3.6 Test Conditions and Results - Channel Closing Transmission and Channel Move Time

3.6.1 Information

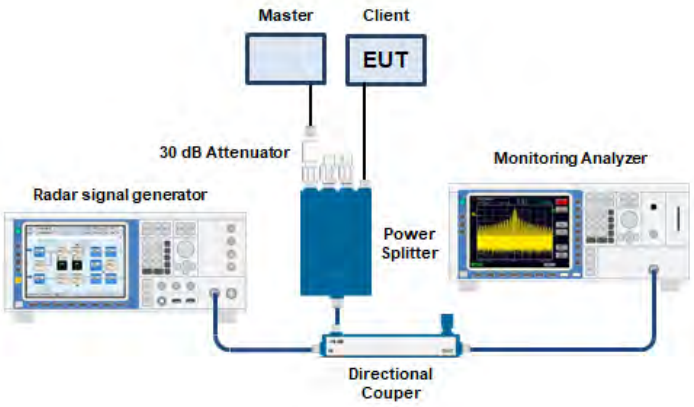
Test Information	
Reference	FCC 15E.407 (h)(2), RSS-247 6.3
Measurement Method	KDB 905462 D02 v02 Section 7.8.3
Operator	Christian Weber
Date	2019-10-10

3.6.2 Limits

Limits	
Maximum channel move time	10 s
Maximum channel closing transmission time	200 ms + aggregate of 60 ms

3.6.3 Setup

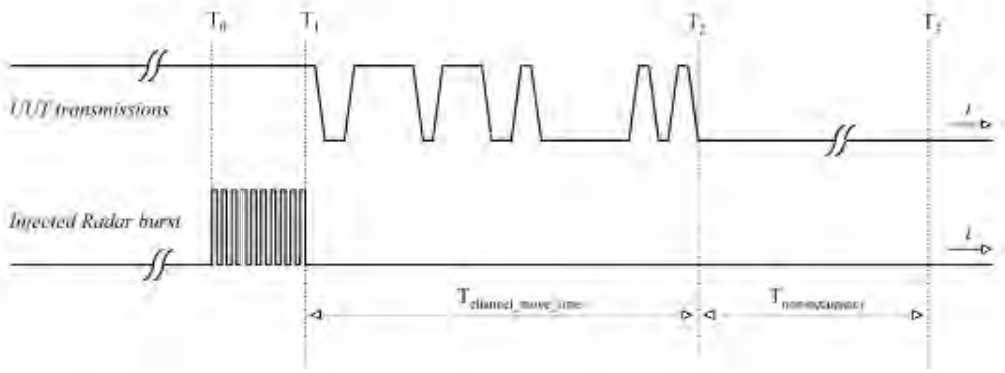
Test Setup - Client device



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz Vertriebs GmbH	FSW43	EF00896	2019-07	2020-07
Signal generator	Rohde & Schwarz Vertriebs GmbH	SMU200A	EF00004	2019-07	2020-07

3.6.5 Procedure

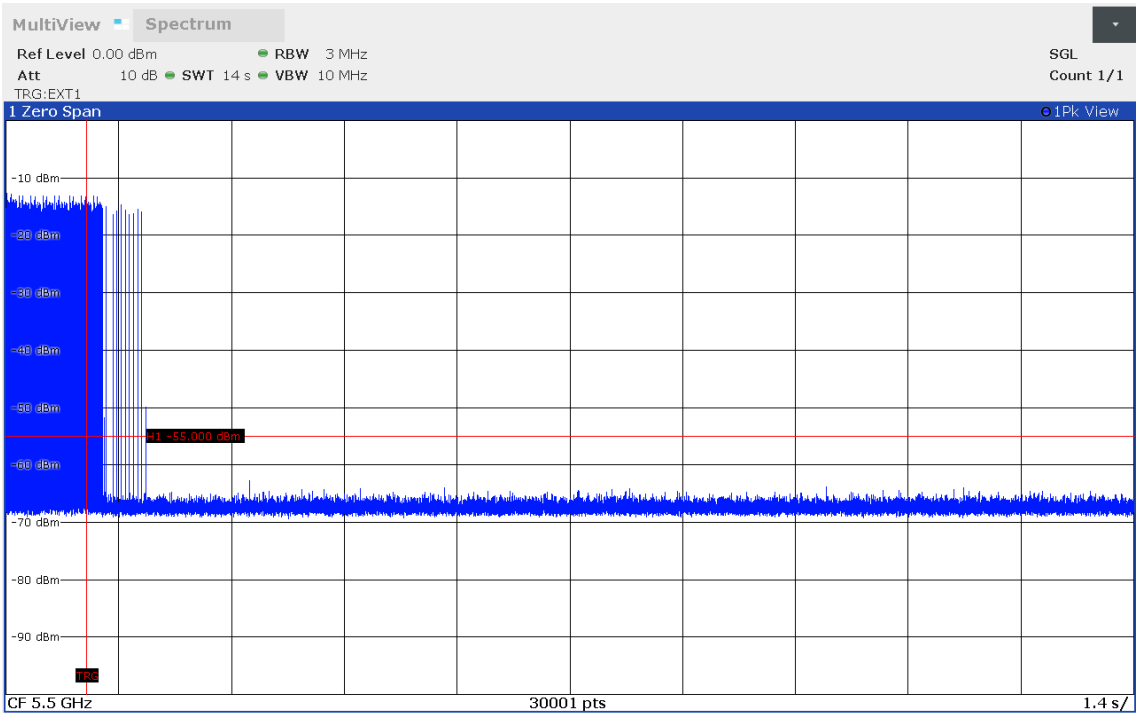
Test Procedure
1. The waveform signal generator and the spectrum analyzer are set to the test frequency 2. The spectrum analyzer is set to zero span with RBW = VBW = 3 MHz 3. The sweep time is set to 16 s 4. A channel loading stream is established between master and client 5. At time T_0 a single radar burst of type 0 is send to the master with power level 1 dB above the DFS threshold level 6. With the end of the burst the analyzer sweep is triggered and all emissions are recorded 7. The analyzer trace is analyzed in order to determine the instance in time when all transmissions on the channel are stopped 8. The result is recorded as channel move time 9. The analyzer trace is analyzed in order to determine the accumulated transmission time between the end of the burst and the channel move time 10. The result is recorded as channel closing transmission time 

3.6.6 Results

Test Results - Client without radar detection				
Channel	Frequency [MHz]	Channel move time [s]	Channel closing transmission time [ms]	Verdict
100	5500	0.737	116 + 9	PASS

DFS Channel moving and closing time

Project Number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
Model Description:	programming device for BIOTRONIK pacemakers, ICDs, CRT-devices and ICMs
Model:	Renamic Neo
Test Sample ID:	24936
Reference Standards:	FCC 15.407
Reference Method:	KDB 905462 D02 v02
Operational Mode:	IEEE 802.11a, Channel: 100, 5500 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Christian Weber
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-10-10
EUT DFS Role:	Client without radar detection
Closing transmission time ≤ 200 ms [s]:	0.116 s
Closing transmission time > 200 ms [s]:	0.009 s
Channel move time [s]:	0.737 s
Closing time verdict:	PASS
Move time verdict:	PASS
Overall Verdict:	PASS



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3.7 Test Conditions and Results - Non-Occupancy Time

3.7.1 Information

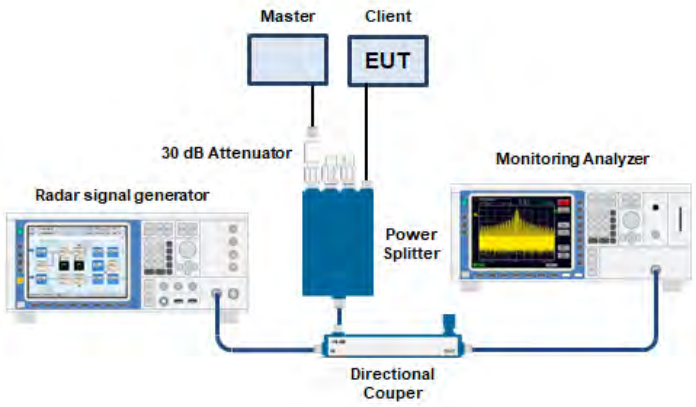
Test Information	
Reference	FCC 15E.407 (h)(2), RSS-247 6.3
Measurement Method	KDB 905462 D02 v02 Section 7.8.3
Operator	Christian Weber
Date	2019-10-11

3.7.2 Limits

Limits
30 min

3.7.3 Setup

Test Setup - Client device



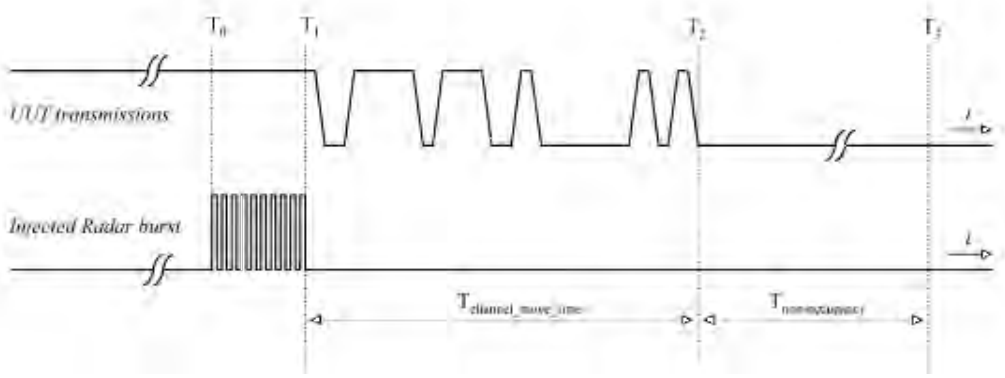
3.7.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz Vertriebs GmbH	FSW43	EF00896	2019-07	2020-07
Signal generator	Rohde & Schwarz Vertriebs GmbH	SMU200A	EF00004	2019-07	2020-07

3.7.5 Procedure

Test Procedure

1. The waveform signal generator and the spectrum analyzer are set to the test frequency
2. The spectrum analyzer is set to zero span with RBW = VBW = 3 MHz
3. The sweep time is set to 2000 s
4. A channel loading stream is established between master and client
5. At time T_0 a single radar burst of type 0 is send to the master with a power level 1 dB above the DFS threshold level
6. With the end of the burst the analyzer sweep is triggered and all emissions are recorded
7. The analyzer trace is analyzed in order to determine the end of the channel move time T_2
8. The time after between the end of the channel move time is analyzed in order to determine whether the non-occupancy period is preserved
9. The duration of the silent period after the end of the end of the channel move time is recorded and compared to the limit

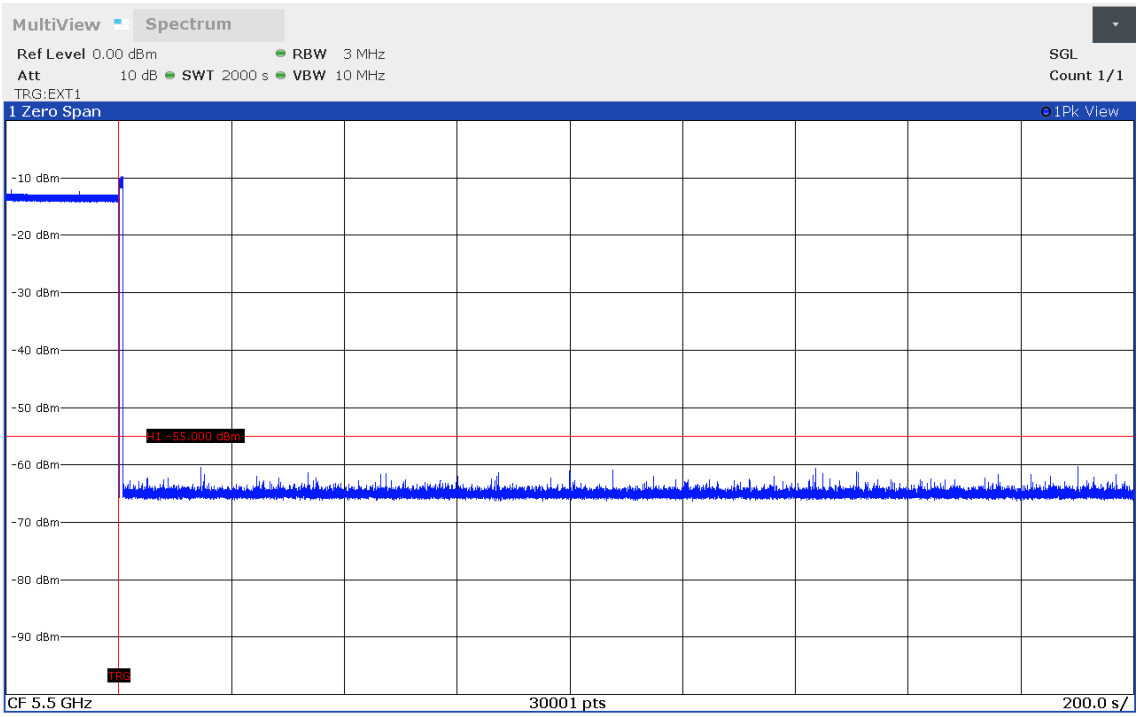


3.7.6 Results

Test Results - Client without radar detection			
Channel	Frequency [MHz]	Non-occupancy period [s]	Verdict
100	5500	> 1800	PASS

DFS Non-occupancy period

Project Number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
Model Description:	programming device for BIOTRONIK pacemakers, ICDs, CRT-devices and ICMs
Model:	Renamic Neo
Test Sample ID:	24936
Reference Standards:	FCC 15.407
Reference Method:	KDB 905462 D02 v02
Operational Mode:	IEEE 802.11a, Channel: 100, 5500 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Christian Weber
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-10-11
EUT DFS Role:	Client without radar detection
Verdict:	PASS



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3.8 Test Conditions and Results - AC power line conducted emissions

3.8.1 Information

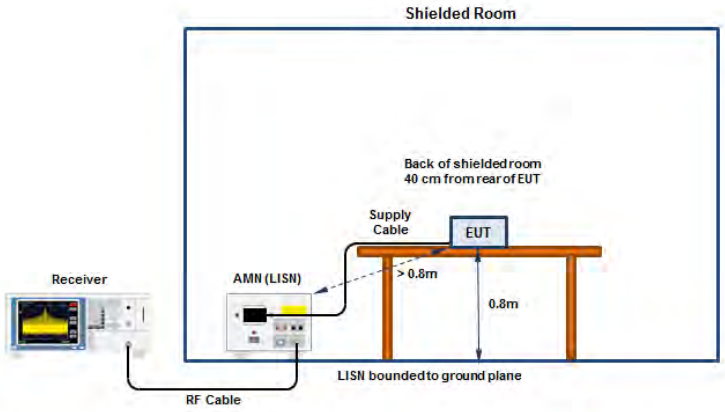
Test Information	
Reference	FCC 15.207
Measurement Method	ANSI C63.10 6.2
Operator	Christian Weber
Date	2019-11-06

3.8.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBµV]	Average [dBµV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50
* Limit decreases linearly with the logarithm of the frequency		

3.8.3 Setup

Test Setup



3.8.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2016.1.10

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Receiver	R&S	ESR7	EF00943	2019-10	2020-10
LISN	R&S	ESH3-Z5	EF00036	2019-07	2021-07

EMI voltage test in the ac-mains according to FCC Part 15C

Project number: G0M-1905-8256

Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	programming device for BIOTRONIK pacemakers, ICDs, CRT-devices and ICMs
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Weber
Test Conditions:	Tnom: 22°C, Unom: 120V AC (AC/DC adaptor)
LISN:	Rohde & Schwarz ESH3-Z5
Mode:	IEEE 802.11 n (HT20), 5200 MHz, MCS8, Max. Power
Test Date:	2019-11-06
Note:	Power Supply: AHM85PS19C2-8

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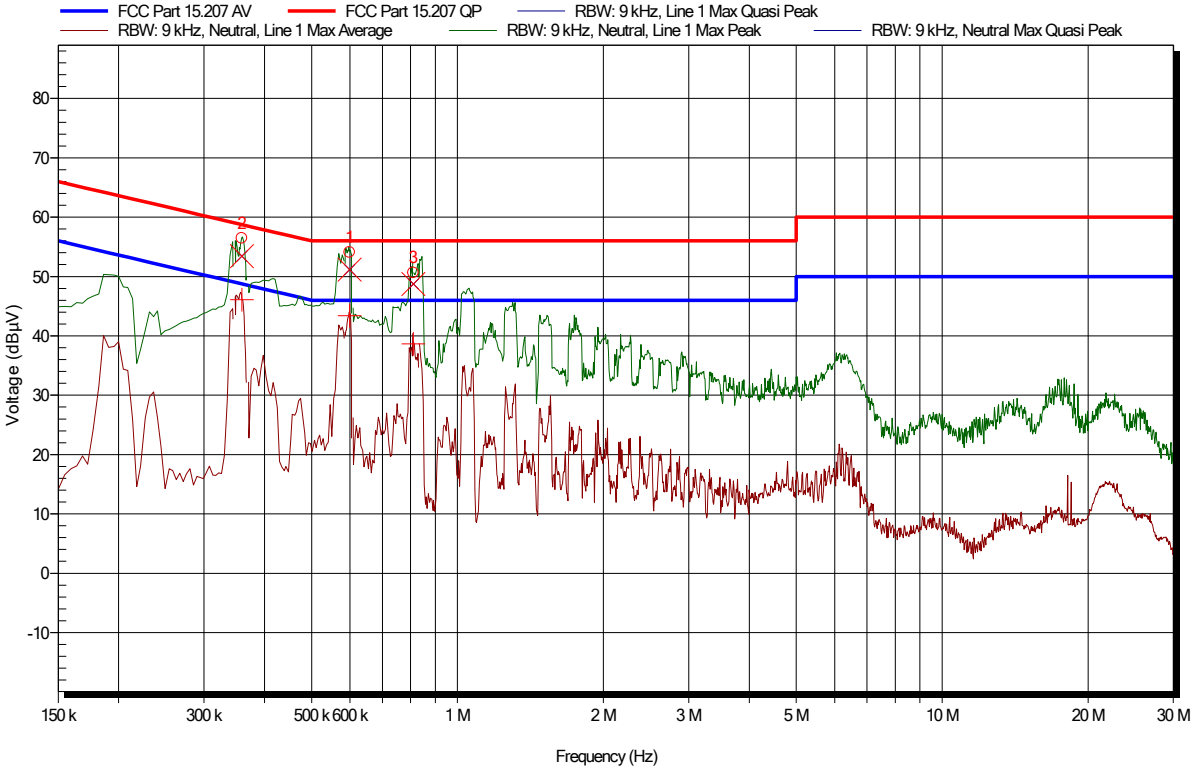


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	598.65 kHz	51.19 dBµV	56 dBµV	-4.81 dB	Pass
2	359.25 kHz	53.43 dBµV	58.75 dBµV	-5.31 dB	Pass
3	811.5 kHz	48.74 dBµV	56 dBµV	-7.26 dB	Pass

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	598.65 kHz	43.39 dBµV	46 dBµV	-2.61 dB	Pass
2	359.25 kHz	46.1 dBµV	48.75 dBµV	-2.64 dB	Pass
3	811.5 kHz	38.66 dBµV	46 dBµV	-7.34 dB	Pass

3.9 Test Conditions and Results - Transmitter radiated emissions

3.9.1 Information

Test Information	
Reference	FCC 15.407(b)
Measurement Method	KDB 789033 G
Operator	Christian Weber, Abdullah Al Jamal, Florian Voigt
Date	2019-07-29 – 2019-10-22

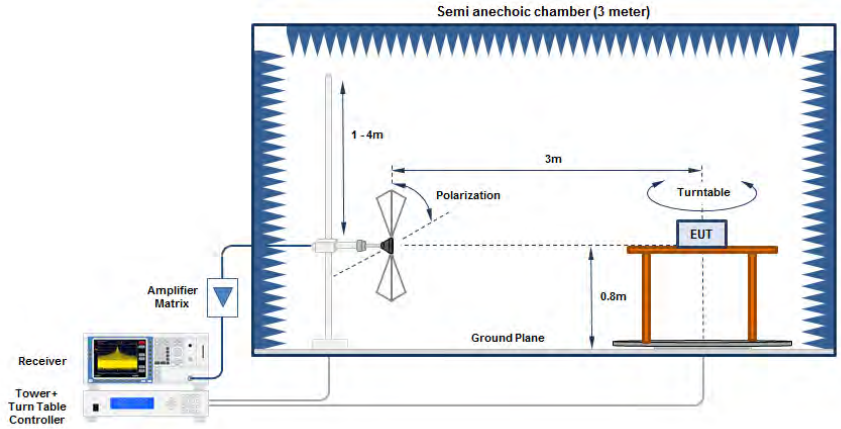
3.9.2 Limits

Limits - Restricted frequency bands and below 1 GHz			
Frequency [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

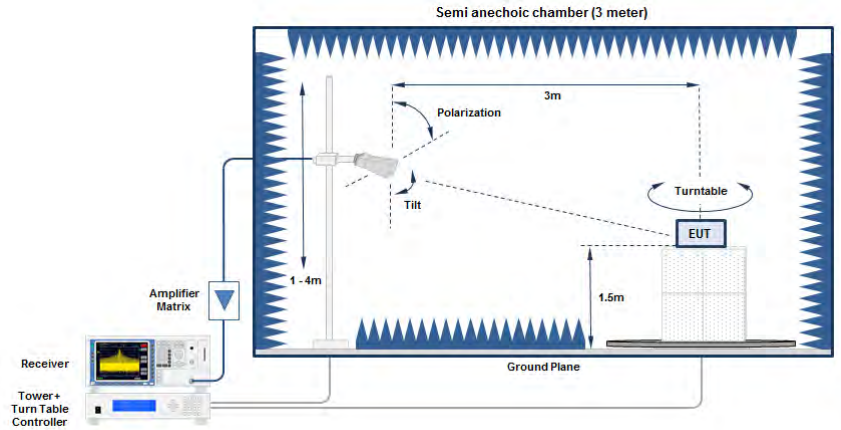
Limits - Outside restricted frequency bands above 1 GHz			
Frequency band [MHz]	Power limit [dBm EIRP]	Field strength limit [dBµV/m]	Measurement distance [m]
5150 - 5250	-27 dBm/MHz	68.2	3
5250 - 5350	-27 dBm/MHz	68.2	3
5470 - 5725	-27 dBm/MHz	68.2	3
5725 - 5850	-27 dBm/MHz @ ±75 MHz from band edge	68.2	3
5725 - 5850	10 to -27 dBm/MHz @ ±25 to ±75 MHz from band edge	105.2 to 68.2	3
5725 - 5850	15.6 to 10 dBm/MHz @ ±5 to ±25 MHz from band edge	110.8 to 105.2	3
5725 - 5850	27 to 15.6 dBm/MHz @ ±0 to ±5 MHz from band edge	122.2 to 110.8	3

3.9.3 Setup

Test Setup 30 - 1000 MHz



Test Setup > 1 GHz



3.9.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2015.2.4

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
EMI Test Receiver	R&S	ESU8	EF00379	2019-07	2020-07
Biconical antenna	R&S	HK116	EF00030	2019-04	2022-04
LPD antenna	R&S	HL223	EF00013	2018-06	2020-06

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Spectrum analyzer	R&S	FSU 26	EF01003	2019-07	2020-07
Spectrum analyzer	R&S	FSW43	EF00896	2019-07	2020-07
40GHz Standard Gain Horn with Amplifier	Flann Microwave Ltd	22240-25 Amp. CBL26402075	EF00301	2016-11	2019-11
Horn antenna	Schwarzbeck	BBHA 9120D	EF00019	2018-10	2020-10
40GHz High Gain Antenna	Amplifier Research	AT4560	EF00302	2019-05	2020-05

3.9.5 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

3.9.6 Results

Test Results - Channel 36 / 5180 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
639.744	43.37	pk	ver	46.00	-02.63
1307	44.68	pk	ver	74.00	-29.32
2478	44.42	pk	hor	68.20	-23.78
5149	57.76	pk	ver	74.00	-16.24
5149	47.36	RMS	ver	54.00	-06.64
5150	51.14	pk	hor	74.00	-22.86
5150	40.29	RMS	hor	54.00	-13.71
7472	47.87	pk	ver	74.00	-26.13
7484	47.42	pk	hor	74.00	-26.58
7484	36.92	RMS	hor	54.00	-17.08
14496	45.77	pk	hor	74.00	-28.23
20715	38.35	pk	ver	54.00	-15.65
20720	43.13	pk	hor	54.00	-10.87
20720	39.59	RMS	hor	54.00	-14.41

Test Results - Channel 48 / 5240 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.36	pk	ver	46.00	-08.64
638.462	41.86	pk	ver	46.00	-04.14
1332	44.62	pk	hor	74.00	-29.38
2382	44.94	pk	ver	74.00	-29.06
2406	48.95	pk	ver	68.20	-19.25
7475	48.55	pk	ver	74.00	-25.45
20958	38.88	pk	hor	54.00	-15.12
20958	38.15	pk	ver	54.00	-15.85

Test Results - Channel 64 / 5320 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.57	pk	ver	46.00	-08.43
638.462	35.65	pk	hor	46.00	-10.35
638.462	42.11	pk	ver	46.00	-03.89
2433	53.03	pk	ver	68.20	-15.17
5350	47.10	pk	hor	74.00	-26.90
5350	40.01	RMS	hor	54.00	-13.99
5353	44.85	pk	ver	74.00	-29.15
5353	38.40	RMS	ver	54.00	-15.60
7438	47.58	pk	hor	74.00	-26.42
7438	36.97	RMS	hor	54.00	-17.03
7588	48.11	pk	ver	74.00	-25.89
21278	38.31	pk	hor	54.00	-15.69
21278	38.02	pk	ver	54.00	-15.98

Test Results - Channel 36 / 5180 MHz - VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1332	44.00	pk	hor	54.00	-10.00
5149	54.17	pk	hor	74.00	-19.83
5149	45.91	RMS	hor	54.00	-08.09
5149	56.26	pk	ver	74.00	-17.74
5149	46.96	RMS	ver	54.00	-07.04
20715	38.65	pk	hor	54.00	-15.35

Test Results - Channel 48 / 5240 MHz - VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1284	43.21	pk	hor	54.00	-10.79

Test Results - Channel 64 / 5320 MHz - VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1308	43.99	pk	hor	54.00	-10.01
5350	55.43	pk	hor	74.00	-18.57
5350	44.02	RMS	hor	54.00	-09.98
5350	55.35	pk	ver	74.00	-18.65
5350	43.92	RMS	ver	54.00	-10.08

Test Results - Channel 100 / 5500 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.51	pk	ver	46.00	-08.49
638.462	42.06	pk	ver	46.00	-03.94
2409	49.02	pk	ver	68.20	-19.18
5456	47.98	pk	ver	74.00	-26.02
5470	39.22	pk	hor	68.20	-28.98
5470	53.21	pk	ver	68.20	-14.99

Test Results - Channel 120 / 5600 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
141.971	35.87	pk	hor	43.50	-07.63
319.231	37.31	pk	ver	46.00	-08.69
638.462	41.67	pk	ver	46.00	-04.33
2404	59.79	pk	ver	68.20	-08.41
7504	47.87	pk	ver	74.00	-26.13
7537	47.18	pk	hor	74.00	-26.82
7537	36.89	RMS	hor	54.00	-17.11
22557	36.62	pk	ver	54.00	-17.38

Test Results - Channel 140 / 5700 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.39	pk	ver	46.00	-08.61
639.744	42.94	pk	ver	46.00	-03.06
1284	44.90	pk	hor	54.00	-09.10
2279	32.18	pk	ver	54.00	-21.82
2279	16.71	RMS	ver	54.00	-37.29
5725	44.22	pk	hor	68.20	-23.98
22800	36.67	pk	hor	54.00	-17.33
22800	41.09	pk	ver	54.00	-12.91
22800	37.02	RMS	ver	54.00	-16.98

Test Results - Channel 100 / 5500 MHz – VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1317	42.61	pk	hor	54.00	-11.39
1317	41.43	pk	ver	54.00	-12.57
5456	42.95	pk	hor	54.00	-11.05
5460	55.27	pk	ver	74.00	-18.73
5460	44.90	RMS	ver	54.00	-09.10
5467	55.25	pk	ver	68.20	-12.95
5467	44.71	RMS	ver	68.20	-23.49

Test Results - Channel 120 / 5600 MHz – VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1332	43.87	pk	hor	54.00	-10.13

Test Results - Channel 140 / 5700 MHz – VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
5725	58.60	pk	ver	68.20	-09.60
5725	42.74	RMS	ver	68.20	-25.46
5726	54.96	pk	hor	68.20	-13.24
5726	37.53	RMS	hor	68.20	-30.67

