

## FCC Part 15C Compliance Test Report

|                                                         |                                                                                                                                                                                                                                                                                                          |                                   |                                                                                                                                                                                    |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Report no.:</b>                                 | FCC15CWLAN_RM-849_13.docx                                                                                                                                                                                                                                                                                | <b>Date of Report:</b>            | 24-May-2012                                                                                                                                                                        |
| <b>Number of pages:</b>                                 | 42                                                                                                                                                                                                                                                                                                       | <b>Customer's Contact person:</b> | Hu Dongji                                                                                                                                                                          |
| <b>Testing laboratory:</b>                              | TCC Nokia Beijing Laboratory<br>Beijing Economic and Technological Development Area<br>No.5 Donghuan Zhonglu<br>Beijing<br>PRC China 100176<br>Tel. +86 10 8711 8888<br>Fax. +86 10 8711 4550                                                                                                            | <b>Customer:</b>                  | Nokia Corporation<br>Beijing Economic and Technological Development Area<br>No.5 Donghuan Zhonglu<br>Beijing<br>PRC China 100176<br>Tel. +86 10 8711 8888<br>Fax. +86 10 8711 4550 |
| <b>FCC listing no.:</b>                                 | 975940                                                                                                                                                                                                                                                                                                   |                                   |                                                                                                                                                                                    |
| <b>IC recognition no.:</b>                              | 661AH-1                                                                                                                                                                                                                                                                                                  |                                   |                                                                                                                                                                                    |
| <b>Tested devices/ accessories:</b>                     | <b>Phone RM-849 / Battery BP-3L / AC Charger AC-50E / USB data cable CA-190CD / Headset WH-208</b>                                                                                                                                                                                                       |                                   |                                                                                                                                                                                    |
| <b>FCC ID:</b>                                          | QTLRM-849                                                                                                                                                                                                                                                                                                | <b>IC:</b>                        | 661AB-RM849                                                                                                                                                                        |
| <b>Supplement reports:</b>                              | -                                                                                                                                                                                                                                                                                                        |                                   |                                                                                                                                                                                    |
| <b>Testing has been carried out in accordance with:</b> | CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2003), Public Notice DA 00-705, DTS procedures KDB 558074, IC standards, RSS-210 (Issue 8, December 2010). Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit". |                                   |                                                                                                                                                                                    |
| <b>Documentation:</b>                                   | The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.                                                     |                                   |                                                                                                                                                                                    |
| <b>Test Results:</b>                                    | <b>The EUT complies with the requirements in respect of all parameters subject to the test.</b><br>The test results relate only to devices specified in this document                                                                                                                                    |                                   |                                                                                                                                                                                    |
| <b>Date and signature for the contents:</b>             |                                                                                                                                                                                                                                                                                                          |                                   |                                                                                                                                                                                    |

Zou Ming, Engineer, EMC

## 1. Summary for FCC Part 15C Compliance Test Report

|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| Date of receipt               | 27-Apr-2012                                        |
| Testing completed             | 15-May-2012                                        |
| The customer's contact person | Hu Dongji                                          |
| Test Plan referred to         | T:\Projects\RM-849\TestPlan\RS_testplan_RM-849.xls |
| Notes                         | -                                                  |
| Document name                 | FCC15CWLAN_RM-849_13.docx                          |

### 1.1. EUT and Accessory Information

The EUT is a mobile phone with following features:

GSM/WCDMA/WLAN/Bluetooth

The EUT is tested with maximum rated TX power, modulated with pseudo random bit sequence (PRBS9).

Devices under tests

| Product        | Type     | SN                          | HW   | MV | SW                   | DUT   |
|----------------|----------|-----------------------------|------|----|----------------------|-------|
| Phone          | RM-849   | 004402138942945             | 2035 | -  | 1100.0000.8773.12150 | 52703 |
| Battery        | BP-3L    | 3932131515450172308;0670635 | -    | -  | -                    | 52723 |
| AC Charger     | AC-50E   | 4090492071260400830;0675619 | -    | -  | -                    | 52719 |
| USB data cable | CA-190CD | 07304571506G2F              | -    | -  | -                    | 52721 |
| Headset        | WH-208   | 1504321                     | -    | -  | -                    | 52713 |
| Phone          | RM-849   | 004402138943786             | 2035 | -  | 1100.0000.8773.12150 | 52709 |
| Battery        | BP-3L    | 3932131465160112903;0670635 | -    | -  | -                    | 52712 |
| AC Charger     | AC-50E   | 4090492071260400817;0675619 | -    | -  | -                    | 52717 |
| USB data cable | CA-190CD | 07304571506G2F              | -    | -  | -                    | 52722 |
| Headset        | WH-208   | 1504321                     | -    | -  | -                    | 52714 |
| Phone          | RM-849   | 004402138942879;059P3M1     | 2035 | -  | 1100.0000.8773.12150 | 52727 |
| Battery        | BP-3L    | 3932131515450172307;0670635 | -    | -  | -                    | 52710 |
| AC Charger     | AC-50E   | 4090492071260400827;0675619 | -    | -  | -                    | 52718 |
| USB data cable | CA-190CD | 07304571506G2F              | -    | -  | -                    | 52720 |
| Headset        | WH-208   | 1483T41                     | -    | -  | -                    | 52715 |

### 1.2. Summary of Test Results

WLAN:

| Section in CFR 47    | Section in RSS-GEN or RSS-210 | Name of the test                     | Result |
|----------------------|-------------------------------|--------------------------------------|--------|
| 15.247(b)(1)         | A8(0.4(4))                    | Conducted peak output power          | PASSED |
| 15.247(d), 15.205(b) | A8(0.5)                       | Band edge compliance of RF emissions | PASSED |
| 15.247(d)            | A8(0.5)                       | Spurious RF conducted emissions      | PASSED |
| 15.247(d), 15.209    | A8(0.5)                       | Spurious radiated emissions          | PASSED |
| 15.207               | 7.2.2                         | AC powerline conducted emissions     | PASSED |
| 15.247(a)(2)         | A8(0.1(1))                    | 6dB(bandwidth)                       | PASSED |
| 15.247(e)            | A8(0.1(2))                    | Power spectral density               | PASSED |

PASSED  
FAILED  
NP

The EUT complies with the essential requirements in the standard.  
The EUT does not comply with the essential requirements in the standard.  
The test was not performed by the TCC Nokia Laboratory.

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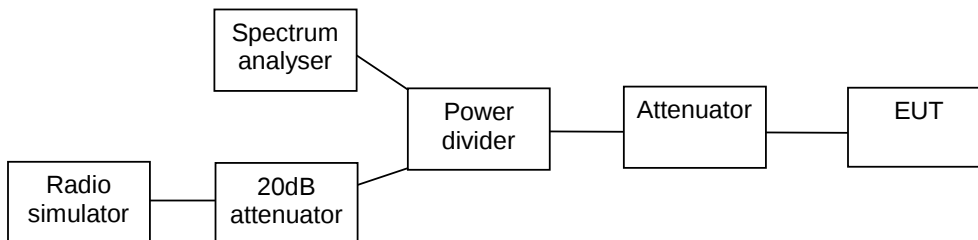
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|                                   |           |
|-----------------------------------|-----------|
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## 2. Conducted peak output power (15.247(b)(1), RSS-210 A8.4 (4))

|                                                        |                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-849, DUT 52709                                                              |
| <b>Accessories with DUT numbers</b>                    | BP-3L, DUT 52712 ; AC-50E, DUT 52717 ; CA-190CD, DUT 52722 ; WH-208, DUT 52714 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                                        |
| <b>Results</b>                                         | PASSED                                                                         |
| <b>Remarks</b>                                         | -                                                                              |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 22/44/100                                                                      |
| <b>Date of measurements</b>                            | 15-May-2012                                                                    |
| <b>Measured by</b>                                     | Gao Sherina                                                                    |

### 2.1. Test Setup



### 2.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for conducted peak output power measurements

| Frequency range [MHz] | Limit [W] | Limit [dBm] |
|-----------------------|-----------|-------------|
| 2400 – 2483.5         | <= 1      | <= 30       |

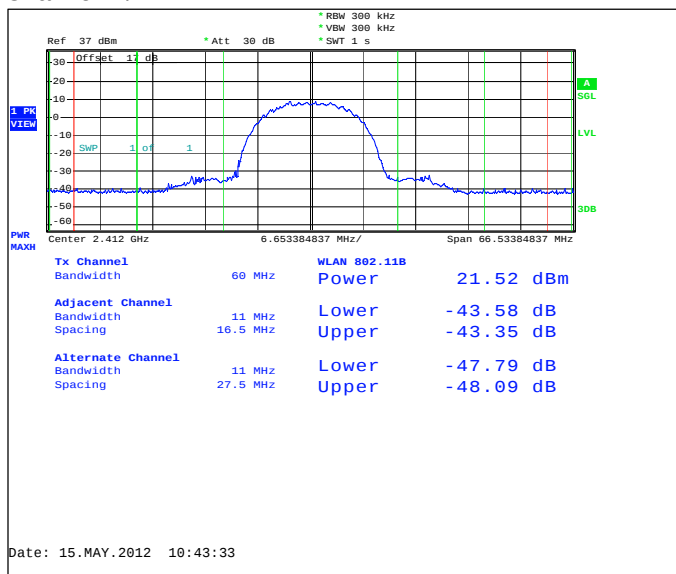
## 2.3. WLAN Test results

| WLAN 2.4 GHz, peak output power [dBm] |       |
|---------------------------------------|-------|
| Mode & data speed                     | Ch 6  |
| b-mode WLAN DSSS 1 Mbps               | 18.79 |
| b-mode WLAN DSSS 2 Mbps               | 19.00 |
| b-mode WLAN DSSS 5.5 Mbps             | 21.86 |
| b-mode WLAN DSSS 11 Mbps              | 21.81 |
| g-mode WLAN OFDM 6 Mbps               | 19.23 |
| g-mode WLAN OFDM 9 Mbps               | 19.54 |
| g-mode WLAN OFDM 12 Mbps              | 19.48 |
| g-mode WLAN OFDM 18 Mbps              | 19.39 |
| g-mode WLAN OFDM 24 Mbps              | 19.54 |
| g-mode WLAN OFDM 36 Mbps              | 19.57 |
| g-mode WLAN OFDM 48 Mbps              | 19.62 |
| g-mode WLAN OFDM 54 Mbps              | 19.72 |

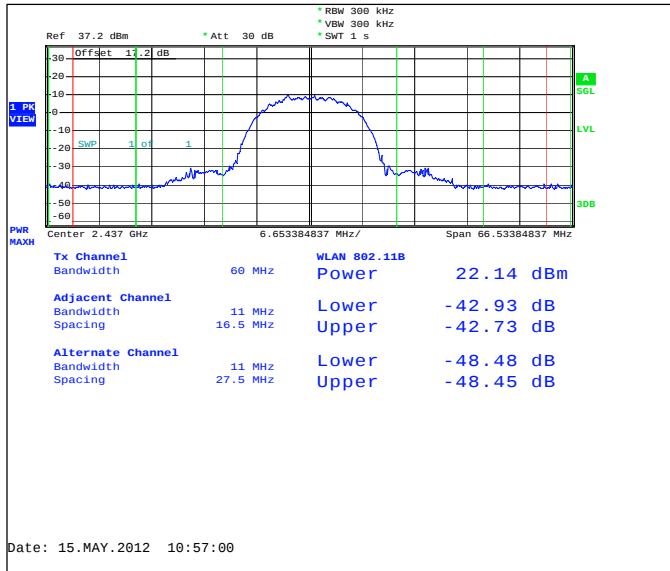
### 2.3.1 DSSS mode, QPSK modulation, 5.5 Mbps data rate

| Channel / $f_c$ [MHz] | P [dBm] | P [mW]  | Result |
|-----------------------|---------|---------|--------|
| 1 / 2412              | 21.52   | 141.906 | PASSED |
| 6 / 2437              | 22.14   | 163.682 | PASSED |
| 11 / 2462             | 22.14   | 163.682 | PASSED |

