



# FCC Part 15.407

## TEST REPORT

For

### DT Research Inc.

6F., NO.1, Ning-Po E. Street, Taipei 100, Taiwan.

**Model: DT395CR, Atlas 91i**  
**FCC ID: YE3800J**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Mobile Tablet
<b>Report Producer:</b> Kaylee Chiang	<i>Kaylee Chiang</i>
<b>Report Number:</b> RTWD161214002-00D	
<b>Report Date:</b> 2017-01-07	
<b>Reviewed By:</b> Jerry Chang	<i>Jerry Chang</i>
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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Taiwan)

### REVISION HISTORY

Revision	Issue Date	Description
1.0	2017-01-07	Original

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## 1 General Information

### 1.1 Product Description for Equipment Under Test (EUT)

<b>Applicant</b>	: DT Research Inc. 6F., NO. 1, Ning-Po E. Street, Taipei 100, Taiwan
<b>Manufacturer</b>	: DT Research Inc. 6F., NO. 1, Ning-Po E. Street, Taipei 100, Taiwan
<b>Product</b>	: Mobile Tablet
<b>Model</b>	: DT395CR, Atlas 91i
<b>Trade Name</b>	: DT Research Inc.
<b>Frequency Range</b>	: 5180 MHz ~ 5240 MHz, 5260 MHz ~5320 MHz, 5500 MHz ~ 5720 MHz, 5745 MHz ~ 5825 MHz
<b>Transmit Power</b>	: IEEE 802.11a Mode: 14.39dBm IEEE802.11n HT20: 14.41dBm IEEE 802.11n HT40 Mode: 15.69dBm IEEE 802.11ac VHT80 Mode:14.95dBm
<b>Modulation Technique</b>	: IEEE 802.11a: OFDM IEEE 802.11n HT20Mode: OFDM IEEE 802.11n HT40Mode: OFDM IEEE 802.11ac VHT80Mode: OFDM
<b>Transmit Data Rate</b>	: IEEE 802.11a Mode :up to 54Mbps IEEE 802.11n Mode: up to 300Mbps IEEE 802.11ac Mode: up to 866.7Mbps
<b>Number of Channels</b>	: IEEE 802.11a / IEEE802.11n HT20 Mode: 25 Channels IEEE 802.11n HT40 Mode: 12 Channels IEEE 802.11ac VHT80 Mode: 6 Channels PCB Antenna
<b>Antenna Specification</b>	: Gain: Main 5150~5250MHz: 4.1 dBi 5250~5350MHz: 4.1 dBi 5470~5745MHz: 4.0 dBi 5725~5850MHz: 4.5 dBi Aux. 5150~5250MHz: 3.4 dBi 5250~5350MHz: 3.4 dBi 5470~5725MHz: 4.2 dBi 5750~5825MHz: 3.3 dBi
<b>Voltage Range</b>	: I/P: 100-240Vac, 1.7A O/P: 19Vdc, 3.42A
<b>Date of Test</b>	: Dec 27, 2016~Jan 06, 2017

*\*All measurement and test data in this report was gathered from production sample serial number: 161214002 (Assigned by BACL, Taiwan) The EUT supplied by the applicant was received on 2016-12-07.*

**Model Difference:**The major electrical and mechanical constructions of series models are identical to the basic model, except different model name and colors. The model, DT395CR is the testing sample, and the final test data are shown on this test report.

## 1.2 Objective

This report is prepared on behalf of *DT Research Inc.* in accordance with Part 2, Subpart J, Part 15, Subparts A, B, C and E of the Federal Communication Commission's rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, and section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

## 1.3 Related Submittal(s)/Grant(s)

FCC Part 15.247 DSS,DTS submission with FCC ID:YE3800J

## 1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

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

## 1.5 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Taiwan) to collect test data is located on the 70, Lane 169, Sec. 2, Datong Road, Xizhi Dist., New Taipei City 22183, Taiwan, R.O.C.

Test site at Bay Area Compliance Laboratories Corp. (Taiwan) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2014. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.10.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 431084. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## 2 System Test Configuration

### 2.1 Description of Test Configuration

The system was configured for testing in an engineering mode, which is provided by manufacture. The system support 802.11a/n ht20/n ht40/ac vht20/ac vht40/ac vht80, the ac vht20/ac vht40 were reduced since the identical parameters with 802.11n ht20 and ht40, except the 802.11ac channel cross the band UNII 2C to U-NII 3.

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
42	5210

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

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)
58	5290

For 802.11a, 802.11n ht20, Channel 52, 56 and 64 were tested, for 802.11n ht40, Channel 54, 62 weretested, for 802.11ac 80, channel 58 was tested.

FOR 5470 ~ 5725MHz

12 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600	144	5720

6 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590	142	5710

3 channels are provided for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
106	5510	138	5690
122	5610		

For 802.11a, 802.11n ht20, Channel 100, 116 and 140 were tested, for 802.11n ht40, Channel 102, 118and 134 were tested, for 802.11ac 80, channel 106, 122 were tested. For 802.11ac channel cross the band U-NII 2C to U-NII 3, channel 144 for ac20, 142 for ac40, 138 for ac80 were chosed to test for compliance requirement.

FOR 5745 ~ 5825MHz:

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442

For 802.11a, 802.11n ht20, Channel 149, 157 and 165 was tested, for 802.11n ht40, Channel 151, 159was tested, for 802.11ac 80, channel 155 was tested.

The device supports SISO at all modes and MIMO at 802.11n modes



### 2.2 Equipment Modifications

No modification was made to the EUT

### 2.3 EUT Exercise Software

The software was used “Diagnostics and Regulatory Testing Utility Version 1.7.4-1041”.

UNII Band	Mode	Channel	Frequency (MHz)	Power setting			
				SISO		MIMO	
				Chain 0	Chain 1	Chain 0	Chain 1
5150-5250MHz	802.11 a	Low	5180	20	19	-	-
		Middle	5200	20	20	-	-
		High	5240	21	20	-	-
	5G 802.11 n20	Low	5180	19	20	18.5	18
		Middle	5200	21	21	18	18
		High	5240	21	20	18	18
	5G 802.11 n40	Low	5190	18	19	15	16
		High	5230	21	21	19	19
	802.11 ac80	Middle	5210	16	15	13	15
5250-5350MHz	802.11 a	Low	5260	21	20	-	-
		Middle	5280	21	20	-	-
		High	5320	19	19	-	-
	5G 802.11 n20	Low	5260	22	21	18	18
		Middle	5280	21	21	18	18
		High	5320	21	21	18	18
	5G 802.11 n40	Low	5270	22	22	19	18
		High	5310	20	20	18.5	18.5
	802.11 ac80	Middle	5290	20	18	17	18
5470-5725MHz	802.11 a	Low	5500	19	19	-	-
		Middle	5580	21	20	-	-
		High	5700	18	18	-	-
	5G 802.11 n20	Low	5500	19	18	18	18
		Middle	5580	21	22	17.5	17.5
		High	5700	19	18	17.5	17.5

	5G 802.11 n40	Low	5510	20	21	18	18
		Middle	5590	20	21	19	19
		High	5670	22	23	19.5	19.5
	802.11 ac80	Low	5530	17	17	12	14
		High	5610	21	20	20	20
5470-5725MHz Cross Band	802.11ac20	High	5720	23	23	20	20
	802.11ac40	High	5710	23	23	20	20
	802.11ac80	High	5690	18	23	22	22
5725-5850MHz	802.11 a	Low	5745	22	21	-	-
		Middle	5785	22	21	-	-
		High	5825	22	21	-	-
	5G 802.11 n20	Low	5745	22	22	19	19
		Middle	5785	22	21	19	19
		High	5825	22	22	20	20
	5G 802.11 n40	Low	5755	23	25	20	20
		High	5795	22	24	20	20
	802.11 ac80	Middle	5775	22	22	18	18

The EUT was configured for testing in an engineering mode which was provided by the manufacturer. The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations.

- 802.11a:6Mbps
- 802.11an ht20 SISO:MCS0
- 802.11an ht20 MIMO: MCS8
- 802.11an ht40 SISO: MCS0
- 802.11an ht40 MIMO: MCS8
- 802.11ac 80:MCS0 Nss =1
- 802.11ac 80:MCS0 Nss =2

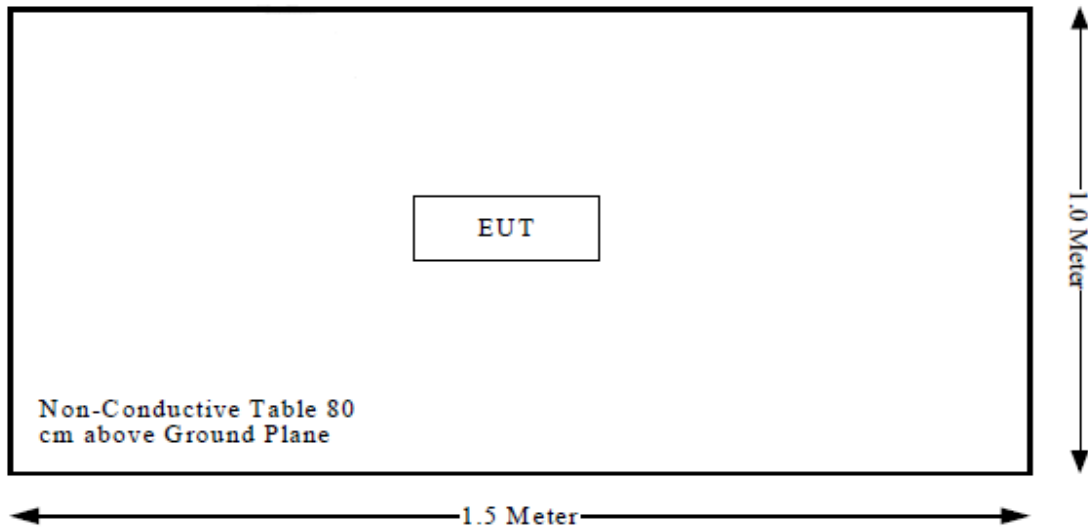
**2.4 Support Equipment List and Details**

Description	Manufacturer	Model Number	BSMI	FCC ID	S/N
N/A	N/A	N/A	N/A	N/A	N/A

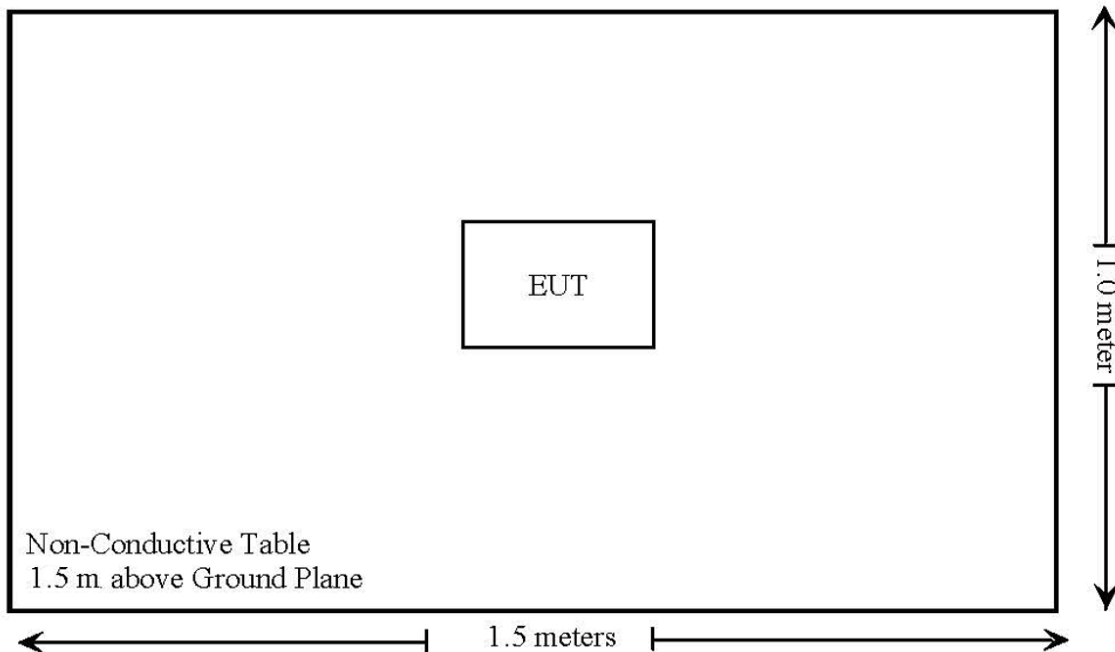
### 2.5 Block Diagram of Test Setup

See test photographs attached in Exhibit A for the actual connections between EUT and support equipment.

Below 1GHz:



Above 1GHz:



### 2.6 Duty Cycle

Duty cycle of test signal is < 98%, duty factor shall be considered.

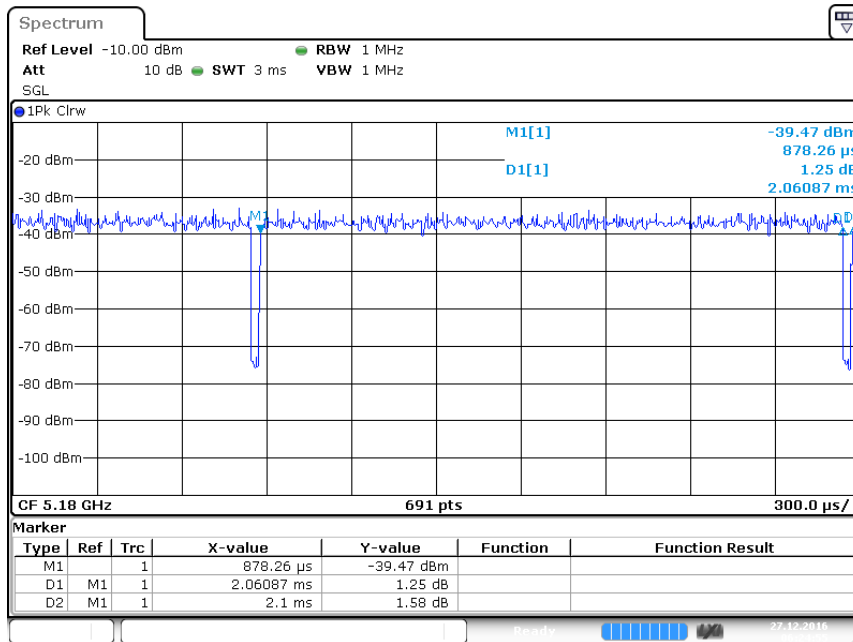
A Mode: Duty cycle = 0.98

An20/AC20 Mode: Duty cycle = 0.98

An40/AC40 Mode: Duty cycle = 0.97, Duty factor =  $10 * \log(1/x) = 0.13 \text{ dB}$ , SA VBW setting 1.2kHz

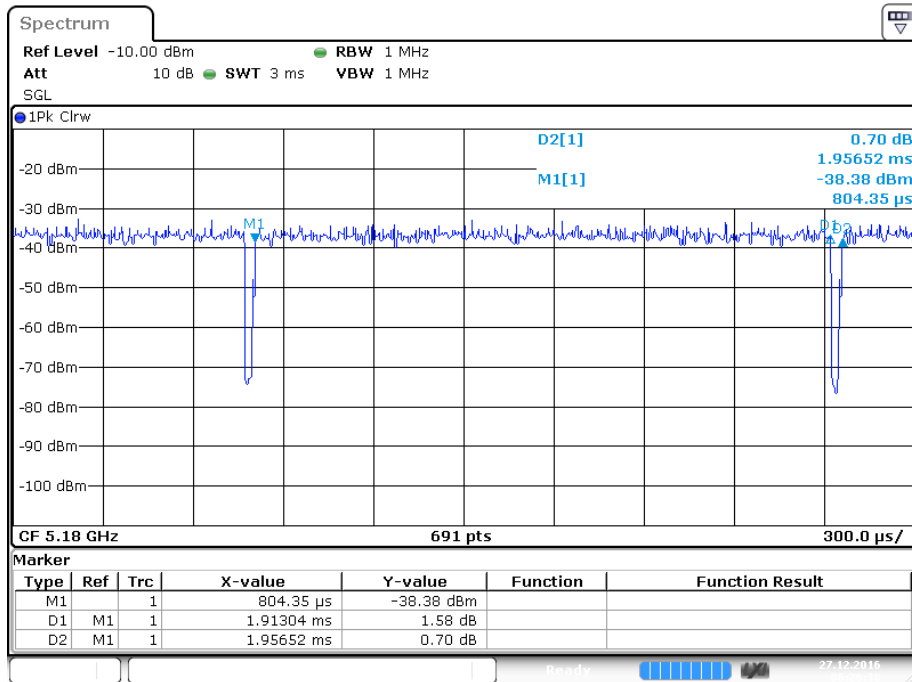
AC80 Mode: Duty cycle = 0.91, Duty factor =  $10 * \log(1/X) = 0.41 \text{ dB}$ , SA VBW setting 3kHz

#### A Mode



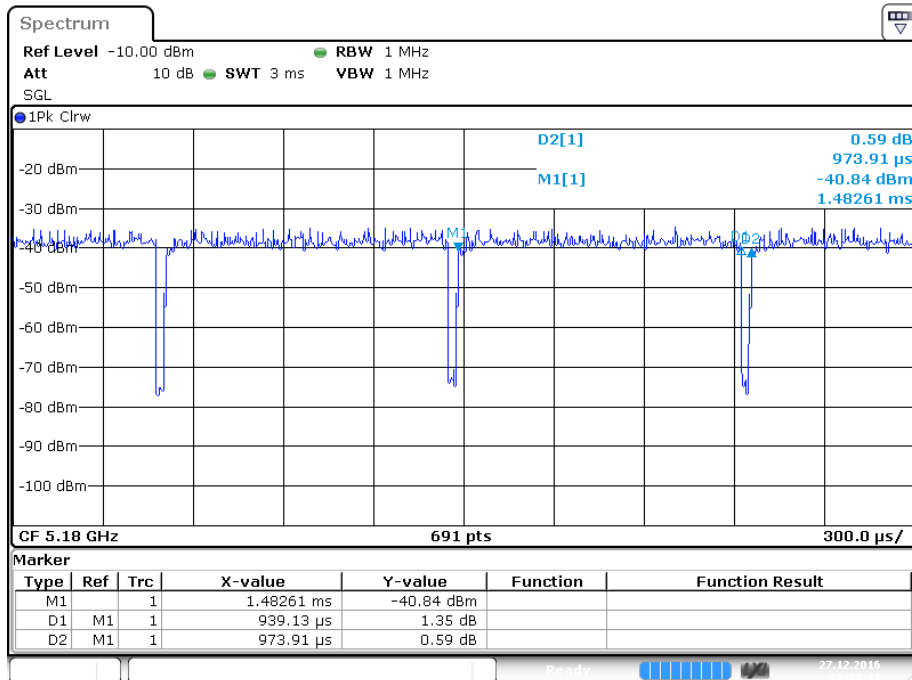
Date: 27 DEC 2016 06:24:55

N20 Mode



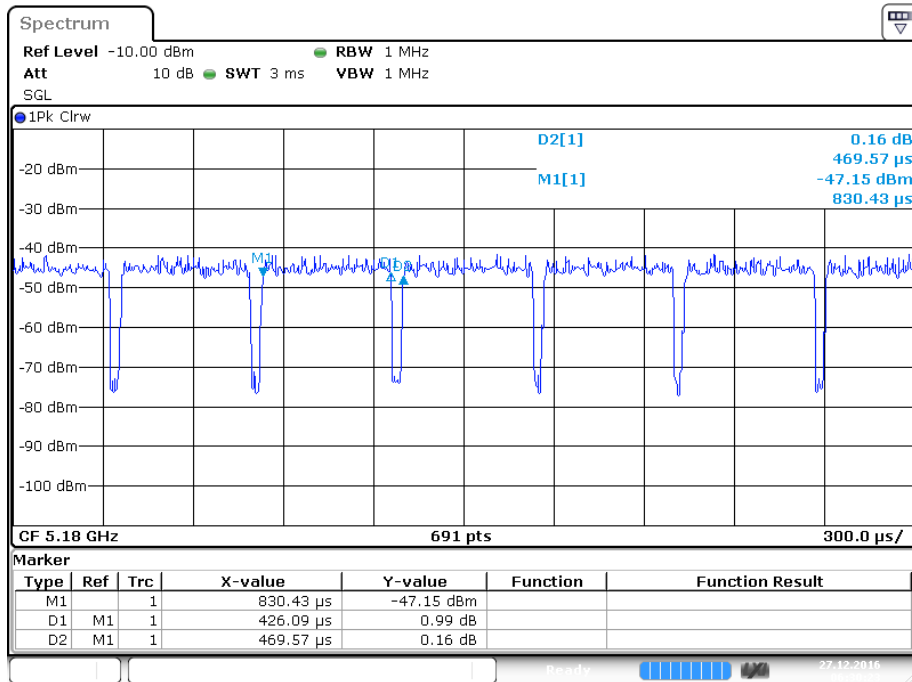
Date: 27 DEC. 2016 06:26:38

N40 Mode



Date: 27 DEC. 2016 06:28:31

AC80 Mode



Date: 27 DEC 2016 06:30:24

### 3 Summary of Test Results

FCC Rules	Description of Test	Result
§15.407 (f) & §1.1310 & §2.1093	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(6) & §15.207(a)	AC Line Conducted Emissions	Compliance
§15.205 & §15.209 & §15.407(b)	Undesirable Emission & Restricted Bands	Compliance
§15.407(a) (1)	Emission Bandwidth	Compliance
§15.407(a) (1)	Conducted Transmitter Output Power	Compliance
§15.407 (a) (1)(5)	Power Spectral Density	Compliance
§15.407(H)	Dynamic Frequency Selection	Compliance*

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## **4 FCC§15.407 (f) &§1.1310 &§2.1093- RF EXPOSURE**

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### **4.1 Applicable Standard**

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

### **4.2 Result**

The SAR data please refer to the SAR report, report No.:RTWD161214002-00E.



## 5 FCC §15.203 – Antenna Requirements

### 5.1 Applicable Standard

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

And according to FCC 47 CFR section 15.407 (a)(3), If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### 5.2 Antenna List and Details

Antenna Type	Manufacturer	Model	Type	Antenna Gain	Result
Main	Taiwan AnJie Electronics Co.,Ltd	DT395CR	PCB Antenna	5150~5250MHz: 4.1 dBi 5250~5350MHz: 4.1 dBi 5470~5745MHz: 4.0 dBi 5725~5850MHz: 4.5 dBi	Compliance
Aux.	Taiwan AnJie Electronics Co.,Ltd	DT395CR	PCB Antenna	5150~5250MHz: 3.4 dBi 5250~5350MHz: 3.4 dBi 5470~5725MHz: 4.2 dBi 5750~5825MHz: 3.3 dBi	Compliance

## 6 FCC §15.407 (b) (6)§15.207 - AC Line Conducted Emissions

### 6.1 Applicable Standard

FCC §15.207, §15.407(b) (6)

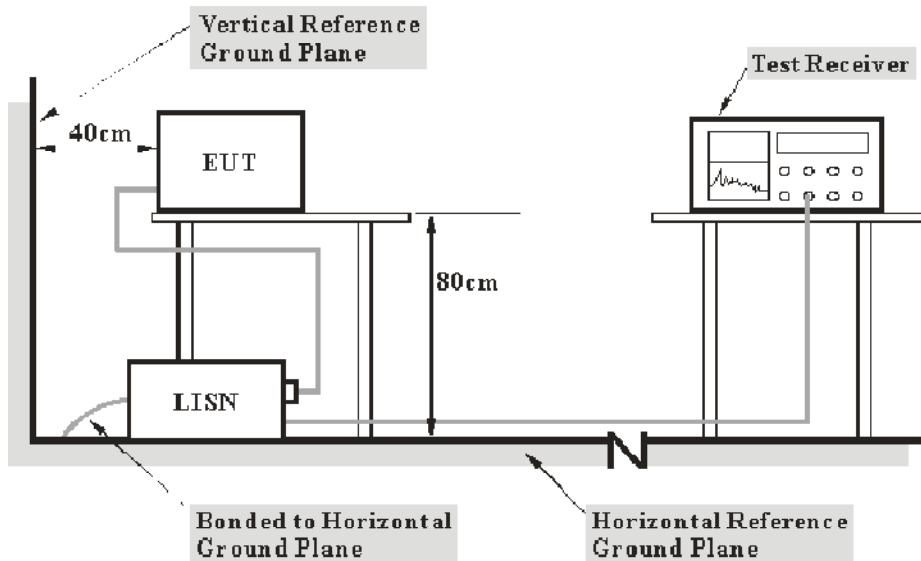
### 6.2 Measurement Uncertainty

Input quantities to be considered for conducted disturbance measurements maybe receiver reading, attenuation of the connection between LISN/ISN and receiver, LISN/ISN voltage division factor, LISN/ISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Taiwan) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report

Port	Expanded Measurement uncertainty
AC Mains	2.71 dB (k=2, 95% level of confidence)

### 6.3 EUT Setup



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

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

The spacing between the peripherals was 10 cm.

## 6.4 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz. During the conducted emission test, the EMI test receiver was set with the following configurations

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

## 6.5 Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

## 6.6 Corrected Factor & Margin Calculation

The factor is calculated by adding LISN/ISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Factor = LISN VDF + Cable Loss + Transient Limiter Attenuation

The "Over Limit" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an over limit of -7 dB means the emission is 7 dB below the limit. The equation for Over Limit calculation is as follows:

Over Limit = Level – Limit Line

## 6.7 Test Equipment List and Details

Manufacturers	Descriptions	Models	Serial Numbers	Calibration Date	Calibration Due Date
LISN	Rohde & Schwarz	ENV216	101248	2016/7/27	2017/7/26
LISN	EMCO	3816/2	75848	2016/8/4	2017/8/3
EMI Test Receiver	Rohde & Schwarz	ESCI	100540	2016/7/22	2017/7/21
Pulse Limiter	Rohde & Schwarz	ESH3Z2	TXZEM025	2016/8/19	2017/8/18
RF Cable	EMEC	EM-CB5D	001	2016/7/27	2017/7/26
Software	AUDIX	E3	V9.150826k	N.C.R	N.C.R

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

## 6.8 Test Environmental Conditions

Temperature:	25°C
Relative Humidity:	58 %
ATM Pressure:	1020 hPa

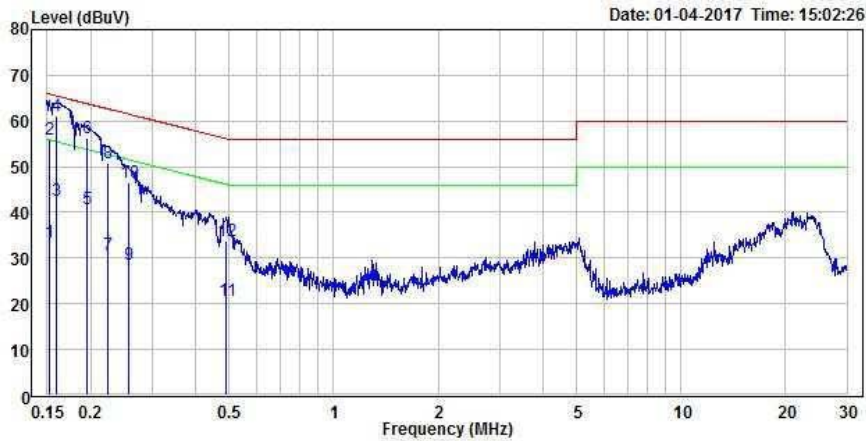
The testing was performed by David Hsu on 2017-01-04.

## 6.9 Test Results

Please refer to the following plots and tables.

Test Mode: Transmitting

Main: AC 120V/60 Hz, Line



Condition: Line

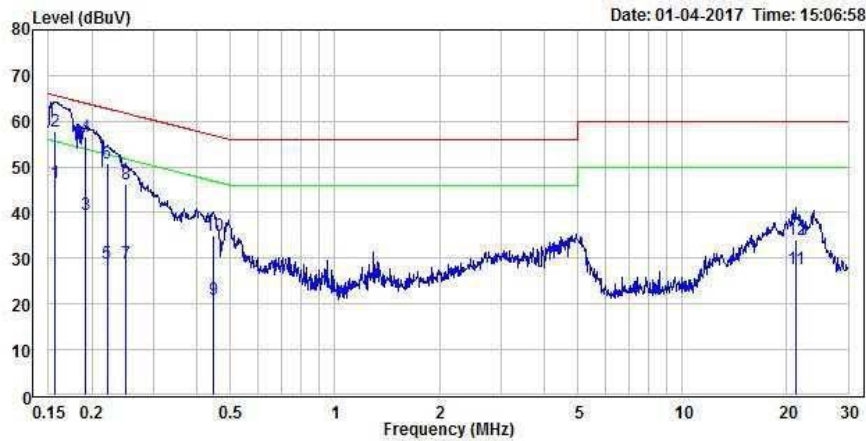
EUT :

Mode :

Note : 120V/60Hz

	Freq	Level	Limit	Over	Read		
	MHz	dBuV	Line	Limit	Factor	Level	Remark
			dBuV	dB	dB	dBuV	Pol/Phase
1	0.152	33.45	55.90	-22.45	19.56	13.89	Average Line
2	0.152	55.98	65.90	-9.92	19.56	36.42	QP Line
3	0.160	42.57	55.47	-12.90	19.56	23.01	Average Line
4	0.160	61.27	65.47	-4.20	19.56	41.71	QP Line
5	0.194	40.62	53.84	-13.22	19.58	21.04	Average Line
6	0.194	56.17	63.84	-7.67	19.58	36.59	QP Line
7	0.224	30.87	52.68	-21.81	19.57	11.30	Average Line
8	0.224	50.93	62.68	-11.75	19.57	31.36	QP Line
9	0.257	28.58	51.52	-22.94	19.56	9.02	Average Line
10	0.257	46.68	61.52	-14.84	19.56	27.12	QP Line
11	0.491	20.57	46.15	-25.58	19.55	1.02	Average Line
12	0.491	33.86	56.15	-22.29	19.55	14.31	QP Line

**Main: AC 120V/60 Hz, Neutral**



Condition: Neutral  
 EUT :  
 Mode :  
 Note : 120V/60Hz

	Freq	Level	Limit	Over	Read			
	MHz	dBuV	dBuV	dB	dB	dBuV	Remark	Pol/Phase
1	0.156	46.43	55.67	-9.24	19.55	26.88	Average	Neutral
2	0.156	57.79	65.67	-7.88	19.55	38.24	QP	Neutral
3	0.191	39.69	53.98	-14.29	19.53	20.16	Average	Neutral
4	0.191	56.44	63.98	-7.54	19.53	36.91	QP	Neutral
5	0.221	29.00	52.78	-23.78	19.52	9.48	Average	Neutral
6	0.221	50.72	62.78	-12.06	19.52	31.20	QP	Neutral
7	0.250	28.88	51.76	-22.88	19.52	9.36	Average	Neutral
8	0.250	46.19	61.76	-15.57	19.52	26.67	QP	Neutral
9	0.448	20.98	46.91	-25.93	19.54	1.44	Average	Neutral
10	0.448	34.90	56.91	-22.01	19.54	15.36	QP	Neutral
11	21.196	27.67	50.00	-22.33	20.03	7.64	Average	Neutral
12	21.196	34.20	60.00	-25.80	20.03	14.17	QP	Neutral

## **7 FCC §15.209, §15.205 && §15.407(b) –UNWANTED EMISSION**

### **7.1 Applicable Standard**

FCC§15.407 (b); §15.209; §15.205

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

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

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

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

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

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

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

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

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

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

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits

### 7.2 Measurement Uncertainty

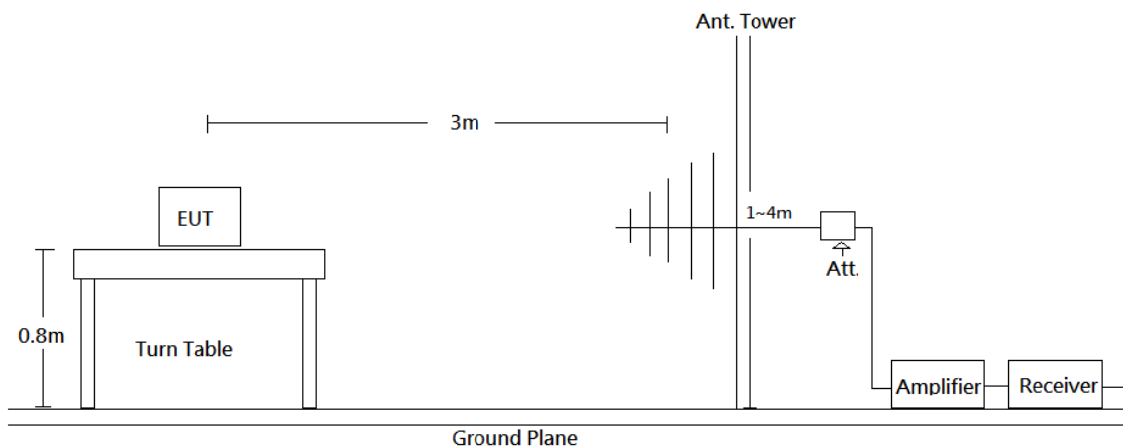
All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR 16-4-2:2011, the expanded combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Taiwan) is shown in below table. And the uncertainty will not be taken into consideration for the test data recorded in the report

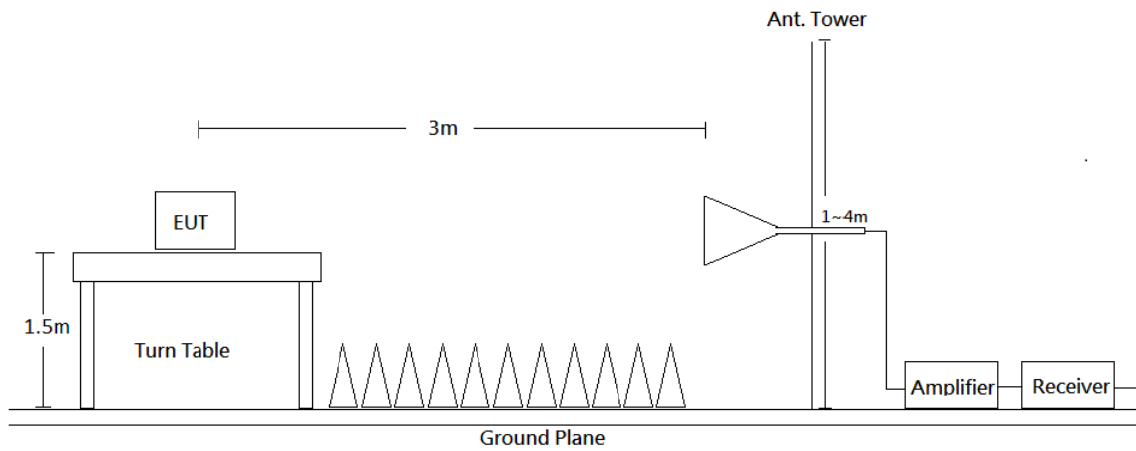
Frequency	Measurement uncertainty
30 MHz~200 MHz	4.21 dB (k=2, 95% level of confidence)
200 MHz~1 GHz	4.41 dB (k=2, 95% level of confidence)
1 GHz~6 GHz	4.51 dB (k=2, 95% level of confidence)
6 GHz~18 GHz	4.88 dB (k=2, 95% level of confidence)
18 GHz~26 GHz	4.30 dB (k=2, 95% level of confidence)
26 GHz~40 GHz	4.30 dB (k=2, 95% level of confidence)

### 7.3 EUT Setup

Blow 1 GHz:



**Above 1 GHz:**



Radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part 15.209 and FCC 15.407 Limits.

**7.4 EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 30 MHz to 40 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10.

Set RBW = 1 MHz, VBW= 3MHz for  $f > 1$  GHz for peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent.  $VBW \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Frequency Range	RBW	VBW	IF BW	Detector	Duty cycle
30-1000 MHz	100 kHz	300 kHz	120 kHz	QP	
Above 1 GHz	1 MHz	3 MHz	/	PK	
	1 MHz	10 Hz	/	Ave	>98%
	1 MHz	1/T	/	Ave	<98%

**7.5 Test Procedure**

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

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.



According to C63.10-2013, emission shall be computed as:  $E [dB\mu V/m] = EIRP[dBm] + 95.2$ , for  $d = 3$  meters.

Frequency Band 5150~5250 MHz, 5250~5350 MHz and 5470~5725MHz EIRP Limit -27(dBm/MHz)

Equivalent Field Strength at 3m is 68.23dB $\mu$ V/m

Frequency Band 5725~5850 MHz, EIRP is all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Equivalent Field Strength at 3m is all emissions shall be limited to a level of 68.2 dB $\mu$ V/m at 75 MHz or more above or below the band edge increasing linearly to 105.2 dB $\mu$ V/m at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 110.8 dB $\mu$ V/m at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 122.2dB $\mu$ V/m at the band edge

## 7.6 Corrected Factor & Margin Calculation

The Correct Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain

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

Margin = Result - Limit

## 7.7 Test Results Summary

According to the data in the following table, the EUT complied with the FCC §15.209 Limit. Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level complies with the limit if

$L_m + U(L_m) \leq L_{lim} + U_{cispr}$

In BACL,  $U(L_m)$  is less than  $U_{cispr}$ , if  $L_m$  is less than  $L_{lim}$ , it implies that the EUT complies with the limit.

## 7.8 Test Equipment List and Details

Manufacturers	Descriptions	Models	Serial Numbers	Calibration Date	Calibration Due Date
Broadband Antenna	Sunol Sciences	JB6	A050115	2016/11/16	2017/11/15
Amplifier	Sonoma	310N	130602	2016/7/15	2017/7/14
EMI Test Receiver	Rohde & Schwarz	ESR7	101419	2016/11/3	2017/11/2
Mircoflex Cable	UTIFLEX	UFB311A-Q-1440-300300	220490-006	2016/11/2	2017/11/1
Mircoflex Cable	UTIFLEX	UFB197C-1-2362-70U-70U	225757-001	2016/7/15	2017/7/14
Mircoflex Cable	UTIFLEX	UFA210A-1-3149-300300	MFR64639 226389-001	2016/12/1	2017/11/30
Turn Table	Champro	TT-2000	060772-T	N.C.R	N.C.R
Antenna Tower	Champro	AM-BS-4500-B	060772-A	N.C.R	N.C.R
Controller	Champro	EM1000	060772	N.C.R	N.C.R
Software	Farad	EZ_EMG	BACL-03A1	N.C.R	N.C.R
Horn Antenna	EMCO	3115	9311-4158	2016/5/10	2017/5/9
Horn Antenna	ETS-Lindgren	3116	00062638	2016/9/5	2017/9/4
Preamplifier	EMEC	EM01G18G	060657	2016/12/13	2017/12/12
Preamplifier	EMEC	EM18G40G	060656	2016/12/13	2017/12/12
Spectrum Analyzer	Rohde & Schwarz	FSEK30	825084/006	2016/7/14	2017/7/13
Mircoflex Cable	ROSNAL	K1K50-UP0264-K1K50-80CM	160309-2	2016/3/24	2017/3/23
Mircoflex Cable	ROSNAL	K1K50-UP0264-K1K50-450CM	160309-1	2016/3/24	2017/3/23

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

## 7.9 Test Environmental Conditions

<b>Temperature:</b>	24°C
<b>Relative Humidity:</b>	57 %
<b>ATM Pressure:</b>	1020 hPa

*The testing was performed by David Hsu on 2017-01-04 to 2017-01-06.*

**7.10 Test Results**Mode: *Transmitting Mode***Below 1 GHz****WIFI Mode****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	136.7000	37.08	-10.80	26.28	43.50	-17.22	100	66	QP
2	308.3900	35.16	-9.66	25.50	46.00	-20.50	100	71	QP
3	418.9700	37.36	-7.27	30.09	46.00	-15.91	100	166	QP
4	571.2600	32.25	-4.55	27.70	46.00	-18.30	100	73	QP
5	737.1300	35.62	-2.07	33.55	46.00	-12.45	100	348	QP
6	960.2300	33.72	2.92	36.64	54.00	-17.36	100	135	QP

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	106.6300	42.81	-12.81	30.00	43.50	-13.50	100	23	QP
2	137.6700	38.14	-10.84	27.30	43.50	-16.20	100	339	QP
3	201.6900	36.38	-11.09	25.29	43.50	-18.21	100	329	QP
4	568.3500	34.77	-4.62	30.15	46.00	-15.85	100	266	QP
5	737.1300	40.35	-2.07	38.28	46.00	-7.72	100	316	QP
6	891.3600	34.05	1.23	35.28	46.00	-10.72	100	34	QP

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Above 1 GHz**

**Mode:802.11a/ 5180MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.63	1.89	52.52	74.00	-21.48	100	308	peak
2	5150.000	38.76	1.89	40.65	54.00	-13.35	100	308	AVG
3	5180.000	92.51	1.95	94.46	NA	NA	100	308	peak
4	5180.000	82.20	1.95	84.15	NA	NA	100	308	AVG
5	10360.000	34.50	12.40	46.90	68.23	-21.33	232	113	peak
6	15540.000	35.96	11.98	47.94	74.00	-26.06	307	113	peak
7	15540.000	23.14	11.98	35.12	54.00	-18.88	307	113	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.57	1.89	52.46	74.00	-21.54	100	96	peak
2	5150.000	39.51	1.89	41.40	54.00	-12.60	100	96	AVG
3	5180.000	93.57	1.95	95.52	NA	NA	100	96	peak
4	5180.000	83.07	1.95	85.02	NA	NA	100	96	AVG
5	10360.000	34.70	12.40	47.10	68.23	-21.13	100	185	peak
6	15540.000	36.45	11.98	48.43	74.00	-25.57	100	185	peak
7	15540.000	23.65	11.98	35.63	54.00	-18.37	100	185	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5200MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5200.000	93.19	1.97	95.16	NA	NA	100	298	peak
2	5200.000	83.82	1.97	85.79	NA	NA	100	298	AVG
3	10440.000	34.11	12.46	46.57	68.23	-21.66	100	203	peak
4	15660.000	35.85	11.95	47.80	74.00	-26.20	100	203	peak
5	15660.000	23.36	11.95	35.31	54.00	-18.69	100	203	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5200.000	94.77	1.97	96.74	NA	NA	100	100	peak
2	5200.000	85.52	1.97	87.49	NA	NA	100	100	AVG
3	10440.000	35.51	12.46	47.97	68.23	-20.26	100	44	peak
4	15660.000	36.52	11.95	48.47	74.00	-25.53	100	44	peak
5	15660.000	23.64	11.95	35.59	54.00	-18.41	100	44	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5240MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5240.000	93.21	2.03	95.24	NA	NA	100	303	peak
2	5240.000	79.98	2.03	82.01	NA	NA	100	303	AVG
3	5350.000	49.97	2.21	52.18	74.00	-21.82	100	303	peak
4	5350.000	39.12	2.21	41.33	54.00	-12.67	100	303	AVG
5	10480.000	34.83	12.49	47.32	68.23	-20.91	100	32	peak
6	15720.000	35.41	11.94	47.35	74.00	-26.65	100	32	peak
7	15720.000	23.59	11.94	35.53	54.00	-18.47	100	32	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5240.000	94.59	2.03	96.62	NA	NA	100	97	peak
2	5240.000	82.97	2.03	85.00	NA	NA	100	97	AVG
3	5350.000	50.80	2.21	53.01	74.00	-20.99	100	97	peak
4	5350.000	39.15	2.21	41.36	54.00	-12.64	100	97	AVG
5	10480.000	34.62	12.49	47.11	68.23	-21.12	100	254	peak
6	15720.000	35.00	11.94	46.94	74.00	-27.06	100	254	peak
7	15720.000	23.71	11.94	35.65	54.00	-18.35	100	254	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5260MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.07	1.89	51.96	74.00	-22.04	100	312	peak
2	5150.000	38.36	1.89	40.25	54.00	-13.75	100	312	AVG
3	5260.000	90.77	2.07	92.84	NA	NA	100	312	peak
4	5260.000	74.07	2.07	76.14	NA	NA	100	312	AVG
5	10520.000	34.30	12.53	46.83	68.23	-21.40	100	5	peak
6	15780.000	34.74	11.92	46.66	74.00	-27.34	100	5	peak
7	15780.000	23.51	11.92	35.43	54.00	-18.57	100	5	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.27	1.89	52.16	74.00	-21.84	100	98	peak
2	5150.000	38.82	1.89	40.71	54.00	-13.29	100	98	AVG
3	5260.000	93.01	2.07	95.08	NA	NA	100	98	peak
4	5260.000	76.97	2.07	79.04	NA	NA	100	98	AVG
5	10520.000	36.36	12.53	48.89	68.23	-19.34	100	216	peak
6	15780.000	35.00	11.92	46.92	74.00	-27.08	100	216	peak
7	15780.000	23.36	11.92	35.28	54.00	-18.72	100	216	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5280MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5280.000	90.85	2.10	92.95	NA	NA	100	317	peak
2	5280.000	81.53	2.10	83.63	NA	NA	100	317	AVG
3	10560.000	34.58	12.56	47.14	68.23	-21.09	100	99	peak
4	15840.000	36.98	11.91	48.89	74.00	-25.11	100	99	peak
5	15840.000	23.94	11.91	35.85	54.00	-18.15	100	99	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5280.000	93.38	2.10	95.48	NA	NA	100	99	peak
2	5280.000	83.95	2.10	86.05	NA	NA	100	99	AVG
3	10560.000	35.57	12.56	48.13	68.23	-20.10	100	1	peak
4	15840.000	35.45	11.91	47.36	74.00	-26.64	100	1	peak
5	15840.000	23.64	11.91	35.55	54.00	-18.45	100	1	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.



**Mode:802.11a / 5320MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5320.000	91.20	2.15	93.35	NA	NA	100	321	peak
2	5320.000	81.62	2.15	83.77	NA	NA	100	321	AVG
3	5350.000	50.18	2.21	52.39	74.00	-21.61	100	321	peak
4	5350.000	39.17	2.21	41.38	54.00	-12.62	100	321	AVG
5	10640.000	34.96	12.65	47.61	74.00	-26.39	100	88	peak
6	10640.000	22.69	12.65	35.34	54.00	-18.66	100	88	AVG
7	15960.000	35.46	11.88	47.34	74.00	-26.66	100	88	peak
8	15960.000	23.75	11.88	35.63	54.00	-18.37	100	88	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5320.000	92.83	2.15	94.98	NA	NA	100	101	peak
2	5320.000	83.31	2.15	85.46	NA	NA	100	101	AVG
3	5350.000	49.98	2.21	52.19	74.00	-21.81	100	101	peak
4	5350.000	39.21	2.21	41.42	54.00	-12.58	100	101	AVG
5	10640.000	36.12	12.65	48.77	74.00	-25.23	100	19	peak
6	10640.000	22.53	12.65	35.18	54.00	-18.82	100	19	AVG
7	15960.000	36.21	11.88	48.09	74.00	-25.91	100	19	peak
8	15960.000	23.94	11.88	35.82	54.00	-18.18	100	19	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5500MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	51.10	2.38	53.48	74.00	-20.52	100	293	peak
2	5460.000	39.95	2.38	42.33	54.00	-11.67	100	293	AVG
3	5500.000	96.13	2.44	98.57	NA	NA	100	293	peak
4	5500.000	86.04	2.44	88.48	NA	NA	100	293	AVG
5	11000.000	34.39	13.00	47.39	74.00	-26.61	100	180	peak
6	11000.000	22.82	13.00	35.82	54.00	-18.18	100	180	AVG
7	16500.000	35.09	13.96	49.05	68.23	-19.18	100	180	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	51.52	2.38	53.90	74.00	-20.10	100	104	peak
2	5460.000	39.95	2.38	42.33	54.00	-11.67	100	104	AVG
3	5500.000	96.33	2.44	98.77	NA	NA	100	104	peak
4	5500.000	86.74	2.44	89.18	NA	NA	100	104	AVG
5	11000.000	33.91	13.00	46.91	74.00	-27.09	100	212	peak
6	11000.000	22.13	13.00	35.13	54.00	-18.87	100	212	AVG
7	16500.000	35.12	13.96	49.08	68.23	-19.15	100	212	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5580MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5580.000	98.83	2.64	101.47	NA	NA	100	296	peak
2	5580.000	87.97	2.64	90.61	NA	NA	100	296	AVG
3	11160.000	35.45	13.05	48.50	74.00	-25.50	100	243	peak
4	11160.000	22.28	13.05	35.33	54.00	-18.67	100	243	AVG
5	16740.000	33.99	15.11	49.10	68.23	-19.13	100	243	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5580.000	96.74	2.64	99.38	NA	NA	100	105	peak
2	5580.000	86.30	2.64	88.94	NA	NA	100	105	AVG
3	11160.000	34.79	13.05	47.84	74.00	-26.16	100	74	peak
4	11160.000	22.87	13.05	35.92	54.00	-18.08	100	74	AVG
5	16740.000	34.25	15.11	49.36	68.23	-18.87	100	74	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5700MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5700.000	95.49	2.96	98.45	NA	NA	100	293	peak
2	5700.000	85.35	2.96	88.31	NA	NA	100	293	AVG
3	5725.000	51.70	3.02	54.72	74.00	-19.28	100	293	peak
4	5725.000	40.70	3.02	43.72	54.00	-10.28	100	293	AVG
5	11400.000	34.66	13.13	47.79	74.00	-26.21	100	29	peak
6	11400.000	22.65	13.13	35.78	54.00	-18.22	100	29	AVG
7	17100.000	39.98	17.16	57.14	68.23	-11.09	100	29	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5700.000	94.23	2.96	97.19	NA	NA	100	84	peak
2	5700.000	84.90	2.96	87.86	NA	NA	100	84	AVG
3	5725.000	51.24	3.02	54.26	74.00	-19.74	100	84	peak
4	5725.000	40.61	3.02	43.63	54.00	-10.37	100	84	AVG
5	11400.000	34.27	13.13	47.40	74.00	-26.60	100	63	peak
6	11400.000	22.92	13.13	36.05	54.00	-17.95	100	63	AVG
7	17100.000	34.46	17.16	51.62	68.23	-16.61	100	63	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5745MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5643.400	57.80	2.80	60.60	68.20	-7.60	100	278	peak
2	5686.800	59.21	2.92	62.13	95.43	-33.30	100	318	peak
3	5705.000	58.51	2.96	61.47	106.60	-45.13	100	354	peak
4	5722.500	58.35	3.01	61.36	116.50	-55.14	100	325	peak
5	5745.000	96.42	3.07	99.49	NA	NA	100	294	peak
6	5745.000	84.92	3.07	87.99	NA	NA	100	294	AVG
7	5851.650	58.51	3.33	61.84	118.44	-56.60	100	298	peak
8	5871.250	59.68	3.40	63.08	106.25	-43.17	100	112	peak
9	5898.550	59.68	3.46	63.14	87.77	-24.63	100	357	peak
10	5934.600	59.97	3.55	63.52	68.20	-4.68	100	254	peak
11	11490.000	33.56	13.17	46.73	74.00	-27.27	316	29	peak
12	11490.000	22.18	13.17	35.35	74.00	-38.65	316	29	peak
13	17235.000	38.05	18.26	56.31	68.23	-11.92	29	29	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5640.250	51.95	2.80	54.75	68.20	-13.45	100	98	peak
2	5689.250	52.72	2.92	55.64	97.25	-41.61	100	202	peak
3	5718.650	55.22	3.00	58.22	110.42	-52.20	100	76	peak
4	5724.950	56.12	3.02	59.14	122.09	-62.95	100	82	peak
5	5745.000	96.72	3.07	99.79	NA	NA	100	82	peak
6	5745.000	84.83	3.07	87.90	NA	NA	100	82	AVG
7	5851.300	53.19	3.33	56.52	119.24	-62.72	100	17	peak
8	5870.200	53.36	3.39	56.75	106.54	-49.79	100	185	peak
9	5904.850	53.79	3.47	57.26	83.11	-25.85	100	91	peak
10	5941.950	53.81	3.57	57.38	68.20	-10.82	100	24	peak
11	11490.000	34.32	13.17	47.49	74.00	-26.51	100	68	peak
12	11490.000	22.17	13.17	35.34	54.00	-18.66	100	68	AVG
13	17235.000	34.34	18.26	52.60	68.23	-15.63	100	68	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5785MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5641.300	58.19	2.80	60.99	68.20	-7.21	100	242	peak
2	5695.200	57.86	2.94	60.80	101.65	-40.85	100	95	peak
3	5709.900	57.81	2.98	60.79	107.97	-47.18	100	265	peak
4	5723.900	57.80	3.01	60.81	119.69	-58.88	100	49	peak
5	5785.000	97.10	3.18	100.28	NA	NA	100	296	peak
6	5785.000	79.24	3.18	82.42	NA	NA	100	296	AVG
7	5852.000	58.99	3.34	62.33	117.64	-55.31	100	207	peak
8	5872.650	60.45	3.40	63.85	105.86	-42.01	100	247	peak
9	5918.850	60.02	3.51	63.53	72.75	-9.22	100	347	peak
10	5935.300	60.04	3.55	63.59	68.20	-4.61	100	6	peak
11	11570.000	34.64	13.21	47.85	74.00	-26.15	100	3	peak
12	11570.000	22.46	13.21	35.67	54.00	-18.33	100	3	AVG
13	17355.000	33.47	19.23	52.70	68.23	-15.53	100	3	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5602.100	58.09	2.70	60.79	68.20	-7.41	100	339	peak
2	5696.950	57.76	2.94	60.70	102.94	-42.24	100	350	peak
3	5717.950	58.10	3.00	61.10	110.23	-49.13	100	281	peak
4	5720.400	57.62	3.01	60.63	111.71	-51.08	100	86	peak
5	5785.000	97.17	3.18	100.35	NA	NA	100	79	peak
6	5785.000	85.07	3.18	88.25	NA	NA	100	79	AVG
7	5853.050	58.29	3.34	61.63	115.25	-53.62	100	284	peak
8	5865.300	59.26	3.37	62.63	107.92	-45.29	100	319	peak
9	5885.600	60.17	3.43	63.60	97.36	-33.76	100	337	peak
10	5930.750	60.10	3.54	63.64	68.20	-4.56	100	270	peak
11	11570.000	34.71	13.21	47.92	74.00	-26.08	100	23	peak
12	11570.000	23.22	13.21	36.43	54.00	-17.57	100	23	AVG
13	17355.000	33.95	19.23	53.18	68.23	-15.05	100	23	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11a / 5825MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5638.850	58.41	2.79	61.20	68.20	-7.00	100	98	peak
2	5699.750	58.28	2.96	61.24	105.02	-43.78	100	285	peak
3	5707.100	57.88	2.97	60.85	107.19	-46.34	100	339	peak
4	5722.500	58.12	3.01	61.13	116.50	-55.37	100	160	peak
5	5825.000	95.65	3.27	98.92	NA	NA	100	293	peak
6	5825.000	84.02	3.27	87.29	NA	NA	100	293	AVG
7	5850.950	58.66	3.33	61.99	120.03	-58.04	100	204	peak
8	5857.600	59.34	3.36	62.70	110.07	-47.37	100	231	peak
9	5906.250	59.44	3.48	62.92	82.08	-19.16	100	109	peak
10	5929.350	59.99	3.54	63.53	68.20	-4.67	100	265	peak
11	11650.000	34.71	13.26	47.97	74.00	-26.03	100	30	peak
12	11650.000	23.63	13.26	36.89	54.00	-17.11	100	30	AVG
13	17475.000	34.30	20.20	54.50	68.23	-13.73	100	30	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5648.650	57.68	2.83	60.51	68.20	-7.69	100	168	peak
2	5693.800	58.01	2.94	60.95	100.61	-39.66	100	348	peak
3	5707.100	57.94	2.97	60.91	107.19	-46.28	100	175	peak
4	5721.100	57.55	3.01	60.56	113.31	-52.75	100	104	peak
5	5825.000	97.25	3.27	100.52	NA	NA	100	103	peak
6	5825.000	84.63	3.27	87.90	NA	NA	100	103	AVG
7	5854.800	58.85	3.35	62.20	111.26	-49.06	100	346	peak
8	5863.200	59.25	3.37	62.62	108.50	-45.88	100	57	peak
9	5919.900	60.10	3.52	63.62	71.97	-8.35	100	35	peak
10	5932.500	59.88	3.55	63.43	68.20	-4.77	100	60	peak
11	11650.000	35.58	13.26	48.84	74.00	-25.16	100	167	peak
12	11650.000	23.14	13.26	36.40	54.00	-17.60	100	167	AVG
13	17475.000	33.71	20.20	53.91	68.23	-14.32	100	167	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5180MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	52.41	1.89	54.30	74.00	-19.70	100	236	peak
2	5150.000	39.56	1.89	41.45	54.00	-12.55	100	236	AVG
3	5180.000	97.67	1.95	99.62	NA	NA	100	236	peak
4	5180.000	80.94	1.95	82.89	NA	NA	100	236	AVG
5	10360.000	34.19	12.40	46.59	68.23	-21.64	100	0	peak
6	15540.000	35.95	11.98	47.93	74.00	-26.07	100	0	peak
7	15540.000	23.96	11.98	35.94	54.00	-18.06	100	0	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	51.15	1.89	53.04	74.00	-20.96	100	97	peak
2	5150.000	39.47	1.89	41.36	54.00	-12.64	100	97	AVG
3	5180.000	97.47	1.95	99.42	NA	NA	100	97	peak
4	5180.000	80.50	1.95	82.45	NA	NA	100	97	AVG
5	10360.000	34.63	12.40	47.03	68.23	-21.20	100	4	peak
6	15540.000	35.43	11.98	47.41	74.00	-26.59	100	4	peak
7	15540.000	23.90	11.98	35.88	54.00	-18.12	100	4	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.



