

## FCC Part 15C Compliance Test Report

|                                                         |                                                                                                                                                                                                                                                                                                          |                                   |                                                                                                                             |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Test Report no.:</b>                                 | FCC15CBT_RM-1116_14.docx                                                                                                                                                                                                                                                                                 | <b>Date of Report:</b>            | 21-Sep-2015                                                                                                                 |
| <b>Number of pages:</b>                                 | 30                                                                                                                                                                                                                                                                                                       | <b>Customer's Contact person:</b> | Tia Melava                                                                                                                  |
| <b>Testing laboratory:</b>                              | TCC Microsoft Salo Laboratory<br>P.O.Box(86)<br>Joensuunkatu 7E<br>FIN-24101 SALO, FINLAND<br>Tel. +358 (0) 7180 08000<br>Fax. +358 71 80 44122                                                                                                                                                          | <b>Customer:</b>                  | Microsoft<br>P.O.Box(86)<br>Joensuunkatu 7E<br>FIN-24101 SALO, FINLAND<br>Tel. +358 (0) 7180 08000<br>Fax. +358 71 80 44122 |
| <b>FCC listing no.:</b>                                 | 533467                                                                                                                                                                                                                                                                                                   |                                   |                                                                                                                             |
| <b>IC recognition no.:</b>                              | 661V-1                                                                                                                                                                                                                                                                                                   |                                   |                                                                                                                             |
| <b>Tested devices/ accessories:</b>                     | <b>Phone RM-1116 / Dummy Battery SD-241R / Battery BV-T4D / Charger AC-100E / Headset WH-308</b>                                                                                                                                                                                                         |                                   |                                                                                                                             |
| <b>FCC ID:</b>                                          | PYARM-1116                                                                                                                                                                                                                                                                                               | <b>IC:</b>                        | 661X-RM-1116                                                                                                                |
| <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 (2014), 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 Microsoft.                                                 |                                   |                                                                                                                             |
| <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>             |                                                                                                                                                                                                                                                                                                          |                                   |                                                                                                                             |

Hannu Söderholm, Engineer, EMC

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

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| Date of receipt               | 15-Jun-2015                                           |
| Testing completed             | 01-Sep-2015                                           |
| The customer's contact person | Tia Melava                                            |
| Test Plan referred to         | T:\Projects\RM-1085\TestPlan\RS_TestPlan_RM-1085.xlsm |
| Notes                         | -                                                     |
| Document name                 | T:\Projects\RM-1116\EMC\FCC15CBT_RM-1116_14.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.

Devices under tests

| Product       | Type    | SN                          | HW   | MV   | SW                      | DUT    |
|---------------|---------|-----------------------------|------|------|-------------------------|--------|
| Phone         | RM-1085 | 004402742320777;059W5J6     | 2111 | -    | 01063.00001.15244.09000 | 100012 |
| Dummy Battery | SD-241R | -                           | V2   | -    | -                       | 100016 |
| Phone         | RM-1085 | 0044027423084756059W5J6     | 2110 | -    | 01065.00000.15264.47000 | 100191 |
| Battery       | BV-T4D  | 495540517401030034260670771 | -    | -    | -                       | 100190 |
| Charger       | AC-100E | 409049512558030174860675758 | 0.3  | B2.0 | -                       | 100196 |
| Headset       | WH-308  | 51251B1                     | -    | -    | -                       | 100195 |
| Phone         | RM-1085 | 004402742308384;059W5J6     | 2110 | -    | 01063.00001.15244.09000 | 100024 |
| Battery       | BV-T4D  | 4955405174010300826;0670771 | v3.0 | -    | -                       | 100025 |
| Headset       | WH-308  |                             |      |      |                         | 100028 |

### 1.2. Summary of Test Results

Bluetooth:

| Section in CFR 47    | Section in RSS-GEN or RSS-210 | Name of the test                     | Result |
|----------------------|-------------------------------|--------------------------------------|--------|
| 15.247(b)(1)         | A8.4(2)                       | Conducted peak output power          | PASSED |
| 15.247(d), 15.205(b) | A8.5                          | Band edge compliance of RF emissions | -      |
| 15.247(d)            | A8.5                          | Spurious RF conducted emissions      | PASSED |
| 15.247(d), 15.209    | A8.5                          | Spurious radiated emissions          | -      |
| 15.207               | 7.2.4                         | AC powerline conducted emissions     | PASSED |
| 15.247(a)(1)         | A8.1(a)                       | 20dB(bandwidth)                      | PASSED |
| 15.247(a)(1)         | A8.1(b)                       | Carrier frequency separation         | PASSED |
| 15.247(a)(1)(iii)    | A8.1(d)                       | Number of hopping frequencies        | PASSED |
| 15.247(a)(1)(iii)    | A8.1(d)                       | Time of occupancy                    | NP     |

The test results of RM-1085 are re-used for certification of the RM-1116. The table above indicates the results, which will be re-used.

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 Microsoft Laboratory.

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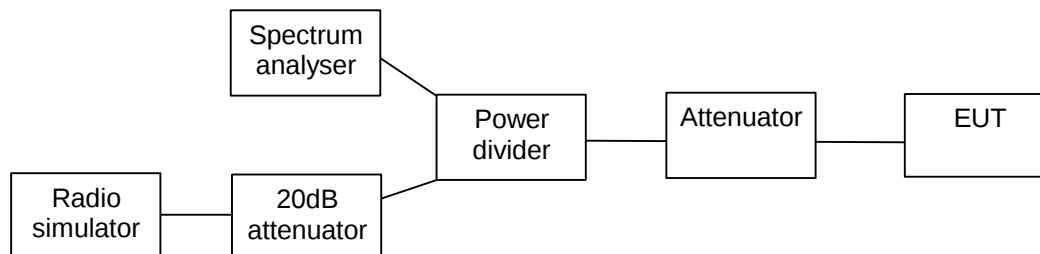
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|           |                              |           |
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## 2. Conducted peak output power (FCC §15.247(b)(1), RSS-210 A8.4(2))

|                                                 |                     |
|-------------------------------------------------|---------------------|
| EUT with DUT number                             | RM-1085, DUT 100012 |
| Accessories with DUT numbers                    | SD-241R, DUT 100016 |
| Operation Voltage [V] / [Hz]                    | Nominal             |
| Results                                         | PASSED              |
| Remarks                                         | -                   |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 101.0     |
| Date of measurements                            | 26-Jun-2015         |
| Measured by                                     | Tomi Lipponen       |

### 2.1. Test Setup



### 2.2. Test method and limit

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

Limits for conducted peak output power measurements

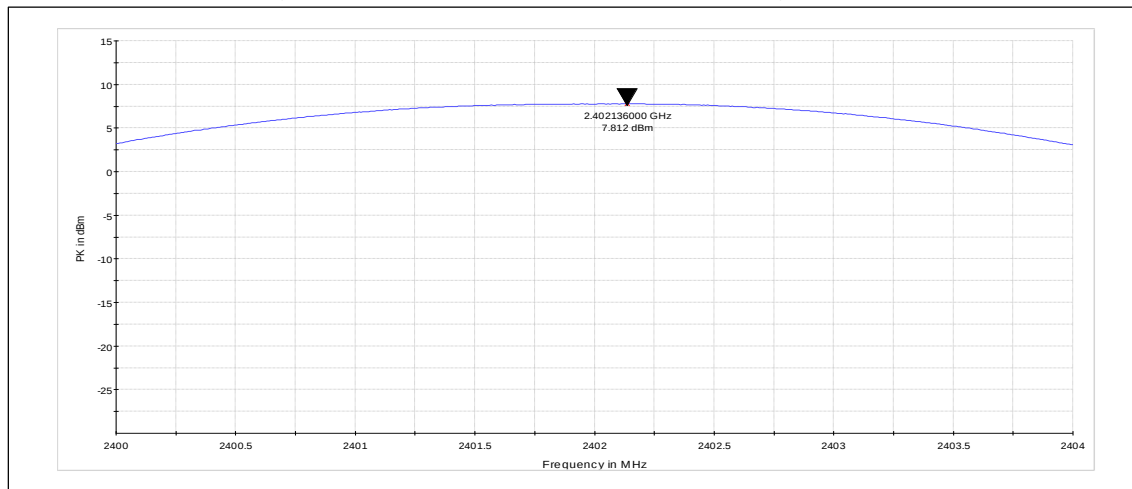
| Frequency range [MHz]        | Limit [W] | Limit [dBm] |
|------------------------------|-----------|-------------|
| 2400 – 2483.5<br>5725 - 5850 | $\leq 1$  | $\leq 30$   |