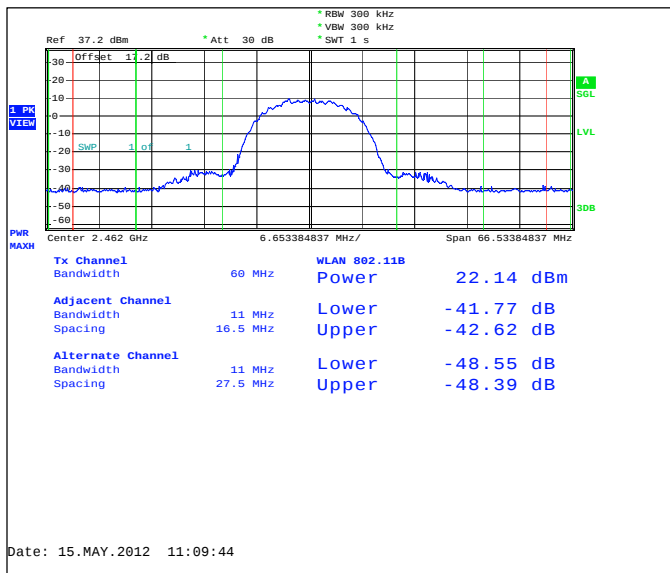
#### Channel 1 / 2412 MHz



## Channel 6 / 2437 MHz



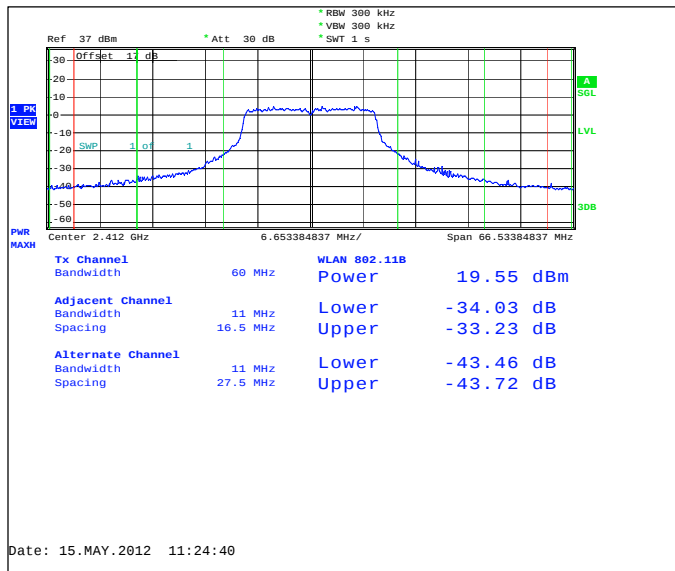
## Channel 11 / 2462 MHz



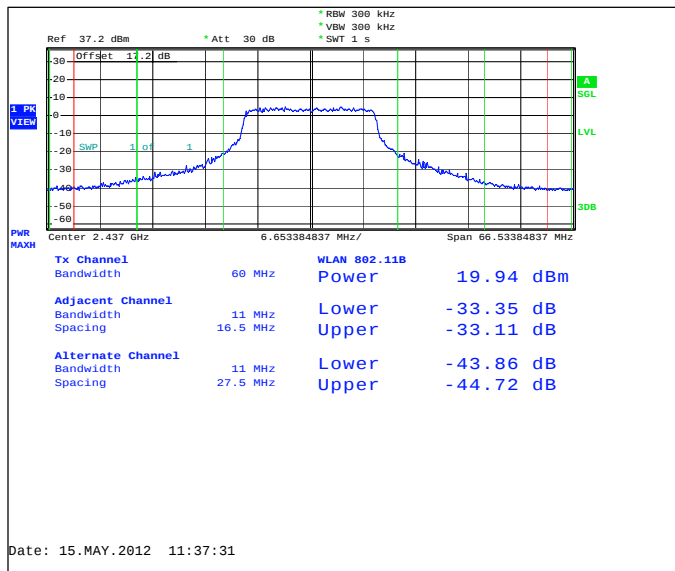
## 2.3.2 OFDM mode, 64QAM modulation, 54 Mbps data rate

| Channel / f <sub>c</sub> [MHz] | P [dBm] | P [mW] | Result |
|--------------------------------|---------|--------|--------|
| 1 / 2412                       | 19.55   | 90.157 | PASSED |
| 6 / 2437                       | 19.94   | 98.628 | PASSED |
| 11 / 2462                      | 19.94   | 98.628 | PASSED |

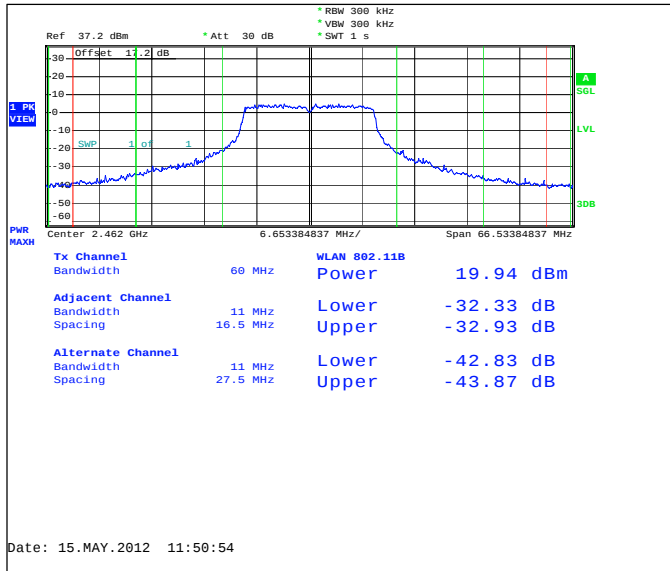
### Channel 1 / 2412 MHz



### Channel 6 / 2437 MHz



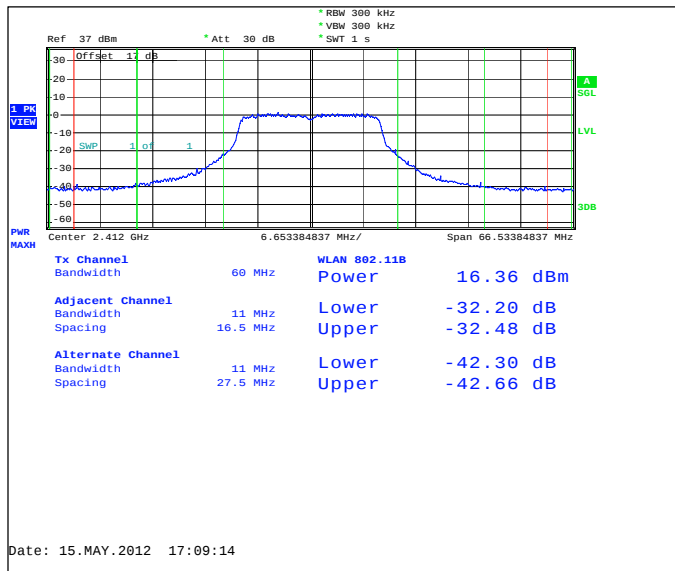
## Channel 11 / 2462 MHz



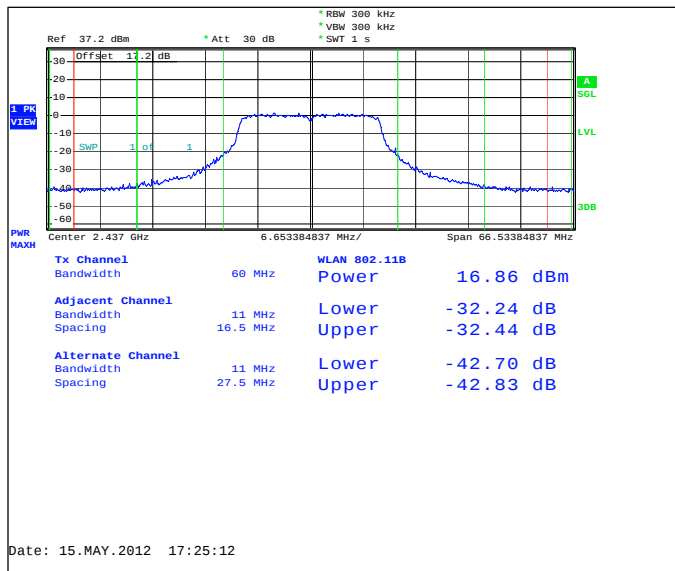
### 2.3.3 802.11n, HT20, MCS0

| Channel / f <sub>c</sub> [MHz] | P [dBm] | P [mW] | Result |
|--------------------------------|---------|--------|--------|
| 1 / 2412                       | 16.36   | 43.251 | PASSED |
| 6 / 2437                       | 16.86   | 48.529 | PASSED |
| 11 / 2462                      | 17.01   | 50.234 | PASSED |

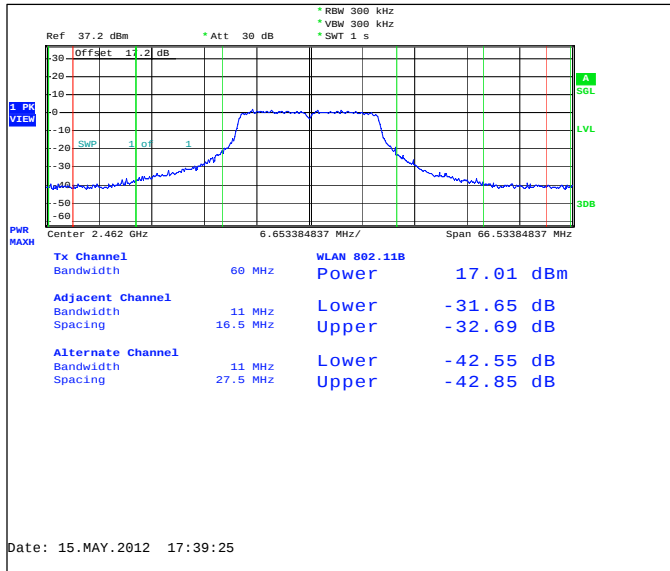
#### Channel 1 / 2412 MHz



#### Channel 6 / 2437 MHz



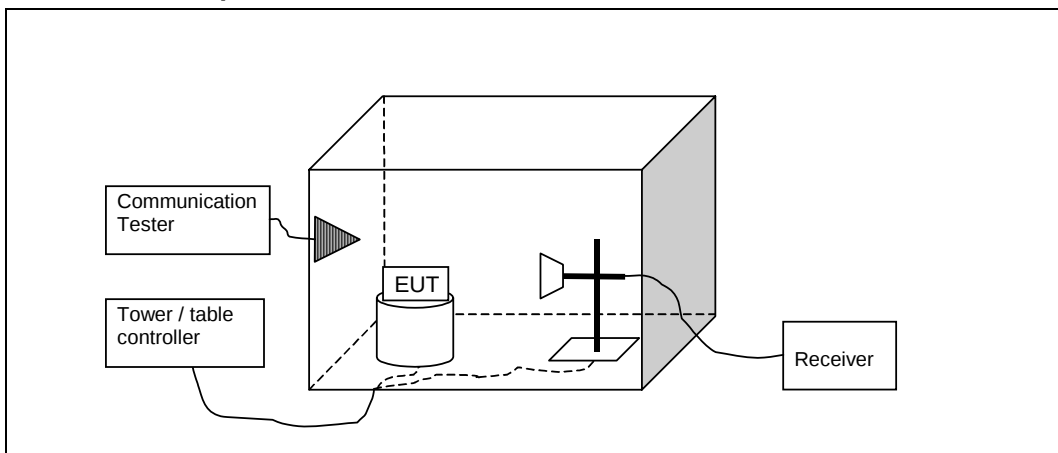
## Channel 11 / 2462 MHz



### 3. Band edge compliance of RF emissions (FCC §15.247(d), 15.205(b), RSS-210 A8.5)

|                                                        |                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-849, DUT 52727                                                              |
| <b>Accessories with DUT numbers</b>                    | BP-3L, DUT 52710 ; AC-50E, DUT 52718 ; CA-190CD, DUT 52720 ; WH-208, DUT 52715 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                                        |
| <b>Results</b>                                         | PASSED                                                                         |
| <b>Remarks</b>                                         | -                                                                              |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 23/49/101                                                                      |
| <b>Date of measurements</b>                            | 11-May-2012                                                                    |
| <b>Measured by</b>                                     | Zou Ming                                                                       |

#### 3.1.1 Test Setup



#### 3.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

The measurement results are obtained as described below:

$$E [dB\mu V/m] = U_{RX} + A_{TOT}$$

Where  $U_{RX}$  is receiver reading and  $A_{TOT}$  is total correction factor including cable loss, antenna factor and preamplifier gain ( $A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$ ).

Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

| Frequency range [MHz]       | Limit Average [dBμV/m] | Limit Peak [dBμV/m] |
|-----------------------------|------------------------|---------------------|
| Below 2390 and above 2483.5 | <=54                   | <=74                |

### 3.3. WLANg Test results

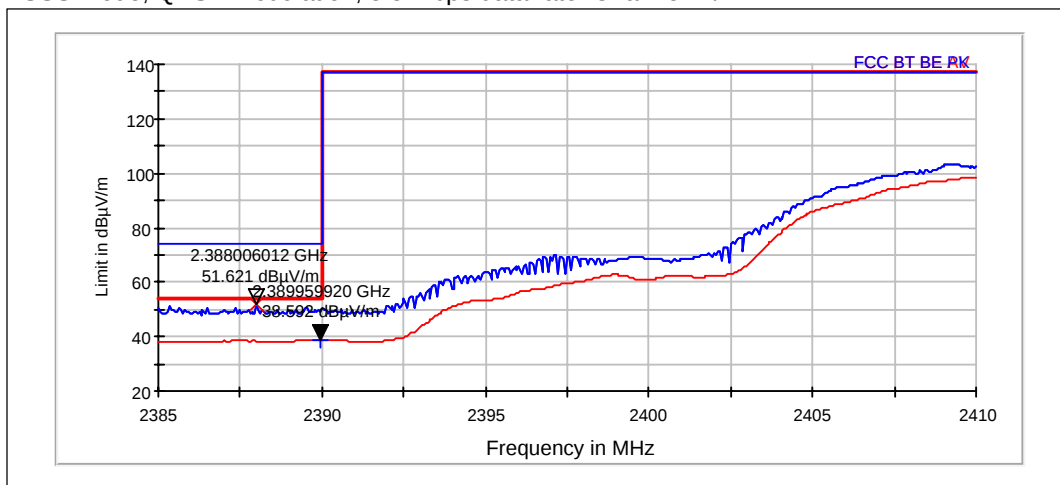
Average (RBW: 1 MHz, VBW: 10 Hz)

| Channel / $f_c$ [MHz]         | E [dB $\mu$ V/m] | Result |
|-------------------------------|------------------|--------|
| 1 / 2412 (DSSS,QPSK,5.5)      | 38.59            | PASSED |
| 11 / 2462 (DSSS,QPSK,5.5)     | 40.56            | PASSED |
| 1 / 2412 (OFDM,64QAM,54)      | 47.03            | PASSED |
| 11 / 2462 (OFDM,64QAM,54)     | 52.75            | PASSED |
| 1 / 2412 (802.11n,HT20,MCS0)  | 41.24            | PASSED |
| 11 / 2462 (802.11n,HT20,MCS0) | 47.85            | PASSED |

