






<b>RADIO REPORT</b> <b>FCC 47 CFR Part 24E, FCC 47 CFR Part 27</b> <b>ISED RSS-133, Issue 6 Amendment 1, ISED Canada RSS-139, Issue 3, ISED Canada RSS-130, Issue 2</b>	
<b>Report Reference No</b>	G0M-2107-9897-TFCMOCORSE-V01
<b>Testing Laboratory</b>	Eurofins Product Service GmbH
<b>Address</b>	Storkower Str. 38c 15526 Reichenwalde Germany
<b>Accreditation</b>	 <p>DAkkS - Registration number : D-PL-12092-01-03 (ISED)                      ISED Testing Laboratory site: 3470A                      DAkkS - Registration number : D-PL-12092-01-04 (FCC)                      FCC Filed Test Laboratory, Reg.-No.: 96970</p>
<b>Applicant</b>	BIOTRONIK SE & Co. KG
<b>Address</b>	Woermannkehe 1 12359 Berlin GERMANY
<b>Test Specification</b>	47 CFR Part 24E 47 CFR Part 27 ISED RSS-133, Issue 6+A1: 2018-01 ISED RSS-139, Issue 3: 2015-07 ISED RSS-130, Issue 2: 2019-02
<b>Non-Standard Test Method</b>	None
<b>Equipment under Test (EUT):</b>	
<b>Product Description</b>	USB Cellular Adapter
<b>Model(s)</b>	DataBridge
<b>Additional Model(s)</b>	None
<b>Brand Name(s)</b>	BIOTRONIK
<b>Hardware Version(s)</b>	A.A
<b>Software Version(s)</b>	1.0
<b>FCC ID</b>	QRI-DATABRIDGE
<b>IC</b>	4708A-DATABRIDGE
<b>Test Result</b>	<b>PASSED</b>

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 °C – 23 °C	
Test Lab Humidity	32 % – 38 %	
Date of receipt of test item	2021-10-21	
Report:		
Compiled by	Florian Voigt	
Tested by (+ signature)	Jens Degenhardt	
Tested by (+ signature)	Florian Voigt	
Supervised by (+ signature)	Burkhard Pudell	
Approved by (+ signature) (Deputy Head of Lab)	Toralf Jahn	
Date of Issue	2022-06-03	
Total number of pages	52	
General Remarks:		
<p>The test results presented in this report relate only to the object tested.</p> <p>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.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p>		
Additional Comments:		

## VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2022-06-03	Initial Release	

**ABBREVIATIONS AND ACRONYMS**

Acronyms	
Acronym	Description
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V <sub>NOM</sub>	Nominal supply voltage

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## 1 Equipment (Test Item) Under Test

Description	USB Cellular Adapter	
Model	DataBridge	
Additional Model(s)	None	
Brand Name(s)	BIOTRONIK	
Serial Number(s)	#34; #38	
Test Sample Id(s)	36726; 36728	
Hardware Version(s)	A.A	
Software Version(s)	1.0	
PMN	DataBridge	
HVIN	DataBridge	
FVIN	n/a	
HMN	n/a	
IC	4708A-DATABRIDGE	
FCC ID	QRI-DATABRIDGE	
Equipment type	End Product	
Radio type	Transceiver	
Radio technologies	LTE	
LTE frequency bands	LTE FDD2 : UL = 1850 - 1910 MHz, DL = 1930 - 1990 MHz LTE FDD4 : UL = 1710 - 1755 MHz, DL = 2110 - 2155 MHz LTE FDD12 : UL = 699 - 716 MHz, DL = 729 - 746 MHz	
LTE Modulations	QPSK, 16-QAM, 64-QAM	
Number of modules	1	
Radio Module	Type	GSM, UMTS, LTE4G, GPS, GLONASS Modul
	Model	LE910C1-NA
	Manufacturer	Telit
	HW Version	Not specified
	SW Version	Not specified
	FCC-ID	RI7LE910C1NA
	IC	5131A-LE910C1NA
Antenna (Main)	Type	Integrated
	Model	PCB antenna
	Manufacturer	BIOTRONIK SE & Co. KG
	Gain (measured)	FDD12: 1.85 dBi FDD4: 3.27 dBi FDD2: 2.69 dBi
Antenna (Diversity)	Type	Integrated
	Model	PCB antenna
	Manufacturer	BIOTRONIK SE & Co. KG
	Gain	Not specified
Supply Voltage	V <sub>NOM</sub>	5 VDC
AC/DC-Adaptor	None	
Manufacturer	BIOTRONIK SE & Co. KG Woermannkehre 1 12359 Berlin GERMANY	

### 1.3 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
SIM	Communication Tester	R&S	CMW500	Base Station Simulator
SIM	Communication Tester	R&S	CMW290	Base Station Simulator
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

## 1.4 Test Modes

Mode	Description
LTE FDD2 / QPSK	Channel = 18650 Mode = RMC TPC = All 1 Modulation = QPSK Bandwidth = 10 MHz Number of resource blocks = 1 Resource block offset = mid Duty cycle = 100 %
LTE FDD2 / QAM	Channel = 19175 Mode = RMC TPC = All 1 Modulation = 16-QAM Bandwidth = 5 MHz Number of resource blocks = 1 Resource block offset = mid Duty cycle = 100 %
LTE FDD2 / PMAX	Channel = 18607 Mode = RMC TPC = All 1 Modulation = QPSK Bandwidth = 1.4 MHz Number of resource blocks = 3 Resource block offset = 1 (mid) Duty cycle = 100 %
LTE FDD4 / QPSK	Channel = 20000 Mode = RMC TPC = All 1 Modulation = QPSK Bandwidth = 10 MHz Number of resource blocks = 1 Resource block offset = mid Duty cycle = 100 %
LTE FDD4 / QAM	Channel = 19975 Mode = RMC TPC = All 1 Modulation = 16-QAM Bandwidth = 5 MHz Number of resource blocks = 1 Resource block offset = 0 Duty cycle = 100 %
LTE FDD4 / PMAX	Channel = 19957 Mode = RMC TPC = All 1 Modulation = QPSK Bandwidth = 1.4 MHz Number of resource blocks = 3 Resource block offset = 1 (mid) Duty cycle = 100 %



<p>LTE FDD12 / QPSK</p>	<p>Channel = 23060  Mode = RMC  TPC = All 1  Modulation = QPSK  Bandwidth = 10 MHz  Number of resource blocks = 1  Resource block offset = mid  Duty cycle = 100 %</p>
<p>LTE FDD12 / QAM</p>	<p>Channel = 23035  Mode = RMC  TPC = All 1  Modulation = 16-QAM  Bandwidth = 5 MHz  Number of resource blocks = 1  Resource block offset = mid  Duty cycle = 100 %</p>
<p>LTE FDD12 / PMAX</p>	<p>Channel = 23165  Mode = RMC  TPC = All 1  Modulation = QPSK  Bandwidth = 3 MHz  Number of resource blocks = 1  Resource block offset = mid  Duty cycle = 100 %</p>
<p>Comment: Above worst case scenarios were found in module test report: 1710065R-HPUSP37V00, 2021-02-23 issued by DEKRA Testing and Certification Co. Ltd.</p>	

### 1.5 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:

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

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

Test Summary)				
Product Standard Reference	Requirement	Reference Method	Result	Remarks
47 CFR §24.232 47 CFR §27.50 ISED RSS-133 §6.4 ISED RSS-139 §6.5 ISED RSS-130 §4.6	Radiated power	ANSI C63.26 KDB 971168	PASS	
47 CFR §24.238 47 CFR §27.53 ISED RSS-133 §6.5 ISED RSS-139 §6.6 ISED RSS-130 §4.7	Transmitter conducted emissions	ANSI C63.26 KDB 971168	N/T	
47 CFR §24.238 47 CFR §27.53 ISED RSS-133 §6.5 ISED RSS-139 §6.6 ISED RSS-130 §4.7	Transmitter radiated emissions	ANSI C63.26 KDB 971168	PASS	
ISED RSS-133 §3.1 ISED RSS-139 §3.1 ISED RSS-130 §3.3 ISED RSS-Gen §7	Receiver radiated emissions	ANSI C63.4	PASS	
Comment:				

Possible Test Case Verdicts	
PASS	Test object does meet the requirements
FAIL	Test object does not meet the requirements
N/T	Required by standard but not tested
N/R	Not required by standard for the test object

### 3 Test Conditions and Results

#### 3.1 Test Conditions and Results - Radiated power

##### 3.1.1 Information

Test Information	
Reference	47 CFR §24.232 47 CFR §27.50 ISED RSS-133 §6.4 ISED RSS-139 §6.5 ISED RSS-130 §4.6
Measurement Method	Calculation
Operator	Florian Voigt
Date	2022-03-21

##### 3.1.2 Limits

Limits - Portable equipment					
Band	Frequency range [MHz]	Power limit [dBm ERP]	Power limit [W ERP]	Power limit [dBm EIRP]	Power limit [W EIRP]
LTE FDD2	1850 - 1910	30.85	1.22	33	2
LTE FDD4	1710 - 1780	27.85	0.61	30	1
LTE FDD12	699 - 716	34.77	3	36.92	4.92

##### 3.1.3 Procedure

Test Procedure - Calculation
<ol style="list-style-type: none"> <li>1. The highest conducted output power for each radio technology, band, modulation and bandwidth is determined from the modular approval report</li> <li>2. The antenna gain for the corresponding transmission frequency is added to the conducted output power</li> <li>3. The calculated radiated power is compared to the transmitter output power limit</li> </ol>

## 3.1.4 Results

Test Results - LTE FDD2						
Mode	Power [dBm]	Antenna gain [dBi]	Radiated power [dBm EIRP]	Limit [dBm EIRP]	Margin [dB]	Result
LTE FDD2 / PMAX	23.63	2.69	26.32	33	-06.68	PASS
LTE FDD2 / QPSK	23.40	2.69	26.09	33	-06.91	PASS
LTE FDD2 / QAM	22.22	2.69	24.91	33	-08.09	PASS

Test Results - LTE FDD4						
Mode	Power [dBm]	Antenna gain [dBi]	Radiated power [dBm EIRP]	Limit [dBm EIRP]	Margin [dB]	Result
LTE FDD4 / PMAX	24.36	3.27	27.63	30	-02.37	PASS
LTE FDD4 / QPSK	23.95	3.27	27.22	30	-02.78	PASS
LTE FDD4 / QAM	22.46	3.27	25.73	30	-04.27	PASS

Test Results - LTE FDD12						
Mode	Power [dBm]	Antenna gain [dBi]	Radiated power [dBm EIRP]	Limit [dBm EIRP]	Margin [dB]	Result
LTE FDD12 / PMAX	23.33	1.85	25.18	36.92	-11.74	PASS
LTE FDD12 / QPSK	22.98	1.85	24.83	36.92	-12.09	PASS
LTE FDD12 / QAM	21.61	1.85	23.46	36.92	-13.46	PASS