## 2.3. Bluetooth Test results

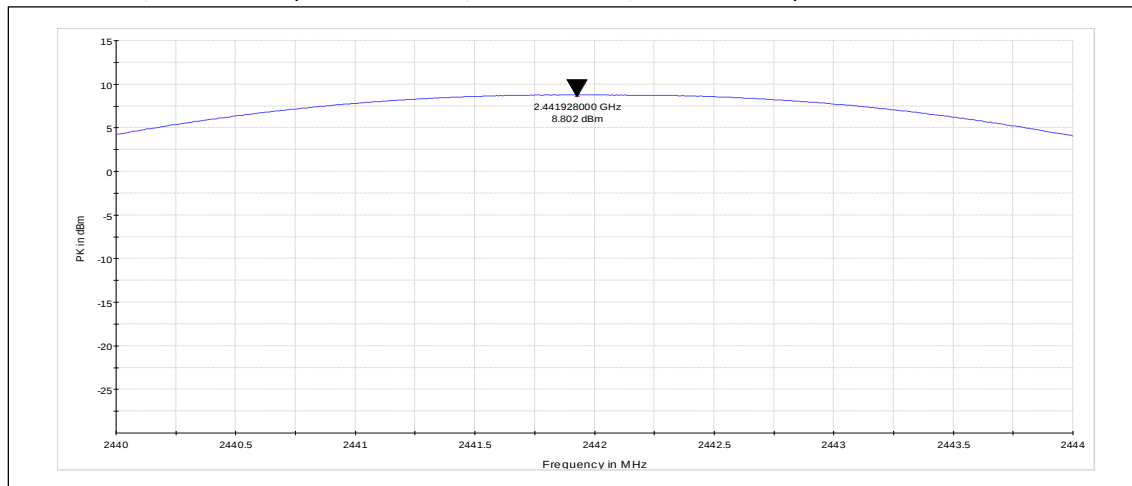
### 2.3.1 GFSK modulation, PRBS packet type

| Channel / $f_c$ [MHz] | P [dBm] | P [mW] | Result |
|-----------------------|---------|--------|--------|
| 0 / 2402              | 7.81    | 6.039  | PASSED |
| 40 / 2442             | 8.8     | 7.586  | PASSED |
| 78 / 2480             | 6.85    | 4.842  | PASSED |

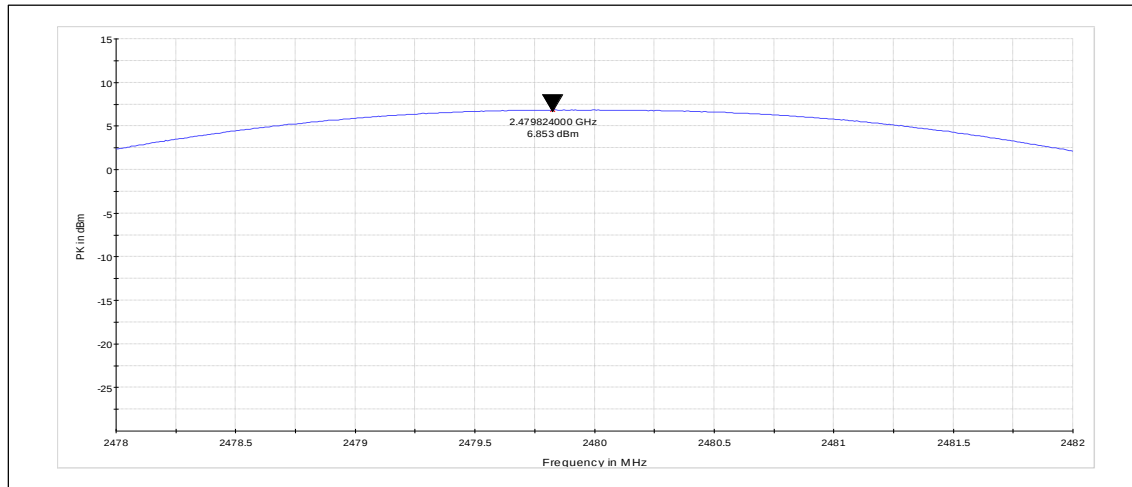
Channel 0 / 2402 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



Channel 40 / 2442 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



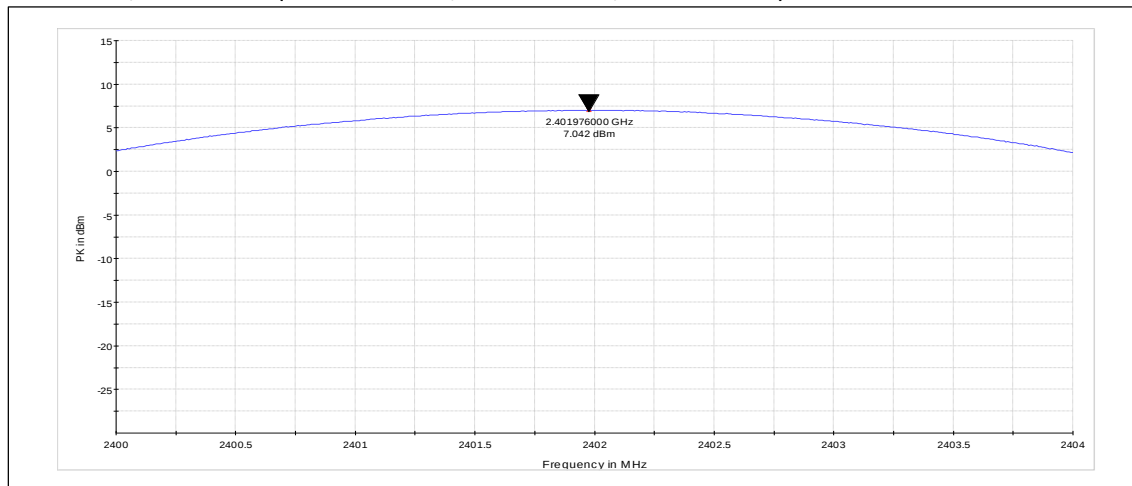
Channel 78 / 2480 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



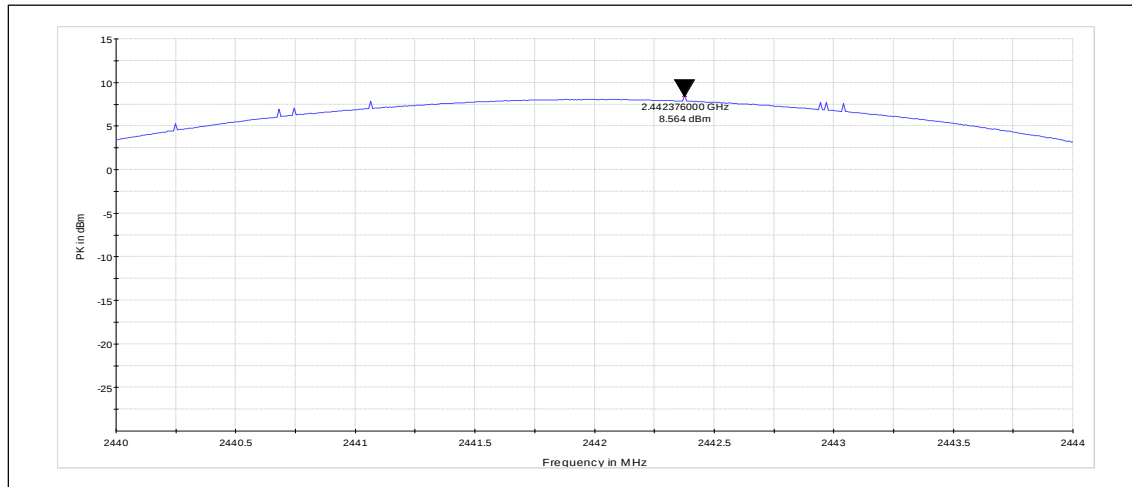
### 2.3.2 8DPSK modulation, PRBS packet type

| Channel / f <sub>c</sub> [MHz] | P [dBm] | P [mW] | Result |
|--------------------------------|---------|--------|--------|
| 0 / 2402                       | 7.04    | 5.058  | PASSED |
| 40 / 2442                      | 8.56    | 7.178  | PASSED |
| 78 / 2480                      | 6.1     | 4.074  | PASSED |

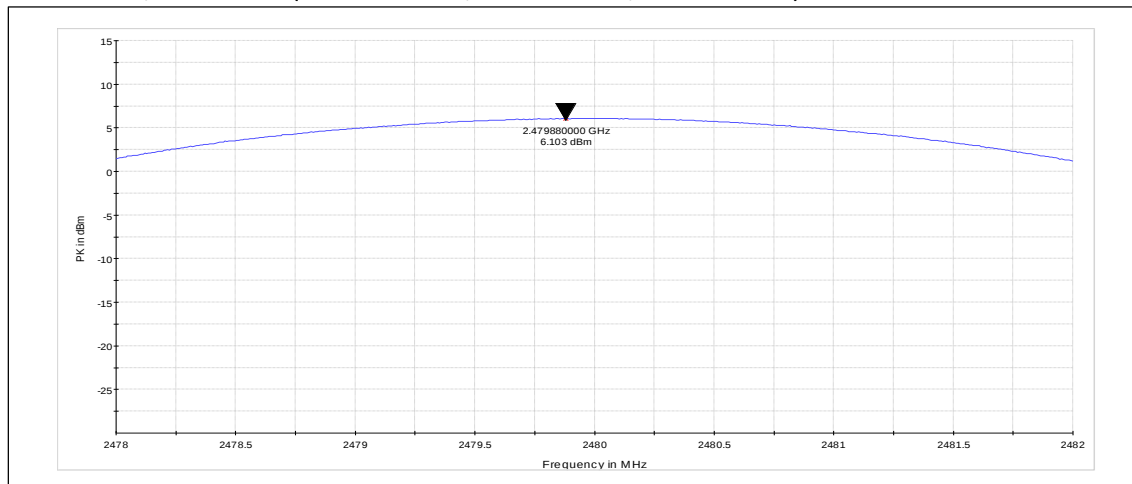
Channel 0 / 2402 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