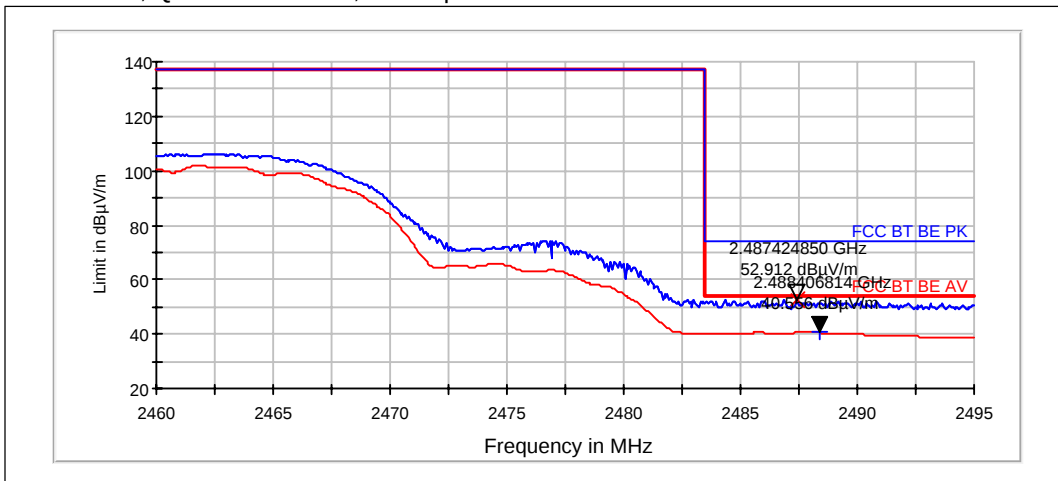
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Channel / $f_c$ [MHz]         | E [dB $\mu$ V/m] | Result |
|-------------------------------|------------------|--------|
| 1 / 2412 (DSSS,QPSK,5.5)      | 51.62            | PASSED |
| 11 / 2462 (DSSS,QPSK,5.5)     | 52.91            | PASSED |
| 1 / 2412 (OFDM,64QAM,54)      | 62.64            | PASSED |
| 11 / 2462 (OFDM,64QAM,54)     | 68.64            | PASSED |
| 1 / 2412 (802.11n,HT20,MCS0)  | 57.87            | PASSED |
| 11 / 2462 (802.11n,HT20,MCS0) | 64.51            | PASSED |

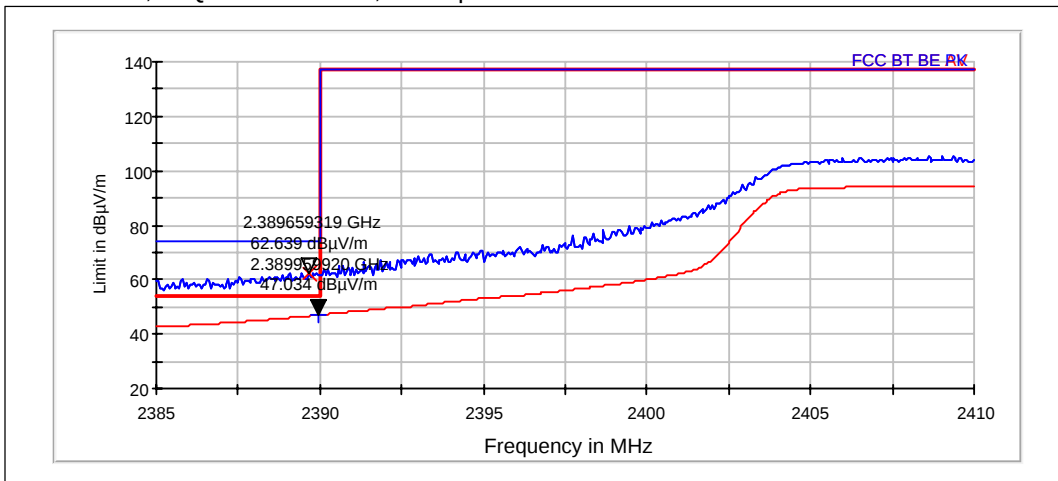
DSSS mode, QPSK modulation, 5.5 Mbps data rate. Channel 1 / 2412 MHz



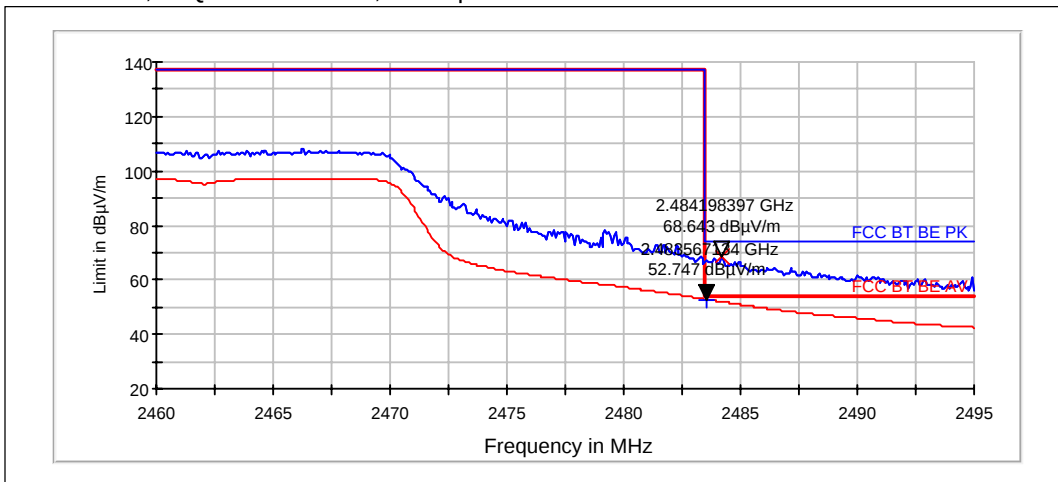
DSSS mode, QPSK modulation, 5.5 Mbps data rate. Channel 11 / 2462 MHz



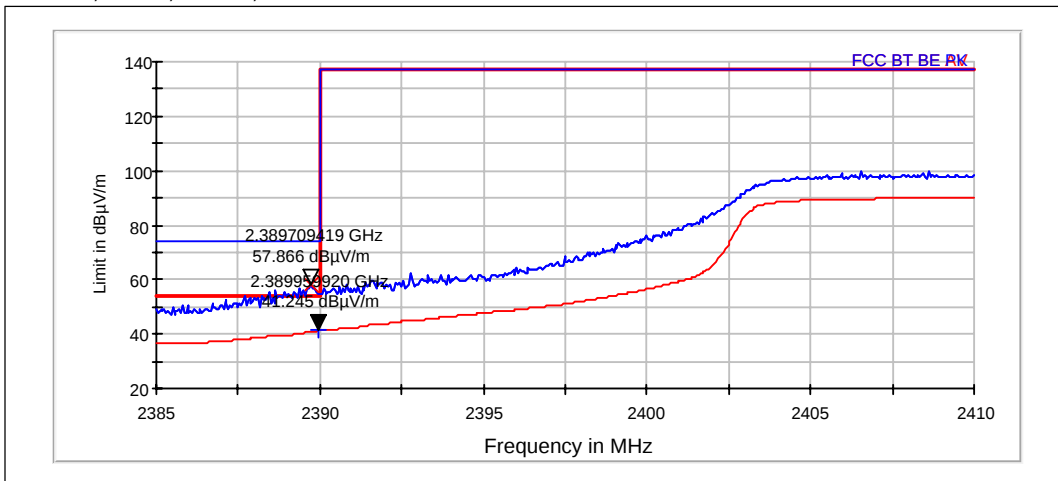
OFDM mode, 64QAM modulation, 54 Mbps data rate. Channel 1 / 2412 MHz



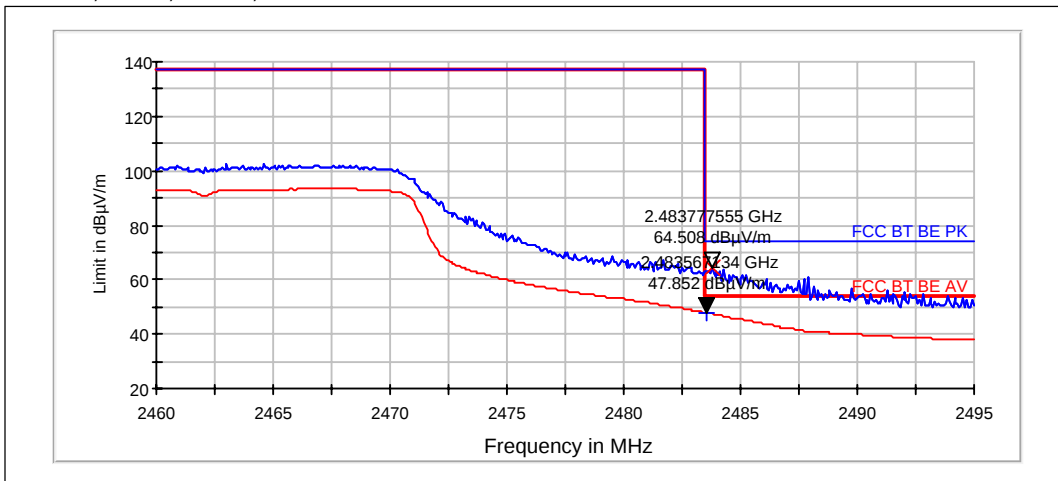
OFDM mode, 64QAM modulation, 54 Mbps data rate. Channel 11 / 2462 MHz



802.11n, HT20, MCS0, Channel 1 / 2412 MHz



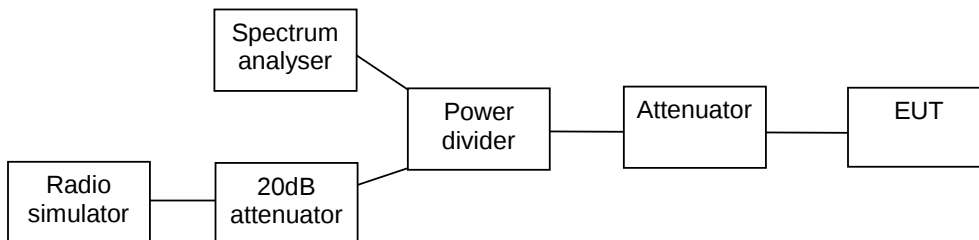
802.11n, HT20, MCS0, Channel 11 / 2462 MHz



#### 4. Spurious RF conducted emissions (FCC §15.247(d), RSS-210 A8.5)

|                                                        |                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-849, DUT 52709                                                              |
| <b>Accessories with DUT numbers</b>                    | BP-3L, DUT 52712 ; AC-50E, DUT 52717 ; CA-190CD, DUT 52722 ; WH-208, DUT 52714 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                                        |
| <b>Results</b>                                         | PASSED                                                                         |
| <b>Remarks</b>                                         | -                                                                              |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 22/44/100                                                                      |
| <b>Date of measurements</b>                            | 15-May-2012                                                                    |
| <b>Measured by</b>                                     | Gao Sherina                                                                    |

##### 4.1. Test Setup



##### 4.2. Test method and limit

The measurement is made according to Public notice DA 00-705 and IC standard RSS-210.