**Mode:802.11n HT20 / 5200MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5200.000	100.24	1.97	102.21	NA	NA	100	235	peak
2	5200.000	88.72	1.97	90.69	NA	NA	100	235	AVG
3	10440.000	34.23	12.46	46.69	68.23	-21.54	100	77	peak
4	15660.000	35.98	11.95	47.93	74.00	-26.07	100	77	peak
5	15660.000	23.42	11.95	35.37	54.00	-18.63	100	77	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5200.000	99.77	1.97	101.74	NA	NA	100	111	peak
2	5200.000	87.84	1.97	89.81	NA	NA	100	111	AVG
3	10440.000	34.50	12.46	46.96	68.23	-21.27	100	5	peak
4	15660.000	35.43	11.95	47.38	74.00	-26.62	100	5	peak
5	15660.000	23.15	11.95	35.10	54.00	-18.90	100	5	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5240MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5240.000	99.11	2.03	101.14	NA	NA	100	233	peak
2	5240.000	84.50	2.03	86.53	NA	NA	100	233	AVG
3	5350.000	50.77	2.21	52.98	74.00	-21.02	100	233	peak
4	5350.000	39.49	2.21	41.70	54.00	-12.30	100	233	AVG
5	10480.000	35.34	12.49	47.83	68.23	-20.40	100	95	peak
6	15720.000	35.07	11.94	47.01	74.00	-26.99	100	95	peak
7	15720.000	23.67	11.94	35.61	54.00	-18.39	100	95	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5240.000	98.43	2.03	100.46	NA	NA	100	99	peak
2	5240.000	84.74	2.03	86.77	NA	NA	100	99	AVG
3	5350.000	50.45	2.21	52.66	74.00	-21.34	100	99	peak
4	5350.000	39.46	2.21	41.67	54.00	-12.33	100	99	AVG
5	10480.000	34.50	12.49	46.99	68.23	-21.24	100	26	peak
6	15720.000	35.42	11.94	47.36	74.00	-26.64	100	26	peak
7	15720.000	24.03	11.94	35.97	54.00	-18.03	100	26	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5260MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.02	1.89	51.91	74.00	-22.09	100	235	peak
2	5150.000	39.52	1.89	41.41	54.00	-12.59	100	235	AVG
3	5260.000	97.41	2.07	99.48	NA	NA	100	235	peak
4	5260.000	79.59	2.07	81.66	NA	NA	100	235	AVG
5	10520.000	34.10	12.53	46.63	68.23	-21.60	100	278	peak
6	15780.000	34.68	11.92	46.60	74.00	-27.40	100	278	peak
7	15780.000	23.56	11.92	35.48	54.00	-18.52	100	278	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	49.98	1.89	51.87	74.00	-22.13	100	96	peak
2	5150.000	39.36	1.89	41.25	54.00	-12.75	100	96	AVG
3	5261.280	96.95	2.07	99.02	NA	NA	100	96	peak
4	5261.280	78.85	2.07	80.92	NA	NA	100	96	AVG
5	10520.000	35.41	12.53	47.94	68.23	-20.29	100	46	peak
6	15780.000	35.09	11.92	47.01	74.00	-26.99	100	46	peak
7	15780.000	23.91	11.92	35.83	54.00	-18.17	100	46	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5720MHz / Cross Band**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5720.000	96.67	3.01	99.68	NA	NA	100	58	peak
2	5720.000	87.18	3.01	90.19	NA	NA	100	58	AVG
3	11440.000	34.55	13.14	47.69	74.00	-26.31	100	45	peak
4	11440.000	22.95	13.14	36.09	54.00	-17.91	100	45	AVG
5	17160.000	37.09	17.65	54.74	68.23	-13.49	100	45	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5720.000	98.42	3.01	101.43	NA	NA	100	288	peak
2	5720.000	88.91	3.01	91.92	NA	NA	100	288	AVG
3	11440.000	35.28	13.14	48.42	74.00	-25.58	100	240	peak
4	11440.000	22.41	13.14	35.55	54.00	-18.45	100	240	AVG
5	17160.000	34.71	17.65	52.36	68.23	-15.87	100	240	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5280MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5280.000	98.18	2.10	100.28	NA	NA	100	235	peak
2	5280.000	86.33	2.10	88.43	NA	NA	100	235	AVG
3	10560.000	35.46	12.56	48.02	68.23	-20.21	100	27	peak
4	15840.000	35.52	11.91	47.43	74.00	-26.57	100	27	peak
5	15840.000	23.73	11.91	35.64	54.00	-18.36	100	27	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5280.000	97.51	2.10	99.61	NA	NA	100	99	peak
2	5280.000	86.67	2.10	88.77	NA	NA	100	99	AVG
3	10560.000	35.10	12.56	47.66	68.23	-20.57	100	343	peak
4	15840.000	35.41	11.91	47.32	74.00	-26.68	100	343	peak
5	15840.000	23.90	11.91	35.81	54.00	-18.19	100	343	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5320MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5320.000	99.54	2.15	101.69	NA	NA	100	234	peak
2	5320.000	87.43	2.15	89.58	NA	NA	100	234	AVG
3	5350.000	53.44	2.21	55.65	74.00	-18.35	100	234	peak
4	5350.000	40.22	2.21	42.43	54.00	-11.57	100	234	AVG
5	10640.000	36.40	12.65	49.05	74.00	-24.95	100	160	peak
6	10640.000	22.16	12.65	34.81	54.00	-19.19	100	160	AVG
7	15960.000	36.51	11.88	48.39	74.00	-25.61	100	160	peak
8	15960.000	23.16	11.88	35.04	54.00	-18.96	100	160	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5320.000	98.73	2.15	100.88	NA	NA	100	110	peak
2	5320.000	86.62	2.15	88.77	NA	NA	100	110	AVG
3	5350.000	52.53	2.21	54.74	74.00	-19.26	100	110	peak
4	5350.000	39.19	2.21	41.40	54.00	-12.60	100	110	AVG
5	10640.000	35.99	12.65	48.64	74.00	-25.36	100	350	peak
6	10640.000	22.18	12.65	34.83	54.00	-19.17	100	350	AVG
7	15960.000	35.22	11.88	47.10	74.00	-26.90	100	350	peak
8	15960.000	23.88	11.88	35.76	54.00	-18.24	100	350	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5500MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	50.92	2.38	53.30	74.00	-20.70	100	280	peak
2	5460.000	39.18	2.38	41.56	54.00	-12.44	100	280	AVG
3	5500.000	95.43	2.44	97.87	NA	NA	100	280	peak
4	5500.000	83.19	2.44	85.63	NA	NA	100	280	AVG
5	11000.000	35.60	13.00	48.60	74.00	-25.40	100	321	peak
6	11000.000	22.93	13.00	35.93	54.00	-18.07	100	321	AVG
7	16500.000	35.39	13.96	49.35	68.23	-18.88	100	321	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	51.36	2.38	53.74	74.00	-20.26	100	103	peak
2	5460.000	40.04	2.38	42.42	54.00	-11.58	100	103	AVG
3	5500.000	95.11	2.44	97.55	NA	NA	100	103	peak
4	5500.000	83.78	2.44	86.22	NA	NA	100	103	AVG
5	11000.000	34.43	13.00	47.43	74.00	-26.57	100	27	peak
6	11000.000	22.11	13.00	35.11	54.00	-18.89	100	27	AVG
7	16500.000	35.70	13.96	49.66	68.23	-18.57	100	27	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5580MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5580.000	100.11	2.64	102.75	NA	NA	100	295	peak
2	5580.000	87.19	2.64	89.83	NA	NA	100	295	AVG
3	11160.000	34.78	13.05	47.83	74.00	-26.17	100	1	peak
4	11160.000	22.28	13.05	35.33	54.00	-18.67	100	1	AVG
5	16740.000	34.85	15.11	49.96	68.23	-18.27	100	1	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5580.000	98.51	2.64	101.15	NA	NA	100	104	peak
2	5580.000	86.52	2.64	89.16	NA	NA	100	104	AVG
3	11160.000	34.96	13.05	48.01	74.00	-25.99	100	224	peak
4	11160.000	22.10	13.05	35.15	54.00	-18.85	100	224	AVG
5	16740.000	33.72	15.11	48.83	68.23	-19.40	100	224	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.



**Mode:802.11n HT20 / 5700MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5700.000	94.95	2.96	97.91	NA	NA	100	294	peak
2	5700.000	83.38	2.96	86.34	NA	NA	100	294	AVG
3	5725.000	52.65	3.02	55.67	74.00	-18.33	100	294	peak
4	5725.000	40.92	3.02	43.94	54.00	-10.06	100	294	AVG
5	11400.000	34.75	13.13	47.88	74.00	-26.12	100	25	peak
6	11400.000	22.44	13.13	35.57	54.00	-18.43	100	25	AVG
7	17100.000	36.79	17.16	53.95	68.23	-14.28	100	25	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5700.000	93.47	2.96	96.43	NA	NA	100	109	peak
2	5700.000	82.05	2.96	85.01	NA	NA	100	109	AVG
3	5725.000	51.28	3.02	54.30	74.00	-19.70	100	109	peak
4	5725.000	40.80	3.02	43.82	54.00	-10.18	100	109	AVG
5	11400.000	34.15	13.13	47.28	74.00	-26.72	100	221	peak
6	11400.000	22.84	13.13	35.97	54.00	-18.03	100	221	AVG
7	17100.000	34.99	17.16	52.15	68.23	-16.08	100	221	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5745MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5614.350	58.41	2.73	61.14	68.20	-7.06	100	242	peak
2	5653.900	58.44	2.83	61.27	71.09	-9.82	100	340	peak
3	5703.250	57.87	2.96	60.83	106.11	-45.28	100	211	peak
4	5724.950	59.27	3.02	62.29	122.09	-59.80	100	232	peak
5	5745.000	96.68	3.07	99.75	NA	NA	100	296	peak
6	5745.000	83.34	3.07	86.41	NA	NA	100	296	AVG
7	5854.100	58.80	3.35	62.15	112.85	-50.70	100	32	peak
8	5866.700	59.88	3.37	63.25	107.52	-44.27	100	292	peak
9	5888.050	60.07	3.44	63.51	95.54	-32.03	100	257	peak
10	5938.450	60.06	3.56	63.62	68.20	-4.58	100	44	peak
11	11490.000	34.25	13.17	47.42	74.00	-26.58	100	45	peak
12	11490.000	22.54	13.17	35.71	54.00	-18.29	100	45	AVG
13	17235.000	34.24	18.26	52.50	68.23	-15.73	100	45	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5623.100	52.08	2.76	54.84	68.20	-13.36	100	308	peak
2	5697.300	53.64	2.94	56.58	103.20	-46.62	100	270	peak
3	5718.650	54.13	3.00	57.13	110.42	-53.29	100	75	peak
4	5724.250	54.42	3.01	57.43	120.49	-63.06	100	83	peak
5	5745.000	97.07	3.07	100.14	NA	NA	100	104	peak
6	5745.000	82.85	3.07	85.92	NA	NA	100	104	AVG
7	5851.300	53.14	3.33	56.47	119.24	-62.77	100	83	peak
8	5871.950	53.59	3.40	56.99	106.05	-49.06	100	95	peak
9	5903.450	53.90	3.47	57.37	84.15	-26.78	100	303	peak
10	5933.200	54.44	3.55	57.99	68.20	-10.21	100	7	peak
11	11490.000	33.93	13.17	47.10	74.00	-26.90	100	166	peak
12	11490.000	22.72	13.17	35.89	54.00	-18.11	100	166	AVG
13	17235.000	33.95	18.26	52.21	68.23	-16.02	100	166	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5785MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5622.750	57.38	2.75	60.13	68.20	-8.07	100	202	peak
2	5660.900	57.95	2.85	60.80	76.27	-15.47	100	31	peak
3	5703.950	58.13	2.96	61.09	106.31	-45.22	100	1	peak
4	5724.250	57.67	3.01	60.68	120.49	-59.81	100	143	peak
5	5785.000	96.54	3.18	99.72	NA	NA	100	230	peak
6	5785.000	83.55	3.18	86.73	NA	NA	100	230	AVG
7	5850.950	58.88	3.33	62.21	120.03	-57.82	100	133	peak
8	5872.300	59.20	3.40	62.60	105.96	-43.36	100	54	peak
9	5921.300	59.54	3.52	63.06	70.94	-7.88	100	297	peak
10	5942.650	59.82	3.57	63.39	68.20	-4.81	100	173	peak
11	11570.000	34.64	13.21	47.85	74.00	-26.15	100	0	peak
12	11570.000	23.07	13.21	36.28	54.00	-17.72	100	0	AVG
13	17355.000	34.35	19.23	53.58	68.23	-14.65	100	0	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5634.300	58.05	2.79	60.84	68.20	-7.36	100	75	peak
2	5695.900	58.05	2.94	60.99	102.17	-41.18	100	204	peak
3	5702.900	58.10	2.96	61.06	106.01	-44.95	100	145	peak
4	5720.050	58.06	3.01	61.07	110.91	-49.84	100	180	peak
5	5785.000	96.33	3.18	99.51	NA	NA	100	106	peak
6	5785.000	82.97	3.18	86.15	NA	NA	100	106	AVG
7	5850.600	59.41	3.33	62.74	120.83	-58.09	100	61	peak
8	5867.050	60.43	3.37	63.80	107.43	-43.63	100	328	peak
9	5887.350	60.08	3.43	63.51	96.06	-32.55	100	6	peak
10	5925.850	59.99	3.53	63.52	68.20	-4.68	100	249	peak
11	11570.000	34.41	13.21	47.62	74.00	-26.38	100	266	peak
12	11570.000	22.55	13.21	35.76	54.00	-18.24	100	266	AVG
13	17355.000	32.86	19.23	52.09	68.23	-16.14	100	266	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT20 / 5825MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5641.650	58.37	2.80	61.17	68.20	-7.03	100	56	peak
2	5690.650	58.62	2.92	61.54	98.28	-36.74	100	18	peak
3	5715.850	58.32	2.99	61.31	109.64	-48.33	100	204	peak
4	5721.450	58.51	3.01	61.52	114.11	-52.59	100	223	peak
5	5825.000	95.97	3.27	99.24	NA	NA	100	230	peak
6	5825.000	83.46	3.27	86.73	NA	NA	100	230	AVG
7	5854.100	59.12	3.35	62.47	112.85	-50.38	100	268	peak
8	5865.300	59.64	3.37	63.01	107.92	-44.91	100	20	peak
9	5896.450	60.30	3.46	63.76	89.33	-25.57	100	216	peak
10	5925.850	60.17	3.53	63.70	68.20	-4.50	100	214	peak
11	11650.000	35.42	13.26	48.68	74.00	-25.32	100	54	peak
12	11650.000	22.41	13.26	35.67	54.00	-18.33	100	54	AVG
13	17475.000	33.71	20.20	53.91	68.23	-14.32	100	54	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5610.150	58.37	2.72	61.09	68.20	-7.11	100	114	peak
2	5665.100	58.41	2.86	61.27	79.37	-18.10	100	212	peak
3	5714.800	58.41	2.98	61.39	109.34	-47.95	100	355	peak
4	5721.800	58.09	3.01	61.10	114.90	-53.80	100	126	peak
5	5825.000	97.18	3.27	100.45	NA	NA	100	104	peak
6	5825.000	83.28	3.27	86.55	NA	NA	100	104	AVG
7	5853.400	59.75	3.34	63.09	114.45	-51.36	100	355	peak
8	5858.650	59.55	3.36	62.91	109.78	-46.87	100	138	peak
9	5905.200	60.68	3.48	64.16	82.85	-18.69	100	54	peak
10	5925.850	60.45	3.53	63.98	68.20	-4.22	100	138	peak
11	11650.000	34.88	13.26	48.14	74.00	-25.86	100	263	peak
12	11650.000	22.57	13.26	35.83	54.00	-18.17	100	263	AVG
13	17475.000	33.54	20.20	53.74	68.23	-14.49	100	263	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5190MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	52.00	1.89	53.89	74.00	-20.11	100	235	peak
2	5150.000	42.71	1.89	44.60	54.00	-9.40	100	235	AVG
3	5190.000	94.38	1.95	96.33	NA	NA	100	235	peak
4	5190.000	85.58	1.95	87.53	NA	NA	100	235	AVG
5	10380.000	34.31	12.41	46.72	68.23	-21.51	100	298	peak
6	15570.000	35.70	11.97	47.67	74.00	-26.33	100	298	peak
7	15570.000	24.08	11.97	36.05	54.00	-17.95	100	298	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	51.34	1.89	53.23	74.00	-20.77	100	113	peak
2	5150.000	41.65	1.89	43.54	54.00	-10.46	100	113	AVG
3	5190.000	94.43	1.95	96.38	NA	NA	100	113	peak
4	5190.000	84.82	1.95	86.77	NA	NA	100	113	AVG
5	10380.000	34.42	12.41	46.83	68.23	-21.40	100	40	peak
6	15570.000	35.93	11.97	47.90	74.00	-26.10	100	40	peak
7	15570.000	23.77	11.97	35.74	54.00	-18.26	100	40	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5230MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5230.000	95.67	2.02	97.69	NA	NA	100	236	peak
2	5230.000	86.41	2.02	88.43	NA	NA	100	236	AVG
3	5350.000	51.41	2.21	53.62	74.00	-20.38	100	236	peak
4	5350.000	40.00	2.21	42.21	54.00	-11.79	100	236	AVG
5	10460.000	35.29	12.48	47.77	68.23	-20.46	100	1	peak
6	15690.000	35.62	11.94	47.56	74.00	-26.44	100	1	peak
7	15690.000	23.53	11.94	35.47	54.00	-18.53	100	1	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5230.000	96.12	2.02	98.14	NA	NA	100	98	peak
2	5230.000	85.71	2.02	87.73	NA	NA	100	98	AVG
3	5350.000	51.32	2.21	53.53	74.00	-20.47	100	98	peak
4	5350.000	39.58	2.21	41.79	54.00	-12.21	100	98	AVG
5	10460.000	34.72	12.48	47.20	68.23	-21.03	100	87	peak
6	15690.000	35.72	11.94	47.66	74.00	-26.34	100	87	peak
7	15690.000	23.72	11.94	35.66	54.00	-18.34	100	87	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5270MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.60	1.89	52.49	74.00	-21.51	100	265	peak
2	5150.000	39.88	1.89	41.77	54.00	-12.23	100	265	AVG
3	5270.000	94.33	2.08	96.41	NA	NA	100	265	peak
4	5270.000	85.28	2.08	87.36	NA	NA	100	265	AVG
5	10540.000	35.47	12.56	48.03	68.23	-20.20	100	1	peak
6	15810.000	35.51	11.92	47.43	74.00	-26.57	100	1	peak
7	15810.000	23.59	11.92	35.51	54.00	-18.49	100	1	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	50.24	1.89	52.13	74.00	-21.87	100	99	peak
2	5150.000	38.90	1.89	40.79	54.00	-13.21	100	99	AVG
3	5270.000	95.69	2.08	97.77	NA	NA	100	99	peak
4	5270.000	86.16	2.08	88.24	NA	NA	100	99	AVG
5	10540.000	34.41	12.56	46.97	68.23	-21.26	100	102	peak
6	15810.000	35.02	11.92	46.94	74.00	-27.06	100	102	peak
7	15810.000	23.89	11.92	35.81	54.00	-18.19	100	102	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5310MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5310.000	96.48	2.15	98.63	NA	NA	100	286	peak
2	5310.000	83.35	2.15	85.50	NA	NA	100	286	AVG
3	5350.000	55.08	2.21	57.29	74.00	-16.71	100	286	peak
4	5350.000	41.10	2.21	43.31	54.00	-10.69	100	286	AVG
5	10620.000	35.40	12.63	48.03	74.00	-25.97	100	224	peak
6	10620.000	22.77	12.63	35.40	54.00	-18.60	100	224	AVG
7	15930.000	35.69	11.89	47.58	74.00	-26.42	100	224	peak
8	15930.000	23.69	11.89	35.58	54.00	-18.42	100	224	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5310.000	94.48	2.15	96.63	NA	NA	100	99	peak
2	5310.000	84.19	2.15	86.34	NA	NA	100	99	AVG
3	5350.000	51.38	2.21	53.59	74.00	-20.41	100	99	peak
4	5350.000	40.91	2.21	43.12	54.00	-10.88	100	99	AVG
5	10620.000	35.85	12.63	48.48	74.00	-25.52	100	274	peak
6	10620.000	22.59	12.63	35.22	54.00	-18.78	100	274	AVG
7	15930.000	36.26	11.89	48.15	74.00	-25.85	100	274	peak
8	15930.000	23.67	11.89	35.56	54.00	-18.44	100	274	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.



**Mode:802.11n HT40 / 5510MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	51.31	2.38	53.69	74.00	-20.31	100	282	peak
2	5460.000	41.53	2.38	43.91	54.00	-10.09	100	282	AVG
3	5510.000	94.11	2.47	96.58	NA	NA	100	282	peak
4	5510.000	83.79	2.47	86.26	NA	NA	100	282	AVG
5	11020.000	34.26	13.01	47.27	74.00	-26.73	100	151	peak
6	11020.000	22.83	13.01	35.84	54.00	-18.16	100	151	AVG
7	16530.000	34.52	14.10	48.62	68.23	-19.61	100	151	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	52.41	2.38	54.79	74.00	-19.21	100	101	peak
2	5460.000	41.80	2.38	44.18	54.00	-9.82	100	101	AVG
3	5510.000	94.88	2.47	97.35	NA	NA	100	101	peak
4	5510.000	84.29	2.47	86.76	NA	NA	100	101	AVG
5	11020.000	36.42	13.01	49.43	74.00	-24.57	100	49	peak
6	11020.000	22.76	13.01	35.77	54.00	-18.23	100	49	AVG
7	16530.000	35.00	14.10	49.10	68.23	-19.13	100	49	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5590MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5590.000	95.55	2.67	98.22	NA	NA	100	296	peak
2	5590.000	85.66	2.67	88.33	NA	NA	100	296	AVG
3	11180.000	35.17	13.06	48.23	74.00	-25.77	100	20	peak
4	11180.000	22.57	13.06	35.63	54.00	-18.37	100	20	AVG
5	16770.000	36.98	15.25	52.23	68.23	-16.00	100	20	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5590.000	94.03	2.67	96.70	NA	NA	200	107	peak
2	5590.000	83.20	2.67	85.87	NA	NA	200	107	AVG
3	11180.000	36.43	13.06	49.49	74.00	-24.51	100	58	peak
4	11180.000	23.54	13.06	36.60	54.00	-17.40	100	58	AVG
5	16770.000	36.37	15.25	51.62	68.23	-16.61	100	58	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5670MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5670.000	96.78	2.88	99.66	NA	NA	100	295	peak
2	5670.000	86.23	2.88	89.11	NA	NA	100	295	AVG
3	5725.000	51.94	3.02	54.96	74.00	-19.04	100	295	peak
4	5725.000	41.01	3.02	44.03	54.00	-9.97	100	295	AVG
5	11340.000	34.06	13.12	47.18	74.00	-26.82	100	69	peak
6	11340.000	22.47	13.12	35.59	54.00	-18.41	100	69	AVG
7	17010.000	35.15	16.44	51.59	68.23	-16.64	100	69	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5670.000	95.90	2.88	98.78	NA	NA	100	83	peak
2	5670.000	85.28	2.88	88.16	NA	NA	100	83	AVG
3	5725.000	52.82	3.02	55.84	74.00	-18.16	100	83	peak
4	5725.000	40.05	3.02	43.07	54.00	-10.93	100	83	AVG
5	11340.000	34.24	13.12	47.36	74.00	-26.64	100	40	peak
6	11340.000	22.21	13.12	35.33	54.00	-18.67	100	40	AVG
7	17010.000	34.35	16.44	50.79	68.23	-17.44	100	40	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5710MHz / Cross Band**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5710.000	93.63	2.98	96.61	NA	NA	100	57	peak
2	5710.000	84.78	2.98	87.76	NA	NA	100	57	AVG
3	11420.000	34.25	13.14	47.39	74.00	-26.61	100	3	peak
4	11420.000	22.14	13.14	35.28	54.00	-18.72	100	3	AVG
5	17130.000	36.99	17.41	54.40	68.23	-13.83	100	3	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5710.000	95.15	2.98	98.13	NA	NA	100	288	peak
2	5710.000	86.48	2.98	89.46	NA	NA	100	288	AVG
3	11420.000	33.61	13.14	46.75	74.00	-27.25	100	28	peak
4	11420.000	22.61	13.14	35.75	54.00	-18.25	100	28	AVG
5	17130.000	34.88	17.41	52.29	68.23	-15.94	100	28	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5755MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5642.350	58.28	2.80	61.08	68.20	-7.12	100	307	peak
2	5698.700	59.65	2.95	62.60	104.24	-41.64	100	293	peak
3	5719.700	60.10	3.01	63.11	110.72	-47.61	100	226	peak
4	5724.600	62.65	3.02	65.67	121.29	-55.62	100	232	peak
5	5755.000	97.20	3.09	100.29	N/A	N/A	100	296	peak
6	5755.000	87.14	3.09	90.23	N/A	N/A	100	296	AVG
7	5852.350	59.44	3.34	62.78	116.84	-54.06	100	63	peak
8	5873.350	59.36	3.40	62.76	105.66	-42.90	100	114	peak
9	5894.350	59.97	3.46	63.43	90.88	-27.45	100	106	peak
10	5926.200	60.21	3.53	63.74	68.20	-4.46	100	232	peak
11	11510.000	34.11	13.17	47.28	74.00	-26.72	100	24	peak
12	11510.000	22.38	13.17	35.55	54.00	-18.45	100	24	AVG
13	17265.000	36.63	18.50	55.13	68.23	-13.10	100	24	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5606.650	58.18	2.72	60.90	68.20	-7.30	100	301	peak
2	5657.750	58.56	2.85	61.41	73.94	-12.53	100	132	peak
3	5719.700	60.02	3.01	63.03	110.72	-47.69	100	106	peak
4	5722.500	60.60	3.01	63.61	116.50	-52.89	100	82	peak
5	5755.000	96.92	3.09	100.01	N/A	N/A	100	105	peak
6	5755.000	87.31	3.09	90.40	N/A	N/A	100	105	AVG
7	5854.450	58.93	3.35	62.28	112.05	-49.77	100	281	peak
8	5872.650	59.60	3.40	63.00	105.86	-42.86	100	340	peak
9	5893.300	59.93	3.44	63.37	91.66	-28.29	100	183	peak
10	5946.850	59.94	3.59	63.53	68.20	-4.67	100	271	peak
11	11510.000	34.48	13.17	47.65	74.00	-26.35	100	44	peak
12	11510.000	23.06	13.17	36.23	54.00	-17.77	100	44	AVG
13	17265.000	34.24	18.50	52.74	68.23	-15.49	100	44	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11n HT40 / 5795MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5626.600	58.32	2.76	61.08	68.20	-7.12	100	127	peak
2	5693.800	58.75	2.94	61.69	100.61	-38.92	100	289	peak
3	5706.400	58.63	2.97	61.60	106.99	-45.39	100	300	peak
4	5720.050	58.69	3.01	61.70	110.91	-49.21	100	180	peak
5	5795.000	95.01	3.20	98.21	N/A	N/A	100	296	peak
6	5795.000	85.93	3.20	89.13	N/A	N/A	100	296	AVG
7	5854.450	59.16	3.35	62.51	112.05	-49.54	100	339	peak
8	5861.100	59.83	3.37	63.20	109.09	-45.89	100	82	peak
9	5897.150	60.35	3.46	63.81	88.81	-25.00	100	266	peak
10	5941.950	59.97	3.57	63.54	68.20	-4.66	100	77	peak
11	11590.000	35.48	13.22	48.70	74.00	-25.30	100	23	peak
12	11590.000	23.37	13.22	36.59	54.00	-17.41	100	23	AVG
13	17385.000	34.70	19.47	54.17	68.23	-14.06	100	23	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5647.600	58.39	2.82	61.21	68.20	-6.99	100	336	peak
2	5699.400	58.13	2.96	61.09	104.76	-43.67	100	138	peak
3	5716.200	58.53	3.00	61.53	109.74	-48.21	100	359	peak
4	5724.250	58.08	3.01	61.09	120.49	-59.40	100	90	peak
5	5795.000	95.93	3.20	99.13	N/A	N/A	100	106	peak
6	5795.000	86.42	3.20	89.62	N/A	N/A	100	106	AVG
7	5853.750	59.24	3.35	62.59	113.65	-51.06	100	304	peak
8	5857.600	59.96	3.36	63.32	110.07	-46.75	100	258	peak
9	5913.250	59.85	3.50	63.35	76.89	-13.54	100	53	peak
10	5943.000	60.08	3.57	63.65	68.20	-4.55	100	124	peak
11	11590.000	34.89	13.22	48.11	74.00	-25.89	100	325	peak
12	11590.000	22.12	13.22	35.34	54.00	-18.66	100	325	AVG
13	17385.000	33.34	19.47	52.81	68.23	-15.42	100	325	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11ac VHT80 / 5210MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	51.31	1.89	53.20	74.00	-20.80	100	59	peak
2	5150.000	41.89	1.89	43.78	54.00	-10.22	100	59	AVG
3	5210.000	89.07	1.99	91.06	NA	NA	100	59	peak
4	5210.000	82.18	1.99	84.17	NA	NA	100	59	AVG
5	5350.000	50.92	2.21	53.13	74.00	-20.87	100	59	peak
6	5350.000	40.96	2.21	43.17	54.00	-10.83	100	59	AVG
7	10420.000	34.42	12.44	46.86	68.23	-21.37	100	127	peak
8	15630.000	37.25	11.96	49.21	74.00	-24.79	100	127	peak
9	15630.000	26.80	11.96	38.76	54.00	-15.24	100	127	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	51.03	1.89	52.92	74.00	-21.08	100	294	peak
2	5150.000	41.42	1.89	43.31	54.00	-10.69	100	294	AVG
3	5210.000	87.25	1.99	89.24	NA	NA	100	294	peak
4	5210.000	78.59	1.99	80.58	NA	NA	100	294	AVG
5	5350.000	50.74	2.21	52.95	74.00	-21.05	100	294	peak
6	5350.000	41.58	2.21	43.79	54.00	-10.21	100	294	AVG
7	10420.000	34.10	12.44	46.54	68.23	-21.69	100	303	peak
8	15630.000	35.64	11.96	47.60	74.00	-26.40	100	303	peak
9	15630.000	26.65	11.96	38.61	54.00	-15.39	100	303	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11ac VHT80 / 5290MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	49.94	1.89	51.83	74.00	-22.17	100	59	peak
2	5150.000	41.62	1.89	43.51	54.00	-10.49	100	59	AVG
3	5290.000	93.18	2.11	95.29	NA	NA	100	59	peak
4	5290.000	85.48	2.11	87.59	NA	NA	100	59	AVG
5	5350.000	53.23	2.21	55.44	74.00	-18.56	100	59	peak
6	5350.000	45.12	2.21	47.33	54.00	-6.67	100	59	AVG
7	10580.000	34.50	12.59	47.09	68.23	-21.14	100	160	peak
8	15870.000	35.00	11.90	46.90	74.00	-27.10	100	160	peak
9	15870.000	26.82	11.90	38.72	54.00	-15.28	100	160	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5150.000	49.90	1.89	51.79	74.00	-22.21	100	279	peak
2	5150.000	41.95	1.89	43.84	54.00	-10.16	100	279	AVG
3	5290.000	90.06	2.11	92.17	NA	NA	100	279	peak
4	5290.000	82.40	2.11	84.51	NA	NA	100	279	AVG
5	5350.000	51.21	2.21	53.42	74.00	-20.58	100	279	peak
6	5350.000	43.90	2.21	46.11	54.00	-7.89	100	279	AVG
7	10580.000	34.79	12.59	47.38	68.23	-20.85	100	160	peak
8	15870.000	35.99	11.90	47.89	74.00	-26.11	100	160	peak
9	15870.000	26.36	11.90	38.26	54.00	-15.74	100	160	AVG

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.



**Mode:802.11ac VHT80 / 5530MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	52.46	2.38	54.84	74.00	-19.16	100	62	peak
2	5460.000	43.06	2.38	45.44	54.00	-8.56	100	62	AVG
3	5530.000	91.24	2.52	93.76	NA	NA	100	62	peak
4	5530.000	83.72	2.52	86.24	NA	NA	100	62	AVG
5	11060.000	35.97	13.03	49.00	74.00	-25.00	100	300	peak
6	11060.000	26.98	13.03	40.01	54.00	-13.99	100	300	AVG
7	16590.000	35.49	14.39	49.88	68.23	-18.35	100	300	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5460.000	53.18	2.38	55.56	74.00	-18.44	100	288	peak
2	5460.000	44.77	2.38	47.15	54.00	-6.85	100	288	AVG
3	5530.000	93.16	2.52	95.68	NA	NA	100	288	peak
4	5530.000	84.58	2.52	87.10	NA	NA	100	288	AVG
5	11060.000	34.02	13.03	47.05	74.00	-26.95	100	96	peak
6	11060.000	26.19	13.03	39.22	54.00	-14.78	100	96	AVG
7	16590.000	34.93	14.39	49.32	68.23	-18.91	100	96	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11ac VHT80 / 5610MHz****Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5610.000	90.04	2.72	92.76	NA	NA	100	59	peak
2	5610.000	82.41	2.72	85.13	NA	NA	100	59	AVG
3	5725.000	52.47	3.02	55.49	74.00	-18.51	100	59	peak
4	5725.000	42.85	3.02	45.87	54.00	-8.13	100	59	AVG
5	11220.000	34.48	13.07	47.55	74.00	-26.45	100	21	peak
6	11220.000	26.74	13.07	39.81	54.00	-14.19	100	21	AVG
7	16830.000	35.68	15.54	51.22	68.23	-17.01	100	21	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5610.000	91.47	2.72	94.19	NA	NA	100	285	peak
2	5610.000	84.14	2.72	86.86	NA	NA	100	285	AVG
3	5725.000	51.62	3.02	54.64	74.00	-19.36	100	285	peak
4	5725.000	42.65	3.02	45.67	54.00	-8.33	100	285	AVG
5	11220.000	34.06	13.07	47.13	74.00	-26.87	138	35	peak
6	11220.000	26.77	13.07	39.84	54.00	-14.16	138	35	AVG
7	16830.000	33.48	15.54	49.02	68.23	-19.21	35	35	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11ac VHT80 / 5690MHz / Cross Band**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5690.000	90.39	2.92	93.31	NA	NA	100	111	peak
2	5690.000	83.74	2.92	86.66	NA	NA	100	111	AVG
3	11380.000	33.82	13.13	46.95	74.00	-27.05	100	313	peak
4	11380.000	26.59	13.13	39.72	54.00	-14.28	100	313	AVG
5	17070.000	36.28	16.92	53.20	68.23	-15.03	100	313	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )	Remark
1	5690.000	92.73	2.92	95.65	NA	NA	100	287	peak
2	5690.000	84.98	2.92	87.90	NA	NA	100	287	AVG
3	11380.000	34.20	13.13	47.33	74.00	-26.67	100	39	peak
4	11380.000	26.24	13.13	39.37	54.00	-14.63	100	39	AVG
5	17070.000	34.58	16.92	51.50	68.23	-16.73	100	39	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Mode:802.11ac VHT80 / 5775MHz**

**Horizontal**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5637.800	57.69	2.79	60.48	68.20	-7.72	100	60	peak
2	5691.000	61.73	2.93	64.66	98.54	-33.88	100	60	peak
3	5719.350	64.20	3.01	67.21	110.62	-43.41	100	60	peak
4	5720.750	63.27	3.01	66.28	112.51	-46.23	100	60	peak
5	5775.000	93.58	3.14	96.72	N/A	N/A	100	60	peak
6	5775.000	84.63	3.14	87.77	N/A	N/A	100	60	AVG
7	5850.250	59.94	3.33	63.27	121.63	-58.36	100	60	peak
8	5861.450	60.54	3.37	63.91	108.99	-45.08	100	60	peak
9	5905.200	60.03	3.48	63.51	82.85	-19.34	100	60	peak
10	5946.150	60.06	3.59	63.65	68.20	-4.55	100	60	peak
11	11550.000	34.18	13.19	47.37	74.00	-26.63	100	26	peak
12	11550.000	26.95	13.19	40.14	54.00	-13.86	100	26	AVG
13	17325.000	34.40	18.99	53.39	68.23	-14.84	100	26	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

**Vertical**

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
1	5648.650	52.53	2.83	55.36	68.20	-12.84	100	289	peak
2	5693.800	62.88	2.94	65.82	100.61	-34.79	100	289	peak
3	5715.150	63.96	2.98	66.94	109.44	-42.50	100	289	peak
4	5720.400	63.34	3.01	66.35	111.71	-45.36	100	289	peak
5	5775.000	93.84	3.14	96.98	N/A	N/A	100	289	peak
6	5775.000	86.17	3.14	89.31	N/A	N/A	100	289	AVG
7	5850.600	58.90	3.33	62.23	120.83	-58.60	100	289	peak
8	5870.550	57.02	3.39	60.41	106.45	-46.04	100	289	peak
9	5886.300	54.25	3.43	57.68	96.84	-39.16	100	289	peak
10	5948.250	53.78	3.59	57.37	68.20	-10.83	100	289	peak
11	11550.000	34.42	13.19	47.61	74.00	-26.39	100	93	peak
12	11550.000	26.09	13.19	39.28	54.00	-14.72	100	93	AVG
13	17325.000	33.80	18.99	52.79	68.23	-15.44	100	93	peak

Note: Result = Reading + Factor

Margin = Result – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

The other emission levels were very low against the limit.

## **8 FCC §15.407(a) –EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH**

### **8.1 Applicable Standard**

15.407(a),(e)

### **8.2 Test Procedure**

According to KDB 789033 D02 General UNII Test Procedures New Rules v01r03

### **8.3 Test Equipment List and Details**

Description	Manufacturers	Models	Serial Numbers	Calibration Date	Calibration Due Date
Cable	WOKEN	SFL402	00100A1F6A192S	N.C.R	N.C.R
Spectrum Analyzer	Rohde & Schwarz	FSV40	101203	2016/7/14	2017/7/13

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

### **8.4 Test Environmental Conditions**

<b>Temperature:</b>	24°C
<b>Relative Humidity:</b>	57 %
<b>ATM Pressure:</b>	1020 hPa

*The testing was performed by David Hsu on 2016-12-28~2016-12-29.*

### 8.5 Test Results

Test mode: Transmitting (test performed at SISO mode)

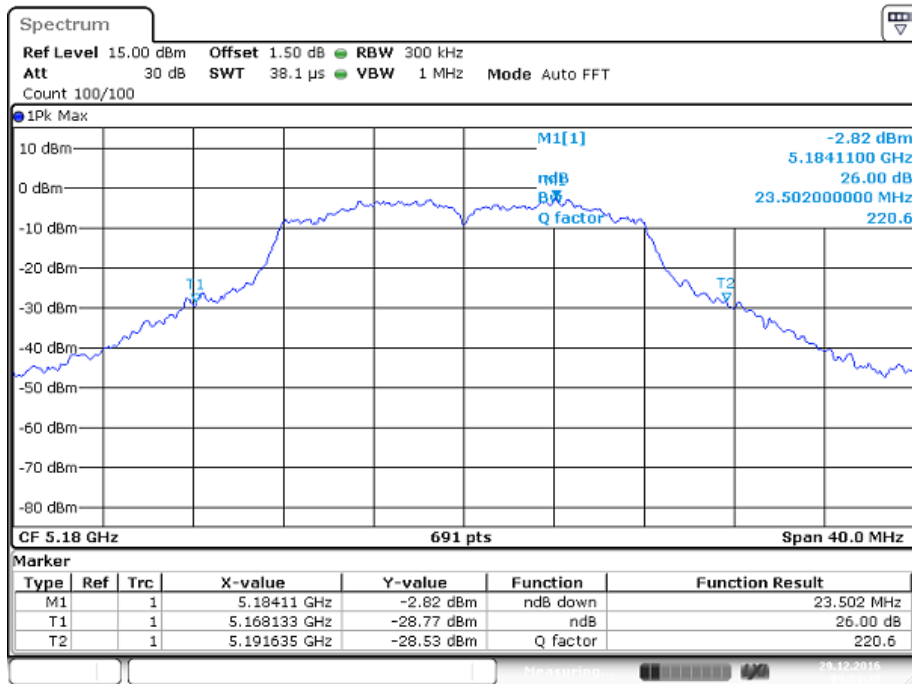
Mode	UNII Band	Frequency (MHz)	26 dB Emission Bandwidth (MHz)		99% Emission Bandwidth (MHz)	
			Chain 0	Chain 1	Chain 0	Chain 1
802.11 a	5150-5250MHz	5180	23.50	21.48	17.58	17.22
		5200	22.52	21.30	17.29	17.29
		5240	22.52	22.58	17.59	17.29
	5250-5350MHz	5260	23.16	22.17	17.37	17.37
		5280	22.98	22.69	17.37	17.29
		5320	22.81	23.27	17.37	17.37
	5470-5725MHz	5500	21.94	22.87	17.29	17.29
		5580	22.98	23.56	17.37	17.29
		5700	21.77	21.59	17.29	17.36
	5725-5850MHz	5745	21.65	22.06	17.29	17.29
		5785	21.59	22.98	17.22	17.15
		5825	22.81	23.68	17.22	17.29
802.11n20	5150-5250MHz	5180	22.80	23.79	18.31	18.31
		5200	22.57	22.92	18.37	18.31
		5240	22.00	22.87	18.38	18.38
	5250-5350MHz	5260	23.21	23.16	18.38	18.38
		5280	22.23	23.33	18.38	18.38
		5320	23.33	23.44	18.38	18.38
	5470-5725MHz	5500	24.08	23.10	18.38	18.31
		5580	23.10	22.52	18.38	18.31
		5700	22.29	22.40	18.31	18.38
	5725-5850MHz	5745	22.92	23.44	18.38	18.38
		5785	22.40	22.63	18.38	18.31
		5825	22.29	22.29	18.31	18.38
802.11n40	5150-5250MHz	5190	41.79	42.14	36.32	36.47
		5230	42.37	40.29	36.47	36.47
	5250-5350MHz	5270	43.18	41.33	36.47	36.32

		5310	42.26	41.33	36.47	36.32
	5470-5725MHz	5510	42.60	42.14	36.32	36.47
		5590	42.95	41.79	36.61	36.47
		5670	42.72	41.10	36.47	36.47
	5725-5850MHz	5755	42.14	40.52	36.18	36.32
		5795	42.14	42.37	36.47	36.47
802.11ac80	5150-5250MHz	5210	82.43	81.74	75.48	75.48
	5250-5350MHz	5290	81.74	81.97	75.48	75.25
	5470-5725MHz	5530	81.51	82.20	75.48	75.25
		5610	82.20	82.66	75.48	75.72
	5725-5850MHz	5775	81.51	82.43	75.48	75.48
802.11ac20	Cross Band	5720	25.18	25.93	18.89	19.03
802.11ac40		5710	43.76	43.88	36.61	36.61
802.11ac80		5690	83.13	83.59	75.48	75.25

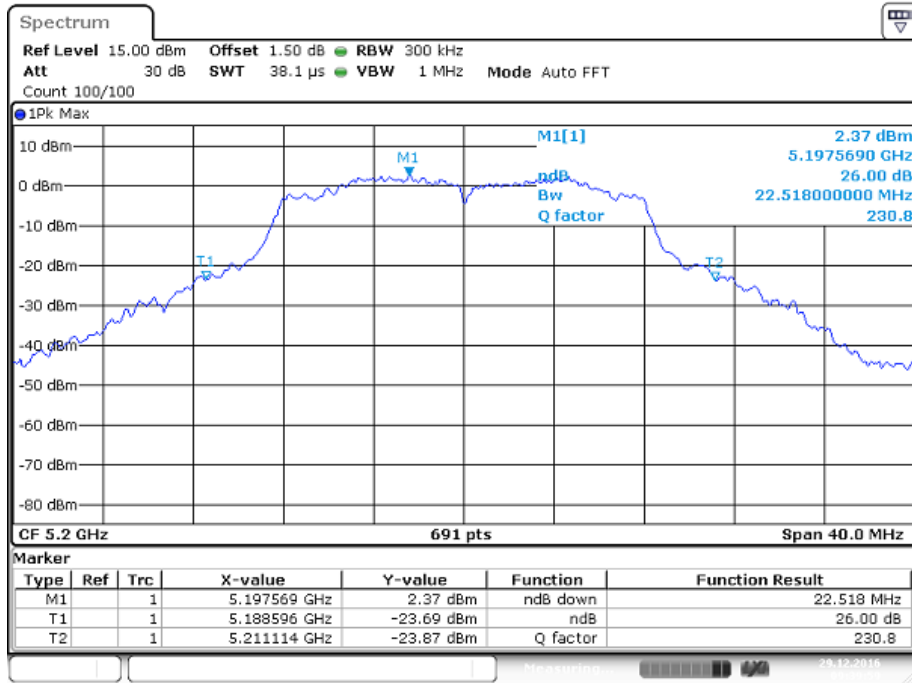
UNII Band	Mode	Channel	Frequency (MHz)	6dBc Emission Bandwidth (MHz)		Limit (MHz)
				Chain 0	Chain 1	
5725-5850MHz	802.11 a	Low	5745	15.51	15.46	0.5
		Middle	5785	15.34	15.80	0.5
		High	5825	15.63	15.51	0.5
	802.11 n20	Low	5745	16.17	16.50	0.5
		Middle	5785	16.09	16.61	0.5
		High	5825	15.46	15.63	0.5
	802.11 n40	Low	5755	35.25	35.20	0.5
		High	5795	35.37	35.26	0.5
	802.11 ac80	Middle	5775	75.08	74.85	0.5

Please refer to the following plots

**UNII BW26dBc**  
**IEEE 802.11a mode / 5180 ~ 5825MHz(chain0)**  
**5180MHz**

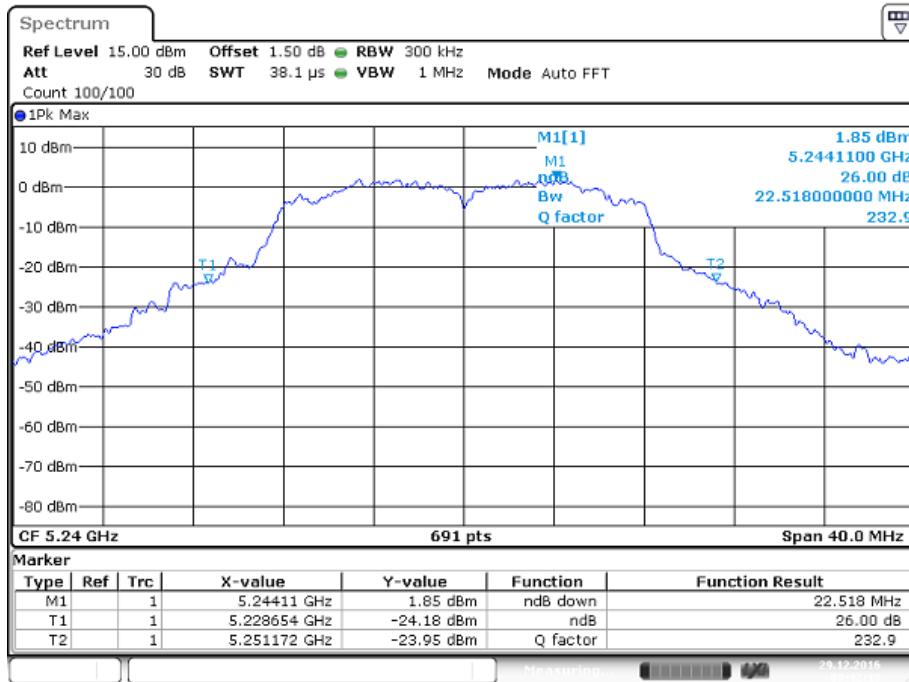


**5200MHz**

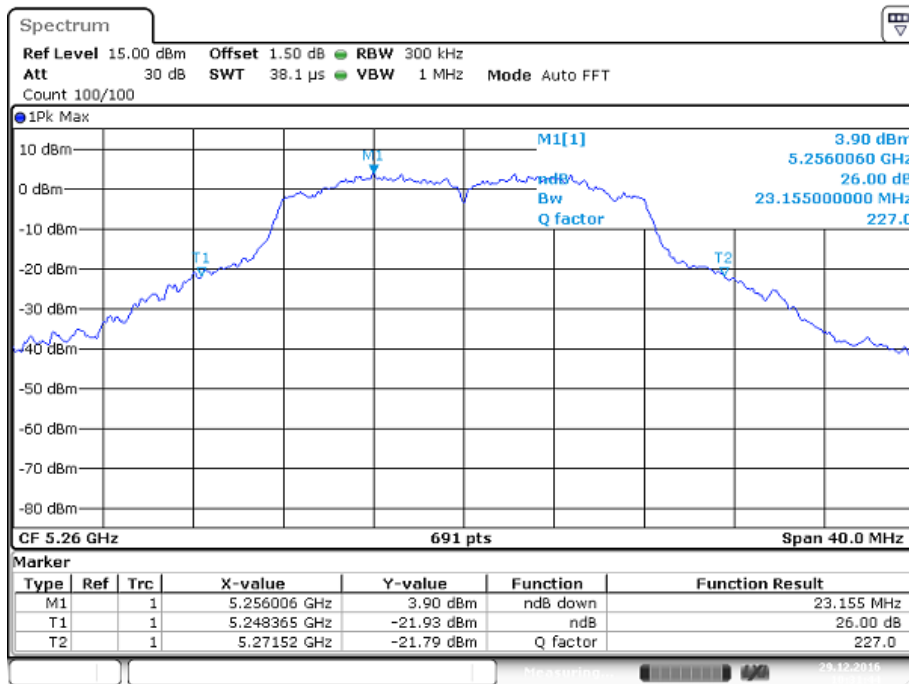




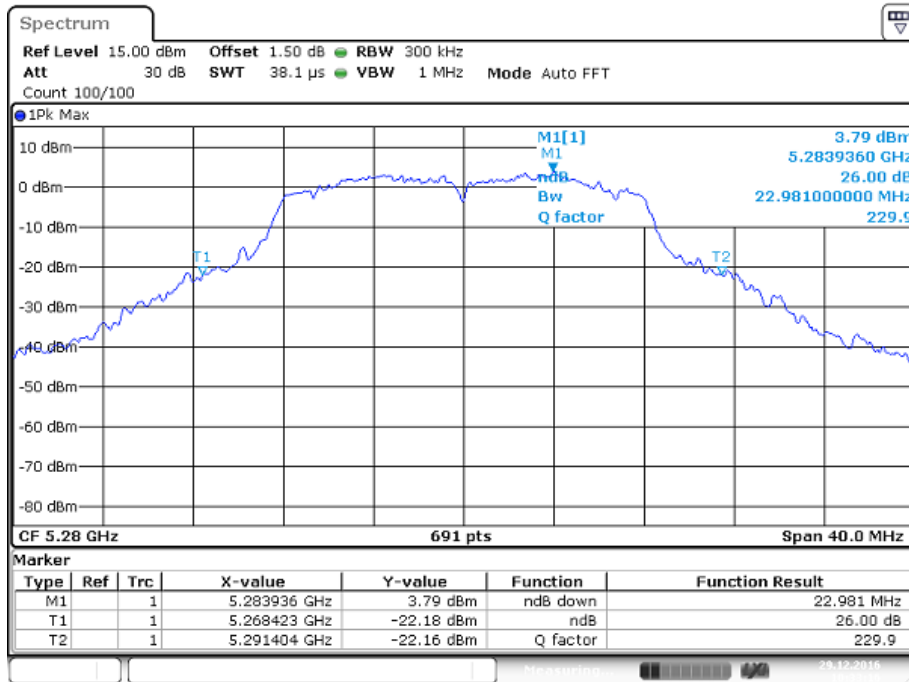
5240MHz



5260MHz

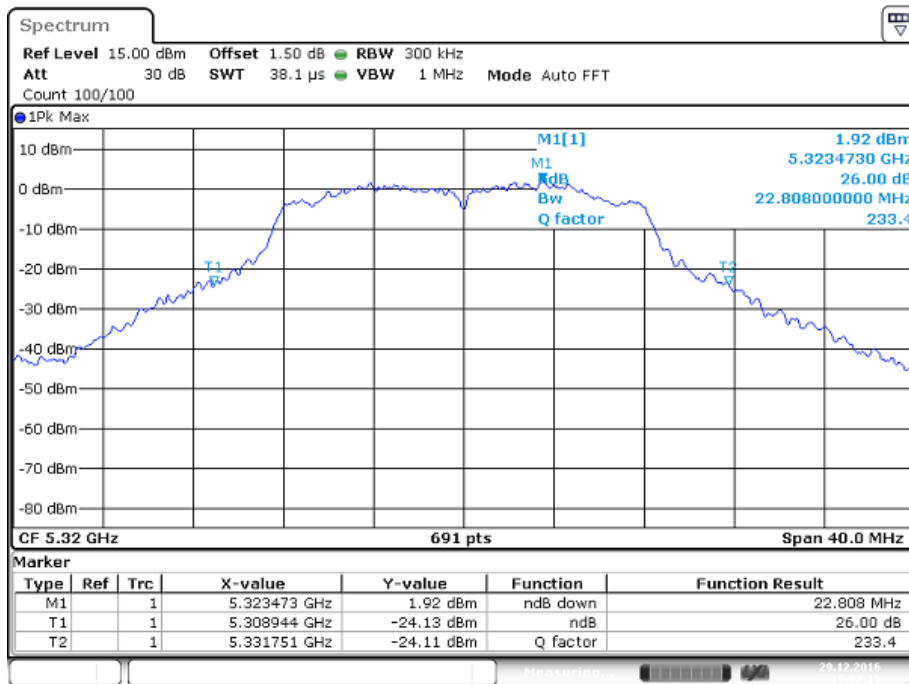


5280MHz



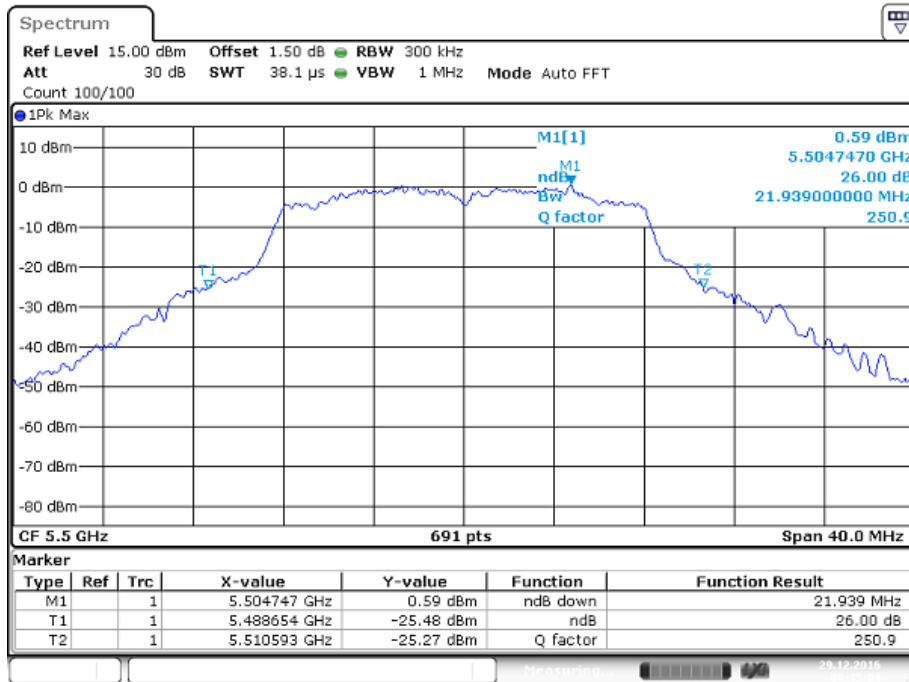
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5320MHz