Channel 40 / 2442 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



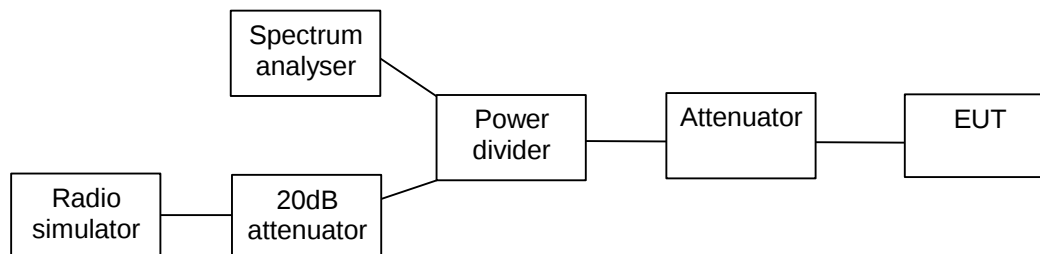
Channel 78 / 2480 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



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

|                                                        |                     |
|--------------------------------------------------------|---------------------|
| <b>EUT with DUT number</b>                             | RM-1085, DUT 100012 |
| <b>Accessories with DUT numbers</b>                    | SD-241R, DUT 100016 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal             |
| <b>Results</b>                                         | PASSED              |
| <b>Remarks</b>                                         | -                   |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 21 / 42 / 101.0     |
| <b>Date of measurements</b>                            | 26-Jun-2015         |
| <b>Measured by</b>                                     | Tomi Lipponen       |

#### 3.1. Test Setup



#### 3.2. Test method and limit

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

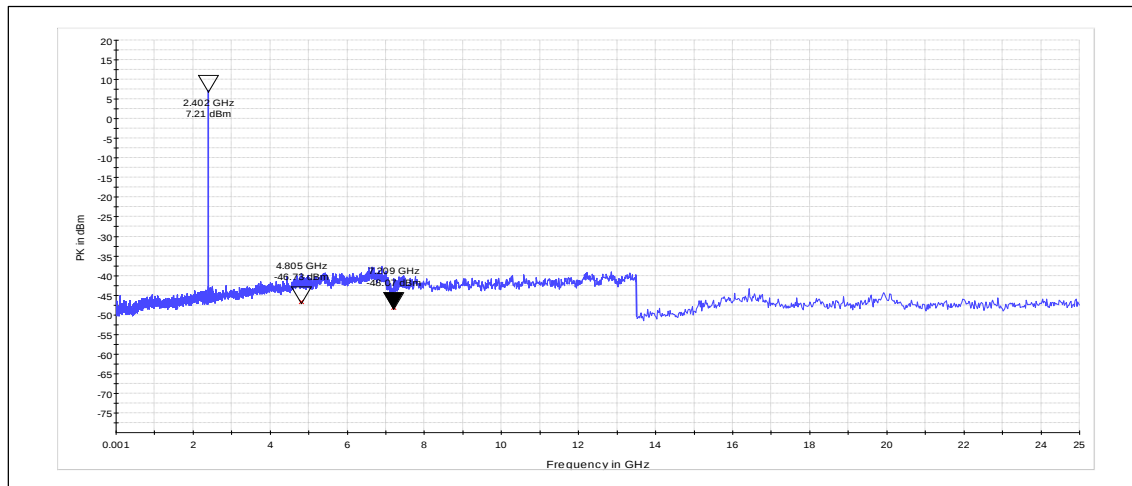
Limits for spurious RF conducted emissions measurements

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

### 3.3. Bluetooth Test results

#### 3.3.1 GFSK modulation, PRBS packet type

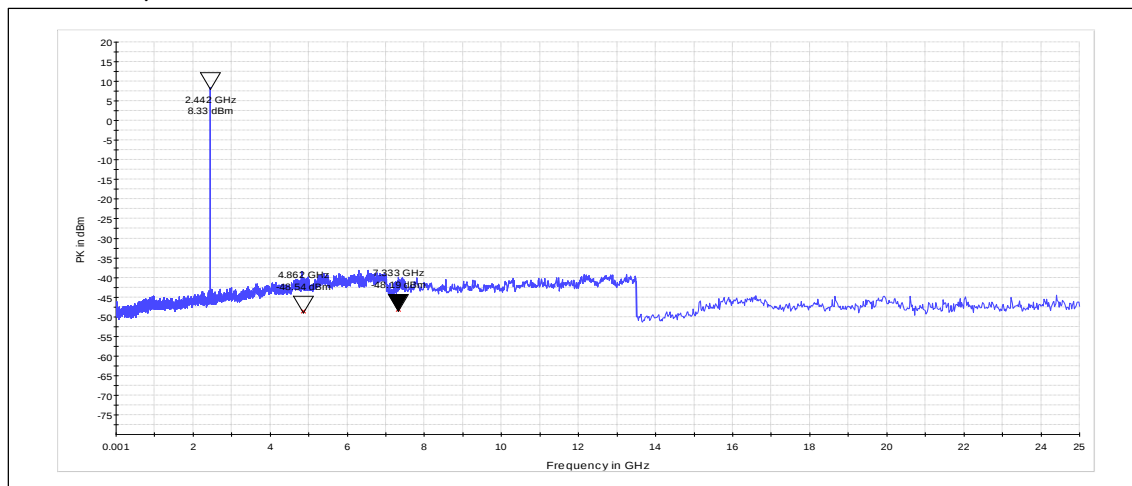
Channel 0 / 2402 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4804.800        | -46.73  | PASSED |
| 7209.000        | -48.07  | PASSED |

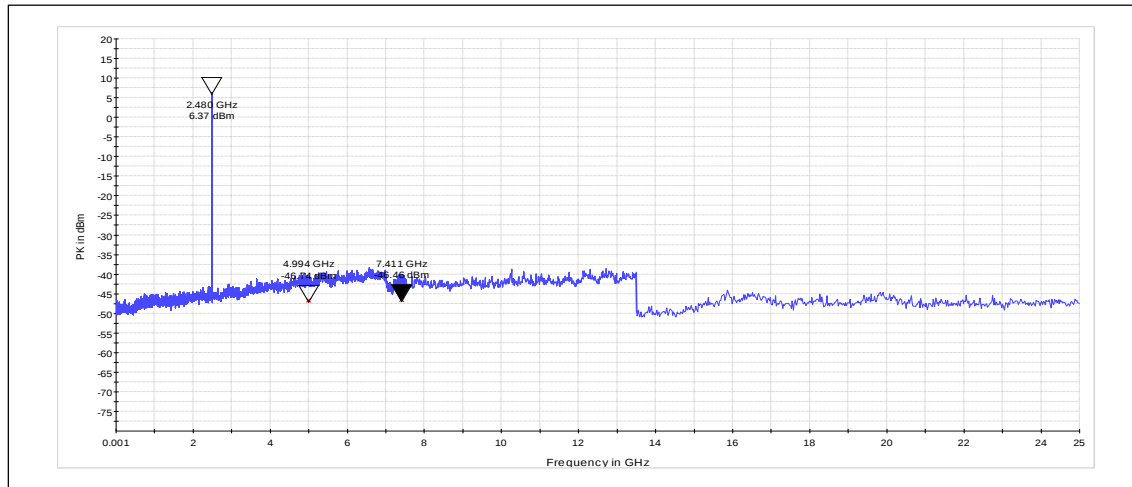
Channel 40 / 2442 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4862.400        | -48.54  | PASSED |
| 7332.600        | -48.19  | PASSED |

## Channel 78 / 2480 MHz

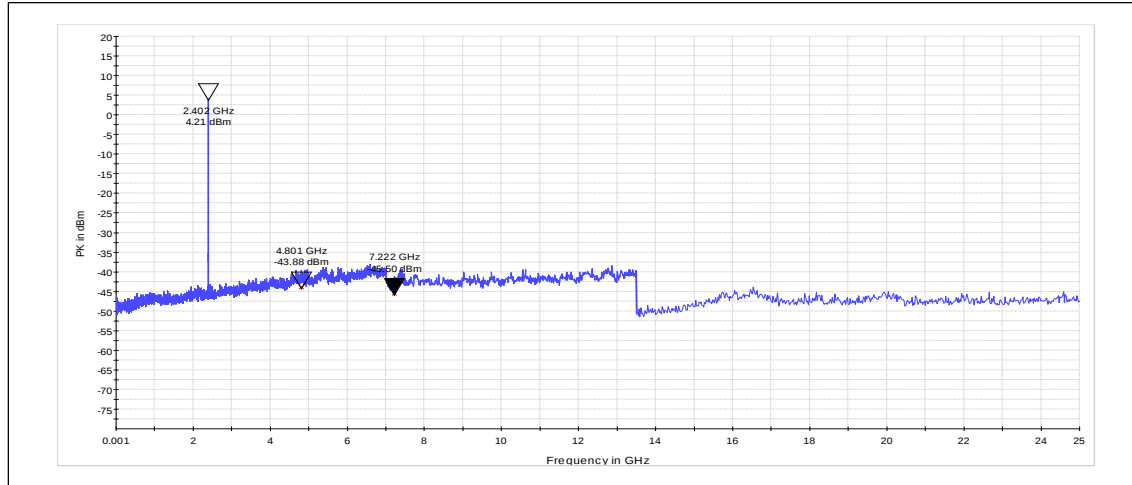


Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4993.600        | -46.74  | PASSED |
| 7411.200        | -46.46  | PASSED |

