

## FCC Part 15C Compliance Test Report

|                                                         |                                                                                                                                                                                                                                                                        |                                   |                                                                                                                                                                            |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Report no.:</b>                                 | FCC15CBT_RM-1089_06                                                                                                                                                                                                                                                    | <b>Date of Report:</b>            | 10-Oct-2014                                                                                                                                                                |
| <b>Number of pages:</b>                                 | 47                                                                                                                                                                                                                                                                     | <b>Customer's Contact person:</b> | Li Craig                                                                                                                                                                   |
| <b>Testing laboratory:</b>                              | TCC Microsoft 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>                  | Microsoft<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-1089 / Battery BL-L4A / AC-Charger AC-18E / Headset WH-108</b>                                                                                                                                                                                             |                                   |                                                                                                                                                                            |
| <b>FCC ID:</b>                                          | PYARM-1089                                                                                                                                                                                                                                                             | <b>IC:</b>                        | -                                                                                                                                                                          |
| <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. 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>             |                                                                                                                                                                                                                                                                        |                                   |                                                                                                                                                                            |

Fu Roger, Engineer, EMC

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

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| Date of receipt               | 02-Sep-2014                                           |
| Testing completed             | 19-Sep-2014                                           |
| The customer's contact person | Li Craig                                              |
| Test Plan referred to         | T:\Projects\RM-1090\TestPlan\RS_Testplan_RM-1090.xlsm |
| Notes                         | -                                                     |
| Document name                 | FCC15CBT_RM-1089_06.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-1090 | SIM1:004402479710497;SIM2:004402479710505 | 2000a | -  | 02038.00000.14325.55001 | 54590 |
| Battery    | BL-L4A  | 4175354312P10202289;0670762               | -     | -  | -                       | 54592 |
| AC-Charger | AC-18E  | 4868673455310302287;0675695               | -     | -  | -                       | 54218 |
| Headset    | WH-108  | 3022D71                                   | -     | -  | -                       | 54458 |
| Phone      | RM-1090 | SIM1:004402479711594;SIM2:004402479711602 | 2000a | -  | 02038.00000.14325.55001 | 54588 |
| Battery    | BL-L4A  | 4181574341S10300002;0670762               | -     | -  | -                       | 54595 |
| AC-Charger | AC-18E  | 4868674226410700997;0675695               | -     | -  | -                       | 54598 |
| Headset    | WH-108  | 3323471                                   | -     | -  | -                       | 54603 |
| Phone      | RM-1090 | SIM1:004402479711834;SIM2:004402479711842 | 2000a | -  | 02038.00000.14325.55001 | 54587 |
| AC-Charger | AC-18E  | 4868674226410701000;0675695               | -     | -  | -                       | 54599 |
| Battery    | BL-L4A  | 4181574341S10300003;0670762               | -     | -  | -                       | 54594 |
| Headset    | WH-108  | 3323471                                   | -     | -  | -                       | 54601 |

### 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 | PASSED |
| 15.247(d)            | A8.5                          | Spurious RF conducted emissions      | PASSED |
| 15.247(d), 15.209    | A8.5                          | Spurious radiated emissions          | PASSED |
| 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                    | PASSED |

PASSED                      The EUT complies with the essential requirements in the standard.  
FAILED                     The EUT does not comply with the essential requirements in the standard.  
NP                          The test was not performed by the TCC Microsoft Laboratory.  
*The test results of PYARM-1090 are re-used for certification of the PYARM-1089. The table above indicates the results, which will be re-used.*

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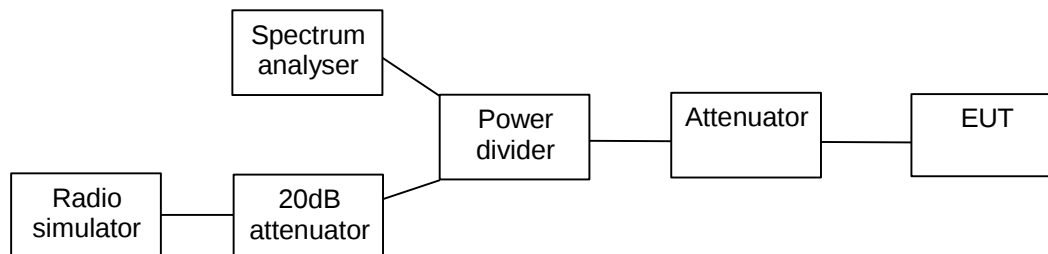
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## 2. Conducted peak output power (FCC §15.247(b)(1), RSS-210 A8.4(2))

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| EUT with DUT number                             | RM-1090, DUT 54590                                        |
| Accessories with DUT numbers                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                   |
| Results                                         | PASSED                                                    |
| Remarks                                         | -                                                         |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 24/52/100.6                                               |
| Date of measurements                            | 19-Sep-2014                                               |
| Measured by                                     | Dou Rubo                                                  |

### 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

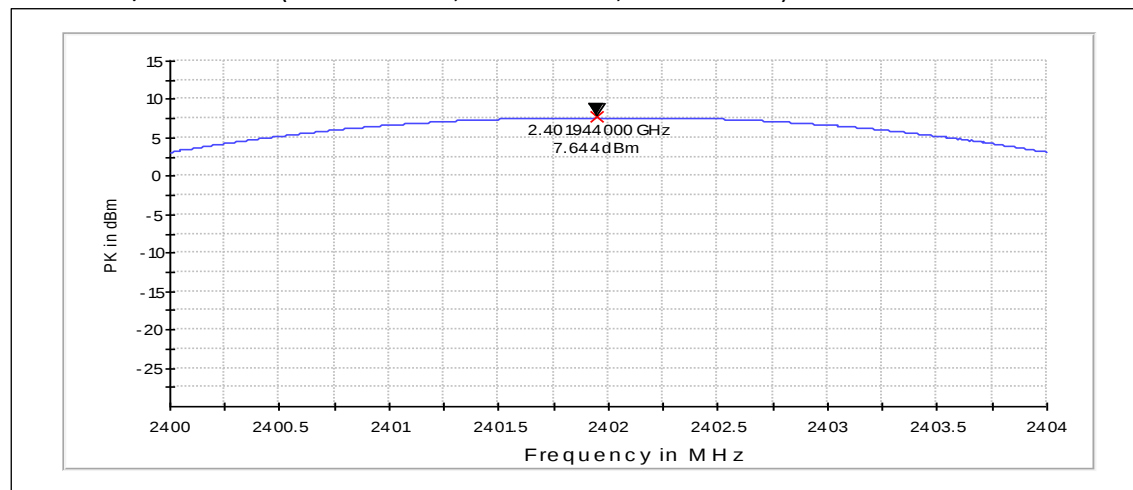
| Frequency range [MHz]        | Limit [W] | Limit [dBm] |
|------------------------------|-----------|-------------|
| 2400 – 2483.5<br>5725 - 5850 | $\leq 1$  | $\leq 30$   |

## 2.3. Bluetooth Test results

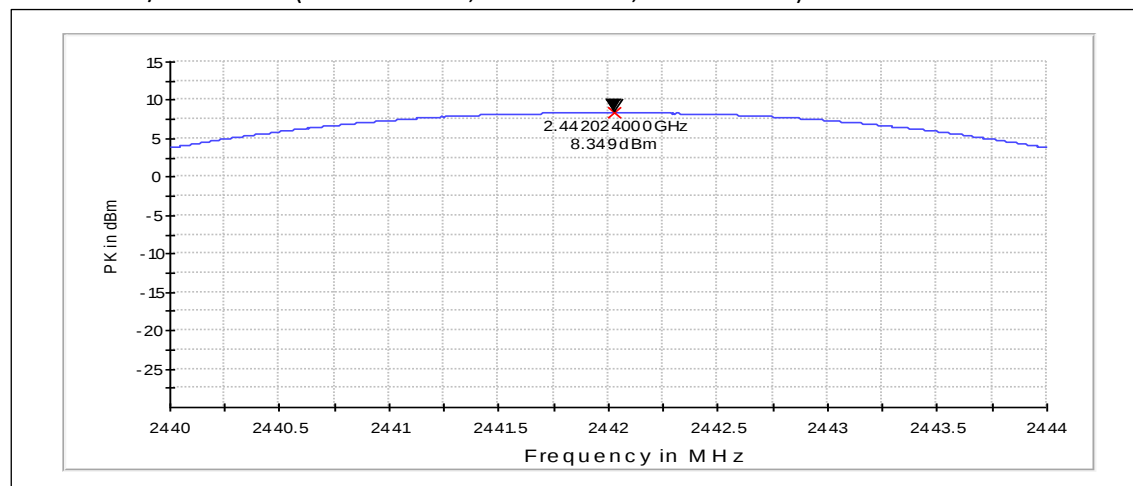
### 2.3.1 GFSK modulation, PRBS packet type

| Channel / $f_c$ [MHz] | P [dBm] | P [mW] | Result |
|-----------------------|---------|--------|--------|
| 0 / 2402              | 7.64    | 5.808  | PASSED |
| 40 / 2442             | 8.35    | 6.839  | PASSED |
| 78 / 2480             | 9.13    | 8.185  | PASSED |

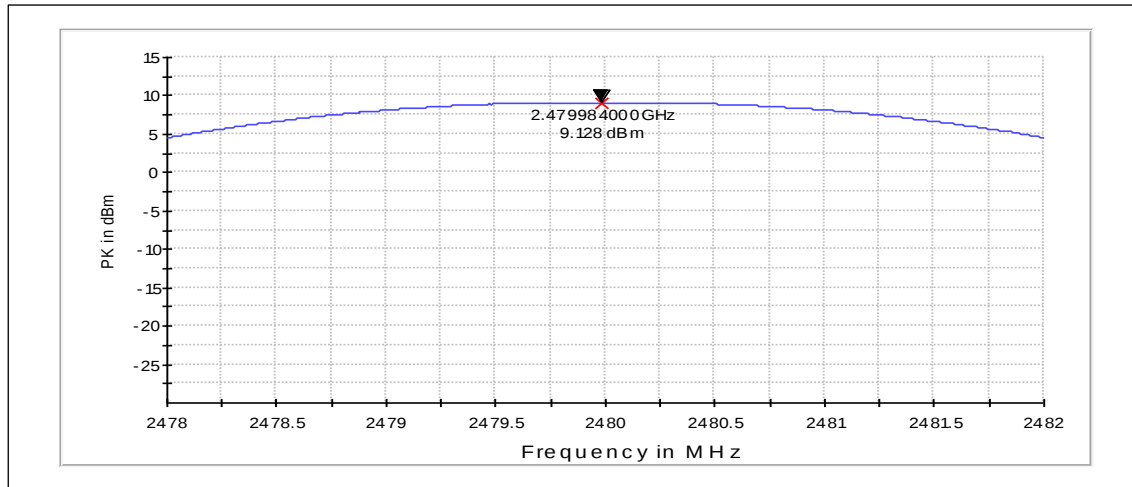
Channel 0 / 2402 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



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



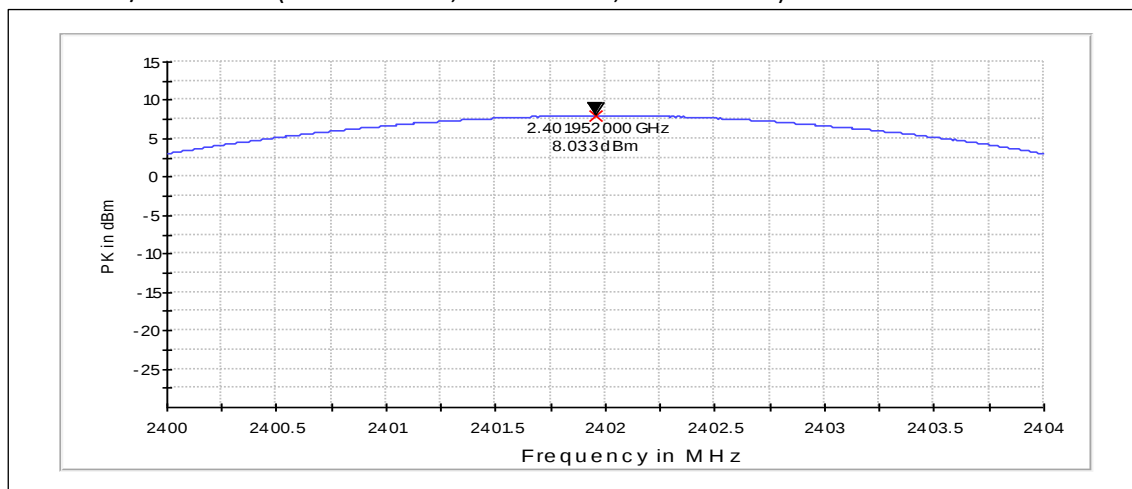
Channel 78 / 2480 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



