



FCC - TEST REPORT

Report Number : **68.950.16.158.01** Date of Issue: **May 19, 2016**

Model : **KX-HNC800**

Product Type : **HD Wi-Fi Camera**

Applicant : **Panasonic Corporation of North America**

Address : **Two Riverfront Plaza, 9th Floor, Newark, NJ, 07102-5490, USA**

Manufacturer : **Panasonic System Networks Co., Ltd.**

Address : **1-62, 4-chome, Minoshima, Hakata-ku, Fukuoka 812-8531, Japan**

Test Result : **Positive** **Negative**

Total pages including Appendices : **93**

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
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FCC Registration Number: 502708

IC Registration No: 10320A-1

Telephone: 86 755 8828 6998
Fax: 86 755 8828 5299

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product:	HD Wi-Fi Camera
Model no.:	KX-HNC800
Brand Name:	Panasonic
FCC ID:	ACJ96NKX-HNC800
Rating:	5VDC,1.0A (Supplied by an external power adapter Adapter input:100-240VAC, 50/60Hz, 0.2A Adapter output:5.0V, 1.0A)
RF Transmission Frequency:	5.150GHz~5.250GHz; 5.250GHz~5.350GHz; 5.470GHz~5.725GHz; 5.725GHz~5.850GHz
Modulation:	802.11a: BPSK, QPSK, 16QAM, 64QAM, OFDM 802.11n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 128QAM, 256QAM
Antenna Type:	Integral Antenna
Antenna Gain:	2.5dBi
Description of the EUT:	The Equipment Under Test (EUT) is a WIFI Camera with WIFI function which operated at 2.4GHz and 5GHz Only 5GWiFi test data include in this report.

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, 10-1-2015 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices
FCC Part 15 Subpart C 10-1-2015 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

Test Method:

FCC KDB 558074 D01 DTS Meas Guidance v03r02

FCC KDB 662911 D01 Multiple Transmitter Output v02

KDB 789033 D02 General UNII Test Procedures New Rules v01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v01r02

ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices

5 Summary of Test Results

Technical Requirements				
FCC Part 15 Subpart E, FCC Part 15 Subpart C				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
15.207 Conducted Emission AC Power Port	10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.403(a)(5) Emission bandwidth	13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(a)(1) 15.407(a)(3) Maximum Conducted Output Power	19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(a)(1) 15.407(a)(3) Peak Power Spectral Density	22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(b)(1) 15.407(b)(4) 15.407(b)(6) 15.407(b)(7) 15.209 Unwanted Emissions	46	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duty Cycle	81	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(g) Frequencies Stability	85	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(h) Dynamic Frequency Selection (DFS). ^a	87	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE 1^a: This result include in this report is only the DFS Slave Mode part of the product.

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: ACJ96NKX-HNC800 complies with Section FCC Part 15 Subpart C Rules and FCC Part 15 Subpart E Rules.

SUMMARY:

All tests according to the regulations cited on page 5 were

- Performed

- **Not** Performed

The Equipment Under Test

- **Fulfills** the general approval requirements.

- **Does not** fulfill the general approval requirements.

Sample Received Date: April 14, 2016

Testing Start Date: April 18, 2016

Testing End Date: May 18, 2016

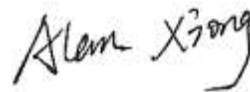
- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch –

Reviewed by:

Prepared by:



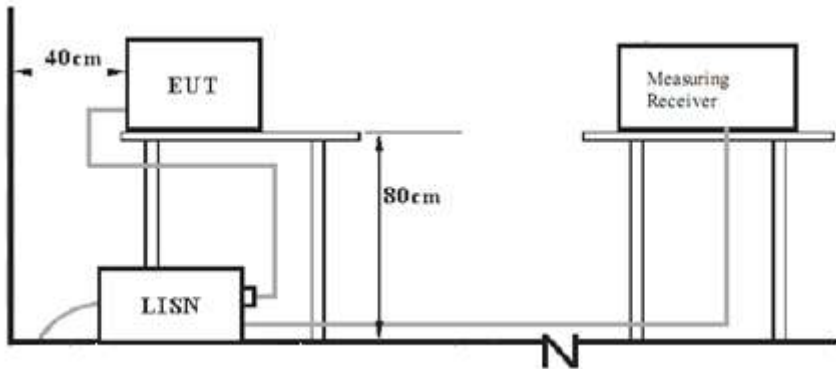
John Zhi
Section Manager



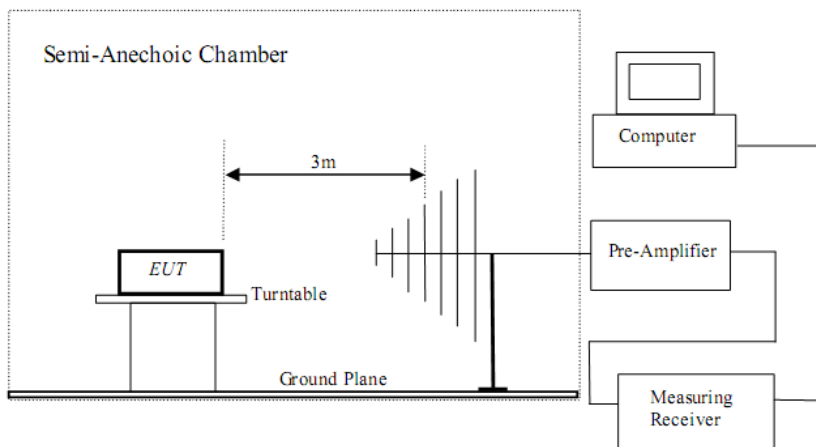
Alan Xiong
Project Engineer

7 Test setups

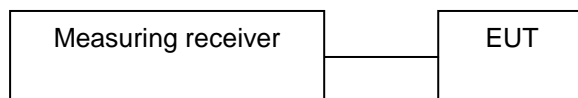
7.1 AC Power Line Conducted Emission test setups



7.2 Radiated test setups



7.3 Conducted RF test setups



8. Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
---	---	---	---

The system was configured to channel 36(5180MHz), 64(5320MHz), 100 (5500MHz), 140(5700MHz), 149(5745MHz) and 165(5825MHz) for 802.11a & 802.11n-HT20 & 802.11acVHT20
Channel 38(5190MHz); 62(5310MHz) , 102(5510MHz), 134(5670MHz), 151(5755MHz) and 159(5795MHz) for 802.11n-HT40 & 802.11acVHT40
Channel 42(5210MHz), 58(5290MHz), 106(5530MHz), 122(5610MHz) and 155 (5775MHz) for 802.11ac VHT80.

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Limit

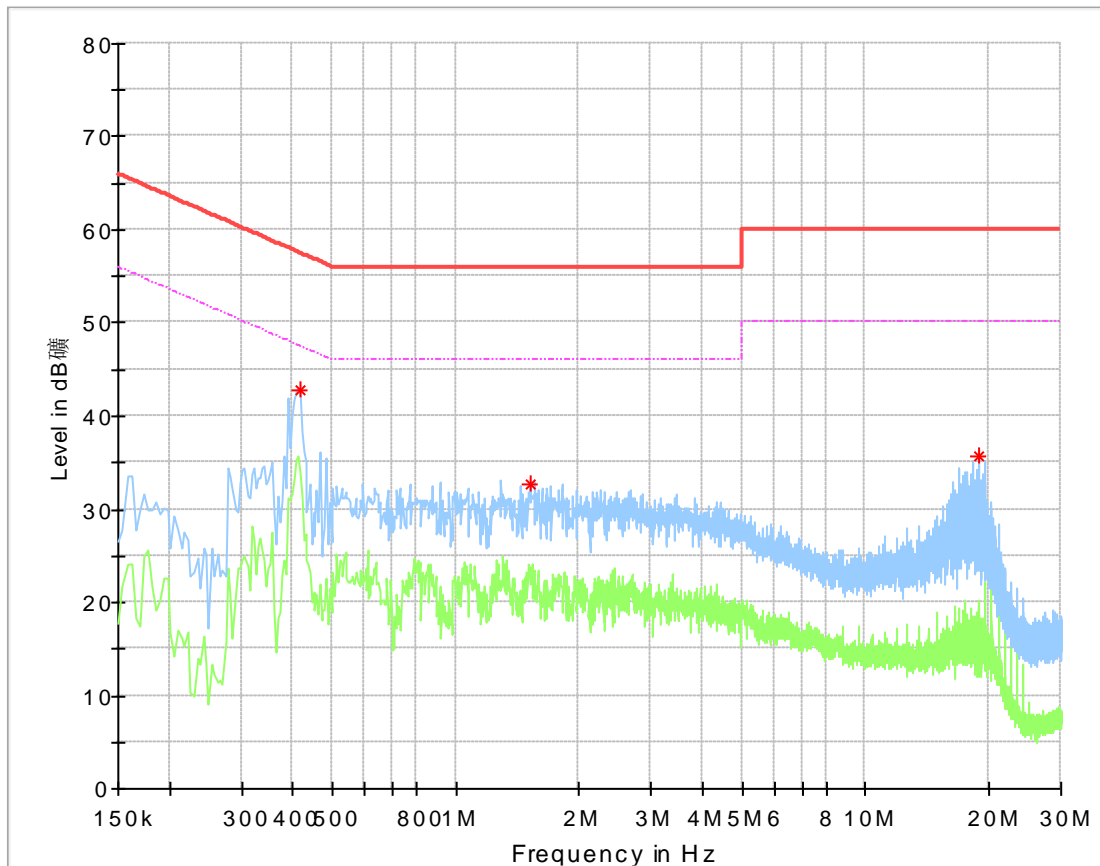
According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency

Conducted Emission

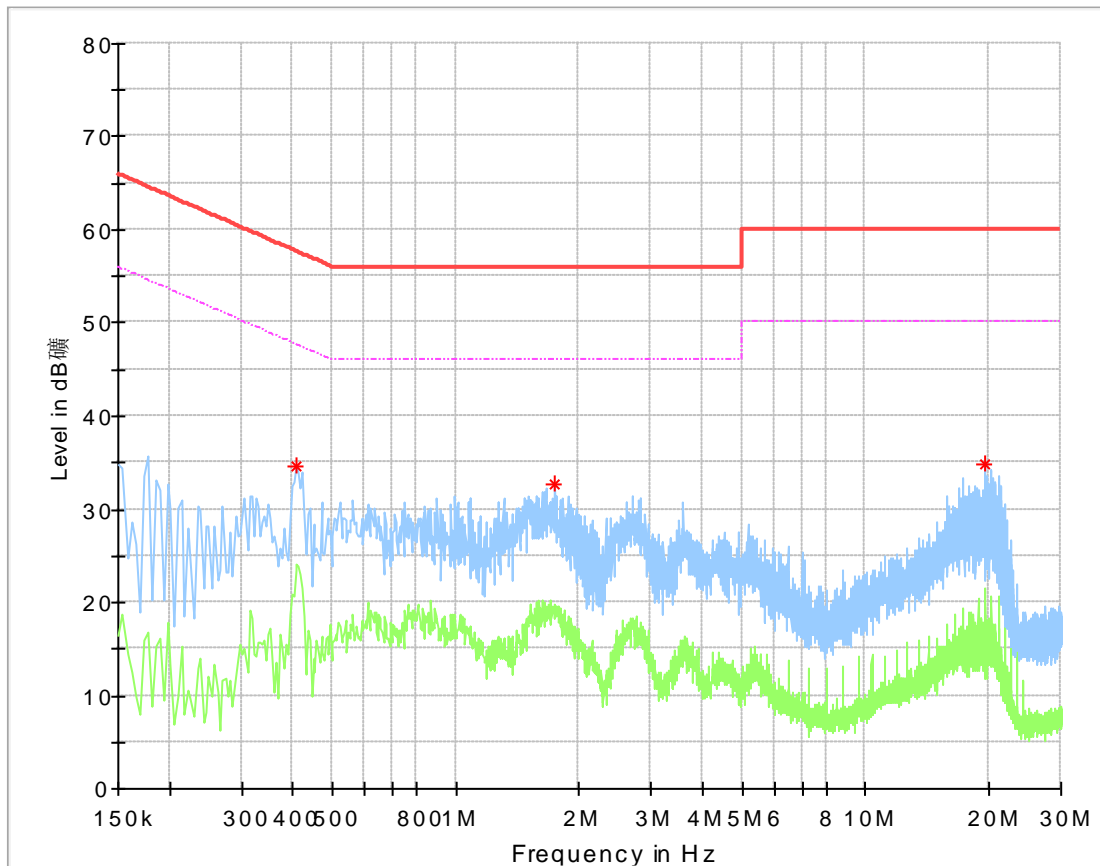
Product Type : HD Wi-Fi Camera
 M/N : KX-HNC800
 Operating Condition : Charging and Transmitting
 Test Specification : Line
 Comment : AC 120V/60Hz



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line
0.418000	42.78	---	57.49	14.70	L1
1.522000	32.74	---	56.00	23.26	L1
18.930000	35.68	---	60.00	24.32	L1

Conducted Emission

Product Type : HD Wi-Fi Camera
 M/N : KX-HNC800
 Operating Condition : Charging and Transmitting
 Test Specification : Neutral
 Comment : AC 120V/60Hz



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line
0.410000	34.66	---	57.65	22.99	N
1.750000	32.59	---	56.00	23.41	N
19.578000	34.74	---	60.00	25.26	N

9.2 Emission bandwidth

1、 Test Method of 26dB Bandwidth

According to KDB789033 D02

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Limit: No limit

2、 Test Method of 6dB Bandwidth

According to KDB789033 D02

- a) Set RBW = 100KHz
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Limit: ≥ 500 KHz

3、 Test Method of 99% Bandwidth

According to KDB789033 D02

- a) Set center frequency to the nominal EUT channel center frequency
- b) Set span = 1.5 times to 5.0 times the OBW.
- c) Set RBW = 1 % to 5 % of the OBW
- d) Set VBW $\geq 3 \cdot$ RBW
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99 % power bandwidth function of the instrument (if available).
- g) If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Limit: No limit

Test result as below table:

IEEE 802.11a modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5180	16.671	21.230	N/A
	High	5320	16.671	21.187	N/A
5.5G Band	Low	5500	16.715	21.404	N/A
	High	5700	16.758	21.447	N/A
5.8G Band	Low	5745	16.498	N/A	16.368
	High	5825	16.498	N/A	16.368

IEEE 802.11n-HT20 modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5180	17.713	21.274	N/A
	High	5320	17.800	21.404	N/A
5.5G Band	Low	5500	17.757	21.708	N/A
	High	5700	17.757	21.447	N/A
5.8G Band	Low	5745	17.670	N/A	17.670
	High	5825	17.670	N/A	17.670

IEEE 802.11n-HT40 modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5190	36.295	40.007	N/A
	High	5310	36.208	39.855	N/A
5.5G Band	Low	5510	36.295	40.029	N/A
	High	5670	36.382	40.289	N/A
5.8G Band	Low	5755	36.035	N/A	36.035
	High	5795	35.716	N/A	36.122

IEEE 802.1ac-VHT20 modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5180	17.757	20.883	N/A
	High	5320	17.757	21.404	N/A
5.5G Band	Low	5500	17.757	21.404	N/A
	High	5700	17.757	21.187	N/A
5.8G Band	Low	5745	17.757	N/A	17.757
	High	5825	17.800	N/A	17.713

IEEE 802.1ac-VHT40 modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5190	36.469	40.289	N/A
	High	5310	36.295	40.289	N/A
5.5G Band	Low	5510	36.382	40.203	N/A
	High	5670	36.382	40.376	N/A
5.8G Band	Low	5755	36.469	N/A	36.469
	High	5795	36.382	N/A	36.556

IEEE 802.1ac-VHT80 modulation Test Result

Band	Channel	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Measured 26dB Bandwidth (MHz)	Measured 6dB Bandwidth (MHz)
5.2G Band	Low	5210	75.716	80.750	N/A
	High	5290	75.716	81.450	N/A
5.5G Band	Low	5530	75.716	81.270	N/A
	High	5610	75.716	81.270	N/A
5.8G Band	155	5775	75.753	N/A	73.630

Remark: "N/A" means "Not Applicable"

9.3 Maximum conducted output power

Test Method

According to KDB789033 D02

Limits: The maximum conducted output power over the frequency band of operation shall not exceed 1W for 5.15-5.25GHz Band, 250mW for 5.25-5.35GHz, 5.47-5.725 GHz Band and 1W for 5.725-5.85GHz Band, provided the maximum antenna gain does not exceed 6dBi.

Test result as below table

IEEE 802.11a modulation Test Result

Duty Cycle CF(dB)	0.30	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5180	14.77	15.07	30.00
	High	5320	15.50	15.80	24.00
5.5G Band	Low	5500	14.48	14.78	24.00
	High	5700	14.15	14.45	24.00
5.8G Band	Low	5745	13.58	13.88	30.00
	High	5825	13.54	13.84	30.00

IEEE 802.11n-HT20 modulation Test Result

Duty Cycle CF(dB)	0.53	Included in Calculations of Corr'd Power & PSD
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Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5180	12.55	13.08	30.00
	High	5320	13.03	13.56	24.00
5.5G Band	Low	5500	13.18	13.71	24.00
	High	5700	13.02	13.55	24.00
5.8G Band	Low	5745	12.52	13.05	30.00
	High	5825	12.23	12.76	30.00

IEEE 802.11n-HT40 modulation Test Result

Duty Cycle CF(dB)	0.89	Included in Calculations of Corr'd Power & PSD
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Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5190	11.81	12.70	30.00
	High	5310	12.16	13.05	24.00
5.5G Band	Low	5510	12.15	13.04	24.00
	High	5670	11.71	12.60	24.00
5.8G Band	Low	5755	12.66	13.55	30.00
	High	5795	12.86	13.75	30.00

IEEE 802.11ac-VHT20 modulation Test Result

Duty Cycle CF(dB)	2.10	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5180	11.34	13.44	30.00
	High	5320	11.27	13.37	24.00
5.5G Band	Low	5500	11.91	14.01	24.00
	High	5700	11.49	13.59	24.00
5.8G Band	Low	5745	11.61	13.71	30.00
	High	5825	11.11	13.21	30.00

IEEE 802.11ac-VHT40 modulation Test Result

Duty Cycle CF(dB)	4.91	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5190	8.06	12.97	30.00
	High	5310	8.22	13.13	24.00
5.5G Band	Low	5510	8.78	13.69	24.00
	High	5670	8.48	13.39	24.00
5.8G Band	Low	5755	8.34	13.25	30.00
	High	5795	8.77	13.68	30.00

IEEE 802.11ac-VHT80 modulation Test Result

Duty Cycle CF(dB)	5.44	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Average Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)
5.2G Band	Low	5210	7.42	12.86	30.00
	High	5290	8.07	13.51	24.00
5.5G Band	Low	5530	7.97	13.41	24.00
	High	5610	8.88	14.32	24.00
5.8G Band	155	5775	8.02	13.46	30.00

9.4 Maximum power spectral density

Test Method

According to KDB789033 D02

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHz is available on nearly all spectrum analyzers.

Limit: The maximum power spectral density shall not exceed 11dBm for the 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725 GHz Band and 30dBm for the 5.8GHz Band in any 1 megahertz band.

IEEE 802.11a modulation Test Result

Duty Cycle CF(dB)	0.30	Included in Calculations of Corr'd Power & PSD
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Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5180	3.06	3.36	11.00
	High	5320	3.73	4.03	11.00
5.5G Band	Low	5500	4.31	4.61	11.00
	High	5700	4.29	4.59	11.00
5.8G Band	Low	5745	2.07	2.37	30.00
	High	5825	2.23	2.53	30.00

IEEE 802.11n-HT20 modulation Test Result

Duty Cycle CF(dB)	0.53	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5180	3.25	3.78	11.00
	High	5320	4.77	5.30	11.00
5.5G Band	Low	5500	5.05	5.58	11.00
	High	5700	5.09	5.62	11.00
5.8G Band	Low	5745	2.11	2.64	30.00
	High	5825	2.40	2.93	30.00

IEEE 802.11n-HT40 modulation Test Result

Duty Cycle CF(dB)	0.30	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5190	0.26	1.15	11.00
	High	5310	0.47	1.36	11.00
5.5G Band	Low	5510	1.44	2.33	11.00
	High	5670	0.56	1.45	11.00
5.8G Band	Low	5755	-1.69	-0.80	30.00
	High	5795	-0.53	0.36	30.00

IEEE 802.11ac-VHT20 modulation Test Result

Duty Cycle CF(dB)	2.10	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5180	3.16	5.26	11.00
	High	5320	2.76	4.86	11.00
5.5G Band	Low	5500	4.62	6.72	11.00
	High	5700	3.94	6.04	11.00
5.8G Band	Low	5745	1.65	3.75	30.00
	High	5825	1.57	3.67	30.00

IEEE 802.11ac-VHT40 modulation Test Result

Duty Cycle CF(dB)	4.91	Included in Calculations of Corr'd Power & PSD
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Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5190	-0.99	3.92	11.00
	High	5310	-0.90	4.01	11.00
5.5G Band	Low	5510	0.24	5.15	11.00
	High	5670	-0.82	4.09	11.00
5.8G Band	Low	5755	-2.01	2.90	30.00
	High	5795	-1.70	3.21	30.00

IEEE 802.11ac-VHT80 modulation Test Result

Duty Cycle CF(dB)	5.44	Included in Calculations of Corr'd Power & PSD
-------------------	------	--

Band	Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)
5.2G Band	Low	5210	-9.61	-4.17	11.00
	High	5290	-11.36	-5.92	11.00
5.5G Band	Low	5530	-8.39	-2.95	11.00
	High	5610	-9.49	-4.05	11.00
5.8G Band	155	5775	-10.35	-4.91	30.00

9.5 Unwanted emissions

Test Method

According to KBD789033 D02

Limits:

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

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

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

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

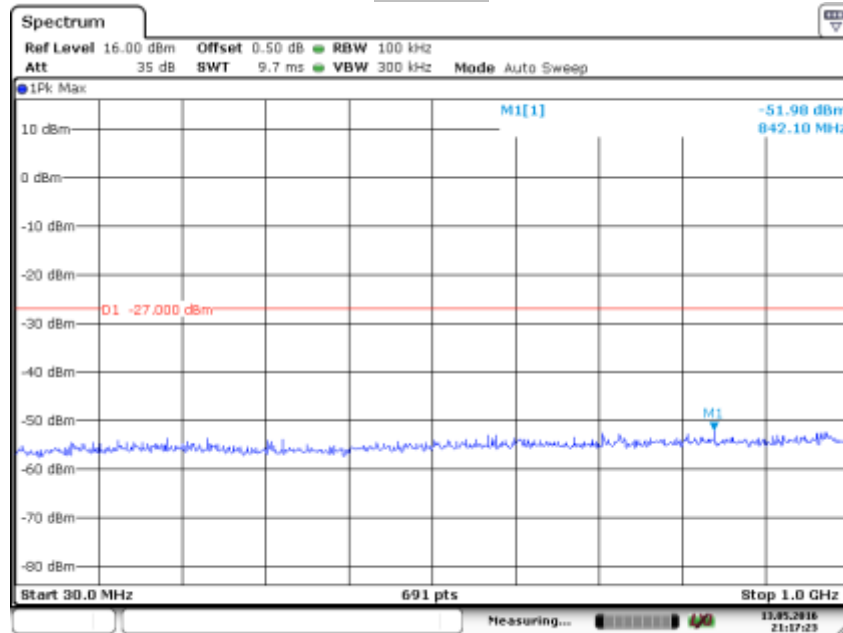
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

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

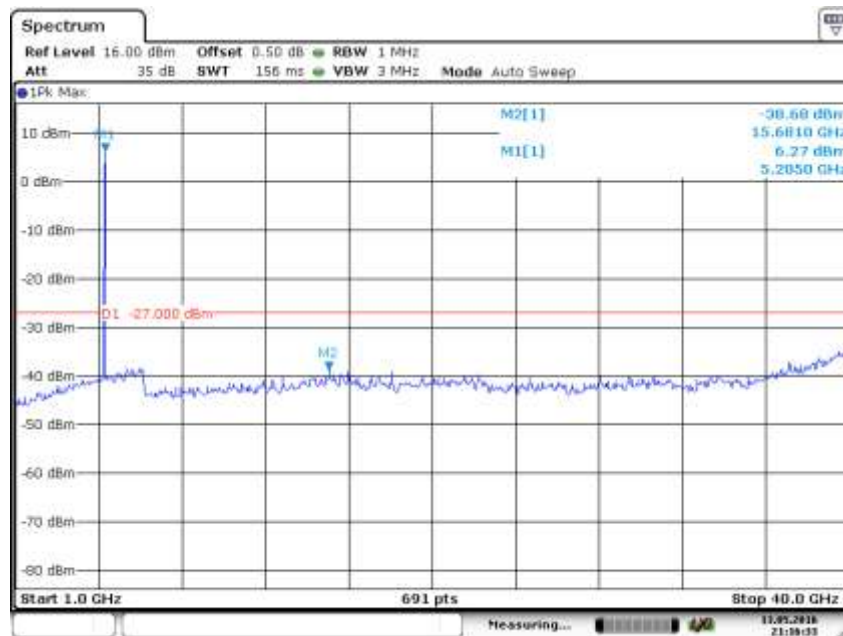
Transmitting spurious emission test result as below (Conducted Mode):