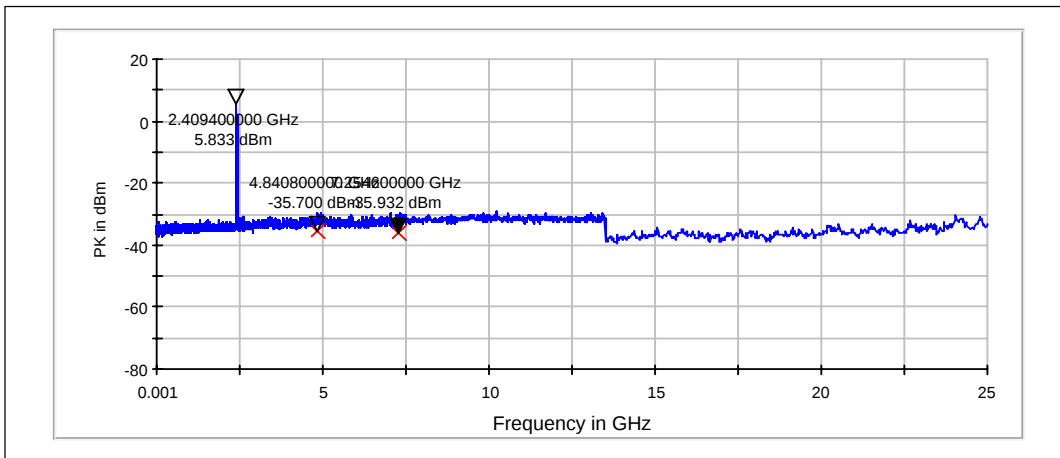
Limits for spurious RF conducted emissions measurements

| Frequency range [MHz] | Limit [dBc] |
|-----------------------|-------------|
| 1 – 25000             | <= -20      |

### 4.3. WLAN Test results

#### 4.3.1 DSSS mode, QPSK modulation, 5.5 Mbps data rate

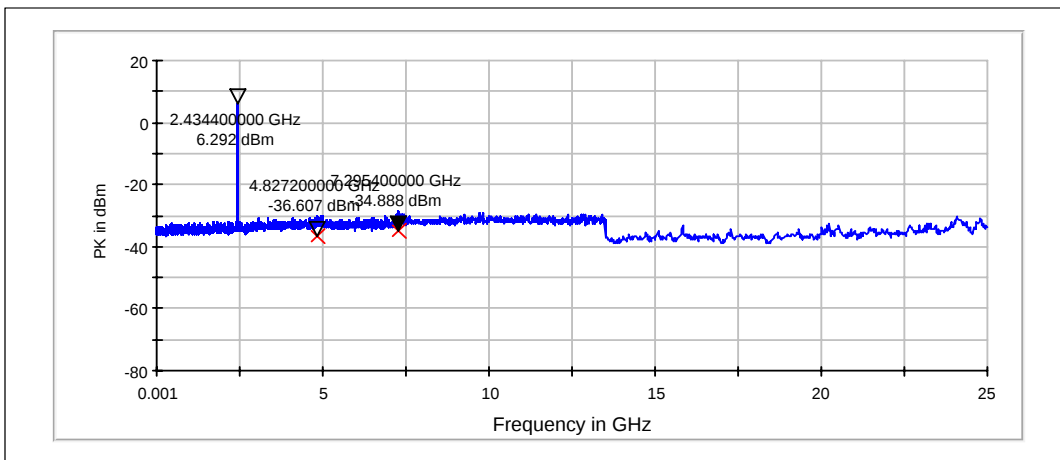
Channel 1 / 2412 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4840.8          | -35.7   | PASSED |
| 7254.6          | -35.93  | PASSED |

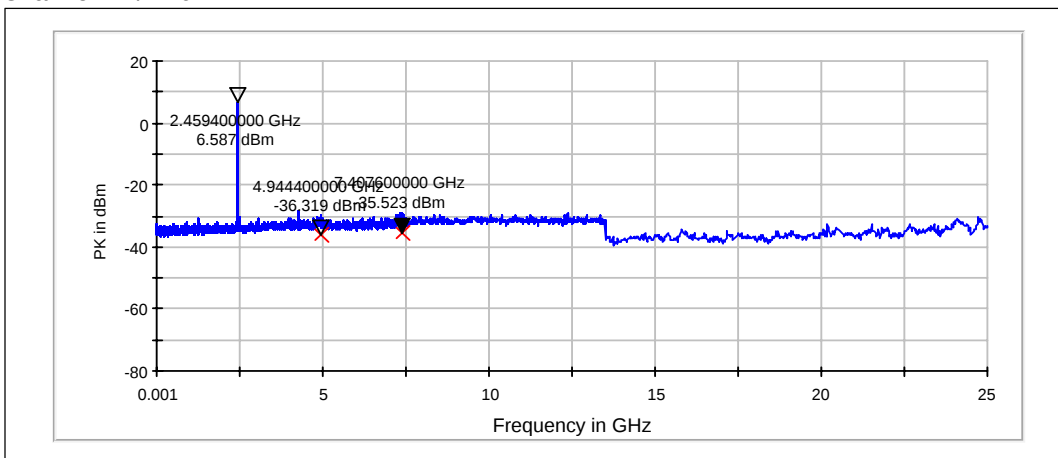
Channel 6 / 2437 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4827.2          | -36.61  | PASSED |
| 7295.4          | -34.89  | PASSED |

#### Channel 11 / 2462 MHz

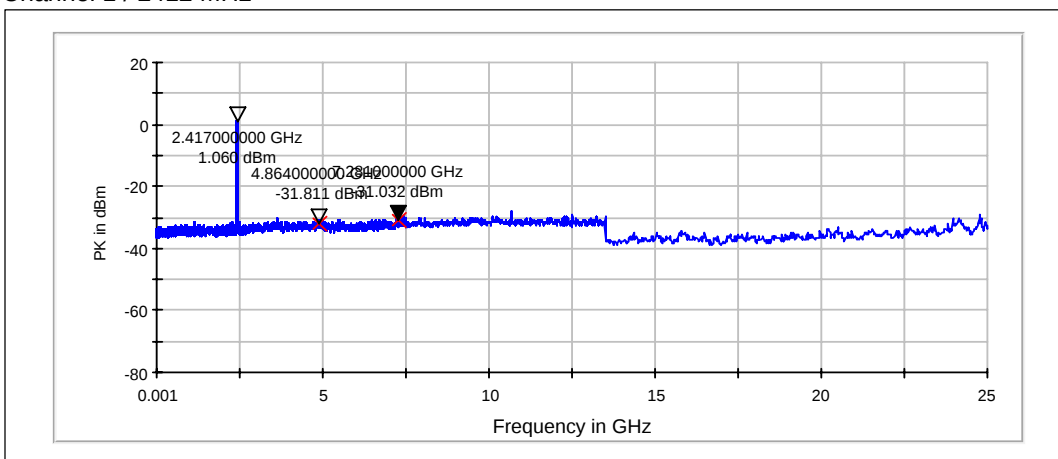


Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4944.4          | -36.32  | PASSED |
| 7407.6          | -35.52  | PASSED |

#### 4.3.2 OFDM mode, 64QAM modulation, 54 Mbps data rate

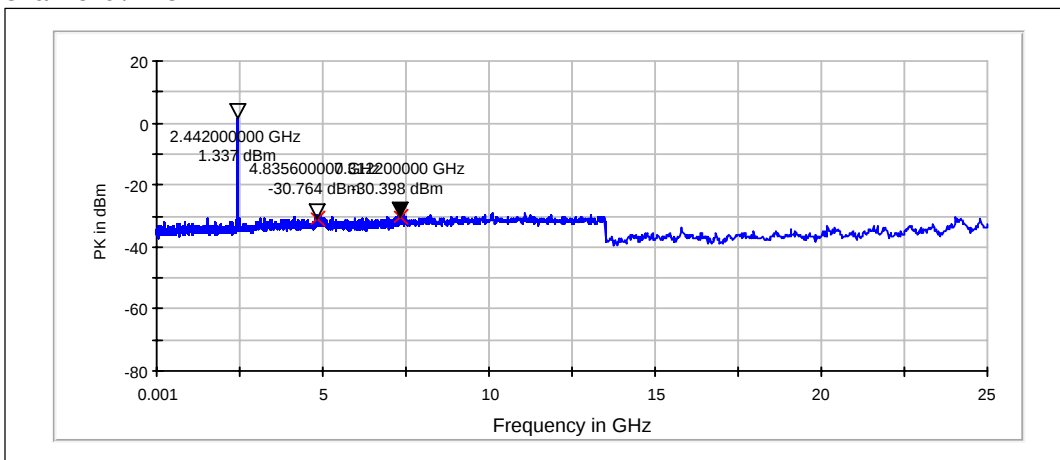
##### Channel 1 / 2412 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4864            | -31.81  | PASSED |
| 7281            | -31.03  | PASSED |

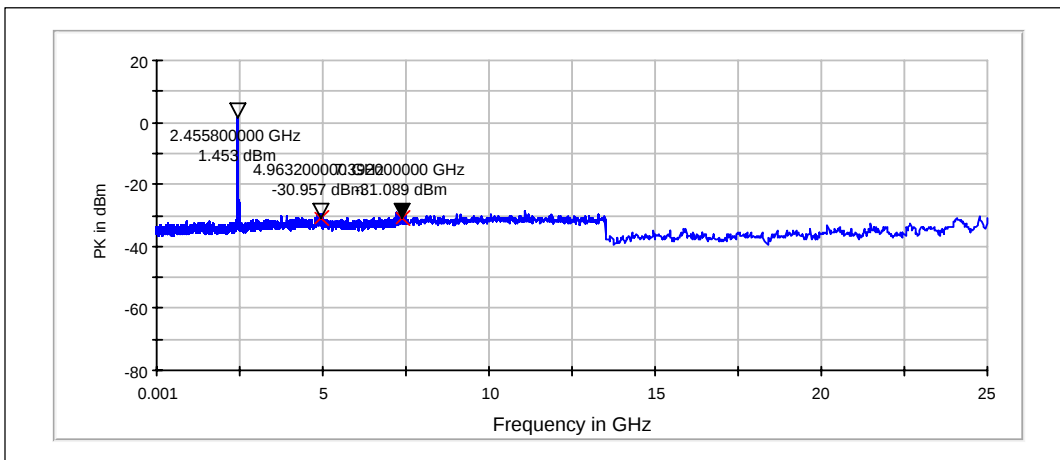
Channel 6 / 2437 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4835.6          | -30.76  | PASSED |
| 7312.2          | -30.4   | PASSED |

Channel 11 / 2462 MHz

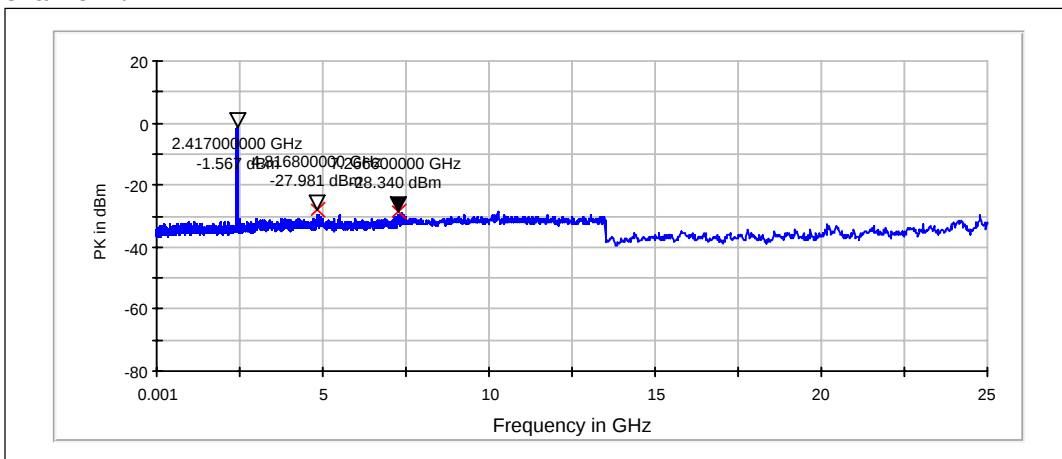


Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4963.2          | -30.96  | PASSED |
| 7392            | -31.09  | PASSED |

#### 4.3.1 802.11n, HT20, MCS0

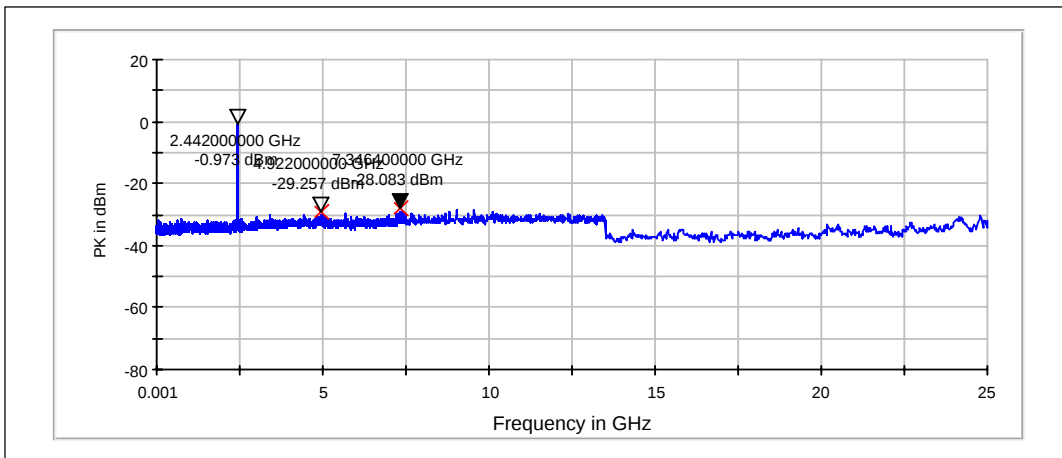
Channel 1 / 2412 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4816.8          | -27.98  | PASSED |
| 7266.6          | -28.34  | PASSED |