### 3.2 Test Conditions and Results - Transmitter radiated emissions

#### 3.2.1 Information

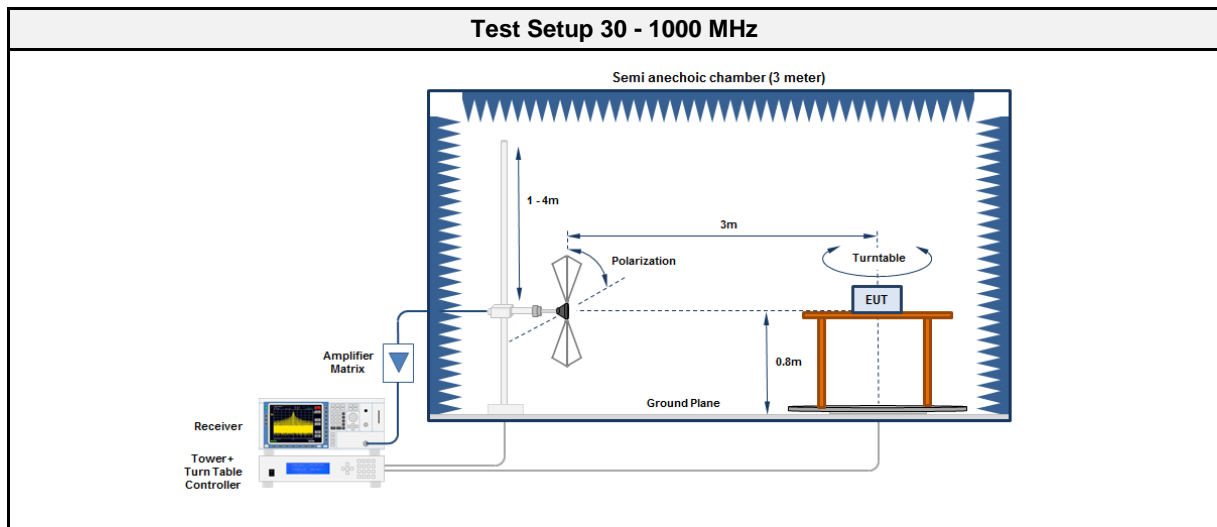
Test Information	
Reference	47 CFR §24.238 47 CFR §27.53 ISED RSS-133 §6.5 ISED RSS-139 §6.6 ISED RSS-130 §4.7
Measurement Method	FCC KDB 971168 D01 Section 7 ANSI C63.26-2015 5.5
Measurement Uncertainty	± 5.95 dB
Operator	Florian Voigt, Jens Degenhardt
Date	2021-11-10 + 2021-11-24
Comment: Tested modes are only LTE FDD2 / PMAx, LTE FDD4 / PMAx, LTE FDD12 / PMAx	

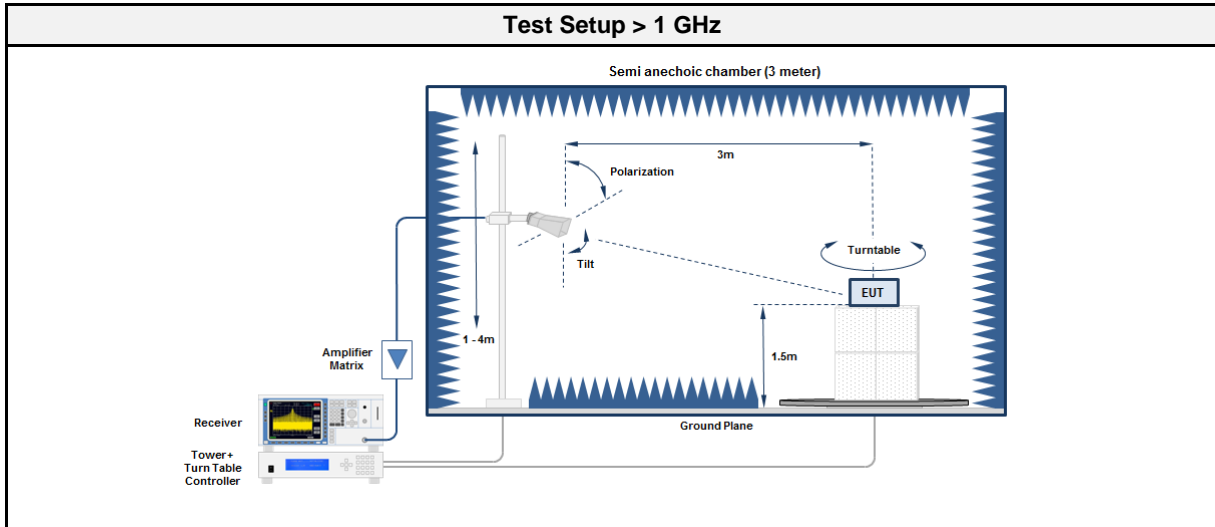
#### 3.2.2 Limits

Limits FCC				
Band	Frequency range [MHz]	Bandwidth	Attenuation [dB]	Limit [dBm EIRP]
LTE FDD2	-	1 MHz	43+Log <sub>10</sub> (P[W])	-13
LTE FDD4	-	1 MHz	43+Log <sub>10</sub> (P[W])	-13
LTE FDD12	-	100 kHz	43+Log <sub>10</sub> (P[W])	-13

Limits ISED				
Band	Frequency range [MHz]	Bandwidth	Attenuation [dB]	Limit [dBm EIRP]
LTE FDD2	-	1 MHz	43+Log <sub>10</sub> (P[W])	-13
LTE FDD4	-	1 MHz	43+Log <sub>10</sub> (P[W])	-13
LTE FDD12	-	100 kHz	43+Log <sub>10</sub> (P[W])	-13

#### 3.2.3 Setup





### 3.2.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic chamber	Frankonia	AC 2	EF01616	2021-09	2022-09
Spectrum analyzer	R&S	FSU43	EF01631	2021-07	2022-07
Horn antenna	Schwarzbeck	BBHA 9120B	EF01678	2021-03	2022-03
Horn antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2022-03
Antenna	Amplifier Research	AT4560	EF00302	2021-06	2023-06

3.2.5 Procedure

Test Procedure 30 - 1000 MHz	
1.	EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5.	All significant emissions are measured again using the corresponding final detector

Test Procedure > 1 GHz	
1.	EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5.	All significant emissions are measured again using the corresponding final detector

3.2.6 Results

Test Results - LTE FDD2						
Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Polarization	Margin [dB]	Result
LTE FDD2 / PMAX	64.871	-39.40	-13.00	ver	-26.41	PASS
LTE FDD2 / PMAX	225.92	-51.10	-13.00	ver	-38.13	PASS
LTE FDD2 / PMAX	7402	-49.50	-13.00	ver	-36.47	PASS
LTE FDD2 / PMAX	9253	-47.80	-13.00	ver	-34.75	PASS
LTE FDD2 / PMAX	12955	-51.20	-13.00	ver	-38.24	PASS
LTE FDD2 / PMAX	14805	-51.00	-13.00	ver	-38.00	PASS

Test Results - LTE FDD4						
Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Polarization	Margin [dB]	Result
LTE FDD4 / PMAX	65.734	-39.80	-13.00	ver	-26.79	PASS
LTE FDD4 / PMAX	6842	-46.80	-13.00	ver	-33.82	PASS
LTE FDD4 / PMAX	8553	-44.40	-13.00	ver	-31.44	PASS
LTE FDD4 / PMAX	10264	-40.00	-13.00	ver	-27.01	PASS
LTE FDD4 / PMAX	13686	-45.40	-13.00	ver	-32.41	PASS

Test Results - LTE FDD12						
Mode	Frequency [MHz]	Level [dBm]	Limit [dBm]	Polarization	Margin [dB]	Result
LTE FDD12 / PMAX	65.483	-68.60	-13.00	ver	-55.57	PASS



### 3.3 Test Conditions and Results - Receiver radiated emissions

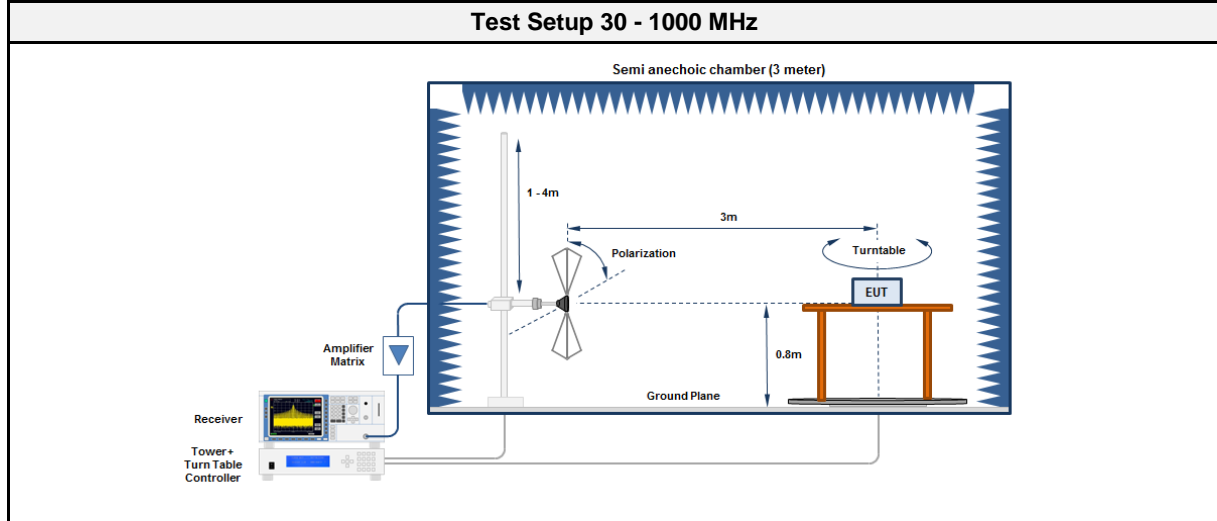
#### 3.3.1 Information

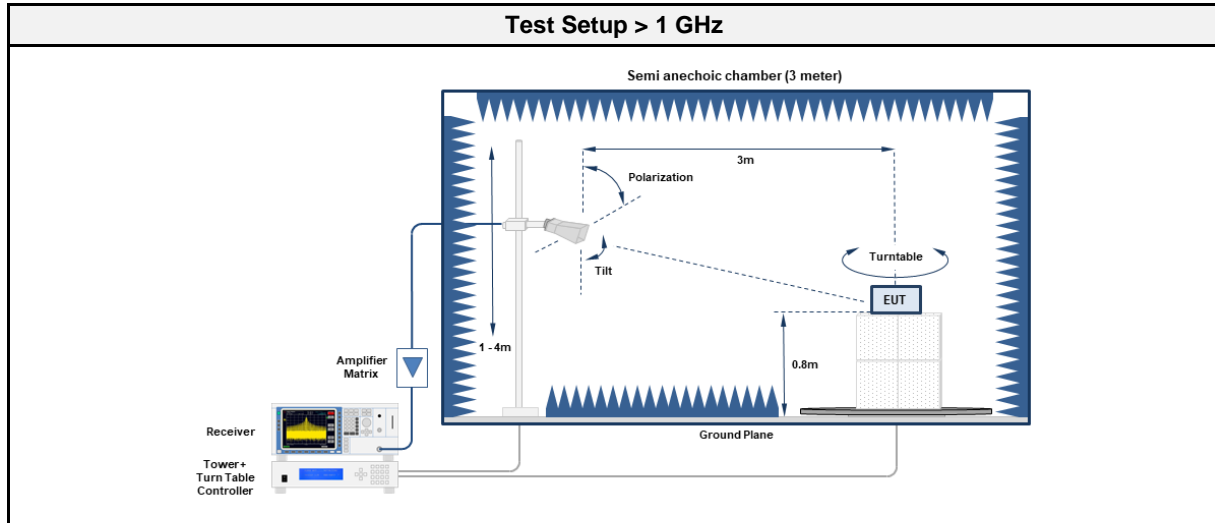
Test Information	
Reference	ISED RSS-133 §3.1 ISED RSS-139 §3.1 ISED RSS-130 §3.3 ISED RSS-Gen §7.4
Measurement Method	ANSI C63.4-2014 8.1-8.3
Measurement Uncertainty	± 5.95 dB
Operator	Florian Voigt
Date	2021-11-22

