



TESTING CERT #3478.01



TEST REPORT

EUT Description	WLAN and BT, 2x2 PCIe M.2 adapter card
Brand Name	Intel
Model Name	Intel® Dual-Band Wireless-AC 8260
Serial Number	TA#: H76739-001 / H76739-001 WF MAC: 34:13:E8:42:D2:BD / 34:13:E8:42:D1:B4 BT MAC: 34:13:E8:42:D2:C1 / 34:13:E8:42:D1:B8 (see section 4)
FCC/IC ID	FCC ID: PD98260NGH / PD98260NGHU IC ID: 1000M-8260NGH
Antenna type	SkyCross WIMAX/WLAN Reference Antenna
Hardware/Software Version	HW: TF5 – cfg20.1HE Test SW: DRTU version 1.8.3 Op SW: 18.10.0.19 / 18.11.0.8
Date of Sample Receipt	2015-06-01
Date of Test Start/End	2015-06-18 / 2015-08-17
Features	802.11 a/b/g/n/ac Wireless LAN + BDR/EDR 2.1 + BLE 4.0 (see section 5)

Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA
Contact Person	Steven Hackett
Telephone/Fax/ Email	steven.c.hackett@intel.com

Reference Standards	FCC CFR Title 47 Part 15E RSS-247 issue 1, RSS-Gen issue 4 (see section 1)
---------------------	--

Test Report number	15051101.TR04
Revision Control	Rev.00

The test results relate only to the samples tested.
The test report shall not be reproduced in full, without written approval of the laboratory.

_____ Issued by _____ Reviewed by _____ Approved by _____

Jose M. FORTES
(Technical Manager)

Jose M. FORTES
(Technical Manager)

Nawfal ASRIH
(Laboratory Manager)

Table of Contents

1. Standards, reference documents and applicable test methods	3
2. General conditions, competences and guarantees	3
3. Environmental Conditions.....	3
4. Test samples.....	4
5. EUT features	4
6. Remarks and comments.....	4
7. Test Verdicts summary.....	5
7.1. 802.11 A/N/AC – U-NII-2A	5
7.2. 802.11 A/N/AC – U-NII-2C	5
8. Document Revision History	5
Annex A. Test & System Description	6
A.1 TEST CONDITIONS	6
A.2 MEASUREMENT SYSTEM	8
A.3 TEST EQUIPMENT LIST	10
A.4 MEASUREMENT UNCERTAINTY EVALUATION.....	10
Annex B. Test Results U-NII-2A	11
B.1 26dB & 99% BANDWIDTH.....	11
B.2 POWER LIMITS. MAXIMUM OUTPUT POWER & PEAK POWER SPECTRAL DENSITY	43
B.3 UNDESIRABLE EMISSIONS LIMITS: BAND EDGE (CONDUCTED)	61
B.4 RADIATED SPURIOUS EMISSION	81
Annex C. Test Results U-NII-2C	106
C.1 26dB & 99% BANDWIDTH.....	106
C.2 POWER LIMITS. MAXIMUM OUTPUT POWER & PEAK POWER SPECTRAL DENSITY	158
C.3 UNDESIRABLE EMISSIONS LIMITS: BAND EDGE (CONDUCTED)	186
C.4 RADIATED SPURIOUS EMISSION	212
Annex D. Photographs.....	240

1. Standards, reference documents and applicable test methods

1. FCC 47 CFR part 15 - Subpart E – Unlicensed National Information Infrastructure Devices.
2. FCC 47 CFR part 15 - Subpart C – §15.209 Radiated emission limits; general requirements.
3. FCC OET KDB 789033 D02 General UNII Test Procedures New Rules – Guidelines for compliance testing of Unlicensed National Information Infrastructure (U-NII) Devices.
4. FCC OET KDB 662911 D01 Multiple Output v02r01 – Emissions Testing of Transmitters with Multiple Outputs in the Same Band.
5. FCC OET KDB 644545 D03 Guidance for IEEE 802.11ac v01 - GUIDANCE FOR IEEE Std 802.11ac™ DEVICES EMISSION TESTING.
6. RSS-247 Issue 1 – Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment.
7. RSS-Gen Issue 4 – General Requirements for Compliance of Radio Apparatus.
8. ANSI C63.10-2009 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. General conditions, competences and guarantees

- ✓ Intel Mobile Communications Wireless RF Lab (Intel WRF Lab) is a testing laboratory accredited by the American Association for Laboratory Accreditation (A2LA).
- ✓ Intel Mobile Communications Wireless RF Lab (Intel WRF Lab) is an Accredited Test Firm listed by the FCC, with Designation Number FR0011.
- ✓ Intel Mobile Communications Wireless RF Lab (Intel WRF Lab) is a Registered Test Site listed by IC, with IC Assigned Code 1000Y.
- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.
- ✓ Complete or partial reproduction of the report cannot be made without written permission of Intel WRF Lab.

3. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

Temperature	23°C ± 2°C
Humidity	55% ± 5%

4. Test samples

Sample	Control #	Description	Model	Serial #	Date of reception	Note
#01	15051101.S21	WiFi/BT High End Module	8260NGW H	WF MAC: 34:13:E8:42:D2:BD	2015-06-01	Used for conducted tests
	15051101.S12	Extender board	PCB00495	ASS0495-001, 4950414-064	2015-05-12	
	15051101.S11	Switching power supply SINPRO 5V 6A	SPU60-102	07990499 1249	2015-05-12	
	15051101.S15	Laptop	DELL E5440	BJSYN32	2015-05-20	
#02	15051101.S22	WiFi/BT High End Module	8260NGW H	WF MAC: 34:13:E8:42:D1:B4	2015-06-01	Used for radiated tests
	15051101.S05	Switching power supply SINPRO 5V 6A	SPU60-102	07990495-1249	2015-05-12	
	15051101.S06	Extender board	PCB00495	ASS0495-001, 4950414-019	2015-05-12	
	15051101.S07	USB Cable	E154336	NA	2015-05-12	
	15051101.S08	PCI Cable	Blue cable 1 meter	NA	2015-05-12	
	15051101.S09	Laptop	Dell E5440	9FSYN32	2015-05-12	
	15051101.S10	AC/DC Adapter	90W 19.5V 4.62A	CN-OJCF3V- 48661-51S-OPIC- A02	2015-05-12	

NA: Not Applicable

5. EUT features

These are the detailed bands and modes supported by the Equipment Under Test:

802.11b/g/n	2.4GHz (2400.0 – 2483.5 MHz)
802.11a/n/ac	5.2GHz(5150.0 – 5250.0 MHz) 5.3GHz (5250.0 – 5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz)
BDR/EDR 2.1 BLE 4.0	2.4GHz (2400.0 – 2483.5 MHz)

6. Remarks and comments

N/A

7. Test Verdicts summary

7.1. 802.11 a/n/ac – U-NII-2A

FCC part	RSS part	Test name	Verdict
15.407 (a) (2)	RSS-247 Clause 6.2.2 (1)	Power Limits. Maximum output power	P
15.407 (a) (2)	RSS-247 Clause 6.2.2 (1)	Peak power spectral density	P
15.407 (b) (2) 15.209	RSS-247 Clause 6.2.2 (2)	Undesirable emissions limits: Band Edge (conducted)	P
15.407 (b) (2) 15.209	RSS-247 Clause 6.2.2 (2)	Undesirable emissions limits (radiated)	P

7.2. 802.11 a/n/ac – U-NII-2C

FCC part	RSS part	Test name	Verdict
15.407 (a) (2)	RSS-247 Clause 6.2.3 (1)	Power Limits. Maximum output power	P
15.407 (a) (2)	RSS-247 Clause 6.2.3 (1)	Peak power spectral density	P
15.407 (b) (3) 15.209	RSS-247 Clause 6.2.3 (2)	Undesirable emissions limits: Band Edge (conducted)	P
15.407 (b) (3) 15.209	RSS-247 Clause 6.2.3 (2)	Undesirable emissions limits (radiated)	P

P: Pass
 F: Fail
 NM: Not Measured
 NA: Not Applicable

8. Document Revision History

Revision #	Date	Modified by	Details
Rev. 00	2015-09-09	J.M. Fortes	First Issue

Annex A. Test & System Description

A.1 Test Conditions

For 802.11a mode the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, but not simultaneously.

For 802.11n20 (20 MHz channel bandwidth), 802.11n40 (40MHz channel bandwidth) and 802.11ac80 (80MHz channel bandwidth) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously.

The conducted RF output power at each chain was adjusted according to the client's supplied Target values (see following table) using the Intel DRTU tool and measuring the power by using a calibrated average power meter. Measured values for adjustment were within -0.2 dB/+0.3 dB from the declared Target values.

U-NII-2A					Conducted Power, Target Value (dBm)		
Mode	BW (MHz)	Data Rate	CH #	Freq. (MHz)	SISO Chain A	SISO Chain B	MIMO at both ports A and B
802.11a	20	6Mbps	52	5260	21.0	21.0	-
			56	5280	21.0	21.0	-
			64	5320	17.0	17.0	-
802.11n	20	HT0 HT8*	52	5260	21.0	21.0	18.0
			56	5280	21.0	21.0	18.0
			64	5320	16.5	16.5	13.5
	40	HT0 HT8*	54F	5270	20.0	19.5	16.5
62F			5310	16.5	16.5	14.0	
802.11ac	80	VHT0	58ac80	5290	16.0	16.0	13.0

U-NII-2C					Conducted Power, Target Value (dBm)		
Mode	BW (MHz)	Data Rate	CH #	Freq. (MHz)	SISO Chain A	SISO Chain B	MIMO at both ports A and B
802.11a	20	6Mbps	100	5500	19.0	19.0	-
			104	5520	19.0	20.0	-
			108	5540	19.5	19.5	-
			120	5600	21.0	21.0	-
			140	5700	17.0	17.0	-
802.11n	20	HT0 HT8*	100	5500	18.5	19.0	15.5
			104	5520	19.5	19.5	18.0
			108	5540	19.5	20.0	16.5
			120	5600	21.0	21.0	18.0
			140	5700	16.5	17.0	13.0
			144*	5720	19.5	20.0	16.5
	40	HT0 HT8*	102F	5510	15.5	16.0	15.0
			118F	5590	21.0	21.0	18.0
134F			5670	18.0	18.5	16.5	
		142F*	5670	20.0	21.0	17.5	
802.11ac	80	VHT0	106ac80	5530	15.0	15.5	15.5
			122ac80	5610	19.0	19.5	19.0
			138ac80*	5690	20.5	21.0	17.5

*Overlapped channels between UNII-2C and UNII-3

* Note: HT8 for MIMO modes only.

The following data rates were selected based on preliminary testing that identified those rates as the worst cases for output power and spurious levels at the band edges:

802.11a → 6Mbps
802.11n20 and 802.11n40 (SISO) → HT0
802.11n20 and 802.11n40 (MIMO) → HT8
802.11ac80 (SISO) → VHT0
802.11ac80 (MIMO) → VHT0

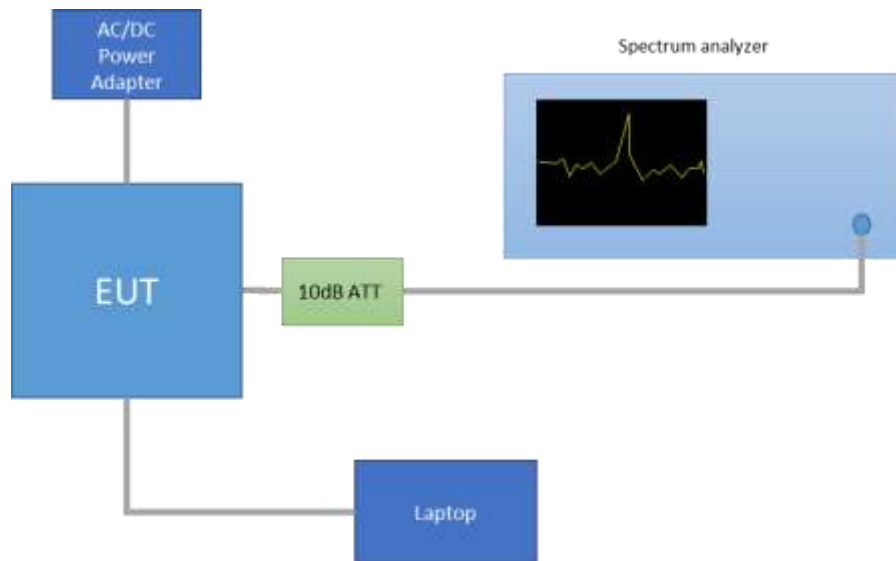
Alternative channels to the lowest and highest channels per band have been also tested for Band Edge compliance.

A.2 Measurement system

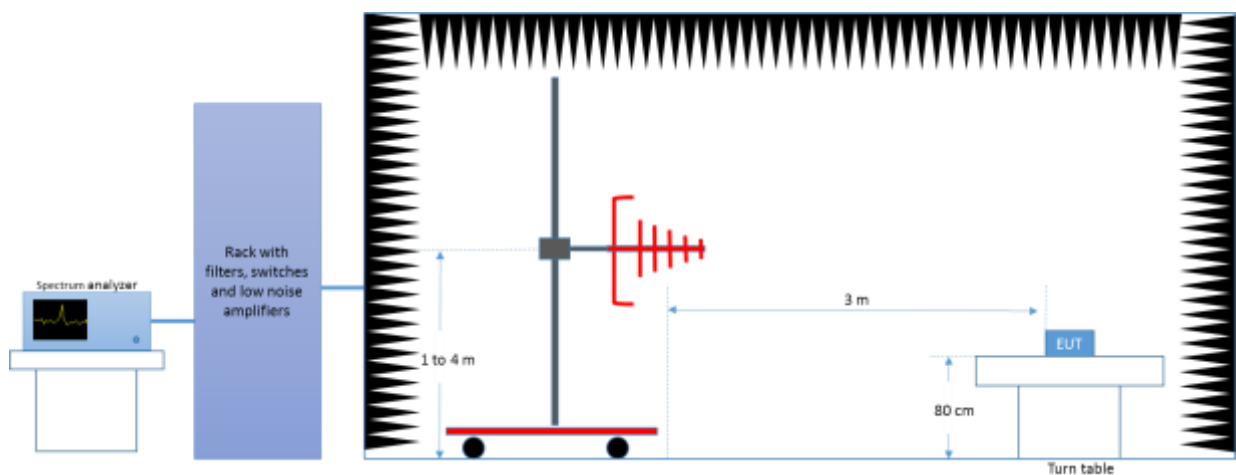
Measurements were performed using the following setups, made in accordance to the general provisions of FCC KDB 789033 D02 General UNII Test Procedures.

The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes, using the Intel proprietary tool DRTU.

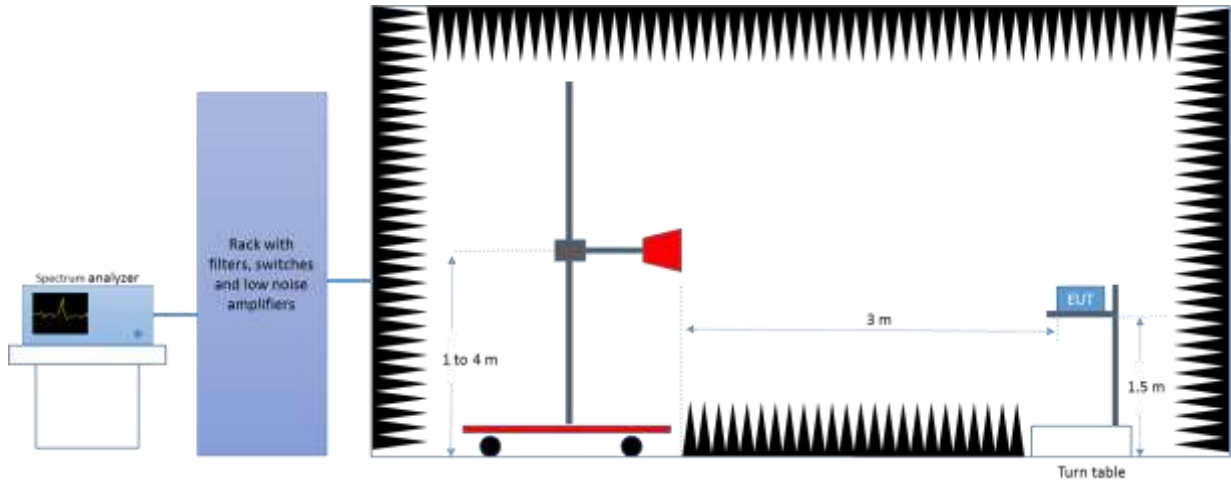
Conducted Setup



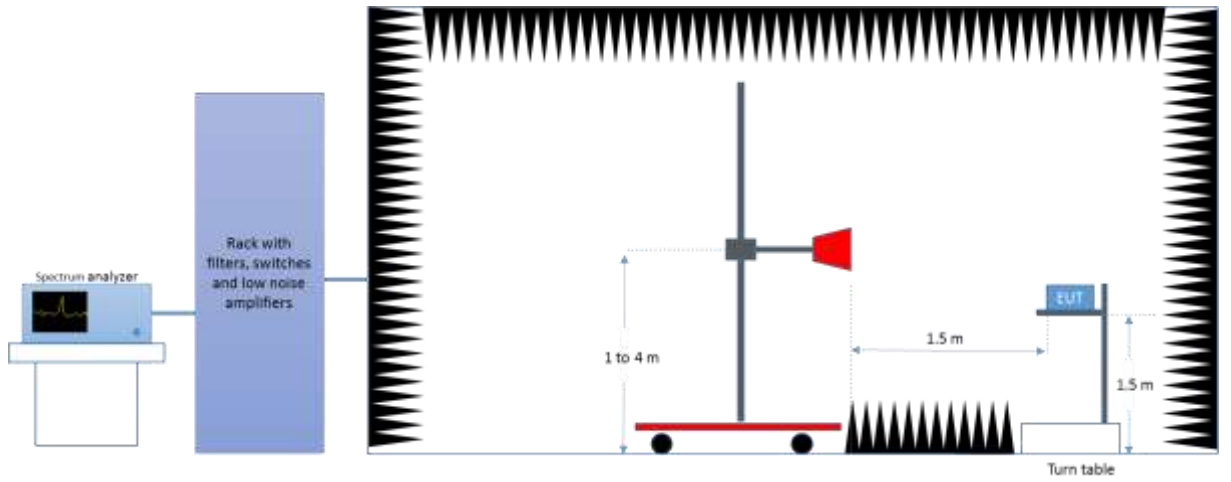
Radiated Setup < 1GHz



Radiated Setup 1 GHz - 18 GHz



Radiated Setup > 18 GHz



A.3 Test Equipment List

Conducted Setup

ID#	Device	Type/Model	Serial Number	Manufacturer	Cal. Date	Cal. Due Date
0310	Spectrum analyzer	FSV40	101425	Rohde & Schwarz	2015-03-25	2017-03-25

Radiated Setup

ID#	Device	Type/Model	Serial Number	Manufacturer	Cal. Date	Cal. Due Date
0133	Spectrum analyzer	FSV40	101358	Rohde & Schwarz	2014-05-09	2016-05-09
0137	Log antenna 30 MHz – 1 GHz	3142E	00156946	ETS Lindgren	2014-03-05	2016-03-05
0138	Horn antenna 1 GHz – 6.4 GHz	3117	00152266	ETS Lindgren	2014-03-04	2016-03-04
0141	Horn Antenna 6.4 GHz – 18 GHz	3117-PA	00157736	ETS Lindgren	2014-06-03	2016-06-03
0248	Horn Antenna 1 GHz – 18 GHz	3117-PA	00167062	ETS Lindgren	2014-08-13	2016-08-13
0139	Horn Antenna 18GHz – 26GHz	114514	00167100	ETS Lindgren	2014-04-25	2016-04-25
0140	Horn Antenna 26GHz – 40GHz	120722	00169638	ETS Lindgren	2014-08-14	2016-08-14
0135	Anechoic chamber	FACT 3	RFD_FA_100	ETS Lindgren	2014-05-06	2016-05-06
0329	Measurement Software	EMC32	1300.7027.00 (100401)	Rohde & Schwarz	N/A	N/A

A.4 Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the below table:

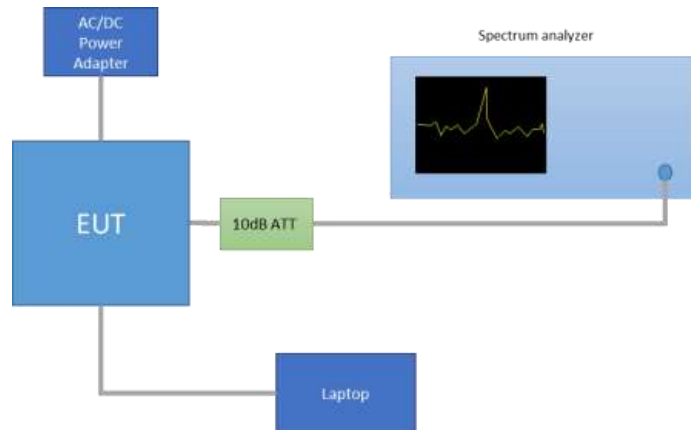
Measurement type	Uncertainty [±dB]
Conducted Power	±1.0
Conducted Spurious Emission	±2.9
Radiated tests <1GHz	±3.8
Radiated tests 1GHz - 40 GHz	±4.7

Annex B. Test Results U-NII-2A

B.1 26dB & 99% Bandwidth

Test procedure:

The setup below was used to measure the 26dB & 99% Bandwidth. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



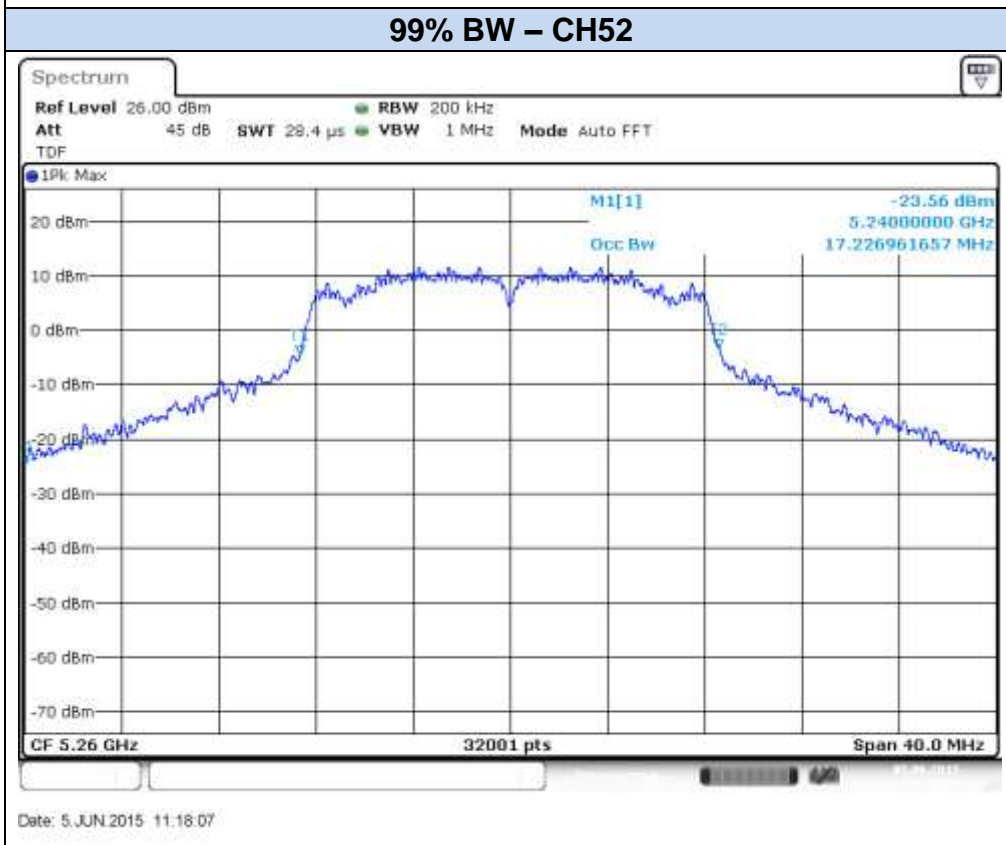
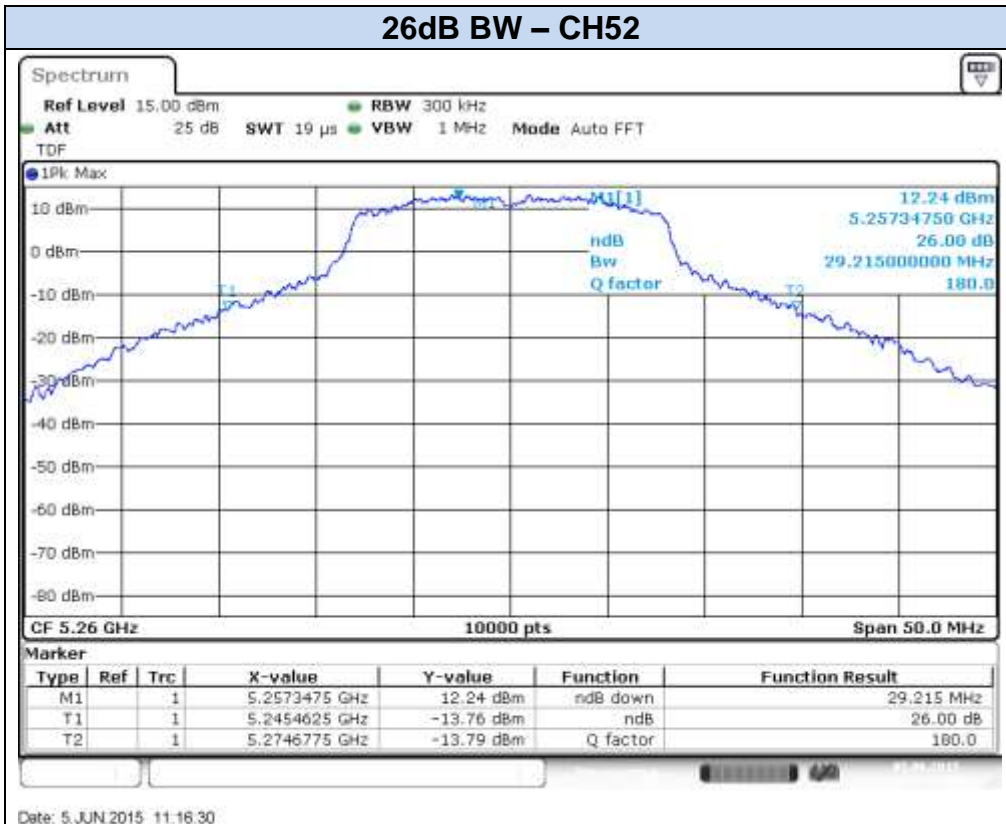
Results tables:

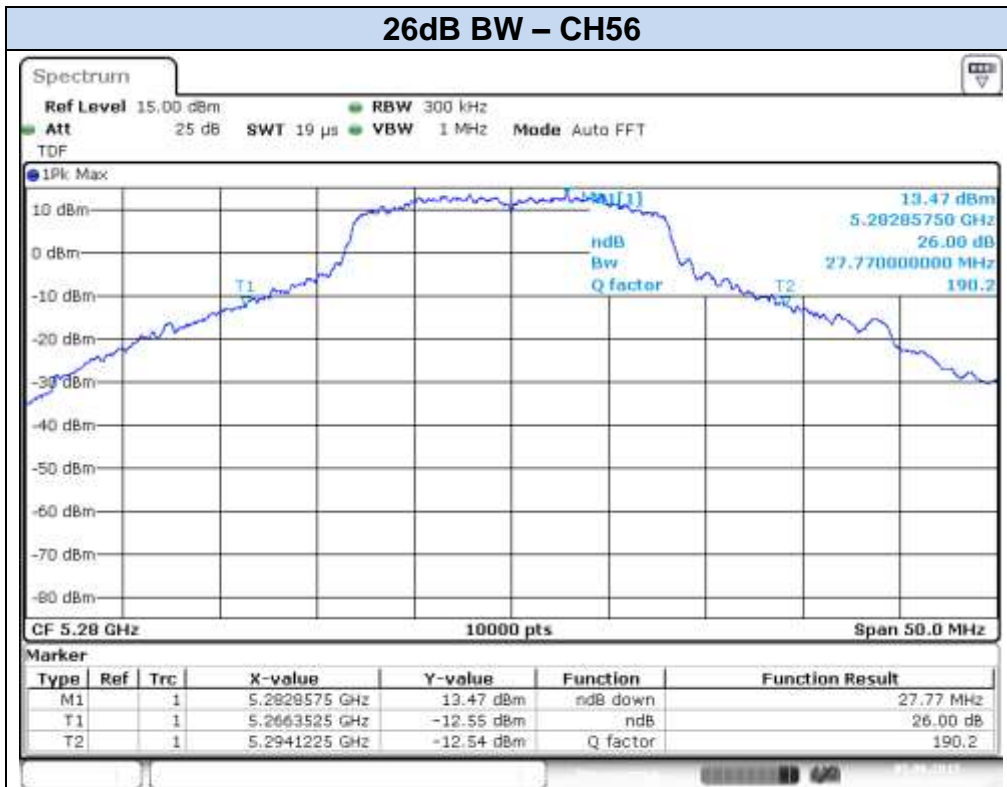
Mode	Rate	Antenna	Channel	Frequency [MHz]	26dB BW [MHz]	99% BW [MHz]
802.11a	6Mbps	SISO CHAIN A	52	5260	29.22	17.23
			56	5280	27.77	17.78
			64	5320	24.20	16.69
		SISO CHAIN B	52	5260	26.66	16.84
			56	5280	25.87	16.87
			64	5320	23.82	16.69
802.11n20	HT0	SISO CHAIN A	52	5260	26.75	18.10
			56	5280	27.66	18.05
			64	5320	24.58	17.76
		SISO CHAIN B	52	5260	25.70	17.87
			56	5280	26.35	17.92
			64	5320	23.70	17.73
802.11n20	HT8	MIMO CHAIN A	52	5260	23.47	17.78
			56	5280	24.12	17.75
			64	5320	23.94	17.85
		MIMO CHAIN B	52	5260	23.90	17.73
			56	5280	23.77	17.74
			64	5320	23.03	17.81

Mode	Rate	Antenna	Channel	Frequency [MHz]	26dB BW [MHz]	99% BW [MHz]
802.11n40	HT0	SISO CHAIN A	54F	5270	47.12	36.37
			62F	5310	45.37	36.21
		SISO CHAIN B	54F	5270	45.53	36.34
			62F	5310	44.89	36.21
	HT8	MIMO CHAIN A	54F	5270	45.11	36.32
			62F	5310	45.63	36.28
		MIMO CHAIN B	54F	5270	43.64	36.19
			62F	5310	43.14	36.09
802.11ac80	VHT0	SISO CHAIN A	58ac80	5290	81.13	74.98
		SISO CHAIN B	58ac80	5290	81.04	74.96
	VHT0	MIMO CHAIN A	58ac80	5290	81.32	74.86
		MIMO CHAIN B	58ac80	5290	80.94	75.04

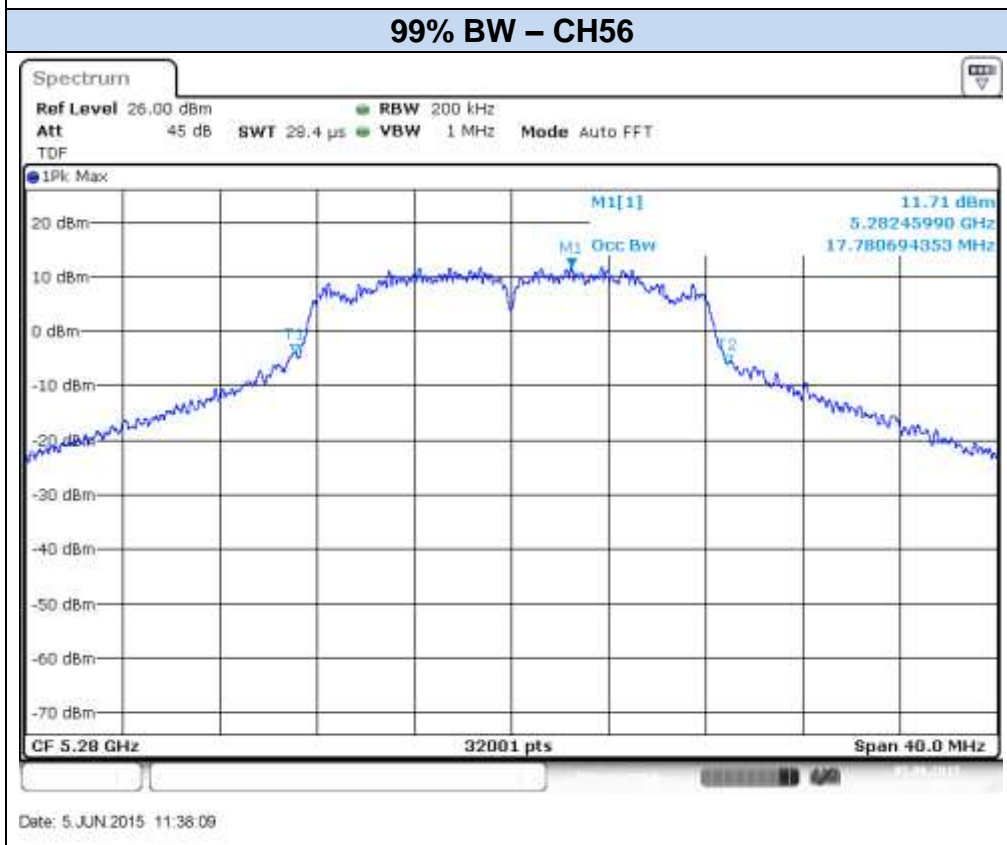
Results screenshot:

