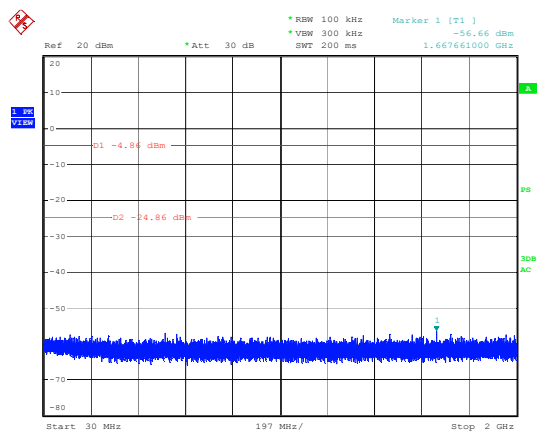


Table 23: Conducted Spurious Emission, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)

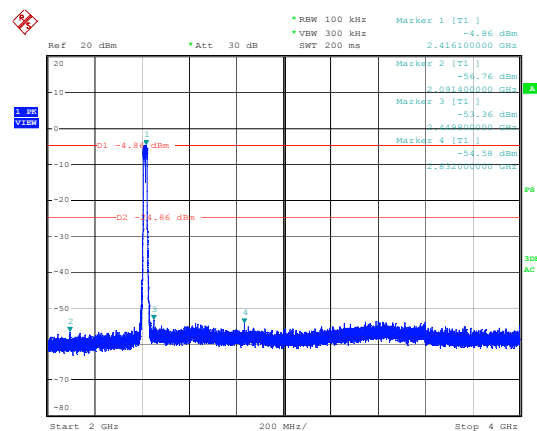
Frequency [MHz]	Reading [dBm]	Correction Factor [dB]	Emission Level [dBm]	Limit [dBm]	Margin [dB]
2416.10	-4.86	2.27	-2.59	N/A	N/A
1667.7	-56.66	2.01	-54.65	-22.59	32.05
2091.4	-56.76	2.13	-54.63	-22.59	32.04
2449.8	-53.36	2.26	-51.11	-22.59	28.51
2832.0	-54.58	2.43	-52.15	-22.59	29.56
4452.5	-54.77	2.93	-51.84	-22.59	29.25
7089.8	-54.53	3.57	-50.96	-22.59	28.37
8889.4	-54.67	4.13	-50.55	-22.59	27.95
11893.0	-54.82	4.52	-50.31	-22.59	27.71
12249.6	-54.87	4.54	-50.33	-22.59	27.74
14939.0	-54.82	5.21	-49.61	-22.59	27.02
16285.3	-53.37	5.24	-48.13	-22.59	25.54
19236.2	-54.44	5.68	-48.76	-22.59	26.17
20704.4	-53.67	5.72	-47.94	-22.59	25.35
23728.9	-53.88	6.04	-47.84	-22.59	25.25
24190.5	-54.04	6.12	-47.91	-22.59	25.32

Notes: Limit = Reading of fundamental + Correction factor – 20dB
 Emission level = Reading + Correction factor
 Correction factor = Total cable loss

Figure 23: Conducted Spurious Emission, 30MHz – 4GHz, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)

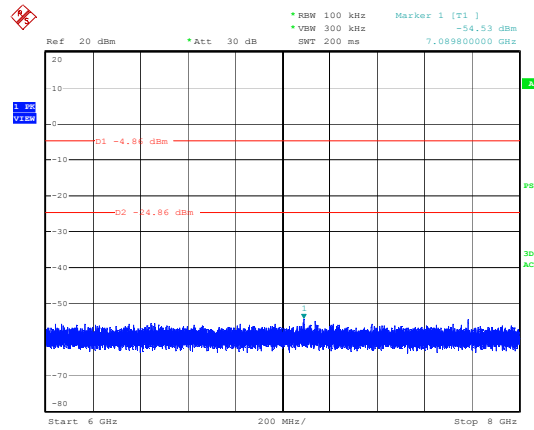
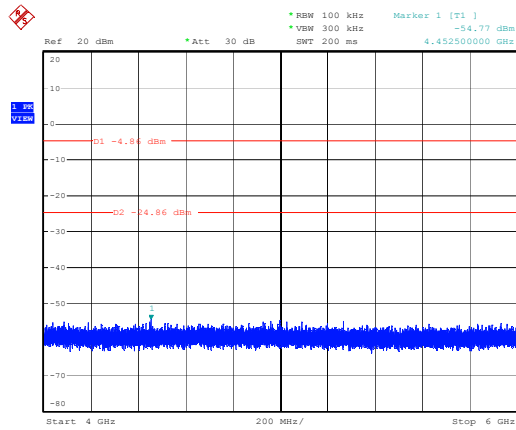


Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:24:31



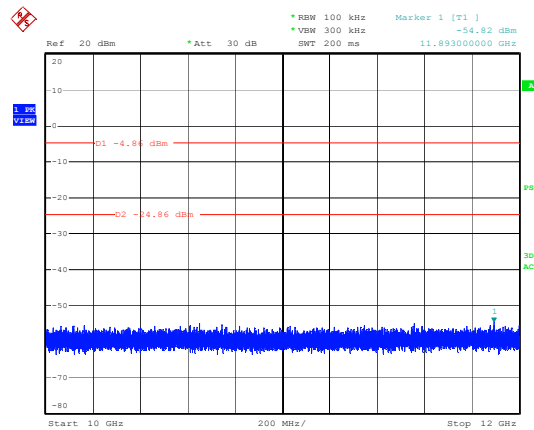
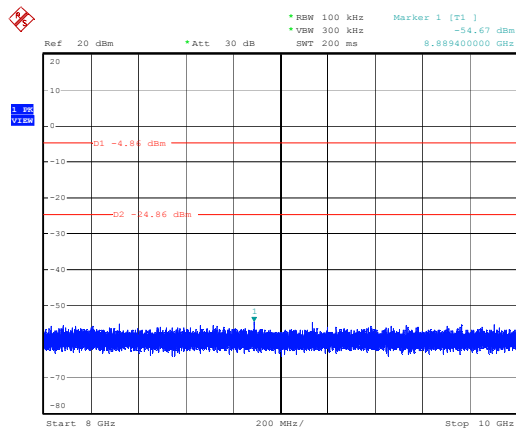
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:24:00

Figure 24: Conducted Spurious Emission, 4 – 16GHz, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)



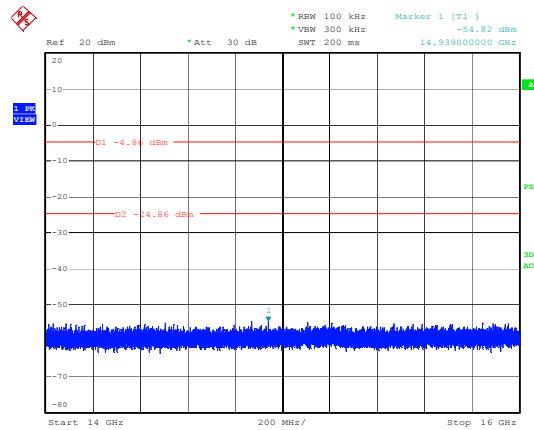
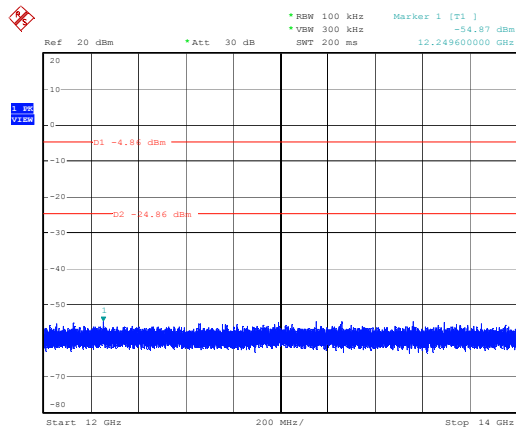
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:25:03

Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:25:26



Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:25:50

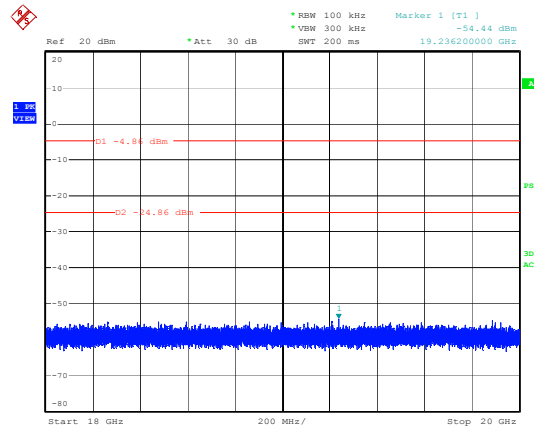
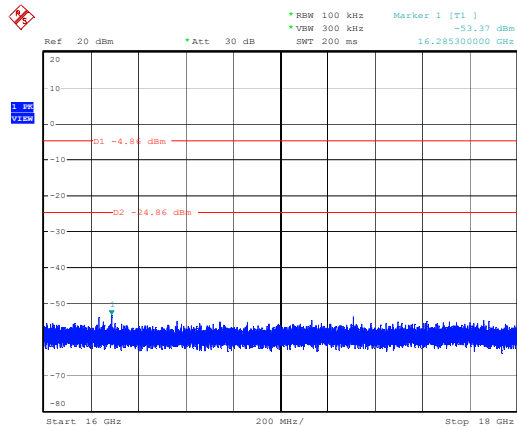
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:26:13



Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:26:39

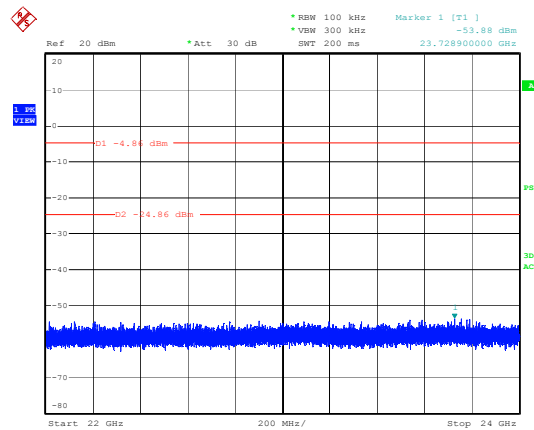
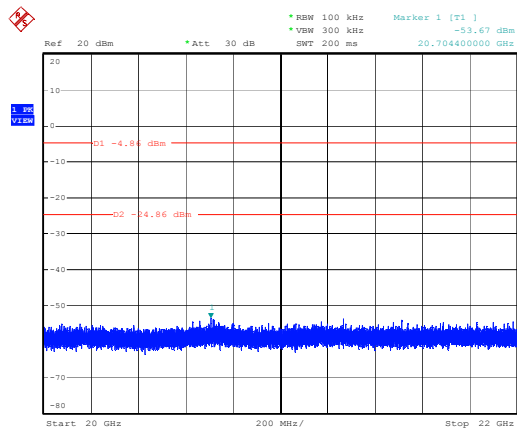
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:27:05

Figure 25: Conducted Spurious Emission, 16 – 25GHz, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)



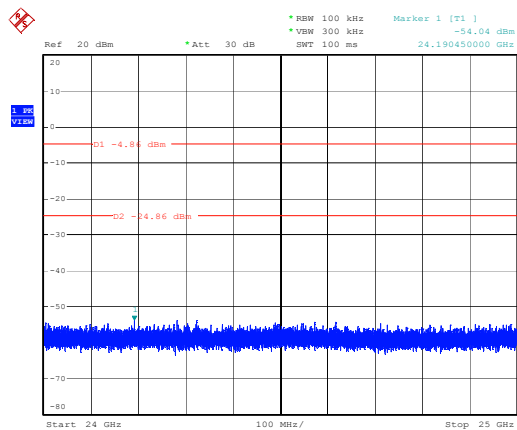
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:27:34

Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:28:00



Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:28:25

Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:28:52



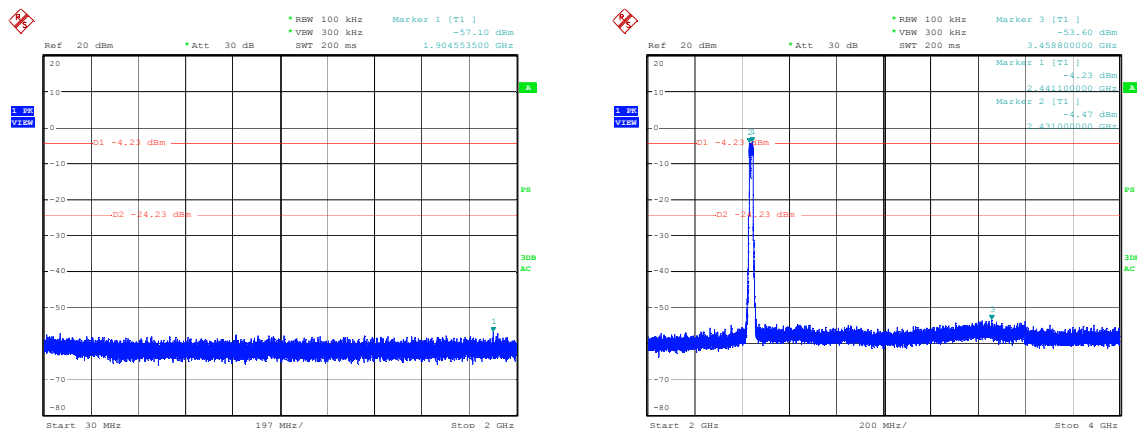
Conducted Spurious Emissions, Mode A2x
 Date: 3.FEB.2011 17:29:31

Table 24: Conducted Spurious Emission, Mode B2x (2437MHz, Radio 802.11g, DC 7.4V Input Voltage)

Frequency [MHz]	Reading [dBm]	Correction Factor [dB]	Emission Level [dBm]	Limit [dBm]	Margin [dB]
2441.10	-4.23	2.32	-1.92	N/A	N/A
1904.6	-57.10	2.07	-55.02	-21.92	33.11
2431.0	-4.47	2.29	-2.18	-21.92	-19.73
3458.8	-53.60	2.60	-50.99	-21.92	29.08
4120.6	-54.95	2.76	-52.18	-21.92	30.27
7397.8	-55.30	3.76	-51.55	-21.92	29.63
9274.9	-54.98	3.99	-50.99	-21.92	29.07
10443.9	-54.44	4.11	-50.33	-21.92	28.41
12202.1	-54.90	4.71	-50.19	-21.92	28.27
15665.6	-54.27	5.12	-49.15	-21.92	27.23
16518.1	-54.84	5.53	-49.31	-21.92	27.40
18236.3	-54.65	5.48	-49.17	-21.92	27.25
20230.9	-54.18	5.63	-48.55	-21.92	26.63
23801.4	-54.00	6.12	-47.88	-21.92	25.97
24835.7	-53.27	6.32	-46.94	-21.92	25.03

Notes: Limit = Reading of fundamental + Correction factor – 20dB
 Emission level = Reading + Correction factor
 Correction factor = Total cable loss

Figure 26: Conducted Spurious Emission, 30MHz – 4GHz, Mode B2x (2437MHz, Radio 802.11g, DC 7.4V Input Voltage)



Conducted Spurious Emissions, Mode B2x
 Date: 3.FEB.2011 17:33:38

Conducted Spurious Emissions, Mode B2x
 Date: 3.FEB.2011 17:33:06

Figure 27: Conducted Spurious Emission, 4 – 16GHz, Mode B2x (2437MHz, Radio 802.11g, DC 7.4V Input Voltage)

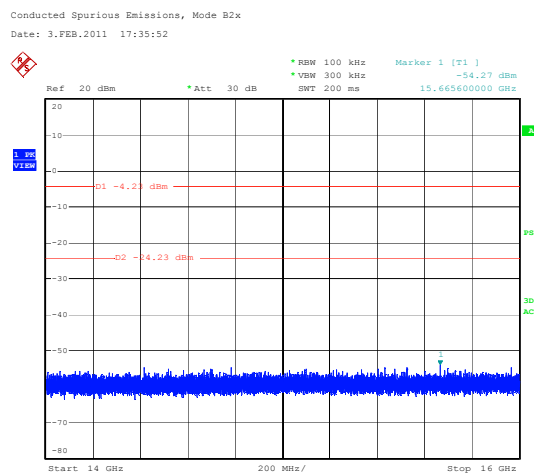
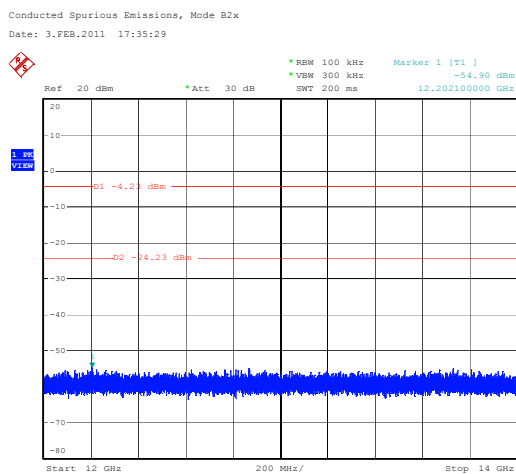
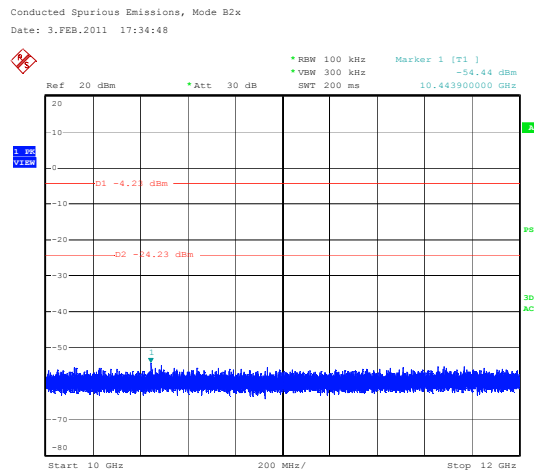
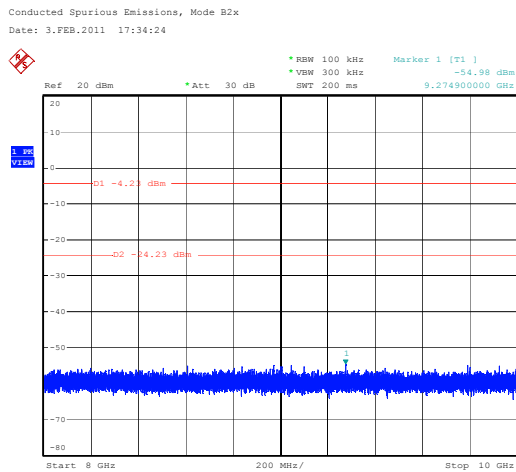
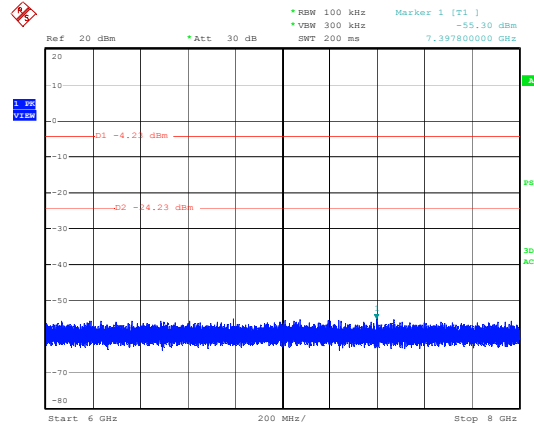
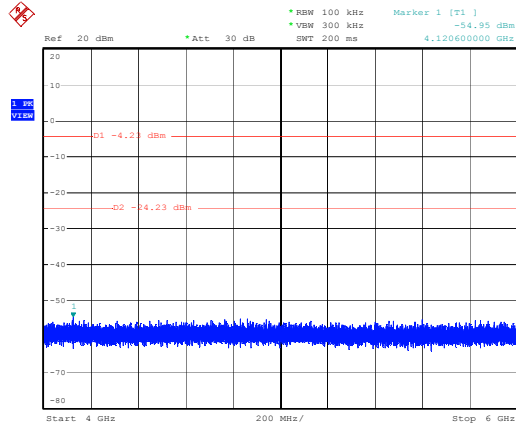


