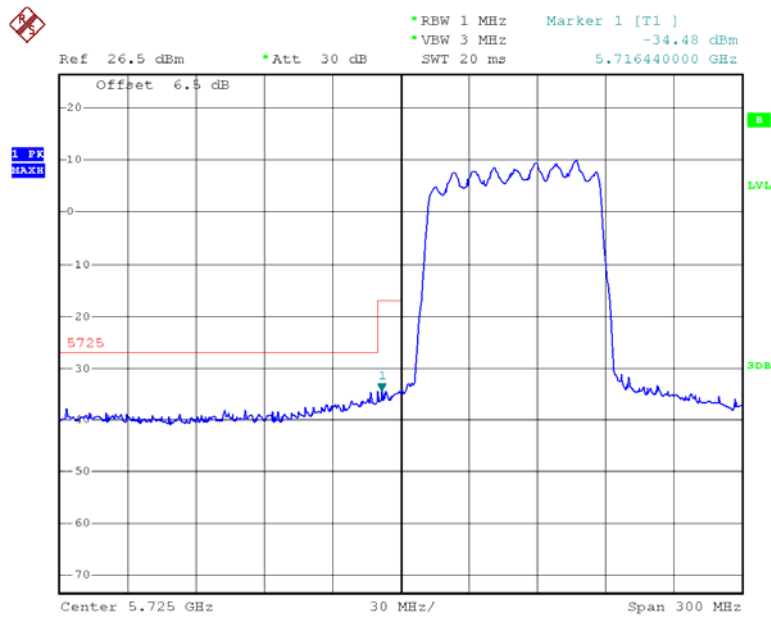
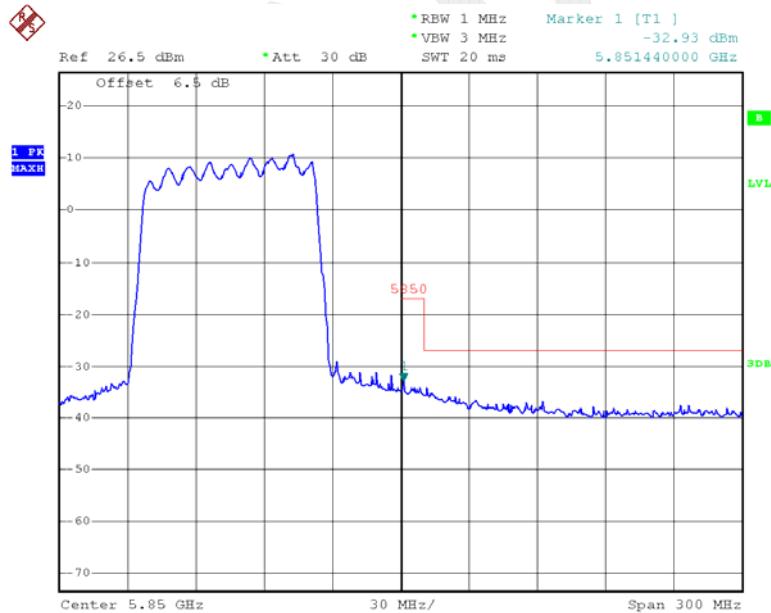


802.11 ac80 Band Edge, Left Side– Chain0



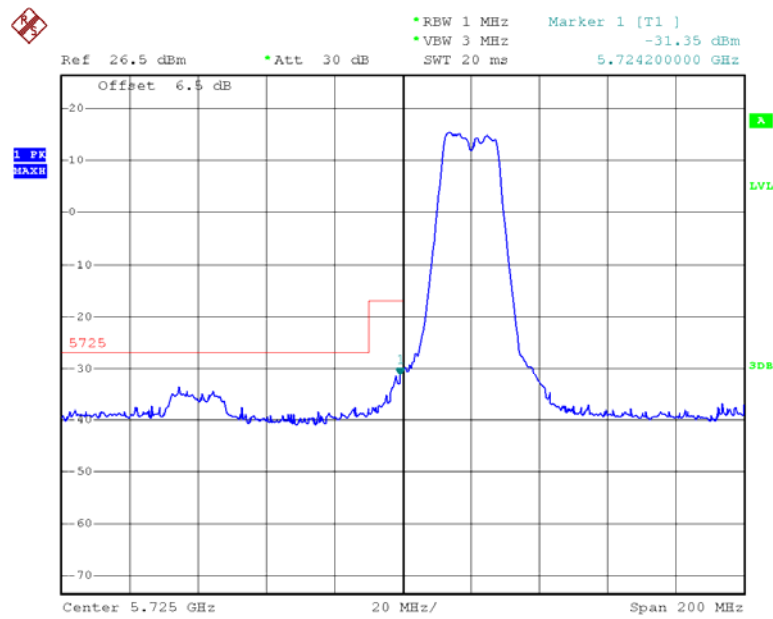
Date: 12.APR.2015 06:58:50

802.11ac80 Band Edge, Right Side– Chain0



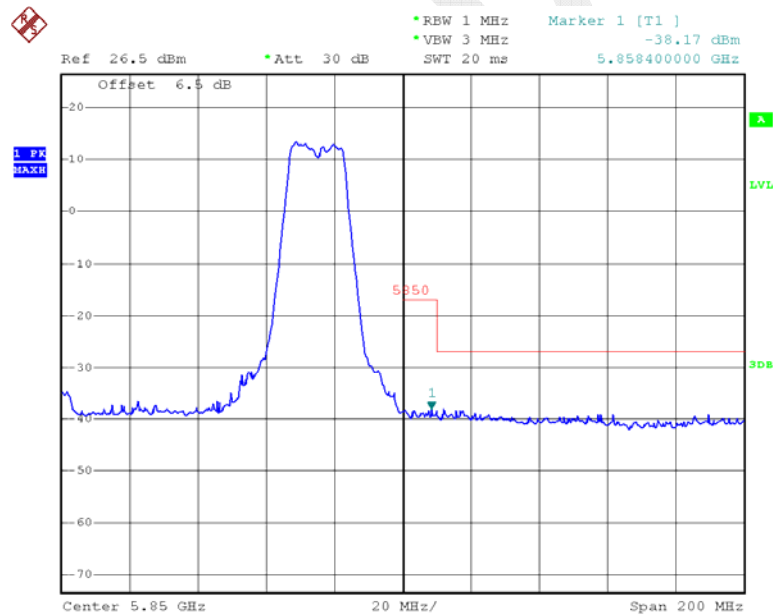
Date: 12.APR.2015 06:58:22

802.11a Band Edge, Left Side – Chain1



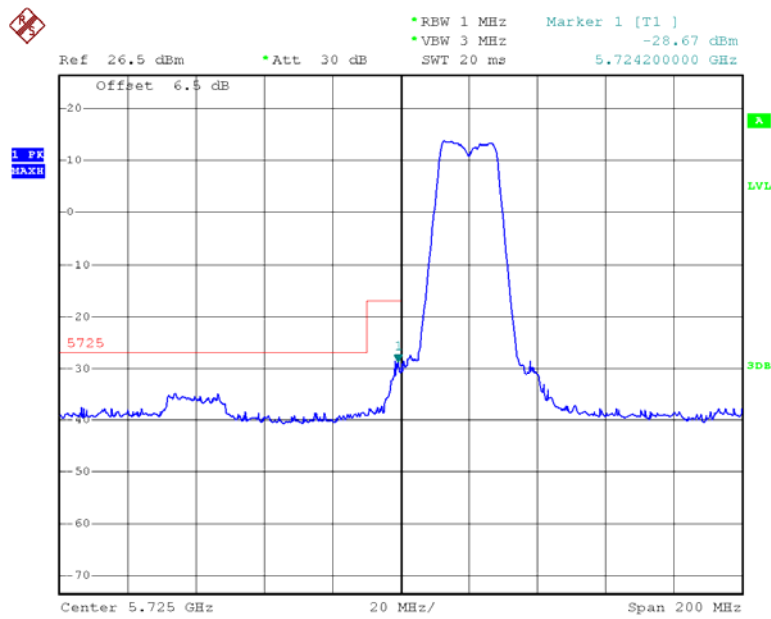
Date: 17.APR.2015 19:36:32

802.11a Band Edge, Right Side– Chain1



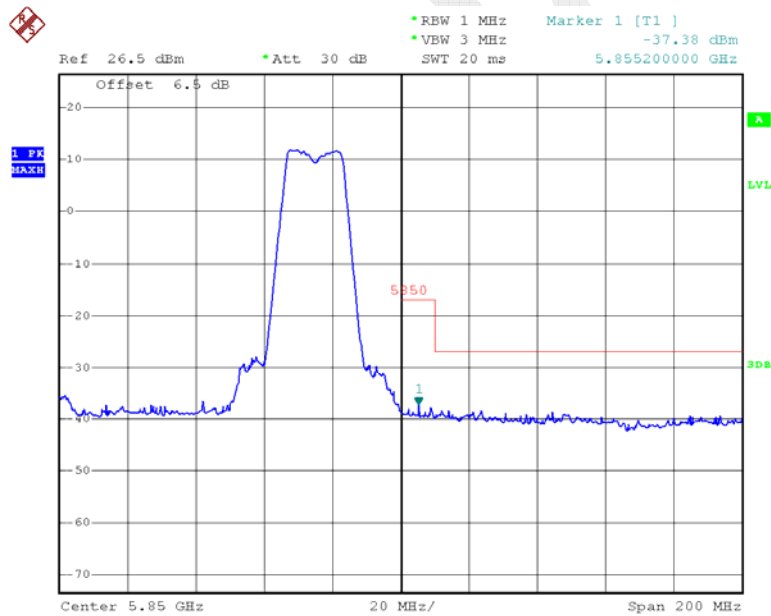
Date: 17.APR.2015 19:35:50

802.11n ht20 Band Edge, Left Side- Chain1



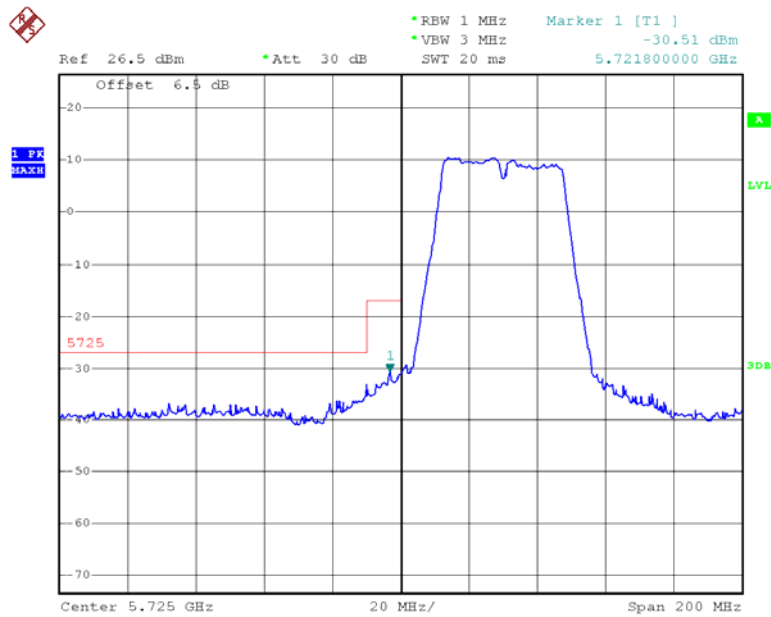
Date: 17.APR.2015 19:34:36

802.11n ht20 Band Edge, Right Side- Chain1



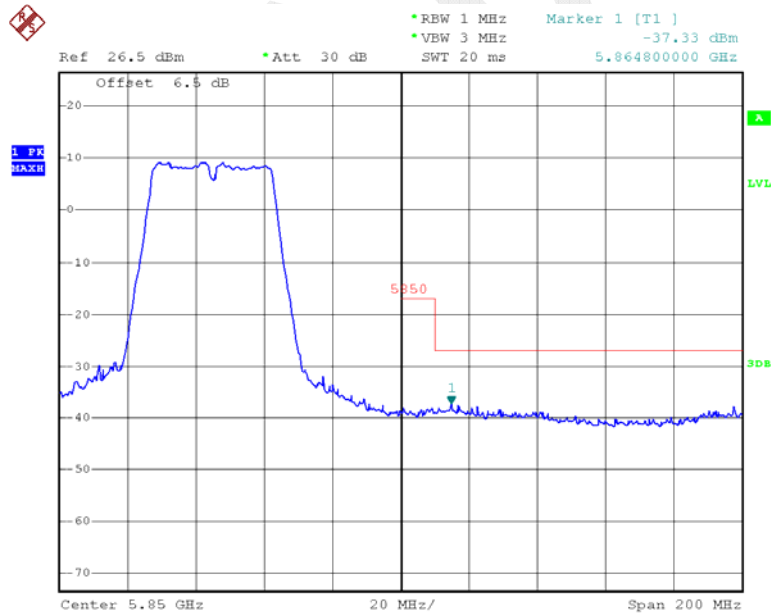
Date: 17.APR.2015 19:35:19

802.11n ht40 Band Edge, Left Side- Chain1



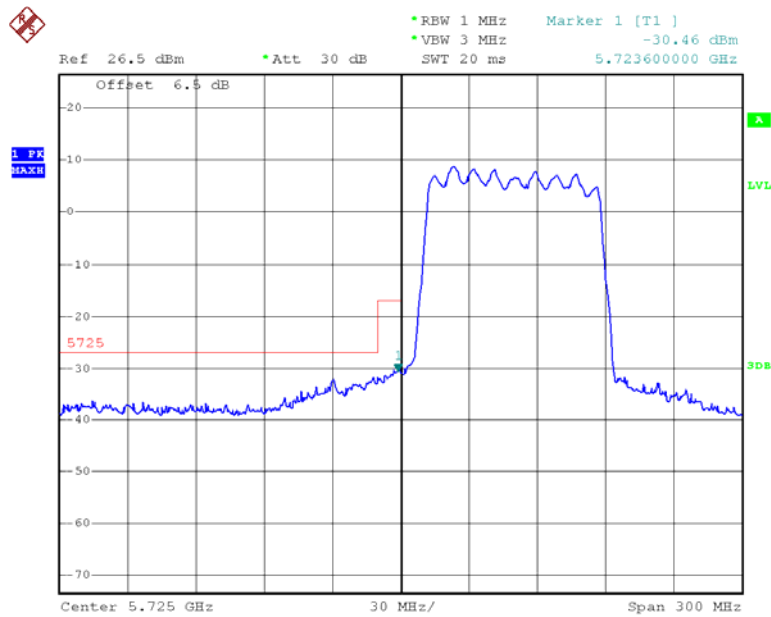
Date: 17.APR.2015 19:33:28

802.11n ht40 Band Edge, Right Side- Chain1



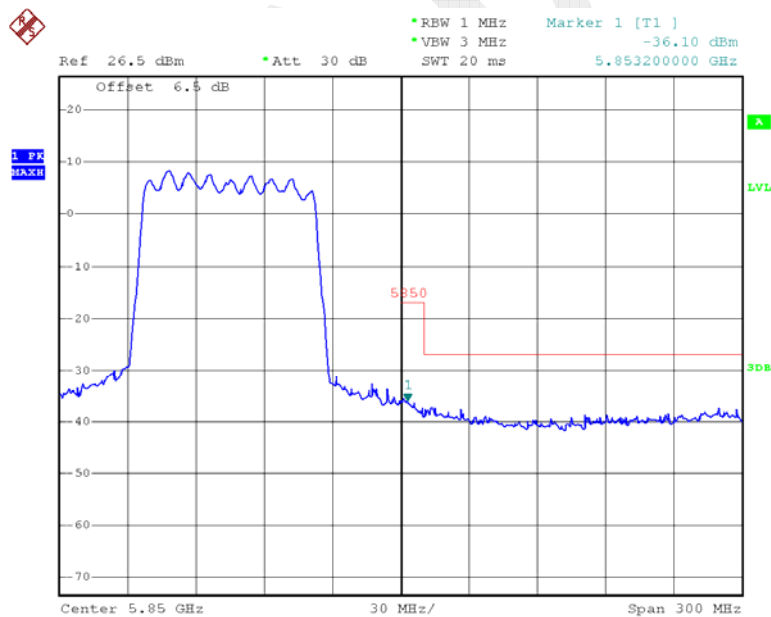
Date: 17.APR.2015 19:31:48

802.11ac80 Band Edge, Left Side- Chain1



Date: 17.APR.2015 19:37:13

802.11ac80 Band Edge, Right Side- Chain1



Date: 17.APR.2015 19:37:40

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

* **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 v01

Test Data**Environmental Conditions**

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

The testing was performed by Allen Qiao on 2015-04-12.

Test Result: Pass.

Please refer to the following tables and plots.

Test mode: Transmitting

5150MHz-5250MHz:

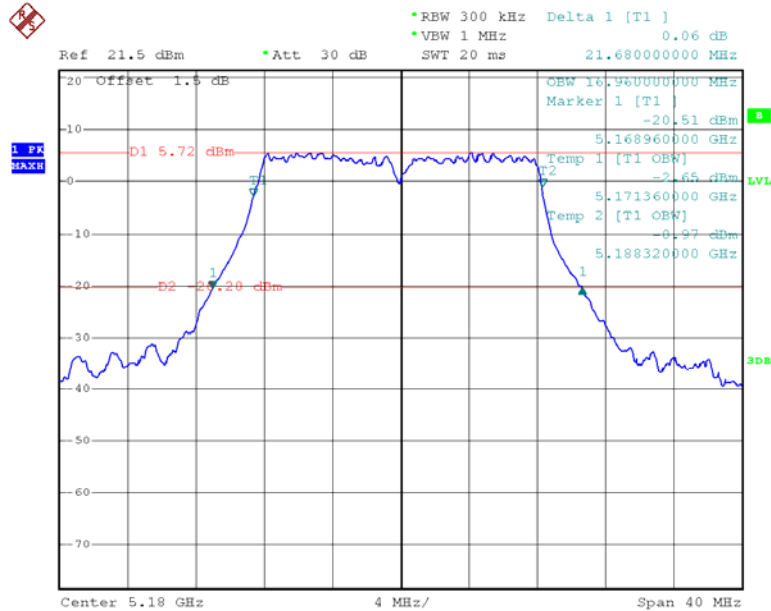
Mode	Channel	Frequency MHz	26 dB Bandwidth (MHz)		99% occupied bandwidth (MHz)		Result
			Chain0	Chain1	Chain0	Chain1	
802.11a	Low	5180	21.68	22.24	16.96	17.12	PASS
	Middle	5200	21.44	22.24	16.96	17.12	PASS
	High	5240	21.52	22.24	16.8	17.04	PASS
802.11n20	Low	5180	22	22.88	18	18.16	PASS
	Middle	5200	22	23.04	18	18.16	PASS
	High	5240	22.08	23.04	17.92	18.16	PASS
802.11n40	Low	5190	43.2	43.68	36.32	36.48	PASS
	High	5230	43.36	43.68	36.48	36.48	PASS
802.11n80	/	5210	81.28	84.96	75.52	76.32	PASS

5725MHz-5850MHz:

Mode	Channel	Frequency MHz	26 dB Bandwidth (MHz)		6dB Bandwidth (MHz)		99% occupied bandwidth (MHz)		Result
			Chain0	Chain1	Chain0	Chain1	Chain0	Chain1	
802.11a	Low	5745	21.28	22.16	16.56	16.64	16.96	17.04	PASS
	Middle	5785	21.20	22.00	16.56	16.64	16.96	17.04	PASS
	High	5825	21.12	22.00	16.56	16.64	16.96	17.04	PASS
802.11n20	Low	5745	22.08	22.80	17.76	17.84	17.92	18.16	PASS
	Middle	5785	22.16	22.80	17.84	17.84	17.92	18.16	PASS
	High	5825	22.24	22.80	17.76	17.84	17.92	18.16	PASS
802.11n40	Low	5755	43.20	43.20	36.80	36.64	36.32	36.48	PASS
	High	5795	43.04	43.20	36.64	36.64	36.32	36.32	PASS
802.11n80	/	5775	80.0	84.8	74.88	76.8	75.52	76.48	PASS

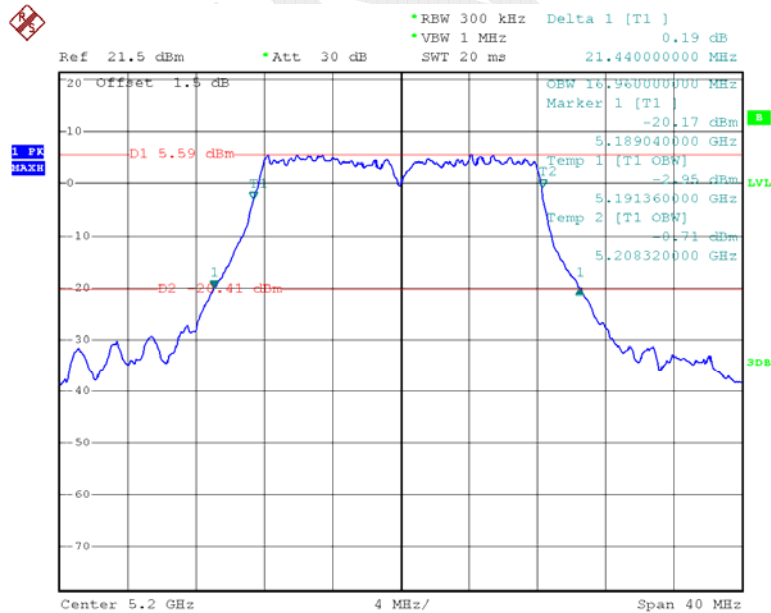
5150MHz-5250MHz:

802.11a Low Channel – Chain0

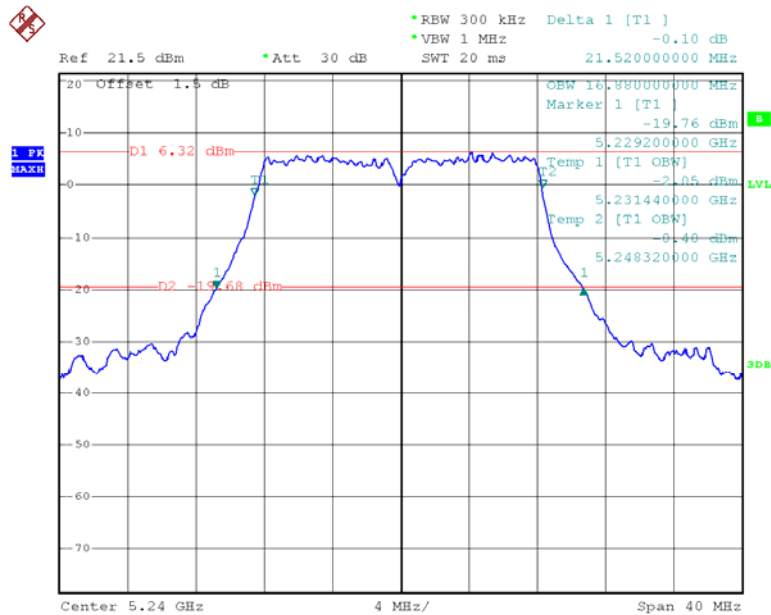


Date: 12.APR.2015 08:16:32

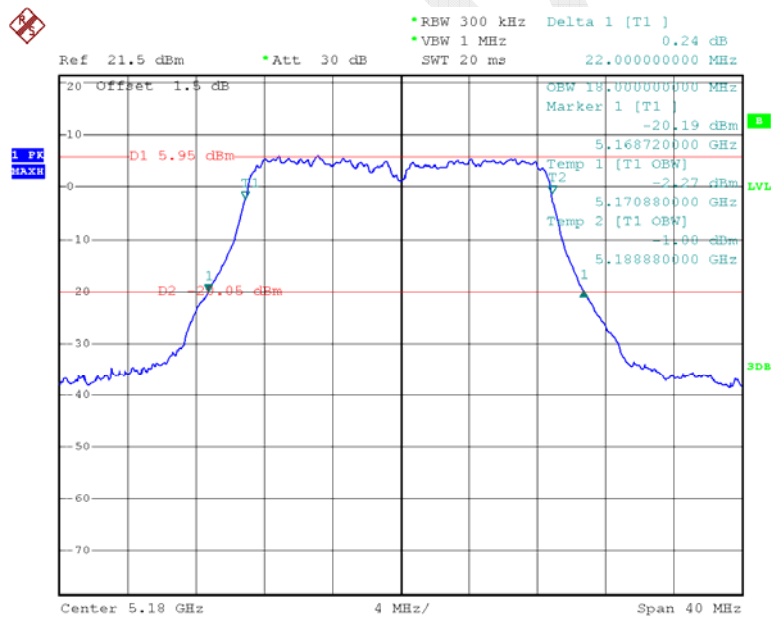
802.11a Middle Channel – Chain0



Date: 12.APR.2015 08:17:23

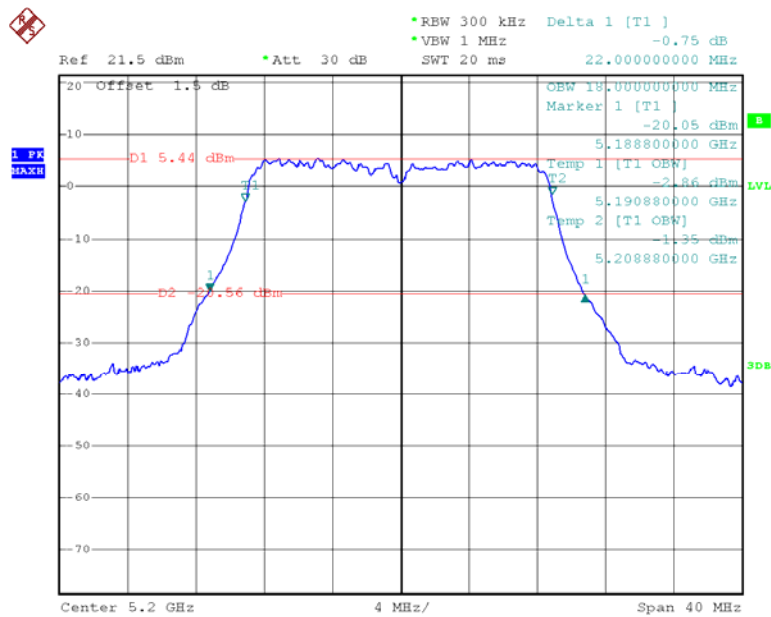
802.11a High Channel – Chain0

Date: 12.APR.2015 08:18:19

802.11n ht20 Low Channel – Chain0

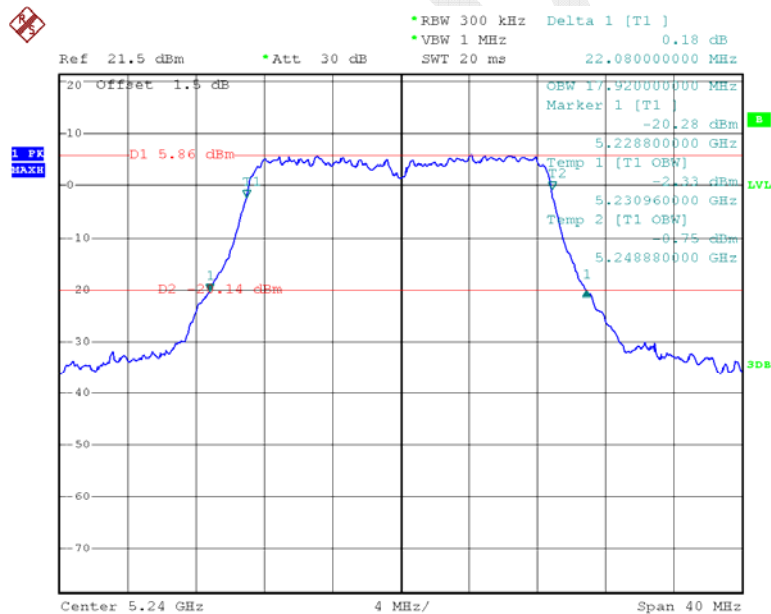
Date: 12.APR.2015 08:20:35

802.11n ht20 Middle Channel – Chain0



Date: 12.APR.2015 08:19:54

802.11n ht20 High Channel – Chain0



Date: 12.APR.2015 08:19:12

Ref 15.5 dBm Att 30 dB

• RBW 300 kHz Delta 1 [T1] -0.03 dB
• VEW 1 MHz
SWT 20 ms 43.200000000 MHz

Offset 1.5 dB

1. PK
MAXH

D1 -1.04 dBm

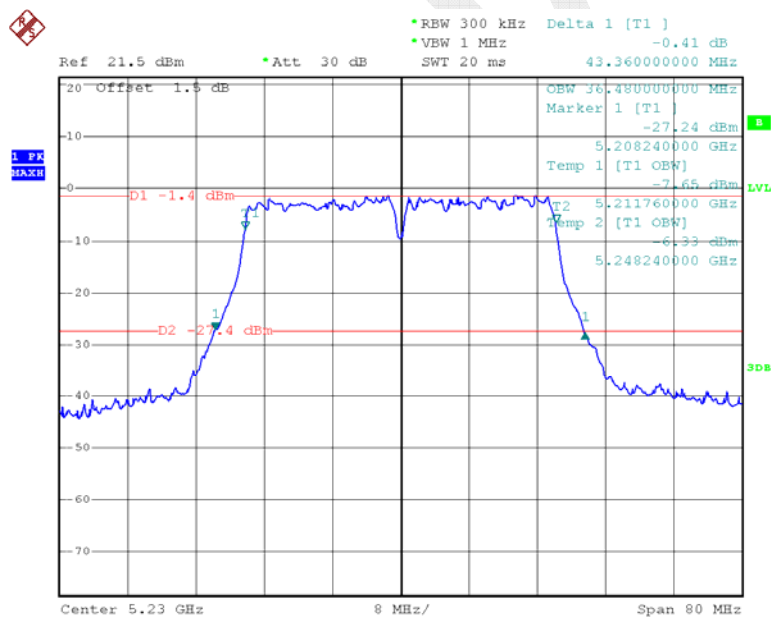
27.04 dBm

D2 -27.04 dBm

OBW 36.320000000 MHz
Marker 1 [T1]
-26.65 dBm
5.168080000 GHz
Temp 1 [T1 OBW]
-6.69 dBm
T2 5.171760000 GHz
Temp 2 [T1 OBW]
-5.91 dBm
5.208080000 GHz

