

TEST REPORT

of

FCC Part 15 Subpart B&C §15.247/ RSS-210 Issue 8, RSS-Gen Issue 3

FCC ID/IC Certification: TUISBG-1000 / 6241A-SBG1000

Equipment Under Test : Smart Business Gateway
Model Name : SBG-1000
Serial No. : N/A
Applicant : LG-Ericsson Co., Ltd.
Manufacturer : LN Srithai Comm. CO., Ltd.
Date of Test(s) : 2010.10.15 ~ 2010.11.04
Date of Issue : 2010.12.20

In the configuration tested, the EUT complied with the standards specified above.

Tested By:



Date

2010.12.20

Grant Lee

Approved By:



Date

2010.12.20

Feel Jeong

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

INDEX

Table of contents

| | |
|--|----|
| 1. General information ----- | 3 |
| 2. Transmitter radiated spurious emissions and conducted spurious emission ----- | 6 |
| 3. Receiver Radiated Spurious Emission ----- | 40 |
| 4. 6 dB bandwidth and 99% BW ----- | 42 |
| 5. Maximum peak output power ----- | 68 |
| 6. Power Spectral Density ----- | 71 |
| 7. Transmitter AC Power Line Conducted Emission----- | 89 |
| 8. Receiver AC Power Line Conducted Emission ----- | 94 |
| 9. Antenna Requirement ----- | 98 |
| 10. RF Exposure evaluation ----- | 99 |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

1. General Information

1.1. Testing Laboratory

SGS Testing Korea Co., Ltd.

- Wireless Div. 2FL, 18-34, Sanbon-dong, Gunpo-si, Gyeonggi-dong, Korea

- 705, Dongcheon-dong Suji-gu, Yongin-si, Gyeonggi-do, Korea

www.electrolab.kr.sgs.com

Telephone : +82 +31 428 5700

FAX : +82 +31 427 2371

1.2. Details of Applicant

Applicant : LG-Ericsson

Address : 533, Hogye-dong, Dongan-Gu, Anyang-shi, Kyongki-do, 431-749, Korea

Contact Person : Rex Lee

Phone No. : +82 +31 450 4804

1.3. Description of EUT

| | |
|-----------------------------|--|
| Kind of Product | Smart Business Gateway |
| Model Name | SBG-1000 |
| Serial Number | N / A |
| Power Supply | AC 100 ~240 V |
| Frequency Range | 2 412 MHz ~ 2 462 MHz (802.11b/g/n-HT20, MIMO) 2 422 MHz ~ 2 452 MHz (802.11n-HT40, MIMO) |
| Modulation Technique | DSSS, OFDM |
| Number of Channels | 11 Ch (b/g/n-HT20), 7 Ch (HT40) |
| Antenna Type | Integral Type |
| Antenna Gain | 6.48 dBi (Combined), 2.313 dBi (Ant 1), 4.390 dBi (Ant 2) |

1.4. Declaration by the manufacturer

- N/A

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

1.5. Test Equipment List

| EQUIPMENT | MANUFACTURER | MODEL | CAL DUE. |
|--------------------|-------------------------------|----------------------------------|---------------|
| Signal Generator | R & S | SMR40 | Jul. 15, 2011 |
| Spectrum Analyzer | R & S | FSV30 | May 31, 2011 |
| Spectrum Analyzer | R & S | FSV30 | Aug. 09, 2011 |
| Preamplifier | H.P | 8447F | Jul. 05, 2011 |
| Preamplifier | Agilent | 8449B | Apr. 01, 2011 |
| Power Sensor | R & S | 100748 | Aug. 14, 2011 |
| High Pass Filter | Wainwright | WHK3.0/18G-10SS | Sep. 29, 2011 |
| Test Receiver | R & S | ESU26 | Apr. 08, 2011 |
| Bilog Antenna | SCHWARZBECK MESSELEKTRONIK | VULB9163 | Jul. 22, 2011 |
| Horn Antenna | R & S | HF 906 | Oct. 08, 2011 |
| Horn Antenna | SCHWARZBECK MESSELEKTRONIK | BBHA9170 | Mar. 17, 2012 |
| Antenna Master | EMCO | 1050 | N / A |
| Turn Table | Daeil EMC | DI-1500 | N / A |
| Anechoic Chamber | SY Corporation | L × W × H (9.6 m×6.4 m×6.6 m) | Jan. 27, 2011 |
| Two-Line V-Network | R & S | ENV216 | Jan. 06, 2011 |
| Test Receiver | R & S | ESHS10 | Jul. 13, 2011 |
| Anechoic Chamber | SY Corporation | L × W × H (6.5 m×3.5 m×3.5 m) | N / A |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

1.6. Summary of Test Results

The EUT has been tested according to the following specifications:

| APPLIED STANDARD:FCC Part15 subpart B&C, RSS-210, RSS-Gen | | | |
|---|-------------------------|--|----------|
| Standard section | | Test Item | Result |
| 15.205(a) 15.209 15.247(d) | A8.5 | Transmitter Radiated Spurious Emissions Conducted Spurious Emission | Complied |
| 15.109(a) | RSS-Gen 6 | Receiver Radiated Spurious Emission | Complied |
| 15.247(a)(2) | A8.2(1) | 6 dB Bandwidth and 99% BW | Complied |
| 15.247(b)(3) | A8.4(4) | Maximum Peak Output Power | Complied |
| 15.247(e) | A8.3(2) | Power Spectral Density | Complied |
| 15.207 | RSS-Gen 7.2.2 | Transmitter AC Power Line Conducted Emission | Complied |
| 15.107 | RSS-Gen 7.2.2 | Receiver AC Power Line Conducted Emission | Complied |
| 15.247(i) 1.1307(b)(1) | RSS-Gen 5.5/ RSS-102 | Maximum Permissible Exposure (Exposure of Humans to RF Fields) | Complied |

1.7. Conclusion of worst-case

The field strength of spurious emission was measured in three orthogonal EUT positions (X-axis, Y-axis and Z-axis). Worst case is X-axis. 1 Mbps is the highest output power in the 11b. 6 Mbps is the highest output power in the 11g. MCS0 mode is the highest output power in the 11n (HT20), MCS0 mode is the highest output power in the 11n (HT40).