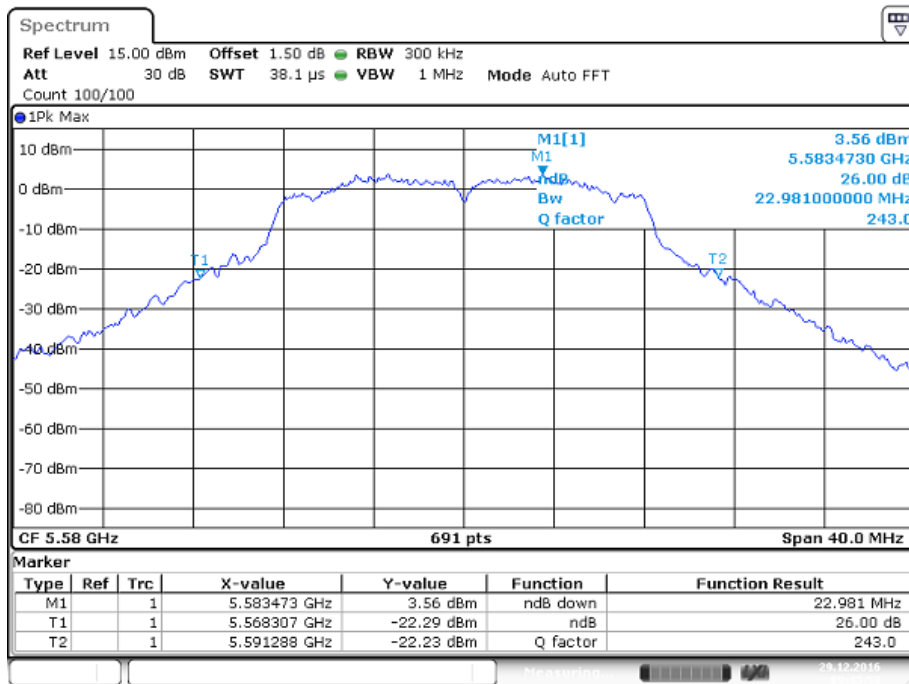
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5500MHz



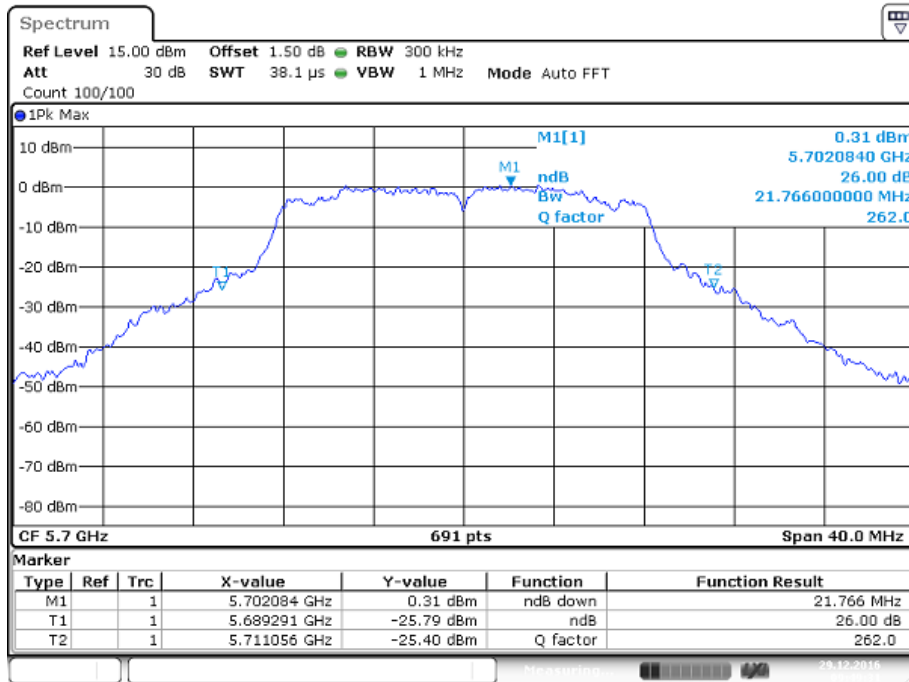
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5580MHz

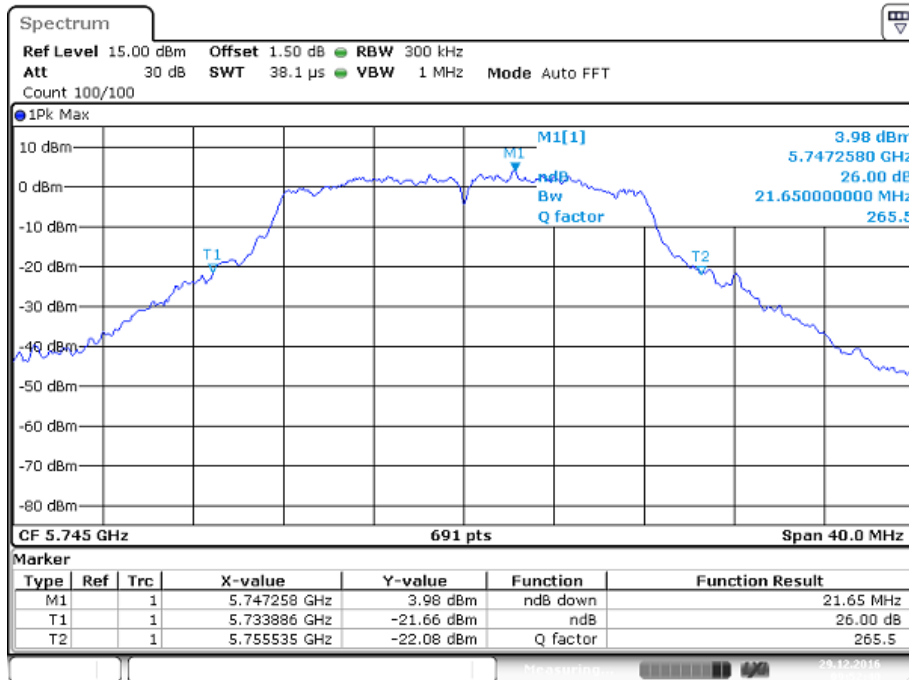


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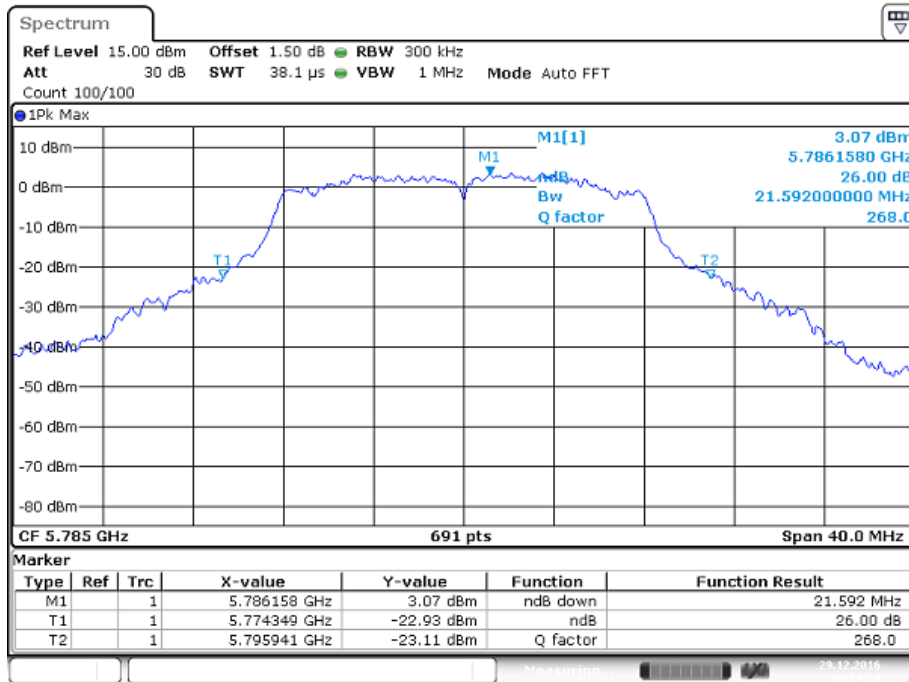
5700MHz



5745MHz

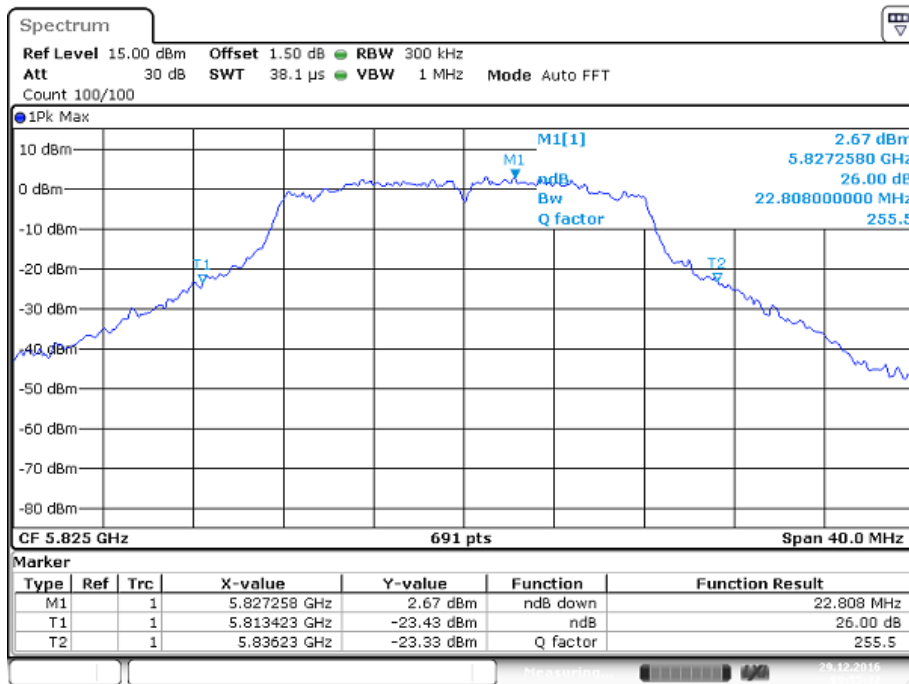


5785MHz



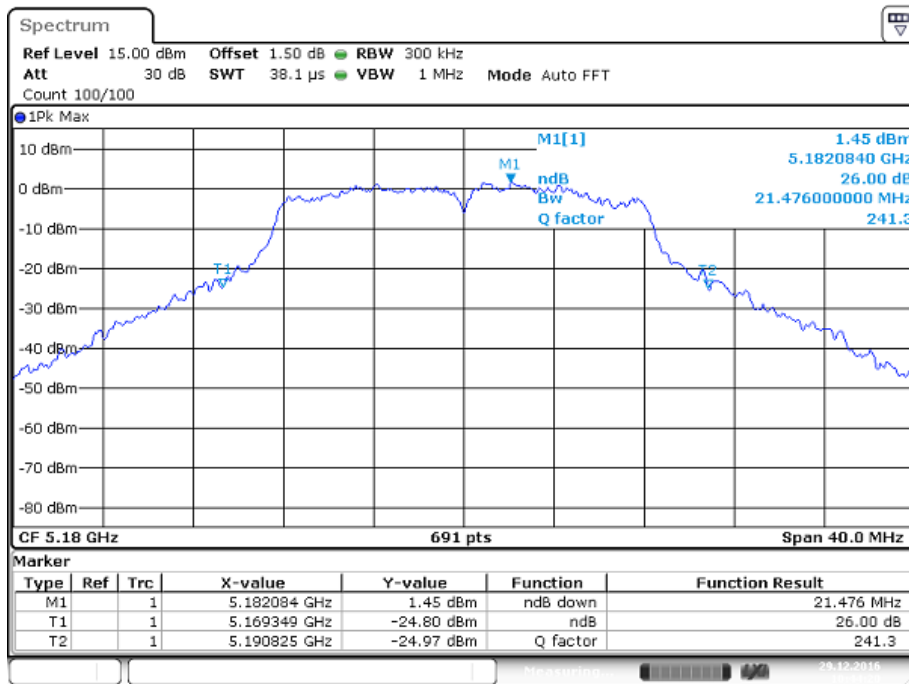
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5825MHz

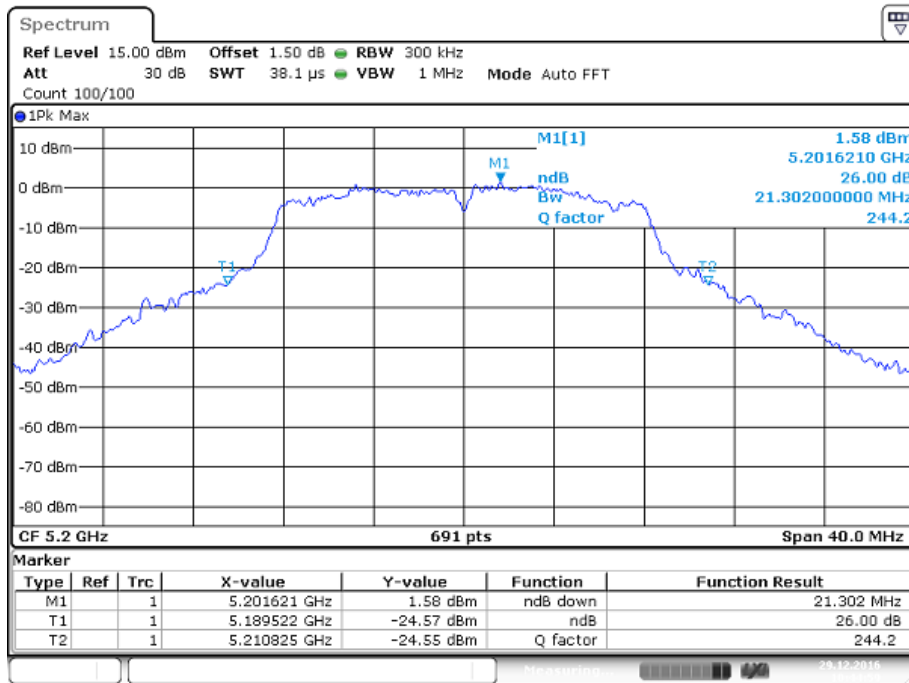


Date: 29 DEC 2016 09:55:32

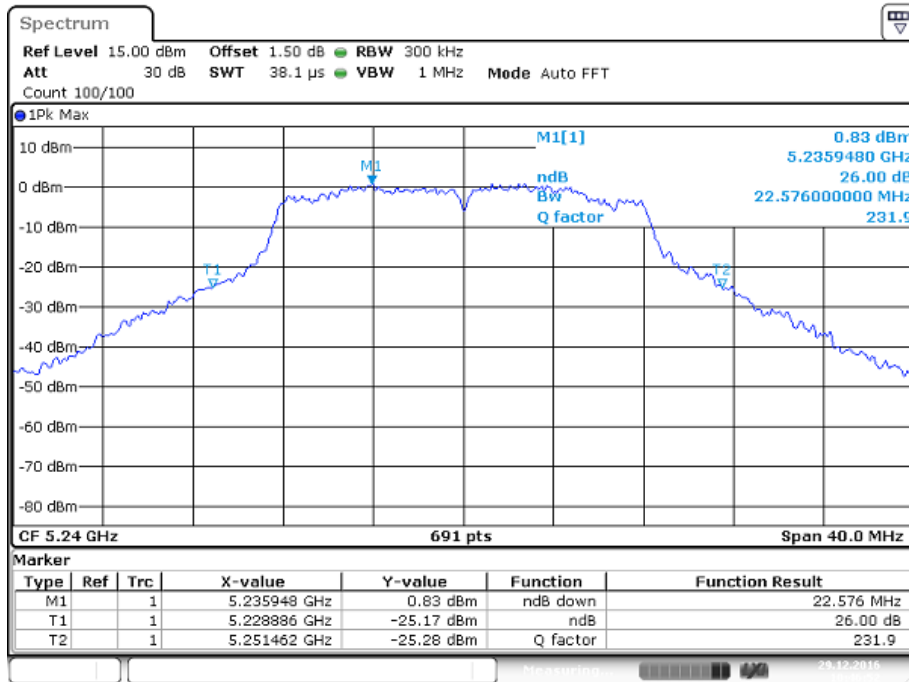
**IEEE 802.11a mode / 5180 ~ 5825MHz(chain 1)  
5180MHz**



**5200MHz**

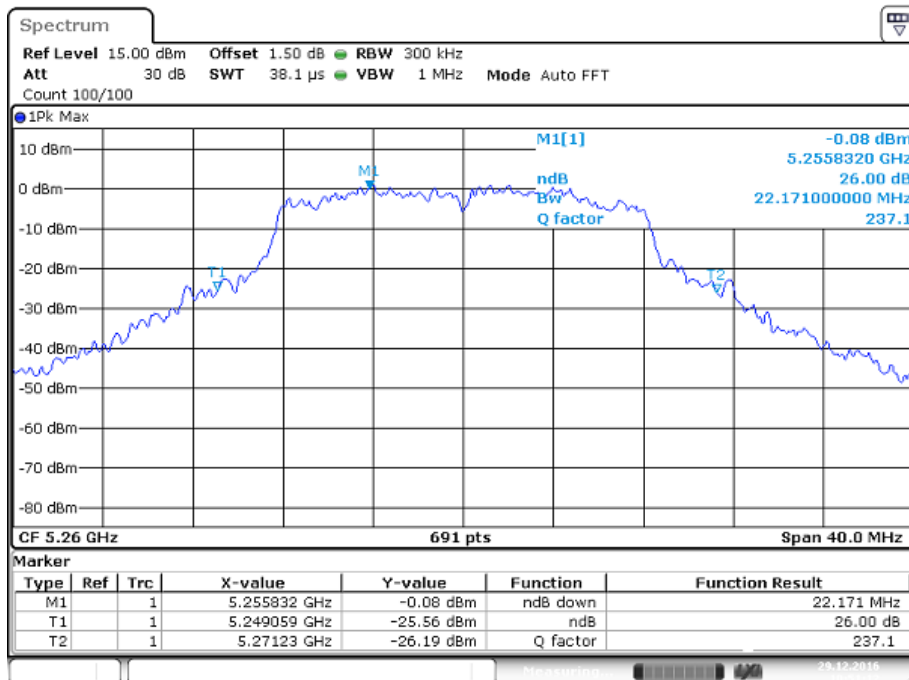


5240MHz



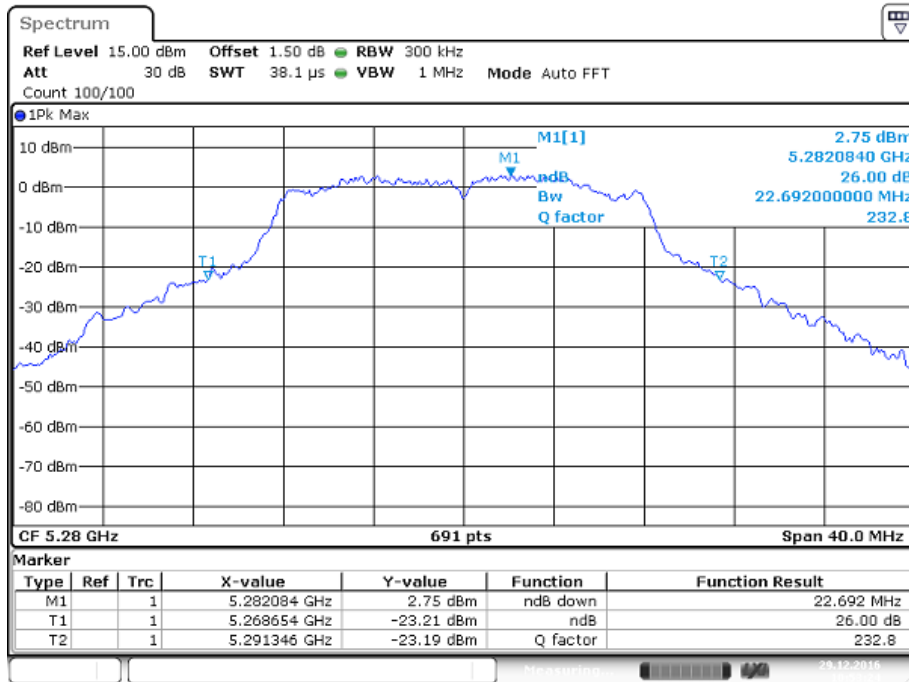
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5260MHz

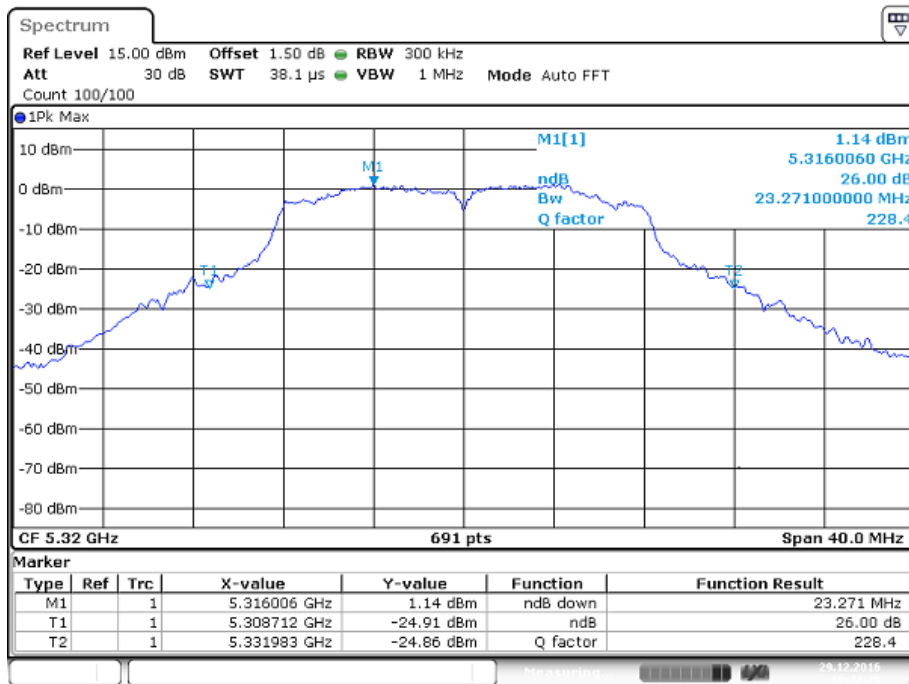


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5280MHz

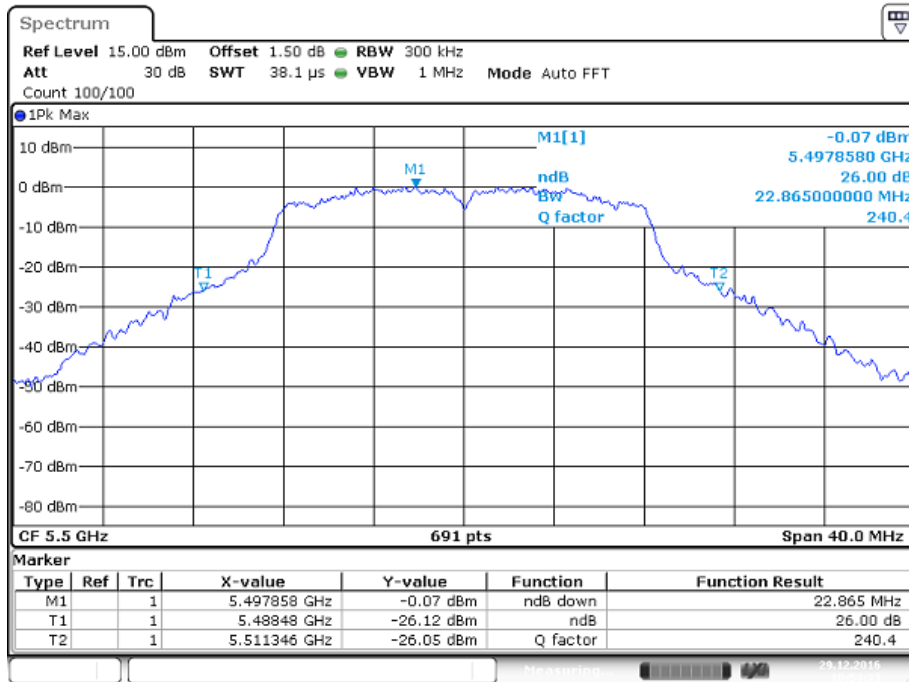


5320MHz



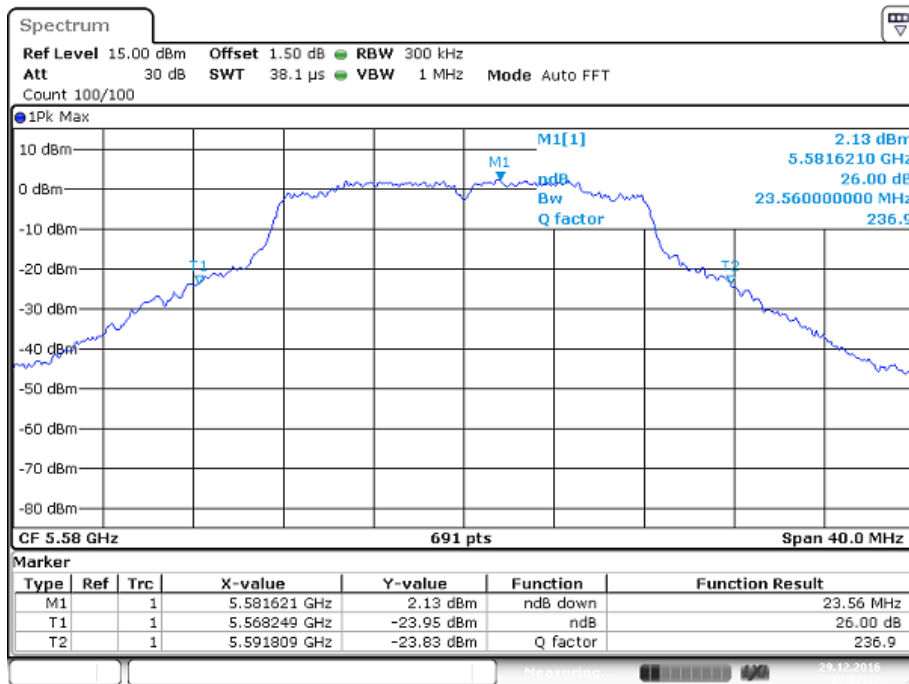


5500MHz



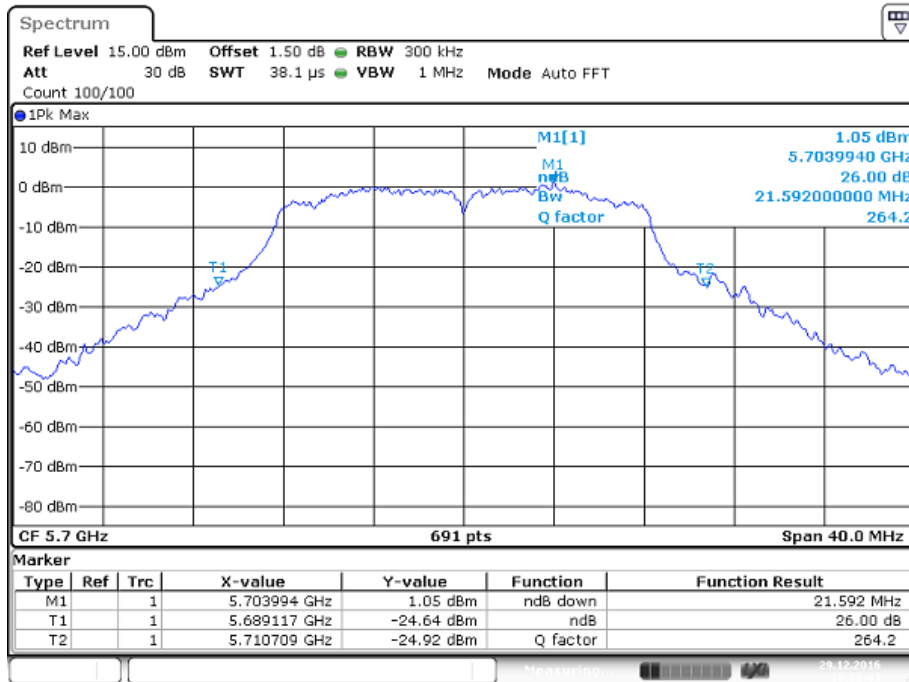
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5580MHz

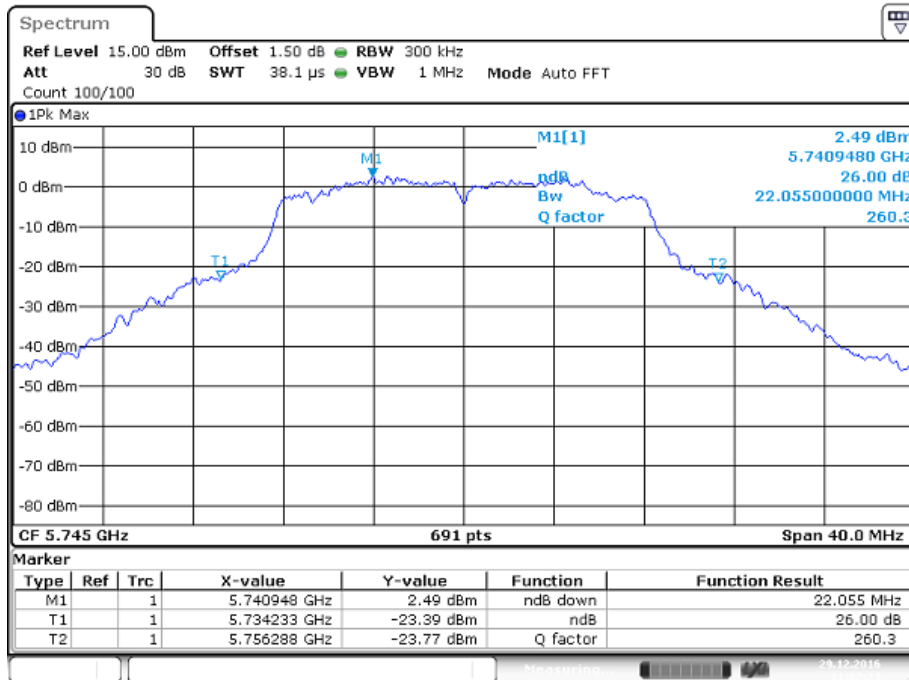


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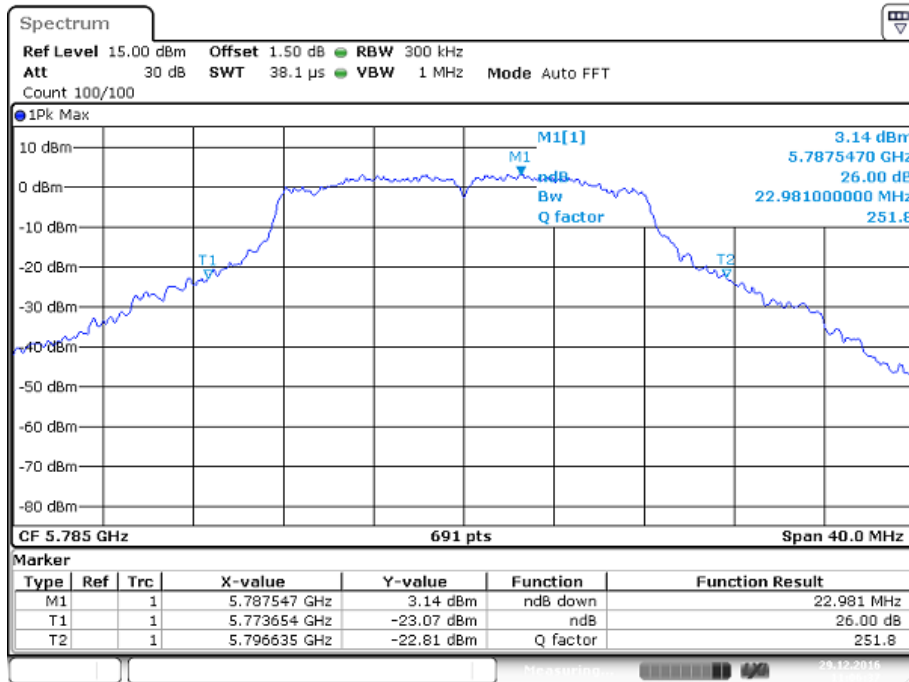
5700MHz



5745MHz

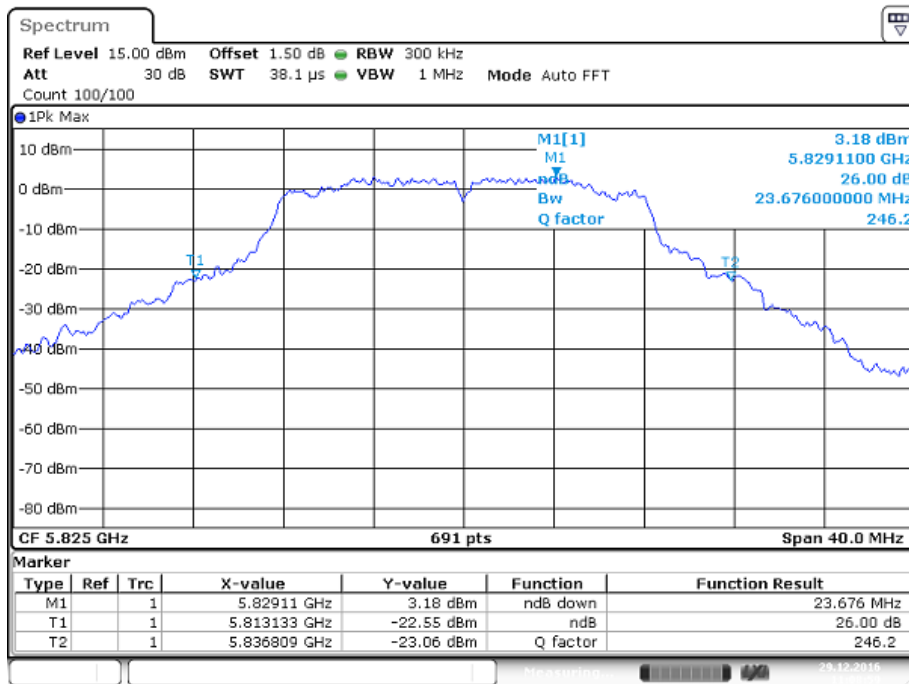


5785MHz



Date: 29 DEC 2016 11:06:38

5825MHz



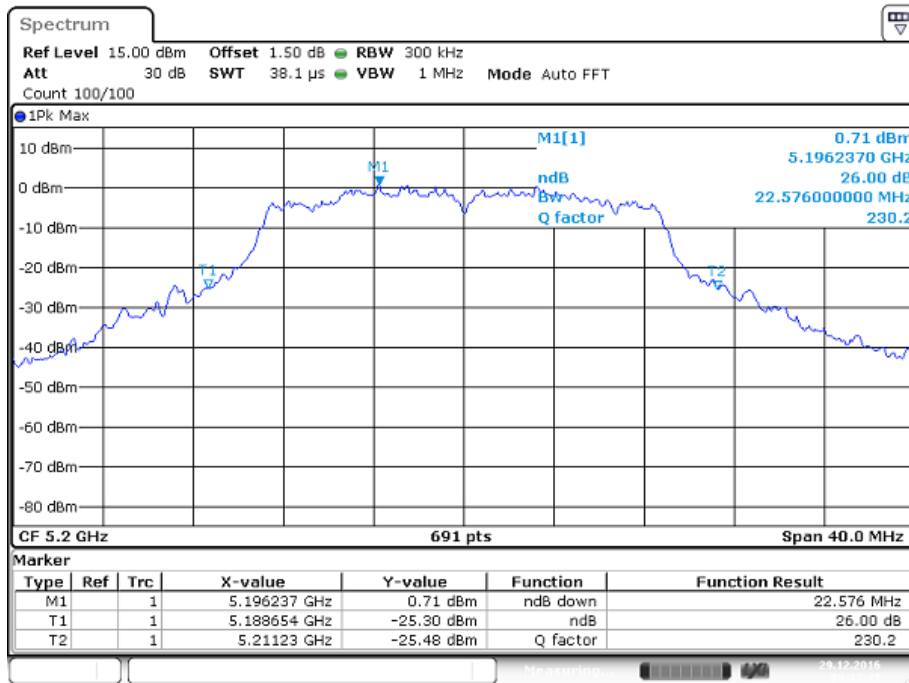
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**IEEE 802.11n HT20 Mode / 5180 ~ 5825MHz(chain0)  
5180MHz**