### 3.3.2 8DPSK modulation, PRBS packet type

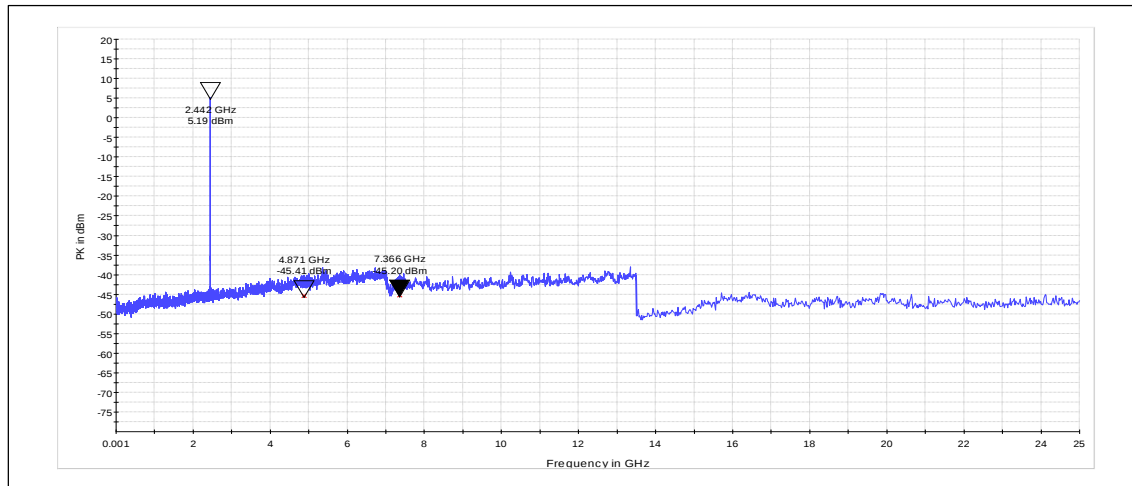
Channel 0 / 2402 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4801.200        | -43.88  | PASSED |
| 7222.200        | -45.50  | PASSED |

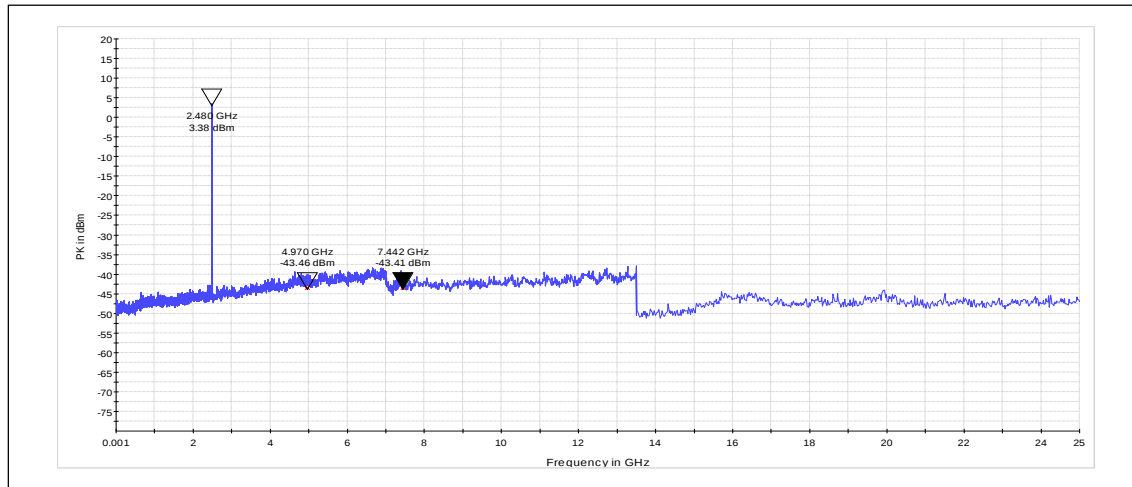
Channel 40 / 2442 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4870.800        | -45.41  | PASSED |
| 7365.600        | -45.20  | PASSED |

## Channel 78 / 2480 MHz



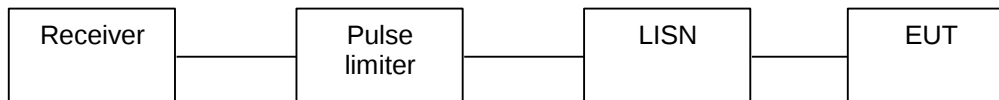
Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4970.400        | -43.46  | PASSED |
| 7442.400        | -43.41  | PASSED |

#### 4. AC powerline conducted emissions (FCC §15.207, RSS-210 7.2.4)

|                                                 |                                                               |
|-------------------------------------------------|---------------------------------------------------------------|
| EUT with DUT number                             | RM-1085, DUT 100024                                           |
| Accessories with DUT numbers                    | BV-T4D, DUT 100025 ; AC-100E, DUT 100026 ; WH-308, DUT 100028 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                       |
| Results                                         | PASSED                                                        |
| Remarks                                         | -                                                             |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 102.1                                               |
| Date of measurements                            | 01-Jul-2015                                                   |
| Measured by                                     | Tomi Lipponen                                                 |

##### 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-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.

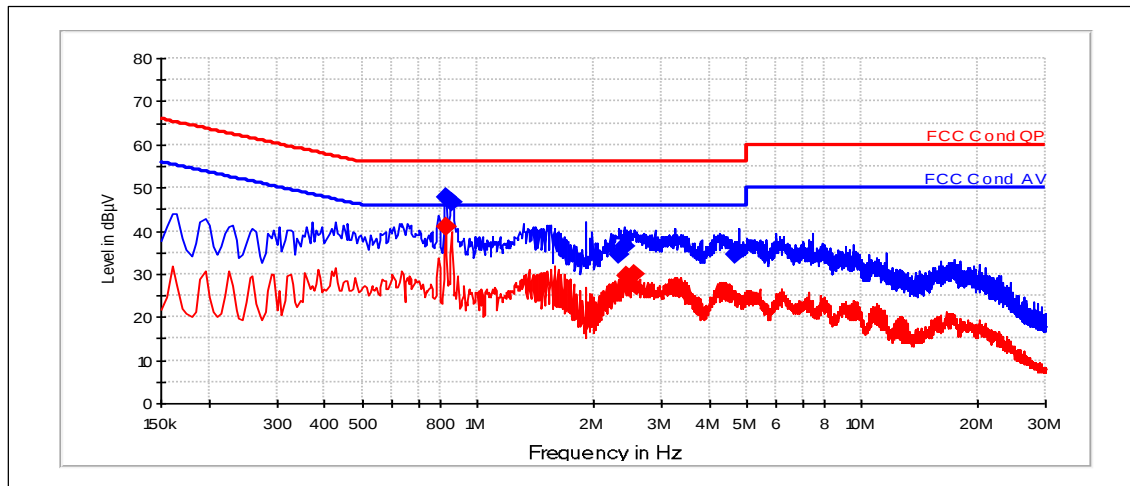
CISPR 22 Class B limits

| 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                   |

### 4.3. Bluetooth Test results

#### 4.3.1 GFSK modulation, PRBS packet type

Channel 40 / 2442 MHz



QuasiPeak (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 0.825           | 47.96    | N    | PASSED |
| 0.855           | 46.75    | N    | PASSED |
| 2.325           | 34.6     | N    | PASSED |
| 2.405           | 36.4     | N    | PASSED |
| 4.695           | 34.59    | N    | PASSED |

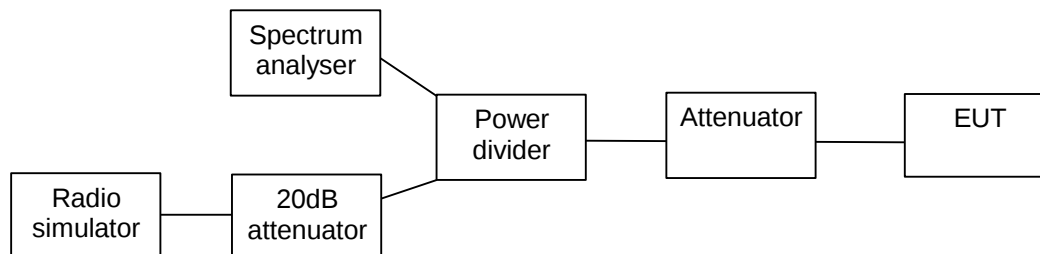
Average (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 0.825           | 40.82    | N    | PASSED |
| 2.445           | 29.74    | N    | PASSED |
| 2.54            | 30.04    | N    | PASSED |

## 5. 20dB(bandwidth) (FCC §15.247(a)(1), RSS-210 A8.1(a))

|                                                 |                     |
|-------------------------------------------------|---------------------|
| EUT with DUT number                             | RM-1085, DUT 100012 |
| Accessories with DUT numbers                    | SD-241R, DUT 100016 |
| Operation Voltage [V] / [Hz]                    | Nominal             |
| Results                                         | PASSED              |
| Remarks                                         | -                   |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 101.0     |
| Date of measurements                            | 26-Jun-2015         |
| Measured by                                     | Tomi Lipponen       |

