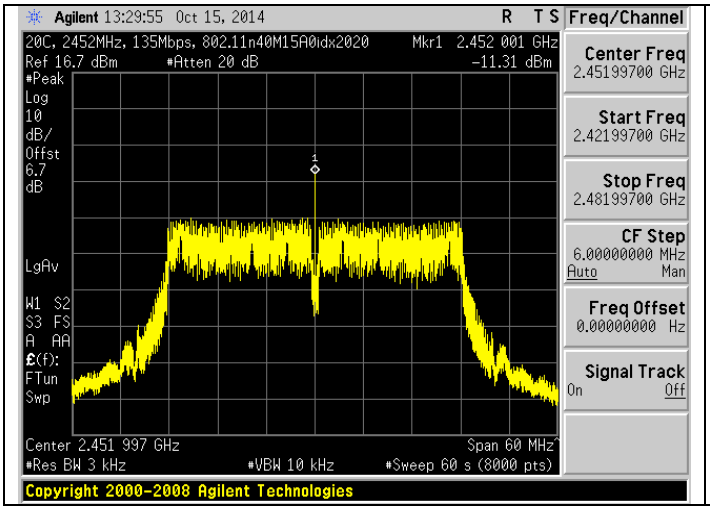
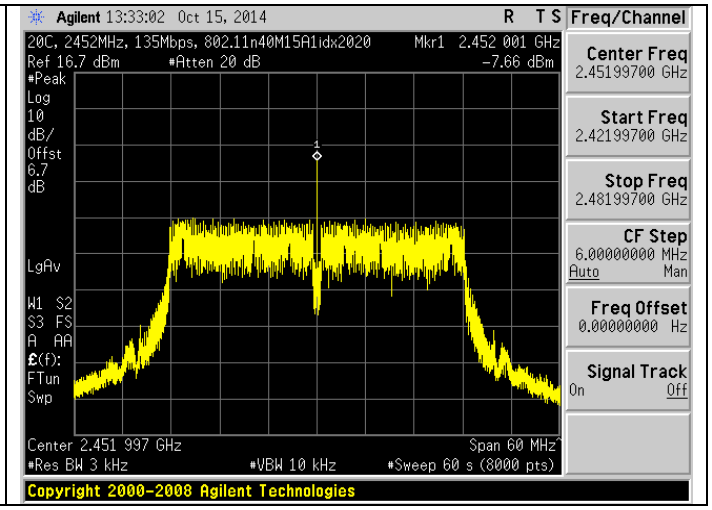




Conducted Band Edge

FCC 15.247(d); RSS-210 A8.5: 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in FCC§15.209(a) & RSS-Gen is not required.

Test Procedure

Ref. KDB 558074 DTS Meas Guidance v3.2 section 11.1(b)

Reference Level Measurement & Emission Level Measurement **Test Procedure**
1. Allow trace to fully stabilize. Use marker#1 peak search function to determine the maximum PSD level. Then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (30dBc). 2. The radio is configured in the continuous transmitting mode. The average emission levels within 2 MHz of the authorized band edge shall be measured by using the integration test parameters setting below. 3. Compute power by integrating the spectrum over 1 MHz using the spectrum analyzer's band power measurement function with the band limits set equal to the emissions frequency ±0.5 MHz. 4. Capture the transmitter waveforms on the spectrum analyzer, and record the pertinent measurements data.

Ref. KDB 558074 DTS Meas Guidance v3.2 section 11.2

Reference Level Measurement & Emission Level Measurement Test parameters
Span ≥ 1.5 times the DTS bandwidth RBW ≥ 100 kHz VBW ≥ 3 x RBW

Detector = Peak Sweep = Auto Trace Mode = Max. Hold

Ref. KDB 558074 DTS Meas Guidance v3.2 section 13.3

Integration Test parameters
Span ≥ 2 MHz RBW ≥ 100 kHz VBW ≥ 3 x RBW Detector = RMS Trace Average ≥ 100 Sweep = Auto Averaging Type = Power average (RMS) Sweep Points ≥ 2 x span/ RBW.

Recorded Test Data:

802.11b Band Edge						
Frequency (MHz)	**Data Rate (Mbps)**	**Ant. Port0 Power Level @Band Edge (dBm)**	**Ant. Port1 Power Level @Band Edge (dBm)**	**Limit -30dBc Ant. P0 / Ant. P1 (dBm)**		**Results**
Lower Band Edge Average Test Results						
2412	1	-37.73	-37.06	-23.60	-23.90	Pass
Upper Band Edge Average Test Results						
2462	1	-51.50	-52.00	-23.60	-23.5	Pass

802.11g Band Edge						
Frequency (MHz)	**Data Rate (Mbps)**	**Ant. Port0 Power Level @Band Edge (dBm)**	**Ant. Port1 Power Level @Band Edge (dBm)**	**Limit -30dBc Ant. P0 / Ant. P1 (dBm)**		**Result**
Lower Band Edge Average Test Results						
2412	1	-36.54	-35.36	-31.40	-31.00	Pass
Upper Band Edge Average Test Results						
2462	1	-48.08	-47.18	-31.50	-31.6	Pass

802.11n (HT20) Band Edge						
Frequency (MHz)	**Data Rate (Mbps)**	**Ant. Port0 Power Level @Band Edge (dBm)**	**Ant. Port1 Power Level @Band Edge (dBm)**	**Limit -30dBc Ant. P0 / Ant. P1 (dBm)**		**Result**
Lower Bandedge Average Test Results						
2412	6.5	-38.04	-37.28	-32.2	-31.6	Pass
Upper Bandedge Average Test Results						
2462	6.5	-49.97	-48.78	-33.2	-33.0	Pass
Note: correction factors (ext. attenuation + cable loss) are compensated in the offset function of the Spectrum						

Analyzer.

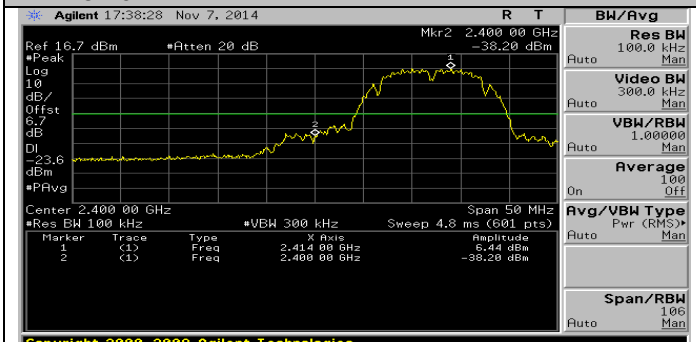
802.11n (HT40) Band Edge						
Frequency (MHz)	**Data Rate (Mbps)**	**Ant. Port0 Power Level @Band Edge (dBm)**	**Ant. Port1 Power Level @Band Edge (dBm)**	**Limit -30dBc Ant. P0 / Ant. P1 (dBm)**		**Result**
Lower Bandedge Average Test Results						
2422	13.5	-42.21	-42.28	-39.60	-38.70	Pass
Upper Bandedge Average Test Results						
2452	13.5	-49.89	-49.58	-37.10	-36.80	Pass

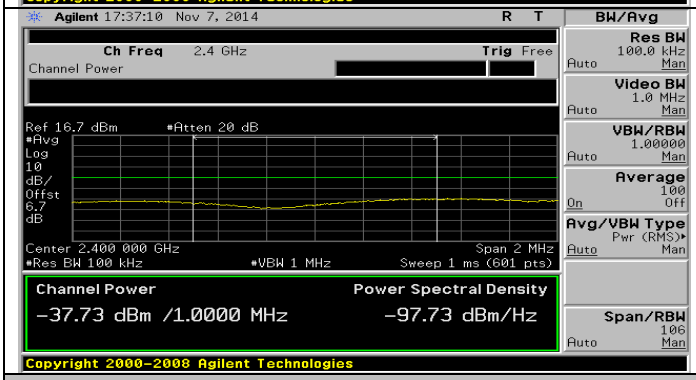
Note: correction factors (ext. attenuation + cable loss) are compensated in the offset function of the Spectrum Analyzer.

Graphical Test Results for 802.11b Mode:

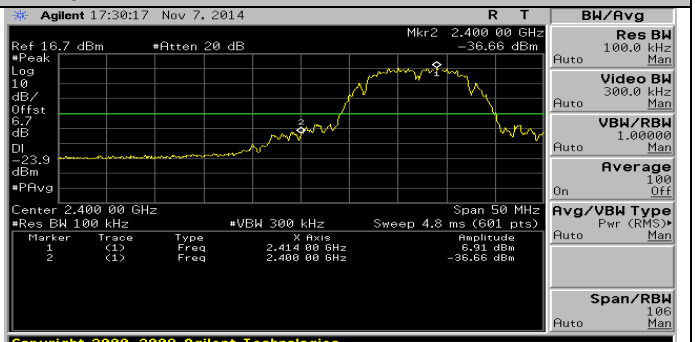
802.11b, 1Mbps — Lower Band Edge

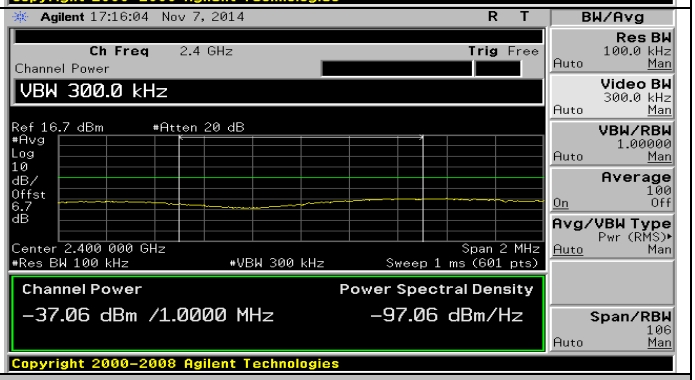
Ant.Port 0





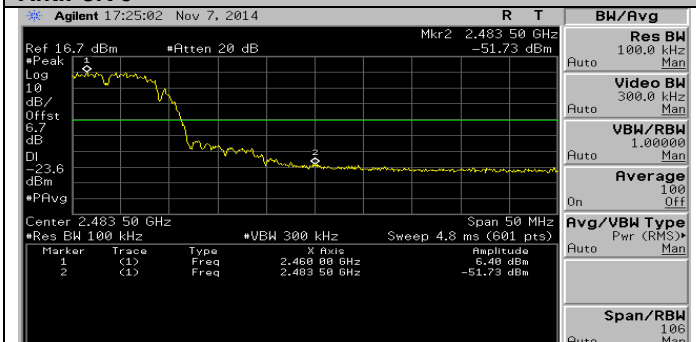
Ant.Port1

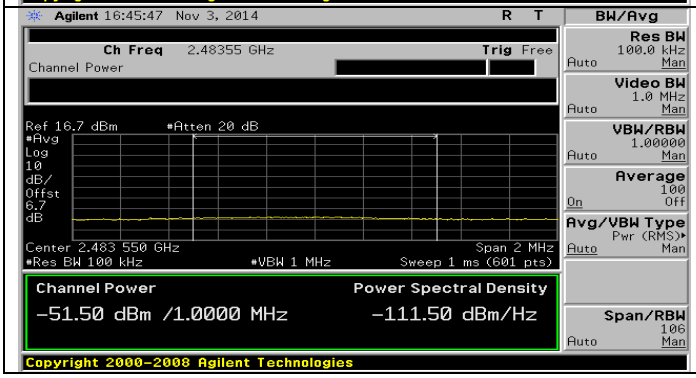




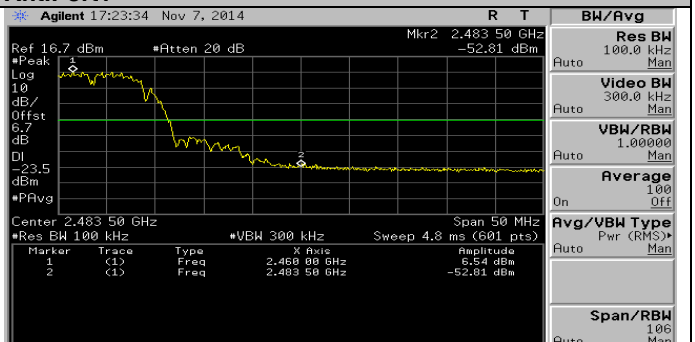
802.11b, 1Mbps — Upper Band Edge

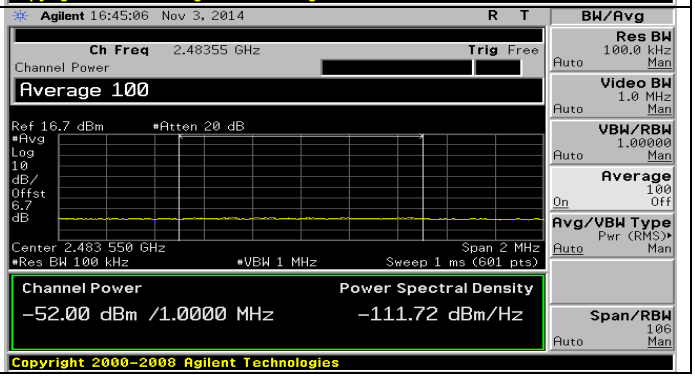
Ant.Port 0





Ant.Port1

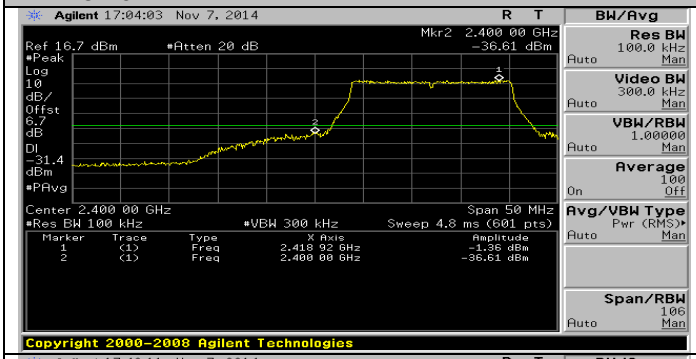


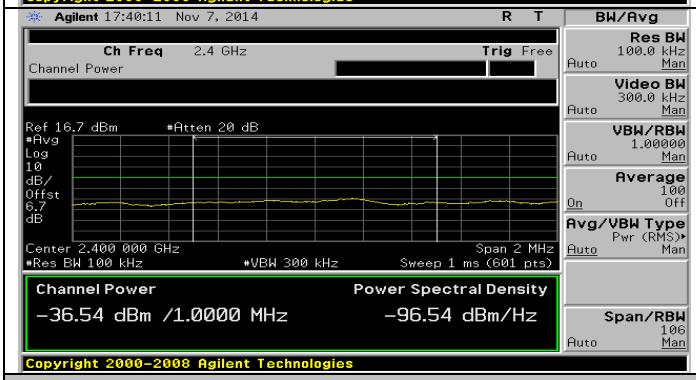


Graphical Test Results for 802.11g:

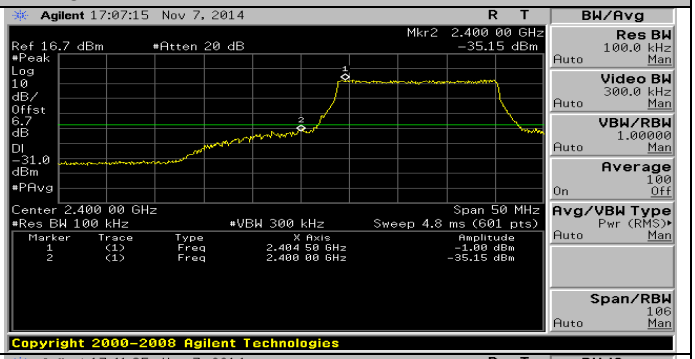
802.11g, 1Mbps — Lower Band Edge

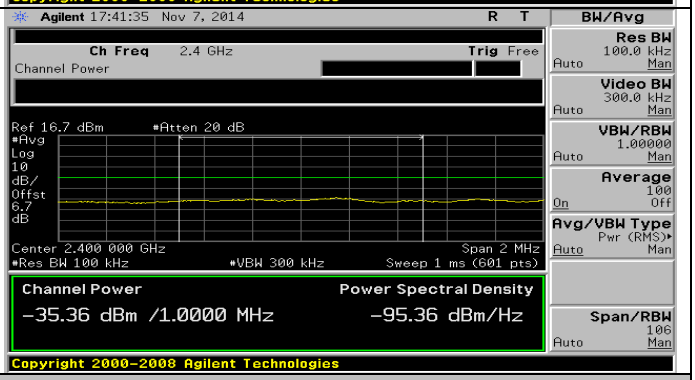
Ant.Port 0





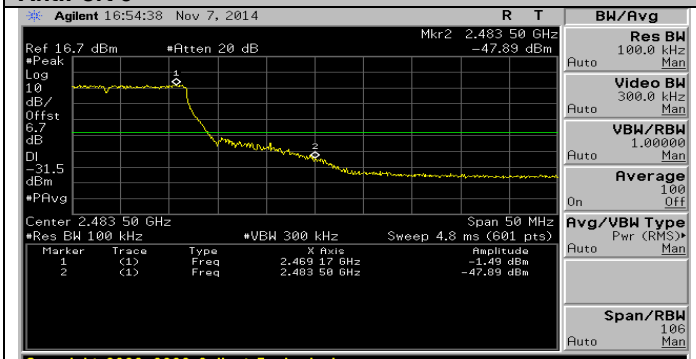
Ant.Port1

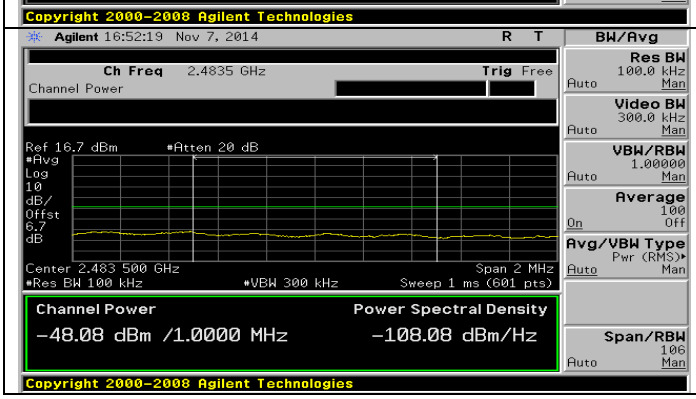




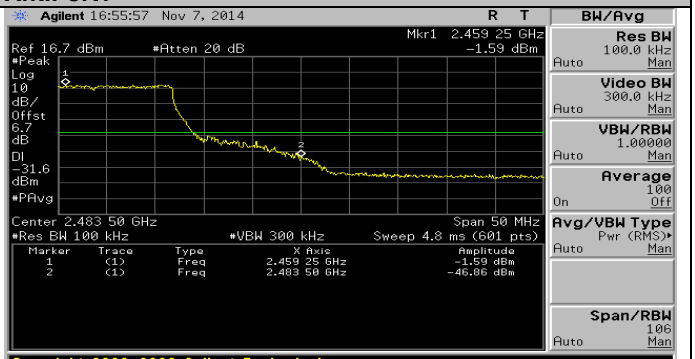
802.11g, 1Mbps — Upper Band Edge

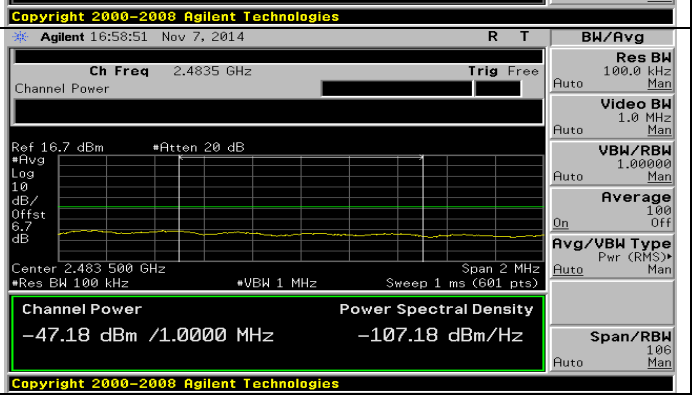
Ant.Port 0





Ant.Port1

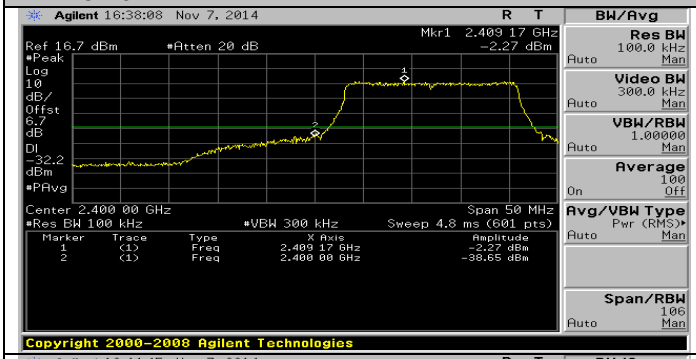


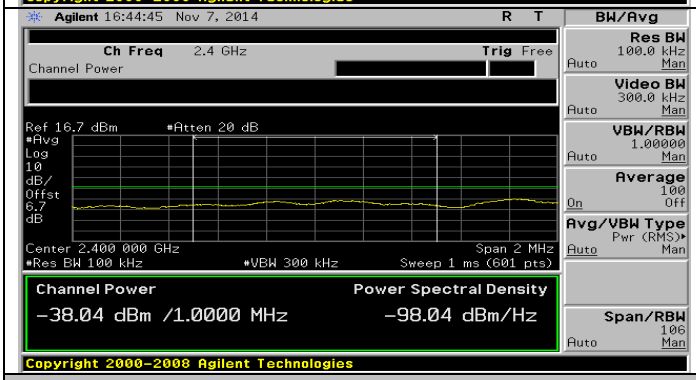


Graphical Test Results for 802.11n (HT20):

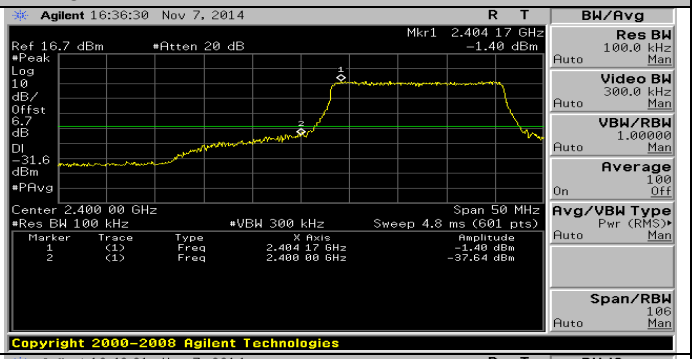
802.11n (HT20), 6.5Mbps — **Lower Band Edge**

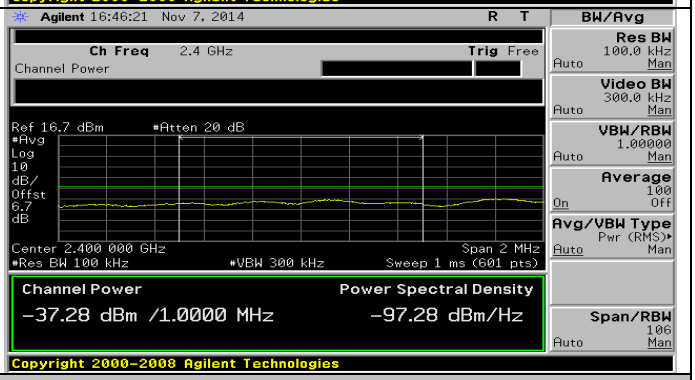
Ant.Port 0





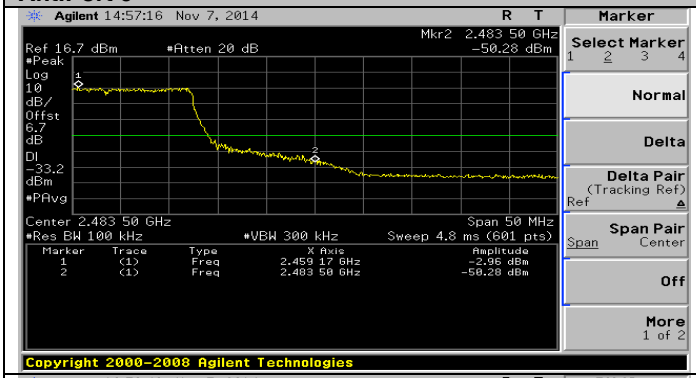
Ant.Port1

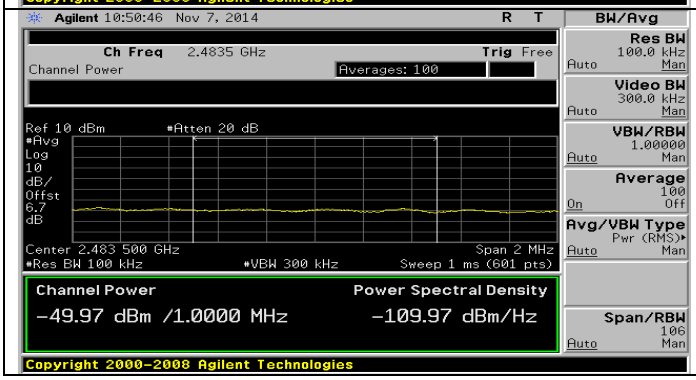




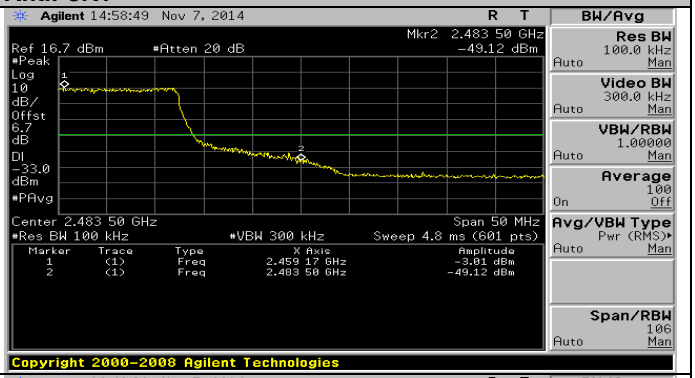
802.11n (HT20), 6.5Mbps — **Upper Band Edge**

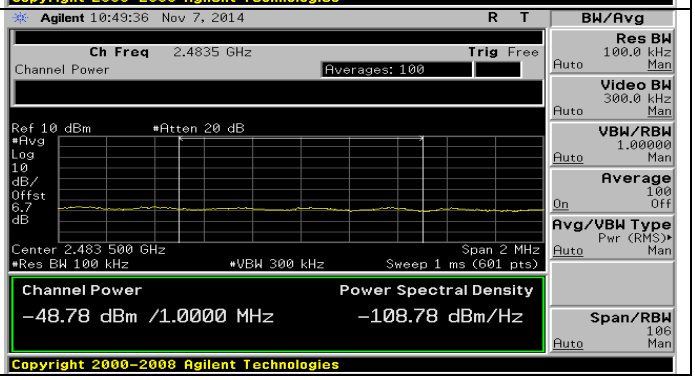
Ant.Port 0





Ant.Port1

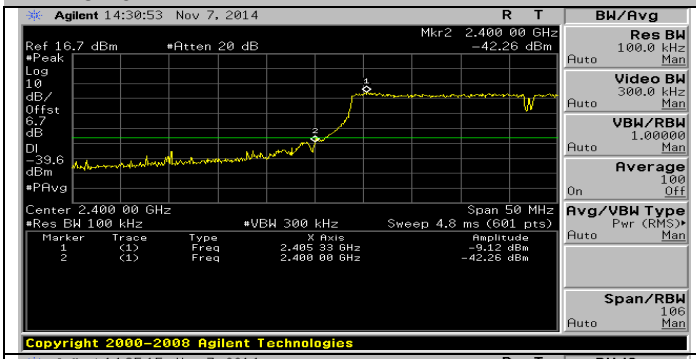


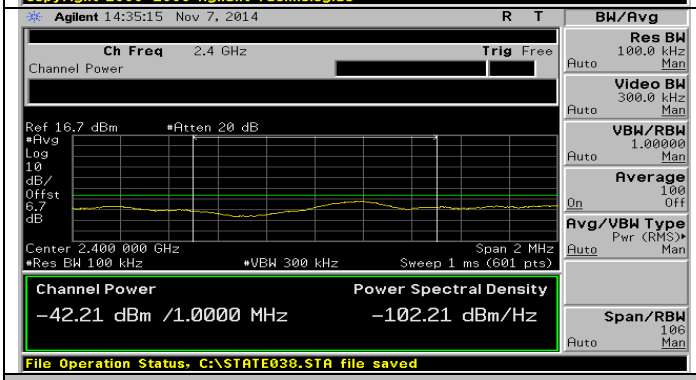


Graphical Test Results for 802.11n (HT40):

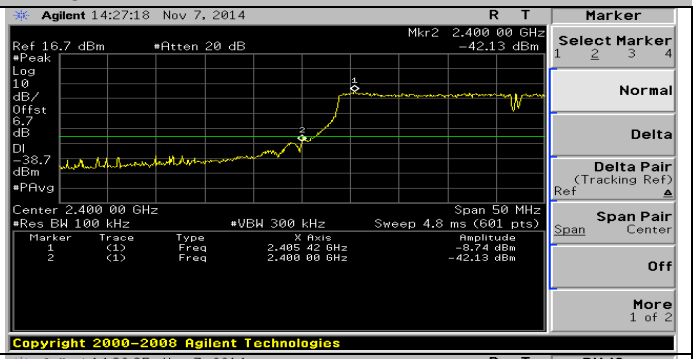
802.11n (HT40), 13.5Mbps — **Lower Band Edge**

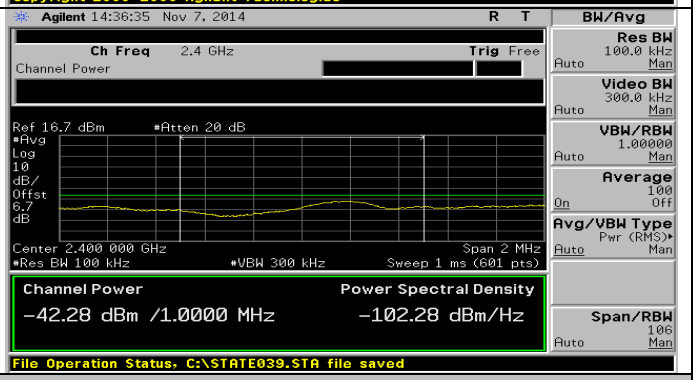
Ant.Port 0





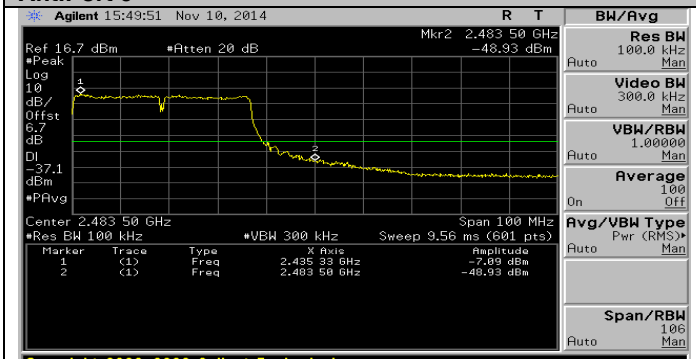
Ant.Port1

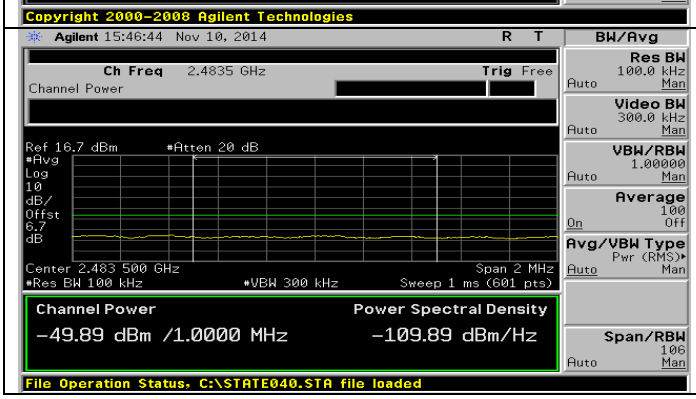




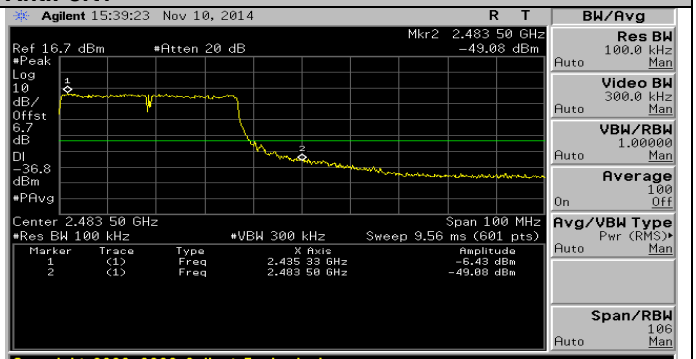
802.11n (HT40), 13.5Mbps — **Upper Band Edge**

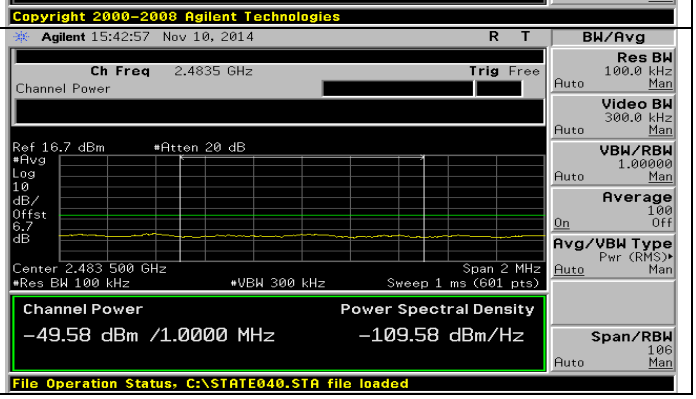
Ant.Port 0





Ant.Port1





Restricted Bands

FCC 15.205/ 15.247(e): Radiated emissions which fall in the restricted bands, as defined in FCC §15.205(a), must also comply with the radiated emission limits specified in Sec. 15.209(a).