#### 3.3.2 Limits

Limits			
Frequency range [MHz]	Bandwidth	Detector	Limit [dBµV/m @ 3 m]
30 - 88	100 kHz	Quasi-peak	40
88 - 216	100 kHz	Quasi-peak	43.5
216 - 960	100 kHz	Quasi-peak	46
960 - 1000	100 kHz	Quasi-peak	54
> 1000	1 MHz	Average	54

#### 3.3.3 Setup





### 3.3.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	Schwarzbeck	BBHA 9120D	EF00018	2019-10	2022-10
Horn antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2022-03

3.3.5 Procedure

<b>Test Procedure 30 - 1000 MHz</b>	
1.	EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5.	All significant emissions are measured again using the corresponding final detector

<b>Test Procedure &gt; 1 GHz</b>	
1.	EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5.	All significant emissions are measured again using the corresponding final detector

3.3.6 Results

<b>Test Results - LTE FDD4</b>							
Mode	Frequency [MHz]	Level [dBμV/m]	Detector	Pol.	Limit [dBμV/m]	Margin [dB]	Result
Receive	30.085	30.10	qpk	ver	40.00	-09.89	PASS
Receive	38.0452	33.30	pk	ver	40.00	-06.73	PASS
Receive	57.4635	16.00	qpk	ver	40.00	-24.00	PASS
Receive	65.5597	27.60	qpk	ver	40.00	-12.39	PASS
Receive	82.2665	02.90	qpk	ver	40.00	-37.09	PASS
Receive	411.0288	12.10	qpk	ver	46.00	-33.86	PASS
Receive	2111	49.07	pk	hor	74.00	-24.93	PASS
Receive	2111	40.60	avg	hor	53.98	-13.38	PASS

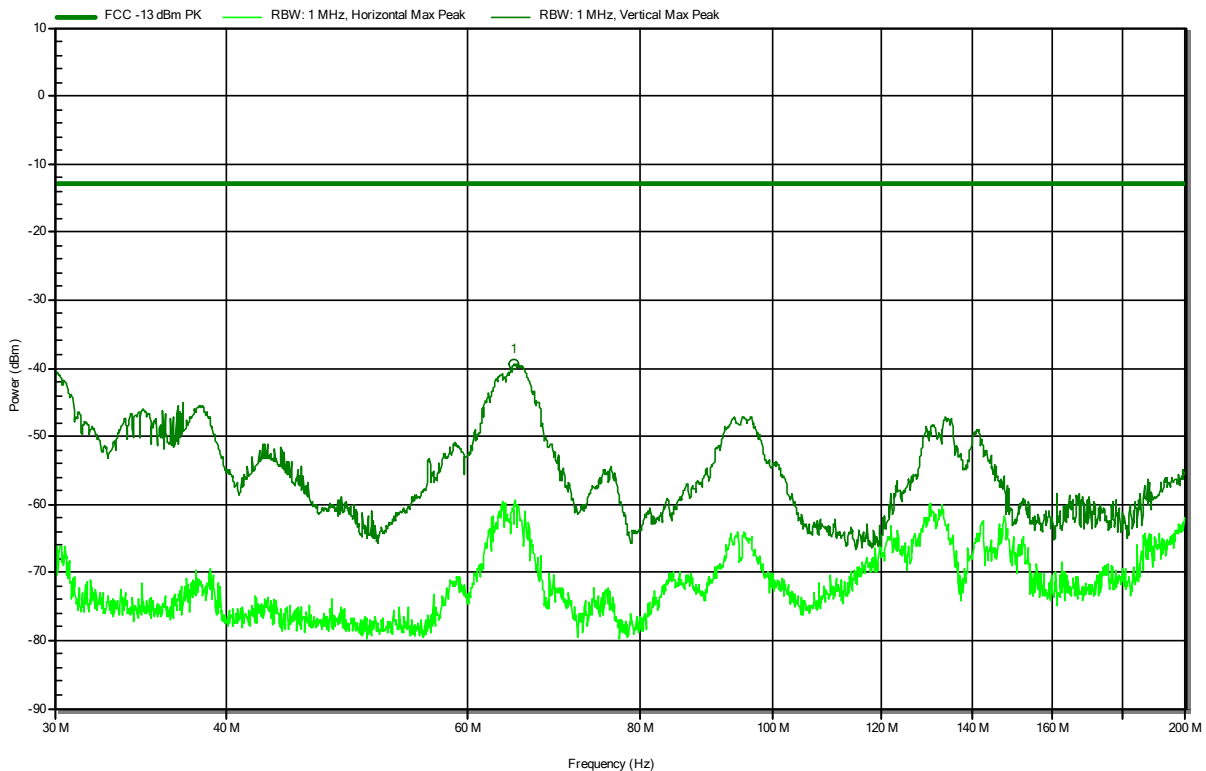
## ANNEX A Transmitter radiated emissions

### Radiated Spurious Emissions according to 47 CFR Part 24 Subpart E, RSS-133, Issue 6 + A1

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom:  
 Antenna: Rohde & Schwarz HK 116  
 Measurement distance: 3 m  
 Mode: Tx; FDD2, CH18607, cell BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-24  
 Note:

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RadiMation

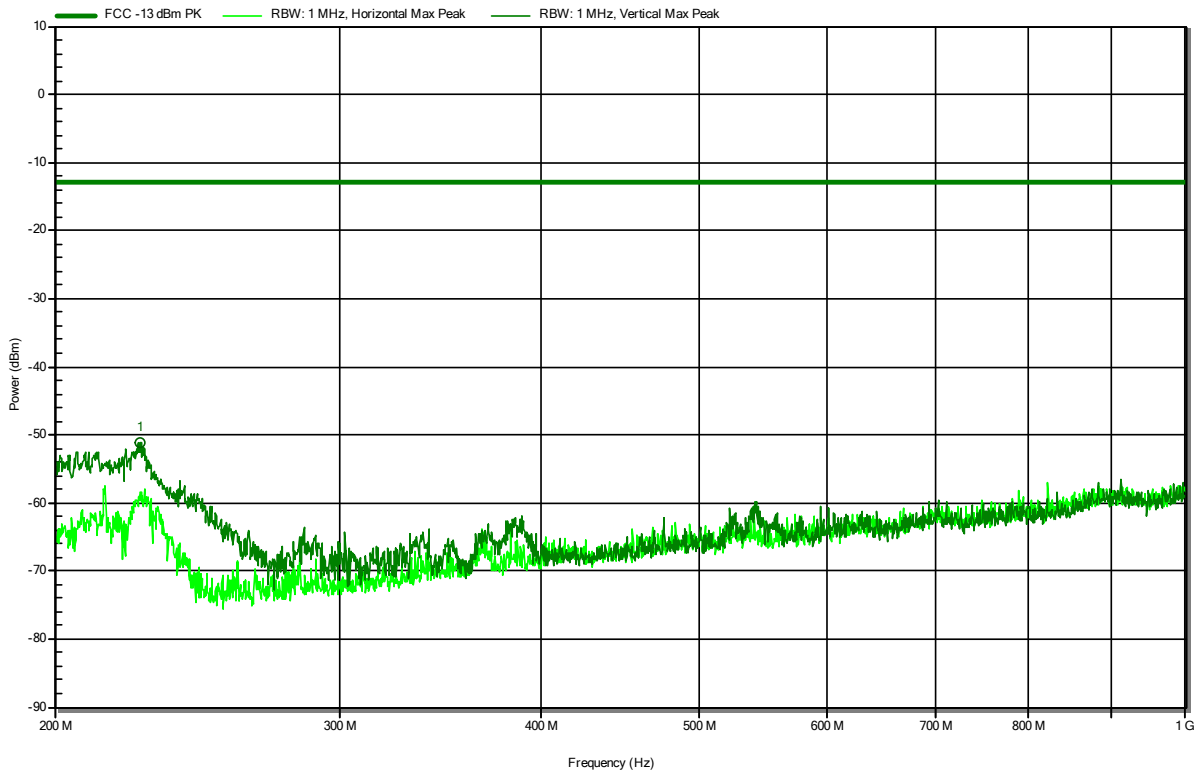


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
64.871 MHz	-39.4 dBm	-13 dBm	-26.41 dB	Pass

**Radiated Spurious Emissions according to 47 CFR Part 24 Subpart E, RSS-133, Issue 6 + A1**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom:  
 Antenna: Rohde & Schwarz HL 223  
 Measurement distance: 3 m  
 Mode: Tx; FDD2, CH18607, cell BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-24  
 Note:

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**RadiMation**

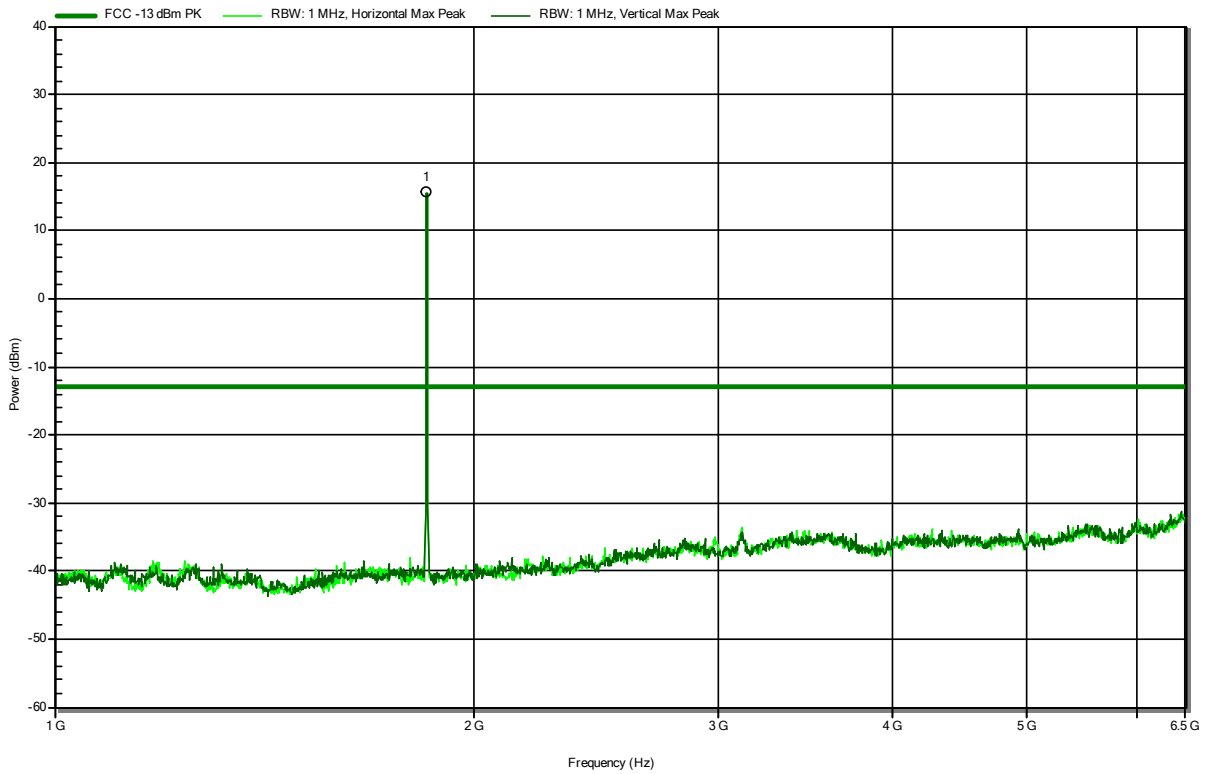


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
225.92 MHz	-51.1 dBm	-13 dBm	-38.13 dB	Pass

