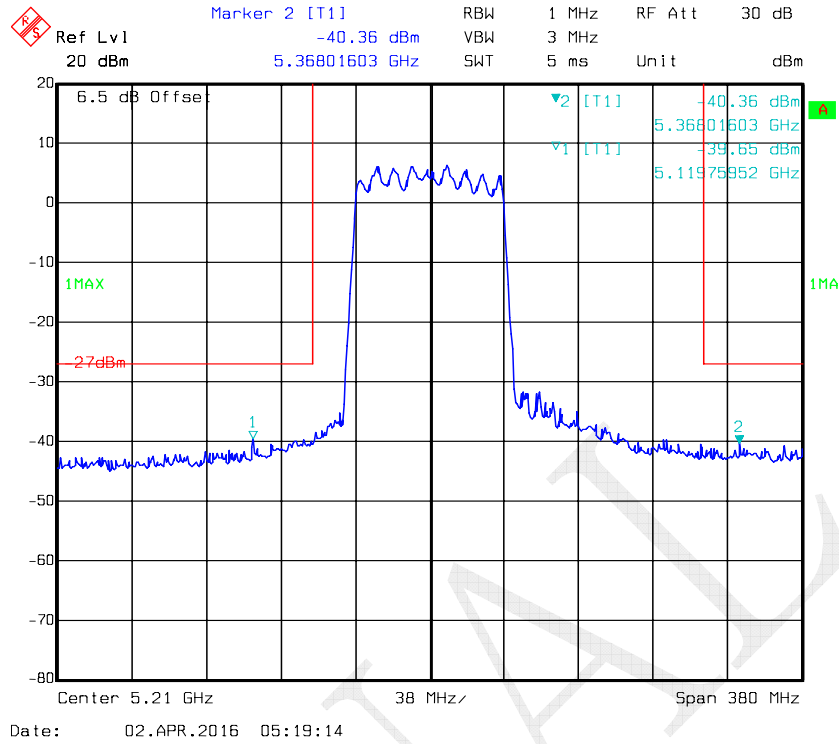
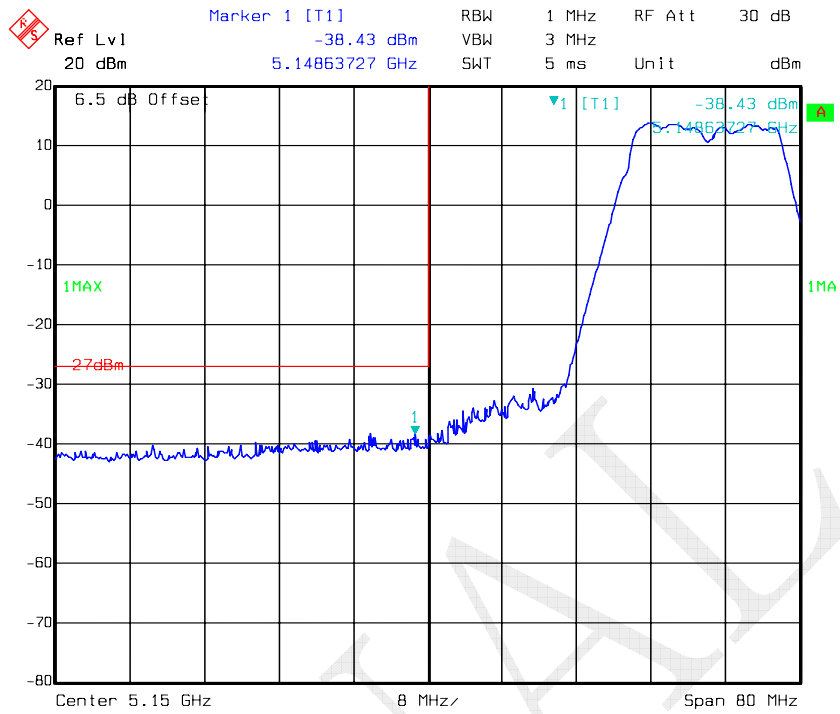


### 802.11n ac80 Band Edge Middle- Chain0

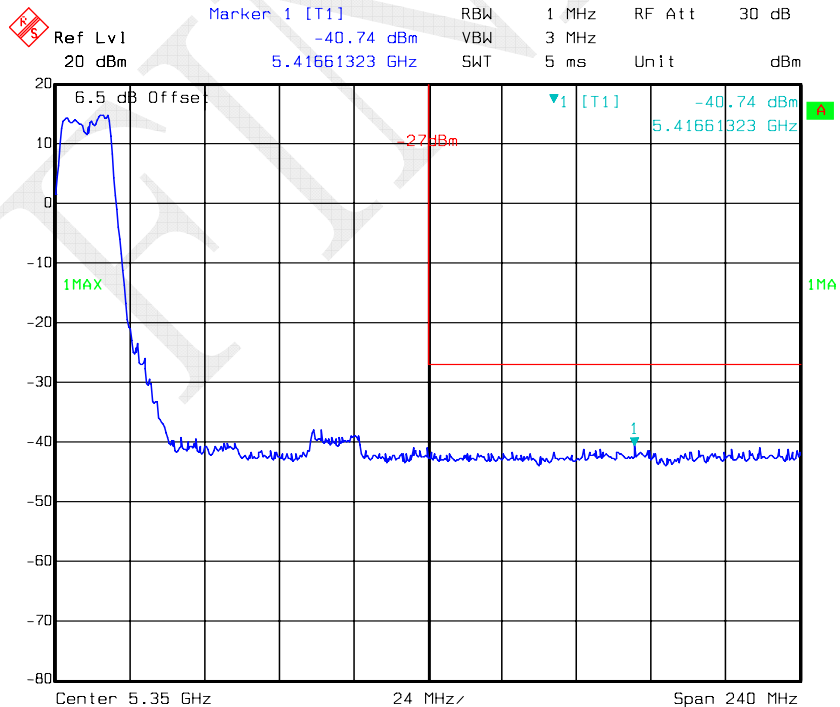


### 802.11a Band Edge, Left Side – Chain1



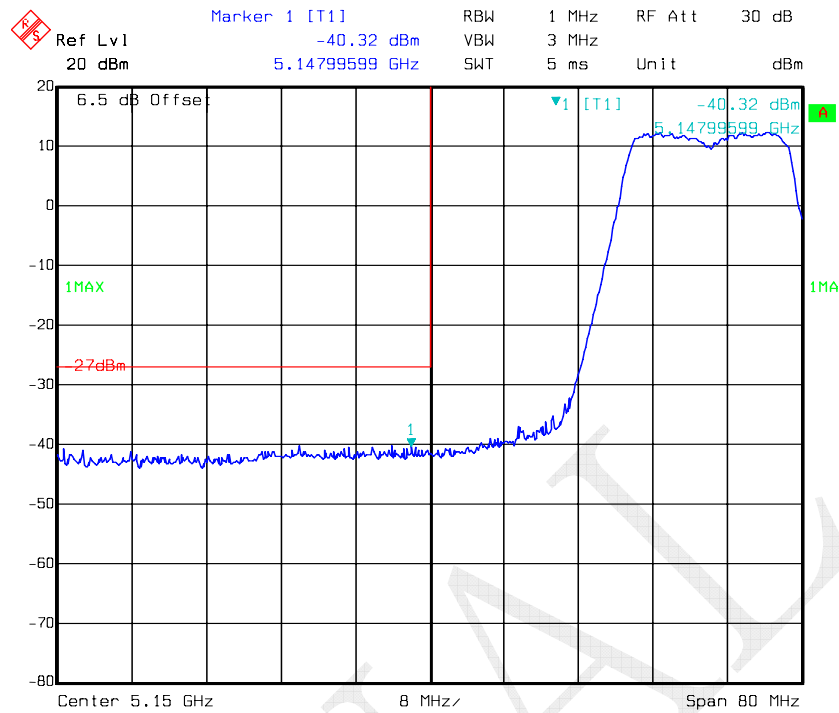
Date: 02.APR.2016 06:24:30

### 802.11a Band Edge, Right Side – Chain1



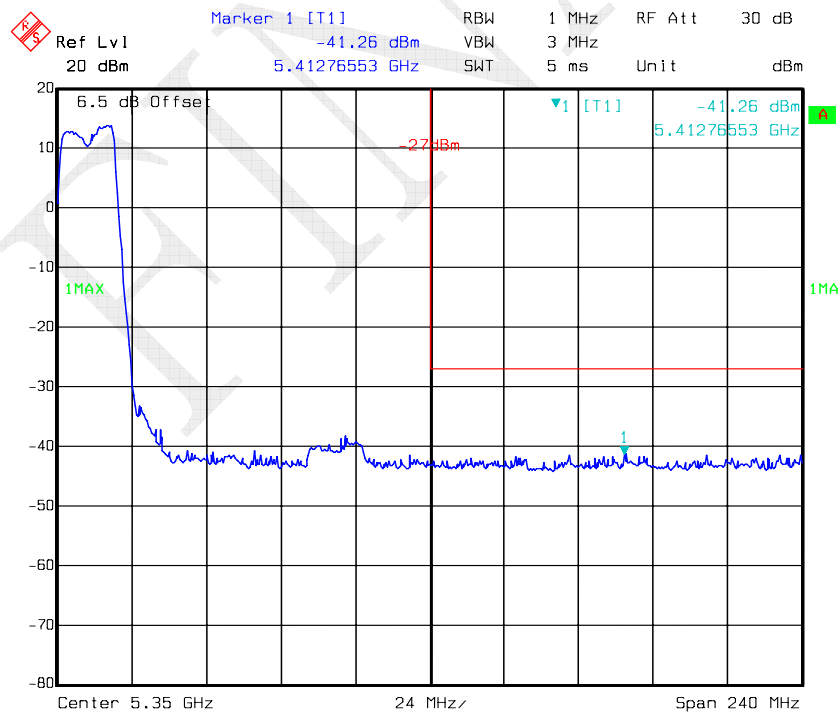
Date: 02.APR.2016 06:18:24

### 802.11n ht20 Band Edge, Left Side- Chain1



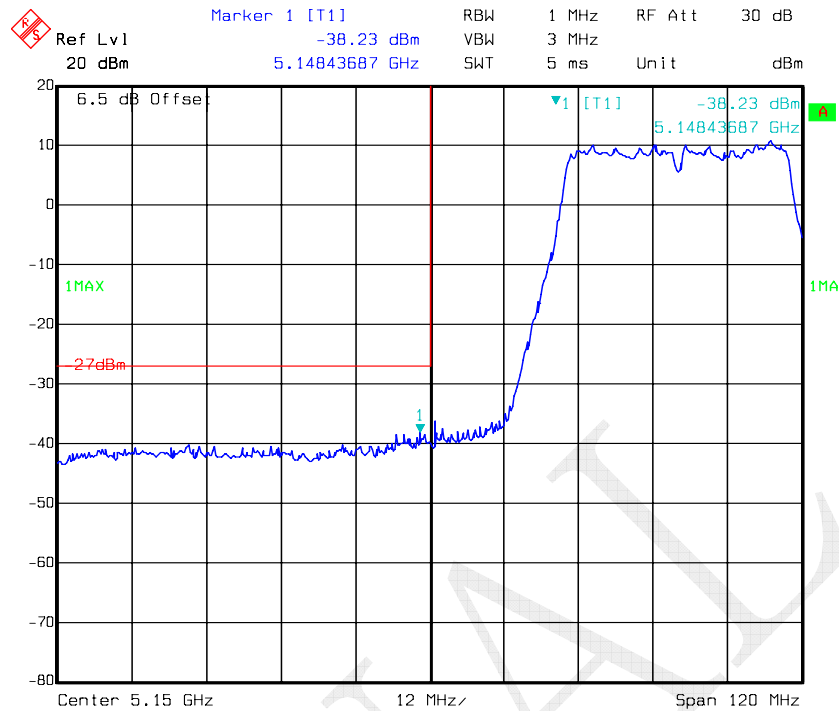
Date: 02.APR.2016 06:09:15

### 802.11n ht20 Band Edge, Right Side- Chain1

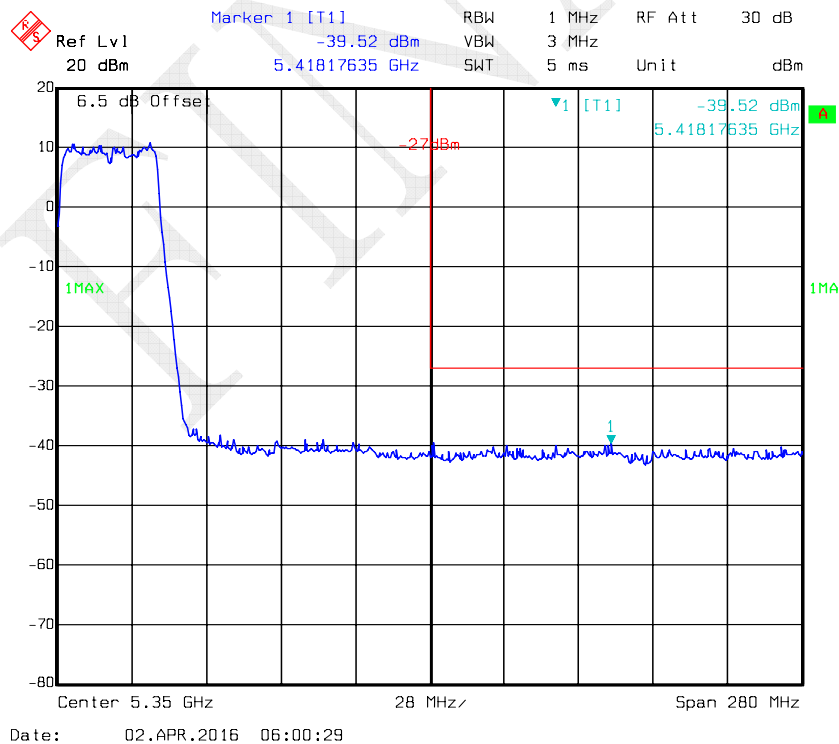


Date: 02.APR.2016 06:14:13

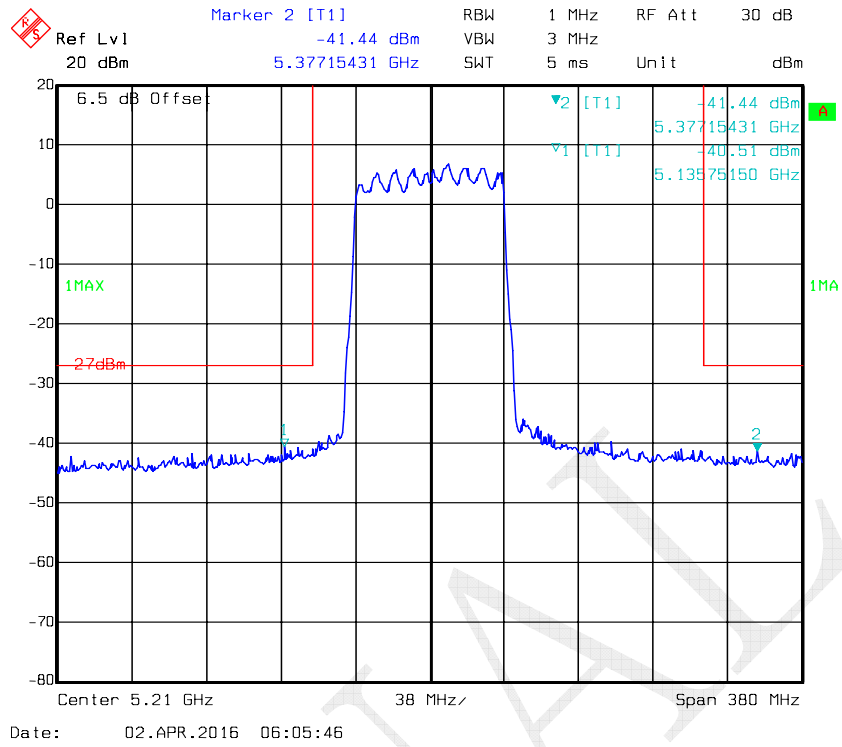
### 802.11n ht40 Band Edge, Left Side- Chain1



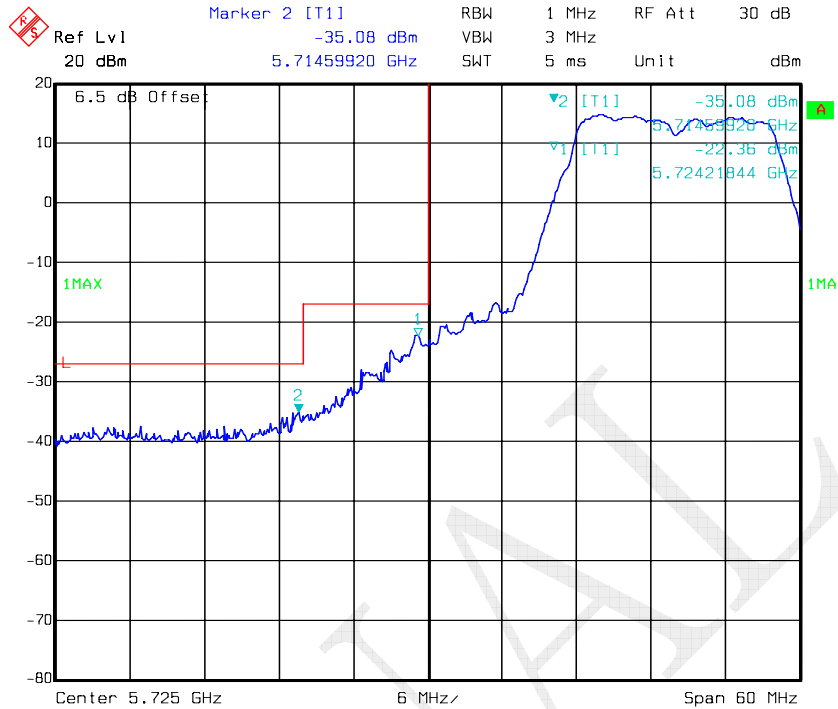
### 802.11n ht40 Band Edge, Right Side- Chain1



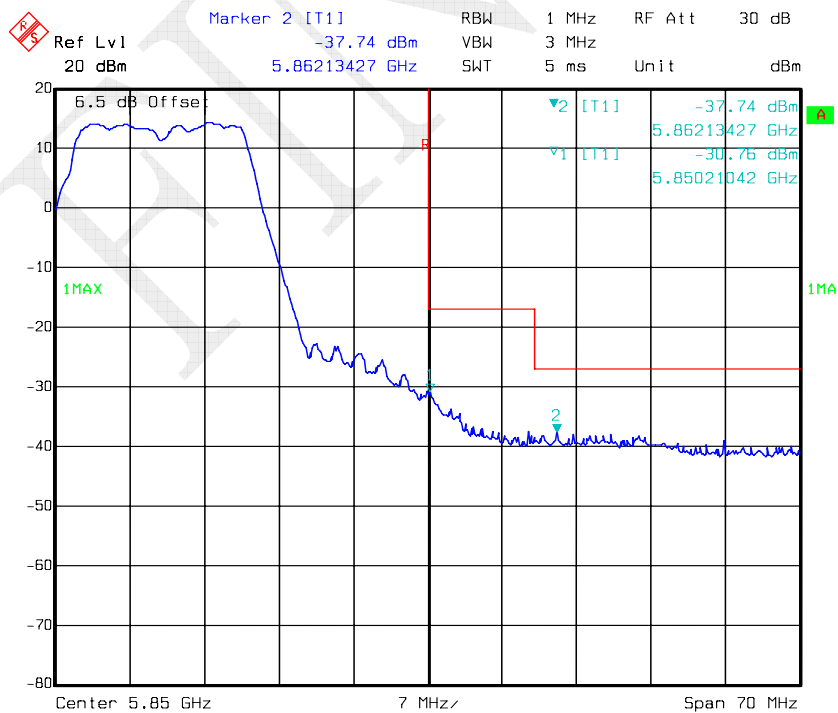
### 802.11n ac80 Band Edge, Middle- Chain1



5725MHz-5850MHz:

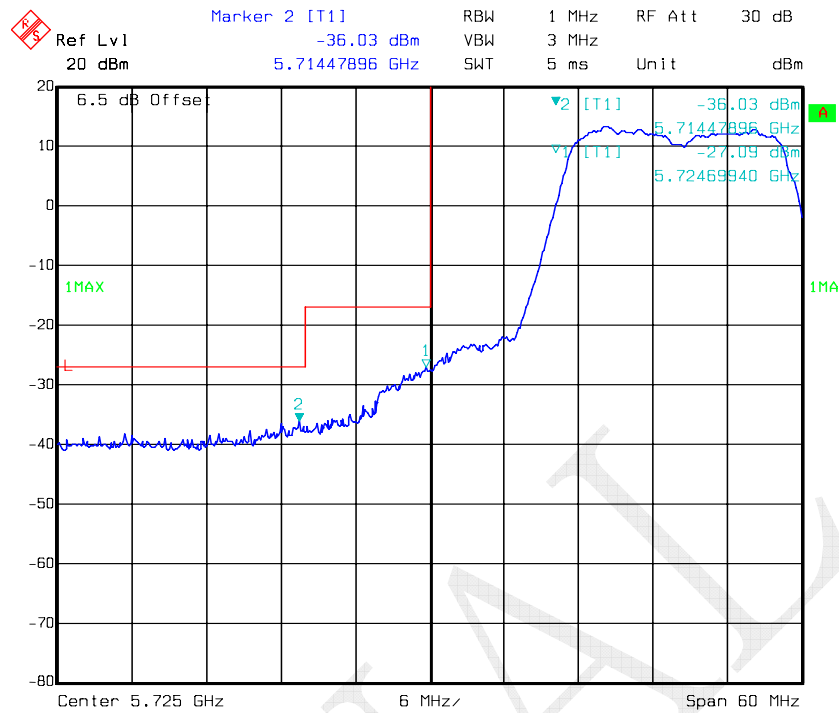
**802.11a Band Edge, Left Side – Chain0**