Test Results - Channel 149 / 5745 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.33	pk	ver	46.00	-08.67
638.462	42.56	pk	ver	46.00	-03.44
1293	42.86	pk	hor	54.00	-11.14
2365	41.77	pk	ver	54.00	-12.23
22983	38.32	pk	hor	54.00	-15.68
28728	53.59	pk	hor	68.20	-14.61
28728	42.90	RMS	hor	68.20	-25.30
28735	48.63	pk	ver	68.20	-19.57
28735	37.83	RMS	ver	68.20	-30.37

Test Results - Channel 157 / 5785 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
319.231	37.62	pk	ver	46.00	-08.38
639.744	41.58	pk	ver	46.00	-04.42
1260	43.43	pk	hor	54.00	-10.57
2389	43.15	pk	ver	54.00	-10.85
2435	49.97	pk	ver	68.20	-18.23
28917	50.08	pk	hor	68.20	-18.12
28927	49.09	pk	ver	68.20	-19.11

Test Results - Channel 165 / 5825 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
638.462	35.47	pk	hor	46.00	-10.53
638.462	41.30	pk	ver	46.00	-04.70
1308	43.87	pk	hor	54.00	-10.13
2500	40.96	pk	ver	54.00	-13.04
23303	38.85	pk	hor	68.20	-29.35
23303	38.88	pk	ver	68.20	-29.32
29125	47.41	pk	hor	68.20	-20.79
29125	46.75	pk	ver	68.20	-21.45

Test Results - Channel 149 / 5745 MHz – VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1135	42.38	pk	ver	74.00	-31.62
1332	43.81	pk	ver	74.00	-30.19

Test Results - Channel 157 / 5785 MHz - VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1207	45.14	pk	hor	74.00	-28.86
1207	42.97	pk	ver	74.00	-31.03
2389	42.86	pk	ver	74.00	-31.14
3356	43.73	pk	ver	74.00	-30.27

Test Results - Channel 165 / 5825 MHz - VHT20					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1207	42.54	pk	hor	74.00	-31.46

ANNEX A Transmitter spurious emissions

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-30
Note:	

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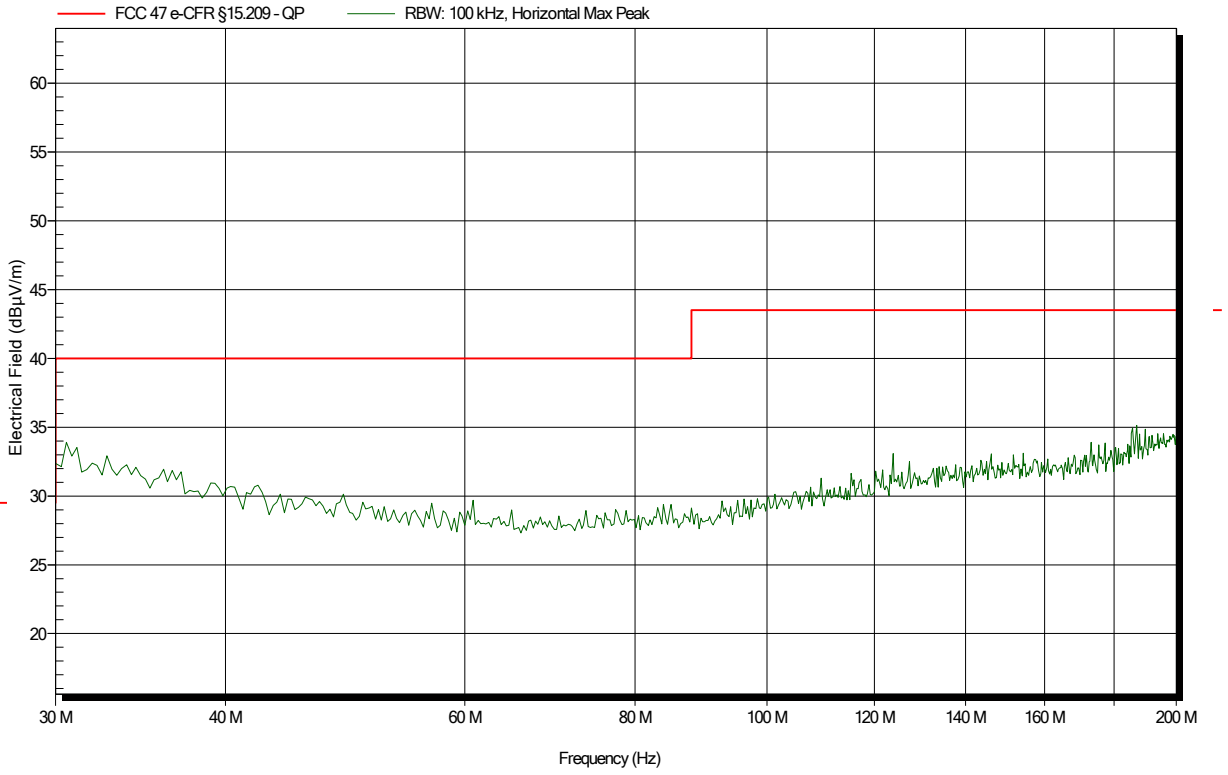

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-30
Note:	

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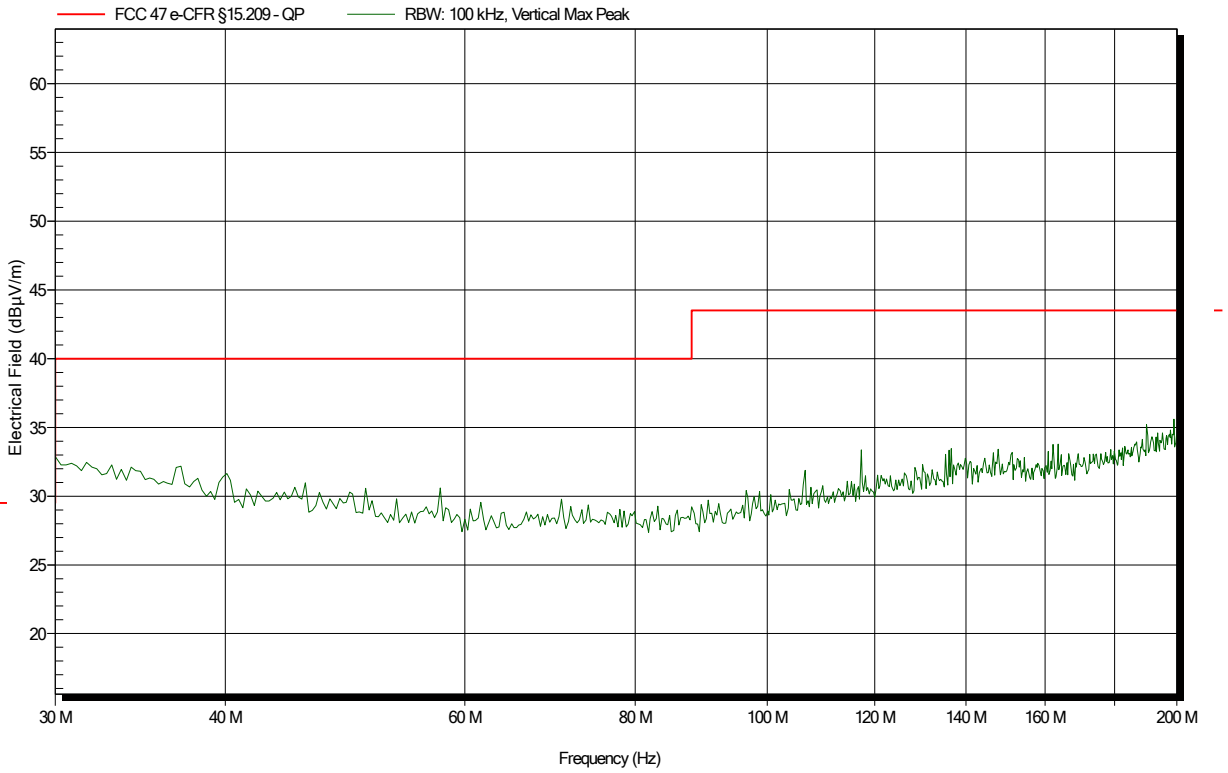

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-30
Note:	

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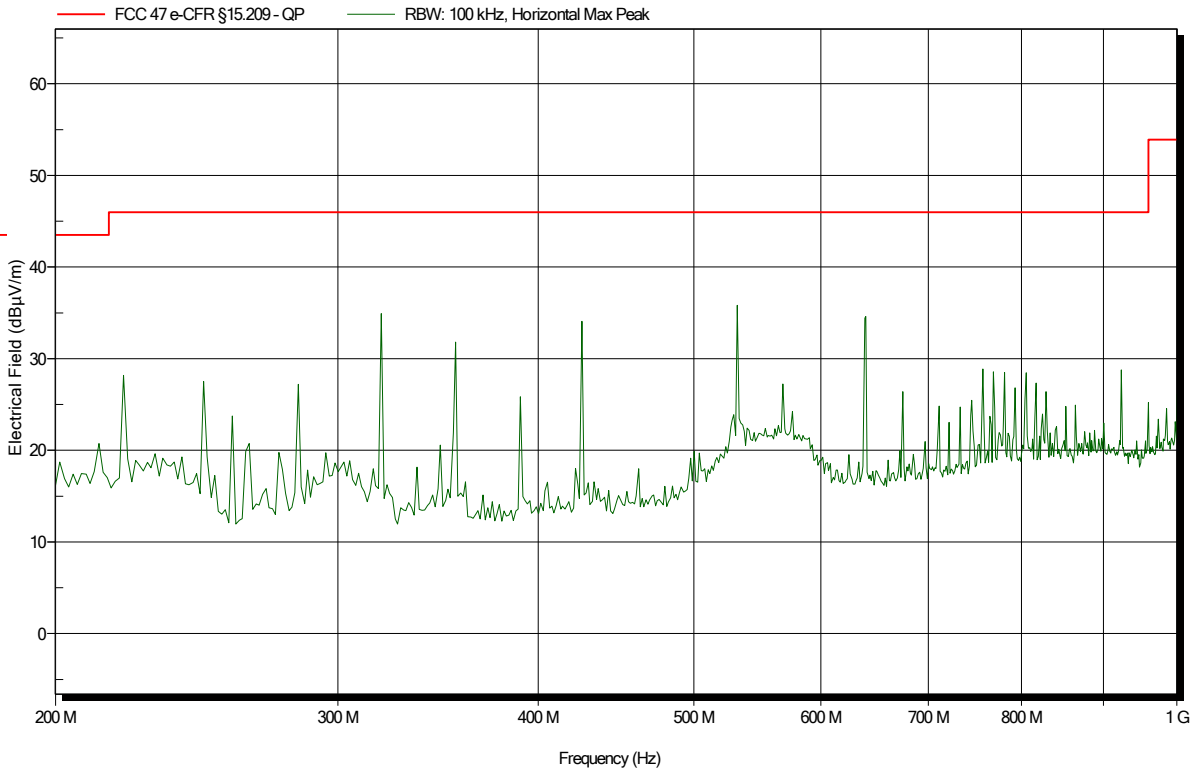

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-30
Note:	

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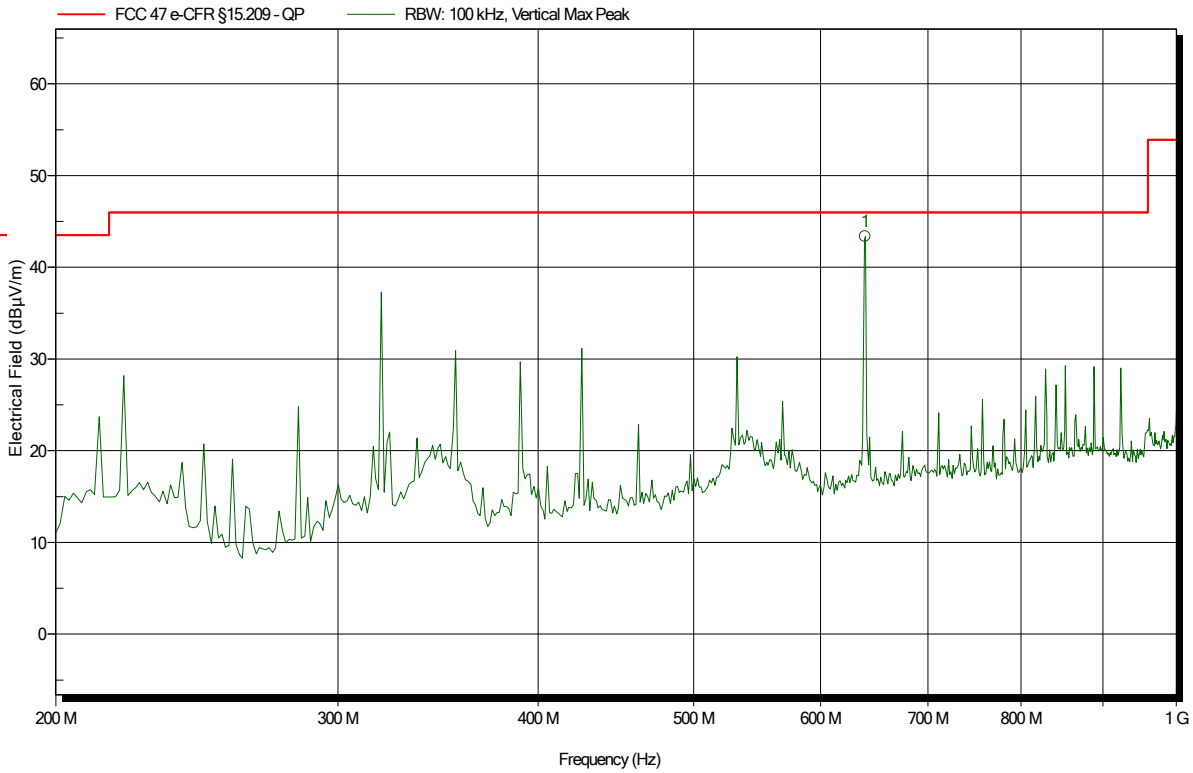

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
639.744 MHz	43.37 dBµV/m	46 dBµV/m	-2.63 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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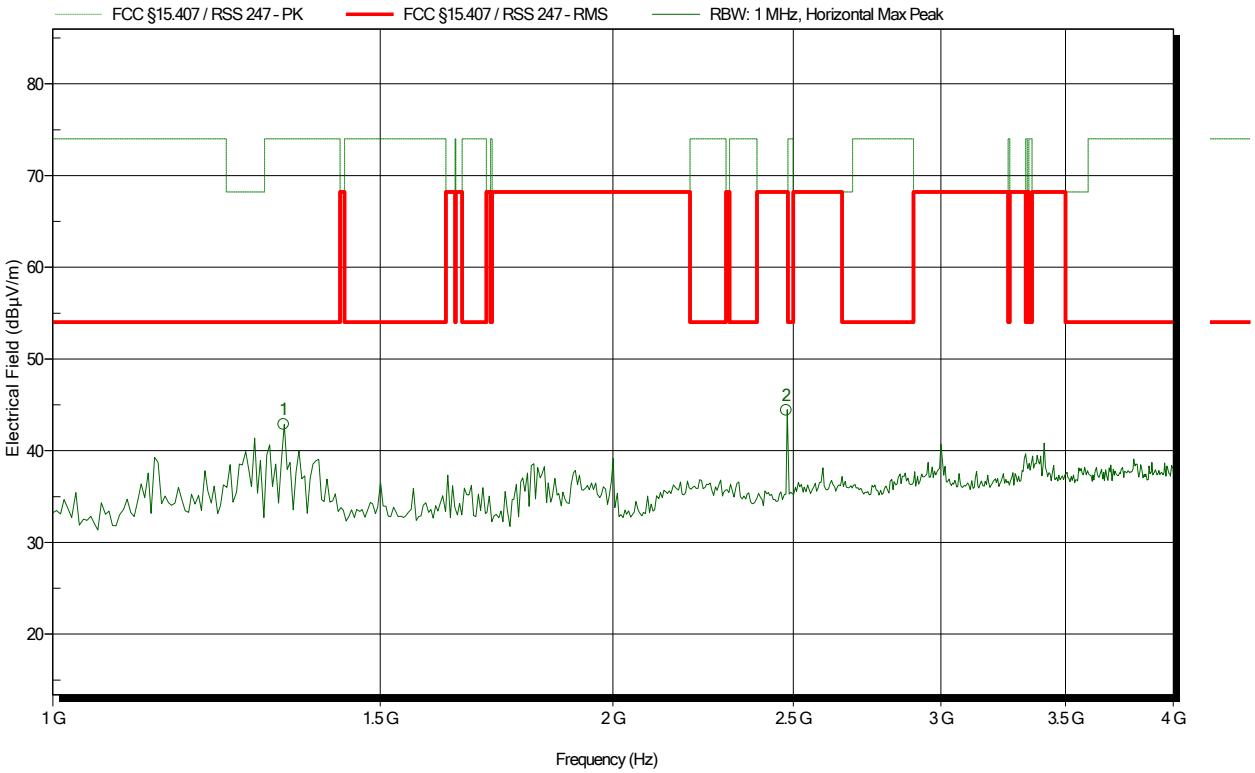

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.331 GHz	42.89 dBµV/m	74 dBµV/m	-31.11 dB	Pass
2.478 GHz	44.42 dBµV/m	68.2 dBµV/m	-23.78 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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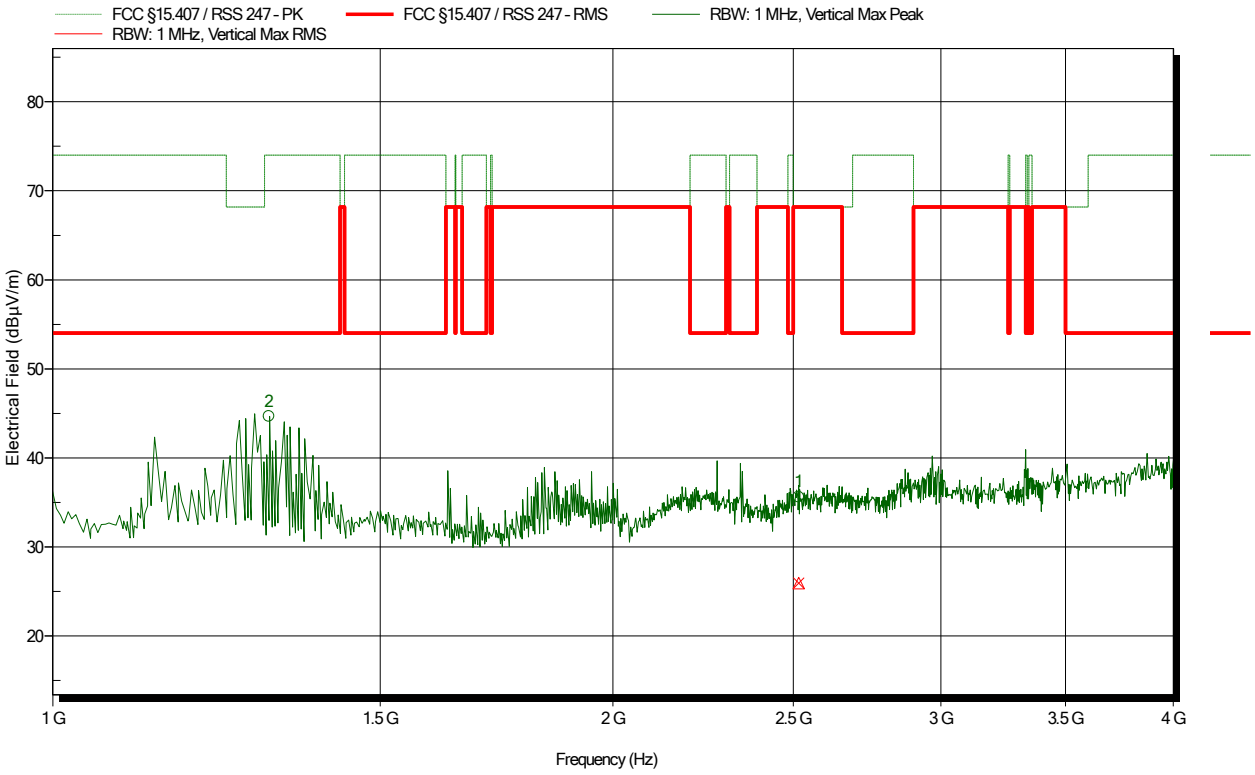

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.307 GHz	44.68 dBµV/m	74 dBµV/m	-29.32 dB	Pass
2.516 GHz	35.61 dBµV/m	68.2 dBµV/m	-32.59 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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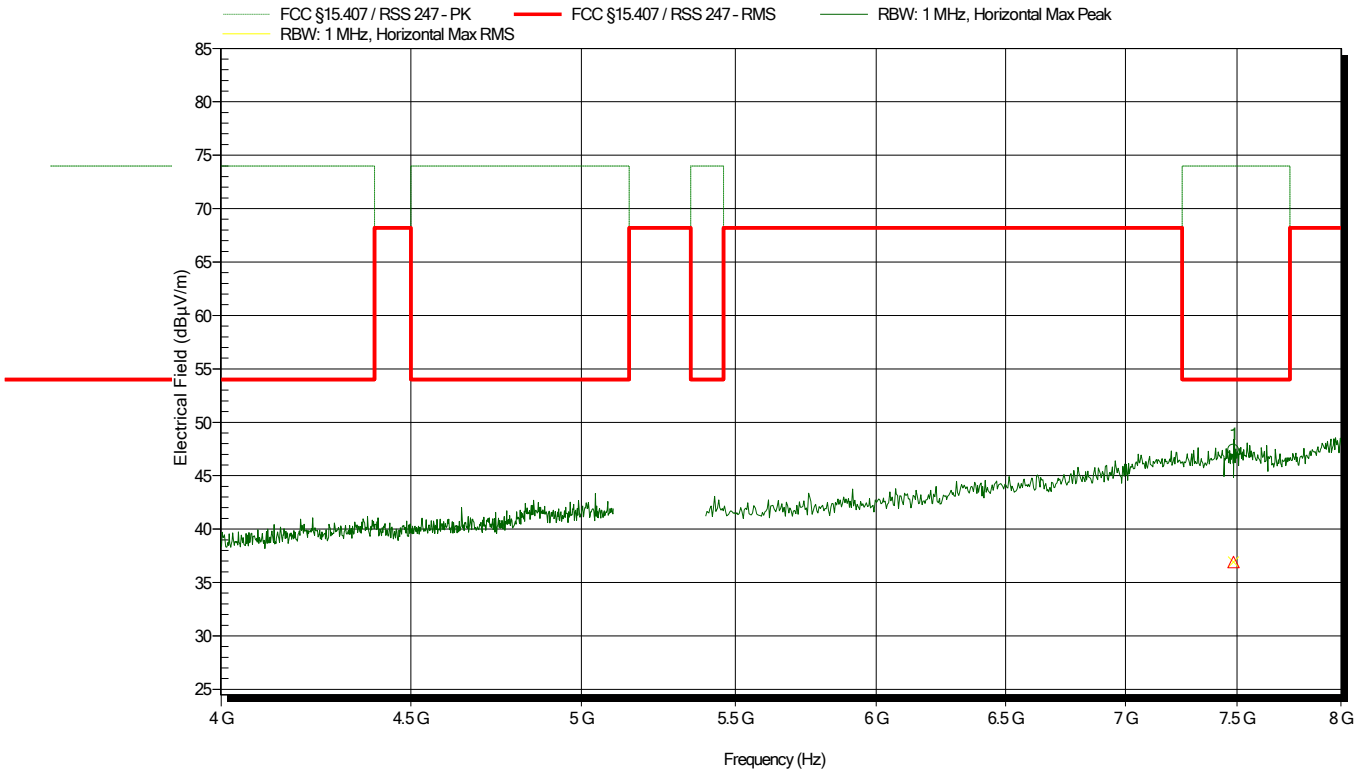

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.484 GHz	47.42 dBµV/m	74 dBµV/m	-26.58 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
7.484 GHz	36.92 dBµV/m	54 dBµV/m	-17.08 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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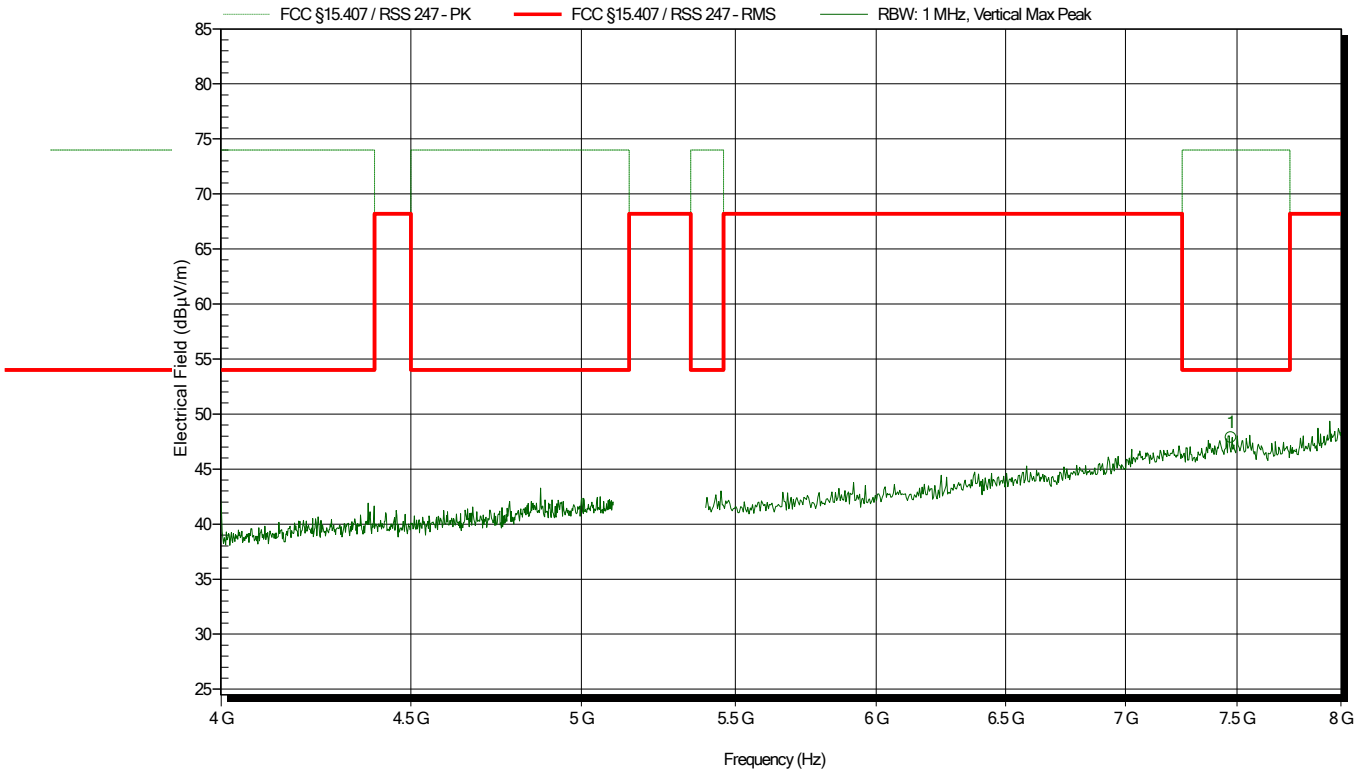

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.472 GHz	47.87 dBµV/m	74 dBµV/m	-26.13 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-08-26
Note:	lower band area