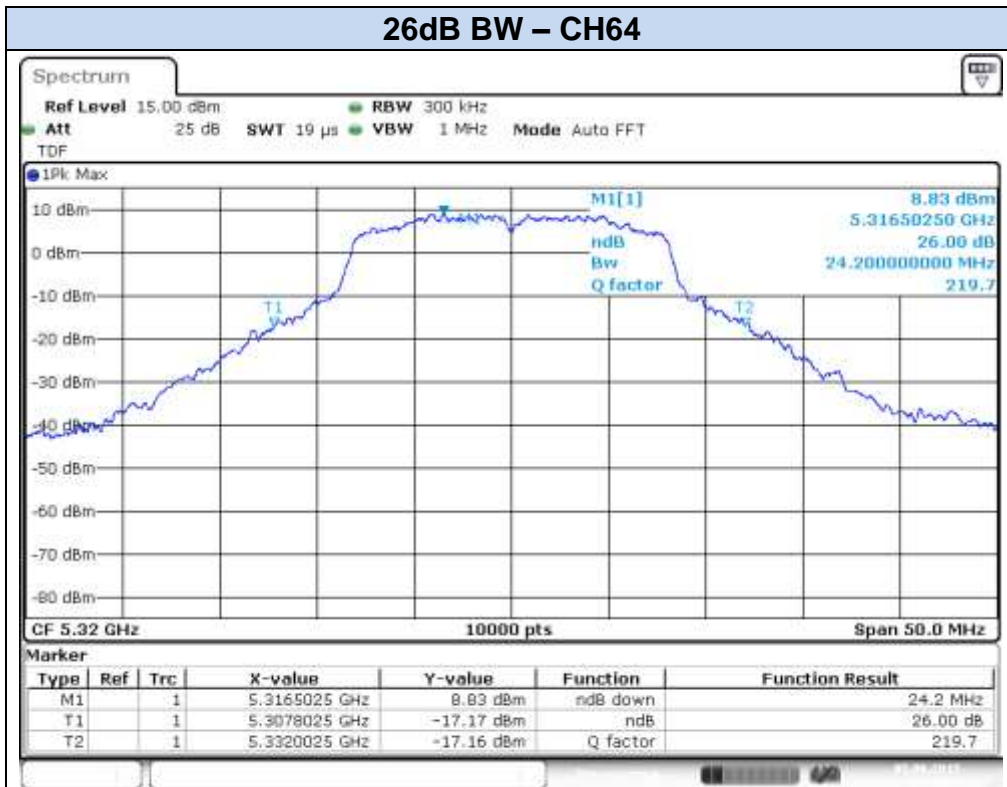
802.11a, 6Mbps – Chain A



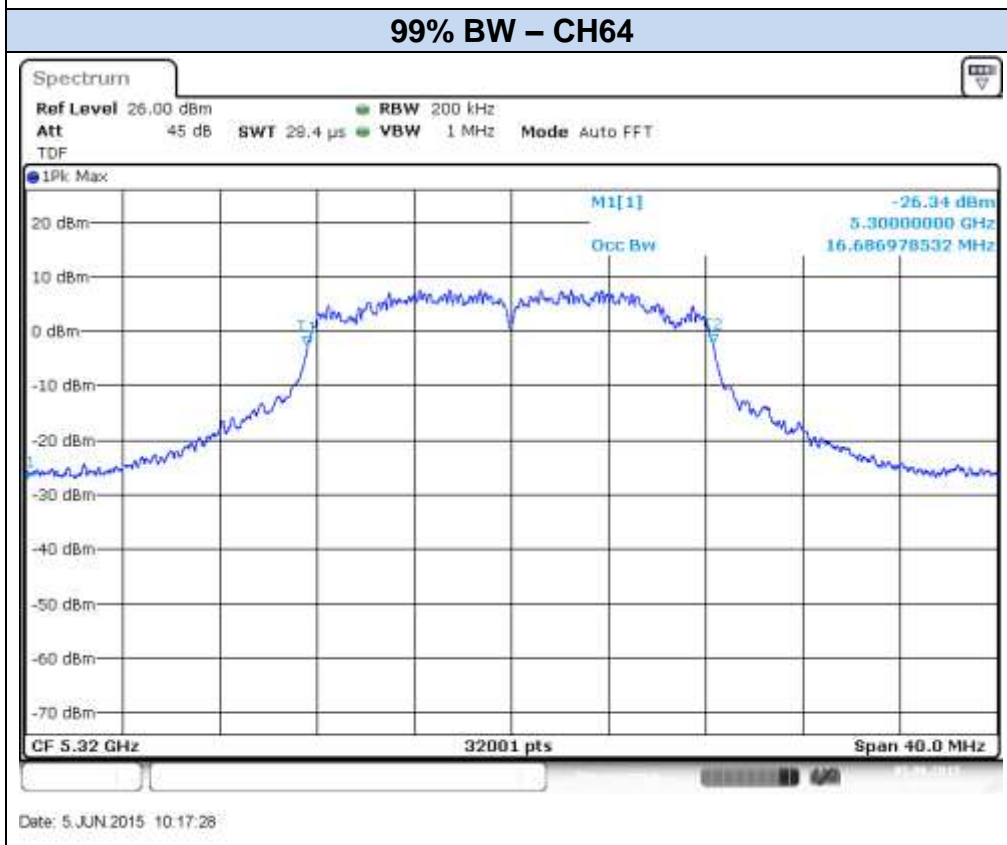


Date: 5 JUN 2015 11:36:55



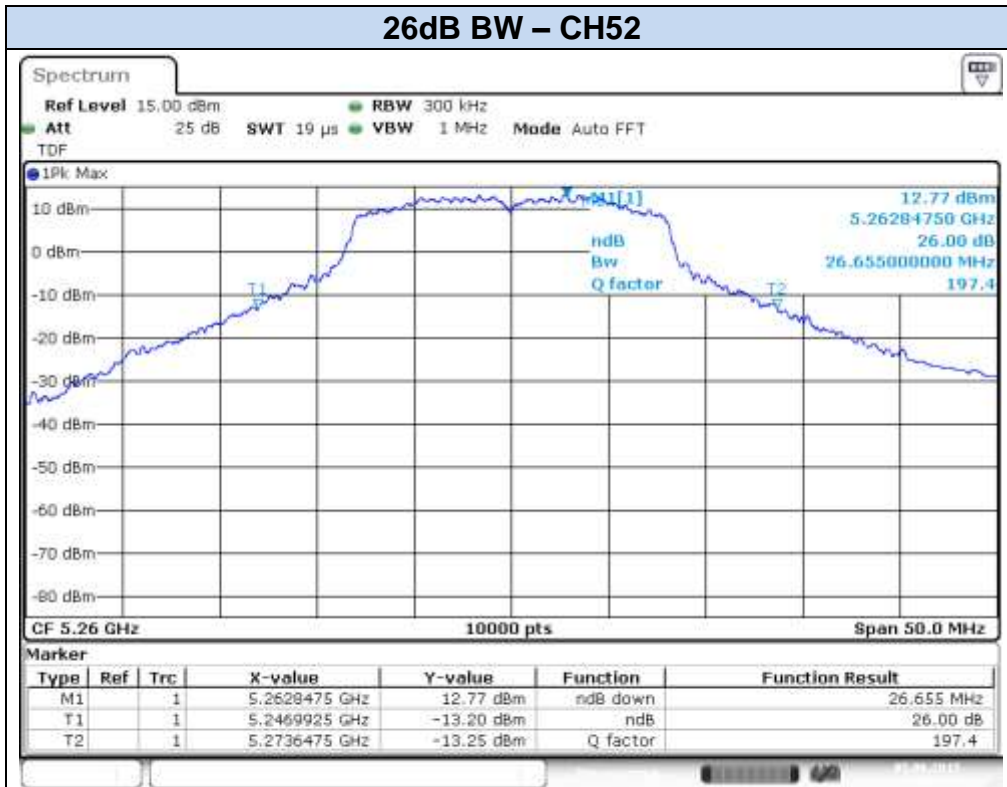


Date: 5 JUN 2015 10:16:01

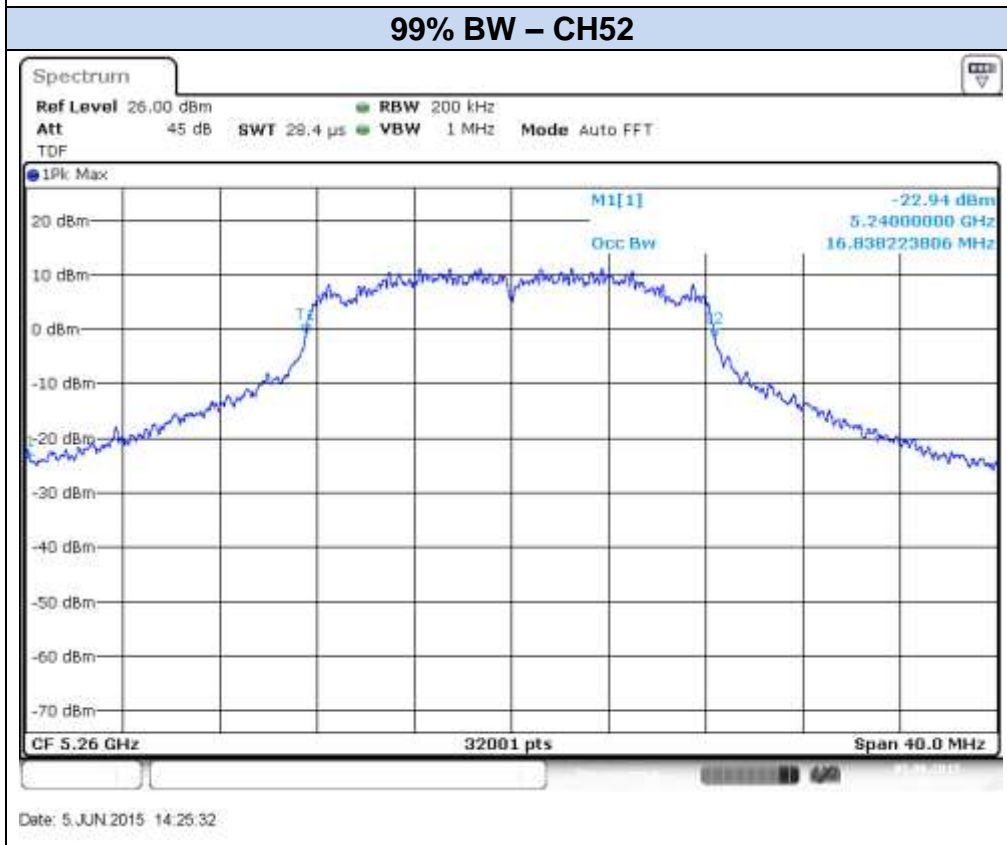


Date: 5 JUN 2015 10:17:28

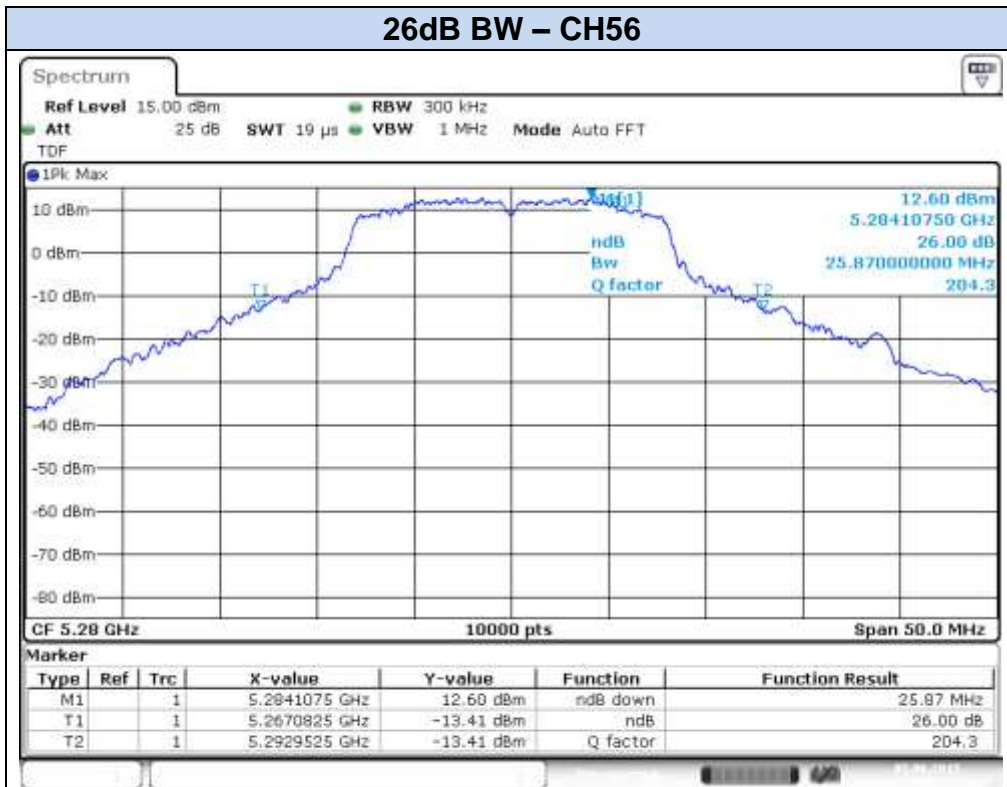
802.11a, 6Mbps – Chain B



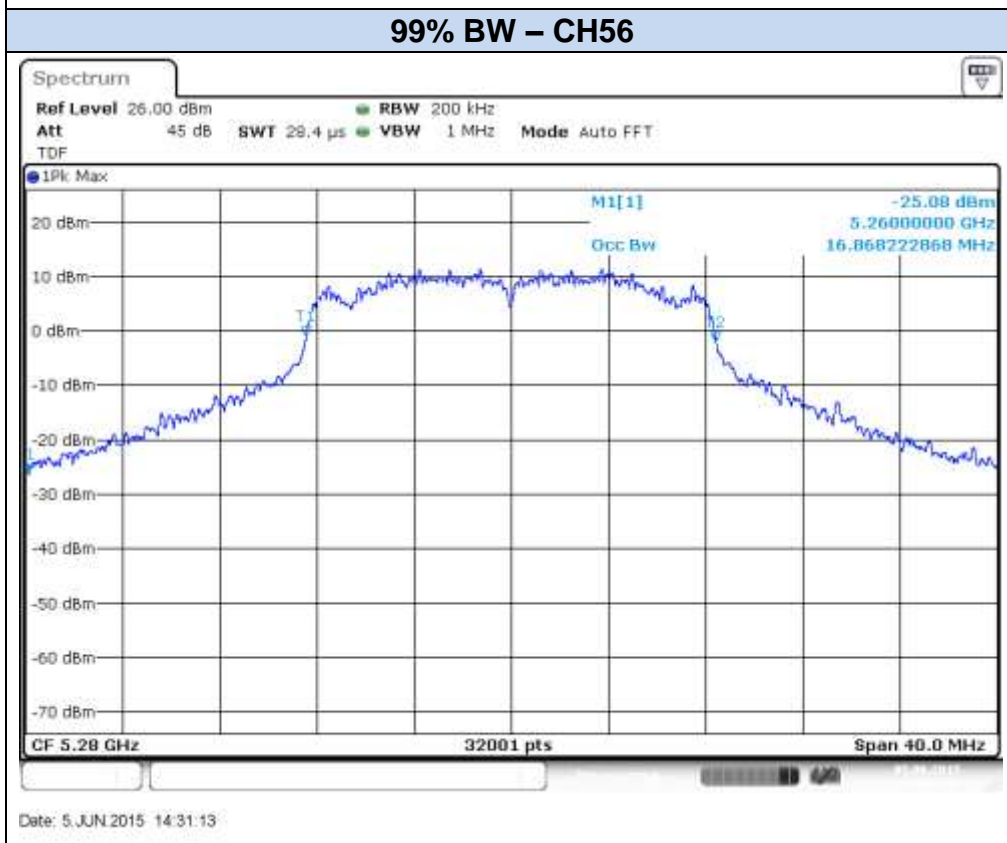
Date: 5 JUN 2015 14:24:33



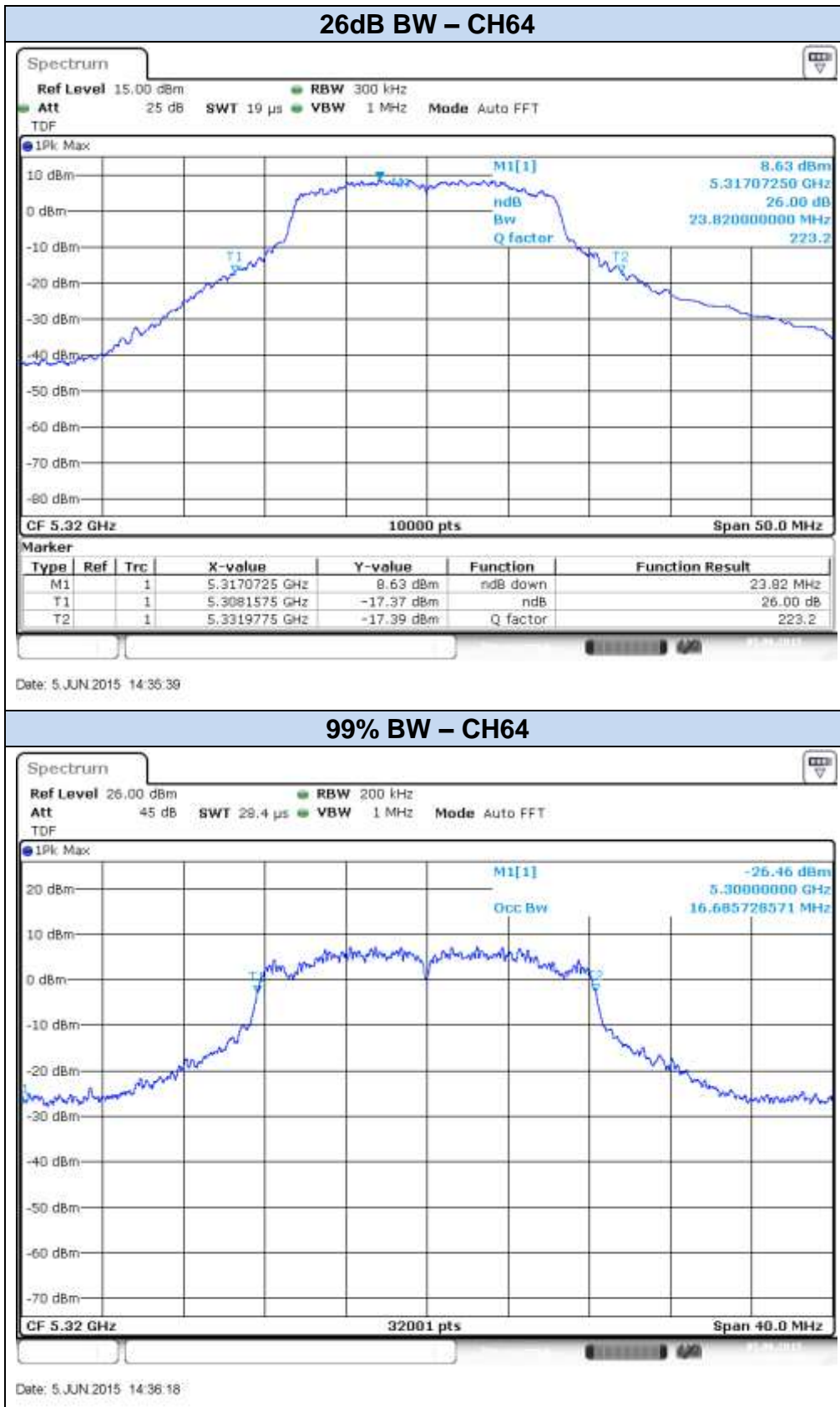
Date: 5 JUN 2015 14:25:32



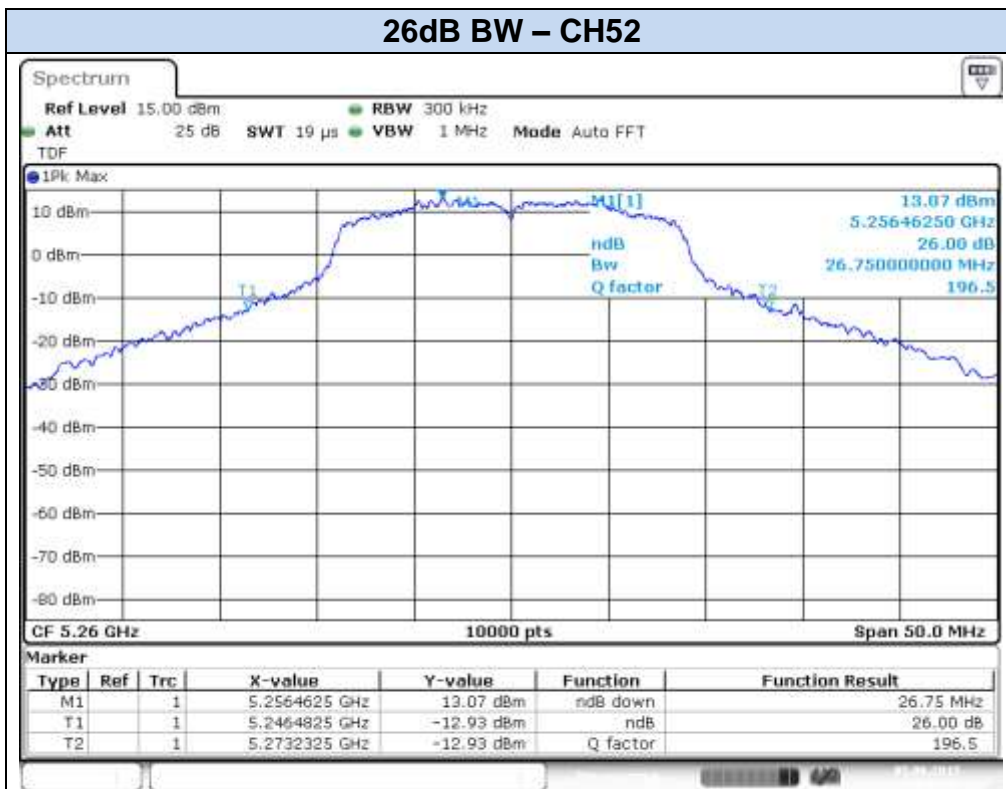
Date: 5 JUN 2015 14:30:26



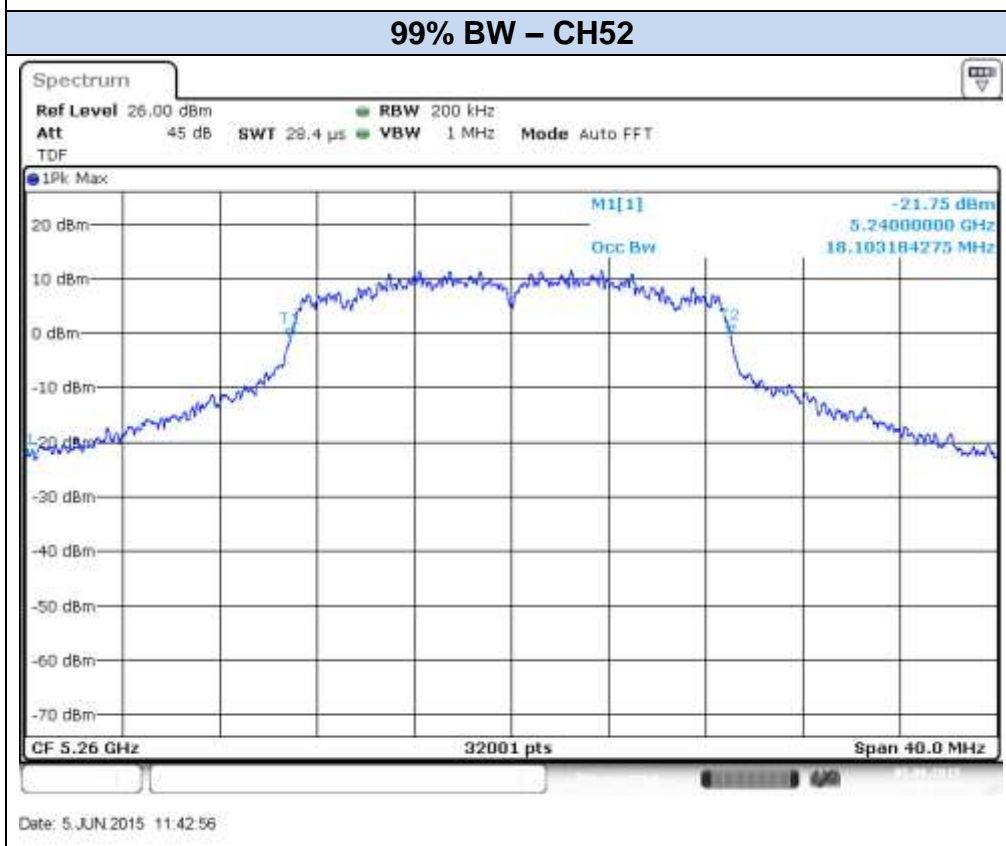
Date: 5 JUN 2015 14:31:13



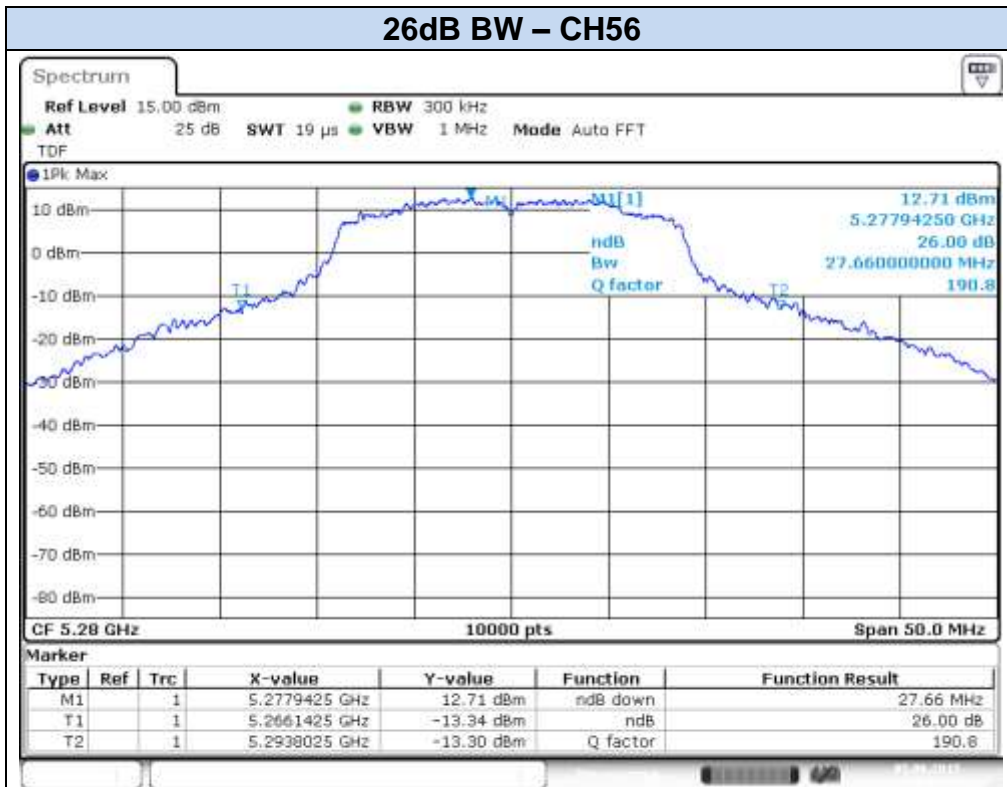
802.11n20, HT0 (SISO) – Chain A



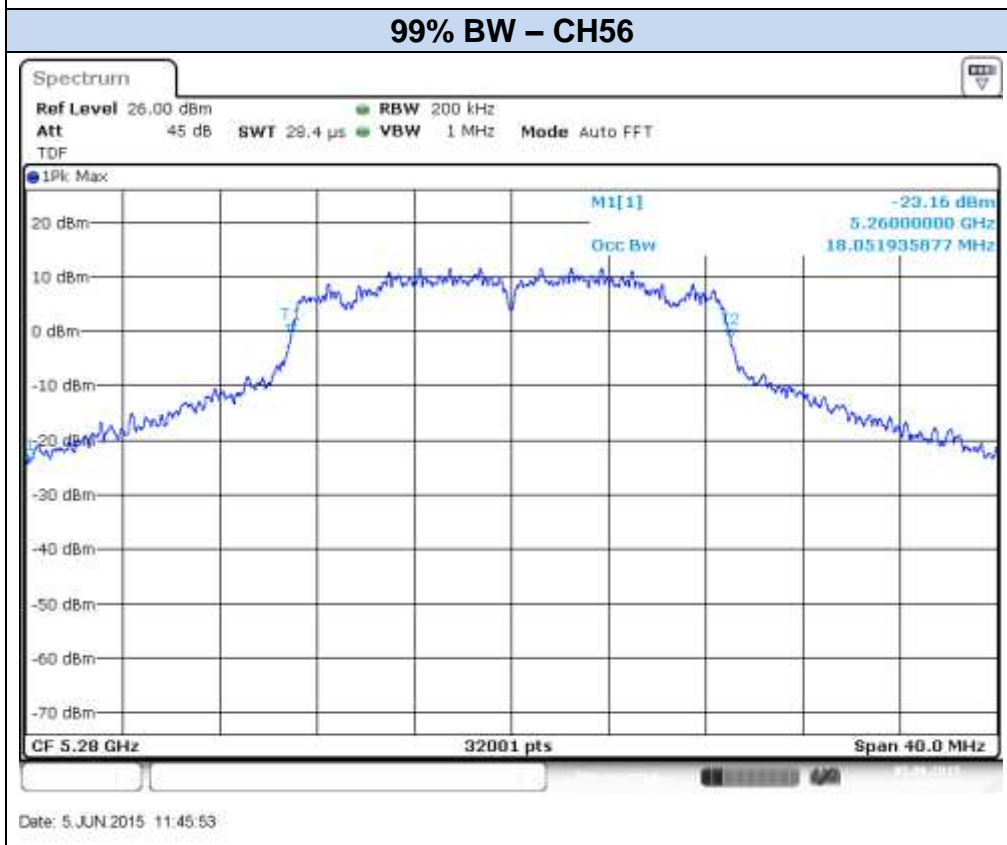
Date: 5 JUN 2015 11:41:42

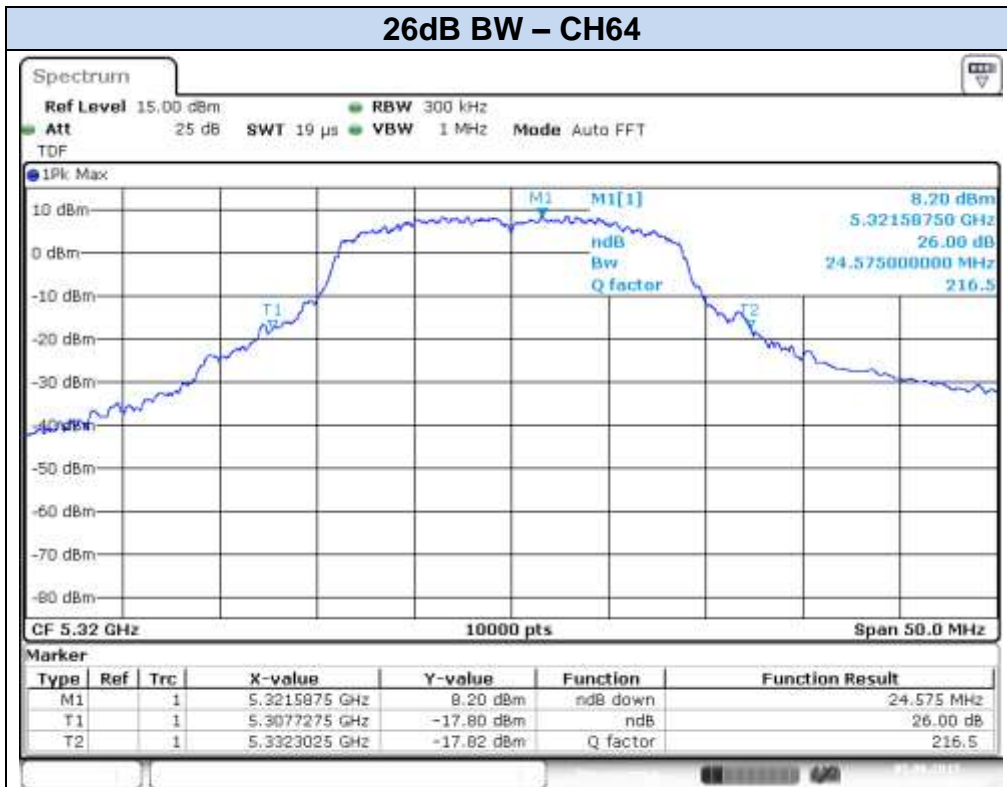


Date: 5 JUN 2015 11:42:56

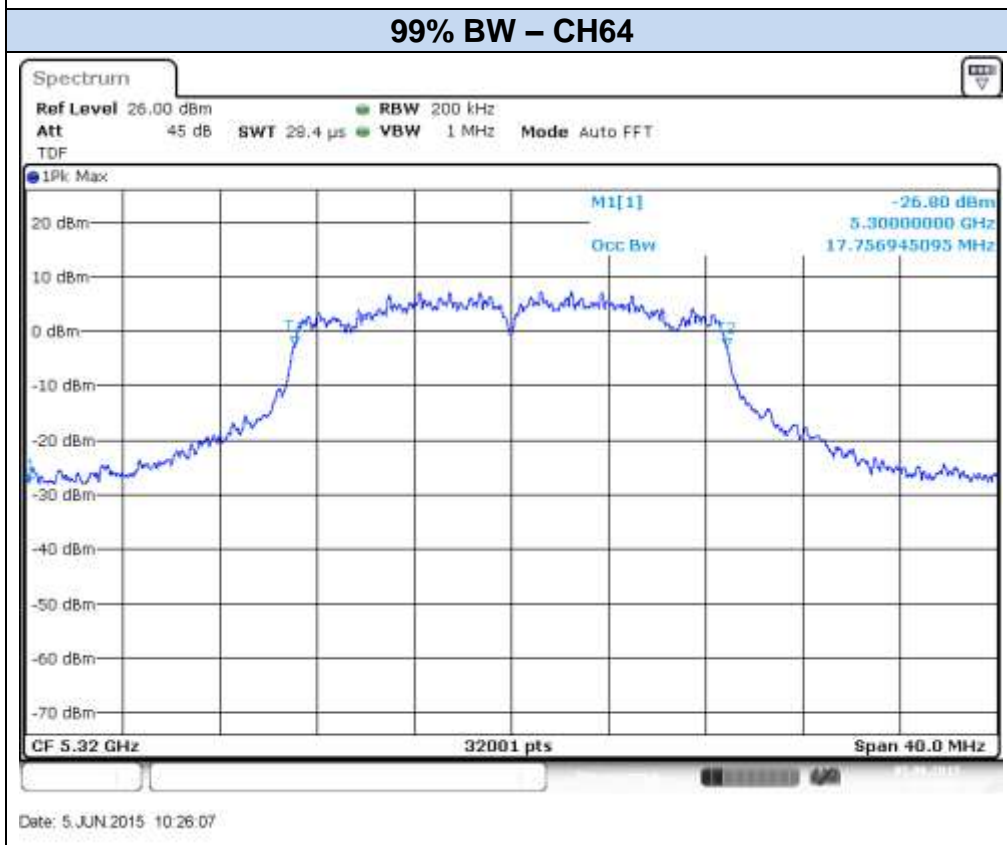


Date: 5 JUN 2015 11:44:59



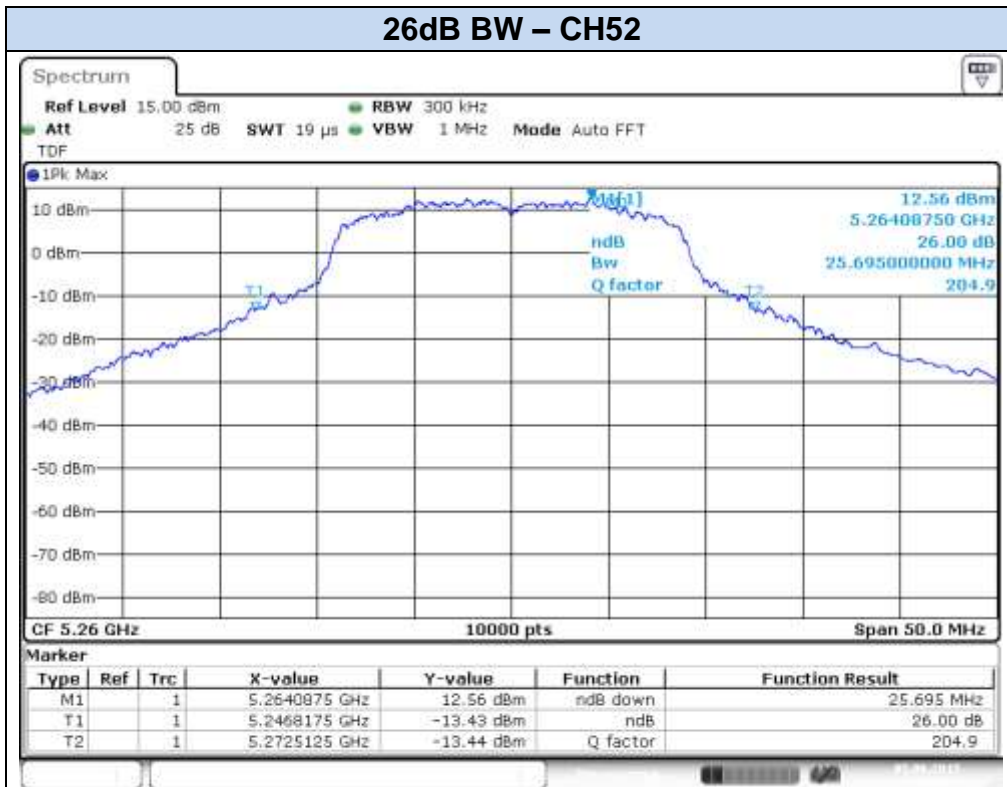


Date: 5 JUN 2015 10:37:11

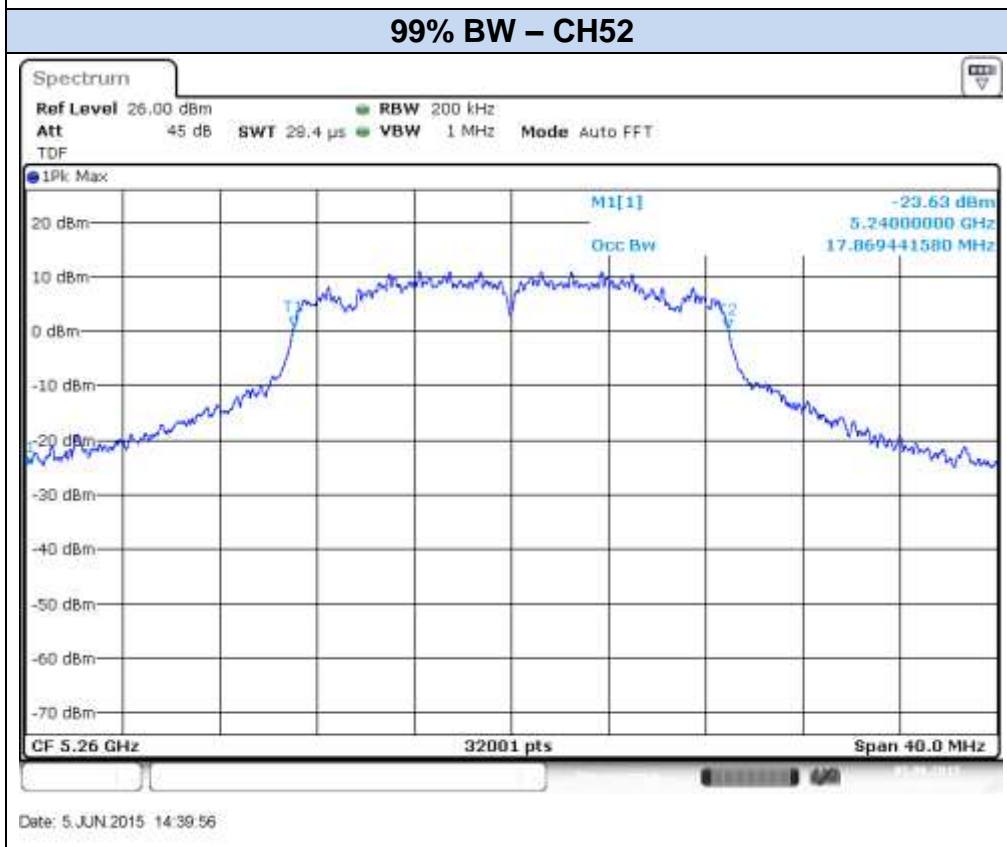


Date: 5 JUN 2015 10:26:07

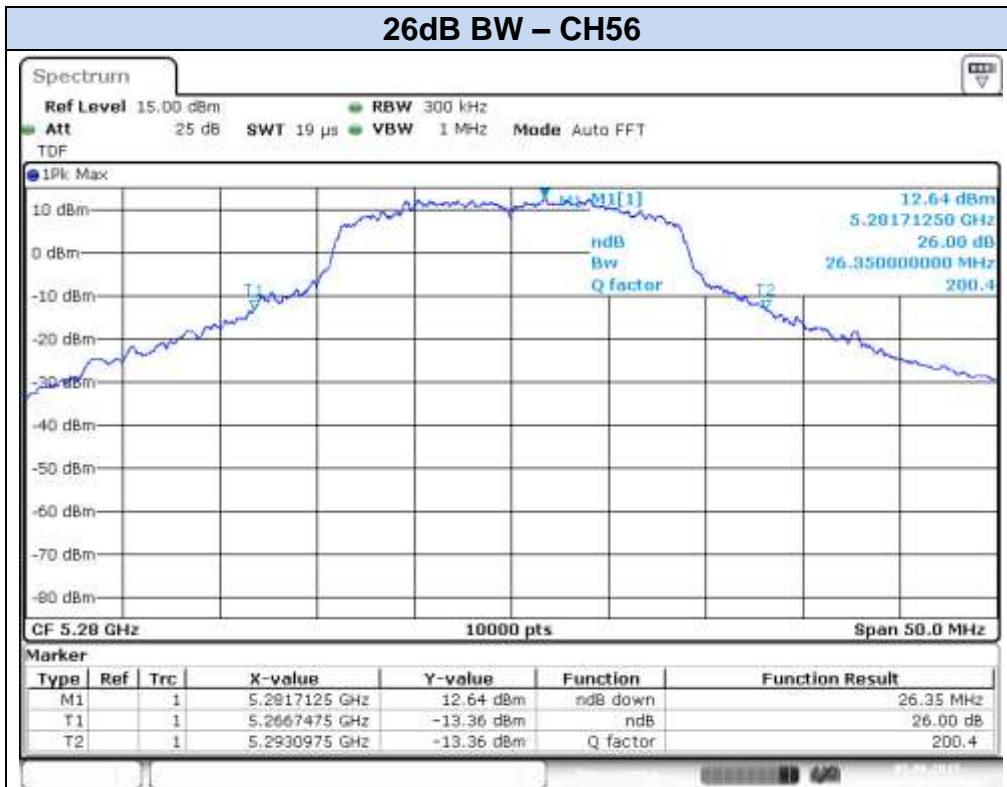
802.11n20, HT0 (SISO) – Chain B



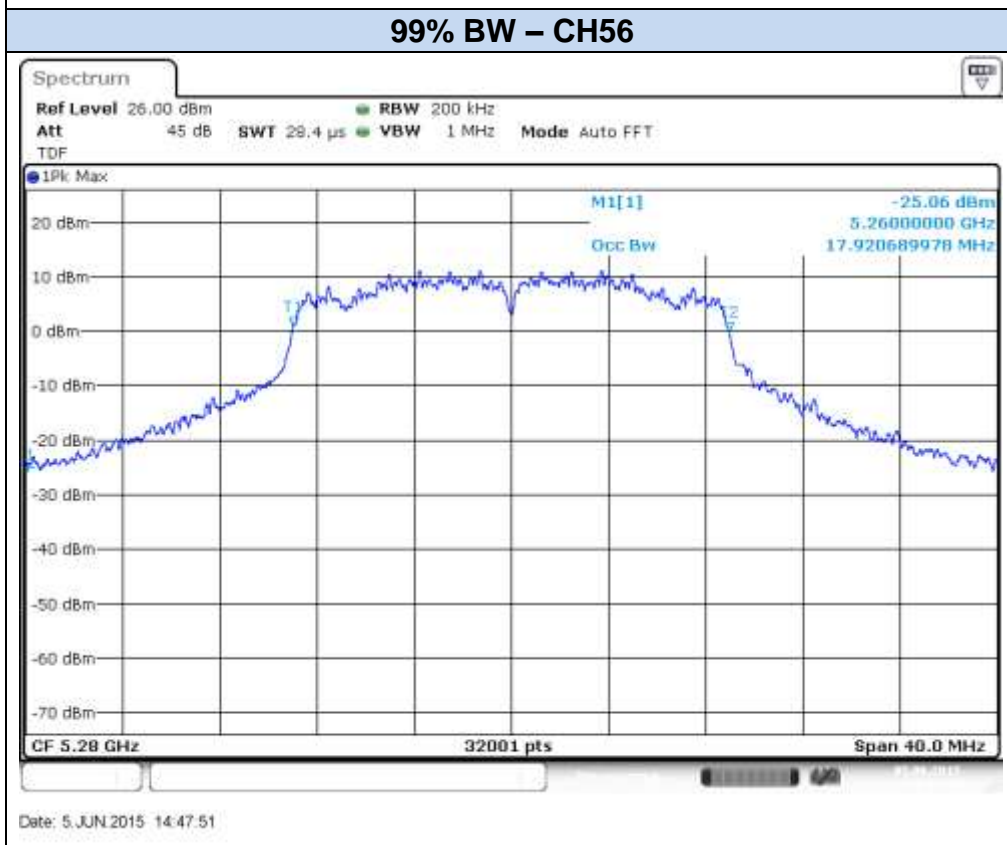
Date: 5 JUN 2015 14:39:09



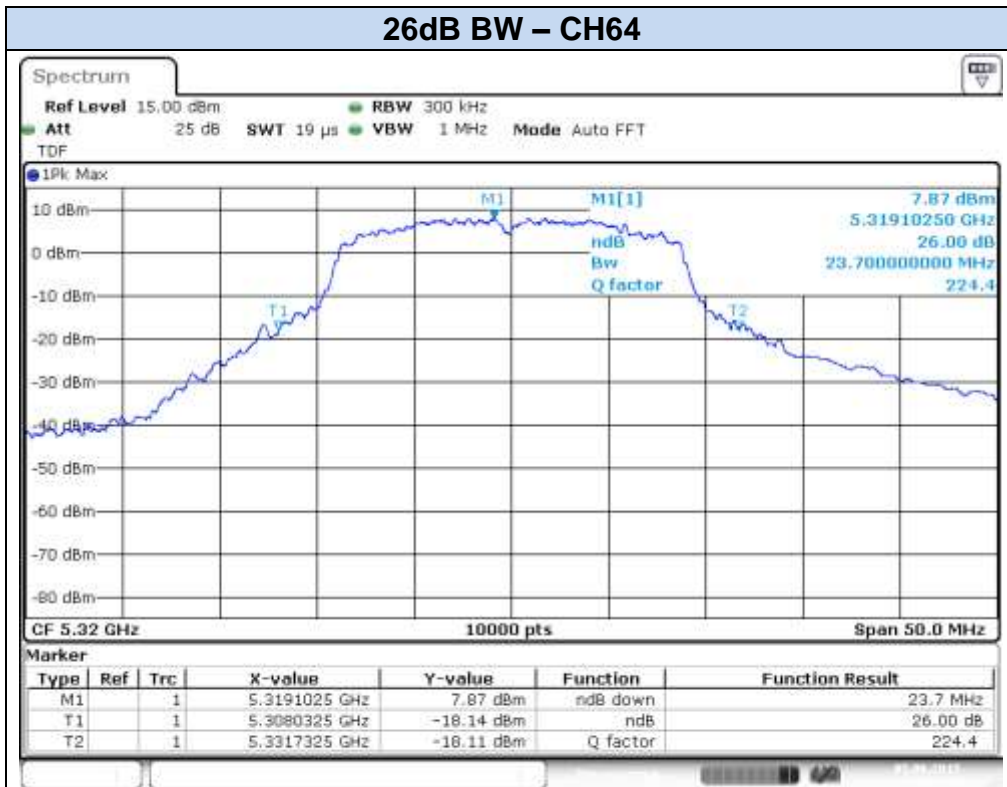
Date: 5 JUN 2015 14:39:56



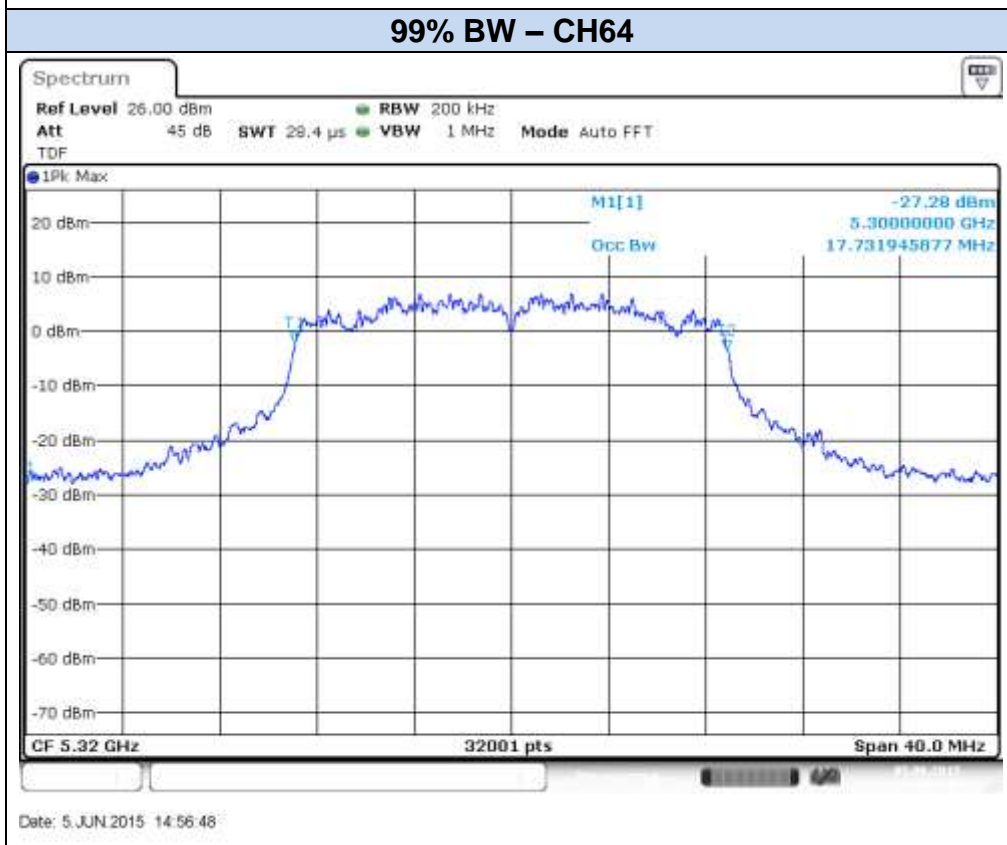
Date: 5 JUN 2015 14:46:57



Date: 5 JUN 2015 14:47:51

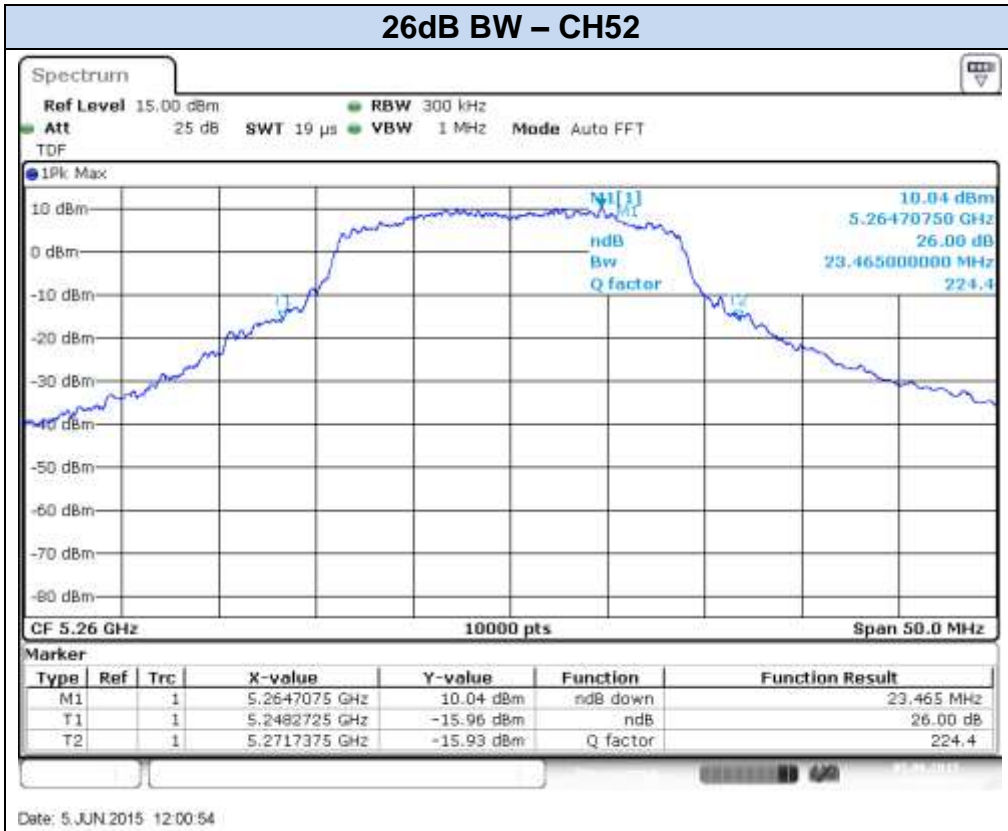


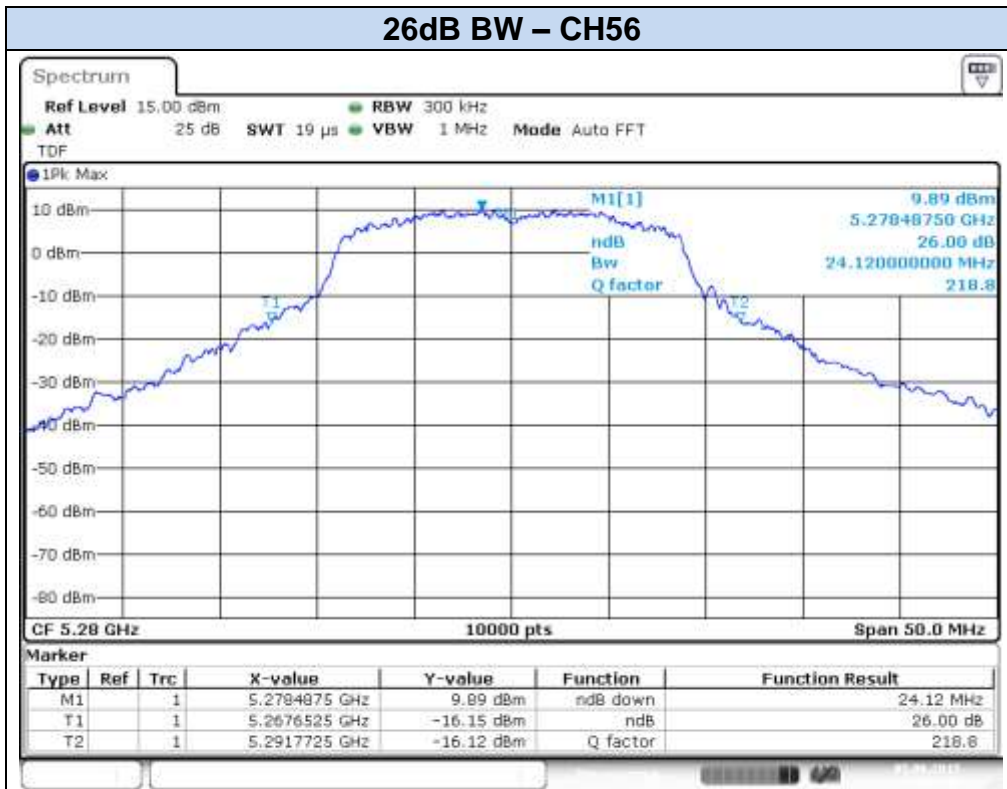
Date: 5 JUN 2015 14:56:19



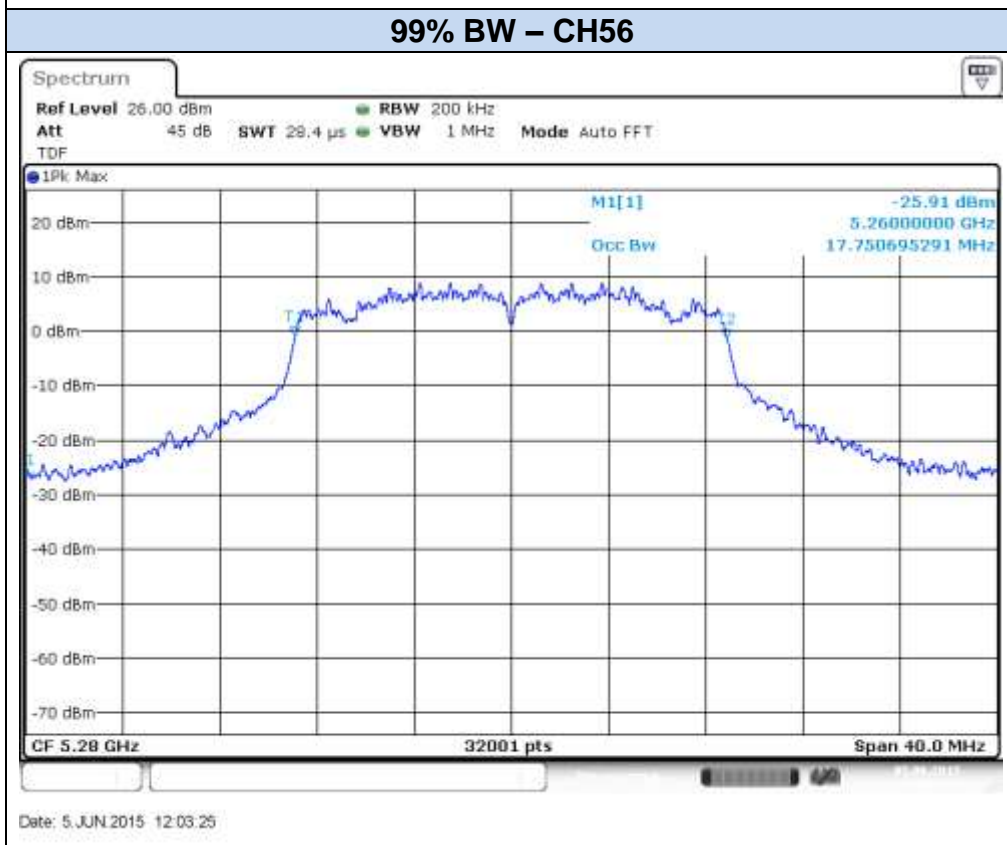
Date: 5 JUN 2015 14:56:48

802.11n20, HT8 (MIMO) – Chain A

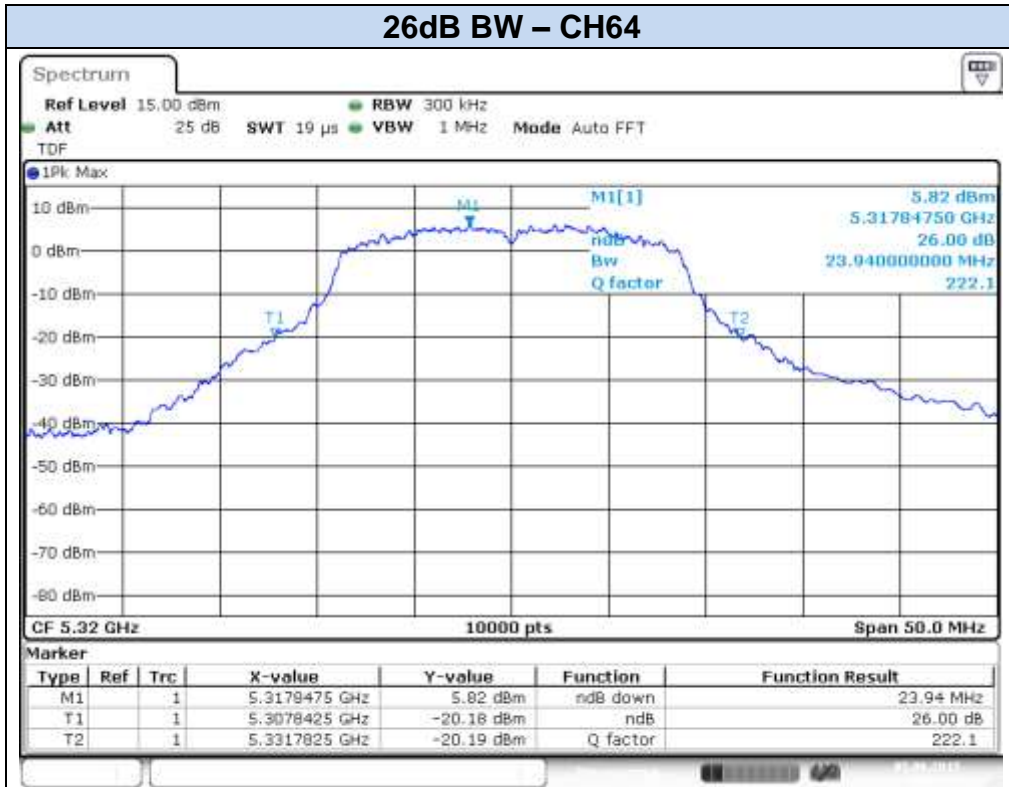




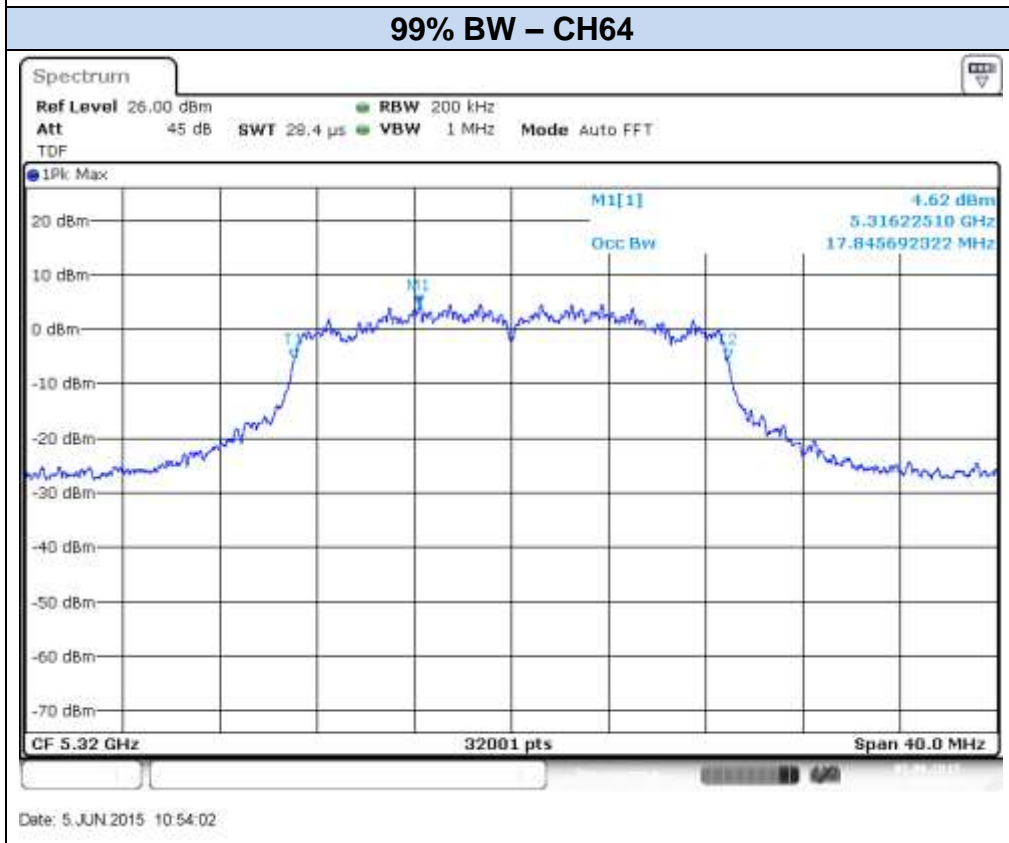
Date: 5 JUN 2015 12:02:41



Date: 5 JUN 2015 12:03:25

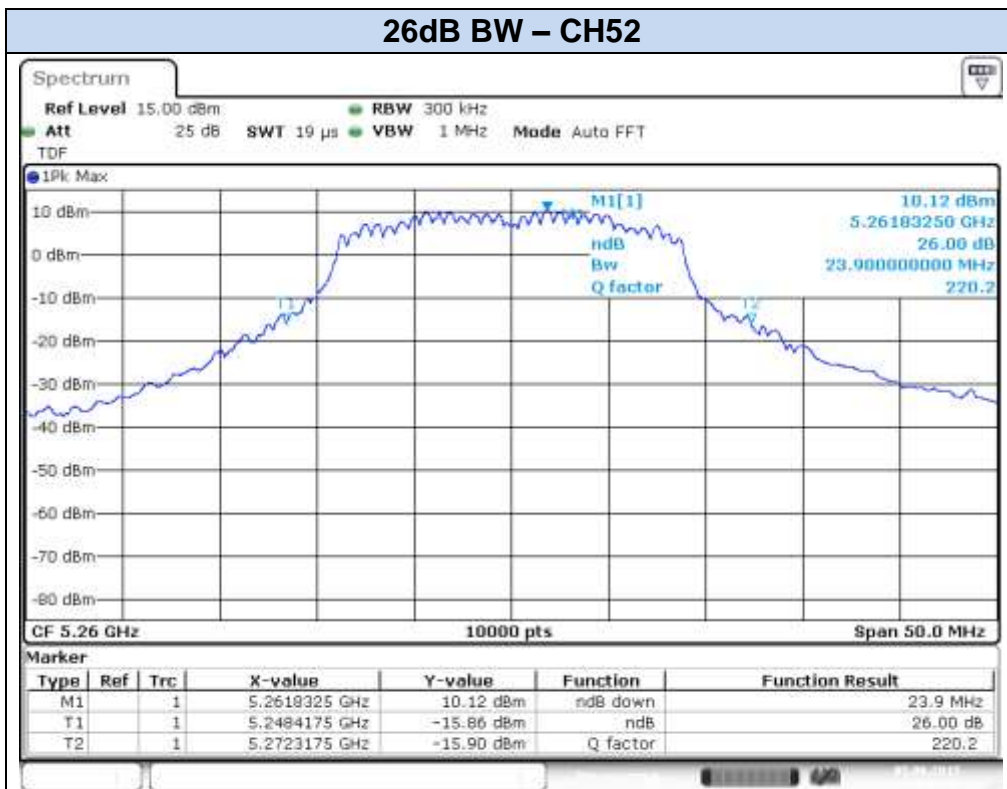


Date: 5 JUN 2015 10:53:01

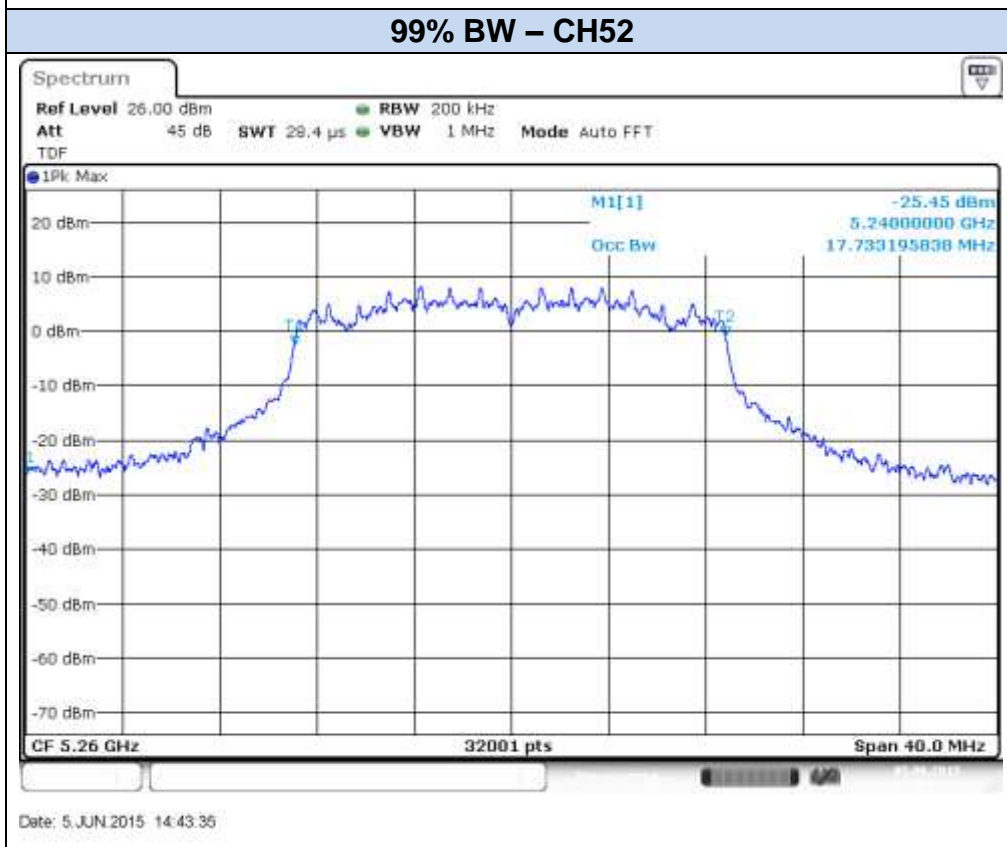


Date: 5 JUN 2015 10:54:02

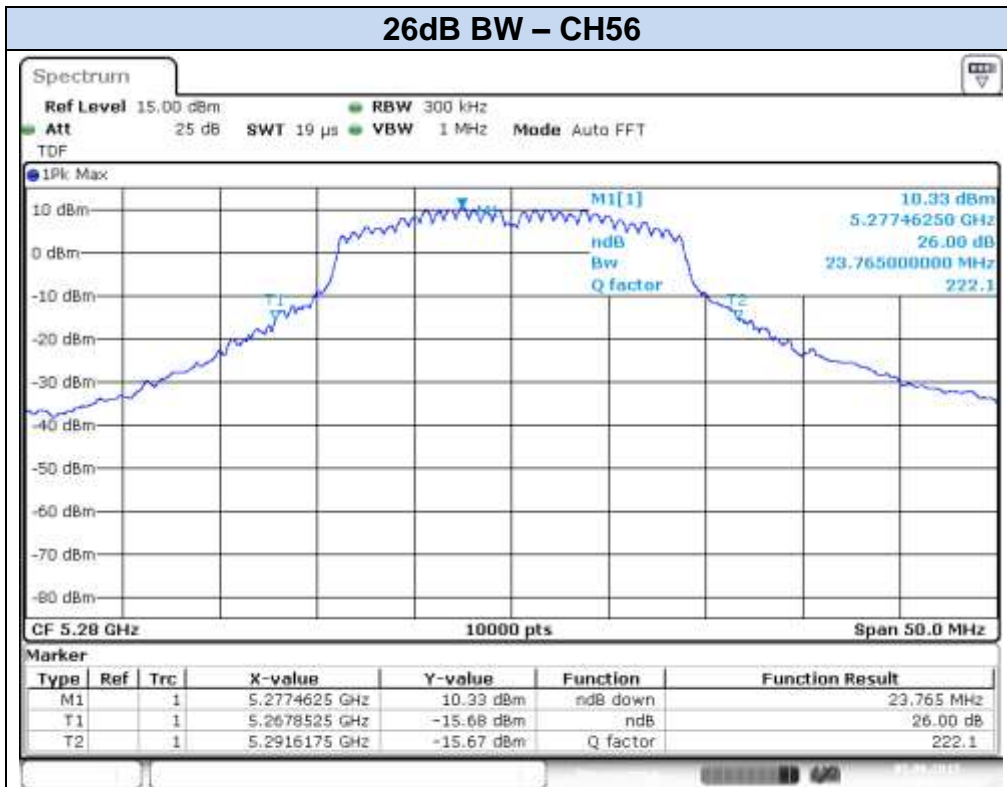
802.11n20, HT8 (MIMO) – Chain B



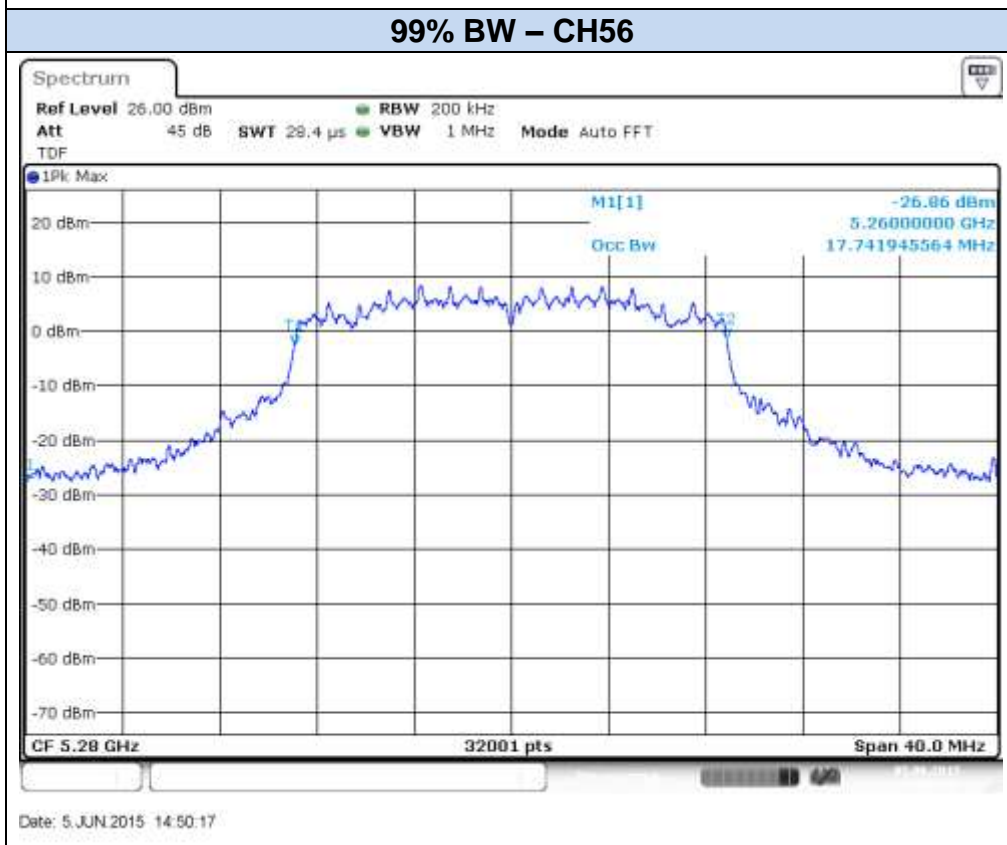
Date: 5 JUN 2015 14:42:42



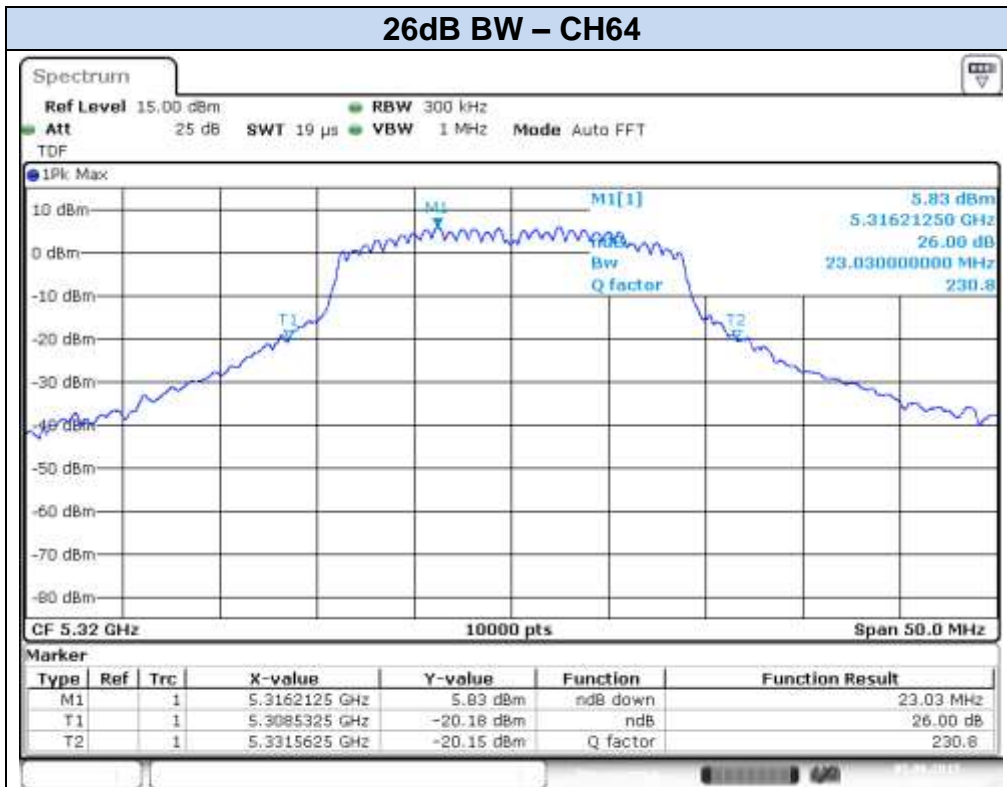
Date: 5 JUN 2015 14:43:35



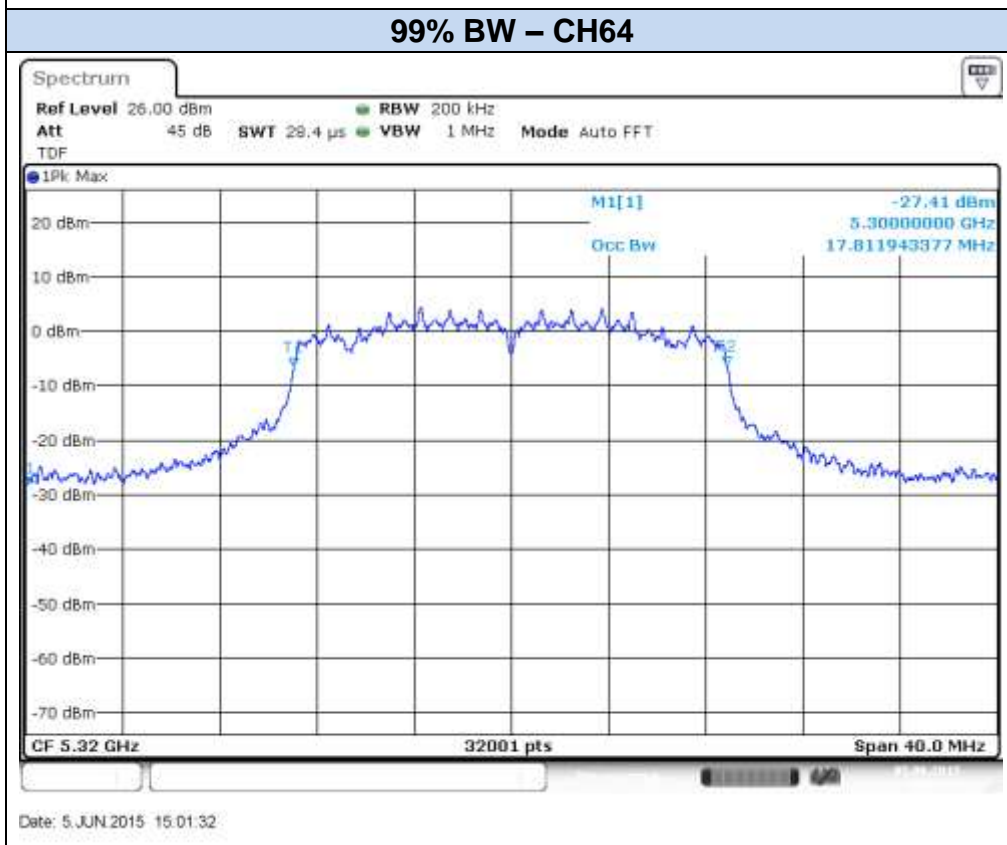
Date: 5 JUN 2015 14:49:37



Date: 5 JUN 2015 14:50:17