Date: 02.APR.2016 09:36:27

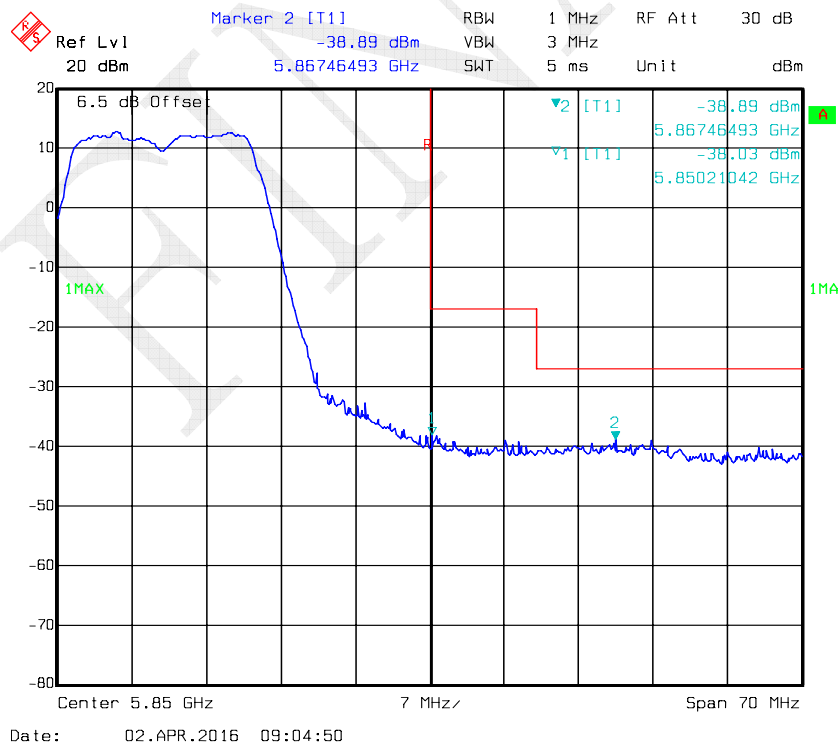
**802.11a Band Edge, Right Side – Chain0**

Date: 02.APR.2016 09:45:54

### 802.11n ht20 Band Edge, Left Side – Chain0



### 802.11n ht20 Band Edge, Right Side – Chain0



Ref Lvl 20 dBm

Marker 2 [T1] -32.58 dBm

RBW 1 MHz

VBW 3 MHz

SWT 5 ms

RF Att 30 dB

Unit dBm

6.5 dB Offset

1MAX

2

3

2 [T1] -32.58 dBm

5.71207415 GHz

5.72409820 GHz

Center 5.725 GHz

10 MHz

Span 100 MHz

Date: 02.APR.2016 09:18:43

Ref Lvl 20 dBm  
Marker 2 [T1] -39.98 dBm  
5.86668337 GHz  
RBW 1 MHz  
VBW 3 MHz  
SWT 5 ms  
RF Att 30 dB  
Unit dBm

6.5 dB Offset

1MAX

2

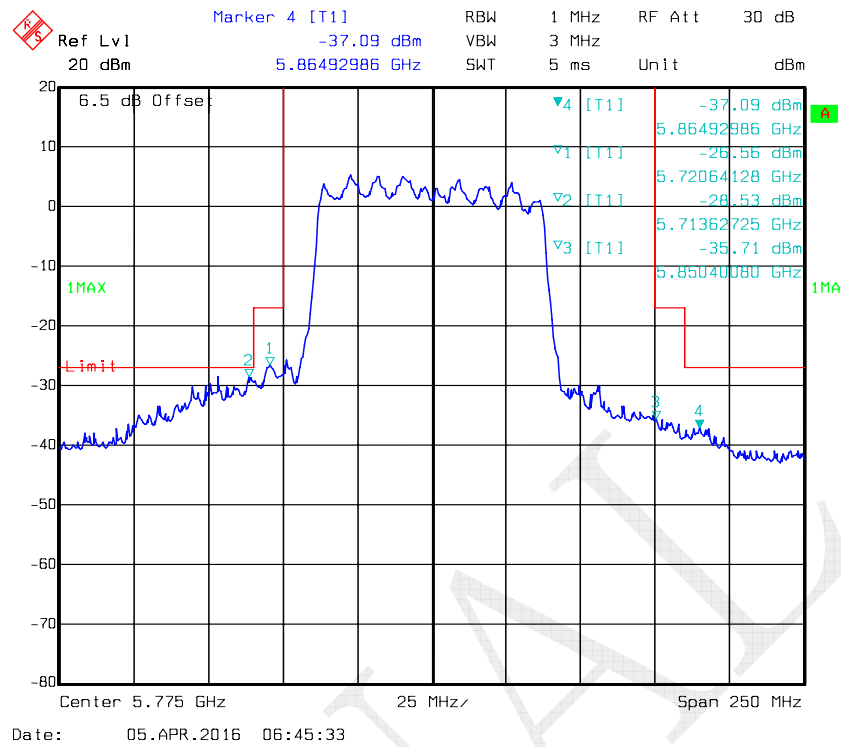
Center 5.85 GHz  
15 MHz  
Span 150 MHz

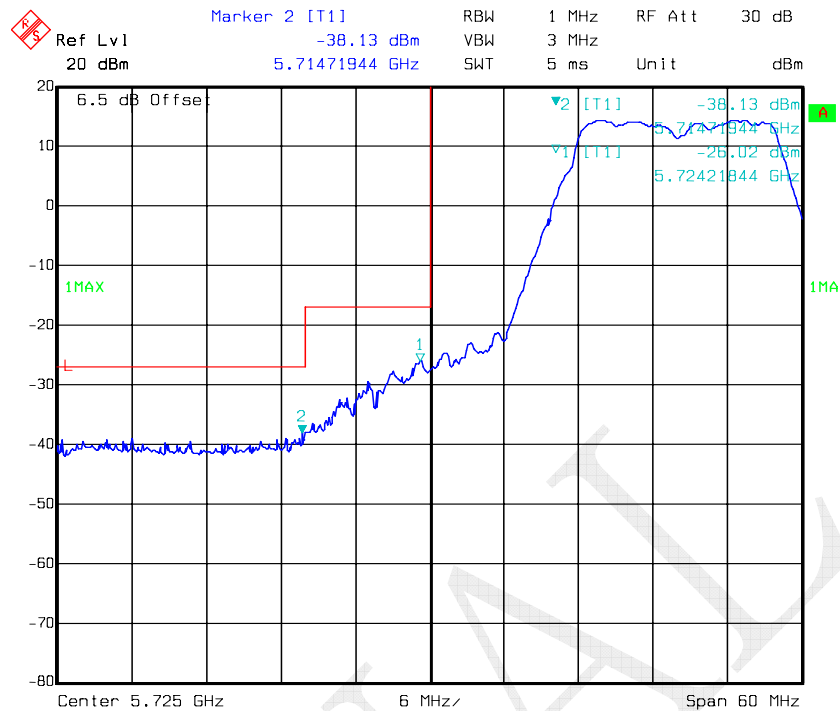
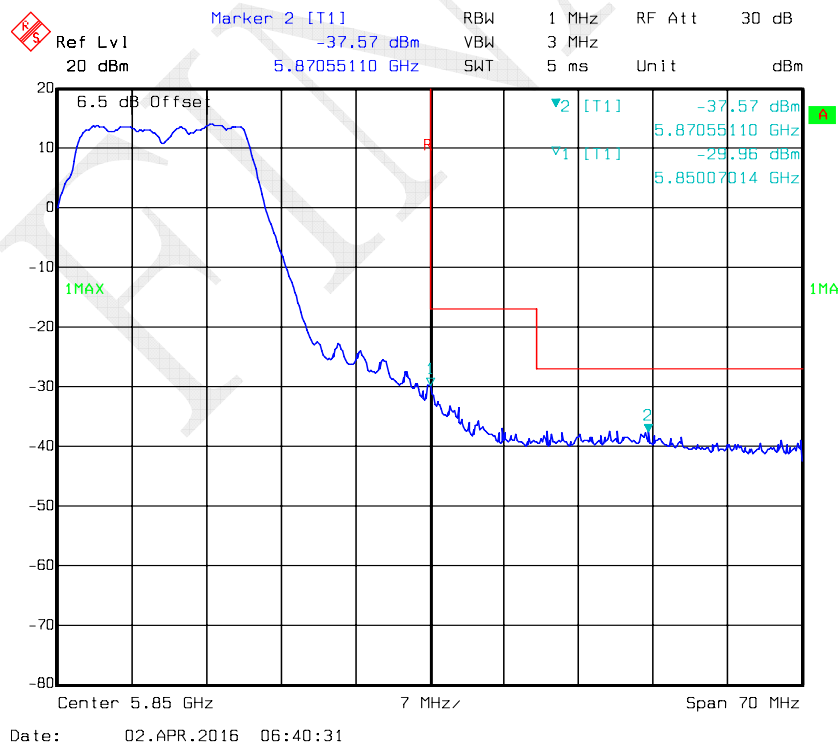
Marker	Frequency (GHz)	Power (dBm)
1	5.85495992	-40.28
2	5.86668337	-39.98

Date: 02.APR.2016 09:22:46



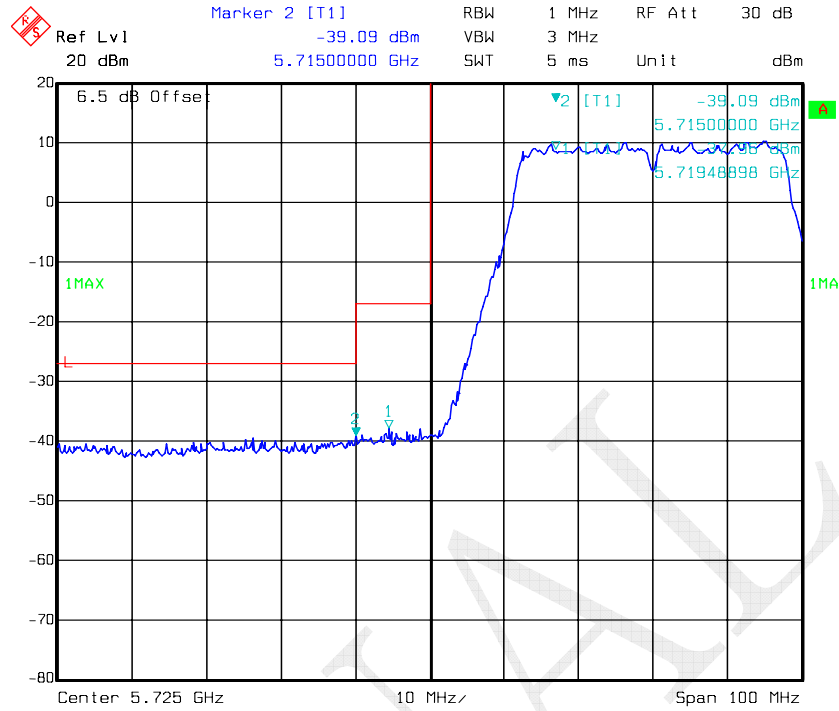
### 802.11n ac80 Band Edge, Middle – Chain0



**802.11a Band Edge, Left Side – Chain1****802.11a Band Edge, Right Side – Chain1**

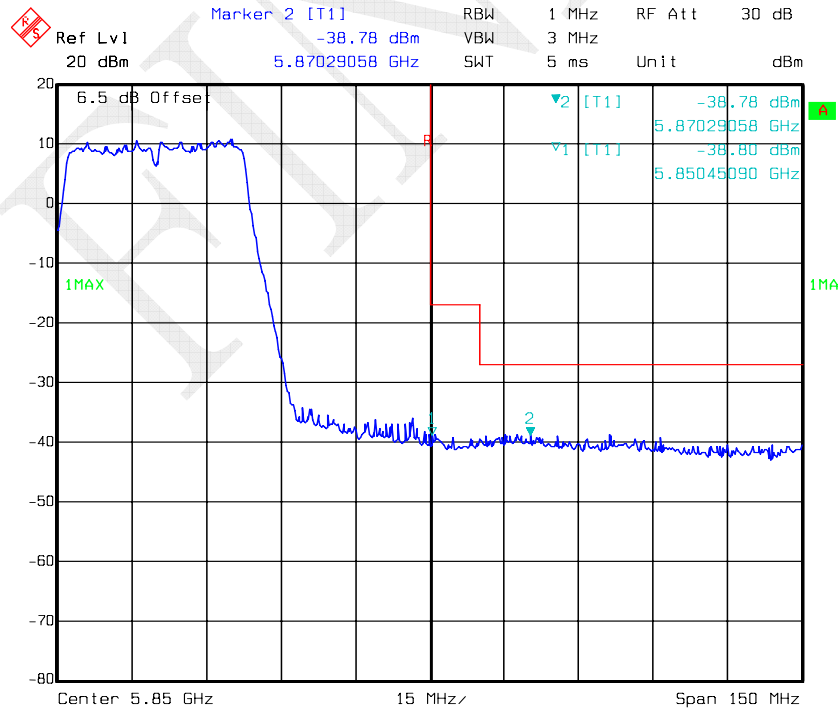


### 802.11n ht40 Band Edge, Left Side – Chain1



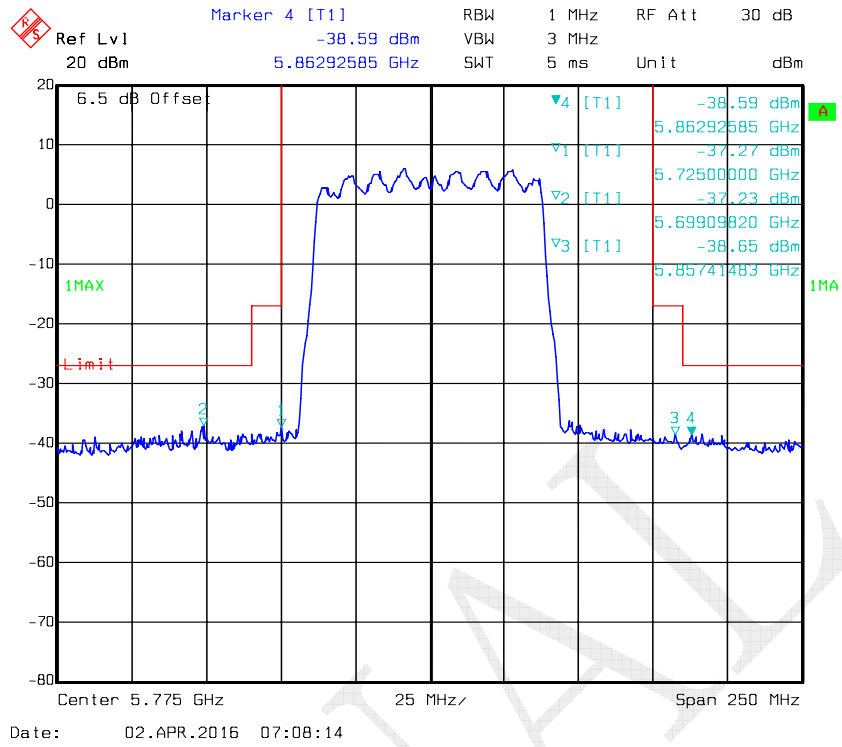
Date: 02.APR.2016 06:59:38

### 802.11n ht40 Band Edge, Right Side – Chain1



Date: 02.APR.2016 07:03:27

### 802.11n ac80 Band Edge, Middle – Chain1



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

### Applicable Standard

15.407(a) (e)

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09
N/A	Coaxial Cable	0.1m	N/A	2015-05-06	2016-05-06
E-Microwave	DC Blocking	EMDCB-00036	0E01201047	2015-05-06	2016-05-06

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

### Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v01r01

### Test Data

#### Environmental Conditions

Temperature:	24.6 °C
Relative Humidity:	50 %
ATM Pressure:	100.9 kPa

*The testing was performed by Dean Liu on 2015-04-02.*

**Test Result:** Pass.

Please refer to the following tables and plots.

Test mode: Transmitting

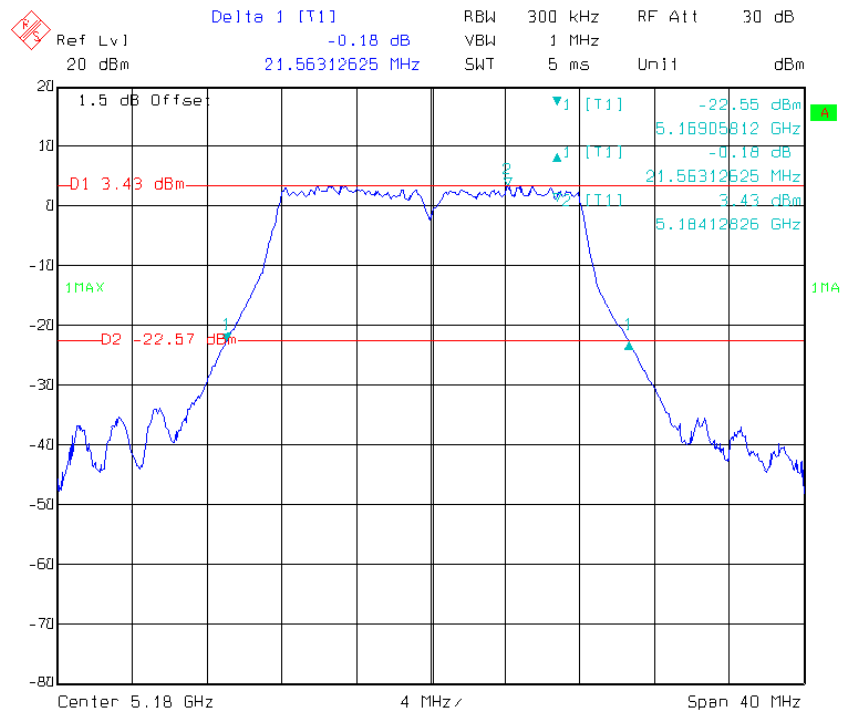
5150MHz-5250MHz:

Mode	Channel	Frequency MHz	26 dB Emission Bandwidth (MHz)		Result
			Chain0	Chain1	
802.11a	Low	5180	21.56	22.12	PASS
	Middle	5200	21.48	22.12	PASS
	High	5240	21.33	22.28	PASS
802.11n20	Low	5180	21.96	21.56	PASS
	Middle	5200	21.88	21.48	PASS
	High	5240	21.92	21.3	PASS
802.11n40	Low	5190	43.13	42	PASS
	High	5230	43.33	42.53	PASS
802.11ac80	Middle	5210	82.79	82.4	PASS

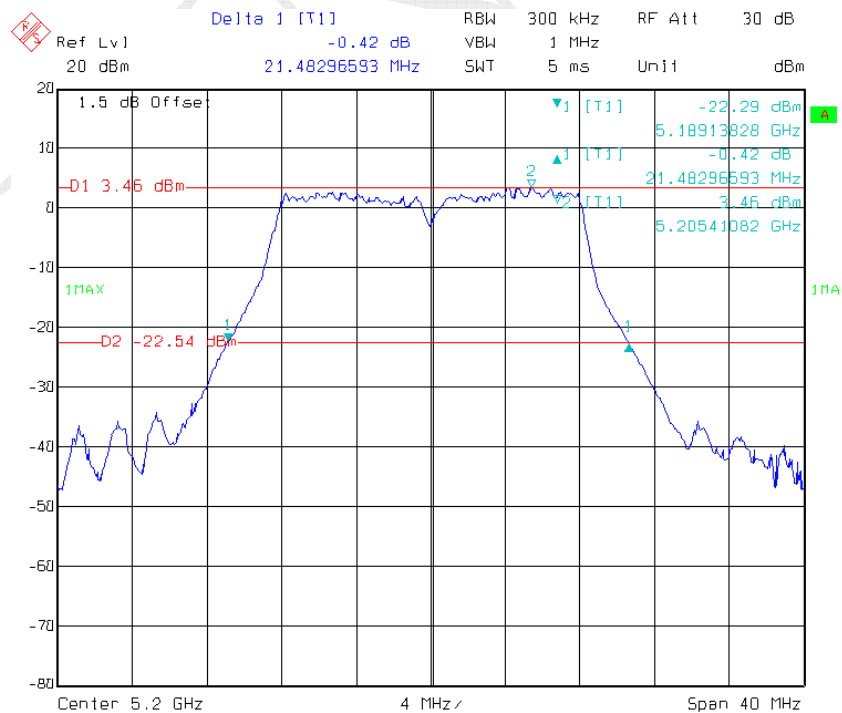
5725MHz-5850MHz:

Mode	Channel	Frequency MHz	6dB Emission Bandwidth (MHz)		Result
			Chain0	Chain1	
802.11a	Low	5745	16.59	16.59	PASS
	Middle	5785	16.59	16.59	PASS
	High	5825	16.59	16.59	PASS
802.11n20	Low	5745	17.8	17.72	PASS
	Middle	5785	17.8	17.8	PASS
	High	5825	17.88	17.72	PASS
802.11n40	Low	5755	36.55	36.71	PASS
	High	5795	36.71	36.71	PASS
802.11ac80	Middle	5775	75.67	75.99	PASS

5150MHz-5250MHz:

**802.11a Low Channel – Chain0**

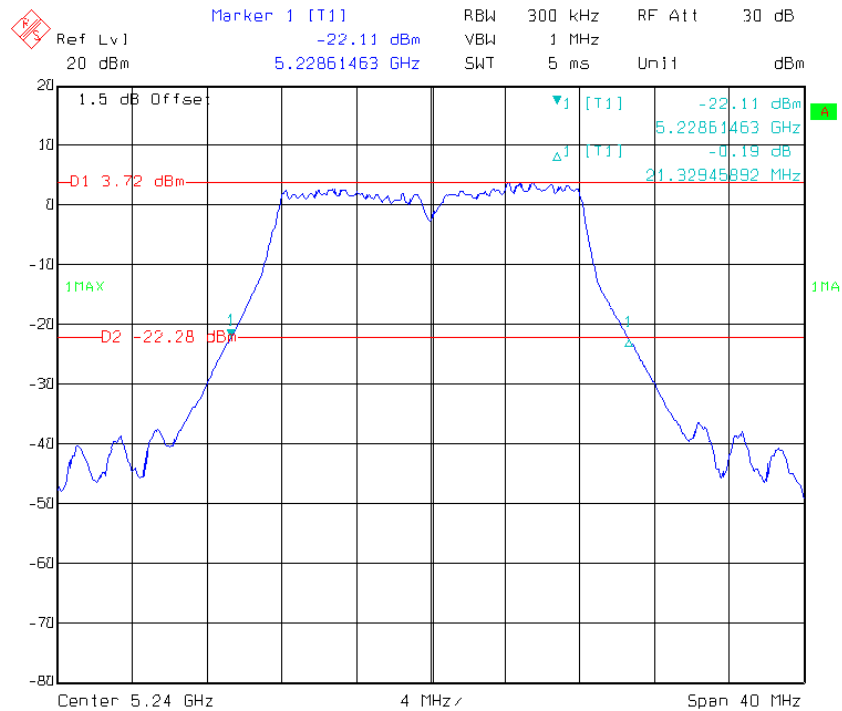
Date: 02.APR.2016 04:44:40

**802.11a Middle Channel – Chain0**

Date: 02.APR.2016 04:48:41

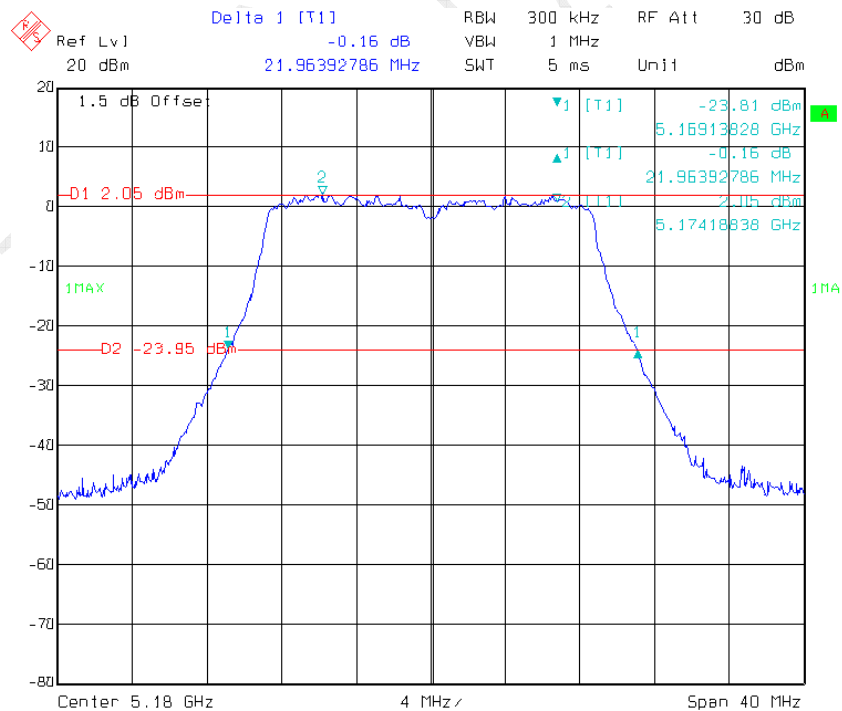


## 802.11a High Channel – Chain0



Date: 05.APR.2016 10:02:26

## 802.11n ht20 Low Channel – Chain0



Date: 02.APR.2016 05:03:37

Ref Lvl 20 dBm

Delta 1 [T1] 0.31 dB

21.88376754 MHz

RBW 300 kHz

VBW 1 MHz

SWT 5 ms

RF Att 30 dB

Unit dBm

1.5 dB Offset

D1 2 17 dBm

D2 -23.83 dBm

1MAX

1 [T1] -23.60 dBm

2 [T1] 5.18913828 GHz

3 [T1] 0.31 dB

4 [T1] 21.88376754 MHz

5 [T1] 2.17 dBm

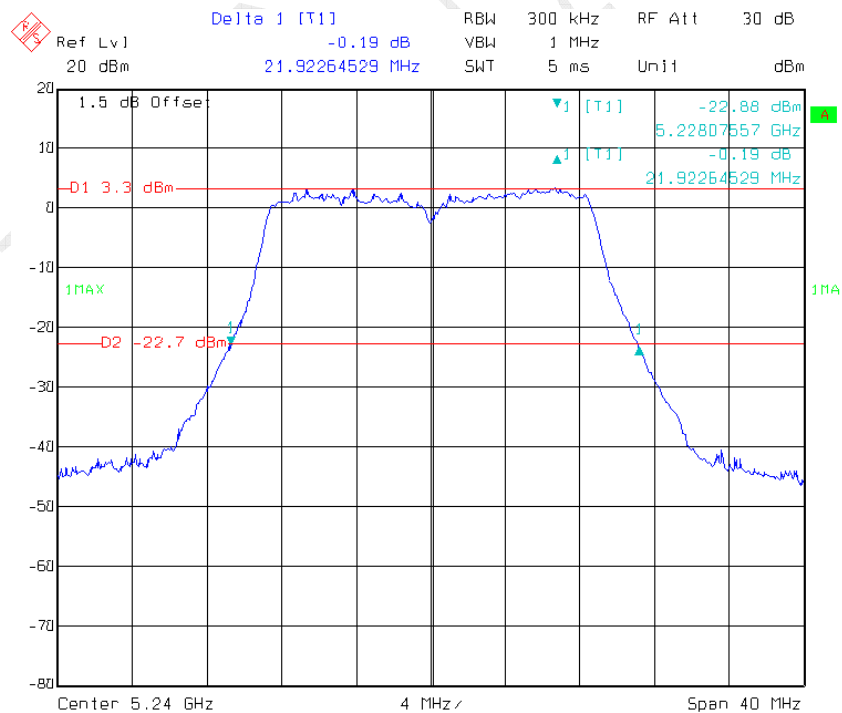
6 [T1] 5.20525050 GHz

Center 5.2 GHz

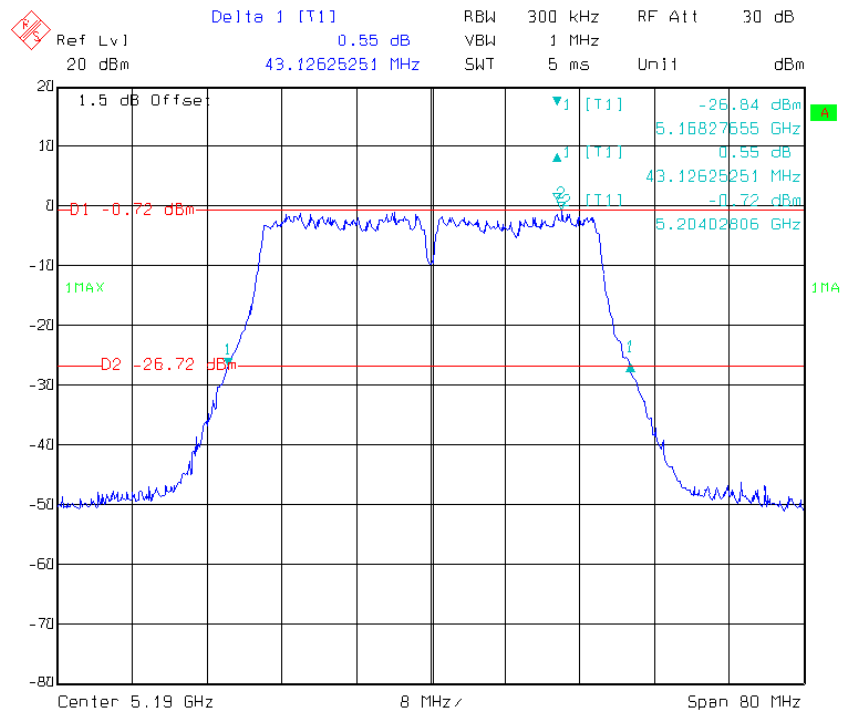
4 MHz

Span 40 MHz

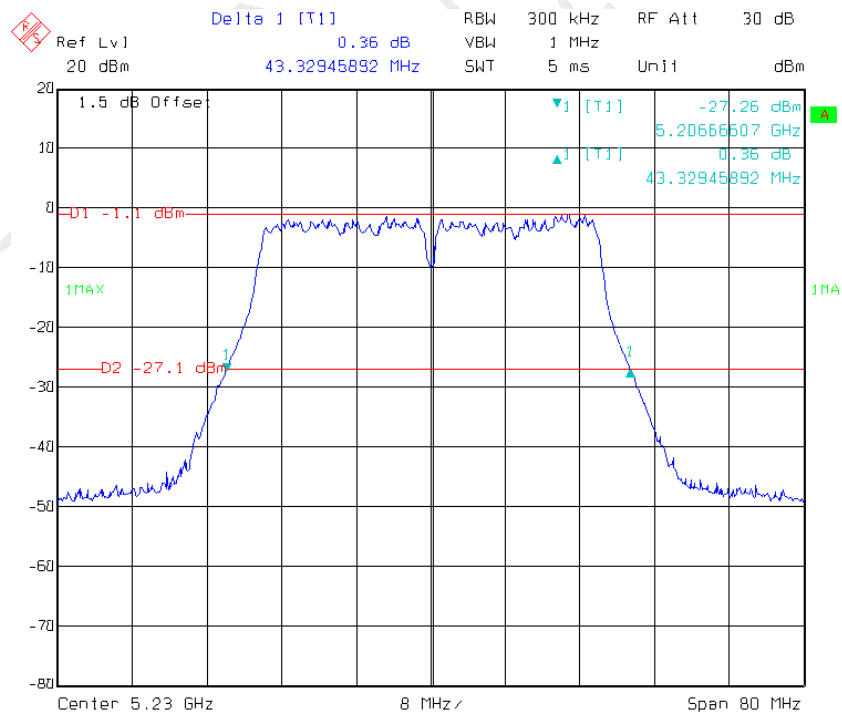
## 802.11n ht20 High Channel – Chain0



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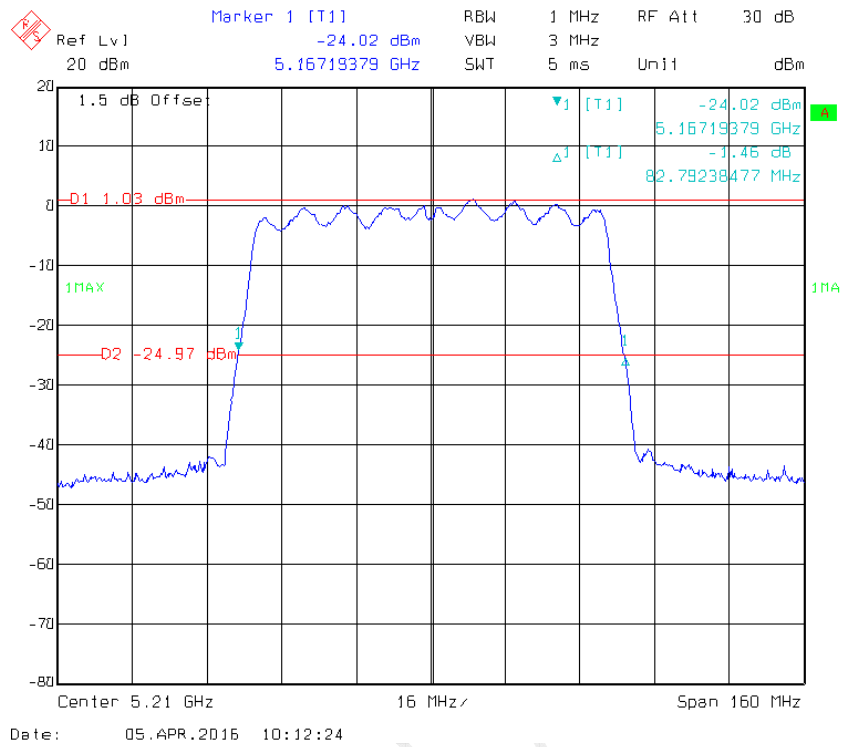
**802.11n ht40 Low Channel – Chain0**

Date: 02.APR.2016 05:07:54

**802.11n ht40 High Channel – Chain0**

Date: 05.APR.2016 10:09:47

### 802.11ac80 Middle Channel – Chain0



Ref Lvl 20 dBm RBW 300 kHz VBW 1 MHz RF Att 30 dB  
 20 dBm 22.12424850 MHz SWT 5 ms Unit dBm

