



TEST REPORT

EUT Description	WLAN and BT, 2x2 PCIe M.2 2230 adapter card
Brand Name	Intel® Wireless-AC 9560
Model Name	9560NGW
FCC ID IC ID	PD99560NG 1000M-9560NG
Date of Test Start/End	2017-05-29 / 2017-06-20
Features	802.11 a/b/g/n/ac Wireless LAN + Bluetooth 5 (see section 5)
Applicant	Intel Mobile Communications
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Reference Standards	FCC CFR Title 47 Part 15 C RSS-247 issue 2, RSS-Gen issue 4 (see section 1)
Test Report identification	170524-02.TR04
Revision Control	Rev. 00 This test report revision replaces any previous test report revision (see section 8)

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

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1. Standards, reference documents and applicable test methods

- FCC 47 CFR part 15 Subpart C §15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.
- 2. FCC 47 CFR part 15 Subpart C §15.209 Radiated emission limits; general requirements.
- FCC OET KDB 558074 D01 DTS Meas Guidance v04 Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247.
- 4. FCC OET KDB 662911 D01 Multiple Transmitter Output v02r01.
- 5. RSS-247 Issue 2 Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
- 6. RSS-Gen Issue 4 General Requirements for Compliance of Radio Apparatus.
- 7. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. General conditions, competences and guarantees

- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is an ISO/IEC 17025:2005 testing laboratory accredited by the American Association for Laboratory Accreditation (A2LA) with the certificate number 3478.01.
- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is an Accredited Test Firm recognized by the FCC, with Designation Number FR0011.
- ✓ Intel Mobile Communications France SAS 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.

3. Environmental Conditions

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

Temperature	23 °C ± 3 °C		
Humidity	50 % ± 20 %		



4. Test samples

Sample	Control #	Description	Model	Serial #	Date of receipt	Note	
	170524-02.S01	Module	9560NGW	WFM 3413E8901EAB	2017-05-30		
#01	170524-02.S11	Extender Board	PCB00609_01	6092416-453	2017-05-30	Used for conducted tests	
	170000-01.S03	Laptop	Latitude E5470	6Q9LMC2	2017-04-25		
	170524-02.S02	Module	9560NGW	WFM 3413E88FF066	2017-05-30		
#02	170220-02.\$03	Extender Board	PCB00609_01	6092416-446	2017-02-20		
	170000-01.S13	Laptop	Latitude E5470	FT6LMC2	2017-05-30	Used for radiated	
	170524-02.S06	Module	9560NGW	WFM 3413E890192E	2017-05-30	tests	
#03	170524-02.S16	Extender Board	PCB00609_01	6092416-451	2017-06-15		
	161129-02.S01	Laptop	Latitude 6430U	25PVLX1	2016-06-12		

5. EUT Features

Brand Name	Intel® Wireless-AC 9560		
Model Name	9560NGW		
FCC ID	PD99560NG		
IC ID	1000M-9560NG		
Software Version	10.1720.0-05195		
Driver Version	99.0.28.6,		
Prototype / Production	Production		
	802.11b/g/n	2.4GHz (2400.0 – 2483.5 MHz)	
	802.11a/n/ac	5.2GHz (5150.0 – 5350.0 MHz)	
Supported Radios		5.6GHz (5470.0 – 5725.0 MHz)	
		5.8GHz (5725.0 – 5850.0 MHz)	
	Bluetooth 5	2.4GHz (2400.0 – 2483.5 MHz)	
Antenna Information	Main WLAN: Slot antenna. WiFi 2.4GHz & 5GHz (DRTU CHAIN B) Aux WLAN: Slot antenna. WiFi 2.4GHz & 5GHz BT (DRTU CHAIN A)		
Additional Information			

6. Remarks and comments

N/A

7. Test Verdicts summary

7.1. 802.11 b/g/n 2.4GHz

FCC part	RSS part	Test name	Verdict
15.247 (a) (2)	RSS-247 Clause 5.2 (a)	6dB Bandwidth	Р
15.247 (b) (3)	RSS-247 Clause 5.4 (d)	Maximum output power and E.I.R.P	Р
15.247 (e)	RSS-247 Clause 5.2 (b)	Power spectral density	Р
15.247 (d) 15.209	RSS-247 Clause 5.5 RSS-Gen Clause 8.9	Out-of-band Emission (conducted)	Р
15.247 (d) 15.209	RSS-247 Clause 5.5 RSS-Gen Clause 8.9	Out-of-band Emission (radiated)	Р

7.2. BLE

FCC part	RSS part	Test name	Verdict
15.247 (a) (2)	RSS-247 Clause 5.2 (a)	6dB Bandwidth	Р
15.247 (b) (3)	RSS-247 Clause 5.4 (d)	Maximum output power and E.I.R.P.	Р
15.247 (e)	RSS-247 Clause 5.2 (b)	Power spectral density	Р
15.247 (d) 15.209	RSS-247 Clause 5.5 RSS-Gen Clause 8.9	Out-of-band Emissions (conducted)	Р
15.247 (d) 15.209	RSS-247 Clause 5.5 RSS-Gen Clause 8.9	Out-of-band Emissions (radiated)	Р

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

8. Document Revision History

Revision #	Date	Modified by	Revision Details
Rev. 00	2017-07-07	BLavenant	First Issue



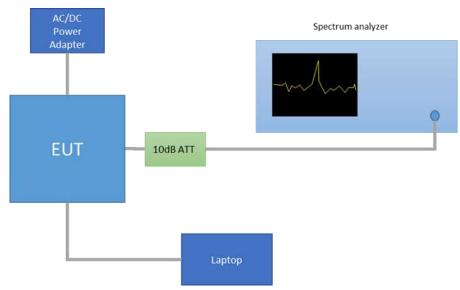
Annex A. Test & System Description

A.1 Measurement System

Measurements were performed using the following setups, made in accordance to the general provisions of FCC DTS Measurement KDB 558074 D01 DTS Meas Guidance.

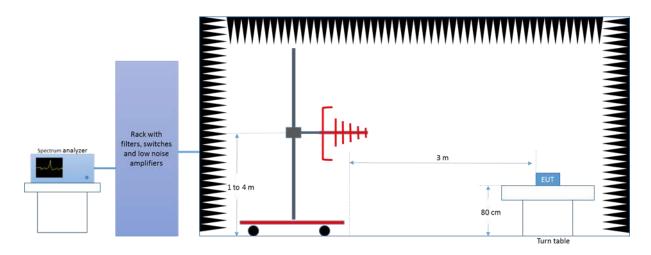
The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes, using the Intel proprietary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

Conducted Setup

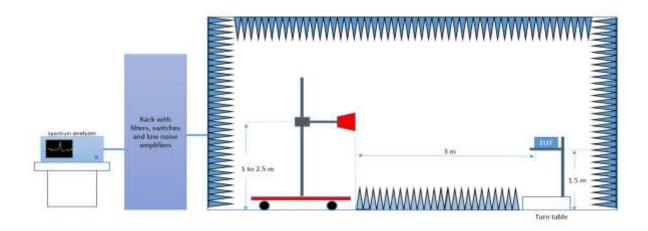




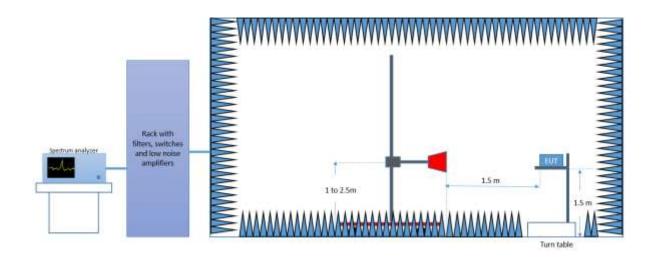
Radiated Setup < 1GHz



Radiated Setup 1 GHz – 18 GHz



Radiated Setup > 18 GHz





A.2 Test Equipment List

Conducted Setup

ID#	Cted Setup Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date			
0315	Spectrum analyzer	FSV30	103307	Rohde & Schwarz	2017-01-30	2019-01-30			
Radiated Setup									
ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date			
0420	Spectrum analyzer	FSV40	101556	Rohde & Schwarz	2016-04-15	2018-04-15			
0133	Spectrum analyzer	FSV40	101358	Rohde & Schwarz	2016-04-15	2018-04-15			
0137	Log antenna 30 MHz – 1 GHz	3142E	00156946	ETS Lindgren	2015-12-11	2017-12-11			
0138	Horn antenna 1 GHz – 6.4 GHz	3117	00152266	ETS Lindgren	2016-03-14	2018-03-14			
0141	Double Ridge Horn Antenna 1 GHz – 18 GHz	3117	00157736	ETS Lindgren	2016-04-13	2018-04-13			
0409	PreAmplifier	3117-PA	00157993	ETS Lindgren	N/A	N/A			
0139	Horn Antenna 18 GHz - 26.5 GHz	114514	00167100	ETS Lindgren	2016-03-16	2018-03-16			
0334	Double Ridged Horn Antenna 18 GHz – 40 GHz	3116C-PA	00196308	ETS Lindgren	2015-07-15	2017-07-15			
0135	Semi Anechoic chamber	FACT 3	5720	ETS Lindgren	2016-04-28	2018-04-28			
0337	Full Anechoic chamber	RFD_FA_100	5996	ETS Lindgren	2016-04-28	2018-04-28			
0329	Measurement Software	EMC32	100401	Rohde & Schwarz	N/A	N/A			
0530	Measurement Software	EMC32	100623	Rohde & Schwarz	N/A	N/A			
0296	Power Supply	6673A	MY41000318	Agilent	N/A	N/A			
0346	Multimeter	34401A	US36054685	HP	2016-02-04	2018-02-04			
0014	Power Sensor	NRP-Z57	101280	Rohde & Schwarz	2017-04-25	2019-04-25			



A.3 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 DTS

B.1 Test Conditions

For 802.11b/g modes 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) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously.

For Bluetooth Low Energy mode the EUT can transmit only at CHAIN A RF output.

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 spectrum analyzer with the channel integration method according to point 9.2.2.2 (Method AVGSA-1) of KDB 558074 D01.

Measured values for adjustment were within +/-0.25 dB from the declared Target values.

2.4GHz DTS & BLE					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
			1	2412	19.50	20.00	-
			7	2442	21.00	21.00	-
802.11b	20	1Mbps	11	2462	20.00	19.50	-
			12	2467	19.00	19.00	-
			13	2472	15.50	15.50	-
			1	2412	17.00	17.00	-
			7	2442	21.00	21.00	-
802.11g	20	6Mbps	11	2462	17.00	17.00	-
			12	2467	14.00	13.50	-
			13	2472	-5.50	-5.50	-
			1	2412	16.50	16.50	18.50
			7	2442	21.00	21.00	20.50
802.11n	20	HT0 HT8*	11	2462	16.50	16.50	19.00
		1110	12	2467	14.00	13.00	16.00
			13	2472	-6.00	-6.00	-5.50
			3F	2422	15.00	15.00	17.00
			7F	2442	16.00	16.00	17.50
802.11n	40	HT0 HT8*	9F	2452	14.50	14.50	17.00
		1110	10F	2457	11.00	11.00	13.50
			11F	2462	3.50	4.00	5.00
			0	2412	-	8.50	-
Bluetooth Low Energy	2	1Mbps	19	2440	-	9.00	-
Low Energy			39	2462	-	9.00	-

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:

802.11b → 1Mbps 802.11g → 6Mbps 802.11n20 and 802.11n40 (SISO) → HT0 802.11n20 and 802.11n40 (MIMO) → HT8

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



B.2 Test Results Tables

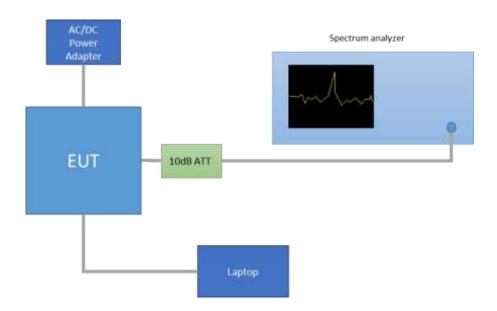
B.2.1 6dB & 99% Bandwidth

Test limits

FCC part	RSS part	Limits
15.247 (a) (2)	RSS-247 Clause 5.2 (a)	Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test procedure

The setup below was used to measure the 6dB & 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]	6dB BW [MHz]	99% BW [MHz]
			1	2412	10.11	13.81
			7	2442	10.05	14.53
		SISO CHAIN A	11	2462	10.10	13.79
			12	2467	10.10	14.13
000 441			13	2472	10.10	13.42
802.11b	1Mbps		1	2412	10.11	13.83
			7	2442	10.10	14.39
		SISO CHAIN B	11	2462	10.11	13.76
			12	2467	10.09	14.24
			13	2472	10.10	13.42
			1	2412	16.35	16.79
			7	2442	16.33	24.82
		SISO CHAIN A	11	2462	16.35	16.79
			12	2467	16.34	16.77
000 44 -	Ch dha a		13	2472	16.35	16.87
802.11g	6Mbps	SISO CHAIN B	1	2412	16.35	16.80
			7	2442	16.35	25.53
			11	2462	16.35	16.80
			12	2467	16.35	16.78
			13	2472	16.35	16.83
		SISO CHAIN A	1	2412	17.58	17.89
			7	2442	17.58	22.73
			11	2462	17.58	17.91
			12	2467	17.59	17.89
			13	2472	17.58	17.94
	HT0		1	2412	17.58	17.90
			7	2442	17.58	23.41
		SISO CHAIN B	11	2462	17.58	17.90
			12	2467	17.59	17.89
802.11n20			13	2472	17.58	17.95
			1	2412	17.59	17.90
			7	2442	17.59	17.92
		MIMO CHAIN A	11	2462	17.58	17.87
			12	2467	17.58	17.87
			13	2472	17.60	17.93
	HT8		1	2412	17.60	17.87
			7	2442	17.60	17.88
		MIMO CHAIN B	11	2462	17.60	17.87
			12	2467	17.60	17.83
			13	2472	17.61	17.91



Mode	Rate	Antenna	Channel	Frequency [MHz]	6dB BW [MHz]	99% BW [MHz]
			3F	2422	36.35	36.49
			7F	2442	36.34	36.50
		SISO CHAIN A	9F	2452	36.10	36.50
			10F	2457	36.34	36.45
	нто		11F	2462	36.35	36.46
	піо	SISO CHAIN B	3F	2422	36.11	36.51
			7F	2442	36.35	36.51
			9F	2452	36.35	36.46
			10F	2457	36.35	36.45
802.11n40			11F	2462	36.35	36.51
		MIMO CHAIN A	3F	2422	36.09	36.52
			7F	2442	36.34	36.51
			9F	2452	36.08	36.52
			10F	2457	36.34	36.47
	НТ8		11F	2462	36.18	36.47
			3F	2422	36.37	36.36
			7F	2442	36.39	36.33
		MIMO CHAIN B	9F	2452	36.36	36.35
			10F	2457	36.35	36.28
			11F	2462	36.34	36.30

Max Value

B.2.2 Maximum Output Power and antenna gain

F

Test limits

	Limits
FCC Part 15.247 (b) (3)	 (b) The maximum peak conducted output power of the intentional radiator shall not exceed the following: (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. (4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi.
RSS-247 Clause 5.4 (d)	For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e). As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power. The maximum conducted output power is the total transmit power delivered to all antennas and antenna elements, averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or transmitting at a reduced power level. If multiple modes of operation are implemented, the maximum conducted output power is the highest total transmit power occurring in any mode.





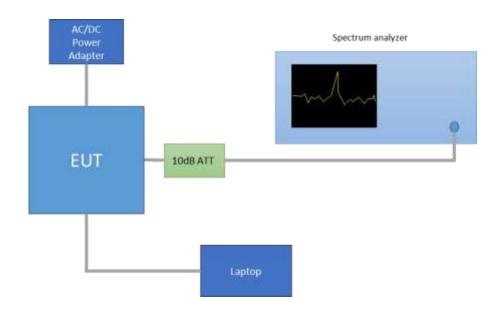
Test procedure

The Maximum Peak Conducted Output Power was measured using the channel integration method as authorized in chapter 2.0 "Power limits, definitions and device configuration" of FCC KDB 558074 D01.

For MIMO mode, according to the measure-and-sum approach defined in FCC KDB 662911 - Guidance for Emission Testing of Transmitters with Multiple Outputs in the Same Band, 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 declared maximum antenna gain is 3.24dBi.