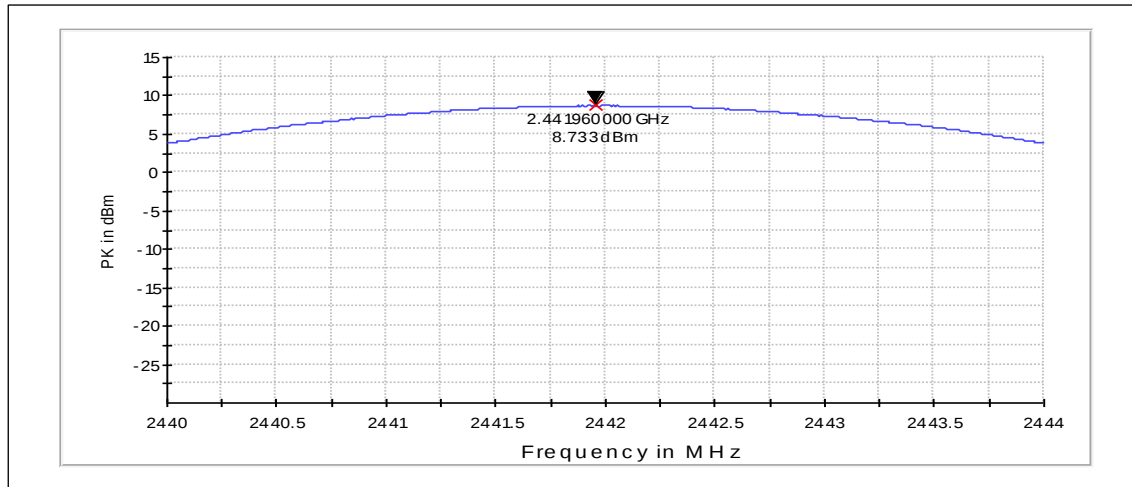
### 2.3.2 8DPSK modulation, PRBS packet type

| Channel / $f_c$ [MHz] | P [dBm] | P [mW] | Result |
|-----------------------|---------|--------|--------|
| 0 / 2402              | 8.03    | 6.353  | PASSED |
| 40 / 2442             | 8.73    | 7.464  | PASSED |
| 78 / 2480             | 9.52    | 8.954  | PASSED |

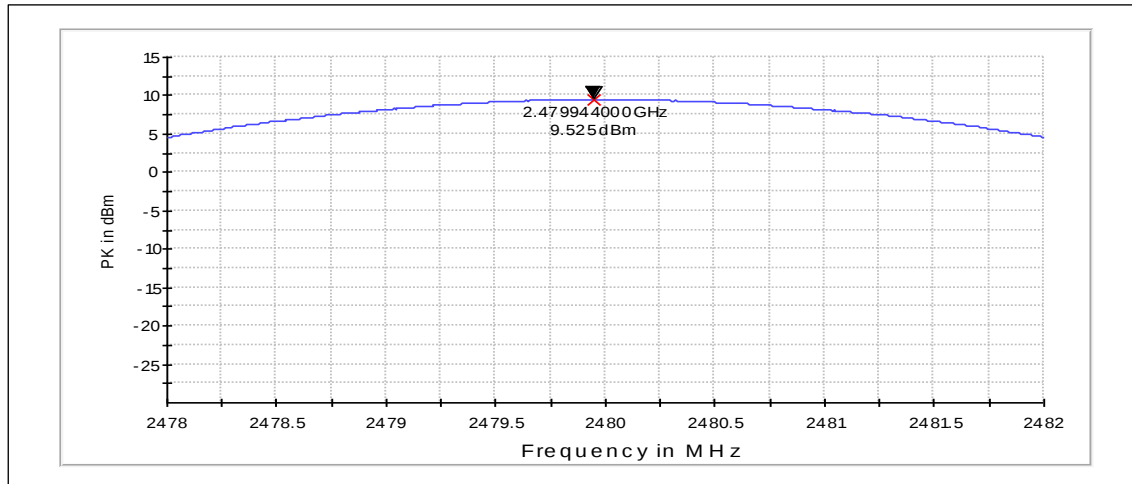
Channel 0 / 2402 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



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



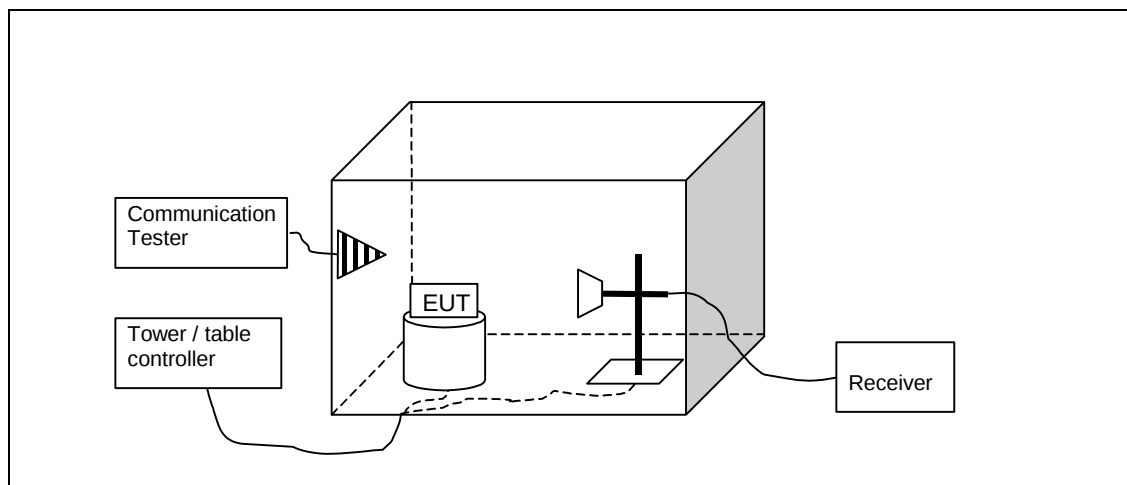
Channel 78 / 2480 MHz (Peak detector, RBW: 3 MHz, VBW: 3 MHz)



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

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| EUT with DUT number                             | RM-1090, DUT 54588                                        |
| Accessories with DUT numbers                    | BL-L4A, DUT 54595 ; AC-18E, DUT 54598 ; WH-108, DUT 54603 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                   |
| Results                                         | PASSED                                                    |
| Remarks                                         | -                                                         |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 23/46/100.7 to 22/46/100.8                                |
| Date of measurements                            | 17-Sep-2014 to 18-Sep-2014                                |
| Measured by                                     | Gao Sherina                                               |

#### 3.1.1 Test setup



#### 3.2. Test method and limit

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

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 ( $A_{TOT} = L_{CABLES} + A_F - G_{PREAMP}$ ).

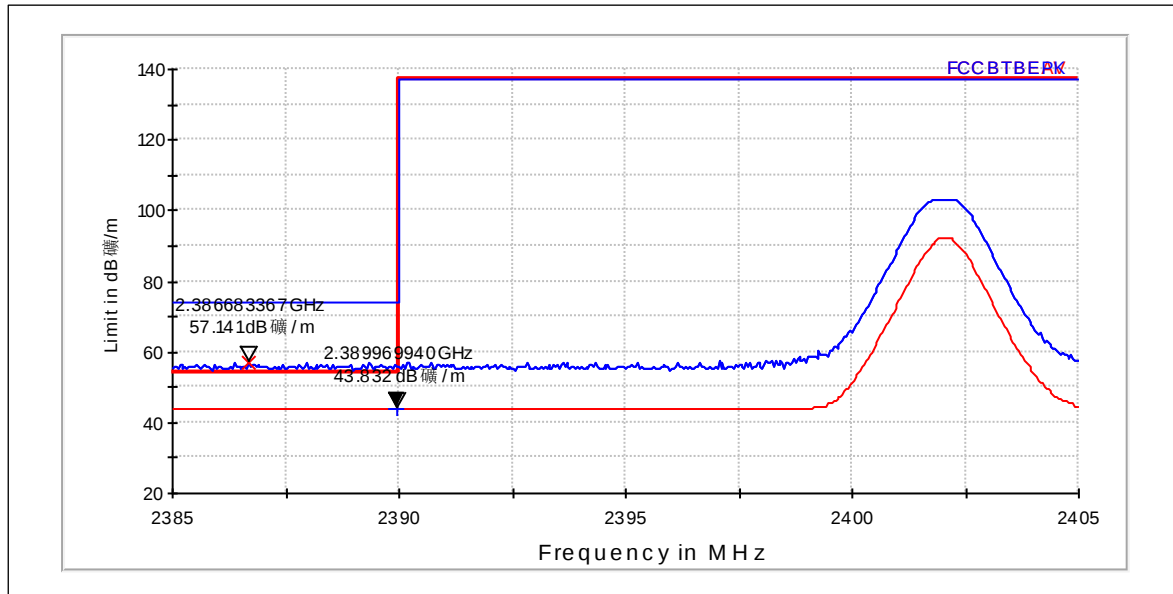
Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

| Frequency range [MHz]       | Limit                              |
|-----------------------------|------------------------------------|
| Below 2390 and above 2483.5 | 54 dBuV/m (avg) and 74 dBuV/m (pk) |

### 3.3. Bluetooth test results

#### 3.3.1 GFSK modulation, PRBS packet type

Channel 0 / 2402 MHz



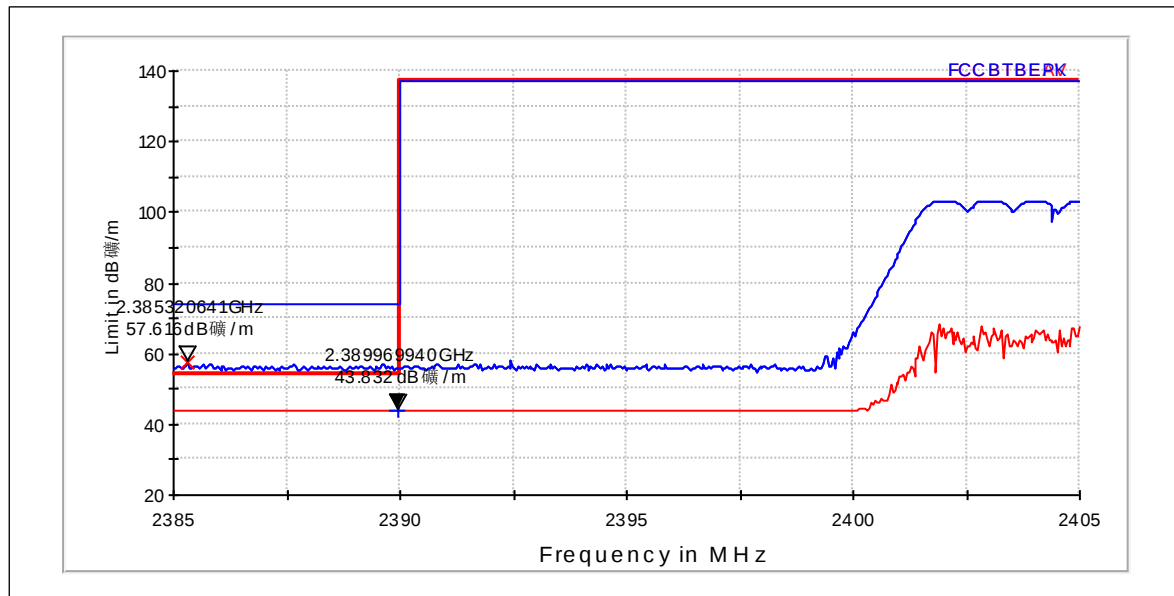
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2387            | 57.14      | 719.532  | 57.78                  | -0.64                 | PASSED  |

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

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2390            | 43.83      | 155.453  | 44.47                  | -0.64                 | PASSED  |

Hopping on. Low end.



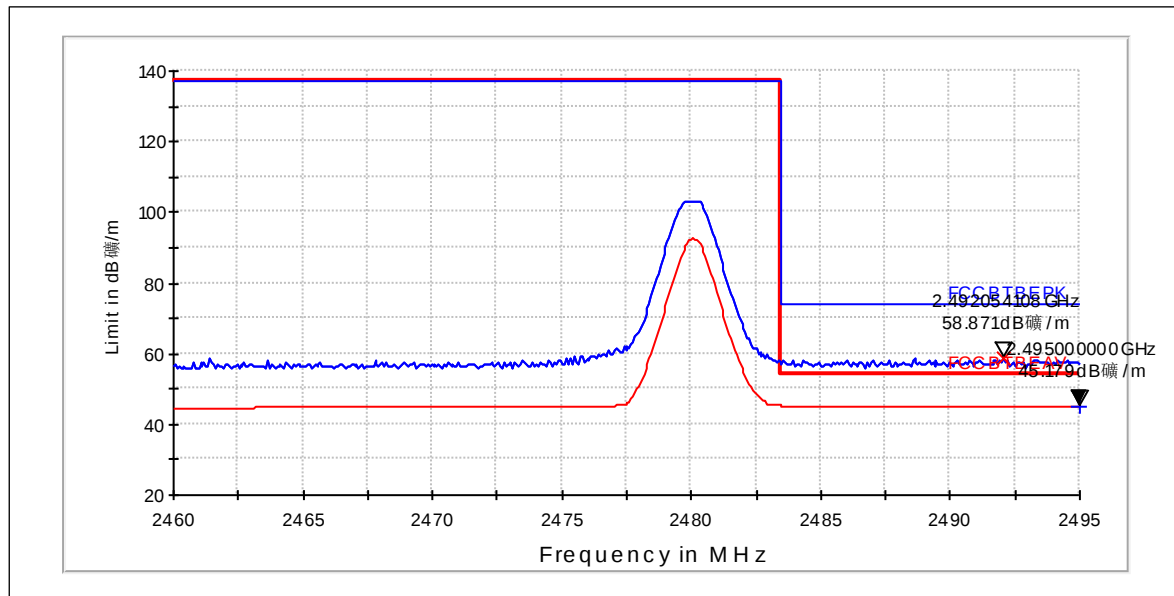
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2385            | 57.62      | 759.976  | 58.26                  | -0.64                 | PASSED  |

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

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2390            | 43.83      | 155.453  | 44.47                  | -0.64                 | PASSED  |