Figure 28: Conducted Spurious Emission, 16 – 25GHz, Mode B2x (2437MHz, Radio 802.11g, DC 7.4V Input Voltage)

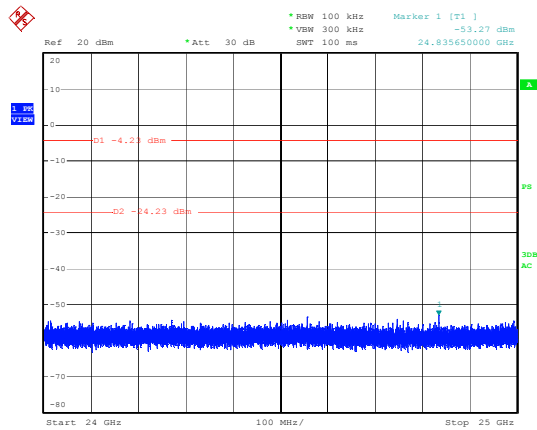
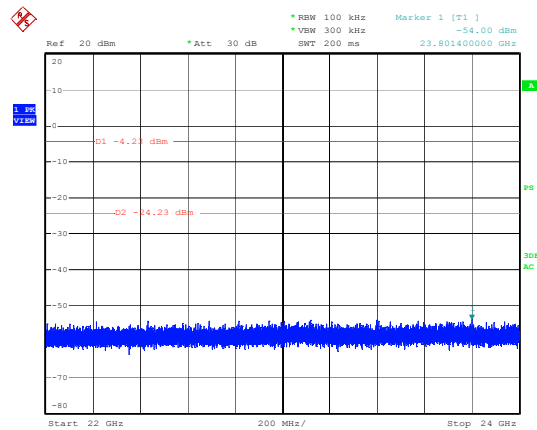
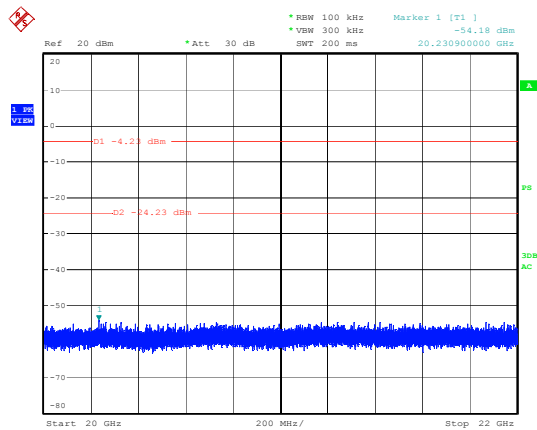
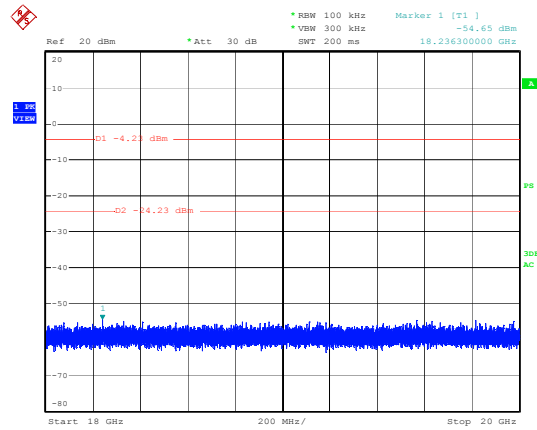
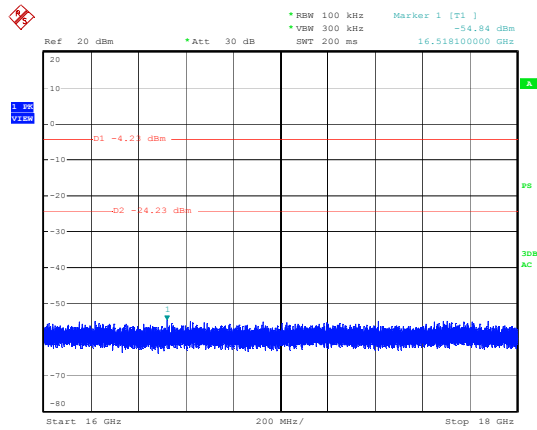
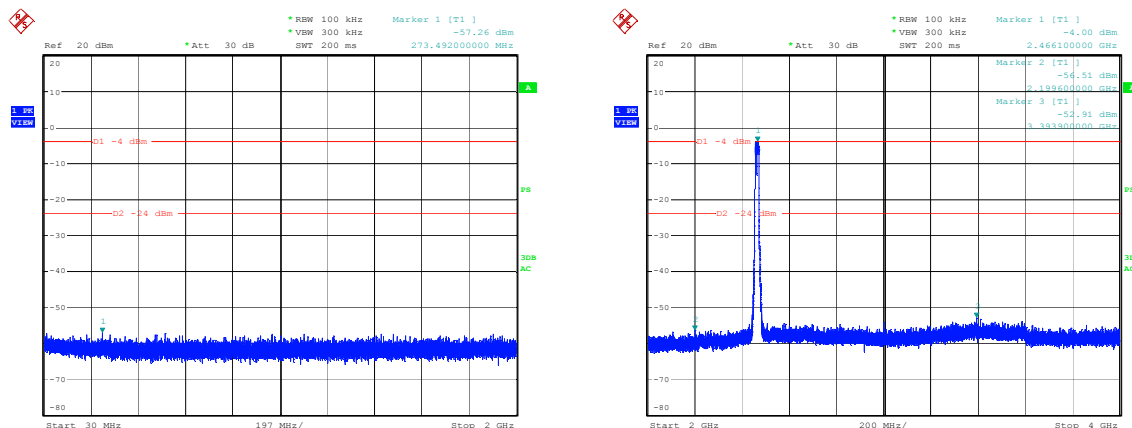


Table 25: Conducted Spurious Emission, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)

Frequency [MHz]	Reading [dBm]	Correction Factor [dB]	Emission Level [dBm]	Limit [dBm]	Margin [dB]
2466.10	-4.00	2.31	-1.69	N/A	N/A
273.5	-57.26	1.21	-56.05	-21.69	34.36
2199.6	-56.51	2.19	-54.32	-21.69	32.63
3393.9	-52.91	2.55	-50.36	-21.69	28.67
4642.1	-54.93	2.91	-52.02	-21.69	30.33
6432.5	-55.30	3.31	-52.00	-21.69	30.31
8334.5	-55.18	3.69	-51.49	-21.69	29.80
11828.6	-54.29	4.62	-49.67	-21.69	27.99
13630.3	-54.87	4.96	-49.92	-21.69	28.23
14752.0	-54.84	4.98	-49.86	-21.69	28.18
17717.9	-54.50	5.42	-49.08	-21.69	27.39
18056.5	-54.75	5.38	-49.37	-21.69	27.69
20098.3	-54.18	5.69	-48.49	-21.69	26.81
23125.6	-54.18	5.98	-48.19	-21.69	26.51
24292.8	-53.53	6.15	-47.39	-21.69	25.70

Notes: Limit = Reading of fundamental + Correction factor – 20dB
 Emission level = Reading + Correction factor
 Correction factor = Total cable loss

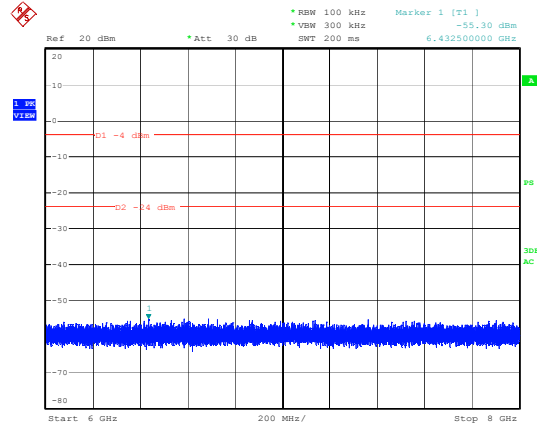
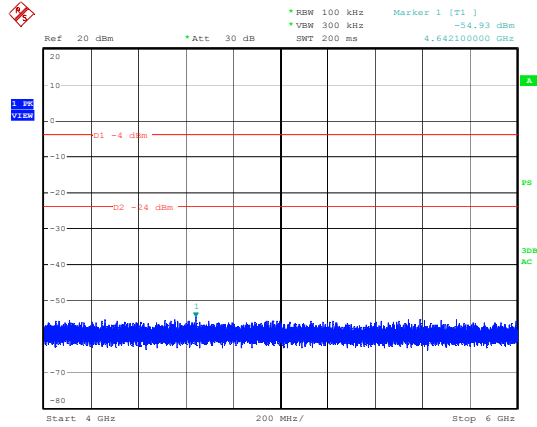
Figure 29: Conducted Spurious Emission, 30MHz – 4GHz, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)



Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:42:11

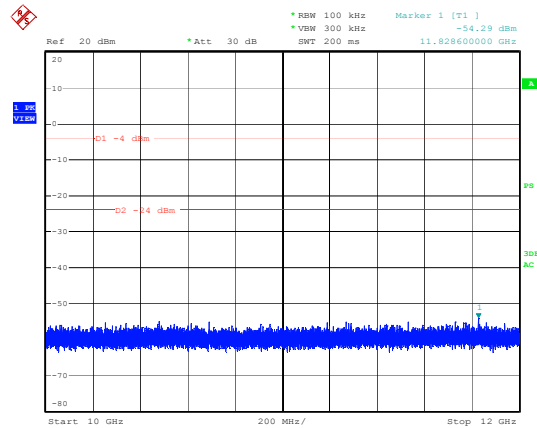
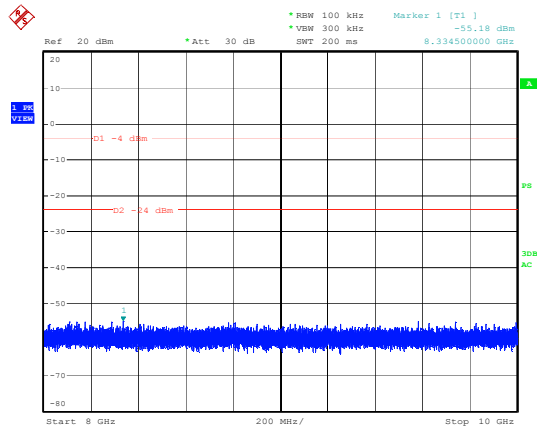
Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:41:47