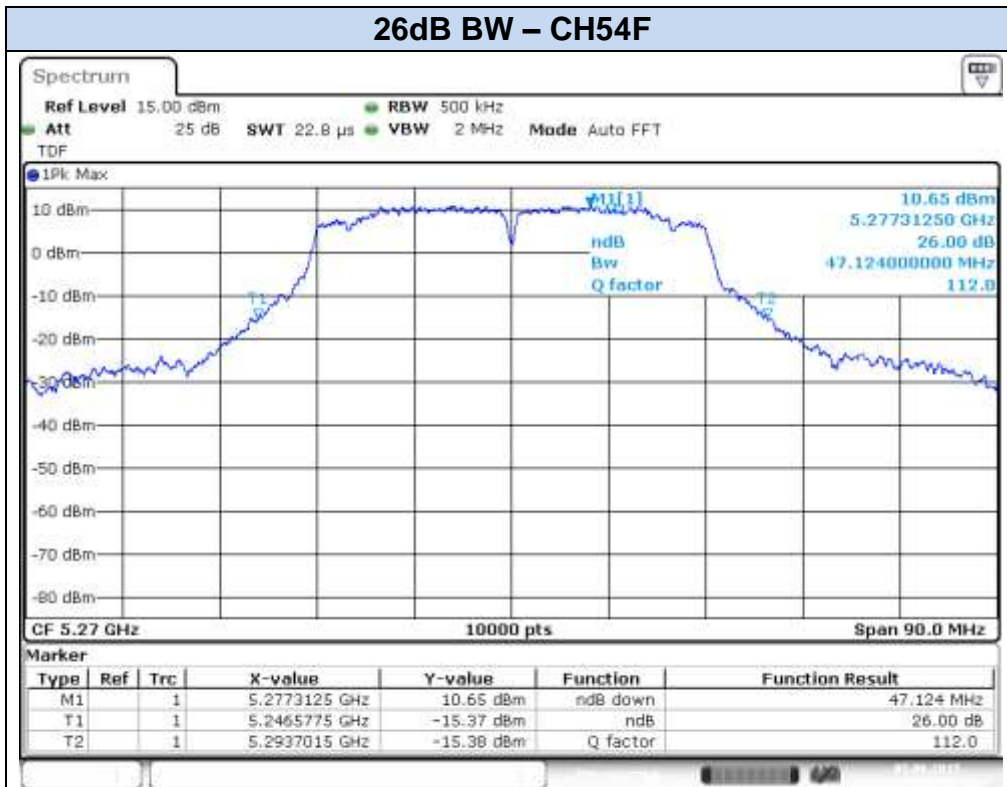


Date: 5 JUN 2015 15:01:02

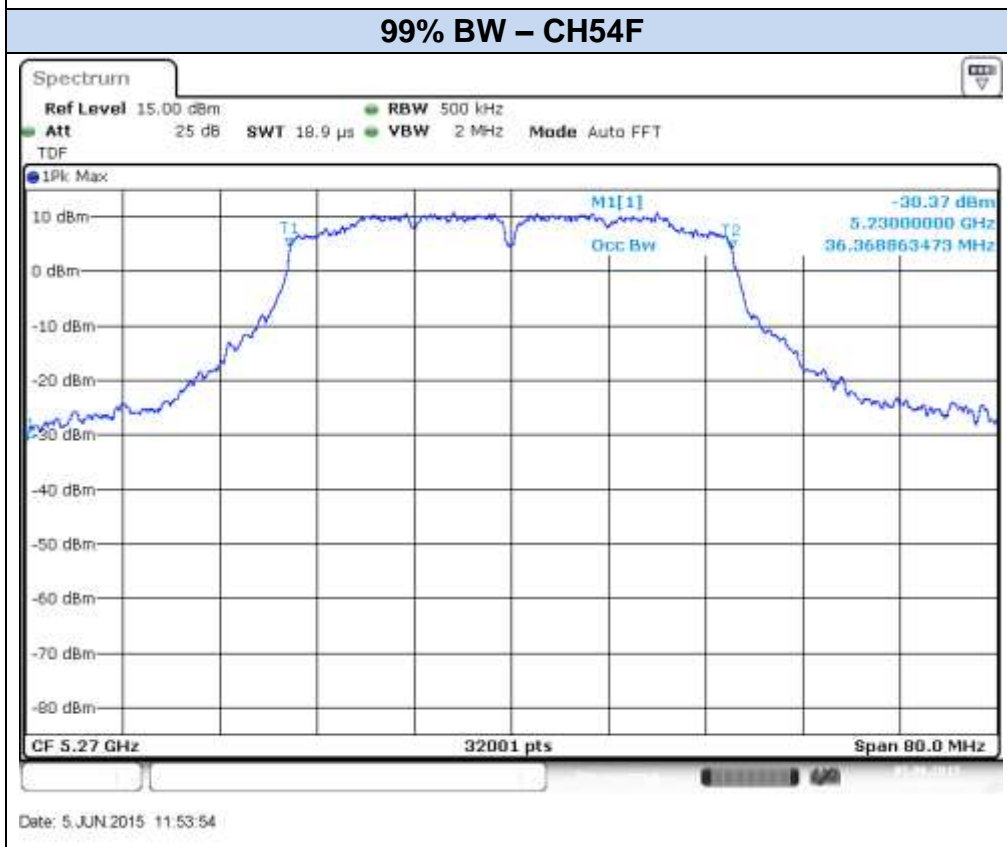


Date: 5 JUN 2015 15:01:32

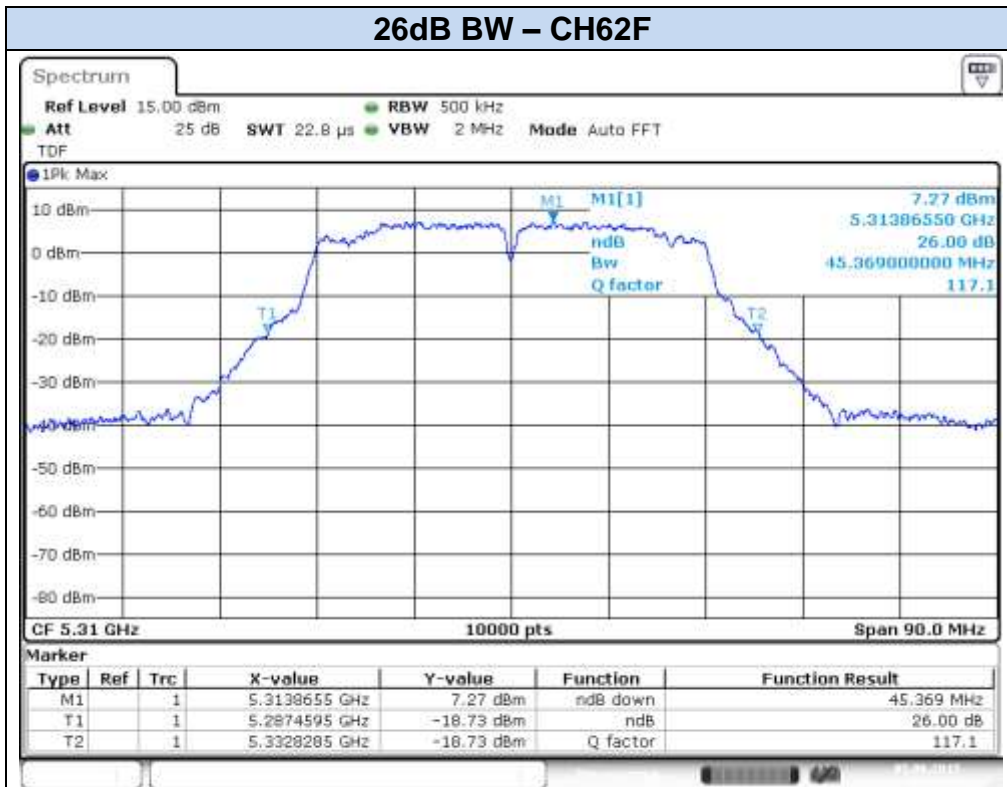
802.11n40, HT0 (SISO) – Chain A



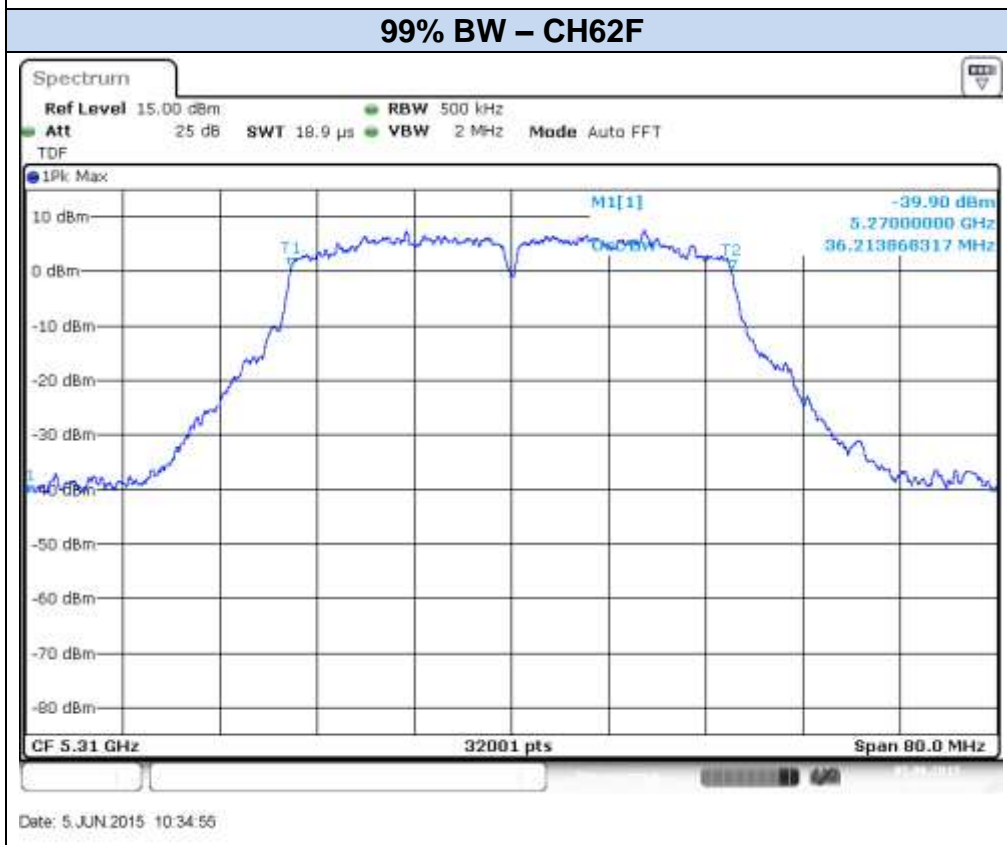
Date: 5 JUN 2015 11:52:42



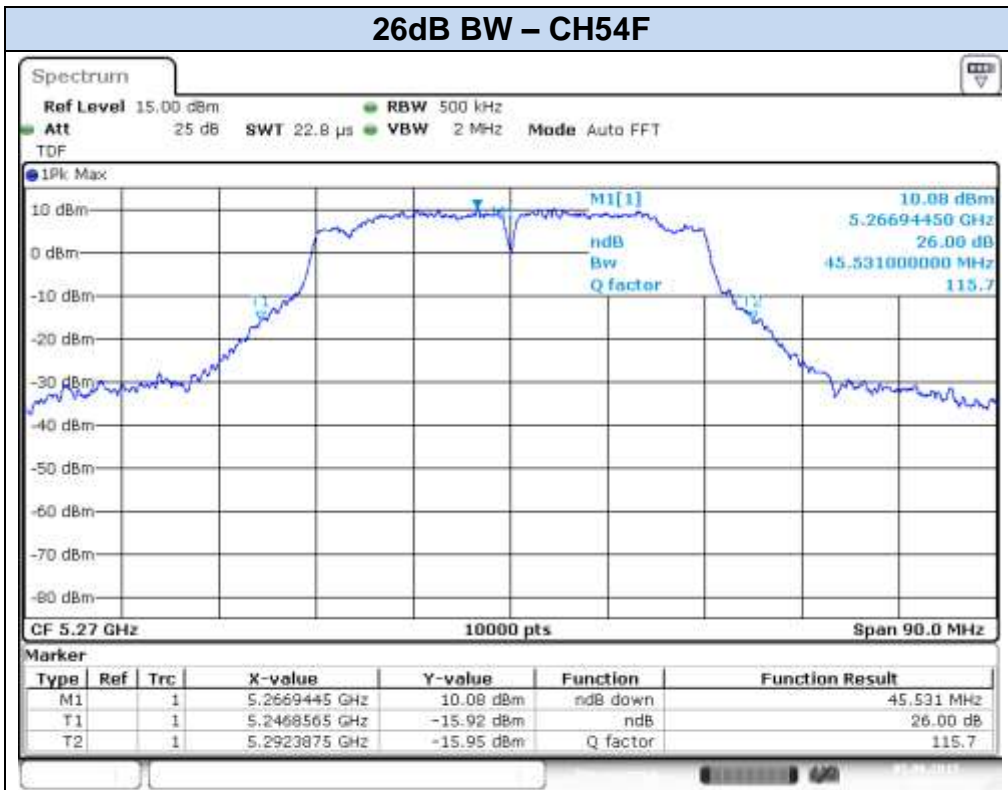
Date: 5 JUN 2015 11:53:54



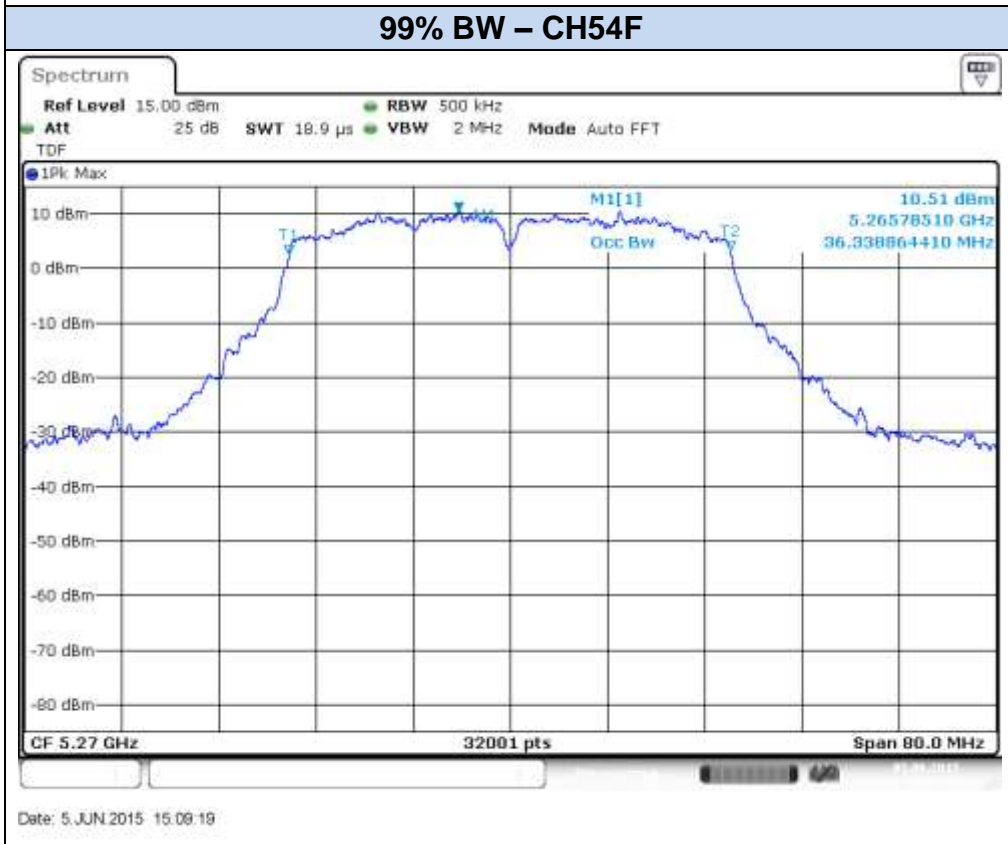
Date: 5 JUN 2015 10:33:32



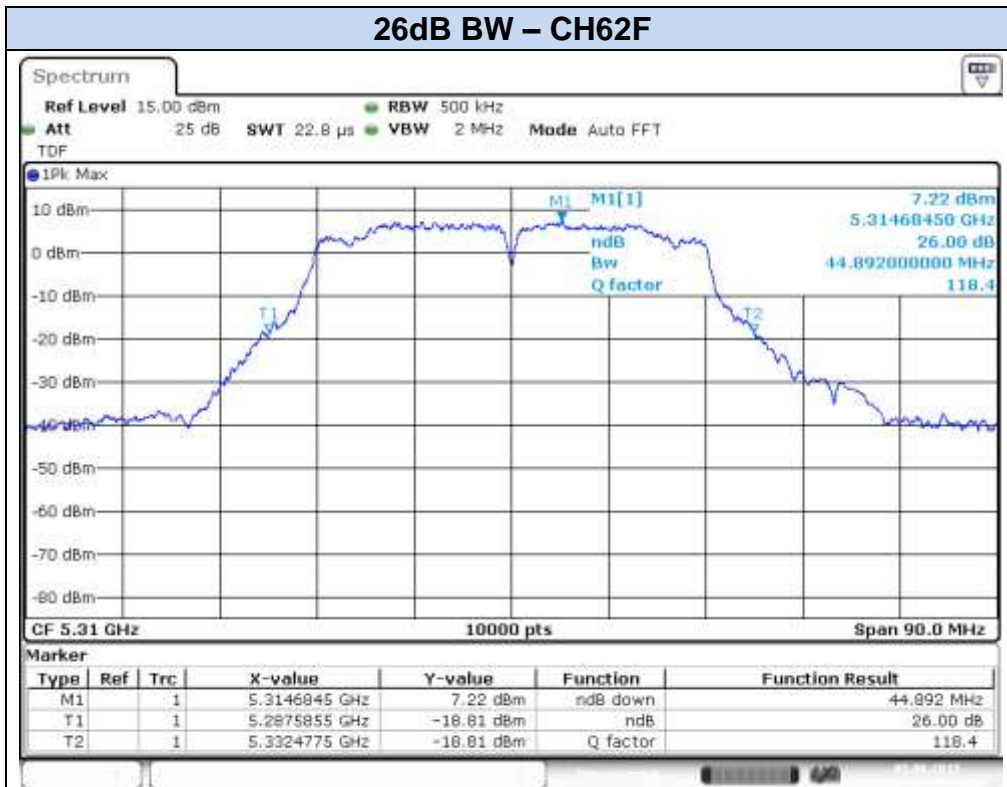
802.11n40, HT0 (SISO) – Chain B



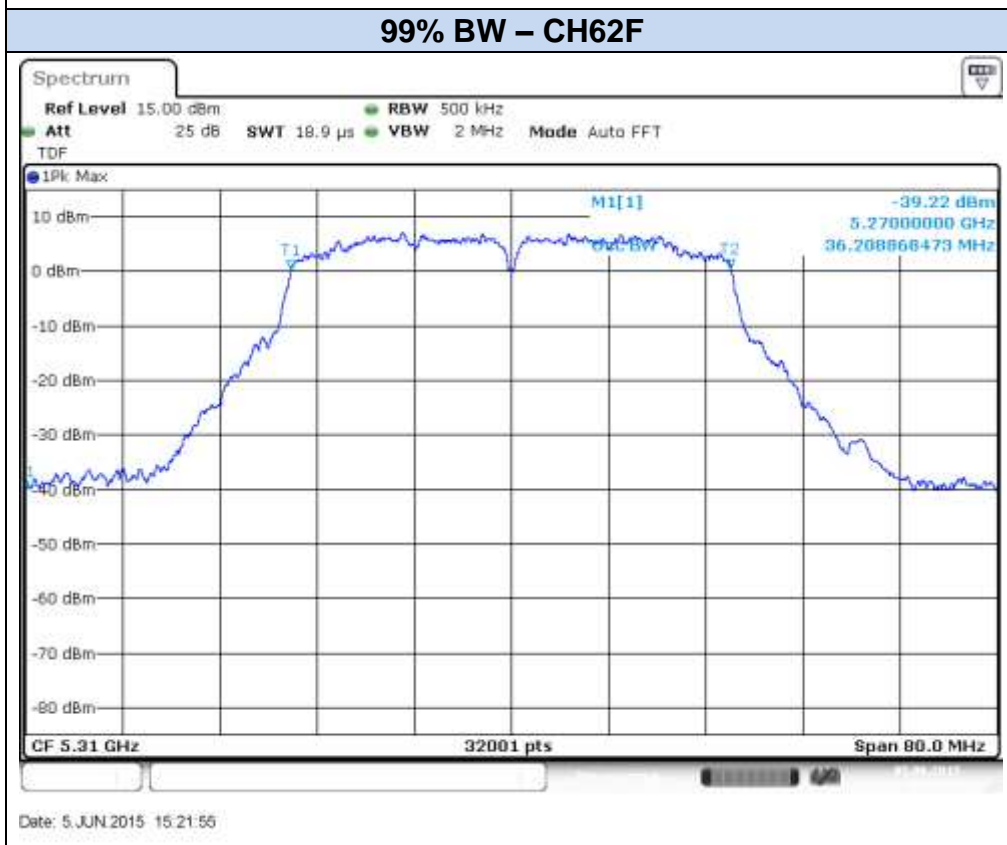
Date: 5 JUN 2015 15:08:27



Date: 5 JUN 2015 15:08:19



Date: 5 JUN 2015 15:21:02

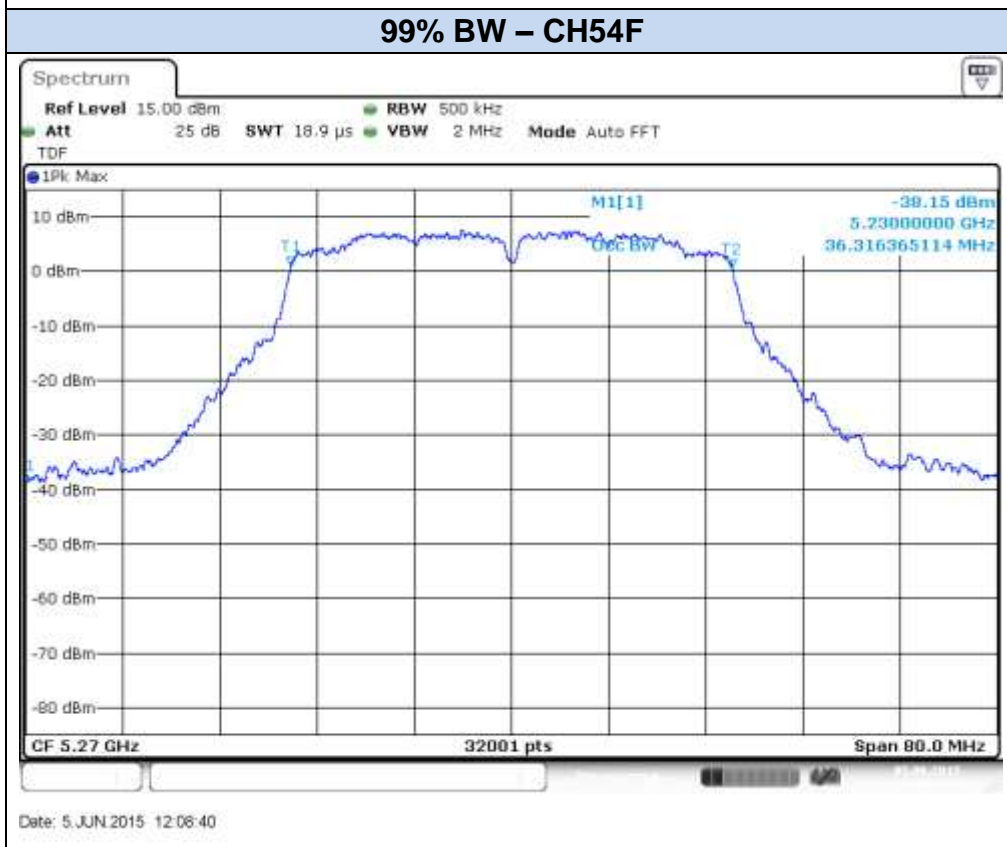


Date: 5 JUN 2015 15:21:55

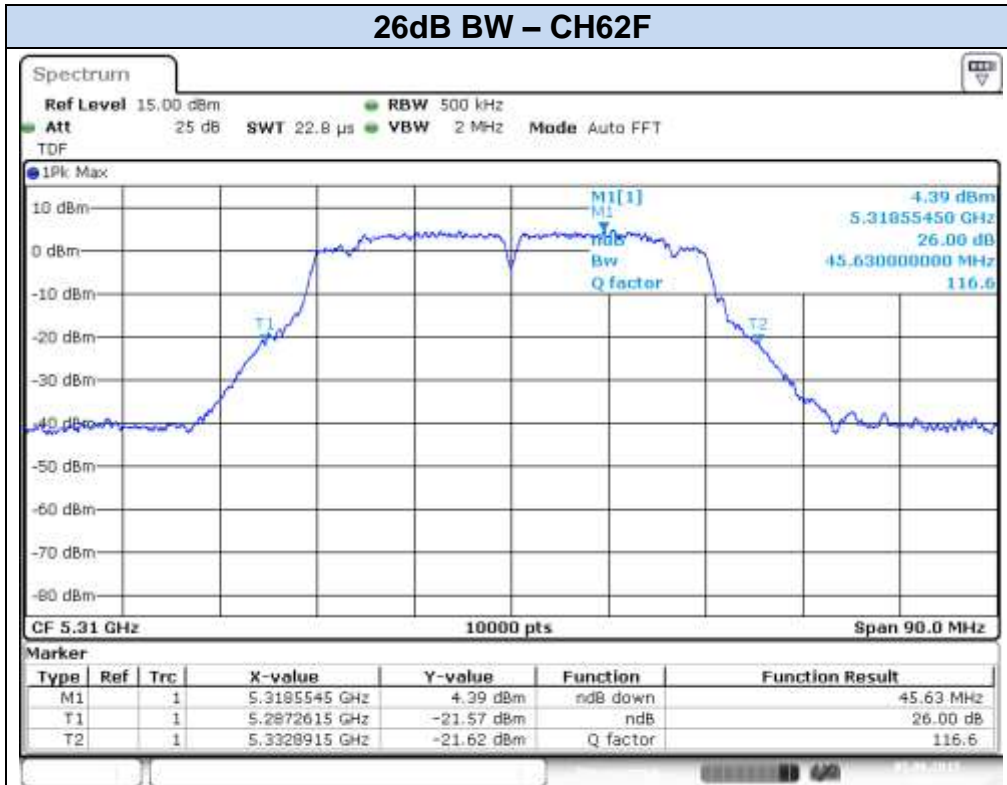
802.11n40, HT8 (MIMO) – Chain A



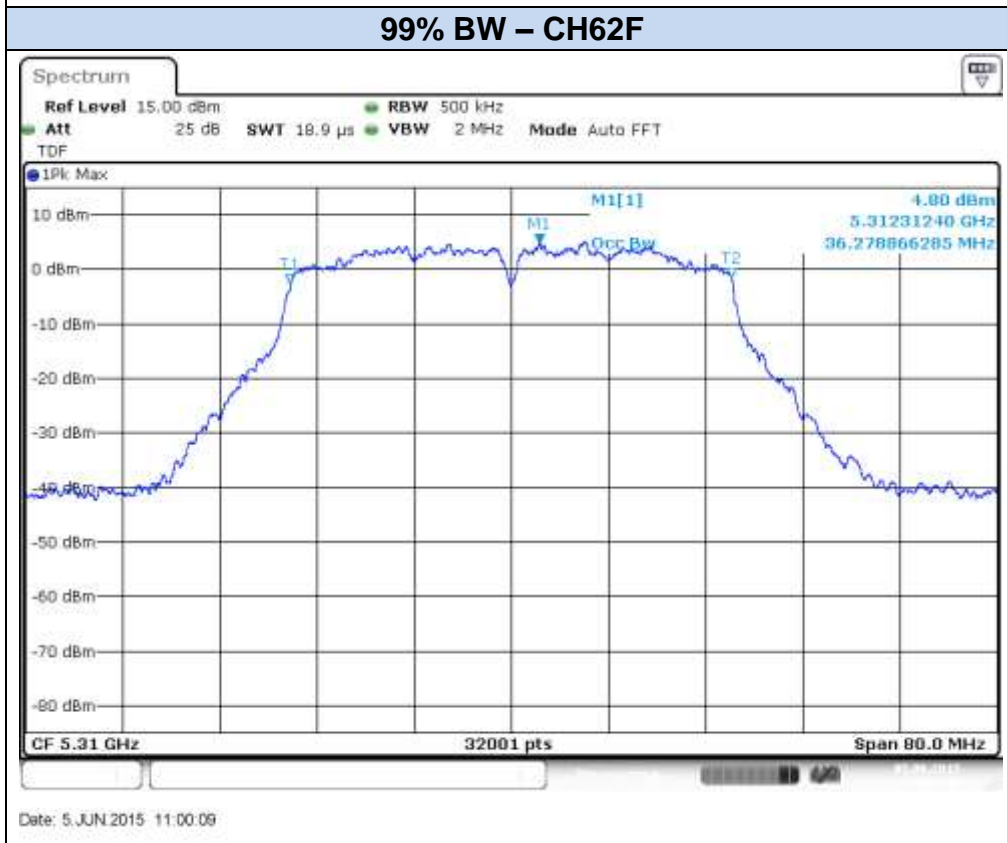
Date: 5 JUN 2015 12:05:09



Date: 5 JUN 2015 12:06:40

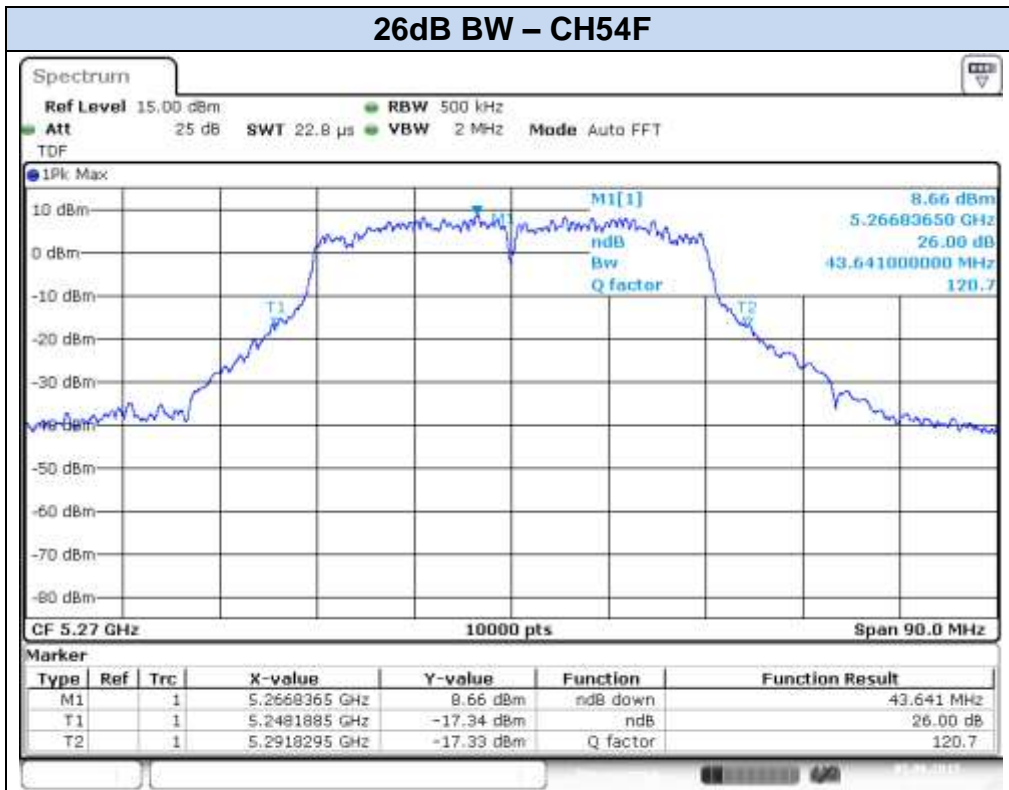


Date: 5 JUN 2015 10:59:23

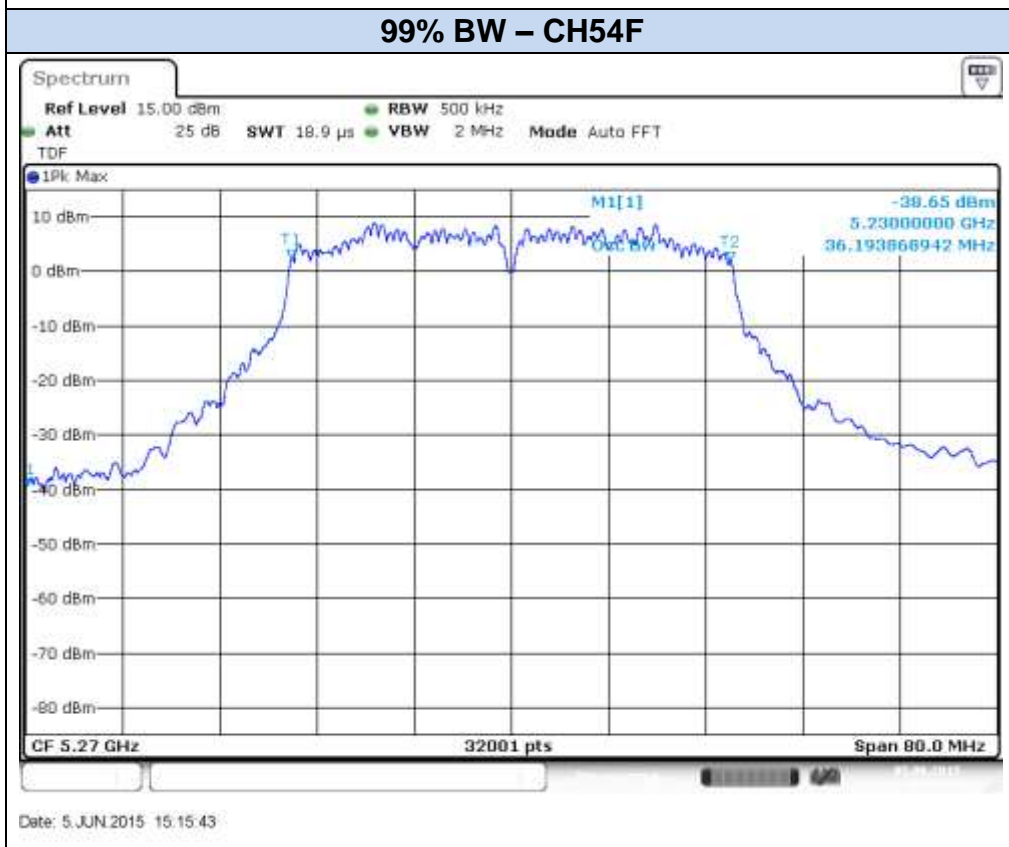


Date: 5 JUN 2015 11:00:09

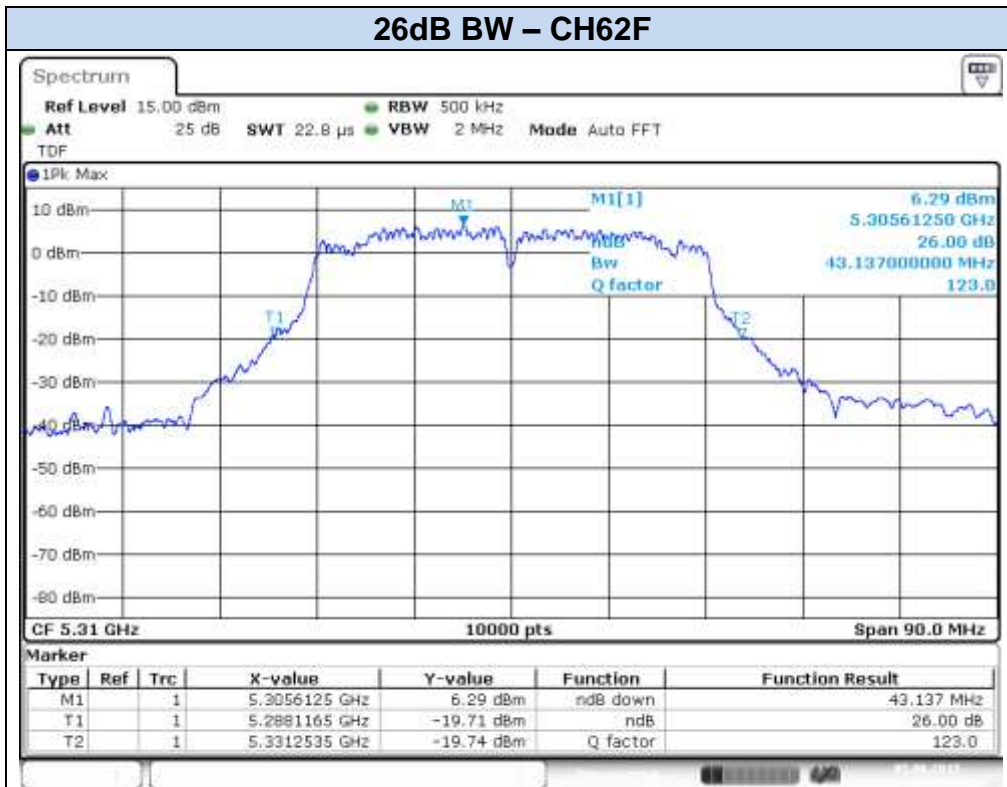
802.11n40, HT8 (MIMO) – Chain B



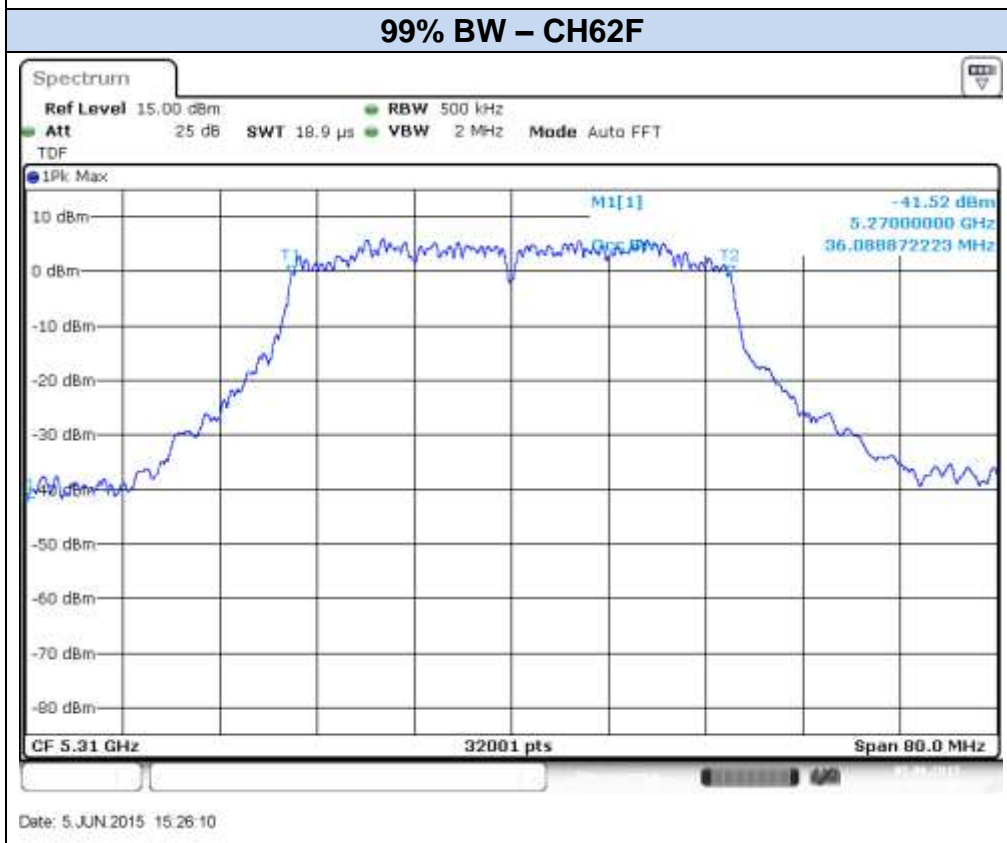
Date: 5 JUN 2015 15:14:58



Date: 5 JUN 2015 15:15:43

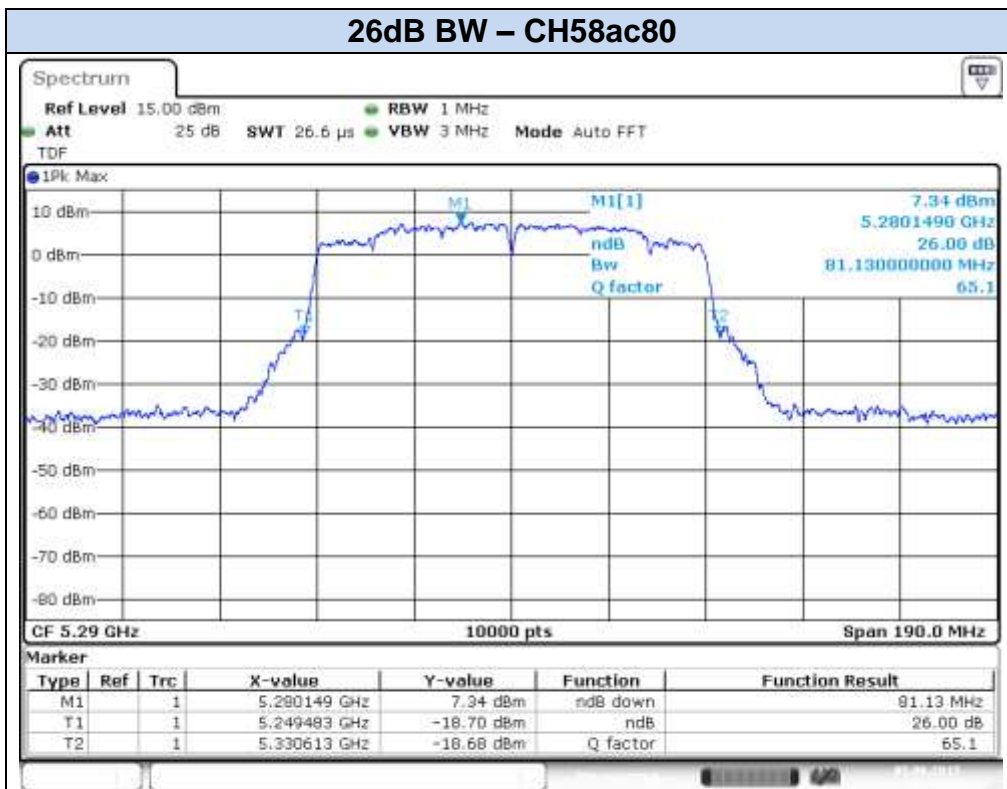


Date: 5 JUN 2015 15:25:33

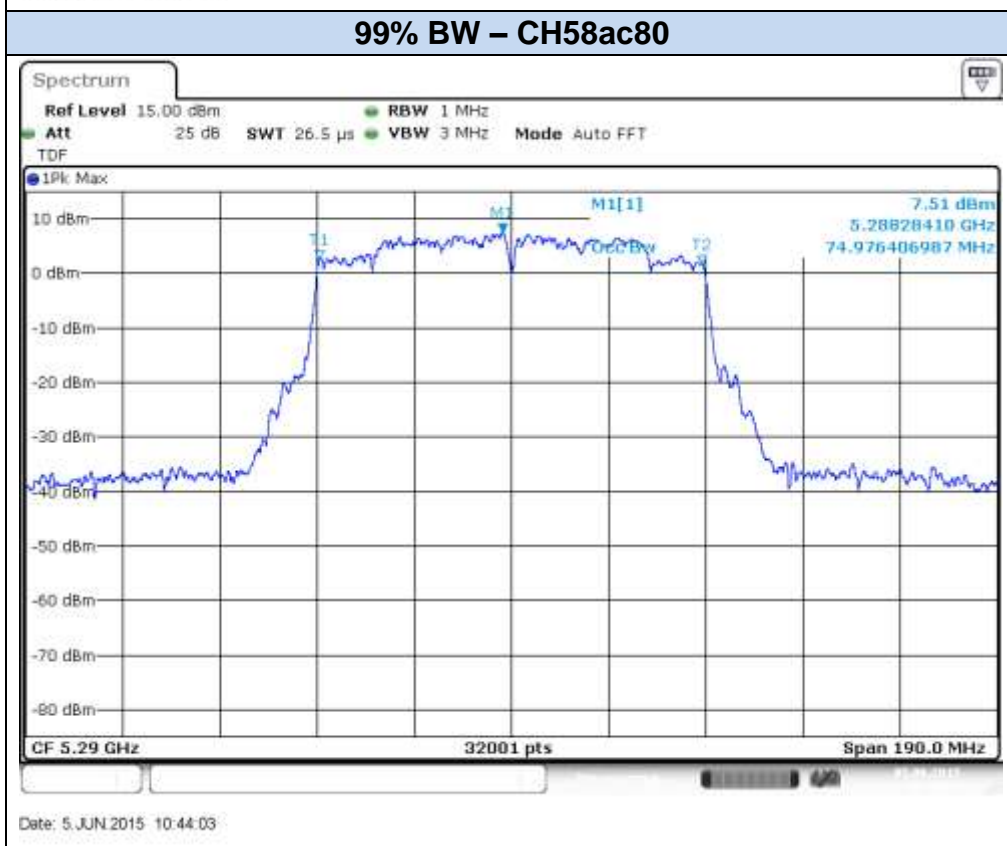


Date: 5 JUN 2015 15:26:10

802.11ac80, VHT0 (SISO) – Chain A

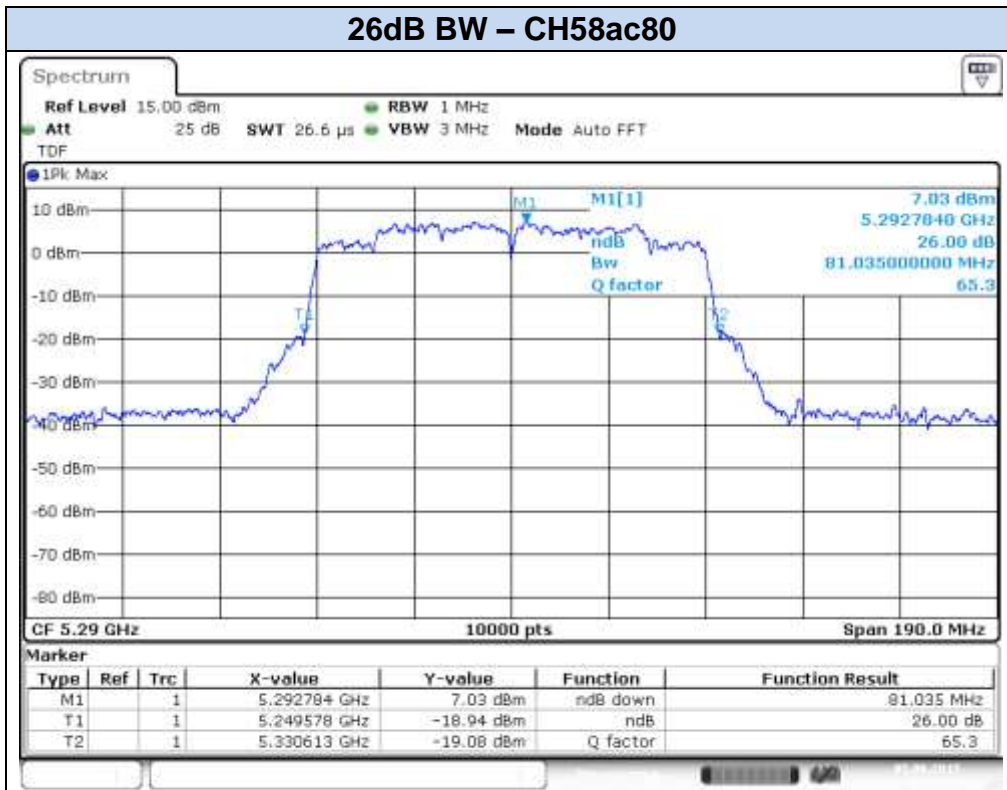


Date: 5 JUN 2015 10:42:56

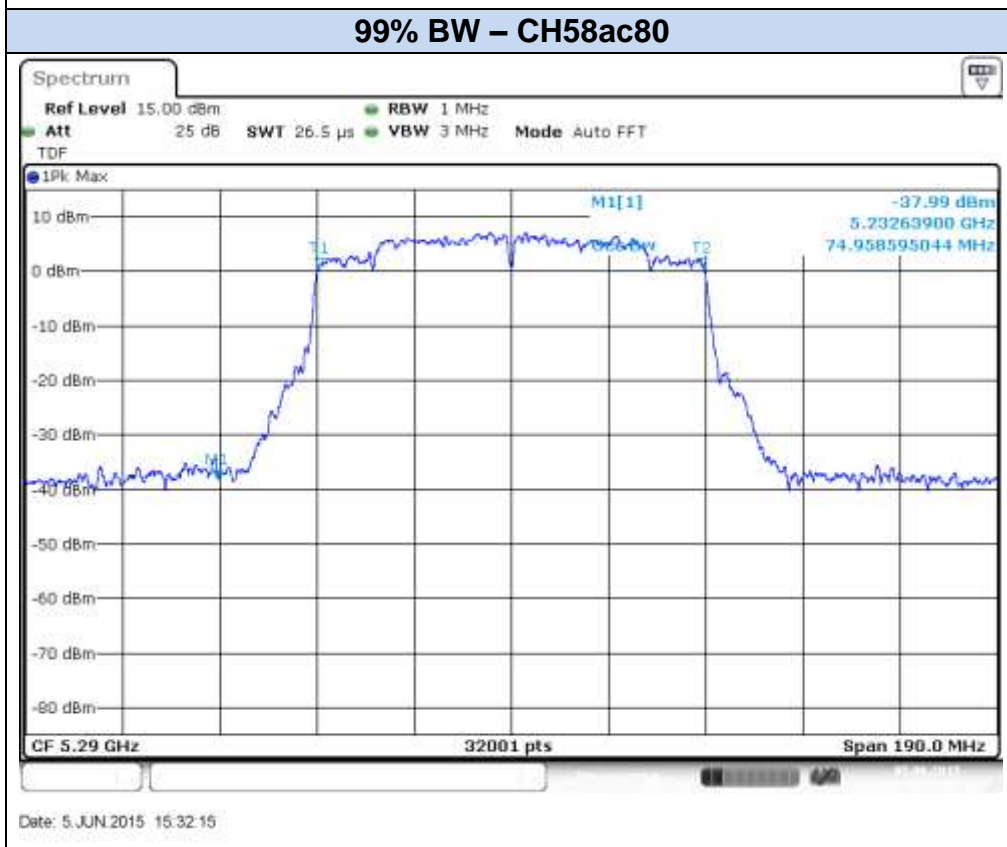


Date: 5 JUN 2015 10:44:03

802.11ac80, VHT0 (SISO) – Chain B

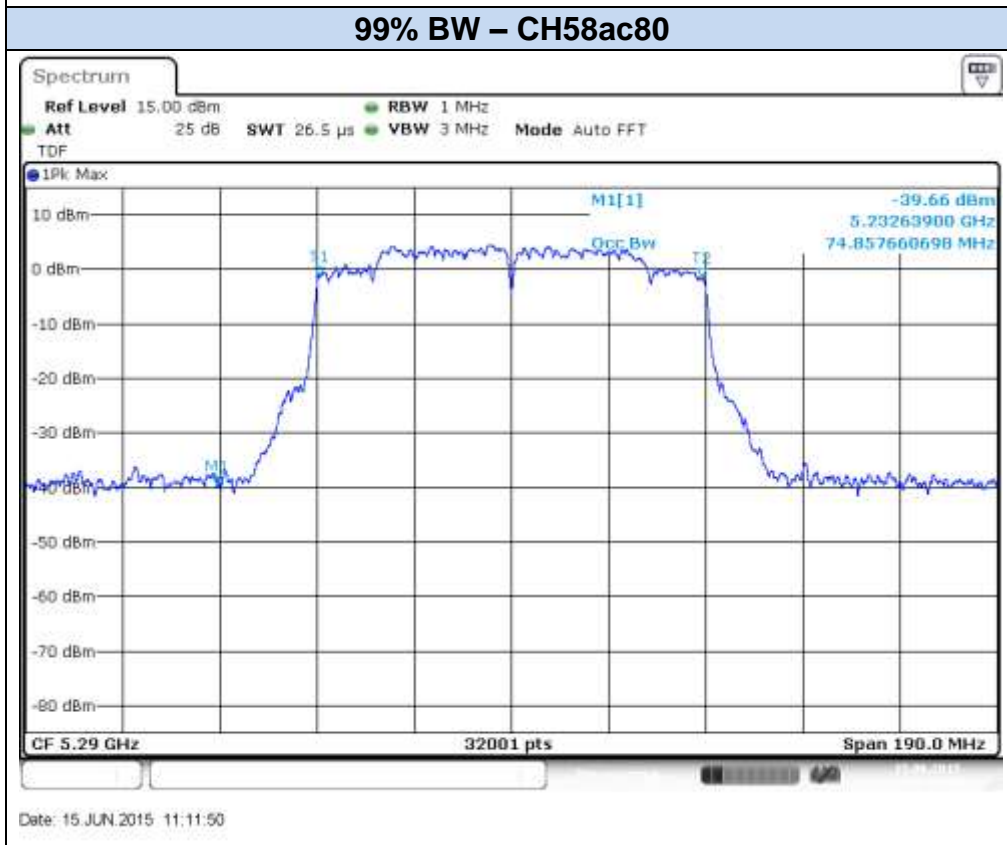
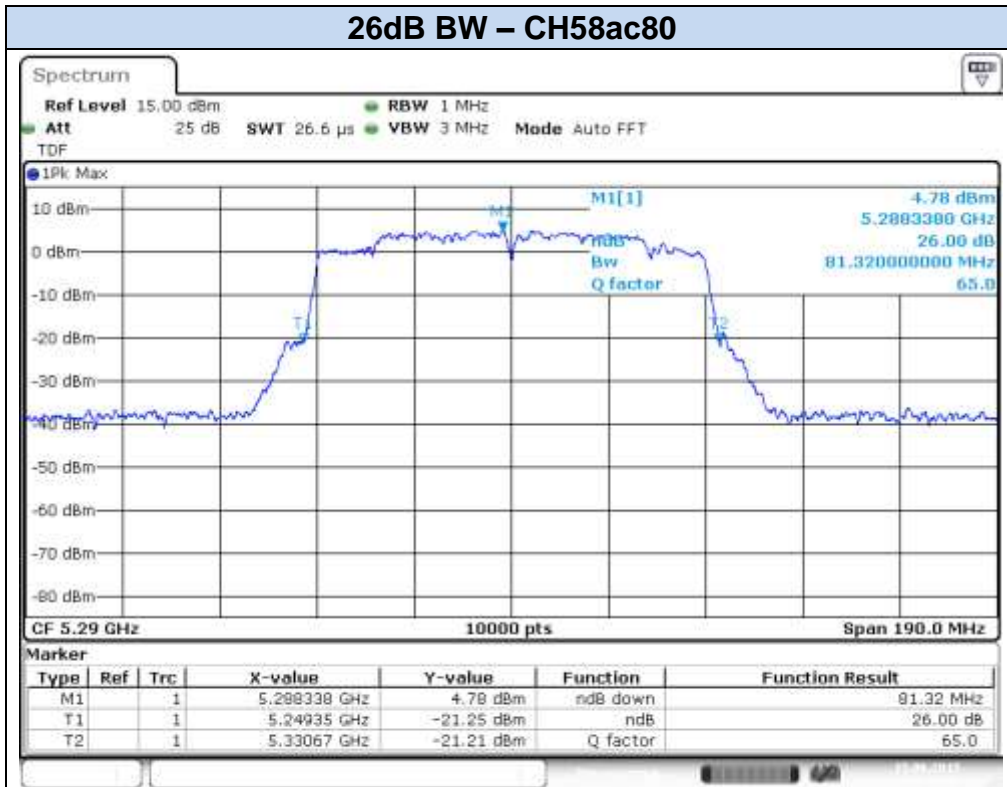


Date: 5 JUN 2015 15:31:33

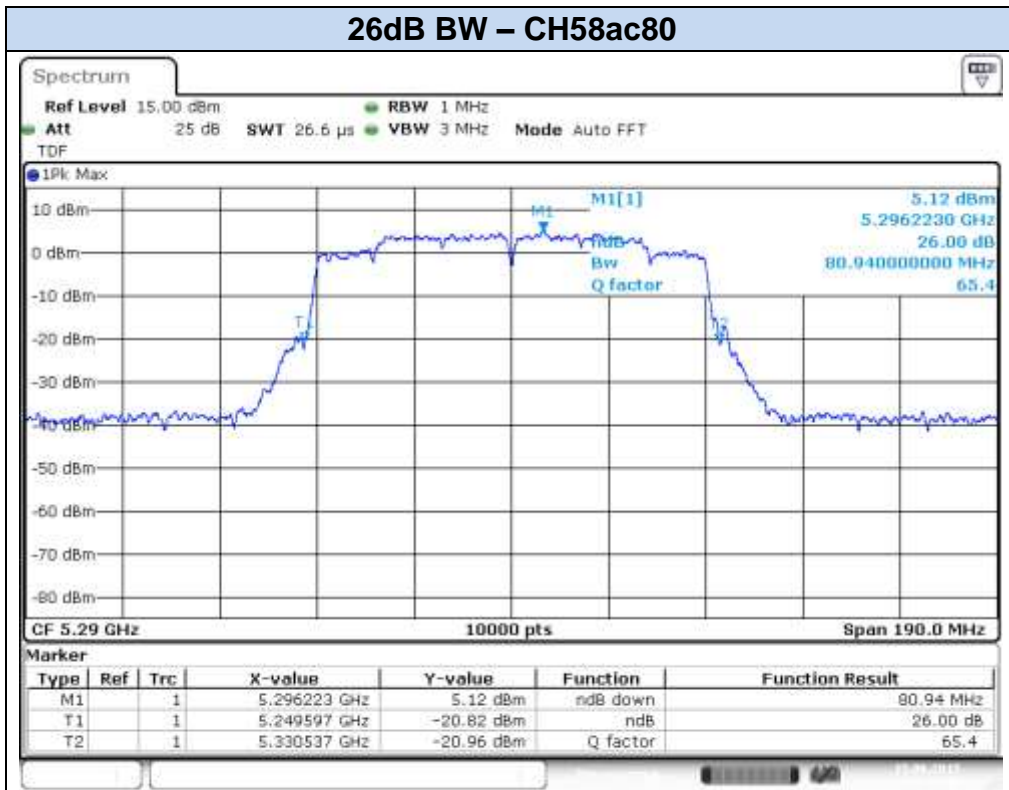


Date: 5 JUN 2015 15:32:15

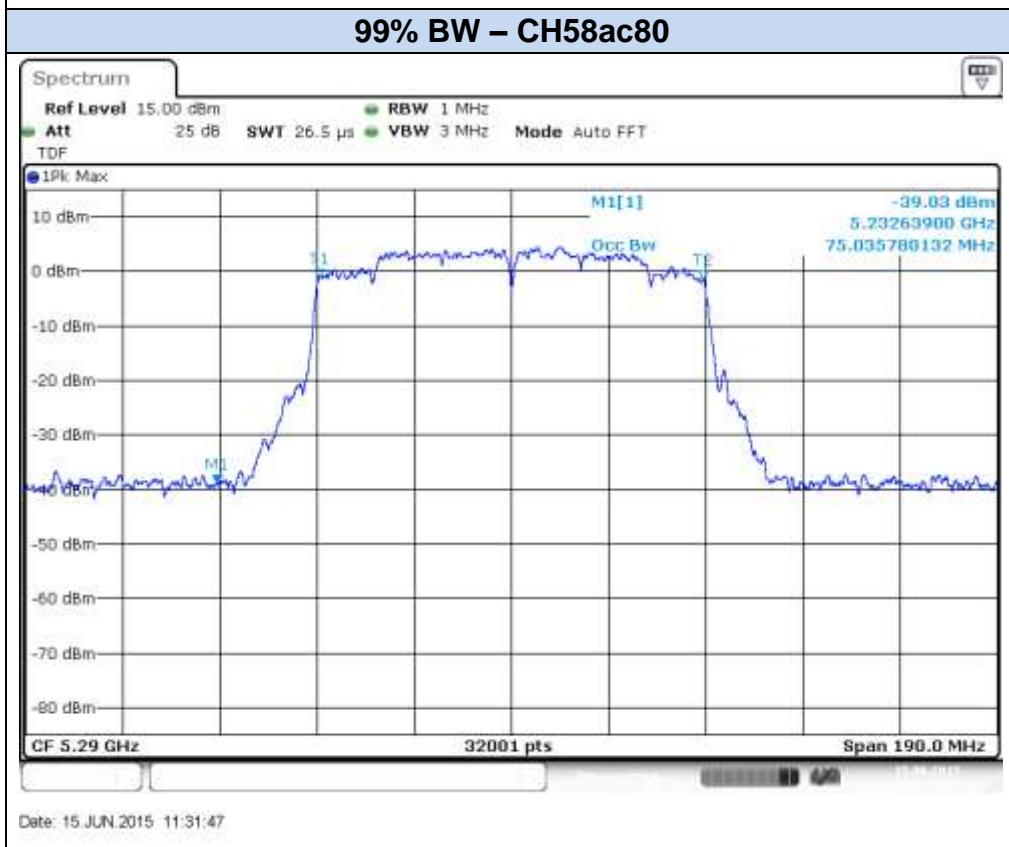
802.11ac80, VHT0 (MIMO) – Chain A



802.11ac80, VHT0 (MIMO) – Chain B



Date: 15 JUN 2015 11:30:48



Date: 15 JUN 2015 11:31:47

B.2 Power Limits. Maximum Output power & Peak power spectral density

Test limits:

FCC part	RSS part	Limits
15.407 (a) (2)	RSS-247 Clause 6.2.2 (1)	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 peak power spectral density shall not exceed 11 dBm in any 1 megahertz band.