1.5 dB Offset

Delta 1 [T1] 0.28 dB

D1 3 dBm

D2 -23 dBm

1MAX

1MIN

Center 5.18 GHz 4 MHz Span 40 MHz

20 dBm 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm

22.12424850 MHz

5.16873747 GHz

5.18412826 GHz

[T1] -23.29 dBm

[T1] 0.28 dB

[T1] 22.12424850 MHz

[T1] 3.00 dBm

[T1] 5.18412826 GHz

Ref Lvl 20 dBm Delta 1 [T1] -0.01 dB RBW 300 kHz RF Att 30 dB

20 dBm 22.12424850 MHz VBW 1 MHz Unit dBm

1.5 dB Offset

D1 3.85 dBm

D2 -22.15 dBm

1 [T1] -22.20 dBm

2 [T1] -0.01 dB

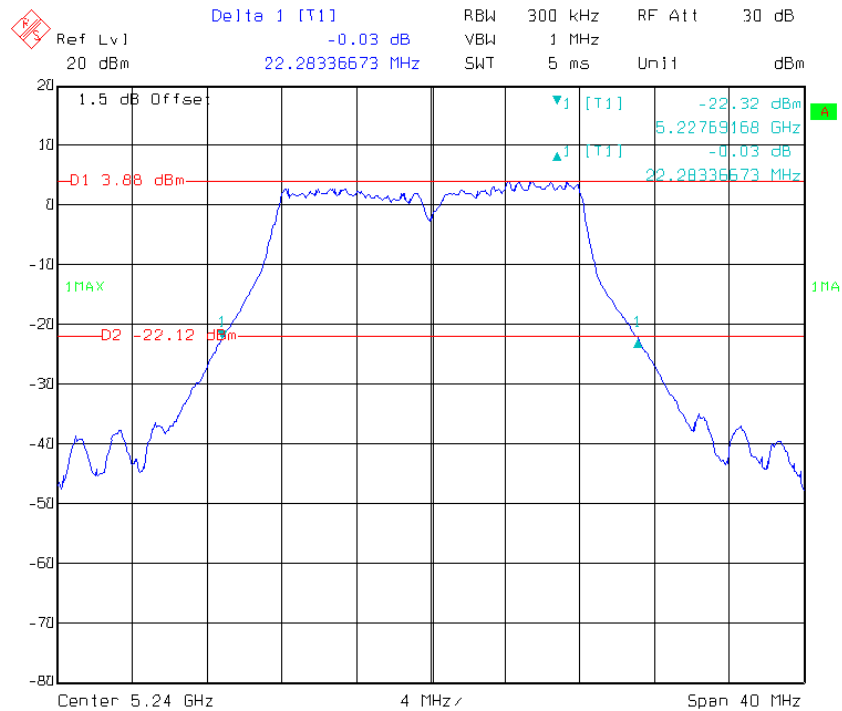
3 [T1] 3.85 dBm

4 [T1] 5.20412826 GHz

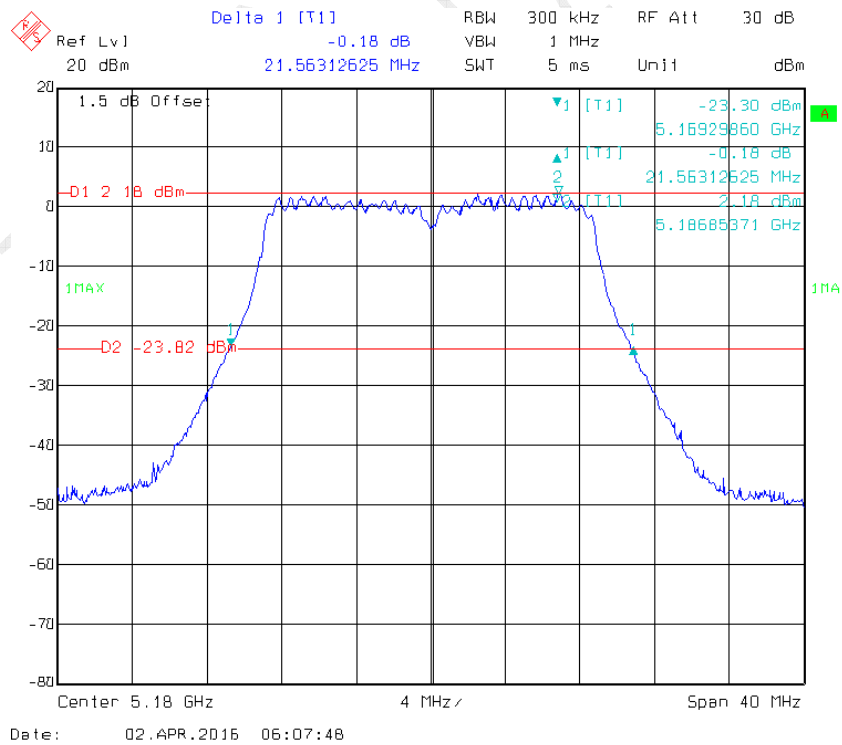
Center 5.2 GHz 4 MHz Span 40 MHz

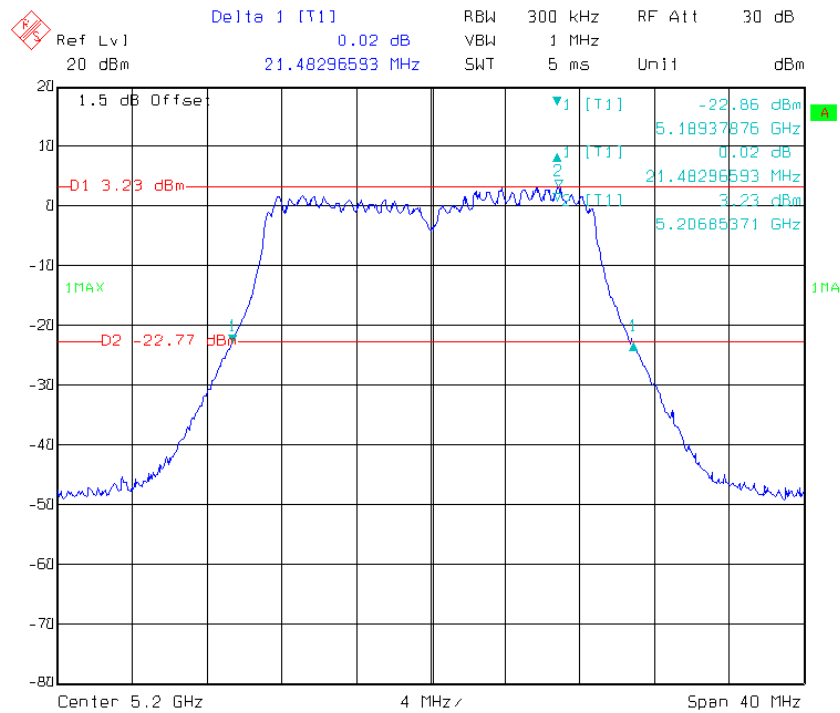
Page 111 of 151

### 802.11a High Channel – Chain1

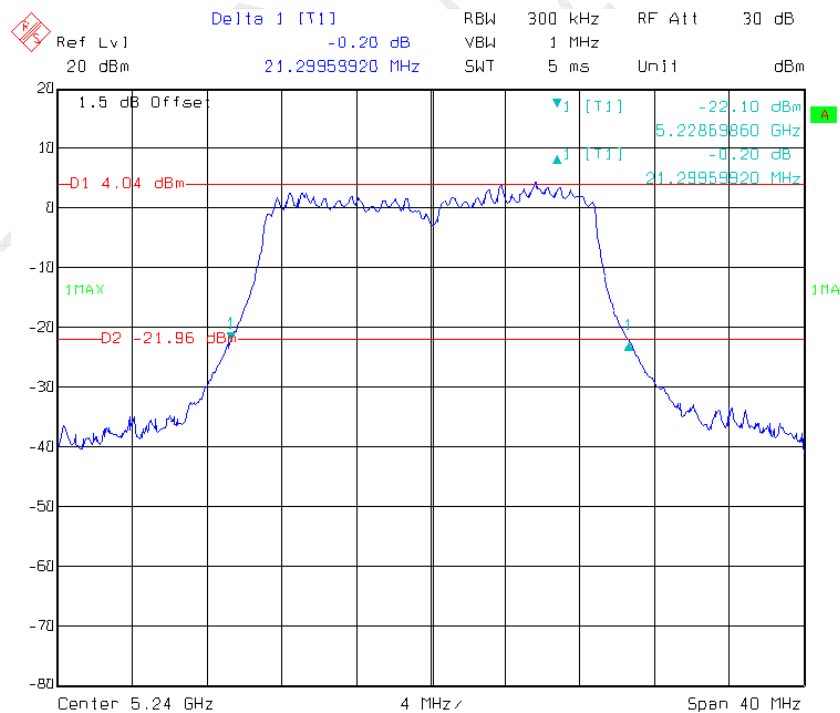


### 802.11n ht20 Low Channel – Chain1



**802.11n ht20 Middle Channel – Chain1**

Date: 02.APR.2016 06:10:50

**802.11n ht20 High Channel – Chain1**

Date: 05.APR.2016 09:55:37

Delta 1 [T1] -0.31 dB

Ref Lvl 20 dBm

42.00400802 MHz

RBW 300 kHz

VBW 1 MHz

SWT 5 ms

RF Att 30 dB

Unit dBm

1.5 dB Offset

D1 -0.31 dBm

D2 -25.69 dBm

1 [T1] -25.14 dBm

1 [T1] -0.31 dB

2 [T1] 42.00400802 MHz

3 [T1] 0.31 dBm

4 [T1] 5.19136273 GHz

1 MAX

1

1

Center 5.19 GHz

8 MHz

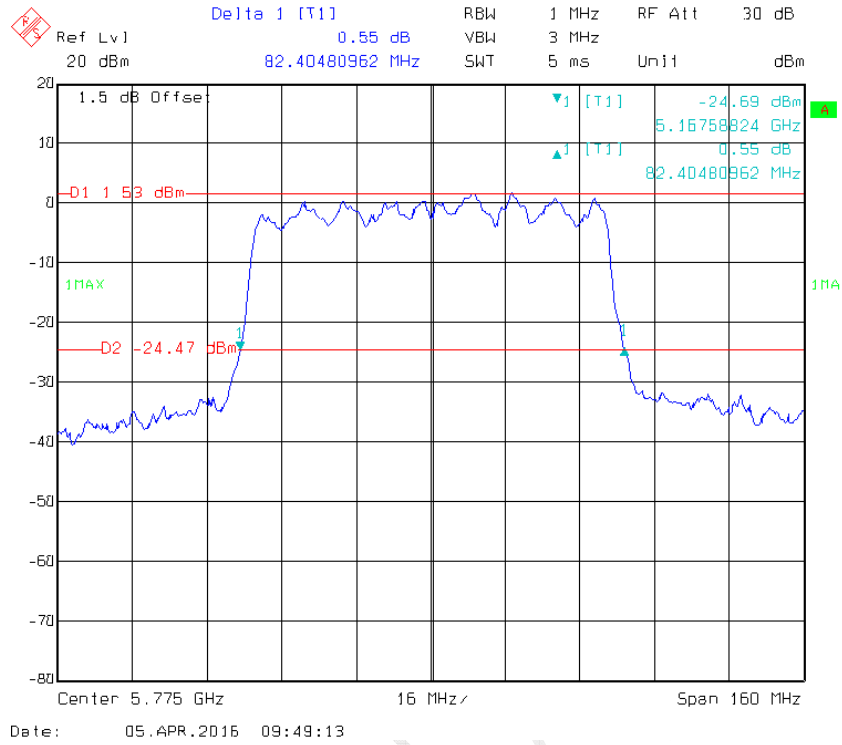
Span 80 MHz

### 802.11n ht40 High Channel – Chain1





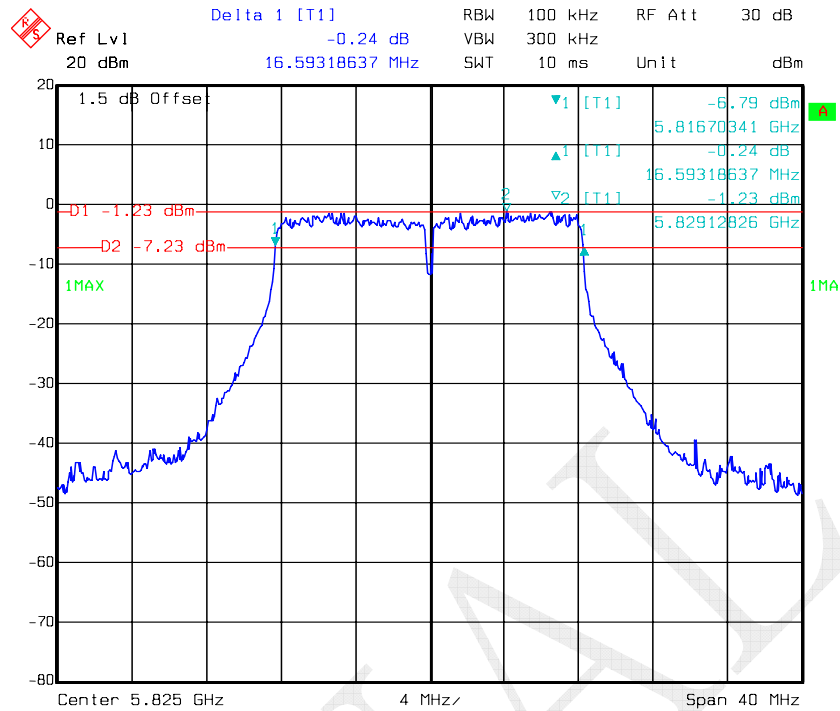
### 802.11n ac80 Middle Channel – Chain1



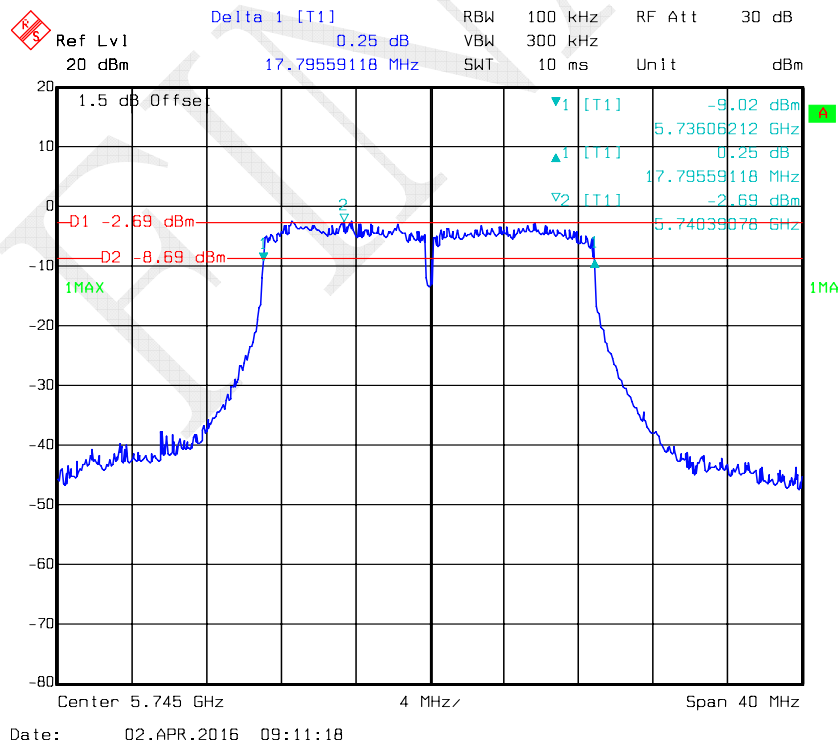
## 802.11a Low Channel – Chain0



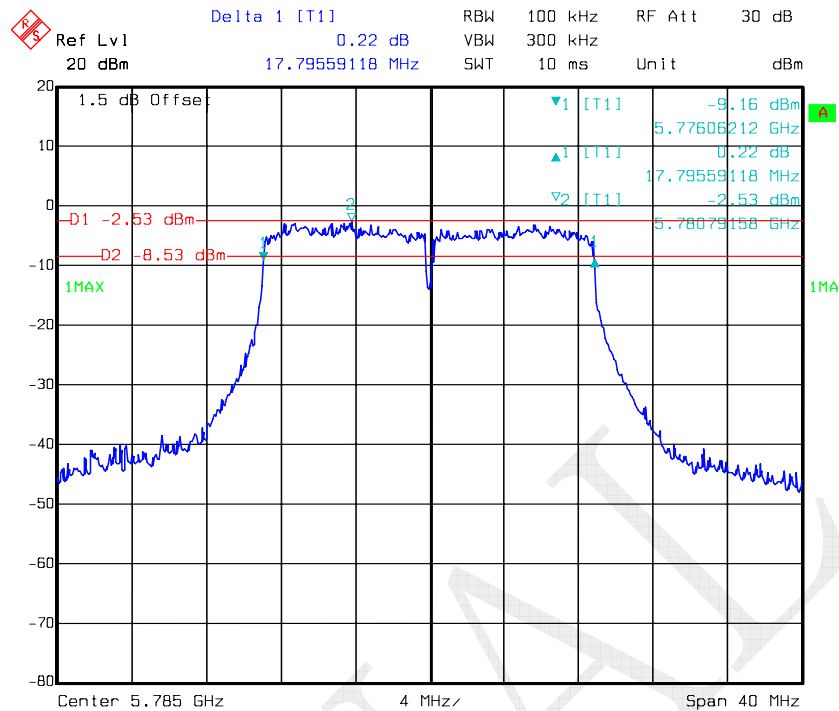
## 802.11a High Channel – Chain0



## 802.11n ht20 Low Channel – Chain0

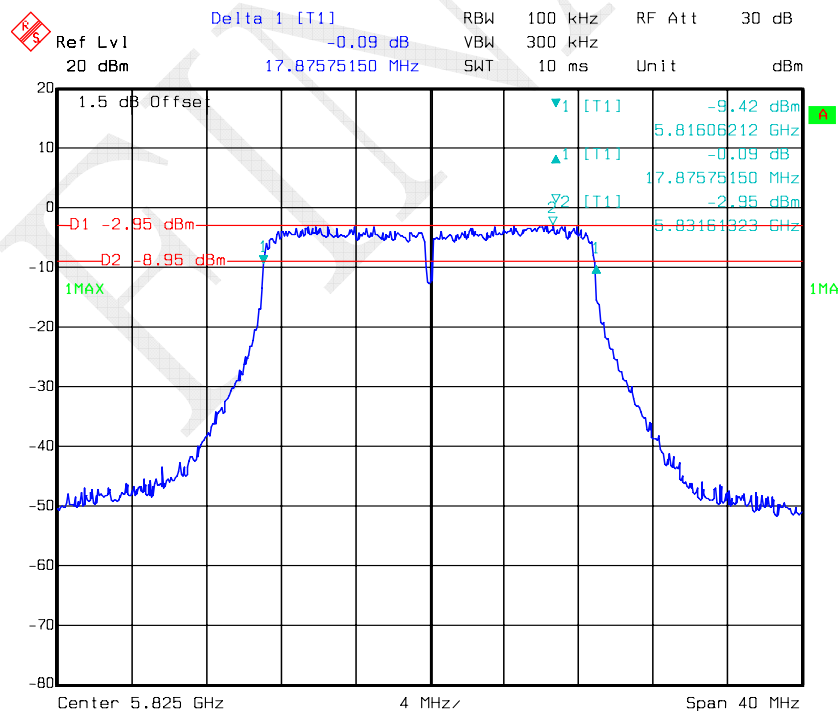


## 802.11n ht20 Middle Channel – Chain0



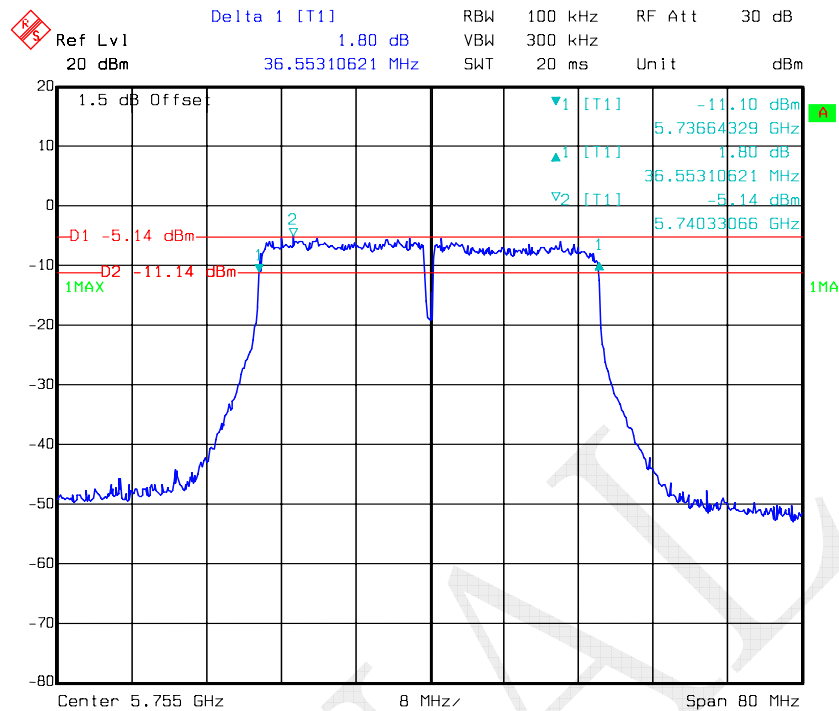
Date: 02.APR.2016 09:06:50

## 802.11n ht20 High Channel – Chain0

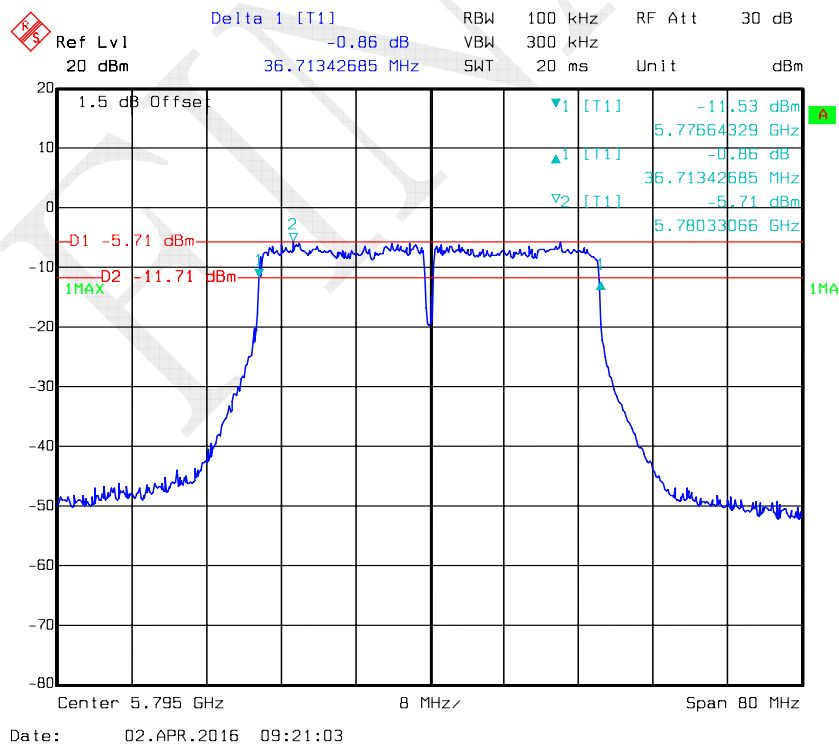


Date: 02.APR.2016 09:03:01

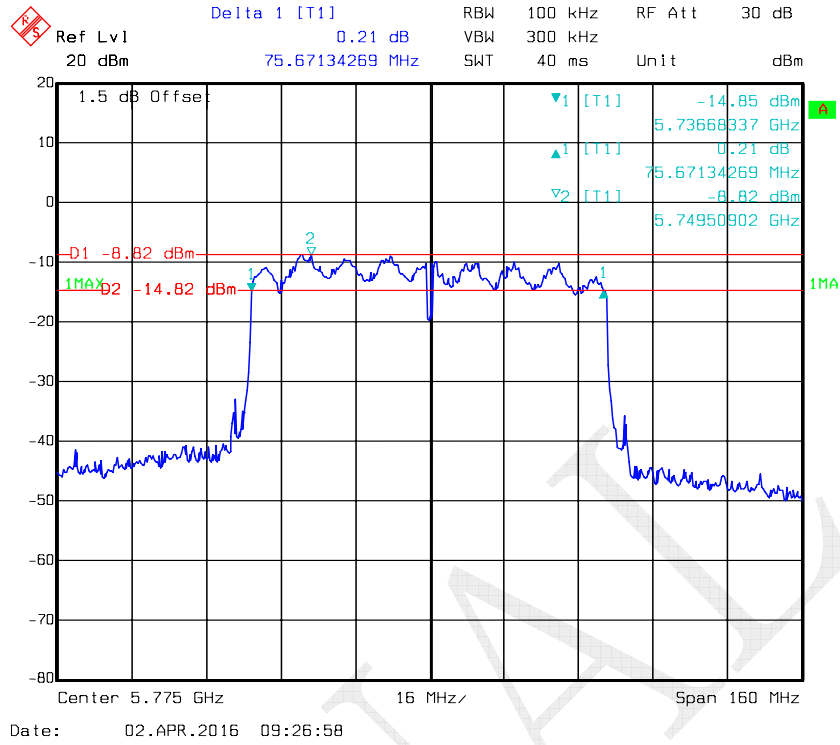
## 802.11n ht40 Low Channel – Chain0



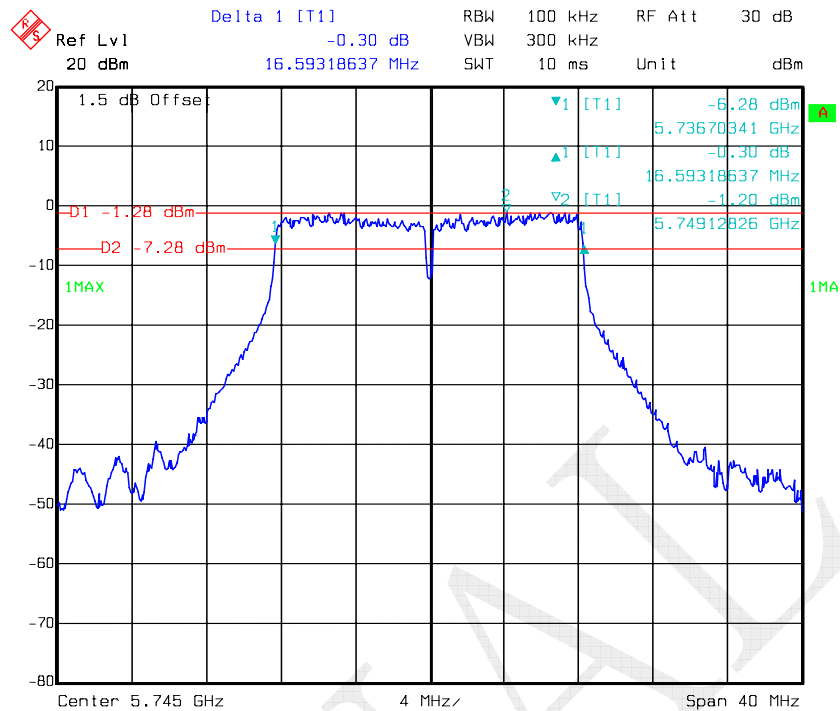
## 802.11n ht40 High Channel – Chain0



### 802.11n ac80 Middle Channel – Chain0

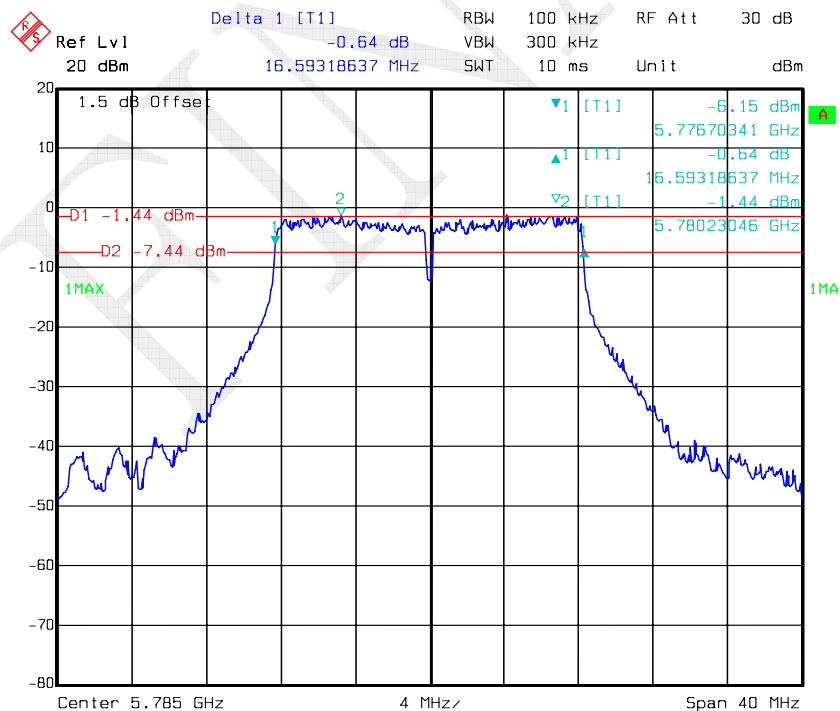


## 802.11a Low Channel – Chain1

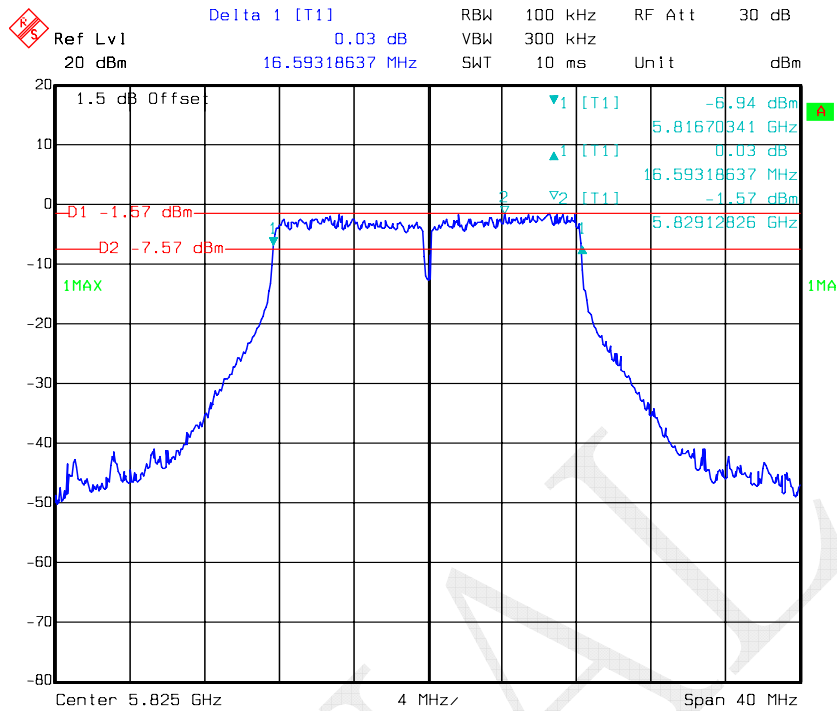
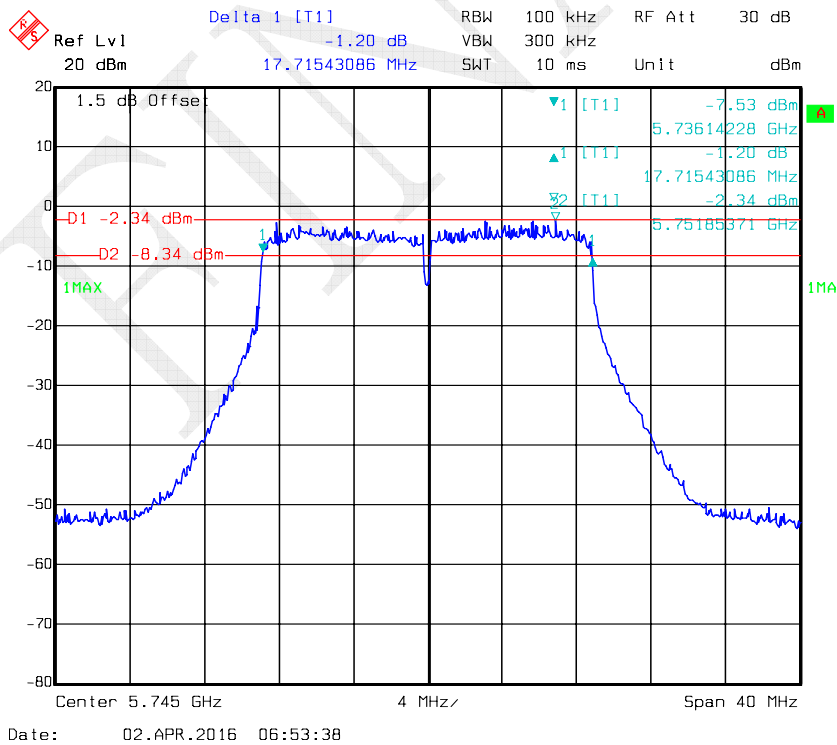