Figure 30: Conducted Spurious Emission, 4 – 16GHz, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)



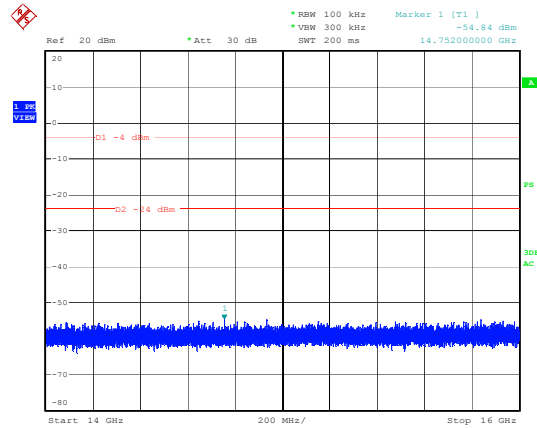
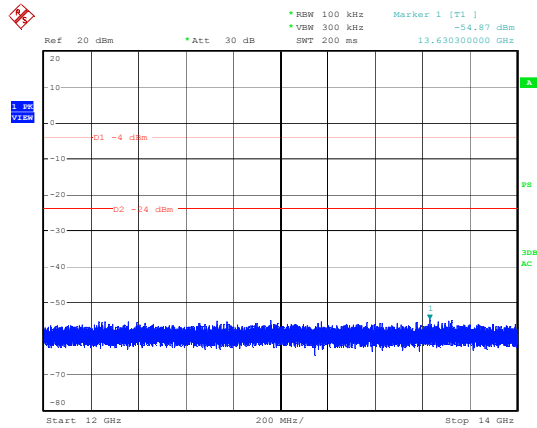
Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:42:34

Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:42:59



Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:43:23

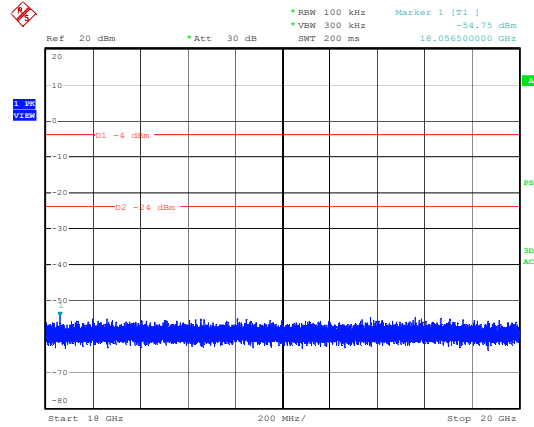
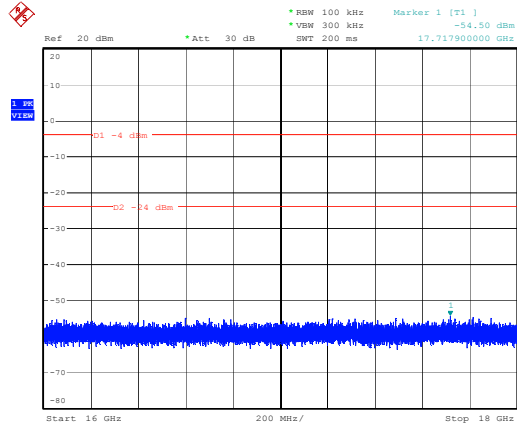
Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:43:45



Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:44:12

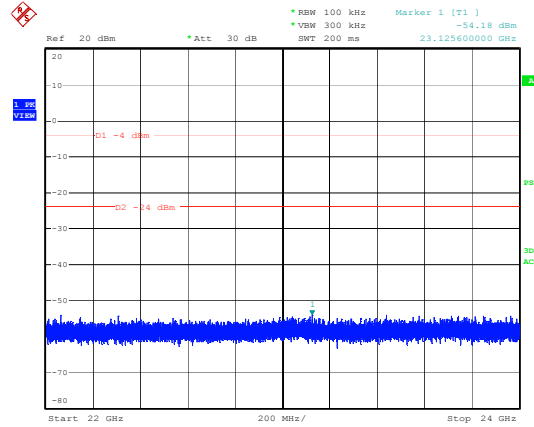
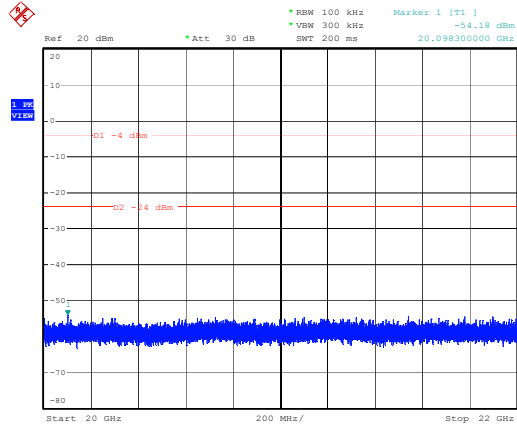
Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:44:45

Figure 31: Conducted Spurious Emission, 16 – 25GHz, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)



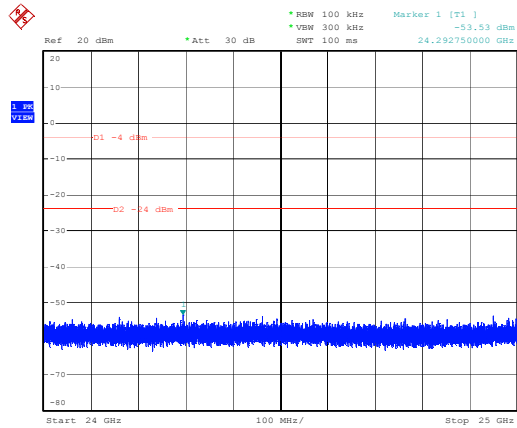
Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:45:09

Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:45:33



Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:45:56

Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:46:24



Conducted Spurious Emissions, Mode C2x
 Date: 3.FEB.2011 17:46:47

5.1.5 Peak Power Spectral Density

RESULT:

PASS

Date of testing: 2011-02-04

Ambient temperature: 23°C

Relative humidity: 28%

Atmospheric pressure: 1014hPa

Requirements:

FCC 15.247(e) and RSS-210 A8.2(b)

For digitally modulated systems, the power spectral density (PSD) conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

Test procedure:

ANSI C63.4-2003 and Measurement of Digital Transmission Systems Operating under Section 15.247.

A spectrum analyzer was connected to the antenna port of the EUT. The analyzer resolution bandwidth was set to 3kHz and the video bandwidth was set to 10kHz. The sweep time was set to 500s.

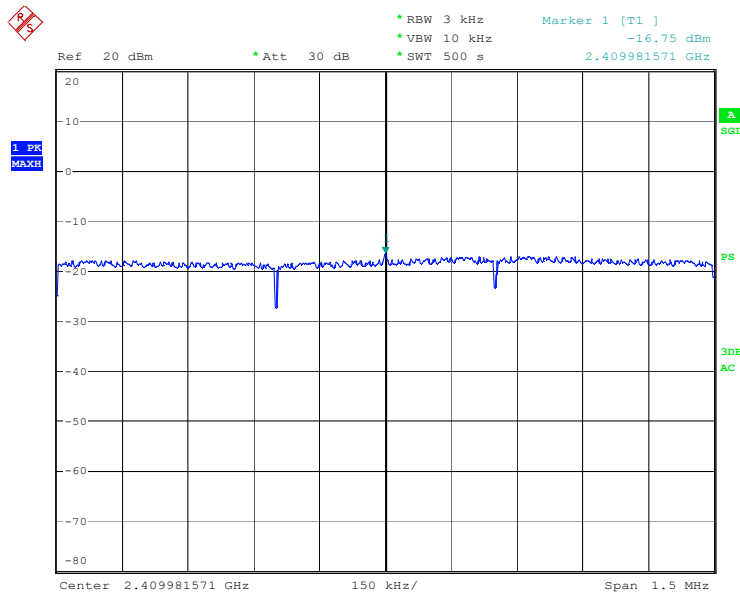
The final measurement takes into account the loss generated by all the involved cables.

Table 26: Peak Power Spectral Density, Configuration 1x (Radio 802.11b, DC 7.4V Input Voltage)

Operating Frequency [MHz]	Max PSD Frequency [MHz]	Reading [dBm]	Correction Factor [dB]	Max PSD [dBm]	Limit [dBm]	Margin [dB]
2412	2409.98	-16.75	2.27	-14.48	8.00	22.48
2437	2437.70	-15.97	2.32	-13.65	8.00	21.65
2462	2459.98	-15.32	2.31	-13.00	8.00	21.00

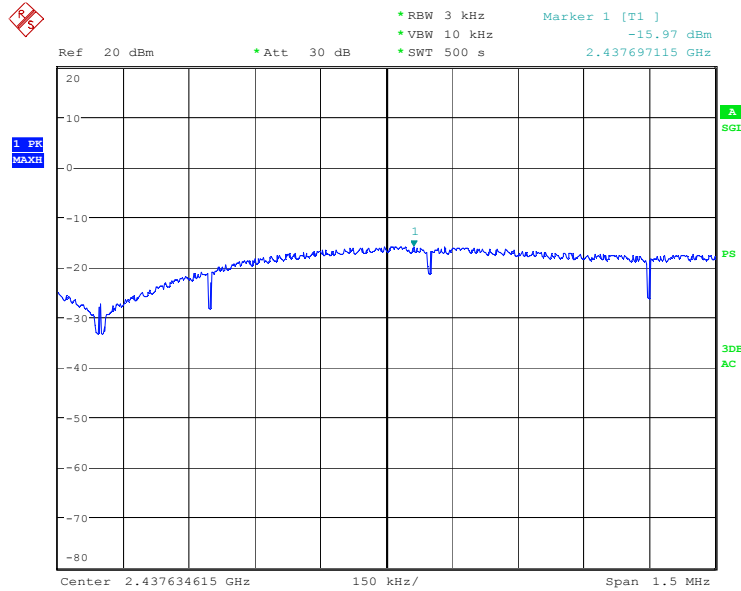
Notes: Power density = Reading + Correction factor
 Correction factor = Total cable loss