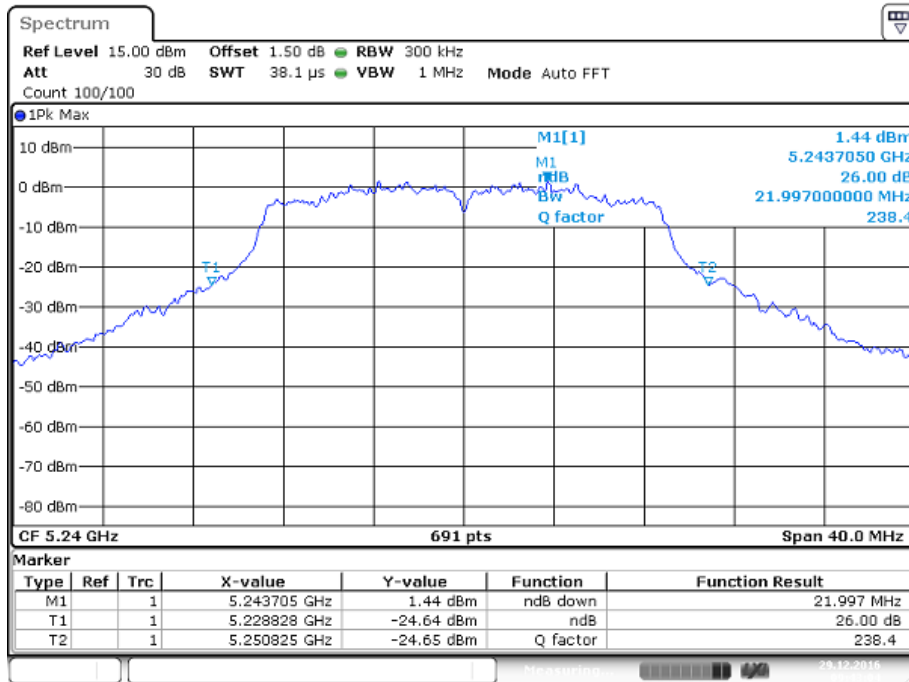
Date: 29 DEC 2016 09:32:24

**5200MHz**



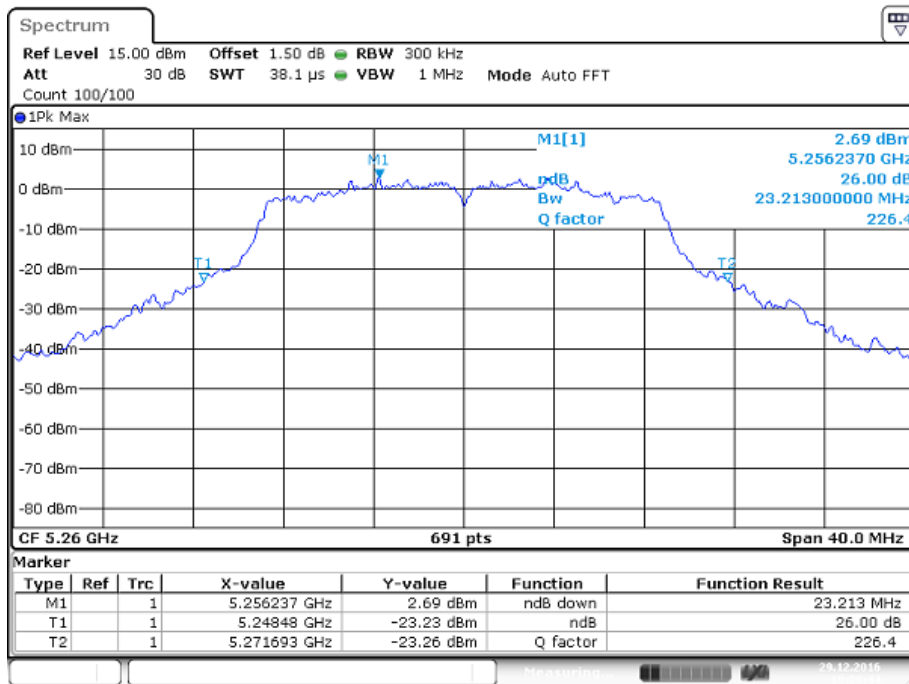
Date: 29 DEC 2016 09:33:37

5240MHz



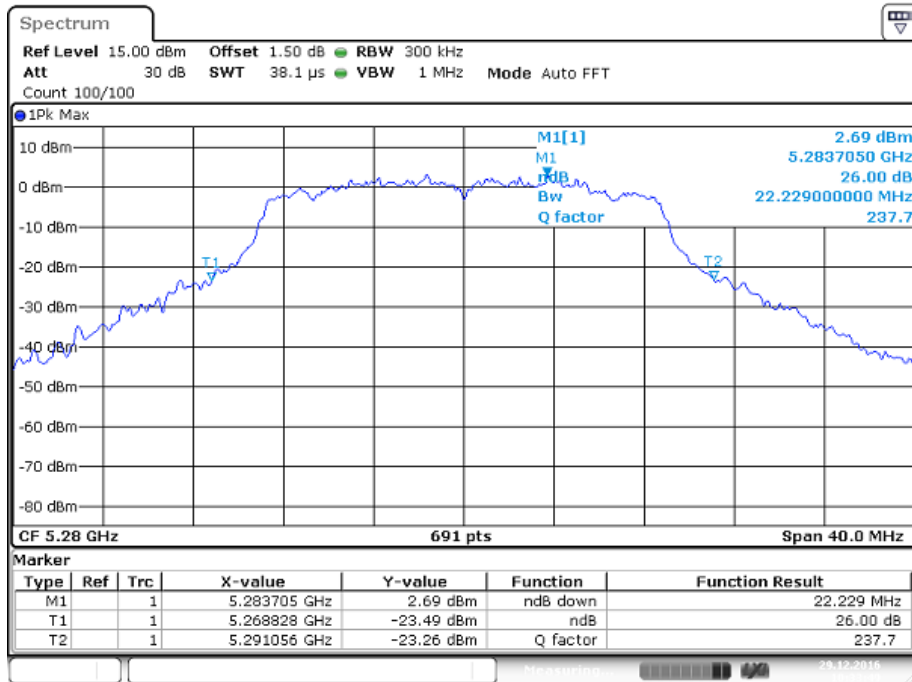
Date: 29 DEC 2016 09:43:04

5260MHz



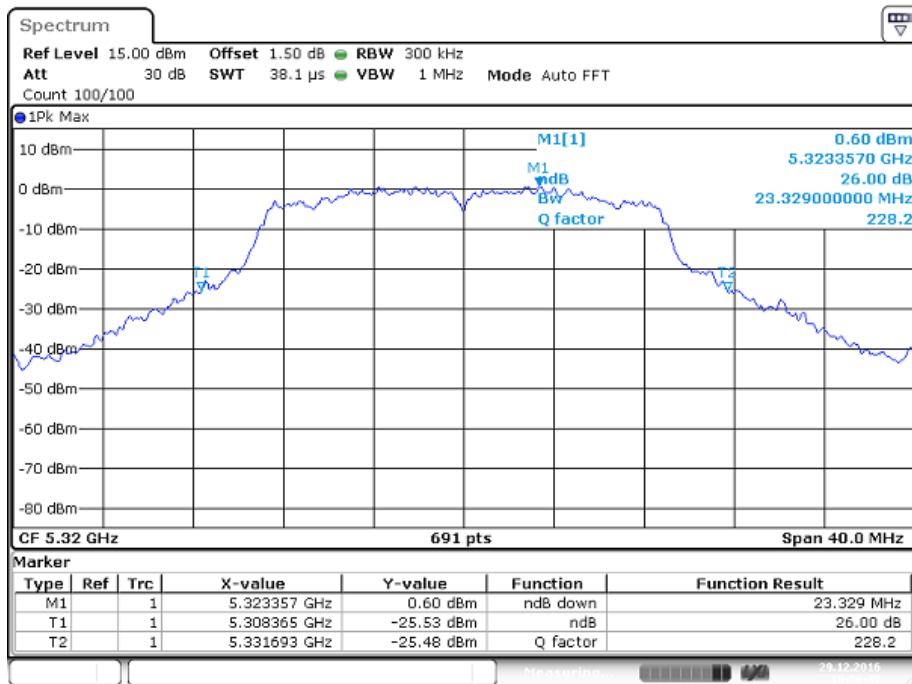
Date: 29 DEC 2016 10:30:45

5280MHz



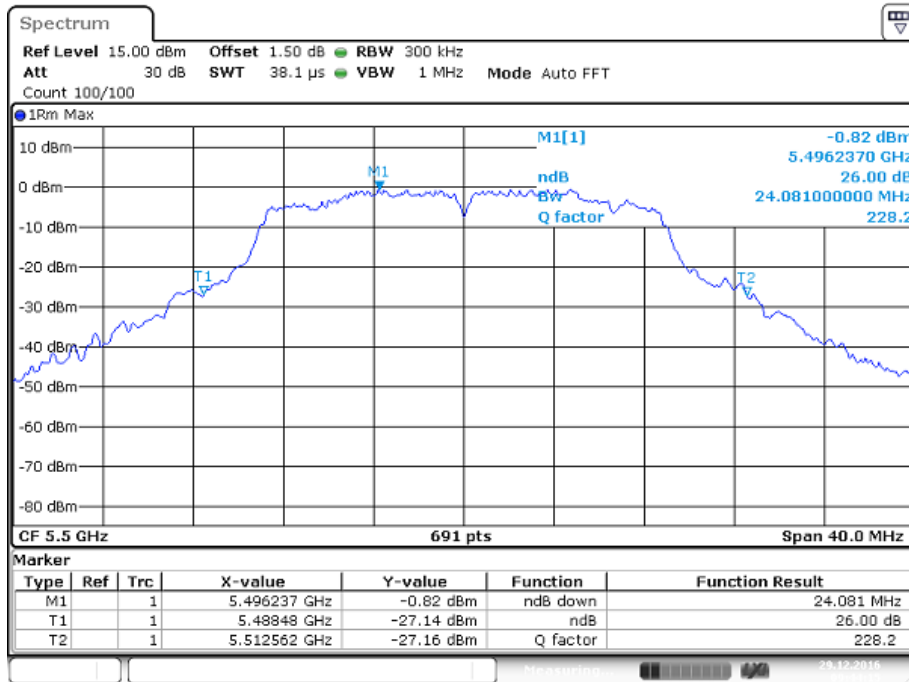
Date: 29 DEC 2016 10:33:50

5320MHz



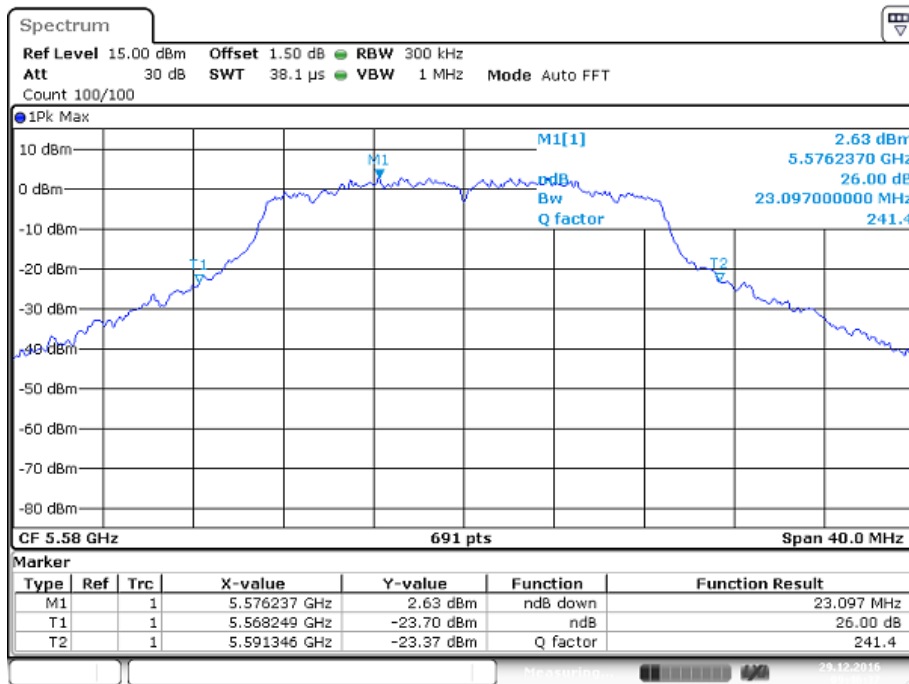
Date: 29 DEC 2016 10:36:40

5500MHz



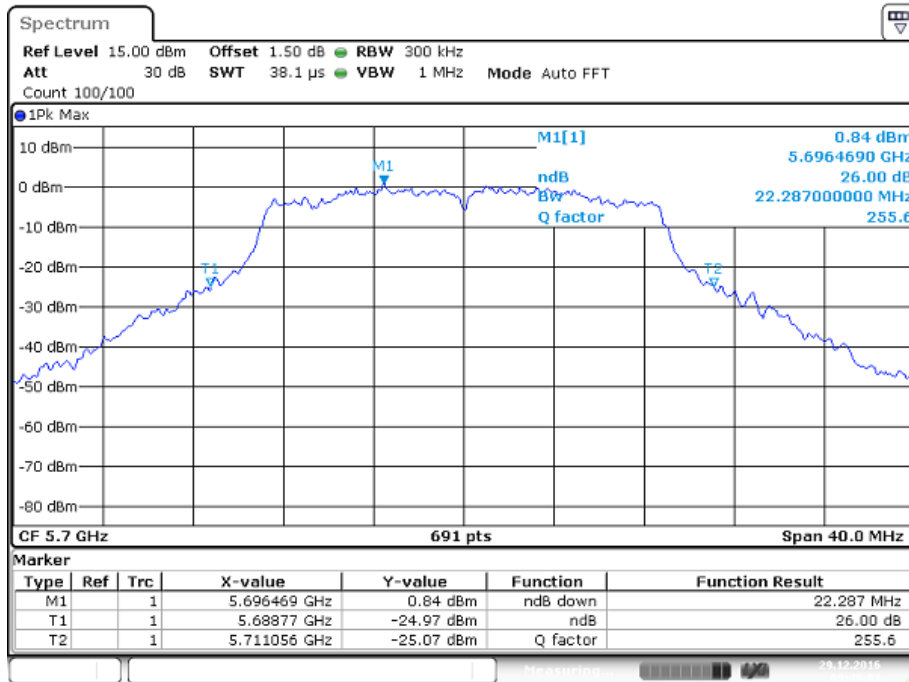
Date: 29 DEC 2016 09:44:15

5580MHz



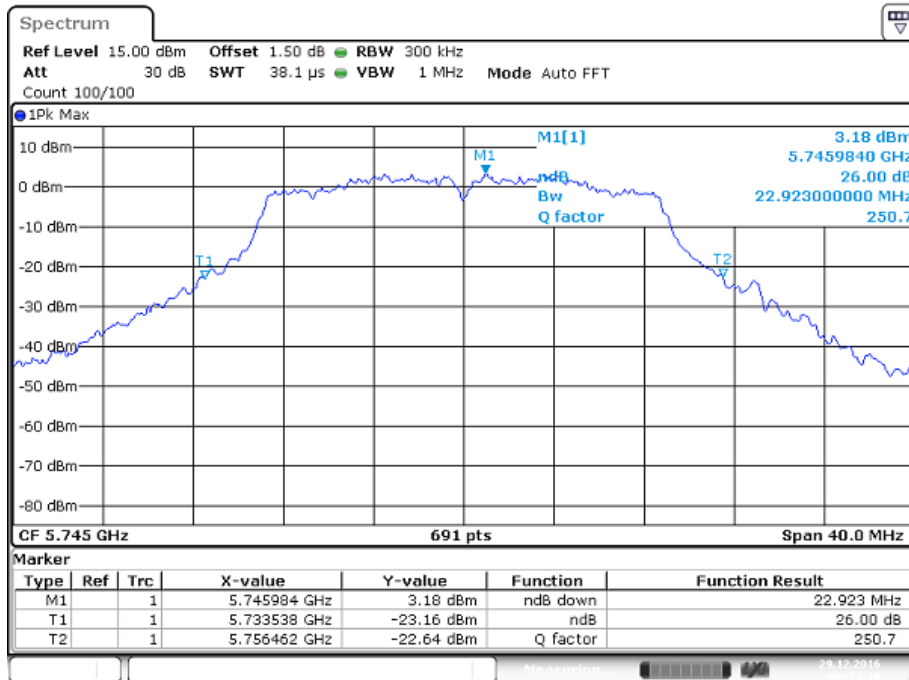
Date: 29 DEC 2016 09:46:37

5700MHz



Date: 29 DEC 2016 09:49:01

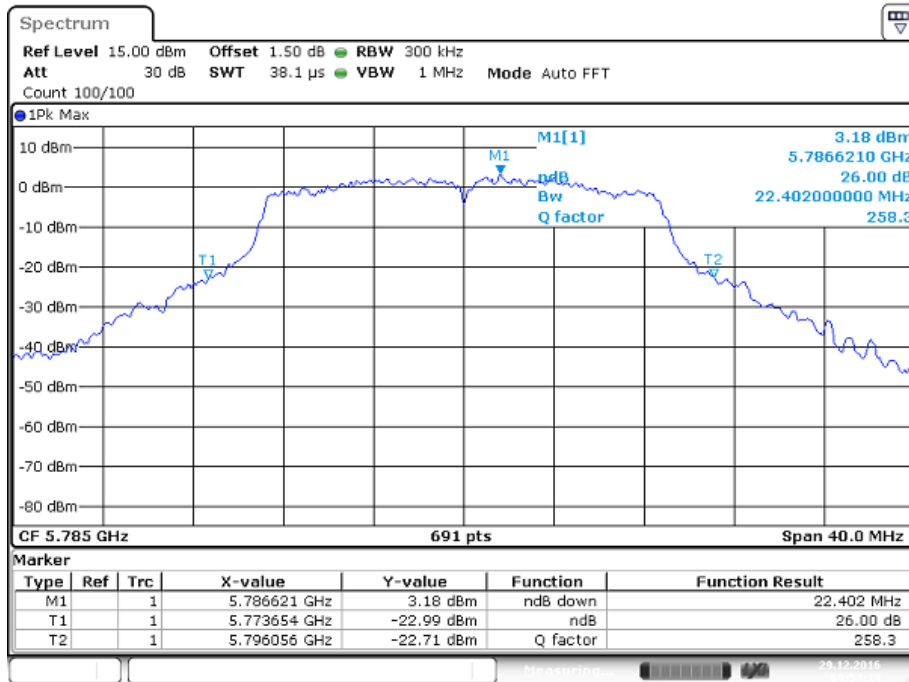
5745MHz



Date: 29 DEC 2016 09:53:17

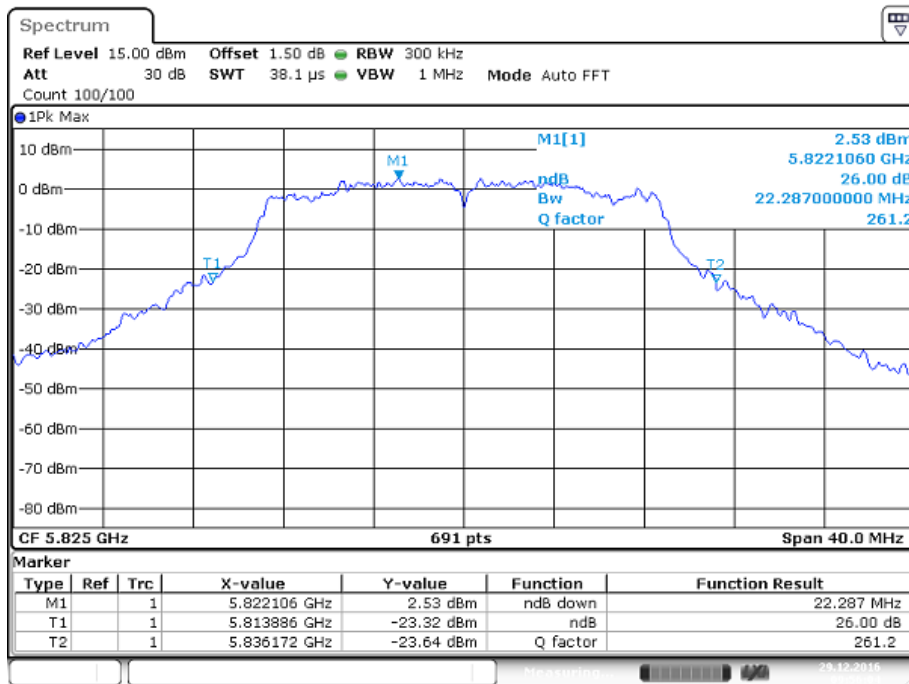


5785MHz



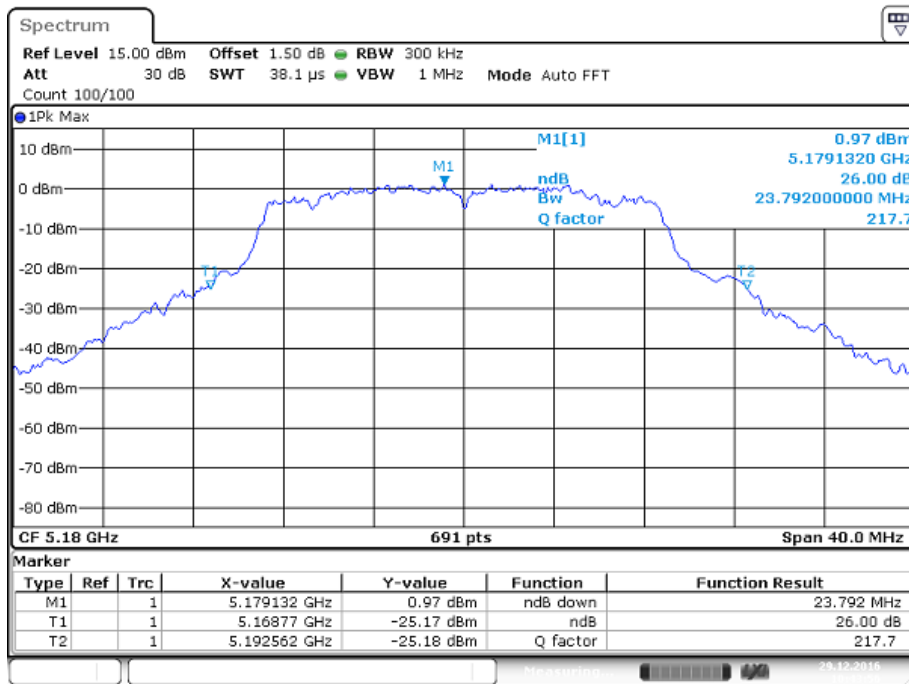
Date: 29 DEC 2016 09:54:15

5825MHz



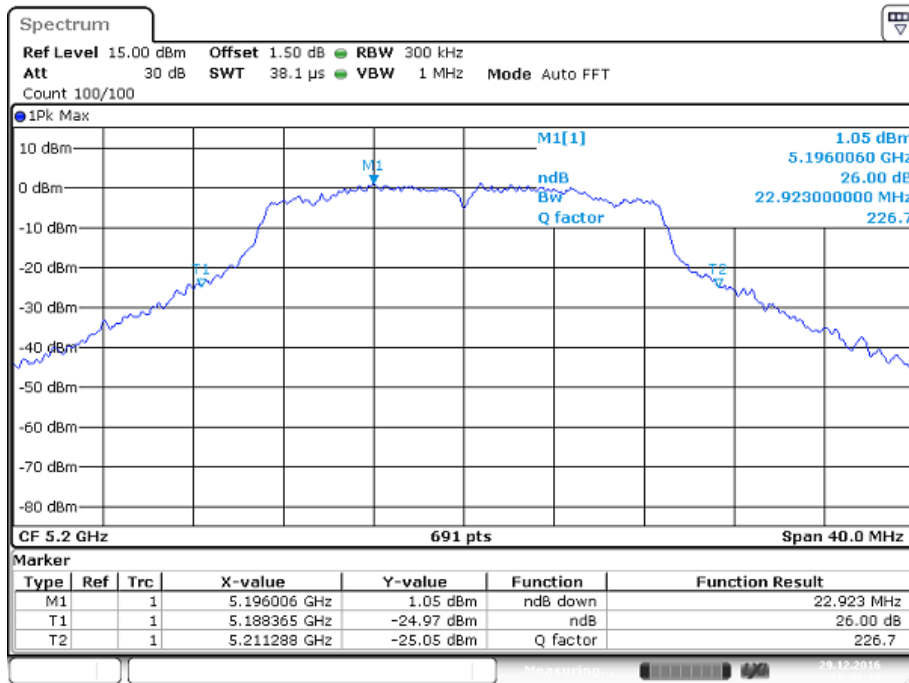
Date: 29 DEC 2016 09:56:04

**IEEE 802.11n HT20 Mode / 5180 ~ 5825MHz(chain 1)  
5180MHz**



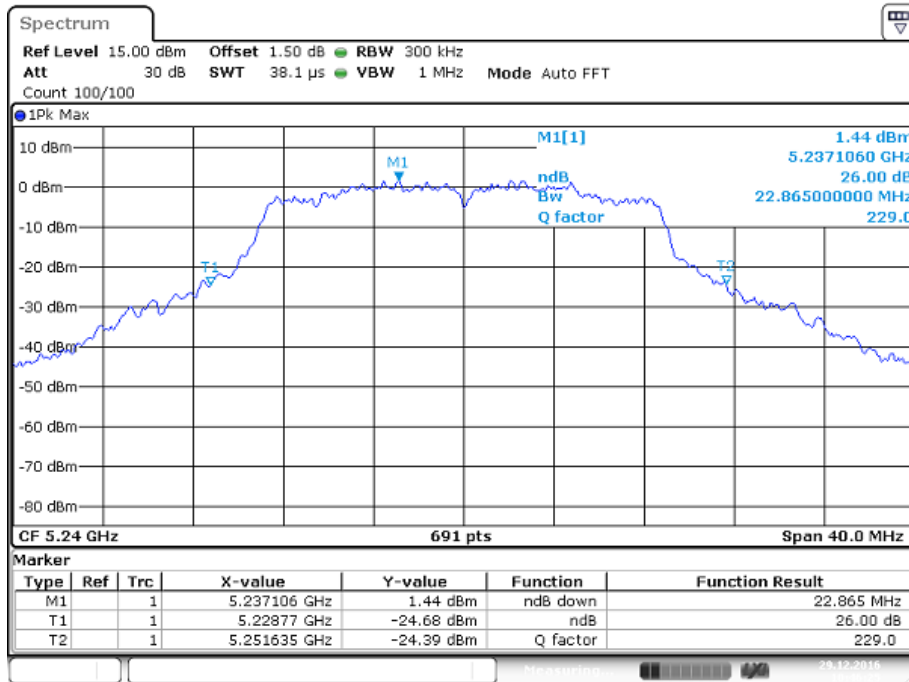
Date: 29 DEC 2016 10:43:57

**5200MHz**

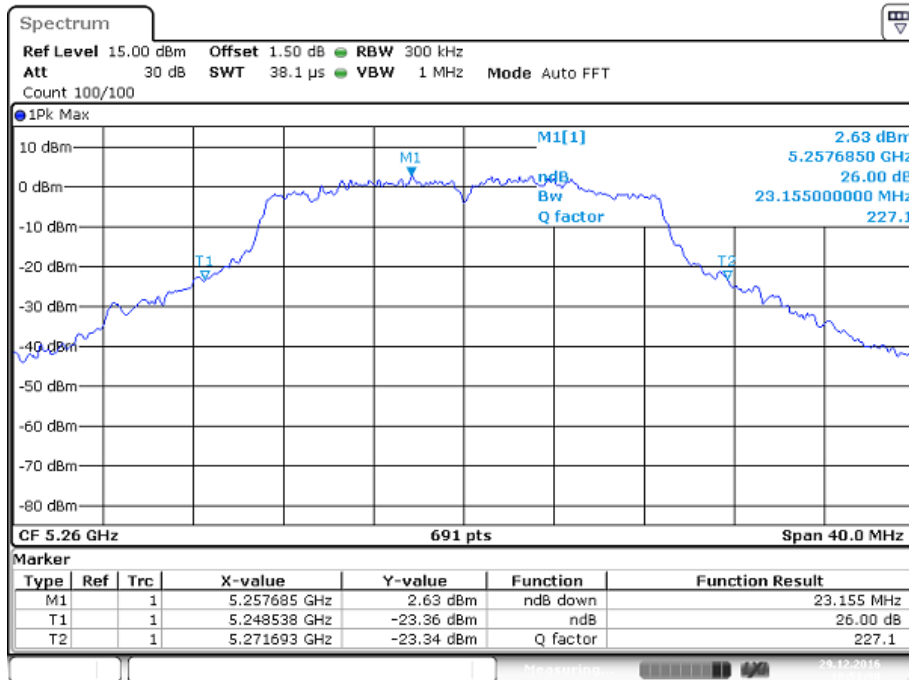


Date: 29 DEC 2016 10:45:39

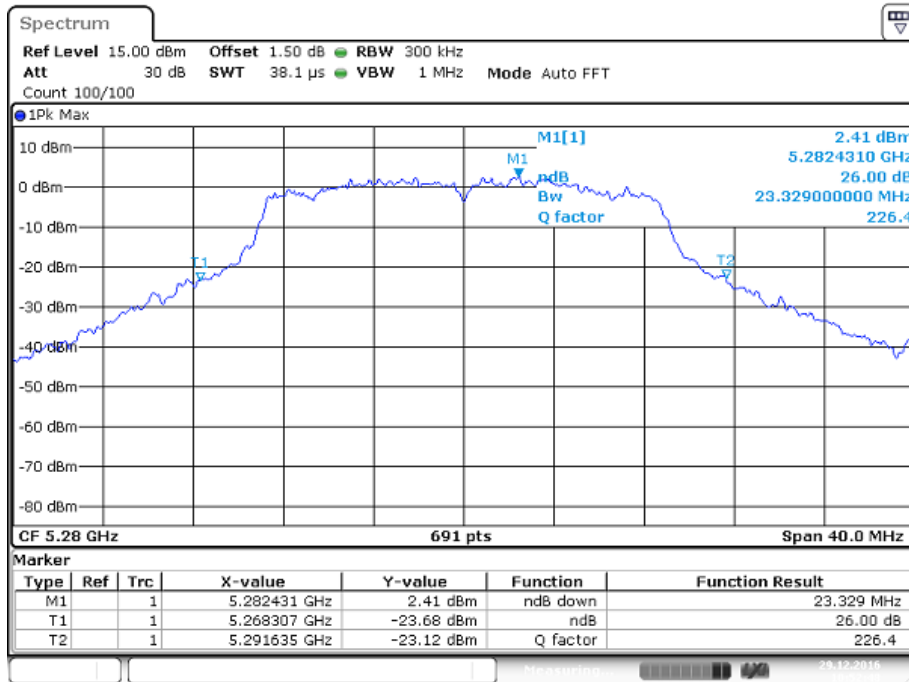
5240MHz



5260MHz

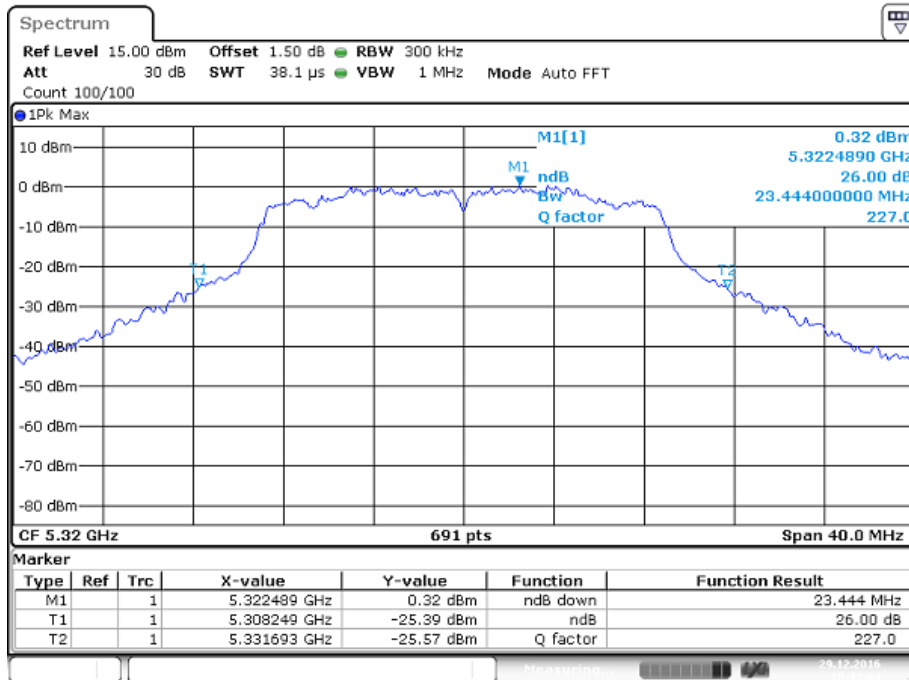


5280MHz



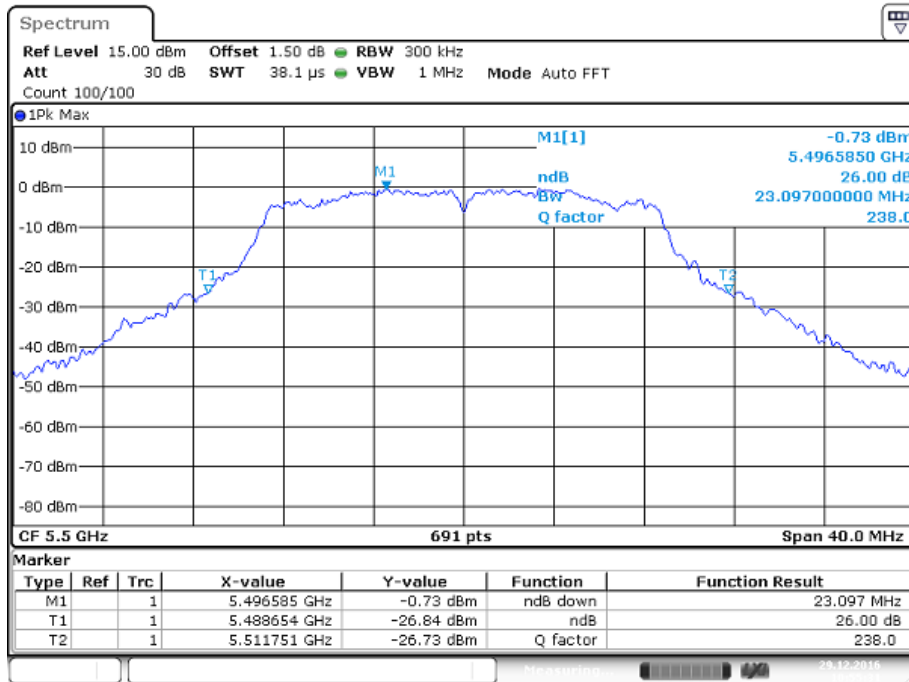
Date: 29 DEC 2016 10:52:47

5320MHz



Date: 29 DEC 2016 10:43:04

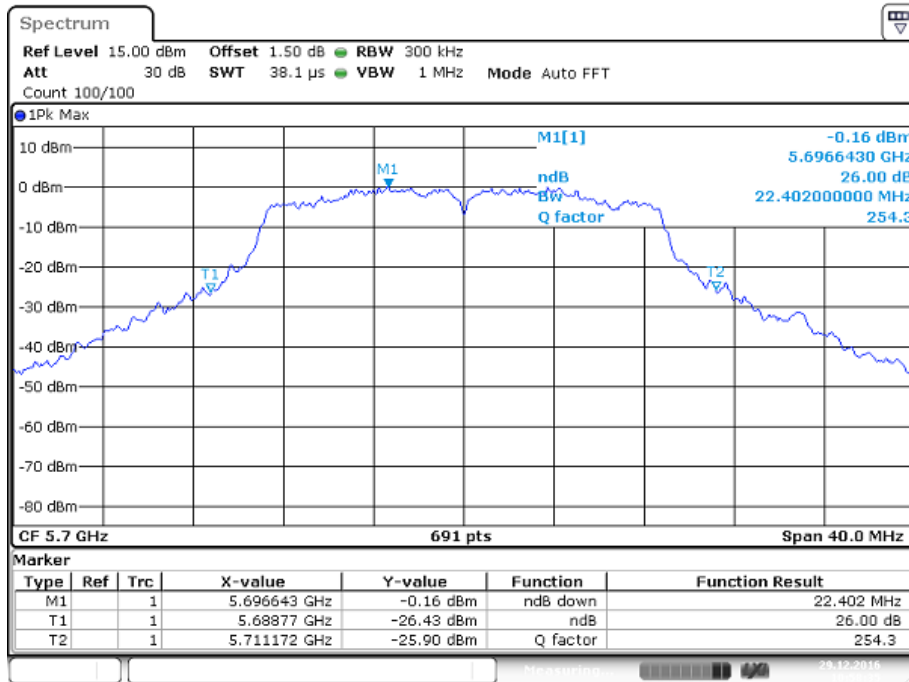
5500MHz



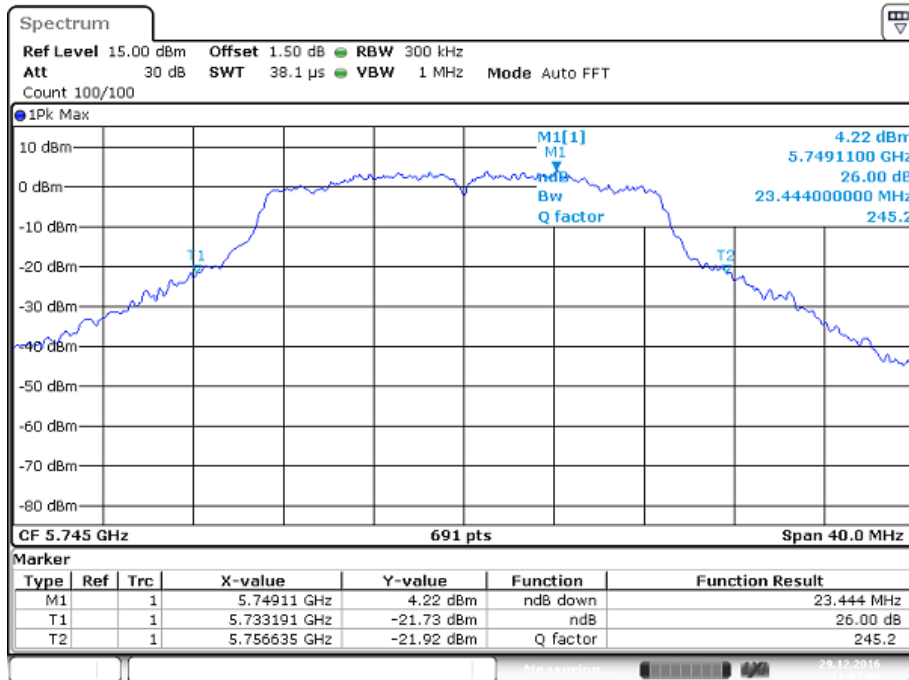
5580MHz



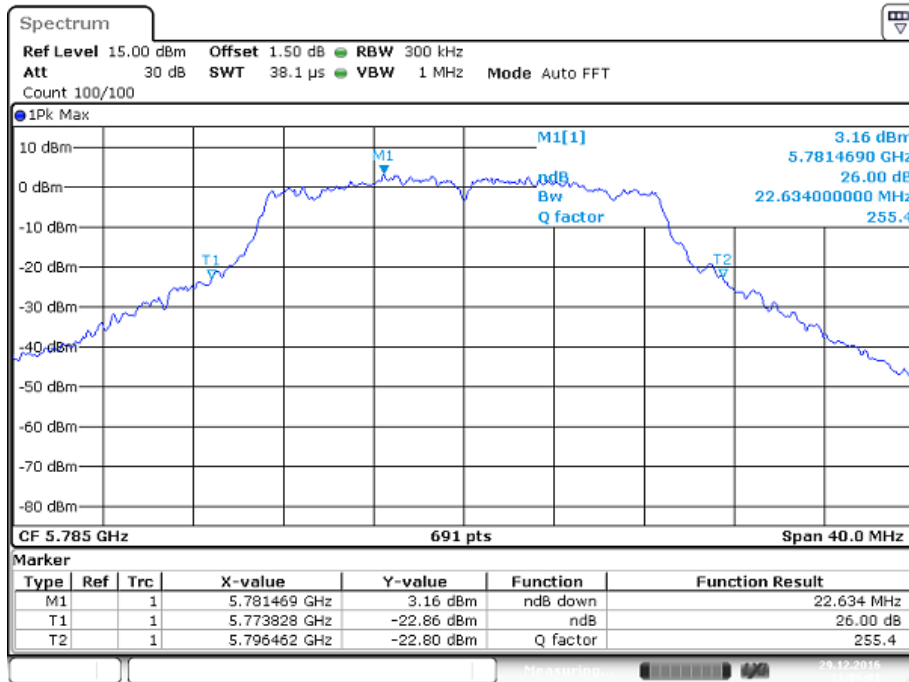
5700MHz



5745MHz

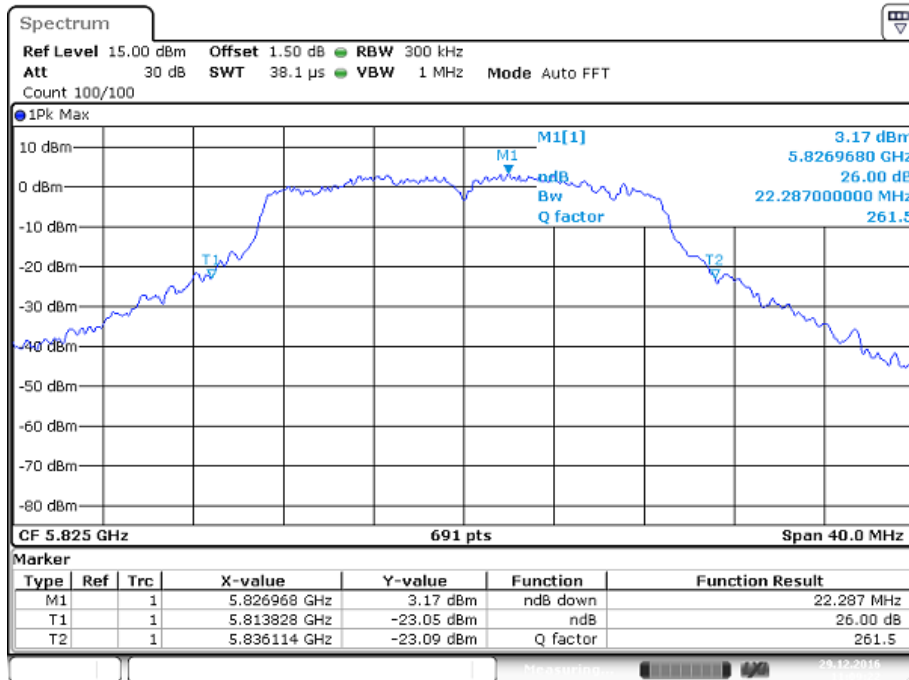


5785MHz



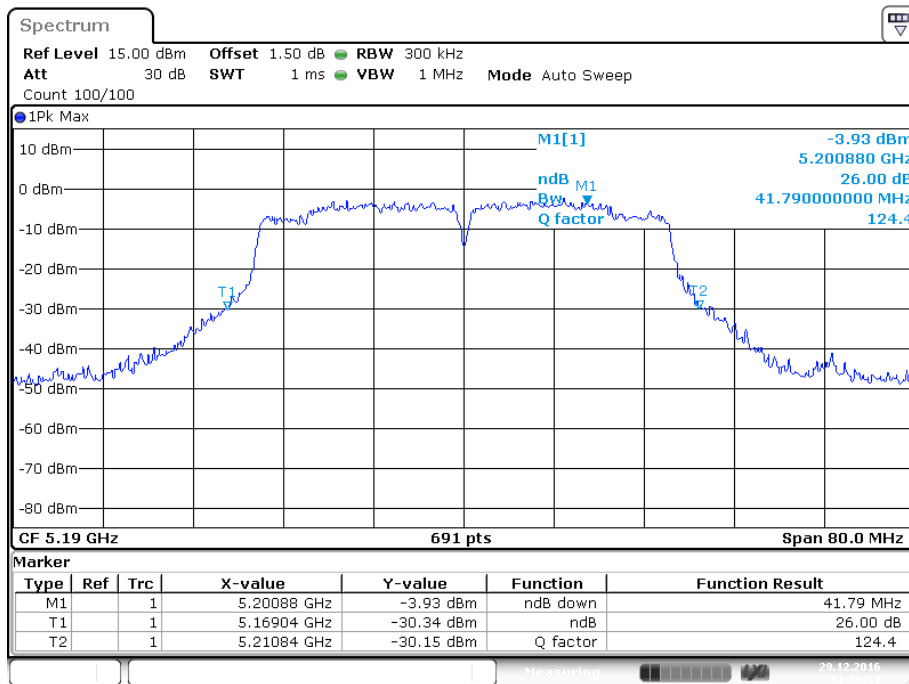
Date: 29 DEC 2016 11:06:02

5825MHz



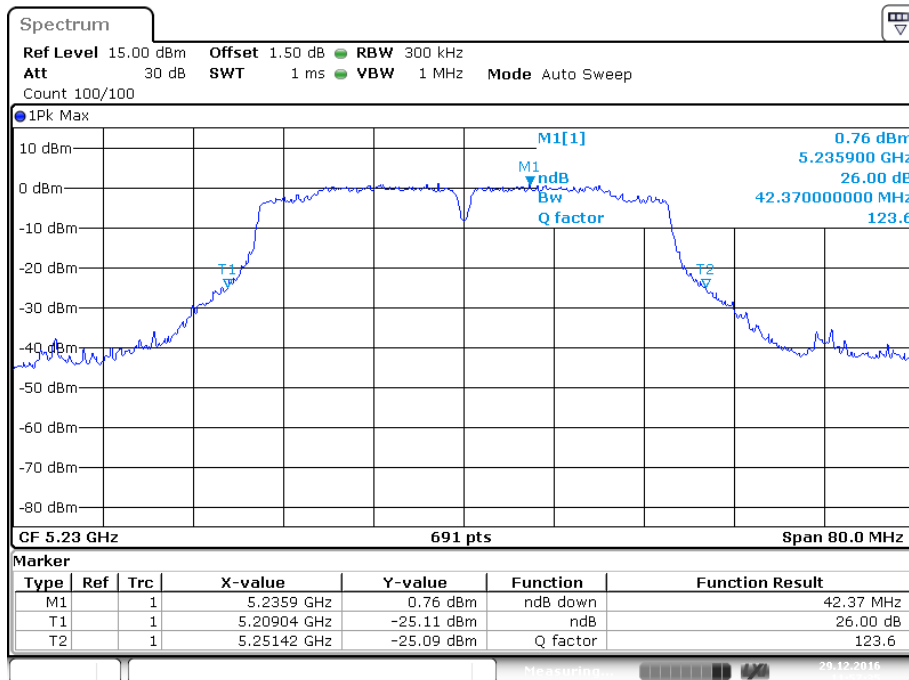
Date: 29 DEC 2016 11:09:22

**IEEE 802.11n HT40 Mode / 5190 ~ 5795MHz (chain0)**  
**5190MHz**



Date: 29 DEC. 2016 11:56:51

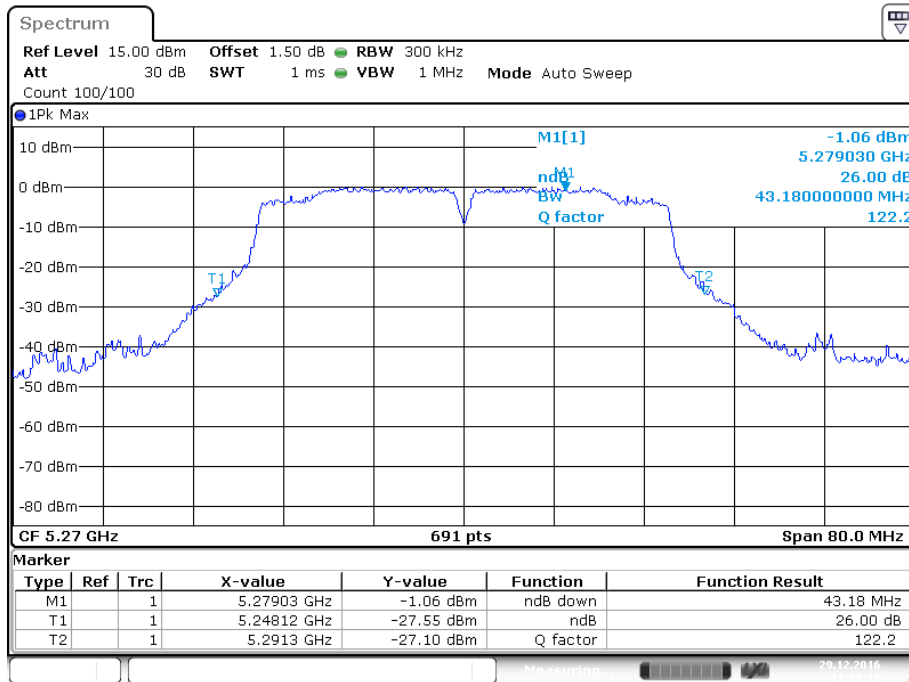
**5230MHz**



Date: 29 DEC. 2016 11:57:36

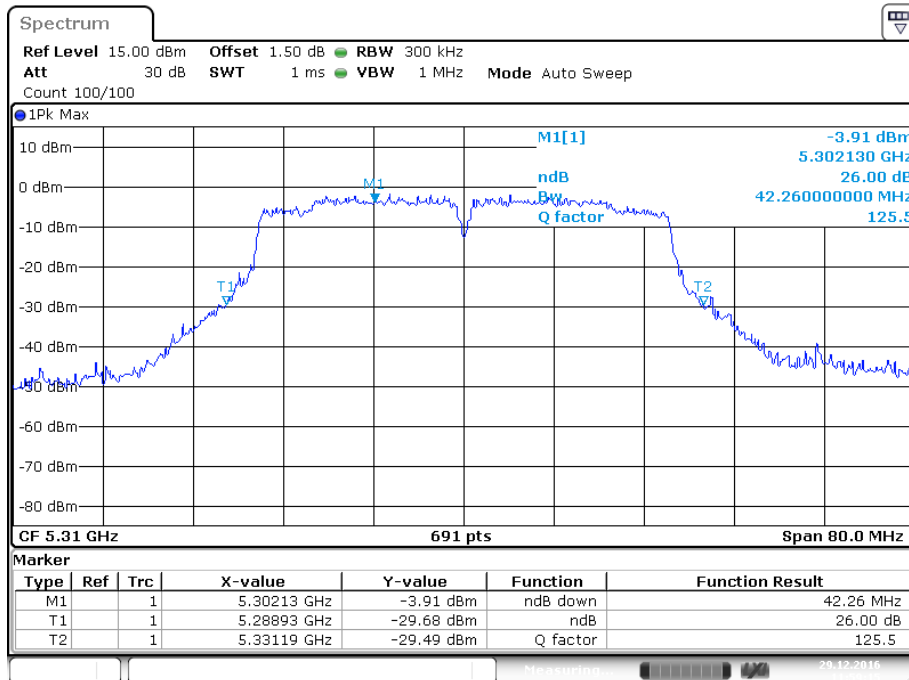


5270MHz



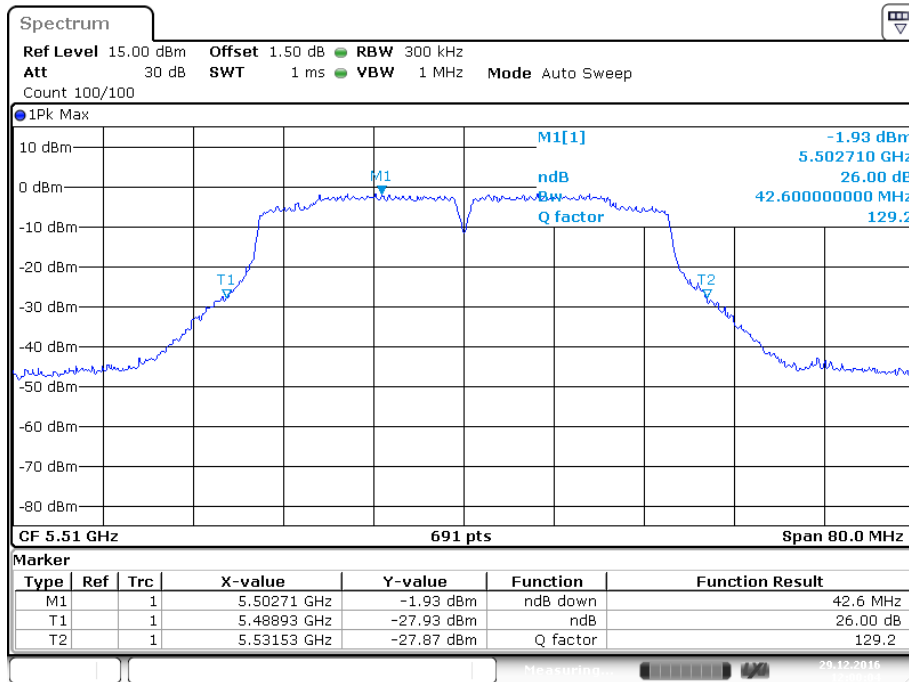
Date: 29 DEC. 2016 11:58:18

5310MHz



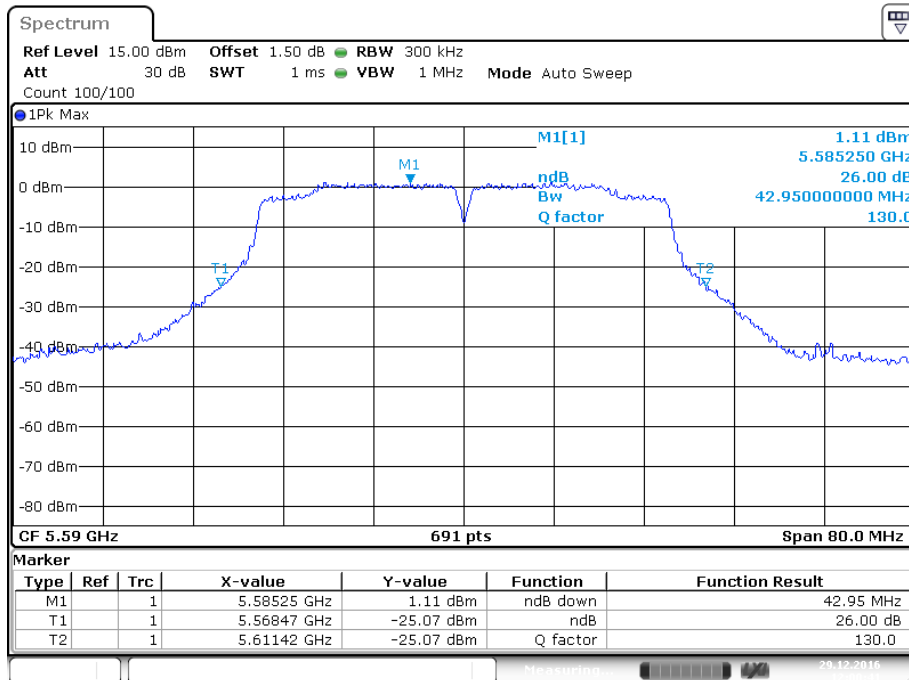
Date: 29 DEC. 2016 11:59:15

5510MHz



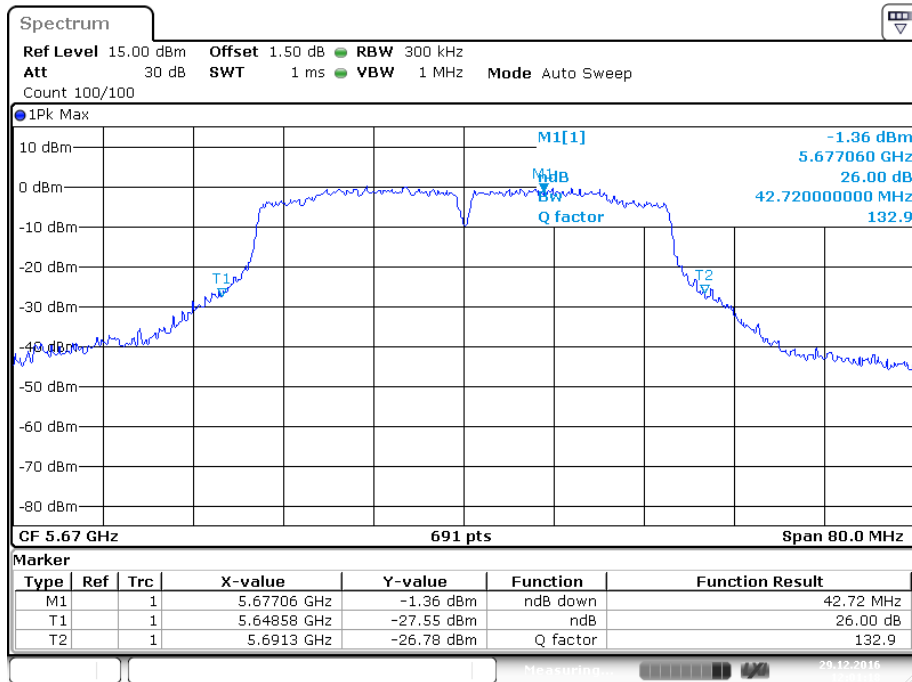
Date: 29 DEC. 2016 12:00:04

5590MHz



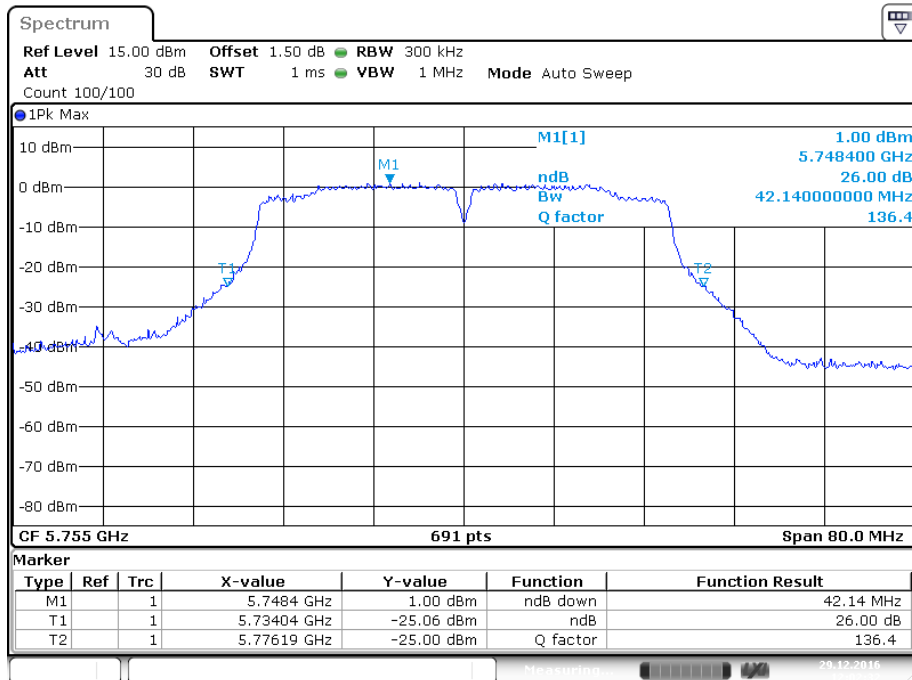
Date: 29 DEC. 2016 12:00:41

5670MHz



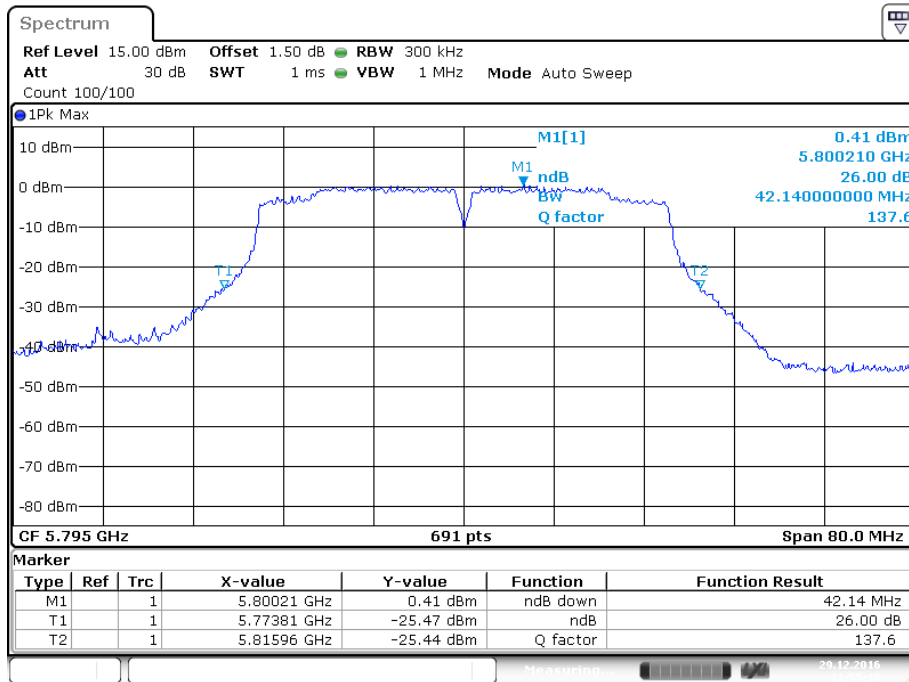