**Radiated Spurious Emissions according to 47 CFR Part 24 Subpart E, RSS-133, Issue 6 + A1**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom:  
 Antenna: Schwarzbeck BBHA 9120B  
 Measurement distance: 3 m  
 Mode: Tx; FDD2, CH18607, cell BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note: Marker 1 : uplink

Index 2  
**RadiMation**

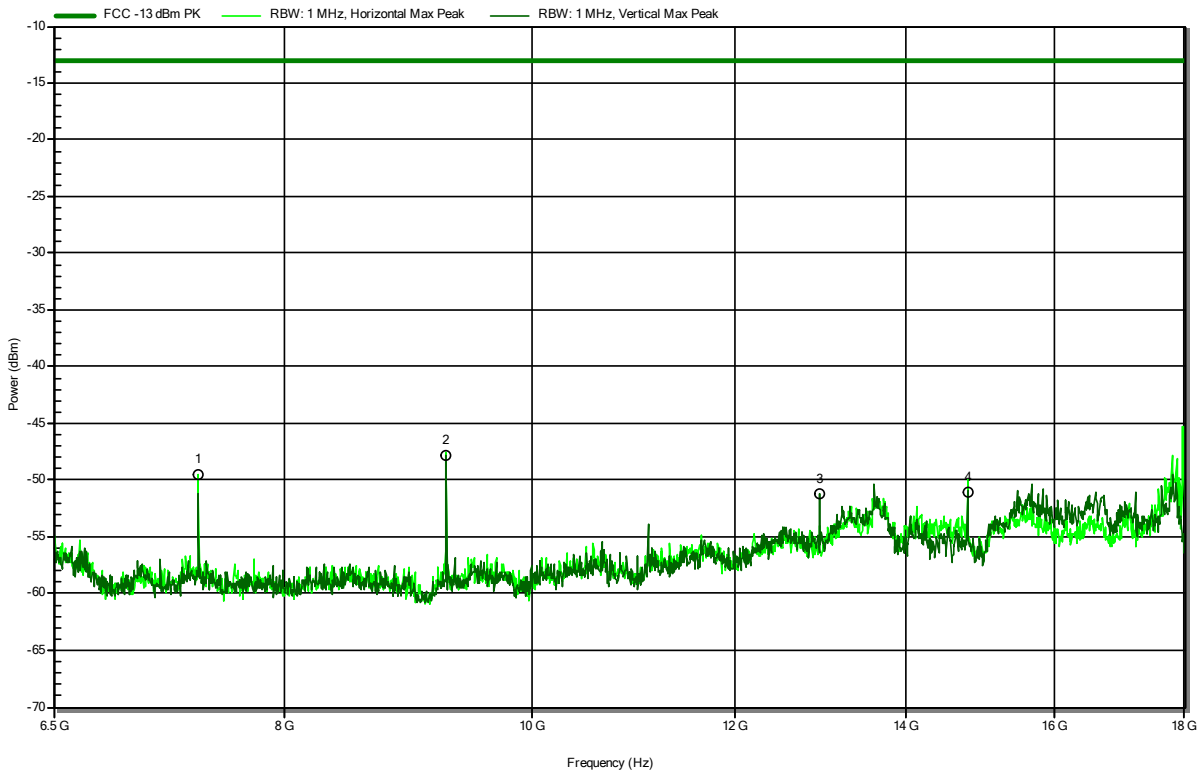


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.85 GHz				Uplink

**Radiated Spurious Emissions according to 47 CFR Part 24 Subpart E, RSS-133, Issue 6 + A1**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom:  
 Antenna: Schwarzbeck HWRD 650  
 Measurement distance: 3 m  
 Mode: Tx; FDD2, CH18607, cell BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note:

Index 4  
**RadiMation**

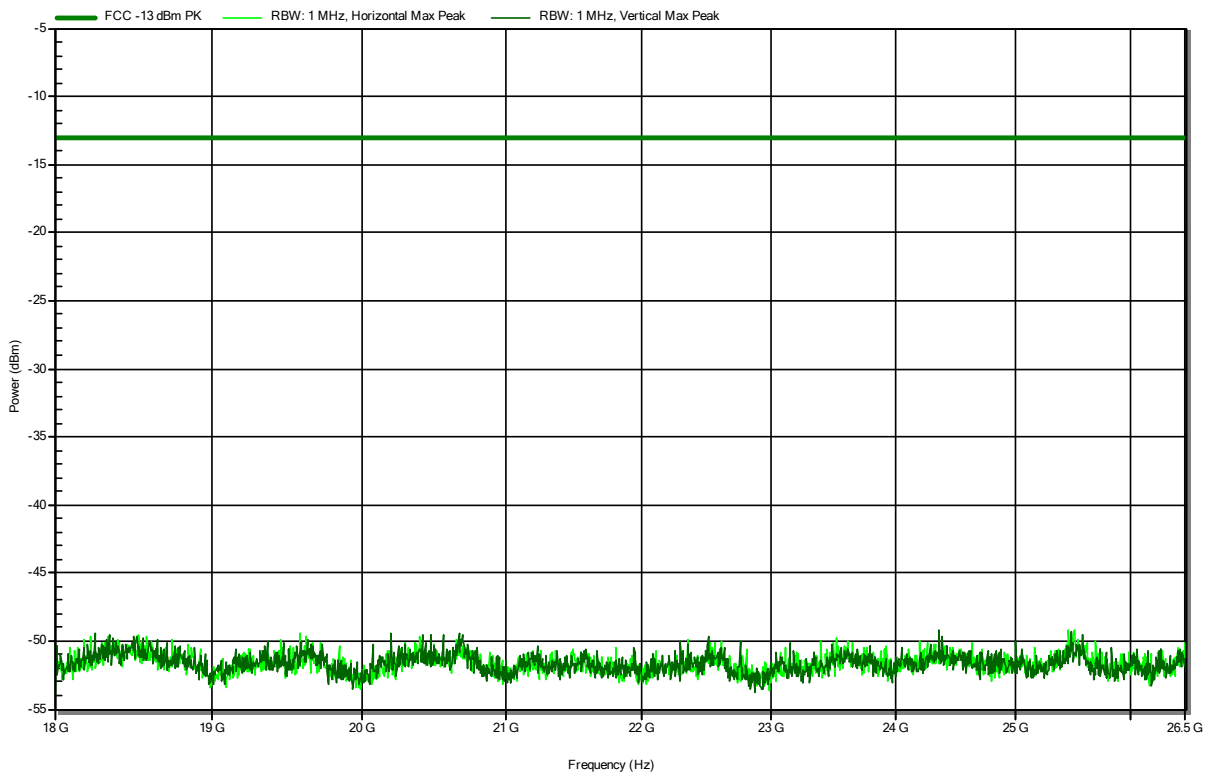


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.402 GHz	-49.5 dBm	-13 dBm	-36.47 dB	Pass
9.253 GHz	-47.8 dBm	-13 dBm	-34.75 dB	Pass
12.955 GHz	-51.2 dBm	-13 dBm	-38.24 dB	Pass
14.805 GHz	-51 dBm	-13 dBm	-38 dB	Pass

**Radiated Spurious Emissions according to 47 CFR Part 24 Subpart E, RSS-133, Issue 6 + A1**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom:  
 Antenna: Amplifier Research AT4560  
 Measurement distance: 3 m  
 Mode: Tx; FDD2, CH18607, cell BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note:

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**RadiMation**



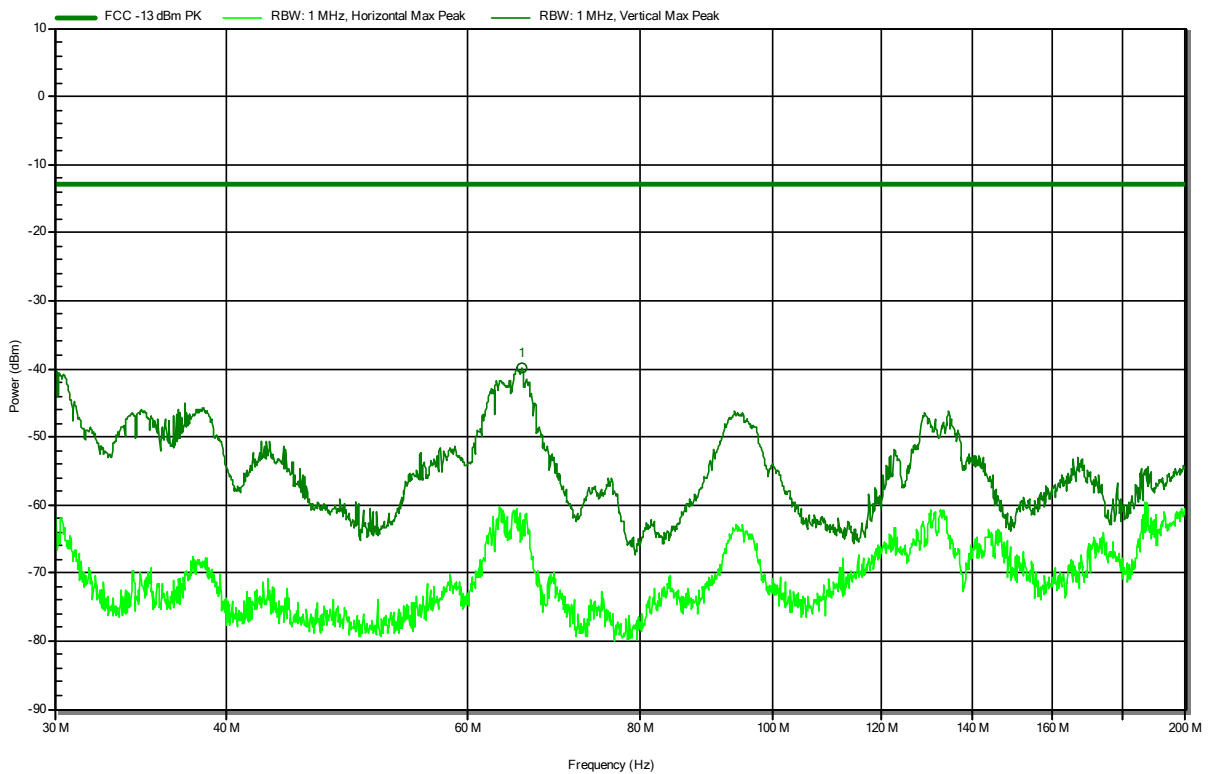


**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-139, Issue 3**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Rohde & Schwarz HK 116  
 Measurement distance: 3 m  
 Mode: Tx; FDD4, CH19957, cell-BW 1.4MHz, QPSK, RMC, RB 3#1  
 Test Date: 2021-11-24  
 Note:

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**RadiMation**



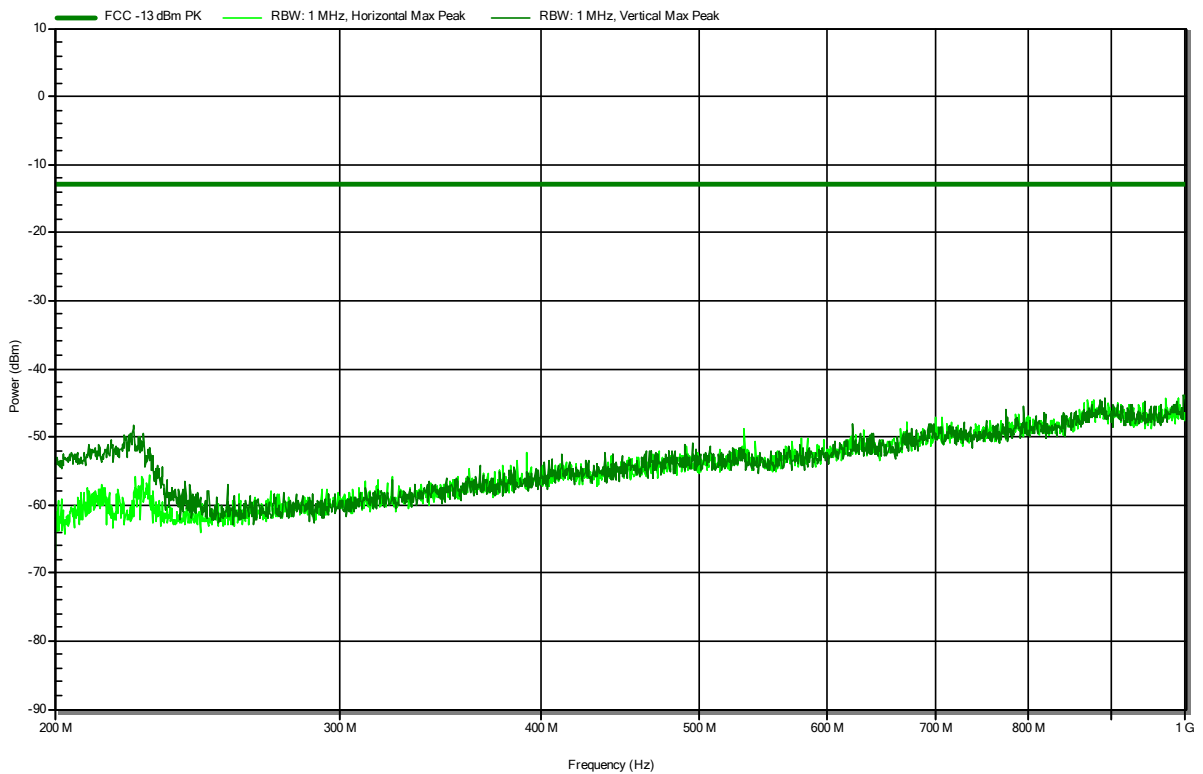
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
65.734 MHz	-39.8 dBm	-13 dBm	-26.79 dB	Pass

### Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-139, Issue 3

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Rohde & Schwarz HL 223  
 Measurement distance: 3 m  
 Mode: Tx; FDD4, CH19957, cell-BW 1.4MHz, QPSK, RMC, RB 3#1  
 Test Date: 2021-11-24  
 Note:

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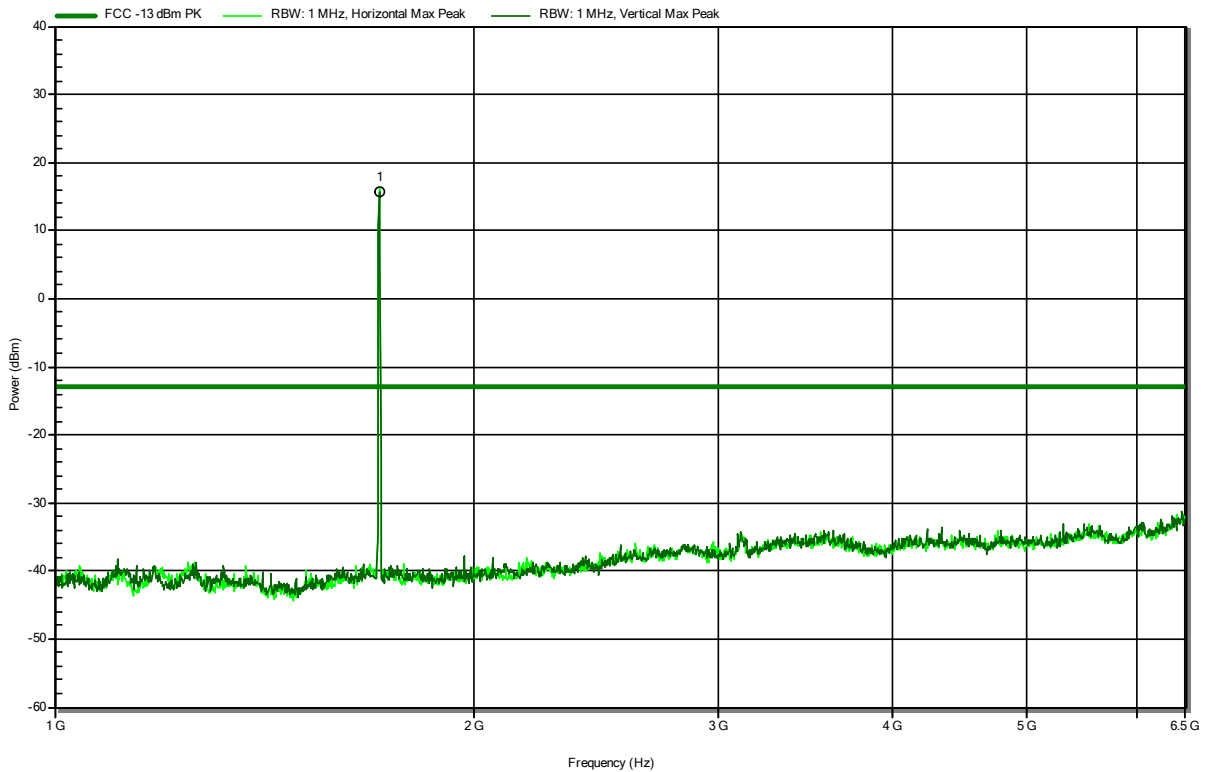
**RadiMation**



**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-139, Issue 3**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Schwarzbeck BBHA 9120B  
 Measurement distance: 3 m  
 Mode: Tx; FDD4, CH19957, cell-BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note: Marker 1 : uplink

Index 2  
**RadiMation**

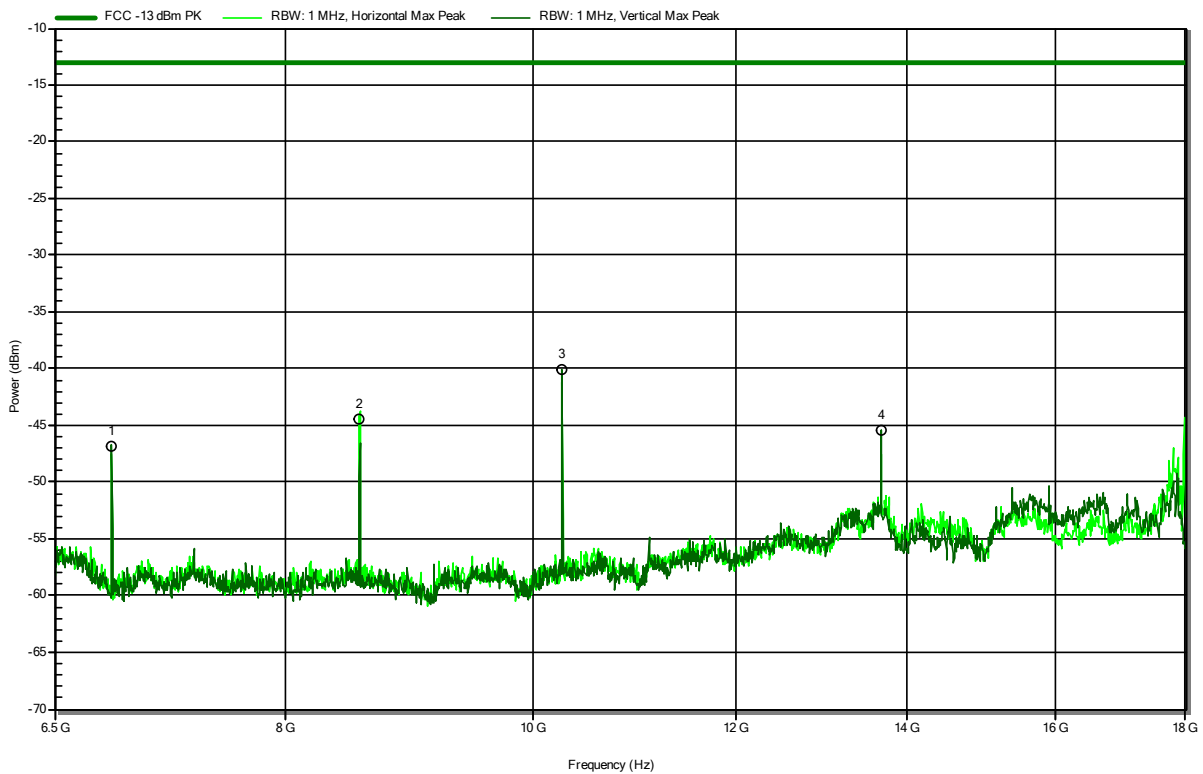


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.71 GHz				Uplink

**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-139, Issue 3**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Schwarzbeck HWRD 650  
 Measurement distance: 3 m  
 Mode: Tx; FDD4, CH19957, cell-BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note:

Index 3  
**RadiMation**



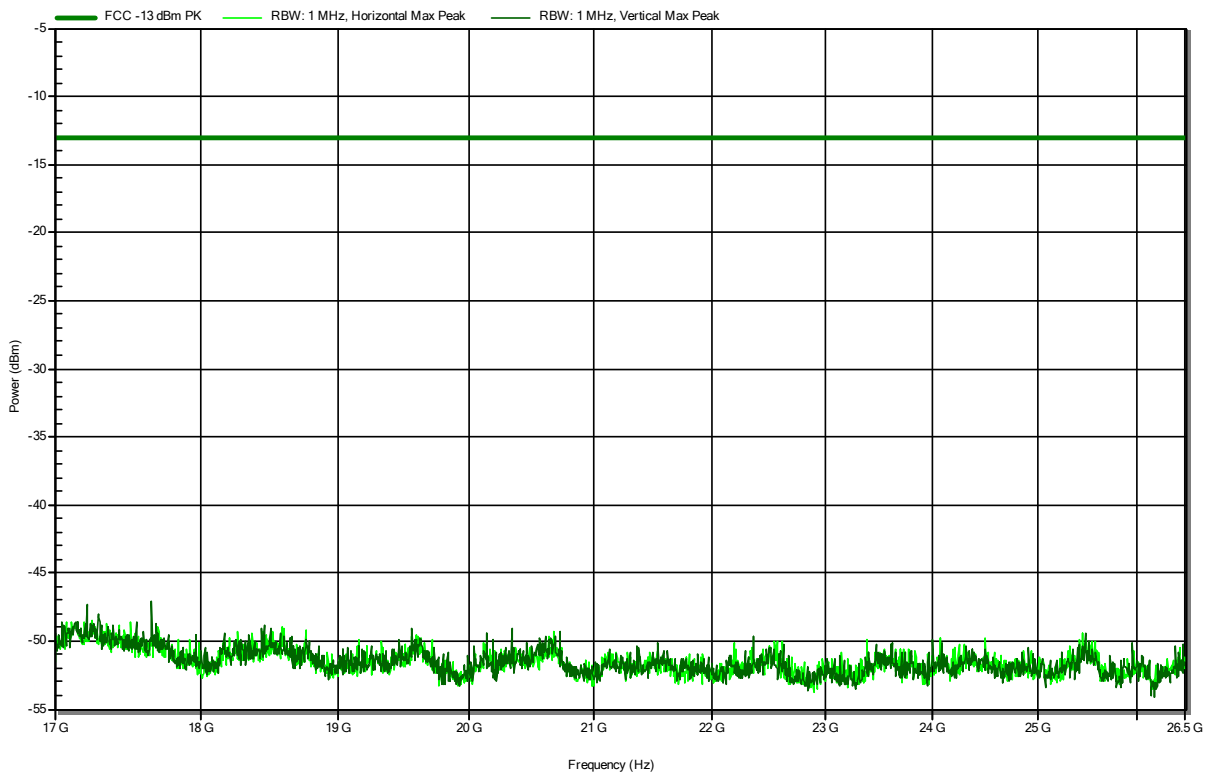
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
6.842 GHz	-46.8 dBm	-13 dBm	-33.82 dB	Pass
8.553 GHz	-44.4 dBm	-13 dBm	-31.44 dB	Pass
10.264 GHz	-40 dBm	-13 dBm	-27.01 dB	Pass
13.686 GHz	-45.4 dBm	-13 dBm	-32.41 dB	Pass

**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-139, Issue 3**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Amplifier Research AT4560  
 Measurement distance: 3 m  
 Mode: Tx; FDD4, CH19957, cell-BW 1.4MHz, QPSK, RB 3#1  
 Test Date: 2021-11-10  
 Note:

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**RadiMation**

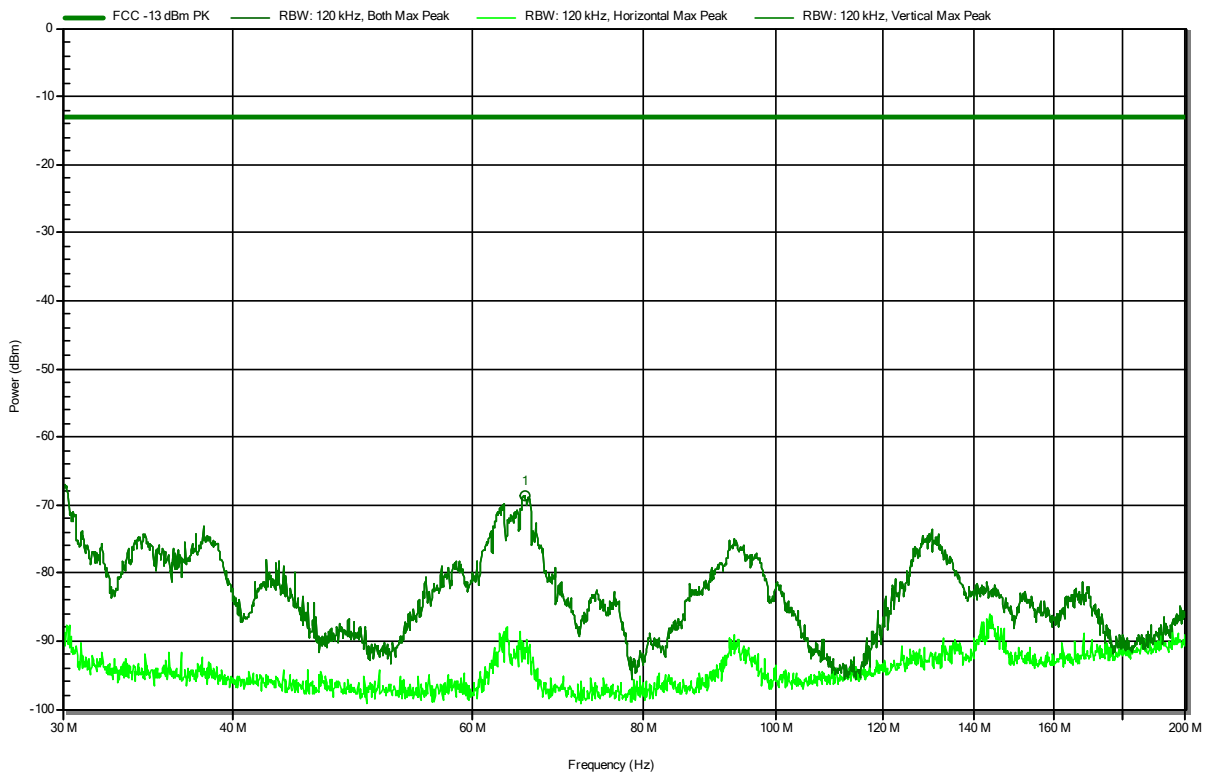


**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-130, Issue 2**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Rohde & Schwarz HK 116  
 Measurement distance: 3 m  
 Mode: Tx; FDD12, CH23165, cell-BW 1.4MHz, QPSK, RB 1#mid  
 Test Date: 2021-11-24  
 Note:

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**RadiMation**



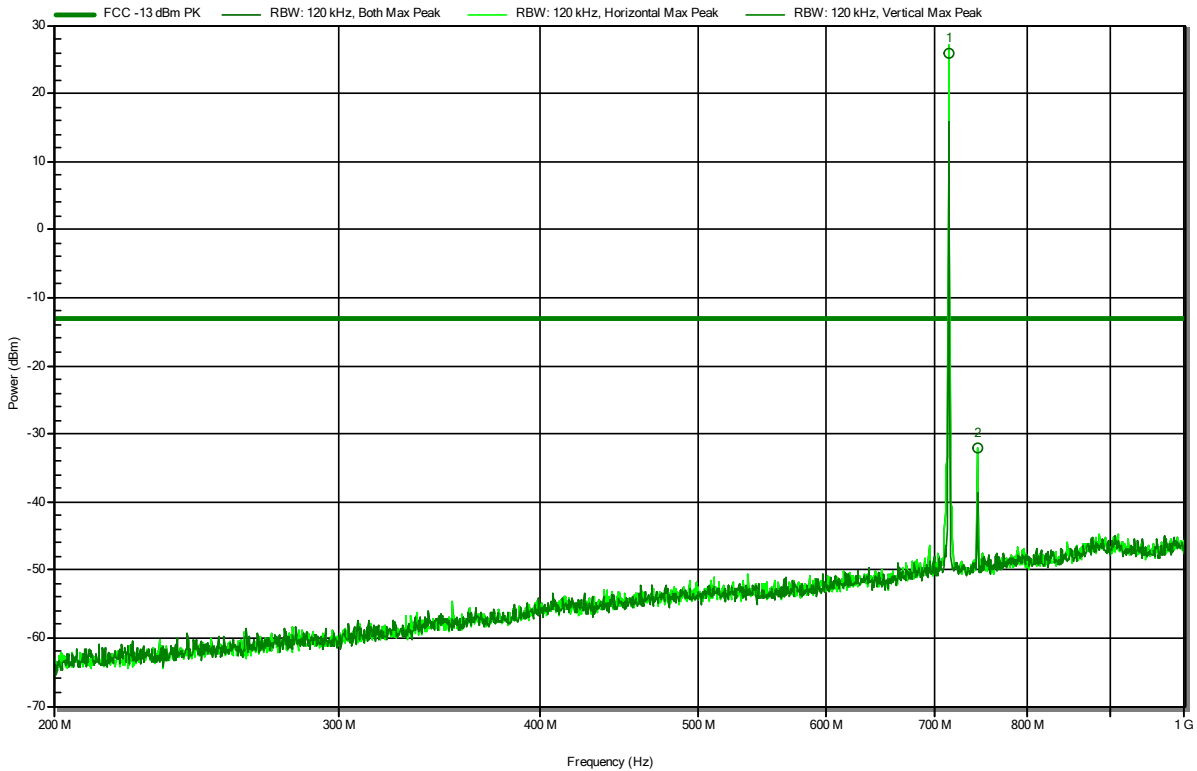
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
65.483 MHz	-68.6 dBm	-13 dBm	-55.57 dB	Pass

**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-130, Issue 2**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Rohde & Schwarz HL 223  
 Measurement distance: 3 m  
 Mode: Tx; FDD12, CH23165, cell-BW 1.4MHz, QPSK, RB 1#mid  
 Test Date: 2021-11-24  
 Note: Marker1 is uplink  
 Marker2 is downlink

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**RadiMation**

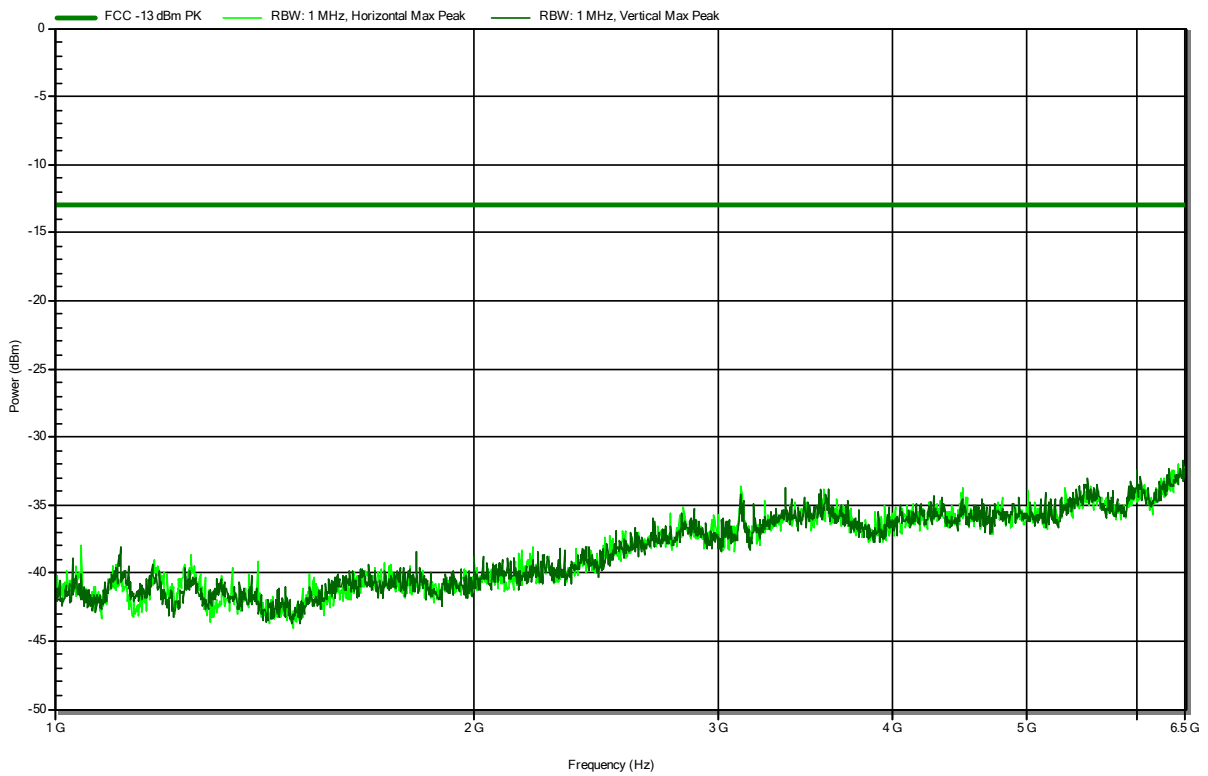


Frequency	Peak	Peak Limit	Peak Difference	Peak Status
714.58 MHz				Uplink
744.32 MHz				Downlink

