

| FCC TEST REPORT                                                          |                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC 47 CFR Part 15C<br>ISED RSS-247                                      |                                                                                                                                                                                                                                                                                                                            |
| Digital transmission systems operating within the 2400 – 2483.5 MHz band |                                                                                                                                                                                                                                                                                                                            |
| Report Reference No. .... :                                              | G0M-1608-5788-TFC247BL_S-V02                                                                                                                                                                                                                                                                                               |
| Testing Laboratory .....                                                 | Eurofins Product Service GmbH                                                                                                                                                                                                                                                                                              |
| Address .....                                                            | Storkower Str. 38c<br>15526 Reichenwalde<br>Germany                                                                                                                                                                                                                                                                        |
| Accreditation .....                                                      |  <br>A2LA Accredited Testing Laboratory, Certificate No.: 1983.01<br>FCC Filed Test Laboratory, Reg.-No.: 96970<br>ISED OATS Filing assigned code: 3470A |
| Applicant's name .....                                                   | Schneider Schreibgeräte GmbH                                                                                                                                                                                                                                                                                               |
| Address .....                                                            | Unterm Dorf 184/1<br>78144 Schramberg<br>GERMANY                                                                                                                                                                                                                                                                           |
| <b>Test specification:</b>                                               |                                                                                                                                                                                                                                                                                                                            |
| Standard..... :                                                          | 47 CFR Part 15C<br>RSS-247, Issue 1, 2015-05                                                                                                                                                                                                                                                                               |
| Test scope..... :                                                        | complete Radio compliance test                                                                                                                                                                                                                                                                                             |
| <b>Equipment under test (EUT):</b>                                       |                                                                                                                                                                                                                                                                                                                            |
| Product description                                                      | blukii module                                                                                                                                                                                                                                                                                                              |
| Model No.                                                                | S                                                                                                                                                                                                                                                                                                                          |
| Additional Model(s)                                                      | None                                                                                                                                                                                                                                                                                                                       |
| Brand Name(s)                                                            | blukii                                                                                                                                                                                                                                                                                                                     |
| Hardware version                                                         | 3.0                                                                                                                                                                                                                                                                                                                        |
| Firmware / Software version                                              | None                                                                                                                                                                                                                                                                                                                       |
|                                                                          | FCC-ID: A6C-104001      IC: N/A                                                                                                                                                                                                                                                                                            |
| <b>Test result</b>                                                       | <b>Passed</b>                                                                                                                                                                                                                                                                                                              |

**Possible test case verdicts:**

- neither assessed nor tested ..... : N/N
- required by standard but not appl. to test object ..... : N/A
- required by standard but not tested ..... : N/T
- not required by standard for the test object ..... : N/R
- test object does meet the requirement ..... : P (Pass)
- test object does not meet the requirement ..... : F (Fail)

**Testing:**

Test Lab Temperature ..... : 20 – 23 °C

Test Lab Humidity ..... : 32 – 38 %

Date of receipt of test item ..... : 2016-10-04

Date (s) of performance of tests ..... : 2016-10-06 – 2016-10-14

Compiled by ..... : Wilfried Treffke

Tested by (+ signature) ..... : Sebastian Suckow  
(Responsible for Test) 

Approved by (+ signature) ..... : Christian Weber  
(Head of Lab) 

Date of issue ..... : 2016-11-18

Total number of pages ..... : 78

**General remarks:**

**The test results presented in this report relate only to the object tested.**

**The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.**

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

**Additional comments:**

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## Version History

| Version | Issue Date | Remarks          | Revised by |
|---------|------------|------------------|------------|
| 01      | 2016-10-28 | Initial Release  |            |
| 02      | 2016-11-18 | FCC-ID corrected | C. Weber   |

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## 1 Equipment (Test item) Description

|                             |                                                                                  |                              |
|-----------------------------|----------------------------------------------------------------------------------|------------------------------|
| Description                 | blukii module                                                                    |                              |
| Model                       | S                                                                                |                              |
| Additional Model(s)         | None                                                                             |                              |
| Brand Name(s)               | blukii                                                                           |                              |
| Serial number               | None                                                                             |                              |
| Hardware version            | 3.0                                                                              |                              |
| Software / Firmware version | None                                                                             |                              |
| PMN                         | N/R                                                                              |                              |
| HVIN                        | N/R                                                                              |                              |
| FVIN                        | N/R                                                                              |                              |
| HMN                         | N/R                                                                              |                              |
| FCC ID                      | A6C-104001                                                                       |                              |
| IC                          | N/A                                                                              |                              |
| Equipment type              | End product                                                                      |                              |
| Radio type                  | Transceiver                                                                      |                              |
| Radio technology            | Bluetooth 4.0 Low Energy                                                         |                              |
| Operating frequency range   | 2402 - 2480 MHz                                                                  |                              |
| Assigned frequency band     | 2400 - 2483.5 MHz                                                                |                              |
| Main test frequencies       | F <sub>LOW</sub>                                                                 | 2402 MHz                     |
|                             | F <sub>MID</sub>                                                                 | 2442 MHz                     |
|                             | F <sub>HIGH</sub>                                                                | 2480 MHz                     |
| Spreading                   | Frequency Hopping                                                                |                              |
| Modulations                 | GFSK                                                                             |                              |
| Number of channels          | 40                                                                               |                              |
| Channel spacing             | 2MHz                                                                             |                              |
| Number of antennas          | 1                                                                                |                              |
| Antenna                     | Type                                                                             | integrated                   |
|                             | Model                                                                            | custom model                 |
|                             | Manufacturer                                                                     | ProAnt                       |
|                             | Gain                                                                             | 0 dBi (declared by customer) |
| Manufacturer                | Schneider Schreibgeräte GmbH<br>Unterm Dorf 184/1<br>78144 Schramberg<br>GERMANY |                              |
| Power supply                | V <sub>NOM</sub>                                                                 | 3.0VDC (CR2032 battery)      |
|                             | V <sub>MIN</sub>                                                                 | N/A                          |
|                             | V <sub>MAX</sub>                                                                 | N/A                          |
| AC/DC-Adaptor               | none                                                                             | N/R                          |

#### 1.4 Supporting Equipment Used During Testing

| Product Type*                                                                                                                                                    | Device | Manufacturer | Model No.      | Comments |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------|----------------|----------|
| AE                                                                                                                                                               | Laptop | Dell         | Latitude E6420 | Funk2    |
| <b>*Note:</b> Use the following abbreviations:<br>AE : Auxiliary/Associated Equipment, or<br>SIM : Simulator (Not Subjected to Test)<br>CABL : Connecting cables |        |              |                |          |

## 1.5 Test Modes

| Mode #   | Description         |                                                                                                                                                                                                   |
|----------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transmit | General conditions: | EUT powered by laboratory power supply.                                                                                                                                                           |
|          | Radio conditions:   | Mode = standalone transmit<br>Spreading = Hopping stopped (single hopping channel)<br>Modulation = GFSK<br>Data rate = 1 Mbps<br>Bandwidth = 2 MHz<br>Duty cycle = 100 %<br>Power level = Maximum |
| Receive  | General conditions: | EUT powered by laboratory power supply.                                                                                                                                                           |
|          | Radio conditions:   | Mode = standalone receive (scan mode)<br>Spreading = On<br>Modulation = GFSK                                                                                                                      |

## 1.6 Test Equipment Used During Testing

| Measurement Software |                  |            |          |
|----------------------|------------------|------------|----------|
| Description          | Manufacturer     | Name       | Version  |
| EMC Test Software    | Dare Instruments | Radimation | 2015.2.4 |

| Occupied Bandwidth |              |        |            |           |          |
|--------------------|--------------|--------|------------|-----------|----------|
| Description        | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer  | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| 6dB Bandwidth     |              |        |            |           |          |
|-------------------|--------------|--------|------------|-----------|----------|
| Description       | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| Maximum peak conducted power |              |        |            |           |          |
|------------------------------|--------------|--------|------------|-----------|----------|
| Description                  | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer            | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| Power spectral density |              |        |            |           |          |
|------------------------|--------------|--------|------------|-----------|----------|
| Description            | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer      | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| Band edge compliance |              |        |            |           |          |
|----------------------|--------------|--------|------------|-----------|----------|
| Description          | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer    | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| Conducted spurious emissions |              |        |            |           |          |
|------------------------------|--------------|--------|------------|-----------|----------|
| Description                  | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Spectrum Analyzer            | R&S          | FSP 30 | EF00312    | 2016-02   | 2017-02  |

| Radiated spurious emissions |              |        |            |           |          |
|-----------------------------|--------------|--------|------------|-----------|----------|
| Description                 | Manufacturer | Model  | Identifier | Cal. Date | Cal. Due |
| Semi-anechoic chamber       | Frankonia    | AC 1   | EF00062    | -         | -        |
| Spectrum Analyzer           | R&S          | FSIQ26 | EF00242    | 2016-04   | 2017-04  |
| Biconical Antenna           | R&S          | HK 116 | EF00012    | 2016-05   | 2019-05  |
| LPD Antenna                 | R&S          | HL 223 | EF00187    | 2016-05   | 2019-05  |
| LPD Antenna                 | R&S          | HL 025 | EF00327    | 2015-10   | 2018-10  |



## 1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBμV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyzer (dB}\mu\text{V)} + \text{A.F. (dB)} = \text{Net field strength (dB}\mu\text{V/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBμV/m). The FCC limits are given in units of μV/m. The following formula is used to convert the units of μV/m to dBμV/m:

$$\text{Limit (dB}\mu\text{V/m)} = 20 * \log (\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

|           |   |       |   |             |   |                           |   |         |
|-----------|---|-------|---|-------------|---|---------------------------|---|---------|
| Reading   | + | AF    | = | Net Reading | : | Net reading - FCC limit   | = | Margin  |
| 21.5 dBμV | + | 26 dB | = | 47.5 dBμV/m | : | 47.5 dBμV/m - 57.0 dBμV/m | = | -9.5 dB |

## 2 Result Summary

| FCC 47 CFR Part 15C, ISED RSS-247                     |                                         |                  |        |                                                  |
|-------------------------------------------------------|-----------------------------------------|------------------|--------|--------------------------------------------------|
| Product Specific Standard Section                     | Requirement – Test                      | Reference Method | Result | Remarks                                          |
| RSS-Gen 6.6                                           | Occupied Bandwidth                      | ANSI C63.10      | N/R    | Informational only                               |
| FCC § 15.247(a)(2)<br>ISED RSS-247 § 5.2              | 6dB Bandwidth                           | ANSI C63.10      | PASS   |                                                  |
| FCC § 15.247(b)(3)<br>ISED RSS-247 § 5.4              | Maximum peak conducted power            | ANSI C63.10      | PASS   |                                                  |
| FCC § 15.247(e)<br>ISED RSS-247 § 5.2                 | Power spectral density                  | ANSI C63.10      | PASS   |                                                  |
| 47 CFR 15.207<br>ISED RSS-247 § 3.1                   | AC power line conducted emissions       | ANSI C63.4       | N/R    | No powered (directly or indirectly) via AC-Mains |
| FCC § 15.247(d)<br>ISED RSS-247 § 5.5                 | Band edge compliance                    | ANSI C63.10      | PASS   |                                                  |
| FCC § 15.247(d)<br>ISED RSS-247 § 5.5                 | Conducted spurious emissions            | ANSI C63.10      | PASS   |                                                  |
| FCC § 15.247(d)<br>FCC § 15.209<br>ISED RSS-247 § 5.5 | Transmitter radiated spurious emissions | ANSI C63.10      | PASS   |                                                  |
| ISED RSS-247 § 3.1                                    | Receiver radiated spurious emissions    | ANSI C63.10      | PASS   |                                                  |
| Remarks:                                              |                                         |                  |        |                                                  |

### 3 Test Conditions and Results

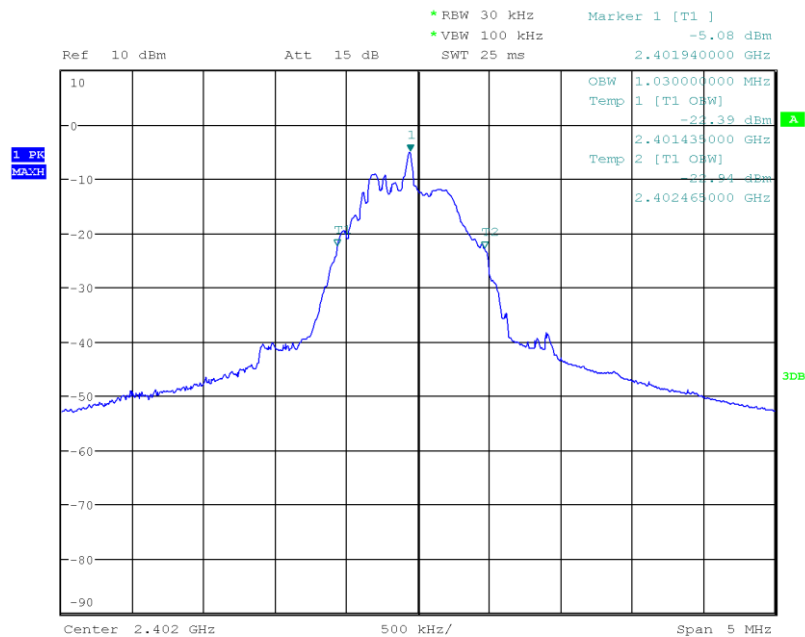
#### 3.1 Test Conditions and Results – Occupied Bandwidth

| Occupied Bandwidth acc. to ISED RSS-Gen                                                                                                                                                                                                                                                                   |                 |                                                         |                          | Verdict: PASS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|--------------------------|---------------|
| Test according to measurement reference                                                                                                                                                                                                                                                                   |                 | Reference Method                                        |                          |               |
|                                                                                                                                                                                                                                                                                                           |                 | ANSI C63.10                                             |                          |               |
| Test frequency range                                                                                                                                                                                                                                                                                      |                 | Tested frequencies                                      |                          |               |
|                                                                                                                                                                                                                                                                                                           |                 | F <sub>LOW</sub> / F <sub>MID</sub> / F <sub>HIGH</sub> |                          |               |
| Limits                                                                                                                                                                                                                                                                                                    |                 |                                                         |                          |               |
| None (Informational only)                                                                                                                                                                                                                                                                                 |                 |                                                         |                          |               |
| Test setup                                                                                                                                                                                                                                                                                                |                 |                                                         |                          |               |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                                     |                 |                                                         |                          |               |
| Test procedure                                                                                                                                                                                                                                                                                            |                 |                                                         |                          |               |
| <div>1. EUT set to test mode (Communication tester is used if needed)</div> <div>2. Span set to at least twice the emission spectrum</div> <div>3. Resolution bandwidth set to 1 % of span</div> <div>4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function</div> |                 |                                                         |                          |               |
| Test results                                                                                                                                                                                                                                                                                              |                 |                                                         |                          |               |
| Channel                                                                                                                                                                                                                                                                                                   | Frequency [MHz] | Mode                                                    | Occupied Bandwidth [MHz] |               |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                          | 2402            | Transmit                                                | 1.030                    |               |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                          | 2442            | Transmit                                                | 1.040                    |               |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                         | 2480            | Transmit                                                | 1.045                    |               |
| Comments:                                                                                                                                                                                                                                                                                                 |                 |                                                         |                          |               |

# Occupied Bandwidth – F<sub>Low</sub>

## Occupied Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 6.9.3  
 Operational Mode: GFSK, Channel: 0, 2402 MHz  
 Operating Conditions: Tnom/Vnom  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Occupied Bandwidth [MHz]: 1.030



Date: 7.OCT.2016 13:26:26

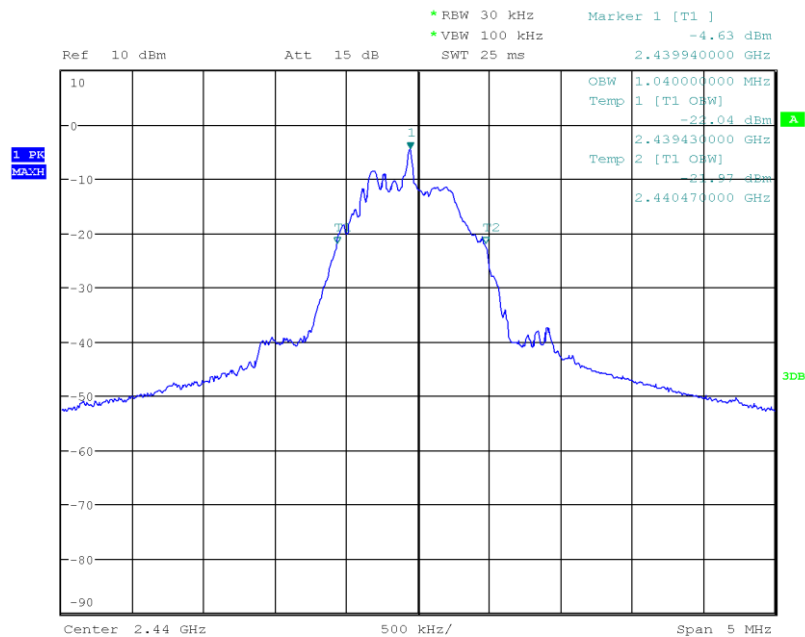
Test Report No.: G0M-1608-5788-TFC247BL\_S-V02

Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

# Occupied Bandwidth – F<sub>MID</sub>

## Occupied Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 6.9.3  
 Operational Mode: GFSK, Channel: 19, 2440 MHz  
 Operating Conditions: Tnom/Vnom  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Occupied Bandwidth [MHz]: 1.040

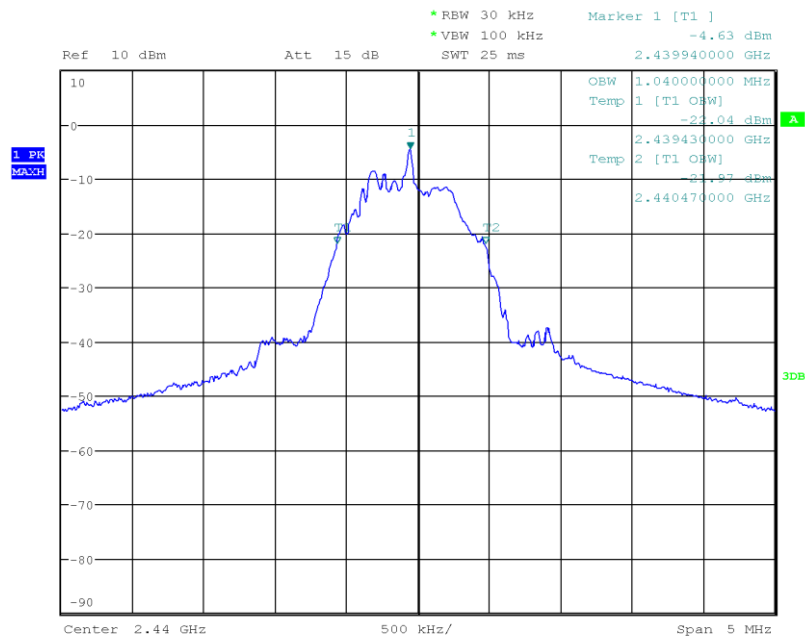


Date: 7.OCT.2016 13:29:56

## Occupied Bandwidth – F<sub>HIGH</sub>

### Occupied Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 6.9.3  
 Operational Mode: GFSK, Channel: 19, 2440 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Occupied Bandwidth [MHz]: 1.040



Date: 7.OCT.2016 13:29:56

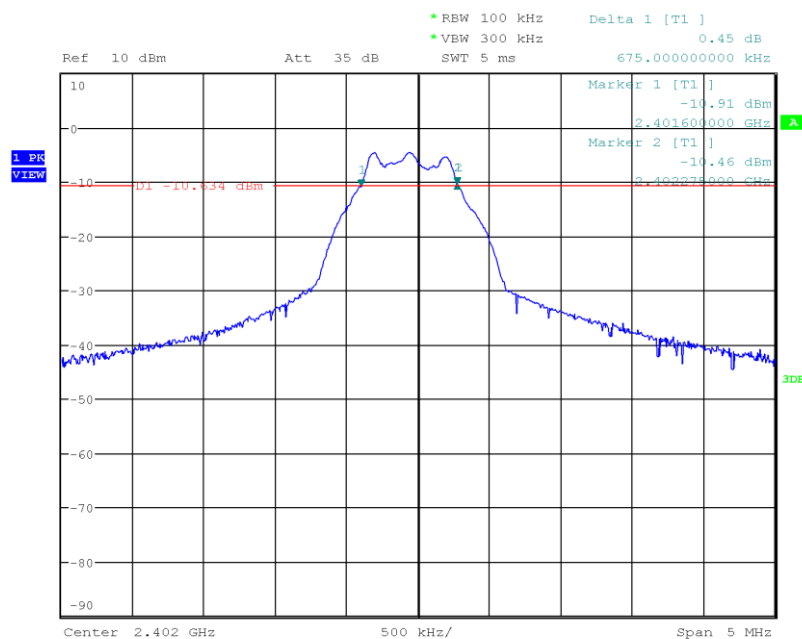
### 3.2 Test Conditions and Results – 6 dB Bandwidth

| 6dB Bandwidth acc. to FCC 15.247 / ISSED RSS-247                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                                                         |                      | Verdict: PASS |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|----------------------|---------------|--------|
| EUT requirement<br>rule parts and clause                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 | Reference                                               |                      |               |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 | FCC 15.247(a)(2) / ISED RSS-247 5.2                     |                      |               |        |
| Test according to<br>measurement reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 | Reference Method                                        |                      |               |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 | ANSI C63.10                                             |                      |               |        |
| Test frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                 | Tested frequencies                                      |                      |               |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 | F <sub>LOW</sub> / F <sub>MID</sub> / F <sub>HIGH</sub> |                      |               |        |
| Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                 |                                                         |                      |               |        |
| Limit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                                                         |                      |               |        |
| ≥ 500kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                                                         |                      |               |        |
| Test setup                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                 |                                                         |                      |               |        |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                                                         |                      |               |        |
| Test procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                 |                                                         |                      |               |        |
| <div>1. EUT set to test mode</div> <div>2. Span set to at least twice the emission spectrum</div> <div>3. Detector set to peak and max hold and RBW is set to 100 kHz</div> <div>4. Envelope peak value of emission spectrum is selected</div> <div>5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak</div> <div>6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak</div> <div>7. 6 dB Bandwidth is determined by marker frequency separation</div> |                 |                                                         |                      |               |        |
| Test results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                                                         |                      |               |        |
| Channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Frequency [MHz] | Mode                                                    | 6 dB Bandwidth [kHz] | Limit [kHz]   | Result |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2402            | Transmit                                                | 675                  | 500           | PASS   |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2442            | Transmit                                                | 685                  | 500           | PASS   |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2480            | Transmit                                                | 690                  | 500           | PASS   |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                                                         |                      |               |        |

6 dB Bandwidth – F<sub>Low</sub>

## DTS (6 dB) Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1  
 Operational Mode: GFSK, Channel: 0, 2402 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Lower Frequency [MHz]: 2401.600  
 Upper Frequency [MHz]: 2402.275  
 6 dB Bandwidth [kHz]: 675