The setup below was used to measure the maximum conducted output power. 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

Maximum peak conducted output power

Mode	Rate	СН	Freq [MHz]	Antenna	Measured Conducted Output power [dBm]	EIRP [dBm]	EIRP [mW]	Conducted power [mW]											
		1	2412	SISO A	22.55	25.79	379.31	179.89											
		I	2412	SISO B	22.91	26.15	412.10	195.43											
		7	2442	SISO A	24.00	27.24	529.66	251.19											
		1	1	2442	SISO B	23.99	27.23	528.45	250.61										
802.11b	1 Mbps	11	2462	SISO A	22.77	26.01	399.02	189.23											
802.	1MI		2402	SISO B	22.64	25.88	387.26	183.65											
		12	2467	SISO A	22.10	25.34	341.98	162.18											
		12	2407	SISO B	21.87	25.11	324.34	153.82											
	1	10	2472	SISO A	18.33	21.57	143.55	68.08											
		15	15	13	13	13	13		15	2472	SISO B	18.35	21.59	144.21	68.39				
		1	1	1	1	2412	SISO A	25.35	28.59	722.77	342.77								
				2412	SISO B	25.46	28.70	741.31	351.56										
		7	2442	SISO A	29.93	33.17	2074.91	984.01											
				2442	SISO B	29.92	33.16	2070.14	981.75										
802.11g	6Mbps	11	11	2462	SISO A	25.29	28.53	712.85	338.06										
802.	6MI			2402	SISO B	25.48	28.72	744.73	353.18										
		12	12	12	12	2467	SISO A	22.30	25.54	358.10	169.82								
						12	12	12	12	12	12	12	12	2407	SISO B	21.88	25.12	325.09	154.17
		10	13	13	13	13	13	13	13	13	13	13	13	2472	SISO A	2.81	6.05	4.03	1.91
		13	2472	SISO B	2.43	5.67	3.69	1.75											
		4	2442	SISO A	24.95	28.19	659.17	312.61											
		1	1	1	2412	SISO B	24.95	28.19	659.17	312.61									
		7	2442	SISO A	29.81	33.05	2018.37	957.19											
0		'	2442	SISO B	29.70	32.94	1967.89	933.25											
1n2	2	11	2462	SISO A	25.05	28.29	674.53	319.89											
02.1	802.11n20 HT0	11	2402	SISO B	25.08	28.32	679.20	322.11											
8		40	2467	SISO A	22.28	25.52	356.45	169.04											
		12	2467	SISO B	21.66	24.90	309.03	146.55											
		40	2472	SISO A	2.49	5.73	3.74	1.77											
		13	2412	SISO B	2.22	5.46	3.52	1.67											

Max Value Min Value



Mode	Rate	СН	Freq [MHz]	Antenna	Measured Conducted Output power [dBm]	EIRP [dBm]	EIRP [mW]	Conducted power [mW]									
				MIMO A	24.26	27.50	562.34	266.69									
		1	2412	MIMO B	24.37	27.61	576.77	273.53									
				Combined A+B	27.33	30.57	1139.11	540.21									
				MIMO A	25.84	29.08	809.10	383.71									
	7		7	2442	MIMO B	26.05	29.29	849.18	402.72								
				Combined A+B	28.96	32.20	1658.28	786.42									
120			2462	MIMO A	24.03	27.27	533.33	252.93									
802.11n20	HT8	11		MIMO B	24.93	28.17	656.15	311.17									
802				Combined A+B	27.51	30.75	1189.48	564.10									
													MIMO A	21.27	24.51	282.49	133.97
		12	2467	MIMO B	21.66	24.90	309.03	146.55									
				Combined A+B	24.48	27.72	591.52	280.52									
		13		MIMO A	0.43	3.67	2.33	1.10									
			2472	MIMO B	0.70	3.94	2.48	1.17									
				Combined A+B	3.58	6.82	4.81	2.28									

Max Value Min Value



Mode	Rate	СН	Freq [MHz]	Antenna	Measured Conducted Output power [dBm]	EIRP [dBm]	EIRP [mW]	Conducted power [mW]
		3F	2422	SISO A	23.74	26.98	498.88	236.59
		51	2422	SISO B	23.43	26.67	464.52	220.29
		7F	2442	SISO A	24.52	27.76	597.04	283.14
		71	2442	SISO B	24.42	27.66	583.45	276.69
	НТО	9F	2452	SISO A	23.05	26.29	425.60	201.84
	Τ	51	2432	SISO B	22.99	26.23	419.76	199.07
		10F	2457	SISO A	19.41	22.65	184.08	87.30
		TUF	2437	SISO B	19.19	22.43	174.98	82.99
		11F	2462	SISO A	11.91	15.15	32.73	15.52
			2402	SISO B	22.62	25.86	385.48	182.81
		3F		MIMO A	22.62	25.86	385.48	182.81
40			3F 2422	MIMO B	22.54	25.78	378.44	179.47
302.11n40				Combined A+B	25.59	28.83	763.92	362.28
802				MIMO A	23.00	26.24	420.73	199.53
		7F	2442	MIMO B	23.17	26.41	437.52	207.49
				Combined A+B	26.10	29.34	858.25	407.02
				MIMO A	22.36	25.60	363.08	172.19
	HT8	9F	2452	MIMO B	22.89	26.13	410.20	194.54
				Combined A+B	25.64	28.88	773.28	366.72
				MIMO A	18.94	22.18	165.20	78.34
		10F	2457	MIMO B	19.11	22.35	171.79	81.47
				Combined A+B	22.04	25.28	336.99	159.81
				MIMO A	10.33	13.57	22.75	10.79
		11F	2462	MIMO B	11.45	14.69	29.44	13.96
				Combined A+B	13.94	17.18	52.20	24.75

Max Value Min Value



Maximum (Average) conducted output power*

Mode	Rate	СН	Freq [MHz]	Antenna	Measured average conducted power [dBm]	Maximum** (average) conducted output power [dBm]	EIRP [dBm]	Average Output Power [mW]			
		1	2412	SISO A	19.61	19.61	22.85	91.41			
			2412	SISO B	19.87	19.87	23.11	97.05			
		7	2442	SISO A	20.98	20.98	24.22	125.31			
			2442	SISO B	20.95	20.95	24.19	124.45			
802.11b	1 Mbps	11	2462	SISO A	19.75	19.75	22.99	94.41			
802	1M	11	2402	SISO B	19.55	19.55	22.79	90.16			
		12	2467	SISO A	19.06	19.06	22.30	80.54			
			2407	SISO B	18.82	18.82	22.06	76.21			
		13	2472	SISO A	15.30	15.30	18.54	33.88			
			13	2472	SISO B	15.33	15.33	18.57	34.12		
		1	1	2412	SISO A	16.90	16.90	20.14	48.98		
			2412	SISO B	17.02	17.02	20.26	50.35			
		7	2442	SISO A	21.08	21.08	24.32	128.23			
			2442	SISO B	20.99	20.99	24.23	125.60			
802.11g	6Mbps	11	11	2462	SISO A	16.79	16.79	20.03	47.75		
802.	6MI			11	2402	SISO B	16.94	16.94	20.18	49.43	
		12	12	2467	SISO A	13.79	13.79	17.03	23.93		
				12	12	12	2407	SISO B	13.32	13.32	16.56
		12	2472	SISO A	-5.74	-5.74	-2.50	0.27			
		13	13	13	13	2472	SISO B	-6.10	-6.10	-2.86	0.25
		1	2442	SISO A	16.44	16.44	19.68	44.06			
		1	2412	SISO B	16.36	16.36	19.60	43.25			
		7	2442	SISO A	20.82	20.82	24.06	120.78			
0		7	2442	SISO B	20.84	20.84	24.08	121.34			
1n2	НТО	11	2462	SISO A	16.48	16.48	19.72	44.46			
802.11n20	L I	11	2402	SISO B	16.41	16.41	19.65	43.75			
8			0467	SISO A	13.75	13.75	16.99	23.71			
		12	2467	SISO B	13.01	13.01	16.25	20.00			
				2472	SISO A	-6.07	-6.07	-2.83	0.25		
		13	2412	SISO B	-6.33	-6.33	-3.09	0.23			



Mode	Rate	СН	Freq [MHz]	Antenna	Measured average conducted power [dBm]	Maximum** (average) conducted output power [dBm]	EIRP [dBm]	Average Output Power [mW]				
				MIMO A	15.70	15.88	19.12	38.72				
		1	2412	MIMO B	15.35	15.53	18.77	35.72				
				Combined A+B	18.54	18.72	21.96	74.44				
	7			MIMO A	17.25	17.43	20.67	55.33				
		7	7 2442	MIMO B	16.98	17.16	20.40	51.99				
				Combined A+B	20.13	20.31	23.55	107.32				
20					MIMO A	15.41	15.59	18.83	36.22			
802.11n20	HT8	11	11 2462	MIMO B	15.83	16.01	19.25	39.90				
802				Combined A+B	18.64	18.81	22.05	76.11				
								MIMO A	12.64	12.82	16.06	19.14
		12	2467	MIMO B	12.52	12.70	15.94	18.62				
				Combined A+B	15.59	15.77	19.01	37.76				
		13		MIMO A	-8.23	-8.05	-4.81	0.16				
			2472	MIMO B	-8.43	-8.25	-5.01	0.15				
				Combined A+B	-5.32	-5.14	-1.90	0.31				



Mode	Rate	СН	Freq [MHz]	Antenna	Measured average conducted power [dBm]	Maximum** (average) conducted output power [dBm]	EIRP [dBm]	Average Output Power [mW]						
		3F	2422	SISO A	14.95	15.11	18.35	32.43						
			2422	SISO B	14.69	14.84	18.08	30.45						
		7F	2442	SISO A	15.71	15.87	19.11	38.64						
		7	2442	SISO B	15.63	15.78	19.02	37.81						
	НТО	9F	9F	9F	OF	QE	OF	05	2452	SISO A	14.28	14.44	17.68	27.80
	Έ		2452	SISO B	14.17	14.32	17.56	27.02						
		10F	10F	10F	10F	10F	2457	SISO A	10.69	10.84	14.08	12.12		
							IUF	TUF	TUF	TUF	2437	SISO B	10.90	11.06
		11F	2462	SISO A	3.77	3.92	7.16	2.46						
			2402	SISO B	3.41	3.57	6.81	2.28						
				MIMO A	13.75	14.09	17.33	25.65						
140 140		3F	2422	MIMO B	13.13	13.47	16.71	22.24						
802.11n40				Combined A+B	16.46	16.80	20.04	47.89						
802									MIMO A	14.10	14.44	17.68	27.80	
		7F	2442	MIMO B	13.77	14.11	17.35	25.77						
				Combined A+B	16.95	17.29	20.53	53.57						
				MIMO A	13.46	13.80	17.04	23.99						
	HT8	9F	2452	MIMO B	13.52	13.86	17.10	24.33						
				Combined A+B	16.50	16.84	20.08	48.32						
				MIMO A	10.35	10.69	13.93	11.72						
		10F	2457	MIMO B	9.80	10.14	13.38	10.33						
				Combined A+B	13.09	13.44	16.68	22.06						
				MIMO A	1.61	1.95	5.19	1.57						
		11F	2462	MIMO B	2.02	2.36	5.60	1.72						
				Combined A+B	4.83	5.17	8.41	3.29						

* Maximum (average) conducted output power are shown for indicative purpose only.

** Duty cycle compensated



B.2.3 Power Spectral Density

Test limits

FCC part	RSS part	Limits
15.247 (e)	RSS-247 Clause 5.2 (b)	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

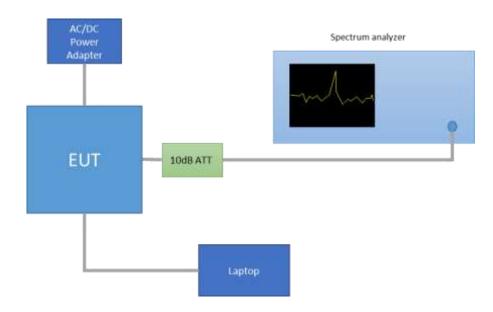
Test procedure

The peak power spectral density level in the fundamental emission was measured using the *Method PKPSD* (*peak PSD*) according to point 10.2 of KDB 558074 D01 DTS Meas Guidance. This method was used for 802.11b, 802.11g, 802.11n20 an 802.11n40 modes.

For MIMO mode, the *Measure and add 10 log(N_{ANT}) dB*, (where N_{ANT} is the number of outputs) technique was used according to the Guidance for Emission Testing of Transmitters with Multiple Outputs in the Same Band 662911 D01 Multiple Transmitter Output v02r01.

With this technique, spectrum measurements are performed at each output of the device, and the quantity $10 \log(N_{ANT})$ dB is added to each spectrum value before comparing to the emission limit. Number of outputs = 2.

The setup below was used to measure the 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.





Results tables

Mode	Rate	Channel	Frequency [MHz]	Antenna	PSD Peak [dBm]
			0440	SISO CHAIN A	-2.98
		1	2412	SISO CHAIN B	-2.56
		7	0.1.10	SISO CHAIN A	-1.76
		7	2442	SISO CHAIN B	-1.70
000 441			0.400	SISO CHAIN A	-2.90
802.11b	1Mbps	11	2462	SISO CHAIN B	-3.08
		12	0407	SISO CHAIN A	-3.66
			2467	SISO CHAIN B	-3.91
		40	0.470	SISO CHAIN A	-7.29
		13	2472	SISO CHAIN B	-7.26
			2412	SISO CHAIN A	-7.35
		1	2412	SISO CHAIN B	-7.15
		7	0440	SISO CHAIN A	-3.24
		7	2442	SISO CHAIN B	-2.97
802.11~	CMbaa		0460	SISO CHAIN A	-7.63
802.11g	6Mbps	11	2462	SISO CHAIN B	-7.46
		12	2467	SISO CHAIN A	-10.70
				SISO CHAIN B	-11.12
		10	0470	SISO CHAIN A	-30.56
		13	2472	SISO CHAIN B	-30.67
		1	2412	SISO CHAIN A	-7.86
			2412	SISO CHAIN B	-7.31
		-	2442	SISO CHAIN A	-3.43
		7		SISO CHAIN B	-3.02
000 11-00			0.400	SISO CHAIN A	-7.28
802.11n20	HT0	11	2462	SISO CHAIN B	-7.44
		40	0407	SISO CHAIN A	-10.38
		12	2467	SISO CHAIN B	-10.78
		10	0470	SISO CHAIN A	-30.27
		13	2472	SISO CHAIN B	-29.54
		25	0400	SISO CHAIN A	-12.34
		3F	2422	SISO CHAIN B	-12.72
		75	0440	SISO CHAIN A	-11.30
		7F	2442	SISO CHAIN B	-11.38
000 44 40		05	0450	SISO CHAIN A	-12.96
802.11n40	HT0	9F	2452	SISO CHAIN B	-13.23
		10F	0457	SISO CHAIN A	-16.56
			2457	SISO CHAIN B	-15.55
			0400	SISO CHAIN A	-23.04
		11F	2462	SISO CHAIN B	-24.19



MIMO modes					PSD Peak [dBm]					
Mode	Rate	СН	Freq. [MHz]	Antenna	Measured Conducted	MIMO Combined +10·log(N _{ant})				
		4	0440	CHAIN A	-9.01	-6.00				
		1	2412	CHAIN B	-8.89	-5.88				
		7	0440	CHAIN A	-7.88	-4.87				
		1	2442	CHAIN B	-7.88	-4.87				
802.11n20	HT8	11	2462	CHAIN A	-9.88	-6.87				
602. I III20	пю	11	2402	CHAIN B	-8.43	-5.42				
		12	2467	CHAIN A	-12.26	-9.25				
		12		CHAIN B	-11.82	-8.81				
		10	10	12	13	2472	CHAIN A	-33.01	-30.00	
		13	2472	CHAIN B	-32.61	-29.60				
		25	25	25	3F	2422	CHAIN A	-13.51	-10.50	
		JF	2422	CHAIN B	-13.75	-10.74				
		75	75	70	7F	75	0.1.10	CHAIN A	-13.00	-9.99
			2442	CHAIN B	-13.23	-10.22				
802.11n40	HT8	9F	2452	CHAIN A	-13.83	-10.82				
002.111140	пю	эг	2452	CHAIN B	-13.56	-10.55				
		10F	2457	CHAIN A	-17.00	-13.99				
		IUF	2437	CHAIN B	-17.21	-14.20				
			2462	CHAIN A	-25.59	-22.58				
		11F	2462	CHAIN B	-24.40	-21.39				

Max Value



B.2.4 Out-of-band emission (conducted)

Test Limits

FCC part	RSS part			Lin	nits			
15.247 (d)	RSS-247 Clause 5.5	spectru frequer dB belo level o measu	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.					
	Radiated emissions which fall in the restricted bands, as defined in § must also comply with the radiated emission limits specified in §15.209							
			Freq Range (MHz)	Field Stregth (μV/m)	Field Stregth (dBµV/m)	Meas. Distance (m)		
			30-88	100	40	3		
			88-216	150	43.5	3		
			216-960	200	46	3		
15.209	RSS-Gen Clause 8.9		Above 960	500	54	3		
	Clause 6.9	employ 110-49 are bas For ave limit sp						

Test procedure

The setup below was used to measure the out-of-band emissions. The antenna terminal of the EUT is connected to the spectrum analyzer through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

The Band Edge High, was measured using the method according to point 13.3 (Integration Method) of KDB 558074 D01 DTS Meas Guidance v04.