Date: 29 DEC. 2016 12:01:18

5755MHz



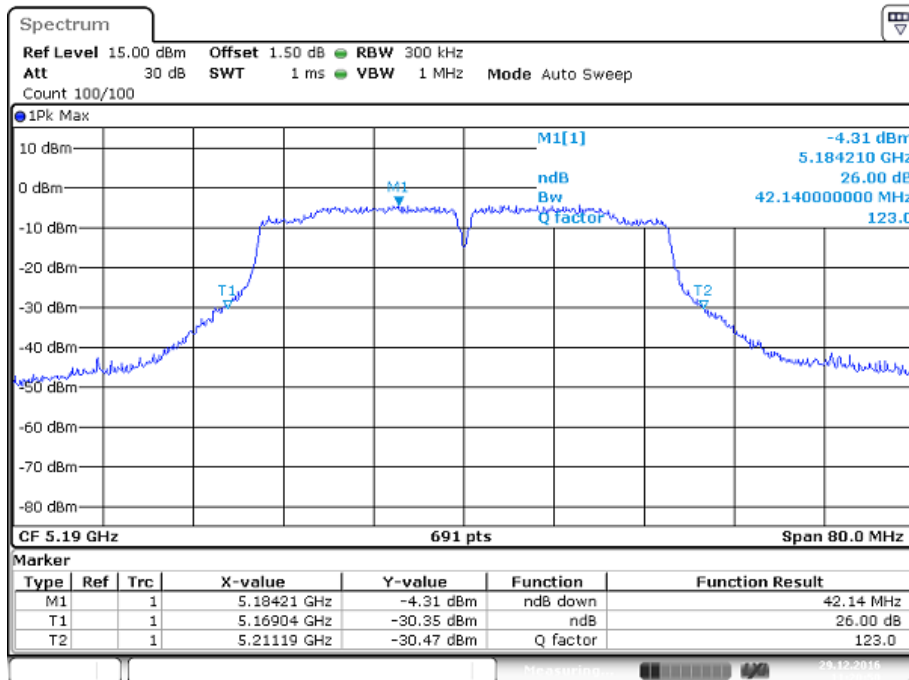
Date: 29 DEC. 2016 12:02:32

5795MHz



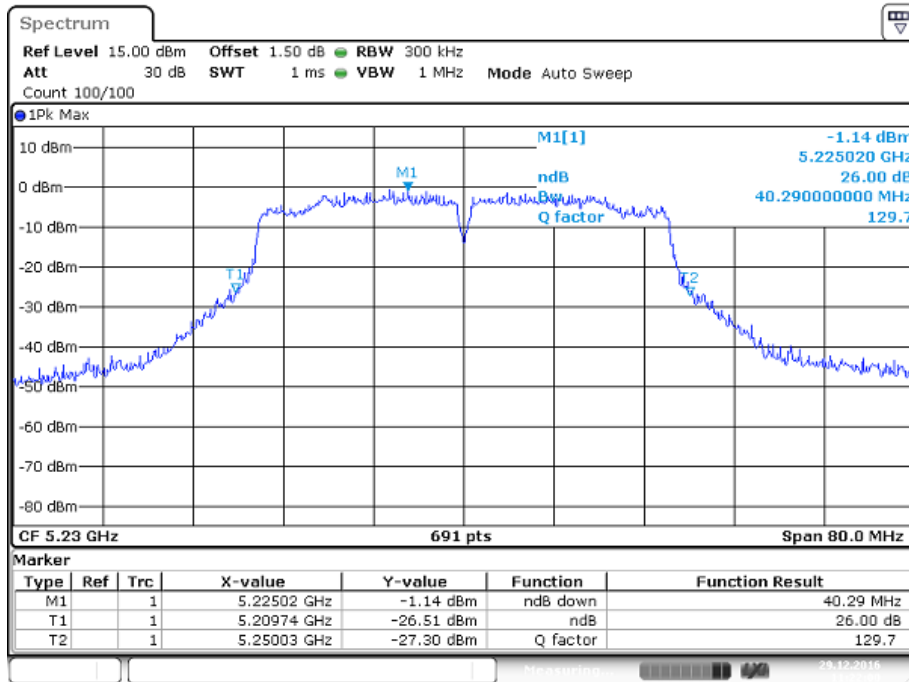
Date: 29 DEC 2016 11:55:18

IEEE 802.11n HT40 Mode / 5190 ~ 5795MHz (chain 1)  
 5190MHz



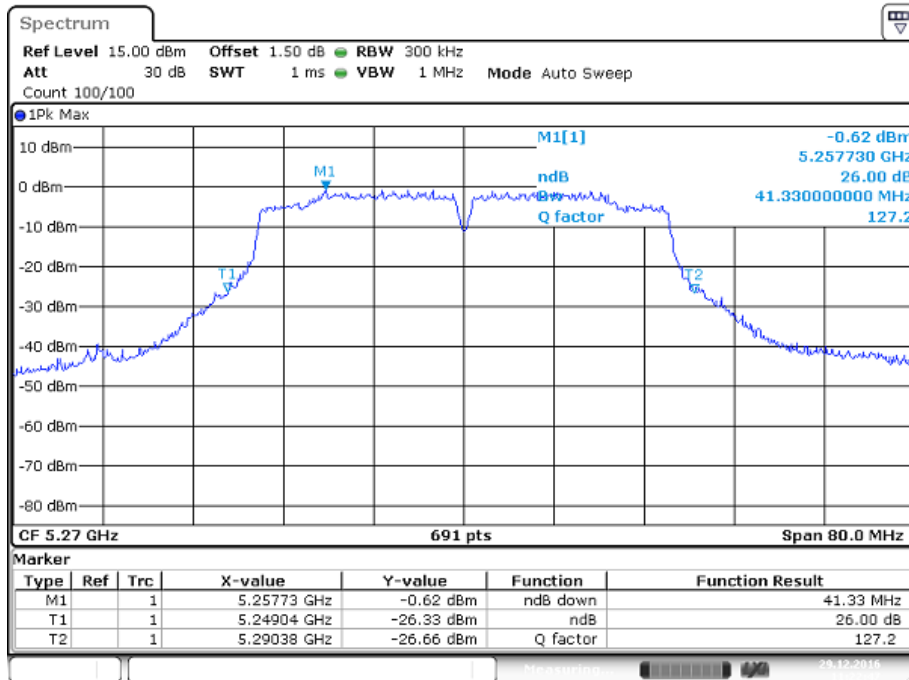
Date: 29 DEC 2016 11:20:50

5230MHz



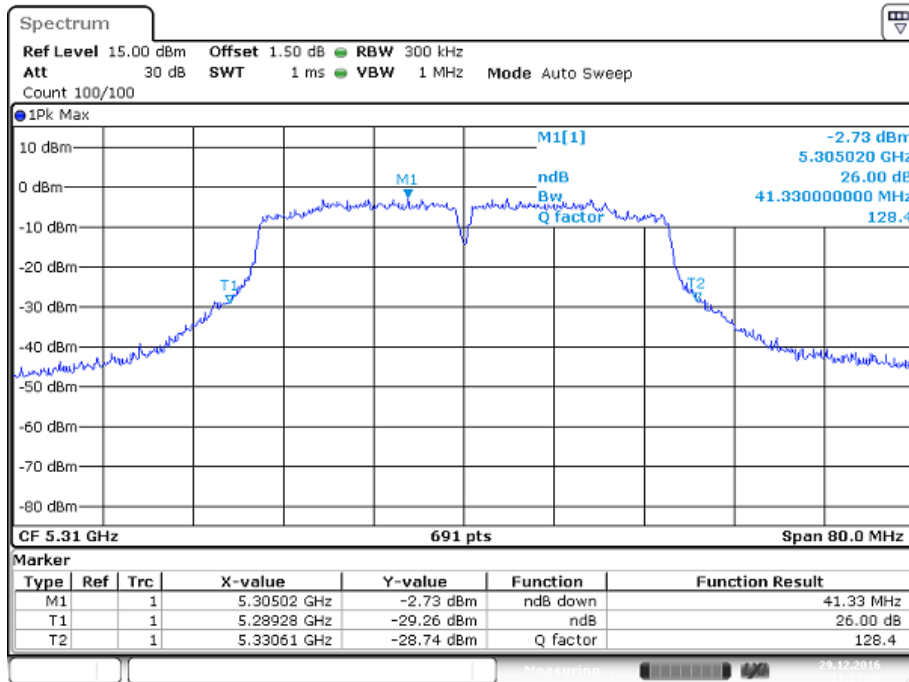
Date: 29 DEC 2016 11:22:00

5270MHz



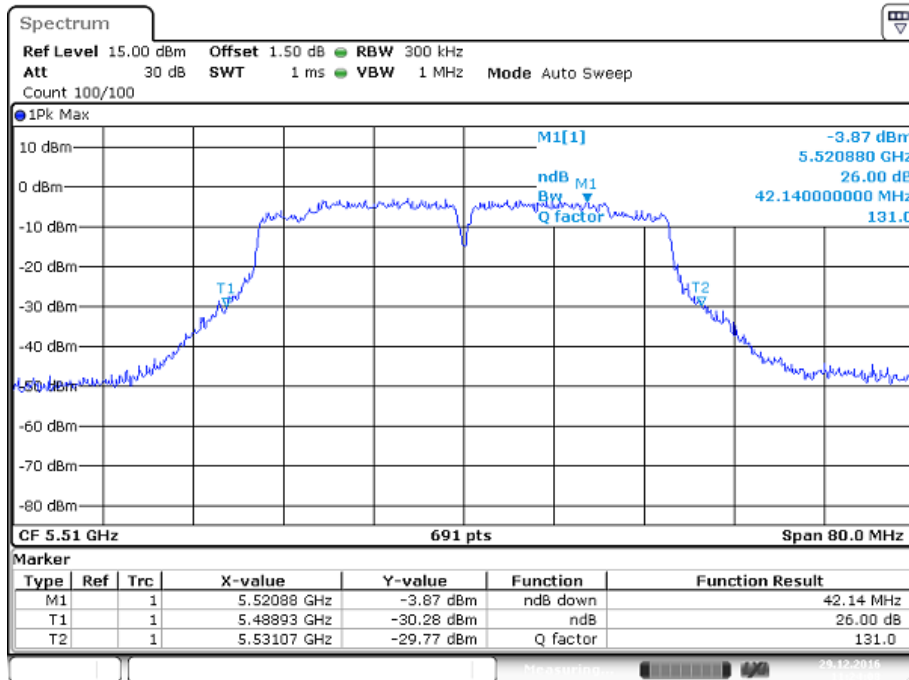
Date: 29 DEC 2016 11:22:47

5310MHz



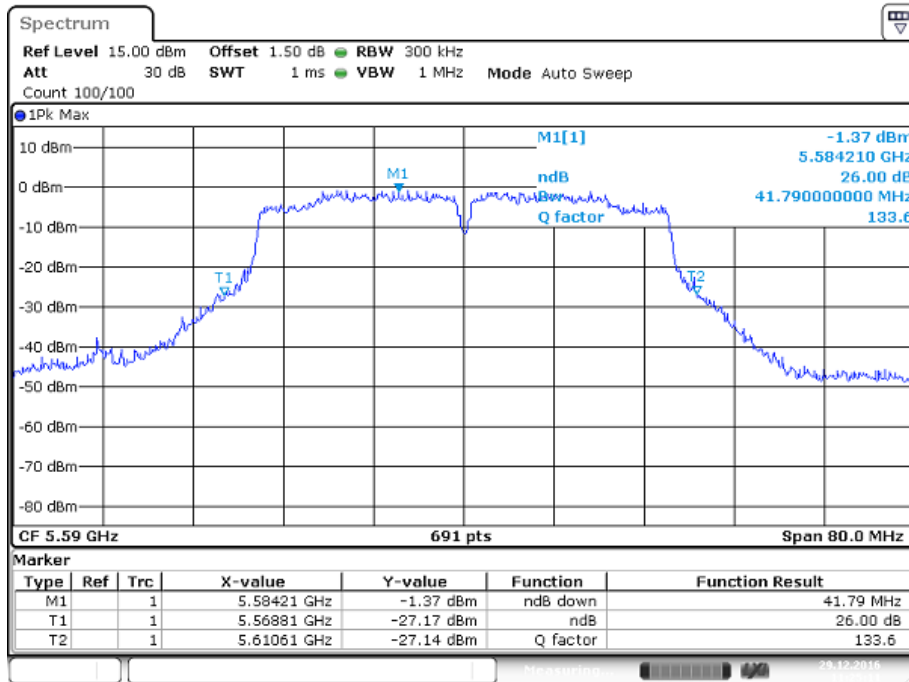
Date: 29 DEC 2016 11:23:26

5510MHz

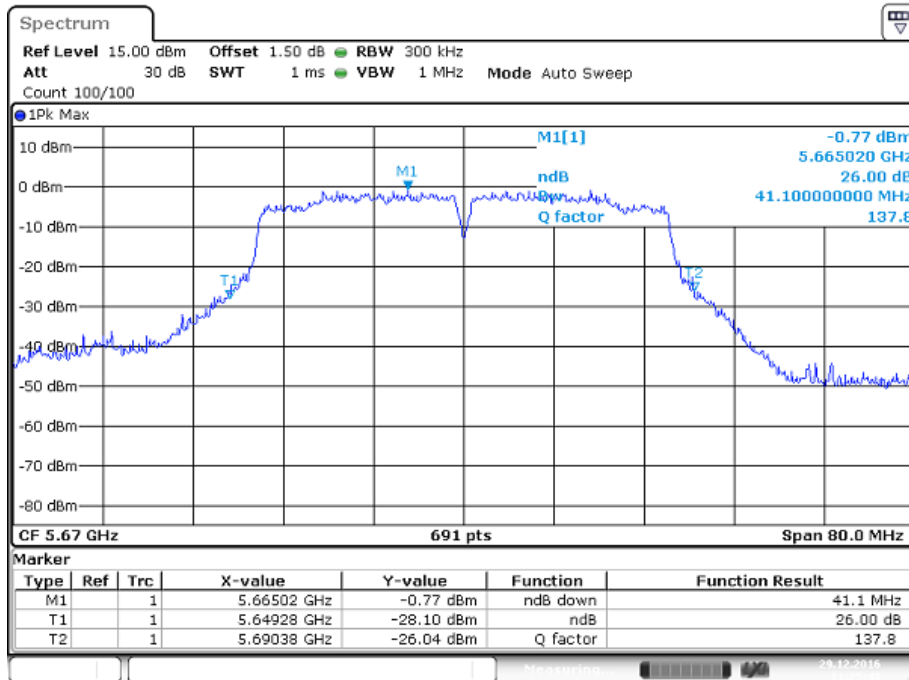


Date: 29 DEC 2016 11:24:08

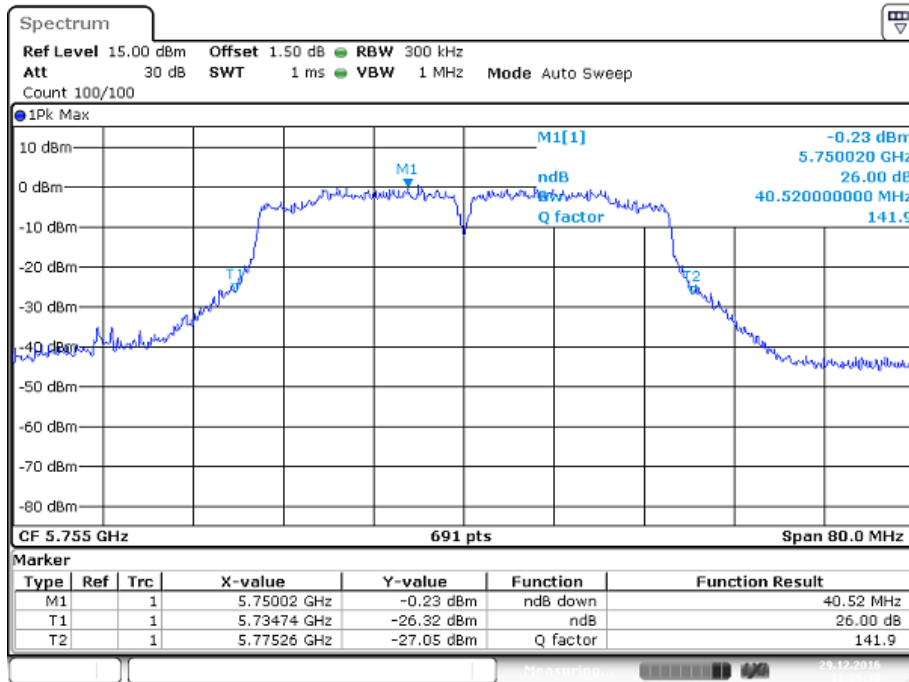
5590MHz



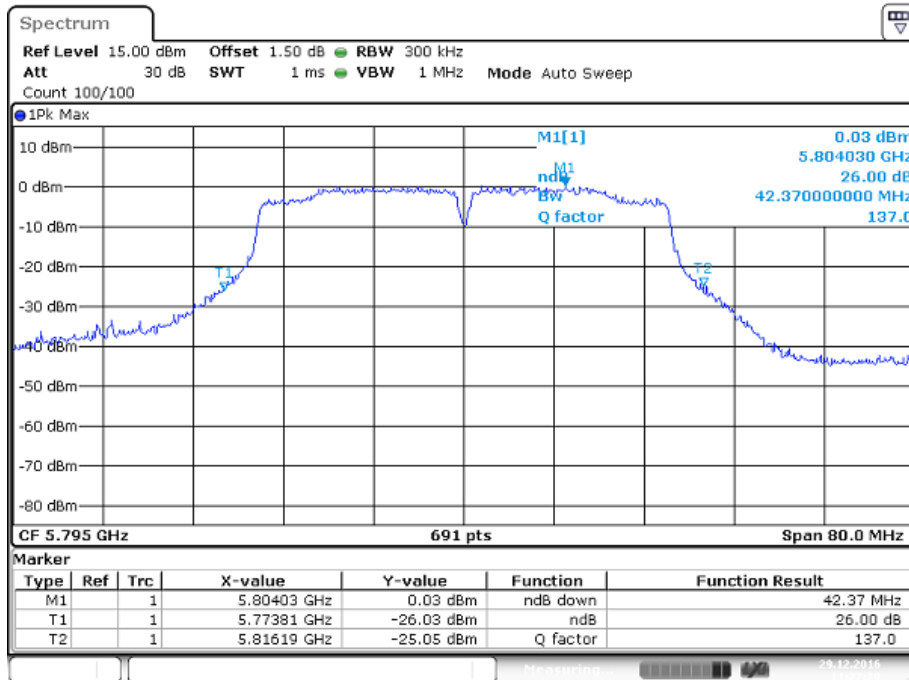
5670MHz



5755MHz

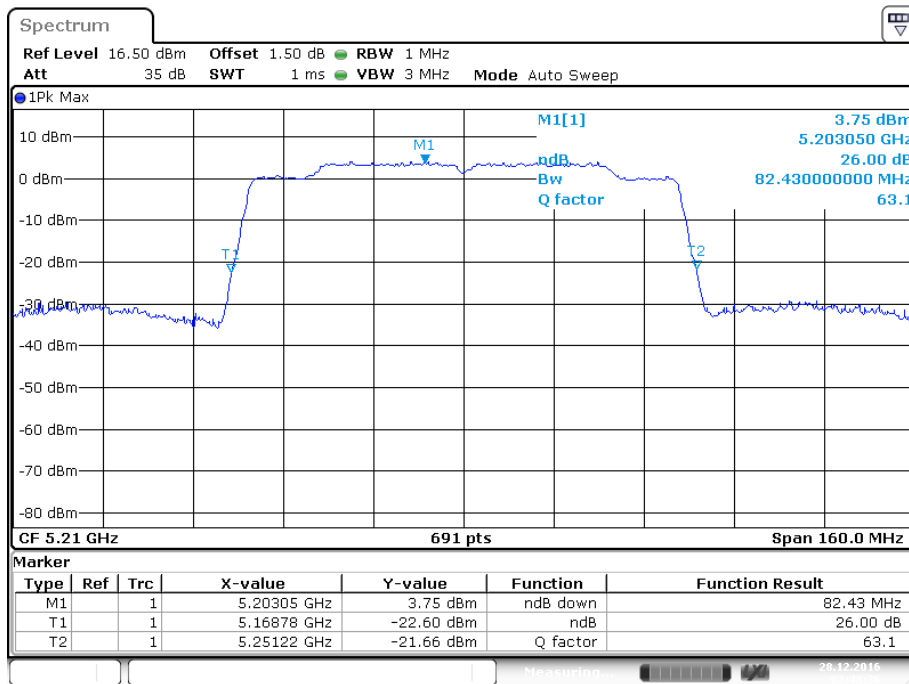


5795MHz



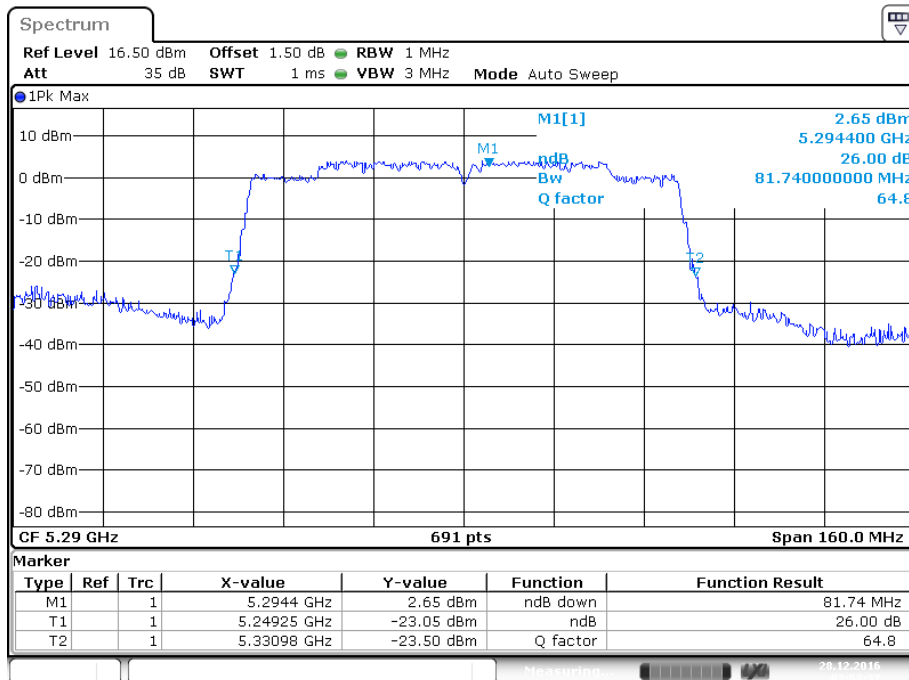


**IEEE 802.11ac VHT80 Mode / 5210~5775MHz (chain 0)  
5210MHz**



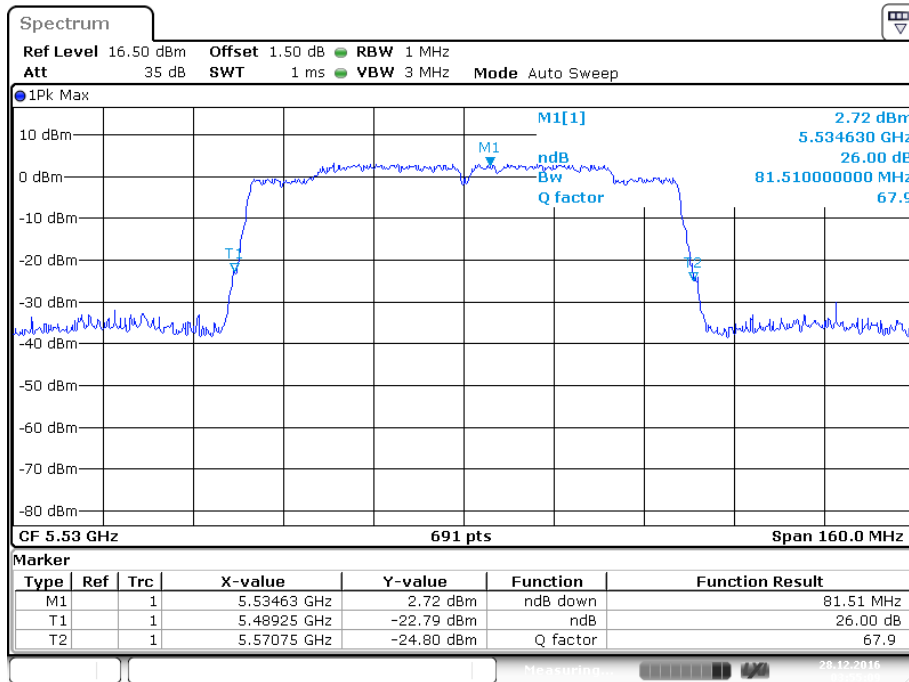
Date: 28 DEC. 2016 03:48:36

**5290MHz**



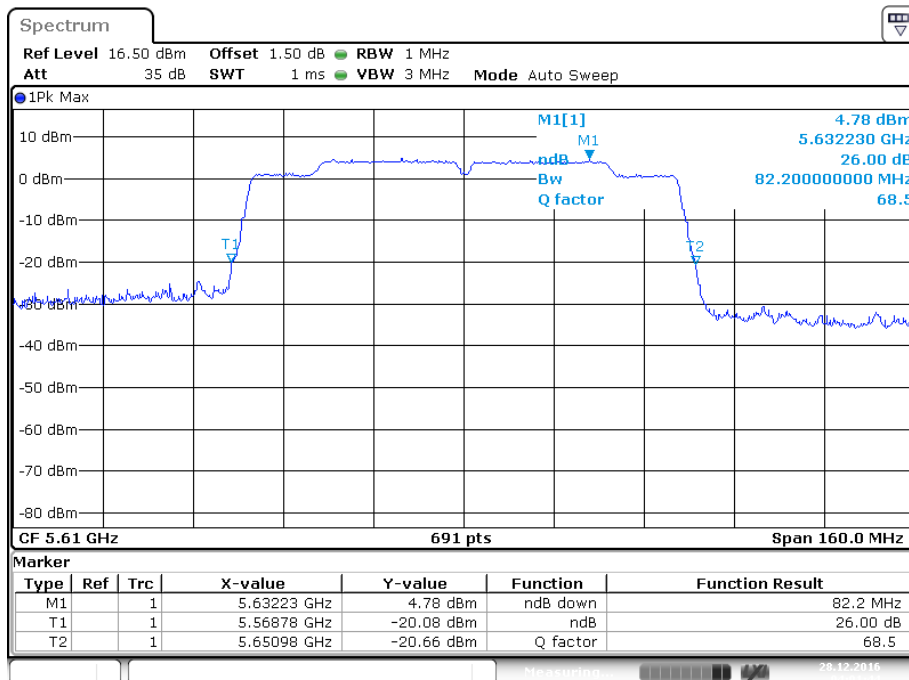
Date: 28 DEC. 2016 03:53:38

5530MHz



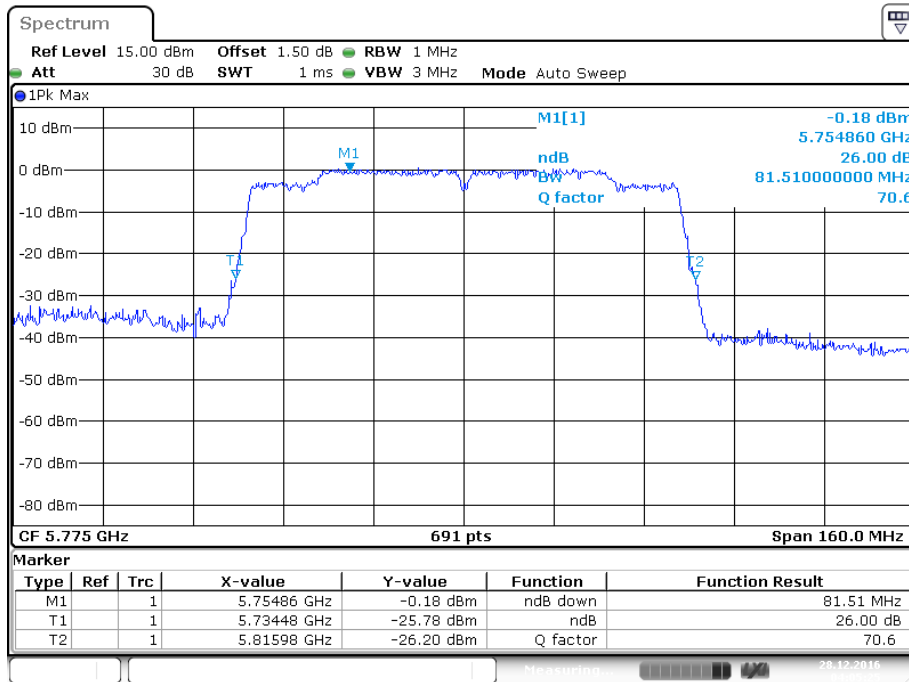
Date: 28 DEC. 2016 03:55:10

5610MHz



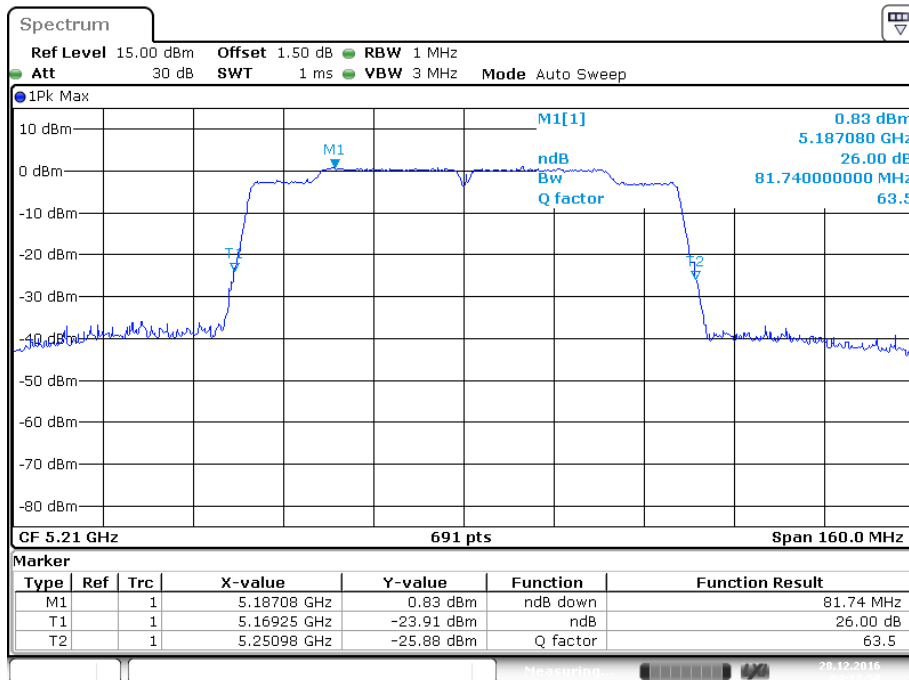
Date: 28 DEC. 2016 04:01:44

5775MHz



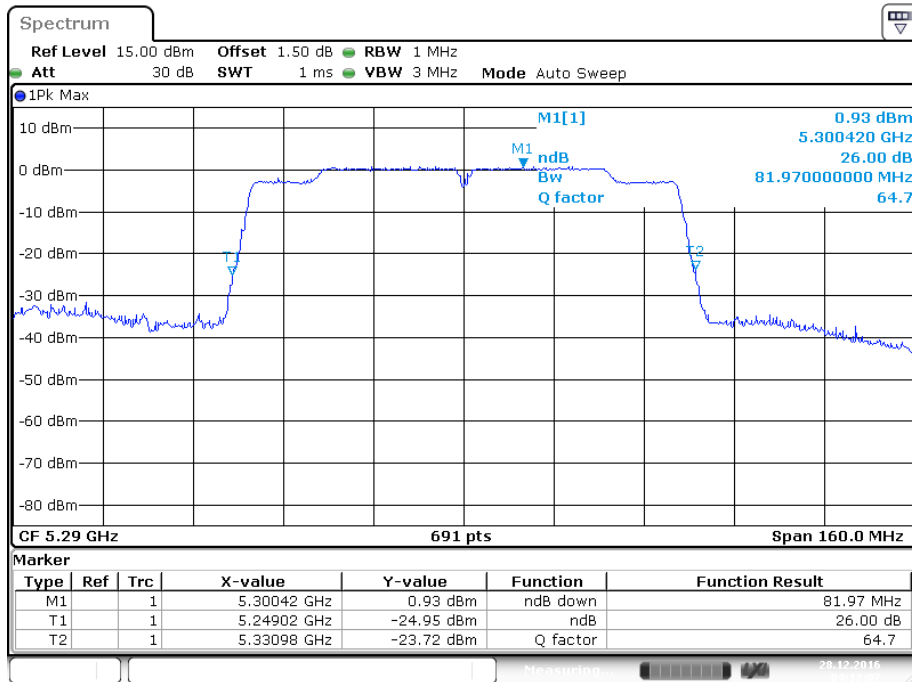
Date: 28 DEC. 2016 04:05:25

IEEE 802.11ac VHT80 Mode / 5210~5775MHz (chain 1)  
 5210MHz



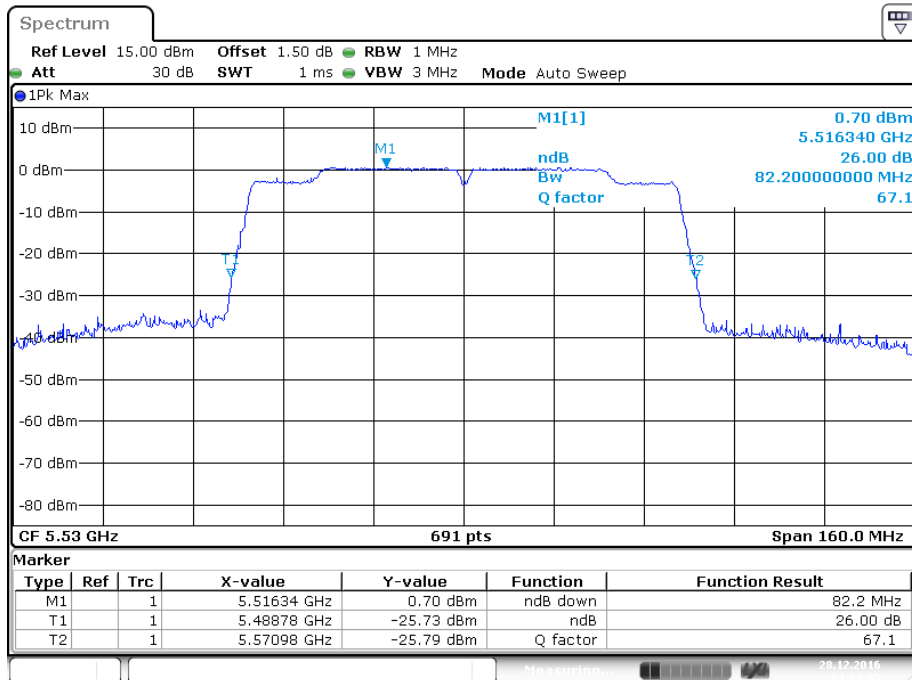
Date: 28 DEC. 2016 04:12:58

5290MHz



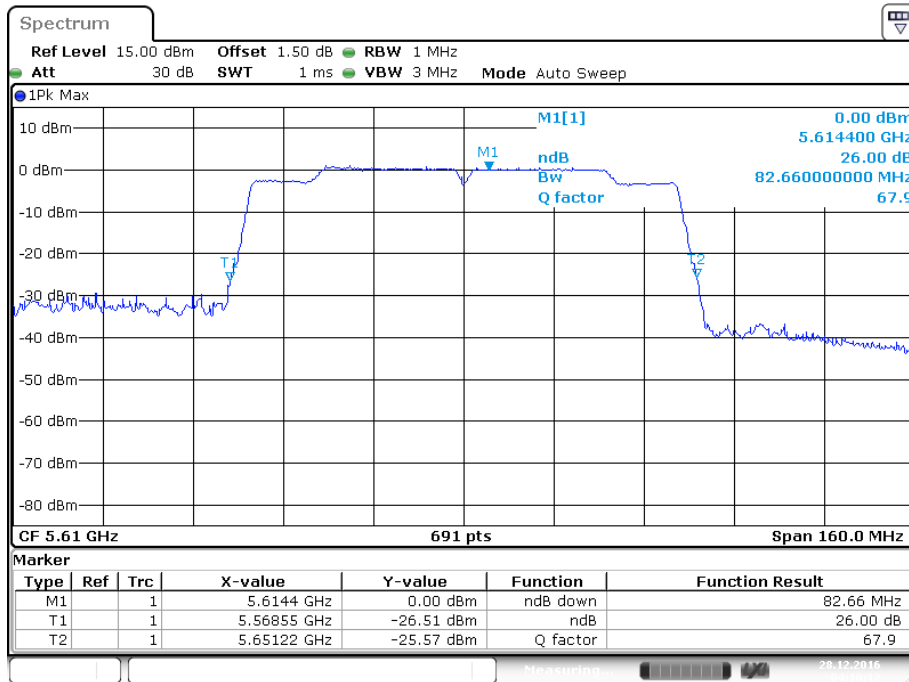
Date: 28 DEC. 2016 04:12:08

5530MHz



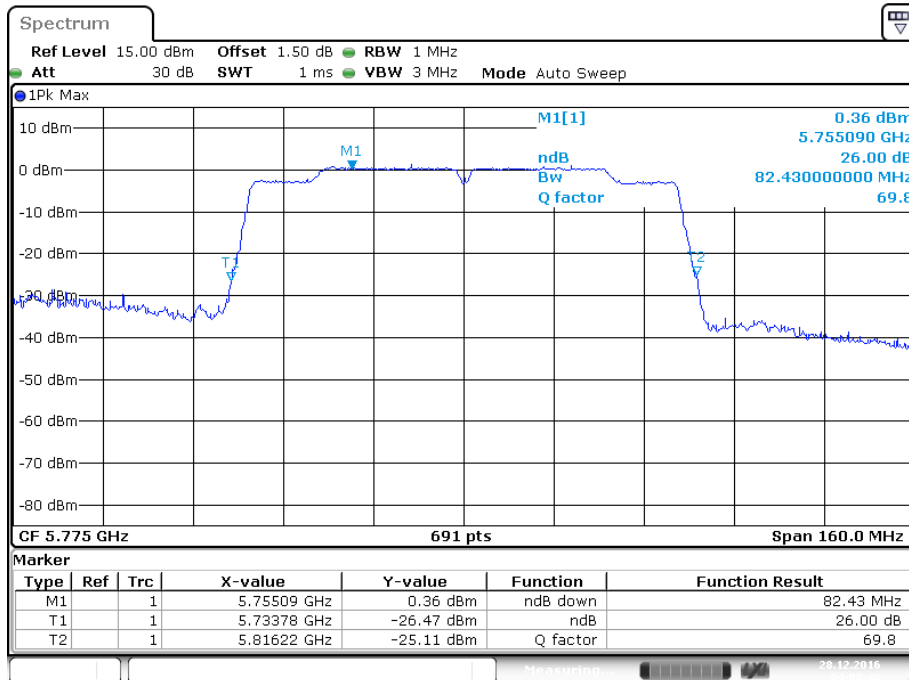
Date: 28 DEC. 2016 04:11:06

5610MHz



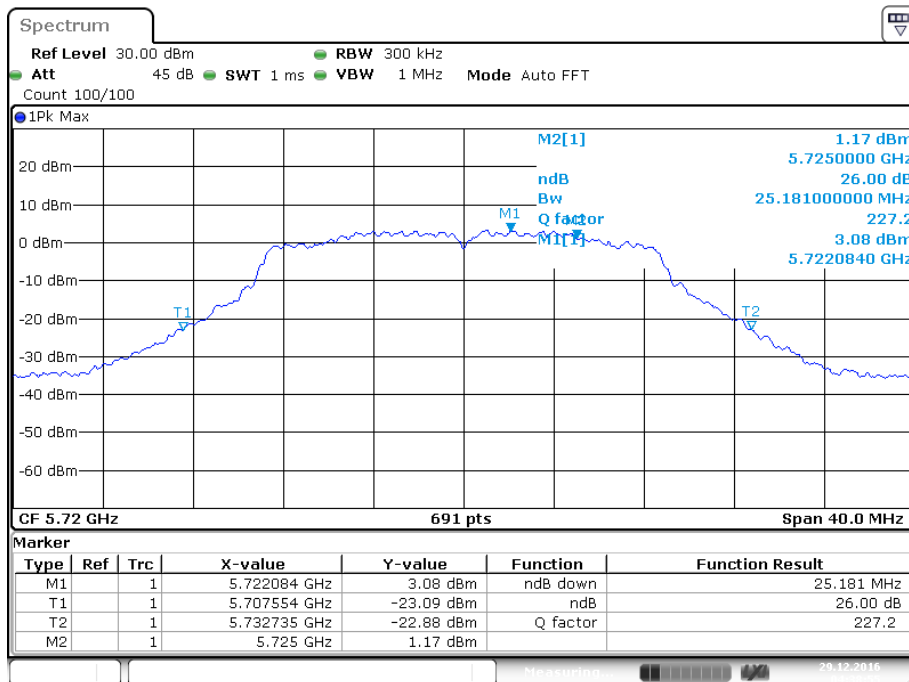
Date: 28 DEC. 2016 04:10:12

5775MHz

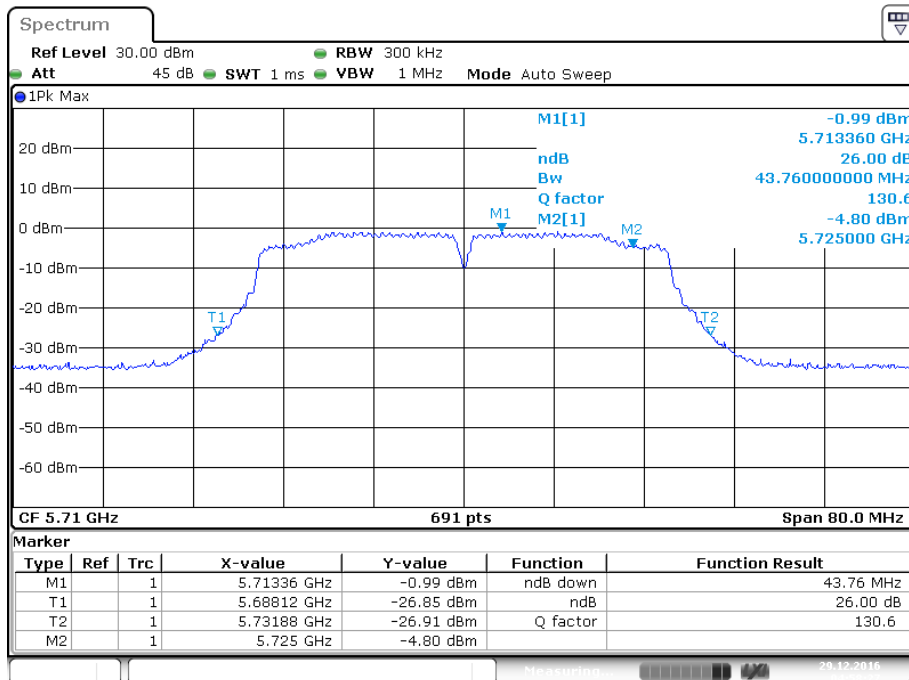


Date: 28 DEC. 2016 04:08:47

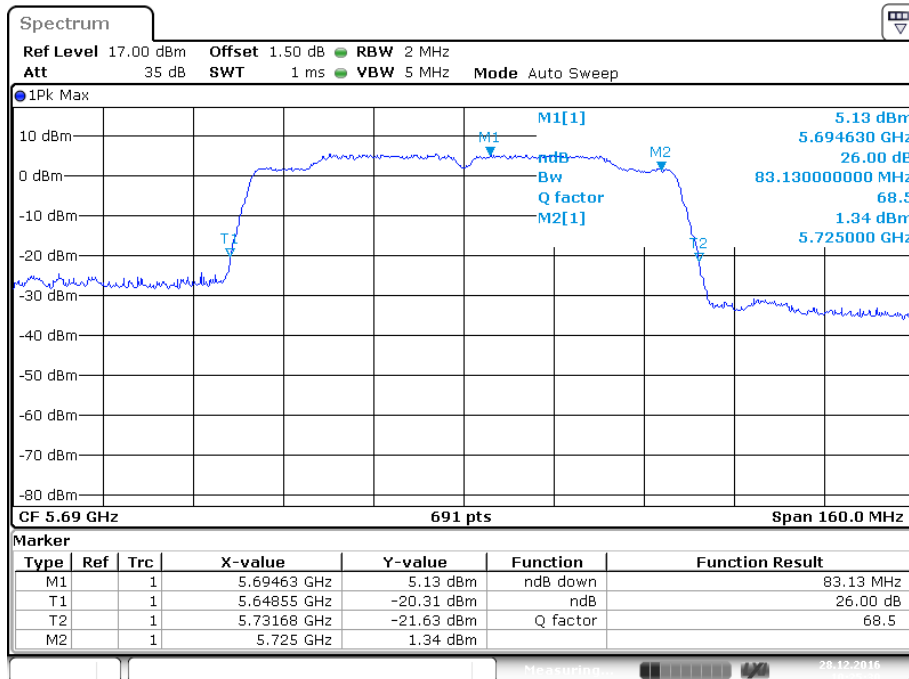
**Cross Band  
IEEE 802.11n HT20 Mode / 5720MHz (chain 0)**



**IEEE 802.11n HT40 Mode / 5710MHz (chain 0)**

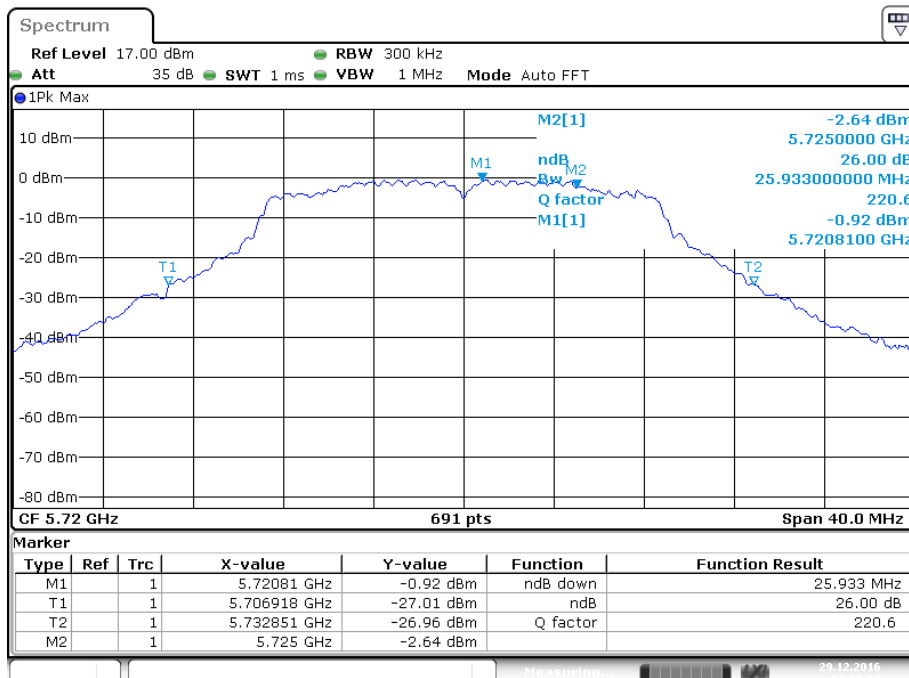


**IEEE 802.11ac VHT80 Mode / 5690MHz (chain 0)**



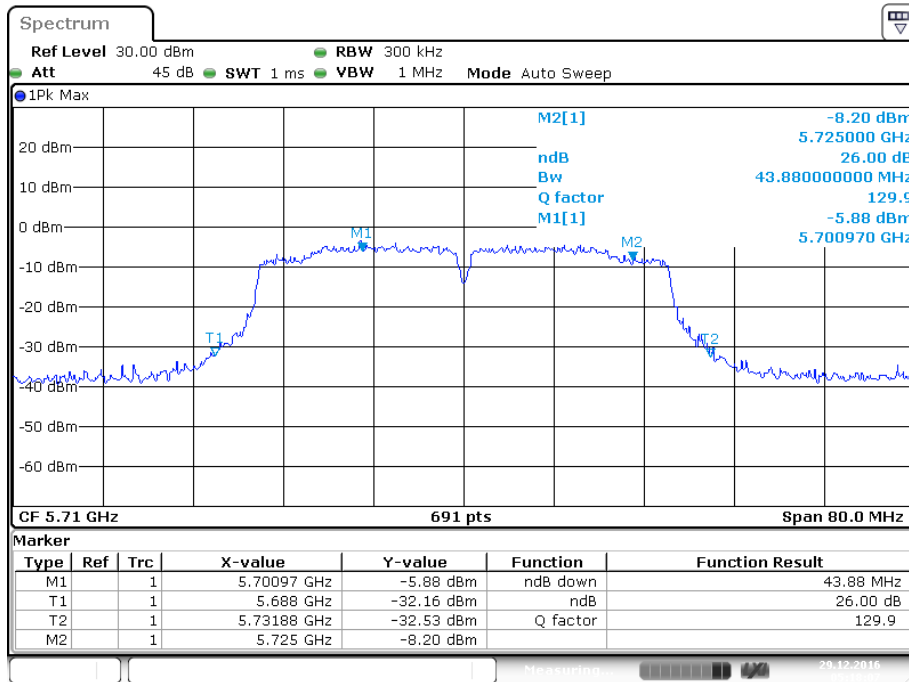
Date: 28 DEC.2016 10:25:31

**IEEE 802.11n HT20 Mode / 5720MHz (chain 1)**



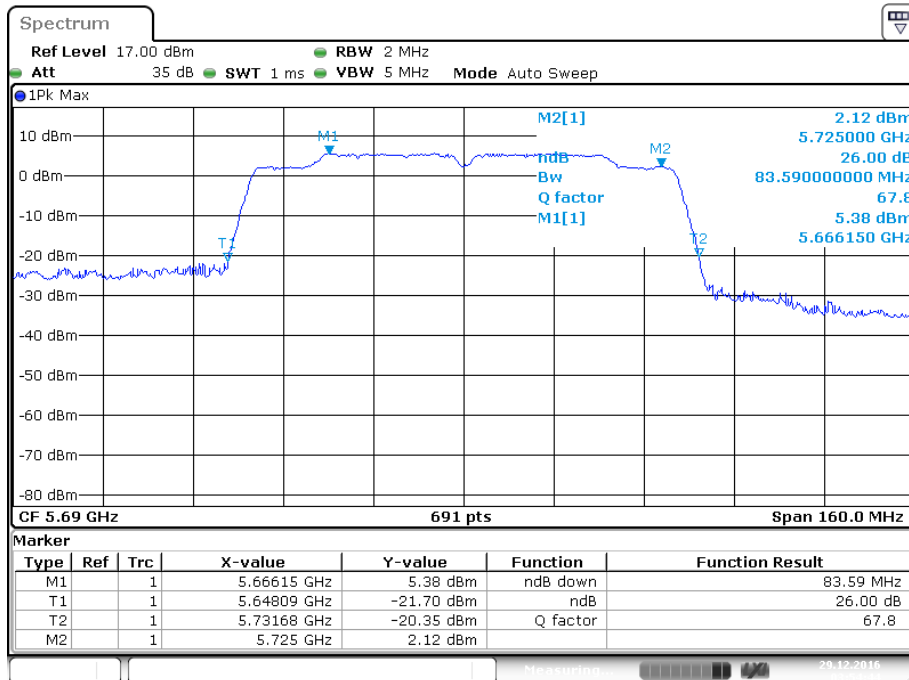
Date: 29 DEC.2016 04:19:08

**IEEE 802.11n HT40 Mode / 5710MHz (chain 1)**



Date: 29 DEC. 2016 05:18:08

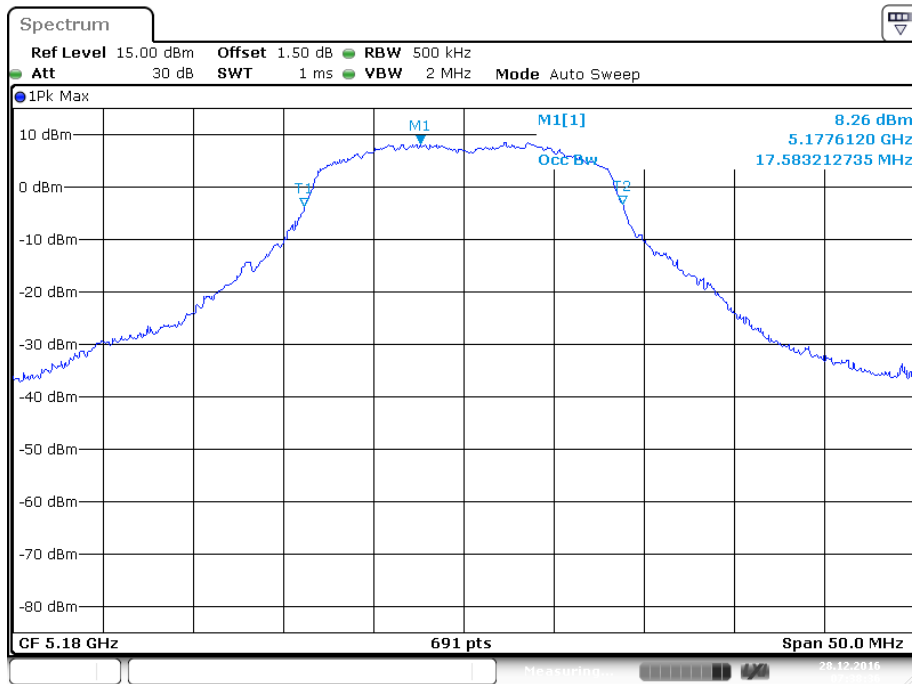
**IEEE 802.11ac VHT80 Mode / 5690MHz (chain 1)**