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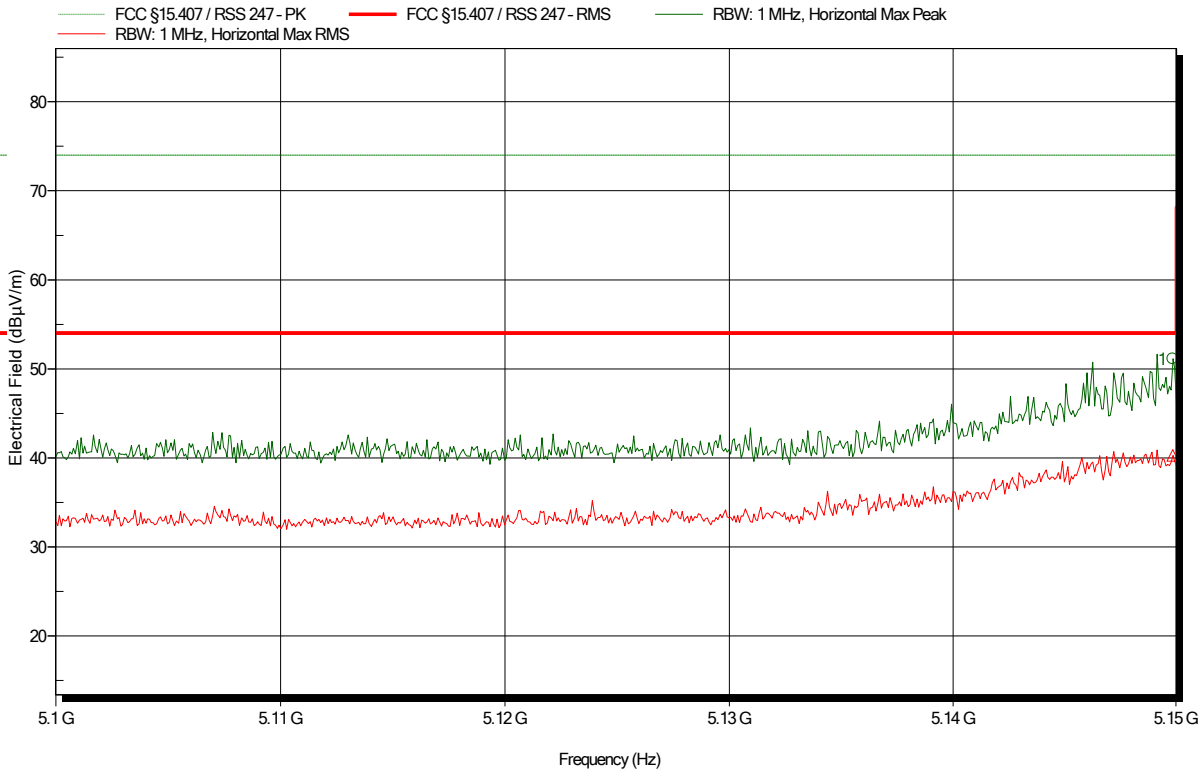

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.15 GHz	51.14 dBµV/m	74 dBµV/m	-22.86 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.15 GHz	40.29 dBµV/m	54 dBµV/m	-13.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-08-26
Note:	lower band area

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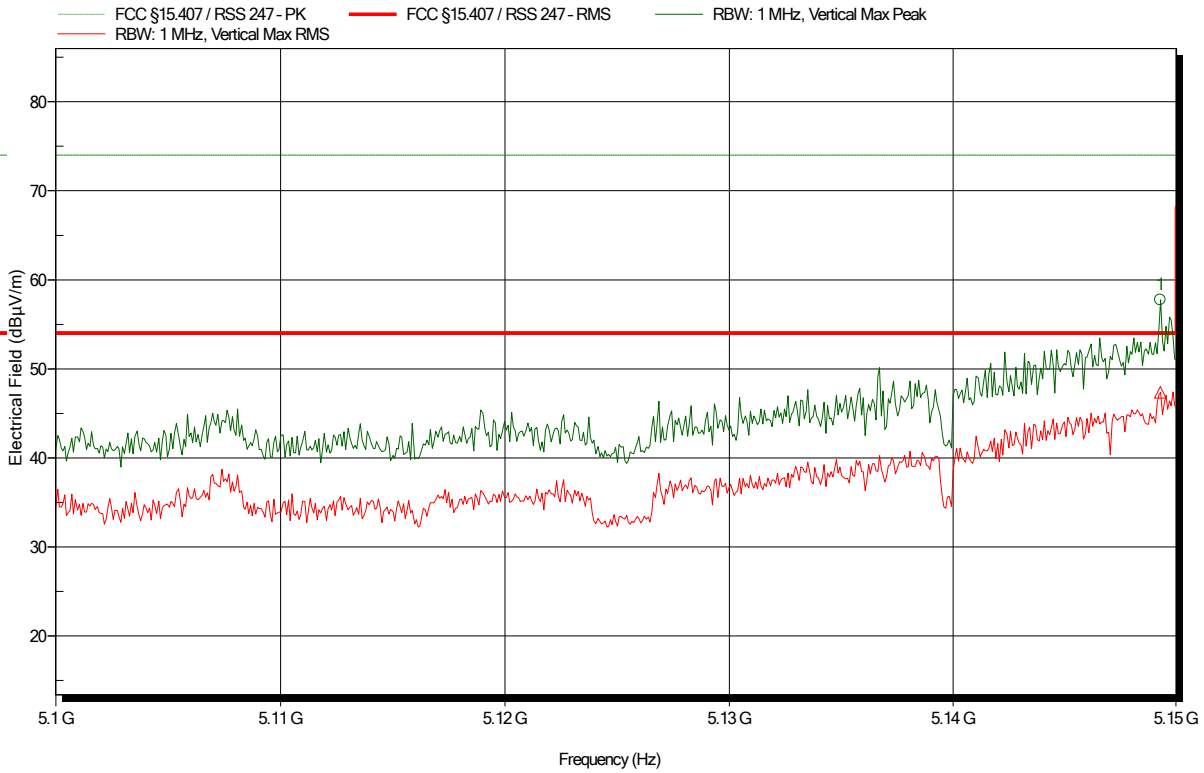

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.149 GHz	57.76 dBµV/m	74 dBµV/m	-16.24 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.149 GHz	47.36 dBµV/m	54 dBµV/m	-6.64 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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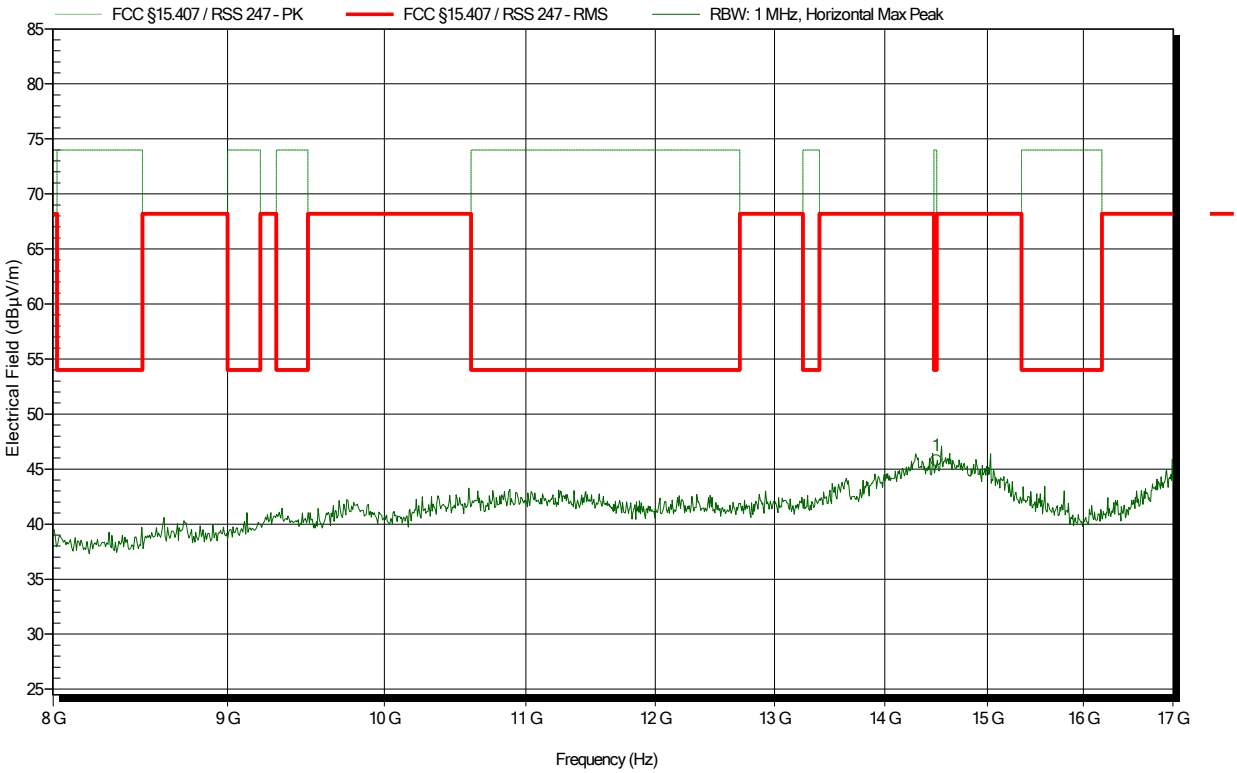

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
14.496 GHz	45.77 dBµV/m	74 dBµV/m	-28.23 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-07-29
Note:	

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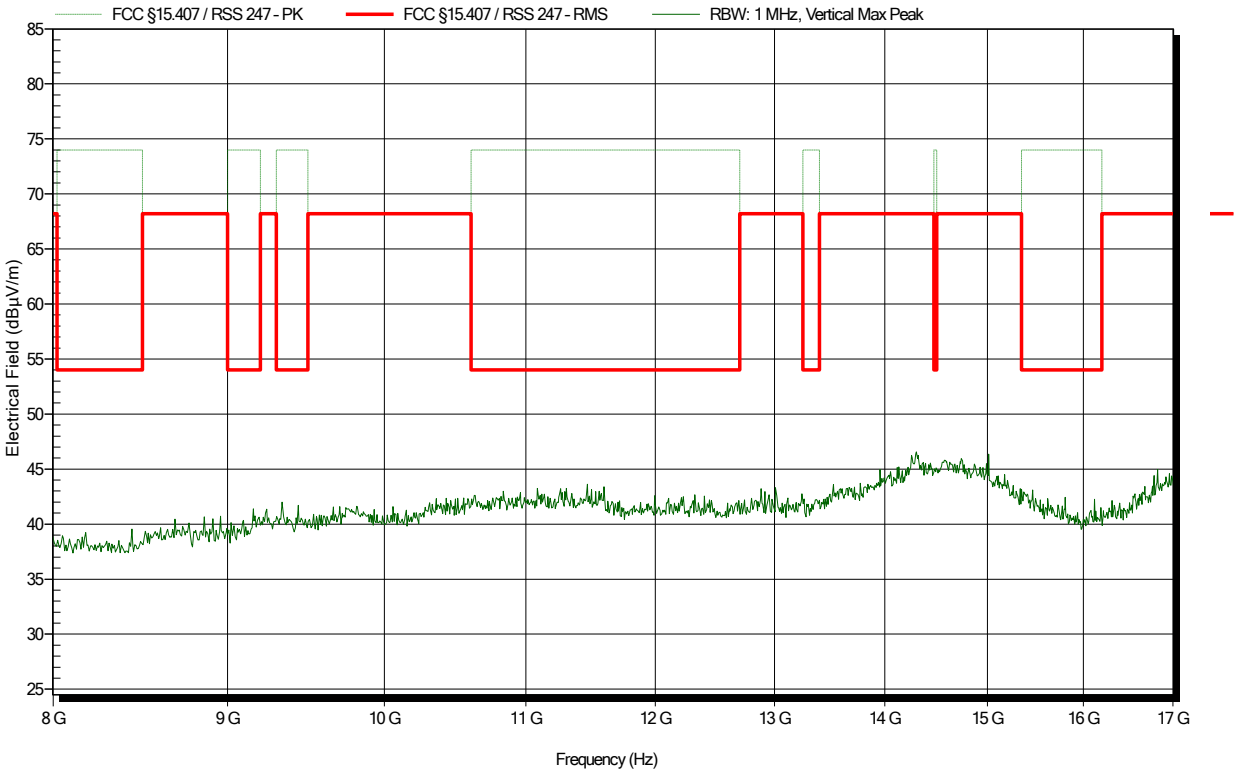

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-09-27
Note:	

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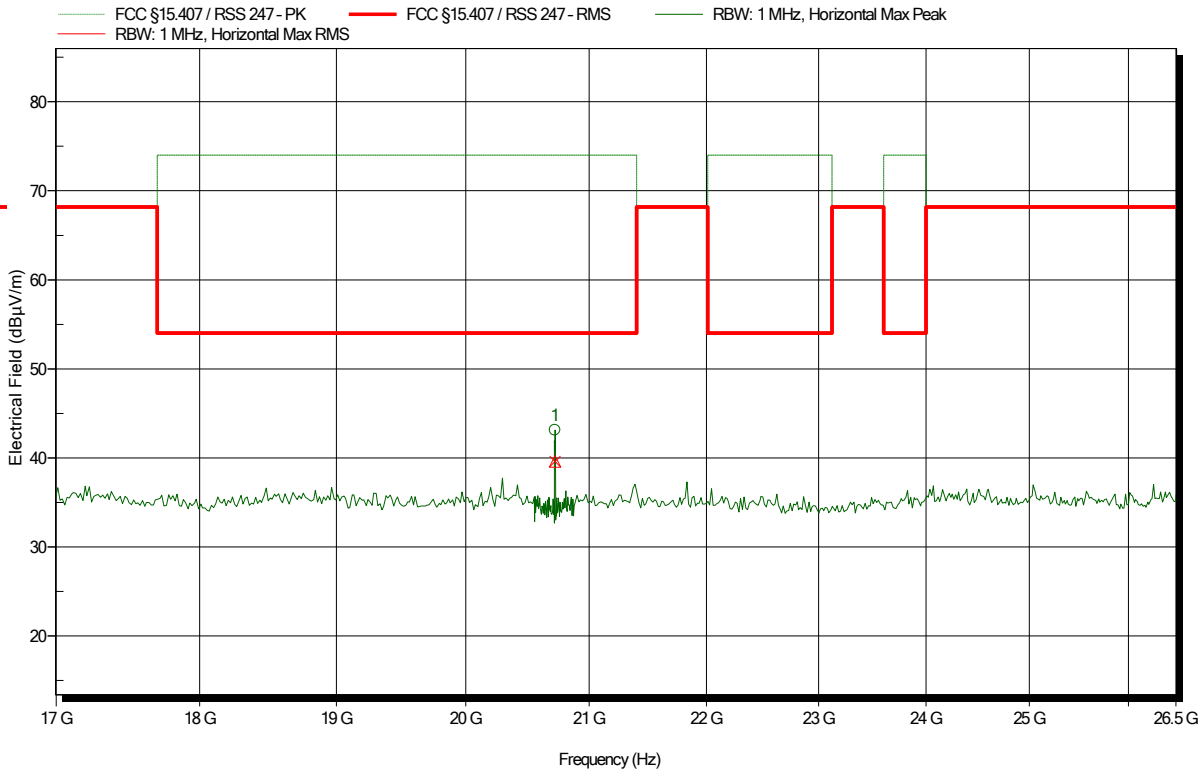

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.72 GHz	43.13 dBµV/m	54 dBµV/m	-10.87 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
20.72 GHz	39.59 dBµV/m	54 dBµV/m	-14.41 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-09-27
Note:	

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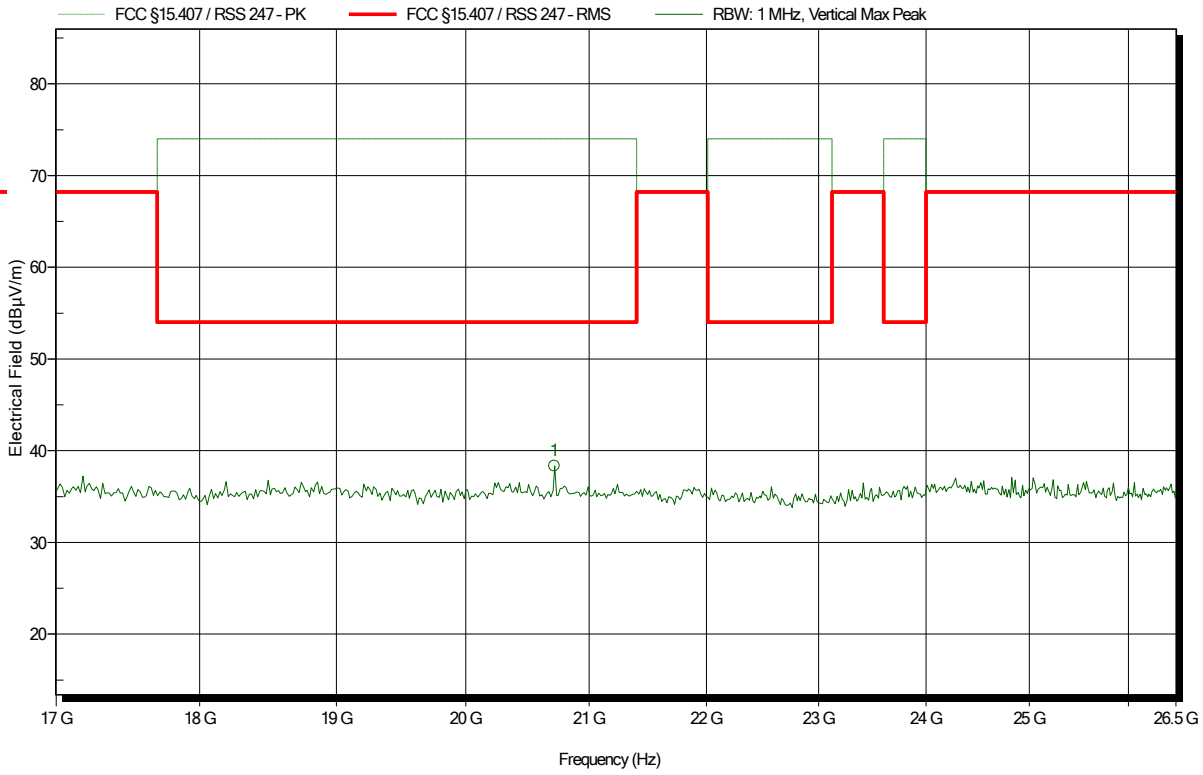

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.715 GHz	38.35 dBµV/m	54 dBµV/m	-15.65 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-09-27
Note:	

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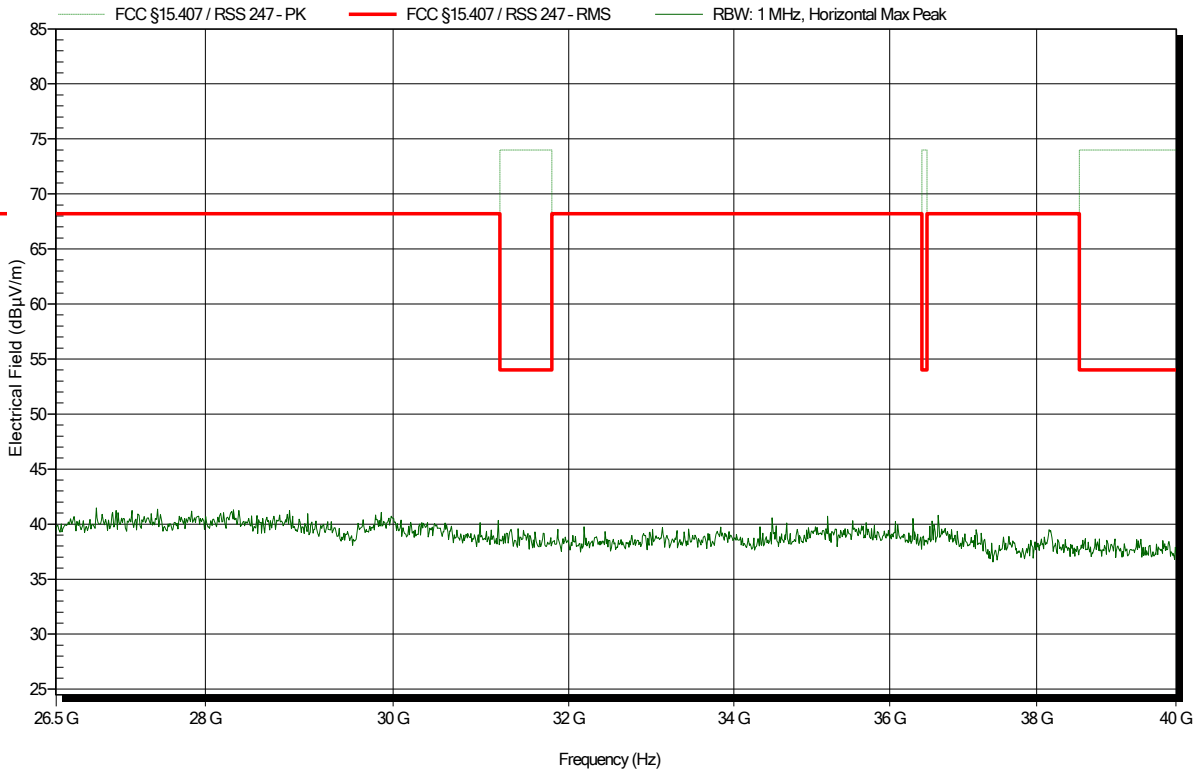

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5180 MHz
Test Date:	2019-09-27
Note:	

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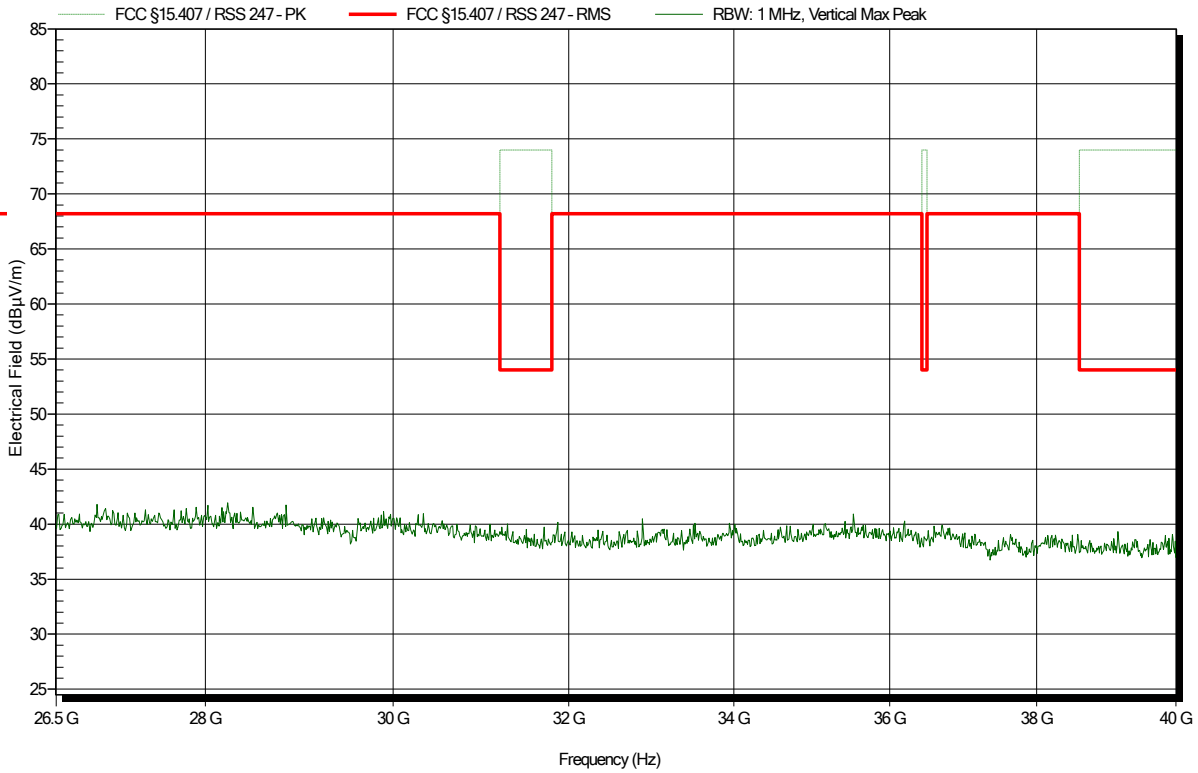

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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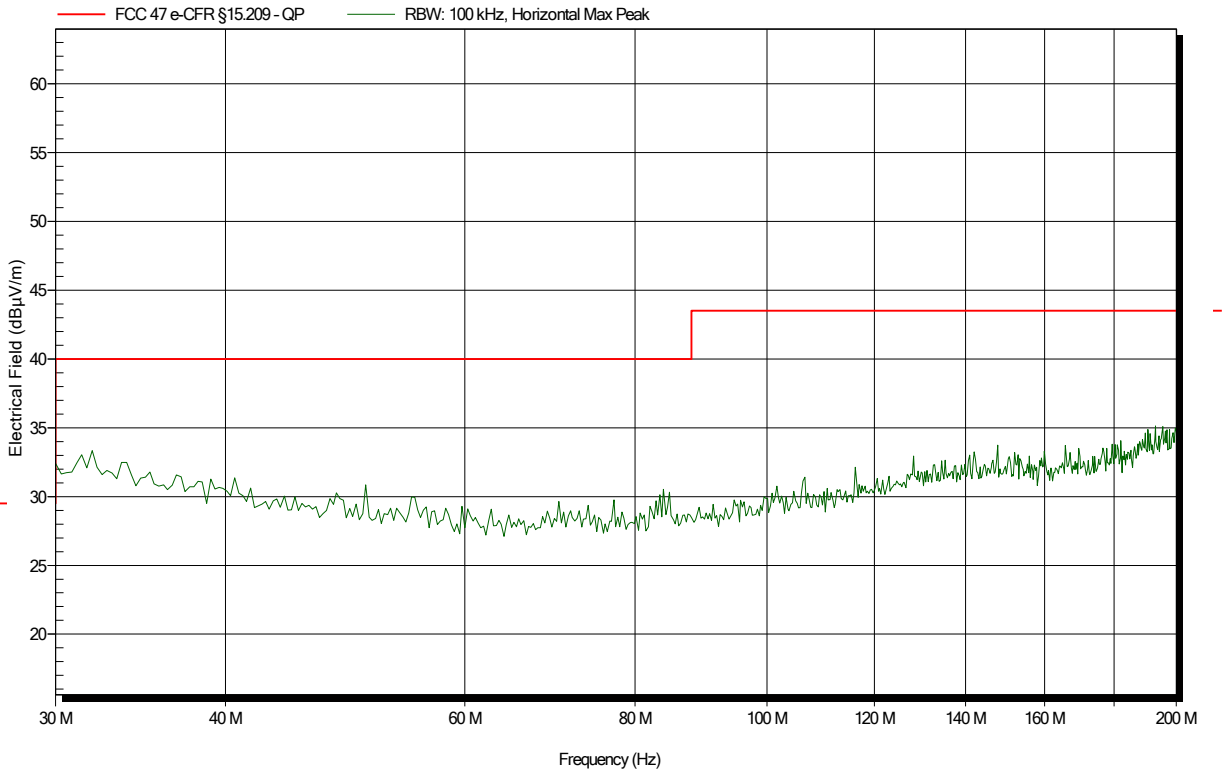

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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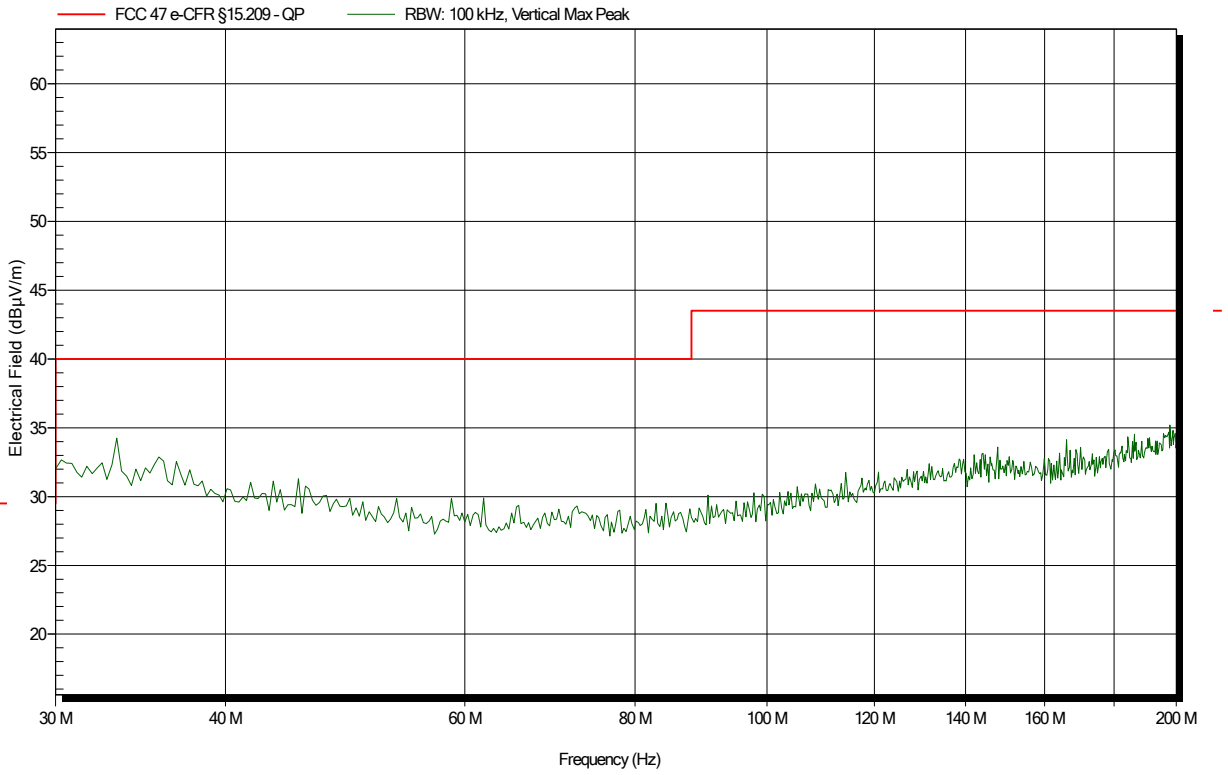