Date: 02.APR.2016 06:31:11

## 802.11a Middle Channel – Chain1

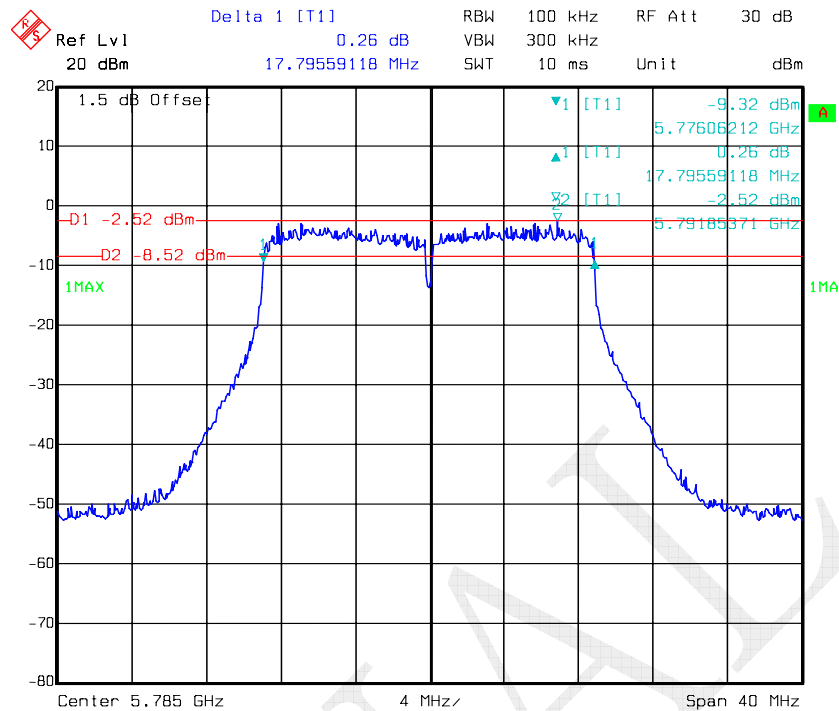


Date: 02.APR.2016 06:34:37

**802.11a High Channel – Chain1****802.11n ht20 Low Channel – Chain1**

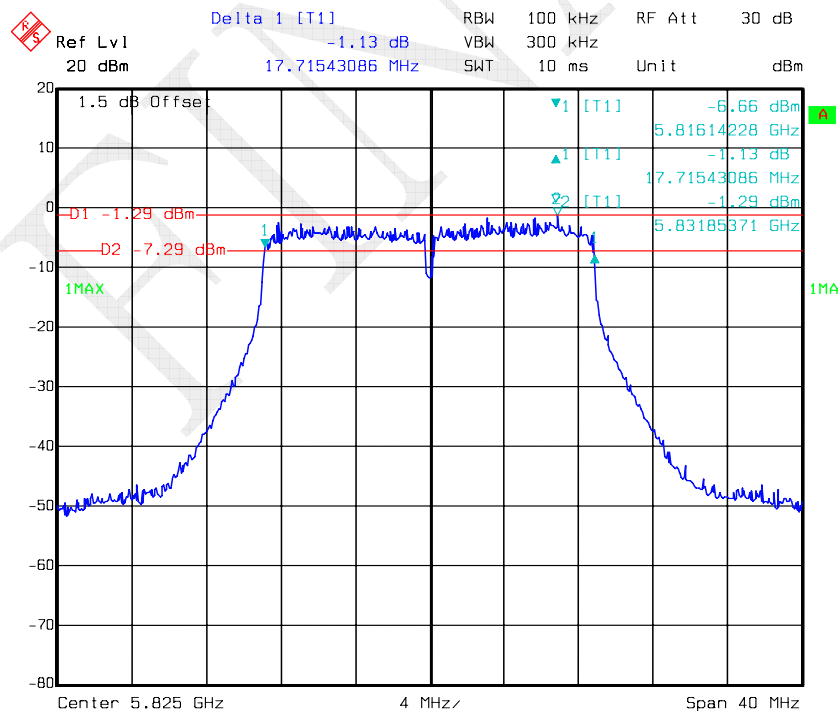


## 802.11n ht20 Middle Channel – Chain1



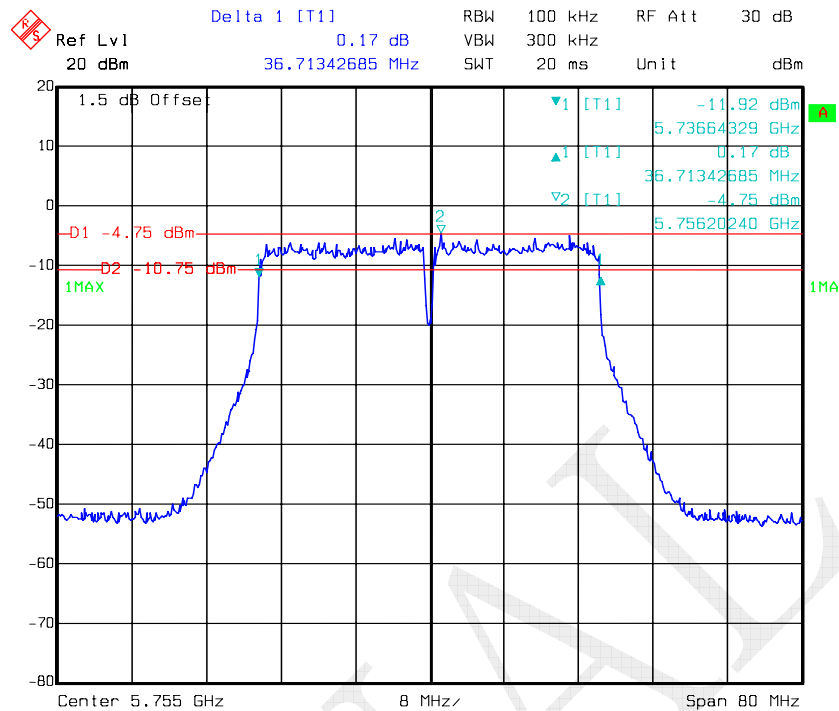
Date: 02.APR.2016 06:49:46

## 802.11n ht20 High Channel – Chain1



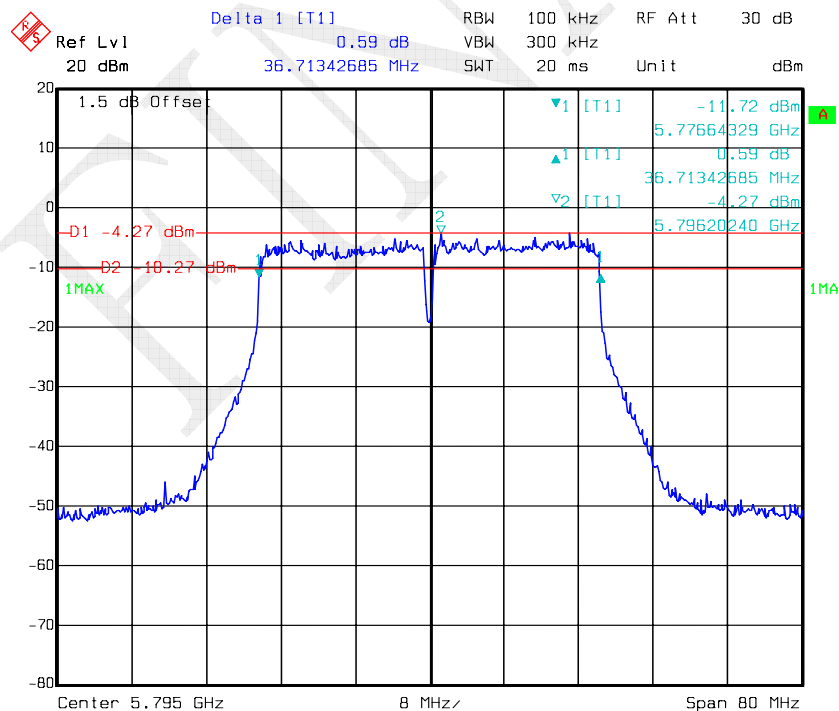
Date: 02.APR.2016 06:45:07

## 802.11n ht40 Low Channel – Chain1



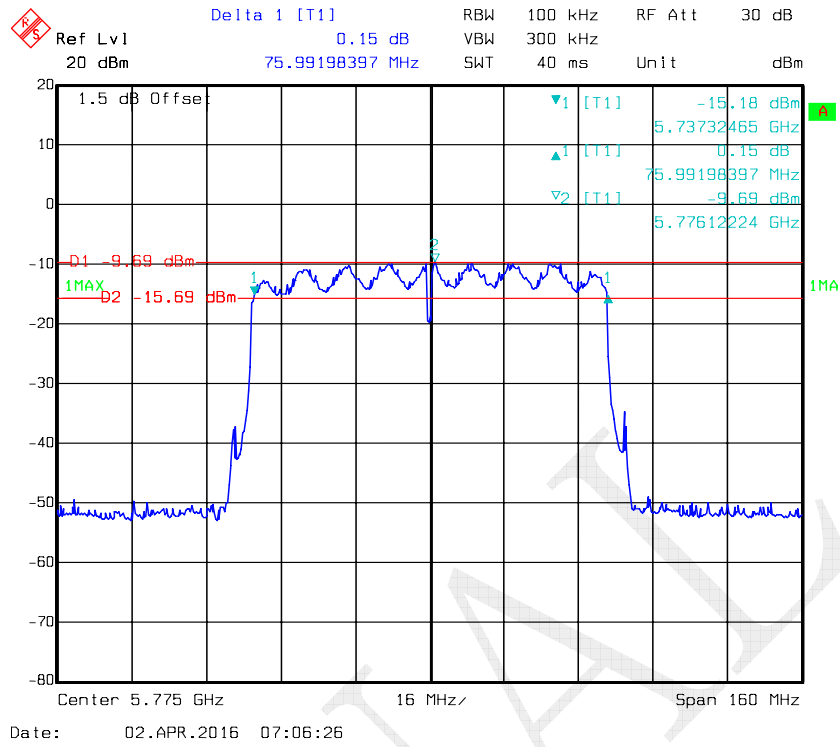
Date: 02.APR.2016 06:57:50

## 802.11n ht40 High Channel – Chain1



Date: 02.APR.2016 07:01:43

### 802.11 ac80 Middle Channel – Chain1



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**FCC §15.407(a) –MAXIMUM CONDUCTED OUTPUT POWER**

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**Applicable Standard**

(a) Power limits:

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

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

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

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

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

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Wideband Power Sensor	N1921A	MY54210016	2015-11-03	2016-11-03
Agilent	Wideband Power Sensor	N1921A	MY54170013	2015-11-03	2016-11-03
Agilent	P-Series Power Meter	N1912A	MY5000448	2015-11-03	2016-11-03
N/A	Coaxial Cable	0.1m	N/A	2015-05-06	2016-05-06
E-Microwave	DC Blocking	EMDCB-00036	0E01201047	2015-05-06	2016-05-06

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

### Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v01r01

### Test Data

#### Environmental Conditions

Temperature:	24.6 °C
Relative Humidity:	50 %
ATM Pressure:	100.9 kPa

*The testing was performed by Dean Liu on 2016-04-02.*

Test Mode: Transmitting

5150-5250 MHz band

Mode	Channel	Frequency	Maximum Conducted Output Power (dBm)				Result
		MHz	Chain 0	Chain 1	Total	Limits	
802.11a	Low	5180	12.94	12.39	15.68	24	PASS
	Middle	5200	12.57	12.73	15.66	24	PASS
	High	5240	12.84	13.27	16.07	24	PASS
802.11n20	Low	5180	11.59	11.19	14.4	24	PASS
	Middle	5200	11.47	11.56	14.53	24	PASS
	High	5240	11.31	12.37	14.88	24	PASS
802.11n40	Low	5190	11.22	11.62	14.43	24	PASS
	High	5230	11.17	11.92	14.57	24	PASS
802.11ac80	Middle	5210	9.9	10.35	13.14	24	PASS

5725-5850 MHz band

Mode	Channel	Frequency	Maximum Conducted Output Power (dBm)				Result
		MHz	Chain 0	Chain 1	Total	Limits	
802.11a	Low	5745	13.12	13.11	16.13	30	PASS
	Middle	5785	13.05	12.96	16.02	30	PASS
	High	5825	12.93	12.66	15.81	30	PASS
802.11n20	Low	5745	11.51	11.24	14.39	30	PASS
	Middle	5785	11.22	11.1	14.17	30	PASS
	High	5825	11.46	11.82	14.65	30	PASS
802.11n40	Low	5755	11.98	11.51	14.76	30	PASS
	High	5795	11.31	11.97	14.66	30	PASS
802.11ac80	Middle	5775	9.98	9.82	12.91	30	PASS

Note: the device is a client device. both antenna maximum antenna gain are 5dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

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

So:

Directional gain =  $G_{ANT} + \text{Array Gain} = 5\text{dBi}$

The power limit no need reduce.

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**FCC §15.407(a) - POWER SPECTRAL DENSITY**

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**Applicable Standard**

(a) Power limits:

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

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

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

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

### Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v01r01

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09
N/A	Coaxial Cable	0.1m	N/A	2015-05-06	2016-05-06
E-Microwave	DC Blocking	EMDCB-00036	0E01201047	2015-05-06	2016-05-06

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

### Test Data

#### Environmental Conditions

Temperature:	22.9 °C
Relative Humidity:	54 %
ATM Pressure:	101 kPa

*The testing was performed by Dean Liu on 2015-04-12.*

*Test Mode: Transmitting*

*Test Result: Compliance. Please refer to the following table and plot.*



5150MHz-5250MHz:

Mode	Channel	Frequency MHz	PSD (dBm/MHz)			Limit (dBm/MHz)	Result
			Chain0	Chain1	Total		
802.11a	Low	5180	2.31	1.72	5.04	15	PASS
	Middle	5200	2.11	2.64	5.39	15	PASS
	High	5240	2.47	3.06	5.79	15	PASS
802.11n20	Low	5180	0.72	0.58	3.66	15	PASS
	Middle	5200	0.89	1.48	4.21	15	PASS
	High	5240	1.3	1.97	4.66	15	PASS
802.11n40	Low	5190	-2.78	-1.32	1.02	15	PASS
	High	5230	-2.72	-0.82	1.34	15	PASS
802.11ac80	Middle	5210	-6.19	-5.49	-2.82	15	PASS

Note: the device is a client device. Both antenna maximum antenna gain are 5dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

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

So:

Directional gain = GANT + Array Gain =  $5 + 10 \cdot \log(2) = 8$  dBi

The Power density Limits was reduce 2dB

5725MHz-5850MHz:

Mode	Channel	Frequency	Power Spectral Density (dBm/300kHz)		Power Spectral Density (dBm/500kHz)			Limits (dBm/500kHz)
		MHz	Chain 0	Chain 1	Chain0 Integrated Value	Chain 1 Integrated Value	Total	
802.11a	Low	5745	-1.32	-1.11	0.9	1.11	4.02	28
	Middle	5785	-1.58	-1.31	0.64	0.91	3.79	28
	High	5825	-1.29	-1.59	0.93	0.63	3.79	28
802.11n20	Low	5745	-2.98	-2.57	-0.76	-0.35	2.46	28
	Middle	5785	-2.96	-3.05	-0.74	-0.83	2.23	28
	High	5825	-3.31	-2.58	-1.09	-0.36	2.3	28
802.11n40	Low	5755	-5.85	-4.99	-3.63	-2.77	-0.17	28
	High	5795	-5.81	-4.7	-3.59	-2.48	0.01	28
802.11n40	Middle	5775	-8.67	-9.97	-6.45	-7.75	-4.04	28

Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10 \log(500\text{kHz}/\text{RBW})$  to the measured result, whereas RBW ( $< 500$  KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

Note: the device is a client device. Both antenna maximum antenna gain are 5dBi, and employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

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

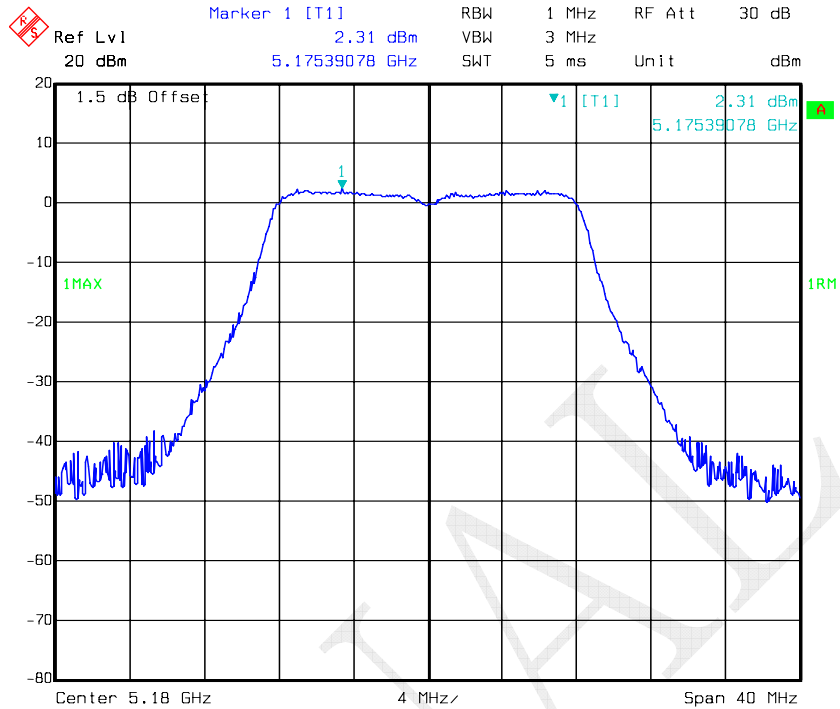
So:

Directional gain = GANT + Array Gain =  $5 + 10 \cdot \log(2) = 8$  dBi

The Power density Limits was reduce 2dB

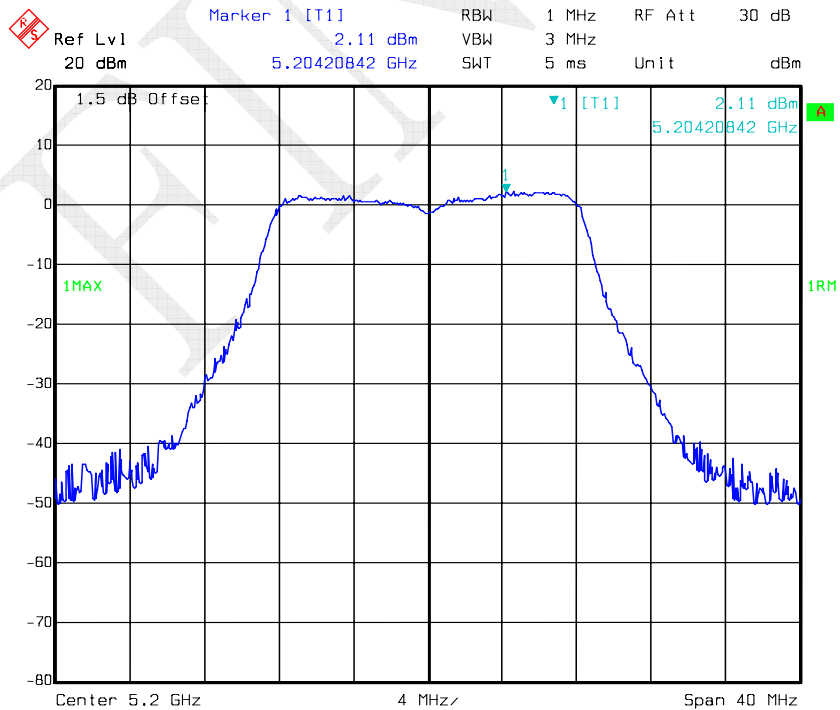
5150MHz-5250MHz:

### 802.11a Low Channel – Chain0



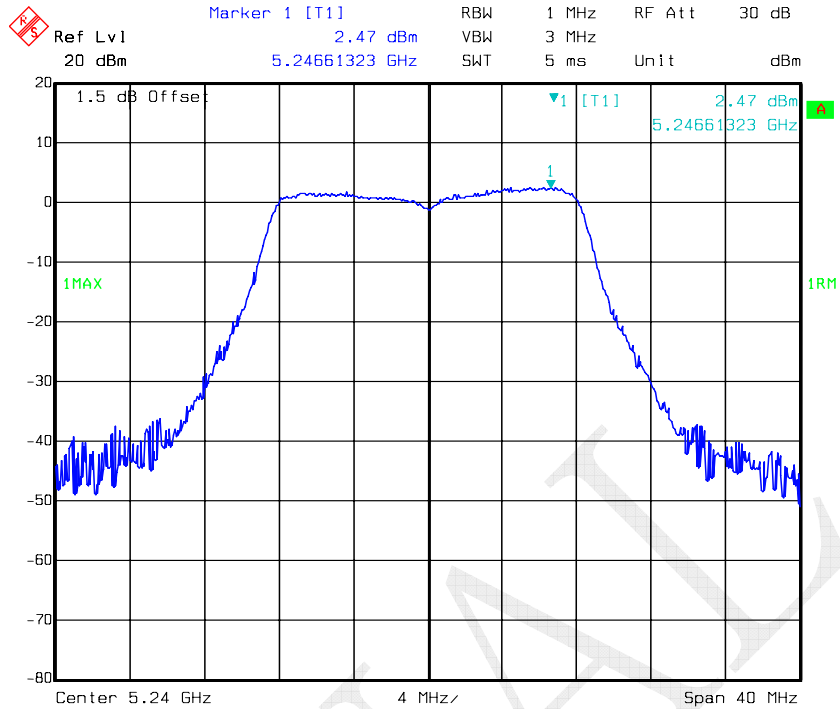
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### 802.11a Middle Channel – Chain0



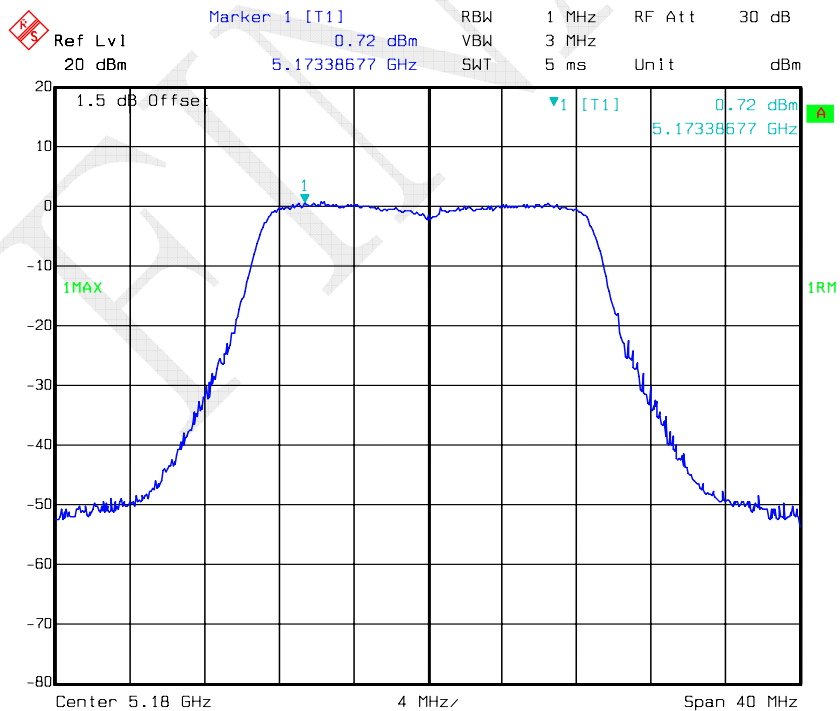
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### 802.11a High Channel – Chain0



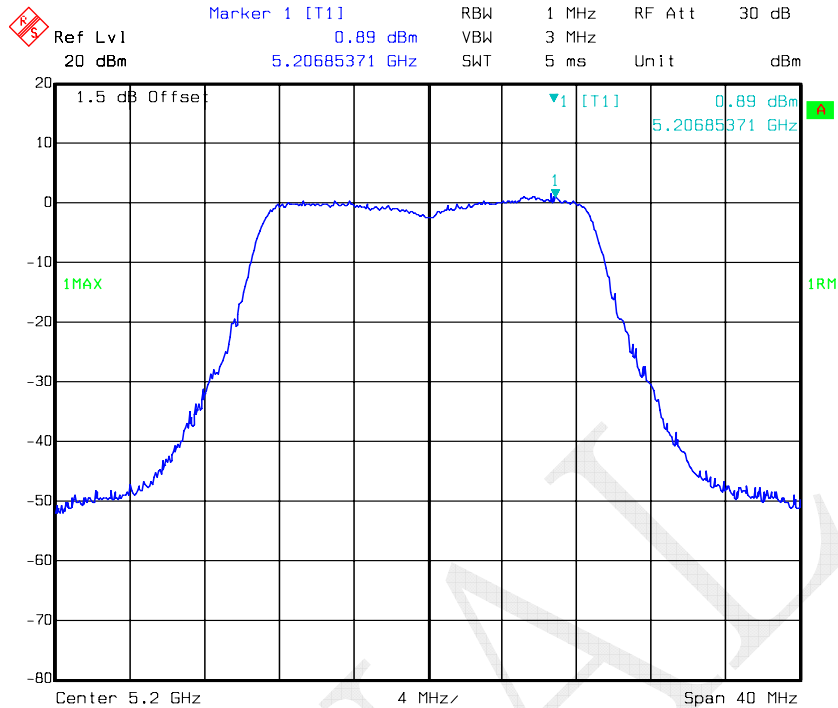
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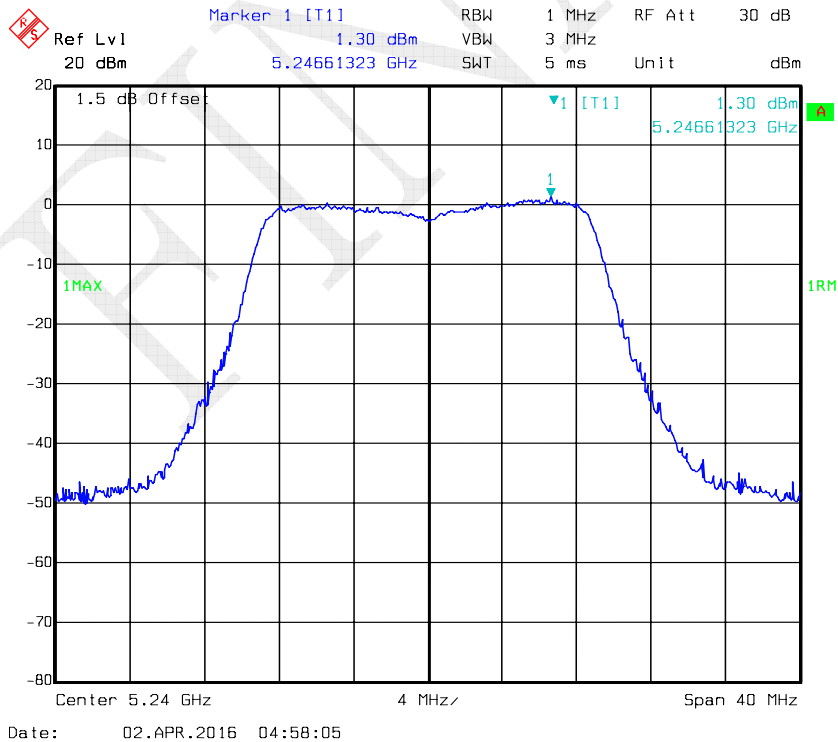


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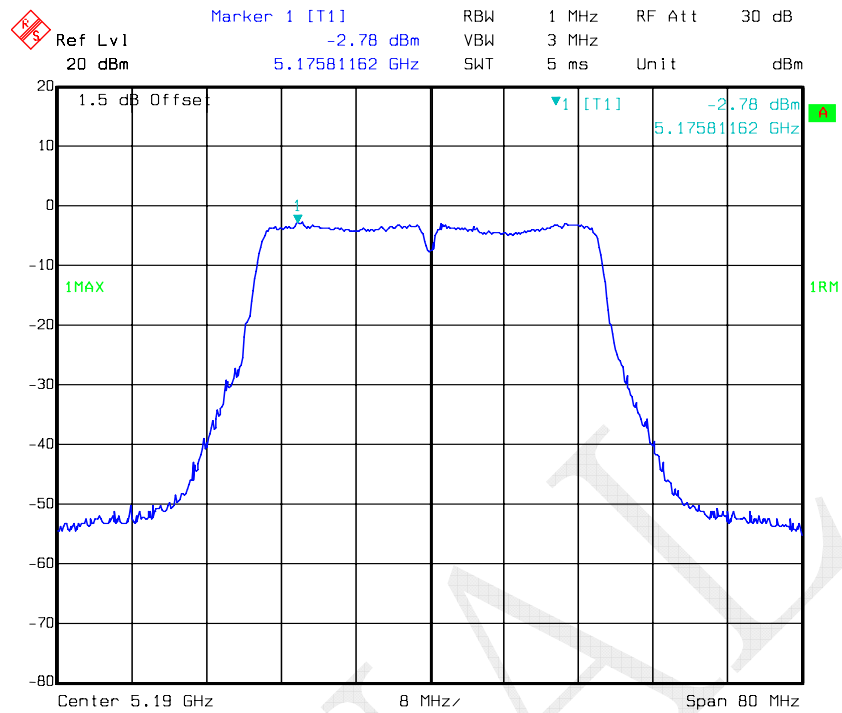
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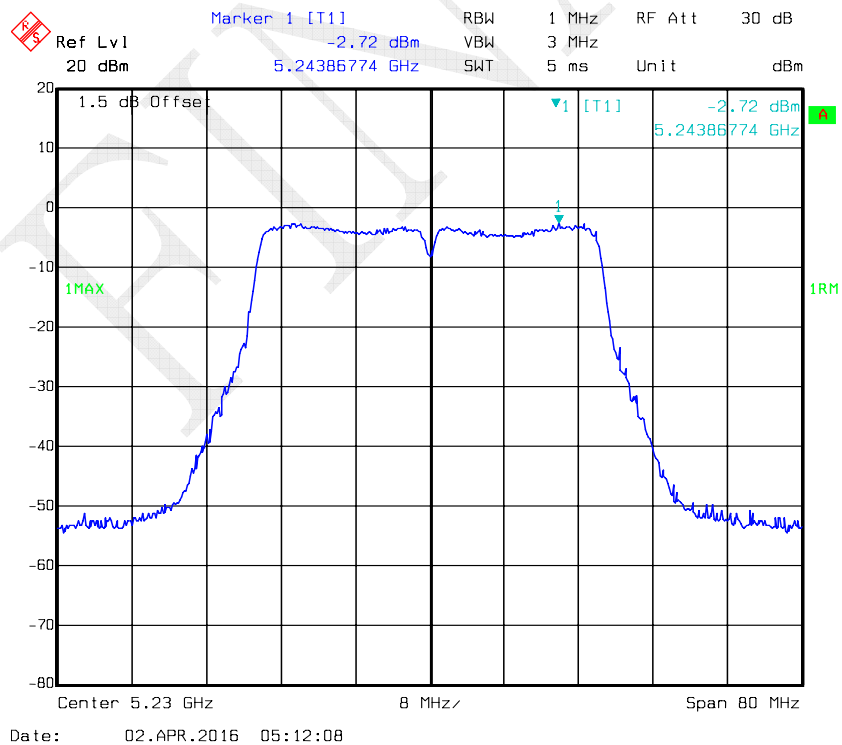
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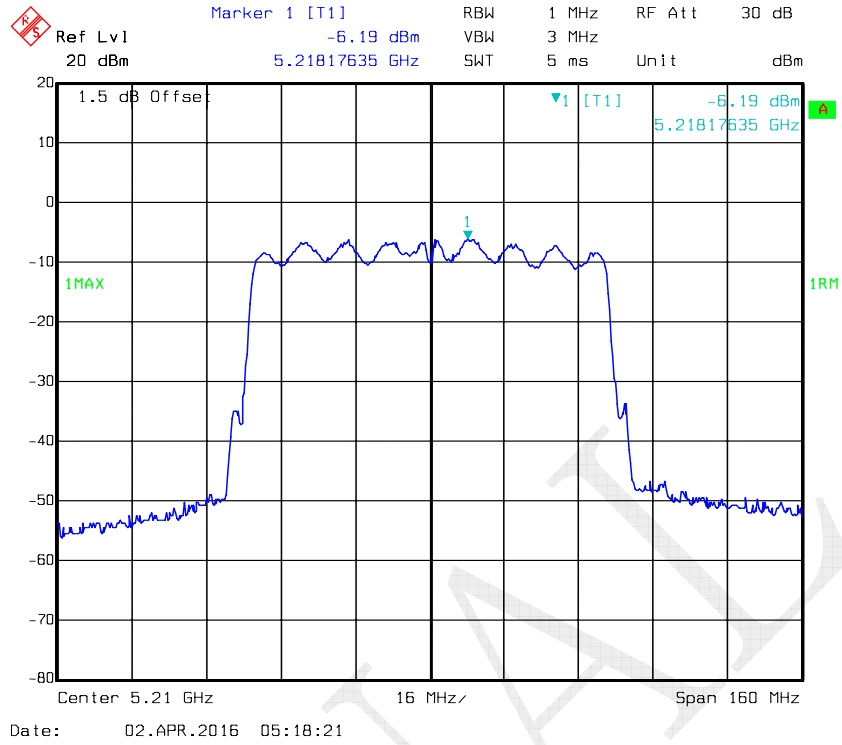
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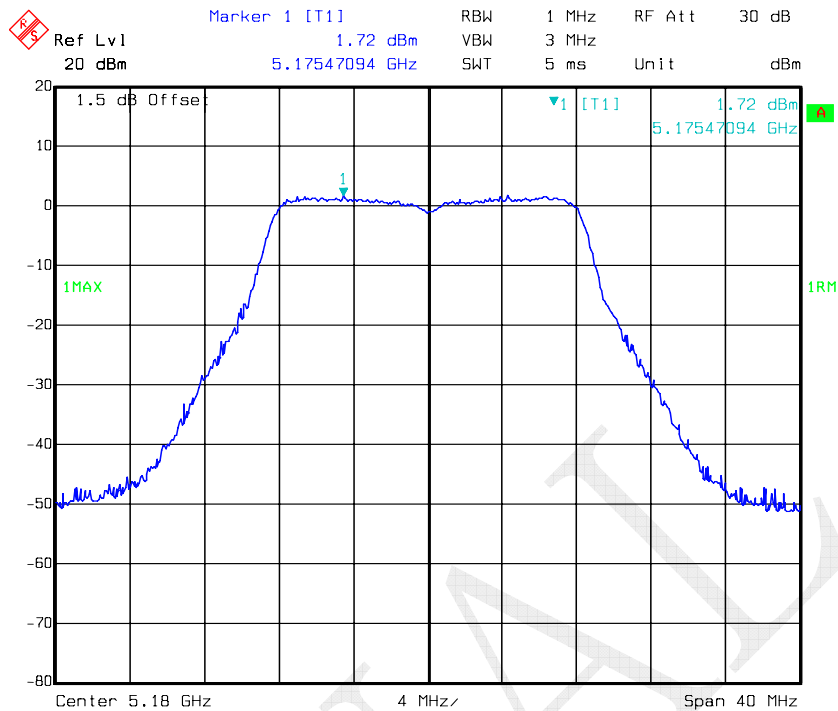
### 802.11n ht40 High Channel – Chain0