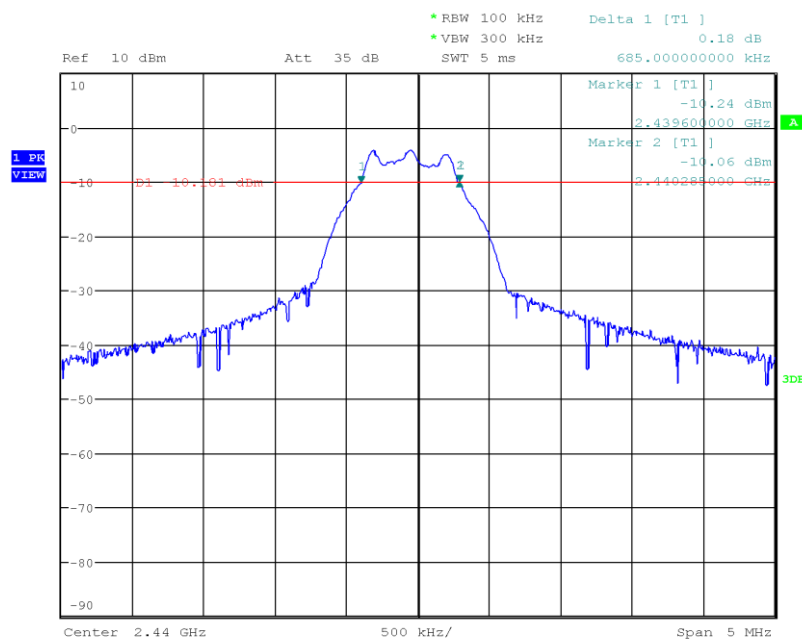
Date: 7.OCT.2016 13:33:54



6 dB Bandwidth –  $F_{\text{MD}}$ 

## DTS (6 dB) Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1  
 Operational Mode: GFSK, Channel: 19, 2440 MHz  
 Operating Conditions:  $T_{\text{nom}}/V_{\text{nom}}$   
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Lower Frequency [MHz]: 2439.600  
 Upper Frequency [MHz]: 2440.285  
 6 dB Bandwidth [kHz]: 685

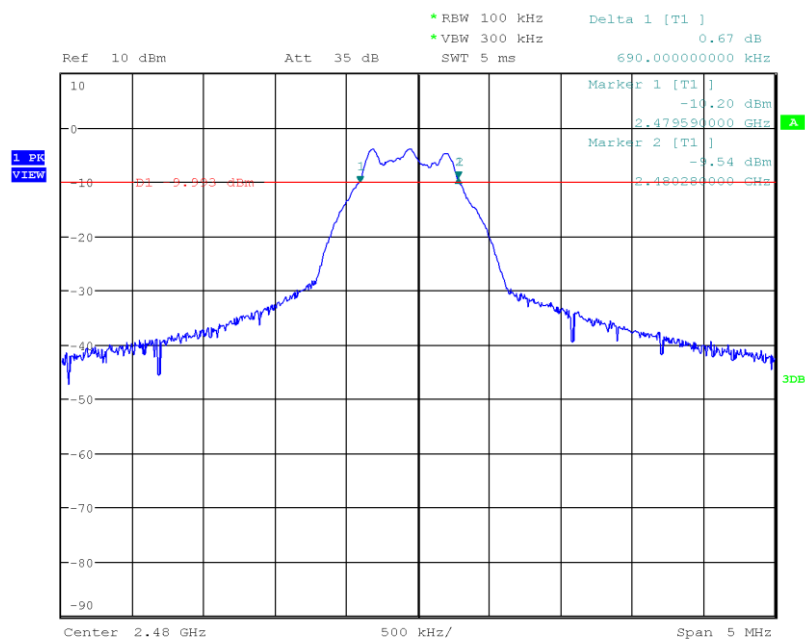


Date: 7.OCT.2016 13:35:41

6 dB Bandwidth – F<sub>HIGH</sub>

## DTS (6 dB) Bandwidth

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1  
 Operational Mode: GFSK, Channel: 39, 2480 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Lower Frequency [MHz]: 2479.590  
 Upper Frequency [MHz]: 2480.280  
 6 dB Bandwidth [kHz]: 690



Date: 7.OCT.2016 13:36:43

### 3.3 Test Conditions and Results – Maximum peak conducted power

| Maximum peak conducted power acc. to FCC 15.247 / ISSED RSS-247                                                                                                                                                                                                                                                                                                                                                         |                                                         | Verdict: PASS |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------|
| EUT requirement<br>rule parts and clause                                                                                                                                                                                                                                                                                                                                                                                | Reference                                               |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                         | FCC 15.247(b)(3) / ISSED RSS-247 5.4                    |               |
| Test according to<br>measurement reference                                                                                                                                                                                                                                                                                                                                                                              | Reference Method                                        |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                         | ANSI C63.10                                             |               |
| Test frequency range                                                                                                                                                                                                                                                                                                                                                                                                    | Tested frequencies                                      |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                         | F <sub>LOW</sub> / F <sub>MID</sub> / F <sub>HIGH</sub> |               |
| Measurement mode                                                                                                                                                                                                                                                                                                                                                                                                        | Peak                                                    |               |
| Maximum antenna gain                                                                                                                                                                                                                                                                                                                                                                                                    | 0 dBi ⇒ Limit correction = 0 dB                         |               |
| Limits                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                         |               |
| 1 W (30 dBm)                                                                                                                                                                                                                                                                                                                                                                                                            |                                                         |               |
| The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi. |                                                         |               |
| Test setup                                                                                                                                                                                                                                                                                                                                                                                                              |                                                         |               |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                                                                                                                                                   |                                                         |               |
| Test procedure                                                                                                                                                                                                                                                                                                                                                                                                          |                                                         |               |
| <div><div>1. EUT set to test mode (Communication tester is used if needed)</div><div>2. Center frequency set to test channel center frequency</div><div>3. Span set to twice the 20 dB bandwidth and detector to peak and max hold</div><div>4. Resolution bandwidth is set to 3 MHz</div><div>5. Peak conducted power is determined from peak of spectrum envelope</div></div>                                         |                                                         |               |

| Test results      |                 |                         |          |                  |                |             |             |
|-------------------|-----------------|-------------------------|----------|------------------|----------------|-------------|-------------|
| Channel           | Frequency [MHz] | Voltage                 | Mode     | Peak power [dbm] | Peak power [W] | Limit [dBm] | Margin [dB] |
| F <sub>LOW</sub>  | 2402            | V <sub>nom</sub> = 3.3V | Transmit | 2.726            | 0.0019         | 30          | -27.27      |
| F <sub>MID</sub>  | 2442            | V <sub>nom</sub> = 3.3V | Transmit | 3.194            | 0.0021         | 30          | -26.81      |
| F <sub>HIGH</sub> | 2480            | V <sub>nom</sub> = 3.3V | Transmit | 3.421            | 0.0022         | 30          | -26.58      |
| Comment:          |                 |                         |          |                  |                |             |             |

### 3.4 Test Conditions and Results – Power spectral density

| Power spectral density acc. to FCC 15.247 / ISED RSS-247                                                                                                                                                                                                                                       |                 |                                                         |                      |                                 | Verdict: PASS    |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------|----------------------|---------------------------------|------------------|-------------|
| EUT requirement<br>rule parts and clause                                                                                                                                                                                                                                                       |                 | Reference                                               |                      |                                 |                  |             |
|                                                                                                                                                                                                                                                                                                |                 | FCC 15.247(e) / ISED RSS-247 5.2                        |                      |                                 |                  |             |
| Test according to<br>measurement reference                                                                                                                                                                                                                                                     |                 | Reference Method                                        |                      |                                 |                  |             |
|                                                                                                                                                                                                                                                                                                |                 | ANSI C63.10                                             |                      |                                 |                  |             |
| Test frequency range                                                                                                                                                                                                                                                                           |                 | Tested frequencies                                      |                      |                                 |                  |             |
|                                                                                                                                                                                                                                                                                                |                 | F <sub>LOW</sub> / F <sub>MID</sub> / F <sub>HIGH</sub> |                      |                                 |                  |             |
| Measurement mode                                                                                                                                                                                                                                                                               |                 | Peak                                                    |                      |                                 |                  |             |
| Limits                                                                                                                                                                                                                                                                                         |                 |                                                         |                      |                                 |                  |             |
| 8 dBm / 3 kHz                                                                                                                                                                                                                                                                                  |                 |                                                         |                      |                                 |                  |             |
| Test setup                                                                                                                                                                                                                                                                                     |                 |                                                         |                      |                                 |                  |             |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                          |                 |                                                         |                      |                                 |                  |             |
| Test procedure                                                                                                                                                                                                                                                                                 |                 |                                                         |                      |                                 |                  |             |
| 1. EUT set to test mode (Communication tester is used if needed)<br>2. Center frequency set to test channel center frequency<br>3. Span is set large enough to capture maximum emissions in passband, RBW is set to 3kHz<br>4. Peak power density is determined from peak emission of envelope |                 |                                                         |                      |                                 |                  |             |
| Test results                                                                                                                                                                                                                                                                                   |                 |                                                         |                      |                                 |                  |             |
| Channel                                                                                                                                                                                                                                                                                        | Frequency [MHz] | Test mode                                               | Peak frequency [MHz] | Peak power density [dBm/100kHz] | Limit [dBm/3kHz] | Margin [dB] |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                               | 2402            | Transmit                                                | 2401.928             | 2.244                           | 8.0              | -05.76      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                               | 2442            | Transmit                                                | 2439.943             | 2.629                           | 8.0              | -05.37      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                              | 2480            | Transmit                                                | 2479.934             | 2.882                           | 8.0              | -05.12      |
| Comments:                                                                                                                                                                                                                                                                                      |                 |                                                         |                      |                                 |                  |             |

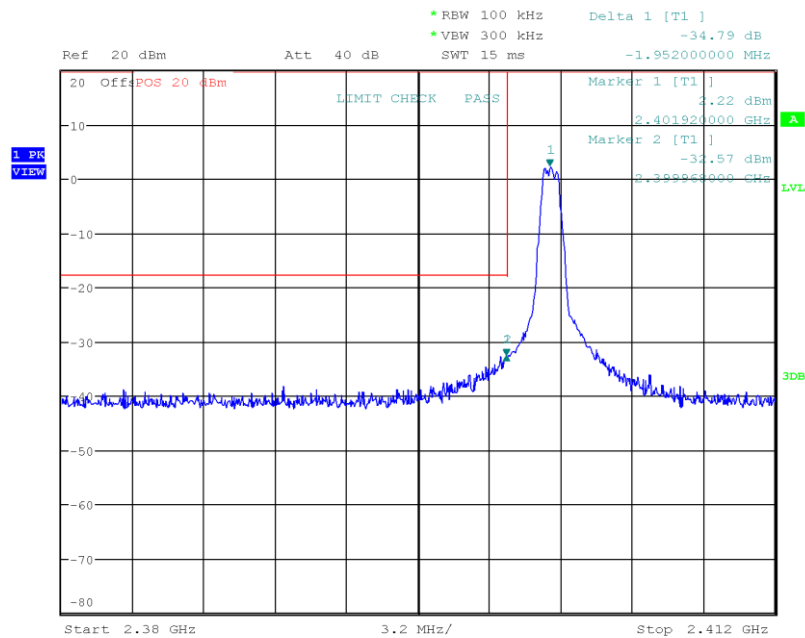
### 3.6 Test Conditions and Results – Band edge compliance

| Band-edge compliance acc. to FCC 15.247 / ISED RSS-247                                                                                                                                                                                                                                                                                                                                                 |                    |                                      |                                   | Verdict: PASS  |                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------|-----------------------------------|----------------|----------------|
| EUT requirement<br>rule parts and clause                                                                                                                                                                                                                                                                                                                                                               |                    | Reference                            |                                   |                |                |
|                                                                                                                                                                                                                                                                                                                                                                                                        |                    | FCC 15.247(d) / ISED RSS-247 5.5     |                                   |                |                |
| Test according to<br>measurement reference                                                                                                                                                                                                                                                                                                                                                             |                    | Reference Method                     |                                   |                |                |
|                                                                                                                                                                                                                                                                                                                                                                                                        |                    | ANSI C63.10                          |                                   |                |                |
| Test frequency range                                                                                                                                                                                                                                                                                                                                                                                   |                    | Tested frequencies                   |                                   |                |                |
|                                                                                                                                                                                                                                                                                                                                                                                                        |                    | F <sub>LOW</sub> / F <sub>HIGH</sub> |                                   |                |                |
| Measurement mode                                                                                                                                                                                                                                                                                                                                                                                       |                    | Peak                                 |                                   |                |                |
| Limits                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                                      |                                   |                |                |
| Limit                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                                      | Condition                         |                |                |
| ≤ -20 dB / 100 kHz                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                      | Power measurement detector = Peak |                |                |
| ≤ -30 dB / 100 kHz                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                      | Power measurement detector = RMS  |                |                |
| Test setup                                                                                                                                                                                                                                                                                                                                                                                             |                    |                                      |                                   |                |                |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                                                                                                                                  |                    |                                      |                                   |                |                |
| Test procedure                                                                                                                                                                                                                                                                                                                                                                                         |                    |                                      |                                   |                |                |
| <div>1. EUT set to test mode (Communication tester is used if needed)</div> <div>2. Span set around lower band edge and detector is set to peak and max hold</div> <div>3. Resolution bandwidth is set to 100 kHz</div> <div>4. Markers are set to peak emission levels within frequency band and outside frequency band</div> <div>5. Band edge attenuation is determined from level difference</div> |                    |                                      |                                   |                |                |
| Test results                                                                                                                                                                                                                                                                                                                                                                                           |                    |                                      |                                   |                |                |
| Channel                                                                                                                                                                                                                                                                                                                                                                                                | Frequency<br>[MHz] | Mode                                 | Level<br>[dBc]                    | Limit<br>[dBc] | Margin<br>[dB] |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                       | 2402               | Transmit                             | -34.79                            | -20            | -14.79         |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                      | 2480               | Transmit                             | -39.17                            | -20            | -19.17         |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                      |                                   |                |                |

# Band-edge compliance LOW

## Band-edge Compliance

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.11  
 Operational Mode: GFSK, Channel: 0, 2402 MHz  
 Operating Conditions: Tnom/Vnom  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Band-edge: Lower  
 In-band Frequency [MHz]: 2401.92  
 Max. in-band Level [dBm/100 kHz]: 2.223  
 Out-of-band Frequency [MHz]: 2399.968  
 Max. out-of-band Level [dBm/100 kHz]: -32.567  
 Attenuation [dB]: -34.79



Date: 7.OCT.2016 14:05:11

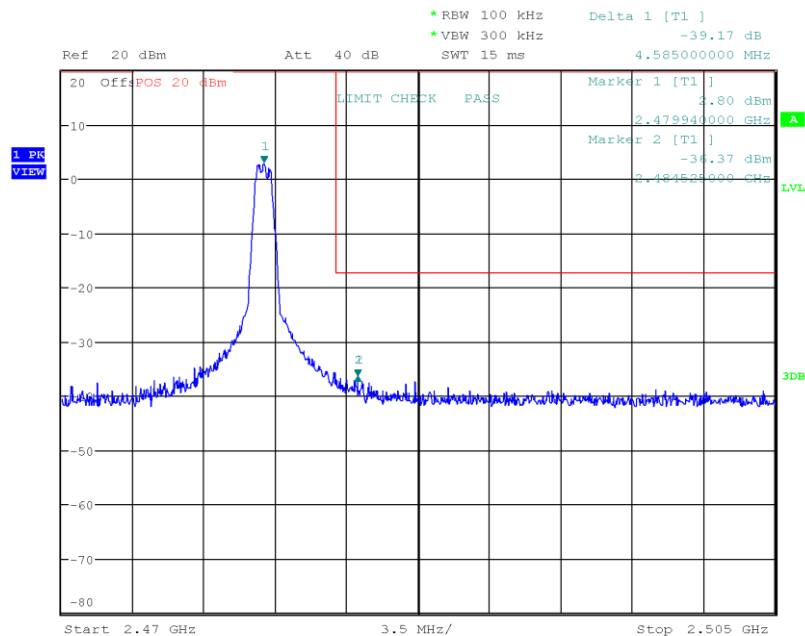
Test Report No.: G0M-1608-5788-TFC247BL\_S-V02

Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

# Band-edge compliance HIGH

## Band-edge Compliance

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.11  
 Operational Mode: GFSK, Channel: 39, 2480 MHz  
 Operating Conditions: Tnom/Vnom  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Band-edge: Upper  
 In-band Frequency [MHz]: 2479.94  
 Max. in-band Level [dBm/100 kHz]: 2.8  
 Out-of-band Frequency [MHz]: 2484.525  
 Max. out-of-band Level [dBm/100 kHz]: -36.374  
 Attenuation [dB]: -39.17



Date: 7.OCT.2016 14:07:51

Test Report No.: G0M-1608-5788-TFC247BL\_S-V02

Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany



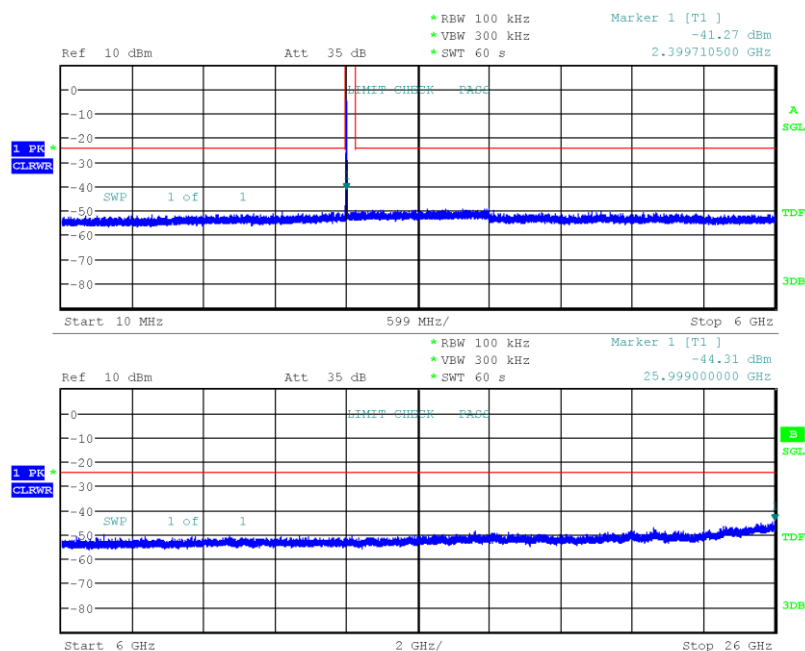
### 3.7 Test Conditions and Results – Conducted spurious emissions

| Conducted spurious emissions acc. to FCC 15.247 / ISED RSS-247                                                                                                                                                                                                                                                                                                                                                                                     |                 |                                   |                                    |                                        |                  | Verdict: PASS |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------|------------------------------------|----------------------------------------|------------------|---------------|-------------|
| EUT requirement<br>rule parts and clause                                                                                                                                                                                                                                                                                                                                                                                                           |                 |                                   | Reference                          |                                        |                  |               |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                                   | FCC 15.247(d) / ISED RSS-247 5.5   |                                        |                  |               |             |
| Test according to<br>measurement reference                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                                   | Reference Method                   |                                        |                  |               |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                                   | ANSI C63.10                        |                                        |                  |               |             |
| Test frequency range                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |                                   | Tested frequencies                 |                                        |                  |               |             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                                   | 10 MHz – 10 <sup>th</sup> Harmonic |                                        |                  |               |             |
| Measurement mode                                                                                                                                                                                                                                                                                                                                                                                                                                   |                 |                                   | Peak                               |                                        |                  |               |             |
| Limits                                                                                                                                                                                                                                                                                                                                                                                                                                             |                 |                                   |                                    |                                        |                  |               |             |
| Limit                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                                   |                                    | Condition                              |                  |               |             |
| ≤ -20 dB / 100 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |                                   |                                    | Peak power measurement detector = Peak |                  |               |             |
| ≤ -30 dB /100 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                  |                 |                                   |                                    | Peak power measurement detector = RMS  |                  |               |             |
| Test setup                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                                   |                                    |                                        |                  |               |             |
| <div><div>Spectrum Analyzer</div><div>EUT</div></div>                                                                                                                                                                                                                                                                                                                                                                                              |                 |                                   |                                    |                                        |                  |               |             |
| Test procedure                                                                                                                                                                                                                                                                                                                                                                                                                                     |                 |                                   |                                    |                                        |                  |               |             |
| <div>1. EUT set to test mode (Communication tester is used if needed)</div> <div>2. Span it set according to measurement range</div> <div>3. Resolution bandwidth is set to 100 kHz and detector to peak and max hold</div> <div>4. Markers are set to peak emission levels within frequency band</div> <div>5. Emission level is determined by second marker on emission peak</div> <div>6. Attenuation is determined from level difference</div> |                 |                                   |                                    |                                        |                  |               |             |
| Test results                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                                   |                                    |                                        |                  |               |             |
| Channel                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency [MHz] | Mode                              | Emission [MHz]                     | Emission Level [dBm]                   | Peak power [dBm] | Limit [dBm]   | Margin [dB] |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2402            | Peak                              | 2399.7                             | -41.3                                  | -4.3             | -24.3         | -17.00      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2442            | no significant spurious emissions |                                    |                                        |                  |               |             |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2480            | Peak                              | 2483.9                             | -45.4                                  | -3.6             | -23.6         | -21.80      |
| Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                          |                 |                                   |                                    |                                        |                  |               |             |

Conducted spurious emissions – F<sub>Low</sub>

## Conducted Spurious Emissions

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.11  
 Operational Mode: GFSK, Channel: 0, 2402 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Max. in-band Frequency [MHz]: 2401.9  
 Max. in-band Level [dBm/100 kHz]: -4.3  
 Out-of-band Limit [dBm/100 kHz]: -24.3

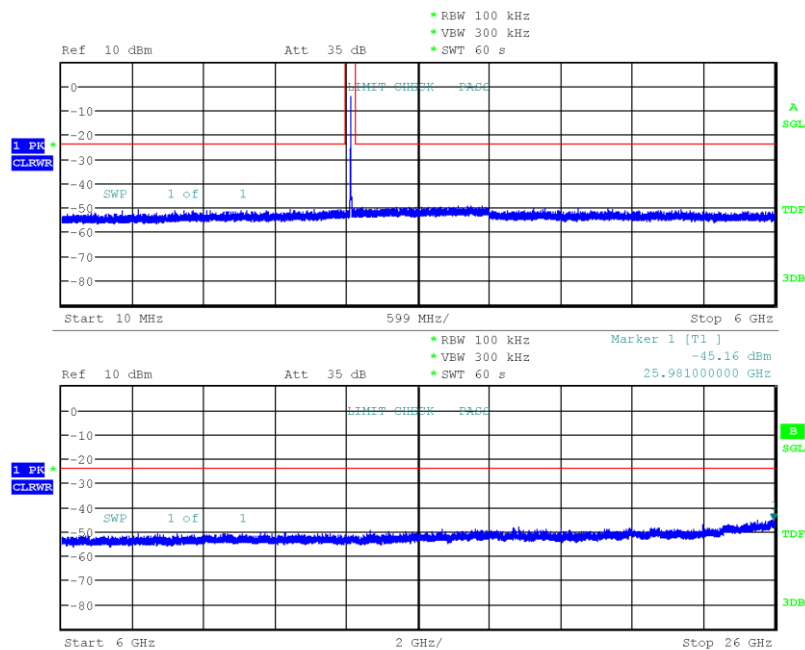


Date: 7.OCT.2016 14:16:00

Conducted spurious emissions – F<sub>MID</sub>

## Conducted Spurious Emissions

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.11  
 Operational Mode: GFSK, Channel: 19, 2440 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Max. in-band Frequency [MHz]: 2439.9  
 Max. in-band Level [dBm/100 kHz]: -3.8  
 Out-of-band Limit [dBm/100 kHz]: -23.8