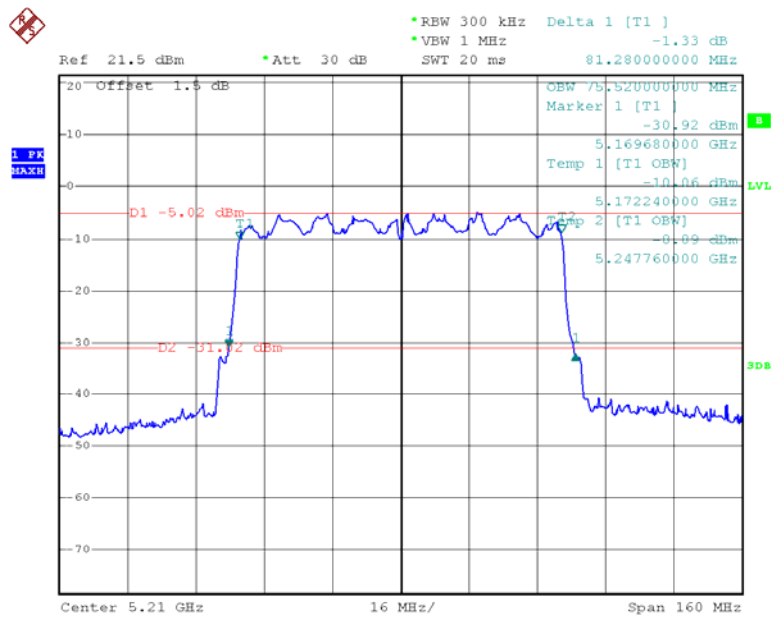
Center 5.19 GHz 8 MHz/ Span 80 MHz

802.11n ht40 High Channel – Chain0



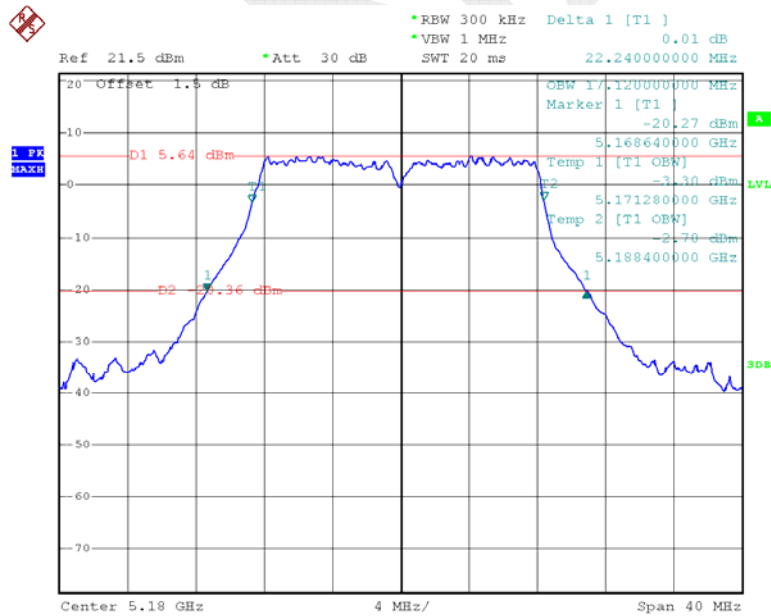
Page 110 of 177

802.11n ac80 – Chain0



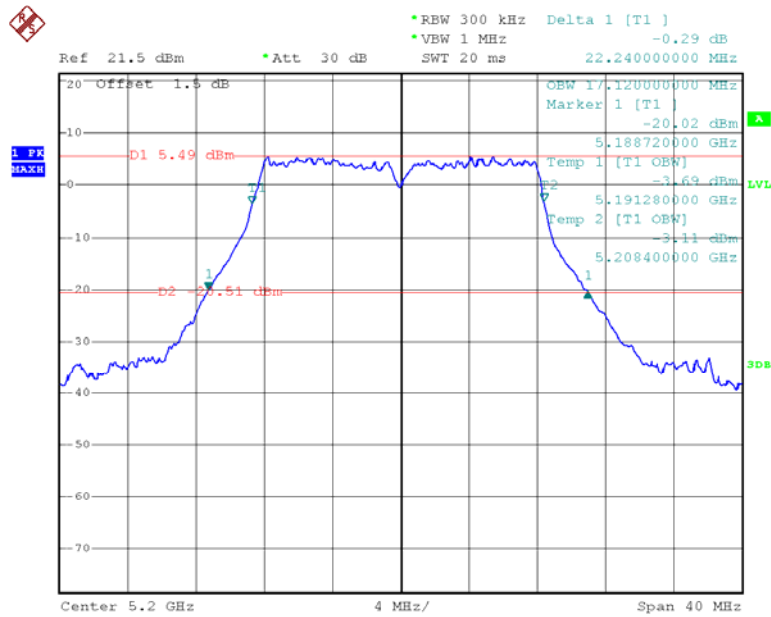
Date: 12.APR.2015 08:23:40

802.11a Low Channel – Chain1



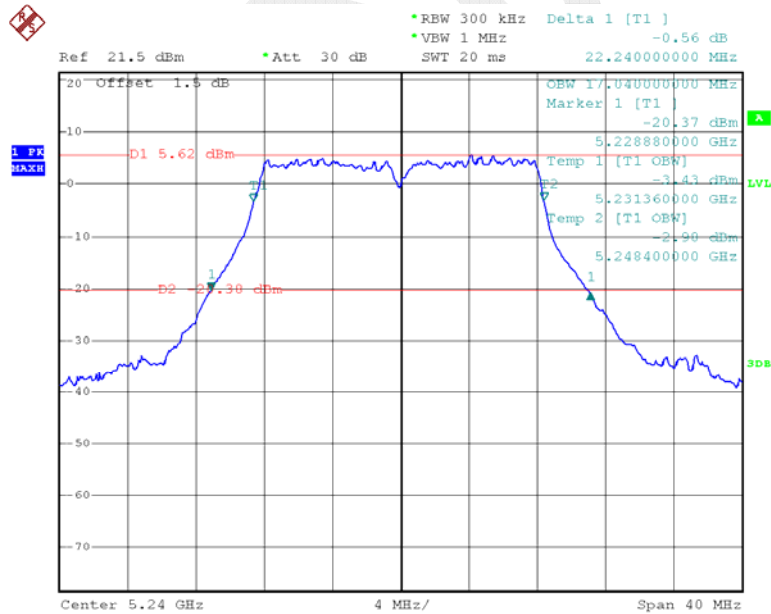
Date: 12.APR.2015 09:07:58

802.11a Middle Channel – Chain1



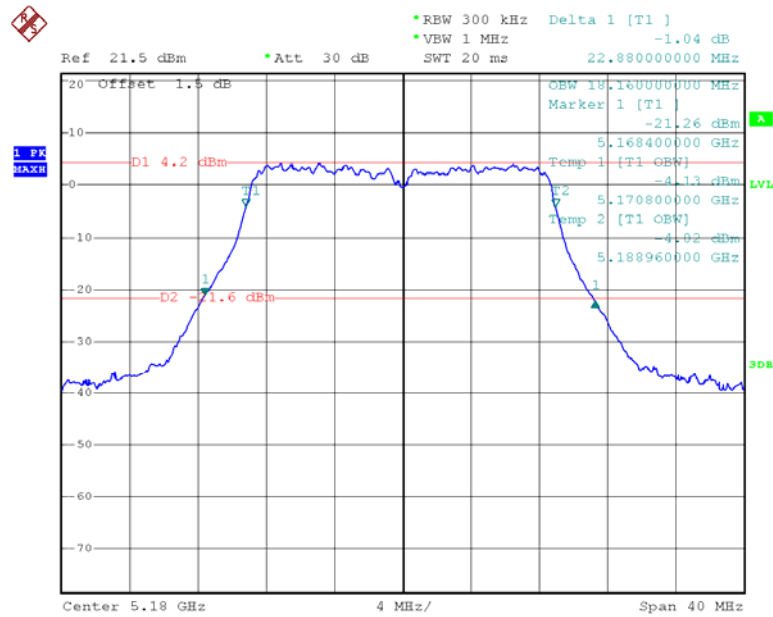
Date: 12.APR.2015 09:08:41

802.11a High Channel – Chain1



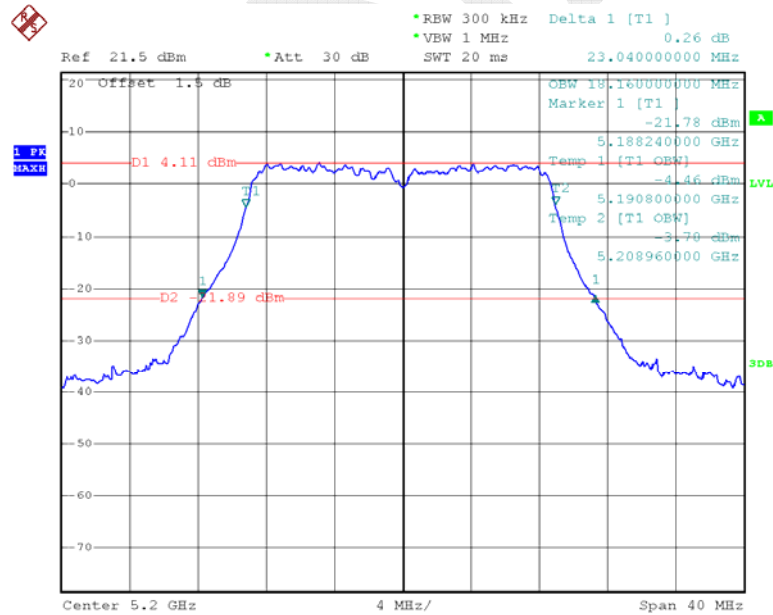
Date: 12.APR.2015 09:09:28

802.11n ht20 Low Channel – Chain1



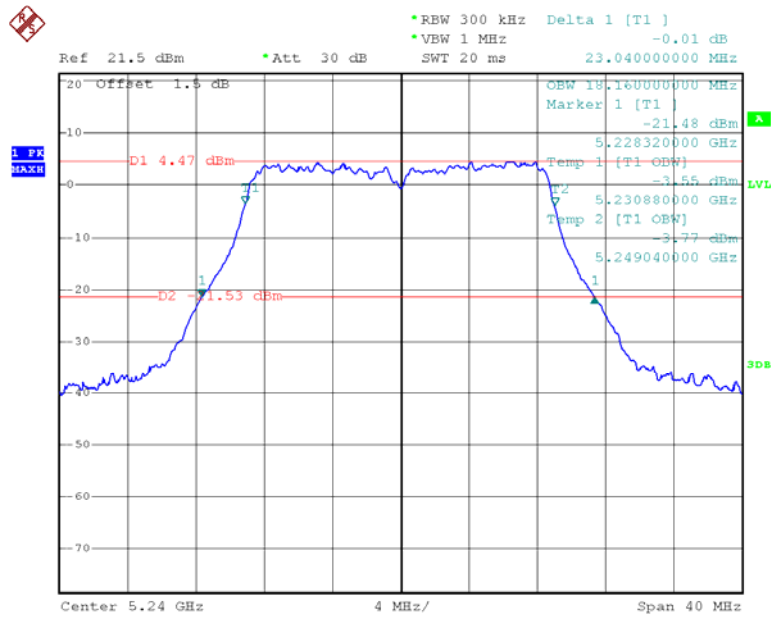
Date: 12.APR.2015 09:12:25

802.11n ht20 Middle Channel – Chain1



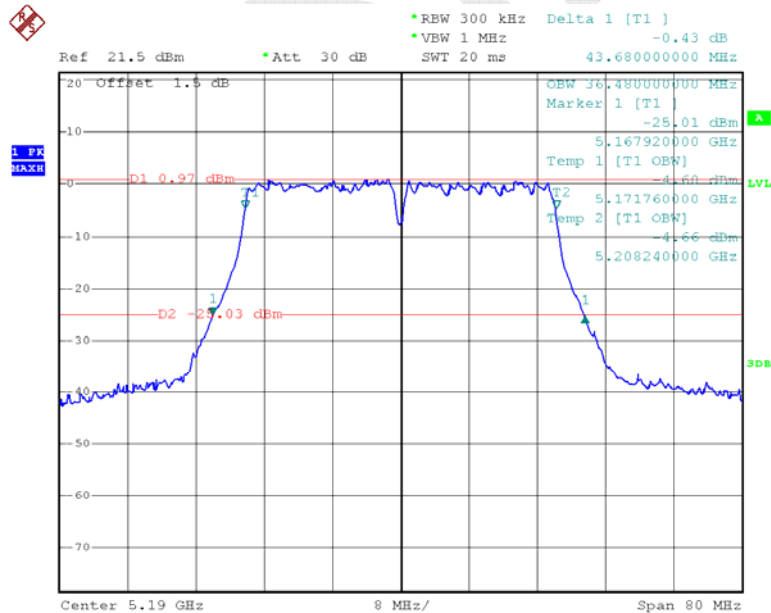
Date: 12.APR.2015 09:11:27

802.11n ht20 High Channel – Chain1

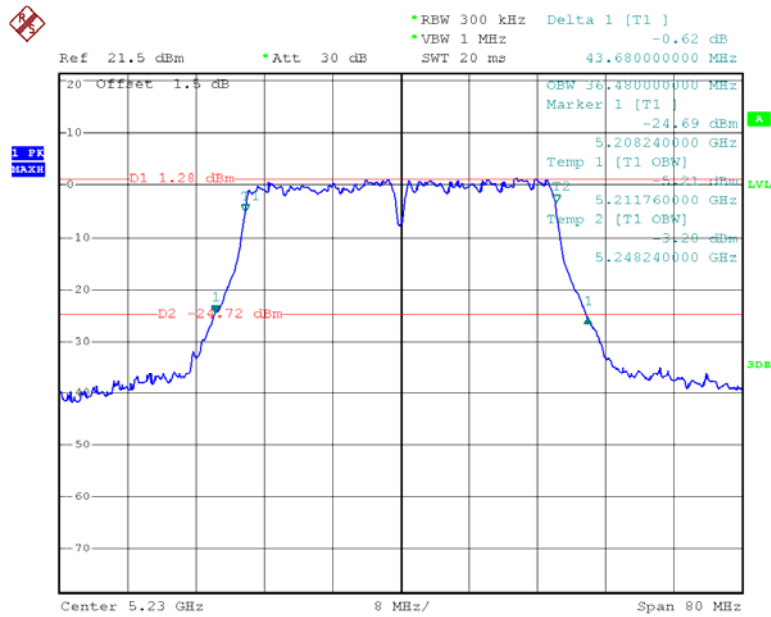


Date: 12.APR.2015 09:10:38

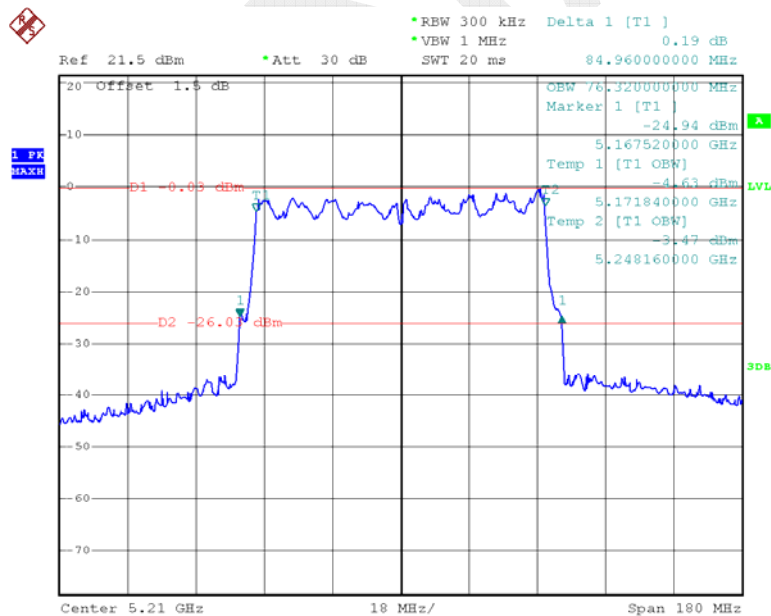
802.11n ht40 Low Channel – Chain1



Date: 12.APR.2015 09:14:26

802.11n ht40 High Channel – Chain1

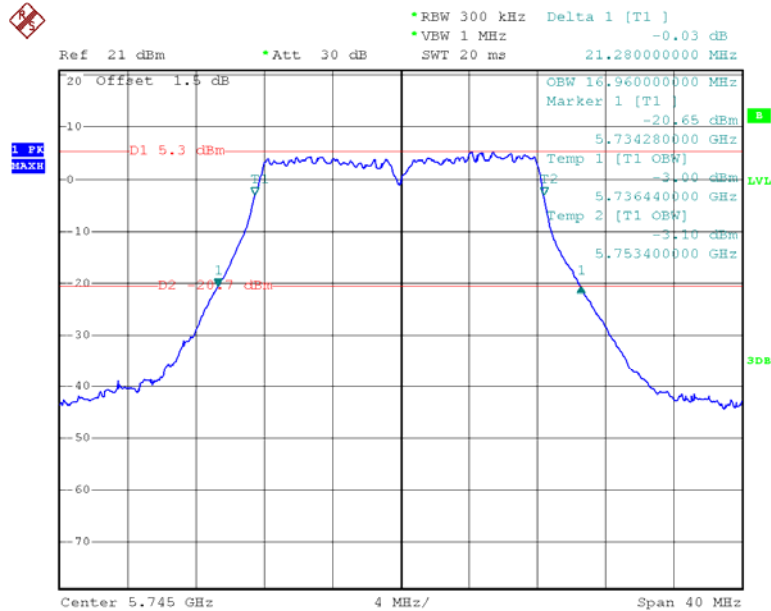
Date: 12.APR.2015 09:15:25

802.11n ac80 – Chain1

Date: 12.APR.2015 09:16:26

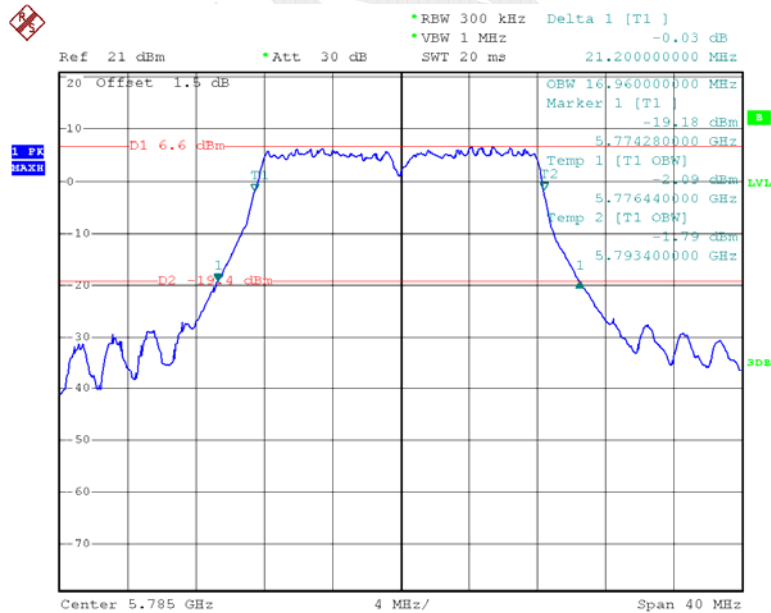
5725MHz-5850MHz: 26 dB Bandwidth

802.11a Low Channel – Chain0



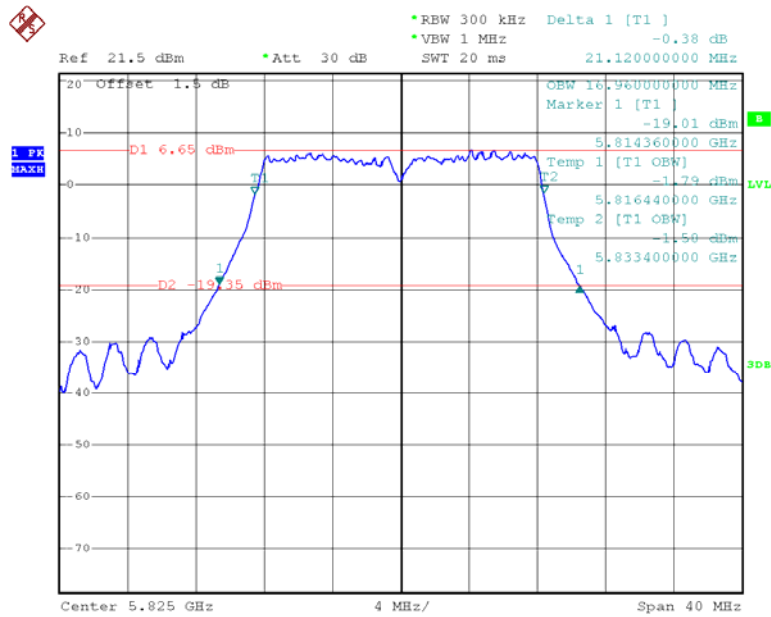
Date: 12.APR.2015 05:15:21

802.11a Middle Channel – Chain0



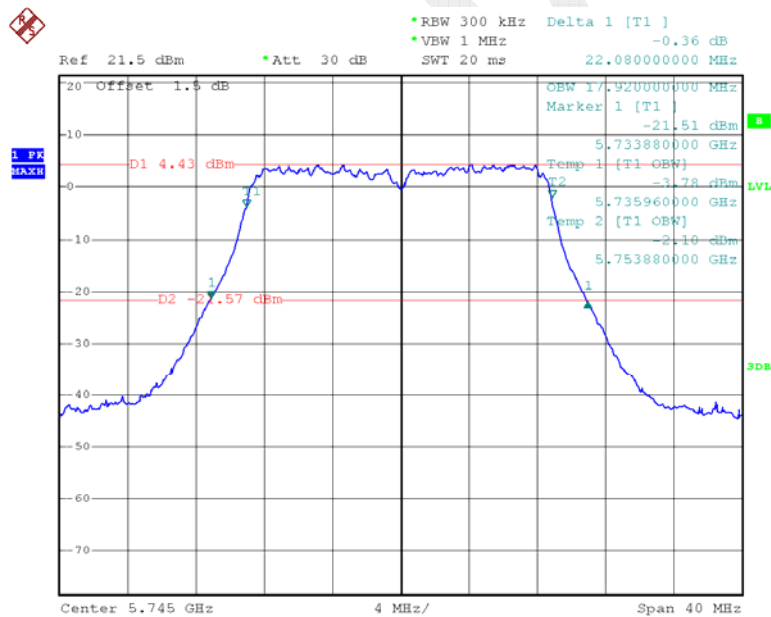
Date: 12.APR.2015 05:18:21

802.11a High Channel – Chain0



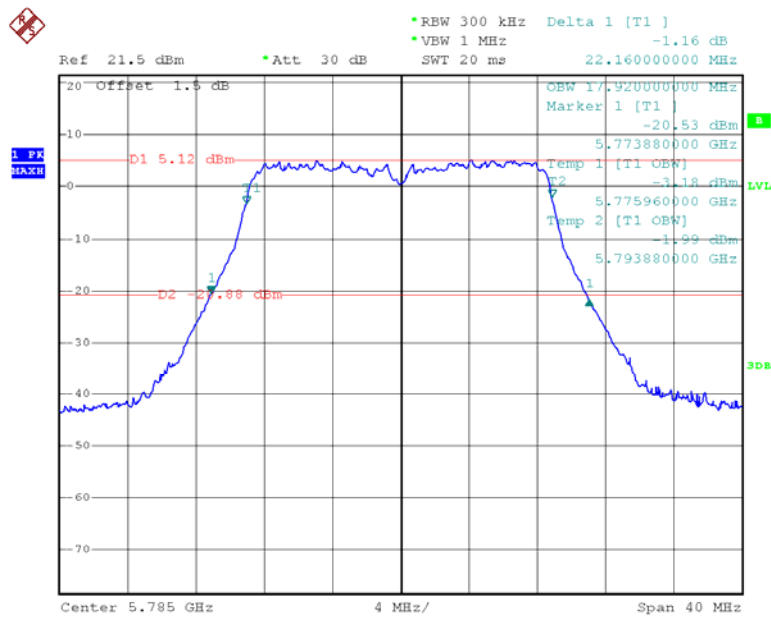
Date: 12.APR.2015 05:21:08

802.11n ht20 Low Channel – Chain0



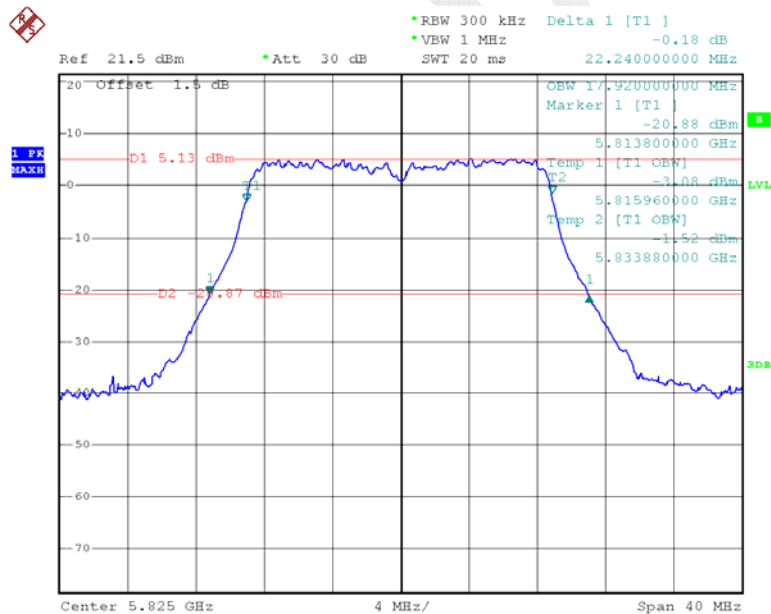
Date: 12.APR.2015 05:38:22

802.11n ht20 Middle Channel – Chain0



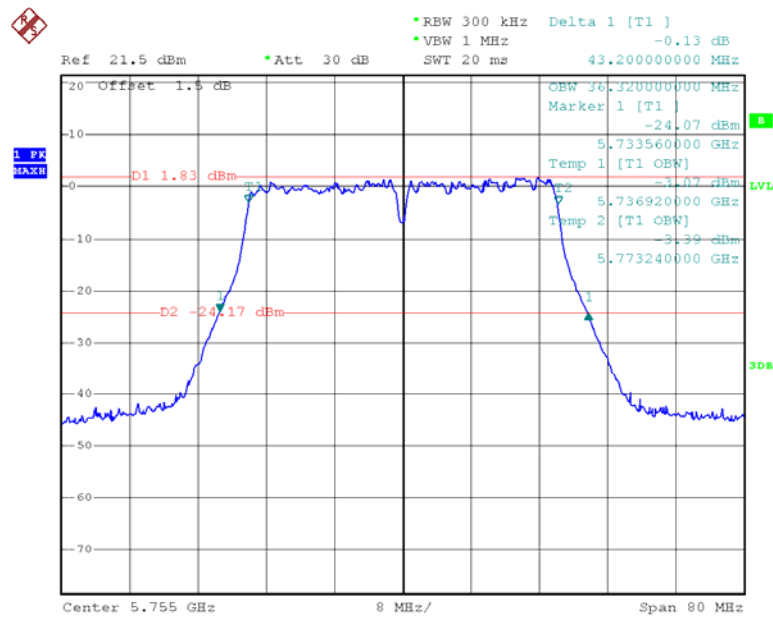
Date: 12.APR.2015 05:40:02

802.11n ht20 High Channel – Chain0



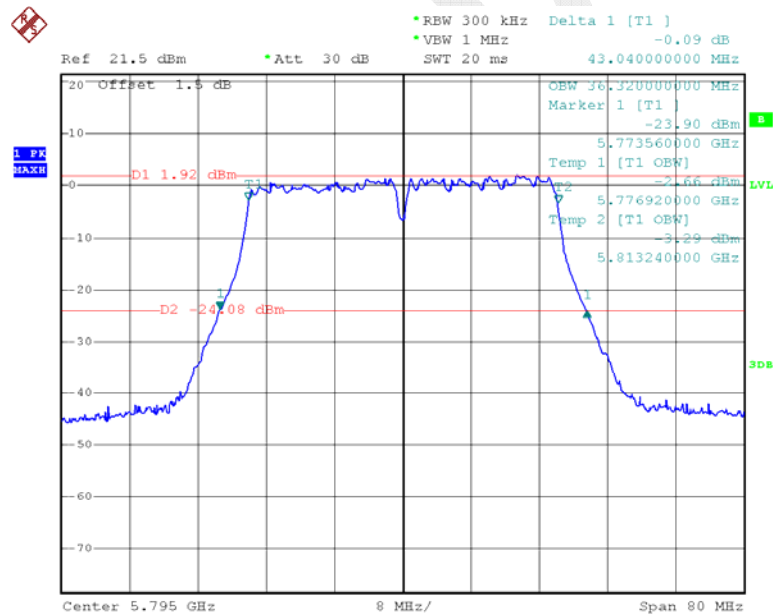
Date: 12.APR.2015 05:41:02

802.11n ht40 Low Channel – Chain0



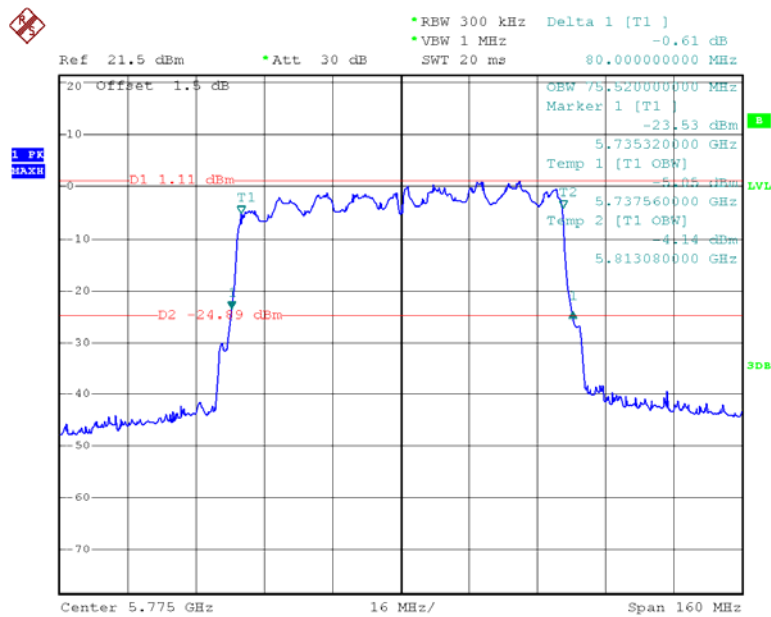
Date: 12.APR.2015 05:42:44

802.11n ht40 High Channel – Chain0



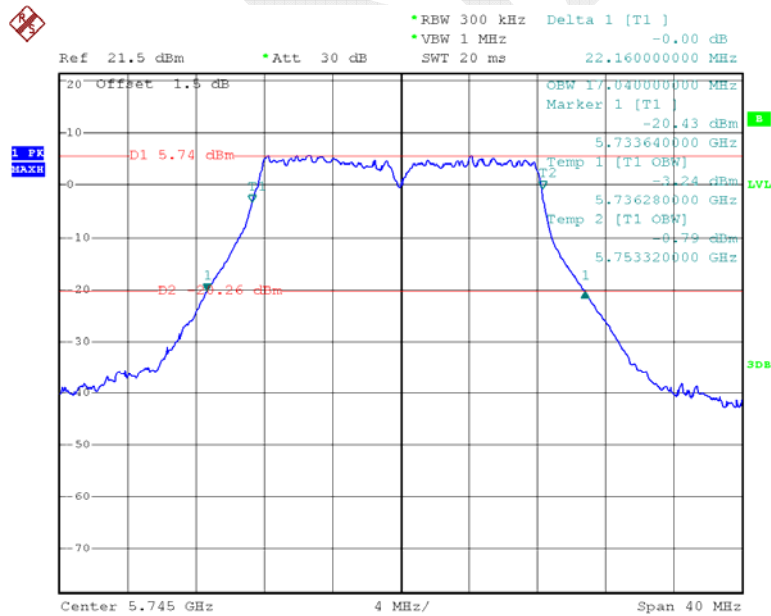
Date: 12.APR.2015 05:43:47

802.11n ac80- Chain0



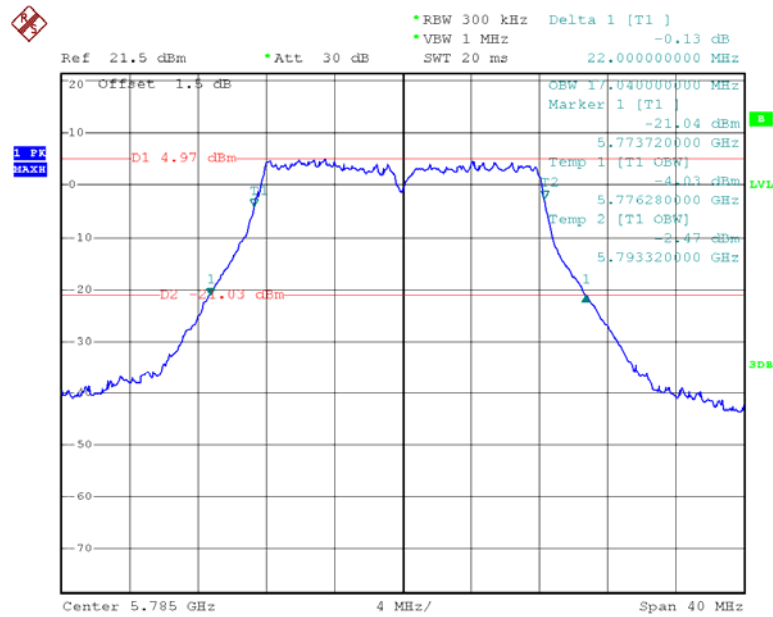
Date: 12.APR.2015 05:44:48

802.11a Low Channel - Chain1



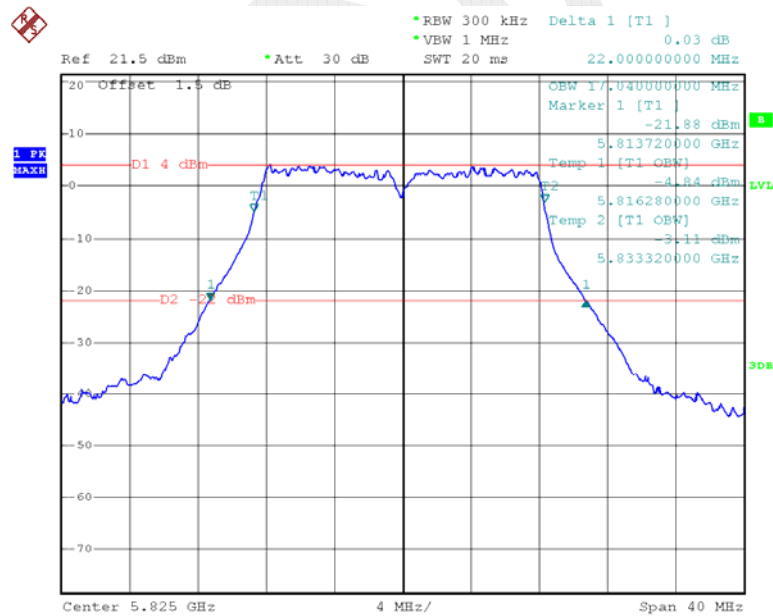
Date: 12.APR.2015 07:35:46

802.11a Middle Channel – Chain1



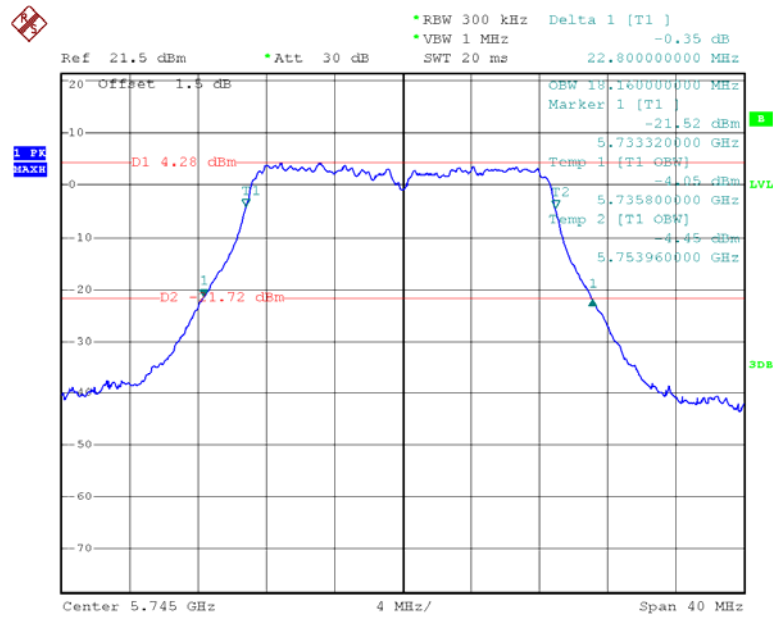
Date: 12.APR.2015 07:36:39

802.11a High Channel – Chain1



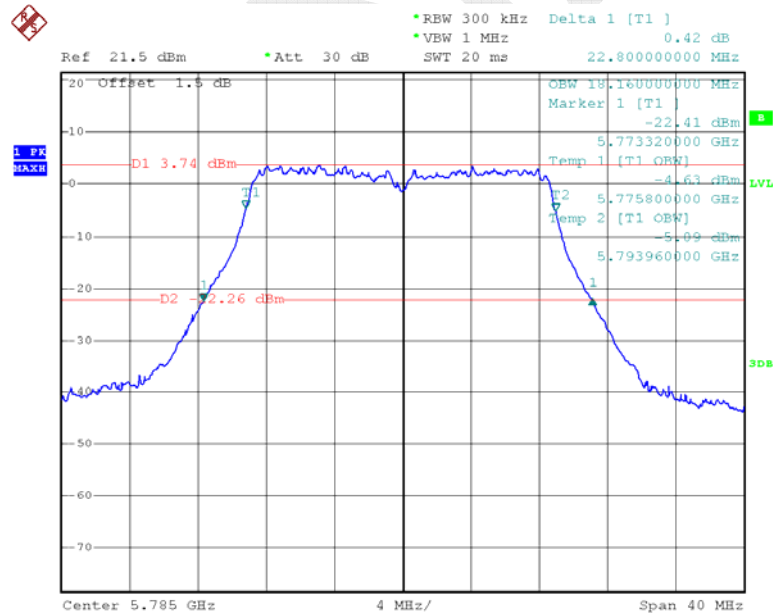
Date: 12.APR.2015 07:38:05

802.11n ht20 Low Channel – Chain1



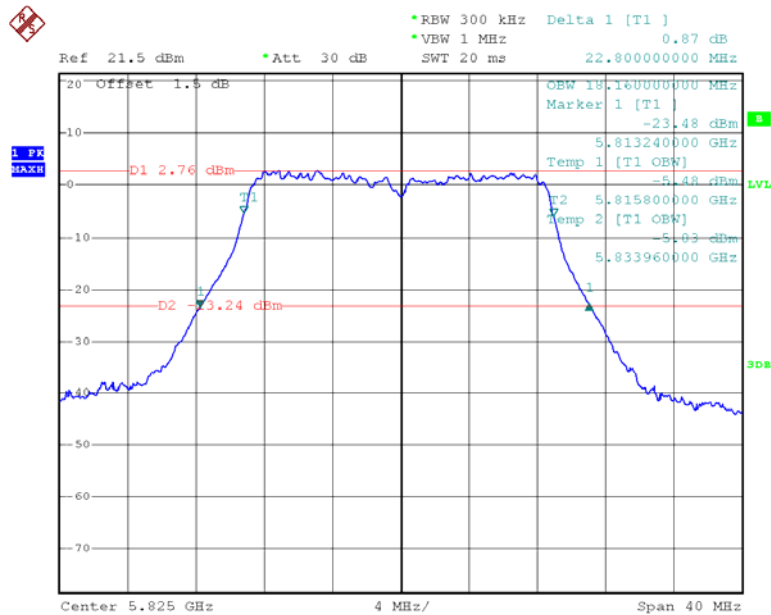
Date: 12.APR.2015 07:32:28

