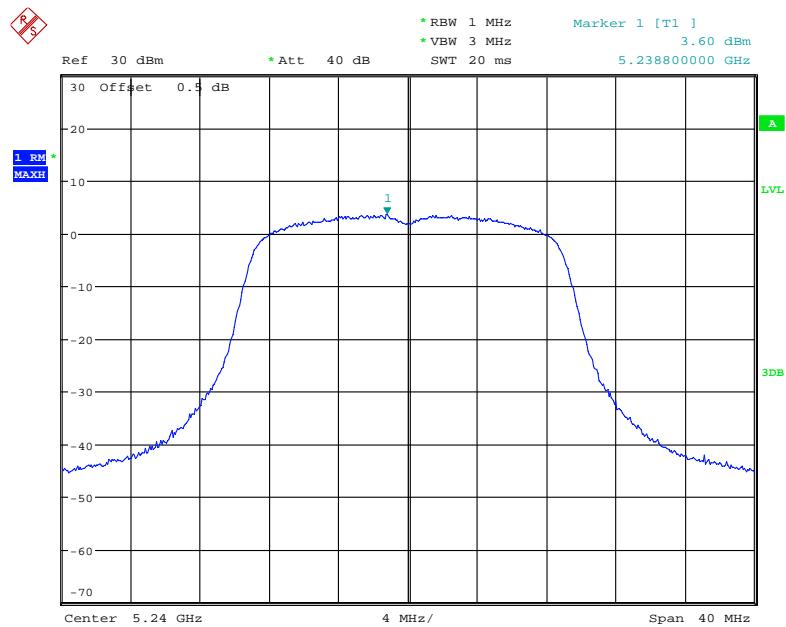
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 8.DEC.2017 11:37:59

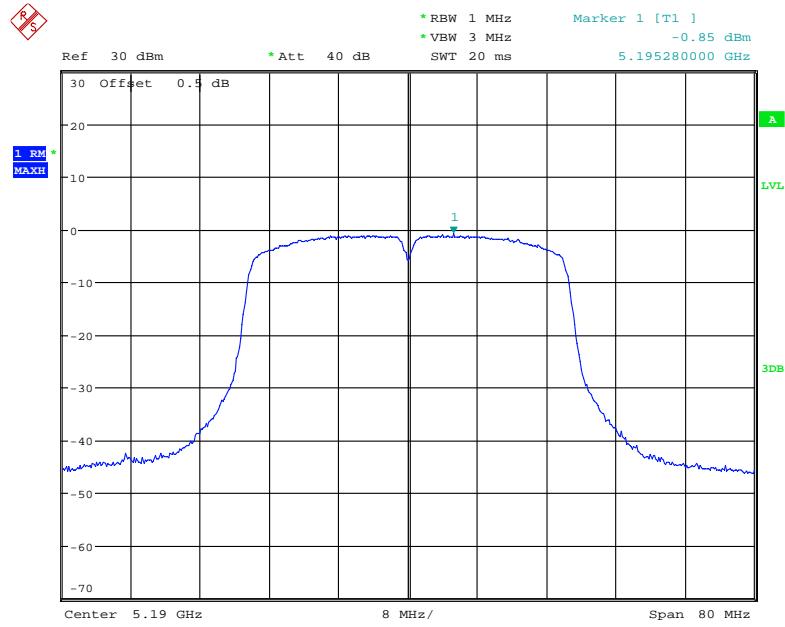
Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel



Main Chain: Power Spectral Density, 802.11n ht20 High Channel

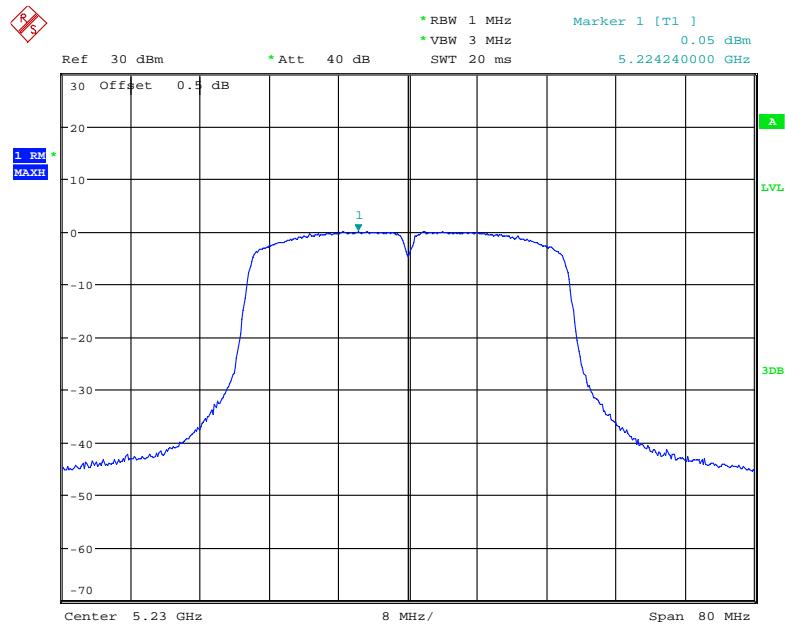


Main Chain: Power Spectral Density, 802.11n ht40 Low Channel

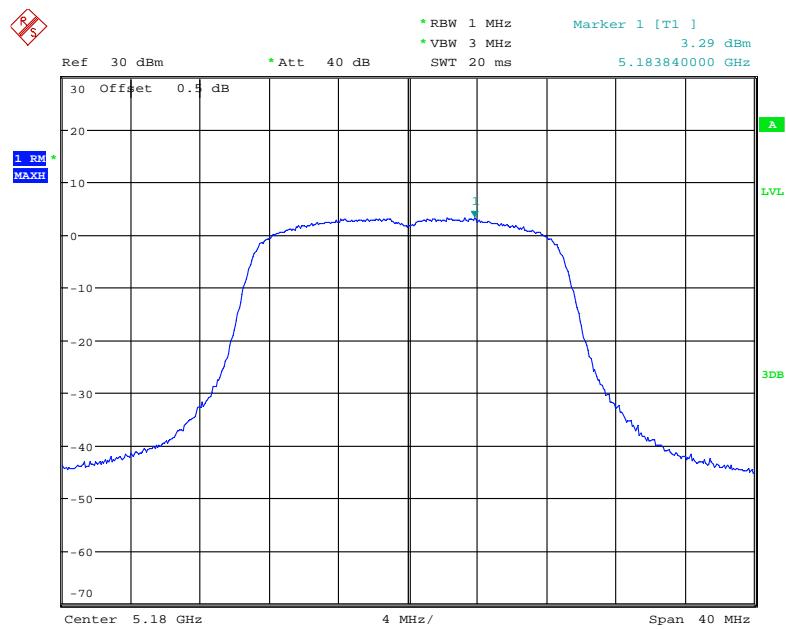


Date: 8.DEC.2017 13:39:15

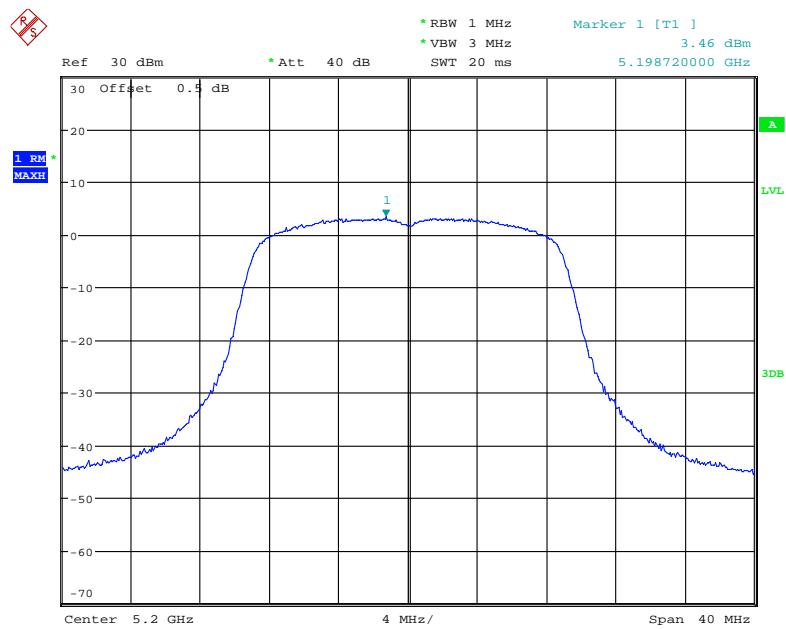
Main Chain: Power Spectral Density, 802.11n ht40 High Channel



Date: 8.DEC.2017 11:55:45

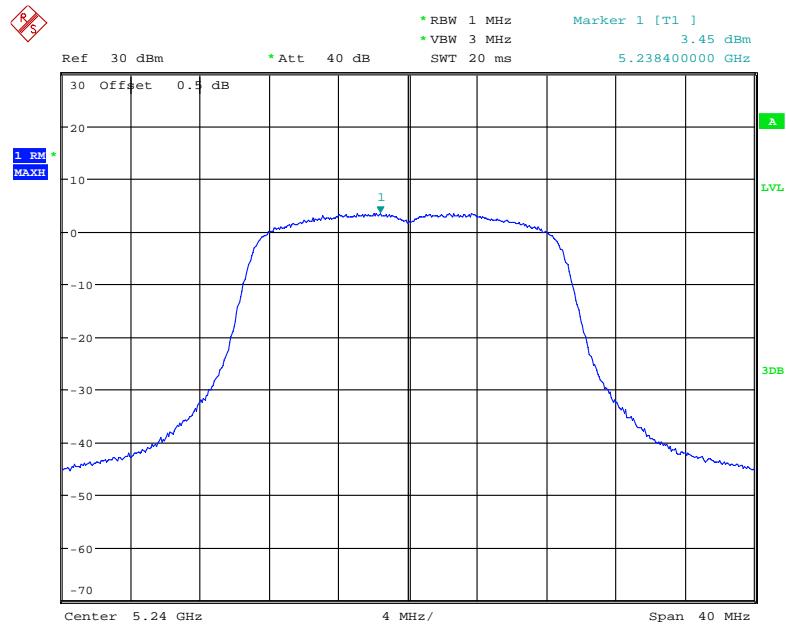
Main Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 8.DEC.2017 11:44:20

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel

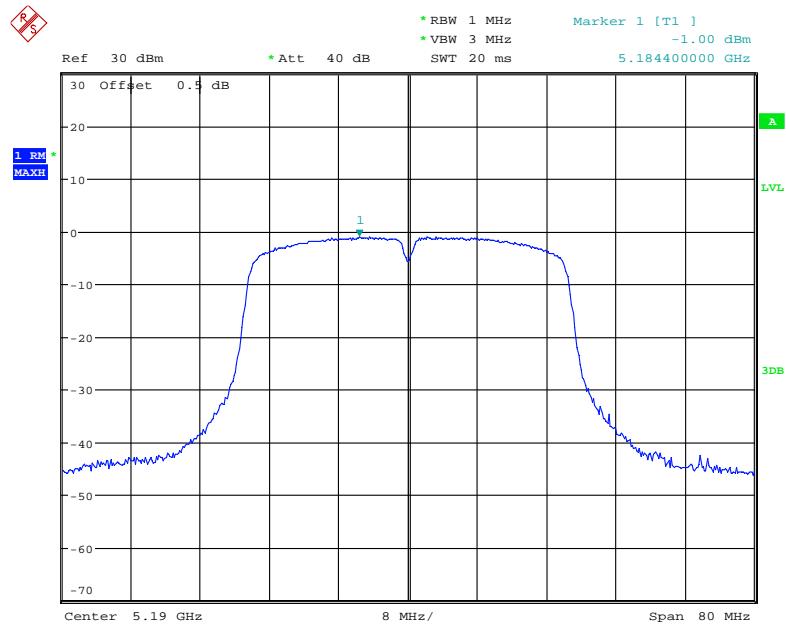
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Main Chain: Power Spectral Density, 802.11n ac20 High Channel



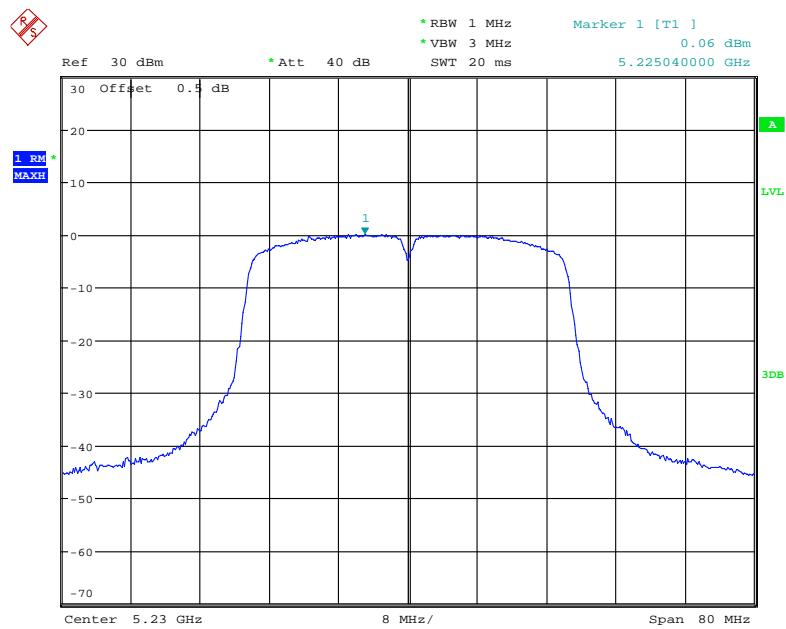
Date: 8.DEC.2017 11:42:00

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



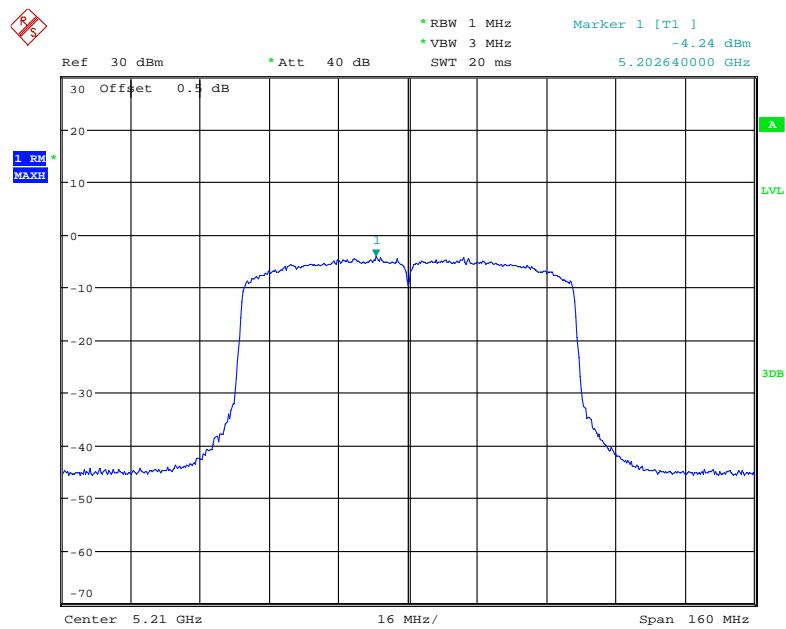
Date: 8.DEC.2017 13:40:46

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



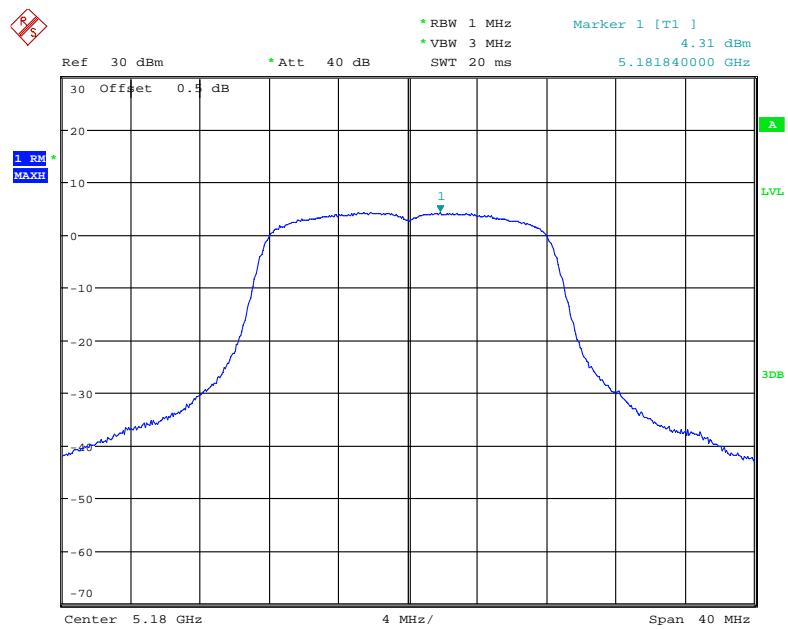
Date: 8.DEC.2017 11:58:04

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel



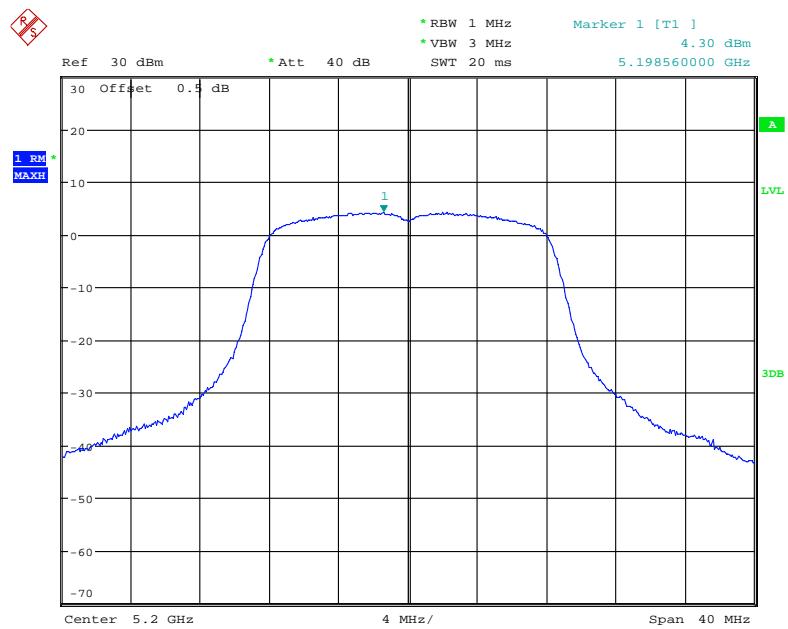
Date: 8.DEC.2017 13:04:16

AUX Chain: Power Spectral Density, 802.11a Low Channel



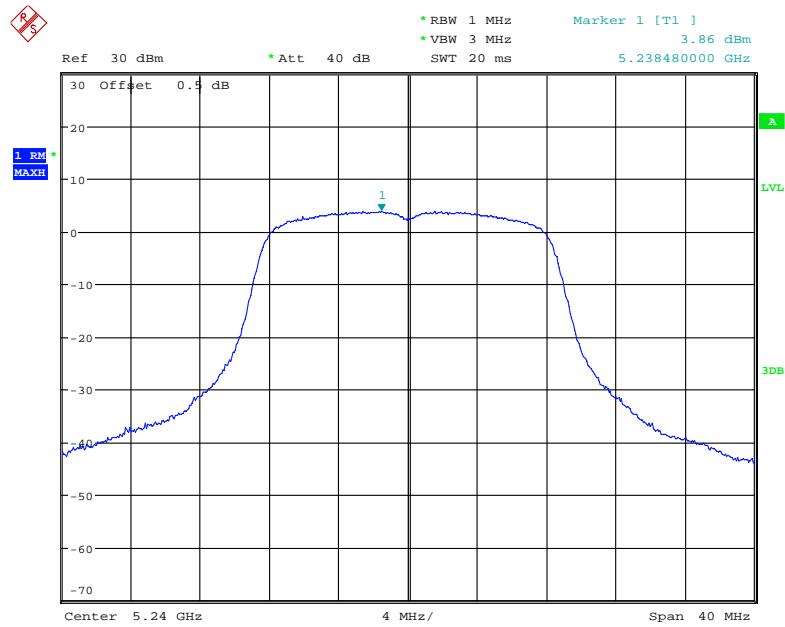
Date: 11.DEC.2017 15:30:18

AUX Chain: Power Spectral Density, 802.11a Middle Channel



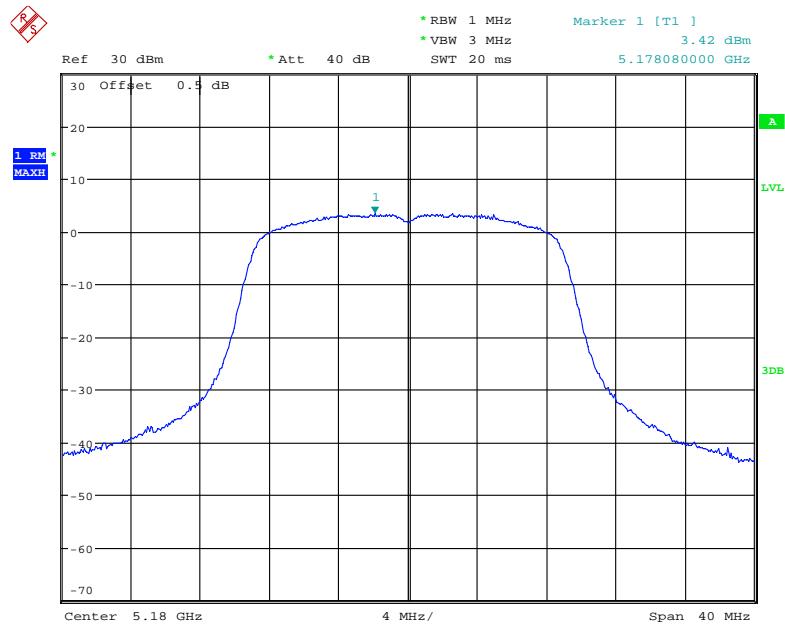
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AUX Chain: Power Spectral Density, 802.11a High Channel

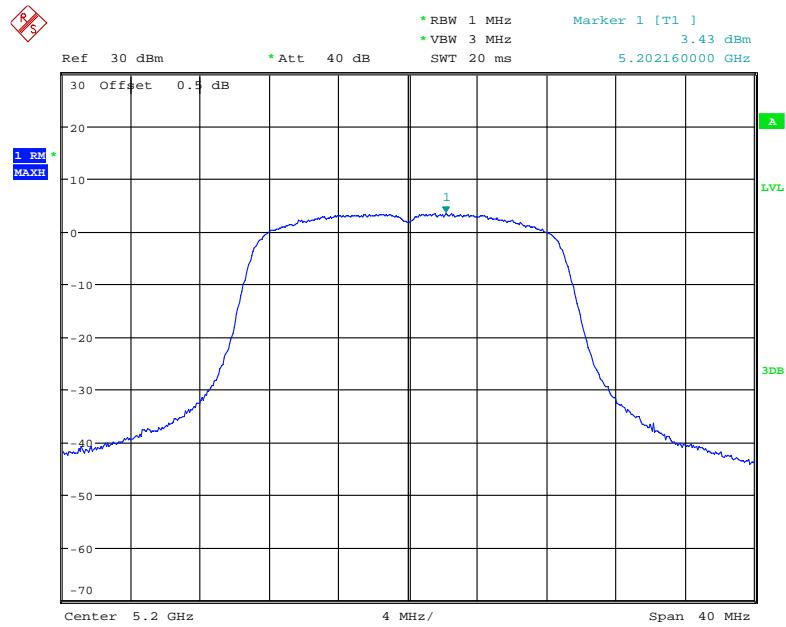


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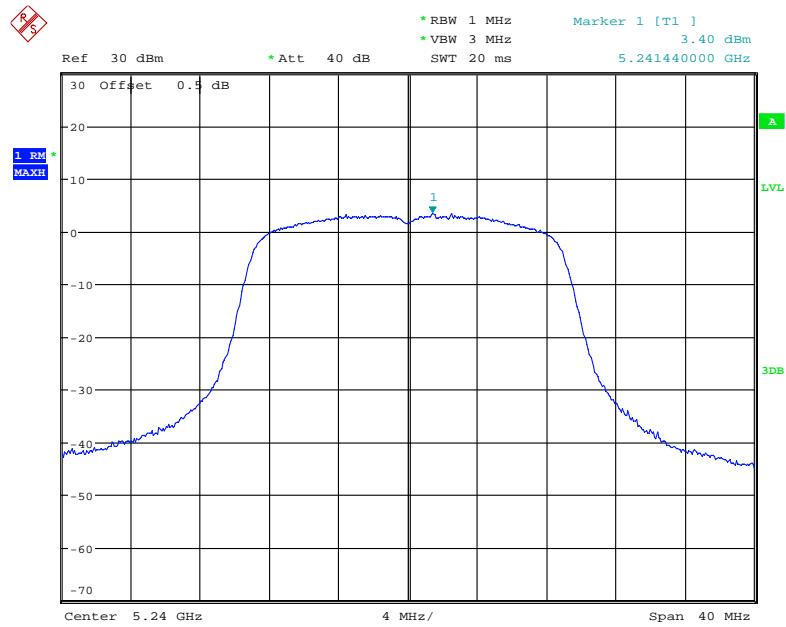
AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



Date: 11.DEC.2017 15:32:14

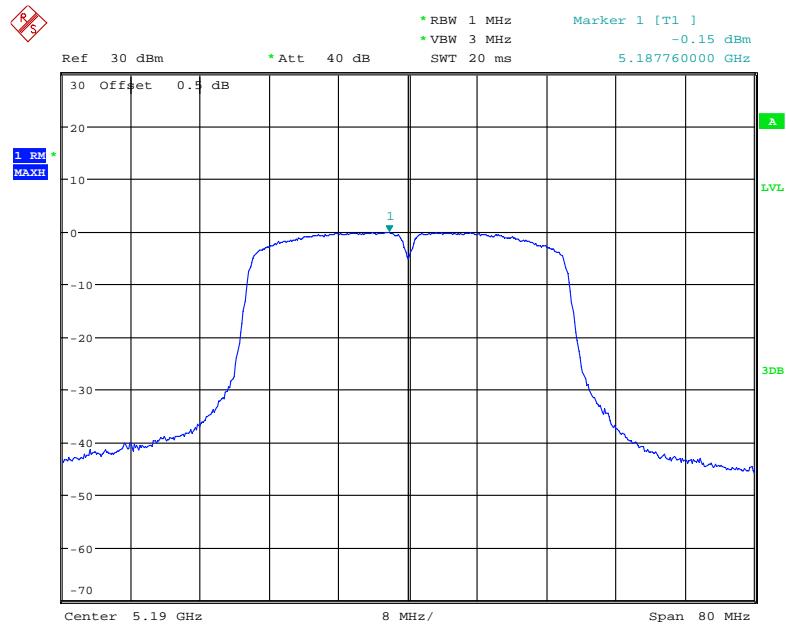
AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel

Date: 11.DEC.2017 15:32:42

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

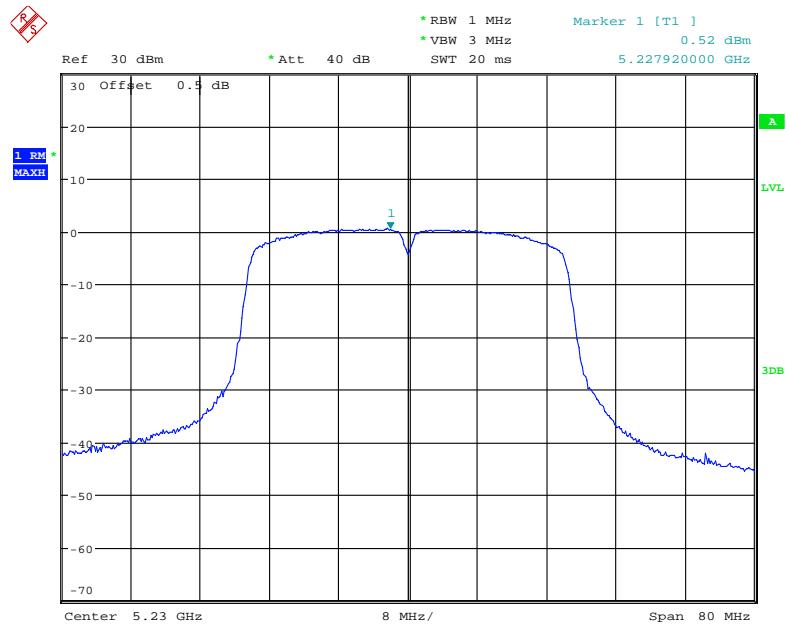
Date: 11.DEC.2017 15:33:11

AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel

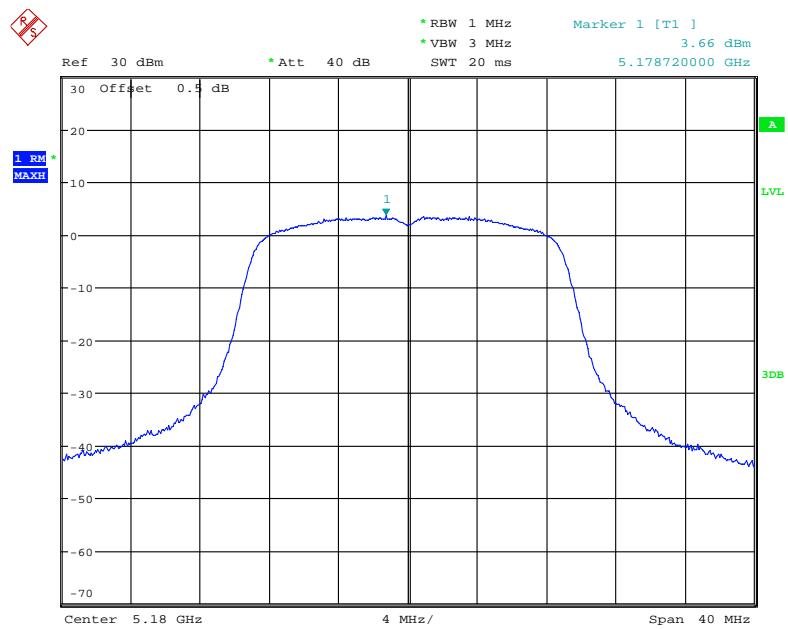


Date: 11.DEC.2017 15:37:29

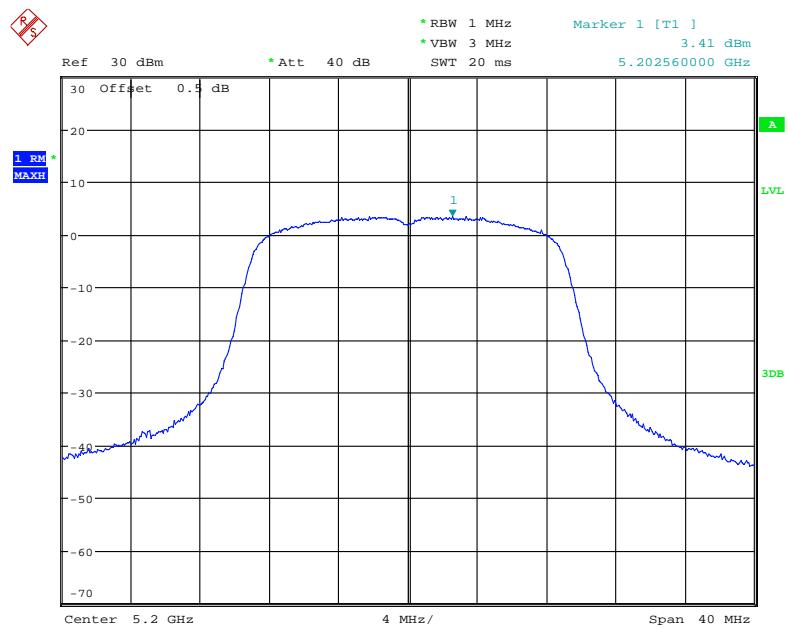
AUX Chain: Power Spectral Density, 802.11n ht40 High Channel



Date: 11.DEC.2017 15:41:30

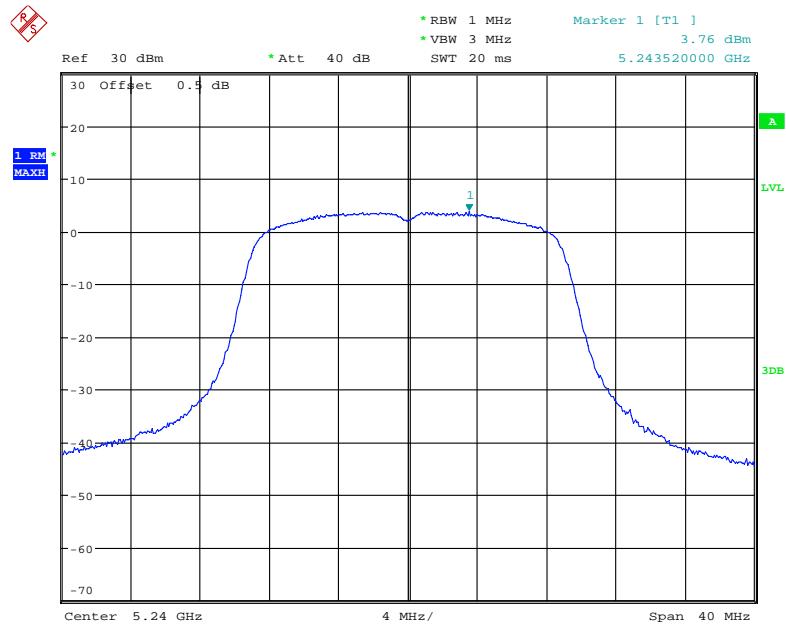
AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 11.DEC.2017 15:33:43

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel

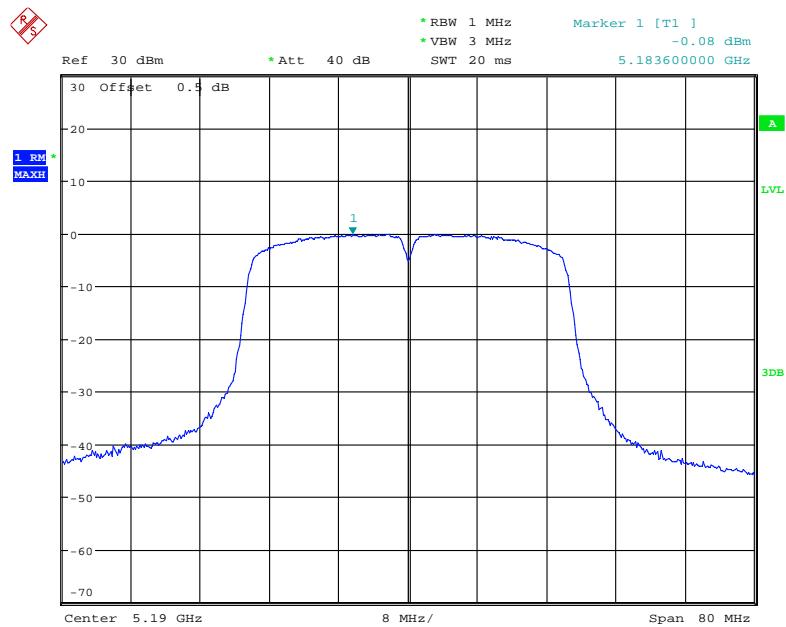
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AUX Chain: Power Spectral Density, 802.11n ac20 High Channel



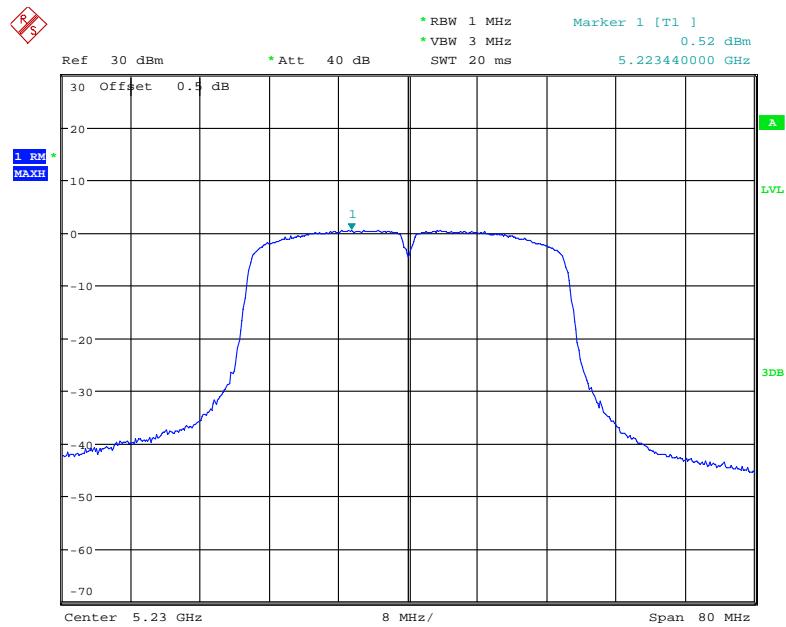
Date: 11.DEC.2017 15:34:40

AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



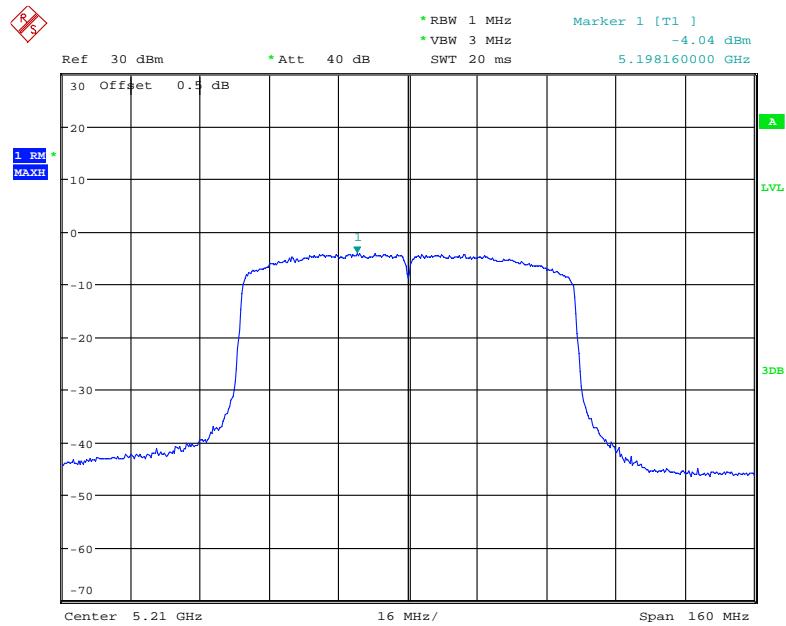
Date: 11.DEC.2017 15:38:24

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel



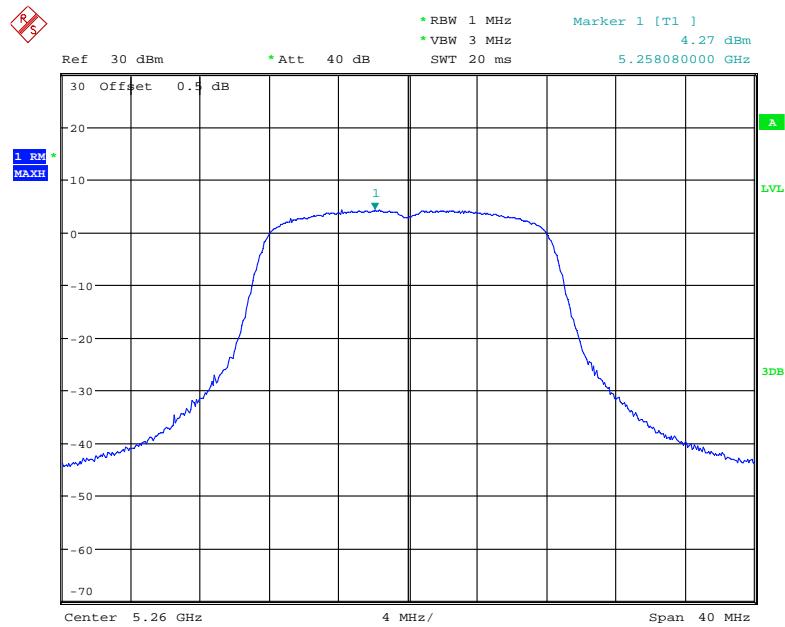
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AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel

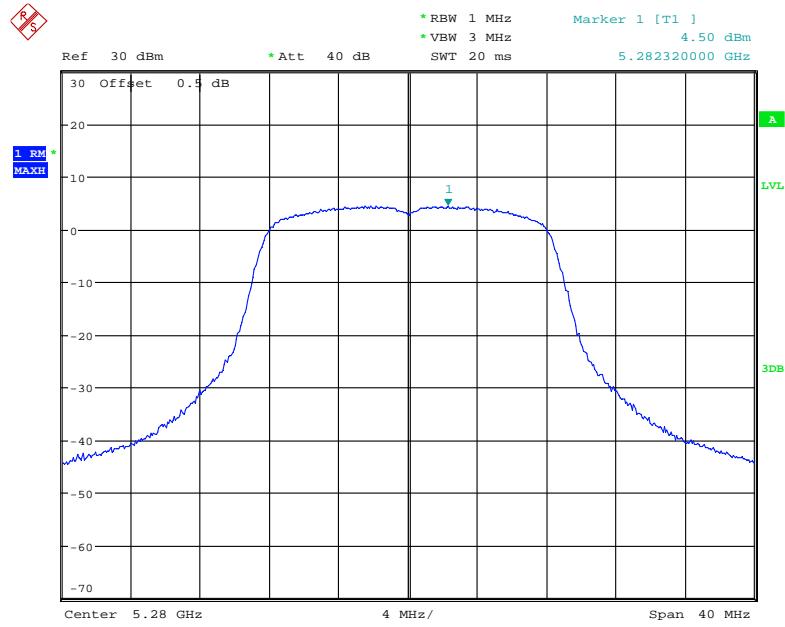


Date: 11.DEC.2017 15:42:35

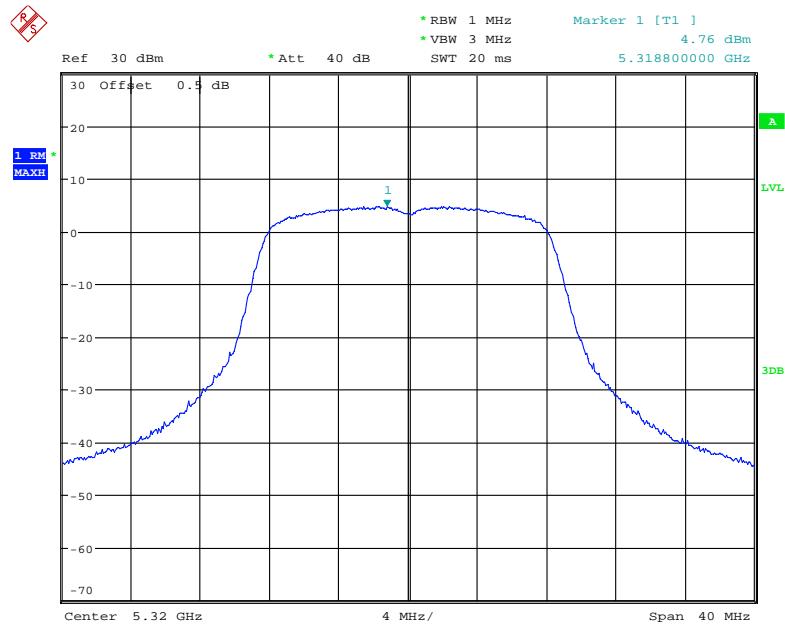
5250-5350MHz:

Main Chain: Power Spectral Density, 802.11a Low Channel

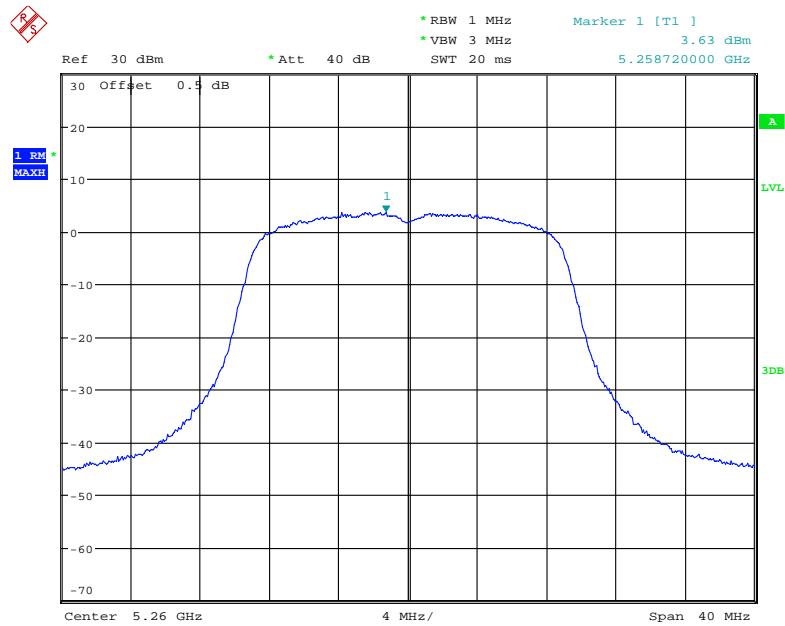
Date: 8.DEC.2017 13:08:13

Main Chain: Power Spectral Density, 802.11a Middle Channel

Date: 8.DEC.2017 13:09:38

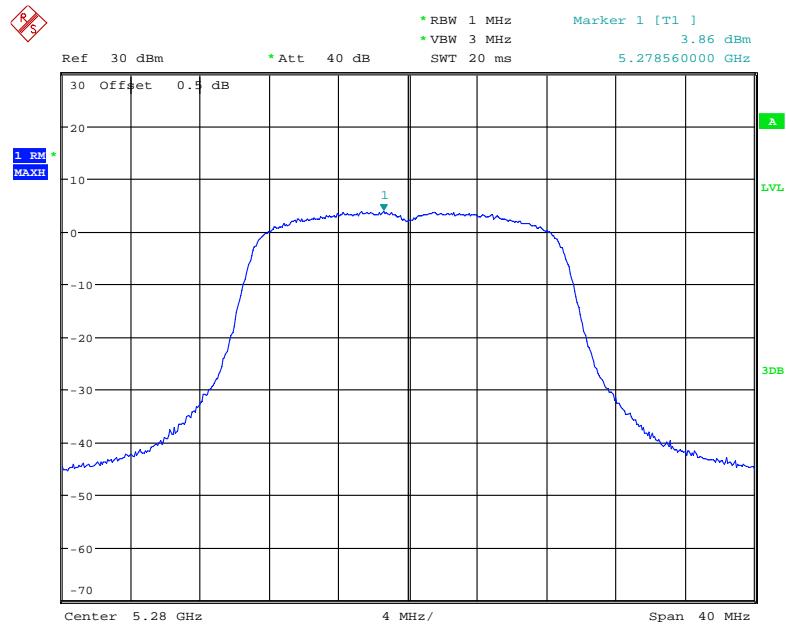
Main Chain: Power Spectral Density, 802.11a High Channel