Test procedure:

The Maximum Conducted Output Power was measured using the channel integration method according to point E) 2) e) (Method SA-2 Alternative) of Guidance 789033 D01.

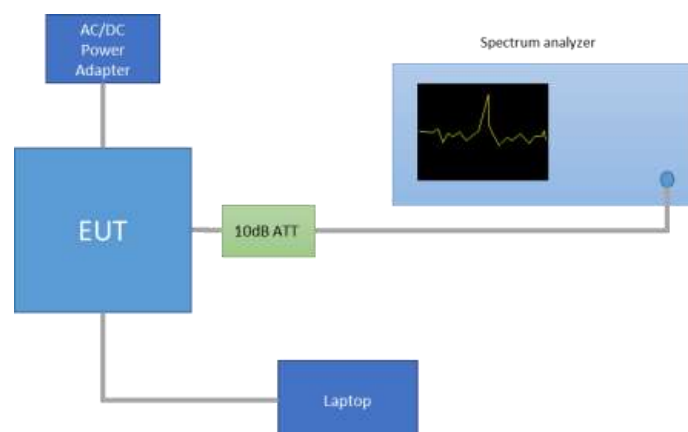
The maximum power spectral density (PSD) was measured using the method according to point F) (Method SA-2 Alternative) of Guidance 789033 D01.

In the measure-and-sum approach for MIMO mode, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically in linear power units to determine the total emission level from the device.

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

The setup below was used to measure the maximum conducted output power and power spectral density. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

The declared maximum antenna gain is 5dBi.



Results tables:

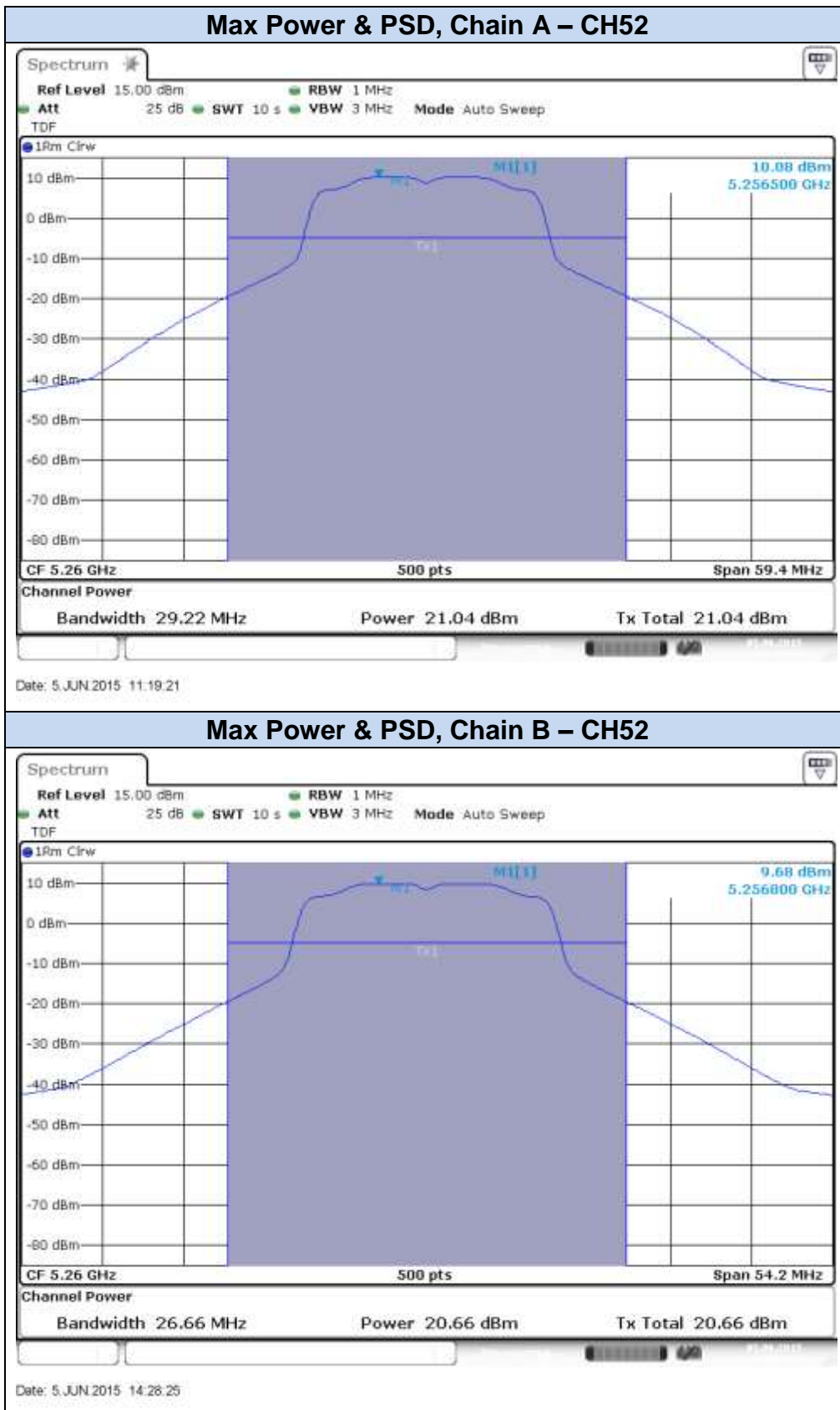
Mode	Rate	Meas. Duty Cycle	CH	Freq. [MHz]	Antenna	Power [dBm]			
						Meas. Cond RMS	Duty cycle Compensated	EIRP	PSD
802.11a	6Mbps	0.98	52	5260	SISO CHAIN A	21.04	21.11	26.11	10.08
					SISO CHAIN B	20.66	20.73	25.73	9.68
			56	5280	SISO CHAIN A	21.05	21.12	26.12	10.09
					SISO CHAIN B	20.71	20.78	25.78	9.76
			64	5320	SISO CHAIN A	17.09	17.16	22.16	6.13
					SISO CHAIN B	16.83	16.90	21.90	5.88
802.11n20	HT0	0.96	52	5260	SISO CHAIN A	20.80	20.96	25.96	9.66
					SISO CHAIN B	20.38	20.54	25.54	9.24
			56	5280	SISO CHAIN A	20.86	21.02	26.02	9.72
					SISO CHAIN B	20.35	20.51	25.51	9.21
			64	5320	SISO CHAIN A	16.69	16.85	21.85	5.56
					SISO CHAIN B	16.36	16.52	21.52	5.23
	HT8	0.96	52	5260	MIMO CHAIN A	18.01	18.17	23.17	6.87
					MIMO CHAIN B	17.37	17.53	22.53	6.25
			56	5280	MIMO CHAIN A	18.05	18.21	23.21	6.93
					MIMO CHAIN B	17.39	17.55	22.55	6.26
			64	5320	MIMO CHAIN A	13.88	14.04	19.04	2.76
					MIMO CHAIN B	13.30	13.46	18.46	2.19
802.11n40	HT0	0.93	54F	5270	SISO CHAIN A	19.84	20.15	25.13	5.34
					SISO CHAIN B	19.28	19.59	24.59	4.82
			62F	5310	SISO CHAIN A	16.54	16.85	21.85	2.07
					SISO CHAIN B	16.31	16.62	21.62	1.85
	HT8	0.93	54F	5270	MIMO CHAIN A	16.71	17.02	22.02	2.28
					MIMO CHAIN B	16.00	16.31	21.31	1.63
			62F	5310	MIMO CHAIN A	13.88	14.19	19.19	-0.55
					MIMO CHAIN B	13.80	14.11	19.11	-0.6
802.11ac80	VHT0	0.94	58ac80	5290	SISO CHAIN A	15.68	15.97	20.97	-1.49
					SISO CHAIN B	15.42	15.71	20.71	-1.77
	VHT0	0.63	58ac80	5290	MIMO CHAIN A	12.62	13.23	18.23	-4.46
					MIMO CHAIN B	12.05	12.65	17.65	-5.06

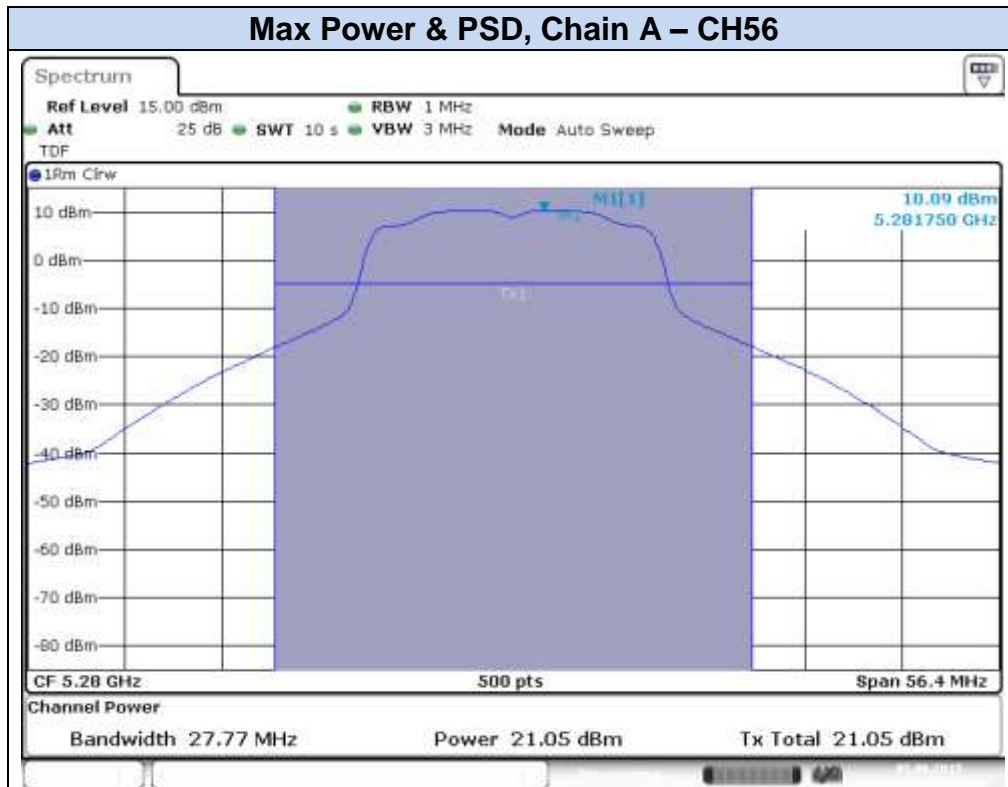
Max Value

MIMO modes – Combined results

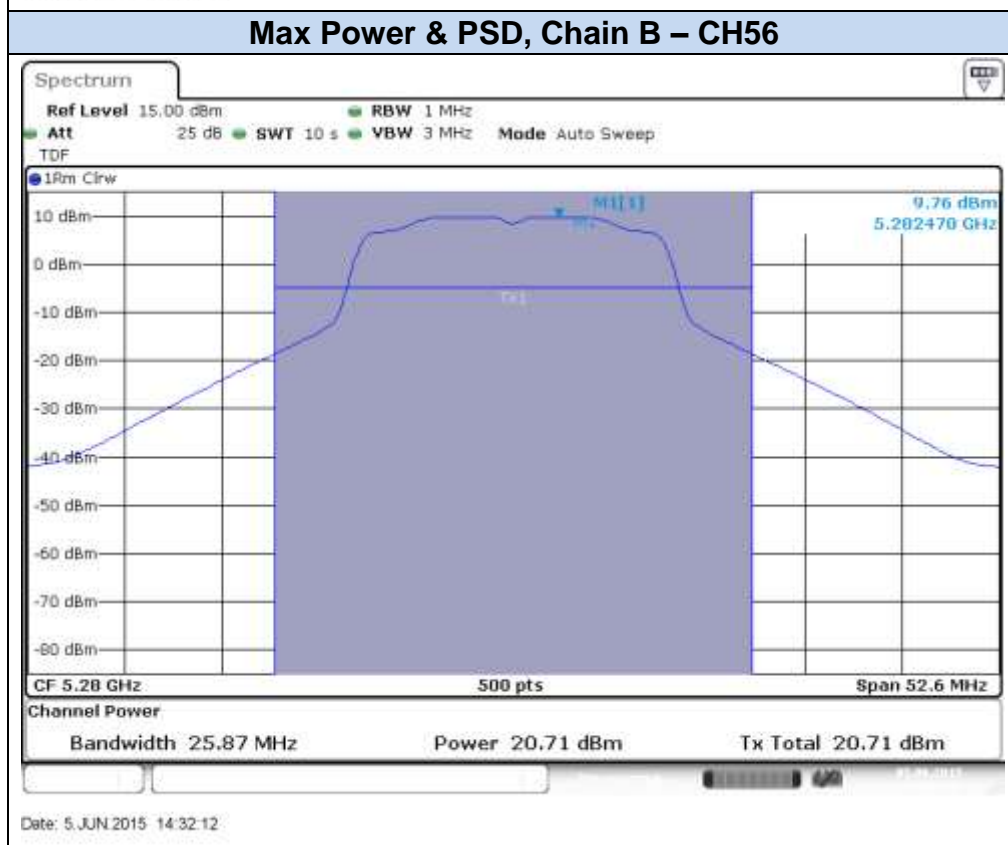
MIMO modes – Combined results					Power [dBm]		
Mode	Rate	Channel	Frequency (MHz)	Antenna	Combined, Duty Cycle compensated	EIRP	Combined PSD
802.11n20	HT8	52	5260	MIMO CHAIN A + CHAIN B	20.88	25.88	9.58
		56	5280		20.91	25.91	9.62
		64	5320		16.77	21.77	5.49
802.11n40	HT8	54F	5270		19.69	24.69	4.98
		62F	5310		17.16	22.16	2.44
802.11ac80	VHT0	58ac80	5290		15.96	20.96	-1.74

Max Value

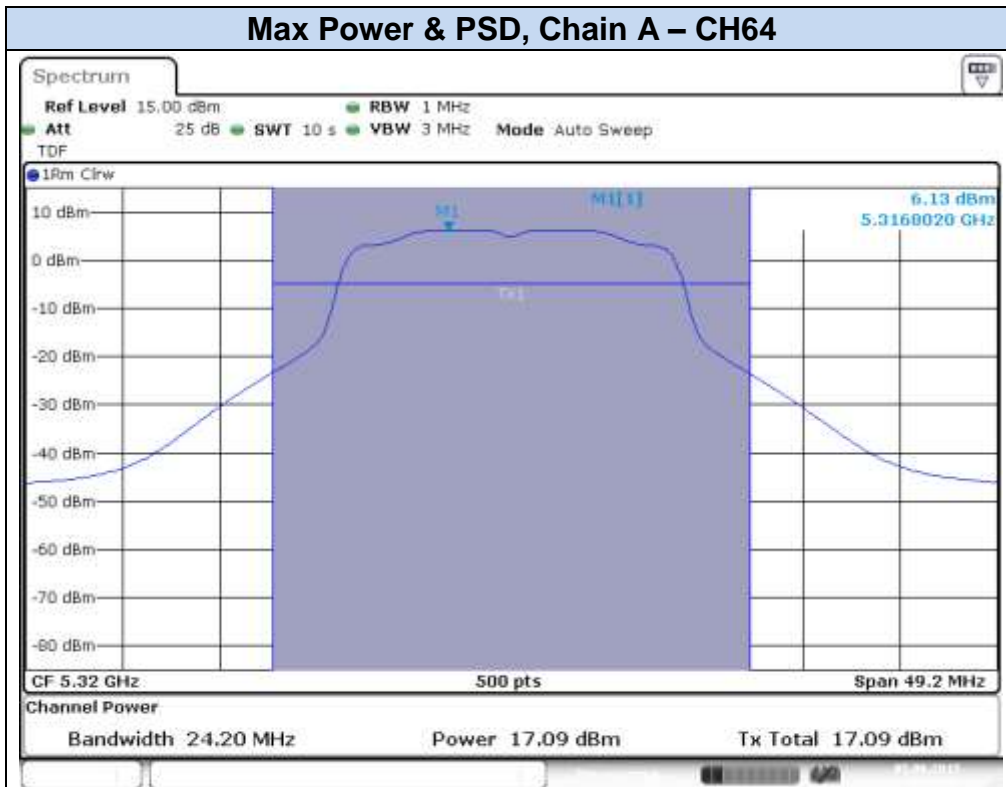
Results screenshot:**802.11a, 6Mbps**



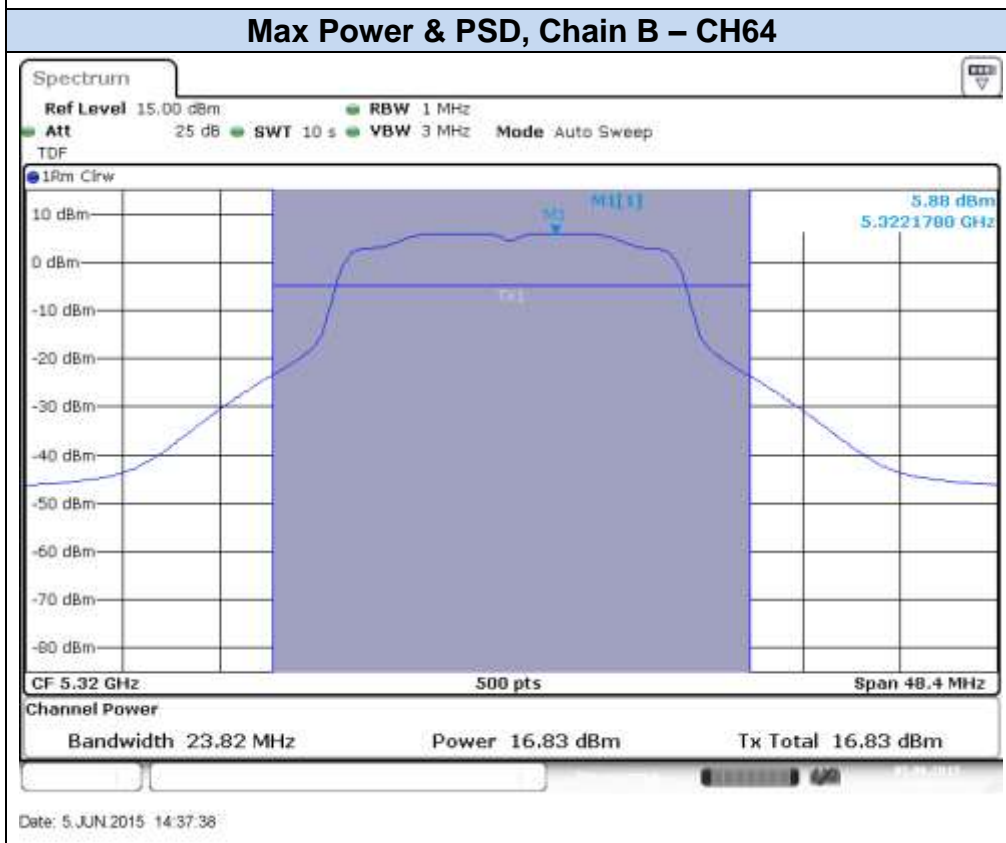
Date: 5 JUN 2015 11:40:01



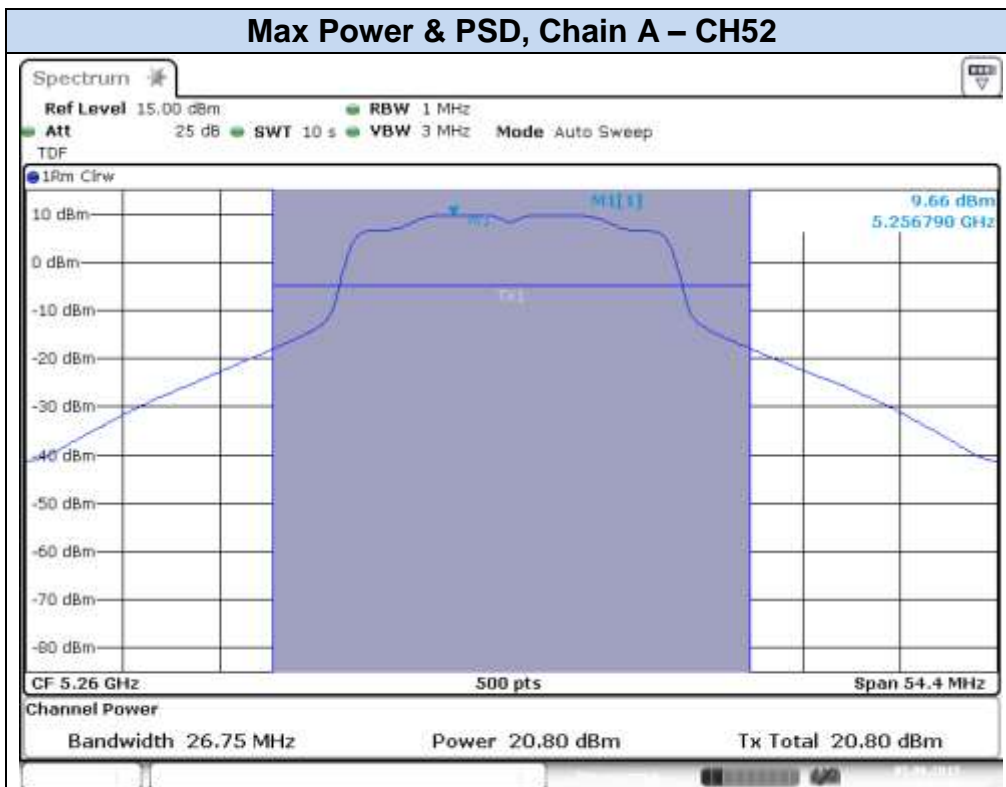
Date: 5 JUN 2015 14:32:12



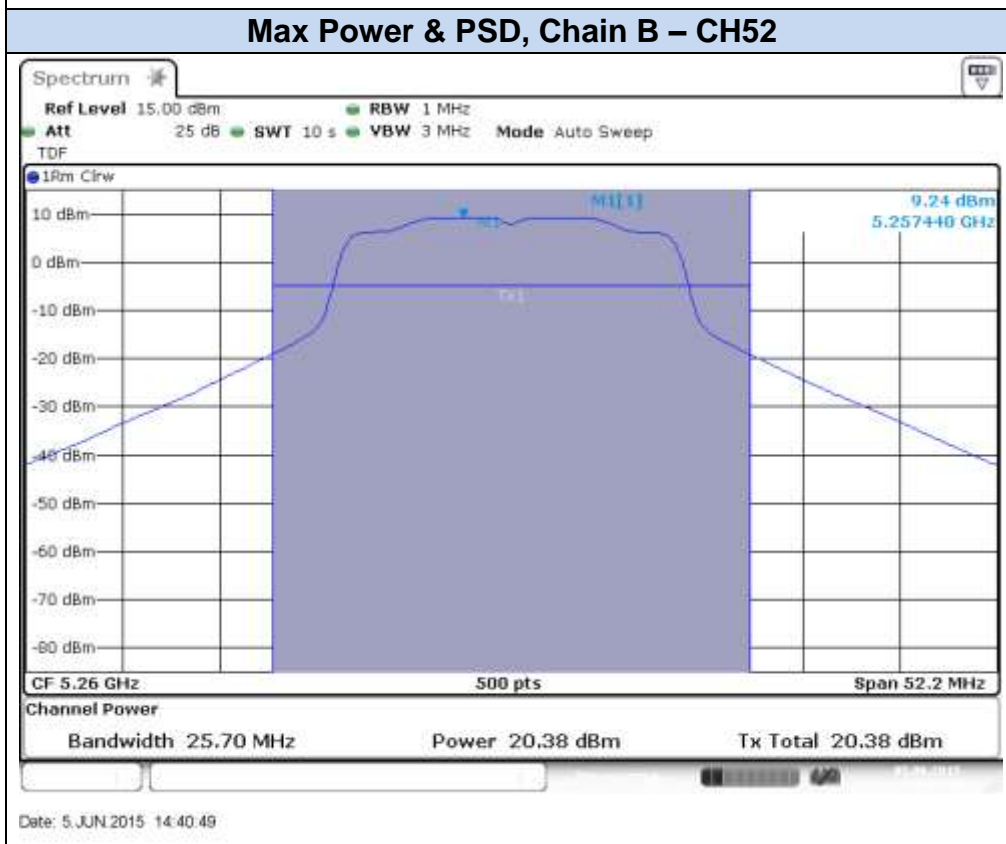
Date: 5 JUN 2015 10:18:47



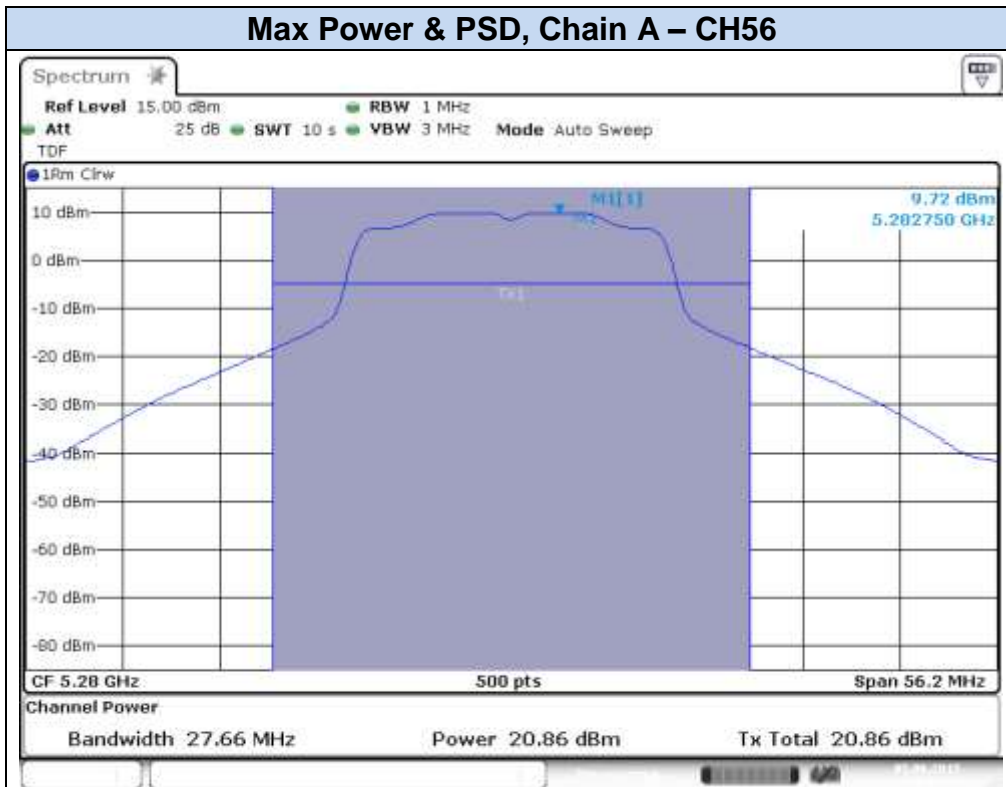
Date: 5 JUN 2015 14:37:38

802.11n20, HT0 (SISO)

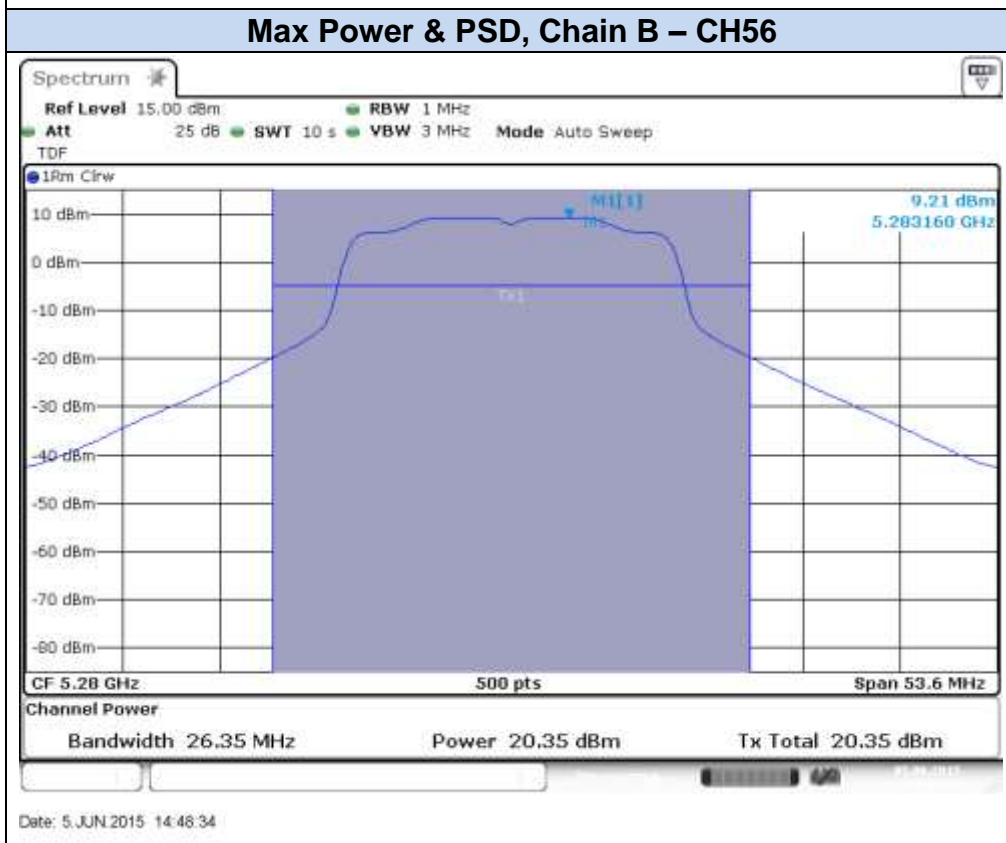
Date: 5 JUN 2015 11:43:46



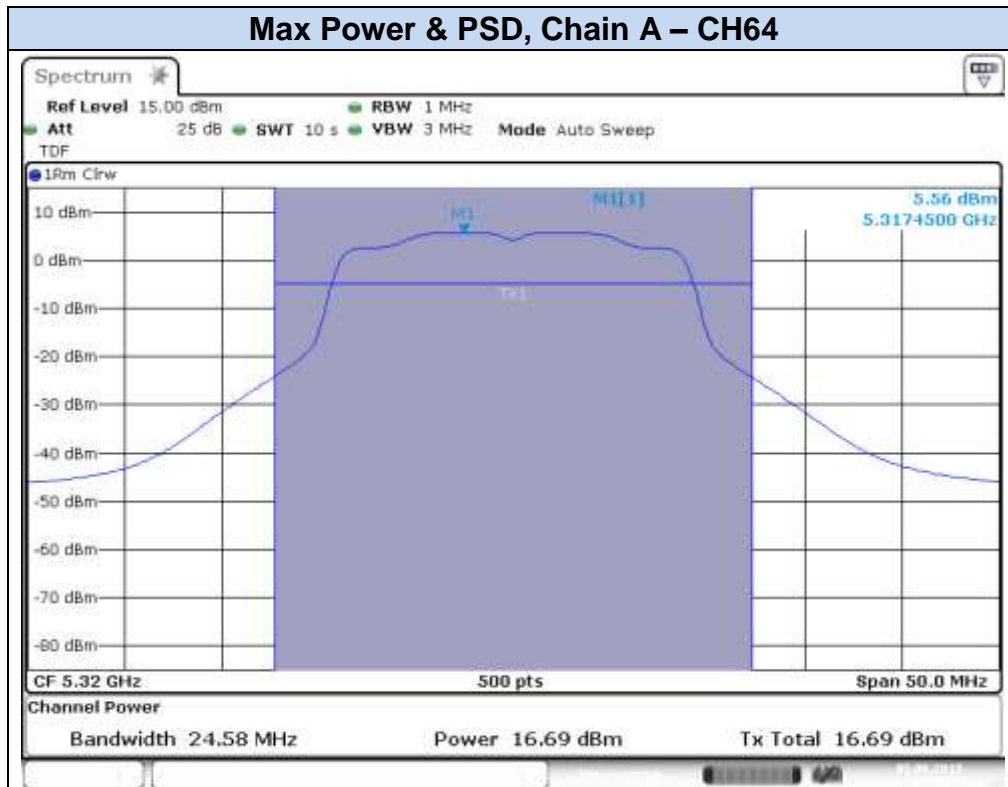
Date: 5 JUN 2015 14:40:49



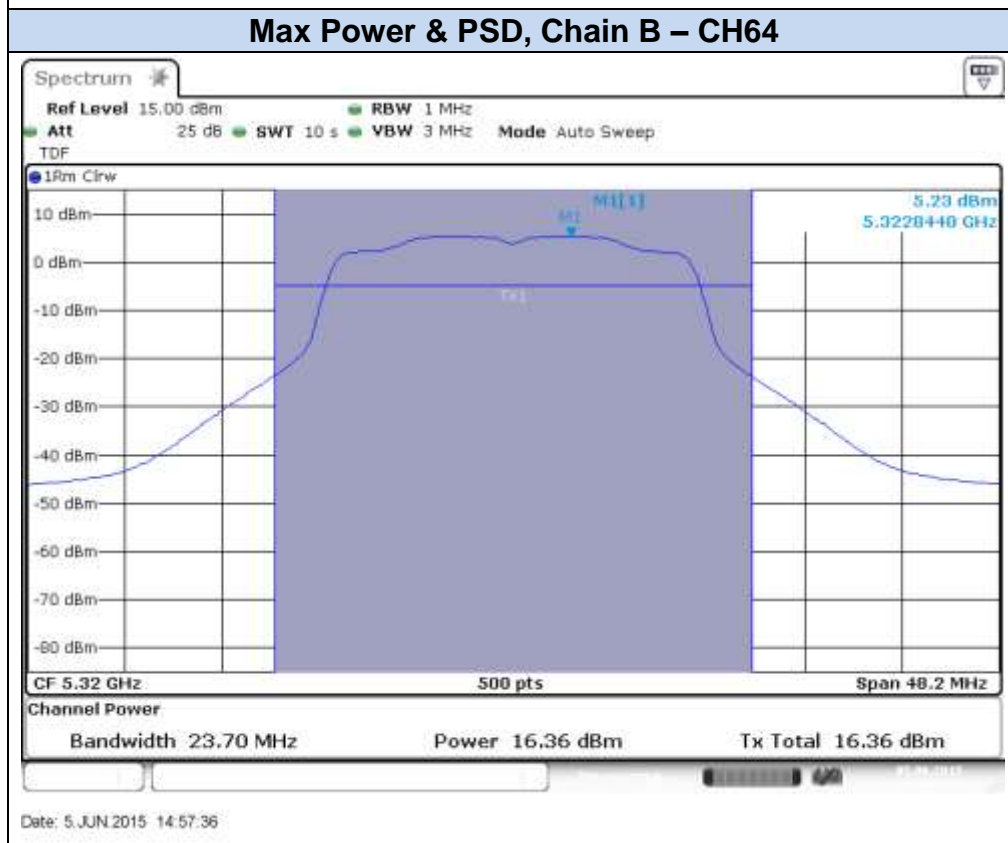
Date: 5 JUN 2015 11:46:39



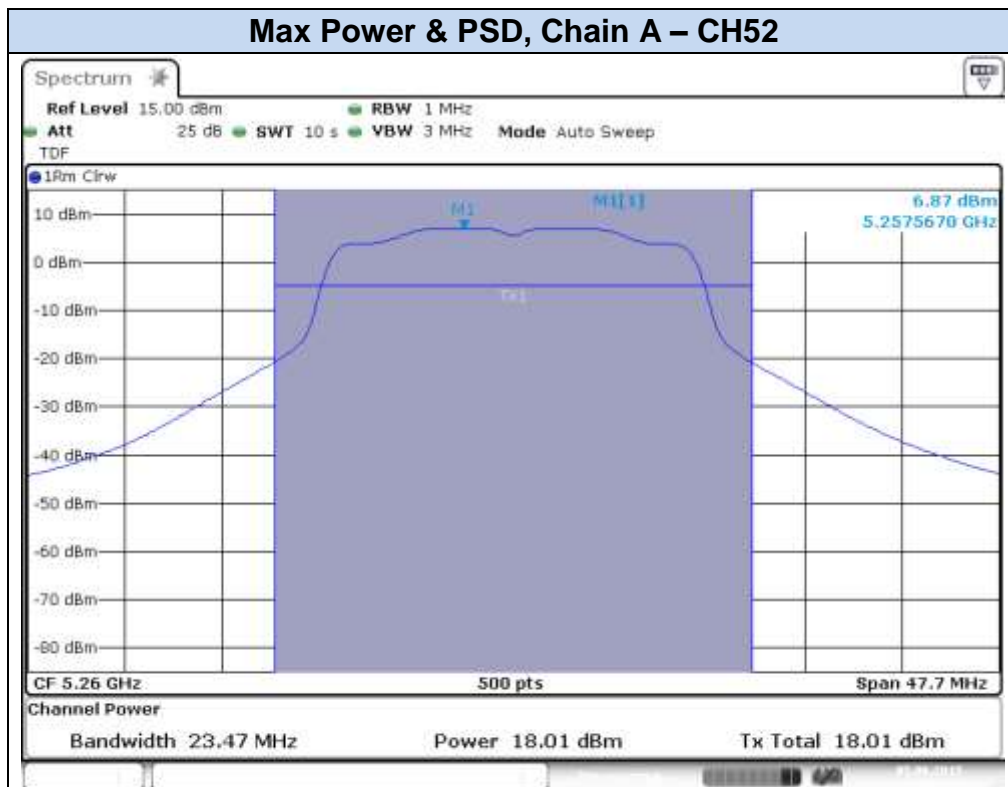
Date: 5 JUN 2015 14:48:34



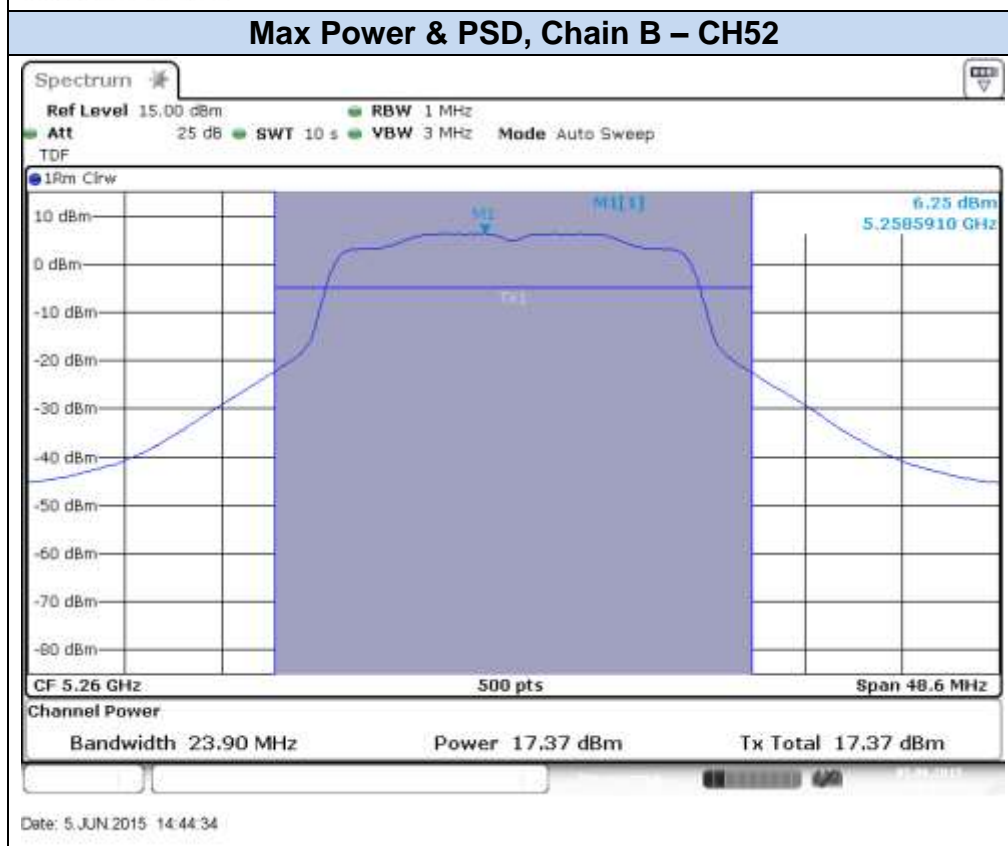
Date: 5 JUN 2015 10:38:02



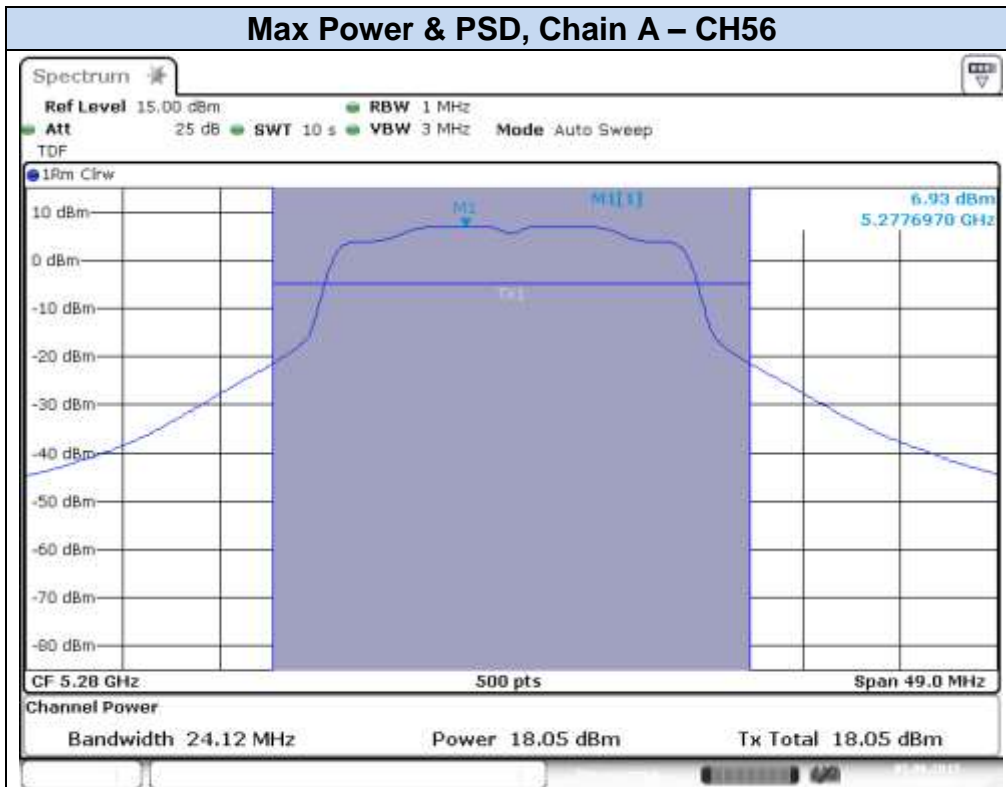
Date: 5 JUN 2015 14:57:36

802.11n20, HT8 (MIMO)