### 5.1. Test Setup



### 5.2. Test method and limit

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

Limits for 20 dB bandwidth measurements

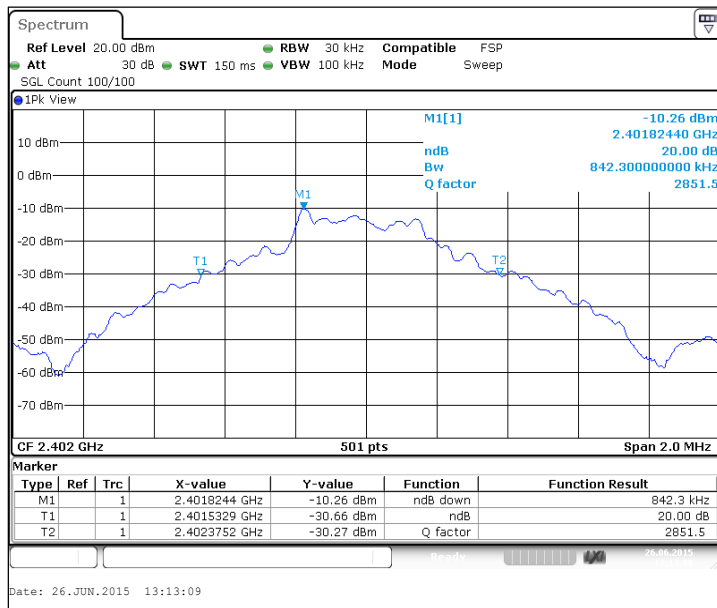
| Limit [MHz] |
|-------------|
| N/A         |

### 5.3. Bluetooth Test results

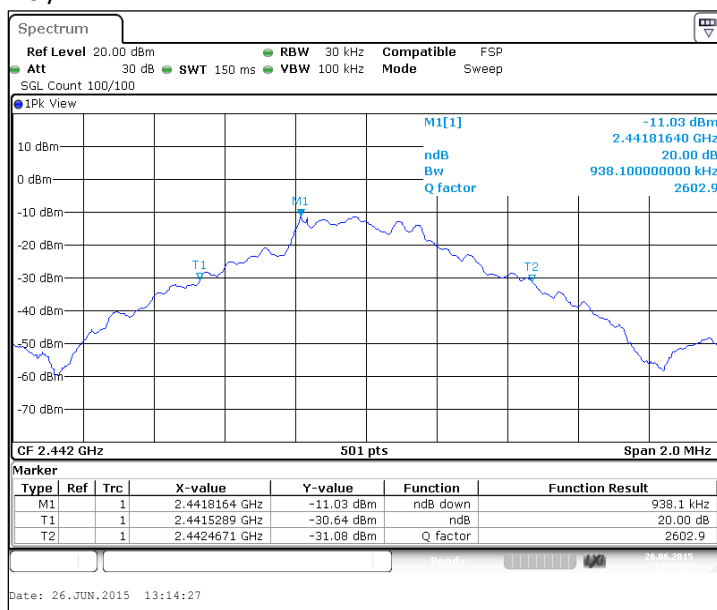
#### 5.3.1 GFSK modulation, PRBS packet type

| Channel / f <sub>c</sub> [MHz] | 20 dB bandwidth [kHz] |
|--------------------------------|-----------------------|
| 0 / 2402                       | 842.3                 |
| 40 / 2442                      | 938.1                 |
| 78 / 2480                      | 838.3                 |

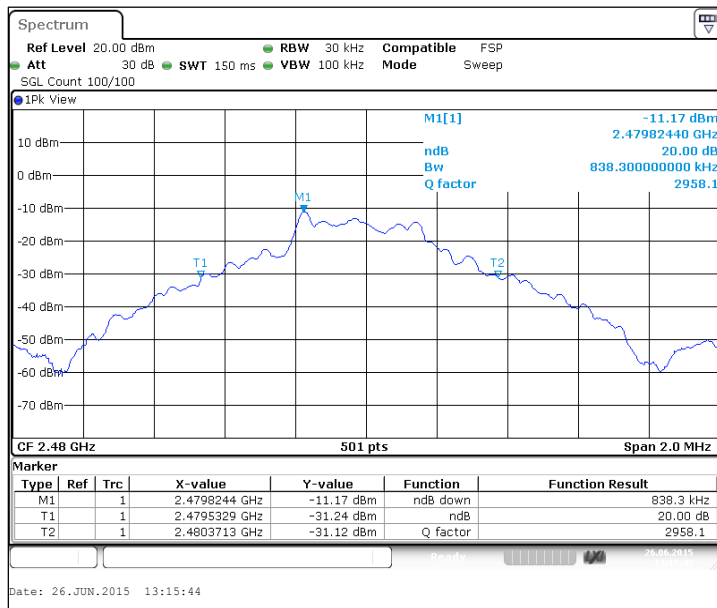
##### 0 / 2402



##### 40 / 2442



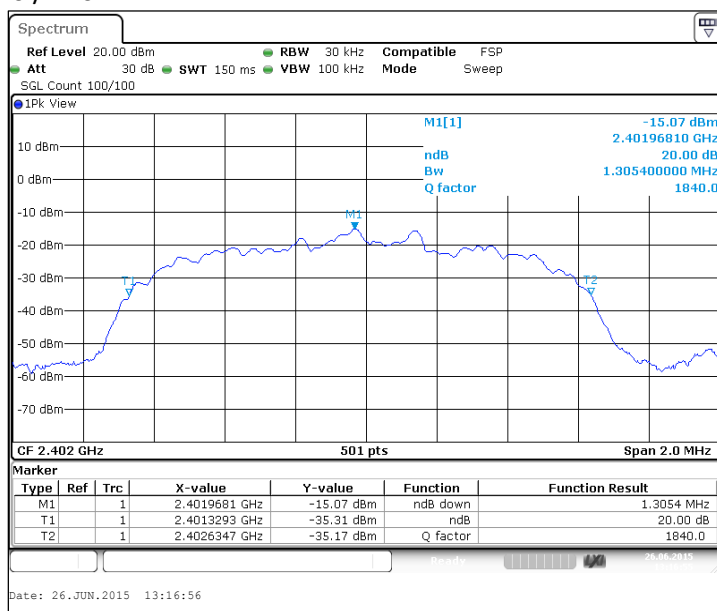
78 / 2480



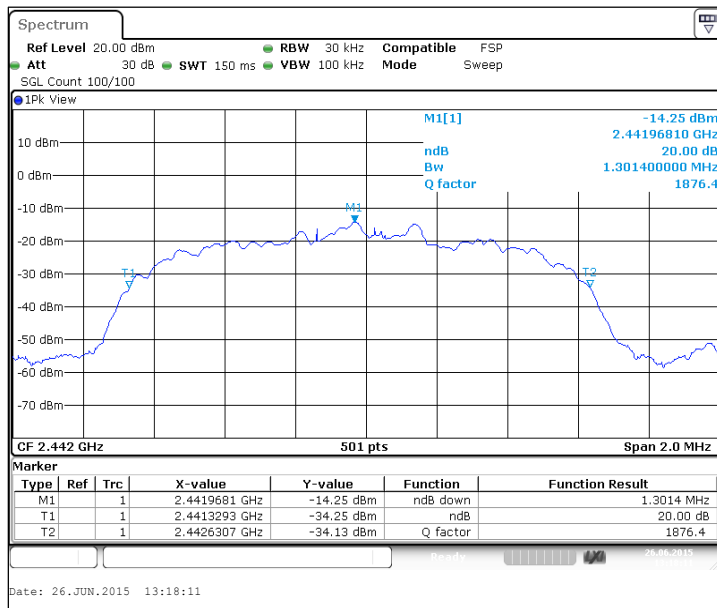
### 5.3.2 8DPSK modulation, PRBS packet type

| Channel / f <sub>c</sub> [MHz] | 20 dB bandwidth [kHz] |
|--------------------------------|-----------------------|
| 0 / 2402                       | 1305.4                |
| 40 / 2442                      | 1301.4                |
| 78 / 2480                      | 1301.4                |