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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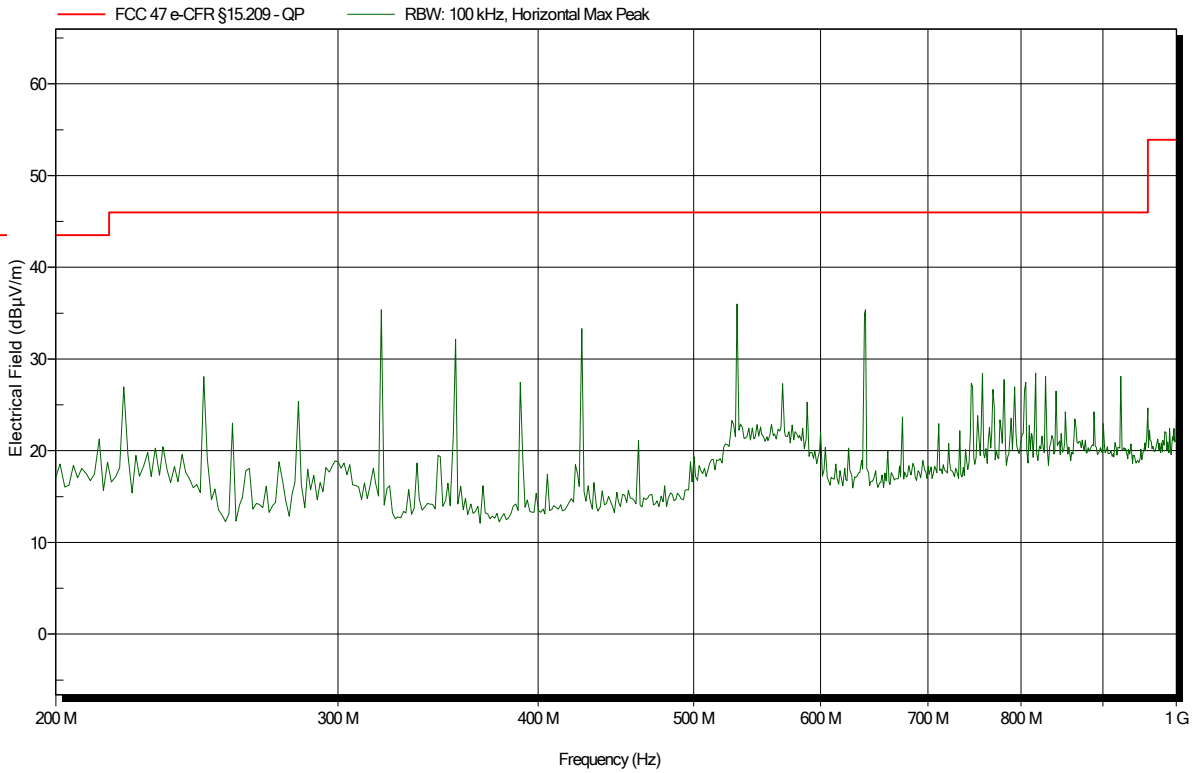

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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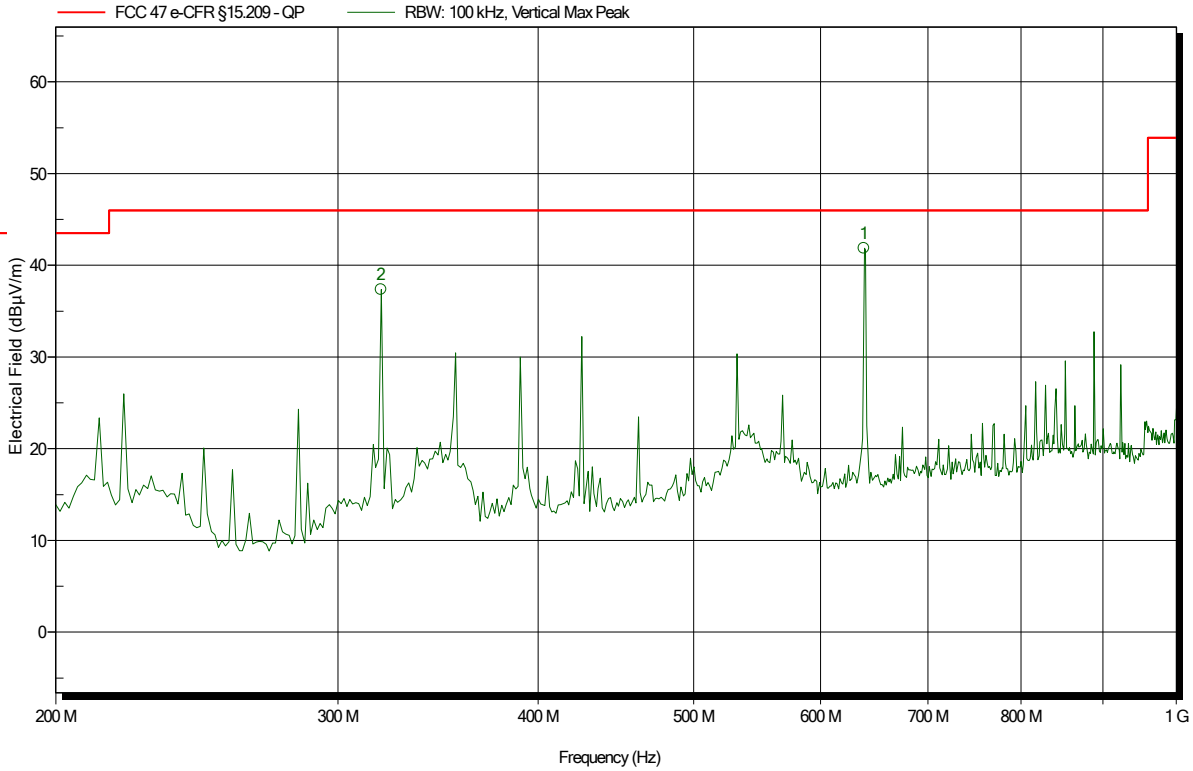

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.36 dBµV/m	46 dBµV/m	-8.64 dB	Pass
638.462 MHz	41.86 dBµV/m	46 dBµV/m	-4.14 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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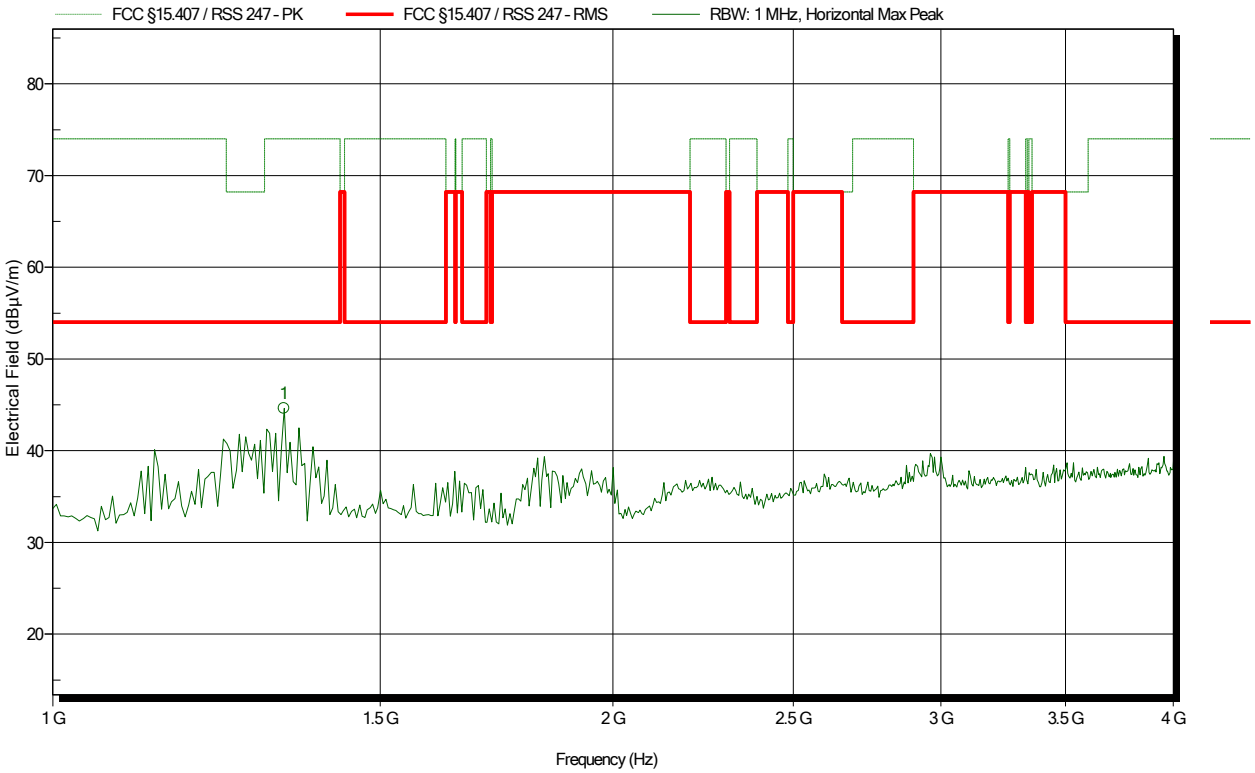

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.332 GHz	44.62 dBµV/m	74 dBµV/m	-29.38 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-29
Note:	

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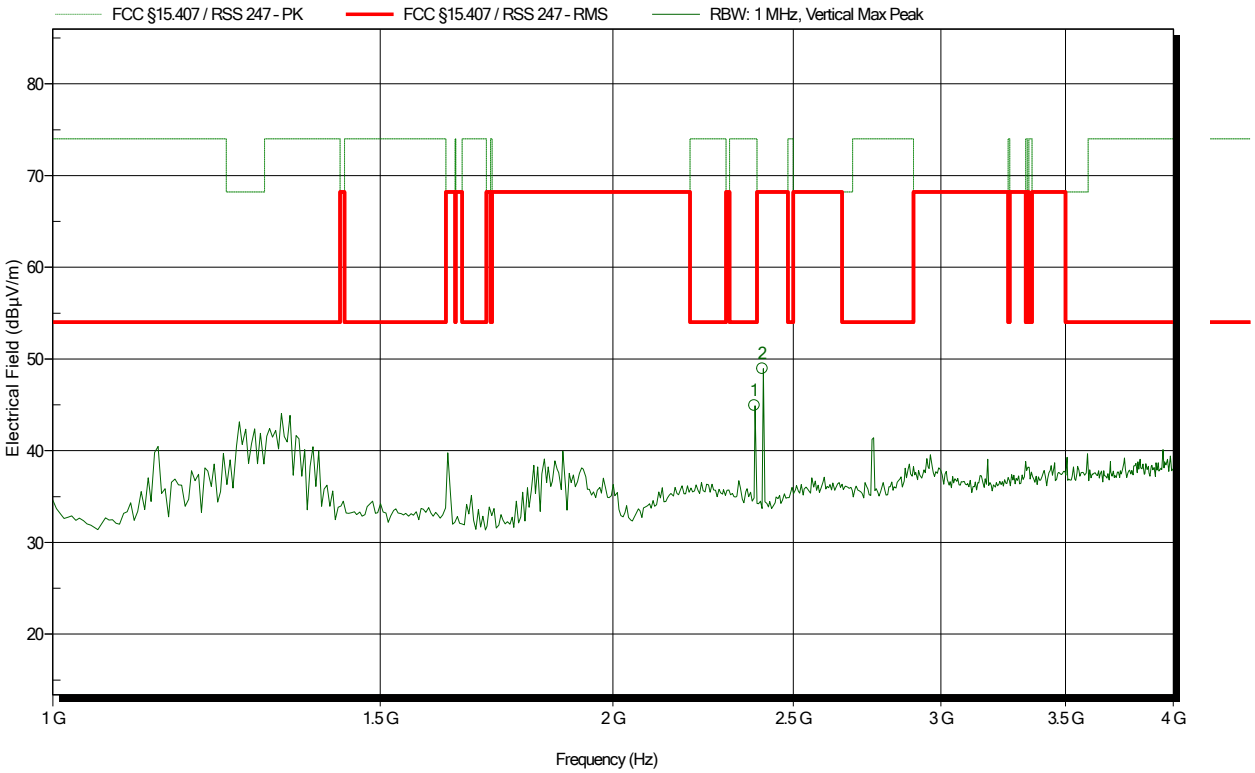

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.382 GHz	44.94 dBµV/m	74 dBµV/m	-29.06 dB	Pass
2.406 GHz	48.95 dBµV/m	68.2 dBµV/m	-19.25 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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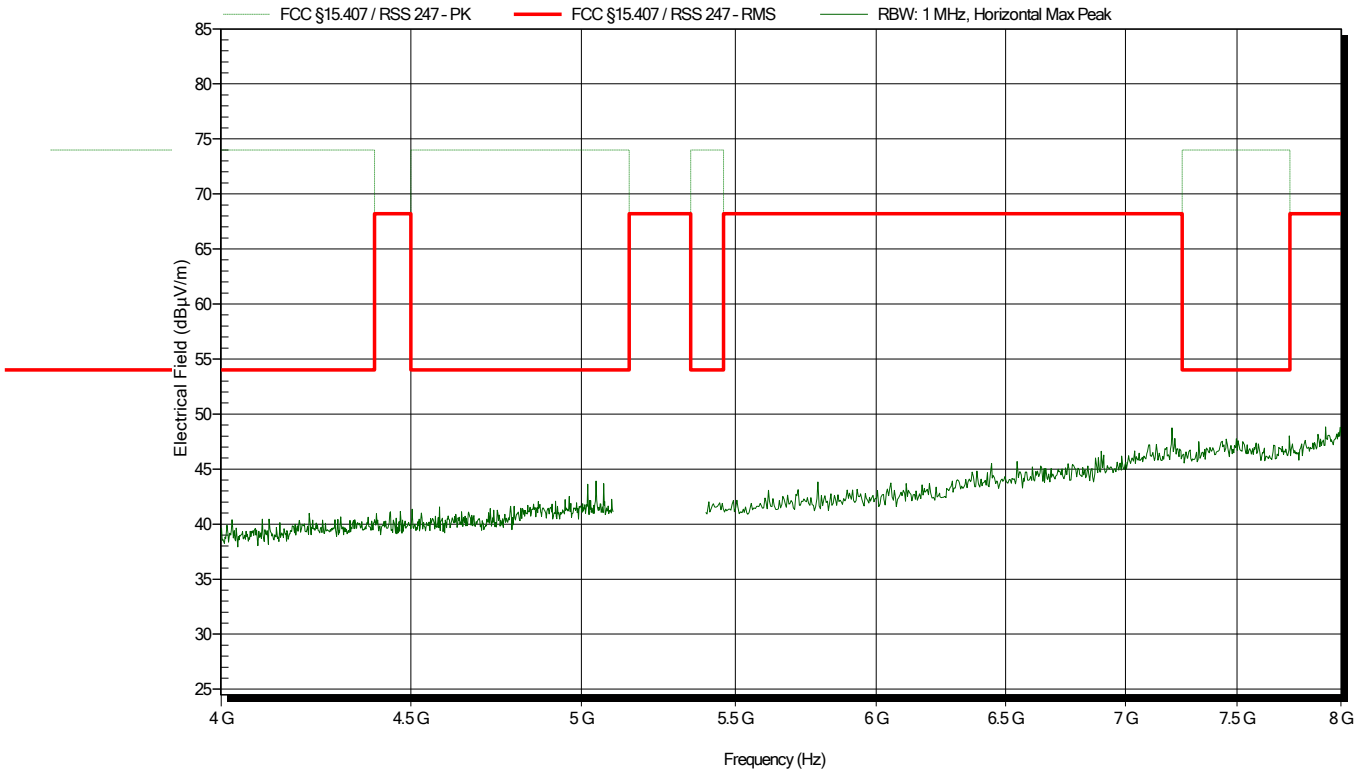

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-07-30
Note:	

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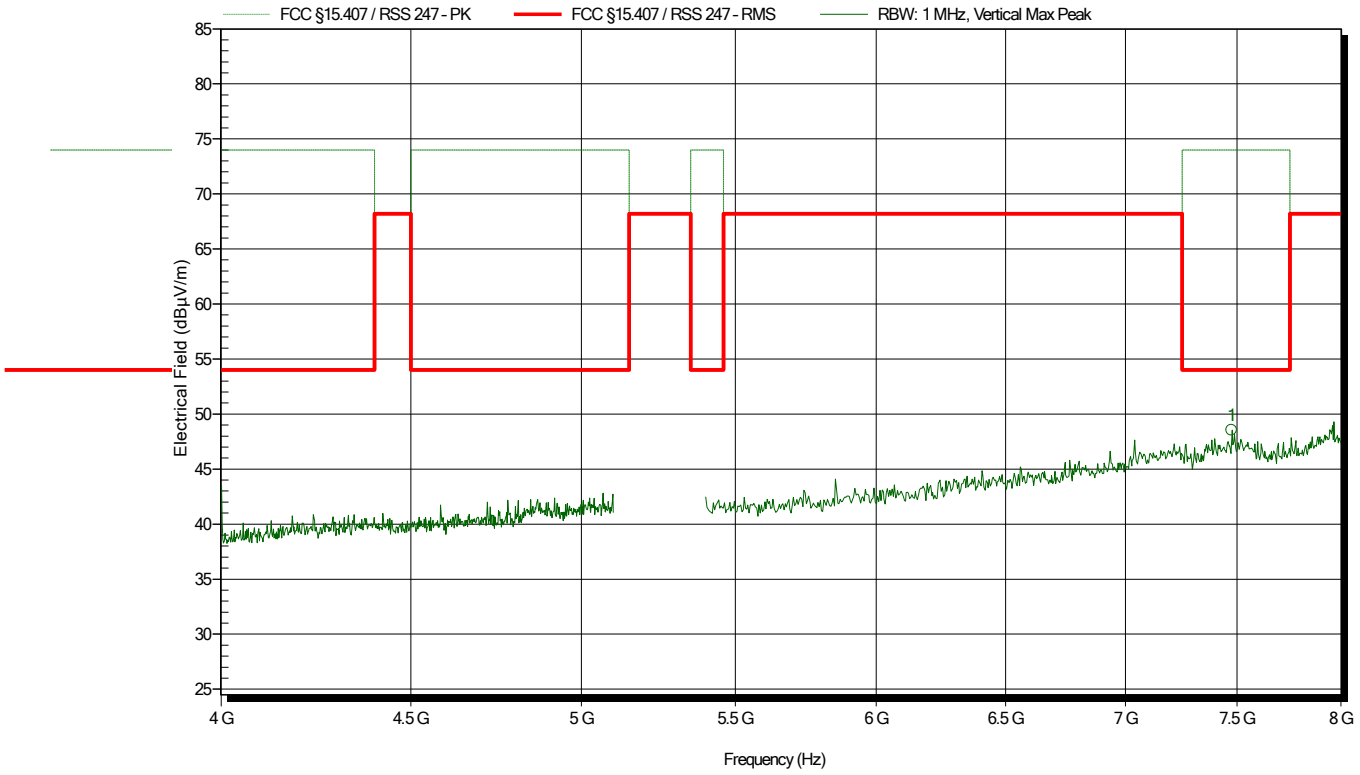

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.475 GHz	48.55 dBµV/m	74 dBµV/m	-25.45 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-16
Note:	

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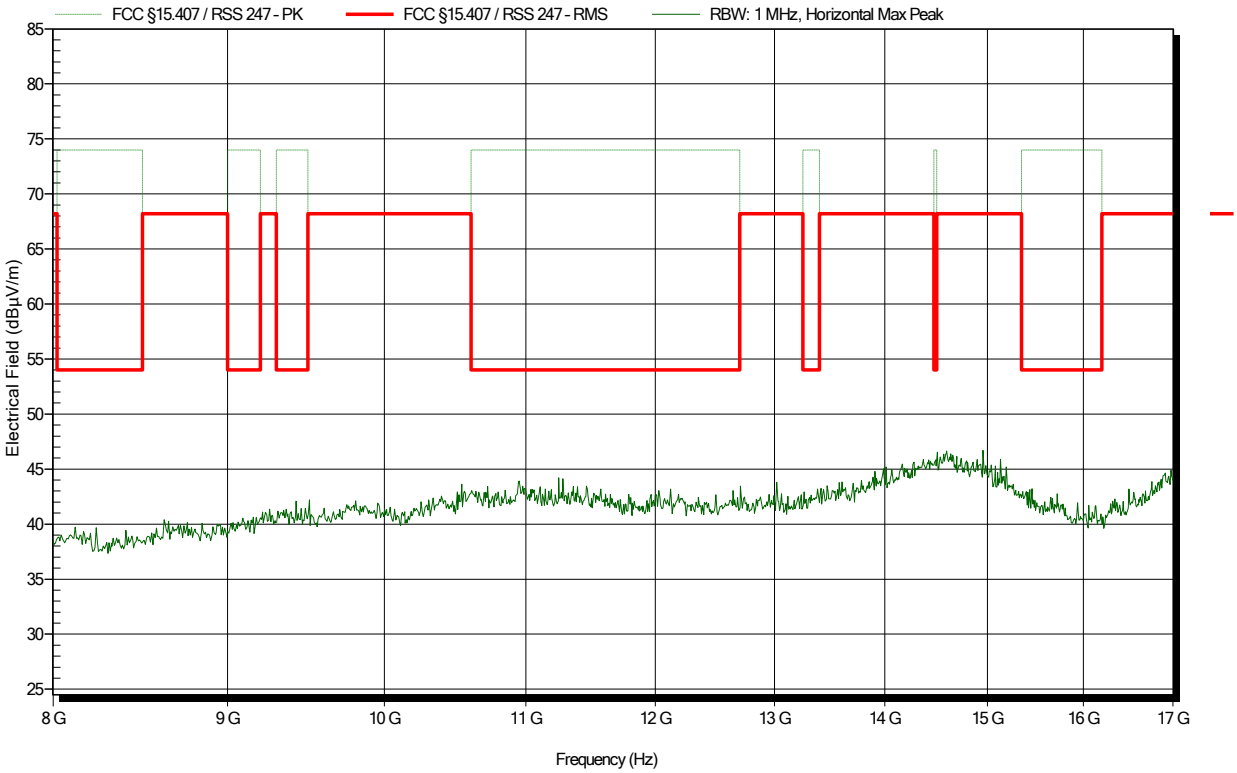

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-16
Note:	

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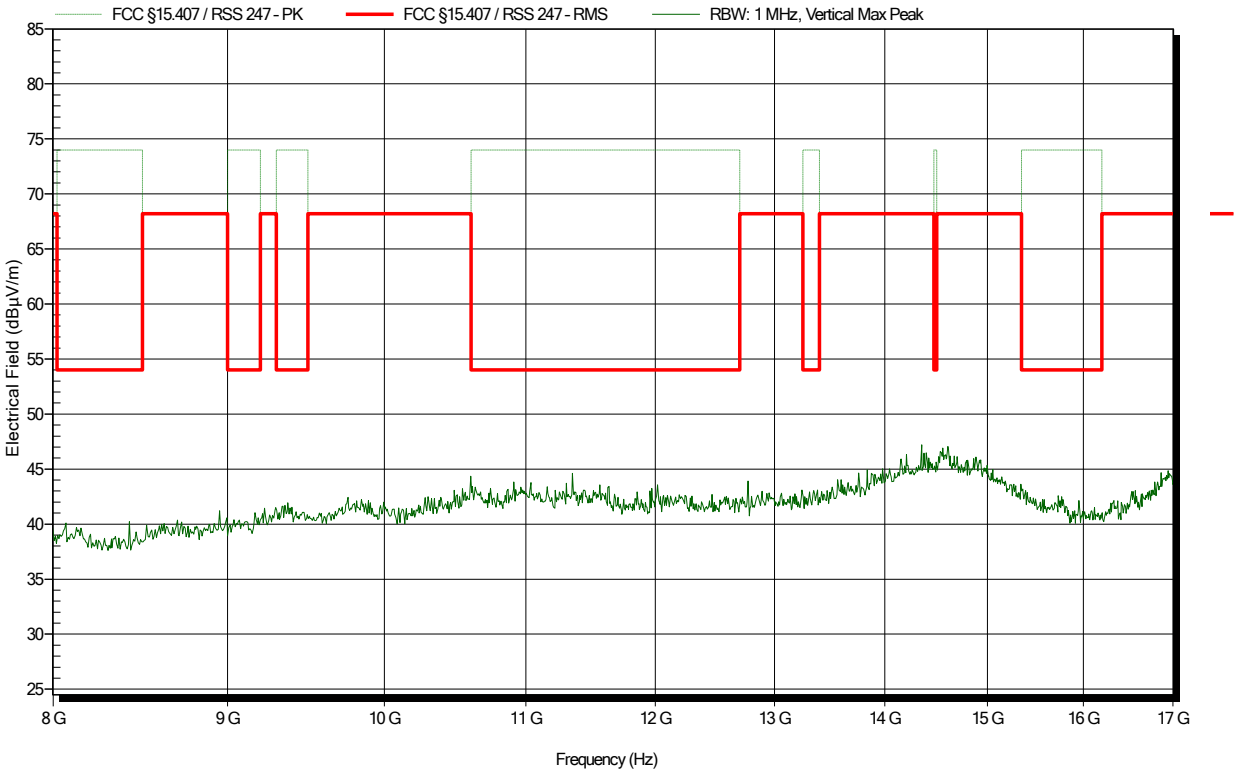

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-27
Note:	

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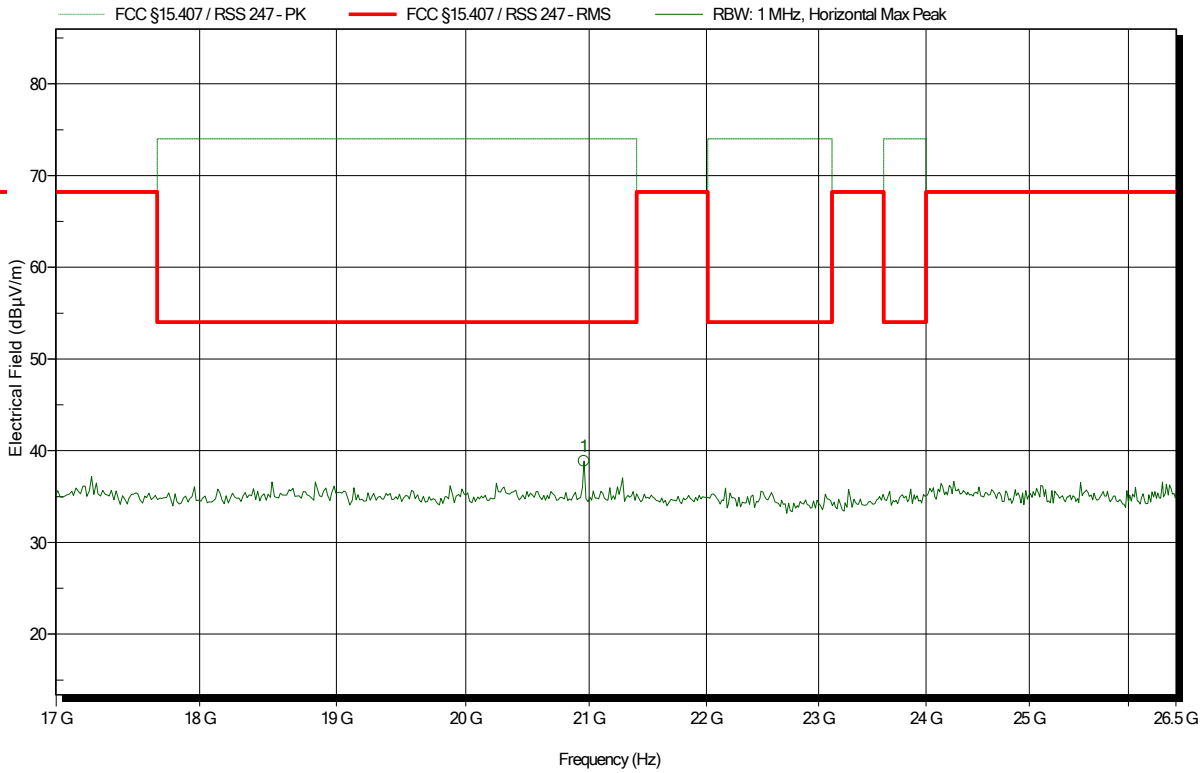

