

Prüfbericht-Nr.: <i>Test report No.:</i>	50064781 004	Auftrags-Nr.: <i>Order No.:</i>	164075733	Seite 1 von 33 <i>Page 1 of 33</i>
Kunden-Referenz-Nr.: <i>Client reference No.:</i>	N/A	Auftragsdatum: <i>Order date.:</i>	11.10.2016	
Auftraggeber: <i>Client:</i>	ContextMedia Health LLC 330 N. Wabash Ave STE 2500, Chicago, Illinois United States.			
Prüfgegenstand: <i>Test item:</i>	Media Player			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	P-PLA-XXX-XXX-XX (The variable "X" can be 0 to 9, A to Z)			
Auftrags-Inhalt: <i>Order content:</i>	FCC and IC approval			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart E Section 15.407 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 RSS-247 Issue 1 May 2015 RSS-Gen Issue 4 November 2014			
Wareneingangsdatum: <i>Date of receipt:</i>	20.10.2016	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000436925-002			
	A000436925-003			
Prüfzeitraum: <i>Testing period:</i>	08.11.2016 - 08.12.2016			
Ort der Prüfung: <i>Place of testing:</i>	Accurate Technology Co., Ltd. Shenzhen Academy of Metrology & Quality Inspection			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:	kontrolliert von / reviewed by:			
21.12.2016	Andy Yan / Project Manager	21.12.2016		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>
Unterschrift <i>Signature</i>				
Sonstiges / Other:				
FCC ID: 2AI6X-PPLAYIT IC: 21722-PPLAYIT HVIN: PPLAYIT01				
All the Identification no. are identical in the hardware and electronic aspects with each other for marketing strategy only.				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(all) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specifications(s) F(all) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzelchens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 PEAK OUTPUT POWER

RESULT: Pass

5.1.3 26dB BANDWIDTH

RESULT: Pass

5.1.4 99% BANDWIDTH

RESULT: Pass

5.1.5 6dB BANDWIDTH

RESULT: Pass

5.1.6 POWER SPECTRAL DENSITY

RESULT: Pass

5.1.7 SPURIOUS EMISSION

RESULT: Pass

5.1.8 CONDUCTED EMISSIONS

RESULT: Pass

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Wi-Fi 802.11a/n/ac of Conducted Testing

Appendix B: Test Results of Wi-Fi 802.11a/n/ac of AC Conducted and Radiated Emission

2. Test Sites

2.1 Test Facilities

Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

Shenzhen Academy of Metrology& Quality Inspection

No.4 Tongfa Rd, Xili, Shenzhen,Guangdong,China

FCC Registration Number is 806614

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Test (Accurate Technology Co., Ltd.)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	ESPI3	100396/003	09.01.2017
Spectrum Analyzer	R&S	FSV40	101495	09.01.2017
Temp.& Humid.Chamber	Gongwen	HSD-500	0109	09.01.2017
Spurious Emission (Accurate Technology Co., Ltd.)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Spectrum Analyzer	R&S	FSV40	101495	09.01.2017
Test Receiver	R&S	ESCS30	100307	09.01.2017
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	14.01.2017
Loop Antenna	Schwarzbeck	FMZB1516	1516131	14.01.2017
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	14.01.2017
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	14.01.2017
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	09.01.2017
Pre-Amplifier	R&S	CBLU11835 40-01	3791	09.01.2017
50 Coaxial Switch	Anritsu Corp	MP59B	6200506474	09.01.2017
RF Coaxial Cable	SUHNER	N-3m	No.8	09.01.2017
RF Coaxial Cable	RESENBERGER	N-3.5m	No.9	09.01.2017
RF Coaxial Cable	SUHNER	N-6m	No.10	09.01.2017
RF Coaxial Cable	RESENBERGER	N-12m	No.11	09.01.2017
50_ Coaxial Switch	Anritsu Corp	MP59B	6200283933	09.01.2017
Conducted Emission on AC Mains (Accurate Technology Co., Ltd.)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
Test Receiver	R&S	ESCS30	100307	09.01.2017
L.I.S.N.	R&S	NLSK8126	8126431	09.01.2017
50Ω Coaxial Switch	Anritsu	MP59B	6200283933	09.01.2017
Spurious Emissions (Shenzhen Academy of Metrology& Quality Inspection) (for 26.5 - 40GHz)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Receiver	Rohde & Schwarz	ESCI3	SB9058/05	2017-05-02
EMI Receiver	Rohde & Schwarz	ESU40	SB8501/09	2017-05-14
Horn Antenna	Rohde & Schwarz	3160-10	SB8501/12	2017-05-14

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Item	Extended Uncertainty
Conducted Emission	± 3.0 dB
Radiated Emission (9kHz-30MHz)	U=3.08dB, k=2, σ=95%
Radiated Emission (30-1000MHz)	U=4.42dB, k=2, σ=95%
Radiated Emission (above 1000MHz)	U=4.06dB, k=2, σ=95%
Occupied Channel Bandwidth	±5.0 %
RF Output Power, Conducted	±1.5 dB
Power Spectral Density, Conducted	±3.0 dB
Unwanted Emission, Conducted	±3.0 dB
Radio Frequency	±1x10^-5
Duty Cycle	±5.0 %

2.6 Location of Original Data

The original copies of all test data taken during actual testing were retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Accurate Technology Co., Ltd. Test facility located at F1, Bldg. A, Changyuan New Material Port Keyuan Rd., Science & Industry Park, Nanshan Shenzhen, 518057, P.R. China and Shenzhen Academy of Metrology& Quality Inspection Test facility located at No.4 Tongfa Rd, Xili, Shenzhen, Guangdong, China are listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Media Player which supports Bluetooth (dual mode) and Wi-Fi 802.11 a/b/g/n/ac wireless technology. This NII report is only for 5GHz band 802.11a/n/ac technology. Other functions with different technologies are reported in the related reports.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment	Media Player
Type Designation	P-PLA-XXX-XXX-XX
Trade Mark	ContextMedia Health
FCC ID	2AI6X-PPLAYIT
IC / HVIN	21722-PPLAYIT/ PPLAYIT01
Equipment Type	Client Device (Indoor)
Operating Frequency band	5150-5250MHz; 5725-5850MHz
Extreme Temperature Range	-10 °C ~ +50 °C
Operating Voltage	DC 5.0 V from AC/DC Adapter
Testing Voltage	DC 5.0 V from AC/DC Adapter with input 120V/60Hz
Antenna Type	Detachable Antenna with reversed SMA connector
Antenna Gain	2.0dBi

Table 4: Technical Specification of 5GHz, 802.11a/n

Operating mode(s) / WiFi:	IEEE 802.11a	IEEE 802.11n HT20	IEEE 802.11n HT40
Test modulation	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Data Rate (Mbps) used for testing	6, 9, 12, 18, 24, 36, 48, 54	MCS0 ~ MCS7	MCS0 ~ MCS7
Maximum Conducted tune-up output power (dBm):	15.5	15.0	15.0
Reported Max. Power data rate(Mbps)	6	MCS0	MCS0

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Table 5: Technical Specification of 5GHz, 802.11ac

Operating mode(s) / WiFi:	IEEE 802.11ac VHT20	IEEE 802.11ac VHT40	IEEE 802.11ac VHT80
Test modulation	OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
Data Rate (Mbps) used for testing	MCS0 ~ MCS9	MCS0 ~ MCS9	MCS0 ~ MCS9
Maximum conducted tune-up output power (dBm):	15.0	15.0	15.0
Reported Max. Power data rate(Mbps)	MCS0	MCS0	MCS0

Table 6: List of WLAN Channel of 5GHz 802.11a/n

802.11a		802.11n HT20		802.11n HT40	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	36	5180	38	5190
40	5220	40	5220	46	5230
44	5220	44	5220	151	5755
48	5240	48	5240	159	5795
149	5745	149	5745		
153	5765	153	5765		
157	5785	157	5785		
161	5805	161	5805		
165	5825	165	5825		

Table 7: List of WLAN Channel of 5GHz 802.11ac

802.11ac VHT20		802.11ac VHT40		802.11ac VHT80			
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)		
36	5180	38	5190	42	5210		
40	5220	46	5230	155	5775		
44	5220	151	5755				
48	5240	159	5795				
149	5745						
153	5765						
157	5785						
161	5805						
165	5825						

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wi-Fi mode (Band U-NII-1)
 - 1. Transmitting
 - a. Low Channel
 - b. Middle Channel
 - c. High Channel
- B. On, Wi-Fi mode (Band U-NII-3)
 - 1. Transmitting
 - a. Low Channel
 - b. Middle Channel
 - c. High Channel
- C. Normal Operation (WiFi Link)

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Application Form
- Block Diagram
- Schematics
- Technical Description
- FCC/IC Label and Location Info
- Photo Document
- User Manual

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.

4.3 Special Accessories and Auxiliary Equipment

List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
LCD TV	KONKA	LCH23HS95	LCH1223W704445 7	--
Headphone	Lenovo	CE-1253H	--	--
Adapter	Mass Power	NBS18C050250V U	--	Input: 100-240V~, 50/60Hz, 0.6A Output: DC 5.0V, 2.5A
HDMI Cable	--	--	--	120cm Shielded
RS232 Cable	--	--	--	120cm Shielded

4.4 Countermeasures to Achieve ERM Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF). No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test of below 1GHz

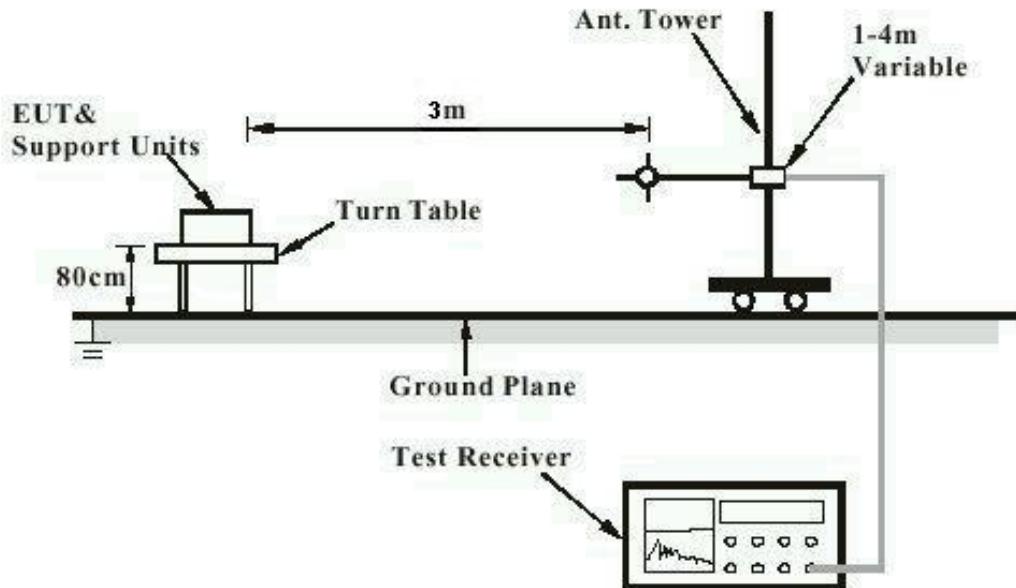


Diagram of Measurement Configuration for Radiation Test of above 1GHz

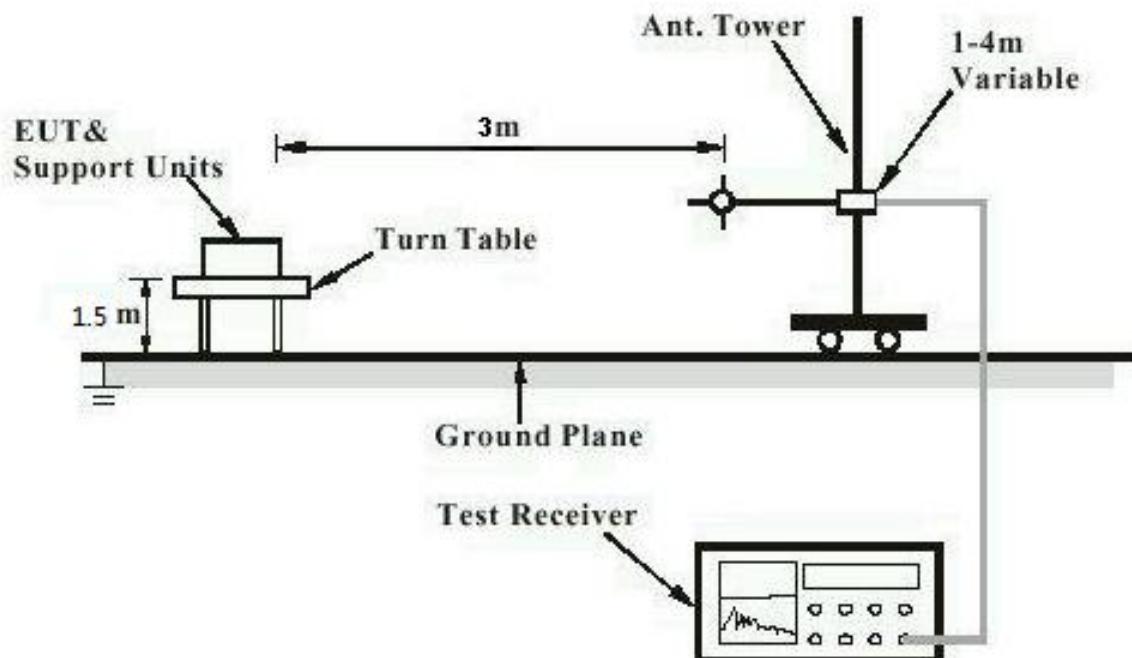


Diagram of Measurement Equipment Configuration for Conduction Measurement

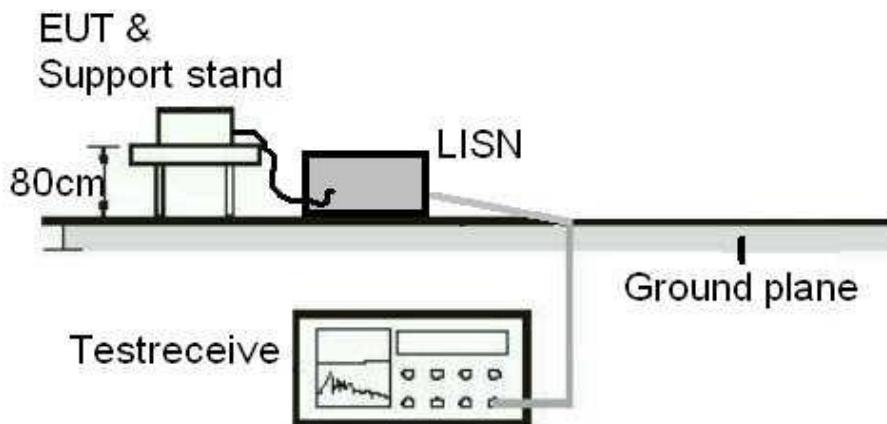
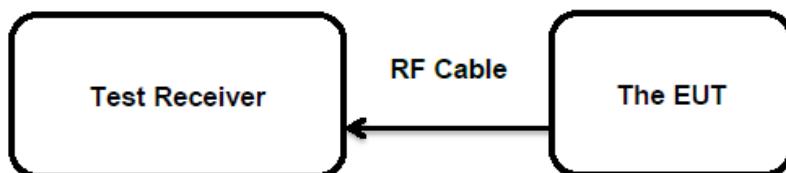


Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:	Pass
Test standard	: FCC Part 15.203
Limit	RSS-Gen Clause 8.3 The use of antennas with directional gains that do not exceed 6dBi

According to the manufacturer declared, the EUT has two dedicated antennas with reversed SMA connector, the directional gain of each antenna is 2.00dBi. Therefore the EUT is considered sufficient to comply with the provision.

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5.1.2 Peak Output Power

RESULT:
Pass

Test date	:	22.11.2016-26.11.2016
Test standard	:	FCC Part 15.407(a)(1)(iv) FCC Part 15.407(a)(3) RSS-247 clause 6.2.1(1) RSS-247 clause 6.2.4(1)
Basic standard	:	ANSI C63.10: 2013
Limit	:	24dBm for FCC, 23dBm or $10 + 10 \log_{10}B$, dBm, whichever power is less for IC (Band U-NII-1) 30dBm (Band U-NII-3)
Kind of test site	:	Shielded room

Test setup

Test Channel	:	All channel
Operation Mode	:	A.1, B.1
Ambient temperature	:	25°C
Relative humidity	:	56%
Atmospheric pressure	:	101kPa

For details refer to following test result.

Table 8: Test result of Peak Output Power of Band U-NII-1 (SISO_ANTO)

Mode	Channel Frequency (MHz)	Max. Conducted output power (dBm)	Limit (dBm)
802.11a	5180	13.07	22.2
	5220	12.89	22.2
	5240	13.02	22.2
802.11n HT20	5180	13.10	22.5
	5220	13.20	22.5
	5240	13.16	22.5
802.11n HT40	5190	13.41	23
	5230	13.15	23
802.11ac VHT20	5180	13.37	22.5
	5220	13.26	22.5
	5240	13.23	22.5
802.11ac VHT40	5190	13.47	23
	5230	13.66	23
802.11ac VHT80	5210	13.22	23

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Table 9: Test result of Peak Output Power of Band U-NII-1 (SISO_ANT1)

Mode	Channel Frequency (MHz)	Max. Conducted output power (dBm)	Limit (dBm)
802.11a	5180	13.42	22.2
	5220	13.27	22.2
	5240	13.35	22.2
802.11n HT20	5180	13.39	22.5
	5220	13.35	22.5
	5240	13.38	22.5
802.11n HT40	5190	13.44	23
	5230	13.40	23
802.11ac VHT20	5180	13.28	22.5
	5220	13.63	22.5
	5240	13.28	22.5
802.11ac VHT40	5190	13.36	23
	5230	13.44	23
802.11ac VHT80	5210	13.47	23

Table 10: Test result of Peak Output Power of Band U-NII-1 (MINO_ANT0 + ANT1)

Mode	Channel Frequency (MHz)	Max. Conducted output power (dBm)			Limit (dBm)
		ANT0	ANT1	Total	
802.11n HT20	5180	11.60	11.62	14.62	22.5
	5220	11.49	11.64	14.58	22.5
	5240	11.40	11.70	14.56	22.5
802.11n HT40	5190	11.80	11.71	14.77	23
	5230	11.57	11.73	14.66	23
802.11ac VHT20	5180	11.29	11.62	14.47	22.5
	5220	11.30	11.52	14.42	22.5
	5240	11.48	11.63	14.57	22.5
802.11ac VHT40	5190	11.72	11.94	14.84	23
	5230	11.44	11.55	14.51	23
802.11ac VHT80	5210	11.35	11.91	14.65	23

Note: The cable loss is taken into account in results.

Max. e.i.r.p. = Max. Conducted TX Power + Antenna Gain

Antenna Gain = 2dBi for each antenna, In MIMO (2Tx), Ant0+Ant1 Directional gain = G_{ANT} + 10 log(N) dBi = 2 + 10 log(2) = 5.0dBi.

The max. e.i.r.p. = 15.66dBm in SISO mode.

The max. e.i.r.p. = 19.84dBm in MIMO mode

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Table 11: Test result of Peak Output Power of Band U-NII-3 (SISO_ANT0)

Mode	Channel Frequency (MHz)	Conducted output power (dBm)	Limit (dBm)
802.11a	5745	12.58	30
	5785	12.40	30
	5825	12.06	30
802.11n HT20	5745	13.20	30
	5785	13.02	30
	5825	12.59	30
802.11n HT40	5755	13.43	30
	5795	13.11	30
802.11ac VHT20	5745	12.95	30
	5785	12.85	30
	5825	12.41	30
802.11ac VHT40	5755	13.31	30
	5795	13.06	30
802.11ac VHT80	5775	12.75	30

Table 12: Test result of Peak Output Power of Band U-NII-3 (SISO_ANT1)

Mode	Channel Frequency (MHz)	Conducted output power (dBm)	Limit (dBm)
802.11a	5745	13.56	30
	5785	13.31	30
	5825	13.10	30
802.11n HT20	5745	13.60	30
	5785	13.40	30
	5825	13.04	30
802.11n HT40	5755	13.62	30
	5795	13.62	30
802.11ac VHT20	5745	13.57	30
	5785	13.51	30
	5825	13.21	30
802.11ac VHT40	5755	13.86	30
	5795	13.73	30
802.11ac VHT80	5775	13.43	30

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Table 13: Test result of Peak Output Power of Band U-NII-3 (MIMO_ANT0+ANT1)

Mode	Channel Frequency (MHz)	Conducted output power (dBm)			Limit (dBm)
		ANT0	ANT1	Total	
802.11n HT20	5745	11.44	11.20	14.33	30
	5785	11.43	11.13	14.29	30
	5825	11.30	11.00	14.16	30
802.11n HT40	5755	11.77	11.51	14.65	30
	5795	11.20	11.51	14.37	30
802.11ac VHT20	5745	11.01	11.89	14.48	30
	5785	11.19	11.88	14.56	30
	5825	11.01	11.36	14.20	30
802.11ac VHT40	5755	11.58	11.36	14.48	30
	5795	11.05	11.02	14.05	30
802.11ac VHT80	5775	11.08	11.50	14.31	30

Note: The cable loss is taken into account in results.

Max. e.i.r.p. = Max. Conducted TX Power + Antenna Gain

Antenna Gain = 2dBi for each antenna, In MIMO (2Tx), Ant0+Ant1 Directional gain = $G_{ANT} + 10 \log(N)$ dBi = $2 + 10 \log(2) = 5.0$ dBi.

The max. e.i.r.p. = 15.86dBm in SISO mode. The max. e.i.r.p. = 19.65dBm in MIMO mode.

Less than 36dBm

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5.1.3 26dB Bandwidth

RESULT:

Pass

Date of testing : 22.11.2016-26.11.2016
 Test standard : FCC Part 15.407(a)(5)
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded room

Test setup

Test Channel : All channel
 Operation Mode : A.1, B.1
 Ambient temperature : 25°C
 Relative humidity : 56%
 Atmospheric pressure : 101kPa

Table 14: Test result of 26dB Bandwidth Band U-NII-1 (ANT0)

Mode	Channel Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
802.11a	5180	21.621	--
	5220	21.621	
	5240	21.577	
802.11n HT20	5180	22.116	--
	5220	21.881	
	5240	21.959	
802.11n HT40	5190	40.630	--
	5230	40.860	
802.11ac VHT20	5180	22.055	--
	5220	21.939	
	5240	21.939	
802.11ac VHT40	5190	40.637	--
	5230	40.637	
802.11ac VHT80	5210	83.530	

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Table 15: Test result of 26dB Bandwidth Band U-NII-1 (ANT1)

Mode	Channel Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
802.11a	5180	21.621	--
	5220	21.621	
	5240	21.534	
802.11n HT20	5180	21.959	--
	5220	22.037	
	5240	21.882	
802.11n HT40	5190	40.990	--
	5230	40.750	
802.11ac VHT20	5180	21.940	
	5220	22.055	
	5240	21.940	
802.11ac VHT40	5190	40.723	
	5230	40.724	
802.11ac VHT80	5210	83.010	

Table 16: Test result of 26dB Bandwidth Band U-NII-3 (ANT0)

Mode	Channel Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	21.577	--
	5785	21.664	
	5825	21.752	
802.11n HT20	5745	21.881	--
	5785	21.959	
	5825	22.116	
802.11n HT40	5755	40.750	
	5795	40.980	
802.11ac VHT20	5745	21.824	
	5785	21.997	
	5825	21.997	
802.11ac VHT40	5755	40.688	
	5795	40.810	
802.11ac VHT80	5775	83.010	

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*Test Report No.*Seite 20 von 33
Page 20 of 33**Table 17: Test result of 26dB Bandwidth Band U-NII-3 (ANT1)**

Mode	Channel Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	21.534	--
	5785	21.621	
	5825	21.751	
802.11n HT20	5745	21.959	--
	5785	21.332	
	5825	21.881	
802.11n HT40	5755	40.760	--
	5795	40.980	
802.11ac VHT20	5745	21.997	--
	5785	21.766	
	5825	21.997	
802.11ac VHT40	5755	40.637	--
	5795	40.810	
802.11ac VHT80	5775	83.540	--

Note: 99% Occupied Bandwidth within the U-NII-1 and U-NII-3 band and 26dB Emission Bandwidth for reference.

For details refer to the test plots in Appendix A.

5.1.4 99% Bandwidth

RESULT:

Pass

Date of testing : 22.11.2016
 Test standard : RSS-Gen clause 6.6
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded room

Test setup

Test Channel : All channel
 Operation Mode : A.1, B.1
 Ambient temperature : 25°C
 Relative humidity : 56%
 Atmospheric pressure : 101kPa

Table 18: Test result of 99% Bandwidth Band U-NII-1 (ANT0)

Mode	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11a	5180	16.758	Within the Frequency band 5150-5250MHz
	5220	16.802	
	5240	16.802	
802.11n HT20	5180	17.974	Within the Frequency band 5150-5250MHz
	5220	17.974	
	5240	17.896	
802.11n HT40	5190	36.932	Within the Frequency band 5150-5250MHz
	5230	36.932	
802.11ac VHT20	5180	17.945	Within the Frequency band 5150-5250MHz
	5220	17.887	
	5240	17.945	
802.11ac VHT40	5190	36.903	Within the Frequency band 5150-5250MHz
	5230	36.903	
802.11ac VHT80	5210	76.237	

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Table 19: Test result of 99% Bandwidth Band U-NII-1 (ANT1)

Mode	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11a	5180	16.758	Within the Frequency band 5150-5250MHz
	5220	16.758	
	5240	16.845	
802.11n HT20	5180	17.896	Within the Frequency band 5150-5250MHz
	5220	17.818	
	5240	17.974	
802.11n HT40	5190	36.816	Within the Frequency band 5150-5250MHz
	5230	36.932	
802.11ac VHT20	5180	17.945	Within the Frequency band 5150-5250MHz
	5220	18.003	
	5240	17.945	
802.11ac VHT40	5190	36.816	Within the Frequency band 5150-5250MHz
	5230	36.903	
802.11ac VHT80	5210	76.237	

Note: The frequency stability of 99% emission bandwidth is maintained within the U-NII-1 band of operation under all conditions (-10~+50°C) of normal operation.

Table 20: Test result of 99% Bandwidth of Band U-NII-3 (ANT0)

Mode	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11a	5745	16.802	Within the frequency band 5725-5850MHz
	5785	16.758	
	5825	16.758	
802.11n HT20	5745	17.887	Within the frequency band 5725-5850MHz
	5785	17.887	
	5825	17.844	
802.11n HT40	5755	36.903	Within the frequency band 5725-5850MHz
	5795	36.903	
802.11ac VHT20	5745	17.931	Within the frequency band 5725-5850MHz
	5785	17.931	
	5825	17.931	
802.11ac VHT40	5755	36.903	Within the frequency band 5725-5850MHz
	5795	36.903	
802.11ac VHT80	5775	76.237	

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Table 21: Test result of 99% Bandwidth of Band U-NII-3 (ANT1)

Mode	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)
802.11a	5745	16.758	Within the frequency band 5725-5850MHz
	5785	16.802	
	5825	16.802	
802.11n HT20	5745	17.844	Within the frequency band 5725-5850MHz
	5785	17.887	
	5825	17.974	
802.11n HT40	5755	36.903	Within the frequency band 5725-5850MHz
	5795	36.990	
802.11ac VHT20	5745	17.931	Within the frequency band 5725-5850MHz
	5785	17.887	
	5825	17.931	
802.11ac VHT40	5755	36.903	Within the frequency band 5725-5850MHz
	5795	36.990	
802.11ac VHT80	5775	76.237	

Note: The frequency stability of 99% emission bandwidth is maintained within the U-NII-3 band of operation under all conditions (-10~+50°C) of normal operation.

For details refer to the test plots in Appendix A.

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5.1.5 6dB Bandwidth

RESULT:

Pass

Date of testing : 22.11.2016
 Test standard : FCC Part 15.407(e)
 RSS-247 clause 6.2.4(1)
 Basic standard : ANSI C63.10: 2013
 Limit : 500kHz for 6dB bandwidth
 Kind of test site : Shielded room

Test setup

Test Channel : All channel
 Operation Mode : B.1
 Ambient temperature : 25°C
 Relative humidity : 56%
 Atmospheric pressure : 101kPa

Table 22: Test result of 6dB Bandwidth of Band U-NII-3 (ANT0)

Mode	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	16.411	≥0.5
	5785	16.411	≥0.5
	5825	16.411	≥0.5
802.11n HT20	5745	17.670	≥0.5
	5785	17.670	≥0.5
	5825	17.670	≥0.5
802.11n HT40	5755	36.556	≥0.5
	5795	36.521	≥0.5
802.11ac VHT20	5745	17.626	≥0.5
	5785	17.627	≥0.5
	5825	17.670	≥0.5
802.11ac VHT40	5755	36.556	≥0.5
	5795	36.556	≥0.5
802.11ac VHT80	5775	76.580	≥0.5

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*Page 25 of 33***Table 23: Test result of 6dB Bandwidth of Band U-NII-3 (ANT1)**

Mode	Channel Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	16.411	≥0.5
	5785	16.454	≥0.5
	5825	16.411	≥0.5
802.11n HT20	5745	17.654	≥0.5
	5785	17.714	≥0.5
	5825	17.670	≥0.5
802.11n HT40	5755	36.556	≥0.5
	5795	36.556	≥0.5
802.11ac VHT20	5745	17.670	≥0.5
	5785	17.670	≥0.5
	5825	17.670	≥0.5
802.11ac VHT40	5755		≥0.5
	5795		≥0.5
802.11ac VHT80	5775	76.410	≥0.5

For details refer to the test plots in Appendix A.

5.1.6 Power spectral density

RESULT:
Pass

Date of testing	:	22.11.2016-08.12.2016
Test standard	:	FCC Part 15.407(a)(1)(iv) FCC Part 15.407(a)(3) RSS-247 clause 6.2.1(1) RSS-247 clause 6.2.4(1)
Basic standard	:	ANSI C63.10: 2013
Limit	:	11dBm/MHz for FCC, 10dBm/MHz for IC (Band U-NII-1) 30dBm/500kHz (Band U-NII-3)
Kind of test site	:	Shield room

Test setup

Test Channel	:	All channel
Operation mode	:	A.1, B.1
Ambient temperature	:	23.6°C
Relative humidity	:	53.4%
Atmospheric pressure	:	102.8kPa

Antenna Gain = 2dBi for each antenna, In MIMO (2Tx), Ant0+Ant1 Directional gain = $G_{ANT} + 10 \log(N) \text{ dBi} = 2 + 10 \log(2) = 5.0 \text{ dBi}$.

Table 24: Test result of power spectral density of Band U-NII-1 (ANT0)

Mode	Channel Frequency (MHz)	Result (dBm/MHz)		Limit (dBm/MHz)
		Conducted power spectral density	e.i.r.p. spectral density	
802.11a	5180	2.06	4.06	10
	5220	1.73	3.73	10
	5240	1.83	3.83	10
802.11n HT20	5180	2.31	4.31	10
	5220	2.30	4.30	10
	5240	2.72	4.72	10
802.11n HT40	5190	-1.94	0.06	10
	5230	-2.05	-0.05	10
802.11ac VHT20	5180	0.86	2.86	10
	5220	1.28	3.28	10
	5240	0.84	2.84	10
802.11ac VHT40	5190	-0.21	1.79	10
	5230	-0.30	1.70	10
802.11ac VHT80	5210	-4.68	-2.68	10

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Table 25: Test result of power spectral density of Band U-NII-1 (ANT1)

Mode	Channel Frequency (MHz)	Result (dBm/MHz)		Limit (dBm/MHz)
		Conducted power spectral density	e.i.r.p. spectral density	
802.11a	5180	2.53	4.53	10
	5220	2.24	4.24	10
	5240	2.41	4.41	10
802.11n HT20	5180	2.81	4.81	10
	5220	2.65	4.65	10
	5240	2.88	4.88	10
802.11n HT40	5190	-1.57	0.43	10
	5230	-1.92	0.08	10
802.11ac VHT20	5180	0.78	2.78	10
	5220	0.98	2.98	10
	5240	0.86	2.86	10
802.11ac VHT40	5190	0.37	2.37	10
	5230	0.00	2.00	10
802.11ac VHT80	5210	-5.09	-3.09	10

Table 26: Test result of power spectral density of Band U-NII-1 (ANT0 + ANT1)

Mode	Channel Frequency (MHz)	Result (dBm/MHz)			Limit (dBm/MHz)	
		Conducted power spectral density		Total e.i.r.p. spectral density		
		ANT0	ANT1			
802.11n HT20	5180	1.36	1.05	4.37	9.37	
	5220	1.45	0.28	4.46	9.46	
	5240	1.22	0.42	4.23	9.23	
802.11n HT40	5190	-3.89	-3.62	-0.61	4.39	
	5230	-3.31	-3.84	-0.30	4.70	
802.11ac VHT20	5180	-1.14	-1.92	1.87	6.87	
	5220	-0.96	-0.90	2.10	7.10	
	5240	-1.26	-1.46	1.75	6.75	
802.11ac VHT40	5190	-2.30	-2.38	0.71	5.71	
	5230	-2.04	-2.63	0.97	5.97	
802.11ac VHT80	5210	-6.68	-6.59	-3.58	1.42	

Note: The cable loss is taken into account in results.

For MIMO system 2Tx the antenna ports were checked, the worst case power density is calculated from the method of measure by adding 10Log(2) according KDB662911.

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Table 27: Test result of power spectral density of Band U-NII-3 (ANT0)

Mode	Channel Frequency (MHz)	Result (dBm/500kHz)	Limit (dBm/500kHz)
802.11a	5745	0.36	30
	5785	0.45	30
	5825	-0.25	30
802.11n HT20	5745	0.10	30
	5785	0.20	30
	5825	-0.52	30
802.11n HT40	5755	-2.28	30
	5795	-2.23	30
802.11ac VHT20	5745	0.22	30
	5785	0.39	30
	5825	-0.08	30
802.11ac VHT40	5755	-2.62	30
	5795	-1.56	30
802.11ac VHT80	5775	-5.56	30

Table 28: Test result of power spectral density of Band U-NII-3 (ANT1)

Mode	Channel Frequency (MHz)	Result (dBm/500kHz)	Limit (dBm/500kHz)
802.11a	5745	1.23	30
	5785	0.97	30
	5825	1.01	30
802.11n HT20	5745	1.06	30
	5785	1.30	30
	5825	0.53	30
802.11n HT40	5755	-0.92	30
	5795	-1.49	30
802.11ac VHT20	5745	1.76	30
	5785	1.65	30
	5825	1.32	30
802.11ac VHT40	5755	-0.64	30
	5795	-0.82	30
802.11ac VHT80	5775	-4.82	30

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Table 29: Test result of power spectral density of Band U-NII-3 (ANT0 + ANT1)

Mode	Channel Frequency (MHz)	Result (dBm/500kHz)			Limit (dBm/M Hz)	
		Conducted power spectral density				
		ANT0	ANT1	Total		
802.11n HT20	5745	-0.91	-1.28	2.10	30	
	5785	-1.08	-2.31	1.93	30	
	5825	-1.19	-1.75	1.82	30	
802.11n HT40	5755	-3.47	-3.49	-0.48	30	
	5795	-3.73	-3.86	-0.72	30	
802.11ac VHT20	5745	-1.12	-1.98	1.89	30	
	5785	-1.52	-1.30	1.71	30	
	5825	-1.34	-1.56	1.67	30	
802.11ac VHT40	5755	-4.50	-4.95	-1.49	30	
	5795	-4.03	-4.39	-1.02	30	
802.11ac VHT80	5775	-6.86	-6.52	-3.51	30	

Note: The cable loss is taken into account in results.

For MIMO system 2Tx the antenna ports were checked, the worst case power density is calculated from the method of measure by adding 10Log(2) according KDB662911.

For details refer to the test plots in Appendix A.

5.1.7 Spurious Emission

RESULT:**Pass**

Date of testing	:	08.11.2016 – 23.11.2016
Test standard	:	FCC part 15.407(b) RSS-247 clause 6.2.1(2) RSS-247 clause 6.2.4(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	FCC part 15.209(a)
Kind of test site	:	3m Semi-Anechoic Chamber & Anechoic Chamber

Test setup

Test Channel	:	All channel
Operation mode	:	A.1, B.1
Ambient temperature	:	23.0°C
Relative humidity	:	48.0%
Atmospheric pressure	:	101.6kPa

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test set-up photos.

Testing was carried out within frequency range 9kHz to the tenth harmonics. All the out of band e.i.r.p. emission for 5150-5350MHz and 5725-5850MHz are below the limit.

For details refer to the test plots in Appendix B.

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*Page 31 of 33***5.1.8 Conducted emissions****RESULT:****Pass**

Date of testing	:	23.11.2016
Test standard	:	FCC Part 15.207 FCC part 15.407(b)(6) RSS-Gen Clause 8.8
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation Mode	:	A.1, B.1
Earthing	:	Not Connected
Ambient temperature	:	23.0°C
Relative humidity	:	48.0%
Atmospheric pressure	:	101.6kPa

For details refer to the test plots in Appendix B.

6. Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions for 9KHz - 30MHz

Please refer to TÜV Rheinland report 50064781 002 for more details.

Photograph 2: Set-up for Spurious Emissions for 30 - 1000MHz

Please refer to TÜV Rheinland report 50064781 002 for more details.

Photograph 3: Set-up for Spurious Emissions for 1 - 18GHz

Please refer to TÜV Rheinland report 50064781 002 for more details.

Photograph 4: Set-up for Spurious Emissions above 18GHz

Please refer to TÜV Rheinland report 50064781 002 for more details.

Photograph 5: Set-up for Conducted Emission on AC Mains

Please refer to TÜV Rheinland report 50064781 002 for more details.

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APPENDIX A

Test Results of Wi-Fi 802.11a/n/ac of Conducted Testing

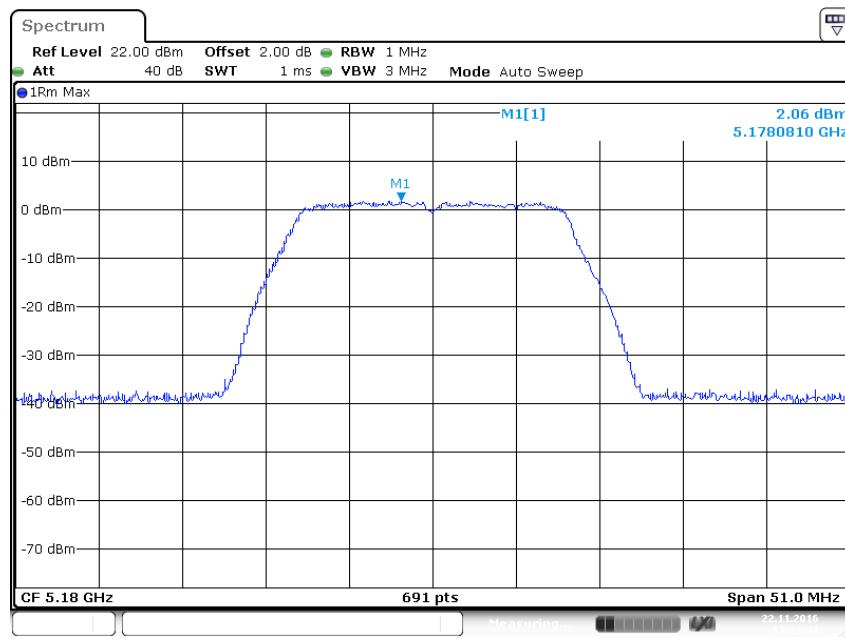
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APPENDIX A.1: Conducted Power Spectral Density

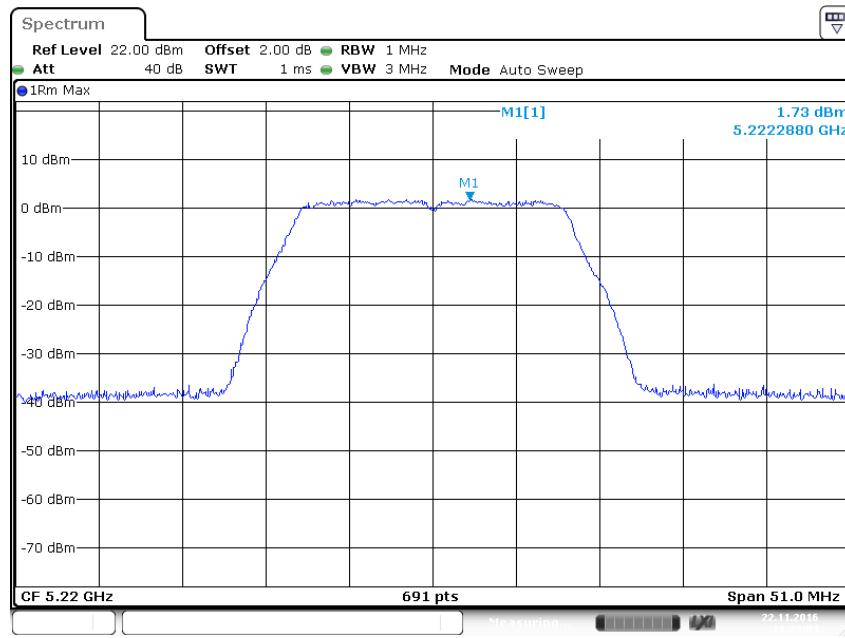
Wi-Fi 802.11 a mode

U-NII-1

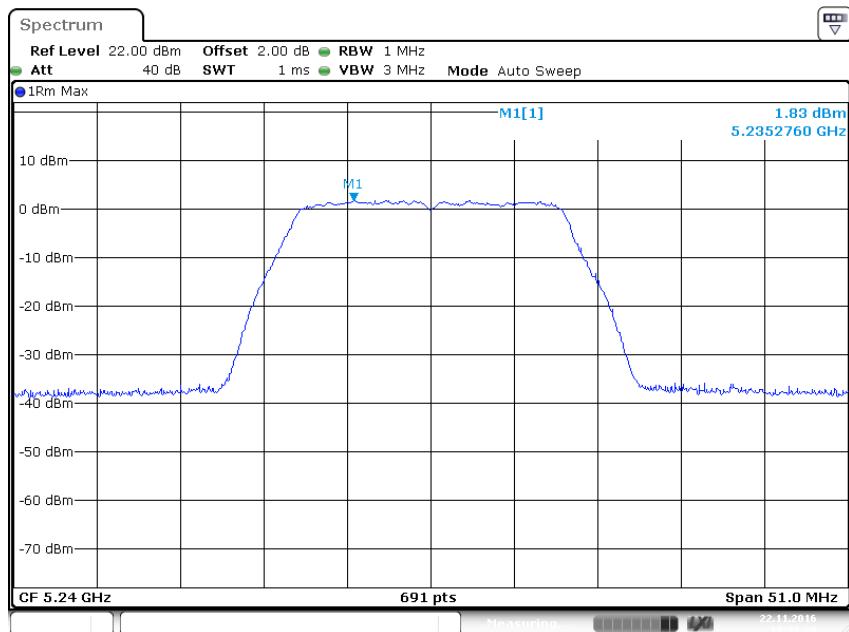
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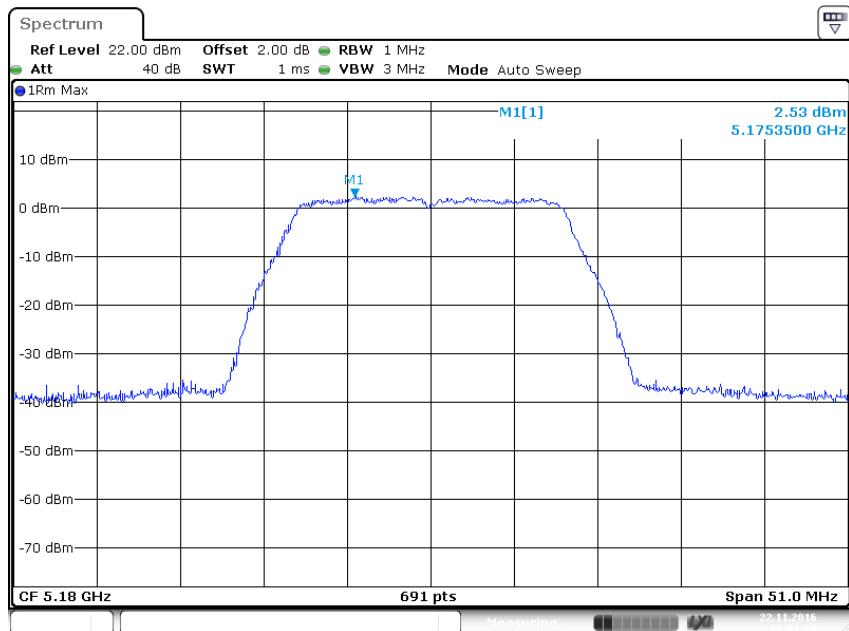


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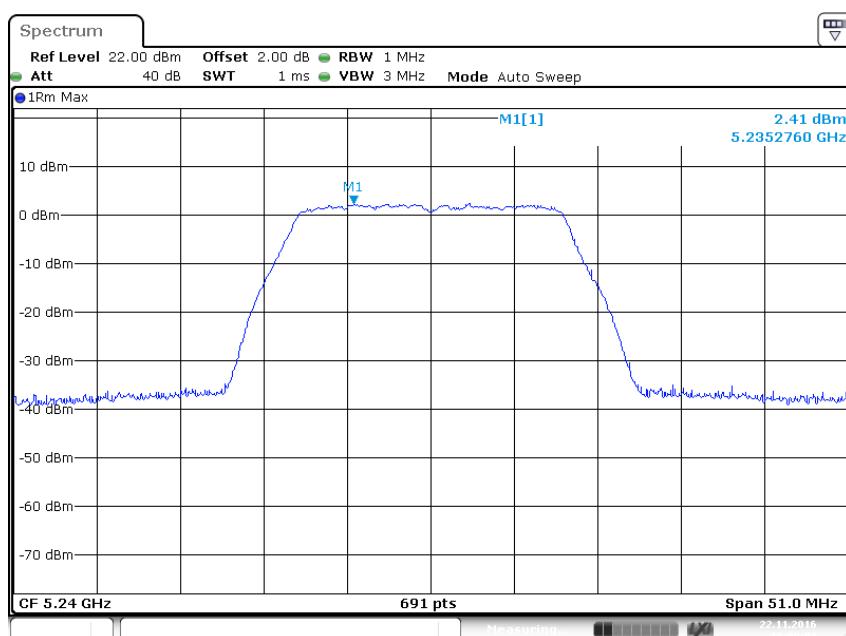
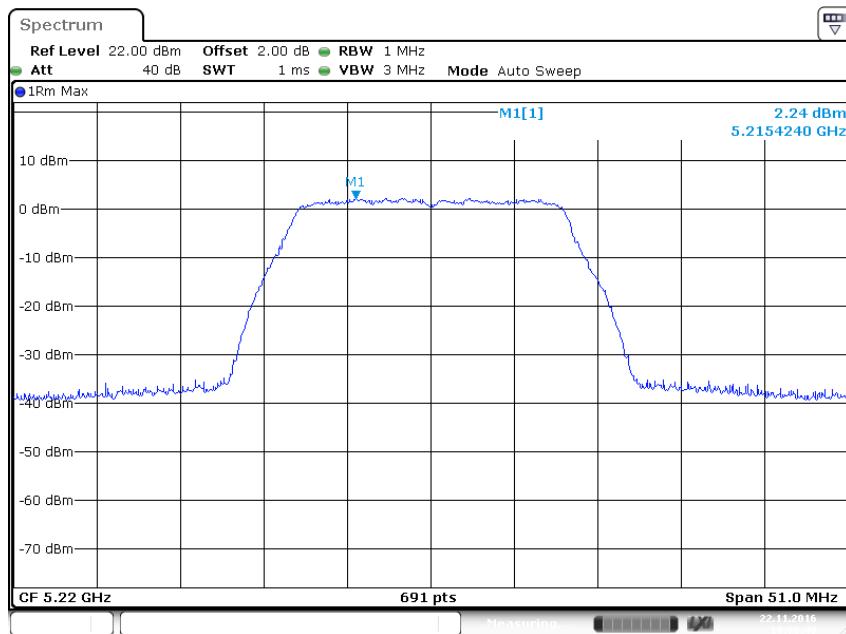


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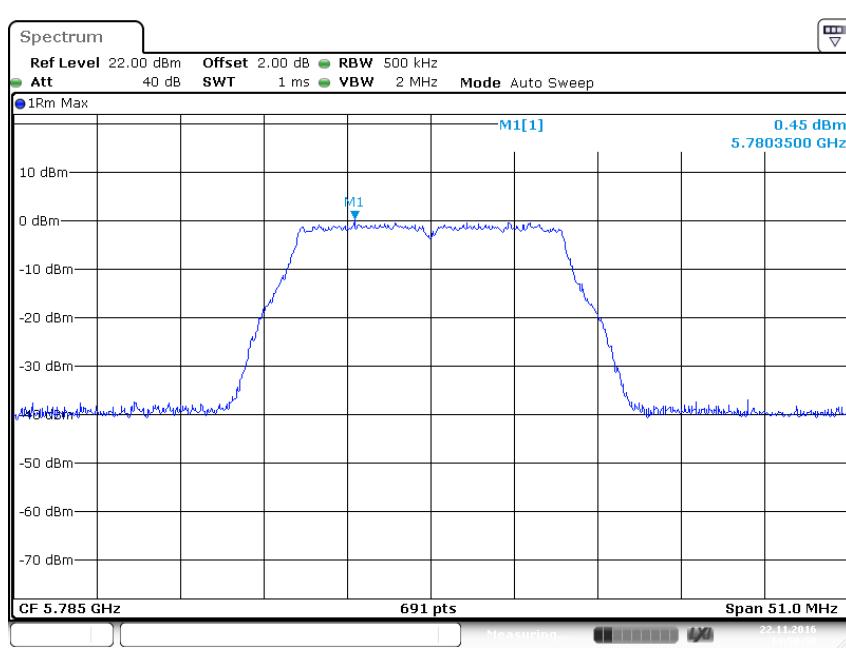
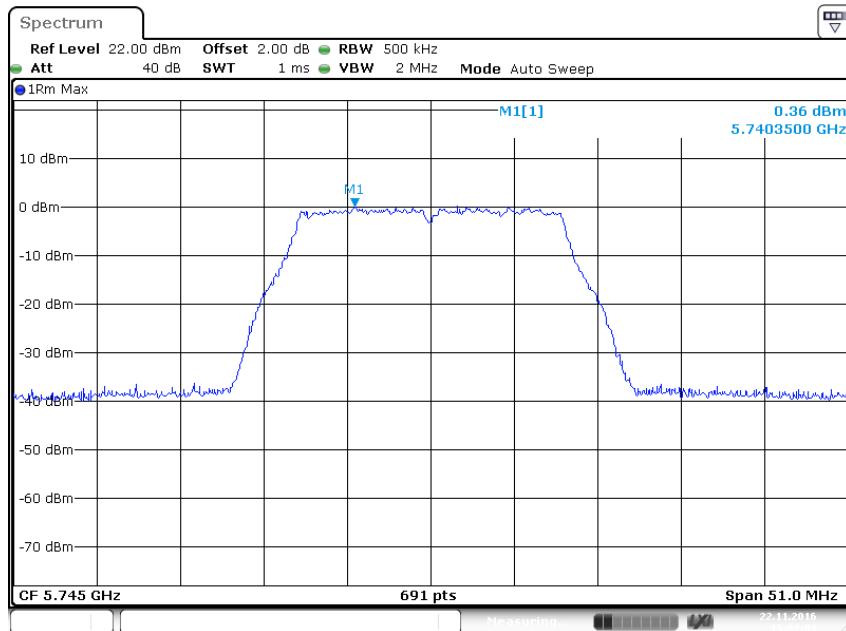
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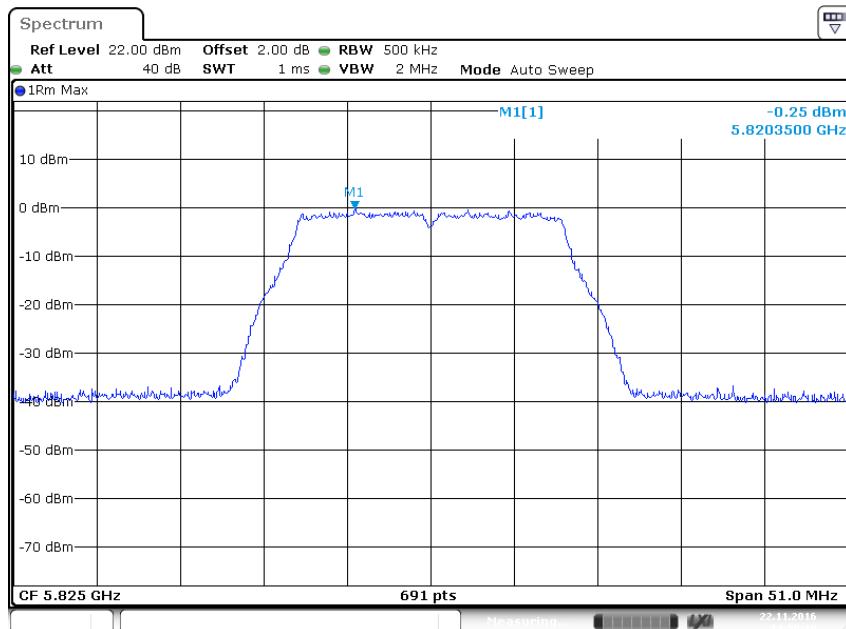


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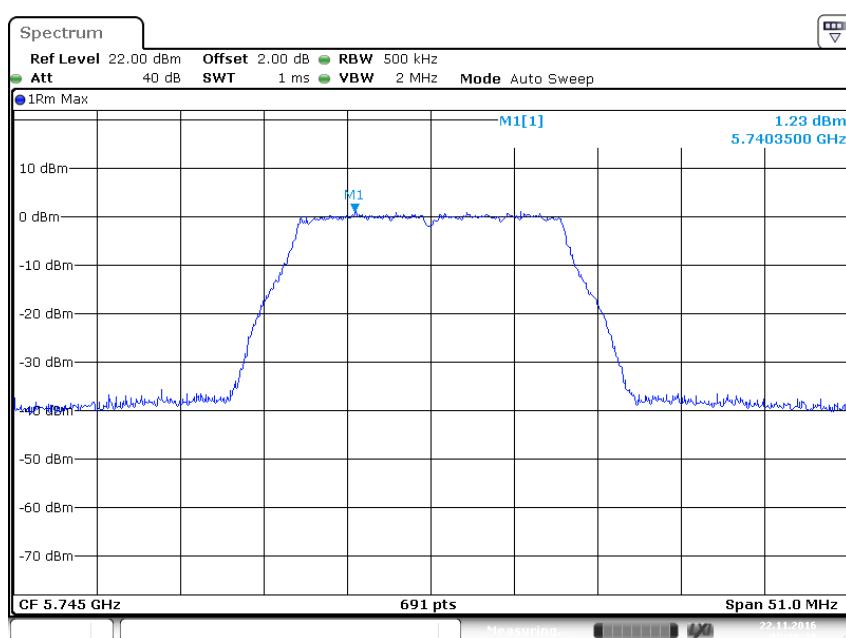


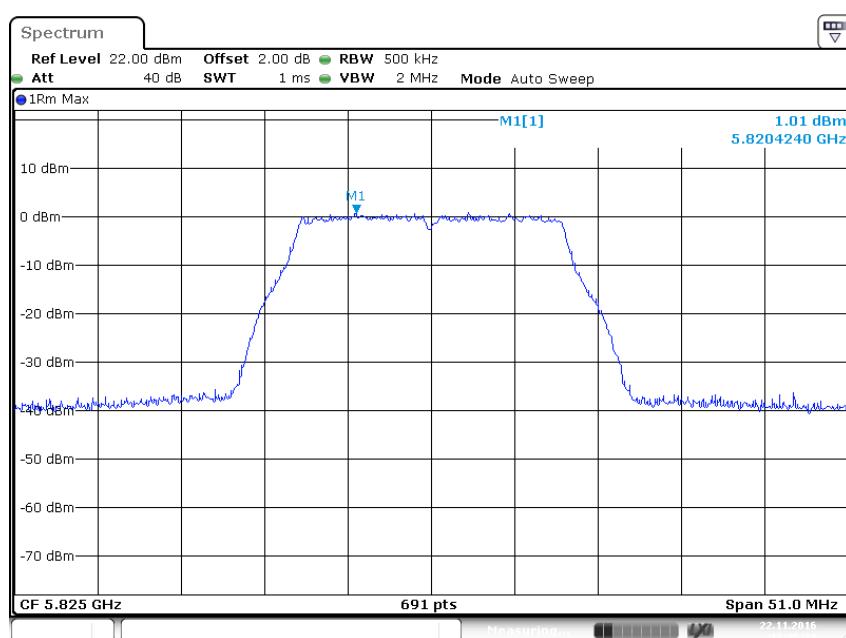
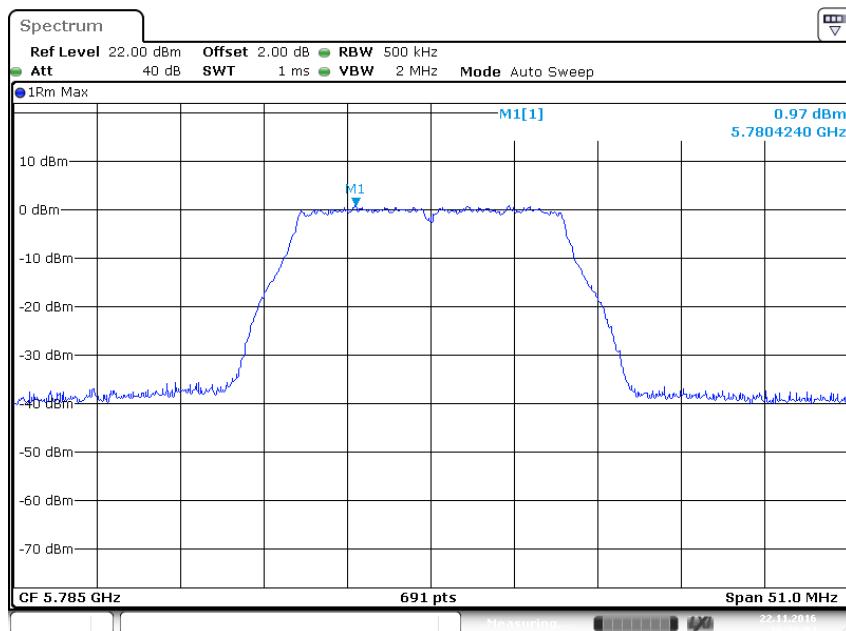
U-NII-3
ANT 0