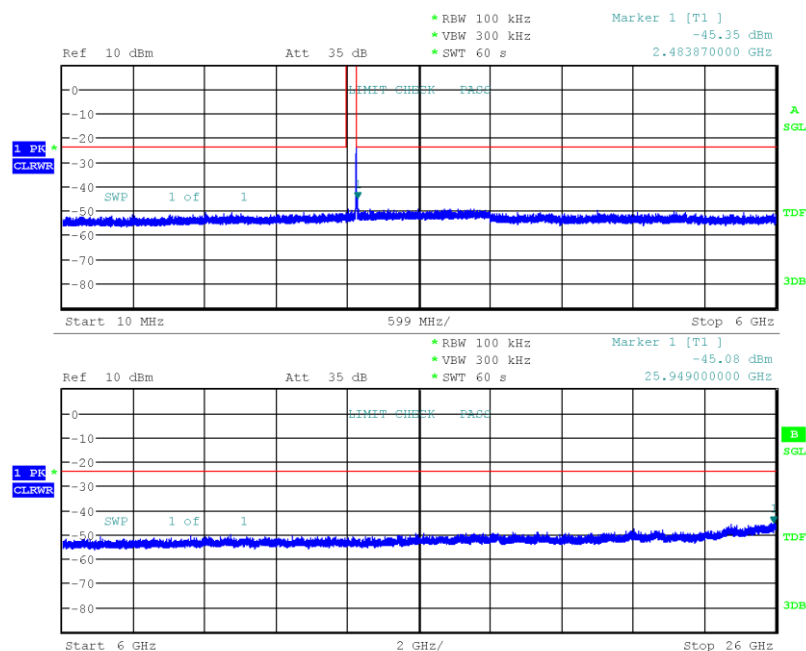


Date: 7.OCT.2016 14:22:40

Conducted spurious emissions – F<sub>HIGH</sub>

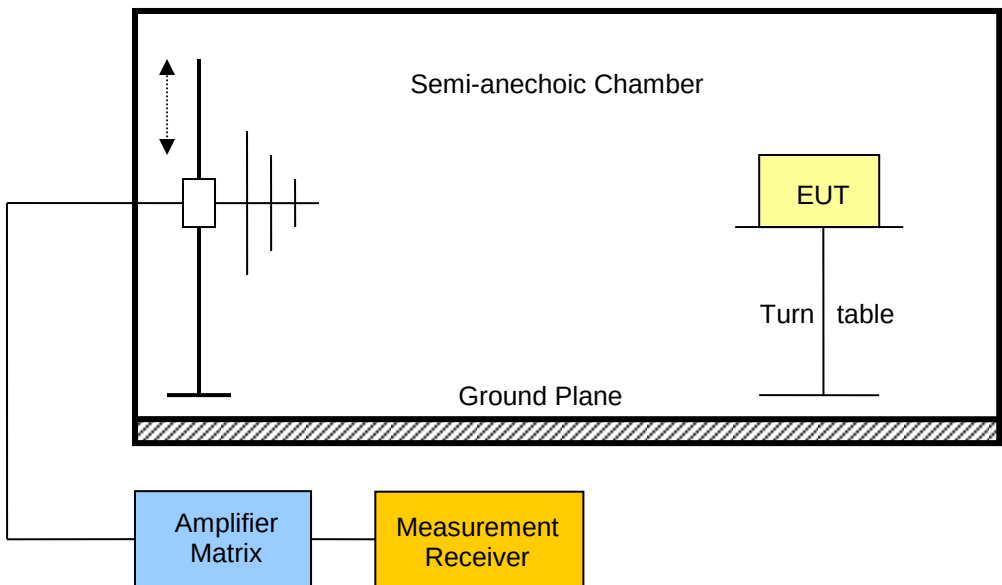
## Conducted Spurious Emissions

Project Number: G0M-1608-5788  
 Applicant: Schneider Schreibgeräte GmbH  
 Model Description: blukii module  
 Model: S  
 Test Sample ID: 10502  
 Reference Standards: FCC 15.247, RSS-247  
 Reference Method: ANSI C63.10:2013, Section 11.11  
 Operational Mode: GFSK, Channel: 39, 2480 MHz  
 Operating Conditions: T<sub>nom</sub>/V<sub>nom</sub>  
 Operator: W. Treffke  
 Test Site: Eurofins Product Service GmbH  
 Test Date: 2016-10-07  
 Max. in-band Frequency [MHz]: 2479.9  
 Max. in-band Level [dBm/100 kHz]: -3.6  
 Out-of-band Limit [dBm/100 kHz]: -23.6



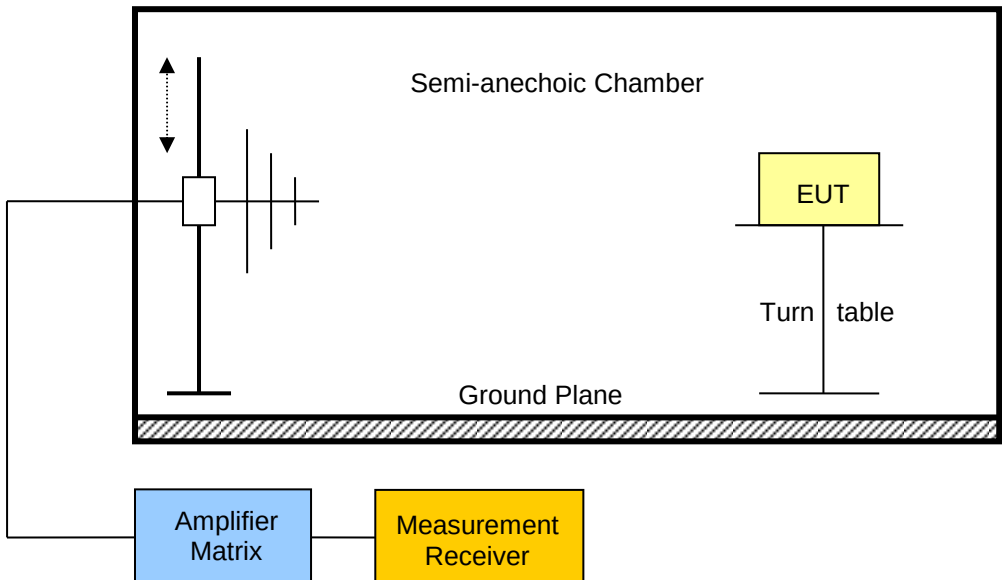
Date: 7.OCT.2016 14:28:16

### 3.8 Test Conditions and Results – Transmitter radiated emissions

| Transmitter radiated emissions acc. to<br>FCC 47 CFR 15.247 / ISED RSS-247                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                    |                | Verdict: PASS      |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------|----------------|--------------------|--|
| Test according referenced standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            | Reference Method                   |                |                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | FCC 15.247(d) / ISED RSS-247 5.5   |                |                    |  |
| Test according to measurement reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | Reference Method                   |                |                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | ANSI C63.10                        |                |                    |  |
| Test frequency range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            | Tested frequencies                 |                |                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | 30 MHz – 10 <sup>th</sup> Harmonic |                |                    |  |
| Limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                                    |                |                    |  |
| Frequency range [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Detector   | Limit [µV/m]                       | Limit [dBµV/m] | Limit Distance [m] |  |
| 30 – 88                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quasi-Peak | 100                                | 40             | 3                  |  |
| 88 – 216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quasi-Peak | 150                                | 43.5           | 3                  |  |
| 216 – 960                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-Peak | 200                                | 46             | 3                  |  |
| 960 – 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Quasi-Peak | 500                                | 54             | 3                  |  |
| > 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Average    | 500                                | 54             | 3                  |  |
| <p>Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.</p> |            |                                    |                |                    |  |
| Test setup                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |                                    |                |                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |                                    |                |                    |  |

| Test procedure                                                                                                                                                                                                                                                                                                                                                                                                                |                 |          |                |                |      |      |                |                  |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|----------------|----------------|------|------|----------------|------------------|-------------|
| <ol style="list-style-type: none"> <li>1. EUT set to test mode (Communication tester is used if needed)</li> <li>2. Span it set according to measurement range</li> <li>3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz</li> <li>4. Markers are set to peak emission levels within restricted bands</li> </ol> |                 |          |                |                |      |      |                |                  |             |
| Test results                                                                                                                                                                                                                                                                                                                                                                                                                  |                 |          |                |                |      |      |                |                  |             |
| Channel                                                                                                                                                                                                                                                                                                                                                                                                                       | Frequency [MHz] | Mode     | Emission [MHz] | Level [dBμV/m] | Det. | Pol. | Limit [dBμV/m] | Limit dist. [m]* | Margin [dB] |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2388.8         | 49.80          | pk   | ver  | 74.00          | 1                | -24.20      |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2389.8         | 55.74          | pk   | hor  | 74.00          | 1                | -18.26      |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2389.8         | 38.94          | RMS  | hor  | 54.00          | 1                | -15.06      |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2389.8         | 53.75          | pk   | ver  | 74.00          | 1                | -20.25      |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2389.8         | 38.19          | RMS  | ver  | 54.00          | 1                | -15.81      |
| F <sub>LOW</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2402            | Transmit | 2483.5         | 40.79          | pk   | hor  | 74.00          | 1                | -33.21      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2440            | Transmit | 7320           | 57.41          | pk   | hor  | 74.00          | 1                | -16.59      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2440            | Transmit | 7320           | 53.40          | avg  | hor  | 54.00          | 1                | -00.60      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2440            | Transmit | 7321           | 56.29          | pk   | ver  | 74.00          | 1                | -17.71      |
| F <sub>MID</sub>                                                                                                                                                                                                                                                                                                                                                                                                              | 2440            | Transmit | 7321           | 50.06          | avg  | ver  | 54.00          | 1                | -03.94      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 2483.6         | 67.85          | pk   | hor  | 74.00          | 1                | -06.15      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 2483.6         | 42.33          | RMS  | hor  | 54.00          | 1                | -11.67      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 2483.7         | 66.03          | pk   | ver  | 74.00          | 1                | -07.97      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 2483.7         | 41.25          | RMS  | ver  | 54.00          | 1                | -12.75      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 7439           | 55.37          | pk   | hor  | 74.00          | 1                | -18.63      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 7439           | 53.20          | avg  | hor  | 54.00          | 1                | -00.80      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 7439           | 54.67          | pk   | ver  | 74.00          | 1                | -19.33      |
| F <sub>HIGH</sub>                                                                                                                                                                                                                                                                                                                                                                                                             | 2480            | Transmit | 7439           | 52.30          | avg  | ver  | 54.00          | 1                | -01.70      |
| Comments: * Physical distance between EUT and measurement antenna.                                                                                                                                                                                                                                                                                                                                                            |                 |          |                |                |      |      |                |                  |             |

### 3.1 Test Conditions and Results – Receiver radiated emissions

| Receiver radiated emissions acc. to ISED RSS-247                                     |                                   |              |                | Verdict: PASS      |
|--------------------------------------------------------------------------------------|-----------------------------------|--------------|----------------|--------------------|
| Test according referenced standards                                                  | Reference Method                  |              |                |                    |
|                                                                                      | ISED RSS-247 3.1                  |              |                |                    |
| Test according to measurement reference                                              | Reference Method                  |              |                |                    |
|                                                                                      | ANSI C63.10                       |              |                |                    |
| Test frequency range                                                                 | Tested frequencies                |              |                |                    |
|                                                                                      | 30 MHz – 5 <sup>th</sup> Harmonic |              |                |                    |
| EUT test mode                                                                        | Receive                           |              |                |                    |
| Limits                                                                               |                                   |              |                |                    |
| Frequency range [MHz]                                                                | Detector                          | Limit [µV/m] | Limit [dBµV/m] | Limit Distance [m] |
| 30 – 88                                                                              | Quasi-Peak                        | 100          | 40             | 3                  |
| 88 – 216                                                                             | Quasi-Peak                        | 150          | 43.5           | 3                  |
| 216 – 960                                                                            | Quasi-Peak                        | 200          | 46             | 3                  |
| 960 – 1000                                                                           | Quasi-Peak                        | 500          | 54             | 3                  |
| > 1000                                                                               | Average                           | 500          | 54             | 3                  |
| Test setup                                                                           |                                   |              |                |                    |
|  |                                   |              |                |                    |

| Test procedure                                                                                                                                                                                                                                                                                                                       |                 |                |                         |      |      |                |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|-------------------------|------|------|----------------|-----------------|
| 1. EUT set to receive mode (Communication tester is used if needed)<br>2. Span it set according to measurement range<br>3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz<br>4. Markers are set to peak emission levels |                 |                |                         |      |      |                |                 |
| Test results                                                                                                                                                                                                                                                                                                                         |                 |                |                         |      |      |                |                 |
| Channel                                                                                                                                                                                                                                                                                                                              | Frequency [MHz] | Emission [MHz] | Emission Level [dBμV/m] | Pol. | Det. | Limit [dBμV/m] | Margin [dBμV/m] |
| 19                                                                                                                                                                                                                                                                                                                                   | 2440            | 484.8          | 23.06                   | ver  | pk   | 46.00          | -22.94 dB       |
| 19                                                                                                                                                                                                                                                                                                                                   | 2440            | 880            | 26.65                   | ver  | pk   | 46.00          | -19.35 dB       |
| 19                                                                                                                                                                                                                                                                                                                                   | 2440            | 4872           | 43.25                   | hor  | pk   | 53.98          | -10.73 dB       |
| 19                                                                                                                                                                                                                                                                                                                                   | 2440            | 4872           | 41.78                   | ver  | pk   | 53.98          | -12.2 dB        |
| 19                                                                                                                                                                                                                                                                                                                                   | 2440            | 7136           | 47.77                   | ver  | pk   | 53.98          | -6.21 dB        |
| Comments:<br>* Emission level corresponds to ambient noise floor                                                                                                                                                                                                                                                                     |                 |                |                         |      |      |                |                 |



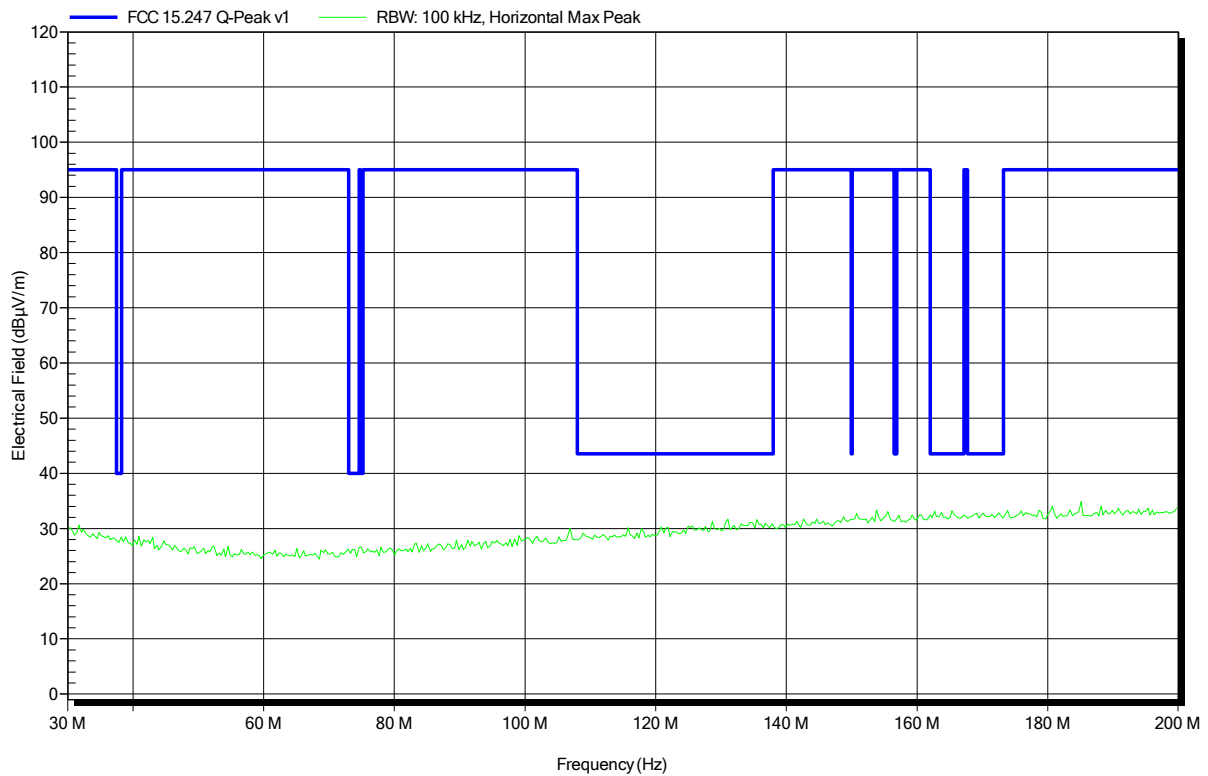
## ANNEX A Transmitter radiated spurious emissions

### Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HK 116, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | TX; BLE; 2402MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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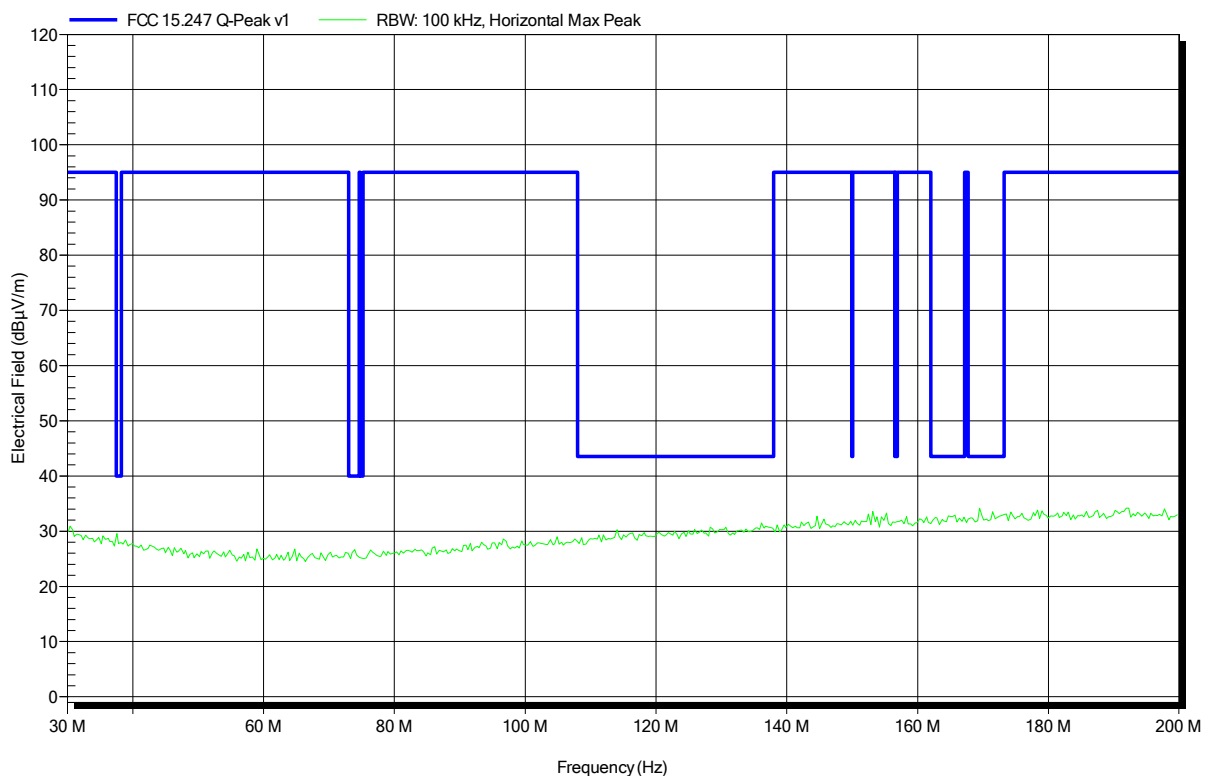


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HK 116, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | TX; BLE; 2402MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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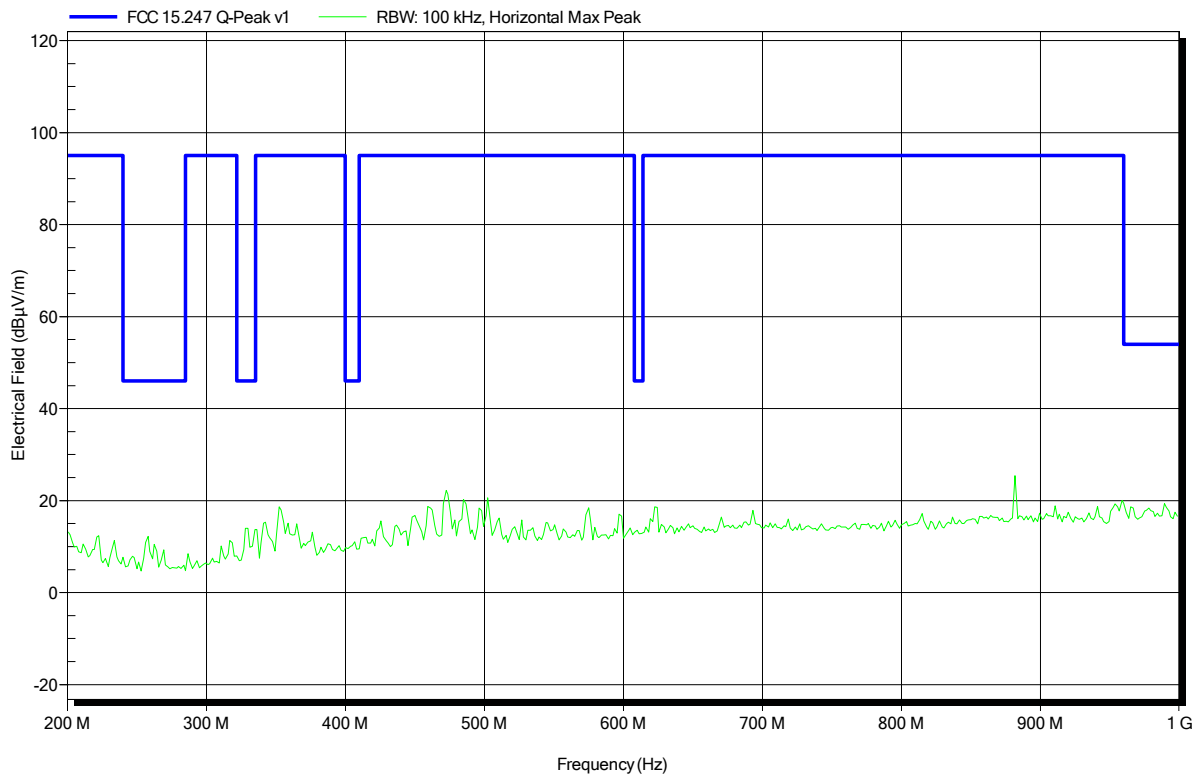


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HL 223, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | TX; BLE; 2402MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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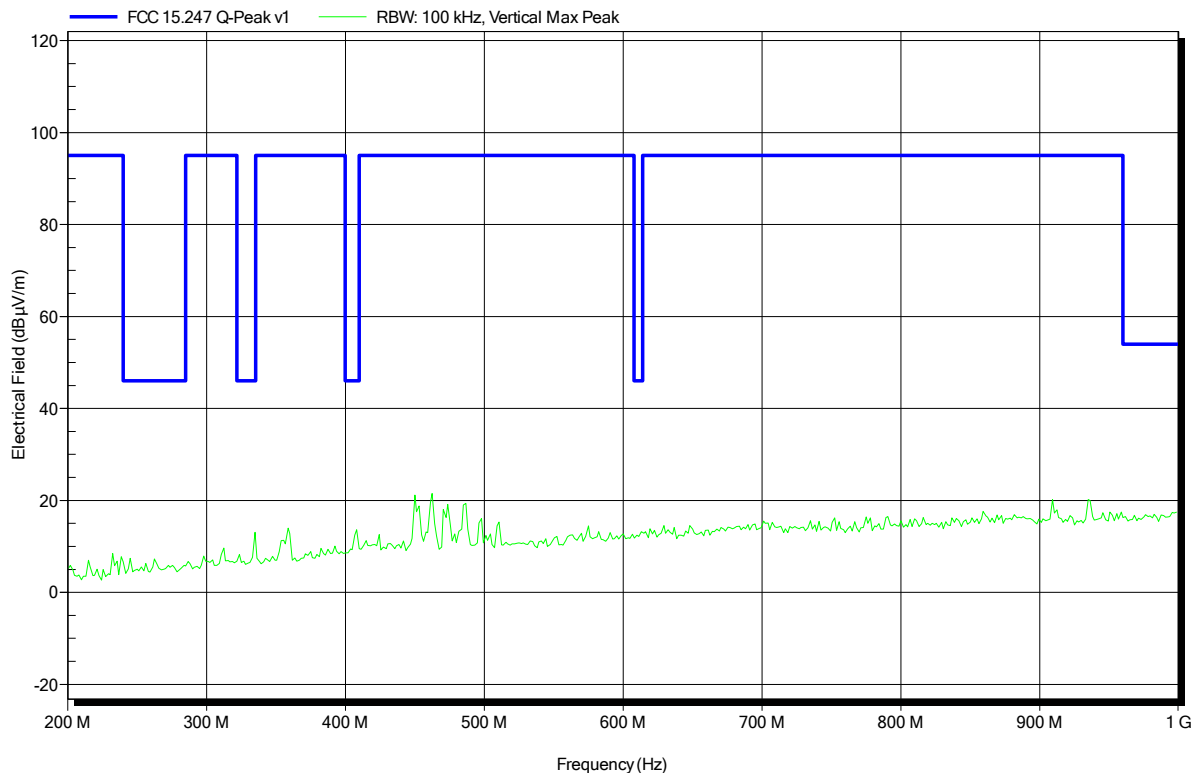