IEEE 802.11a modulation Test Result

5180MHz



Date: 13.MAY.2016 21:17:23

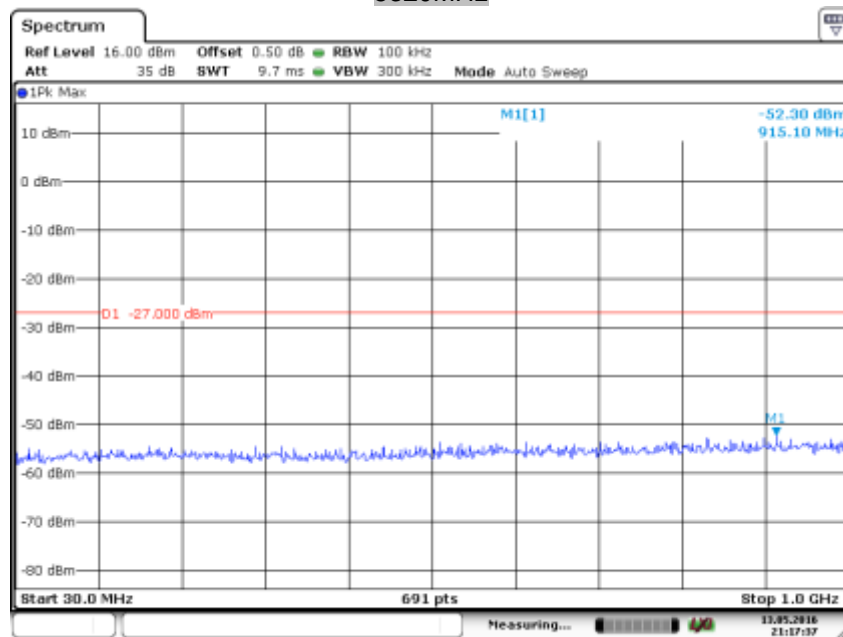


Date: 13.MAY.2016 21:18:33

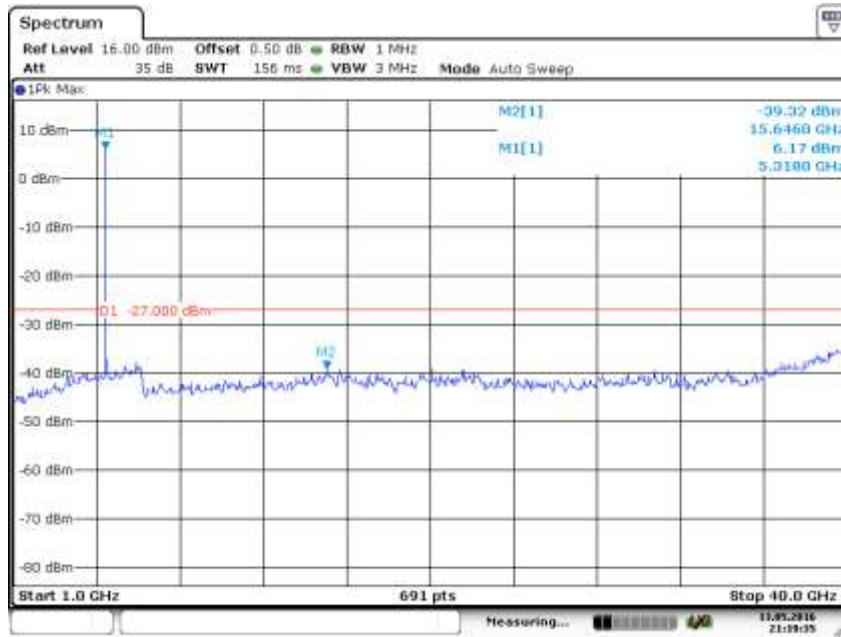


Date: 13.MAY.2016 20:47:04

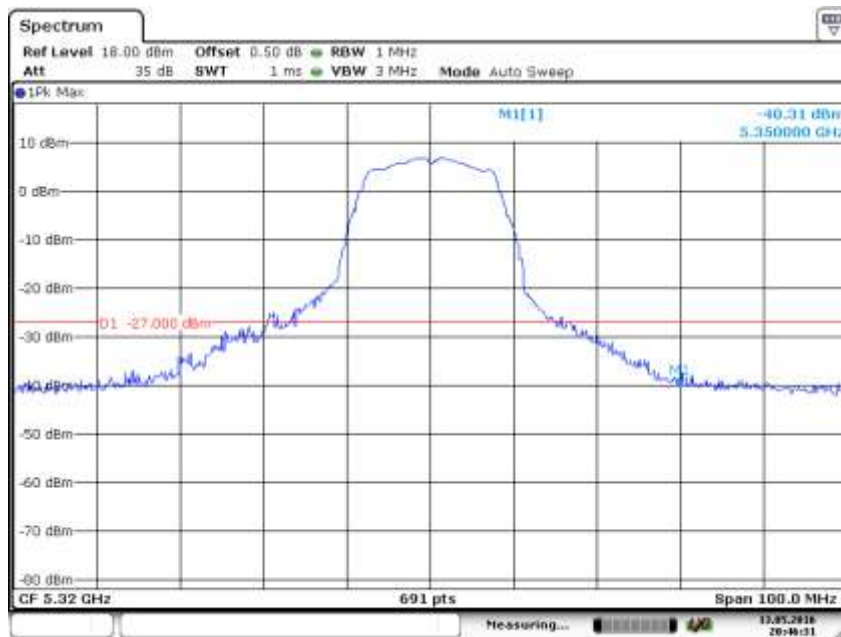
5320MHz



Date: 13.MAY.2016 21:17:37

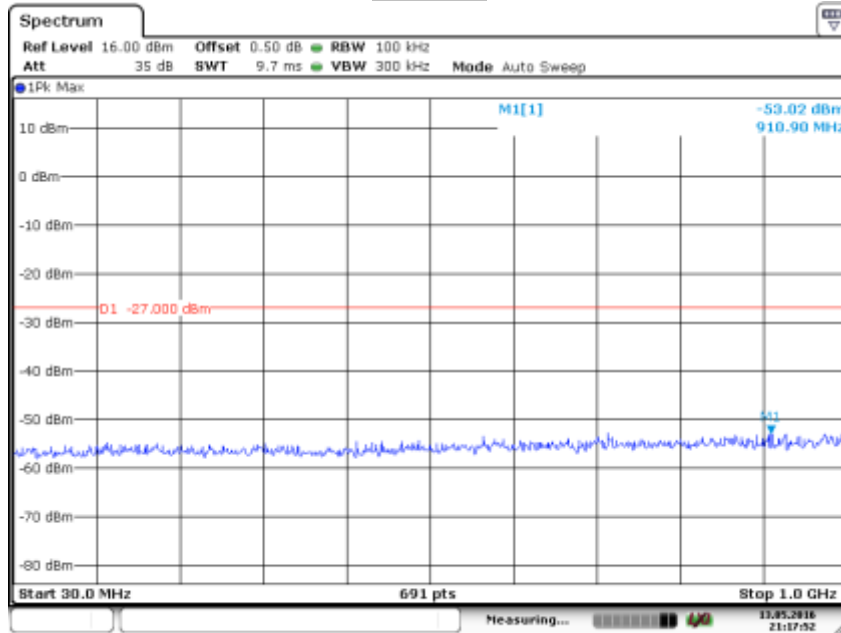


Date: 13.MAY 2016 21:19:36

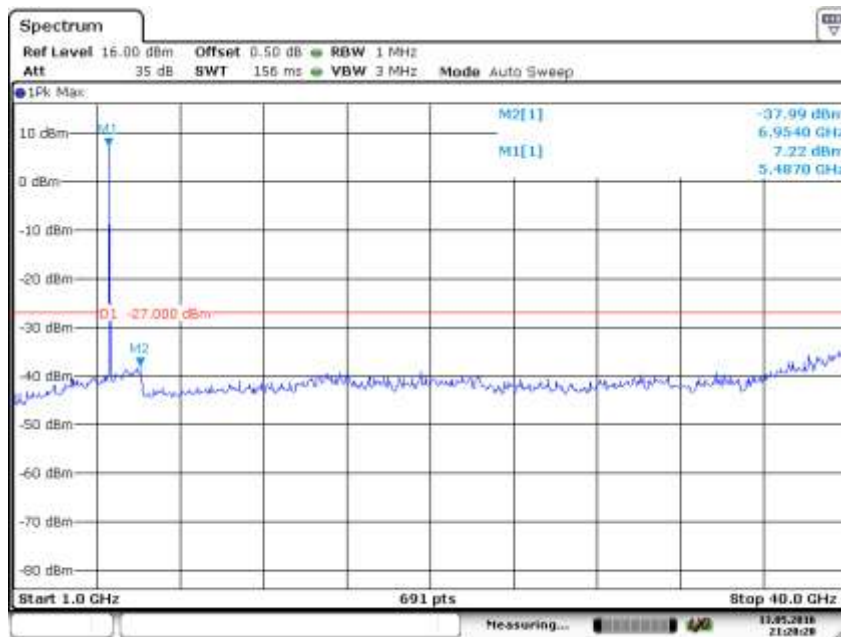


Date: 13.MAY 2016 20:46:31

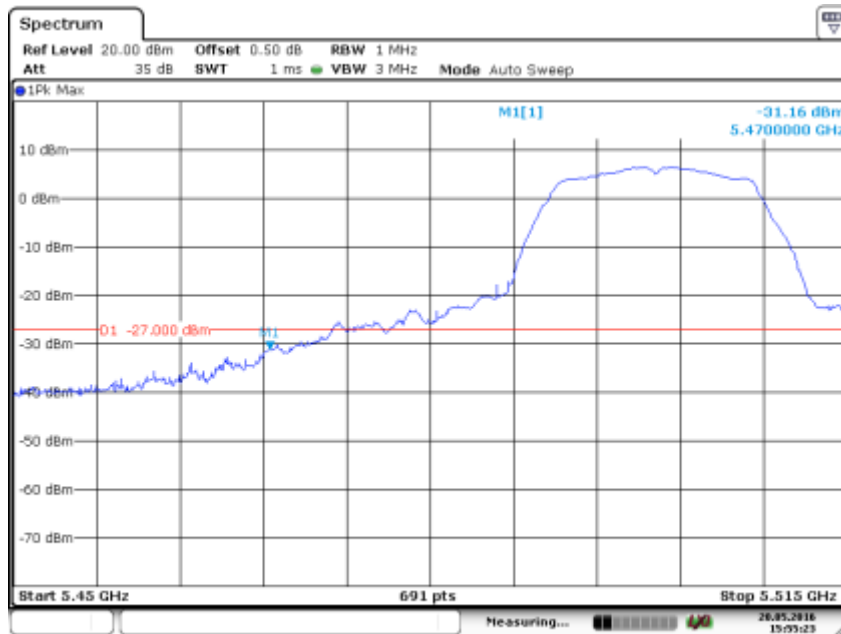
5500MHz



Date: 13.MAY 2016 21:17:52

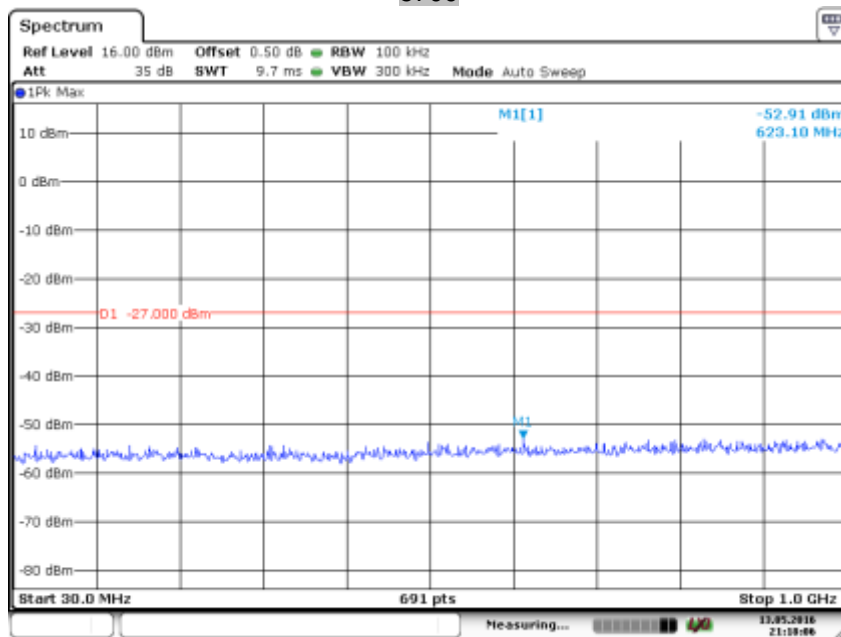


Date: 13.MAY 2016 21:20:21

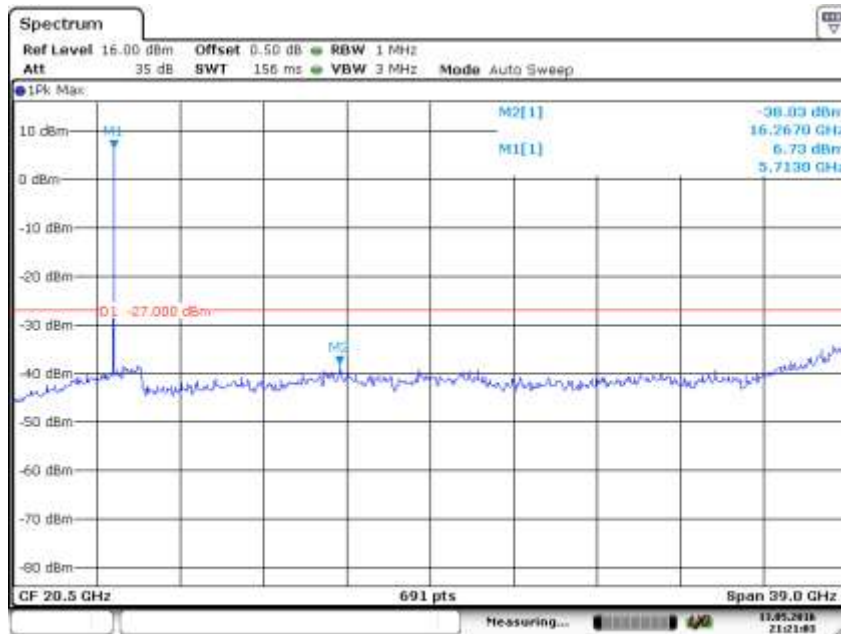


Date: 20 MAY 2016 15:55:23

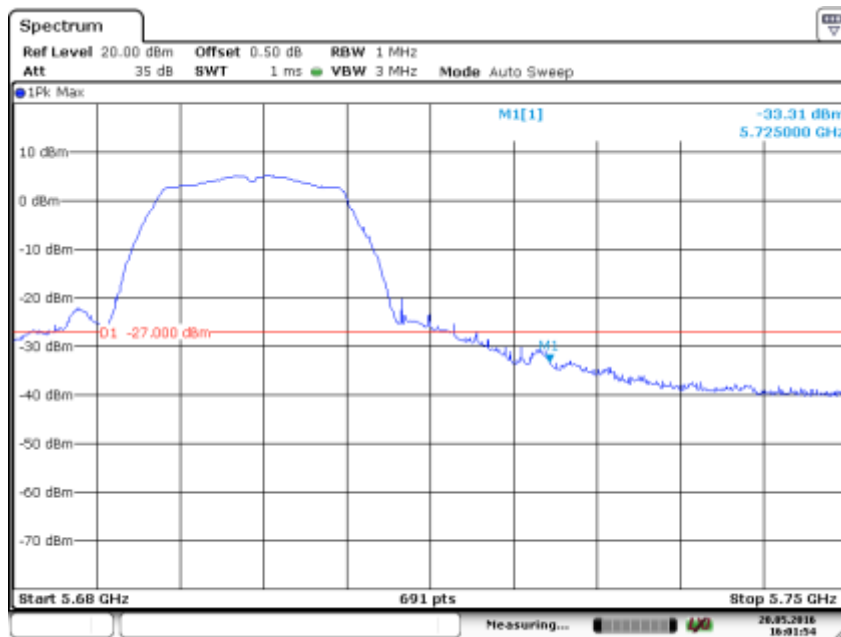
5700



Date: 13 MAY 2016 21:18:07

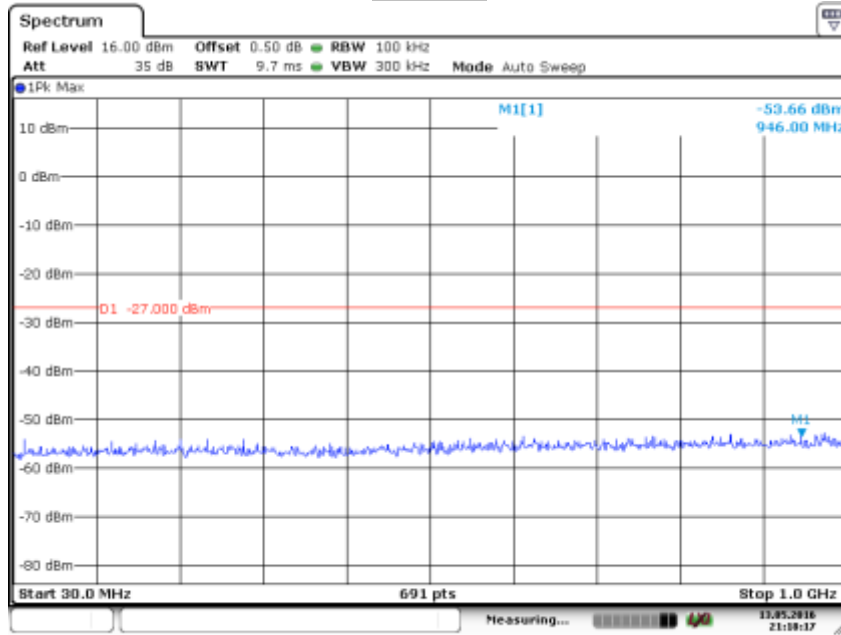


Date: 13.MAY.2016 21:21:02

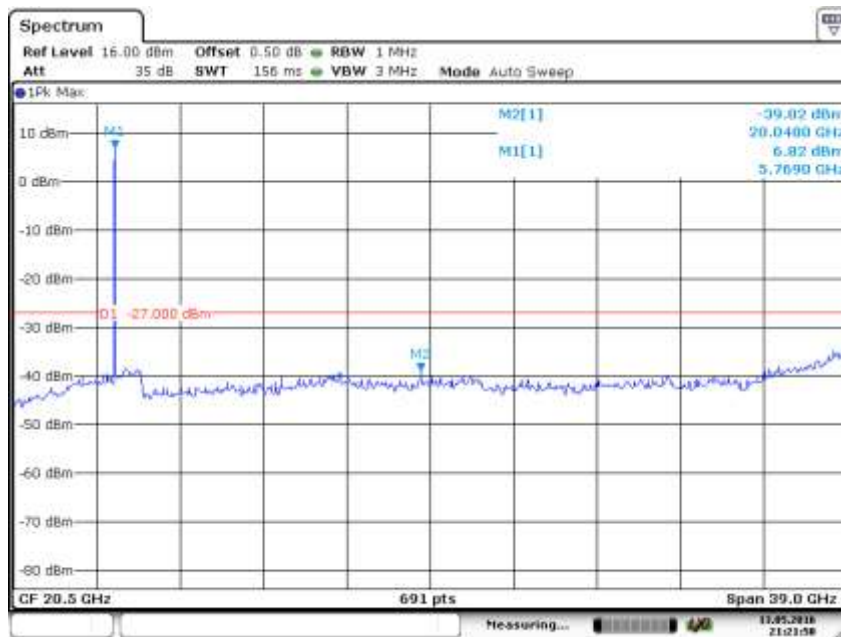


Date: 20 MAY 2016 16:01:54

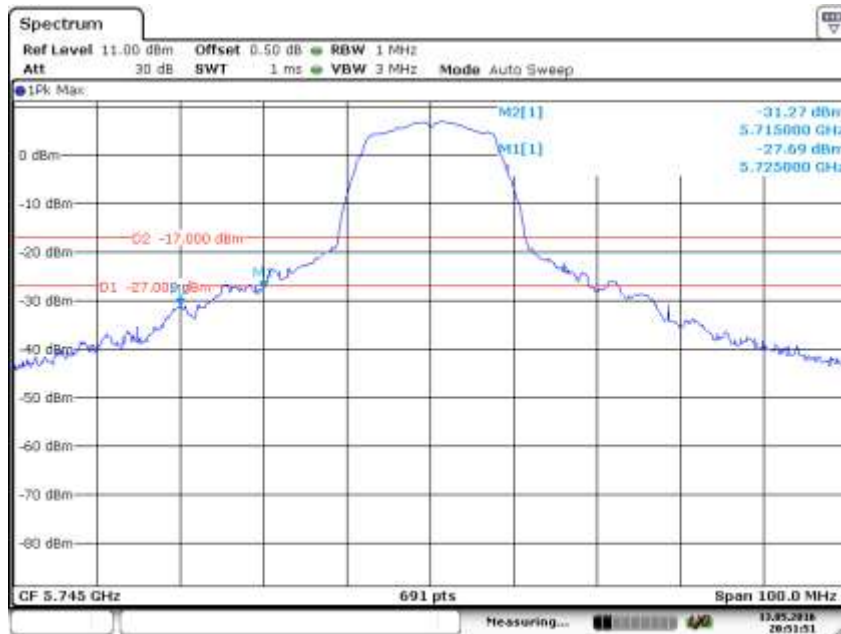
5745MHz



Date: 13.MAY 2016 21:18:18

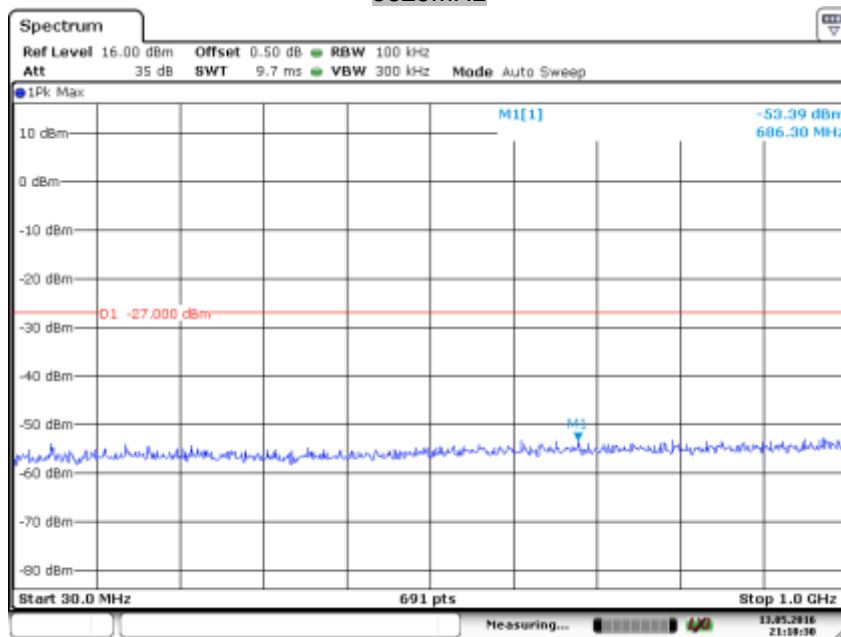


Date: 13.MAY 2016 21:21:51

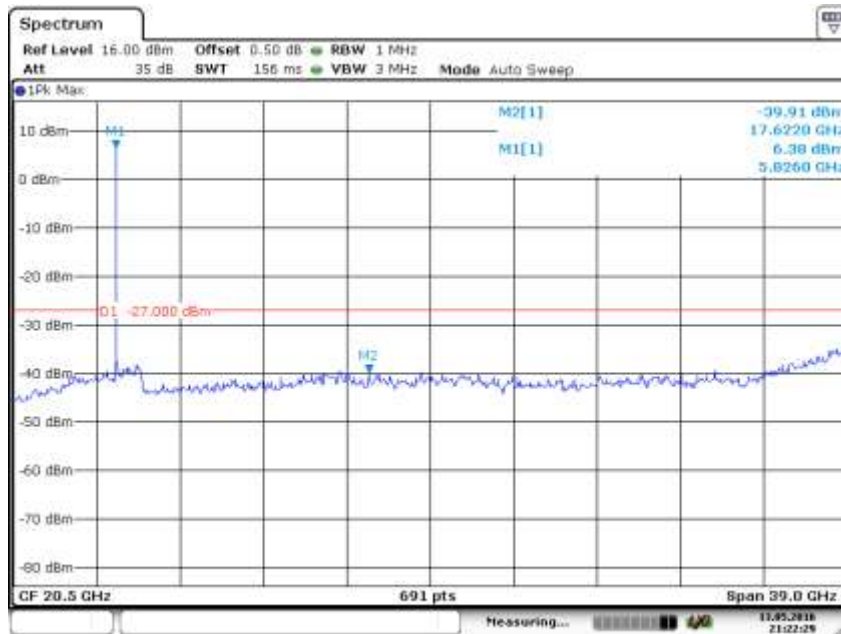


Date: 13.MAY.2016 20:51:51

5825MHz



Date: 13.MAY.2016 21:18:29



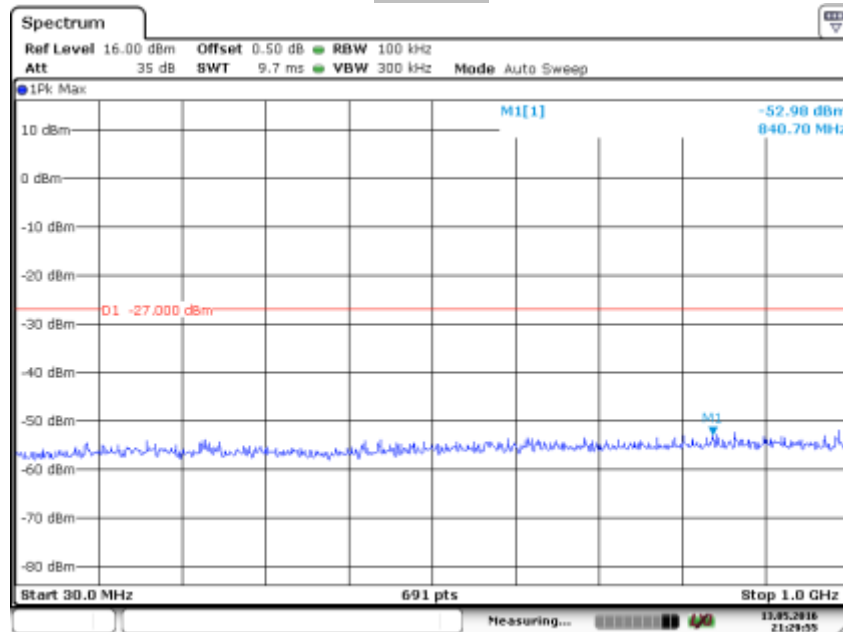
Date: 13.MAY.2016 21:22:28



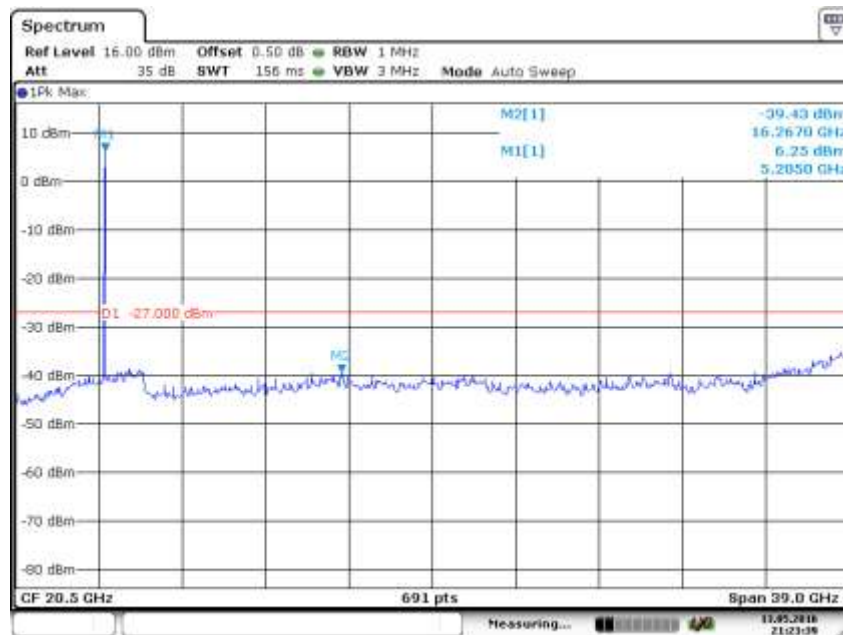
Date: 13.MAY.2016 20:52:42

IEEE 802.11n-HT20 modulation Test Result

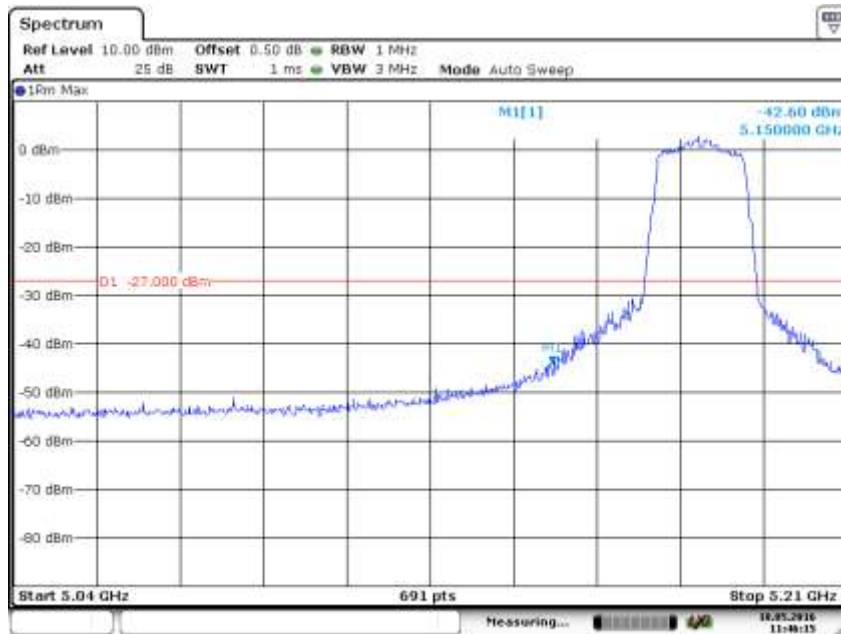
5180MHz



Date: 13.MAY 2016 21:29:55

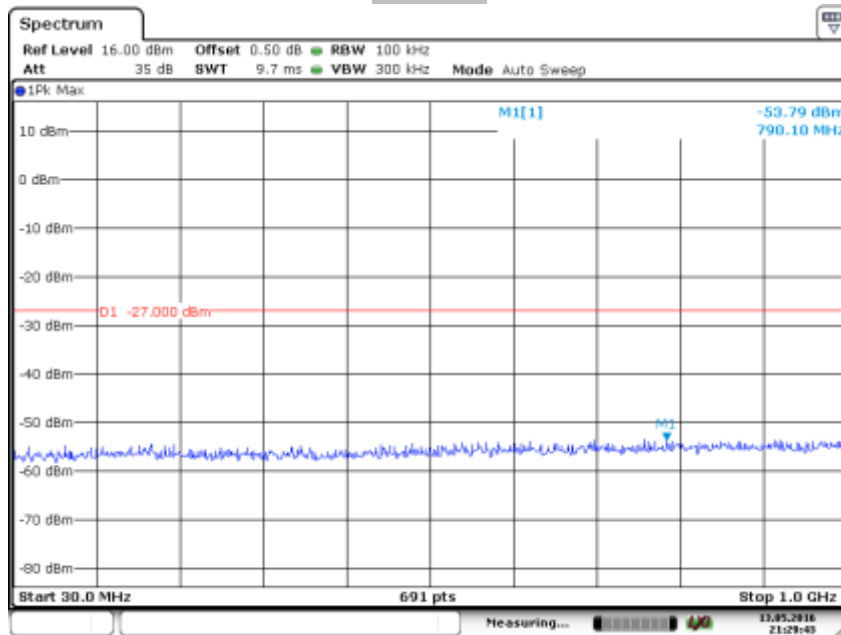


Date: 13.MAY 2016 21:23:39

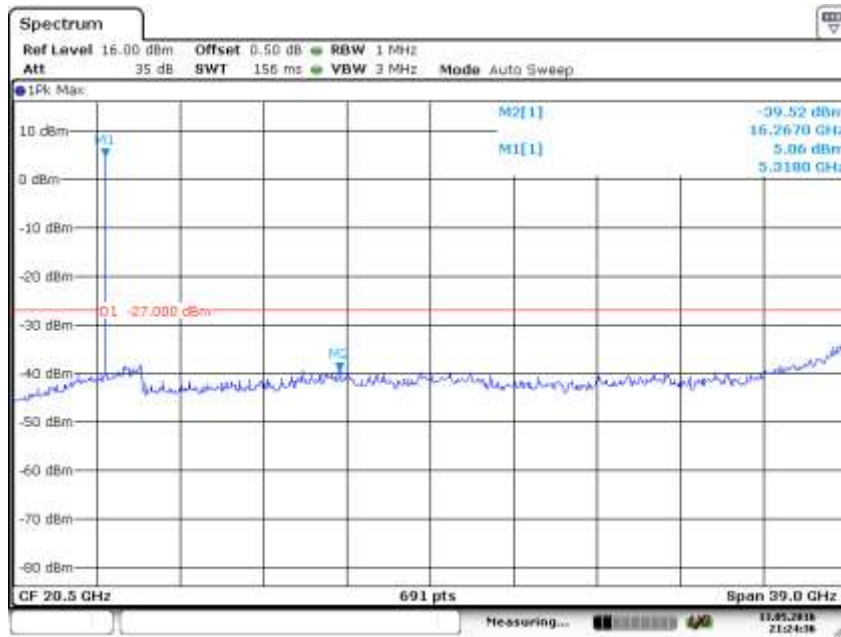


Date: 18.MAY.2016 11:48:15

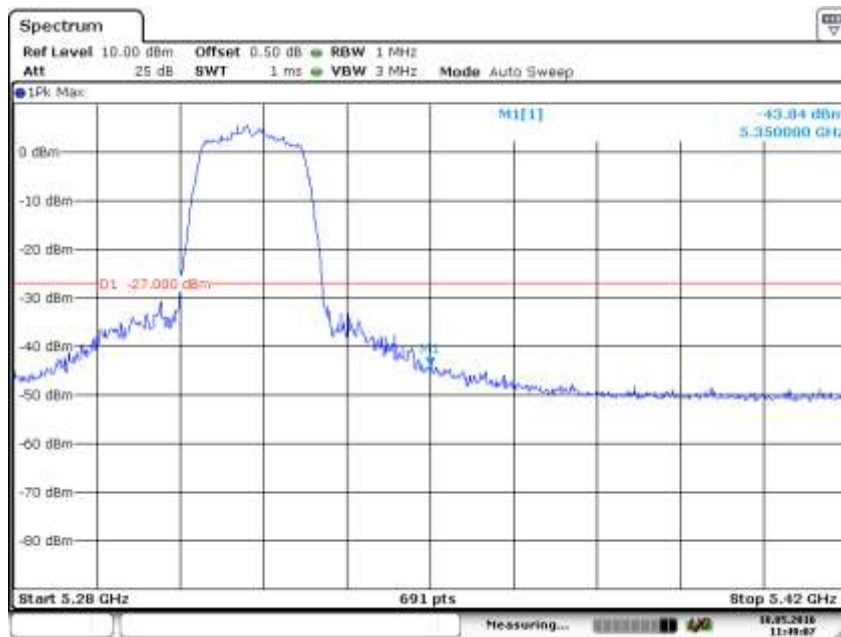
5320MHz



Date: 13.MAY.2016 21:29:43

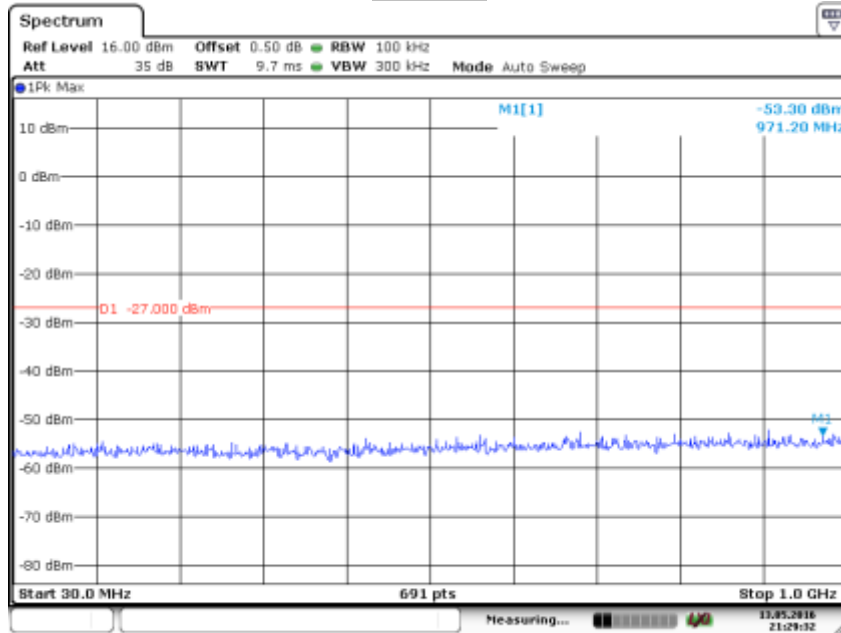


Date: 13.MAY.2016 21:24:35

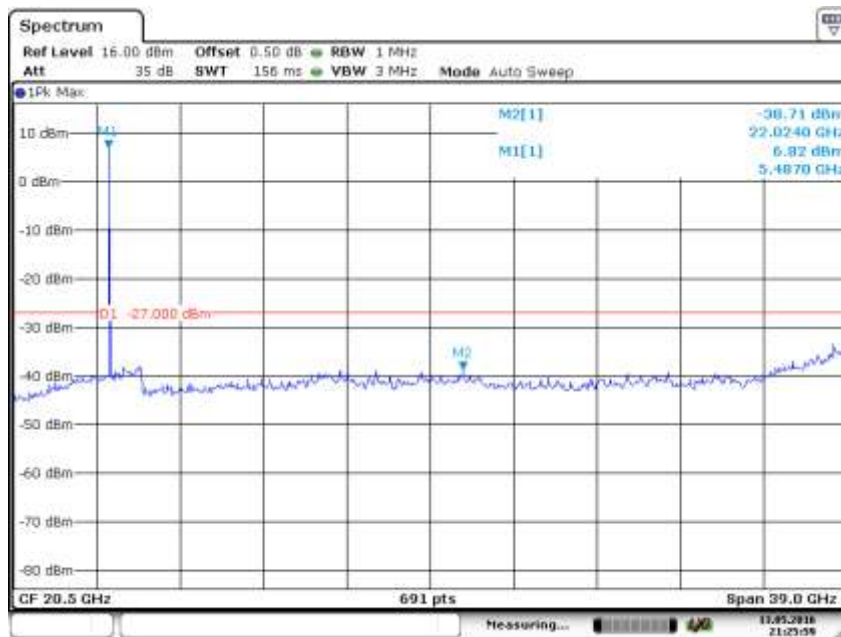


Date: 18.MAY.2016 11:49:07

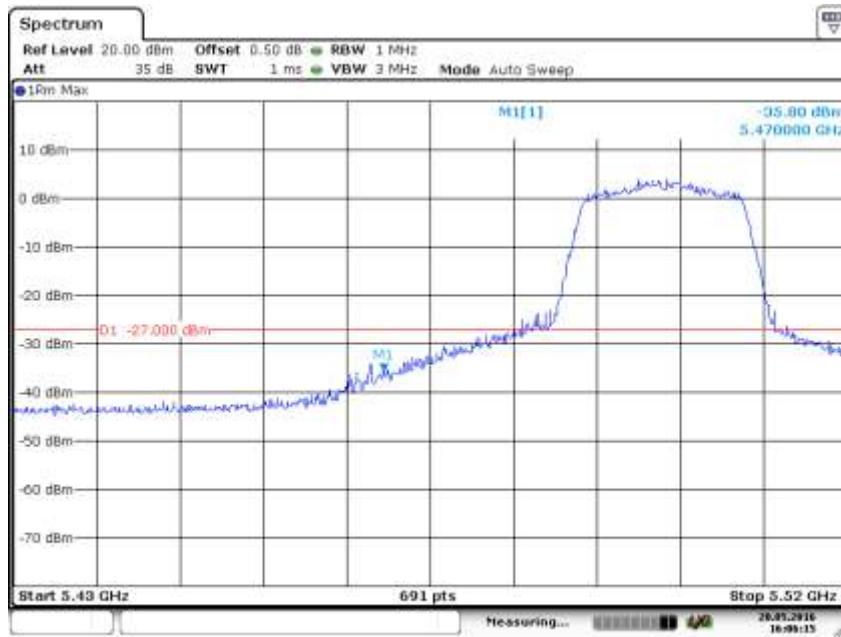
5500MHz



Date: 13.MAY 2016 21:29:32

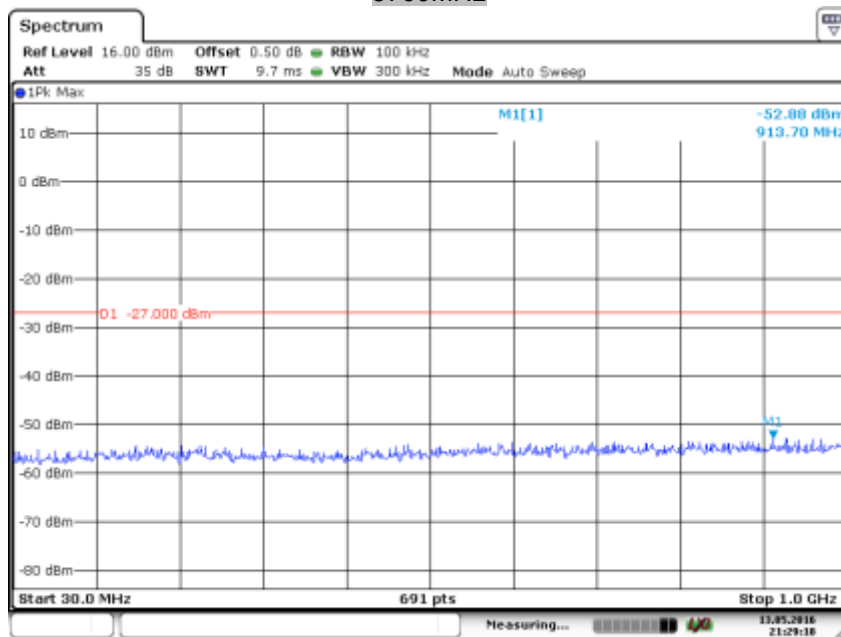


Date: 13.MAY 2016 21:25:59