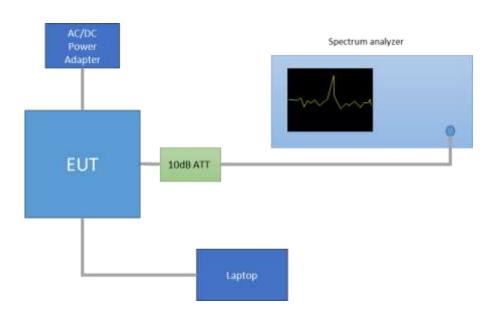
In case of Band Edge measurements falling in restricted bands, the declared Antenna Gain is also compensated in the graph. The declared maximum antenna gain is 3.24dBi.

For Band Edge measurements falling in restricted bands, 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)	
Above 960	3	500	54.0	-41.2	



The setup below was used to measure the out-of-band emissions. 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.



Note: these PSD_{Peak} values are shown just as a reference for the compliance of the Out-of-band Measurements. Thus the RBW used for these measurements was 100kHz.

Mode	Rate	Measured Duty Cycle [%]	Channel	Frequency [MHz]	Antenna	PSD Peak [dBm]
			1	2412	SISO CHAIN A	10.39
			Ι	2412	SISO CHAIN B	10.74
			7	2437	SISO CHAIN A	11.79
			1	2437	SISO CHAIN B	11.67
902 11h	1 Mbpo	09.7	11	2462	SISO CHAIN A	10.44
802.11b	1Mbps	98.7			SISO CHAIN B	10.23
			10	0467	SISO CHAIN A	9.74
			12	2467	SISO CHAIN B	9.47
			10		SISO CHAIN A	5.94
			13	2472	SISO CHAIN B	6.08



Mode	Rate	Measured Duty Cycle [%]	Channel	Frequency [MHz]	Antenna	PSD Peak [dBm]
				0.110	SISO CHAIN A	6.13
			1	2412	SISO CHAIN B	6.29
					SISO CHAIN A	10.88
			6	2437	SISO CHAIN B	10.83
					SISO CHAIN A	6.01
802.11g	6Mbps	98.4	11	2462	SISO CHAIN B	6.18
					SISO CHAIN A	3.07
			12	2467	SISO CHAIN B	2.54
					SISO CHAIN A	-16.56
			13	2472	SISO CHAIN B	-16.89
				0.110	SISO CHAIN A	5.79
			1	2412	SISO CHAIN B	5.73
			7	2442	SISO CHAIN A	10.49
					SISO CHAIN B	10.67
				0.400	SISO CHAIN A	5.78
	HT0	98.0	11	2462	SISO CHAIN B	5.76
			40	0.407	SISO CHAIN A	2.97
			12	2467	SISO CHAIN B	2.46
			40	0.170	SISO CHAIN A	-16.78
000 11 00			13	2472	SISO CHAIN B	-16.46
802.11n20				0.110	MIMO CHAIN A	5.13
			1	2412	MIMO CHAIN B	4.80
			7	0.1.10	MIMO CHAIN A	6.59
			7	2442	MIMO CHAIN B	6.40
				0.400	MIMO CHAIN A	4.77
	HT8	96.0	11	2462	MIMO CHAIN B	5.33
			40	0.407	MIMO CHAIN A	1.92
			12	2467	MIMO CHAIN B	1.92
			40	0.470	MIMO CHAIN A	-18.92
			13	2472	MIMO CHAIN B	-19.05



Mode	Rate	Measured Duty Cycle [%]	Channel	Frequency [MHz]	Antenna	PSD Peak [dBm]
			3F	2422	SISO CHAIN A	1.21
			55	2422	SISO CHAIN B	0.93
			7F	2442	SISO CHAIN A	3.37
			75	2442	SISO CHAIN B	1.75
	НТО	96.0	9F	2452	SISO CHAIN A	0.41
	IIIU	90.0	96	2402	SISO CHAIN B	0.29
			10F	2457	SISO CHAIN A	-3.36
			TUF	2407	SISO CHAIN B	-3.24
			11F	11F 2462	SISO CHAIN A	-10.49
802.11n40				2402	SISO CHAIN B	0.00
002.11140			3F	2422	MIMO CHAIN A	0.18
				2422	MIMO CHAIN B	-0.45
			7F	2442	MIMO CHAIN A	0.46
			/1	2442	MIMO CHAIN B	0.08
	HT8	92.4	9F	2452	MIMO CHAIN A	-0.21
	1110	32.4		2452	MIMO CHAIN B	0.17
			10F	2457	MIMO CHAIN A	-3.65
			101	2407	MIMO CHAIN B	-4.03
			115	2462	MIMO CHAIN A	-12.19
			11F	2402	MIMO CHAIN B	-11.71

See Section B.3.5 and Section B.3.6 for the screenshot results.



B.2.5 Radiated spurious emission

Standard references

FCC part	RSS part	Limits					
		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	Field Stregth	Field Stregth	Meas. Distance		
		(MHz)	(μV/m)	(dBµV/m)	(m)		
		30-88	100	40	3		
		88-216	150	43.5	3		
	RSS-247	216-960	200	46	3		
15.247 (d)	Clause 5.5	Above 960	500	54	3		
15.209´	RSS-Gen Clause 8.9	employing CISP kHz. 110-490 kH three bands are For average radi	R quasi-peak de Iz and above 10 based on measu ated emission m vhen measuring	tector except for 000 MHz. Radiat rements employi easurements abo with peak detect	re based on mea r the frequency b ted emission limiting an average de ove 1000 MHz. th or function corres	bands 9-90 ts in these etector. here is also	

Test procedure

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

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

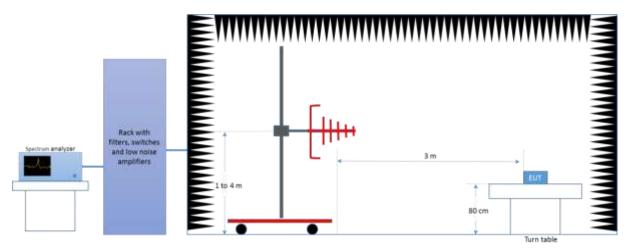
The final measurement is done by varying the antenna height from 1 to 4 meters, the EUT azimuth over 360° and for both Vertical and Horizontal polarizations.

The radiated spurious emissions were measured on the worst case configuration selected from the chapter 0 and using the lowest, middle and highest channels.

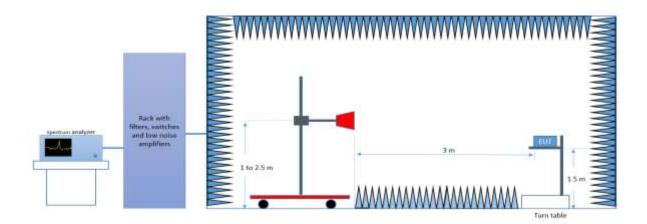
For technologies 802.n20, 802.n40 the worst case in terms of spurious emissions found among the low, mid and high channels were tested on chain A and B separately is used to perform the test in MIMO mode (Chain A+B).



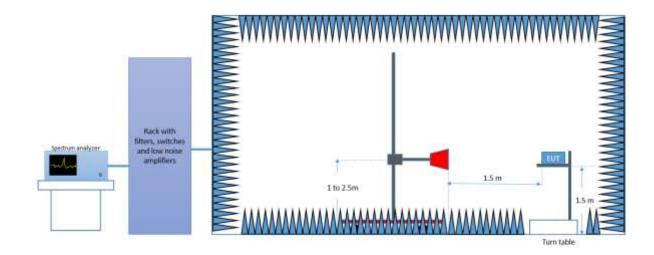
Radiated Setup < 1GHz



Radiated Setup 1 GHz - 18 GHz



Radiated Setup > 18GHz





Sample Calculation

The field strength is deduced from the radiated measurement using the following equation:

 $E = 126.8 - 20log(\lambda) + P - G$

where

E is the field strength of the emission at the measurement distance, in $dB\mu V/m$

P is the power measured at the output of the test antenna, in dBm

 λ is the wavelength of the emission under investigation [300/f_{MHz}], in m

G is the gain of the test antenna, in dBi

NOTE - The measured power P includes all applicable instrument correction factors up to the connection to the test

Antenna e.g. cable losses, amplifier gains.

For field strength measurements made at other than the distance at which the applicable limit is specified, the field strength of the emission at the distance specified by the limit is deduced as follows:

E_{SpecLimit} = E_{Meas} + 20log(D_{Meas}/D_{SpecLimit})

where

ESpecLimit is the field strength of the emission at the distance specified by the limit, in dBµV/m

 E_{Meas} is the field strength of the emission at the measurement distance, in $dB\mu V/m$

D_{Meas} is the measurement distance, in m

DspecLimit is the distance specified by the limit, in m



Test Results

30 MHz – 26.5 GHz, 802.11b, 1Mbps, Chain A

Radiated Spurious – CH1

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		35.5	40	4.6
62.5	37.2		40	2.9
3430.0	59.2		74	14.9
3450.0		46.9	54	7.1
4823.9	54.6		74	19.4
4823.9		48.6	54	5.5
7233.9	45.1		74	28.9
7234.8		36.7	54	17.4
12349.9	49.8		74	24.2
12365.1		39.5	54	14.6
17984.4		49.8	54	4.2
17996.4	61.6		74	12.5
19295.8		40.7	54	13.3
19295.8	44.9		74	29.2

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		27.0	40	13.1
62.5	28.5		40	11.6
3449.1	59.2		74	14.8
3473.4		46.8	54	7.3
4884.0		52.1	54	2.0
4884.4	54.2		74	19.9
7326.7	45.8		74	28.3
7327.6		37.1	54	16.9
12371.3		39.3	54	14.8
12399.9	50.3		74	23.7
17973.7	61.2		74	12.9
17982.6		49.8	54	4.3
19535.7		33.1	54	20.9
19544.2	42.0		74	32.1



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	35.2		40	4.8
62.5		34.9	40	5.2
3469.4		46.7	54	7.4
3469.4	58.8		74	15.2
4924.6	54.4		74	19.6
4923.9		46.9	54	7.2
17616.8	58.3		74	15.8
17642.2		46.7	54	7.4
17972.8	60.9		74	13.2
17988.0		49.9	54	4.2
19695.8		35.1	54	18.9
19696.2	42.1		74	31.9



30 MHz – 26.5 GHz, 802.11b, 1Mbps, Chain B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		28.7	40	11.4
62.5	29.6		40	10.4
3455.6	59.5		74	14.5
3483.4	59.1		74	14.9
4823.9		47.5	54	6.6
5636.2		42.6	54	11.5
7233.9		36.7	54	17.4
7234.3	45.5		74	28.6
12361.5		39.2	54	14.9
12366.4	51.2		74	22.9
17980.8	61.4		74	12.6
17992.9		50.1	54	3.9
19295.8		37.4	54	16.7
19295.8	43.3		74	30.8

Radiated Spurious – CH1

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	32.1		40	8.0
62.5		31.6	40	8.5
3459.1		46.7	54	7.4
3475.6	59.1		74	15.0
4883.7	53.0		74	21.0
4884.0		45.4	54	8.7
7327.6		36.2	54	17.9
7330.2	45.8		74	28.2
12362.8		39.2	54	14.9
12379.4	50.9		74	23.1
17966.1	61.1		74	12.9
17983.9		49.8	54	4.2
19535.7		37.4	54	16.7
19536.1	42.8		74	31.2



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		30.1	40	10.0
62.5	30.7		40	9.4
3458.8		46.4	54	7.6
3464.1	58.6		74	15.5
4924.3		42.0	54	12.1
4926.4	53.2		74	20.9
7384.7		36.8	54	17.2
14772.1		41.8	54	12.3
17914.8	59.4		74	14.7
17998.2	61.0		74	13.1
19695.8	42.1		74	32.0
19695.8		36.3	54	17.7



30 MHz – 26.5 GHz, 802.11g, 6Mbps, Chain A

Frequency	MaxPeak	Avg	Limit	Margin
		-		-
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		24.4	40	15.6
62.5	25.7		40	14.4
3463.1	59.3		74	14.7
3465.0		46.5	54	7.5
6371.4		43.6	54	10.4
6371.4	56.1		74	18.0
17971.4	61.3		74	12.8
17972.8		49.5	54	4.5
17994.2		50.0	54	4.1
17999.1	60.9		74	13.2
19295.8	44.0		74	30.0
19295.8	44.0		74	30.0

Radiated Spurious – CH1

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		27.2	40	12.9
62.5	27.9		40	12.2
3462.8		46.8	54	7.3
3467.5	59.0		74	15.0
6361.6	56.0		74	18.1
6369.9		43.7	54	10.4
7326.2		35.6	54	18.4
7327.1	46.0		74	28.1
17992.9		49.9	54	4.2
17997.3	61.8		74	12.3
19496.0		38.0	54	16.1
19496.0	43.5		74	30.5



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		31.7	40	8.4
62.5	32.1		40	7.9
3467.5	58.5		74	15.6
3471.3		46.7	54	7.3
6360.1	56.0		74	18.1
6367.7		43.7	54	10.4
17929.1		48.3	54	5.8
17983.0		49.9	54	4.2
17999.6	60.6		74	13.5
17987.1	60.8		74	13.3
19695.8	42.8		74	31.2
19695.8		37.8	54	16.3



30 MHz – 26.5 GHz, 802.11g, 6Mbps, Chain B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		36.3	40	3.7
62.5	37.1		40	2.9
3462.2		46.4	54	7.6
3462.2	58.9		74	15.2
6368.1	56.1		74	18.0
6372.5		43.7	54	10.4
17650.7		46.7	54	7.4
17983.9		50.0	54	4.0
17988.0	61.2		74	12.9
17993.8	61.1		74	12.9
19295.8	41.8		74	32.3
19295.8		34.5	54	19.6

Radiated Spurious – CH1

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		28.5	40	11.6
62.5	29.4		40	10.7
3443.1	58.9		74	15.2
3455.0		46.8	54	7.3
6303.6	56.6		74	17.4
6307.2		43.6	54	10.4
17653.3		46.6	54	7.4
17959.4	60.8		74	13.2
17997.3		49.8	54	4.2
17992.4	62.0		74	12.1
19535.7	42.0		74	32.0
19535.7		34.5	54	19.6



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	28.1		40	12.0
62.5		26.7	40	13.4
3475.3		47.0	54	7.1
3476.6	59.4		74	14.7
6390.6	56.3		74	17.8
6396.0		43.7	54	10.3
17625.2		46.5	54	7.5
17987.5	60.7		74	13.4
17992.0		50.0	54	4.1
17993.8	61.3		74	12.8
19694.8	42.1		74	32.0
19695.8		34.7	54	19.4



30 MHz - 26.5 GHz, 802.11n20, HT0, Chain A

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		27.7	40	12.3
62.5	28.5		40	11.5
3416.3	59.4		74	14.7
3420.0		46.8	54	7.3
6362.7	56.0		74	18.1
6366.7		43.7	54	10.3
17678.3		46.8	54	7.3
17969.7	61.0		74	13.0
17978.6	61.0		74	13.1
17994.6		49.9	54	4.2
19295.8	43.4		74	30.7
19295.8		37.9	54	16.2

Radiated Spurious – CH1

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	29.0		40	11.1
62.5		28.1	40	12.0
3444.1		46.9	54	7.2
3468.8	59.0		74	15.0
6349.3	56.0		74	18.0
6356.1		43.5	54	10.6
7327.6		35.4	54	18.7
17988.4	61.5		74	12.6
17994.6	61.5		74	12.6
17999.1		49.8	54	4.2
19535.7	43.3		74	30.8
19535.7		38.2	54	15.8



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	29.7		40	10.4
62.5		28.5	40	11.6
3450.6		46.7	54	7.4
3465.3	59.4		74	14.6
6362.3		43.5	54	10.5
6362.3	56.2		74	17.9
17642.6		46.7	54	7.4
17969.7	60.8		74	13.3
17994.2	60.5		74	13.5
17997.8		50.0	54	4.1
19695.8	43.7		74	30.4
19695.8		36.7	54	17.3



30 MHz - 26.5 GHz, 802.11n20, HT0, Chain B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	31.0		40	9.1
62.5		30.2	40	9.8
3454.4		46.8	54	7.3
3461.3	58.5		74	15.5
6370.6	56.2		74	17.9
6372.8		43.7	54	10.4
7232.5		34.5	54	19.6
7237.9	46.8		74	27.2
17990.2	61.1		74	13.0
17993.3		50.0	54	4.0
19295.8	42.2		74	31.9
19295.8		34.5	54	19.6