Channel 78 / 2480 MHz



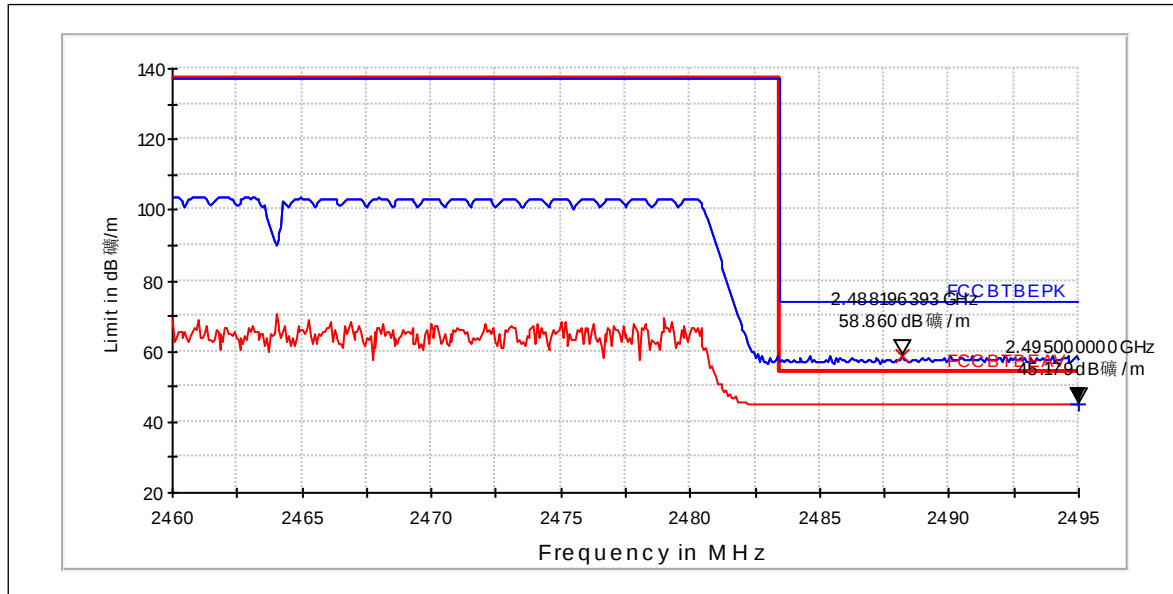
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dB $\mu$ V/m] | E [ $\mu$ V/m] | U <sub>RX</sub> [dB $\mu$ V] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------------|----------------|------------------------------|-----------------------|---------|
| 2492            | 58.87            | 878.112        | 58.46                        | 0.41                  | PASSED  |

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

| Frequency [MHz] | E [dB $\mu$ V/m] | E [ $\mu$ V/m] | U <sub>RX</sub> [dB $\mu$ V] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------------|----------------|------------------------------|-----------------------|---------|
| 2495            | 45.18            | 181.531        | 44.77                        | 0.41                  | PASSED  |

Hopping on. High end.



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

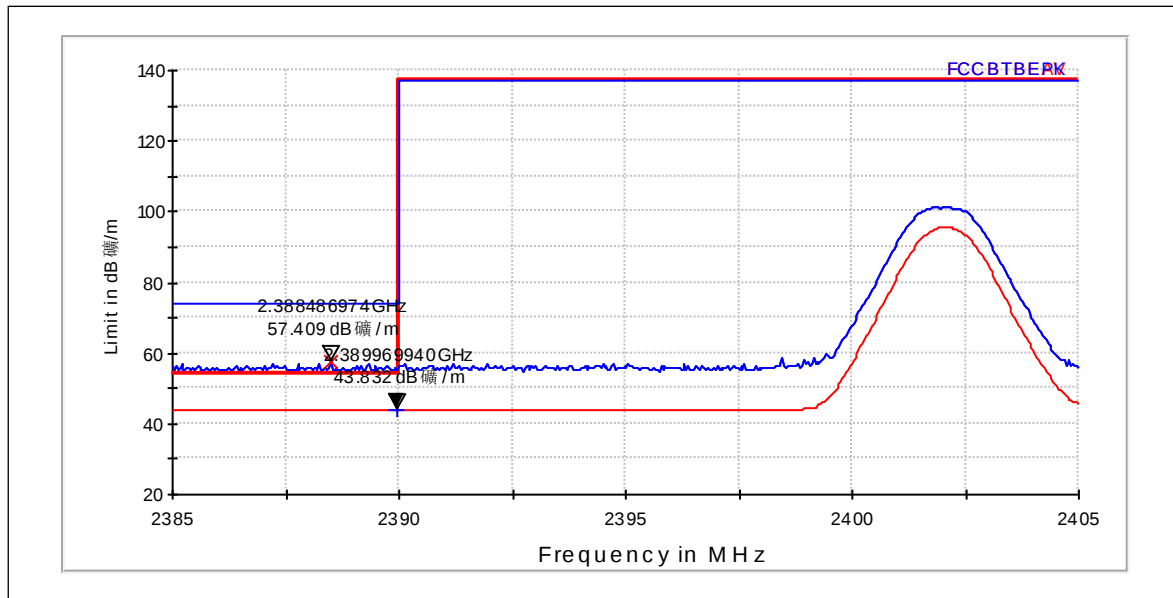
| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2488            | 58.86      | 877.001  | 58.45                  | 0.41                  | PASSED  |

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

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2495            | 45.18      | 181.531  | 44.77                  | 0.41                  | PASSED  |

### 3.3.2 8DPSK modulation, PRBS packet type

Channel 0 / 2402 MHz



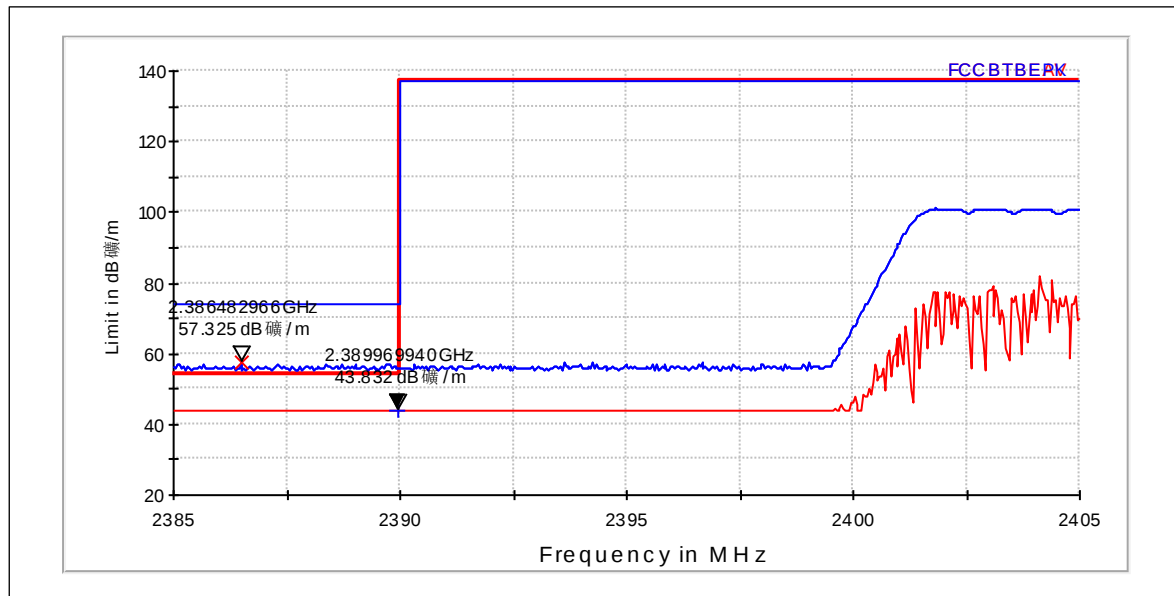
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dB $\mu$ V/m] | E [ $\mu$ V/m] | U <sub>RX</sub> [dB $\mu$ V] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------------|----------------|------------------------------|-----------------------|---------|
| 2388            | 57.41            | 742.079        | 58.05                        | -0.64                 | PASSED  |

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

| Frequency [MHz] | E [dB $\mu$ V/m] | E [ $\mu$ V/m] | U <sub>RX</sub> [dB $\mu$ V] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------------|----------------|------------------------------|-----------------------|---------|
| 2390            | 43.83            | 155.453        | 44.47                        | -0.64                 | PASSED  |

Hopping on. Low end.



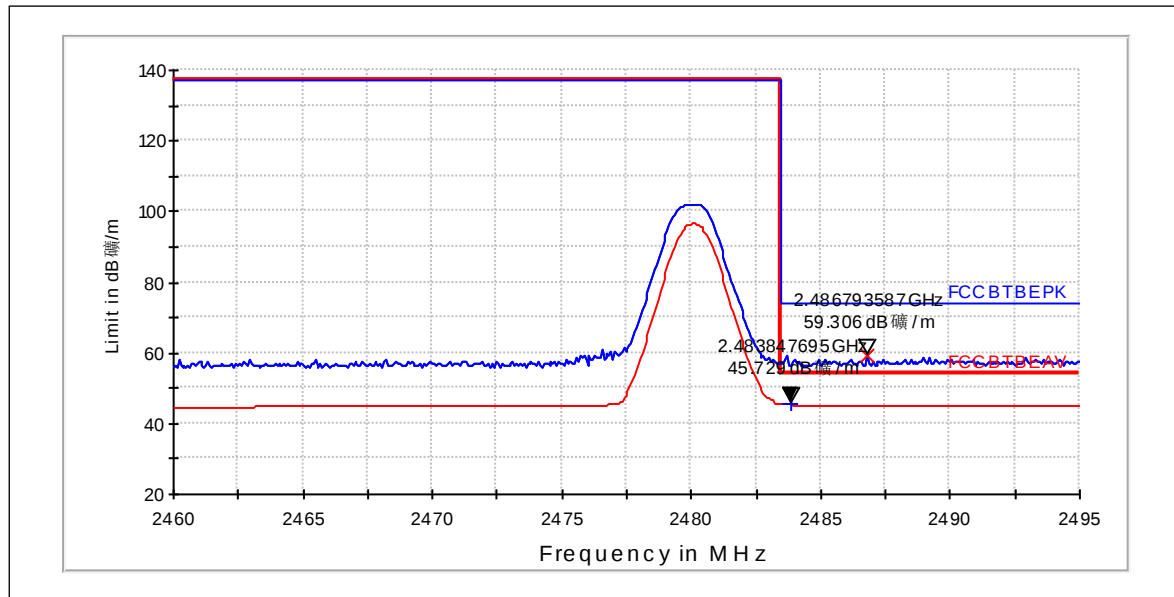
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2386            | 57.33      | 734.937  | 57.97                  | -0.64                 | PASSED  |

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

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2390            | 43.83      | 155.453  | 44.47                  | -0.64                 | PASSED  |

Channel 78 / 2480 MHz



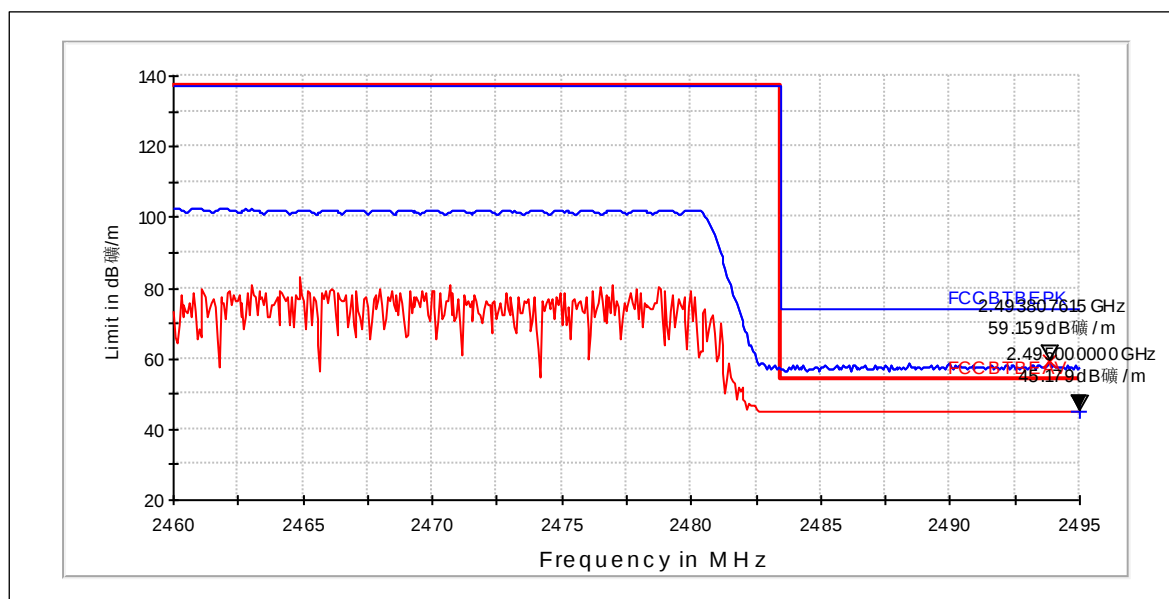
Peak (RBW: 1 MHz, VBW: 1 MHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2487            | 59.31      | 923.209  | 58.9                   | 0.41                  | PASSED  |

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

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2484            | 45.73      | 193.397  | 45.32                  | 0.41                  | PASSED  |

Hopping on. High end.