Date: 8.DEC.2017 13:10:43

Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

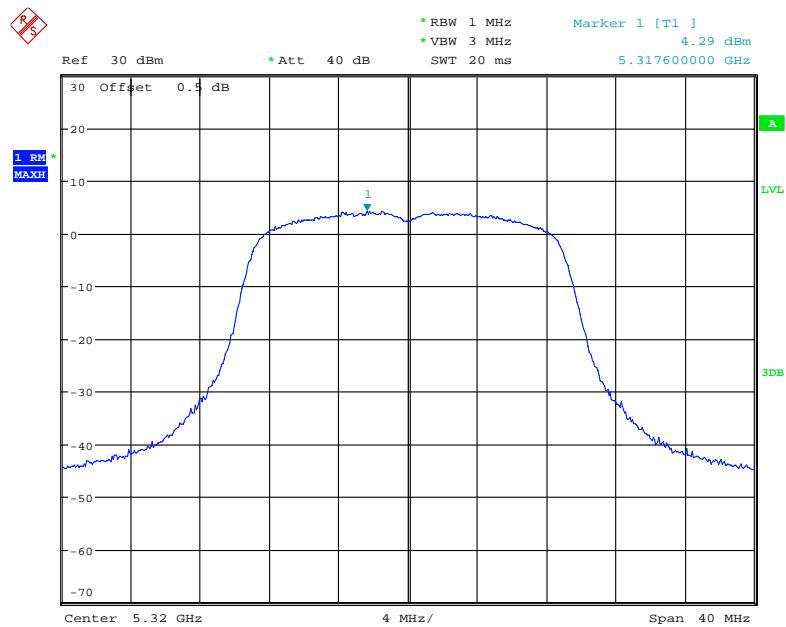
Date: 8.DEC.2017 13:14:51

Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel



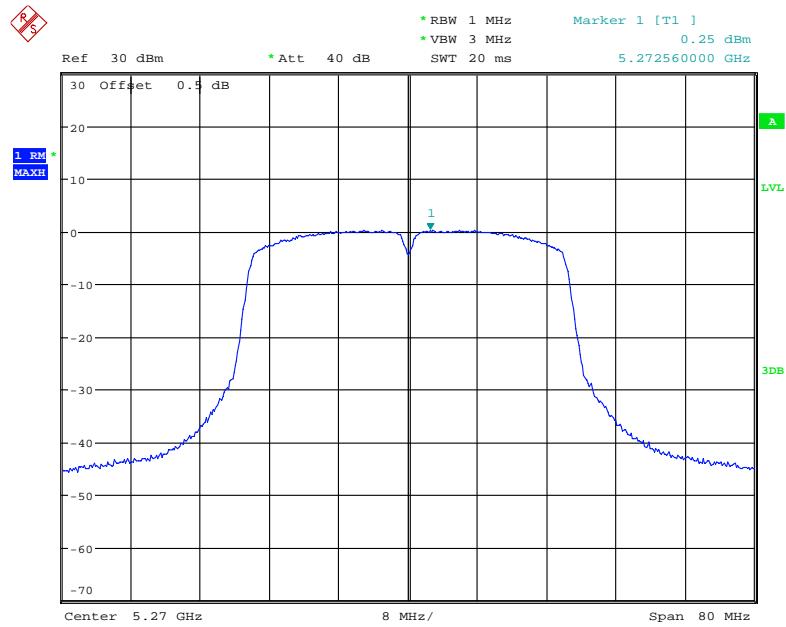
Date: 8.DEC.2017 13:13:52

Main Chain: Power Spectral Density, 802.11n ht20 High Channel



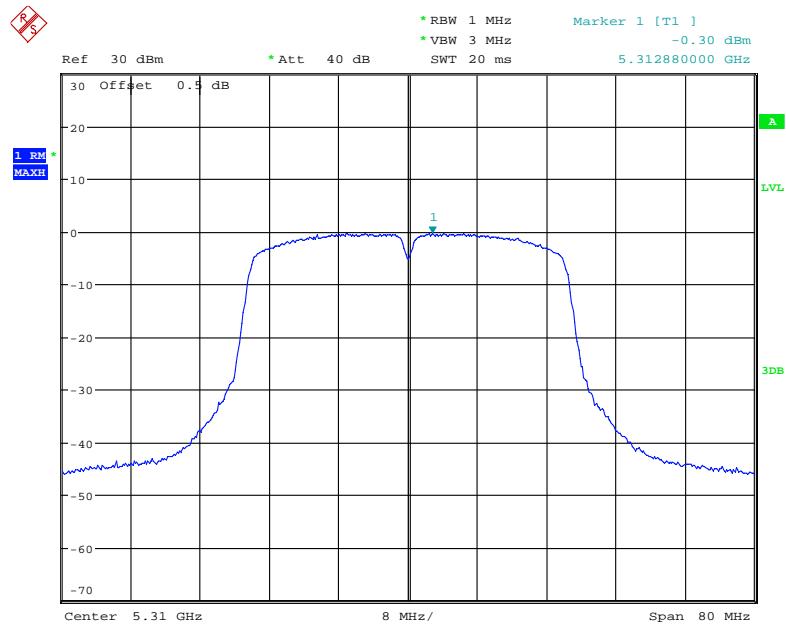
Date: 8.DEC.2017 13:12:28

Main Chain: Power Spectral Density, 802.11n ht40 Low Channel

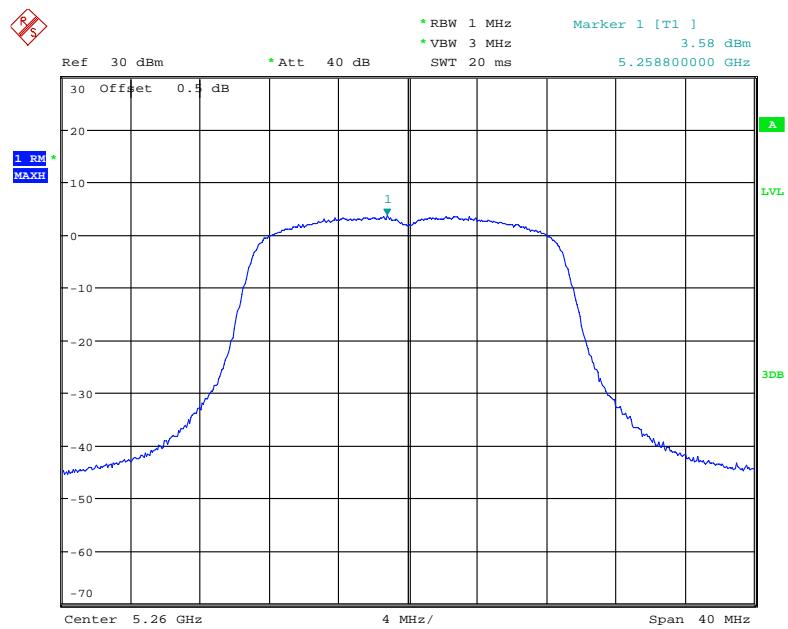


Date: 8.DEC.2017 13:20:36

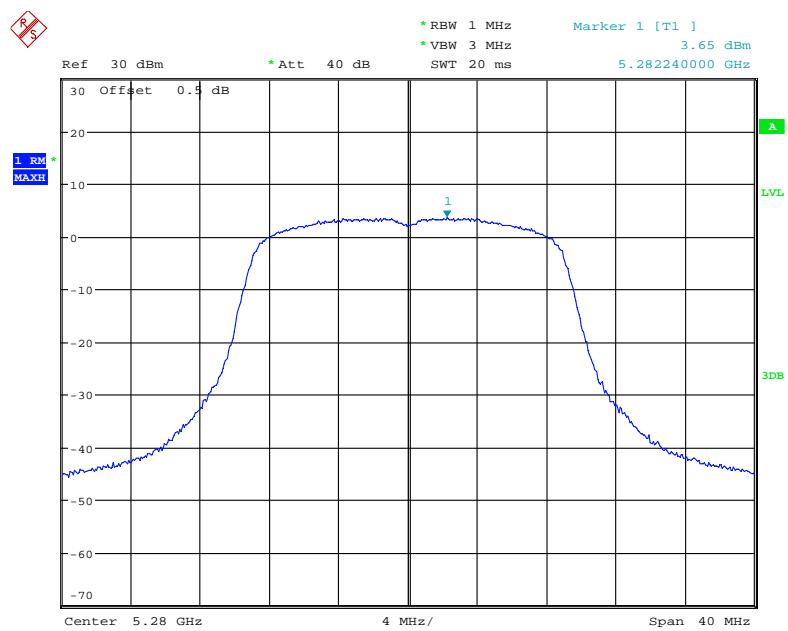
Main Chain: Power Spectral Density, 802.11n ht40 High Channel



Date: 8.DEC.2017 13:37:14

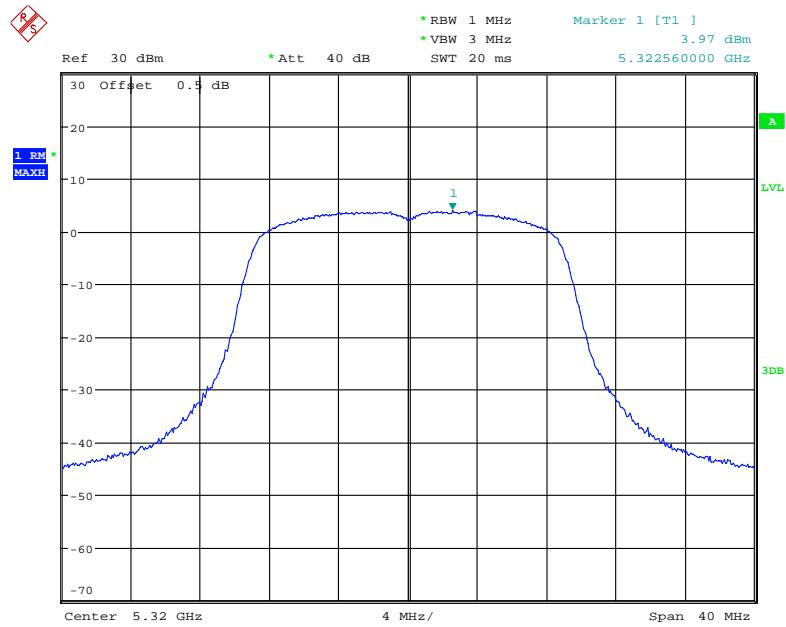
Main Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 8.DEC.2017 13:16:26

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel

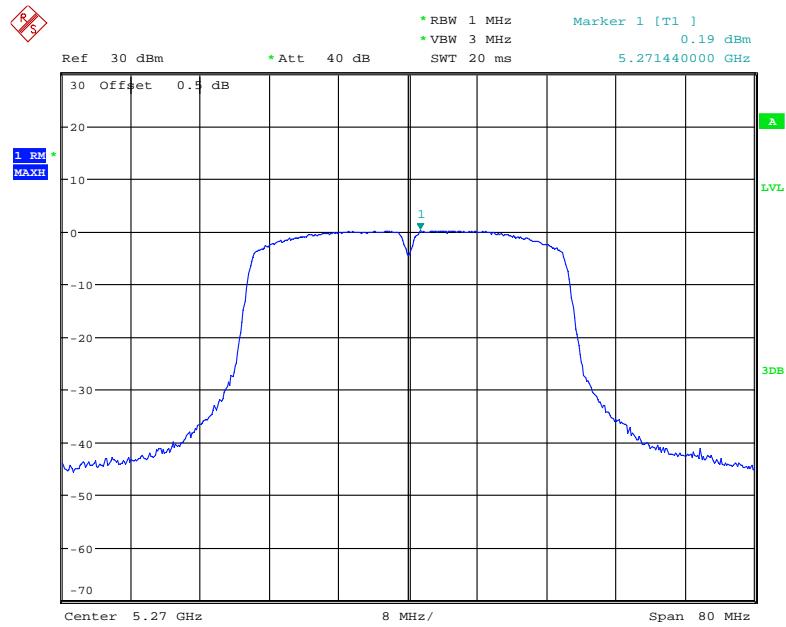
Date: 8.DEC.2017 13:17:54

Main Chain: Power Spectral Density, 802.11n ac20 High Channel



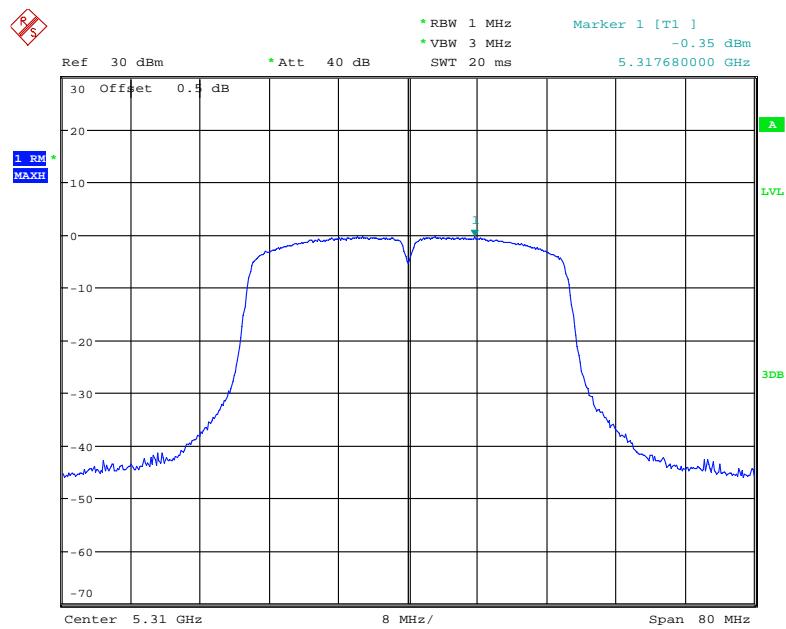
Date: 8.DEC.2017 13:18:50

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



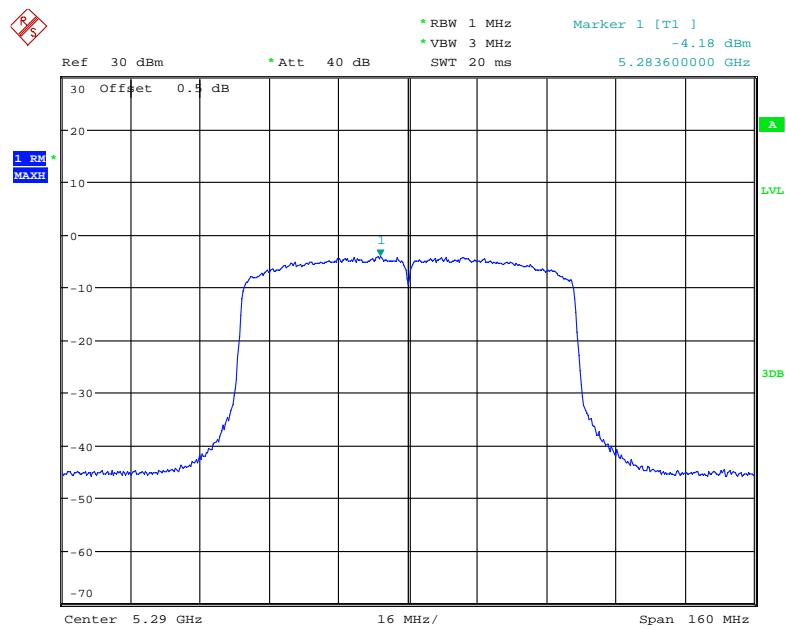
Date: 8.DEC.2017 13:33:19

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



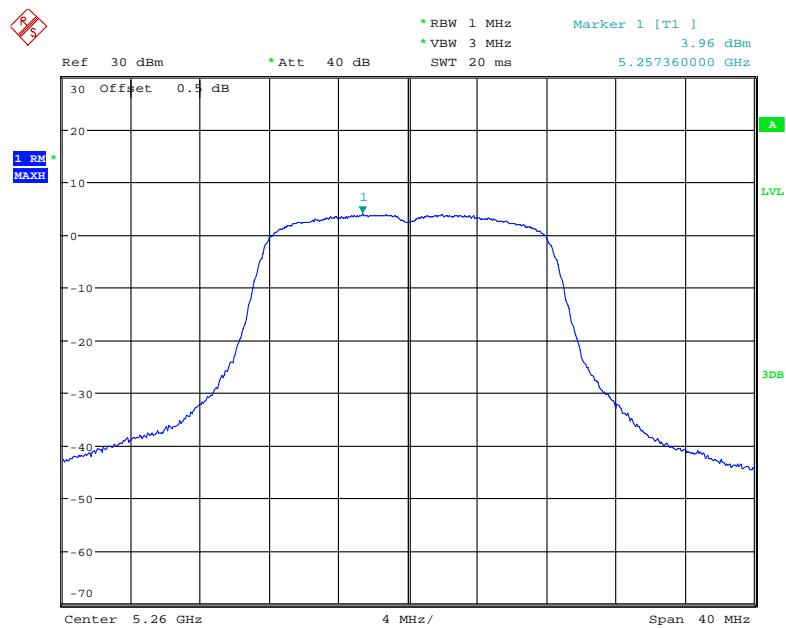
Date: 8.DEC.2017 13:34:55

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel



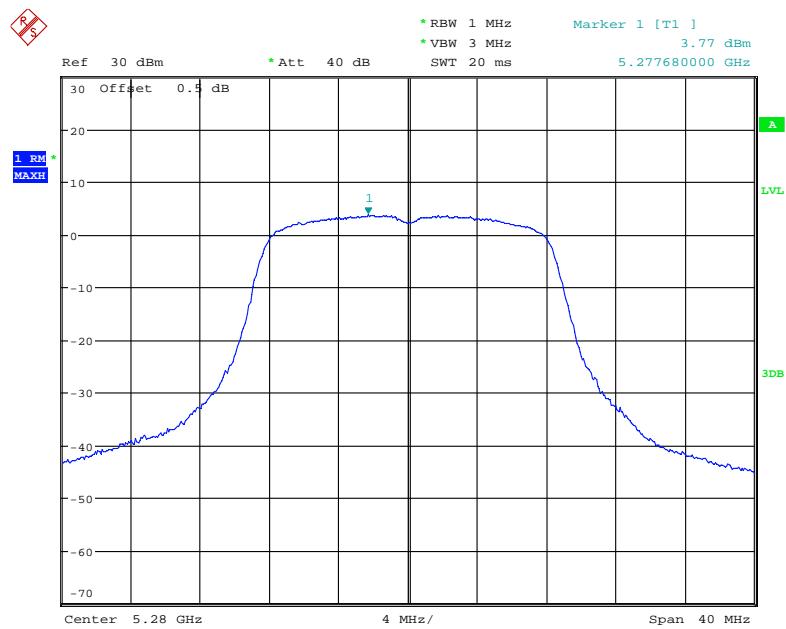
Date: 8.DEC.2017 13:06:22

AUX Chain: Power Spectral Density, 802.11a Low Channel

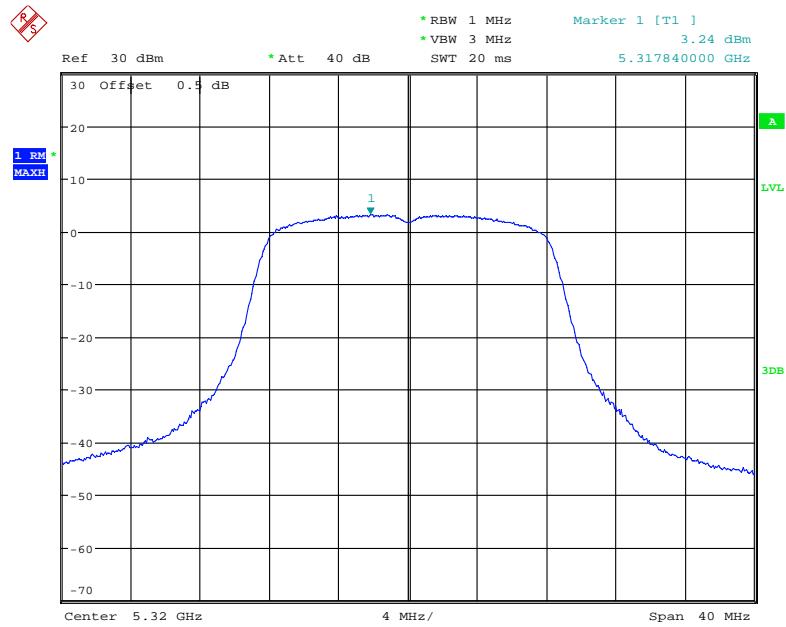


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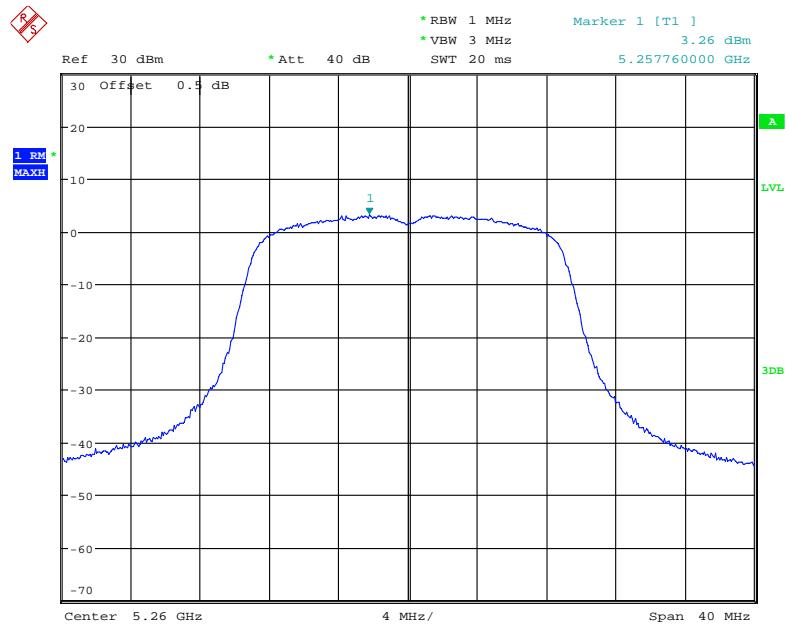
AUX Chain: Power Spectral Density, 802.11a Middle Channel



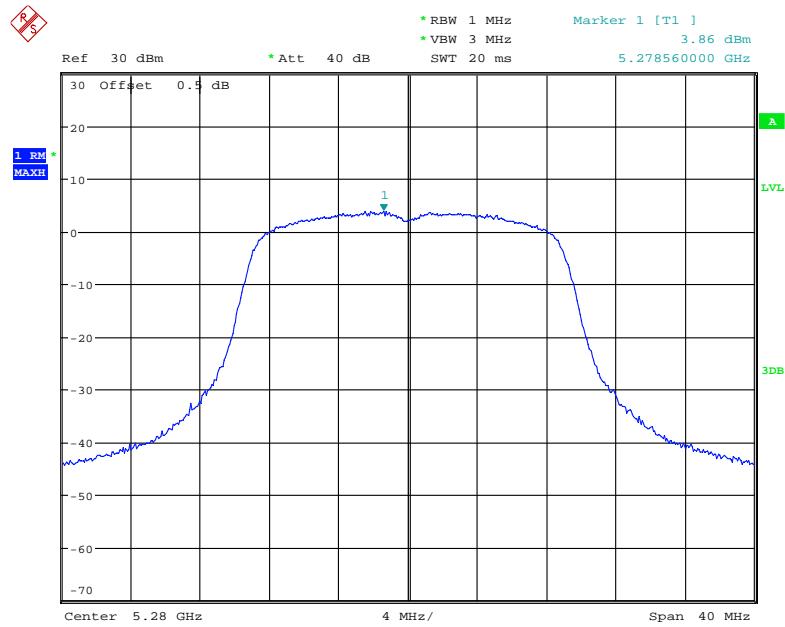
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AUX Chain: Power Spectral Density, 802.11a High Channel

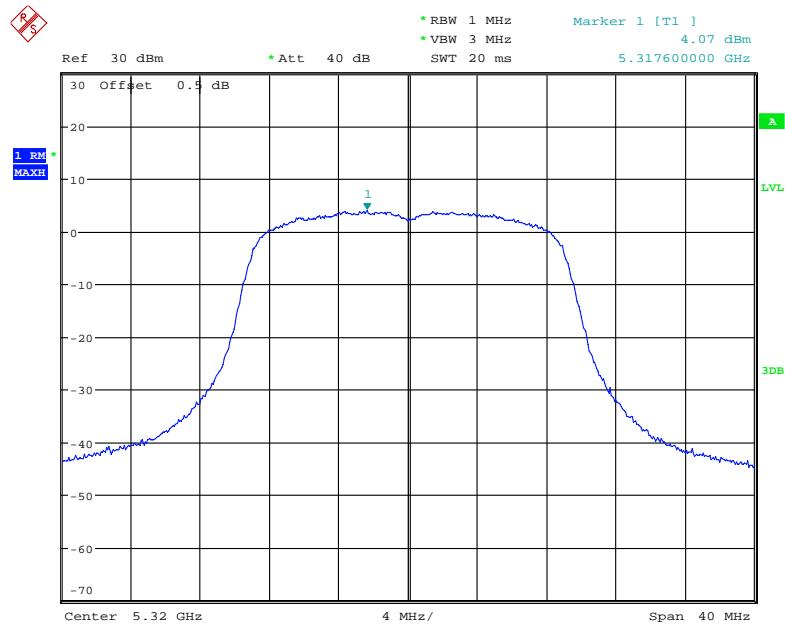
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AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 8.DEC.2017 15:45:02

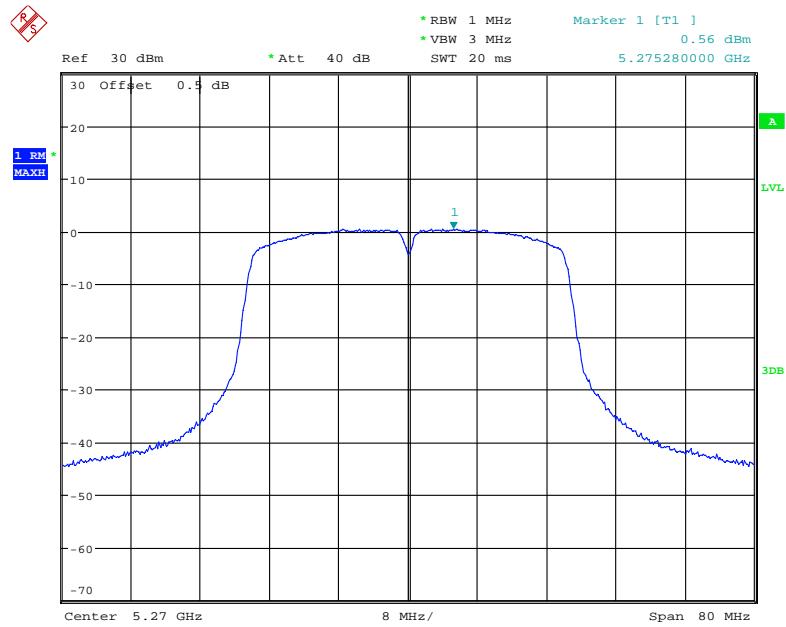
AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel

Date: 8.DEC.2017 15:46:54

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

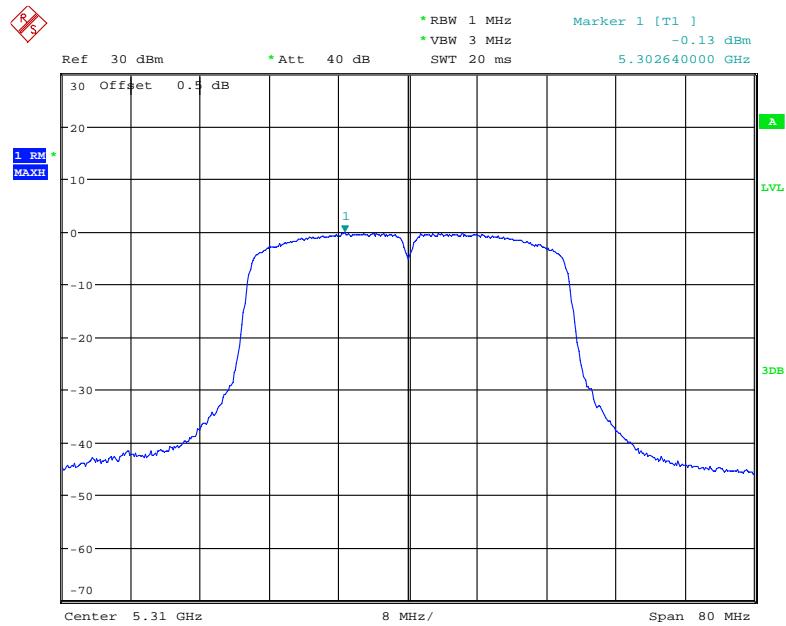
Date: 8.DEC.2017 15:47:51

AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel

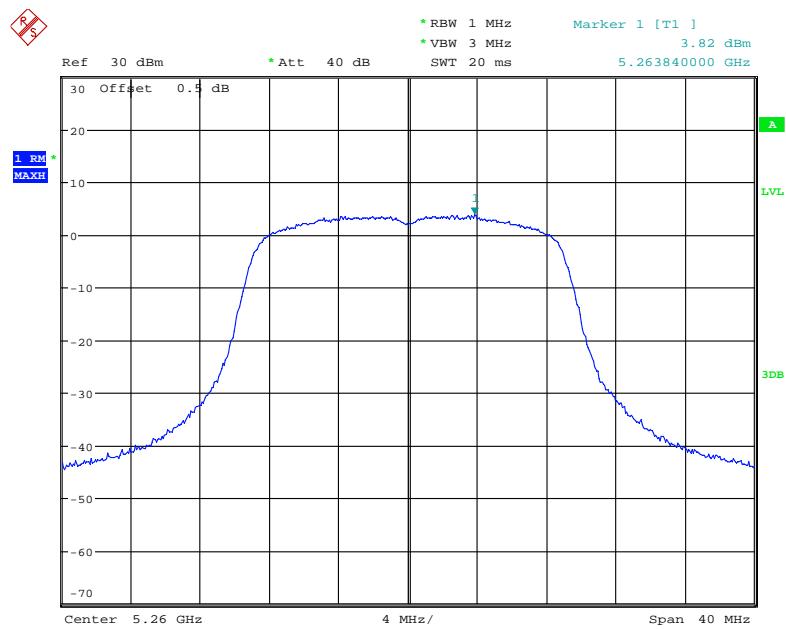


Date: 8.DEC.2017 15:53:16

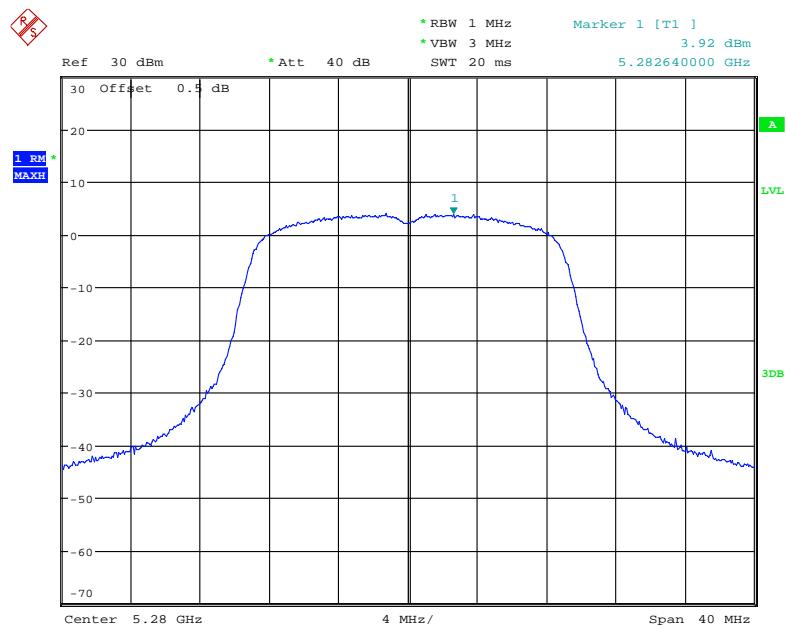
AUX Chain: Power Spectral Density, 802.11n ht40 High Channel



Date: 8.DEC.2017 15:54:44

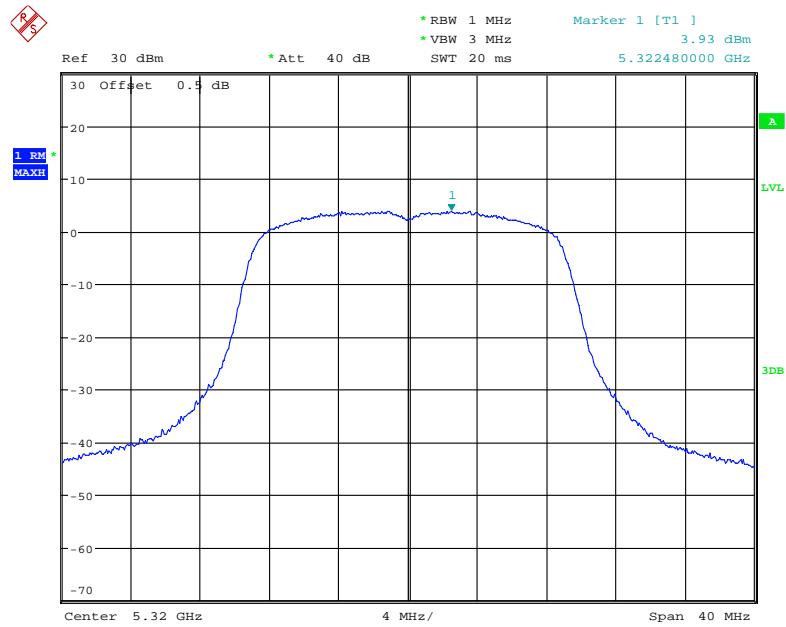
AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 8.DEC.2017 15:49:15

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel

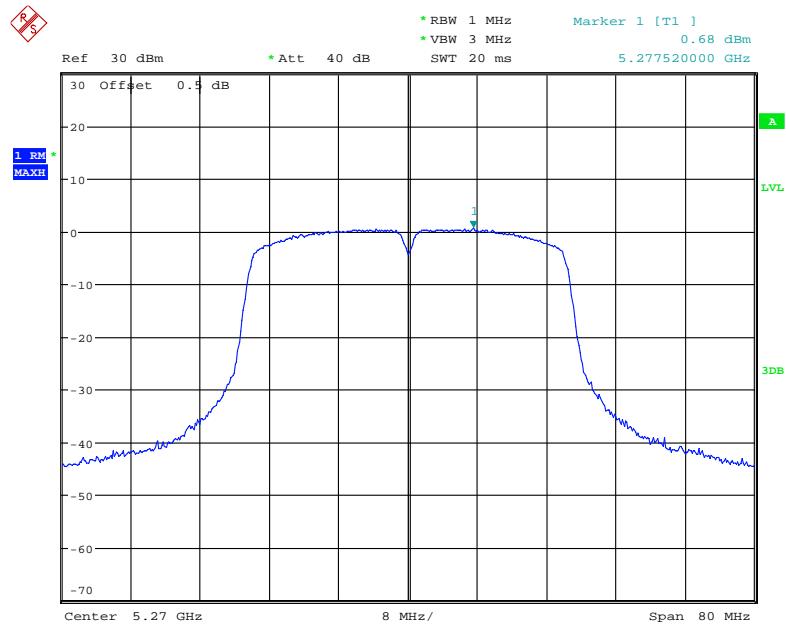
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AUX Chain: Power Spectral Density, 802.11n ac20 High Channel

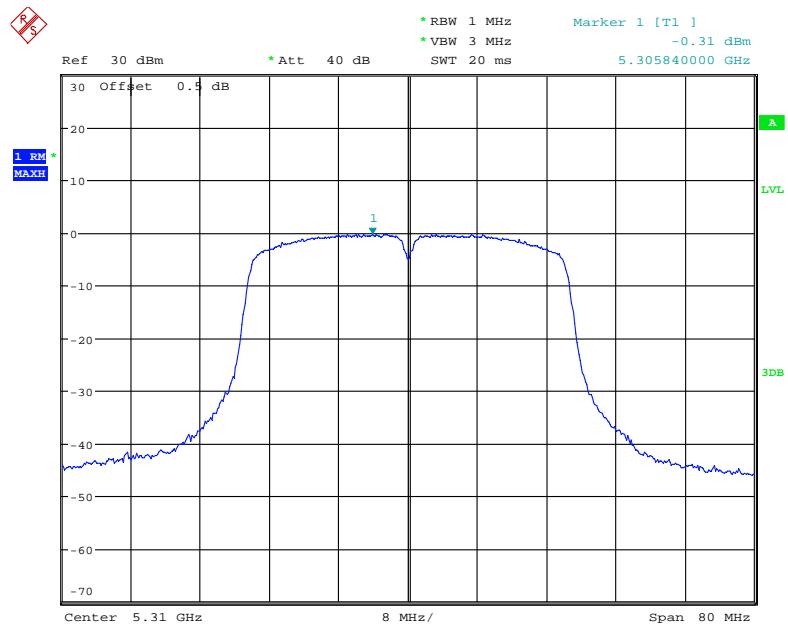


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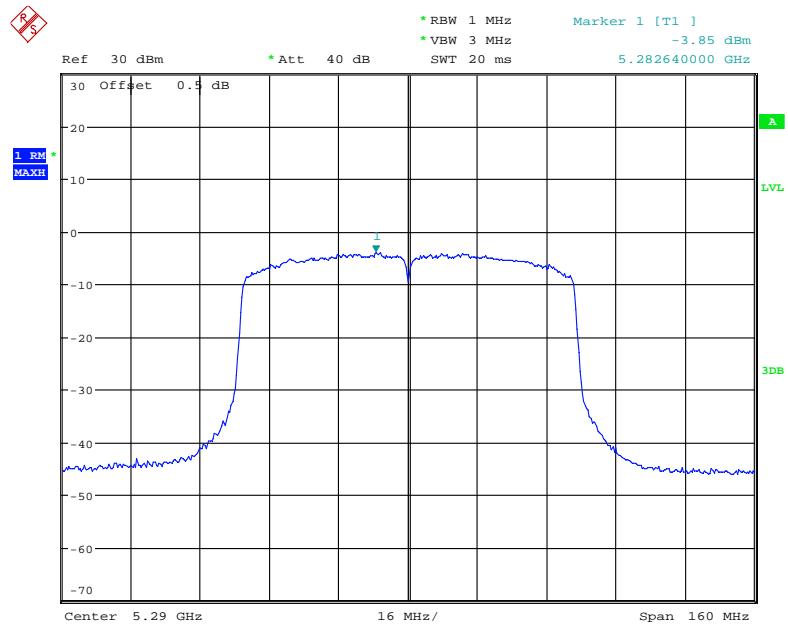
AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



Date: 8.DEC.2017 15:57:36

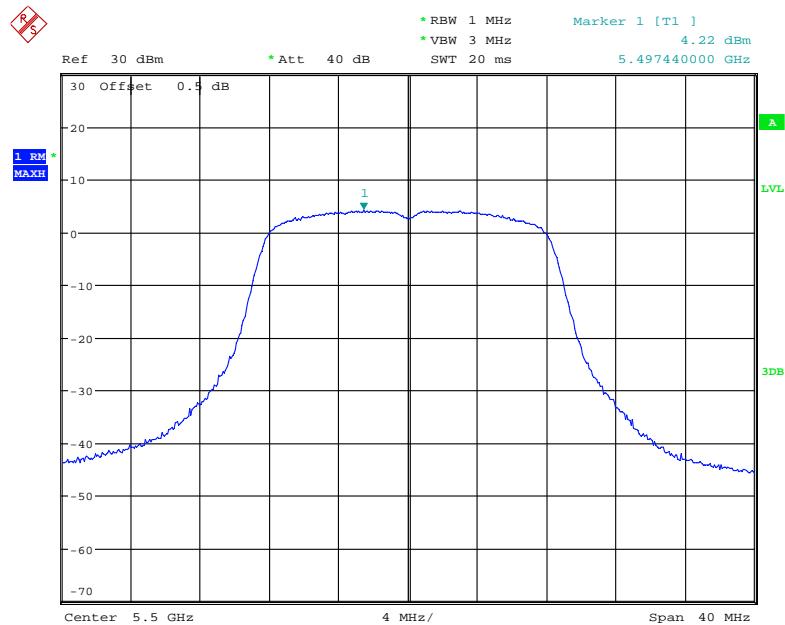
AUX Chain: Power Spectral Density, 802.11n ac40 High Channel

Date: 8.DEC.2017 15:56:12

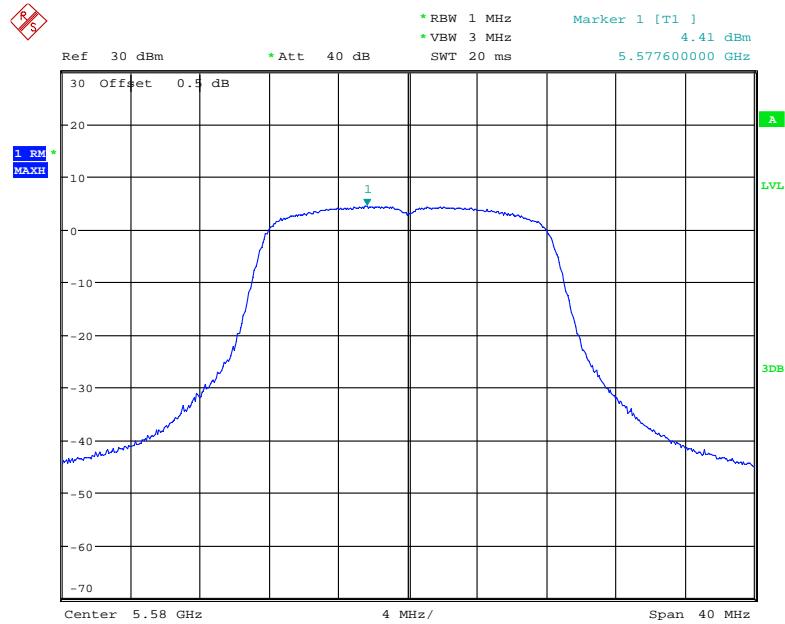
AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel

Date: 8.DEC.2017 16:14:29

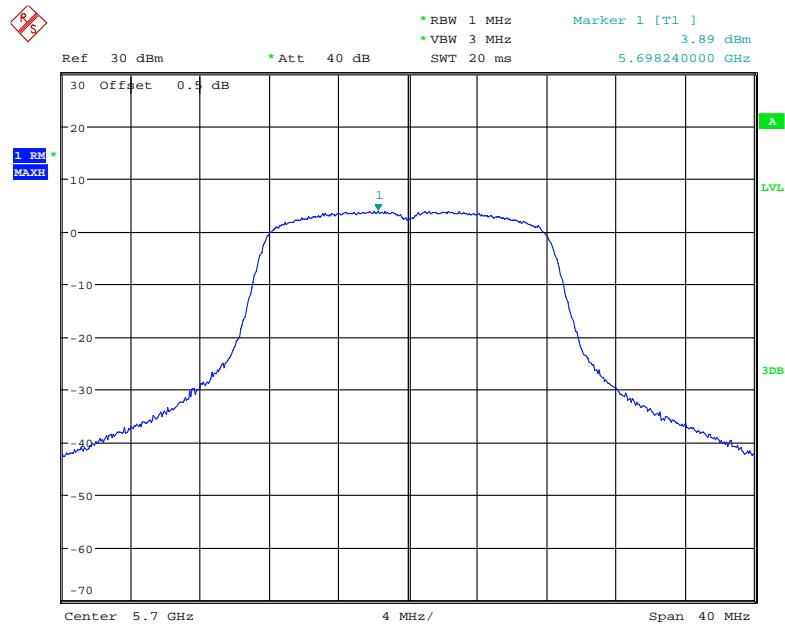
5470-5725MHz:

Main Chain: Power Spectral Density, 802.11a Low Channel

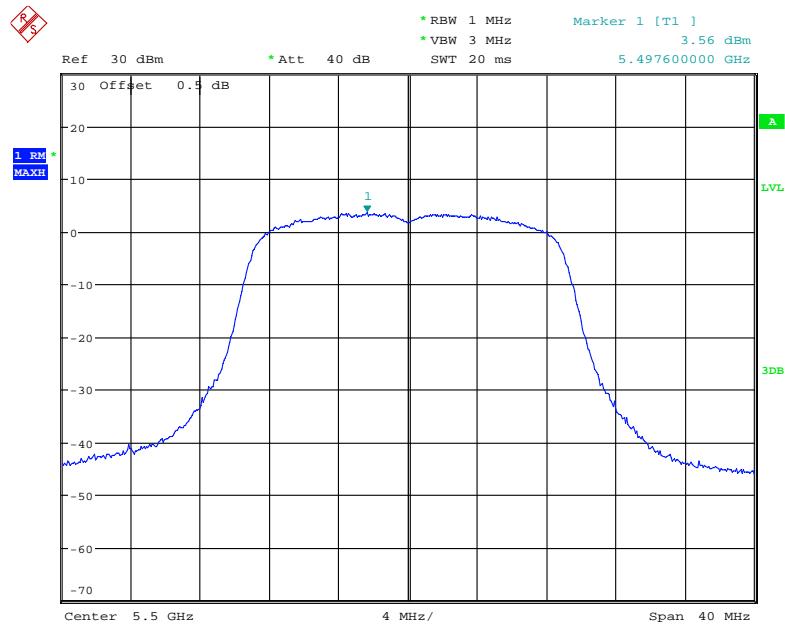
Date: 8.DEC.2017 13:44:28

Main Chain: Power Spectral Density, 802.11a Middle Channel

Date: 8.DEC.2017 13:45:48

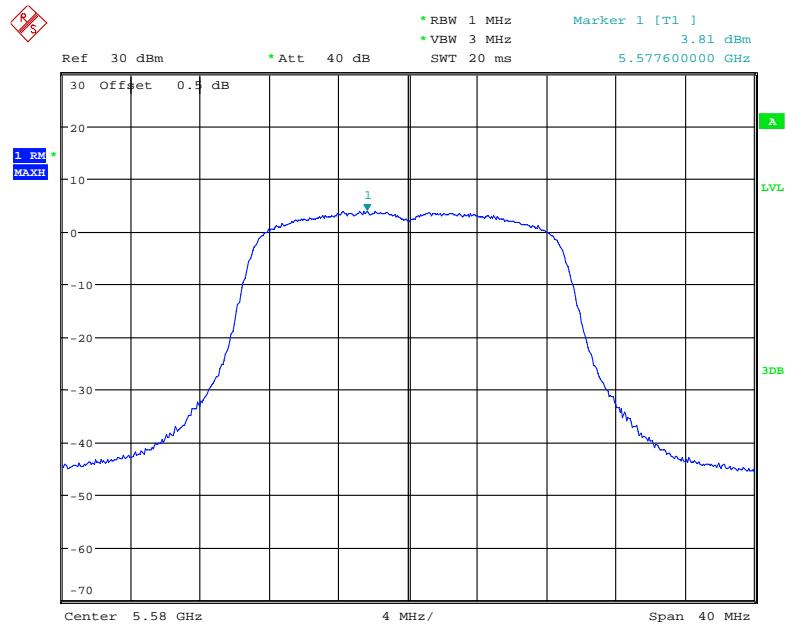
Main Chain: Power Spectral Density, 802.11a High Channel

Date: 8.DEC.2017 13:46:54

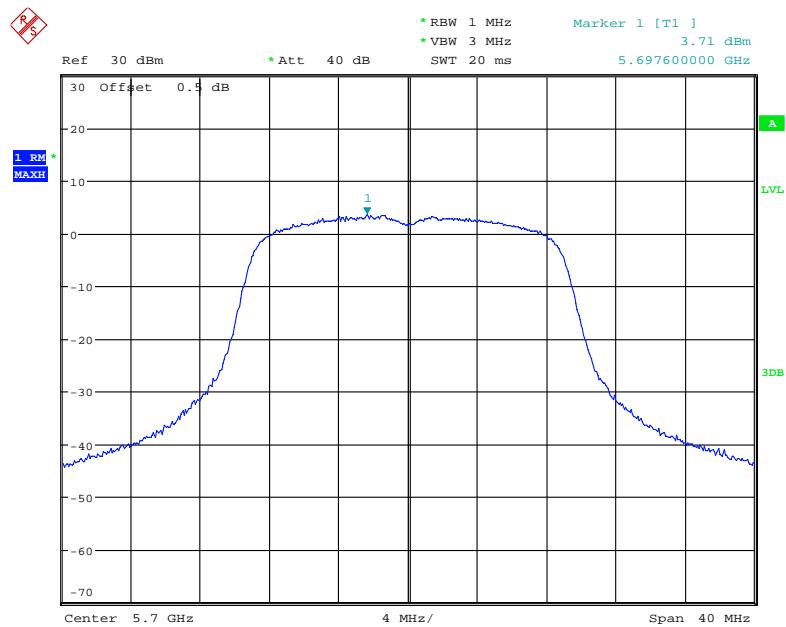
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 8.DEC.2017 13:52:14

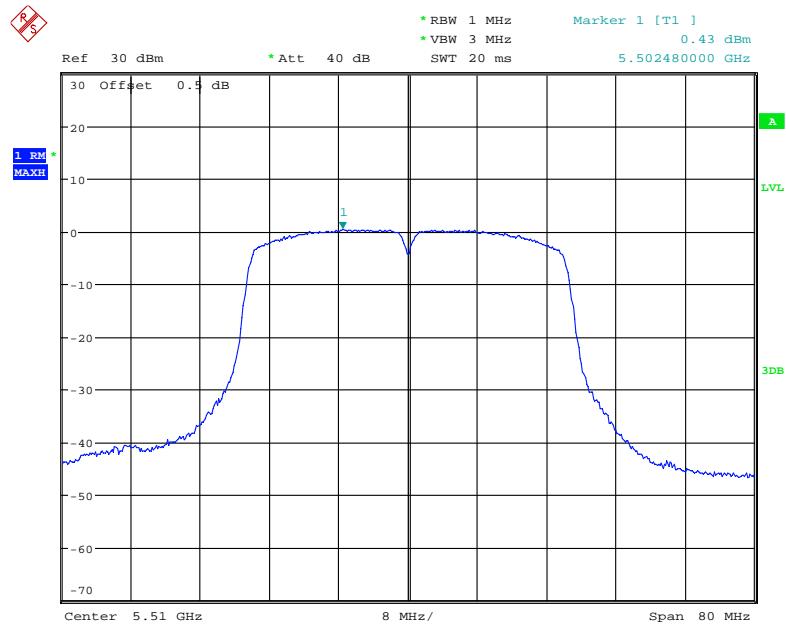
Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel



Main Chain: Power Spectral Density, 802.11n ht20 High Channel

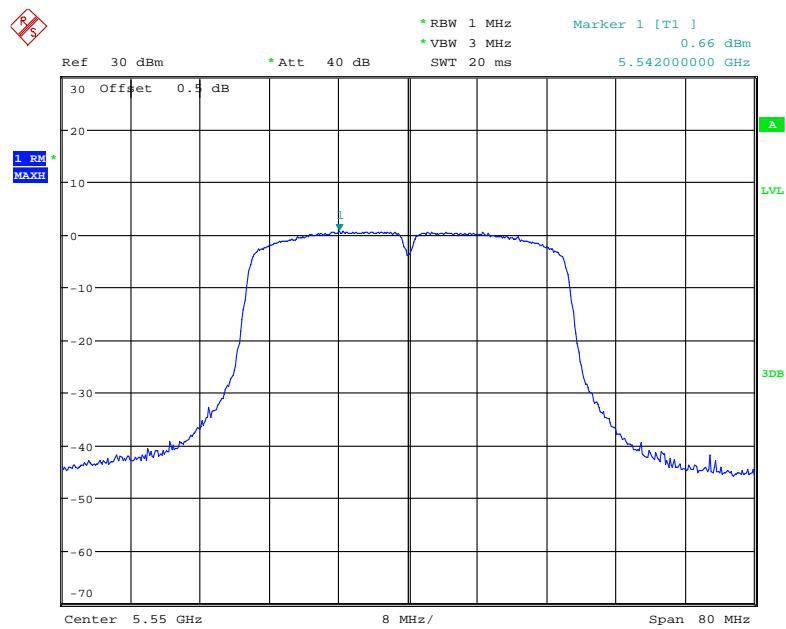


Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



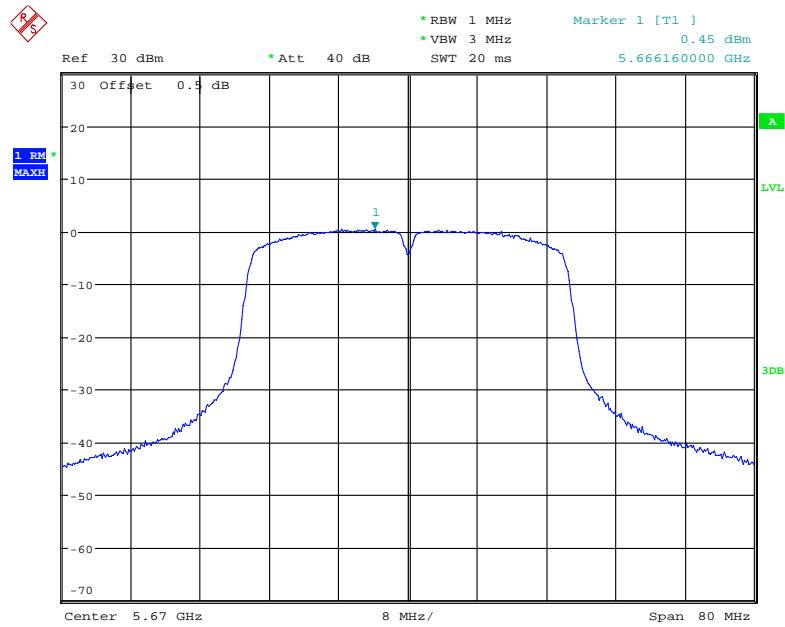
Date: 8.DEC.2017 14:01:35

Main Chain: Power Spectral Density, 802.11n ht40 Middle Channel



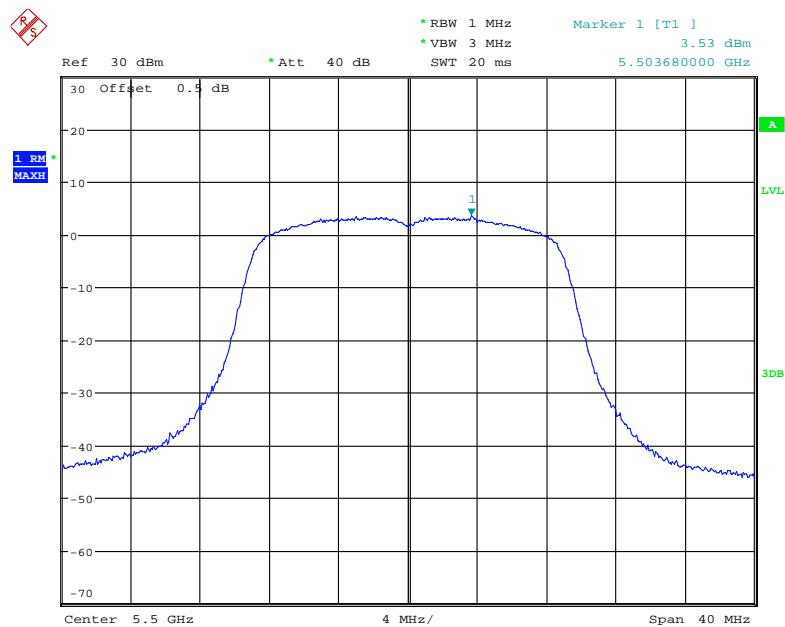
Date: 8.DEC.2017 14:02:59

Main Chain: Power Spectral Density, 802.11n ht40 High Channel



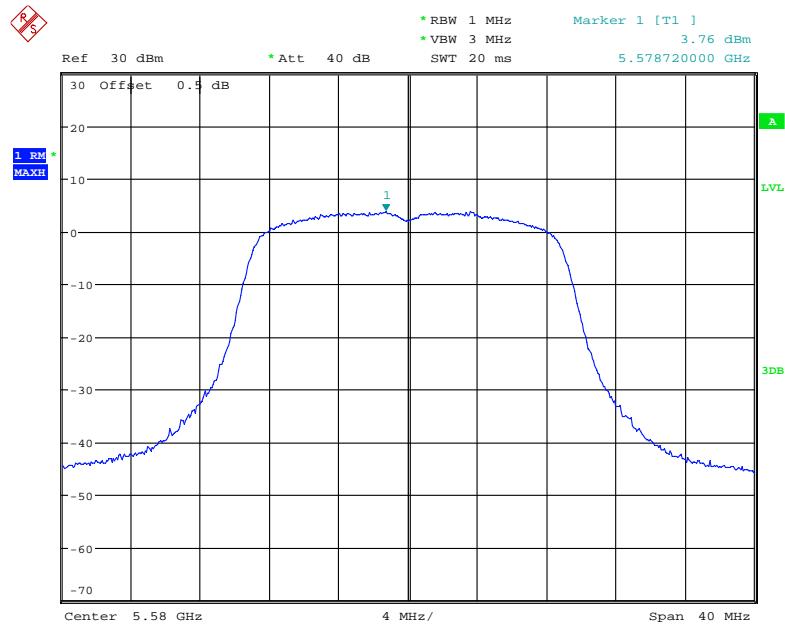
Date: 8.DEC.2017 14:04:07

Main Chain: Power Spectral Density, 802.11n ac20 Low Channel



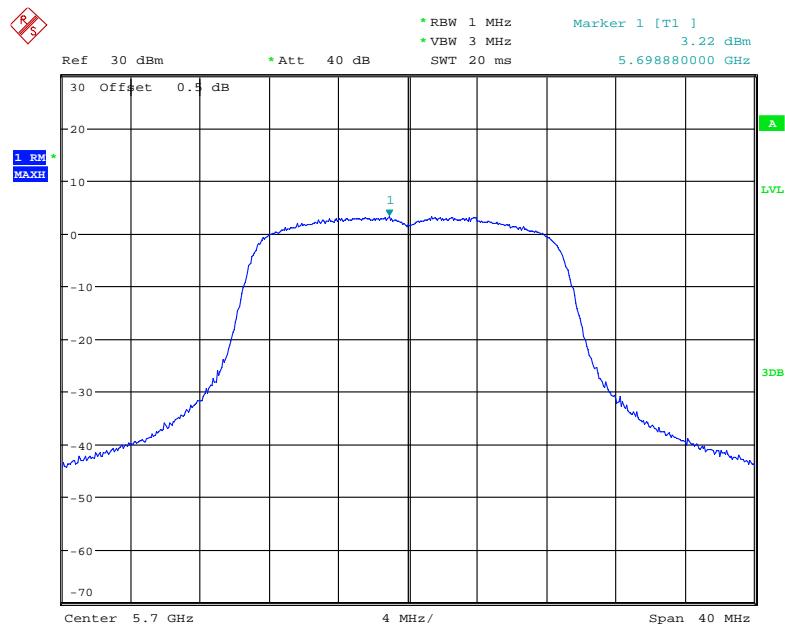
Date: 8.DEC.2017 13:54:05

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel

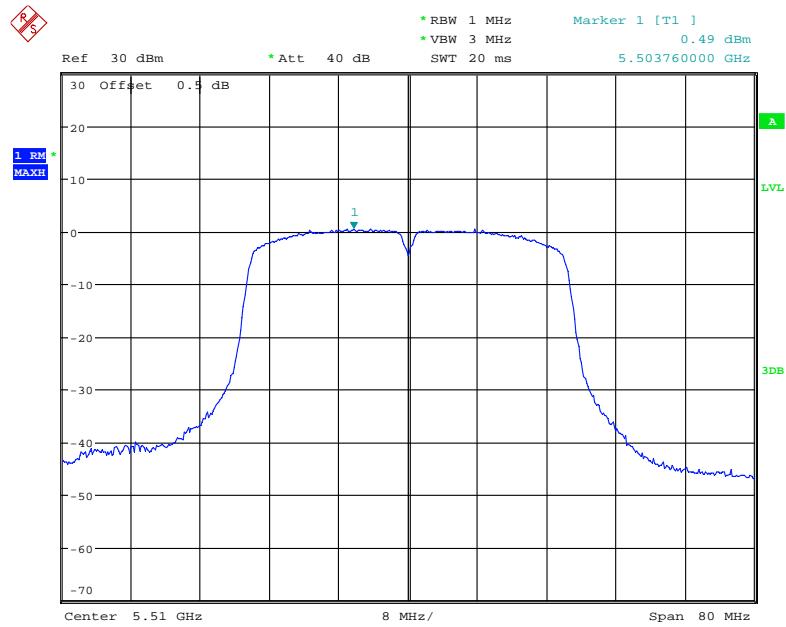


Date: 8.DEC.2017 13:55:27

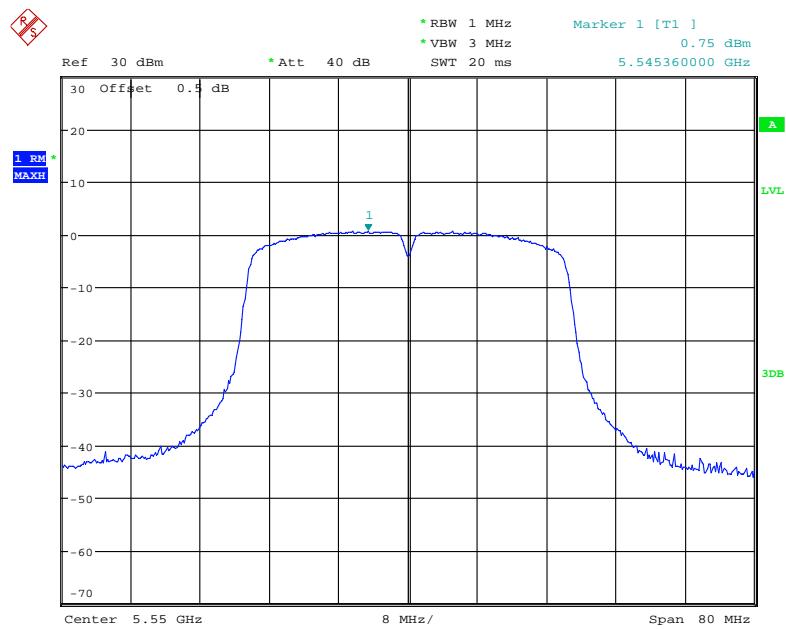
Main Chain: Power Spectral Density, 802.11n ac20 High Channel



Date: 8.DEC.2017 13:56:34

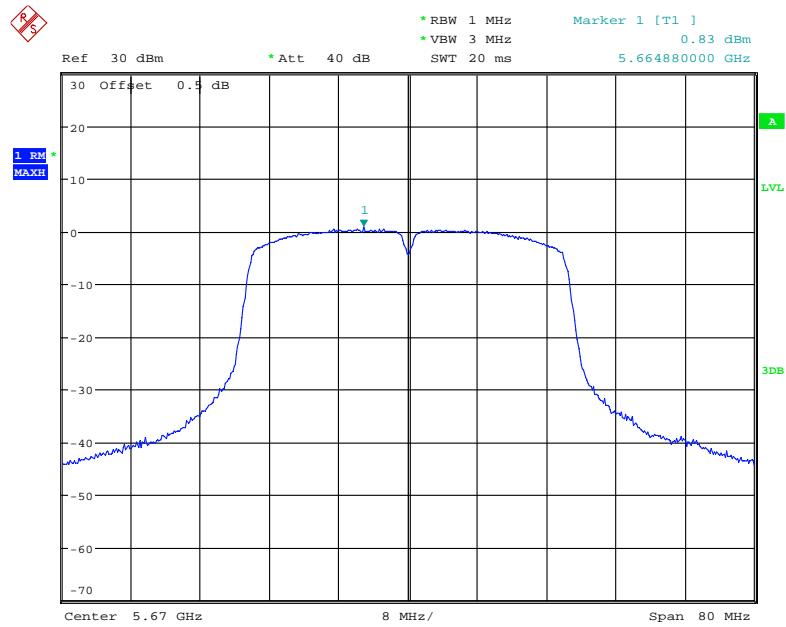
Main Chain: Power Spectral Density, 802.11n ac40 Low Channel

Date: 8.DEC.2017 14:10:34

Main Chain: Power Spectral Density, 802.11n ac40 Middle Channel

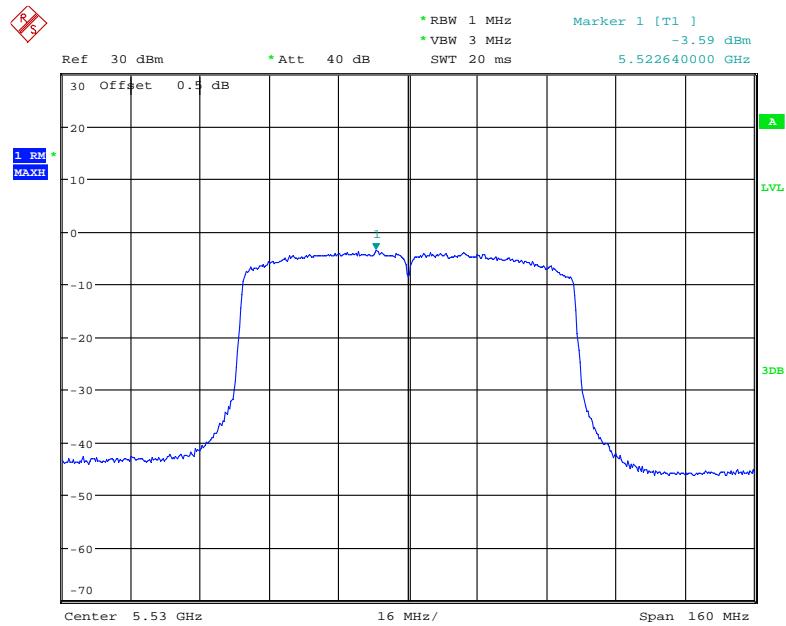
Date: 8.DEC.2017 14:08:30

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



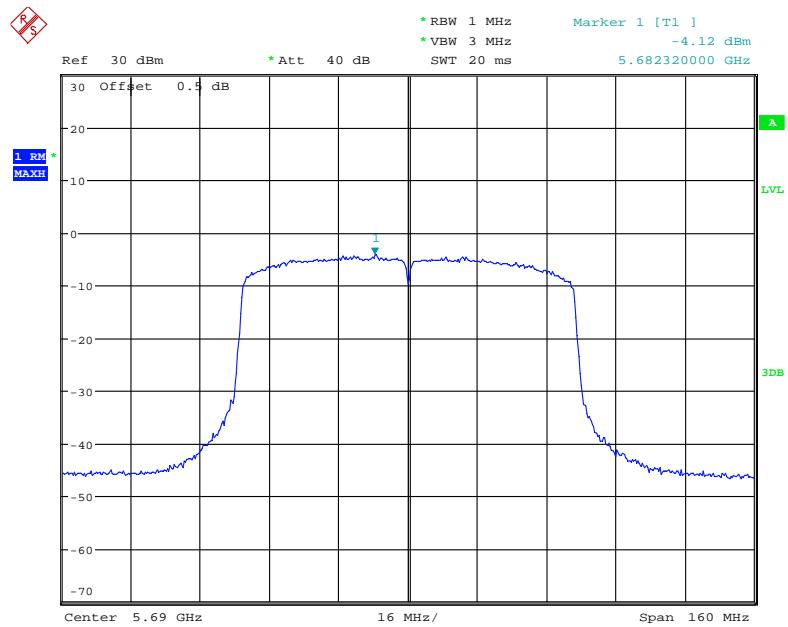
Date: 8.DEC.2017 14:06:56

Main Chain: Power Spectral Density, 802.11n ac80 Low Channel



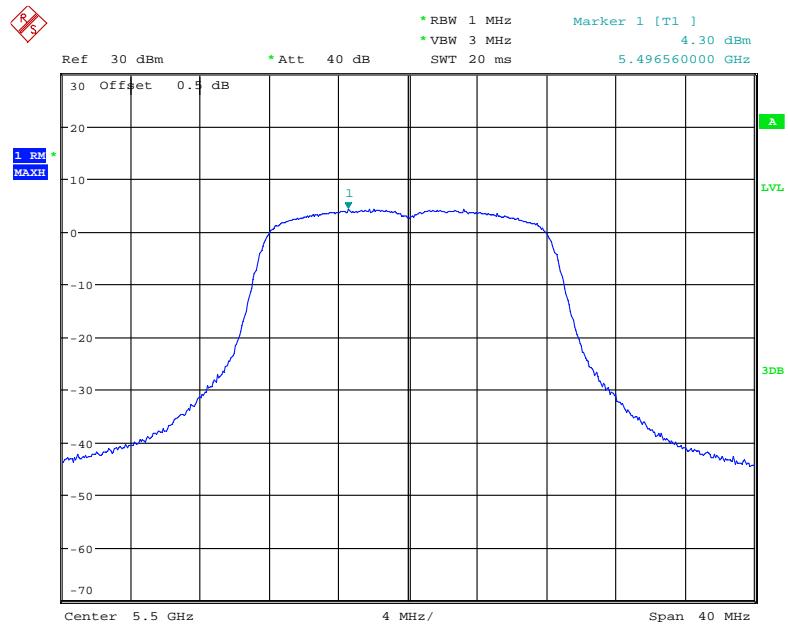
Date: 8.DEC.2017 14:12:17

Main Chain: Power Spectral Density, 802.11n ac80 High Channel



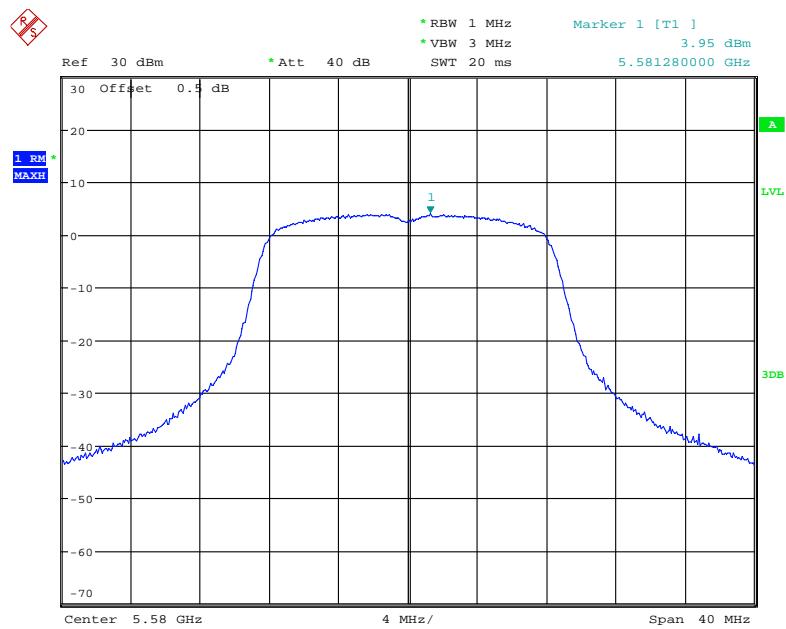
Date: 8.DEC.2017 14:14:15

AUX Chain: Power Spectral Density, 802.11a Low Channel



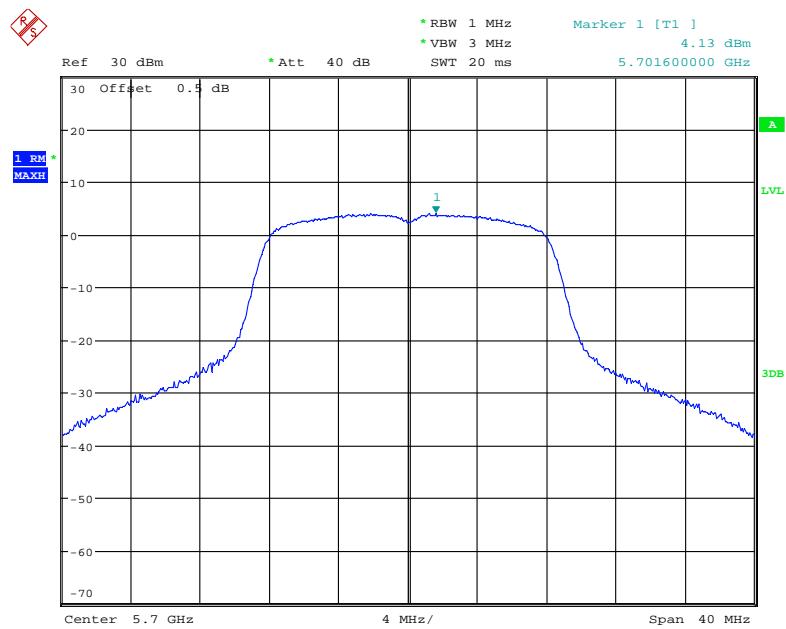
Date: 8.DEC.2017 16:20:56

AUX Chain: Power Spectral Density, 802.11a Middle Channel



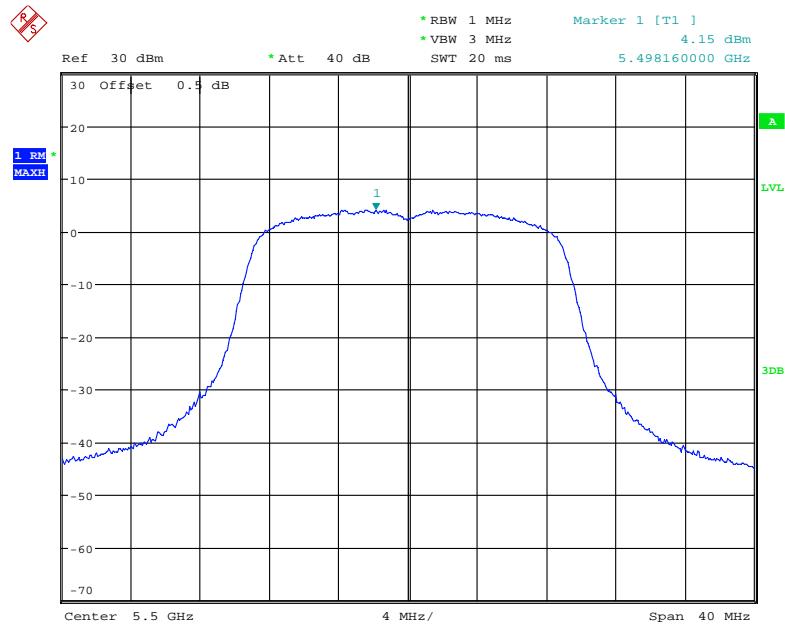
Date: 8.DEC.2017 16:22:14

AUX Chain: Power Spectral Density, 802.11a High Channel



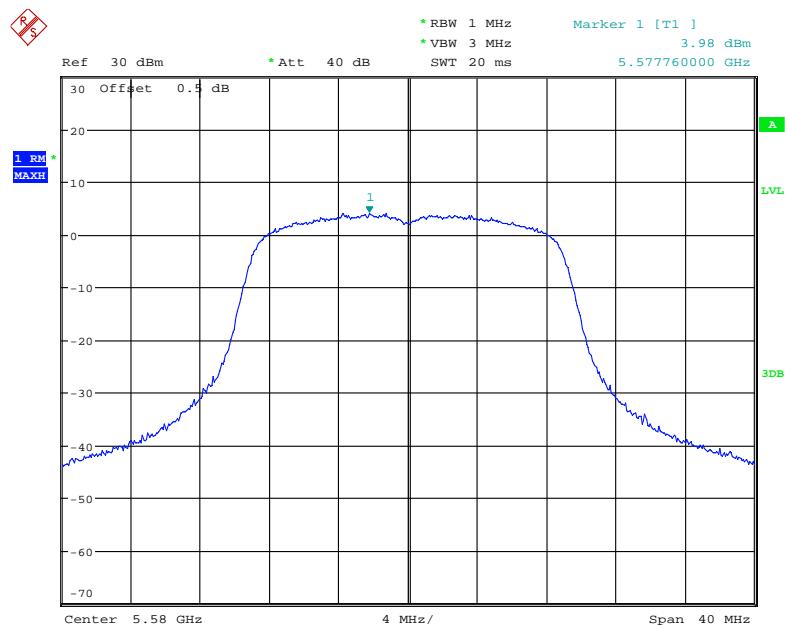
Date: 8.DEC.2017 16:23:16

AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



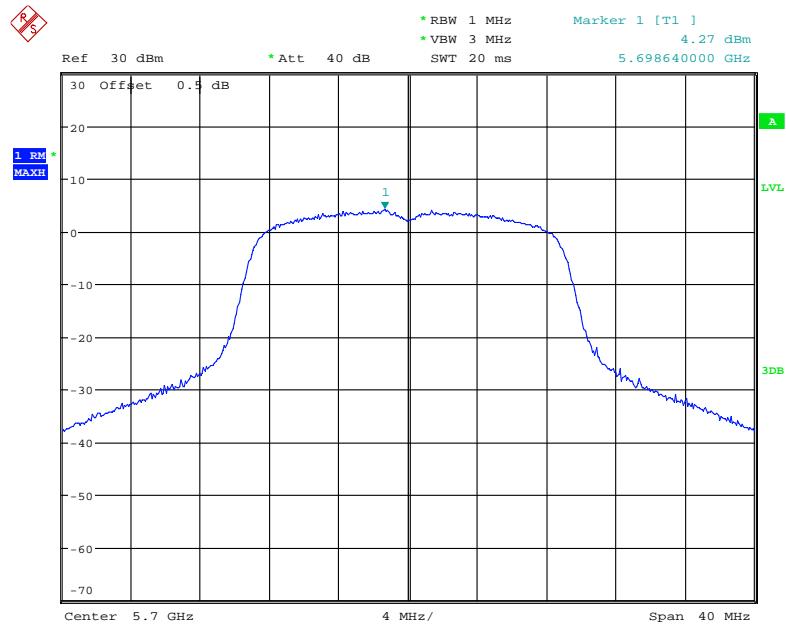
Date: 8.DEC.2017 16:25:13

AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel



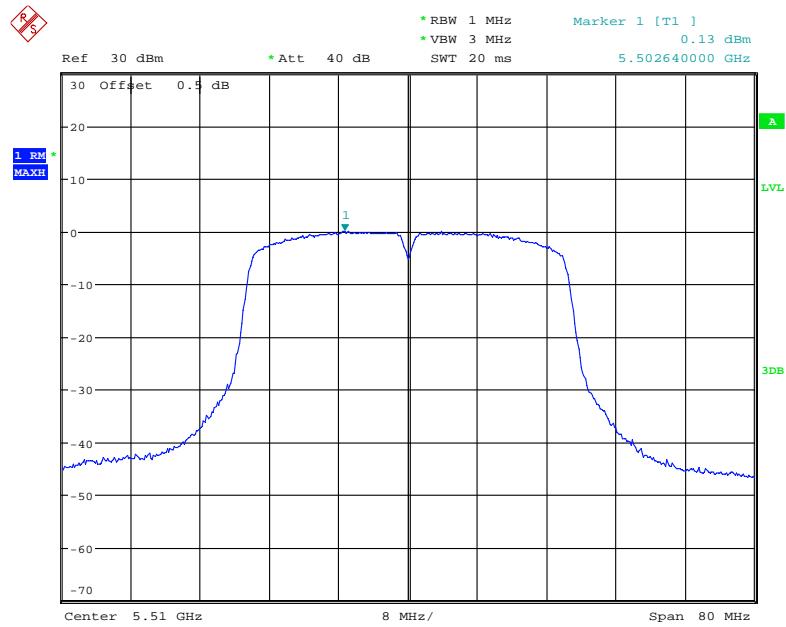
Date: 8.DEC.2017 16:26:33

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

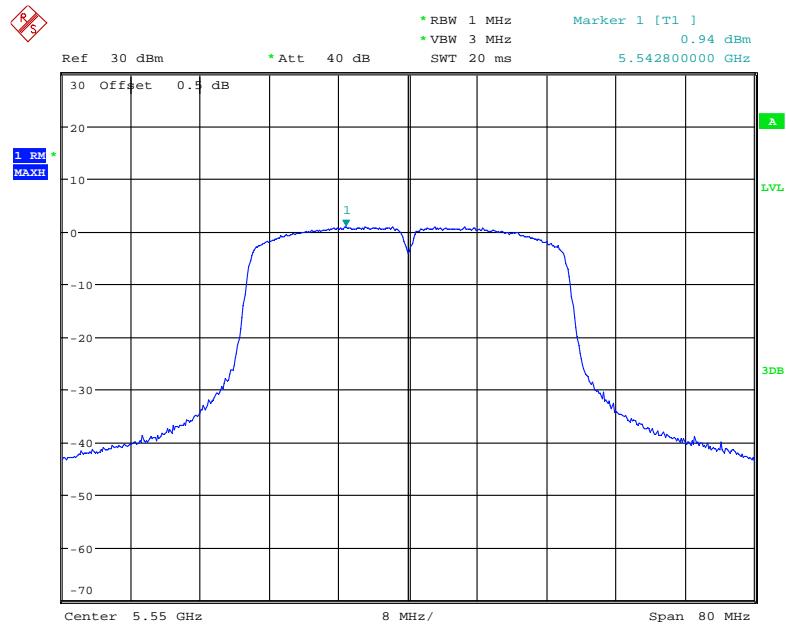


Date: 8.DEC.2017 16:28:04

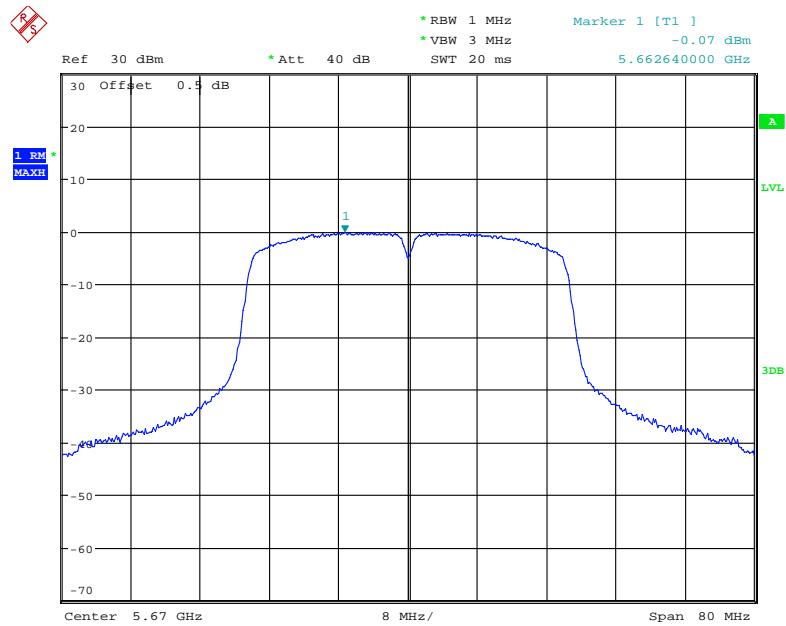
AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel



Date: 8.DEC.2017 16:39:03

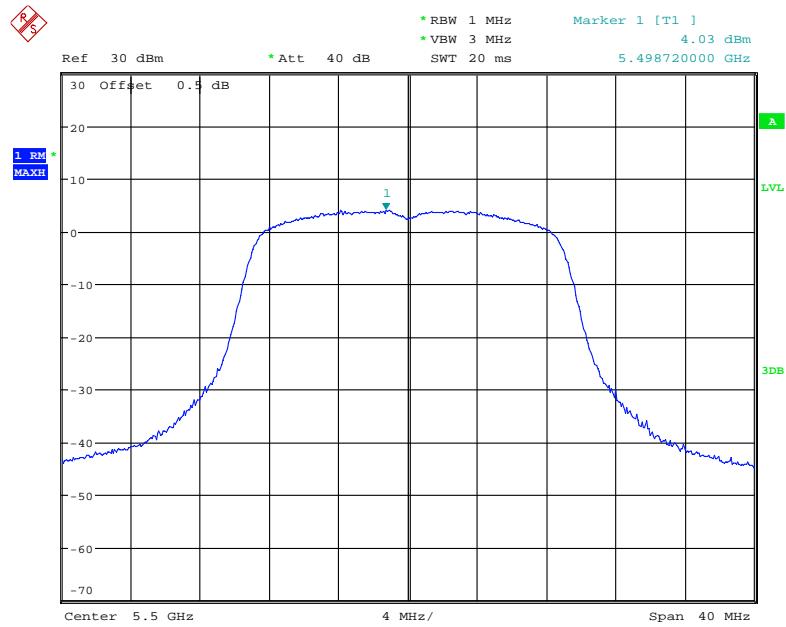
AUX Chain: Power Spectral Density, 802.11n ht40 Middle Channel

Date: 8.DEC.2017 16:45:08

AUX Chain: Power Spectral Density, 802.11n ht40 High Channel

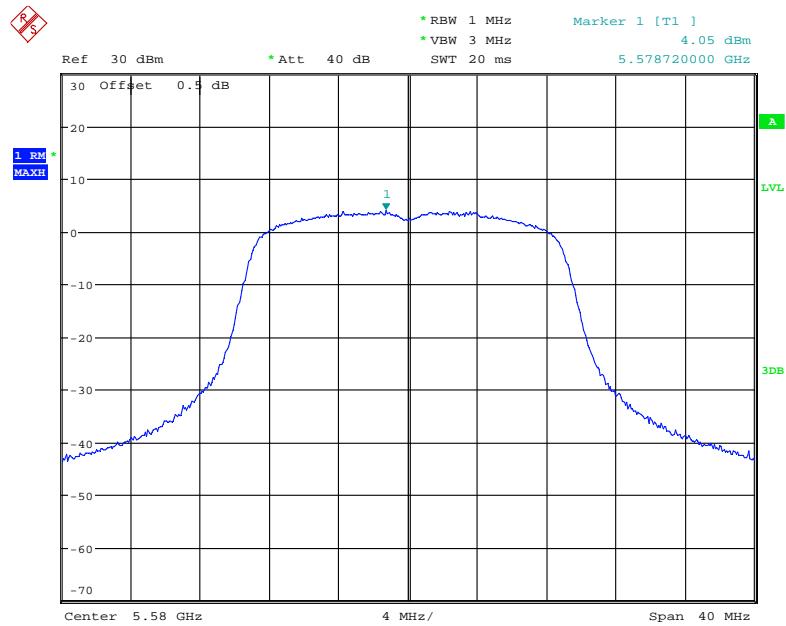
Date: 8.DEC.2017 16:49:50

AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel

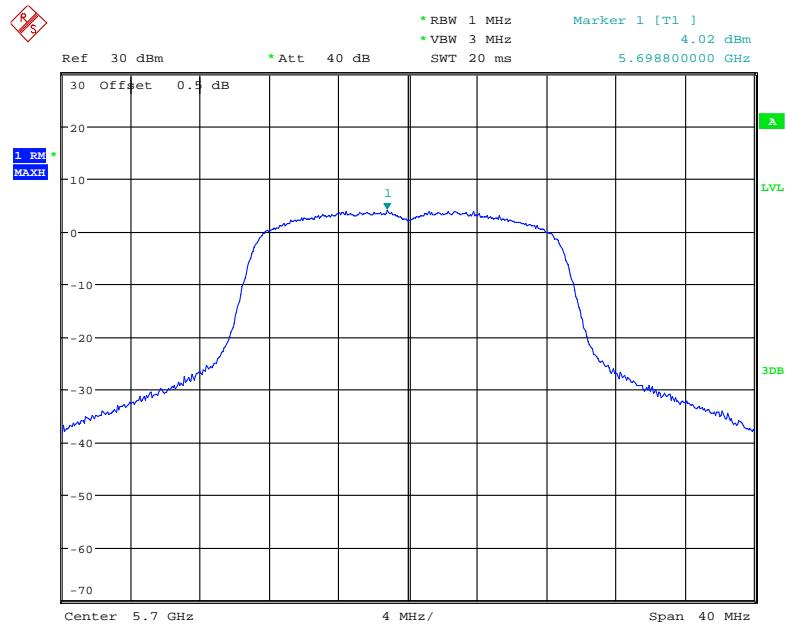


Date: 8.DEC.2017 16:32:50

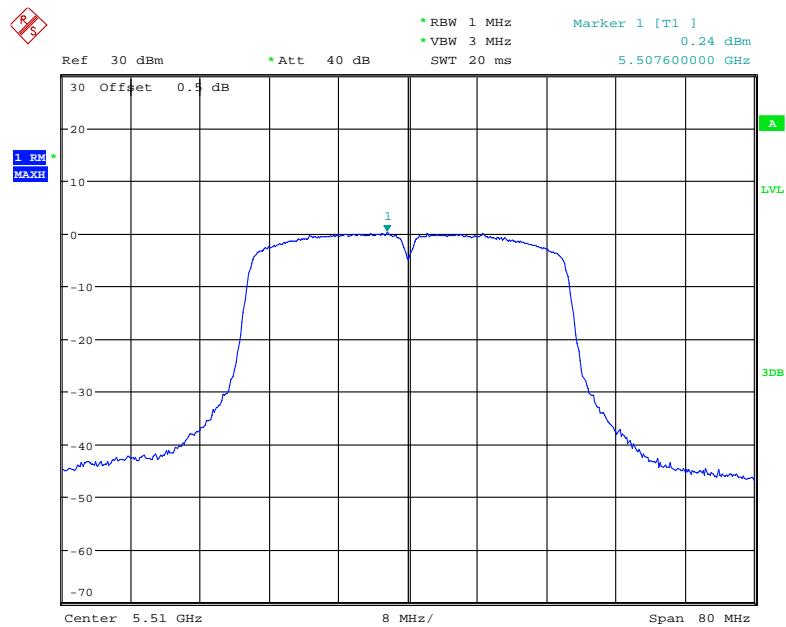
AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel



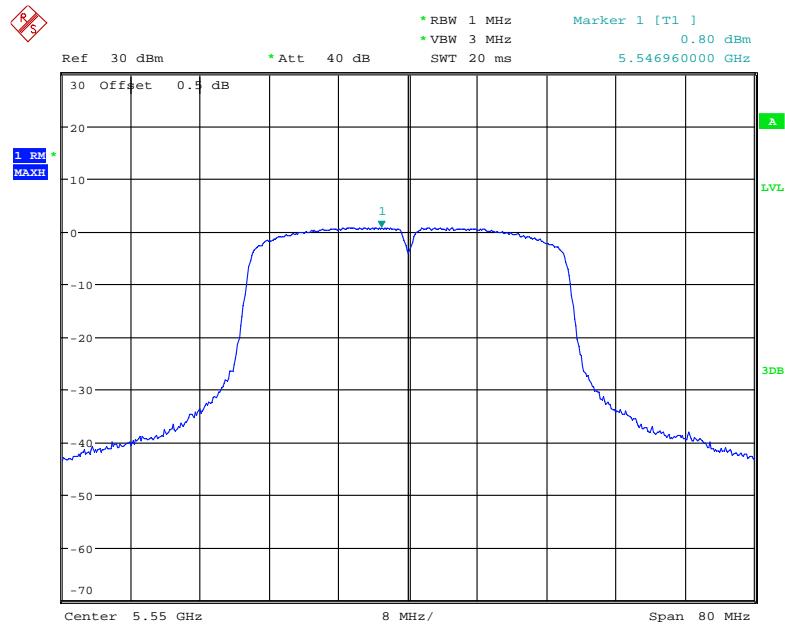
Date: 8.DEC.2017 16:34:15

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel

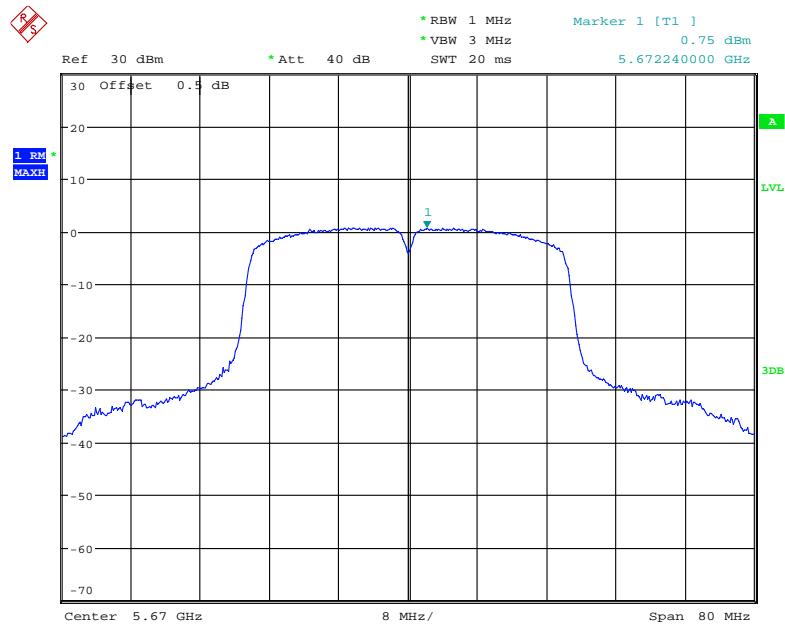
Date: 8.DEC.2017 16:35:19

AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel

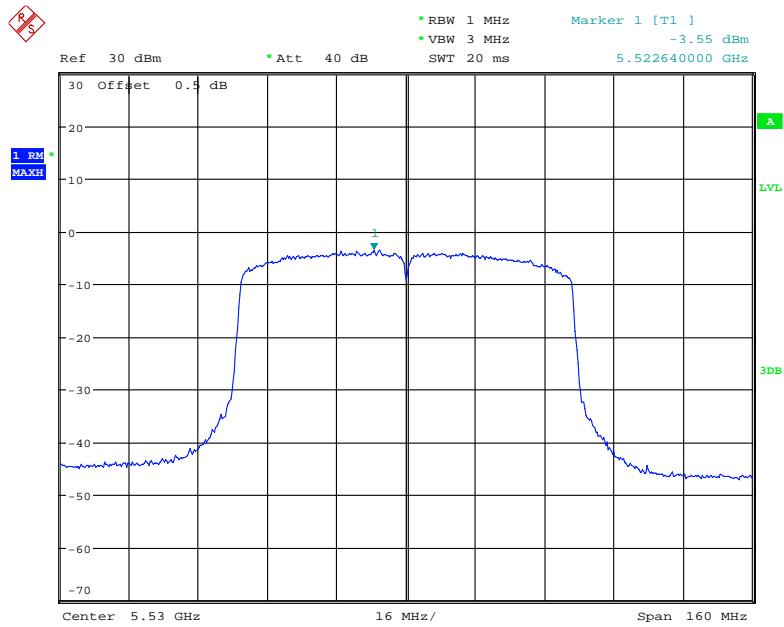
Date: 8.DEC.2017 16:40:50

AUX Chain: Power Spectral Density, 802.11n ac40 Middle Channel

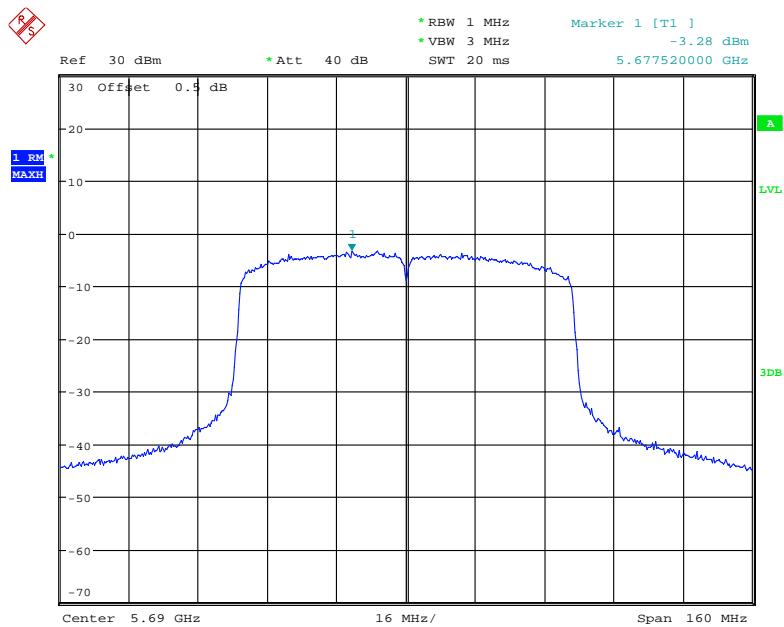
Date: 8.DEC.2017 16:42:30

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel

Date: 8.DEC.2017 16:43:39

AUX Chain: Power Spectral Density, 802.11n ac80 Low Channel

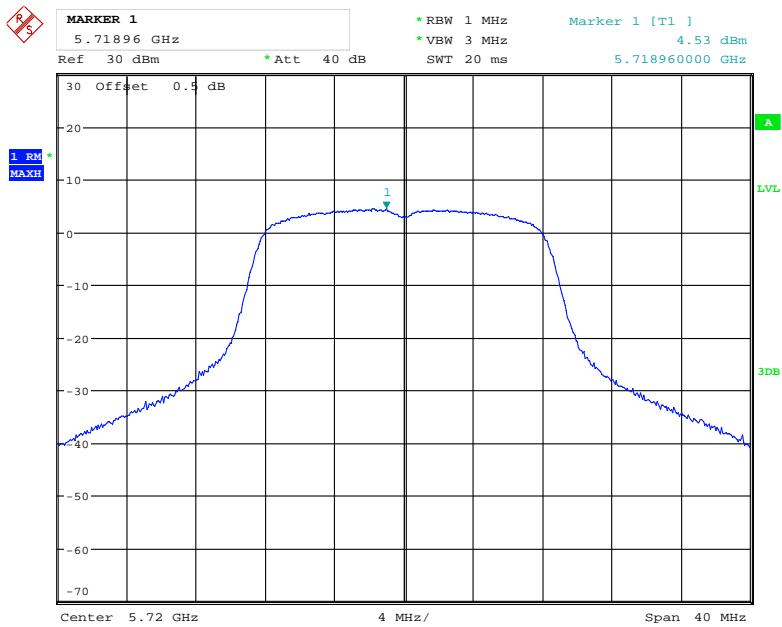
Date: 8.DEC.2017 16:52:00

AUX Chain: Power Spectral Density, 802.11n ac80 High Channel

Date: 8.DEC.2017 16:53:44

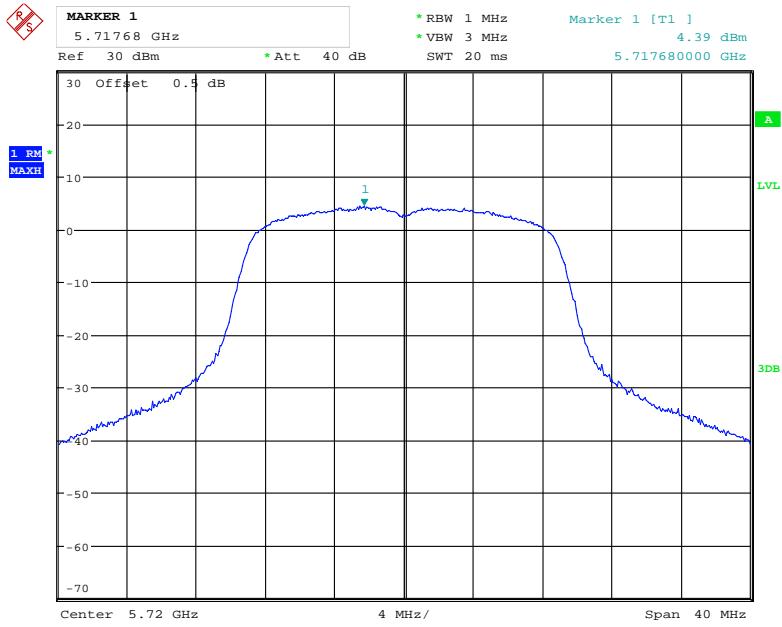
Cross Band:

Main Chain: Power Spectral Density, 802.11a – 5720 MHz

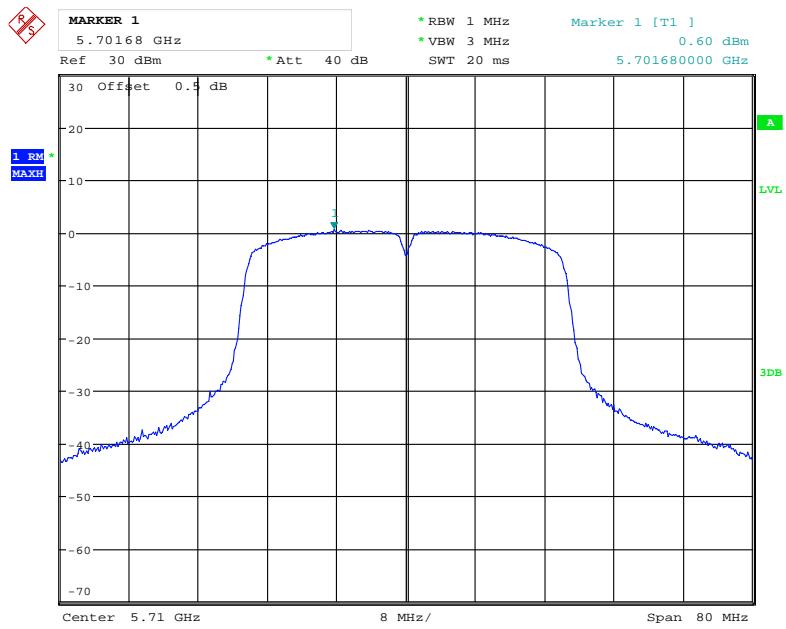


Date: 9.DEC.2017 10:51:16

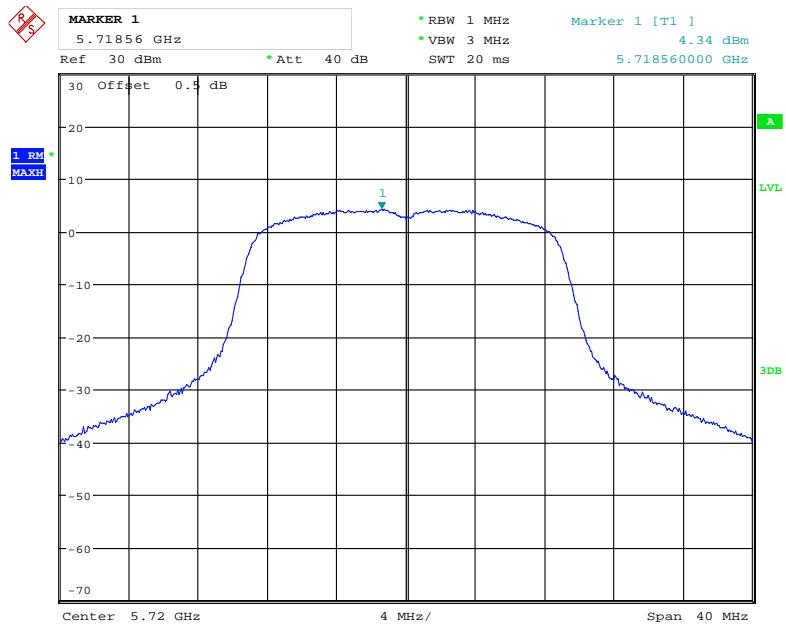
Main Chain: Power Spectral Density, 802.11n ht20 - 5720 MHz



Date: 9.DEC.2017 10:51:41

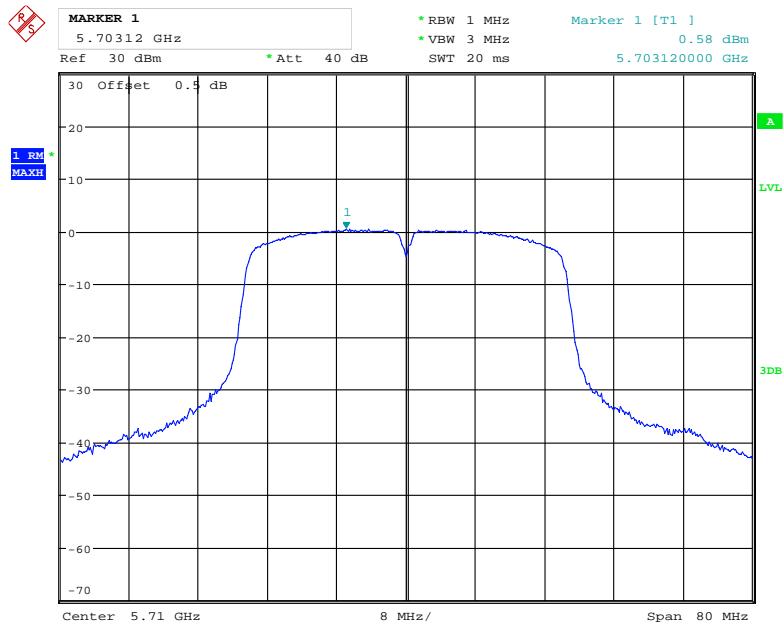
Main Chain: Power Spectral Density, 802.11n ht40 - 5710 MHz

Date: 9.DEC.2017 10:58:41

Main Chain: Power Spectral Density, 802.11n ac20 - 5720 MHz

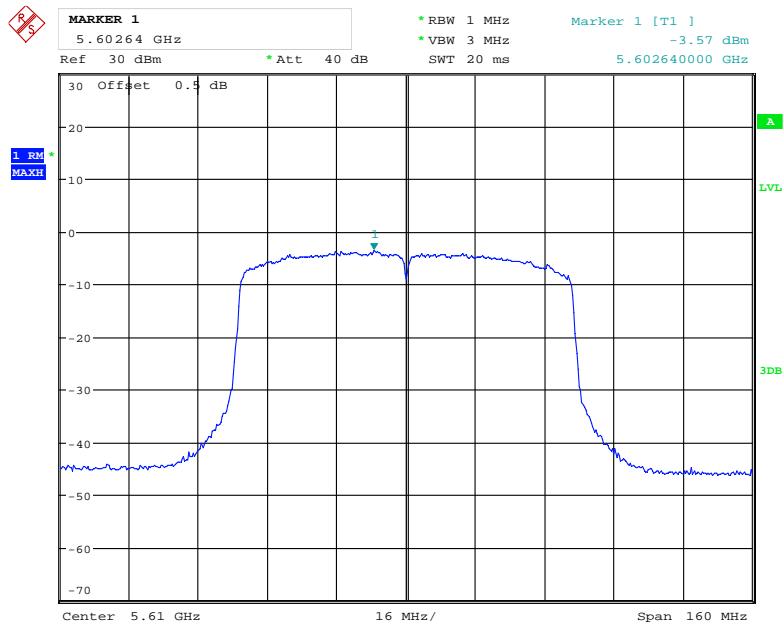
Date: 9.DEC.2017 10:52:56

Main Chain: Power Spectral Density, 802.11n ac40 - 5710 MHz

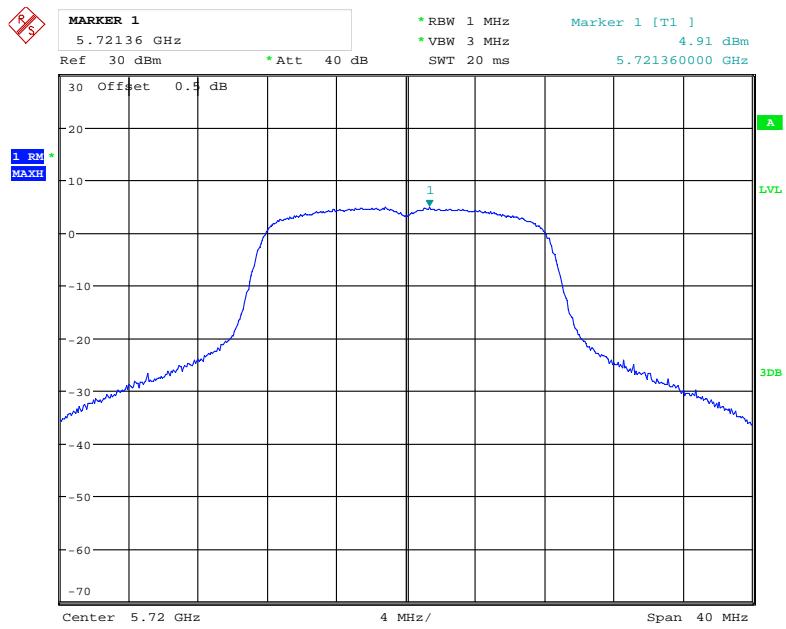


Date: 9.DEC.2017 10:59:09

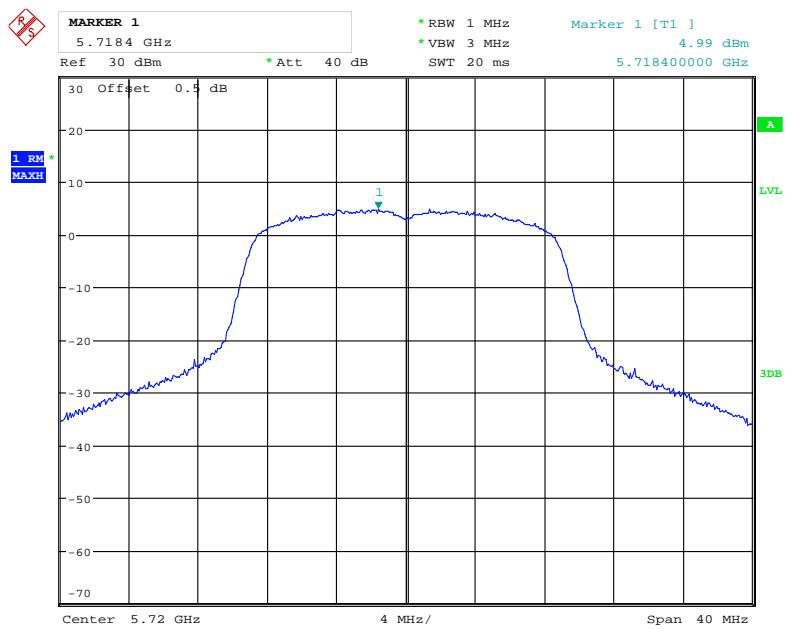
Main Chain: Power Spectral Density, 802.11n ac80 - 5610 MHz



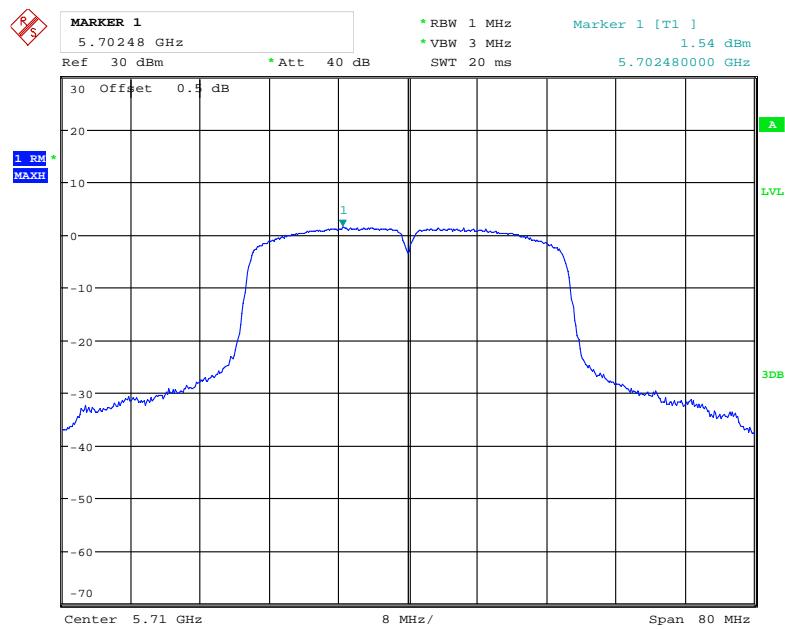
Date: 9.DEC.2017 10:38:25

AUX Chain: Power Spectral Density, 802.11a – 5720 MHz

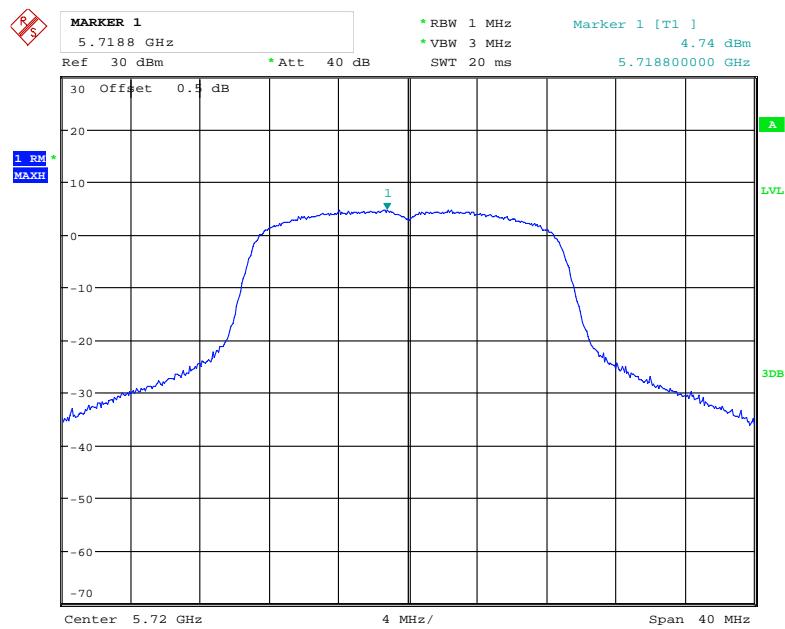
Date: 9.DEC.2017 10:10:14

AUX Chain: Power Spectral Density, 802.11n ht20 - 5720 MHz

Date: 9.DEC.2017 10:10:34

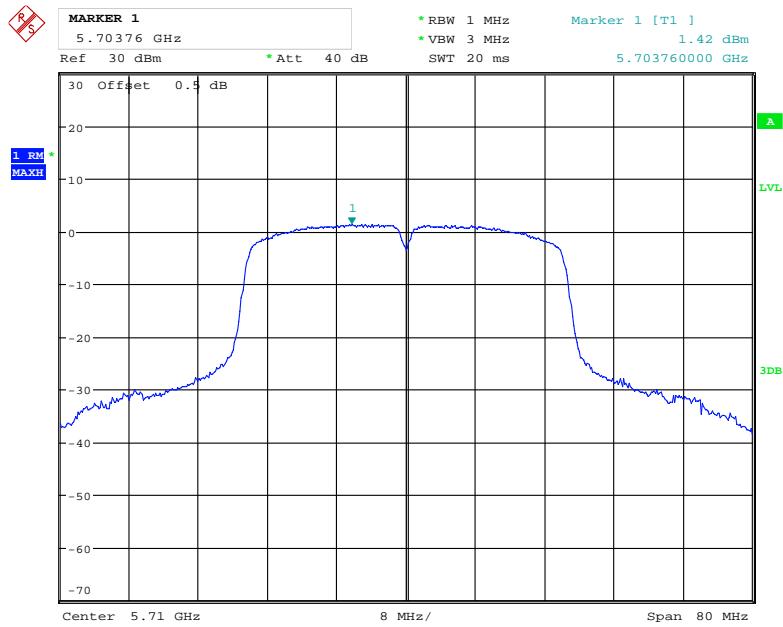
AUX Chain: Power Spectral Density, 802.11n ht40 - 5710 MHz

Date: 9.DEC.2017 10:19:43

AUX Chain: Power Spectral Density, 802.11n ac20 - 5720 MHz

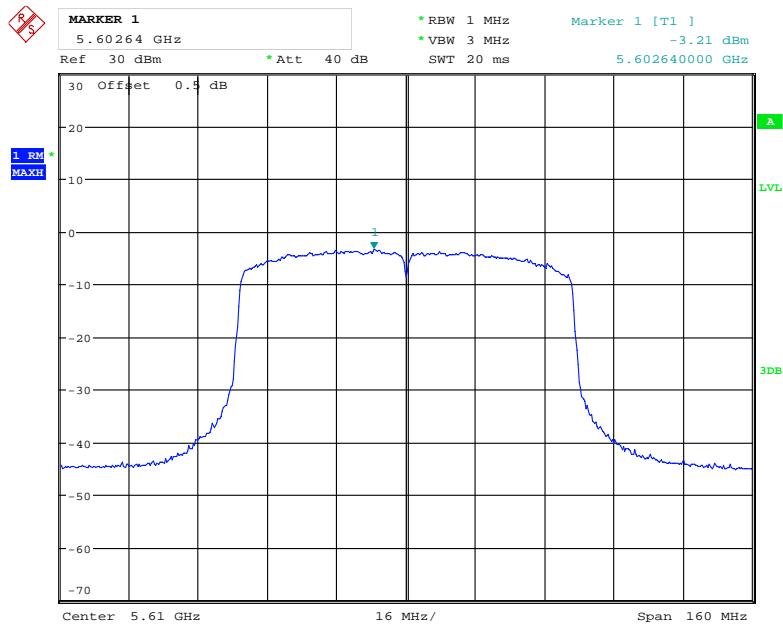
Date: 9.DEC.2017 10:10:59

AUX Chain: Power Spectral Density, 802.11n ac40 - 5710 MHz



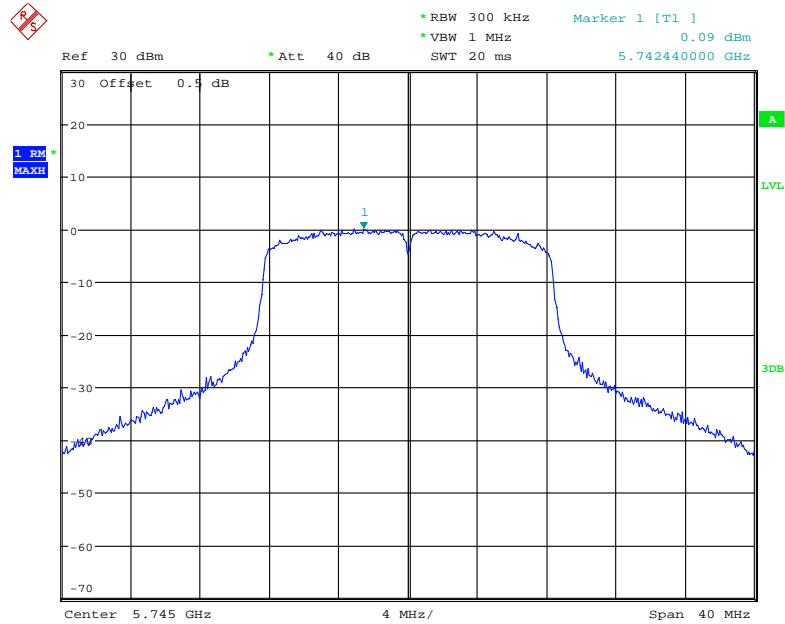
Date: 9.DEC.2017 10:20:04

AUX Chain: Power Spectral Density, 802.11n ac80 - 5610 MHz

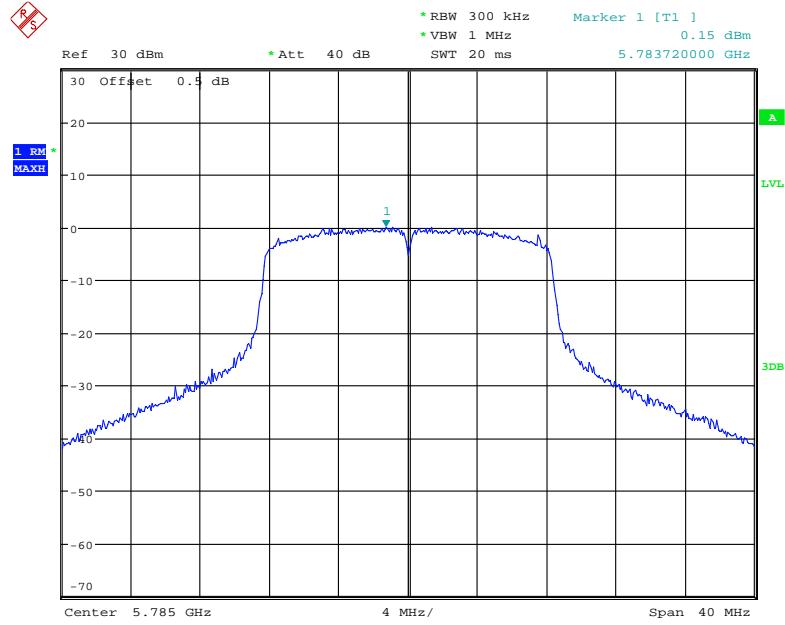


Date: 9.DEC.2017 10:31:54

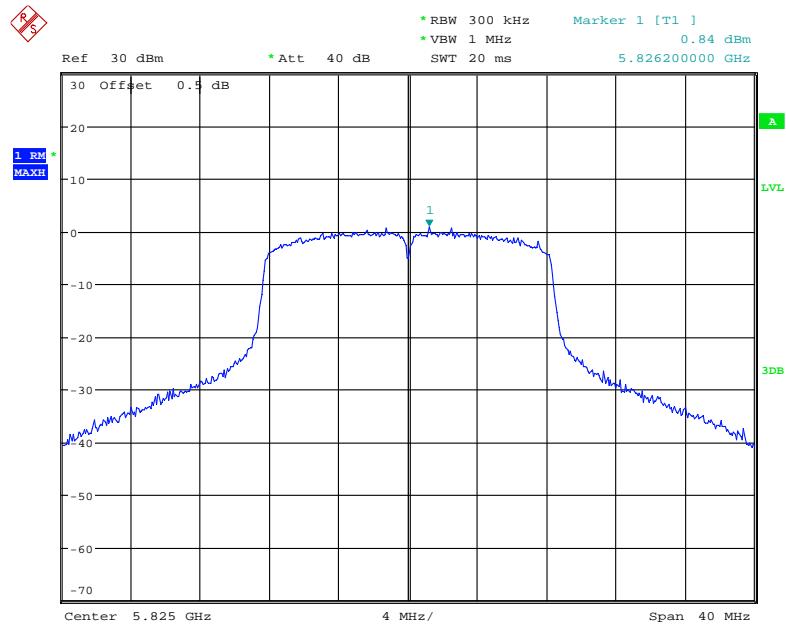
5725-5850MHz:

Main Chain: Power Spectral Density, 802.11a Low Channel

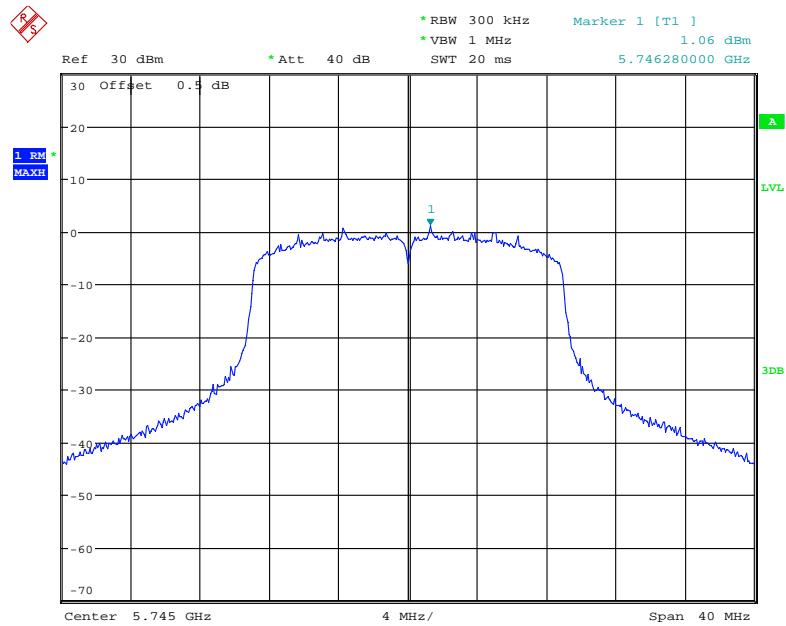
Date: 8.DEC.2017 14:33:53

Main Chain: Power Spectral Density, 802.11a Middle Channel

Date: 8.DEC.2017 14:37:01

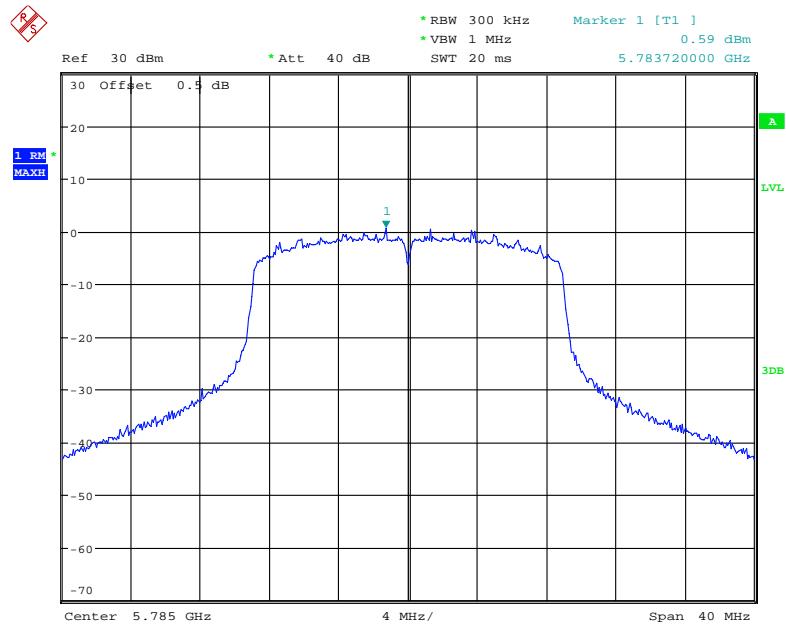
Main Chain: Power Spectral Density, 802.11a High Channel

Date: 8.DEC.2017 14:38:35

Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

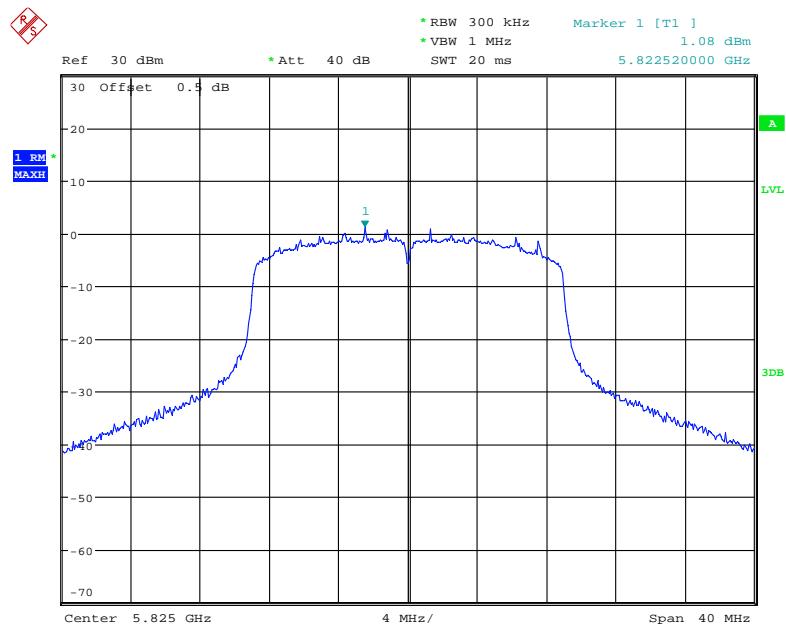
Date: 8.DEC.2017 14:40:49

Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel



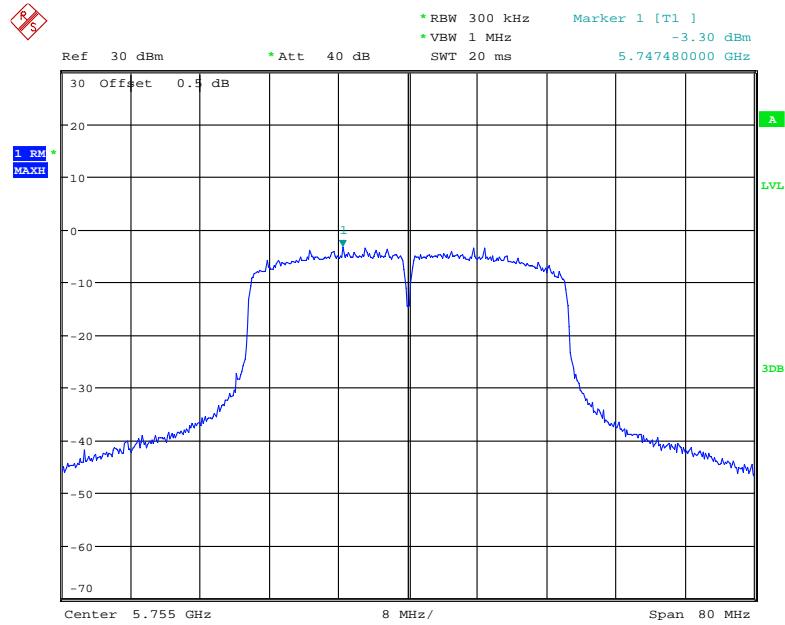
Date: 8.DEC.2017 14:42:56

Main Chain: Power Spectral Density, 802.11n ht20 High Channel



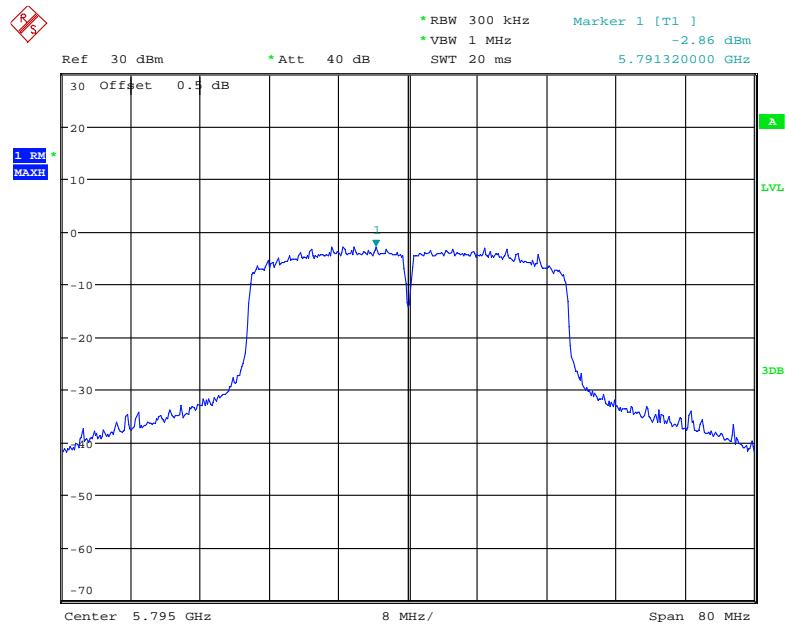
Date: 8.DEC.2017 14:44:53

Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



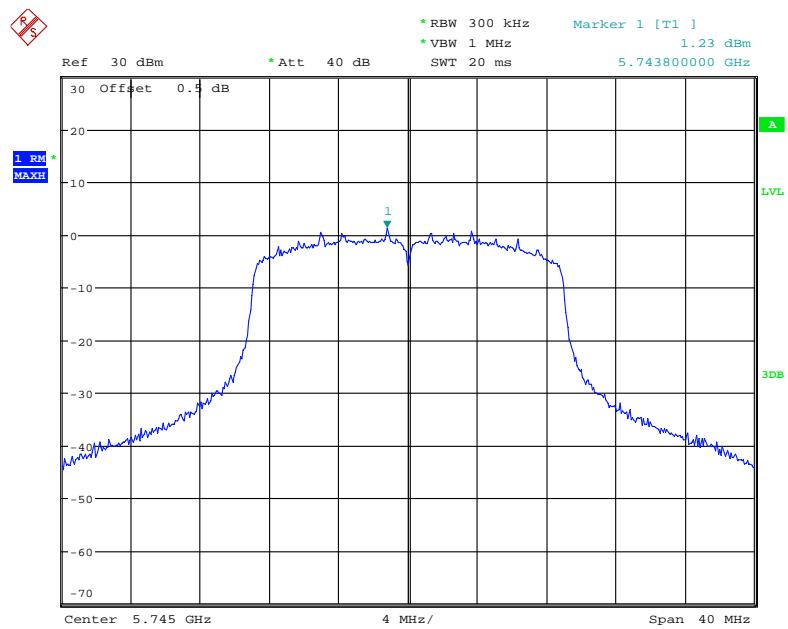
Date: 11.DEC.2017 13:26:48

Main Chain: Power Spectral Density, 802.11n ht40 High Channel



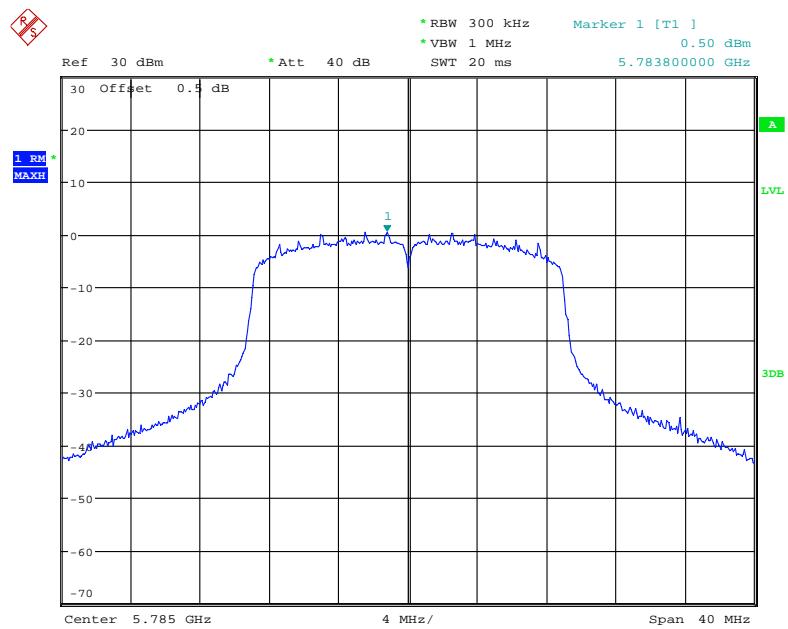
Date: 8.DEC.2017 15:06:22

Main Chain: Power Spectral Density, 802.11n ac20 Low Channel



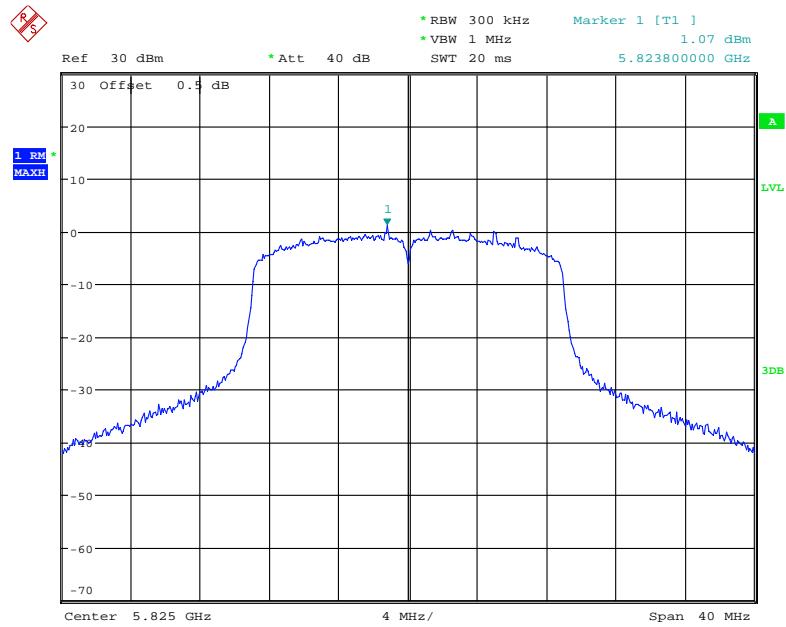
Date: 8.DEC.2017 14:50:04

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel



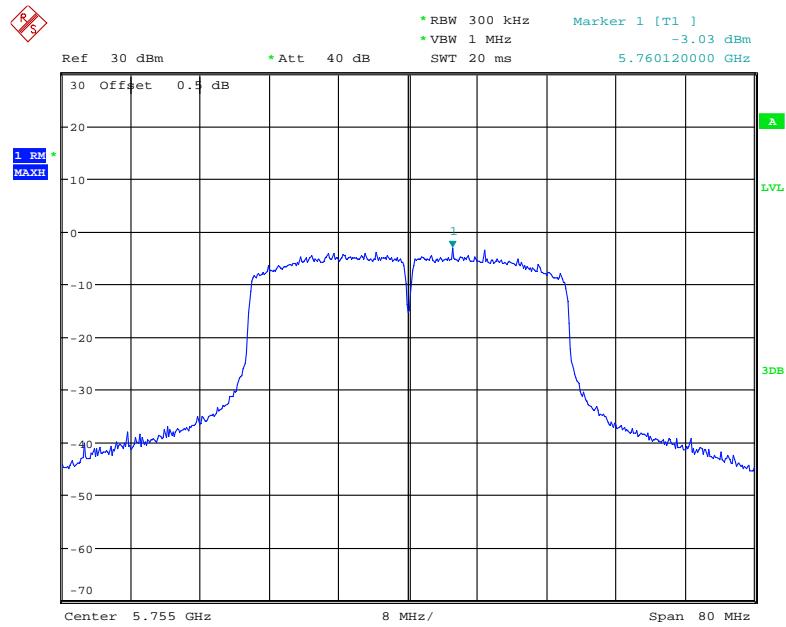
Date: 8.DEC.2017 14:48:46

Main Chain: Power Spectral Density, 802.11n ac20 High Channel

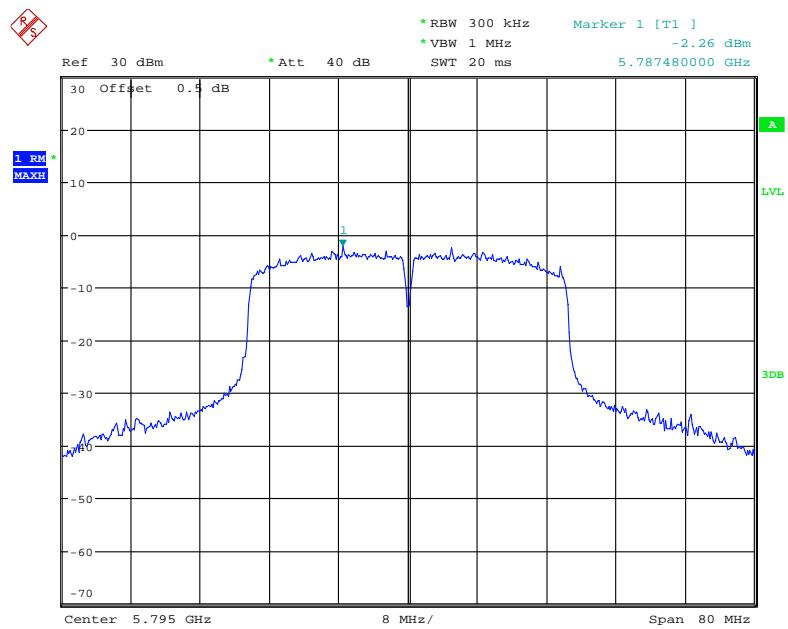


Date: 8.DEC.2017 14:47:01

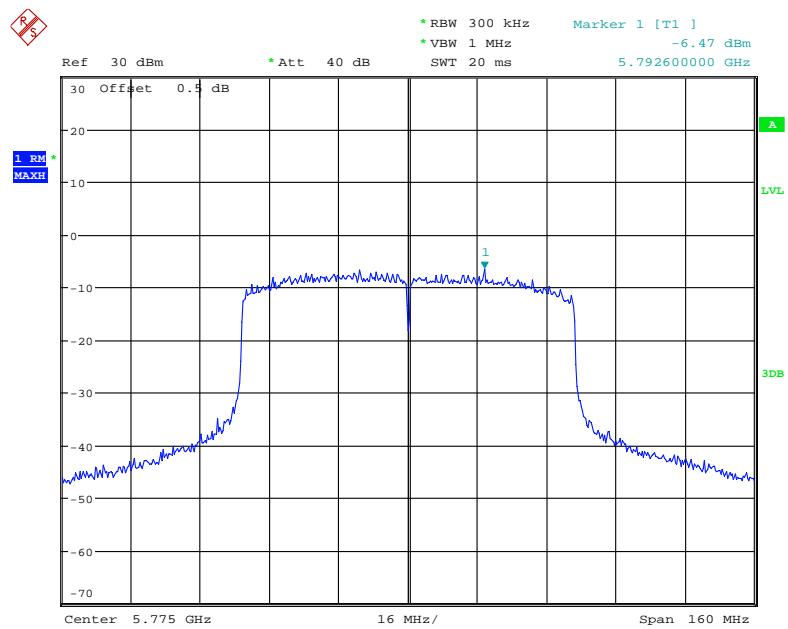
Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