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Radiated Spurious – CH7

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		29.2	40	10.8
62.5	29.9		40	10.2
3472.8		46.7	54	7.4
3475.9	59.0		74	15.1
6372.1	56.2		74	17.8
6377.5		43.8	54	10.3
17890.7		47.1	54	7.0
17971.9	60.6		74	13.5
17985.7		50.1	54	3.9
17989.3	60.6		74	13.5
19535.7		35.8	54	18.3
19539.4	42.4		74	31.7

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		25.6	40	14.5
62.5	26.7		40	13.4
3457.2		46.7	54	7.4
3461.3	58.7		74	15.3
6335.5	56.6		74	17.5
6341.6		43.4	54	10.6
17630.6		46.8	54	7.3
17995.5	60.8		74	13.2
17998.7		49.9	54	4.1
18000.0	60.8		74	13.2
19695.8		34.5	54	19.6
19696.2	42.0		74	32.1



30 MHz - 26.5 GHz, 802.11n20, HT8, Chain A+B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
32.5		31.1	40	8.9
32.5	32.7		40	7.4
3407.5		47.0	54	7.0
3486.6	59.4		74	14.7
4874.6	54.5		74	19.6
4885.1		42.8	54	11.2
17644.4		46.8	54	7.2
17992.4	61.2		74	12.8
17996.9	61.1		74	12.9
17998.7		50.1	54	4.0
19535.7	42.8		74	31.3
19536.1		38.2	54	15.9



30 MHz - 26.5 GHz, 802.11n40, HT0, Chain A

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	27.5		40	12.6
62.5		26.1	40	13.9
3448.1	58.6		74	15.5
3457.5		46.8	54	7.3
6288.7	56.0		74	18.1
6293.1		43.9	54	10.2
17643.5		47.1	54	7.0
17993.3	60.9		74	13.2
17996.4		50.0	54	4.0
17999.6	60.6		74	13.5
19375.6	43.4		74	30.7
19376.1		37.9	54	16.2

Radiated Spurious – CH3F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	30.0		40	10.0
62.5		28.9	40	11.2
3442.5		46.7	54	7.4
3465.0	59.2		74	14.8
6264.1	56.1		74	18.0
6296.0		43.7	54	10.4
7301.7		34.7	54	19.3
17975.9	60.5		74	13.6
17984.4	60.7		74	13.4
17984.4		49.9	54	4.1
19496.0		38.0	54	16.0
19496.0	43.3		74	30.8



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		31.5	40	8.6
62.5	32.7		40	7.4
3446.3	59.6		74	14.4
3457.2		46.8	54	7.2
6340.6		43.9	54	10.2
6365.6	56.7		74	17.4
17655.1		46.7	54	7.4
17985.7	61.3		74	12.8
17992.4		49.8	54	4.3
17996.4	61.1		74	13.0
19615.5		37.6	54	16.4
19615.9	43.6		74	30.5



30 MHz - 26.5 GHz, 802.11n40, HT0, Chain B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5		24.9	40	15.2
62.5	26.3		40	13.7
3405.6	59.1		74	15.0
3411.9		46.8	54	7.3
6290.9		43.6	54	10.4
6293.4	55.9		74	18.1
17640.4		46.7	54	7.4
17955.8	60.9		74	13.2
17974.6	61.1		74	13.0
17986.2		50.0	54	4.1
19375.6		36.1	54	18.0
19376.1	42.0		74	32.1

Radiated Spurious – CH3F

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	29.2		40	10.8
62.5		27.4	40	12.7
3445.6	58.5		74	15.5
3459.4		46.7	54	7.4
6296.0	55.9		74	18.2
6297.1		43.8	54	10.3
17644.4		46.9	54	7.2
17967.9	60.7		74	13.3
17994.6		50.0	54	4.1
17997.8	61.5		74	12.6
19496.0		36.0	54	18.1
19496.0	42.7		74	31.4



Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	33.3		40	6.8
62.5		32.6	40	7.5
3486.9		46.9	54	7.1
3499.4	59.8		74	14.3
6310.8		44.0	54	10.1
6361.6	57.5		74	16.5
17637.7		46.8	54	7.3
17967.0	61.3		74	12.8
17992.9	61.2		74	12.8
17999.1		50.0	54	4.1
19615.9		34.8	54	19.3
19615.9	42.8		74	31.2



30 MHz - 26.5 GHz, 802.11n40, HT8, Chain A+B

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	27.5		40	12.6
62.5		25.6	40	14.5
3392.5		46.9	54	7.2
3413.8	59.4		74	14.6
6210.8	56.1		74	17.9
6362.7		43.9	54	10.2
15972.2		43.6	54	10.5
15979.4	54.9		74	19.2
17929.1		48.4	54	5.7
17989.3	60.9		74	13.2
19376.1		38.4	54	15.6
19376.1	43.4		74	30.7

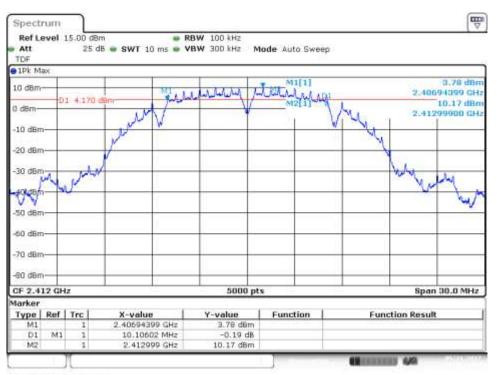


B.3 Test Results Screenshot

B.3.1 6dB Bandwidth

SISO-A, 802.11b, 1Mbps

Channel 1

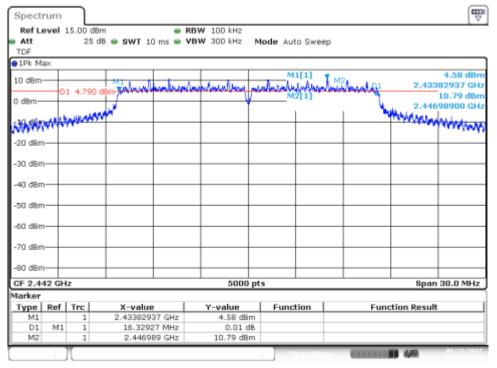


Date: 31.MAY.2017 15:25:22



SISO-A, 802.11g, 6Mbps

Channel 7

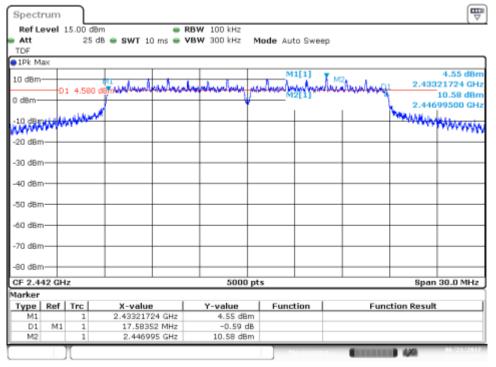


Date: 31.MAY.2017 16:23:36



SISO-B, 802.11n20, HT0

Channel 7

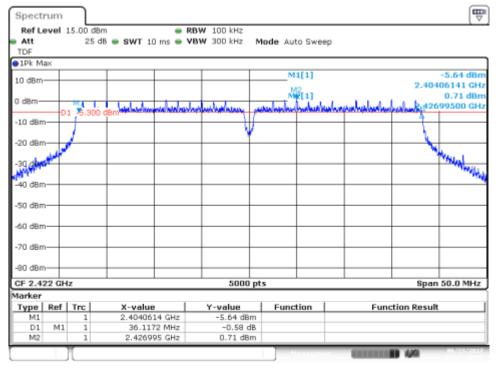


Date: 23 JUN 2017 12 14 23



SISO-B, 802.11n40, HT0

Channel 3F

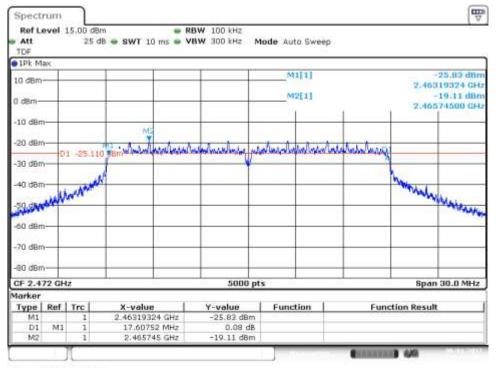


Date: 23 JUN 2017 13:27:20



MIMO-B, 802.11n20, HT8

Channel 13

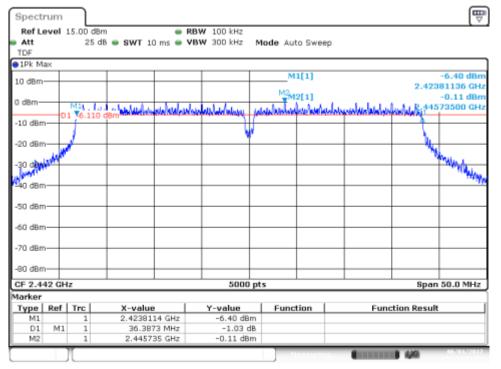


Date: 1.JUN2017 13 19:34



MIMO-B, 802.11n40, HT8

Channel 7F



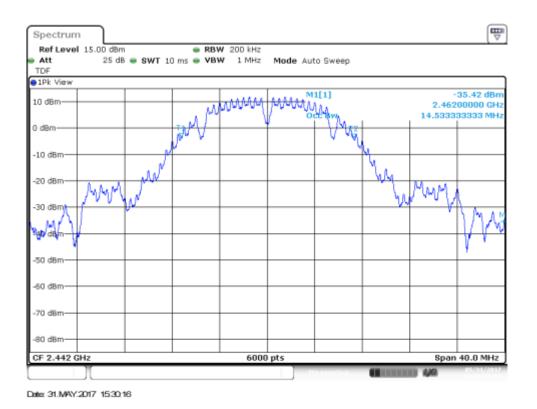
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B.3.2 99% Bandwidth

SISO-A, 802.11b, 1Mbps

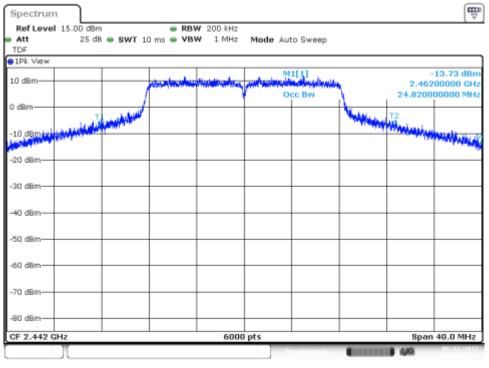
Channel 7





SISO-A, 802.11g, 6Mbps

Channel 7

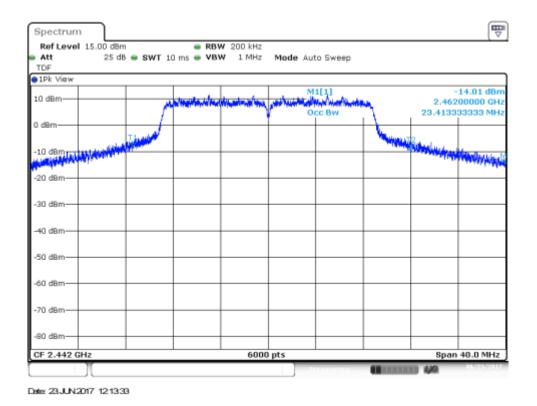


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SISO-B, 802.11n20, HT0

Channel 7

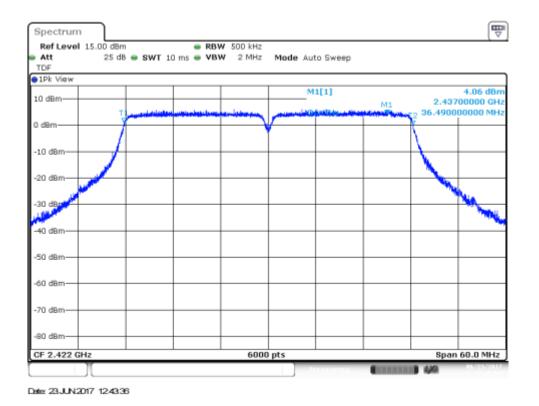


FO-046 RF FCC-IC WLAN DTS BLE Test Report_170524



SISO-A, 802.11n40, HT0

Channel 3F

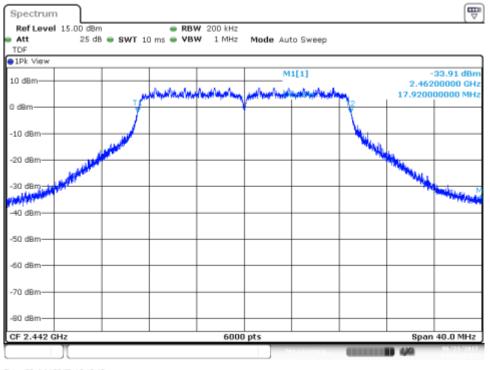


FO-046 RF FCC-IC WLAN DTS BLE Test Report_170524



MIMO-A, 802.11n20, HT8

Channel 7

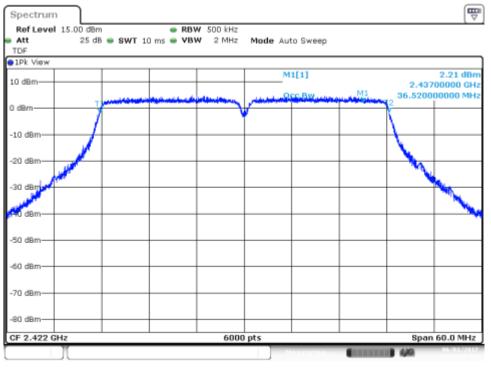


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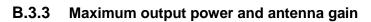


MIMO-A, 802.11n40, HT8

Channel 3F



Date: 1.JUN2017 15:18:26





B Spectrum RBW 1 MHz Ref Level 15.00 dBm Att 25 dB 👄 SWT 20 ms 👄 VBW 3 MHz Mode Auto Sweep TDF 1Pk Max 10 dBm 0 d8m TX1 -10 dBm--20 dBm -30 dBm-40 dBm -50 dBm -60 dBm -70 dBm -80 dBm Span 29.6 MHz CF 2.442 GHz 1000 pts Channel Power