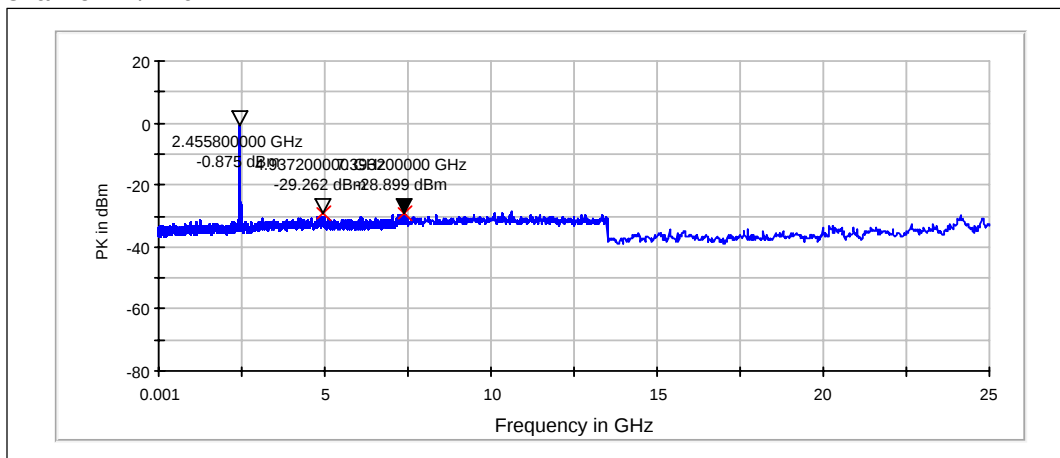
Channel 6 / 2437 MHz



Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4922            | -29.26  | PASSED |
| 7346.4          | -28.08  | PASSED |

Channel 11 / 2462 MHz



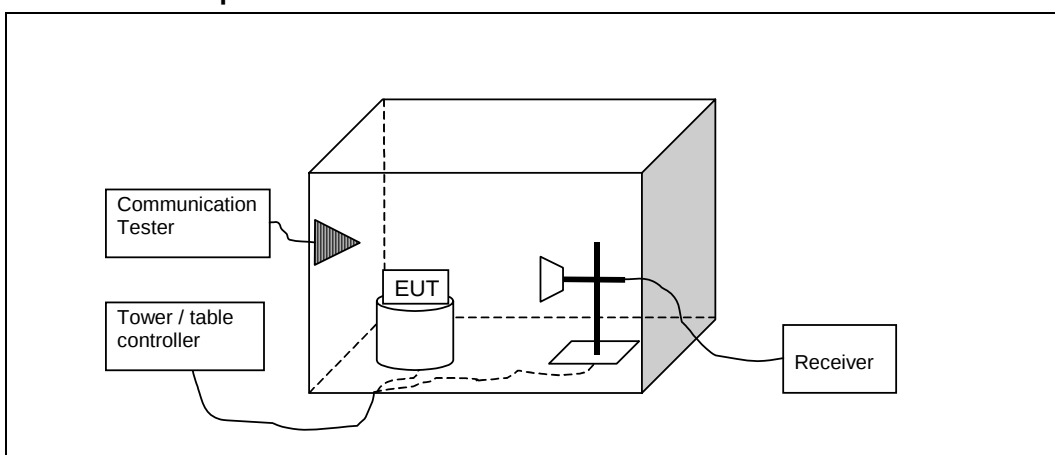
Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4937.2          | -29.26  | PASSED |
| 7393.2          | -28.9   | PASSED |

## 5. Spurious radiated emissions (FCC §15.247(d), §15.209, RSS-210 A8.5)

|                                                        |                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-849, DUT 52727                                                              |
| <b>Accessories with DUT numbers</b>                    | BP-3L, DUT 52710 ; AC-50E, DUT 52718 ; CA-190CD, DUT 52720 ; WH-208, DUT 52715 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                                        |
| <b>Results</b>                                         | PASSED                                                                         |
| <b>Remarks</b>                                         | -                                                                              |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 23/40/99.8                                                                     |
| <b>Date of measurements</b>                            | 07-May-2012                                                                    |
| <b>Measured by</b>                                     | Zou Ming                                                                       |

### 5.1.1 Test Setup



### 5.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210 as follows:

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system.

The Final Measurement is performed in the Semi-Anechoic Chamber with conducting metal floor, if the Preliminary Measurement results are closer than 20 dB to the permissible value.

The EUT is placed at nonconductive plate at the turntable center.

For each suspected frequency, the turntable is rotated 360 degrees and antenna is scanned from 1 to 4 m. This is repeated for both horizontal and vertical receive antenna polarizations.

The emissions less than 20 dB below the permissible value are reported.

The measurement results are obtained as described below:

$$E [dB\mu V/m] = U_{RX} + A_{TOT}$$

Where  $U_{RX}$  is receiver reading and  $A_{TOT}$  is total correction factor including cable loss, antenna factor and preamplifier gain ( $A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$ ).

Limits for spurious radiated emissions measurements (3 m measurement distance)

| Frequency range [MHz] | Limit [ $\mu V/m$ ] | Limit [ $dB\mu V/m$ ] | Detector   |
|-----------------------|---------------------|-----------------------|------------|
| 30 - 88               | 100                 | 40                    | Quasi peak |
| 88 - 216              | 150                 | 43.5                  | Quasi peak |
| 216 - 960             | 200                 | 46                    | Quasi peak |
| 960 - 1000            | 500                 | 54                    | Quasi peak |
| Above 1000            | 500                 | 54                    | Average    |
| Above 1000            | 5000                | 74                    | Peak       |

### 5.3. WLAN Test results

#### 5.3.1 WLAN DSSS mode, QPSK modulation, 5.5 Mbps data rate

Channel 1 / 2412 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4822.1          | 42.74      | 137.041  | 42.66                  | 0.08                  | HORIZONTAL   | PASSED |
| 7236.5          | 46.84      | 219.761  | 41.6                   | 5.24                  | HORIZONTAL   | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4822.1          | 30.14      | 32.122   | 30.06                  | 0.08                  | HORIZONTAL   | PASSED |
| 7236.5          | 33.66      | 48.189   | 28.42                  | 5.24                  | HORIZONTAL   | PASSED |

Channel 6 / 2437 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 30.27           | 29.26      | 29.04    | 31.71                  | -2.45                 | VERTICAL     | PASSED |
| 30.3            | 28.7       | 27.214   | 31.17                  | -2.47                 | VERTICAL     | PASSED |
| 30.42           | 27.86      | 24.717   | 30.41                  | -2.55                 | VERTICAL     | PASSED |
| 31.44           | 28.71      | 27.249   | 31.97                  | -3.26                 | VERTICAL     | PASSED |
| 891.867         | 24.55      | 16.887   | 27.04                  | -2.49                 | VERTICAL     | PASSED |
| 898.734         | 24.7       | 17.185   | 27.04                  | -2.34                 | VERTICAL     | PASSED |
| 899.997         | 32.02      | 39.916   | 34.29                  | -2.27                 | HORIZONTAL   | PASSED |

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3911.92         | 42.07      | 126.867  | 42.79                  | -0.72                 | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3911.92         | 29.43      | 29.611   | 30.15                  | -0.72                 | VERTICAL     | PASSED |

Channel 11 / 2462 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4922.9          | 44.26      | 163.38   | 43.88                  | 0.38                  | VERTICAL     | PASSED |
| 7384.8          | 46.71      | 216.471  | 41.47                  | 5.24                  | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4922.9          | 31.51      | 37.644   | 31.13                  | 0.38                  | VERTICAL     | PASSED |
| 7384.8          | 33.53      | 47.484   | 28.29                  | 5.24                  | VERTICAL     | PASSED |

### 5.3.2 WLAN OFDM mode, 64QAM modulation, 54 Mbps data rate

Channel 1 / 2412 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4824.7          | 42.91      | 139.733  | 42.81                  | 0.1                   | HORIZONTAL   | PASSED |
| 7236.2          | 46.84      | 219.71   | 41.6                   | 5.24                  | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4824.7          | 30.03      | 31.747   | 29.93                  | 0.1                   | HORIZONTAL   | PASSED |
| 7236.2          | 33.45      | 47.065   | 28.21                  | 5.24                  | VERTICAL     | PASSED |

Channel 6 / 2437 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 30.12           | 28.24      | 25.829   | 30.58                  | -2.34                 | VERTICAL     | PASSED |
| 30.21           | 28.01      | 25.136   | 30.42                  | -2.41                 | VERTICAL     | PASSED |
| 30.39           | 27.43      | 23.532   | 29.96                  | -2.53                 | VERTICAL     | PASSED |
| 30.884          | 27.49      | 23.697   | 30.36                  | -2.87                 | VERTICAL     | PASSED |
| 31.59           | 27.39      | 23.415   | 30.75                  | -3.36                 | VERTICAL     | PASSED |
| 31.95           | 28.28      | 25.939   | 31.89                  | -3.61                 | VERTICAL     | PASSED |
| 32.07           | 28.66      | 27.105   | 32.36                  | -3.7                  | VERTICAL     | PASSED |

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3922.245        | 42.75      | 137.294  | 43.47                  | -0.72                 | VERTICAL     | PASSED |
| 3936.872        | 42.41      | 132.038  | 43.05                  | -0.64                 | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3922.245        | 29.46      | 29.706   | 30.18                  | -0.72                 | VERTICAL     | PASSED |
| 3936.872        | 29.46      | 29.73    | 30.1                   | -0.64                 | VERTICAL     | PASSED |

Channel 11 / 2462 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4923.8          | 44.4       | 165.997  | 44.02                  | 0.38                  | VERTICAL     | PASSED |
| 7384.8          | 46.18      | 203.681  | 40.94                  | 5.24                  | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4923.8          | 31.39      | 37.124   | 31.01                  | 0.38                  | VERTICAL     | PASSED |
| 7384.8          | 33.3       | 46.227   | 28.06                  | 5.24                  | VERTICAL     | PASSED |

### 5.3.3 802.11n, HT20, MCS0

Channel 1 / 2412 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4825.4          | 42.92      | 139.959  | 42.8                   | 0.12                  | HORIZONTAL   | PASSED |
| 7237.4          | 46.58      | 213.206  | 41.34                  | 5.24                  | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4825.4          | 30.07      | 31.868   | 29.95                  | 0.12                  | HORIZONTAL   | PASSED |
| 7237.4          | 33.56      | 47.649   | 28.32                  | 5.24                  | VERTICAL     | PASSED |

Channel 6 / 2437 MHz

Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 30              | 28.54      | 26.718   | 30.8                   | -2.26                 | VERTICAL     | PASSED |
| 30.03           | 28.22      | 25.757   | 30.5                   | -2.28                 | VERTICAL     | PASSED |
| 30.06           | 28.2       | 25.695   | 30.5                   | -2.3                  | VERTICAL     | PASSED |
| 30.84           | 28.04      | 25.223   | 30.88                  | -2.84                 | VERTICAL     | PASSED |
| 31.5            | 28.06      | 25.293   | 31.36                  | -3.3                  | VERTICAL     | PASSED |
| 31.56           | 26.67      | 21.545   | 30.01                  | -3.34                 | VERTICAL     | PASSED |
| 890.934         | 27.56      | 23.881   | 30.05                  | -2.49                 | HORIZONTAL   | PASSED |

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3895.395        | 42.09      | 127.218  | 42.79                  | -0.7                  | HORIZONTAL   | PASSED |
| 3908.013        | 42.2       | 128.84   | 42.92                  | -0.72                 | VERTICAL     | PASSED |

Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 3895.395        | 29.48      | 29.792   | 30.18                  | -0.7                  | HORIZONTAL   | PASSED |
| 3908.013        | 29.49      | 29.819   | 30.21                  | -0.72                 | VERTICAL     | PASSED |

Channel 11 / 2462 MHz

Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4924.8          | 44.38      | 165.653  | 44.02                  | 0.36                  | VERTICAL     | PASSED |
| 7387.7          | 46.43      | 209.556  | 41.21                  | 5.22                  | VERTICAL     | PASSED |

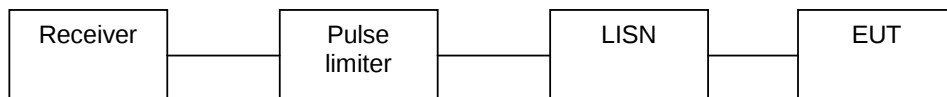
Average (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Polarisation | Result |
|-----------------|------------|----------|------------------------|-----------------------|--------------|--------|
| 4924.8          | 31.31      | 36.758   | 30.95                  | 0.36                  | VERTICAL     | PASSED |
| 7387.7          | 33.37      | 46.628   | 28.15                  | 5.22                  | VERTICAL     | PASSED |

## 6. AC powerline conducted emissions (FCC §15.207, RSS-GEN 7.2.2)

|                                                        |                                                                                |
|--------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-849, DUT 52703                                                              |
| <b>Accessories with DUT numbers</b>                    | BP-3L, DUT 52723 ; AC-50E, DUT 52719 ; CA-190CD, DUT 52721 ; WH-208, DUT 52713 |
| <b>Operation Voltage [V] / [Hz]</b>                    | 115/60                                                                         |
| <b>Results</b>                                         | PASSED                                                                         |
| <b>Remarks</b>                                         | -                                                                              |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 23/40/101.1                                                                    |
| <b>Date of measurements</b>                            | 09-May-2012                                                                    |
| <b>Measured by</b>                                     | Gao Sherina                                                                    |

### 6.1. Test Setup



### 6.2. Test method and limit

The measurement is made according to Public notice DA 00-705 and IC standard RSS-GEN as follows:

The EUT is placed on a wooden table 80 cm above the reference groundplane.

The EUT is connected via LISN to a test power supply.

The measurement results are obtained as described below:

$$U [dB\mu V] = U_{RX} + A_{TOT}$$

Where  $U_{RX}$  is receiver reading and  $A_{TOT}$  is total correction factor including cable and pulse limiter attenuations.