**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-130, Issue 2**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Schwarzbeck BBHA 9120B  
 Measurement distance: 3 m  
 Mode: Tx; FDD12, CH23165, cell-BW 1.4MHz, QPSK, RMC, RB 1#mid  
 Test Date: 2021-11-10  
 Note:

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**RadiMation**

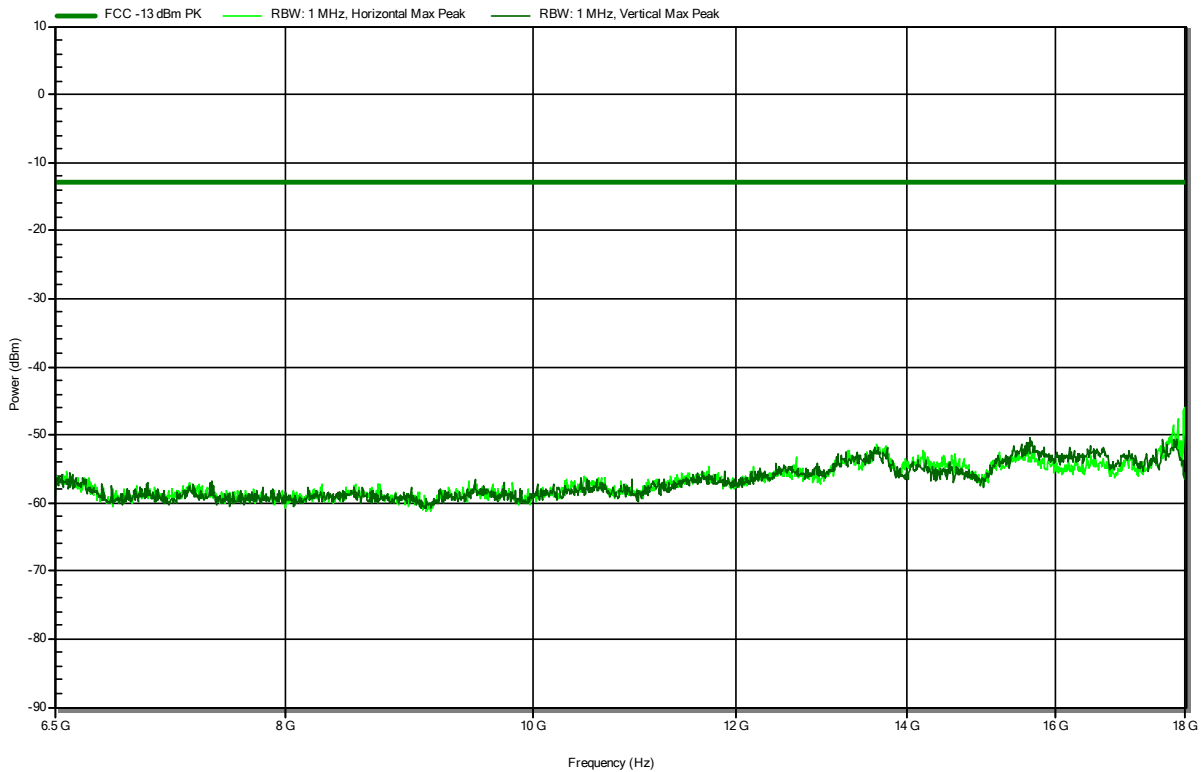




### Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-130, Issue 2

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Schwarzbeck HWRD 650  
 Measurement distance: 3 m  
 Mode: Tx; FDD12, CH23165, cell-BW 1.4MHz, QPSK, RMC, RB 1#mid  
 Test Date: 2021-11-10  
 Note:

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RadiMation

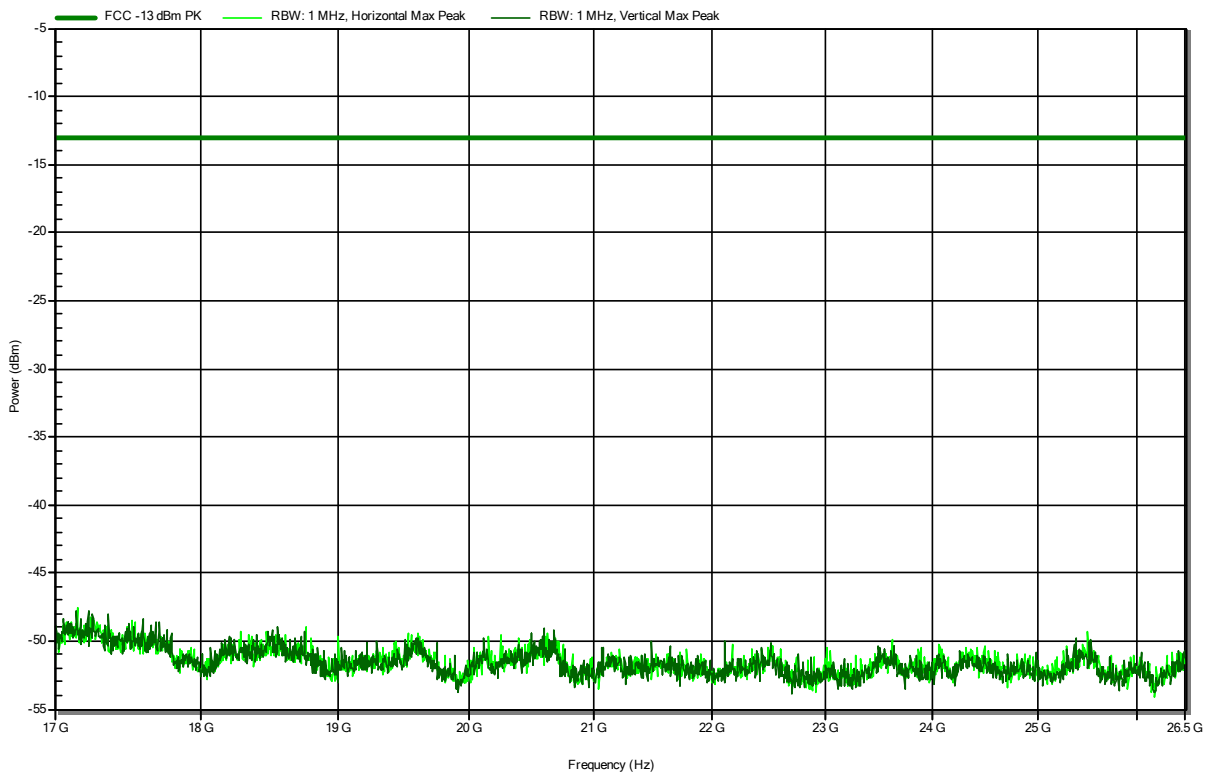


**Radiated Spurious Emissions according to 47 CFR Part 27 Subpart C; RSS-130, Issue 2**

Project Number: G0M-2107-9897  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Degenhardt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 5.0 VDC  
 Antenna: Amplifier Research AT4560  
 Measurement distance: 3 m  
 Mode: Tx; FDD12, CH23165, cell-BW 1.4MHz, QPSK, RB 1#mid  
 Test Date: 2021-11-10  
 Note:

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**RadiMation**



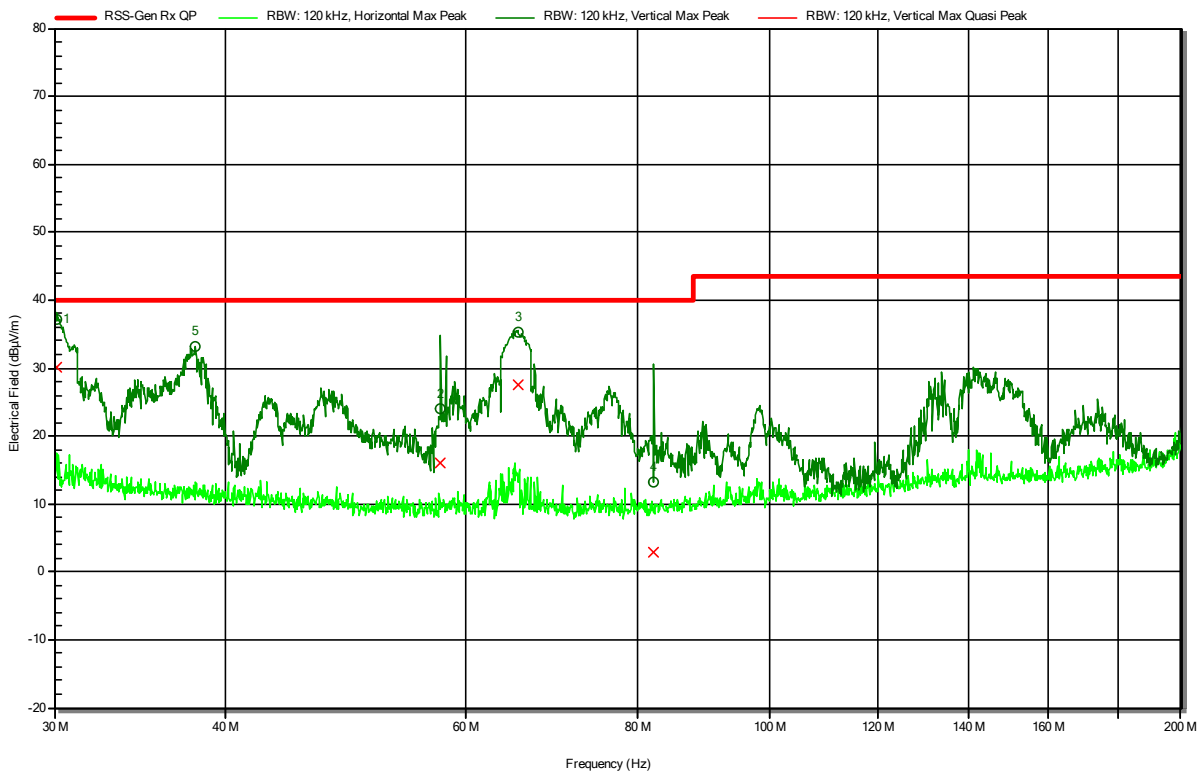
## ANNEX B Receiver radiated emissions

### Radiated Spurious Emissions according to RSS-Gen Issue 5

Project Number: G0M-2107-9898  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 120V 60Hz converted to 5.0 VDC  
 Antenna: Rohde & Schwarz HK 116  
 Measurement distance: 3 m  
 Mode: Rx; FDD4, CH1957, Cell BW 1.4MHz, RMC RB 0#0  
 Test Date: 2021-11-22

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RadiMation



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
38.0452 MHz	33.3 dBµV/m	40 dBµV/m	-6.73 dB	Pass	Vertical