For the RF conducted spurious emission, the combination of ANT1+ANT2 is the worst case in the 11n (HT20 & HT40).

1.8. Test report revision

| Revision | Report number | Description |
|----------|------------------------|-----------------|
| 0 | F690501/RF-RTL004254 | Initial |
| 1 | F690501/RF-RTL004254-1 | Update IC issue |

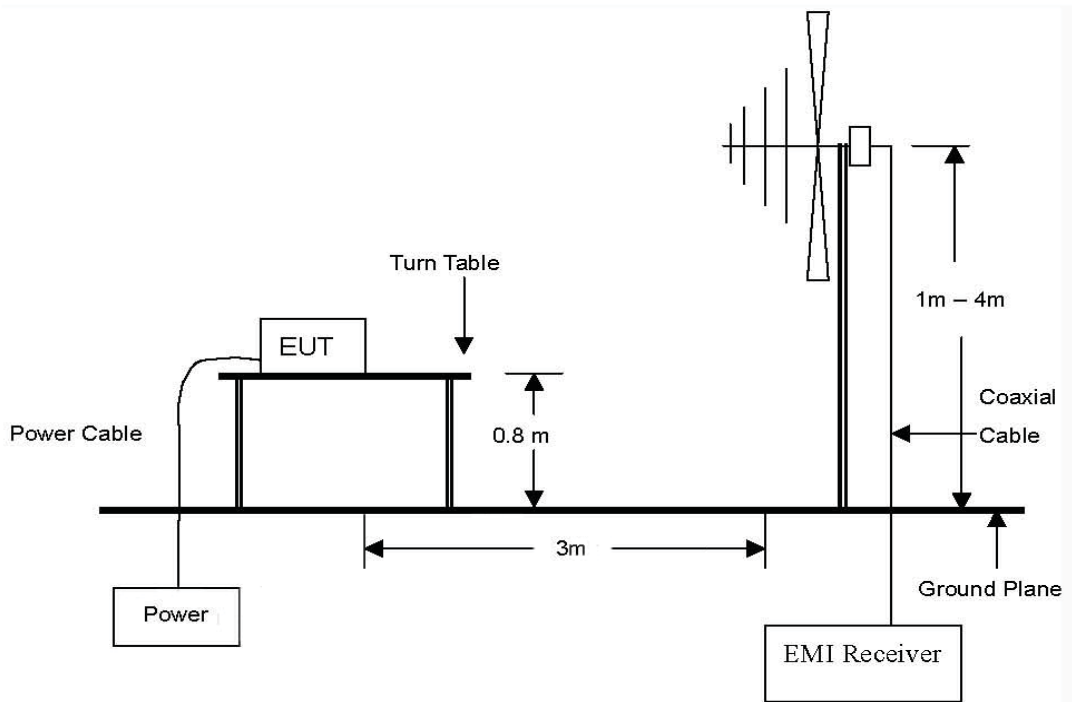
The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

2. Transmitter Radiated Spurious Emissions and Conducted Spurious Emission

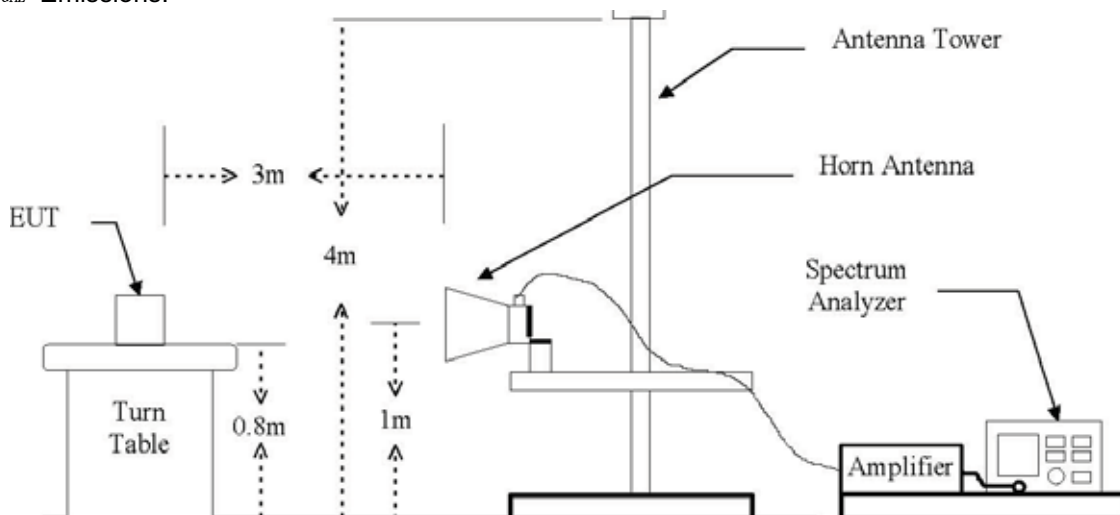
2.1. Test Setup

2.1.1. Transmitter Radiated Spurious Emissions

The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to 24 GHz Emissions.



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

2.1.2. Conducted Spurious Emission



2.2. Limit

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section §15.209(a) is not required. In addition, radiated emission which in the restricted band, as define in section §15.205(a), must also comply the radiated emission limits specified in section §15.209(a) (see section §15.205(c))

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) | Distance (Meters) | Field Strength (dB μ V/m) | Field Strength (μ V/m) |
|-----------------|-------------------|-------------------------------|-----------------------------|
| 30 - 88 | 3 | 40.0 | 100 |
| 88 – 216 | 3 | 43.5 | 150 |
| 216 – 960 | 3 | 46.0 | 200 |
| Above 960 | 3 | 54.0 | 500 |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

2.3. Test Procedures

Radiated emissions from the EUT were measured according to the dictates of ANSI C63.4:2003

2.3.1. Test Procedures for Radiated Spurious Emissions

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
2. During performing radiated emission below 1 GHz, the EUT was set 3 meters away from the interference receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1 GHz, the EUT was set 3 meter away from the interference-receiving antenna.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE ;

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Peak detection (PK) or Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1 GHz.