802.11n ht20 Middle Channel – Chain1



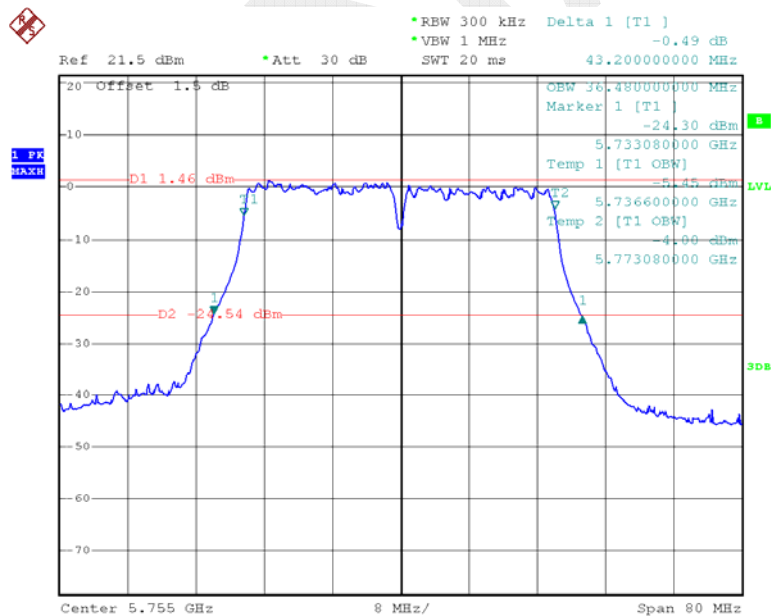
Date: 12.APR.2015 07:33:21

802.11n ht20 High Channel – Chain1

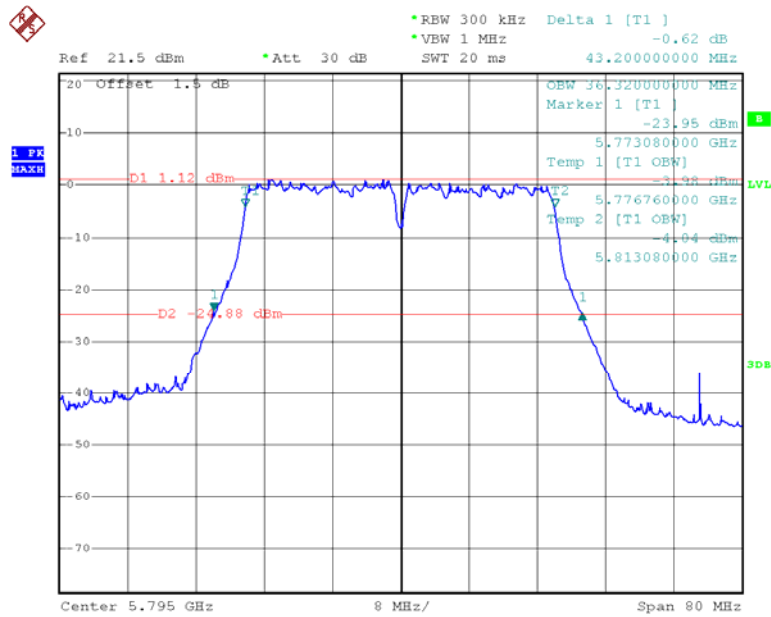


Date: 12.APR.2015 07:34:24

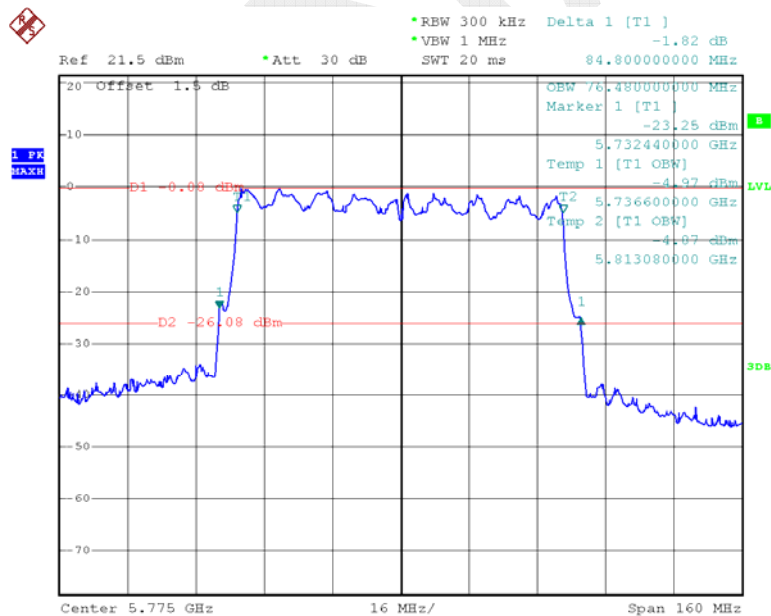
802.11n ht40 Low Channel – Chain1



Date: 12.APR.2015 07:26:59

802.11n ht40 High Channel – Chain1

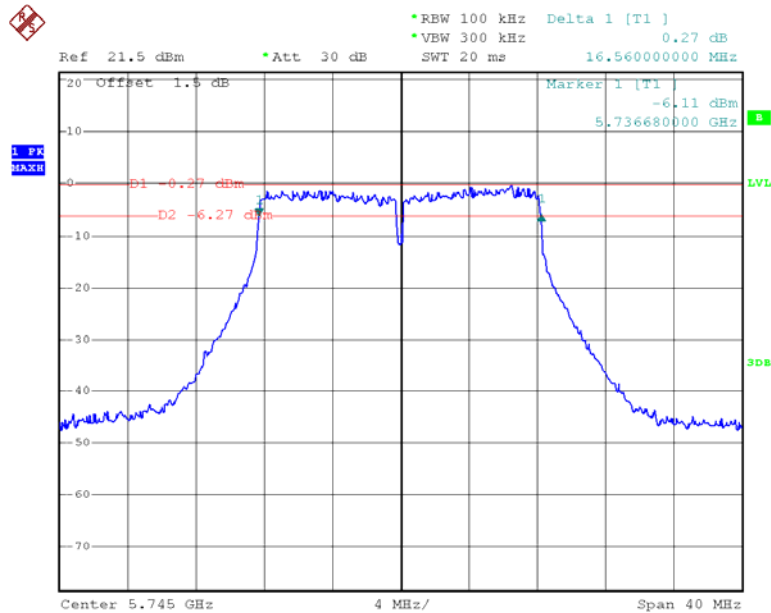
Date: 12.APR.2015 07:28:06

802.11n ac80 – Chain1

Date: 12.APR.2015 07:30:37

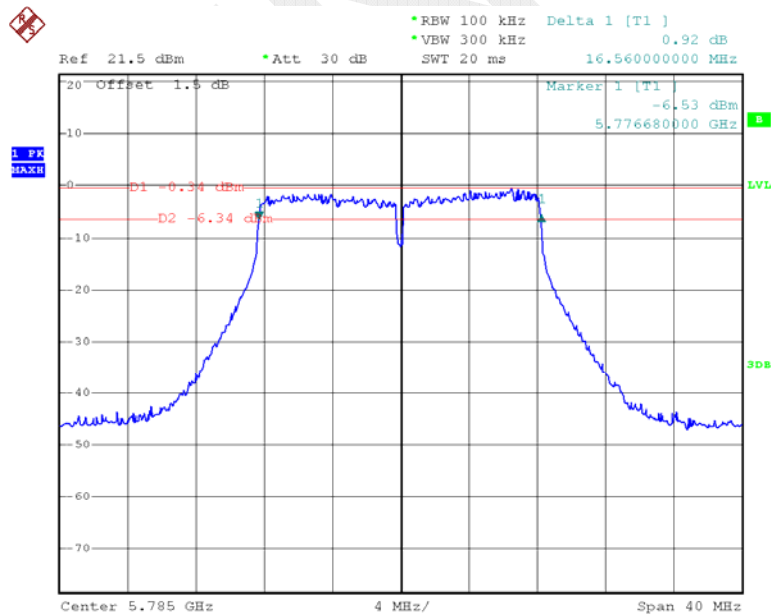
6 dB Bandwidth

802.11a Low Channel – Chain0



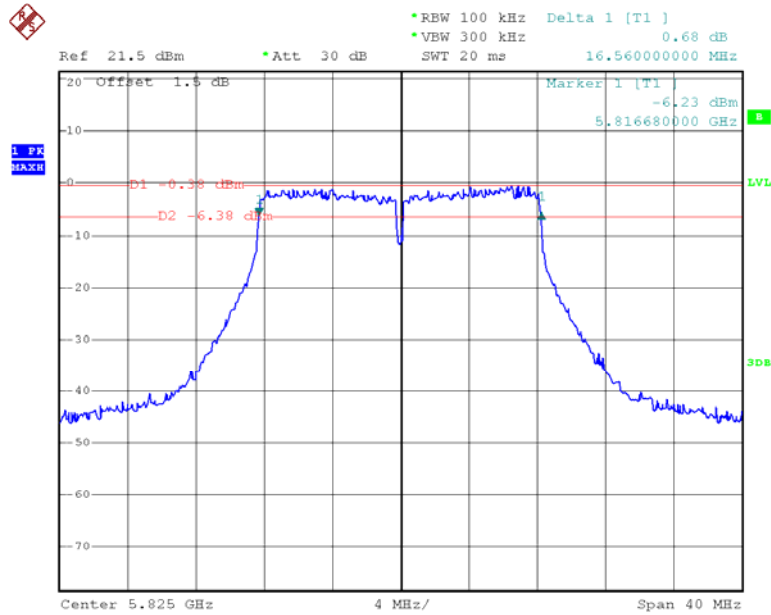
Date: 12.APR.2015 06:02:57

802.11a Middle Channel – Chain0



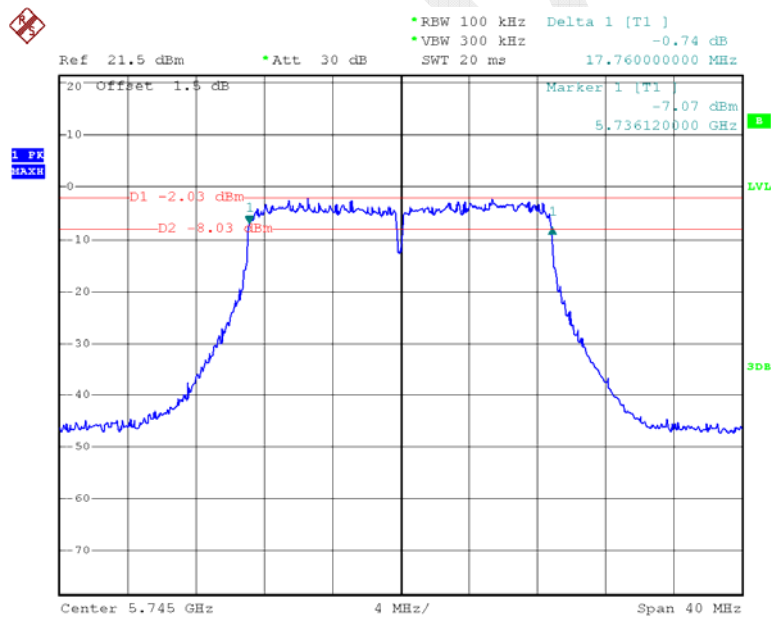
Date: 12.APR.2015 06:03:44

802.11a High Channel – Chain0



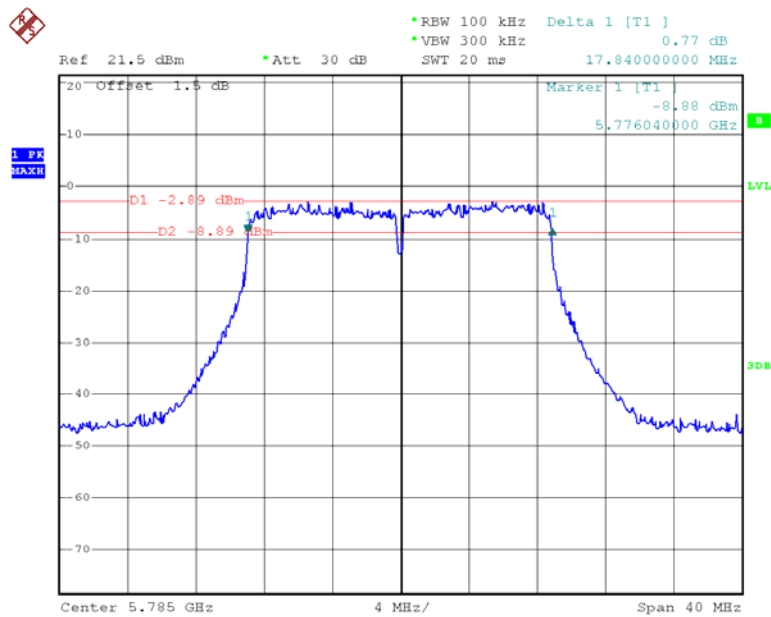
Date: 12.APR.2015 06:04:25

802.11n ht20 Low Channel – Chain0



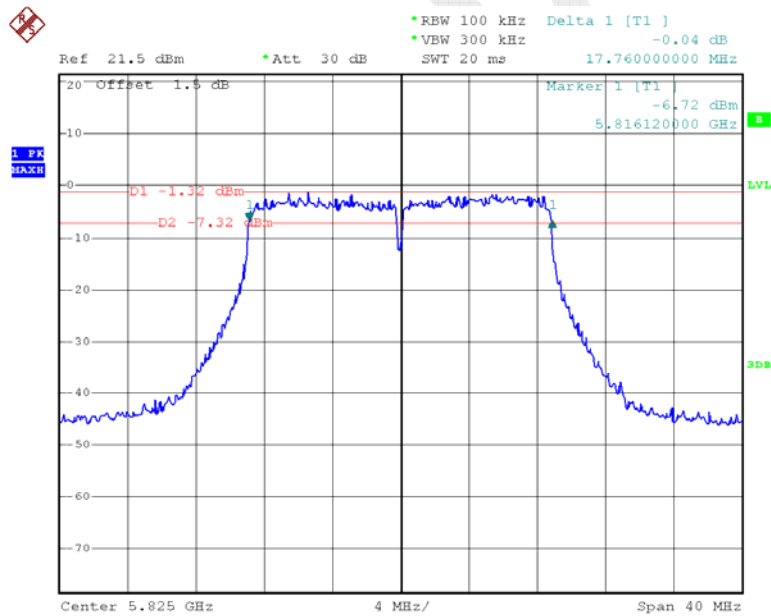
Date: 12.APR.2015 06:07:06

802.11n ht20 Middle Channel – Chain0



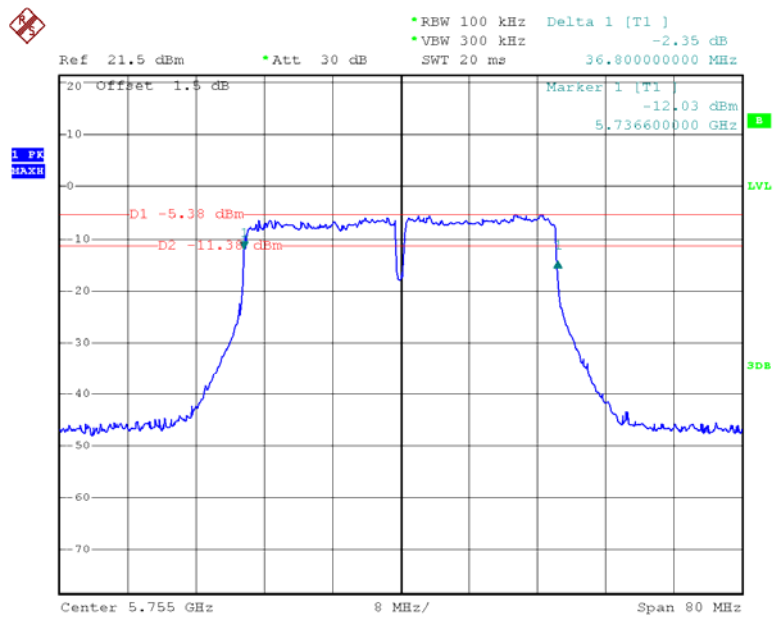
Date: 12.APR.2015 06:06:13

802.11n ht20 High Channel – Chain0



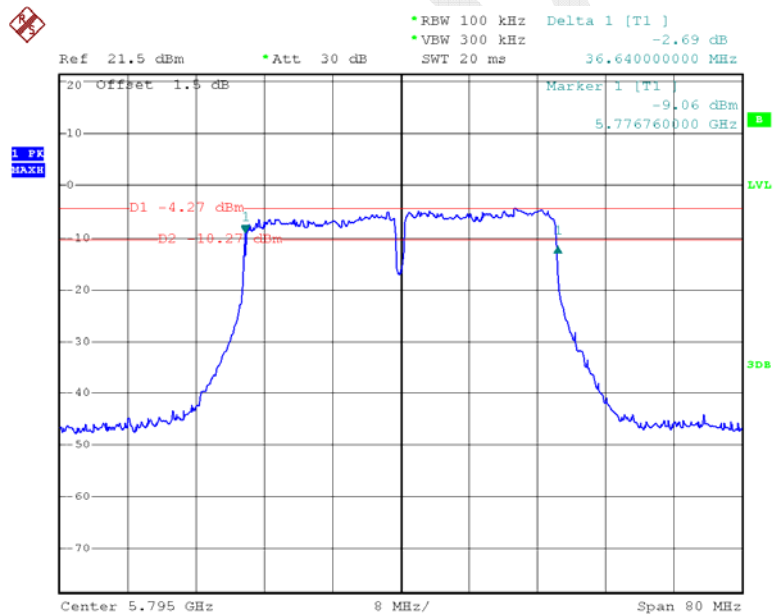
Date: 12.APR.2015 06:05:20

802.11n ht40 Low Channel – Chain0

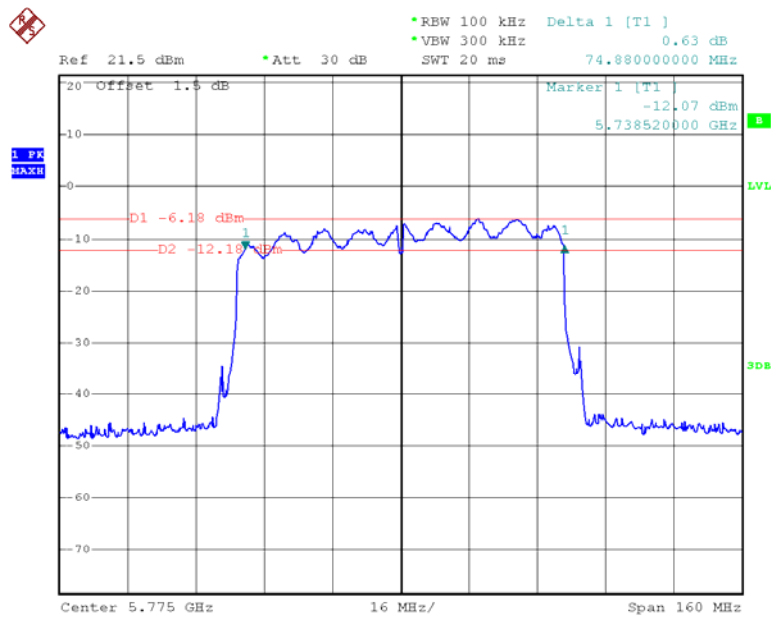


Date: 12.APR.2015 06:08:30

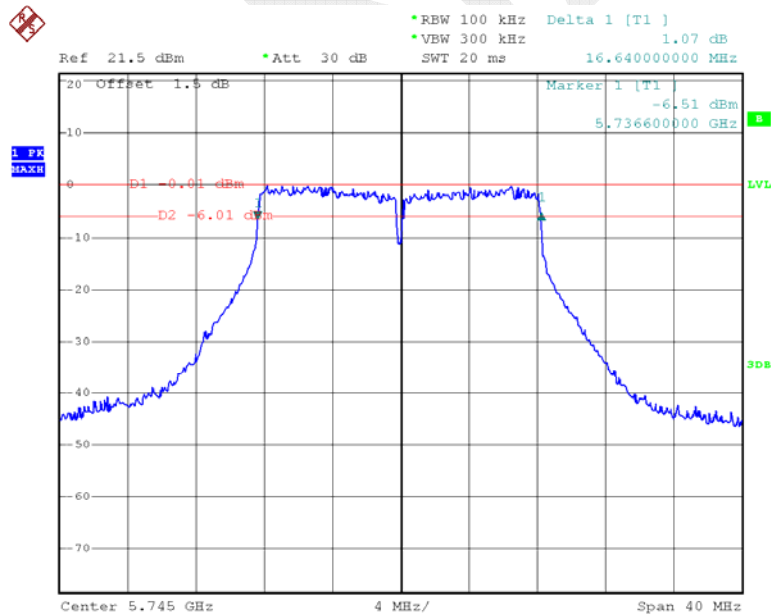
802.11n ht40 High Channel – Chain0



Date: 12.APR.2015 06:09:21

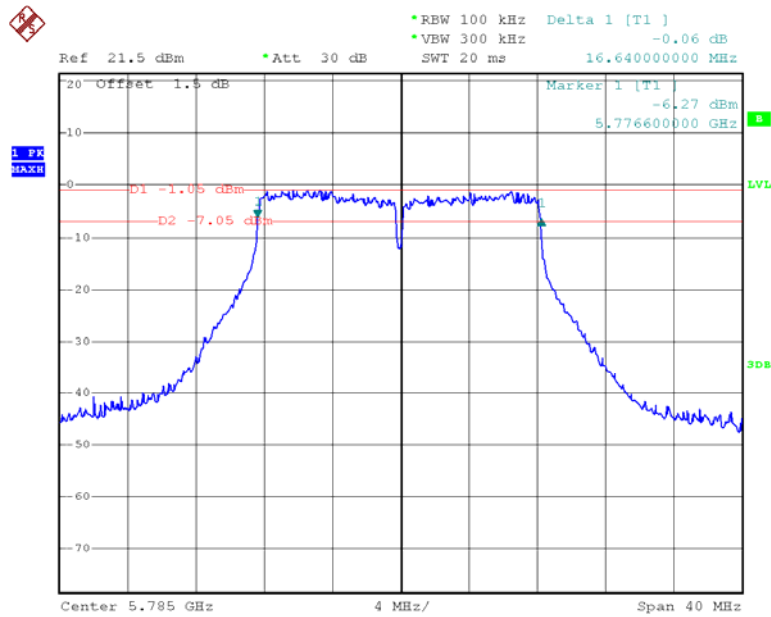
802.11n ac80 – Chain0

Date: 12.APR.2015 06:10:18

802.11a Low Channel – Chain1

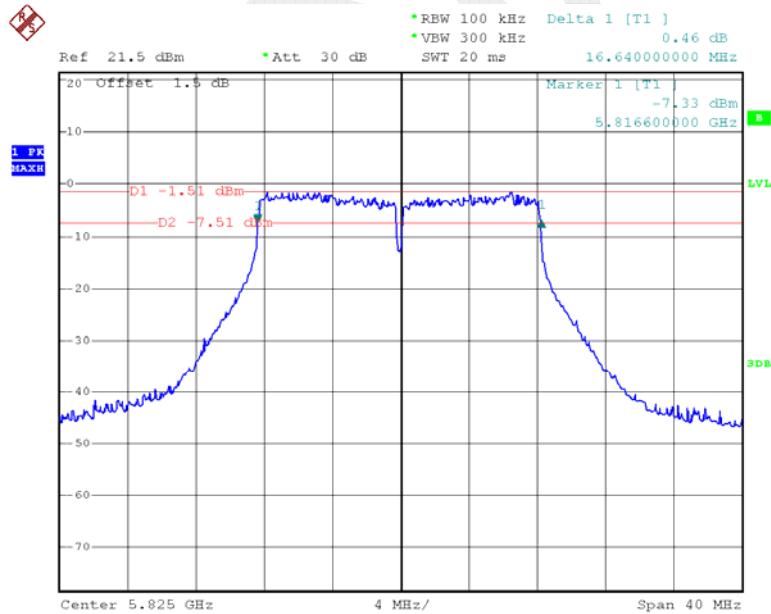
Date: 12.APR.2015 07:52:24

802.11a Middle Channel – Chain1



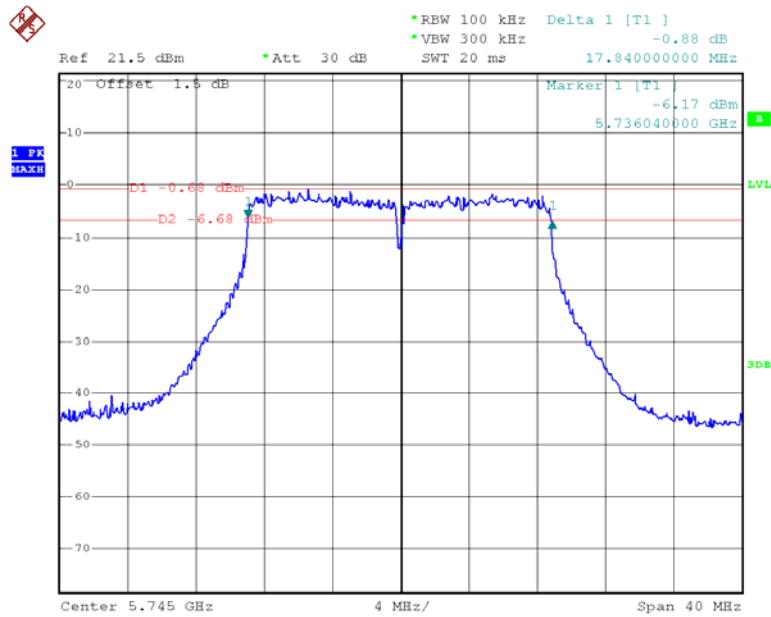
Date: 12.APR.2015 07:51:45

802.11a High Channel – Chain1



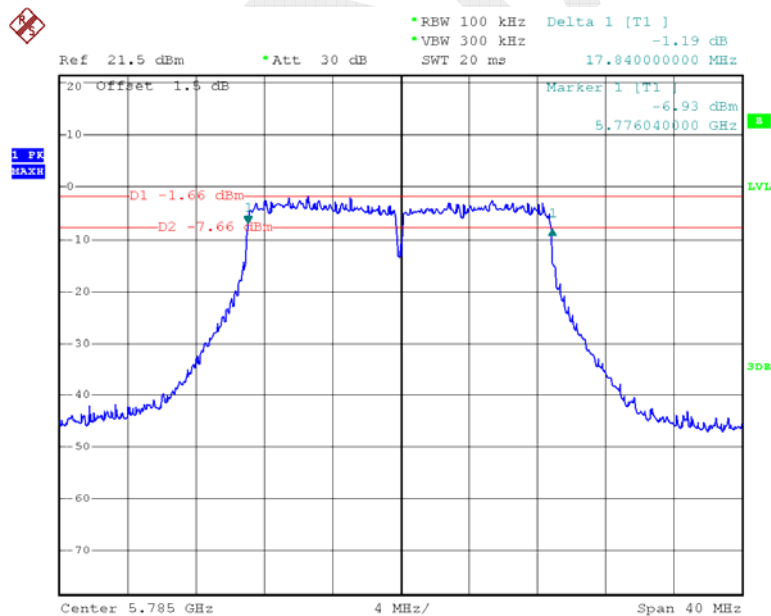
Date: 12.APR.2015 07:51:09

802.11n ht20 Low Channel – Chain1



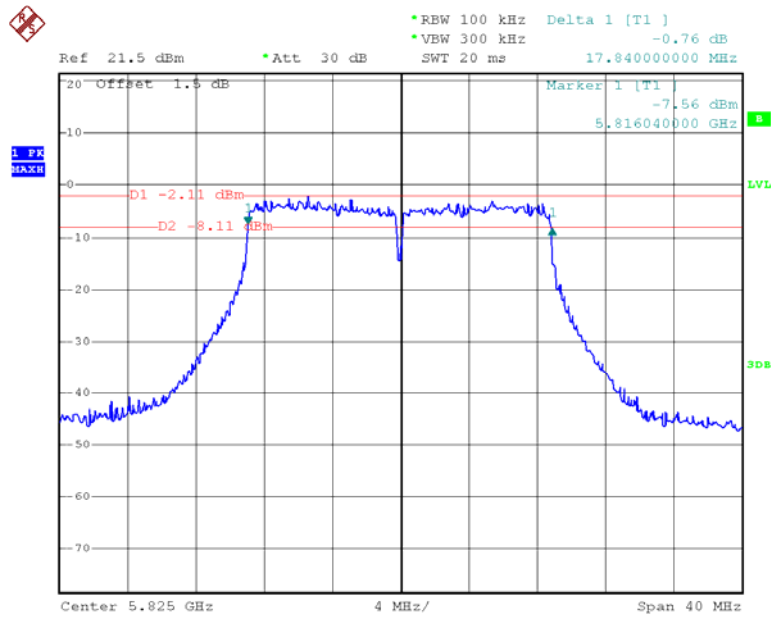
Date: 12.APR.2015 07:49:01

802.11n ht20 Middle Channel – Chain1



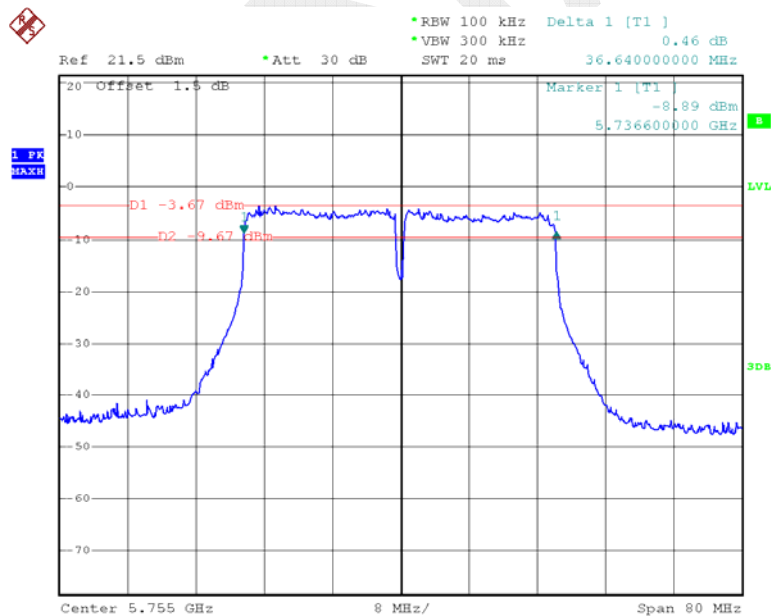
Date: 12.APR.2015 07:49:43

802.11n ht20 High Channel – Chain1



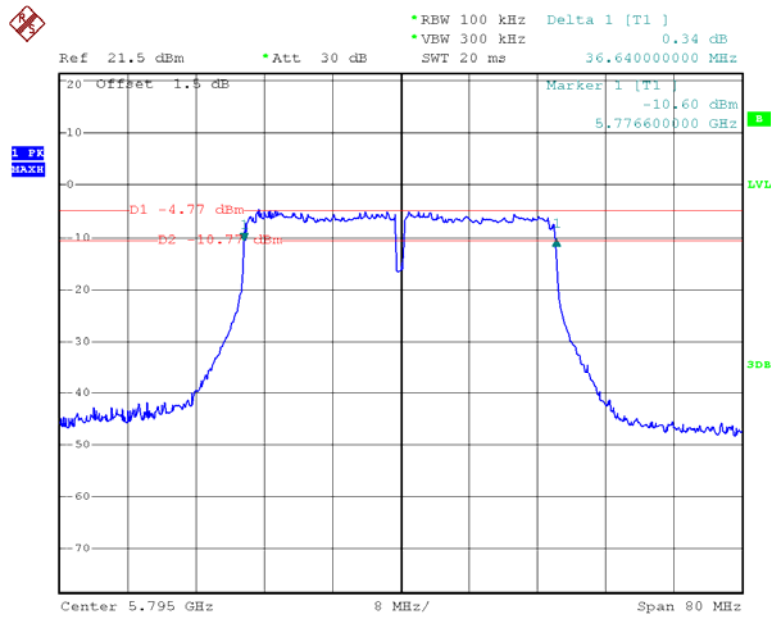
Date: 12.APR.2015 07:50:23

802.11n ht40 Low Channel – Chain1



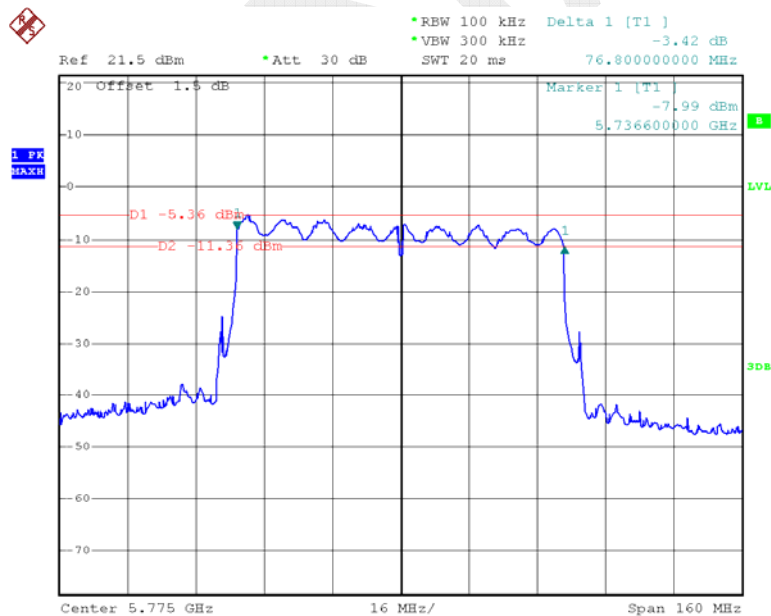
Date: 12.APR.2015 07:47:29

802.11n ht40 High Channel – Chain1



Date: 12.APR.2015 07:48:08

802.11n ac80 – Chain1



Date: 12.APR.2015 07:46:10

FCC §15.407(a) (1) (ii) (4) –MAXIMUM CONDUCTED OUTPUT POWER**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
R&S	Spectrum Analyzer	FSP 38	100478	2014-05-09	2015-05-09

* **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 v01.