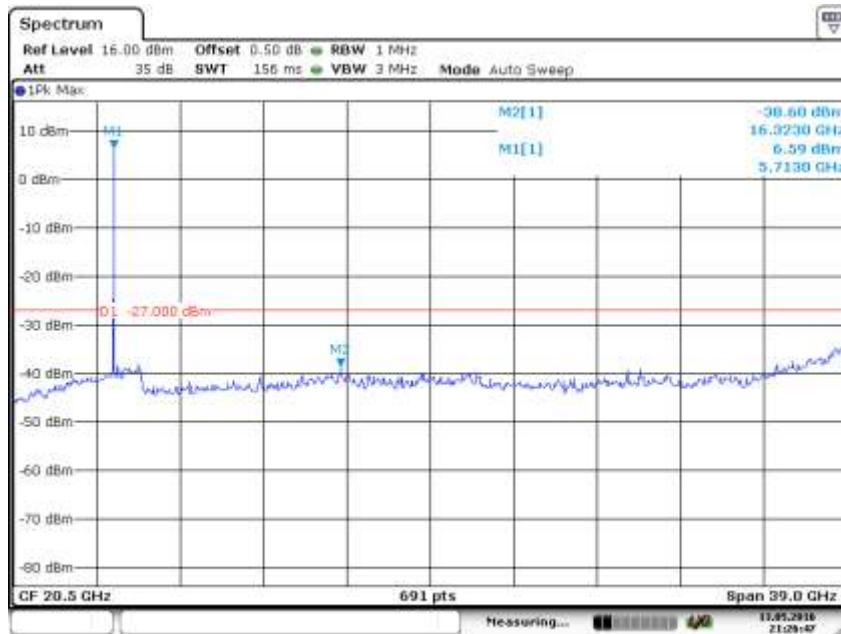


Date: 20 MAY 2016 16:08:15

5700MHz



Date: 13 MAY 2016 21:29:19

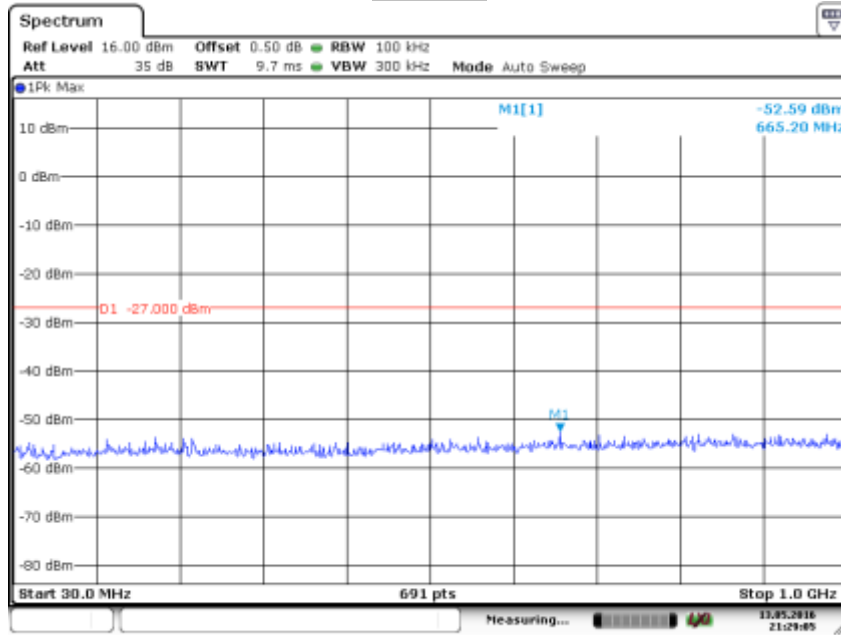


Date: 13.MAY.2016 21:28:48

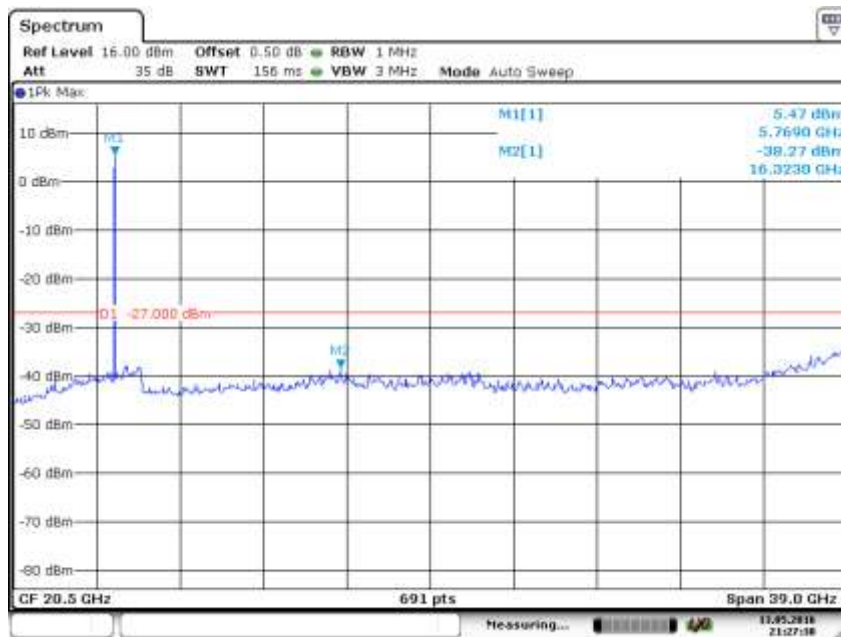


Date: 20 MAY 2016 16:09:55

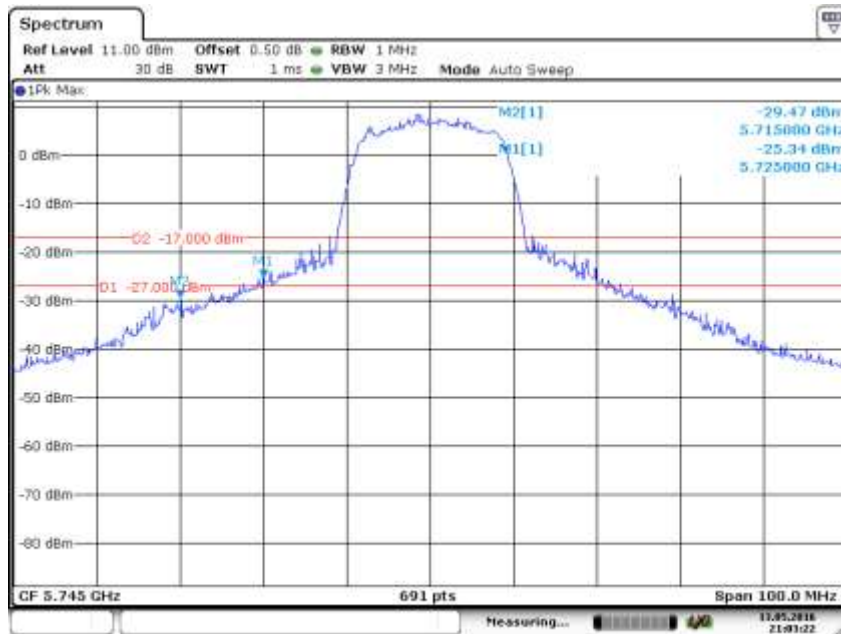
5745MHz



Date: 13.MAY.2016 21:29:06

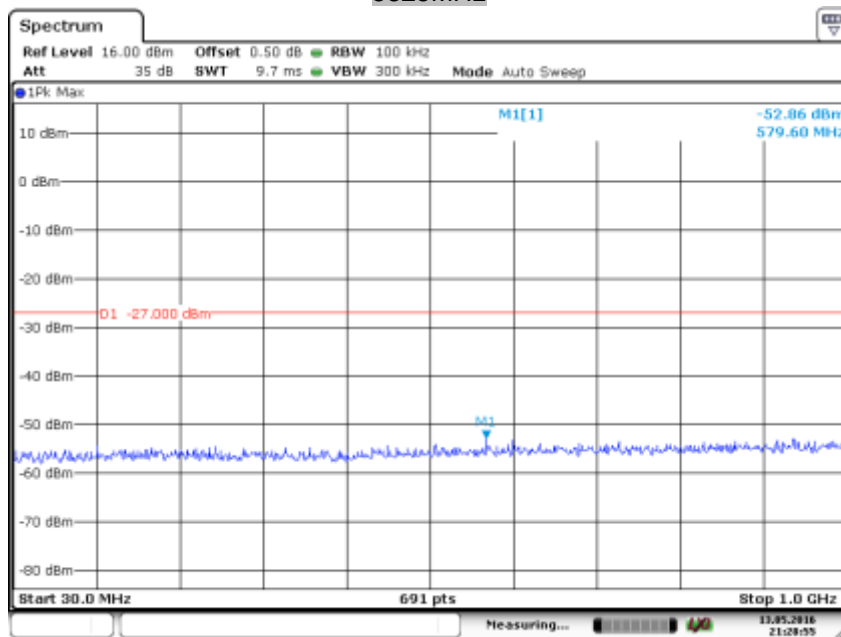


Date: 13.MAY.2016 21:27:39

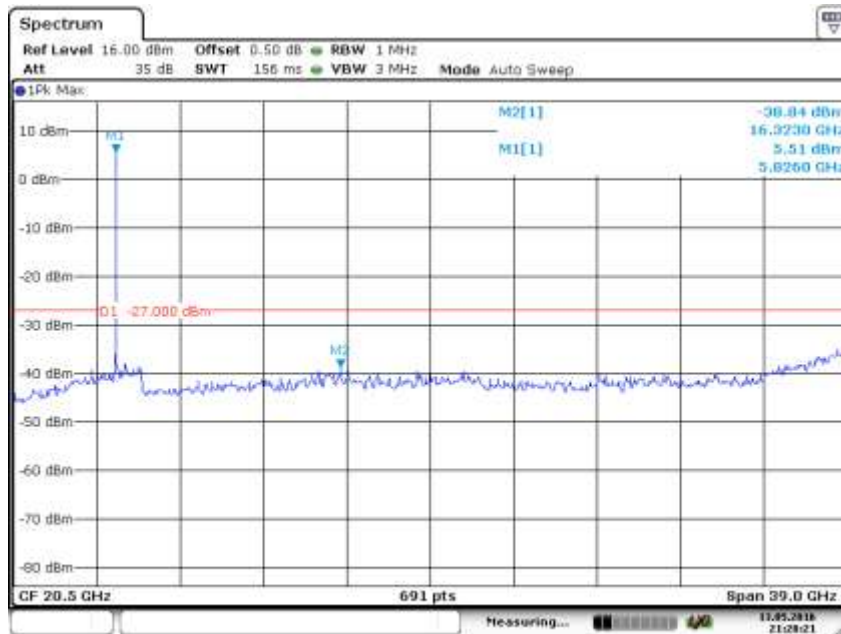


Date: 13.MAY.2016 21:03:22

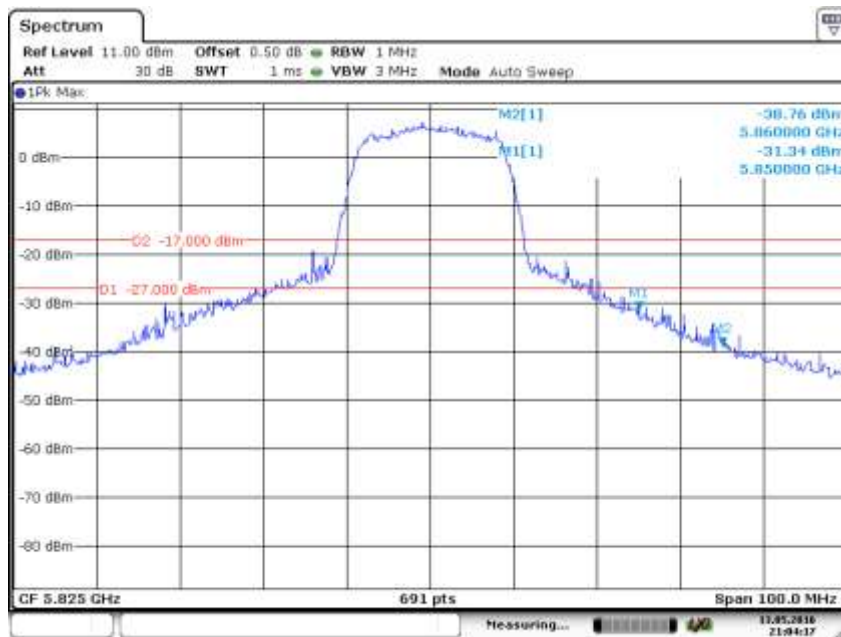
5825MHz



Date: 13.MAY.2016 21:28:55



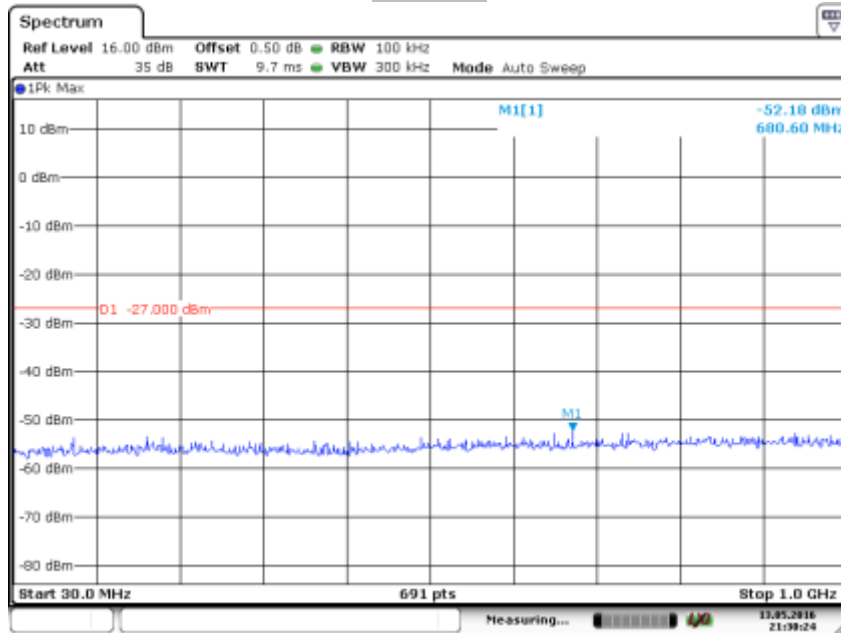
Date: 13.MAY.2016 21:28:21



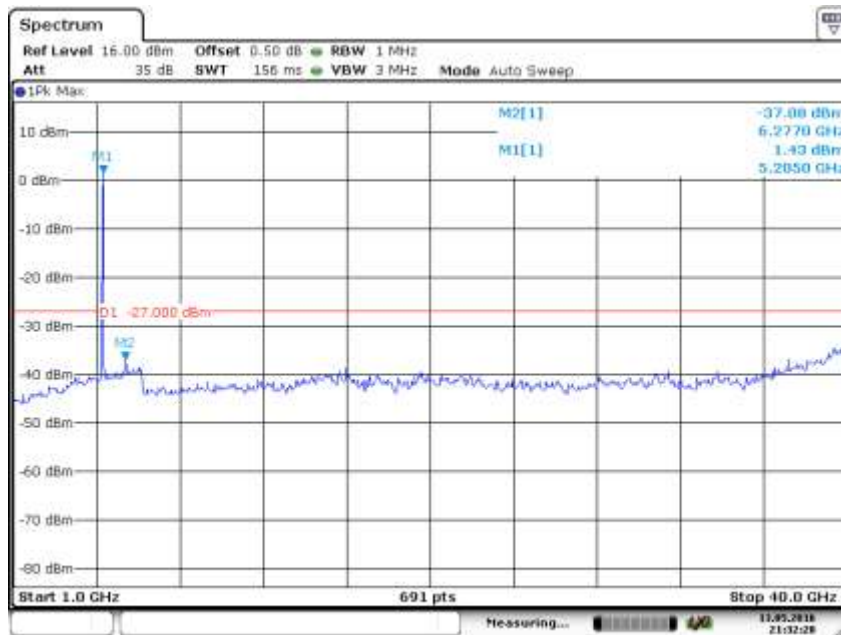
Date: 13.MAY.2016 21:04:17

IEEE 802.11n-HT40 modulation Test Result

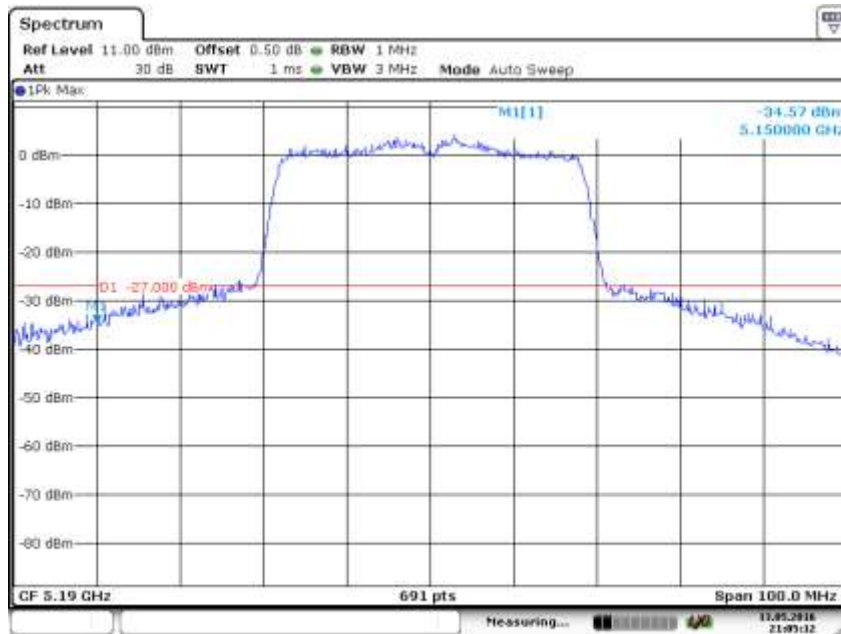
5190MHz



Date: 13.MAY.2016 21:30:25

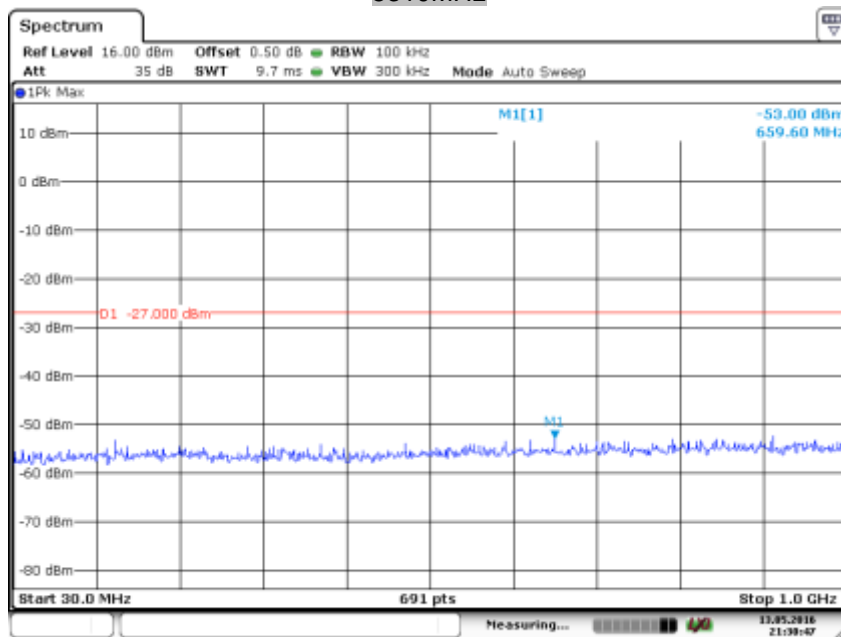


Date: 13.MAY.2016 21:32:28

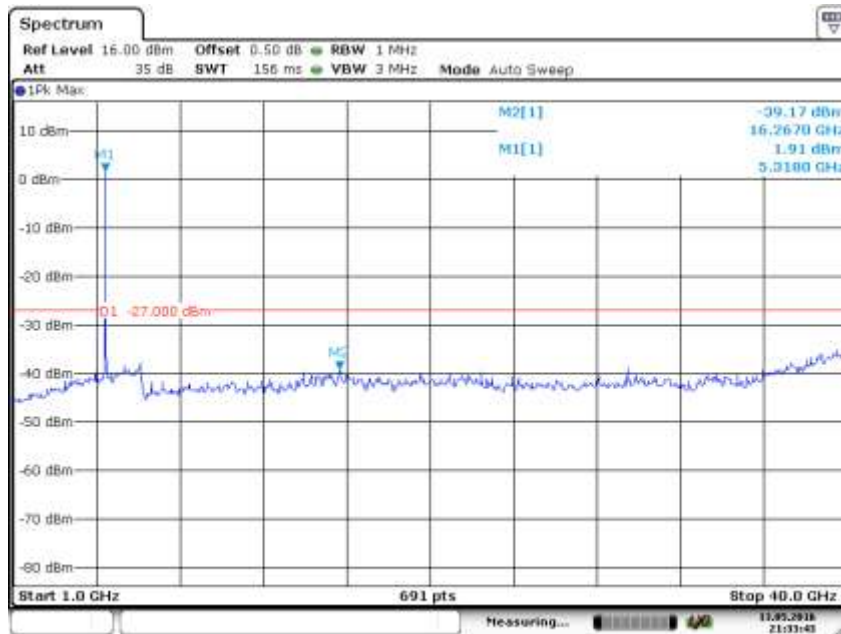


Date: 13.MAY.2016 21:05:13

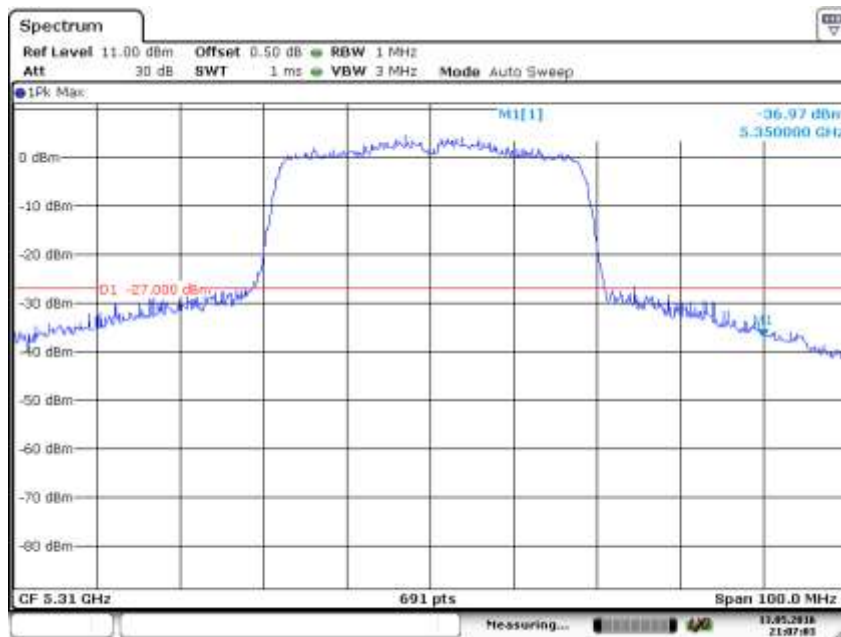
5310MHz



Date: 13.MAY.2016 21:30:46

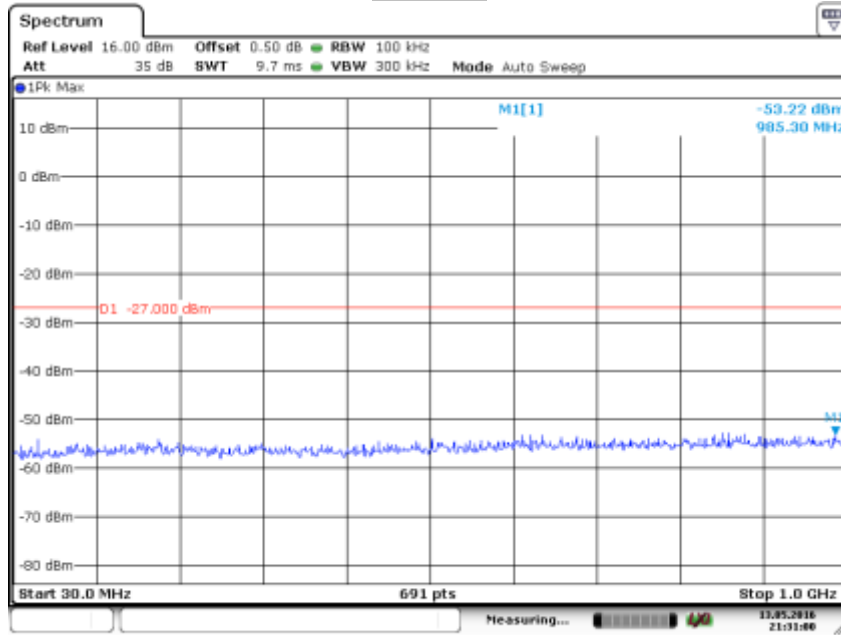


Date: 13.MAY.2016 21:33:43

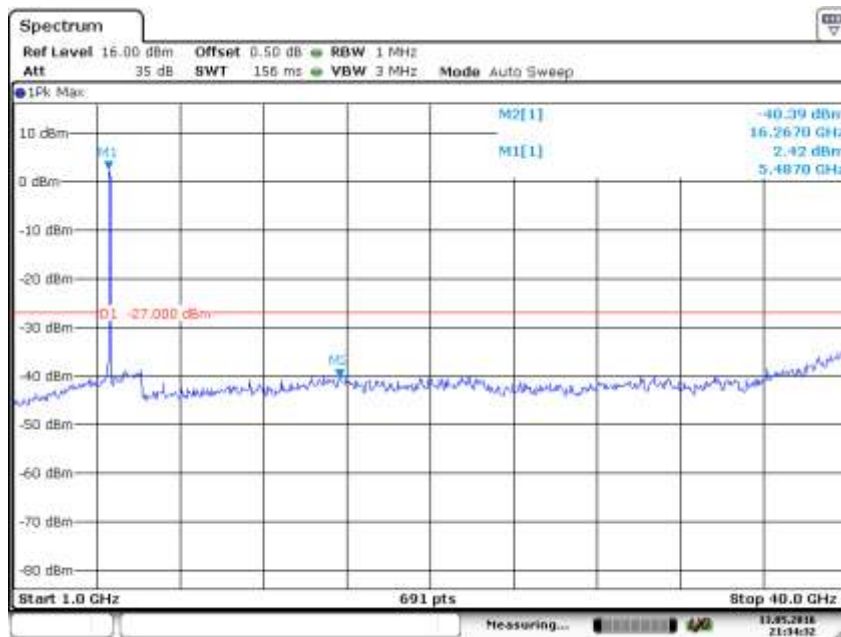


Date: 13.MAY.2016 21:07:04

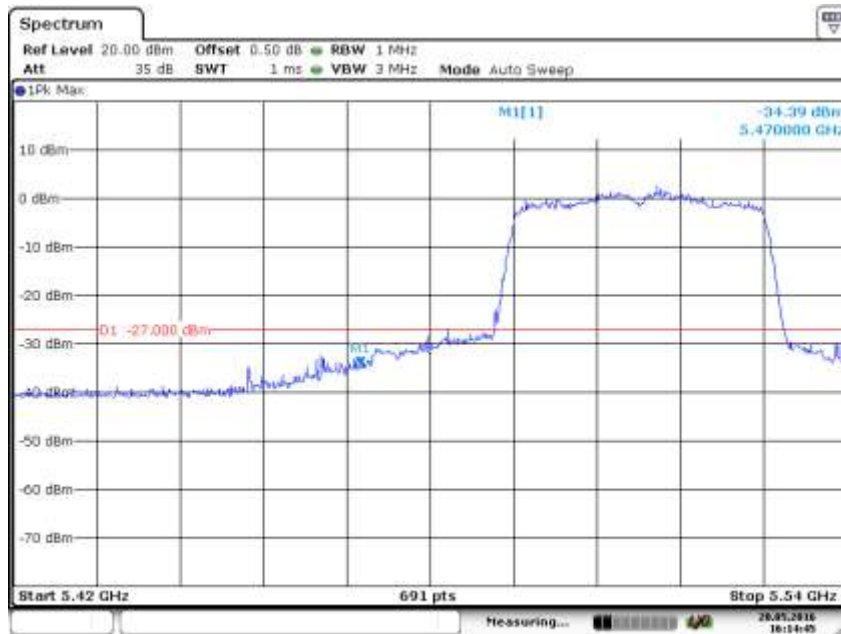
5510MHz



Date: 13.MAY 2016 21:31:00

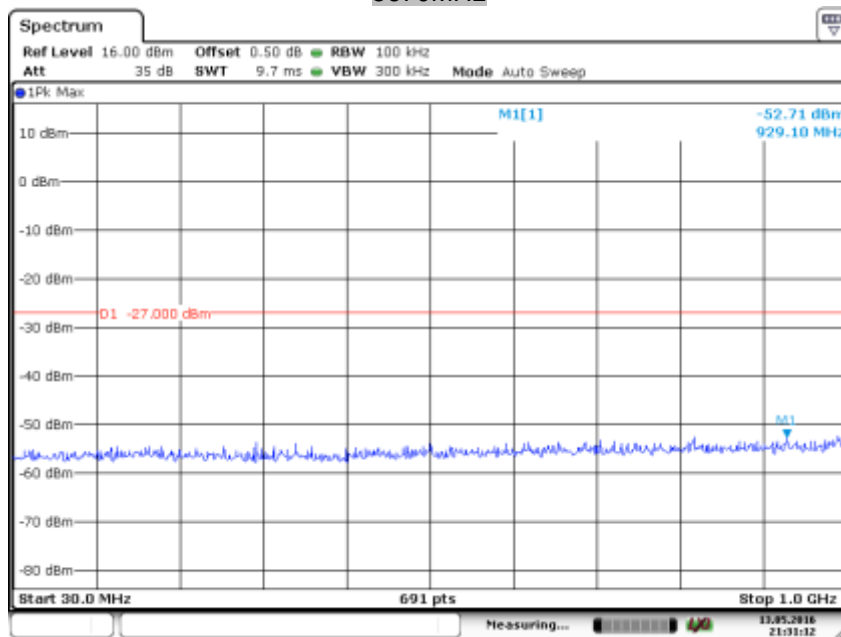


Date: 13.MAY 2016 21:34:32

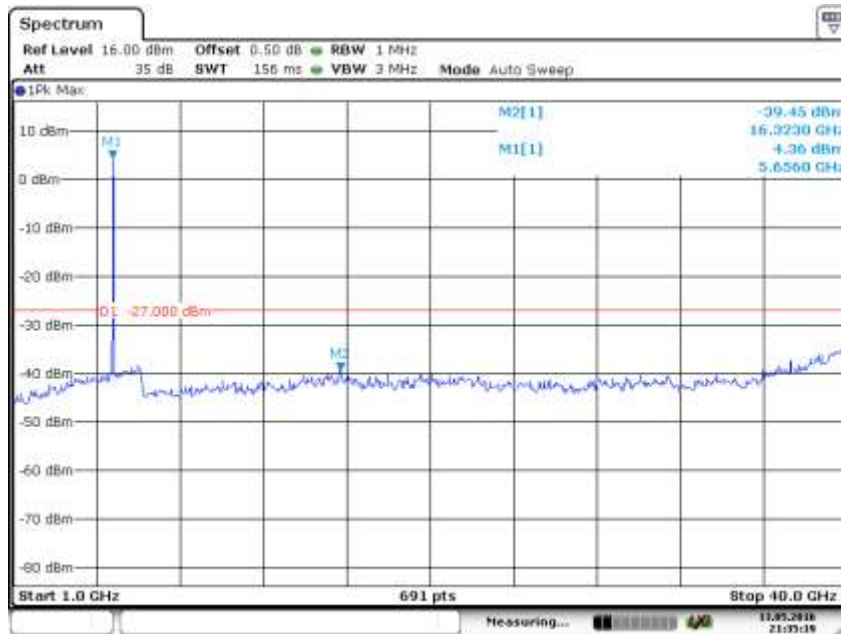


Date: 20 MAY 2016 16:14:45

5670MHz



Date: 13 MAY 2016 21:31:13

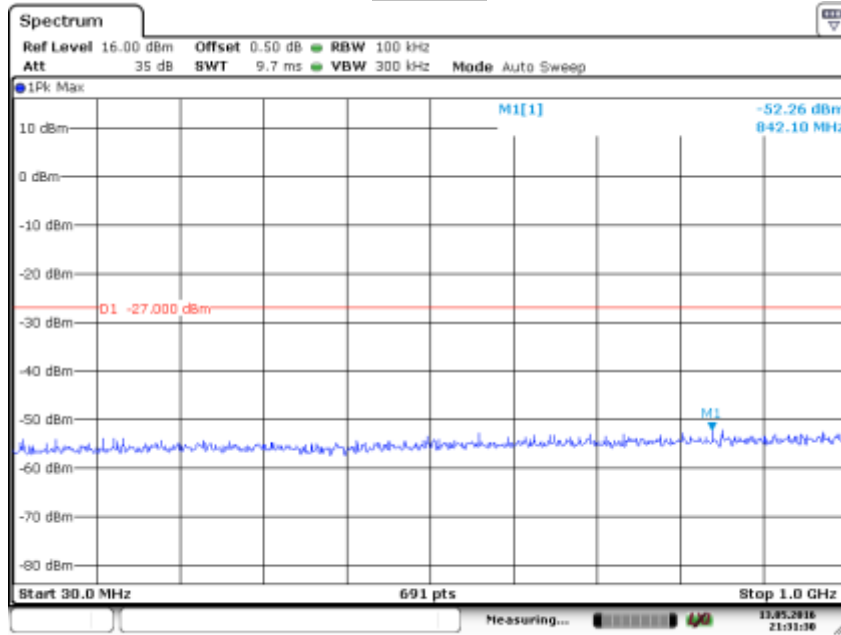


Date: 13 MAY 2016 21:35:19

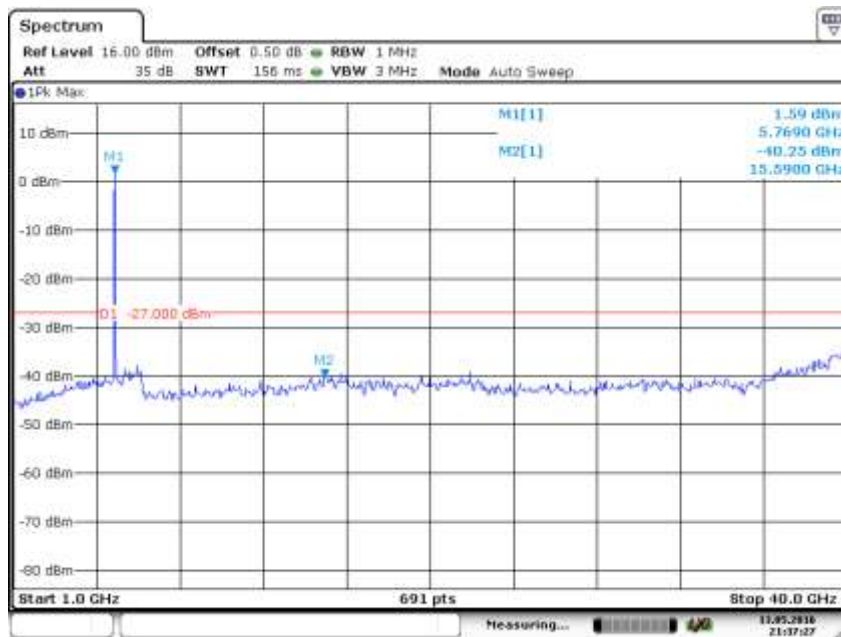


Date: 20 MAY 2016 16:15:52

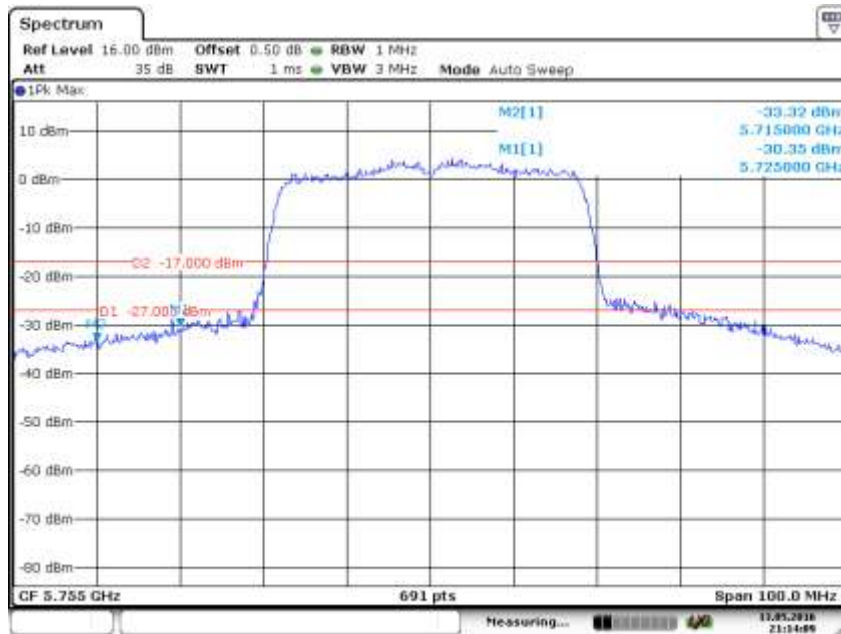
5755MHz



Date: 13.MAY 2016 21:31:30

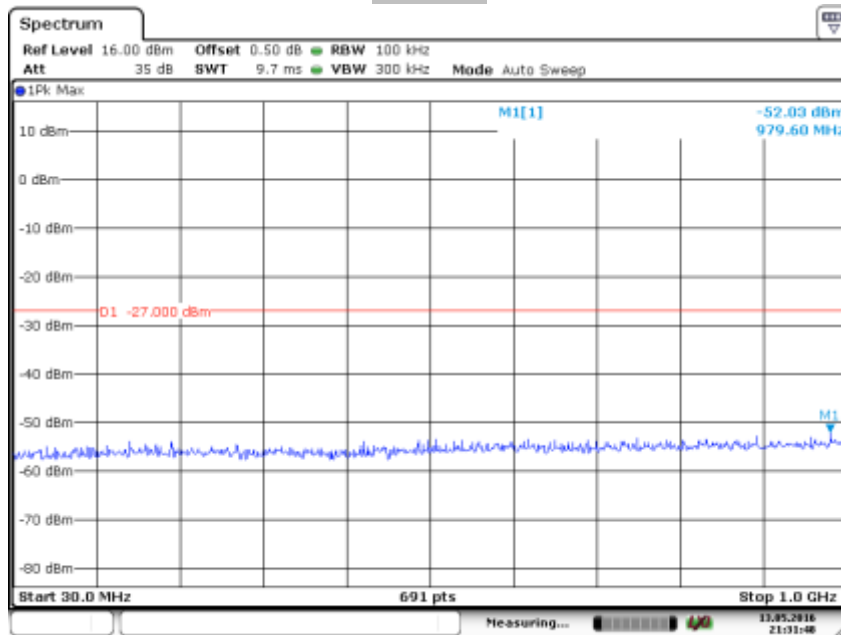


Date: 13.MAY 2016 21:37:27

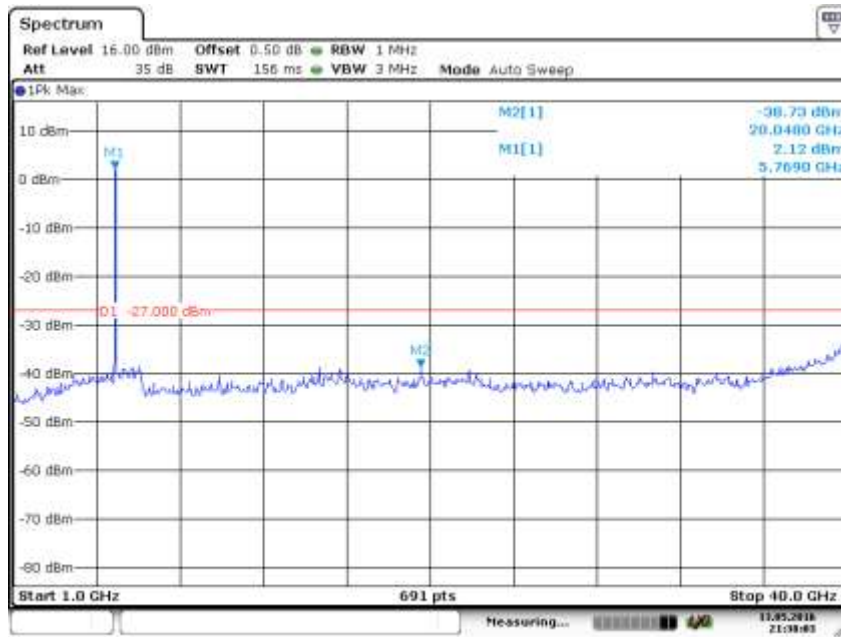


Date: 13.MAY.2016 21:14:09

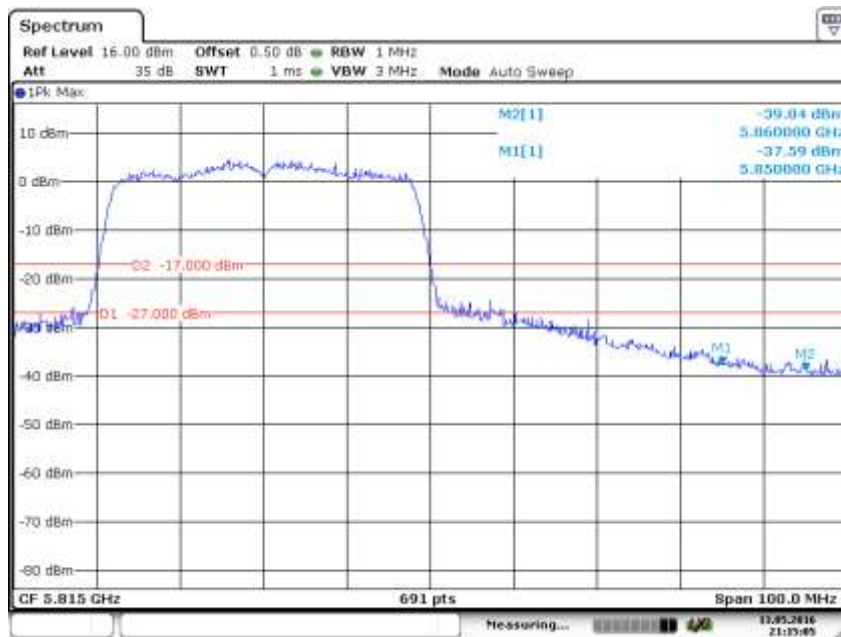
5795MHz



Date: 13.MAY.2016 21:31:48



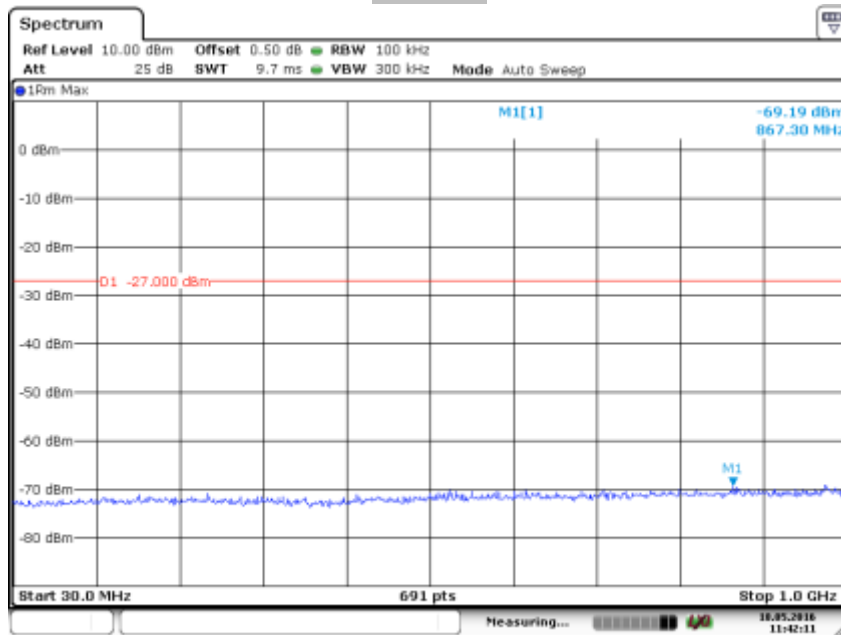
Date: 13.MAY.2016 21:38:03