RSS-Gen 8.10: Except where otherwise indicated, the following restrictions apply:
(a) Fundamental components of modulation of licence-exempt radio apparatus shall not fall within the restricted bands of Table 6 except for apparatus complying under RSS-287;
(b) Unwanted emissions that fall into restricted bands of Table 6 shall comply with the limits specified in RSS-Gen; and
(c) Unwanted emissions that do not fall within the restricted frequency bands of Table 6 shall comply either with the limits specified in the applicable RSS or with those specified in this RSS-Gen.

Test Procedure

Ref. KDB 558074 DTS Meas Guidance v3.2 section12.2.4 / 12.2.5.1

Test Procedure
1. The radio is configured in the continuous transmitting mode. 2. Allow trace to fully stabilize. 3. Use marker peak search function to determine the maximum emissions amplitude within the restricted band. 4. Capture the transmitter waveforms on the spectrum analyzer, and record pertinent measurement data.

Ref. KDB 558074 DTS Meas Guidance v3.2 section12.2.4

Restricted Bands Peak Measurement Test parameters
Span = Enough to capture the full restricted band of interest RBW= 1 MHz VBW ≥ 3 x RBW Detector= Peak Trace Mode= Max. Hold Sweep time= Auto

Ref. KDB 558074 DTS Meas Guidance v3.2 section12.2.5.1

Restricted Bands Average Measurement Test parameters
Span = Enough to capture the full restricted band of interest RBW = 1 MHz VBW ≥ 3 x RBW Detector = RMS Averaging Type = Power average (RMS) Trace Average ≥ 100 Sweep time = Auto
Allow trace to fully stabilize. Use marker peak search function to determine the maximum emissions amplitude within the restricted band. Record data.

Recorded Test Data:

802.11b Restricted Bands Test Results								
Frequency (MHz)	**Data Rate (Mbps)**	**Restricted Bands (MHz)**	**Ant. Port0 Max. Power Level (dBm)**	**Ant. Port1 Max. Power Level (dBm)**	**Total Power Ant.P0+Ant.P1 (mW) / (dBm)**		**Limit (dBm)**	**Result**
2412	1	2310–2390	-41.04	-41.14	0.00016	-38.08	-21.2	Pass
2412	1	2310–2390	-51.15*	-51.35*	0.00002	-48.24*	-41.2	Pass
2462	1	2483.5-2500	-41.81	-41.63	0.00014	-38.71	-21.2	Pass
2462	1	2483.5-2500	-52.69*	-51.95*	0.00001	-49.29*	-41.2	Pass

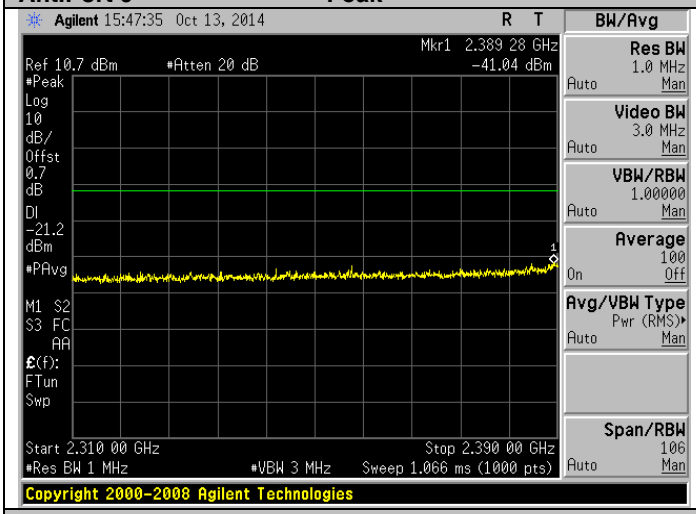
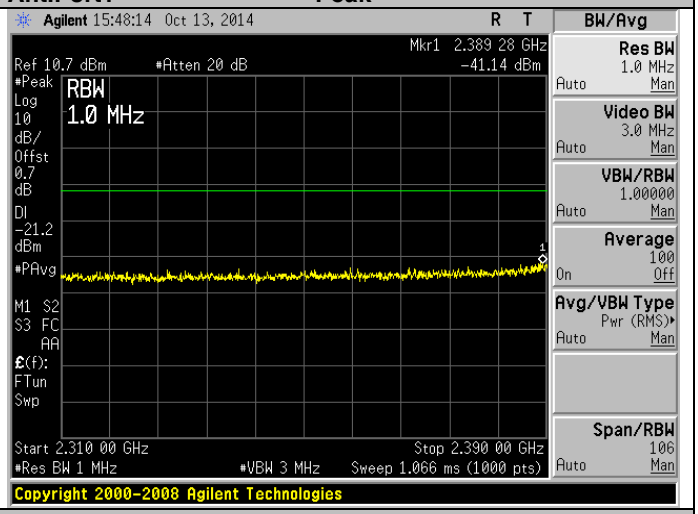
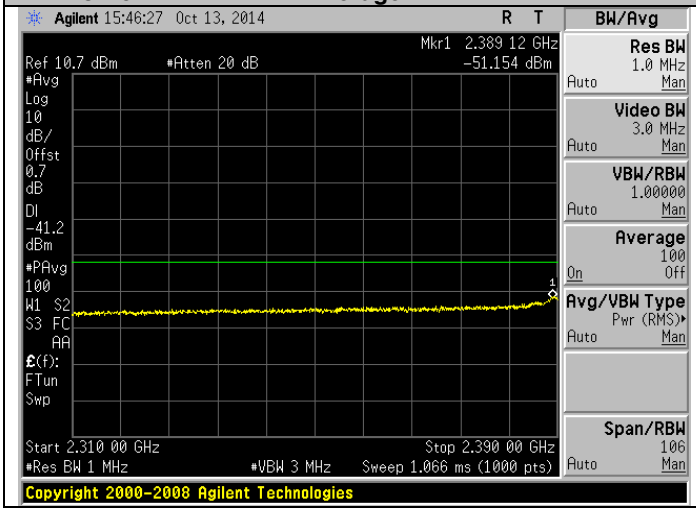
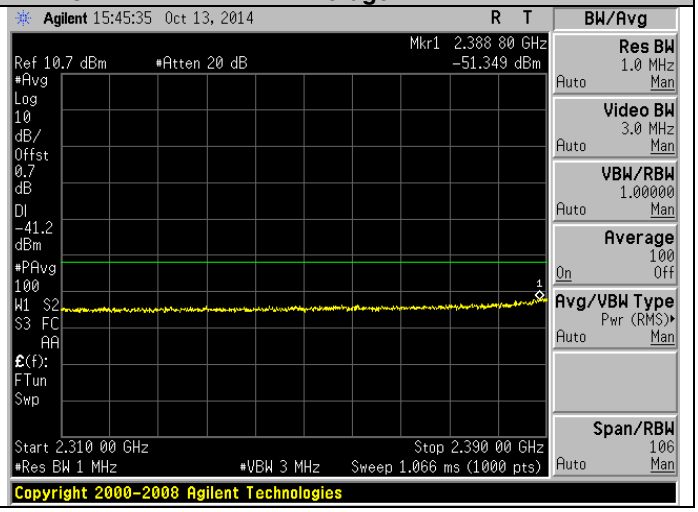
802.11g Restricted Bands Test Results								
Frequency (MHz)	**Data Rate (Mbps)**	**Restricted Bands (MHz)**	**Ant. Port0 Max. Power Level (dBm)**	**Ant. Port1 Max. Power Level (dBm)**	**Total Power Ant.P0+Ant.P1 (mW) / (dBm)**		**Limit (dBm)**	**Result**
2412	6	2310–2390	-31.41	-31.21	0.00148	-28.30	-21.2	Pass
2412	6	2310–2390	-48.61*	-48.08*	0.00003	-45.33*	-41.2	Pass
2462	6	2483.5-2500	-32.99	-31.79	0.00116	-29.34	-21.2	Pass
2462	6	2483.5-2500	-48.22*	-47.24*	0.00003	-44.69*	-41.2	Pass

802.11n (HT20) Restricted Bands Test Results								
Frequency (MHz)	**Data Rate (Mbps)**	**Restricted Bands (MHz)**	**Ant. Port0 Max. Power Level (dBm)**	**Ant. Port1 Max. Power Level (dBm)**	**Total Power Ant.P0+Ant.P1 (mW) / (dBm)**		**Limit (dB)**	**Result**
2412	6.5 (MCS0)	2310–2390	-30.58	-28.37	0.00233	-26.33	-21.2	Pass
2412	6.5 (MCS0)	2310–2390	-47.16*	-46.91*	0.00004	-44.02*	-41.2	Pass
2462	6.5 (MCS0)	2483.5-2500	-34.06	-32.53	0.00095	-30.22	-21.2	Pass
2462	6.5 (MCS0)	2483.5-2500	-49.41*	-48.69*	0.00002	-46.02*	-41.2	Pass

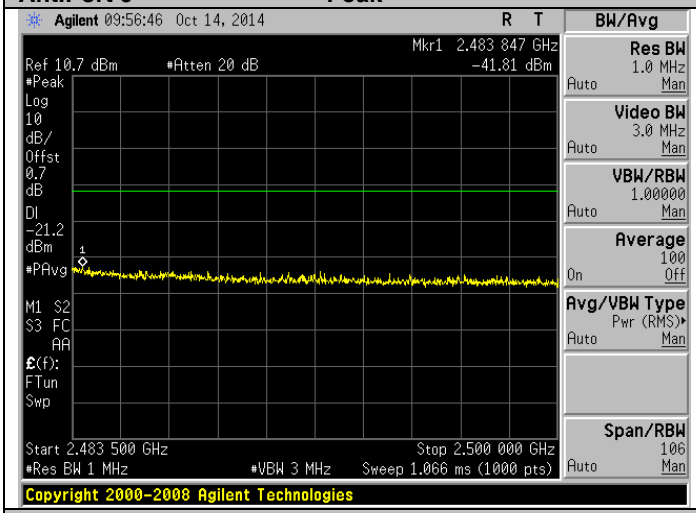
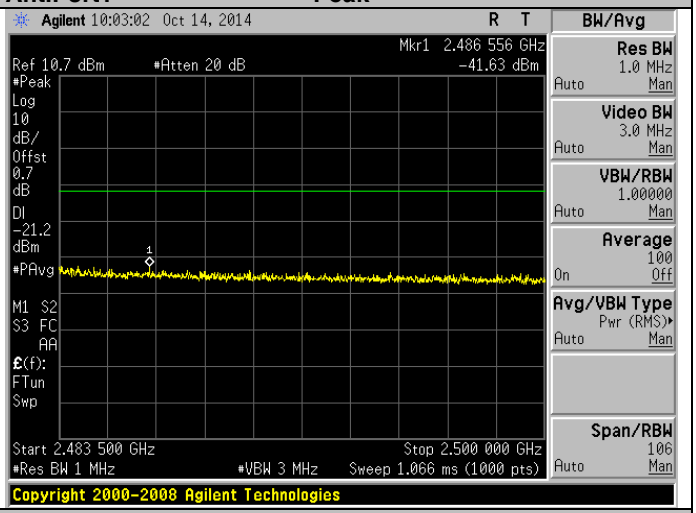
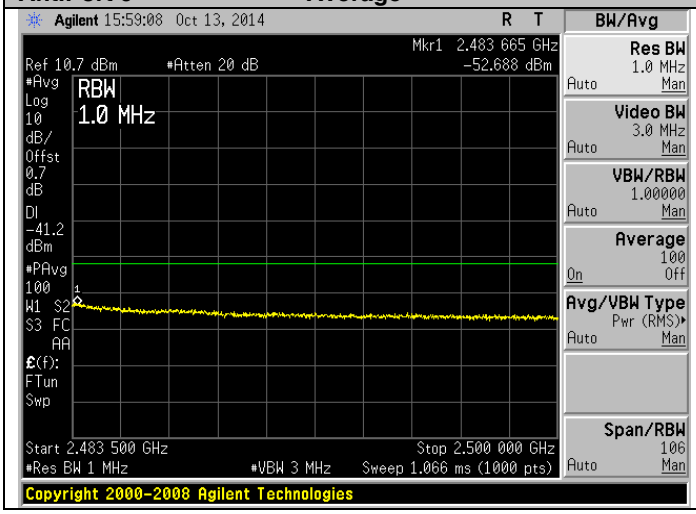
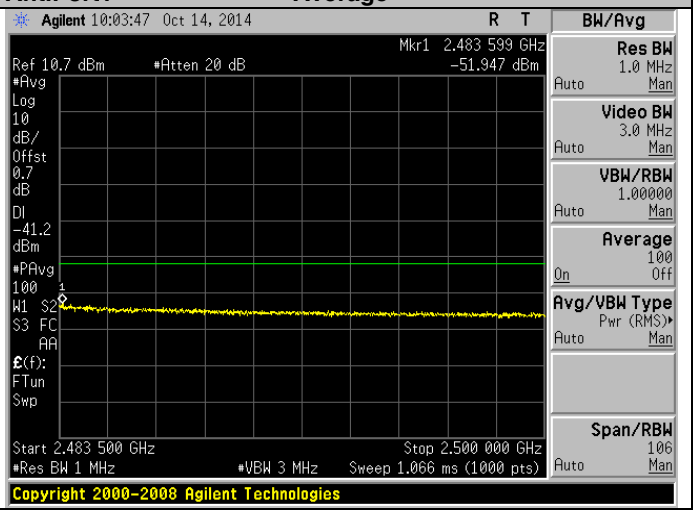
802.11n (HT40) Restricted Bands Test Results								
Frequency (MHz)	**Data Rate (Mbps)**	**Restricted Bands (MHz)**	**Ant. Port0 Max. Power Level (dBm)**	**Ant. Port1 Max. Power Level (dBm)**	**Total Power Ant.P0+Ant.P1 (mW) / (dBm)**		**Limit (dB)**	**Result**
2422	13.5 (MCS0)	2310–2390	-35.38	-34.54	0.00065	-31.84	-21.2	Pass
2422	13.5 (MCS0)	2310–2390	-48.60*	-48.96*	0.00003	-45.77*	-41.2	Pass
2452	13.5 (MCS0)	2483.5-2500	-37.54	-36.98	0.00038	-34.24	-21.2	Pass
2452	13.5 (MCS0)	2483.5-2500	-49.91*	-48.77*	0.00002	-46.29*	-41.2	Pass

Note: Correction factors (ext. attenuation + cable loss) are compensated in the offset function of the measuring instrument.
The readings with * at the end represent measurements in average.