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Rohde & Schwarz HL 223, Vertical  
 Measurement distance: 3 m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-14  
 Note:

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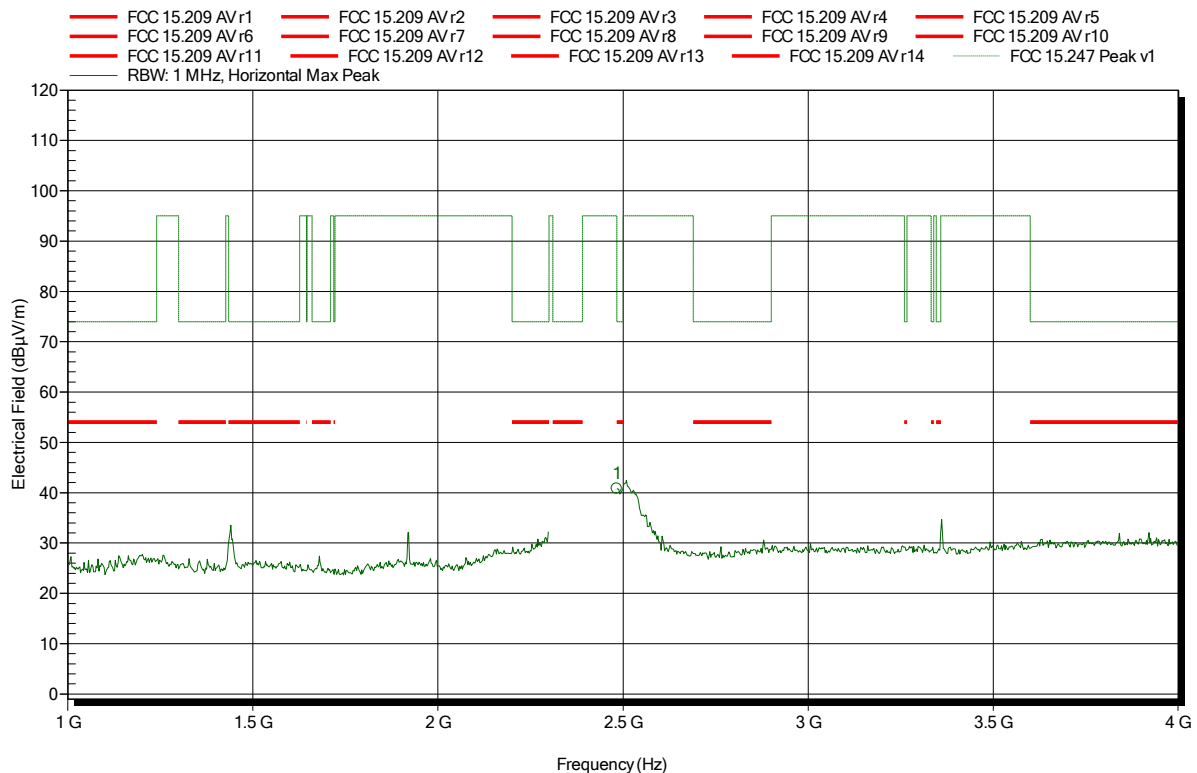


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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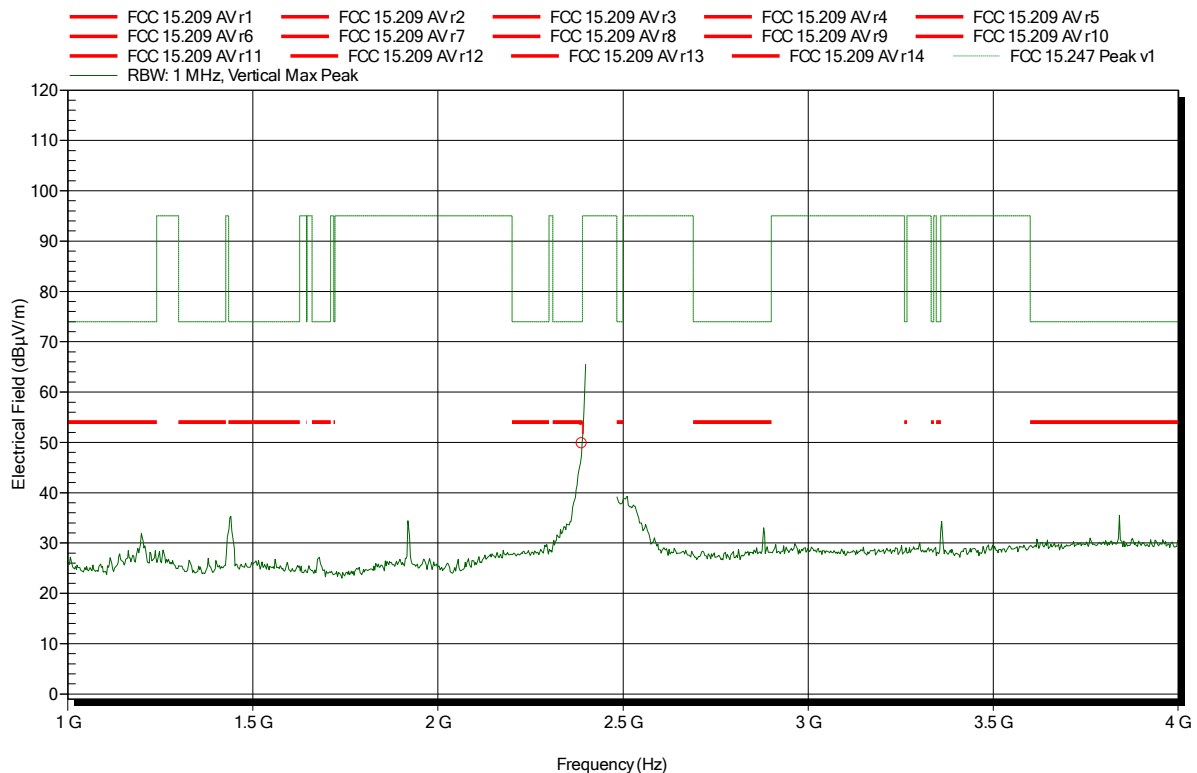
| Frequency  | Peak         | Peak Limit | Peak Difference | Status |
|------------|--------------|------------|-----------------|--------|
| 2.4835 GHz | 40.79 dBµV/m | 74 dBµV/m  | -33.21 dB       | Pass   |

## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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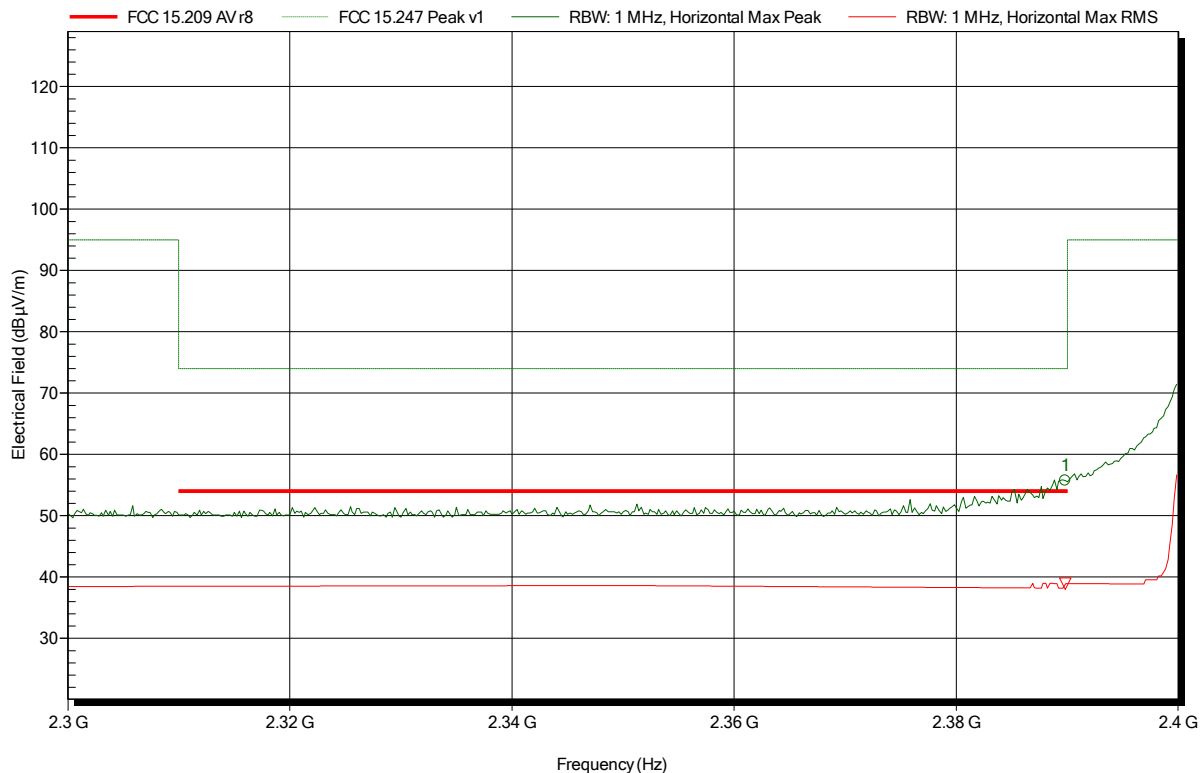
| Frequency  | Peak        | Peak Limit | Peak Difference | Status |
|------------|-------------|------------|-----------------|--------|
| 2.3888 GHz | 49.8 dBµV/m | 74 dBµV/m  | -24.2 dB        | Pass   |

**Spurious emissions according to FCC 15.247**

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note: lower bandedge

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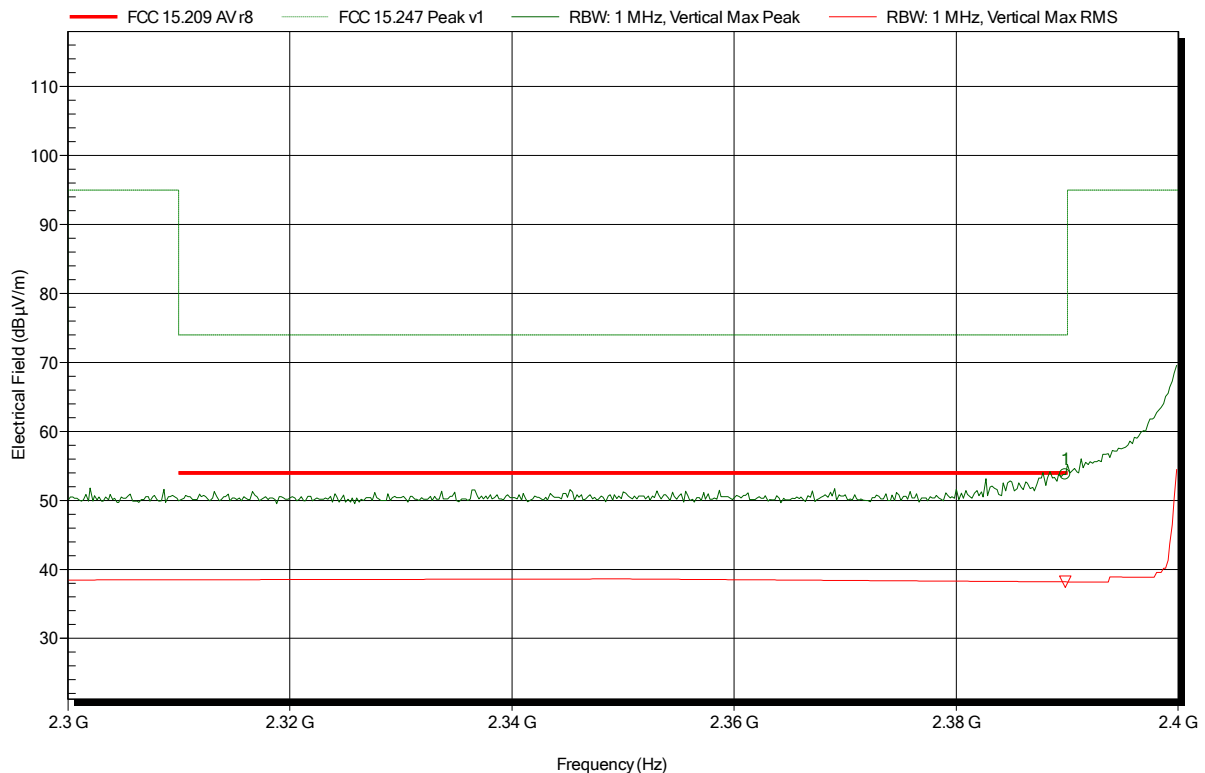
|                         |                      |                         |                              |                     |
|-------------------------|----------------------|-------------------------|------------------------------|---------------------|
| Frequency<br>2.3898 GHz | Peak<br>55.74 dBµV/m | Peak Limit<br>74 dBµV/m | Peak Difference<br>-18.26 dB | Peak Status<br>Pass |
| Frequency<br>2.3898 GHz | RMS<br>38.94 dBµV/m  | RMS Limit<br>54 dBµV/m  | RMS Difference<br>-15.06 dB  | RMS Status<br>Pass  |

**Spurious emissions according to FCC 15.247**

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note: lower bandedge

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|                         |                      |                         |                              |                     |
|-------------------------|----------------------|-------------------------|------------------------------|---------------------|
| Frequency<br>2.3898 GHz | Peak<br>53.75 dBµV/m | Peak Limit<br>74 dBµV/m | Peak Difference<br>-20.25 dB | Peak Status<br>Pass |
| Frequency<br>2.3898 GHz | RMS<br>38.19 dBµV/m  | RMS Limit<br>54 dBµV/m  | RMS Difference<br>-15.81 dB  | RMS Status<br>Pass  |

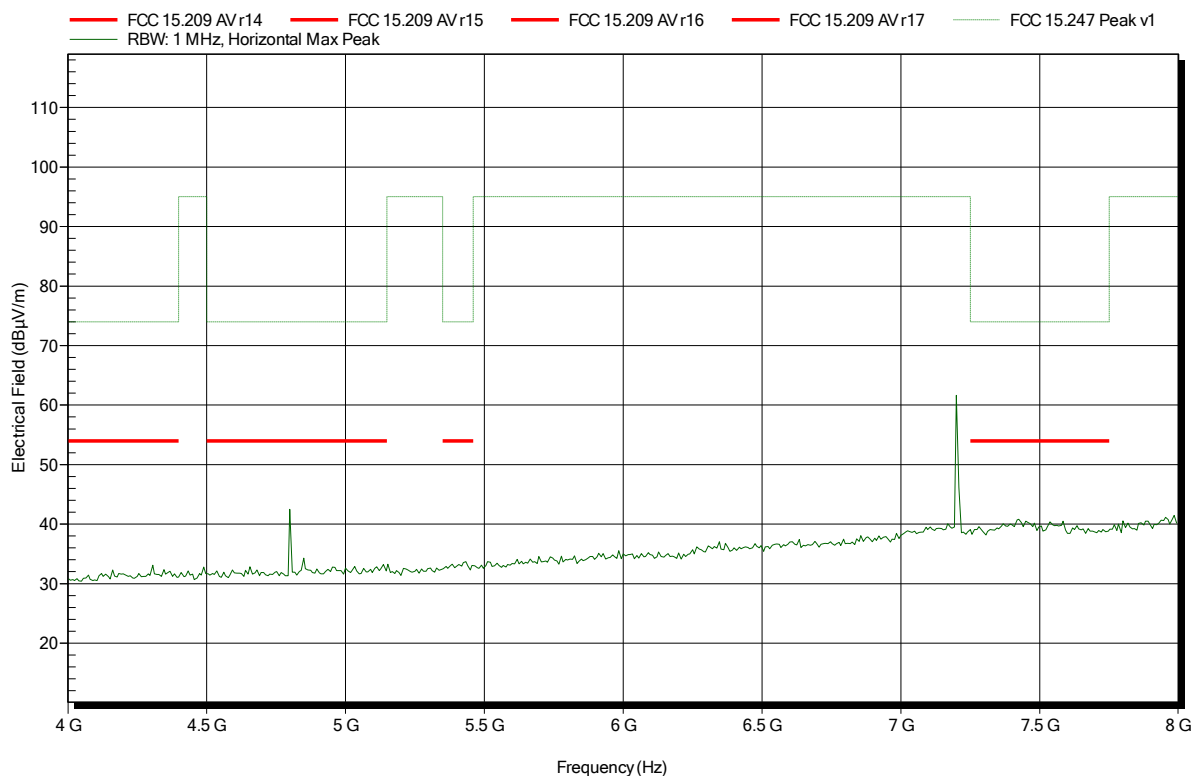


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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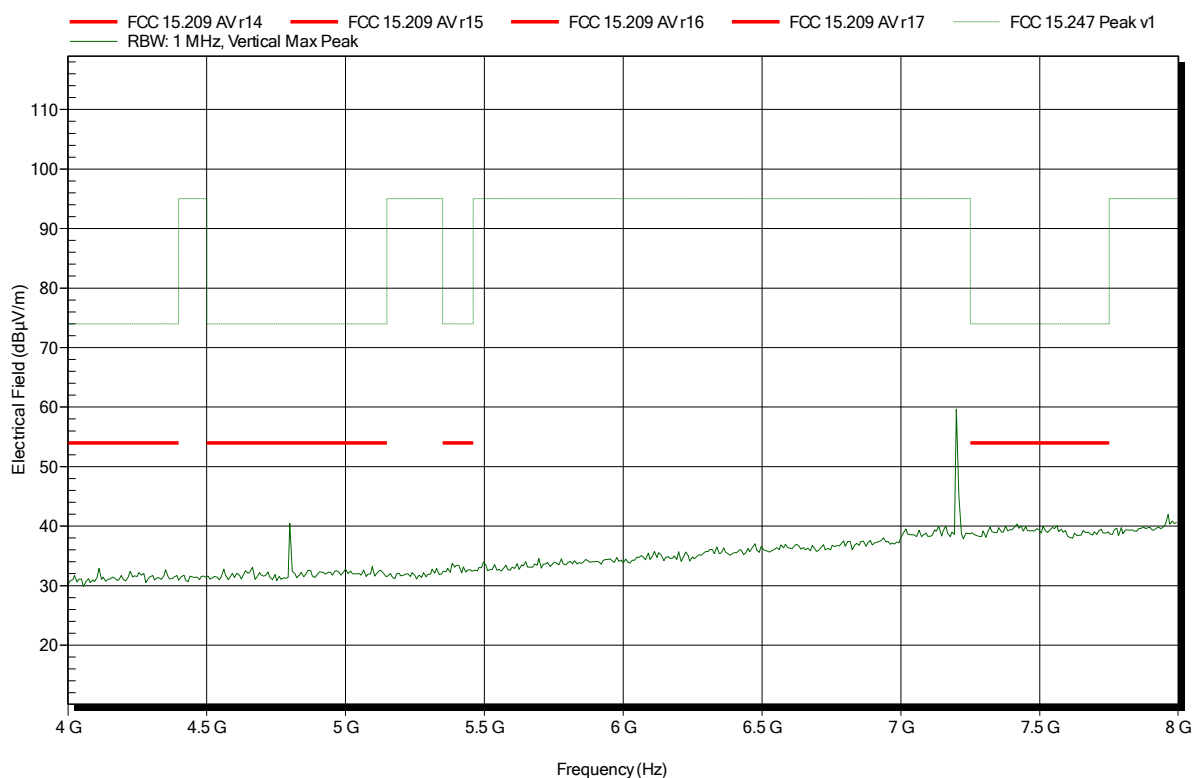


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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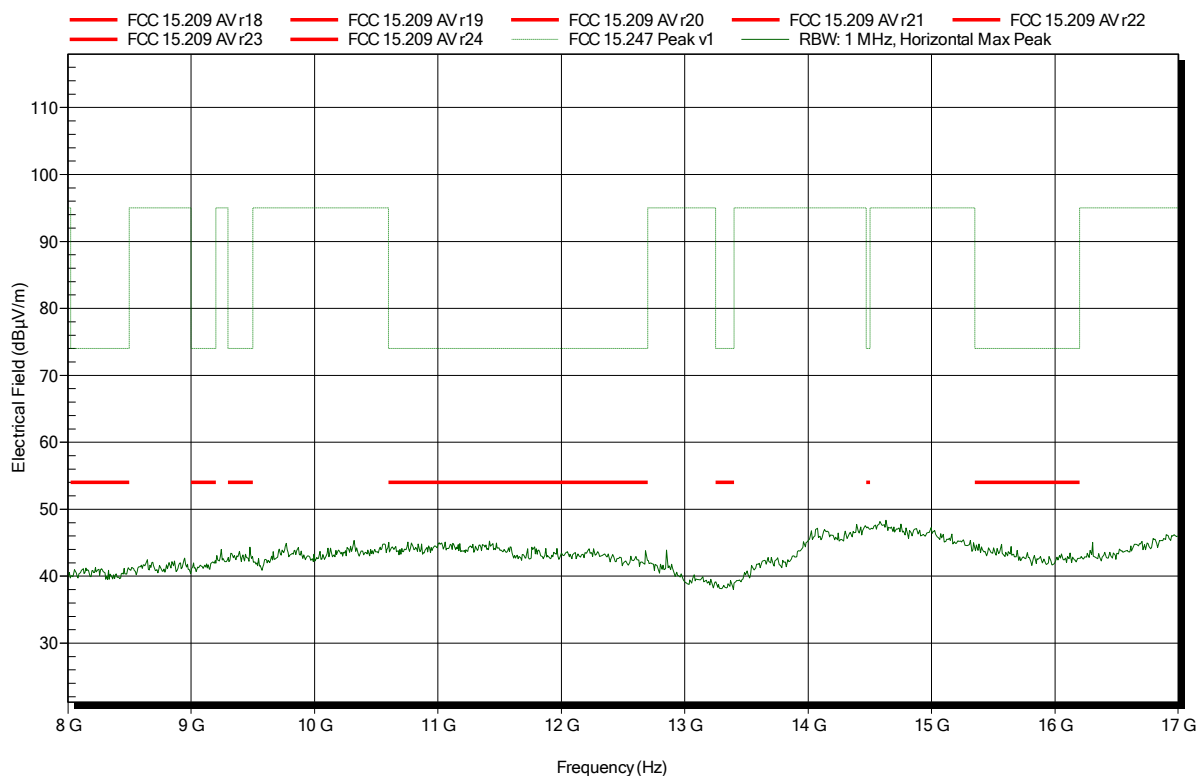