ANT 1



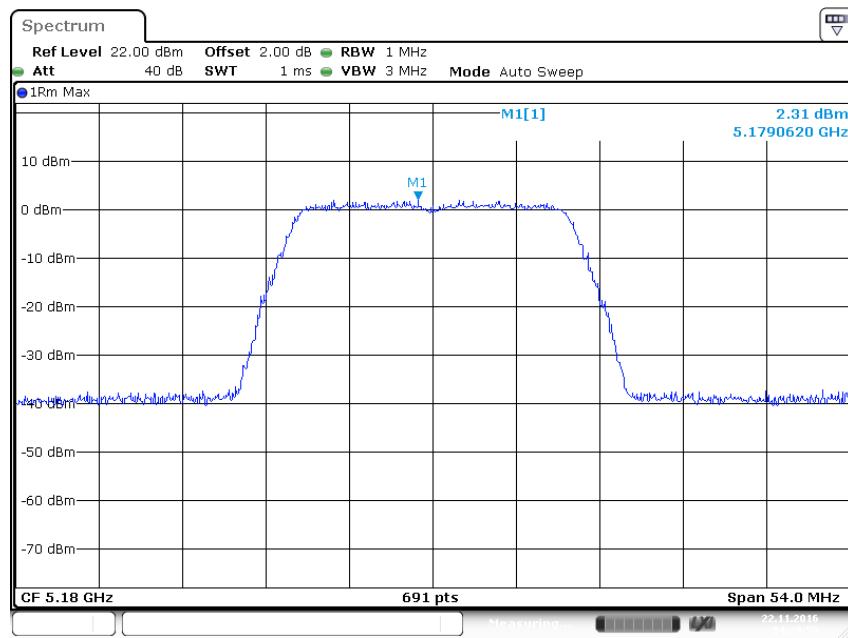


Wi-Fi 802.11 n (HT20)

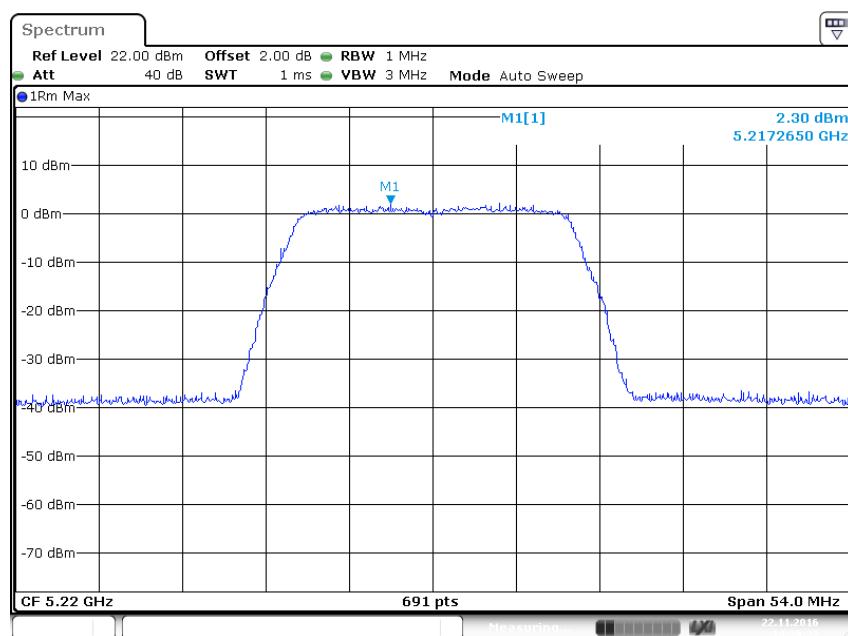
U-NII-1

SISO

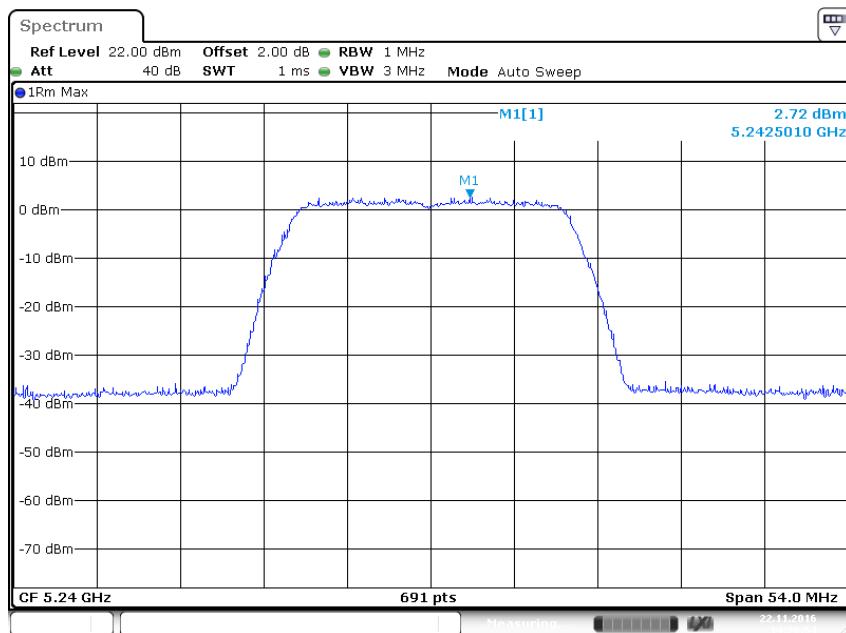
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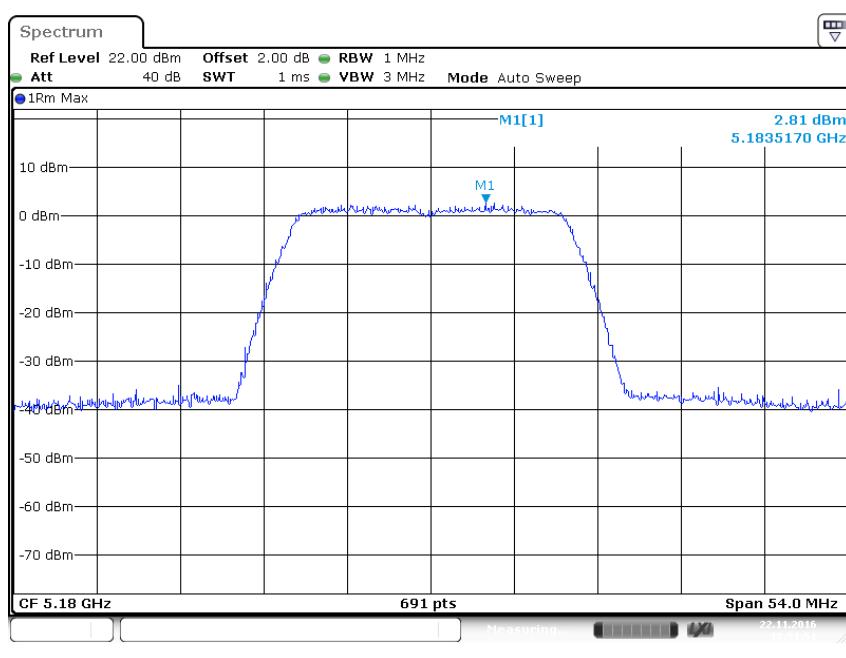
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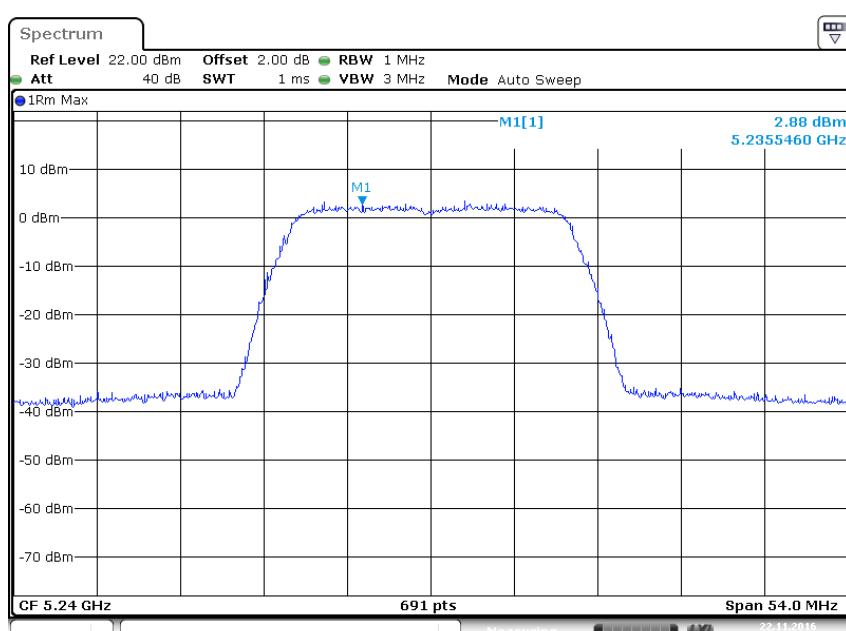
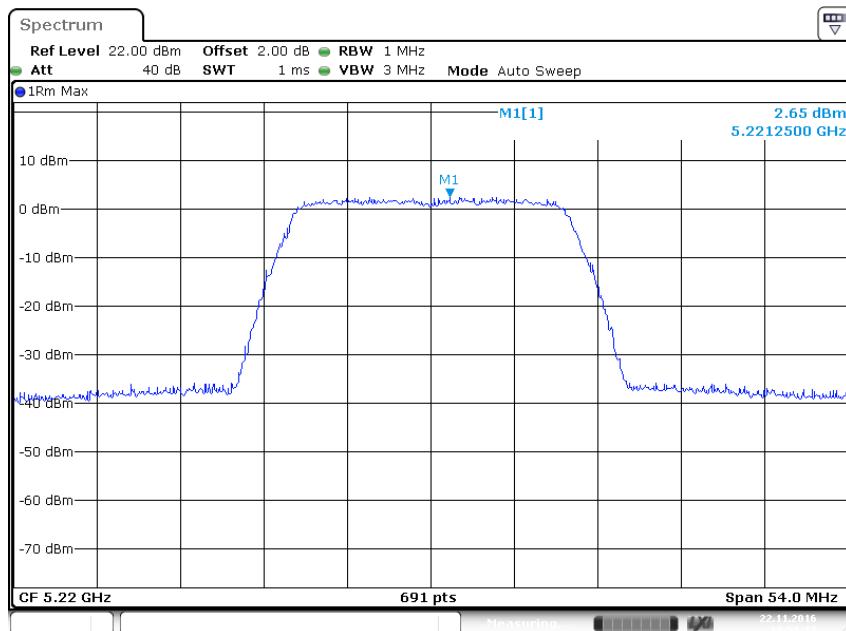


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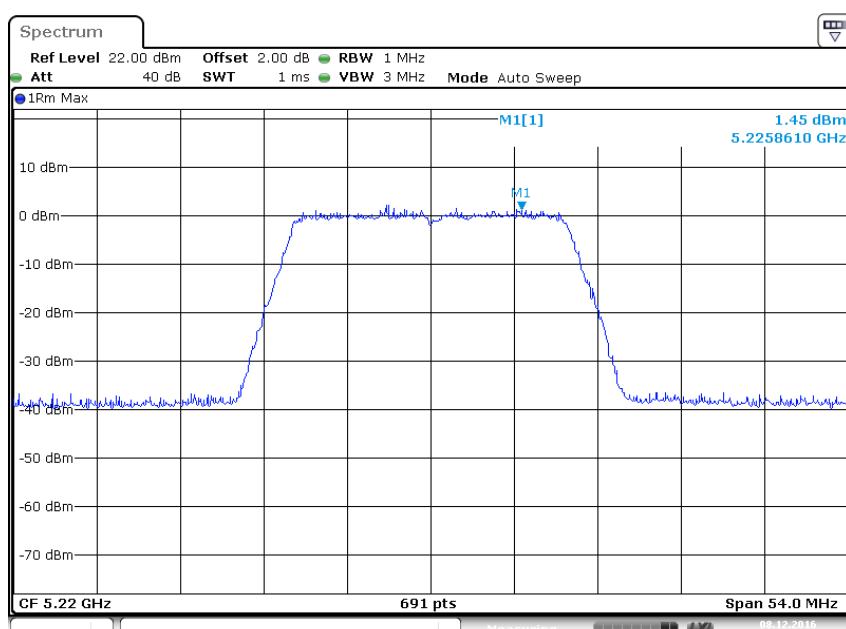
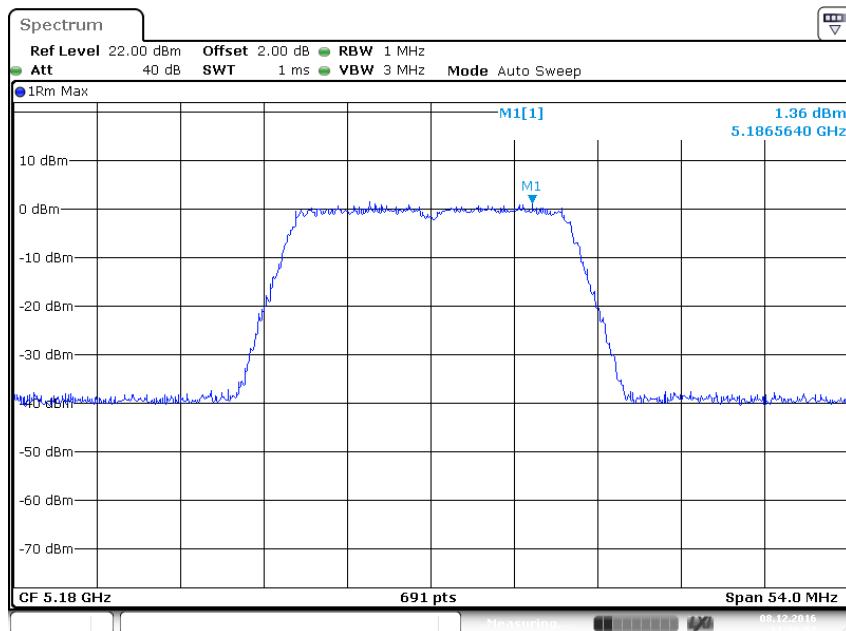


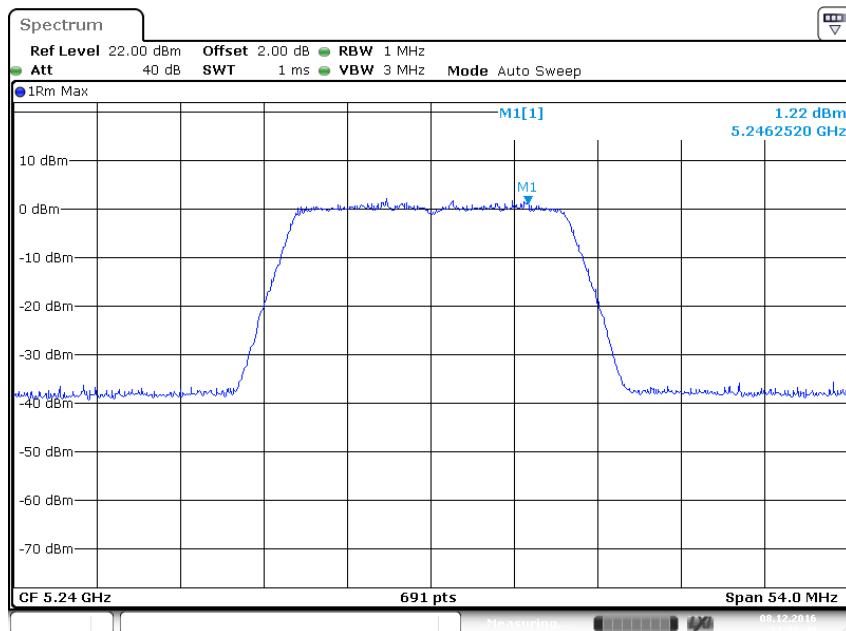
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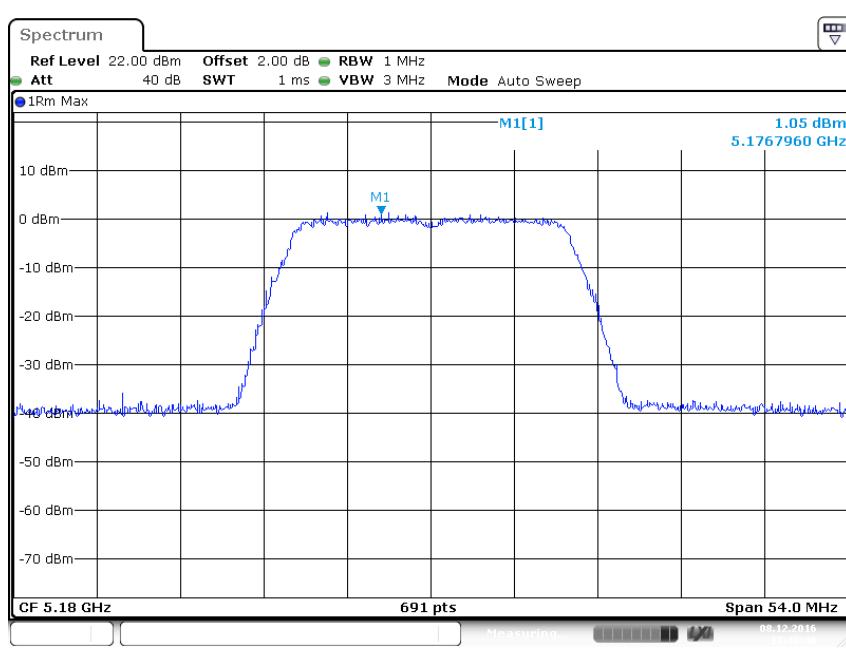


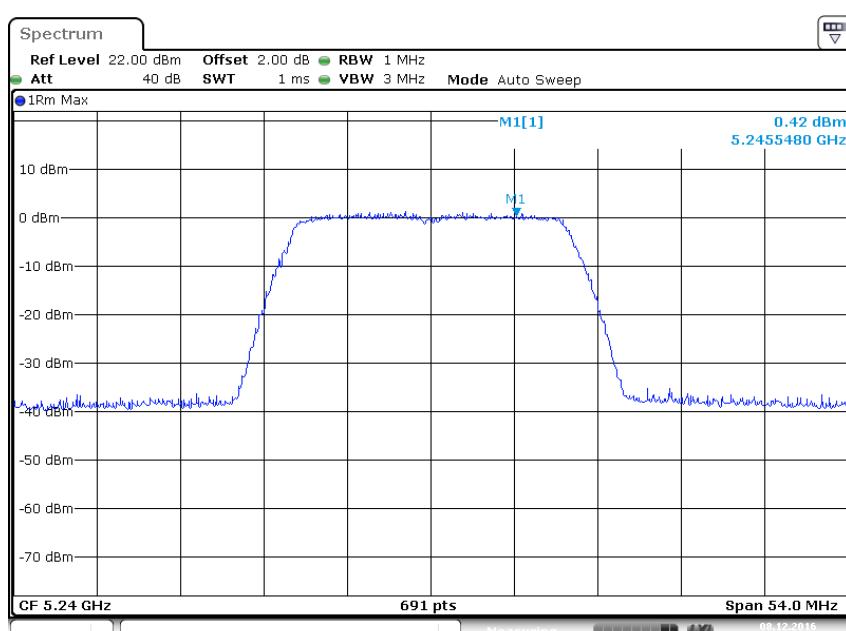
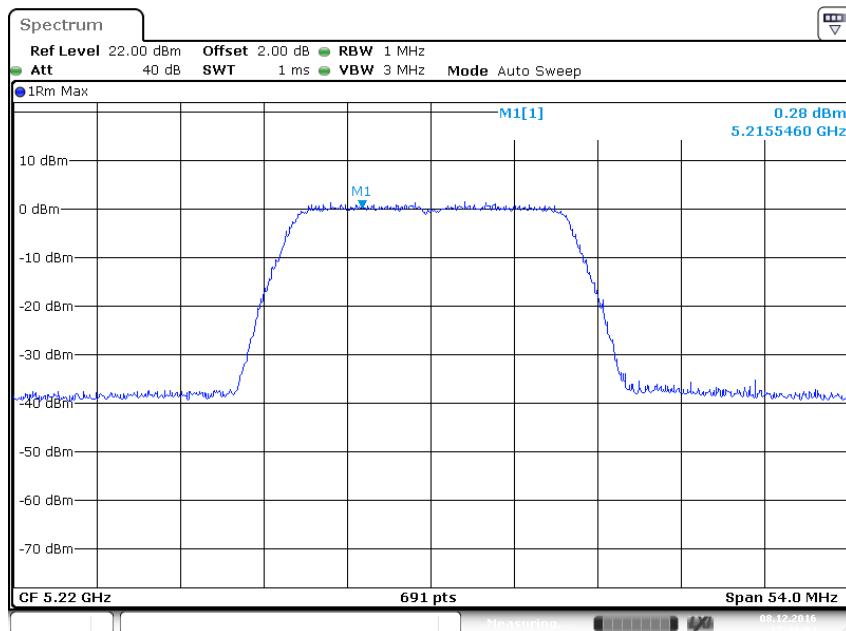
MIMO
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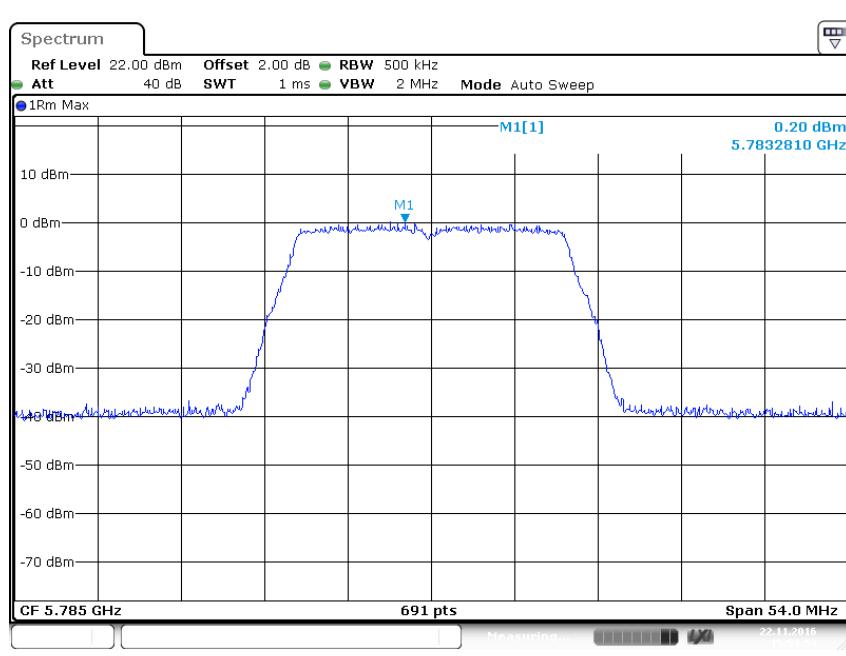
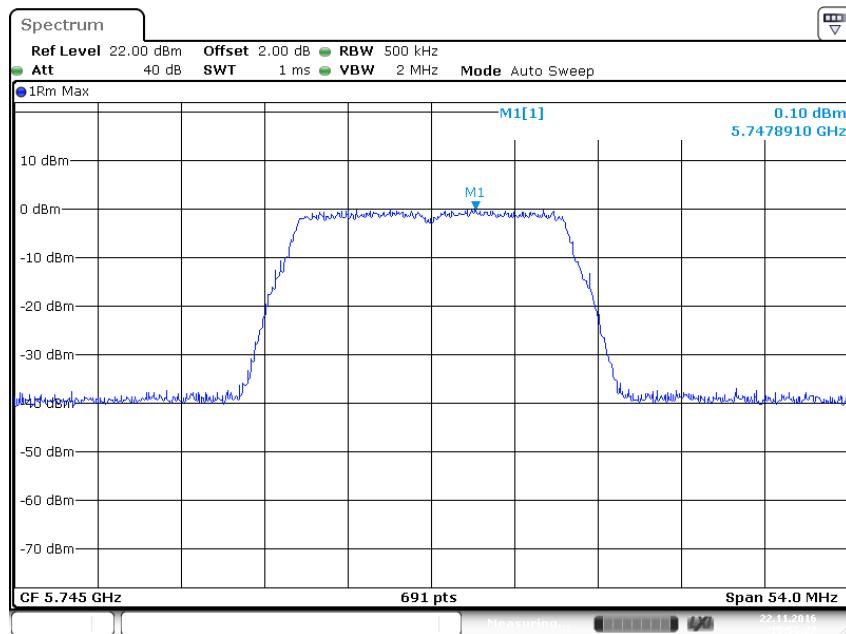


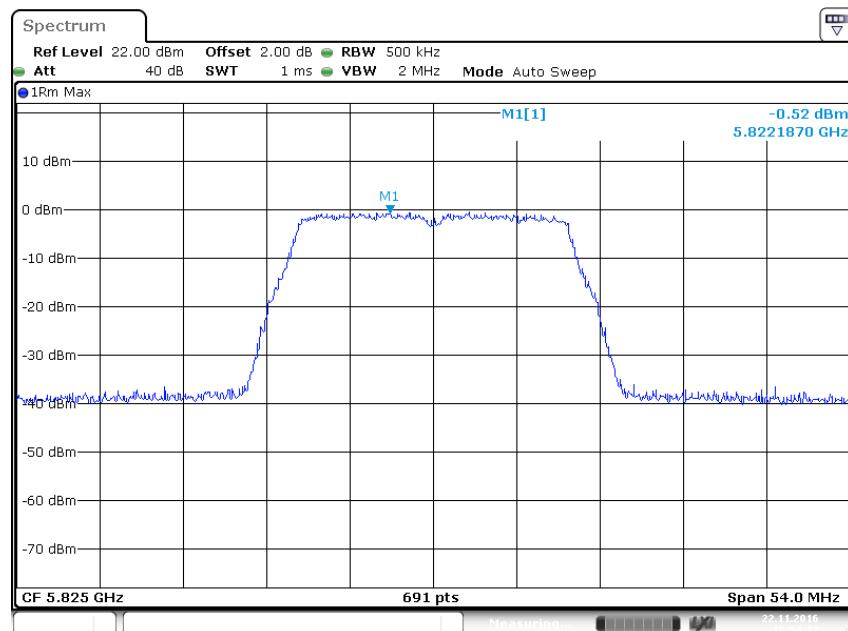
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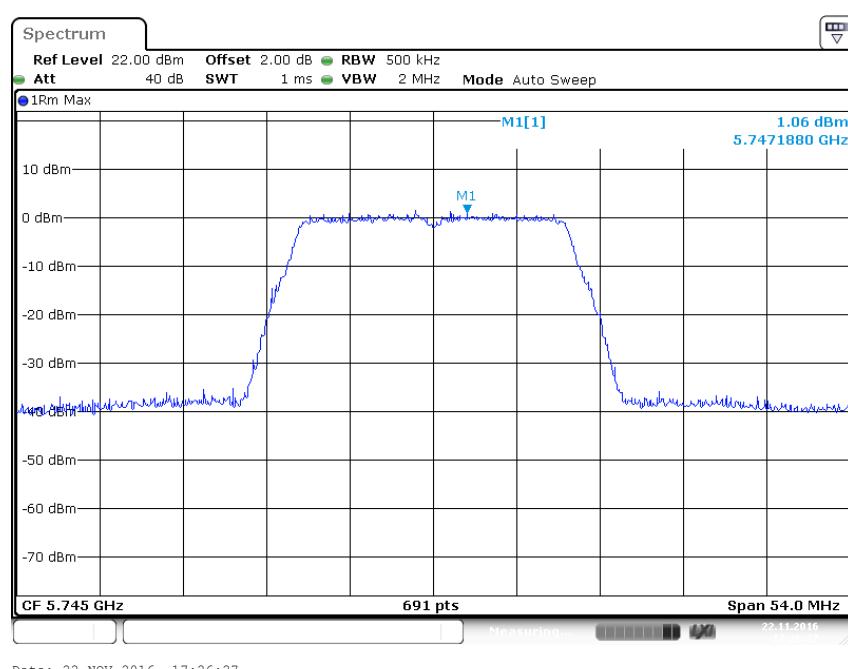


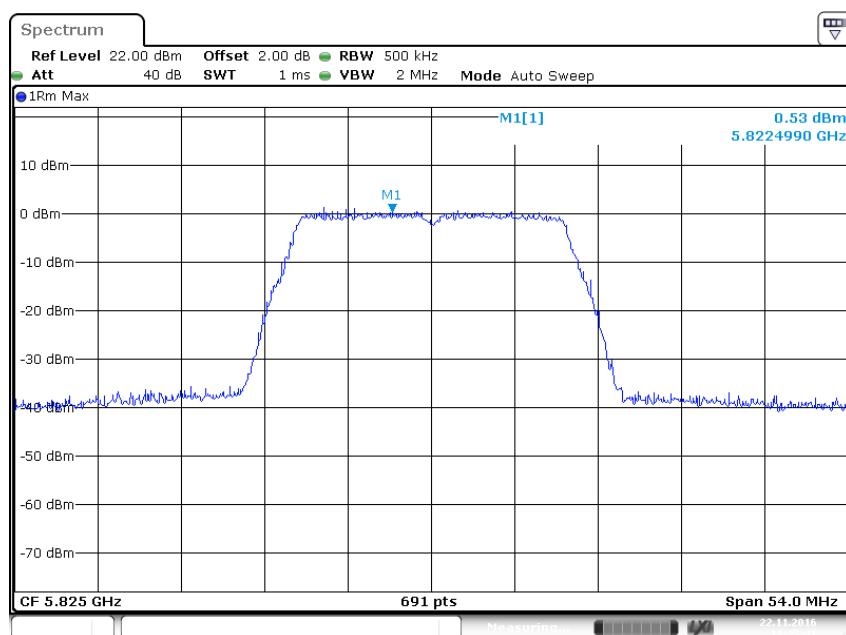
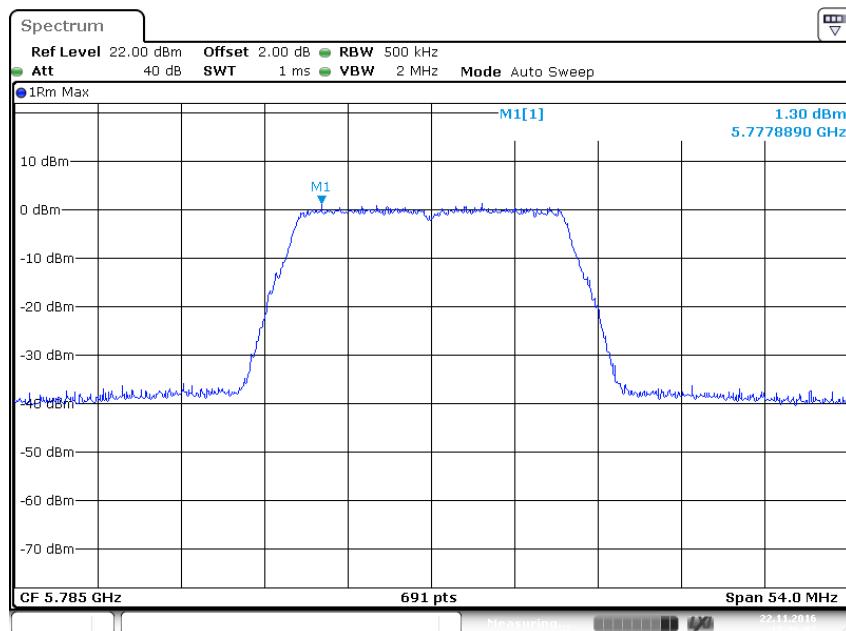
U-NII-3
SISO
ANT 0



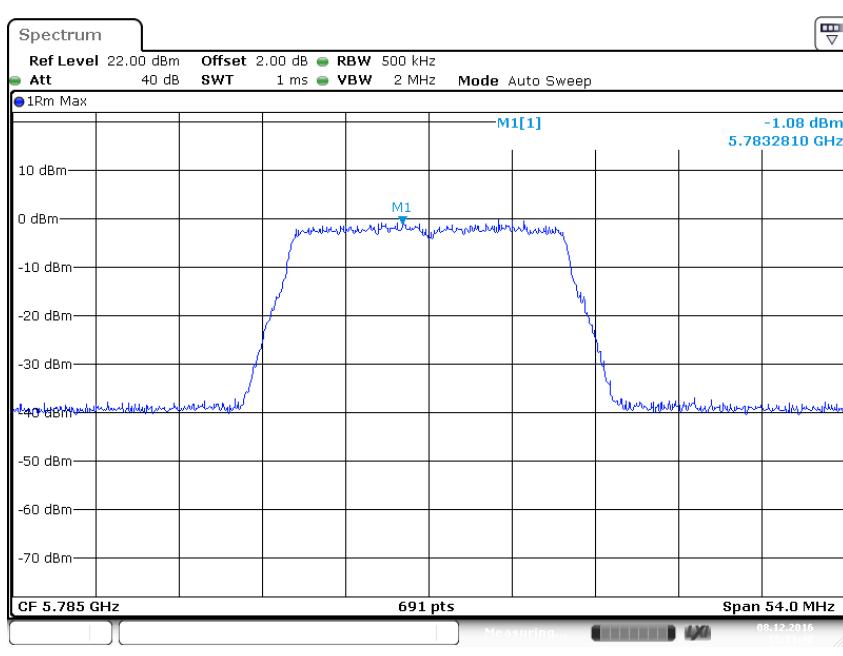
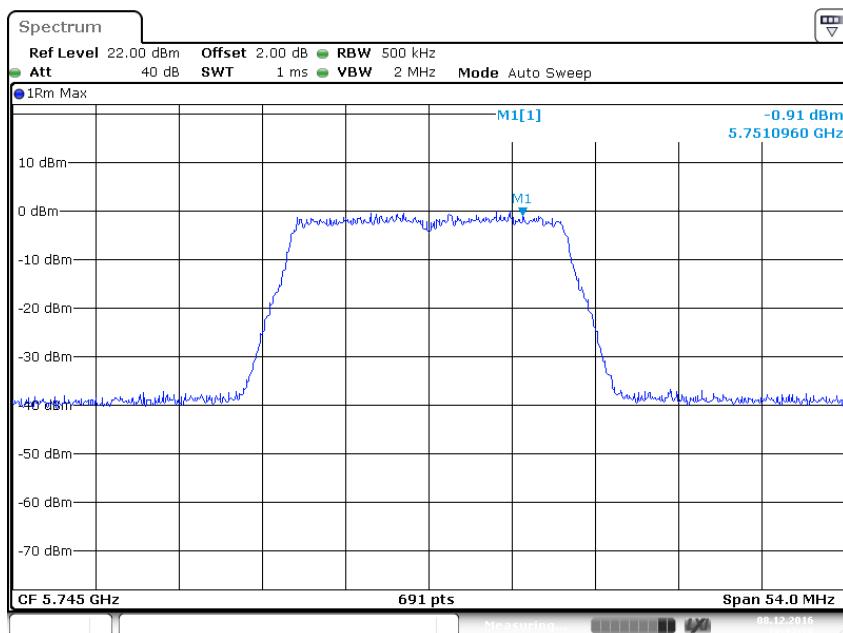


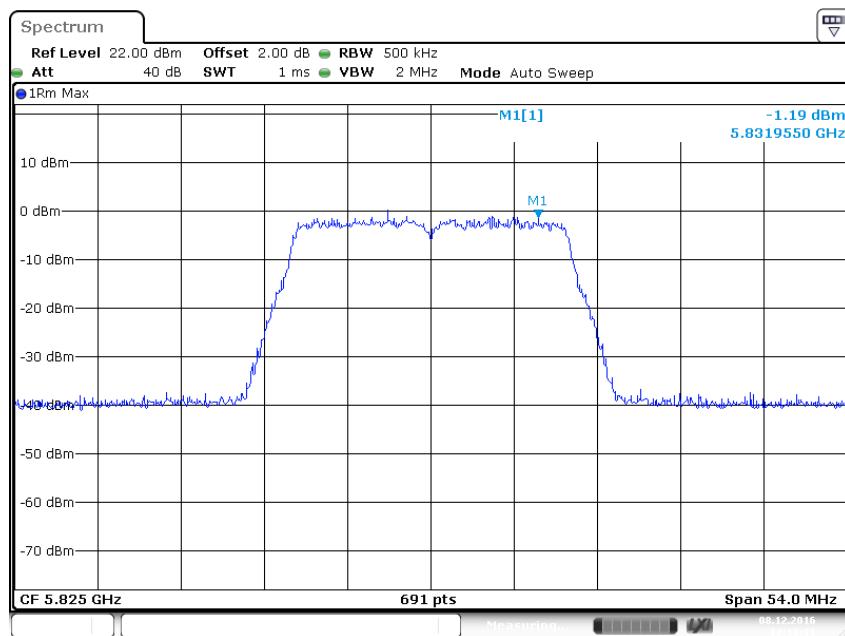
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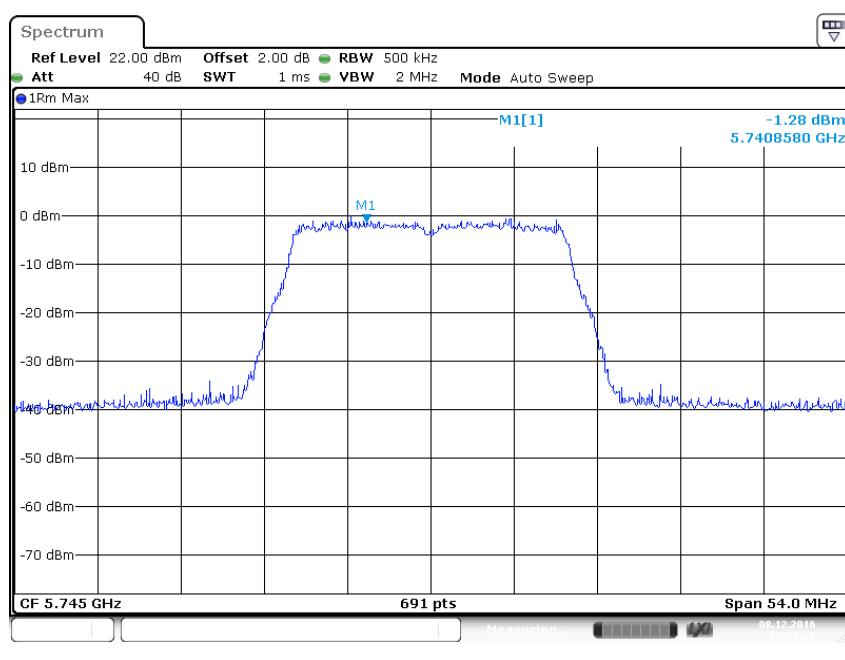


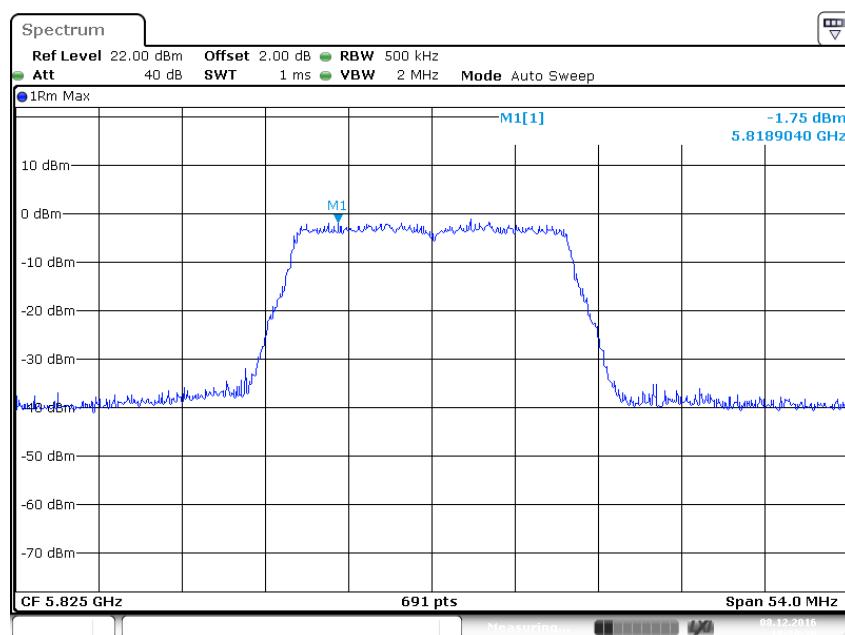
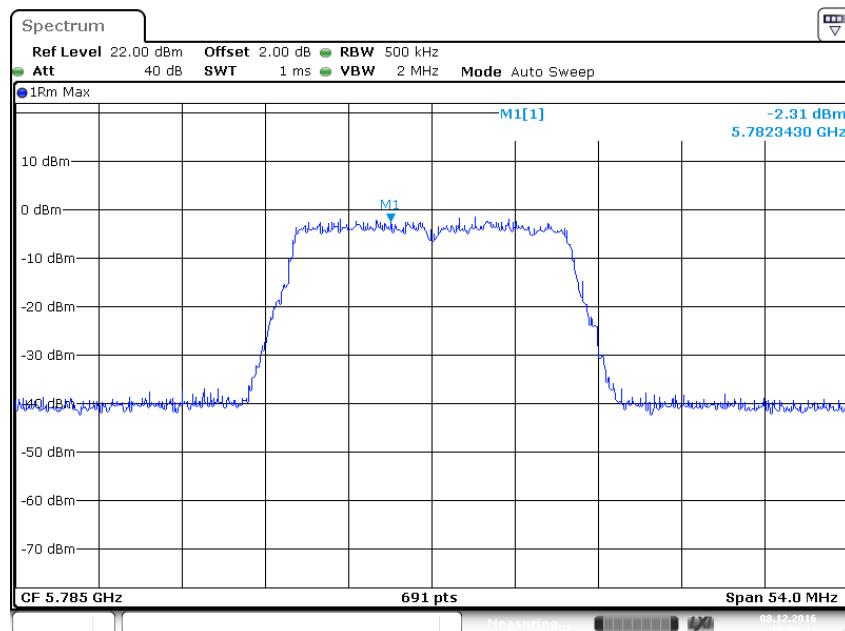
MIMO
ANT 0





ANT 1



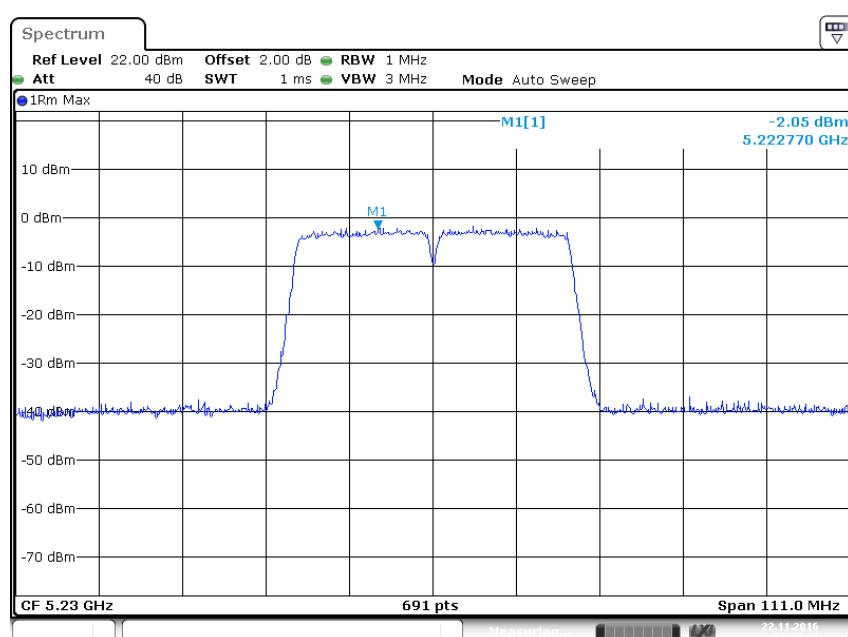
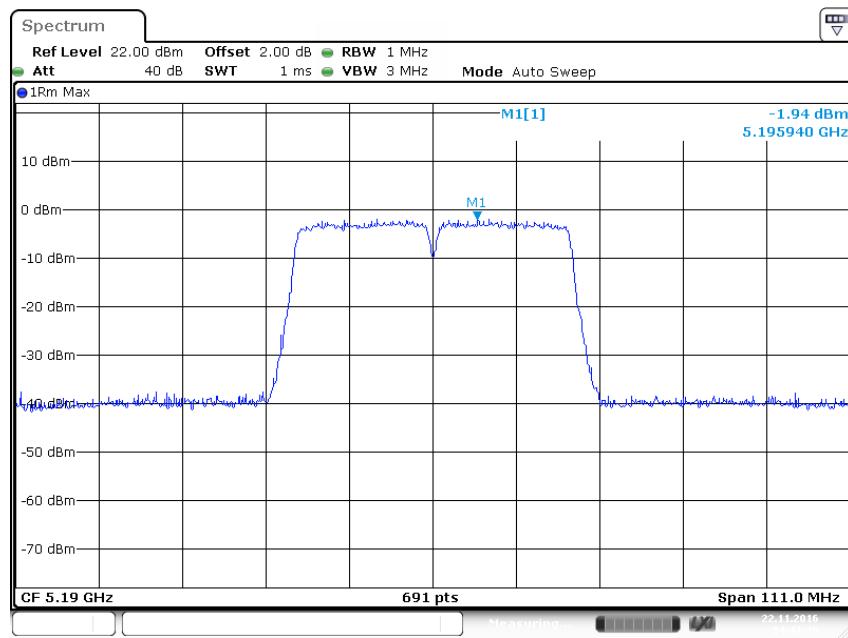


Wi-Fi 802.11 n(HT40)

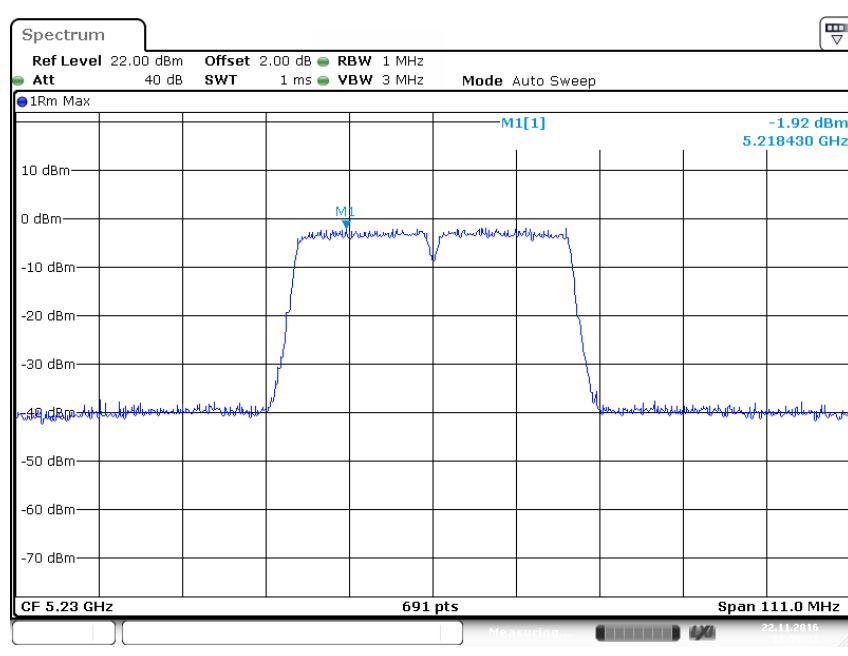
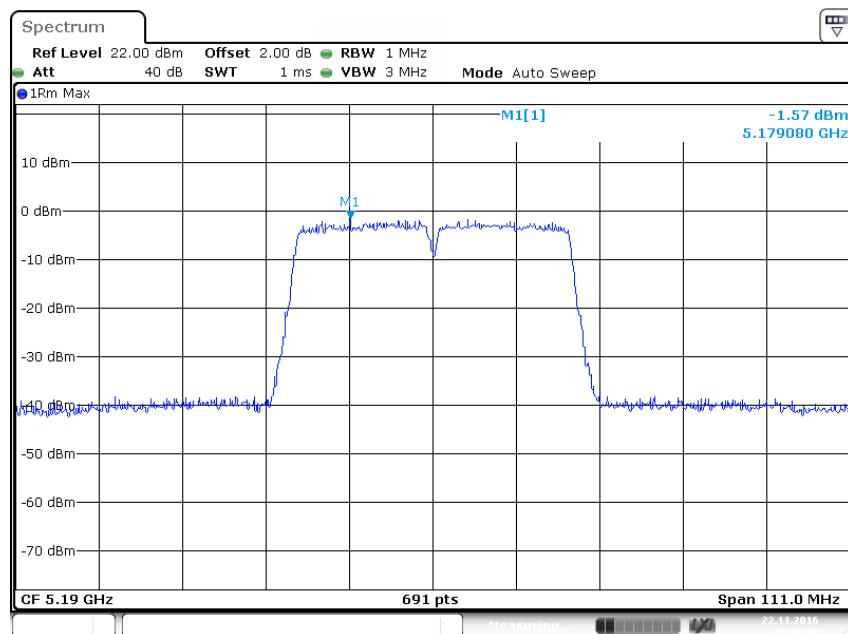
U-NII-1

SISO

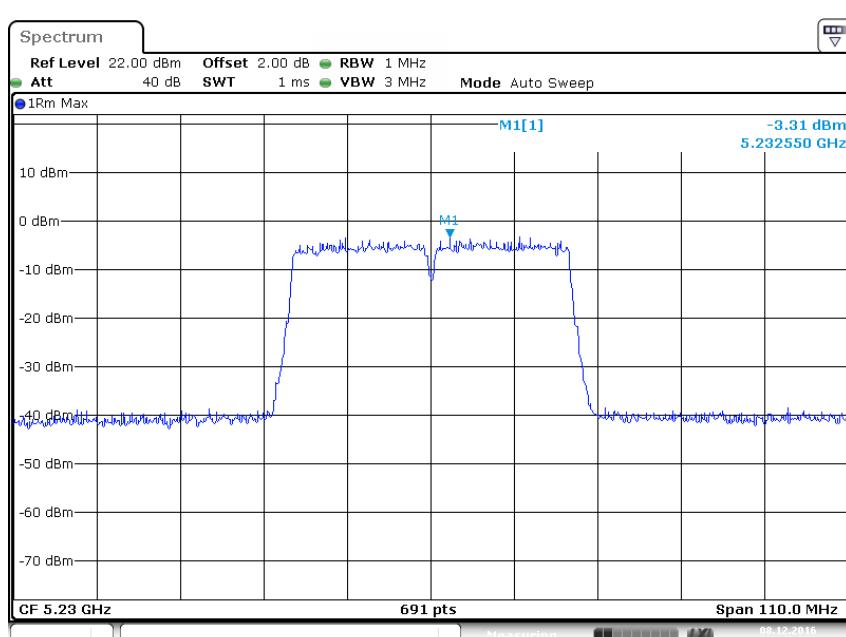
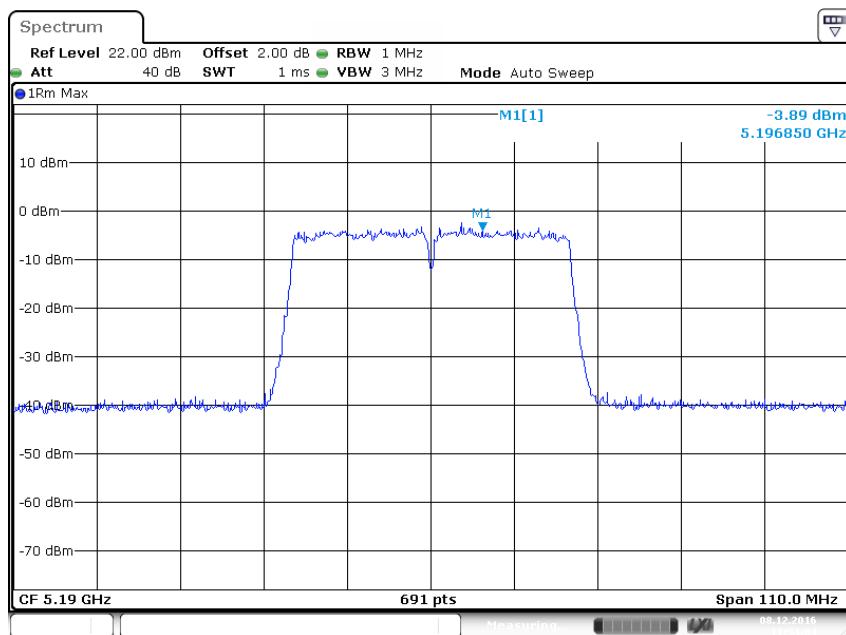
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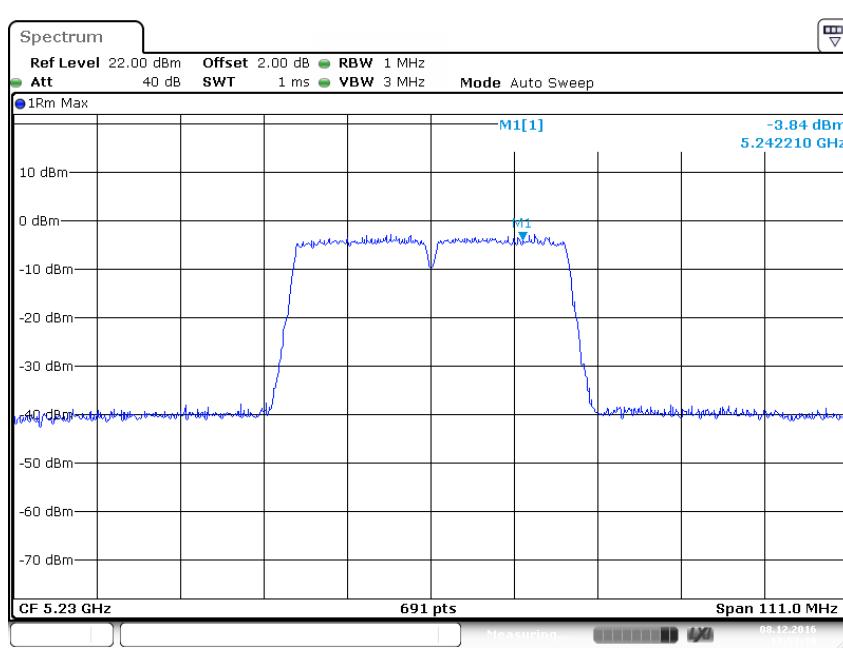
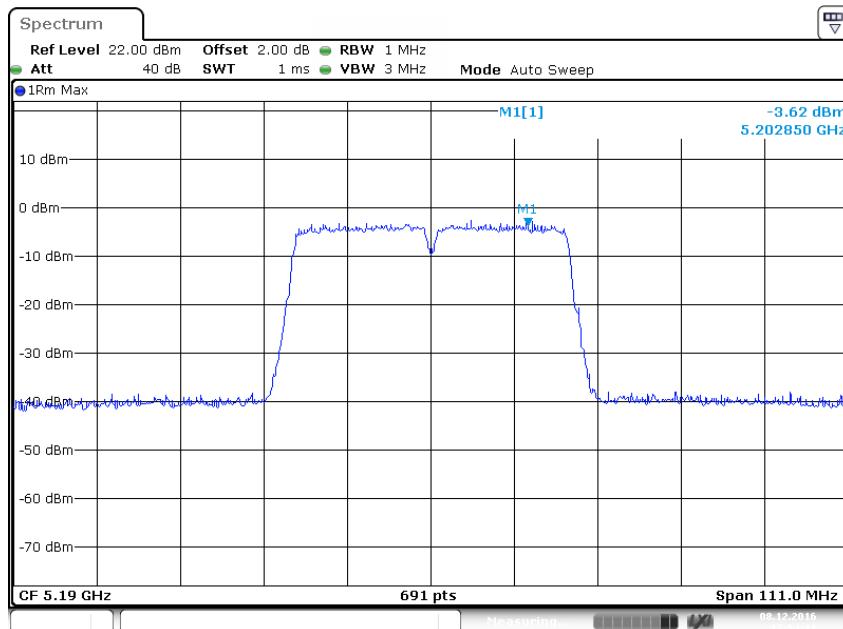
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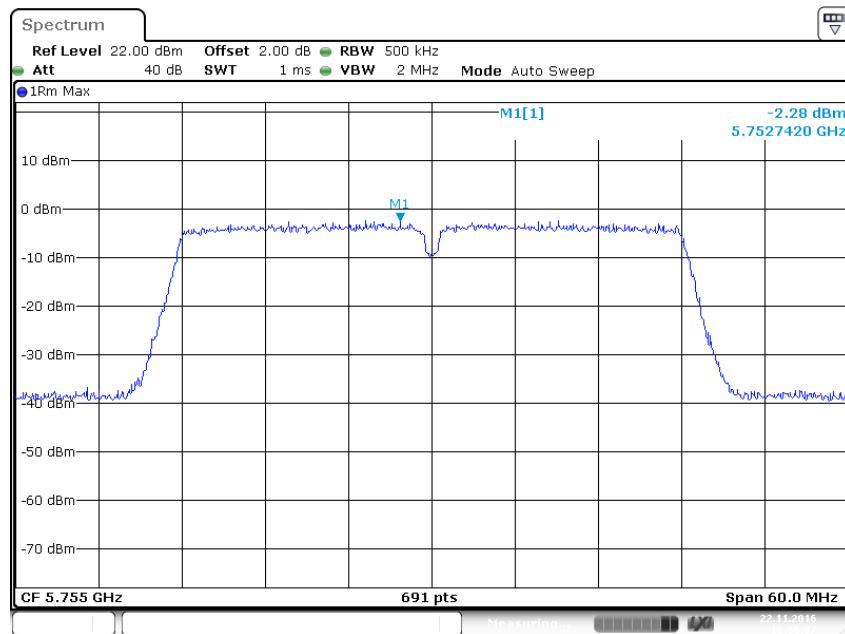
MIMO
ANT 0