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] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2494            | 59.16      | 907.716  | 58.75                  | 0.41                  | PASSED  |

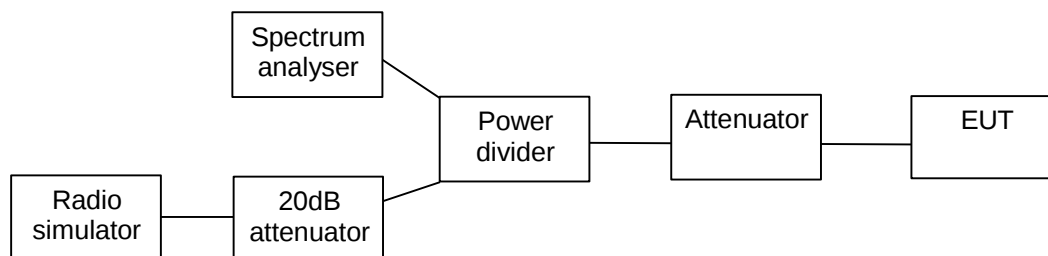
Average (RBW: 1 MHz, VBW: 10 Hz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Results |
|-----------------|------------|----------|------------------------|-----------------------|---------|
| 2495            | 45.18      | 181.531  | 44.77                  | 0.41                  | PASSED  |

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

|                                                        |                                                           |
|--------------------------------------------------------|-----------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-1090, DUT 54590                                        |
| <b>Accessories with DUT numbers</b>                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                   |
| <b>Results</b>                                         | PASSED                                                    |
| <b>Remarks</b>                                         | -                                                         |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 24/52/100.6                                               |
| <b>Date of measurements</b>                            | 19-Sep-2014                                               |
| <b>Measured by</b>                                     | Dou Rubo                                                  |

##### 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.

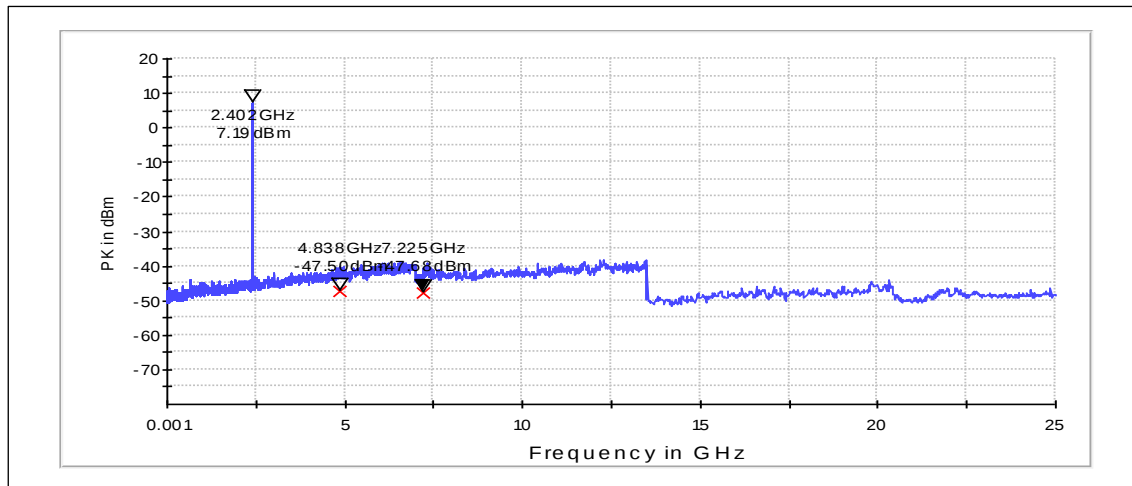
Limits for spurious RF conducted emissions measurements

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

### 4.3. Bluetooth Test results

#### 4.3.1 GFSK modulation, PRBS packet type

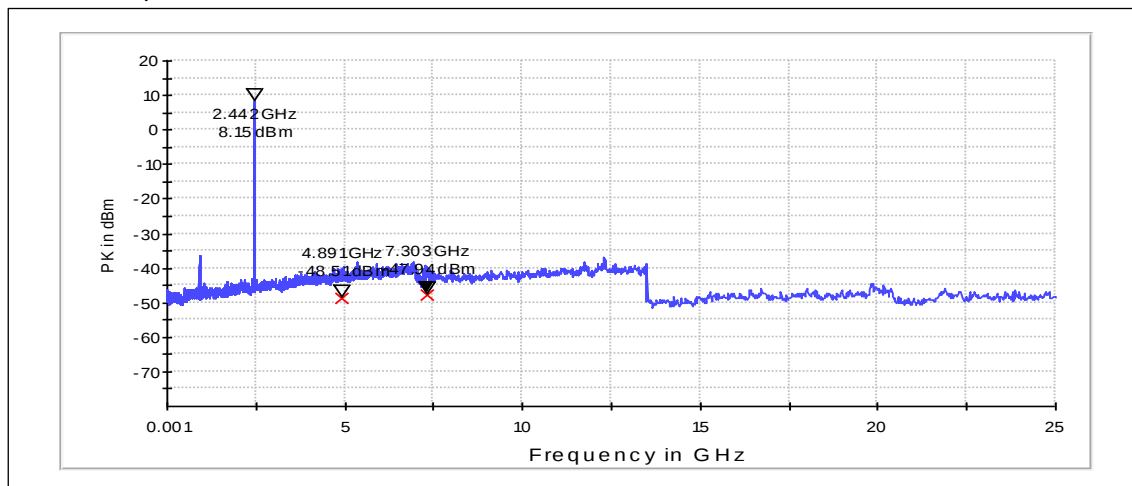
Channel 0 / 2402 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4837.600        | -47.50  | PASSED |
| 7224.600        | -47.68  | PASSED |

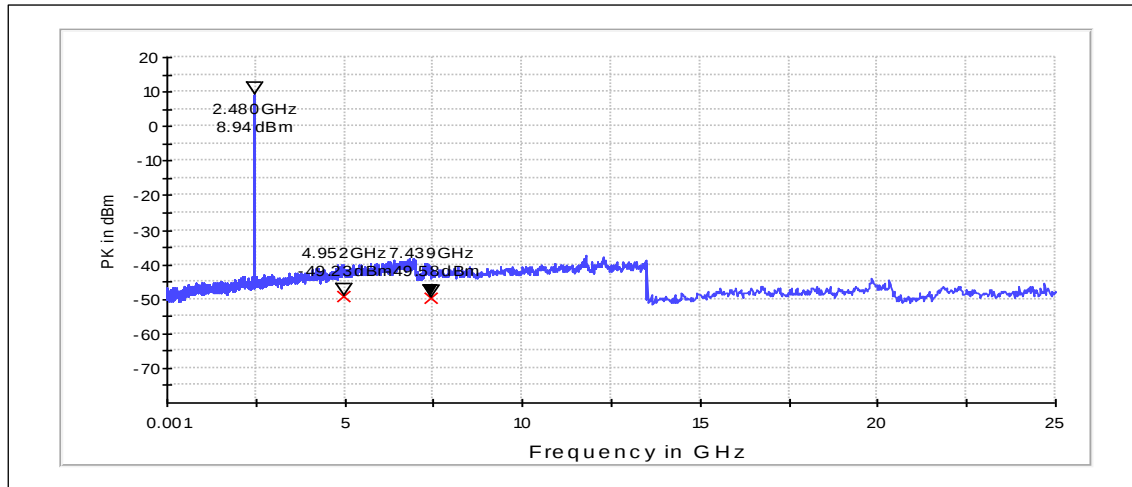
Channel 40 / 2442 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4890.800        | -48.51  | PASSED |
| 7303.200        | -47.94  | PASSED |

Channel 78 / 2480 MHz

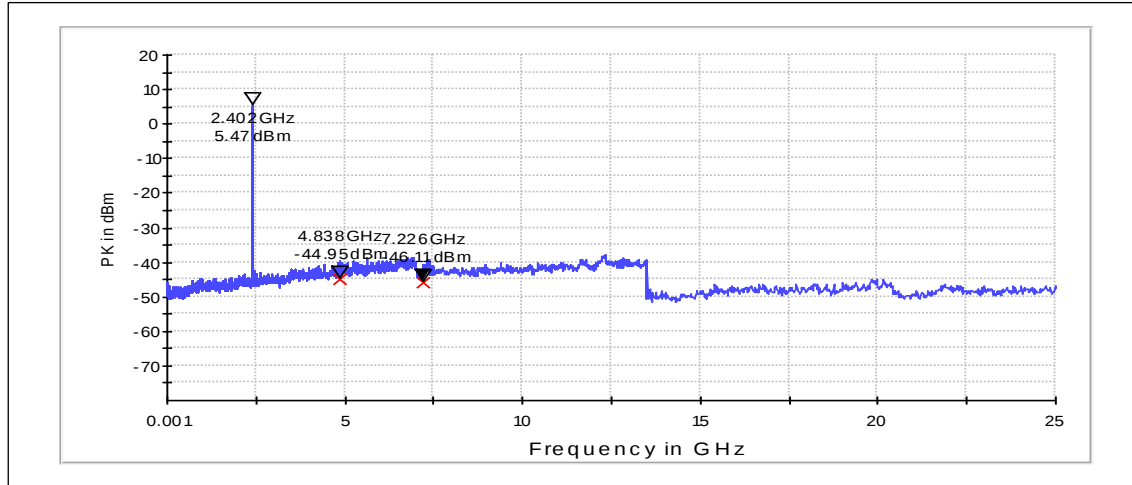


Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4952.400        | -49.23  | PASSED |
| 7439.400        | -49.58  | PASSED |

#### 4.3.2 8DPSK modulation, PRBS packet type

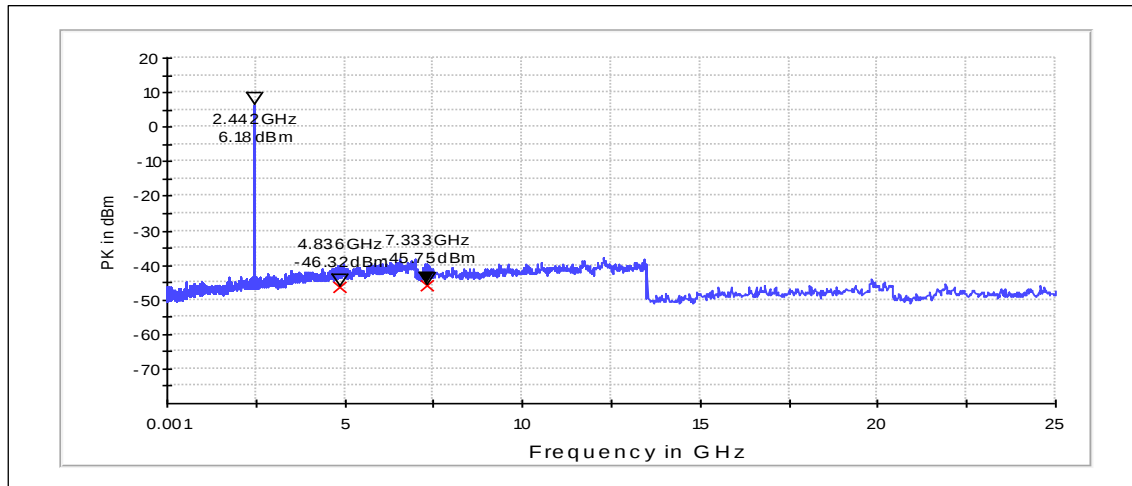
Channel 0 / 2402 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4838.400        | -44.95  | PASSED |
| 7225.800        | -46.11  | PASSED |

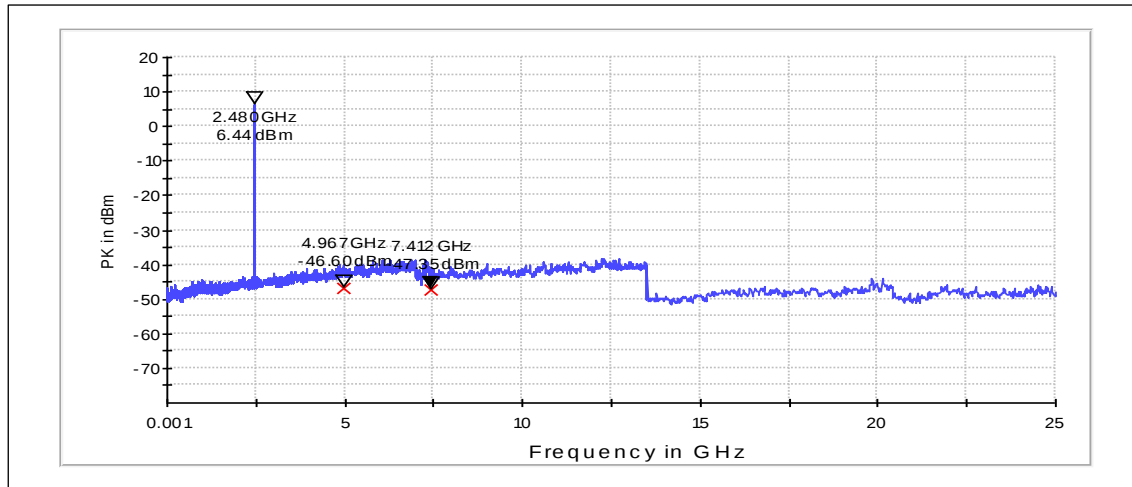
Channel 40 / 2442 MHz



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

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4835.600        | -46.32  | PASSED |
| 7333.200        | -45.75  | PASSED |