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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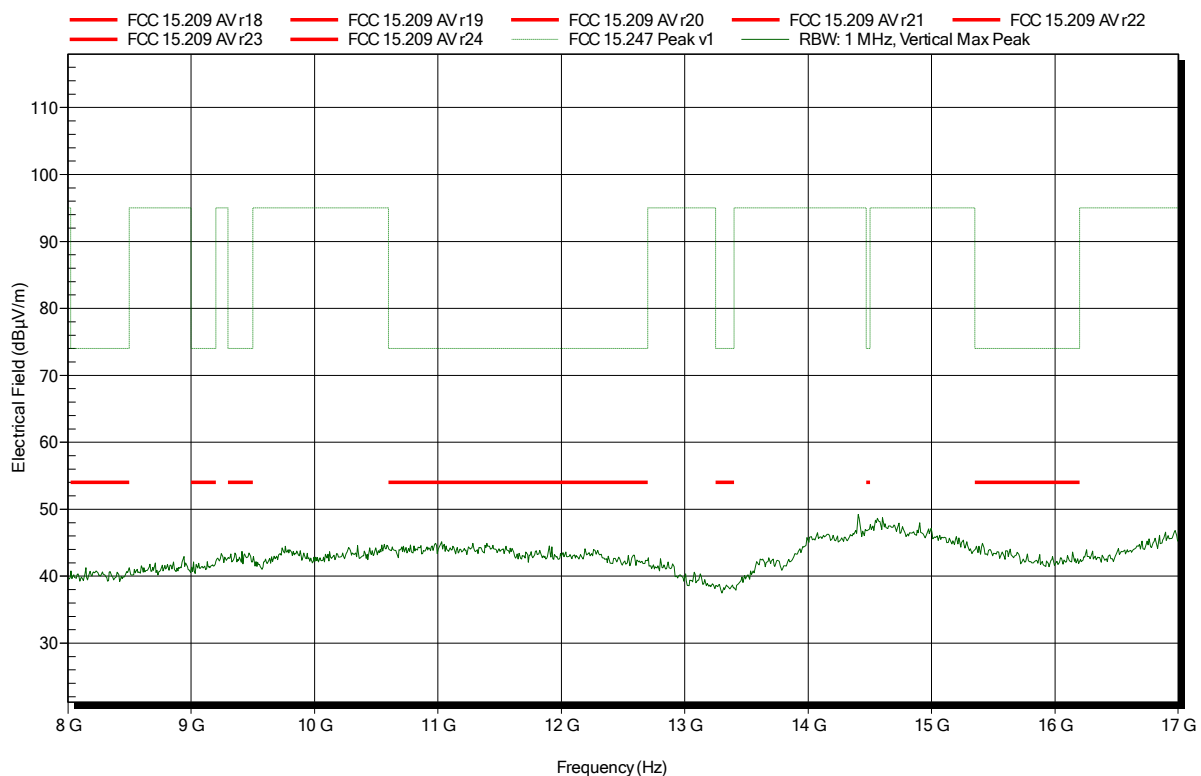


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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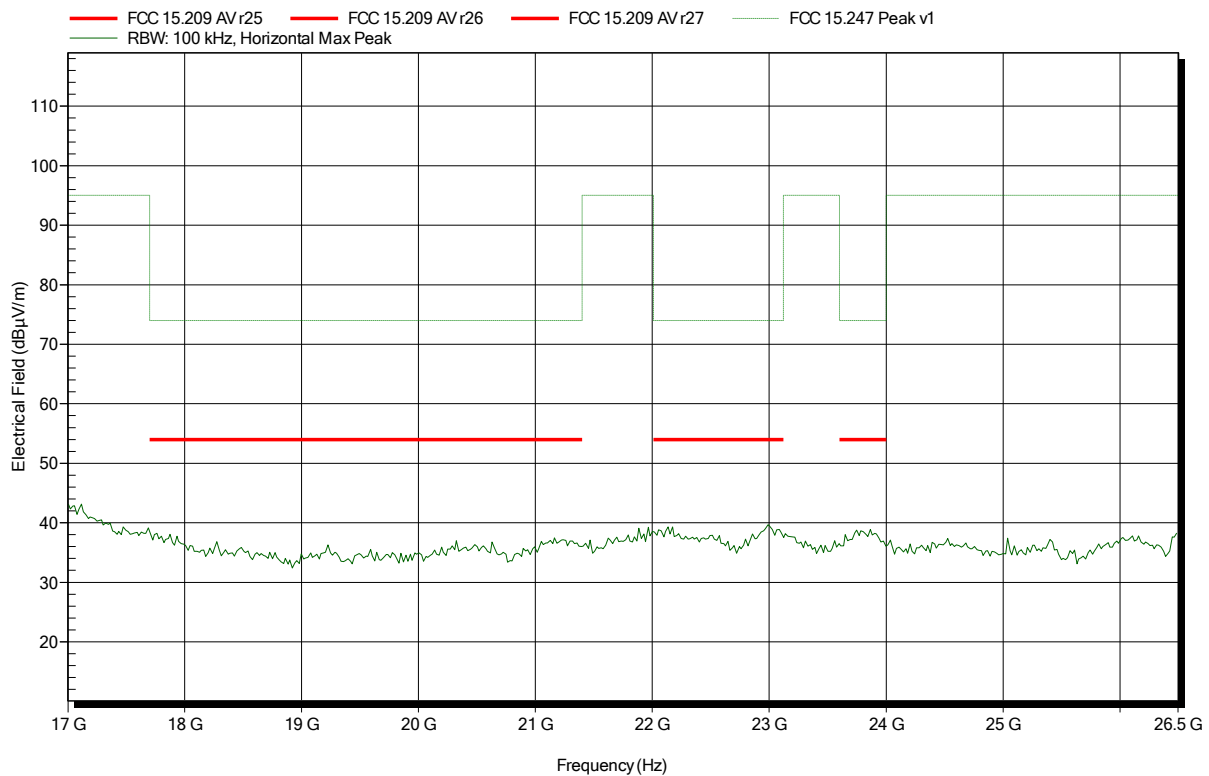


**Spurious emissions according to FCC 15.247**

Project number: GOM-1608-5788

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH                                 |
| EUT Name:             | blukii module                                                |
| Model:                | S (small)                                                    |
| Test Site:            | Eurofins Product Service GmbH                                |
| Operator:             | Mr. Treffke                                                  |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery)                          |
| Antenna:              | Amplifier Research AT 4560 (old name) / ATH18G40 (new name), |
| Horizontal            |                                                              |
| Measurement distance: | 1 m converted to 3m                                          |
| Mode:                 | TX; BLE; 2402MHz                                             |
| Test Date:            | 2016-10-13                                                   |
| Note:                 |                                                              |

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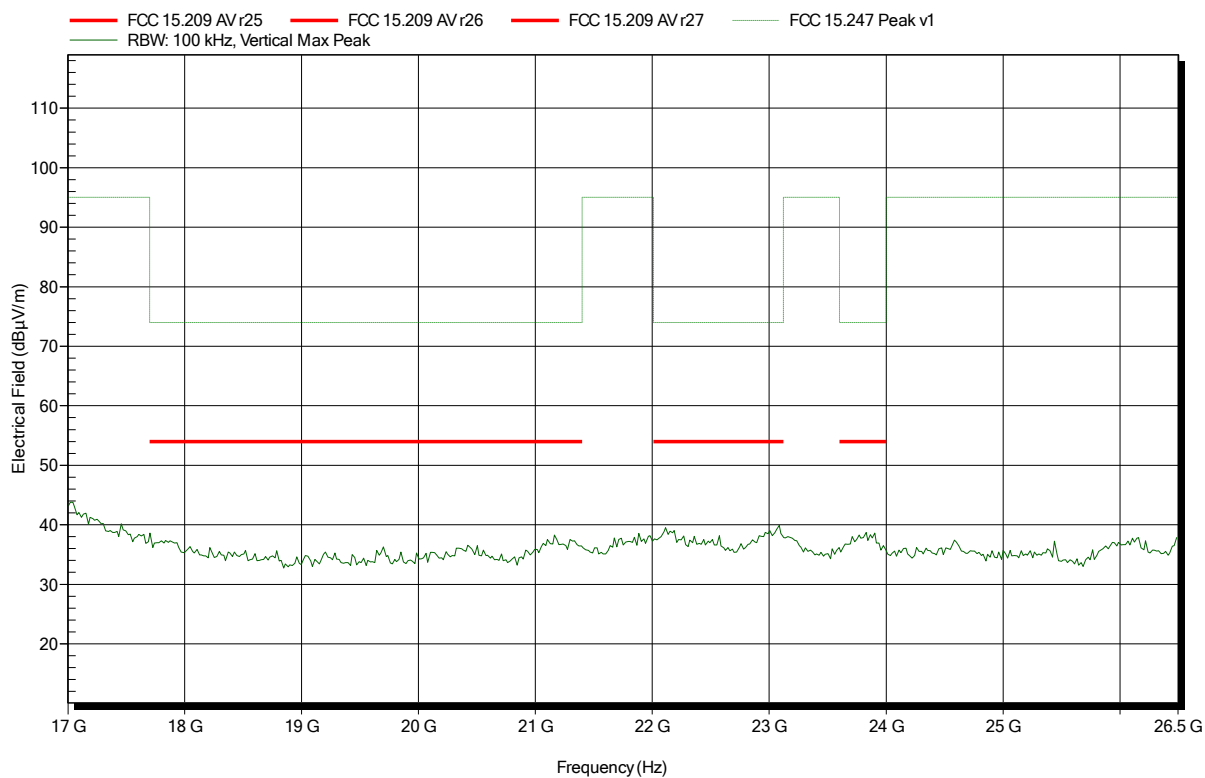


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Amplifier Research AT 4560 (old name) / ATH18G40 (new name),  
 Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2402MHz  
 Test Date: 2016-10-13  
 Note:

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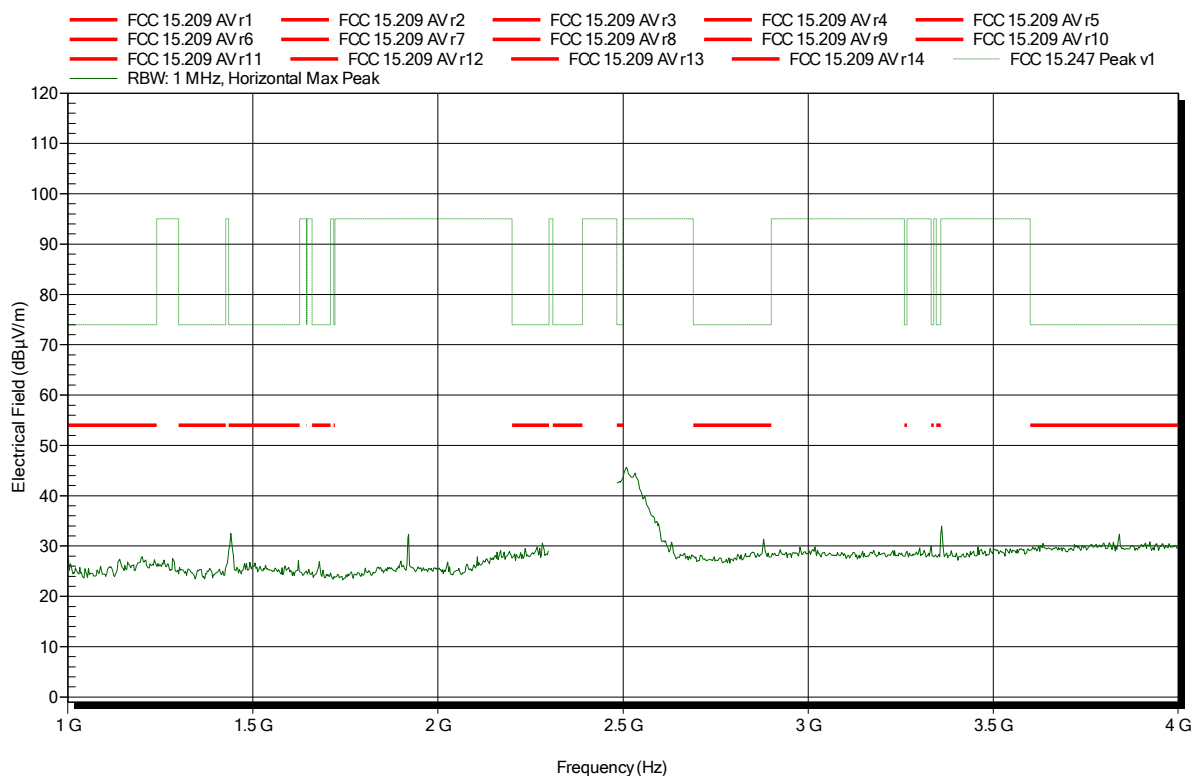


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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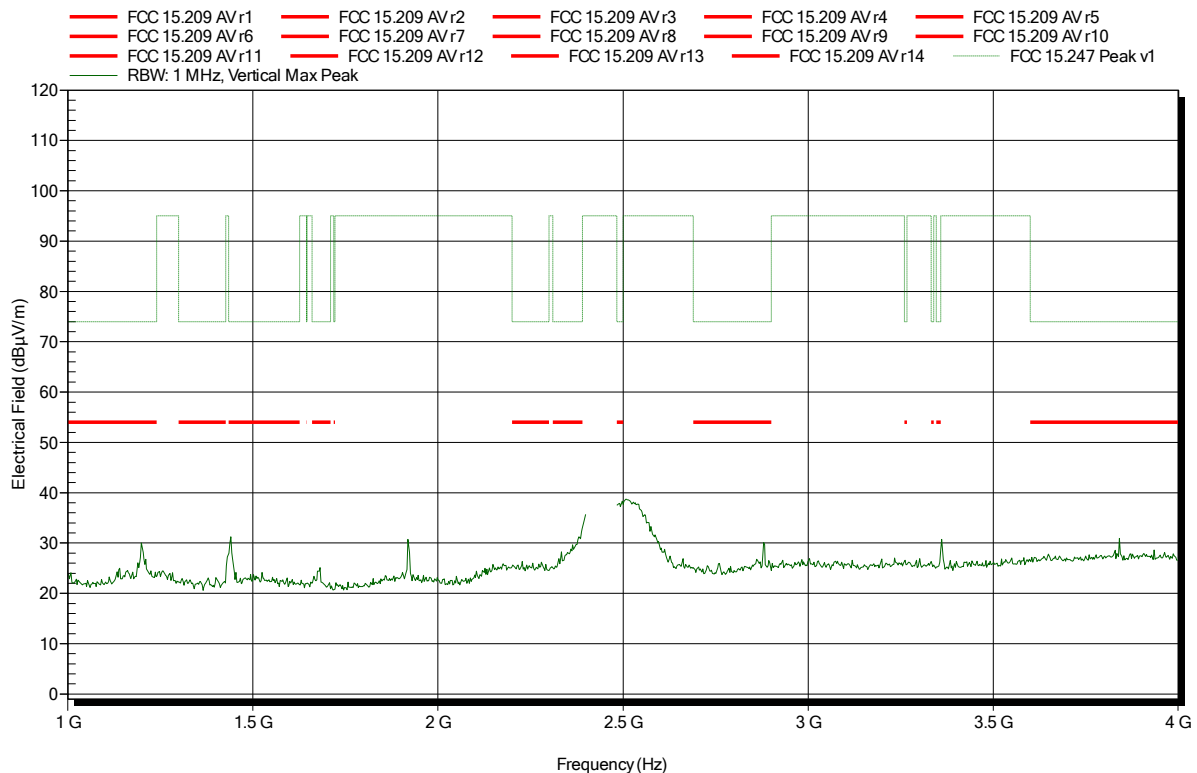


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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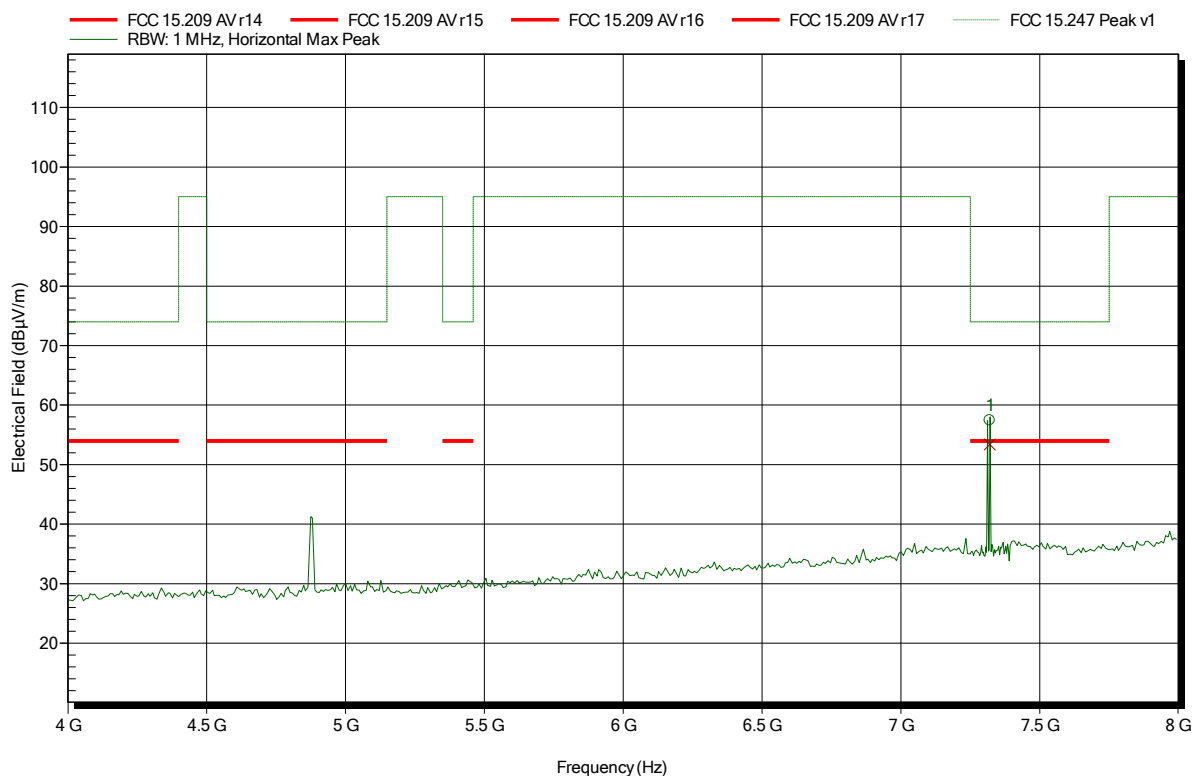


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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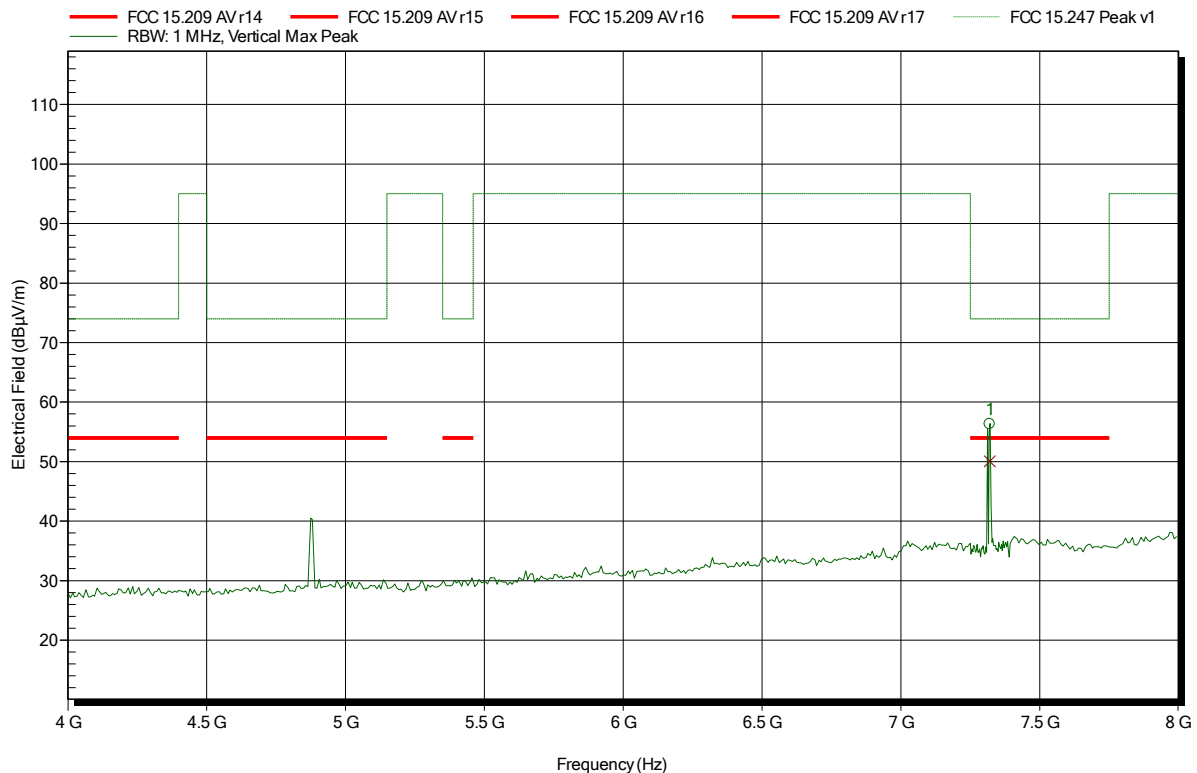
|                       |                        |                            |                               |                        |
|-----------------------|------------------------|----------------------------|-------------------------------|------------------------|
| Frequency<br>7.32 GHz | Peak<br>57.41 dBµV/m   | Peak Limit<br>74 dBµV/m    | Peak Difference<br>-16.59 dB  | Status<br>Pass         |
| Frequency<br>7.32 GHz | Average<br>53.4 dBµV/m | Average Limit<br>54 dBµV/m | Average Difference<br>-0.6 dB | Average Status<br>Pass |

## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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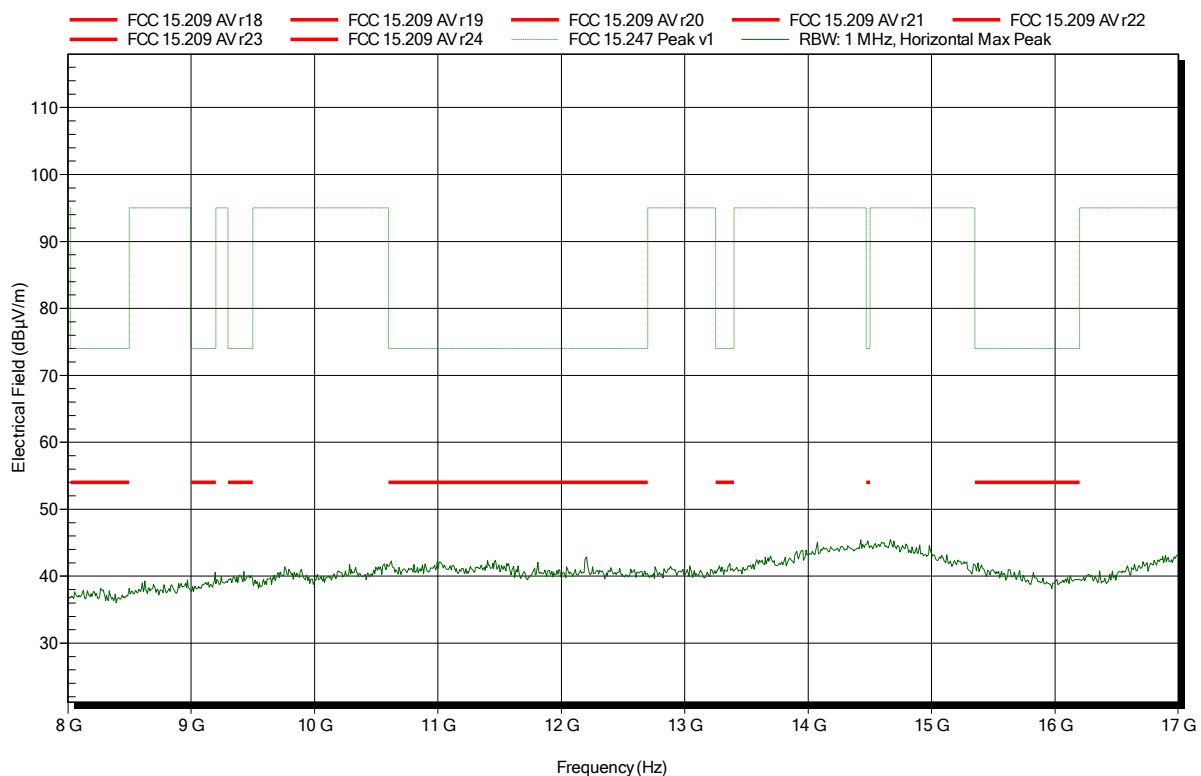
|                        |                         |                            |                                |                        |
|------------------------|-------------------------|----------------------------|--------------------------------|------------------------|
| Frequency<br>7.321 GHz | Peak<br>56.29 dBµV/m    | Peak Limit<br>74 dBµV/m    | Peak Difference<br>-17.71 dB   | Status<br>Pass         |
| Frequency<br>7.321 GHz | Average<br>50.06 dBµV/m | Average Limit<br>54 dBµV/m | Average Difference<br>-3.94 dB | Average Status<br>Pass |

## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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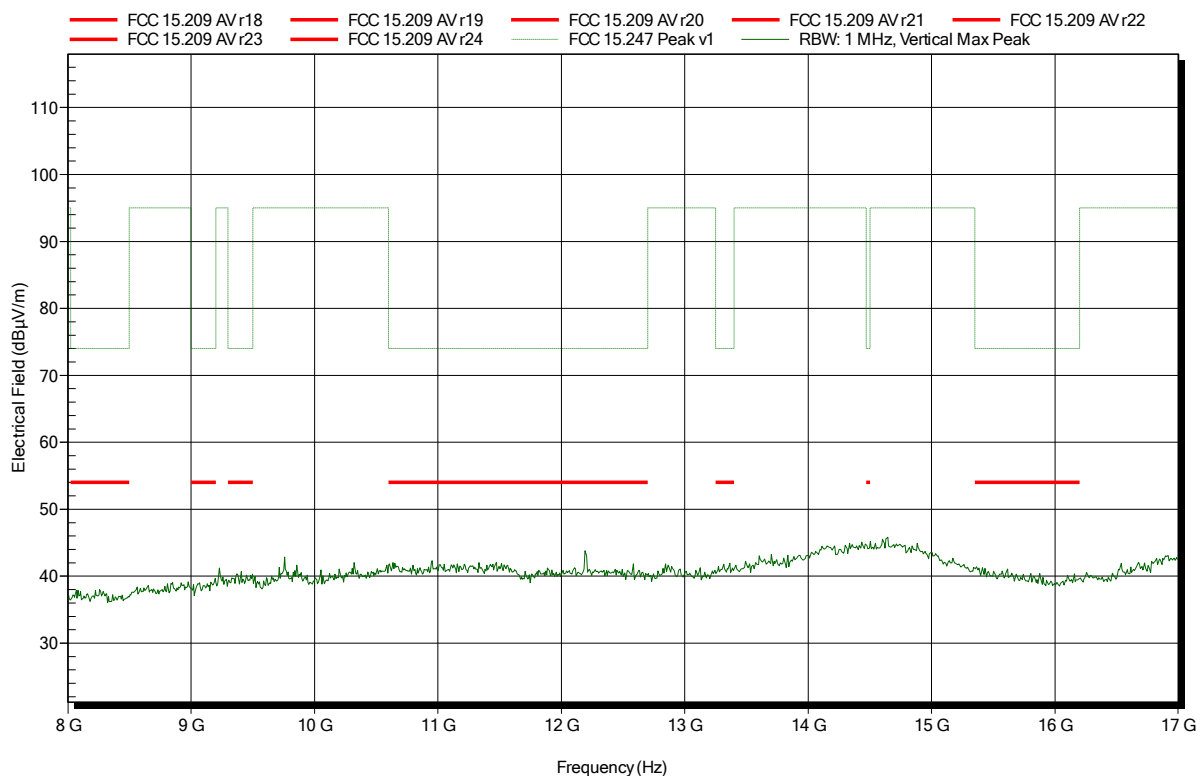


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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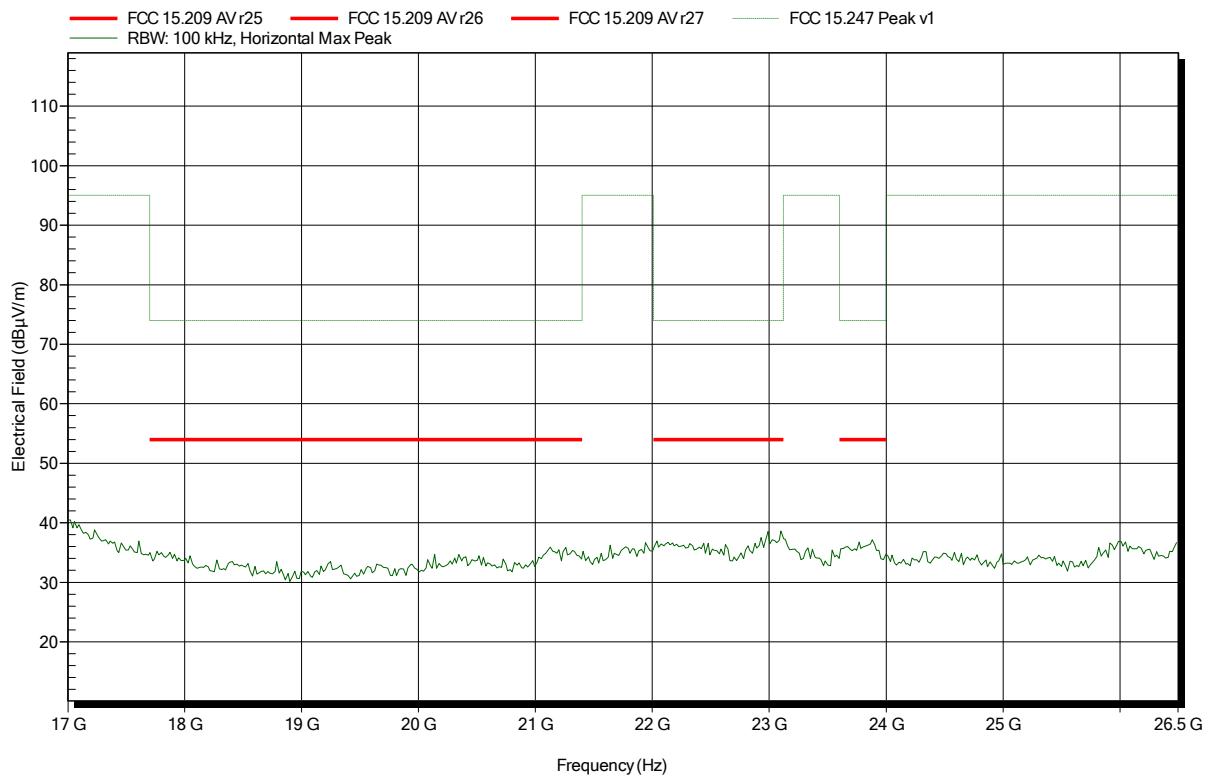


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Amplifier Research AT 4560 (old name) / ATH18G40 (new name),  
 Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2440MHz  
 Test Date: 2016-10-13  
 Note:

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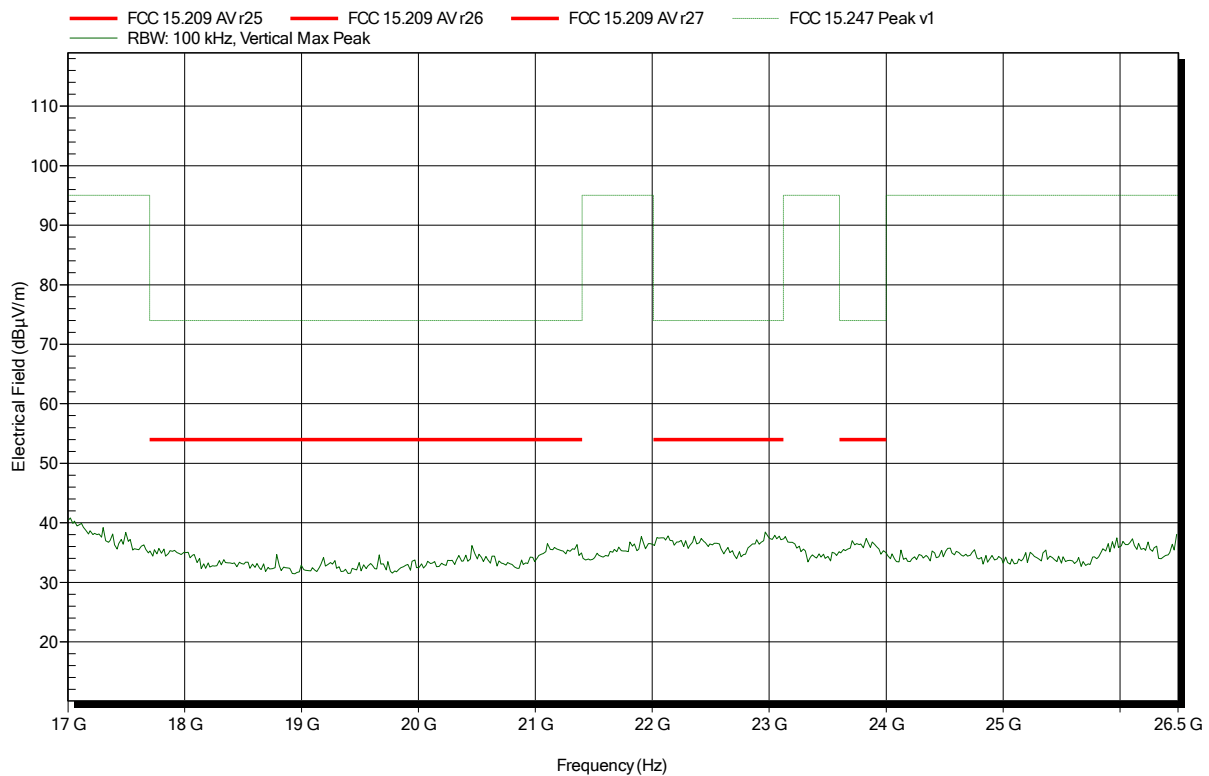


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH                                 |
| EUT Name:             | blukii module                                                |
| Model:                | S (small)                                                    |
| Test Site:            | Eurofins Product Service GmbH                                |
| Operator:             | Mr. Treffke                                                  |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery)                          |
| Antenna:              | Amplifier Research AT 4560 (old name) / ATH18G40 (new name), |
| Vertical              |                                                              |
| Measurement distance: | 1 m converted to 3m                                          |
| Mode:                 | TX; BLE; 2440MHz                                             |
| Test Date:            | 2016-10-13                                                   |
| Note:                 |                                                              |

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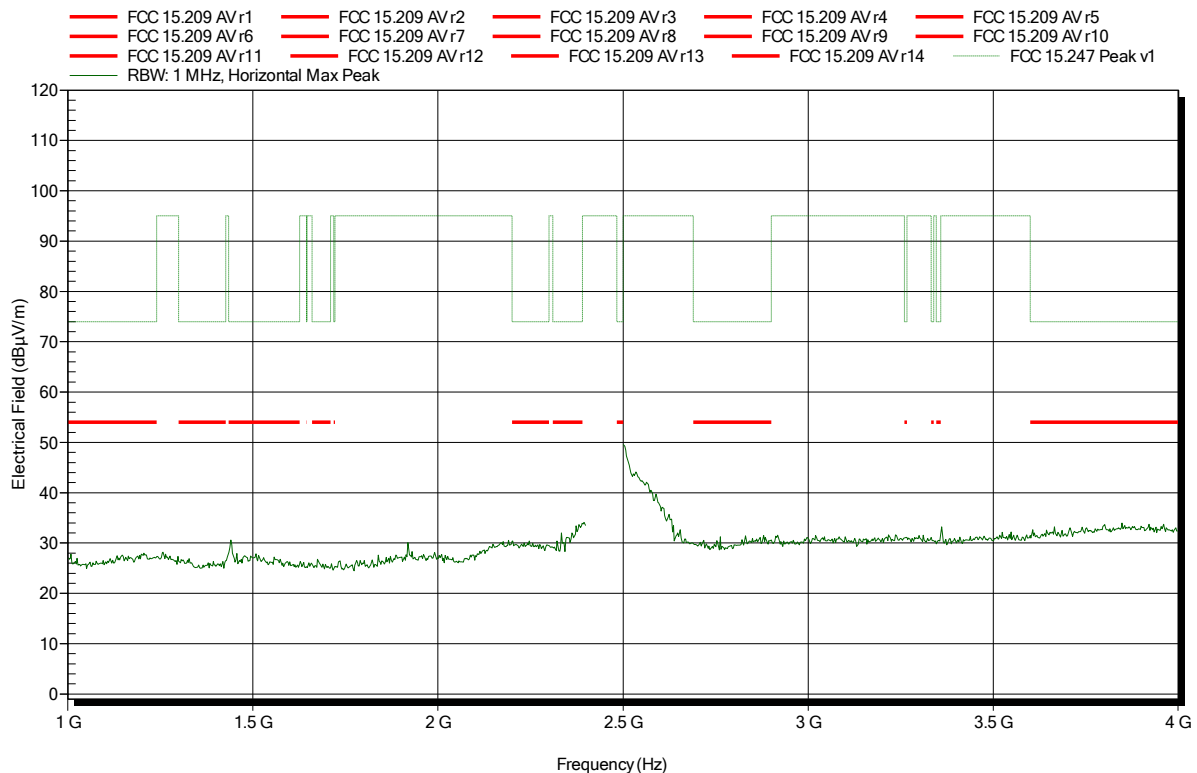


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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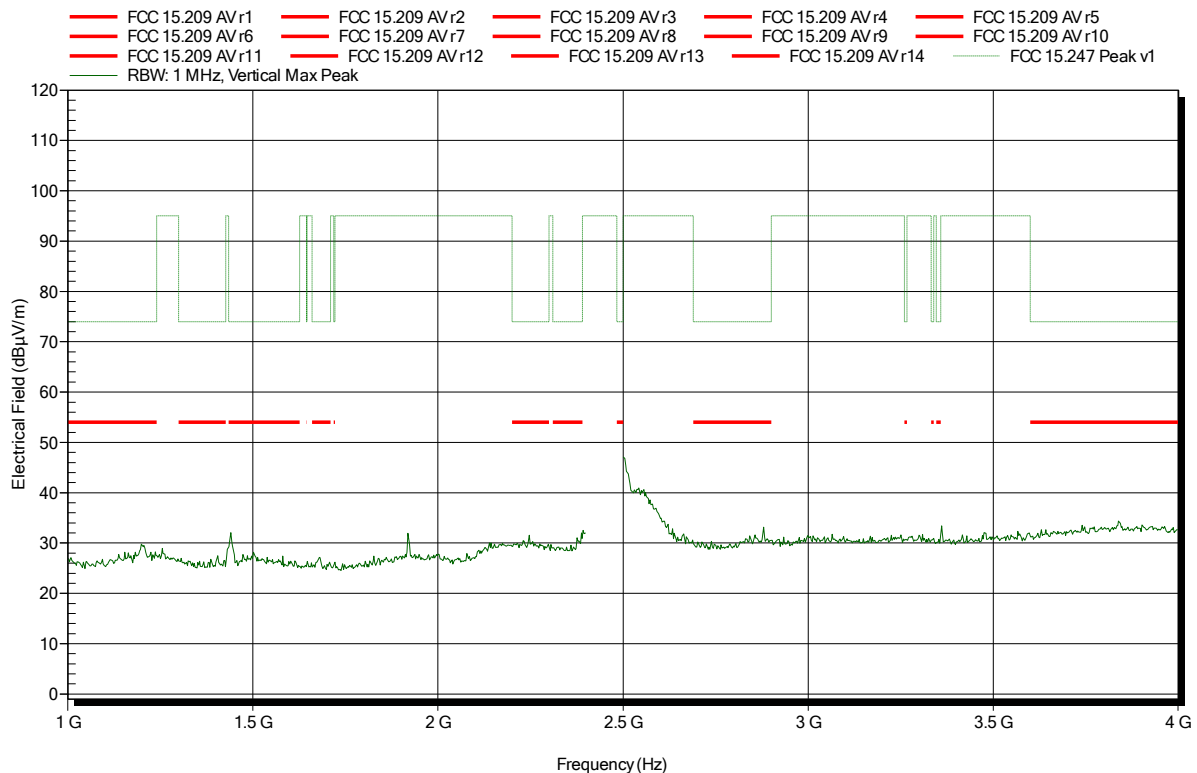


## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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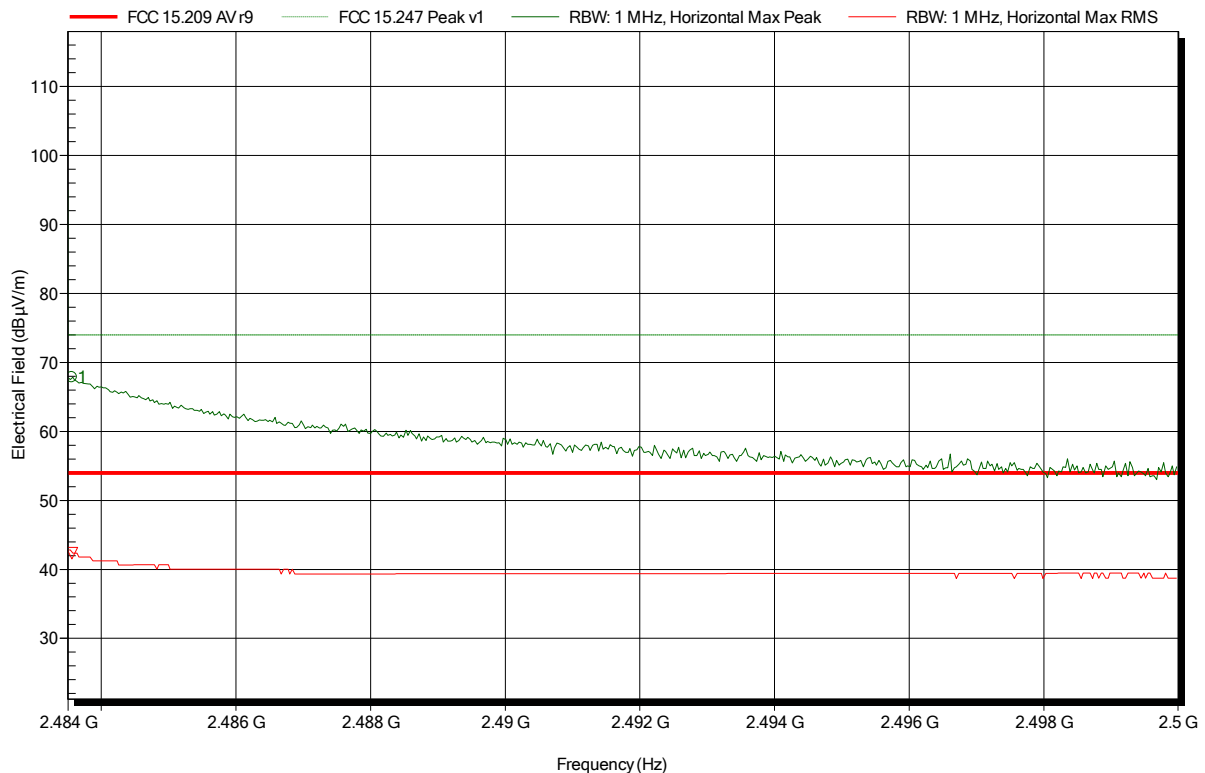


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note: upper bandedge

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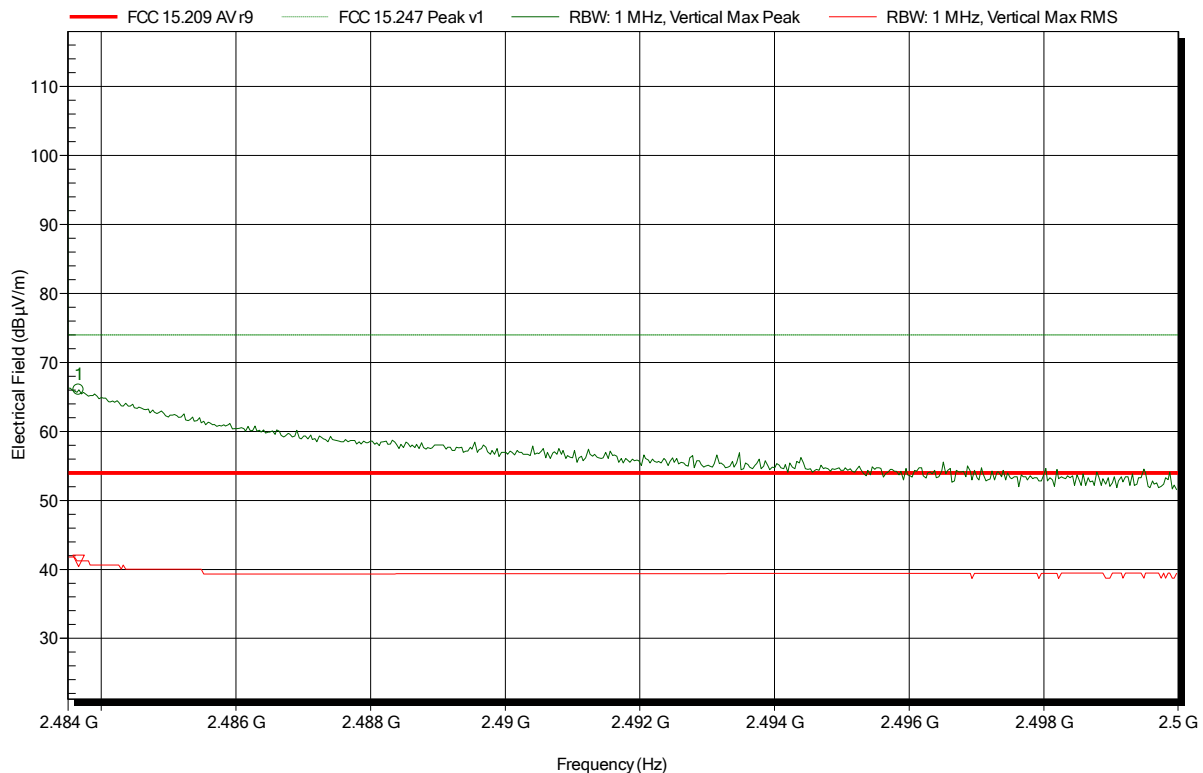


**Spurious emissions according to FCC 15.247**

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note: upper bandedge

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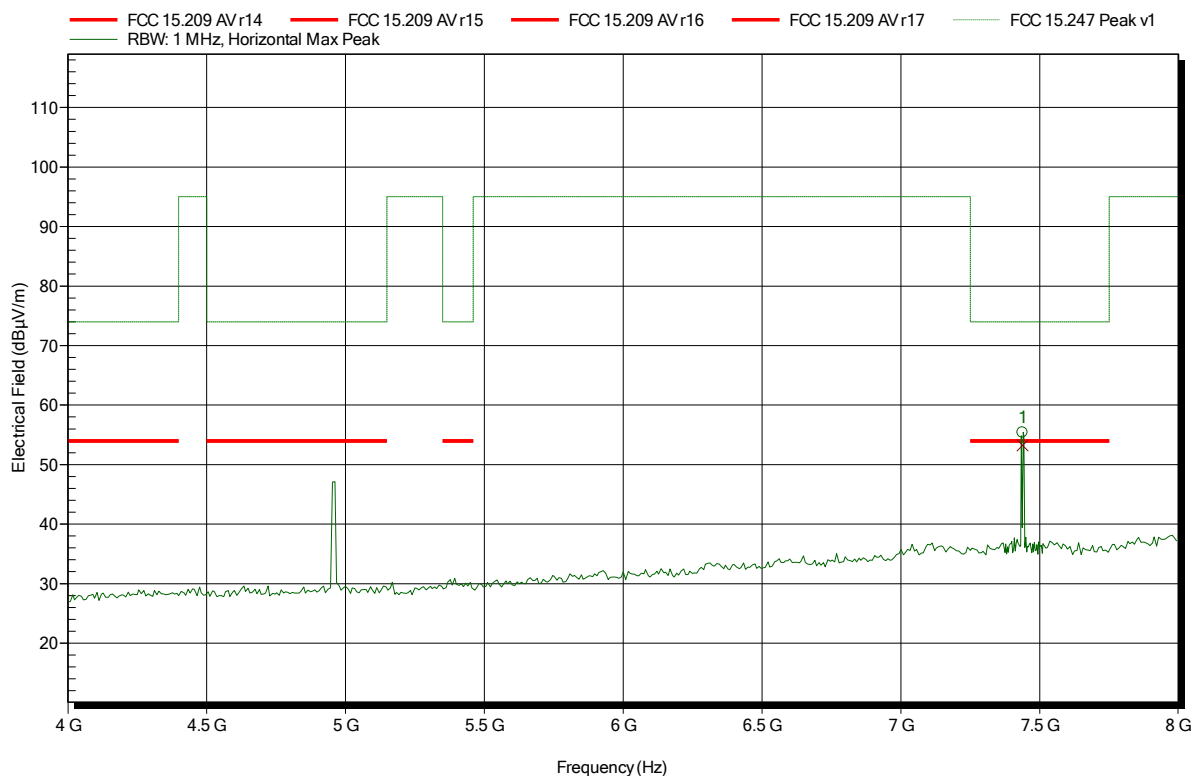
|                         |                      |                         |                             |                     |
|-------------------------|----------------------|-------------------------|-----------------------------|---------------------|
| Frequency<br>2.4837 GHz | Peak<br>66.03 dBµV/m | Peak Limit<br>74 dBµV/m | Peak Difference<br>-7.97 dB | Peak Status<br>Pass |
| Frequency<br>2.4837 GHz | RMS<br>41.25 dBµV/m  | RMS Limit<br>54 dBµV/m  | RMS Difference<br>-12.75 dB | RMS Status<br>Pass  |