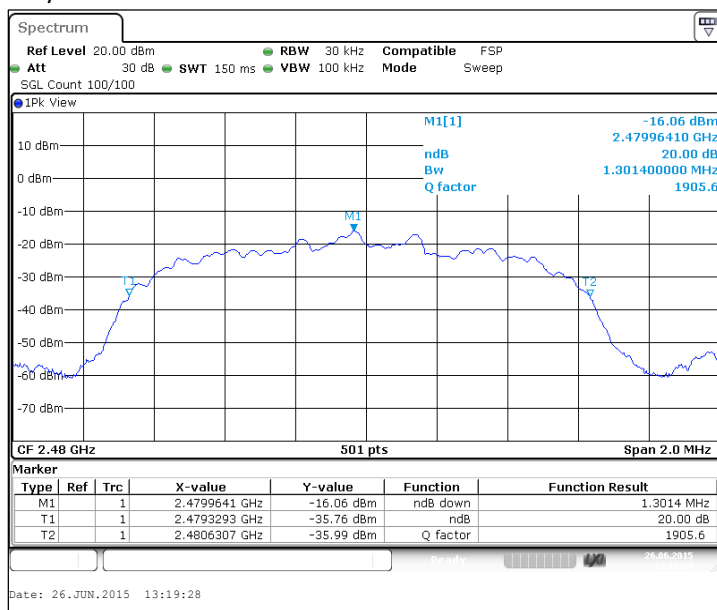
0 / 2402



40 / 2442



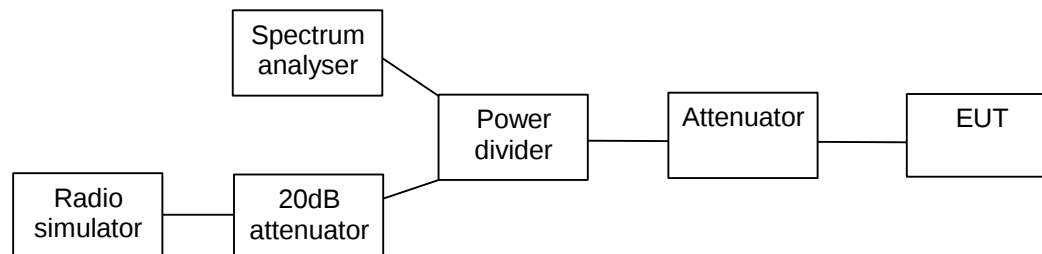
78 / 2480



## 6. Carrier frequency separation (FCC §15.247(a)(1), RSS-210 A8.1(b))

|                                                 |                     |
|-------------------------------------------------|---------------------|
| EUT with DUT number                             | RM-1085, DUT 100012 |
| Accessories with DUT numbers                    | SD-241R, DUT 100016 |
| Operation Voltage [V] / [Hz]                    | Nominal             |
| Results                                         | PASSED              |
| Remarks                                         | -                   |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 101.0     |
| Date of measurements                            | 26-Jun-2015         |
| Measured by                                     | Tomi Lipponen       |

### 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-210.

Limits for carrier frequency separation measurements

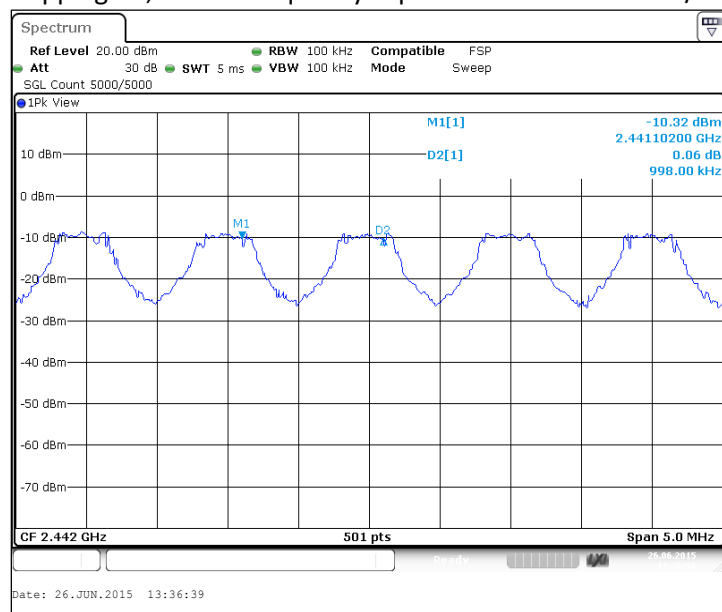
| Limit [MHz]                                  |
|----------------------------------------------|
| $\geq 0.025$ or $2/3$ of the 20 dB bandwidth |

### 6.3. Bluetooth Test results

#### 6.3.1 GFSK modulation, PRBS packet type

| Carrier frequency separation [kHz] | Result |
|------------------------------------|--------|
| 998                                | PASSED |

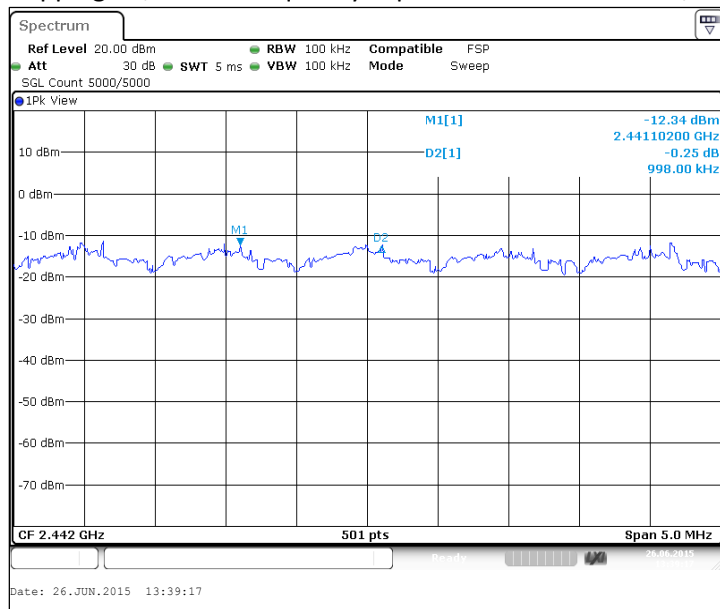
Hopping on, carrier frequency separation of channels 39 / 2441 MHz and 40 / 2442 MHz



### 6.3.2 8DPSK modulation, PRBS packet type

| Carrier frequency separation [kHz] | Result |
|------------------------------------|--------|
| 998                                | PASSED |

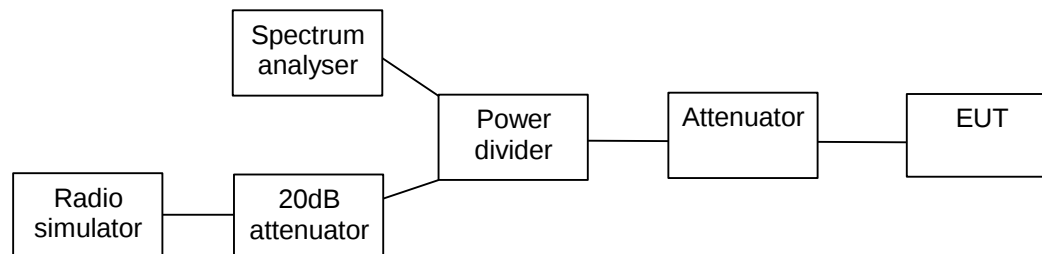
Hopping on, carrier frequency separation of channels 39 / 2441 MHz and 40 / 2442 MHz



## 7. Number of hopping frequencies (FCC §15.247(a)(1)(iii), RSS-210 A8.1(d))

|                                                 |                     |
|-------------------------------------------------|---------------------|
| EUT with DUT number                             | RM-1085, DUT 100012 |
| Accessories with DUT numbers                    | SD-241R, DUT 100016 |
| Operation Voltage [V] / [Hz]                    | Nominal             |
| Results                                         | PASSED              |
| Remarks                                         | -                   |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 101.0     |
| Date of measurements                            | 26-Jun-2015         |
| Measured by                                     | Tomi Lipponen       |

### 7.1. Test Setup



### 7.2. Test method and limit

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

Limits for number of hopping frequencies measurements

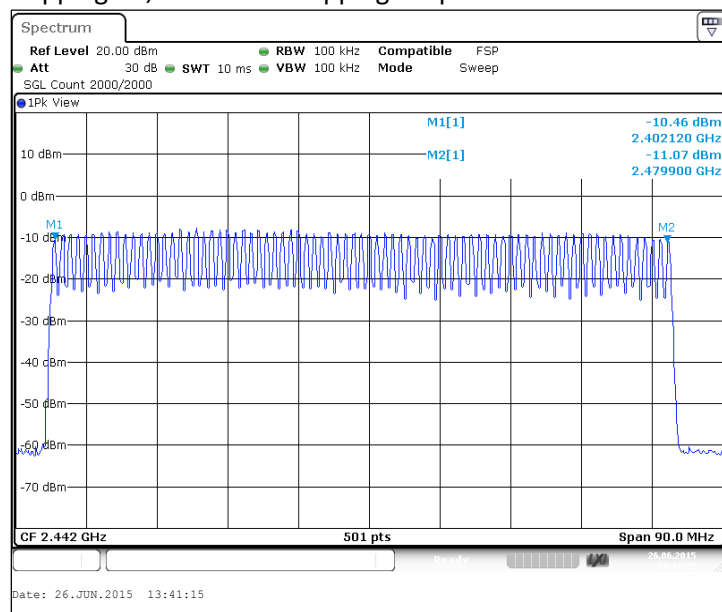
| Limit [number] |
|----------------|
| $\geq 15$      |

### 7.3. Bluetooth Test results

#### 7.3.1 GFSK modulation, PRBS packet type

| Measured number of hopping frequencies | Result |
|----------------------------------------|--------|
| 78                                     | PASSED |