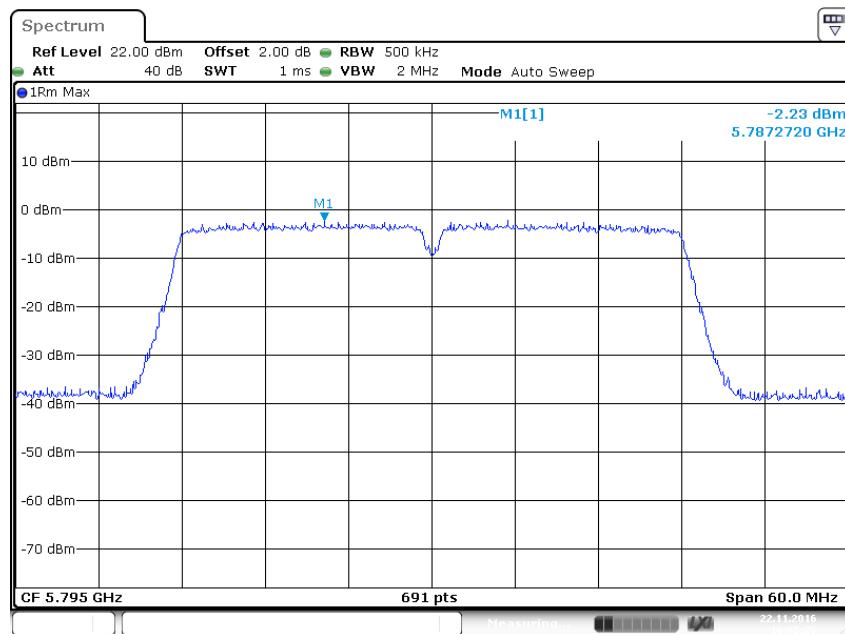
ANT 1



U-NII-3
SISO
ANT 0

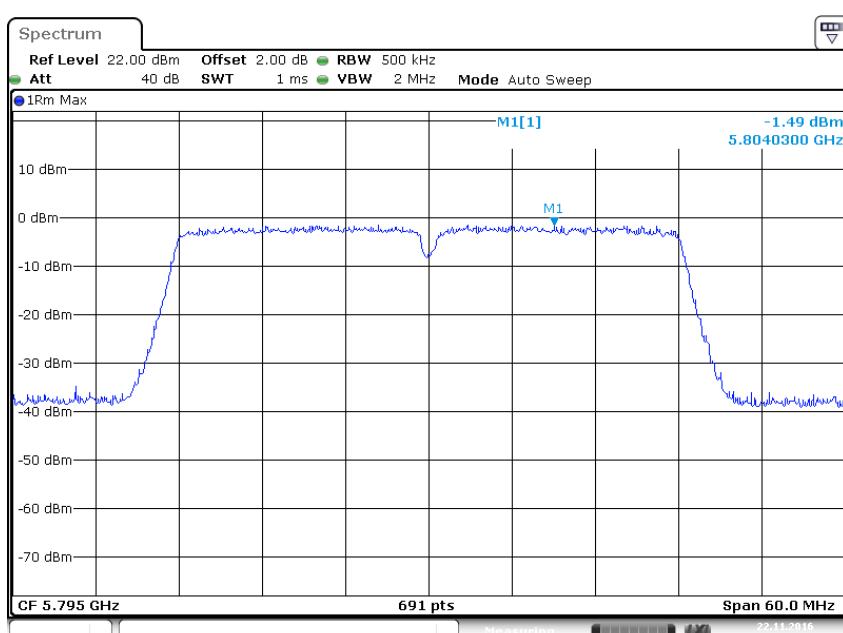
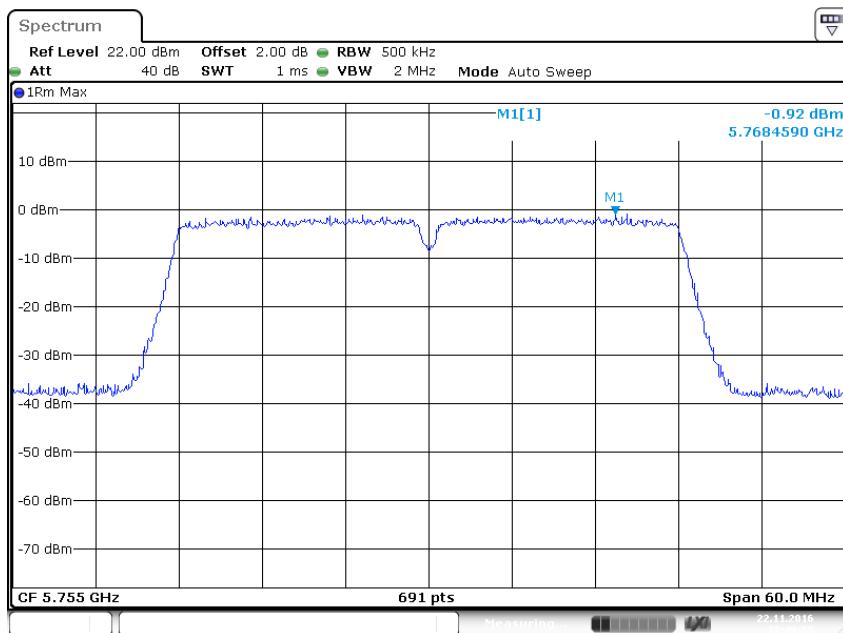


Date: 22.NOV.2016 16:06:07

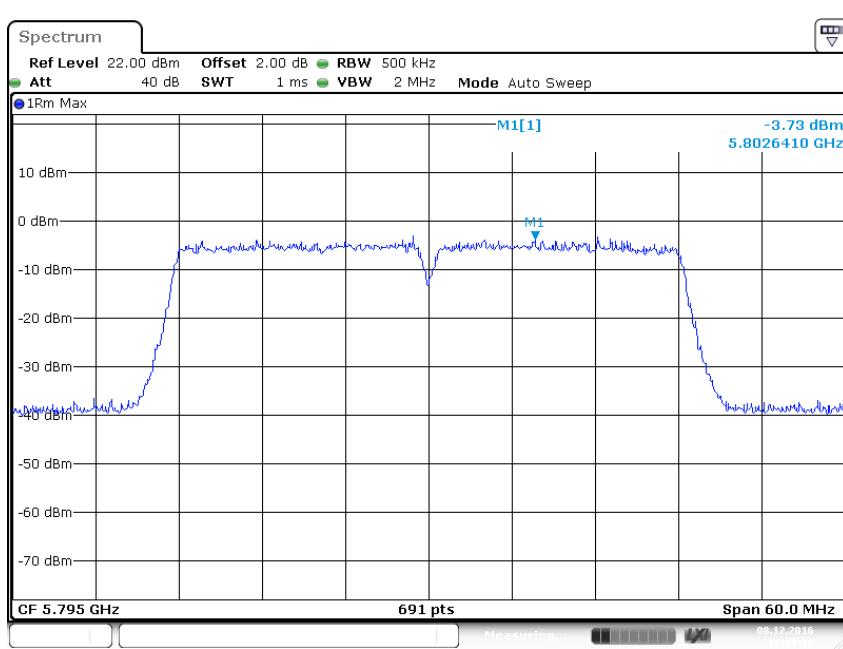
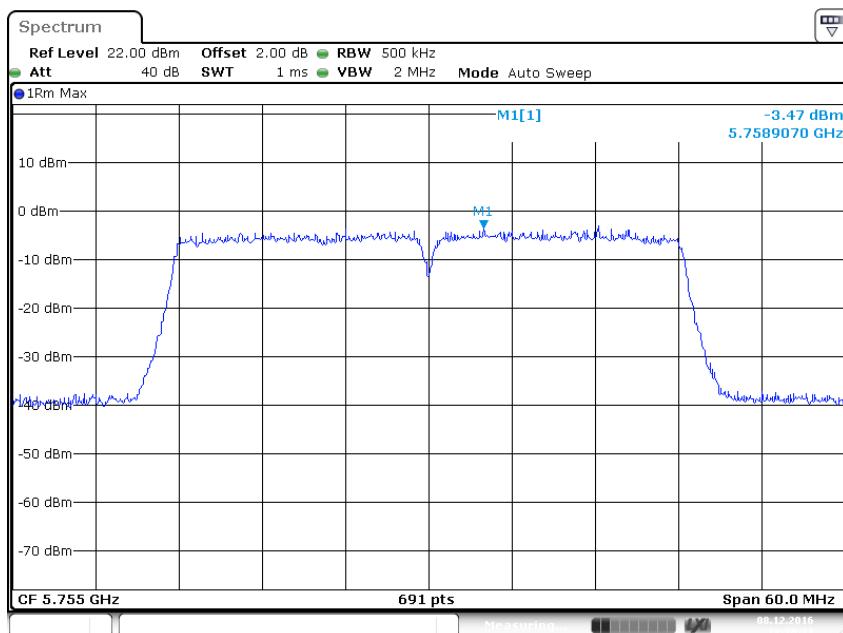


Date: 22.NOV.2016 16:05:25

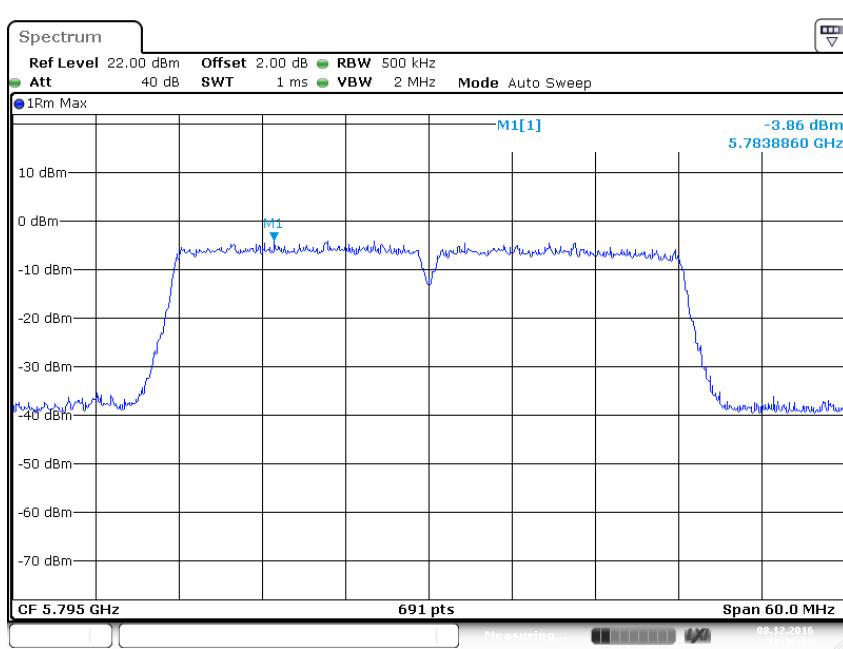
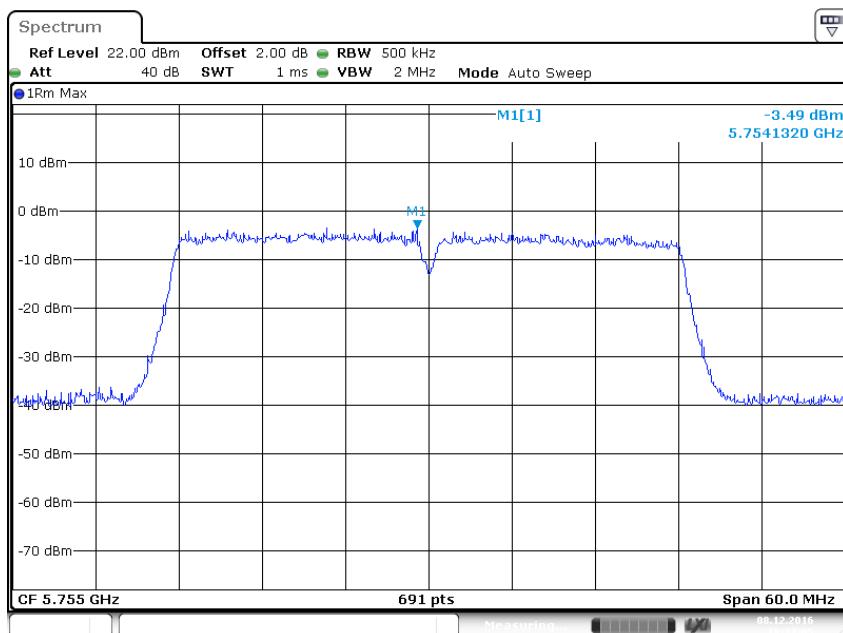
ANT 1



MIMO
ANT 0

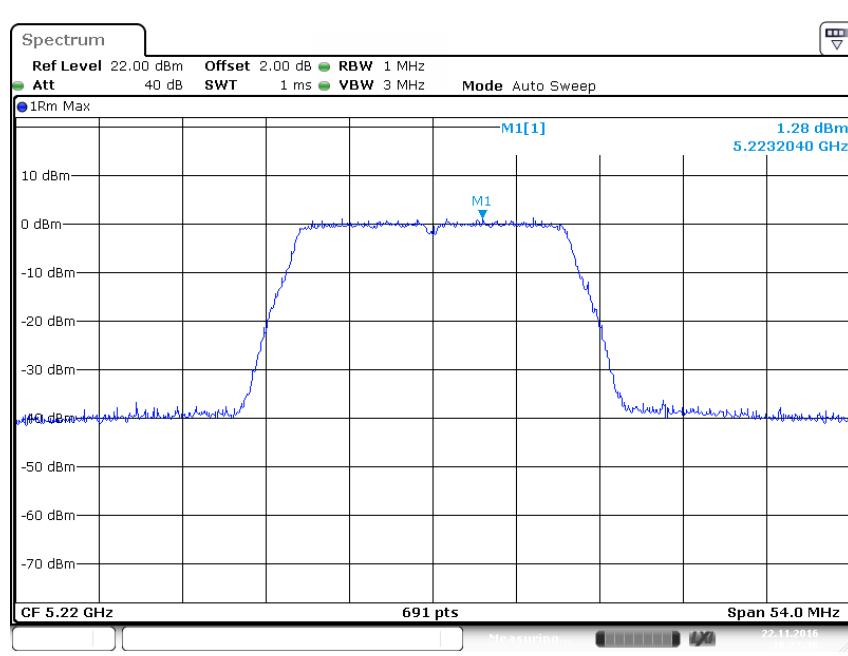
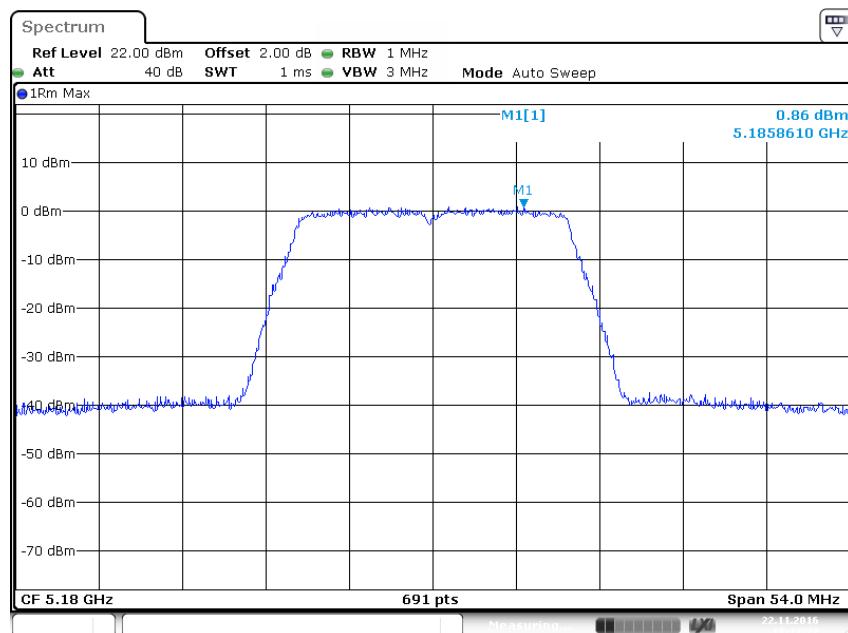


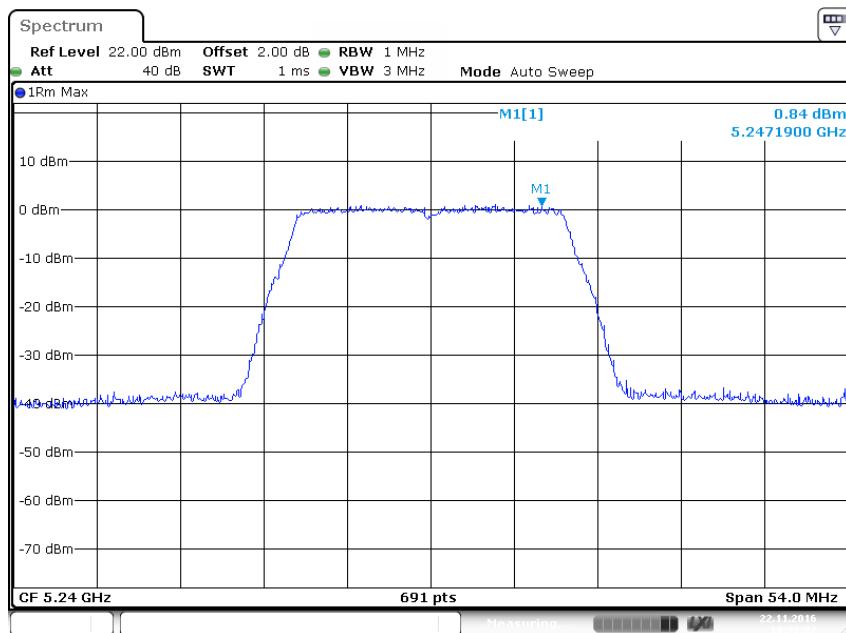
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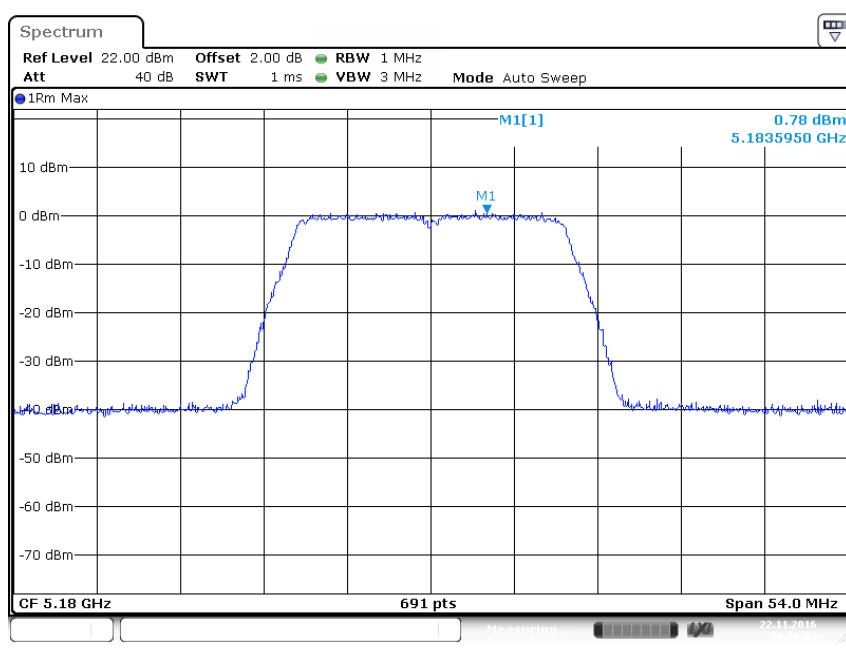
Wi-Fi 802.11 ac (HT20)

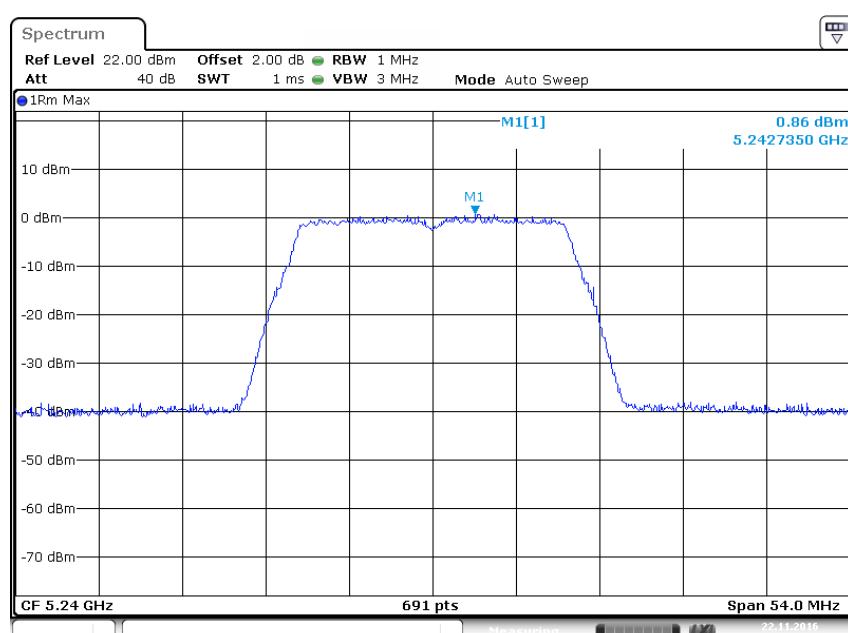
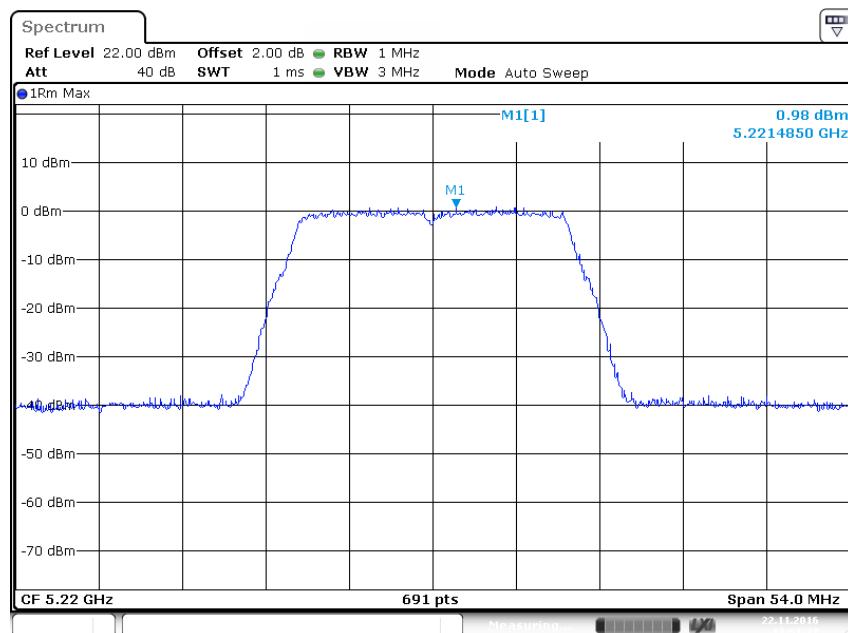
U-NII-1
SISO
ANT 0



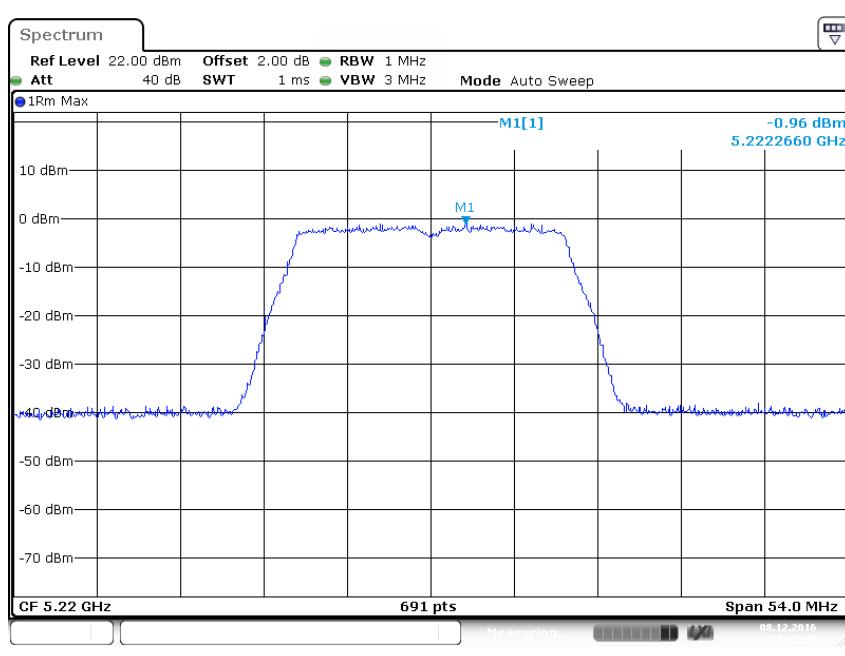
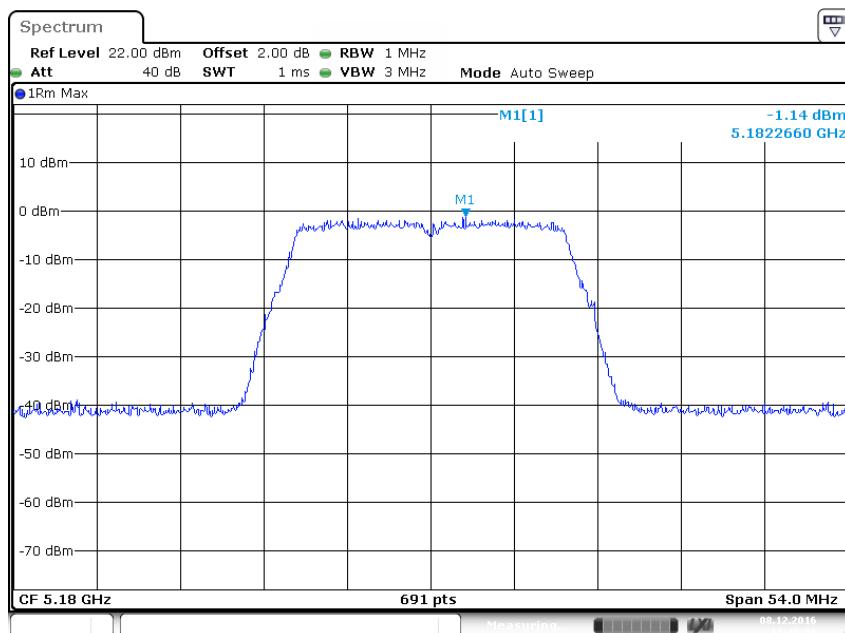


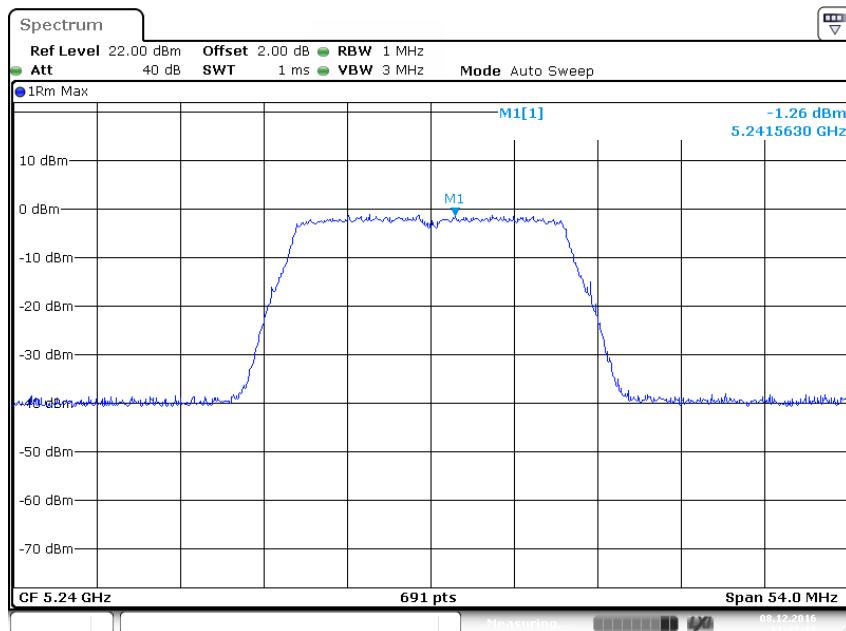
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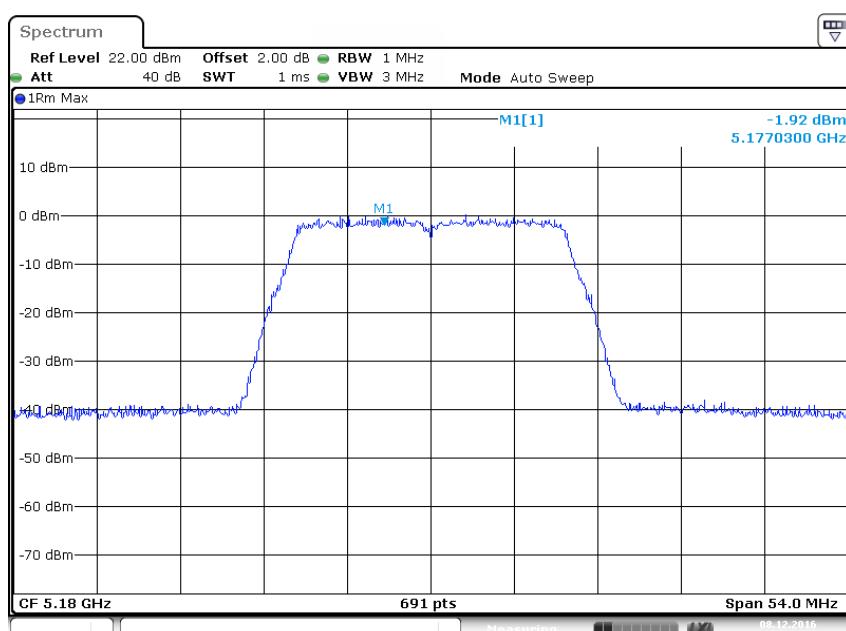


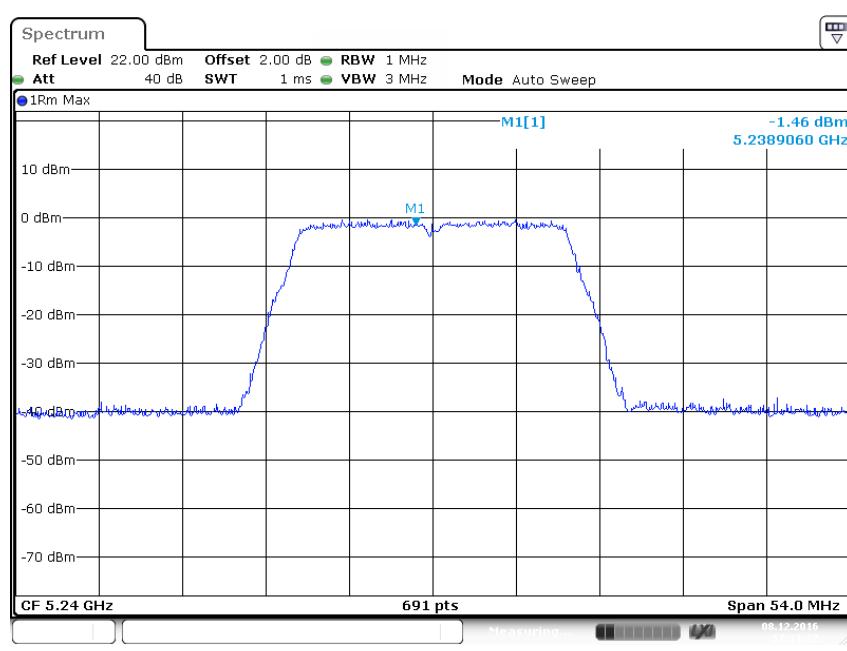
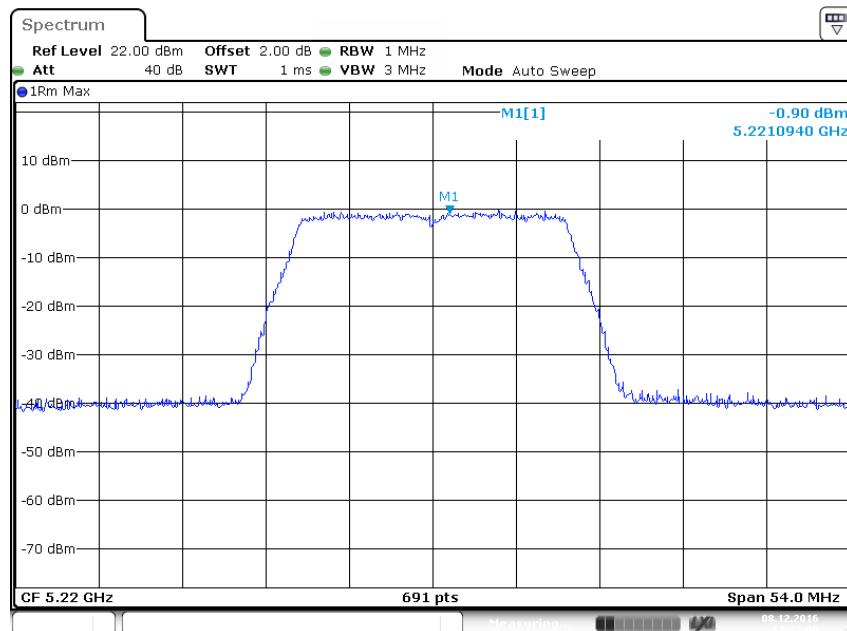
MIMO
ANT 0



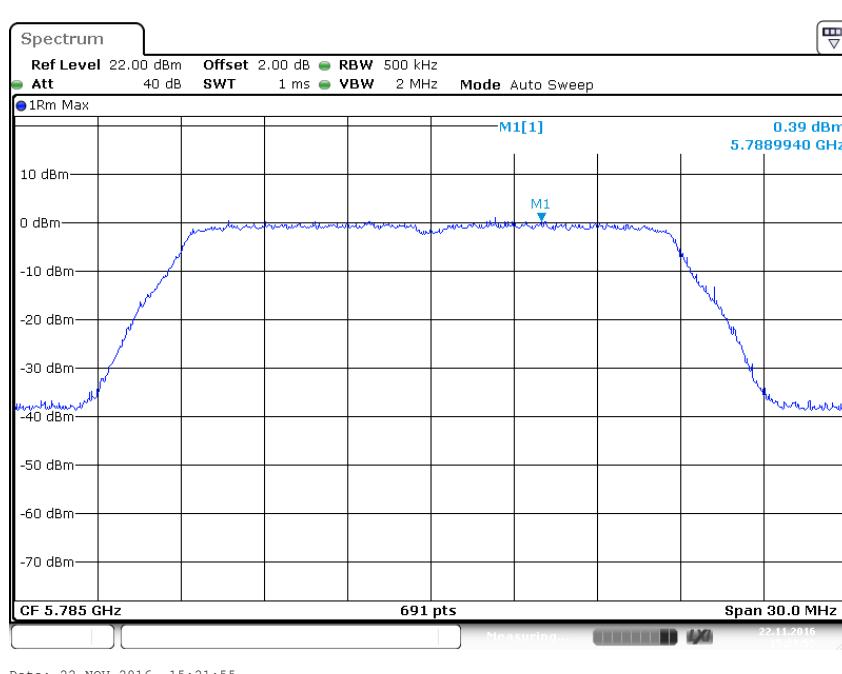
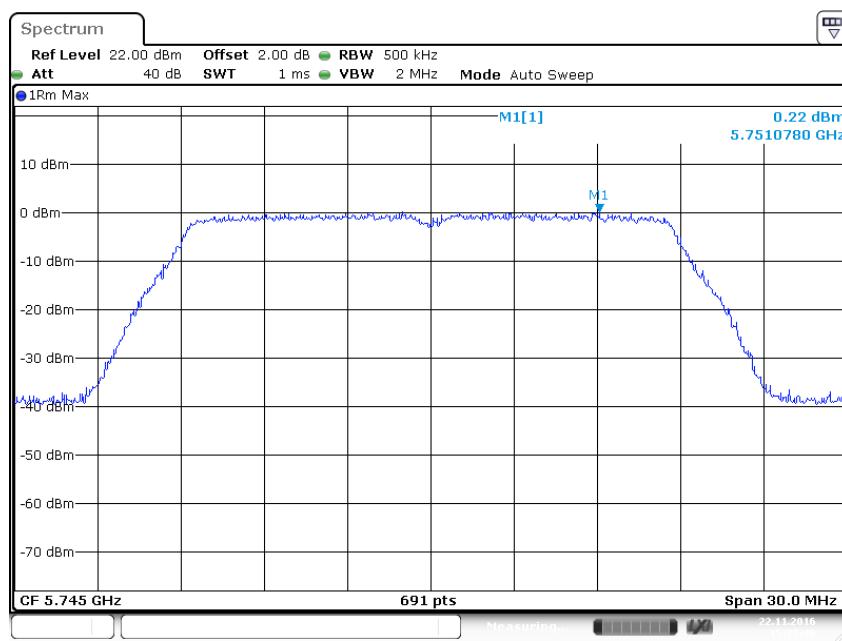


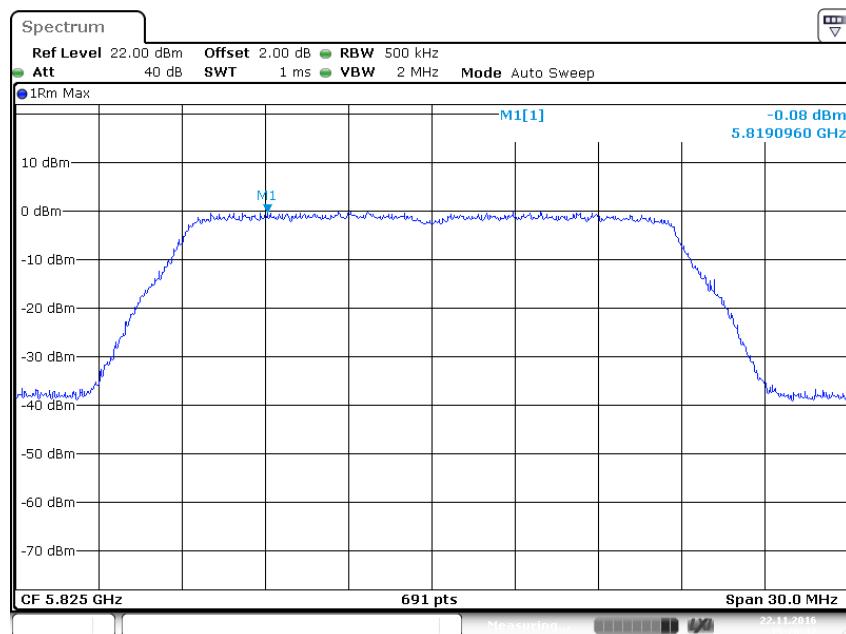
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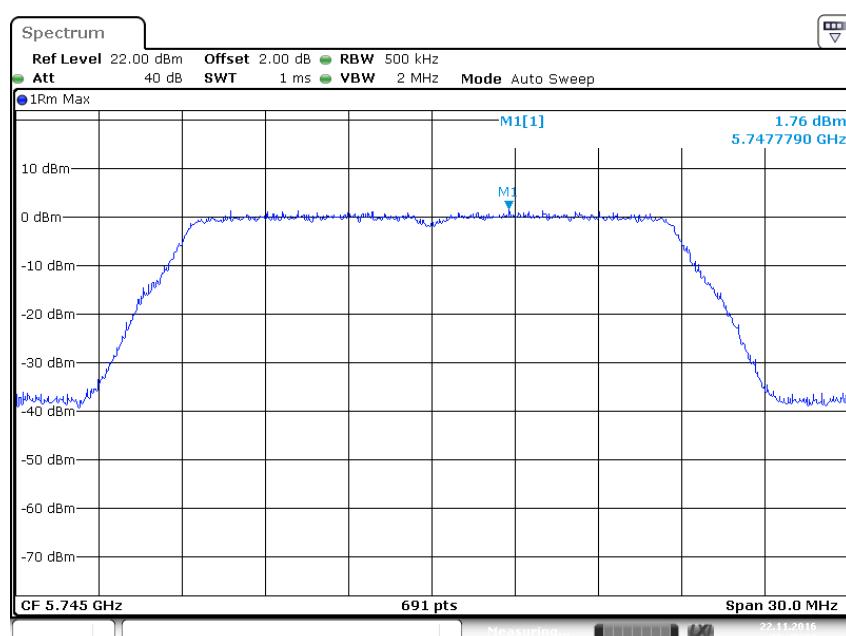


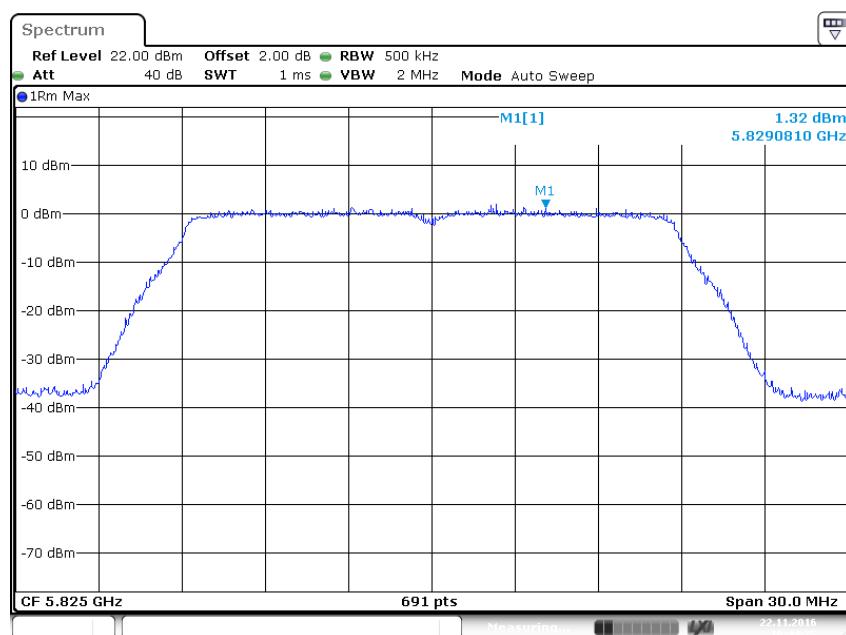
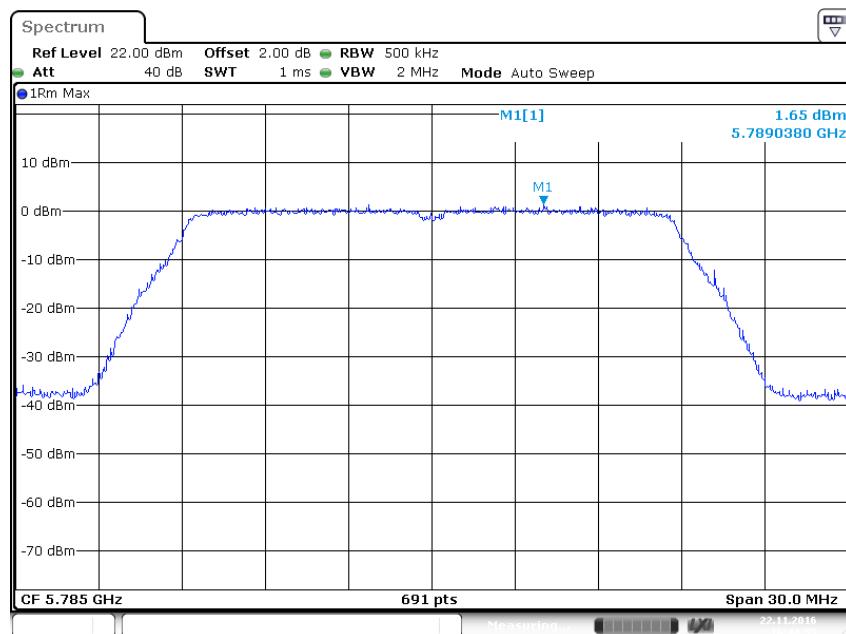
U-NII-3
SISO
ANT 0



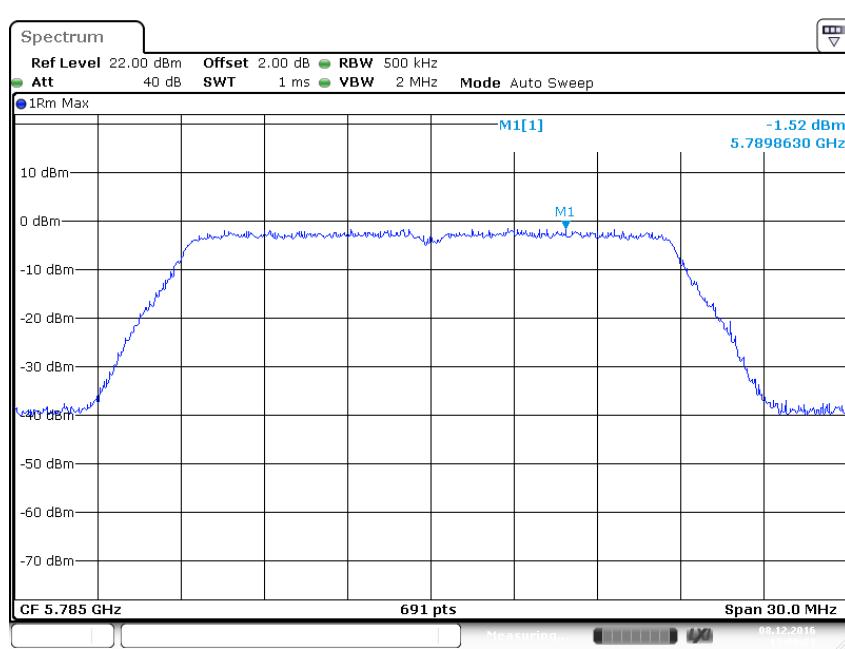
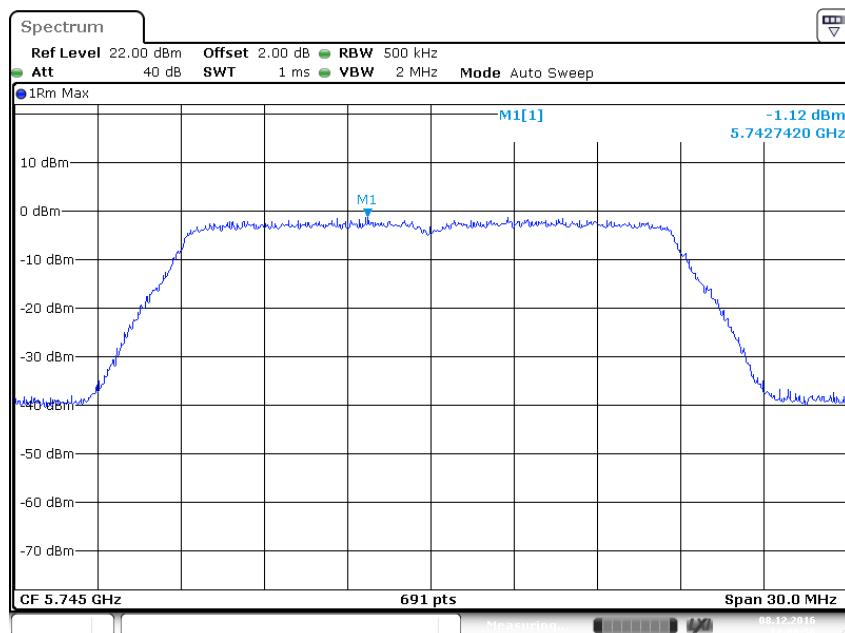


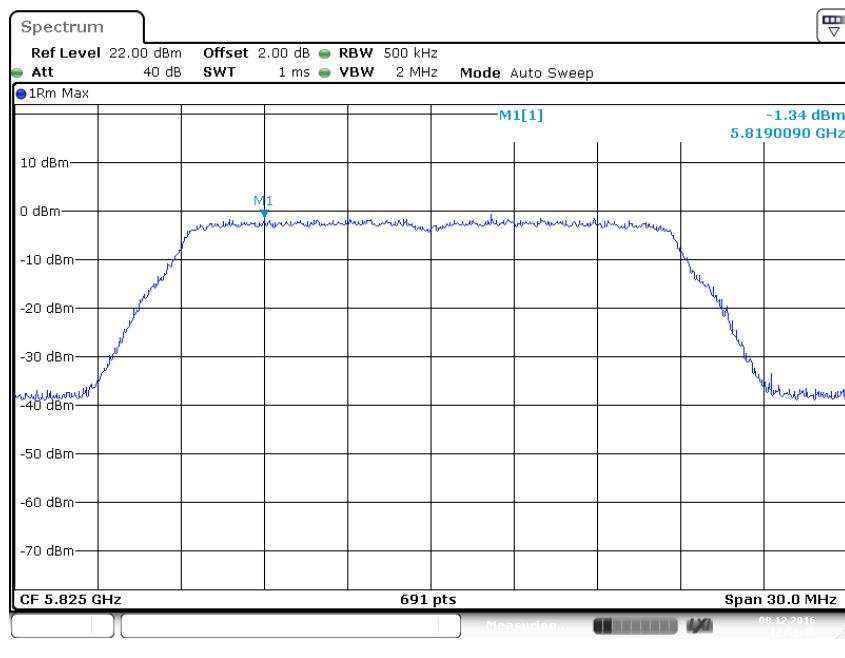
ANT 1



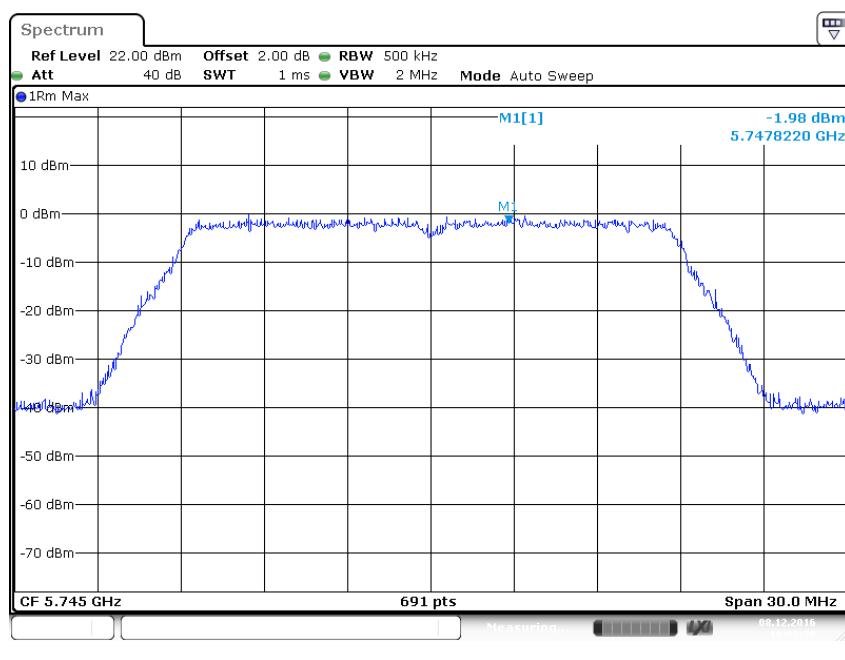


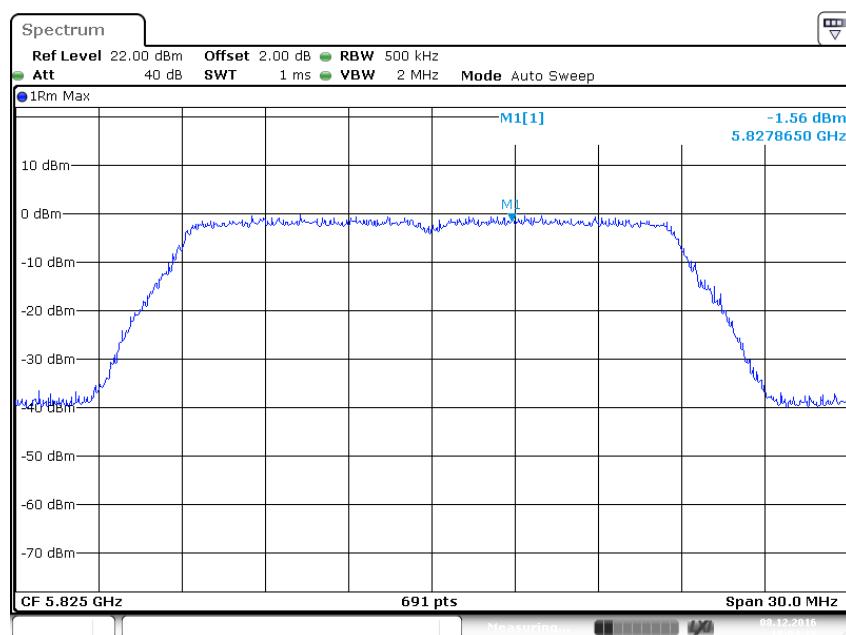
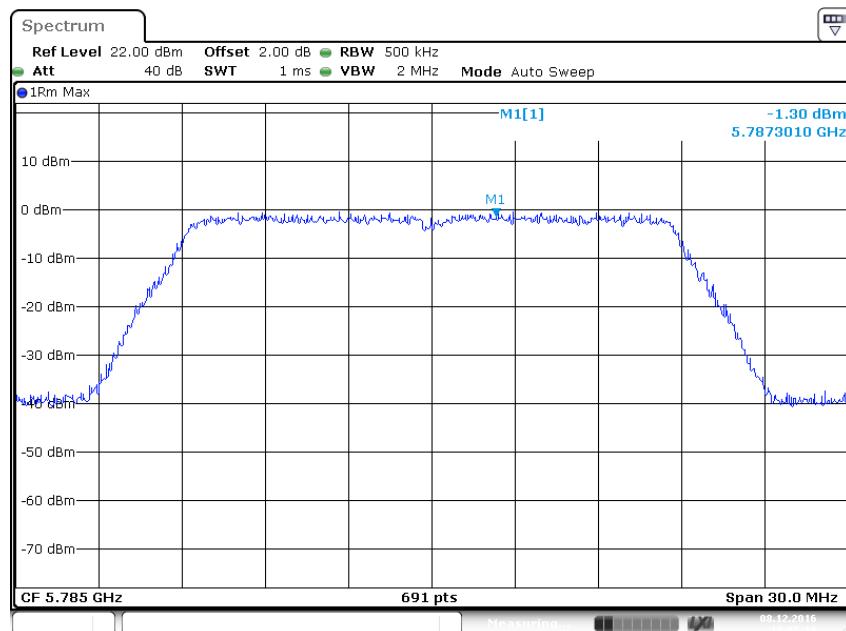
MIMO
ANT 0





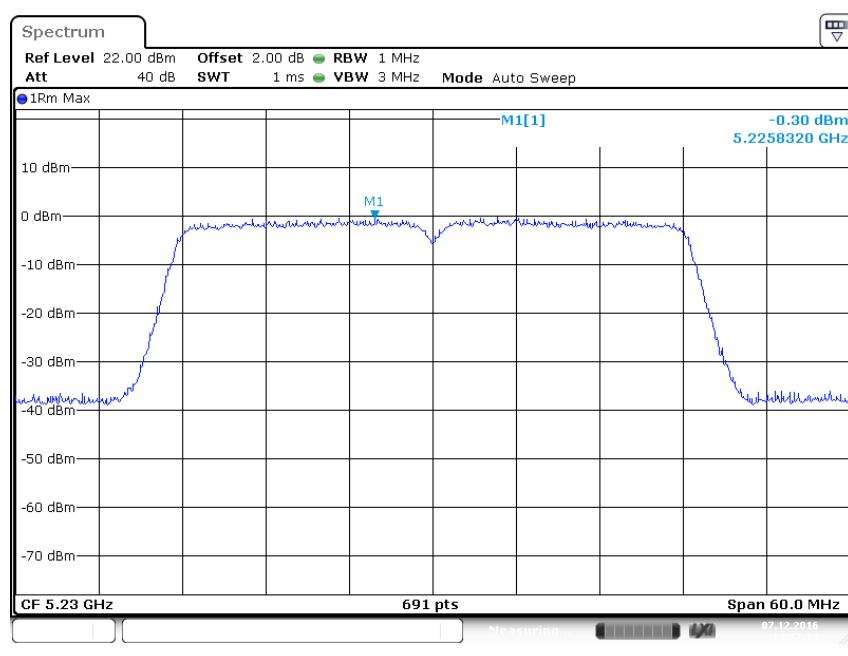
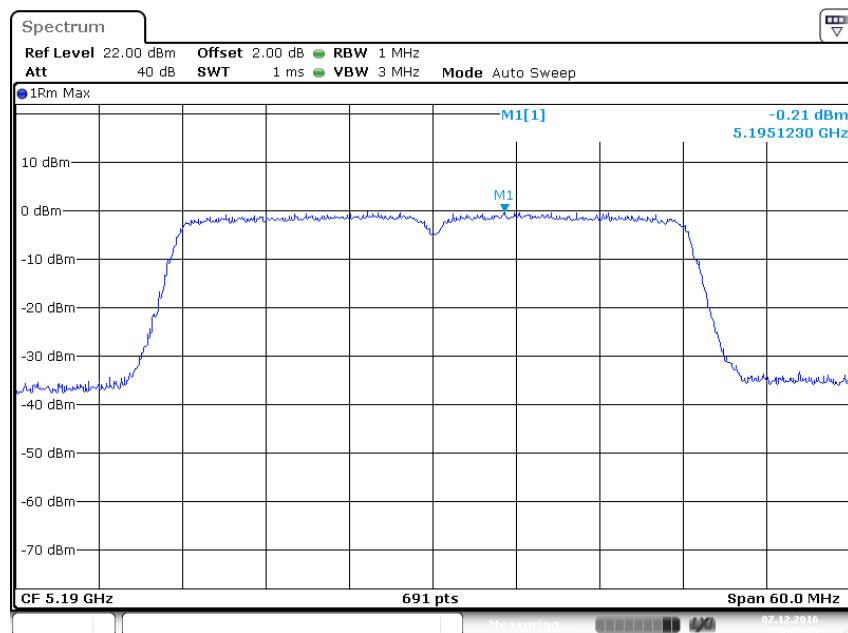
ANT 1