Graphical Test Results for 802.11b mode:

802.11b, 1Mbps	Lower End Restricted Bands: 2310MHz – 2390MHz
Ant.Port 0 Peak	Ant.Port1 Peak
	
Ant.Port 0 Average	Ant.Port1 Average
	

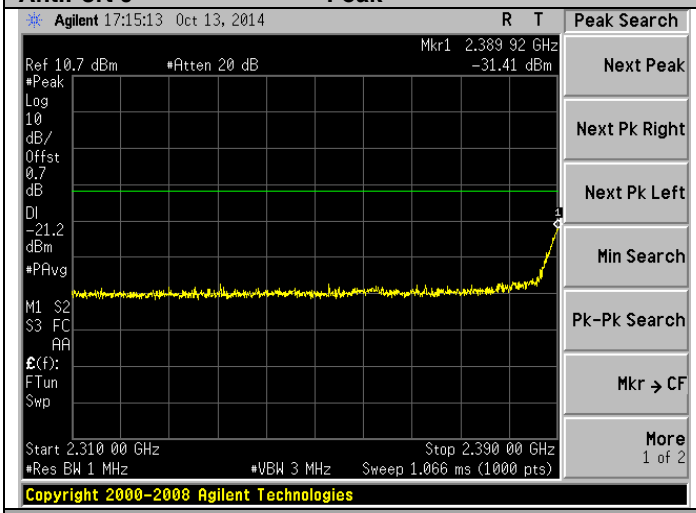
Graphical Test Results for 802.11b Mode:

802.11b, 1Mbps	Higher End Restricted Bands: 2483.5MHz – 2500MHz
Ant.Port 0 Peak	Ant.Port1 Peak
	
Ant.Port 0 Average	Ant.Port1 Average
	

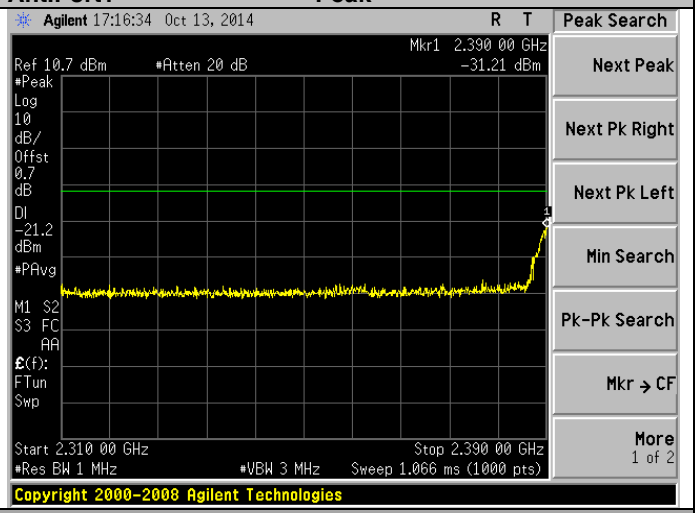
Graphical Test Results for 802.11g Mode:

802.11g, 1Mbps — **Lower End Restricted Bands: 2310MHz – 2390 MHz**

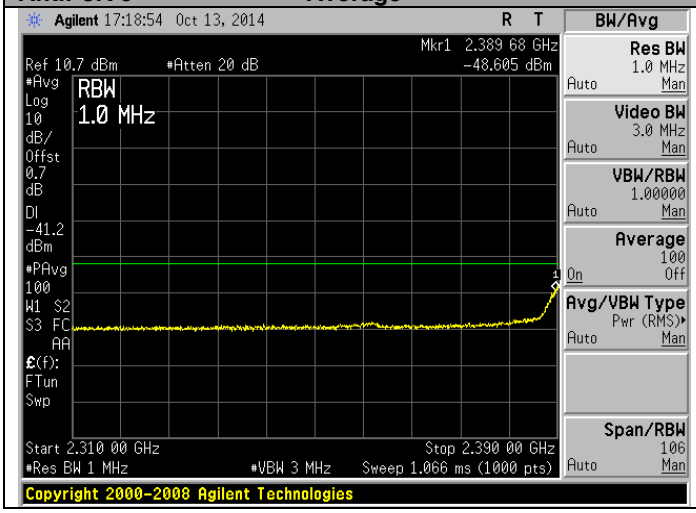
Ant.Port 0 — Peak



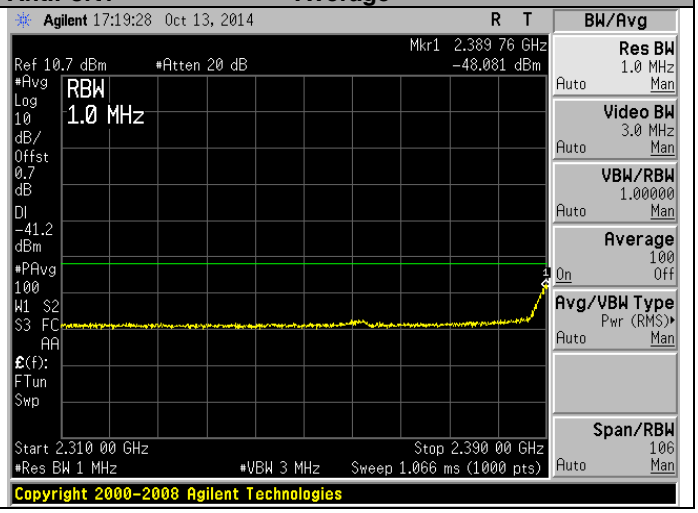
Ant.Port1 — Peak



Ant.Port 0 — Average



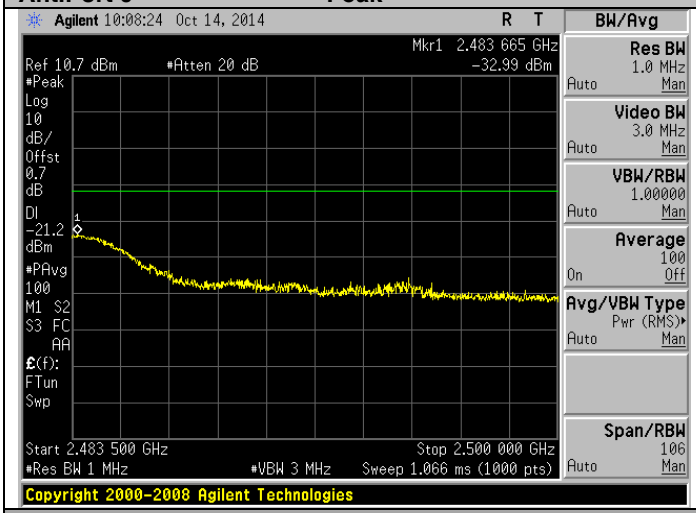
Ant.Port1 — Average



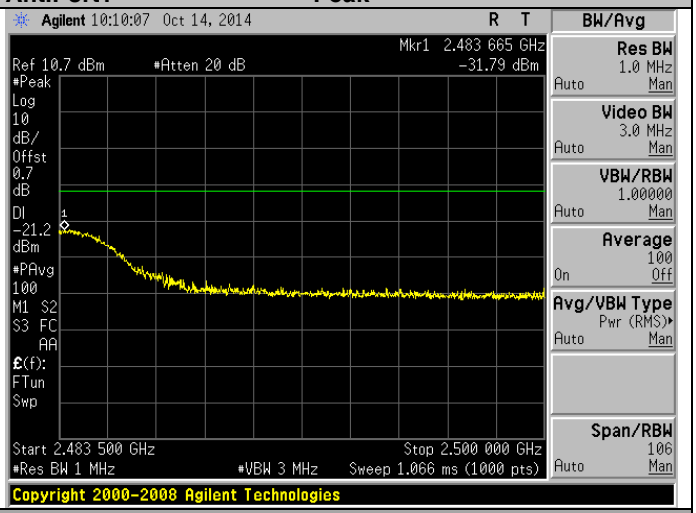
Graphical Test Results for 802.11g Mode:

802.11g, 1Mbps	Higher End Restricted Bands: 2483.5MHz – 2500MHz

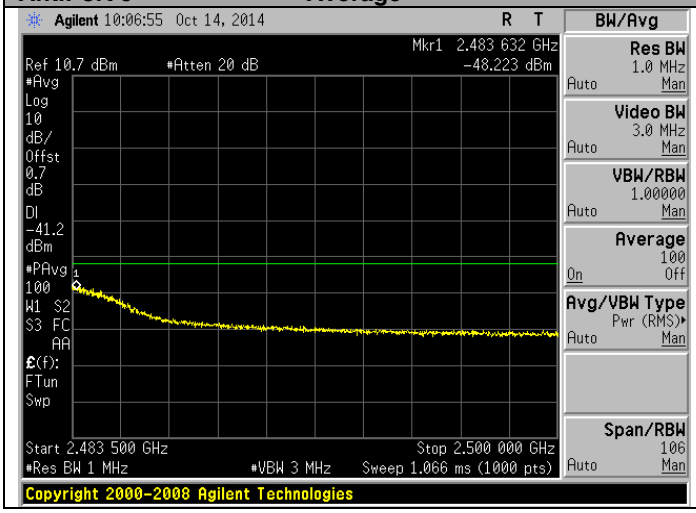
Ant.Port 0 — Peak



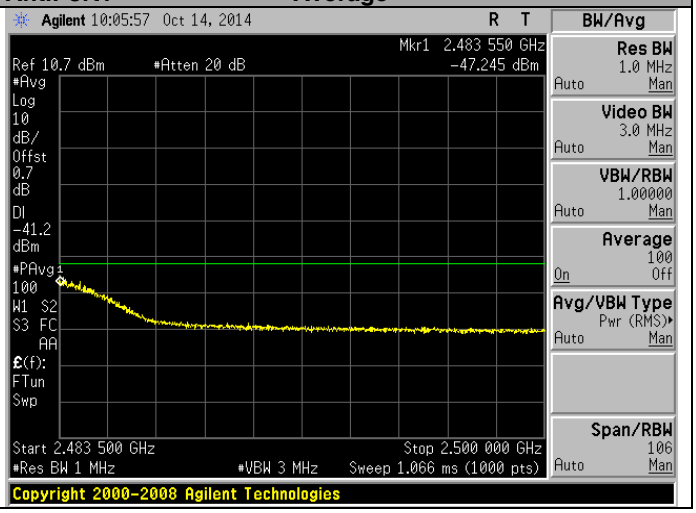
Ant.Port1 — Peak



Ant.Port 0 — Average



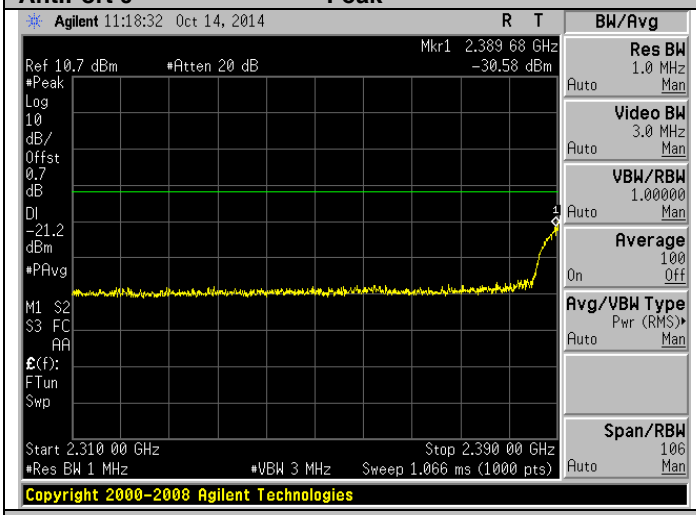
Ant.Port1 — Average



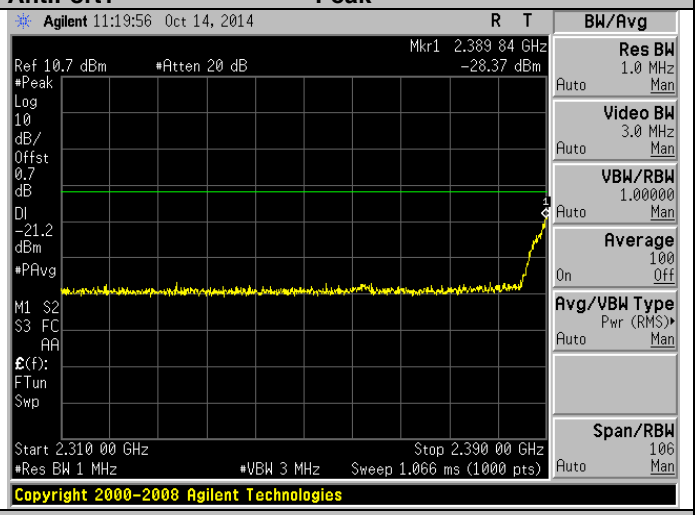
Graphical Test Results for 802.11n (HT20) Mode:

802.11n (HT20), 6.5Mbps **Lower End Restricted Bands: 2310 MHz – 2390 MHz**

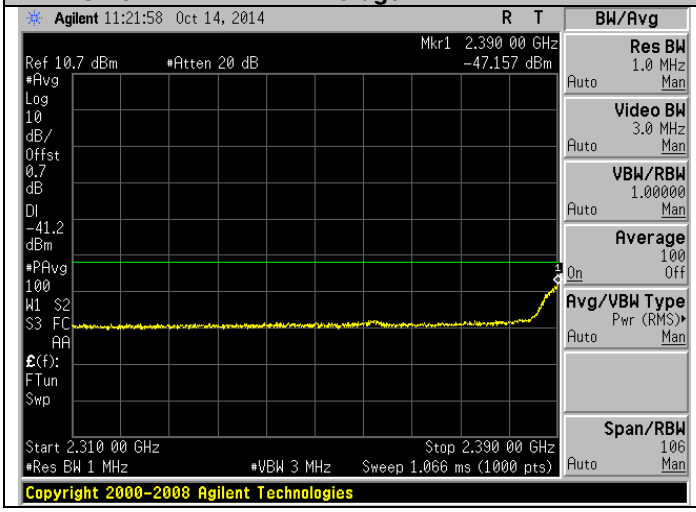
Ant.Port 0 **Peak**



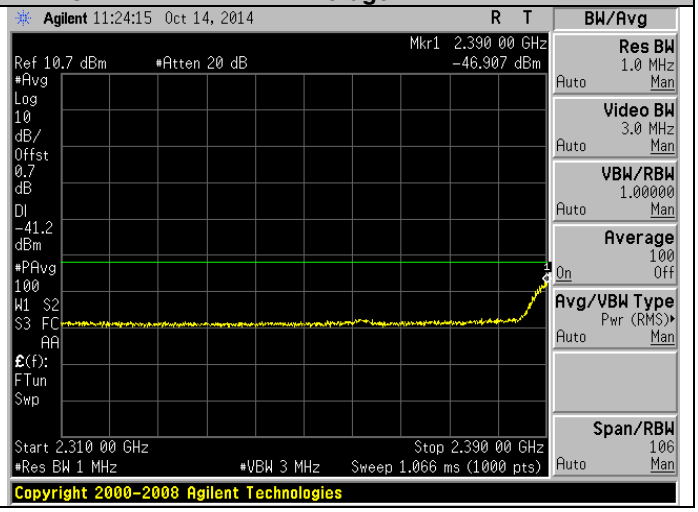
Ant.Port1 **Peak**



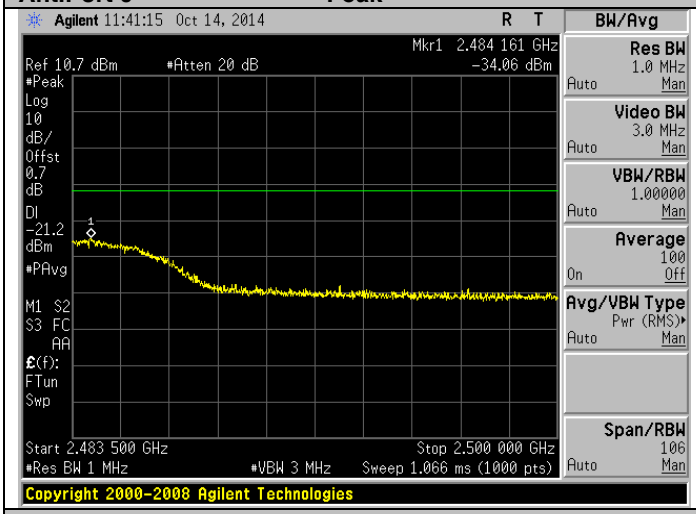
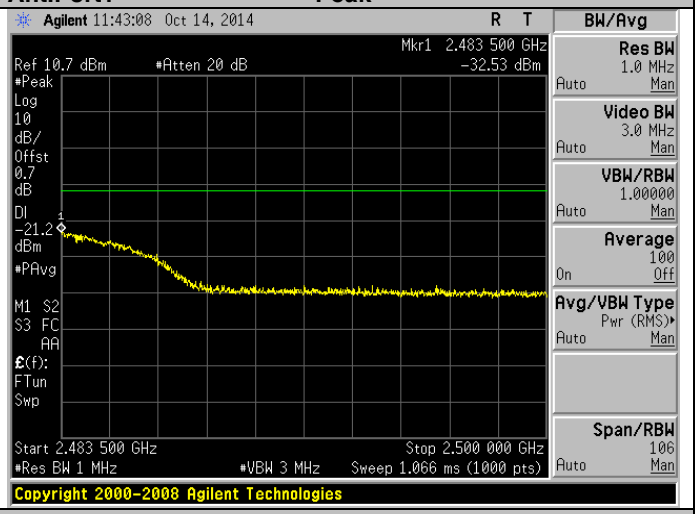
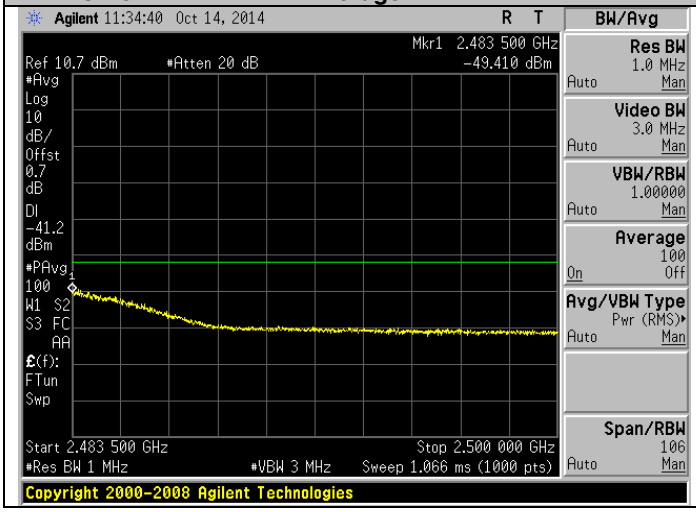
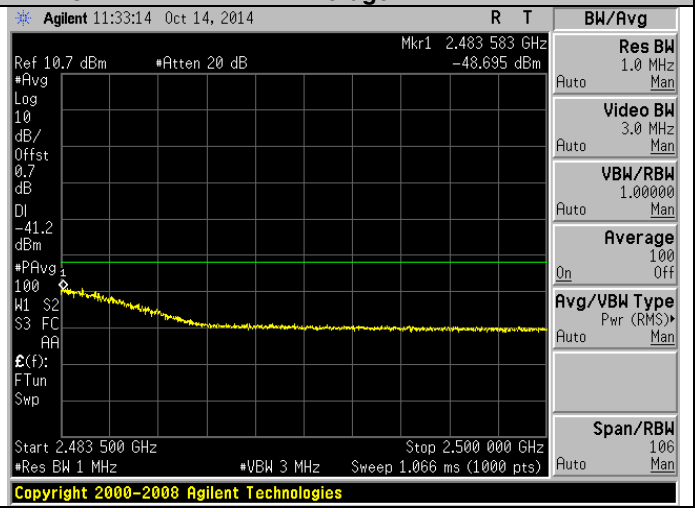
Ant.Port 0 **Average**