2.3.2. Test Procedures for Conducted Spurious Emissions

1. The transmitter output was connected to the spectrum analyzer.
2. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using RBW = 100 kHz, VBW = 100 kHz.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

2.4. Test Results

Ambient temperature : (24 ± 2) °C
 Relative humidity : 47 % R.H.

2.4.1. Spurious Radiated Emission (Worst case configuration_11n_HT40 mode)

The frequency spectrum from 30 MHz to 1 000 MHz was investigated. Emission levels are not reported much lower than the limits by over 30 dB. All reading values are peak values.

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------|-------------|------|--------------------|---------------|-----------------|----------------|-------------|
| Frequency (MHz) | Reading (dBμV) | Detect Mode | Pol. | AF (dB/m) | AMP + CL (dB) | Actual (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
| 36.467 | 49.45 | Peak | V | 16.28 | -27.53 | 38.20 | 40.00 | 1.80 |
| 375.280 | 51.16 | Peak | H | 12.86 | -25.42 | 38.60 | 46.00 | 7.40 |
| 625.055 | 44.31 | Peak | H | 17.49 | -25.70 | 36.10 | 46.00 | 9.90 |
| 875.032 | 38.78 | Peak | H | 20.67 | -24.65 | 34.80 | 46.00 | 11.20 |
| Above 900.000 | Not Detected | - | - | - | - | - | - | - |

Remark:

1. All spurious emission at channels are almost the same below 1 GHz, so that the channel was chosen at representative in final test.
2. Actual = Reading + AF + AMP + CL

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

2.4.2. Spurious Radiated Emission

The frequency spectrum above 1000 MHz was investigated. Emission levels are not reported much lower than the limits by over 30 dB.

DSSS : 802.11b_ANT 1

Low Channel (2 412 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 24.76 | Peak | H | 28.09 | 4.84 | 57.69 | 74.00 | 16.31 |
| *2 390.000 | 12.56 | Average | H | 28.09 | 4.84 | 45.49 | 54.00 | 8.51 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 822.490 | 42.13 | Peak | H | 32.66 | -27.79 | 47.00 | 74.00 | 27.00 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 878.223 | 43.08 | Peak | H | 32.89 | -27.59 | 48.37 | 74.00 | 25.63 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 462 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 23.56 | Peak | H | 28.09 | 4.78 | 56.43 | 74.00 | 17.57 |
| *2 483.500 | 13.55 | Average | H | 28.09 | 4.78 | 46.42 | 54.00 | 7.58 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 926.964 | 43.83 | Peak | H | 33.11 | -27.38 | 49.56 | 74.00 | 24.44 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

DSSS : 802.11b_ ANT 2

Low Channel (2 412 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 25.36 | Peak | H | 28.09 | 4.84 | 58.29 | 74.00 | 15.71 |
| *2 390.000 | 13.51 | Average | H | 28.09 | 4.84 | 46.44 | 54.00 | 7.56 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 826.480 | 42.27 | Peak | H | 32.67 | -27.79 | 47.15 | 74.00 | 26.85 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 875.219 | 42.59 | Peak | H | 32.87 | -27.61 | 47.85 | 74.00 | 26.15 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 462 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 24.13 | Peak | H | 28.09 | 4.78 | 57.00 | 74.00 | 17.00 |
| *2 483.500 | 13.11 | Average | H | 28.09 | 4.78 | 45.98 | 54.00 | 8.02 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 928.206 | 43.86 | Peak | H | 33.11 | -27.37 | 49.60 | 74.00 | 24.40 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

OFDM : 802.11g_ANT 1

Low Channel (2 412 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 23.56 | Peak | H | 28.09 | 4.84 | 56.49 | 74.00 | 17.51 |
| *2 390.000 | 13.04 | Average | H | 28.09 | 4.84 | 45.97 | 54.00 | 8.03 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 823.680 | 41.66 | Peak | H | 32.66 | -27.79 | 46.53 | 74.00 | 27.47 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 872.450 | 43.30 | Peak | H | 32.86 | -27.63 | 48.52 | 74.00 | 25.48 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 462 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 23.89 | Peak | H | 28.09 | 4.78 | 56.76 | 74.00 | 17.24 |
| *2 483.500 | 13.61 | Average | H | 28.09 | 4.78 | 46.48 | 54.00 | 7.52 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 924.941 | 43.06 | Peak | H | 33.10 | -27.38 | 48.78 | 74.00 | 25.22 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

OFDM : 802.11g_ANT 2

Low Channel (2 412 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 23.36 | Peak | H | 28.09 | 4.84 | 56.29 | 74.00 | 17.71 |
| *2 390.000 | 13.52 | Average | H | 28.09 | 4.84 | 46.45 | 54.00 | 7.55 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 823.290 | 42.87 | Peak | H | 32.66 | -27.79 | 47.74 | 74.00 | 26.26 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 874.366 | 43.18 | Peak | H | 32.87 | -27.62 | 48.43 | 74.00 | 25.57 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 462 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 23.83 | Peak | H | 28.09 | 4.78 | 56.70 | 74.00 | 17.30 |
| *2 483.500 | 12.47 | Average | H | 28.09 | 4.78 | 45.34 | 54.00 | 8.66 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 926.964 | 43.13 | Peak | H | 33.11 | -27.38 | 48.86 | 74.00 | 25.14 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

OFDM : 802.11n_HT20 (ANT 1 + ANT 2)

Low Channel (2 412 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 24.04 | Peak | H | 28.09 | 4.84 | 56.97 | 74.00 | 17.03 |
| *2 390.000 | 13.54 | Average | H | 28.09 | 4.84 | 46.47 | 54.00 | 7.53 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 822.970 | 42.63 | Peak | H | 32.66 | -27.79 | 47.50 | 74.00 | 26.50 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 874.366 | 42.88 | Peak | H | 32.87 | -27.62 | 48.13 | 74.00 | 25.87 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 462 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 24.04 | Peak | H | 28.09 | 4.78 | 56.91 | 74.00 | 17.09 |
| *2 483.500 | 13.45 | Average | H | 28.09 | 4.78 | 46.32 | 54.00 | 7.68 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 926.290 | 43.41 | Peak | H | 33.11 | -27.38 | 49.14 | 74.00 | 24.86 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