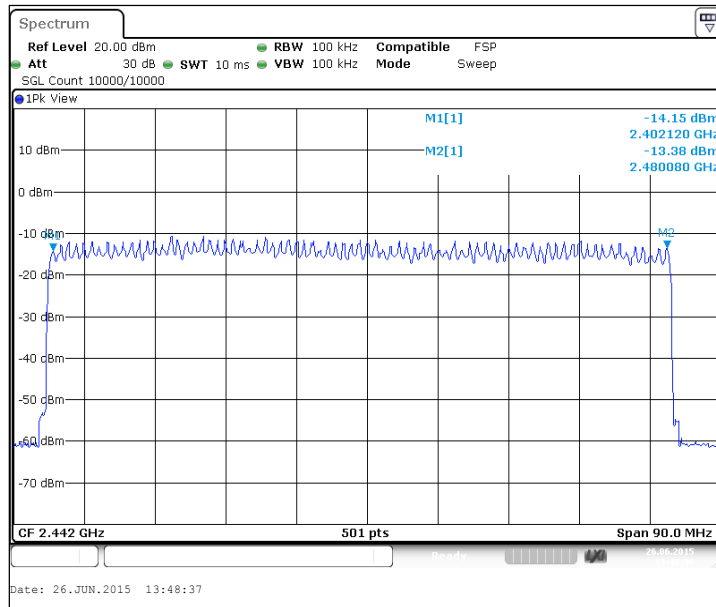
Hopping on, number of hopping frequencies



### 7.3.2 8DPSK modulation, PRBS packet type

| Measured number of hopping frequencies | Result |
|----------------------------------------|--------|
| 78                                     | PASSED |

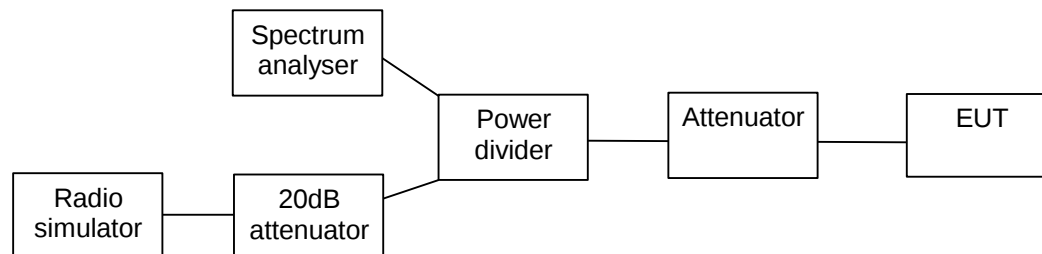
#### Hopping on, number of hopping frequencies



## 8. Time of occupancy (FCC §15.247(a)(1)(iii), RSS-210 A8.1(d))

|                                                 |                     |
|-------------------------------------------------|---------------------|
| EUT with DUT number                             | RM-1085, DUT 100012 |
| Accessories with DUT numbers                    | SD-241R, DUT 100016 |
| Operation Voltage [V] / [Hz]                    | Nominal             |
| Results                                         | PASSED              |
| Remarks                                         | -                   |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 21 / 42 / 101.0     |
| Date of measurements                            | 26-Jun-2015         |
| Measured by                                     | Tomi Lipponen       |

### 8.1. Test Setup



### 8.2. Test method and limit

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

The total time of occupancy is get by multiplying the measured number of transmissions occurred during 31.6 second period with the duration of one transmission.

Limits for time of occupancy measurements

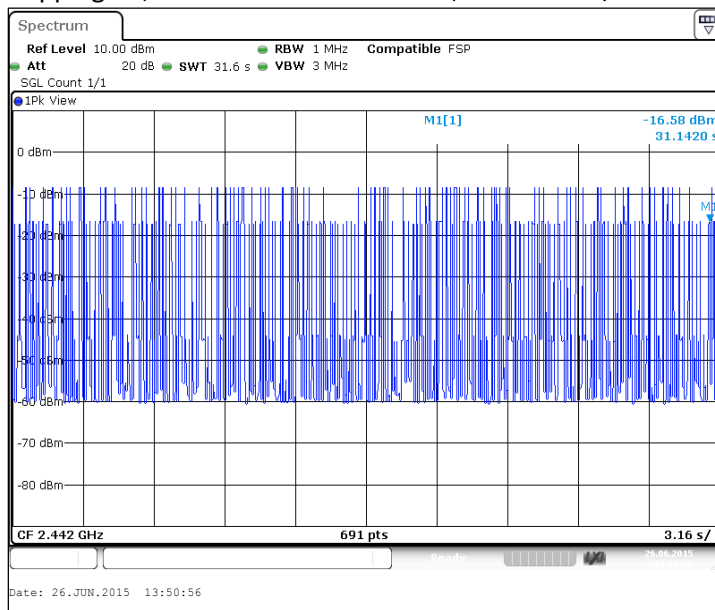
| Limit [s] |
|-----------|
| <= 0.4    |

### 8.3. Bluetooth Test results

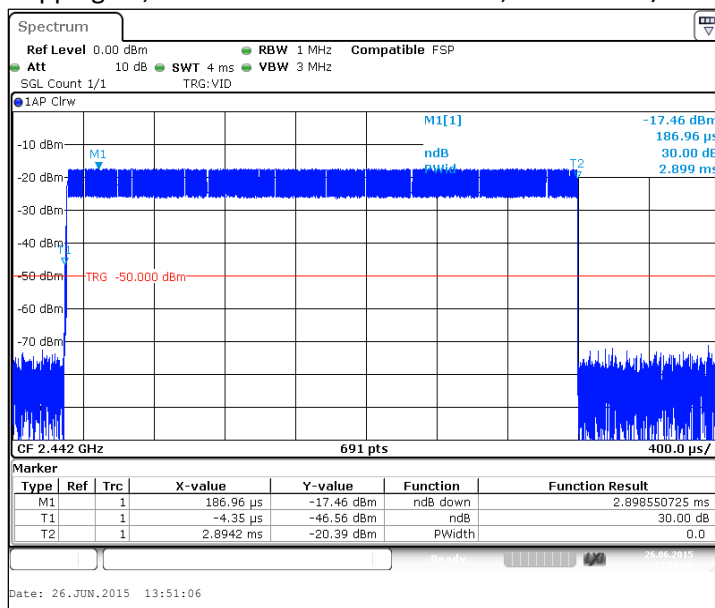
#### 8.3.1 GFSK modulation, PRBS packet type

| Measured number of transmissions | Duration of one transmission [ms] | Time of occupancy [s] | Result |
|----------------------------------|-----------------------------------|-----------------------|--------|
| 87                               | 2.899                             | 0.252                 | PASSED |

Hopping on, number of transmissions, channel 40 / 2442 MHz



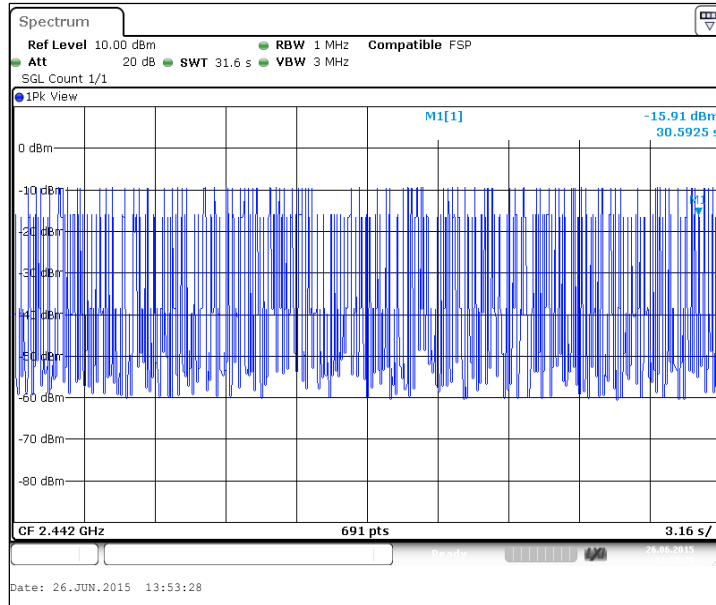
Hopping on, duration of one transmission, channel 40 / 2442 MHz



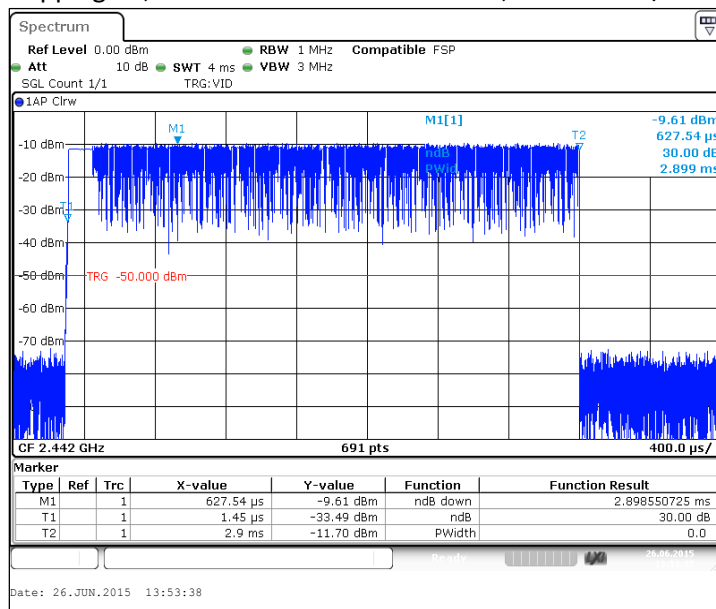
### 8.3.2 8DPSK modulation, PRBS packet type

| Measured number of transmissions | Duration of one transmission [ms] | Time of occupancy [s] | Result |
|----------------------------------|-----------------------------------|-----------------------|--------|
| 90                               | 2.899                             | 0.261                 | PASSED |

