

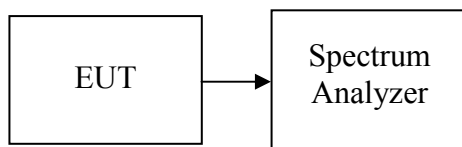
7.6 SPURIOUS EMISSIONS

7.6.1 Conducted Measurement

LIMIT

According to §15.247(d), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum 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. In addition, 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) (see Section 15.205(c)).

Test Configuration



TEST PROCEDURE

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 100 kHz.

Measurements are made over the 30MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels.

TEST RESULTS

No non-compliance noted



Test Plot

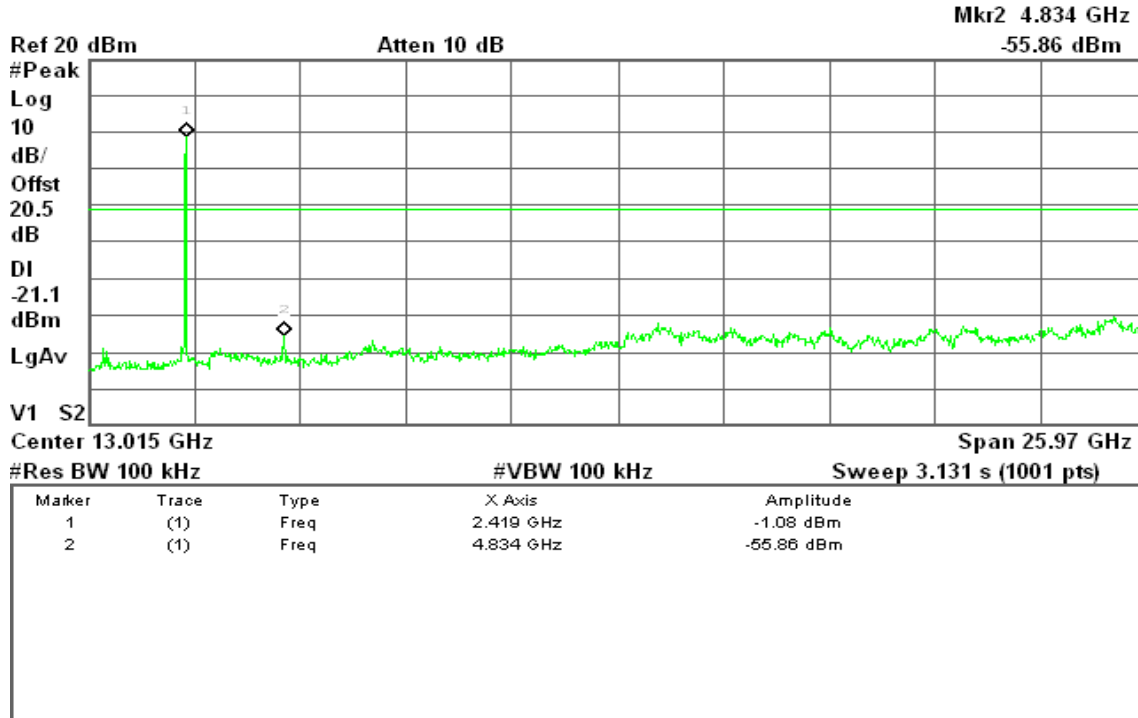
For Omni Antenna

IEEE 802.11b mode

CH Low

Agilent 19:39:50 Nov 19, 2009

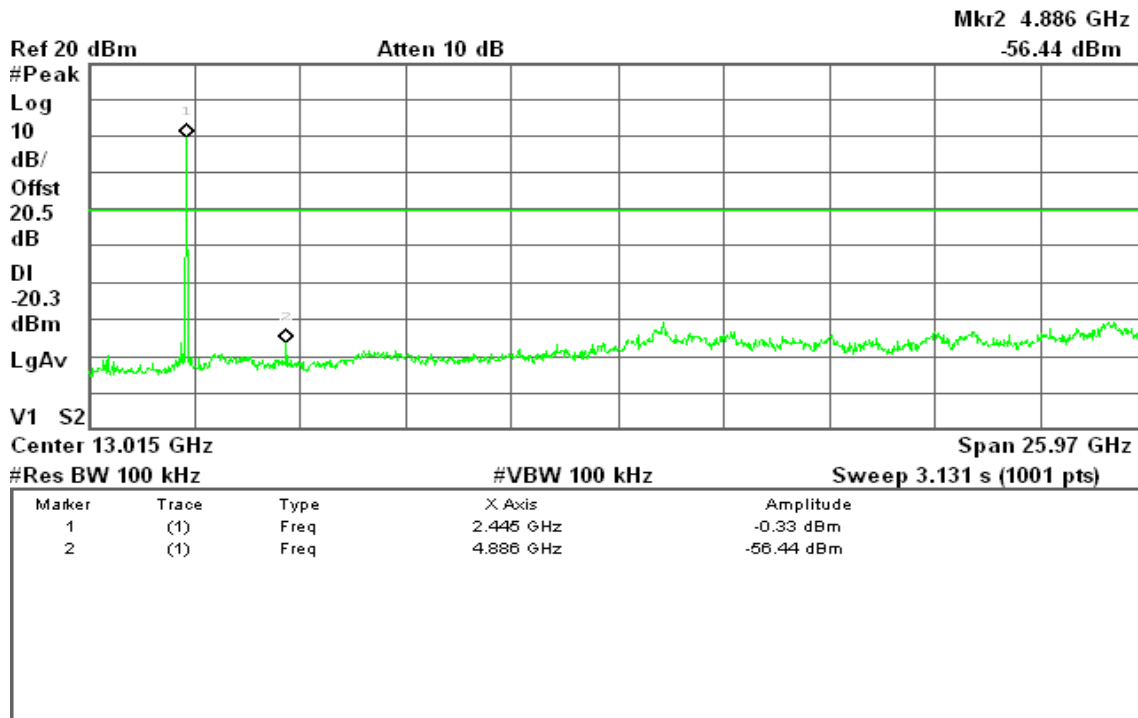
R T



CH Mid

Agilent 19:20:44 Nov 19, 2009

R T



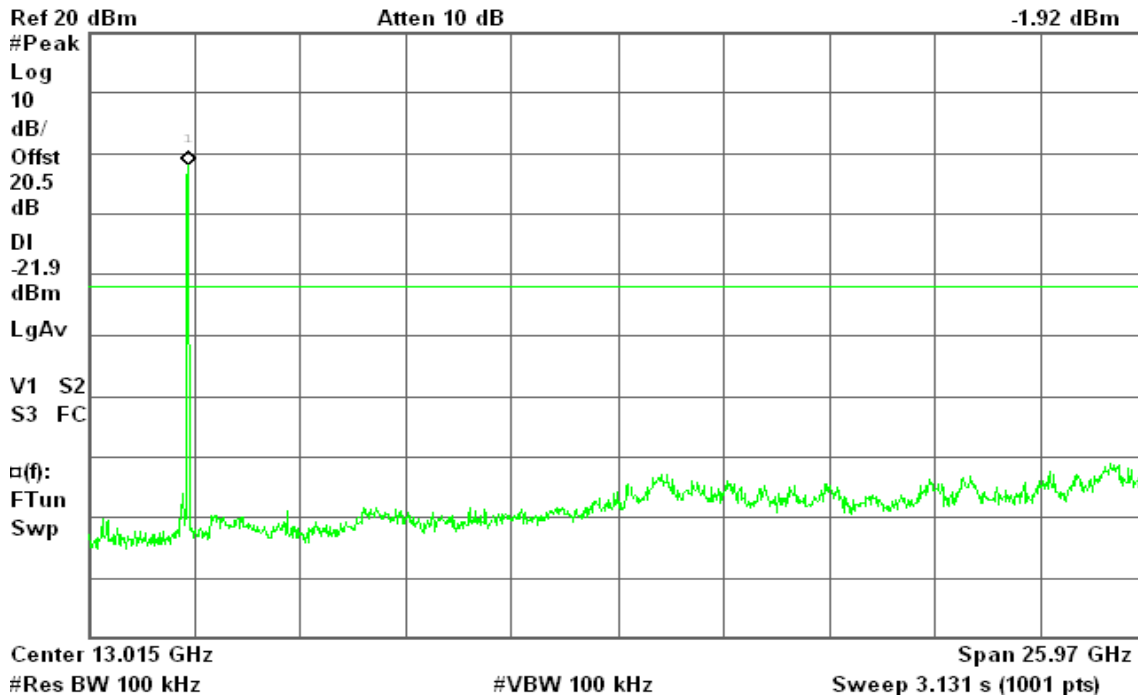


CH High

Agilent 19:32:08 Nov 19, 2009

R T

Mkr1 2.471 GHz
-1.92 dBm