Figure 32: Power Spectral Density, Mode A1x (2412MHz, Radio 802.11b, DC 7.4V Input Voltage)



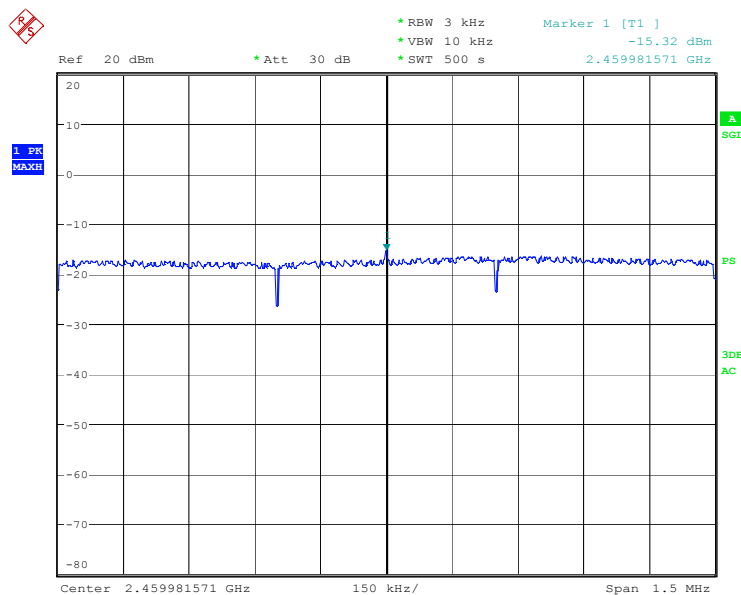
Peak Power Spectral Density, Mode A1x
 Date: 4.FEB.2011 10:21:17

Figure 33: Power Spectral Density, Mode B1x (2437MHz, Radio 802.11b, DC 7.4V Input Voltage)



Peak Power Spectral Density, Mode B1x
Date: 4.FEB.2011 10:33:07

Figure 34: Power Spectral Density, Mode C1x (2462MHz, Radio 802.11b, DC 7.4V Input Voltage)



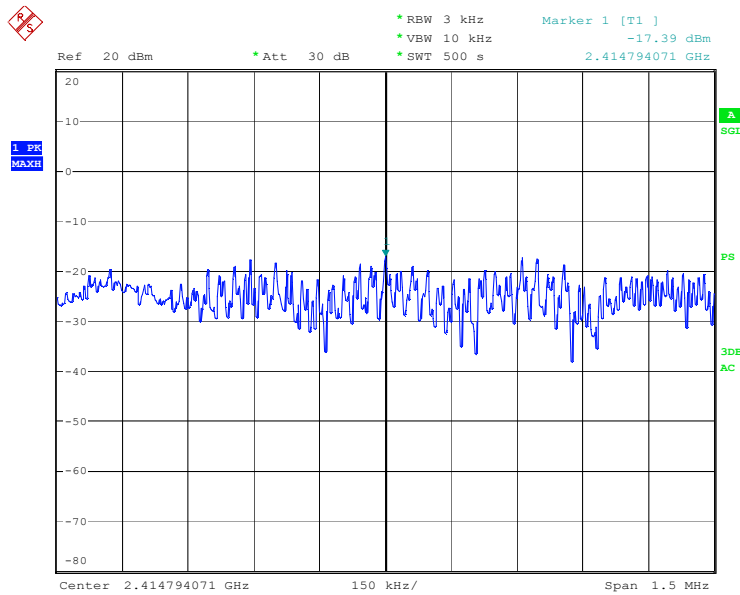
Peak Power Spectral Density, Mode C1x
Date: 4.FEB.2011 10:45:04

Table 27: Peak Power Spectral Density, Configuration 2x (Radio 802.11g, DC 7.4V Input Voltage)

Operating Frequency [MHz]	Max PSD Frequency [MHz]	Reading [dBm]	Correction Factor [dB]	Max PSD [dBm]	Limit [dBm]	Margin [dB]
2412	2414.79	-17.39	2.27	-15.12	8.00	23.12
2437	2440.11	-17.15	2.32	-14.83	8.00	22.83
2462	2465.11	-16.41	2.31	-14.09	8.00	22.09

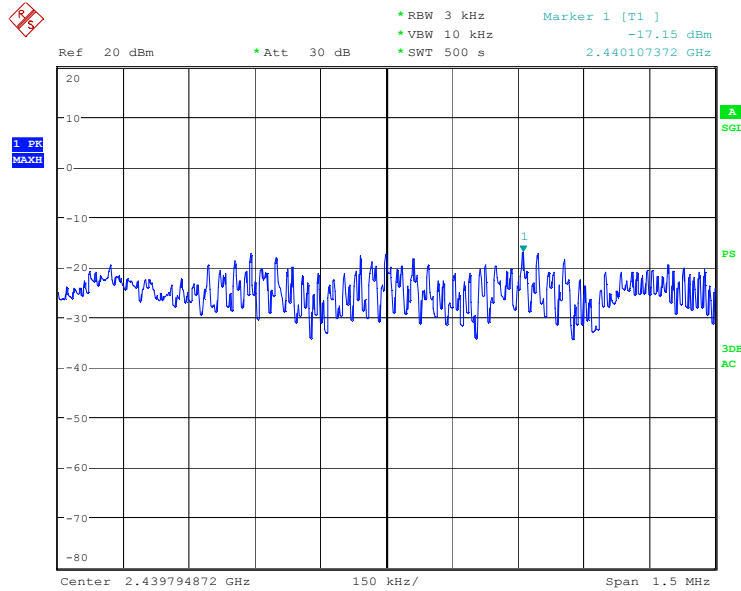
Notes: Power density = Reading + Correction factor
 Correction factor = Total cable loss

Figure 35: Power Spectral Density, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)



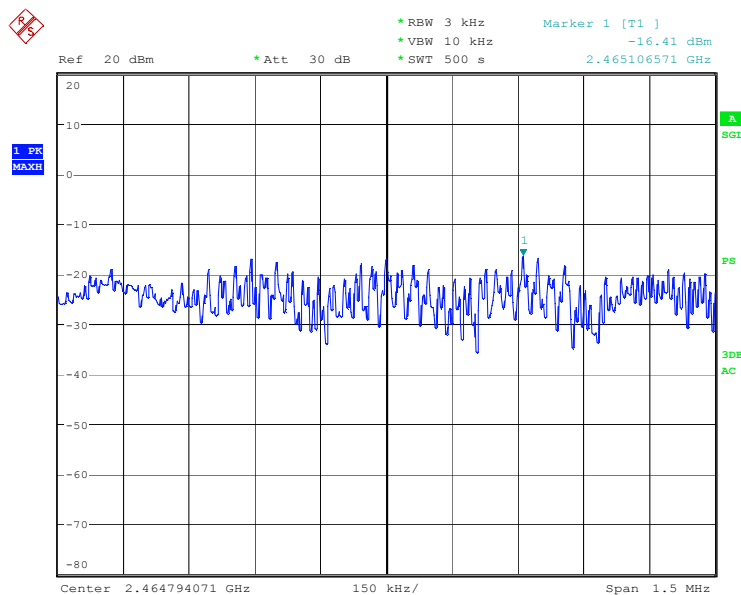
Peak Power Spectral Density, Mode A2x
 Date: 4.FEB.2011 11:16:16

Figure 36: Power Spectral Density, Mode B2x (2437MHz, Radio 802.11g, DC 7.4V Input Voltage)



Peak Power Spectral Density, Mode B2x
Date: 4.FEB.2011 11:28:12

Figure 37: Power Spectral Density, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)



Peak Power Spectral Density, Mode C2x
Date: 4.FEB.2011 11:39:33

6. Test Results of Radiated Measurements

6.1 Transmitter Parameters

6.1.1 Band Edge Radiated Emission

RESULT:

Pass

Date of testing: 2011-02-11

Ambient temperature: 22°C
Relative humidity: 25%
Atmospheric pressure: 1009hPa

Measurement distance: 3m
Kind of test site: Semi Anechoic Chamber

Requirements:

FCC 15.205, FCC 15.209, FCC 15.247(d), RSS-Gen 7.2.2 and 7.2.5 and RSS-210 2.1, 2.2 and 2.5

Radiated emissions which fall in the restricted band near the operation frequency band, as defined in FCC 15.205(a) and RSS-Gen 7.2.2 (table 3), must comply with the radiated emission limits specified in FCC 15.209(a) and RSS-Gen 7.2.5 (tables 5 and 6).

Test procedure:

ANSI C63.4-2003, RSS-Gen 4.9 and Measurement of Digital Transmission Systems Operating under Section 15.247.

The EUT was placed on a nonconductive turntable 0.8m above the ground plane. Measurements were made at 3m distance. The EUT was rotated 360° and the antenna was raised and lowered from 1 to 4m in order to determine the emission's maximum level.

Measurements were taken using both horizontal and vertical antenna polarizations for 3 EUT orientations (X, Y and Z) in both configuration 1x and 2x (radios 802.11b and g, DC 7.4V input power).

Measurements were performed using a spectrum analyzer with a suitable span to encompass the peak of the fundamental and using the following settings: Peak: RBW & VBW = 1MHz, Average: RBW = 1MHz, VBW = 10Hz.