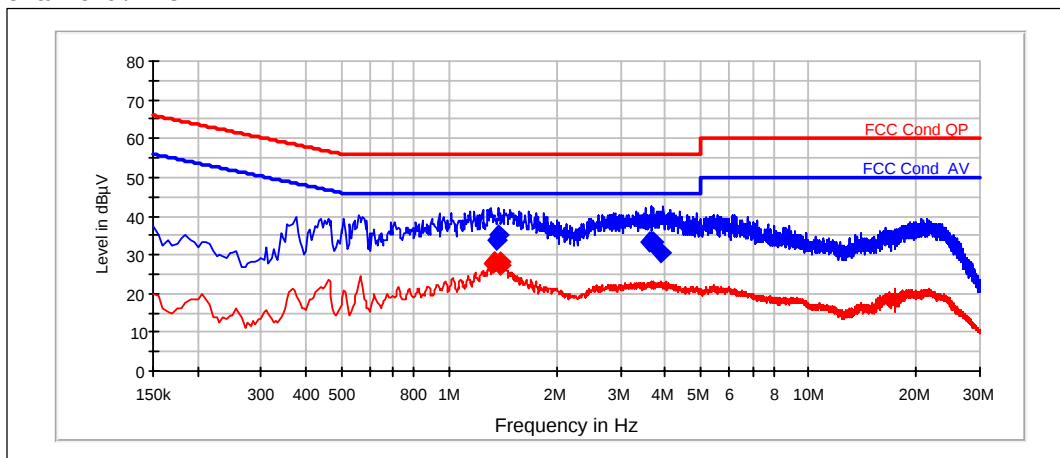
CISPR 22 Class B limits

| Frequency range [MHz] | Quasi peak limit [dBμV] | Average limit [dBμV] |
|-----------------------|-------------------------|----------------------|
| 0.15 - 0.5            | 66 - 56                 | 56 - 46              |
| 0.5 - 5               | 56                      | 46                   |
| 5 - 30                | 60                      | 50                   |

## 6.3. WLAN Test results

### 6.3.1 DSSS mode, QPSK modulation, 5.5 Mbps data rate

Channel 6 / 2437 MHz



QuasiPeak (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 1.36            | 33.53    | N    | PASSED |
| 1.365           | 35.05    | N    | PASSED |
| 3.595           | 33.09    | N    | PASSED |
| 3.64            | 33.3     | N    | PASSED |
| 3.695           | 33.22    | N    | PASSED |
| 3.875           | 30.52    | L1   | PASSED |

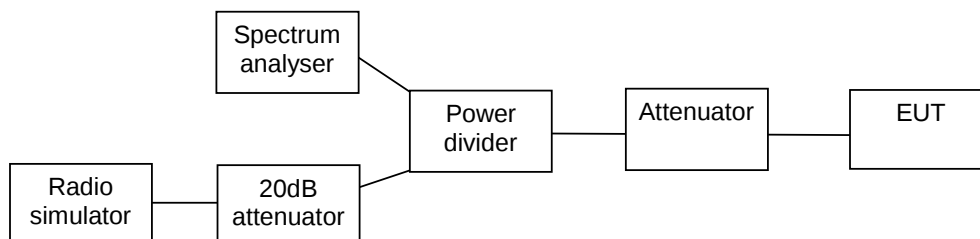
Average (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 1.325           | 27.55    | N    | PASSED |
| 1.335           | 28.33    | N    | PASSED |
| 1.345           | 28.38    | N    | PASSED |
| 1.385           | 28.17    | N    | PASSED |
| 1.395           | 27.47    | N    | PASSED |

## 7. 6 dB bandwidth (FCC §15.247(a)(2), RSS-210 A8.2 (1))

|                                                 |                                                                                |
|-------------------------------------------------|--------------------------------------------------------------------------------|
| EUT with DUT number                             | RM-849, DUT 52709                                                              |
| Accessories with DUT numbers                    | BP-3L, DUT 52712 ; AC-50E, DUT 52717 ; CA-190CD, DUT 52722 ; WH-208, DUT 52714 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                                        |
| Results                                         | PASSED                                                                         |
| Remarks                                         | -                                                                              |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 22/44/100                                                                      |
| Date of measurements                            | 15-May-2012                                                                    |
| Measured by                                     | Gao Sherina                                                                    |

### 7.1. Test Setup



### 7.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for 6 dB bandwidth measurements

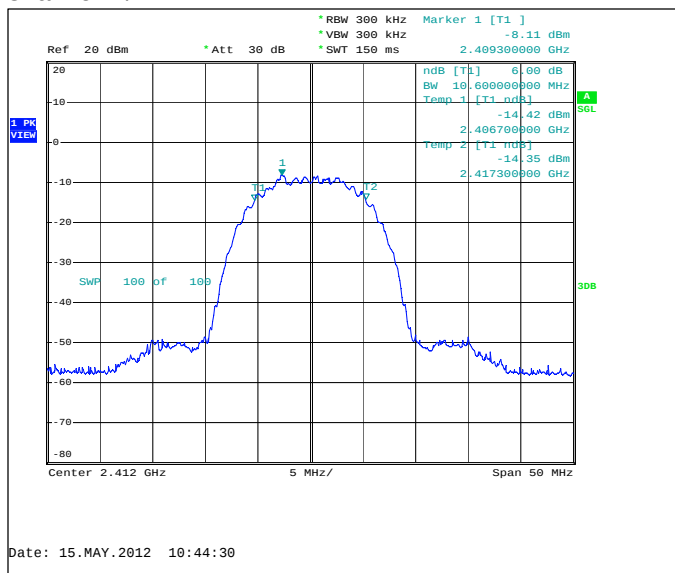
| Limit [kHz] |
|-------------|
| >= 500      |

## 7.3. WLAN Test results

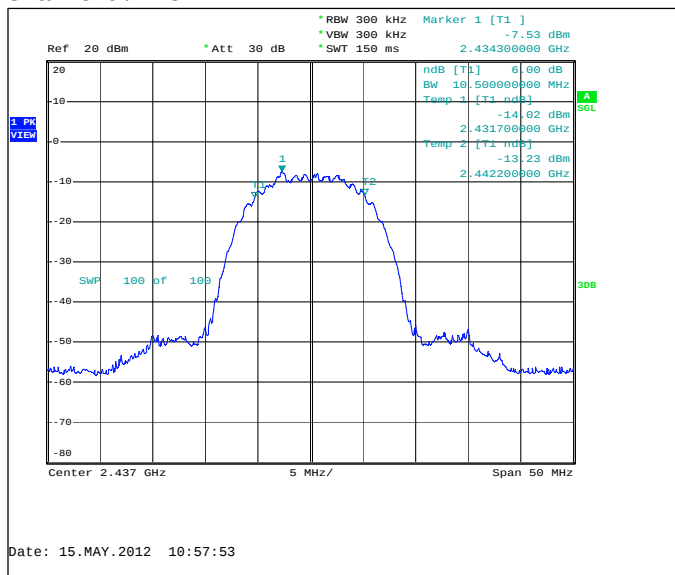
### 7.3.1 DSSS mode, QPSK modulation, 5.5 Mbps data rate

| Channel / f <sub>c</sub> [MHz] | 6 dB bandwidth [kHz] | Result |
|--------------------------------|----------------------|--------|
| 1 / 2412                       | 10600                | PASSED |
| 6 / 2437                       | 10500                | PASSED |
| 11 / 2462                      | 10500                | PASSED |

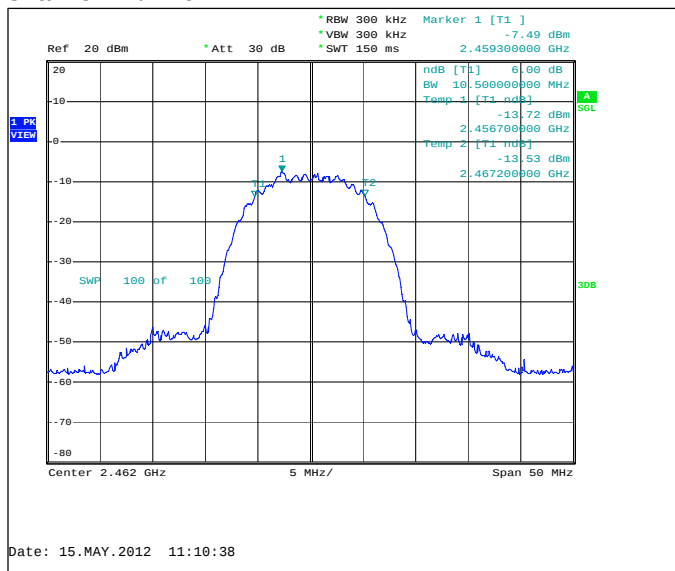
#### Channel 1 / 2412 MHz



#### Channel 6 / 2437 MHz



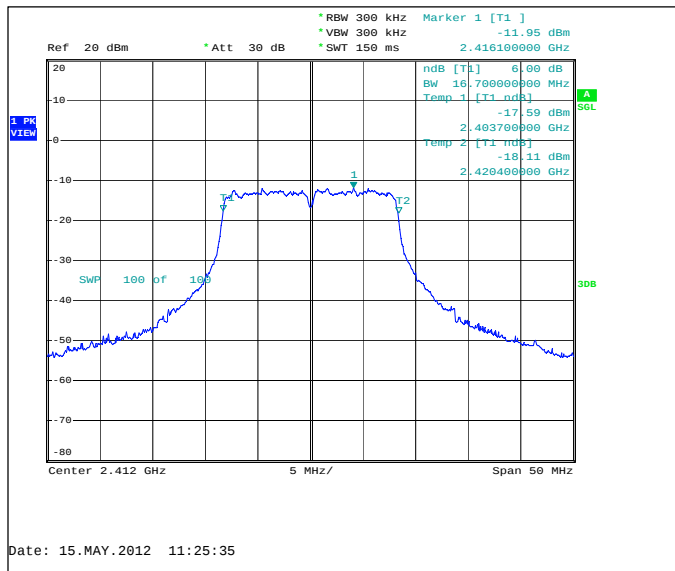
# Channel 11 / 2462 MHz



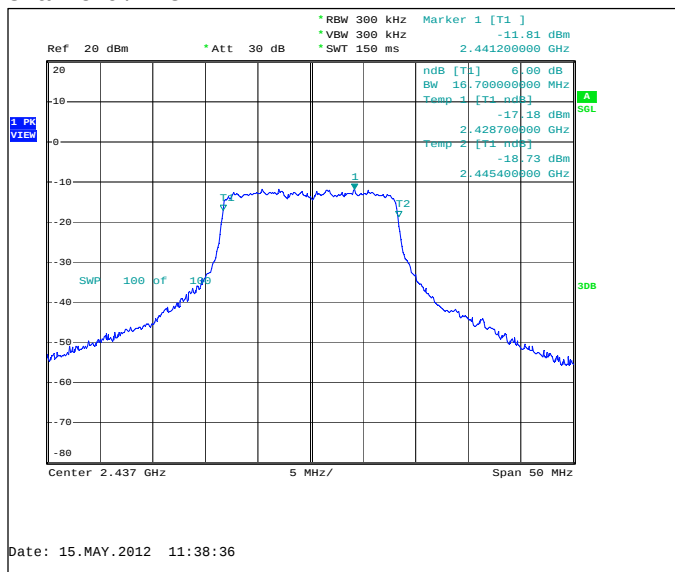
### 7.3.2 OFDM mode, 64QAM modulation, 54 Mbps data rate

| Channel / $f_c$ [MHz] | 6 dB bandwidth [kHz] | Result |
|-----------------------|----------------------|--------|
| 1 / 2412              | 16700                | PASSED |
| 6 / 2437              | 16700                | PASSED |
| 11 / 2462             | 16800                | PASSED |