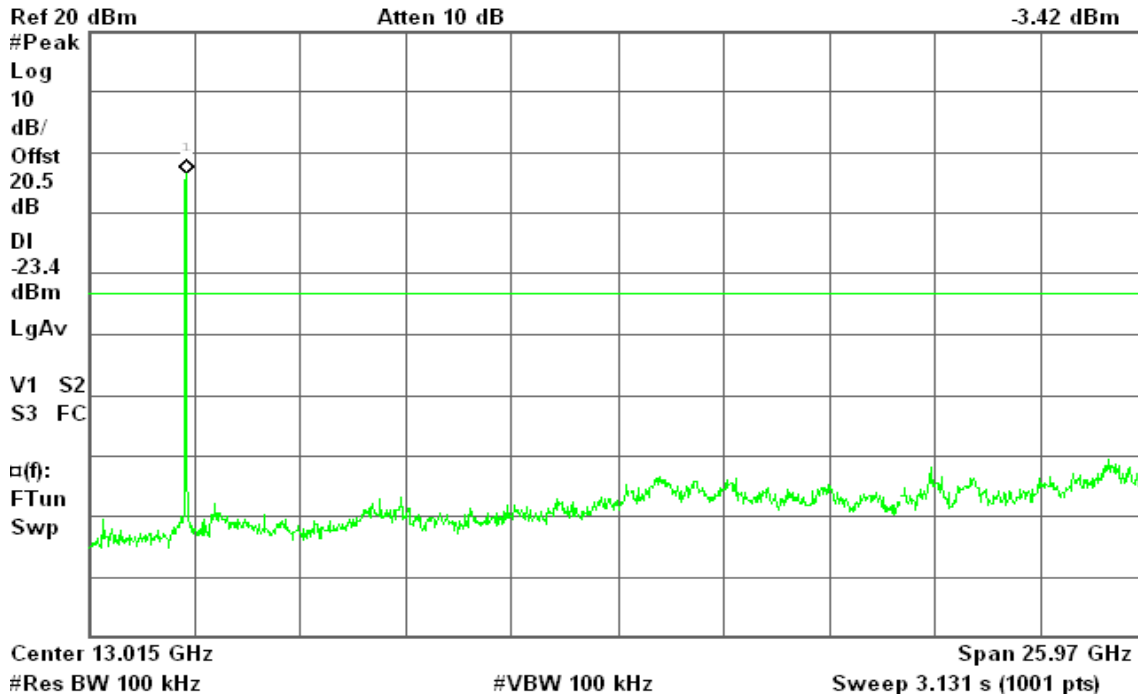
IEEE 802.11g mode

CH Low

Agilent 20:11:36 Nov 19, 2009

R T

Mkr1 2.419 GHz
-3.42 dBm

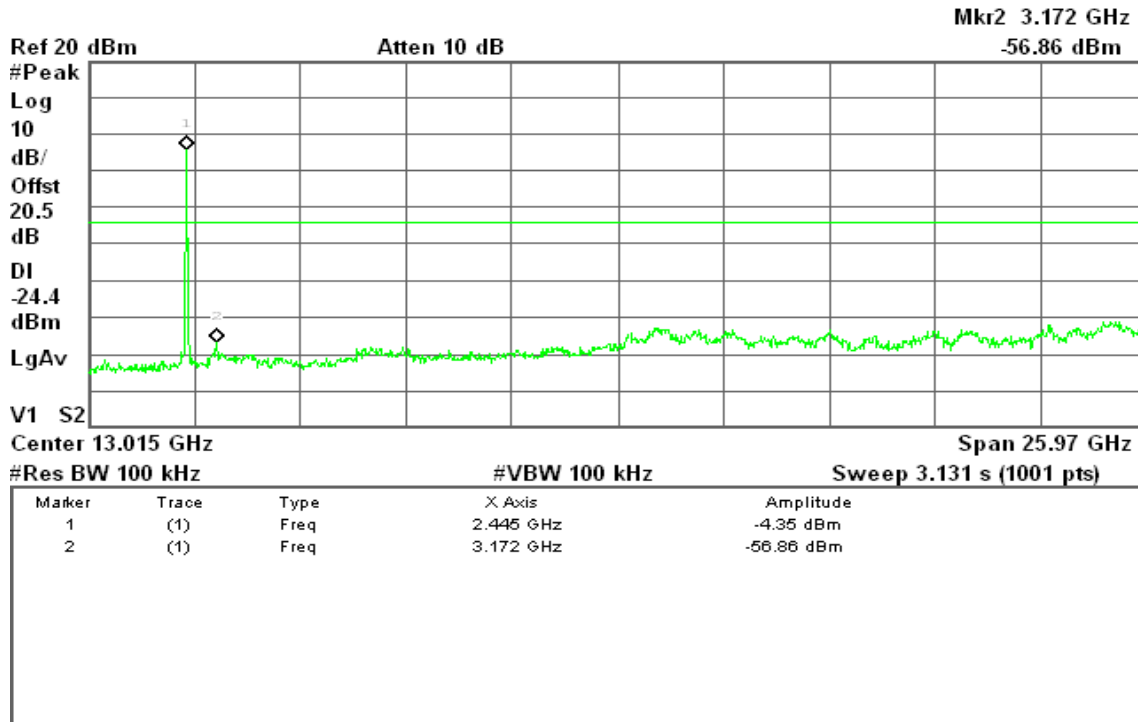




CH Mid

Agilent 20:20:31 Nov 19, 2009

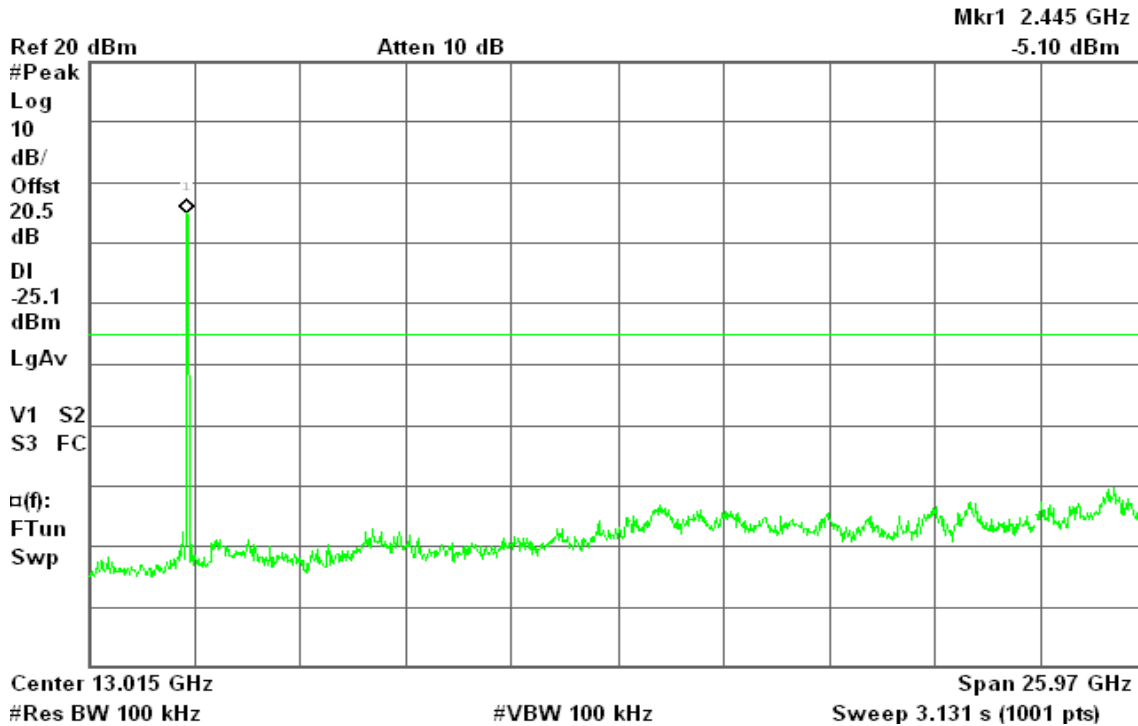
R T



CH High

Agilent 20:30:00 Nov 19, 2009

R T



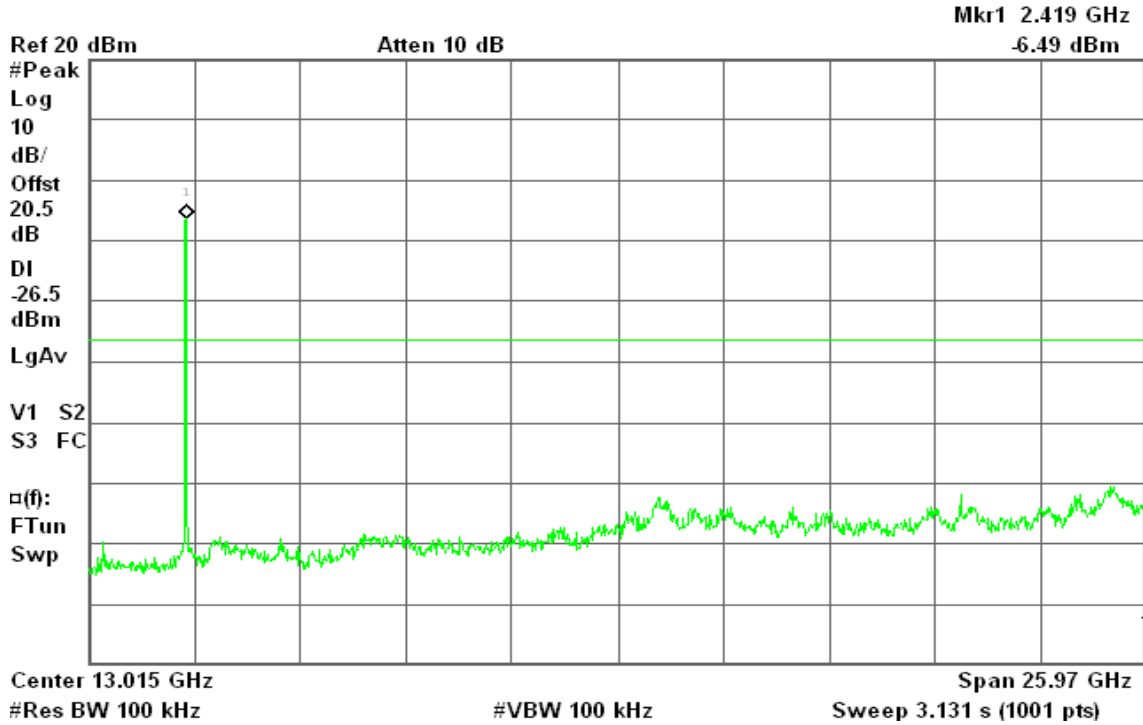


draft 802.11n Standard-20 MHz Channel mode

CH Low

Agilent 20:37:41 Nov 19, 2009

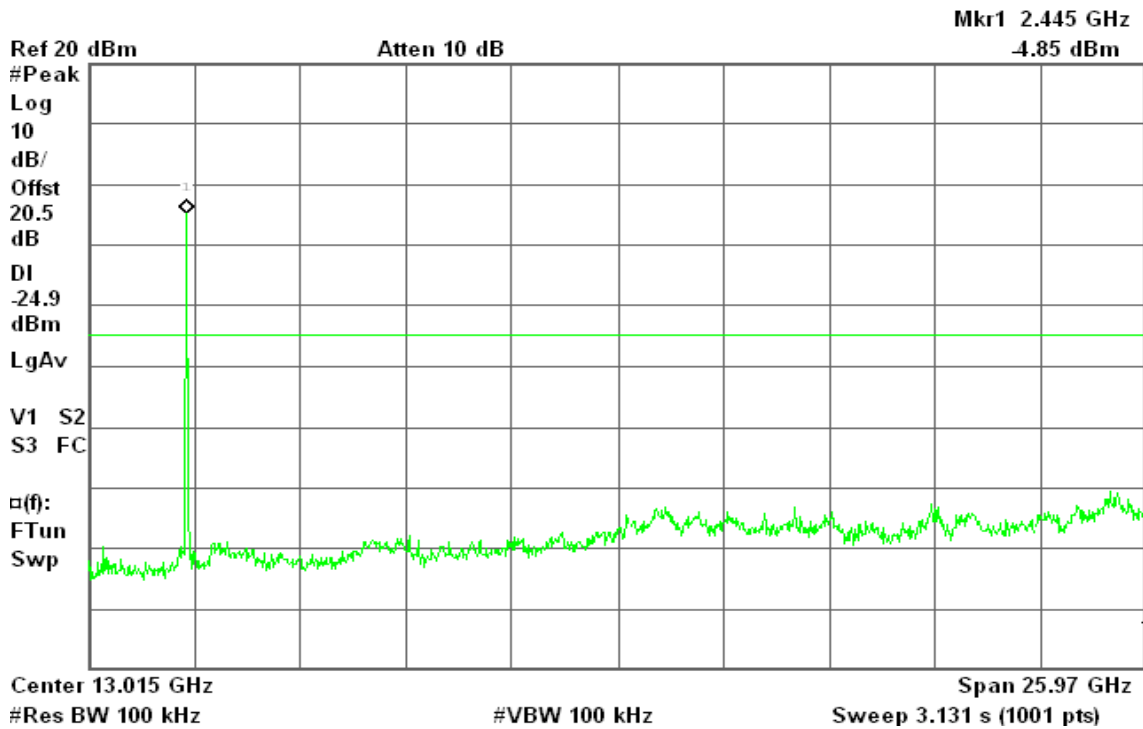
R T



CH Mid

Agilent 20:43:11 Nov 19, 2009

R T



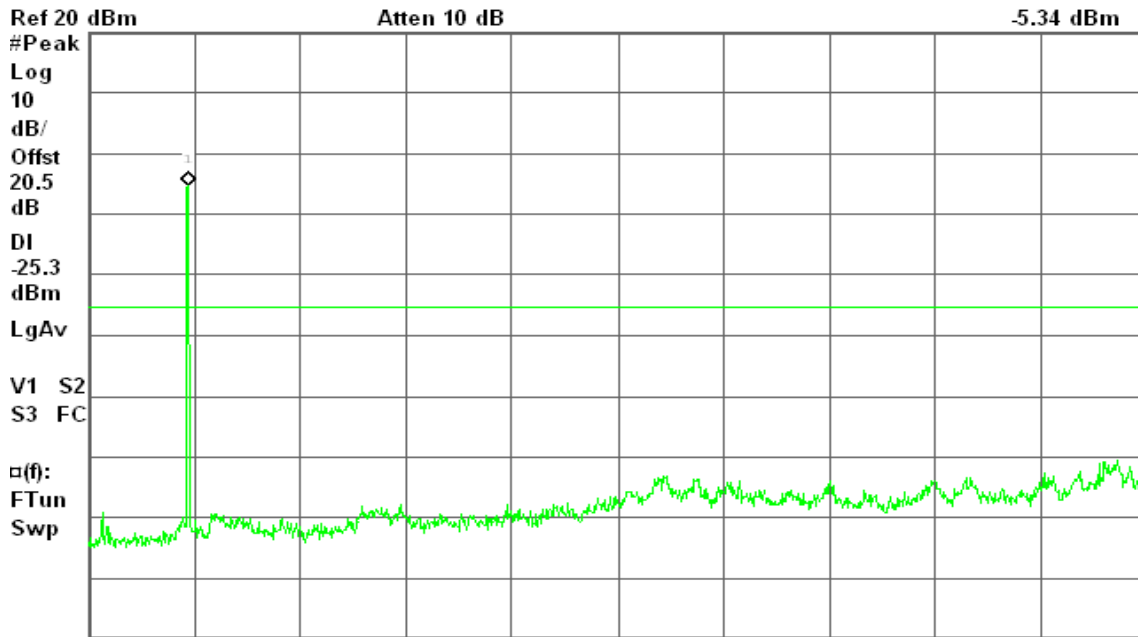


CH High

Agilent 20:48:34 Nov 19, 2009

R T

Mkr1 2.471 GHz
-5.34 dBm



Center 13.015 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)

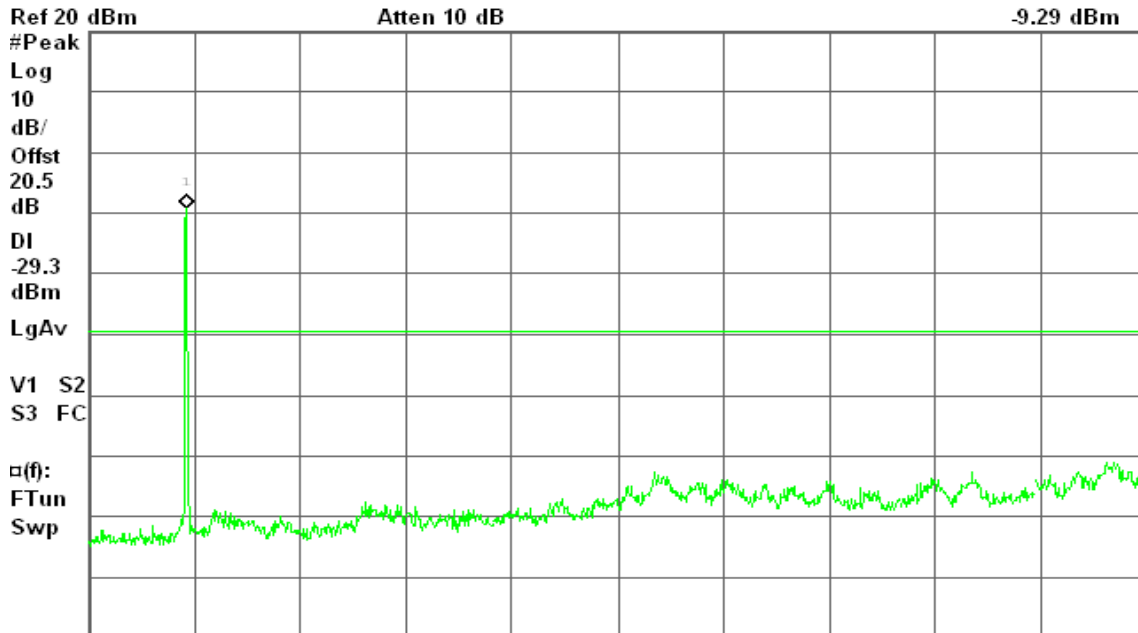
draft 802.11n Wide-40 MHz Channel mode

CH Low

Agilent 21:01:47 Nov 19, 2009

R T

Mkr1 2.419 GHz
-9.29 dBm



Center 13.015 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)