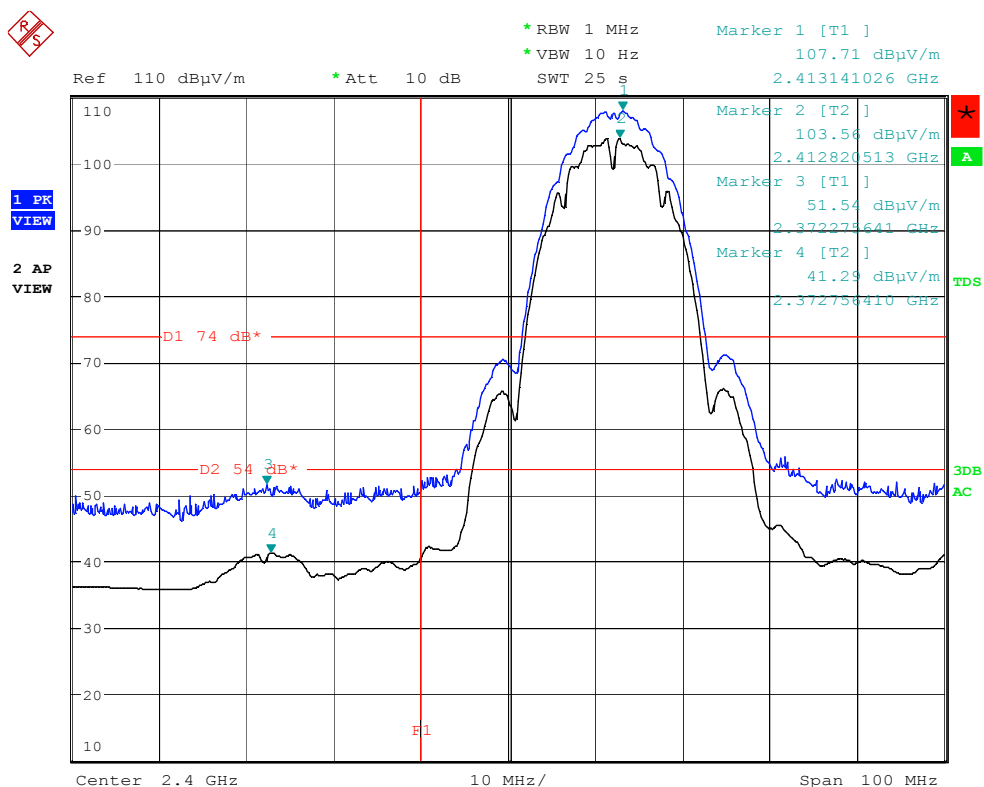
The highest emission amplitudes relative to the appropriate limit were measured and recorded in this report.

Table 28: Band Edge Radiated Emission, Configuration 1x (Radio 802.11b, DC 7.4V Input Voltage)

Operating Frequency [MHz]	EUT / Antenna Orient.	Average Value [dBµV/m]	Peak Value [dBµV/m]	Average Limit [dBµV/m]	Peak Limit [dBµV/m]	Average Margin [dB]	Peak Margin [dB]
2412	X	41.29	51.54	54.00	74.00	12.71	22.46
2462	X	42.55	53.62	54.00	74.00	11.45	20.38

Notes: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.
 Average limit in dBuV/m is calculated as follows: Average limit = 20 x log(500uV/m).
 Peak limit in dBuV/m is calculated as follows: Peak limit = Average limit + 20dB.

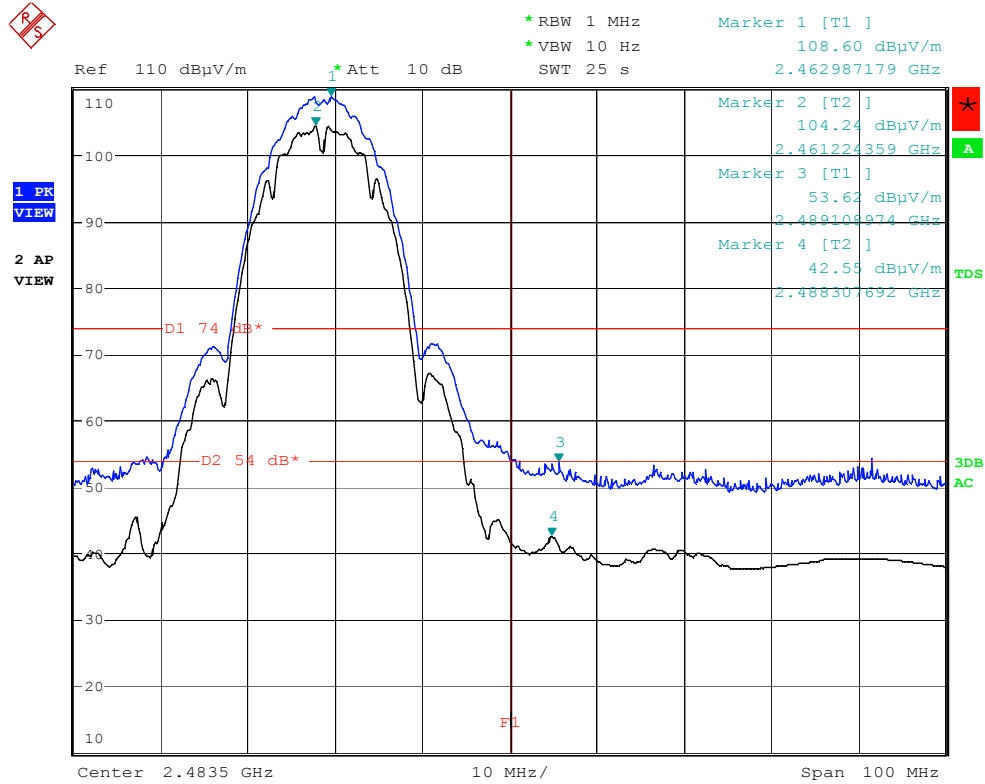
Figure 38: Band Edge Radiated Emission, Spectral Diagram, Mode A1x (2412MHz, Radio 802.11b, DC 7.4V Input Voltage)



Band Edge, Ver, Mode: A1x, Pos.: X
 Date: 11.FEB.2011 17:11:57

Note: The upper trace shows the peak value and the lower trace shows the average value.

Figure 39: Band Edge Radiated Emission, Spectral Diagram, Mode C1x (2462MHz, Radio 802.11b, DC 7.4V Input Voltage)



Band Edge, Ver, Mode: C1x, Pos.: X
 Date: 11.FEB.2011 18:10:17

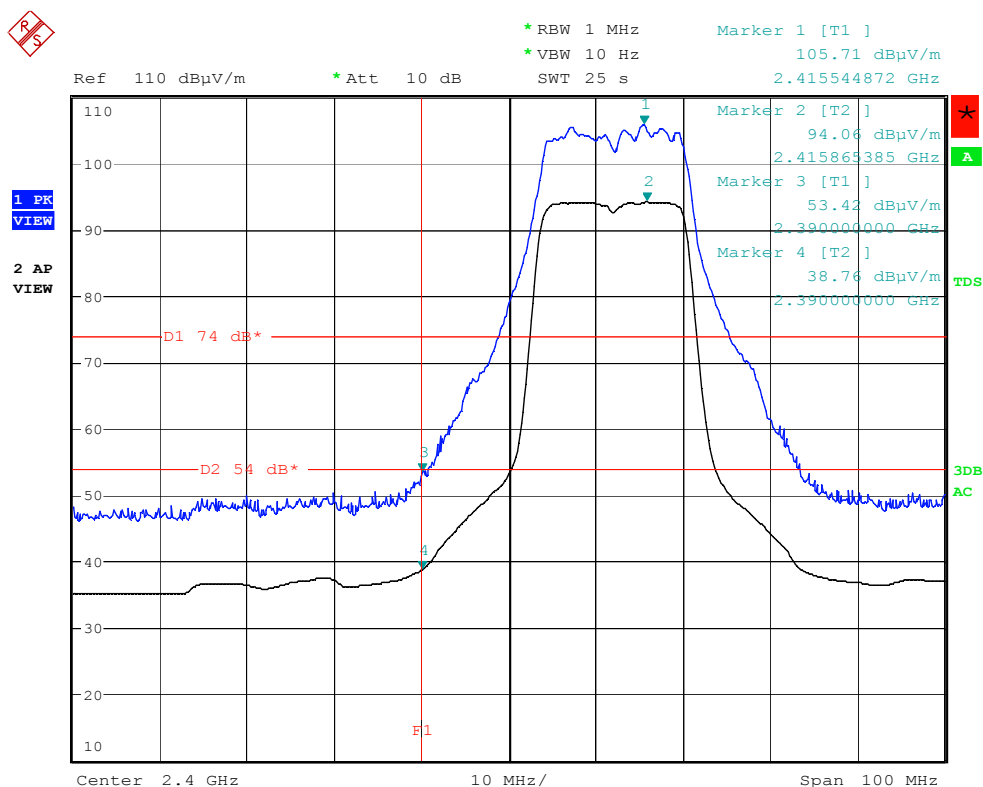
Note: The upper trace shows the peak value and the lower trace shows the average value.

Table 29: Band Edge Radiated Emission, Configuration 2x (Radio 802.11g, DC 7.4V Input Voltage)

Operating Frequency [MHz]	EUT / Antenna Orient.	Average Value [dBµV/m]	Peak Value [dBµV/m]	Average Limit [dBµV/m]	Peak Limit [dBµV/m]	Average Margin [dB]	Peak Margin [dB]
2412	X	38.76	53.42	54.00	74.00	15.24	20.58
2462	X	40.48	56.20	54.00	74.00	13.52	17.80

Notes: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.
 Average limit in dBuV/m is calculated as follows: Average limit = 20 x log(500uV/m).
 Peak limit in dBuV/m is calculated as follows: Peak limit = Average limit + 20dB.