Power 24.00 dBm

Tx Total 24.00 dBm

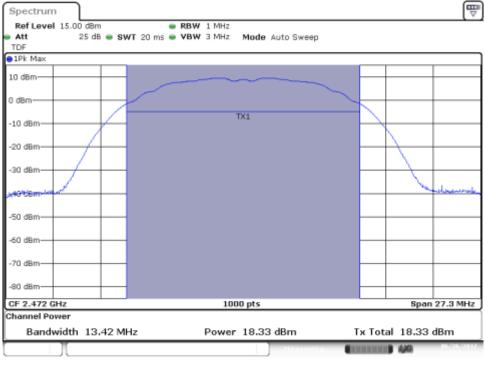
1,00

Date: 31.MAY.2017 15:30.45

Bandwidth 14.53 MHz

Channel 13

Channel 7



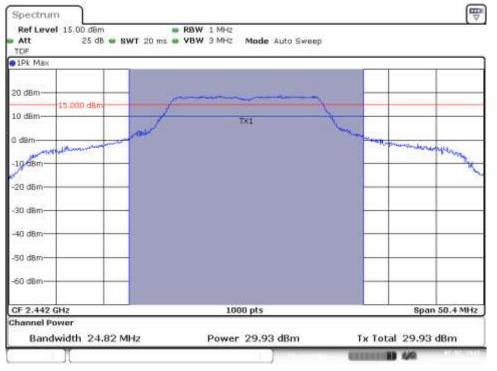
Date: 26JUN2017 11:50:55





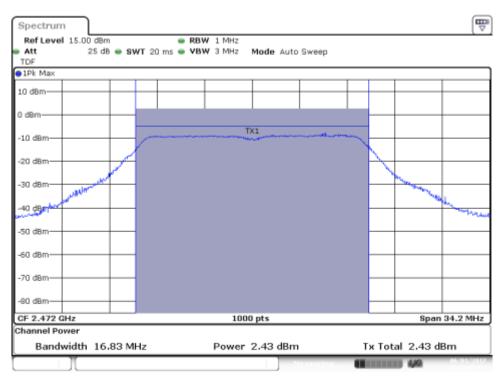
SISO-A, 802.11g, 6Mbps

Channel 7



Date: 7.J.L.2017 12:51:30





SISO-B, 802.11g, 6Mbps

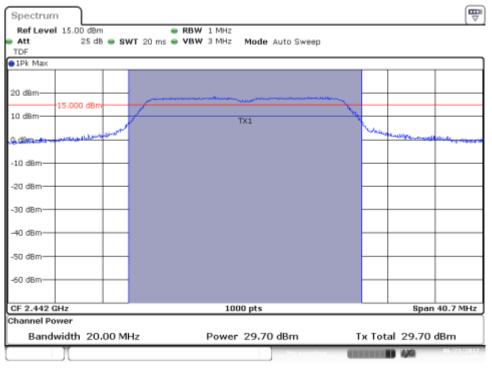
Channel 13

Date: 1.JUN2017 12:22:16



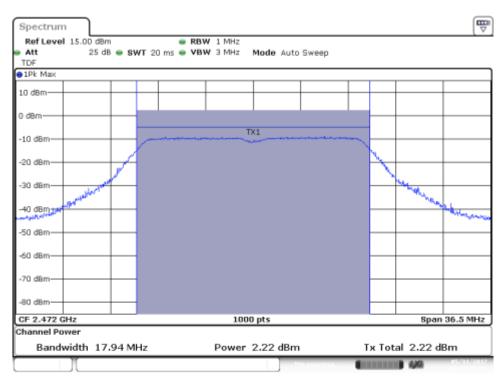
SISO-B, 802.11n20, HT0

Channel 7



Date: 23.JUN 2017 15:51:36



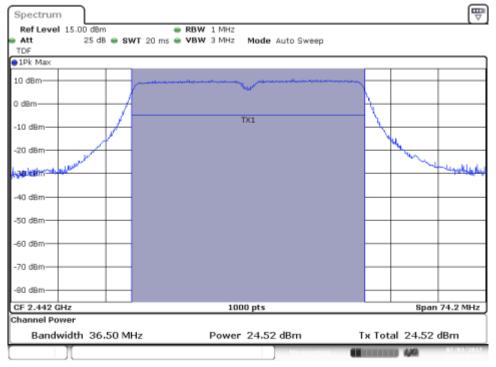


Date: 31.MAY.2017 18:19:15

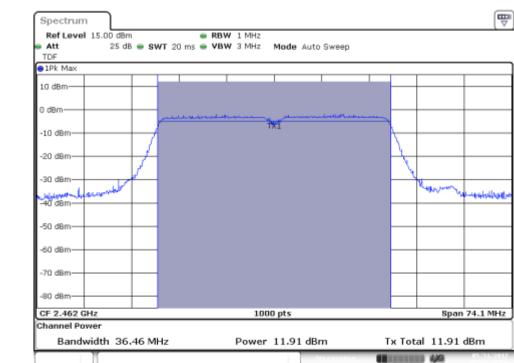


SISO-A, 802.11n40, HT0

Channel 7F



Date: 3.J.L.2017 13:37:36



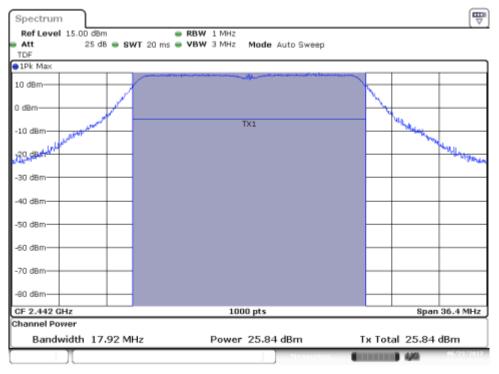
Channel 11F

Date: 31.MAY.2017 19:03:34



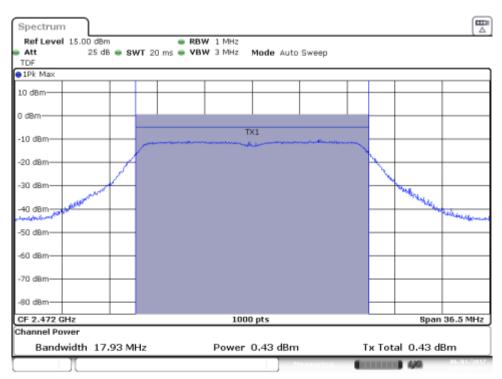
MIMO-A, 802.11n20, HT8

Channel 7



Date: 23JUN2017 16:10:49



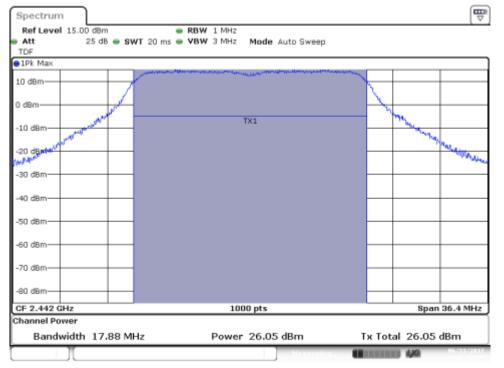


Date: 1.JUN2017 185453



MIMO-B, 802.11n20, HT8

Channel 7



Date: 23 JUN 2017 16:01:10



B Spectrum Ref Level 15.00 dBm RBW 1 MHz Att 25 dB 🖷 SWT 20 ms 🖷 VBW 3 MHz Mode Auto Sweep TDF 1Pk Max 10 dBm 0 d8m TX1 -10 dBm -20 dBm--30 dBm ashe -40 dBm--50 dBm -60 dBm -70 dBm -80 dBm-CF 2.442 GHz 1000 pts Span 74.2 MHz **Channel Power** Bandwidth 36.51 MHz Power 23.00 dBm Tx Total 23.00 dBm 40

MIMO-A, 802.11n40, HT8

Channel 7F

Date: 1.JUN2017 153452



₿ Spectrum Ref Level 15.00 dBm RBW 1 MHz Att 25 dB 🖷 SWT 20 ms 🖷 VBW 3 MHz Mode Auto Sweep TDF 1Pk Max 10 dBm 0 d8m TX1 -10 dBm -20 dBm--30 dBm als. -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm-CF 2.442 GHz 1000 pts Span 73.8 MHz **Channel Power** Bandwidth 36.33 MHz Power 23.17 dBm Tx Total 23.17 dBm III 449

MIMO-B, 802.11n40, HT8

Channel 7F

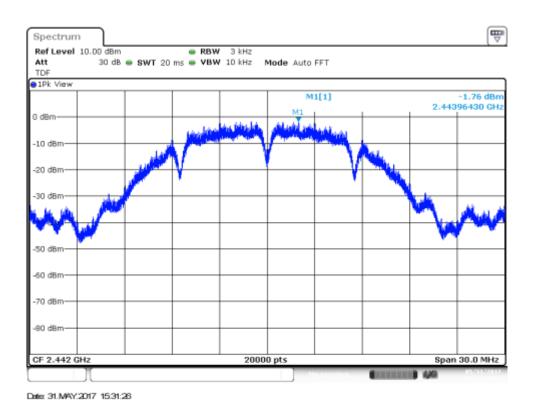
Date: 1.JUN2017 133302



B.3.4 Power spectral density

SISO-A, 802.11b, 1Mbps

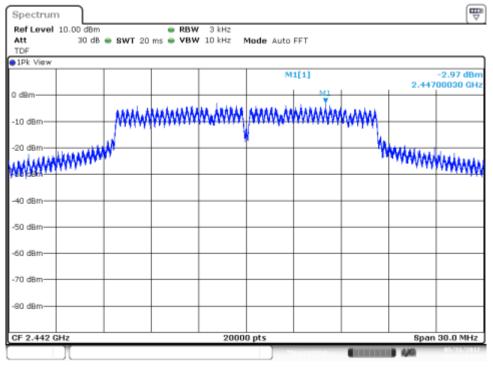
Channel 7





SISO-B, 802.11g, 6Mbps

Channel 7

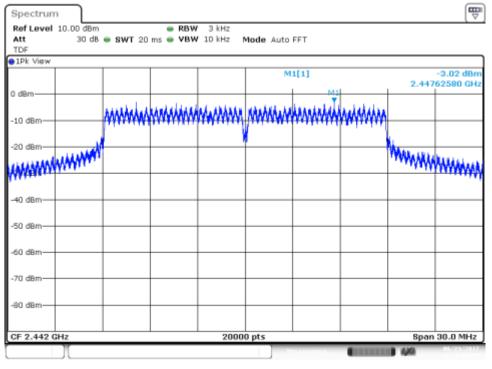


Date: 31.MAY.2017 10:53:27



SISO-B, 802.11n20, HT0

Channel 7

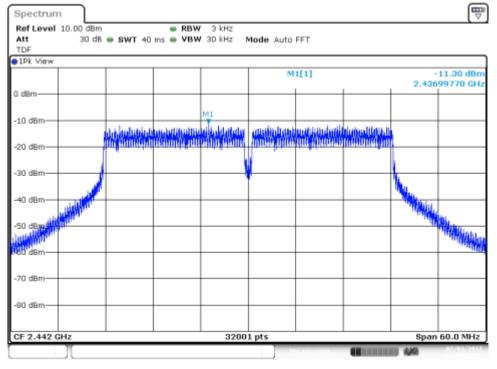


Date: 23 JUN 2017 12 14 42



SISO-A, 802.11n40, HT0

Channel 7F

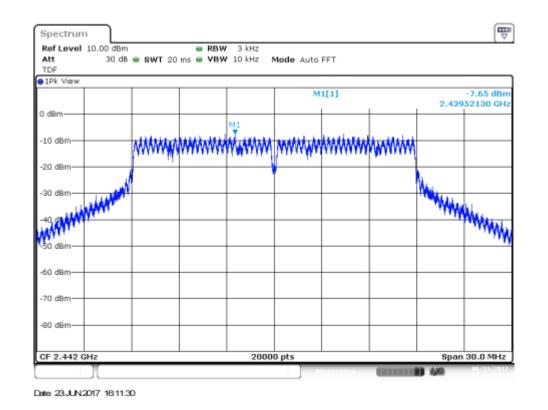


Date: 3JUL 2017 13:39:16



MIMO-A, 802.11n20, HT8

Channel 7

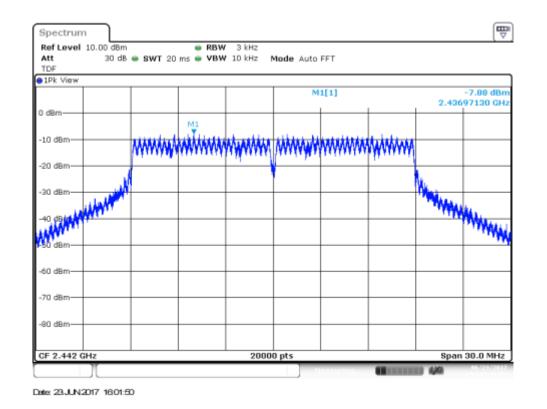


FO-046 RF FCC-IC WLAN DTS BLE Test Report_170524



МІМО-В, 802.11n20, НТ8

Channel 7

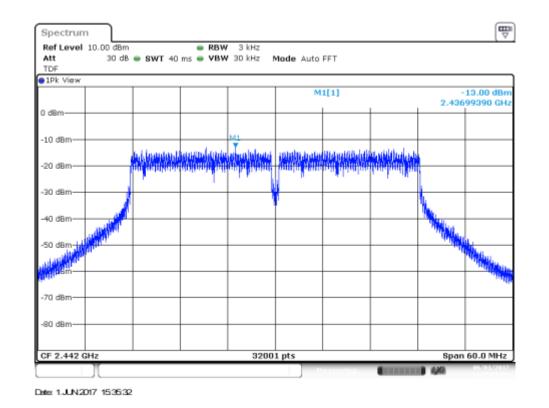


FO-046 RF FCC-IC WLAN DTS BLE Test Report_170524



MIMO-A, 802.11n40, HT8

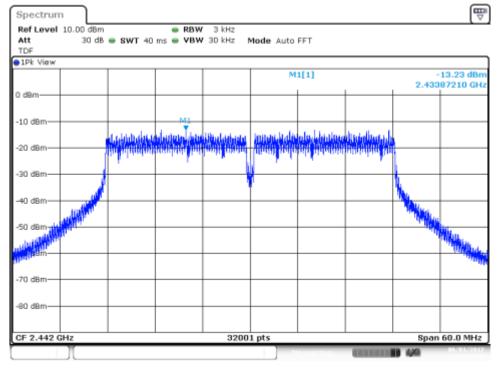
Channel 7F





MIMO-B, 802.11n40, HT8

Channel 7F



Date: 1.JUN2017 133342

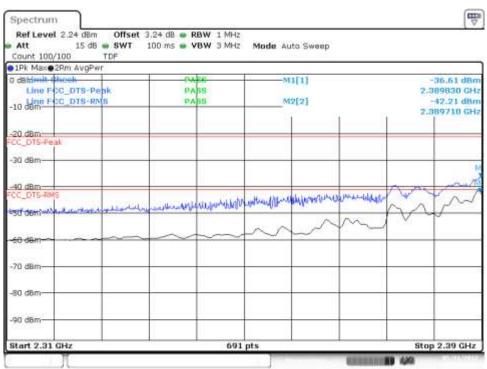


B.3.5 Out of band emissions - band-edge low (conducted)



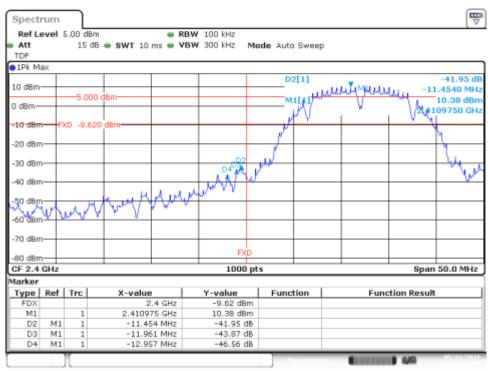
Channel 1

BE Low Freq Section



Date: 31.MAY.2017 15:22:47

BE Low (Non Restricted)



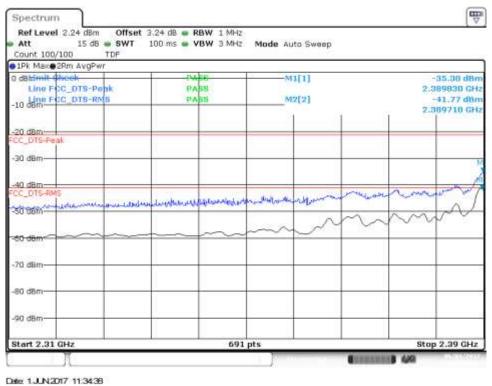
Date: 31.MAY.2017 19.15.17



SISO-B, 802.11b, 1Mbps

Channel 1

BE Low Freq Section



BE Low (Non Restricted)

÷ Spectrum Ref Level 5.00 dBm RBW 100 kHz Att 15 dB 🖷 SWT 10 ms 🖷 VBW 300 kHz Mode Auto Sweep TDF 1Pk Max M1[1] 10.45 dBr 10 dBm MMM MARY 2.4139750 GH 5.000 dBm D2[1 -39.28 dB 0 d8m 44.5040 MH XD -9.550 -10 dB -20 dBm M -30 dBm W 40 dBm NW -50 dBr м -60 dBm -70 dBm EXD -80 dBm 1000 pts CF 2.4 GHz Span 50.0 MHz Marker Type Ref Trc Y-value X-value Function Function Result 2.4 GHz 9.55 dBm Μ1 2.413975 GHz 10.45 dBm D2 M1 -14.504 MHz -14.988 MHz -39.28 dB -41.38 dB M1 D3 D4 M1 -16.965 MHz -42.02 dB 440