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
30.085 MHz	30.1 dBµV/m	40 dBµV/m	-9.89 dB	Pass	Vertical
57.4635 MHz	16 dBµV/m	40 dBµV/m	-24 dB	Pass	Vertical
65.5597 MHz	27.6 dBµV/m	40 dBµV/m	-12.39 dB	Pass	Vertical
82.2665 MHz	2.9 dBµV/m	40 dBµV/m	-37.09 dB	Pass	Vertical

Test Report No.: G0M-2107-9897-TFCMOCORSE-V01

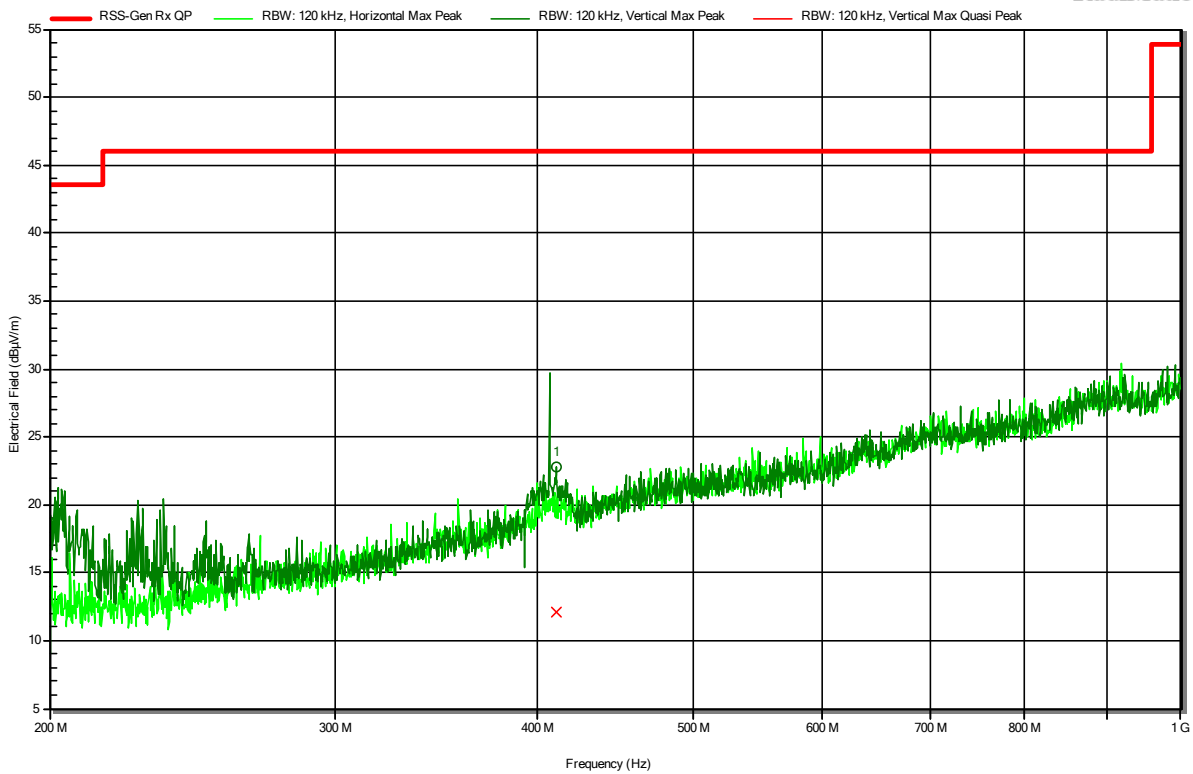
Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

### Radiated Spurious Emissions according to RSS-Gen Issue 5

Project Number: G0M-2107-9898  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 120V 60Hz converted to 5.0 VDC  
 Antenna: Rohde & Schwarz HL 223  
 Measurement distance: 3 m  
 Mode: Rx; FDD4, CH1957, Cell BW 1.4MHz, RMC RB 0#0  
 Test Date: 2021-11-22  
 Note:

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RadiMation



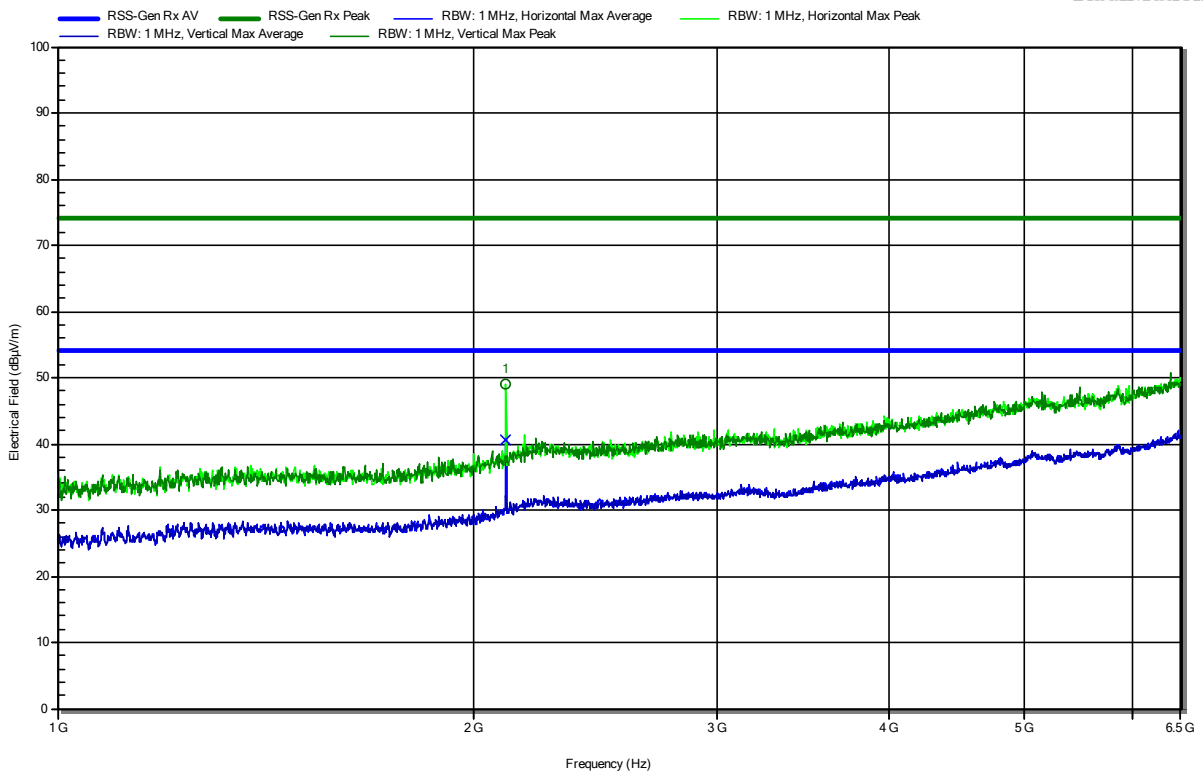
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
411.0288 MHz	12.1 dBµV/m	46 dBµV/m	-33.86 dB	Pass	Vertical

### Radiated Spurious Emissions according to RSS-Gen Issue 5

Project Number: G0M-2107-9898  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 120V 60Hz converted to 5.0 VDC  
 Antenna: Schwarzbeck BBHA 9120D  
 Measurement distance: 3 m  
 Mode: Rx; FDD4, CH1957, Cell BW 1.4MHz, RMC RB 0#0  
 Test Date: 2021-11-22  
 Note: Marker1 is downlink

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**RadiMation**



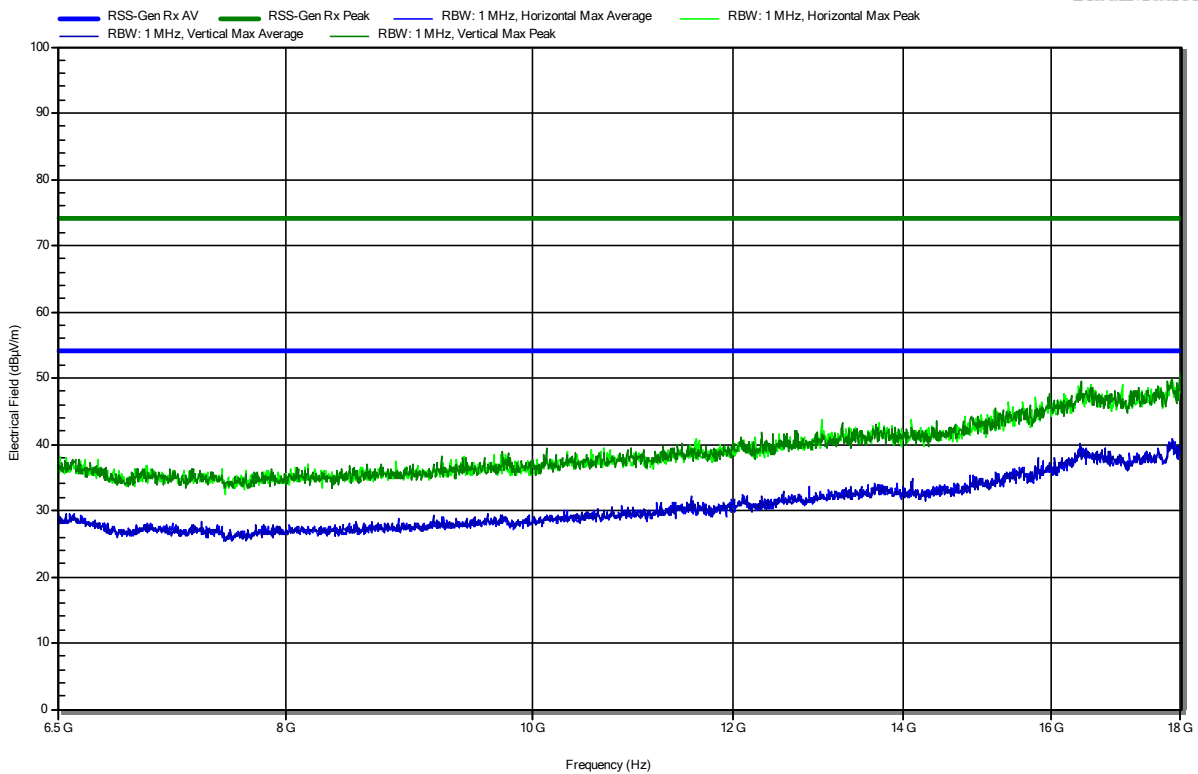
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.111 GHz	49.07 dBµV/m	74 dBµV/m	-24.93 dB	Pass	Horizontal
Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.111 GHz	40.6 dBµV/m	53.98 dBµV/m	-13.38 dB	Pass	Horizontal

### Radiated Spurious Emissions according to RSS-Gen Issue 5

Project Number: G0M-2107-9898  
 Applicant: BIOTRONIK SE & Co. KG  
 Model Description: Projekt Connectivity Box  
 Model: Projekt Connectivity Box US/CA  
 Test Sample ID: 36728  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Voigt  
 Measurement software: RadiMation, version 2020.1.8  
 Test Conditions: Tnom: 23 °Celsius, Vnom: 120V 60Hz converted to 5.0 VDC  
 Antenna: Schwarzbeck HWRD 650  
 Measurement distance: 3 m  
 Mode: Rx; FDD4, CH1957, Cell BW 1.4MHz, RMC RB 0#0  
 Test Date: 2021-11-22  
 Note:

Index 1

**RadiMation**



=== End of test report ===