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.958 GHz	38.88 dBµV/m	54 dBµV/m	-15.12 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-27
Note:	

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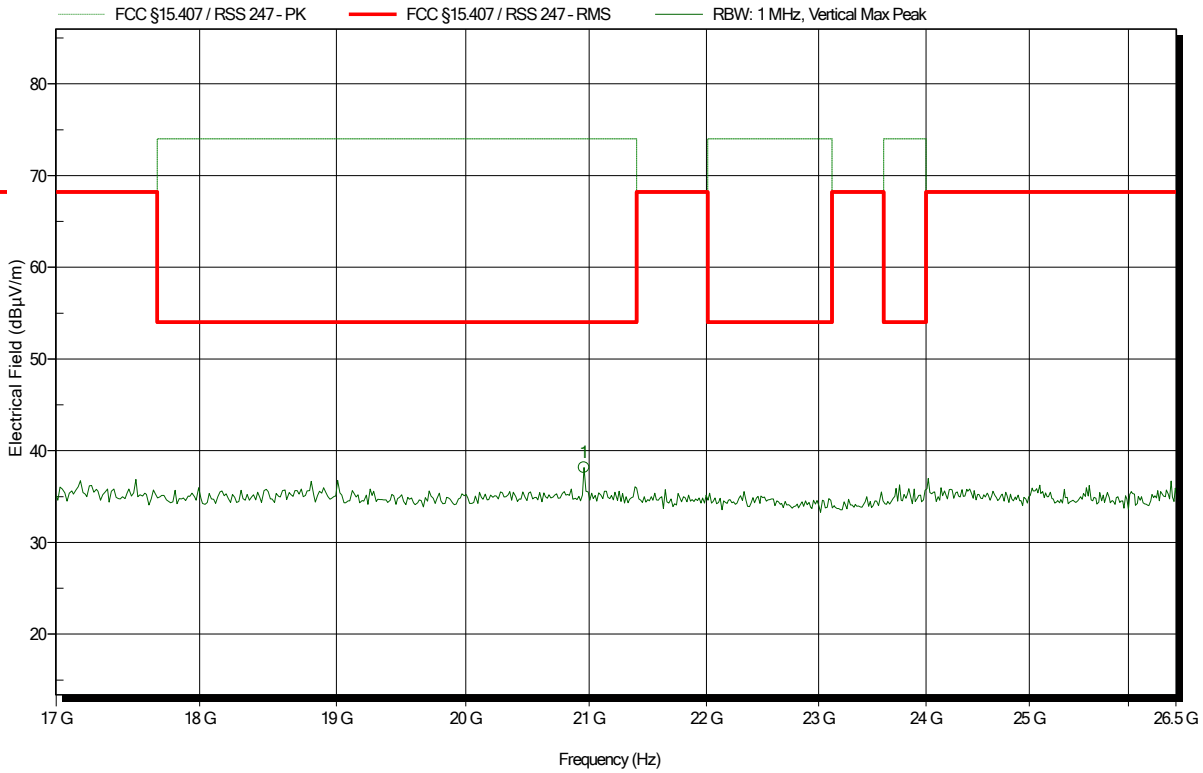

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.958 GHz	38.15 dBµV/m	54 dBµV/m	-15.85 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-27
Note:	

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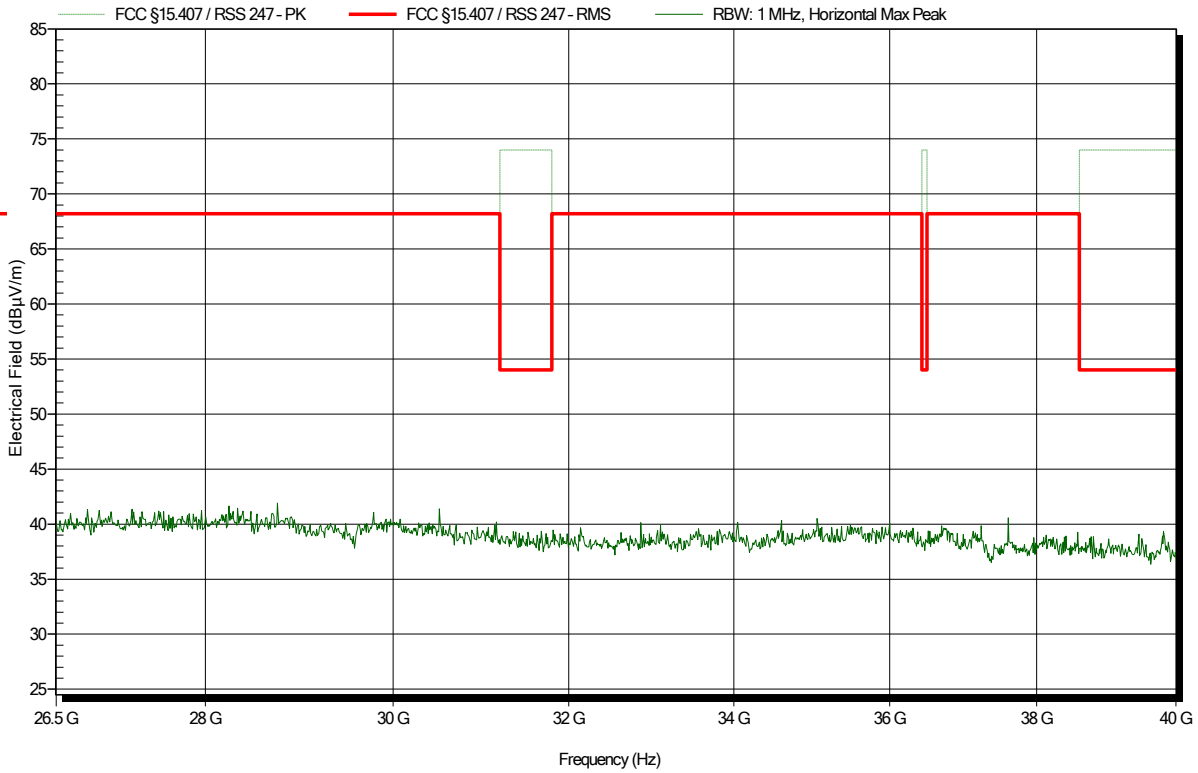

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5240 MHz
Test Date:	2019-09-27
Note:	

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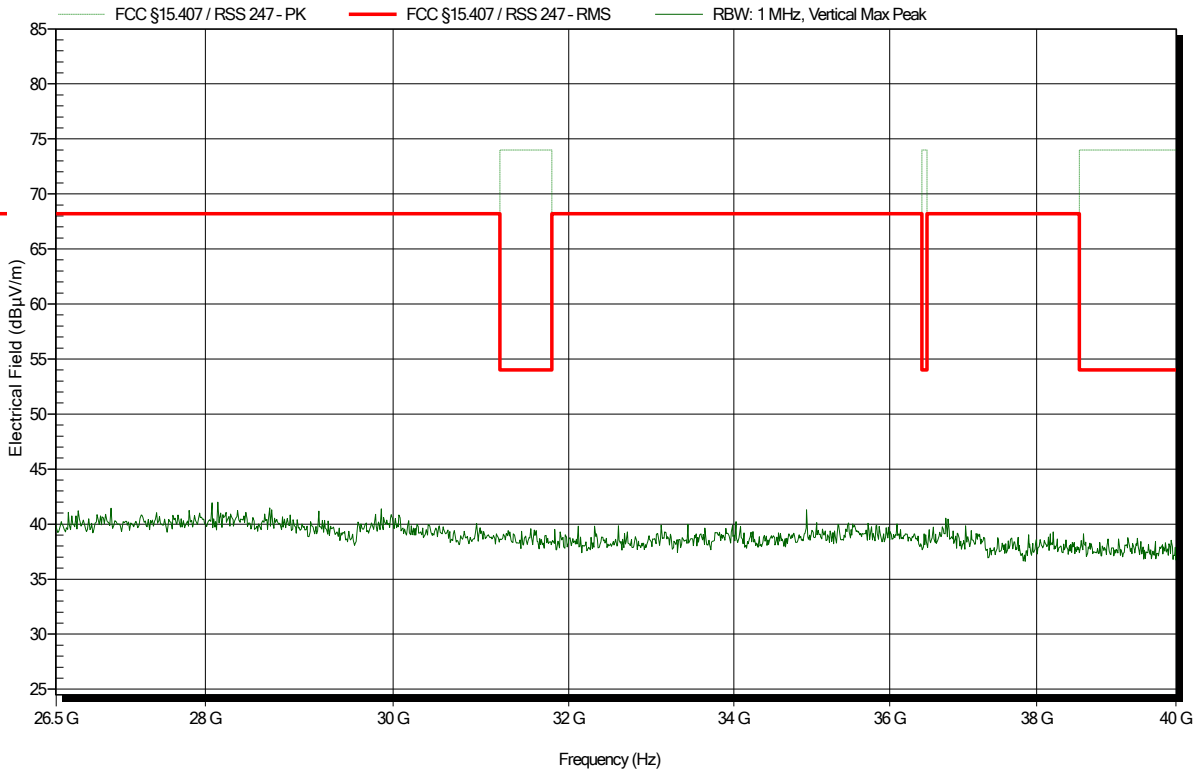

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-07-30
Note:	

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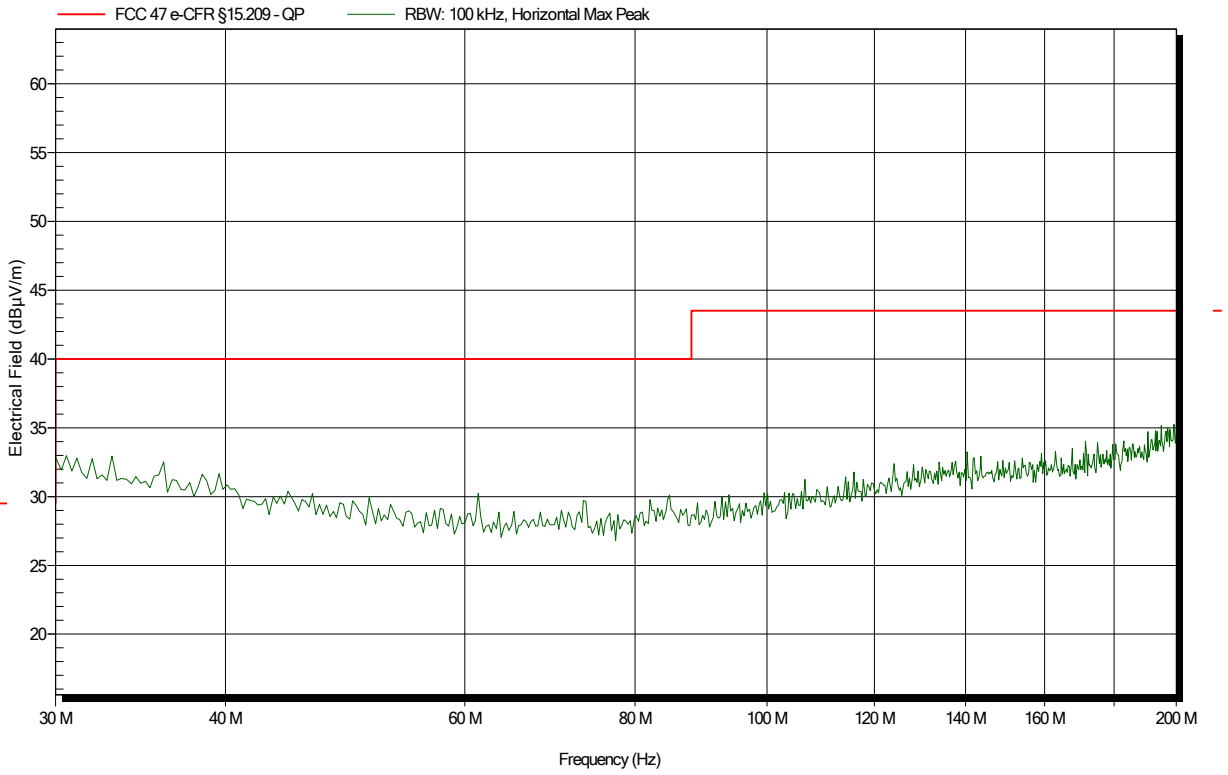

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-07-30
Note:	

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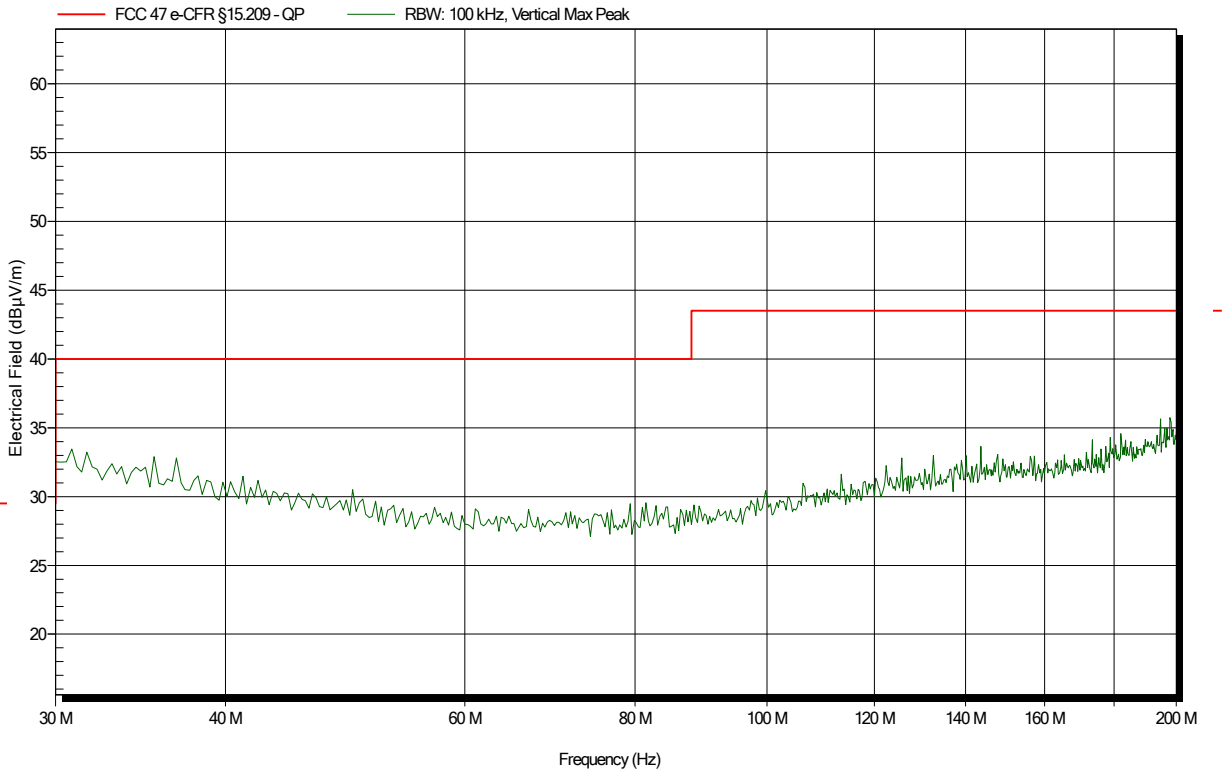

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-07-30
Note:	

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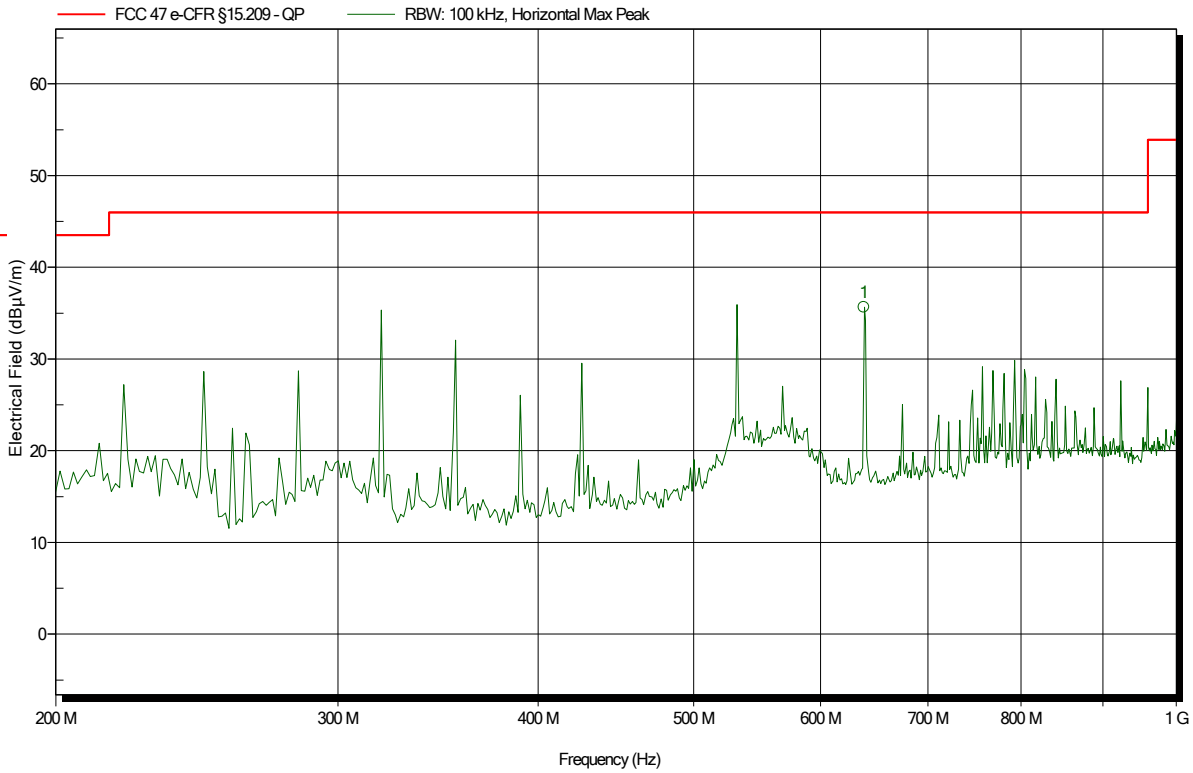

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
638.462 MHz	35.65 dBµV/m	46 dBµV/m	-10.35 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-07-30
Note:	

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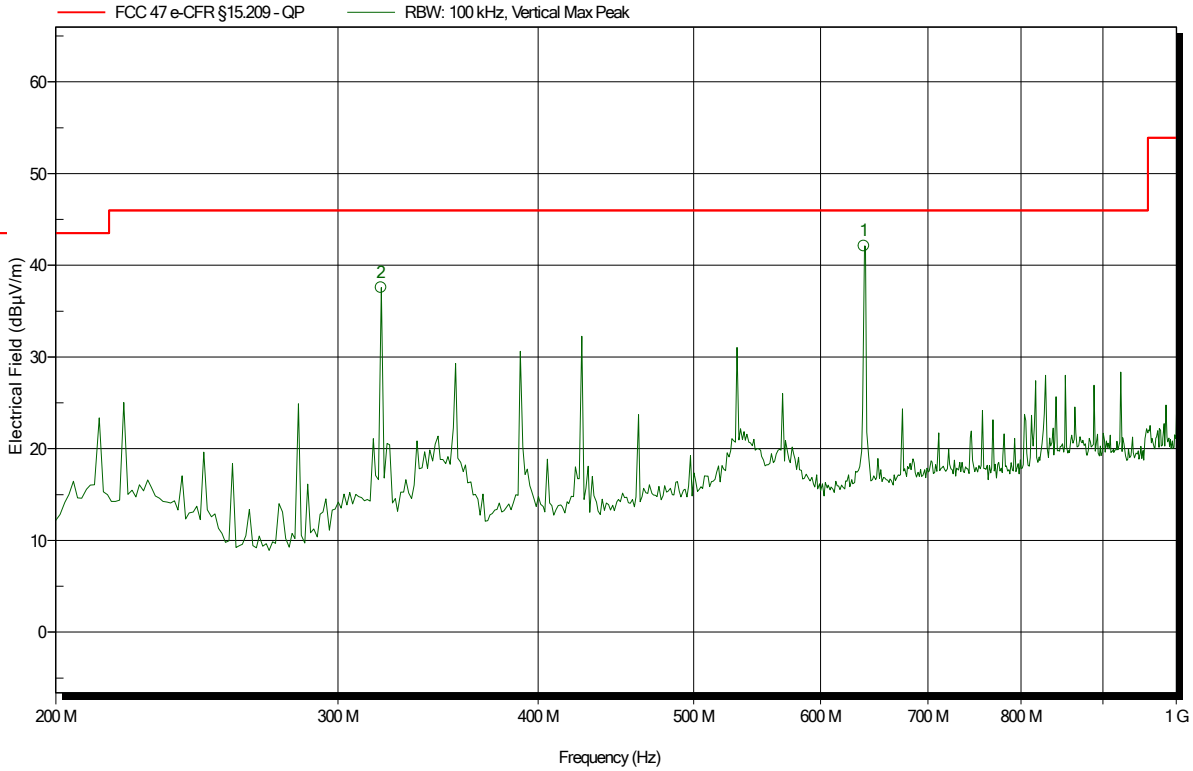

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.57 dBµV/m	46 dBµV/m	-8.43 dB	Pass
638.462 MHz	42.11 dBµV/m	46 dBµV/m	-3.89 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-07-30
Note:	

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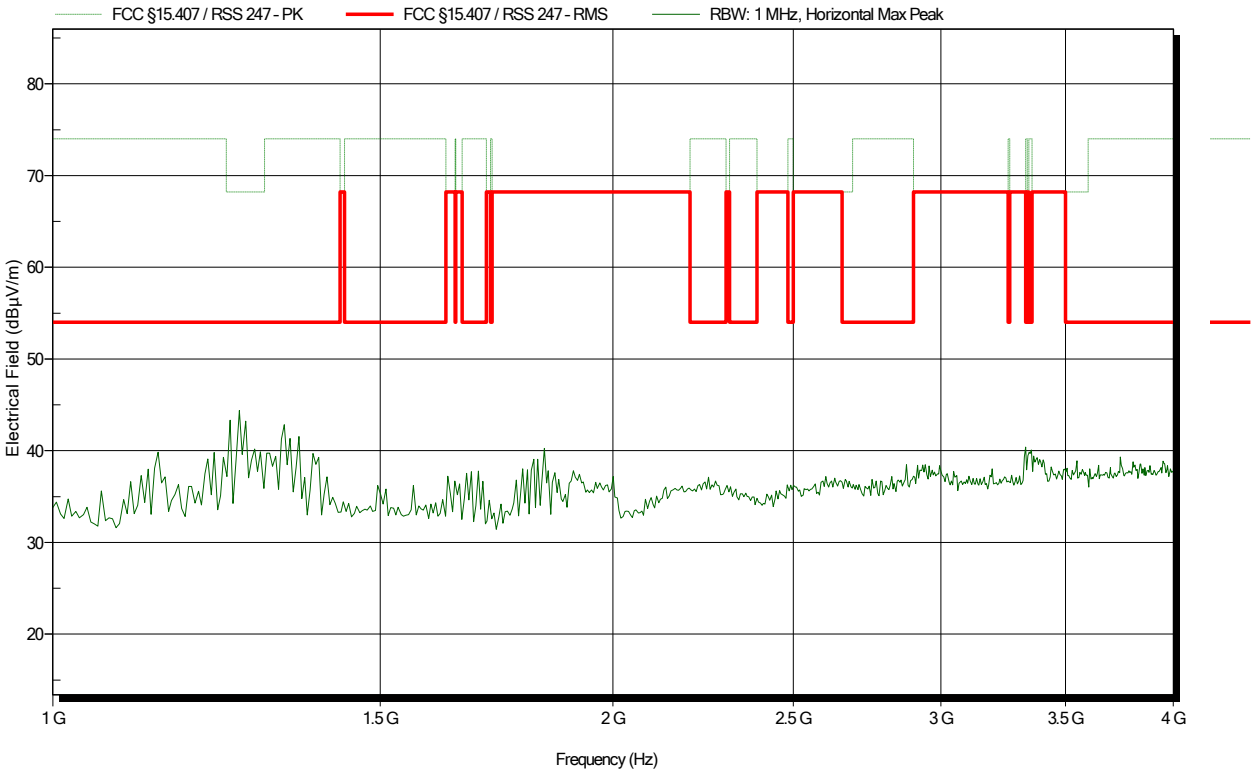

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-08-04
Note:	

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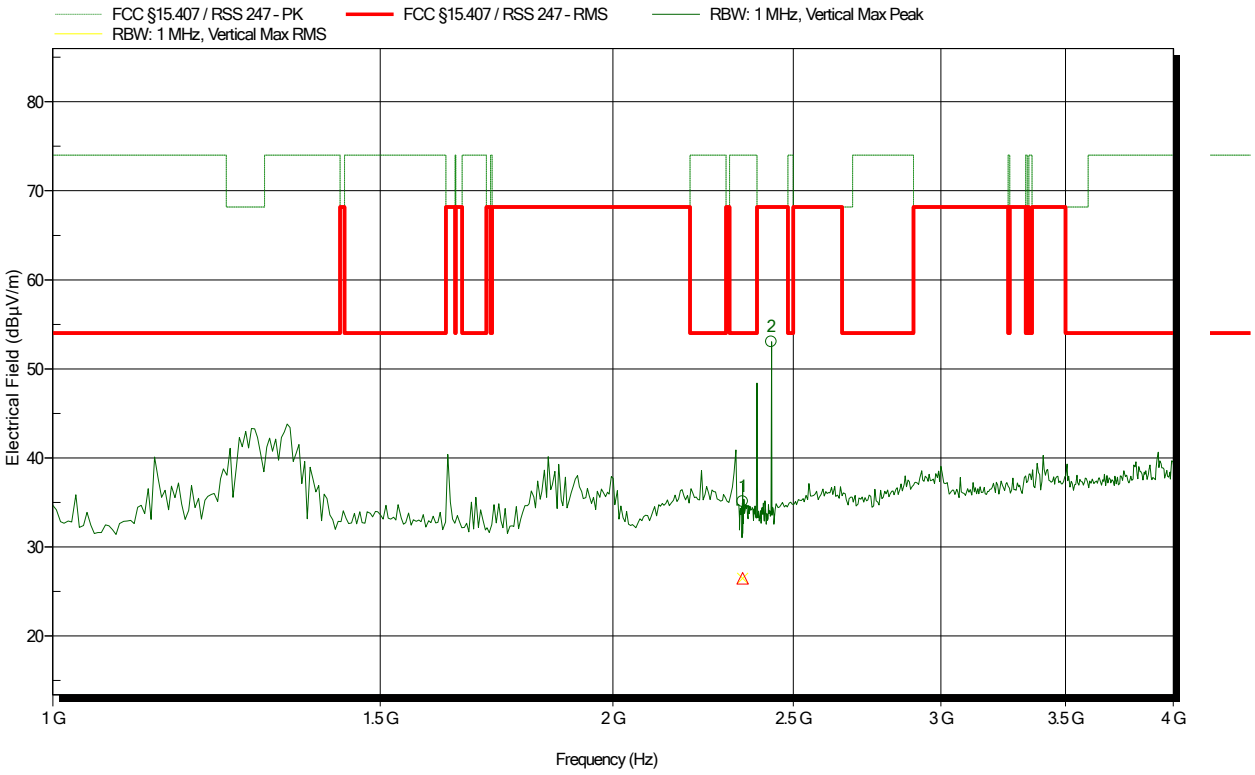

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.348 GHz	35.1 dBµV/m	74 dBµV/m	-38.9 dB	Pass
2.433 GHz	53.03 dBµV/m	68.2 dBµV/m	-15.17 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-08-04
Note:	