For Patch Antenna

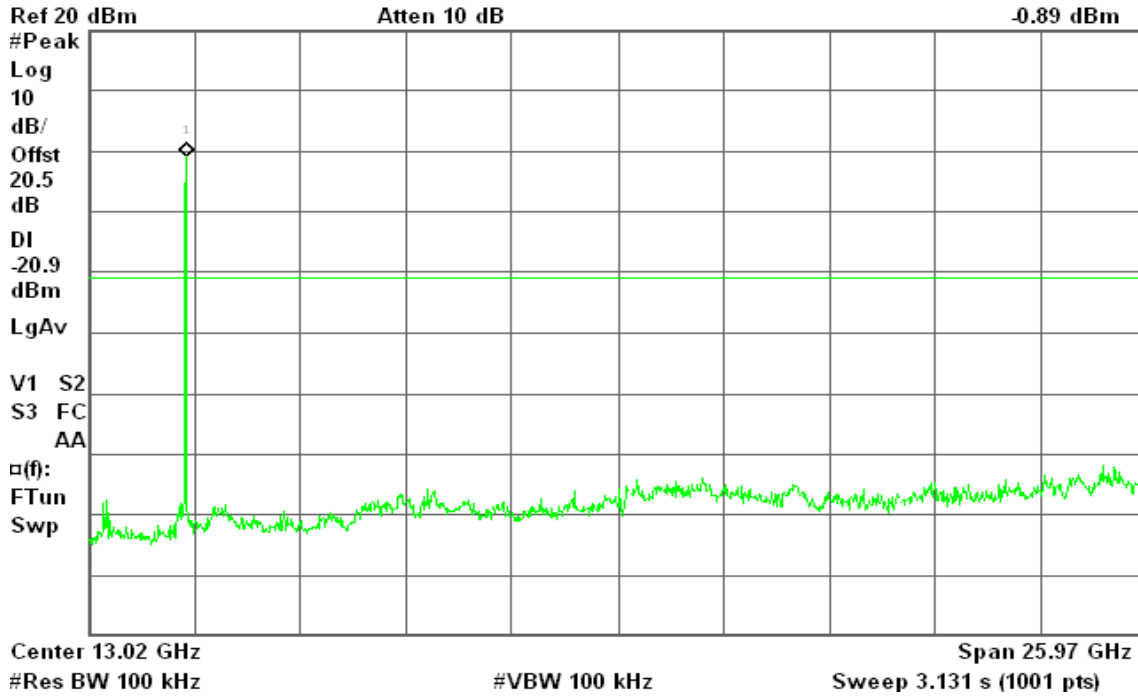
IEEE 802.11b mode

CH Low

Agilent 14:47:02 Nov 30, 2009

R T

Mkr1 2.42 GHz
-0.89 dBm

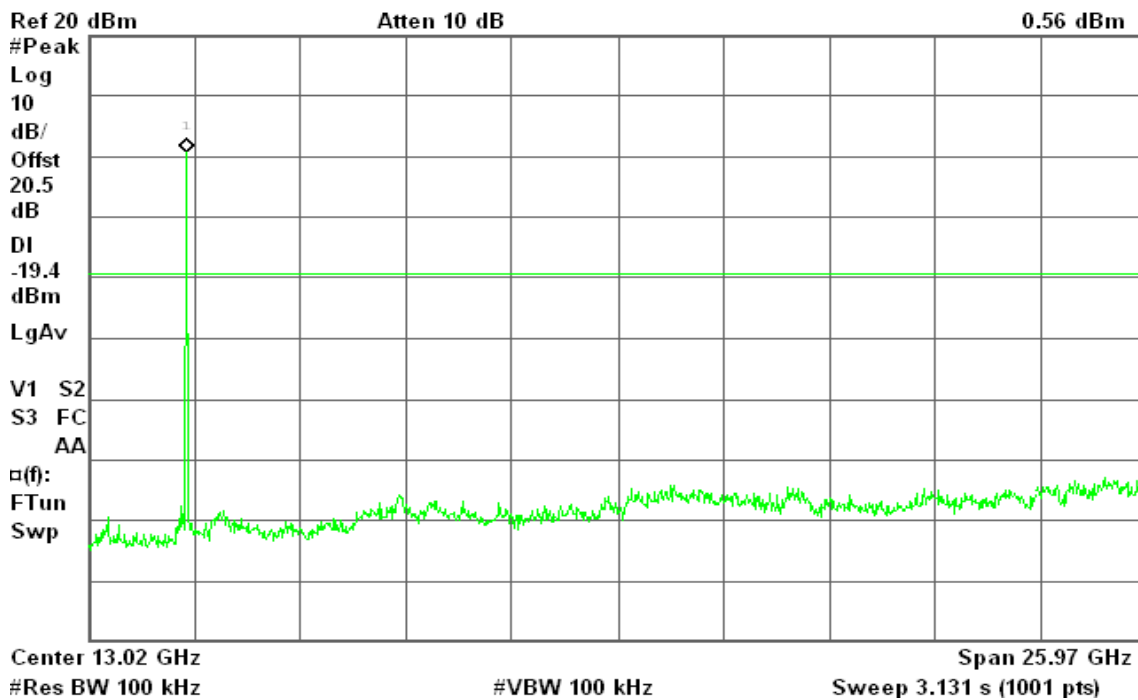


CH Mid

Agilent 14:56:36 Nov 30, 2009

R T

Mkr1 2.45 GHz
0.56 dBm



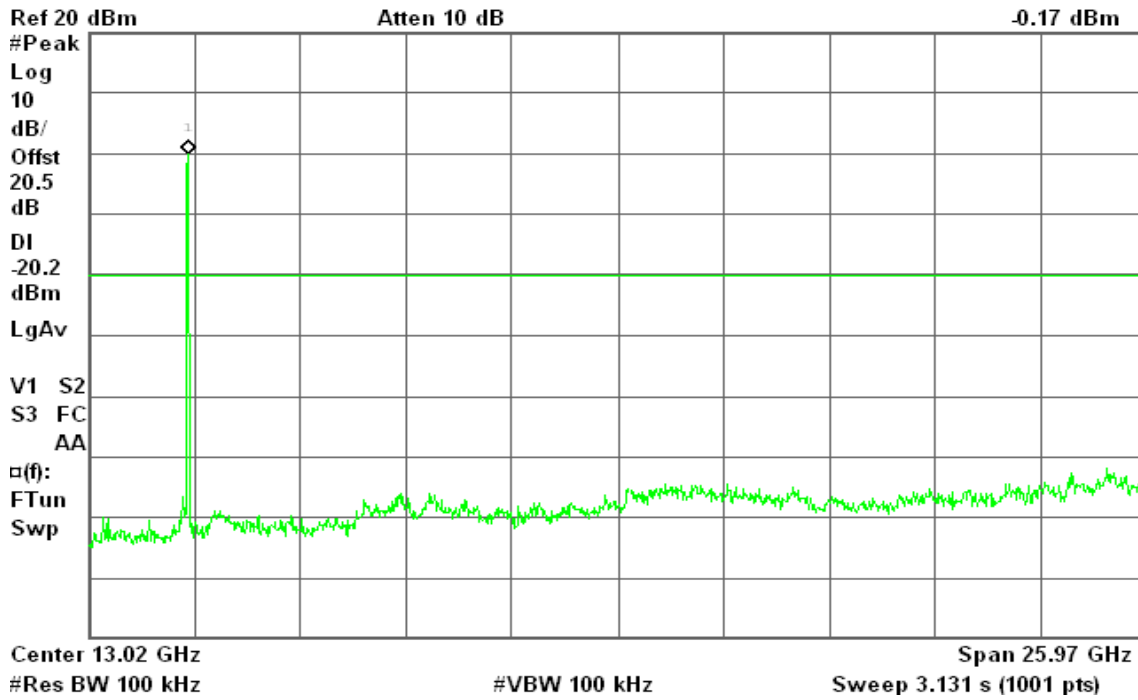


CH High

Agilent 15:01:30 Nov 30, 2009

R T

Mkr1 2.47 GHz
-0.17 dBm



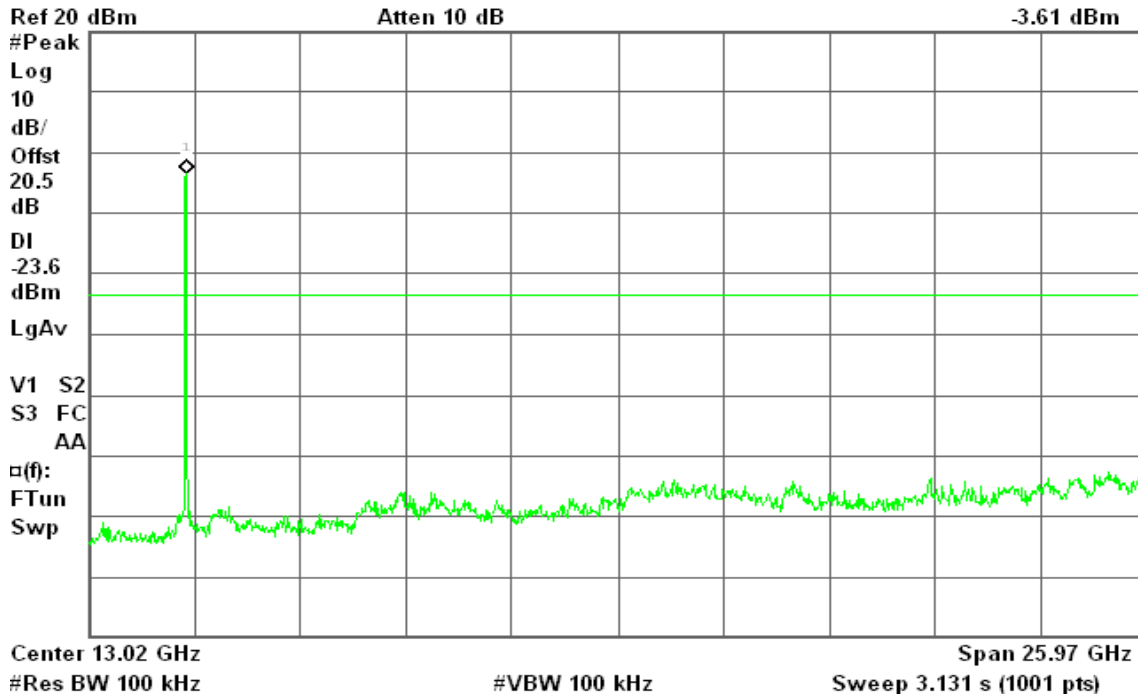
IEEE 802.11g mode

CH Low

Agilent 15:07:43 Nov 30, 2009

R T

Mkr1 2.42 GHz
-3.61 dBm

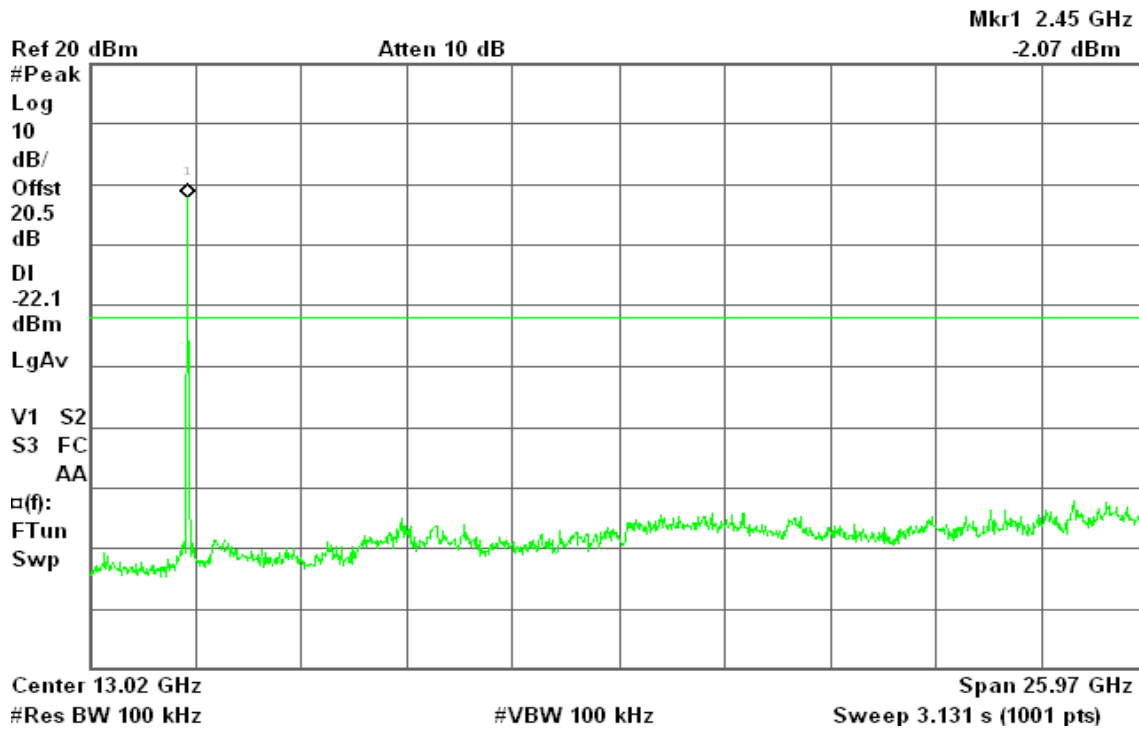




CH Mid

Agilent 15:14:24 Nov 30, 2009

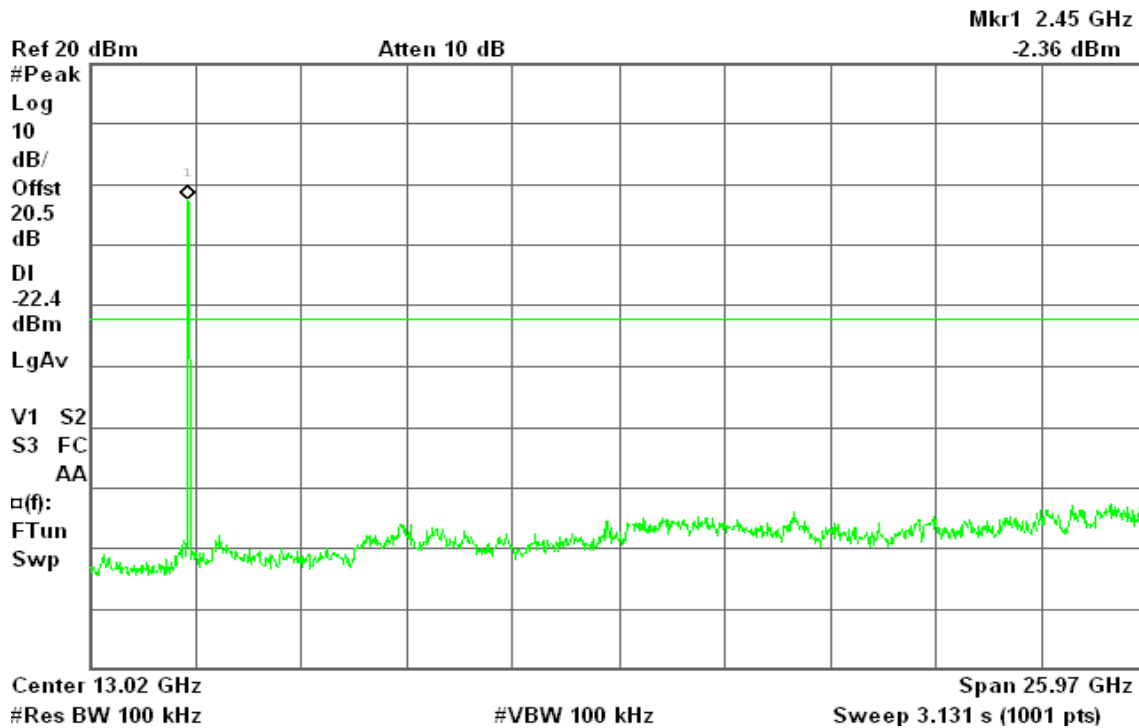
R T



CH High

Agilent 15:23:03 Nov 30, 2009

R T



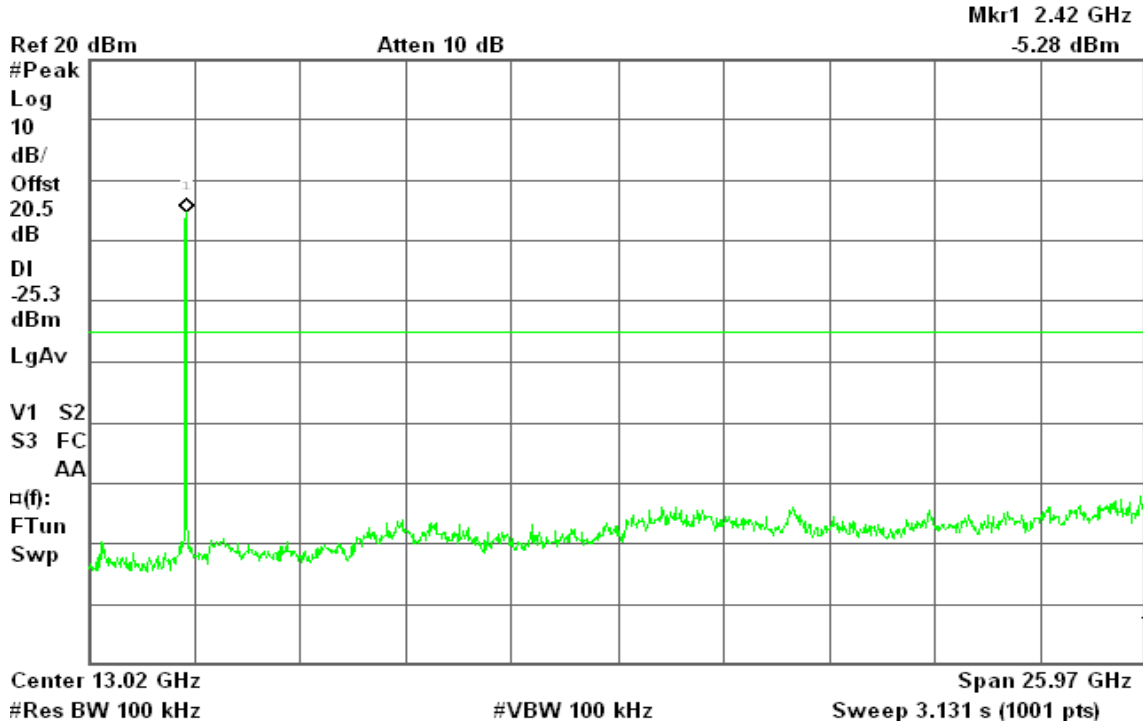


draft 802.11n Standard-20 MHz Channel mode

CH Low