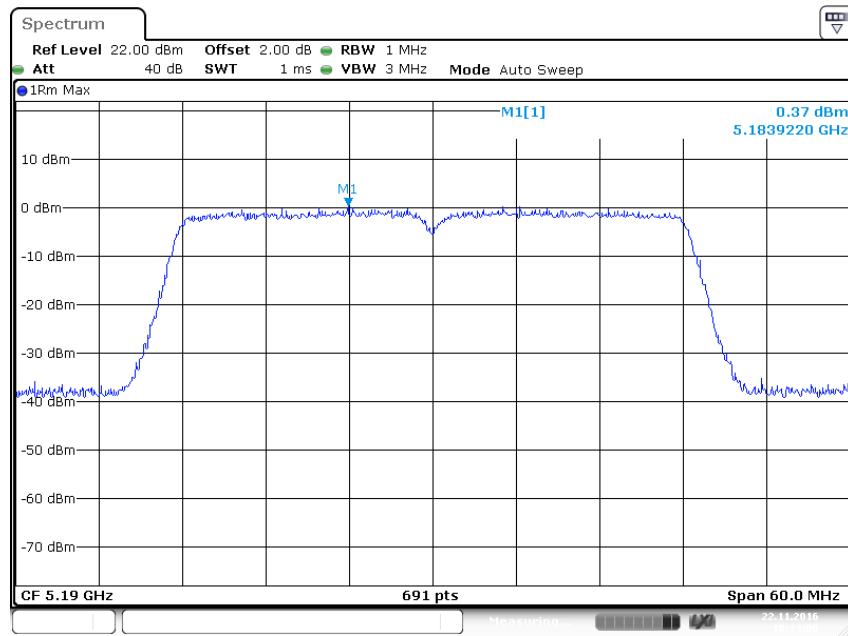


Wi-Fi 802.11 ac (HT40)

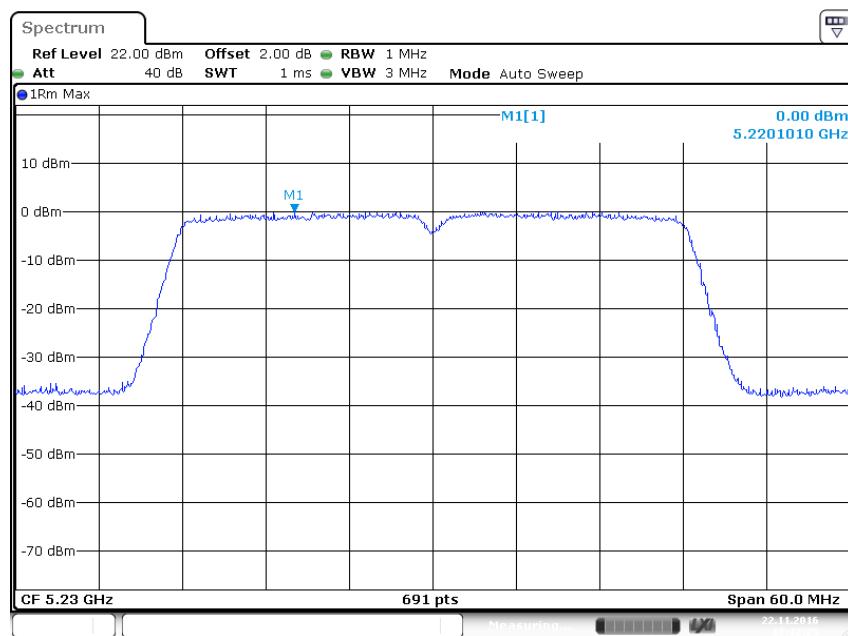
U-NII-1
SISO
ANT 0



ANT 1

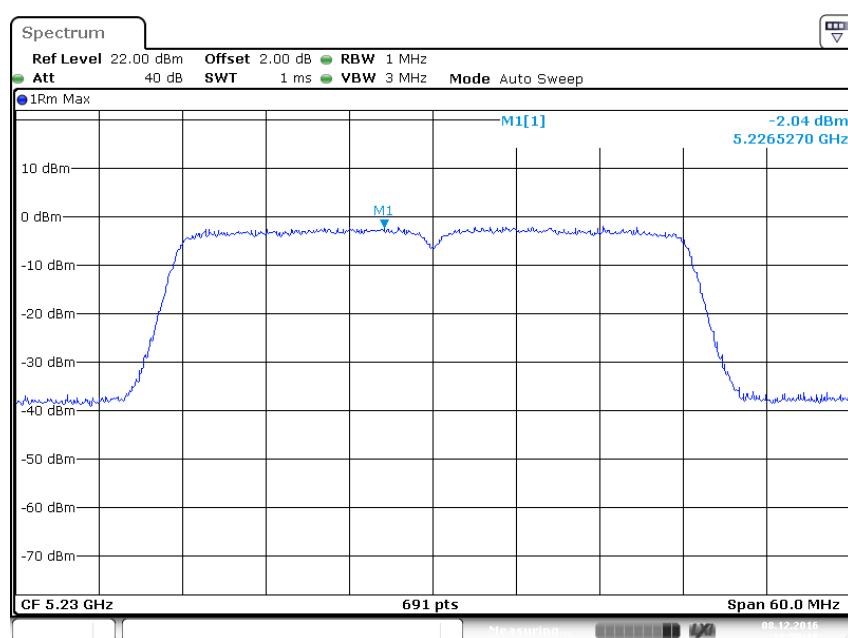
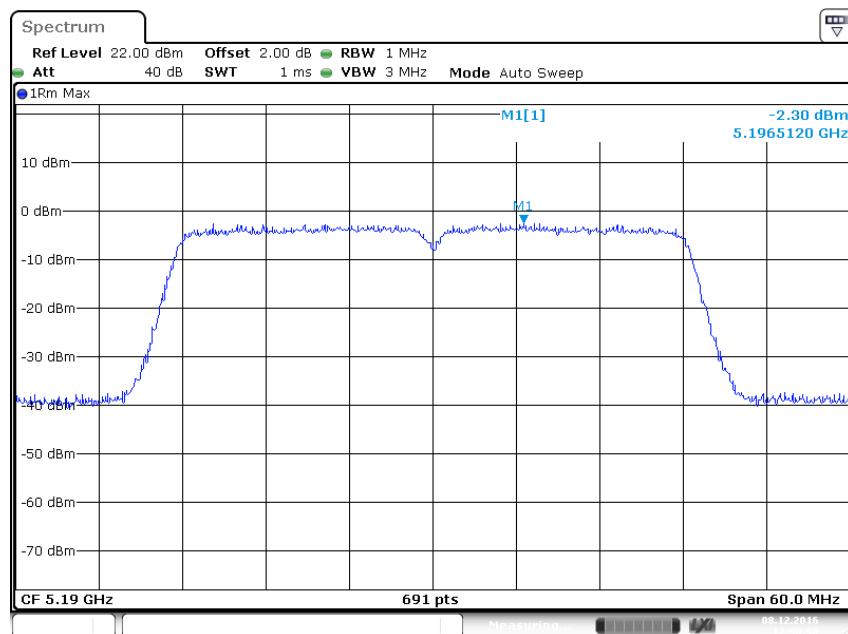


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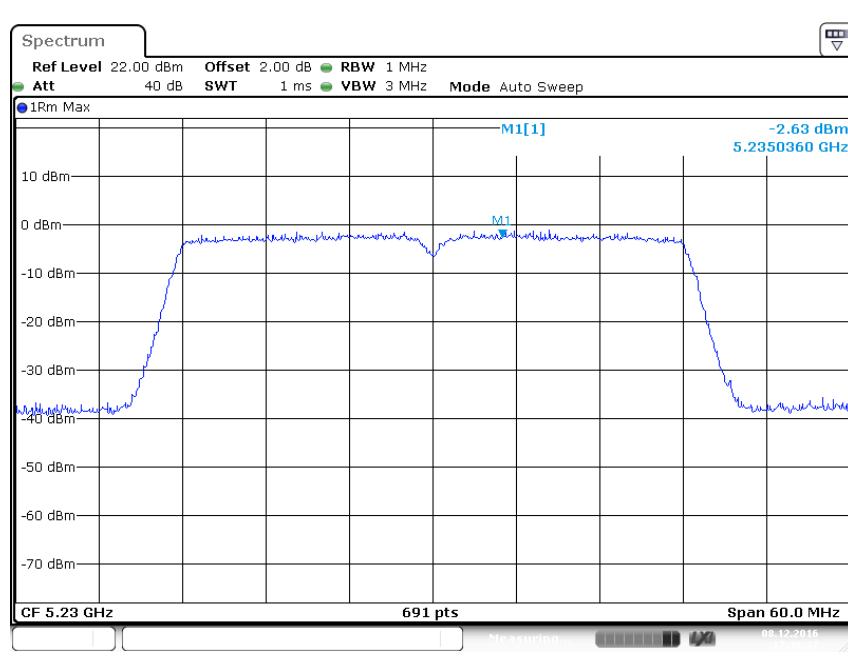
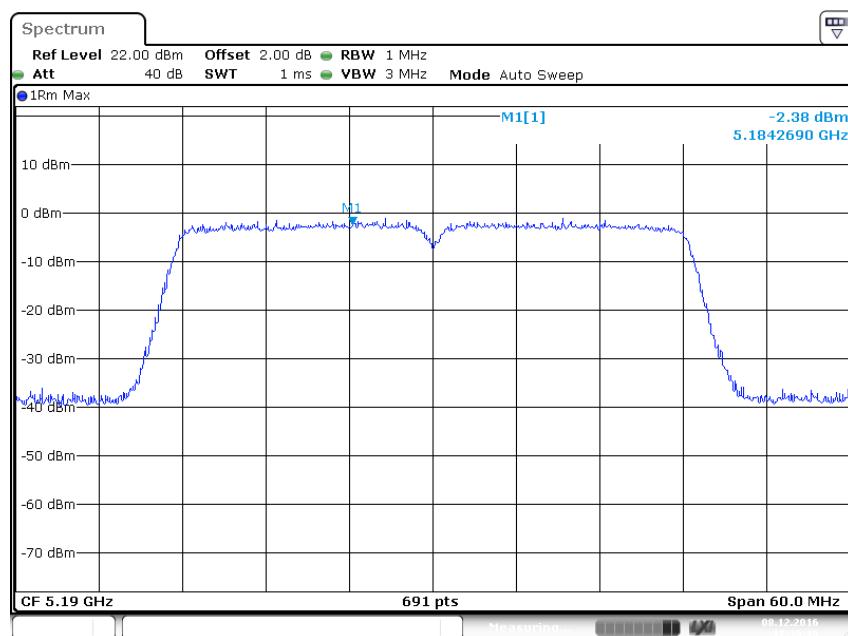


Date: 22.NOV.2016 18:32:25

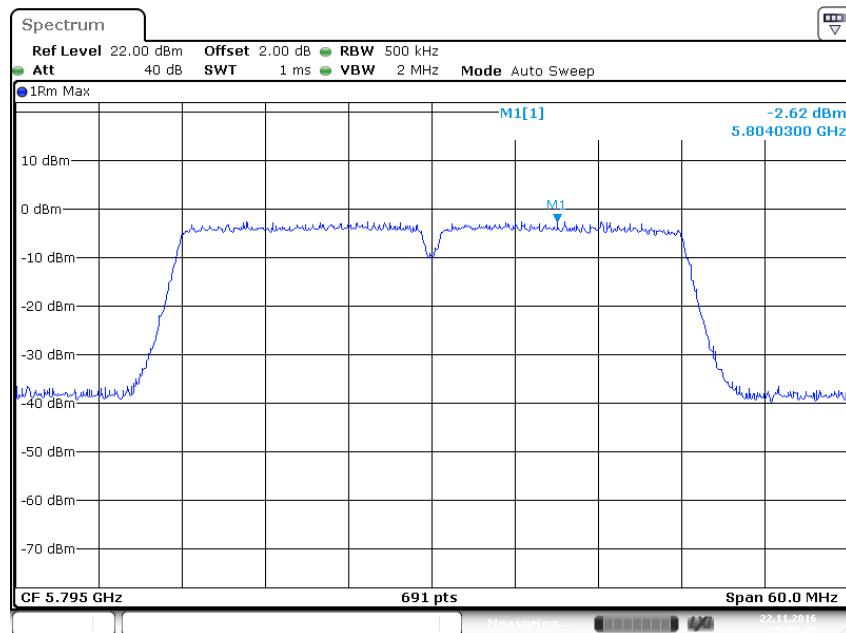
MIMO
ANT 0



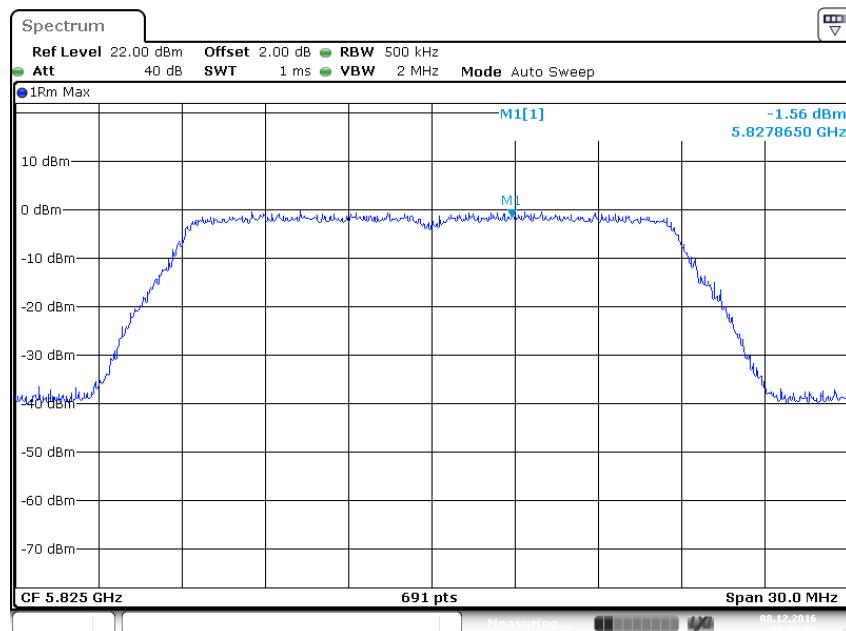
ANT 1



U-NII-3
SISO
ANT 0

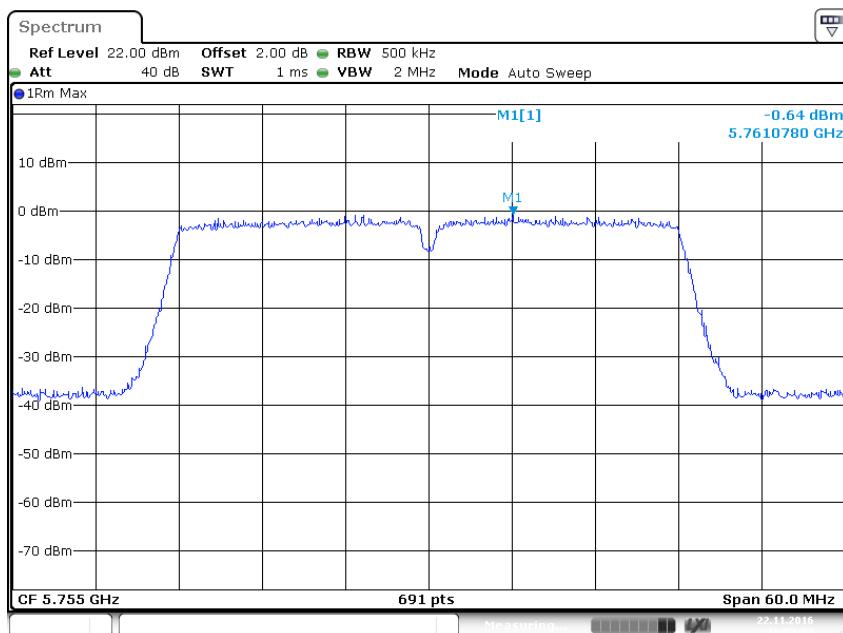


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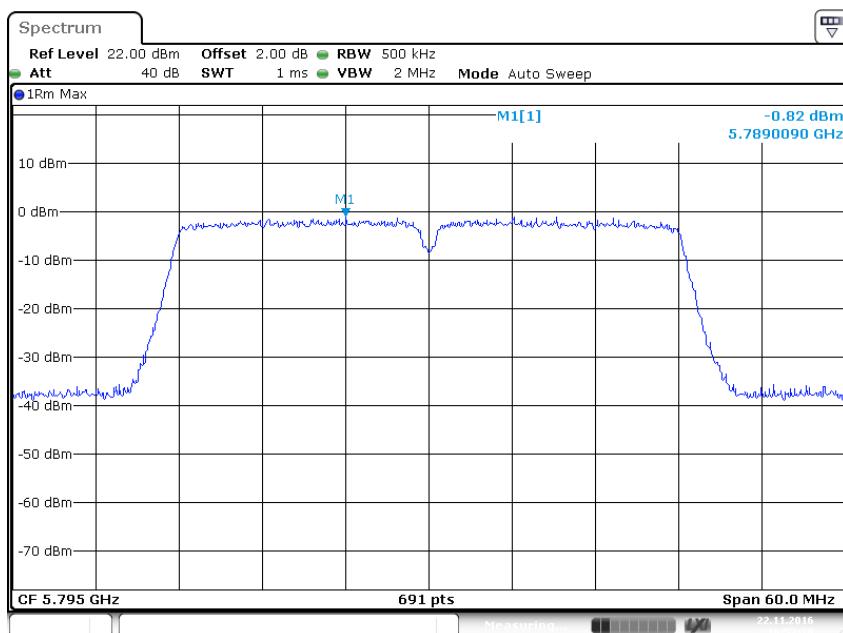


Date: 8.DEC.2016 18:04:18

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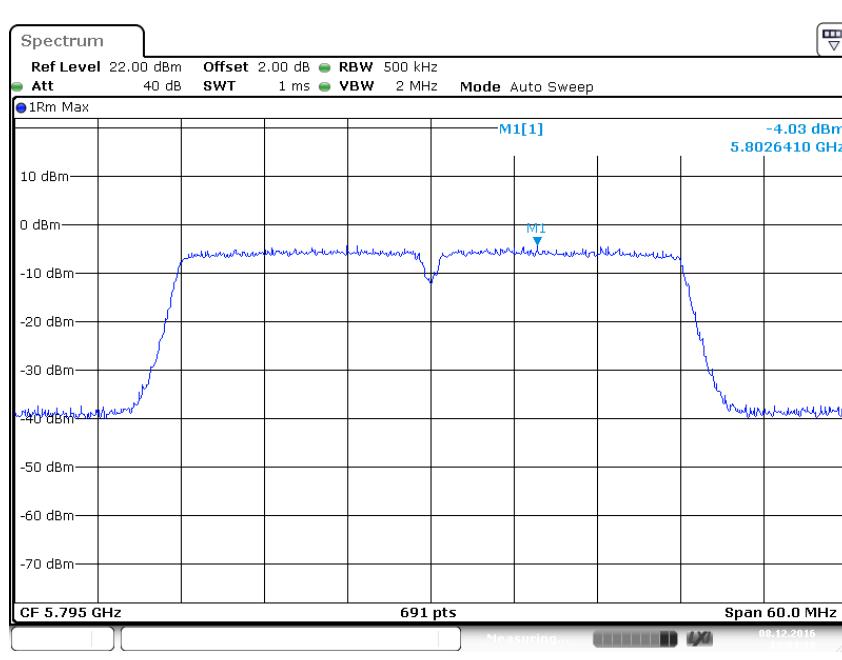
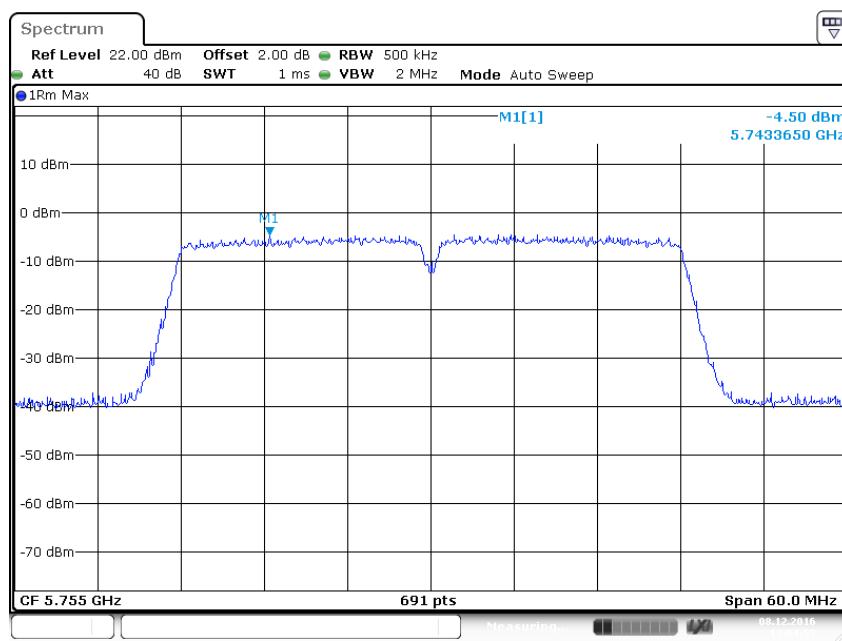


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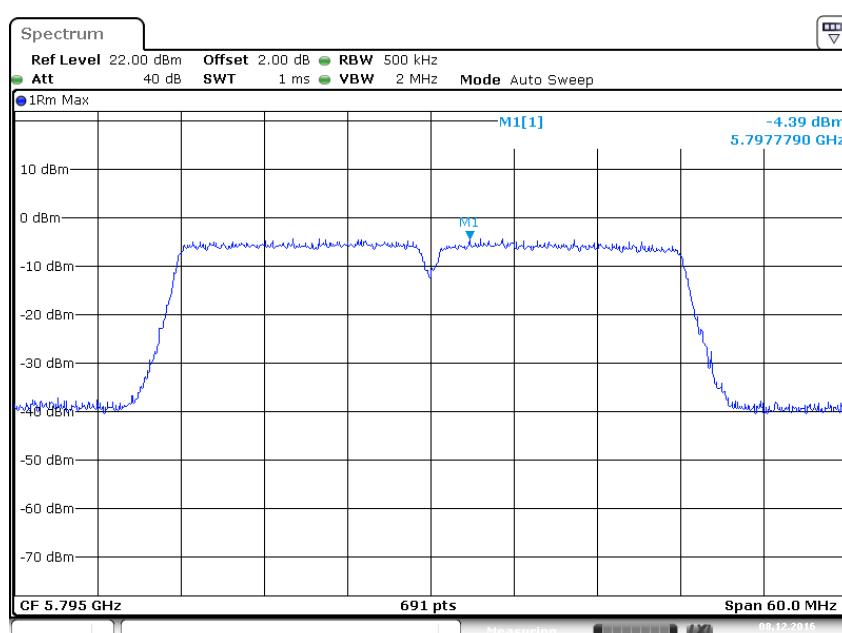
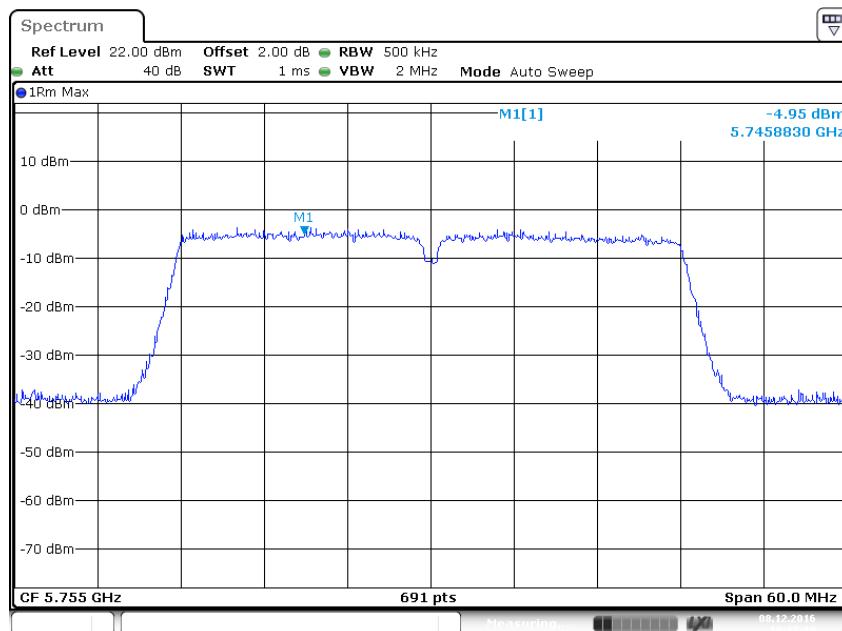


Date: 22.NOV.2016 16:53:29

MIMO
ANT 0



ANT 1

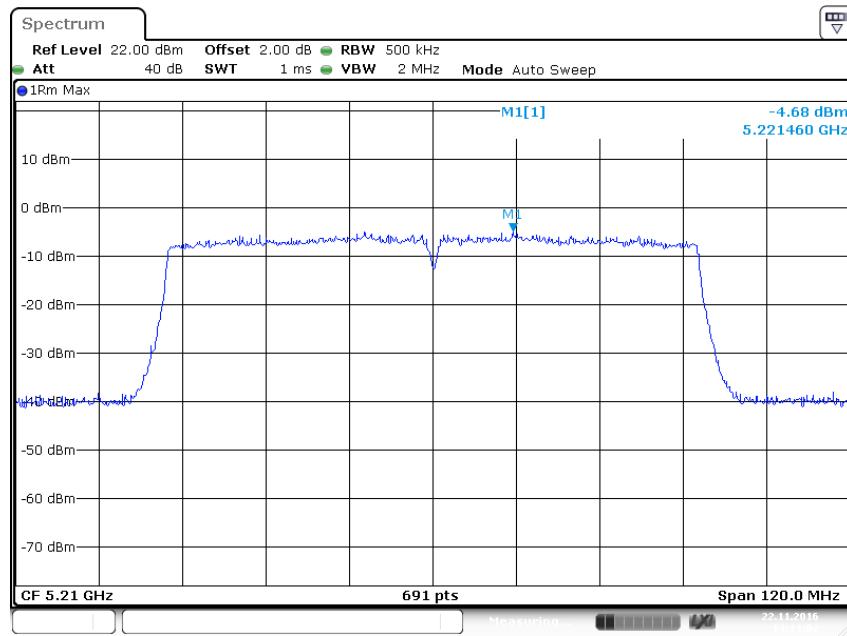


Wi-Fi 802.11 ac (HT80)

U-NII-1

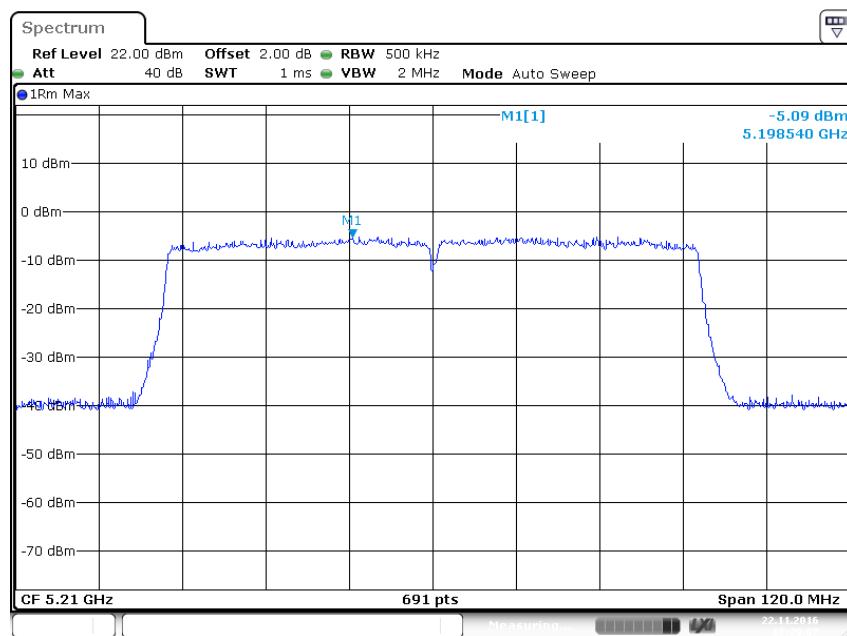
SISO

ANT 0



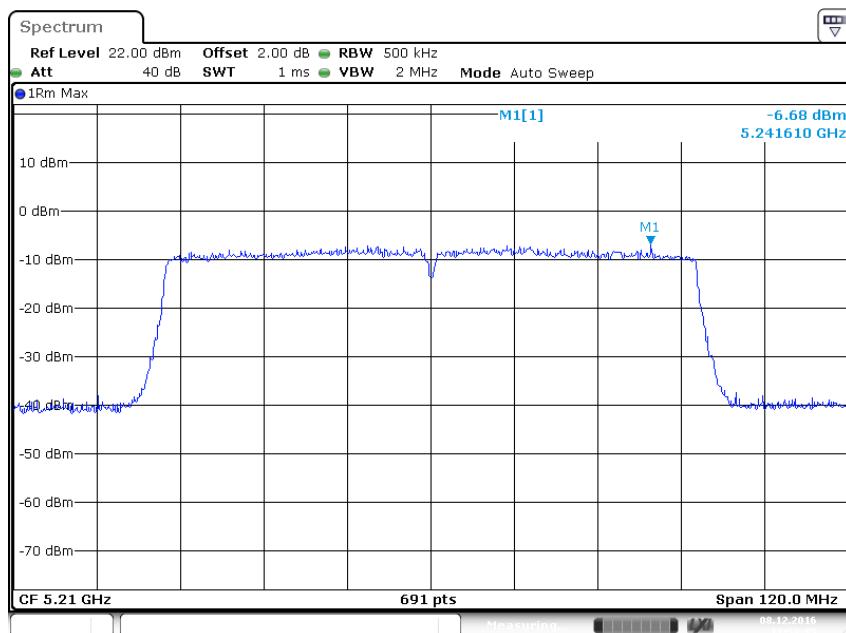
Date: 22.NOV.2016 14:13:03

ANT 1

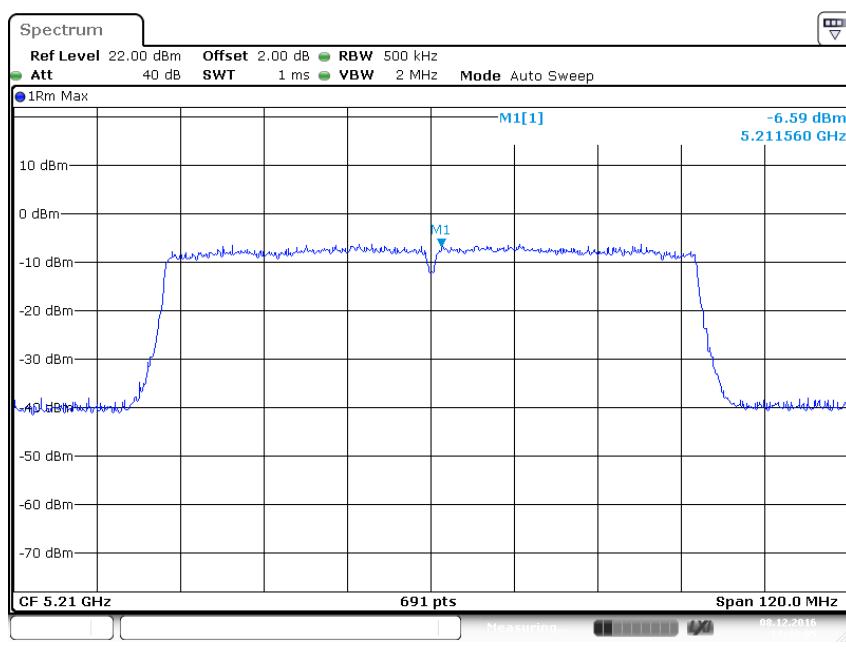


Date: 22.NOV.2016 18:39:08

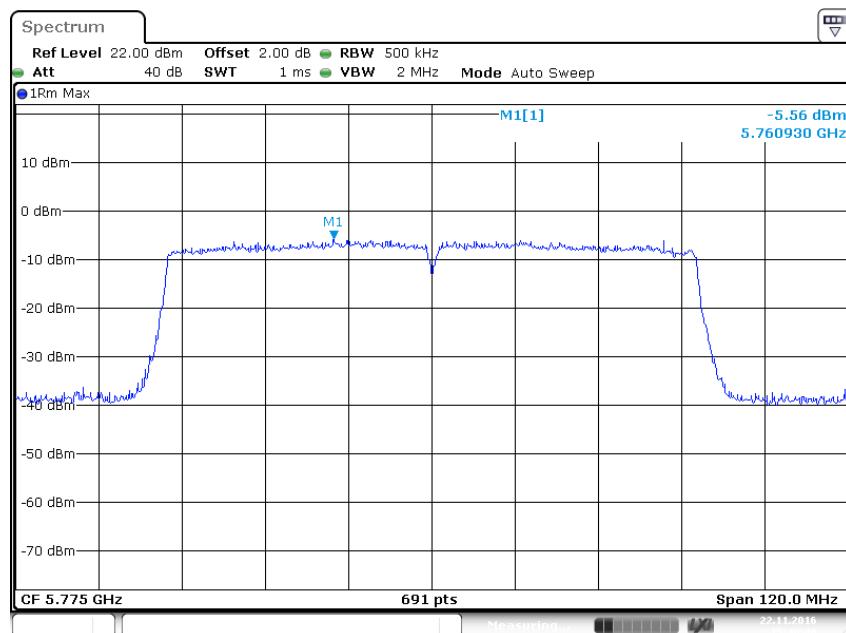
MIMO
ANT 0



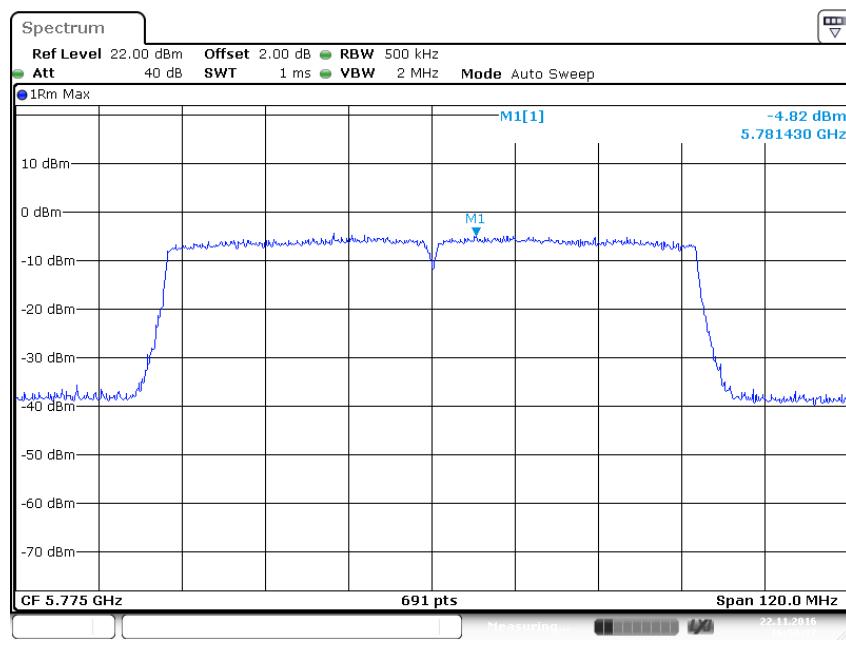
ANT 1



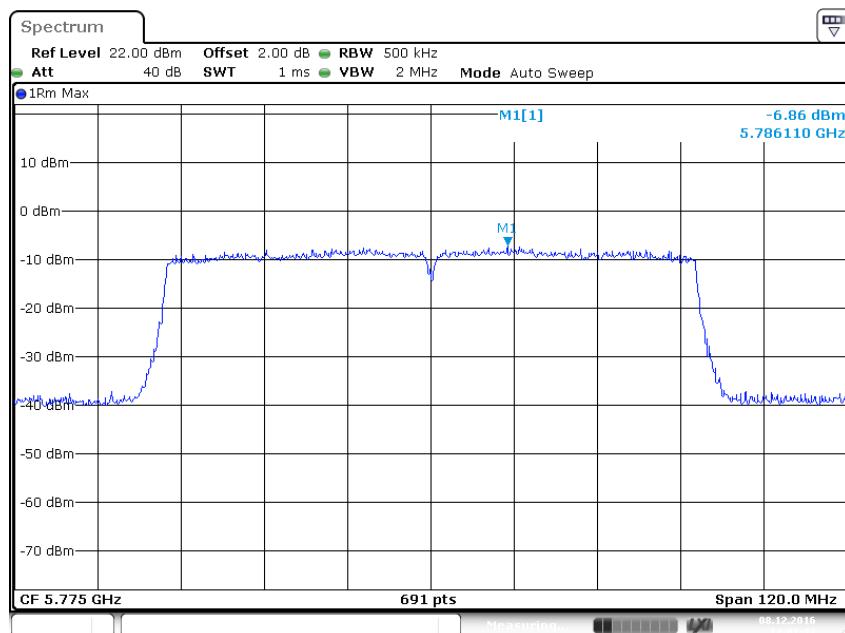
U-NII-3
SISO
ANT 0



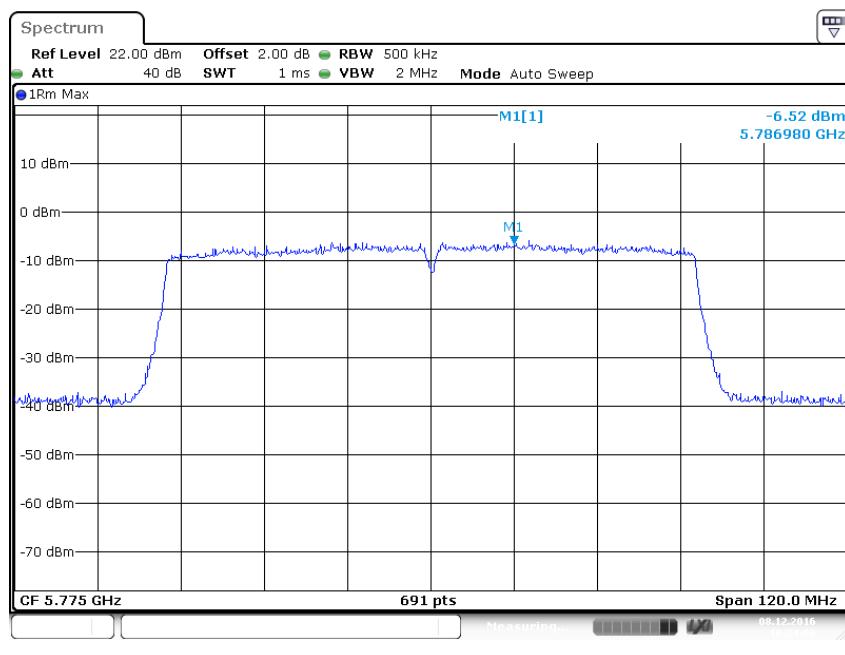
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MIMO
ANT 0



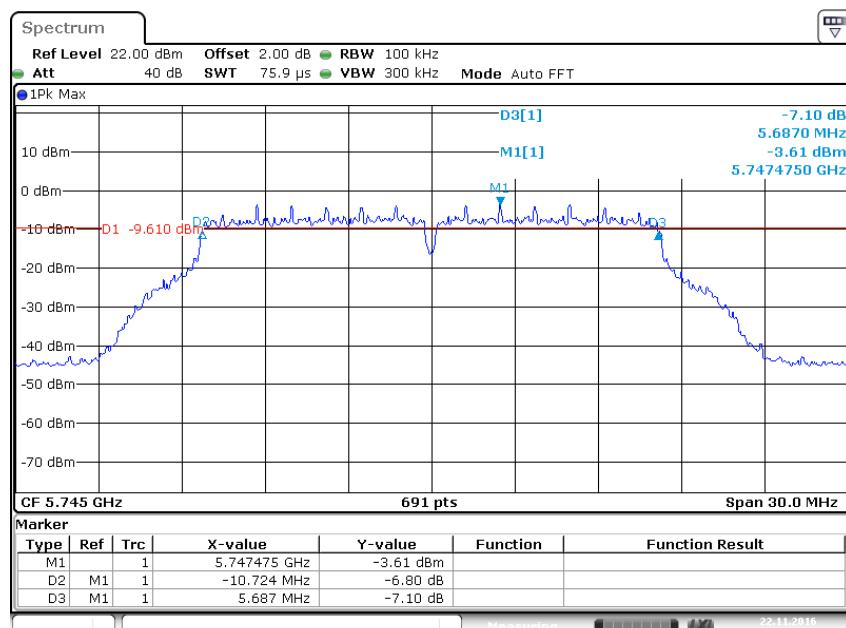
ANT 1



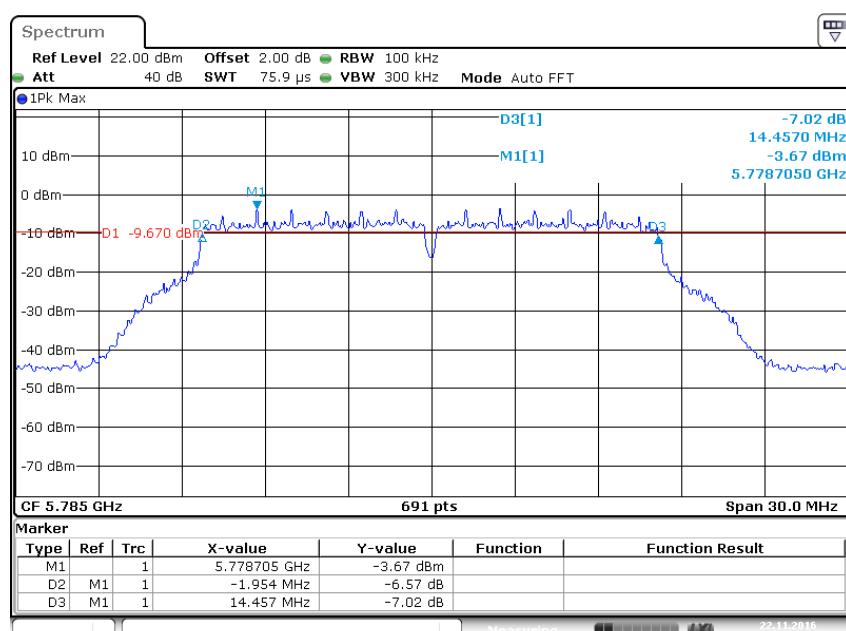
APPENDIX A.2: 6dB Bandwidth

Wi-Fi 802.11 a mode

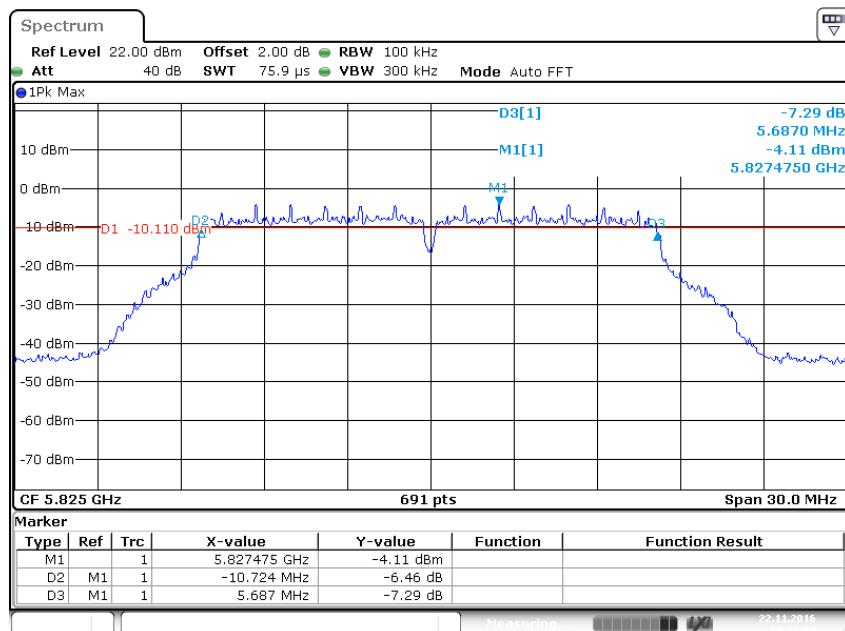
U-NII-3
ANT 0



Date: 22.NOV.2016 14:47:53

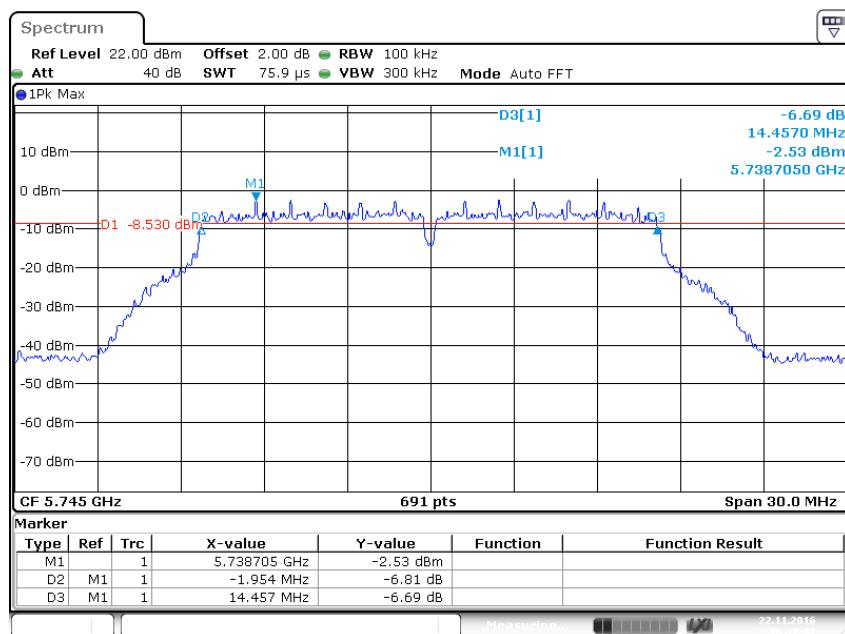


Date: 22.NOV.2016 14:49:43

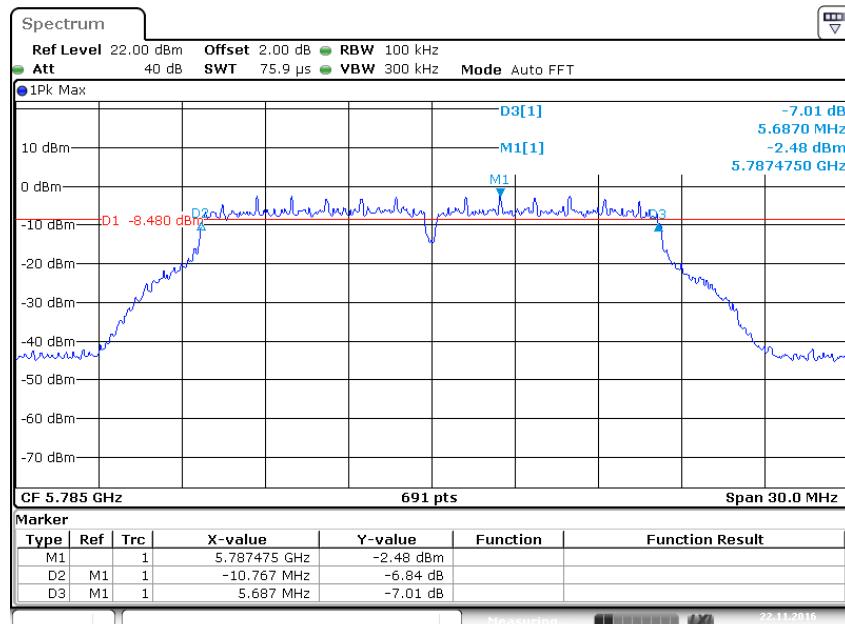


Date: 22.NOV.2016 14:51:10

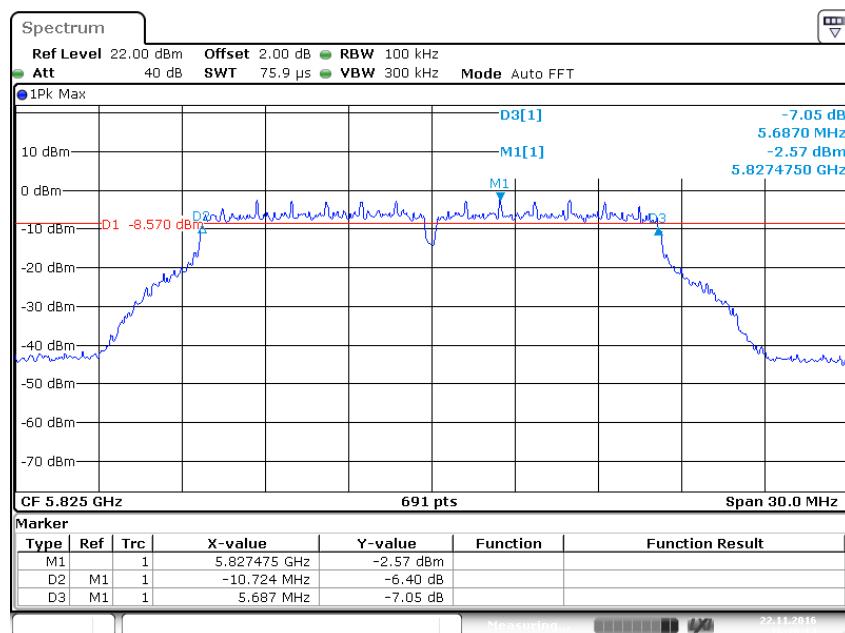
ANT 1



Date: 22.NOV.2016 16:17:47



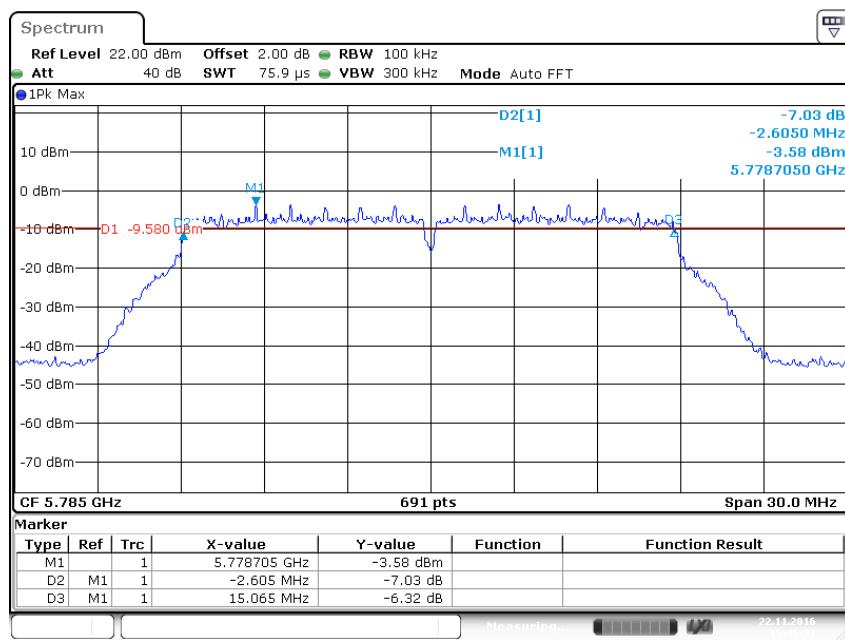
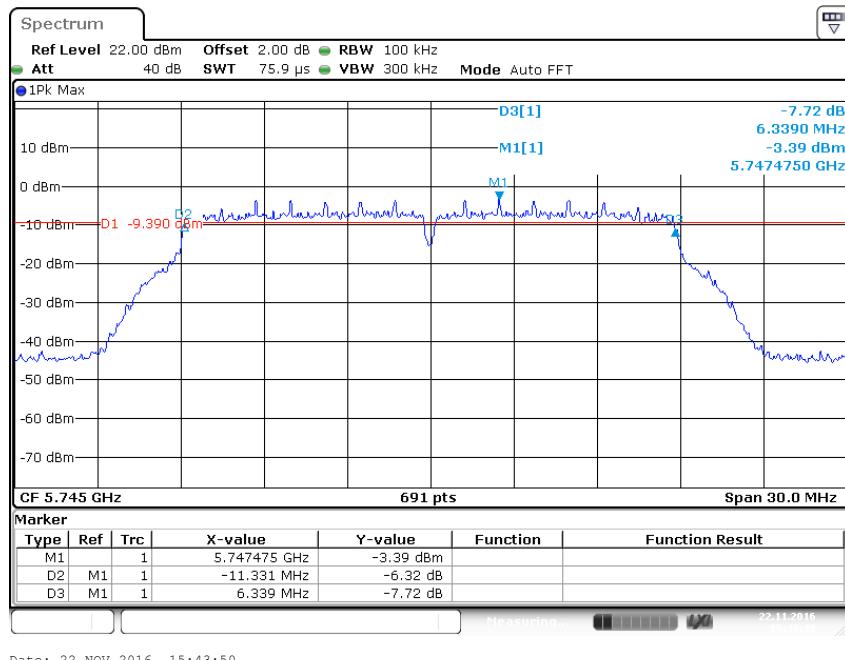
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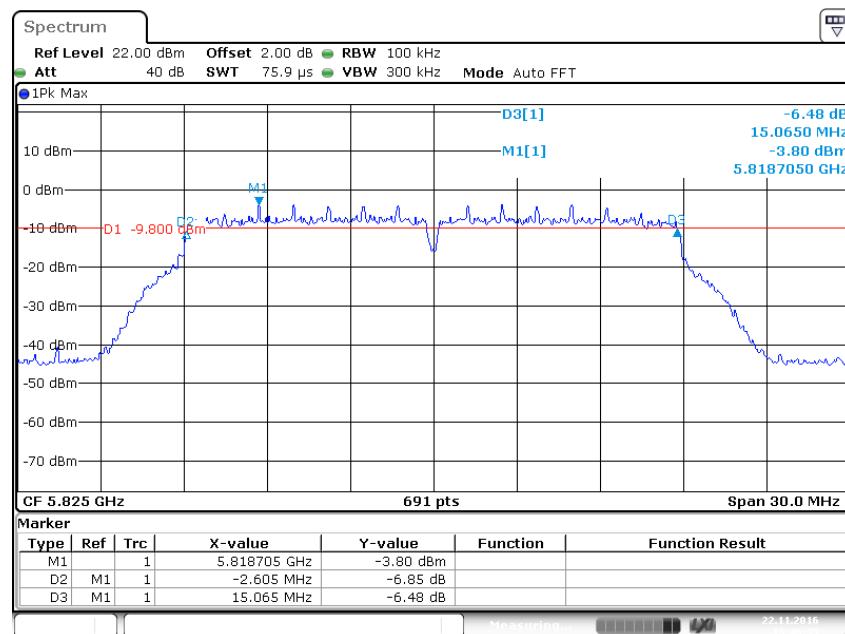