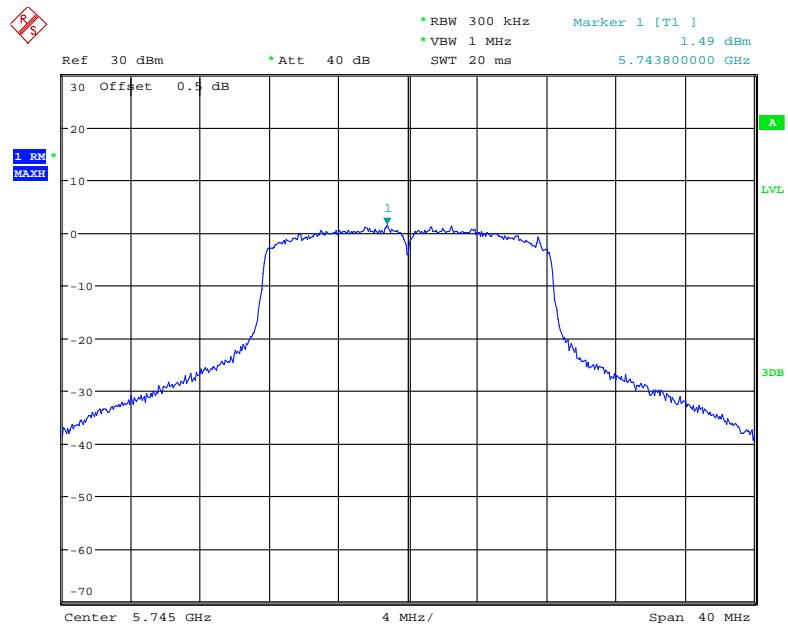
Date: 11.DEC.2017 13:24:49

Main Chain: Power Spectral Density, 802.11n ac40 High Channel

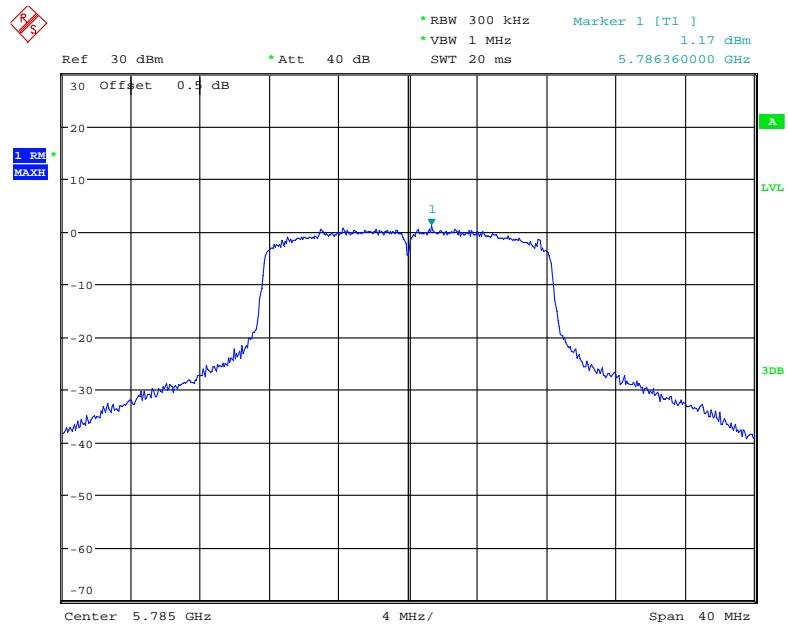
Date: 8.DEC.2017 15:08:18

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel

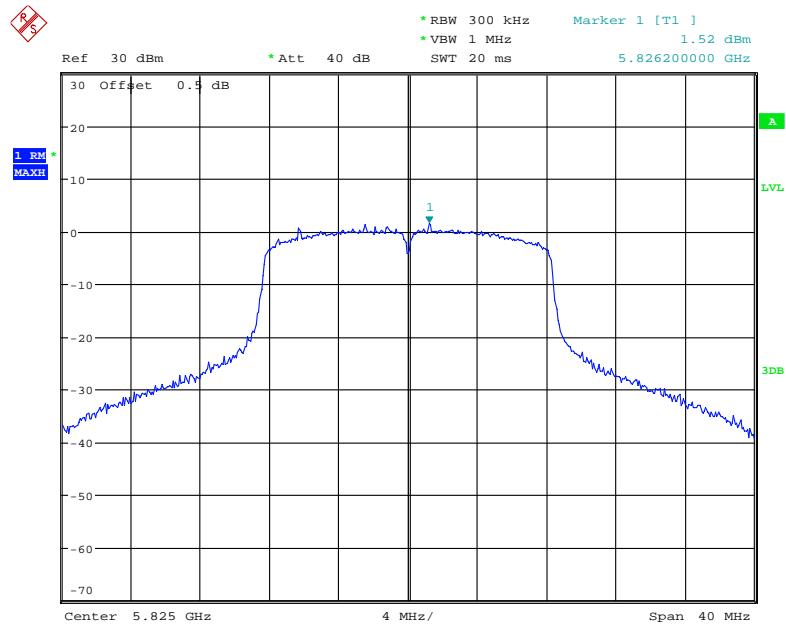
Date: 8.DEC.2017 15:21:25

AUX Chain: Power Spectral Density, 802.11a Low Channel

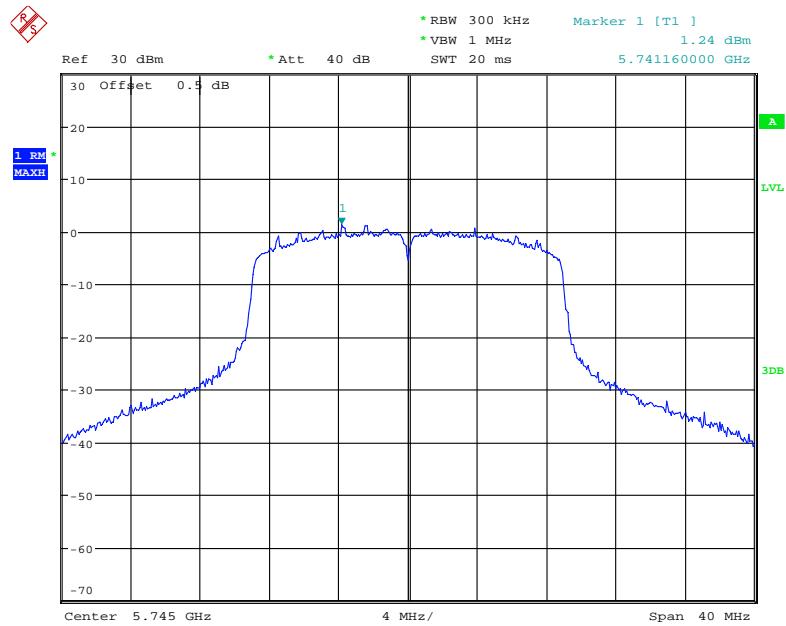
Date: 9.DEC.2017 09:20:55

AUX Chain: Power Spectral Density, 802.11a Middle Channel

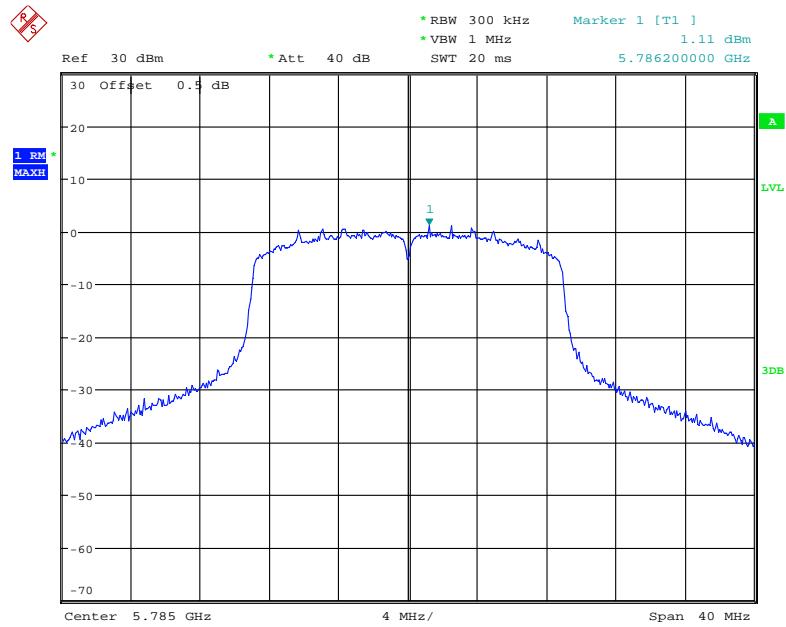
Date: 9.DEC.2017 09:22:44

AUX Chain: Power Spectral Density, 802.11a High Channel

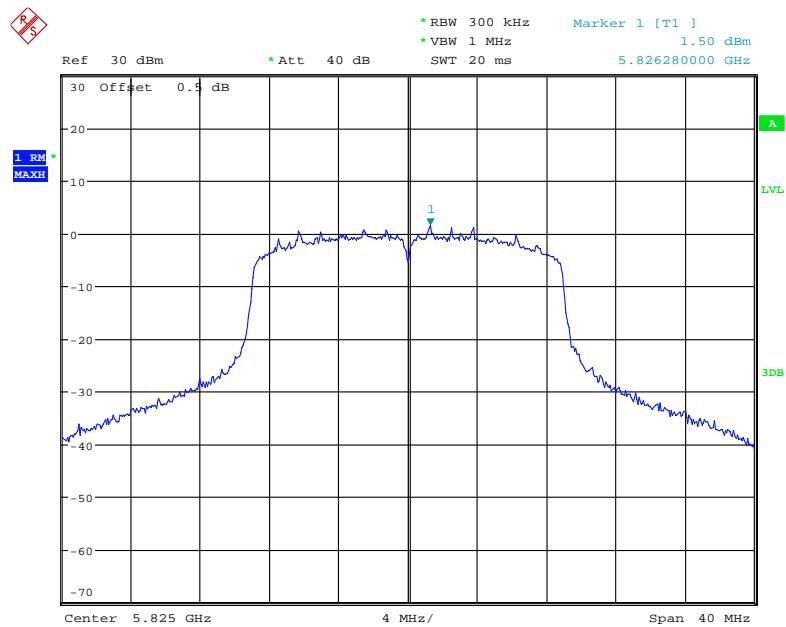
Date: 9.DEC.2017 09:24:08

AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel

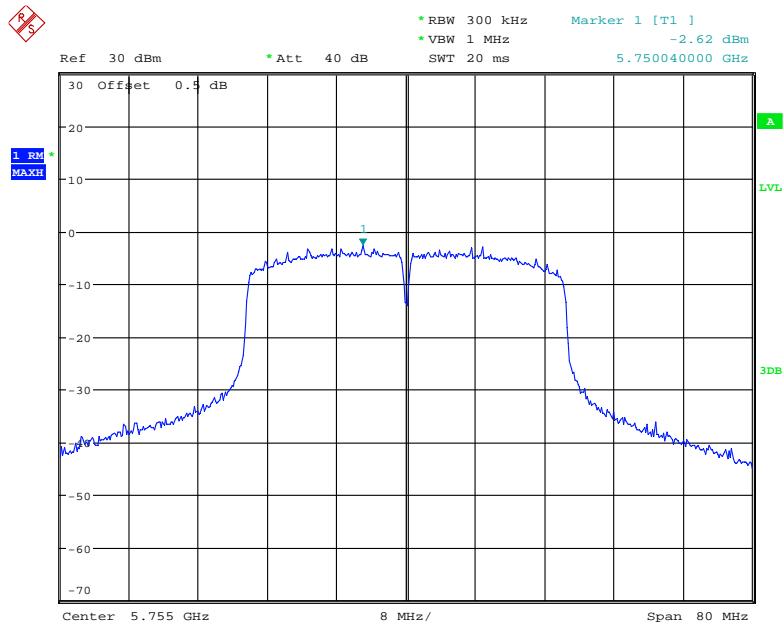
Date: 9.DEC.2017 09:29:32

AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel

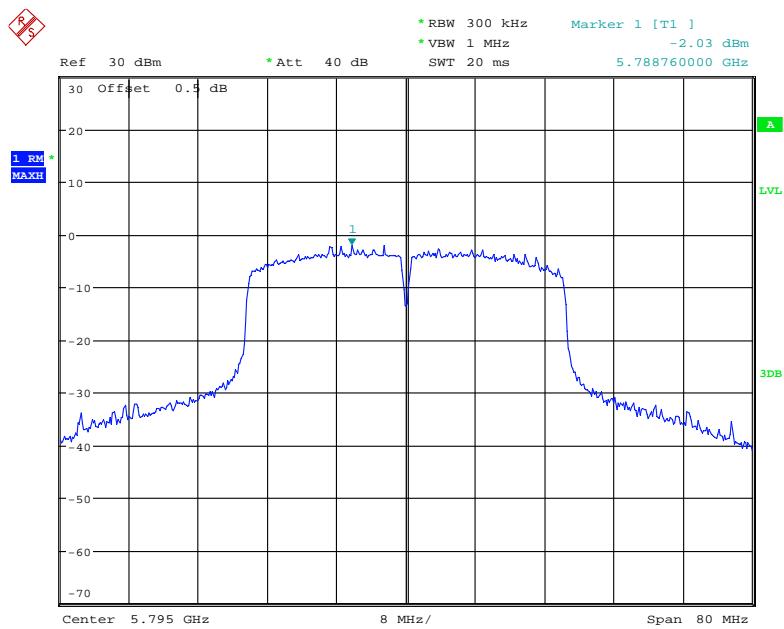
Date: 9.DEC.2017 09:28:07

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

Date: 9.DEC.2017 09:26:24

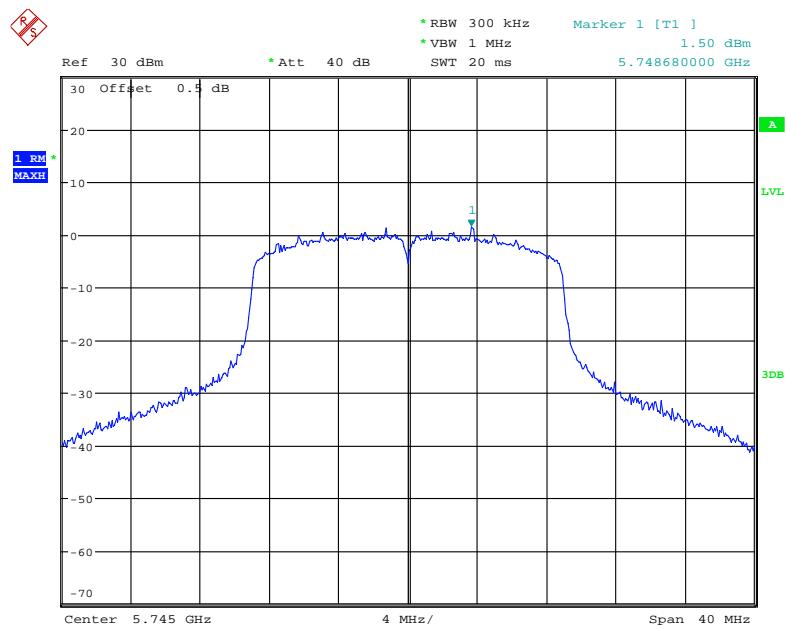
AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel

Date: 11.DEC.2017 13:29:41

AUX Chain: Power Spectral Density, 802.11n ht40 High Channel

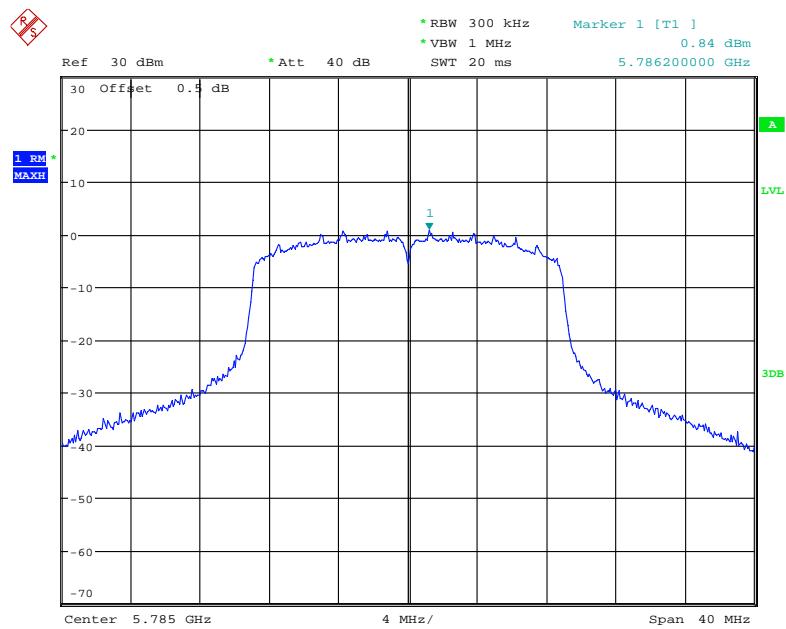
Date: 9.DEC.2017 09:47:48

AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel



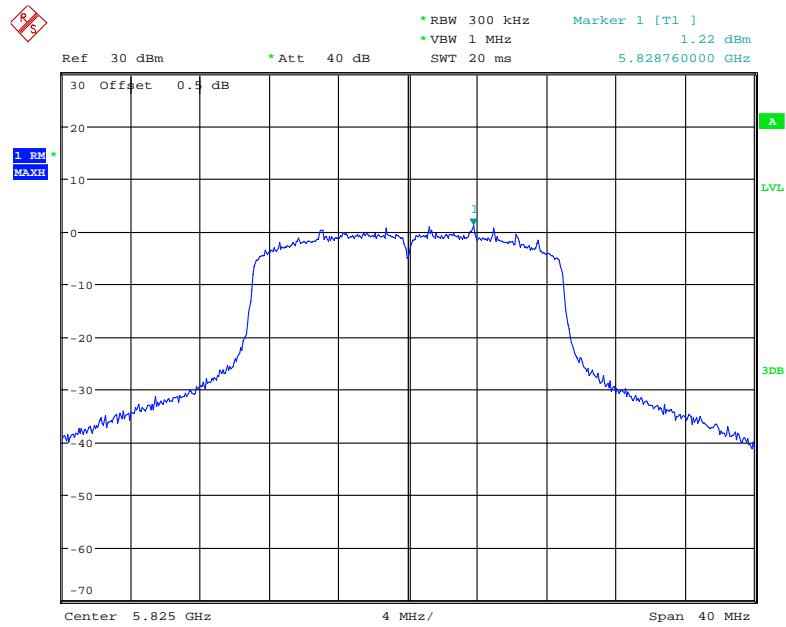
Date: 9.DEC.2017 09:31:25

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel



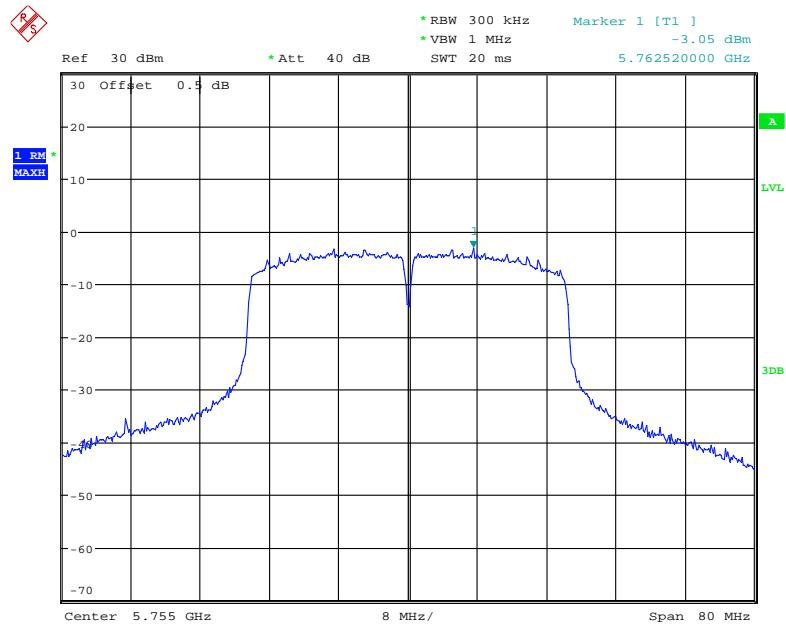
Date: 9.DEC.2017 09:33:11

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel



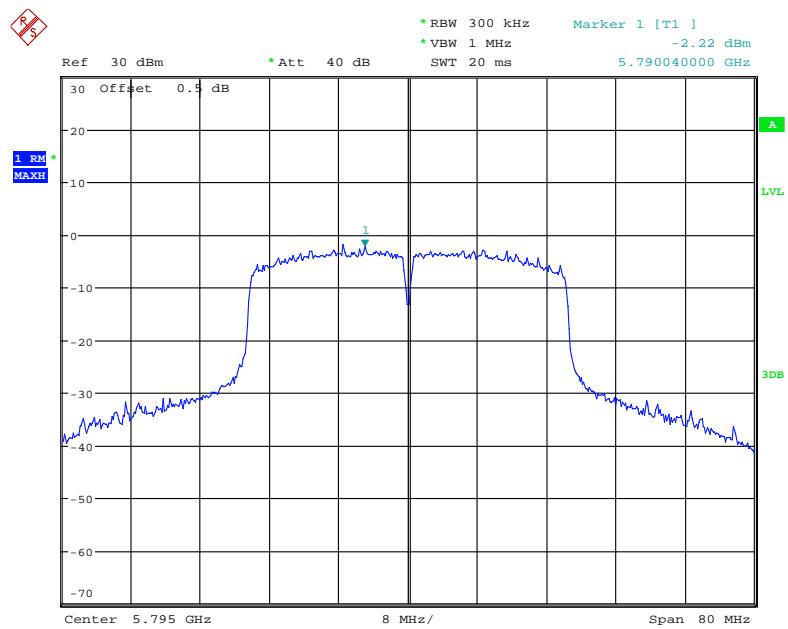
Date: 9.DEC.2017 09:34:28

AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



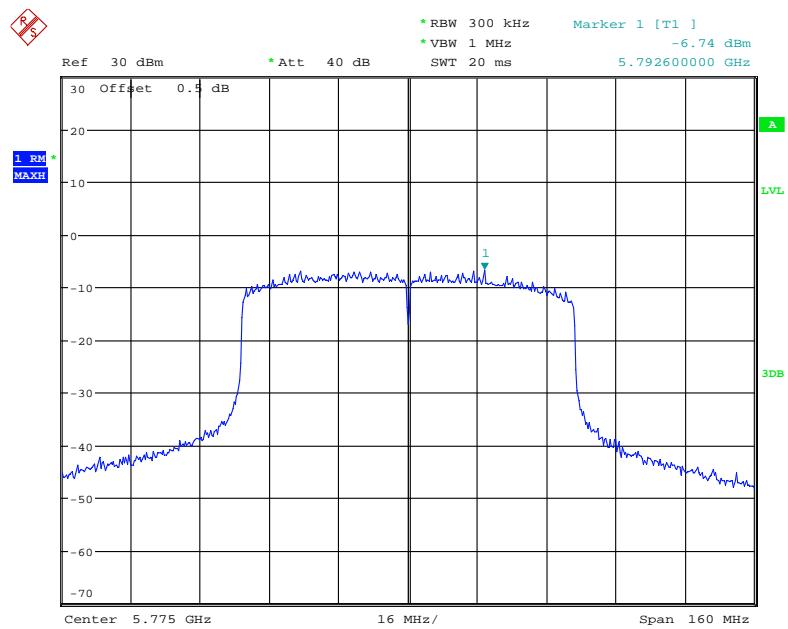
Date: 11.DEC.2017 13:31:36

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel



Date: 9.DEC.2017 09:45:39

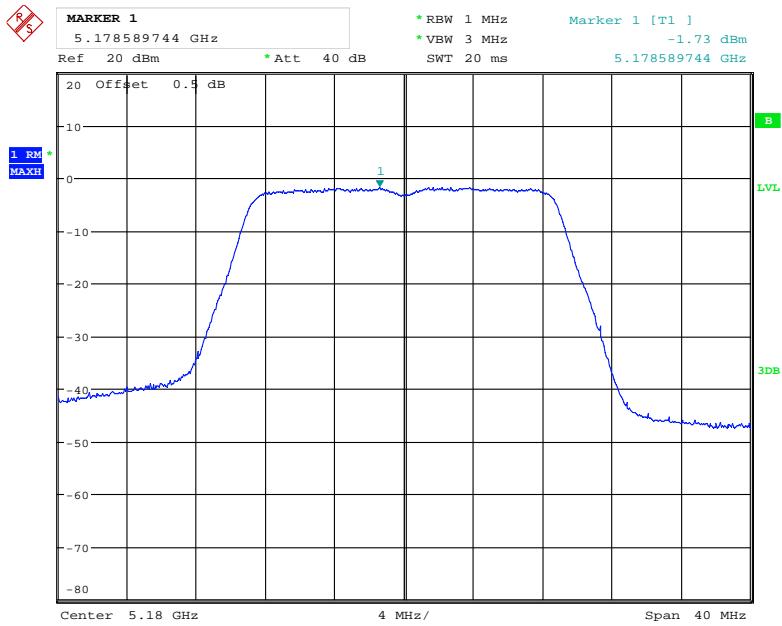
AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel



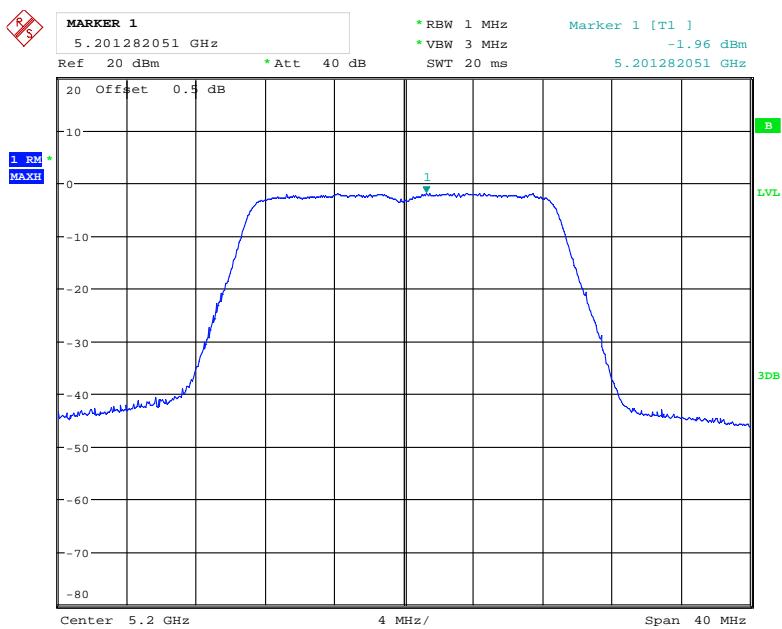
Date: 9.DEC.2017 09:49:56

MIMO:
5150-5250MHz:

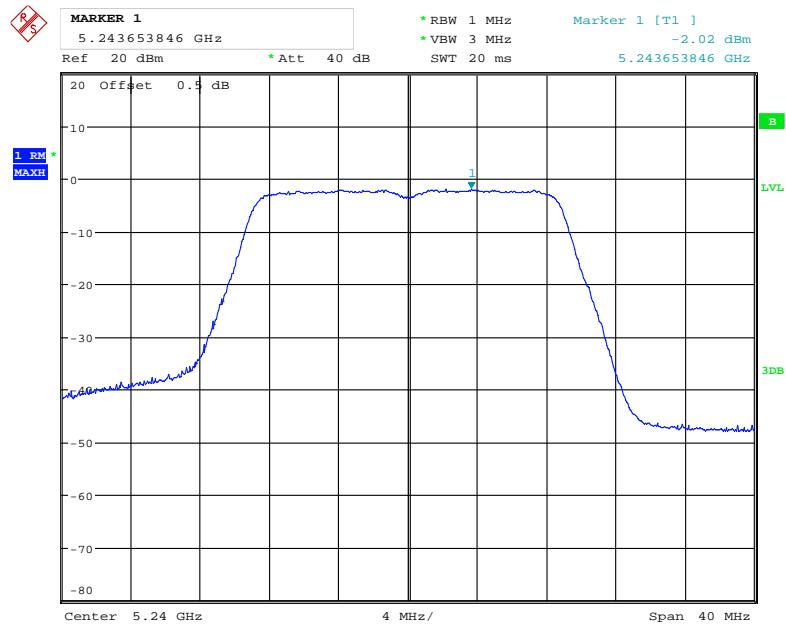
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel



Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel

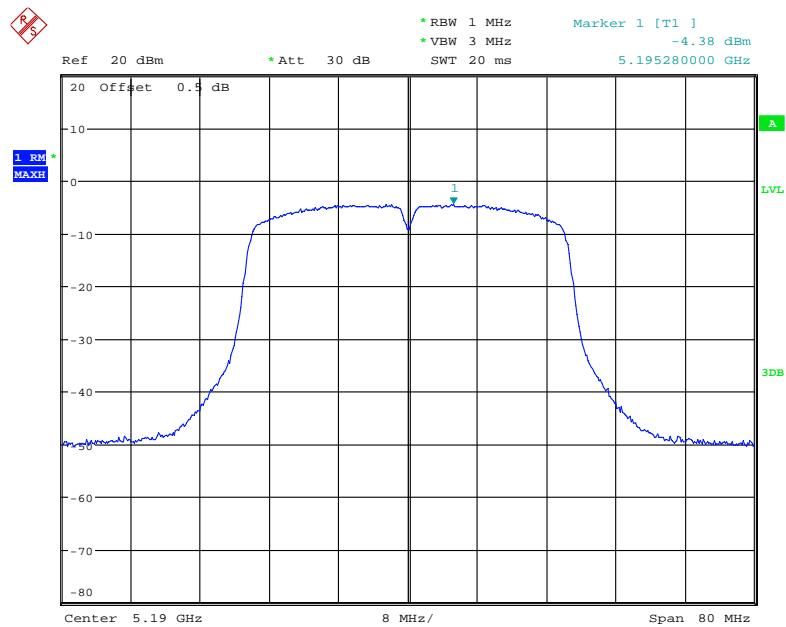


Main Chain: Power Spectral Density, 802.11n ht20 High Channel



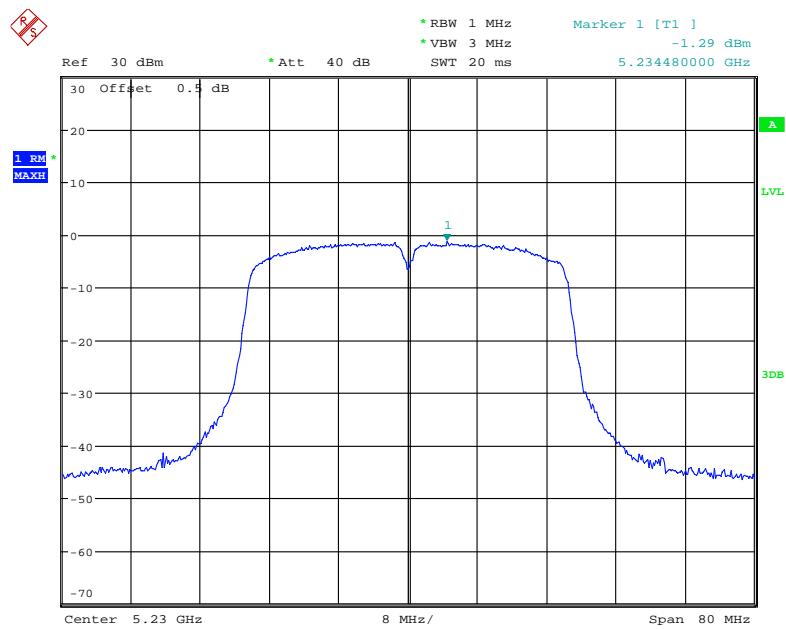
Date: 8.FEB.2018 19:43:07

Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



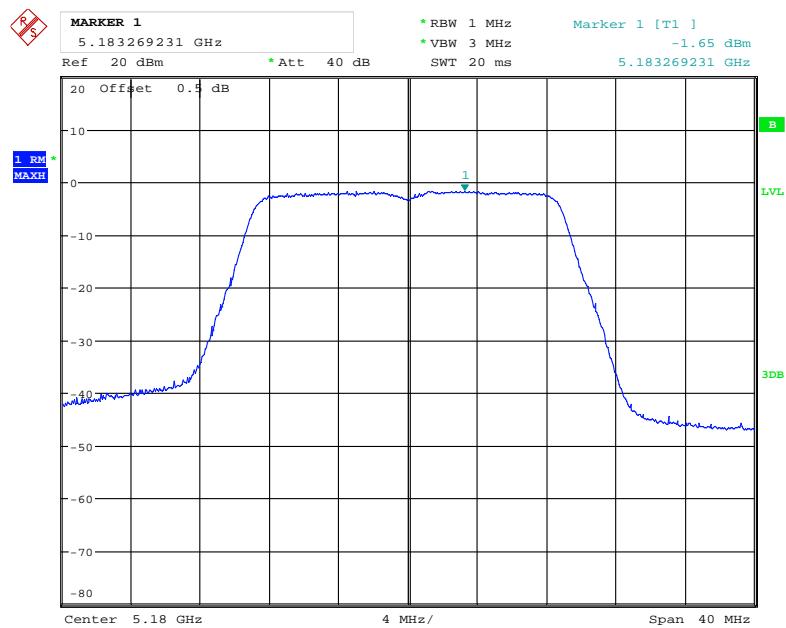
Date: 11.DEC.2017 10:19:27

Main Chain: Power Spectral Density, 802.11n ht40 High Channel



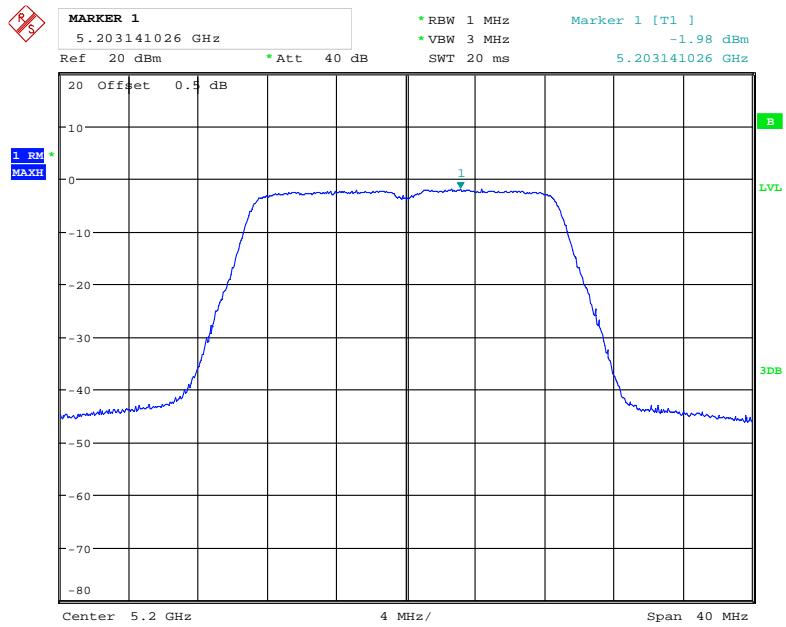
Date: 9.DEC.2017 14:50:05

Main Chain: Power Spectral Density, 802.11n ac20 Low Channel



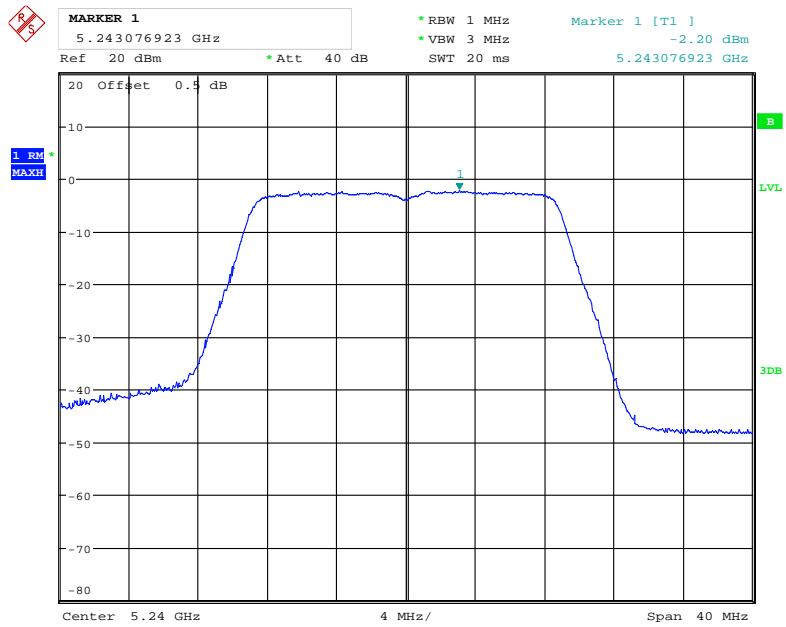
Date: 8.FEB.2018 19:44:56

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel



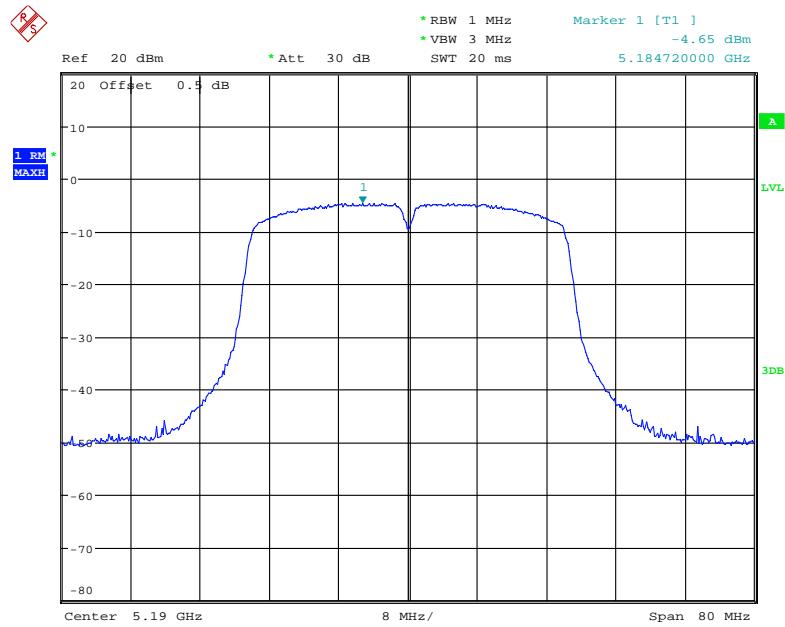
Date: 8.FEB.2018 19:45:29

Main Chain: Power Spectral Density, 802.11n ac20 High Channel



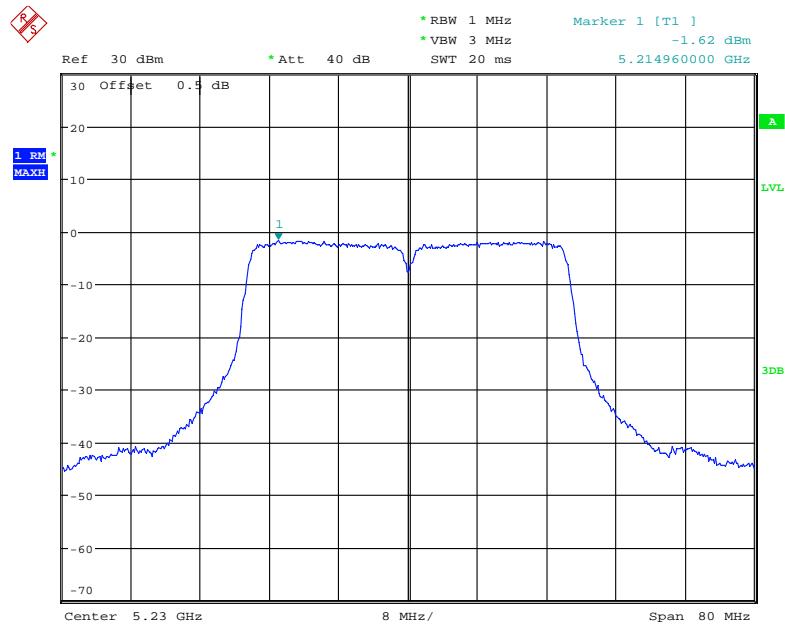
Date: 8.FEB.2018 19:46:04

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



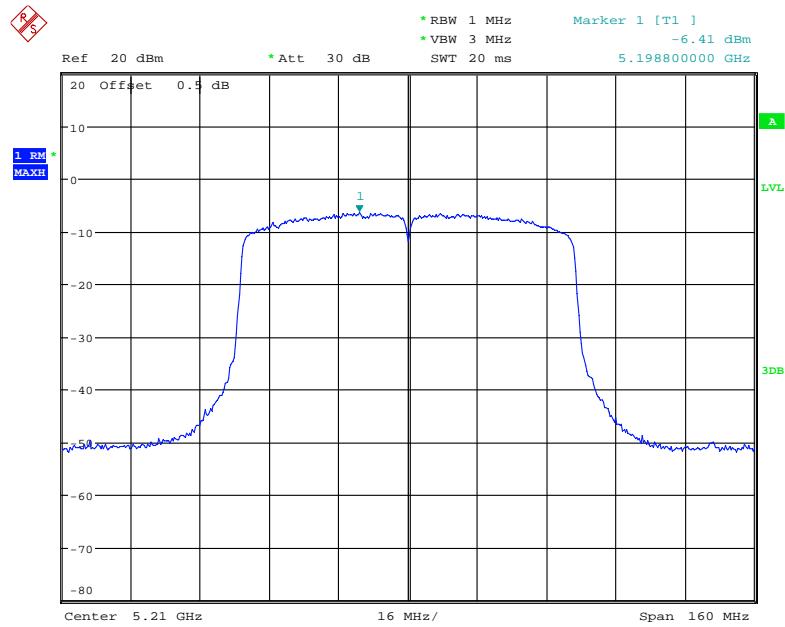
Date: 11.DEC.2017 10:29:43

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



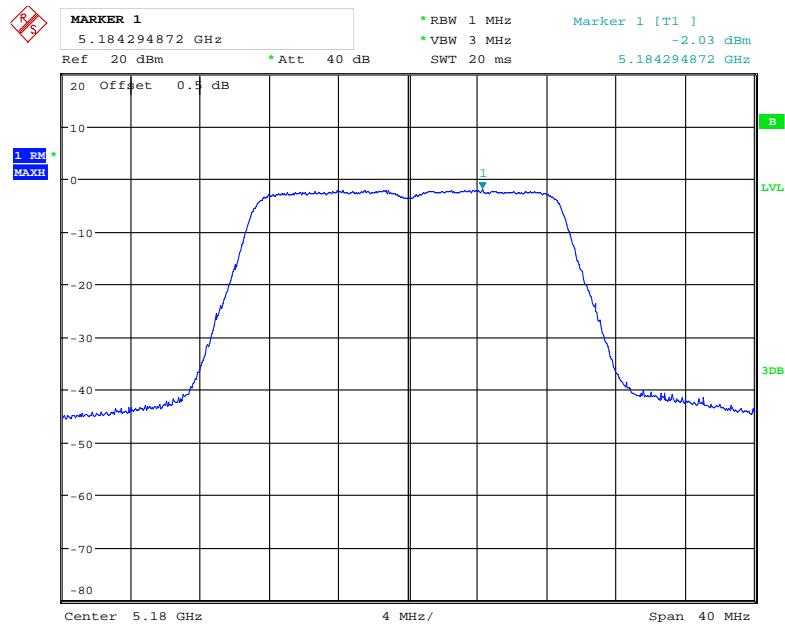
Date: 9.DEC.2017 14:51:44

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel



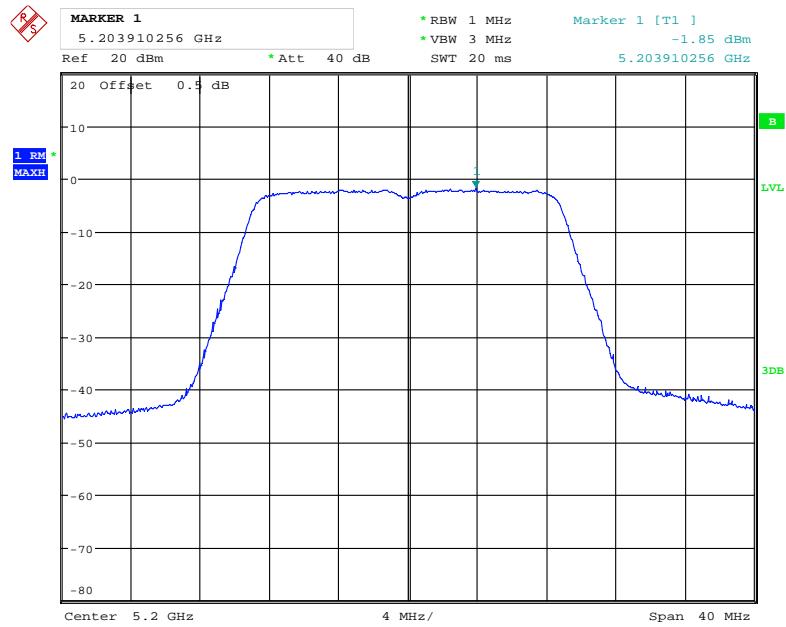
Date: 11.DEC.2017 10:18:19

AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



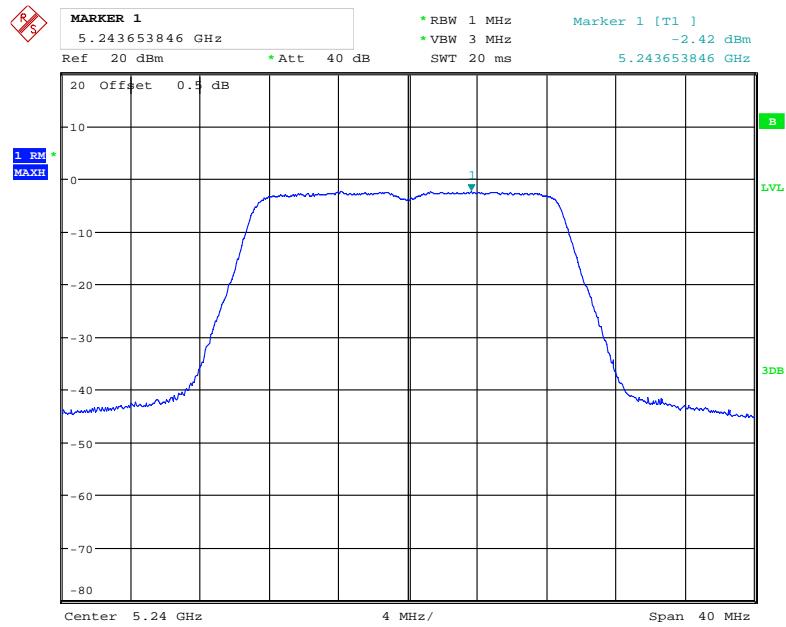
Date: 8.FEB.2018 19:51:00

AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel



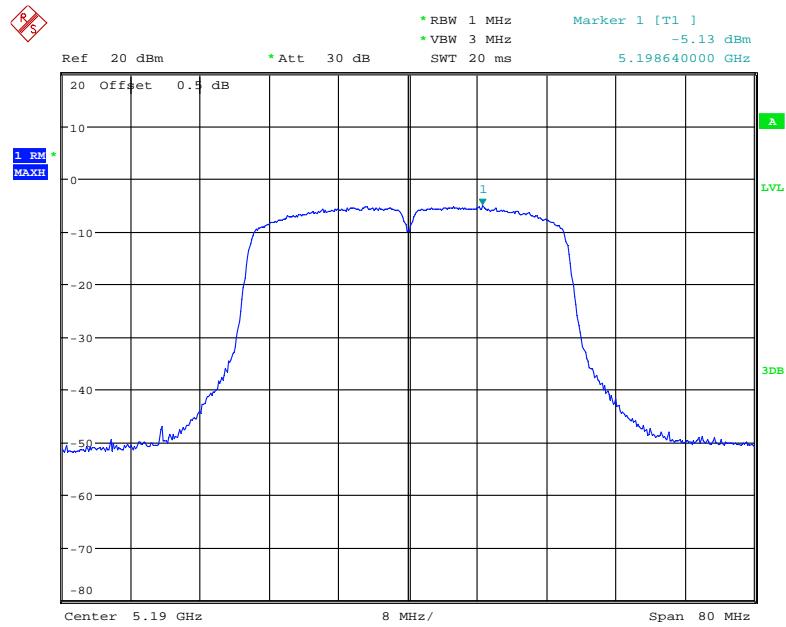
Date: 8.FEB.2018 19:52:00

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel



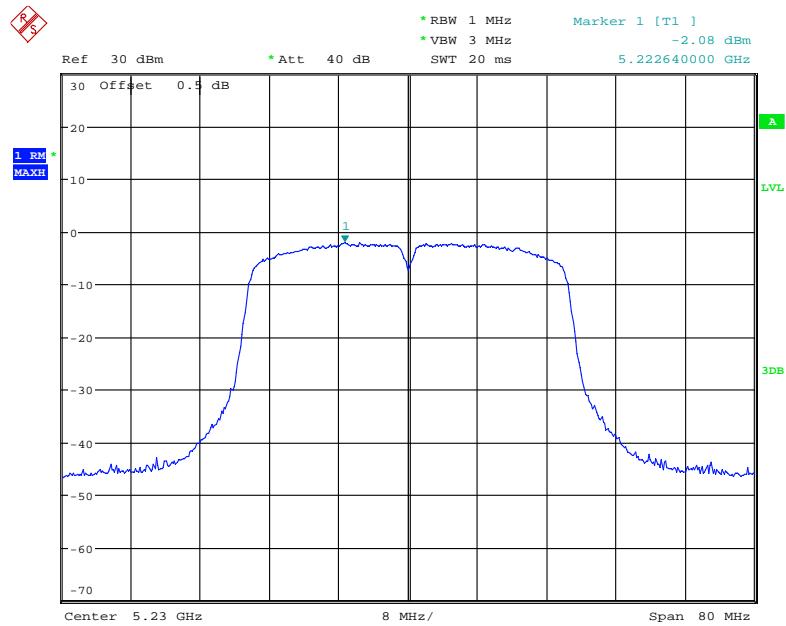
Date: 8.FEB.2018 19:52:25

AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel



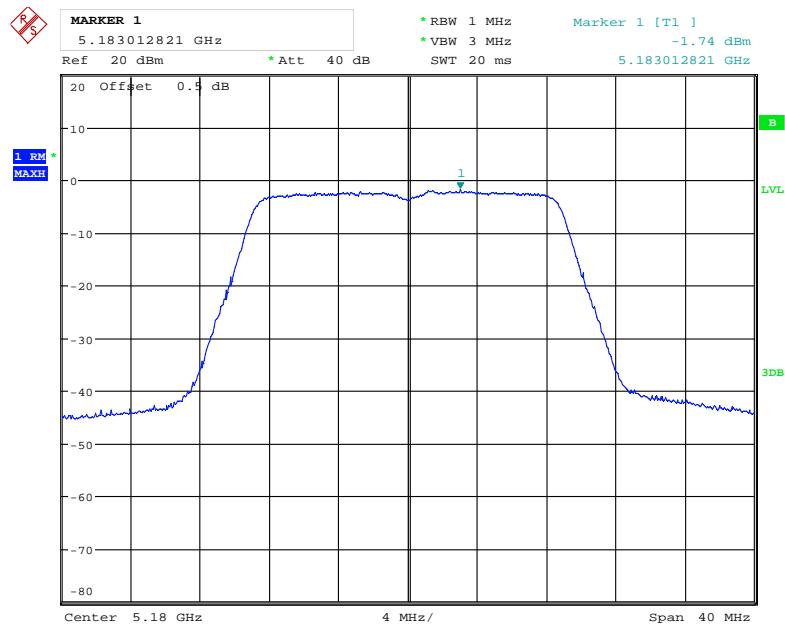
Date: 11.DEC.2017 10:24:53

AUX Chain: Power Spectral Density, 802.11n ht40 High Channel



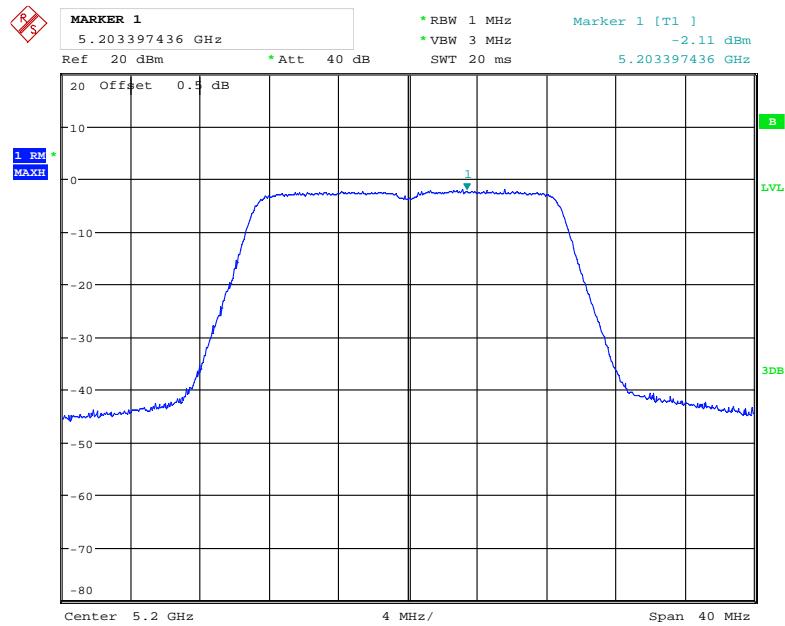
Date: 9.DEC.2017 15:32:45

AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel



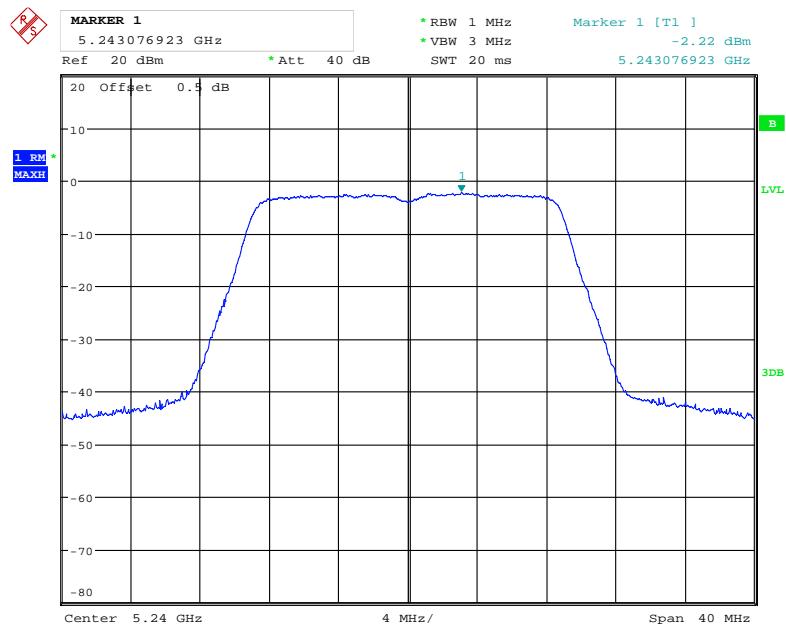
Date: 8.FEB.2018 19:50:27

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel



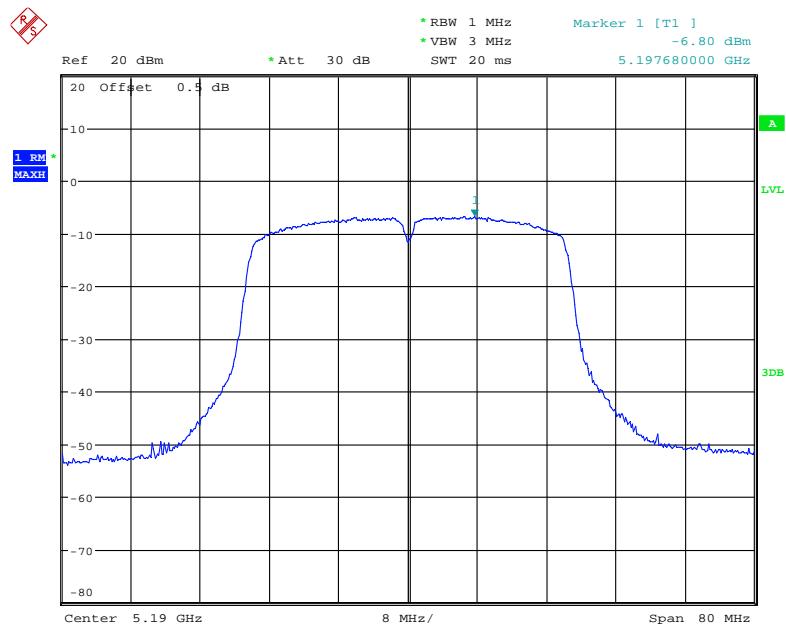
Date: 8.FEB.2018 19:49:58

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel

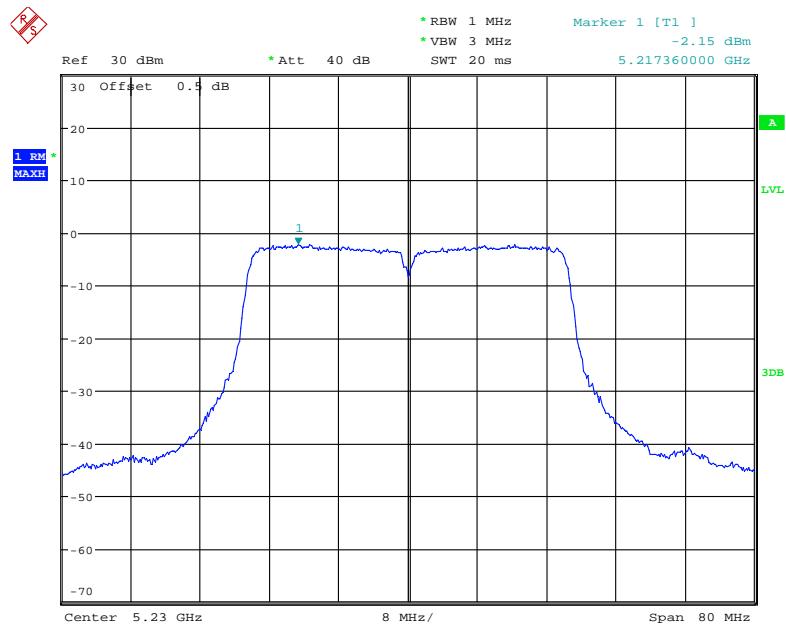


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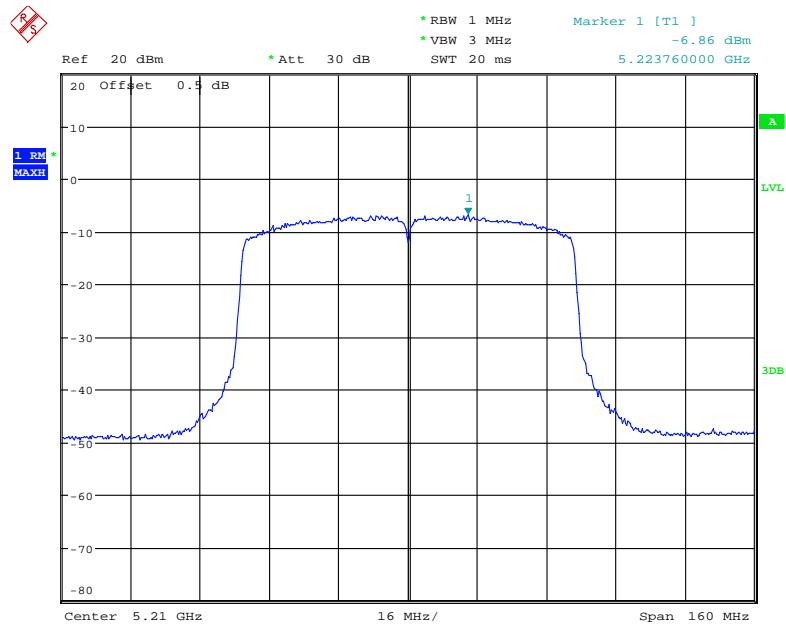
AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