Agilent 15:29:03 Nov 30, 2009

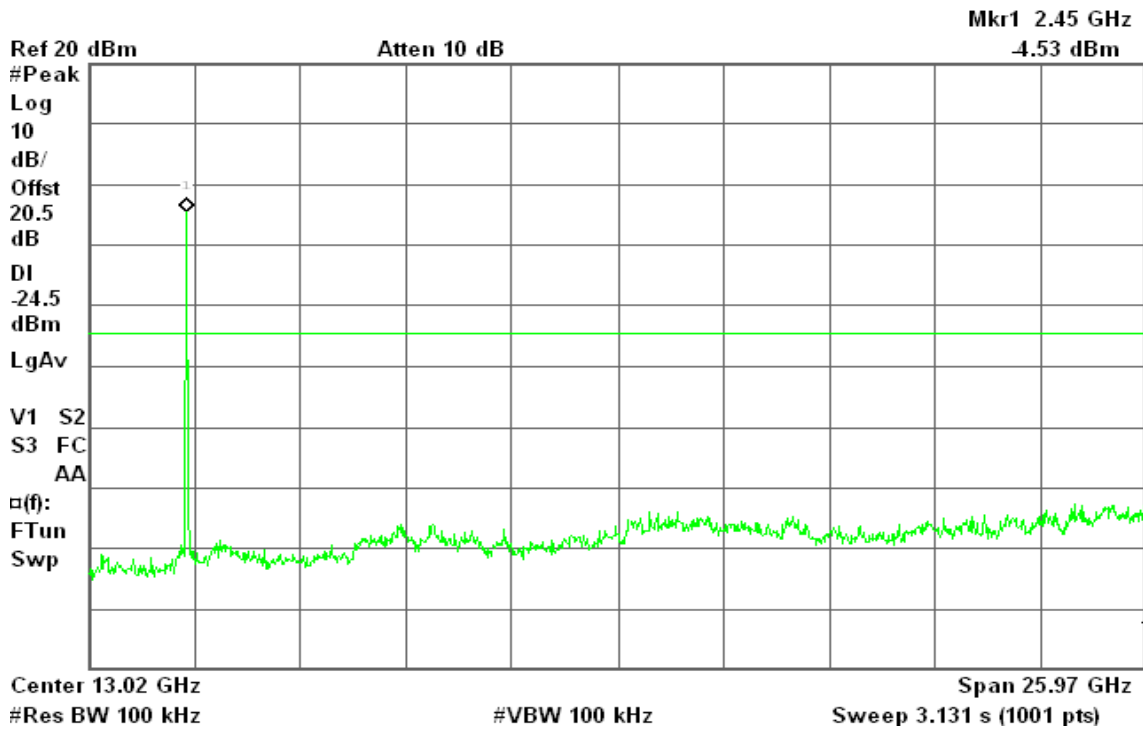
R T



CH Mid

Agilent 15:34:23 Nov 30, 2009

R T



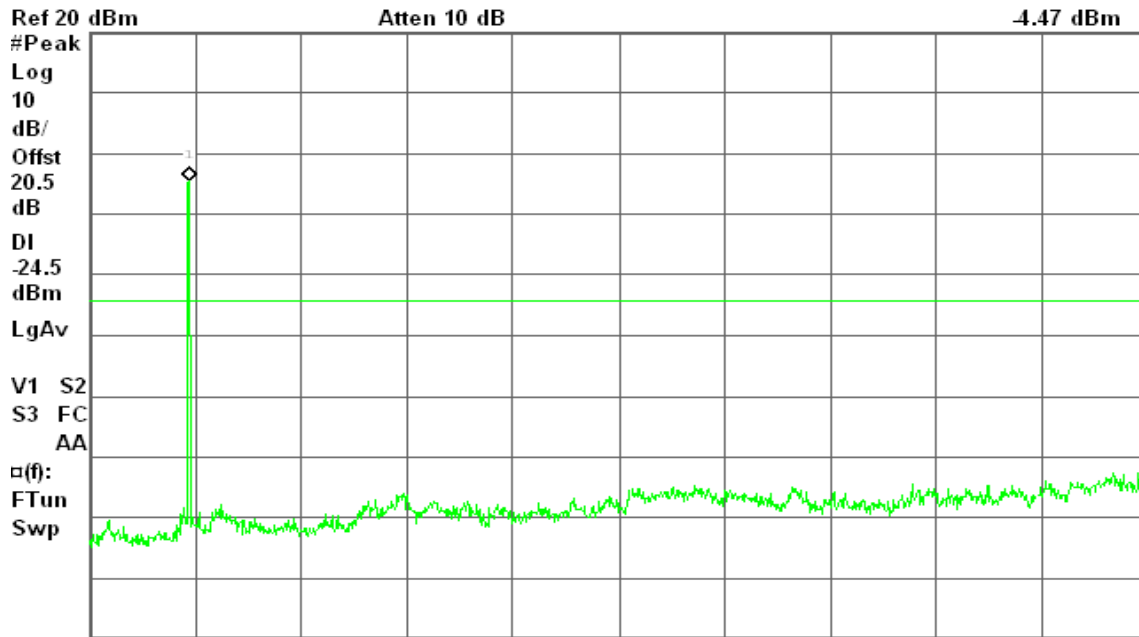


CH High

Agilent 15:41:05 Nov 30, 2009

R T

Mkr1 2.47 GHz
-4.47 dBm



Center 13.02 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)

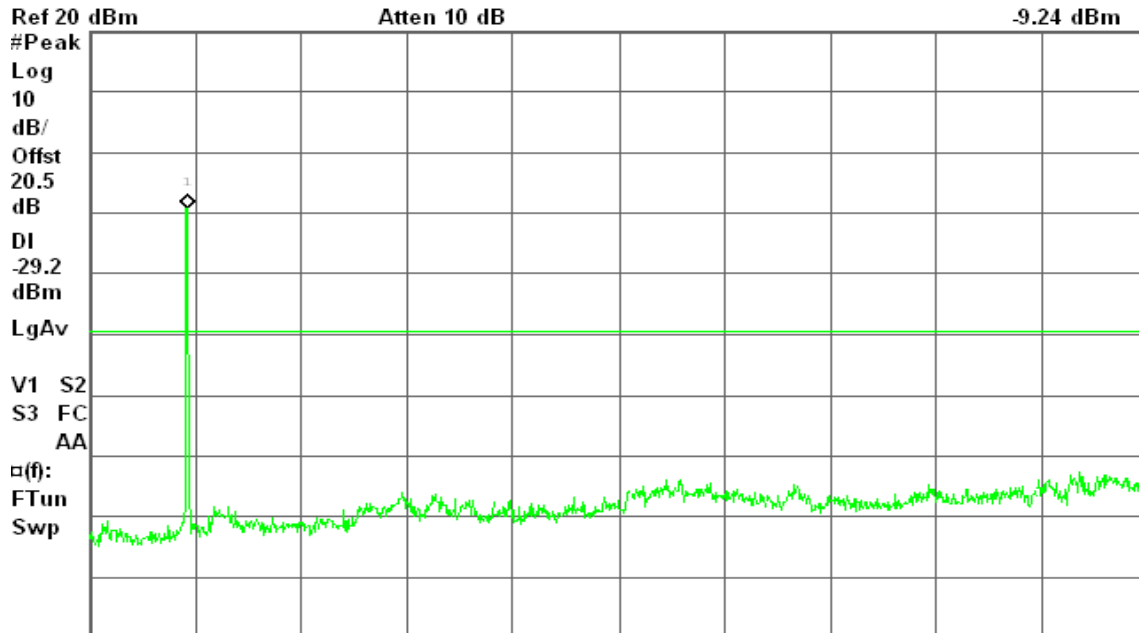
draft 802.11n Wide-40 MHz Channel mode

CH Low

Agilent 15:53:25 Nov 30, 2009

R T

Mkr1 2.42 GHz
-9.24 dBm



Center 13.02 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)

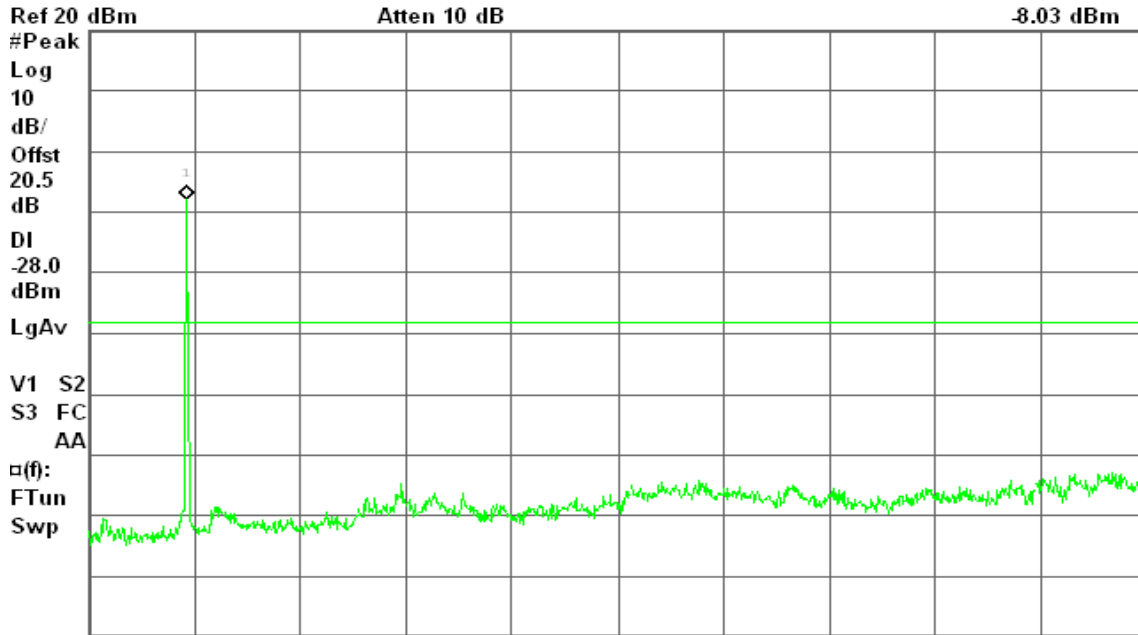


CH Mid

Agilent 16:05:12 Nov 30, 2009

R T

Mkr1 2.45 GHz
-8.03 dBm



Center 13.02 GHz
#Res BW 100 kHz

#VBW 100 kHz

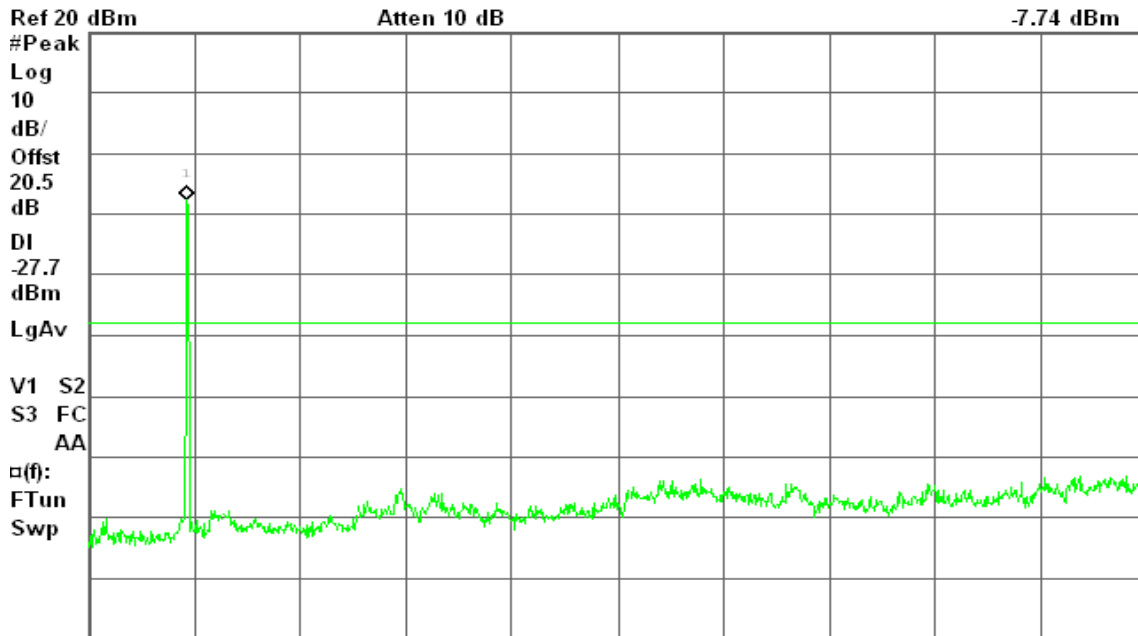
Span 25.97 GHz
Sweep 3.131 s (1001 pts)