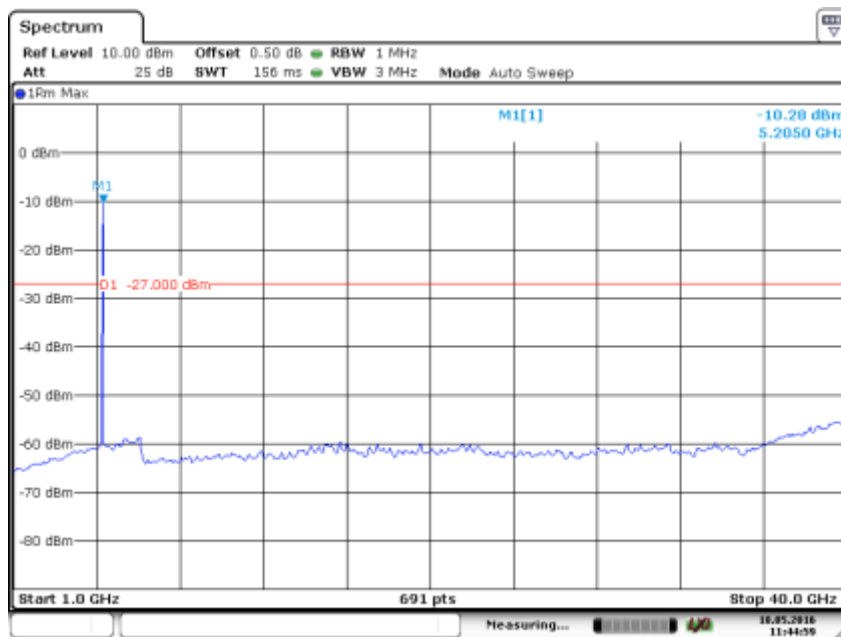
Date: 13.MAY.2016 21:15:05

IEEE 802.11ac-VHT20 modulation Test Result

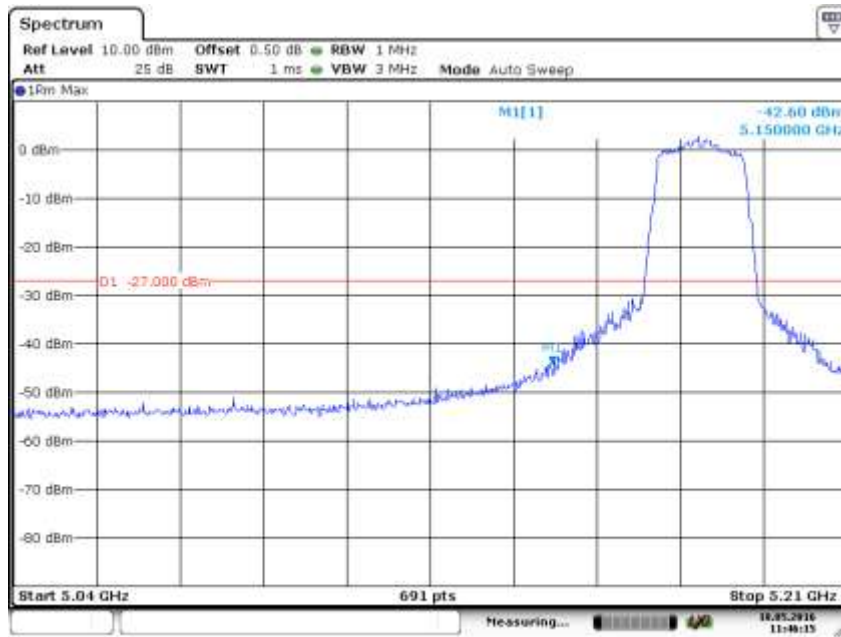
5180MHz



Date: 18.MAY.2016 11:42:11

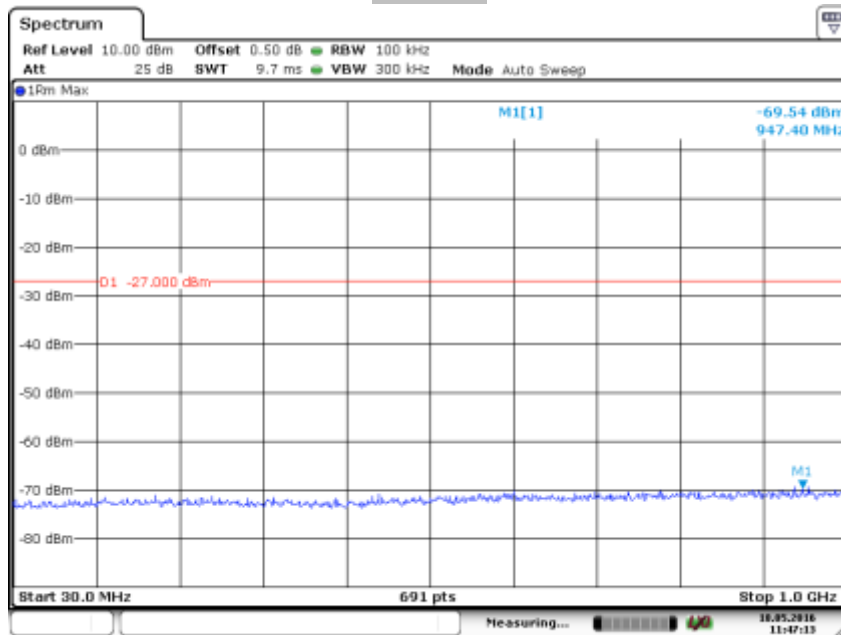


Date: 18.MAY.2016 11:44:59

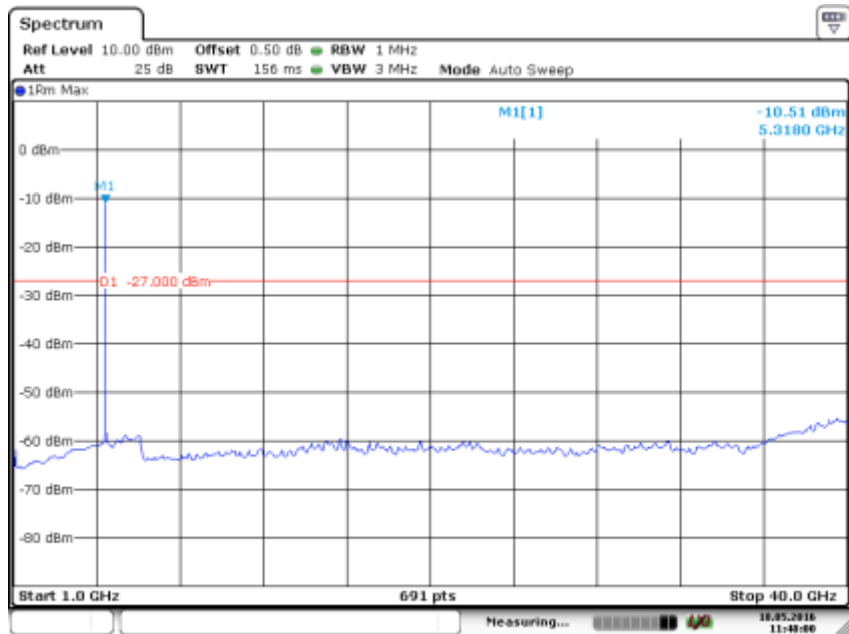


Date: 18.MAY.2016 11:46:15

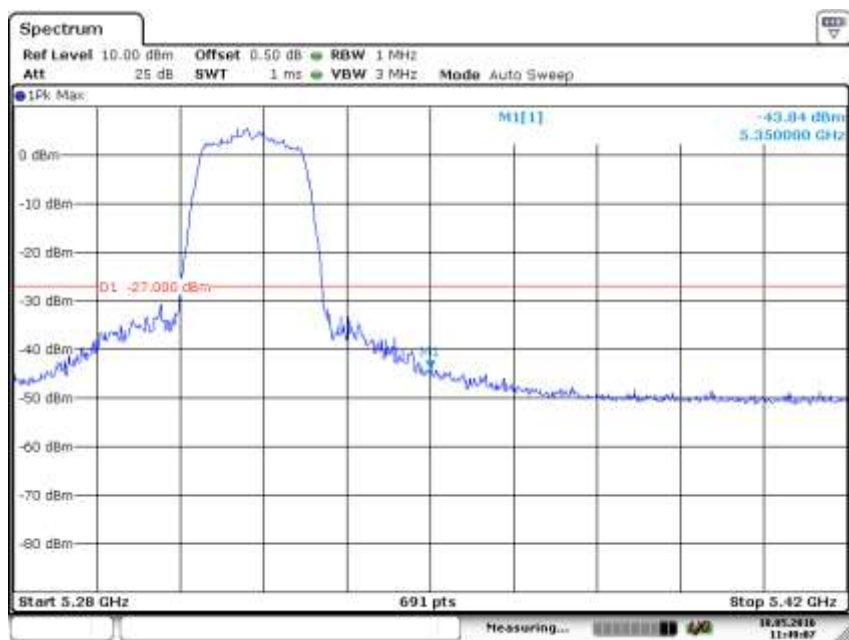
5320MHz



Date: 18.MAY.2016 11:47:13

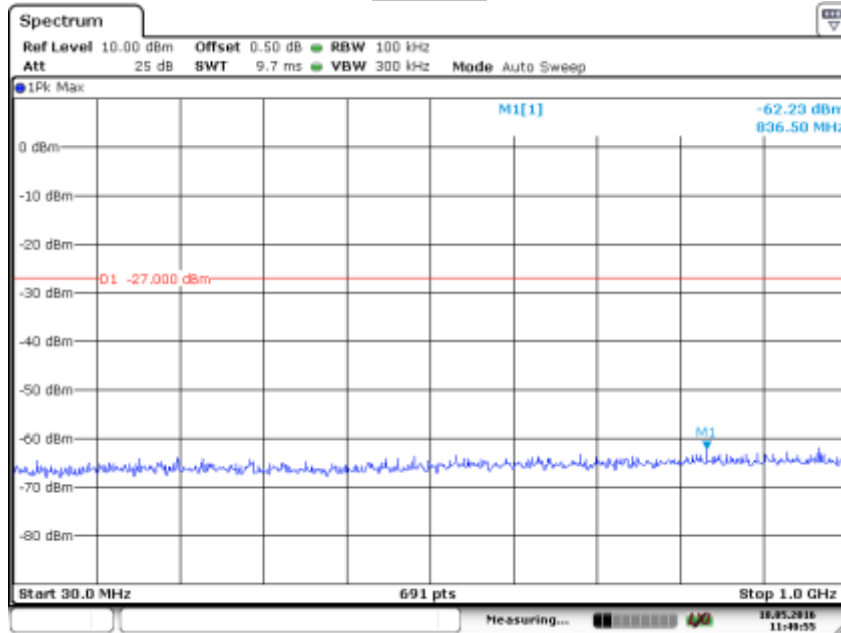


Date: 18.MAY.2016 11:48:00

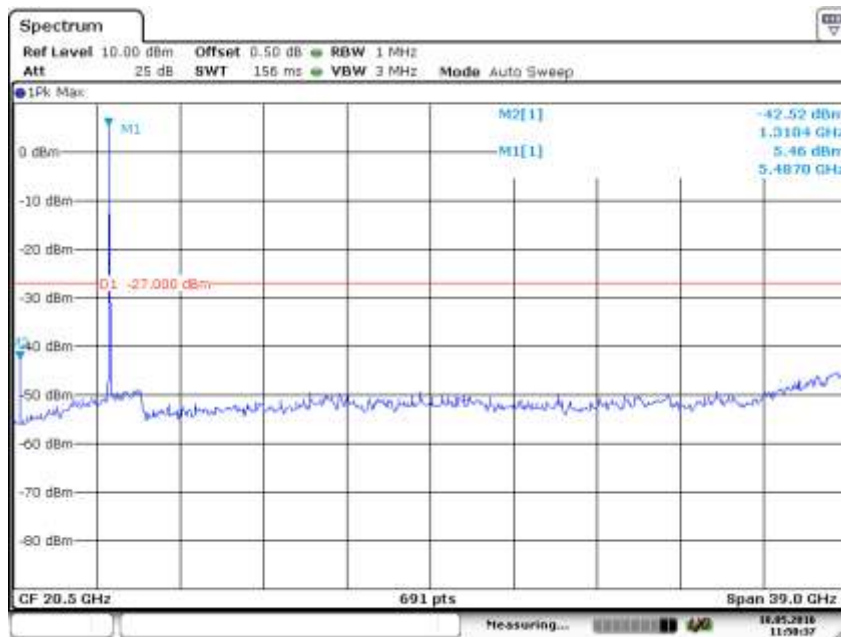


Date: 18.MAY.2016 11:48:07

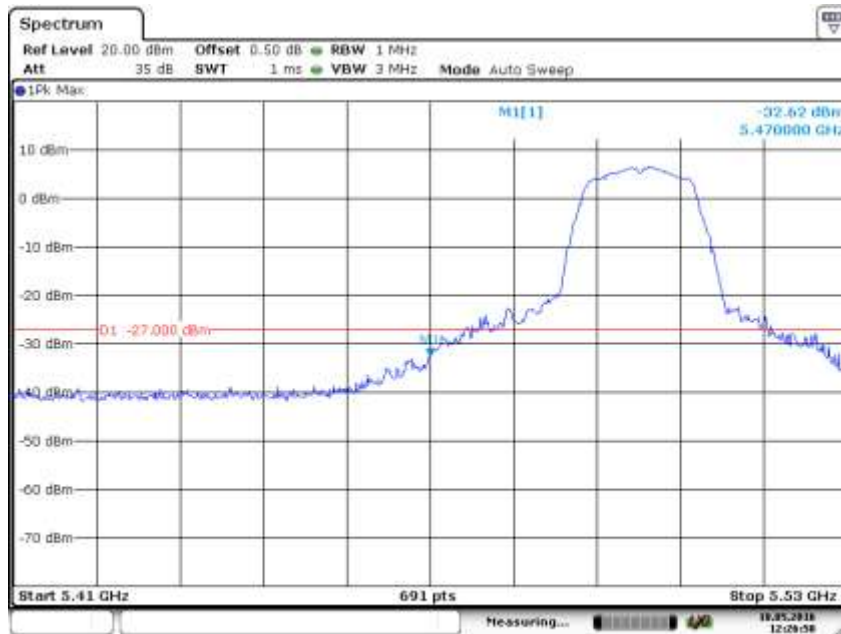
5500MHz



Date: 18.MAY 2016 11:49:55

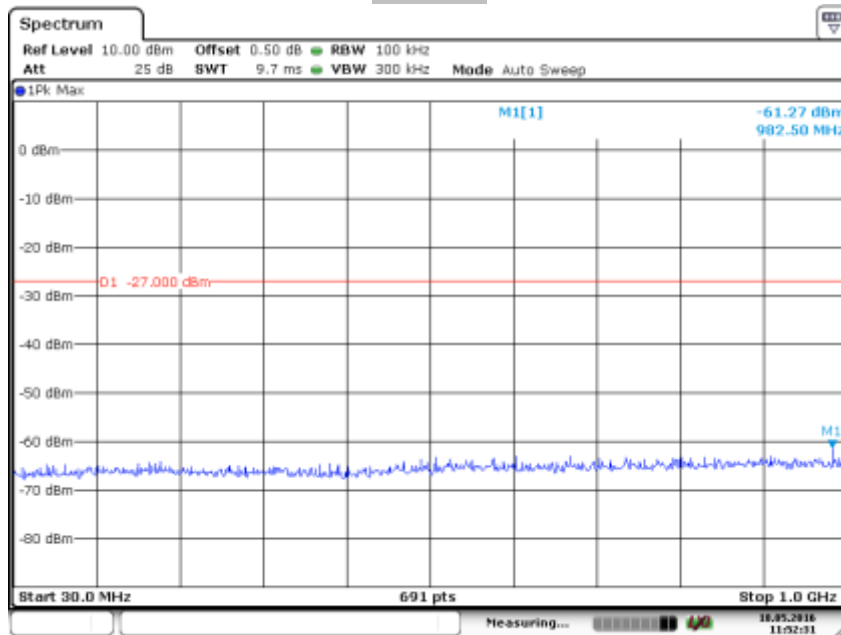


Date: 18.MAY 2016 11:50:37

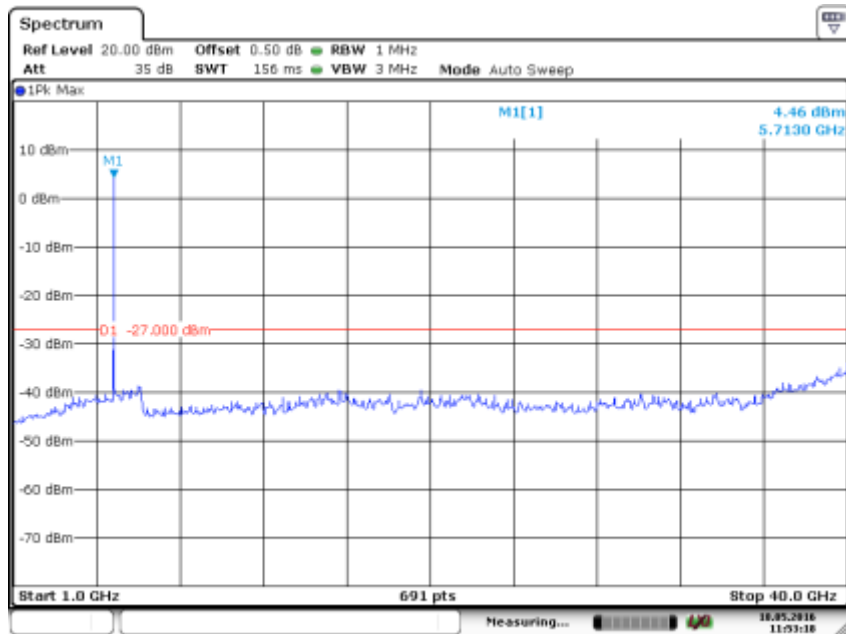


Date: 18.MAY 2016 12:28:58

5700MHz



Date: 18.MAY 2016 11:52:31

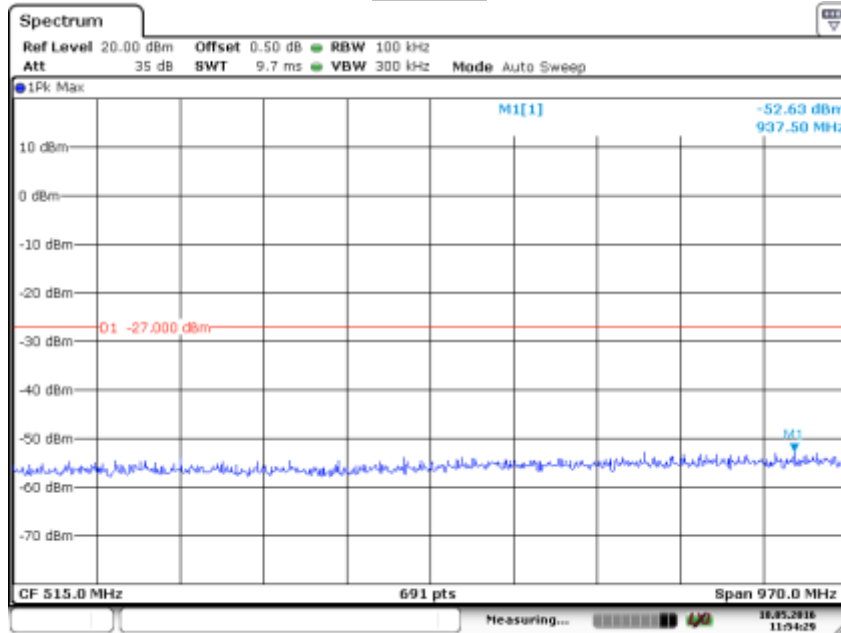


Date: 18.MAY.2016 11:53:17

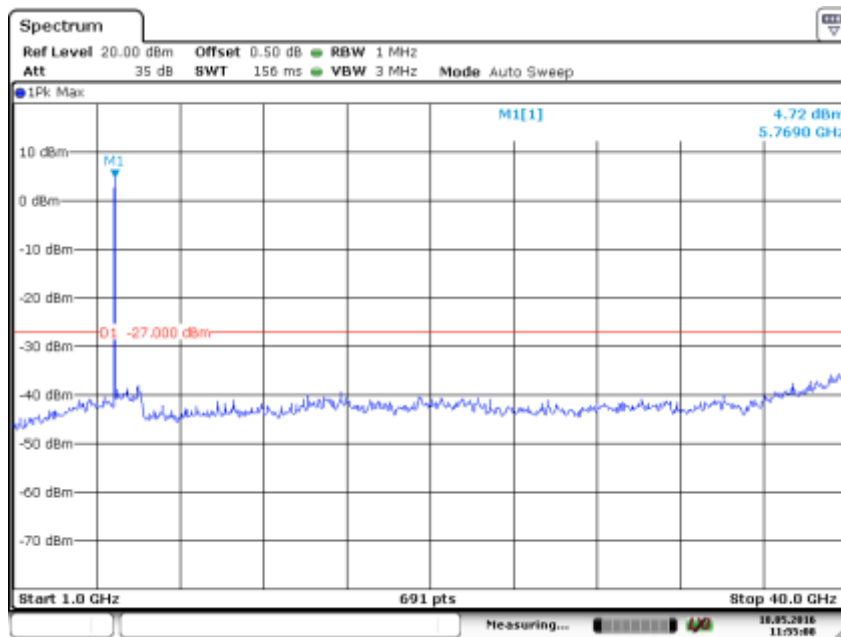


Date: 18.MAY.2016 12:38:43

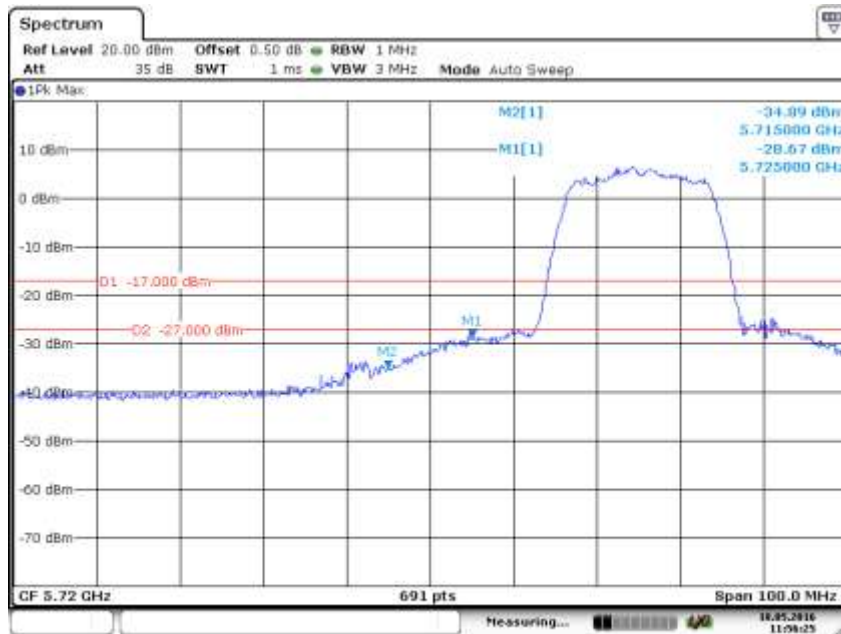
5745MHz



Date: 18.MAY.2016 11:54:29

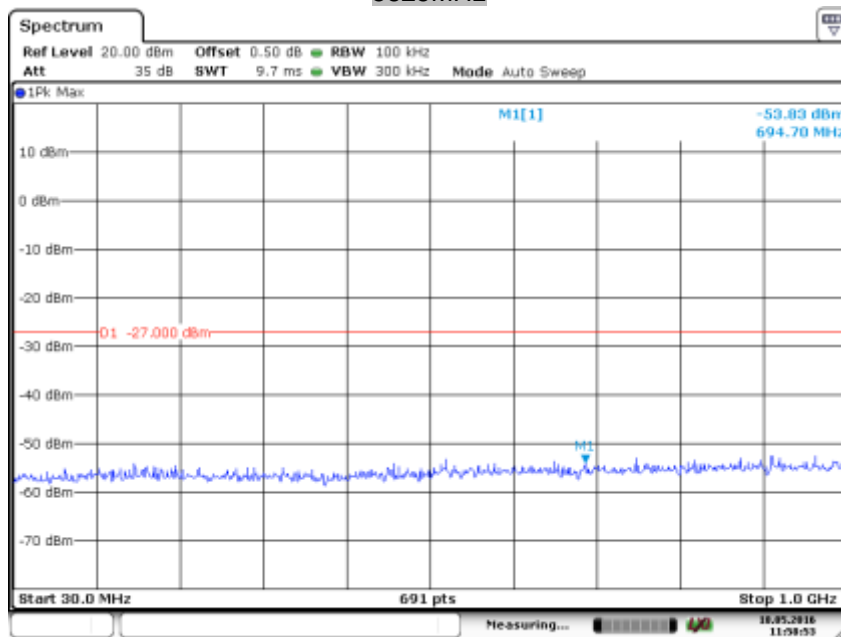


Date: 18.MAY.2016 11:55:08

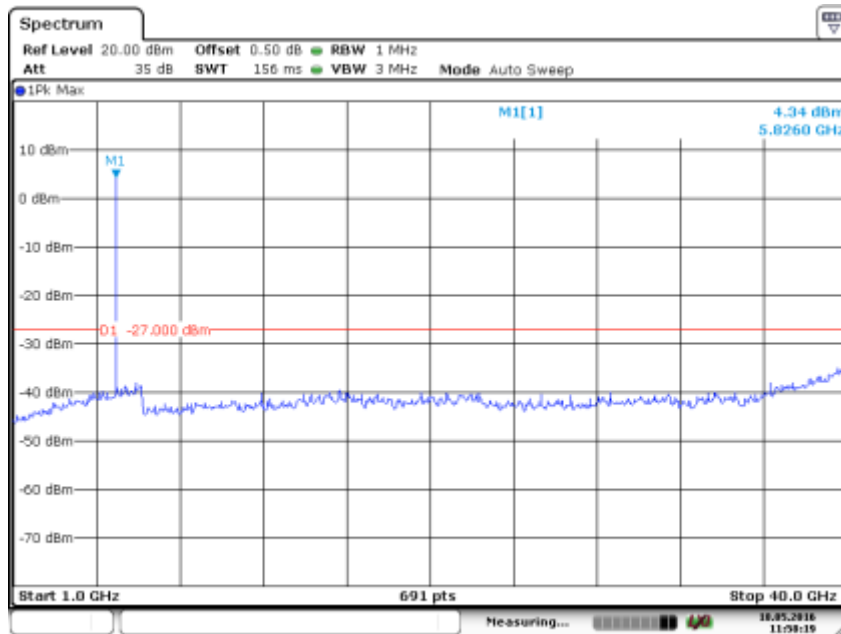


Date: 18.MAY.2016 11:58:25

5825MHz



Date: 18.MAY.2016 11:58:54



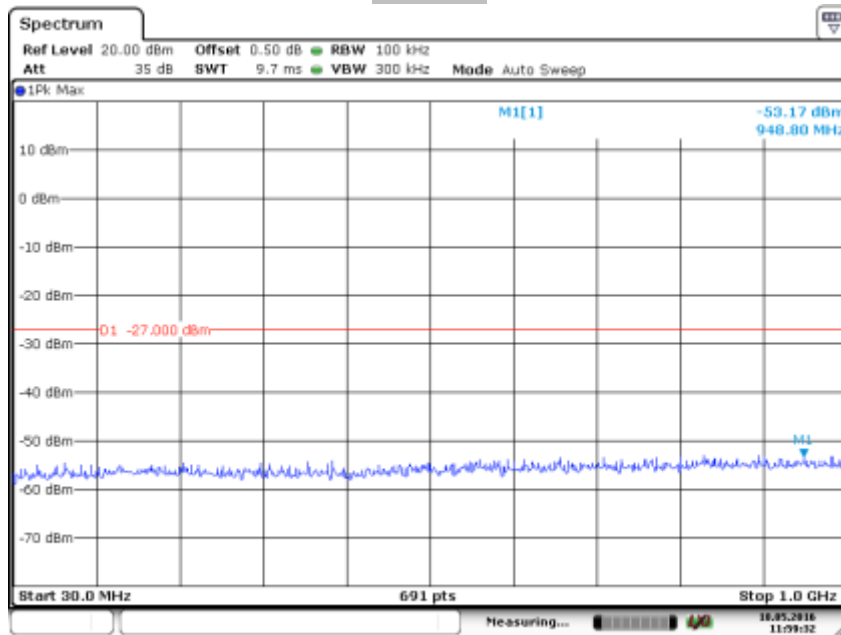
Date: 18.MAY.2016 11:58:19



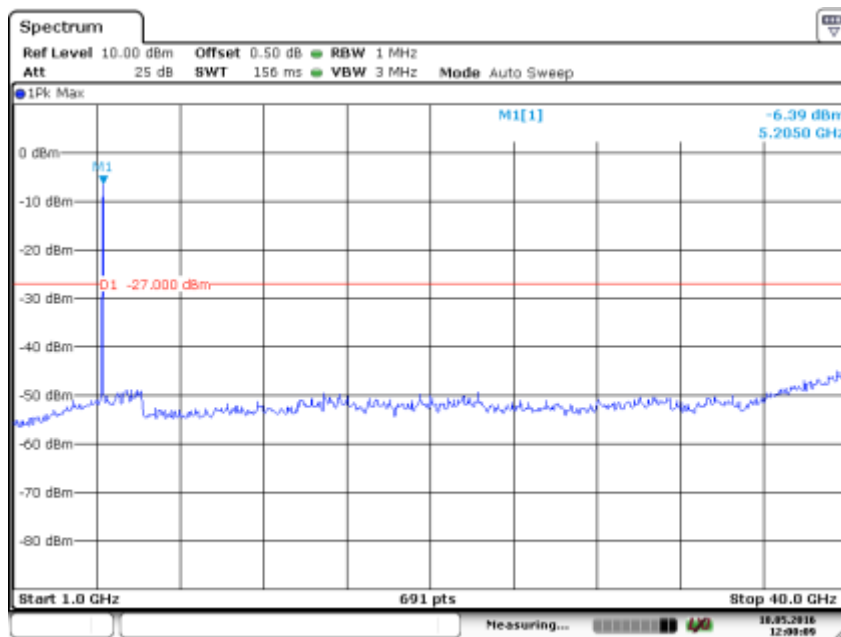
Date: 18.MAY.2016 11:57:35

IEEE 802.11ac-VHT40 modulation Test Result

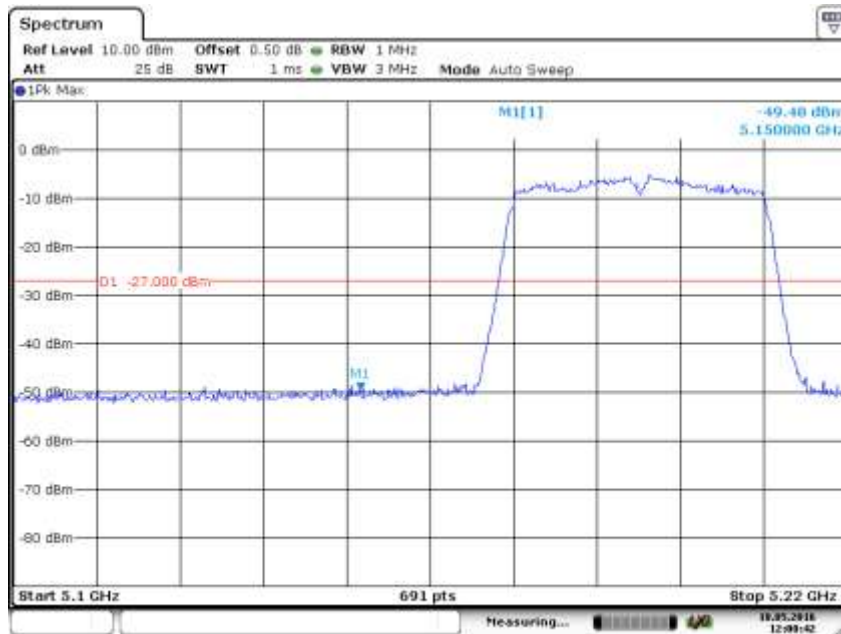
5190MHz



Date: 18.MAY.2016 11:59:32

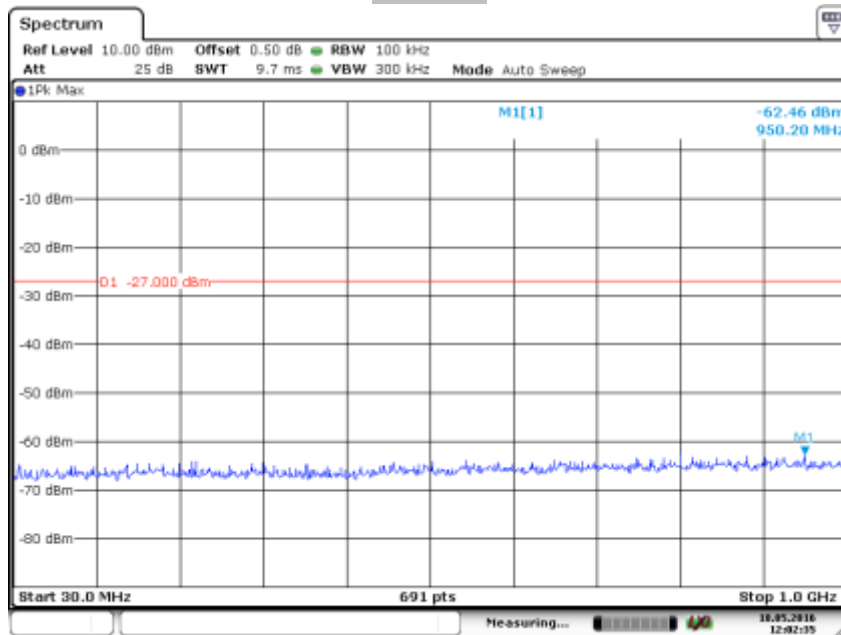


Date: 18.MAY.2016 12:00:10

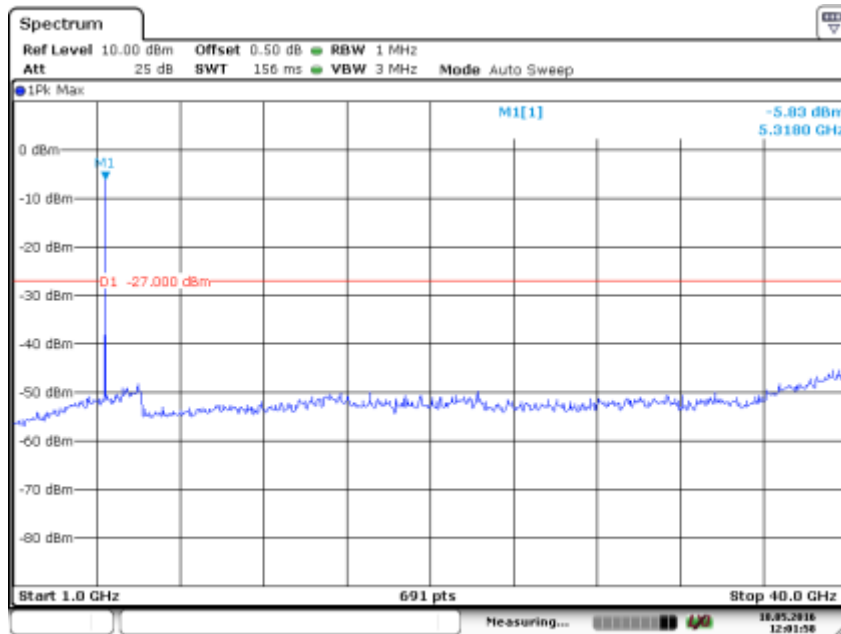


Date: 18.MAY.2016 12:00:42

5310MHz



Date: 18.MAY.2016 12:02:35

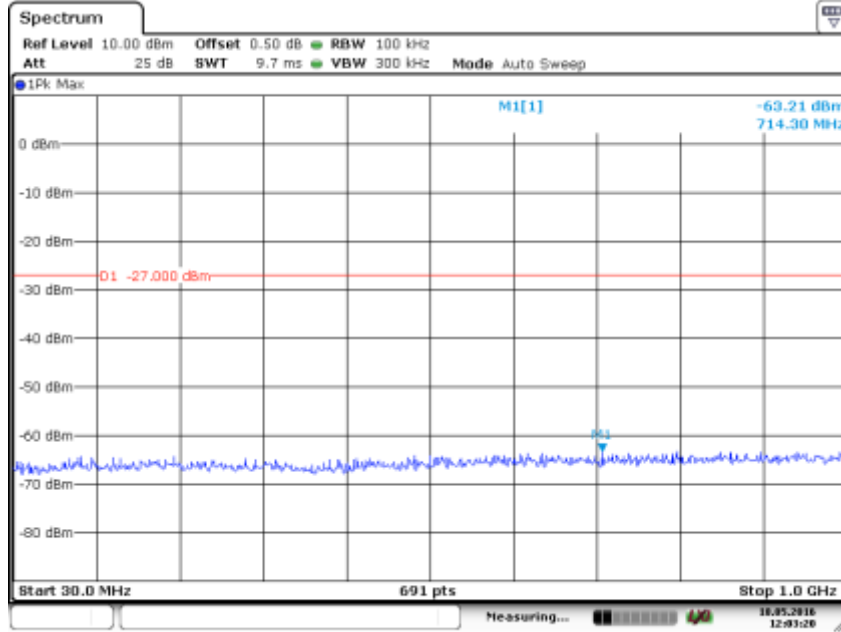


Date: 18.MAY.2016 12:01:58

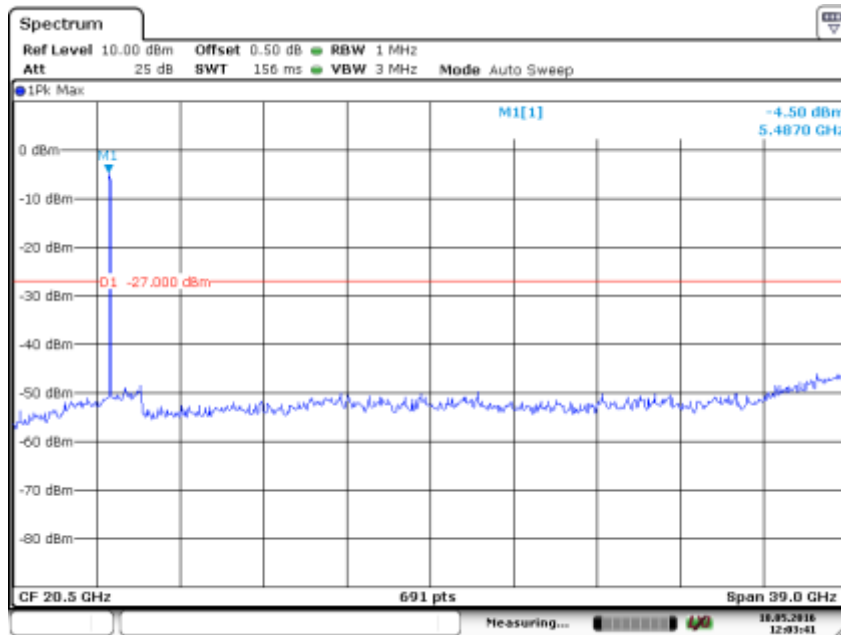


Date: 18.MAY.2016 12:01:31

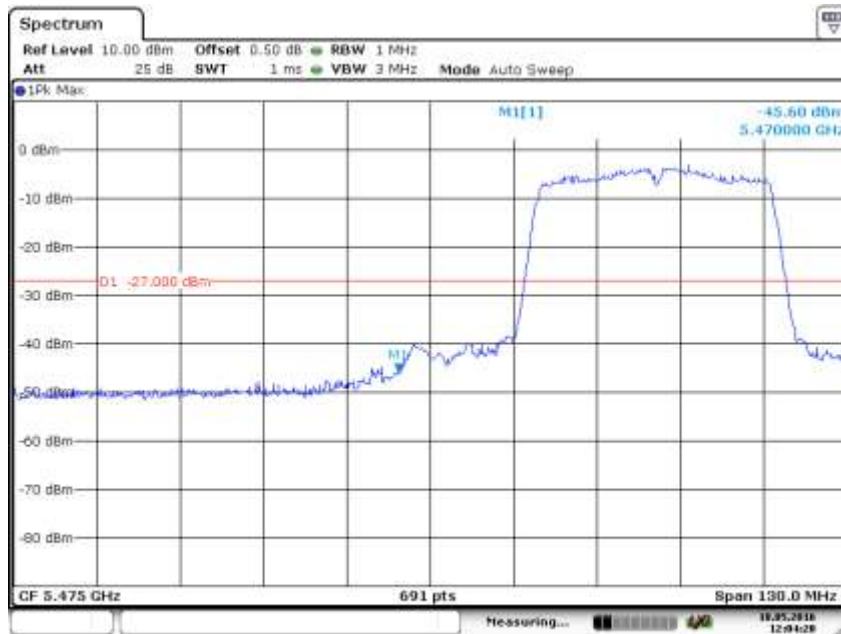
5510MHz



Date: 18.MAY.2016 12:03:20

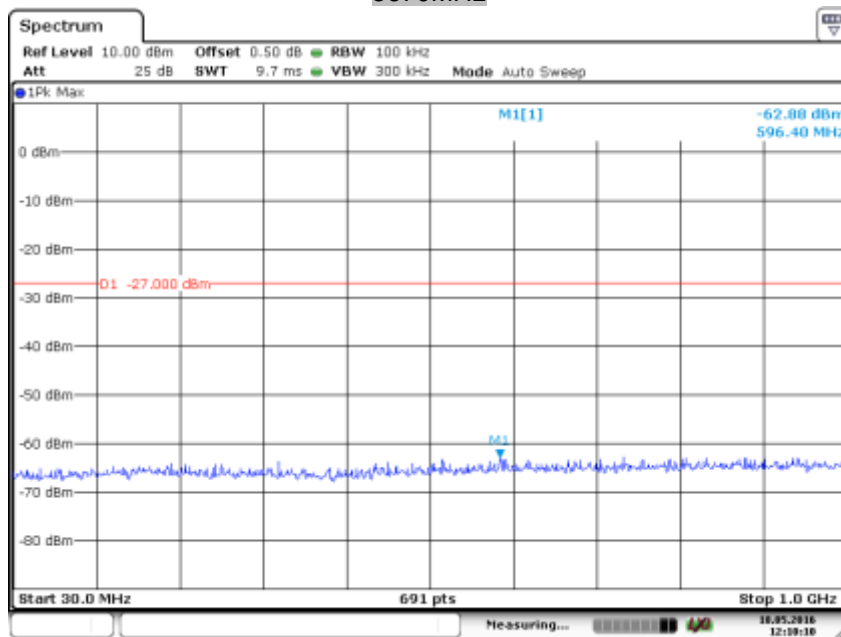