Date: 22.NOV.2016 16:20:14

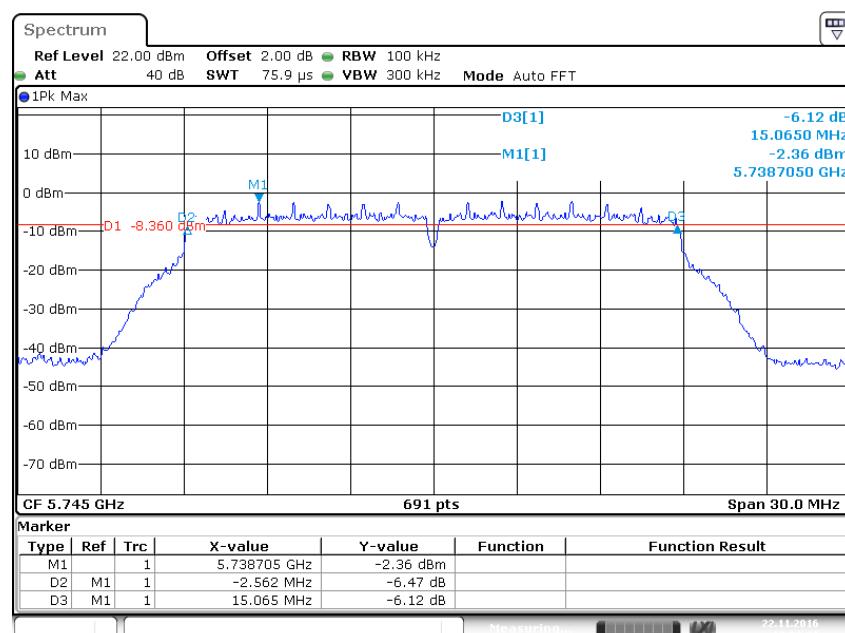
Wi-Fi 802.11 n (HT20) mode

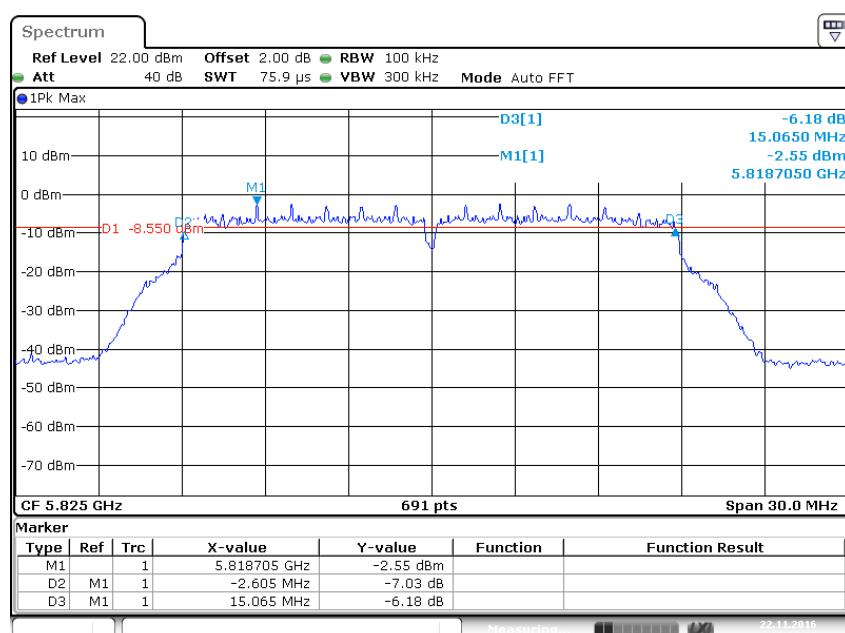
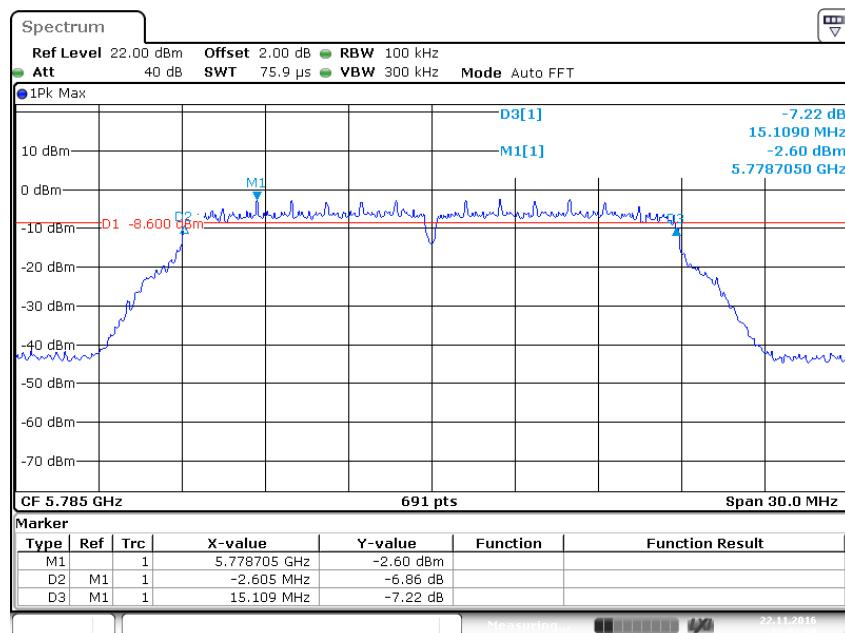
U-NII-3
ANT 0





ANT 1

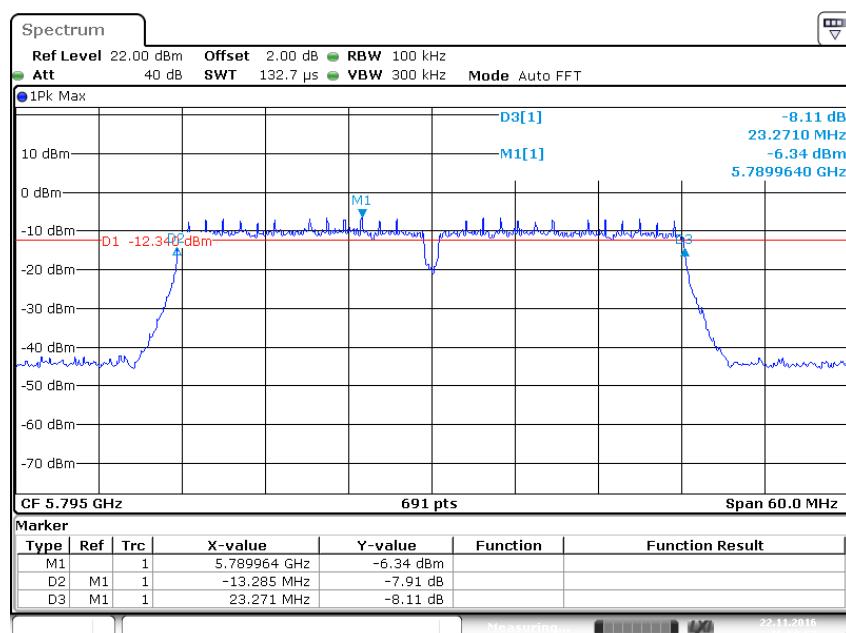
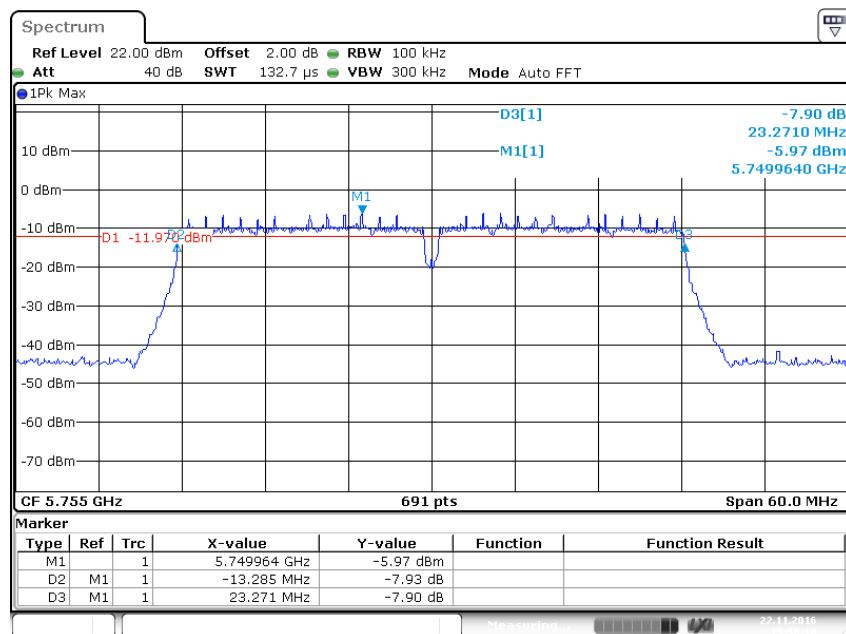




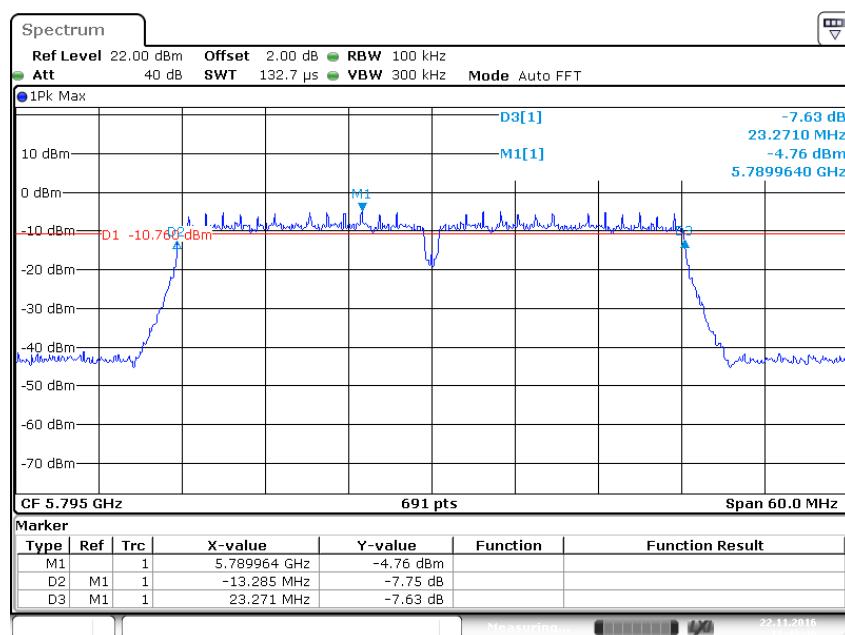
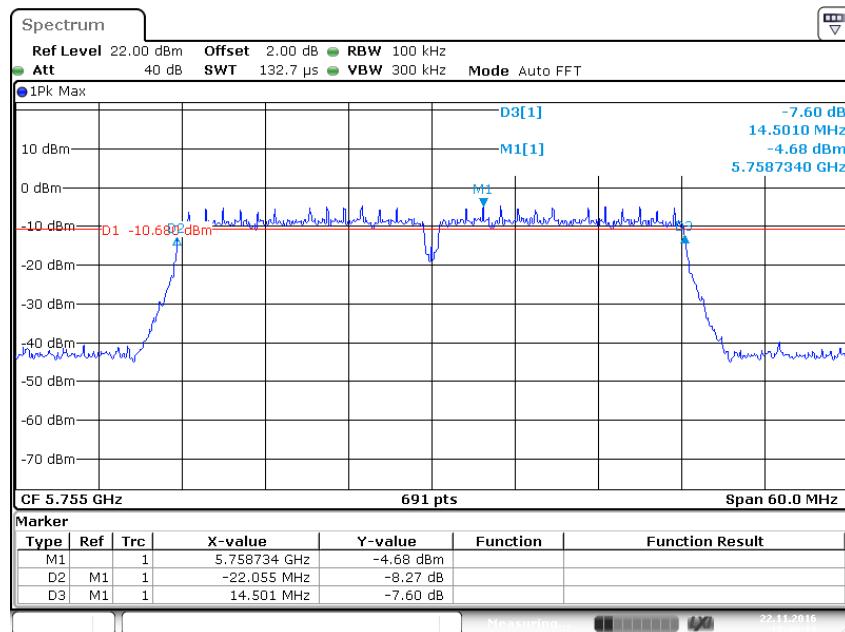
Wi-Fi 802.11 n(HT40) mode

U-NII-3

ANT 0



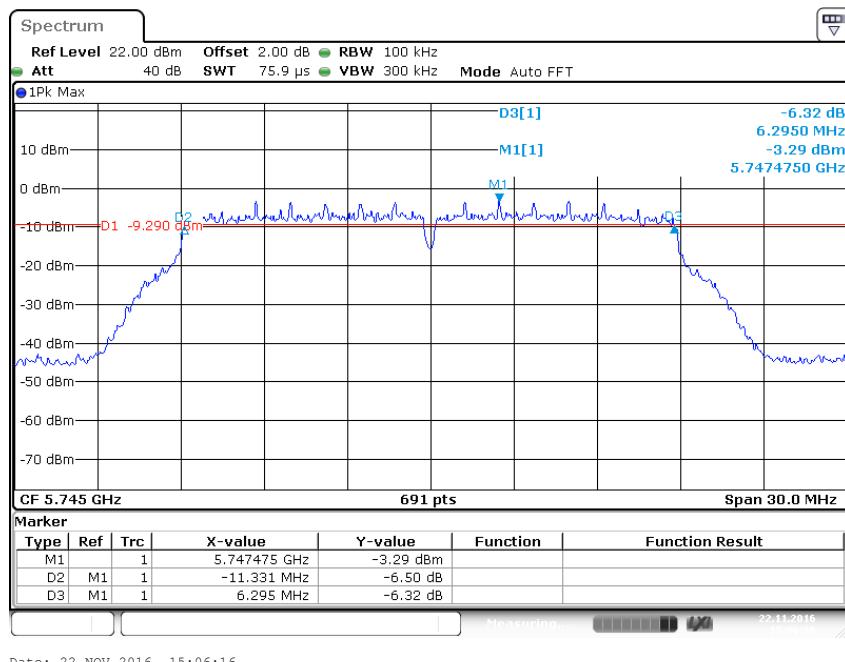
ANT 1



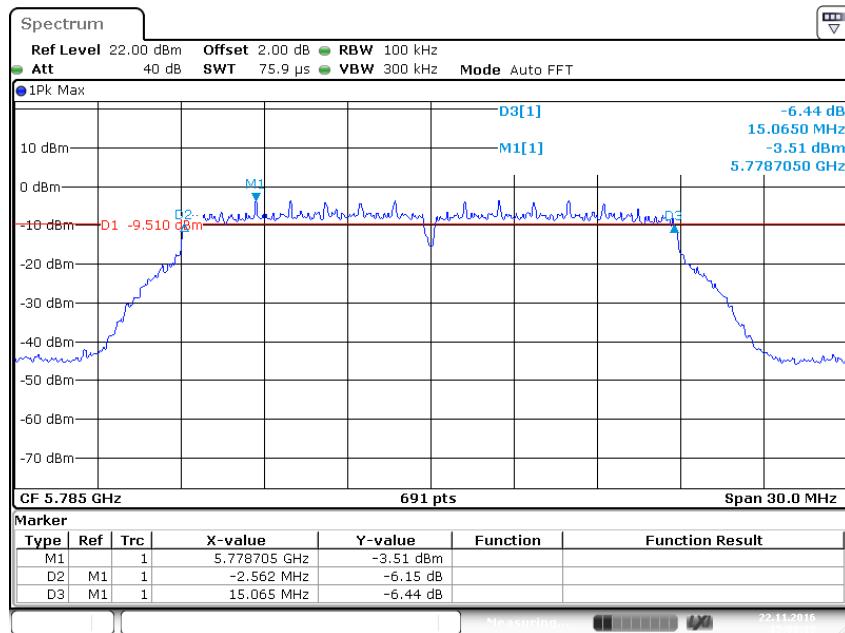
Wi-Fi 802.11 ac(HT20) mode

U-NII-3

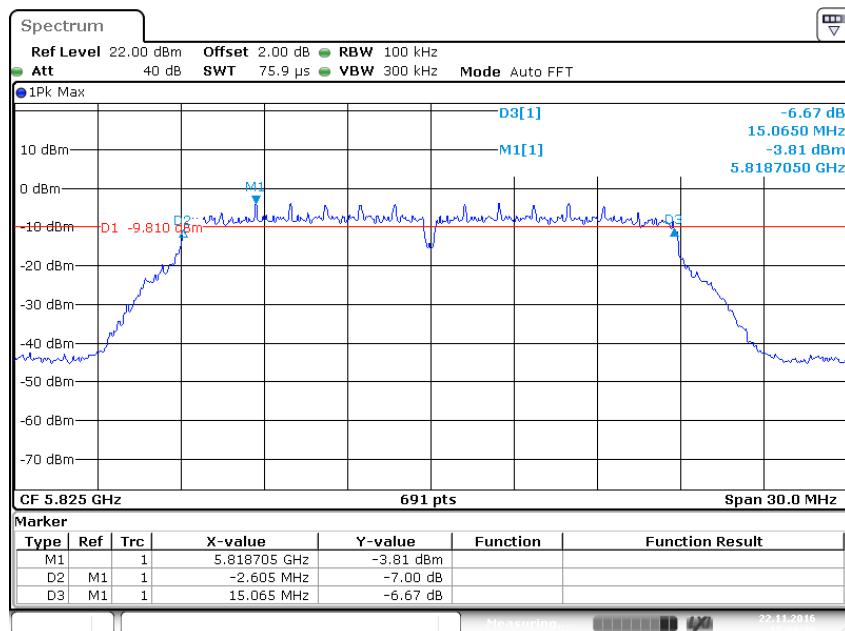
ANT 0



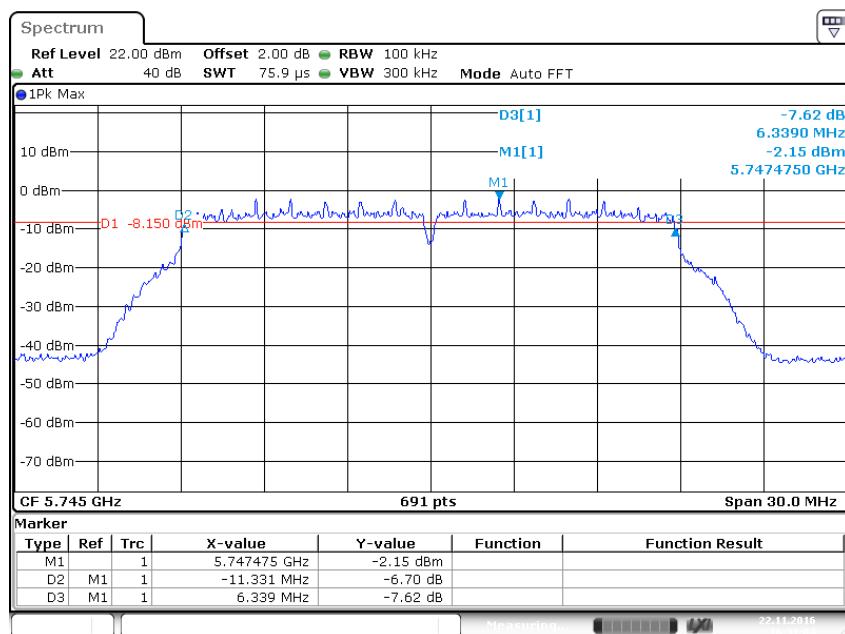
Date: 22.NOV.2016 15:06:16

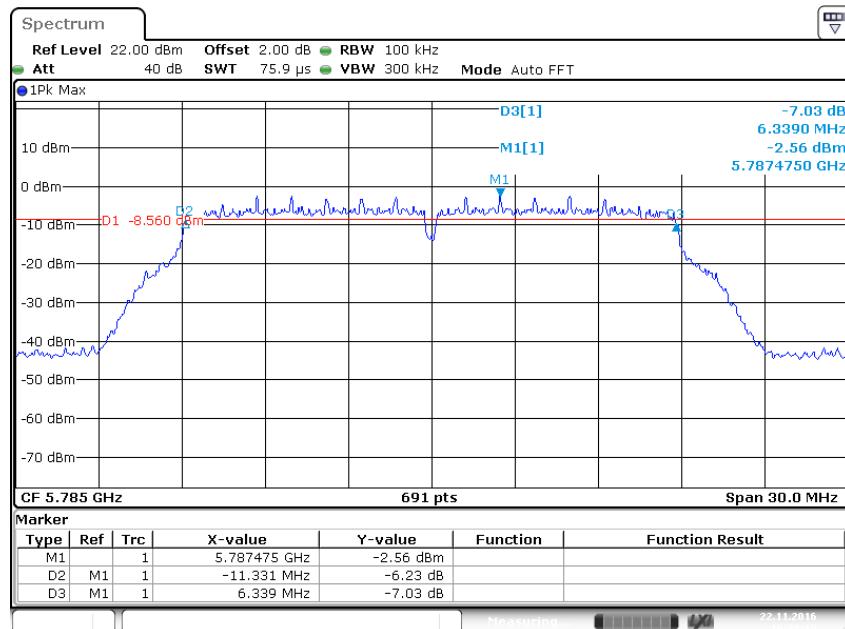


Date: 22.NOV.2016 15:08:15

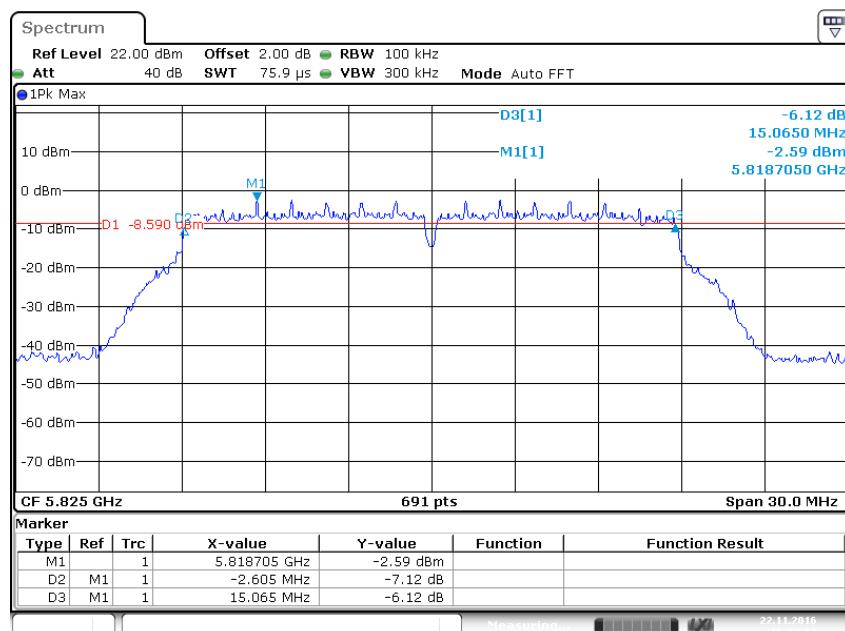


ANT 1





Date: 22.NOV.2016 16:32:16

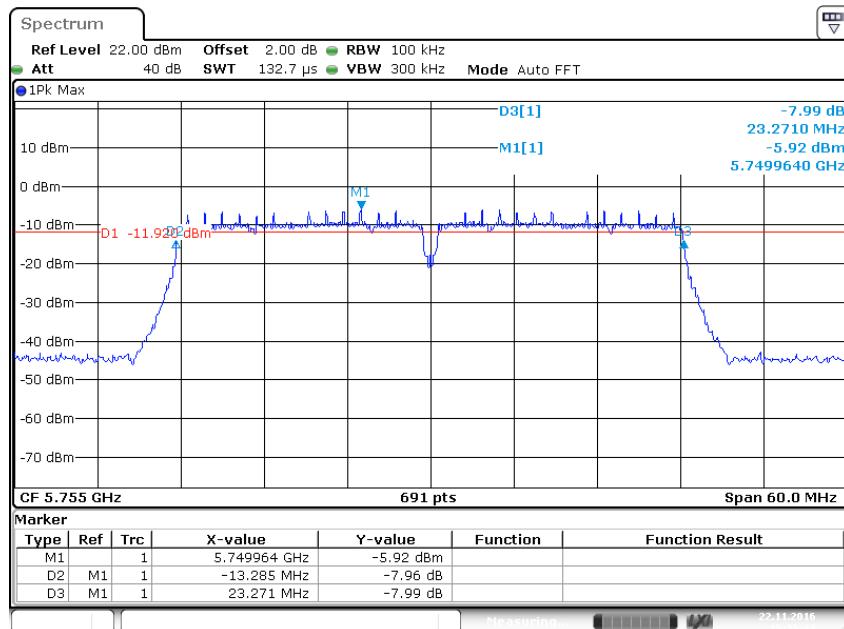


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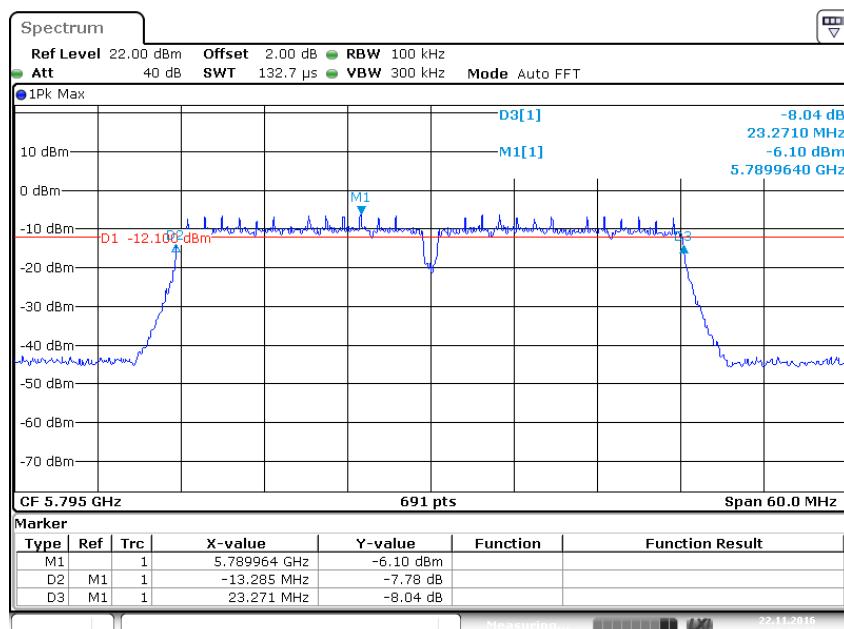
Wi-Fi 802.11 ac(HT40) mode

U-NII-3

ANT 0

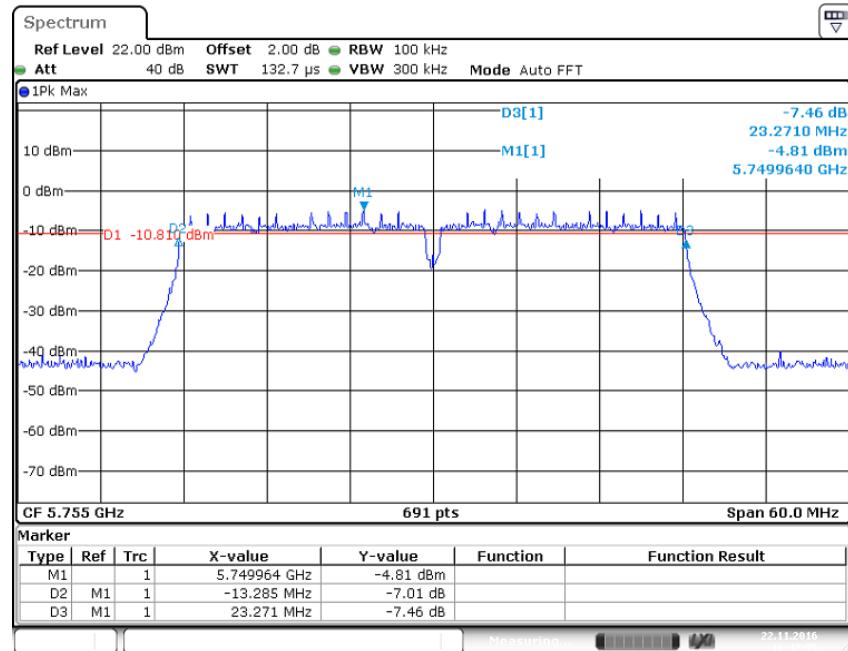


Date: 22.NOV.2016 15:25:37

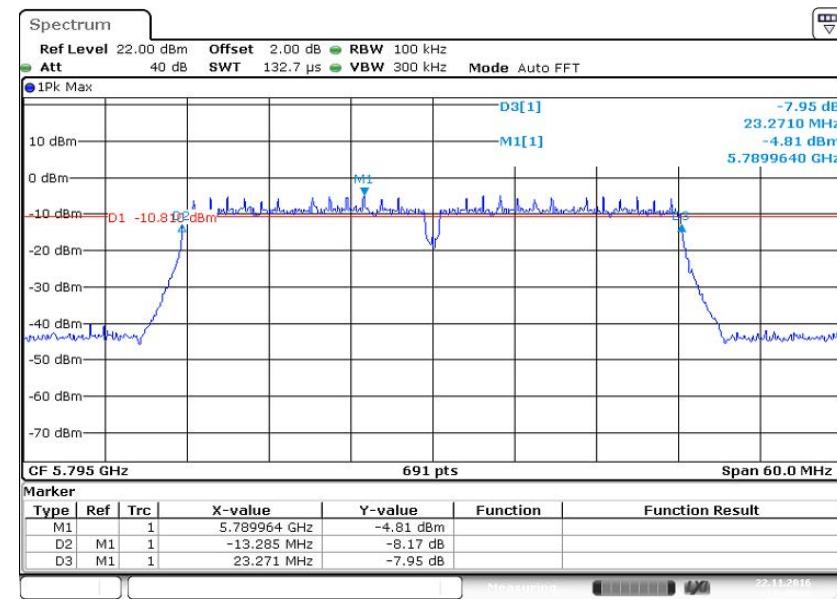


Date: 22.NOV.2016 15:27:09

ANT 1



Date: 22.NOV.2016 16:47:55

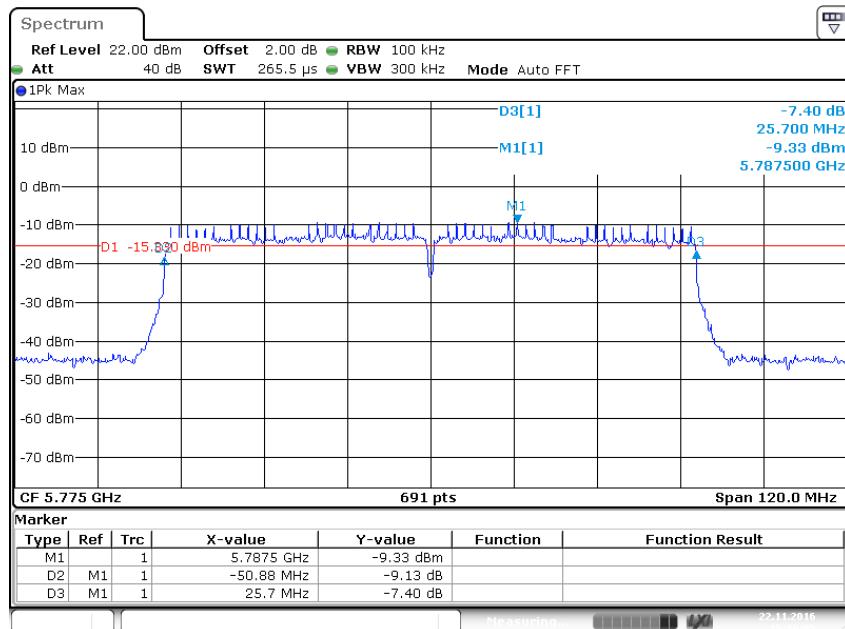


Date: 22.NOV.2016 16:49:02

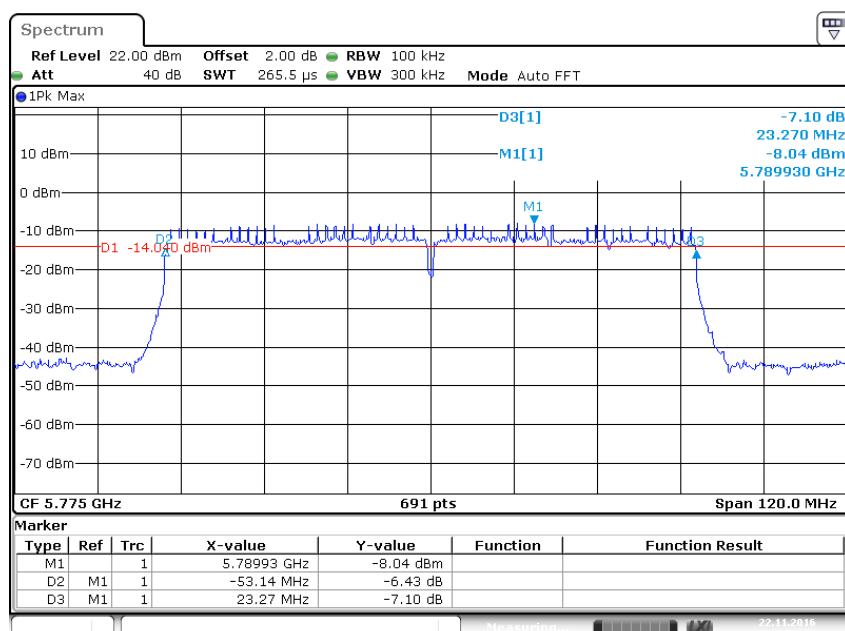
Wi-Fi 802.11 ac(HT80) mode

U-NII-3

ANT 0



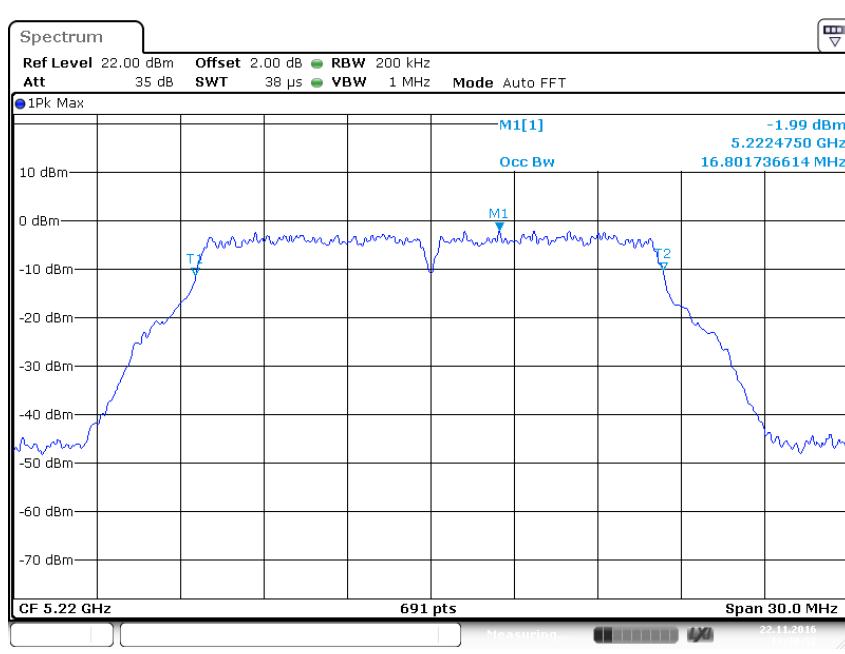
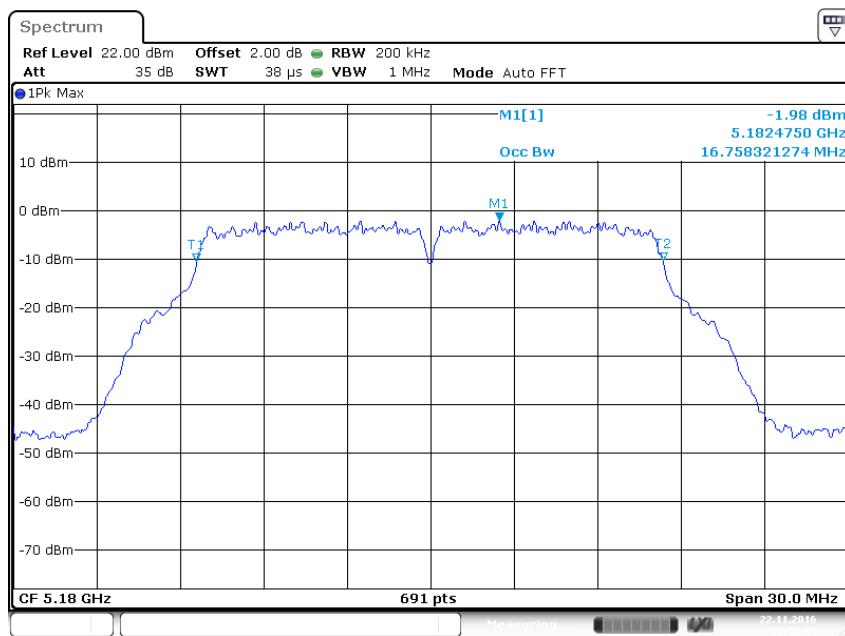
ANT 1

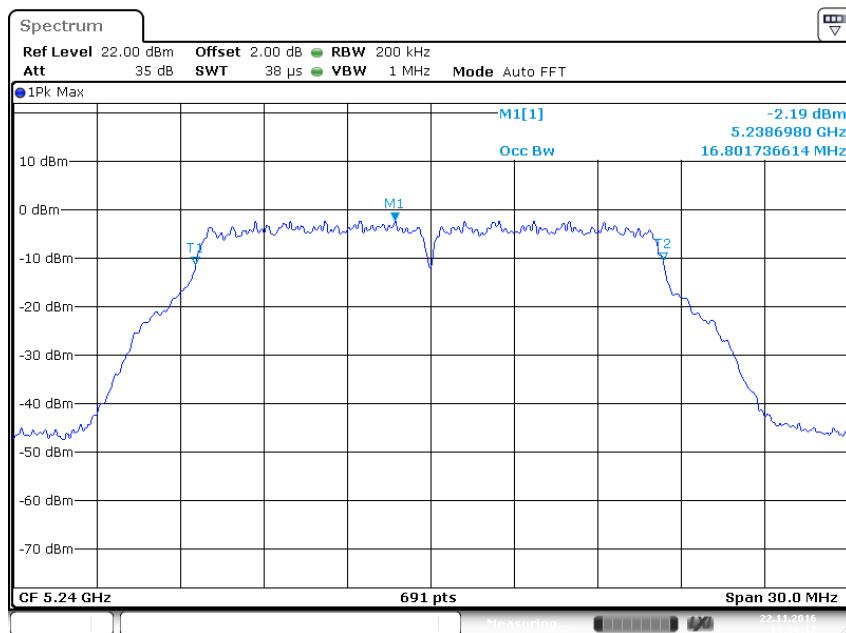


APPENDIX A.3: 99% Bandwidth

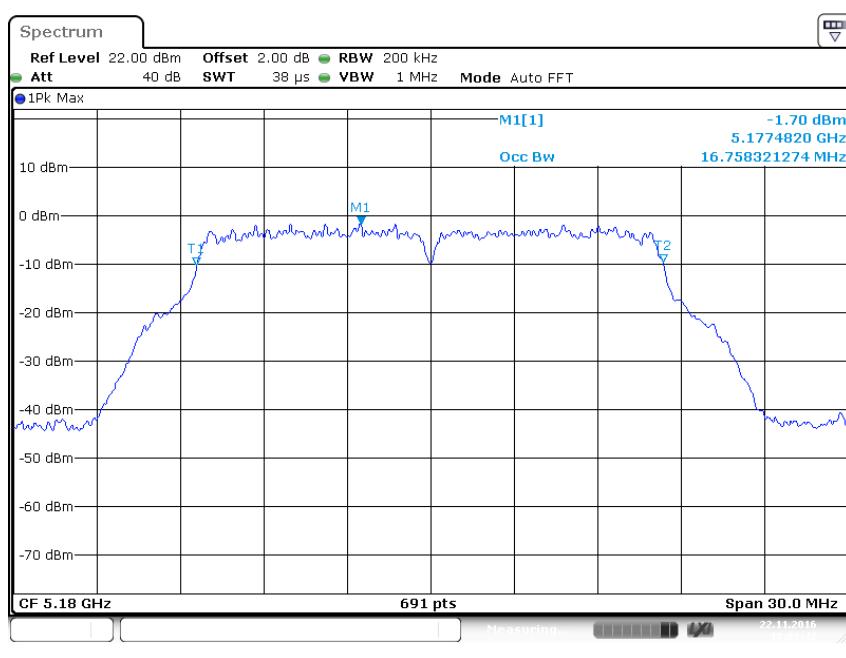
Wi-Fi 802.11 a mode

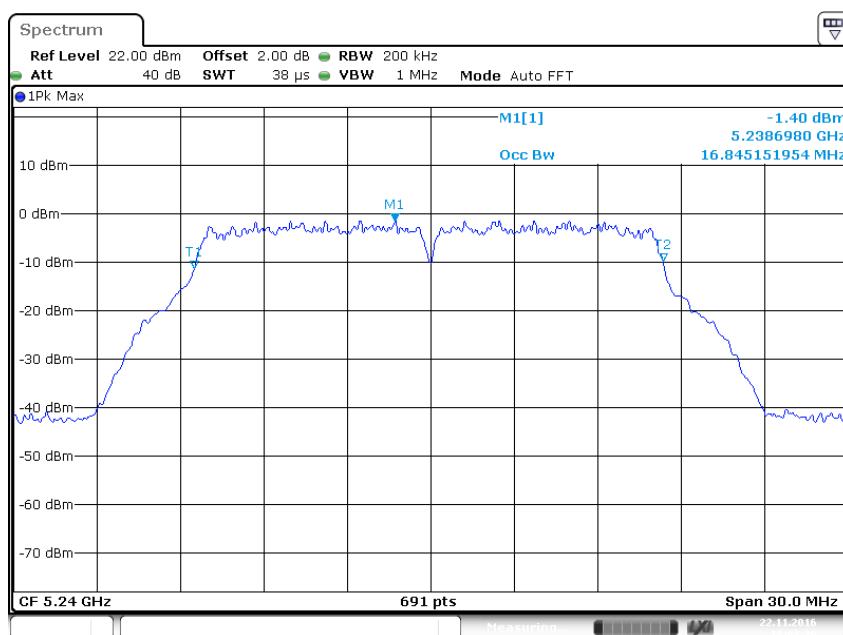
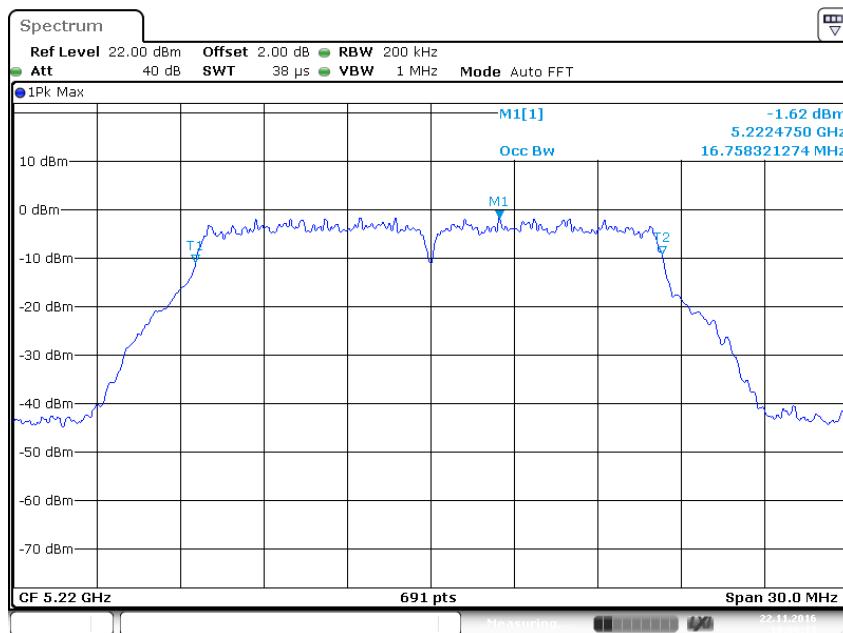
U-NII-1
ANT 0



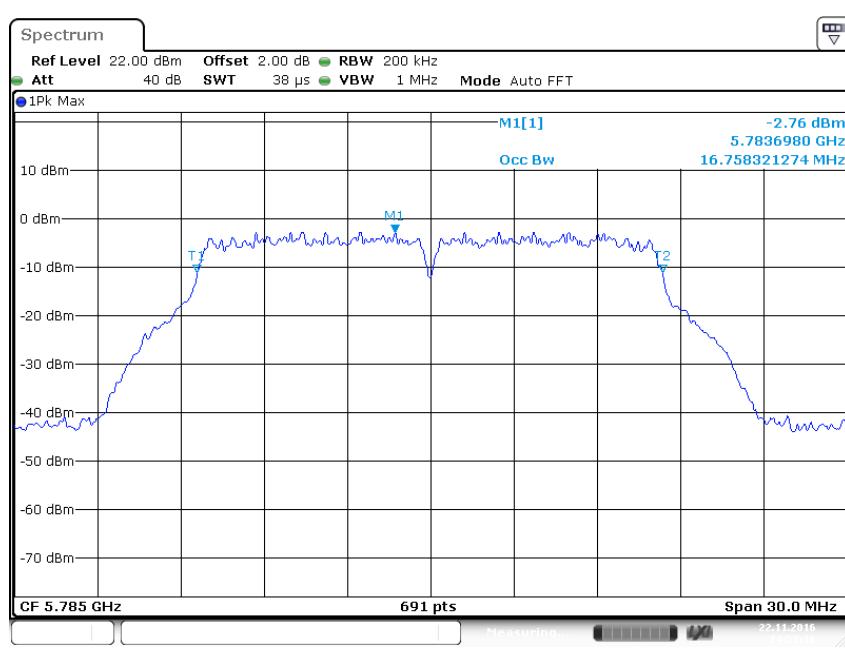
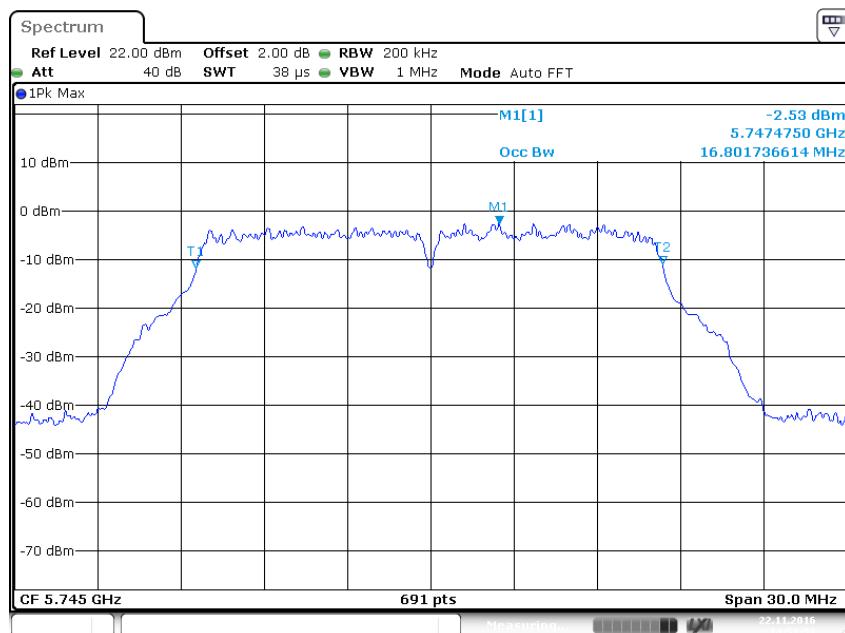


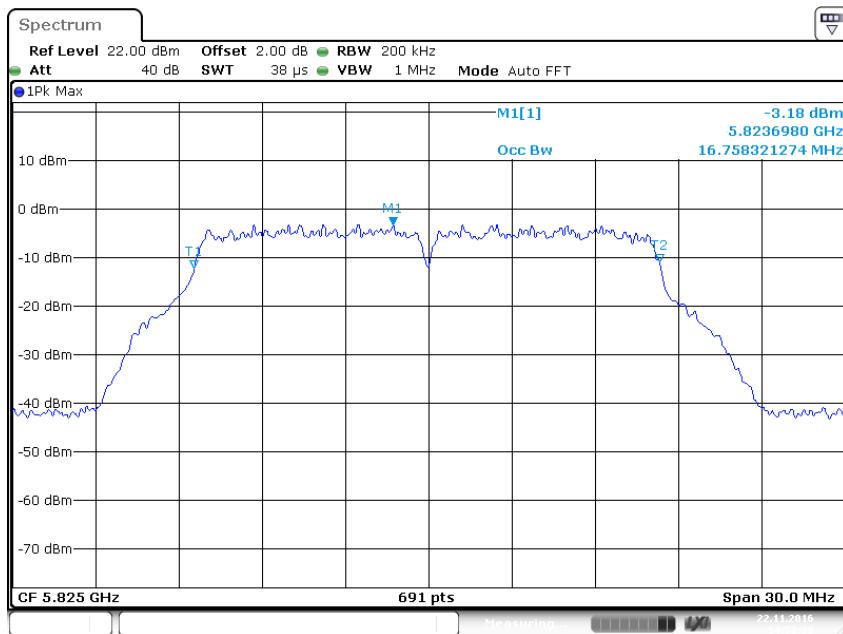
ANT 1



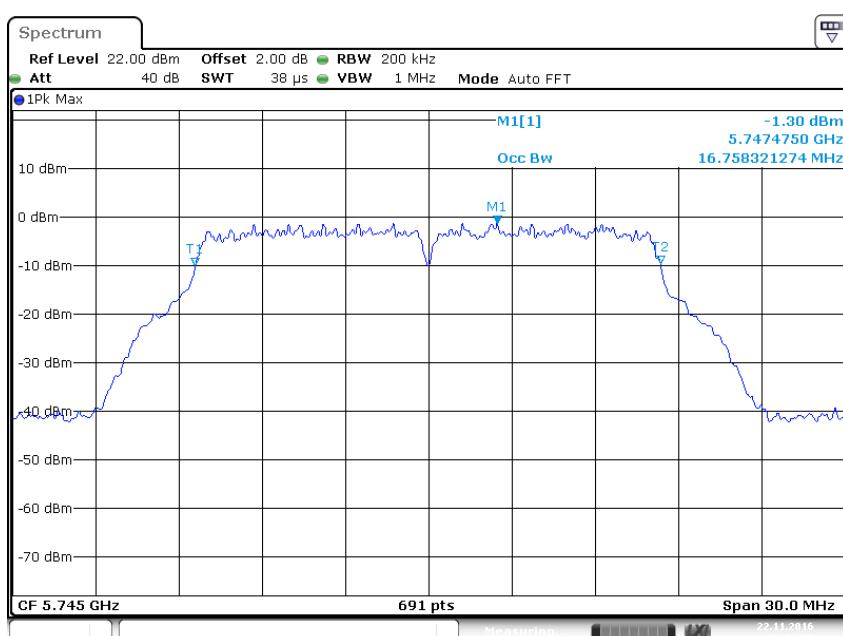


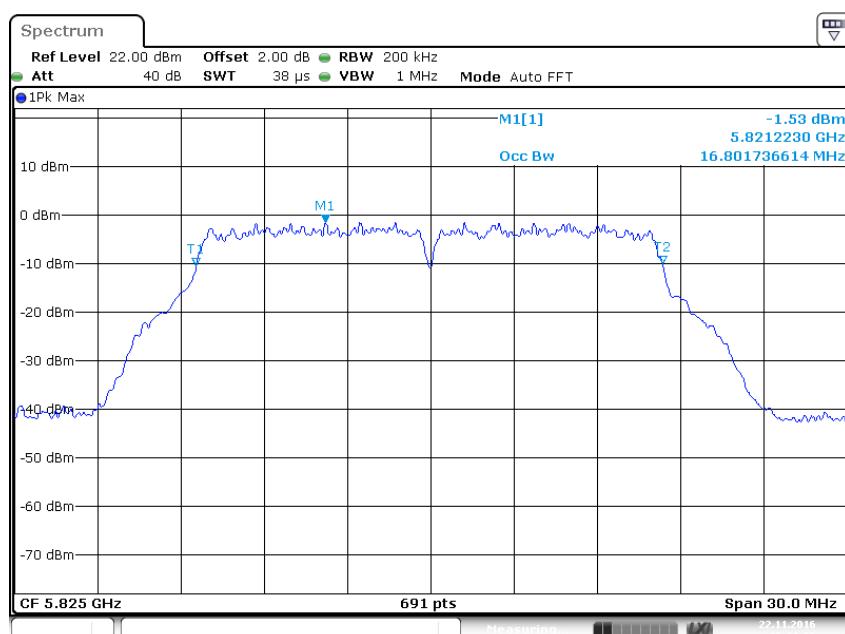
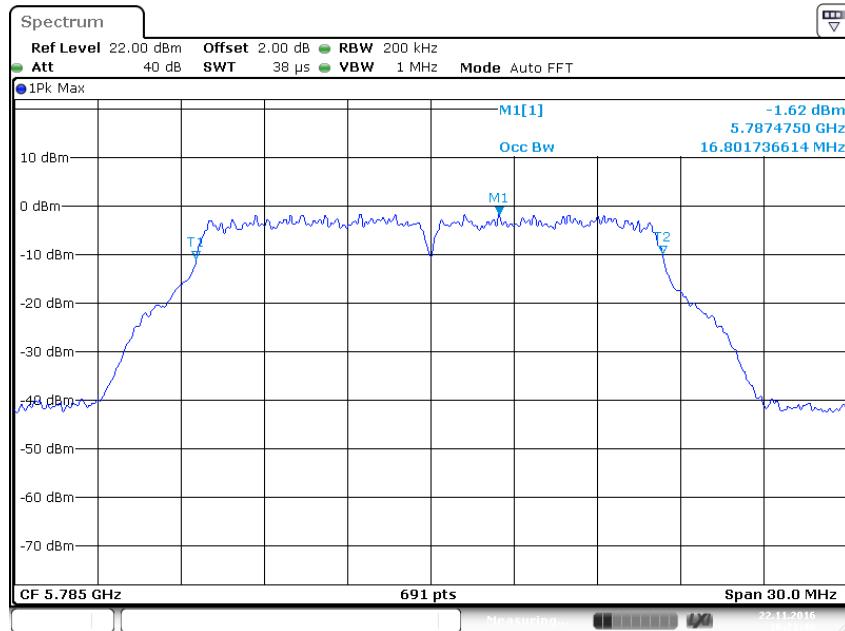
U-NII-3
ANT 0





ANT 1

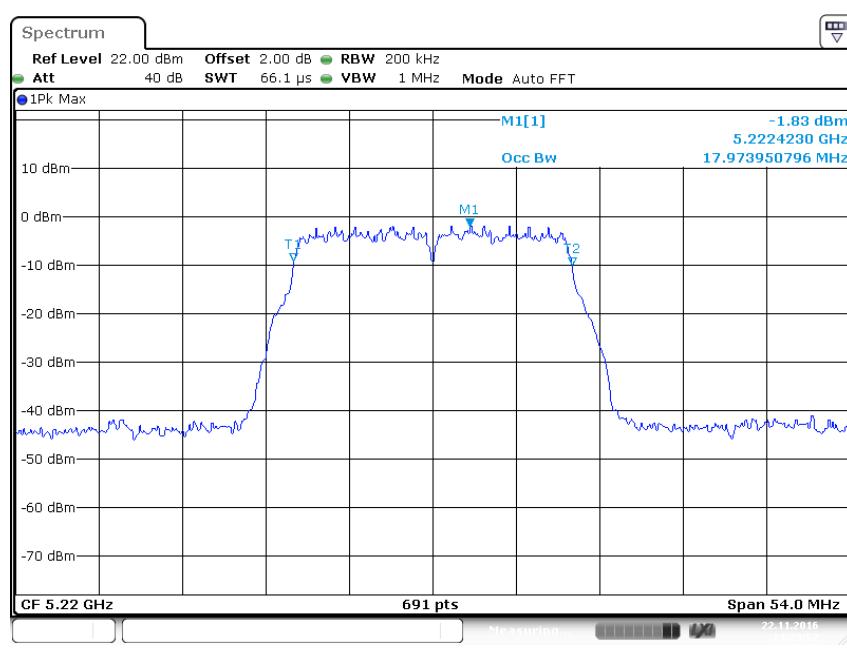
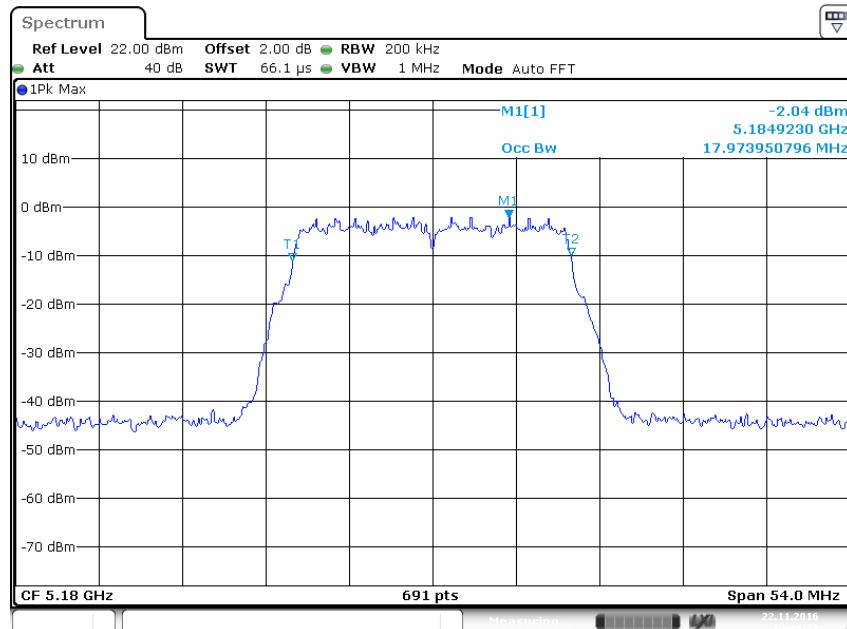