CH High

Agilent 16:12:50 Nov 30, 2009

R T

Mkr1 2.45 GHz
-7.74 dBm



Center 13.02 GHz
#Res BW 100 kHz

#VBW 100 kHz

Span 25.97 GHz
Sweep 3.131 s (1001 pts)

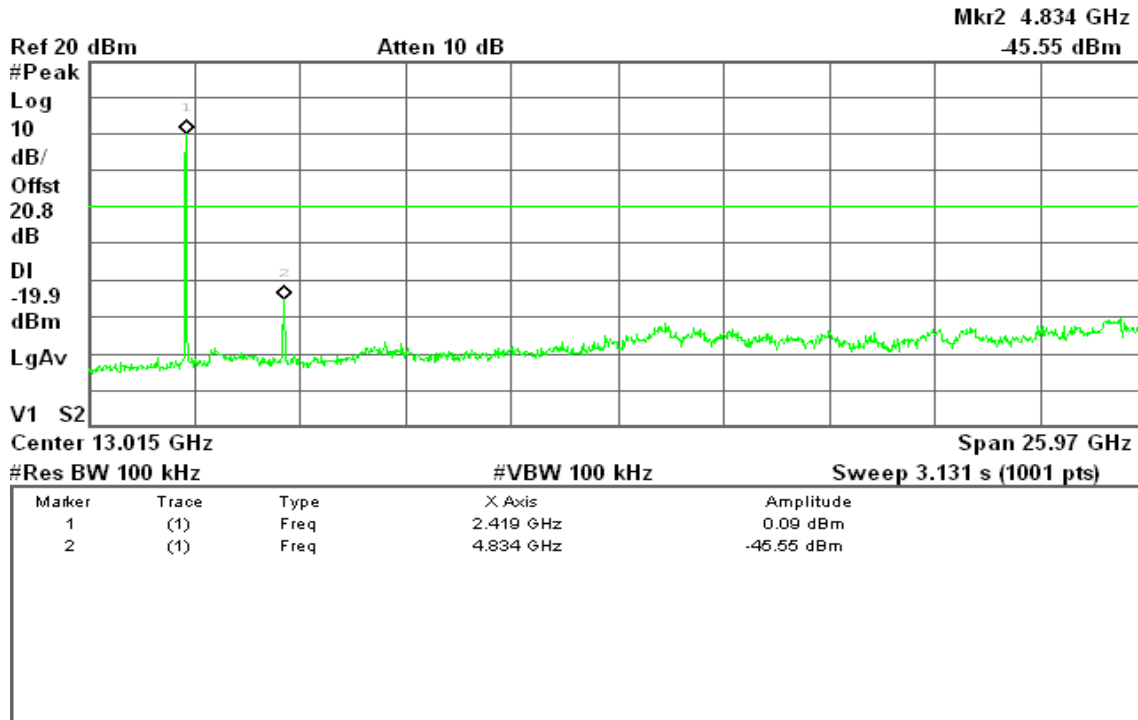


For Chip Antenna IEEE 802.11b mode

CH Low

Agilent 20:50:24 Nov 20, 2009

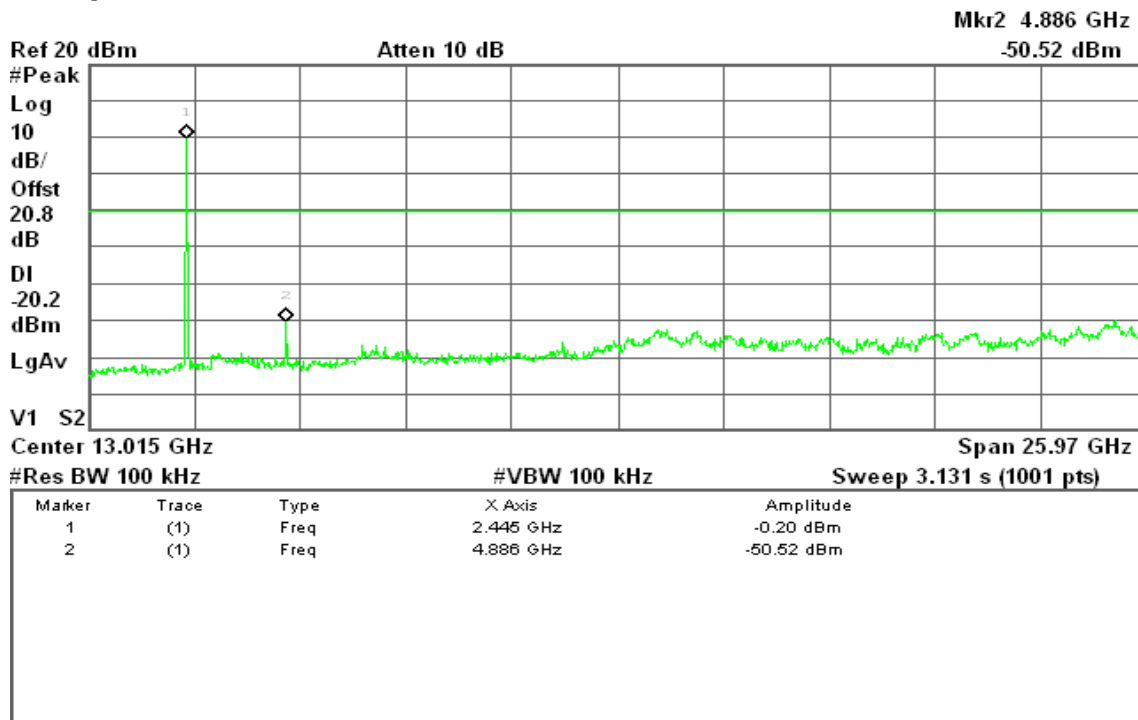
R T



CH Mid

Agilent 21:06:40 Nov 20, 2009

R T

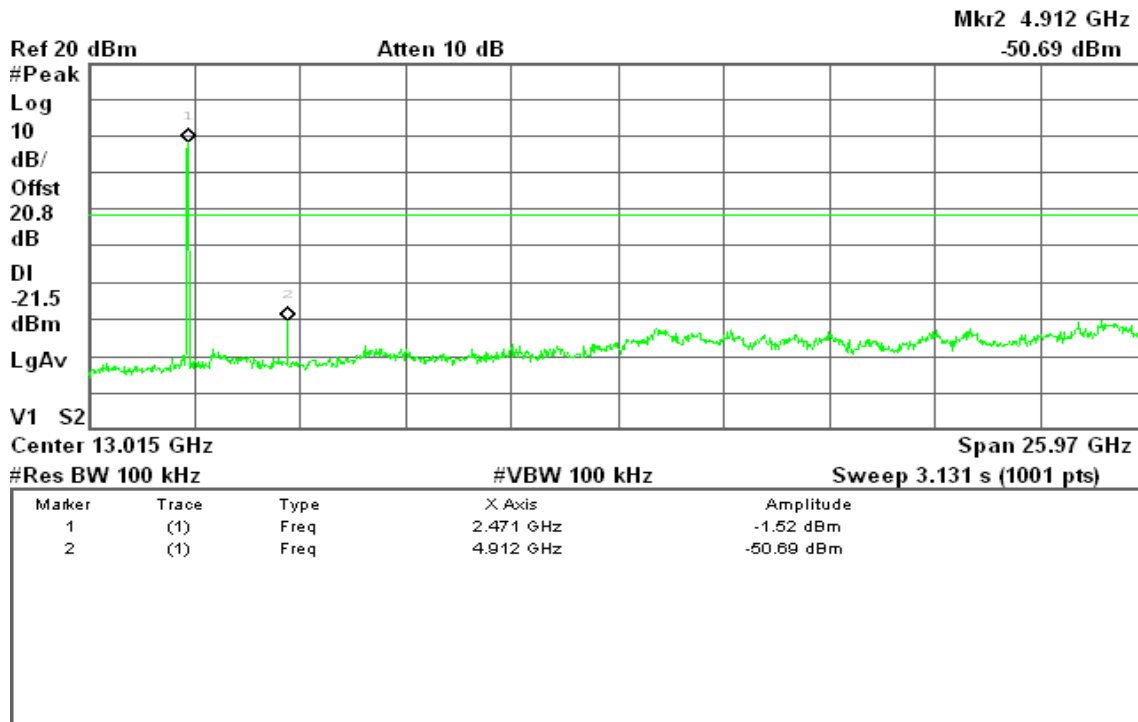




CH High

Agilent 21:12:55 Nov 20, 2009

R T

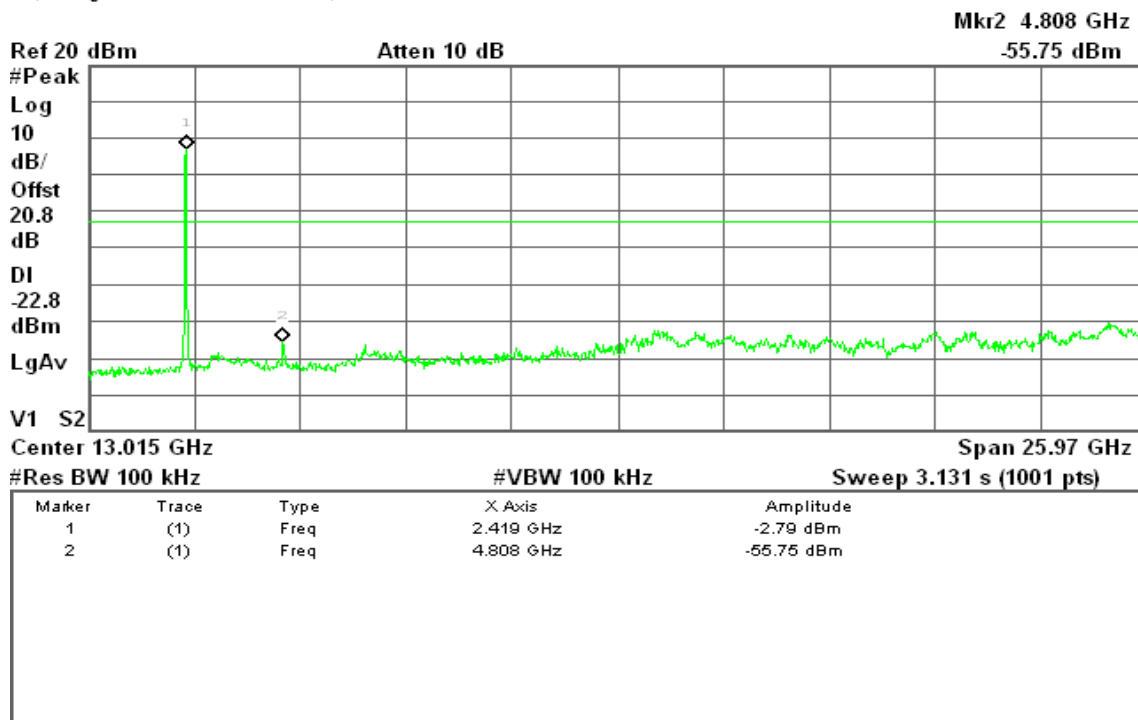


IEEE 802.11g mode

CH Low

Agilent 21:47:54 Nov 20, 2009

R T

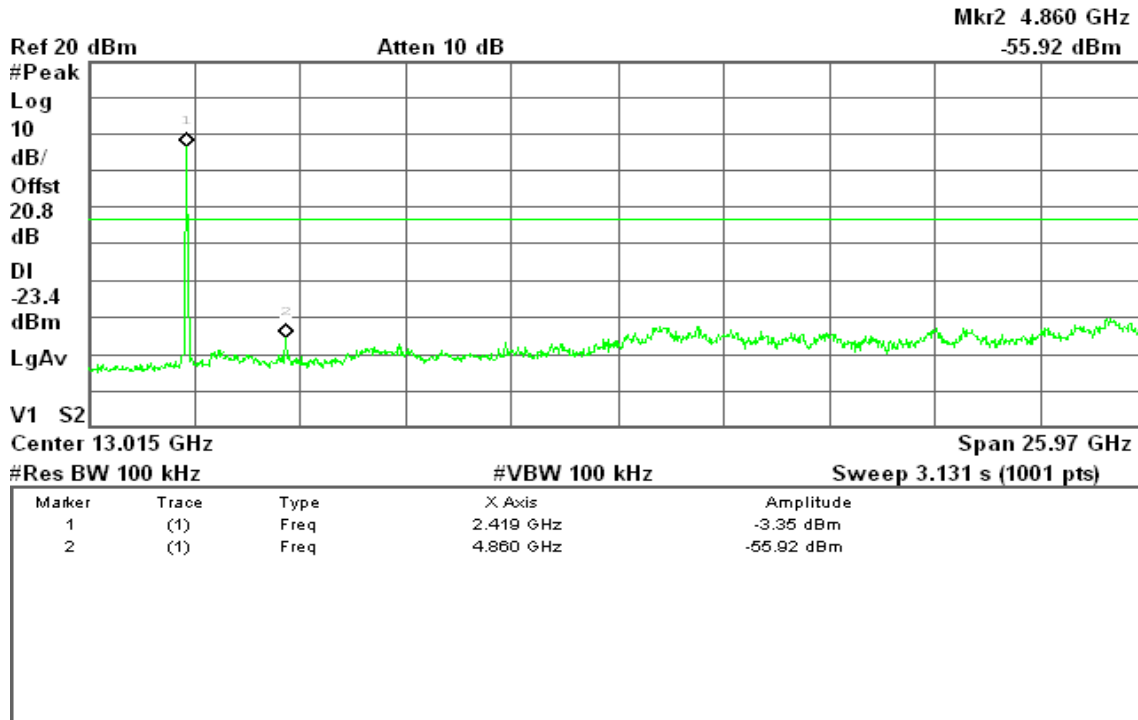




CH Mid

Agilent 21:41:56 Nov 20, 2009

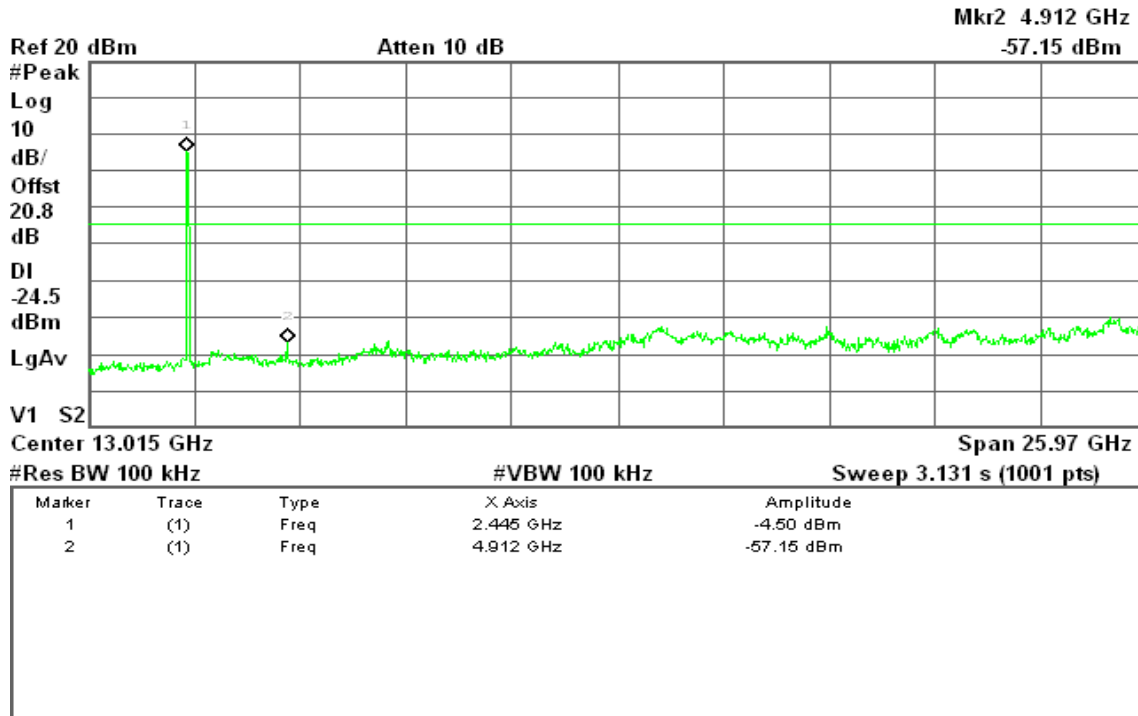
R T



CH High

Agilent 21:35:04 Nov 20, 2009

R T



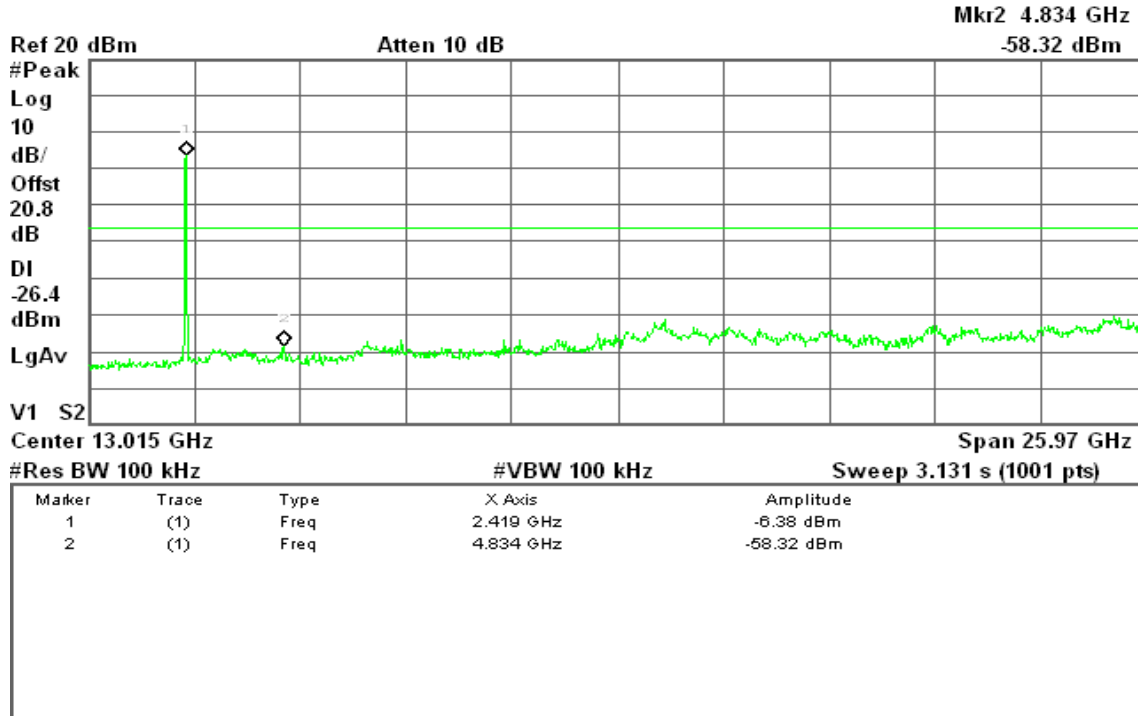