Date: 18.MAY.2016 12:03:41

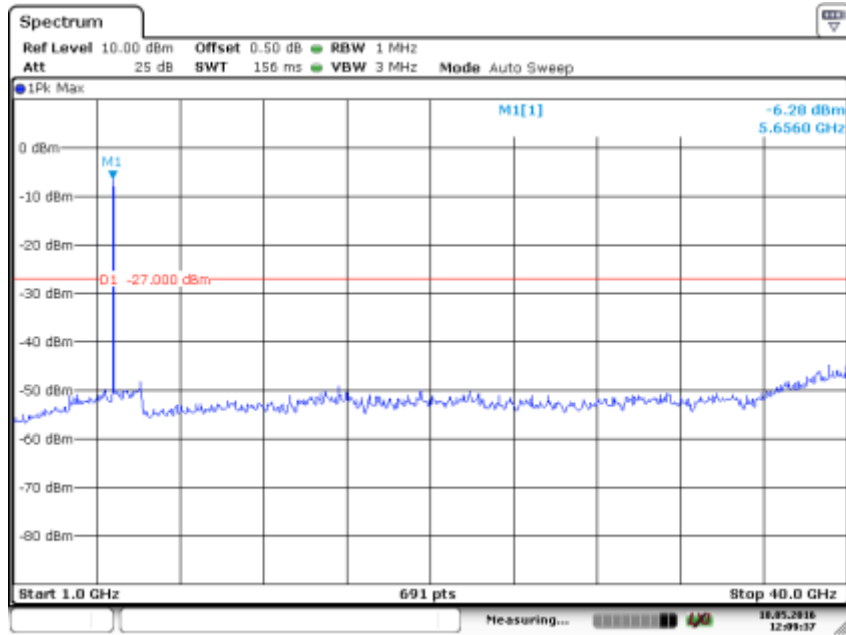


Date: 18.MAY.2016 12:04:20

5670MHz



Date: 18.MAY.2016 12:10:10

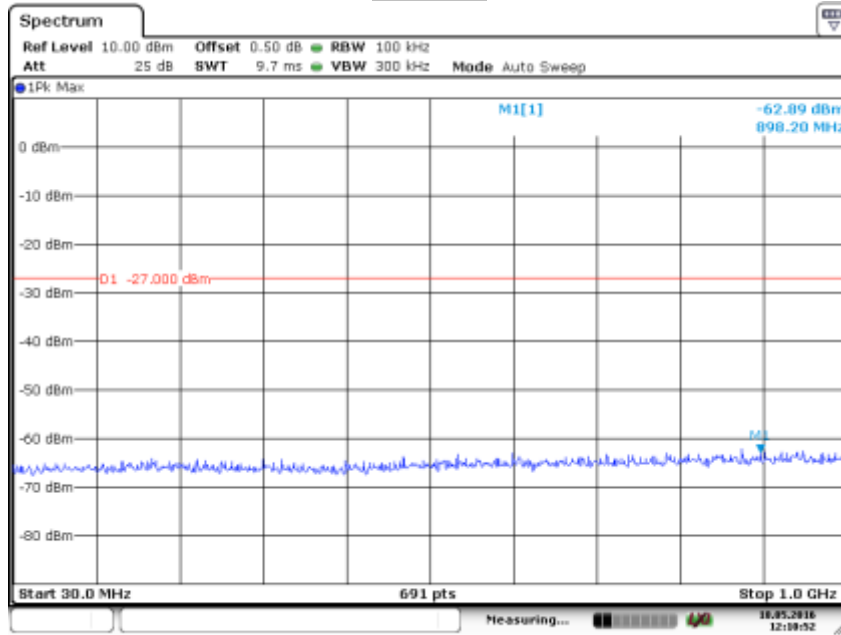


Date: 18.MAY.2016 12:09:37

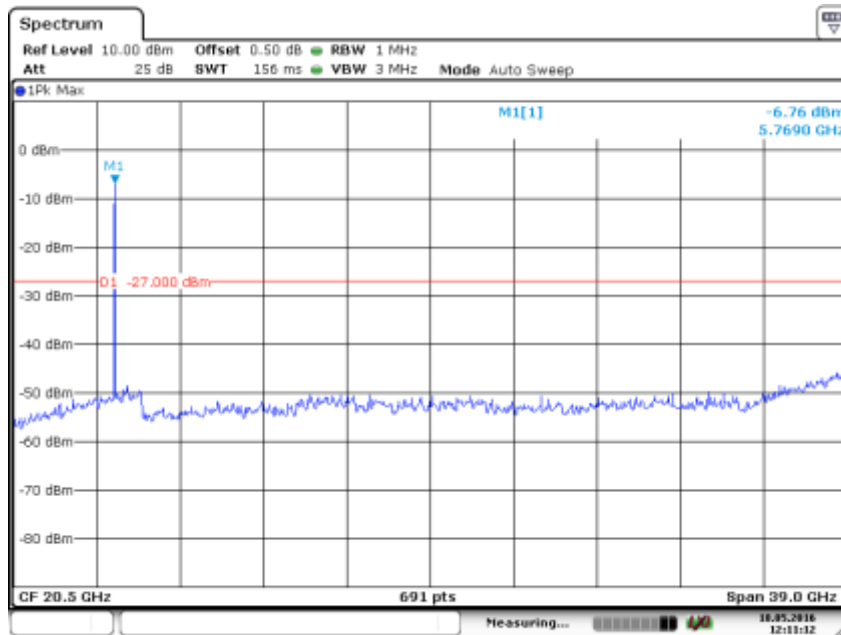


Date: 18.MAY.2016 12:09:25

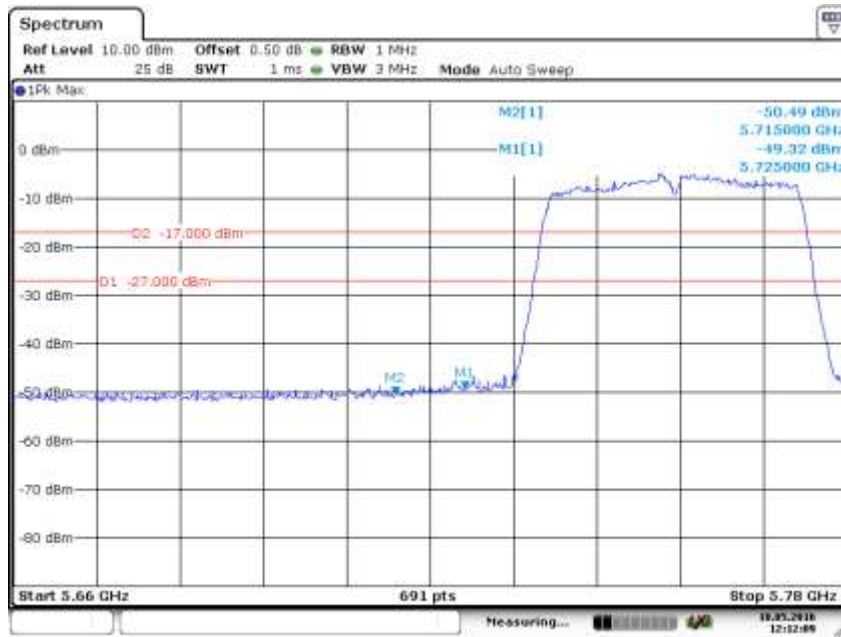
5755MHz



Date: 18.MAY 2016 12:10:52

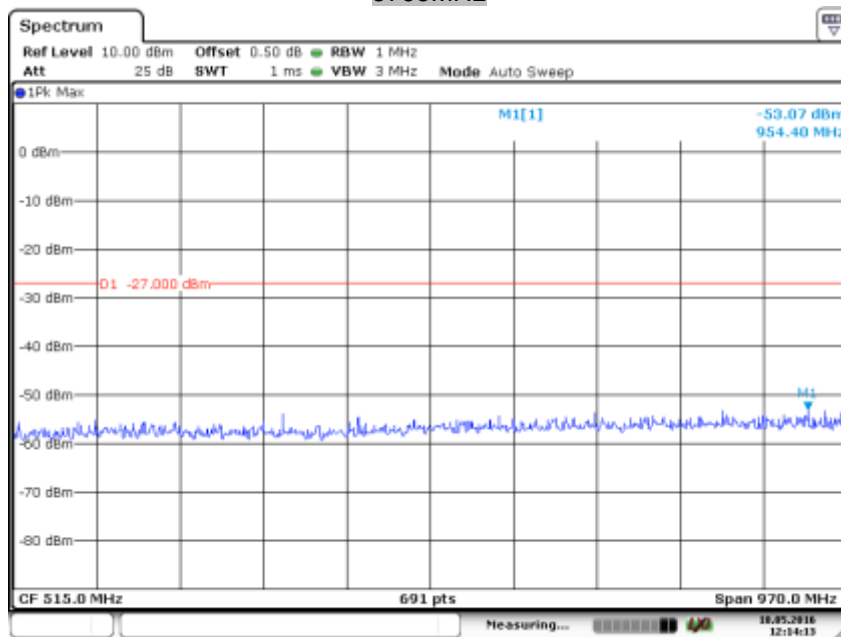


Date: 18.MAY 2016 12:11:12

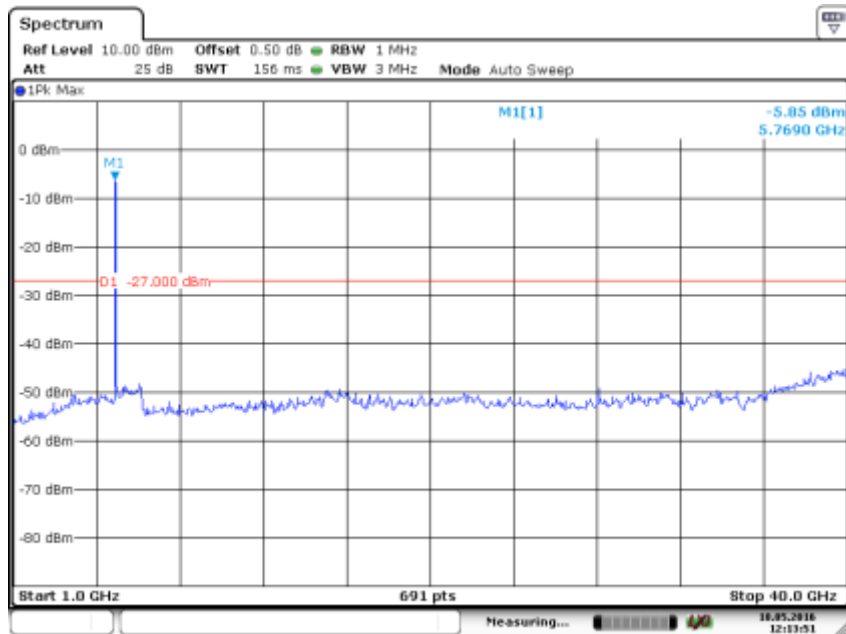


Date: 18.MAY.2016 12:12:10

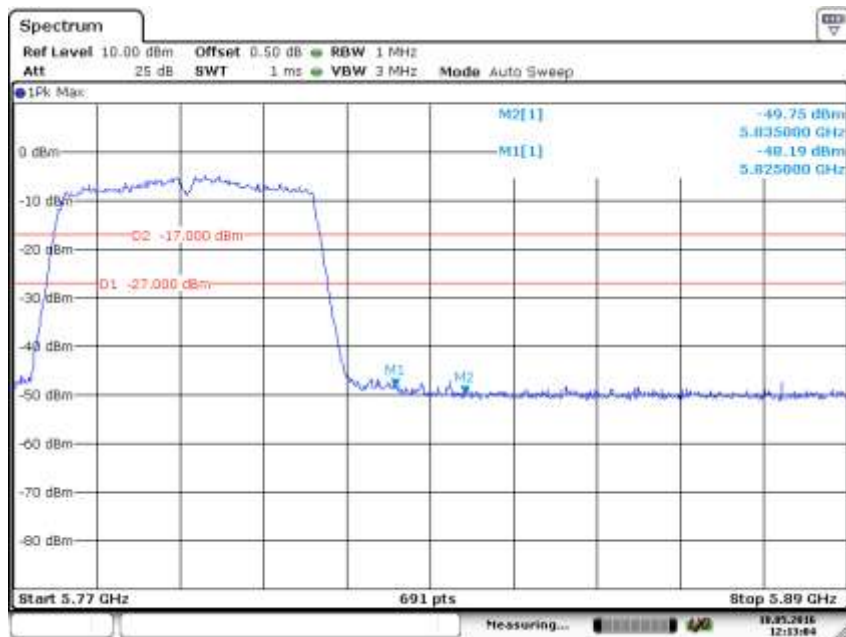
5795MHz



Date: 18.MAY.2016 12:14:13



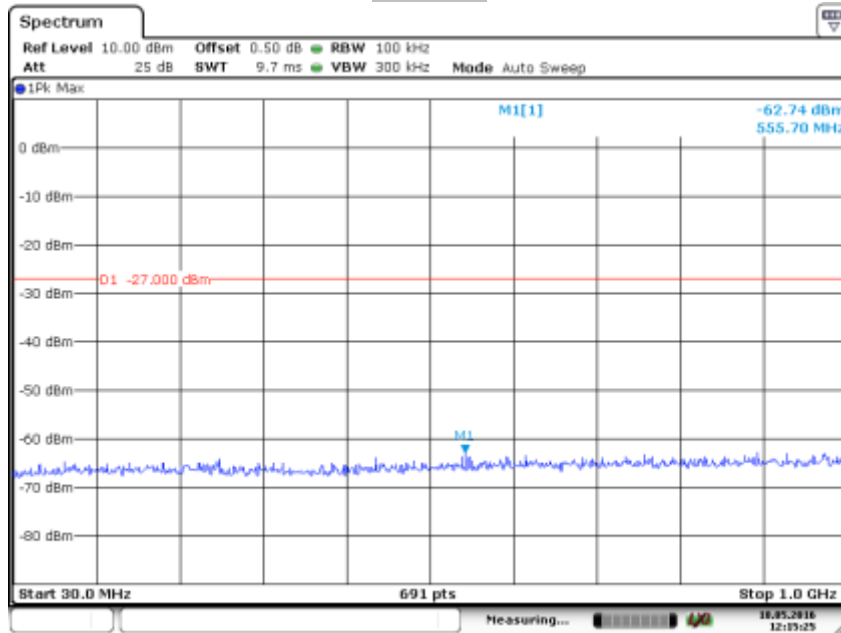
Date: 18.MAY.2016 12:13:51



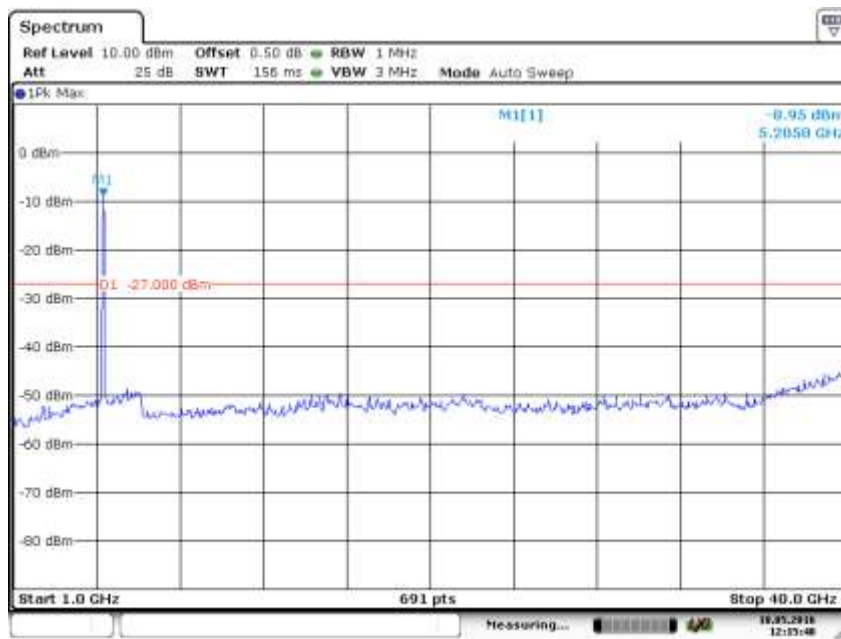
Date: 18.MAY.2016 12:13:04

IEEE 802.11ac-VHT80 modulation Test Result

5210MHz



Date: 18.MAY.2016 12:15:25

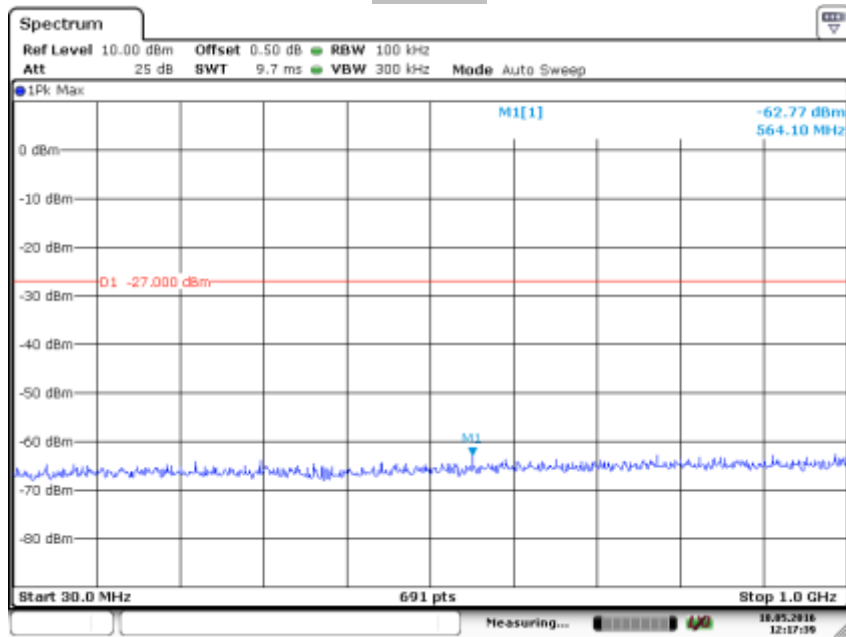


Date: 18.MAY.2016 12:15:49

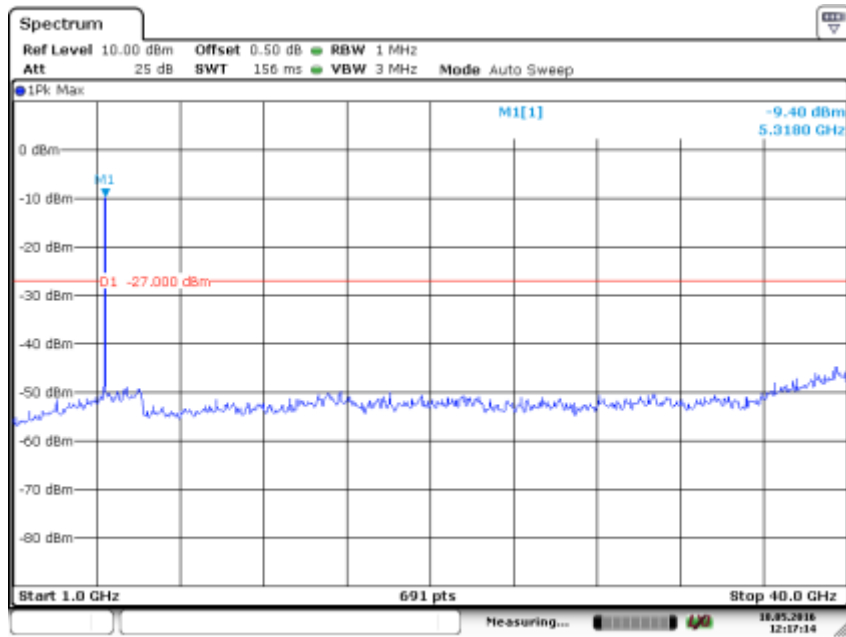


Date: 18.MAY.2016 12:18:16

5290MHz



Date: 18.MAY.2016 12:17:39

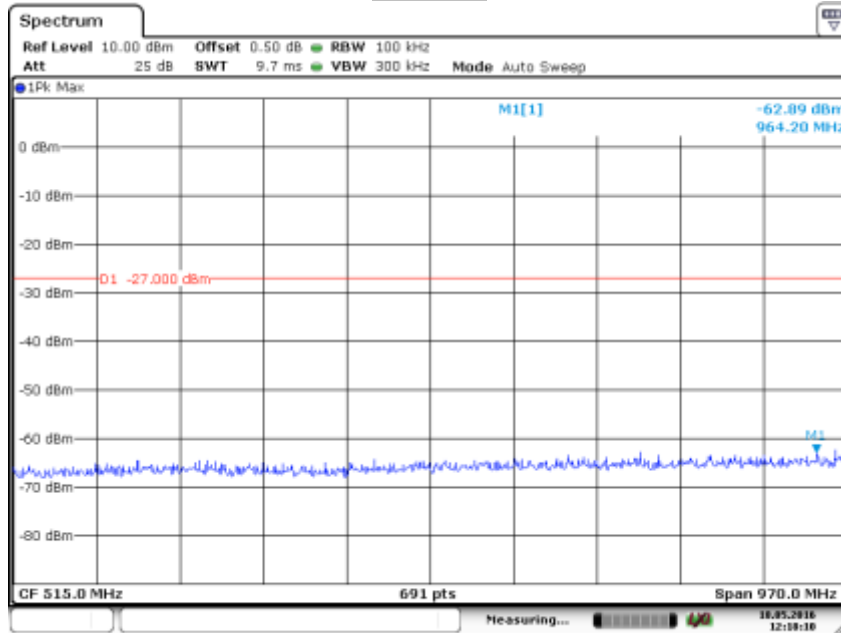


Date: 18.MAY.2016 12:17:14

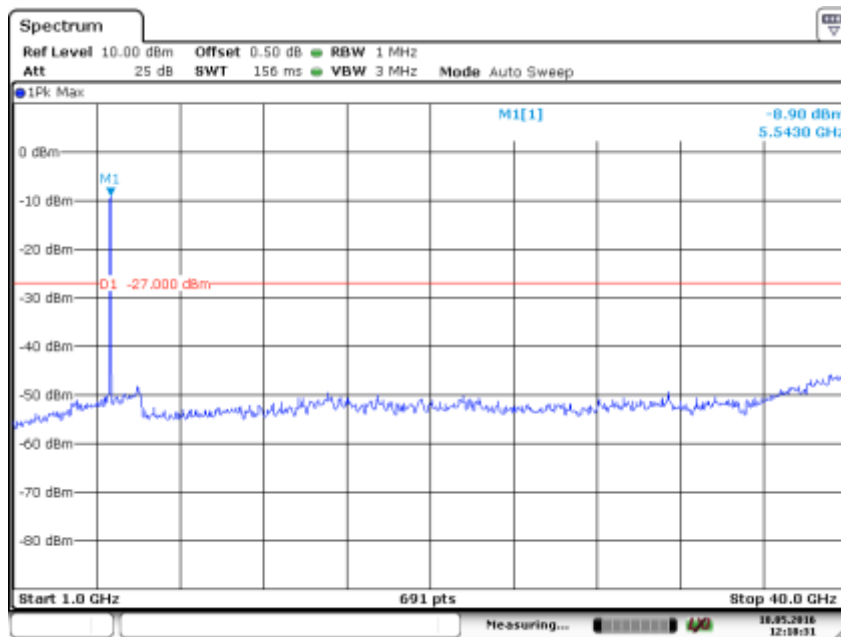


Date: 18.MAY.2016 12:18:56

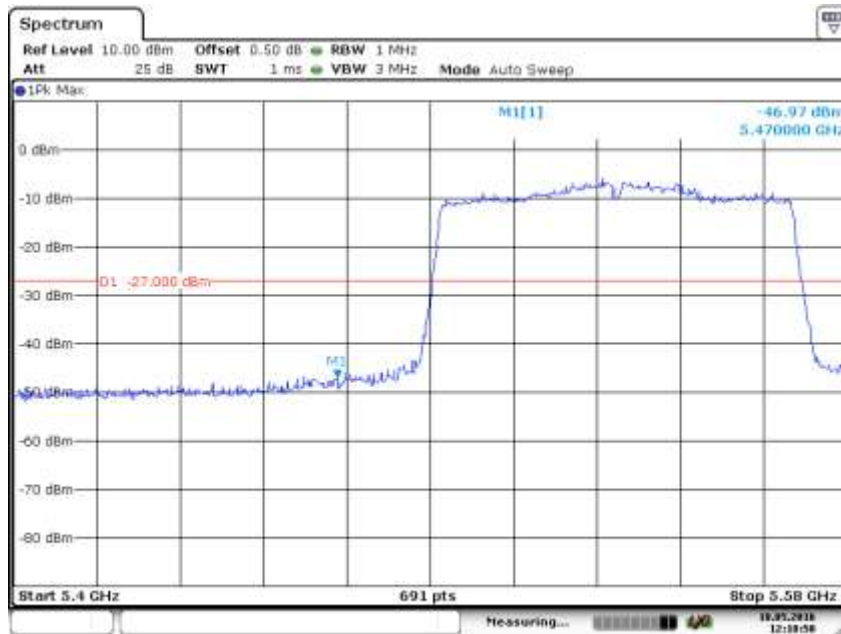
5530MHz



Date: 18.MAY.2016 12:18:10

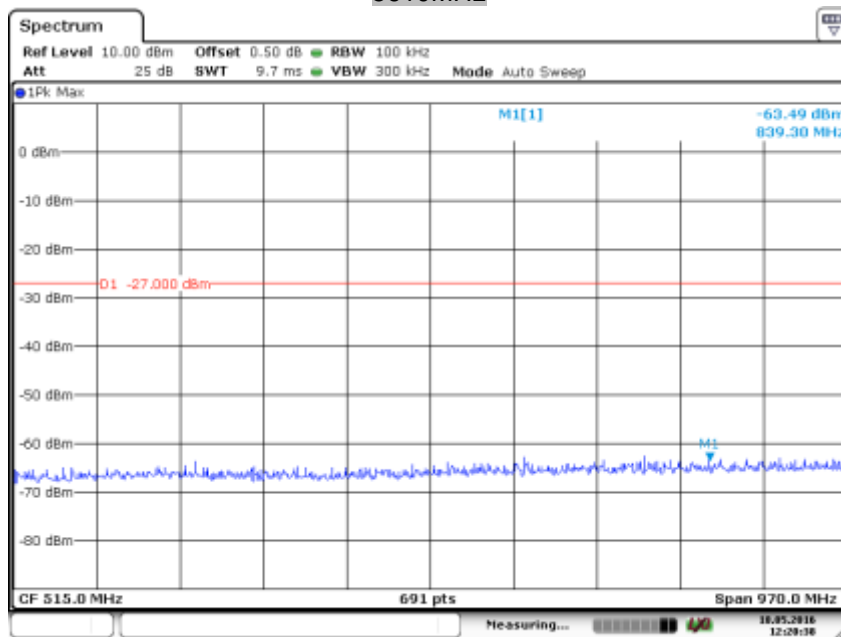


Date: 18.MAY.2016 12:18:31

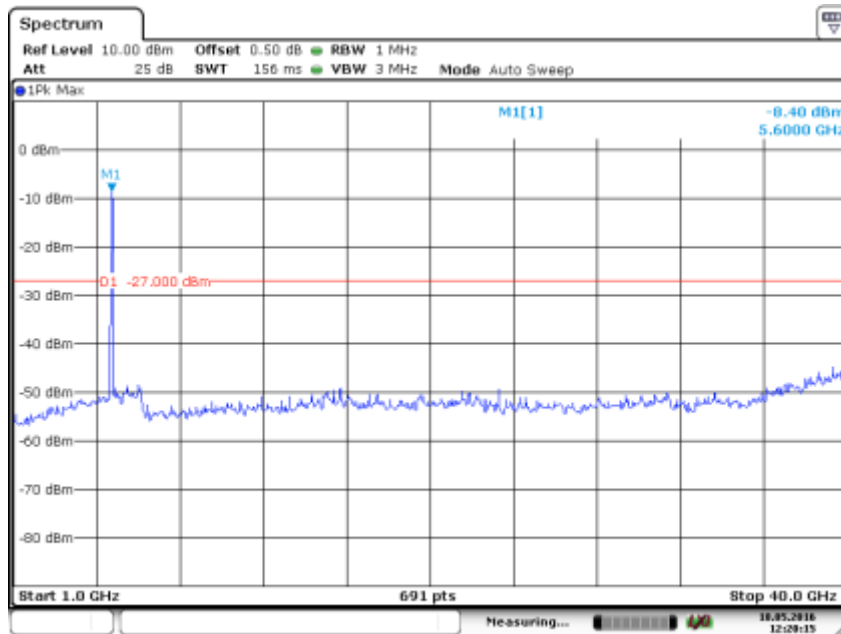


Date: 18.MAY.2016 12:18:58

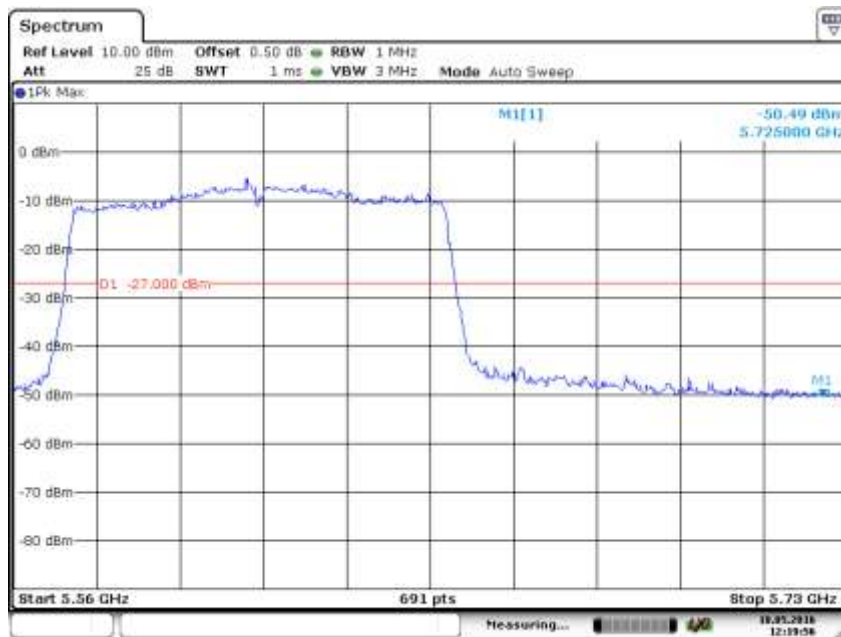
5610MHz



Date: 18.MAY.2016 12:20:38

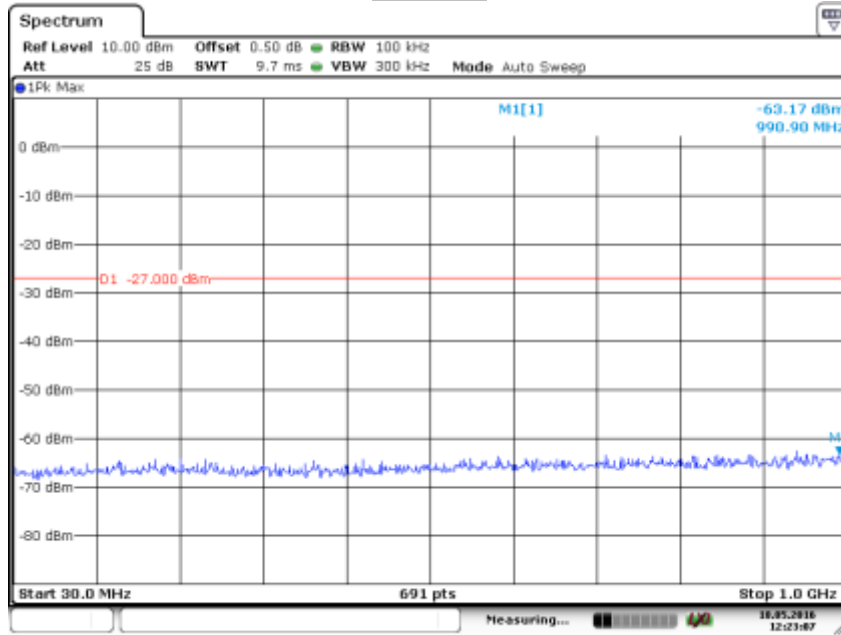


Date: 18.MAY.2016 12:20:15

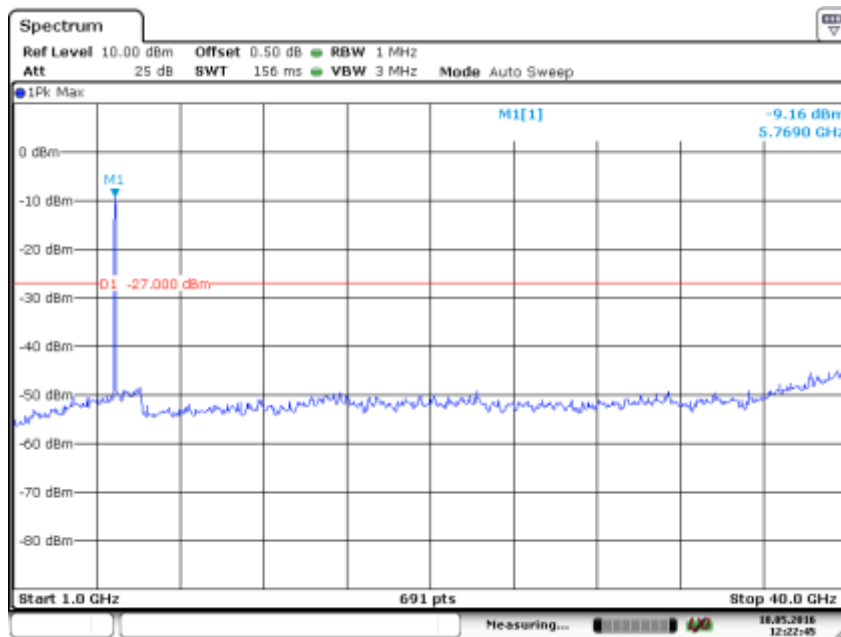


Date: 18.MAY.2016 12:19:56

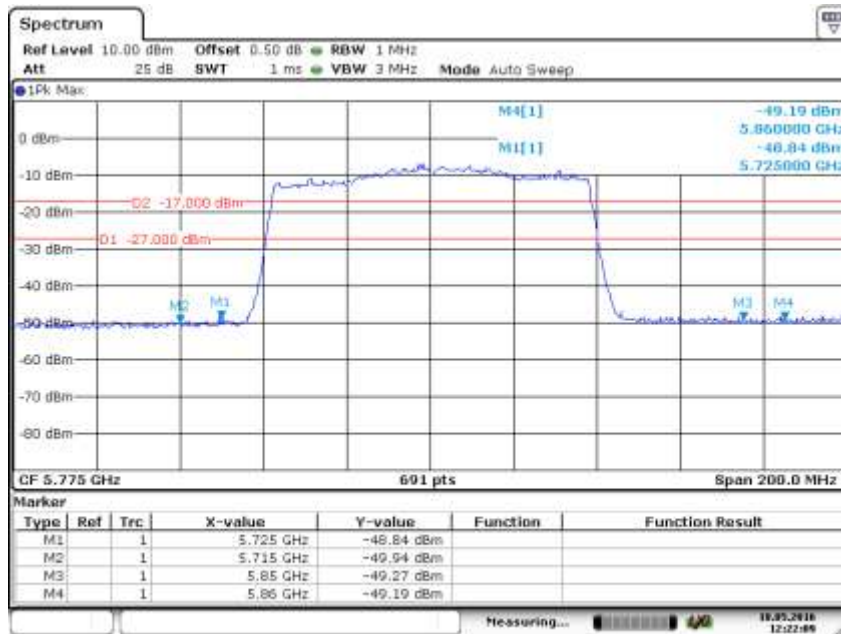
5775MHz



Date: 18.MAY 2016 12:23:07



Date: 18.MAY 2016 12:22:46



Date: 18.MAY 2016 12:22:09

Transmitting spurious emission test result as below (Radiated Mode):

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Transmitting spurious emission test result as below:

802.11A Modulation 5180MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
72.68	20.66	Horizontal	40.00	19.34	QP	Pass
139.02	28.99	Horizontal	43.50	14.51	QP	Pass
257.14	25.64	Horizontal	46.00	20.36	QP	Pass
959.96	34.06	Horizontal	46.00	11.94	QP	Pass
72.20	26.53	Vertical	40.00	13.47	QP	Pass
146.78	23.91	Vertical	43.50	19.59	QP	Pass
257.14	27.63	Vertical	46.00	18.37	QP	Pass
1146.60	34.27	Horizontal	74.00	39.73	PK	Pass
1719.90	35.63	Horizontal	74.00	38.37	PK	Pass
2388.30	36.45	Horizontal	74.00	37.55	PK	Pass
3453.40	37.71	Horizontal	74.00	36.29	PK	Pass
1146.60	31.15	Vertical	74.00	42.85	PK	Pass
1719.90	36.19	Vertical	74.00	37.81	PK	Pass
2399.20	36.54	Vertical	74.00	37.46	PK	Pass
3453.40	39.29	Vertical	74.00	34.71	PK	Pass
*5150	39.88	Horizontal	74	34.12	PK	Pass
*5350	33.70	Horizontal	74	40.30	PK	Pass
*5460	32.61	Horizontal	74	41.39	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	43.32	Vertical	74	30.68	PK	Pass
*5350	34.49	Vertical	74	39.51	PK	Pass
*5460	33.55	Vertical	74	40.45	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11A Modulation 5320MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
*5150	34.58	Horizontal	74	39.42	PK	Pass
*5350	36.61	Horizontal	74	37.39	PK	Pass
*5460	31.63	Horizontal	74	42.37	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	40.86	Vertical	74	33.14	PK	Pass
*5350	42.12	Vertical	74	31.88	PK	Pass
*5460	38.54	Vertical	74	35.46	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11A Modulation 5500MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
*5150	34.35	Horizontal	74	39.65	PK	Pass
*5350	34.16	Horizontal	74	39.84	PK	Pass
*5460	36.83	Horizontal	74	37.17	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	33.94	Vertical	74	40.06	PK	Pass
*5350	33.75	Vertical	74	40.25	PK	Pass