Channel 78 / 2480 MHz



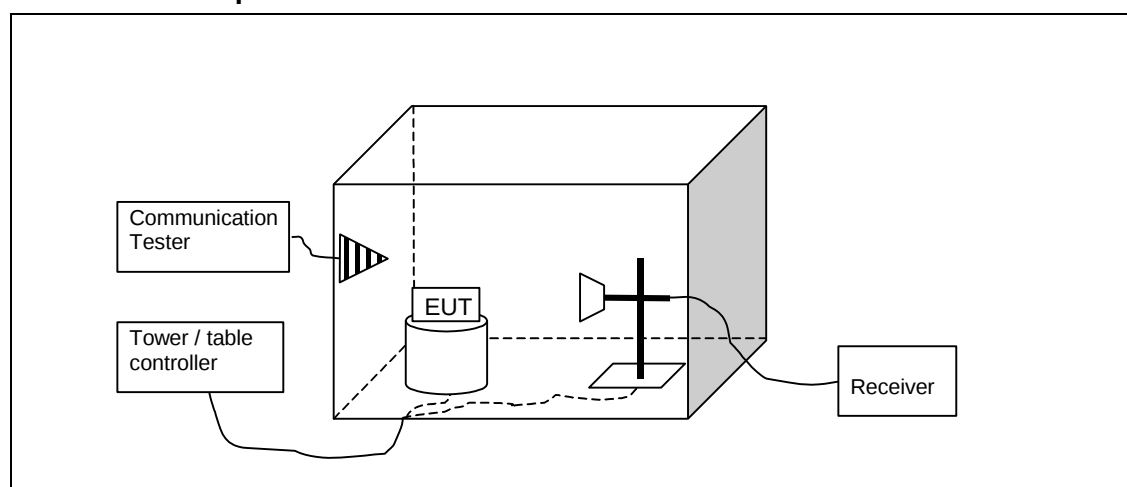
Peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | P [dBc] | Result |
|-----------------|---------|--------|
| 4967.200        | -46.60  | PASSED |
| 7411.800        | -47.35  | PASSED |

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

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| EUT with DUT number                             | RM-1090, DUT 54588                                        |
| Accessories with DUT numbers                    | BL-L4A, DUT 54595 ; AC-18E, DUT 54598 ; WH-108, DUT 54603 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                   |
| Results                                         | PASSED                                                    |
| Remarks                                         | -                                                         |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 22/46/100.8                                               |
| Date of measurements                            | 18-Sep-2014                                               |
| Measured by                                     | Gao Sherina                                               |

### 5.1.1 Test setup



### 5.2. Test method and limit

The measurement is made according to Public notice DA 00-705 and IC standard RSS-210 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 is made up to 10th harmonic of the EUT highest TX channel.

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. Bluetooth test results

#### 5.3.1 8DPSK modulation, PRBS packet type

Channel 40 / 2442 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 35.272          | 19.59      | 9.539    | 30.09                  | -10.5                 | 40             | 20.41  | PASSED  |
| 35.278          | 19.4       | 9.333    | 29.9                   | -10.5                 | 40             | 20.6   | PASSED  |
| 49.495          | 33.73      | 48.585   | 53.83                  | -20.1                 | 40             | 6.27   | PASSED  |
| 49.593          | 33.23      | 45.867   | 53.33                  | -20.1                 | 40             | 6.77   | PASSED  |
| 49.599          | 34.08      | 50.582   | 54.28                  | -20.2                 | 40             | 5.92   | PASSED  |
| 52.857          | 33.57      | 47.698   | 55.77                  | -22.2                 | 40             | 6.43   | PASSED  |
| 902.402         | 23.74      | 15.382   | 27.64                  | -3.9                  | 46             | 22.28  | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 10615.334       | 56.34      | 656.145  | 40.34                  | 16                    | 74             | 17.64  | PASSED  |
| 11405.014       | 55.68      | 608.135  | 39.08                  | 16.6                  | 74             | 18.3   | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 10615.334       | 43.13      | 143.384  | 27.13                  | 16                    | 54             | 10.85  | PASSED  |
| 11405.014       | 43.02      | 141.579  | 26.42                  | 16.6                  | 54             | 10.96  | PASSED  |

Channel 0 / 2402 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4804.4          | 44.44      | 166.725  | 43.24                  | 1.2                   | 74             | 29.54  | PASSED  |
| 7205.5          | 48.99      | 281.514  | 39.29                  | 9.7                   | 95             | 46.24  | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4804.4          | 30.81      | 34.714   | 29.61                  | 1.2                   | 54             | 23.17  | PASSED  |
| 7205.5          | 36.44      | 66.374   | 26.74                  | 9.7                   | ---            | ---    | PASSED  |

Channel 78 / 2480 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4959.5          | 44.19      | 161.994  | 42.79                  | 1.4                   | 74             | 29.79  | PASSED  |
| 7439.8          | 50.34      | 328.852  | 39.54                  | 10.8                  | 74             | 23.64  | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4959.5          | 31.63      | 38.15    | 30.23                  | 1.4                   | 54             | 22.35  | PASSED  |
| 7439.8          | 37.82      | 77.804   | 27.02                  | 10.8                  | 54             | 16.16  | PASSED  |

### 5.3.2 GFSK modulation, PRBS packet type

Channel 0 / 2402 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4804.2          | 44.98      | 177.419  | 43.78                  | 1.2                   | 74             | 29     | PASSED  |
| 7206.7          | 49.86      | 311.172  | 40.06                  | 9.8                   | 95             | 45.37  | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4804.2          | 31.73      | 38.592   | 30.53                  | 1.2                   | 54             | 22.25  | PASSED  |
| 7206.7          | 36.59      | 67.531   | 26.79                  | 9.8                   | ---            | ---    | PASSED  |

## Channel 78 / 2480 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4958.5          | 44.17      | 161.622  | 42.87                  | 1.3                   | 74             | 29.81  | PASSED  |
| 7440.3          | 52.83      | 438.026  | 42.03                  | 10.8                  | 74             | 21.15  | 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] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 4958.5          | 31.6       | 38.019   | 30.3                   | 1.3                   | 54             | 22.38  | PASSED  |
| 7440.3          | 38.88      | 87.902   | 28.08                  | 10.8                  | 54             | 15.1   | PASSED  |

## Channel 40 / 2442 MHz

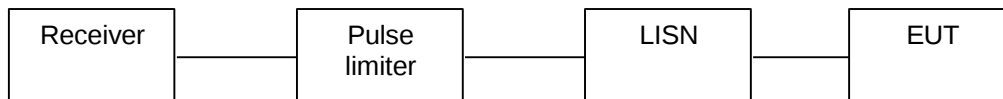
Quasi peak (RBW: 100 kHz, VBW: 100 kHz)

| Frequency [MHz] | E [dBμV/m] | E [μV/m] | U <sub>RX</sub> [dBμV] | A <sub>TOT</sub> [dB] | Limit [dBμV/m] | Margin | Results |
|-----------------|------------|----------|------------------------|-----------------------|----------------|--------|---------|
| 35.482          | 20.19      | 10.221   | 30.79                  | -10.6                 | 40             | 19.81  | PASSED  |
| 35.608          | 22.05      | 12.662   | 32.75                  | -10.7                 | 40             | 17.95  | PASSED  |
| 42.483          | 25.92      | 19.77    | 41.22                  | -15.3                 | 40             | 14.08  | PASSED  |
| 46.371          | 29.21      | 28.874   | 47.11                  | -17.9                 | 40             | 10.79  | PASSED  |
| 49.455          | 33.2       | 45.709   | 53.3                   | -20.1                 | 40             | 6.8    | PASSED  |
| 49.689          | 33.91      | 49.602   | 54.11                  | -20.2                 | 40             | 6.09   | PASSED  |
| 49.743          | 33.64      | 48.084   | 53.84                  | -20.2                 | 40             | 6.36   | PASSED  |
| 52.797          | 33.58      | 47.753   | 55.68                  | -22.1                 | 40             | 6.42   | PASSED  |
| 53.391          | 27.94      | 24.946   | 50.44                  | -22.5                 | 40             | 12.06  | PASSED  |
| 955.474         | 31.05      | 35.686   | 34.45                  | -3.4                  | 46             | 14.97  | PASSED  |

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

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| EUT with DUT number                             | RM-1090, DUT 54587                                        |
| Accessories with DUT numbers                    | AC-18E, DUT 54599 ; BL-L4A, DUT 54594 ; WH-108, DUT 54601 |
| Operation Voltage [V] / [Hz]                    | 115/60                                                    |
| Results                                         | PASSED                                                    |
| Remarks                                         | -                                                         |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 24/50/101.7                                               |
| Date of measurements                            | 17-Sep-2014                                               |
| Measured by                                     | Dou Rubo                                                  |

### 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.

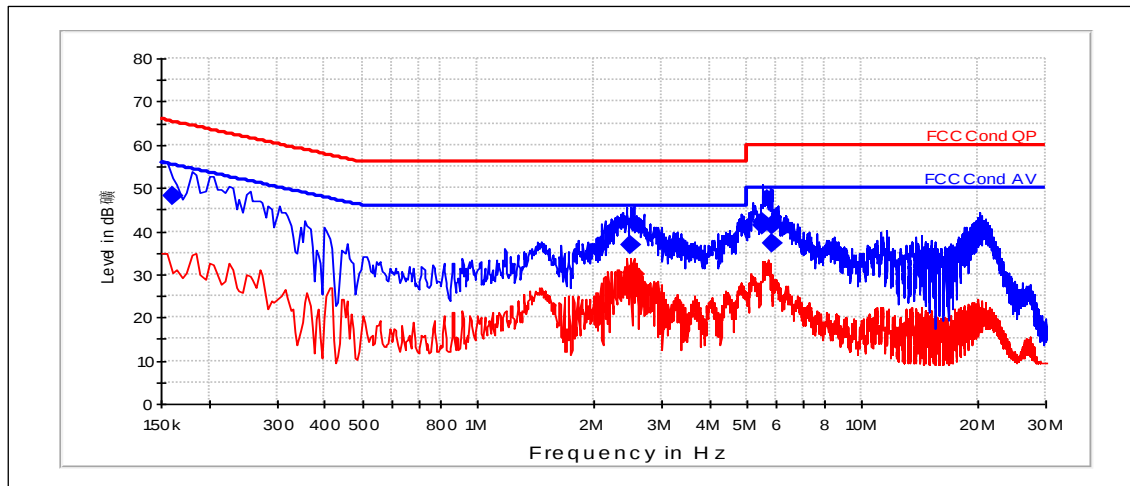
CISPR 22 Class B limits

| 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. Bluetooth Test results

#### 6.3.1 GFSK modulation, PRBS packet type

Channel 40 / 2442 MHz



QuasiPeak (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 0.16            | 48.06    | N    | PASSED |
| 2.49            | 36.72    | L1   | PASSED |
| 5.5             | 42.19    | L1   | PASSED |
| 5.505           | 41.21    | L1   | PASSED |
| 5.82            | 37.25    | N    | PASSED |
| 5.85            | 41.37    | L1   | PASSED |

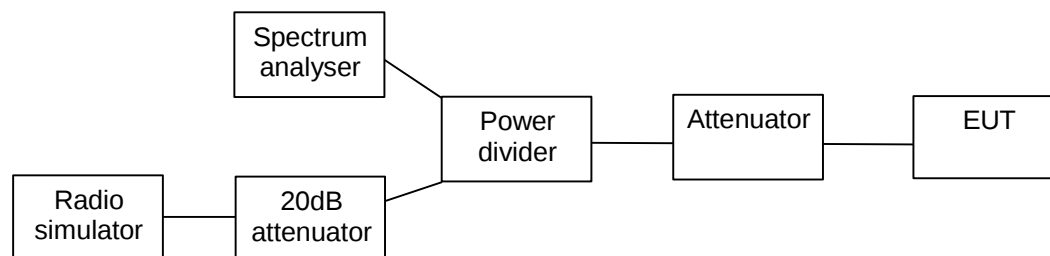
Average (RBW: 9 kHz)

| Frequency [MHz] | U [dBμV] | Line | Result |
|-----------------|----------|------|--------|
| 2.475           | 27.75    | N    | PASSED |
| 2.53            | 30.18    | N    | PASSED |
| 2.56            | 30.1     | L1   | PASSED |

## 7. 20dB(bandwidth) (FCC §15.247(a)(1), RSS-210 A8.1(a))

|                                                        |                                                           |
|--------------------------------------------------------|-----------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-1090, DUT 54590                                        |
| <b>Accessories with DUT numbers</b>                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                   |
| <b>Results</b>                                         | PASSED                                                    |
| <b>Remarks</b>                                         | -                                                         |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 24/52/100.6                                               |
| <b>Date of measurements</b>                            | 19-Sep-2014                                               |
| <b>Measured by</b>                                     | Dou Rubo                                                  |