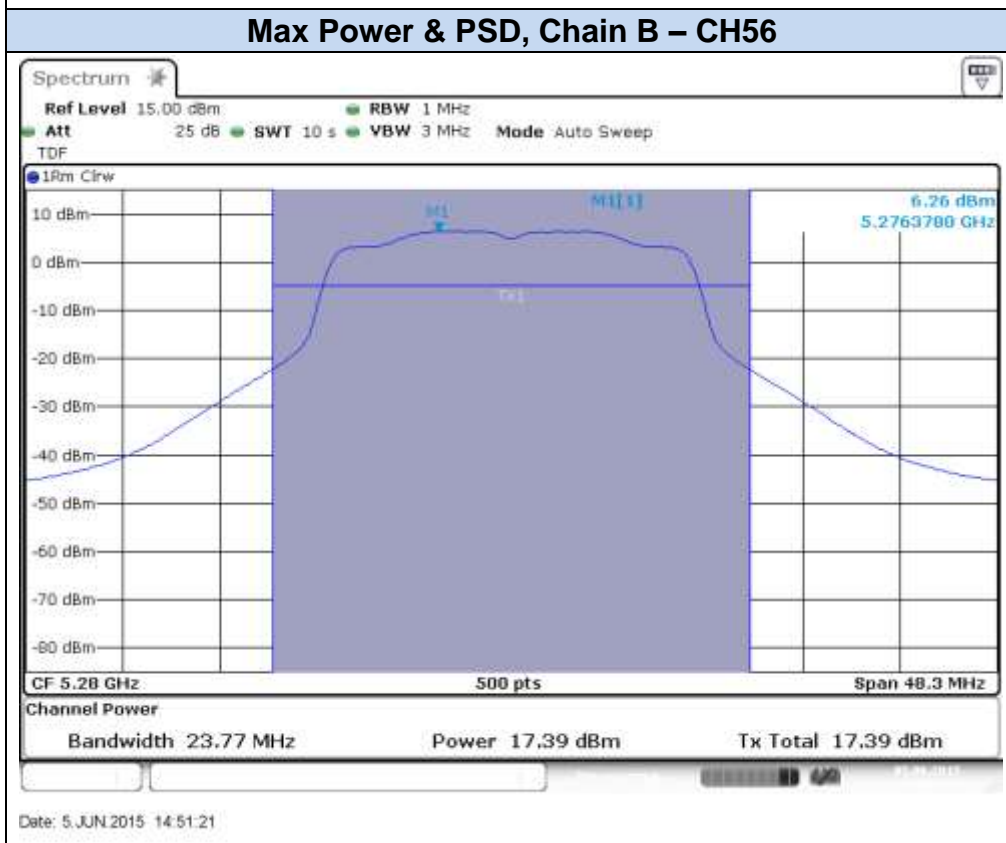
Date: 5 JUN 2015 12:01:41



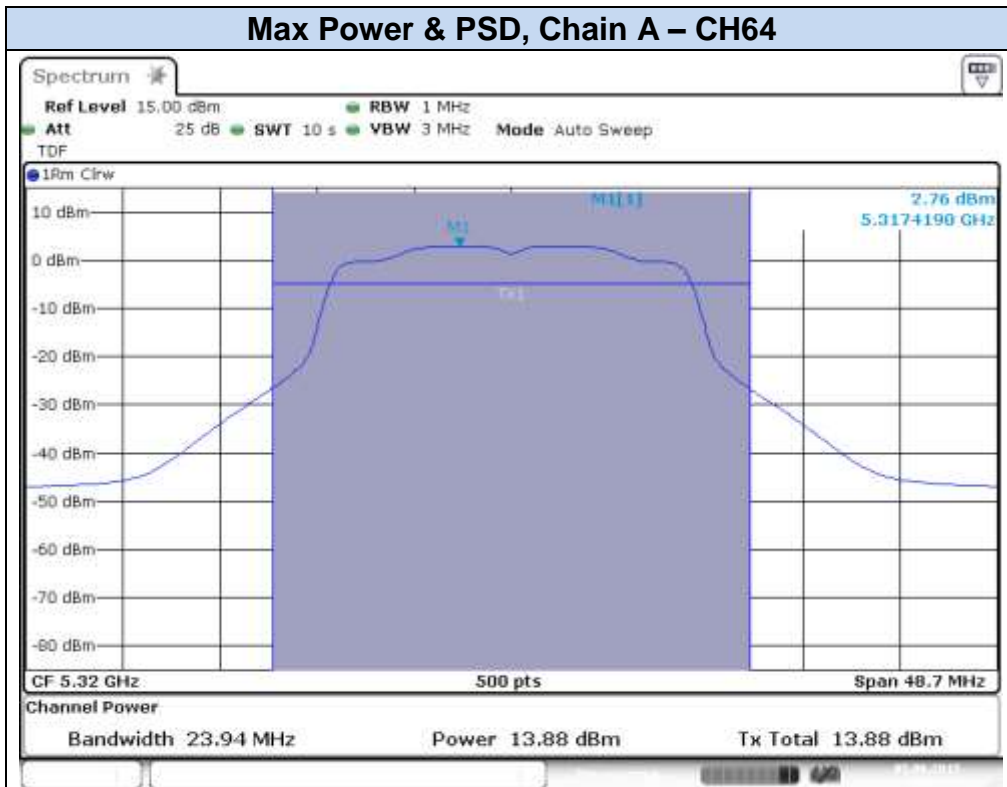
Date: 5 JUN 2015 14:44:34



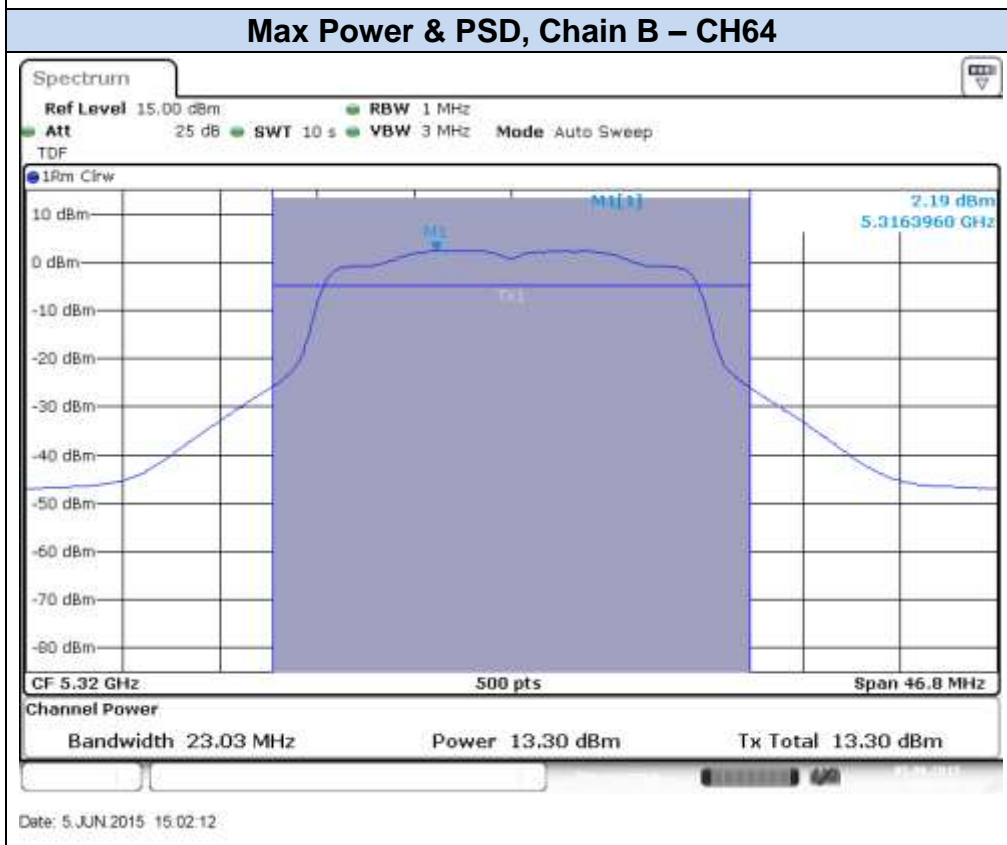
Date: 5 JUN 2015 12:04:05



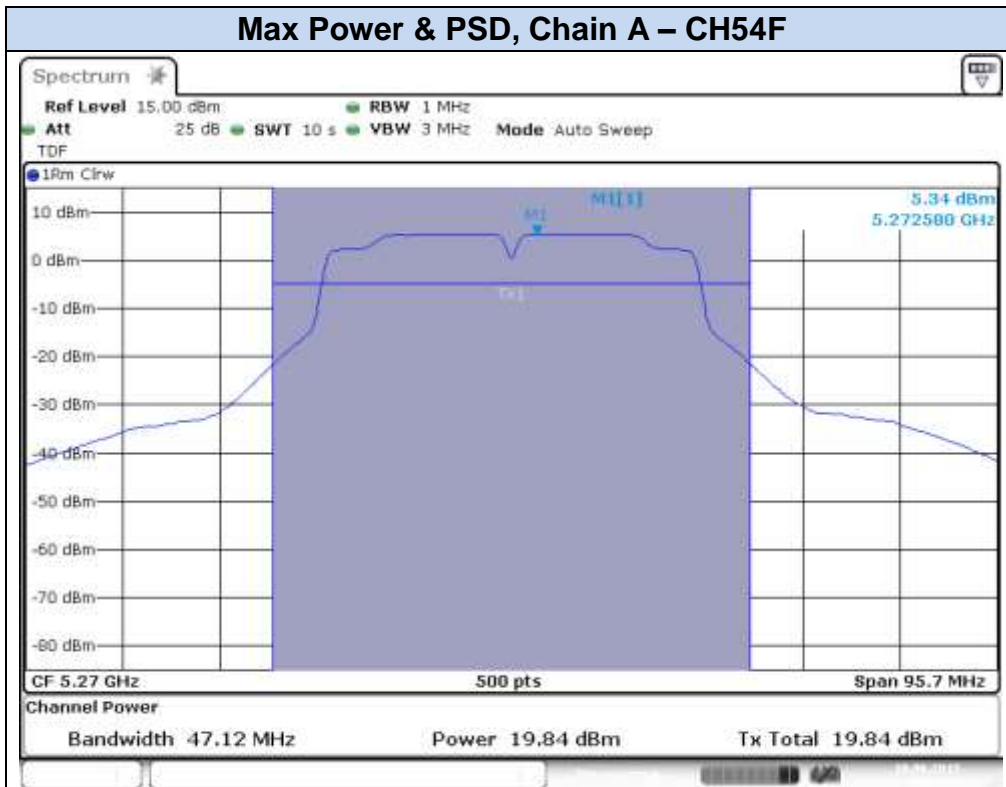
Date: 5 JUN 2015 14:51:21



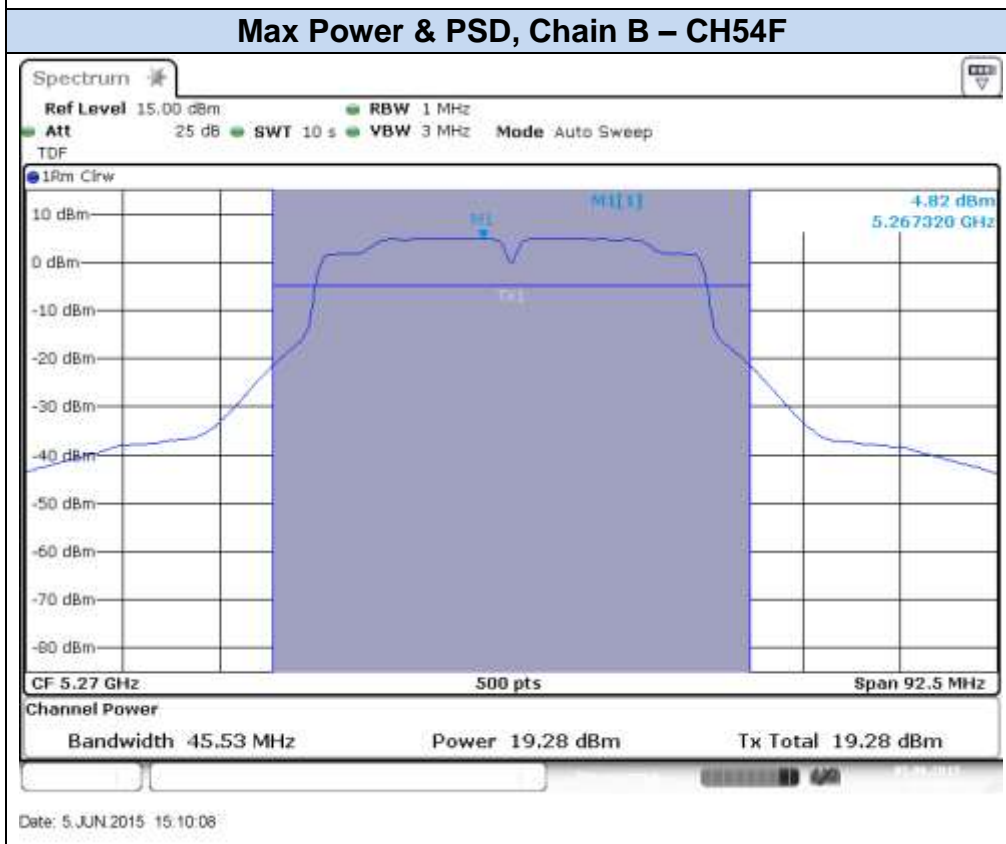
Date: 5 JUN 2015 10:54:59



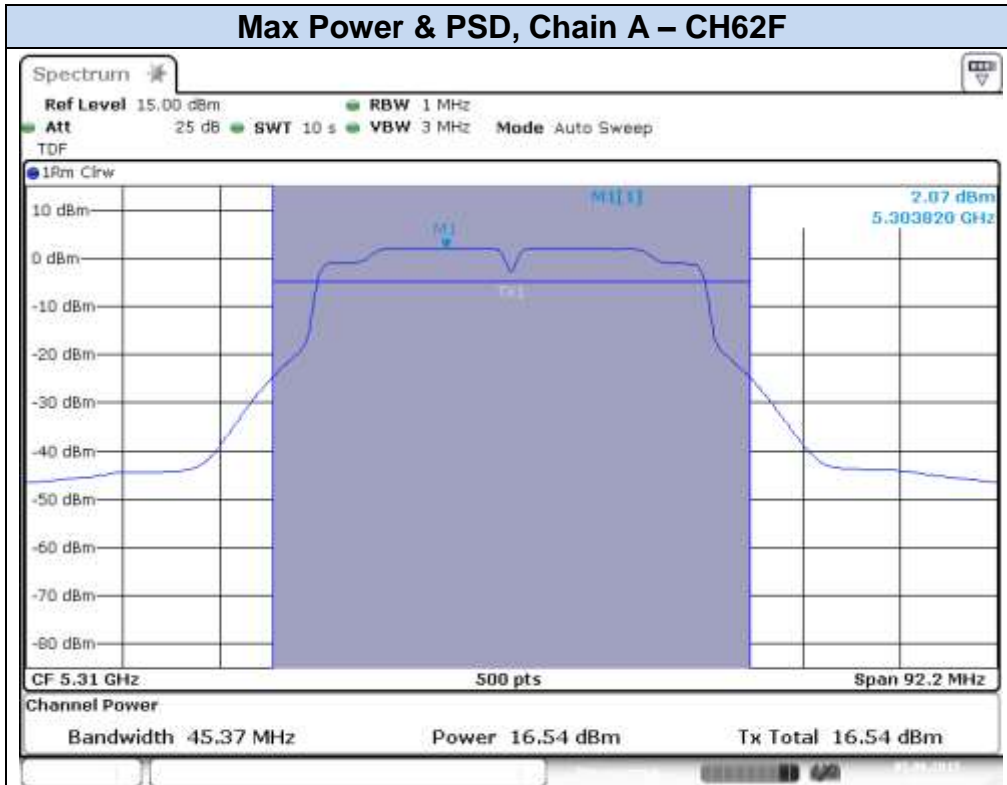
Date: 5 JUN 2015 15:02:12

802.11n40, HT0 (SISO)

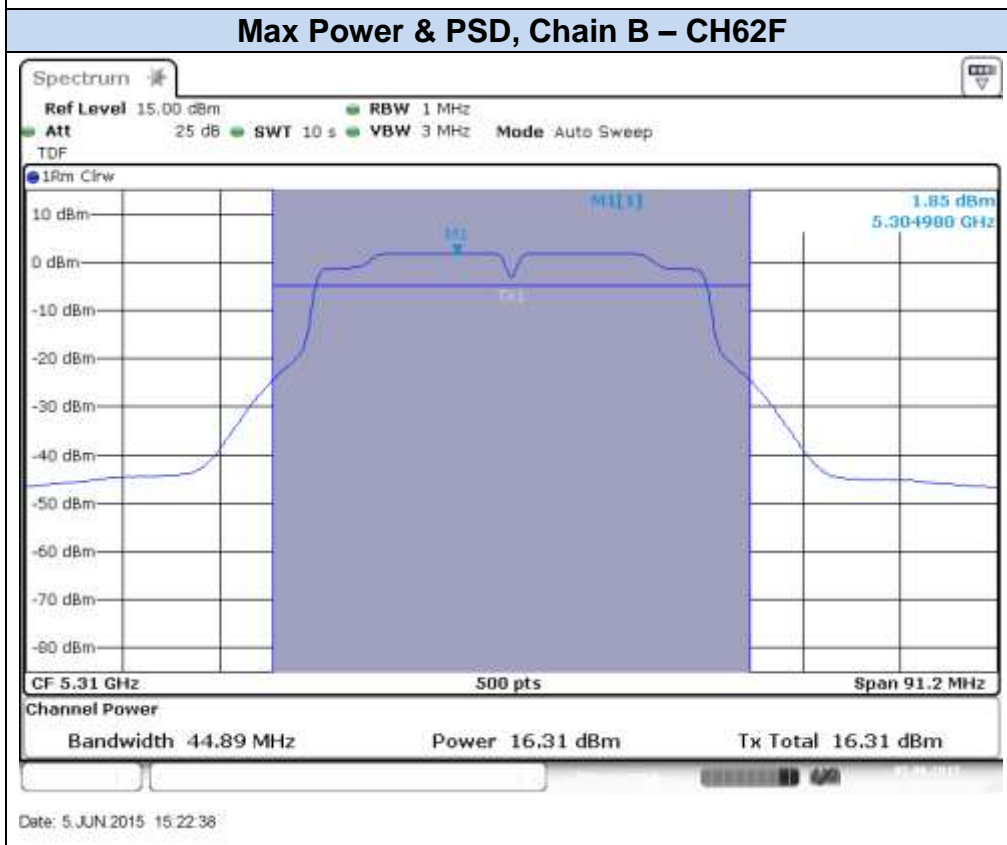
Date: 10 JUN 2015 16:04:57



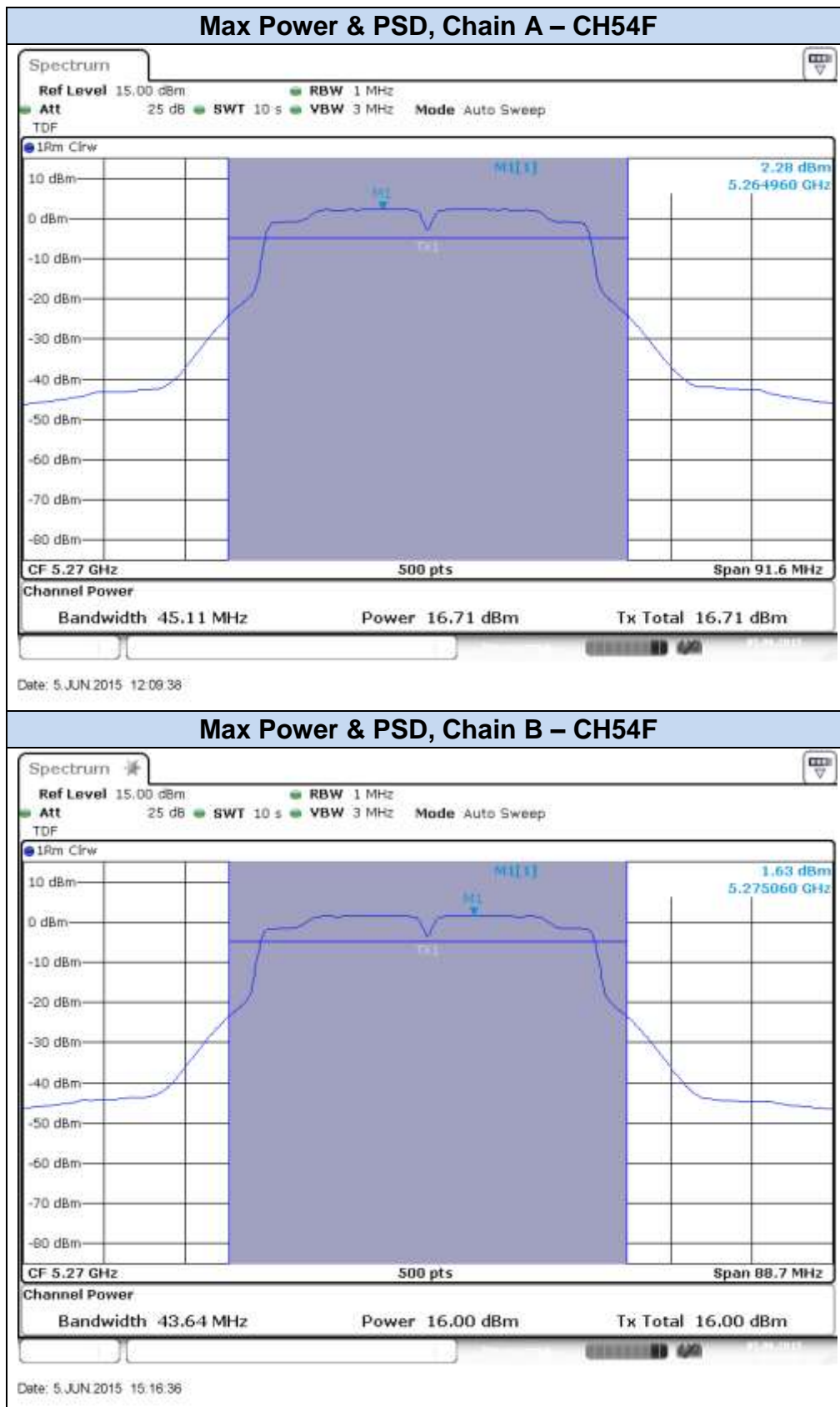
Date: 5 JUN 2015 15:10:08

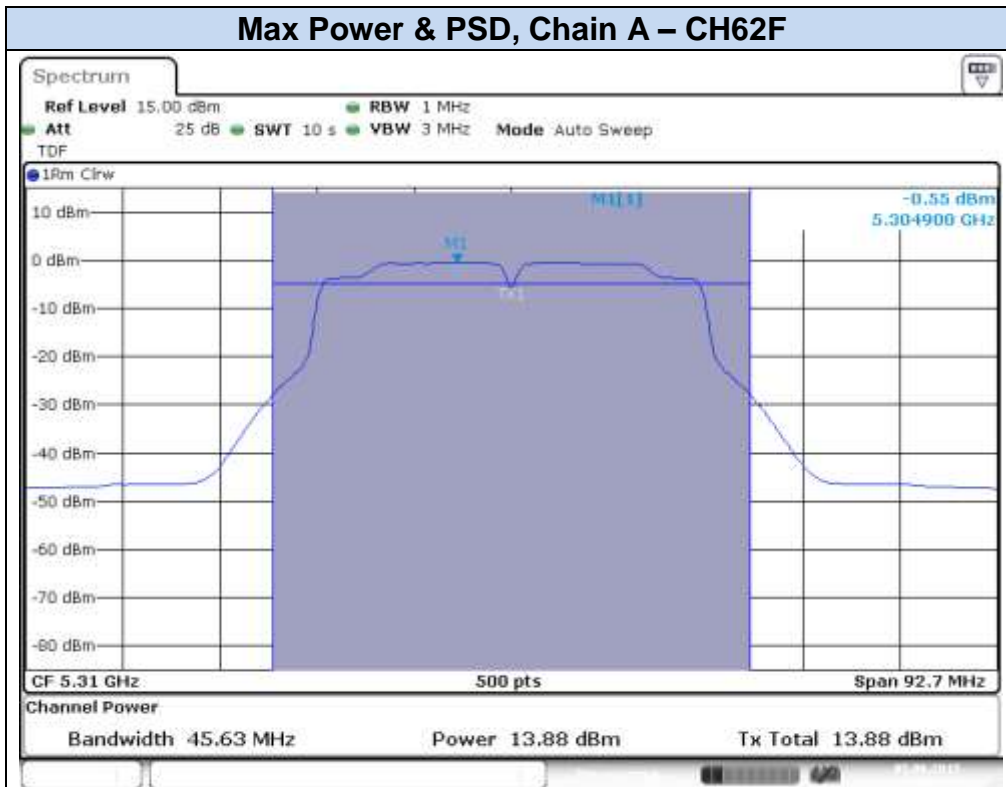


Date: 5 JUN 2015 10:35:51

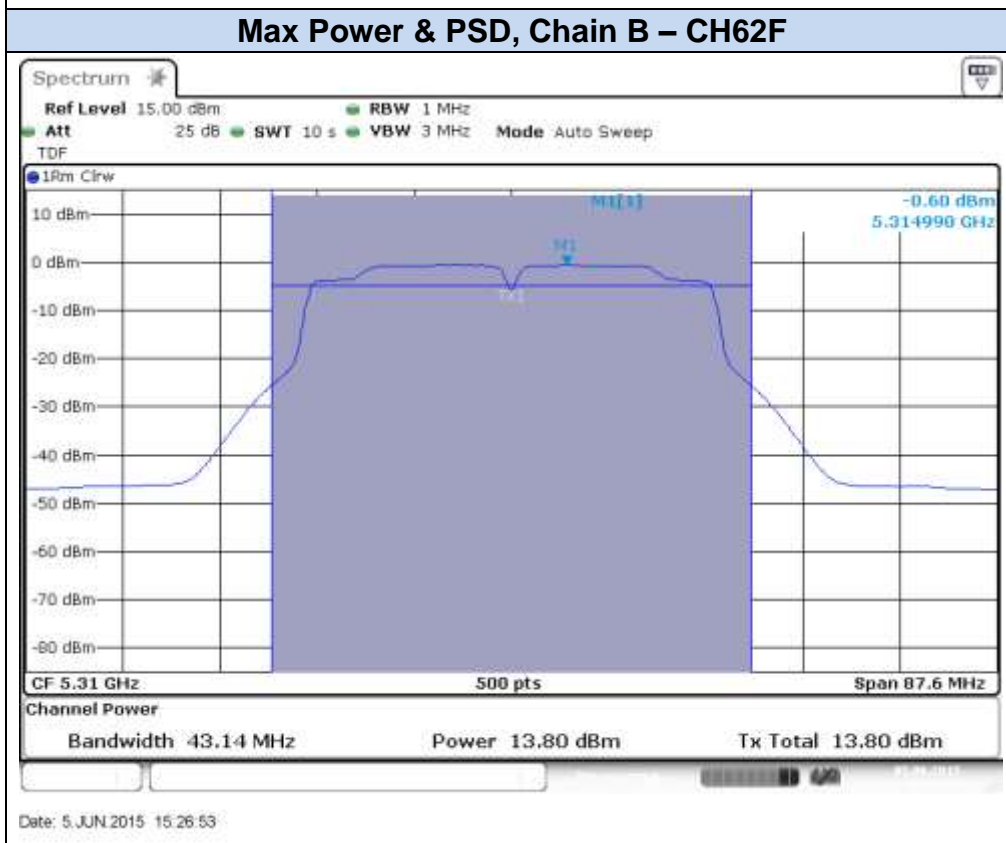


Date: 5 JUN 2015 15:22:38

802.11n40, HT8 (MIMO)

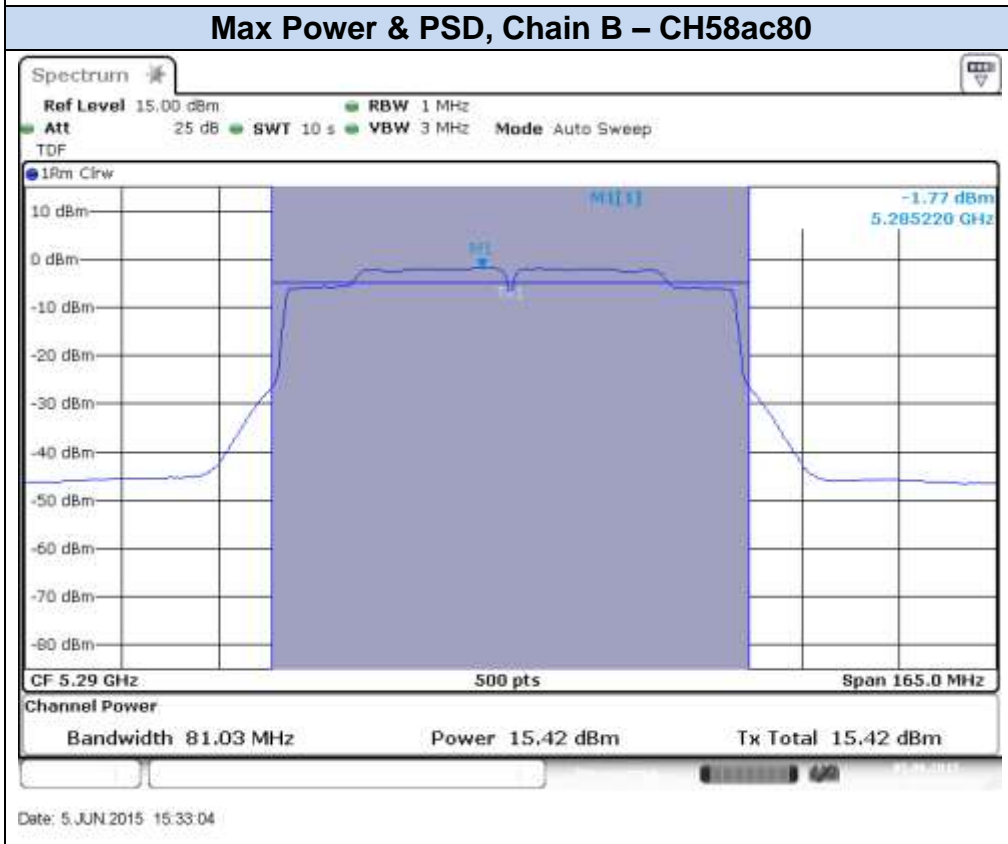
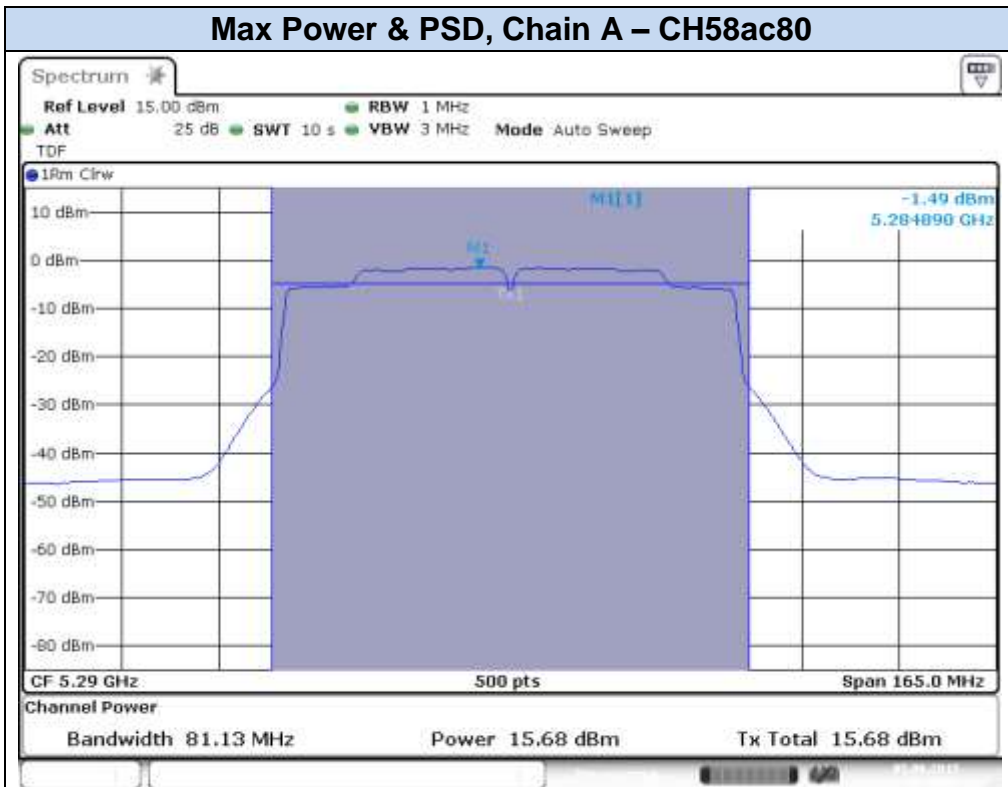


Date: 5 JUN 2015 11:01:14

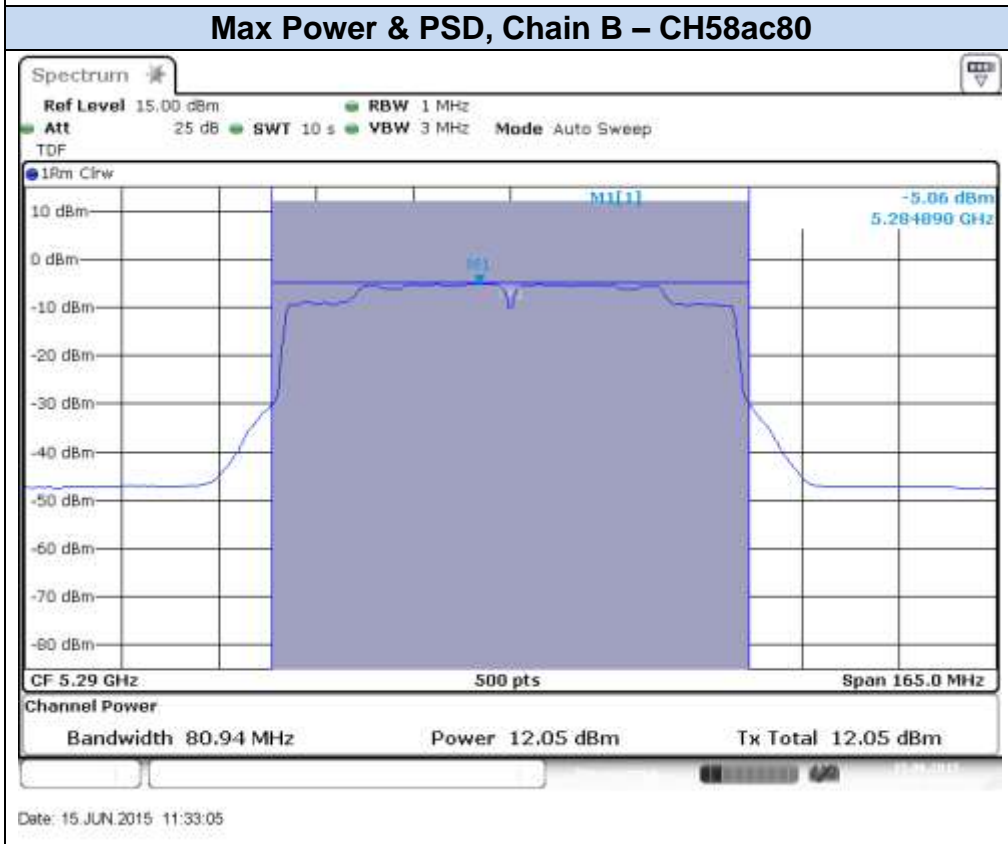
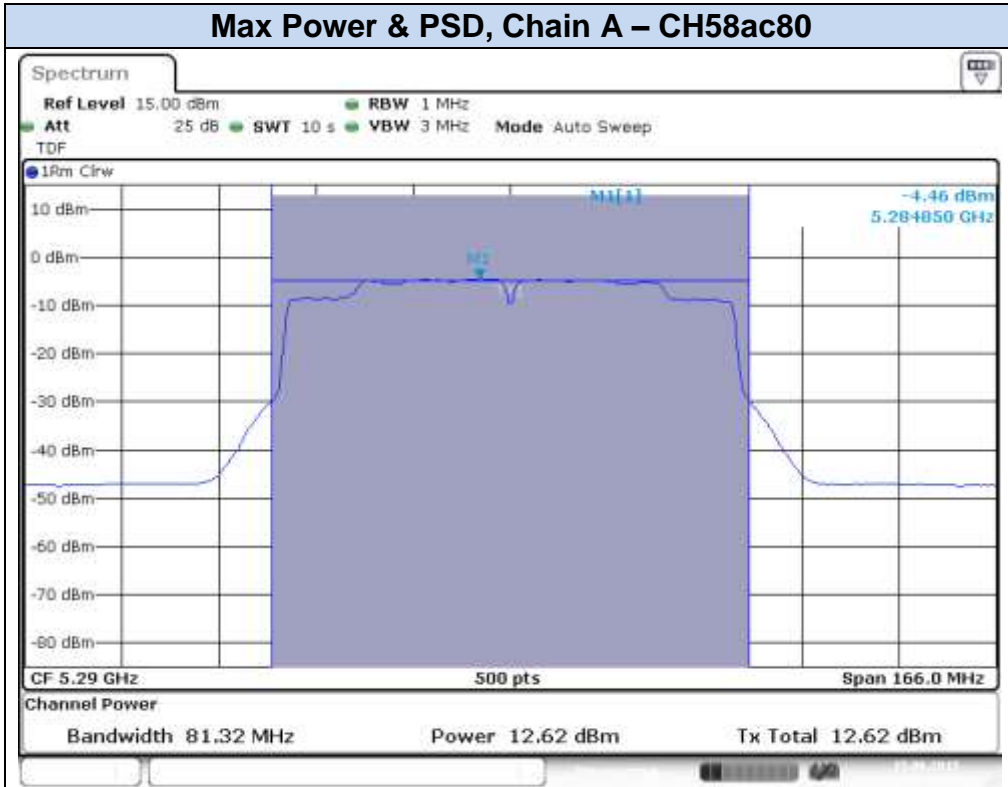


Date: 5 JUN 2015 15:26:53

802.11ac80, VHT0 (SISO)



802.11ac80, VHT0 (MIMO)



B.3 Undesirable emissions limits: Band Edge (conducted)

Test limits:

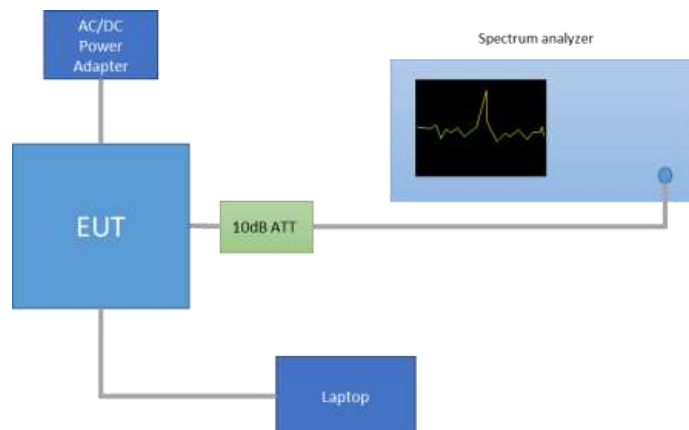
FCC part	RSS part	Limits																																
15.407 (b) (2)	RSS-247 Clause 6.2.2 (2)	For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz.																																
15.209	RSS-247 Clause 6.2.2 (2)	<p>Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):</p> <table border="1"> <thead> <tr> <th>Freq Range (MHz)</th> <th>Field Strength (μV/m)</th> <th>Field Strength (dBμV/m)</th> <th>Meas. Distance (m)</th> </tr> </thead> <tbody> <tr> <td>0.009-0.490</td> <td>2400/f(kHz)</td> <td>-</td> <td>300</td> </tr> <tr> <td>0.490-1.705</td> <td>24000/f(kHz)</td> <td>-</td> <td>300</td> </tr> <tr> <td>1.705-30.0</td> <td>30</td> <td>-</td> <td>30</td> </tr> <tr> <td>30-88</td> <td>100</td> <td>40</td> <td>3</td> </tr> <tr> <td>88-216</td> <td>150</td> <td>43.5</td> <td>3</td> </tr> <tr> <td>216-960</td> <td>200</td> <td>46</td> <td>3</td> </tr> <tr> <td>960-25000</td> <td>500</td> <td>54</td> <td>3</td> </tr> </tbody> </table> <p>The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.</p> <p>For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</p>	Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)	0.009-0.490	2400/f(kHz)	-	300	0.490-1.705	24000/f(kHz)	-	300	1.705-30.0	30	-	30	30-88	100	40	3	88-216	150	43.5	3	216-960	200	46	3	960-25000	500	54	3
Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)																															
0.009-0.490	2400/f(kHz)	-	300																															
0.490-1.705	24000/f(kHz)	-	300																															
1.705-30.0	30	-	30																															
30-88	100	40	3																															
88-216	150	43.5	3																															
216-960	200	46	3																															
960-25000	500	54	3																															

Test procedure:

The setup below was used to measure undesirable emissions on the Band Edge domain. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss and the declared Antenna Gain.

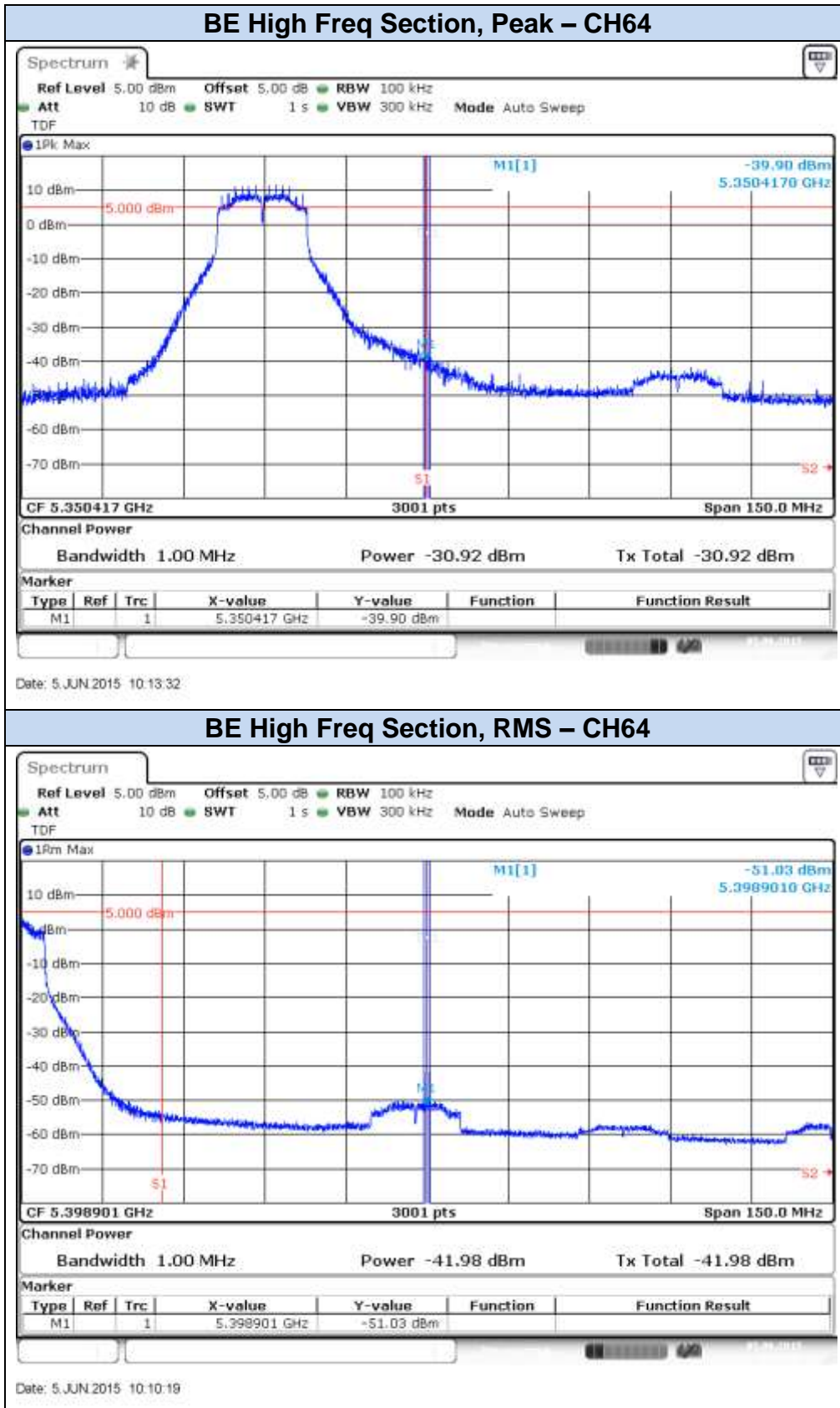
In case of Band Edge measurements falling in restricted bands, the declared Antenna Gain is also compensated in the graph.

The declared maximum antenna gain is 5dBi.

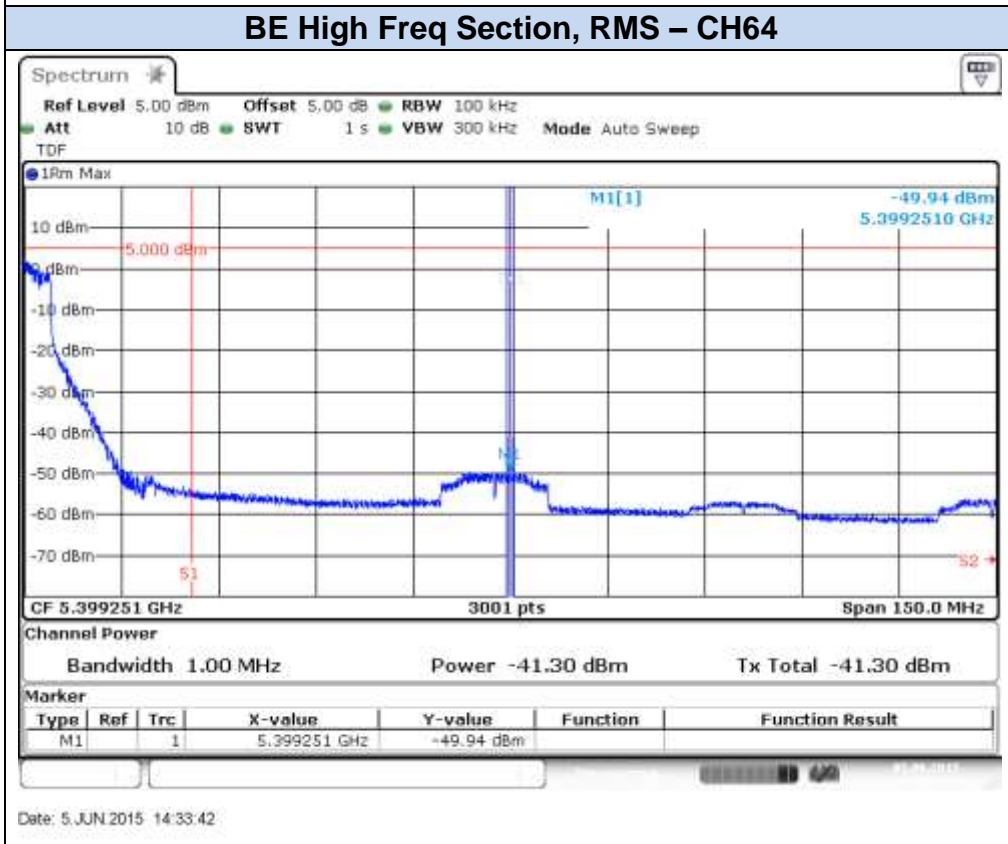
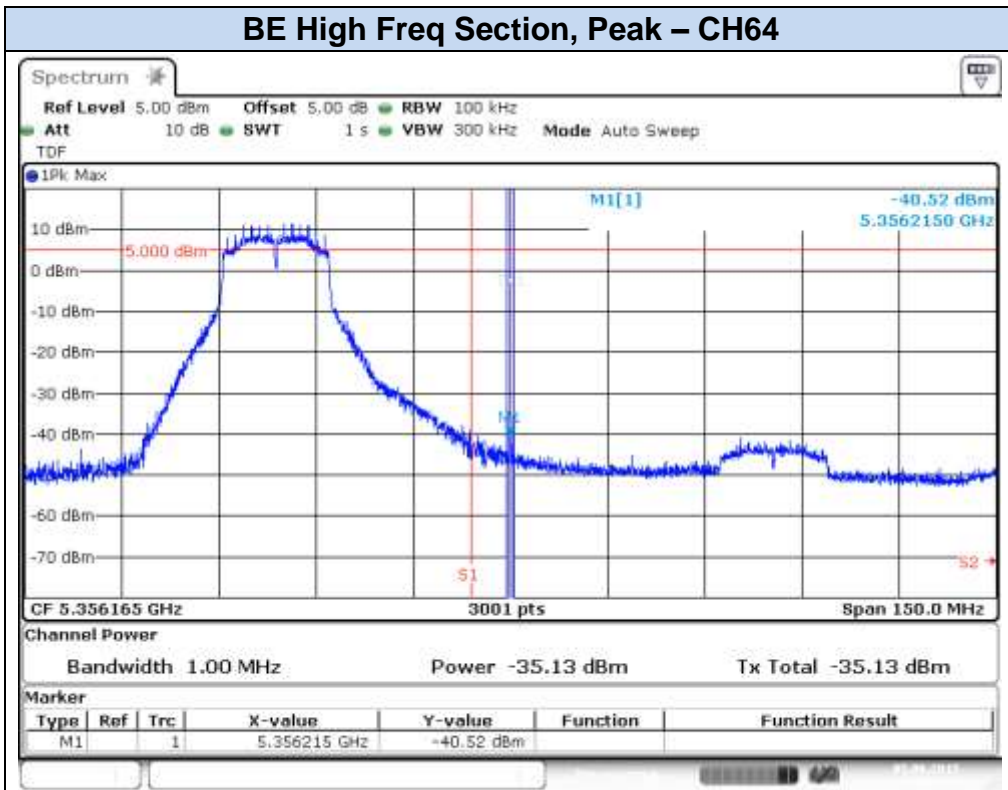


The following limits in dBm were applied for the average detector after the conversion from the limits detailed above in dB μ V/m, according to FCC 47 CFR part 15 - Subpart C – §15.209(a). The limits in dBm for peak detector are 20dB above the indicated values in the table.

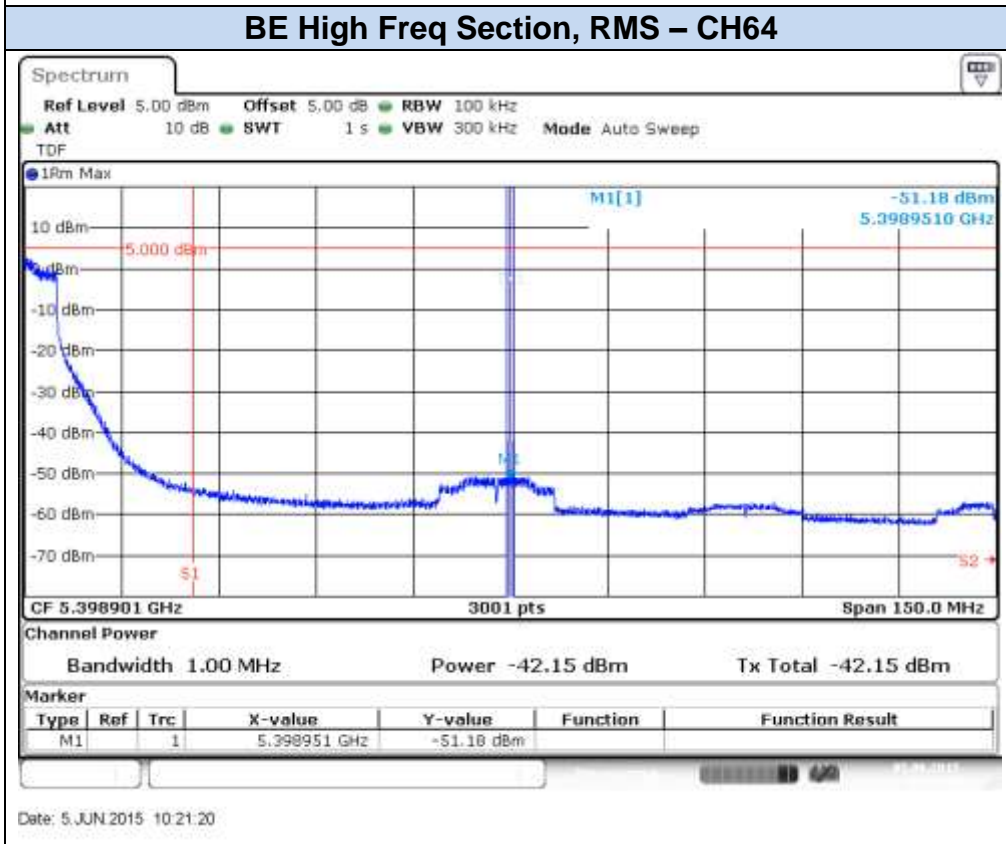
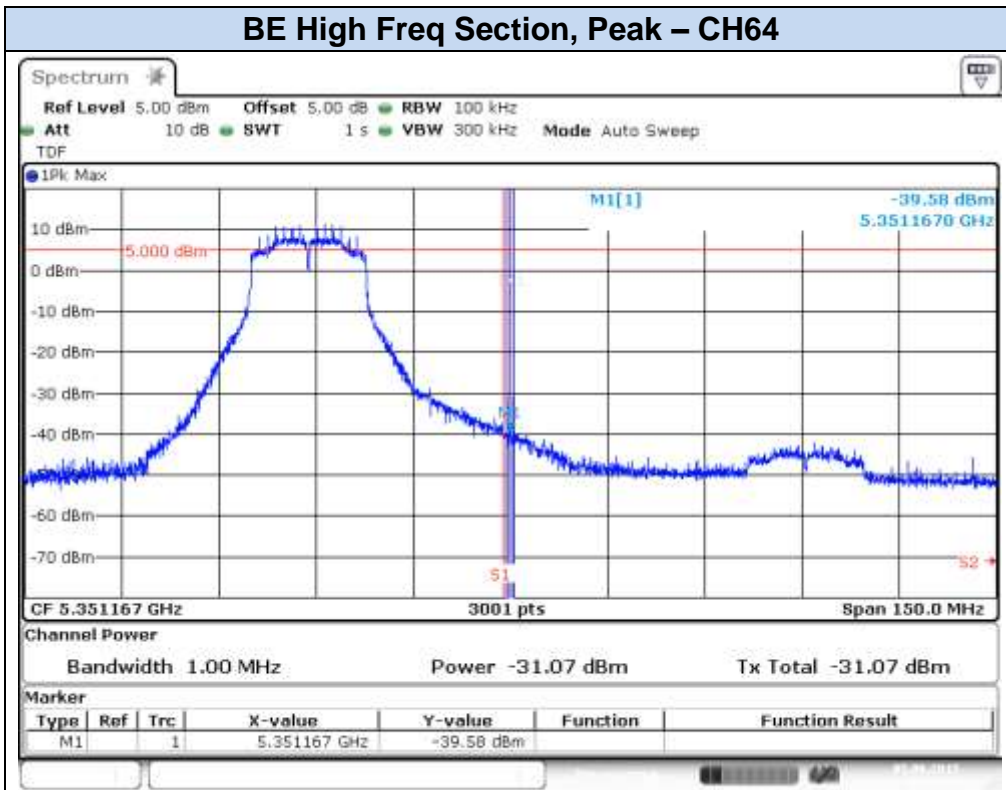
§15.209(a)			Converted values	
Freq Range (MHz)	Distance (m)	Field strength (microvolts/meter)	Field strength (dB microvolts/meter)	Power (dBm)
960-25000	3	500	53.98	-41.28

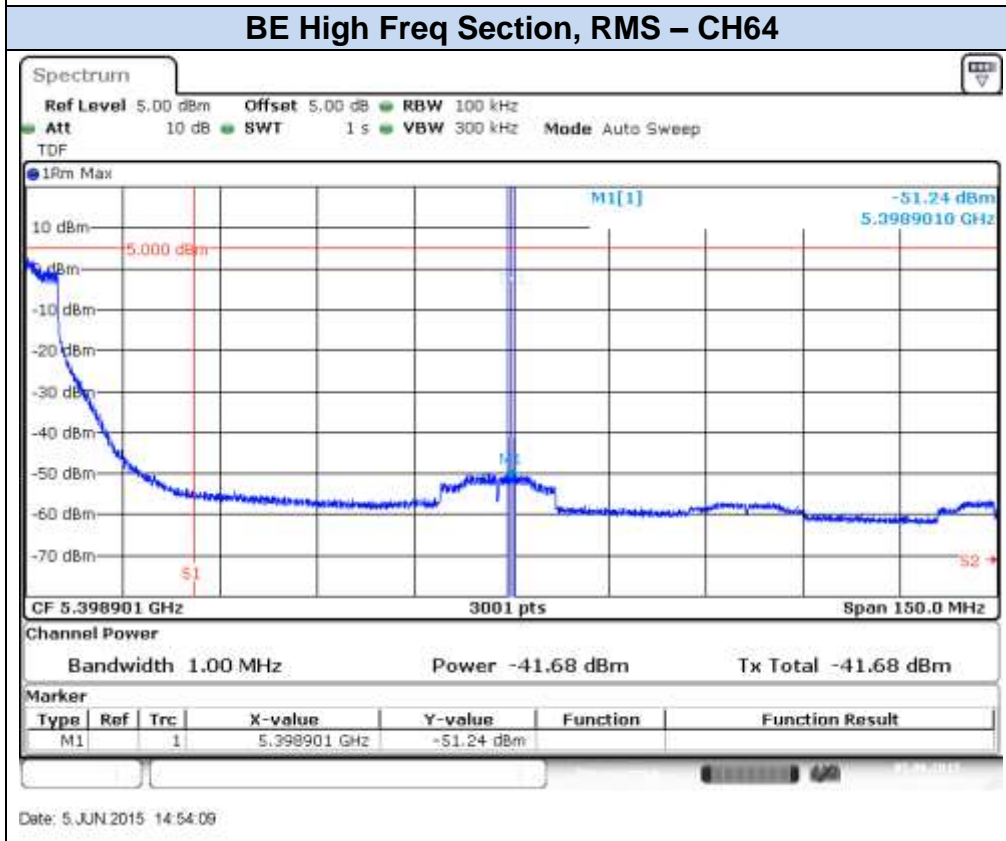
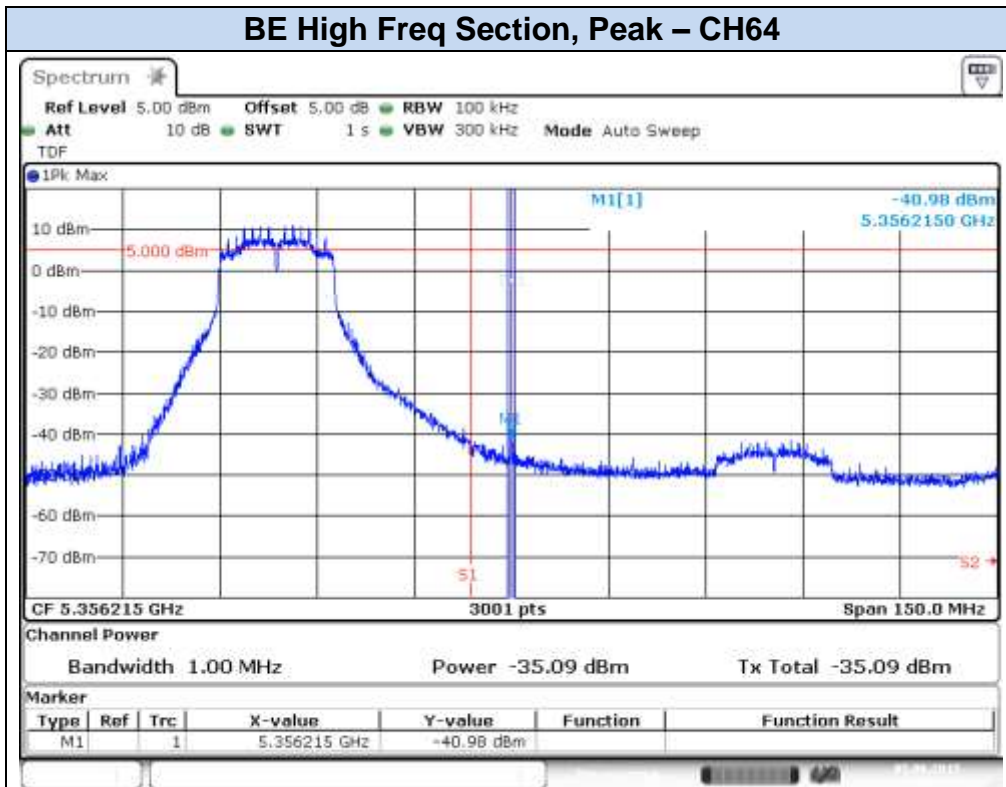
Results Screenshot:**802.11a, 6Mbps – Chain A**