## Spurious emissions according to FCC 15.247

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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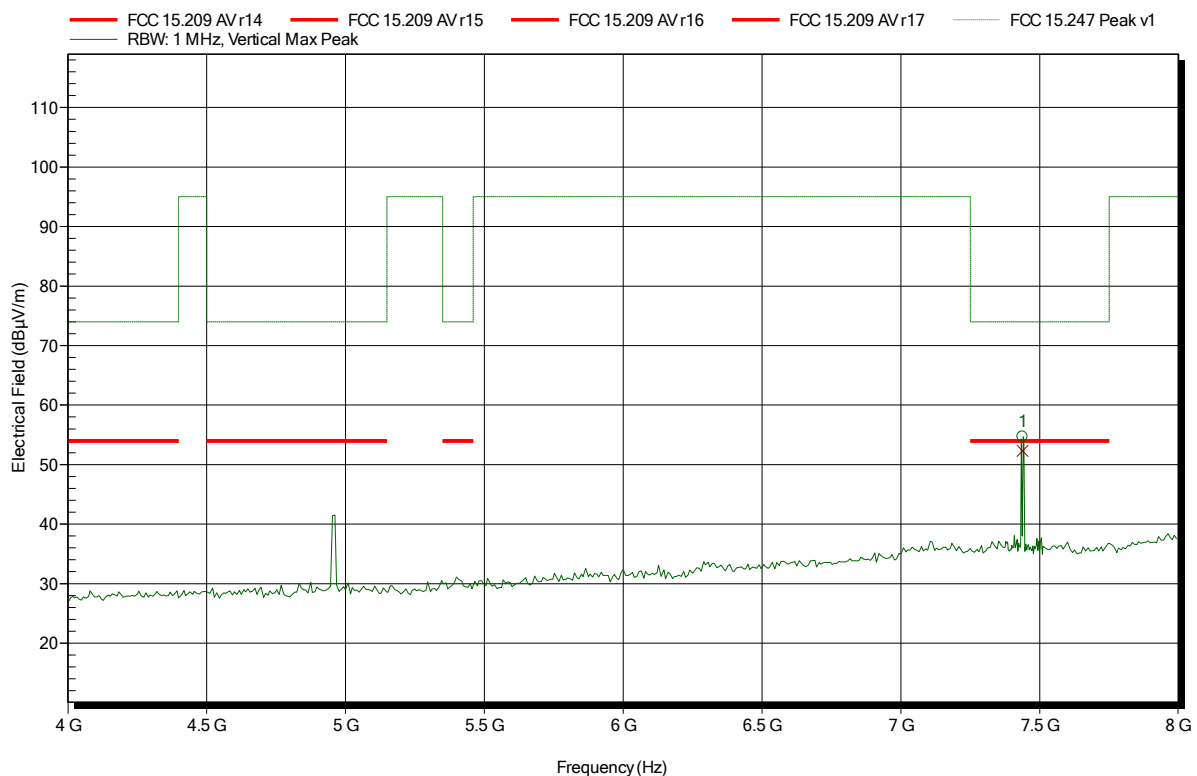
|                        |                        |                            |                               |                        |
|------------------------|------------------------|----------------------------|-------------------------------|------------------------|
| Frequency<br>7.439 GHz | Peak<br>55.37 dBµV/m   | Peak Limit<br>74 dBµV/m    | Peak Difference<br>-18.63 dB  | Status<br>Pass         |
| Frequency<br>7.439 GHz | Average<br>53.2 dBµV/m | Average Limit<br>54 dBµV/m | Average Difference<br>-0.8 dB | Average Status<br>Pass |

## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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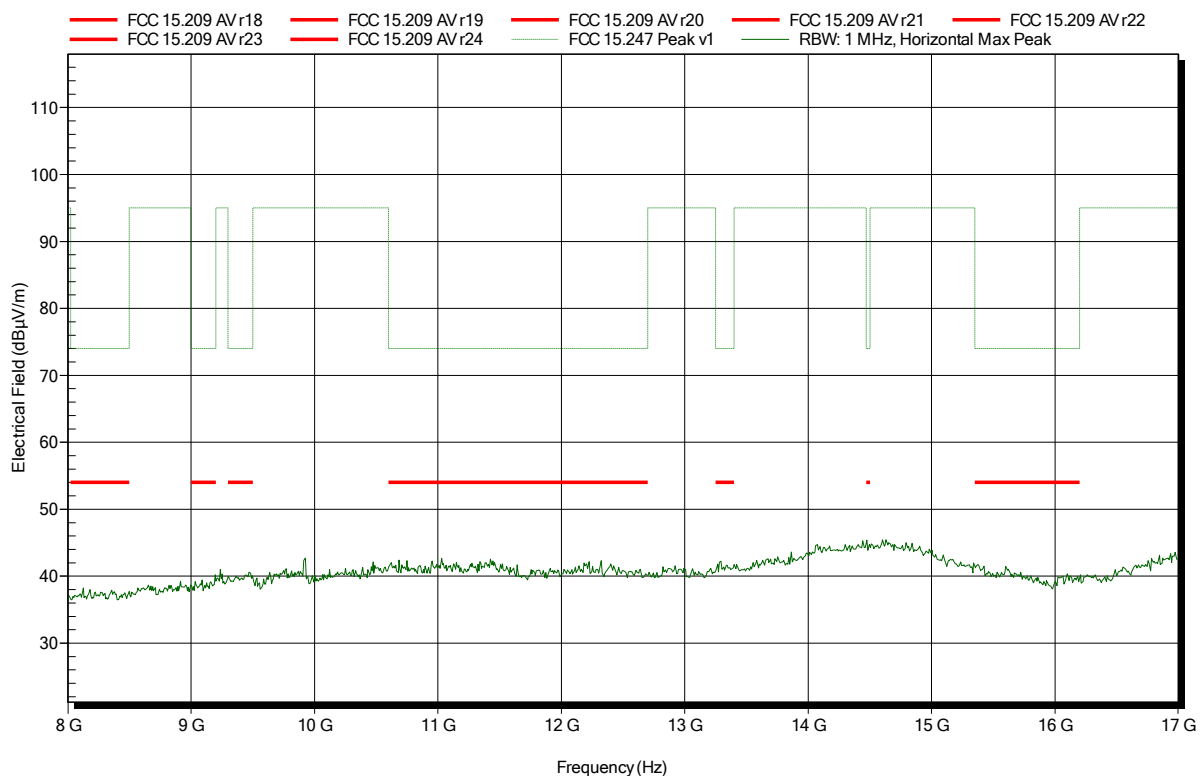
|                        |                        |                            |                               |                        |
|------------------------|------------------------|----------------------------|-------------------------------|------------------------|
| Frequency<br>7.439 GHz | Peak<br>54.67 dBµV/m   | Peak Limit<br>74 dBµV/m    | Peak Difference<br>-19.33 dB  | Status<br>Pass         |
| Frequency<br>7.439 GHz | Average<br>52.3 dBµV/m | Average Limit<br>54 dBµV/m | Average Difference<br>-1.7 dB | Average Status<br>Pass |

**Spurious emissions according to FCC 15.247**

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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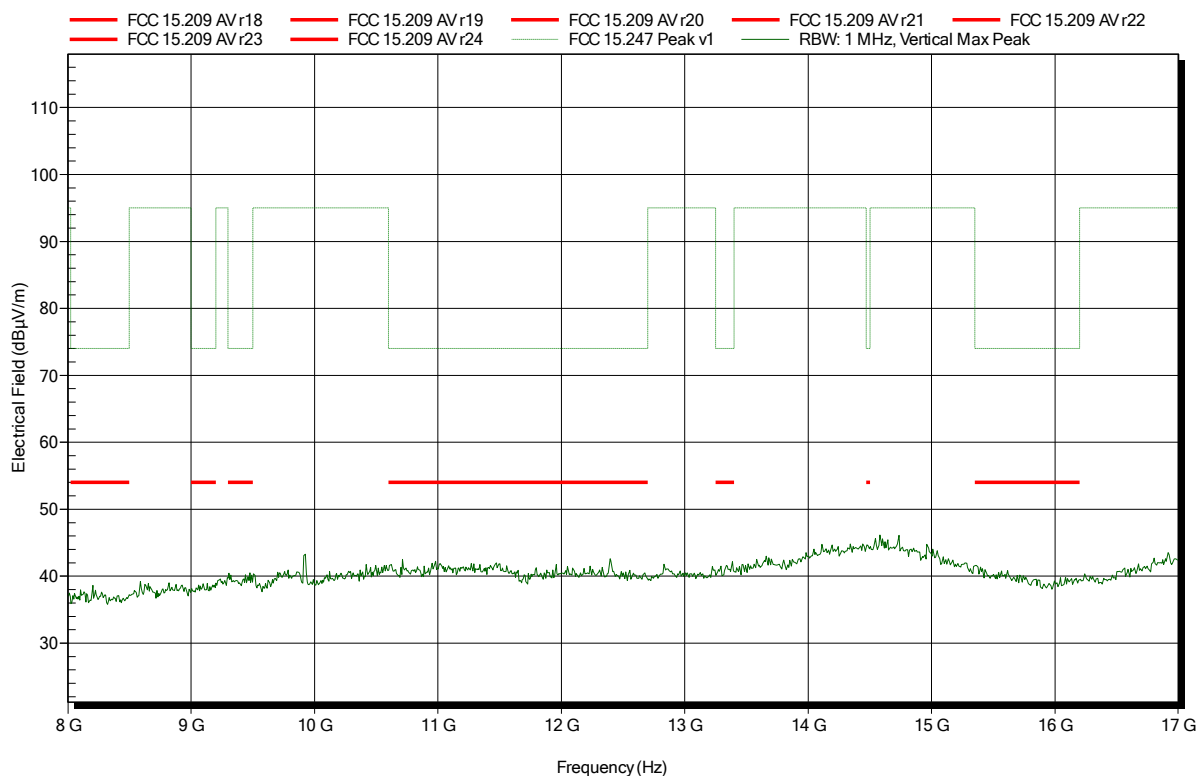


## Spurious emissions according to FCC 15.247

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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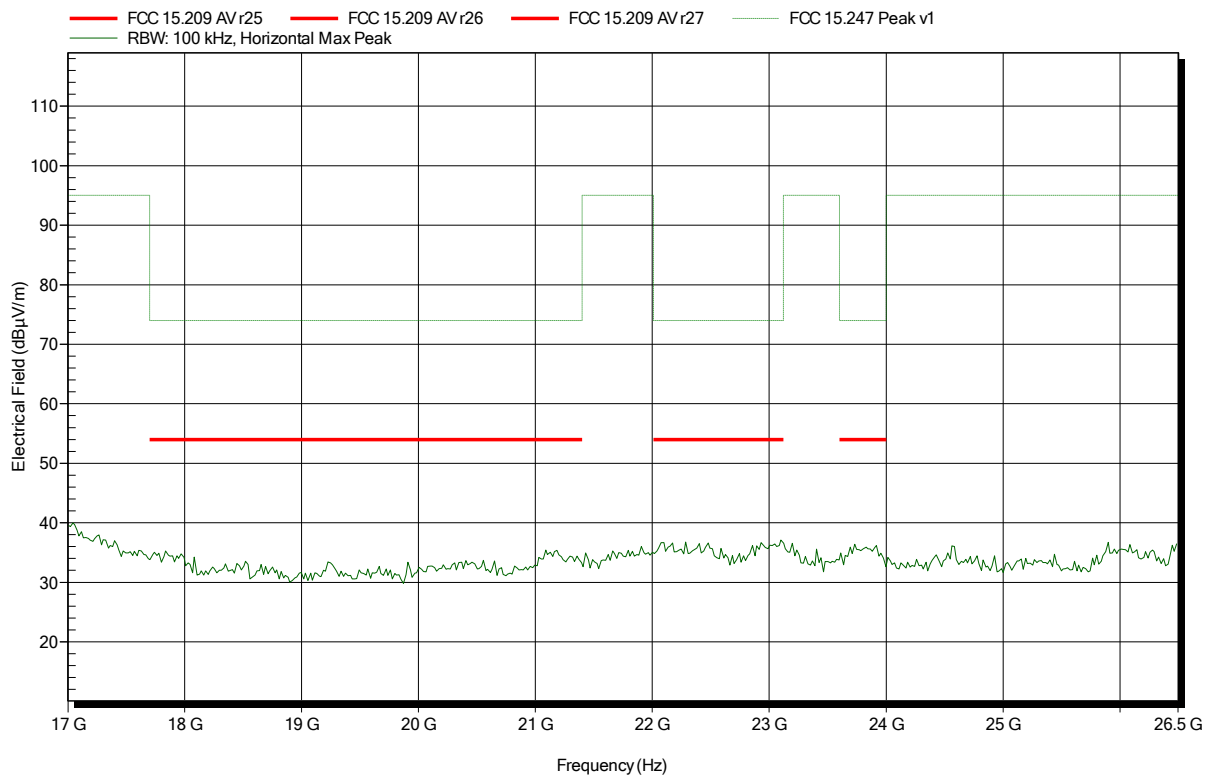


**Spurious emissions according to FCC 15.247**

Project number: GOM-1608-5788

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH                                 |
| EUT Name:             | blukii module                                                |
| Model:                | S (small)                                                    |
| Test Site:            | Eurofins Product Service GmbH                                |
| Operator:             | Mr. Treffke                                                  |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery)                          |
| Antenna:              | Amplifier Research AT 4560 (old name) / ATH18G40 (new name), |
| Horizontal            |                                                              |
| Measurement distance: | 1 m converted to 3m                                          |
| Mode:                 | TX; BLE; 2480MHz                                             |
| Test Date:            | 2016-10-13                                                   |
| Note:                 |                                                              |

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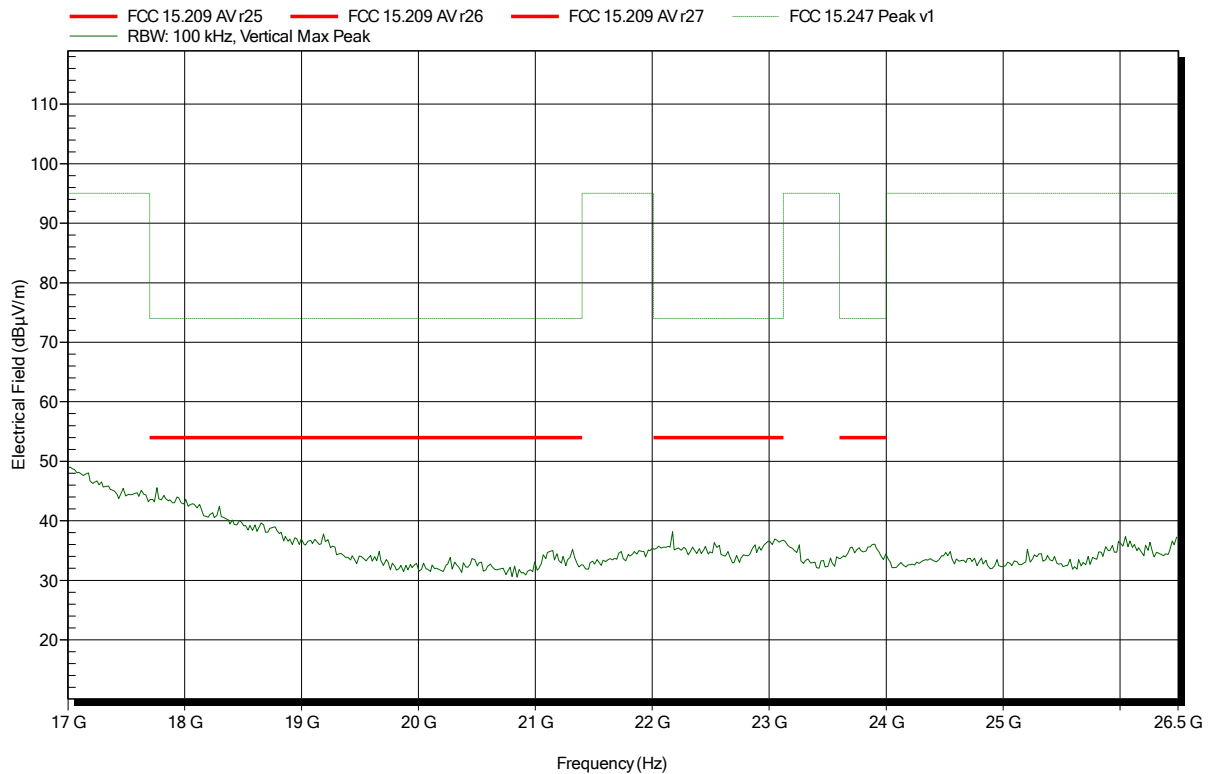


**Spurious emissions according to FCC 15.247**

Project number: GOM-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Amplifier Research AT 4560 (old name) / ATH18G40 (new name),  
 Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; BLE; 2480MHz  
 Test Date: 2016-10-13  
 Note:

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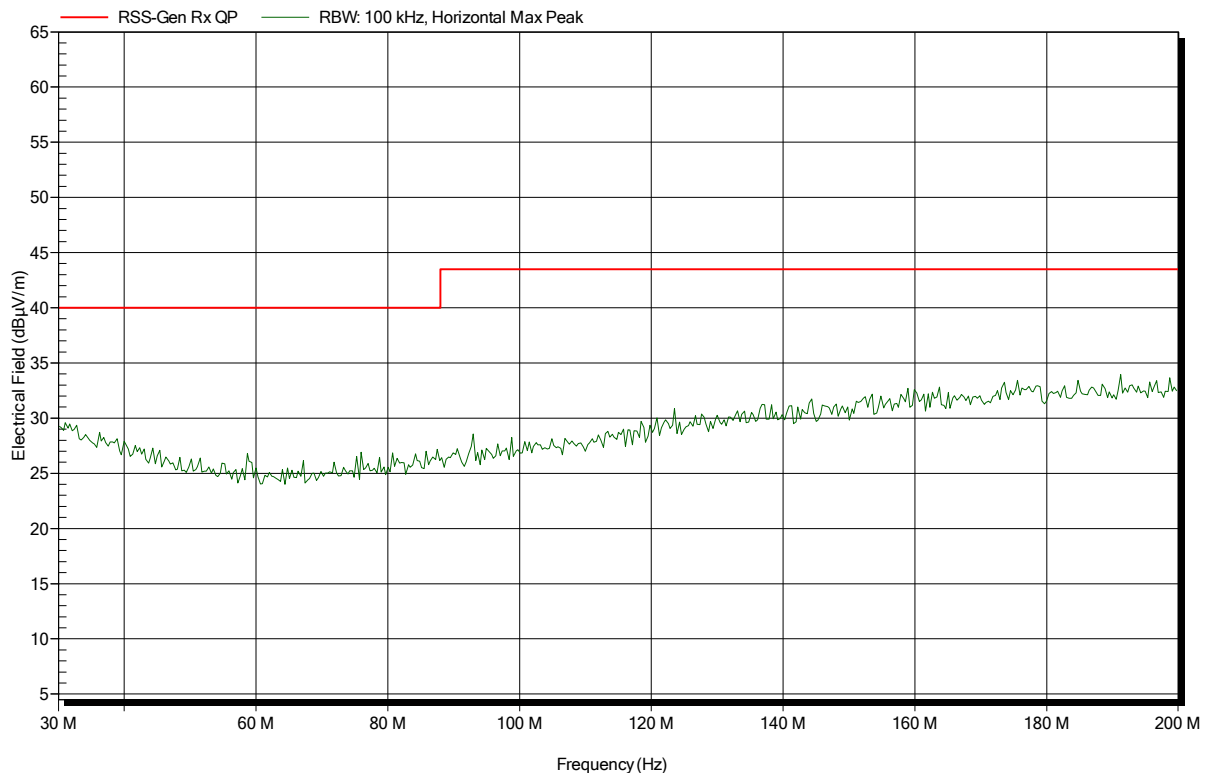
## ANNEX B Receiver radiated spurious emissions

### Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HK 116, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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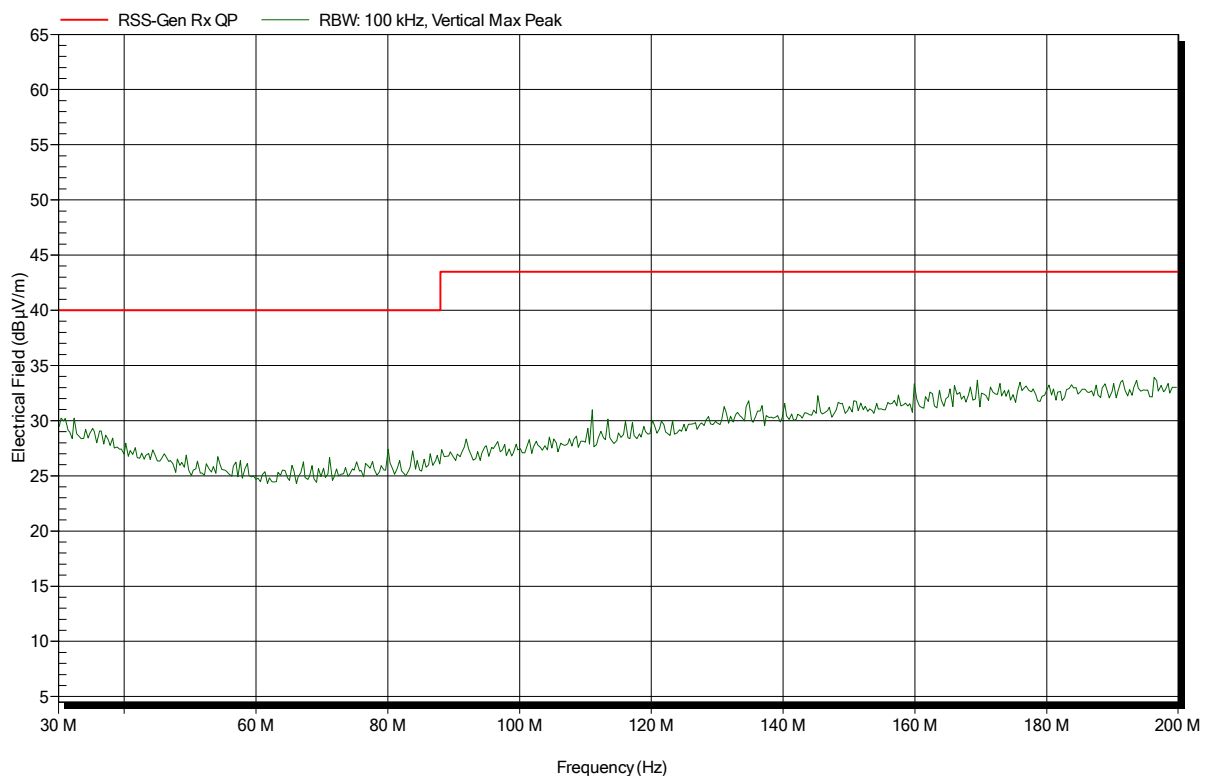