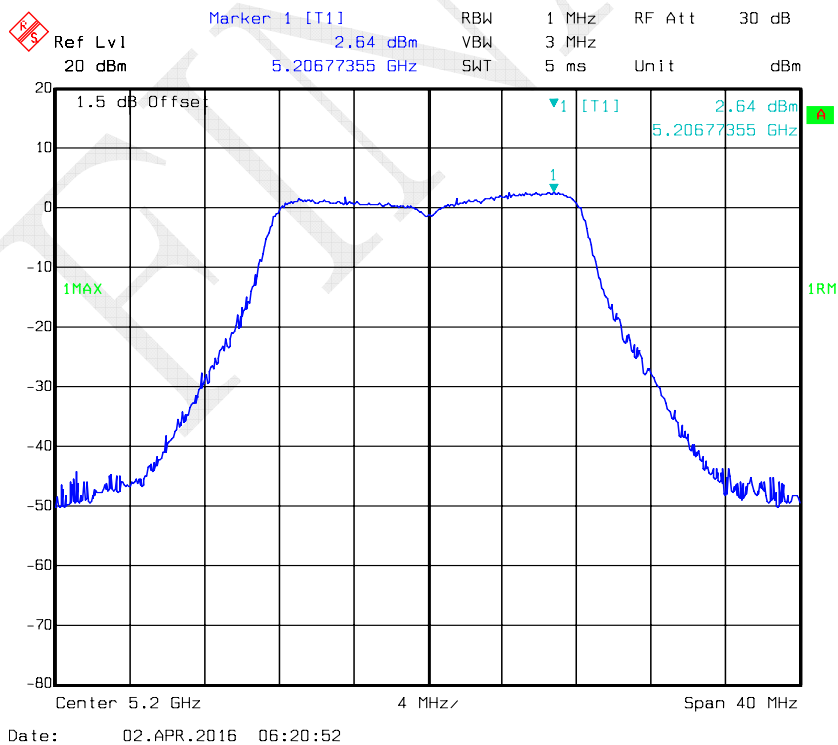
802.11 ac80 Middle Channel – Chain0



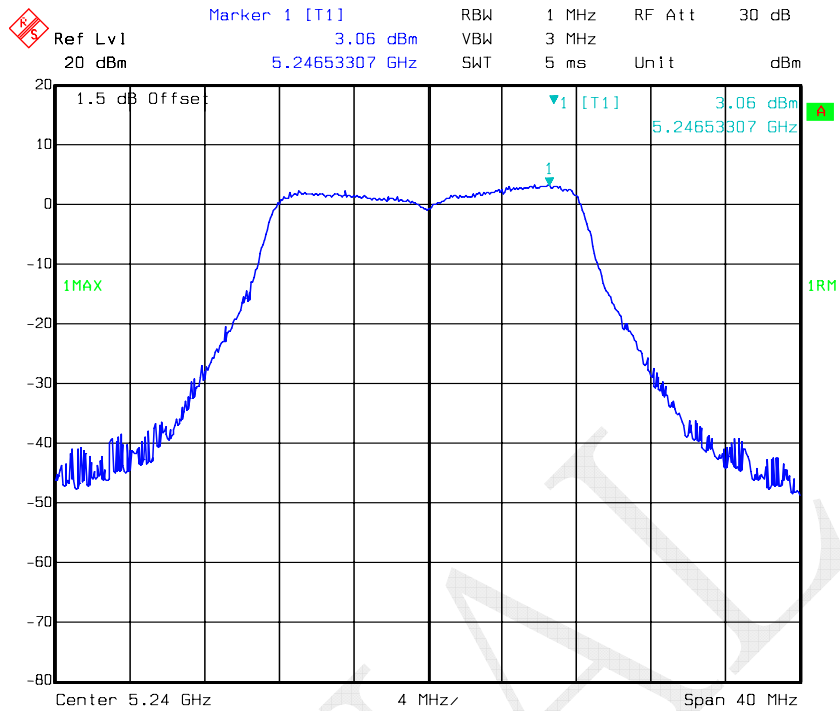
### 802.11a Low Channel – Chain1



### 802.11a Middle Channel – Chain1

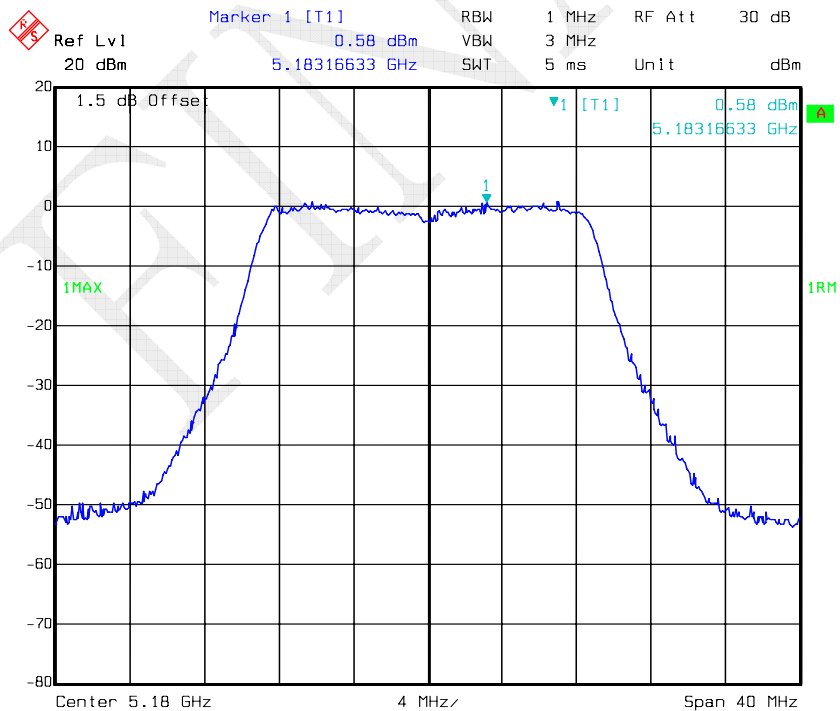


### 802.11a High Channel – Chain1



Date: 02.APR.2016 06:17:33

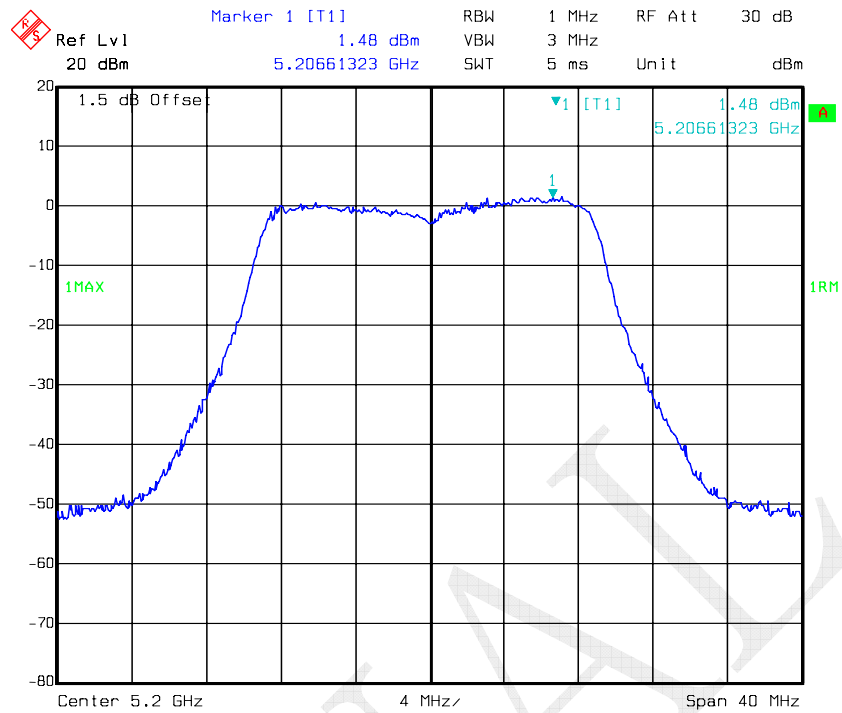
### 802.11n ht20 Low Channel – Chain1



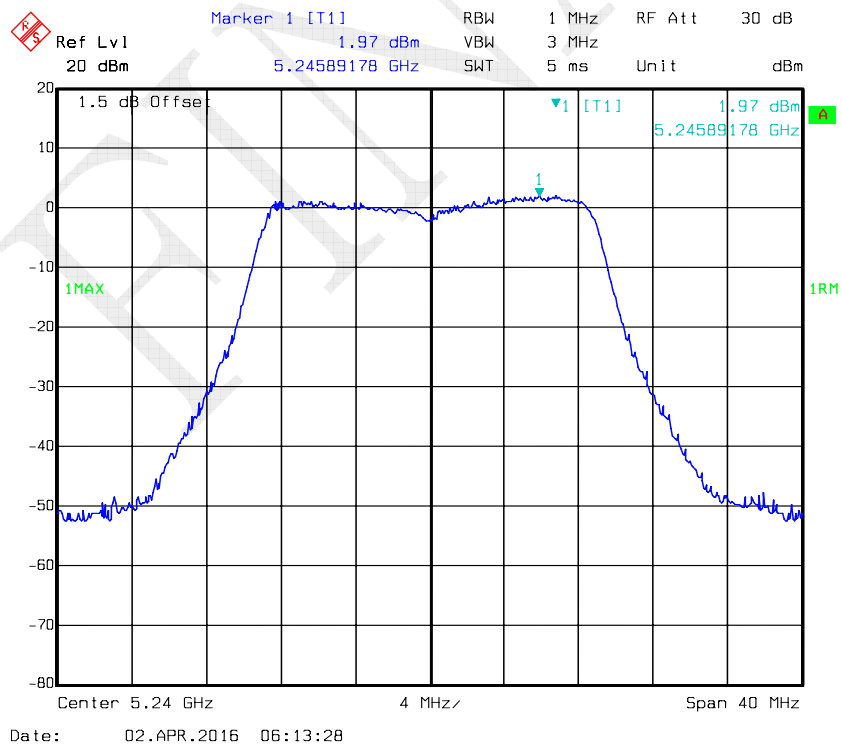
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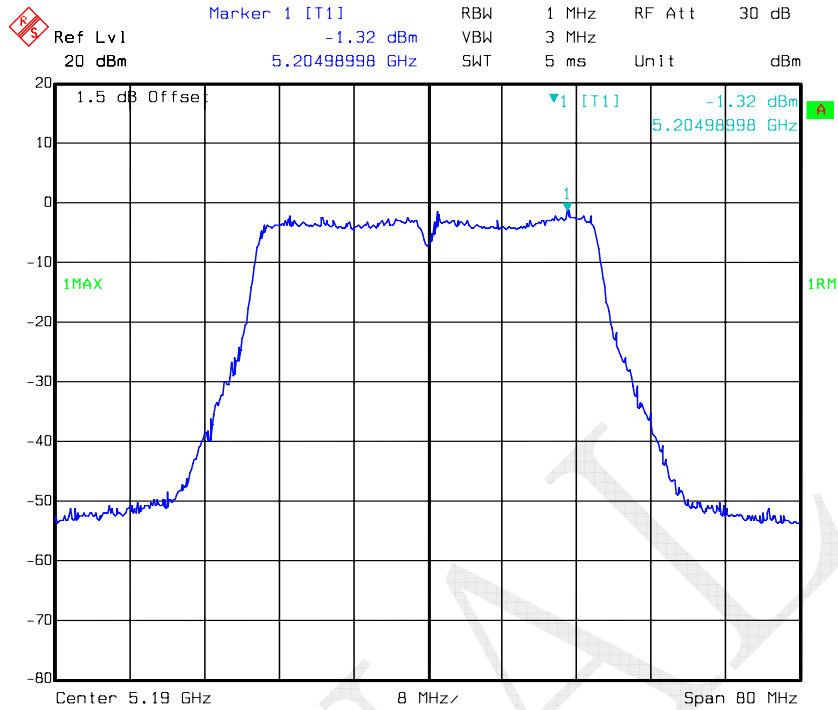
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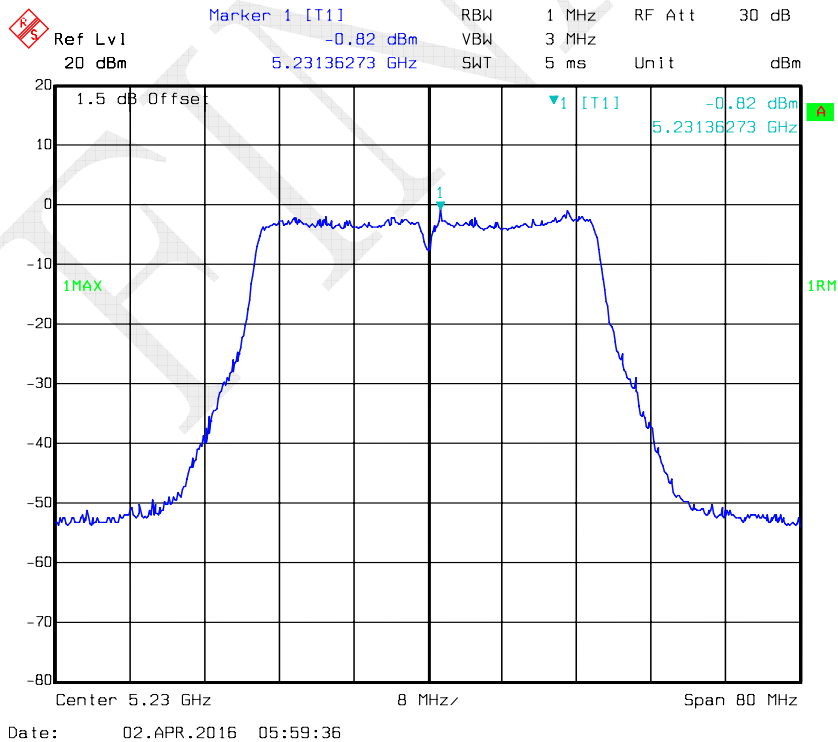
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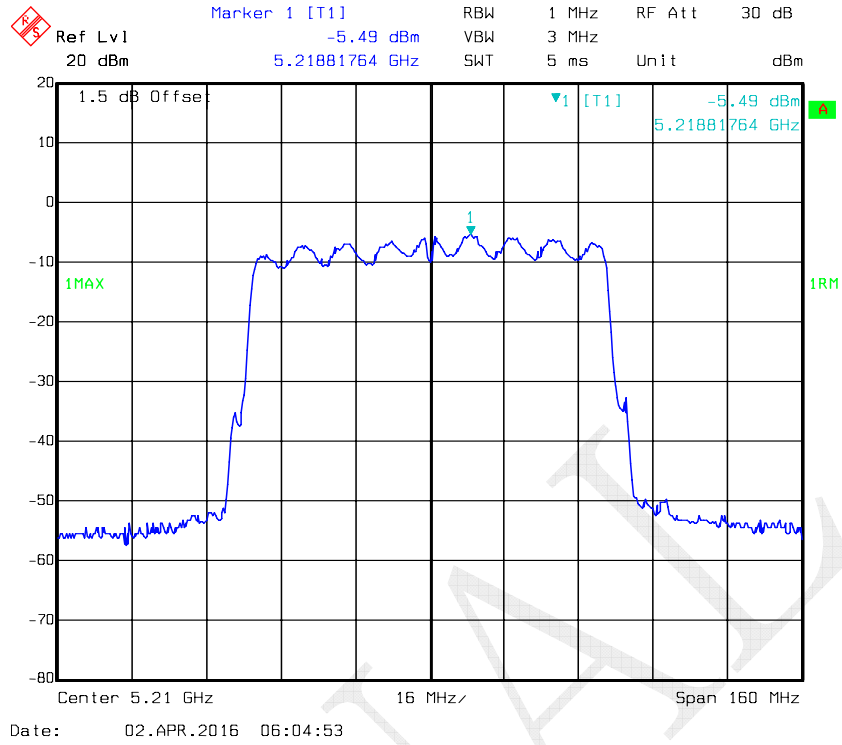
### 802.11n ht40 Low Channel – Chain1



### 802.11n ht40 High Channel – Chain1

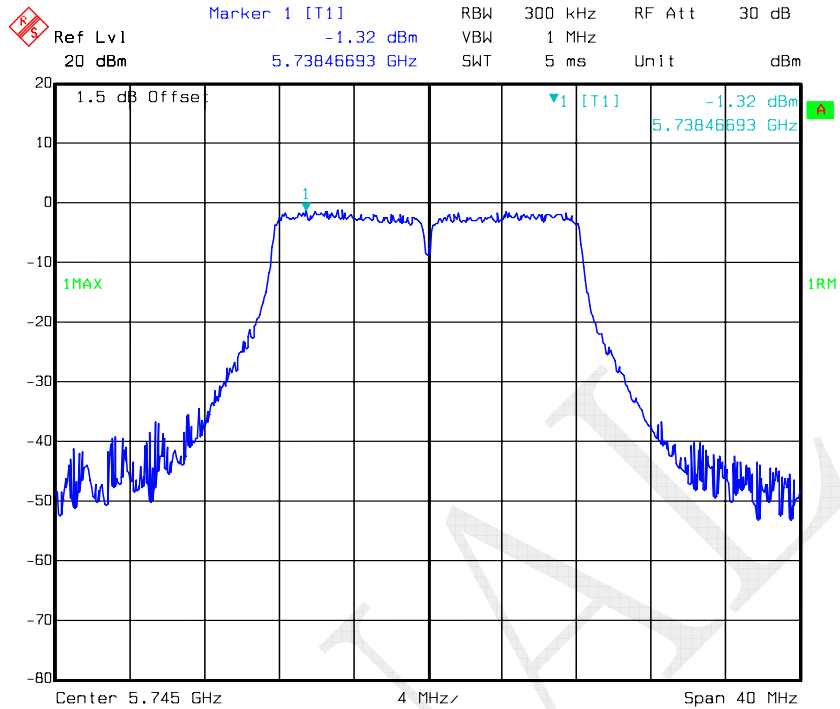


### 802.11 ac80 Middle Channel – Chain1



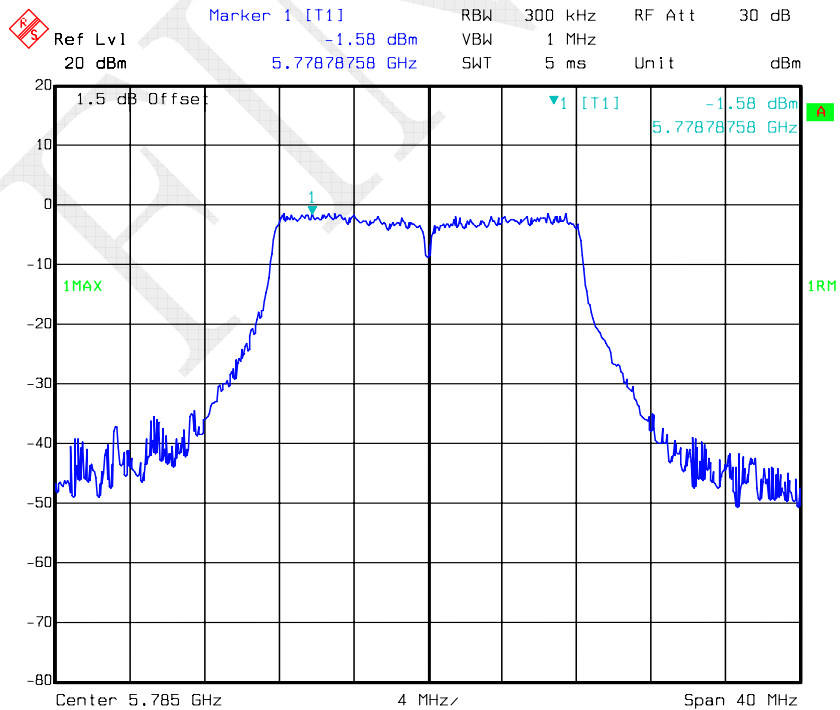
5725MHz-5850MHz:

### 802.11a Low Channel – Chain0



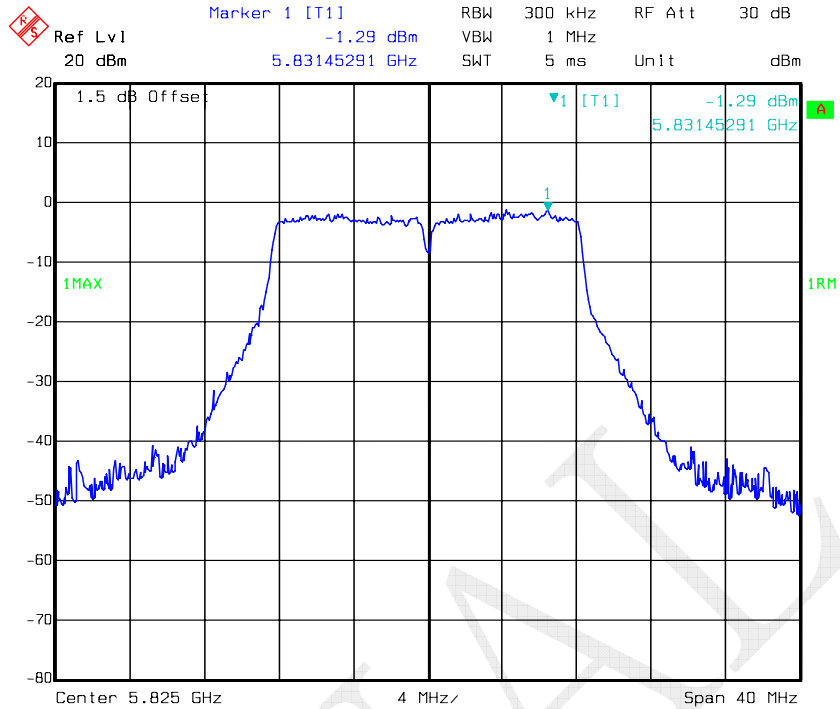
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### 802.11a Middle Channel – Chain0



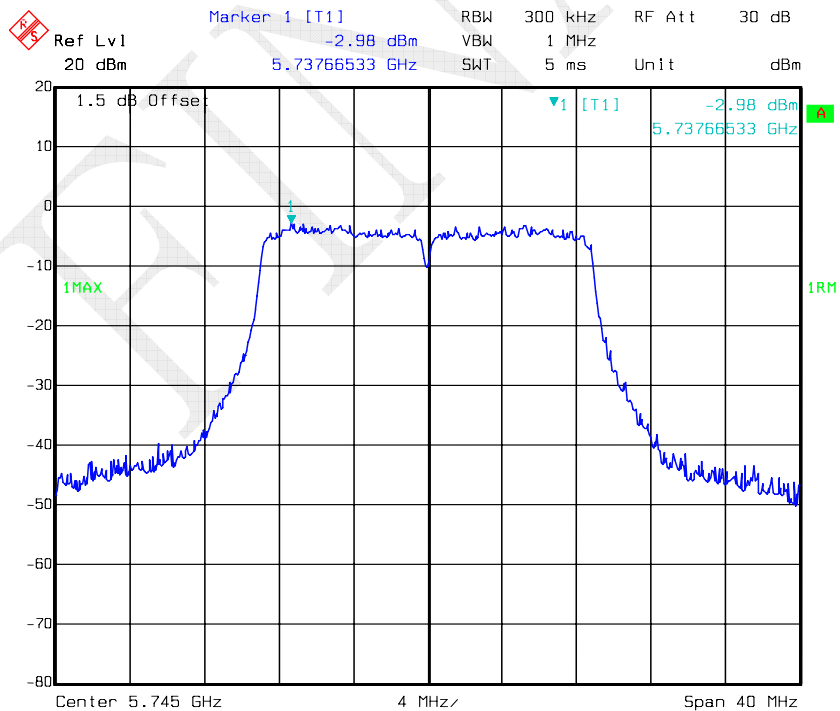
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### 802.11a High Channel – Chain0



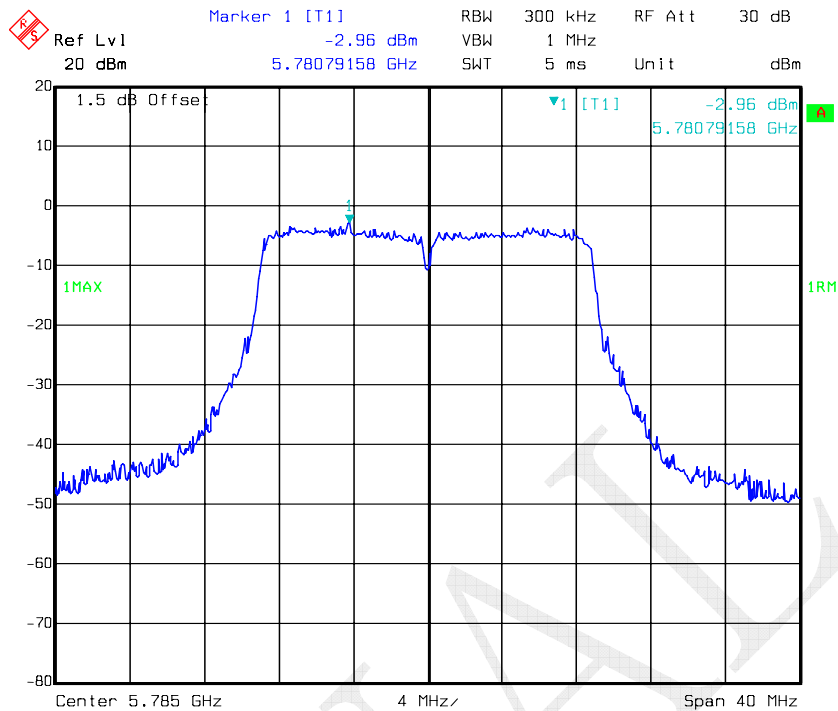
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### 802.11n ht20 Low Channel – Chain0