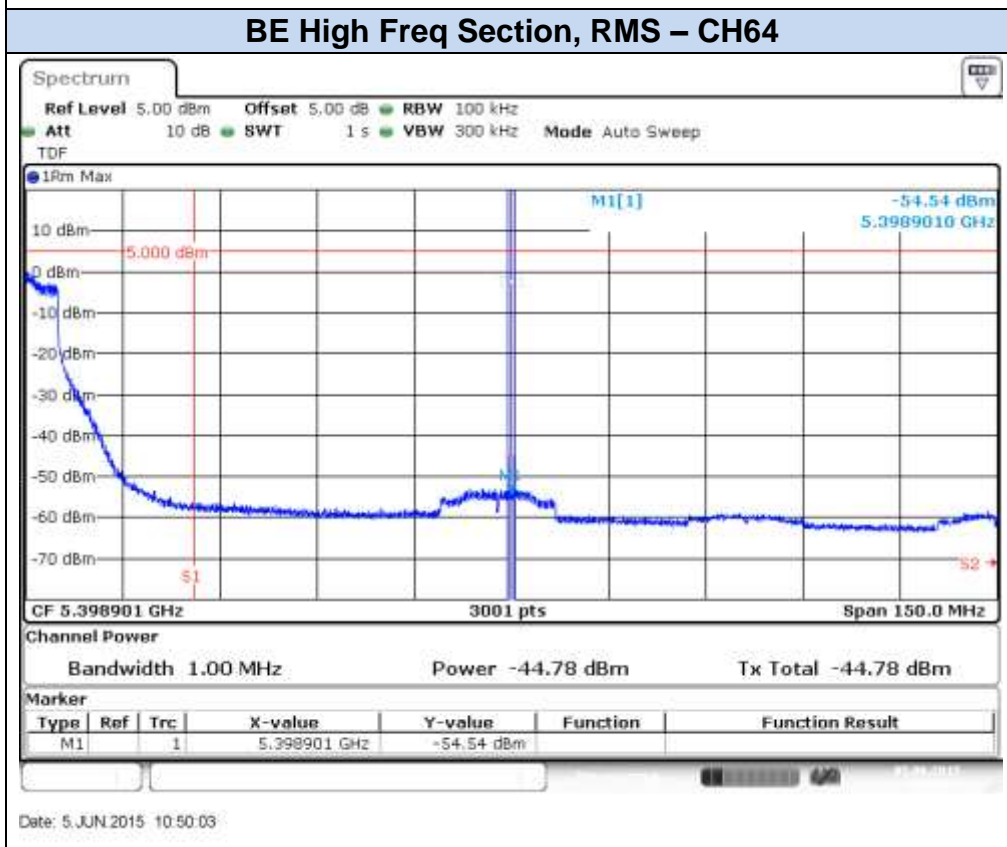
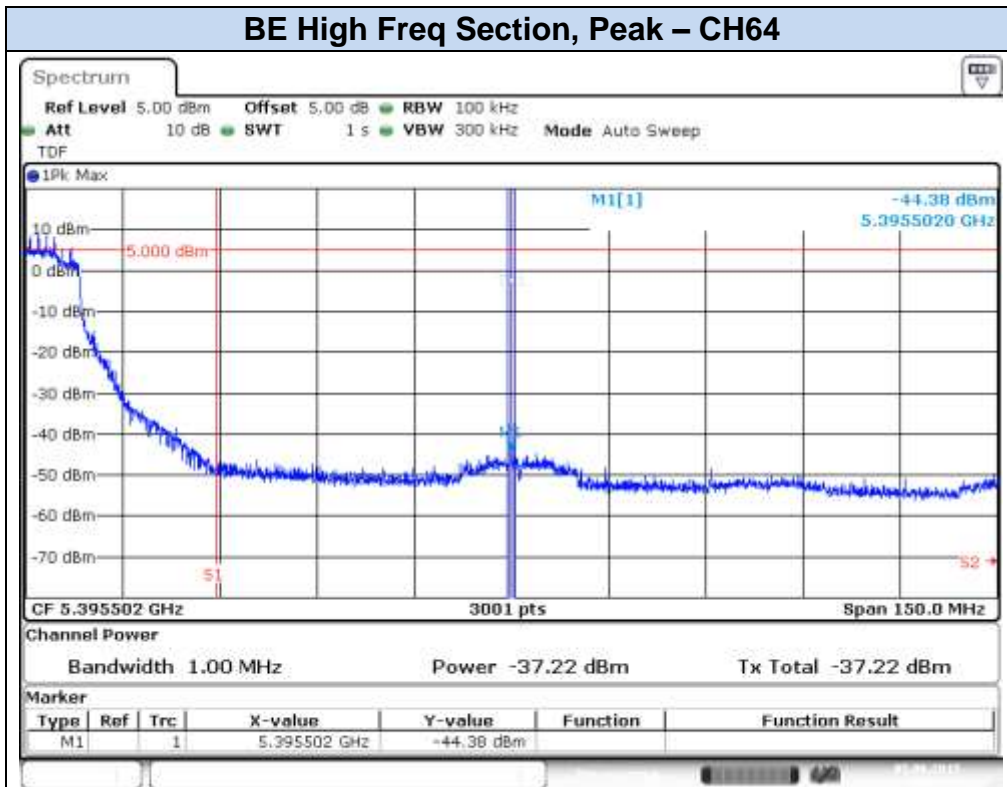
802.11a, 6Mbps – Chain B



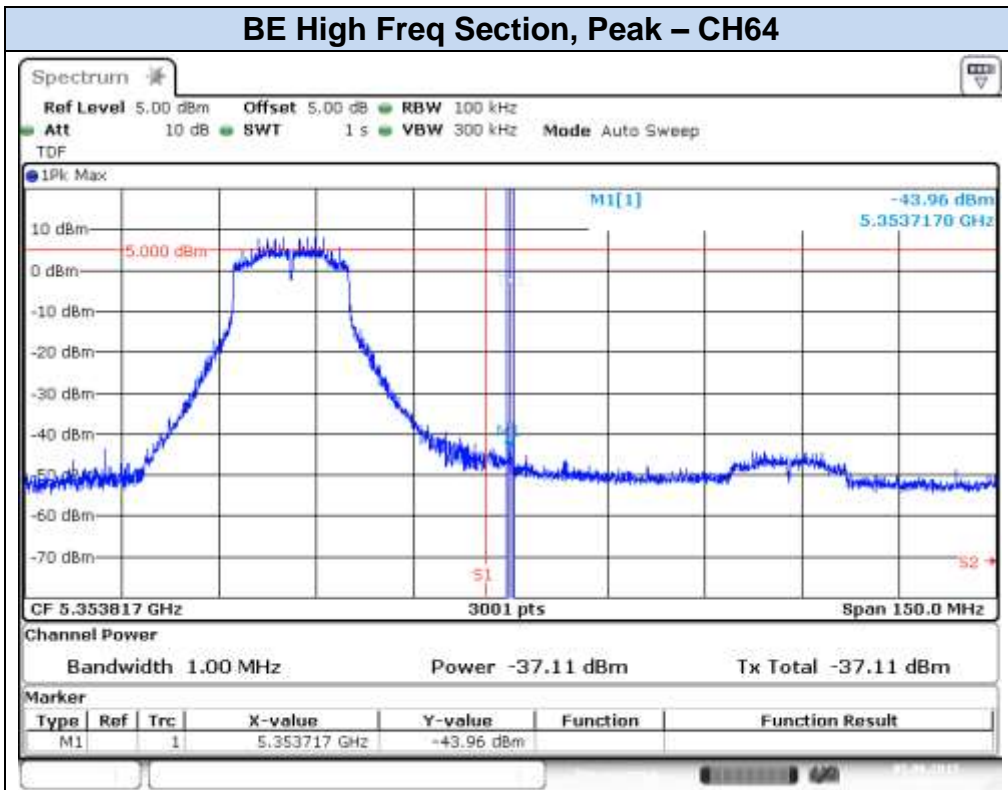
802.11n20, HT0 (SISO) – Chain A



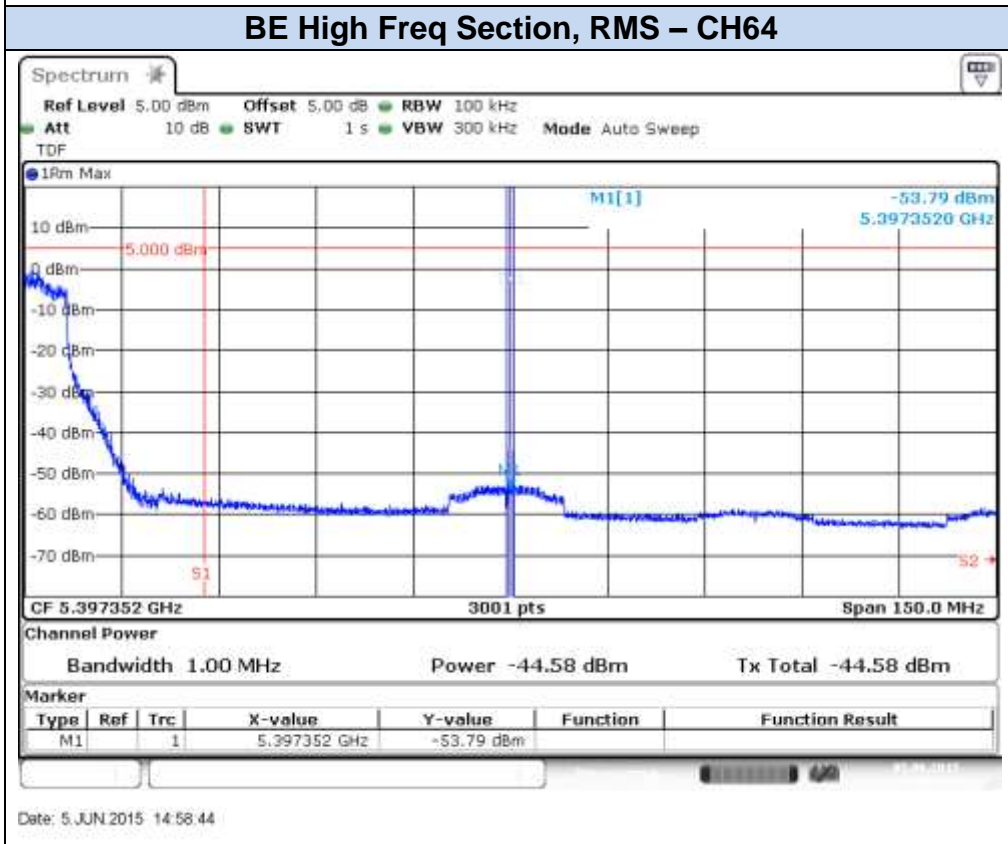
802.11n20, HT0 (SISO) – Chain B

802.11n20, HT8 (MIMO) – Chain A

802.11n20, HT8 (MIMO) – Chain B

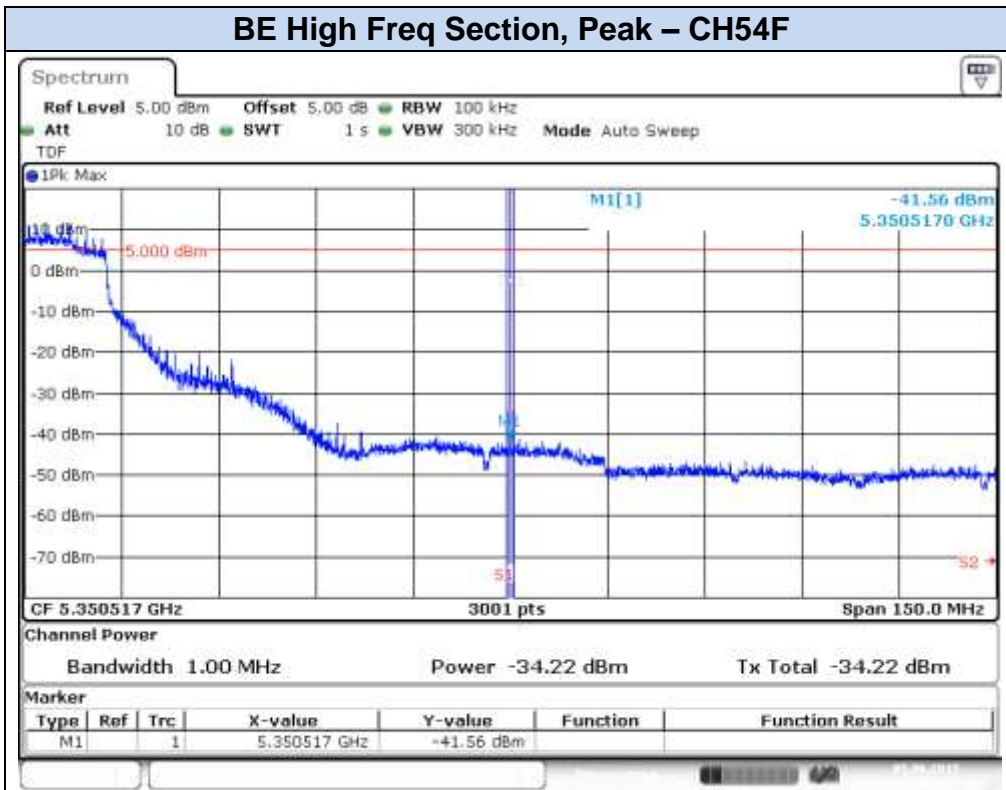


Date: 5 JUN 2015 14:59:59

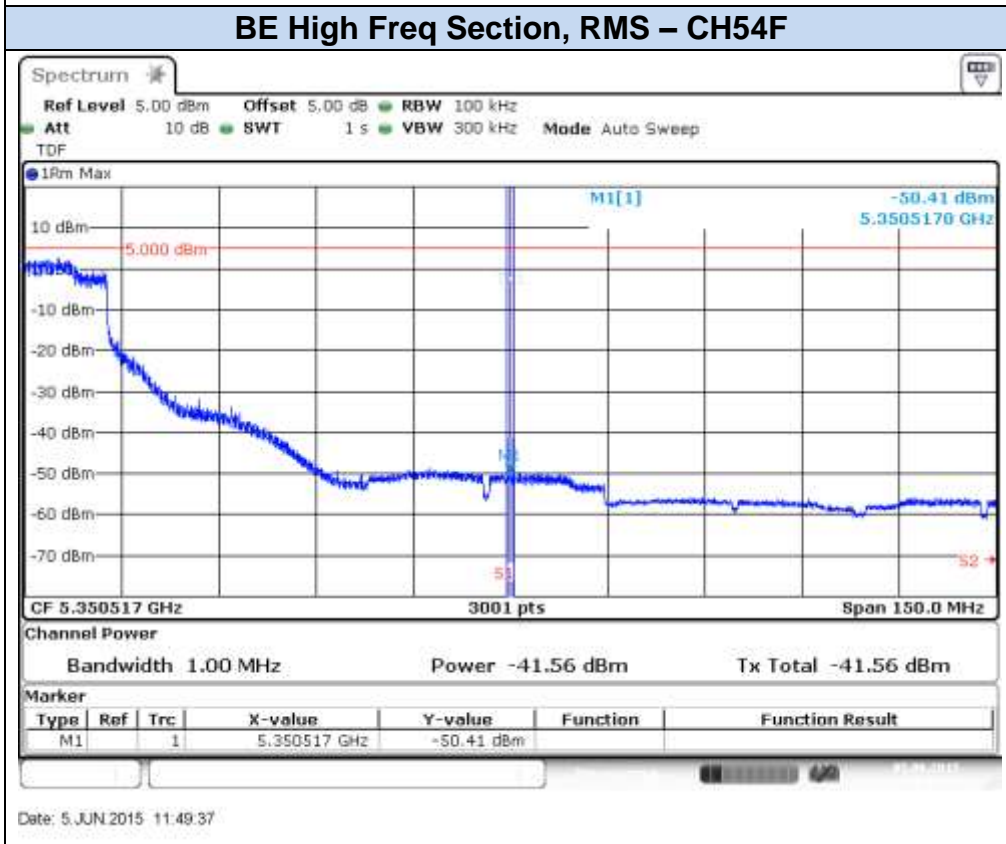


Date: 5 JUN 2015 14:58:44

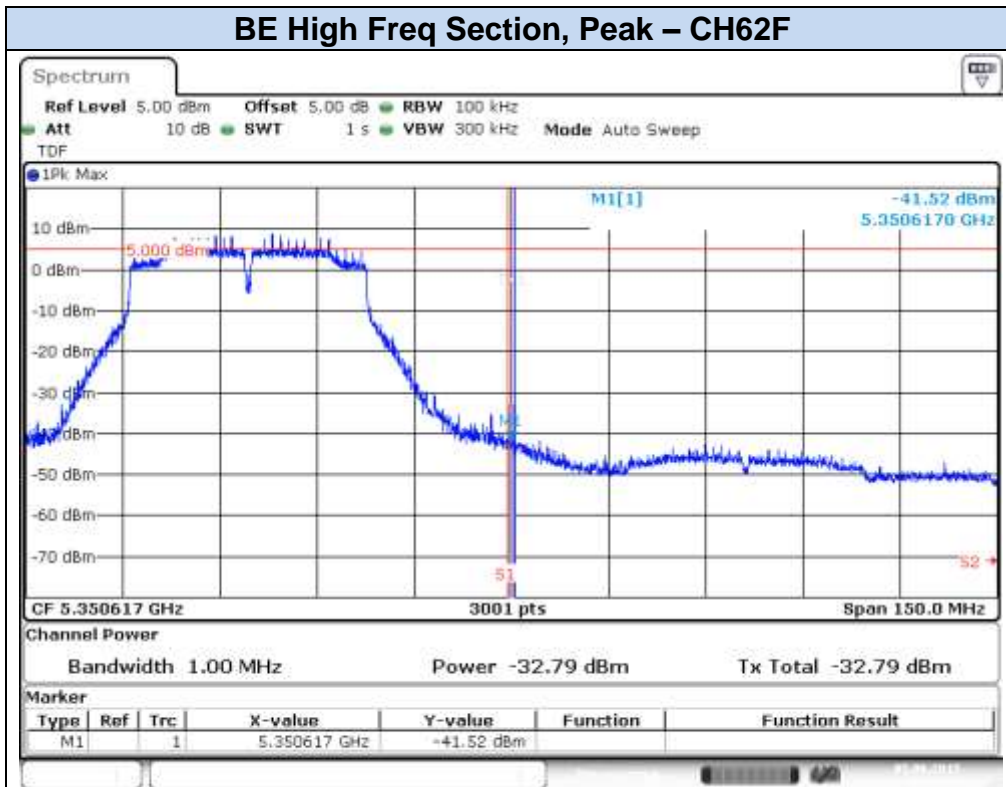
802.11n40, HT0 (SISO) – Chain A



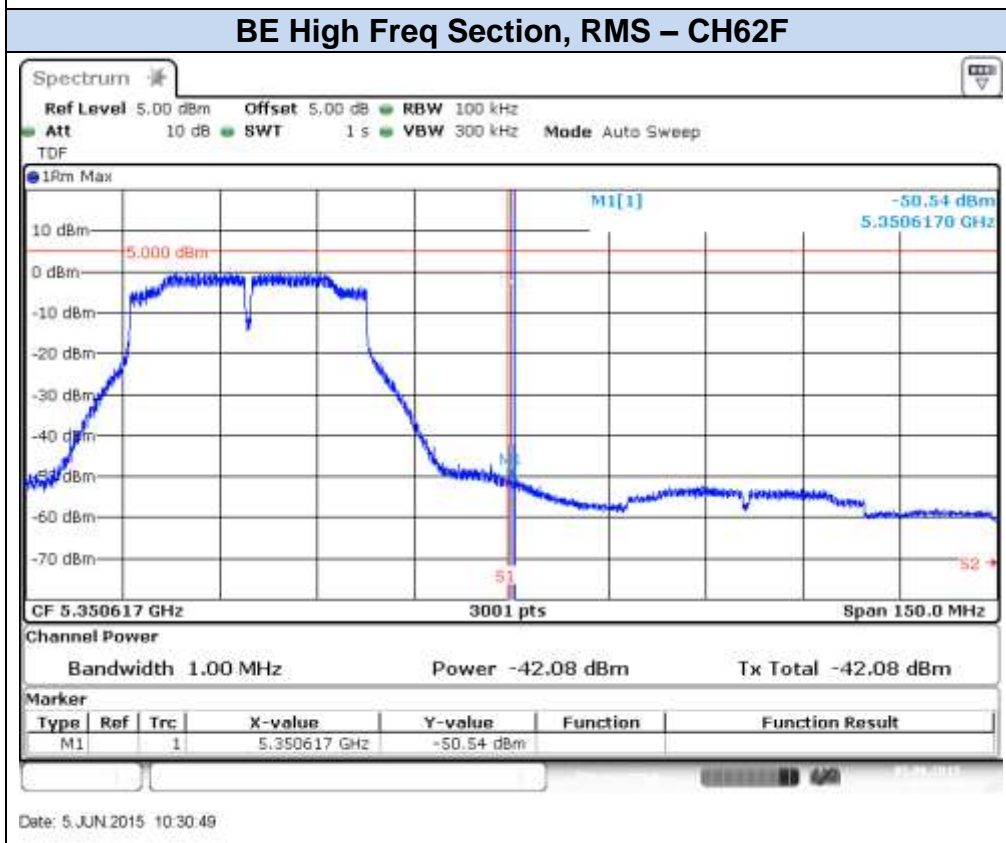
Date: 5 JUN 2015 11:51:19



Date: 5 JUN 2015 11:49:37

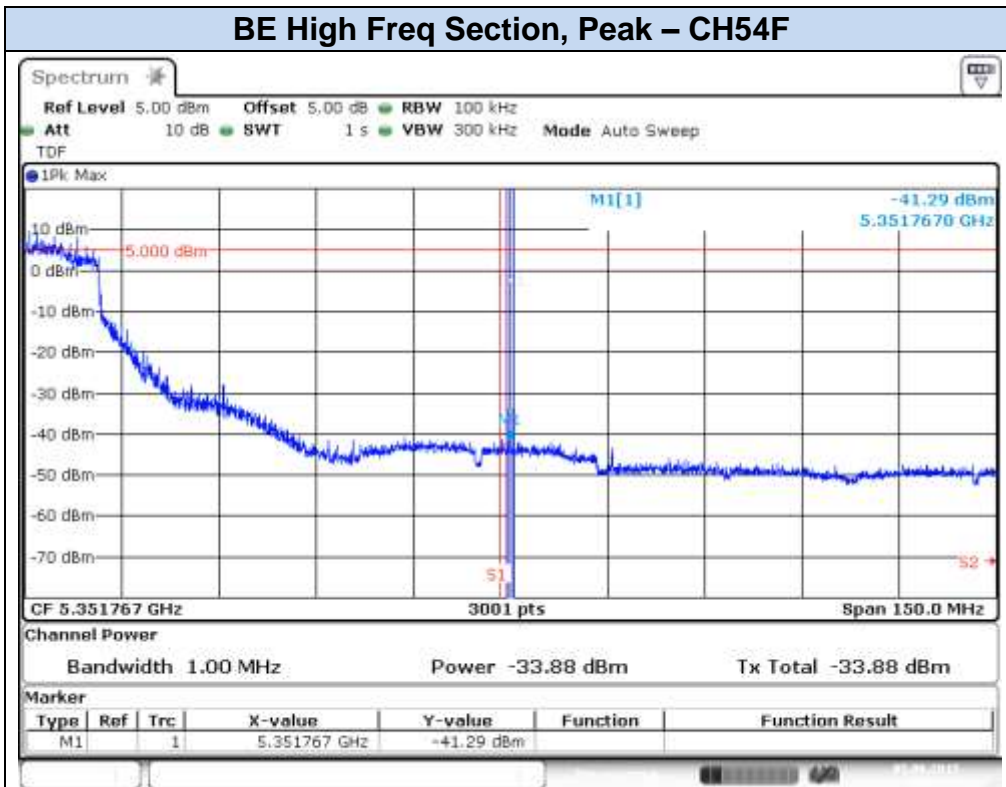


Date: 5 JUN 2015 10:32:28

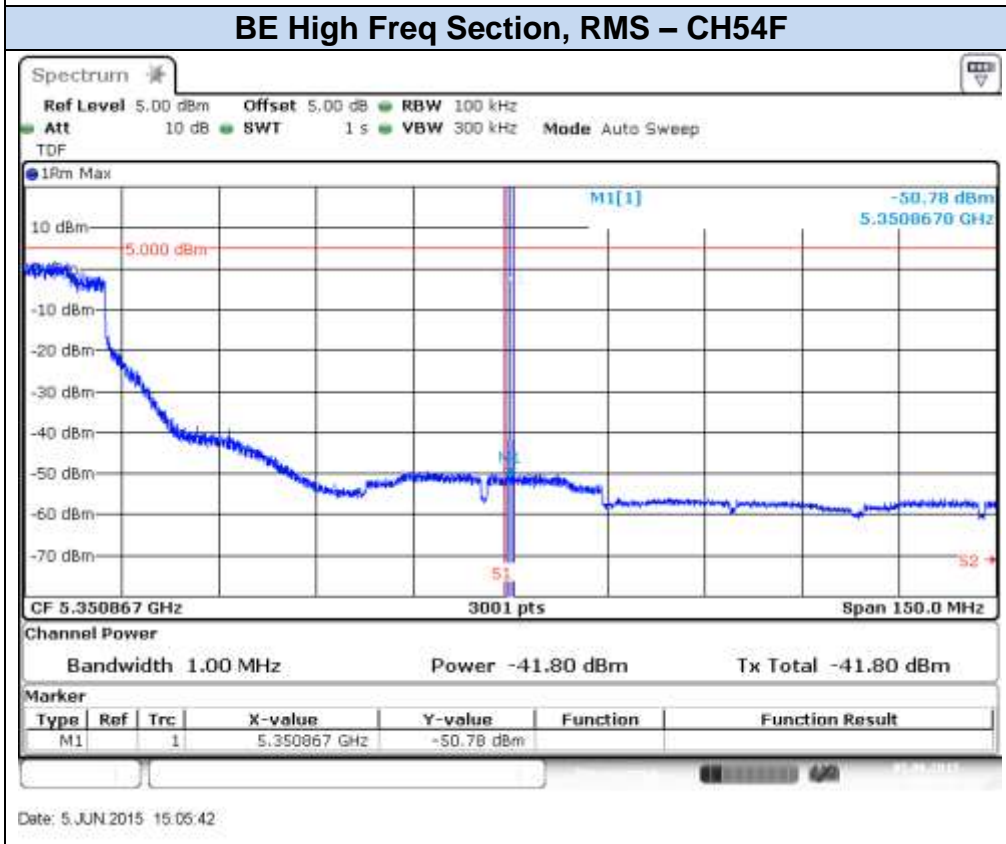


Date: 5 JUN 2015 10:30:49

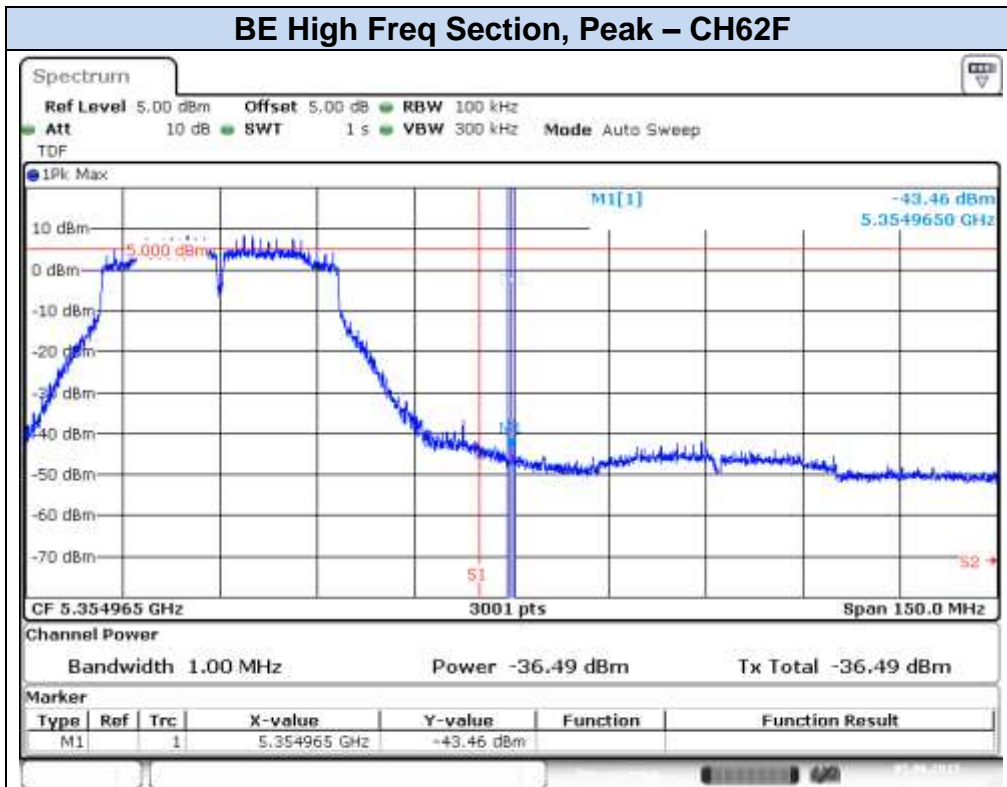
802.11n40, HT0 (SISO) – Chain B



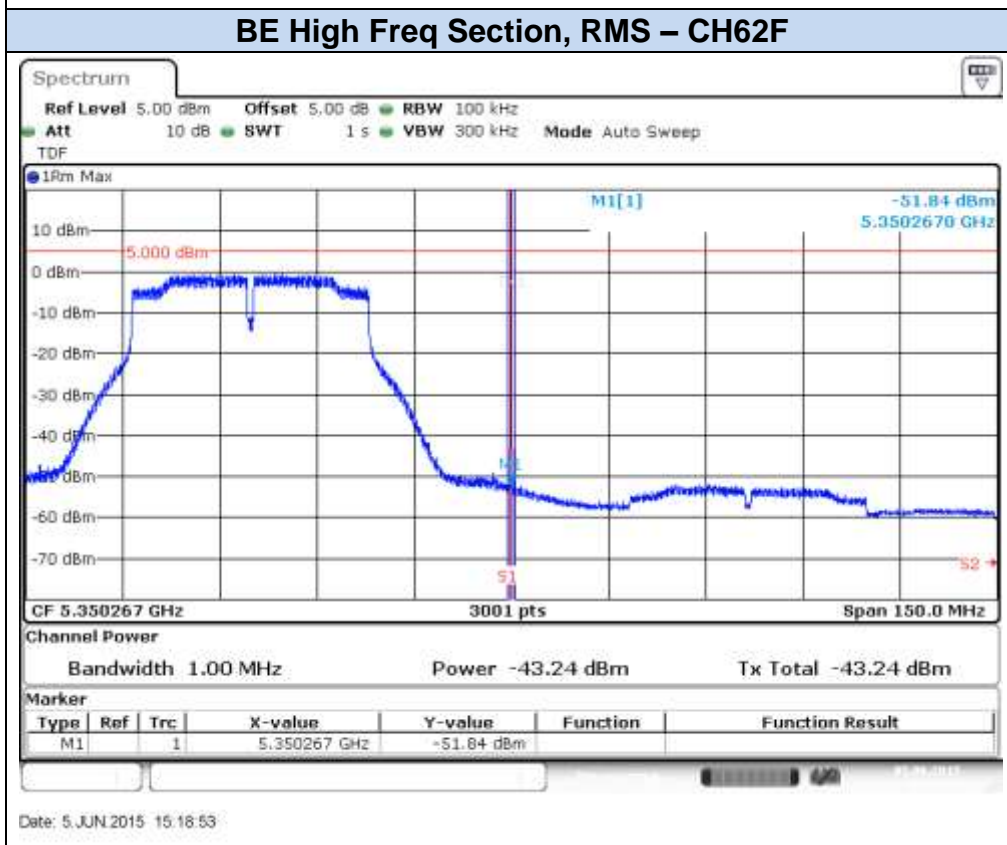
Date: 5 JUN 2015 15:07:43



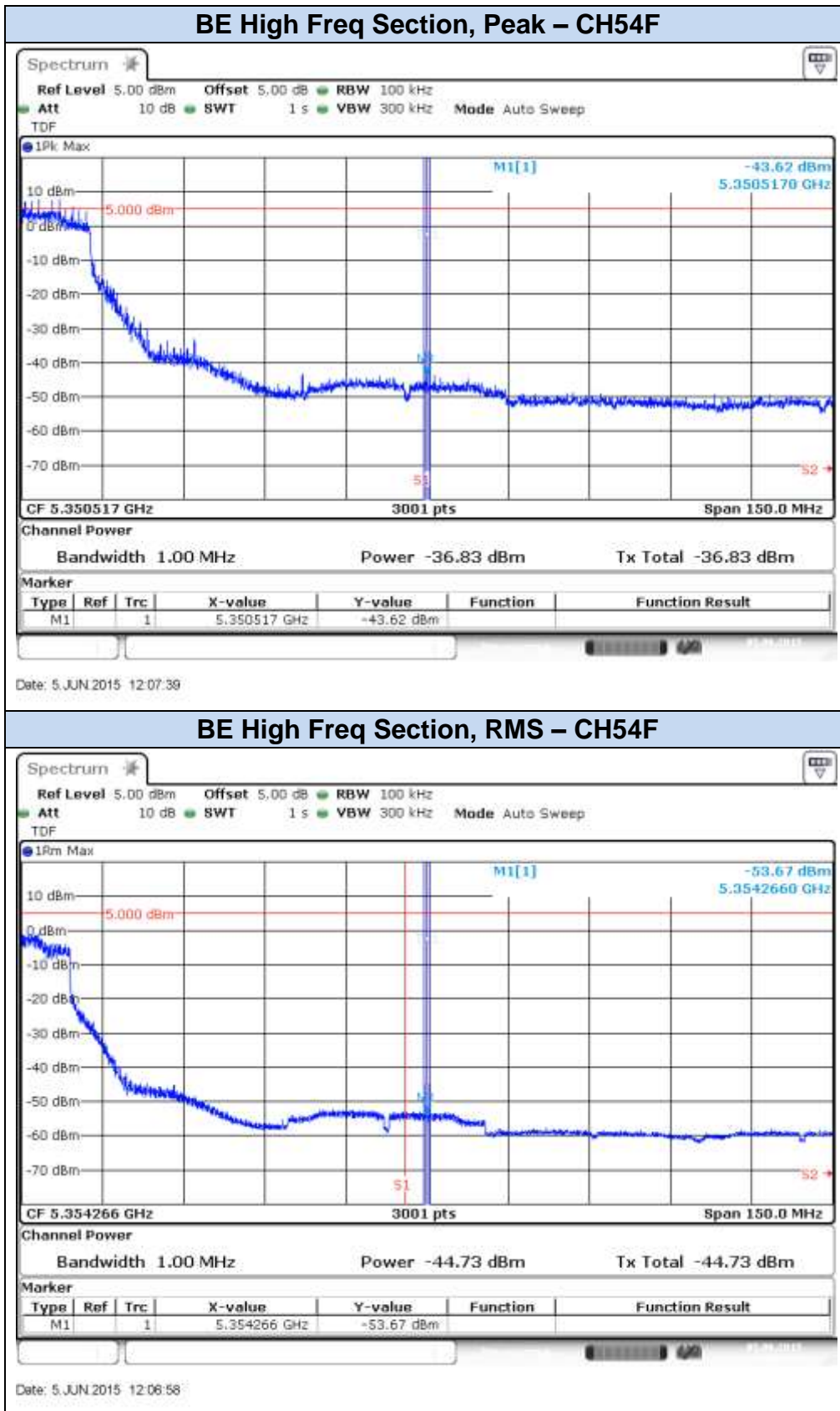
Date: 5 JUN 2015 15:06:42

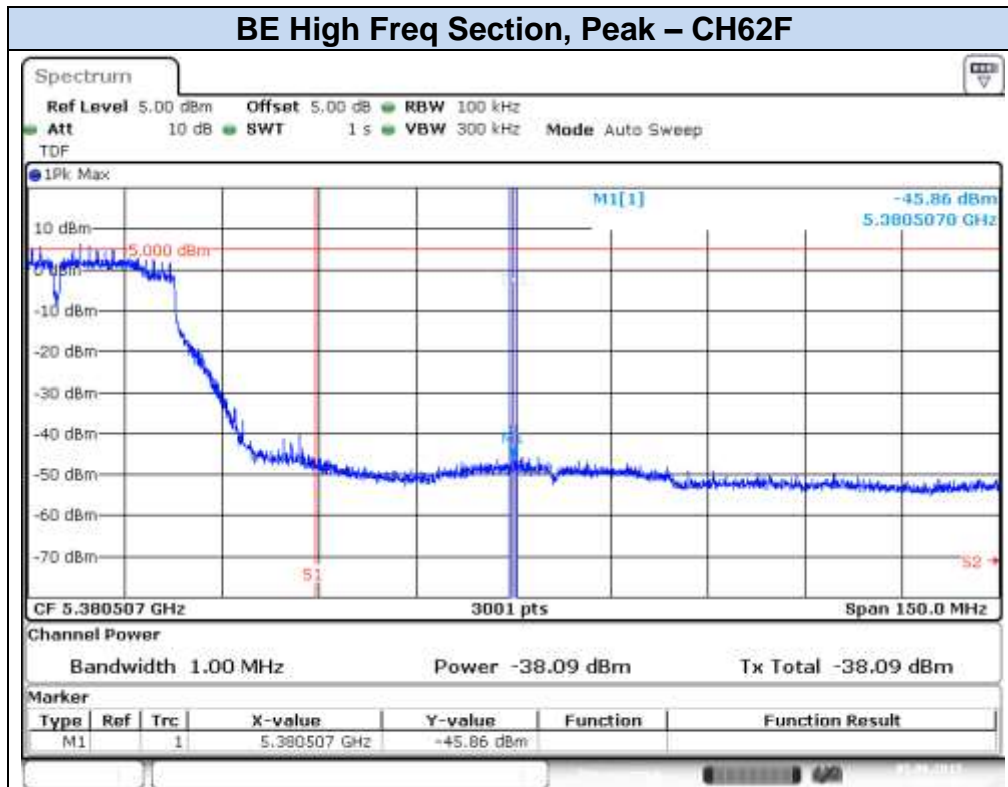


Date: 5 JUN 2015 15:20:22

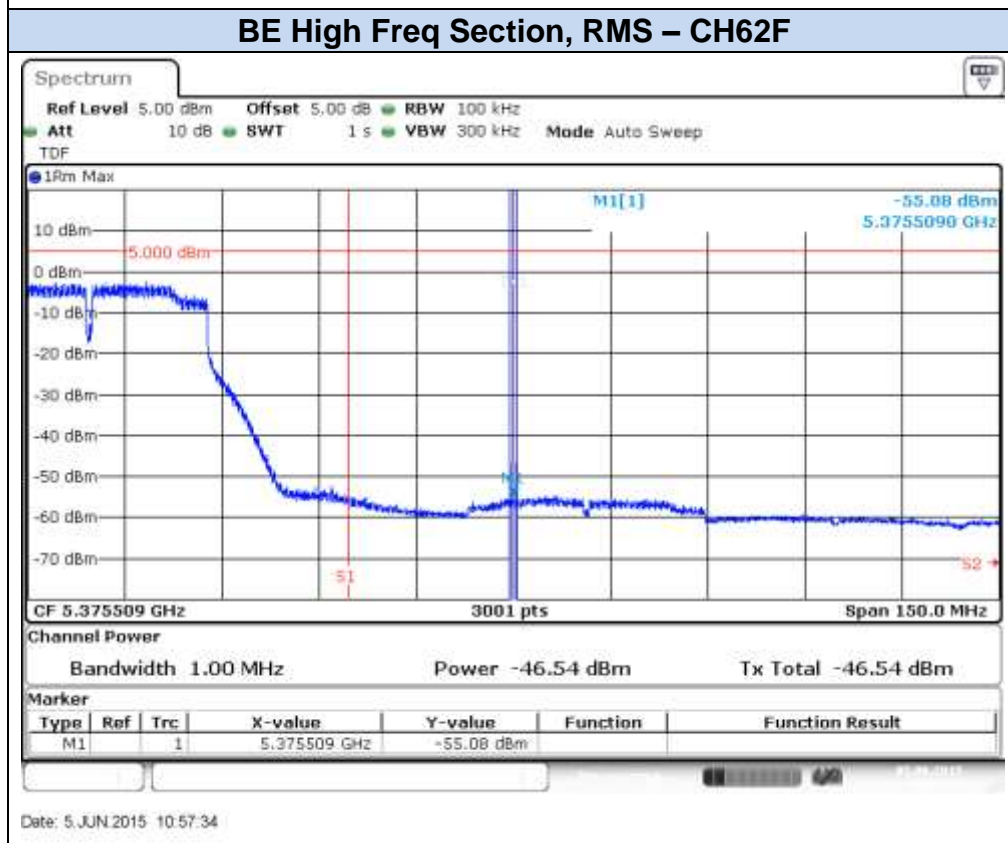


Date: 5 JUN 2015 15:18:53

802.11n40, HT8 (MIMO) – Chain A

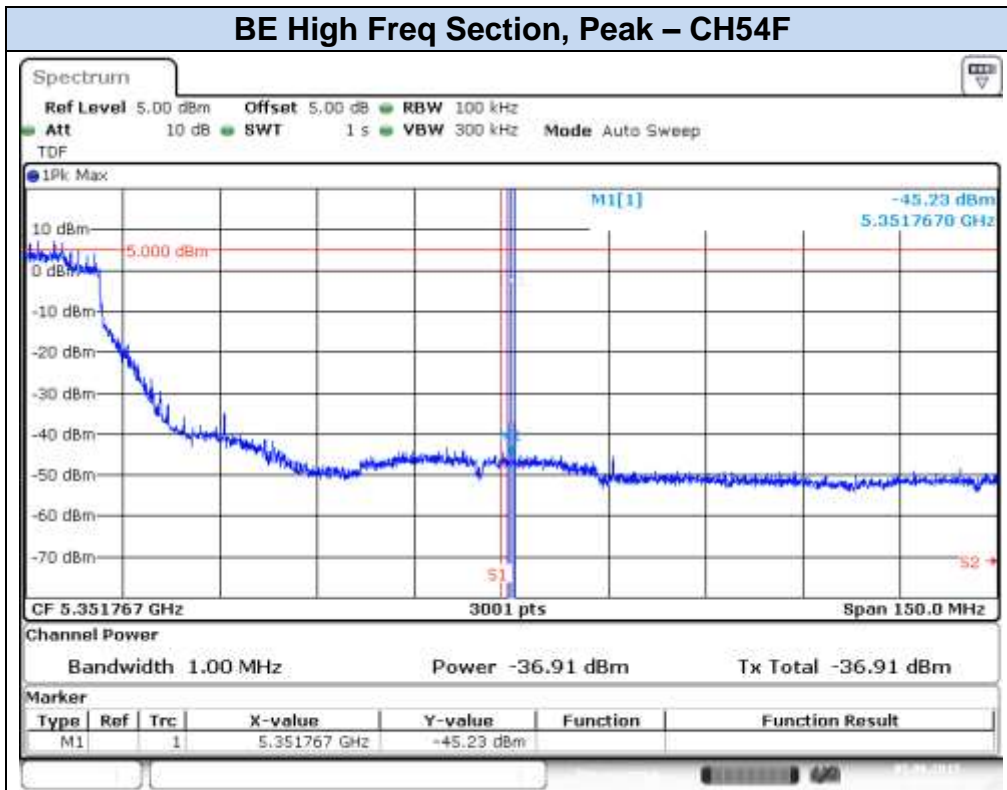


Date: 5 JUN 2015 10:58:41

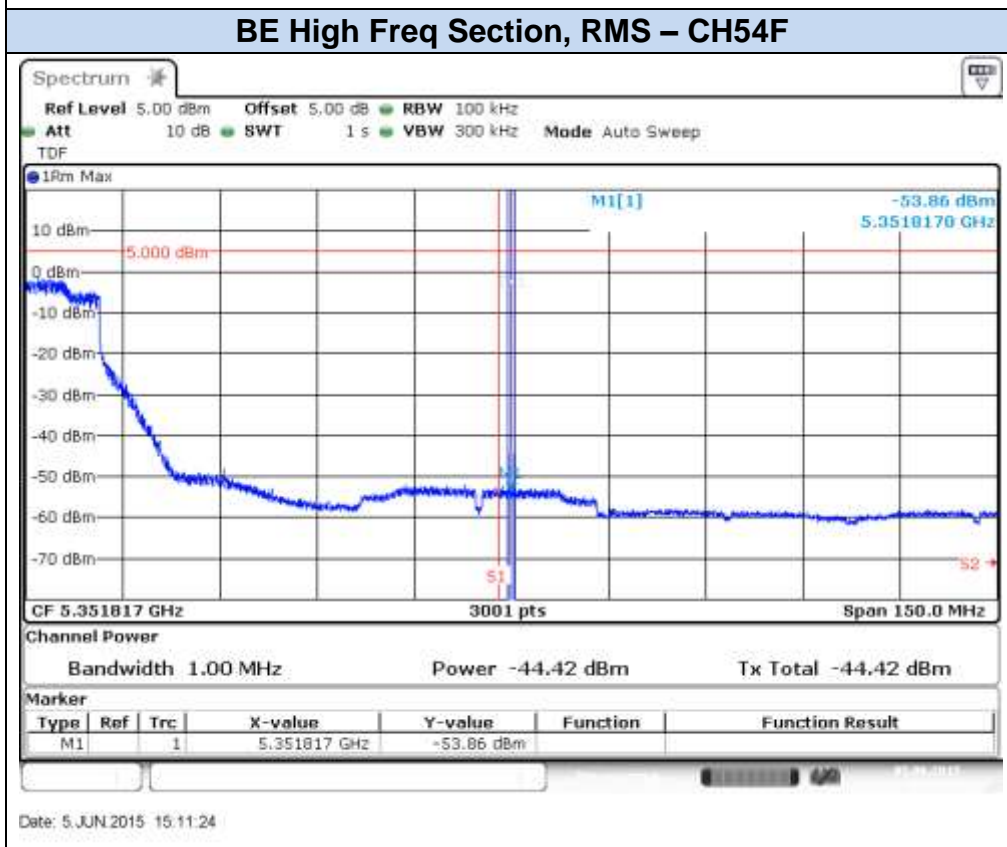


Date: 5 JUN 2015 10:57:34

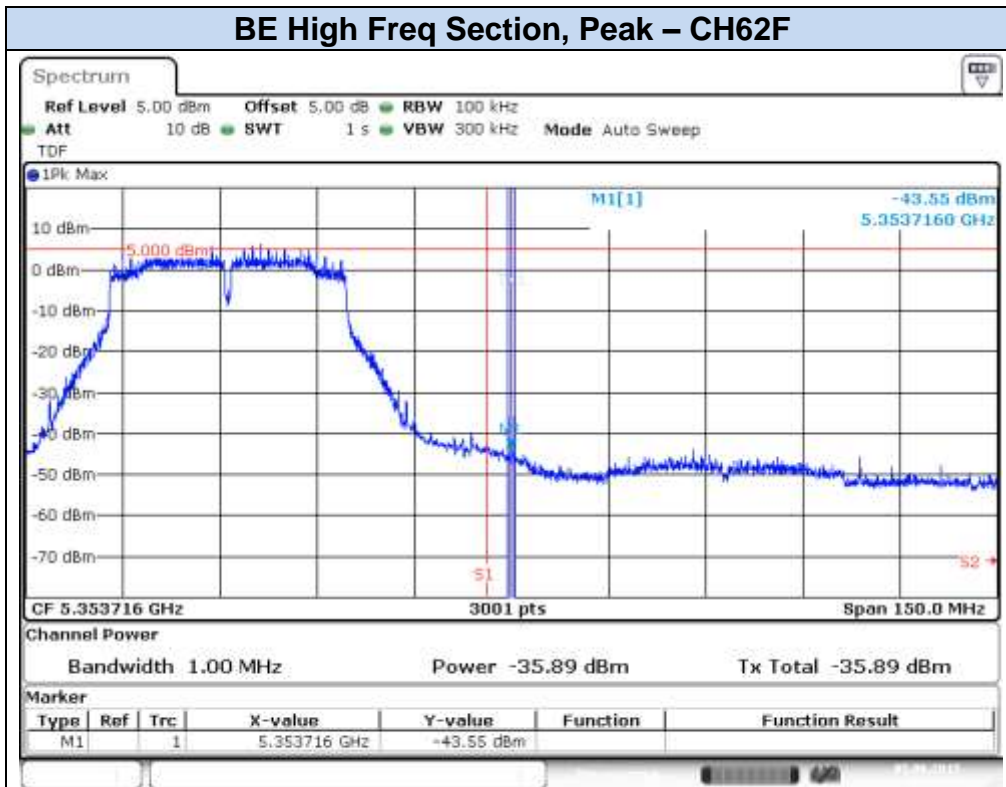
802.11n40, HT8 (MIMO) – Chain B



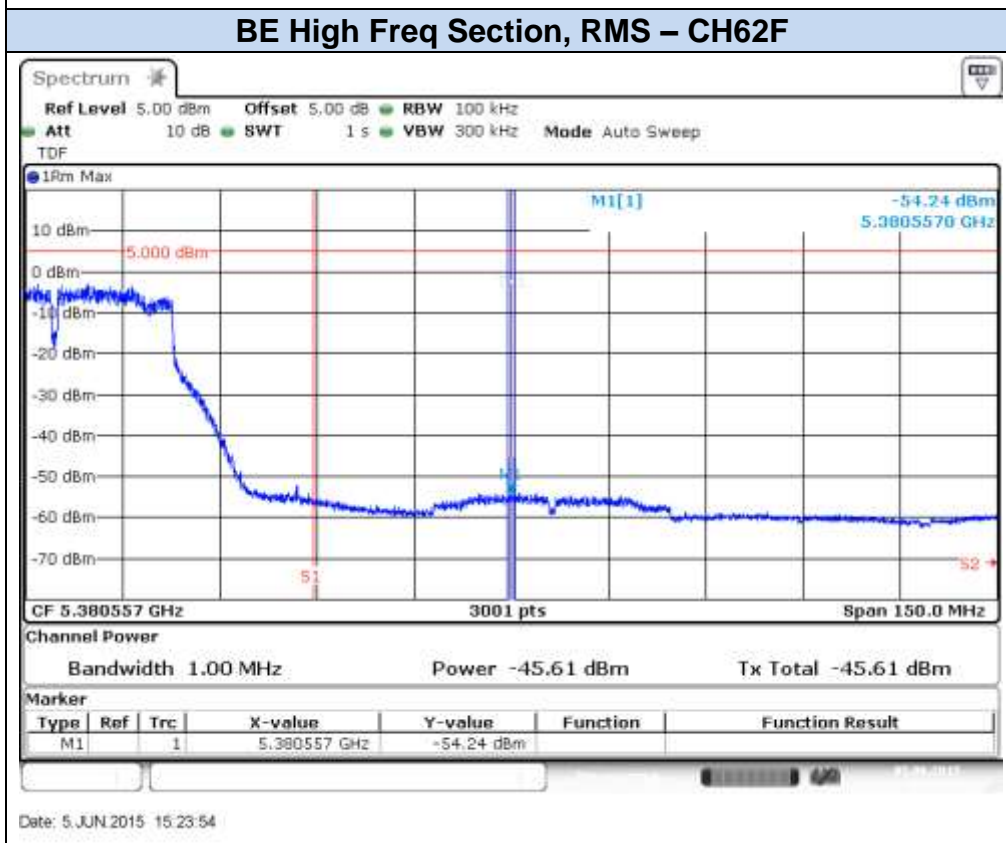
Date: 5 JUN 2015 15:13:06



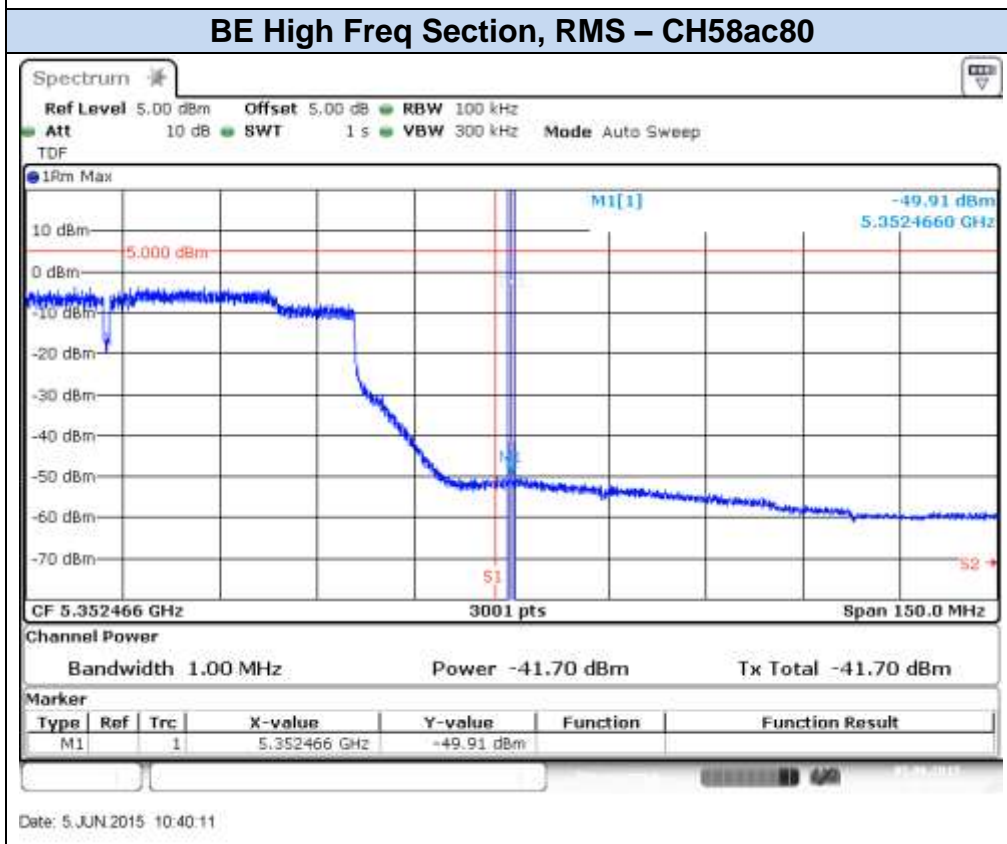
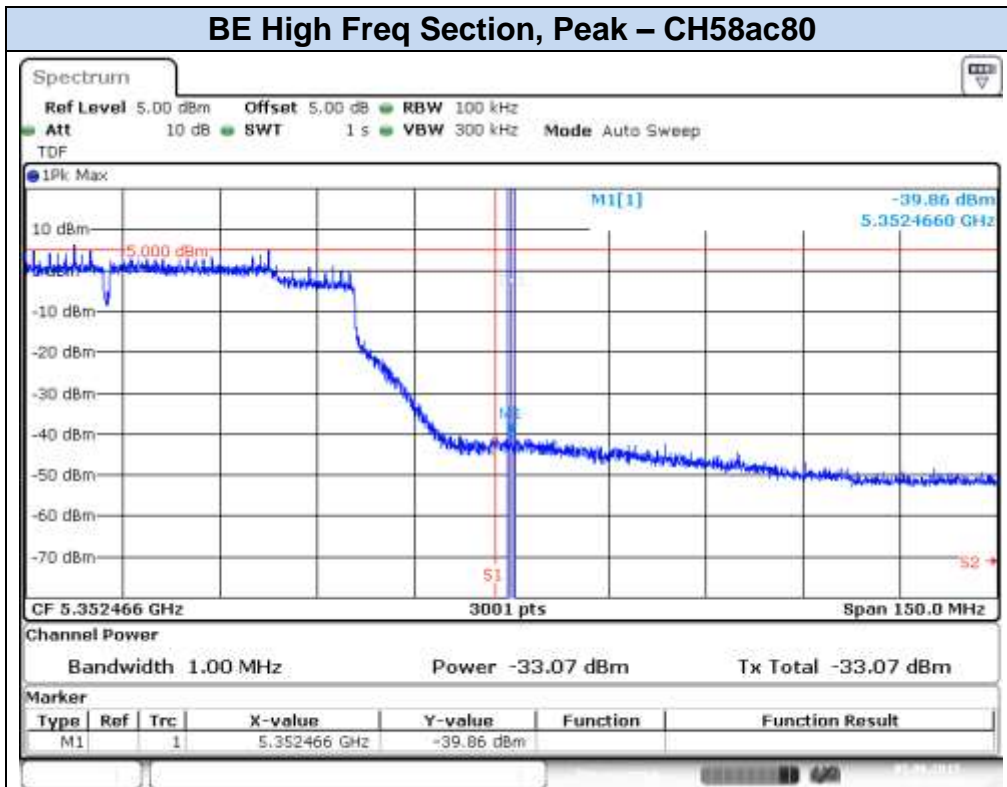
Date: 5 JUN 2015 15:11:24