### 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 20 dB bandwidth measurements

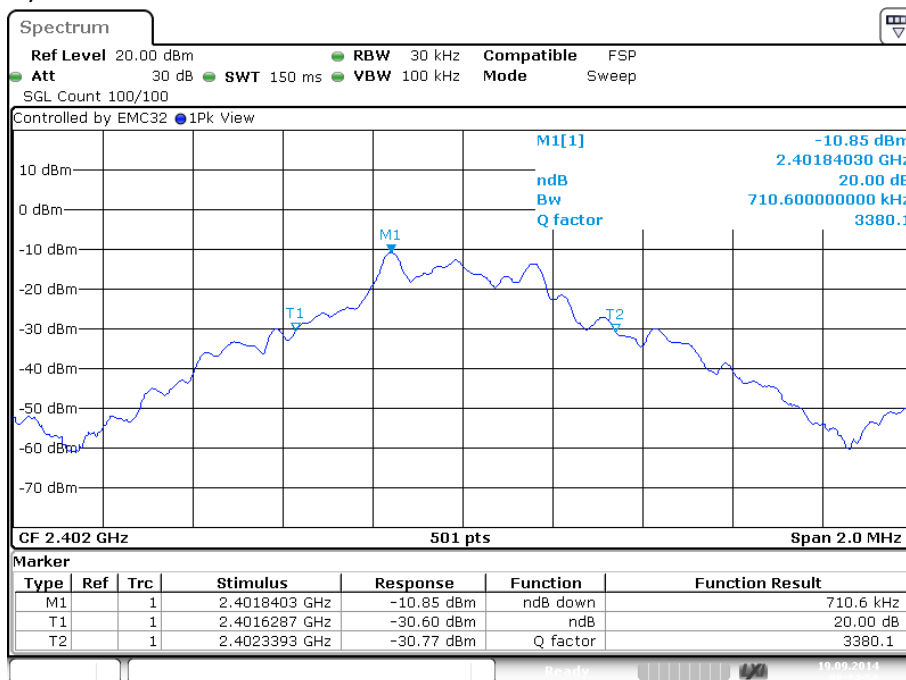
| Limit [MHz] |
|-------------|
| N/A         |

### 7.3. Bluetooth Test results

#### 7.3.1 GFSK modulation, PRBS packet type

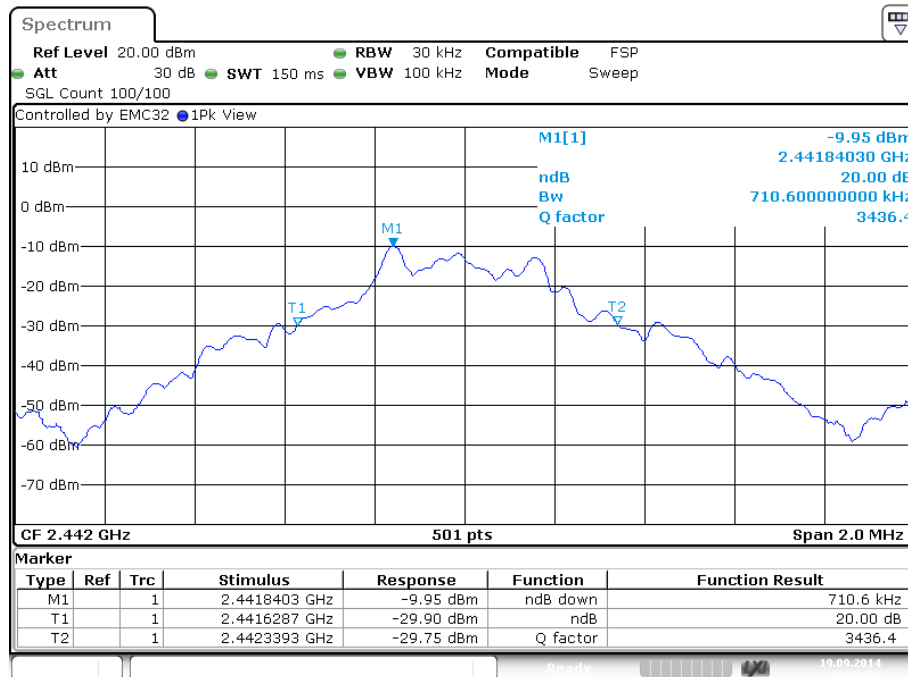
| Channel / f <sub>c</sub> [MHz] | 20 dB bandwidth [kHz] |
|--------------------------------|-----------------------|
| 0 / 2402                       | 710.6                 |
| 40 / 2442                      | 710.6                 |
| 78 / 2480                      | 714.6                 |

0 / 2402



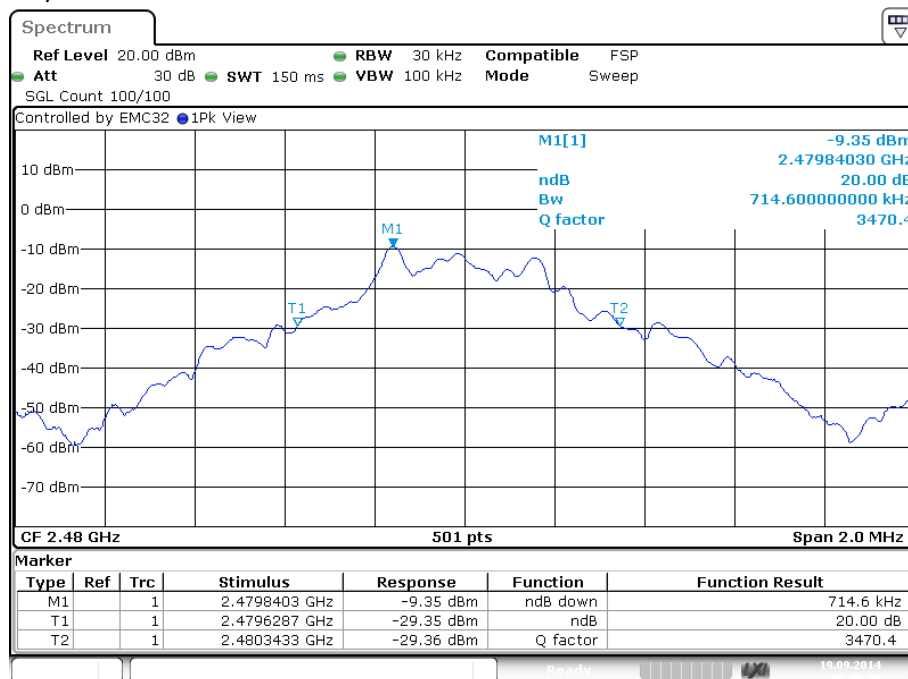
Date: 19.SEP.2014 08:34:58

40 / 2442



Date: 19.SEP.2014 08:42:57

78 / 2480

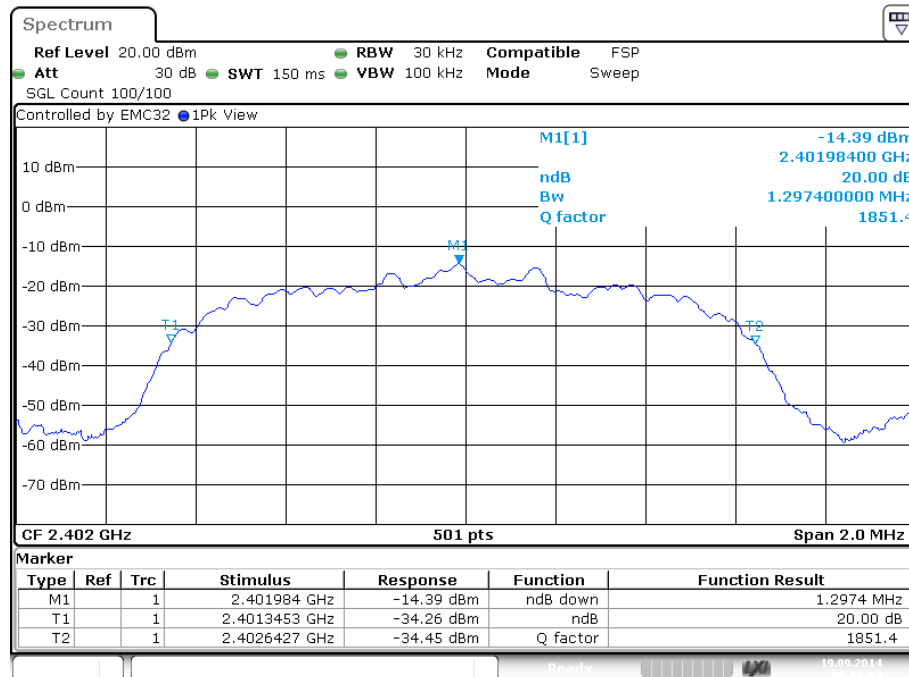


Date: 19.SEP.2014 08:46:50

### 7.3.2 8DPSK modulation, PRBS packet type

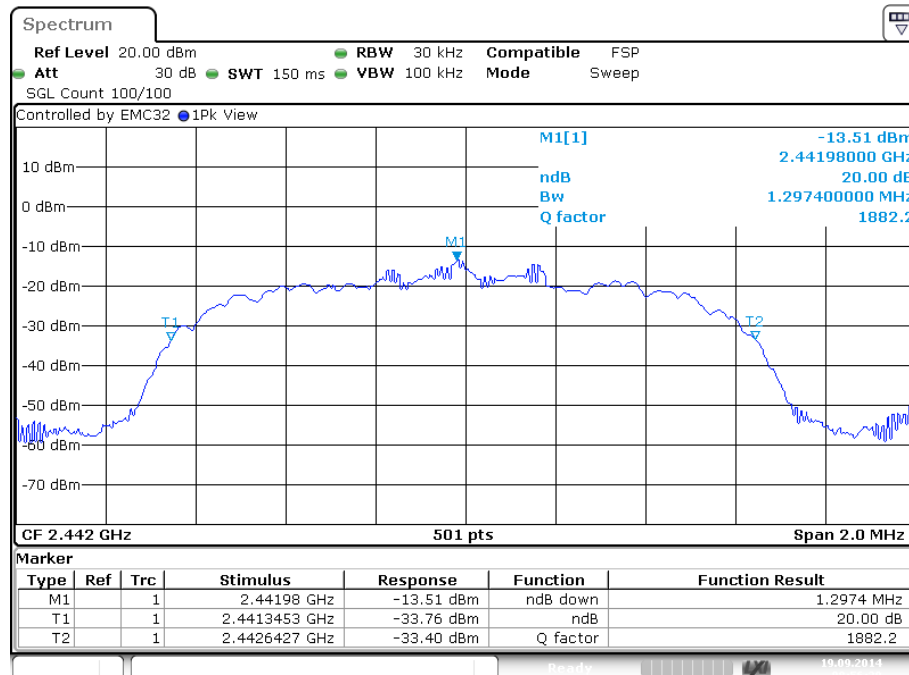
| Channel / $f_c$ [MHz] | 20 dB bandwidth [kHz] |
|-----------------------|-----------------------|
| 0 / 2402              | 1297.4                |
| 40 / 2442             | 1297.4                |
| 78 / 2480             | 1297.4                |

0 / 2402



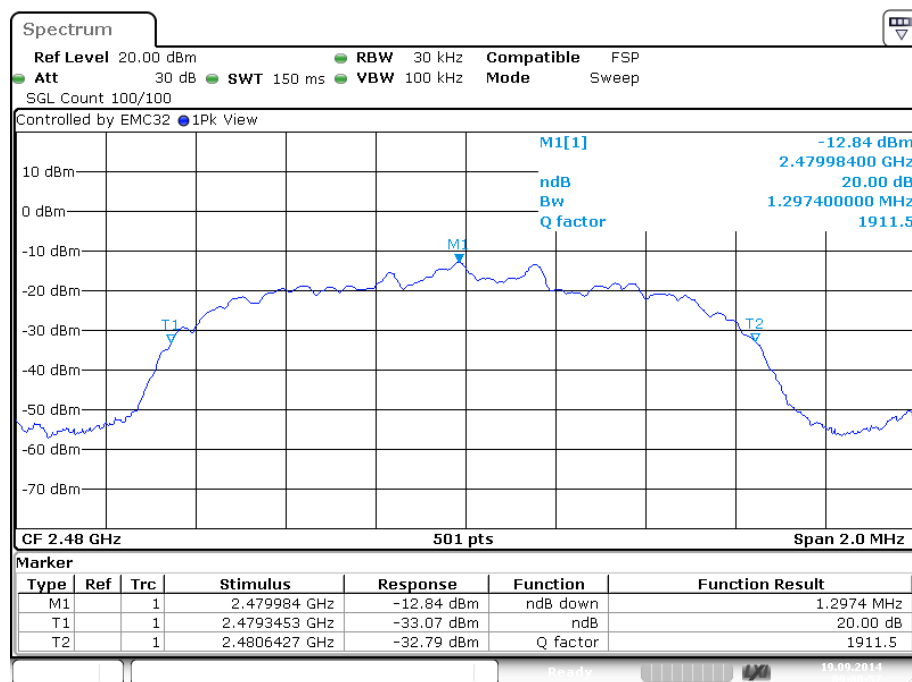
Date: 19.SEP.2014 08:52:04

40 / 2442



Date: 19.SEP.2014 08:56:30

78 / 2480

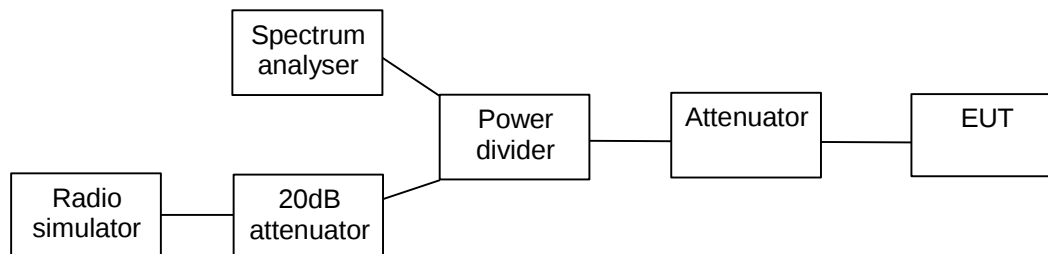


Date: 19.SEP.2014 09:00:58

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

|                                                        |                                                           |
|--------------------------------------------------------|-----------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-1090, DUT 54590                                        |
| <b>Accessories with DUT numbers</b>                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                   |
| <b>Results</b>                                         | PASSED                                                    |
| <b>Remarks</b>                                         | -                                                         |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 24/52/100.6                                               |
| <b>Date of measurements</b>                            | 19-Sep-2014                                               |
| <b>Measured by</b>                                     | Dou Rubo                                                  |