OFDM : 802.11n_H40 (ANT 1 + ANT 2)

Low Channel (2 422 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 390.000 | 28.70 | Peak | H | 28.09 | 4.84 | 61.63 | 74.00 | 12.37 |
| *2 390.000 | 12.55 | Average | H | 28.09 | 4.84 | 45.48 | 54.00 | 8.52 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 842.722 | 43.73 | Peak | H | 32.73 | -27.80 | 48.66 | 74.00 | 25.34 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

Middle Channel (2 437 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 873.520 | 43.55 | Peak | H | 32.86 | -27.63 | 48.79 | 74.00 | 25.21 |
| Above 4 900.000 | Not detected | - | - | - | - | - | - | - |

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel (2 452 MHz)

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|---------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| *2 483.500 | 34.20 | Peak | H | 28.09 | 4.78 | 67.07 | 74.00 | 6.93 |
| *2 483.500 | 14.57 | Average | H | 28.09 | 4.78 | 47.44 | 54.00 | 6.56 |

| Radiated Emissions | | | Ant | Correction Factors | | Total | FCC Limit | |
|--------------------|----------------------|-------------|------|--------------------|-------------|-----------------------|----------------------|-------------|
| Frequency (MHz) | Reading (dB μ V) | Detect Mode | Pol. | AF (dB/m) | AMP+CL (dB) | Actual (dB μ V/m) | Limit (dB μ V/m) | Margin (dB) |
| 4 902.330 | 42.32 | Peak | H | 33.00 | -27.43 | 47.89 | 74.00 | 26.11 |
| Above 5 000.000 | Not detected | - | - | - | - | - | - | - |

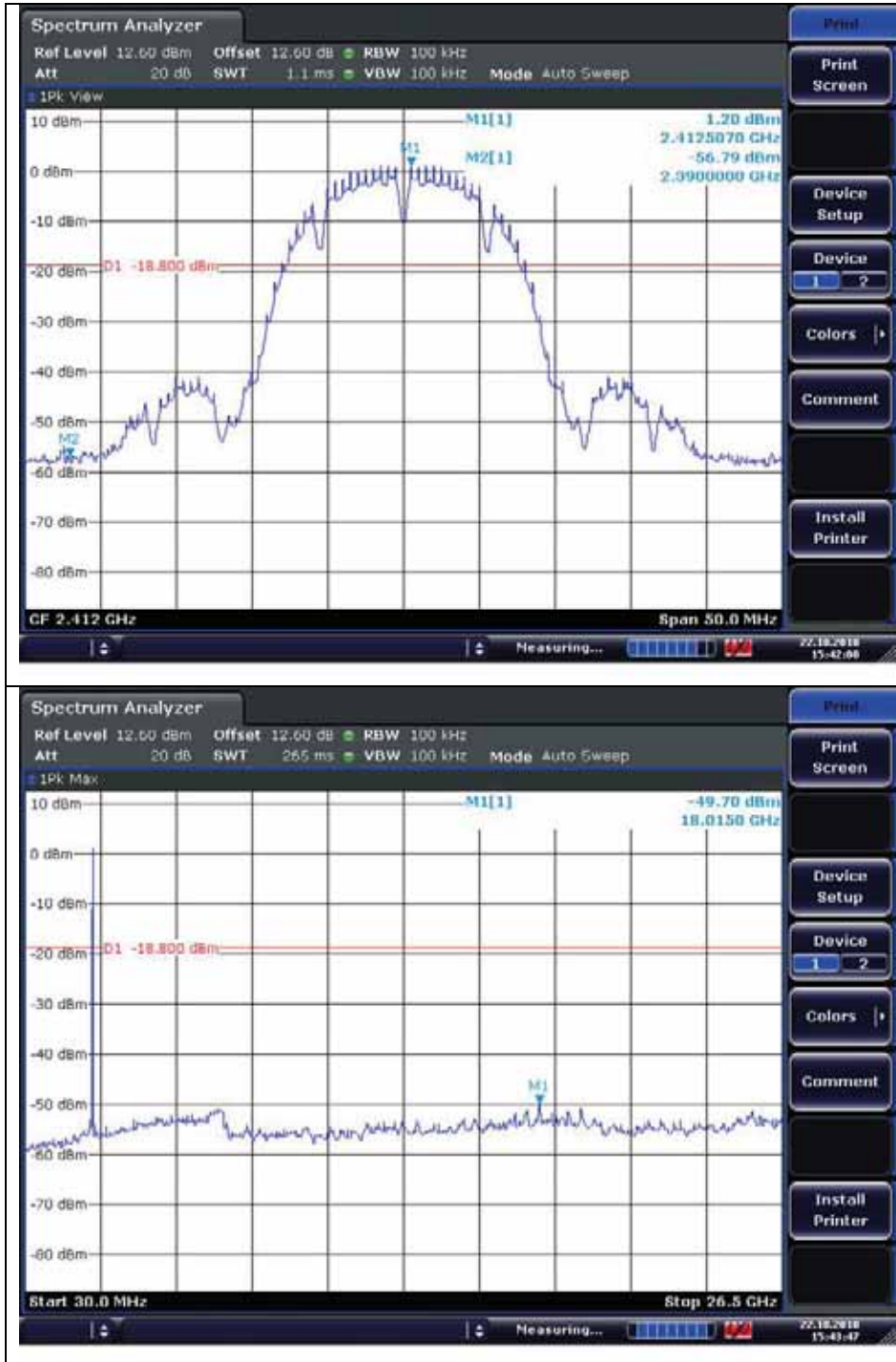
Remarks ;

1. "*" means the restricted band.
2. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental Frequency.
3. Radiated emissions measured in frequency above 1 000 MHz were made with an instrument using peak/average detector mode.
4. Average test would be performed if the peak result were greater than the average limit.
5. Actual = Reading + AF + AMP + CL