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HK 116, Vertical    |
| Measurement distance: | 3 m                                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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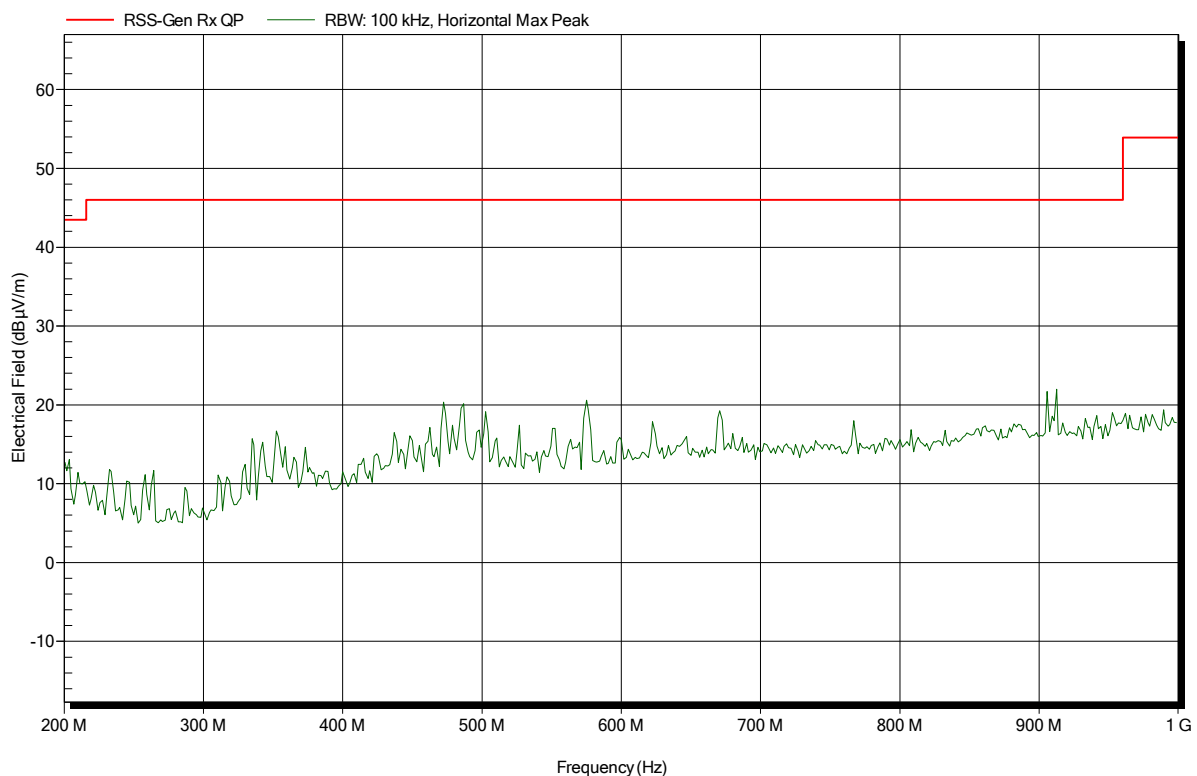


## Spurious emissions according to RSS-247 Issue 1

Project number: GOM-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Rohde & Schwarz HL 223, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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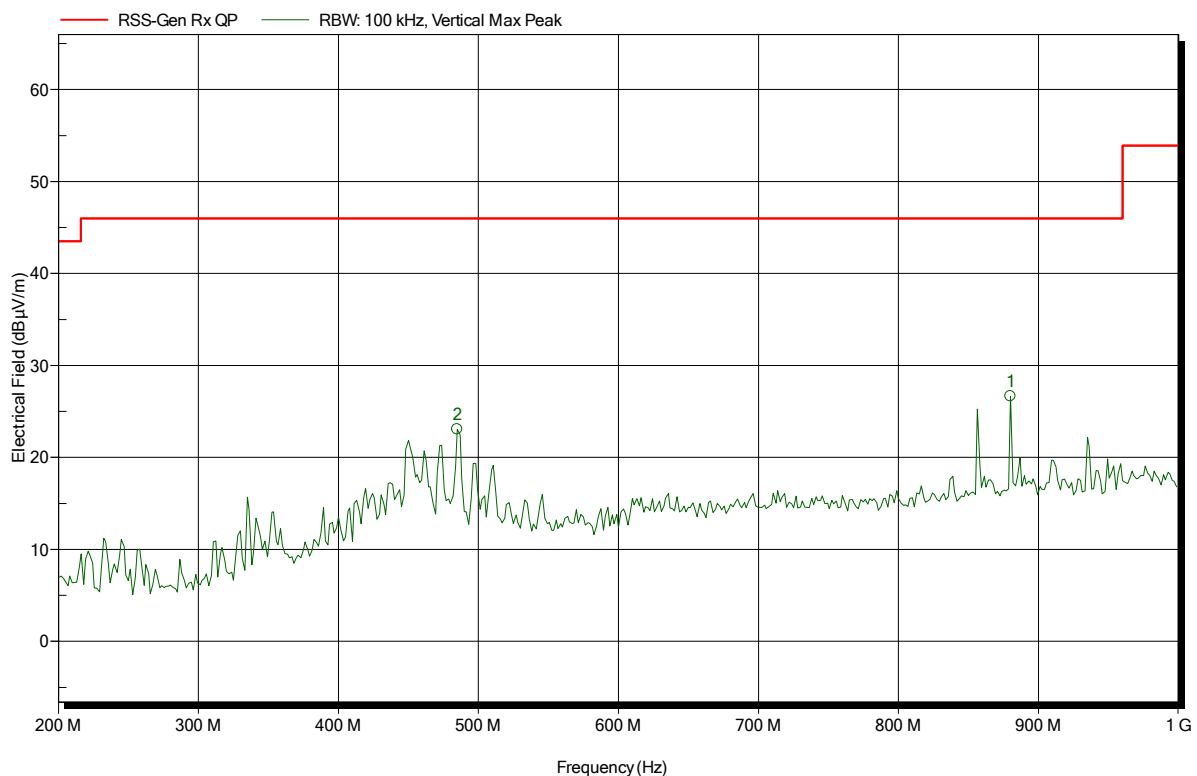


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Rohde & Schwarz HL 223, Vertical  
 Measurement distance: 3 m  
 Mode: RX; BLE; 2440MHz  
 Test Date: 2016-10-14  
 Note:

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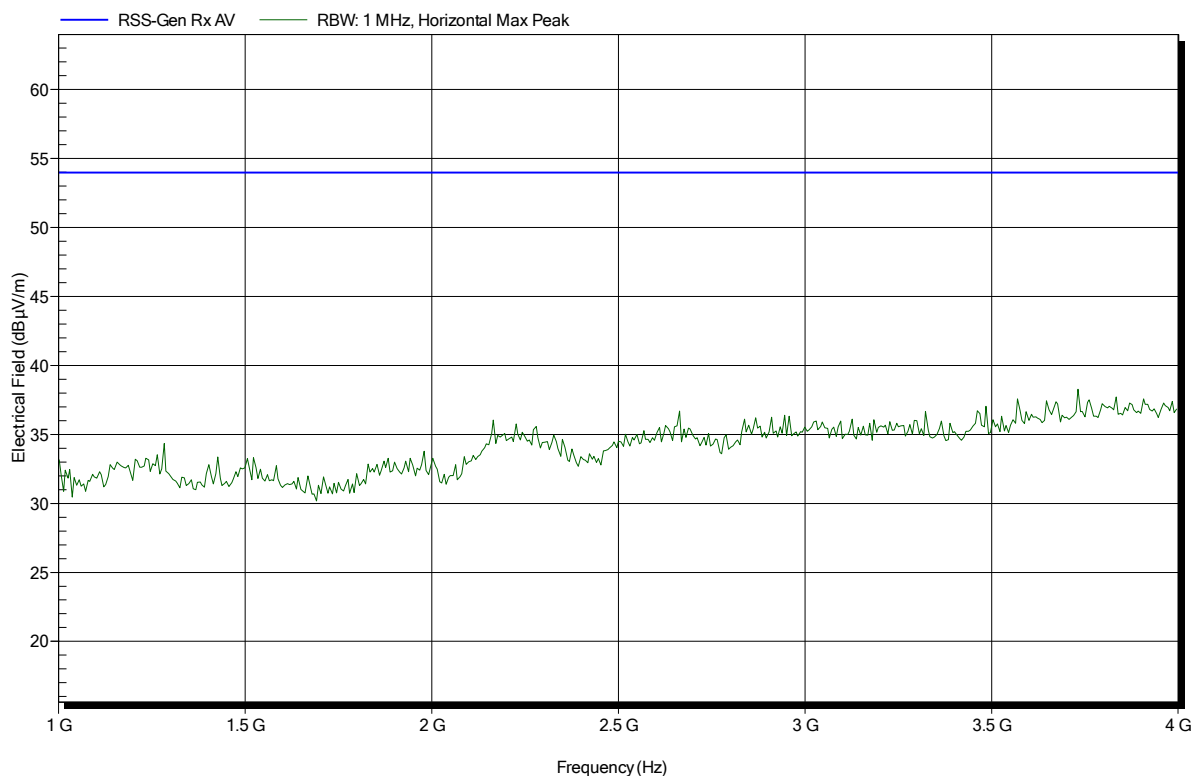
| Frequency | Peak         | Peak Limit | Peak Difference | Status |
|-----------|--------------|------------|-----------------|--------|
| 484.8 MHz | 23.06 dBµV/m | 46 dBµV/m  | -22.94 dB       | Pass   |
| 880 MHz   | 26.65 dBµV/m | 46 dBµV/m  | -19.35 dB       | Pass   |

## Spurious emissions according to RSS-247 Issue 1

Project number: GOM-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Schwarzbeck BBHA 9120D, Horizontal  |
| Measurement distance: | 3 m                                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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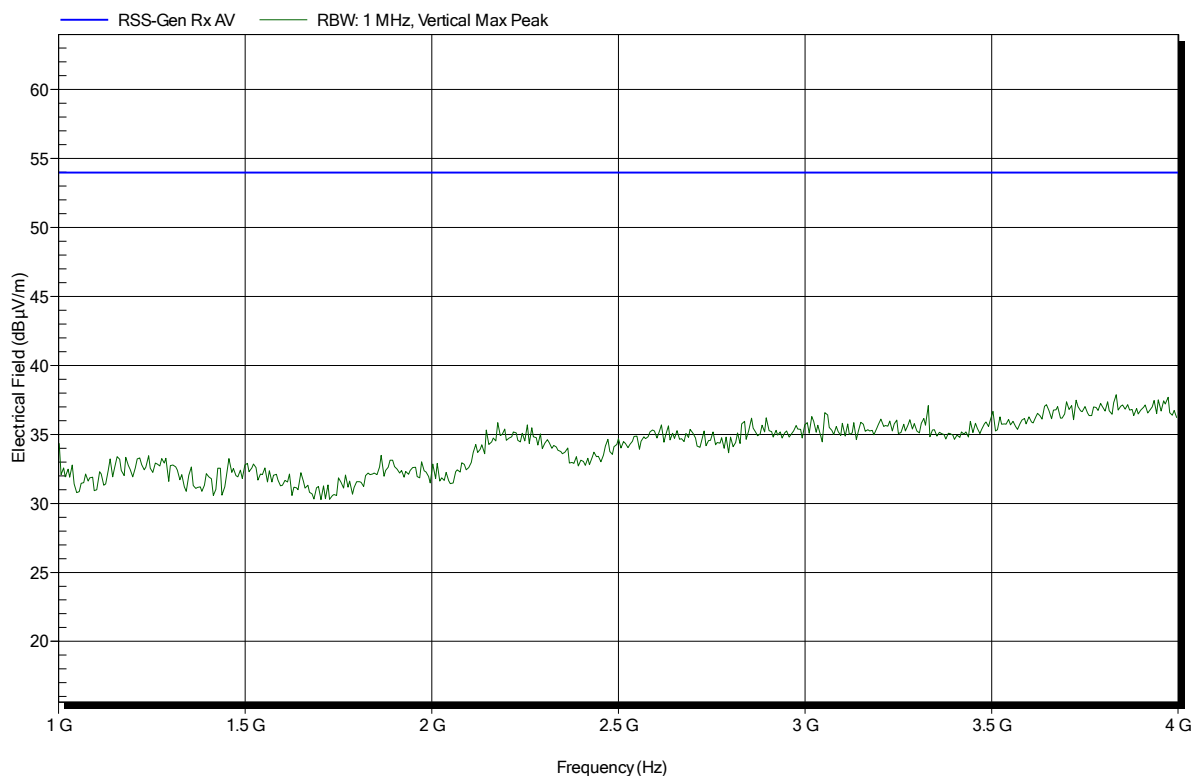


## Spurious emissions according to RSS-247 Issue 1

Project number: GOM-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Schwarzbeck BBHA 9120D, Vertical    |
| Measurement distance: | 3 m                                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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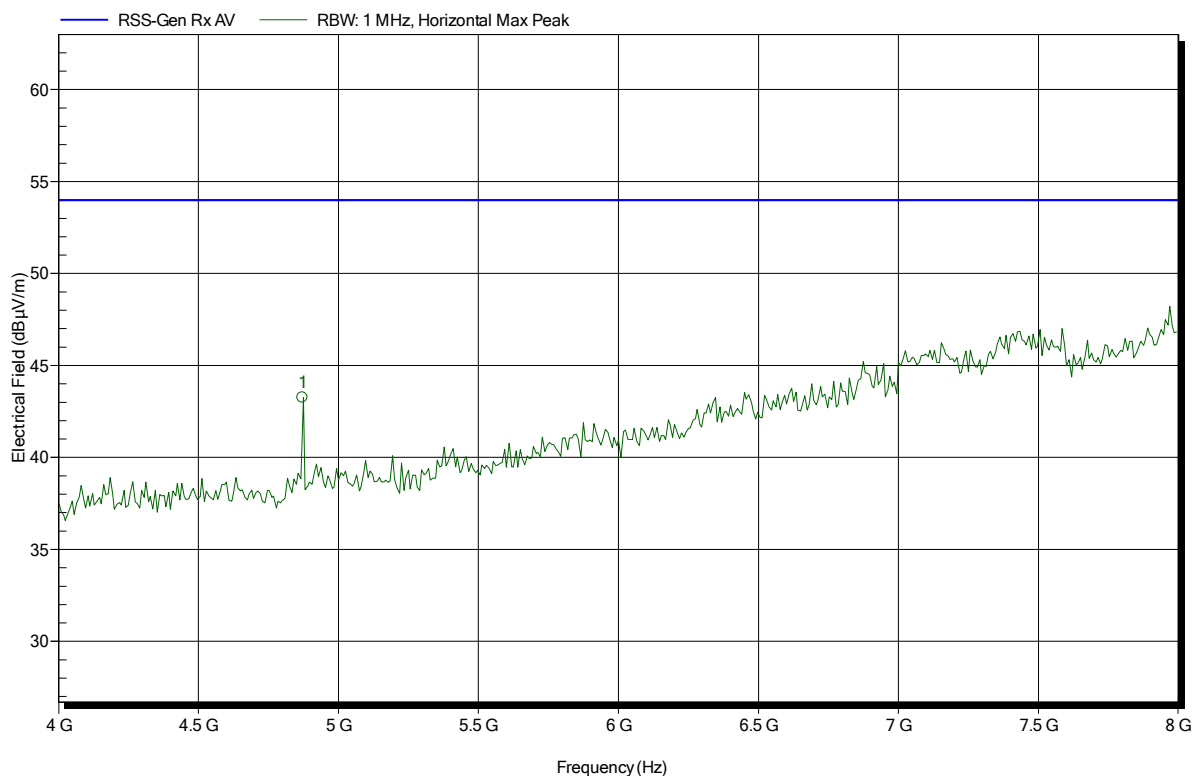


**Spurious emissions according to RSS-247 Issue 1**

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 3 m  
 Mode: RX; BLE; 2440MHz  
 Test Date: 2016-10-14  
 Note:

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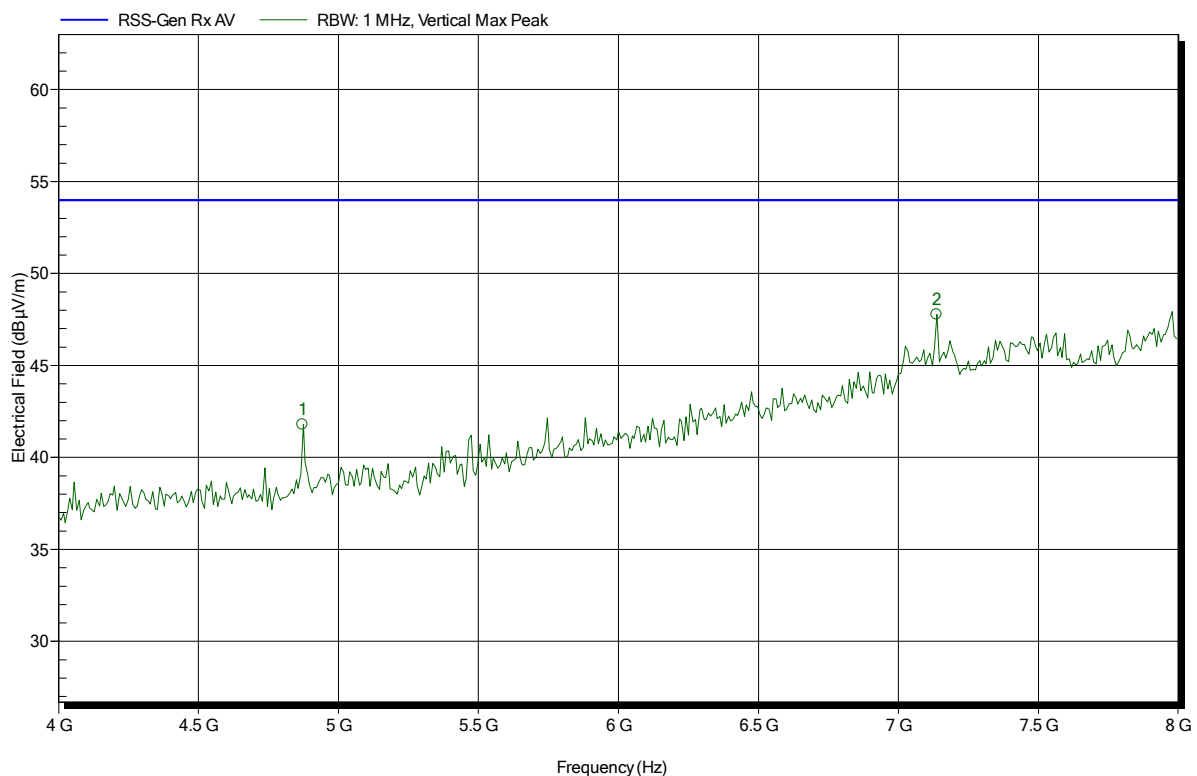
| Frequency | Peak         | Peak Limit   | Peak Difference | Peak Status |
|-----------|--------------|--------------|-----------------|-------------|
| 4.872 GHz | 43.25 dBµV/m | 53.98 dBµV/m | -10.73 dB       | Pass        |

## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 3 m  
 Mode: RX; BLE; 2440MHz  
 Test Date: 2016-10-14  
 Note:

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| Frequency | Peak         | Peak Limit   | Peak Difference | Peak Status |
|-----------|--------------|--------------|-----------------|-------------|
| 4.872 GHz | 41.78 dBµV/m | 53.98 dBµV/m | -12.2 dB        | Pass        |
| 7.136 GHz | 47.77 dBµV/m | 53.98 dBµV/m | -6.21 dB        | Pass        |

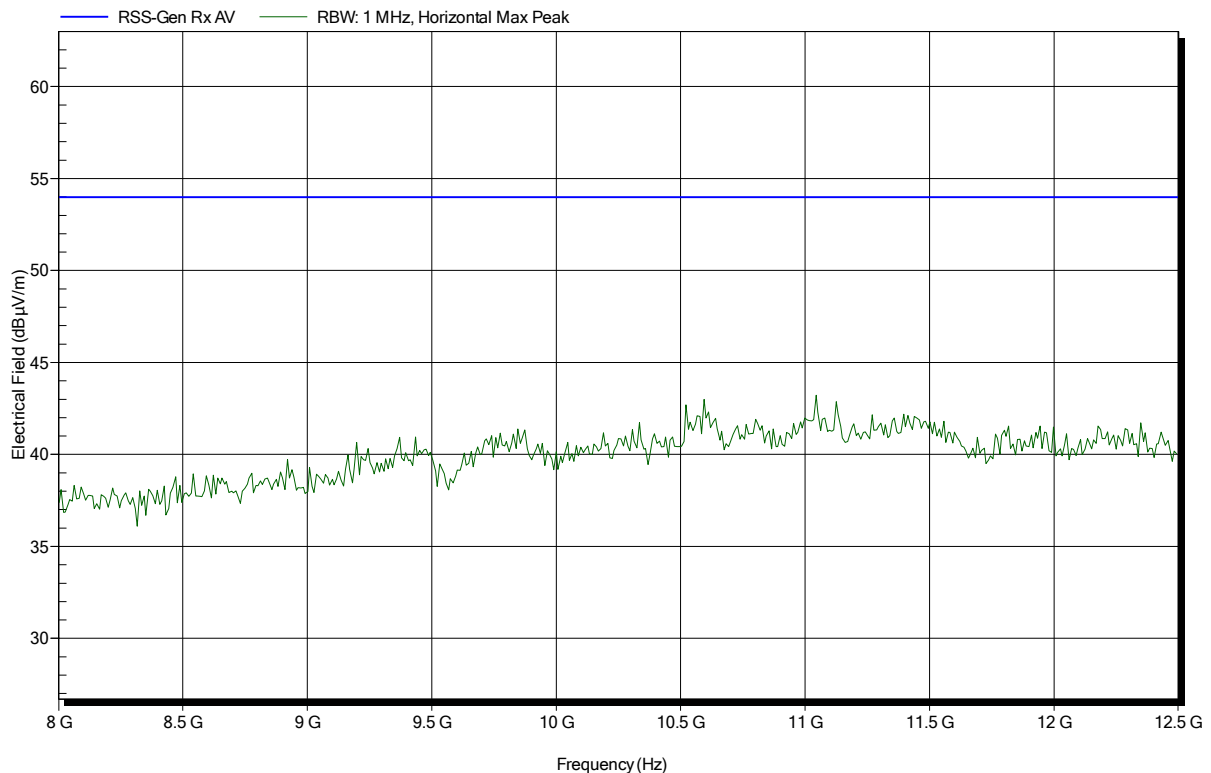


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

|                       |                                     |
|-----------------------|-------------------------------------|
| Applicant:            | Schneider Schreibgeräte GmbH        |
| EUT Name:             | blukii module                       |
| Model:                | S (small)                           |
| Test Site:            | Eurofins Product Service GmbH       |
| Operator:             | Mr. Treffke                         |
| Test Conditions:      | Tnom: 24°C, Vnom: 3.0V DC (battery) |
| Antenna:              | Schwarzbeck BBHA 9120D, Horizontal  |
| Measurement distance: | 1 m converted to 3m                 |
| Mode:                 | RX; BLE; 2440MHz                    |
| Test Date:            | 2016-10-14                          |
| Note:                 |                                     |

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## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1608-5788

Applicant: Schneider Schreibgeräte GmbH  
 EUT Name: blukii module  
 Model: S (small)  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Treffke  
 Test Conditions: Tnom: 24°C, Vnom: 3.0V DC (battery)  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: RX; BLE; 2440MHz  
 Test Date: 2016-10-14  
 Note:

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