draft 802.11n Standard-20 MHz Channel mode

CH Low

Agilent 21:55:55 Nov 20, 2009

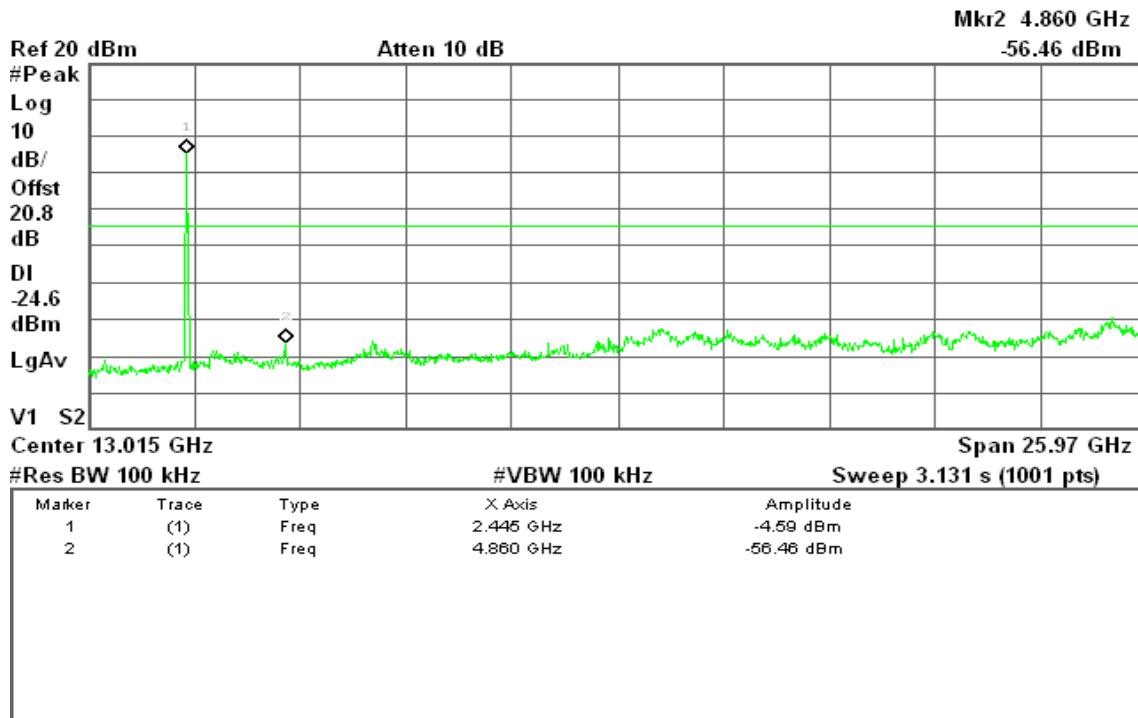
R T



CH Mid

Agilent 22:01:08 Nov 20, 2009

R T



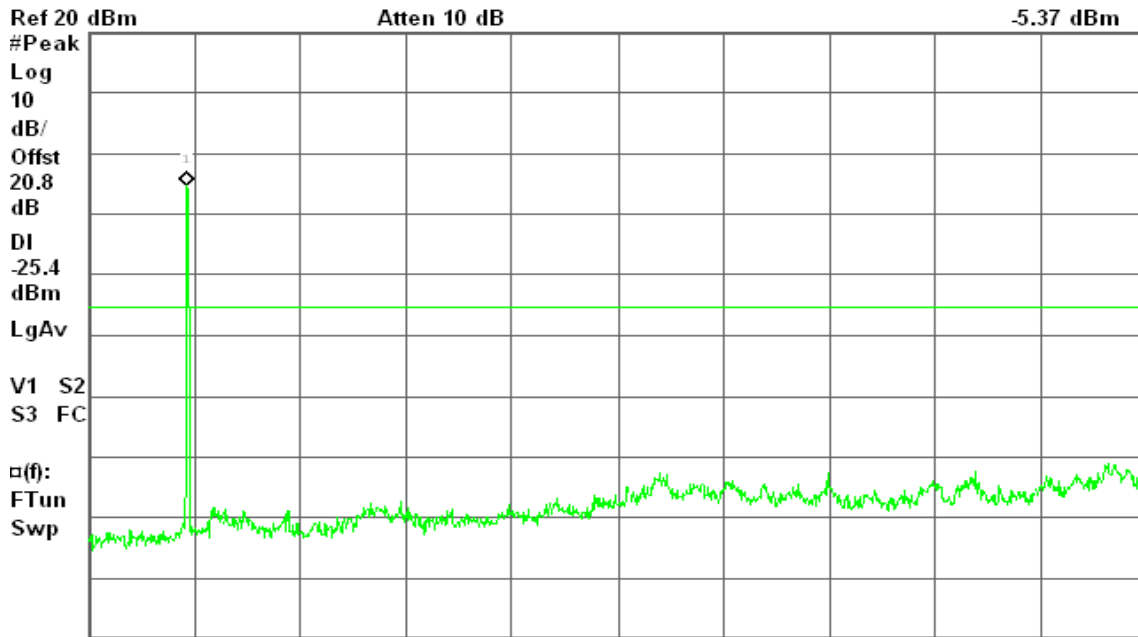


CH High

Agilent 22:07:03 Nov 20, 2009

R T

Mkr1 2.445 GHz
-5.37 dBm



Center 13.015 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)

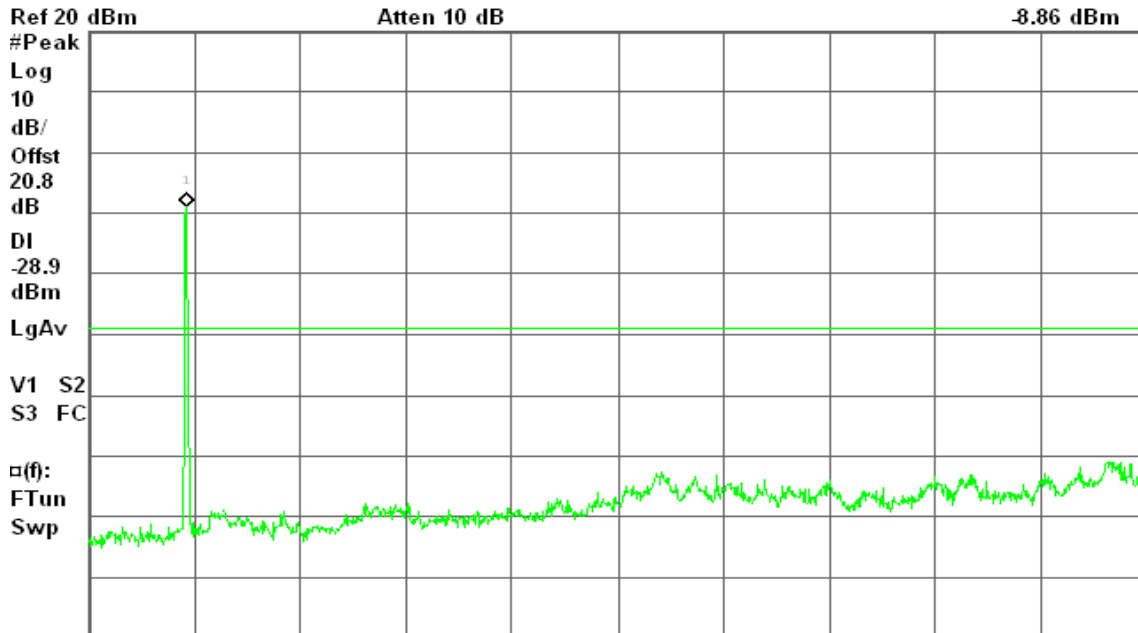
draft 802.11n Wide-40 MHz Channel mode

CH Low

Agilent 22:26:09 Nov 20, 2009

R L

Mkr1 2.419 GHz
-8.86 dBm



Center 13.015 GHz Span 25.97 GHz
#Res BW 100 kHz #VBW 100 kHz Sweep 3.131 s (1001 pts)



7.7 RADIATED EMISSIONS

LIMIT

1. According to §15.209(a), 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 (µV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