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

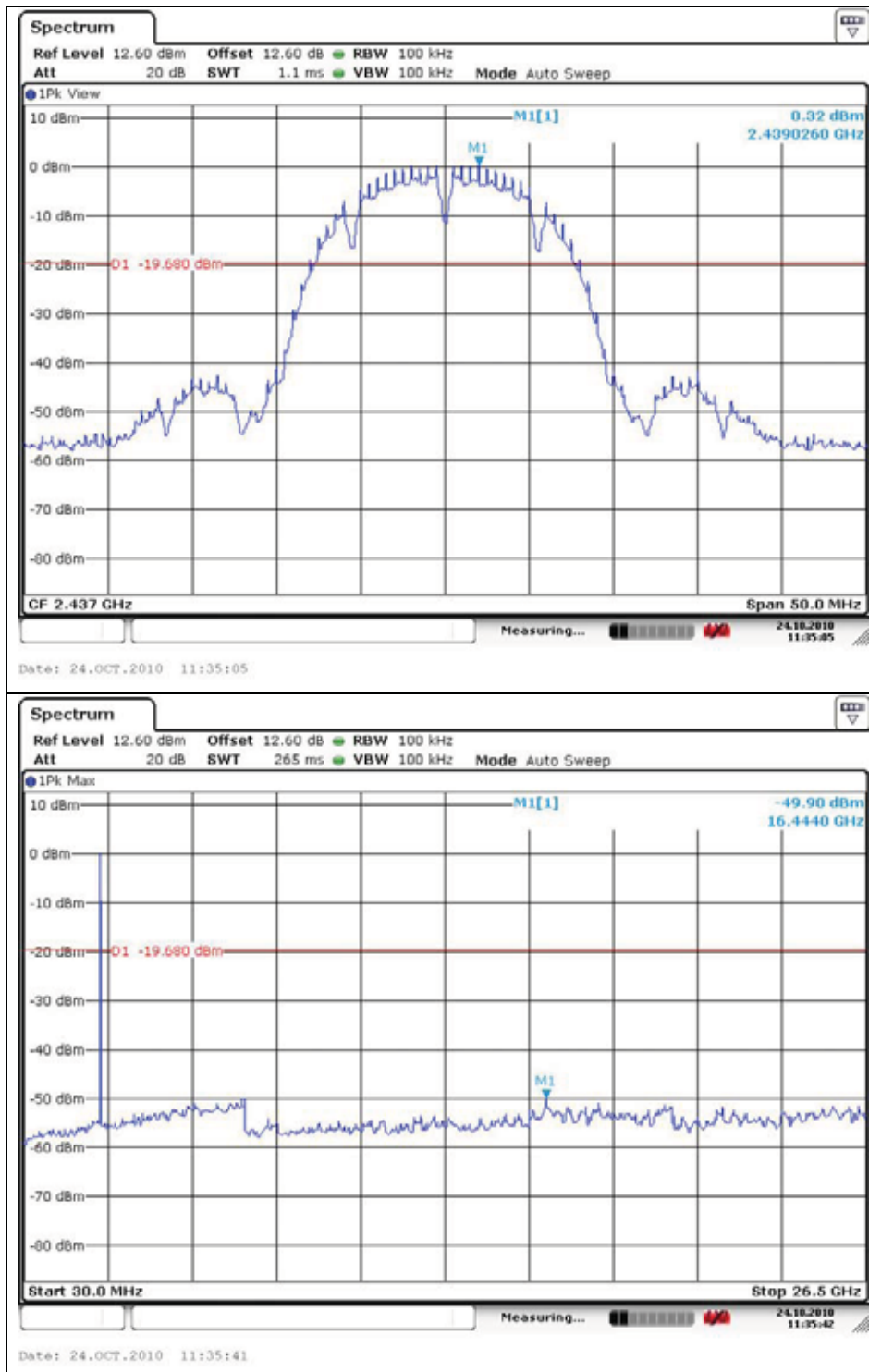
2.4.3. Spurious RF Conducted Emissions: Plot of Spurious RF Conducted Emission