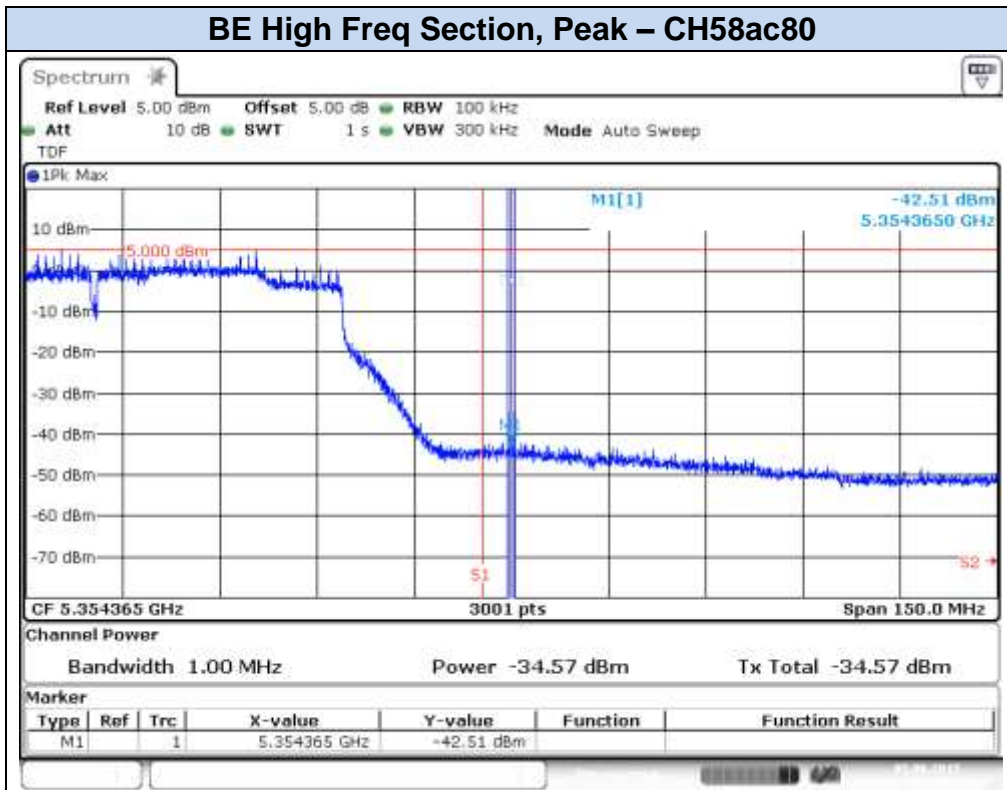
Date: 5 JUN 2015 15:24:56



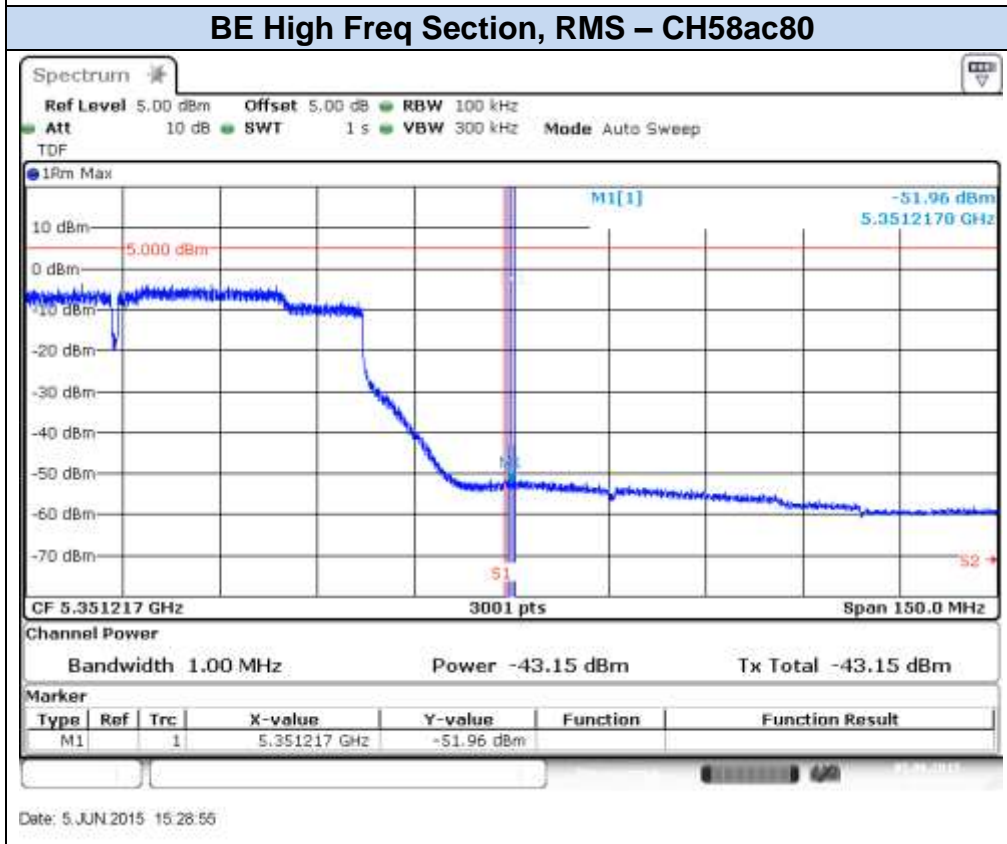
Date: 5 JUN 2015 15:23:54

802.11ac80, VHT0 (SISO)- Chain A

802.11ac80, VHT0 (SISO)- Chain B

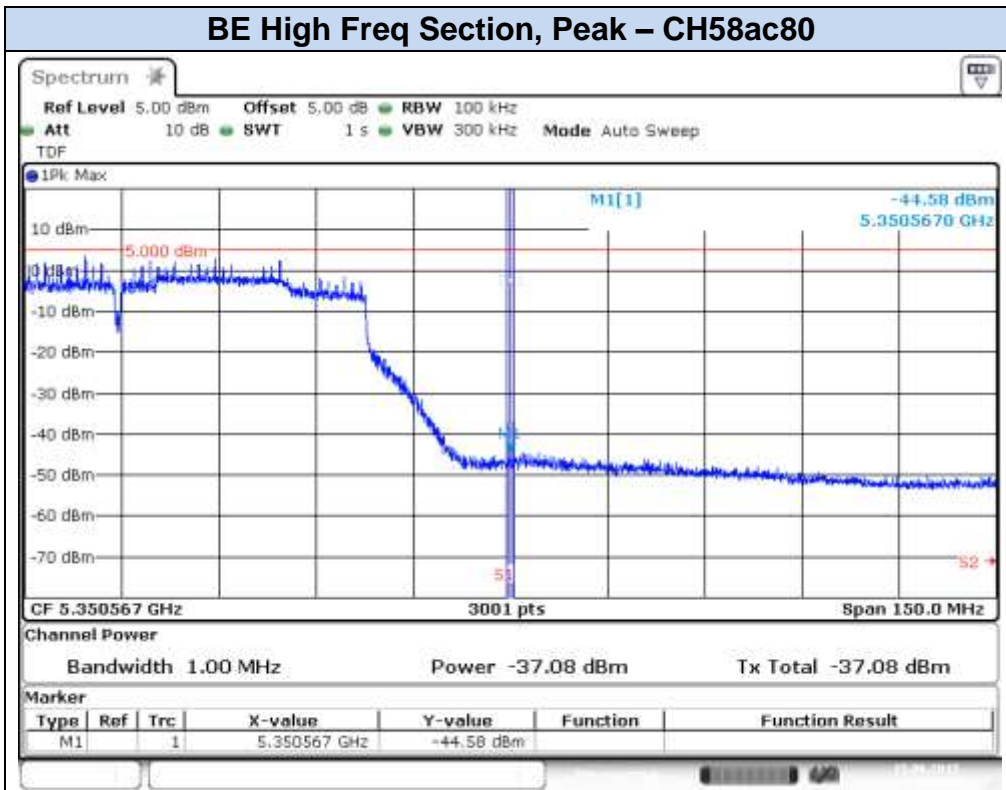


Date: 5 JUN 2015 15:30:55

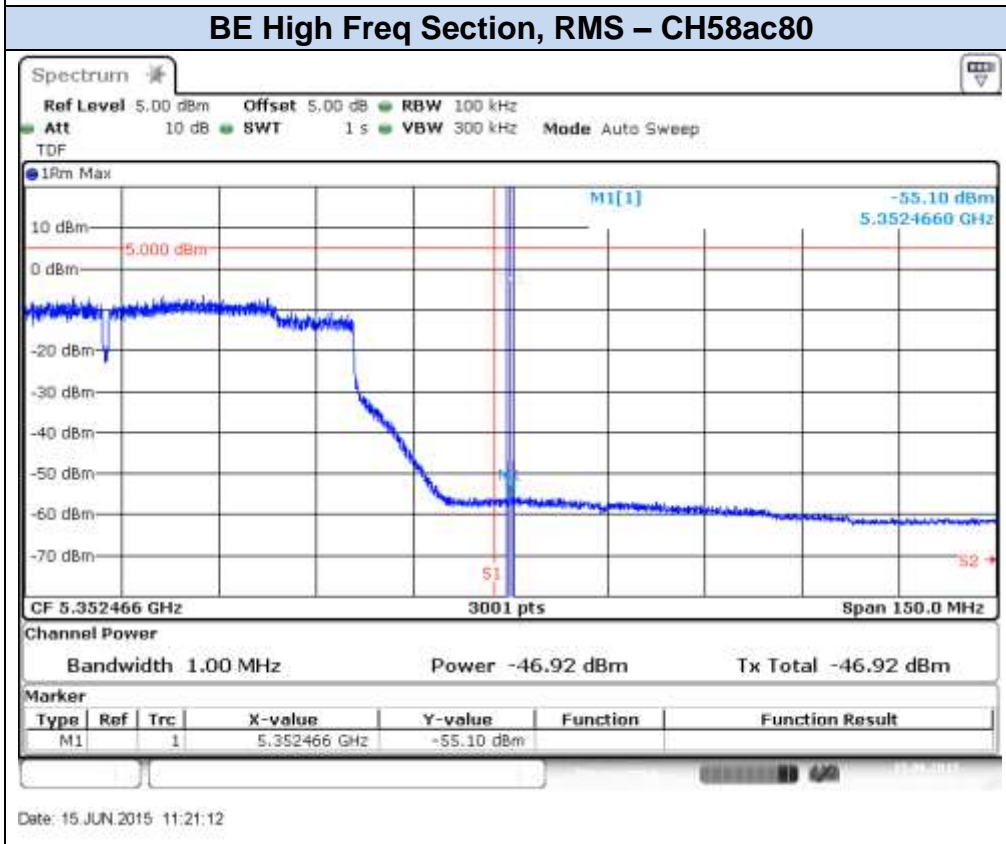


Date: 5 JUN 2015 15:28:55

802.11ac80, VHT0 (MIMO)- Chain A

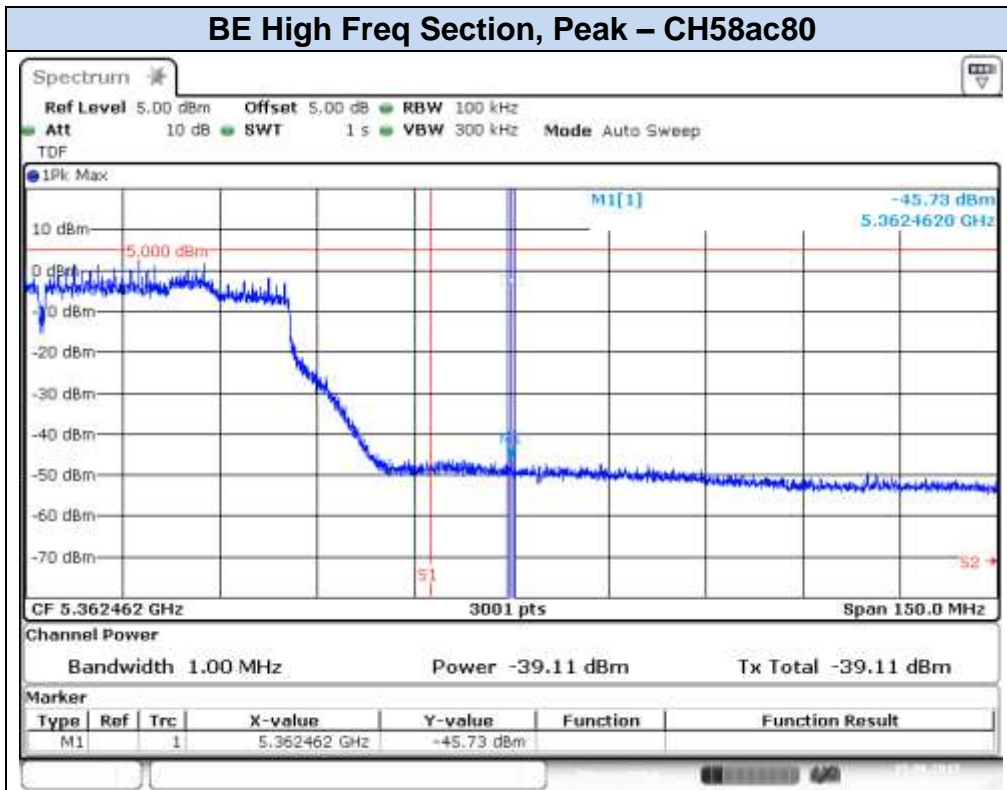


Date: 15 JUN 2015 11:08:00

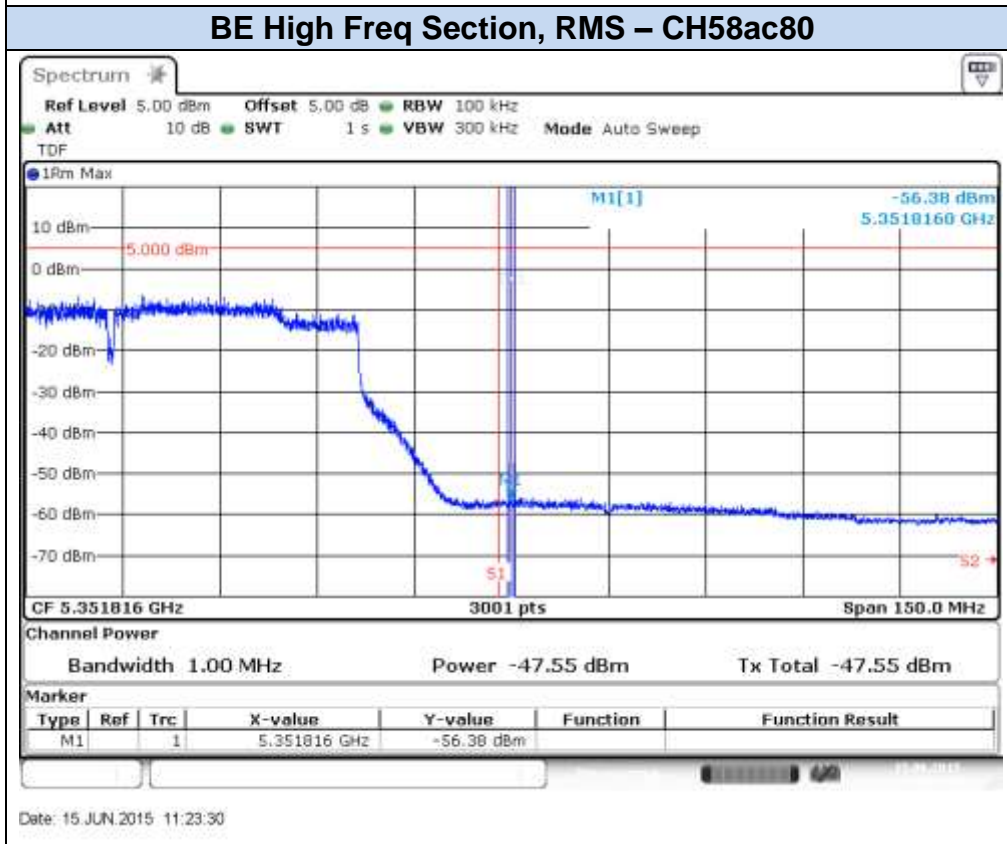


Date: 15 JUN 2015 11:21:12

802.11ac80, VHT0 (MIMO)- Chain B



Date: 15 JUN 2015 11:25:32



Date: 15 JUN 2015 11:23:30

B.4 Radiated spurious emission

Standard references:

FCC part	RSS part	Limits			
15.407 (b) (2) 15.209	RSS-247 Clause 6.2.2 (2)	Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a):			
		Freq Range (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Meas. Distance (m)
		0.009-0.490	2400/f(kHz)	-	300
		0.490-1.705	24000/f(kHz)	-	300
		1.705-30.0	30	-	30
		30-88	100	40	3
		88-216	150	43.5	3
		216-960	200	46	3
		960-25000	500	54	3
		The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.			

Test procedure:

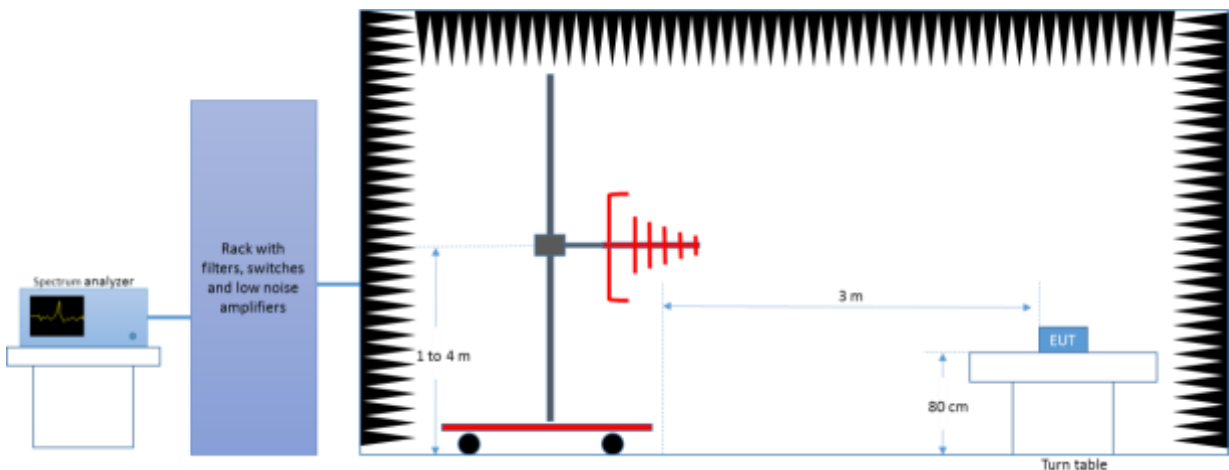
The below setups were used to measure the radiated spurious emissions.

Depending of the frequency range and bands being tested, different antennas and filters were used.

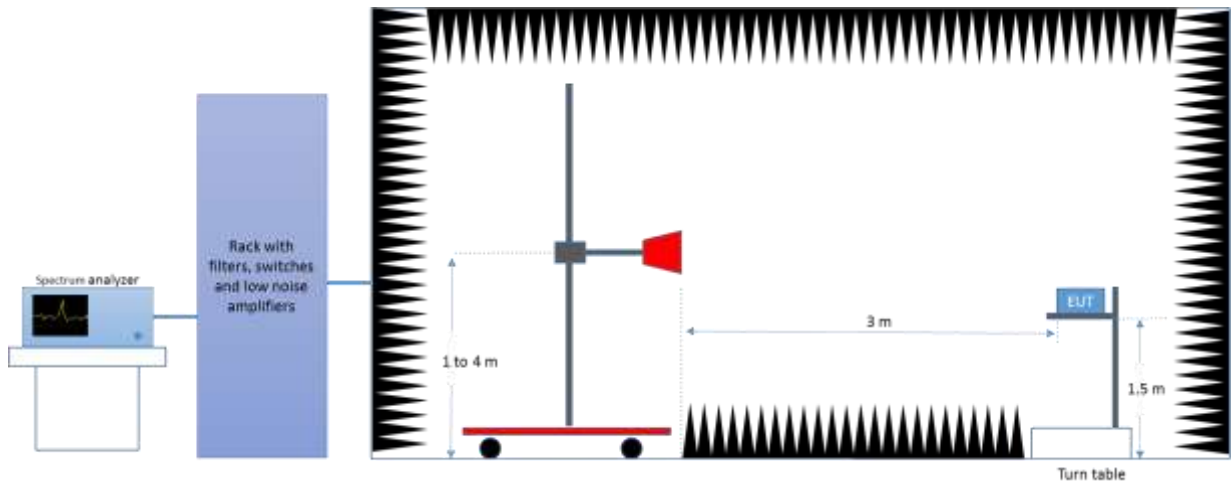
The final measurement is done by varying the antenna height from 1 to 4 meters, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

The radiated spurious emissions were measured on the worst case configuration selected from the chapter *B.2 Power Limits. Maximum Output power & Peak power spectral density* and using the lowest, middle and highest channels.

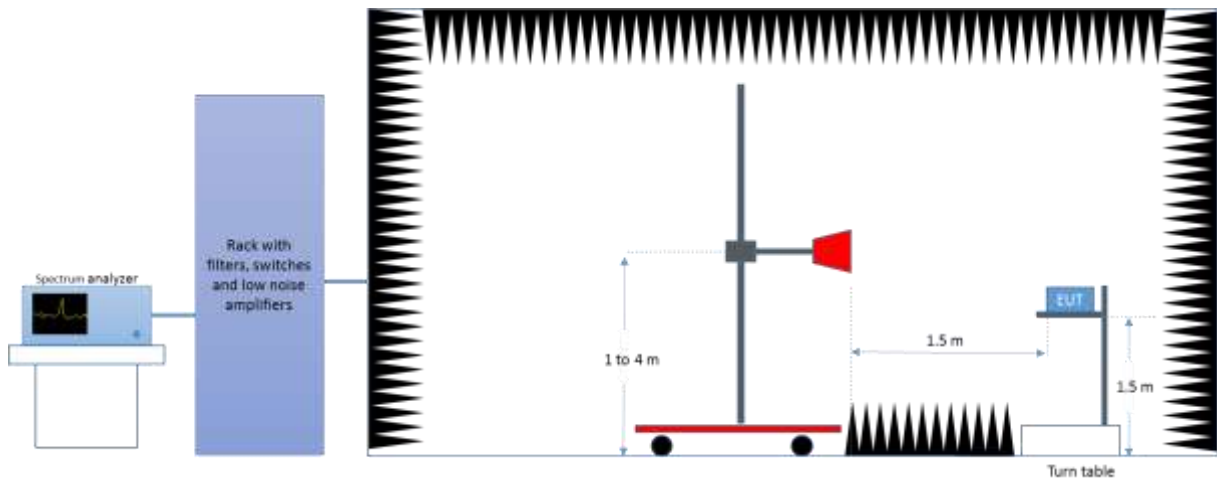
Radiated Setup < 1GHz



Radiated Setup 1 GHz - 18 GHz



Radiated Setup > 18 GHz



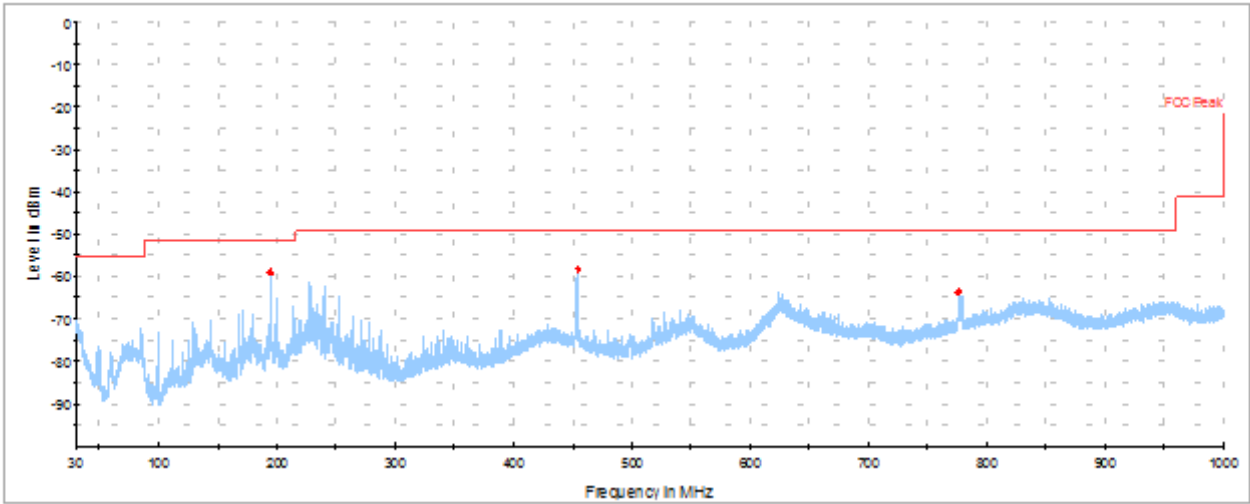
The following limits in dBm were applied after the conversion from the limits detailed above in dB μ V/m, according to FCC 47 CFR part 15 - Subpart C – §15.209(a). Above 1GHz, the limits in dBm for peak detector are 20dB above the indicated values in the table.

§15.209(a)			Converted values	
Freq Range (MHz)	Distance (m)	Field strength (microvolts/meter)	Field strength (dB microvolts/meter)	Power (dBm)
30-88	3	100	40.00	-55.26
88-216	3	150	43.52	-51.74
216-960	3	200	46.02	-49.24
960-25000	3	500	53.98	-41.28

Test Results:

Radiated Spurious – 30MHz to 1GHz

All modes



█ Peak measurements
 █ RMS measurements
 █ FCC Peak

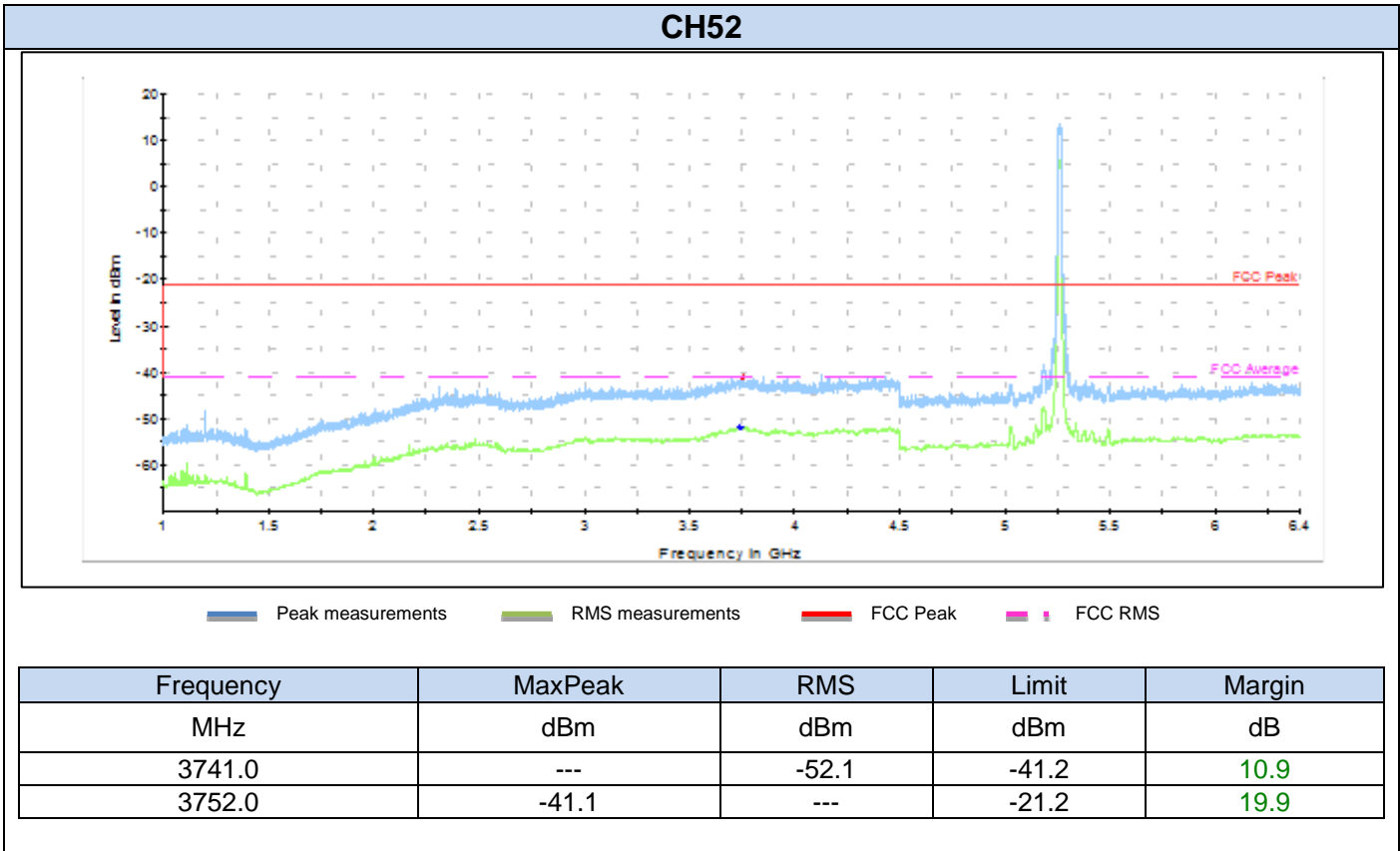
Frequency MHz	MaxPeak dBm	Limit dBm	Margin dB
194.7	-59.2	-51.7	7.5
454.6	-58.3	-49.2	9.1
776.3	-63.8	-49.2	14.6

Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: No spurious signals were found in all modulations and channels tested.

Note 3: This plot is valid for both SISO and MIMO modes.

**Radiated Spurious – 1GHz to 6.4GHz
802.11a, 6Mbps, Chain A**



CH56

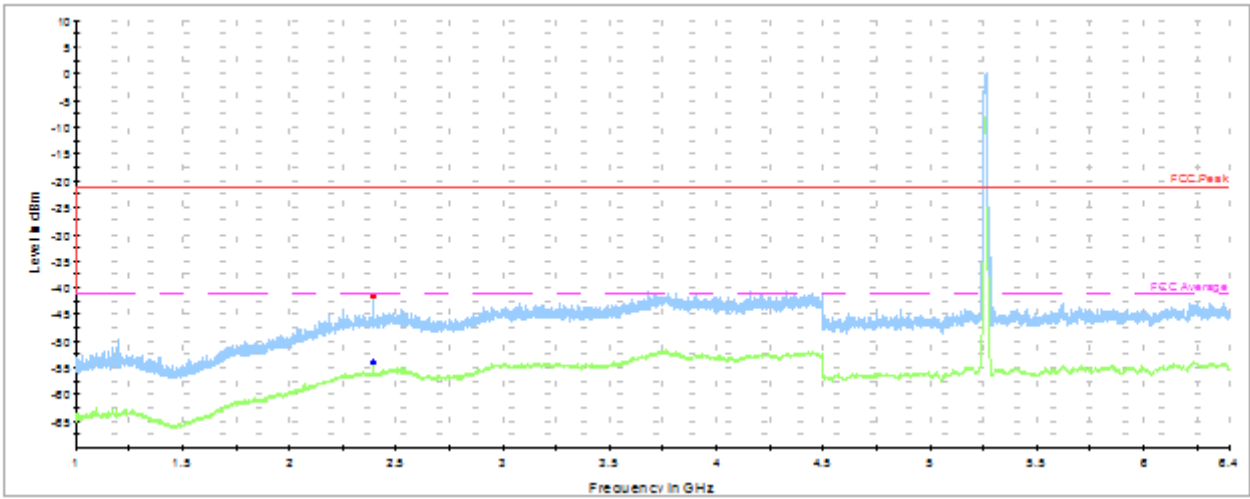


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 - - - FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
2397.0	---	-55.4	-41.2	14.2
2397.0	-41.1	---	-21.2	19.9

Radiated Spurious – 1GHz to 6.4GHz 802.11a, 6Mbps, Chain B

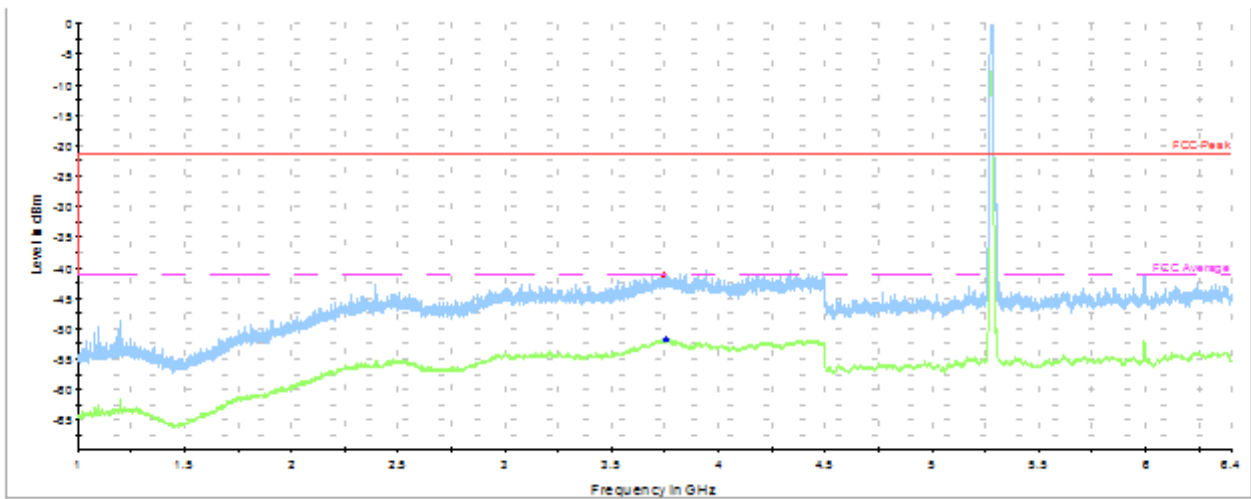
CH52



— Peak measurements
 — RMS measurements
 — FCC Peak
 — FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
2391.5	---	-53.9	-41.2	12.7
2391.0	-41.5	---	-21.2	20.3

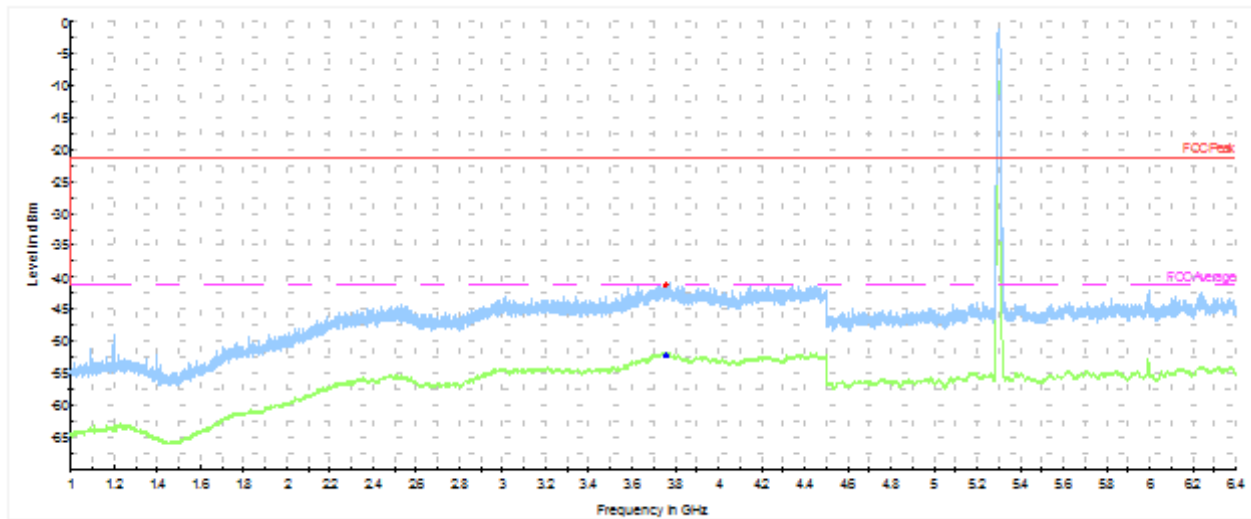
CH56



█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
3742.5	-41.3	---	-21.2	20.1
3754.0	---	-51.9	-41.2	10.7

CH64

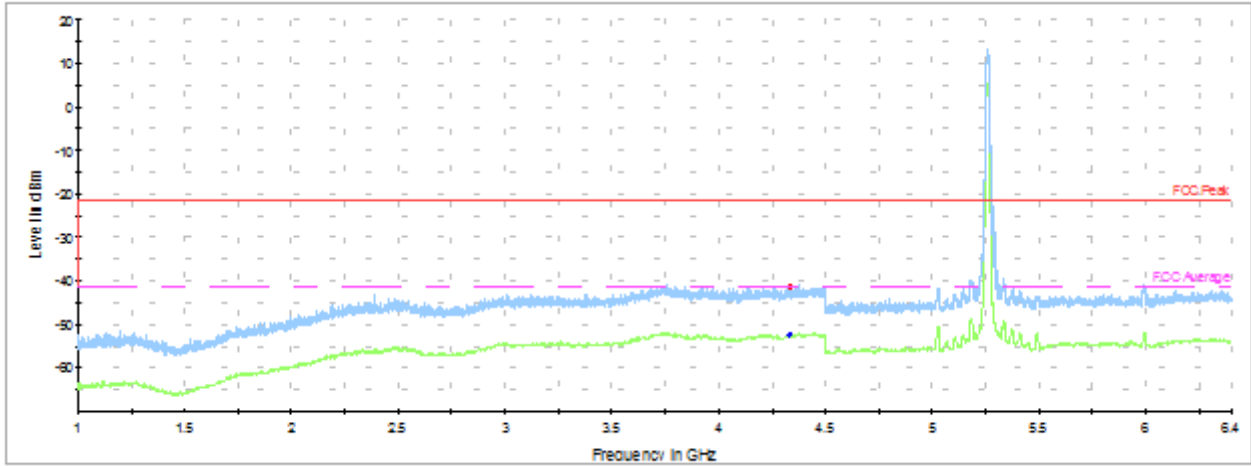


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
3759.5	---	-52.3	-41.2	11.1
3754.5	-41.2	---	-21.2	20.0

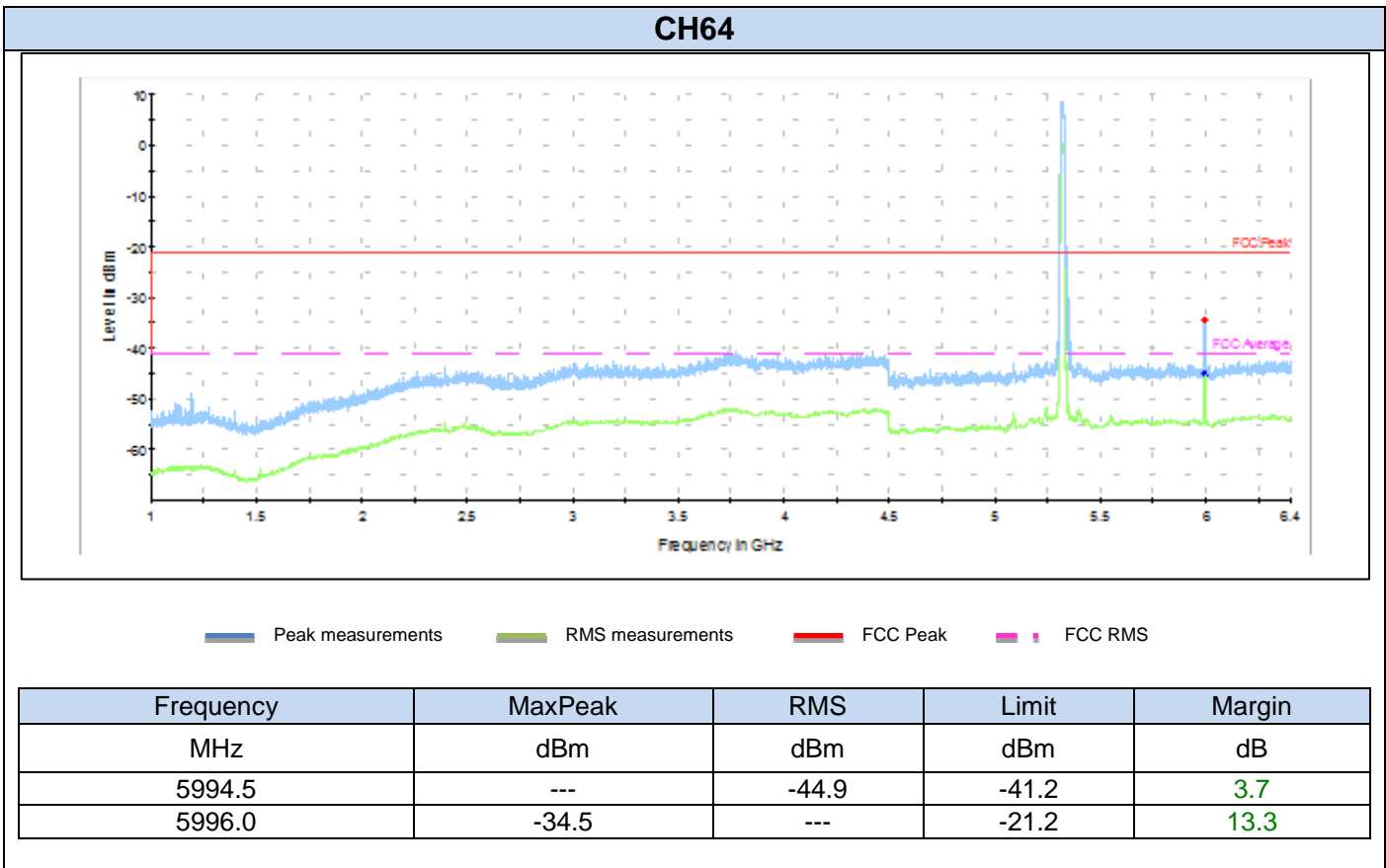
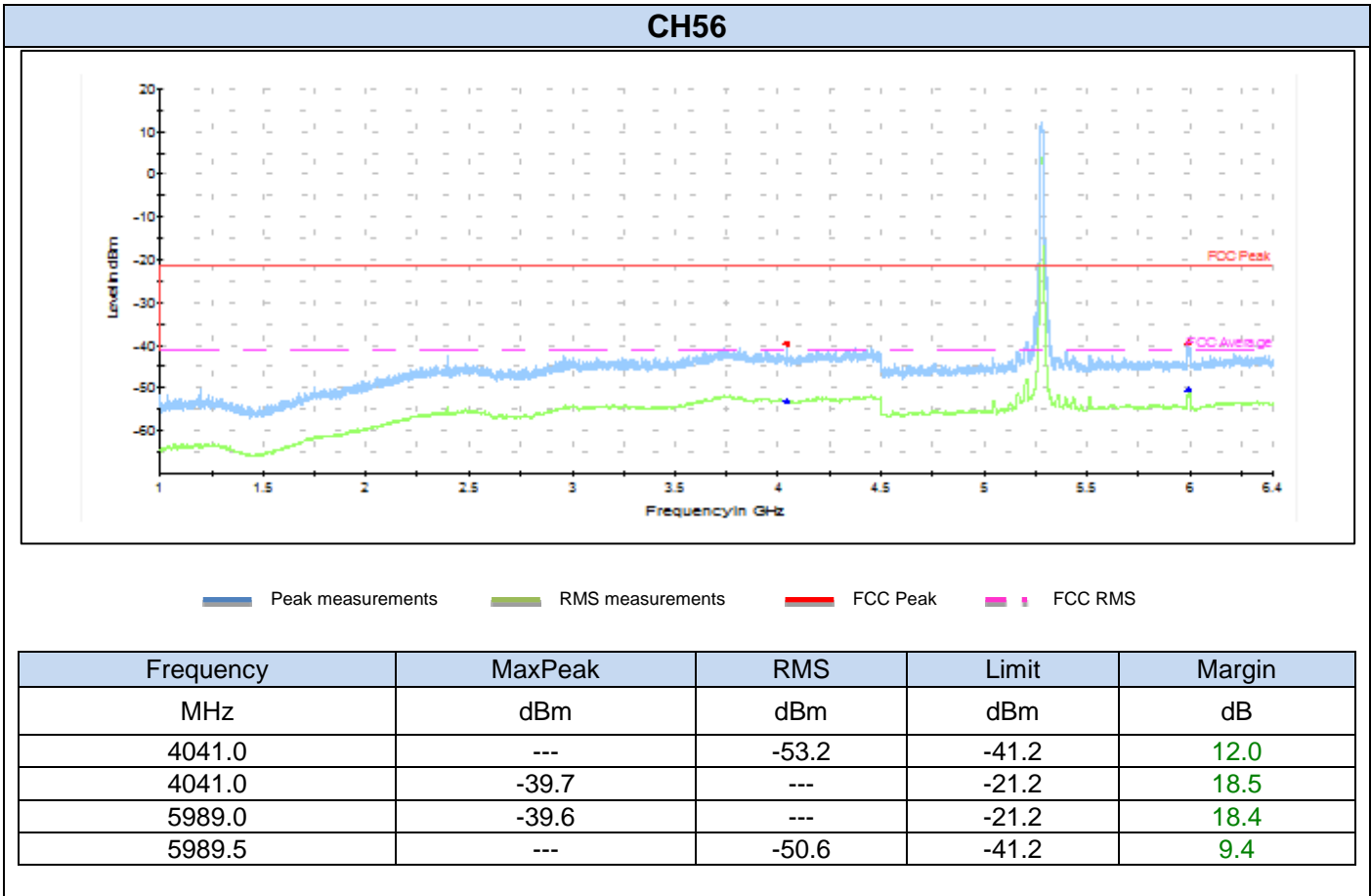
**Radiated Spurious – 1GHz to 6.4GHz
802.11n20, HT0 (SISO), Chain A**

CH52



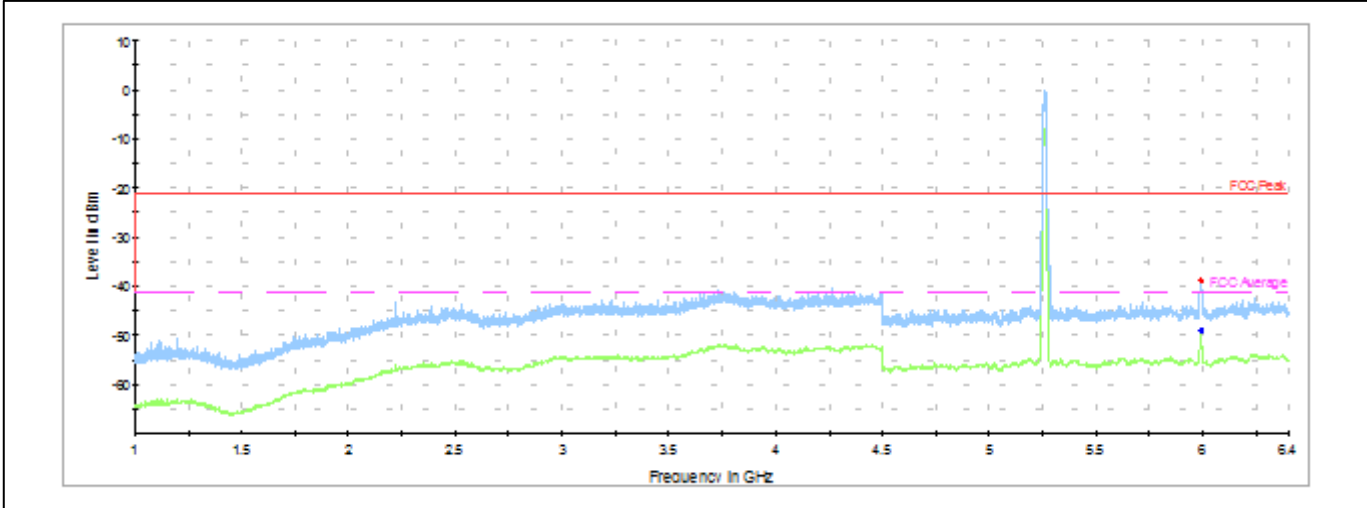
— Peak measurements
 — RMS measurements
 — FCC Peak
 — FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
4335.0	---	-52.4	-41.2	11.2
4337.5	-41.5	---	-21.2	20.3



Radiated Spurious – 1GHz to 6.4GHz 802.11n20, HT0 (SISO), Chain B

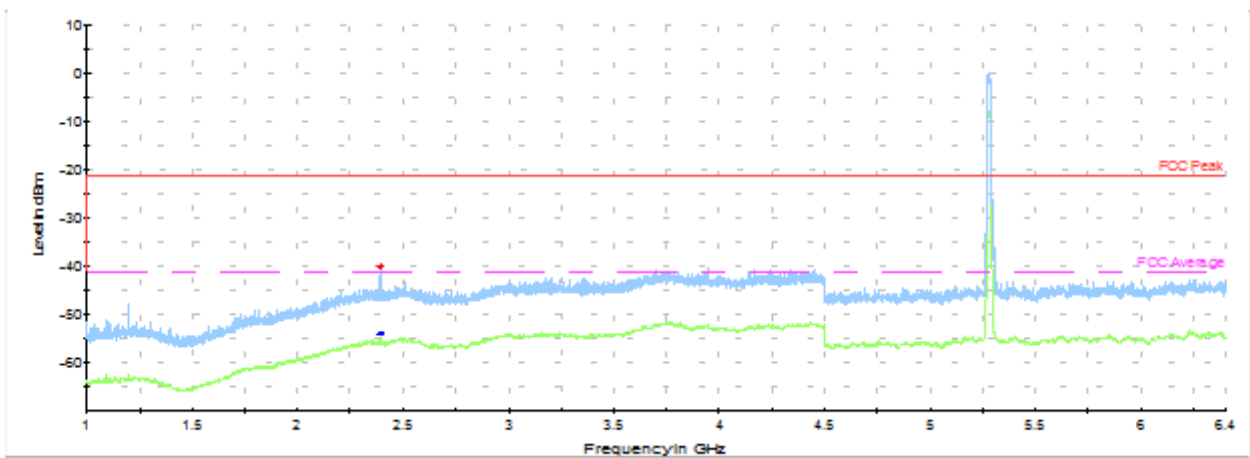
CH52



— Peak measurements
 — RMS measurements
 — FCC Peak
 - - - FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
5993.0	-38.9	---	-21.2	17.7
5994.5	---	-49.1	-41.2	7.9

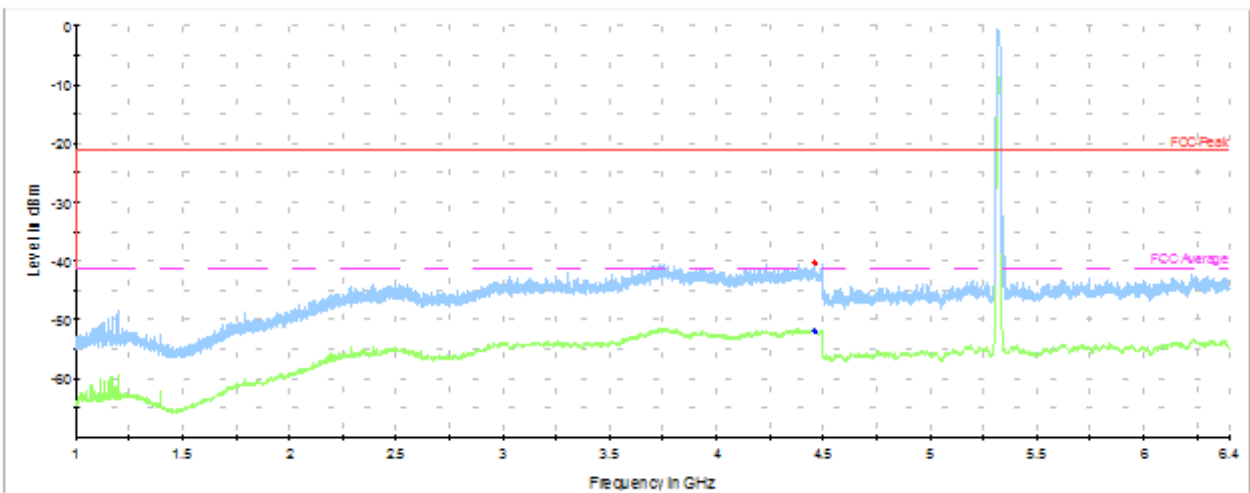
CH56



█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
2392.0	-40.1	---	-21.2	18.9
2392.0	---	-54.0	-41.2	12.8

CH64

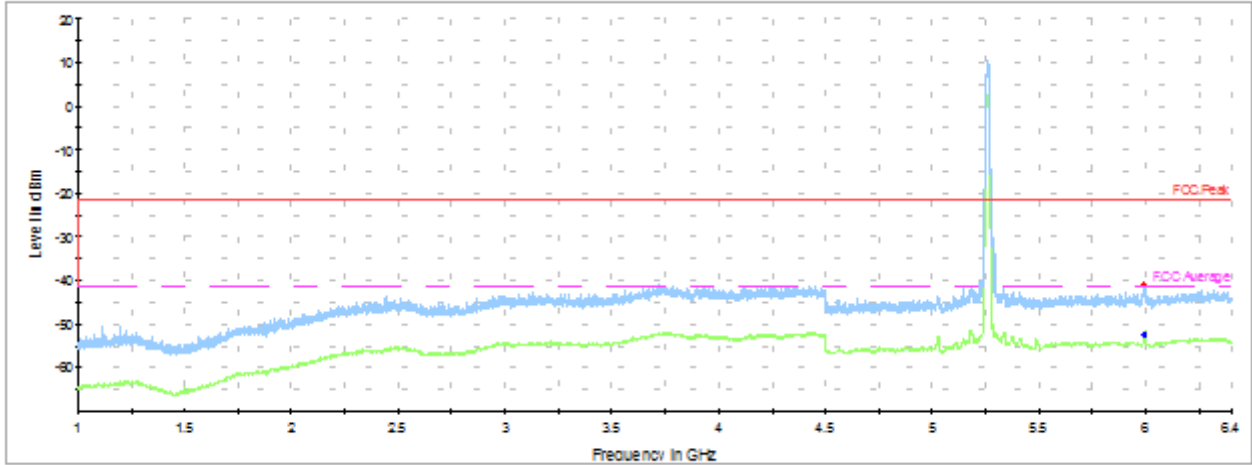


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
4460.5	---	-51.9	-41.2	10.7
4461.5	-40.4	---	-21.2	19.2

**Radiated Spurious – 1GHz to 6.4GHz
802.11n20, HT8 (MIMO), Chain A+B**

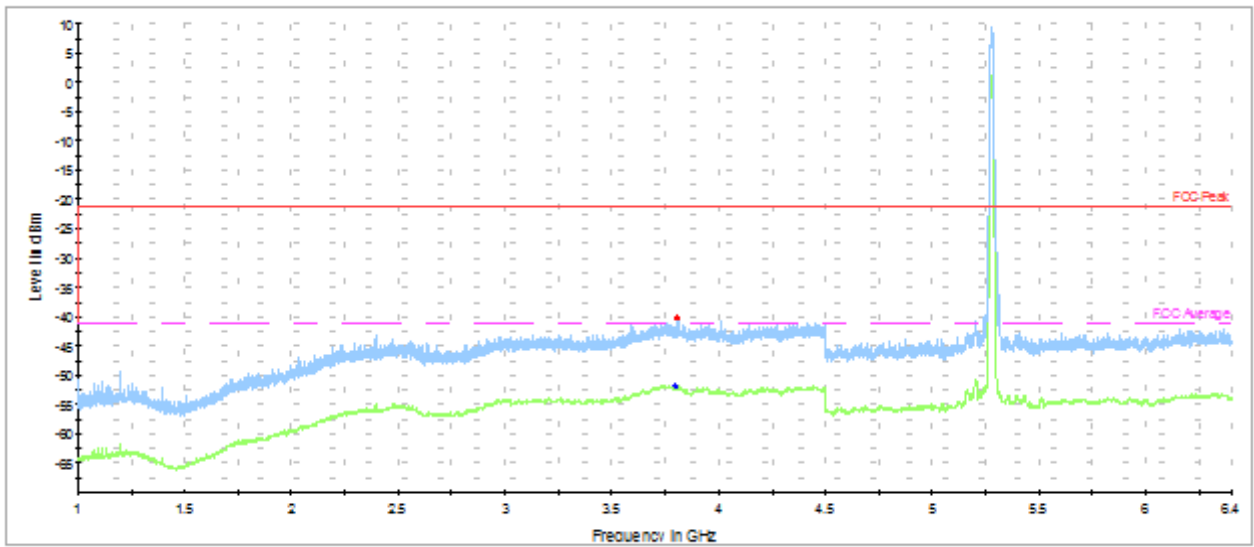
CH52



— Peak measurements
 — RMS measurements
 — FCC Peak
 — FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
5992.5	---	-52.5	-41.2	11.3
5992.5	-41.1	---	-21.2	19.9

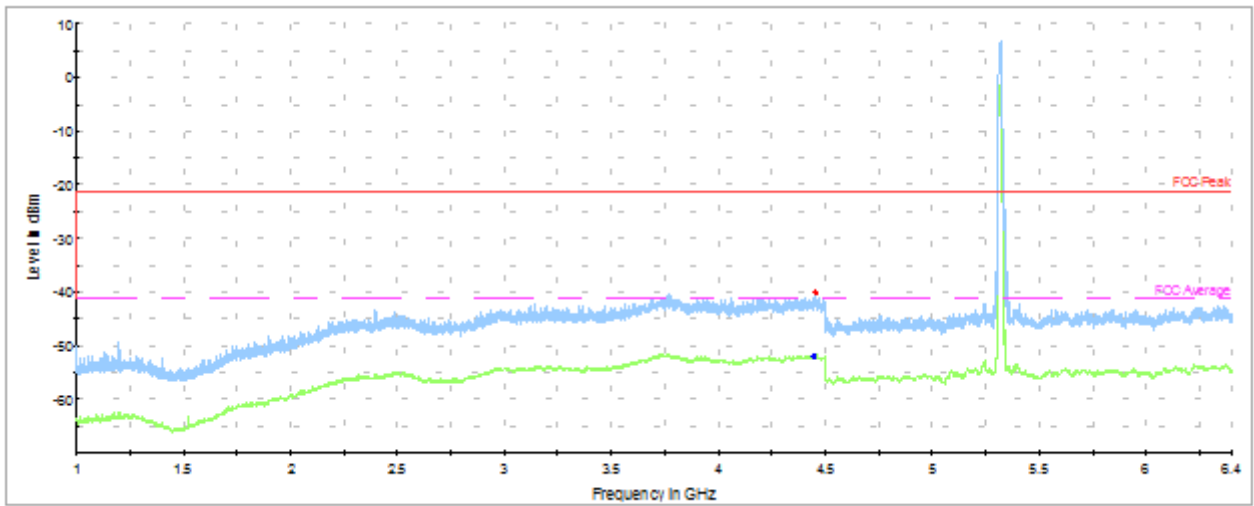
CH56



█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
3800.0	---	-52.0	-41.2	10.8
3805.5	-40.3	---	-21.2	19.1