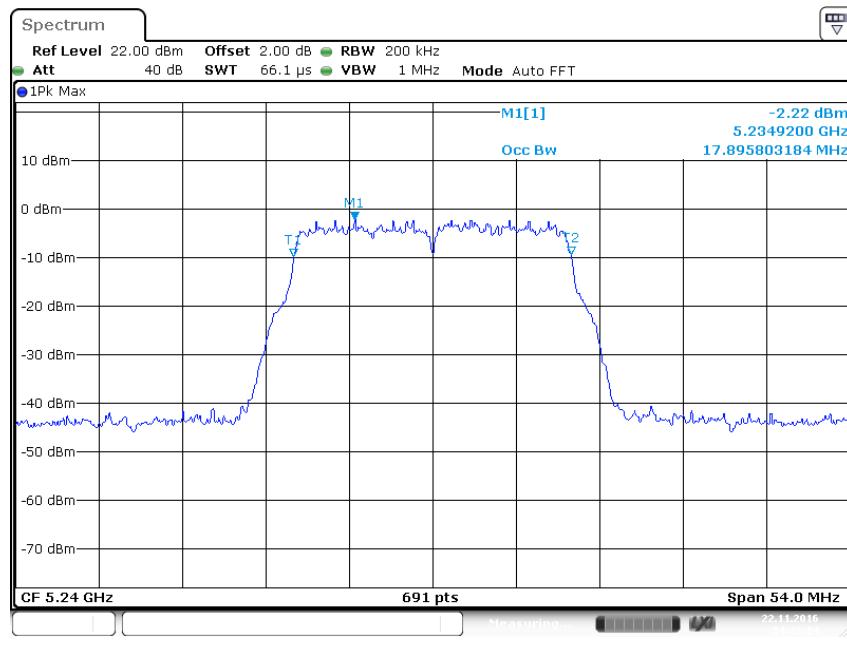


Wi-Fi 802.11 n (HT20) mode

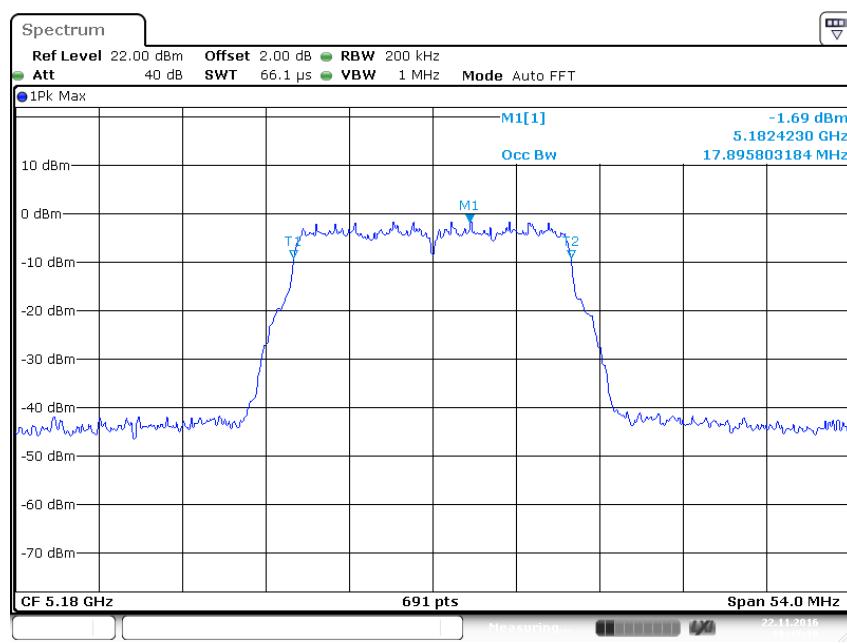
U-NII-1

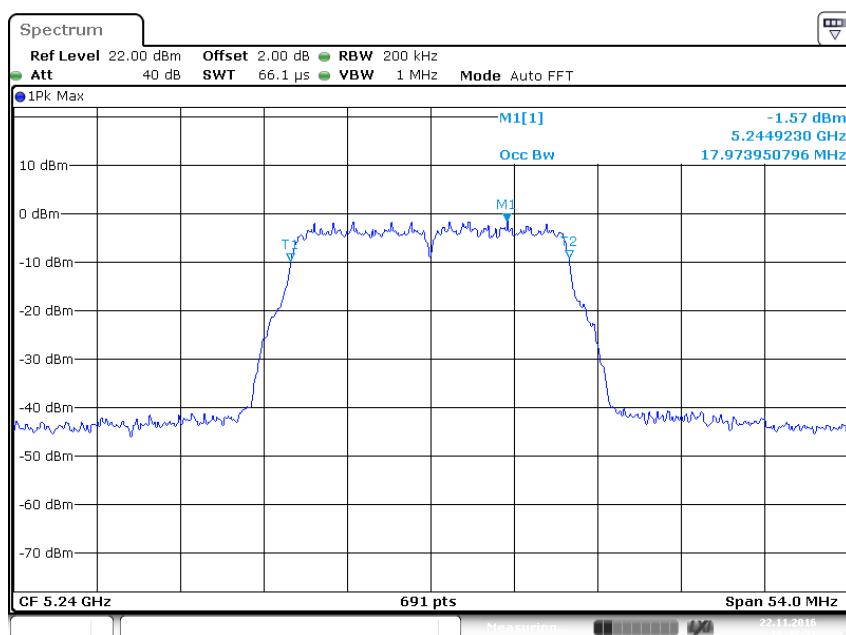
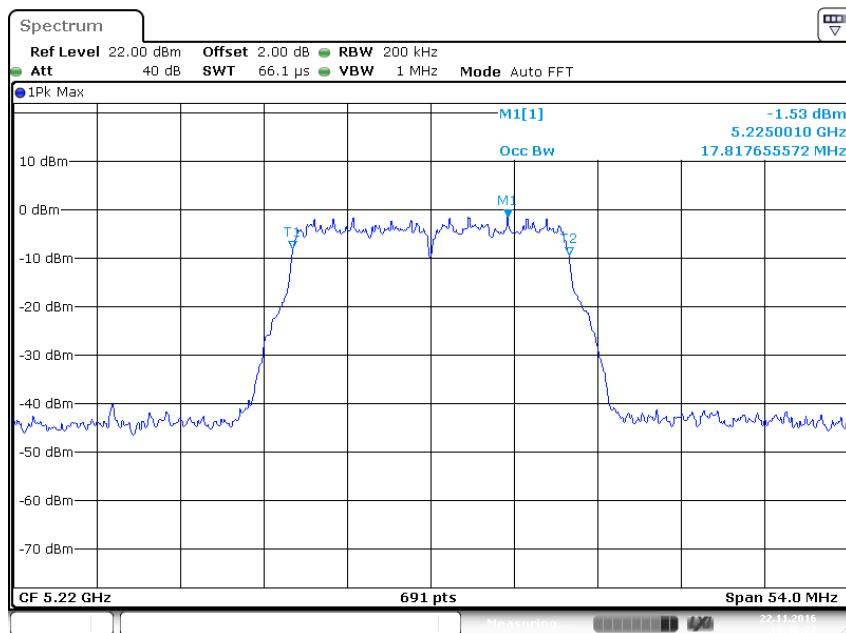
ANT 0



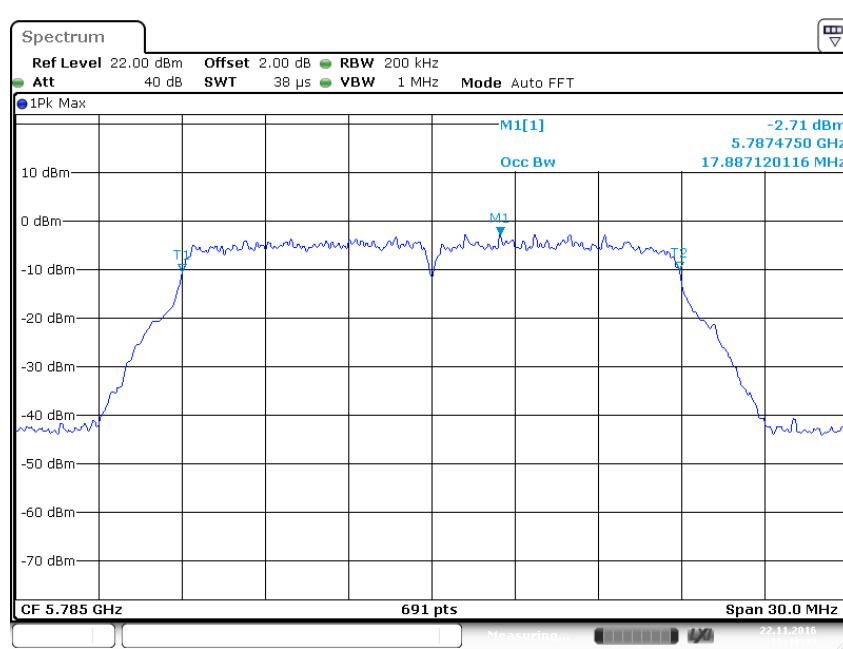
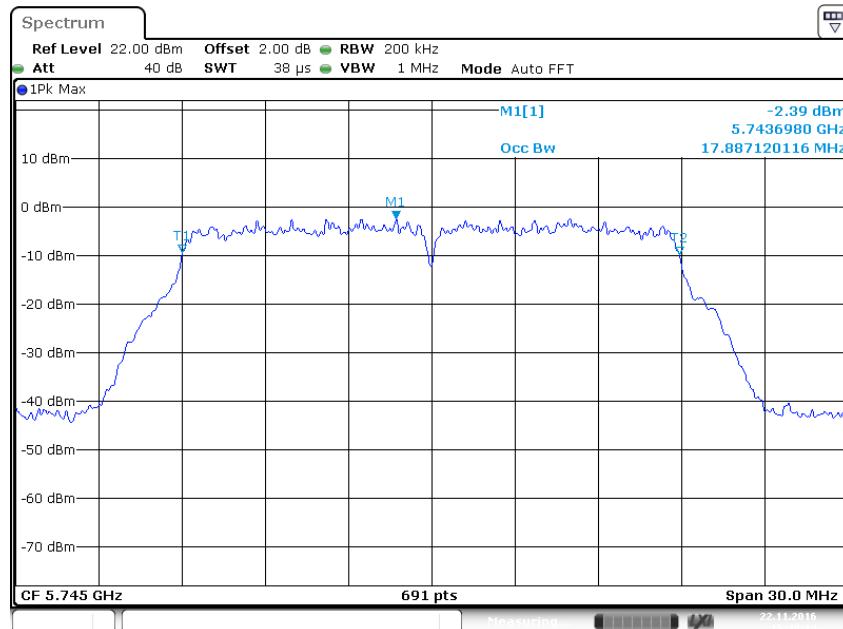


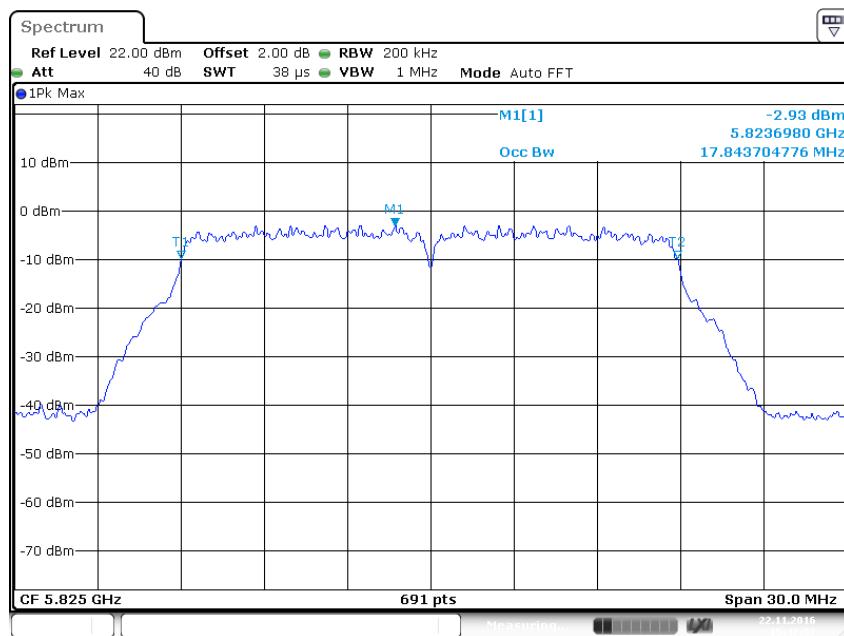
ANT 1



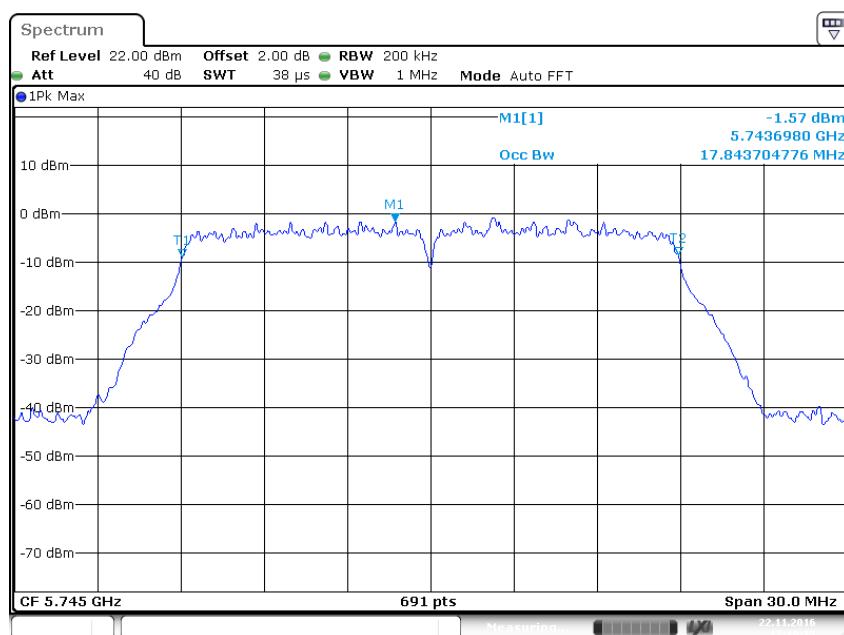


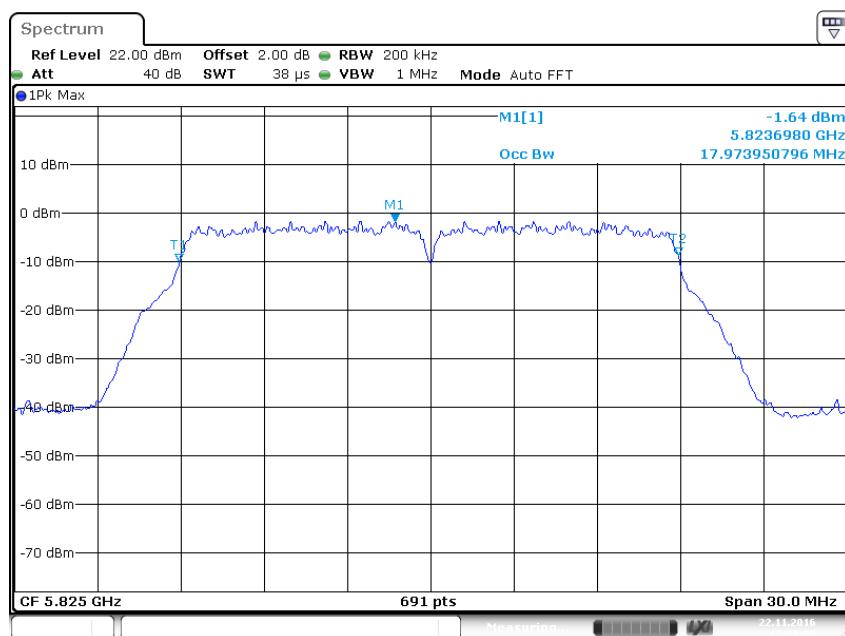
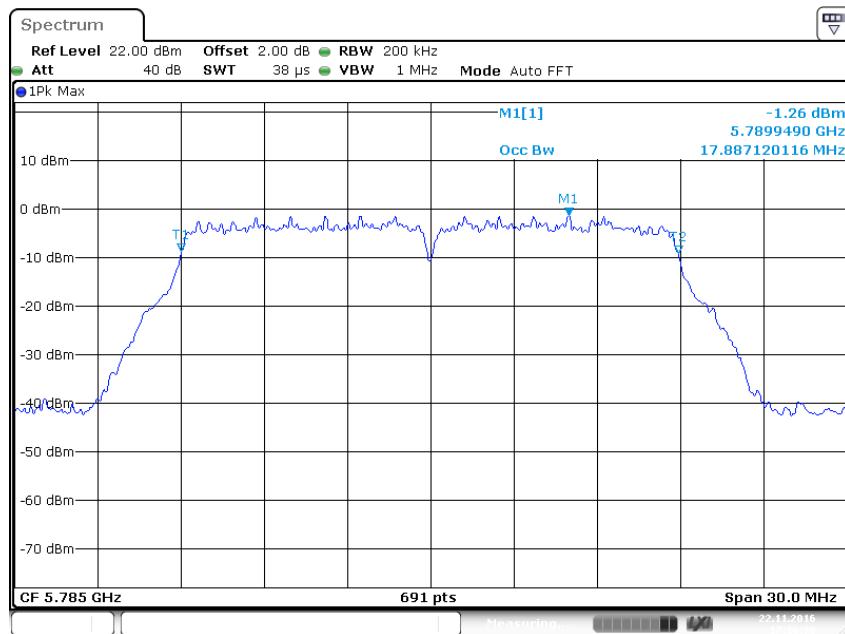
U-NII-3
ANT 0





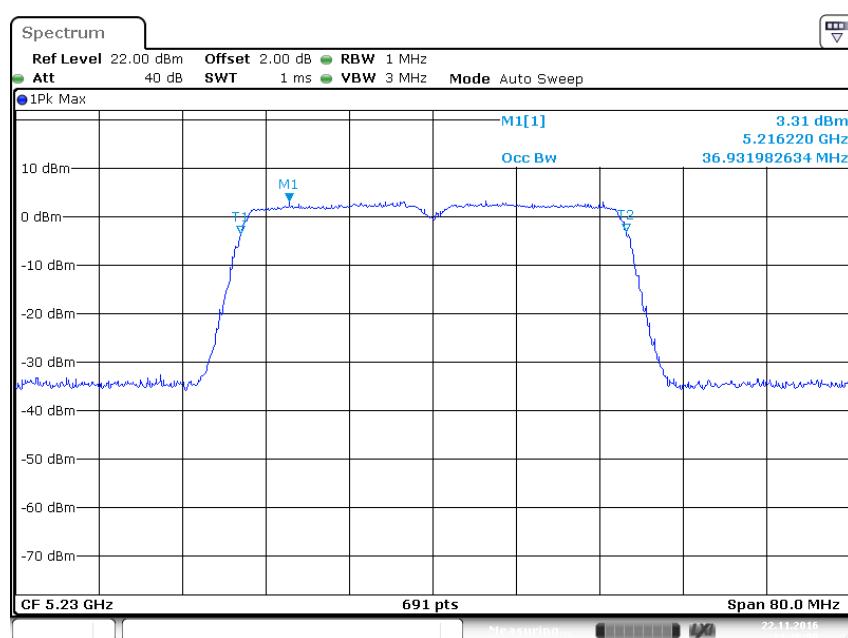
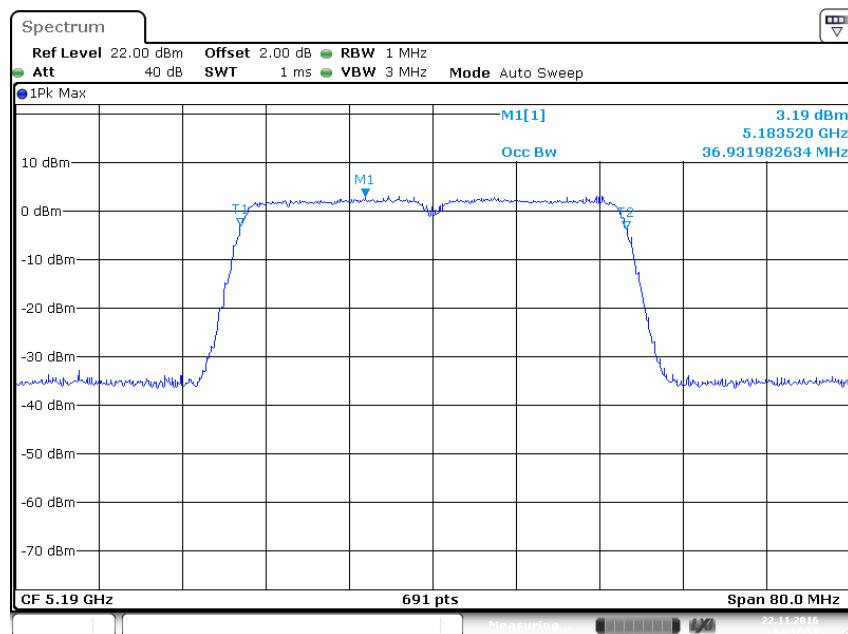
ANT 1



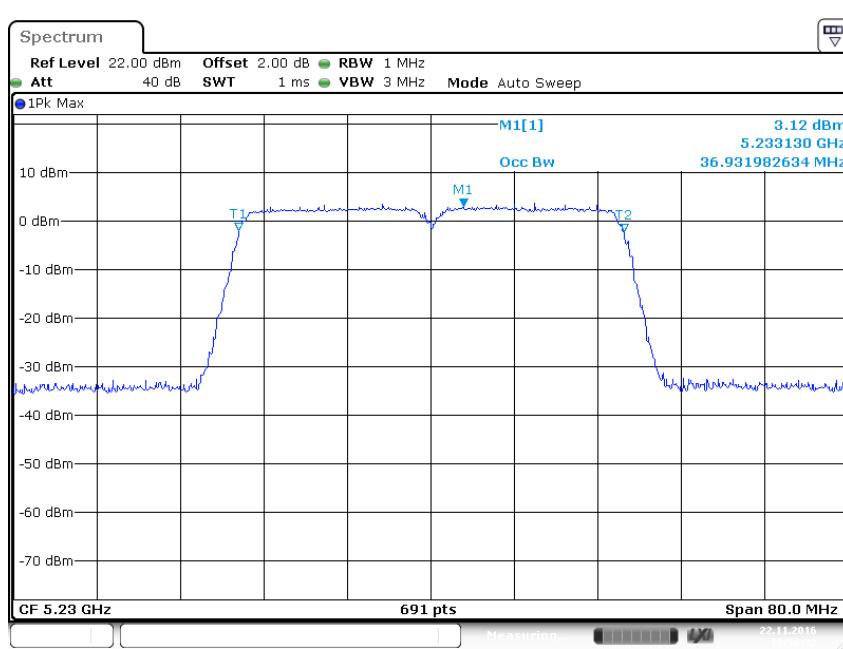
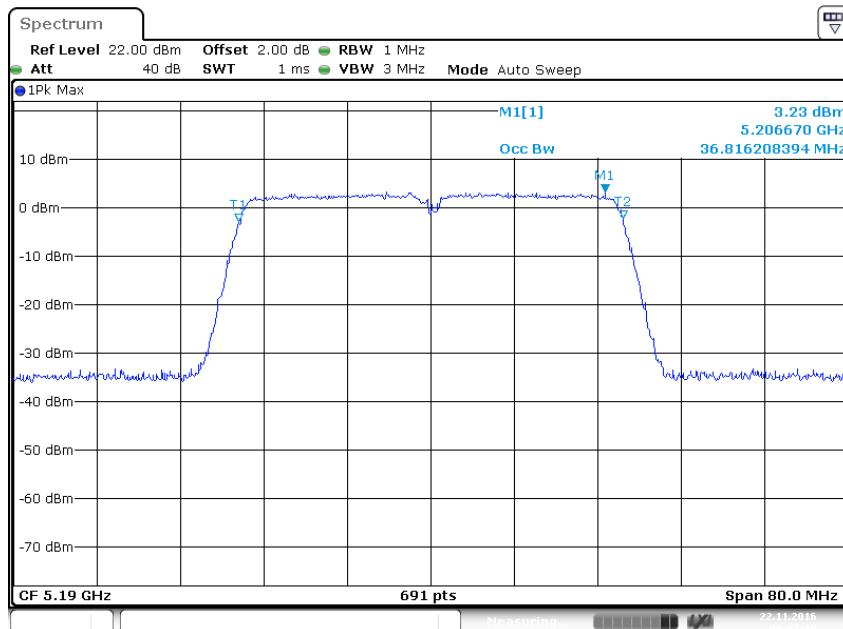


Wi-Fi 802.11 n (HT40) mode

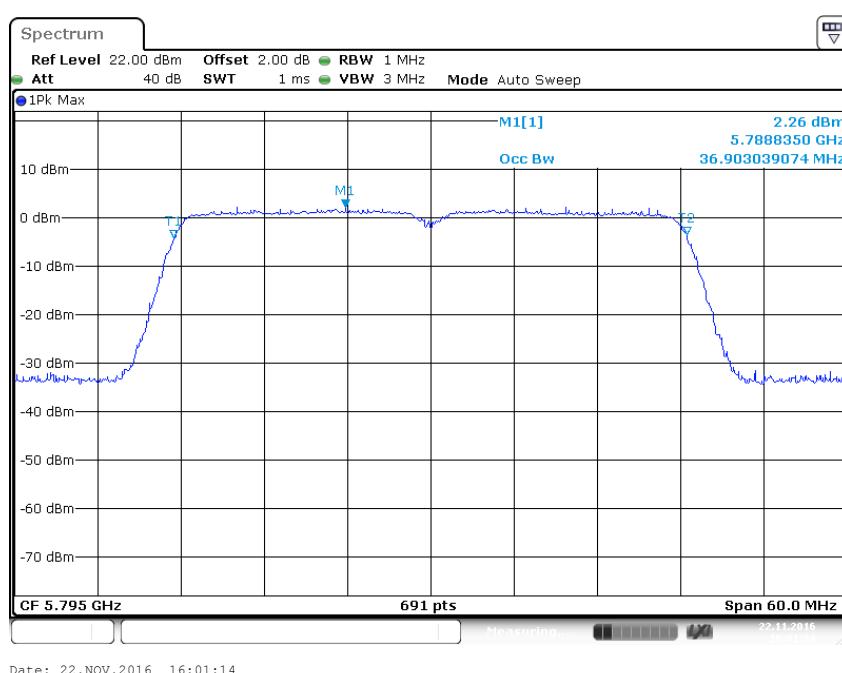
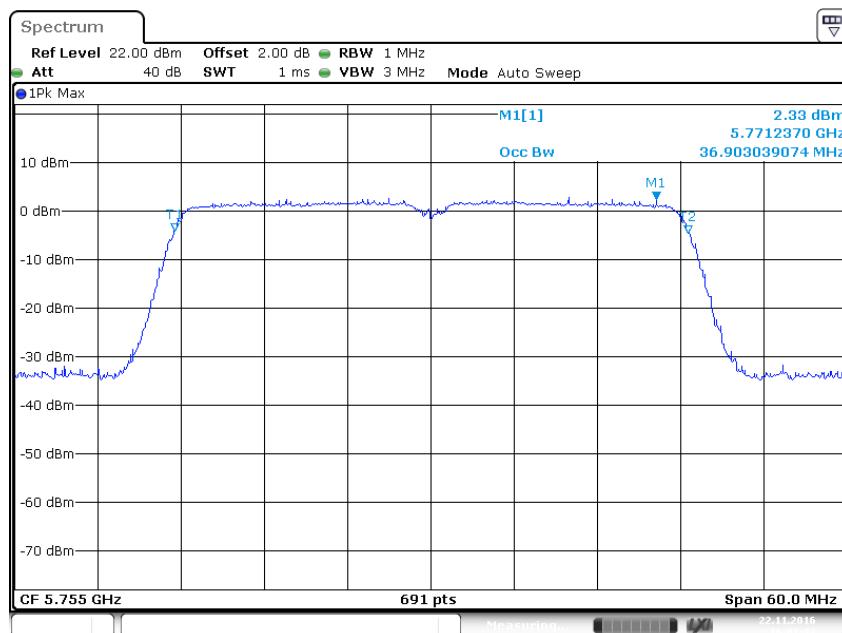
U-NII-1
ANT 0



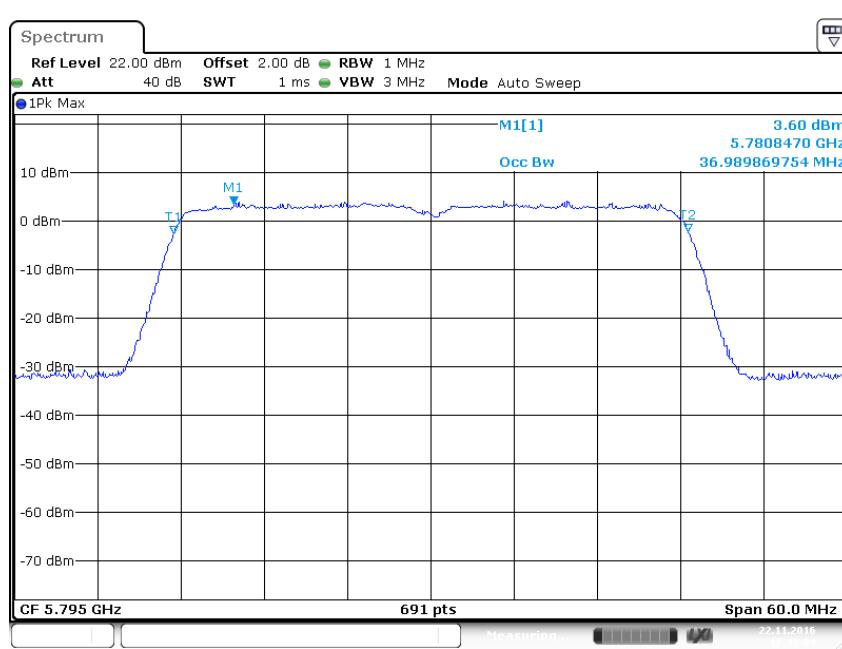
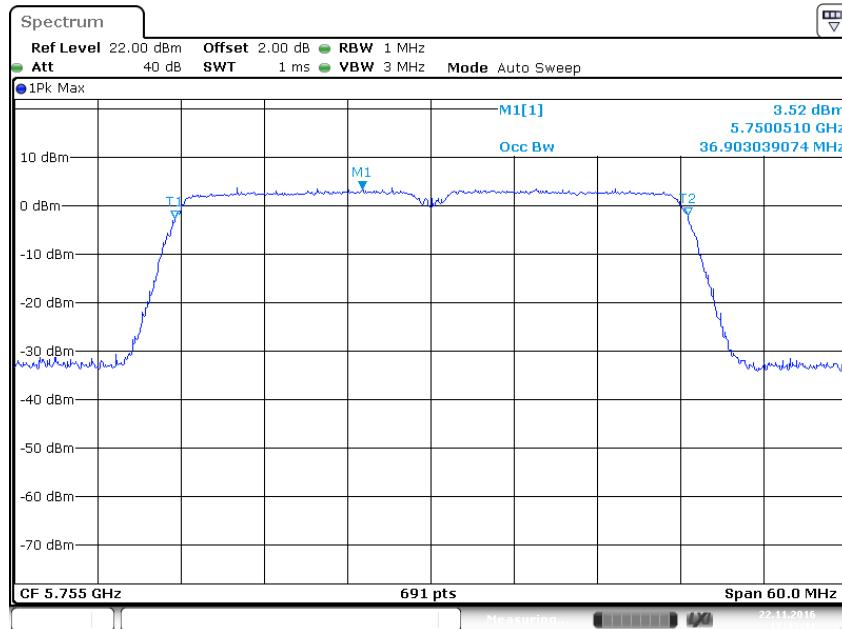
ANT 1



U-NII-3
ANT 0

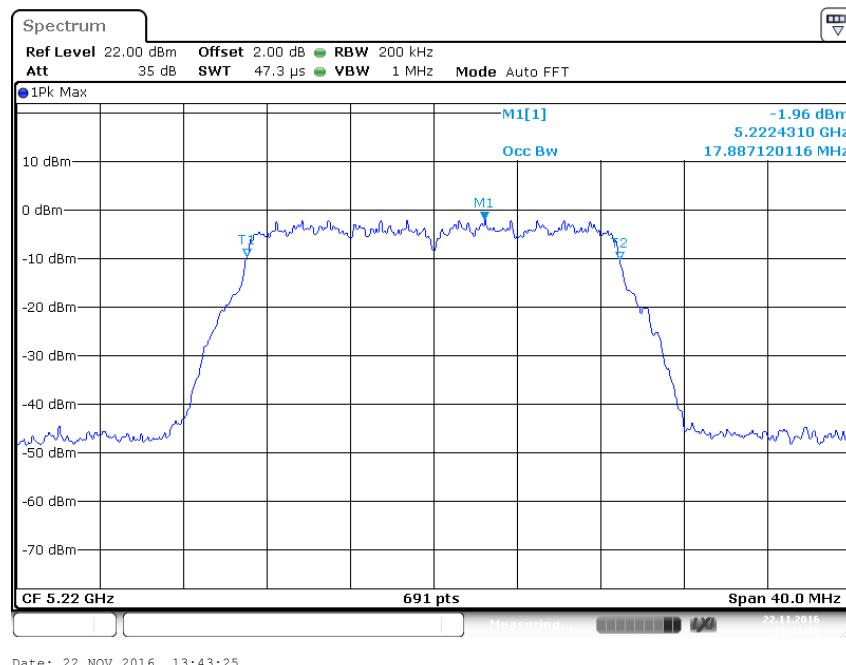
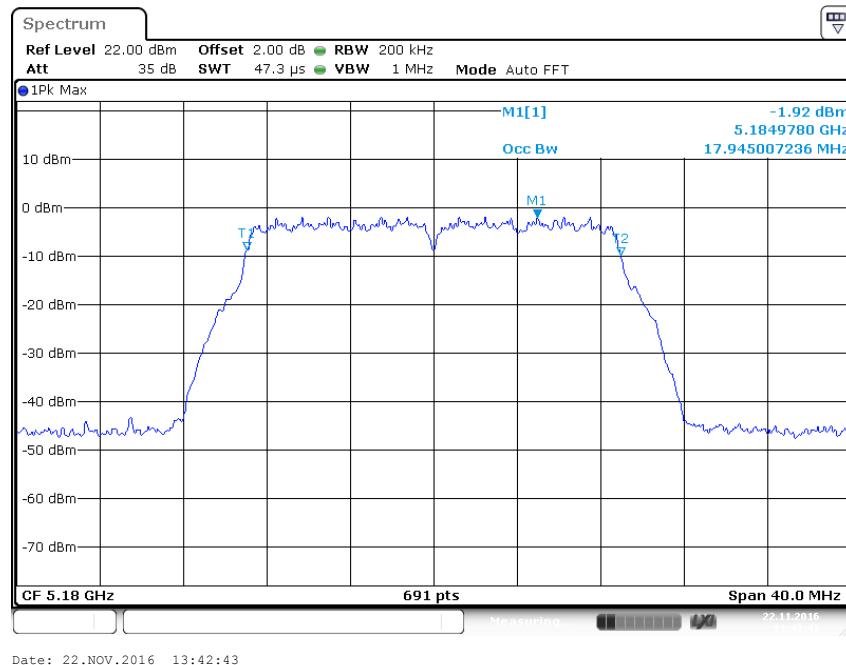


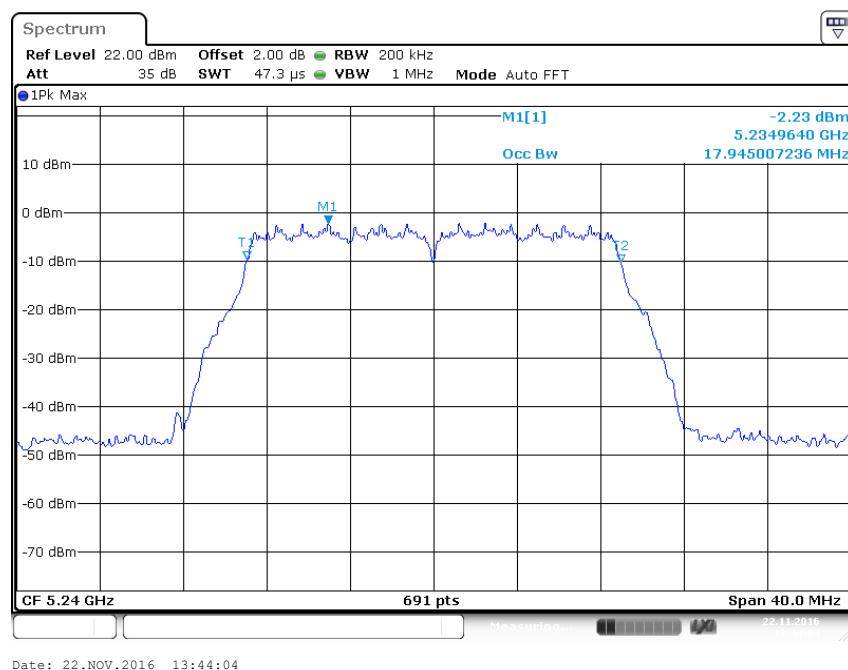
ANT 1



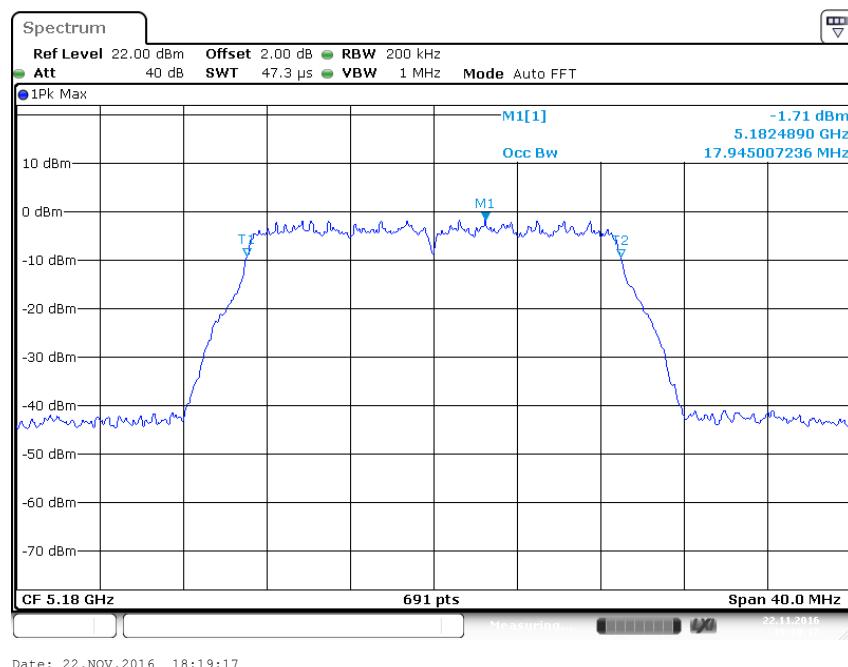
Wi-Fi 802.11 ac (HT20) mode

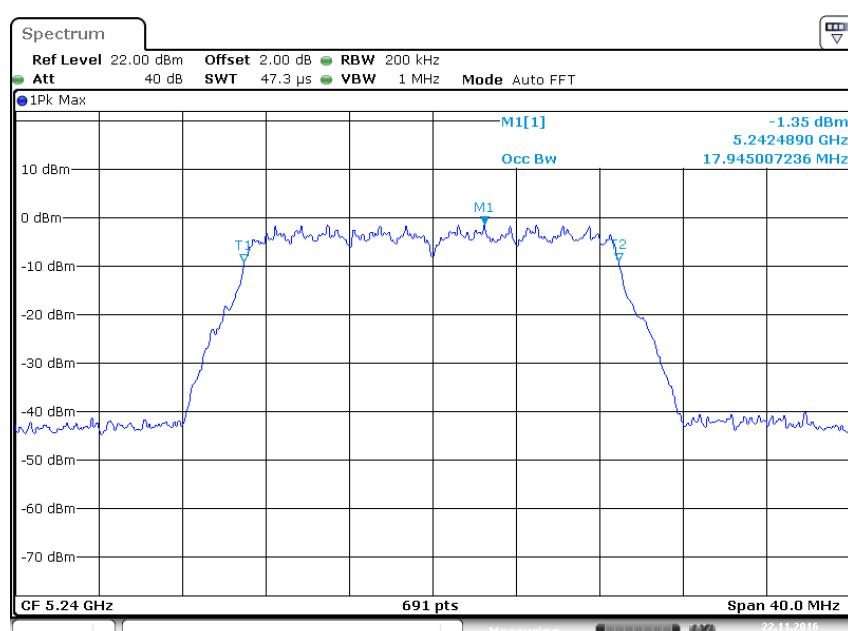
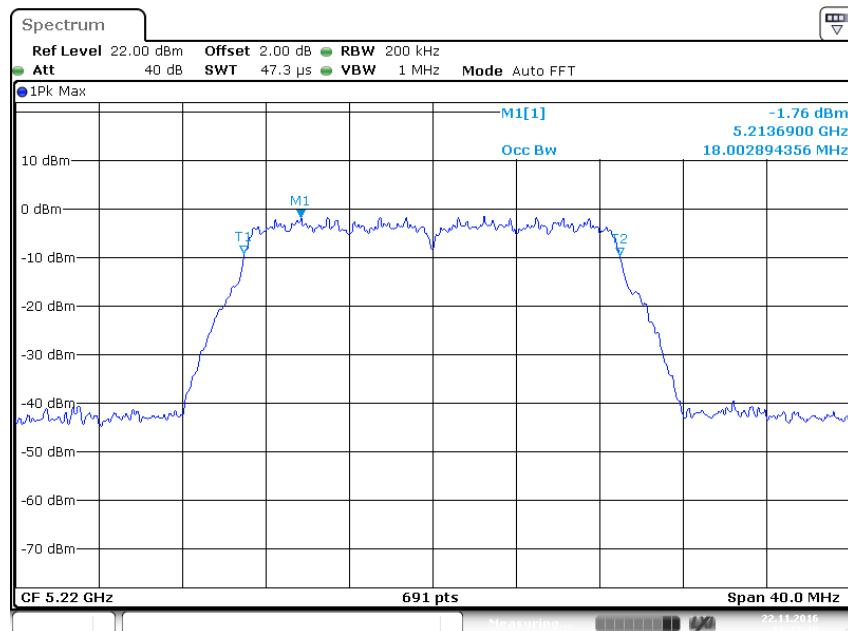
U-NII-1
ANT 0



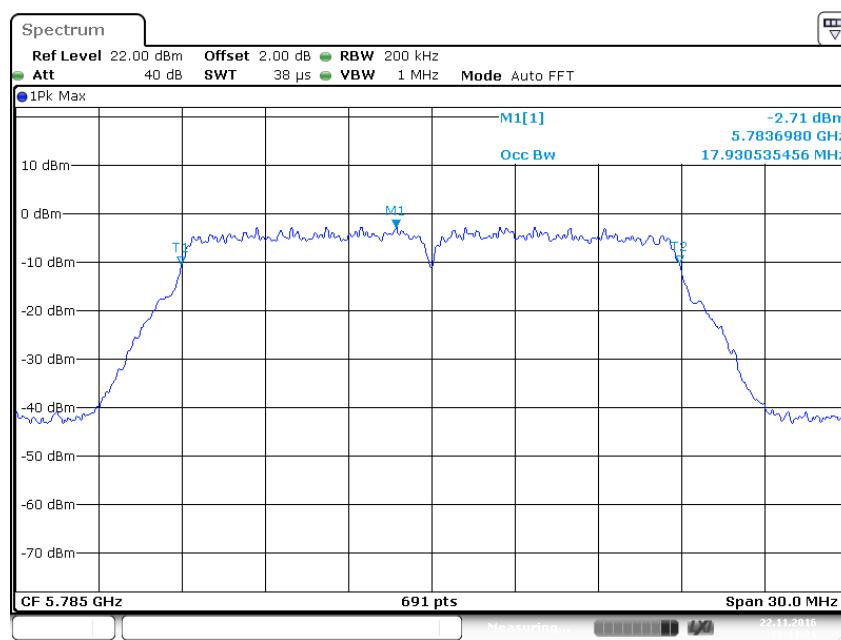
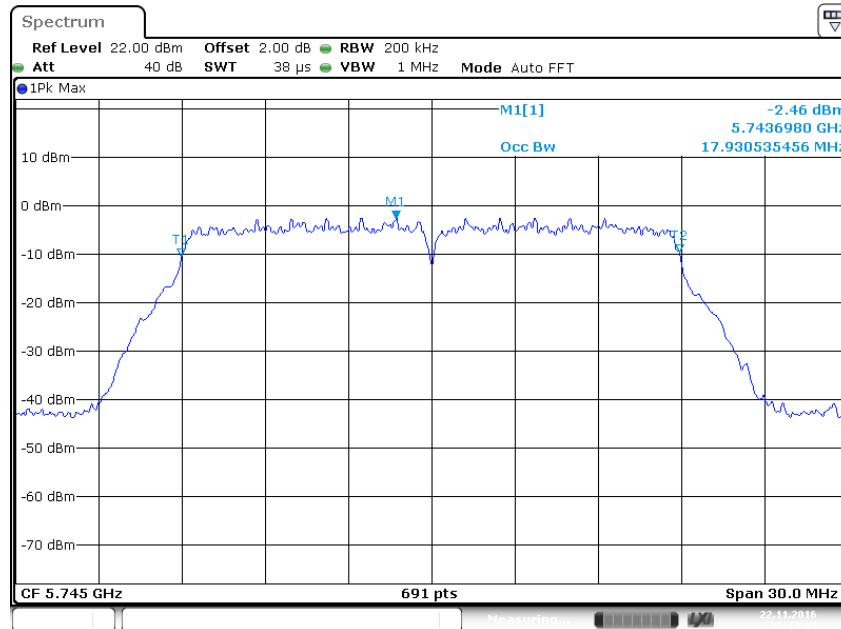


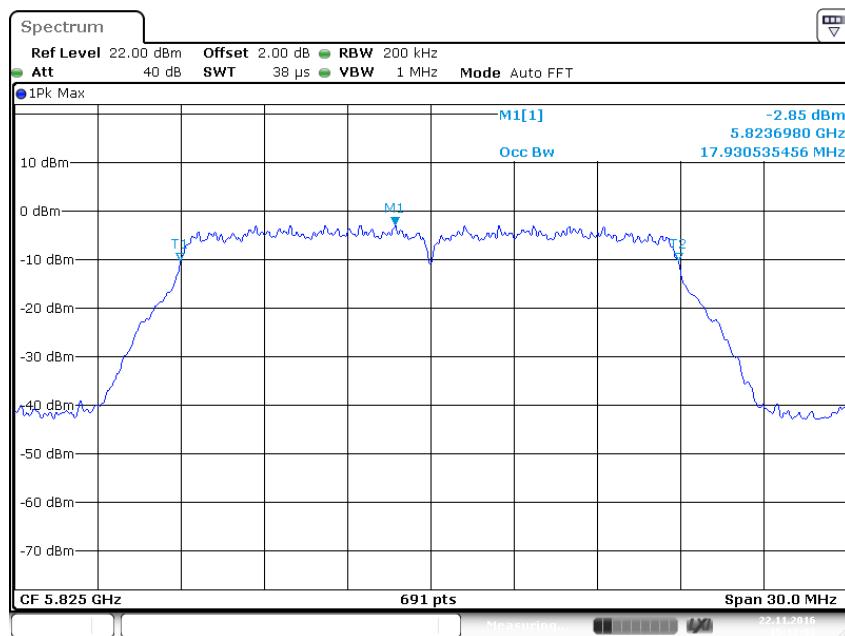
ANT 1



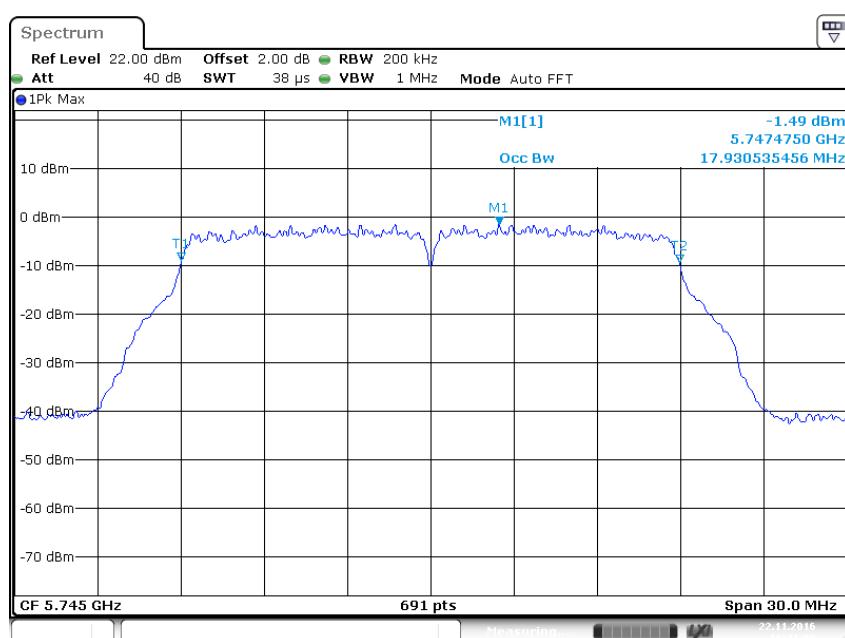


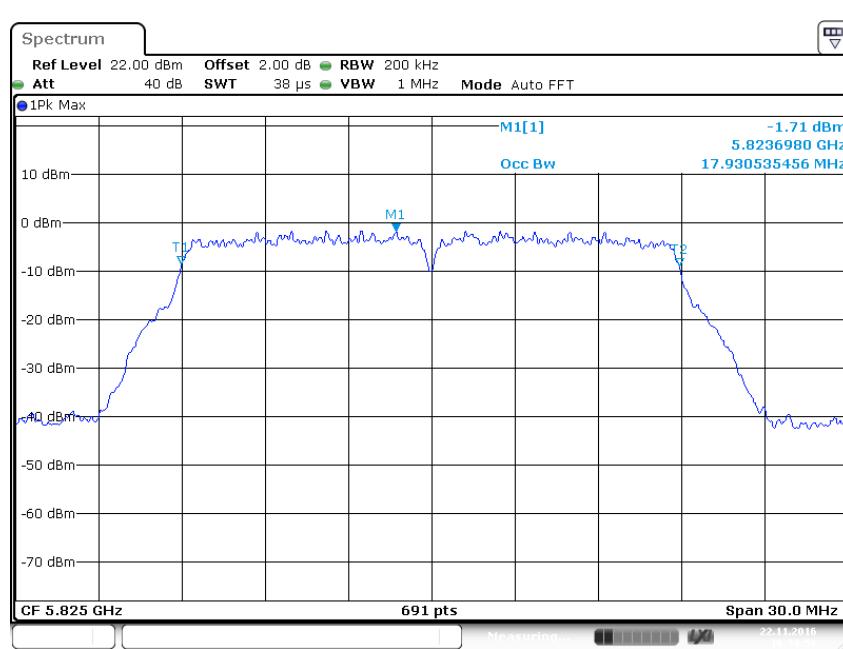
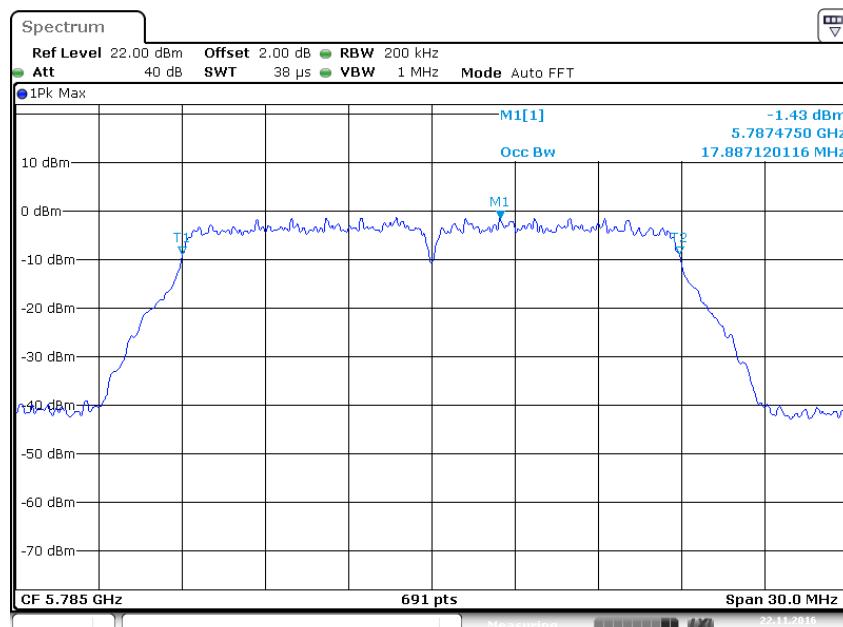
U-NII-3
ANT 0





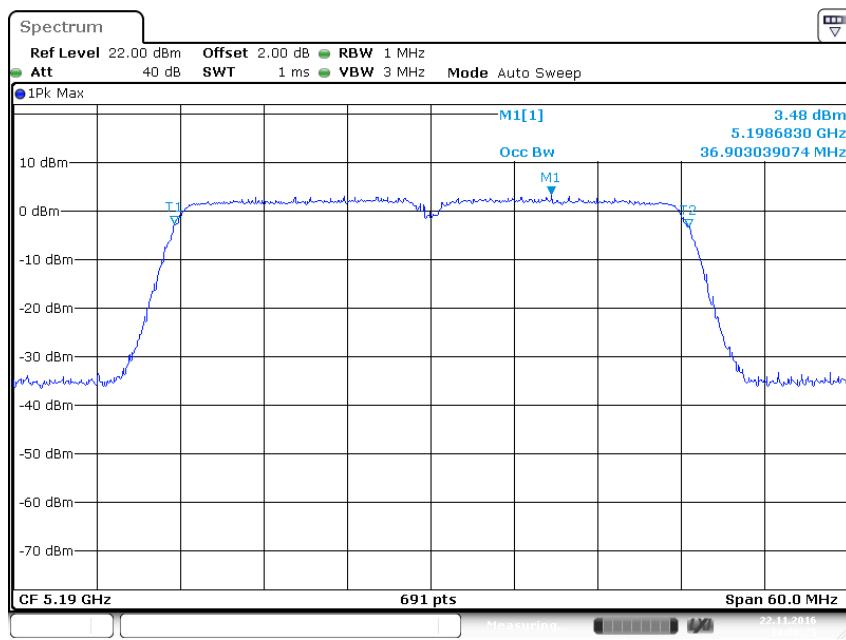
ANT 1



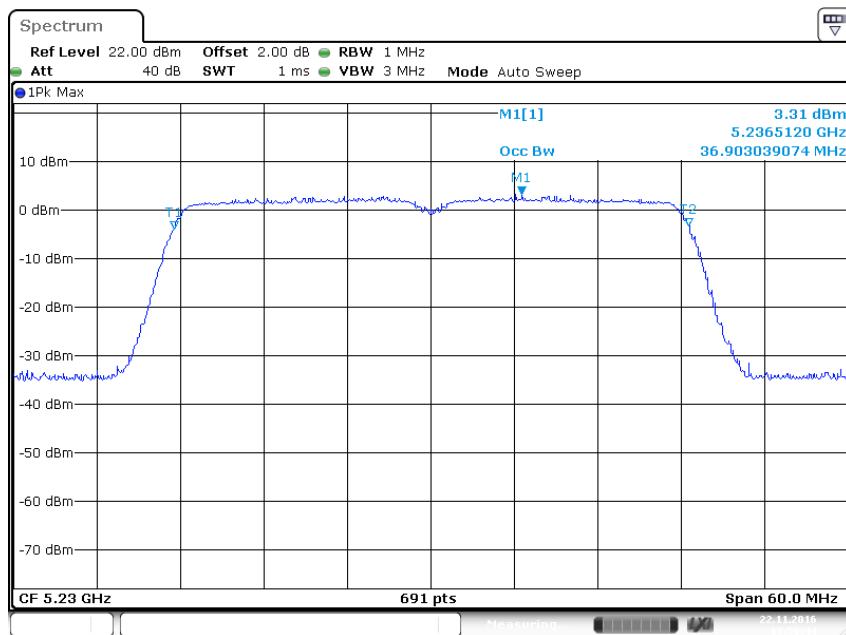


Wi-Fi 802.11 ac (HT40) mode

U-NII-1
ANT 0

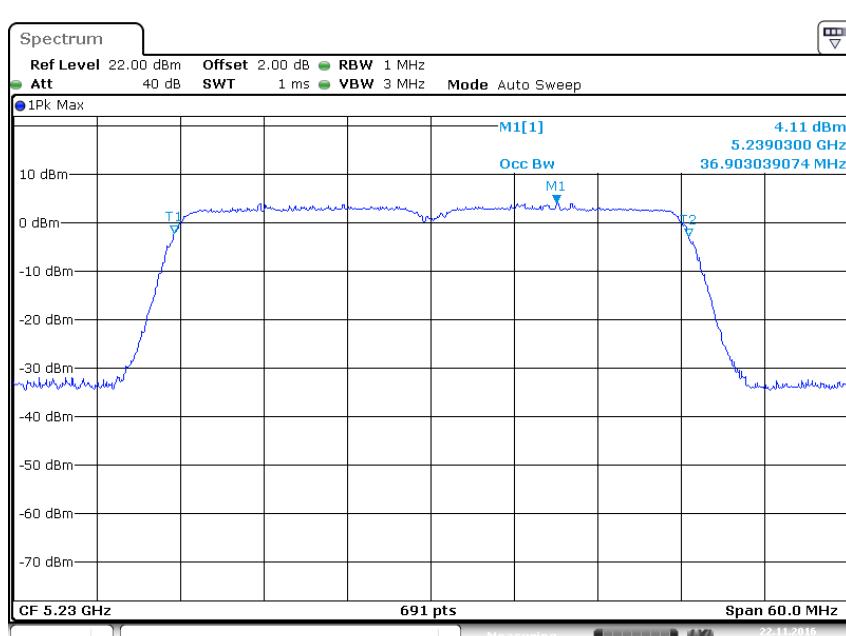
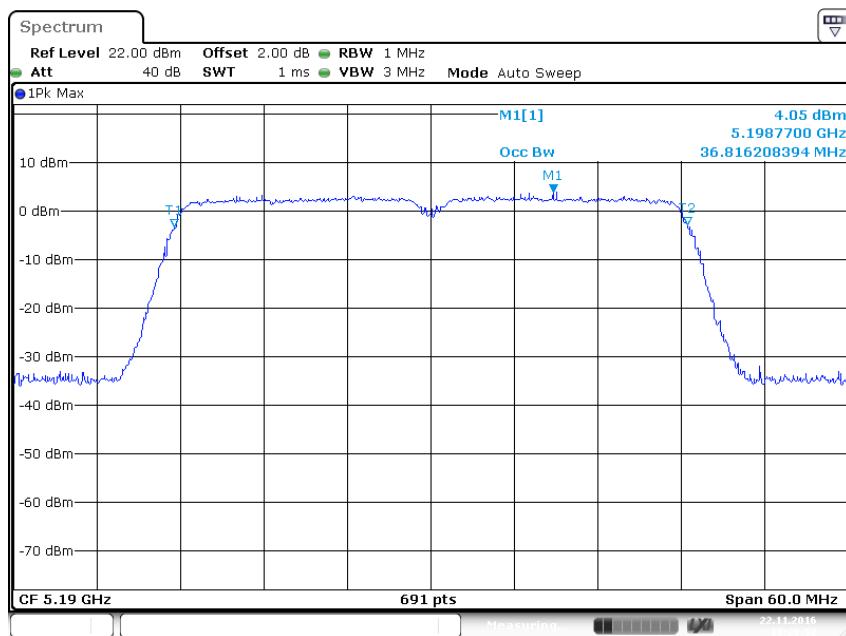