Date: 29 DEC. 2016 03:54:45

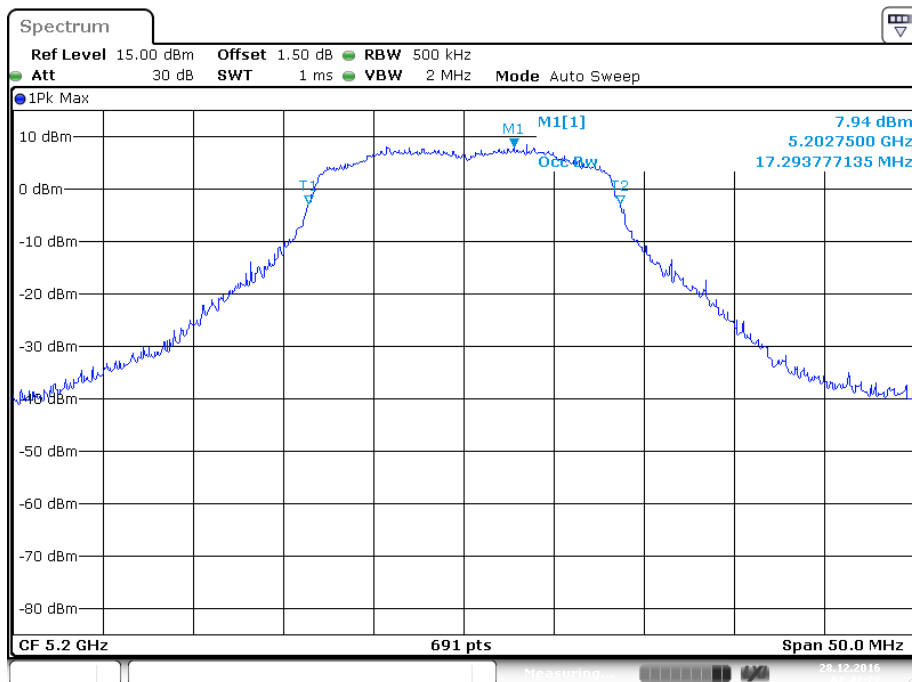


**OBW99%**  
**IEEE 802.11a mode / 5180 ~ 5825MHz(chain0)**  
**5180MHz**



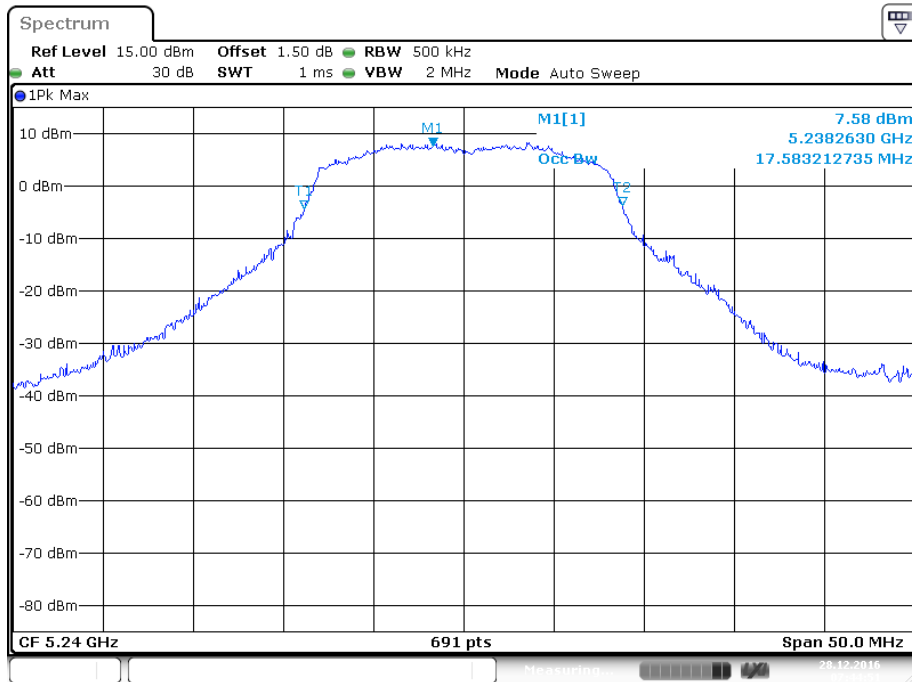
Date: 28 DEC 2016 07:38:36

**5200MHz**



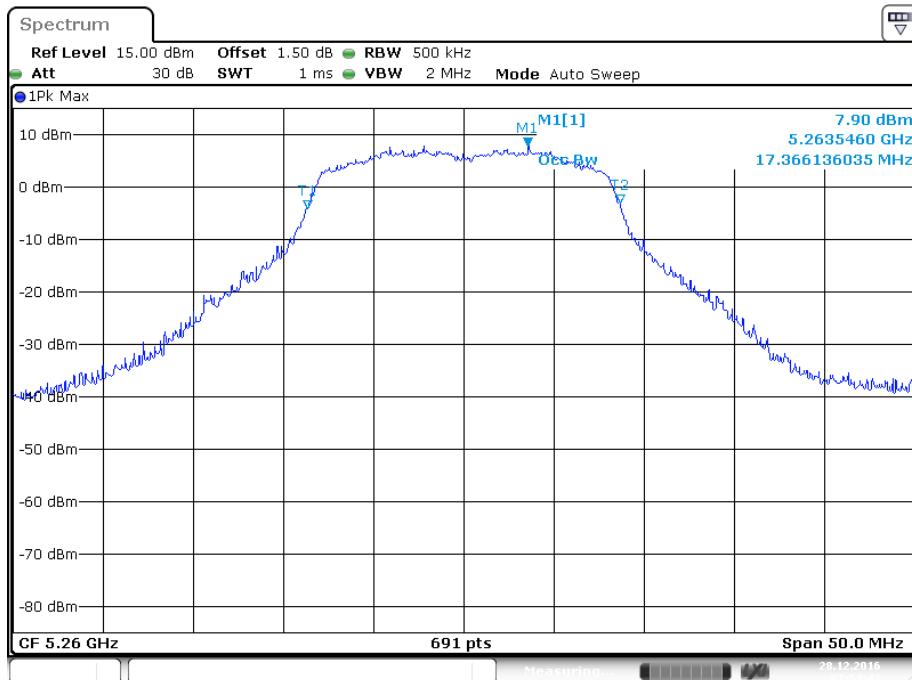
Date: 28 DEC 2016 07:42:27

5240MHz



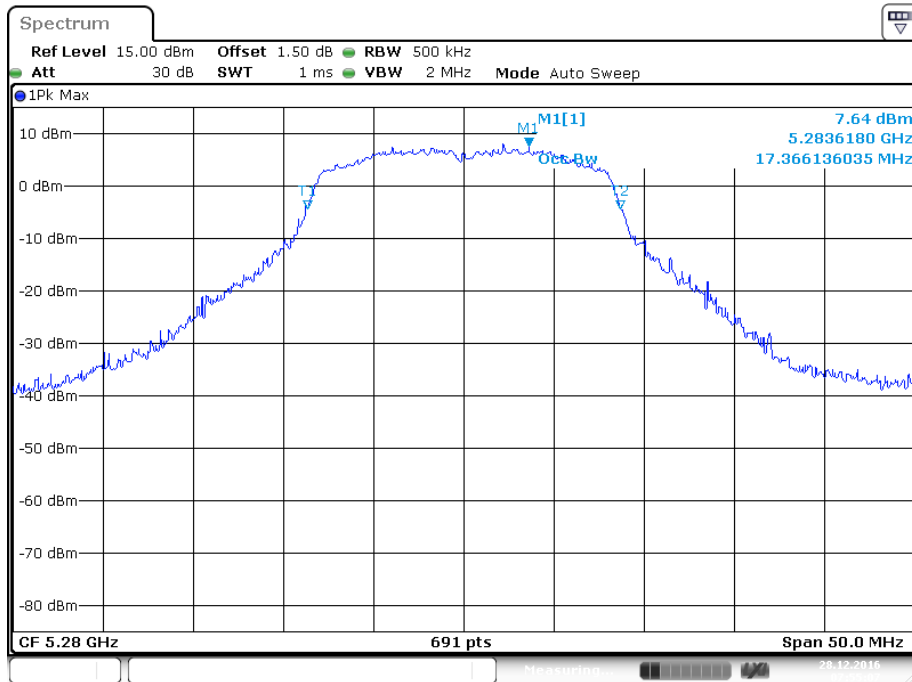
Date: 28 DEC. 2016 07:44:51

5260MHz



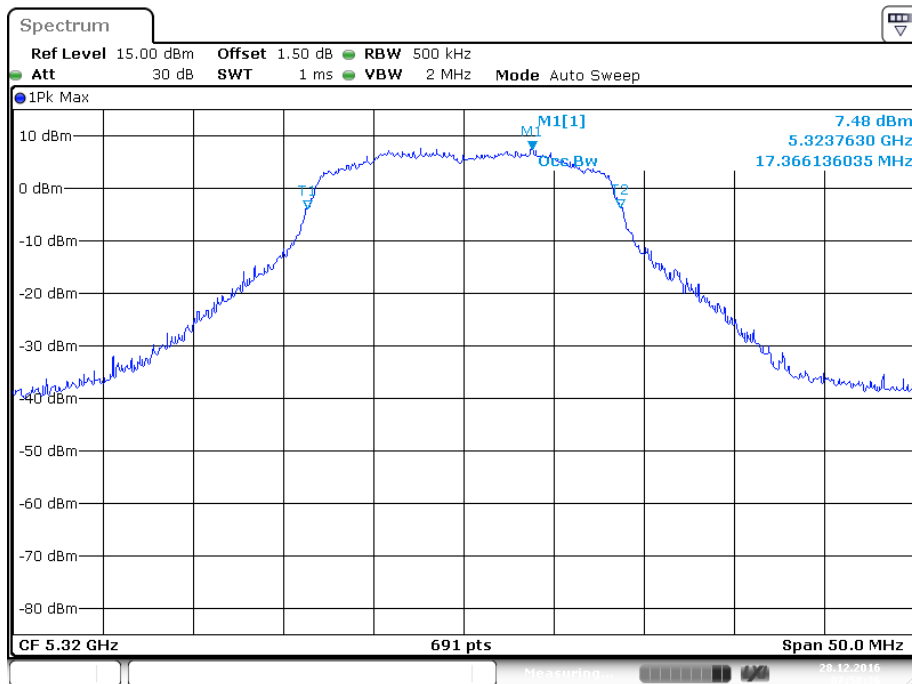
Date: 28 DEC. 2016 07:53:42

### 5280MHz



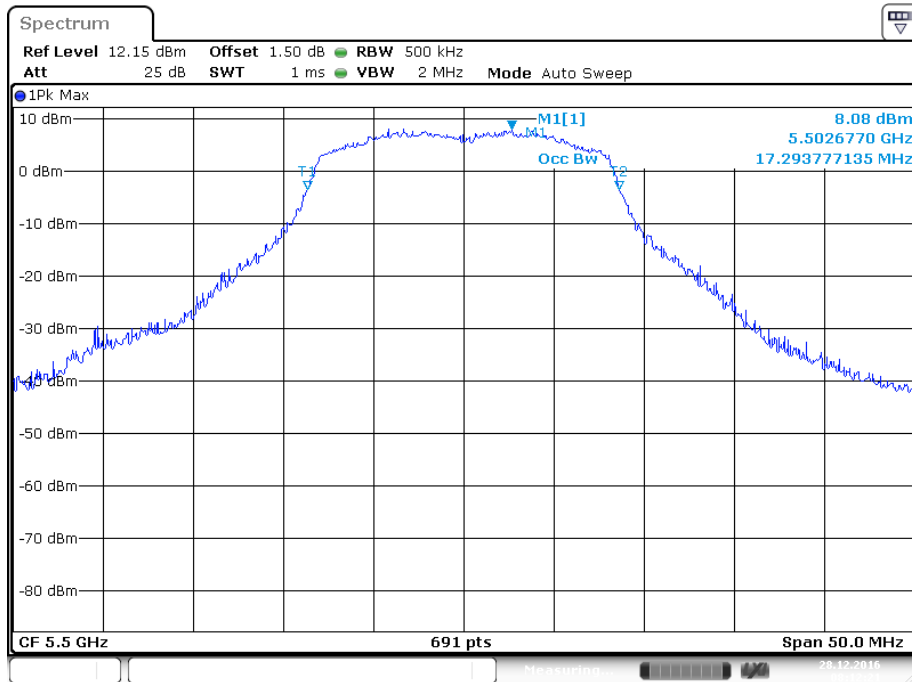
Date: 28 DEC 2016 07:55:07

### 5320MHz



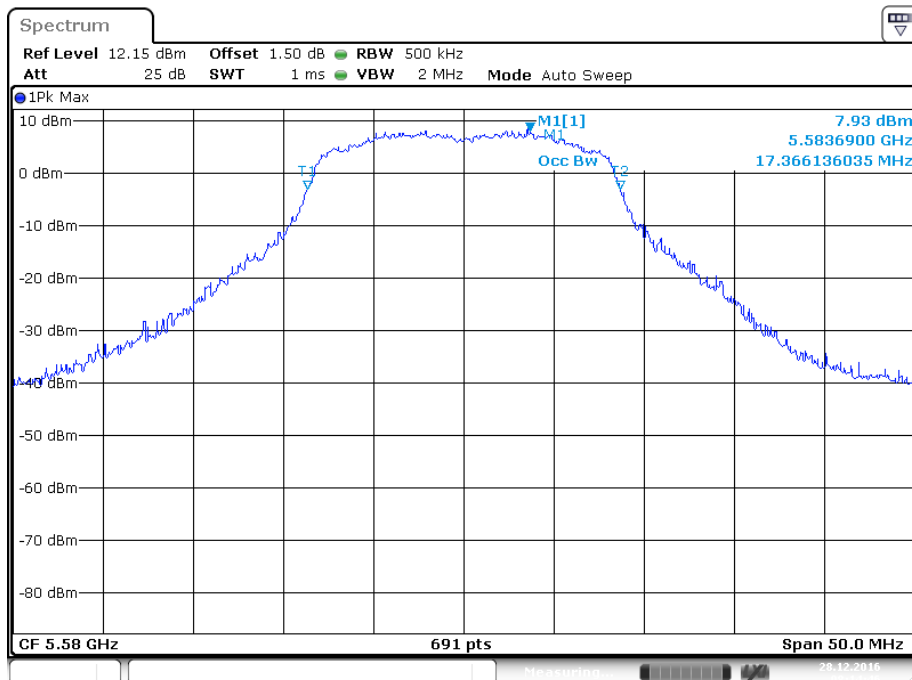
Date: 28 DEC 2016 07:58:36

### 5500MHz



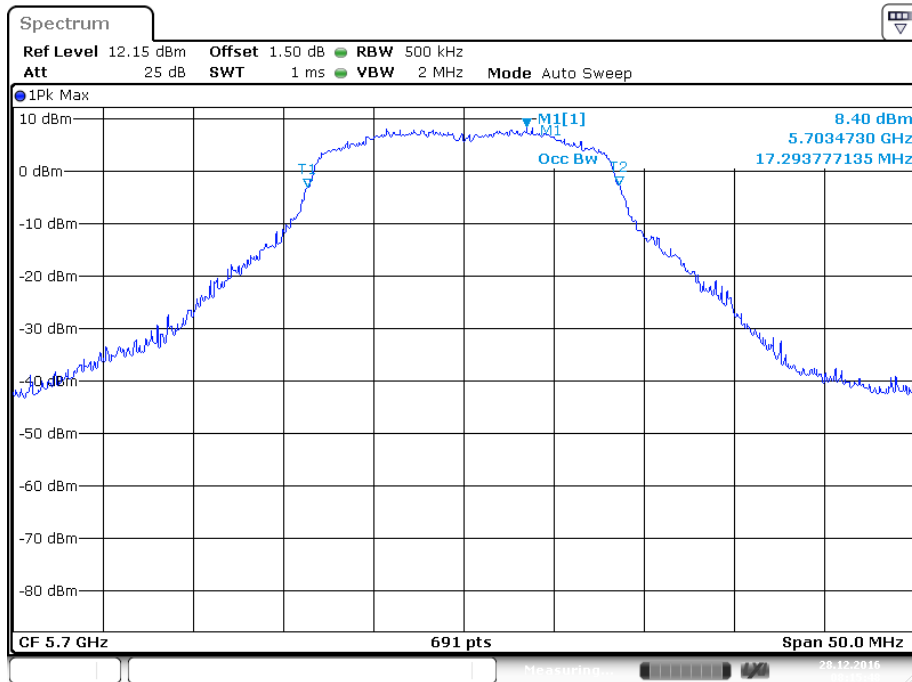
Date: 28 DEC. 2016 08:12:22

### 5580MHz

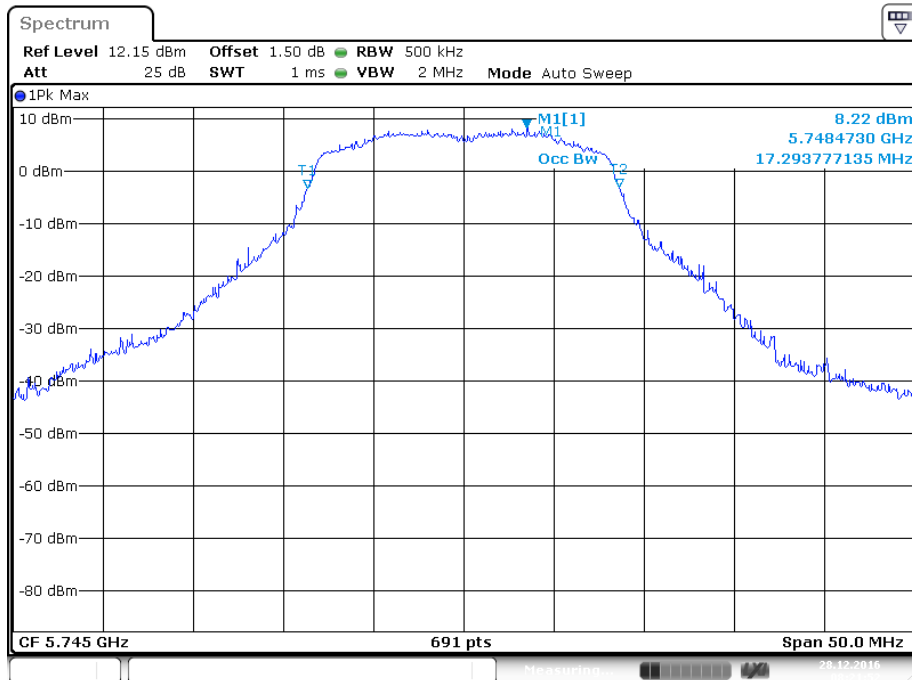


Date: 28 DEC. 2016 08:14:46

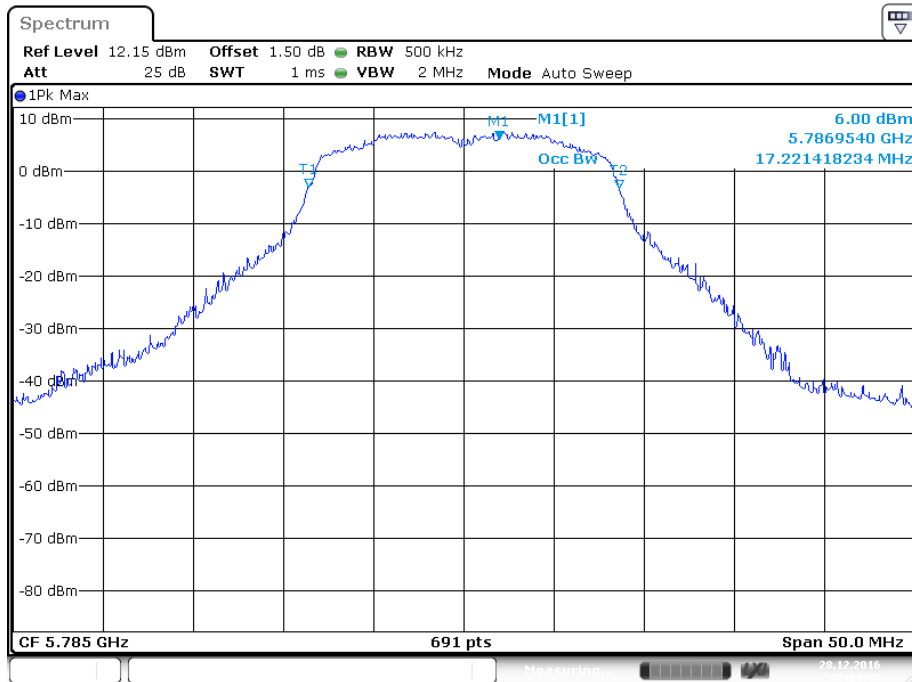
### 5700MHz



### 5745MHz

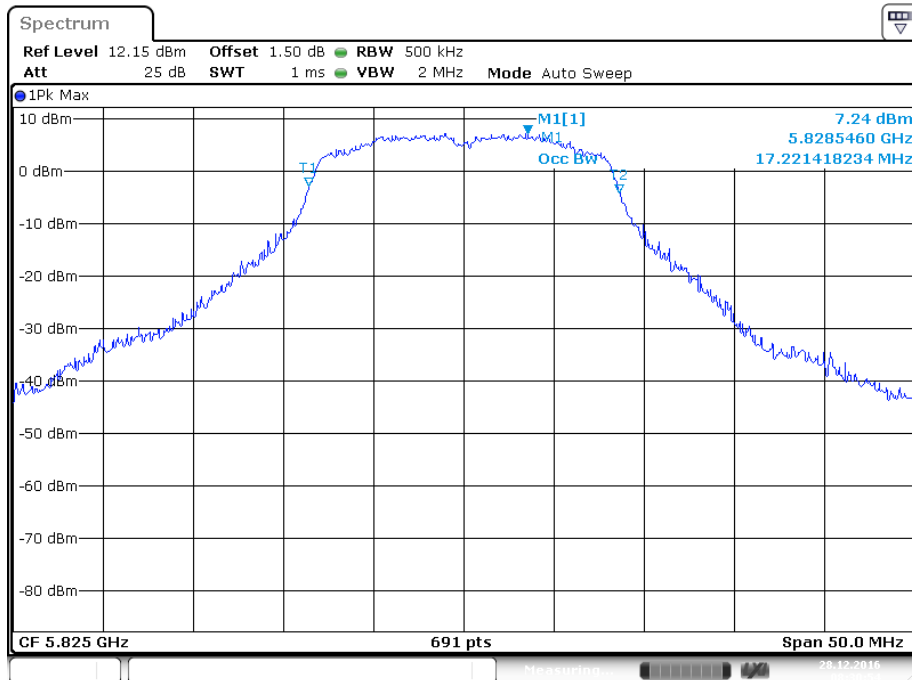


5785MHz



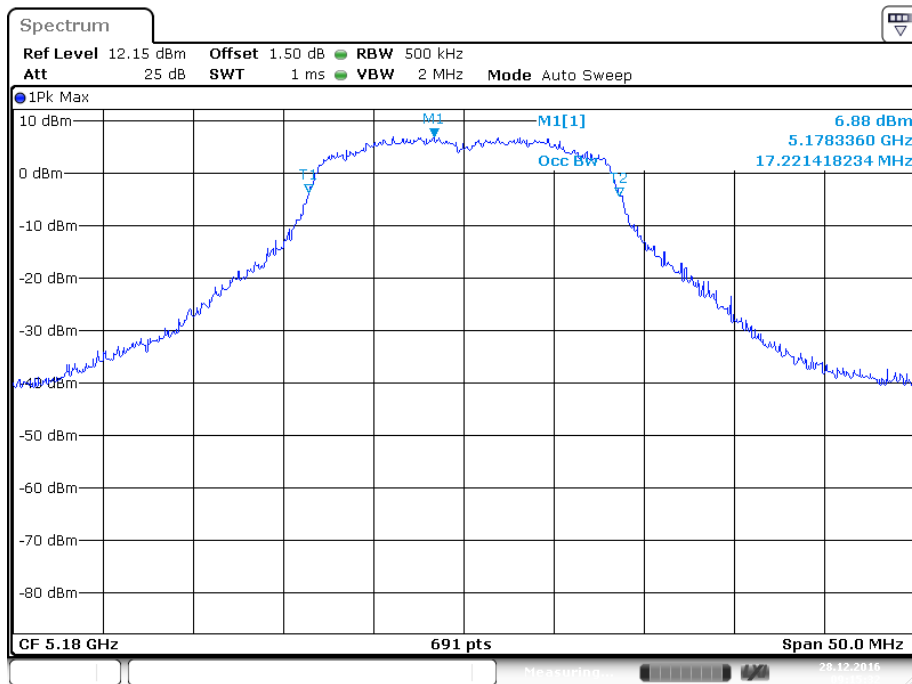
Date: 28 DEC. 2016 08:29:48

5825MHz



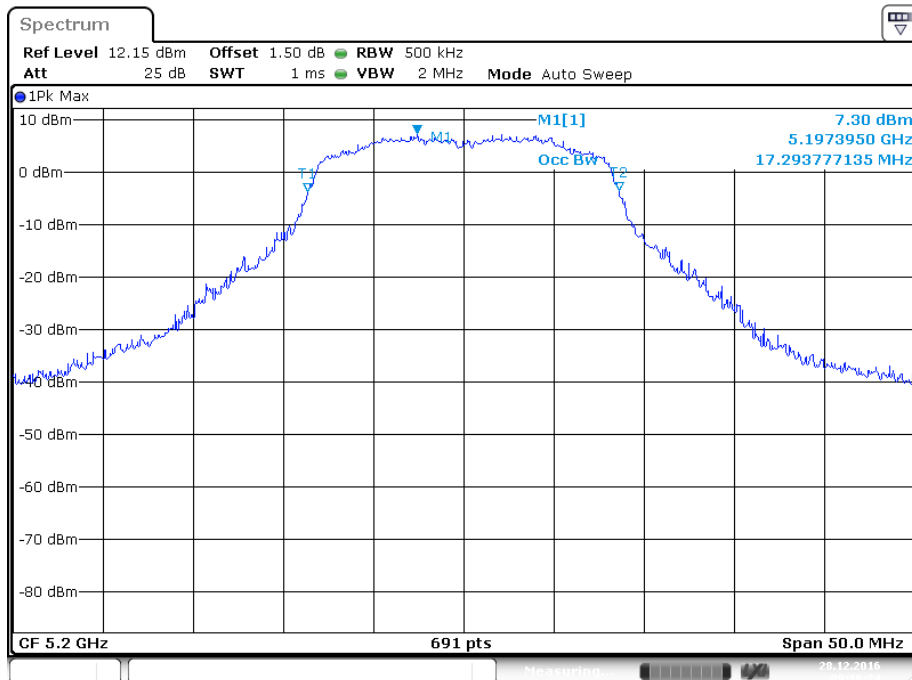
Date: 28 DEC. 2016 08:30:54

**IEEE 802.11a mode / 5180 ~ 5825MHz(chain 1)  
5180MHz**



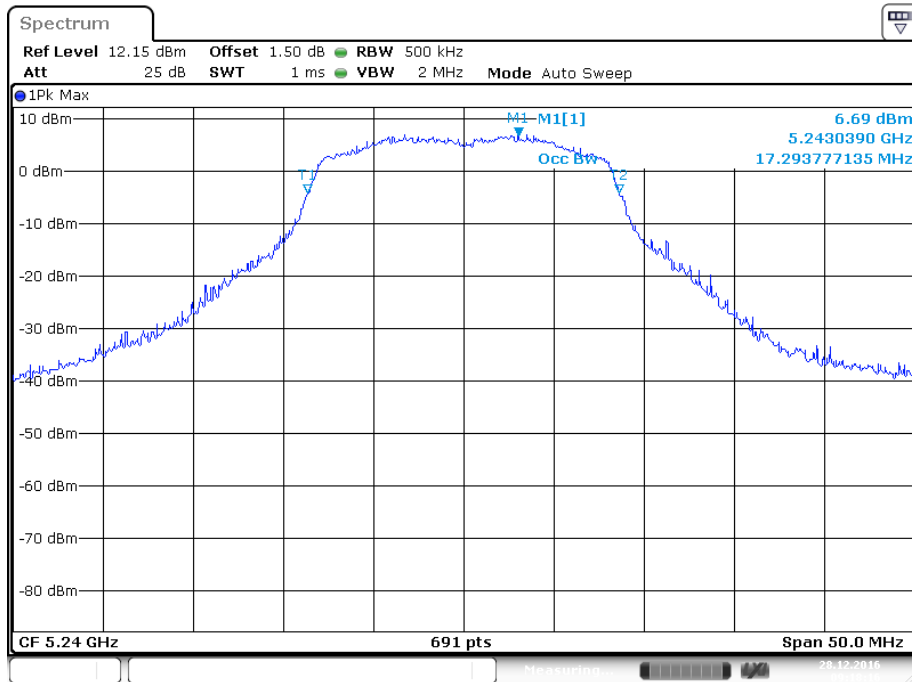
Date: 28 DEC 2016 09:15:32

**5200MHz**

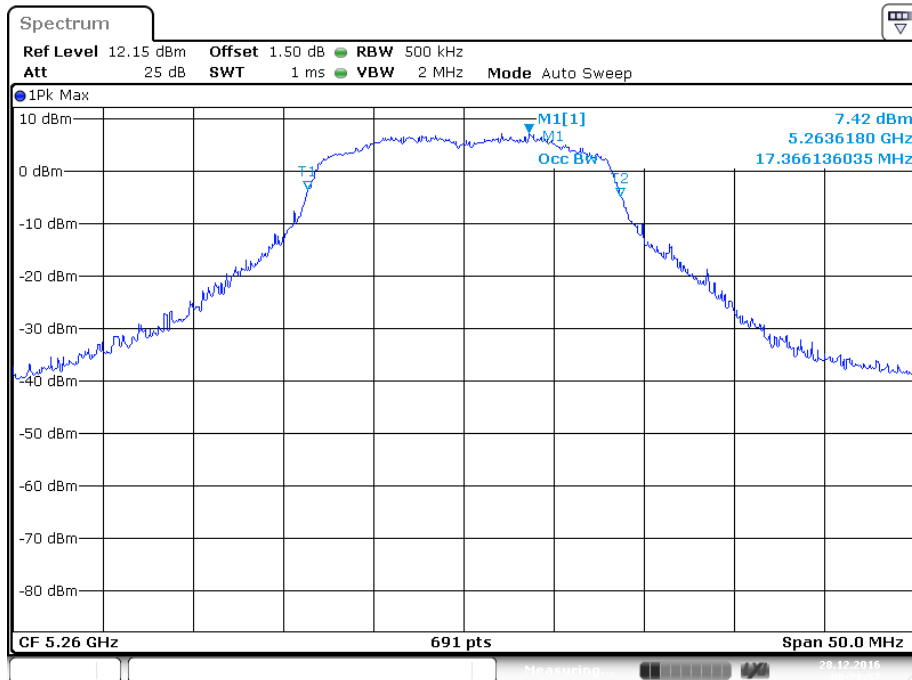


Date: 28 DEC 2016 09:16:25

### 5240MHz

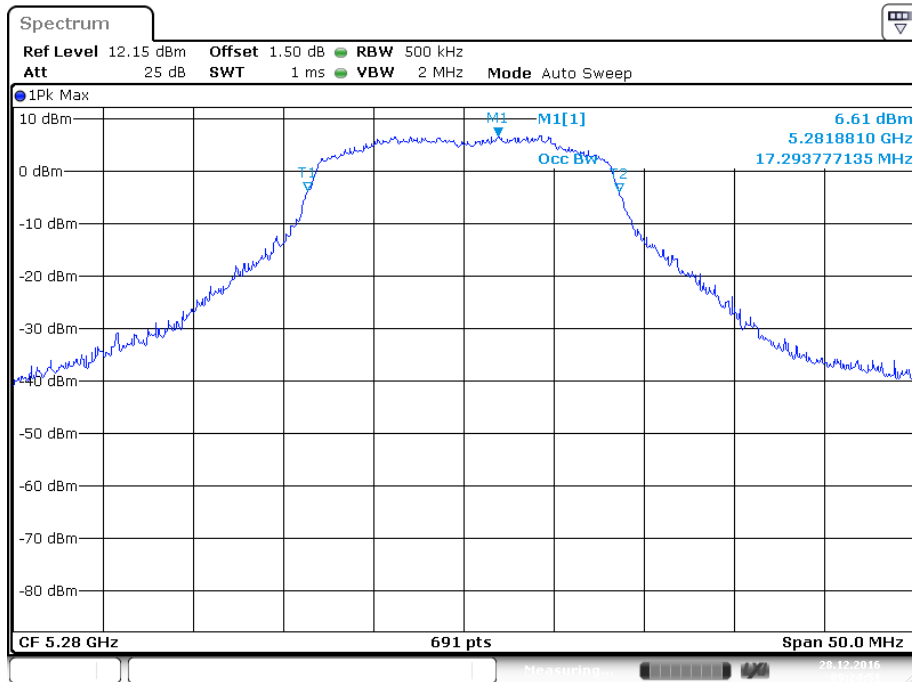


### 5260MHz

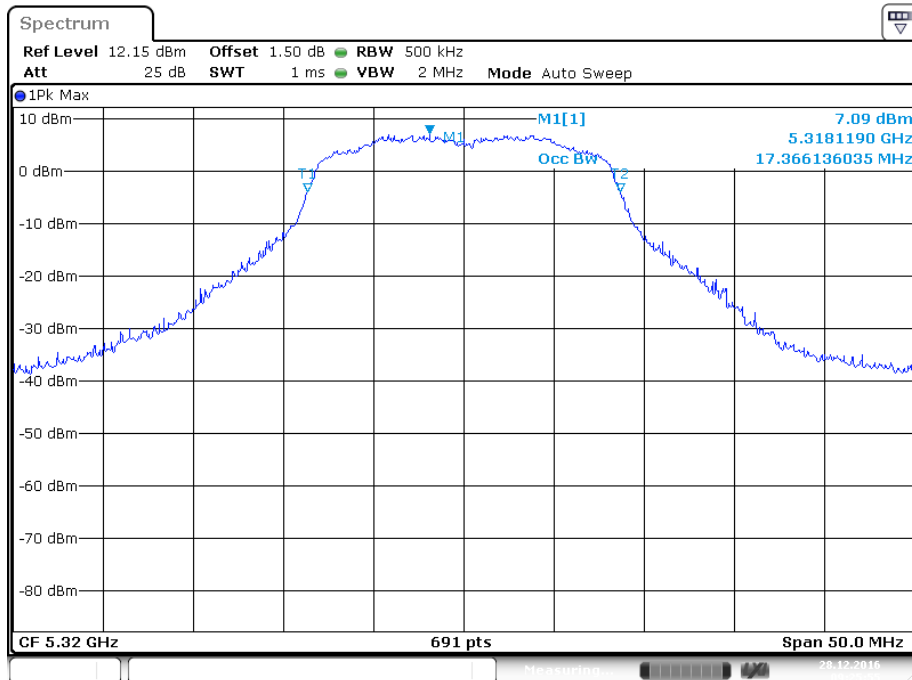




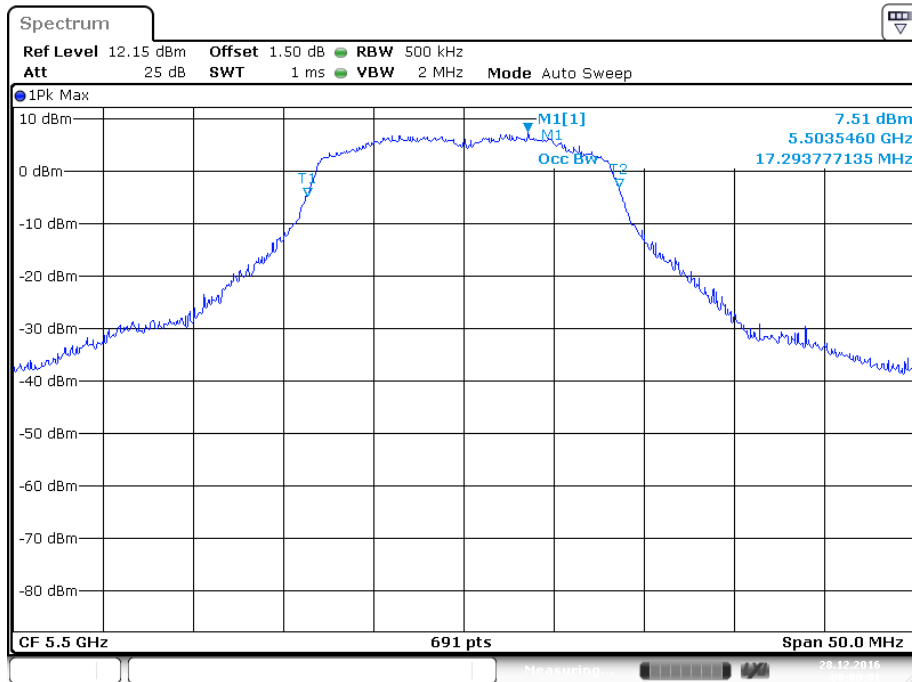
### 5280MHz



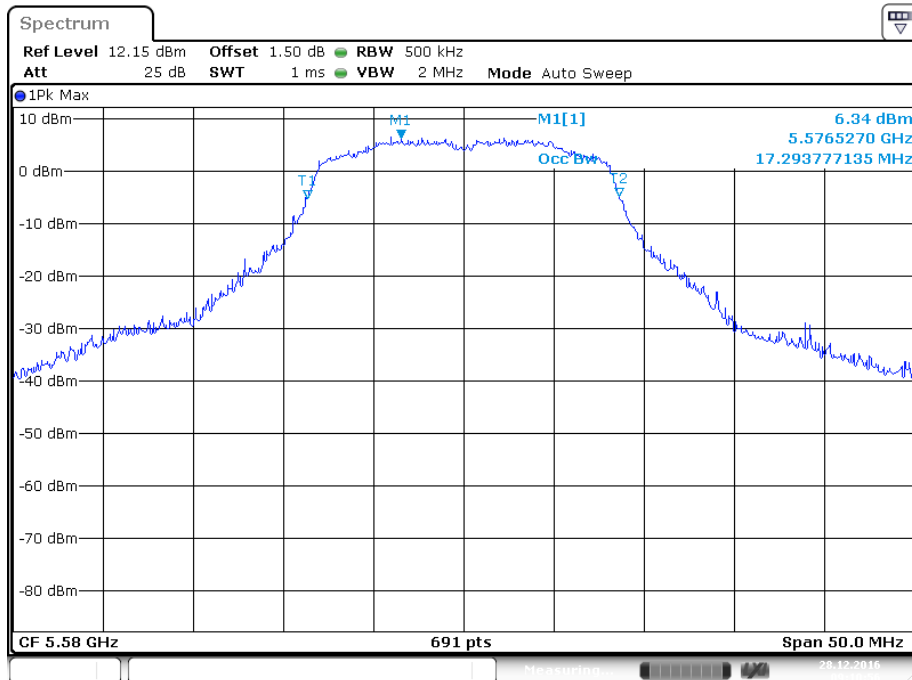
### 5320MHz



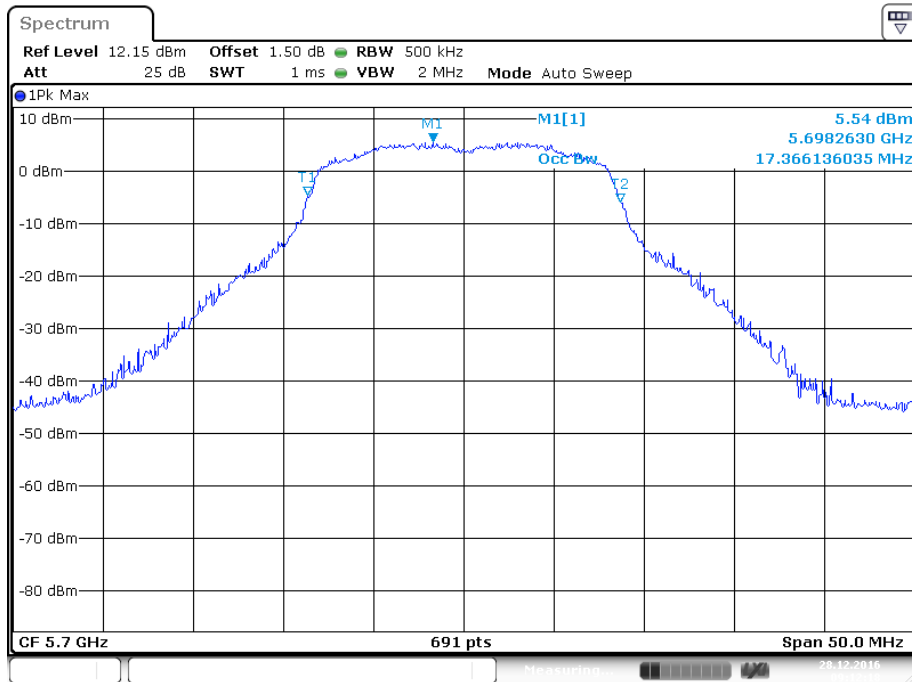
### 5500MHz



### 5580MHz

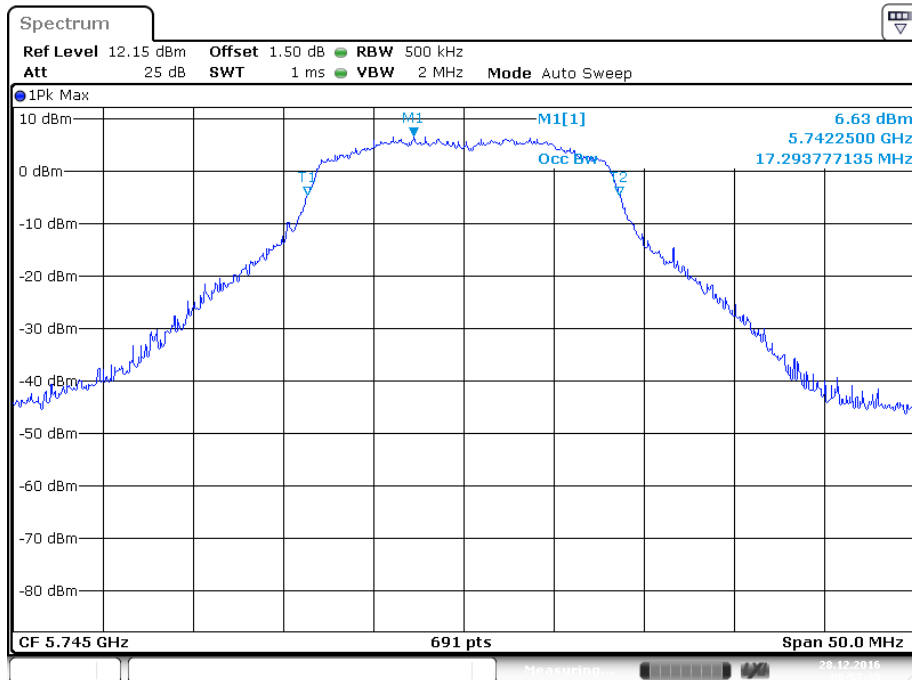


5700MHz



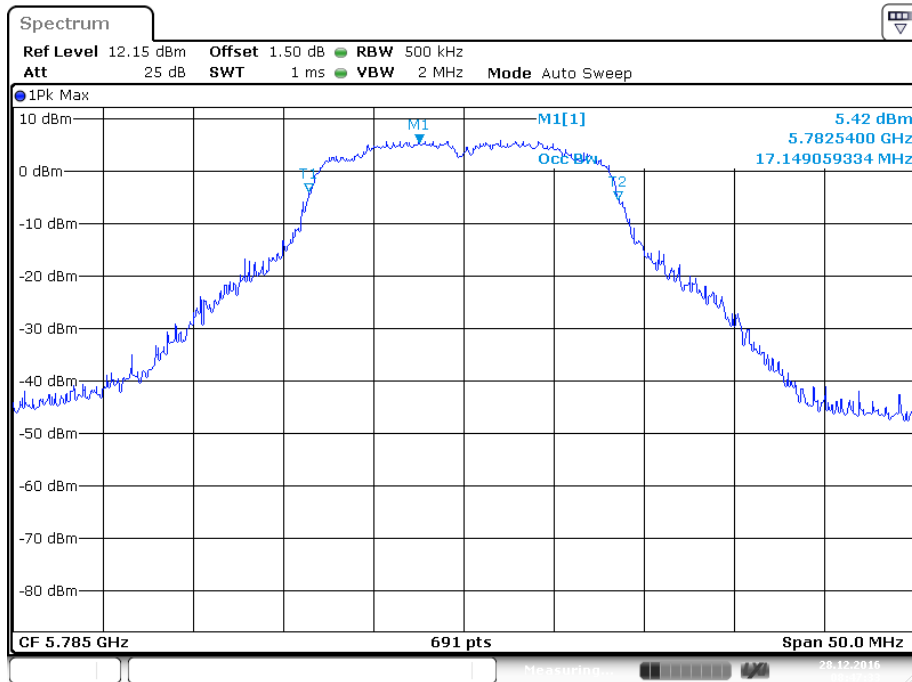
Date: 28 DEC. 2016 09:12:18

5745MHz

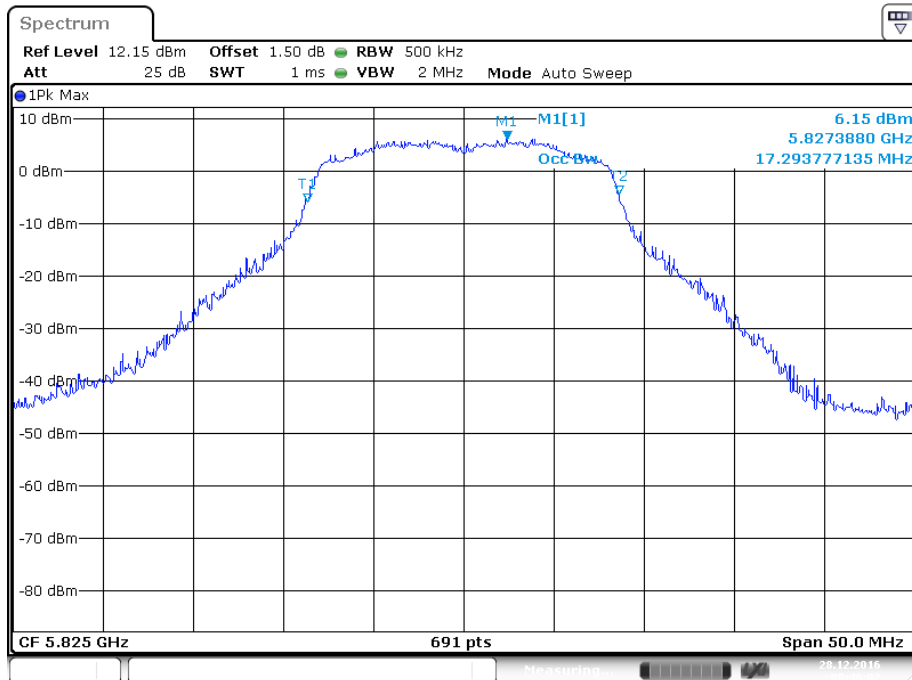


Date: 28 DEC. 2016 08:57:35

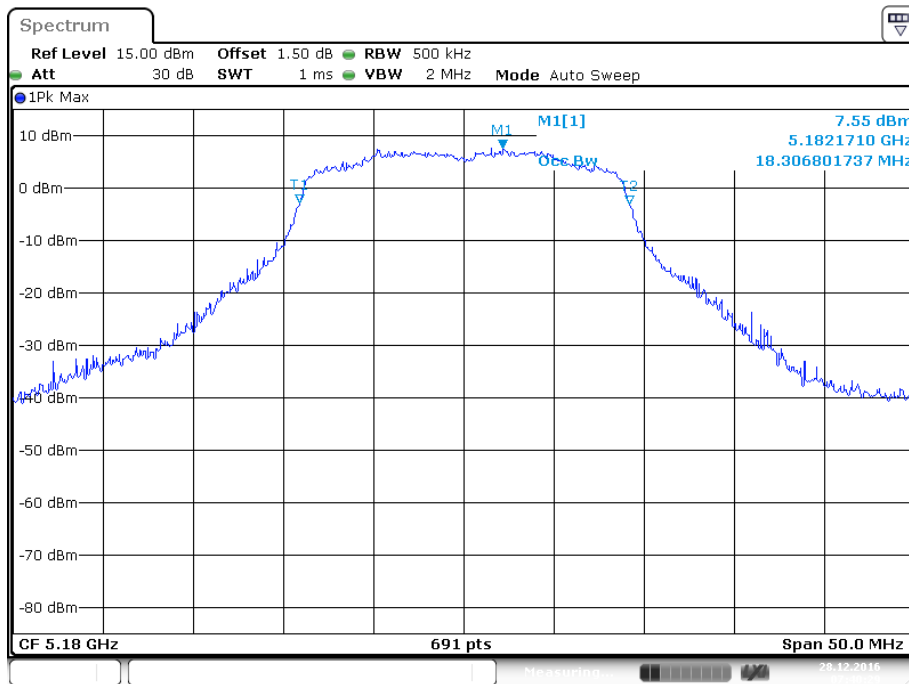
### 5785MHz



### 5825MHz

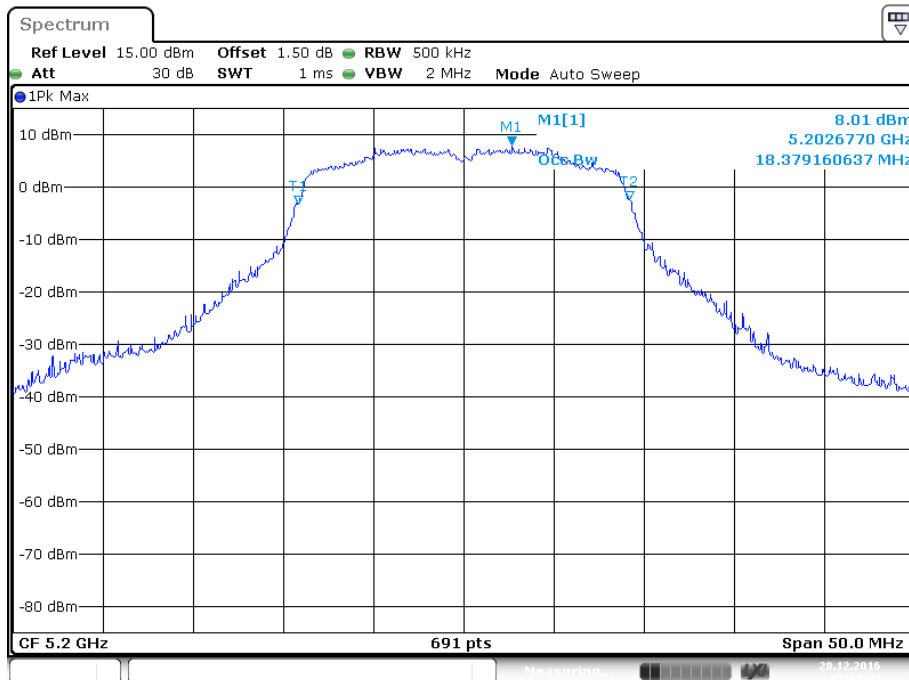


**IEEE 802.11n HT20 Mode / 5180 ~ 5825MHz (chain0)**  
**5180MHz**



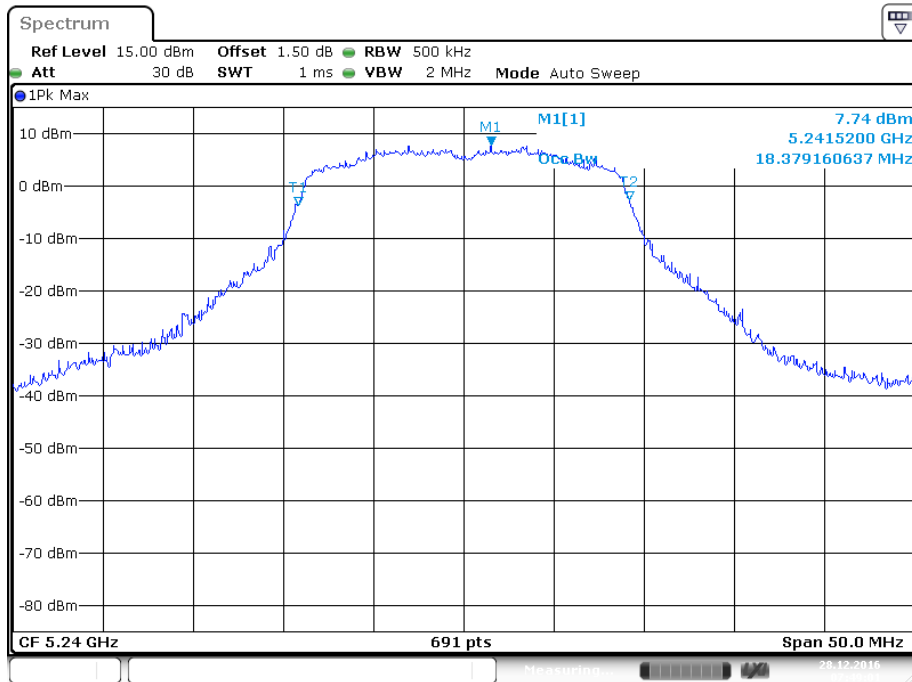
Date: 28 DEC 2016 07:40:29

**5200MHz**



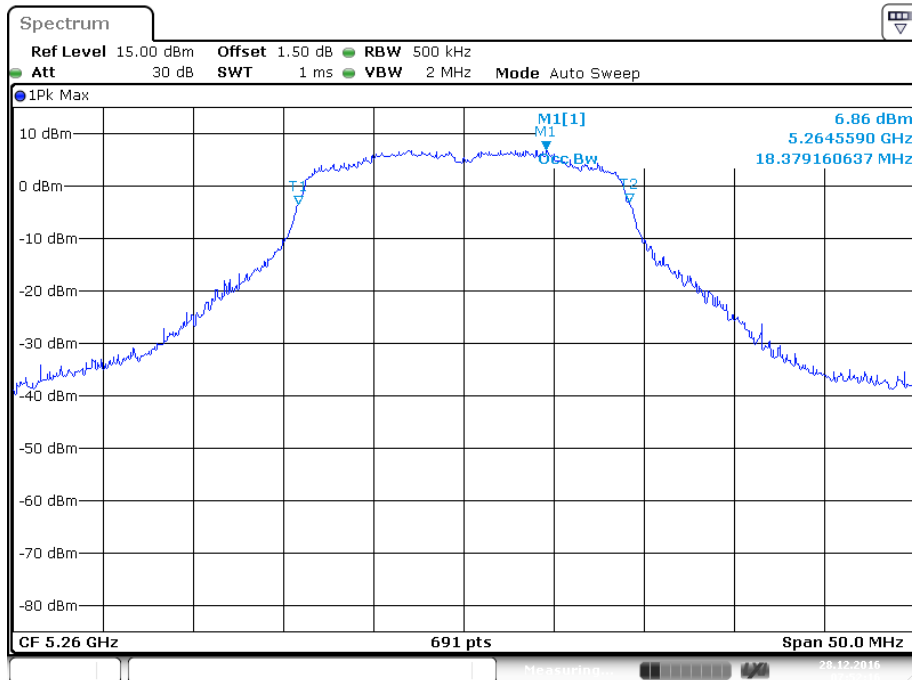
Date: 28 DEC 2016 07:41:42

5240MHz



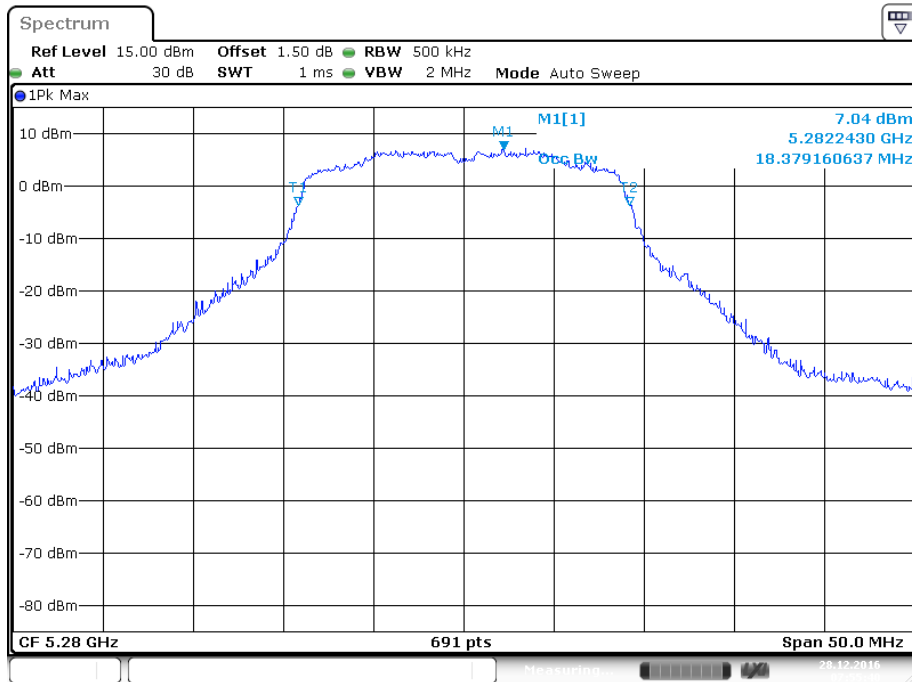
Date: 28 DEC 2016 07:49:01

5260MHz



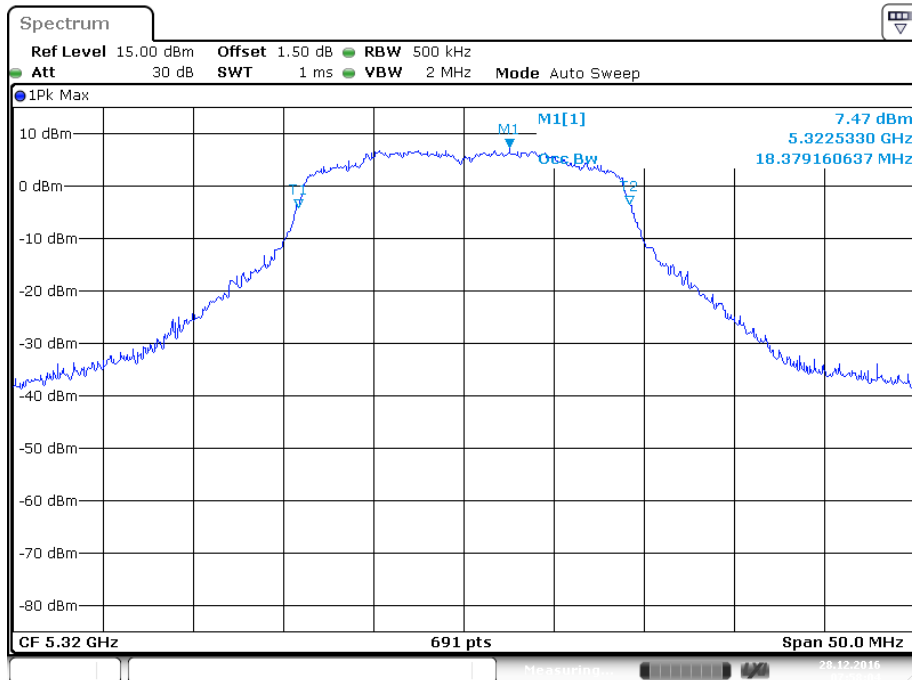
Date: 28 DEC 2016 07:52:17

### 5280MHz



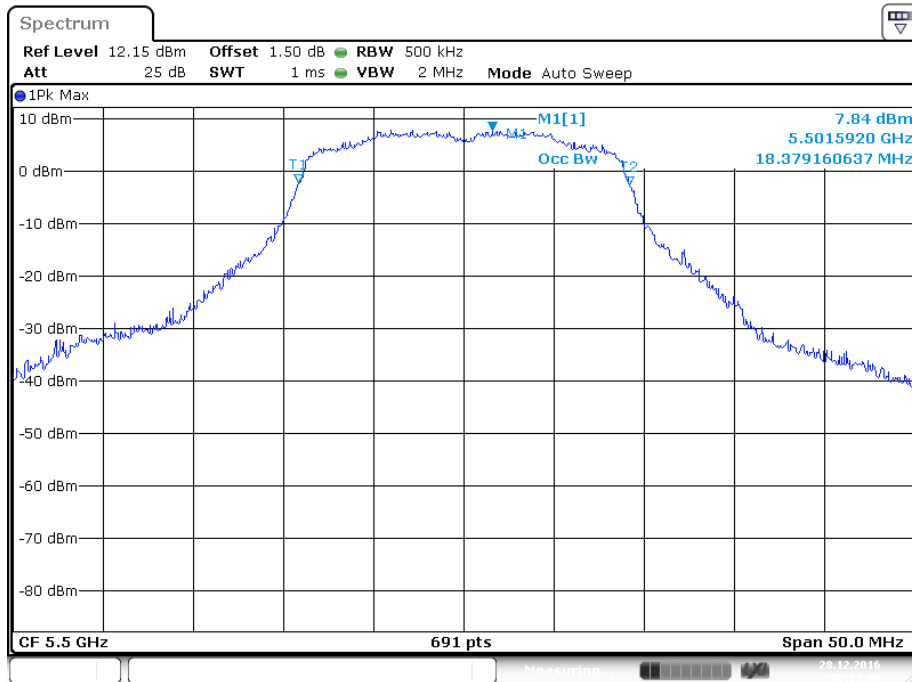
Date: 28 DEC. 2016 07:55:40

### 5320MHz

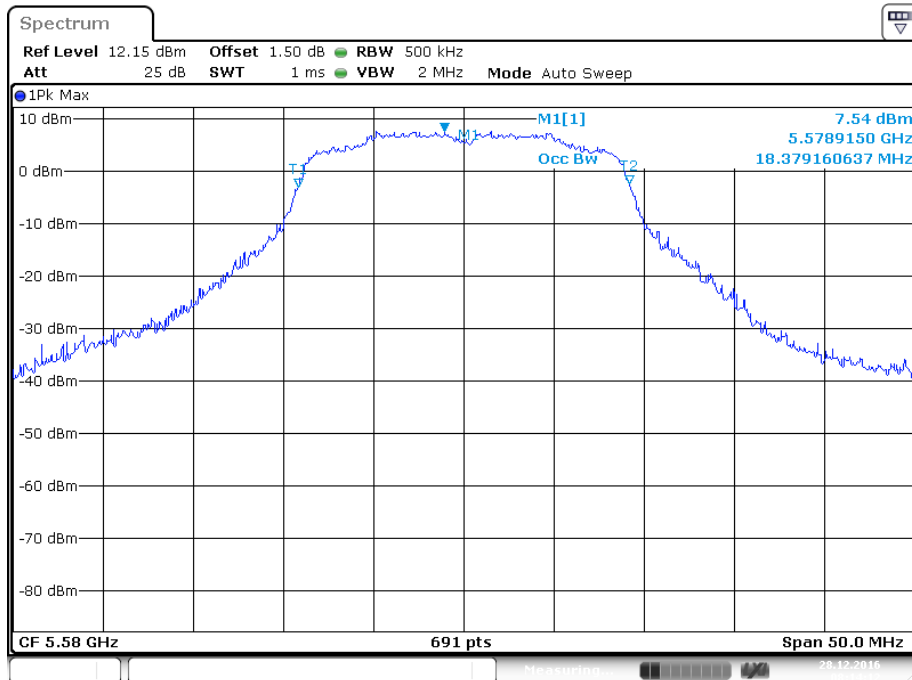


Date: 28 DEC. 2016 07:58:04

### 5500MHz

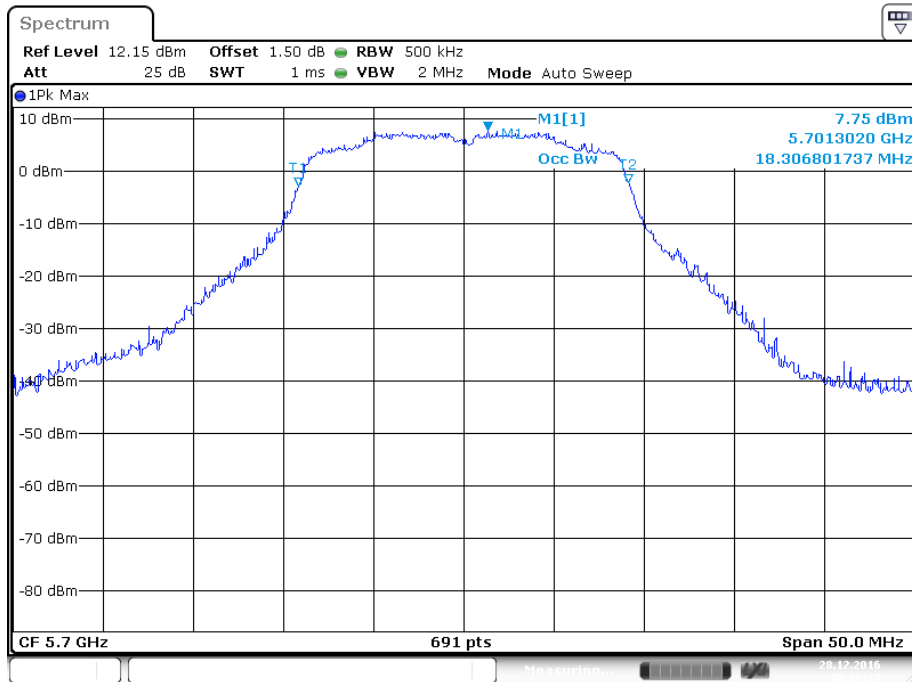


### 5580MHz

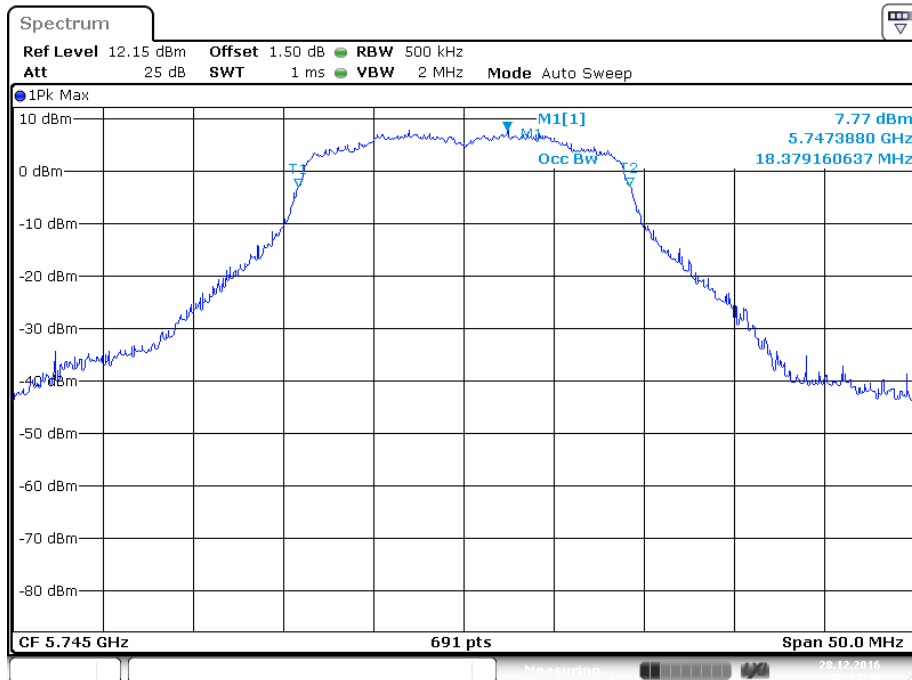




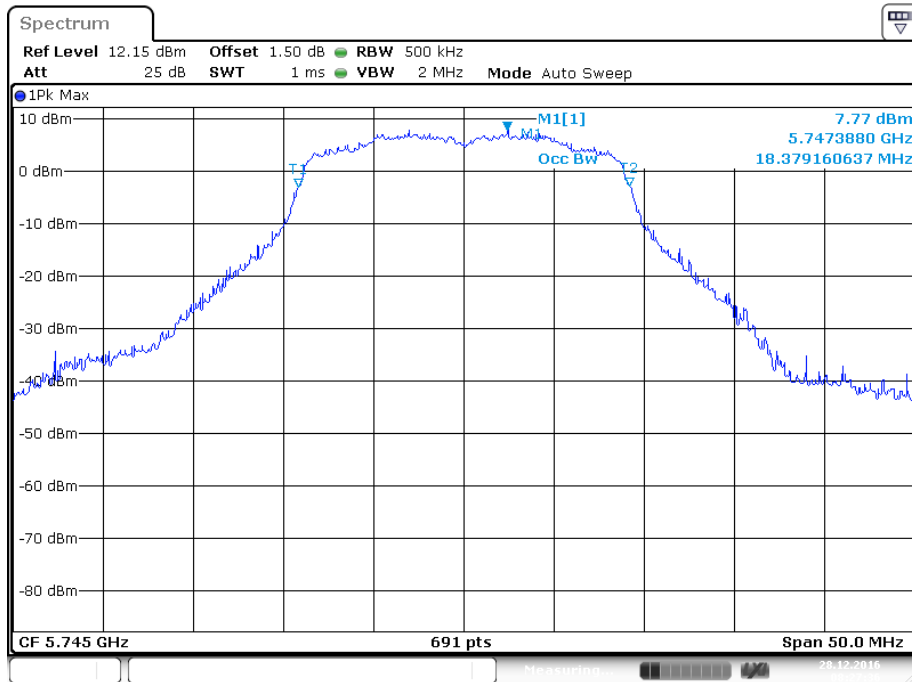
5700MHz



5745MHz

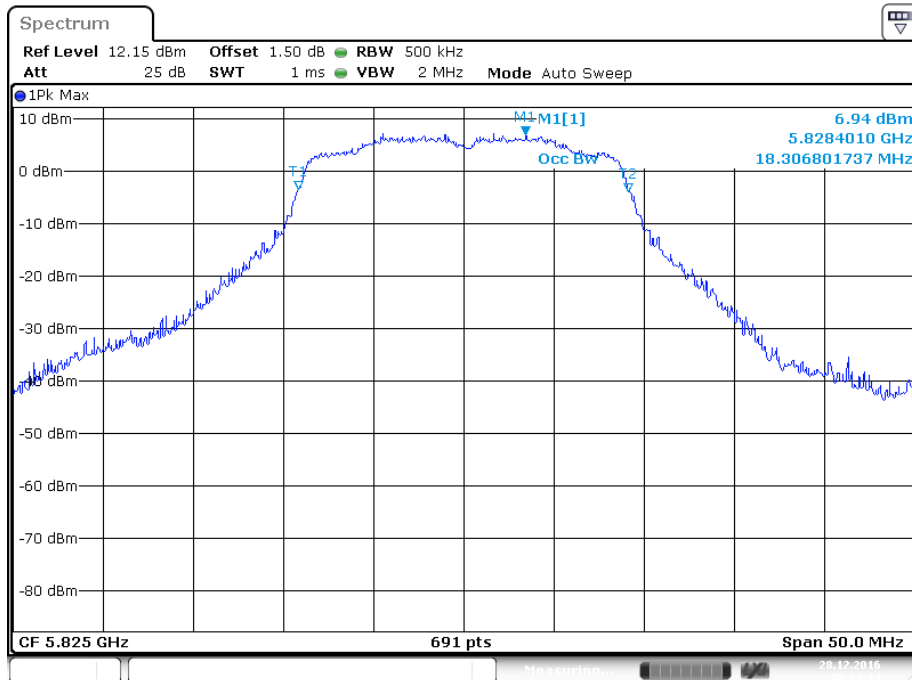


### 5785MHz



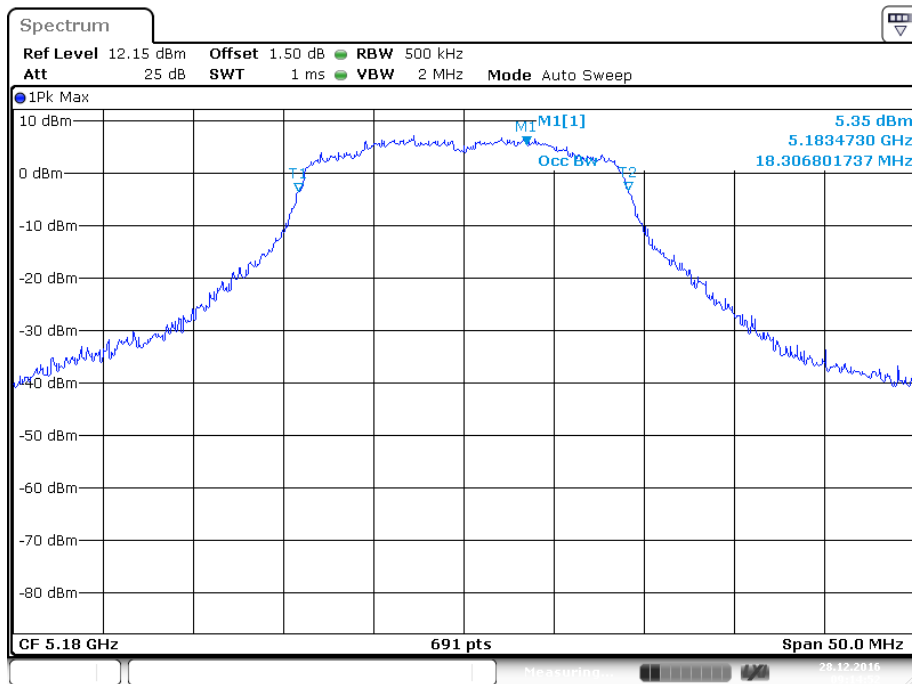
Date: 28 DEC. 2016 08:27:37

### 5825MHz

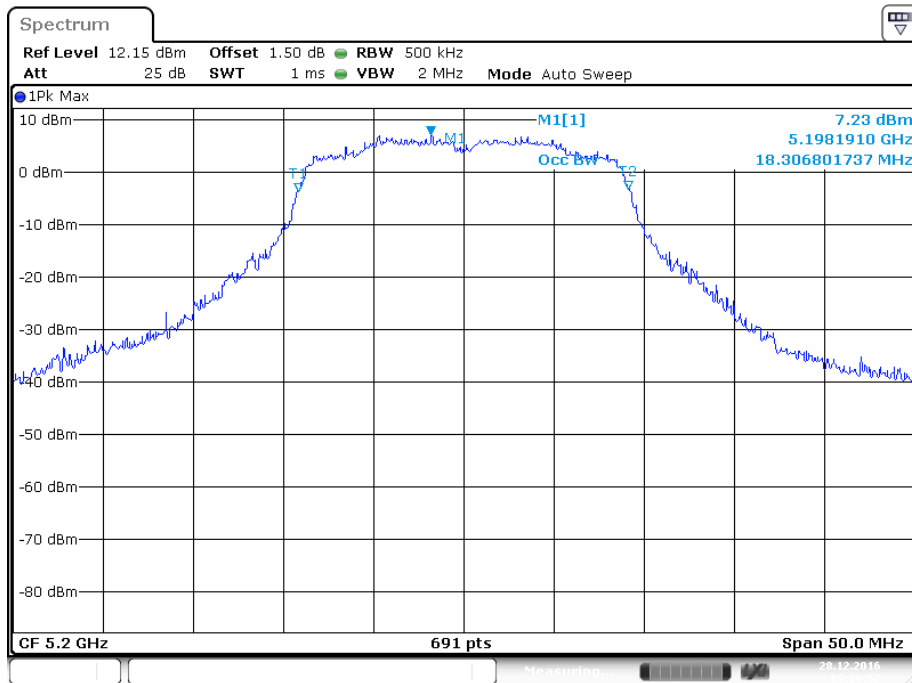


Date: 28 DEC. 2016 08:31:34

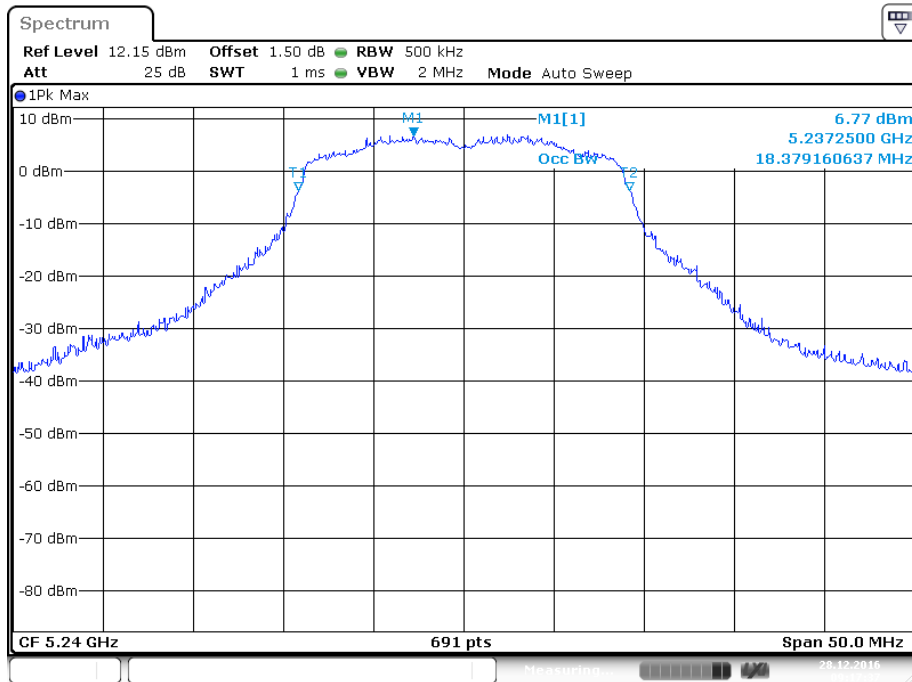
**IEEE 802.11n HT20 Mode / 5180 ~ 5825MHz (chain 1)**  
**5180MHz**