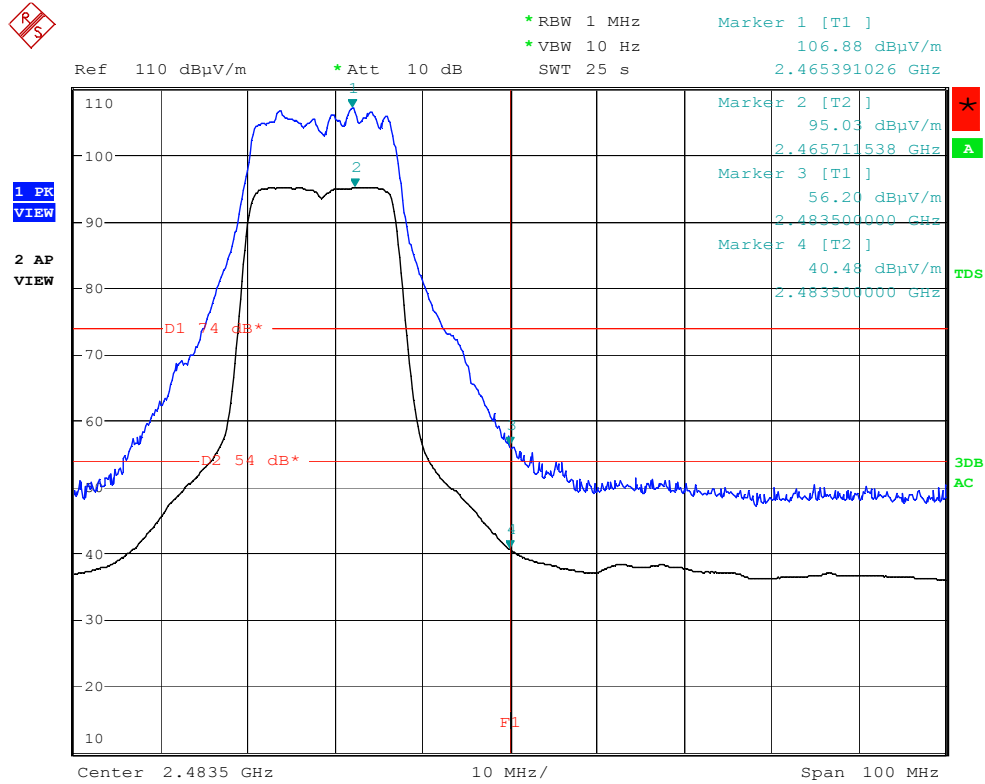
Figure 40: Band Edge Radiated Emission, Spectral Diagram, Mode A2x (2412MHz, Radio 802.11g, DC 7.4V Input Voltage)



Band Edge, Ver, Mode: A2x, Pos.: X
 Date: 11.FEB.2011 17:22:53

Note: The upper trace shows the peak value and the lower trace shows the average value.

Figure 41: Band Edge Radiated Emission, Spectral Diagram, Mode C2x (2462MHz, Radio 802.11g, DC 7.4V Input Voltage)



Band Edge, Ver, Mode: C2x, Pos.: X
 Date: 11.FEB.2011 18:20:47

Note: The upper trace shows the peak value and the lower trace shows the average value.

6.1.2 Radiated Spurious Emission of Transmitter

RESULT:

PASS

Date of testing: 2011-02-07, 2011-08-08, 2011-08-10

Ambient temperature: 21, 23, 21°C

Relative humidity: 32, 37, 30%

Atmospheric pressure: 1002, 1008, 1009hPa

Frequency range: 9kHz – 25GHz

Measurement distance: 3m

Kind of test site: Semi Anechoic Chamber

Requirements:

FCC 15.205, FCC 15.209, FCC 15.247(d), RSS-Gen 7.2.2 and 7.2.5 and RSS-210 2.1, 2.2, 2.5 and A8.5

Radiated emissions which fall in the restricted bands, as defined in FCC 15.205(a) and RSS-Gen 7.2.2 (table 3), must comply with the radiated emission limits specified in FCC 15.209(a) and RSS-Gen 7.2.5 (tables 5 and 6).

Radiated emissions which fall outside the operation frequency band and outside restricted bands shall either meet the limit specified in FCC 15.209(a) and RSS-Gen 7.2.5 or be attenuated at least 20dB below the power level in the 100kHz bandwidth within the band that contains the highest level of the desired power (the less severe limit applies).

Test procedure:

ANSI C63.4-2003, RSS-Gen 4.9 and Measurement of Digital Transmission Systems Operating under Section 15.247.

The EUT was placed on a nonconductive turntable 0.8m above the ground plane. Before final measurements of radiated emissions were performed, the EUT was scanned to determine its emission spectrum profile. The physical arrangement of the test system, the associated cabling and the EUT orientation (X, Y, Z) were varied in order to ensure that maximum emission amplitudes were attained.

The spectrum was examined from 9kHz to the 10th harmonic of the highest fundamental transmitter frequency (25GHz). Final radiated emission measurements were made at 3m distance.

At each frequency where a spurious emission was found, the EUT was rotated 360° and the antenna was raised and lowered from 1 to 4m in order to determine the emission's maximum level. Measurements were taken using both horizontal and vertical antenna polarizations.

For frequencies between 30MHz and 1GHz, the spectrum analyzer's 6 dB bandwidth was set to 120 kHz, and the analyzer was operated in the CISPR quasi-peak detection

mode. For emissions above 1GHz, measurements were performed using the following settings: Peak: RBW & VBW = 1MHz, Average: RBW = 1MHz, VBW = 10Hz.

The highest emission amplitudes relative to the appropriate limit were recorded in this report. Emissions other than those mentioned are small or not detectable.

Precheck showed that power input configuration "y" (EUT powered via DC power input port) produces a higher emission level than configuration "x" (EUT powered via internal battery). Test results are therefore given for the configuration "y".

No spurious emission was found in the range 9kHz – 30MHz.

Table 30: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode A1y (2412MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBµV]	Factor [dB(1/m)]	Level QP [dBµV/m]	Limit [dBµV/m]	Margin QP [dB]	Height [cm]	Angle [°]
32.043	Y / V	46.9	-24.6	22.3	40.0	17.7	100	359
44.247	Y / V	46.7	-23.3	23.4	40.0	16.6	100	228
171.294	Y / H	53.0	-22.5	30.5	43.5	13.0	173	253
171.326	Y / V	50.6	-22.8	27.8	43.5	15.7	100	138
457.498	Y / V	53.0	-15.8	37.2	46.0	8.8	131	121
480.005	Y / V	54.3	-15.3	39.0	46.0	7.0	121	124
762.522	Y / H	43.6	-11.6	32.0	46.0	14.0	120	278
799.989	Y / H	44.1	-11.1	33.0	46.0	13.0	100	245

Note: Level QP = Reading QP + Factor

Table 31: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode A1y (2412MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBµV/m]	Level PK [dBµV/m]	Limit AV [dBµV/m]	Limit PK [dBµV/m]	Margin AV [dB]	Margin PK [dB]
1119.905	Z / V	30.6	43.6	54.0	74.0	23.4	30.4
1525.320	Z / H	23.7	41.7	54.0	74.0	30.3	32.3
4340.363	Z / V	29.0	43.4	54.0	74.0	25.0	30.6

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

Table 32: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode B1y (2437MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBμV]	Factor [dB(1/m)]	Level QP [dBμV/m]	Limit [dBμV/m]	Margin QP [dB]	Height [cm]	Angle [°]
32.064	X / V	50.5	-24.6	25.9	40.0	14.1	100	1
171.295	X / V	51.4	-22.8	28.6	43.5	14.9	104	254
171.300	X / H	53.7	-22.5	31.2	43.5	12.3	166	274
480.004	X / V	47.2	-15.3	31.9	46.0	14.1	133	347
762.509	X / H	47.8	-11.6	36.2	46.0	9.8	109	340
800.009	X / H	47.2	-11.1	36.1	46.0	9.9	104	338

Note: Level QP = Reading QP + Factor

Table 33: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode B1y (2437MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBμV/m]	Level PK [dBμV/m]	Limit AV [dBμV/m]	Limit PK [dBμV/m]	Margin AV [dB]	Margin PK [dB]
4873.997	Z / V	38.1	45.2	54.0	74.0	15.9	28.8

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

Table 34: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode C1y (2462MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBµV]	Factor [dB(1/m)]	Level QP [dBµV/m]	Limit [dBµV/m]	Margin QP [dB]	Height [cm]	Angle [°]
32.053	Z / V	47.8	-24.6	23.2	40.0	16.8	100	359
40.808	Z / V	47.4	-23.5	23.9	40.0	16.1	100	144
71.255	Z / V	47.3	-24.8	22.5	40.0	17.5	100	160
174.057	Z / H	53.1	-22.8	30.3	43.5	13.2	173	261
305.010	Z / H	62.6	-20.6	42.0	46.0	4.0 (*)	100	220
319.995	Z / H	63.8	-20.2	43.6	46.0	2.4 (*)	100	224
799.990	Z / H	46.8	-11.1	35.7	46.0	10.3	107	277

Note: Level QP = Reading QP + Factor

(*) The measured result is below the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to determine compliance at a level of confidence of 95%. However, the measured result indicates a high probability that the tested product complies with the specification limit.

Table 35: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode C1y (2462MHz, Radio 802.11b, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBµV/m]	Level PK [dBµV/m]	Limit AV [dBµV/m]	Limit PK [dBµV/m]	Margin AV [dB]	Margin PK [dB]
1199.942	X / V	23.3	37.8	54.0	74.0	30.7	36.2
4924.005	X / V	39.1	46.3	54.0	74.0	14.9	27.7

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

Table 36: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode A2y (2412MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBµV]	Factor [dB(1/m)]	Level QP [dBµV/m]	Limit [dBµV/m]	Margin QP [dB]	Height [cm]	Angle [°]
32.054	Y / V	48.0	-24.6	23.4	40.0	16.6	100	359
53.994	Y / V	48.9	-23.3	25.6	40.0	14.4	100	143
156.257	Y / H	49.8	-22.0	27.8	43.5	15.7	196	91
305.001	Y / H	61.2	-20.6	40.6	46.0	5.4	100	123
320.011	Y / H	61.1	-20.2	40.9	46.0	5.1	102	124
457.504	Y / V	52.4	-15.8	36.6	46.0	9.4	130	109
479.970	Y / V	52.4	-15.3	37.1	46.0	8.9	131	117

Note: Level QP = Reading QP + Factor

Table 37: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode A2y (2412MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBµV/m]	Level PK [dBµV/m]	Limit AV [dBµV/m]	Limit PK [dBµV/m]	Margin AV [dB]	Margin PK [dB]
1119.960	X / V	34.8	46.0	54.0	74.0	19.2	28.0

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

Table 38: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode B2y (2437MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBµV]	Factor [dB(1/m)]	Level QP [dBµV/m]	Limit [dBµV/m]	Margin QP [dB]	Height [cm]	Angle [°]
74.427	X / V	52.2	-25.4	26.8	40.0	13.2	101	182
171.298	X / H	53.7	-22.5	31.2	43.5	12.3	164	273
457.497	X / V	48.8	-15.8	33.0	46.0	13.0	132	359
762.541	X / V	44.4	-11.3	33.1	46.0	12.9	145	250
762.560	X / H	49.1	-11.6	37.5	46.0	8.5	102	312
800.001	X / H	49.5	-11.1	38.4	46.0	7.6	100	336

Note: Level QP = Reading QP + Factor

Table 39: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode B2y (2437MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBµV/m]	Level PK [dBµV/m]	Limit AV [dBµV/m]	Limit PK [dBµV/m]	Margin AV [dB]	Margin PK [dB]
1119.980	X / V	33.7	45.8	54.0	74.0	20.3	28.2

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

Table 40: Radiated Emission, Quasi Peak Data, 30MHz – 1GHz, Horizontal and Vertical Antenna Orientations, Mode C2y (2462MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Reading QP [dBµV]	Factor [dB(1/m)]	Level QP [dBµV/m]	Limit [dBµV/m]	Margin QP [dB]	Height [cm]	Angle [°]
32.042	Y / V	47.8	-24.6	23.2	40.0	16.8	100	359
54.024	Y / V	49.2	-23.3	25.9	40.0	14.1	102	139
156.258	Y / H	50.6	-22.0	28.6	43.5	14.9	193	90
304.999	Y / H	62.0	-20.6	41.4	46.0	4.6 (*)	101	123
319.998	Y / H	62.5	-20.2	42.3	46.0	3.7 (*)	101	124
320.001	Y / V	56.4	-20.4	36.0	46.0	10.0	156	170
610.103	Y / H	39.0	-13.3	25.7	46.0	20.3	143	156
832.553	Y / V	31.1	-10.8	20.3	46.0	25.7	208	359

Note: Level QP = Reading QP + Factor

(*) The measured result is below the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to determine compliance at a level of confidence of 95%. However, the measured result indicates a high probability that the tested product complies with the specification limit.