DSSS : 802.11b_Ant 1
Low Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

Middle Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

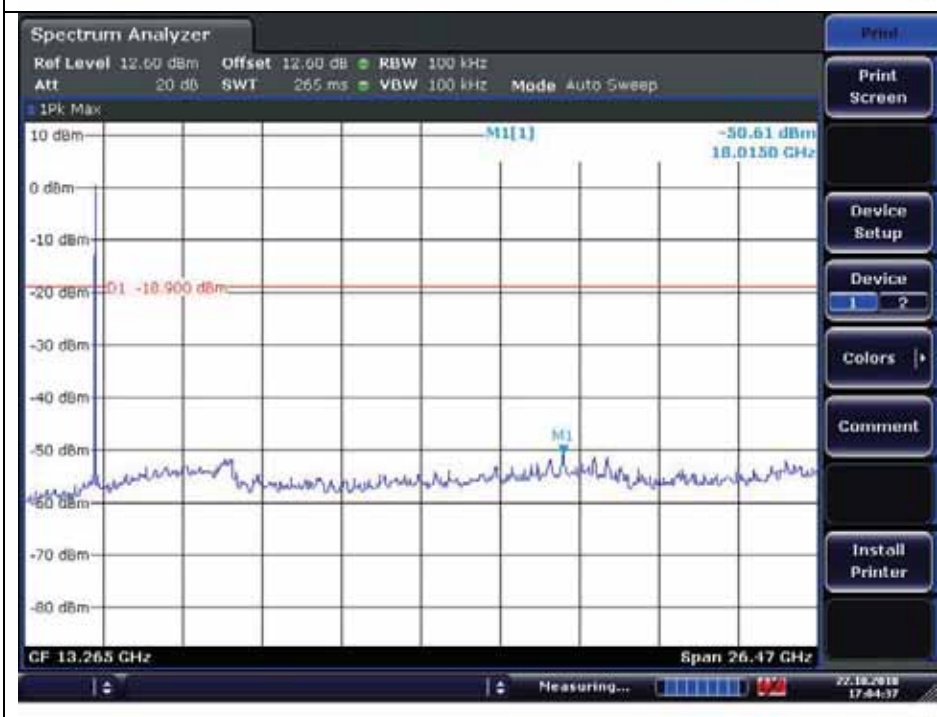
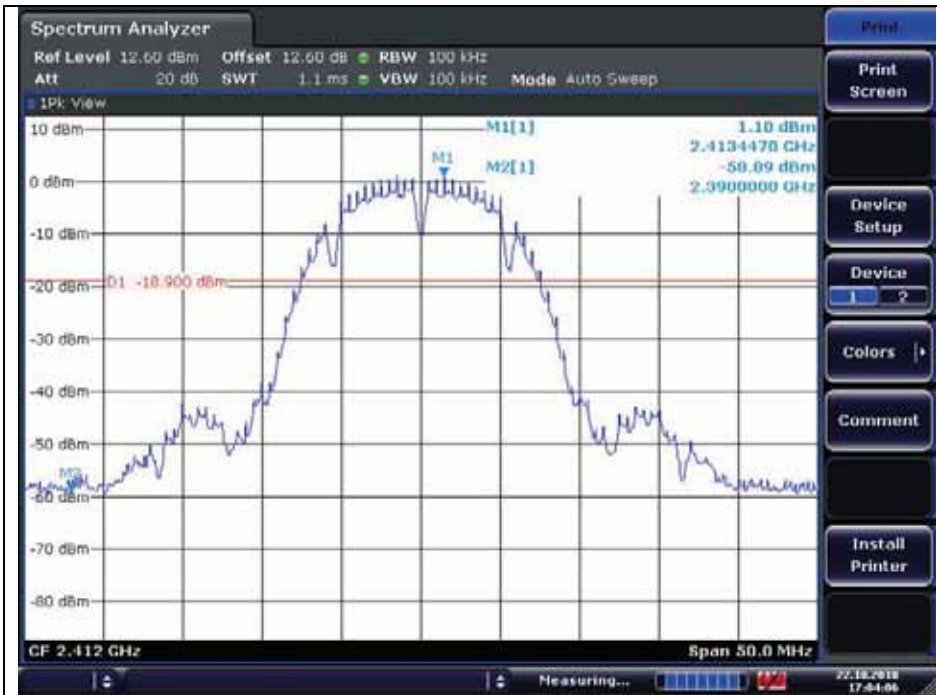
High Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