**5200MHz**

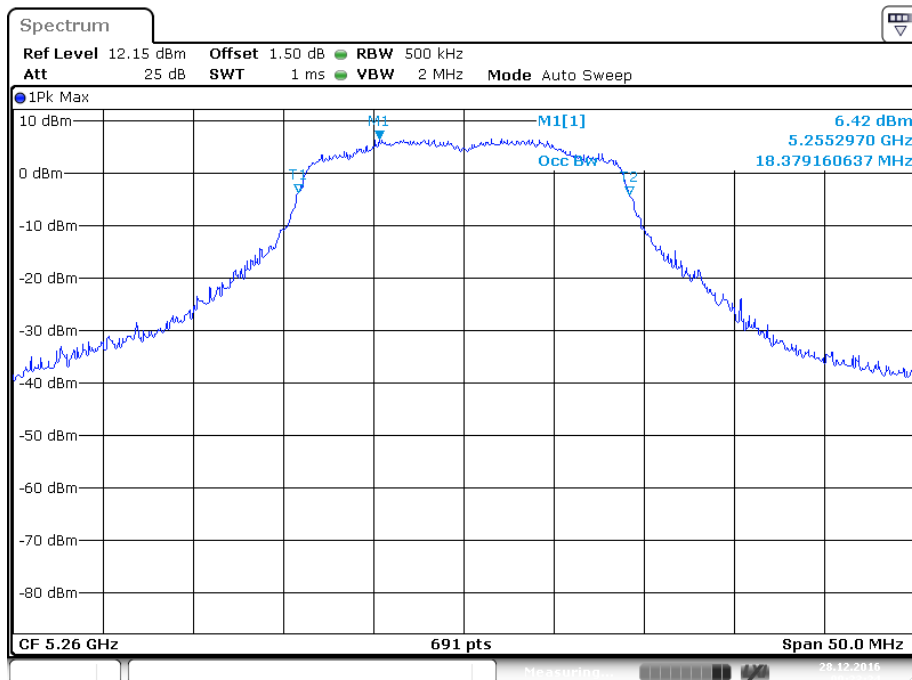


### 5240MHz



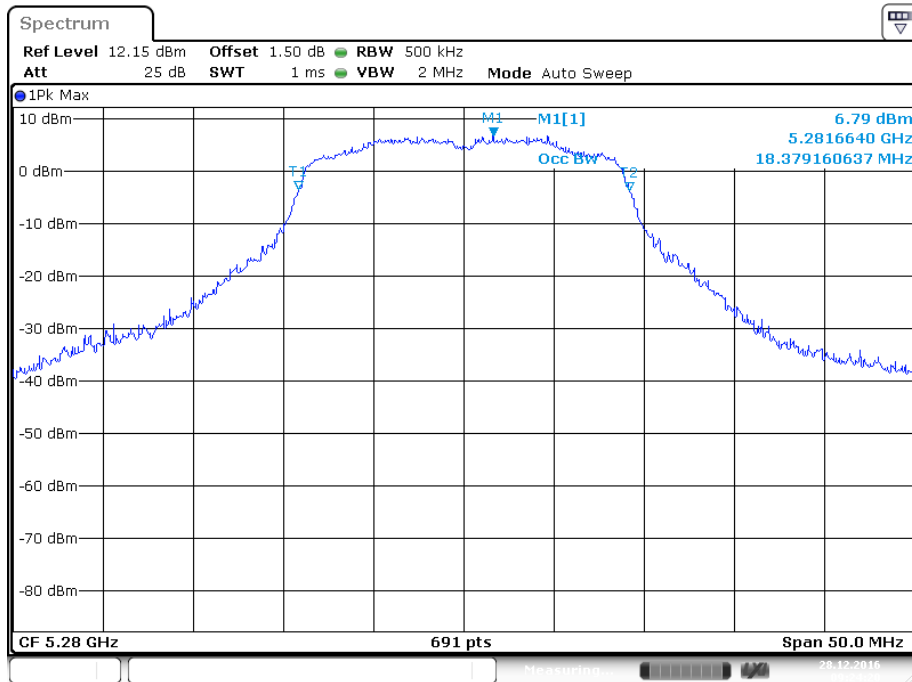
Date: 28 DEC. 2016 09:17:37

### 5260MHz

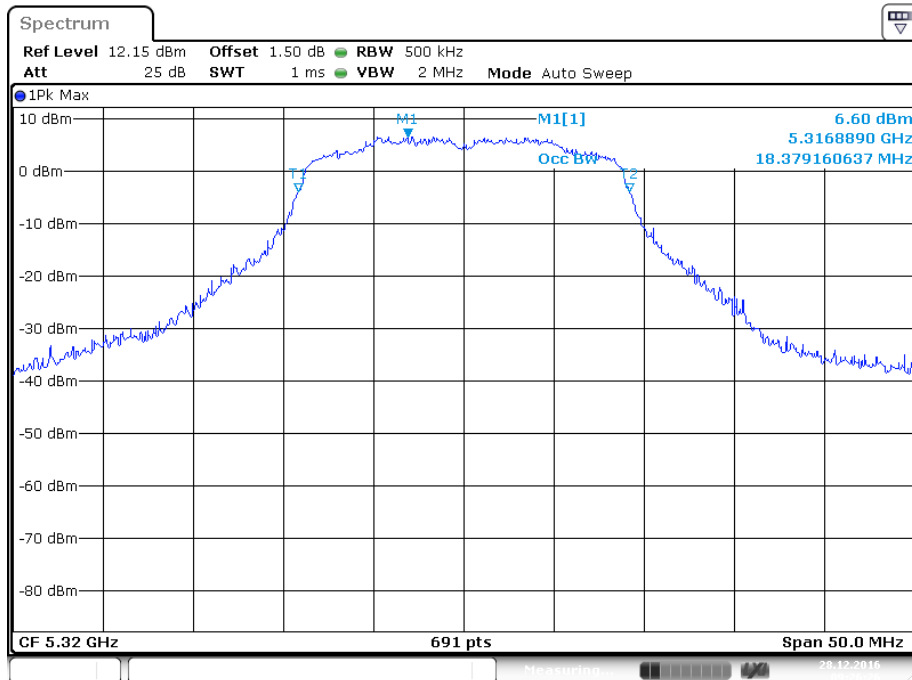


Date: 28 DEC. 2016 09:23:25

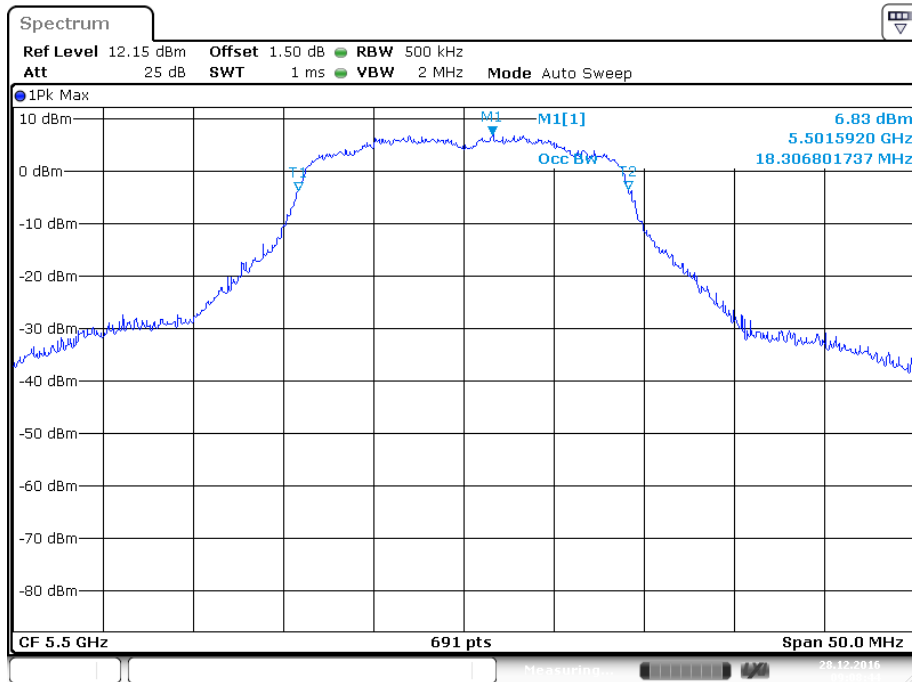
### 5280MHz



### 5320MHz

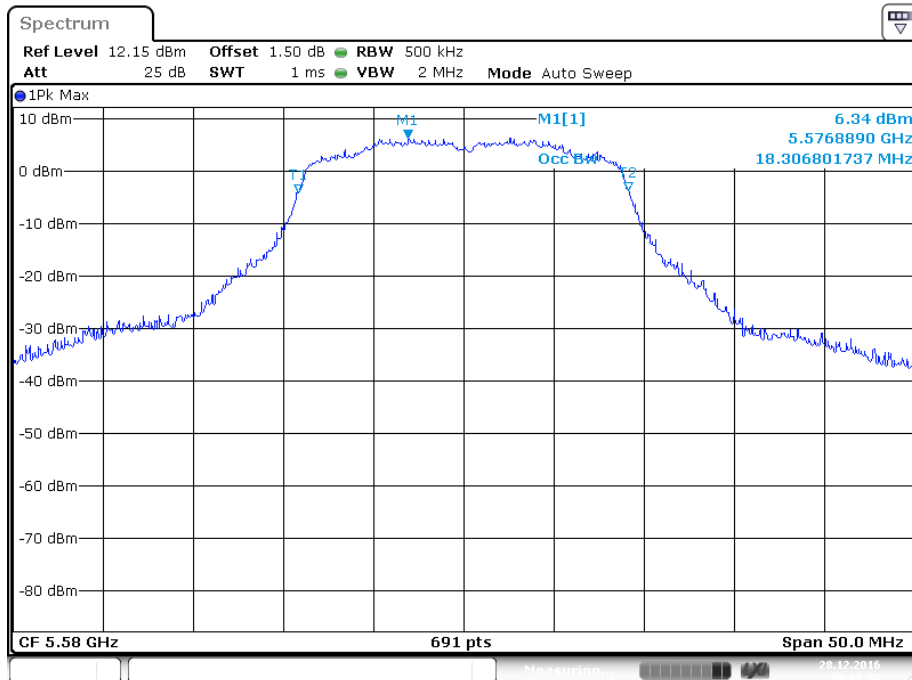


### 5500MHz



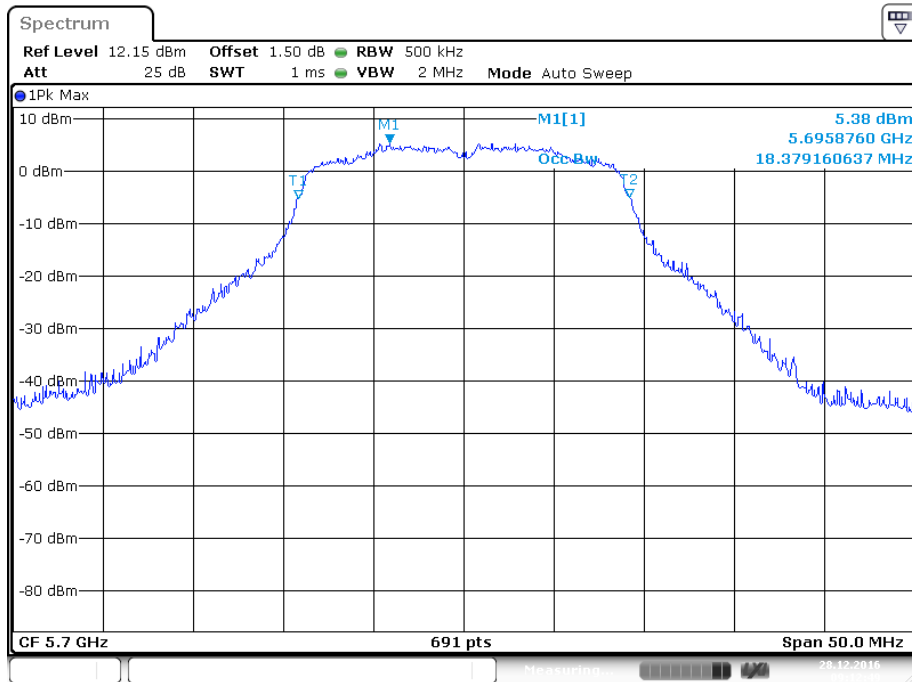
Date: 28 DEC. 2016 09:08:45

### 5580MHz

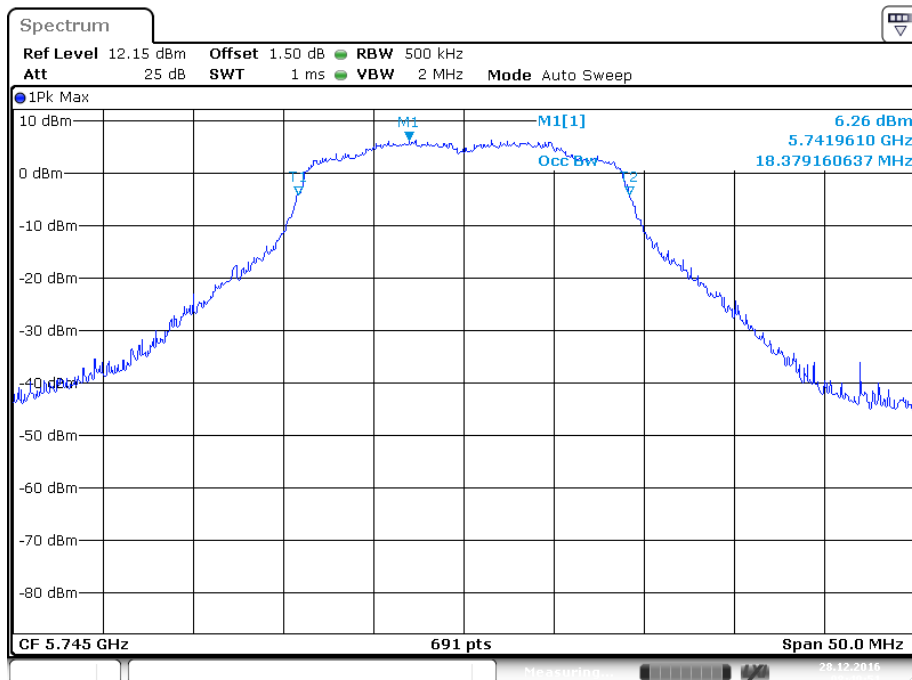


Date: 28 DEC. 2016 09:09:59

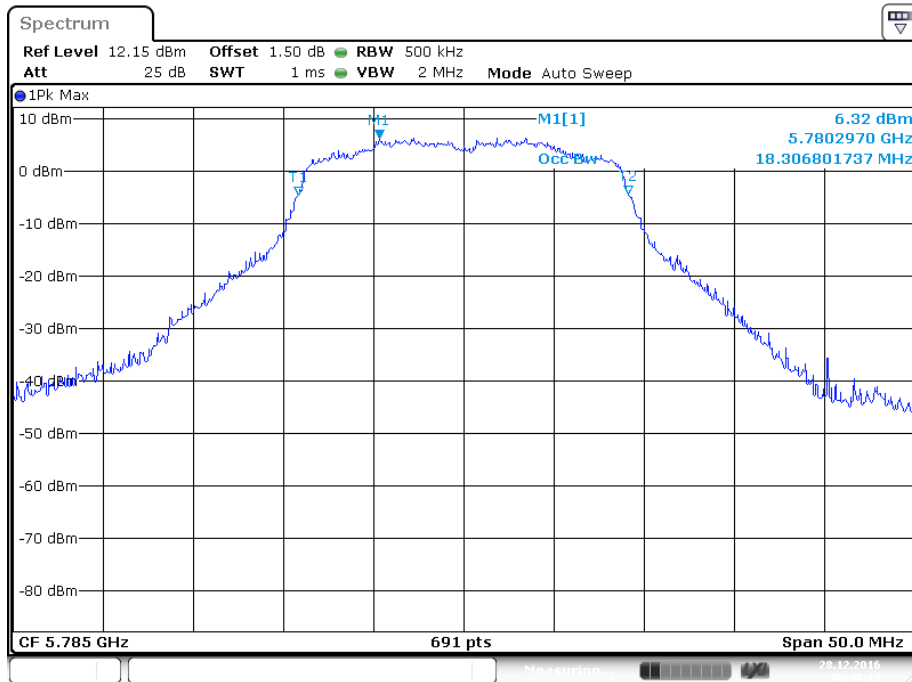
### 5700MHz



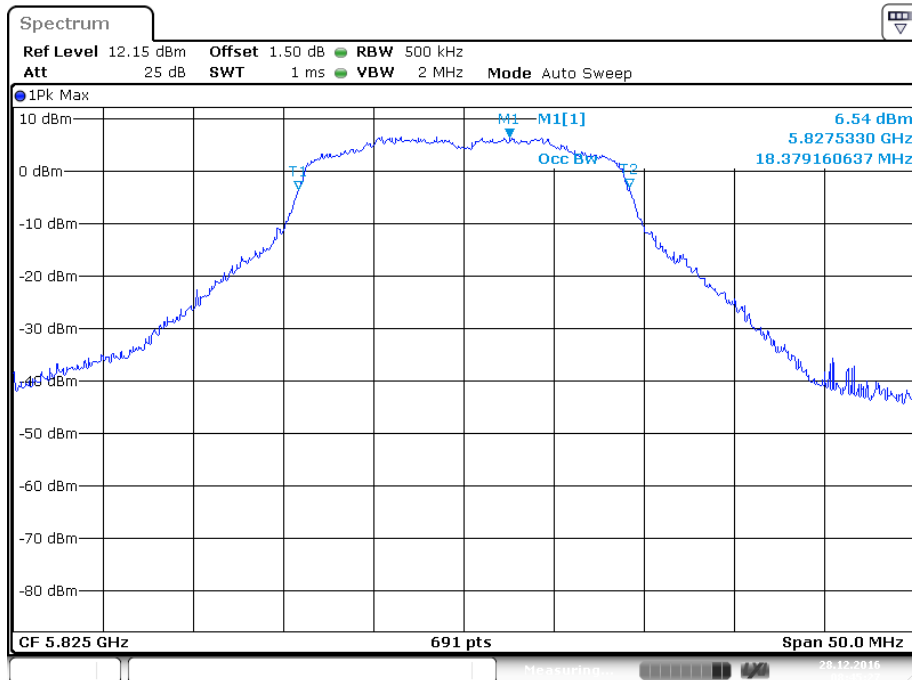
### 5745MHz



5785MHz

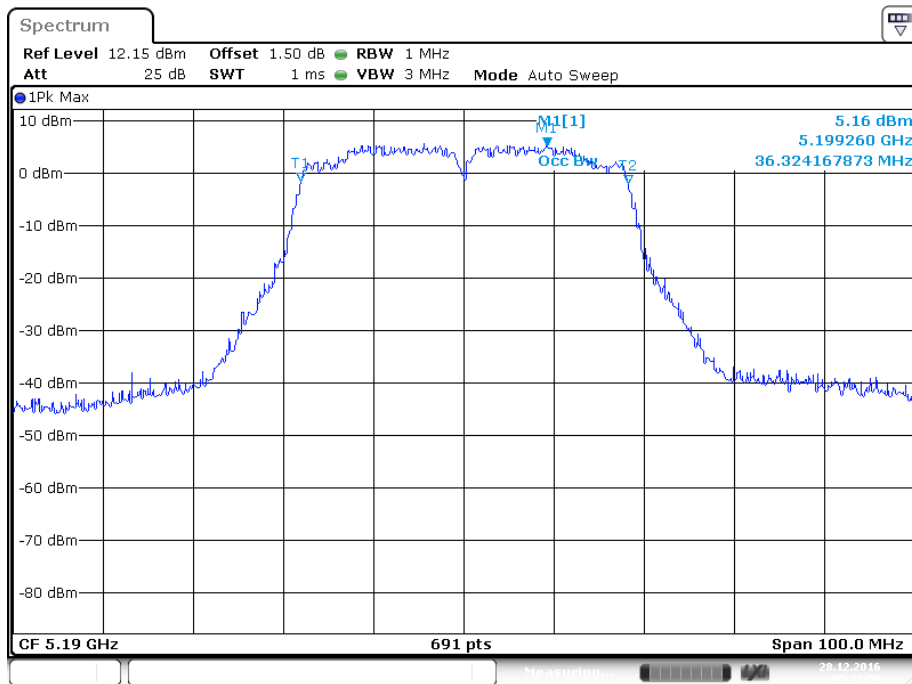


5825MHz



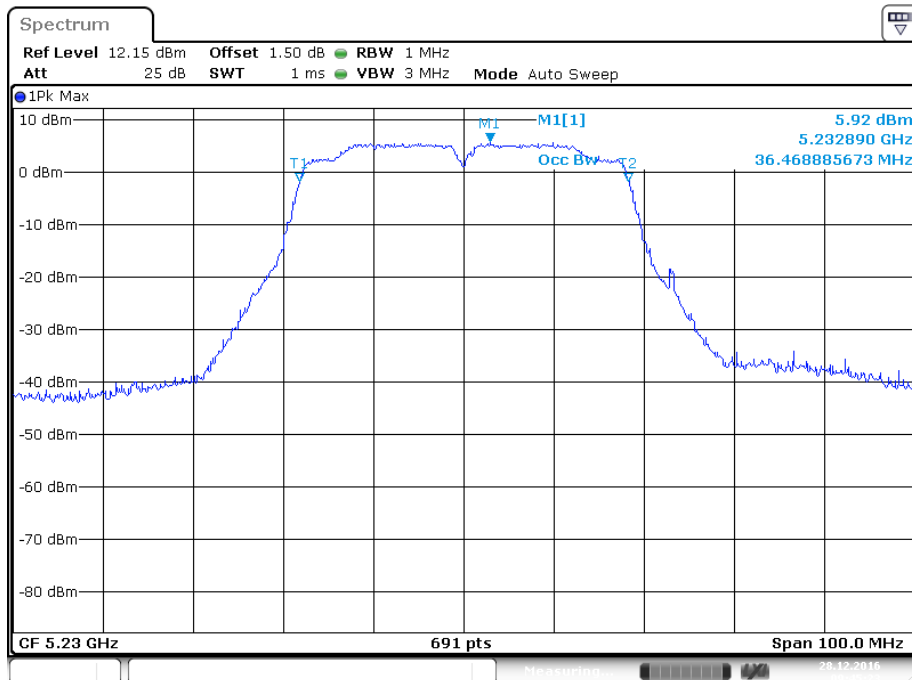


**IEEE 802.11n HT40 Mode / 5190 ~ 5795MHz (chain0)**  
**5190MHz**



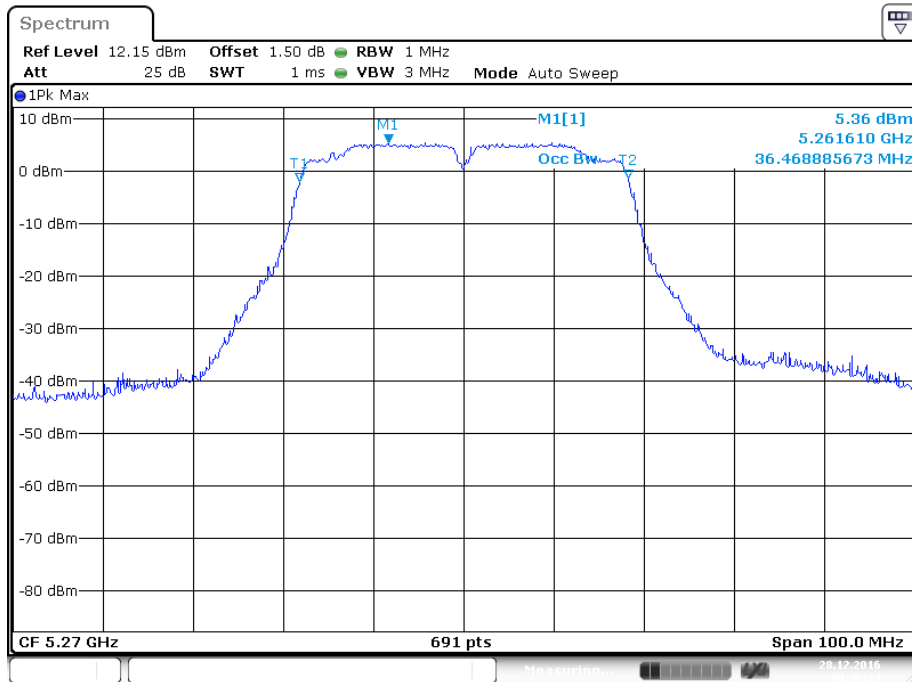
Date: 28 DEC 2016 09:44:00

**5230MHz**

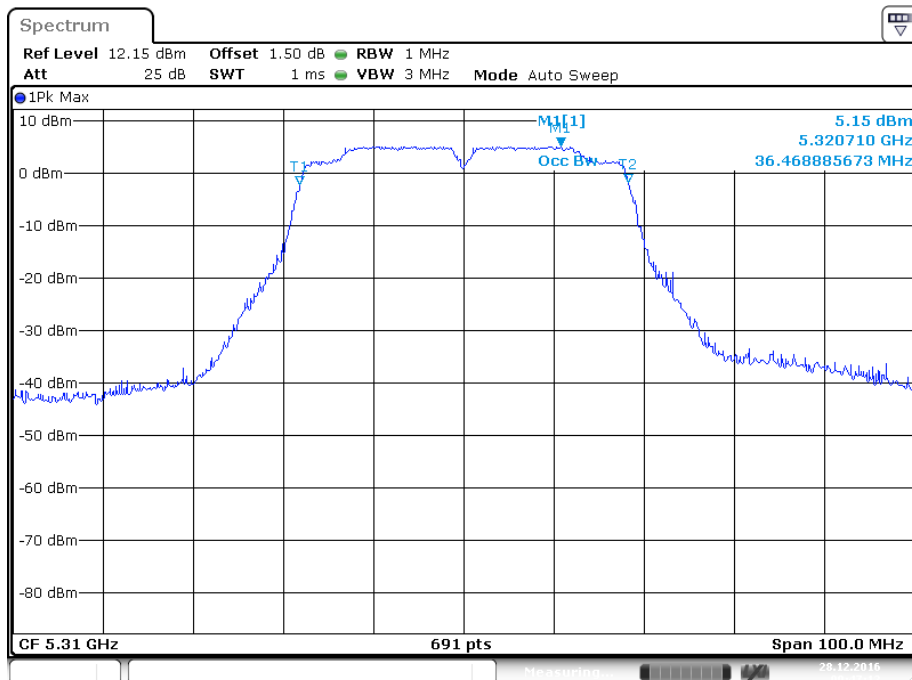


Date: 28 DEC 2016 09:45:24

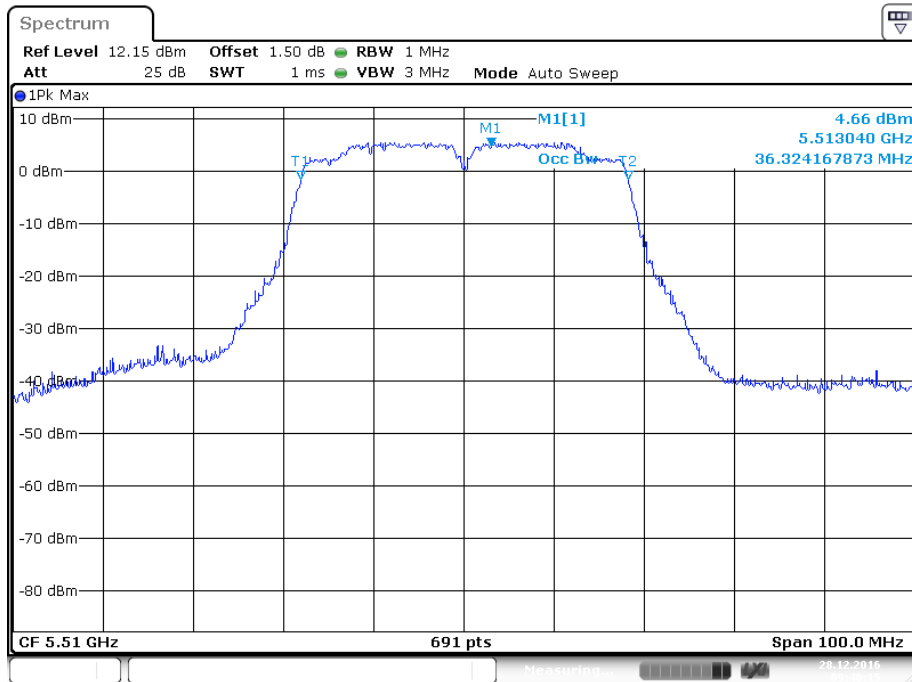
### 5270MHz



### 5310MHz

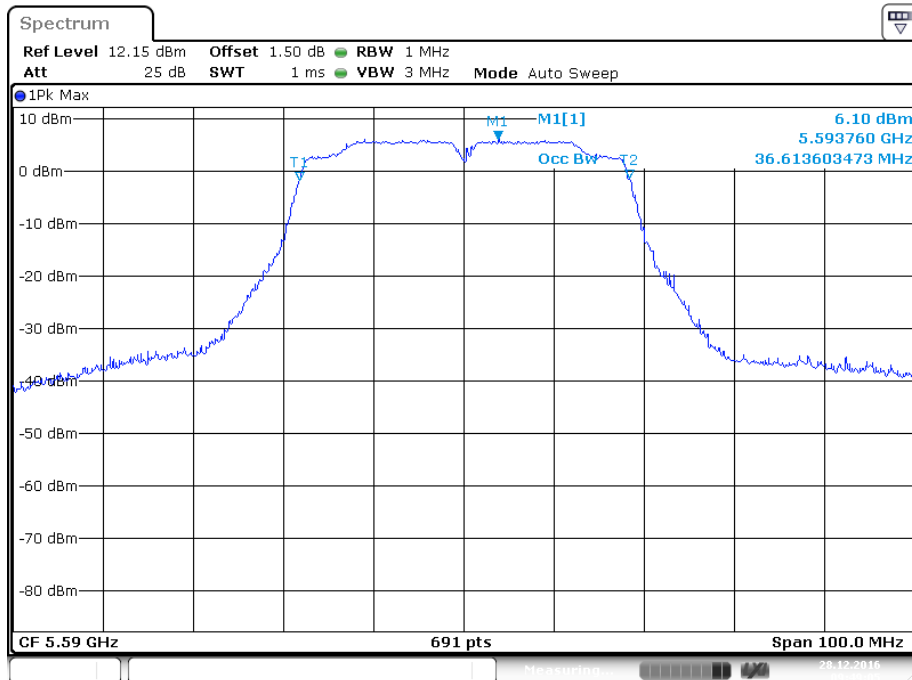


5510MHz



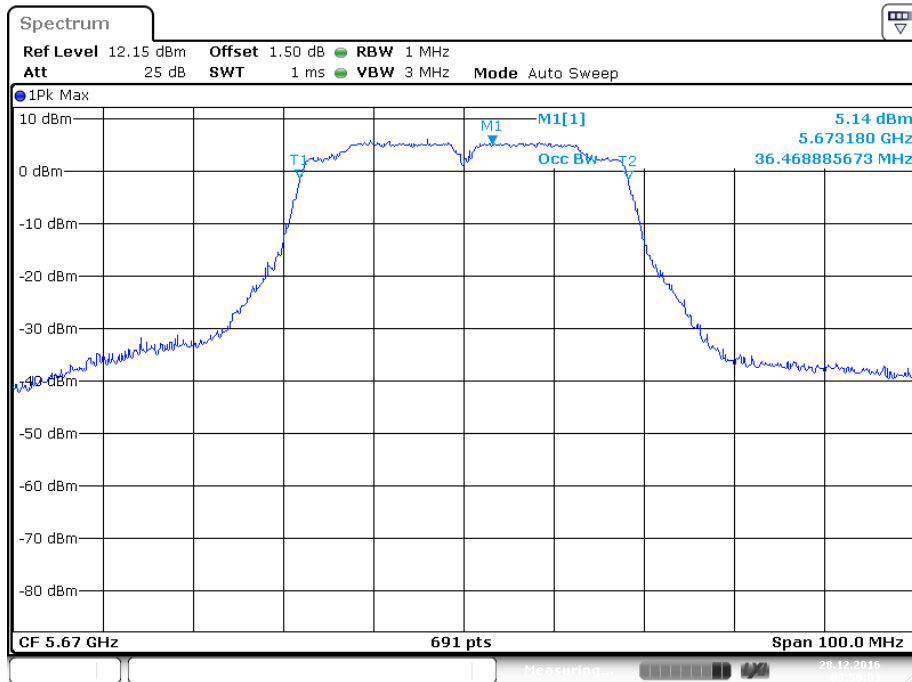
Date: 28 DEC 2016 09:48:15

5590MHz

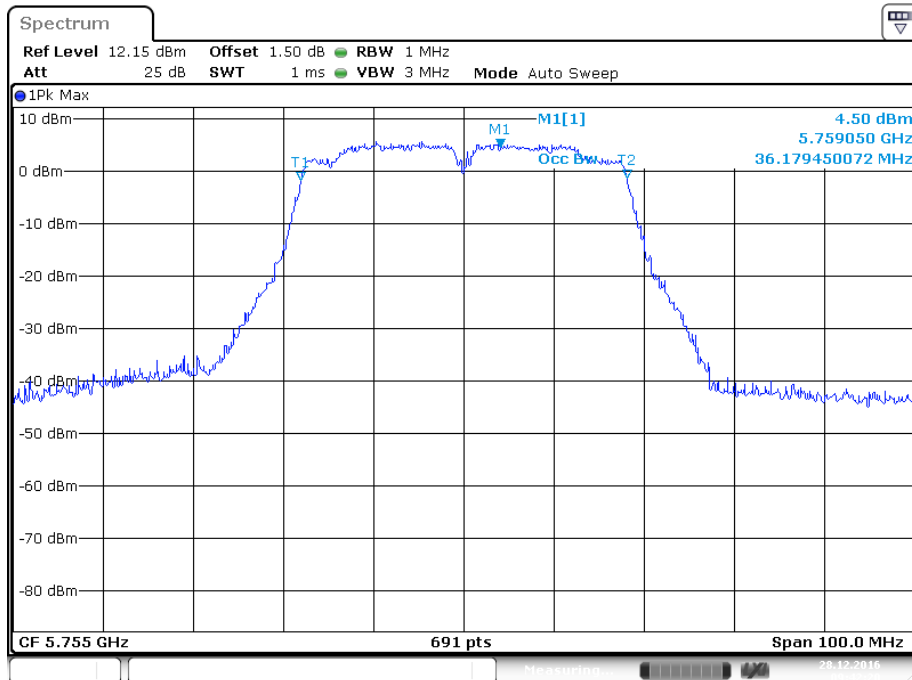


Date: 28 DEC 2016 09:49:05

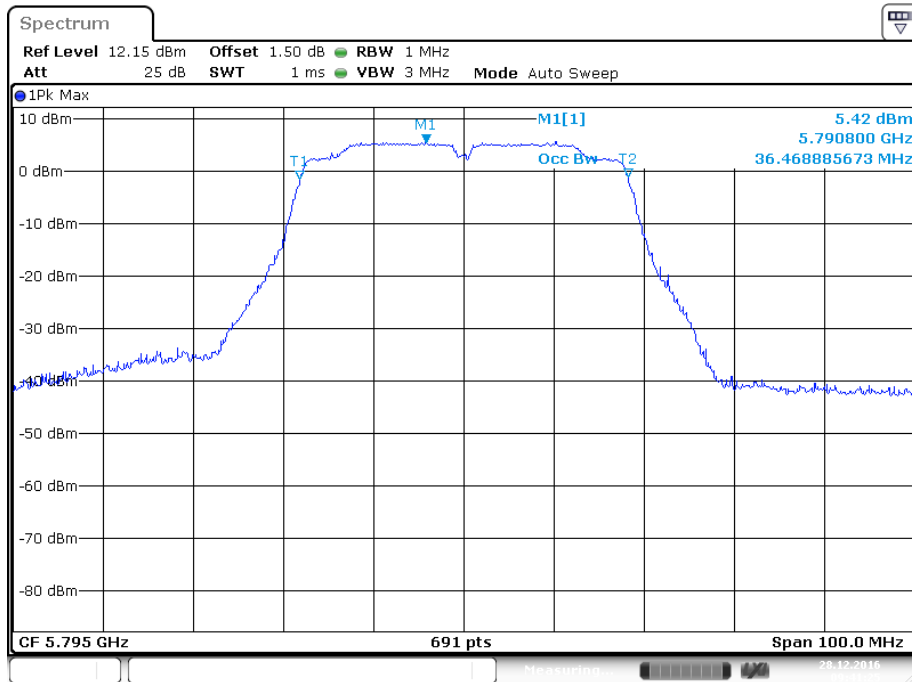
### 5670MHz



### 5755MHz

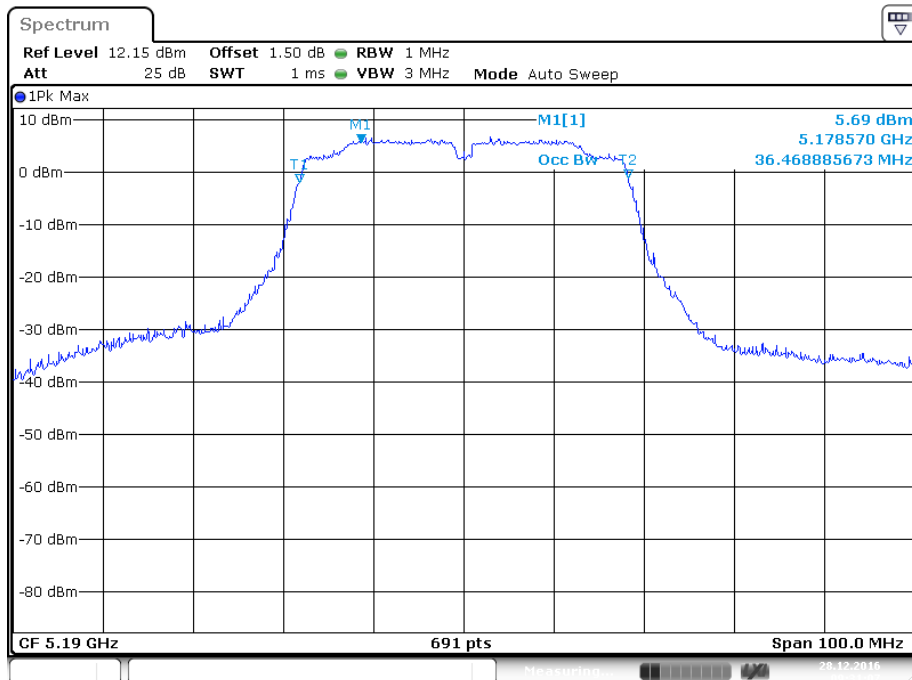


5795MHz



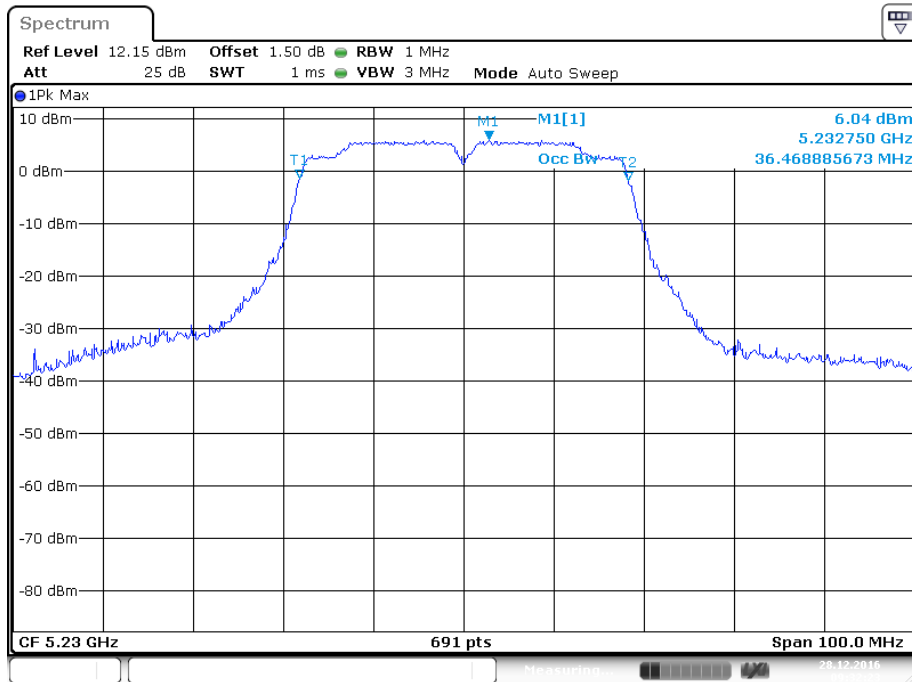
Date: 28 DEC 2016 09:41:26

IEEE 802.11n HT40 Mode / 5755 ~ 5795MHz (chain 1)  
5190MHz

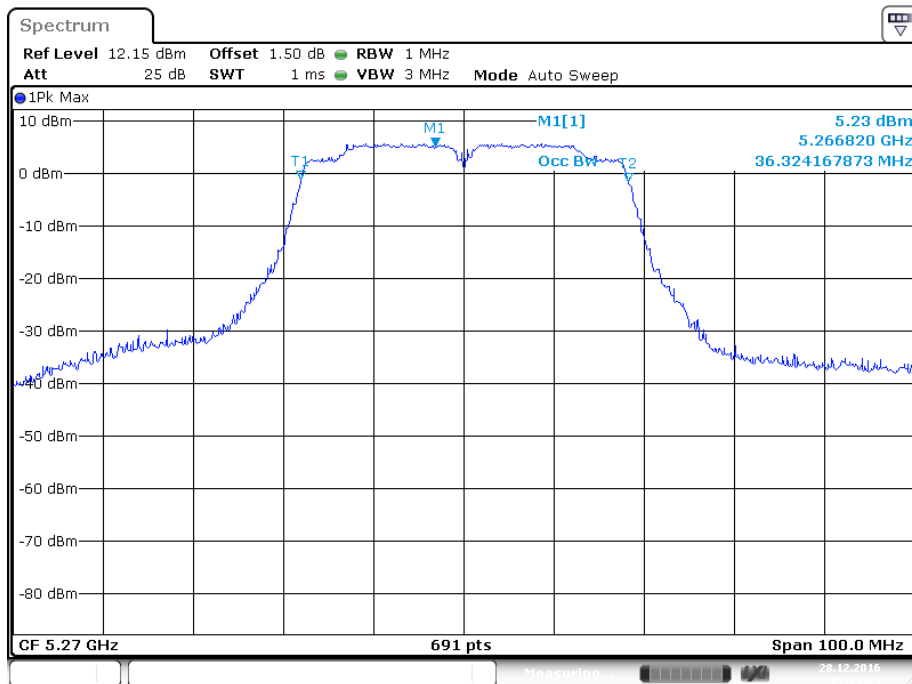


Date: 28 DEC 2016 09:31:07

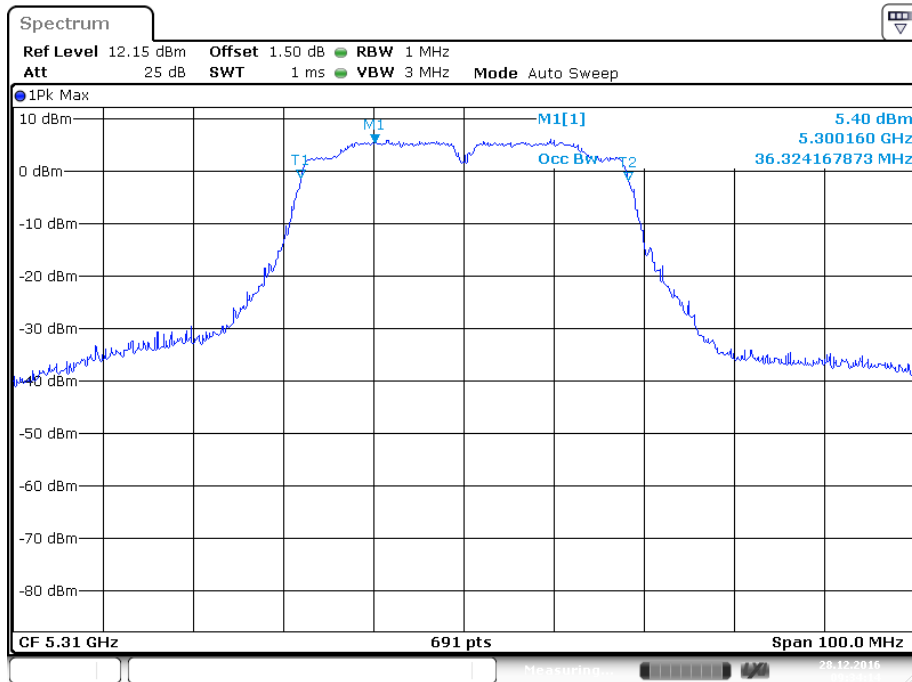
### 5230MHz



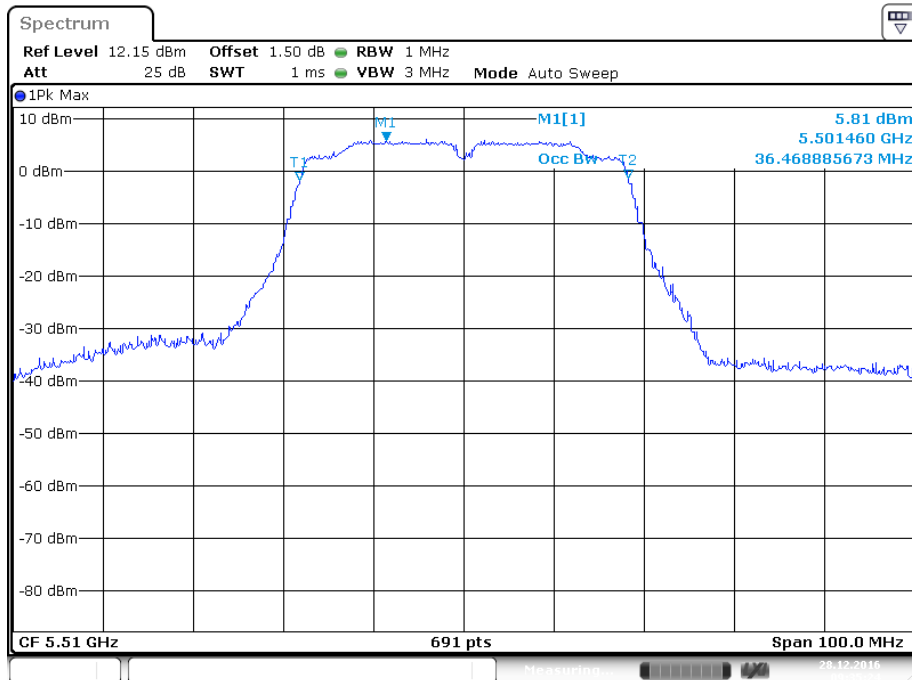
### 5270MHz



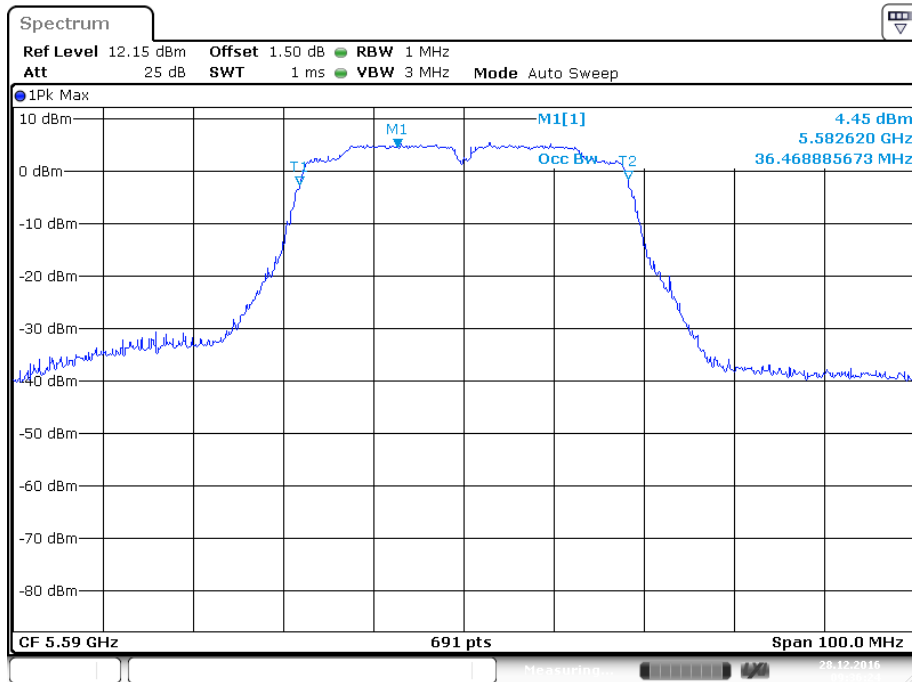
### 5310MHz



### 5510MHz

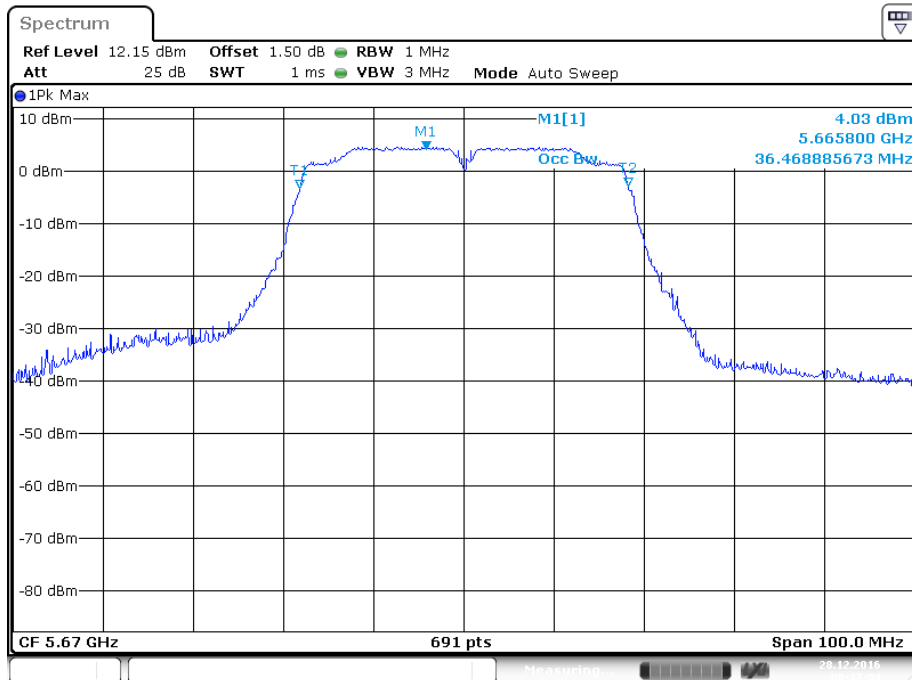


5590MHz



Date: 28 DEC. 2016 09:36:24

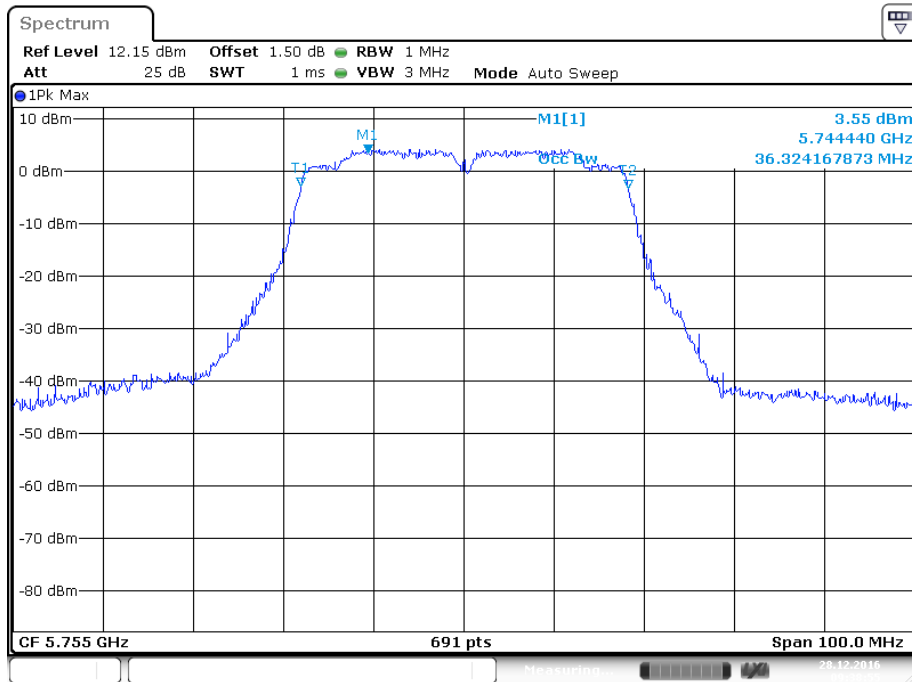