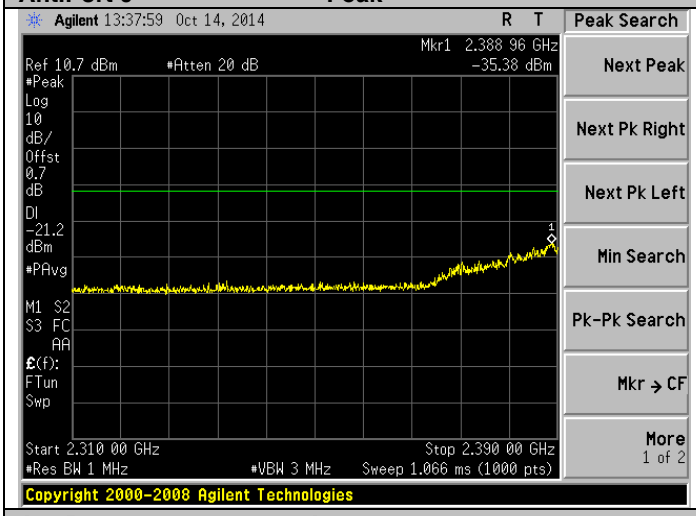
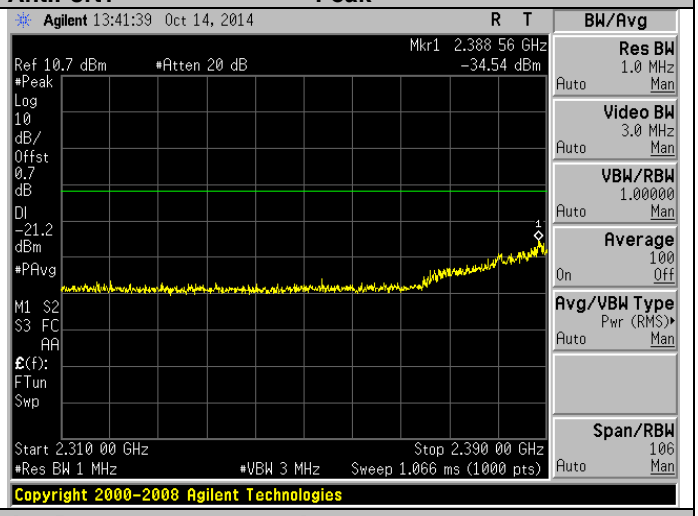
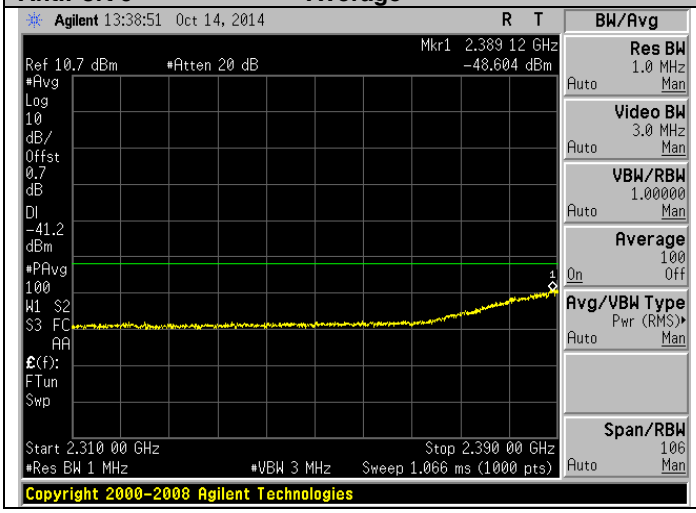
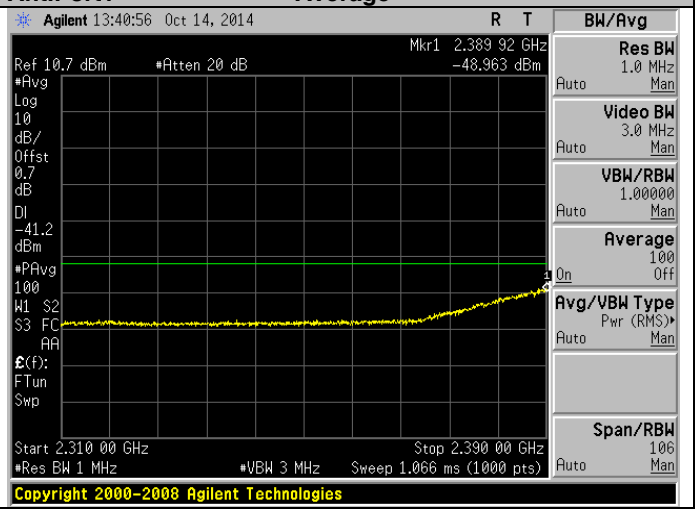
Ant.Port1 **Average**



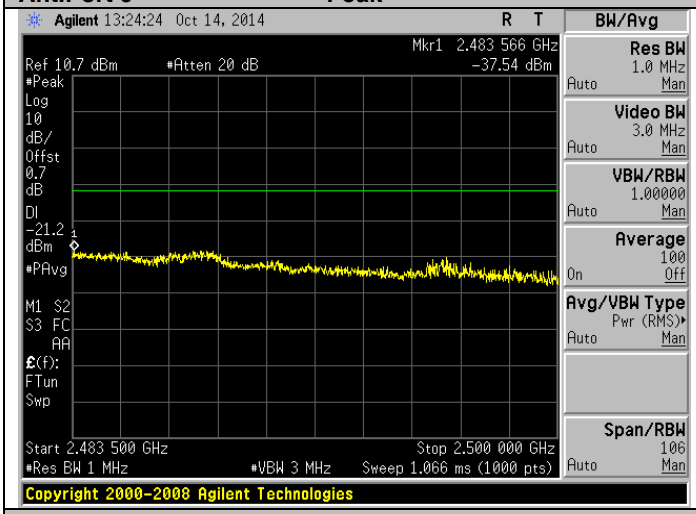
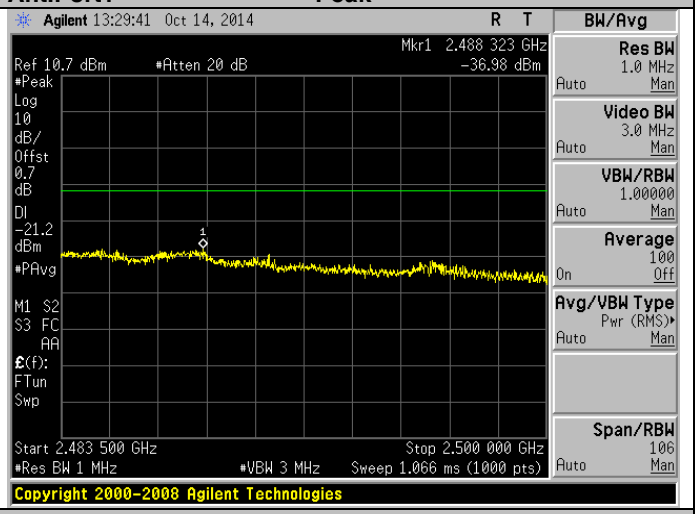
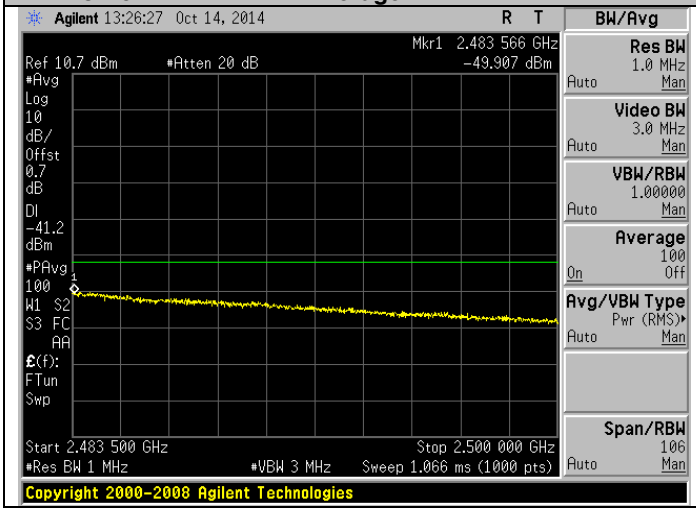
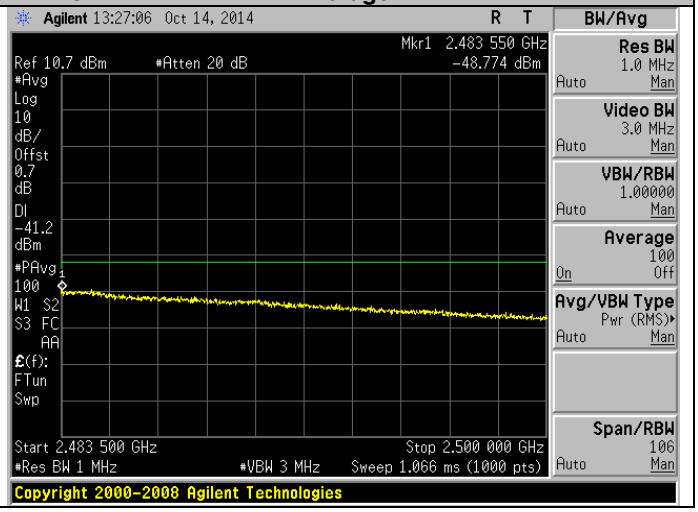
Graphical Test Results for 802.11n (HT20) Mode:

802.11n (HT20), 6.5 Mbps	Higher End Restricted Bands: 2483.5MHz – 2500MHz
Ant.Port 0 Peak	Ant.Port1 Peak
	
Ant.Port 0 Average	Ant.Port1 Average
	

Graphical Test Results for 802.11n (HT40) Mode:

802.11n (HT40), 13.5 Mbps	Lower End Restricted Bands: 2310MHz – 2390MHz
Ant.Port 0 Peak	Ant.Port1 Peak
	
Ant.Port 0 Average	Ant.Port1 Average
	

Graphical Test Results for 802.11n (HT40) Mode:

802.11n (HT40), 13.5 Mbps	Higher End Restricted Bands: 2483.5MHz – 2500MHz
Ant.Port 0 Peak	Ant.Port1 Peak
	
Ant.Port 0 Average	Ant.Port1 Average
	

Transmitter Radiated Spurious Emissions

FCC 15.209; RSS-Gen 6.13, 8.9 Issue 4

FCC 15.209: The level of any unwanted emissions from an intentional radiator operating under these general provisions shall not exceed the level of the fundamental emission. Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the table specified in the table in FCC§15.209(a).

RSS-Gen 6.13: In measuring unwanted emissions, the spectrum shall be investigated from 30 MHz or the lowest radio frequency signal generated in the equipment, whichever is lower, without going below 9 kHz, up to at least the frequency given below:
(a) If the equipment operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
(b) If the equipment operates at or above 10 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

RSS-Gen 8.9: Except when the requirements applicable to a given device state otherwise, emissions from licence-exempt transmitters shall comply with the field strength limits shown in Table 4 or Table 5. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.

Radiated emissions which fall in the restricted bands, as defined in FCC Section 15.205(a) and RSS-Gen Section 8.10, must also comply with the radiated emission limits specified in FCC Section 15.209(a) and RSS-Gen Section 8.9.

15.209 (a)/RSS Gen 8.9: Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (uV/meter)	Field strength (dBuV/meter)	Measurement distance (meters)
30-88	100**	40 Qp	3
88-216	150**	43.5 Qp	3
216-960	200**	46 Qp	3
Above 960	500	54 Av / 74 Pk	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

The emission limits shown in the above table are based on measurements employing a 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.

Test Procedure

Ref. C63.10-2009 section 6.5 & 6.6

Test Procedure
1. Using Vasona software, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 2. Place the radio in continuous transmit mode. Maximize Turntable (find worst case table angle) and maximize Antenna (find worst case height). 3. Use the peak marker function to determine the maximum amplitude level. 4. Center marker frequency and perform final measurement in Quasi-peak (≤ 1Ghz) and Average (above 1 GHz) 4. Record at least 6 highest readings for the worst case operating mode.

Ref. C63.10-2009 section 4 / CISPR16-1-1

Test Parameters
Span = Entire frequency range or segment if necessary. Reference Level = 80 dBuV RBW = 100 kHz (less than or equal to 1 GHz); 1 MHz (above 1 GHz) VBW ≥ 3 x RBW Detector = Peak & Quasi-Peak (frequency range 30 MHz to 1 GHz); Peak & Average (frequency range above 1 GHz); Changing VBW to 10 Hz for average measurement Sweep Time = Couple

. The system was evaluated up to 26 GHz but there were no measurable emissions above 18 GHz.
. These data represent the worst case mode data for all supported operating modes and antennas.

- For emissions below 1000 MHz, measurements shall be performed using a CISPR quasi-peak detector and the related measurement bandwidth. As an alternative to CISPR quasi-peak measurement, compliance with the emission limit can be demonstrated using measuring equipment employing a peak detector function properly adjusted for factors such as pulse desensitization as required, with an equal or greater measurement bandwidth relative to the applicable CISPR quasi-peak bandwidth.
- Above 1000 MHz, measurements shall be performed using an average detector with a minimum resolution bandwidth of 1 MHz.

Note1: A Notch Filter was used during formal testing from 1 – 18GHz to help prevent the front end of the analyzer from over loading. The Notch filters used are designed to suppress TX fundamental frequency but do not effect harmonics of the fundamental frequency from being measured

Note2: The data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Recorded Test Data:

TX Spurious Emissions Test Result Tables for 802.11b (Ch6 / Pk/Qp)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	30.0 MHz - 1.0 GHz
Comments on the above Test Results	TX Channel 6 (2437 MHz) – with DBPSK modulation – 1 Mbps

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
45.769	18.4	0.6	9.9	28.9	Qp	V	203	170	40.5	-11.6	Pass	TX / Ch 6
31.282	5.4	0.5	19.4	25.3	Qp	V	175	353	40.5	-15.2	Pass	TX / Ch 6
71.225	24.5	0.8	8.1	33.3	Pk	V	125	190	40.5	-7.2	Pass	TX / Ch 6
499.944	17.9	2.1	17.8	37.8	Pk	H	127	0	47.5	-9.7	Pass	Tx / Ch 6
374.835	20.8	1.8	15.1	37.7	Pk	V	200	362	47.5	-9.8	Pass	TX / Ch 6
96.445	20.3	0.9	9.3	30.5	Pk	V	125	205	40.5	-10	Pass	TX / Ch 6
249.705	20.1	1.5	11.5	33.1	Pk	V	125	0	47.5	-14.4	Pass	TX / Ch 6

Note: The limits in the table above are CISPR 22 limits @ 3m using 20 dB/decade extrapolation conversions factor from 10 m to
3m.