Date: 22.NOV.2016 14:00:25

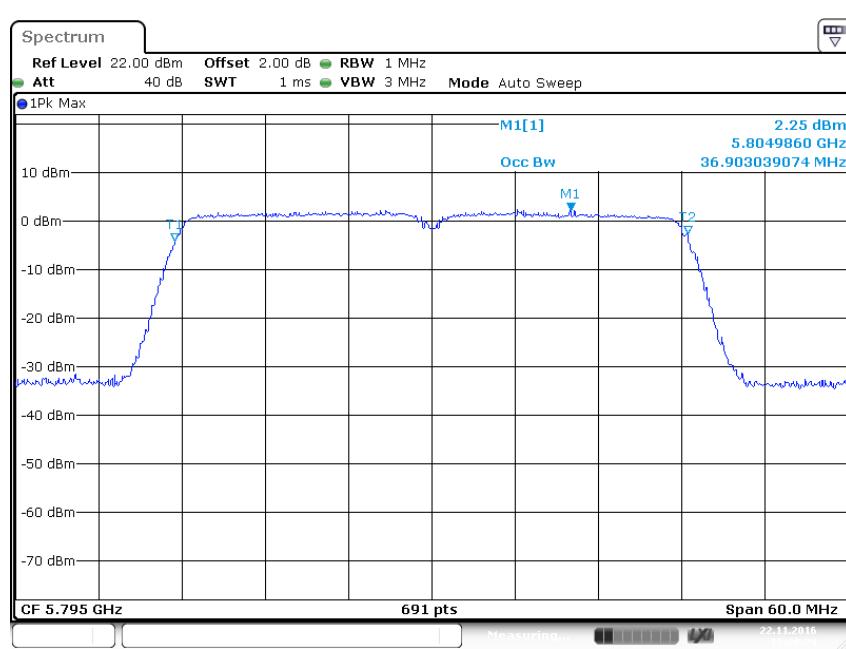
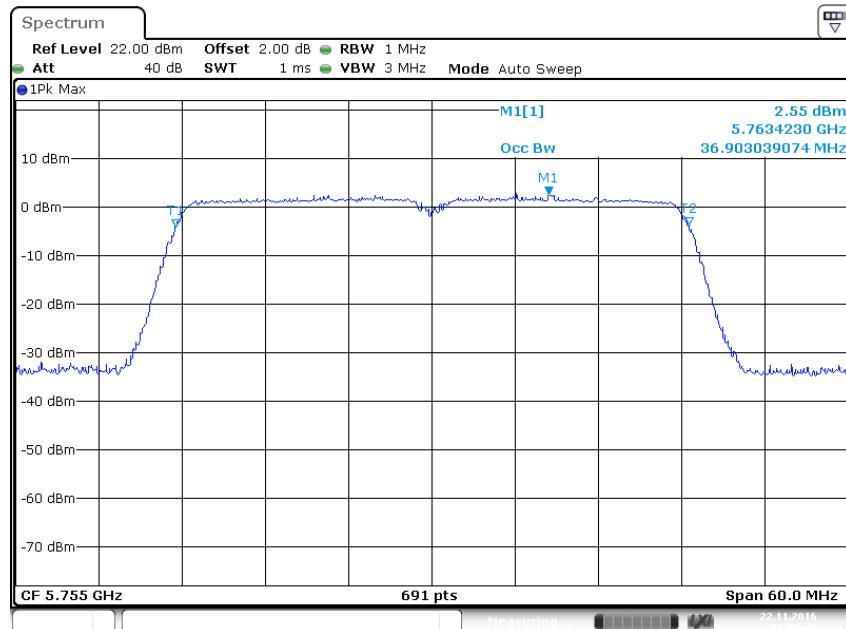


Date: 22.NOV.2016 13:59:45

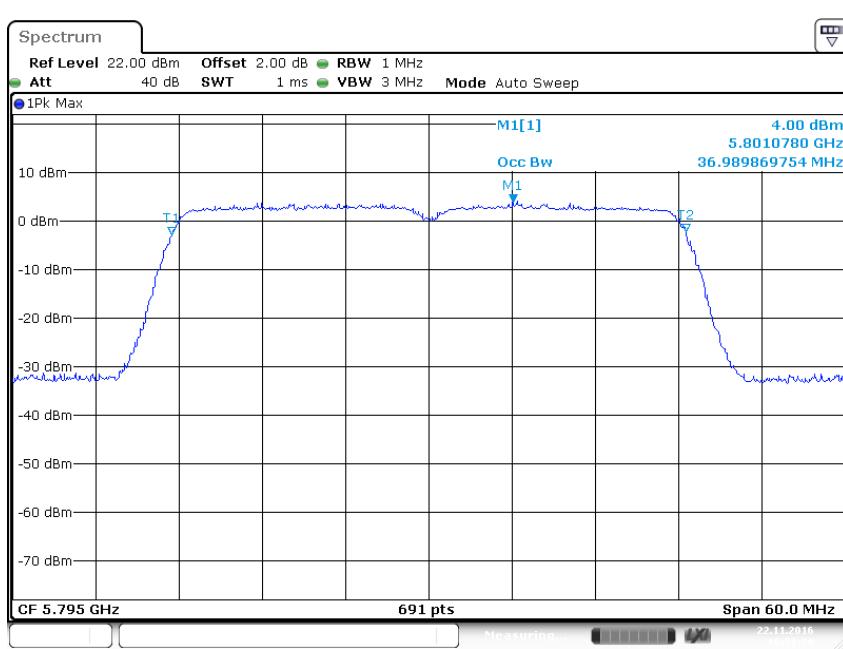
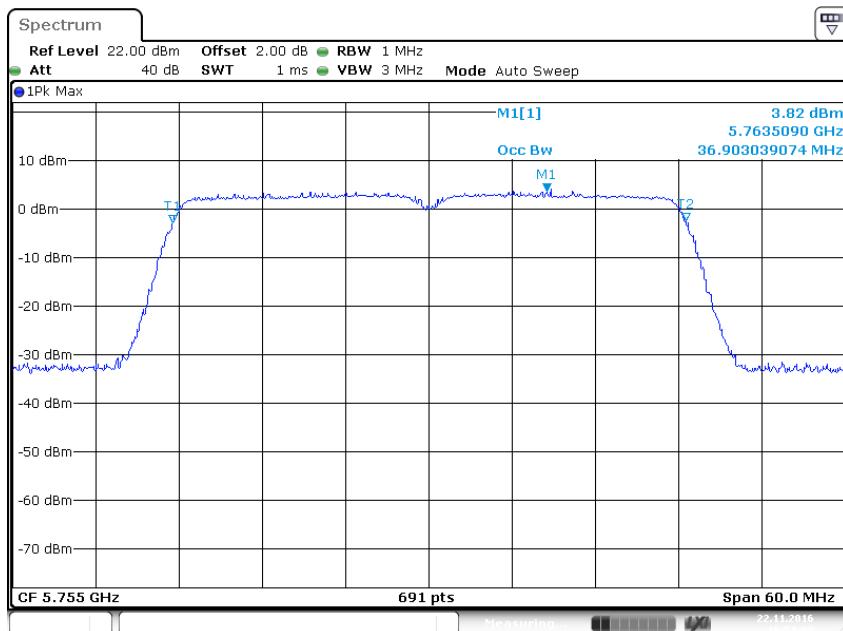
ANT 1



U-NII-3
ANT 0

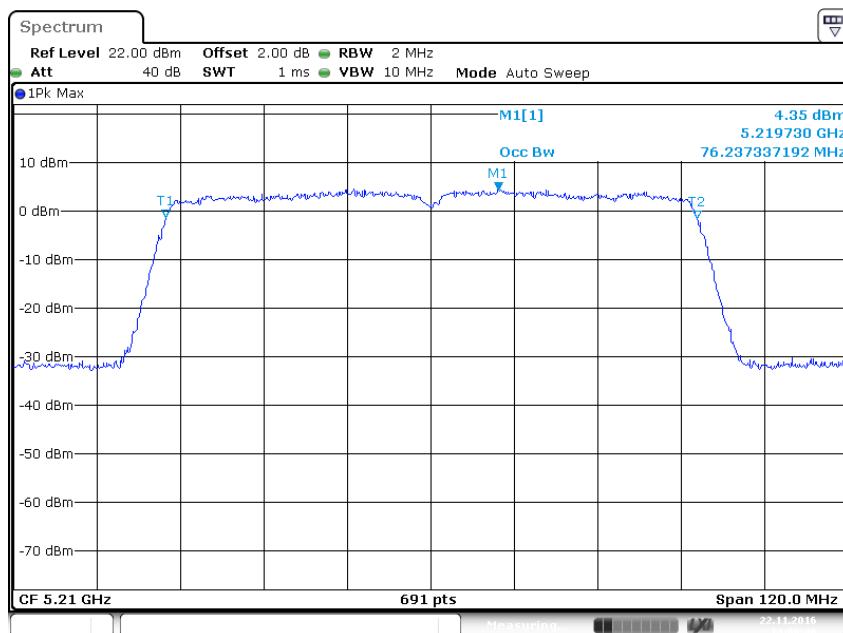


ANT 1

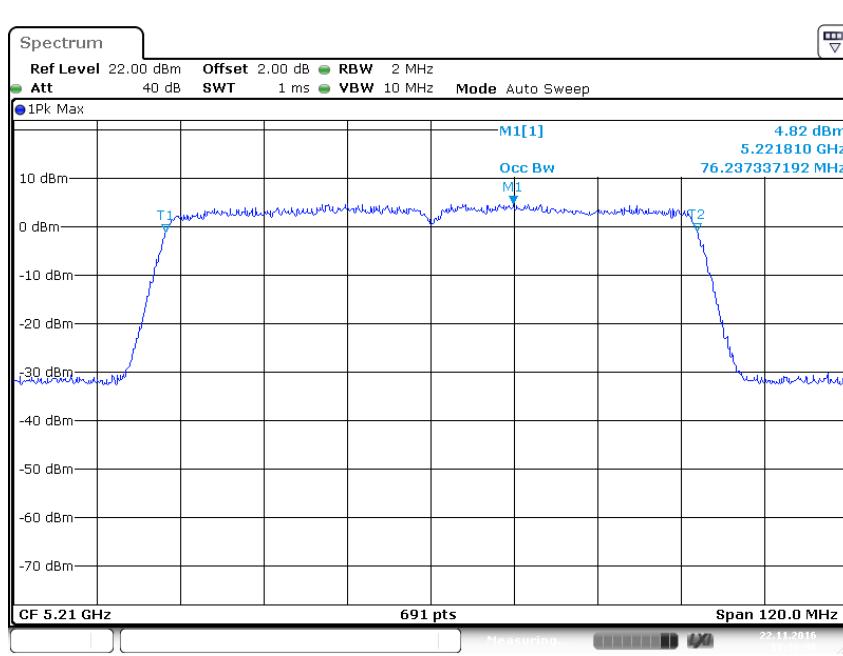


Wi-Fi 802.11 ac (HT80) mode

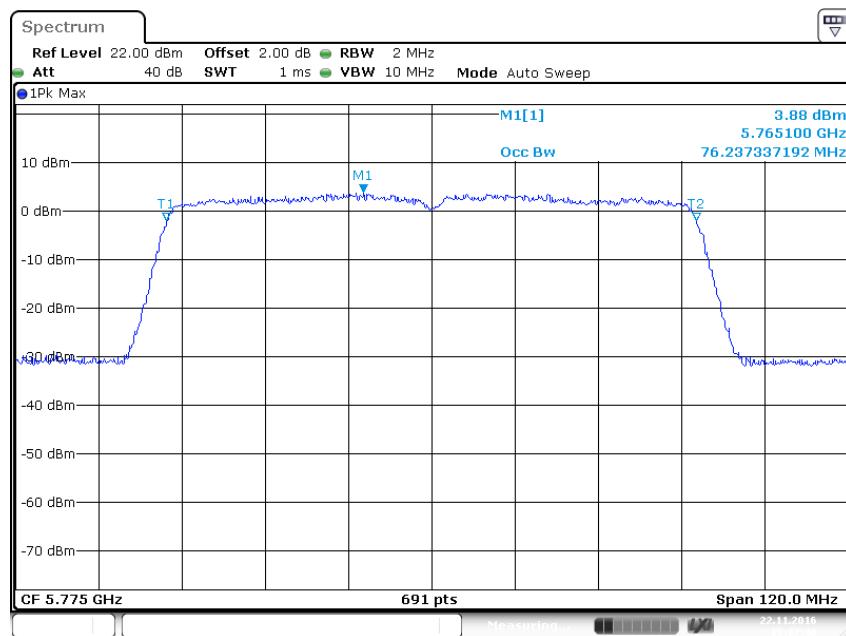
U-NII-1
ANT 0



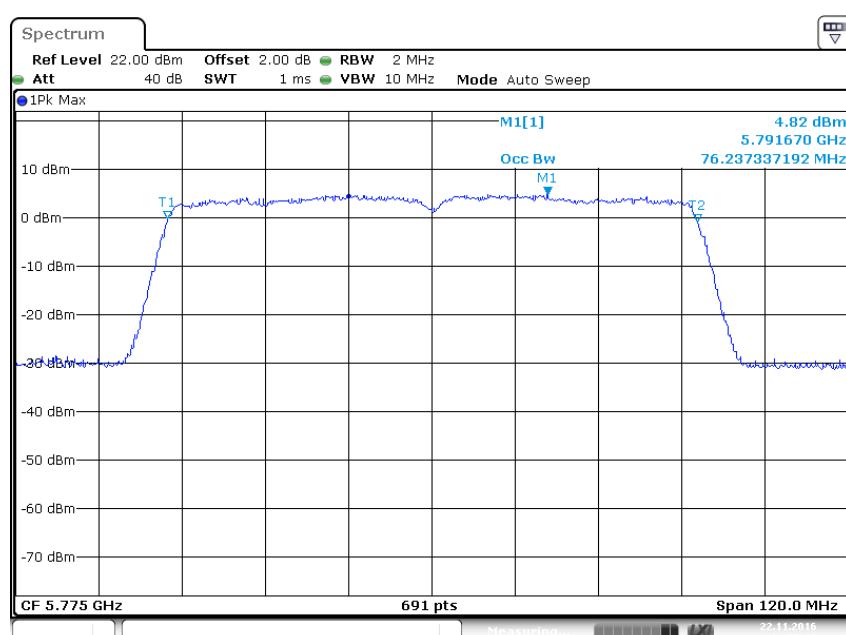
ANT 1



U-NII-3
ANT 0



ANT 1

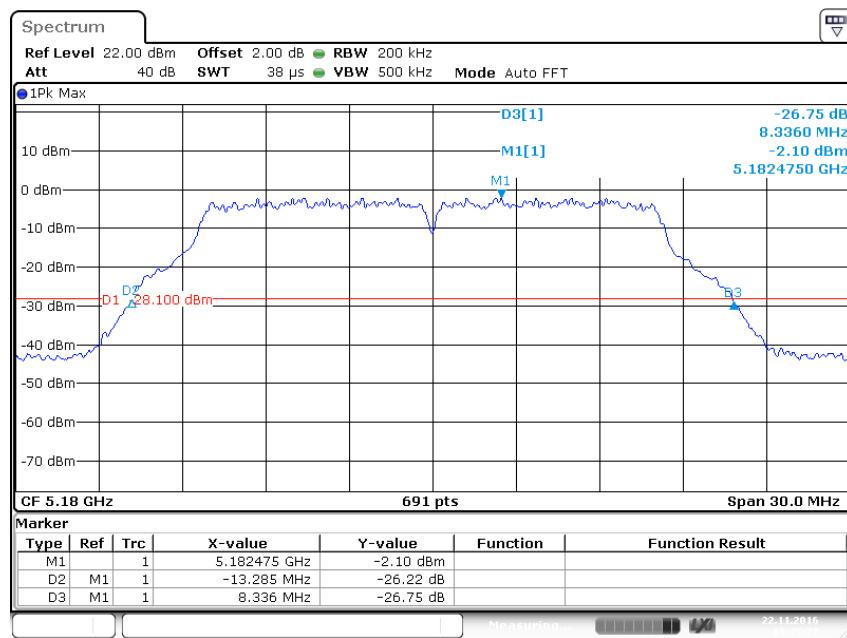


APPENDIX A.4: 26dB Bandwidth

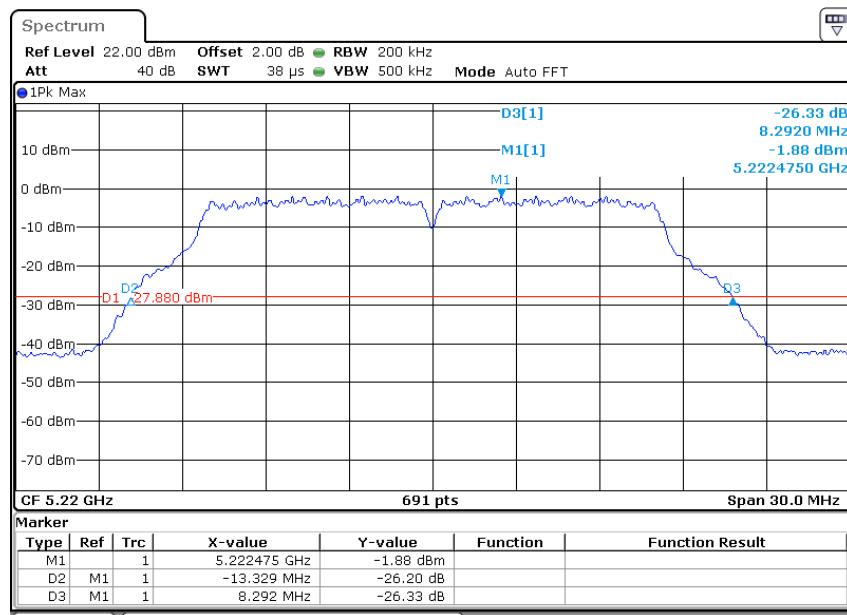
Wi-Fi 802.11 a mode

U-NII-1

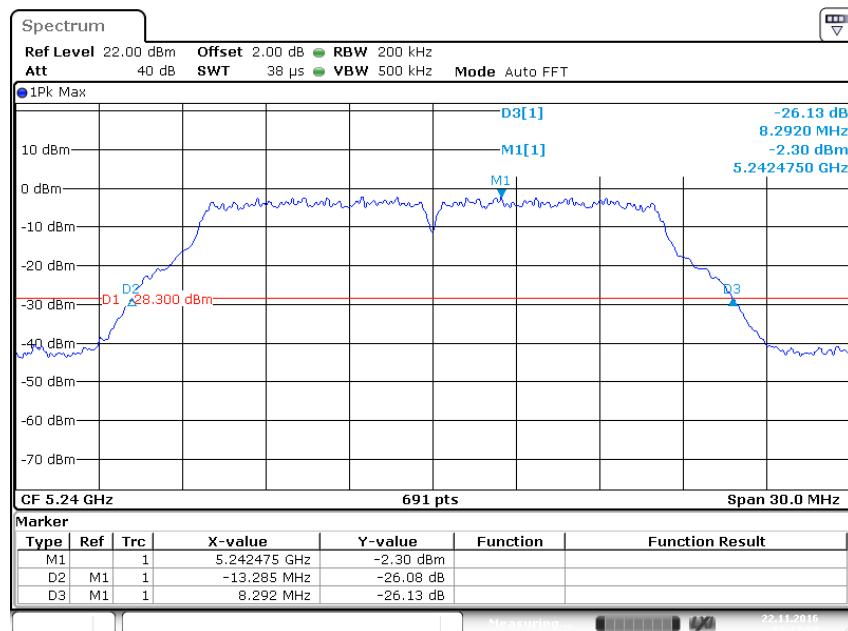
ANT 0



Date: 22.NOV.2016 13:35:27

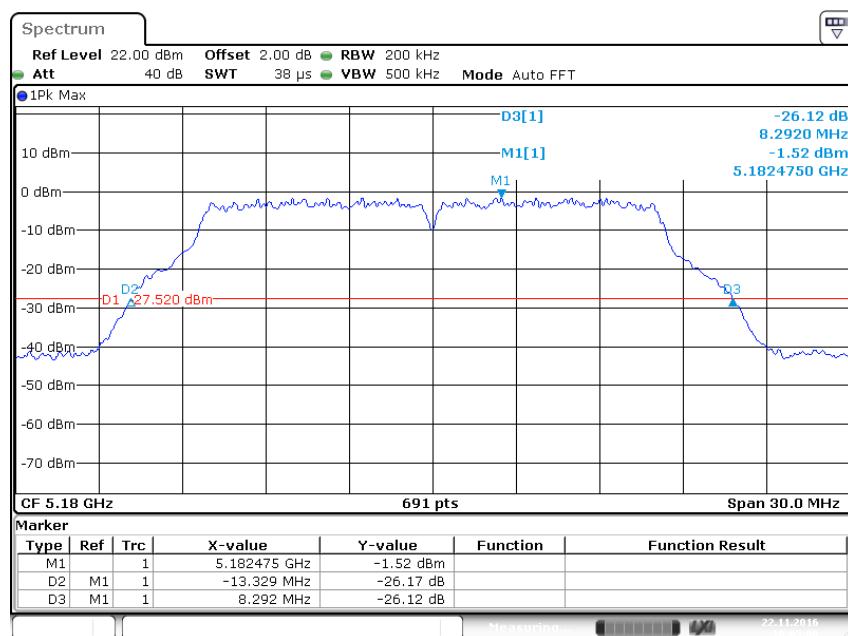


Date: 22.NOV.2016 13:36:54

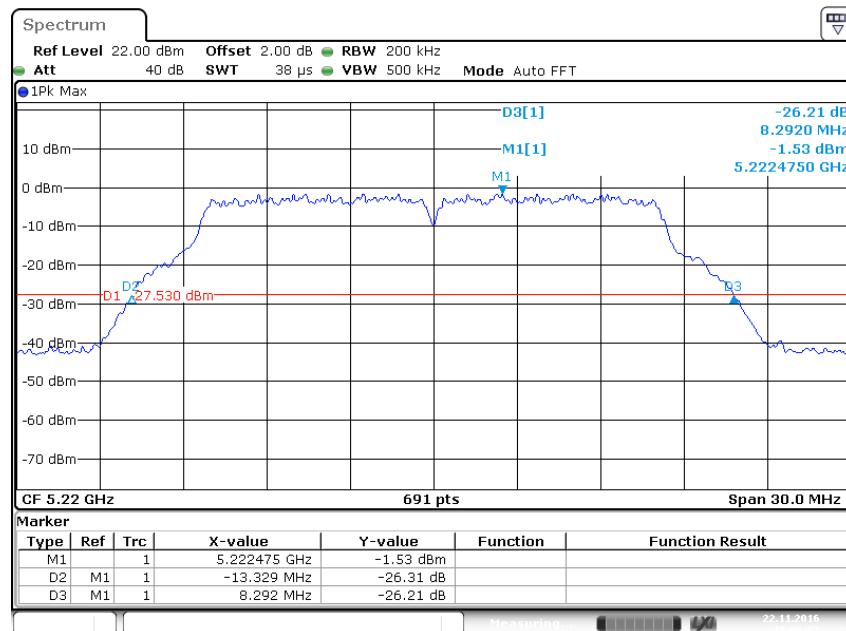


Date: 22.NOV.2016 13:37:58

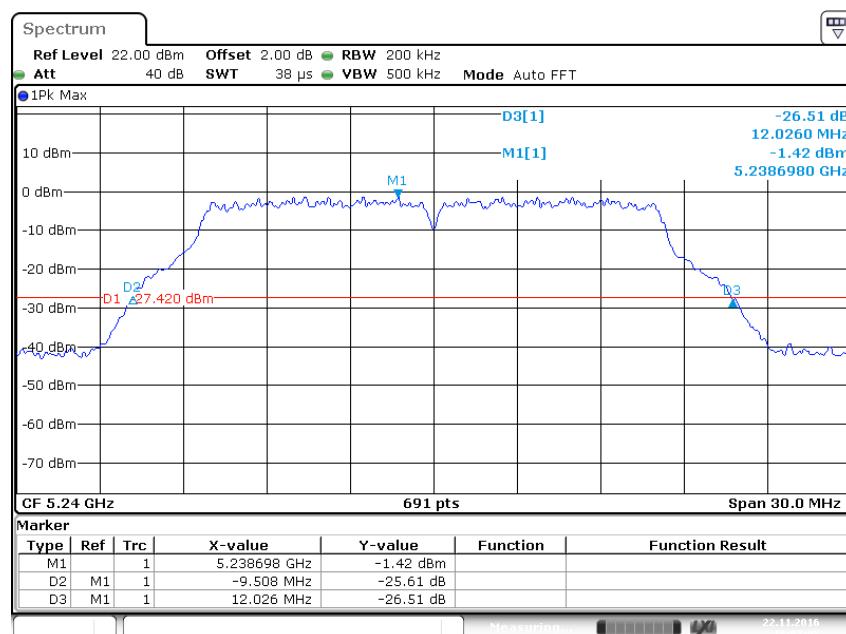
ANT 1



Date: 22.NOV.2016 18:05:00

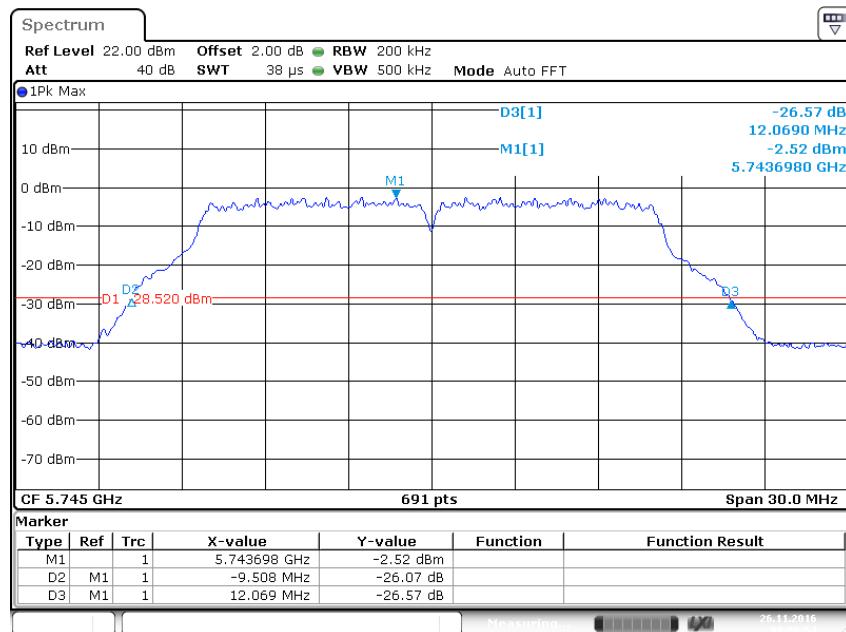


Date: 22.NOV.2016 18:06:08

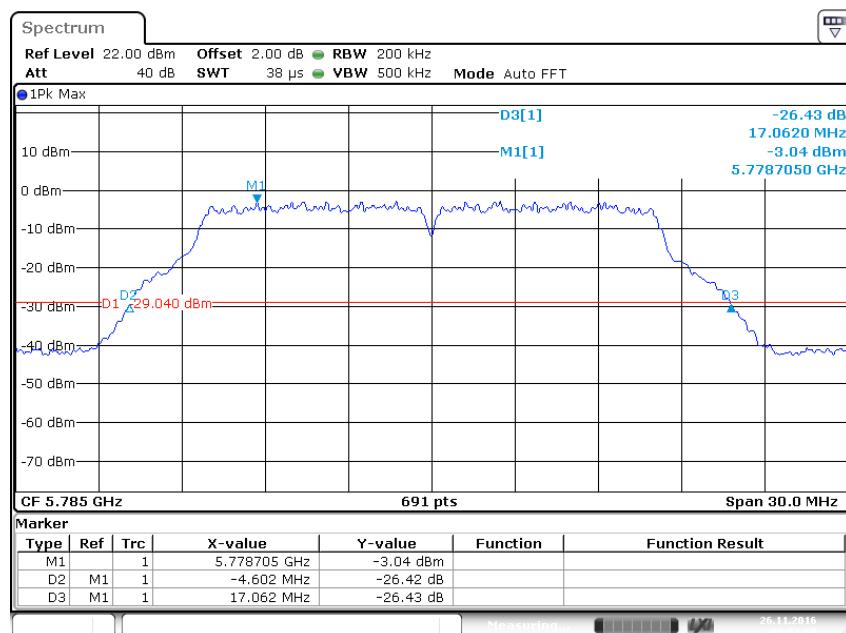


Date: 22.NOV.2016 18:07:05

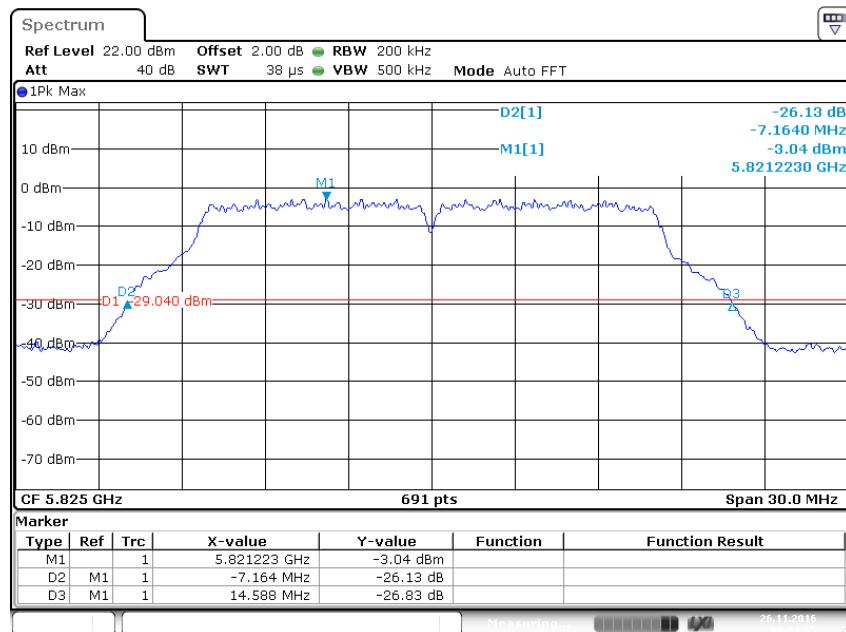
U-NII-3
ANT 0



Date: 26.NOV.2016 09:00:54

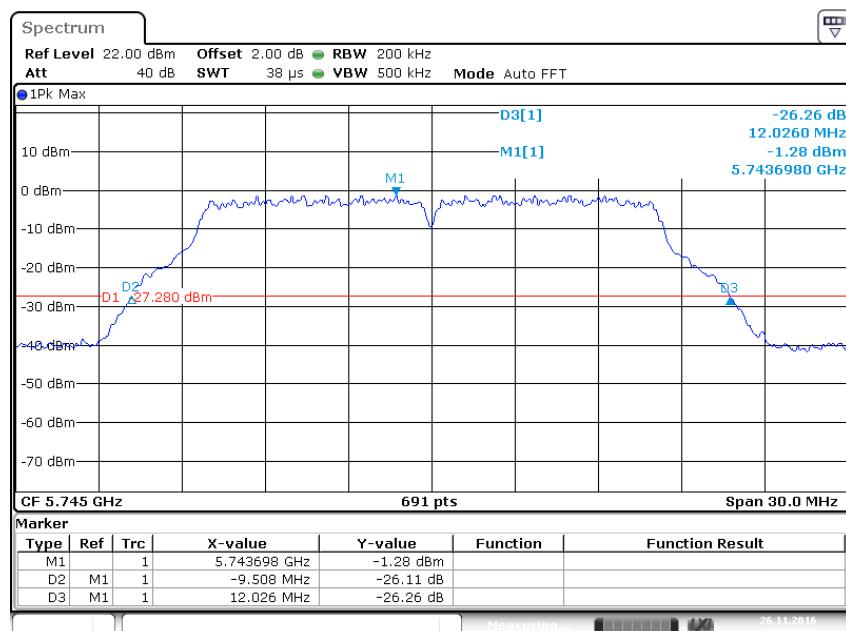


Date: 26.NOV.2016 09:02:50

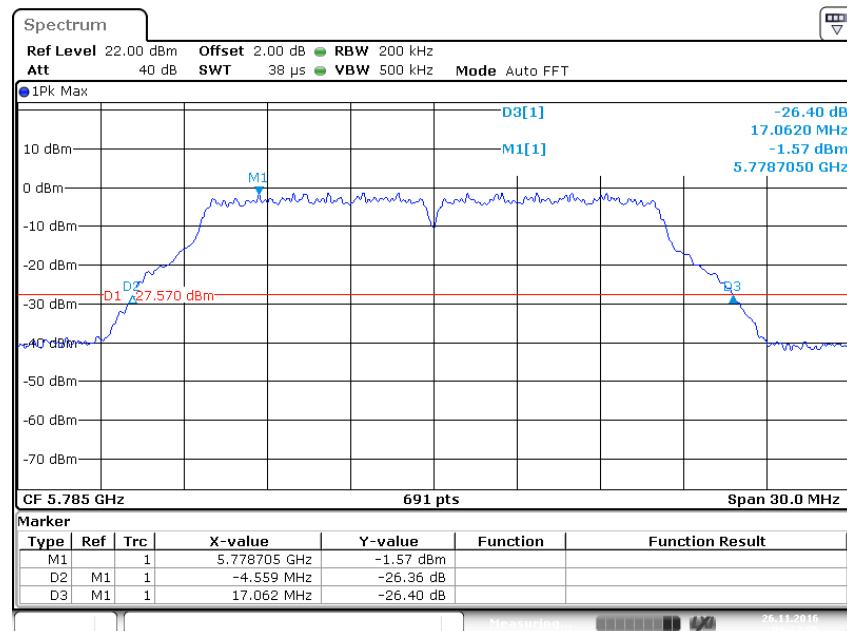


Date: 26.NOV.2016 09:04:35

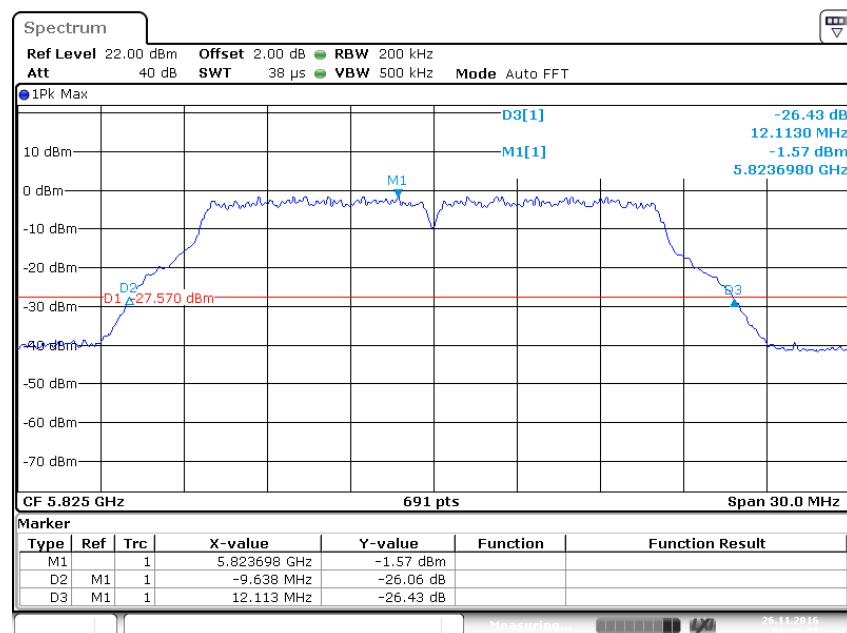
ANT 1



Date: 26.NOV.2016 09:35:23



Date: 26.NOV.2016 09:37:25

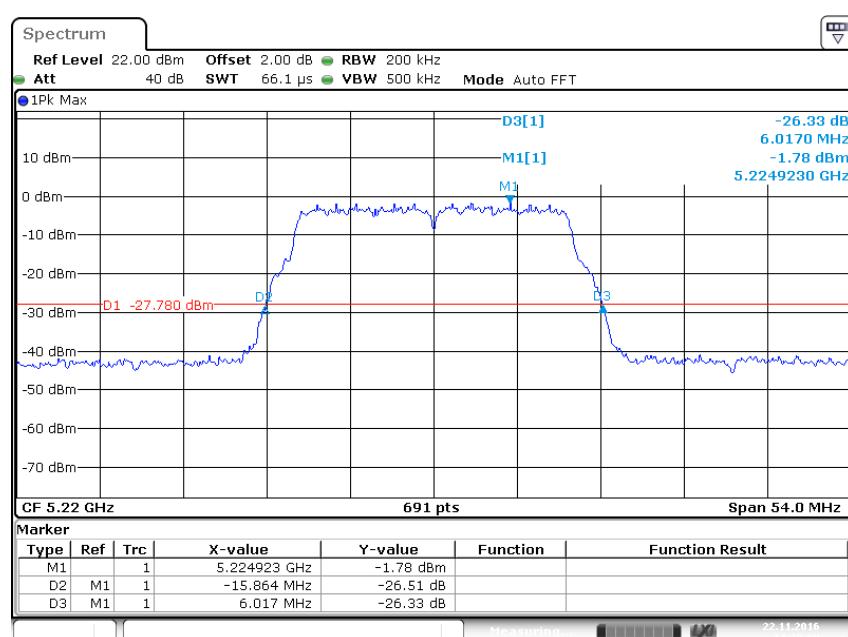
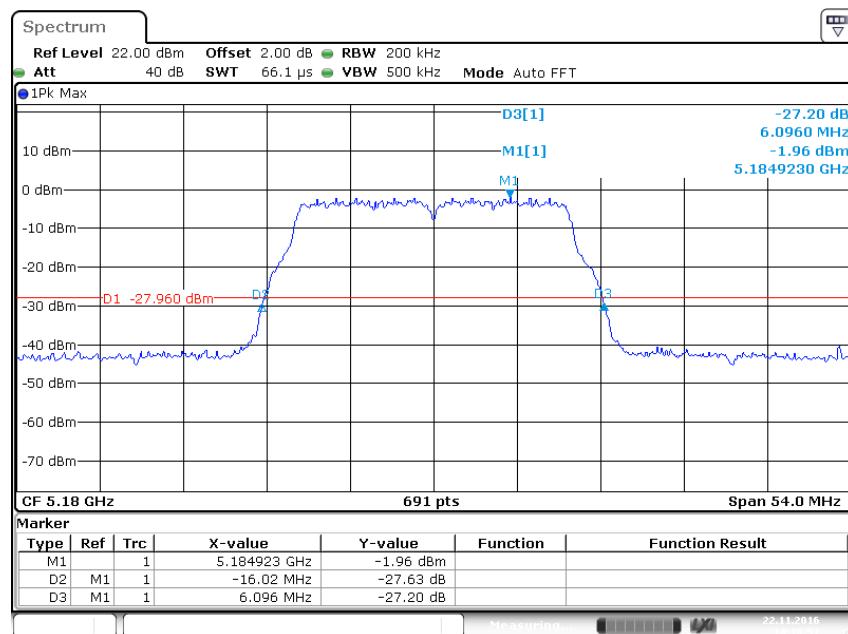


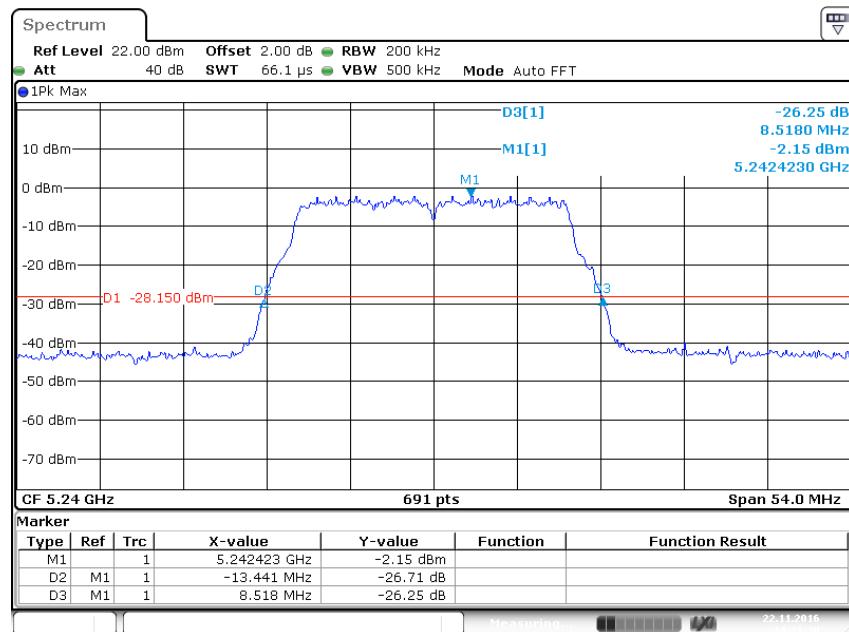
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Wi-Fi 802.11 n (HT20) mode

U-NII-1

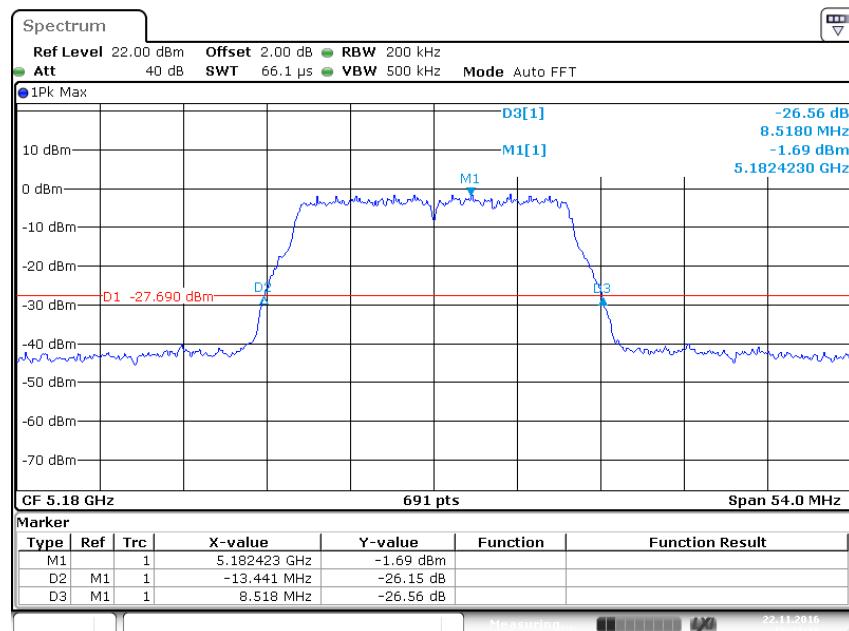
ANT 0



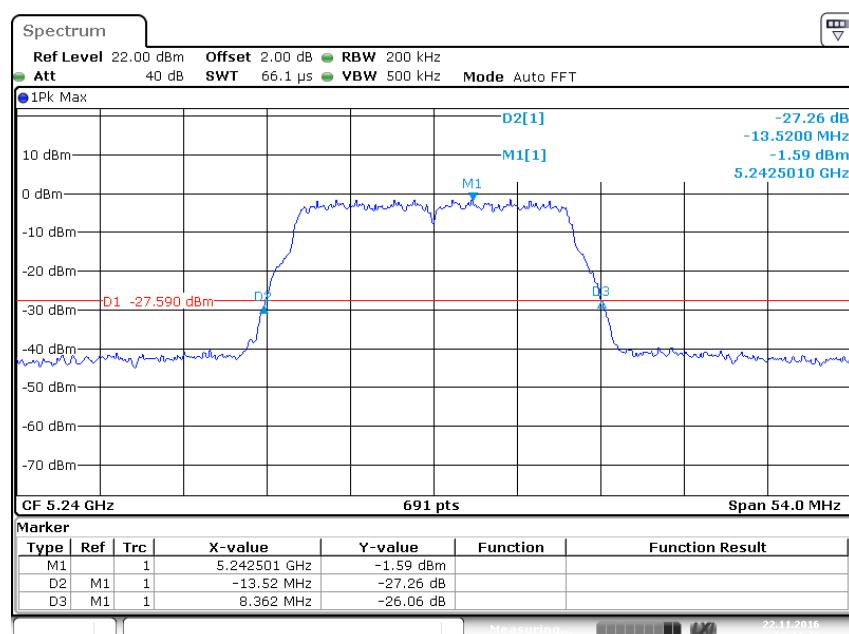
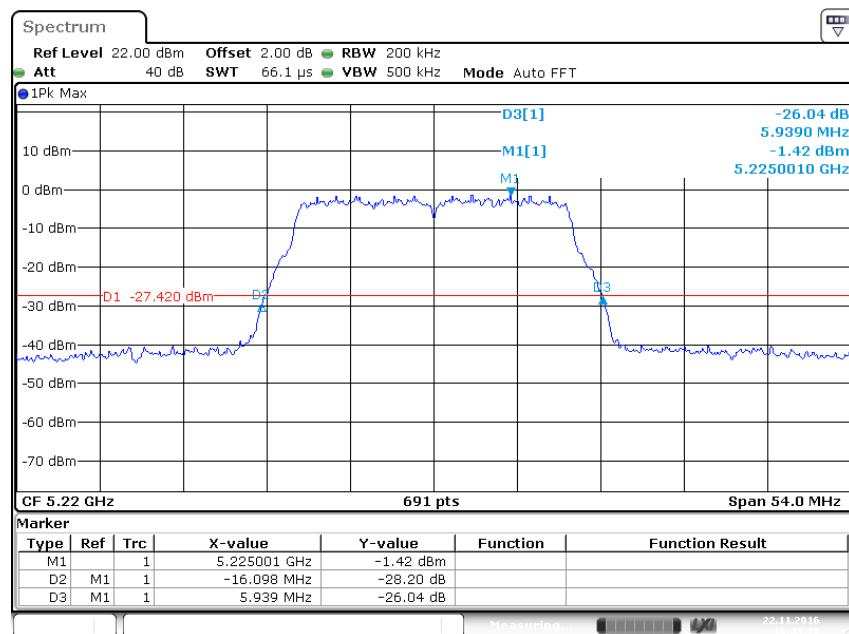


Date: 22.NOV.2016 14:21:31

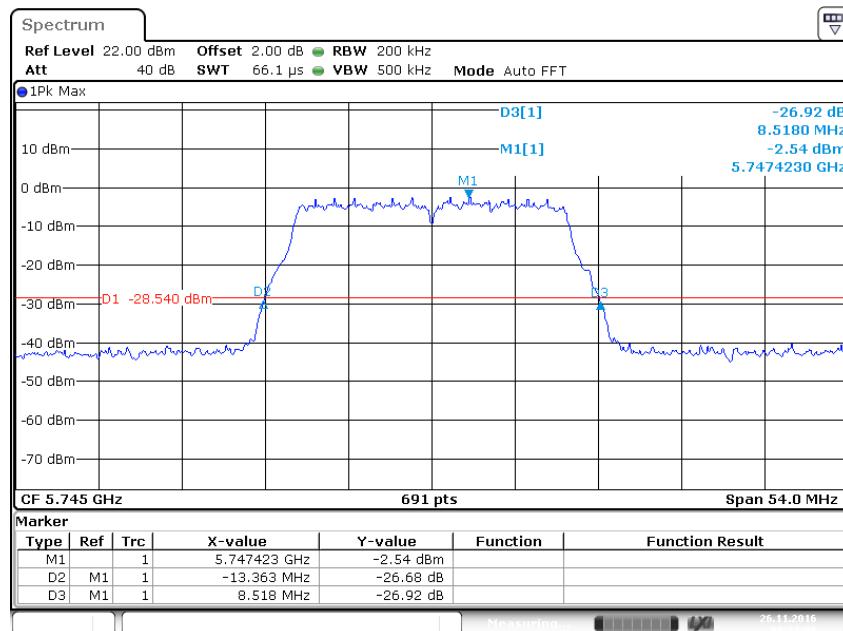
ANT 1



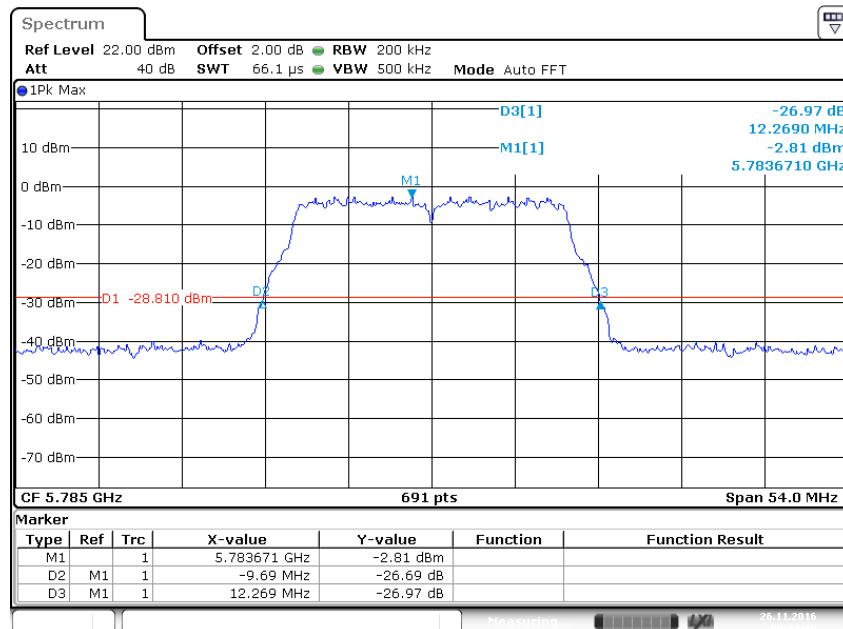
Date: 22.NOV.2016 18:42:16



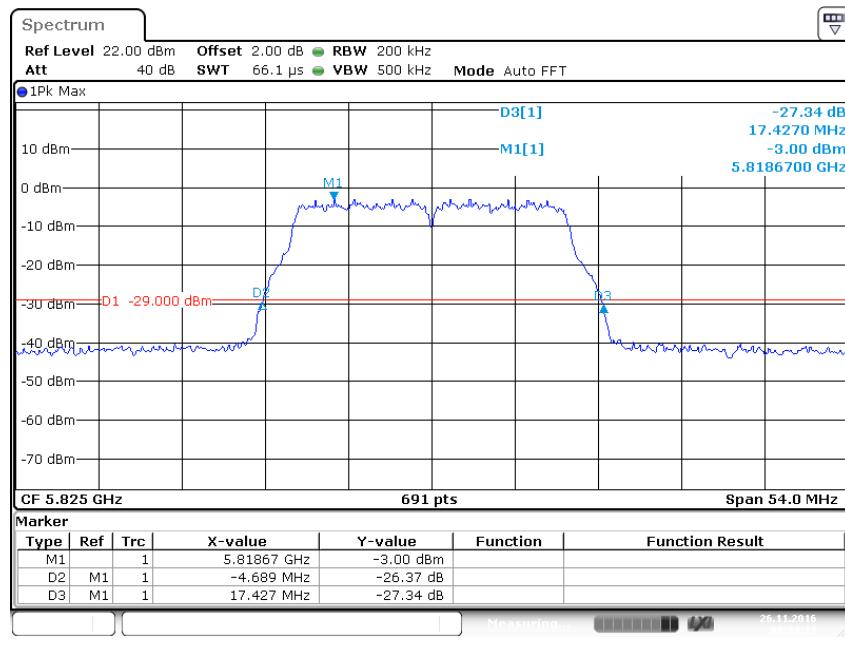
U-NII-3
ANT 0



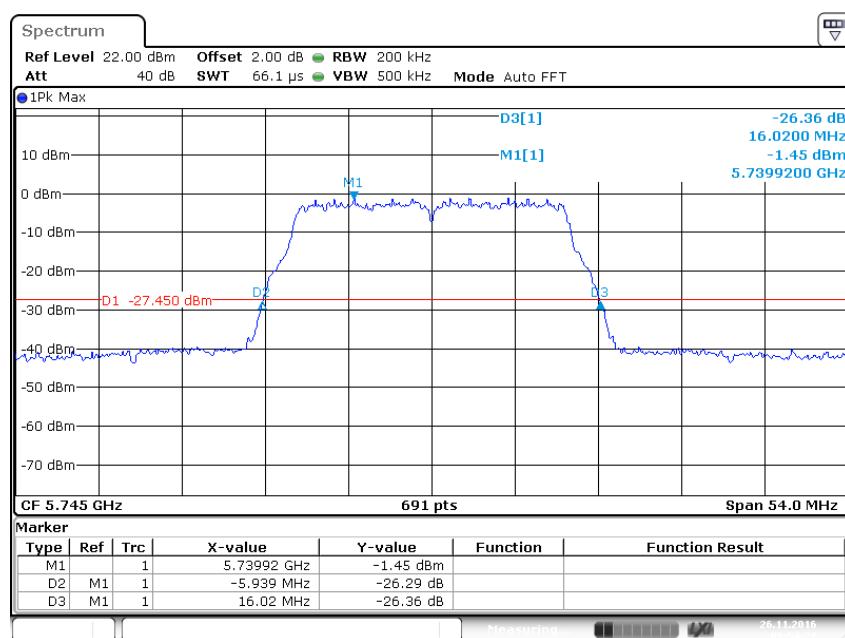
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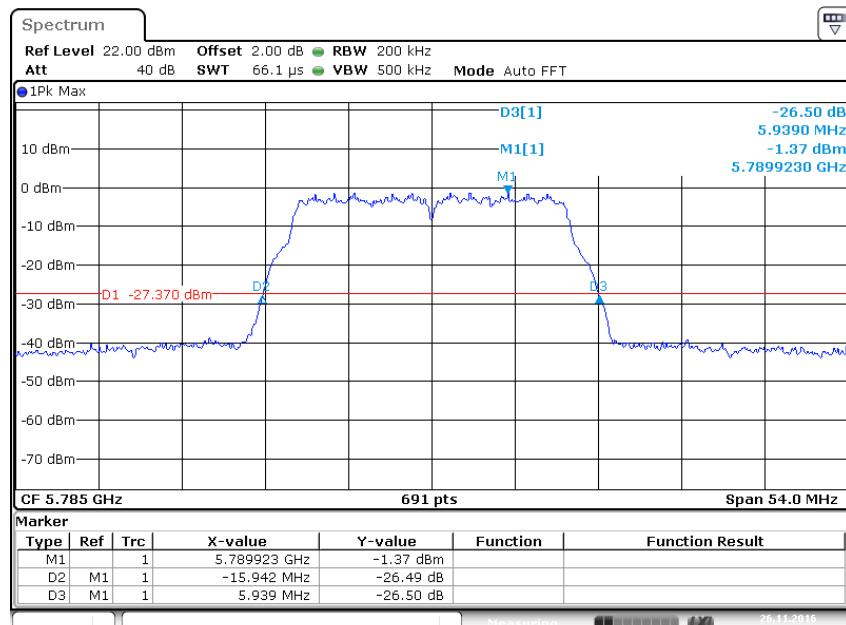


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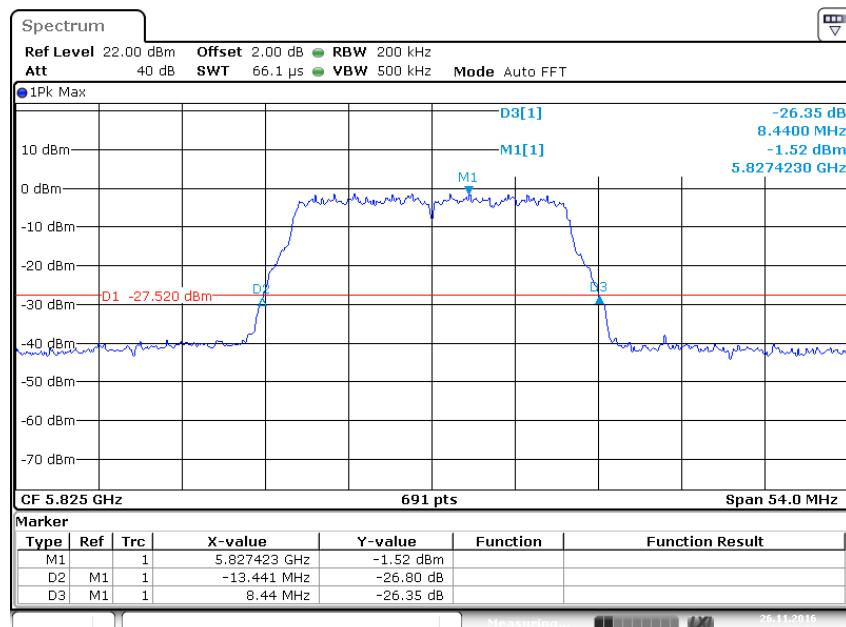