### 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.

Limits for carrier frequency separation measurements

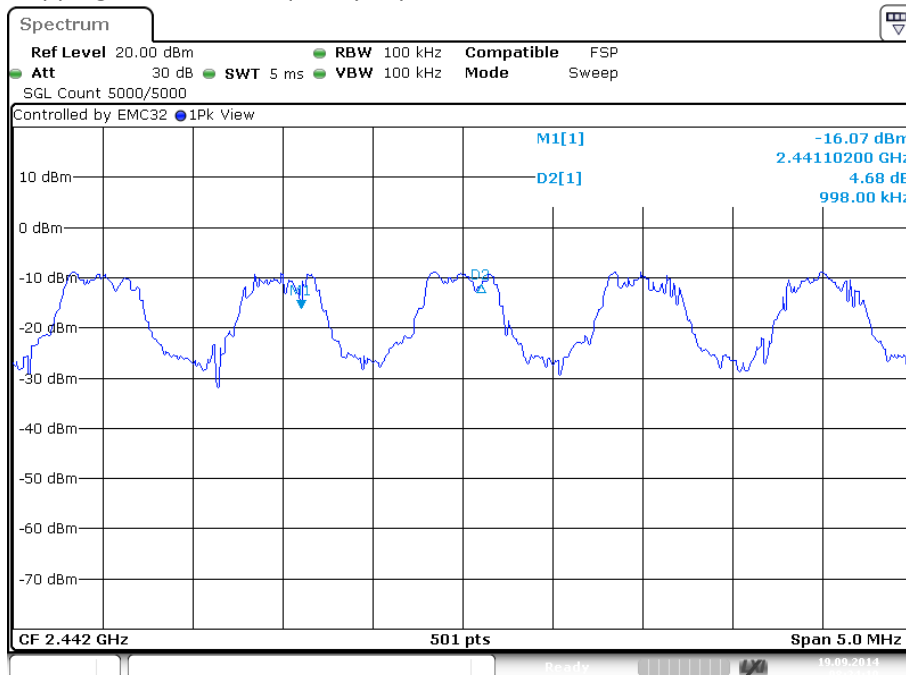
| Limit [MHz]                                  |
|----------------------------------------------|
| $\geq 0.025$ or $2/3$ of the 20 dB bandwidth |

### 8.3. Bluetooth Test results

#### 8.3.1 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

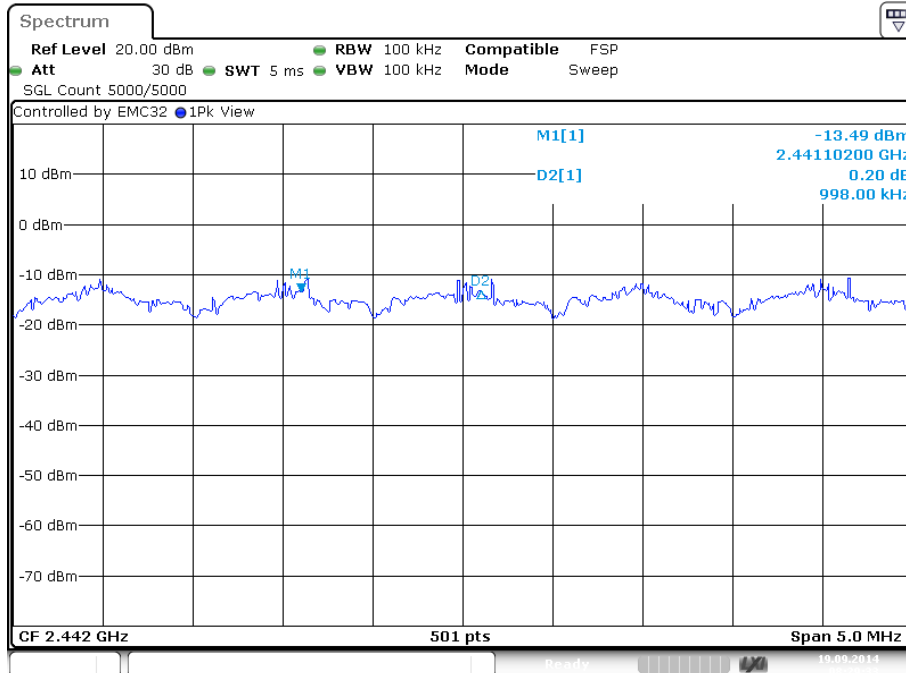


Date: 19.SEP.2014 08:24:11

### 8.3.2 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

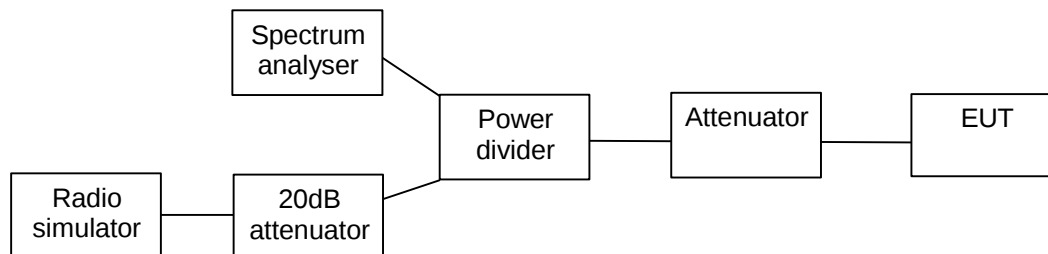


Date: 19.SEP.2014 08:29:34

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

|                                                        |                                                           |
|--------------------------------------------------------|-----------------------------------------------------------|
| <b>EUT with DUT number</b>                             | RM-1090, DUT 54590                                        |
| <b>Accessories with DUT numbers</b>                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| <b>Operation Voltage [V] / [Hz]</b>                    | Nominal                                                   |
| <b>Results</b>                                         | PASSED                                                    |
| <b>Remarks</b>                                         | -                                                         |
| <b>Temp [°C] / Humidity [%RH] / Air Pressure [kPa]</b> | 24/52/100.6                                               |
| <b>Date of measurements</b>                            | 19-Sep-2014                                               |
| <b>Measured by</b>                                     | Dou Rubo                                                  |

### 9.1. Test Setup



### 9.2. 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

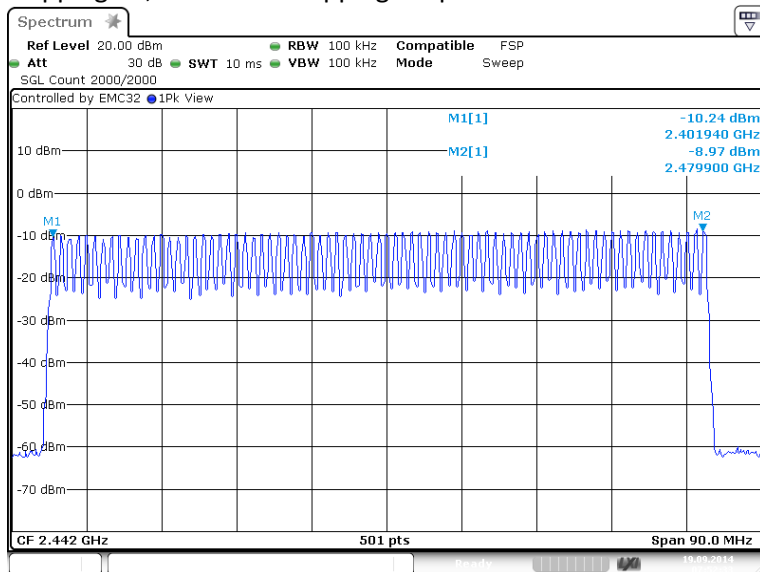
| Limit [number] |
|----------------|
| $\geq 15$      |

### 9.3. Bluetooth Test results

#### 9.3.1 GFSK modulation, PRBS packet type

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

Hopping on, number of hopping frequencies

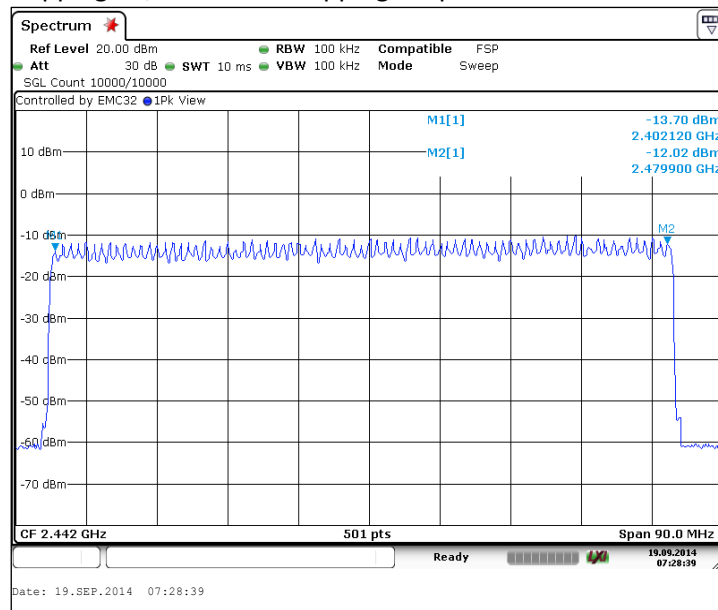


Date: 19. SEP. 2014 07:52:33

### 9.3.2 8DPSK modulation, PRBS packet type

| Measured number of hopping frequencies | Result |
|----------------------------------------|--------|
| 76                                     | PASSED |

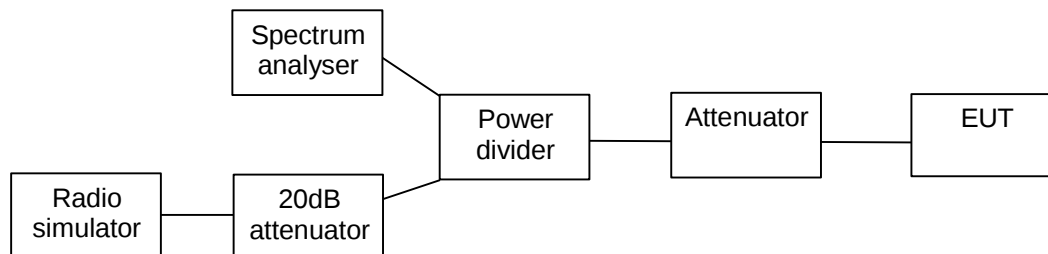
#### Hopping on, number of hopping frequencies



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

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| EUT with DUT number                             | RM-1090, DUT 54590                                        |
| Accessories with DUT numbers                    | BL-L4A, DUT 54592 ; AC-18E, DUT 54218 ; WH-108, DUT 54458 |
| Operation Voltage [V] / [Hz]                    | Nominal                                                   |
| Results                                         | PASSED                                                    |
| Remarks                                         | -                                                         |
| Temp [°C] / Humidity [%RH] / Air Pressure [kPa] | 24/52/100.6                                               |
| Date of measurements                            | 19-Sep-2014                                               |
| Measured by                                     | Dou Rubo                                                  |

### 10.1. Test Setup



### 10.2. 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

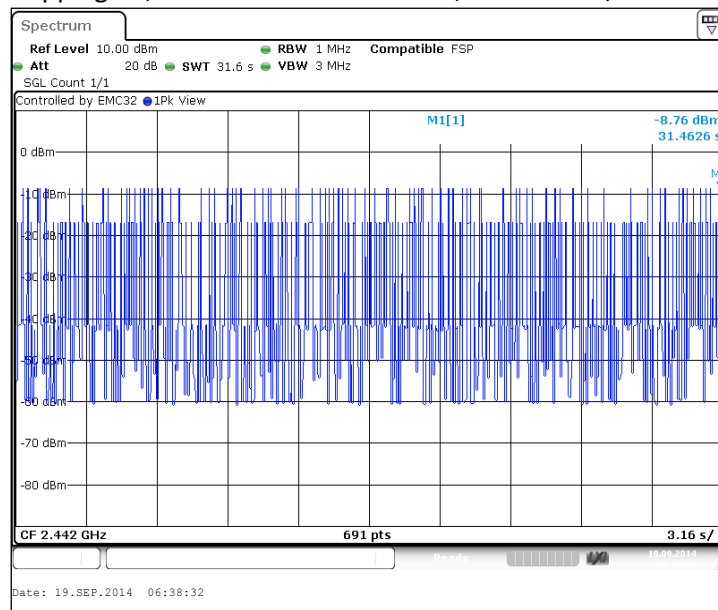
| Limit [s] |
|-----------|
| <= 0.4    |