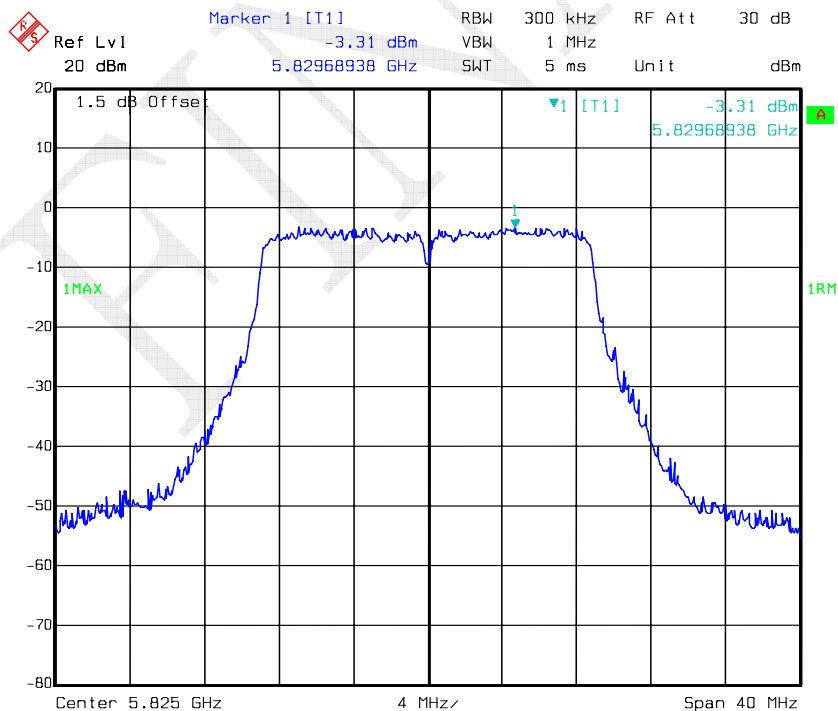
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### 802.11n ht20 Middle Channel – Chain0



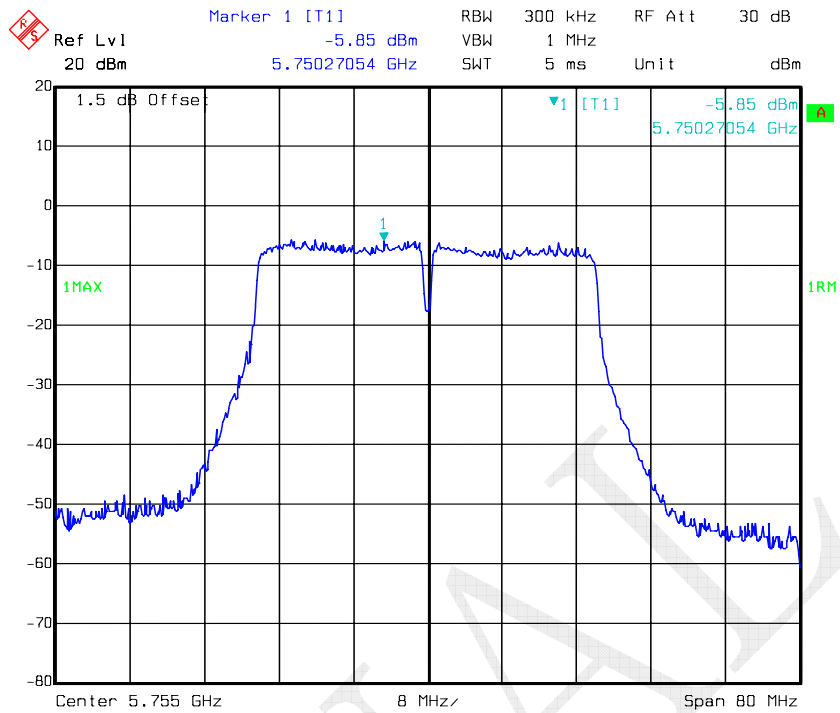
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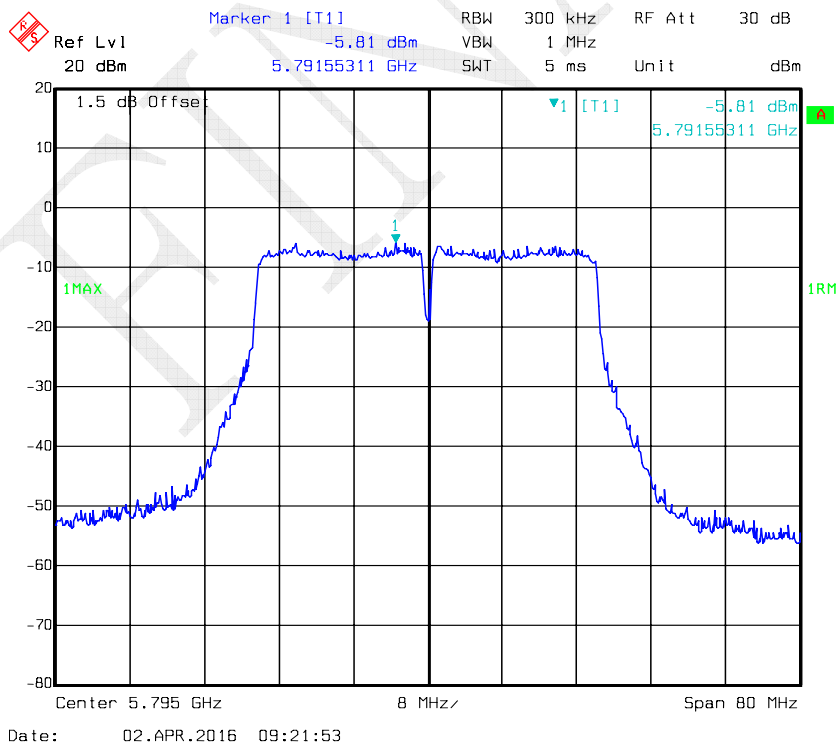


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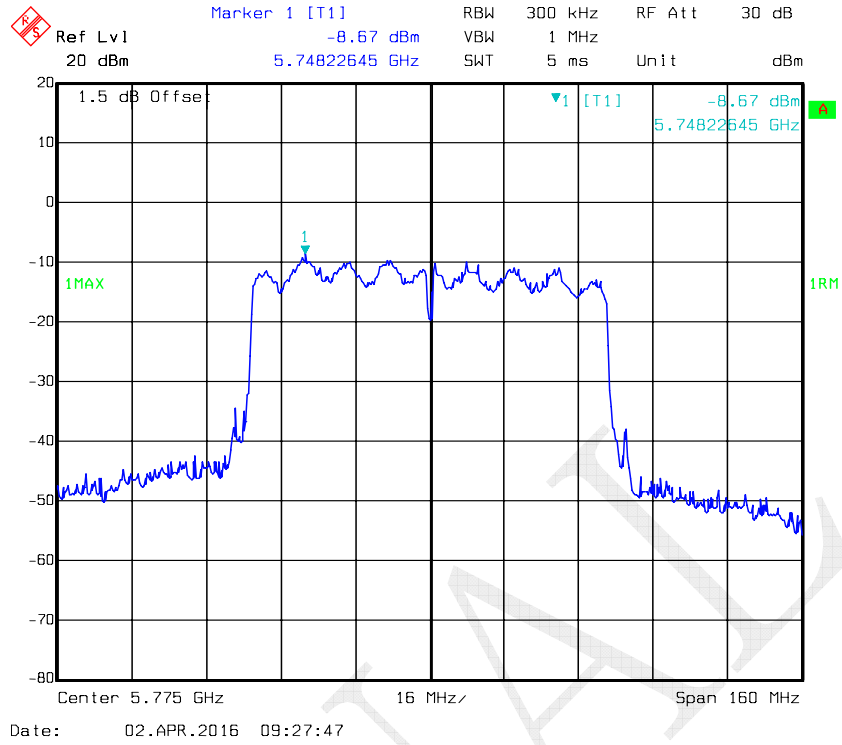
### 802.11n ht40 Low Channel – Chain0



### 802.11n ht40 High Channel – Chain0



802.11 ac80 Middle Channel – Chain0





Ref Lvl 20 dBm

Marker 1 [T1] -1.11 dBm

5.75145291 GHz

RBW 300 kHz

VBW 1 MHz

SWT 5 ms

RF Att 30 dBm

Unit dBm

1.5 dB Offset

[T1] -1.11 dBm

5.75145291 GHz

1MAX

1RM

Center 5.745 GHz

4 MHz/

Span 40 MHz

Ref Lvl 20 dBm

Marker 1 [T1] -1.31 dBm

RBW 300 kHz RF Att 30 dB

VBW 1 MHz

SWT 5 ms Unit dBm

1.5 dB Offset

1 [T1] -1.31 dBm

5.79145291 GHz

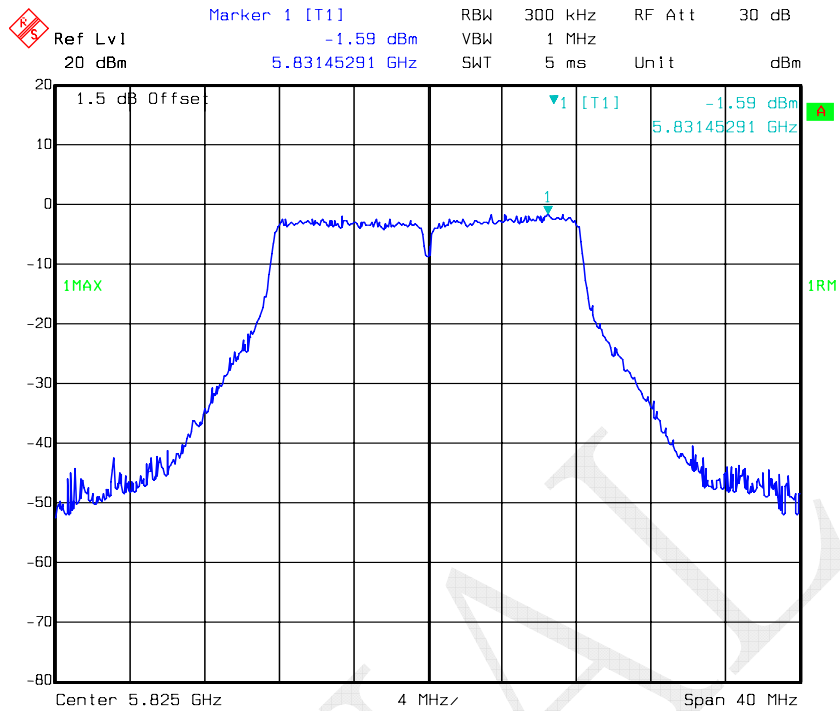
1MAX

1RM

Center 5.785 GHz 4 MHz/ Span 40 MHz

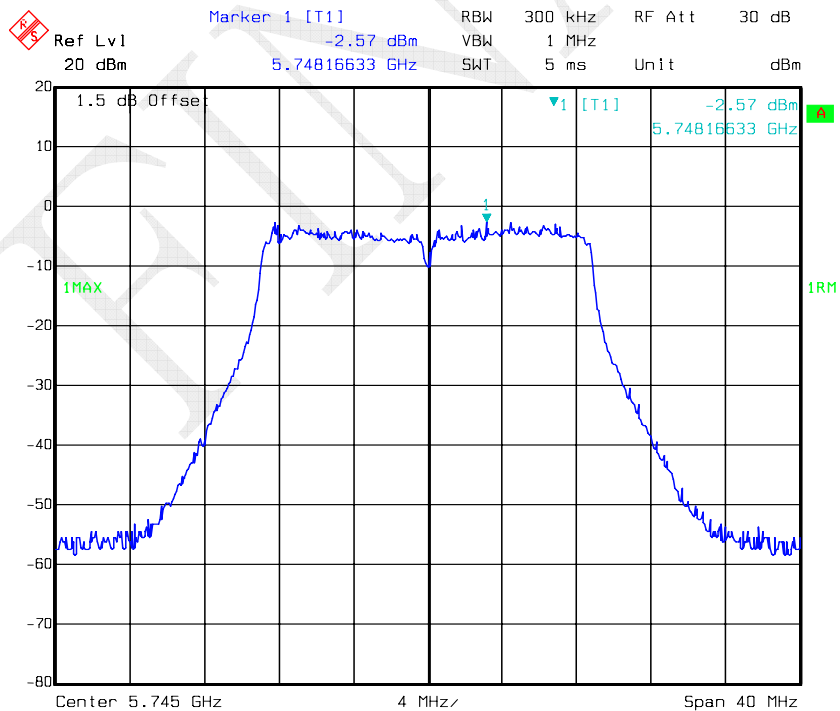
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### 802.11a High Channel – Chain1



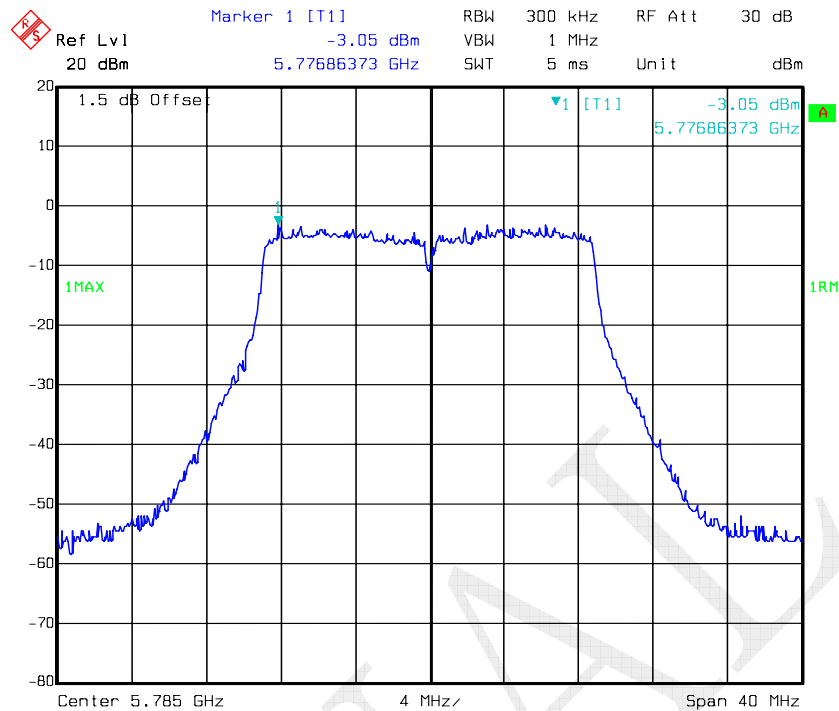
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### 802.11n ht20 Low Channel – Chain1



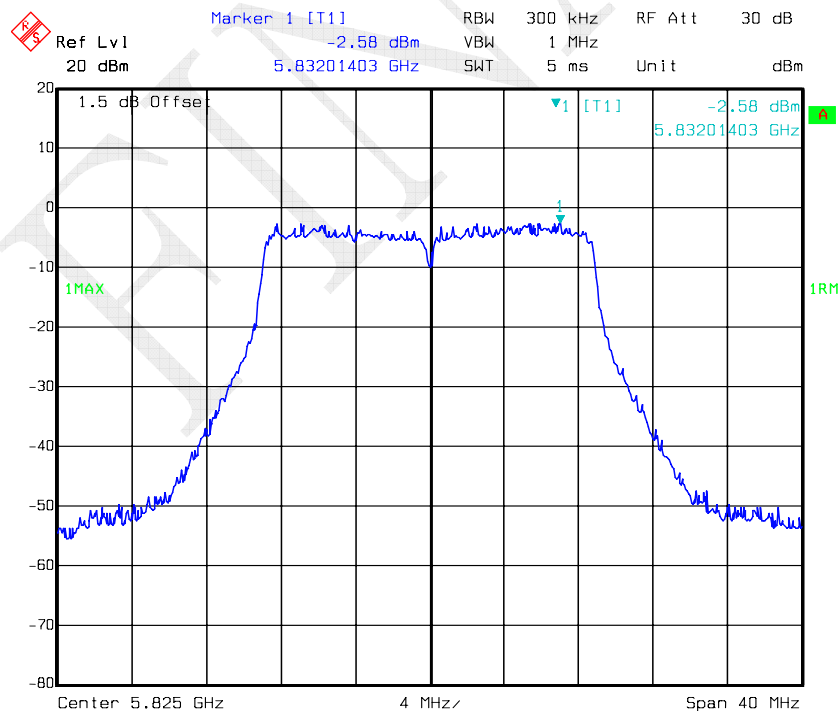
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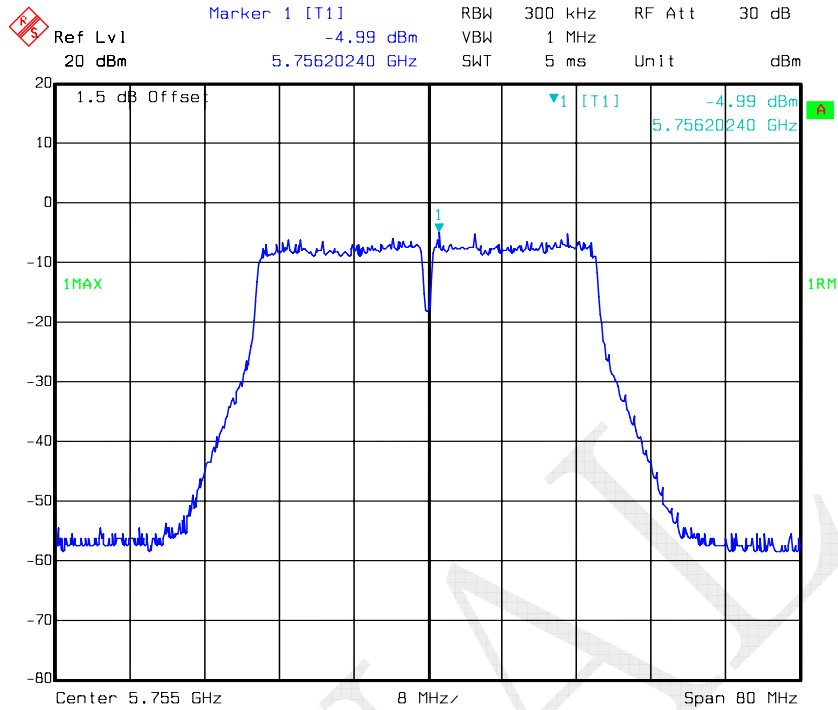
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## 802.11n ht20 High Channel – Chain1

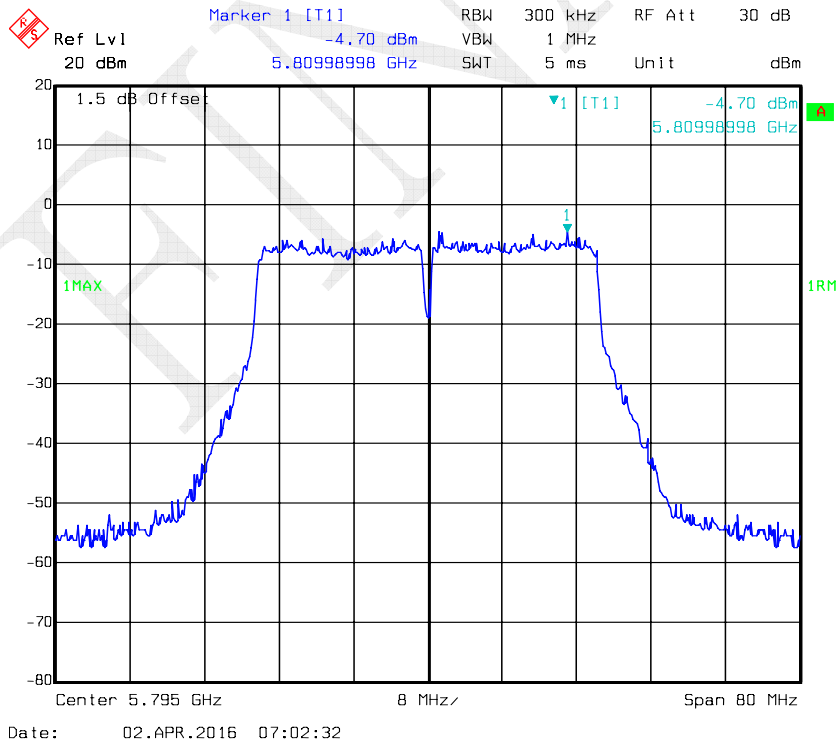


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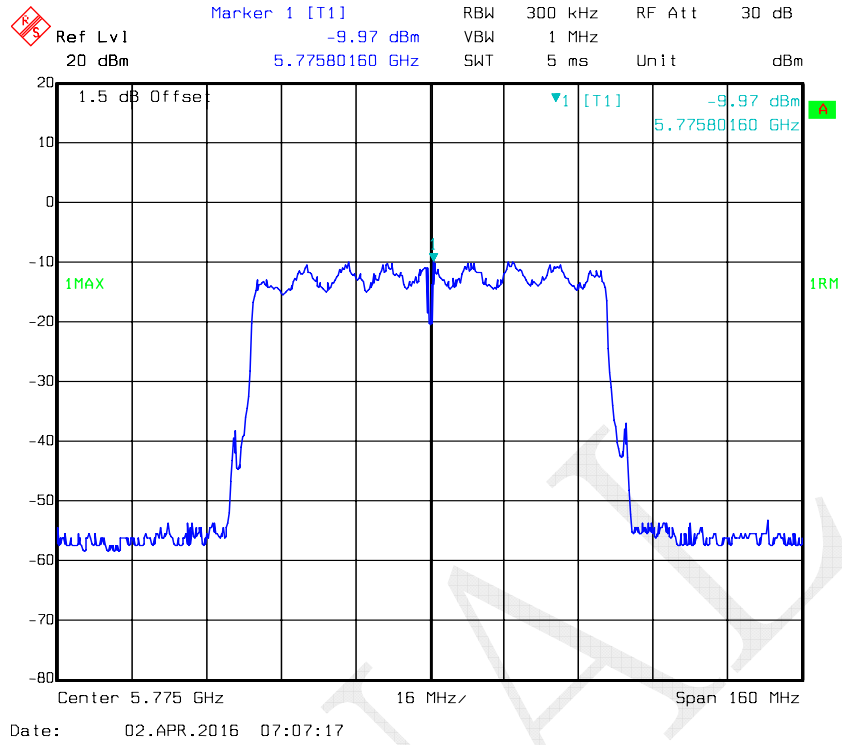
### 802.11n ht40 Low Channel – Chain1



### 802.11n ht40 High Channel – Chain1



### 802.11 ac80 Middle Channel – Chain1



\*\*\*\*\* END OF REPORT \*\*\*\*\*