TX Spurious Emissions Test Result Tables for 802.11b (Ch1 /Peak)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz
Comments on the above Test Results	TX Channel 1 (2412 MHz) – with DBPSK modulation – 1 Mbps

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
4824.397	40.7	7.9	-1.7	46.9	Pk	H	101	363	74	-27.1	Pass	TX / Ch 1
7236.089	39.6	9.9	0.7	50.2	Pk	H	101	363	74	-23.8	Pass	TX / Ch 1
9647.286	37.6	12.2	3.3	53.1	Pk	H	101	363	74	-20.9	Pass	TX / Ch 1
12060.573	38.3	14	4.5	56.8	Pk	H	101	363	74	-17.2	Pass	Tx / Ch 1
3211.412	48.4	6.3	-1.6	53.2	Pk	H	101	363	74	-20.8	Pass	TX / Ch 1
4824.186	41.8	7.9	-1.7	48	Pk	V	120	231	74	-26	Pass	TX / Ch 1
7235.922	40.4	9.9	0.7	50.9	Pk	V	120	231	74	-23.1	Pass	TX / Ch 1
9648.134	37.7	12.2	3.4	53.2	Pk	V	120	231	74	-20.8	Pass	TX / Ch 1
12059.429	38.7	14	4.5	57.2	Pk	V	120	231	74	-16.8	Pass	TX / Ch 1

TX Spurious Emissions Test Result Tables for 802.11b (Ch1 / Average)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz
Comments on the above Test Results	TX Channel 1 (2412 MHz) – with DBPSK modulation – 1 Mbps

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
4924.528	28.8	8.0	-1.8	35	Av	H	102	0	54	-19.0	Pass	TX / Ch 1
4924.616	29.4	8.0	-1.8	35.6	Av	V	111	180	54	-18.4	Pass	TX / Ch 1
7385.514	26.8	10.0	1	37.8	Av	H	102	0	54	-16.2	Pass	TX / Ch 1
7386.03	26.4	10.0	1	37.5	Av	V	111	180	54	-16.5	Pass	Tx / Ch 1
9847.277	22.9	12.3	3.9	39.2	Av	H	102	0	54	-14.8	Pass	TX / Ch 1
9848.064	22.6	12.3	3.9	38.8	Av	V	111	180	54	-15.2	Pass	TX / Ch 1
12309.239	23.4	14.1	4.3	41.8	Av	V	111	180	54	-12.2	Pass	TX / Ch 1
12309.288	23.5	14.1	4.3	42	Av	H	102	0	54	-12.0	Pass	TX / Ch 1
3210	47.0	6.30	-1.6	51.8	Av	V	100	208	54	-2.20	Pass	TX / Ch 1

TX Spurious Emissions Test Result Tables for 802.11b (Ch6 / Peak)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz
Comments on the above Test Results	TX Channel 6 (2437 MHz) – with DBPSK modulation – 1 Mbps

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
3251.667	46.4	6.4	-1.7	51.1	Pk	V	100	0	74	-22.9	Pass	TX / Ch 6
4871.377	40.6	7.9	-1.6	46.9	Pk	H	100	0	74	-27.1	Pass	TX / Ch 6
4871.987	41.6	7.9	-1.6	47.9	Pk	V	110	176	74	-26.2	Pass	TX / Ch 6
7308.173	40	10	0.9	50.8	Pk	H	100	0	74	-23.2	Pass	Tx / Ch 6
7309.22	40.3	10	0.9	51.2	Pk	V	110	176	74	-22.8	Pass	TX / Ch 6
9743.391	39.1	12.3	3.8	55.2	Pk	H	100	0	74	-18.9	Pass	TX / Ch 6
9743.896	37.9	12.3	3.8	54	Pk	V	110	176	74	-20.0	Pass	TX / Ch 6
12180.13	37.7	14	4.9	56.6	Pk	H	100	0	74	-17.4	Pass	Tx / Ch 6
12179.713	38.2	14	4.9	57.2	Pk	V	110	176	74	-16.8	Pass	TX / Ch 6

TX Spurious Emissions Test Result Tables for 802.11b (Ch6 / Average)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz
Comments on the above Test Results	TX Channel 6 (2437 MHz) – with DBPSK modulation – 1 Mbps

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
4871.573	28.1	7.9	-1.6	34.4	Av	H	101	360	54	-19.6	Pass	TX / Ch 6
7307.721	26.5	10.0	0.9	37.3	Av	H	101	360	54	-16.7	Pass	TX / Ch 6
9743.626	22.9	12.3	3.8	38.9	Av	H	101	360	54	-15.1	Pass	TX / Ch 6
12180.539	23.3	14.0	4.9	42.3	Av	H	101	360	54	-11.7	Pass	TX / Ch 6
3244	42.4	6.40	-1.7	47	Av	V	100	170	54	-7.0	Pass	TX / Ch 6
4872.408	28.6	7.90	-1.7	34.9	Av	V	101	176	54	-19.1	Pass	TX / Ch 6
7308.538	27.2	10.0	0.9	38.1	Av	V	101	176	54	-15.9	Pass	TX / Ch 6
9743.738	23.1	12.3	3.8	39.1	Av	V	101	176	54	-14.9	Pass	TX / Ch 6
12180.285	23.0	14.0	4.9	42.0	Av	V	101	176	54	-12.0	Pass	TX / Ch 6

TX Spurious Emissions Test Result Tables for 802.11b (Ch11 / Peak)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz (Peak)
Comments on the above Test Results	TX Channel 11 (2462 MHz) – with DBPSK modulation – 1 Mbps

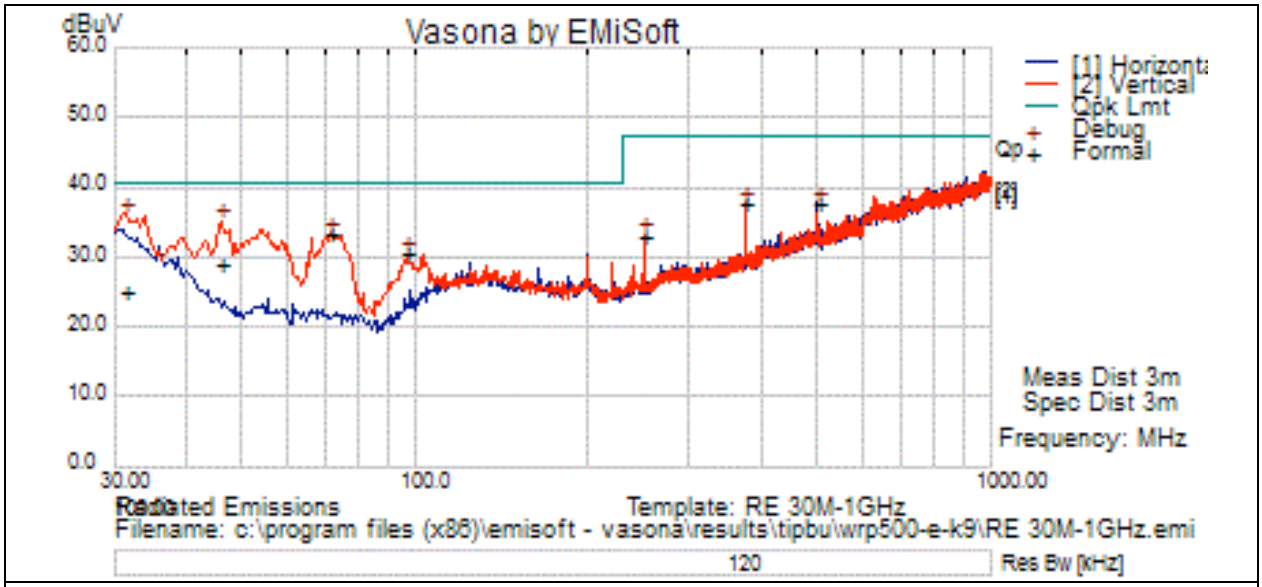
Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
4924.604	40.7	8.0	-1.8	46.9	Pk	H	101	361	74	-27.1	Pass	TX / Ch 11
7385.813	39.0	10.0	1	50	Pk	H	101	361	74	-24.0	Pass	TX / Ch 11
9847.487	38.0	12.3	3.9	54.2	Pk	H	101	361	74	-19.8	Pass	TX / Ch 11
12310.207	37.6	14.1	4.3	56	Pk	H	101	361	74	-18.0	Pass	TX / Ch 11
4924.466	42.4	8.0	-1.8	48.6	Pk	V	112	177	74	-25.4	Pass	TX / Ch 11
7385.685	39.8	10.0	1	50.8	Pk	V	112	177	74	-23.2	Pass	TX / Ch 11
9847.605	37.0	12.3	3.9	53.3	Pk	V	112	177	74	-20.8	Pass	TX / Ch 11
12310.309	38.2	14.1	4.3	56.6	Pk	V	112	177	74	-17.4	Pass	TX / Ch 11

TX Spurious Emissions Test Result Tables for 802.11b (Ch11 /Average)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1.0 GHz - 18.0 GHz (Average)
Comments on the above Test Results	TX Channel 11 (2462 MHz) – with DBPSK modulation – 1 Mbps

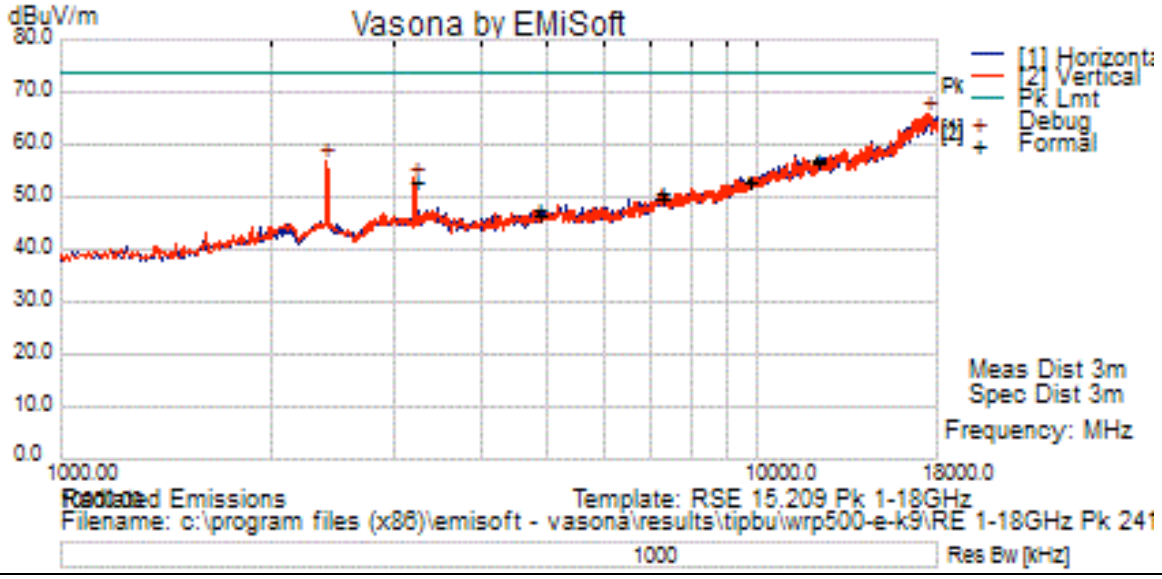
Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
4924.528	28.8	8.0	-1.8	35	Av	H	102	0	54	-19.0	Pass	TX / Ch 11
7385.514	26.8	10.0	1.0	37.8	Av	H	102	0	54	-16.2	Pass	TX / Ch 11
9847.277	22.9	12.3	3.9	39.2	Av	H	102	0	54	-14.8	Pass	TX / Ch 11
12309.288	23.5	14.1	4.3	42	Av	H	102	0	54	-12.0	Pass	TX / Ch 11
3278	38.7	6.5	-1.6	43.6	Av	V	100	203	54	-10.4	Pass	TX / Ch 11
4924.616	29.4	8.0	-1.8	35.6	Av	V	111	180	54	-18.4	Pass	TX / Ch 11
7386.03	26.4	10.0	1.0	37.5	Av	V	111	180	54	-16.5	Pass	TX / Ch 11
9848.064	22.6	12.3	3.9	38.8	Av	V	111	180	54	-15.2	Pass	TX / Ch 11
12309.239	23.4	14.1	4.3	41.8	Av	V	111	180	54	-12.2	Pass	TX / Ch 11

Graphical Test Results for 802.11b Mode:

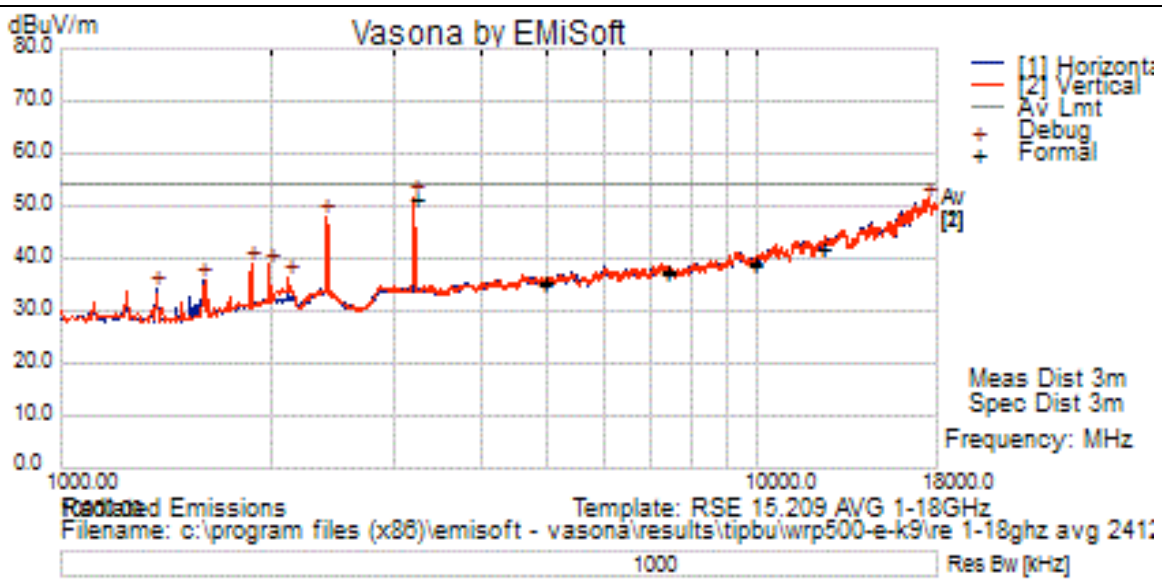


Title: **TX Spurious Emissions from 30 MHz – 1GHz – Ch6 (2437 MHz) - Peak**

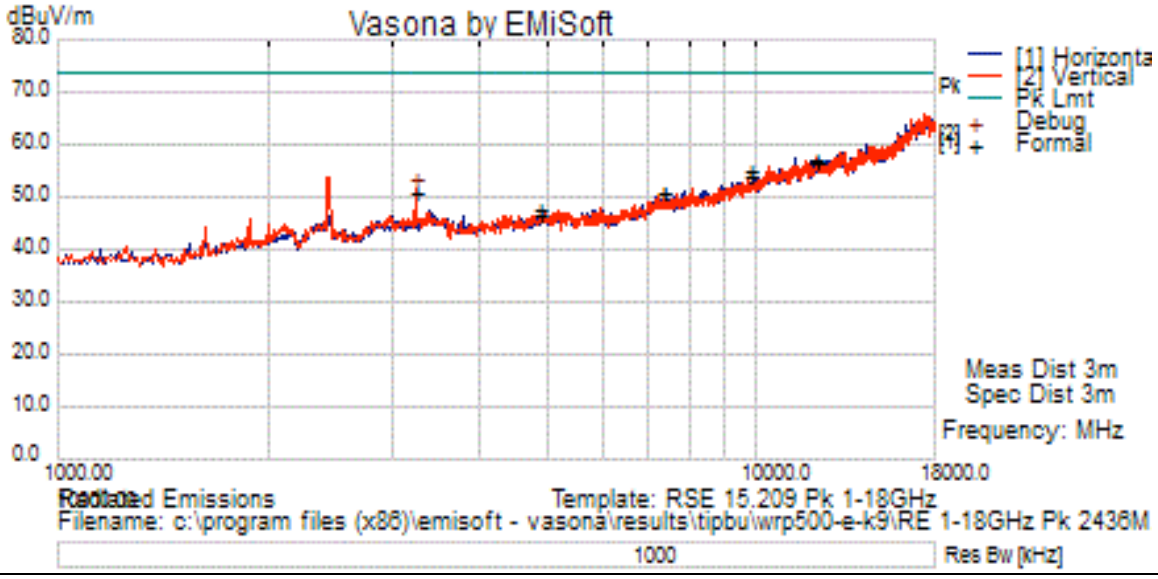
Note: The limits in the plot above are CISPR 22 limits @ 3m using 20 dB/decade extrapolation conversions factor from 10m to 3m.