*5460	39.42	Vertical	74	34.58	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11A Modulation 5700MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11A Modulation 5745MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11A Modulation 5825MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBuV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5190MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	39.67	Horizontal	74	34.33	PK	Pass
*5350	34.19	Horizontal	74	39.81	PK	Pass
*5460	34.07	Horizontal	74	39.93	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	38.76	Vertical	74	35.24	PK	Pass
*5350	33.47	Vertical	74	40.53	PK	Pass
*5460	34.90	Vertical	74	39.10	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5310MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	34.09	Horizontal	74	39.91	PK	Pass
*5350	33.98	Horizontal	74	40.02	PK	Pass
*5460	34.88	Horizontal	74	39.12	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	33.77	Vertical	74	40.23	PK	Pass
*5350	37.54	Vertical	74	36.46	PK	Pass
*5460	33.08	Vertical	74	40.92	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5510MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	34.23	Horizontal	74	39.77	PK	Pass
*5350	34.79	Horizontal	74	39.21	PK	Pass
*5460	35.53	Horizontal	74	38.47	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	34.31	Vertical	74	39.69	PK	Pass
*5350	34.79	Vertical	74	39.21	PK	Pass
*5460	37.75	Vertical	74	36.25	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5670MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5755MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11N40 Modulation 5795MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11AC-VHT80 Modulation 5210MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11AC-VHT80 Modulation 5290MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBµV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11AC-VHT80 Modulation 5530MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBμV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11AC-VHT80 Modulation 5610MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBμV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