ANT 1





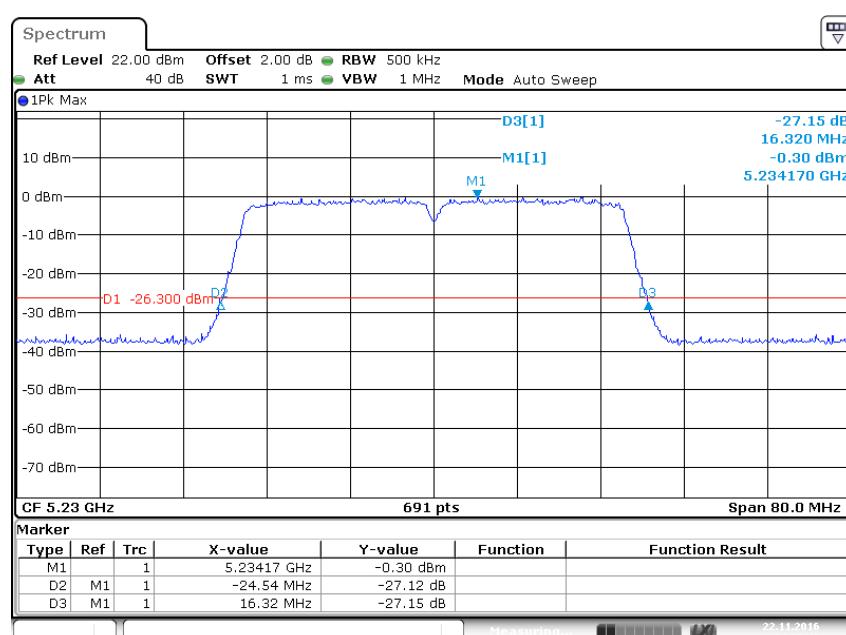
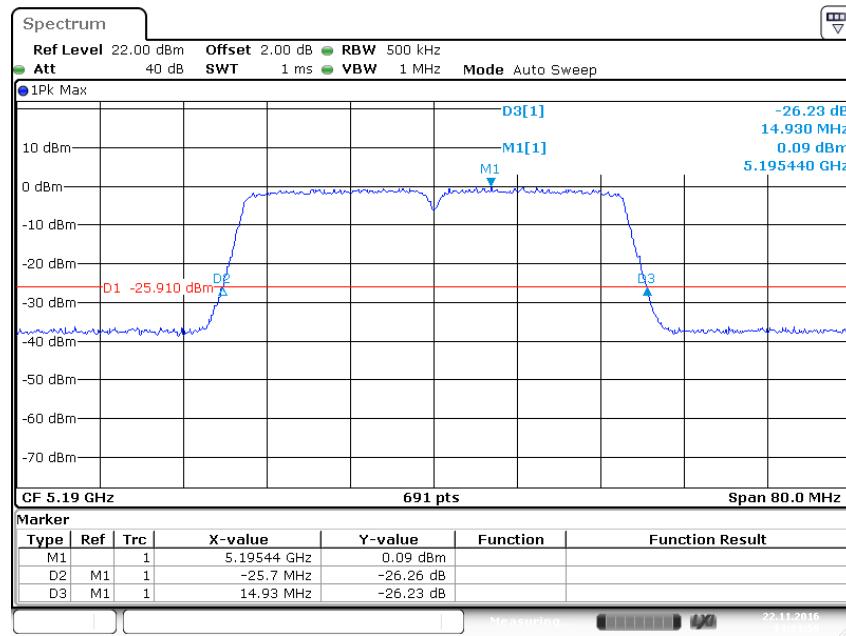
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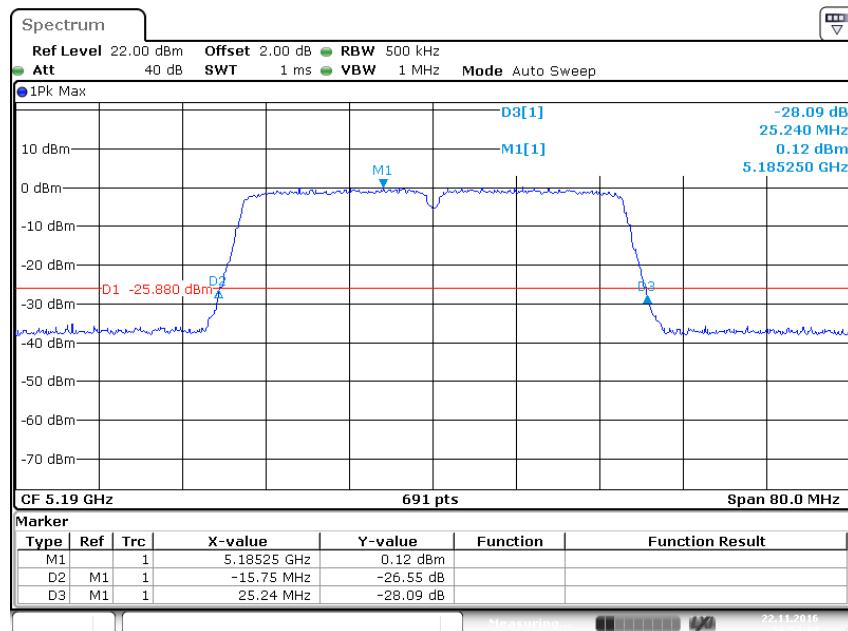
Date: 26.NOV.2016 09:57:11

Wi-Fi 802.11 n (HT40) mode

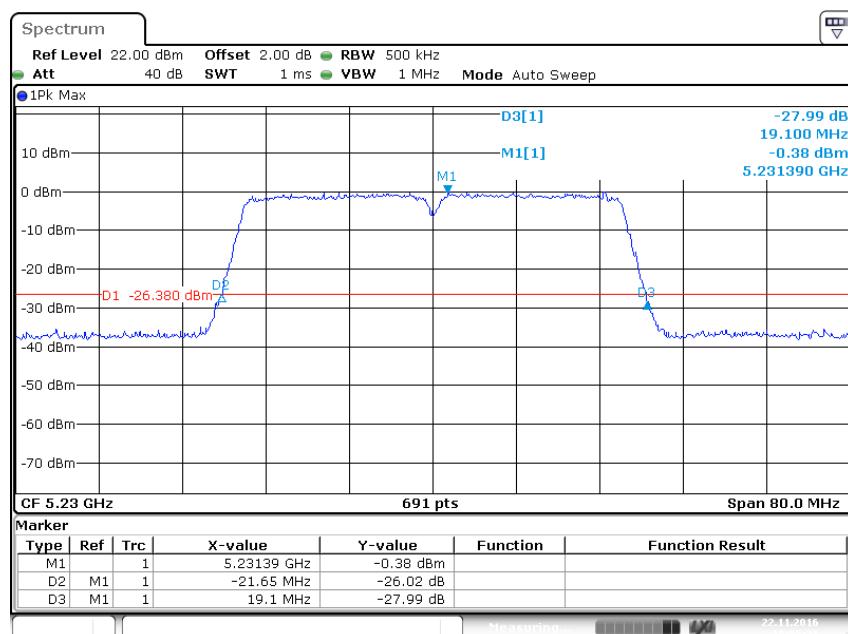
U-NII-1
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ANT 1

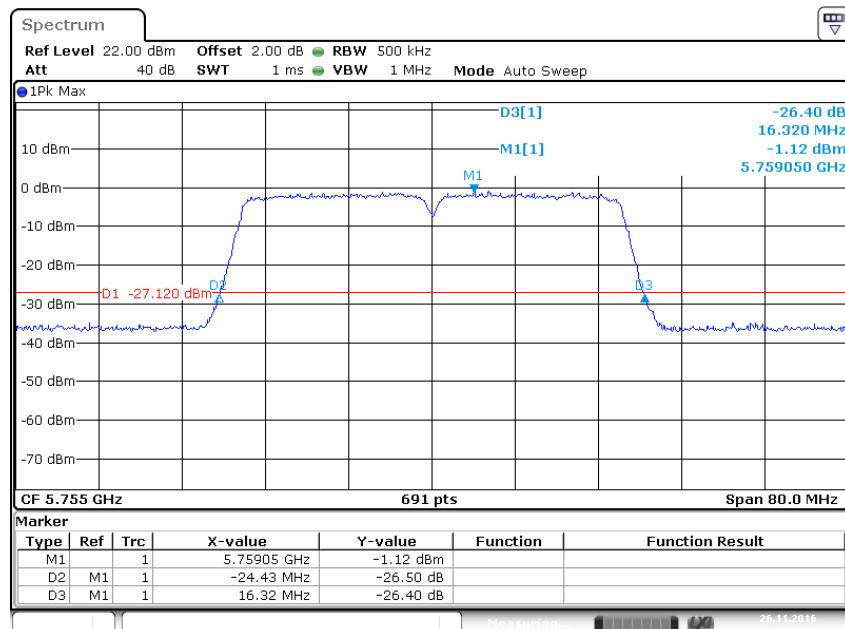


Date: 22.NOV.2016 18:54:14

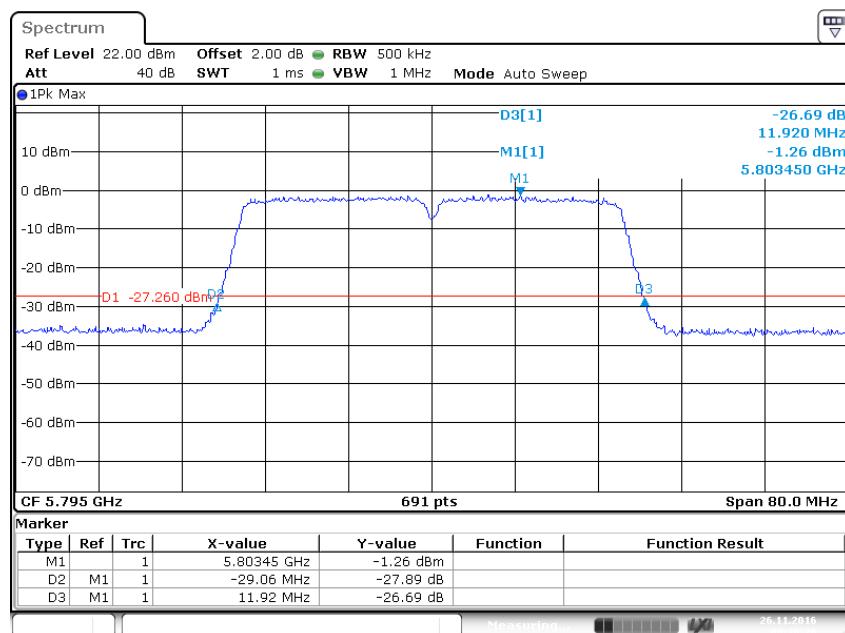


Date: 22.NOV.2016 18:55:22

U-NII-3
ANT 0

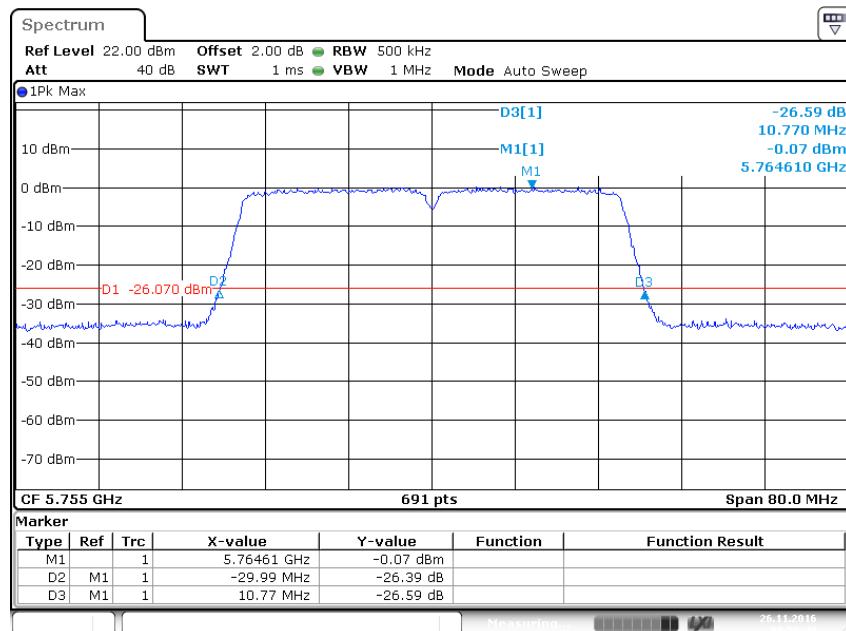


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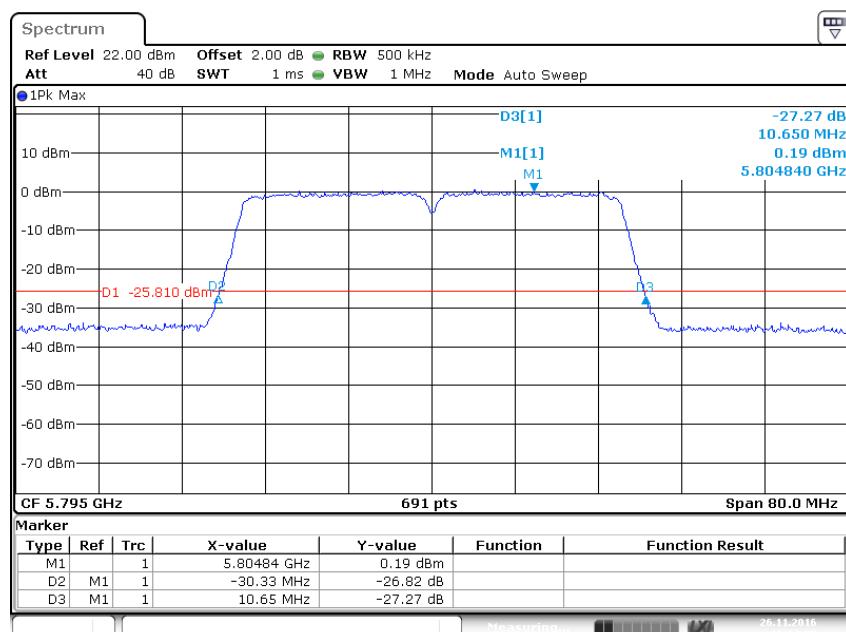


Date: 26.NOV.2016 09:30:31

ANT 1



Date: 26.NOV.2016 09:59:49

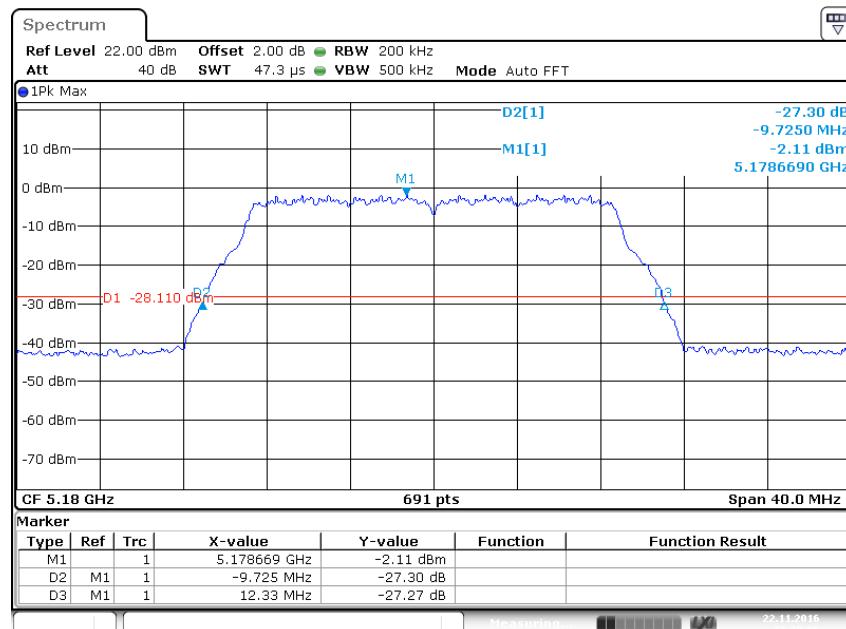


Date: 26.NOV.2016 10:01:50

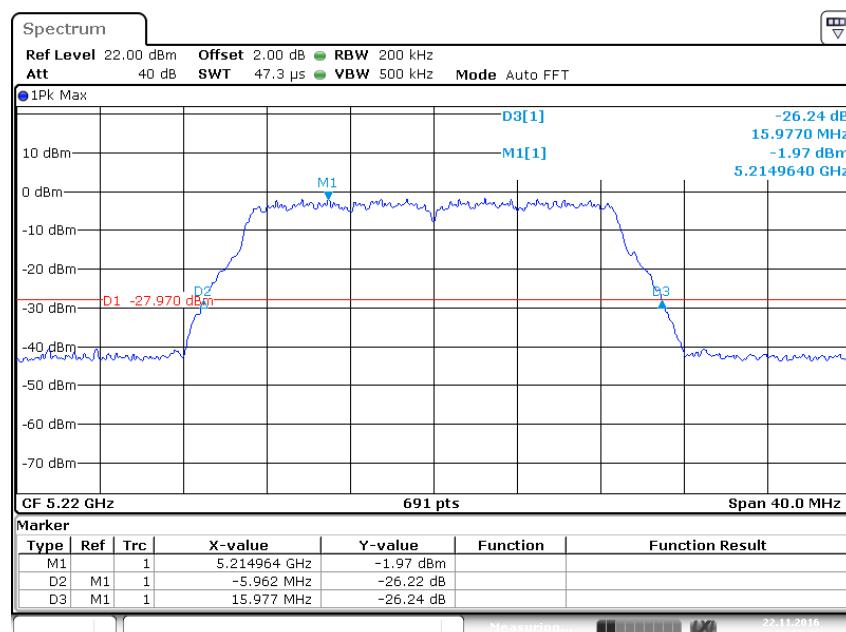
Wi-Fi 802.11 ac (HT20) mode

U-NII-1

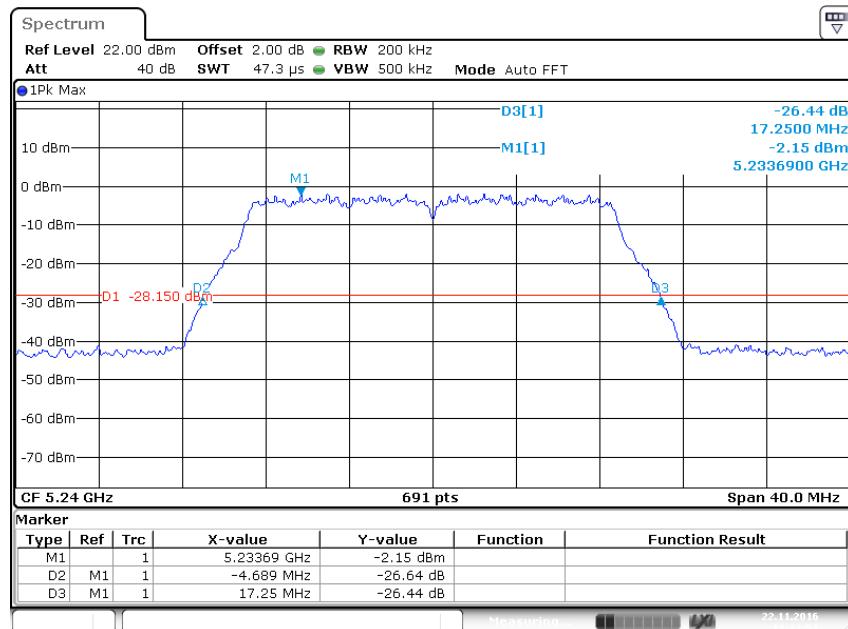
ANT 0



Date: 22.NOV.2016 13:30:06

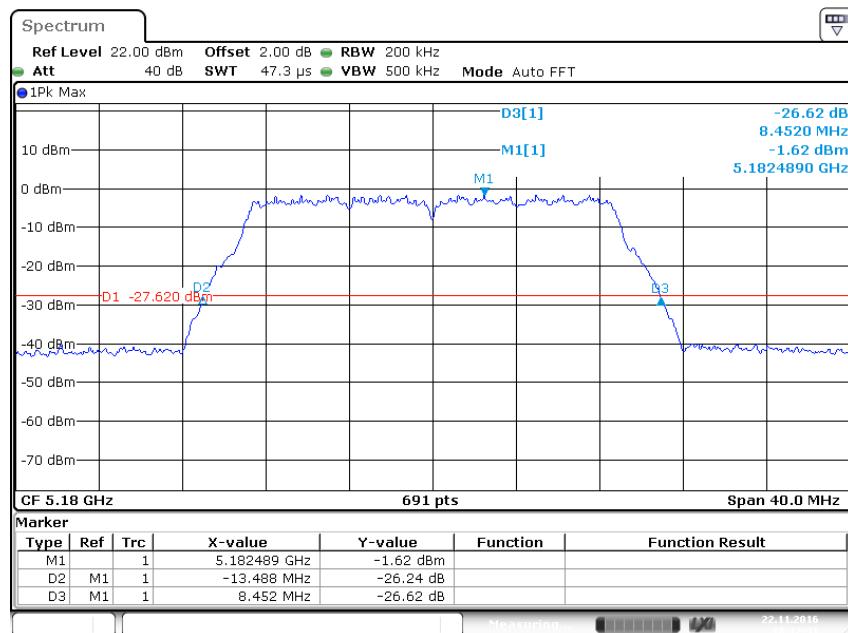


Date: 22.NOV.2016 13:31:47

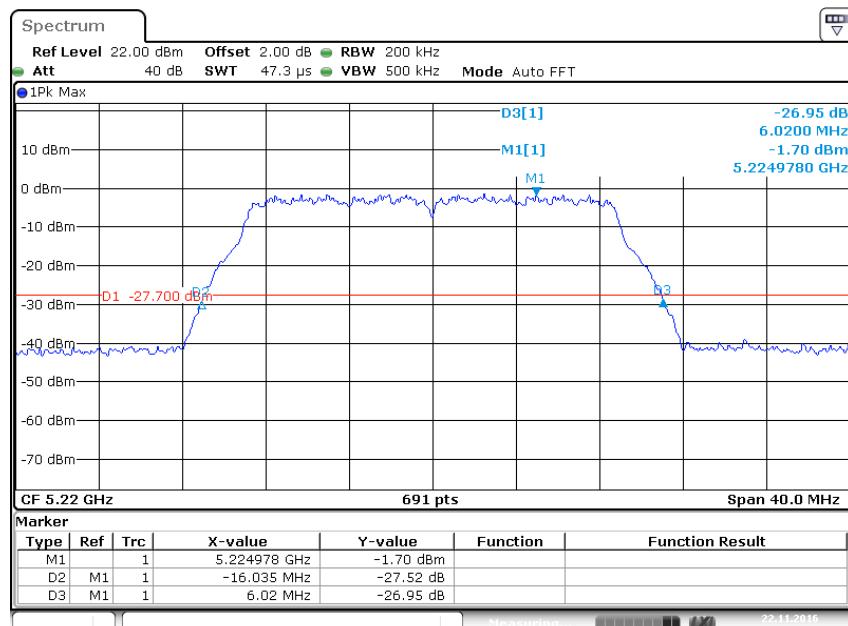


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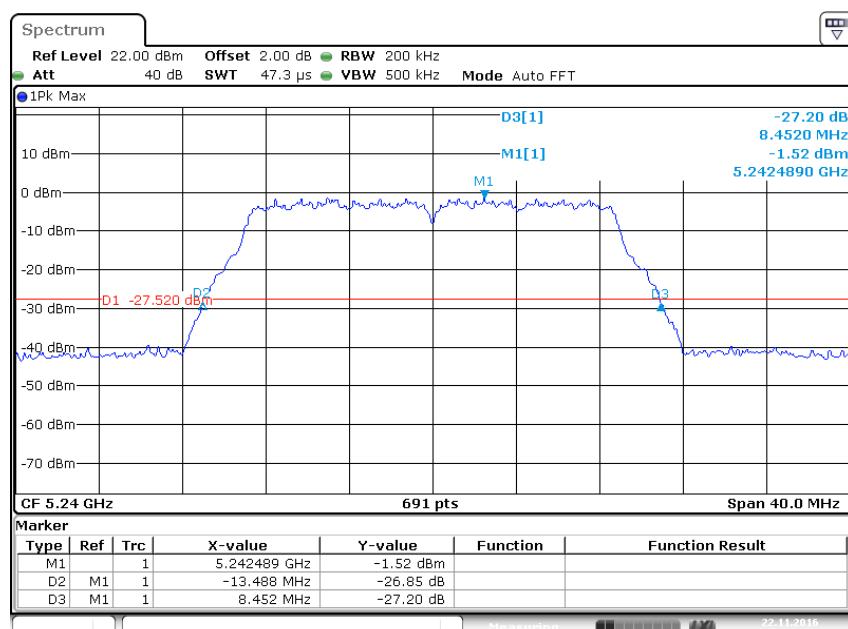
ANT 1



Date: 22.NOV.2016 18:12:31

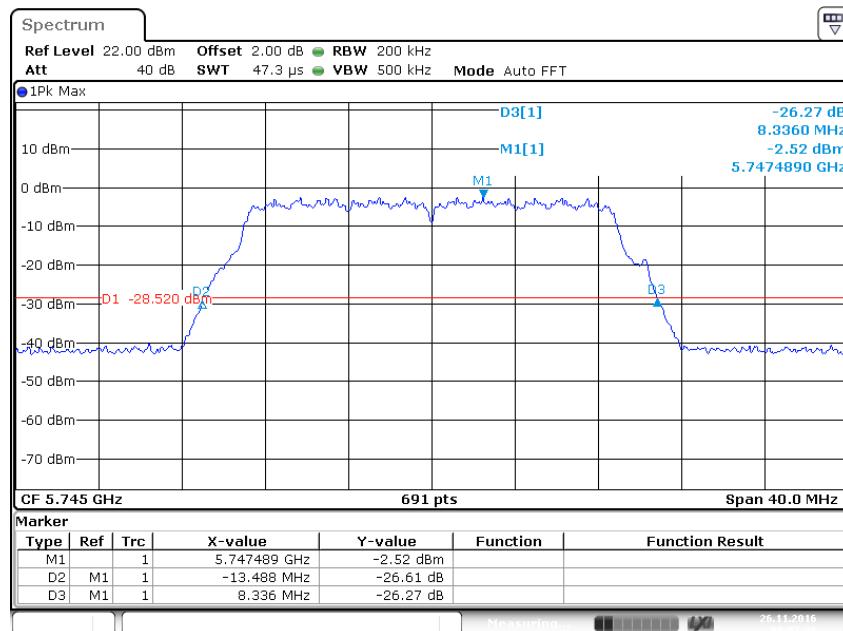


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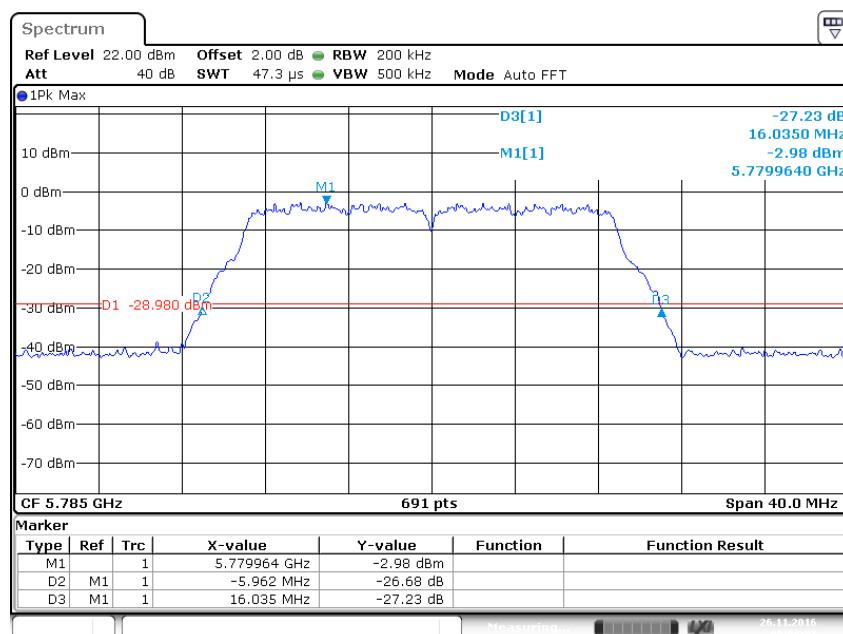


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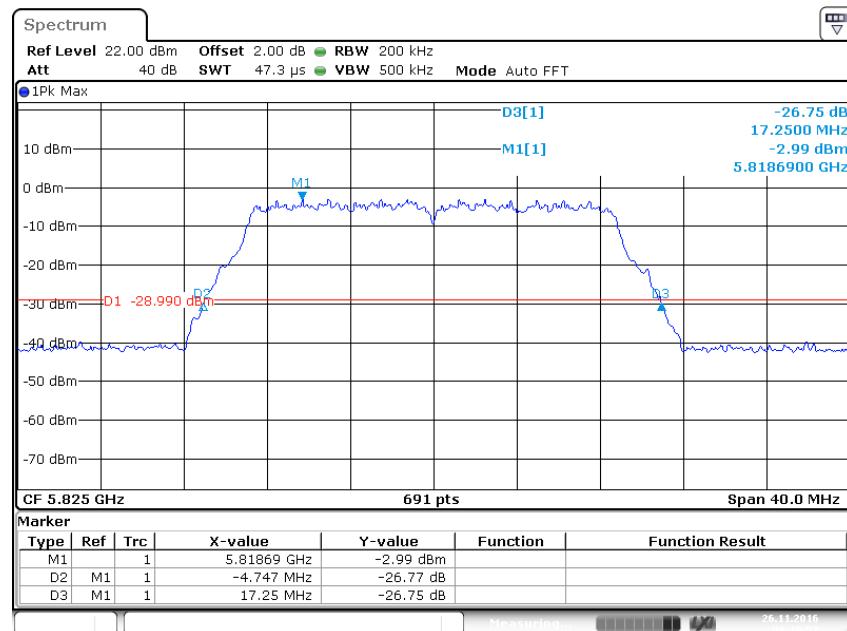
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ANT 0



Date: 26.NOV.2016 09:07:36

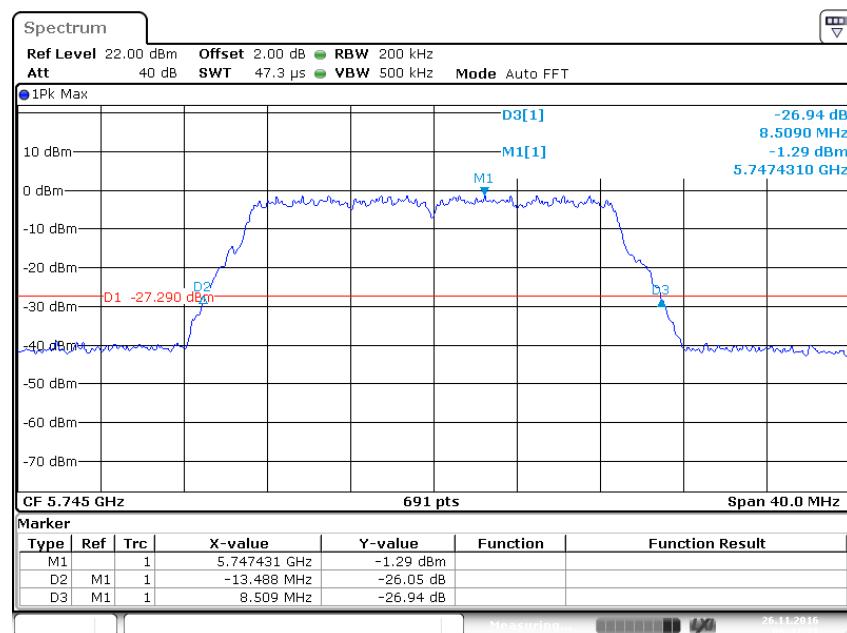


Date: 26.NOV.2016 09:08:57

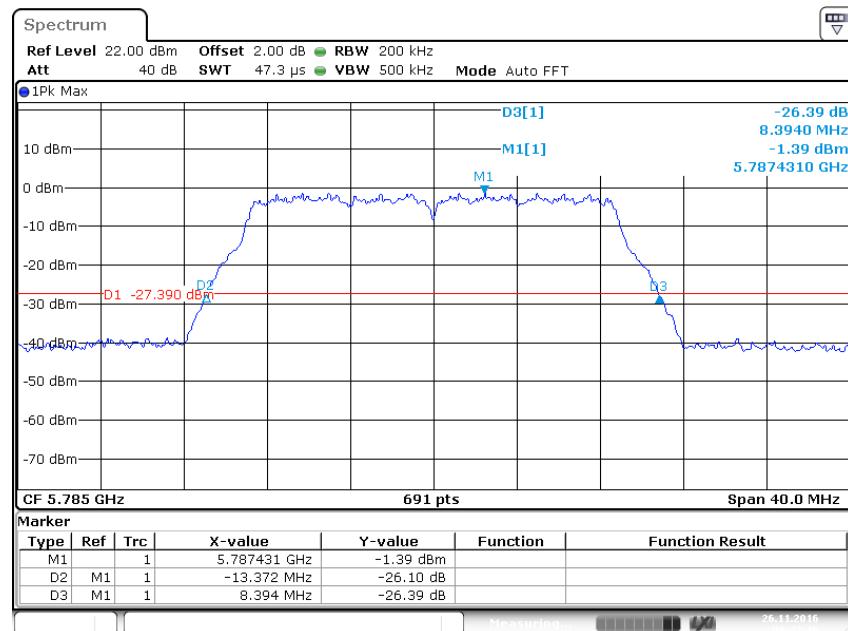


Date: 26.NOV.2016 09:10:58

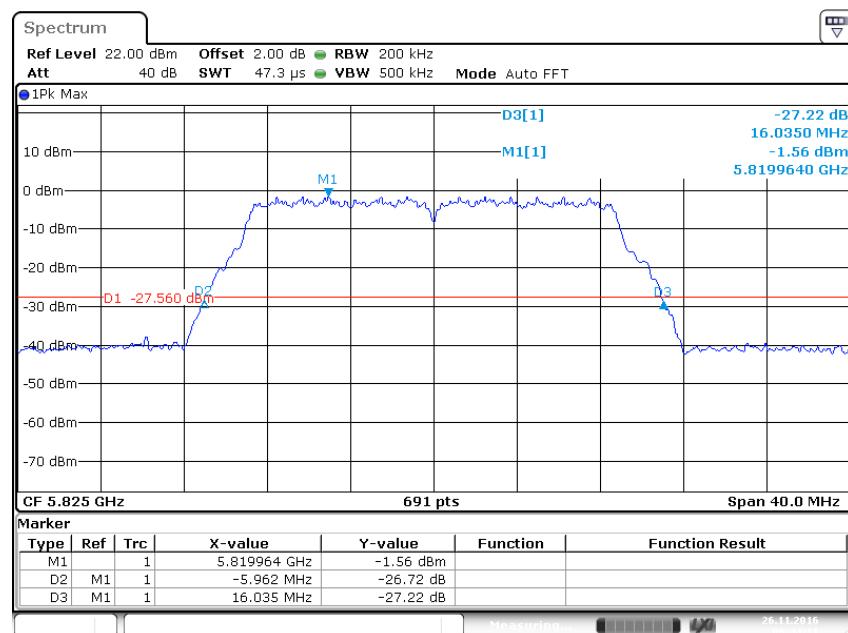
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Date: 26.NOV.2016 09:41:31



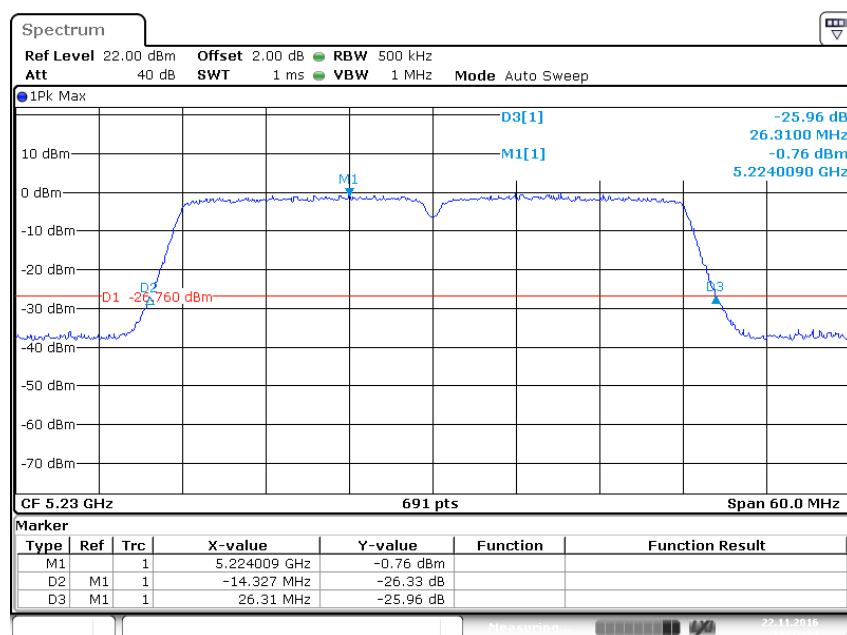
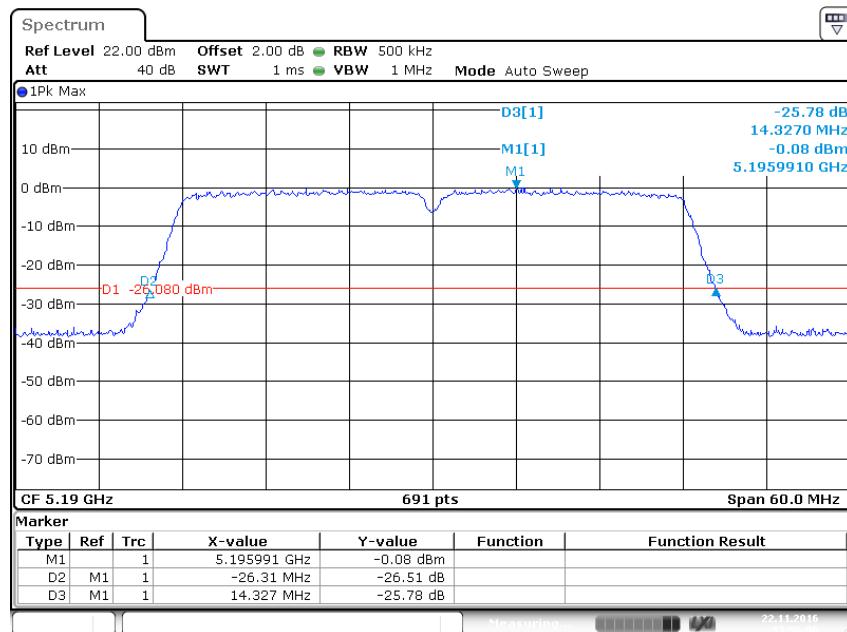
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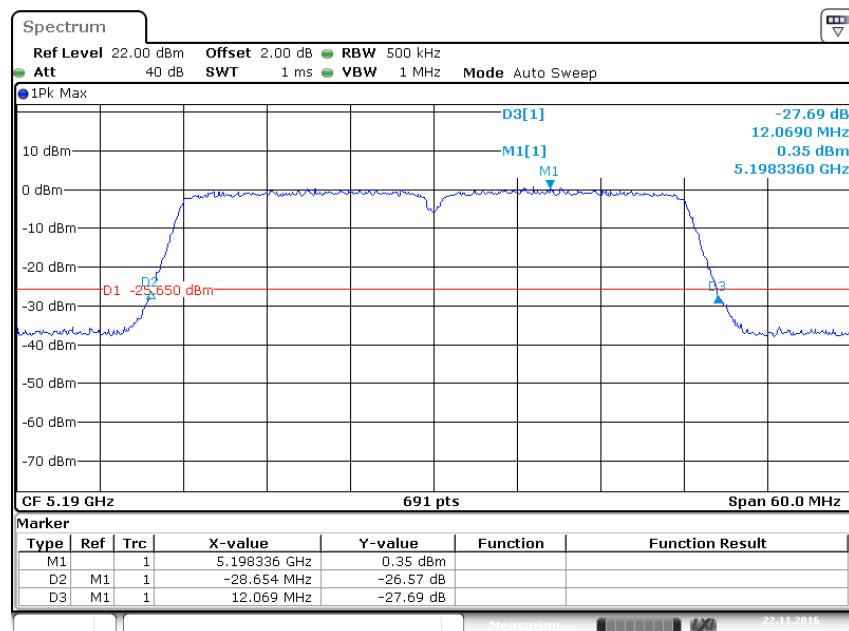
Date: 26.NOV.2016 09:44:11

Wi-Fi 802.11 ac (HT40) mode

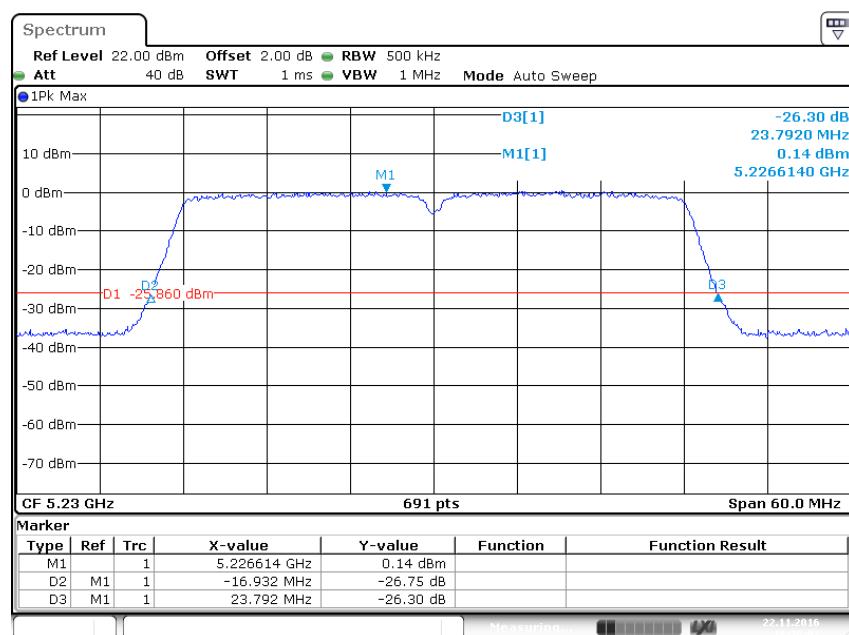
U-NII-1
ANT 0



ANT 1

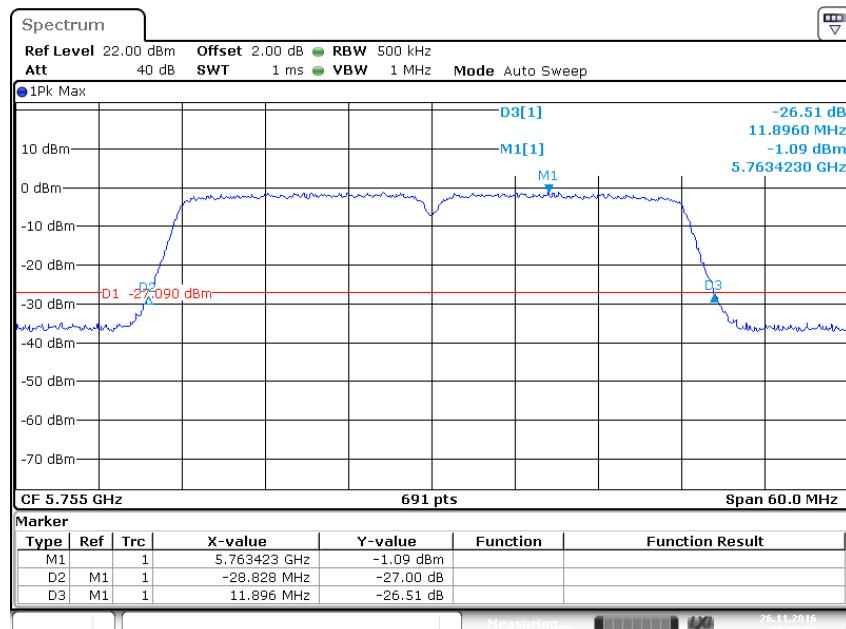


Date: 22.NOV.2016 18:26:39

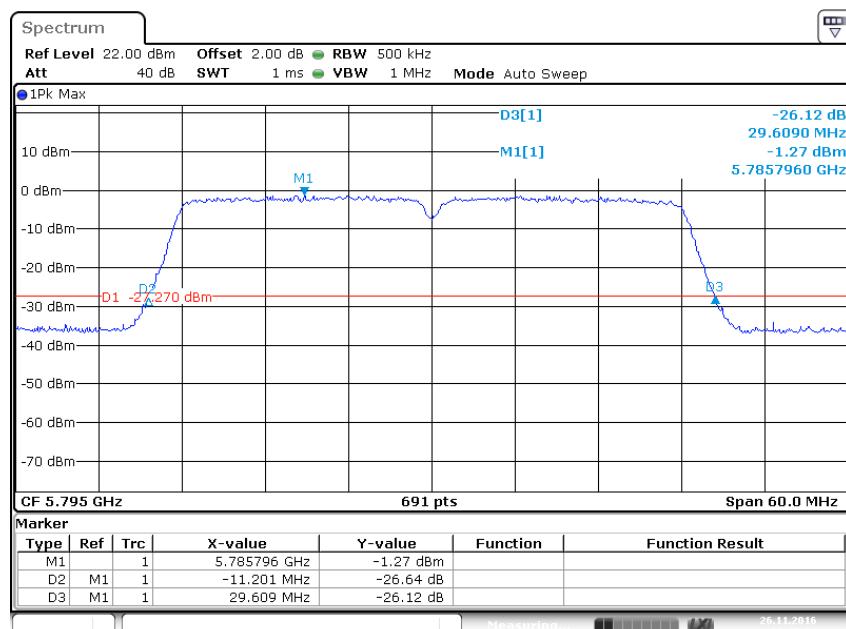


Date: 22.NOV.2016 18:28:02

U-NII-3
ANT 0

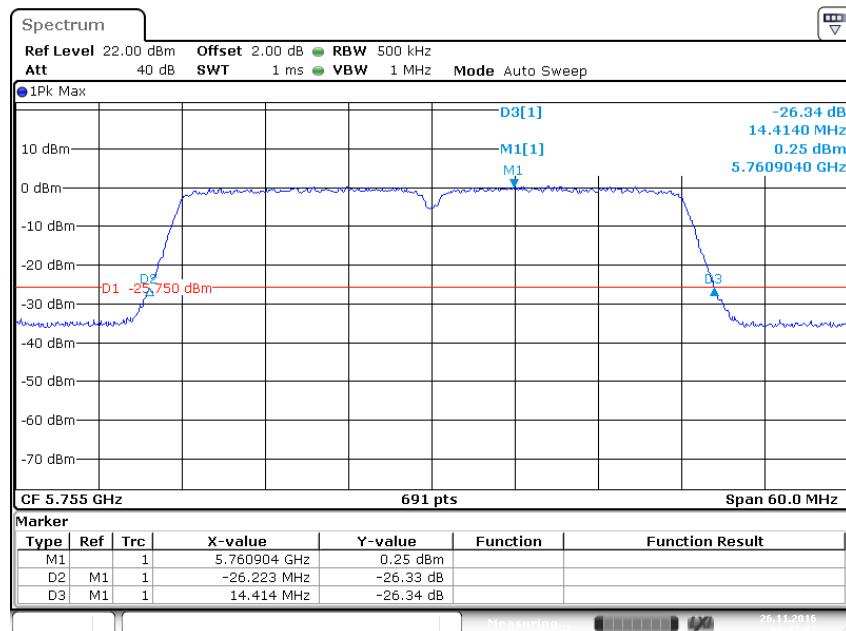


Date: 26.NOV.2016 09:13:57

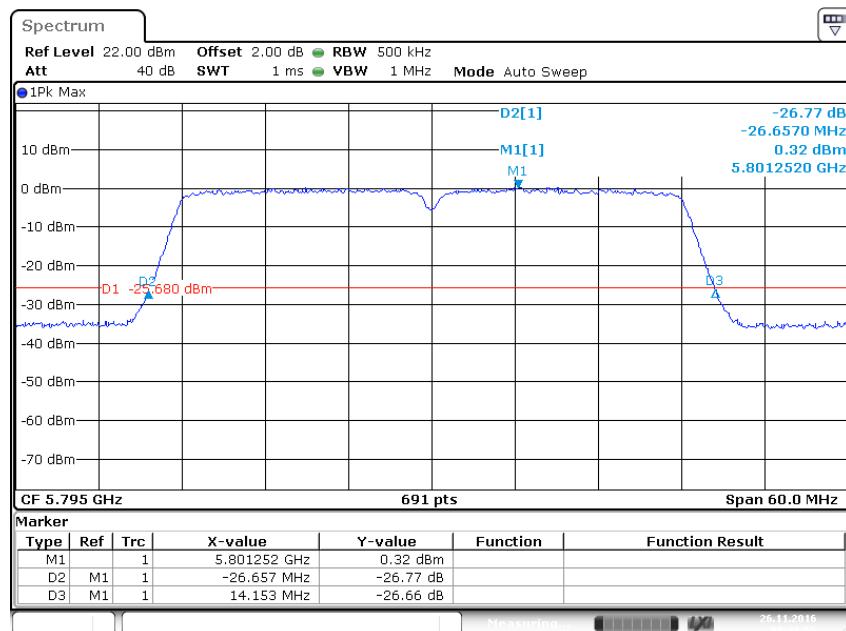


Date: 26.NOV.2016 09:15:54

ANT 1



Date: 26.NOV.2016 09:47:07

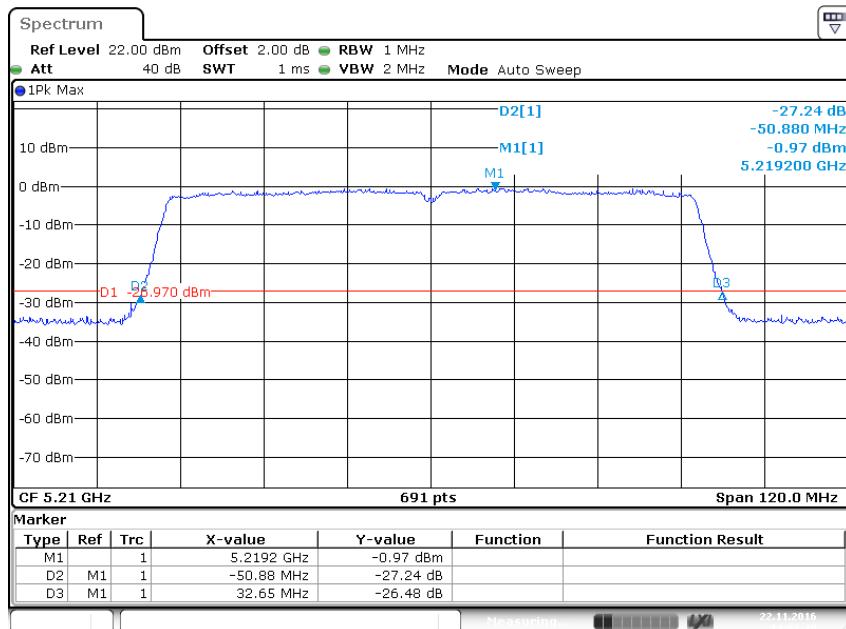


Date: 26.NOV.2016 09:48:56

Wi-Fi 802.11 ac (HT80) mode

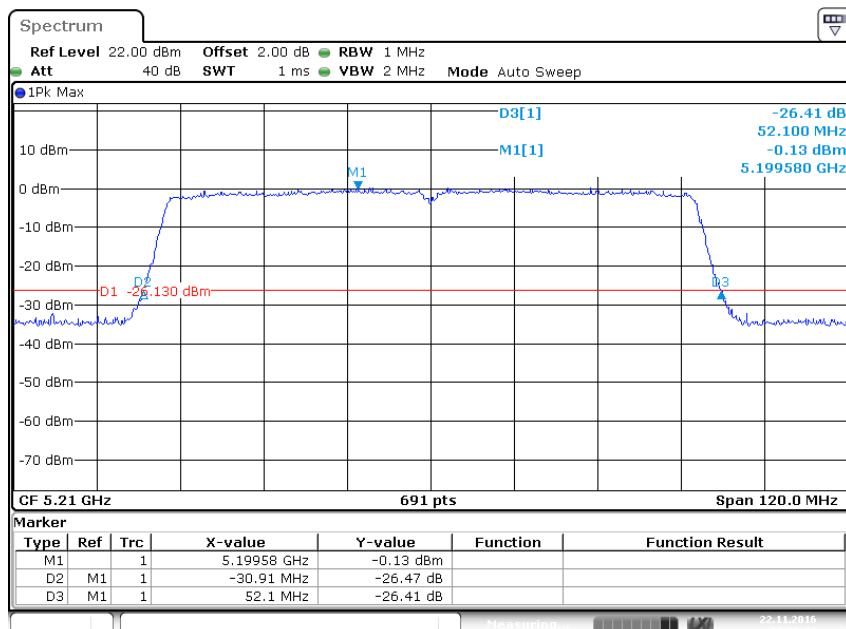
U-NII-1

ANT 0



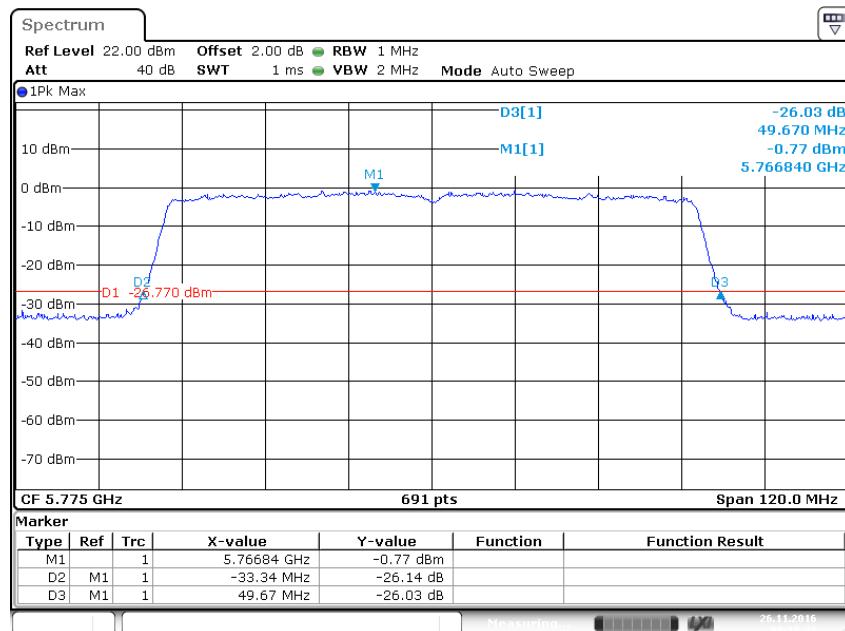
Date: 22.NOV.2016 14:07:39

ANT 1



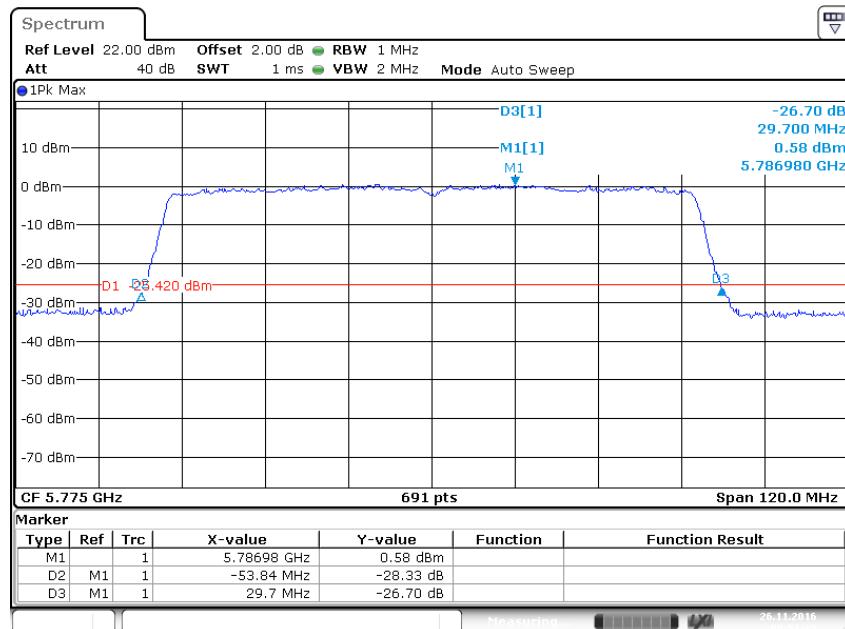
Date: 22.NOV.2016 18:35:34

U-NII-3
ANT 0



Date: 26.NOV.2016 09:18:33

ANT 1



Date: 26.NOV.2016 09:51:35