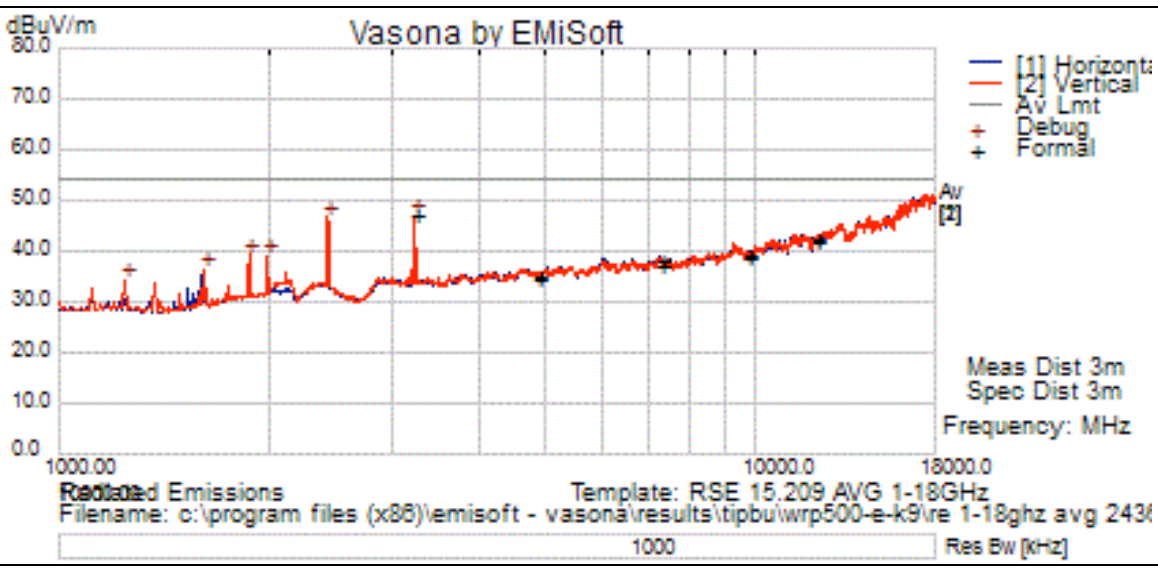
Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch1 (2412 MHz) - Peak**



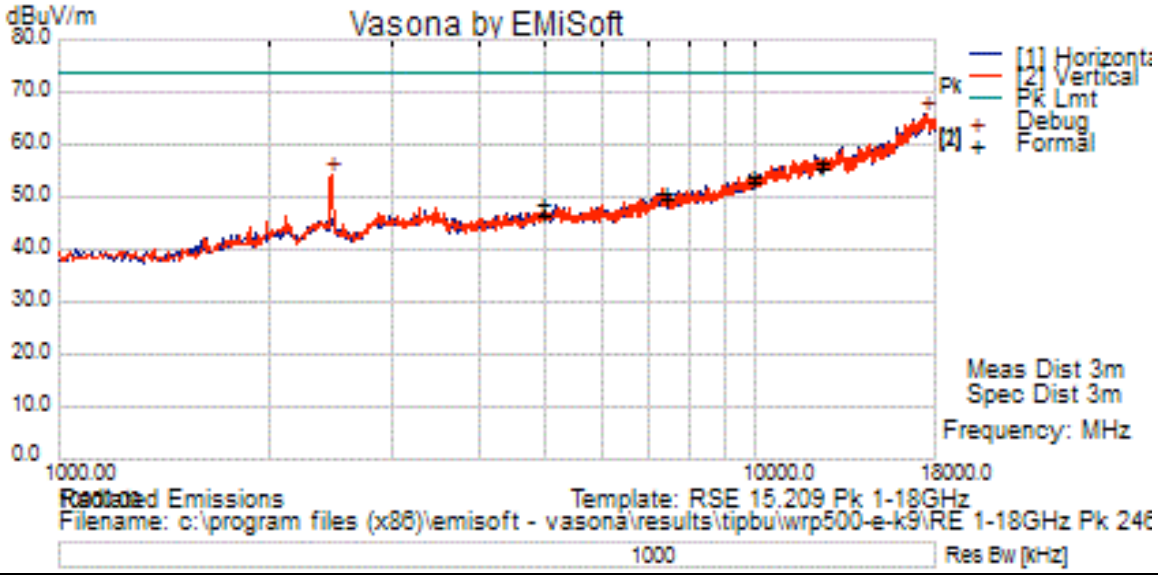
Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch1 (2412 MHz) - Average**



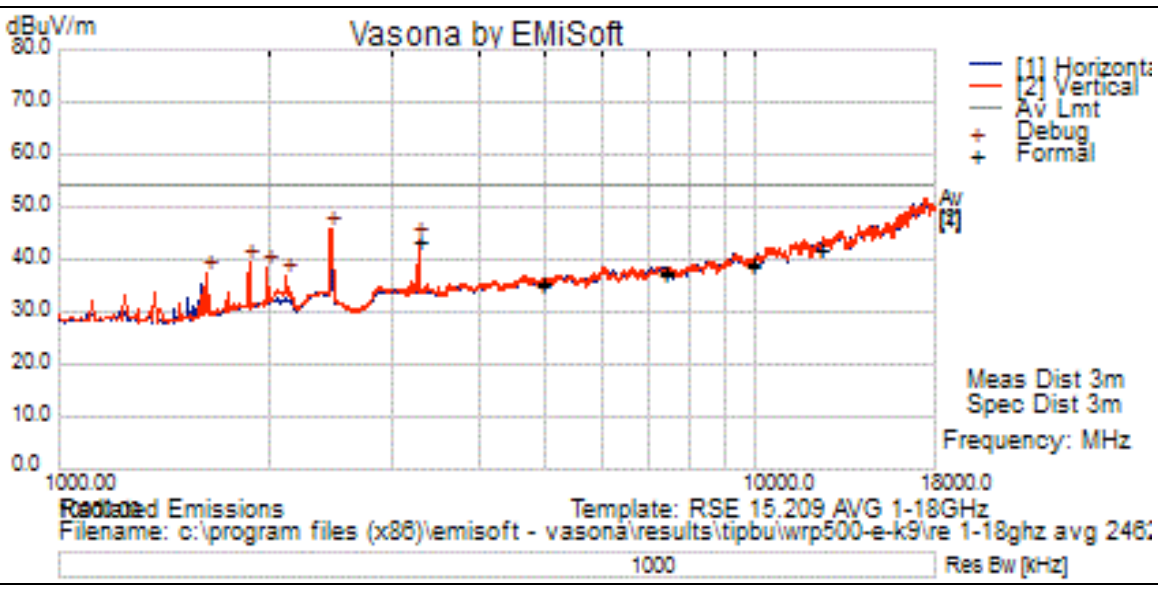
Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch6 (2437 MHz) - Peak**



Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch6 (2437 MHz) - Average**



Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch11 (2462 MHz) - Peak**



Title: **TX Spurious Emissions from 1GHz – 18GHz – Ch11 (2462 MHz) - Average**

Receiver Radiated Spurious Emissions

RSS-Gen 5 / 7.1: The receiver shall be operated in the normal receive mode near the mid-point of the band in which the receiver is designed to operate. And spurious emissions from the receivers shall not exceed the radiated limits shown in the table 2 in section 7.1.2 of RSS-Gen.

For either method, the search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator frequency, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least 3 times the highest turntable or local oscillator frequency whichever is higher, without exceeding 40 GHz.

For emissions below 1000 MHz, measurements shall be performed using a CISPR quasi-peak detector and the related measurement bandwidth. Above 1000 MHz, measurements shall be performed using an average detector with a minimum resolution bandwidth of 1 MHz.

As an alternative to CISPR quasi-peak measurement, compliance with the emission limit can be demonstrated using measuring equipment employing a peak detector function properly adjusted for factors such as pulse desensitization as required, with an equal or greater than the applicable CISPR quasi-peak bandwidth or 1 MHz bandwidth, respectively.

Table 2: Radiated Limits of Receiver Spurious Emissions

Frequency (MHz)	Field strength (uV/meter)*	Field strength (dBuV/meter)	Measurement distance (meters)
30-88	100	40 Qp	3
88-216	150	43.5 Qp	3
216-960	200	46 Qp	3
Above 960	500	54 Av / 74 Pk	3

*Measurements for compliance with limits in the above table may be performed at distances other than 3 metres, in accordance with Section 6.5.

Test Procedure

Ref. C63.10-2009/2009 section 6.5 & 6.6

Test Procedure
1. Using Vasona software, configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer). 2. Place the radio in continuous Receiver mode. Maximize Turntable (find worst case table angle) and maximize Antenna (find worst case height). 3. Use the peak marker function to determine the maximum amplitude level. 4. Center marker frequency and perform final measurement in Quasi-peak (≤ 1Ghz) and Average (above 1GHz) 5. Record at least 6 highest readings.

Ref. C63.10-2009/2009 section 4 / CISPR16-1-1

Test Parameters
Span = Entire frequency range or segment if necessary. Reference Level = 80 dBuV RBW = 100 kHz (less than or equal to 1 GHz); 1 MHz (above 1 GHz) VBW ≥ 3 x RBW Detector = Peak & Quasi-Peak (frequency range 30 MHz to 1 GHz); Peak & Average (frequency range above 1 GHz); Changing VBW to 10 Hz for average measurement Sweep Time = Couple

Recorded Test Data:

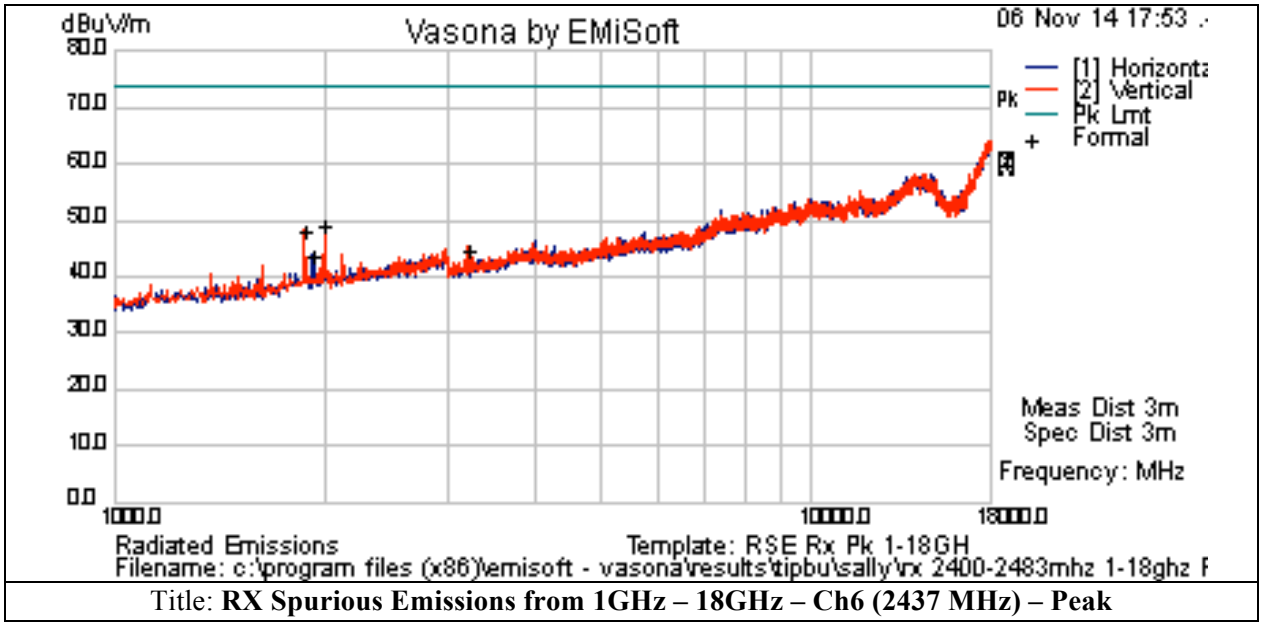
RX Spurious Emissions Test Result Tables for 802.11b (RX / Peak & Average)

Subtest Date:	06-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building P, 5m Anechoic
Subtest Title	Transmitter Spurious Emissions
Frequency Range	1 GHz - 18 GHz
Comments on the above Test Results	RX Mode

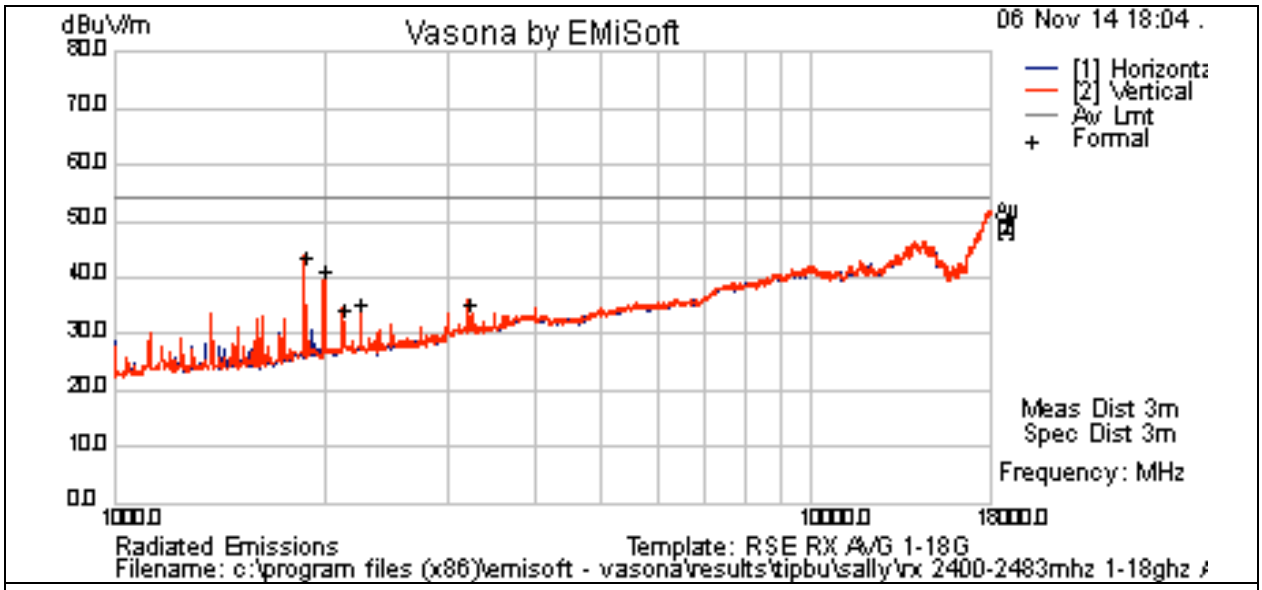
Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	AF (dB)	Level (dBuV)	Detector	Polarity	Height (cm)	Azt (Deg)	Limit (dBuV)	Margin (dB)	Results Pass /Fail	Comments
1928.123	47.1	2.5	-6.07	43.53	Pk	H	100	1	74	-30.47	Pass	RX / Ch 6
1874.927	51.94	2.47	-6.2	48.22	Pk	V	100	1	74	-25.78	Pass	RX / Ch 6
2002.217	52.46	2.6	-6.21	48.84	Pk	V	100	1	74	-25.16	Pass	RX / Ch 6
3217.475	45.46	3.32	-4.22	44.56	Pk	V	100	1	74	-29.44	Pass	RX / Ch 6
1874.922	47.42	2.47	-6.2	43.7	Av	V	100	172	54	-10.3	Pass	RX / Ch 6
2002.183	45.05	2.6	-6.21	41.43	Av	V	100	353	54	-12.57	Pass	RX / Ch 6
2251.404	38.41	2.74	-5.87	35.28	Av	V	100	262	54	-18.72	Pass	RX / Ch 6
2124.142	37.94	2.65	-6.09	34.5	Av	V	100	262	54	-19.5	Pass	RX / Ch 6
3216.552	36.26	3.31	-4.22	35.36	Av	V	100	1	54	-18.64	Pass	RX / Ch 6

Note: The limits in the table above are CISPR 22 limits @ 3m using 20 dB/decade extrapolation conversions factor from 10 m to 3m.

Graphical Test Results for 802.11b Mode:



Title: **RX Spurious Emissions from 1GHz – 18GHz – Ch6 (2437 MHz) – Peak**



Title: **RX Spurious Emissions from 1GHz – 18GHz – Ch6 (2437 MHz) – Average**

AC Power Line Conducted emissions
FCC 15.207 (a) & RSS-Gen 8.8 Issue 4

FCC 15.207: (a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN).

RSS-Gen 8.8 : A radio apparatus that is designed to be connected to the public utility (AC) power line shall ensure that the radio frequency voltage, which is conducted back onto the AC power line on any frequency or frequencies within the band 0.15 MHz to 30 MHz shall not exceed the limits in Table 3 shown in this section.

Test Procedure

C63.10:2009
Section 6.2.2 Measurement requirements
Measured levels of ac power-line conducted emission shall be the emission voltages from the voltage probe or across the 50 Ω LISN port (to which the EUT is connected), where permitted, terminated into a 50 Ω measuring instrument, or where permitted or required, the emission currents on the power line sensed by a current probe. All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the
manufacturer, and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer. For those measurements, using a LISN, the 50 Ω measuring port is terminated by a measuring instrument having a 50 Ω input impedance. All other ports are terminated in 50 Ω loads. Figure 5, Figure 6, and Figure 7 show typical test setups for ac power-line conducted emissions testing (see 6.13). For information about the use of a RF-shielded (screen) room, vertical conducting plane and voltage probe, see ANSI C63.4.