802.11AC-VHT80 Modulation 5775MHz Test Result

Frequency	Emission Level	Polarization	Limit	Margin	Detector	Result
MHz	dBuV/m		dBμV/m	dB		
*5150	---	Horizontal	74	---	PK	Pass
*5350	---	Horizontal	74	---	PK	Pass
*5460	---	Horizontal	74	---	PK	Pass
7000-40000	---	Horizontal	74	---	PK	Pass
*5150	---	Vertical	74	---	PK	Pass
*5350	---	Vertical	74	---	PK	Pass
*5460	---	Vertical	74	---	PK	Pass
7000-40000	---	Vertical	74	---	PK	Pass

Remark:

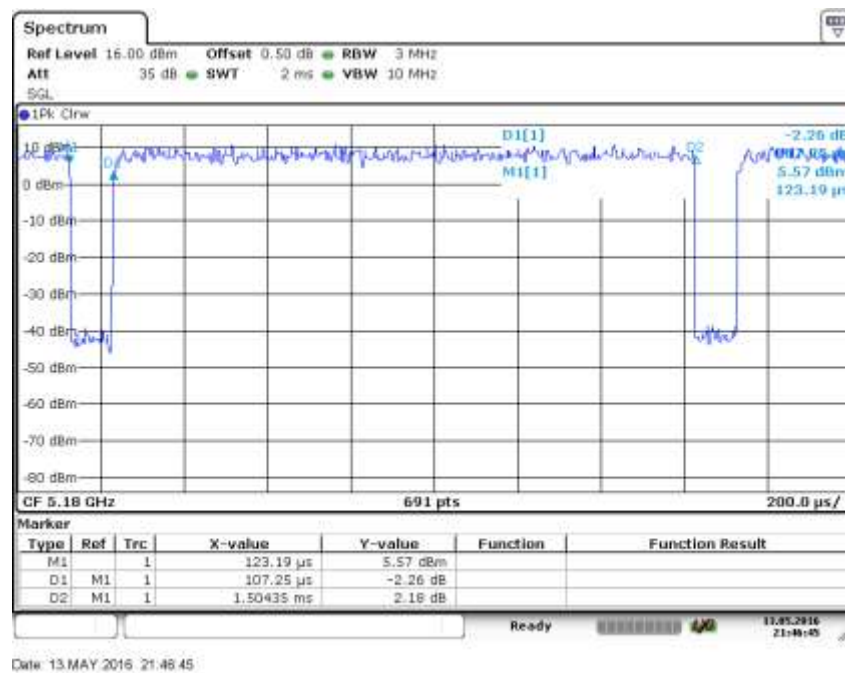
- (1) QP Emission Level= Antenna Factor +Cable Loss + Reading
 PK Emission Level= Antenna Factor +Cable Loss - Amp. factor + Reading
 AV Emission Level= PK Emission Level+20log(dutycycle)
- (2) “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.
- (3) We test all modes and only the worse case for each bandwidth recorded in the report.
- (4) Testing is carried out with frequency rang 9KHz to 40GHz, which below 30MHz and data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

9.6 Duty Cycle

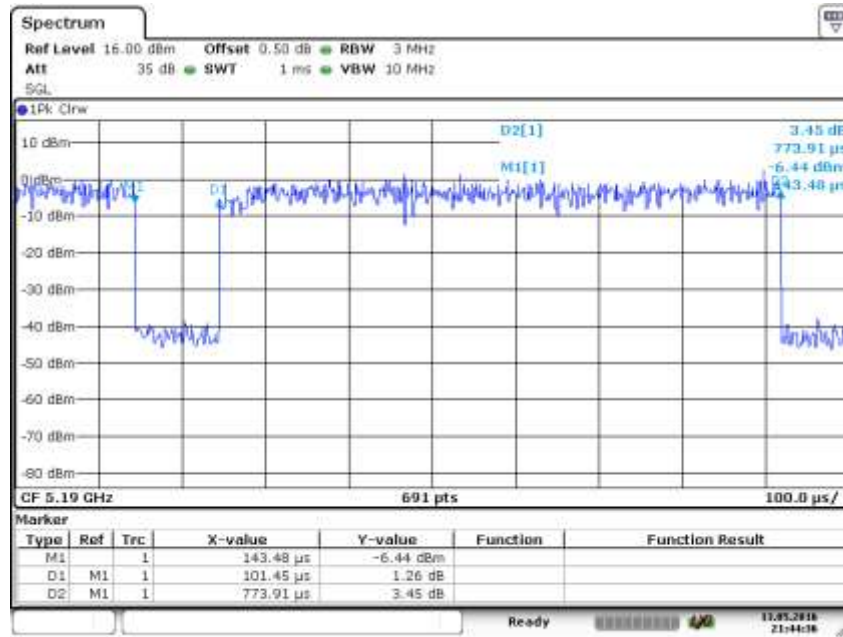
Test Data:

Mode	ON Time (msec)	Period (msec)	Duty Cycle (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
802.11a	1.504	1.611	0.9336	93.36%	0.30
802.11n HT20	0.774	0.875	0.8846	88.46%	0.53
802.11n HT40	0.446	0.547	0.8154	81.54%	0.89
802.11ac VHT20	0.270	0.438	0.6164	61.64%	2.10
802.11ac VHT40	0.092	0.285	0.3228	32.28%	4.91
802.11ac VHT80	0.066	0.231	0.2857	28.57%	5.44

802.11a

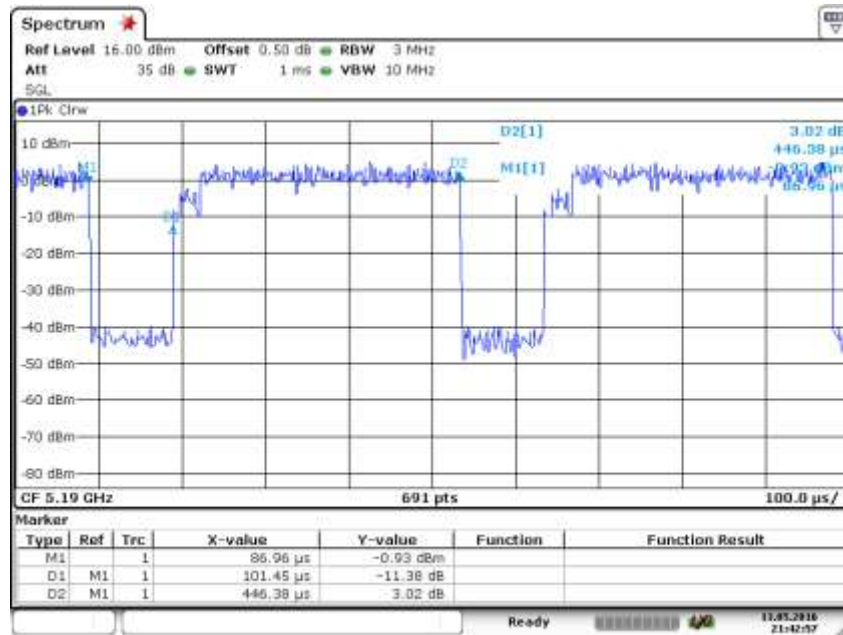


802.11n HT20



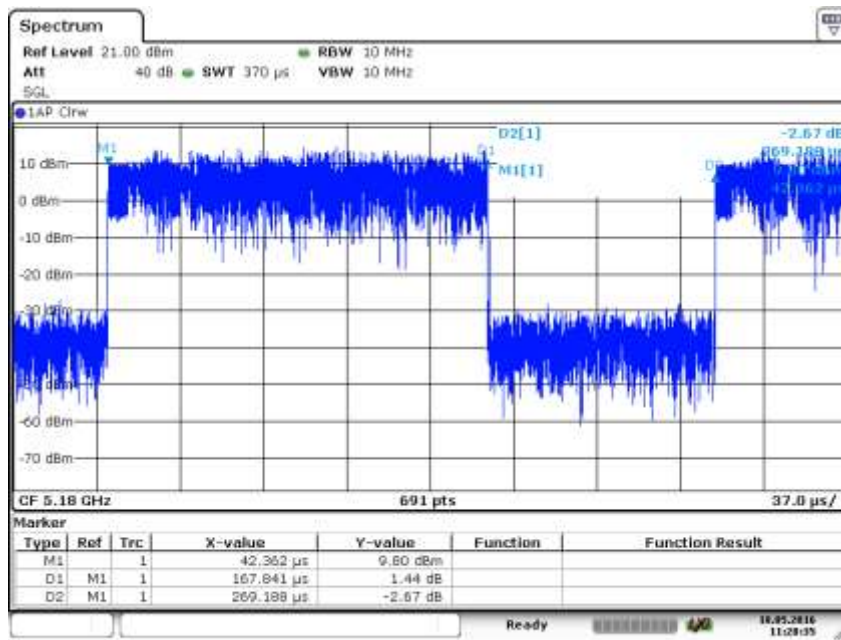
Date: 13.MAY.2016 21:44:36

802.11n HT40



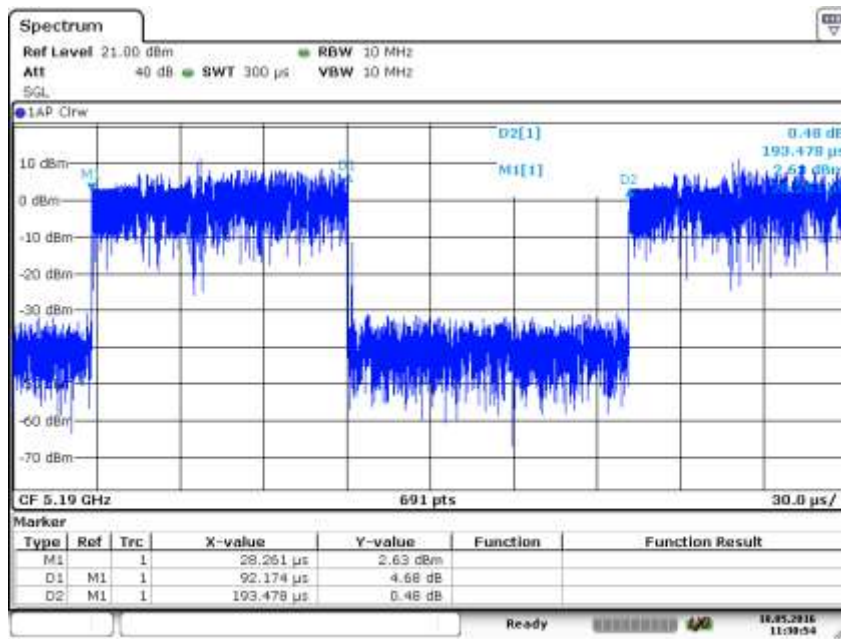
Date: 13.MAY.2016 21:42:57

802.11ac VHT20



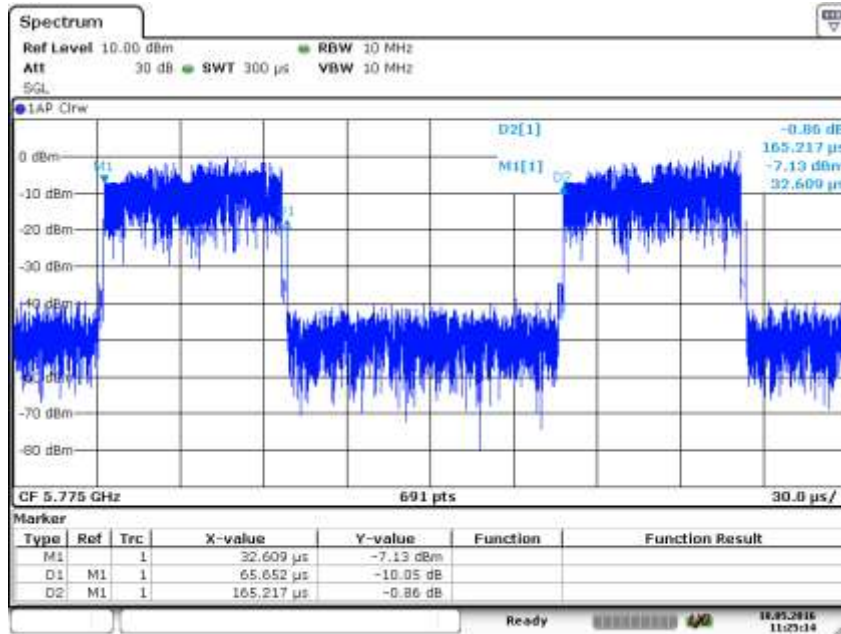
Date: 18.MAY.2016 11:28:35

802.11ac VHT40



Date: 18.MAY.2016 11:30:54

802.11ac VHT80



Date: 18.MAY.2016 11:25:14

9.7 Frequencies Stability

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
	5180
V nom(V)	5180.0430
V max(V)	5179.9570
V min(V)	5179.9570
Max. Deviation Frequency	0.0430
Max. Frequency Error (ppm)	8.30

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
	5180
0	5180.0383
5	5180.0328
10	5180.0366
20	5180.0379
30	5180.0389
40	5180.0327
Max. Deviation Frequency	0.0389
Max. Frequency Error (ppm)	7.51

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
	5500
V nom(V)	5500.0241
V max(V)	5500.0211
V min(V)	5500.0205
Max. Deviation Frequency	0.0241
Max. Frequency Error (ppm)	4.38

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
	5500
0	5500.0194
5	5500.0231
10	5500.0219
20	5500.0220
30	5500.0211
40	5500.0172
Max. Deviation Frequency	0.0231
Max. Frequency Error (ppm)	4.20

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
V nom(V)	5745.0430
V max(V)	5745.0430
V min(V)	5745.0430
Max. Deviation Frequency	0.0430
Max. Frequency Error (ppm)	7.48

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
0	5745.0420
5	5745.0380
10	5745.0400
20	5745.0385
30	5745.0420
40	5745.0411
Max. Deviation Frequency	0.0420
Max. Frequency Error (ppm)	7.31

Remark: V min(V) = 85% of the nominal supply voltage
 V max(V)=115% of the nominal supply voltage

9.8 Dynamic Frequency Selection (DFS)

1、 General Test Condition

Parameters of EUT	
Frequency	5250 – 5350 MHz & 5470 – 5725 MHz
Operational Mode	Slave
Modulation:	OFDM
Channel Bandwidth:	20 MHz , 40 MHz, 80 MHz

Note: This device was functioned as a Slave device during the DFS

2、 Test requirement

The manufacturer shall whether the EUT is capable of operating as a master and a client. If the EUT is capable of operating in more than one operating mode then each operating mode shall be tested separately.

DFS Applicability

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

DFS Applicability During Normal Operation

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Yes	Not required
Uniform Spreading	Yes	Yes	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

3、 Test Limited

According to KDB 905462 D02 Table 4 DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

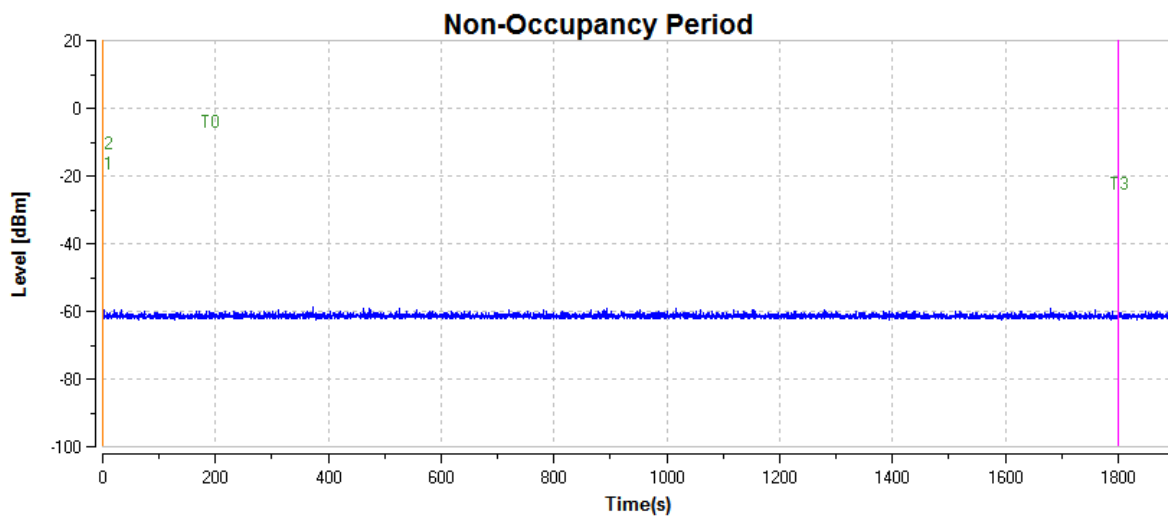
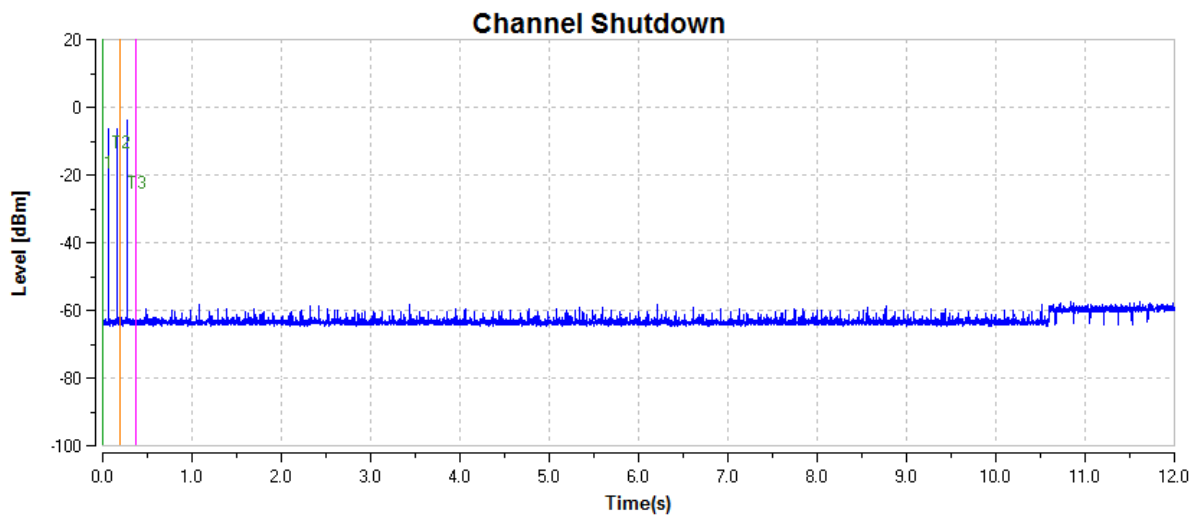
Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

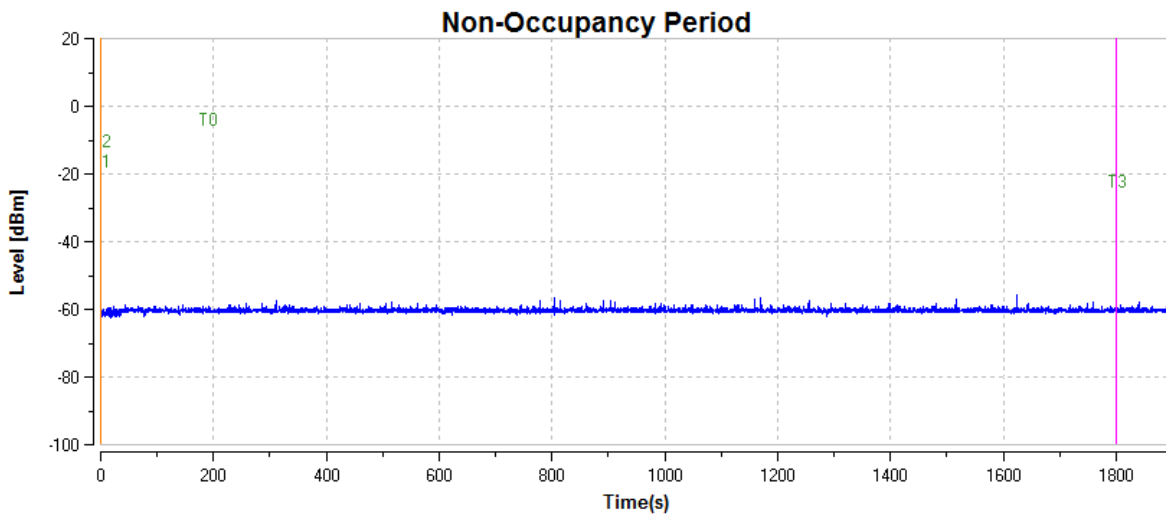
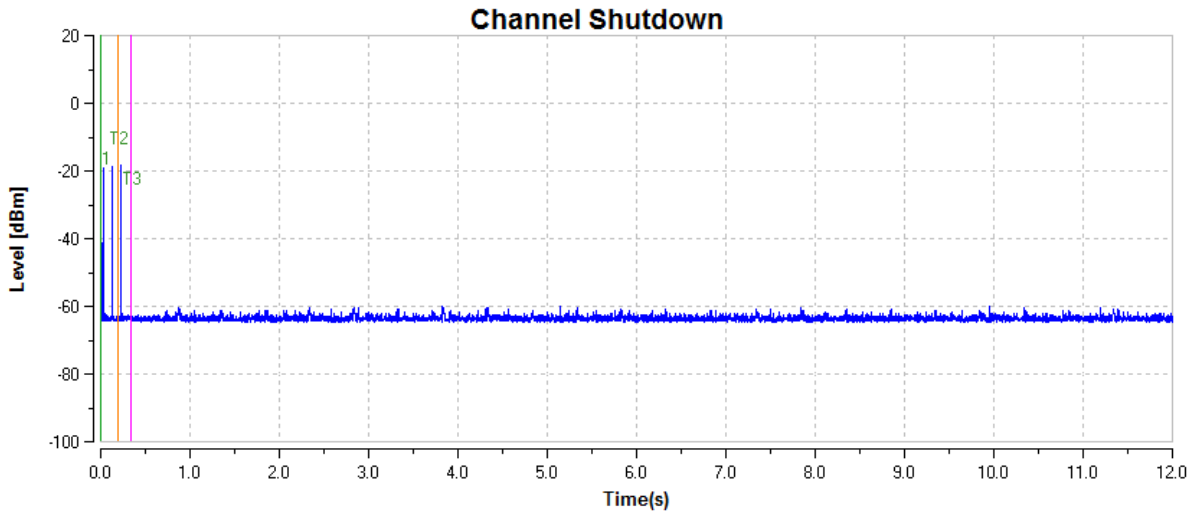
4、 Test Result

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	No Applicable	N/A
15.407	Channel Availability Check time	No Applicable	N/A
15.407	Channel Move time	Applicable	Pass
15.407	Channel Closing Transmission Time	Applicable	Pass
15.407	Non-Occupancy Period	Applicable	Pass
15.407	Uniform Spreading	No Applicable	N/A
15.407	U-NII Detection Bandwidth	No Applicable	N/A

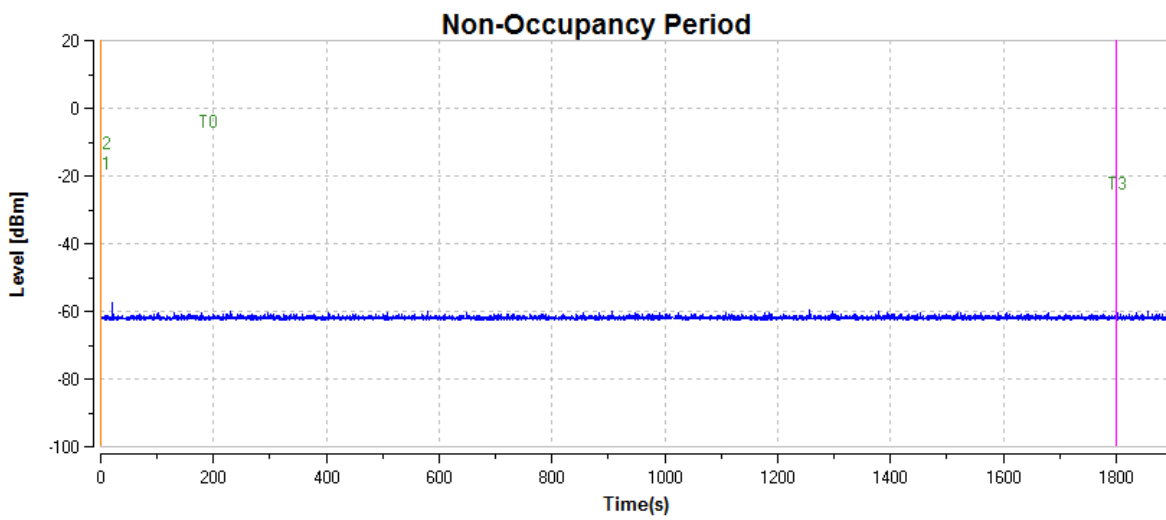
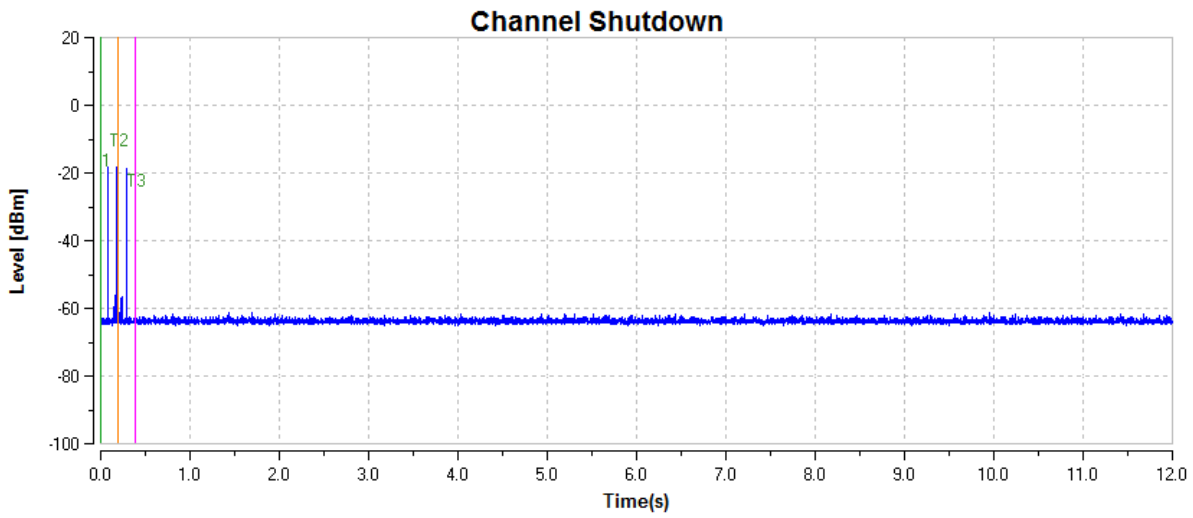
TX(20M)



TX(40M)



TX(80M)



10 Test Equipment List

List of Test Instruments

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2016-7-24
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2016-8-14
Horn Antenna	Rohde & Schwarz	HF907	102294	2016-7-24
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2016-7-24
3m Semi-anechoic chamber	TDK	9X6X6	----	2019-5-29
Test software	Rohde & Schwarz	EMC32	Version 9.15.00	N/A
Signal Analyzer	Rohde & Schwarz	FSV40	101030	2016-7-24

11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 9kHz-30MHz	4.70dB
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.99dB; Vertical: 4.97dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-18000MHz	Horizontal: 4.96dB; Vertical: 4.95dB;
Uncertainty for Radiated Emission in 3m chamber 18000MHz-40000MHz	Horizontal: 5.14dB; Vertical: 5.12dB;
Uncertainty for Conducted RF test	Power level test involved: 2.06dB Frequency test involved: 1.16×10^{-7}

THE END