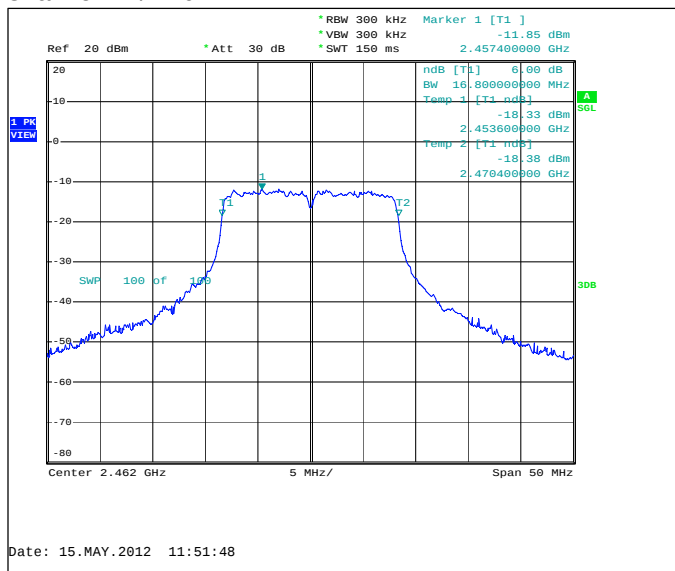
Channel 1 / 2412 MHz



Channel 6 / 2437 MHz



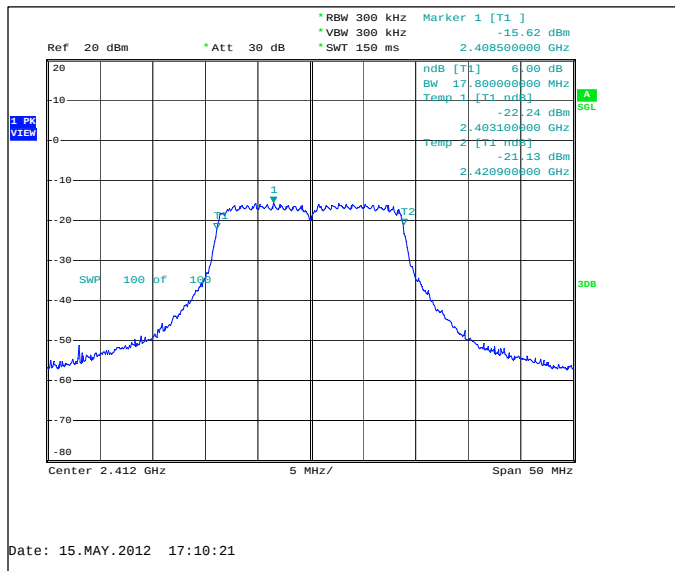
# Channel 11 / 2462 MHz



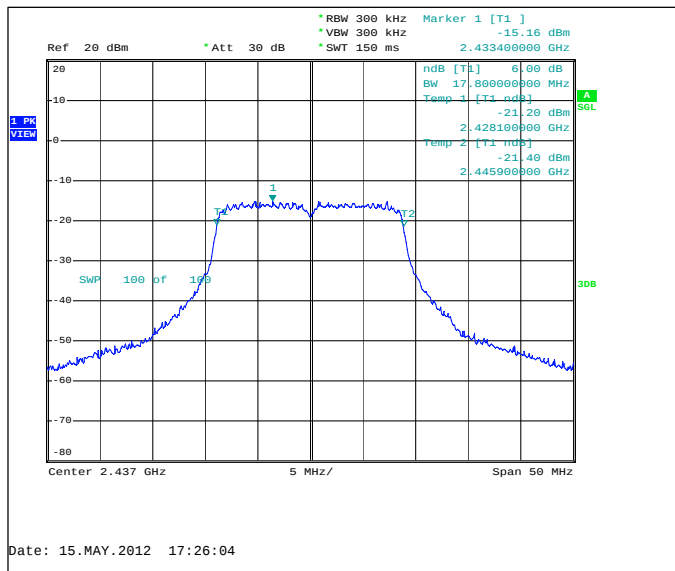
### 7.3.3 802.11n, HT20, MCS0

| Channel / f <sub>c</sub> [MHz] | 6 dB bandwidth [kHz] | Result |
|--------------------------------|----------------------|--------|
| 1 / 2412                       | 17800                | PASSED |
| 6 / 2437                       | 17800                | PASSED |
| 11 / 2462                      | 17800                | PASSED |

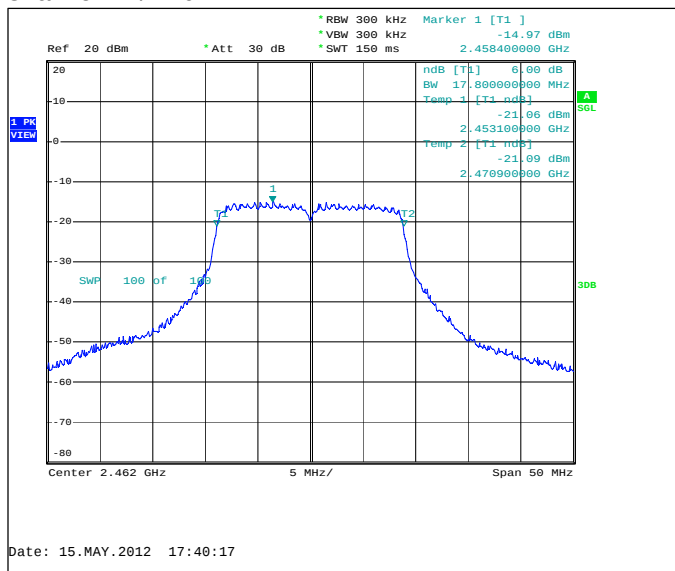
#### Channel 1 / 2412 MHz



#### Channel 6 / 2437 MHz



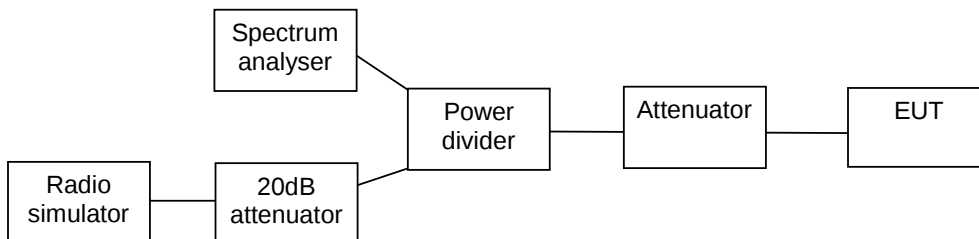
# Channel 11 / 2462 MHz



## 8. Power spectral density (FCC §15.247(e), RSS-210 A8.2 (2))

|                                                 |                                                                                |
|-------------------------------------------------|--------------------------------------------------------------------------------|
| EUT with DUT number                             | RM-849, DUT 52709                                                              |
| Accessories with DUT numbers                    | BP-3L, DUT 52712 ; AC-50E, DUT 52717 ; CA-190CD, DUT 52722 ; WH-208, DUT 52714 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                                        |
| Results                                         | PASSED                                                                         |
| Remarks                                         | -                                                                              |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 22/44/100                                                                      |
| Date of measurements                            | 15-May-2012                                                                    |
| Measured by                                     | Gao Sherina                                                                    |

### 8.1. Test Setup



### 8.2. Test method and limit

The measurement is made according to DTS procedures KDB 558074 and IC standard RSS-210.

Limits for power spectral density measurements

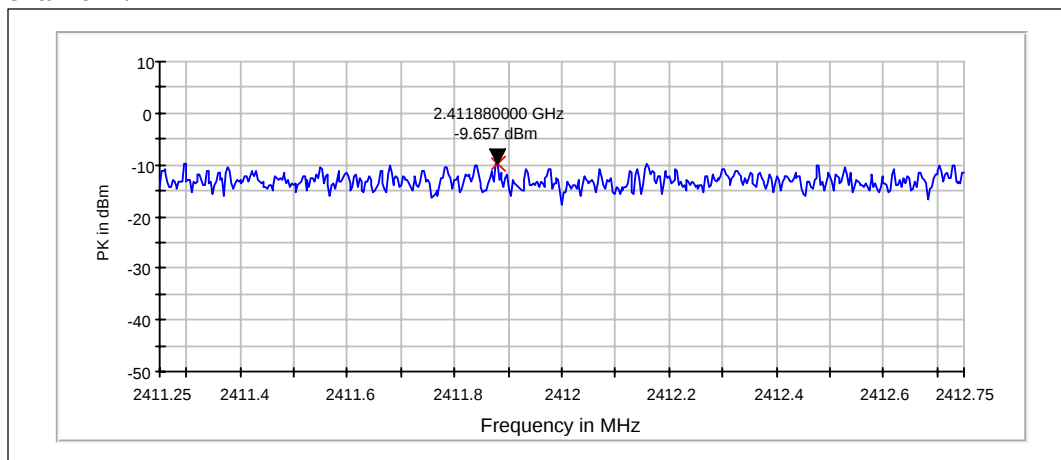
| Limit [dBm] @ 3 kHz |
|---------------------|
| <= 8                |

### 8.3. WLAN Test results

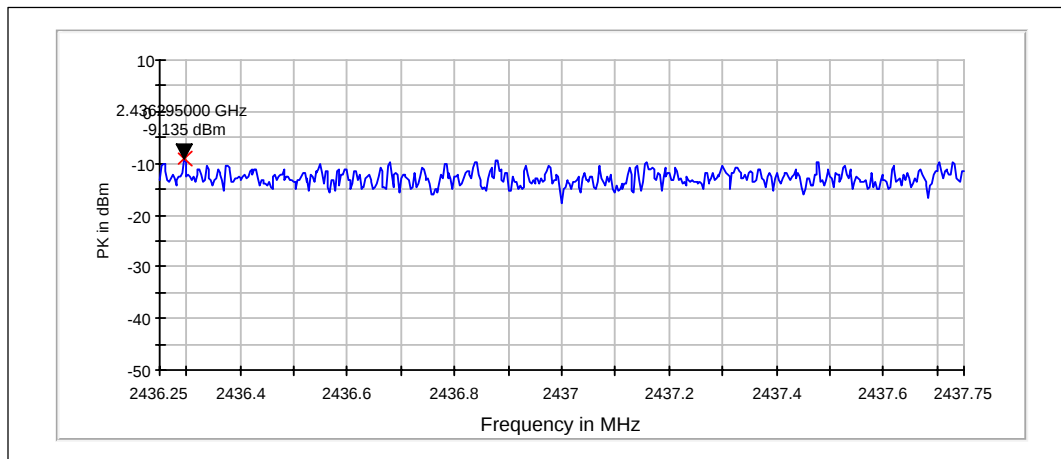
#### 8.3.1 DSSS mode, QPSK modulation, 5.5 Mbps data rate

| Channel / f <sub>c</sub> [MHz] | P [dBm] | Result |
|--------------------------------|---------|--------|
| 1 / 2412                       | -9.66   | PASSED |
| 6 / 2437                       | -9.13   | PASSED |
| 11 / 2462                      | -9.1    | PASSED |

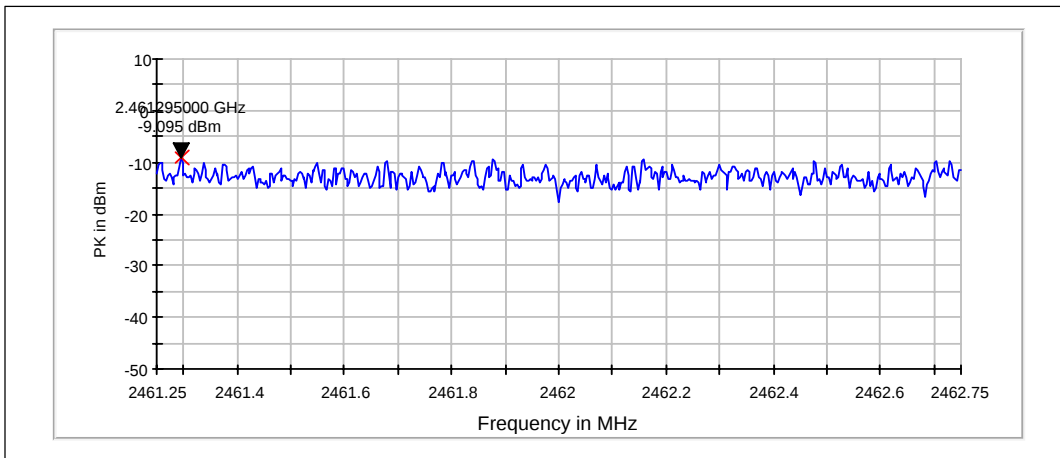
Channel 1 / 2412 MHz



Channel 6 / 2437 MHz



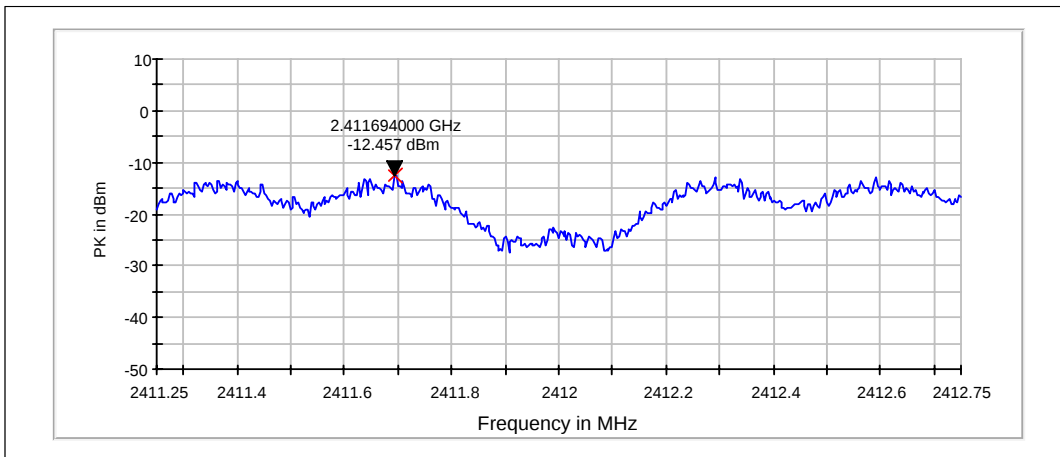
### Channel 11 / 2462 MHz



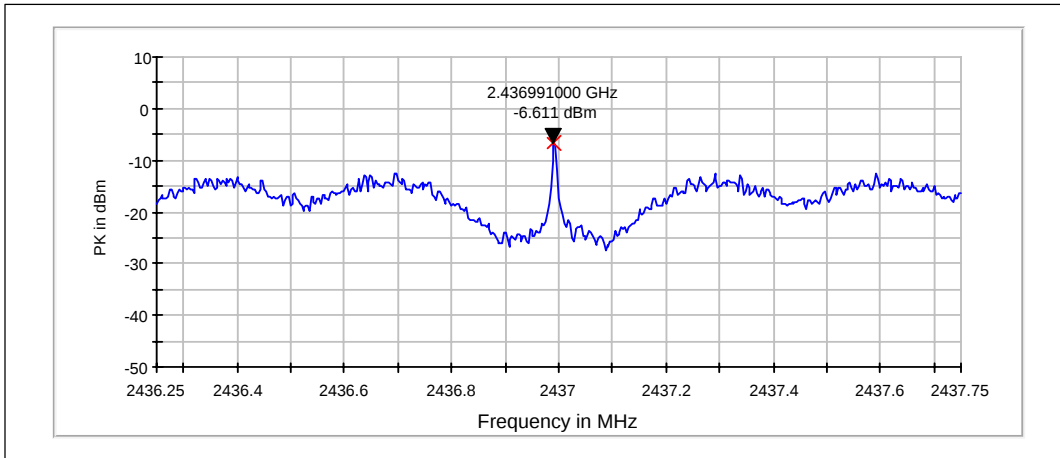
### 8.3.2 OFDM mode, 64QAM modulation, 54 Mbps data rate

| Channel / $f_c$ [MHz] | P [dBm] | Result |
|-----------------------|---------|--------|
| 1 / 2412              | -12.46  | PASSED |
| 6 / 2437              | -6.61   | PASSED |
| 11 / 2462             | -12.26  | PASSED |