Tabletop devices shall be placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above thereference ground plane. The vertical conducting plane or wall of an RF-shielded (screen) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

6.2.5 Final ac power-line conducted emission measurements
Based on the exploratory tests of the EUT performed in 6.2.4, the one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT. If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are
performed. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation. If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each
current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency.
Ref. C63.10-2009 section 6.2

Test Procedure
1. Using Vasona software, configure the spectrum analyzer as shown above (be sure to enter all losses between the transmitter output and the spectrum analyzer). 2. Set the radio in continuous transmit mode. 3. Connect cable end to LISN Hot port and other cable end to the spectrum Analyzer/EMC receiver RF input port. Terminate the LISN neutral port with a 50 Ω impedance terminator. 4. Sweep the frequency range from 150 kHz to 30 MHz (segment if necessary) 5. Use the peak marker function to determine the maximum amplitude level. 6. Center marker frequency and perform final measurement using applicable detector (Quasi-Pk/Average). 7. Record at least 6 highest reading for the worst case operating modes in Quasi-peak/Average. 8. Repeat the test on Neutral lead. 9. Repeat step 3 – 7 with the radio sets in the Receiver mode. 10. Record at least 6 highest reading in Quasi-peak/Average

Ref. C63.10-2009 section 4 / CISPR16-1-1

Test Parameters
Span = Entire frequency range or segment if necessary. Reference Level = 70 dBuV RBW = 9 kHz VBW ≥ 3 x RBW Sweep Time = Couple Detector = Quasi-Peak & Average

Recorded Test Data for 802.11b mode:

Conducted Emissions Test Result Tables for 802.11b (TX Ch6/ Quasi-Peak & Average)

Subtest Date:	12-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building B, 3m Anechoic
Subtest Title	Conducted Emissions
Frequency Range	150 kHz - 30 MHz
Comments on the above Test Results	TX Ch6 (2437 MHz) with DBPSK modulation – 1 Mbps

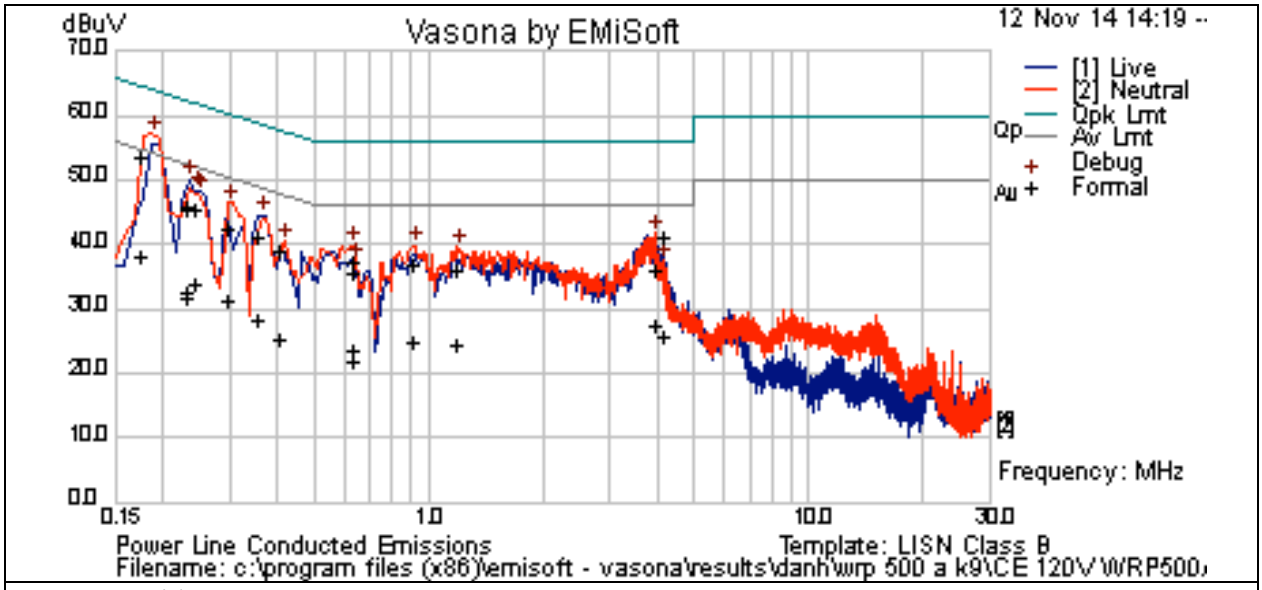
Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	Factors (dB)	Level (dBuV)	Detector	Lines (Live/Neutral)	Limit (dBuV)	Margin (dB)	Results Pass / Fail	Comments
0.1738	32.48	20.97	0.05	53.5	Quasi Peak	Neutral	64.78	-11.28	Pass	TX / Ch6
4.1652	20.98	20.01	0.04	41.02	Quasi Peak	Live	56	-14.98	Pass	TX / Ch6
0.2424	24.9	20.65	0.02	45.57	Quasi Peak	Live	62.01	-16.44	Pass	TX / Ch6
0.1738	17.31	20.97	0.05	38.33	Average	Neutral	54.78	-16.45	Pass	TX / Ch6
0.2315	25.03	20.69	0.01	45.74	Quasi Peak	Live	62.4	-16.66	Pass	TX / Ch6
0.231	24.87	20.69	0.02	45.58	Quasi Peak	Live	62.41	-16.83	Pass	TX / Ch6
0.2929	22.13	20.46	0.04	42.63	Quasi Peak	Neutral	60.44	-17.81	Pass	TX / Ch6
0.3537	20.71	20.28	0.04	41.02	Quasi Peak	Live	58.88	-17.85	Pass	TX / Ch6
0.2424	13.19	20.65	0.02	33.86	Average	Live	52.01	-18.15	Pass	TX / Ch6
0.6301	17.25	20.02	0.03	37.3	Quasi Peak	Neutral	56	-18.7	Pass	TX / Ch6
0.4027	18.89	20.15	0.03	39.07	Quasi Peak	Neutral	57.8	-18.73	Pass	TX / Ch6
3.9455	7.22	20	0.04	27.26	Average	Neutral	46	-18.74	Pass	TX / Ch6
0.2929	10.88	20.46	0.04	31.38	Average	Neutral	50.44	-19.06	Pass	TX / Ch6
0.9081	16.74	20	0.02	36.75	Quasi Peak	Neutral	56	-19.25	Pass	TX / Ch6
0.2315	11.81	20.69	0.01	32.52	Average	Live	52.4	-19.88	Pass	TX / Ch6
1.1859	16.02	19.98	0.05	36.05	Quasi Peak	Neutral	56	-19.95	Pass	TX / Ch6
3.9455	15.91	20	0.04	35.95	Quasi Peak	Neutral	56	-20.05	Pass	TX / Ch6
4.1652	5.81	20.01	0.04	25.85	Average	Live	46	-20.15	Pass	TX / Ch6
0.6287	15.66	20.02	0.02	35.71	Quasi Peak	Live	56	-20.29	Pass	TX / Ch6
0.3537	8.19	20.28	0.04	28.51	Average	Live	48.88	-20.37	Pass	TX / Ch6
0.231	11.16	20.69	0.02	31.88	Average	Live	52.41	-20.54	Pass	TX / Ch6
0.9081	4.94	20	0.02	24.96	Average	Neutral	46	-21.04	Pass	TX / Ch6
1.1859	4.59	19.98	0.05	24.62	Average	Neutral	46	-21.38	Pass	TX / Ch6
0.6301	3.66	20.02	0.03	23.71	Average	Neutral	46	-22.29	Pass	TX / Ch6
0.4027	5.26	20.15	0.03	25.44	Average	Neutral	47.8	-22.35	Pass	TX / Ch6
0.6287	1.95	20.02	0.02	21.99	Average	Live	46	-24.01	Pass	TX / Ch6

Conducted Emissions Test Result Tables for 802.11b (RX Ch6/ Quasi-Peak & Average)

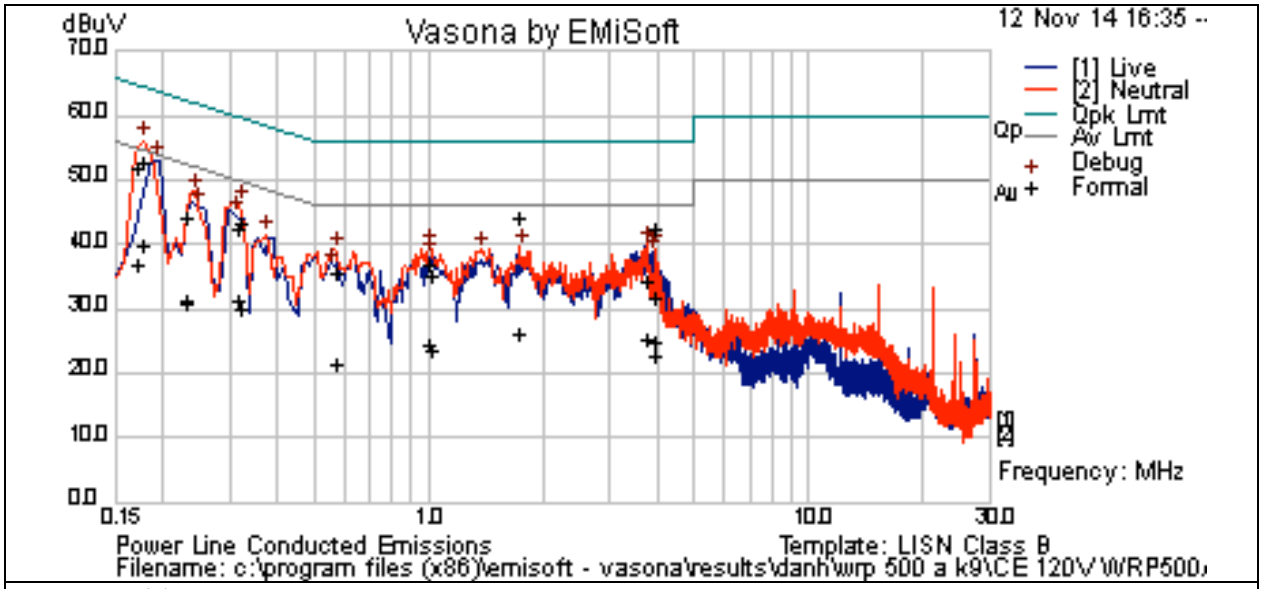
Subtest Date:	12-Nov-2014
Engineer	Jose Aguirre
Lab Information	Building B, 3m Anechoic
Subtest Title	Conducted Emissions
Frequency Range	150 kHz - 30 MHz
Comments on the above Test Results	RX Ch6 (2437 MHz)

Frequency (MHz)	Raw (dBuV)	Cab Loss (dB)	Factors (dB)	Level (dBuV)	Detector	Lines (Live/Neutral)	Limit (dBuV)	Margin (dB)	Results Pass / Fail	Comments
1.7363	24.33	19.97	0.02	44.31	Quasi Peak	Neutral	56	-11.69	Pass	RX / Ch6
0.1753	31.78	20.96	0.06	52.79	Quasi Peak	Live	64.71	-11.91	Pass	RX / Ch6
0.1717	30.77	20.98	0.03	51.78	Quasi Peak	Neutral	64.88	-13.1	Pass	RX / Ch6
3.9025	22.3	20	0.04	42.34	Quasi Peak	Live	56	-13.66	Pass	RX / Ch6
0.1753	18.74	20.96	0.06	39.76	Average	Live	54.71	-14.95	Pass	RX / Ch6
0.3182	23.11	20.38	0.03	43.52	Quasi Peak	Neutral	59.75	-16.23	Pass	RX / Ch6
0.3136	21.92	20.4	0.03	42.34	Quasi Peak	Live	59.87	-17.53	Pass	RX / Ch6
0.1717	15.87	20.98	0.03	36.88	Average	Neutral	54.88	-17.99	Pass	RX / Ch6
0.2292	23.58	20.7	0.03	44.31	Quasi Peak	Neutral	62.48	-18.16	Pass	RX / Ch6
0.2319	23.41	20.69	0.01	44.11	Quasi Peak	Live	62.38	-18.27	Pass	RX / Ch6
0.3136	10.82	20.4	0.03	31.24	Average	Live	49.87	-18.63	Pass	RX / Ch6
1.007	17.08	19.99	0.03	37.11	Quasi Peak	Neutral	56	-18.89	Pass	RX / Ch6
0.3182	9.52	20.38	0.03	29.93	Average	Neutral	49.75	-19.82	Pass	RX / Ch6
1.7363	6.09	19.97	0.02	26.08	Average	Neutral	46	-19.92	Pass	RX / Ch6
0.5664	15.36	20.03	0.03	35.43	Quasi Peak	Live	56	-20.57	Pass	RX / Ch6
3.7336	5.27	20	0.04	25.32	Average	Neutral	46	-20.68	Pass	RX / Ch6
1.0158	15.11	19.99	0.03	35.14	Quasi Peak	Live	56	-20.86	Pass	RX / Ch6
3.9025	4.97	20	0.04	25.02	Average	Live	46	-20.98	Pass	RX / Ch6
0.2292	10.53	20.7	0.03	31.26	Average	Neutral	52.48	-21.21	Pass	RX / Ch6
1.007	4.64	19.99	0.03	24.66	Average	Neutral	46	-21.34	Pass	RX / Ch6
0.2319	10.14	20.69	0.01	30.84	Average	Live	52.38	-21.54	Pass	RX / Ch6
3.7336	14.1	20	0.04	34.14	Quasi Peak	Neutral	56	-21.86	Pass	RX / Ch6
1.0158	3.55	19.99	0.03	23.58	Average	Live	46	-22.42	Pass	RX / Ch6
3.9541	2.7	20	0.04	22.74	Average	Neutral	46	-23.26	Pass	RX / Ch6
3.9541	11.59	20	0.04	31.63	Quasi Peak	Neutral	56	-24.37	Pass	RX / Ch6
0.5664	1.46	20.03	0.03	21.53	Average	Live	46	-24.47	Pass	RX / Ch6

Graphical Test Results for 802.11b Mode:
Note: The data displayed on the plots detailed in this section were measured using a 'Peak Detector'.
Please refer to the results table for the detectors used during final measurements.



Title: **TX Conducted Emissions from 150kHz – 30MHz – Ch6 (2437 MHz) - Peak**



Title: **RX Conducted Emissions from 150kHz – 30MHz – Ch6 (2437 MHz) - Peak**

Appendix A: Test Equipment/Software Used to perform the test

Test Equipment List					
Equipment #	**Manufacturer**	**Model**	**Description**	**Last Cal**	**Next Cal Due Date**
CIS005691	Miteq	NSP1800-25-S1	Broadband Preamplifier (1-18GHz)	27-JAN-14	27-JAN-15
CIS008448	Cisco	NSA 5m Chamber	NSA 5m Chamber	07-OCT-14	07-OCT-15
CIS021117	Micro-Coax	UFB311A-0-2484-520520	RF Coaxial Cable, to 18GHz, 248.4 in	25-AUG-14	25-AUG-15
CIS025655	Micro-Coax	UFB311A-1-0840-504504	RF Coaxial Cable, to 18GHz, 84 in	27-FEB-14	27-FEB-15
CIS025658	Micro-Coax	UFB311A-1-0840-504504	RF Coaxial Cable, to 18GHz, 84 in	14-FEB-14	14-FEB-15
CIS032806	Sunol Sciences	JB1	Combination Antenna	20-MAR-14	20-MAR-15
CIS037581	ETS-Lindgren	3117	Double Ridged Waveguide Horn Antenna	16-SEP-14	16-SEP-15
CIS040597	Cisco	Above 1GHz Site Cal	Above 1GHz Cispr Site Verification	28-MAY-14	28-MAY-15
CIS042013	ETS-Lindgren	3117	Double Ridged Waveguide Horn Antenna	09-APR-14	09-APR-15
CIS040641	Rohde & Schwarz	ESU26	EMI Test Receiver	29-JUL-14	29-JUL-15
CIS041935	Newport	iBTHP-5-DB9	5 inch Temp/RH/Press Sensor w/20ft cable	01-APR-14	01-APR-15
CIS049563	Huber + Suhner	Sucoflex 106A	N Type Cable 18GHz	25-AUG-14	25-AUG-15
CIS030666	Micro-Tronics	BRM50702-02	Band Reject Filter, Stop Band=2.4-2.5GHz	03-JUN-14	03-JUN-2015
CIS051741	Rohde & Schwarz	NRP-Z81	Power Meter	08-Jan-14	08-Jan-15
CIS040503	Agilent	E4440A	Spectrum Analyzer	06-Jun-14	06-Jun-15
CIS041995	Mini-Circuits	BW-S6W2+	SMA 6 dB Attenuator	21-MAR-14	21-Mar-15
CIS07036	Agilent	E7401A	EMC Analyzer	11-Sep-14	11-Sep-15
CIS08197	TTL, Inc	H613-150K-50-21378	HP-Filter	17-Apr-14	17-Apr-15
CIS08192	Fisher Custom Com	53779	Pulse Limiter	30-Jul-14	30-Jul-15
CIS046010	Fisher Custom Com	F-090527-1009-1	LISN	20-Jun-14	20-Jun-15

Software Used for Testing
1. Vasona File version 5.073, 5.089 2. Winsoft Radio Automation Software version 1.2