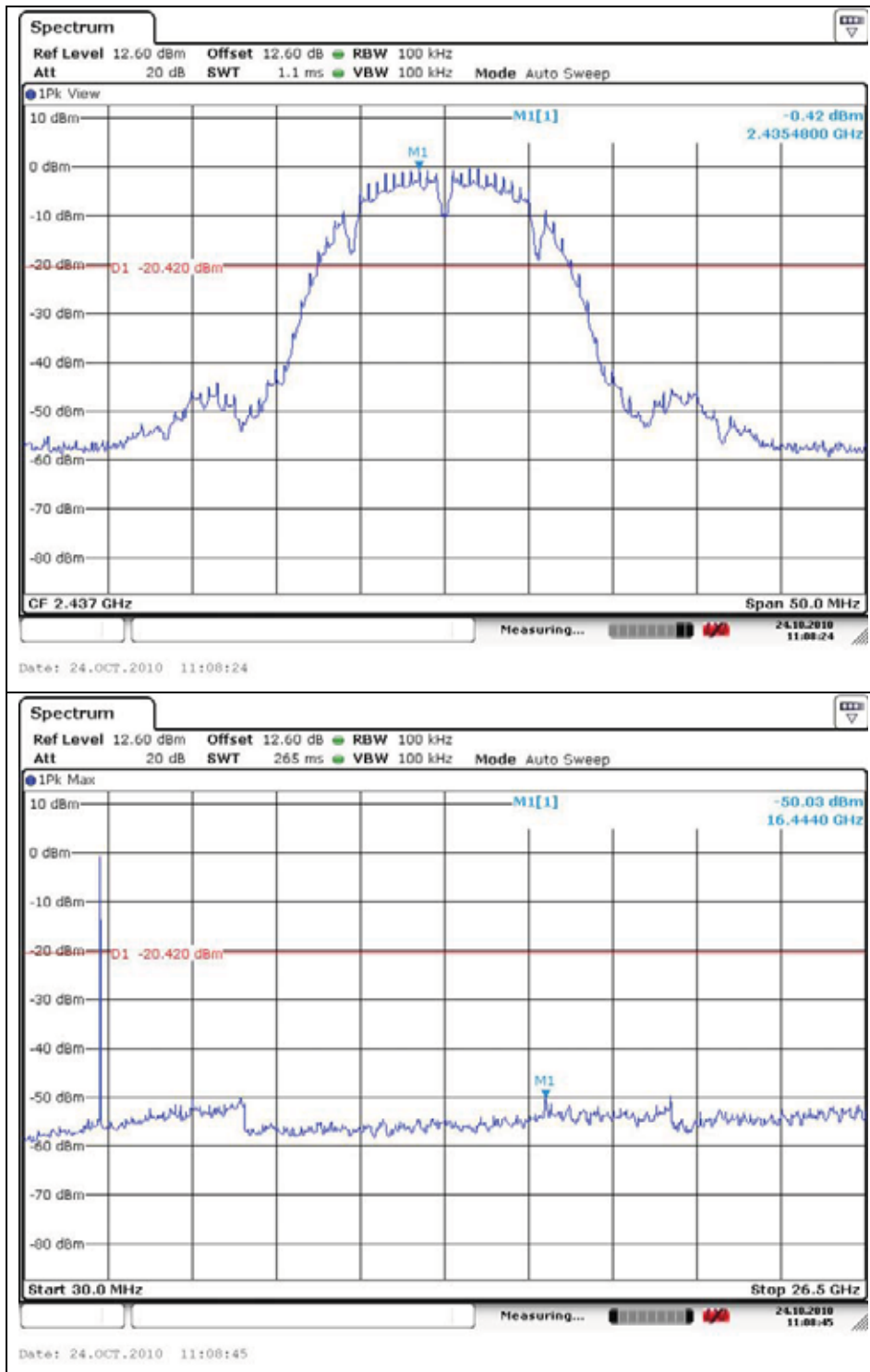
OFDM : 802.11b_Ant 2

Low Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

Middle Channel



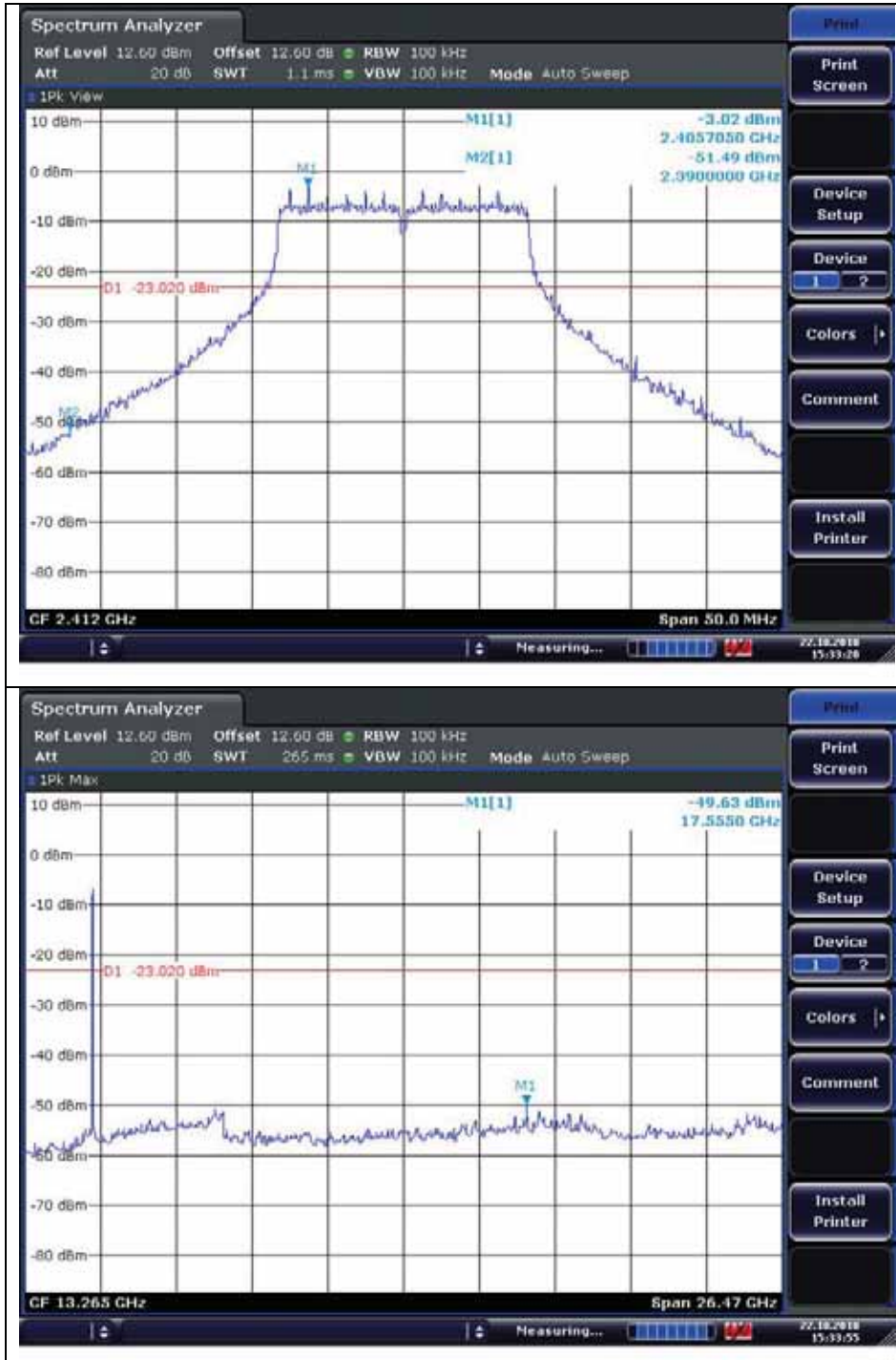
The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel



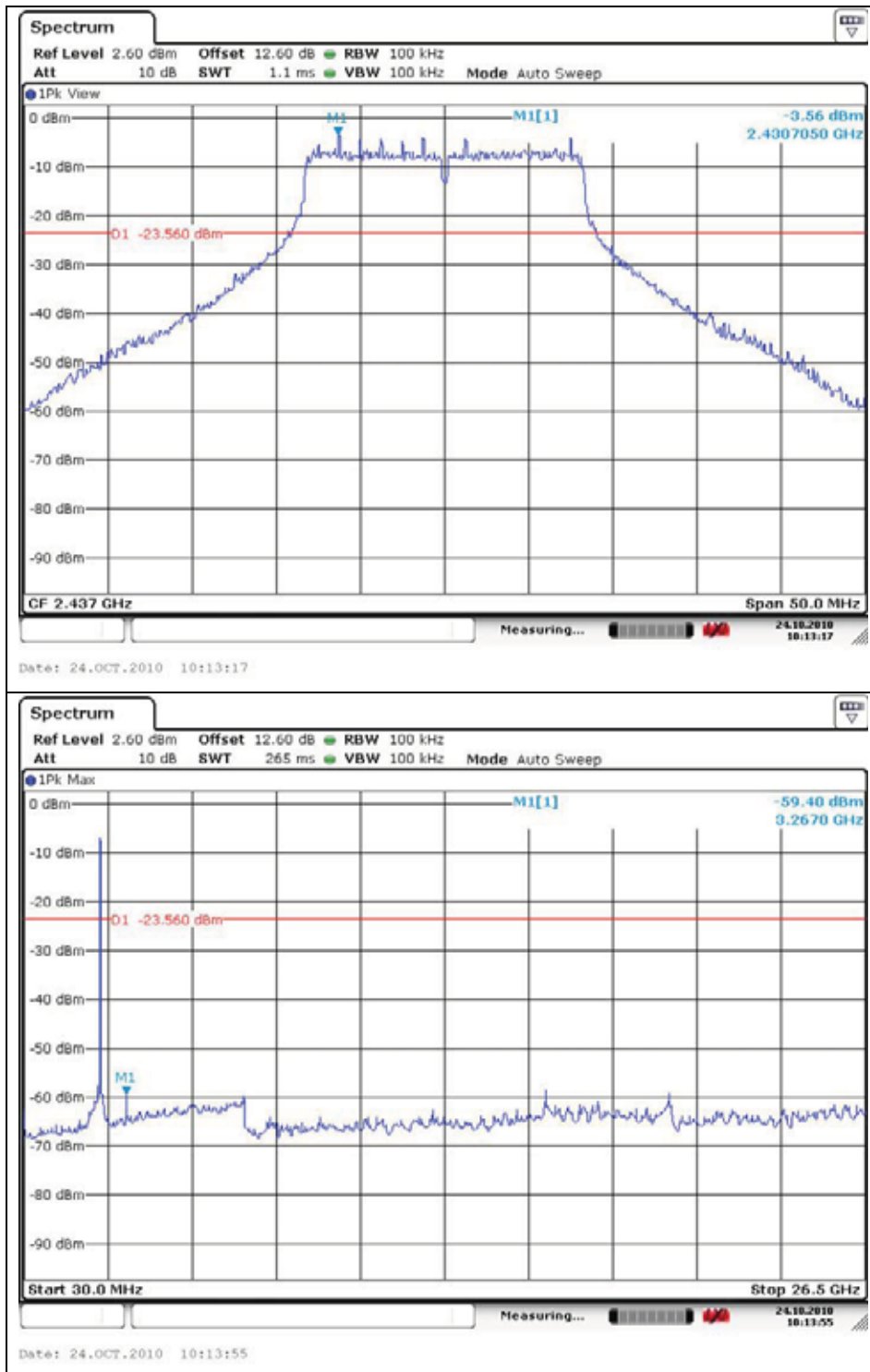
The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

OFDM : 802.11g_Ant 1
Low Channel



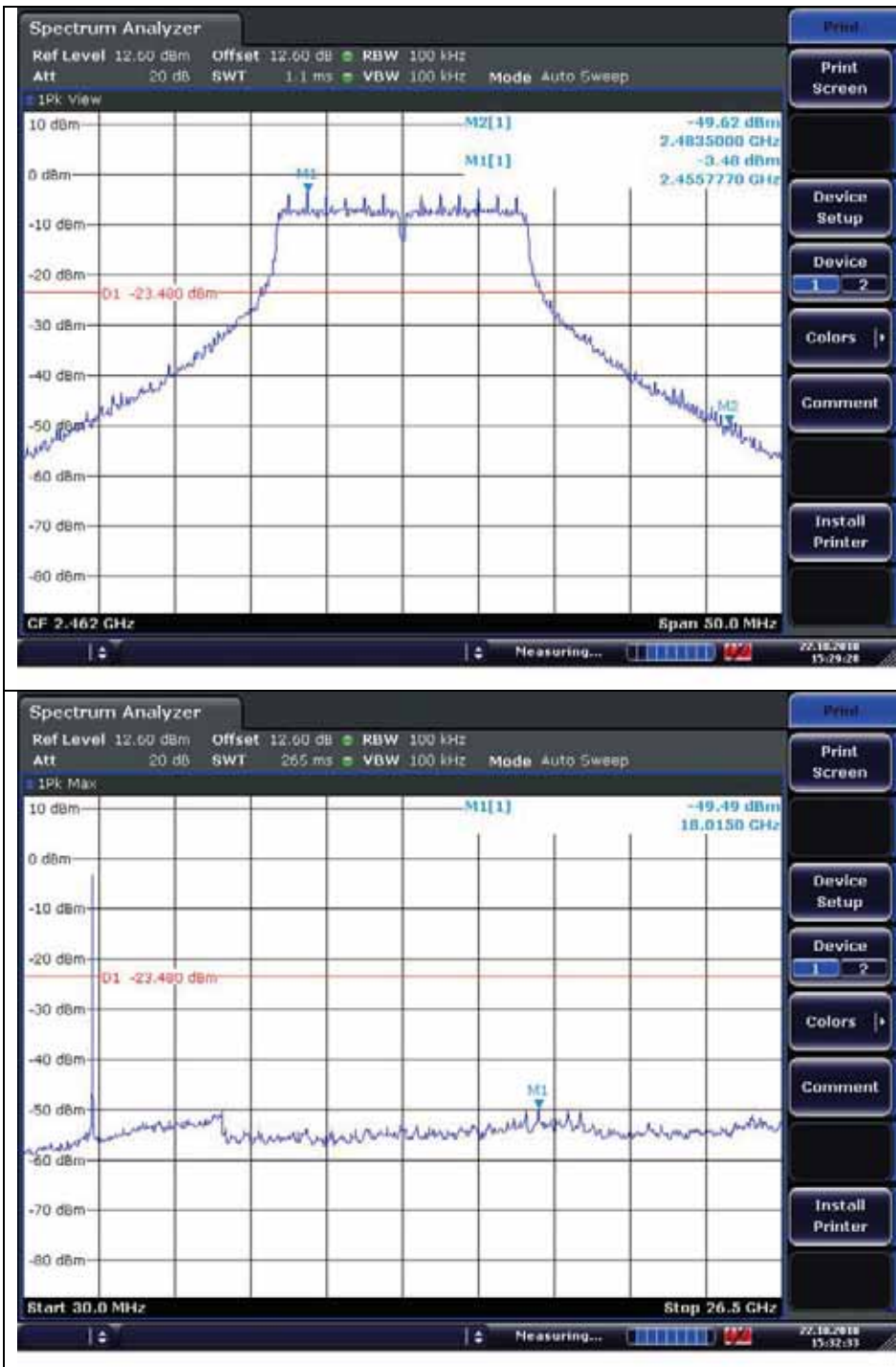
The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

Middle Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.

High Channel



The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report cannot be reproduced, except in full, without prior written permission of the Company.