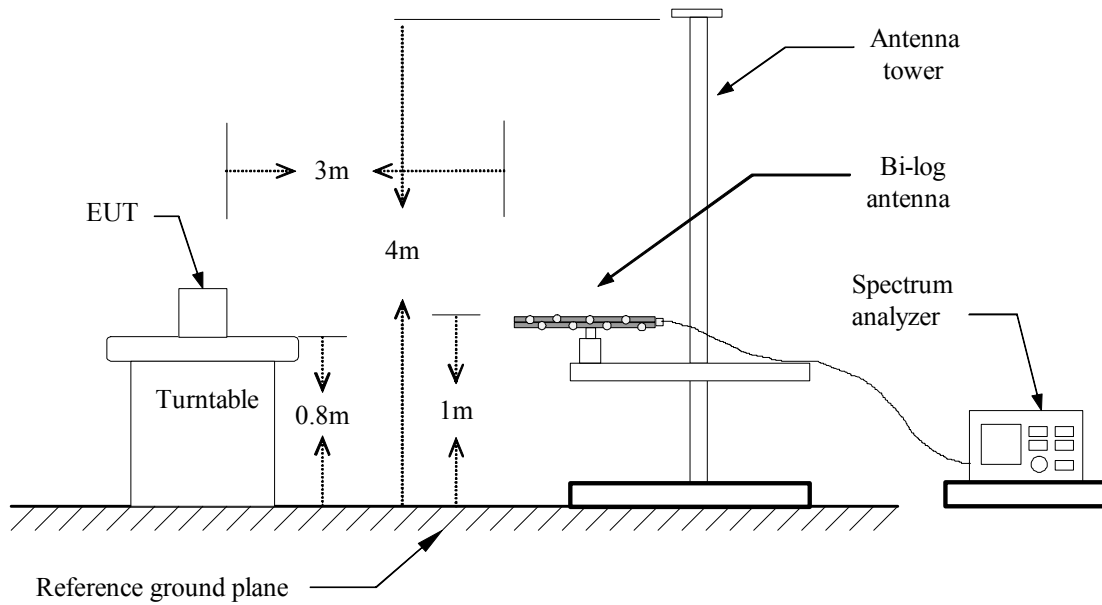
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of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

2. In the emission table above, the tighter limit applies at the band edges.

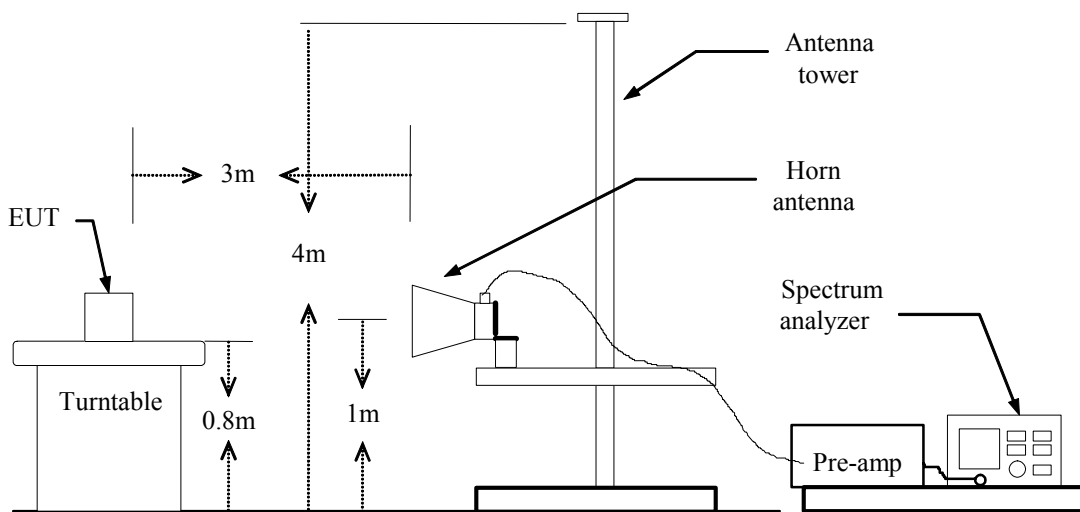
Frequency (MHz)	Field Strength (µV/m at 3-meter)	Field Strength (dBµV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

Below 1 GHz



Above 1 GHz





TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:
Below 1GHz:
RBW=100kHz / VBW=300kHz / Sweep=AUTO
Above 1GHz:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO
7. Repeat above procedures until the measurements for all frequencies are complete.

**Below 1GHz****For Omni Antenna****Operation Mode:** Normal Link**Test Date:** November 19, 2009**Temperature:** 23°C**Tested by:** Mimic Yang**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
57.48	V	49.85	-15.60	34.25	40.00	-5.75	QP
123.77	V	45.98	-9.42	36.56	43.50	-6.94	Peak
180.35	V	45.25	-11.32	33.93	43.50	-9.57	Peak
222.38	V	45.69	-11.06	34.64	46.00	-11.36	Peak
382.43	V	41.40	-6.76	34.64	46.00	-11.36	Peak
456.80	V	39.17	-4.91	34.27	46.00	-11.73	Peak
57.48	H	54.00	-15.60	38.40	40.00	-1.60	QP
122.15	H	47.39	-9.39	38.00	43.50	-5.50	QP
177.12	H	49.53	-11.20	38.33	43.50	-5.17	Peak
380.82	H	48.07	-6.79	41.28	46.00	-4.72	Peak
439.02	H	46.99	-5.32	41.67	46.00	-4.33	Peak
599.07	H	39.01	-2.94	36.07	46.00	-9.93	Peak

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
4. Margin (dB) = Result (dBuV/m) – Limit (dBuV/m).

**For Patch Antenna****Operation Mode:** Normal Link**Test Date:** November 19, 2009**Temperature:** 23°C**Tested by:** Mimic Yang**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
55.87	V	51.22	-15.44	35.78	40.00	-4.22	QP
120.53	V	46.88	-9.37	37.51	43.50	-5.99	QP
133.47	V	46.79	-9.56	37.23	43.50	-6.27	Peak
177.12	V	48.78	-11.20	37.58	43.50	-5.92	Peak
240.17	V	53.05	-10.68	42.37	46.00	-3.63	Peak
277.35	V	44.34	-9.01	35.33	46.00	-10.67	Peak
72.03	H	50.54	-14.58	35.96	40.00	-4.04	QP
120.53	H	49.72	-9.37	40.35	43.50	-3.15	QP
133.47	H	49.39	-9.56	39.83	43.50	-3.67	Peak
178.73	H	49.37	-11.28	38.09	43.50	-5.41	Peak
238.55	H	51.69	-10.71	40.98	46.00	-5.02	QP
337.17	H	46.04	-7.75	38.29	46.00	-7.71	Peak

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
4. Margin (dB) = Result (dBuV/m) – Limit (dBuV/m).

**For Chip Antenna****Operation Mode:** Normal Link**Test Date:** November 19, 2009**Temperature:** 23°C**Tested by:** Mimic Yang**Humidity:** 53% RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
30.00	V	31.70	-1.79	29.92	40.00	-10.08	Peak
72.03	V	42.19	-14.58	27.61	40.00	-12.39	Peak
133.47	V	37.64	-9.56	28.09	43.50	-15.41	Peak
146.40	V	37.61	-9.87	27.74	43.50	-15.76	Peak
665.35	V	33.05	-1.59	31.46	46.00	-14.54	Peak
717.08	V	32.91	-1.03	31.88	46.00	-14.12	Peak
133.47	H	38.71	-9.56	29.15	43.50	-14.35	Peak
322.62	H	35.54	-8.12	27.43	46.00	-18.57	Peak
411.53	H	38.09	-6.08	32.01	46.00	-13.99	Peak
550.57	H	34.70	-3.41	31.29	46.00	-14.71	Peak
599.07	H	37.48	-2.94	34.54	46.00	-11.46	Peak
720.32	H	37.95	-0.97	36.97	46.00	-9.03	Peak

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
3. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
4. Margin (dB) = Result (dBuV/m) – Limit (dBuV/m).

**Above 1 GHz****For Omni Antenna****Operation Mode:** TX / IEEE 802.11b / CH Low**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1830.00	V	55.61	---	-3.88	51.73	---	74.00	54.00	-2.27	Peak
4825.00	V	53.86	48.61	1.04	54.90	49.65	74.00	54.00	-4.35	AVG
N/A										
2656.67	H	55.47	41.33	-1.11	54.36	40.22	74.00	54.00	-13.78	AVG
4825.00	H	53.89	48.10	1.04	54.93	49.14	74.00	54.00	-4.86	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11b / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1653.33	V	55.60	---	-5.56	50.03	---	74.00	54.00	-3.97	Peak
4875.00	V	53.33	49.87	1.02	54.35	50.89	74.00	54.00	-3.11	AVG
N/A										
1816.67	H	55.18	---	-4.00	51.18	---	74.00	54.00	-2.83	Peak
4875.00	H	53.48	49.36	1.02	54.50	50.38	74.00	54.00	-3.62	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2343.33	V	57.77	46.12	-1.68	56.09	44.44	74.00	54.00	-9.56	AVG
4925.00	V	53.42	48.91	1.01	54.43	49.92	74.00	54.00	-4.08	AVG
N/A										
2156.67	H	55.92	41.64	-1.99	53.93	39.65	74.00	54.00	-14.35	AVG
4925.00	H	53.68	47.11	1.01	54.69	48.12	74.00	54.00	-5.88	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Low**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1966.67	V	55.89	41.66	-2.57	53.32	39.09	74.00	54.00	-14.91	AVG
4833.33	V	53.77	43.77	1.03	54.80	44.80	74.00	54.00	-9.20	AVG
N/A										
1650.00	H	55.49	---	-5.60	49.90	---	74.00	54.00	-4.10	Peak
4816.67	H	50.66	---	1.04	51.69	---	74.00	54.00	-2.31	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Mid**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2310.00	V	56.60	41.63	-1.74	54.86	39.89	74.00	54.00	-14.11	AVG
4875.00	V	54.01	42.82	1.02	55.04	43.84	74.00	54.00	-10.16	AVG
N/A										
2880.00	H	55.83	41.13	-0.67	55.16	40.46	74.00	54.00	-13.54	AVG
4866.67	H	53.47	40.63	1.02	54.49	41.65	74.00	54.00	-12.35	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1740.00	V	55.49	---	-4.74	50.76	---	74.00	54.00	-3.24	Peak
4925.00	V	53.94	42.15	1.01	54.95	43.16	74.00	54.00	-10.84	AVG
N/A										
2120.00	H	55.40	41.74	-2.05	53.35	39.69	74.00	54.00	-14.31	AVG
4925.00	H	53.51	40.28	1.01	54.52	41.29	74.00	54.00	-12.71	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1566.67	V	55.66	---	-6.39	49.27	---	74.00	54.00	-4.73	Peak
4833.33	V	50.98	---	1.03	52.02	---	74.00	54.00	-1.98	Peak
N/A										
1783.33	H	55.80	---	-4.32	51.48	---	74.00	54.00	-2.52	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / draft 802.11n Standard-20 MHz Channel mode / CH Mid**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1720.00	V	55.70	---	-4.93	50.78	---	74.00	54.00	-3.22	Peak
4875.00	V	53.28	40.64	1.02	54.30	41.66	74.00	54.00	-12.34	AVG
N/A										
1953.33	H	55.82	41.72	-2.70	53.12	39.02	74.00	54.00	-14.98	AVG
4875.00	H	53.26	40.23	1.02	54.28	41.25	74.00	54.00	-12.75	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1650.00	V	55.92	---	-5.60	50.33	---	74.00	54.00	-3.67	Peak
4925.00	V	53.06	41.42	1.01	54.07	42.43	74.00	54.00	-11.57	AVG
N/A										
1863.33	H	55.35	---	-3.56	51.79	---	74.00	54.00	-2.21	Peak
4916.67	H	49.58	---	1.01	50.59	---	74.00	54.00	-3.41	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1976.67	V	55.37	41.67	-2.47	52.89	39.20	74.00	54.00	-14.80	AVG
N/A										
2670.00	H	56.18	41.2	-1.08	55.10	40.12	74.00	54.00	-13.88	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1440.00	V	55.65	---	-7.14	48.51	---	74.00	54.00	-5.49	Peak
4883.33	V	50.94	---	1.02	51.96	---	74.00	54.00	-2.04	Peak
N/A										
1486.67	H	56.09	---	-7.05	49.04	---	74.00	54.00	-4.96	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1330.00	V	56.59	---	-7.35	49.25	---	74.00	54.00	-4.75	Peak
4900.00	V	50.23	---	1.02	51.25	---	74.00	54.00	-2.75	Peak
N/A										
1543.33	H	55.41	---	-6.62	48.79	---	74.00	54.00	-5.21	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