Date: 11.DEC.2017 10:28:39

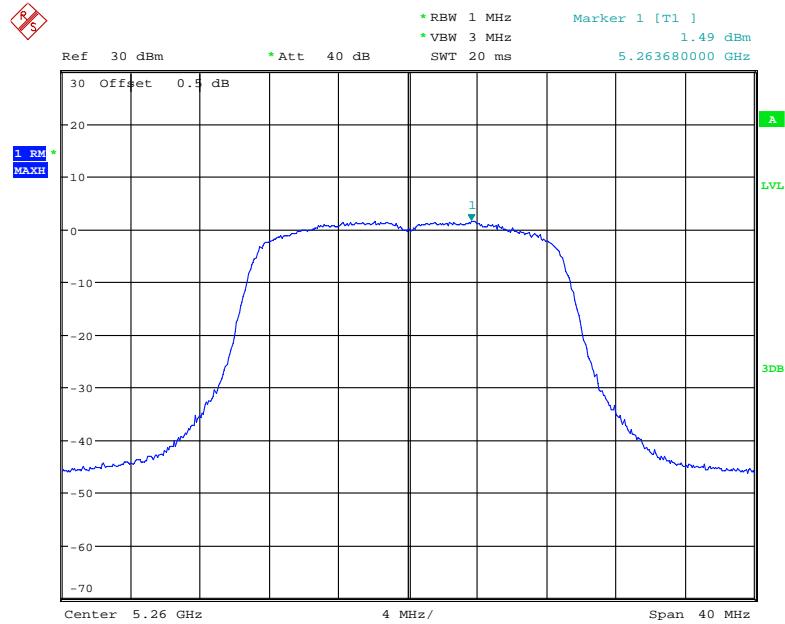
AUX Chain: Power Spectral Density, 802.11n ac40 High Channel

Date: 9.DEC.2017 15:38:26

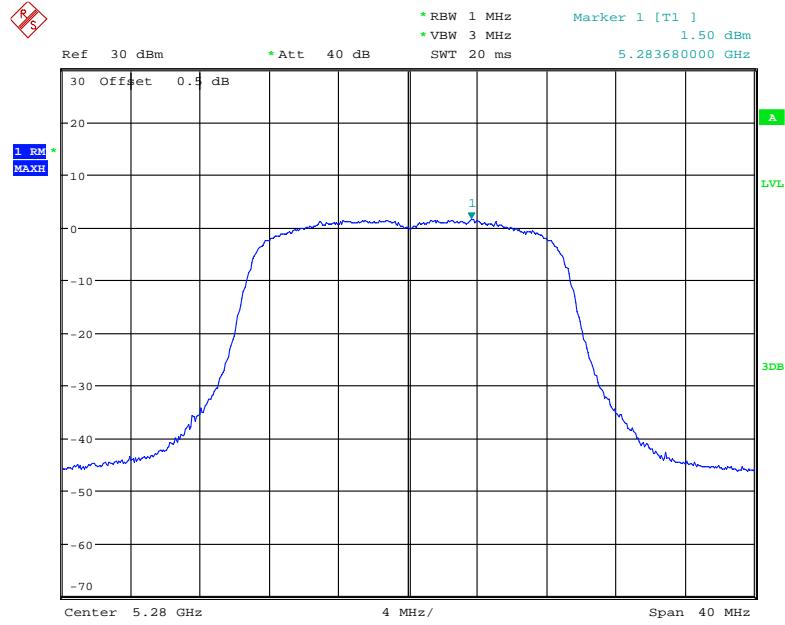
AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel

Date: 11.DEC.2017 10:05:42

5250-5350MHz:

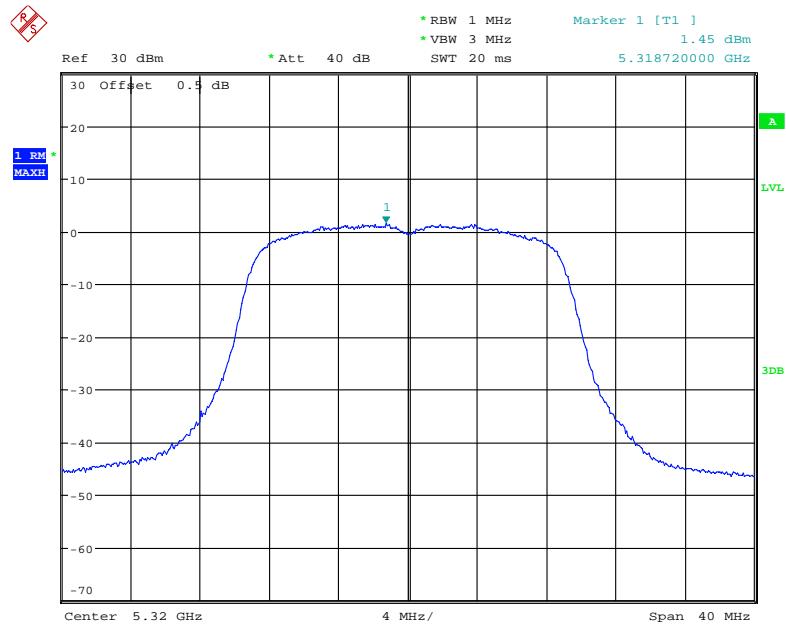
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 9.DEC.2017 13:28:47

Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel

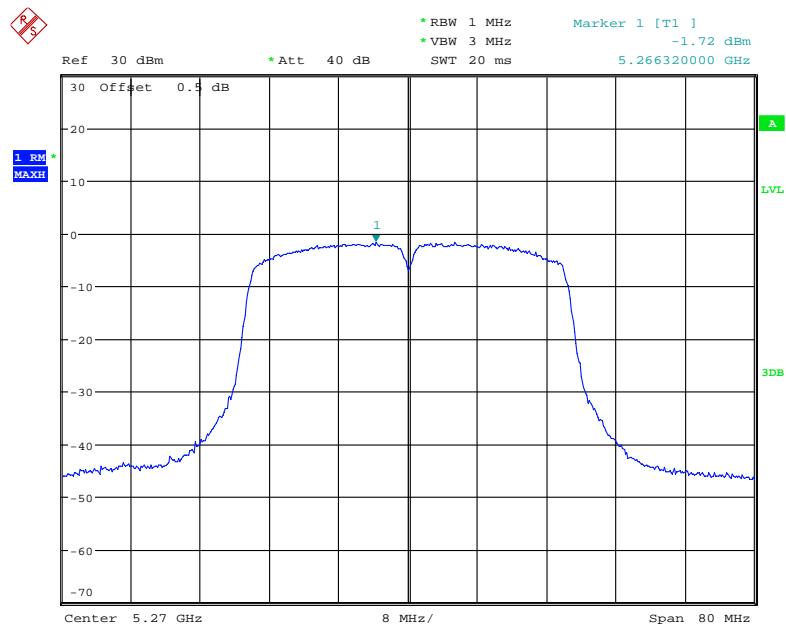
Date: 9.DEC.2017 13:30:44

Main Chain: Power Spectral Density, 802.11n ht20 High Channel



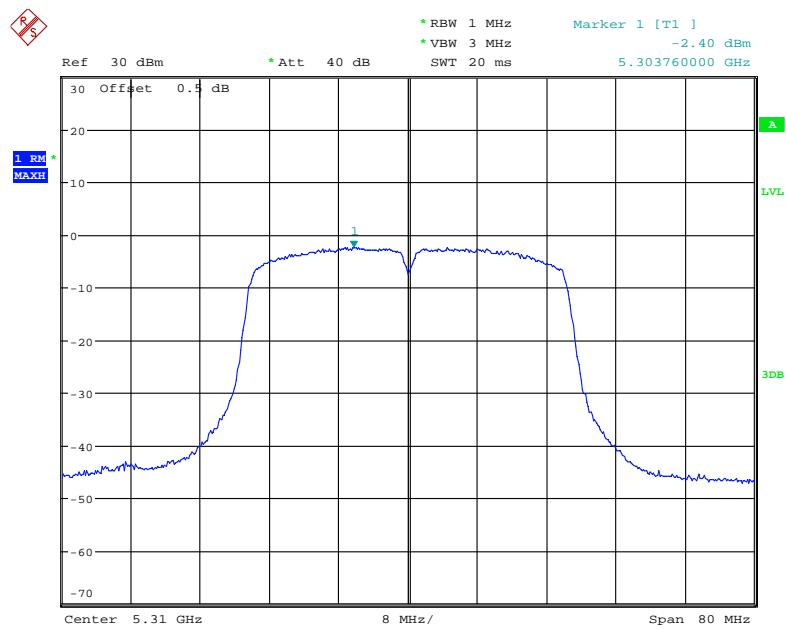
Date: 9.DEC.2017 13:32:06

Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



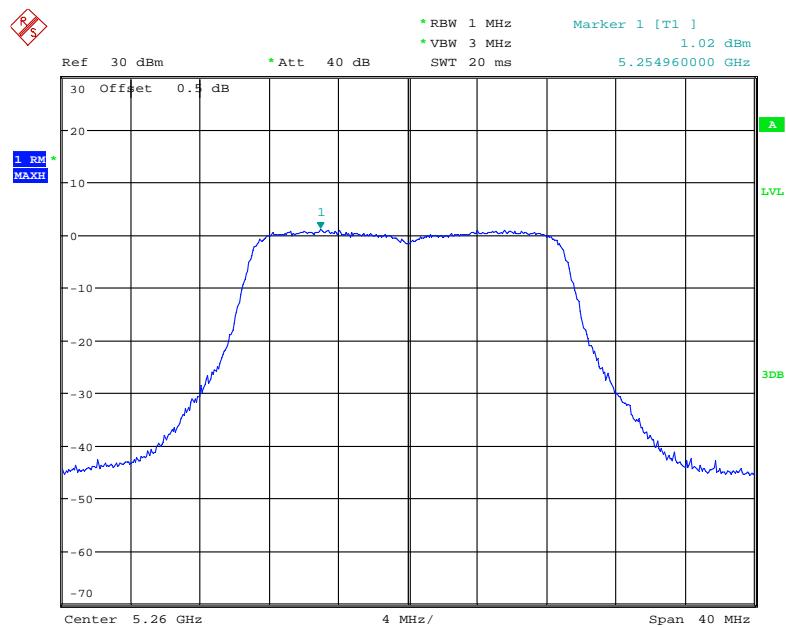
Date: 9.DEC.2017 14:55:59

Main Chain: Power Spectral Density, 802.11n ht40 High Channel



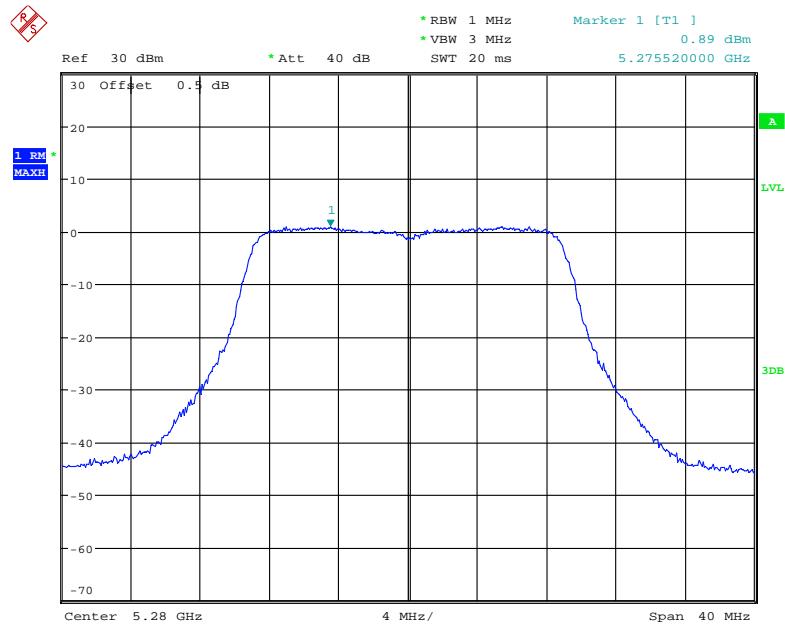
Date: 9.DEC.2017 16:06:24

Main Chain: Power Spectral Density, 802.11n ac20 Low Channel



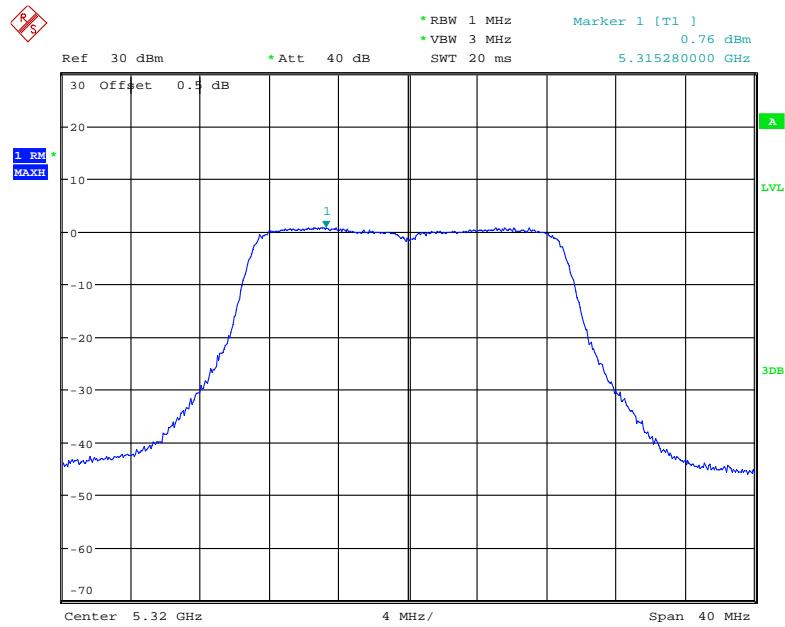
Date: 9.DEC.2017 13:36:34

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel



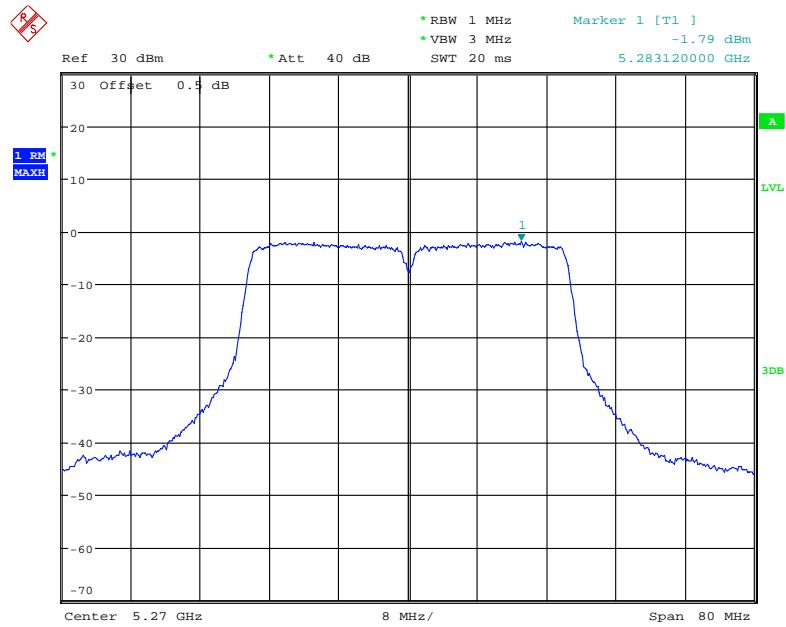
Date: 9.DEC.2017 13:35:34

Main Chain: Power Spectral Density, 802.11n ac20 High Channel



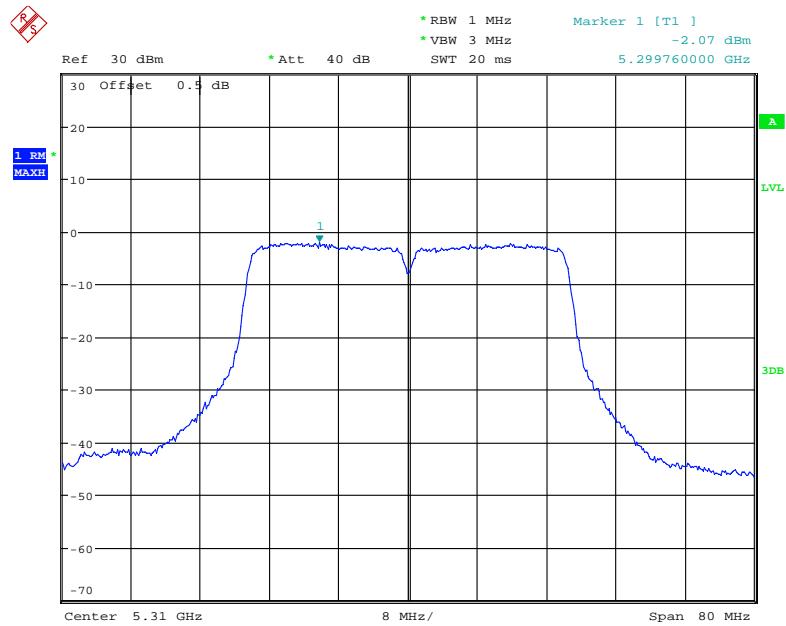
Date: 9.DEC.2017 13:34:02

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



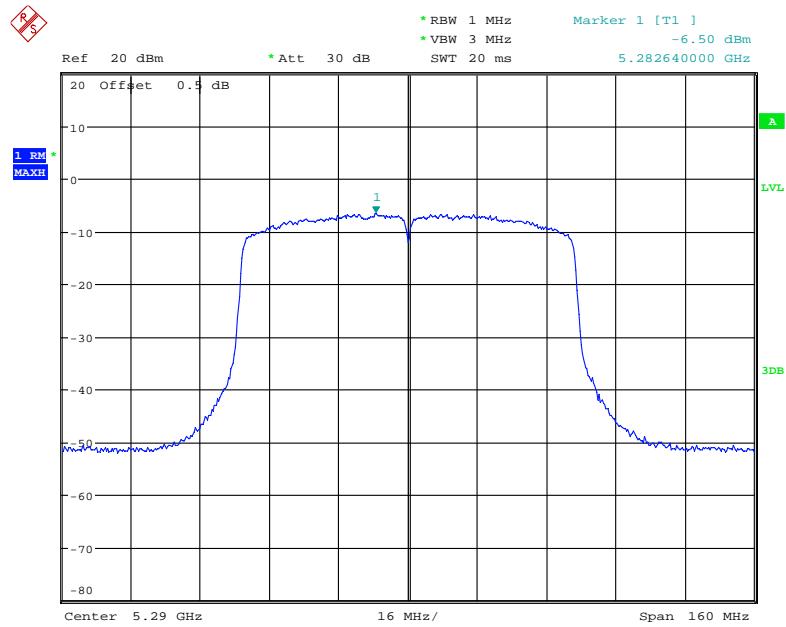
Date: 9.DEC.2017 14:54:16

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



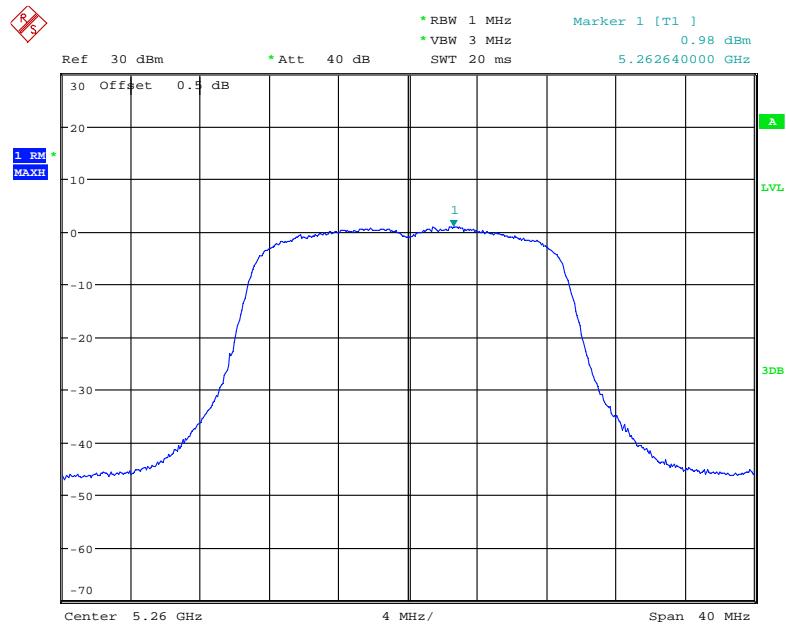
Date: 9.DEC.2017 15:58:41

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel

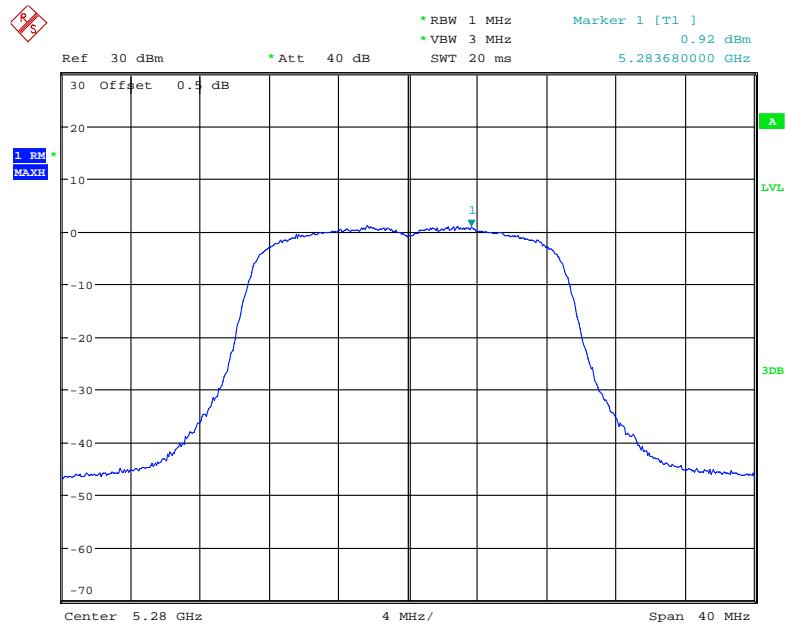


Date: 11.DEC.2017 10:16:17

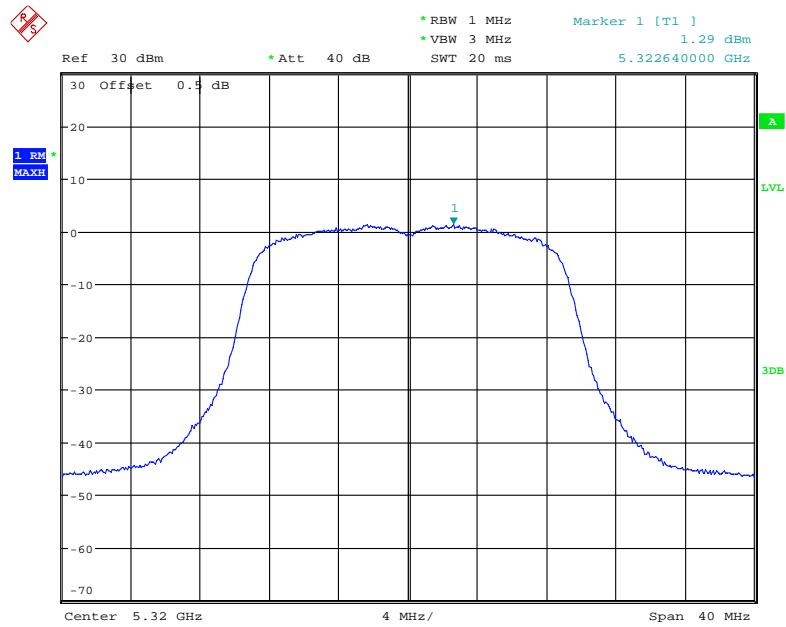
AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



Date: 9.DEC.2017 13:47:30

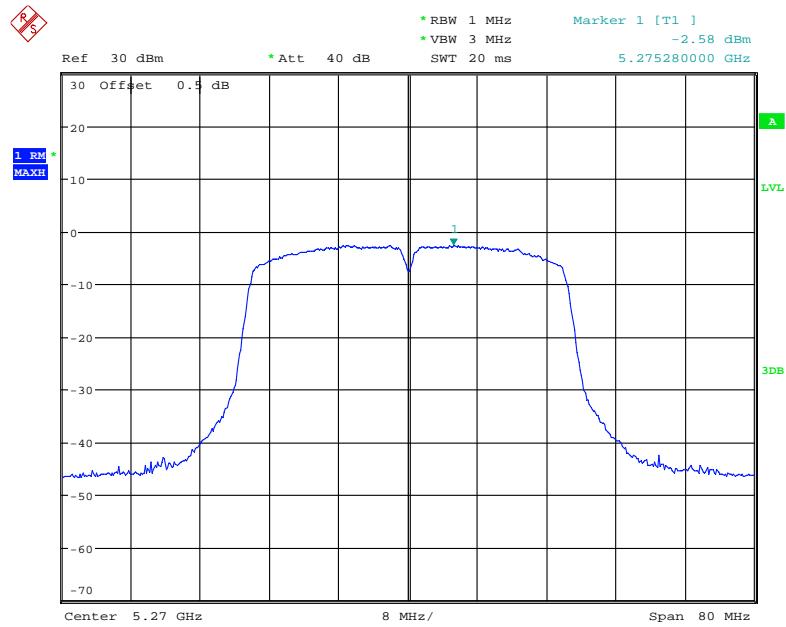
AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel

Date: 9.DEC.2017 13:46:32

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

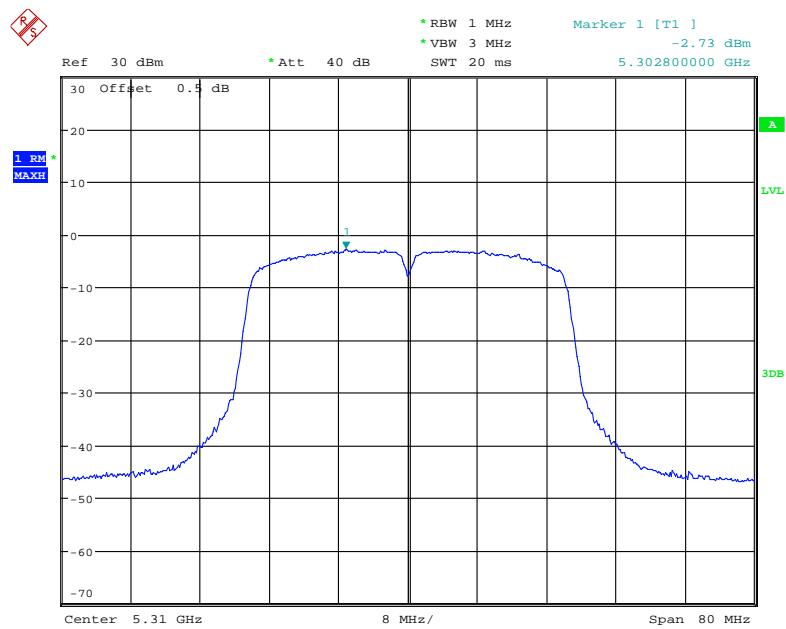
Date: 9.DEC.2017 13:43:48

AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel

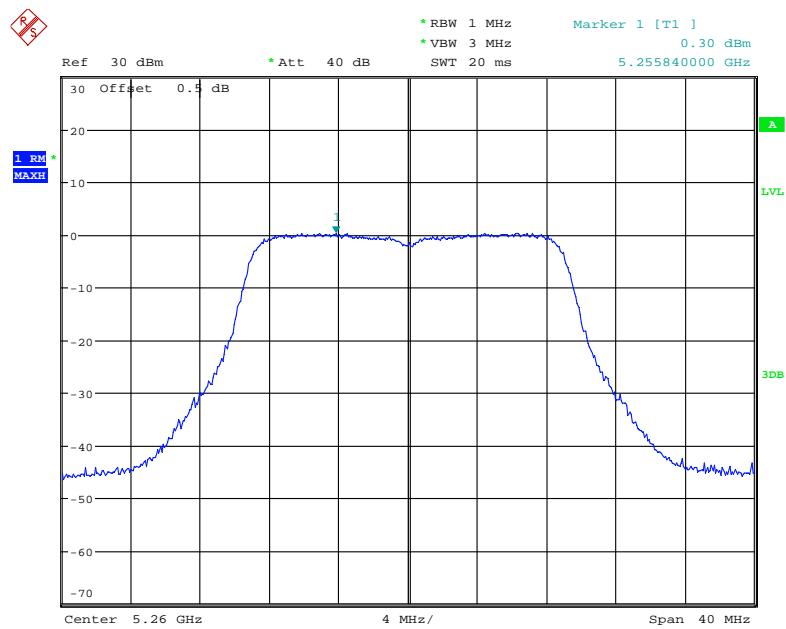


Date: 9.DEC.2017 15:34:29

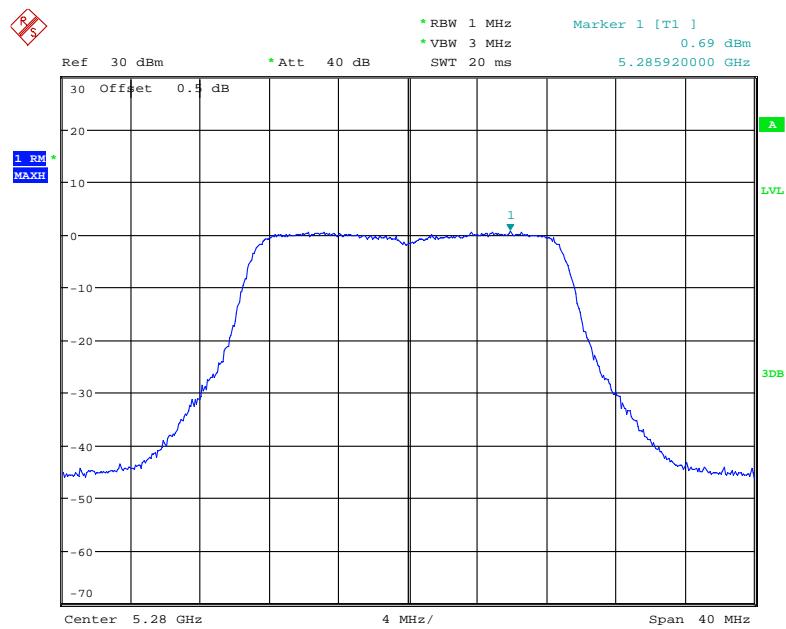
AUX Chain: Power Spectral Density, 802.11n ht40 High Channel



Date: 9.DEC.2017 16:04:58

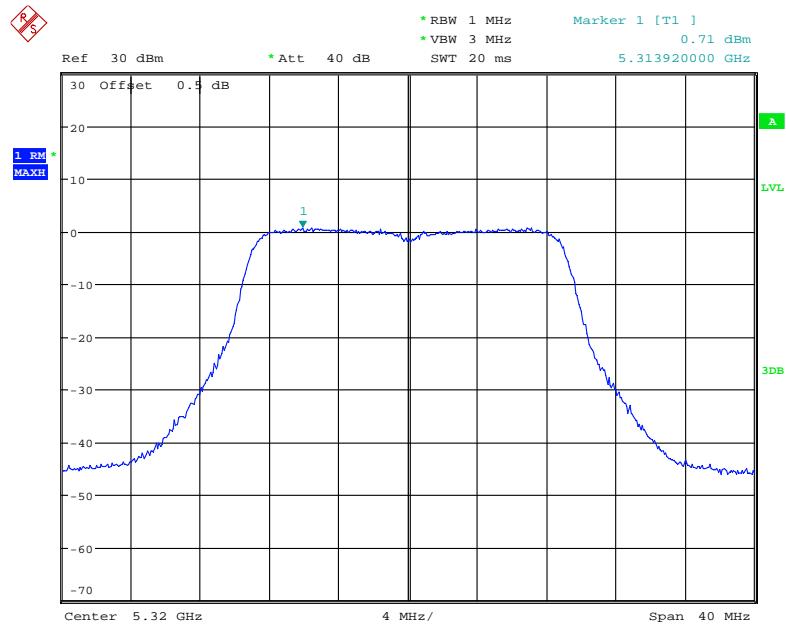
AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 9.DEC.2017 13:38:36

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel

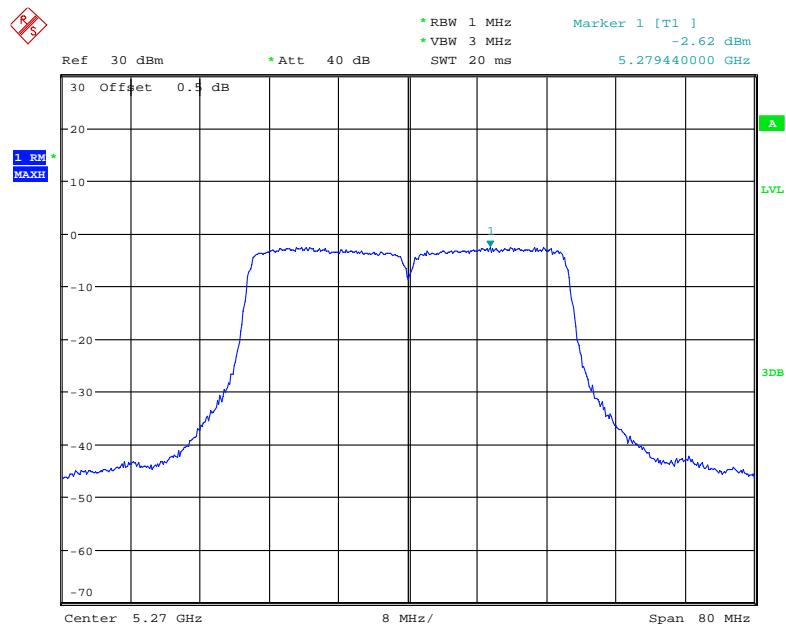
Date: 9.DEC.2017 13:40:08

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel



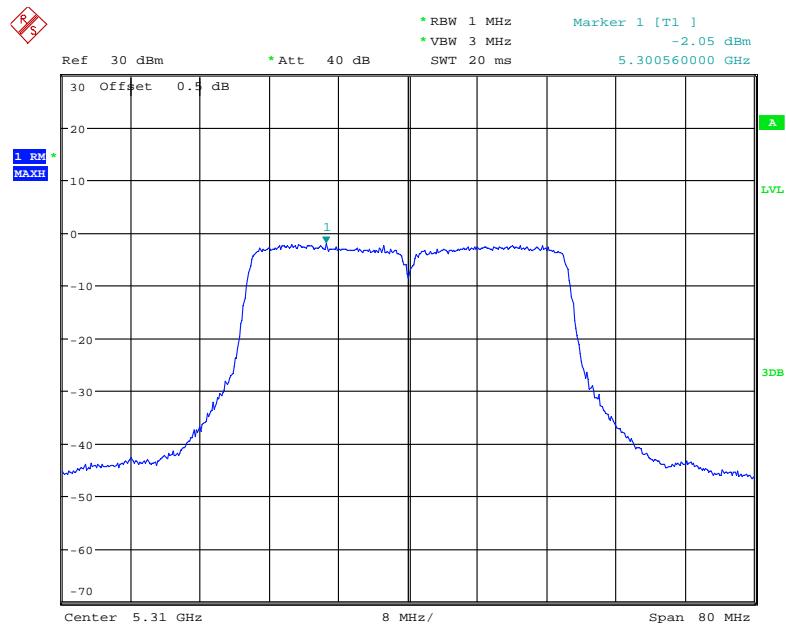
Date: 9.DEC.2017 13:41:55

AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



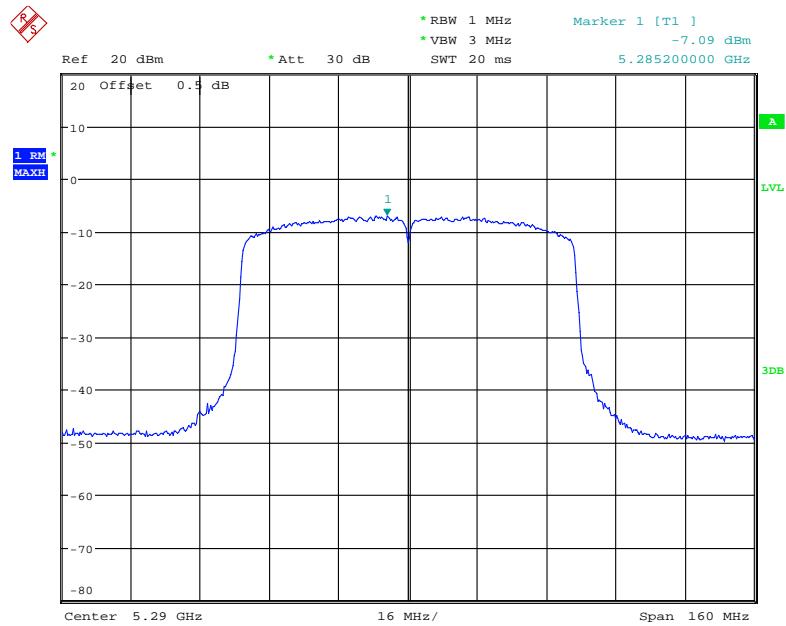
Date: 9.DEC.2017 15:36:12

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel



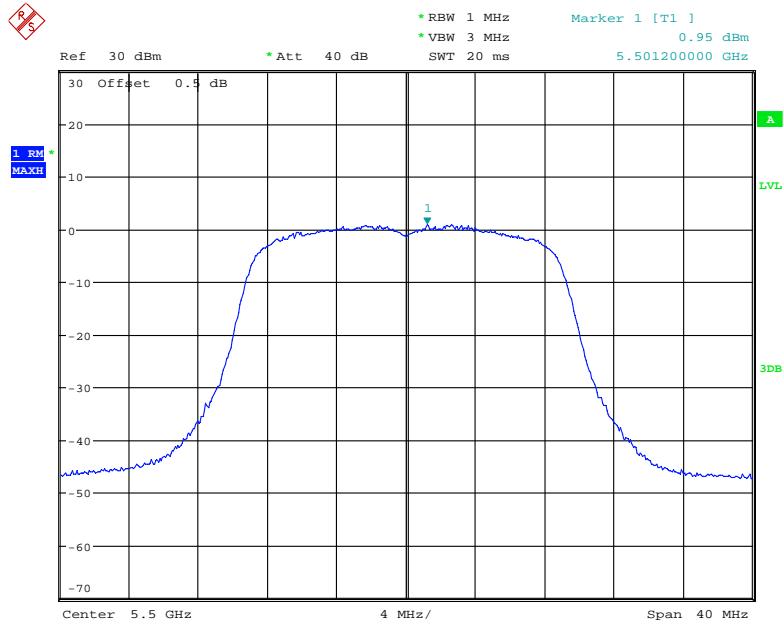
Date: 9.DEC.2017 16:00:15

AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel

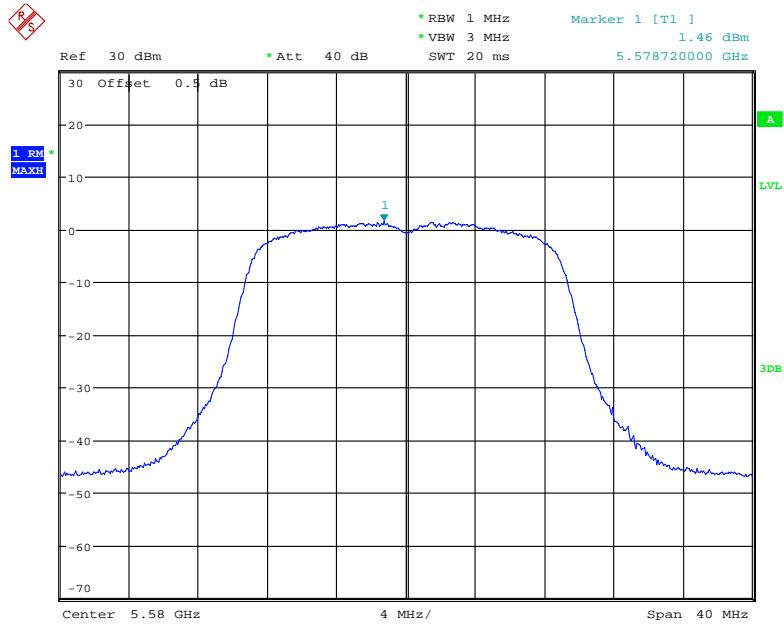


Date: 11.DEC.2017 10:10:12

5470-5725MHz:

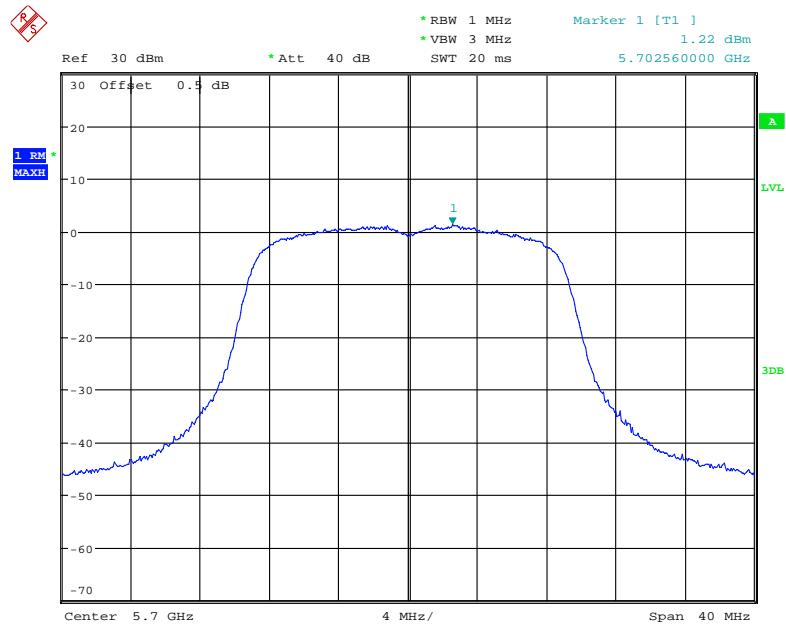
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 9.DEC.2017 13:50:35

Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel

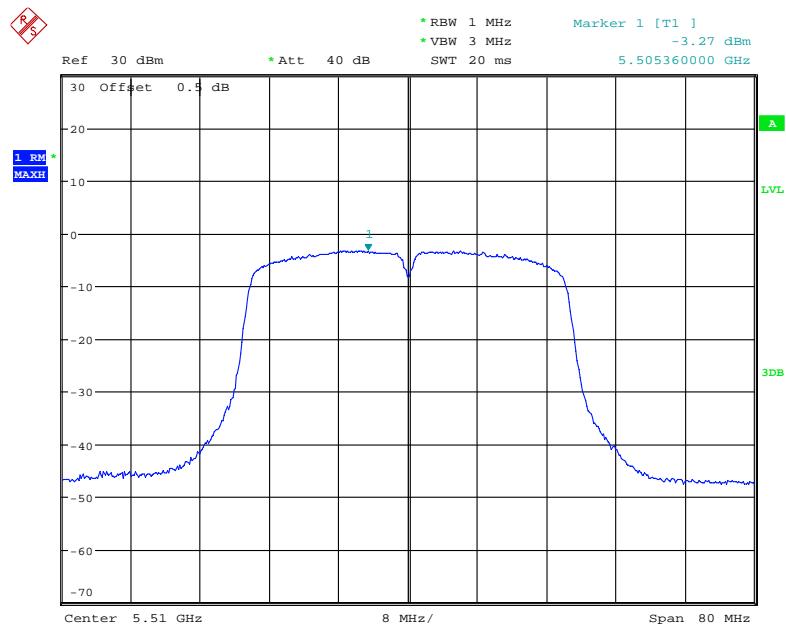
Date: 9.DEC.2017 13:52:11

Main Chain: Power Spectral Density, 802.11n ht20 High Channel

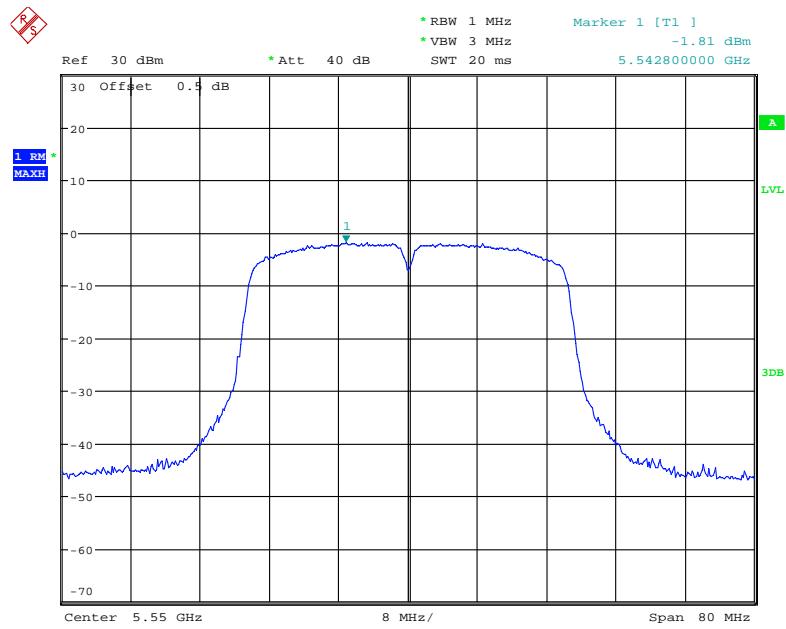


Date: 9.DEC.2017 13:53:39

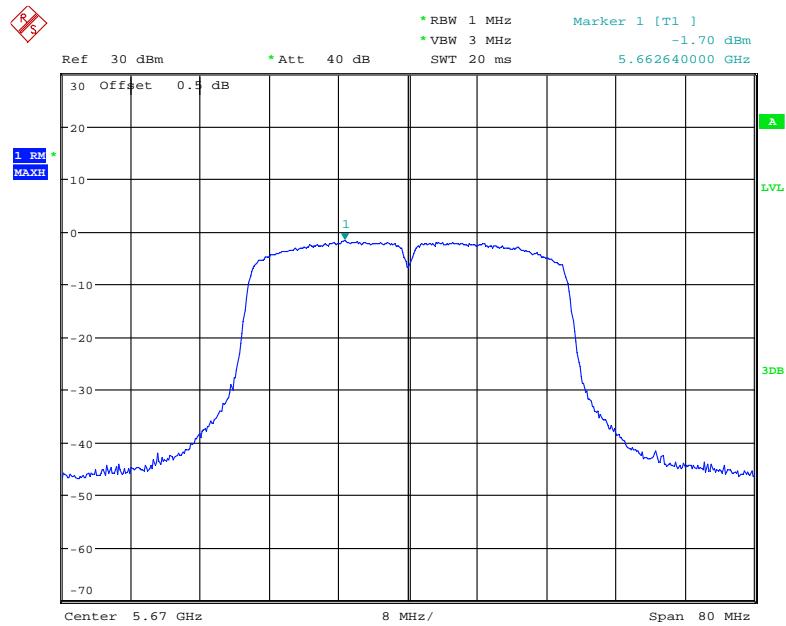
Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



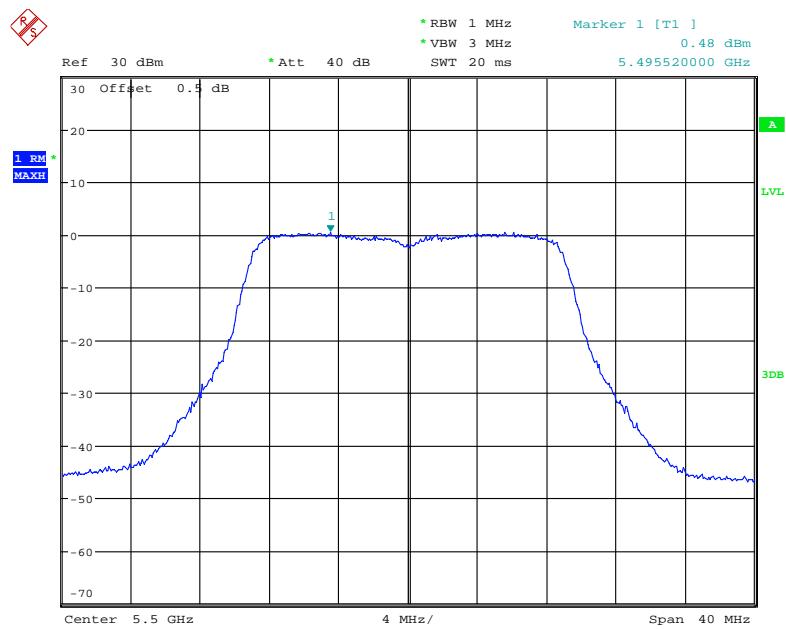
Date: 9.DEC.2017 16:48:24

Main Chain: Power Spectral Density, 802.11n ht40 Middle Channel

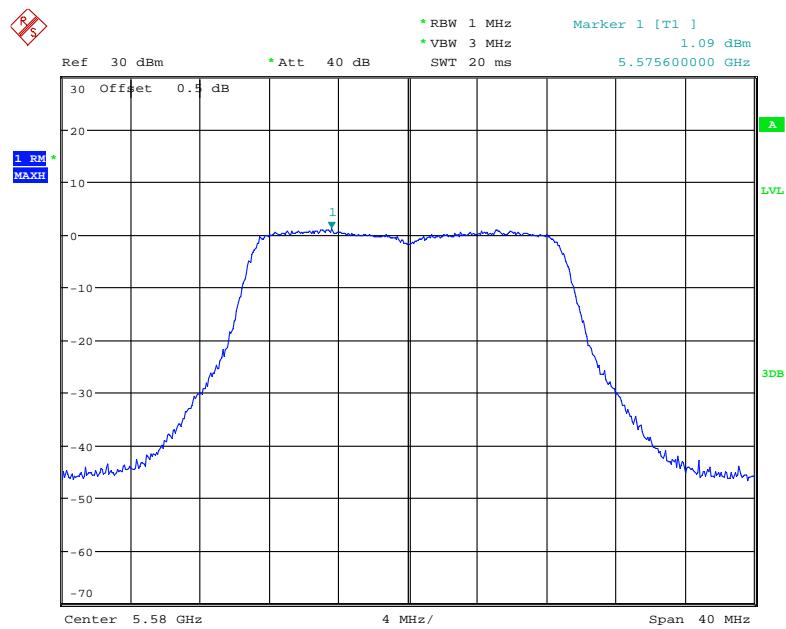
Date: 9.DEC.2017 16:23:36

Main Chain: Power Spectral Density, 802.11n ht40 High Channel

Date: 9.DEC.2017 16:31:50

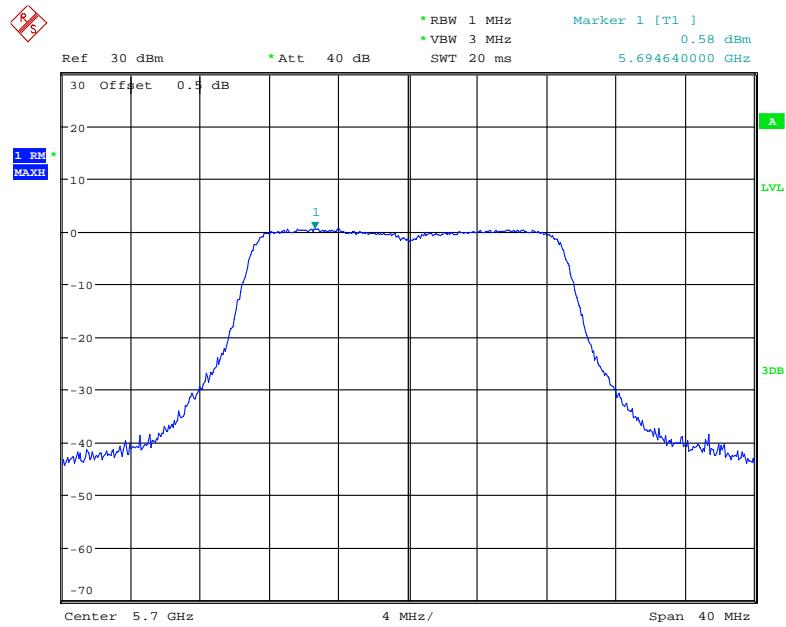
Main Chain: Power Spectral Density, 802.11n ac20 Low Channel

Date: 9.DEC.2017 13:58:59

Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel

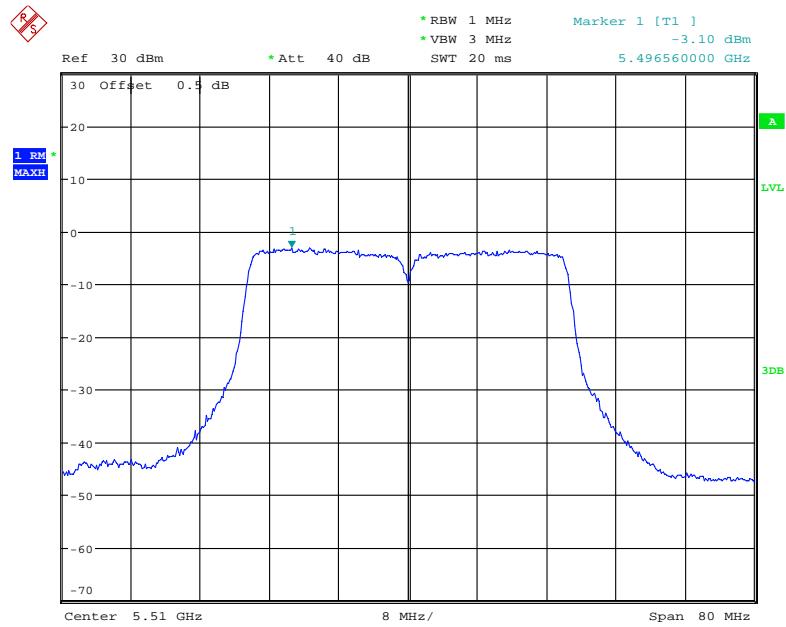
Date: 9.DEC.2017 13:57:42

Main Chain: Power Spectral Density, 802.11n ac20 High Channel



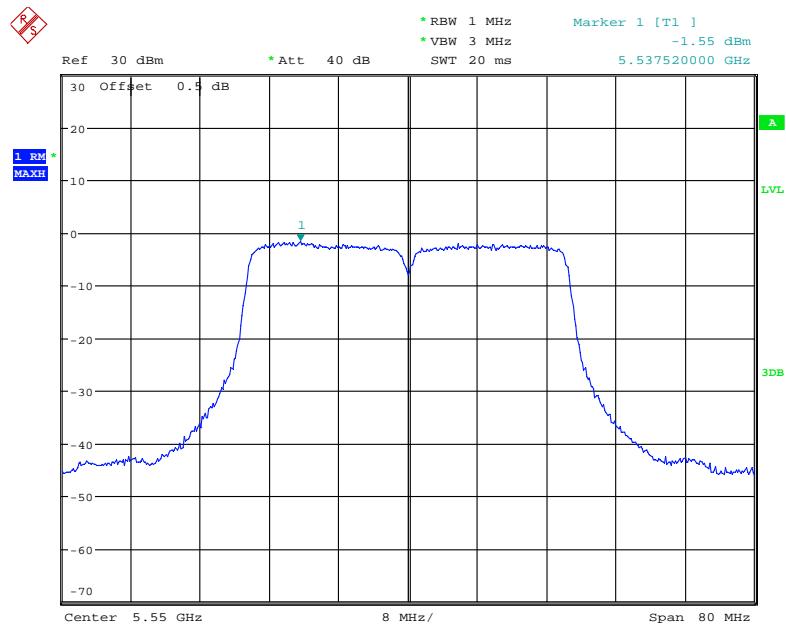
Date: 9.DEC.2017 13:55:35

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



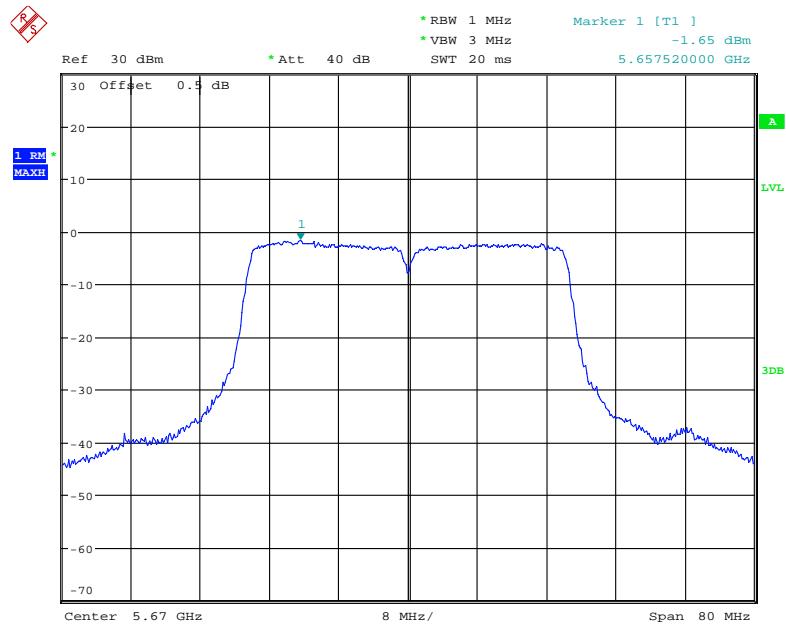
Date: 9.DEC.2017 16:46:26

Main Chain: Power Spectral Density, 802.11n ac40 Middle Channel

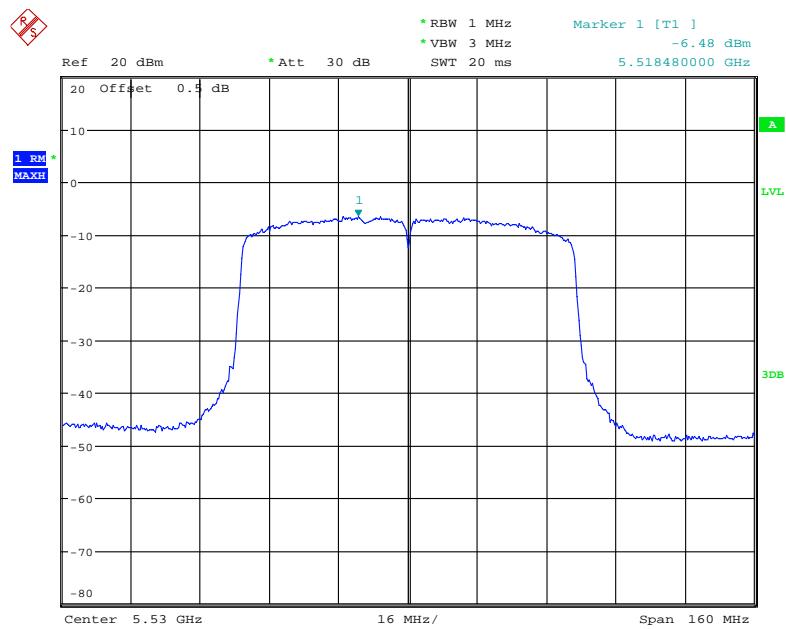


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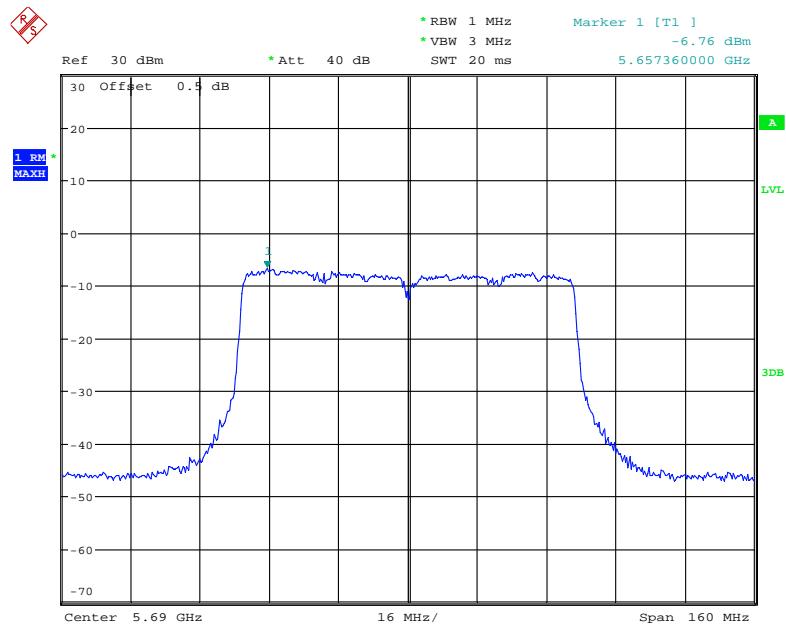
Main Chain: Power Spectral Density, 802.11n ac40 High Channel



Date: 9.DEC.2017 16:28:47

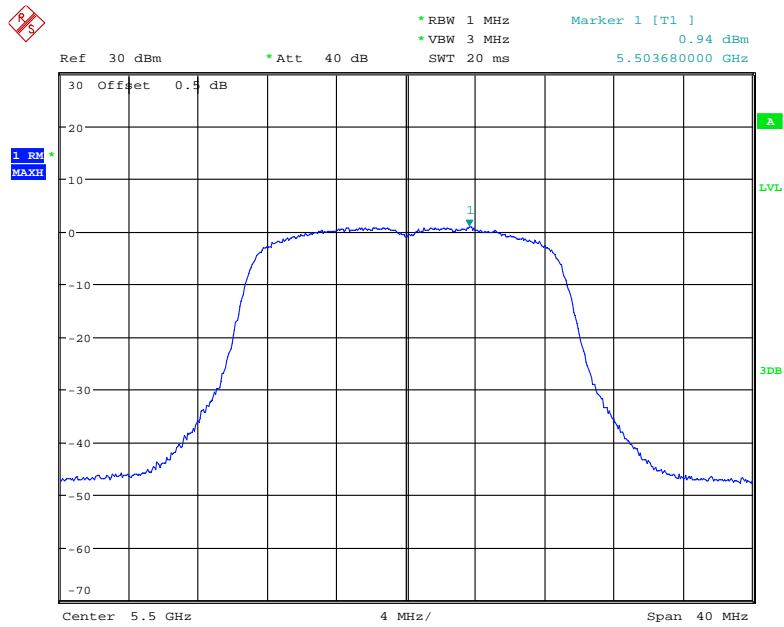
Main Chain: Power Spectral Density, 802.11n ac80 Low Channel

Date: 11.DEC.2017 10:15:08

Main Chain: Power Spectral Density, 802.11n ac80 High Channel

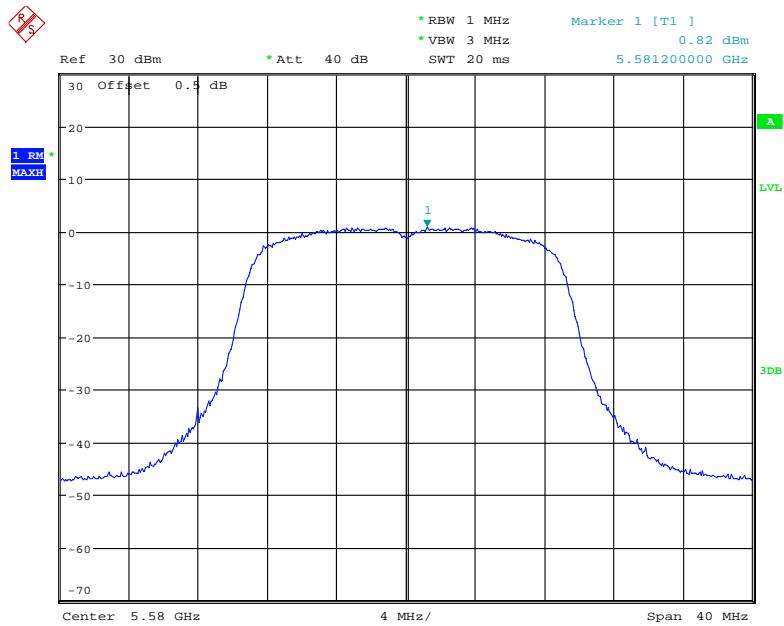
Date: 9.DEC.2017 17:19:12

AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



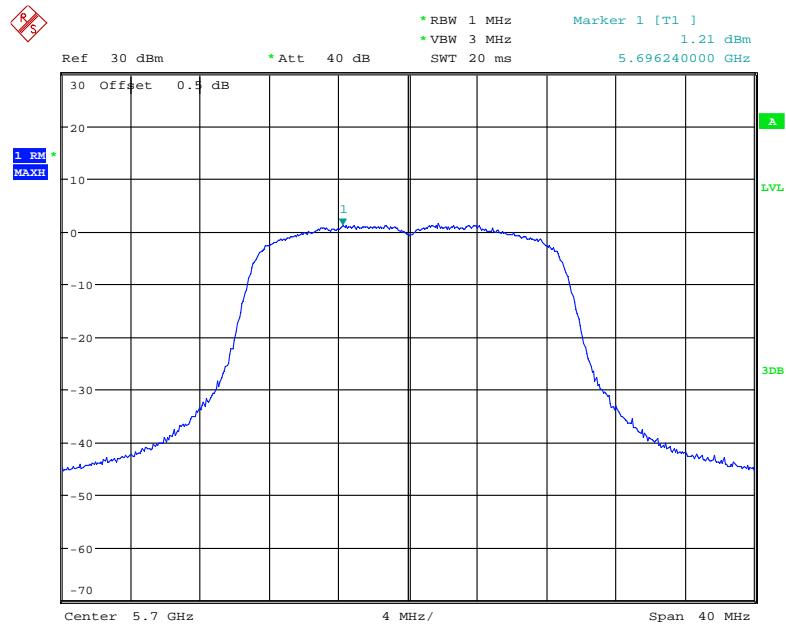
Date: 9.DEC.2017 15:29:34

AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel



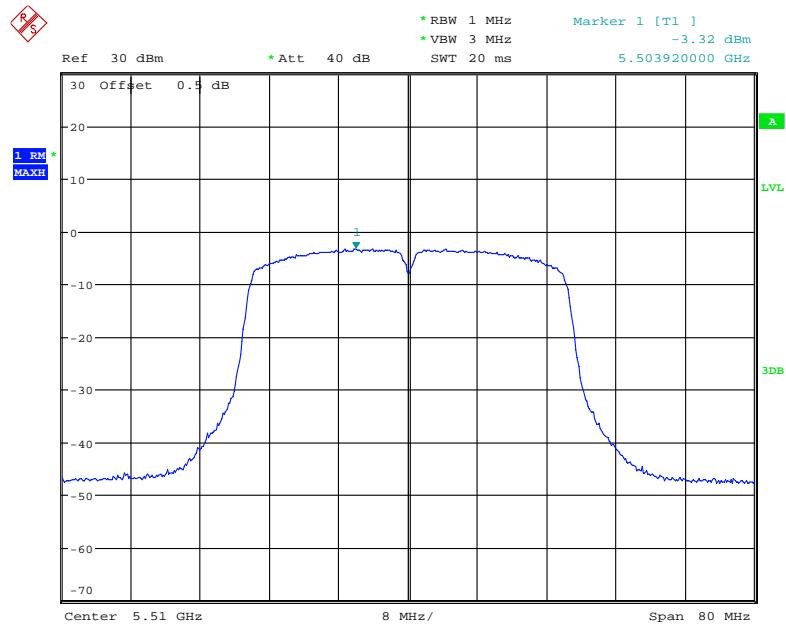
Date: 9.DEC.2017 14:44:11

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

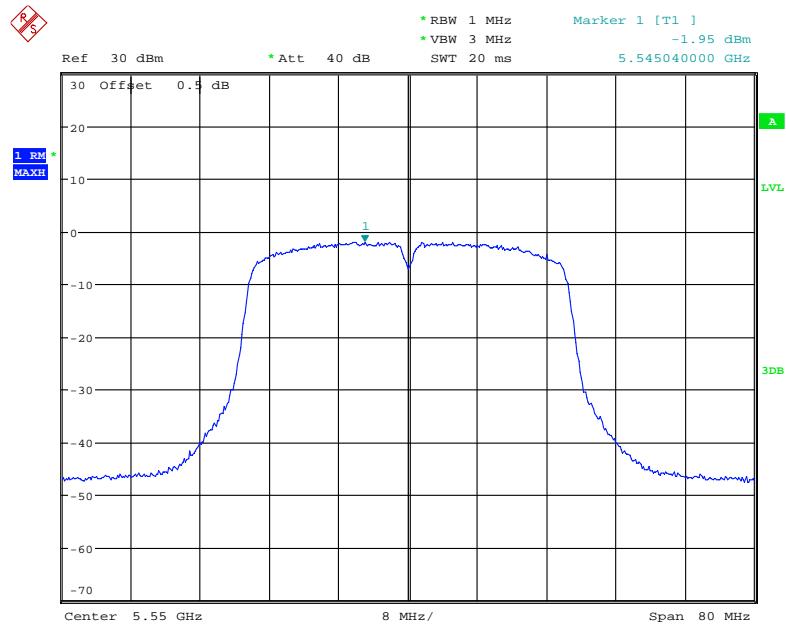


Date: 9.DEC.2017 14:45:11

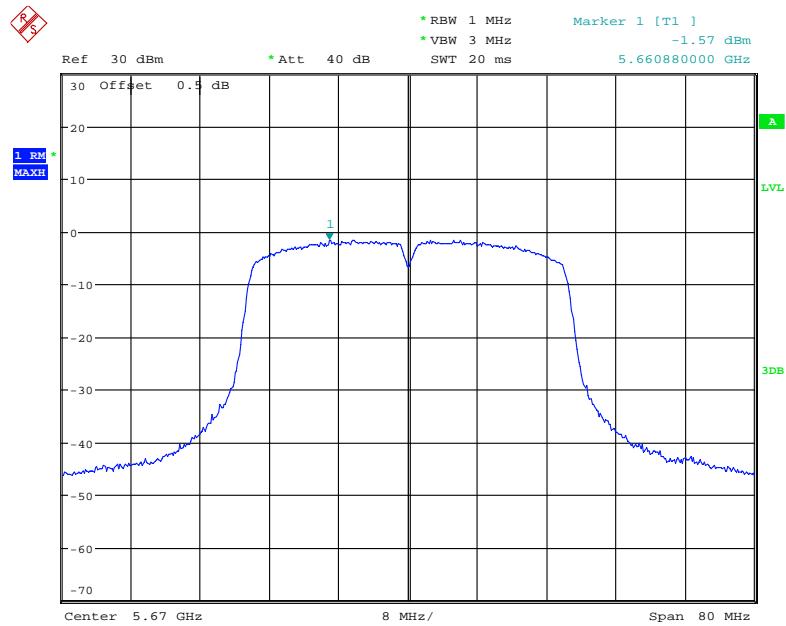
AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel



Date: 9.DEC.2017 16:49:53

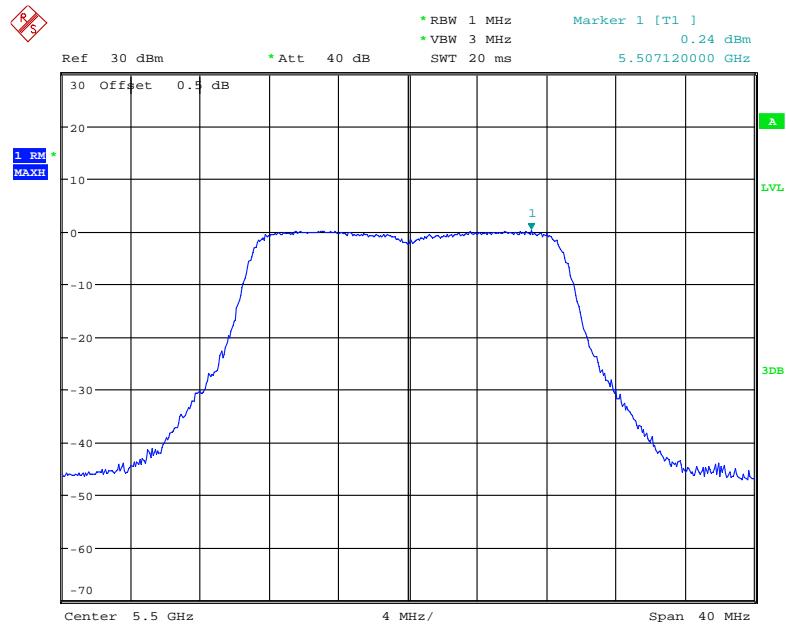
AUX Chain: Power Spectral Density, 802.11n ht40 Middle Channel

Date: 9.DEC.2017 16:37:37

AUX Chain: Power Spectral Density, 802.11n ht40 High Channel

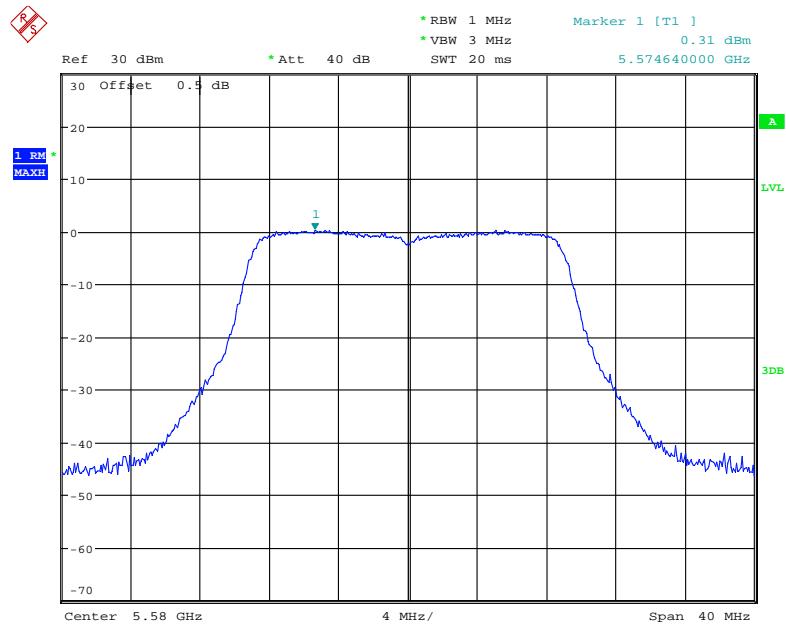
Date: 9.DEC.2017 16:35:10

AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel



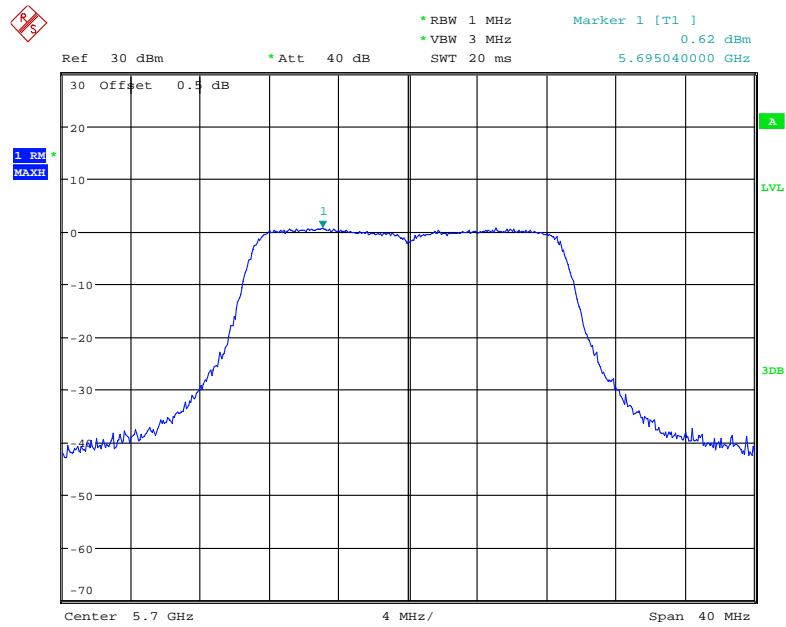
Date: 9.DEC.2017 14:33:43

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel



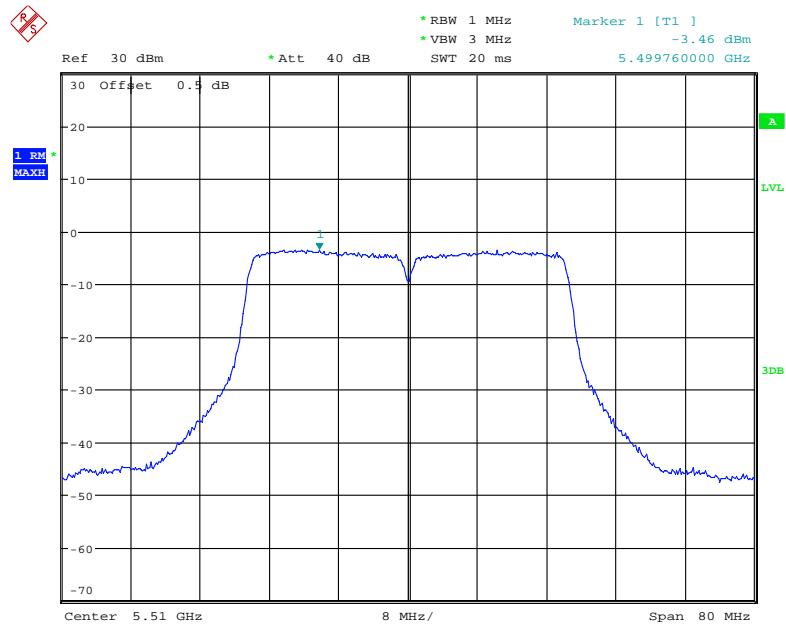
Date: 9.DEC.2017 14:35:13

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel



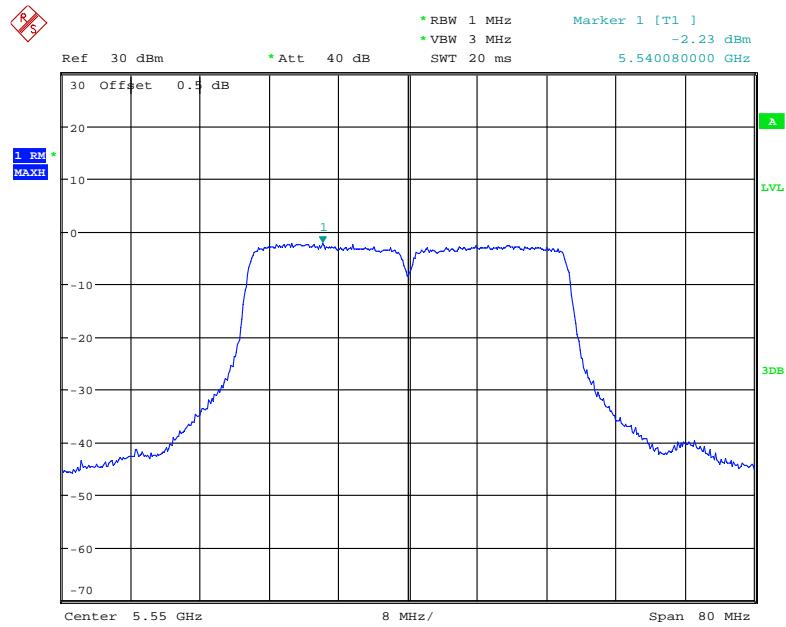
Date: 9.DEC.2017 14:36:51

AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



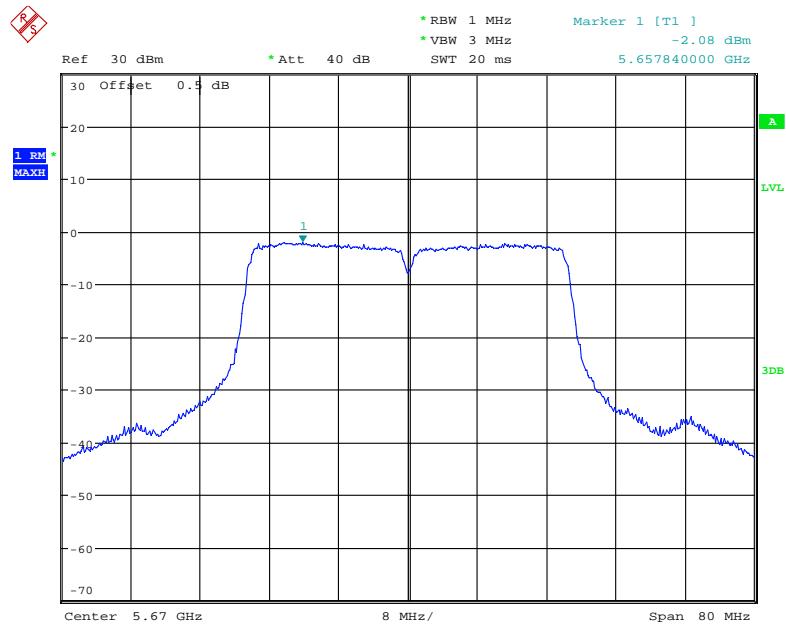
Date: 9.DEC.2017 16:43:54

AUX Chain: Power Spectral Density, 802.11n ac40 Middle Channel



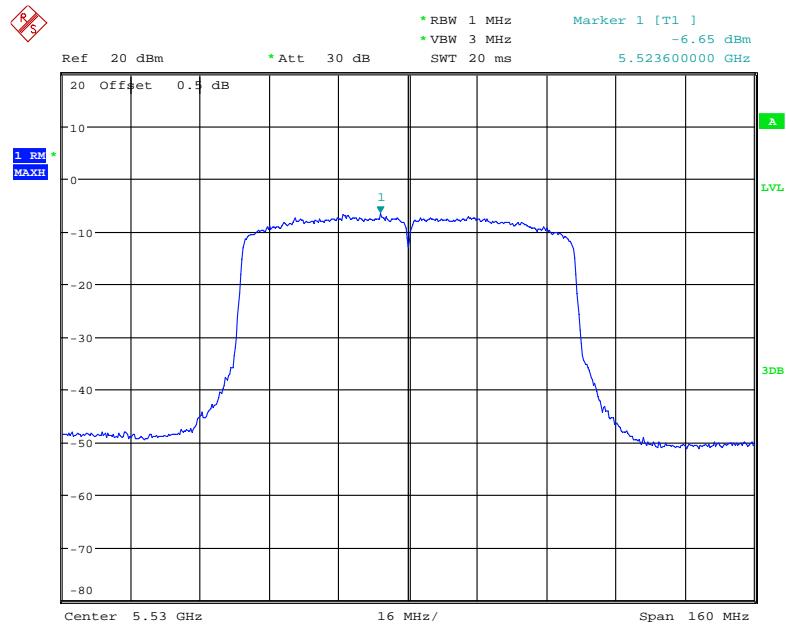
Date: 9.DEC.2017 16:38:56

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel



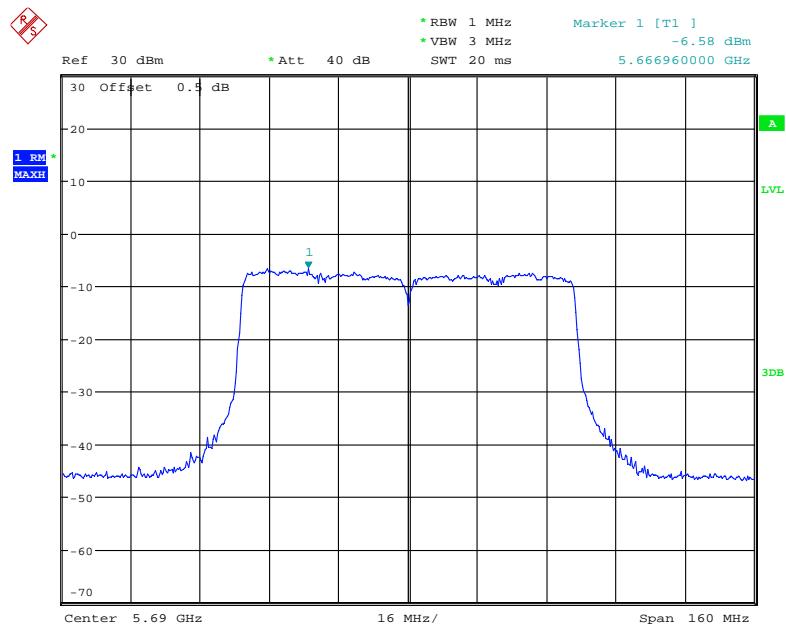
Date: 9.DEC.2017 16:40:06

AUX Chain: Power Spectral Density, 802.11n ac80 Low Channel



Date: 11.DEC.2017 10:11:27

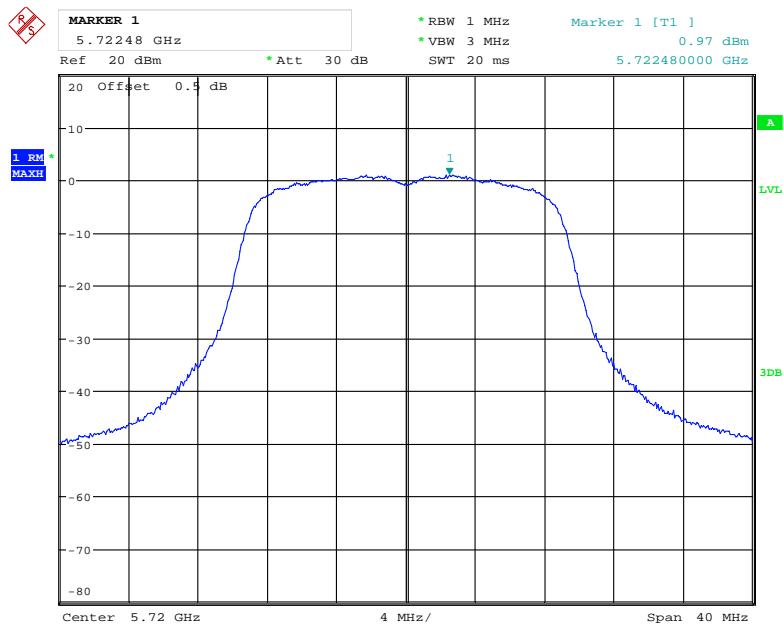
AUX Chain: Power Spectral Density, 802.11n ac80 High Channel



Date: 9.DEC.2017 17:15:36

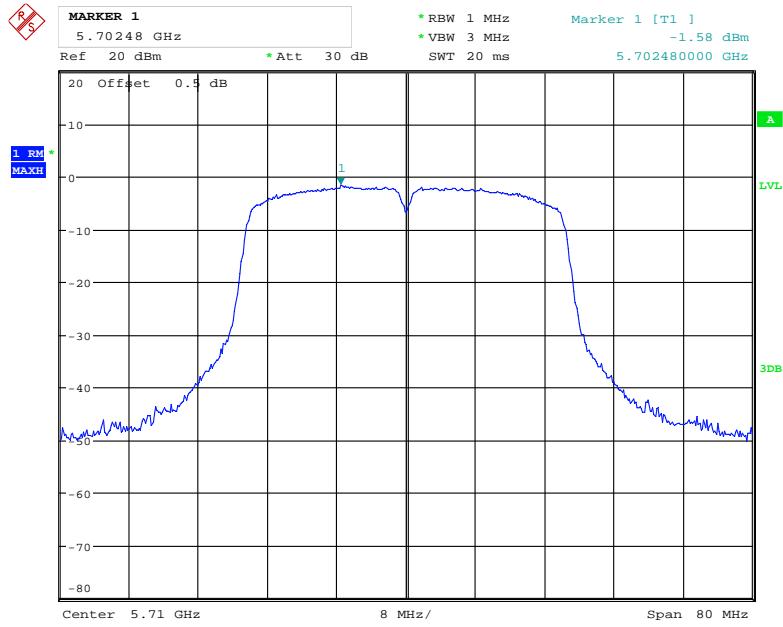
Cross Band:

Main Chain: Power Spectral Density, 802.11n ht20 - 5720 MHz



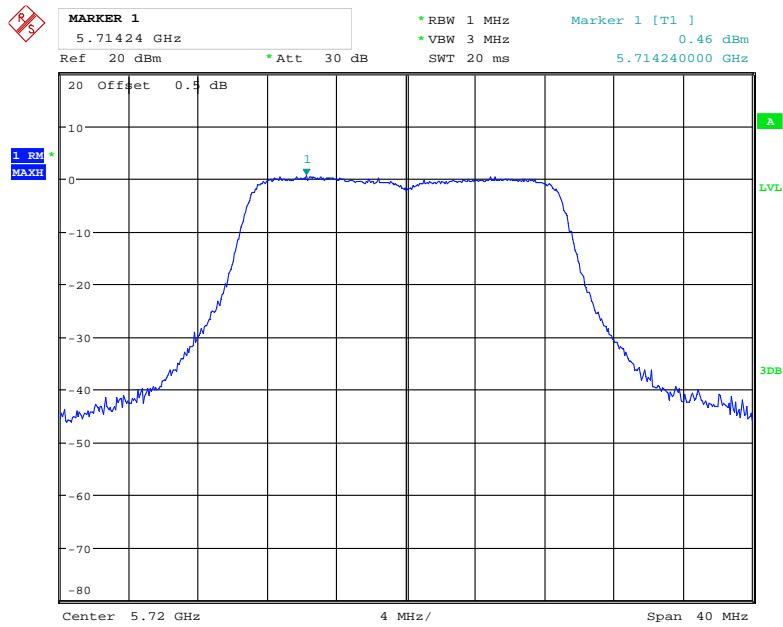
Date: 11.DEC.2017 08:31:44

Main Chain: Power Spectral Density, 802.11n ht40 - 5710 MHz



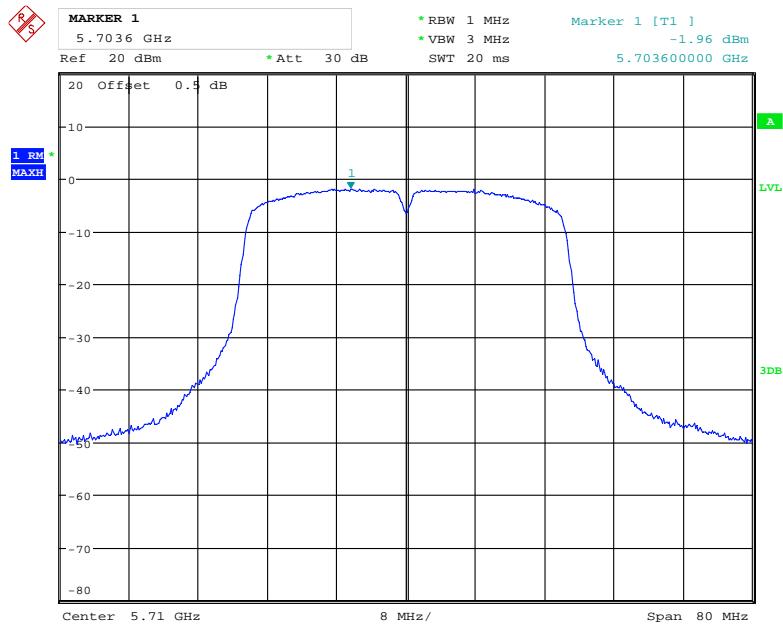
Date: 11.DEC.2017 08:33:45

Main Chain: Power Spectral Density, 802.11n ac20 - 5720 MHz



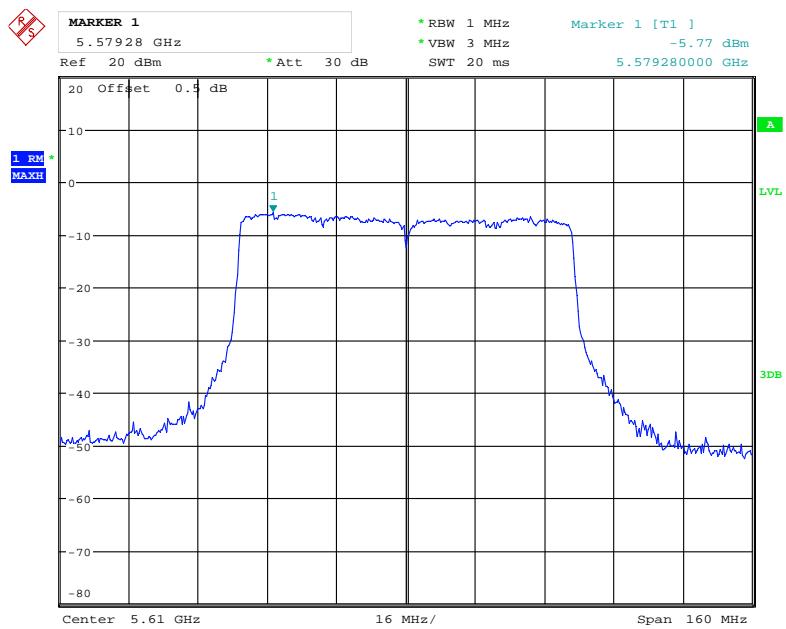
Date: 11.DEC.2017 08:33:03

Main Chain: Power Spectral Density, 802.11n ac40 - 5710 MHz



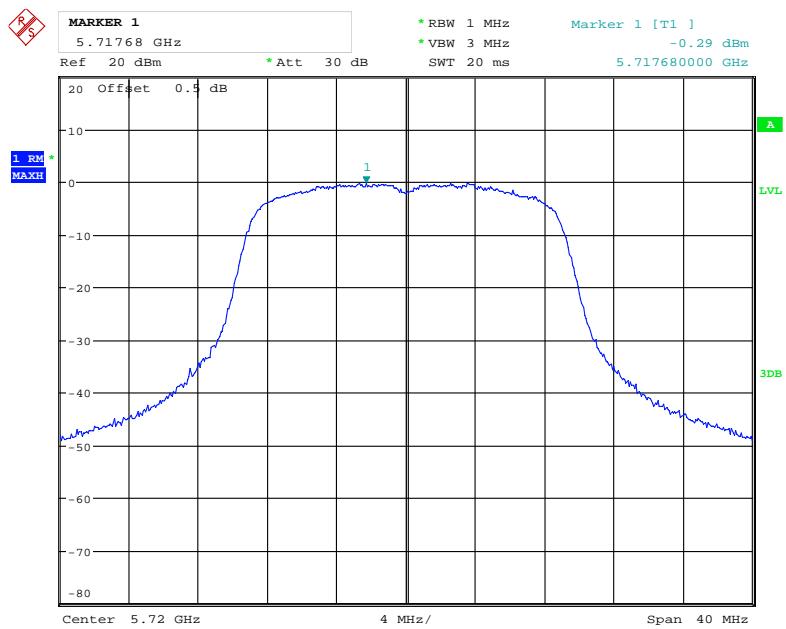
Date: 11.DEC.2017 08:34:12

Main Chain: Power Spectral Density, 802.11n ac80 - 5610 MHz

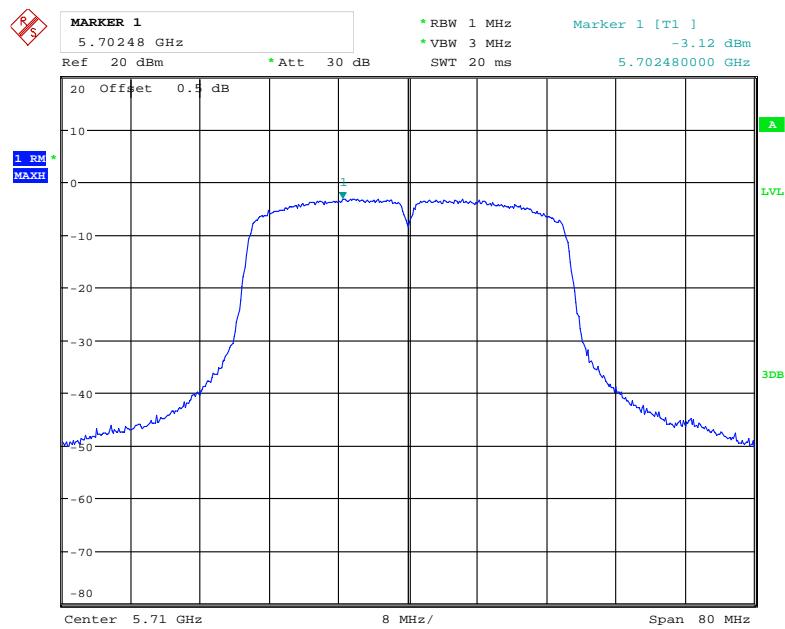


Date: 11.DEC.2017 08:35:09

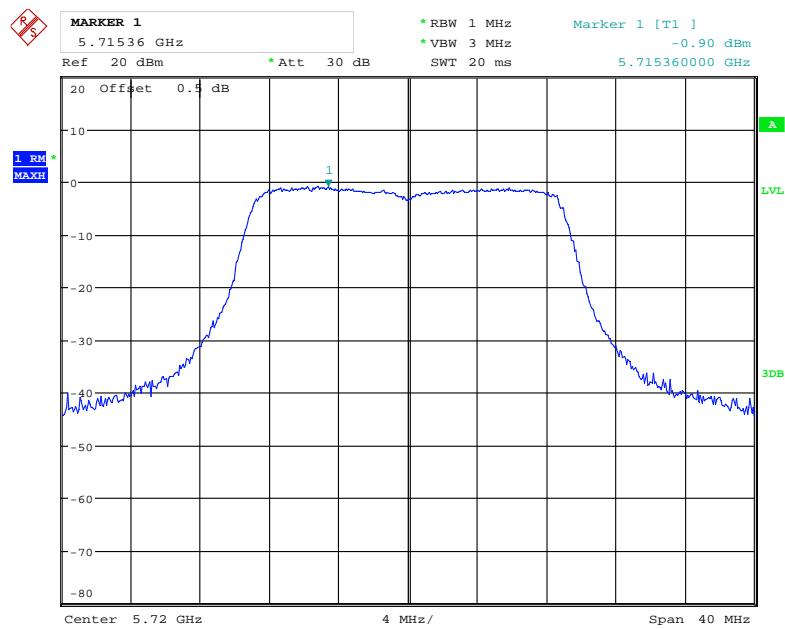
AUX Chain: Power Spectral Density, 802.11n ht20 - 5720 MHz



Date: 11.DEC.2017 09:02:39

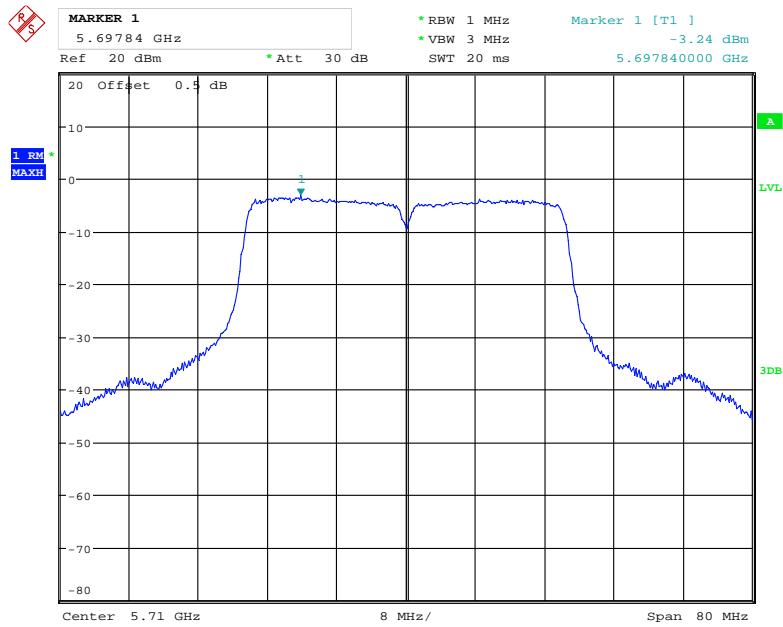
AUX Chain: Power Spectral Density, 802.11n ht40 - 5710 MHz

Date: 11.DEC.2017 09:03:35

AUX Chain: Power Spectral Density, 802.11n ac20 - 5720 MHz

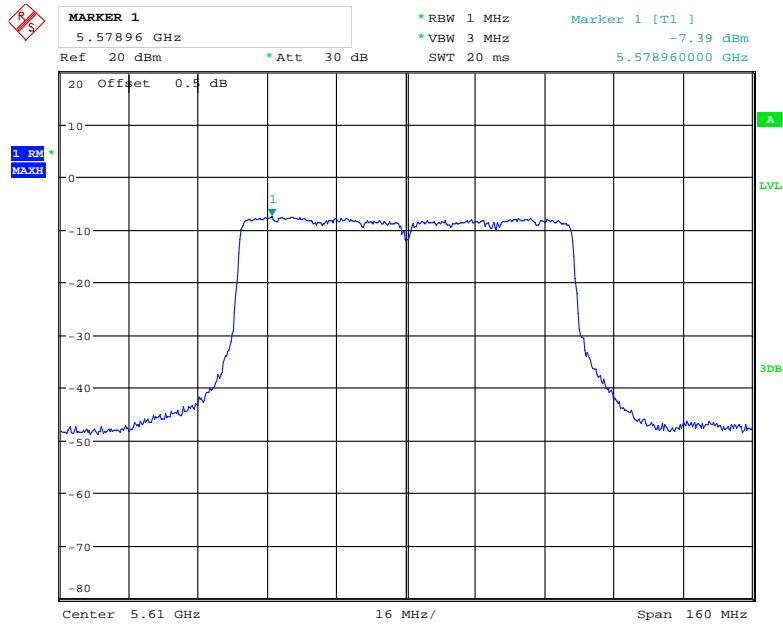
Date: 11.DEC.2017 09:03:05

AUX Chain: Power Spectral Density, 802.11n ac40 - 5710 MHz



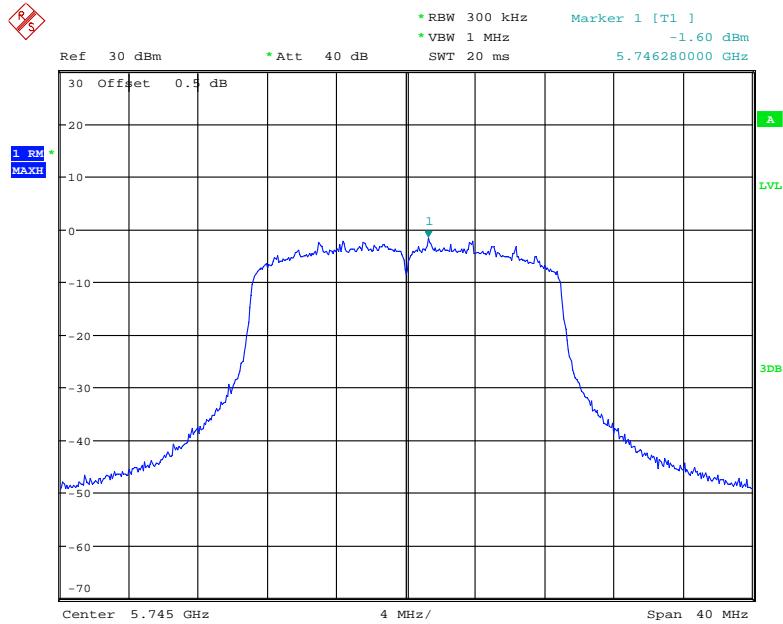
Date: 11.DEC.2017 09:04:01

AUX Chain: Power Spectral Density, 802.11n ac80 - 5610 MHz

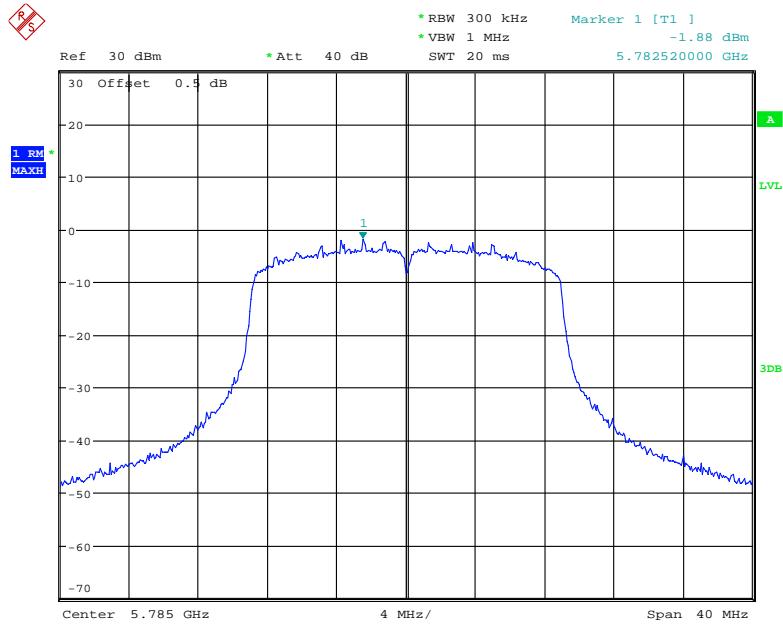


Date: 11.DEC.2017 09:04:39

5725-5850MHz:

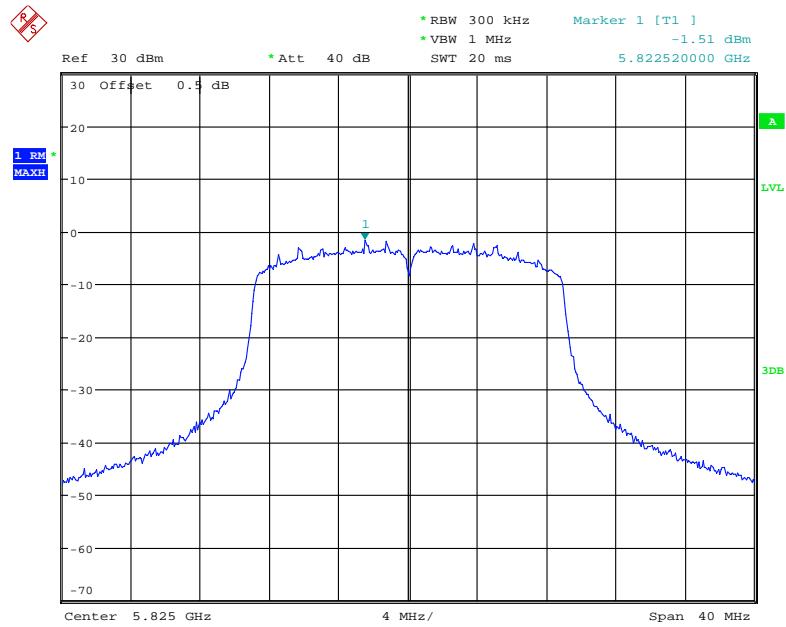
Main Chain: Power Spectral Density, 802.11n ht20 Low Channel

Date: 9.DEC.2017 14:17:52

Main Chain: Power Spectral Density, 802.11n ht20 Middle Channel

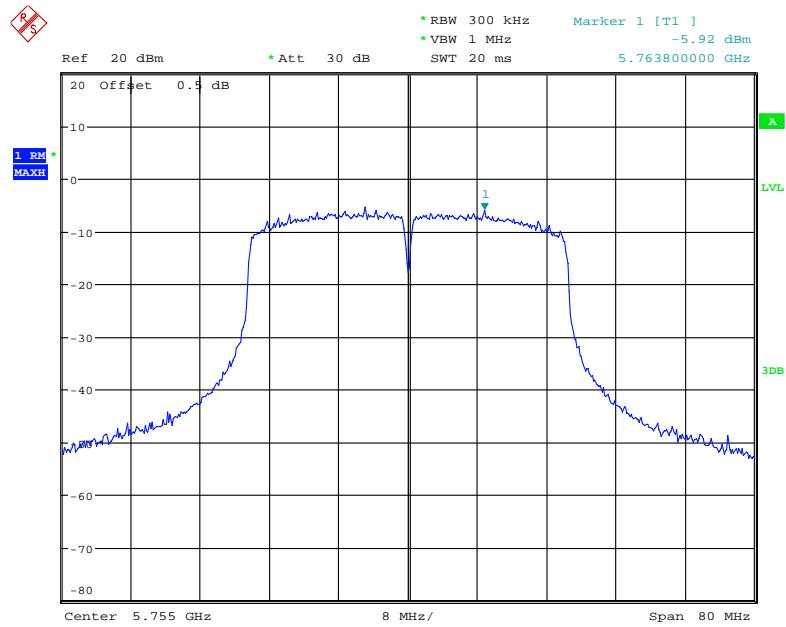
Date: 9.DEC.2017 14:19:40

Main Chain: Power Spectral Density, 802.11n ht20 High Channel



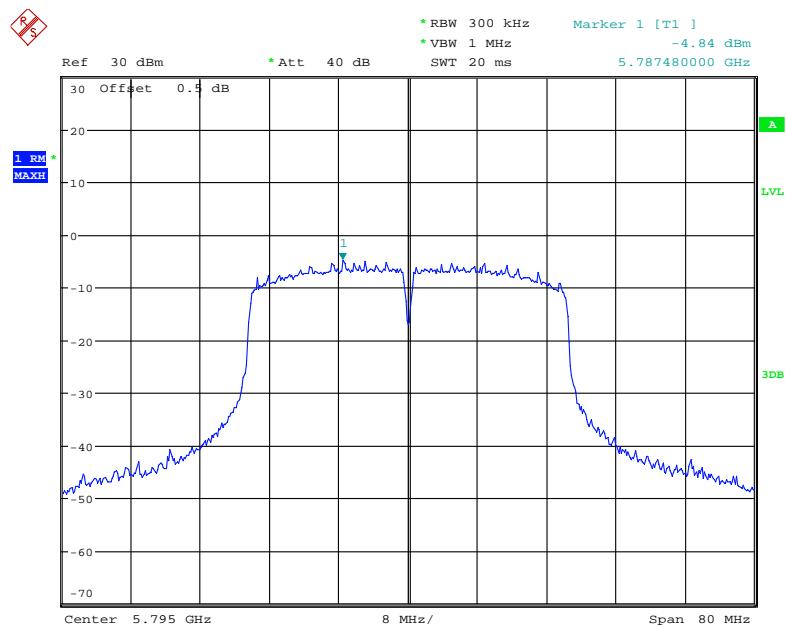
Date: 9.DEC.2017 14:21:00

Main Chain: Power Spectral Density, 802.11n ht40 Low Channel



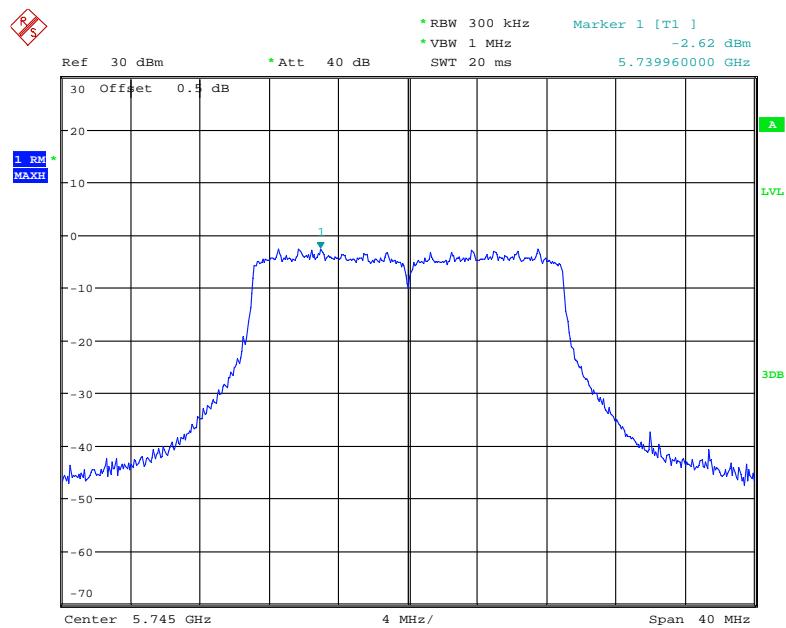
Date: 11.DEC.2017 13:17:29

Main Chain: Power Spectral Density, 802.11n ht40 High Channel

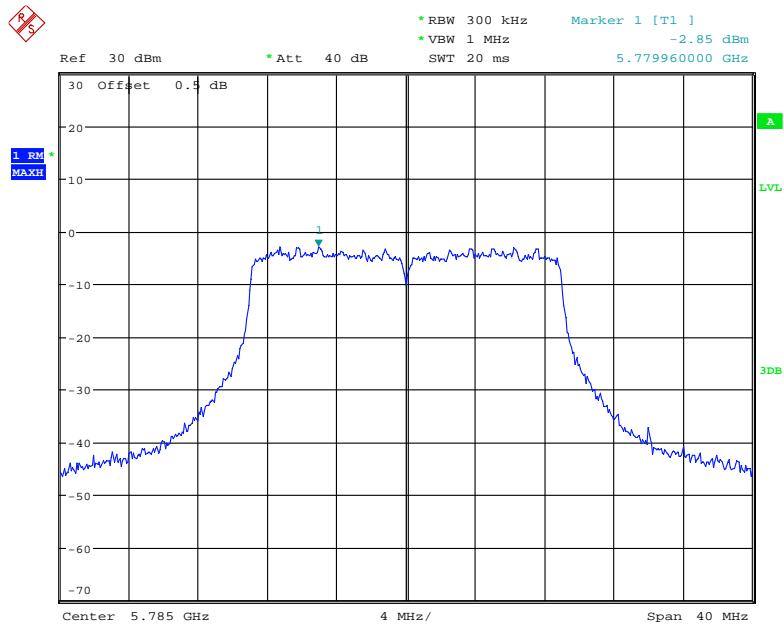


Date: 9.DEC.2017 17:21:40

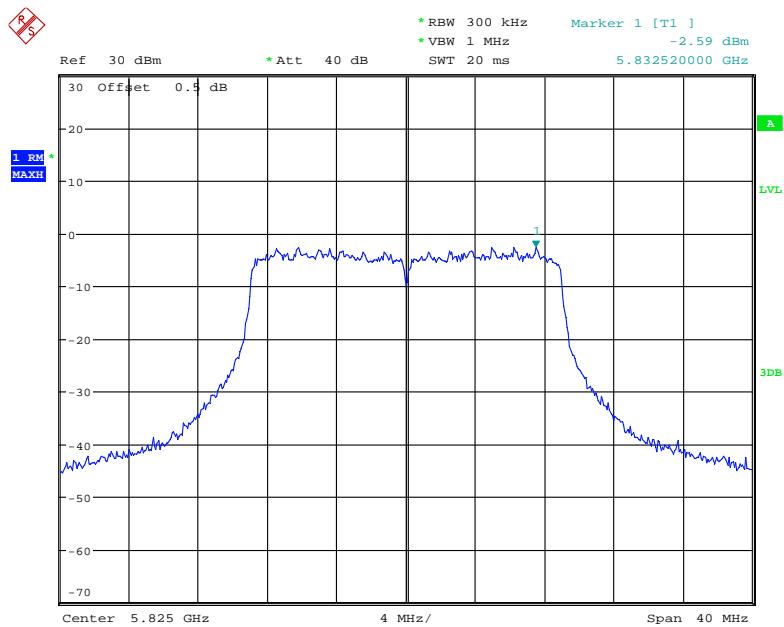
Main Chain: Power Spectral Density, 802.11n ac20 Low Channel



Date: 9.DEC.2017 14:01:54

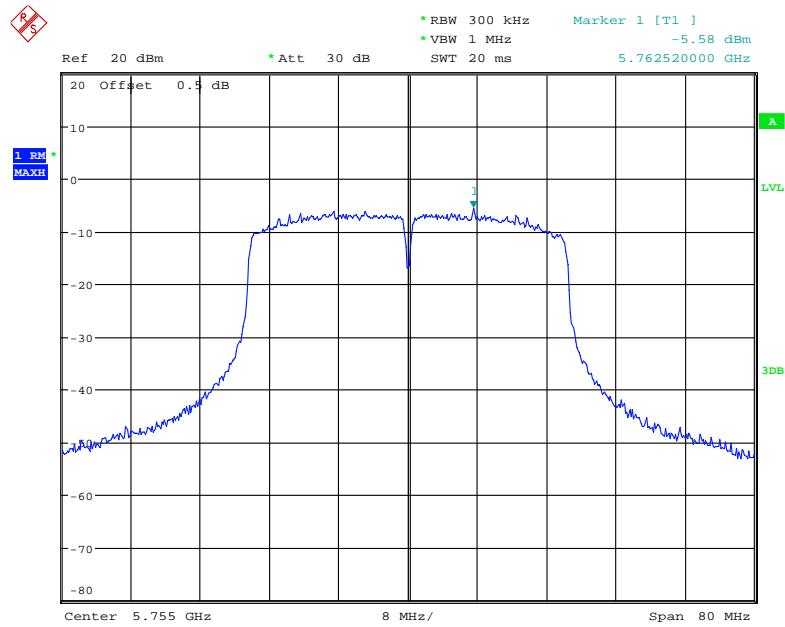
Main Chain: Power Spectral Density, 802.11n ac20 Middle Channel

Date: 9.DEC.2017 14:03:46

Main Chain: Power Spectral Density, 802.11n ac20 High Channel

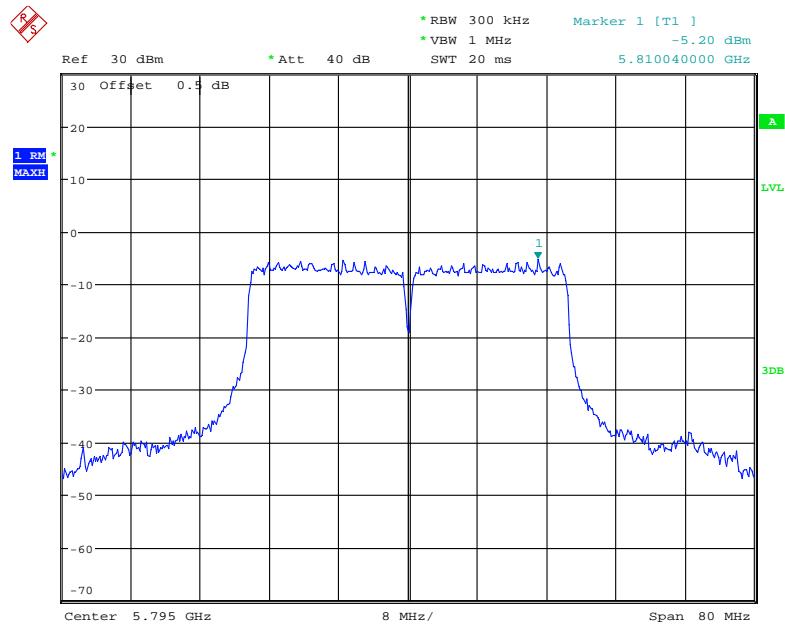
Date: 9.DEC.2017 14:07:13

Main Chain: Power Spectral Density, 802.11n ac40 Low Channel



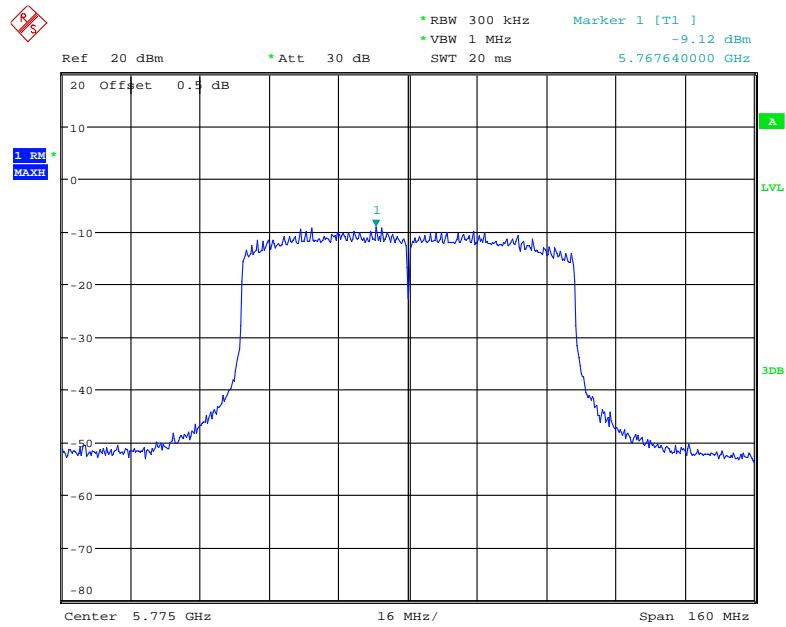
Date: 11.DEC.2017 13:18:33

Main Chain: Power Spectral Density, 802.11n ac40 High Channel



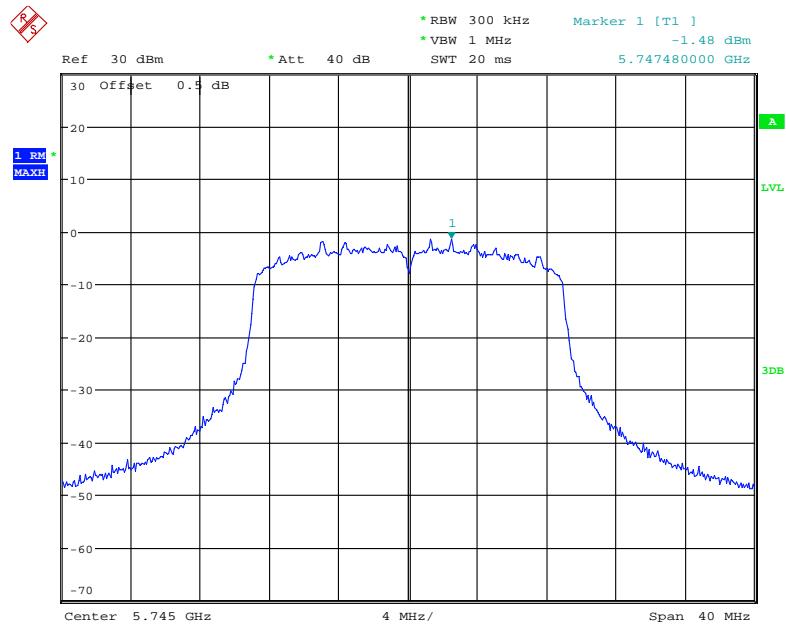
Date: 9.DEC.2017 17:24:19

Main Chain: Power Spectral Density, 802.11n ac80 Middle Channel

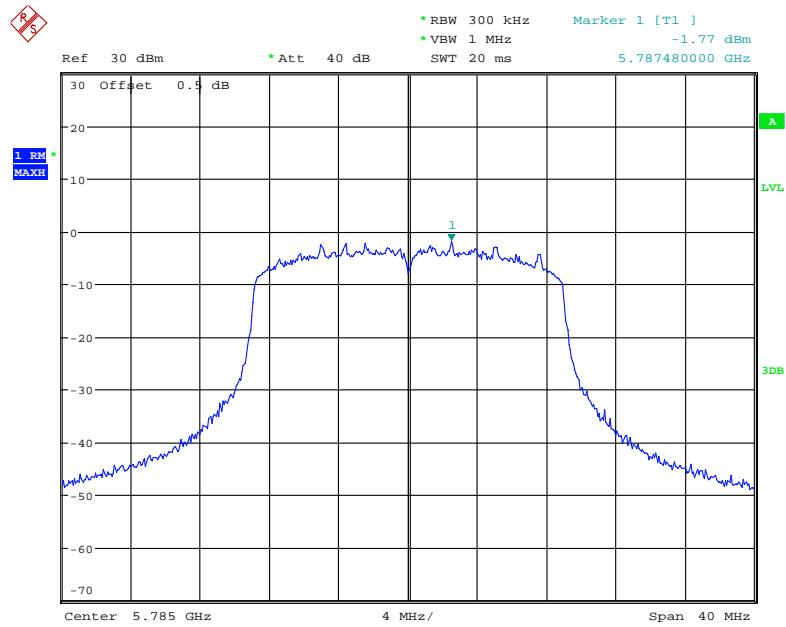


Date: 11.DEC.2017 10:14:02

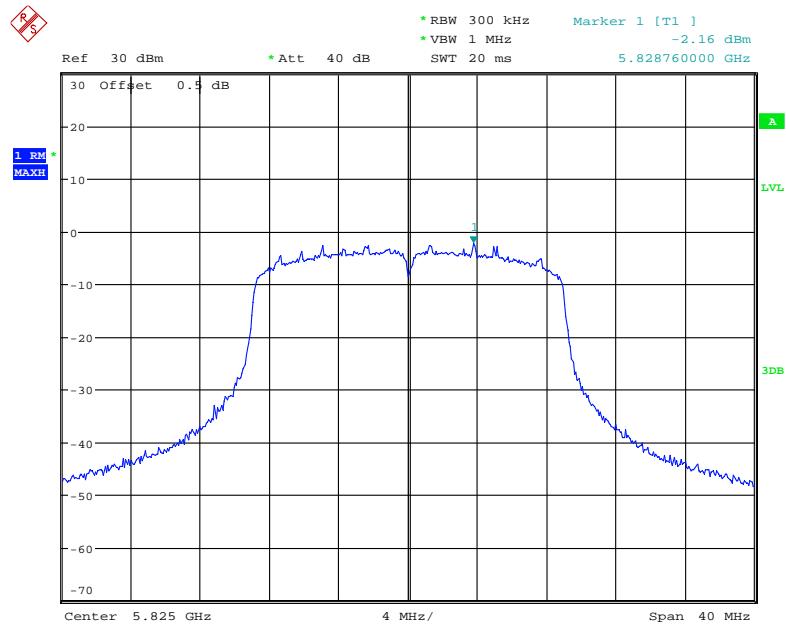
AUX Chain: Power Spectral Density, 802.11n ht20 Low Channel



Date: 9.DEC.2017 14:26:28

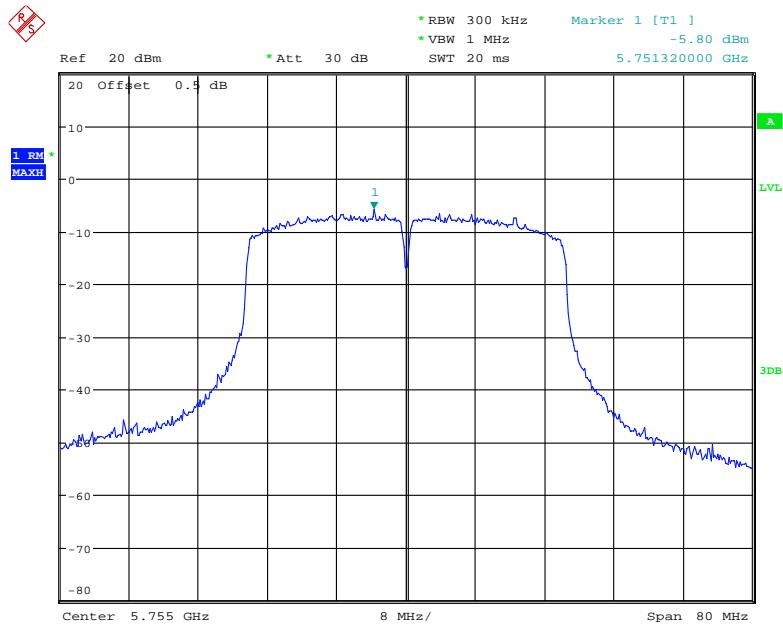
AUX Chain: Power Spectral Density, 802.11n ht20 Middle Channel

Date: 9.DEC.2017 14:24:57

AUX Chain: Power Spectral Density, 802.11n ht20 High Channel

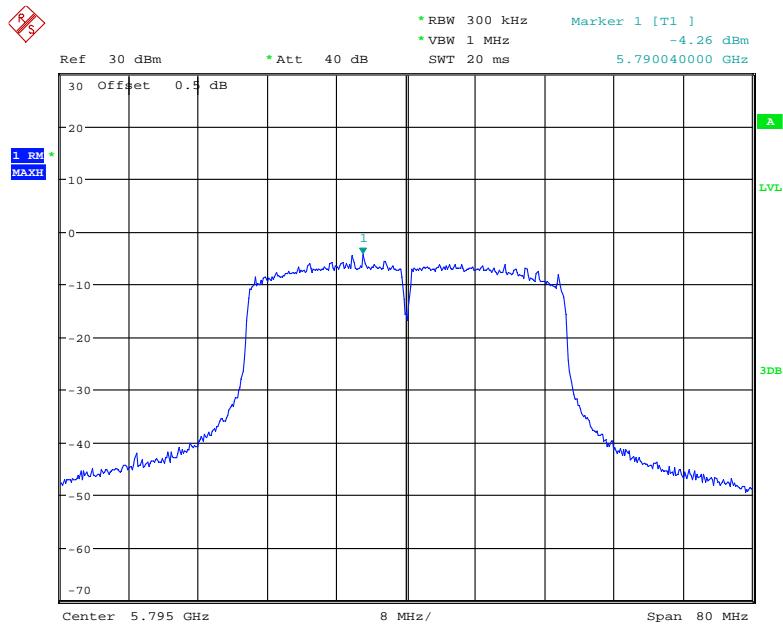
Date: 9.DEC.2017 14:23:01

AUX Chain: Power Spectral Density, 802.11n ht40 Low Channel



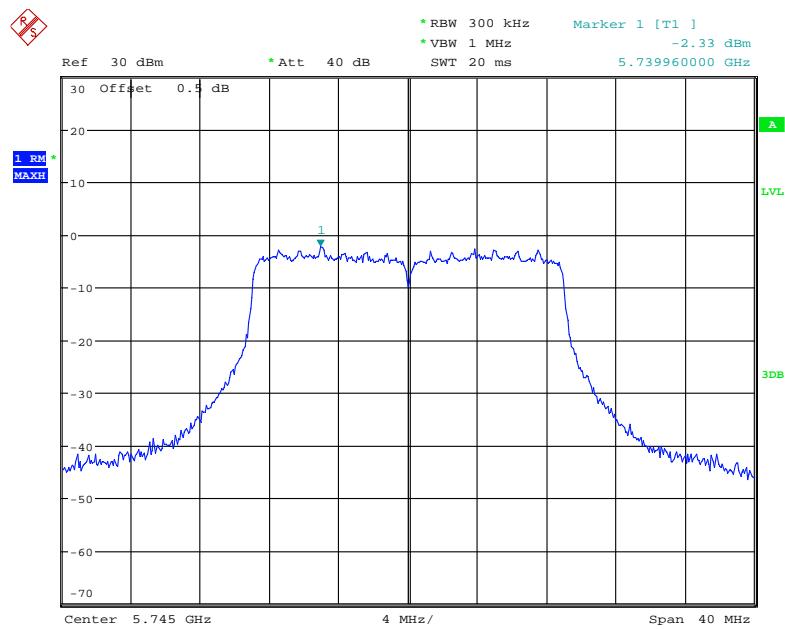
Date: 11.DEC.2017 13:16:25

AUX Chain: Power Spectral Density, 802.11n ht40 High Channel



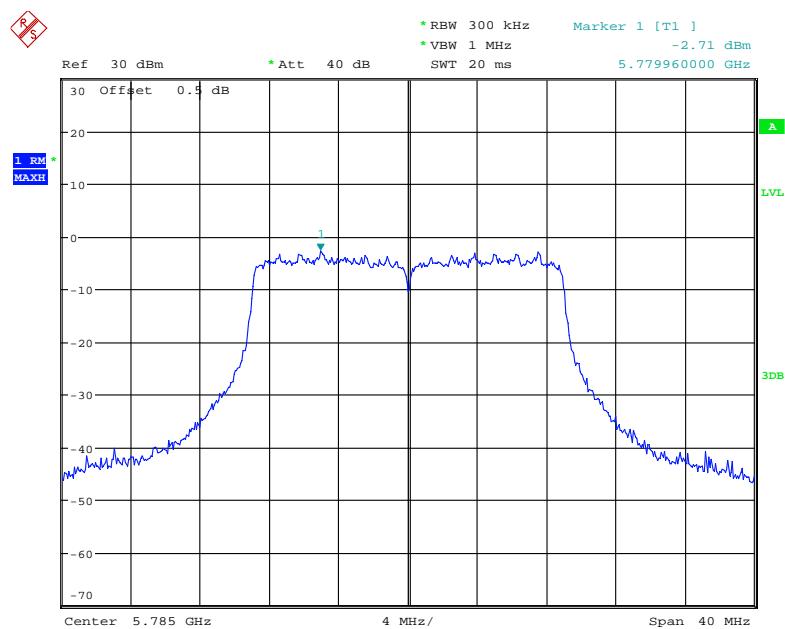
Date: 9.DEC.2017 17:28:34

AUX Chain: Power Spectral Density, 802.11n ac20 Low Channel



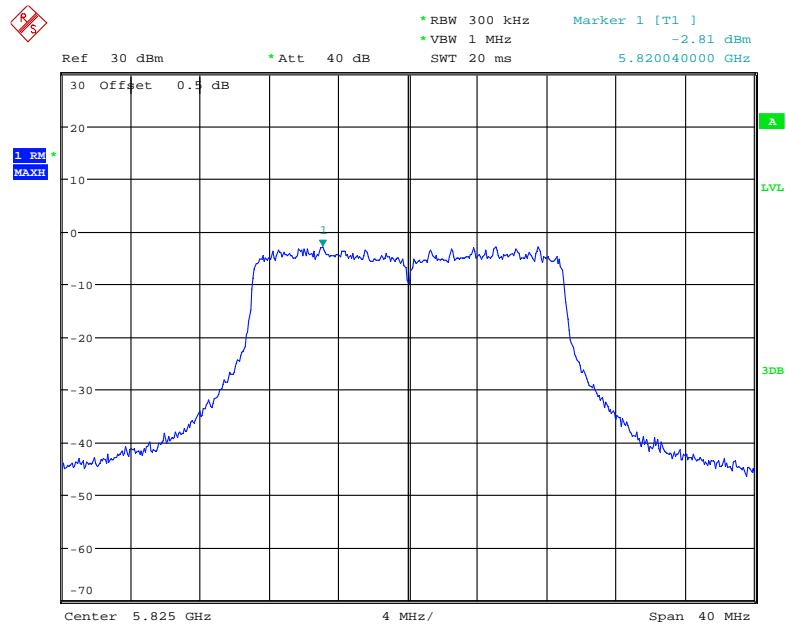
Date: 9.DEC.2017 14:28:28

AUX Chain: Power Spectral Density, 802.11n ac20 Middle Channel



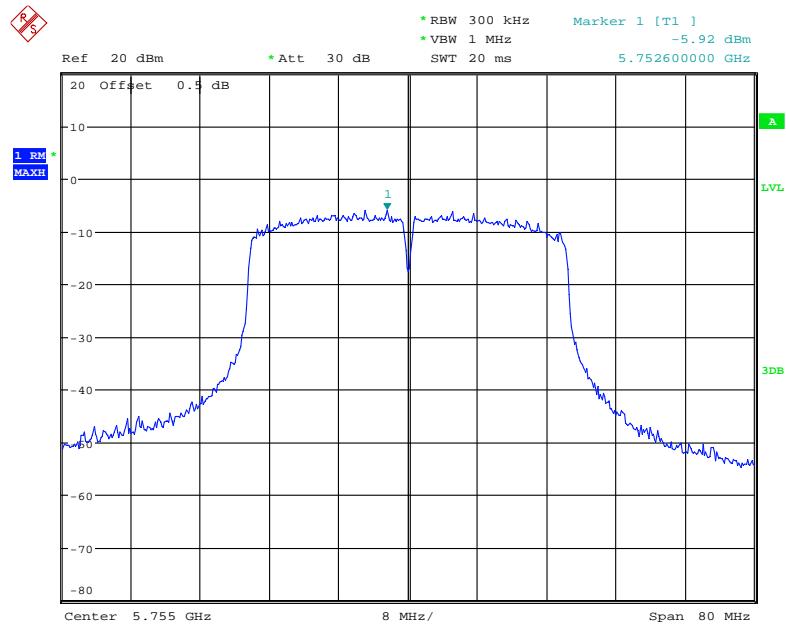
Date: 9.DEC.2017 14:30:12

AUX Chain: Power Spectral Density, 802.11n ac20 High Channel

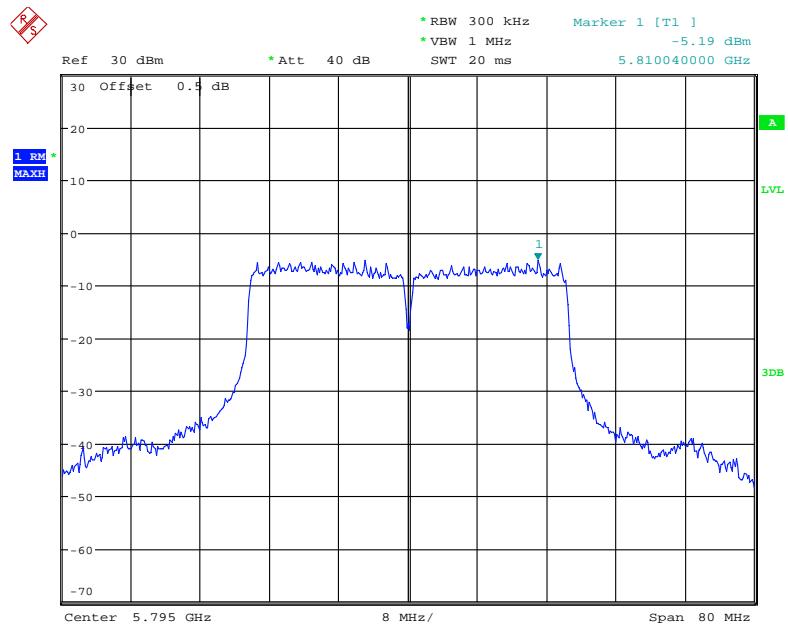


Date: 9.DEC.2017 14:31:37

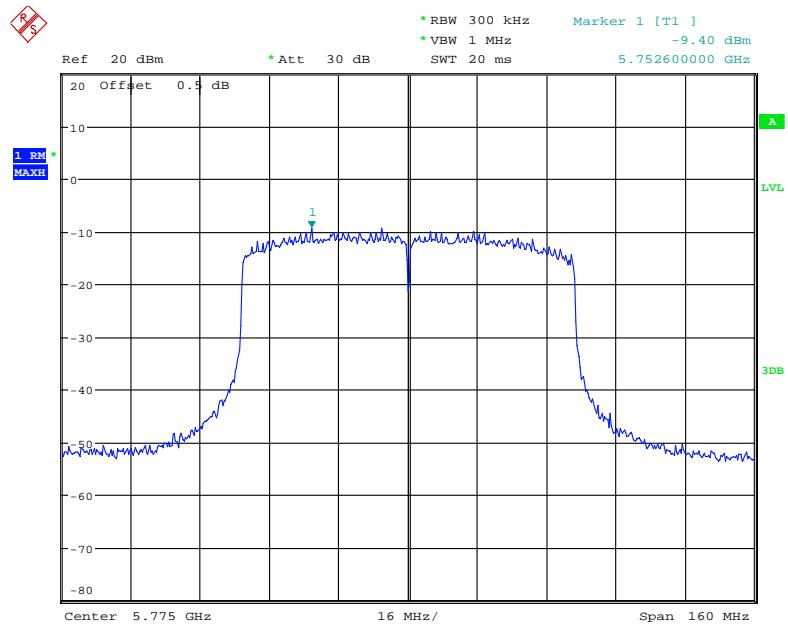
AUX Chain: Power Spectral Density, 802.11n ac40 Low Channel



Date: 11.DEC.2017 13:15:21

AUX Chain: Power Spectral Density, 802.11n ac40 High Channel

Date: 9.DEC.2017 17:26:33

AUX Chain: Power Spectral Density, 802.11n ac80 Middle Channel

Date: 11.DEC.2017 10:13:27

******* END OF REPORT *******