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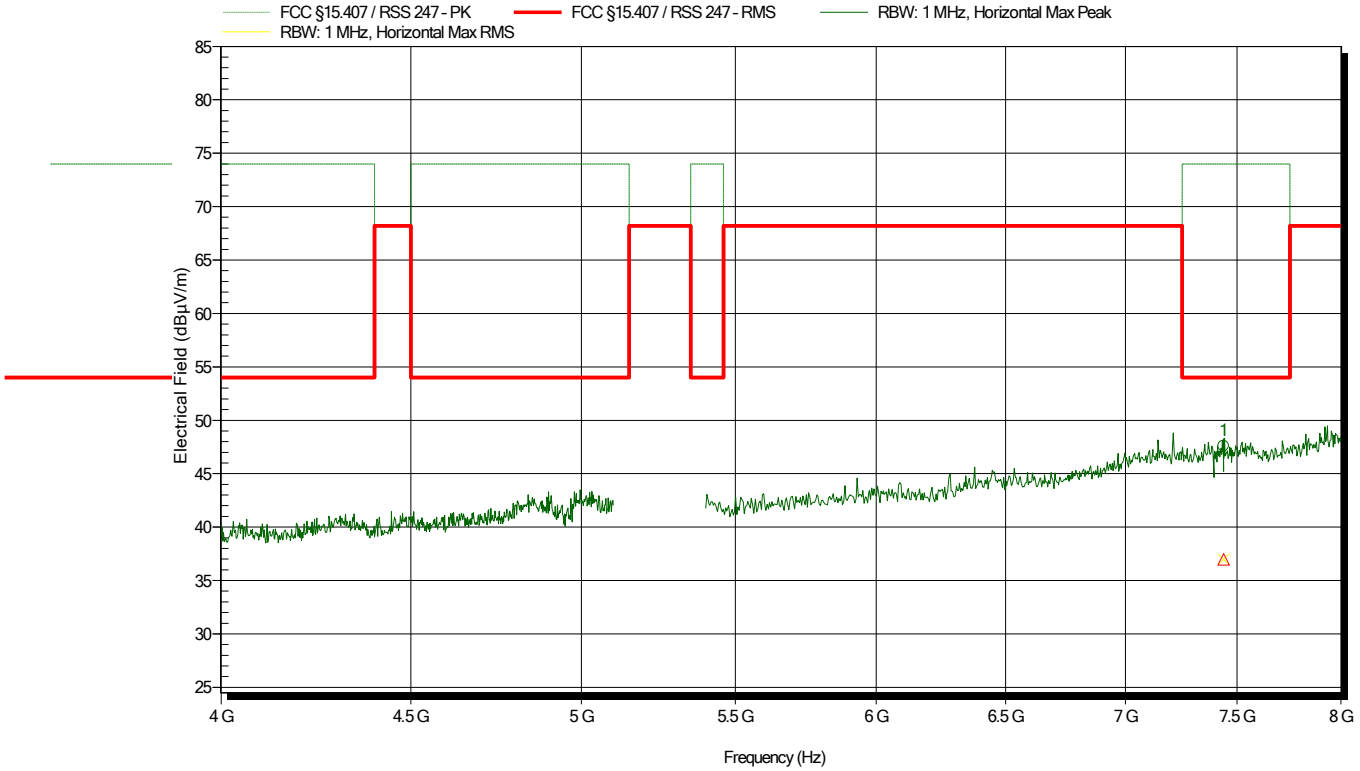

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.438 GHz	47.58 dBµV/m	74 dBµV/m	-26.42 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
7.438 GHz	36.97 dBµV/m	54 dBµV/m	-17.03 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-08-04
Note:	

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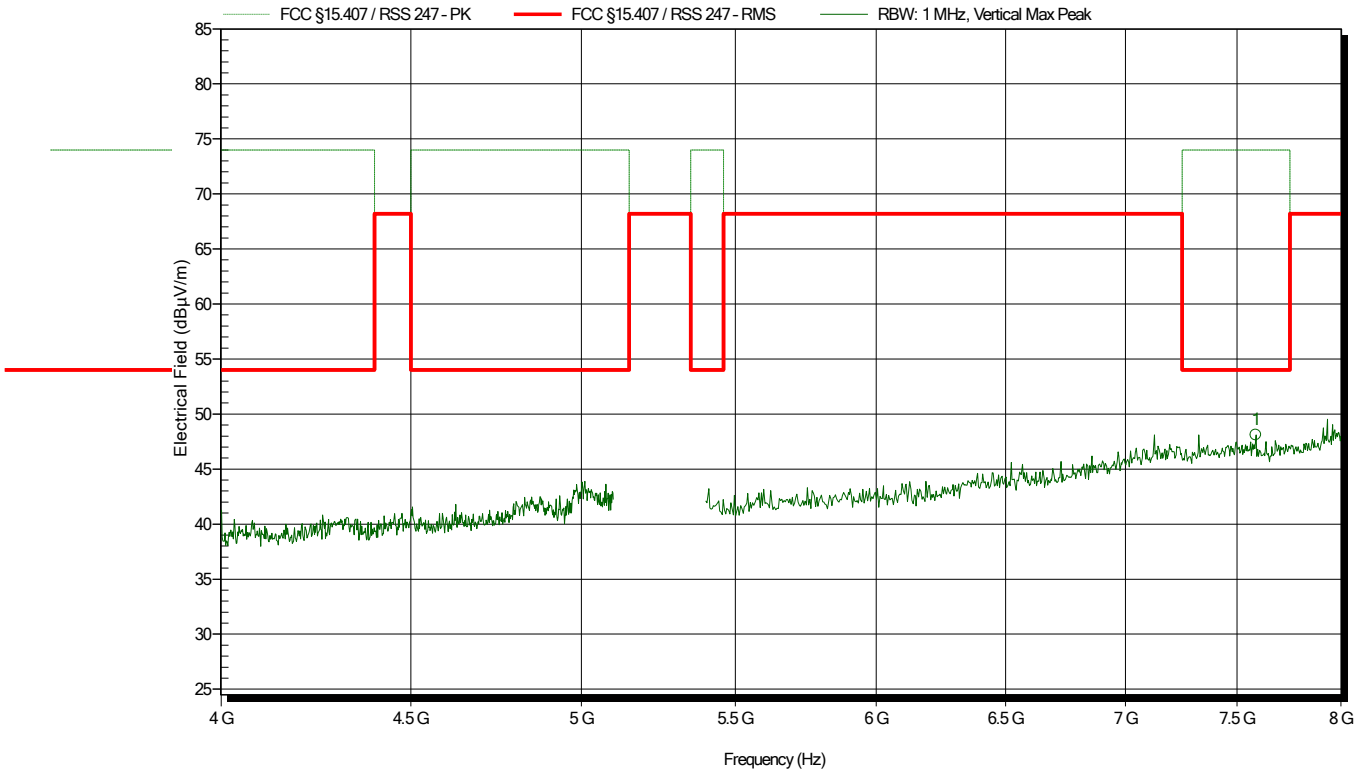

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.588 GHz	48.11 dBµV/m	74 dBµV/m	-25.89 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-08-26
Note:	upper bandedge

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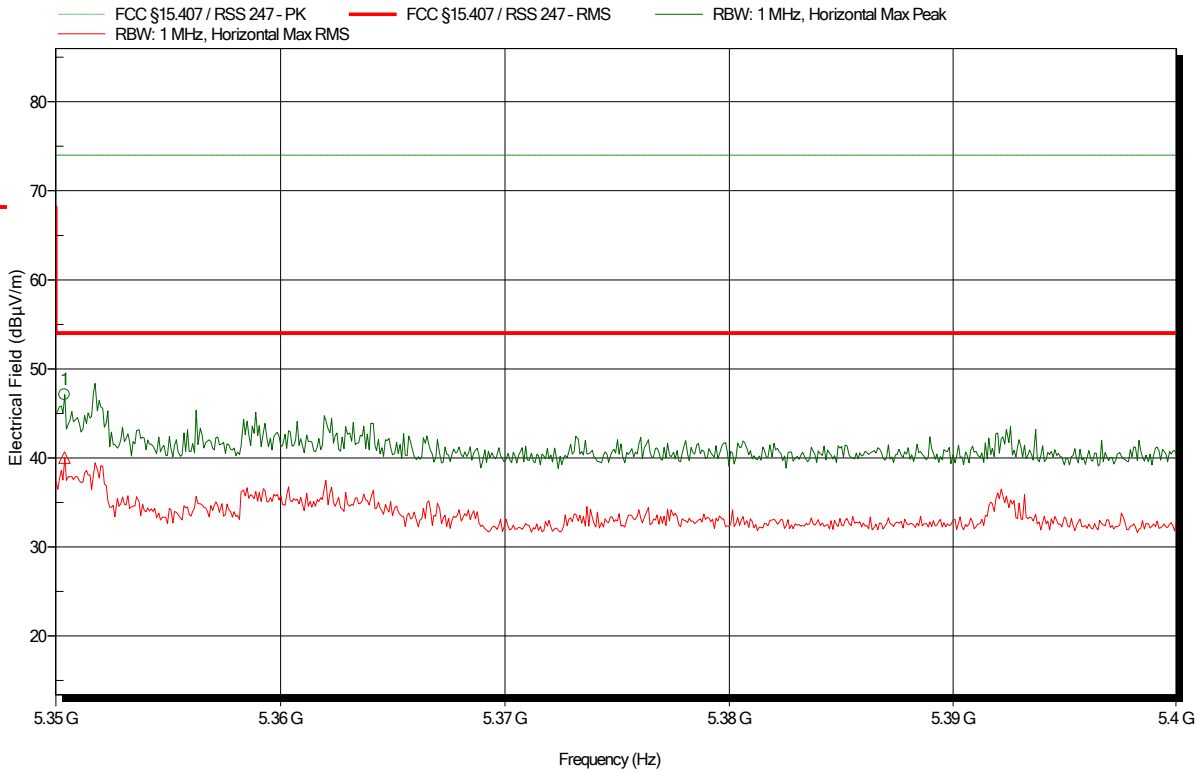

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.35 GHz	47.1 dBµV/m	74 dBµV/m	-26.9 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.35 GHz	40.01 dBµV/m	54 dBµV/m	-13.99 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-08-26
Note:	upper bandedge

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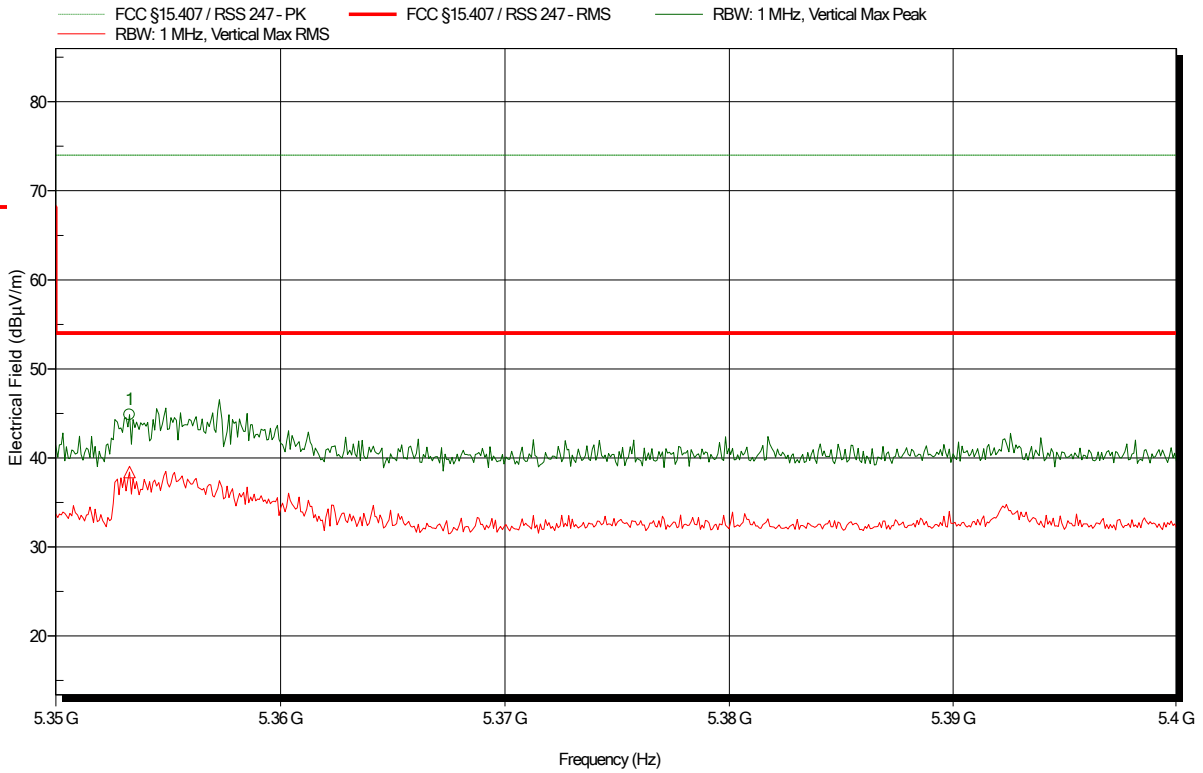

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.353 GHz	44.85 dBµV/m	74 dBµV/m	-29.15 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.353 GHz	38.4 dBµV/m	54 dBµV/m	-15.6 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-16
Note:	

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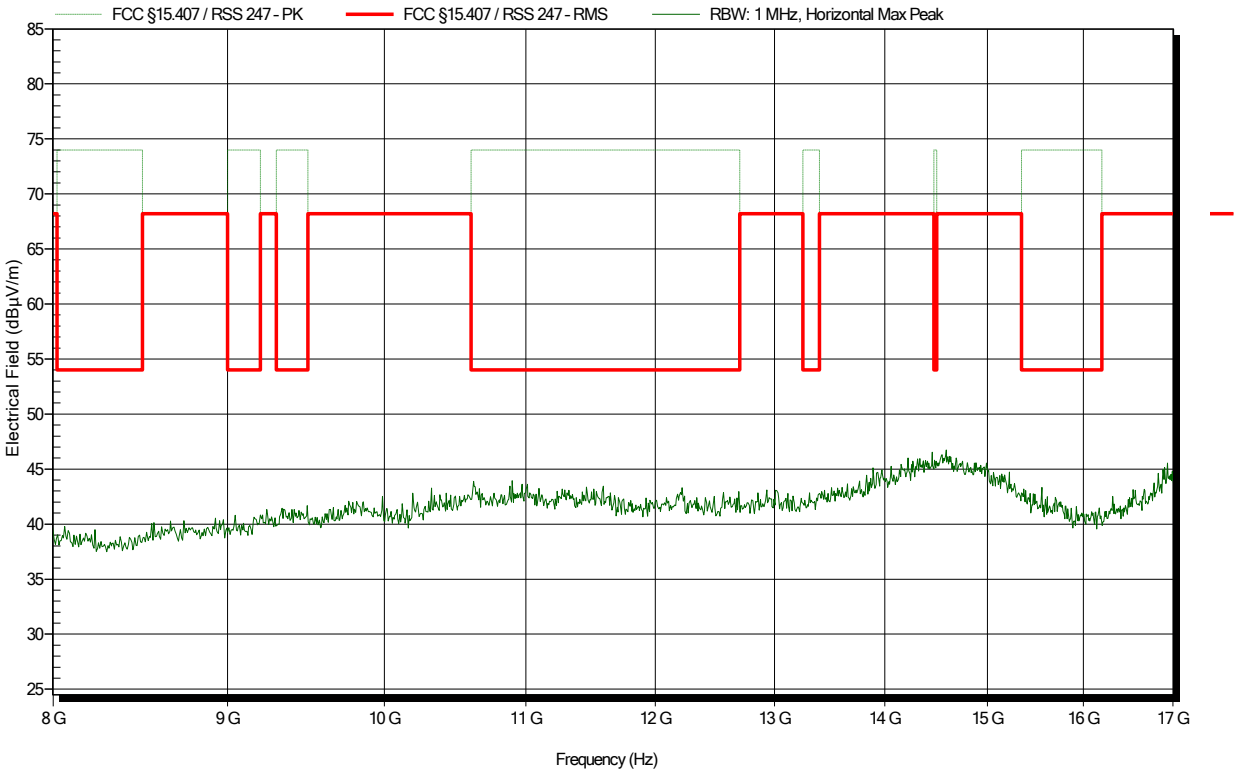

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-16
Note:	

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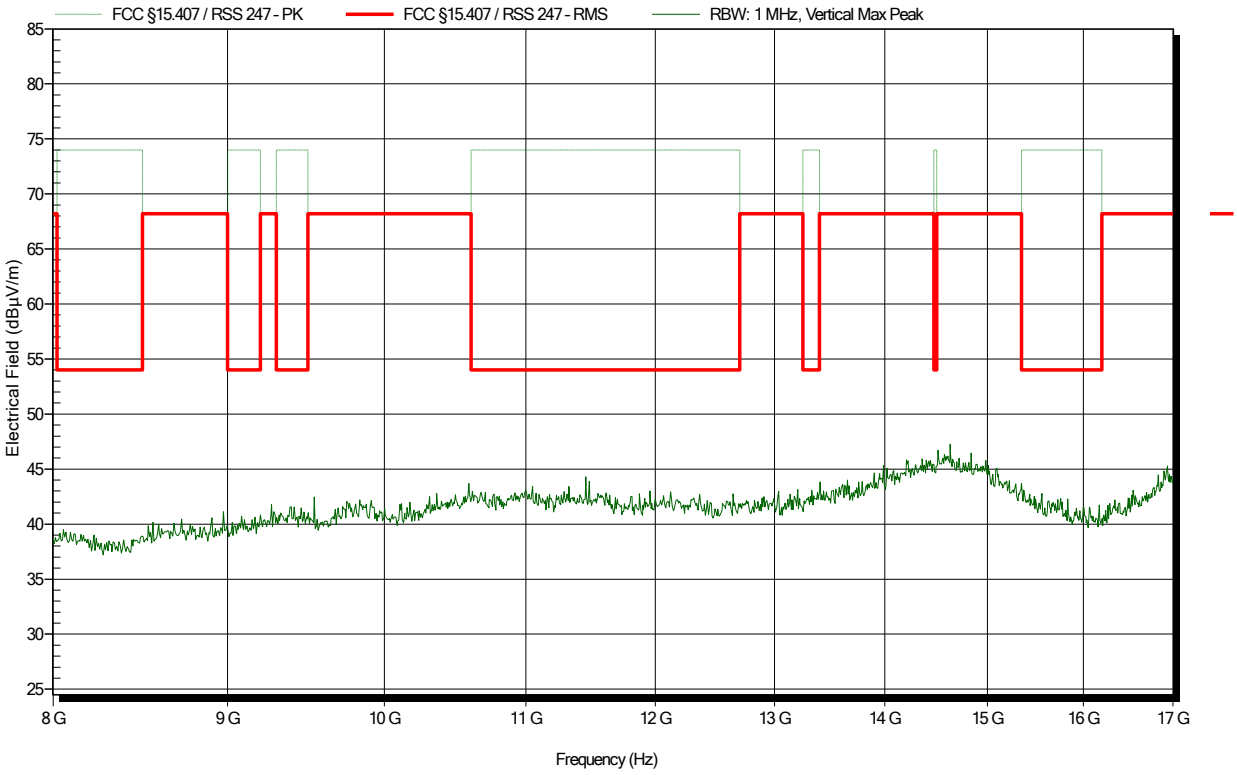

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-27
Note:	

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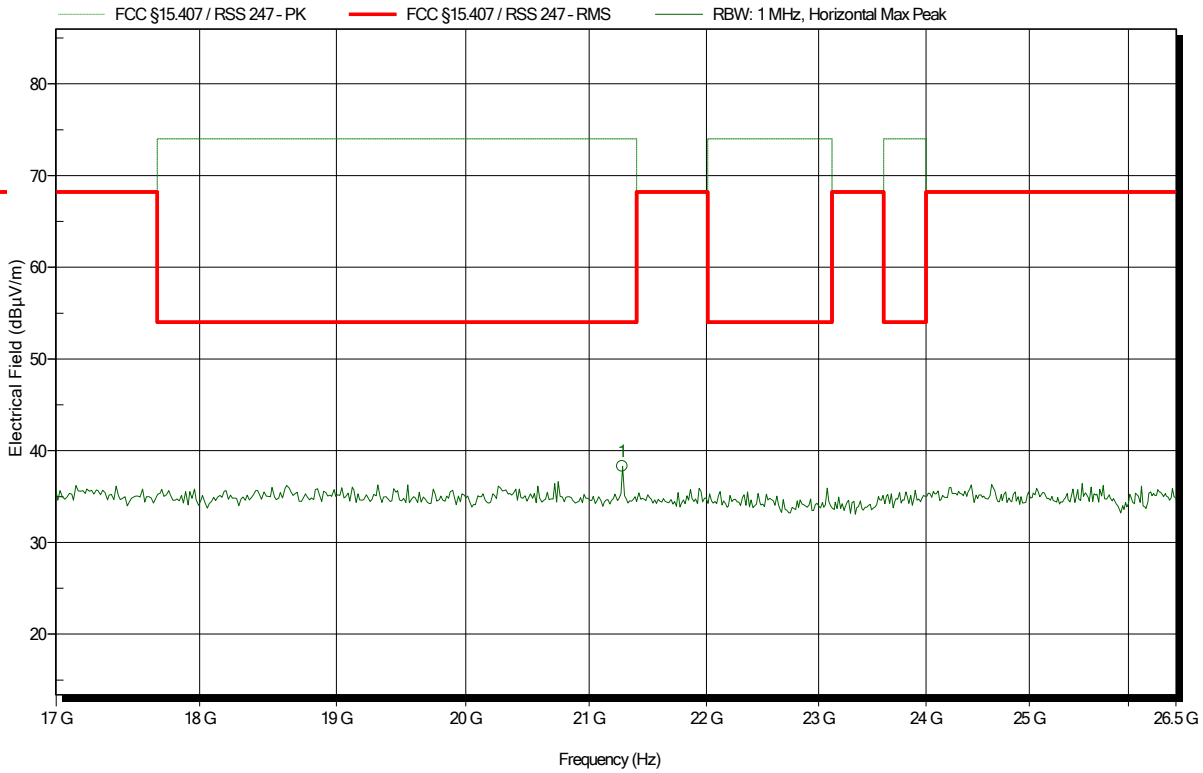

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
21.278 GHz	38.31 dBµV/m	54 dBµV/m	-15.69 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-27
Note:	

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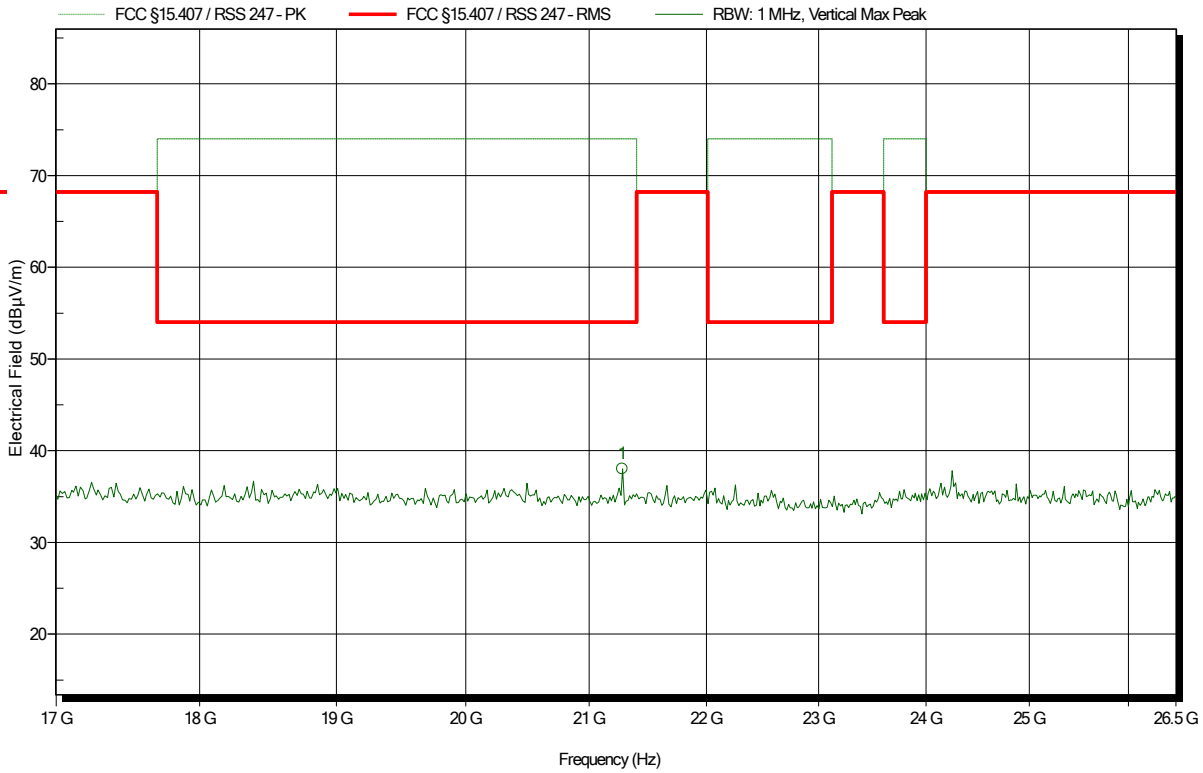

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
21.278 GHz	38.02 dBµV/m	54 dBµV/m	-15.98 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-27
Note:	

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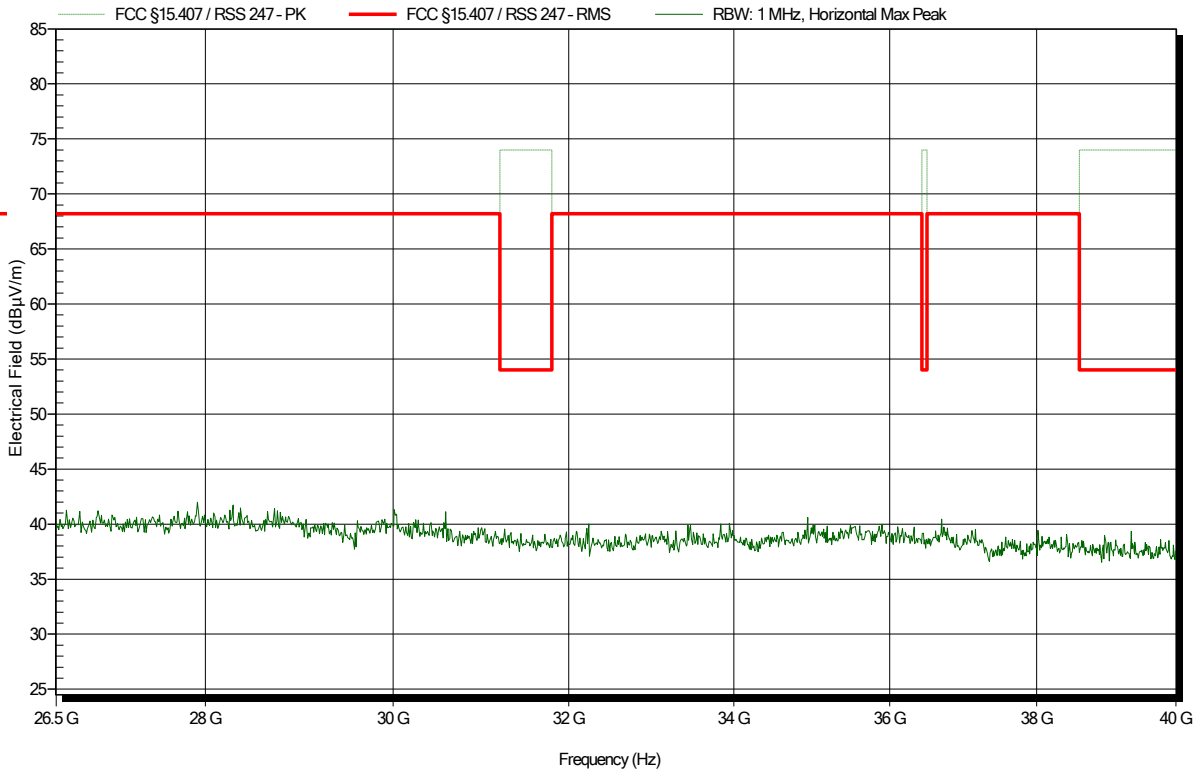

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5320 MHz
Test Date:	2019-09-27
Note:	

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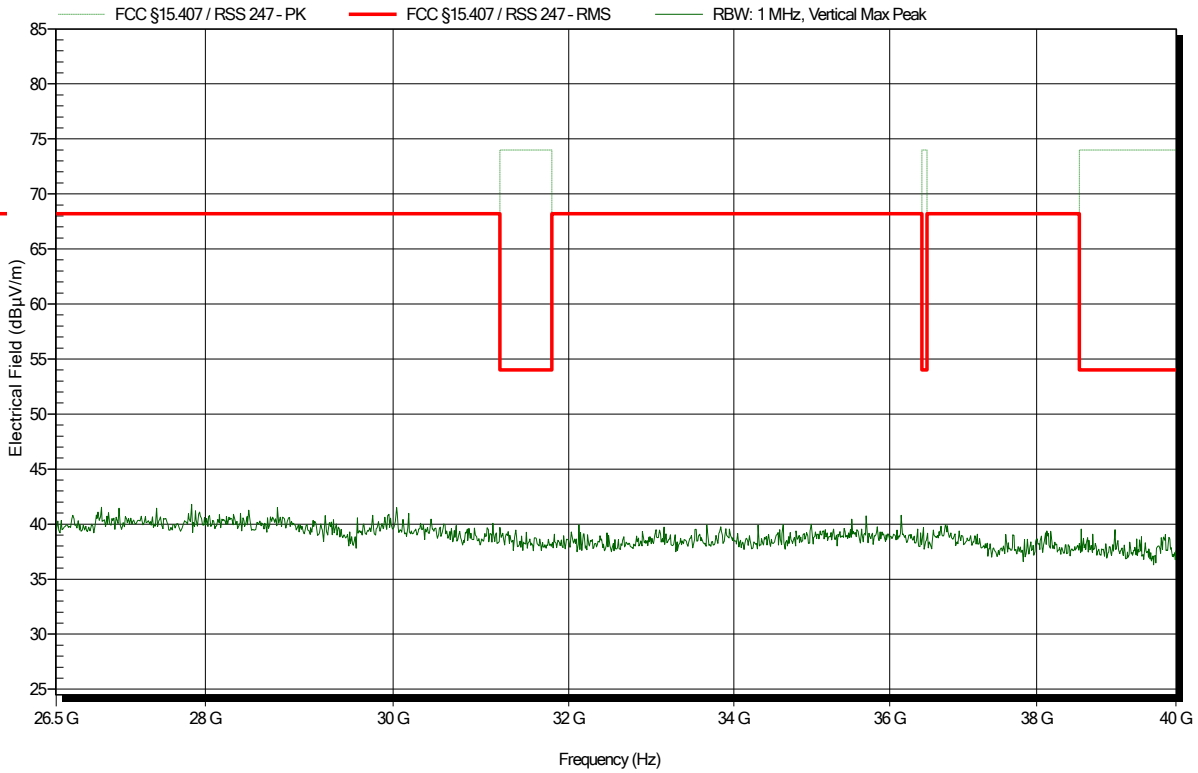