Table 41: Radiated Emission, Average and Peak Data, 1 – 25GHz, Horizontal and Vertical Antenna Orientations, Mode C2y (2462MHz, Radio 802.11g, DC 12V Input Voltage)

Freq. [MHz]	EUT / Antenna Orientation	Level AV [dBµV/m]	Level PK [dBµV/m]	Limit AV [dBµV/m]	Limit PK [dBµV/m]	Margin AV [dB]	Margin PK [dB]
1120.005	X / V	35.6	50.4	54.0	74.0	18.4	23.6

Note: All correction factors (antenna, cable, pre-amplifier) are included in the measurement values.

7. Test Results of AC Power Line Conducted Measurements

7.1 Transmitter Parameters

7.1.1 AC Power Line Conducted Emission of Transmitter

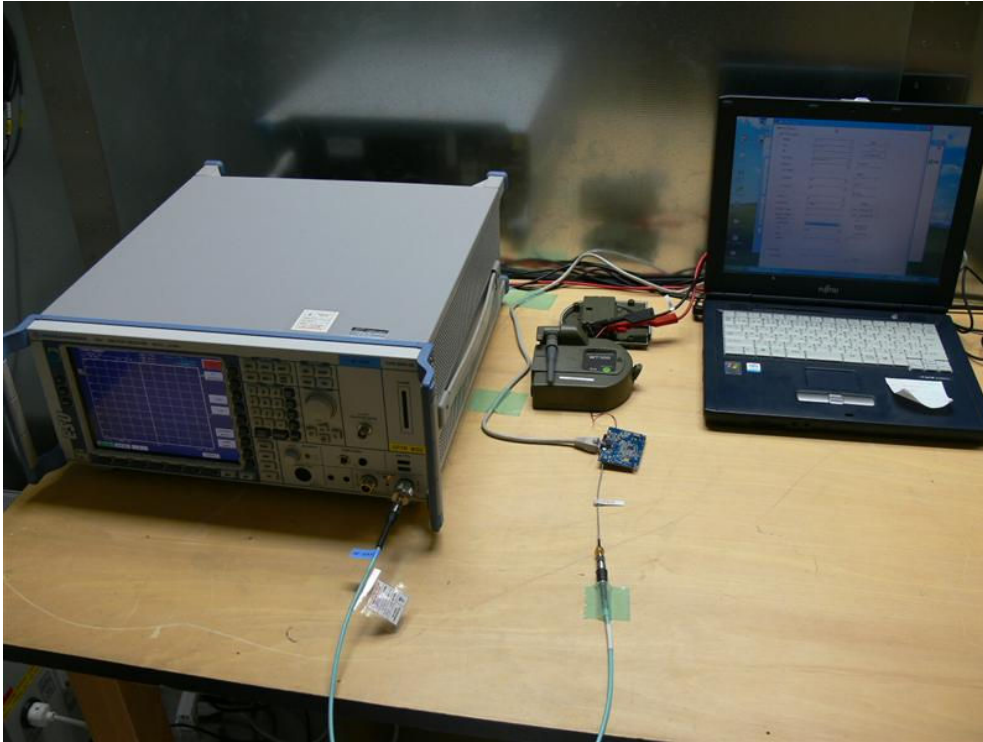
RESULT:

N/A

This test is not applicable, since the EUT is not intended to be connected to the AC mains. (The EUT is battery powered only.)

8. Photographs of the Test Setup

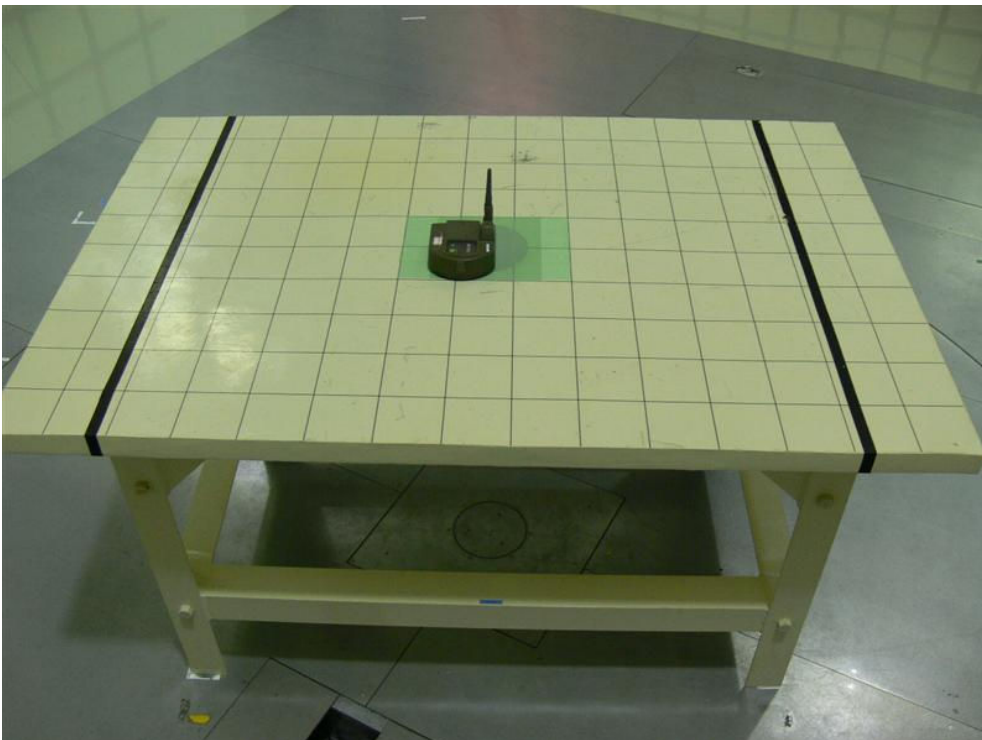
Photograph 1: Set-up for Conducted Emissions at Antenna Port



Photograph 2: Set-up for Radiated Emission of Transmitter, Power Input Method "x", Front View



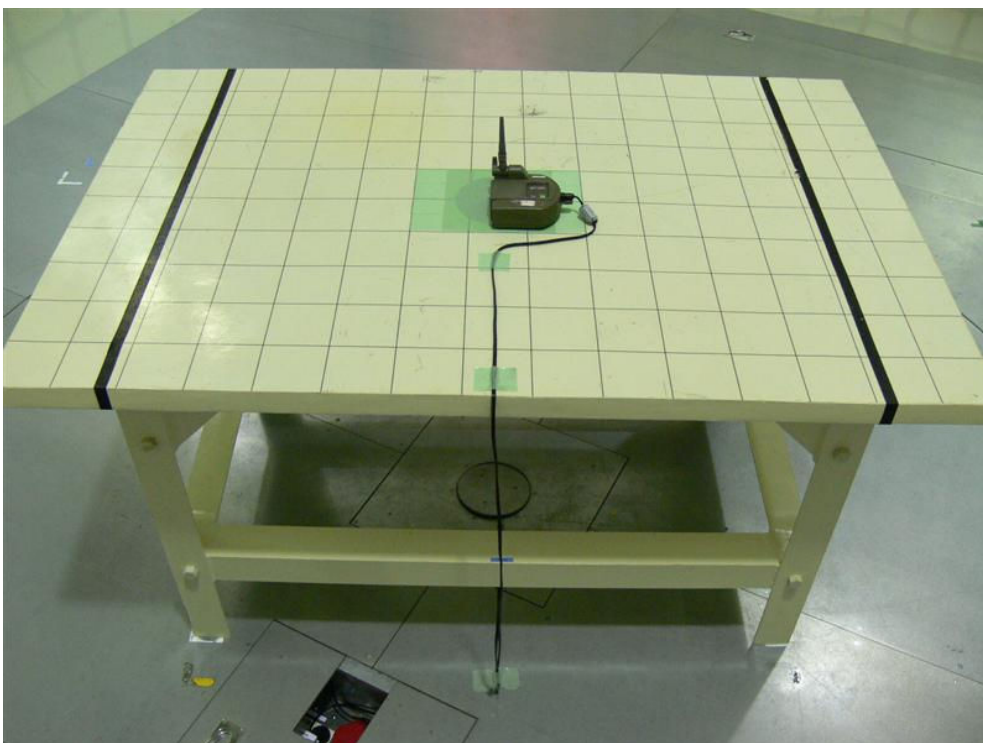
Photograph 3: Set-up for Radiated Emission of Transmitter, Power Input Method "x", Rear View



Photograph 4: Set-up for Radiated Emission of Transmitter, Power Input Method “y”, Front View



Photograph 5: Set-up for Radiated Emission of Transmitter, Power Input Method “y”, Rear View



Photograph 6: Set-up for Radiated Emission, EUT Configuration X-Axis



Photograph 7: Set-up for Radiated Emission, EUT Configuration Y-Axis



Photograph 8: Set-up for Radiated Emission, EUT Configuration Z-Axis



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