### 10.3. Bluetooth Test results

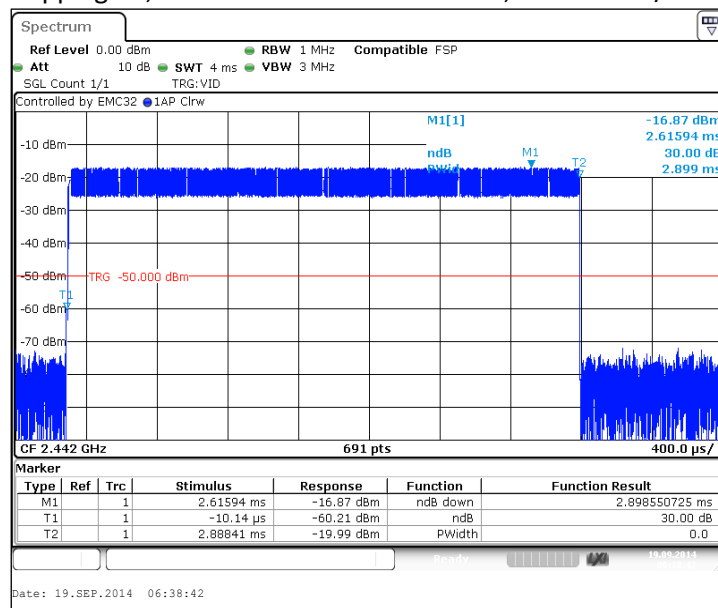
#### 10.3.1 GFSK modulation, PRBS packet type

| 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



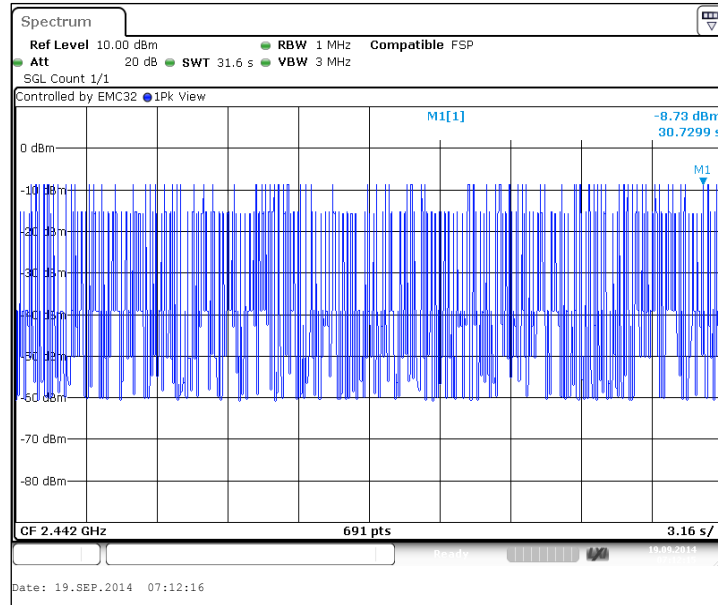
Hopping on, duration of one transmission, channel 40 / 2442 MHz



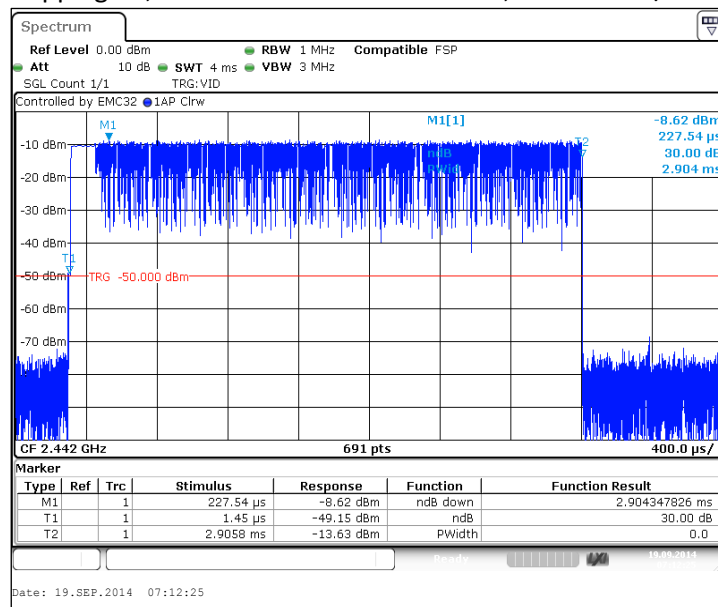
### 10.3.2 8DPSK modulation, PRBS packet type

| Measured number of transmissions | Duration of one transmission [ms] | Time of occupancy [s] | Result |
|----------------------------------|-----------------------------------|-----------------------|--------|
| 80                               | 2.904                             | 0.232                 | PASSED |

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



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



## 11. Test Equipment

### 11.1. Conducted 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 |
| BJPCHW0020  | DC Power supply                        | Hp6632B             | HP                      | 22/24/27, 15C      |
| BJPCPT0040  | Receiver                               | ESCS30              | R&S                     | 15C, 15B           |
| BJPCPT0069  | LISN 50 $\mu$ H                        | ESH3-Z5             | R&S                     | 15C, 15B           |
| BJPCTC0323  | Signal Generator                       | SMR 27              | R&S                     | 22/24/27, 15C, 15B |
| BJPCPT0073  | Signal Generator                       | SMR 20              | R&S                     | 22/24/27, 15C, 15B |
| BJPCPT0191  | Pulse Limiter                          | ESH3-Z2             | R&S                     | 15C, 15B           |
| BJPCPT0208  | UPS                                    | PULSAR RX10         | Merlin gerin            | 15C, 15B           |
| BJPCTC0001  | DIGITAL CAMERA                         | PC1015              | CANON                   | 15C, 15R           |
| BJPCTC0017  | Communication Tester                   | CMU200              | R&S                     | 22/24/27, 15C, 15B |
| BJPCTC0062  | AC Power source                        | 6812B               | HP                      | 15C, 15B           |
| BJPCTC0067  | Bluetooth Tester                       | CBT                 | R&S                     | 22/24/27, 15C      |
| BJPCTC0082  | Humidity and Temperature Sensor        | 175-H2              | Testo                   | 15B, 15C           |
| BJPCTC0088  | Absolut pressure meter                 | testo 511           | Testo                   | 22/24/27, 15B, 15C |
| BJPCTC0089  | Temperature Test chamber               | VT4002              | Votsch industrietechnik | 22/24/27, 15C      |
| BJPCTC0090  | FSP spectrum analyzer                  | FSP30               | R&S                     | 22/24/27, 15C      |
| BJPCTC0094  | GPIO-RS232 convertor                   | GPIO-RS232          | NI                      | 22/24/27, 15C      |
| BJPCTC0112  | Power Splitter                         | 11667B              | Agilent                 | 22/24/27, 15C      |
| BJPCTC0115  | Communication Tester                   | CMU200              | R&S                     | 22/24/27, 15B, 15C |
| BJPCTC0127  | AC Power source                        | SOYI-500VA          | SOYI                    | 15B, 15C           |
| BJPCTC0128  | Communication antenna                  | JXTXLB-10180        | A-INFOMW                | 22/24/27, 15B, 15C |
| BJPCTC0129  | Communication antenna                  | JXTXLB-10180        | A-INFOMW                | 22/24/27, 15B, 15C |
| BJPCTC0131  | Communication tester                   | CMW500              | R&S                     | 22/24/27, 15B, 15C |
| BJPCTC0136  | Communication antenna                  | JXTXLB-880-NF       | A-INFOMW                | 15B, 15C           |
| BJPCTC0306  | Power Splitter                         | 11667B              | Agilent                 | 22/24/27, 15C      |
| BJPCTC0305  | GPIO converter                         | GPIO-RS232          | NI                      | 22/24/27, 15C      |
| BJPCTC0304  | Spectrum Analyser                      | FSV30               | R&S                     | 22/24/27, 15C      |
| BJPCTC0309  | GPIO-RS232 convertor                   | RS232               | NI                      | 22/24/27, 15C      |
| BJPCTC0307  | Dual channel battery/charger simulator | 2306                | KEITHLEY                | 22/24/27, 15C      |
| BJPCTC0308  | Dual channel battery/charger simulator | 2306                | KEITHLEY                | 22/24/27, 15C      |
| BJPCTC0352  | Signal Generator 20GHz                 | MG3692B             | Anritsu                 | 22/24/27, 15C      |
| BJBDATC0169 | Temperature Test chamber               | VT4002              | Votsch                  | 22/24/27, 15C      |
| BJPCTC0334  | Communication Tester                   | CMU200              | R&S                     | 22/24/27, 15C, 15B |
| BJPCTC0342  | Communication Tester                   | CMU200              | R&S                     | 15B, 15C           |
| BJPCTC0343  | Power Splitter                         | 1167A               | Agilent                 | EN300328           |
| BJPCTC0344  | Power Splitter                         | 1167A               | Agilent                 | EN300328           |
| BJPCTC0345  | Power Splitter                         | 1167A               | Agilent                 | EN300328           |
| BJPCTC0346  | Attenuator                             | 8496A               | Agilent                 | EN300328           |
| BJPCTC0347  | Directional Coupler                    | 4226-20             | Narda                   | EN300328           |
| BJPCTC0348  | Signal generator                       | E4438C              | Agilent                 | EN300328           |
| BJPCTC0336  | Signal Generator                       | SMP22               | R&S                     | 22/24/27, 15C      |

### 11.2. 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 |

| Eq. No     | Equipment                       | Type                              | Manufacturer                        | Used in            |
|------------|---------------------------------|-----------------------------------|-------------------------------------|--------------------|
| 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           |
| BJPCPT0166 | Antenna                         | VUBA 9117                         | Swarzbeck                           | 22/24/27           |
| BJPCPT0208 | UPS                             | PULSAR RX10                       | Merlin gerin                        | 15C, 15B           |
| BJPCTC0001 | DIGITAL CAMERA                  | PC1015                            | CANON                               | 15C, 15R           |
| 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           |
| BJPCTC0062 | AC Power source                 | 6812B                             | Hp                                  | 15C, 15B           |
| BJPCTC0064 | Band Reject Filter              | WRCG1877/1883-1870/1890-40/6SS    | Wainwright                          | 24, 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 |
| BJPCTC0081 | Humidity and Temperature Sensor | 175-H2                            | Testo                               | 15B, 15C           |
| BJPCTC0088 | Absolut pressure meter          | testo 511                         | Testo                               | 22/24/27, 15B, 15C |
| 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                  | -                  |
| BJPCTC0125 | Loop Antenna                    | HFH2-Z2                           | R&S                                 | 15C                |
| BJPCTC0126 | Tripod                          | FHU-Z                             | R&S                                 | 15C                |
| BJPCTC0128 | Communication antenna           | JXTXLB-10180                      | A-INFOMW                            | 22/24/27 15B 15C   |
| BJPCTC0129 | Communication antenna           | JXTXLB-10180                      | A-INFOMW                            | 22/24/27 15B 15C   |
| BJPCTC0131 | Communication tester            | CMW500                            | R&S                                 | 22/24/27 15B 15C   |
| BJPCTC0133 | Open Swith and contril unit     | OSP 150                           | R&S                                 | 15B, 15C           |
| BJPCTC0134 | Open Swith and contril unit     | OSP 150                           | R&S                                 | 15B, 15C           |
| BJPCTC0135 | Open Swith and contril unit     | OSP 130                           | R&S                                 | 15B, 15C           |
| BJPCTC0136 | Communication antenna           | JXTXLB-880-NF                     | A-INFOMW                            | 15B 15C            |
| BJPCTC0171 | Broad-band Horn Antenna         | BBHA9120 D                        | SCHWARZBECK<br>MESS -<br>ELEKTRONIK | 22/24/27, 15C, 15B |
| BJPCTC0310 | Horn Antenna                    | QSH20SMA                          | Q-par                               | 22/24/27, 15C, 15B |
| BJPCTC0311 | Horn Antenna                    | QSH18SMA                          | Q-par                               | 22/24/27, 15C, 15B |
| BJPCTC0312 | Relay Switch Unit               | -                                 | -                                   | 22/24/27, 15C, 15B |
| BJPCTC0313 | High Pass Filter                | WHKX1.0/15G-12SS                  | Wainwright                          | 22/24/27, 15C, 15B |
| BJPCTC0314 | High Pass Filter                | WHKX8.0/18G-88SS                  | Wainwright                          | 22/24/27, 15C, 15B |
| BJPCTC0315 | High Pass Filter                | WHKX3.0/18G-12SS                  | Wainwright                          | 22/24/27, 15C, 15B |
| BJPCTC0316 | Preamplifier                    | AMT-5F-18002550-25-108            | -                                   | 22/24/27, 15C, 15B |
| BJPCTC0317 | Preamplifier                    | AMF-6D-02001800-29-20P            | -                                   | 22/24/27, 15C, 15B |
| BJPCTC0350 | Preamplifier                    | AMF-4D-01000800-30-29P            | Miteq                               | 22/24/27, 15C, 15B |
| BJPCTC0324 | Preamplifier                    | AFS4-00100300-20-23P-6            | Miteq                               | 22/24/27, 15C, 15B |
| BJPCTC0329 | Relay Switch Unit               | -                                 | -                                   | 22/24/27, 15C, 15B |
| BJPCTC0334 | Communication Tester            | CMU200                            | R&S                                 | 22/24/27, 15C, 15B |
| BJPCTC0342 | Communication Tester            | CMU200                            | R&S                                 | 15B, 15C           |

| Eq. No     | Equipment    | Type                   | Manufacturer | Used in            |
|------------|--------------|------------------------|--------------|--------------------|
| BJPCTC0349 | Preamplifier | AMF-4D-01000800-30-79P | Miteg        | 22/24/27, 15C, 15B |
| BJPCTC0350 | Preamplifier | AMF-4D-01000800-30-29P | Miteg        | 22/24/27, 15C, 15B |
| BJPCTC0351 | Preamplifier | AFS4-00101800          | -            | 22/24/27, 15C, 15B |