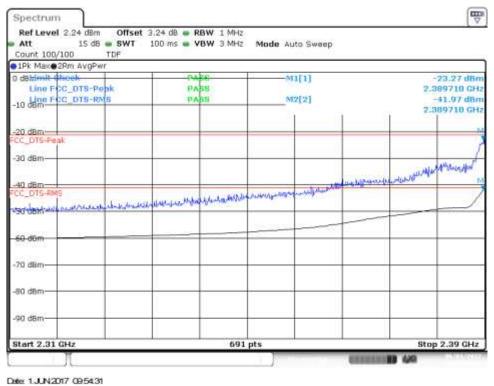
Date: 1.JUN2017 11:38:46



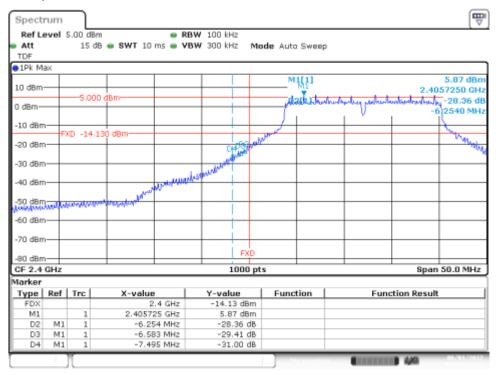
SISO-A, 802.11g, 6Mbps

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



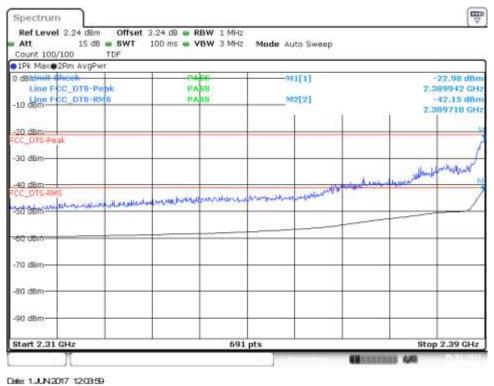
Date: 1.JUN2017 09:58:42



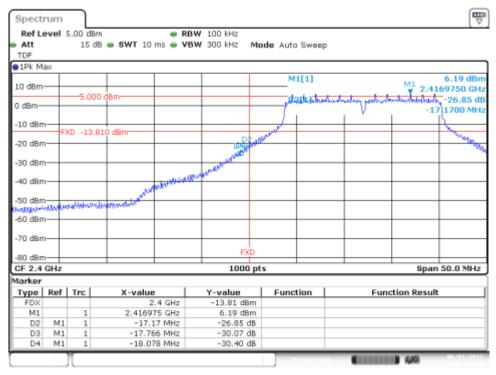
SISO-B, 802.11g, 6Mbps

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



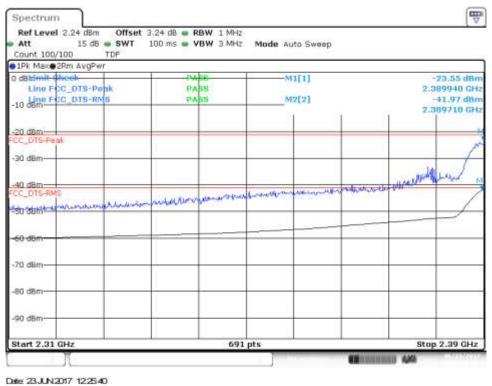
Date: 1.JUN2017 120814



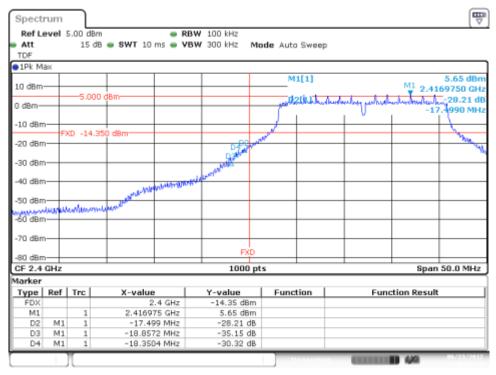
SISO-A, 802.11n20, HT0

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



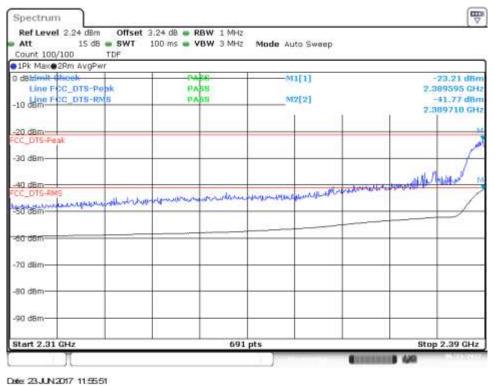
Date: 23JUN2017 122815



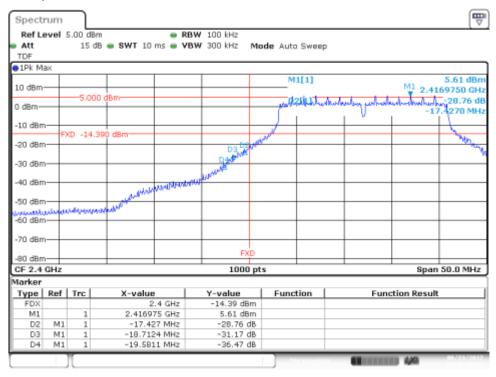
SISO-B, 802.11n20, HT0

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



Date: 23JUN2017 11:5848



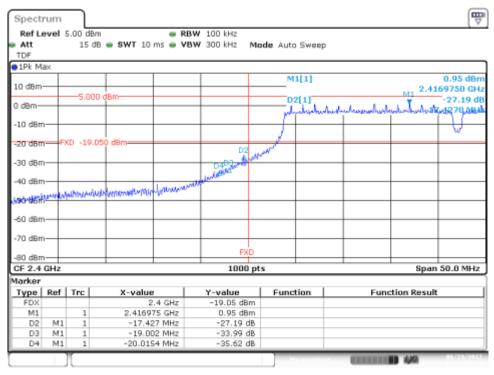
SISO-A, 802.11n40, HT0

Channel 3F

BE Low Freq Section



BE Low (Non Restricted)



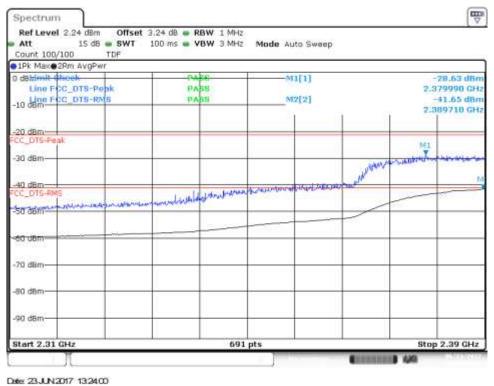
Date: 23JUN2017 124208



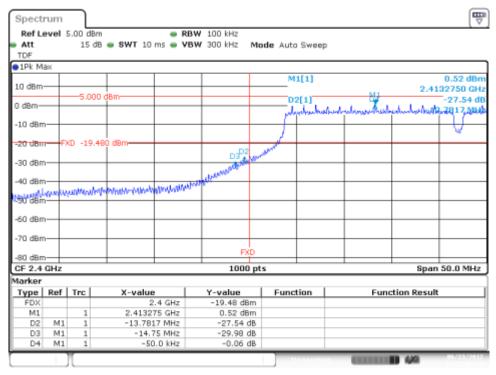
SISO-B, 802.11n40, HT0

Channel 3F

BE Low Freq Section



BE Low (Non Restricted)



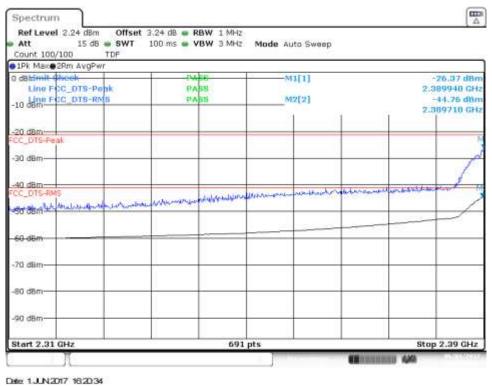
Date: 23JUN2017 132542



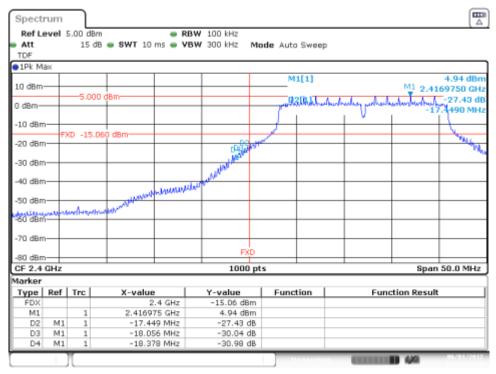
MIMO-A, 802.11n20, HT8

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



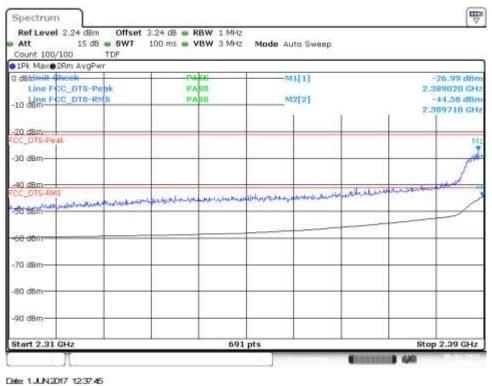
Date: 1.JUN2017 16:22:33



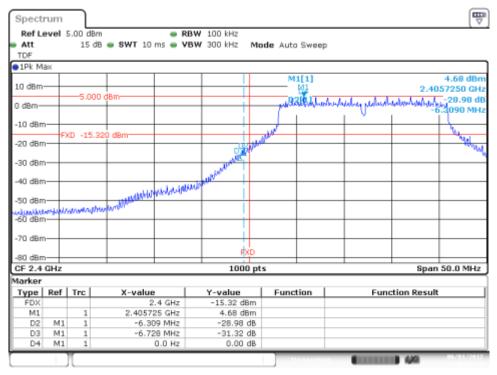
MIMO-B, 802.11n20, HT8

Channel 1

BE Low Freq Section



BE Low (Non Restricted)



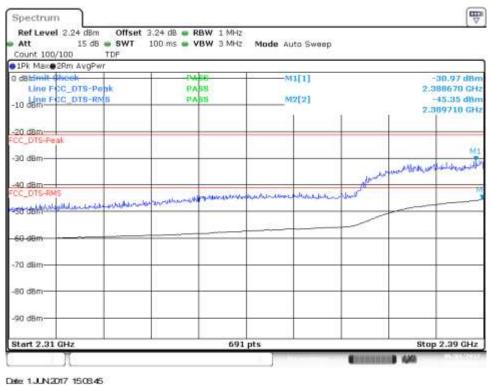
Date: 1.JUN2017 1240.17



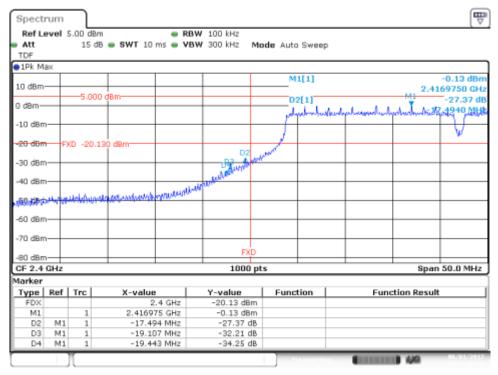
MIMO-A, 802.11n40, HT8

Channel 3F

BE Low Freq Section



BE Low (Non Restricted)



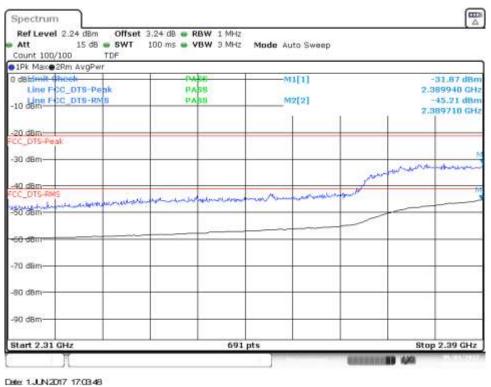
Date: 1.JUN2017 15:13:10



MIMO-B, 802.11n40, HT8

Channel 3F

BE Low (Non Restricted)



Channel 3F BE Low Freq Section

Ret I	evel	5.00 dBm	1	RB	W 100 kHz				
Att	ever					de Auto Sweep			
TDF		20 00				de Auto Sweet	*		
1Pk M	lax								
						M1[1]			-1.05 dB
10 dBm	-+							2.4	169750 G
		5.000	dBm			D2[1]		M1	-27.92
) d8m-						فيلهلهم	had patrices	intertation in	17,2040 M
10 dBr	n —		-						Th M
									w .
20 dBr		XD -21.0	50 d8m				_		
			1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	p.M."			
30 dBr	n				Aug the				
30 dBr 40 dBr	n				mundmana				
-30 dBr -40 dBr	n			لا بر بر ا	Whoman Andreas				
30 dBr 40 dBr	n n	walacised	and the second	hamppented	un horange and a state of the s				
30 dBr 40 dBr	n n bjesnev	walanini	allahadhini qirir	harmonented	un hanna an				
30 dBn 40 dBn 30 dB n 60 dBn	ո ո իչեփրա ո	wahasasa	(Databini qisto	hampoorted	un waren de la companya de la compan				
30 dBn 40 dBn 50 dBn 60 dBn	n n j.j	w.,Napipiti	allaholisini qistis	harmonant	and the second s				
30 dBn 40 dBn 50 dBn 60 dBn 70 dBn	n n hjestare n n	ر بر	allaholisatejinin	harmonanta					
70 dBr	n	ավերերծ	(Clabo ^d ited qinite	harmonia	P FXD				
30 dBn 40 dBn 60 dBn 70 dBn 80 dBn CF 2.4	n	ر بر	and	hadrooparte				Spe	an 50.0 MH
-70 dBr -80 dBr CF 2.4	n n GHz	ավերերո	and and a second se	haumonanta	FXD			Spe	an 50.0 MH
70 dBr 80 dBr 2F 2.4 larker	n GHz		X-valu		FXD		Ft	Spe unction Resu	
30 dBr 30 dBr CF 2.4 larker	n GHz				FXD 1000 pt:	5	Fi		
70 dBr 80 dBr CF 2.4 Iarker Type	n GHz	Trc	X-valu	Je	FXD 1000 pt: Y-value -21.05 dBm -1.05 dBm	5	F		
70 dBr 80 dBr CF 2.4 larker Type FDX M1 D2	n GHz Ref	Trc 1 1	X-valu 2.416 -17.3	2.4 GHz 975 GHz 204 MHz	FXD 1000 pt: -21.05 dBm -1.05 dBm -27.92 dB	5	Ft		
70 dBr 80 dBr CF 2.4 larker Type FDX M1	GHz	Trc	X-valu 2.416 -17.: -17.:	2.4 GHz 975 GHz	FXD 1000 pt: Y-value -21.05 dBm -1.05 dBm	5	F		an 50.0 MH

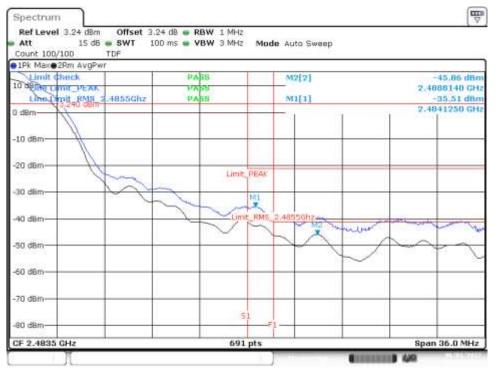
Date: 1.JUN2017 17:02:24



B.3.6 Out of band emissions - band-edge high (conducted)

SISO-A, 802.11b, 1Mbps





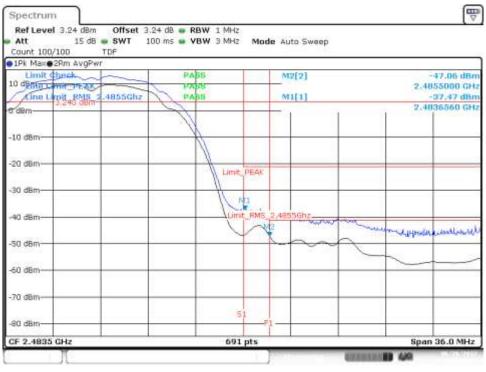
Date: 1.JUN2017 09:37:31

Channel 12 - BE High Freq Section (restricted)



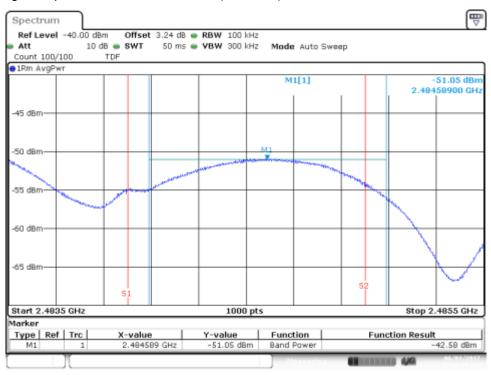


Channel 13 - BE High Freq Section (restricted)



Date: 26 JUN 2017 11:48:26

Channel 11 - BE High Freq Section RMS within 2MHz (restricted)