For Patch Antenna

Operation Mode: TX / IEEE 802.11b / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2530.00	V	52.20	---	-1.36	50.84	---	74.00	54.00	-3.16	Peak
4825.00	V	53.47	47.50	1.04	54.51	48.54	74.00	54.00	-5.46	AVG
N/A										
1676.67	H	51.56	---	-5.34	46.22	---	74.00	54.00	-7.78	Peak
4825.00	H	53.01	51.20	1.04	54.05	52.24	74.00	54.00	-1.76	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11b / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2210.00	V	51.64	---	-1.90	49.73	---	74.00	54.00	-4.27	Peak
N/A										
2033.33	H	51.68	---	-2.19	49.49	---	74.00	54.00	-4.51	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2340.00	V	55.44	48.11	-1.69	53.75	46.42	74.00	54.00	-7.58	AVG
N/A										
2123.33	H	50.90	---	-2.05	48.86	---	74.00	54.00	-5.14	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Low**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2150.00	V	51.26	---	-2.00	49.26	---	74.00	54.00	-4.74	Peak
4825.00	V	51.64	40.25	1.04	52.67	41.29	74.00	54.00	-12.71	AVG
N/A										
1463.33	H	54.83	---	-7.10	47.73	---	74.00	54.00	-6.27	Peak
4816.67	H	53.39	41.89	1.04	54.43	42.93	74.00	54.00	-11.07	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Mid**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1946.67	V	54.28	---	-2.76	51.52	---	74.00	54.00	-2.48	Peak
4950.00	V	49.54	---	1.00	50.54	---	74.00	54.00	-3.46	Peak
N/A										
1710.00	H	53.69	---	-5.02	48.67	---	74.00	54.00	-5.33	Peak
4875.00	H	49.84	---	1.02	50.86	---	74.00	54.00	-3.14	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2350.00	V	55.60	43.91	-1.67	53.93	42.24	74.00	54.00	-11.76	AVG
4116.67	V	49.29	---	0.66	49.95	---	74.00	54.00	-4.05	Peak
N/A										
1990.00	H	52.51	---	-2.35	50.16	---	74.00	54.00	-3.84	Peak
4916.67	H	51.41	37.16	1.01	52.42	38.17	74.00	54.00	-15.83	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2143.33	V	52.73	---	-2.01	50.72	---	74.00	54.00	-3.28	Peak
4116.67	V	49.29	---	0.66	49.95	---	74.00	54.00	-4.05	Peak
4666.67	V	49.68	---	1.08	50.76	---	74.00	54.00	-3.24	Peak
N/A										
2070.00	H	52.12	---	-2.13	49.99	---	74.00	54.00	-4.01	Peak
4825.00	H	50.02	---	1.04	51.05	---	74.00	54.00	-2.95	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1983.33	V	52.77	---	-2.41	50.36	---	74.00	54.00	-3.64	Peak
5800.00	V	49.62	---	1.98	51.60	---	74.00	54.00	-2.40	Peak
6950.00	V	49.85	35.73	4.07	53.92	39.80	74.00	54.00	-14.20	AVG
N/A										
2153.33	H	52.91	---	-2.00	50.91	---	74.00	54.00	-3.09	Peak
4866.67	H	52.06	38.13	1.02	53.09	39.15	74.00	54.00	-14.85	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2346.67	V	54.96	43.53	-1.67	53.29	41.86	74.00	54.00	-12.14	AVG
4841.67	V	49.27	---	1.03	50.30	---	74.00	54.00	-3.70	Peak
N/A										
1896.67	H	52.54	---	-3.24	49.30	---	74.00	54.00	-4.70	Peak
4966.67	H	49.00	---	1.00	50.00	---	74.00	54.00	-4.00	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2216.67	V	53.16	---	-1.89	51.27	---	74.00	54.00	-2.73	Peak
4808.33	V	48.78	---	1.04	49.82	---	74.00	54.00	-4.18	Peak
N/A										
2283.33	H	53.79	42.78	-1.78	52.01	41.00	74.00	54.00	-13.00	AVG
4950.00	H	48.46	---	1.00	49.47	---	74.00	54.00	-4.53	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2016.67	V	52.62	---	-2.22	50.39	---	74.00	54.00	-3.61	Peak
4116.67	V	49.07	---	0.66	49.73	---	74.00	54.00	-4.27	Peak
6541.67	V	50.69	35.92	2.96	53.66	38.88	74.00	54.00	-15.12	AVG
N/A										
1740.00	H	59.10	39.25	-4.74	54.36	34.51	74.00	54.00	-19.49	AVG
4150.00	H	49.45	---	0.70	50.15	---	74.00	54.00	-3.85	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2103.33	V	52.60	---	-2.08	50.52	---	74.00	54.00	-3.48	Peak
4908.33	V	49.22	---	1.01	50.24	---	74.00	54.00	-3.76	Peak
N/A										
1896.67	H	53.26	---	-3.24	50.02	---	74.00	54.00	-3.98	Peak
4850.00	H	48.67	---	1.03	49.70	---	74.00	54.00	-4.30	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**For Chip Antenna****Operation Mode:** TX / IEEE 802.11b / CH Low**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1976.67	V	52.68	---	-2.47	50.21	---	74.00	54.00	-3.79	Peak
4825.00	V	50.33	---	1.04	51.37	---	74.00	54.00	-2.63	Peak
N/A										
2210.00	H	53.41	---	-1.90	51.51	---	74.00	54.00	-2.49	Peak
4825.00	H	51.67	49.75	1.04	52.70	50.79	74.00	54.00	-3.21	AVG
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH Mid**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1686.67	V	53.26	---	-5.25	48.02	---	74.00	54.00	-5.98	Peak
4875.00	V	48.88	---	1.02	49.90	---	74.00	54.00	-4.10	Peak
N/A										
1730.00	H	53.28	---	-4.83	48.44	---	74.00	54.00	-5.56	Peak
4875.00	H	50.29	---	1.02	51.31	---	74.00	54.00	-2.69	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11b / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1930.00	V	52.92	---	-2.92	50.00	---	74.00	54.00	-4.00	Peak
4850.00	V	48.47	---	1.03	49.50	---	74.00	54.00	-4.50	Peak
N/A										
1726.67	H	52.92	---	-4.86	48.06	---	74.00	54.00	-5.94	Peak
4591.67	H	48.59	---	1.10	49.68	---	74.00	54.00	-4.32	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Low**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2020.00	V	52.11	---	-2.22	49.89	---	74.00	54.00	-4.11	Peak
4108.33	V	49.33	---	0.65	49.98	---	74.00	54.00	-4.02	Peak
4825.00	V	49.68	---	1.04	50.72	---	74.00	54.00	-3.28	Peak
N/A										
2286.67	H	53.64	---	-1.77	51.87	---	74.00	54.00	-2.13	Peak
4825.00	H	50.85	---	1.04	51.88	---	74.00	54.00	-2.12	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH Mid**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2250.00	V	52.63	---	-1.84	50.80	---	74.00	54.00	-3.20	Peak
4875.00	V	49.29	---	1.02	50.31	---	74.00	54.00	-3.69	Peak
N/A										
2310.00	H	54.70	40.68	-1.74	52.97	38.94	74.00	54.00	-15.06	AVG
4866.67	H	49.41	---	1.02	50.43	---	74.00	54.00	-3.57	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).

**Operation Mode:** TX / IEEE 802.11g / CH High**Test Date:** November 19, 2009**Temperature:** 25°C**Tested by:** Mimic Yang**Humidity:** 55 % RH**Polarity:** Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2050.00	V	52.28	---	-2.17	50.12	---	74.00	54.00	-3.88	Peak
4116.67	V	49.37	---	0.66	50.03	---	74.00	54.00	-3.97	Peak
4850.00	V	48.59	---	1.03	49.62	---	74.00	54.00	-4.38	Peak
N/A										
2096.67	H	52.91	---	-2.09	50.82	---	74.00	54.00	-3.18	Peak
4875.00	H	49.00	---	1.02	50.02	---	74.00	54.00	-3.98	Peak
5758.33	H	49.90	---	1.92	51.83	---	74.00	54.00	-2.17	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1826.67	V	53.18	---	-3.91	49.28	---	74.00	54.00	-4.72	Peak
5366.67	V	48.97	---	1.42	50.39	---	74.00	54.00	-3.61	Peak
N/A										
1886.67	H	52.86	---	-3.33	49.53	---	74.00	54.00	-4.47	Peak
4825.00	H	49.27	---	1.04	50.31	---	74.00	54.00	-3.69	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1953.33	V	52.27	---	-2.70	49.57	---	74.00	54.00	-4.43	Peak
5016.67	V	50.06	---	1.01	51.07	---	74.00	54.00	-2.93	Peak
N/A										
2070.00	H	52.80	---	-2.13	50.67	---	74.00	54.00	-3.33	Peak
4866.67	H	49.46	---	1.02	50.48	---	74.00	54.00	-3.52	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Standard-20 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2063.33	V	52.54	---	-2.14	50.39	---	74.00	54.00	-3.61	Peak
5341.67	V	48.61	---	1.39	50.00	---	74.00	54.00	-4.00	Peak
N/A										
2090.00	H	53.29	---	-2.10	51.19	---	74.00	54.00	-2.81	Peak
4666.67	H	48.57	---	1.08	49.65	---	74.00	54.00	-4.35	Peak
5341.67	H	49.02	---	1.39	50.41	---	74.00	54.00	-3.59	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Low

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1933.33	V	52.58	---	-2.89	49.70	---	74.00	54.00	-4.30	Peak
5166.67	V	48.62	---	1.18	49.80	---	74.00	54.00	-4.20	Peak
N/A										
2016.67	H	52.57	---	-2.22	50.35	---	74.00	54.00	-3.65	Peak
4941.67	H	49.10	---	1.01	50.11	---	74.00	54.00	-3.89	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH Mid

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
1960.00	V	53.00	---	-2.63	50.37	---	74.00	54.00	-3.63	Peak
4900.00	V	49.06	---	1.02	50.07	---	74.00	54.00	-3.93	Peak
N/A										
2003.33	H	52.29	---	-2.24	50.05	---	74.00	54.00	-3.95	Peak
4850.00	H	49.08	---	1.03	50.11	---	74.00	54.00	-3.89	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



Operation Mode: TX / draft 802.11n Wide-40 MHz Channel mode / CH High

Test Date: November 19, 2009

Temperature: 25°C

Tested by: Mimic Yang

Humidity: 55 % RH

Polarity: Ver. / Hor.

Frequency (MHz)	Ant. Pol. (H/V)	Reading (Peak) (dBuV)	Reading (Average) (dBuV)	Correction Factor (dB/m)	Result (Peak) (dBuV/m)	Result (Average) (dBuV/m)	Limit (Peak) (dBuV/m)	Limit (Average) (dBuV/m)	Margin (dB)	Remark
2196.67	V	53.73	---	-1.92	51.81	---	74.00	54.00	-2.19	Peak
4950.00	V	48.96	---	1.00	49.96	---	74.00	54.00	-4.04	Peak
5183.33	V	49.45	---	1.20	50.65	---	74.00	54.00	-3.35	Peak
N/A										
2186.67	H	52.67	---	-1.94	50.73	---	74.00	54.00	-3.27	Peak
4933.33	H	49.63	---	1.01	50.64	---	74.00	54.00	-3.36	Peak
N/A										

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser; with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



7.8 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §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 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

* Decreases with the logarithm of the frequency.

Test Configuration

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.



TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Test Data

Operation Mode: Normal Link **Test Date:** September 26, 2009
Temperature: 22°C **Tested by:** Eddy Chung
Humidity: 45% RH

Freq. (MHz)	QP Reading (dBuV)	AV Reading (dBuV)	Corr. factor (dB/m)	QP Result (dBuV/m)	AV Result (dBuV/m)	QP Limit (dBuV)	AV Limit (dBuV)	QP Margin (dB)	AV Margin (dB)	Note
0.1700	48.49	42.19	0.11	48.60	42.30	64.96	54.96	-16.36	-12.66	L1
1.6100	44.74	38.94	0.06	44.80	39.00	56.00	46.00	-11.20	-7.00	L1
1.8900	45.84	40.64	0.06	45.90	40.70	56.00	46.00	-10.10	-5.30	L1
2.1200	47.14	41.54	0.06	47.20	41.60	56.00	46.00	-8.80	-4.40	L1
3.6800	44.54	32.24	0.06	44.60	32.30	56.00	46.00	-11.40	-13.70	L1
21.6200	37.74	31.84	0.46	38.20	32.30	60.00	50.00	-21.80	-17.70	L1
0.1700	47.97	41.47	0.13	48.10	41.60	64.96	54.96	-16.86	-13.36	L2
1.4900	43.92	38.22	0.08	44.00	38.30	56.00	46.00	-12.00	-7.70	L2
1.7200	45.92	40.82	0.08	46.00	40.90	56.00	46.00	-10.00	-5.10	L2
1.9500	47.02	41.52	0.08	47.10	41.60	56.00	46.00	-8.90	-4.40	L2
2.1800	46.72	41.42	0.08	46.80	41.50	56.00	46.00	-9.20	-4.50	L2
3.7900	51.01	36.71	0.09	51.10	36.80	56.00	46.00	-4.90	-9.20	L2

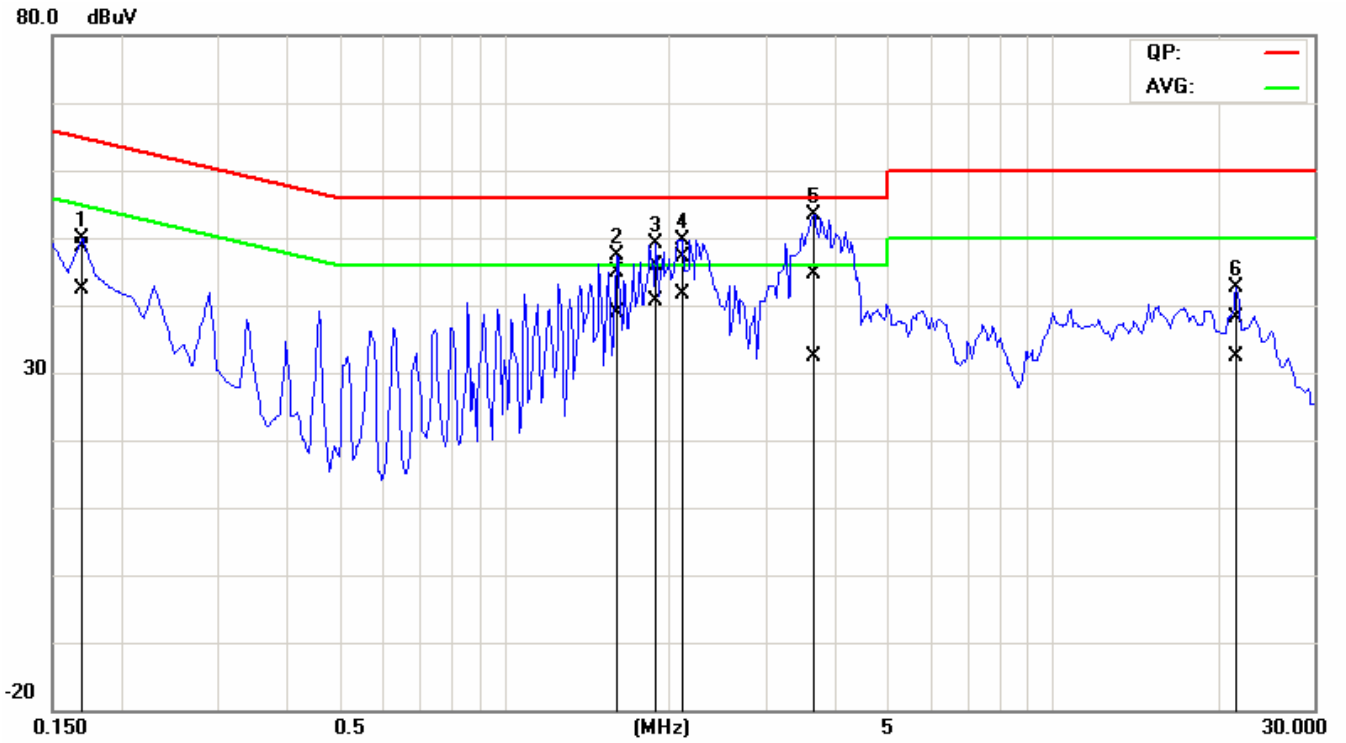
Remark:

1. Measuring frequencies from 0.15 MHz to 30MHz.
2. The emissions measured in frequency range from 0.15 MHz to 30MHz were made with an instrument using Quasi-peak detector and average detector.
3. The IF bandwidth of SPA between 0.15MHz and 30MHz was 10 kHz; the IF bandwidth of Test Receiver between 0.15MHz and 30MHz was 9 kHz;
4. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line)



Test Plots

Conducted emissions (Line 1)



Conducted emissions (Line 2)