Test Data

Environmental Conditions

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

The testing was performed by Allen Qiao on 2015-04-12.

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	15.28	14.74	18.03	28	PASS
	Middle	5200	14.78	14.44	17.62	28	PASS
	High	5240	14.99	14.97	17.99	28	PASS
802.11n20	Low	5180	15.39	14.42	17.94	28	PASS
	Middle	5200	14.94	14.52	17.75	28	PASS
	High	5240	15.32	14.97	18.16	28	PASS
802.11n40	Low	5190	11.32	12.38	14.89	28	PASS
	High	5230	11.07	12.88	15.08	28	PASS
802.11ac80	/	5210	9.22	10.09	12.69	28	PASS

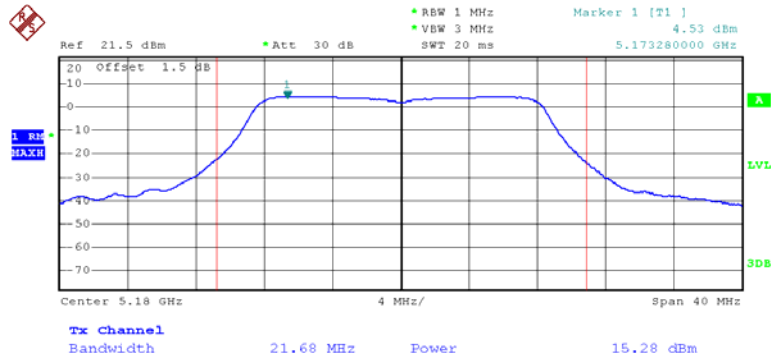
5725-5850 MHz band

Mode	Channel	Frequency	Maximum Conducted Output Power (dBm)				Result
		MHz	Chain 0	Chain 1	Total	Limits	
802.11a	Low	5745	13.67	14.14	16.92	28	PASS
	Middle	5785	13.44	13.16	16.31	28	PASS
	High	5825	13.48	12.12	15.86	28	PASS
802.11n20	Low	5745	11.36	12.71	15.10	28	PASS
	Middle	5785	11.63	12.03	14.84	28	PASS
	High	5825	12.55	11.66	15.14	28	PASS
802.11n40	Low	5755	13.38	13.47	16.44	28	PASS
	High	5795	14.02	12.73	16.43	28	PASS
802.11ac80	/	5775	14.85	13.65	17.30	28	PASS

- Note: 1. Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi
 $= 8 > 6$ dBi, so the limit shall be reduced to $30 - (8 - 6) = 28$ dBm
2. Duty cycle is 100%.
3. The EUT is only for indoor use.

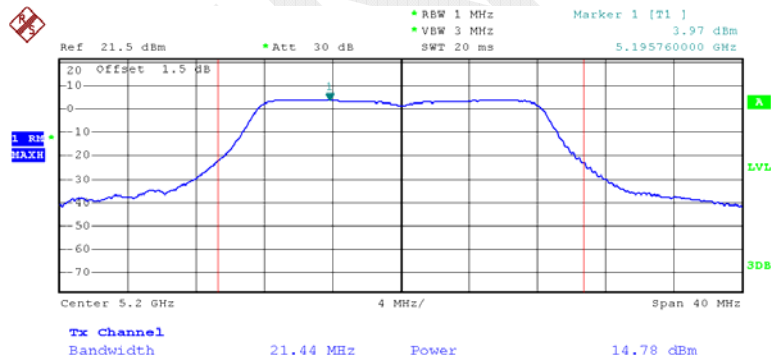
5150MHz-5250MHz:

802.11a Low Channel – Chain0



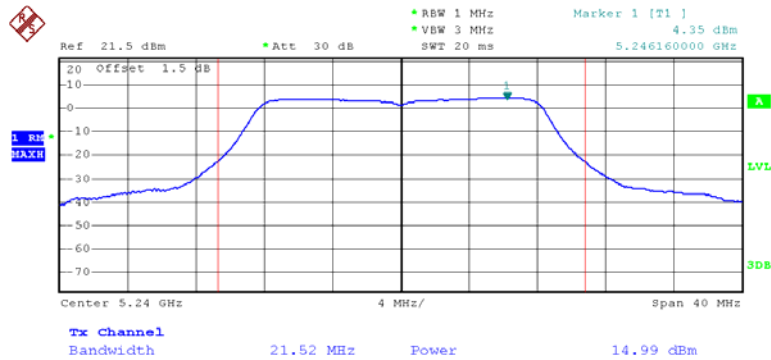
Date: 12.APR.2015 08:35:51

802.11a Middle Channel – Chain0



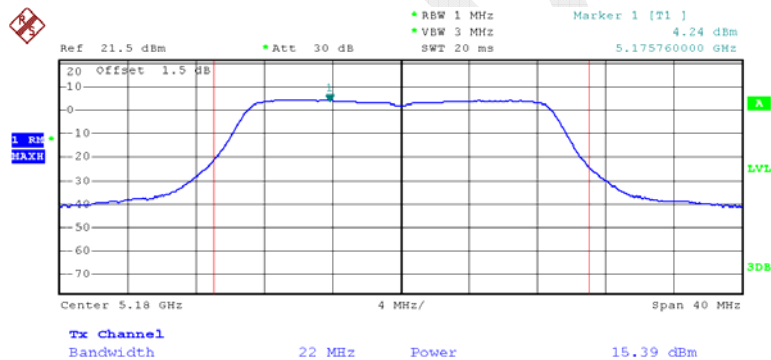
Date: 12.APR.2015 08:36:19

802.11a High Channel – Chain0



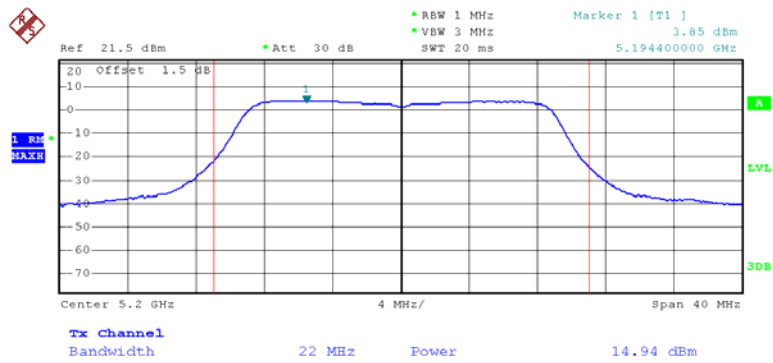
Date: 12.APR.2015 08:37:05

802.11n ht20 Low Channel – Chain0



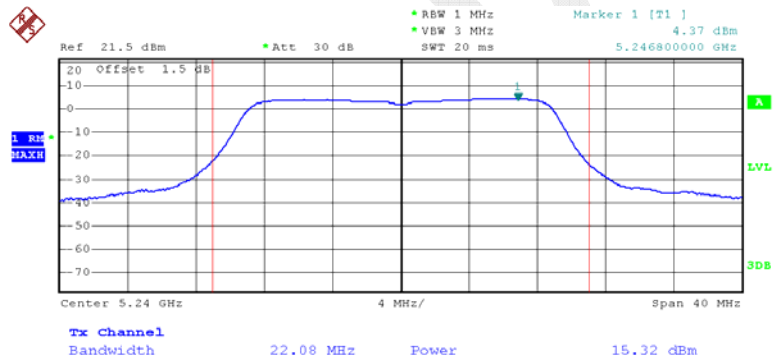
Date: 12.APR.2015 08:33:51

802.11n ht20 Middle Channel – Chain0



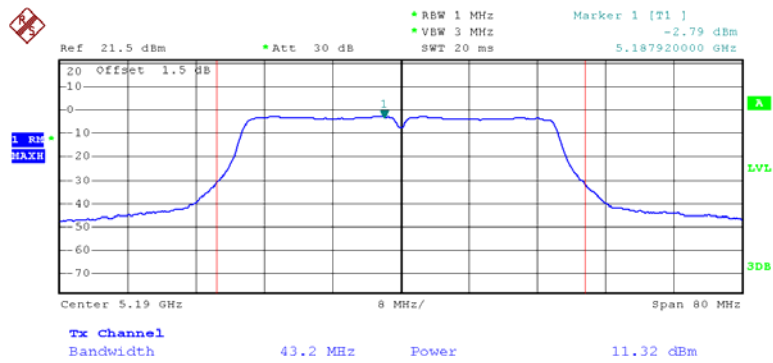
Date: 12.APR.2015 08:34:12

802.11n ht20 High Channel – Chain0



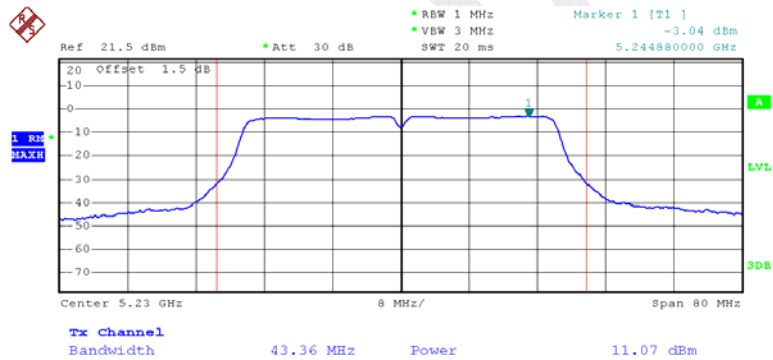
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802.11n ht40 Low Channel – Chain0



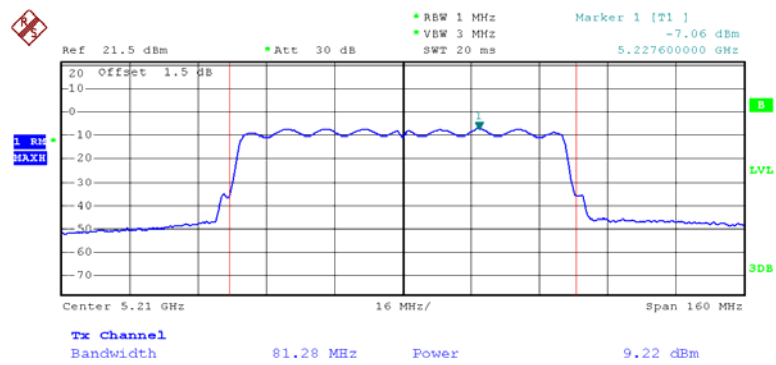
Date: 12.APR.2015 08:31:59

802.11n ht40 High Channel – Chain0



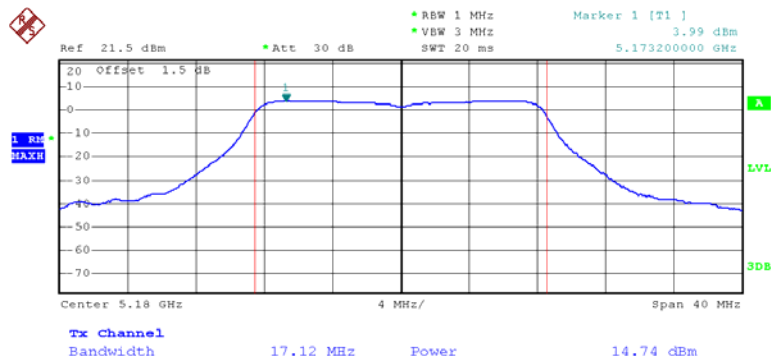
Date: 12.APR.2015 08:32:37

802.11ac80 – Chain0



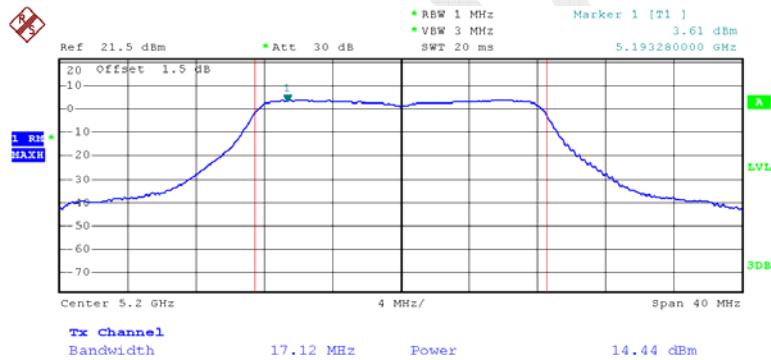
Date: 12.APR.2015 08:24:57

802.11a Low Channel – Chain1



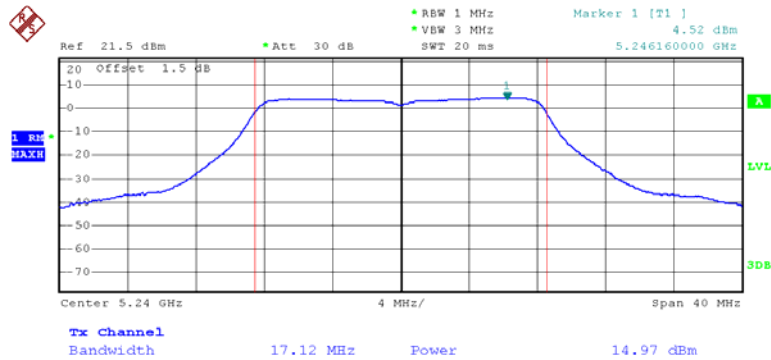
Date: 12.APR.2015 09:29:17

802.11a Middle Channel – Chain1



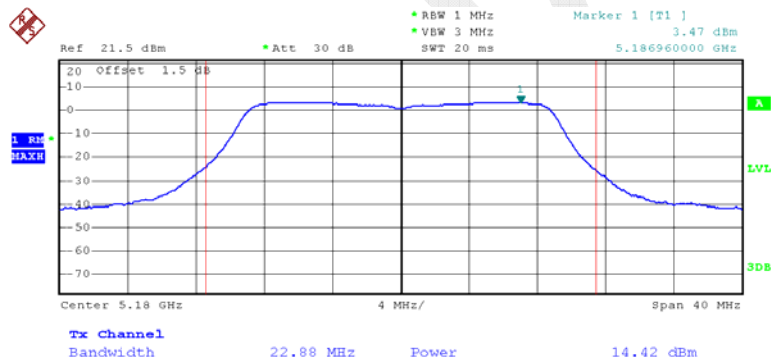
Date: 12.APR.2015 09:29:31

802.11a High Channel – Chain1



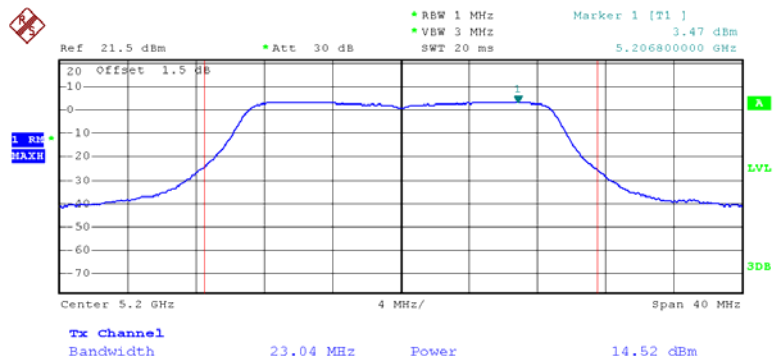
Date: 12.APR.2015 09:29:56

802.11n ht20 Low Channel – Chain1



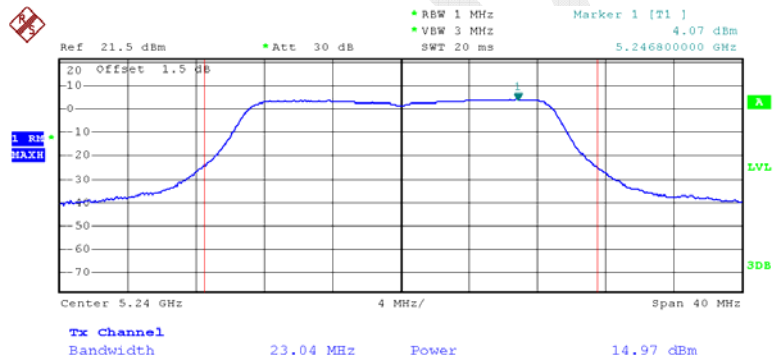
Date: 12.APR.2015 09:26:27

802.11n ht20 Middle Channel – Chain1



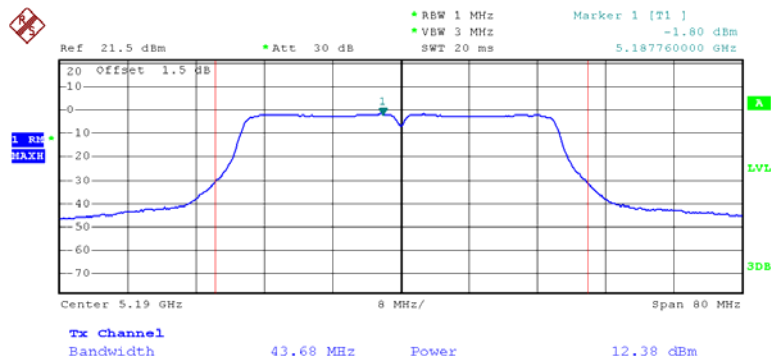
Date: 12.APR.2015 09:27:13

802.11n ht20 High Channel – Chain1



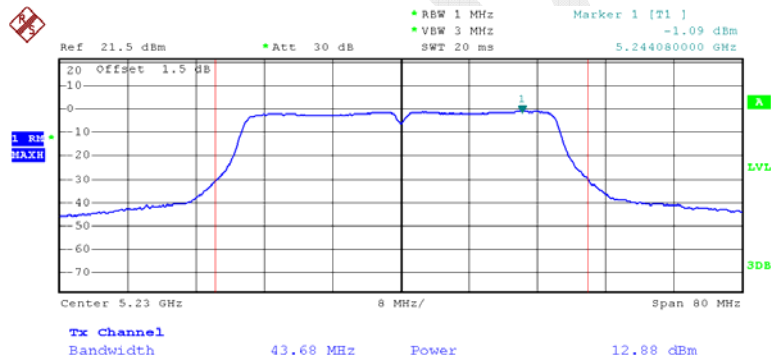
Date: 12.APR.2015 09:28:01

802.11n ht40 Low Channel – Chain1



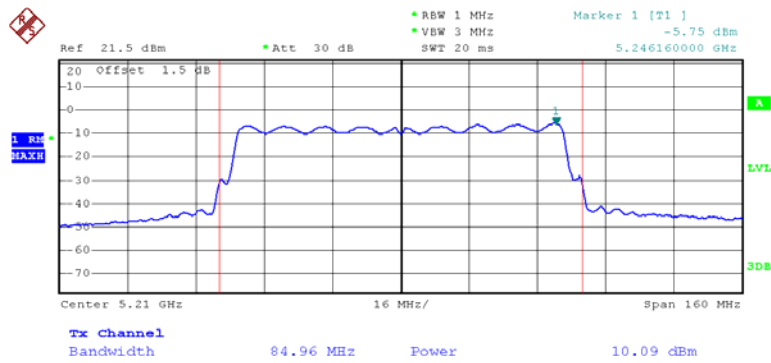
Date: 12.APR.2015 09:24:33

802.11n ht40 High Channel – Chain1



Date: 12.APR.2015 09:24:54

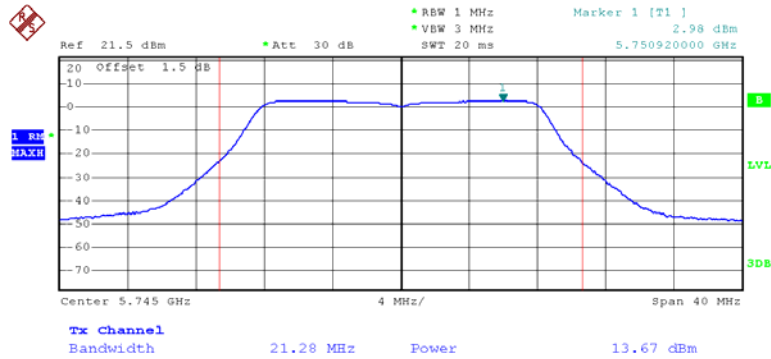
802.11ac80 – Chain1



Date: 12.APR.2015 09:21:39

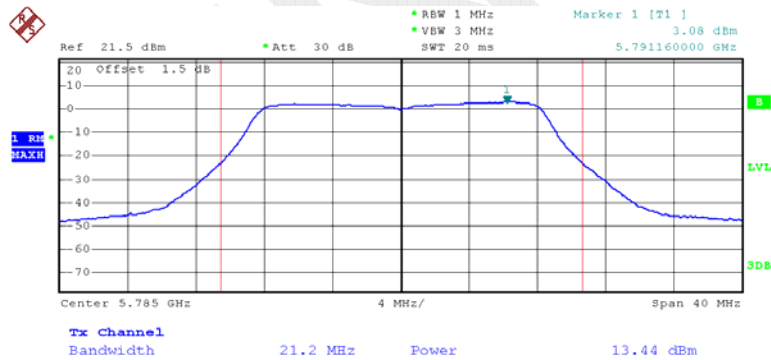
5725MHz-5850MHz:

802.11a Low Channel – Chain0



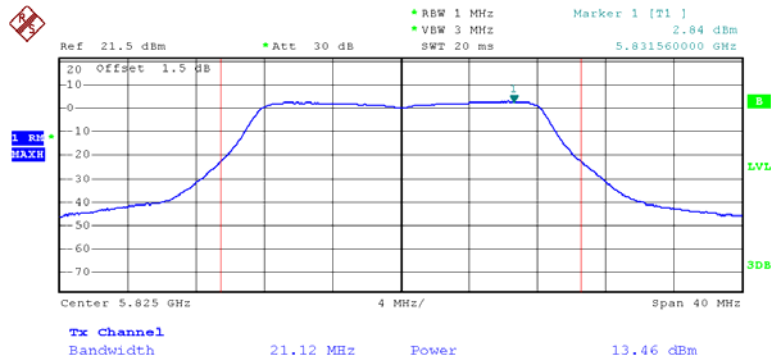
Date: 12.APR.2015 05:57:58

802.11a Middle Channel – Chain0



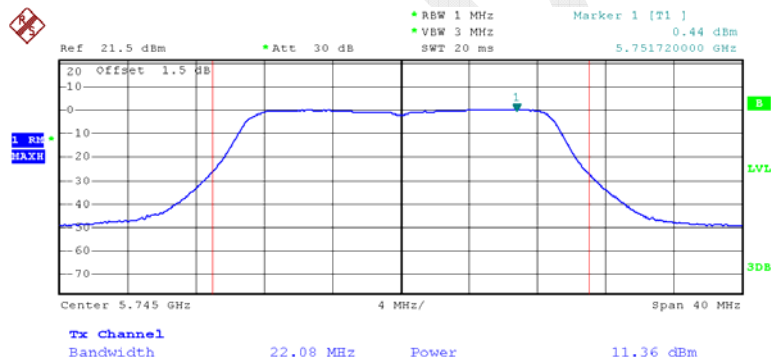
Date: 12.APR.2015 06:01:02

802.11a High Channel – Chain0



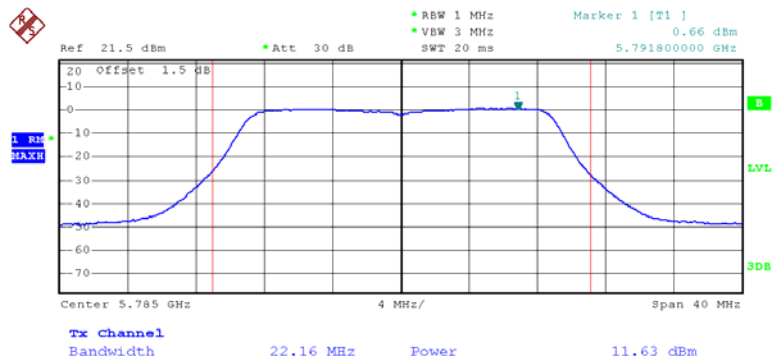
Date: 12.APR.2015 06:00:06

802.11n ht20 Low Channel – Chain0



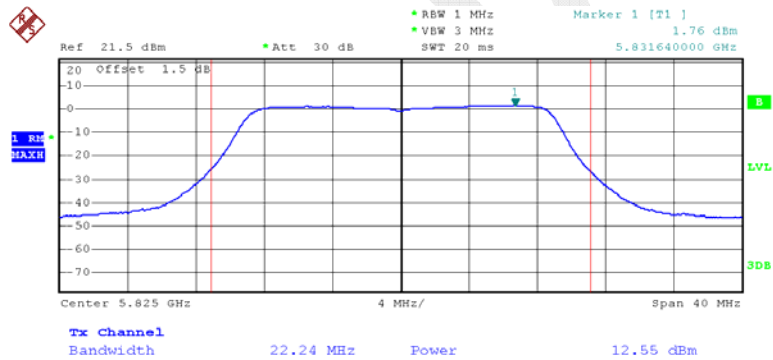
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802.11n ht20 Middle Channel – Chain0



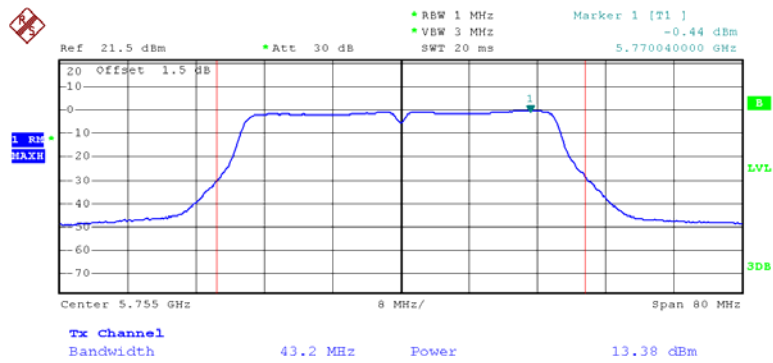
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802.11n ht20 High Channel – Chain0



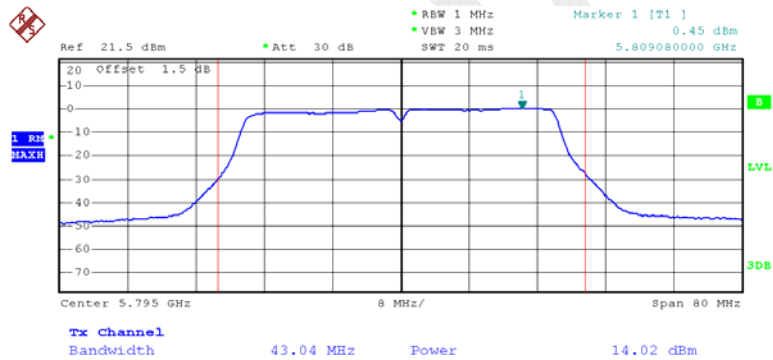
Date: 12.APR.2015 05:56:42

802.11n ht40 Low Channel – Chain0



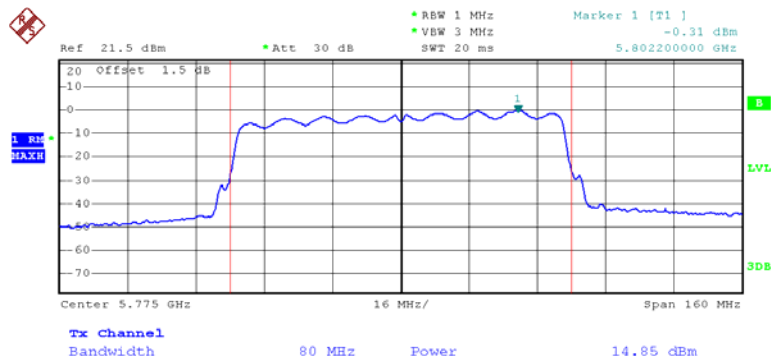
Date: 12.APR.2015 05:50:04

802.11n ht40 High Channel – Chain0



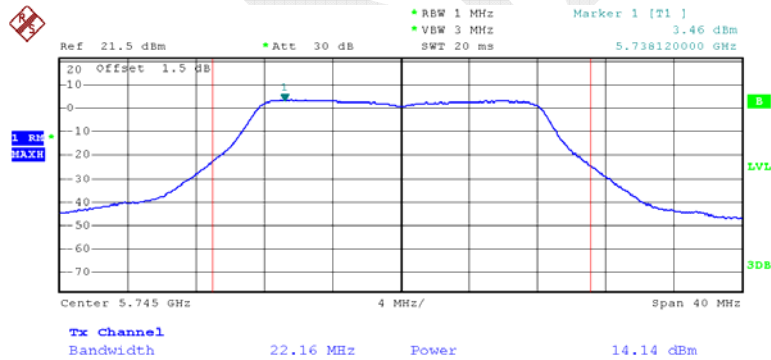
Date: 12.APR.2015 05:51:32

802.11ac80 – Chain0



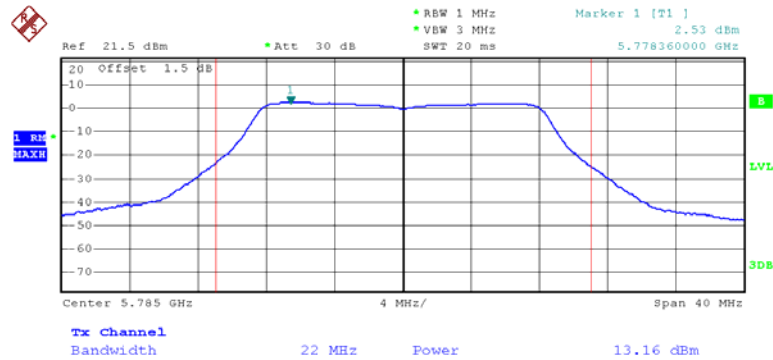
Date: 12.APR.2015 05:47:58

802.11a Low Channel – Chain1



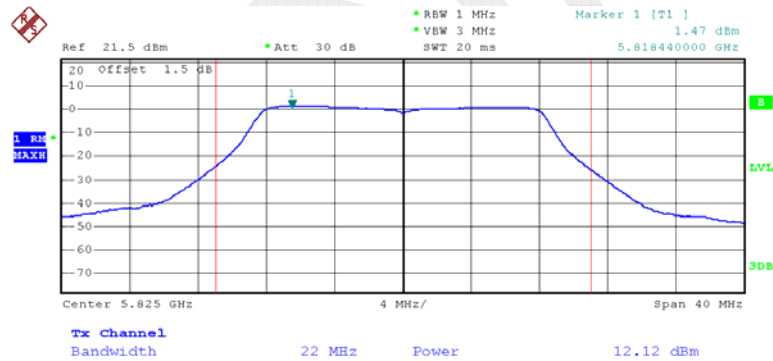
Date: 12.APR.2015 07:40:32

802.11a Middle Channel – Chain1



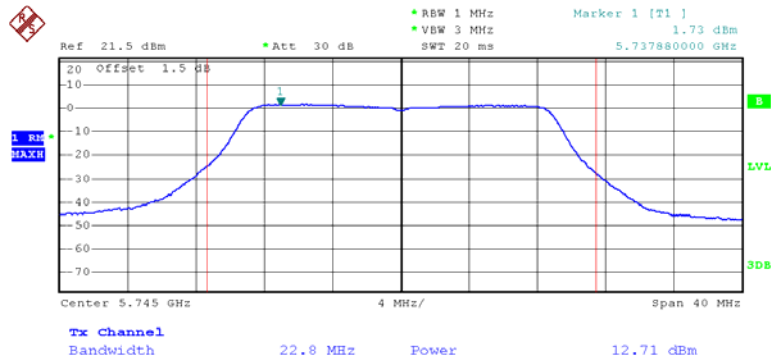
Date: 12.APR.2015 07:39:52

802.11a High Channel – Chain1



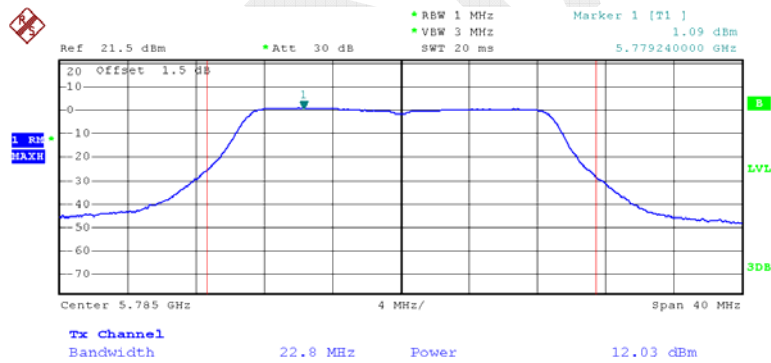
Date: 12.APR.2015 07:39:18

802.11n ht20 Low Channel – Chain1



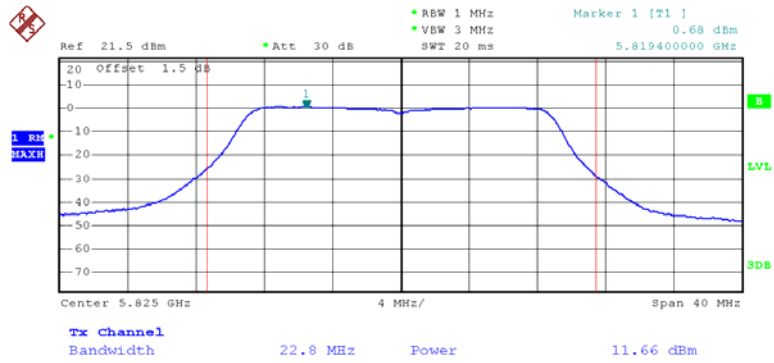
Date: 12.APR.2015 07:41:25

802.11n ht20 Middle Channel – Chain1



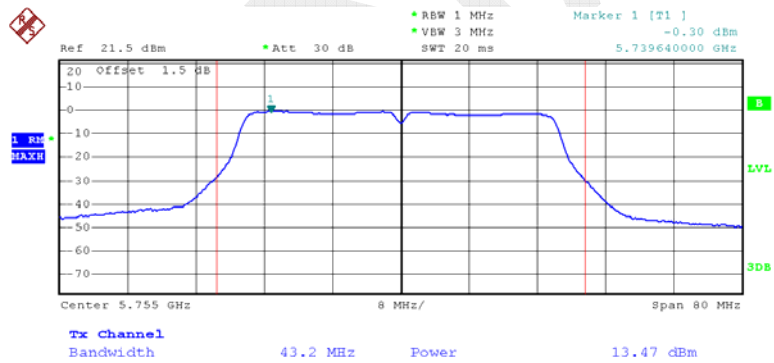
Date: 12.APR.2015 07:41:47

802.11n ht20 High Channel – Chain1



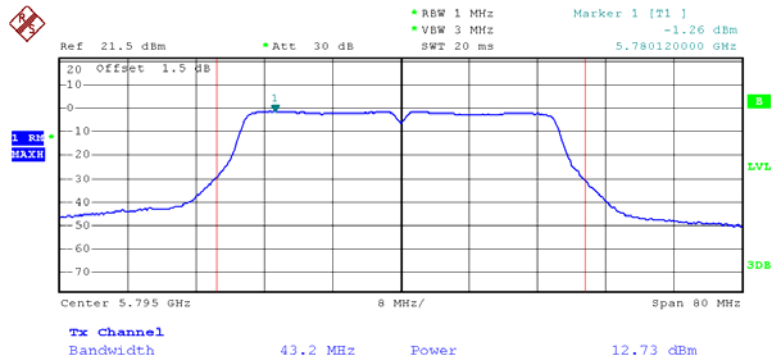
Date: 12.APR.2015 07:42:15

802.11n ht40 Low Channel – Chain1



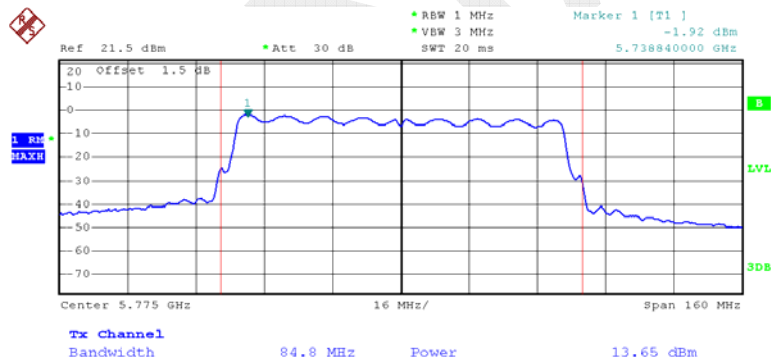
Date: 12.APR.2015 07:43:25

802.11n ht40 High Channel – Chain1



Date: 12.APR.2015 07:43:45

802.11ac80 – Chain1



Date: 12.APR.2015 07:44:30

FCC §15.407(a) - POWER SPECTRAL DENSITY

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 dBm $10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v01

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

* **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:	22.9~24.3 °C
Relative Humidity:	47~57 %
ATM Pressure:	100.7~101.5 kPa

The testing was performed by Allen Qiao from 2015-04-12 to 2015-04-17.

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	4.06	3.91	7.00	15	PASS
	Middle	5200	3.62	3.59	6.62	15	PASS
	High	5240	4.22	4.15	7.20	15	PASS
802.11n20	Low	5180	4.13	3.24	6.72	15	PASS
	Middle	5200	3.56	2.33	6.00	15	PASS
	High	5240	4.49	3.57	7.06	15	PASS
802.11n40	Low	5190	-3.34	-1.61	0.62	15	PASS
	High	5230	-3.26	-0.79	1.16	15	PASS
802.11ac80	/	5210	-7.14	-3.11	-1.66	15	PASS

- Note: 1. Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi
 $= 8 > 6$ dBi, so the limit shall be reduced to $17 - (8 - 6) = 15$ dBm
2. Duty cycle is 100%.
3. The EUT is only for indoor use.

5725MHz-5850MHz:

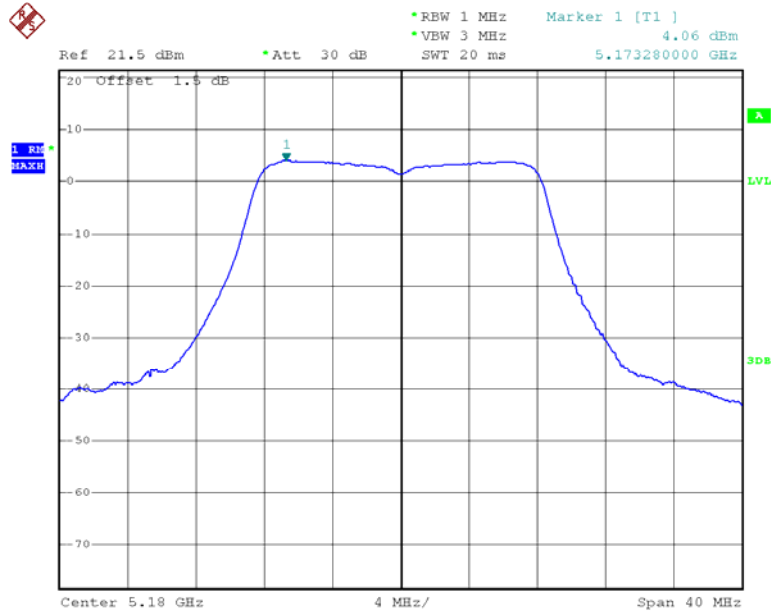
Mode	Channel	Frequency	Power Spectral Density (dBm/300kHz)		Power Spectral Density (dBm/500kHz)			Limits (dBm/500kHz)
		MHz	Chain 0	Chain 1	Chain0 Integrated Value	Chain 1 Integrated Value	Total	
802.11a	Low	5745	-2.94	-2.68	-0.72	-0.46	4.62	28
	Middle	5785	-2.44	-2.64	-0.22	-0.42	4.89	28
	High	5825	-2.23	-2.55	-0.01	-0.33	5.04	28
802.11n20	Low	5745	-3.5	-2.89	-1.28	-0.67	4.24	28
	Middle	5785	-4.23	-3.15	-2.01	-0.93	3.77	28
	High	5825	-3.41	-3.05	-1.19	-0.83	4.20	28
802.11n40	Low	5755	-6.14	-5.56	-3.92	-3.34	1.59	28
	High	5795	-5.5	-5.98	-3.28	-3.76	1.70	28
802.11ac80	/	5775	-6.55	-7.15	-4.33	-4.93	0.59	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: 1. Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi
 $= 8 > 6$ dBi, so the limit shall be reduced to $30 - (8 - 6) = 28$ dBm
2. Duty cycle is 100%.
3. The EUT is only for indoor use.

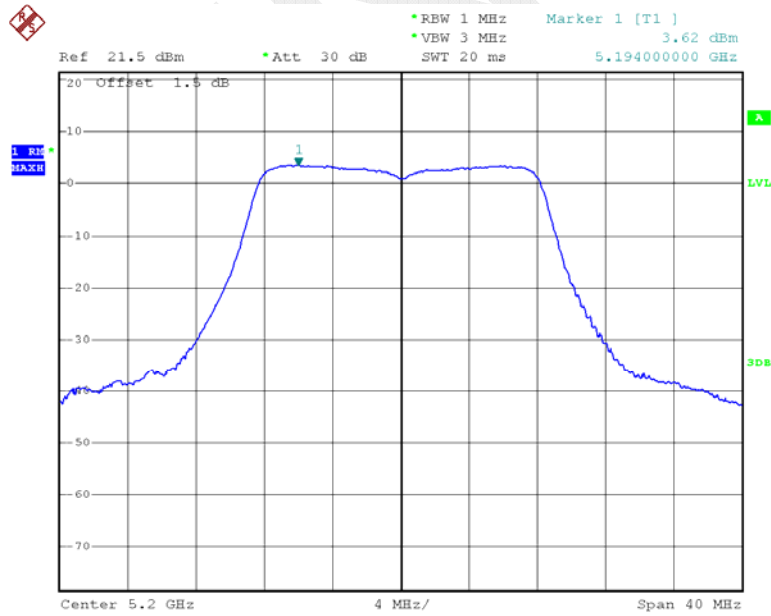
5150MHz-5250MHz:

802.11a Low Channel – Chain0



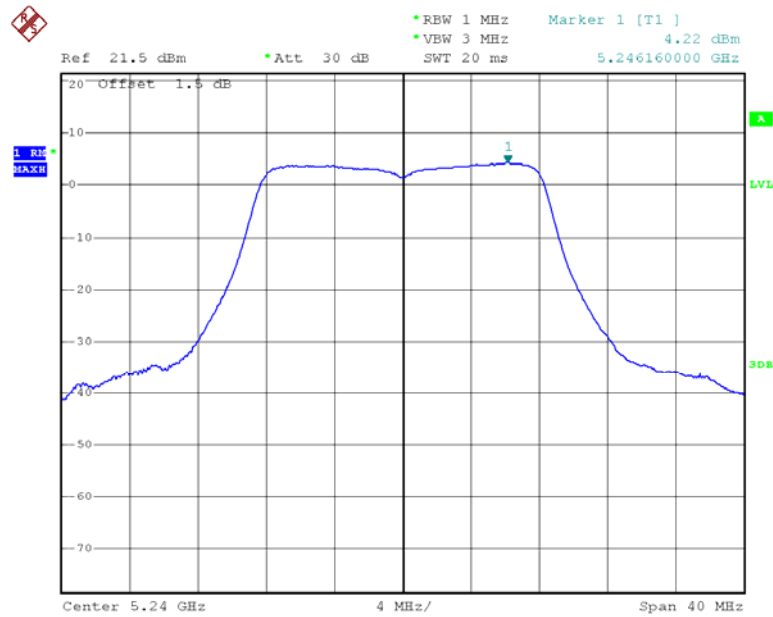
Date: 12.APR.2015 08:38:30

802.11a Middle Channel – Chain0



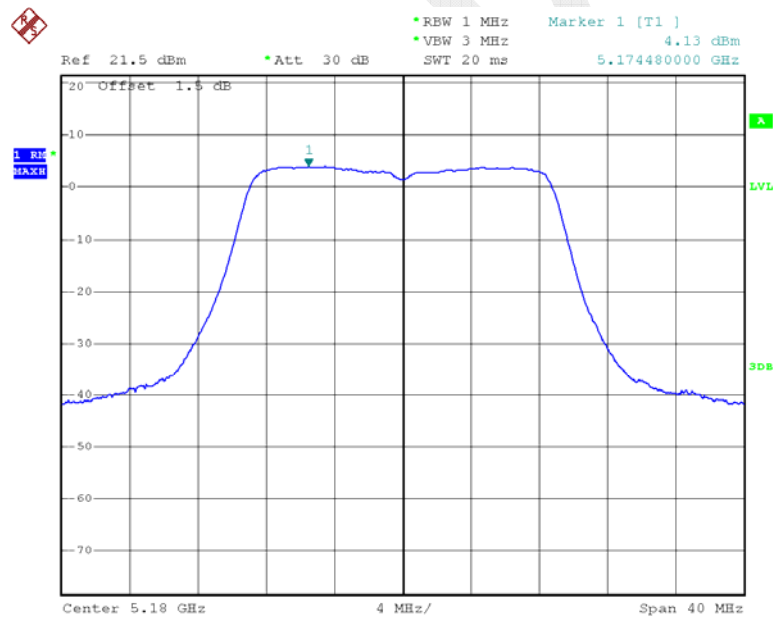
Date: 12.APR.2015 08:38:14

802.11a High Channel – Chain0



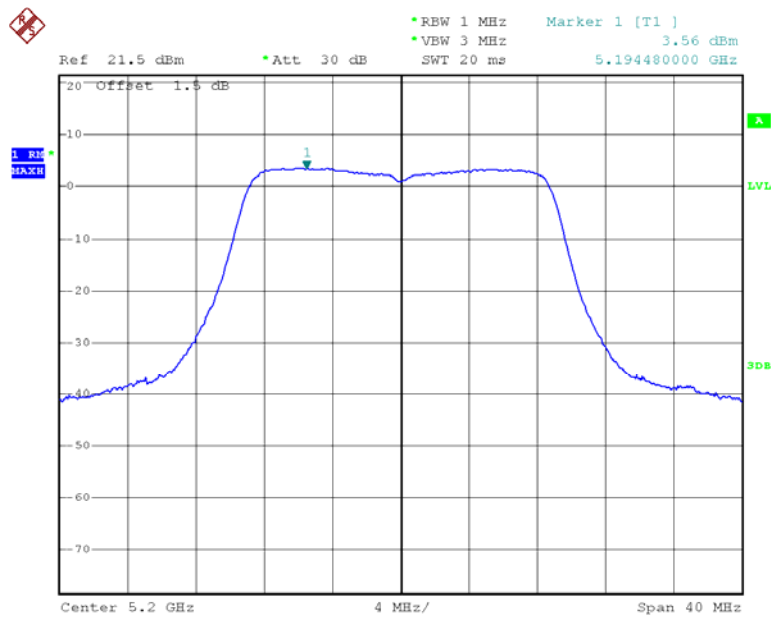
Date: 12.APR.2015 08:37:59

802.11n ht20 Low Channel – Chain0



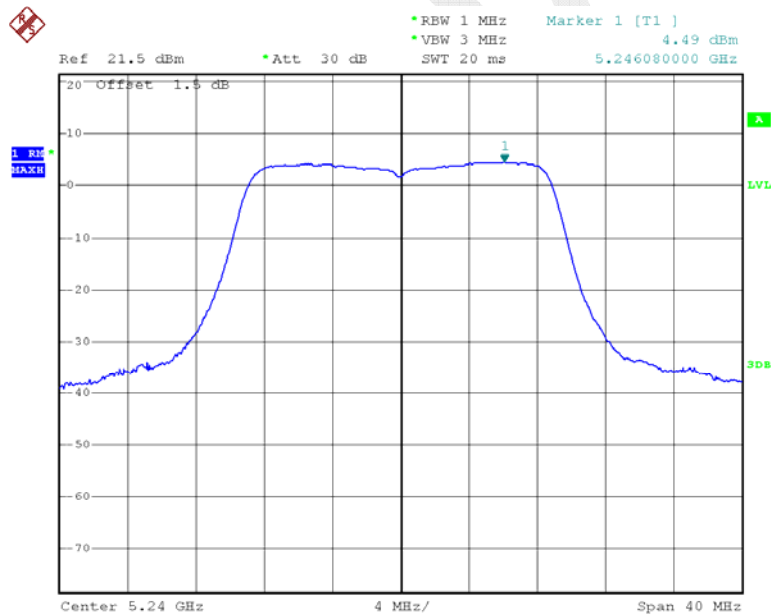
Date: 12.APR.2015 08:38:45

802.11n ht20 Middle Channel – Chain0



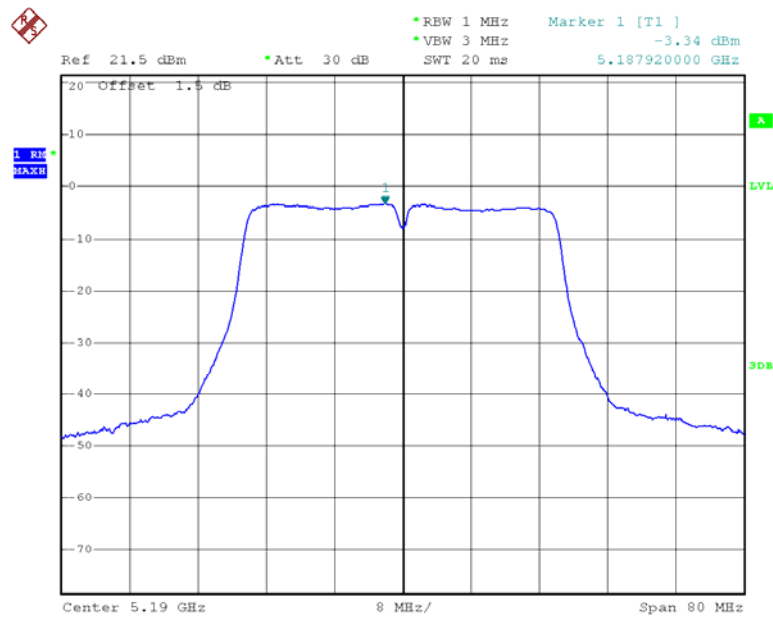
Date: 12.APR.2015 08:39:00

802.11n ht20 High Channel – Chain0



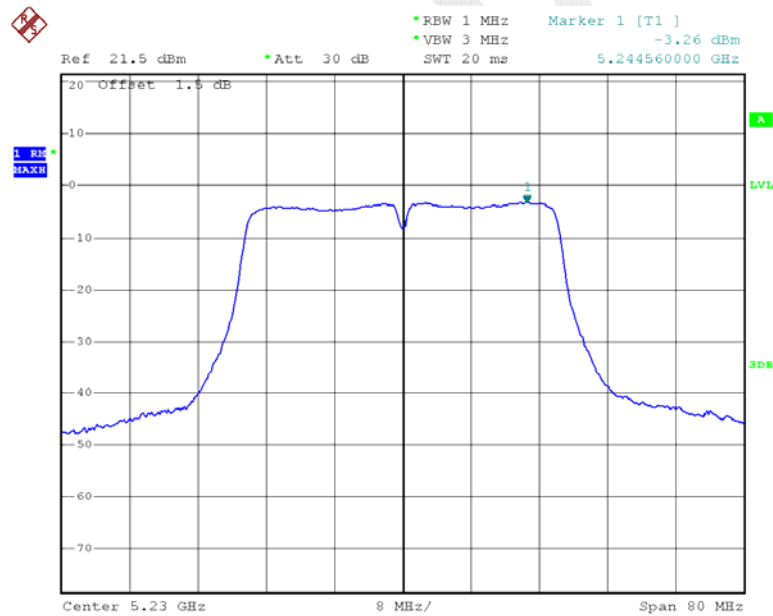
Date: 12.APR.2015 08:39:45

802.11n ht40 Low Channel – Chain0



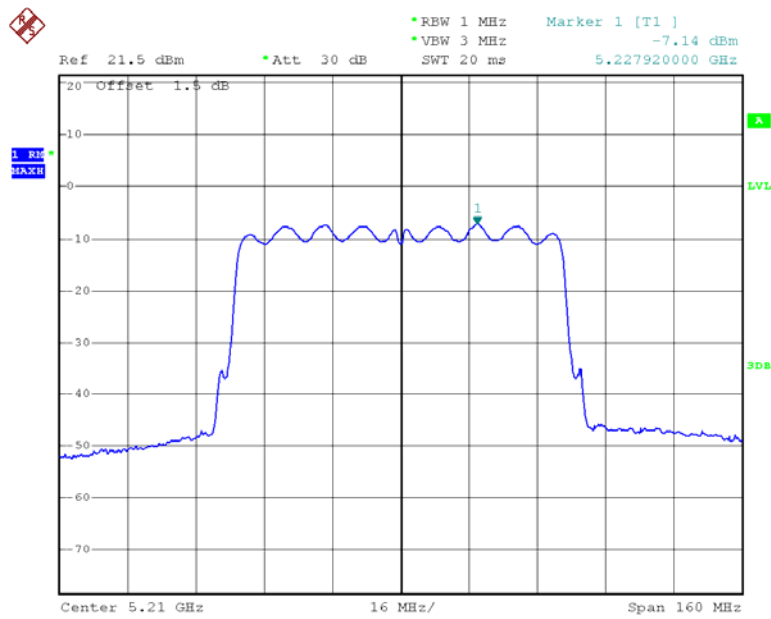
Date: 12.APR.2015 08:40:21

802.11n ht40 High Channel – Chain0



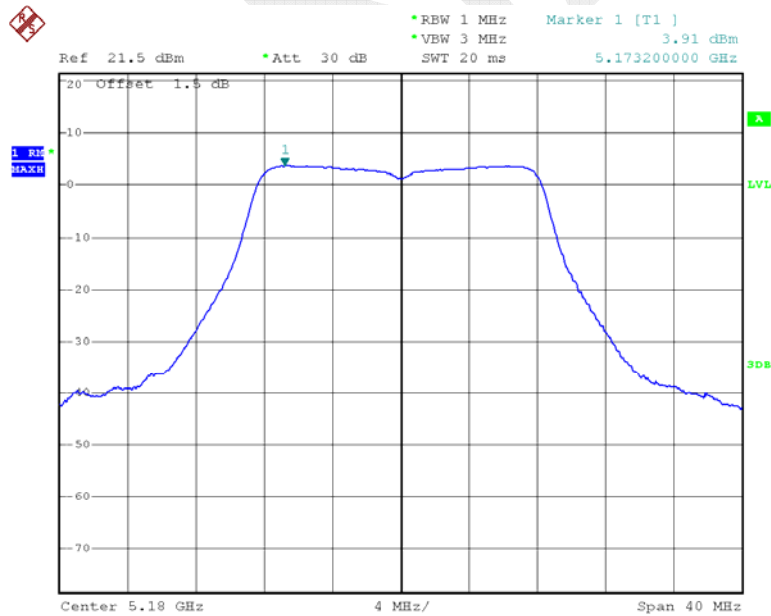
Date: 12.APR.2015 08:40:37

802.11n ac80- Chain0



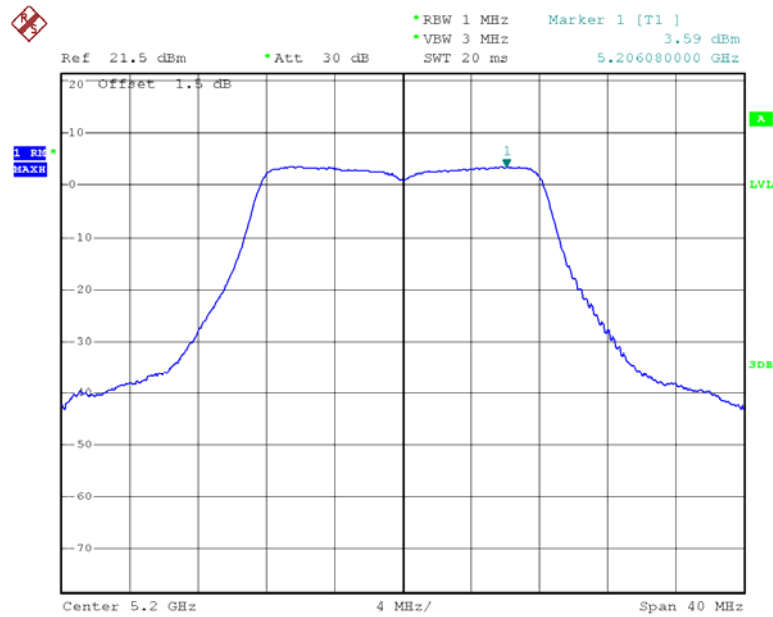
Date: 12.APR.2015 08:41:13

802.11a Low Channel - Chain1



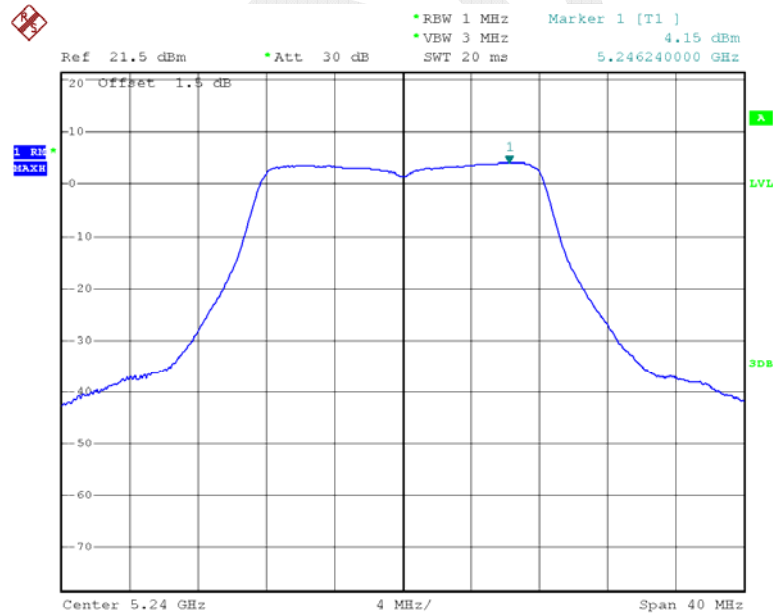
Date: 12.APR.2015 09:31:06

802.11a Middle Channel – Chain1



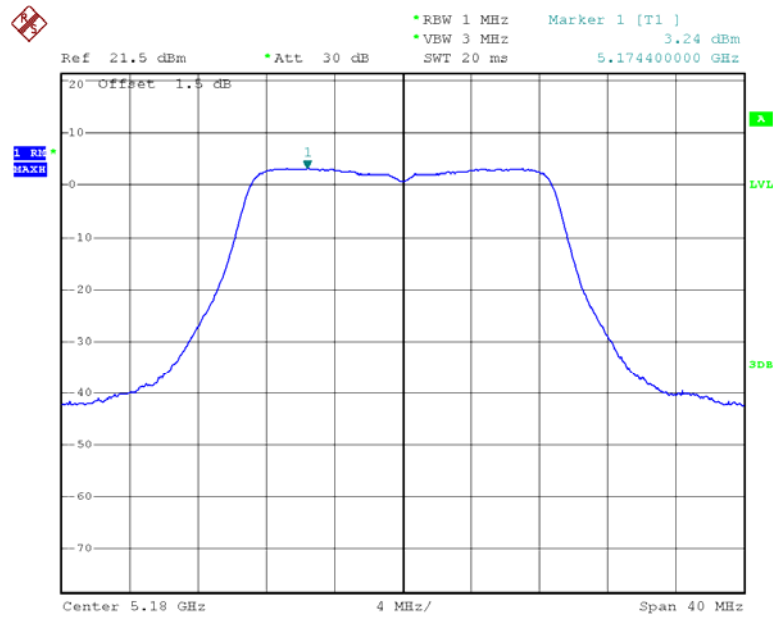
Date: 12.APR.2015 09:30:49

802.11a High Channel – Chain1



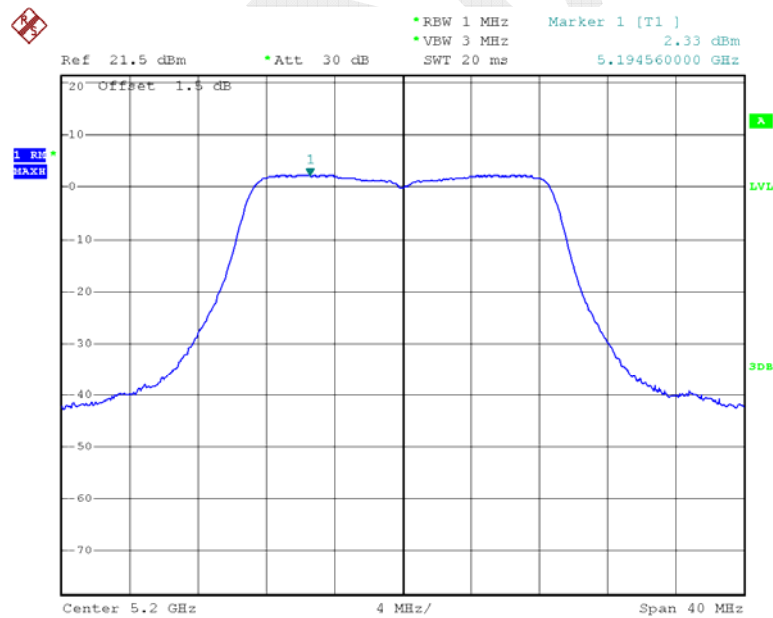
Date: 12.APR.2015 09:30:29

802.11n ht20 Low Channel – Chain1



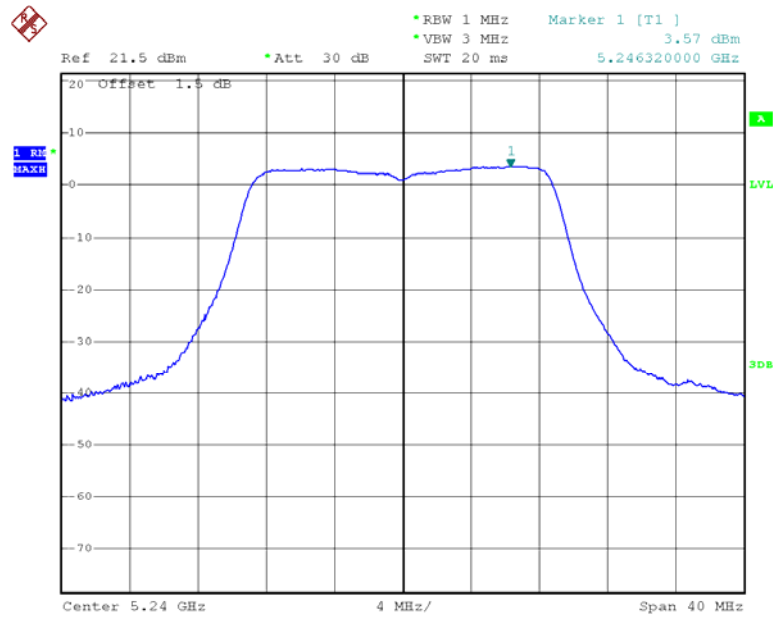
Date: 12.APR.2015 09:31:28

802.11n ht20 Middle Channel – Chain1



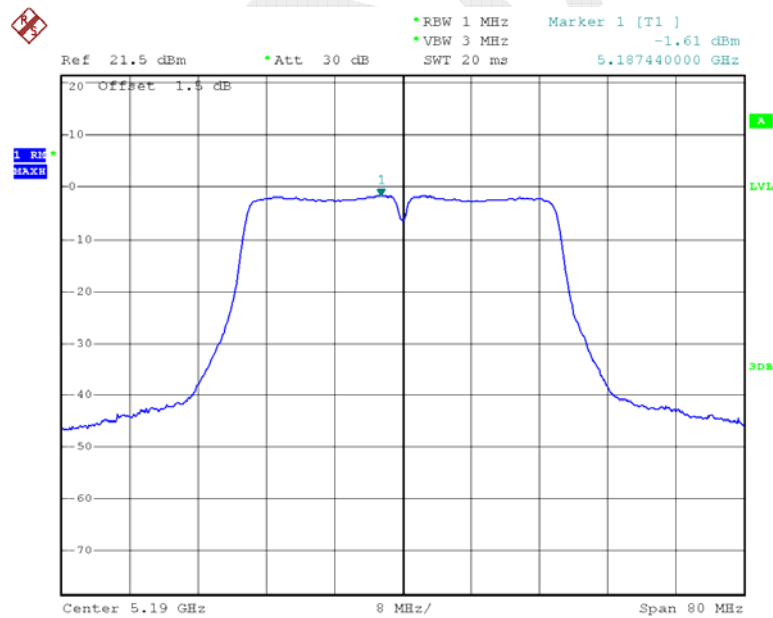
Date: 12.APR.2015 09:31:46

802.11n ht20 High Channel – Chain1



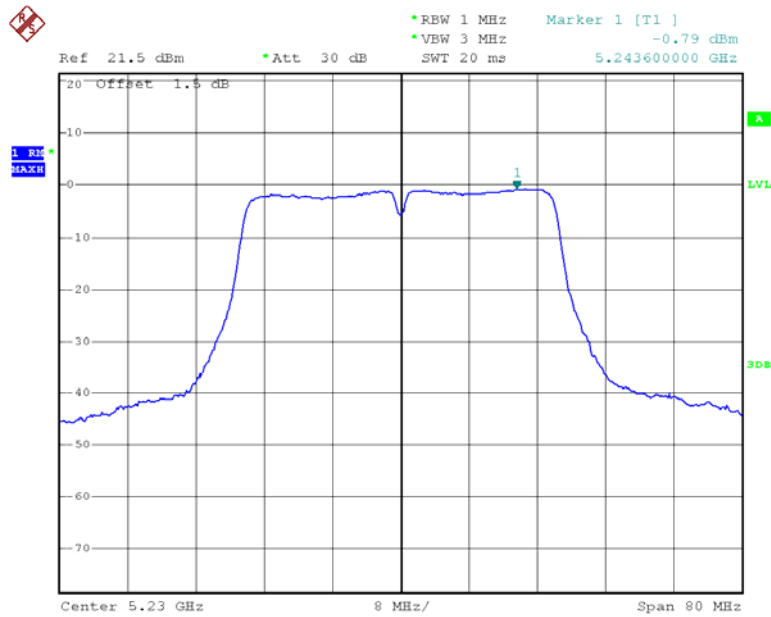
Date: 12.APR.2015 09:32:16

802.11n ht40 Low Channel – Chain1



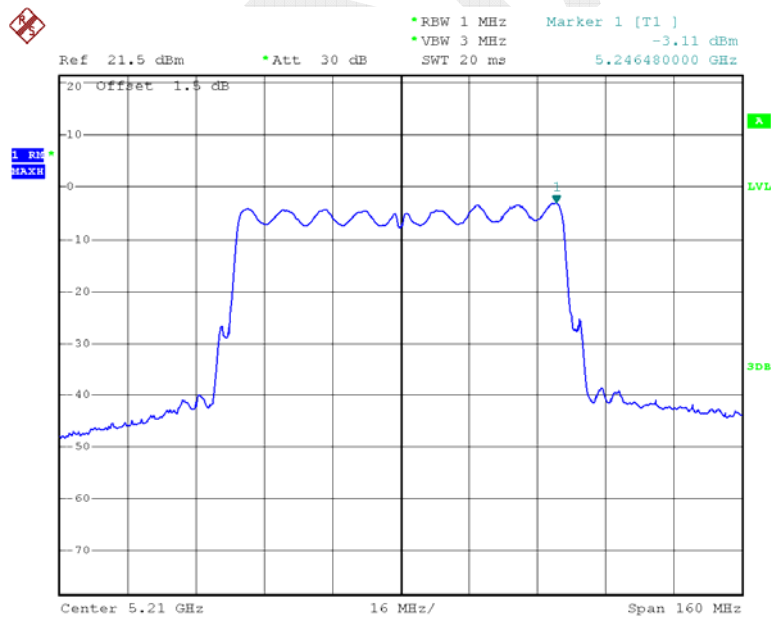
Date: 12.APR.2015 09:32:47

802.11n ht40 High Channel – Chain1



Date: 12.APR.2015 09:33:02

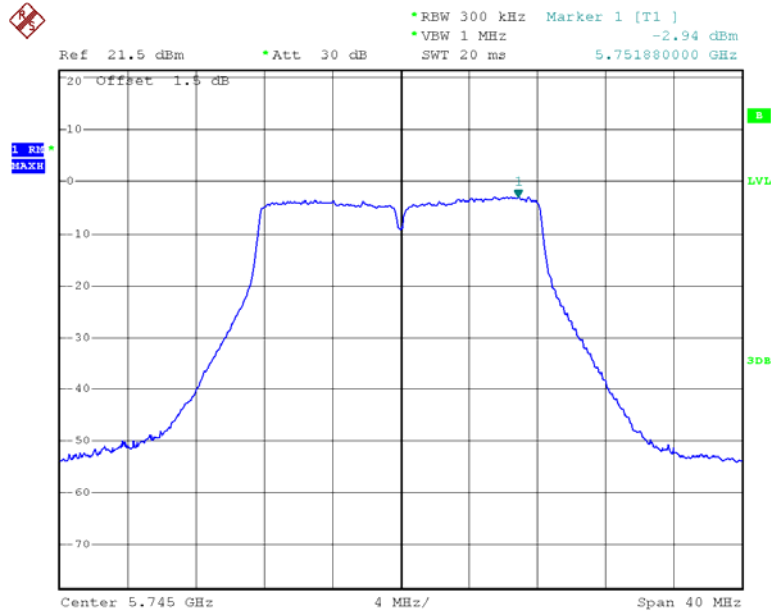
802.11n ac80– Chain1



Date: 12.APR.2015 09:33:33

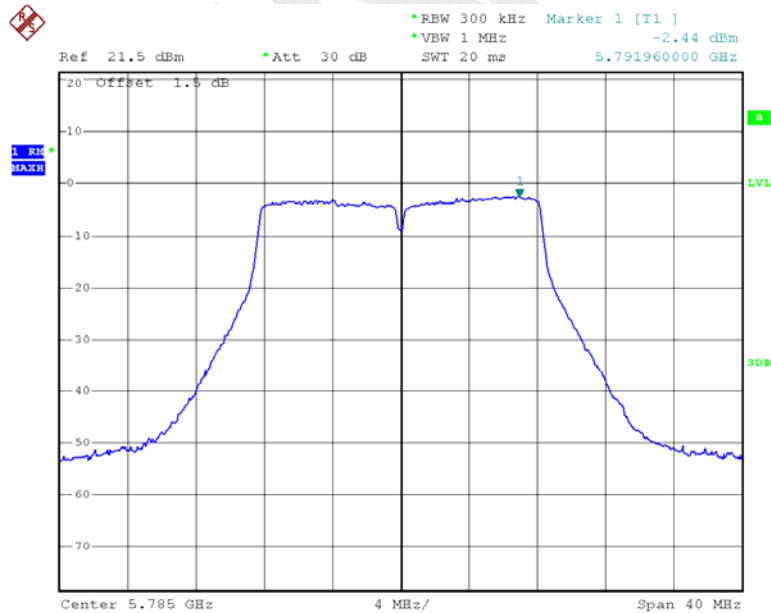
5725MHz-5850MHz:

802.11a Low Channel – Chain0



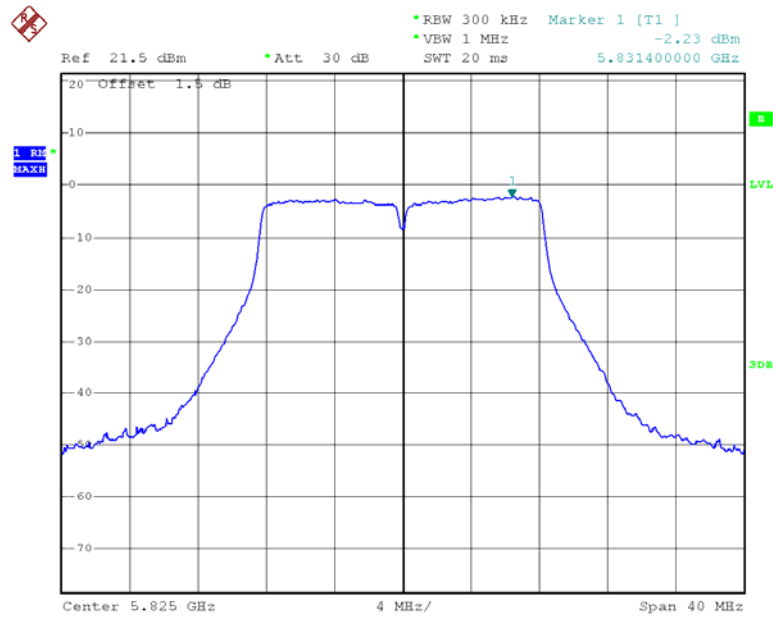
Date: 12.APR.2015 06:39:47

802.11a Middle Channel – Chain0



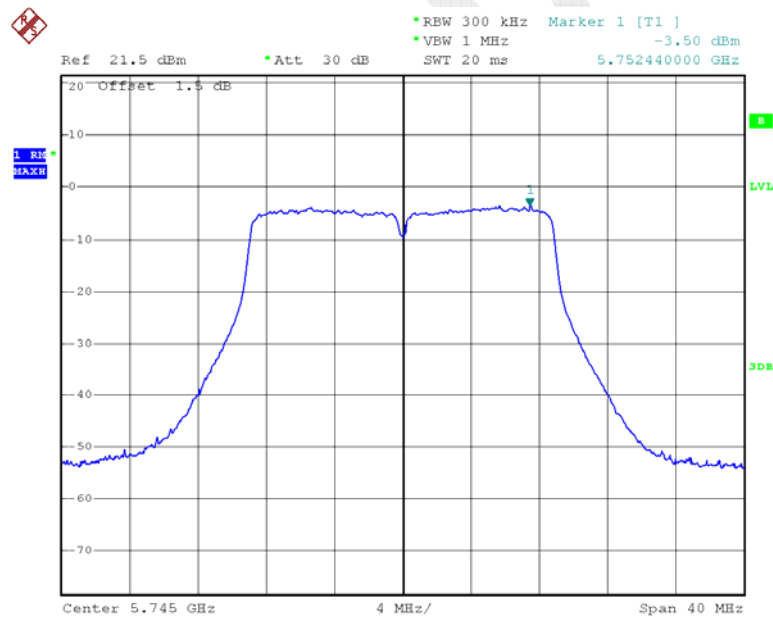
Date: 12.APR.2015 06:40:08

802.11a High Channel – Chain0



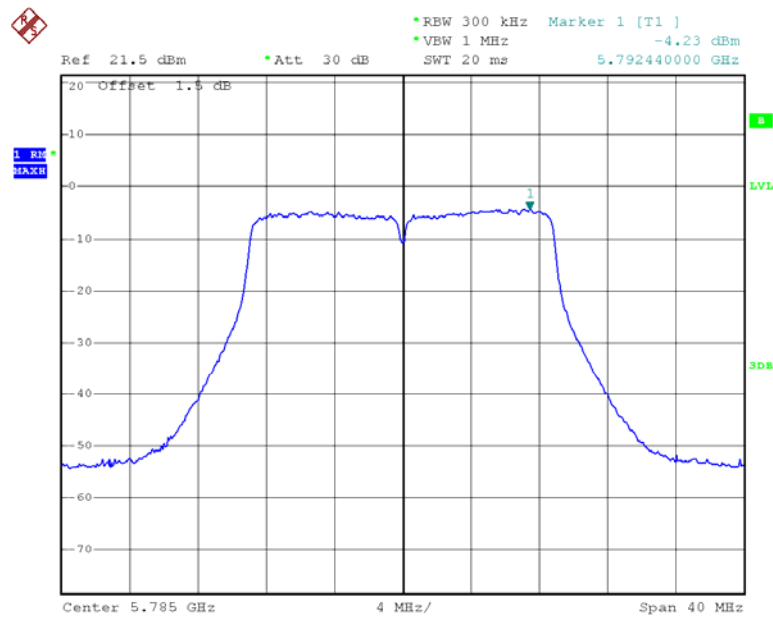
Date: 12.APR.2015 06:40:52

802.11n ht20 Low Channel – Chain0



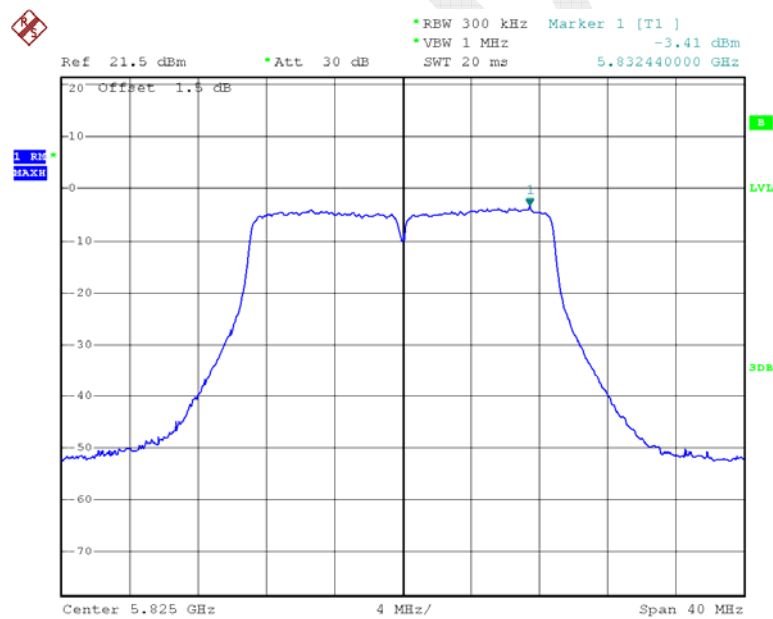
Date: 12.APR.2015 06:41:59

802.11n ht20 Middle Channel – Chain0



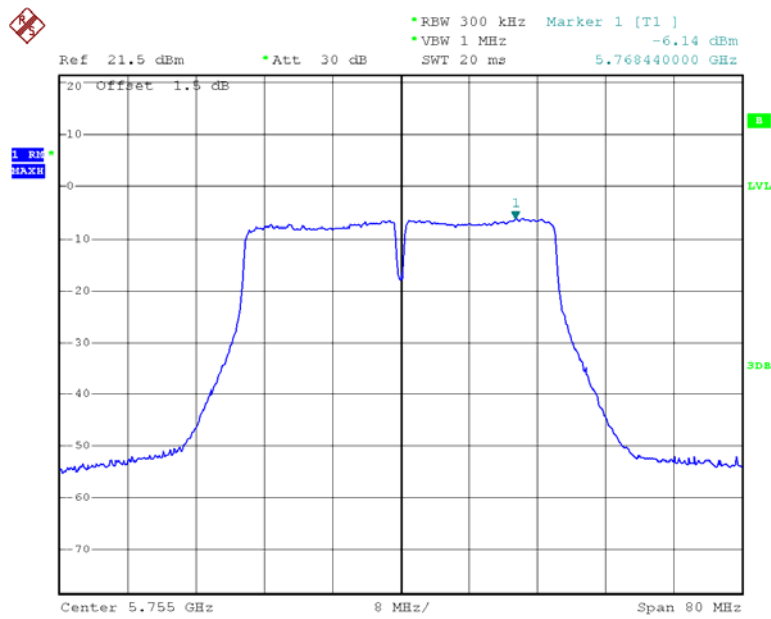
Date: 12.APR.2015 06:41:36

802.11n ht20 High Channel – Chain0



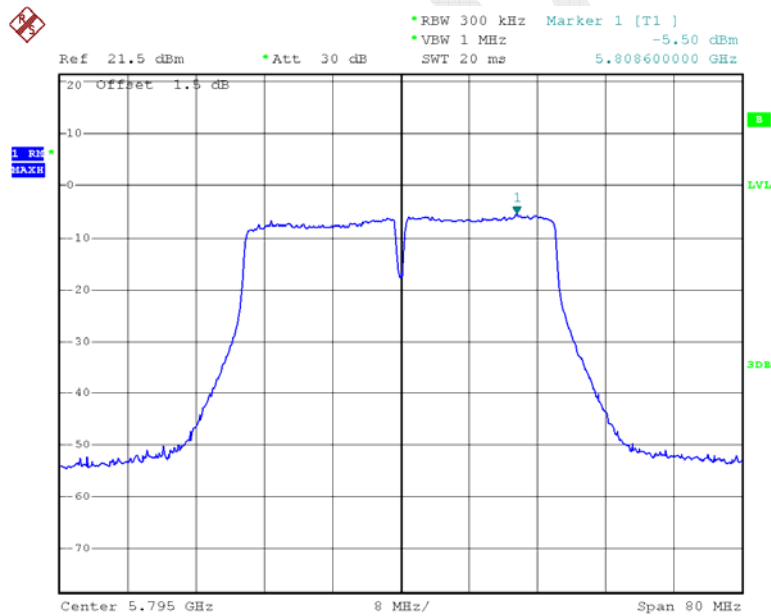
Date: 12.APR.2015 06:41:16

802.11n ht40 Low Channel – Chain0

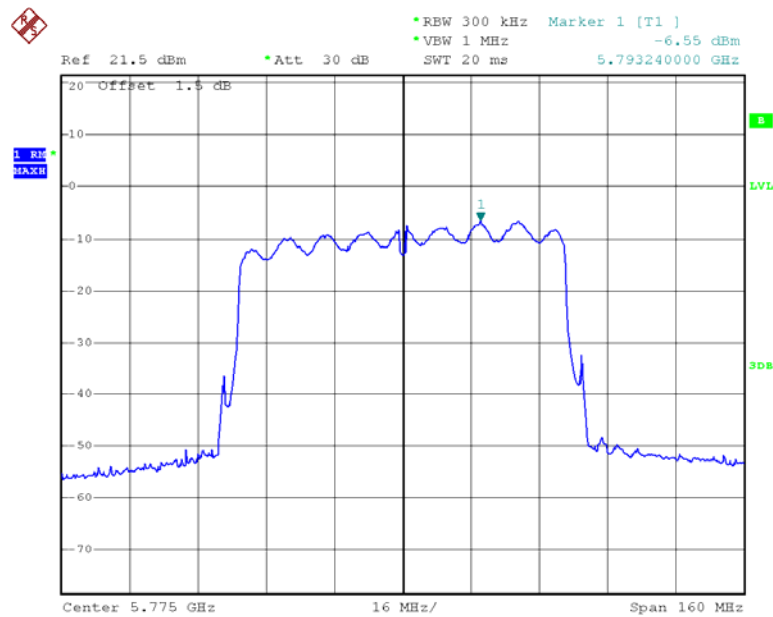


Date: 12.APR.2015 06:42:45

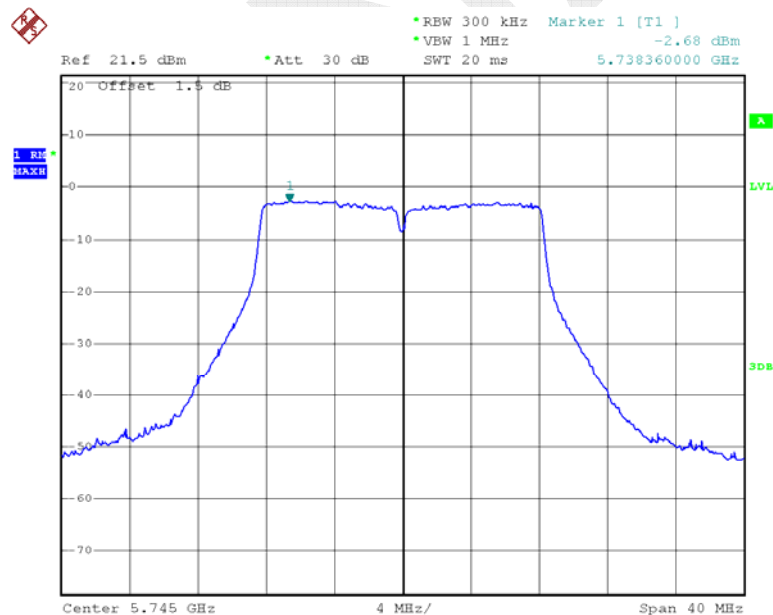
802.11n ht40 High Channel – Chain0



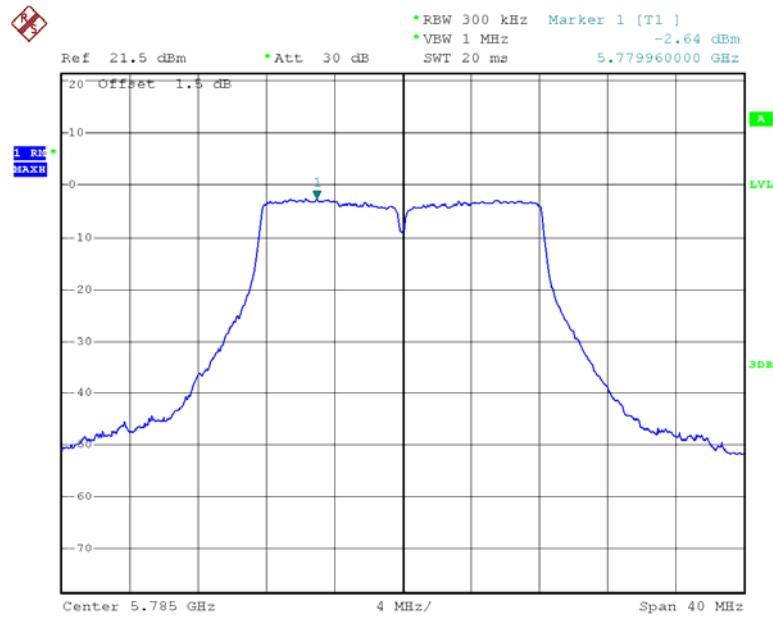
Date: 12.APR.2015 06:43:07

802.11n ac80 – Chain0

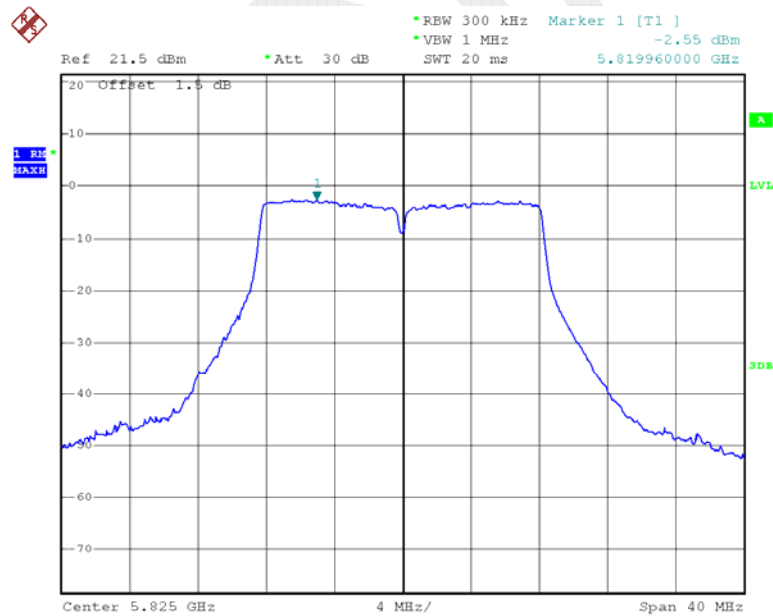
Date: 12.APR.2015 06:43:38

802.11a Low Channel – Chain1

Date: 17.APR.2015 19:11:49

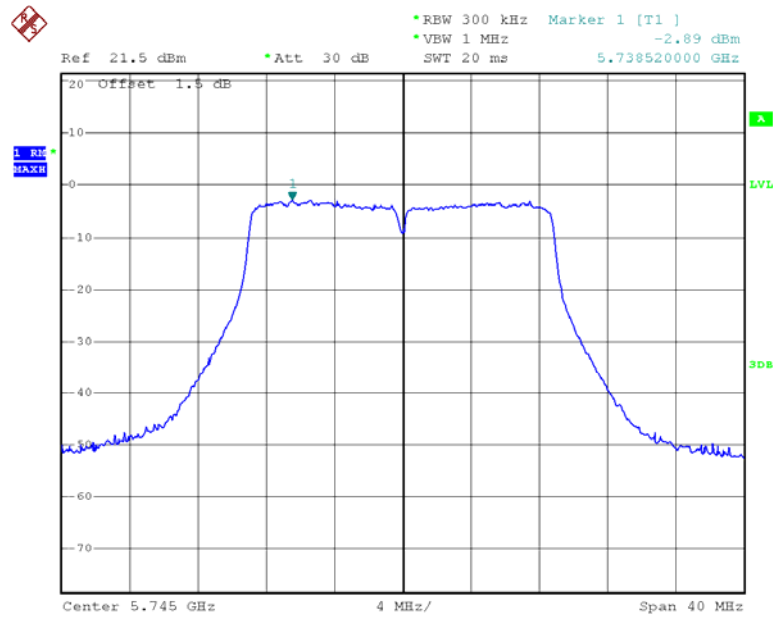
802.11a Middle Channel – Chain1

Date: 17.APR.2015 19:13:49

802.11a High Channel – Chain1

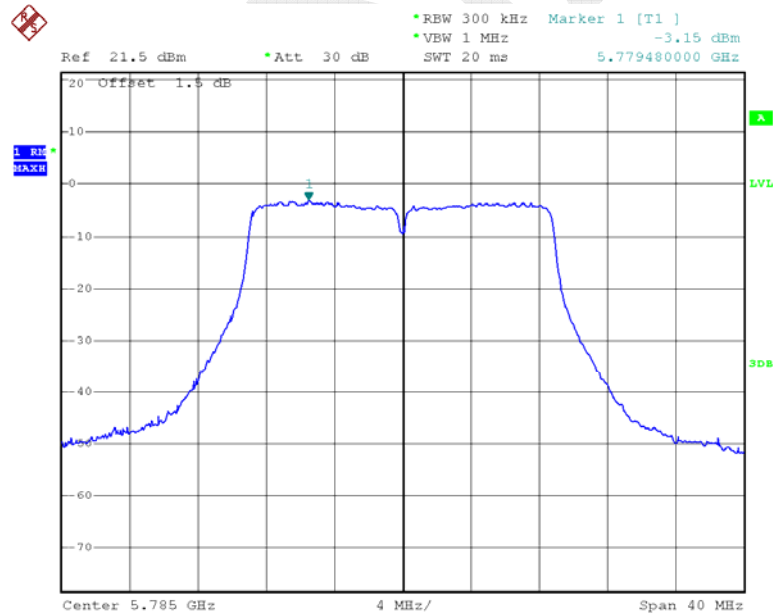
Date: 17.APR.2015 19:14:11

802.11n ht20 Low Channel – Chain1



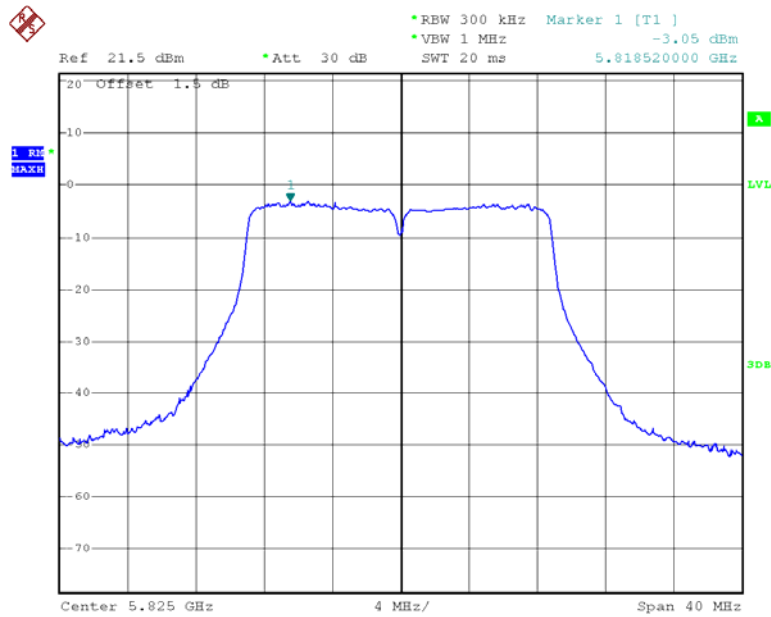
Date: 17.APR.2015 19:15:50

802.11n ht20 Middle Channel – Chain1



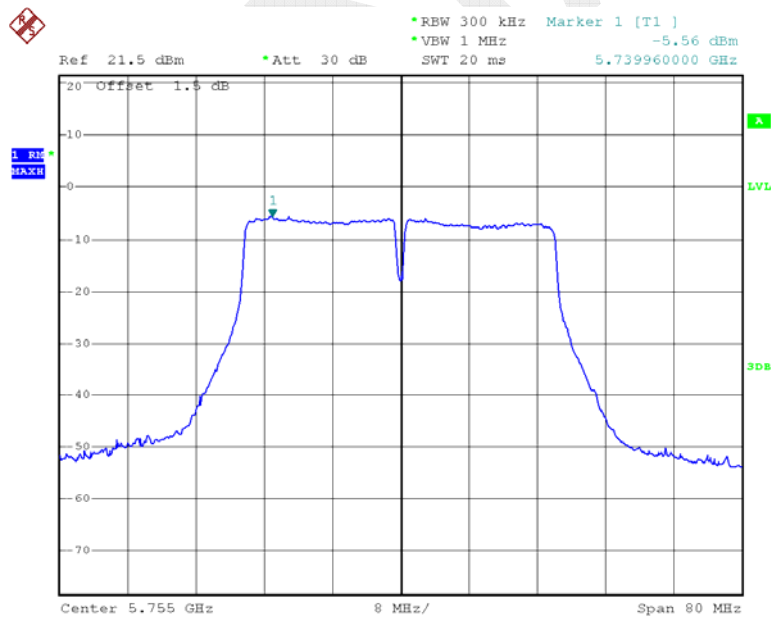
Date: 17.APR.2015 19:15:10

802.11n ht20 High Channel – Chain1

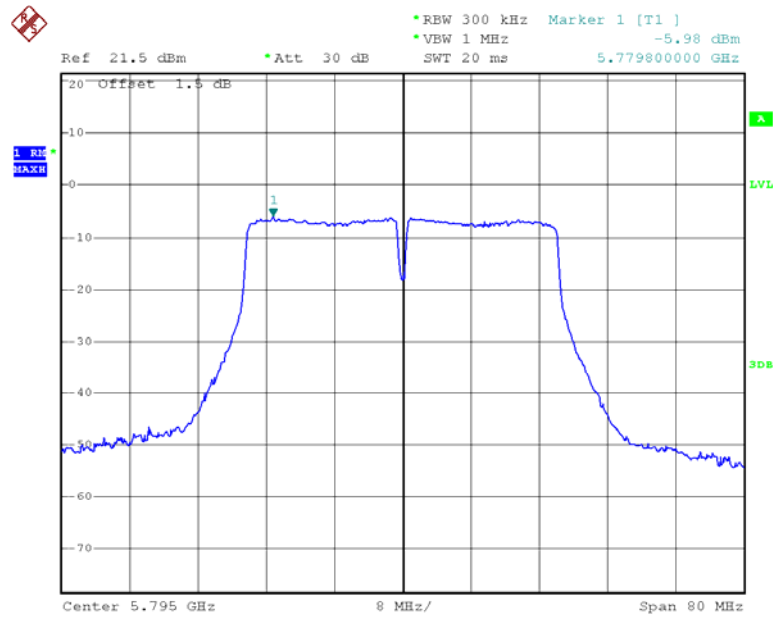


Date: 17.APR.2015 19:14:43

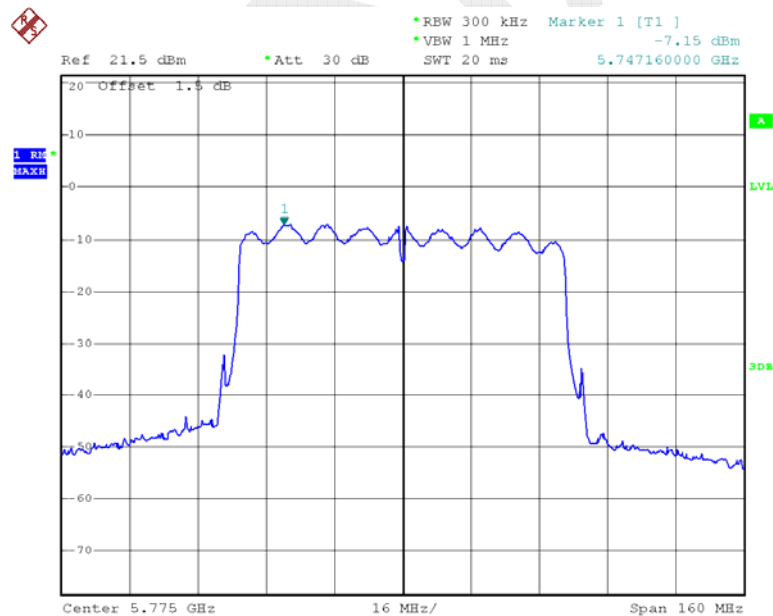
802.11n ht40 Low Channel – Chain1



Date: 17.APR.2015 19:17:59

802.11n ht40 High Channel – Chain1

Date: 17.APR.2015 19:19:40

802.11n ac80– Chain1

Date: 17.APR.2015 19:23:35