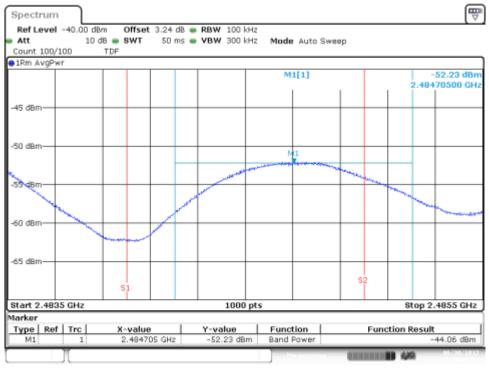


Date: 1.JUN2017 09:36:30



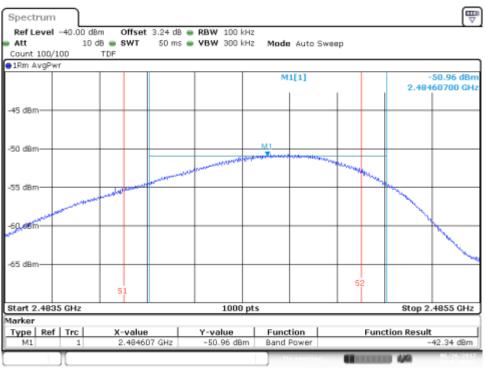


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 30.JUN2017 12.48.04

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

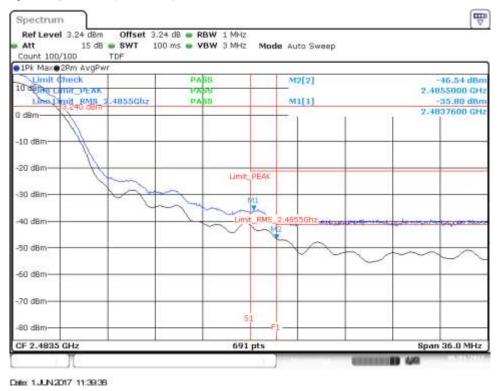


Date: 26JUN2017 11:4648

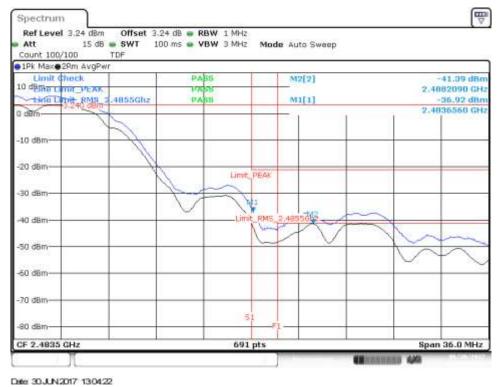


SISO-B, 802.11b, 1Mbps

Channel 11 - BE High Freq Section (restricted)



Channel 12 - BE High Freq Section (restricted)



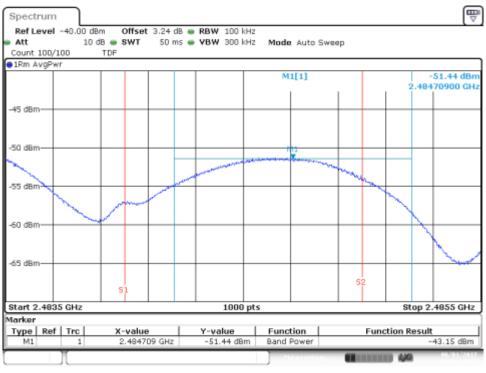


Channel 13 - BE High Freq Section (restricted)



Date: 26 JUN 2017 12 12 23

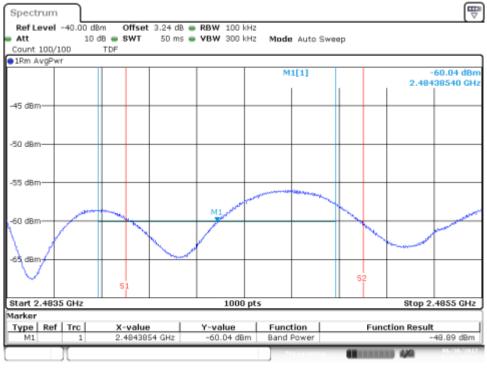
Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 11:38:23

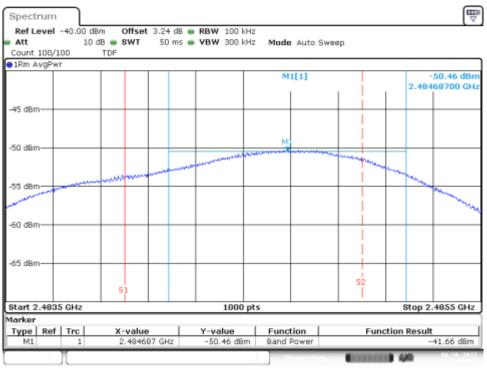


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 30.JUN2017 13/08/52

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)



Date: 26JUN2017 1211:56



SISO-A, 802.11g, 6Mbps

Channel 11 - BE High Freq Section (restricted)

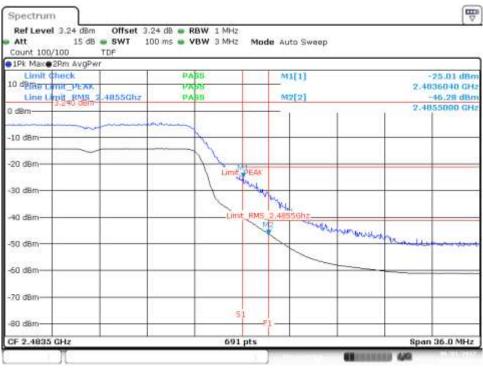


Channel 12 - BE High Freq Section (restricted)



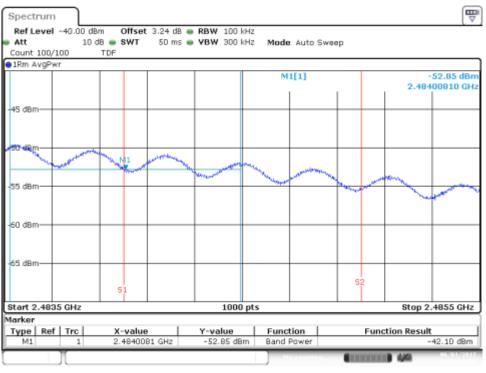


Channel 13 - BE High Freq Section (restricted)



Date: 1.JUN2017 10:31:12

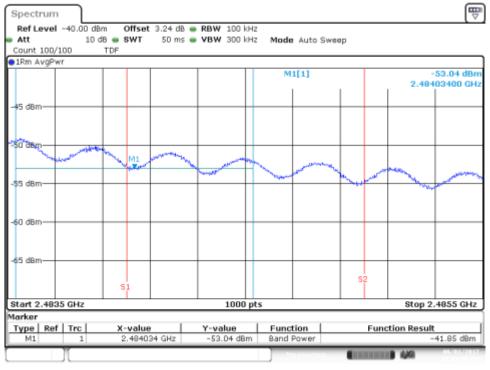
Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 09:59:44

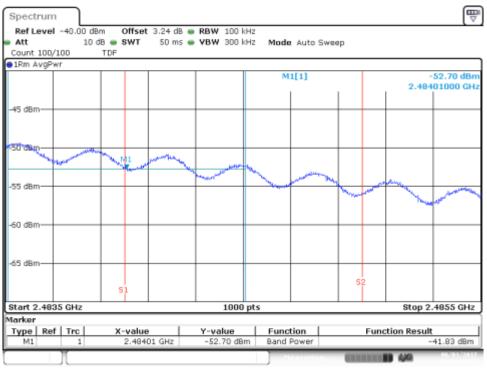


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 10:05:48

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

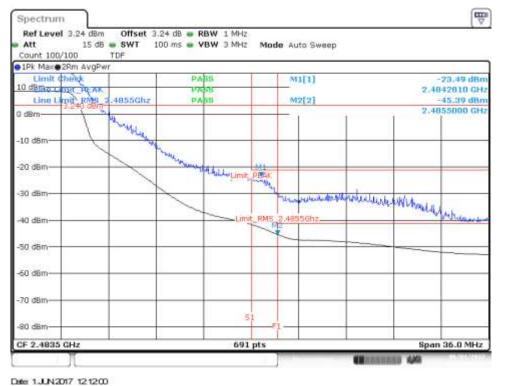


Date: 1.JUN2017 10:30:37

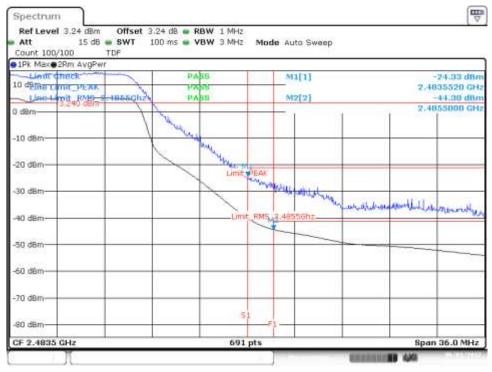


SISO-B, 802.11g, 6Mbps

Channel 11 - BE High Freq Section (restricted)



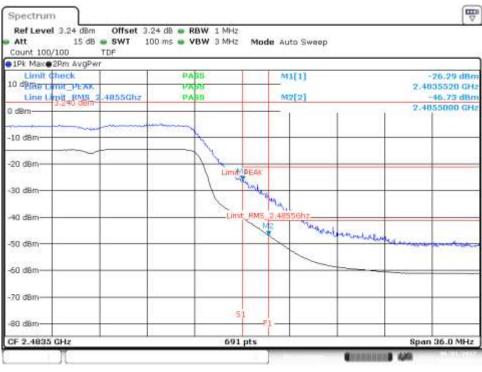




Date: 1.JUN2017 121822

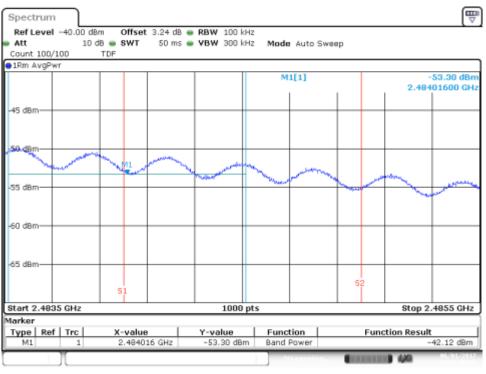


Channel 13 - BE High Freq Section (restricted)



Date: 1.JUN2017 12:20:51

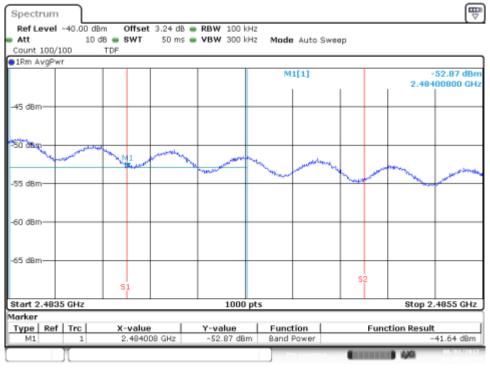
Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 12:11:29

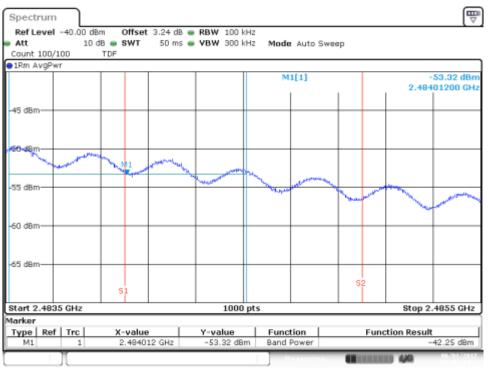


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 12:17:49

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

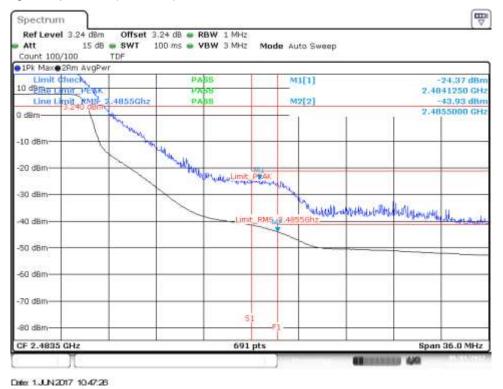


Date: 1.JUN2017 12:20:20

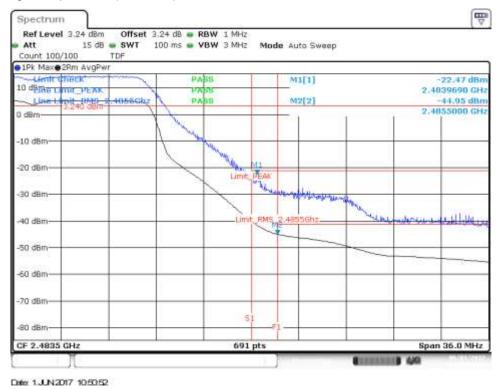


SISO-A, 802.11n20, HT0

Channel 11 - BE High Freq Section (restricted)



Channel 12 - BE High Freq Section (restricted)



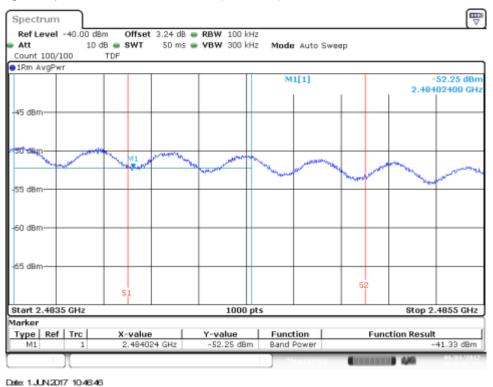


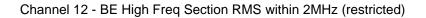
Channel 13 - BE High Freq Section (restricted)



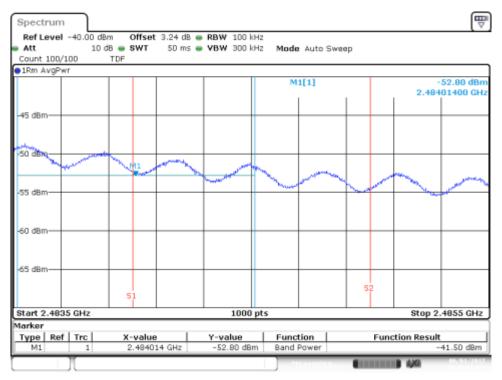
Date: 1.JUN2017 10:52:57

Channel 11 - BE High Freq Section RMS within 2MHz (restricted)







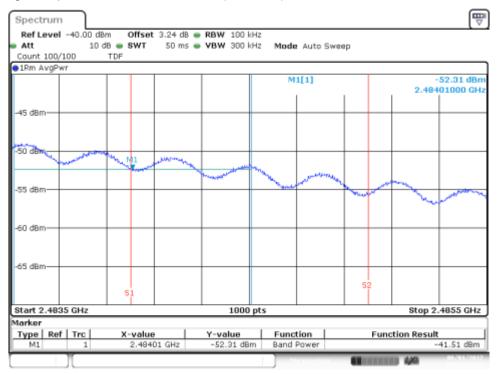


Date: 1.JUN2017 10.49.59





Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

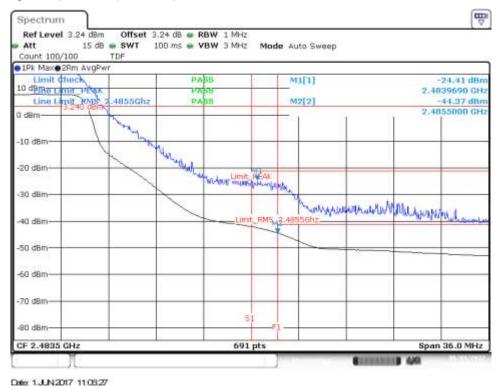


Date: 1.JUN2017 10:52:24

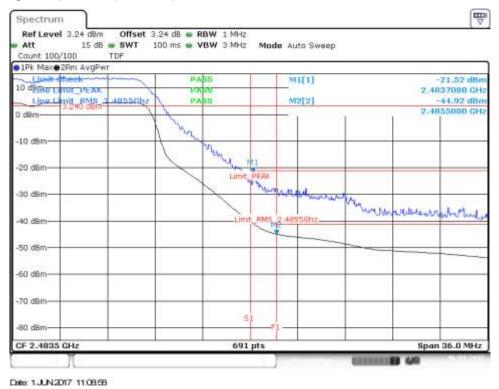


SISO-B, 802.11n20, HT0

Channel 11 - BE High Freq Section (restricted)

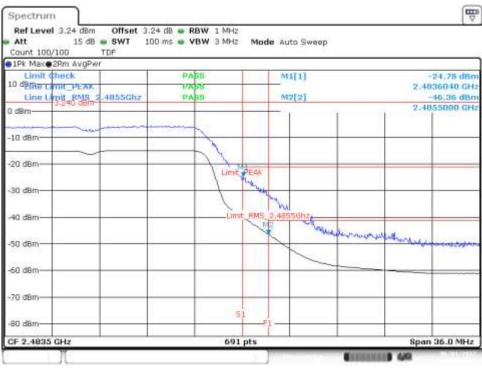


Channel 12 - BE High Freq Section (restricted)