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-07-30
Note:	

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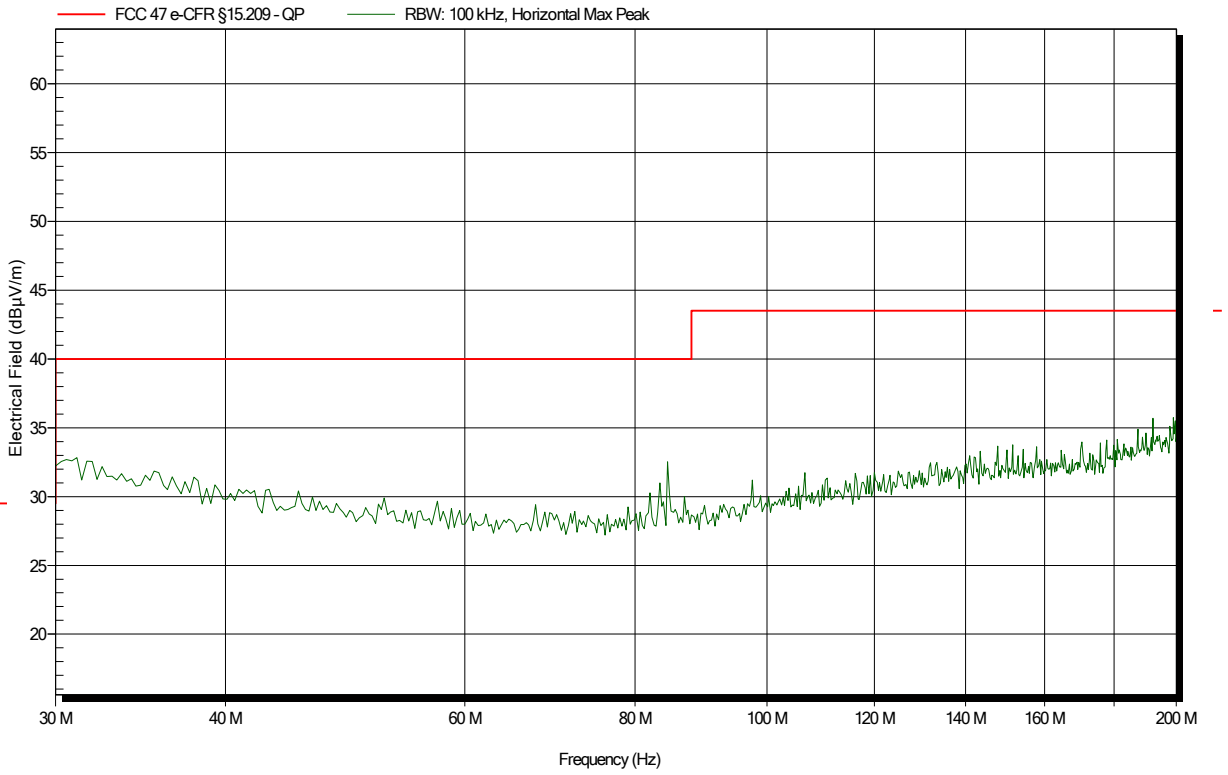

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-07-30
Note:	

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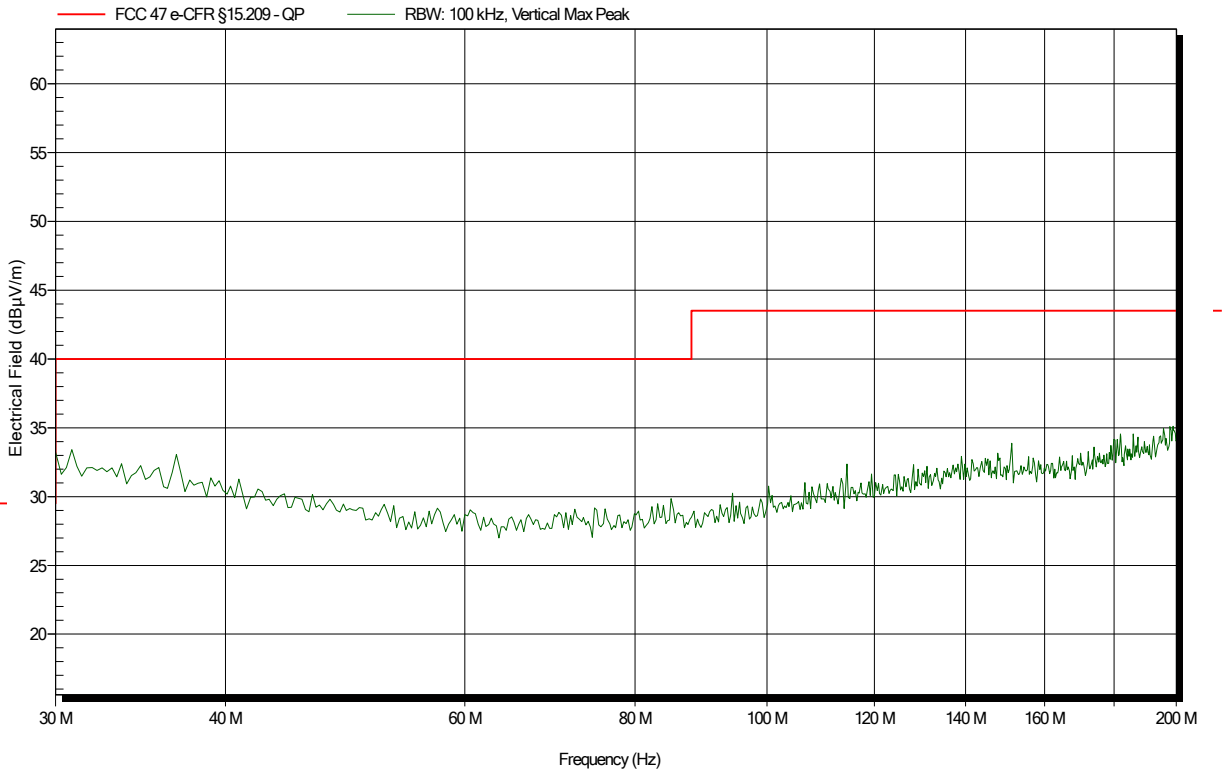

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-07-30
Note:	

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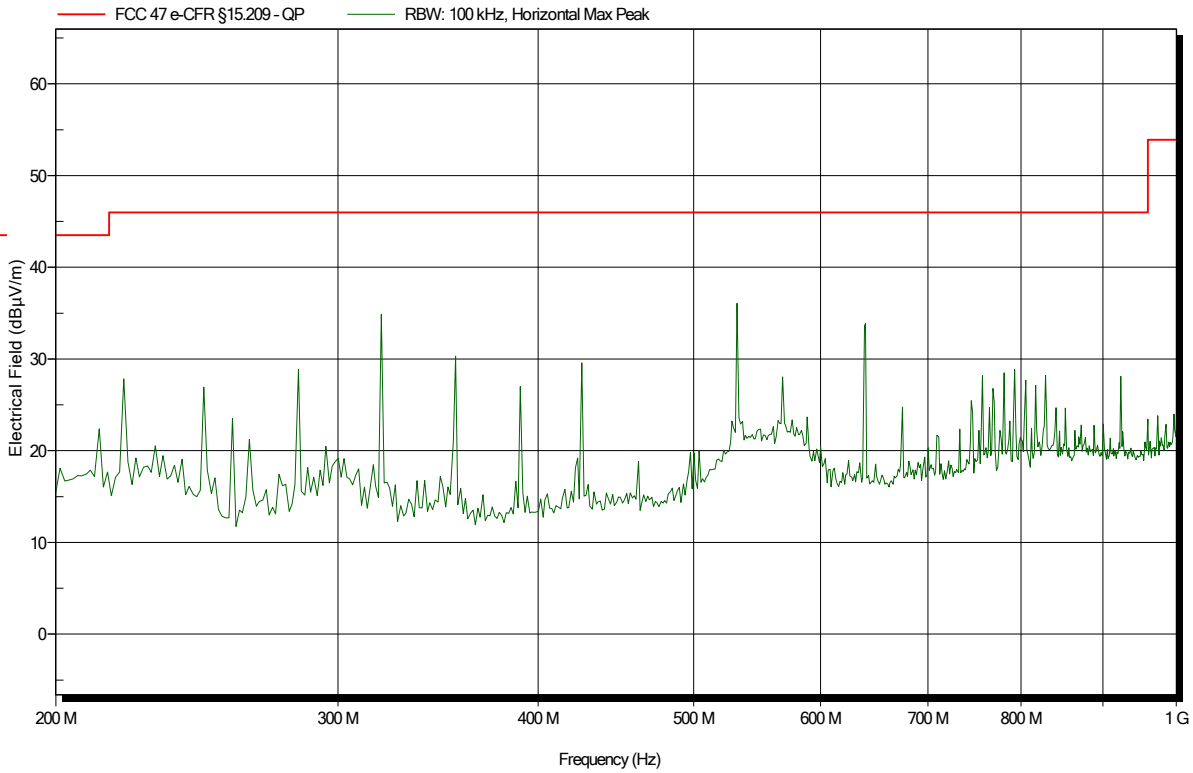

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-07-30
Note:	

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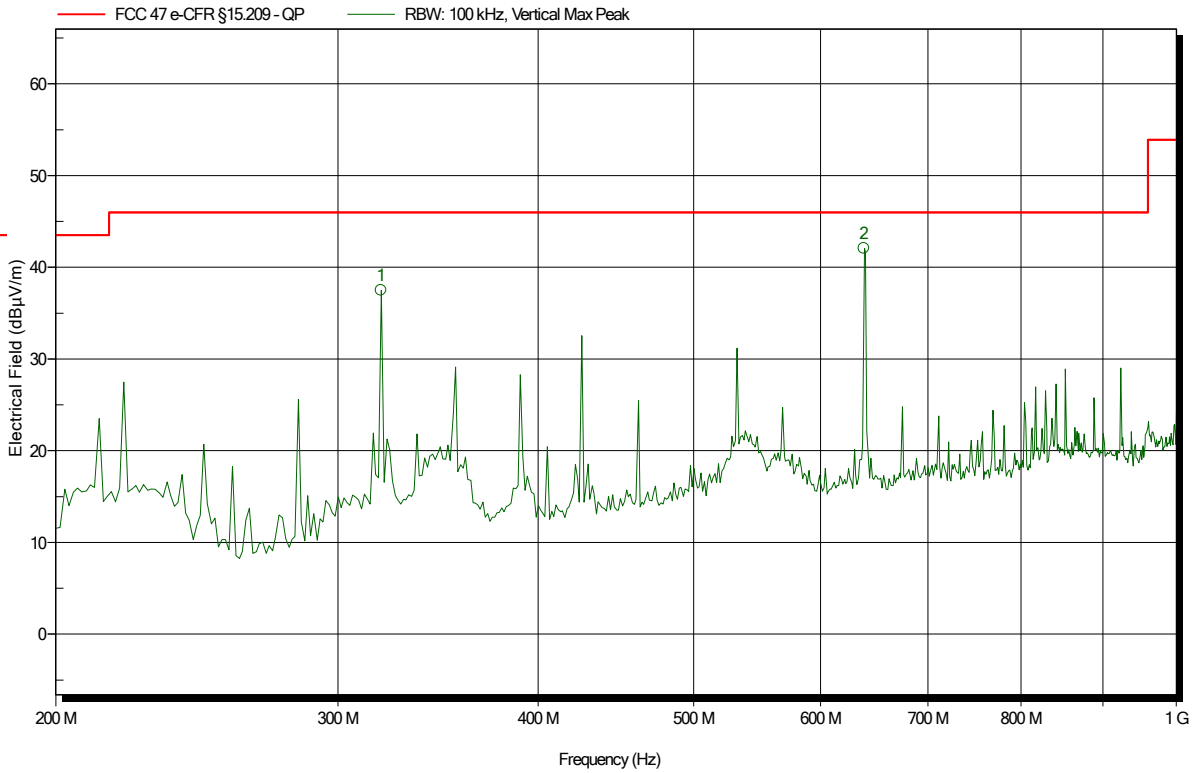

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.51 dBµV/m	46 dBµV/m	-8.49 dB	Pass
638.462 MHz	42.06 dBµV/m	46 dBµV/m	-3.94 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-04
Note:	

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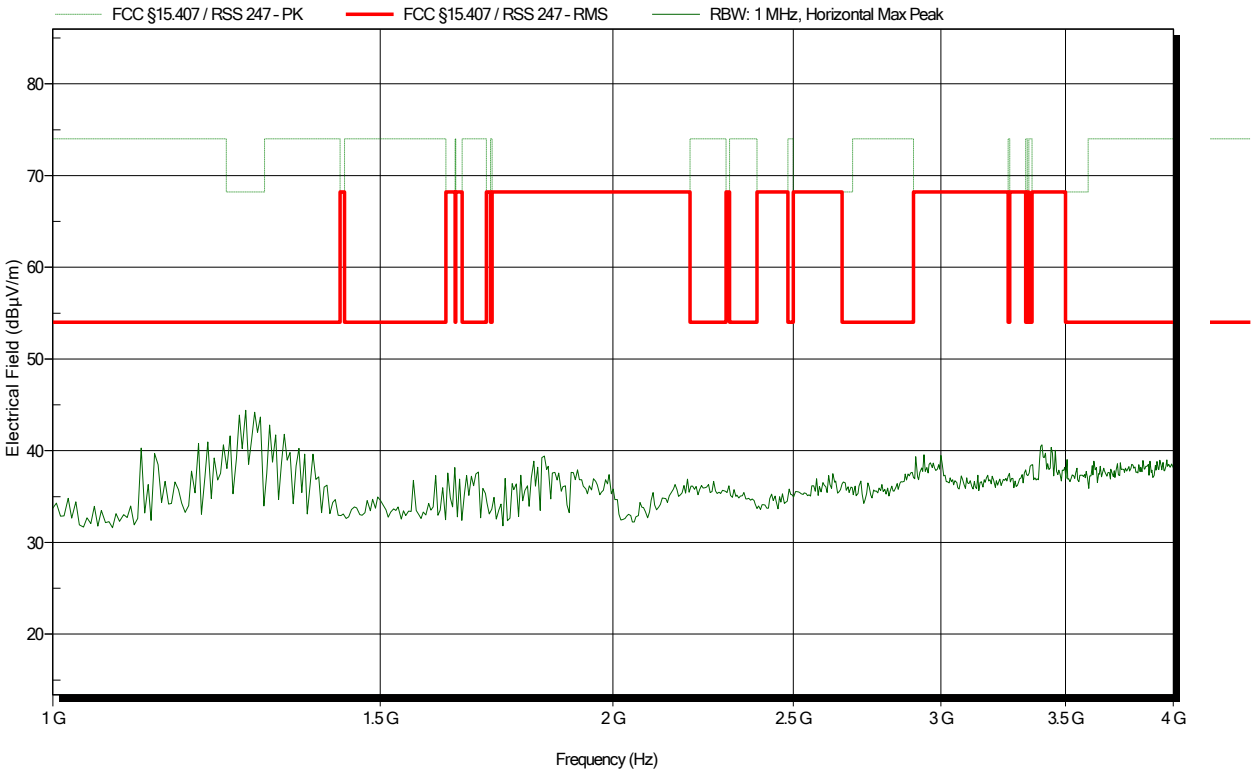

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-04
Note:	

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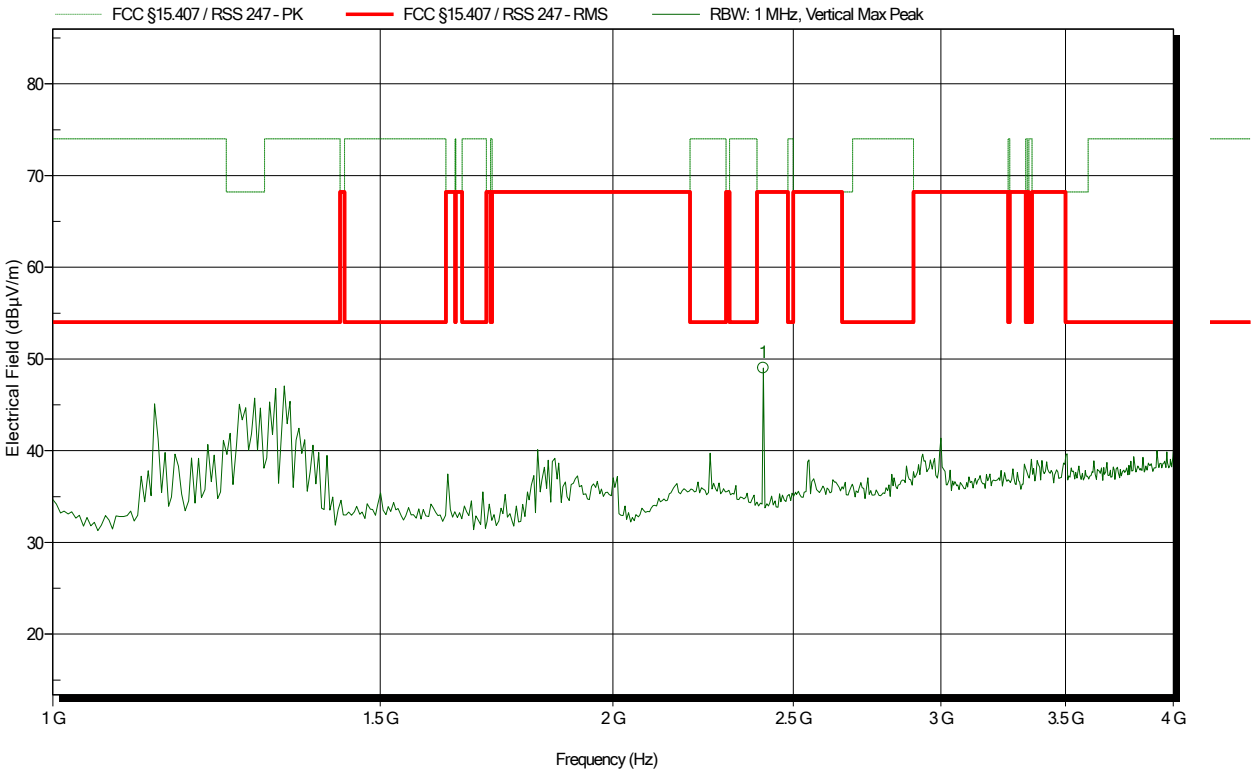

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.409 GHz	49.02 dBµV/m	68.2 dBµV/m	-19.18 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-04
Note:	

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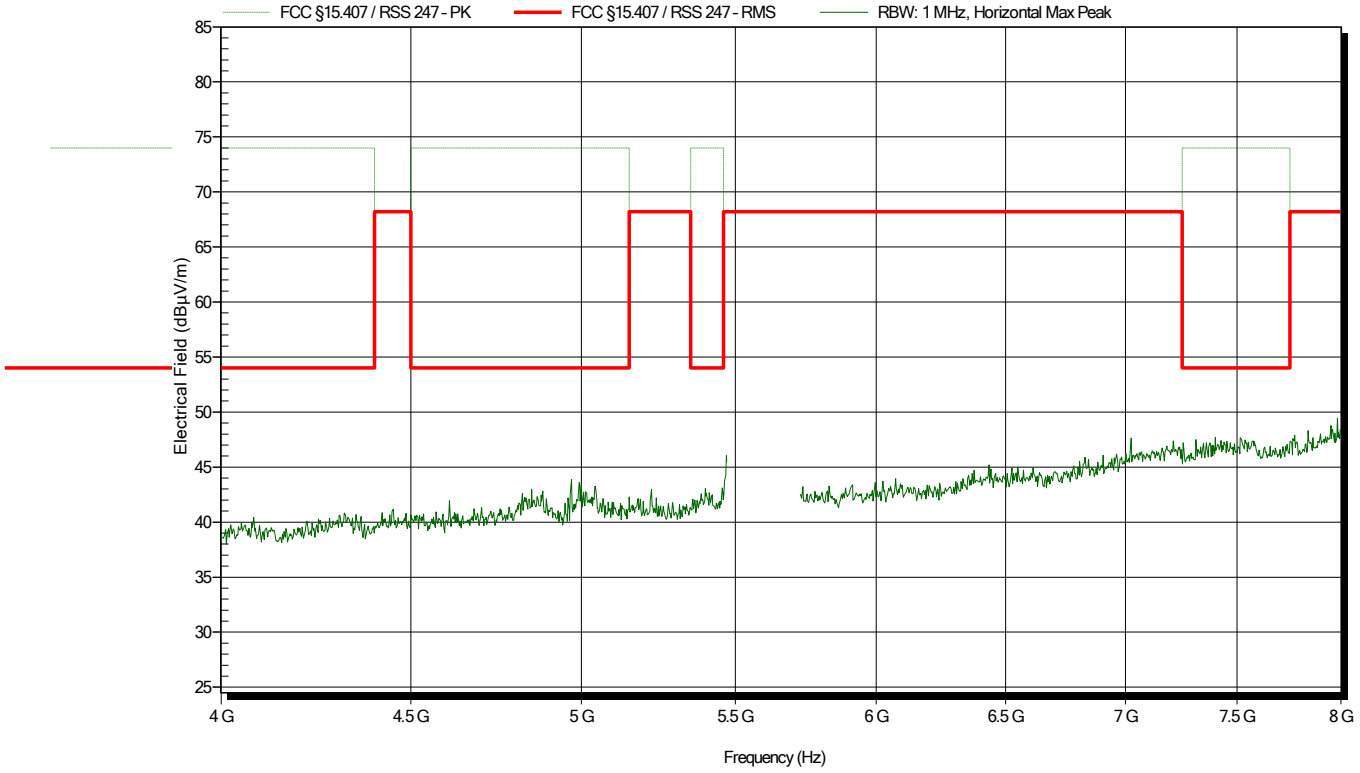

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-04
Note:	

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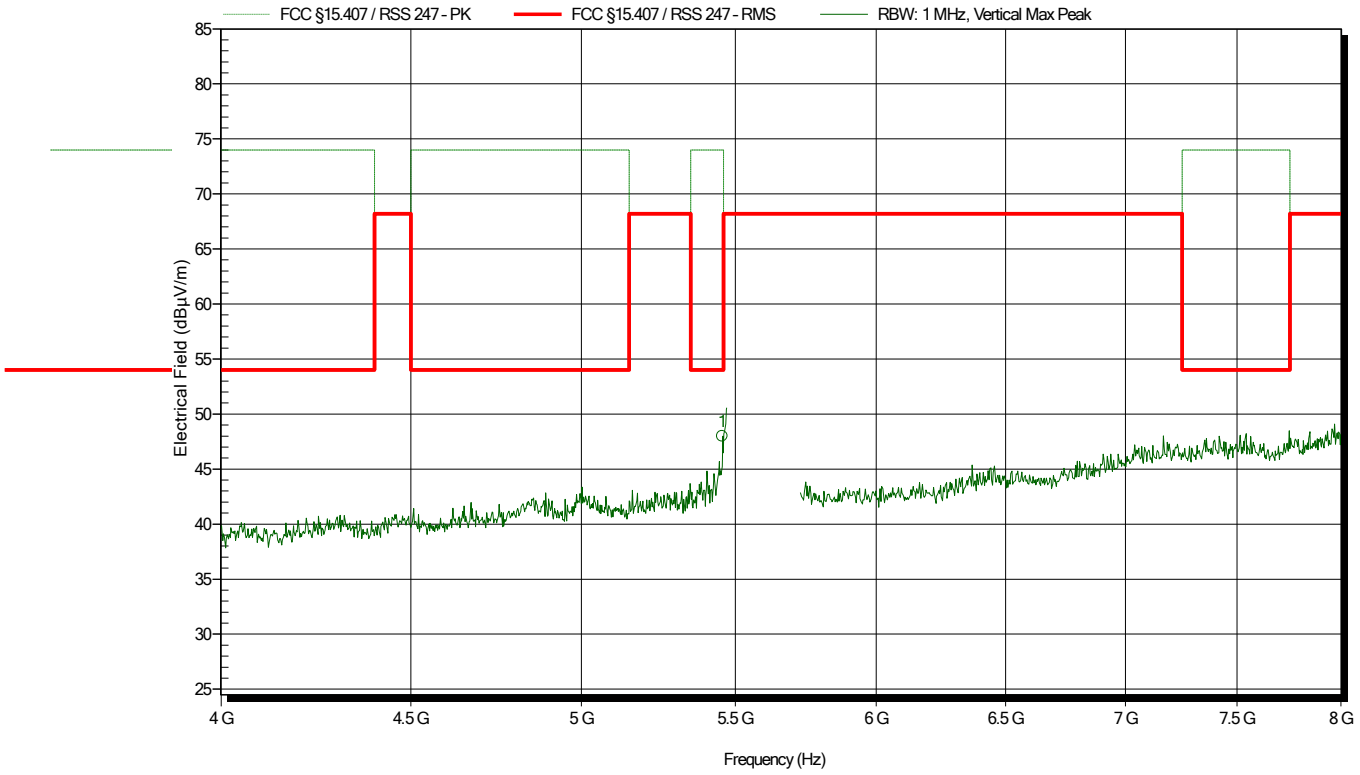

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.456 GHz	47.98 dBµV/m	74 dBµV/m	-26.02 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-26
Note:	lower band area

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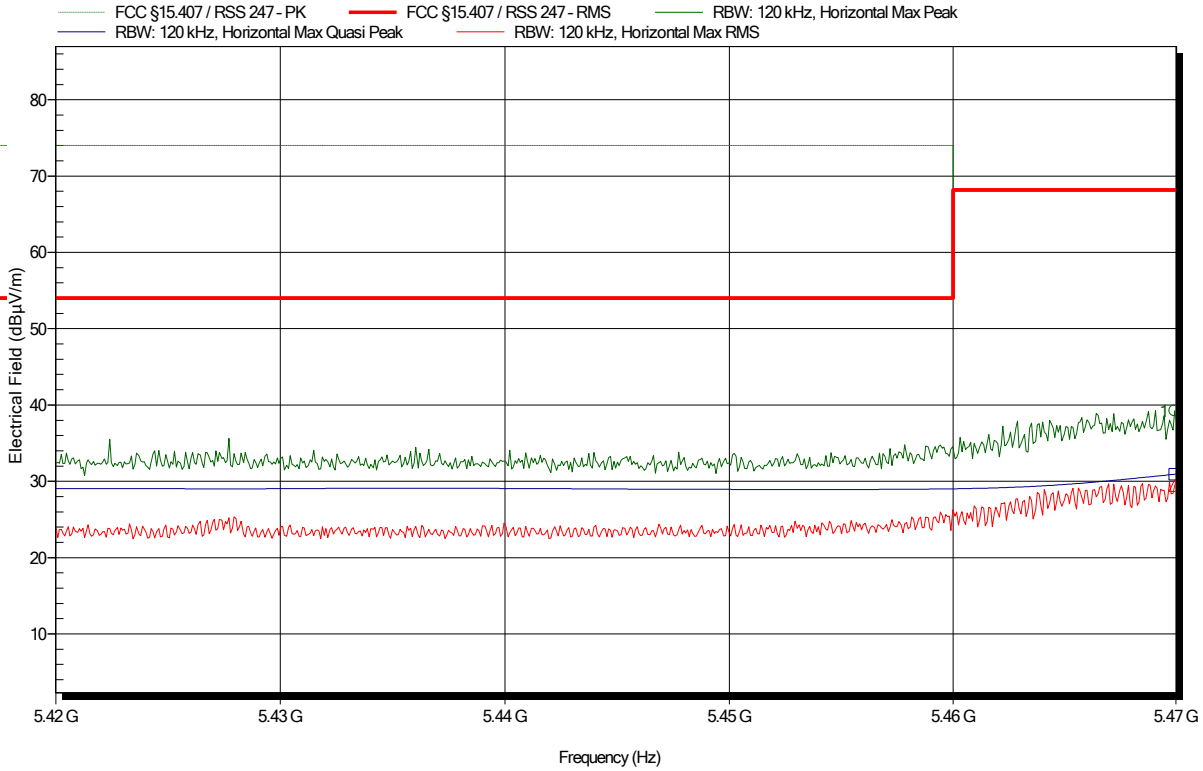