Hopping on, number of transmissions, channel 40 / 2442 MHz



Hopping on, duration of one transmission, channel 40 / 2442 MHz



## 9. Test Equipment

### 9.1. Conducted measurements

| Eq. No | Equipment                       | Type          | Manufacturer  | Used in            |
|--------|---------------------------------|---------------|---------------|--------------------|
| 6039   | USB Interface                   | 5541765       | Testo         | 22/24/27, 15C, 15B |
| 6044   | V-network                       | ESH3-Z6       | R&S           | -                  |
| 2059   | V-network                       | ESH3-Z6       | R&S           | -                  |
| 1759   | LISN 50 µH                      | ESH3-Z5       | R&S           | 22/24/27, 15C, 15B |
| 2097   | Pulse Limiter                   | ESH3-Z2       | R&S           | 22/24/27, 15C, 15B |
| 1999   | Receiver                        | ESIB26        | R&S           | 22/24/27, 15C, 15B |
| 2180   | Communication Tester            | CMU200        | R&S           | 22/24/27, 15C, 15B |
| 2390   | Directional Coupler             | DC2600        | AR            | -                  |
| -      | RF immunity / Emission Software | EMC32         | R&S           | 22/24/27, 15C, 15B |
| 2060   | LISN 50 µH                      | ESH3-Z5       | R&S           | 15C, 15B           |
| 1759   | LISN 50 µH                      | ESH3-Z5       | R&S           | 15C, 15B           |
| 2039   | Power Supply                    | PL330QMD      | Thurlby       | 15C, 15B           |
| 6036   | Data Logger                     | 175-H2        | Testo         | 22/24/27, 15C, 15B |
| 2359   | Temperature Test Chamber        | VT4002        | Vötsch        | 22/24/27           |
| 2352   | Spectrum Analyzer               | FSP-30        | R&S           | 22/24/27, 15C      |
| 6109   | Communication Tester            | CMU200        | R&S           | 22/24/27, 15C      |
| 6246   | Power Supply                    | 66332A        | HP            | 22/24/27, 15C      |
| 1992   | Signal Generator                | 83630B        | Agilent       | 15C, 15B           |
| 6098   | Signal Generator                | 8648C         | Agilent       | -                  |
| 6046   | Attenuator 10dB                 | 8493C         | Agilent       | 22/24/27, 15C      |
| 6047   | Attenuator 20dB                 | 8493C         | Agilent       | 22/24/27, 15C      |
| 6045   | Power splitter                  | 11667B        | Agilent       | 22/24/27, 15C      |
| 6247   | Communication Tester            | CBT           | R&S           | 22/24/27, 15C 15B  |
| 6052   | Communication Tester            | CMU200        | R&S           | 22/24/27, 15C 15B  |
| 6248   | Power Supply                    | 6632B         | -             | 22/24/27, 15C 15B  |
| 6106   | Spectrum Analyzer               | FSP-30        | R&S           | 22/24/27, 15C 15B  |
| 6113   | Signal Generator                | SMF100A       | R&S           | 22/24/27, 15C 15B  |
| 6202   | Temperature Test Chamber        | VT4002        | Vötsch        | 22/24/27, 15C 15B  |
| 6122   | Power Splitter                  | 11667B        | Agilent       | 22/24/27, 15C 15B  |
| 6134   | Attenuator 10dB                 | BW-S10-2W263+ | Mini-Circuits | 22/24/27, 15C      |
| 6136   | Attenuator 20dB                 | BW-S20-2W263+ | Mini-Circuits | 22/24/27, 15C      |
| 6103   | Bluetooth tester                | CBT           | R&S           | 22/24/27, 15C 15B  |
| 6250   | Power Supply                    | 6651A         | Agilent       | 22/24/27, 15C 15B  |
| 6108   | Communication Tester            | CMU200        | R&S           | 22/24/27, 15C 15B  |
| 6105   | Spectrum Analyzer               | FSV-30        | R&S           | 22/24/27, 15C 15B  |
| 6251   | Temperature Test Chamber        | VT4002        | Vötsch        | 22/24/27, 15C 15B  |
| 6243   | Power Splitter                  | 1167B         | Agilent       | 22/24/27, 15C 15B  |
| 6245   | Attenuator 10dB                 | BW-S10-2W263+ | Mini-Circuits | 22/24/27, 15C 15B  |
| 6244   | Attenuator 20dB                 | BW-S20-2W263+ | Mini-Circuits | 22/24/27, 15C 15B  |

### 9.2. Radiated measurements

| Eq. No | Equipment            | Type      | Manufacturer | Used in            |
|--------|----------------------|-----------|--------------|--------------------|
| 2388   | Bluetooth Tester     | CBT       | R&S          | 15B                |
| 10479  | Communication Tester | CMW500    | R&S          | 22/24/27, 15C, 15B |
| 2347   | Communication Tester | CMU200    | R&S          | 22/24/27, 15C, 15B |
| 2009   | Signal Generator     | SMP 22    | R&S          | 22/24/27, 15C, 15B |
| 2348   | Controller           | G-1000DXC | Yaesu        | 22/24/27, 15C, 15B |
| 2349   | Computer Controller  | g-1000DXC | Yaesu        | 22/24/27, 15C, 15B |
| 2116   | Controller           | EMCO 2090 | ETS          | 22/24/27, 15C, 15B |

| Eq. No | Equipment                       | Type                                   | Manufacturer | Used in            |
|--------|---------------------------------|----------------------------------------|--------------|--------------------|
| 2109   | Power Supply                    | PL330QMD                               | Thurlby      | 22/24/27, 15C, 15B |
| 2353   | Receiver                        | ESIB26                                 | R&S          | 22/24/27, 15C, 15B |
| 6115   | Open switch and control unit    | OSP 130                                | R&S          | 22/24/27, 15C, 15B |
| 6116   | Open switch and control unit    | OSP 150                                | R&S          | 22/24/27, 15C, 15B |
| 6117   | Open switch and control unit    | OSP 150                                | R&S          | 22/24/27, 15C, 15B |
| 6131   | Notch Filter                    | WRCT902.4-0.4/40-8SS                   | Wainwright   | 22/24/27, 15C, 15B |
| 6130   | Notch Filter                    | WRCD1880-1.1.25/50-10SS                | Wainwright   | 22/24/27           |
| 6159   | Band Reject Filter              | WRCD1747.8-0.4/40-5SS                  | Wainwright   | 22/24/27, 15C, 15B |
| 6158   | Band Reject Filter              | WRCT836.6-0.4/40-8SS                   | Wainwright   | 22/24/27, 15C, 15B |
| 6197   | Band Reject Filter              | WRCJV2531/2539-2523/2547-60/12SS       | Wainwright   | 22/24/27, 15C, 15B |
| 2231   | Band Reject Filter              | WRCG1947/1953-1940/1960-40/6SS         | Wainwright   | 22/24/27, 15C, 15B |
| 2391   | Band Reject Filter              | WRCG1729.4/1735.4-1722.4/1742.4-40/6SS | Wainwright   | 27                 |
| 2386   | Band Reject Filter              | WRCG1764.4/1770.4-1760.4/1774.4-40/6SS | Wainwright   | 22/24/27, 15C, 15B |
| 2385   | Band Reject Filter              | WRCG1744.4/1750.4-1740.4/1754.4-40/6SS | Wainwright   | 22/24/27, 15C, 15B |
| 2357   | Band Reject Filter              | WRCG2400/2483-2390/2493-35/10SS        | Wainwright   | 15C                |
| 2188   | Preamplifier                    | AFS4-00100300-20-23P-6                 | Miteq        | 22/24/27, 15C, 15B |
| 6195   | High Pass Filter                | -                                      | Wainwright   | 22/24/27, 15C, 15B |
| 2364   | Band Reject Filter              | WRCG1877/1883 - 1870/1890-40/6SS       | Wainwright   | 24                 |
| 2361   | Anechoic Chamber                | 3 m Semi / Full Anechoic Chamber       | Euroshield   | 22/24/27, 15C, 15B |
| 6212   | Antenna Array system            | -                                      | TCC          | 22/24/27, 15C, 15B |
| -      | RF immunity / Emission Software | EMC32                                  | R&S          | 22/24/27, 15C, 15B |
| 6089   | Antenna                         | HFH2-Z2                                | R&S          | 15C, 15B           |
| 2027   | CDN                             | M2 (modified) DC1                      | MEB          | 22/24/27, 15C, 15B |
| 2028   | CDN                             | M3 (modified) DC2                      | MEB          | 22/24/27, 15C, 15B |
| 2176   | CDN                             | CDN 801-M3                             | Lüthi        | 22/24/27, 15C, 15B |
| 2135   | CDN                             | CDN 801-M3                             | Lüthi        | 22/24/27, 15C, 15B |
| 2029   | Power Supply                    | PL330                                  | Thurlby      | 22/24/27, 15C      |
| 6038   | Data Logger                     | Testo 580                              | Testo        | 22/24/27, 15C, 15B |
| 6037   | Data Logger                     | 175-H2                                 | Testo        | 22/24/27, 15C, 15B |
| 6039   | USB Interface                   | 5541765                                | Testo        | 22/24/27, 15C, 15B |

## END OF REPORT