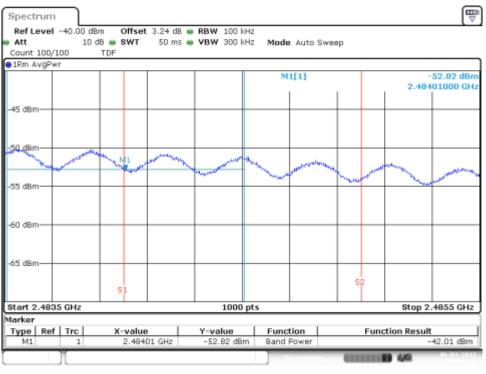


Channel 13 - BE High Freq Section (restricted)



Date: 1.JUN2017 11.01:45

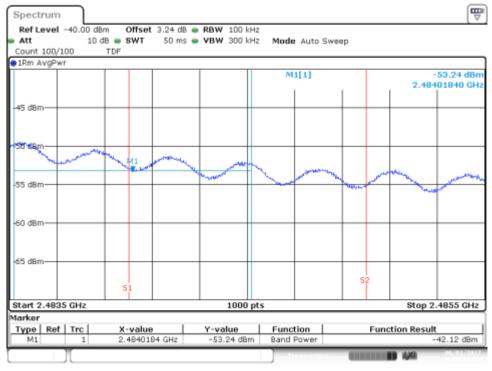
Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 11:06:55

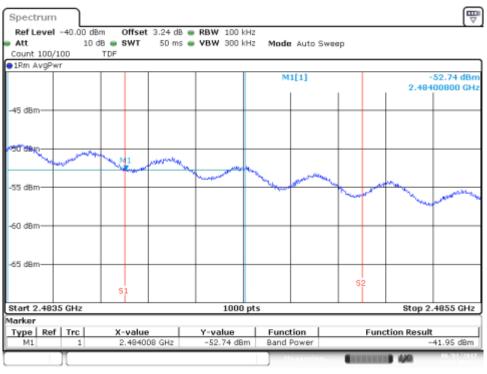


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 11:08:01

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

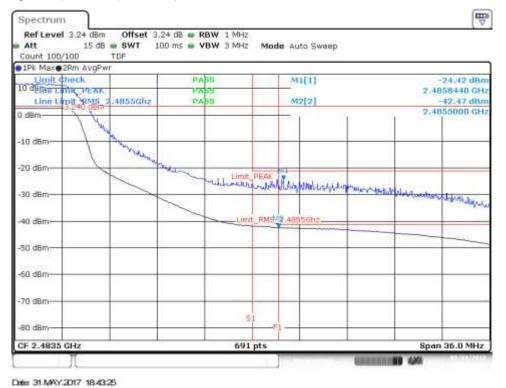


Date: 1.JUN2017 11:01:08

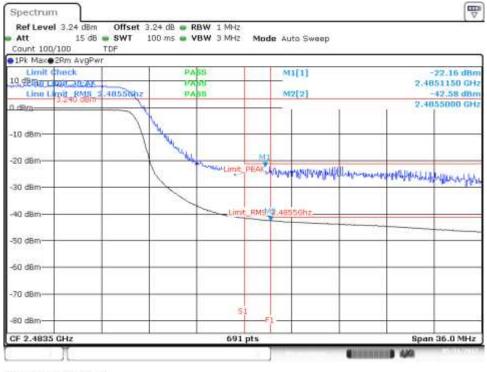


SISO-A, 802.11n40, HT0

Channel 9F - BE High Freq Section (restricted)



Channel 11F - BE High Freq Section (restricted)



Date: 31.MAY.2017 18:51.04

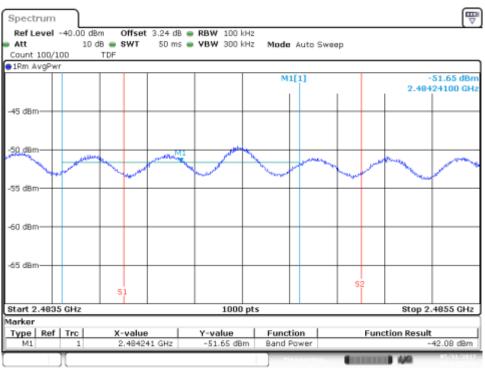


Channel 11F - BE High Freq Section (restricted)



Date: 31.MAY.2017 19:02:24

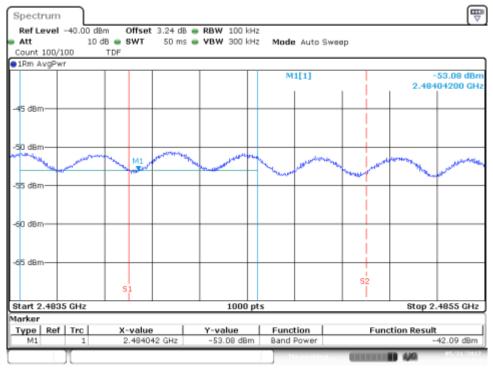
Channel 9F - BE High Freq Section RMS within 2MHz (restricted)



Date: 31.MAY.2017 18.42.52

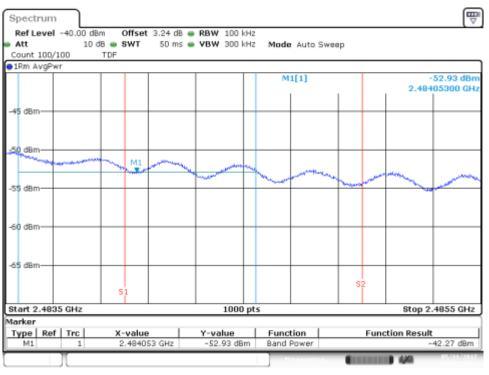


Channel 10F - BE High Freq Section RMS within 2MHz (restricted)



Date: 31.MAY.2017 18:50:26

Channel 11F - BE High Freq Section RMS within 2MHz (restricted)

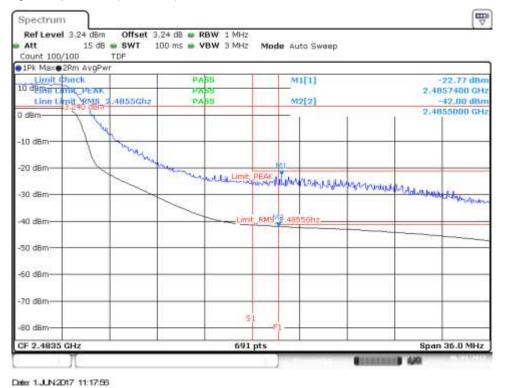


Date: 31.MAY.2017 19:01:52

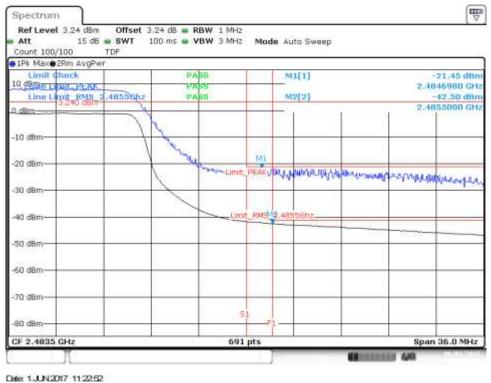


SISO-B, 802.11n40, HT0

Channel 9F - BE High Freq Section (restricted)



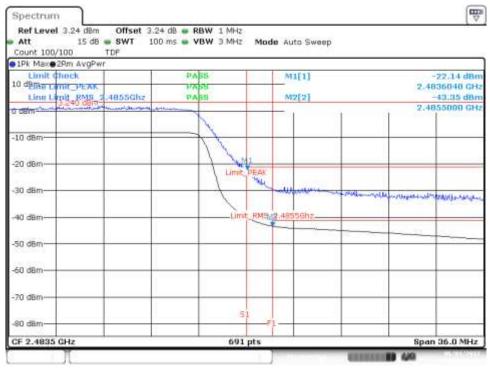
Channel 10F - BE High Freq Section (restricted)



LBB: 1.JUN2017 11:2252

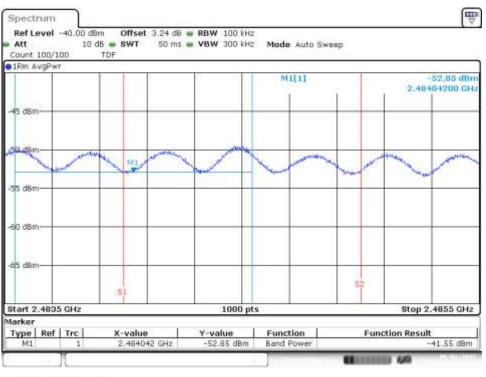


Channel 11F - BE High Freq Section (restricted)



Date: 1.JUN2017 11:28:33

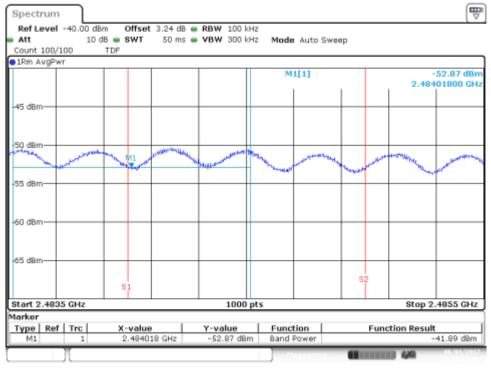
Channel 9F - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 11:17:22

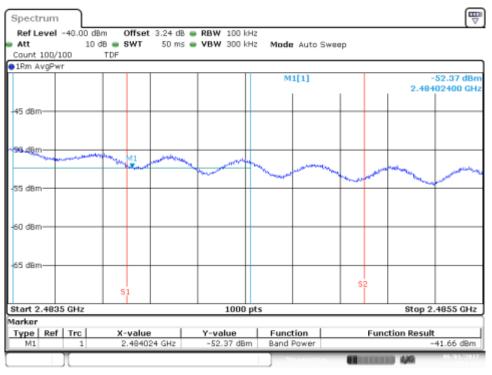


Channel 10F - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 11:20:55

Channel 11F - BE High Freq Section RMS within 2MHz (restricted)

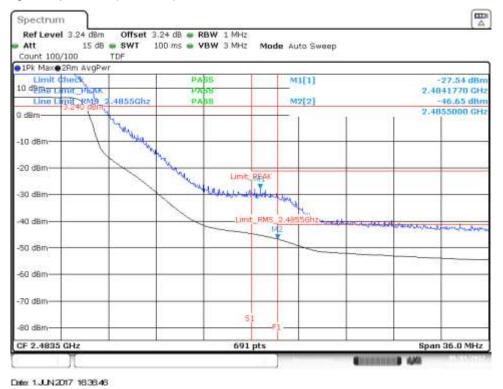


Date: 1.JUN2017 11:27:54

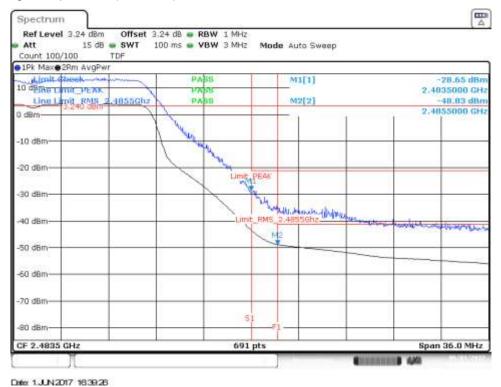


MIMO-A, 802.11n20, HT8

Channel 11 - BE High Freq Section (restricted)

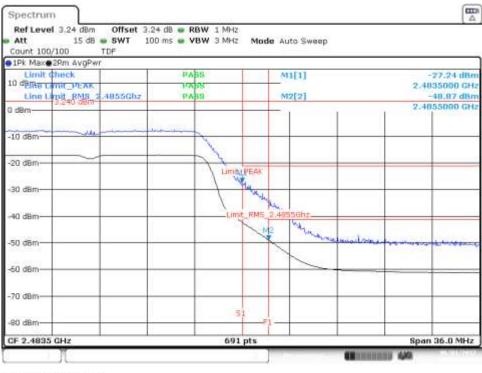


Channel 12 - BE High Freq Section (restricted)



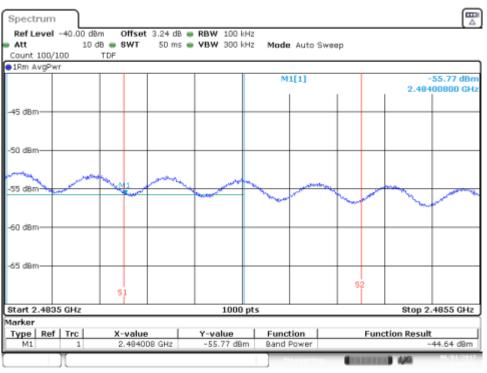


Channel 13 - BE High Freq Section (restricted)



Date: 1.JUN2017 165339

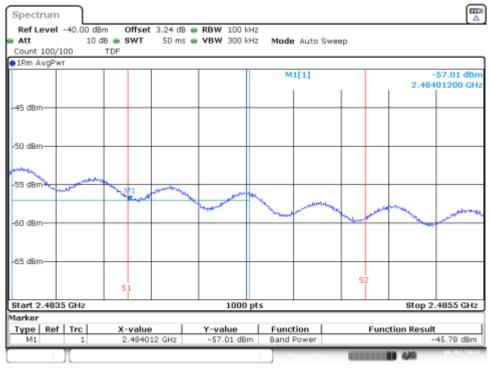
Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 163608

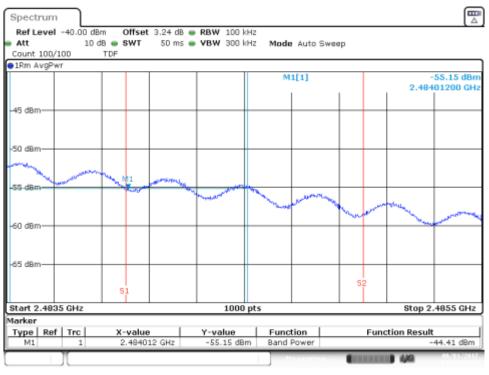


Channel 12 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 163850

Channel 13 - BE High Freq Section RMS within 2MHz (restricted)

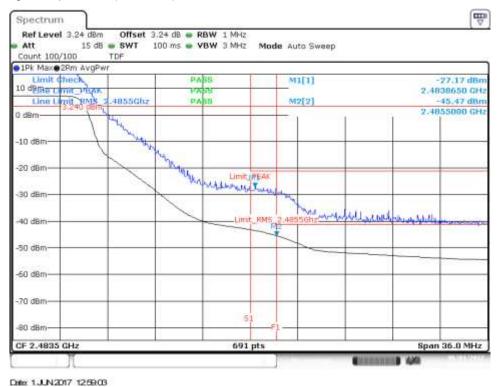


Date: 1.JUN2017 16:53:05

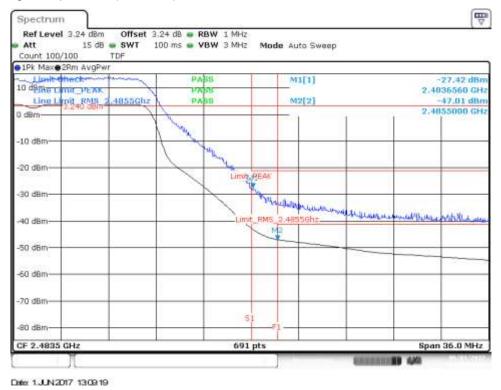


MIMO-B, 802.11n20, HT8

Channel 11 - BE High Freq Section (restricted)

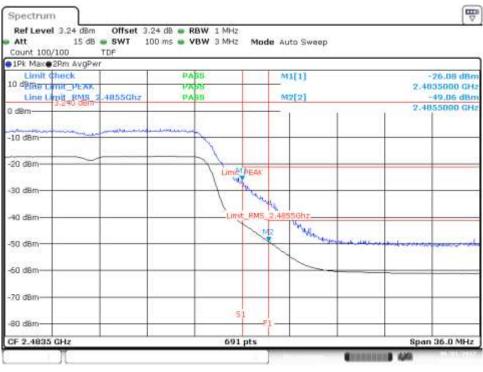


Channel 12 - BE High Freq Section (restricted)



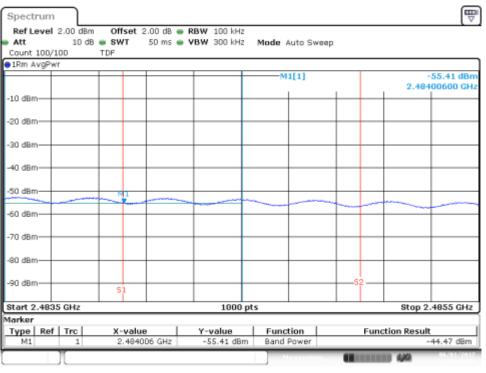


Channel 13 - BE High Freq Section (restricted)



Date: 1.JUN2017 13.18.08

Channel 11 - BE High Freq Section RMS within 2MHz (restricted)



Date: 1.JUN2017 1258.26