CH64

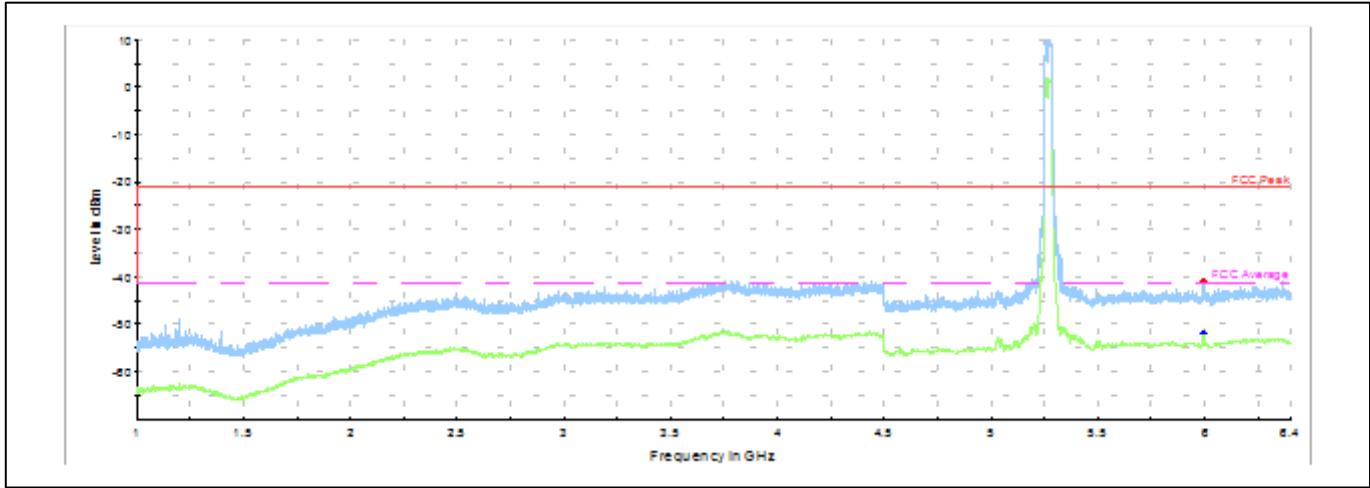


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
4447.5	---	-52.0	-41.2	10.8
4454.5	-40.3	---	-21.2	19.1

**Radiated Spurious – 1GHz to 6.4GHz
802.11n40, HT0 (SISO), Chain A**

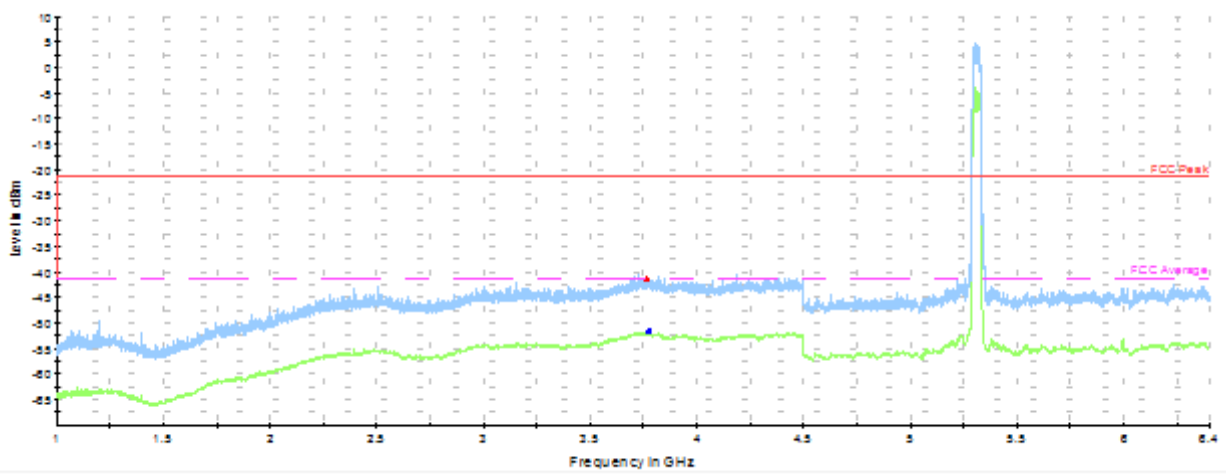
CH54F



— Peak measurements
 — RMS measurements
 — FCC Peak
 - - - FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
5995.0	-40.8	---	-21.2	19.6
5995.0	---	-51.8	-41.2	10.6

CH62F

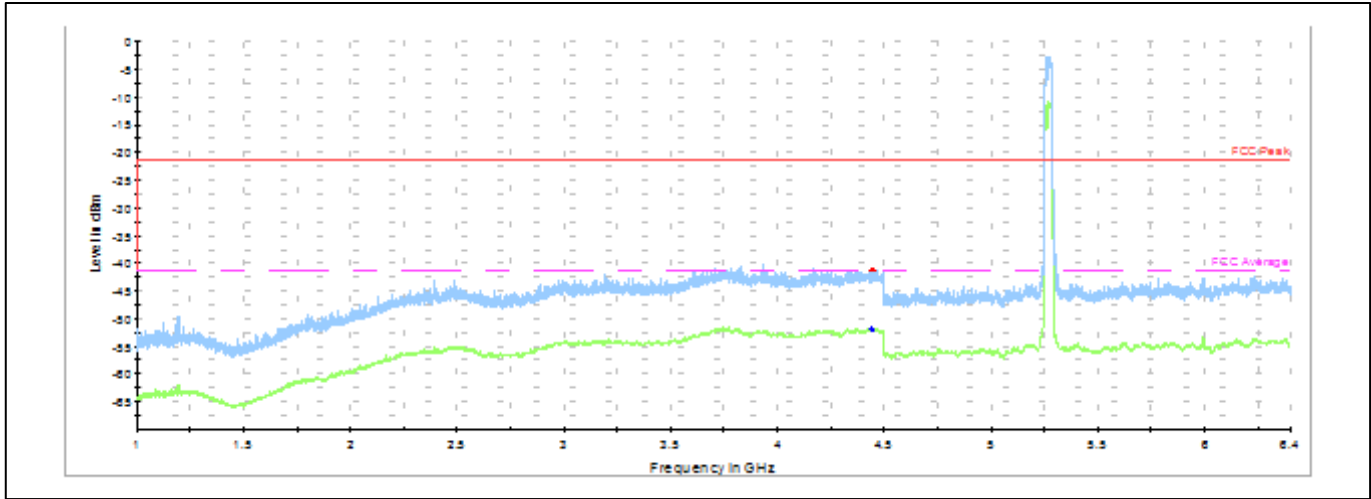


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
3764.0	-41.4	---	-21.2	20.2
3771.0	---	-51.7	-41.2	10.5

**Radiated Spurious – 1GHz to 6.4GHz
802.11n40, HT0 (SISO), Chain B**

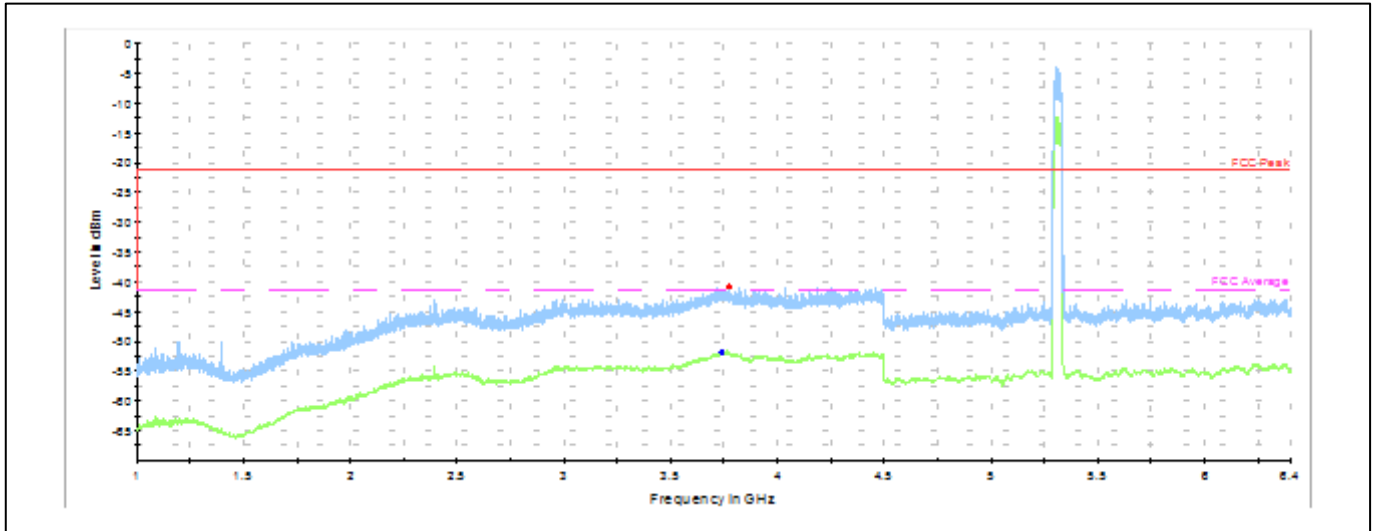
CH54F



█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
4440.5	---	-51.8	-41.2	10.7
4447.0	-41.2	---	-21.2	20.0

CH62F

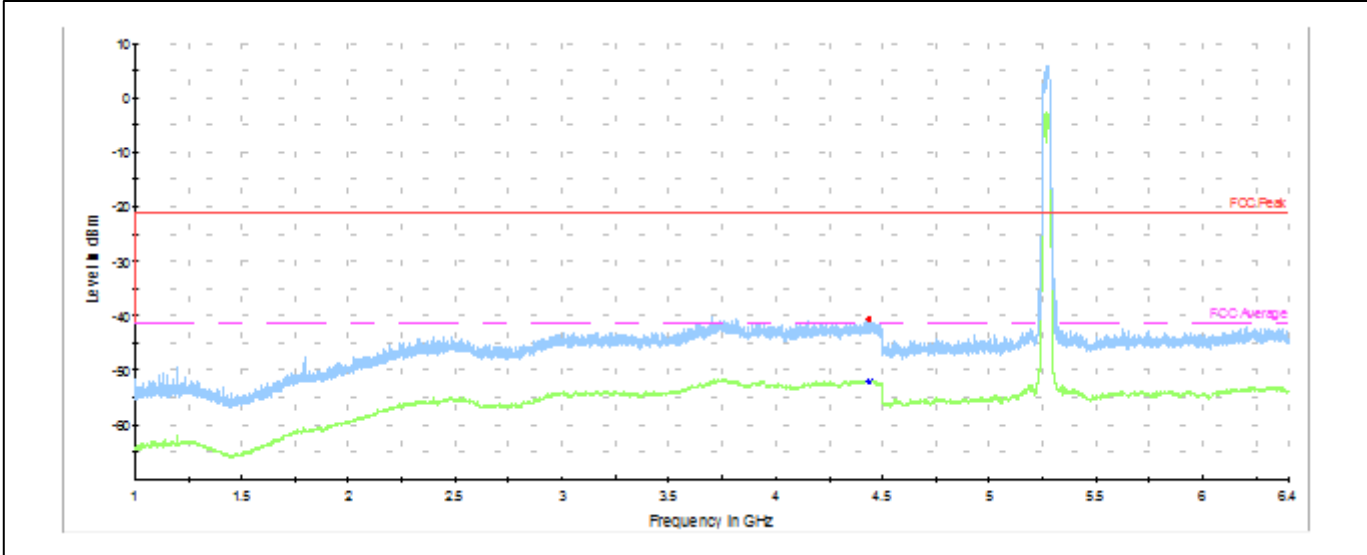


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
3739.5	---	-51.8	-41.2	10.6
3770.5	-40.9	---	-21.2	19.7

**Radiated Spurious – 1GHz to 6.4GHz
802.11n40, HT8 (MIMO), Chain A+B**

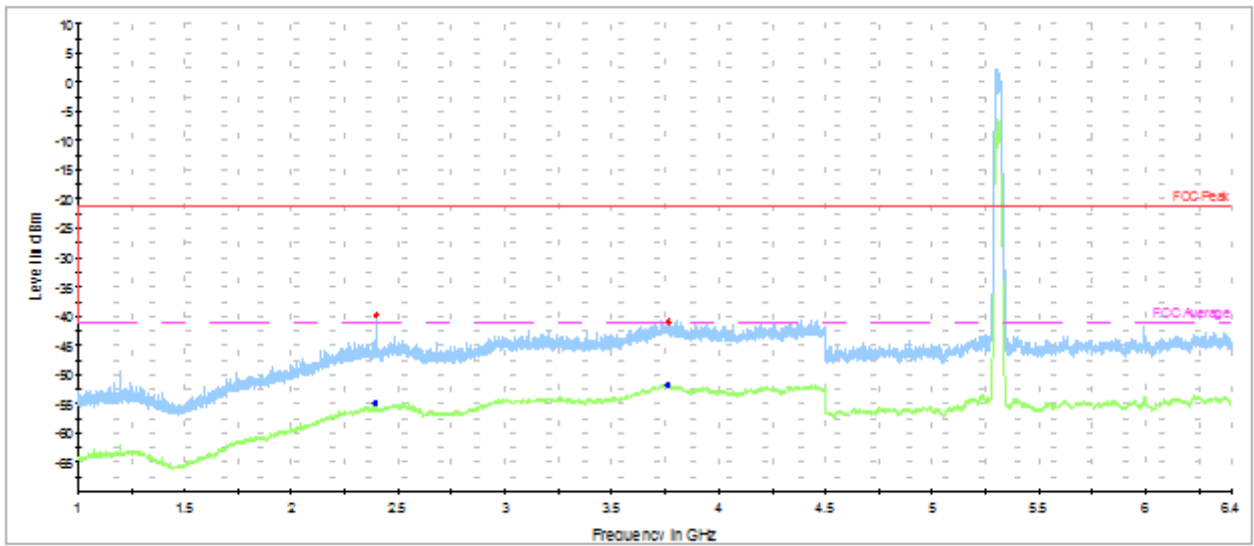
CH54F



█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
4438.5	---	-52.1	-41.2	10.9
4439.0	-40.7	---	-21.2	19.5

CH62F

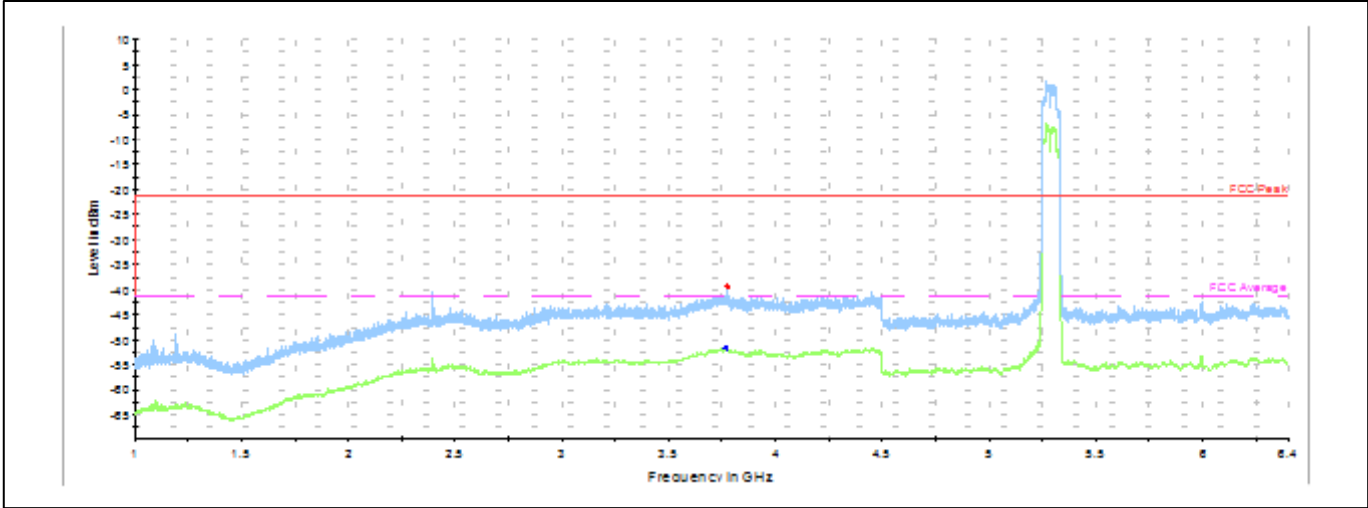


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
2394.5	---	-54.8	-41.2	13.6
2394.5	-39.9	---	-21.2	18.7
3763.0	---	-51.8	-41.2	10.6
3764.0	-41.0	---	-21.2	19.8

**Radiated Spurious – 1GHz to 6.4GHz
802.11ac80, VHT0 (SISO), Chain A**

CH58ac80

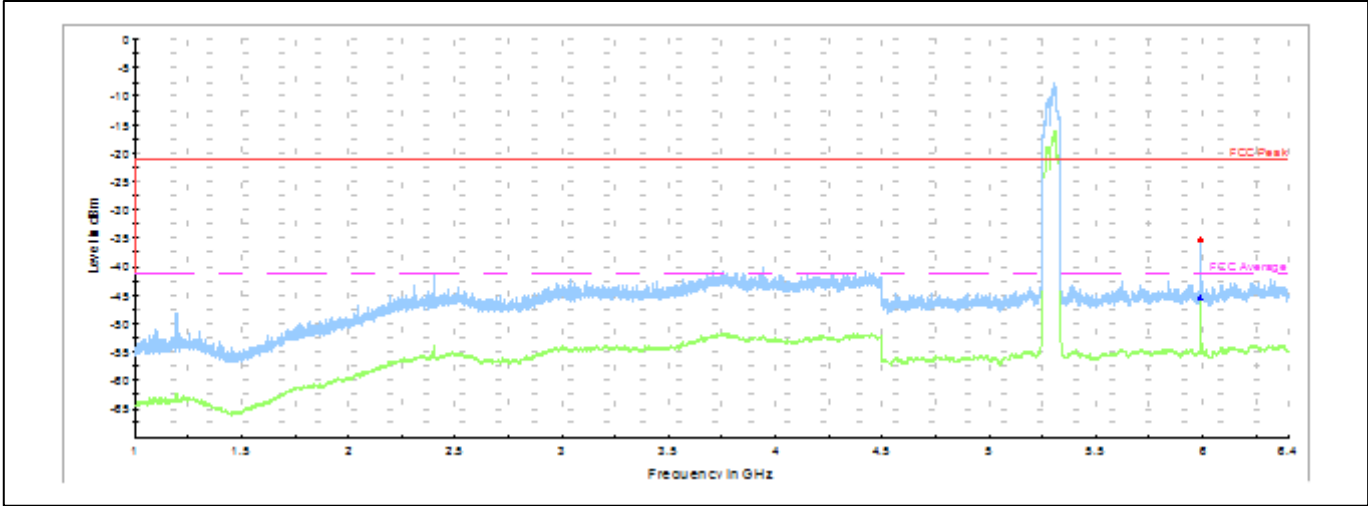


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency MHz	MaxPeak dBm	RMS dBm	Limit dBm	Margin dB
3767.5	---	-51.7	-41.2	10.5
3776.0	-39.3	---	-21.2	18.1

**Radiated Spurious – 1GHz to 6.4GHz
802.11ac80, VHT0 (SISO), Chain B**

CH58ac80

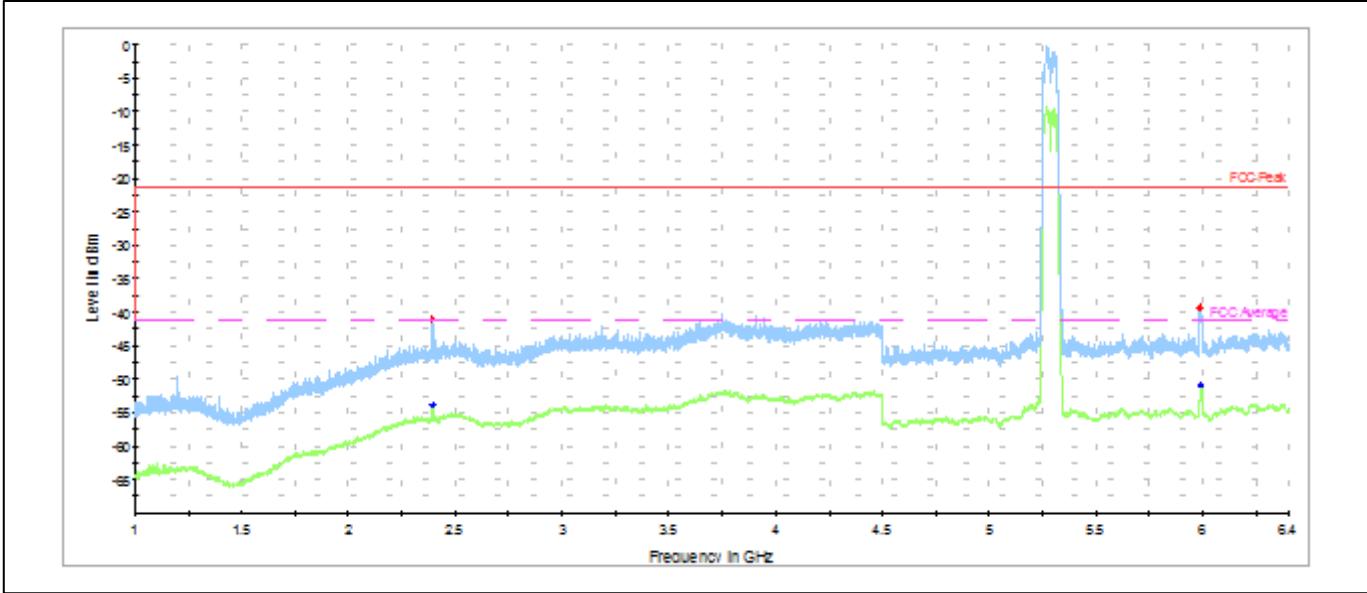


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency MHz	MaxPeak dBm	RMS dBm	Limit dBm	Margin dB
5990.0	---	-45.7	-41.2	4.5
5987.5	-35.2	---	-21.2	14.0

**Radiated Spurious – 1 GHz to 6.4GHz
802.11ac80, VHT0 (MIMO), Chain A+B**

CH58ac80

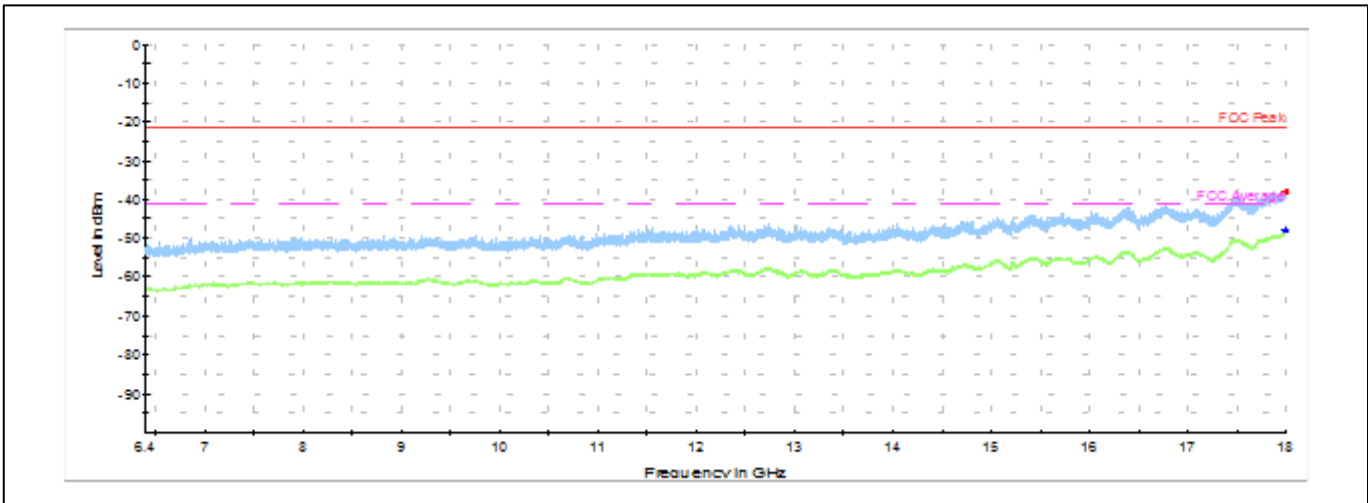


█ Peak measurements
 █ RMS measurements
 █ FCC Peak
 █ FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
2393.5	-41.1	---	-21.2	19.9
2394.0	---	-53.9	-41.2	12.7
5988.5	-39.4	---	-21.2	18.2
5988.5	---	-50.8	-41.2	9.6

Radiated Spurious 6.4GHz to 18GHz

All modes



— Peak measurements
 — RMS measurements
 — FCC Peak
 - - - FCC RMS

Frequency	Max Peak	RMS	Limit	Margin
MHz	dBm		dBm	dB
17994.7	---	-48.0	-41.2	6.8
17998.4	-37.8	---	-21.2	16.6

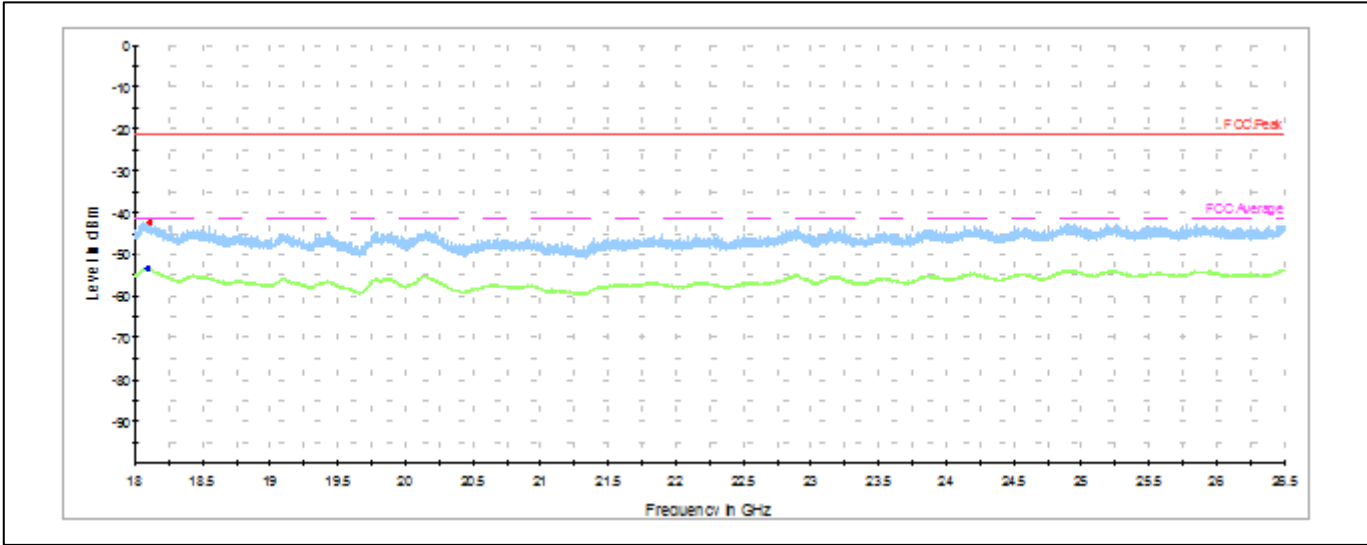
Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: No spurious signals were found in all modulations and channels tested.

Note 3: This plot is valid for both SISO and MIMO modes.

Radiated Spurious – 18GHz to 26.5GHz

All modes



— Peak measurements
 — RMS measurements
 — FCC Peak
 — FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
18094.0	---	-53.3	-41.2	12.1
18106.7	-42.2	---	-21.2	21.0

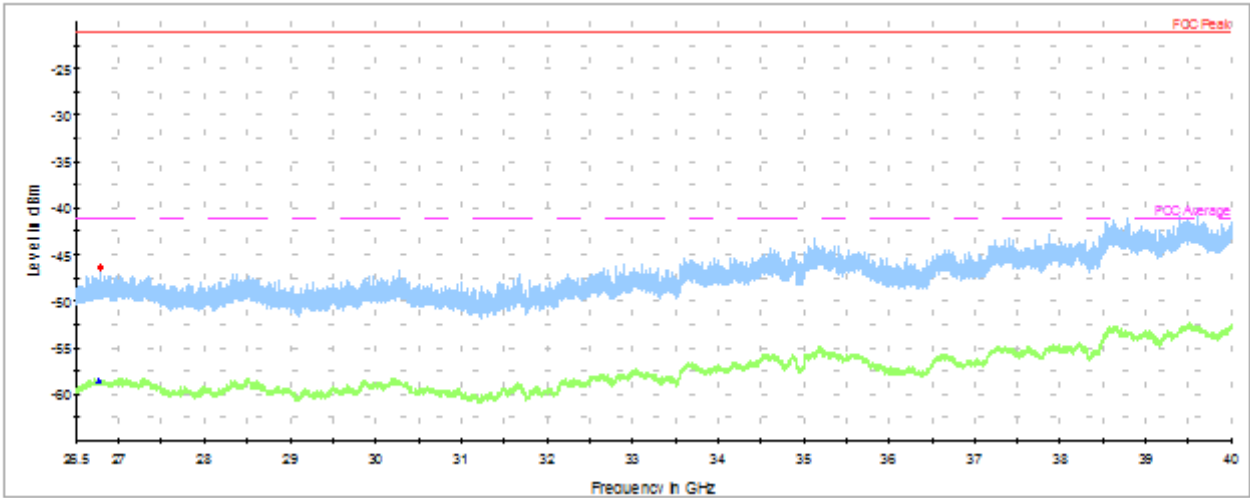
Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: No spurious signals were found in all modulations and channels tested.

Note 3: This plot is valid for both SISO and MIMO modes.

Radiated Spurious – 26.5GHz to 40GHz

All modes



— Peak measurements
 — RMS measurements
 — FCC Peak
 - - - FCC RMS

Frequency	MaxPeak	RMS	Limit	Margin
MHz	dBm	dBm	dBm	dB
26765.8	---	-58.6	-41.20	17.4
26780.3	-46.4	---	-21.20	25.2

Note 1: The spurious signals detected do not depend on either the operating channel or the modulation mode.

Note 2: No spurious signals were found in all modulations and channels tested.

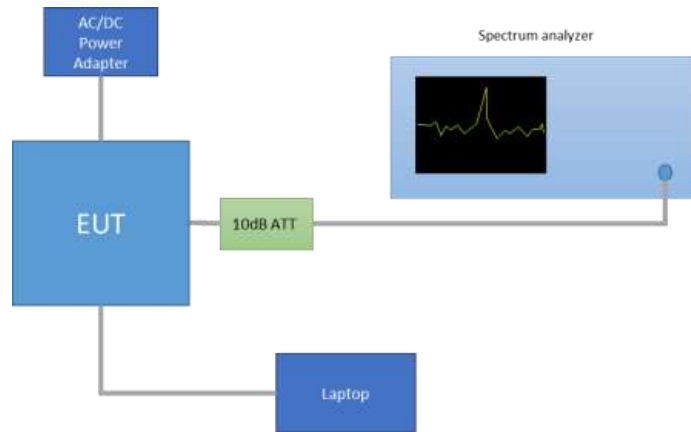
Note 3: This plot is valid for both SISO and MIMO modes.

Annex C. Test Results U-NII-2C

C.1 26dB & 99% Bandwidth

Test procedure:

The setup below was used to measure the 26dB & 99% Bandwidth. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



For the overlapped channels between U-NII-2C and U-NII-3, and according to FCC KDB 644545 D03, the boundary frequency between the bands is used as one edge for defining the portion of the 26dB BW that falls within a particular U-NII band. This rule is only applicable for the 26dB BW and for those channels marked as overlapped.

Results tables:

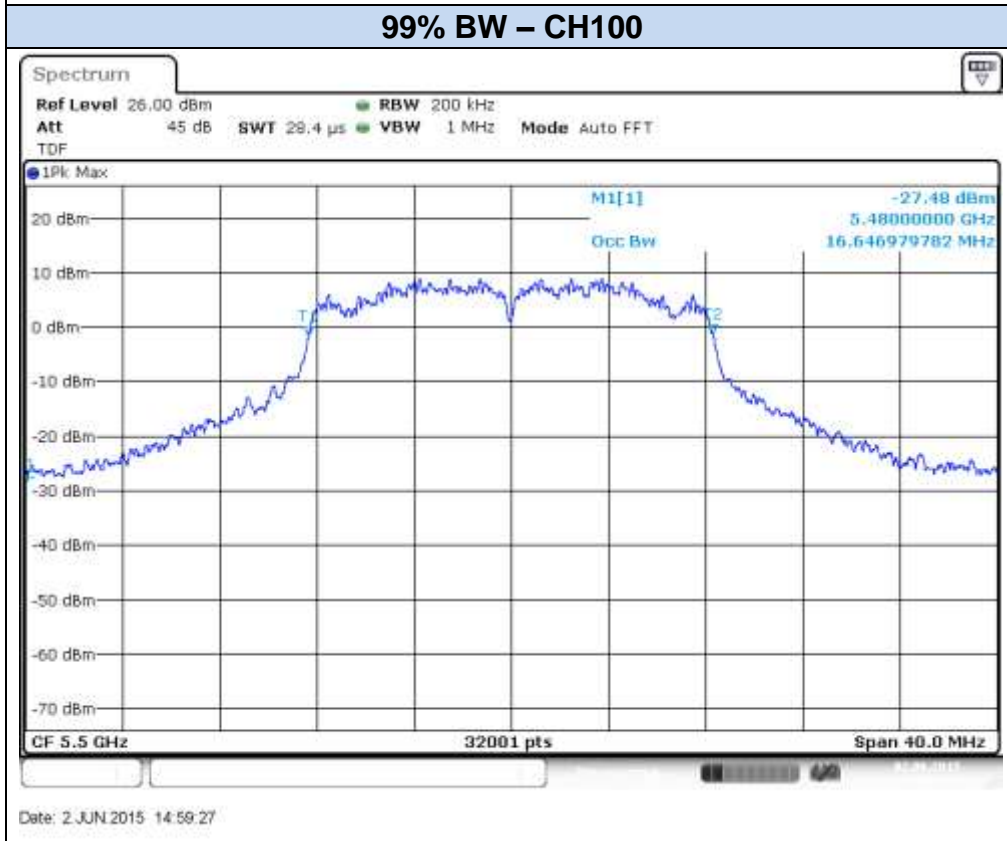
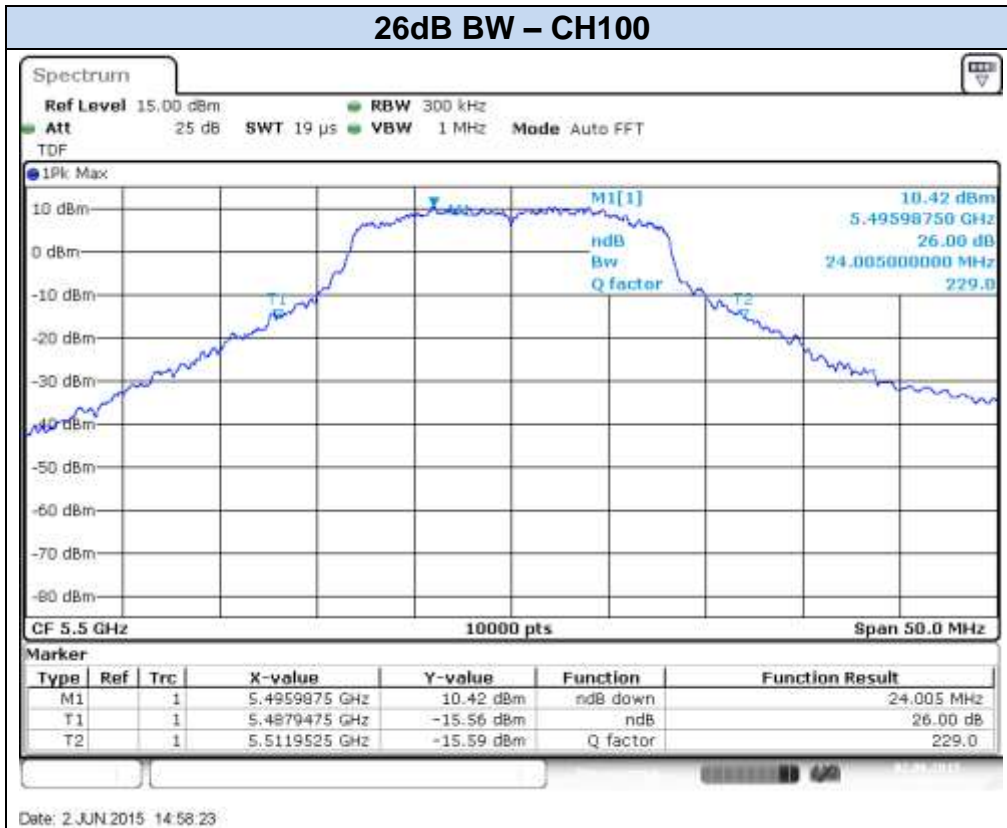
Mode	Rate	Antenna	Channel	Frequency [MHz]	26dB BW [MHz]	99% BW [MHz]
802.11a	6Mbps	SISO CHAIN A	100	5500	24.01	16.65
			120	5600	29.01	16.85
			140	5700	23.48	16.67
		SISO CHAIN B	100	5500	24.33	16.64
			120	5600	25.09	16.71
			140	5700	23.70	16.61
802.11n20	HT0	SISO CHAIN A	100	5500	24.75	17.80
			120	5600	30.26	18.72
			140	5700	25.18	17.79
			144*	5720	19.65	18.59
		SISO CHAIN B	100	5500	24.33	17.77
			120	5600	26.33	17.99
			140	5700	24.23	17.80
			144*	5720	18.28	18.04

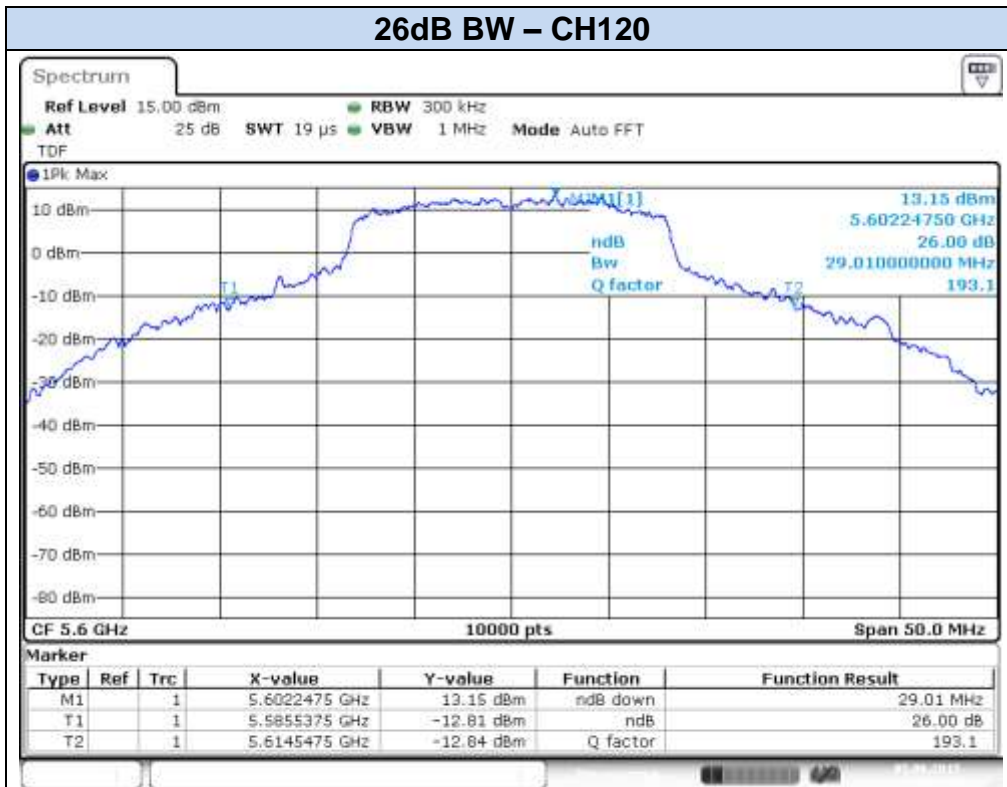
Mode	Rate	Antenna	Channel	Frequency [MHz]	26dB BW [MHz]	99% BW [MHz]
802.11n20	HT8	MIMO CHAIN A	100	5500	23.94	17.77
			120	5600	24.95	17.81
			140	5700	23.51	17.95
			144*	5720	17.10	17.86
802.11n20	HT8	MIMO CHAIN B	100	5500	23.37	17.92
			120	5600	24.26	17.77
			140	5700	23.18	17.92
			144*	5720	17.22	17.75
802.11n40	HT0	SISO CHAIN A	102F	5510	45.49	36.21
			118F	5590	50.14	36.75
			134F	5670	45.44	36.27
			142F*	5670	40.10	36.82
		SISO CHAIN B	102F	5510	45.47	36.30
			118F	5590	48.65	36.43
			134F	5670	45.39	36.28
			142F*	5670	38.39	36.37
	HT8	MIMO CHAIN A	102F	5510	45.00	36.31
			118F	5590	46.96	36.32
			134F	5670	44.81	36.26
			142F*	5670	37.48	36.23
		MIMO CHAIN B	102F	5510	43.53	36.18
			118F	5590	43.73	36.20
			134F	5670	43.26	36.21
			142F*	5670	36.94	36.19
802.11ac80	VHT0	SISO CHAIN A	106ac80	5530	85.82	74.91
			122ac80	5610	106.40	75.91
			138ac80*	5690	81.24	75.55
		SISO CHAIN B	106ac80	5530	81.23	75.04
			122ac80	5610	90.14	75.16
			138ac80*	5690	78.54	75.07
	VHT0	MIMO CHAIN A	106ac80	5530	80.86	75.04
			122ac80	5610	102.37	76.03
			138ac80*	5690	79.53	75.08
		MIMO CHAIN B	106ac80	5530	81.19	74.89
			122ac80	5610	88.98	75.50
			138ac80*	5690	77.70	75.15

* Overlapped channels between U-NII-2C and U-NII-3

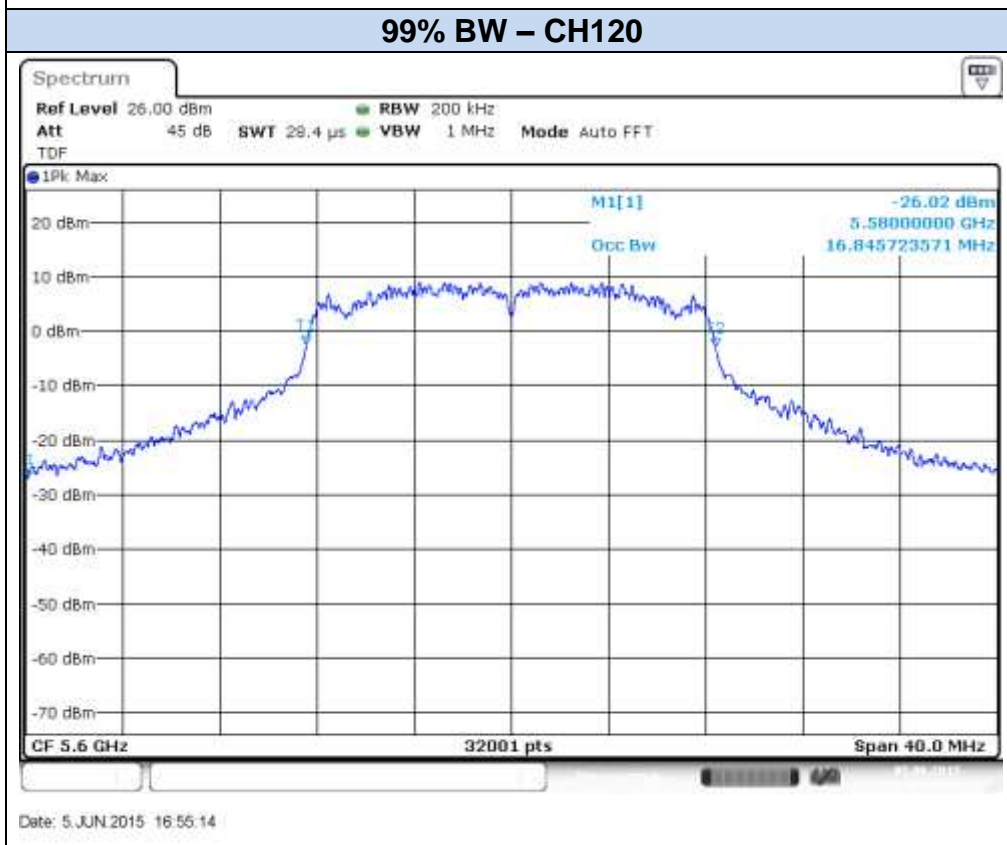
Results screenshot

802.11a, 6Mbps – Chain A

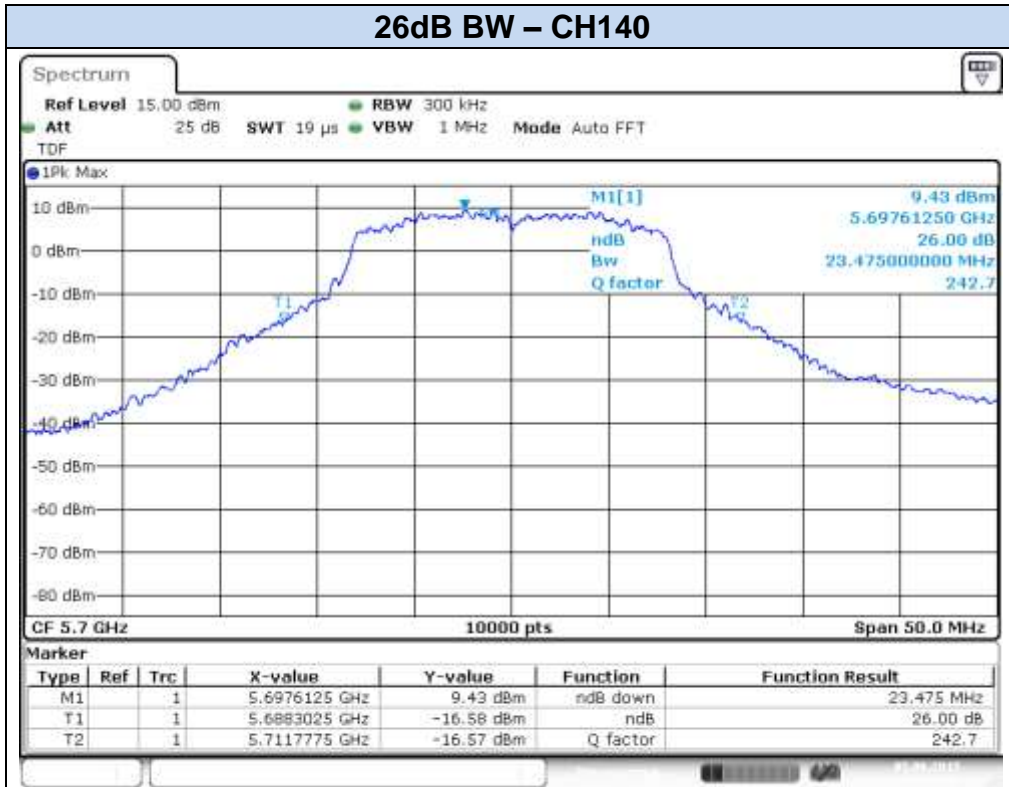




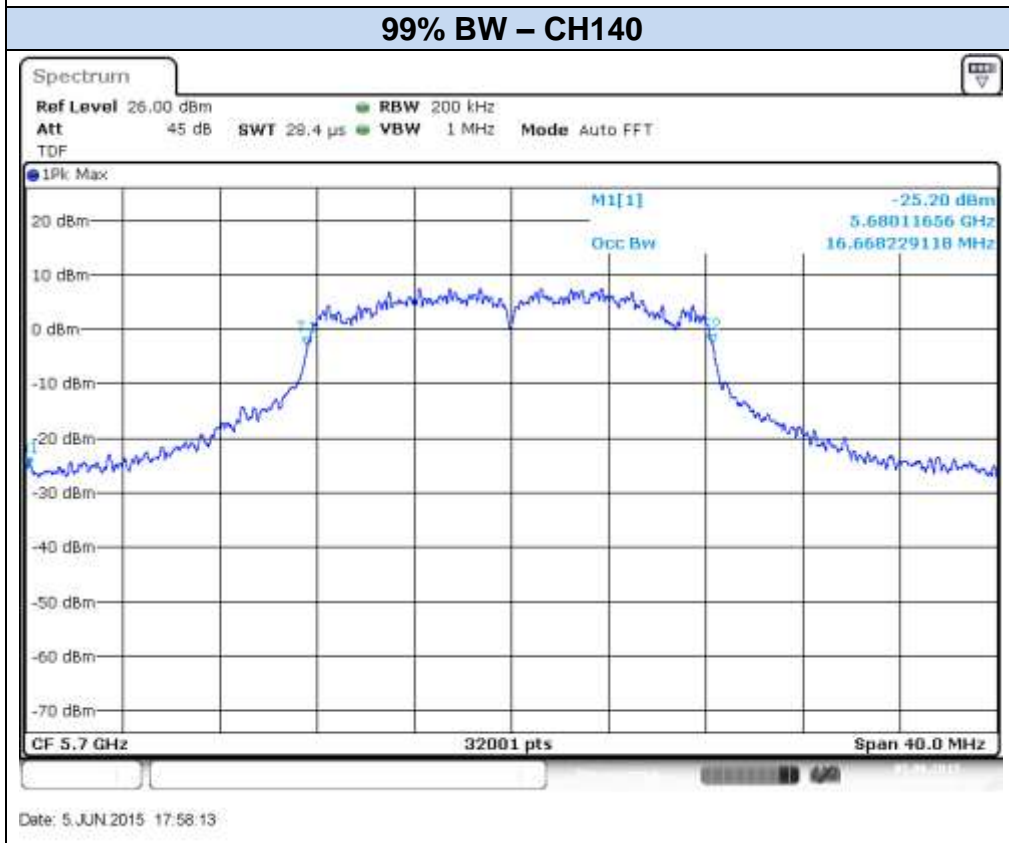
Date: 5 JUN 2015 17:02:49



Date: 5 JUN 2015 16:55:14

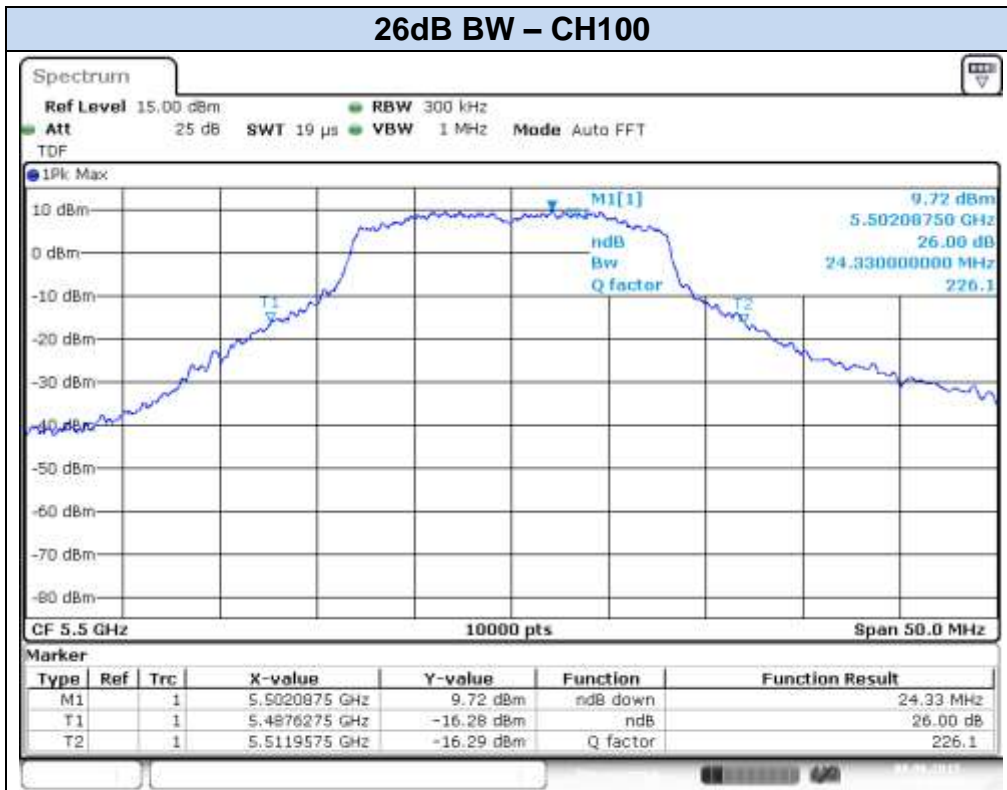


Date: 5 JUN 2015 17:58:48

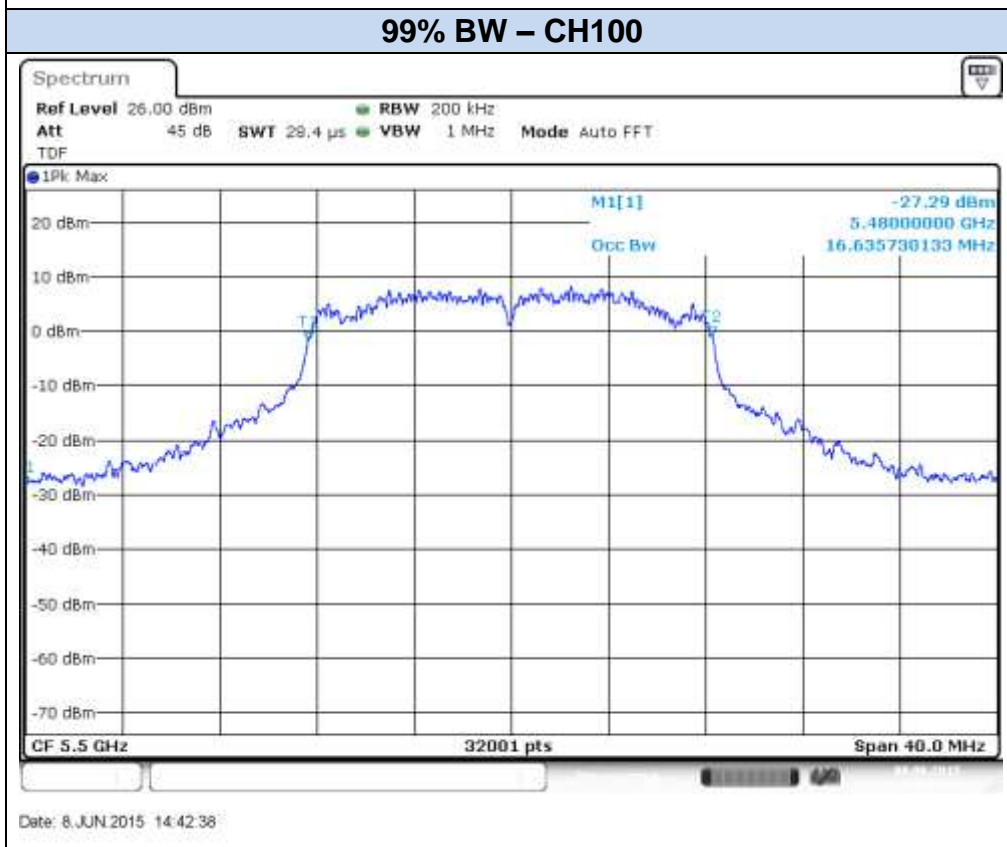


Date: 5 JUN 2015 17:58:13

802.11a, 6Mbps – Chain B



Date: 8 JUN 2015 14:44:00



Date: 8 JUN 2015 14:42:38