5670MHz



Date: 28 DEC. 2016 09:37:04

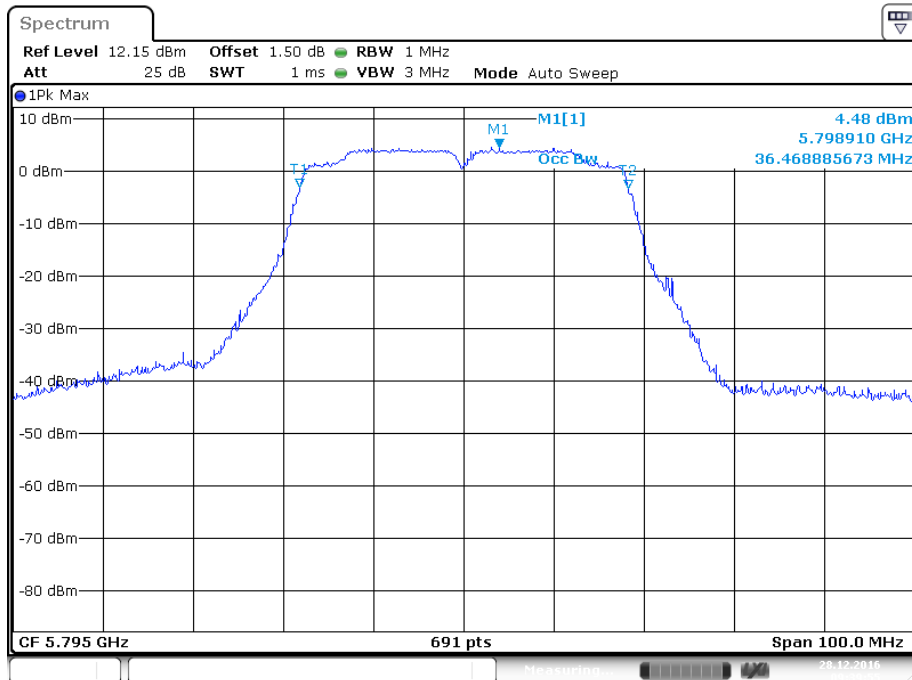


5755MHz



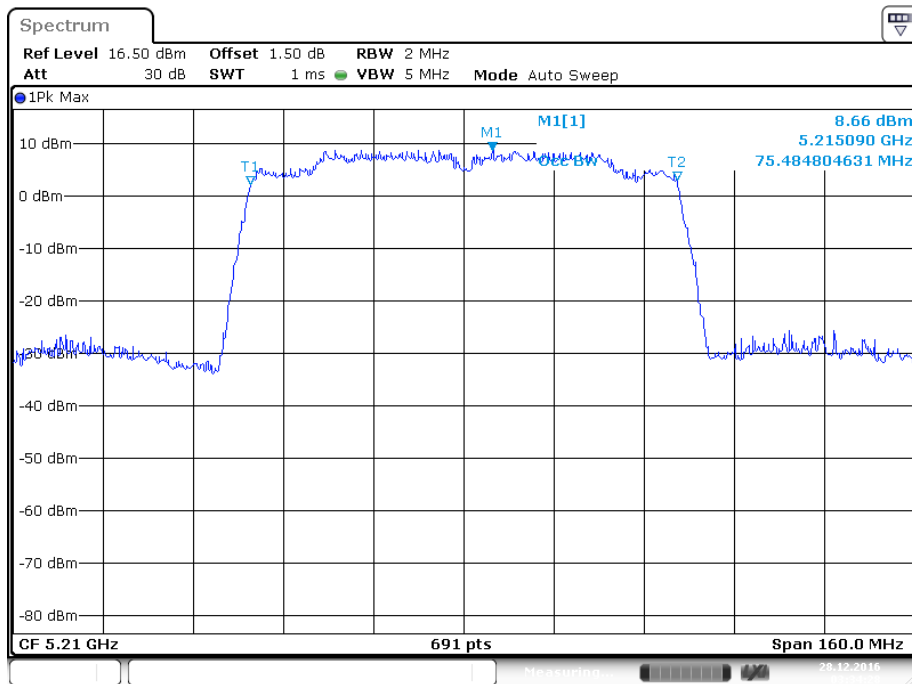
Date: 28 DEC. 2016 09:38:55

5795MHz



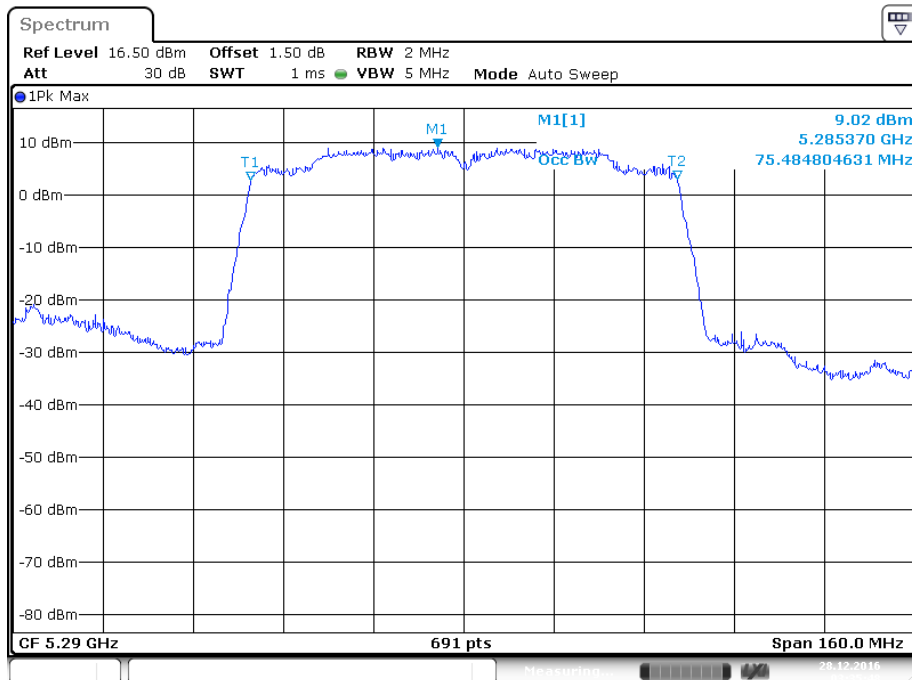
Date: 28 DEC. 2016 09:39:55

**IEEE 802.11ac VHT80 Mode / 5210~5775MHz (chain 0)  
5210MHz**



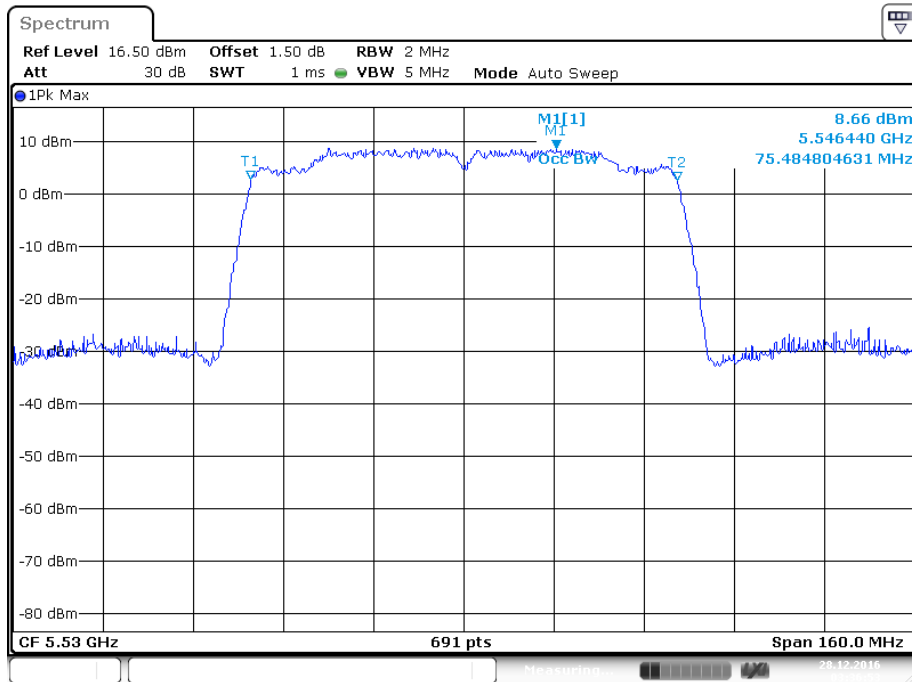
Date: 28 DEC 2016 03:34:29

**5290MHz**

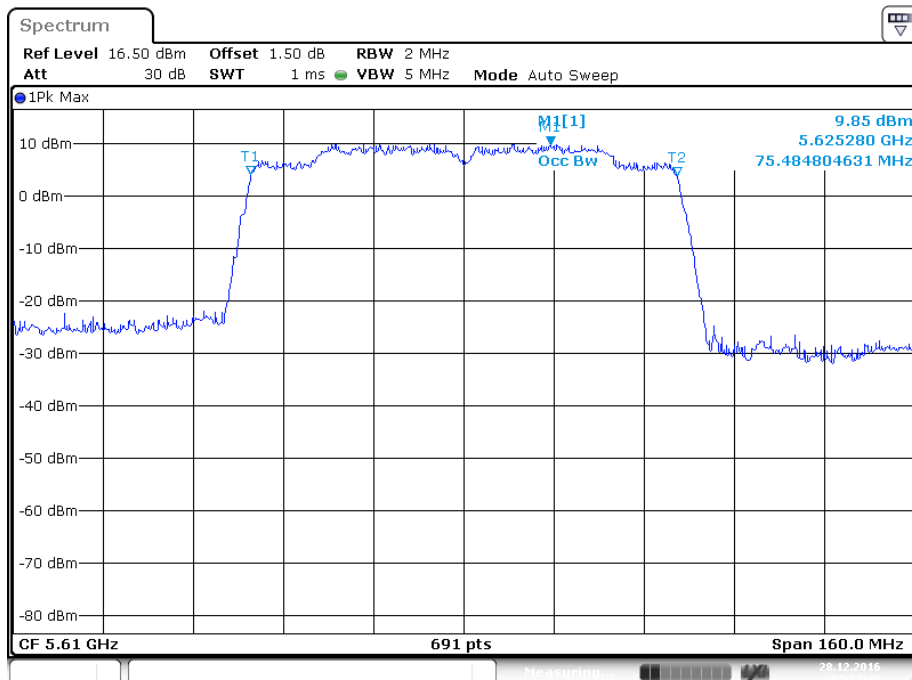


Date: 28 DEC 2016 03:35:48

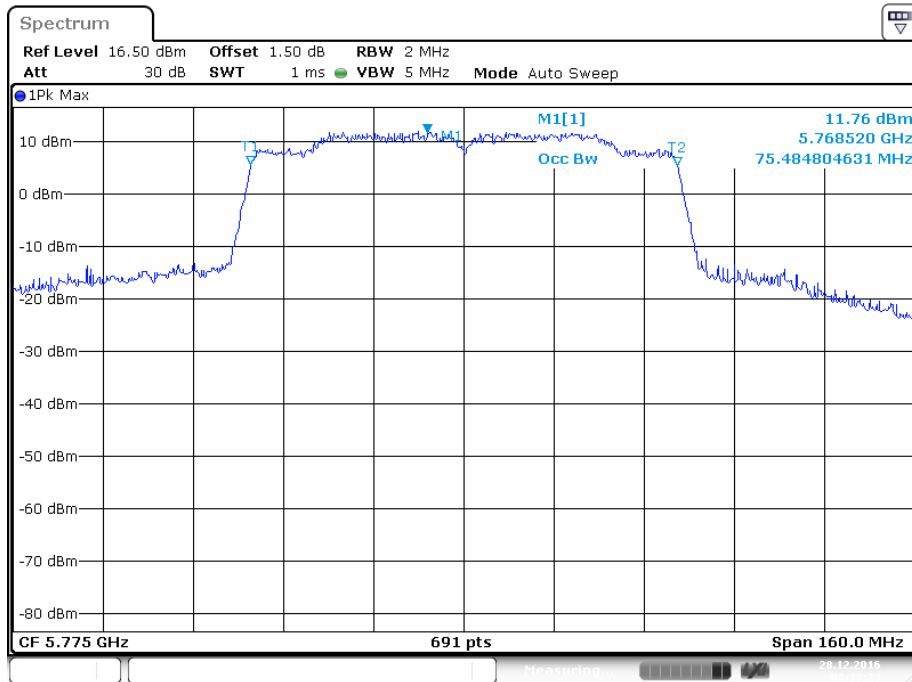
### 5530MHz



### 5610MHz

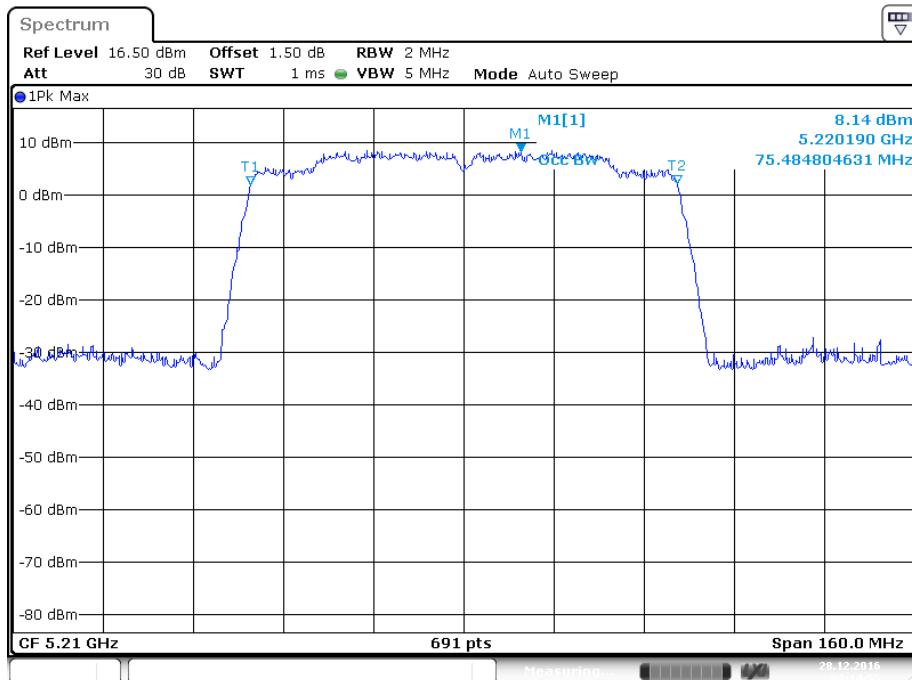


5775MHz



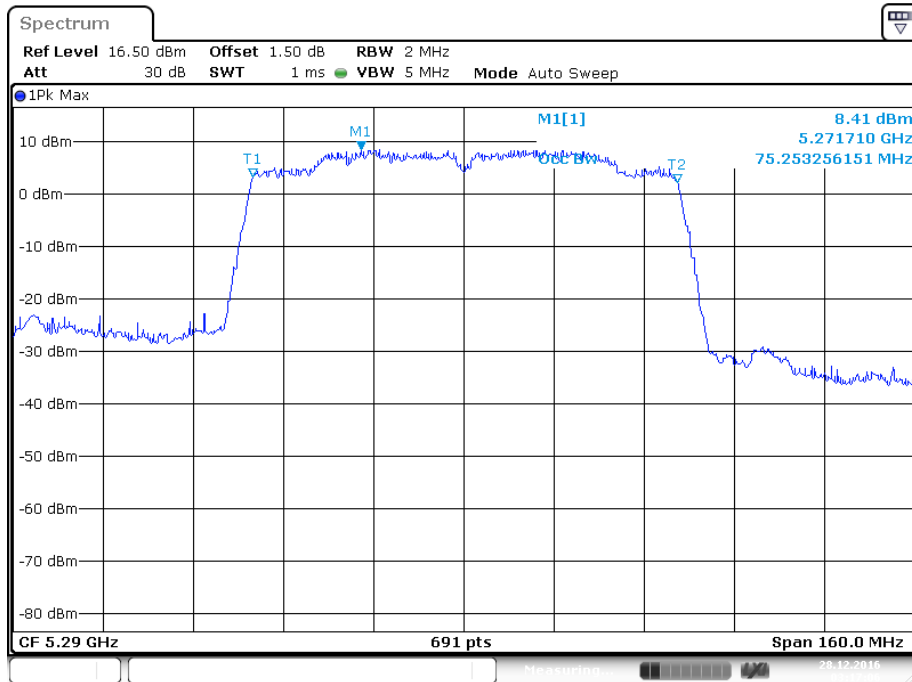
Date: 28 DEC 2016 03:33:24

IEEE 802.11ac VHT80 Mode / 5210~5775MHz (chain 1)  
5210MHz



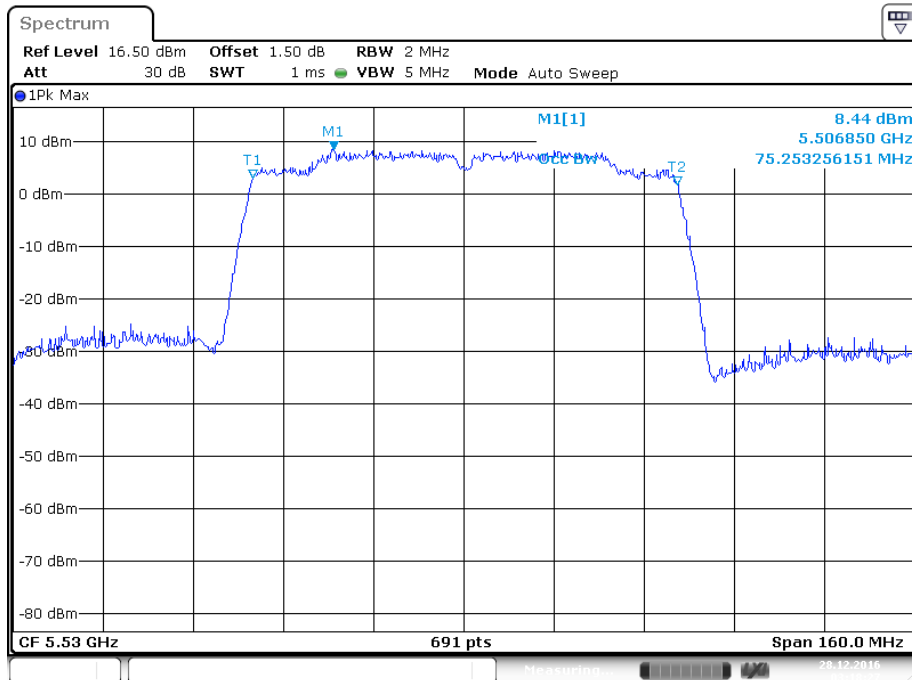
Date: 28 DEC 2016 03:14:55

### 5290MHz



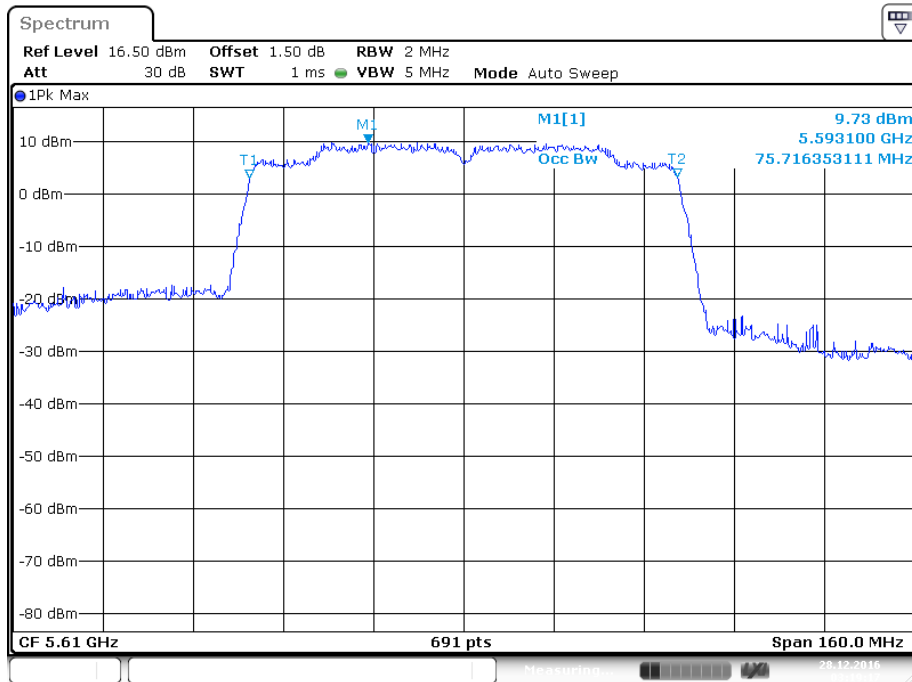
Date: 28 DEC. 2016 03:17:06

### 5530MHz



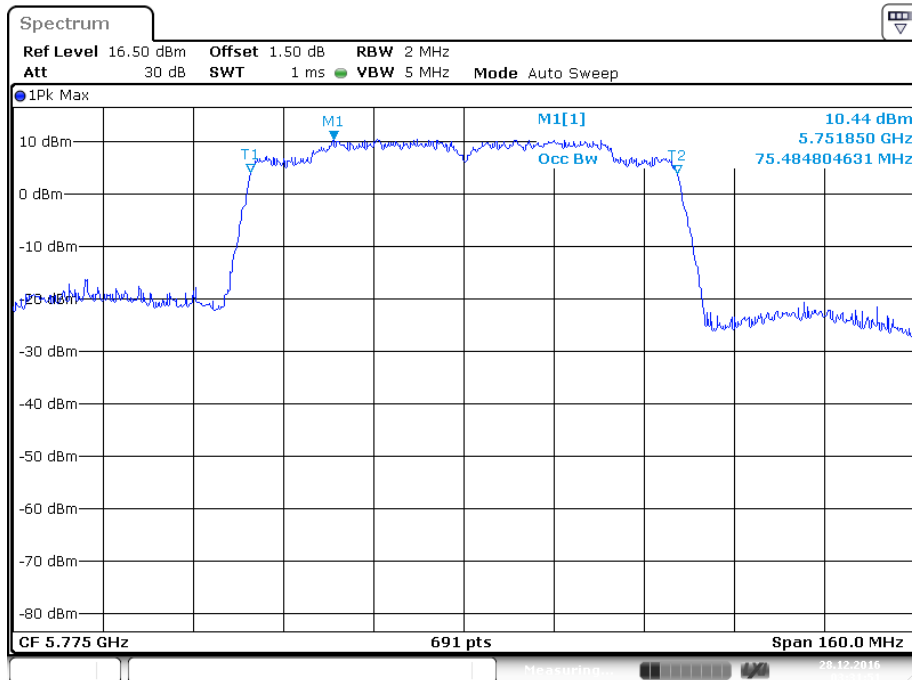
Date: 28 DEC. 2016 03:18:27

### 5610MHz



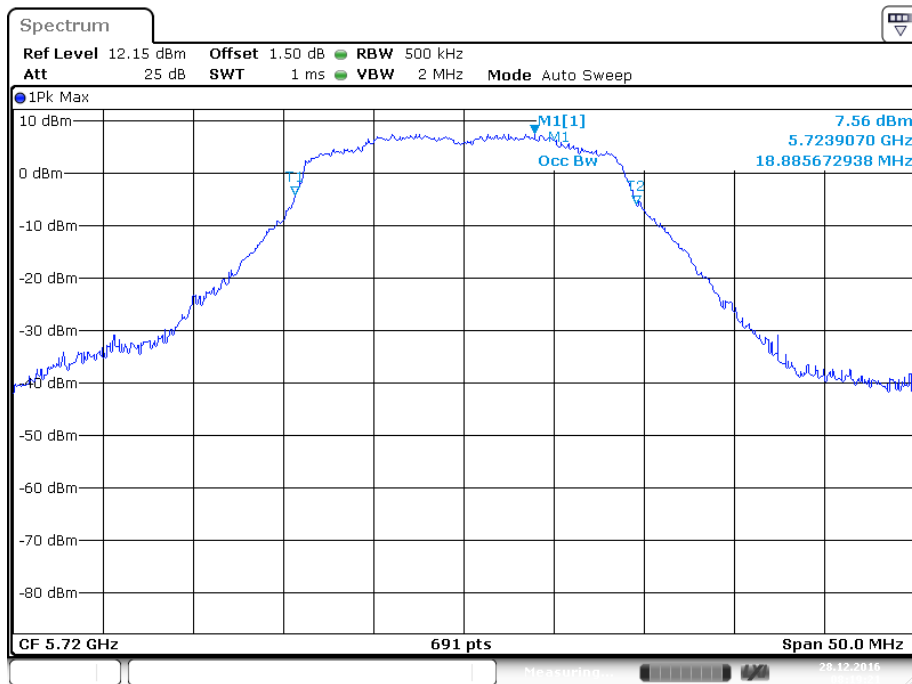
Date: 28 DEC. 2016 03:19:18

### 5775MHz

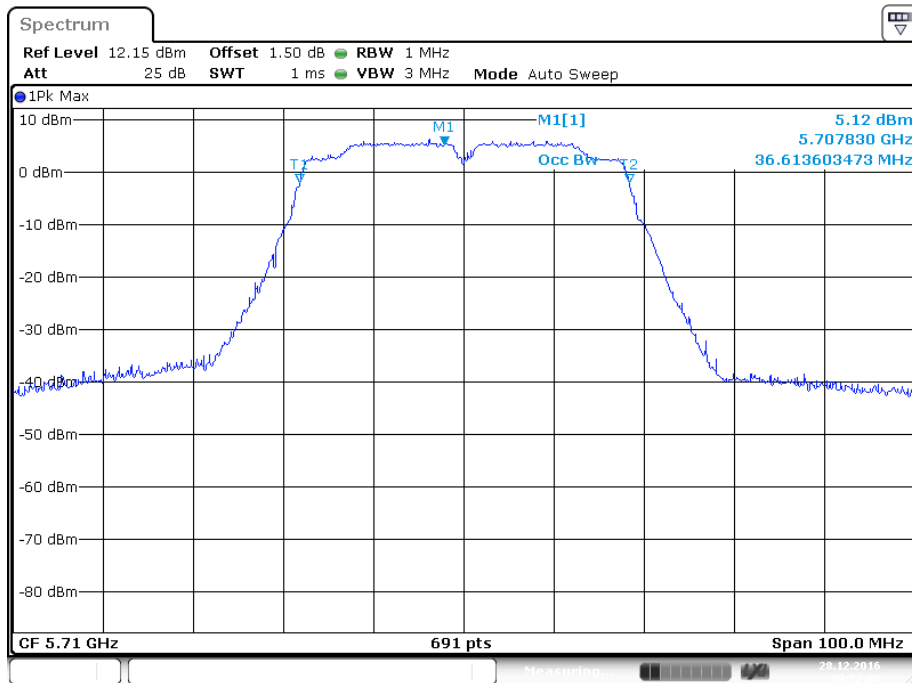


Date: 28 DEC. 2016 03:31:51

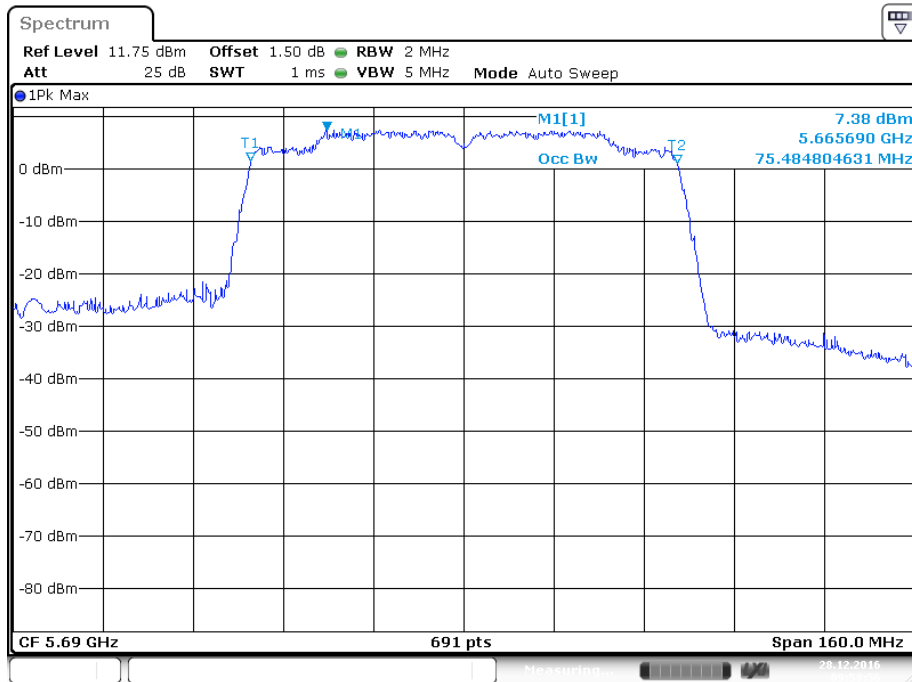
### Cross Band IEEE 802.11n HT20 Mode / 5720MHz (chain 0)



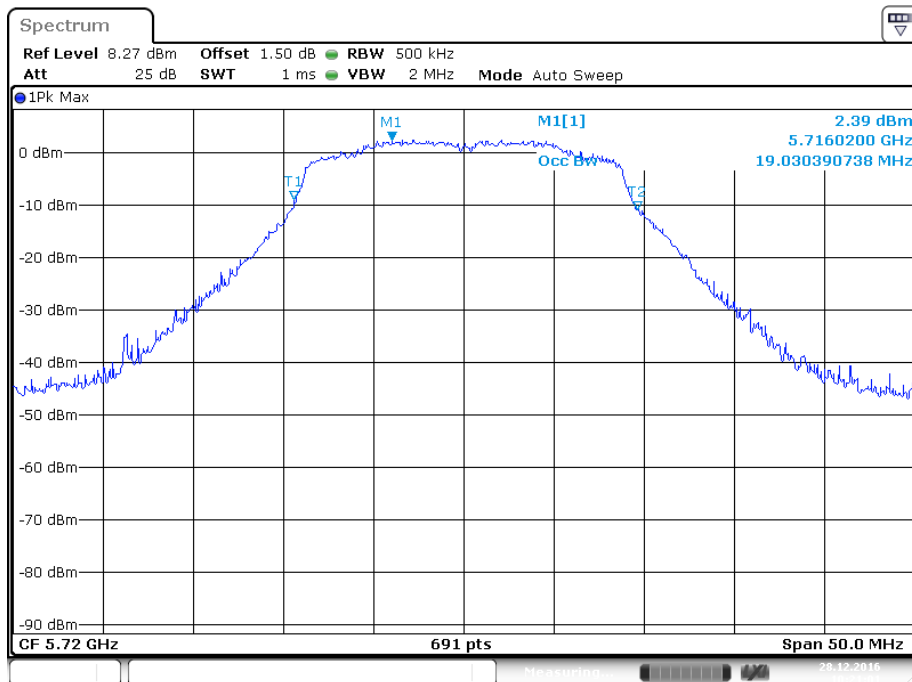
### IEEE 802.11n HT40 Mode / 5710MHz (chain 0)



**IEEE 802.11ac VHT80 Mode / 5690MHz (chain 0)**

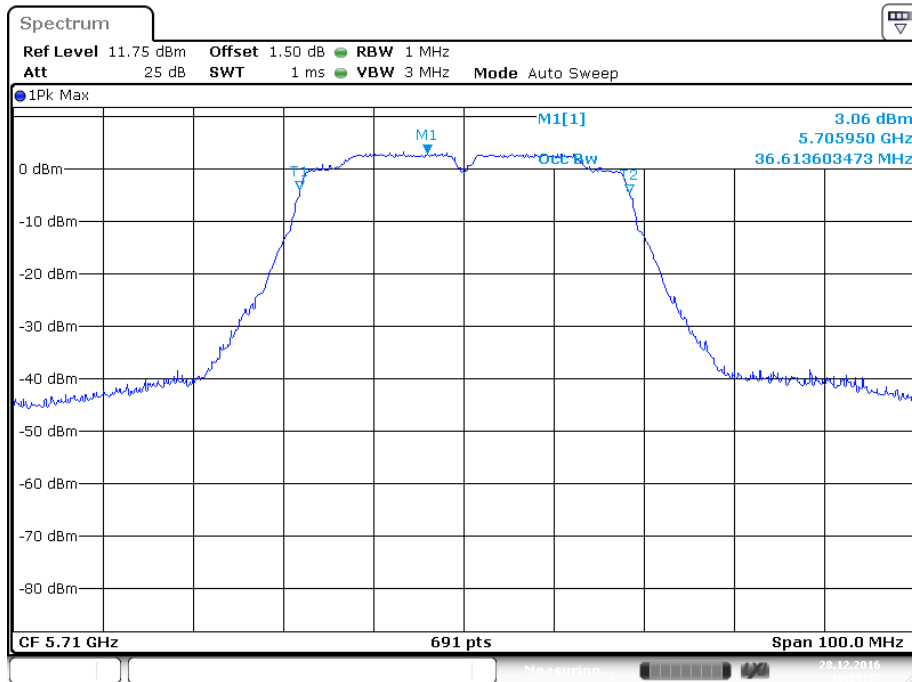


**IEEE 802.11n HT20 Mode / 5720MHz (chain 1)**

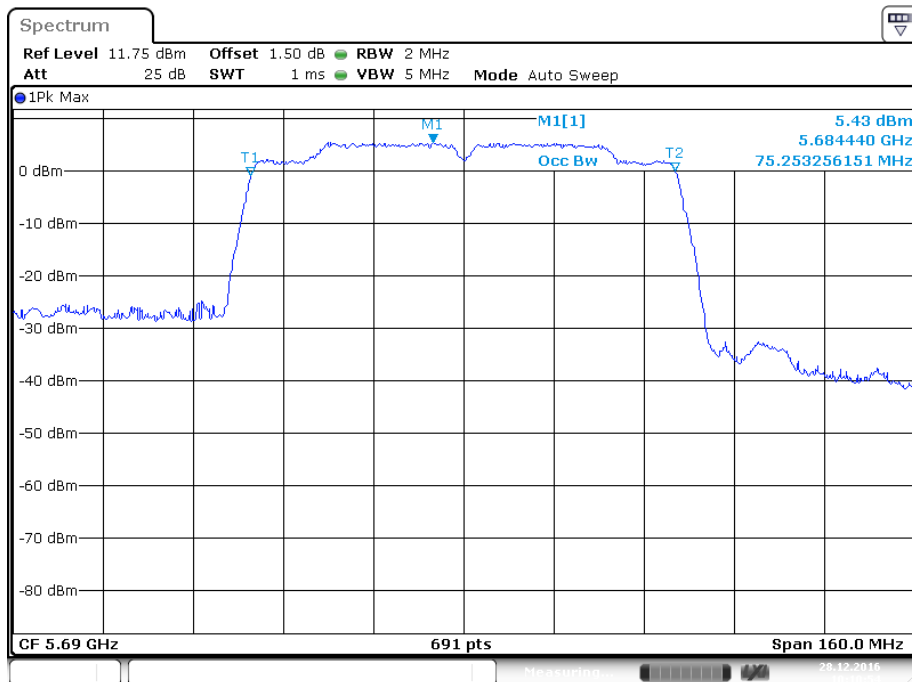




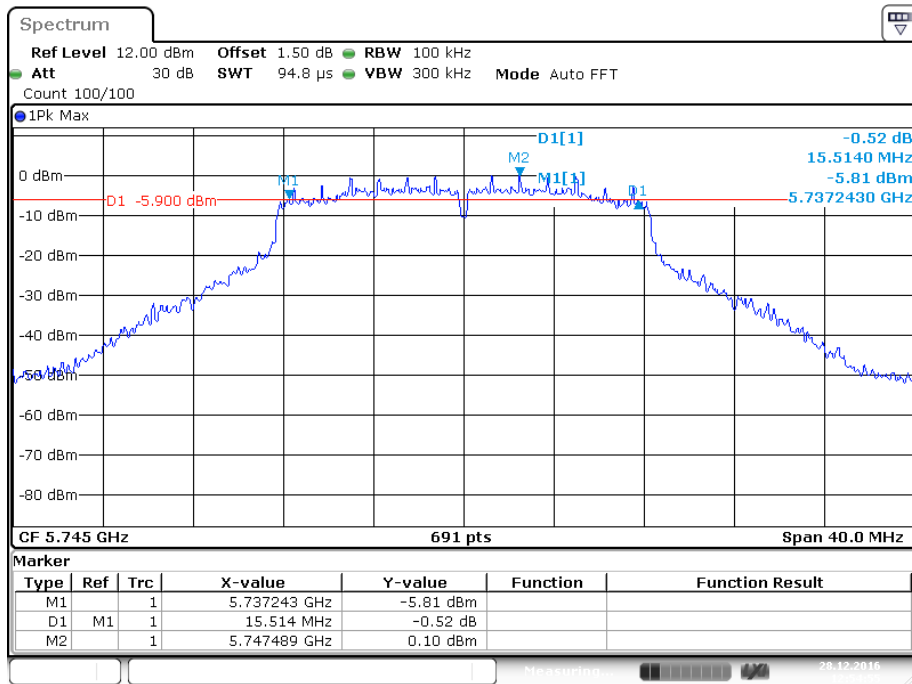
**IEEE 802.11n HT40 Mode / 5710MHz (chain 1)**



**IEEE 802.11ac VHT80 Mode / 5690MHz (chain 1)**

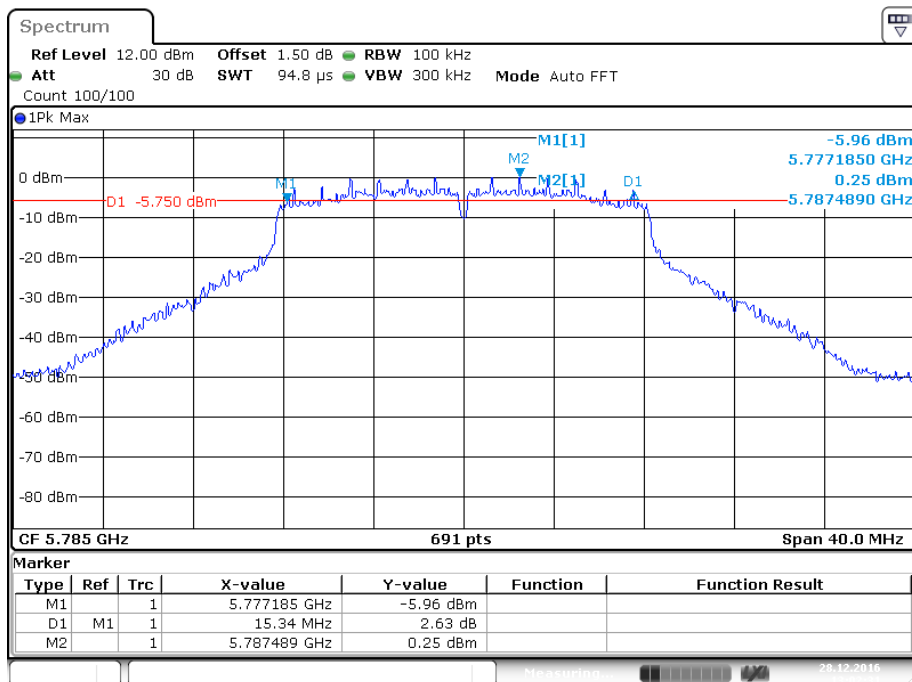


**UNII BW 6dBc**  
**IEEE 802.11a mode / 5745 ~ 5825MHz(chain0)**  
**5745MHz**



Date: 28 DEC 2016 12:54:55

**5785MHz**



Date: 28 DEC 2016 13:02:32