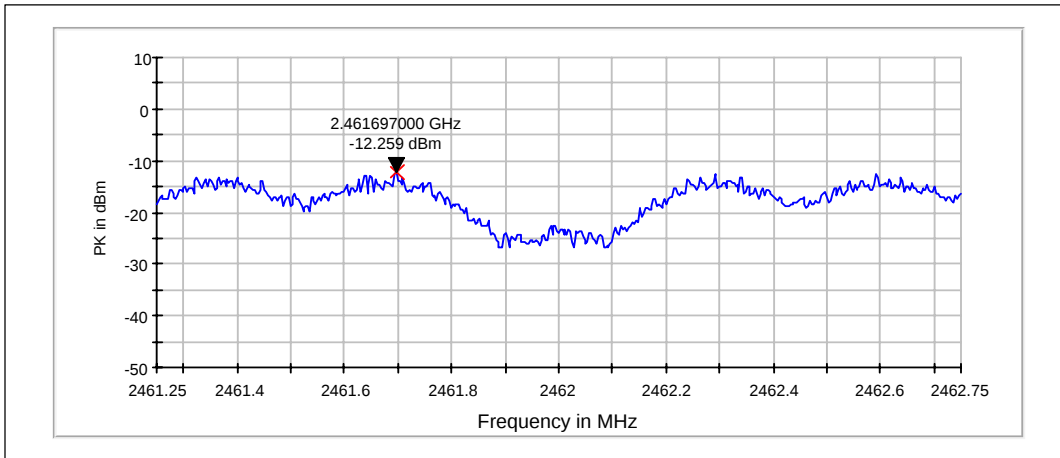
### Channel 1 / 2412 MHz



Channel 6 / 2437 MHz



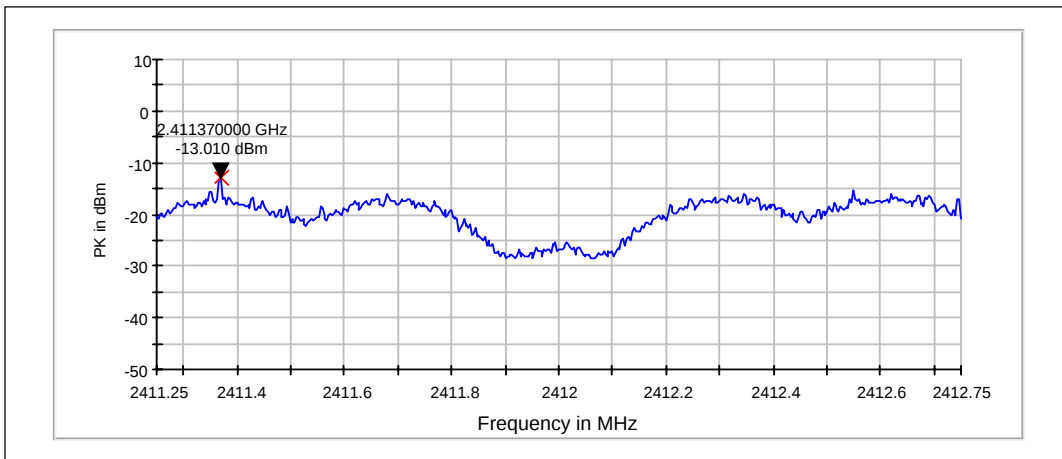
Channel 11 / 2462 MHz



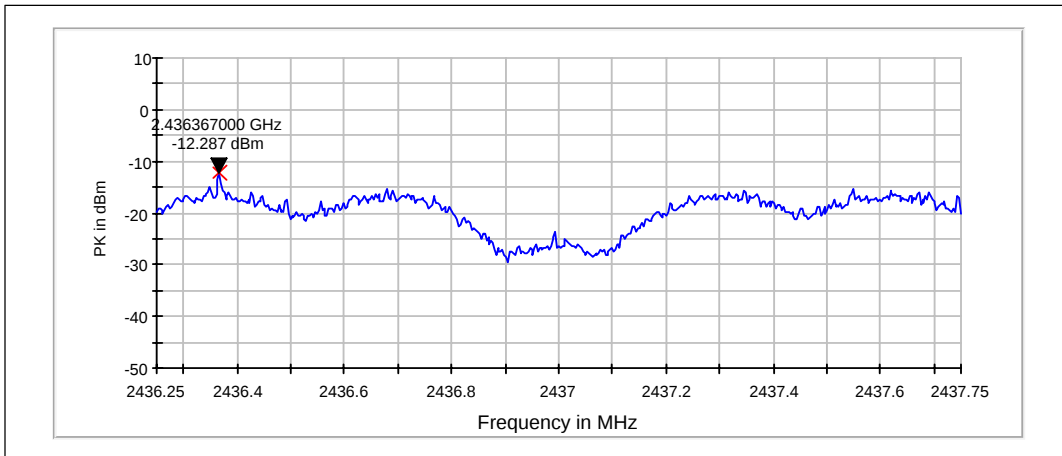
### 8.3.3 802.11n, HT20, MCS0

| Channel / $f_c$ [MHz] | P [dBm] | Result |
|-----------------------|---------|--------|
| 1 / 2412              | -13.01  | PASSED |
| 6 / 2437              | -12.29  | PASSED |
| 11 / 2462             | -12.25  | PASSED |

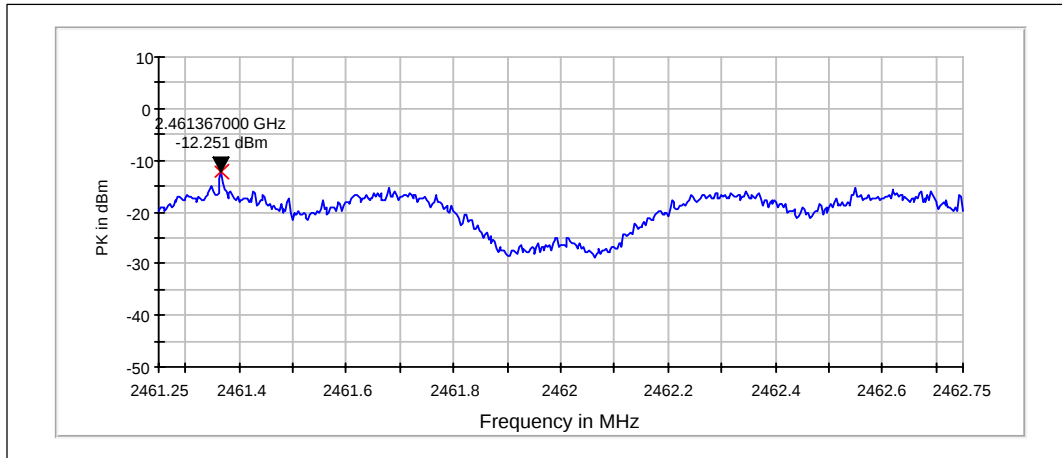
Channel 1 / 2412 MHz



Channel 6 / 2437 MHz



Channel 11 / 2462 MHz



## 9. Test Equipment

### 9.1. Conducted measurements

| Eq. No     | Equipment                | Type                | Manufacturer               | Used in            |
|------------|--------------------------|---------------------|----------------------------|--------------------|
| -          | RF Emission Software     | EMC32 Test Software | R&S                        | 22/24/27, 15C, 15B |
| BJPCHW0020 | DC Power supply          | Hp6632B             | HP                         | 22/24/27, 15C      |
| BJPCPT0040 | Receiver                 | ESCS30              | R&S                        | 15C,15B            |
| BJPCPT0073 | Signal Generator         | SMR 20              | R&S                        | 22/24/27, 15C, 15B |
| BJPCPT0079 | LISN 50 $\mu$ H          | ESH3-Z5             | R&S                        | 15C,15B            |
| BJPCPT0131 | Communication Tester     | CMU200              | R&S                        | 15C,15B            |
| BJPCPT0191 | Pulse Limiter            | ESH3-Z2             | R&S                        | 15C,15B            |
| BJPCTC0017 | Communication Tester     | CMU200              | R&S                        | 22/24/27, 15C, 15B |
| BJPCTC0067 | Bluetooth Tester         | CBT                 | R&S                        | 22/24/27, 15C      |
| BJPCTC0089 | Temperature Test chamber | VT4002              | Votsch<br>industrietechnik | 22/24/27, 15C      |
| BJPCTC0090 | FSP spectrum analyzer    | FSP30               | R&S                        | 22/24/27, 15C      |
| BJPCTC0094 | GPB-RS232 convertor      | GPB-RS232           | NI                         | 22/24/27, 15C      |
| BJPCTC0112 | Power Splitter           | 11667B              | Agilent                    | 22/24/27, 15C      |
| BJPCTC0114 | Signal Generator         | E8357C              | Agilent                    | 22/24/27, 15C      |
| BJPCTC0115 | Communication Tester     | CMU200              | R&S                        | 22/24/27, 15B, 15C |

### 9.2. Radiated measurements

| Eq. No     | Equipment               | Type                              | Manufacturer       | Used in            |
|------------|-------------------------|-----------------------------------|--------------------|--------------------|
| -          | BT / WLAN Antenna       | SPA 2400/75/9/0/V                 | Huber-Suhner       | 15C, 15B           |
| -          | BT / WLAN Antenna       | SPA 2400/75/9/0/V                 | Huber-Suhner       | 15C, 15B           |
| -          | RF Emission Software    | EMC32 Test Software               | R&S                | 22/24/27, 15C, 15B |
| BJPCPT0072 | Receiver                | ESI B26                           | R&S                | 22/24/27, 15C, 15B |
| BJPCPT0130 | Relay Switch Unit       | TS-RSP                            | R&S                | 22/24/27, 15C, 15B |
| BJPCPT0150 | High Pass Filter        | WHKS1200-10SS                     | Wainwright         | 22/24/27, 15C, 15B |
| BJPCPT0151 | Band Reject Filter      | WRCD1880/2000-0.2/40-5SSK         | Wainwright         | 24, 15B            |
| BJPCPT0154 | Band Reject Filter      | WRCT2402/2480-2400/2483.5-30-20SS | Wainwright         | 15C, 15B           |
| BJPCPT0162 | Antenna                 | HF906                             | R&S                | 22/24/27, 15C, 15B |
| BJPCTC0007 | Antenna                 | HL562                             | R&S                | 22/24/27, 15C, 15B |
| BJPCTC0029 | Antenna                 | HF906                             | R&S                | 22/24/27, 15C, 15B |
| BJPCTC0034 | Band Reject Filter      | WRCT 800/880-0.2/40-5SSK          | Wainwright         | 22, 15B            |
| BJPCTC0049 | Preamplifier            | Blma 0118-1A-Bt                   | Bonn               | 22/24/27, 15C, 15B |
| BJPCTC0055 | Communication Tester    | CMU200                            | R&S                | 22/24/27,15C,15B   |
| BJPCTC0058 | Bluetooth Tester        | CBT                               | R&S                | 15C, 15B           |
| BJPCTC0064 | Band Reject Filter      | WRCG1877/1883-1870/1890-40/6SS    | Wainwright         | 24, 15B            |
| BJPCTC0065 | Band Reject Filter      | WRCG832/838-825/845-40/5SS        | Wainwright         | 27, 15B            |
| BJPCTC0071 | Multi-Device Controller | 2090                              | EMCO               | 22/24/27, 15C, 15B |
| BJPCTC0072 | Anechoic Chamber        | 3 m Semi / Full Anechoic Chamber  | ETS                | 22/24/27, 15C, 15B |
| BJPCTC0073 | MAST                    | Model-TR/POL                      | ETS                | 22/24/27, 15C, 15B |
| BJPCTC0074 | MAST                    | Model 2070-2                      | ETS                | 22/24/27, 15C, 15B |
| BJPCTC0075 | Turntable               | Model 2188                        | ETS-EMCO           | 22/24/27, 15C, 15B |
| BJPCTC0096 | Preamplifier            | AFS4-00100300-20-23P-6            | Miteq              | 22/24/27, 15C, 15B |
| BJPCTC0113 | Receiver                | ESI B26                           | R&S                | 22/24/27, 15B, 15C |
| BJPCTC0115 | Communication Tester    | CMU200                            | R&S                | 22/24/27, 15B, 15C |
| BJPCTC0124 | Attenuator              | SA18N200W-40                      | Fairview Microwave | -                  |