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.47 GHz	39.22 dBµV/m	68.2 dBµV/m	-28.98 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.47 GHz	29.44 dBµV/m	68.2 dBµV/m	-38.76 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-08-26
Note:	lower band area

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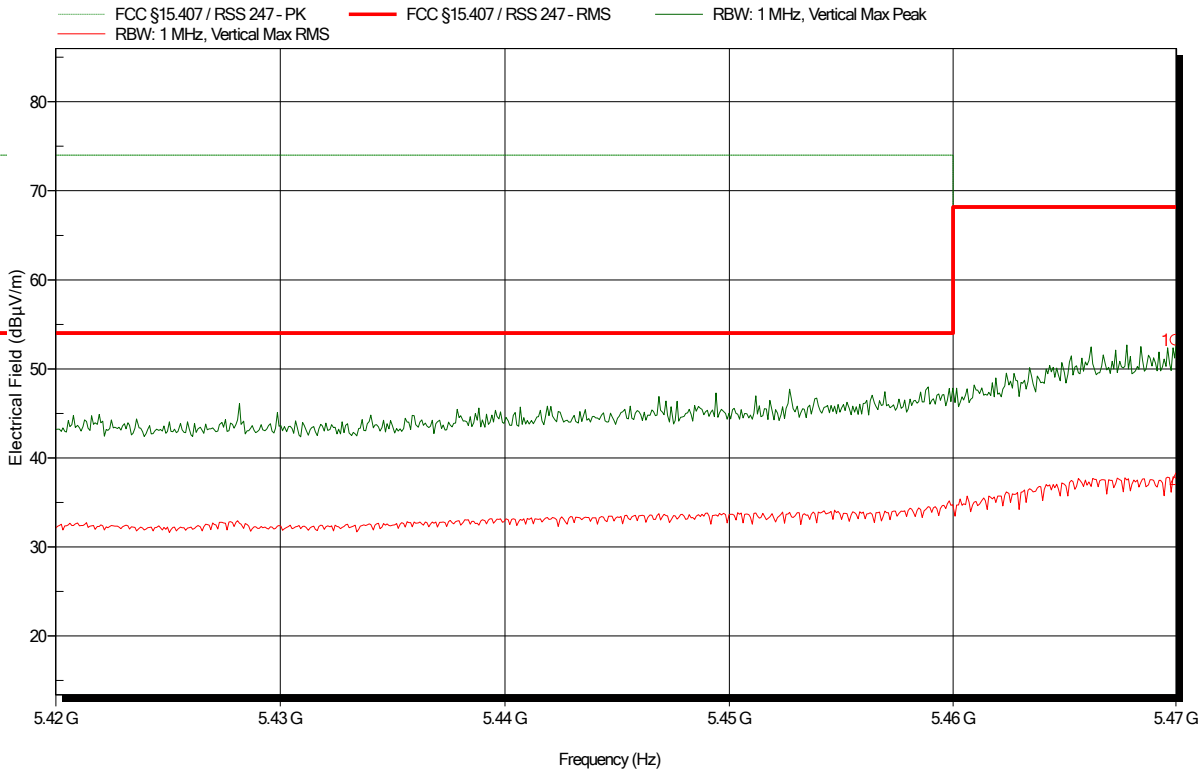

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.47 GHz	53.21 dBµV/m	68.2 dBµV/m	-14.99 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.47 GHz	37.65 dBµV/m	68.2 dBµV/m	-30.55 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-09-19
Note:	

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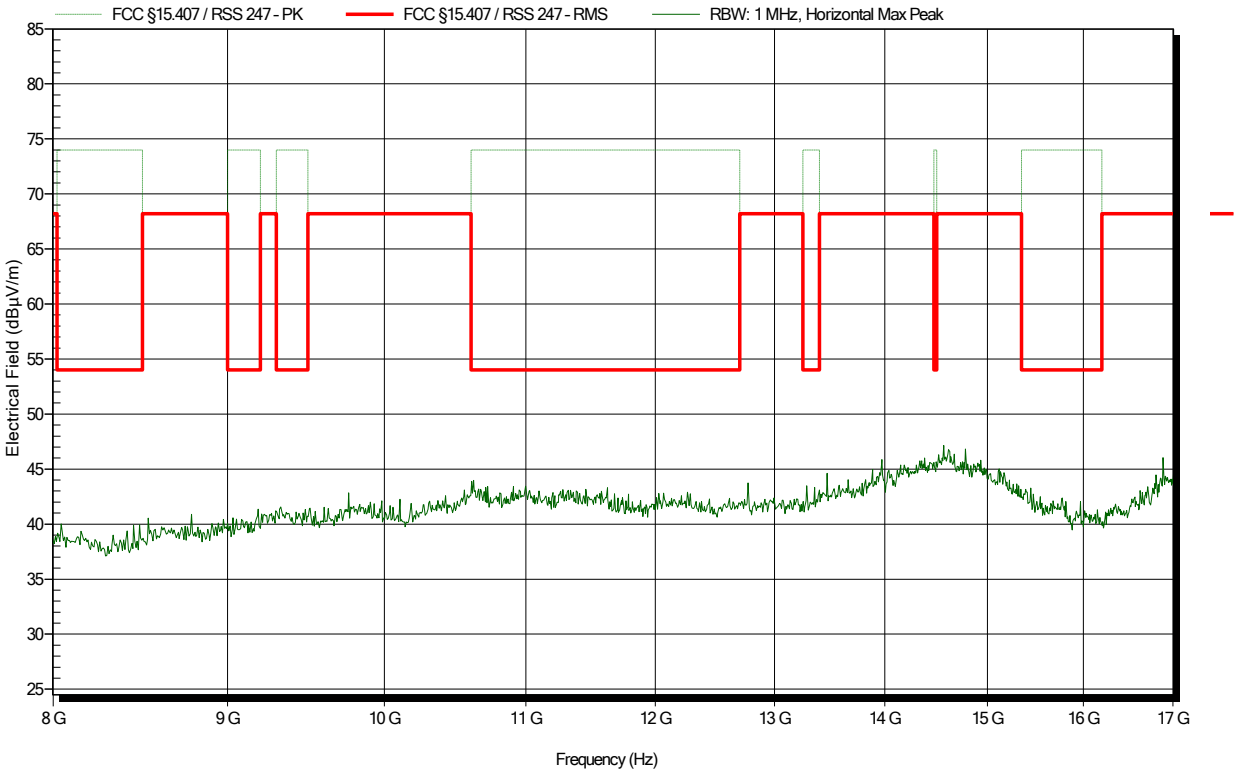

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-09-19
Note:	

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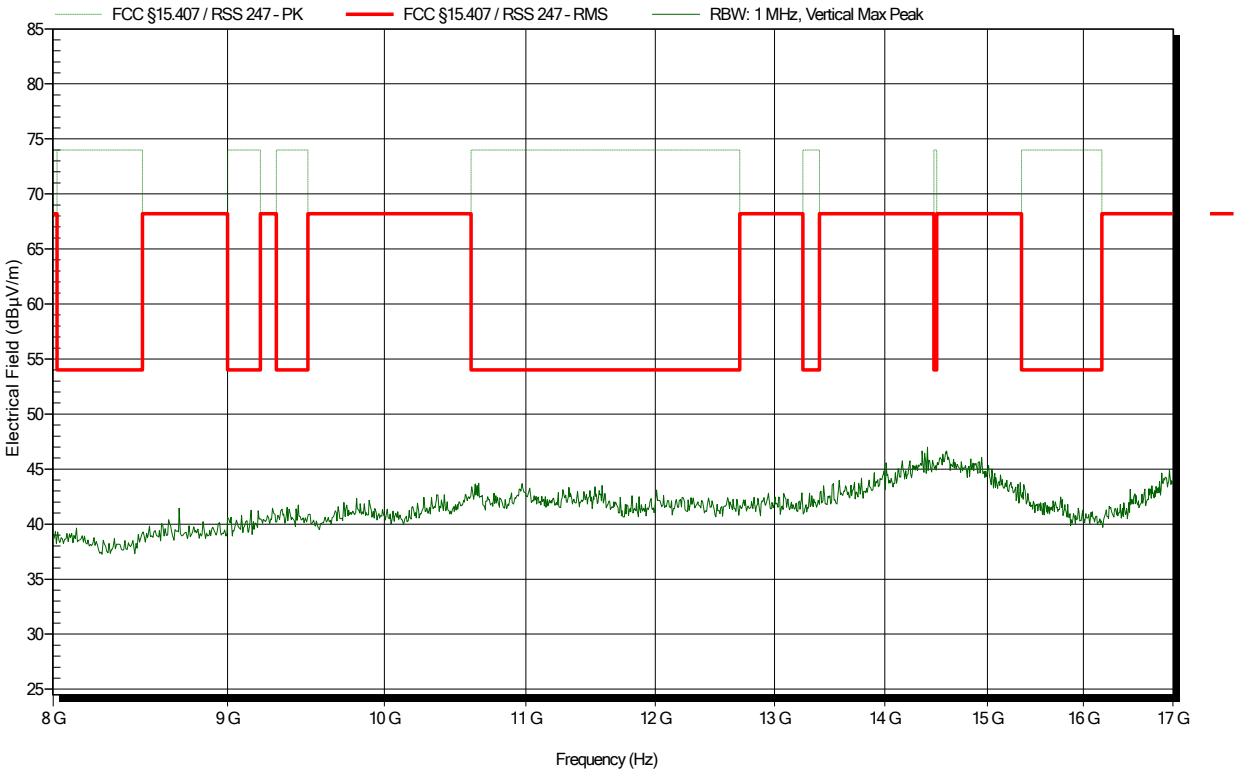

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5550 MHz
Test Date:	2019-09-27
Note:	

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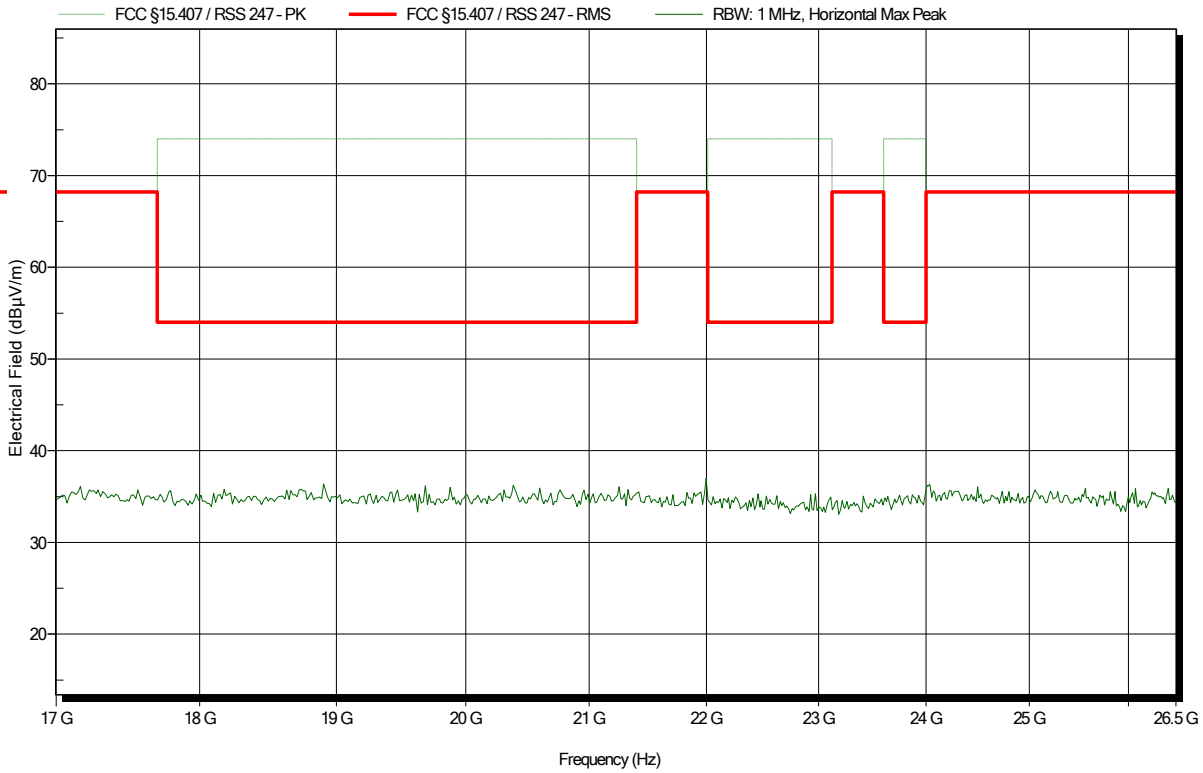

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5550 MHz
Test Date:	2019-09-27
Note:	

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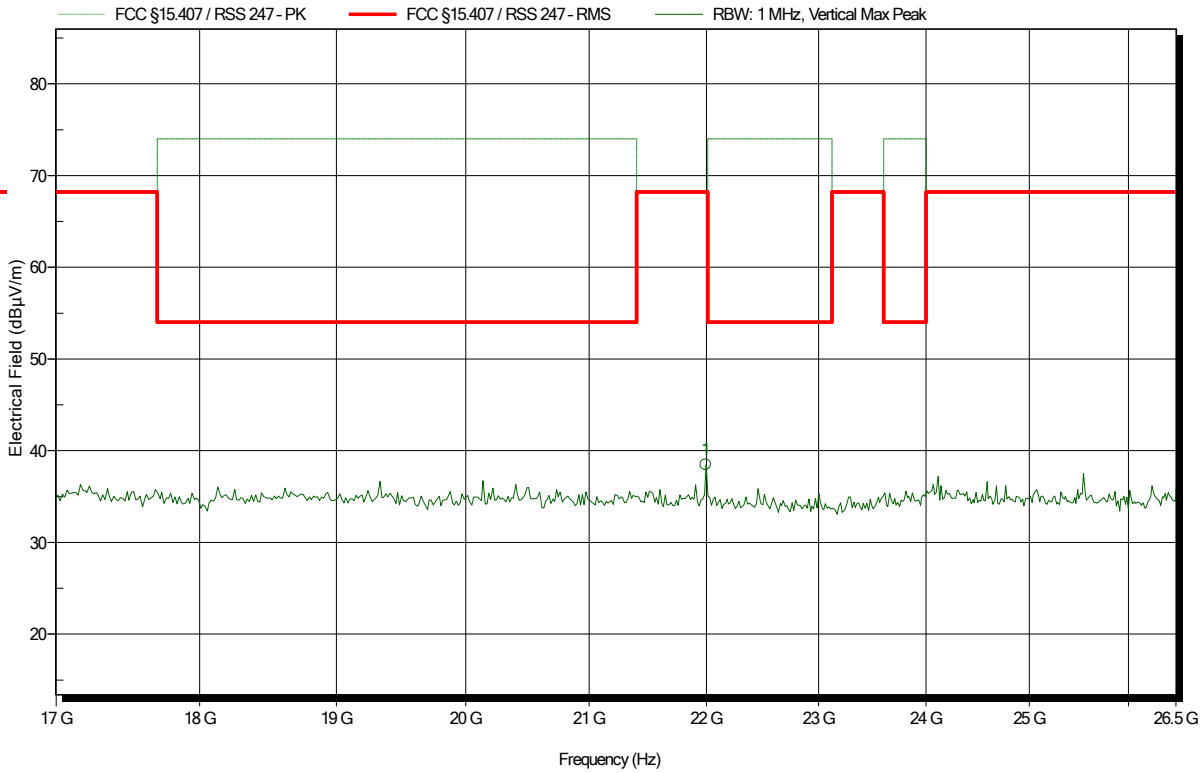

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
21.994 GHz	38.49 dBµV/m	68.2 dBµV/m	-29.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-09-27
Note:	

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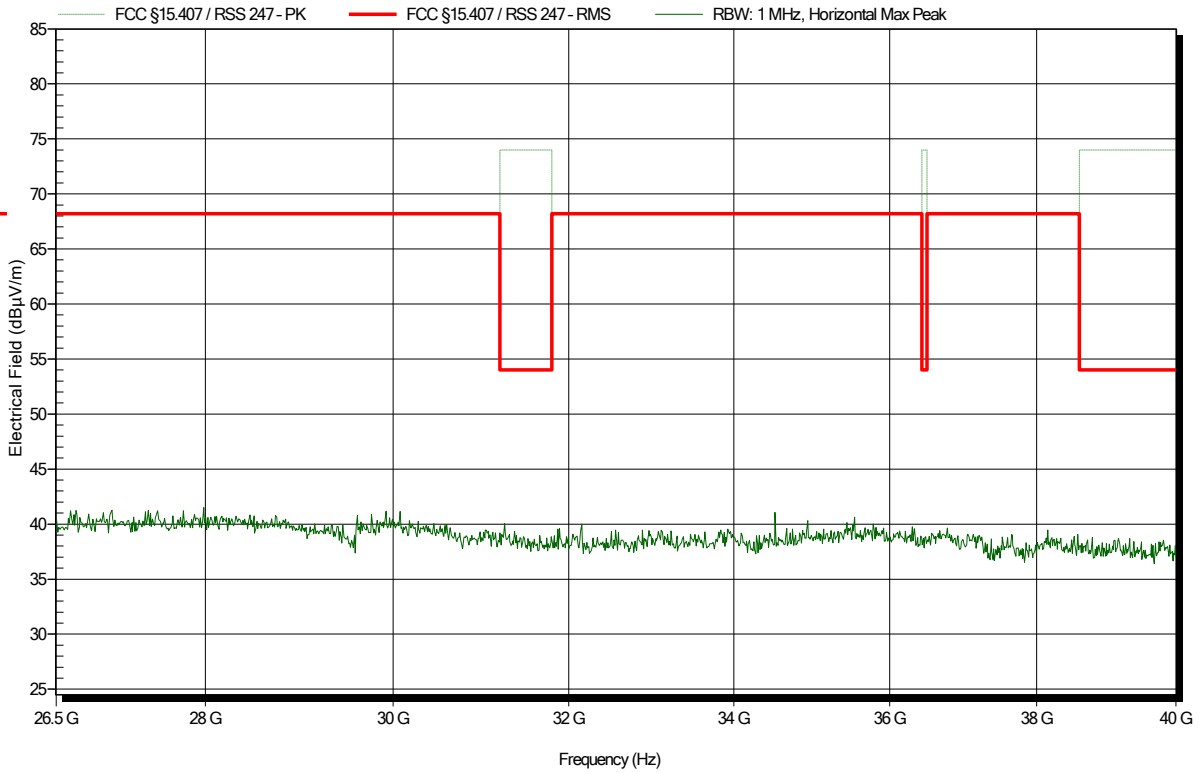

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5500 MHz
Test Date:	2019-09-27
Note:	

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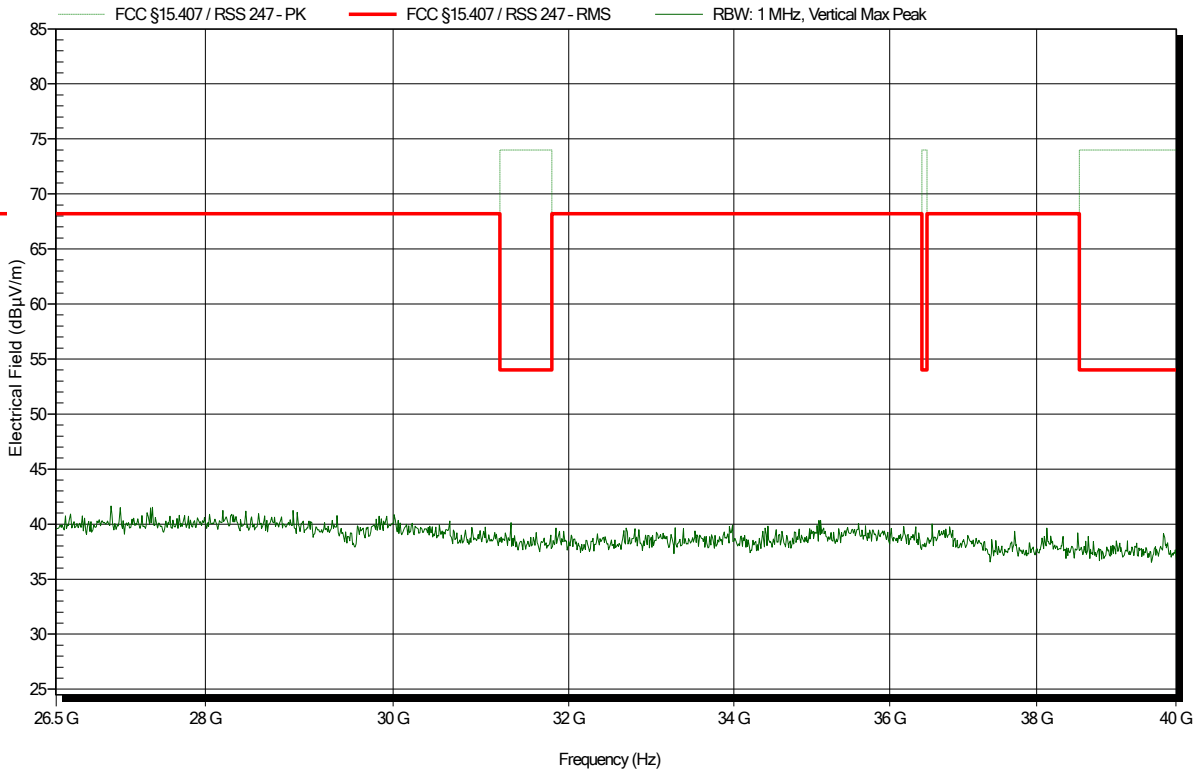

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-10-07
Note:	

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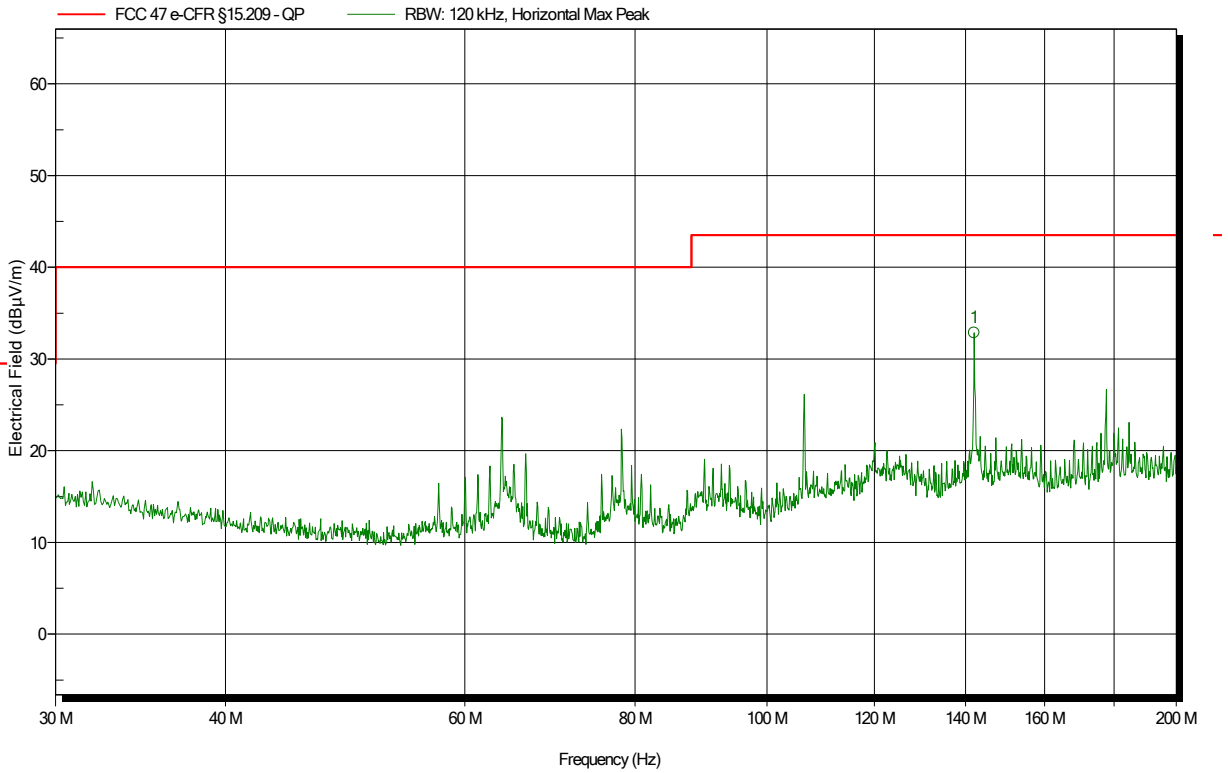

Frequency	Peak	Peak Limit	Peak Difference	Status
142.02 MHz	32.8 dBµV/m	43.5 dBµV/m	-10.65 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-10-07
Note:	

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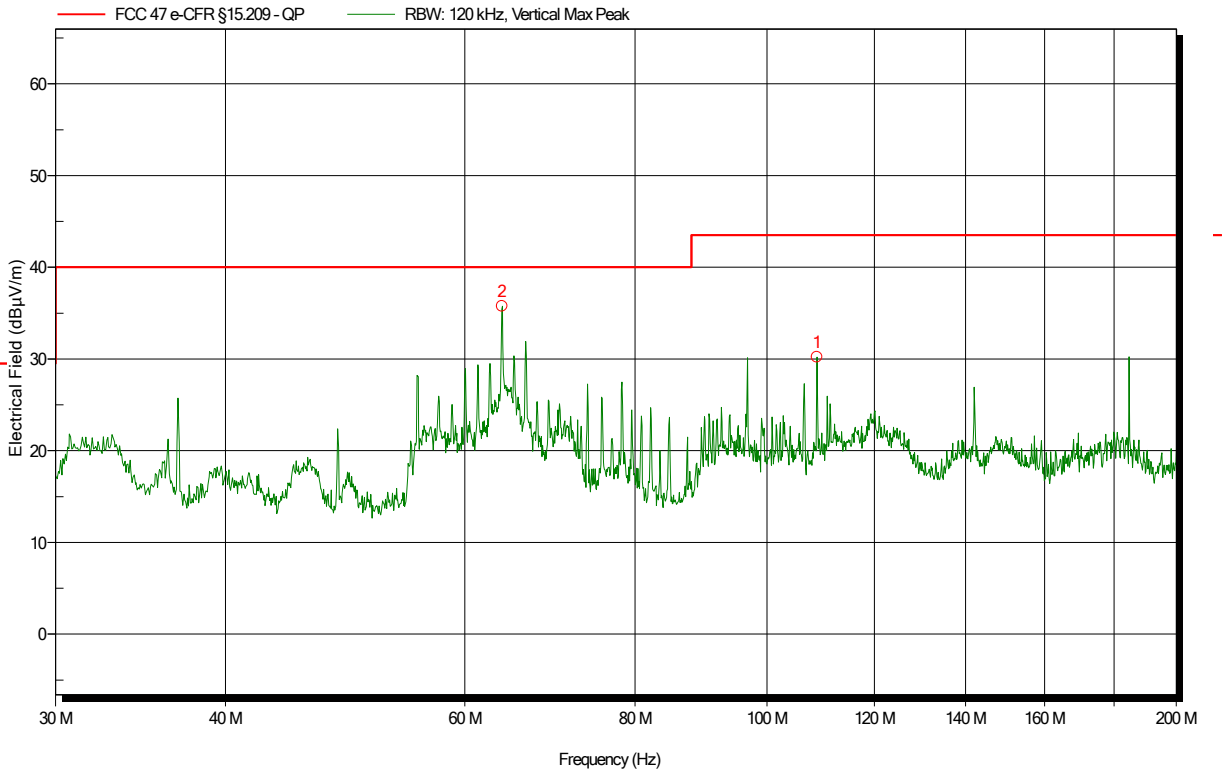

Frequency	Peak	Peak Limit	Peak Difference	Status
63.9 MHz	35.8 dBµV/m	40 dBµV/m	-4.24 dB	Pass
108.84 MHz	30.2 dBµV/m	43.5 dBµV/m	-13.31 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Weber
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-10-10
Note:	

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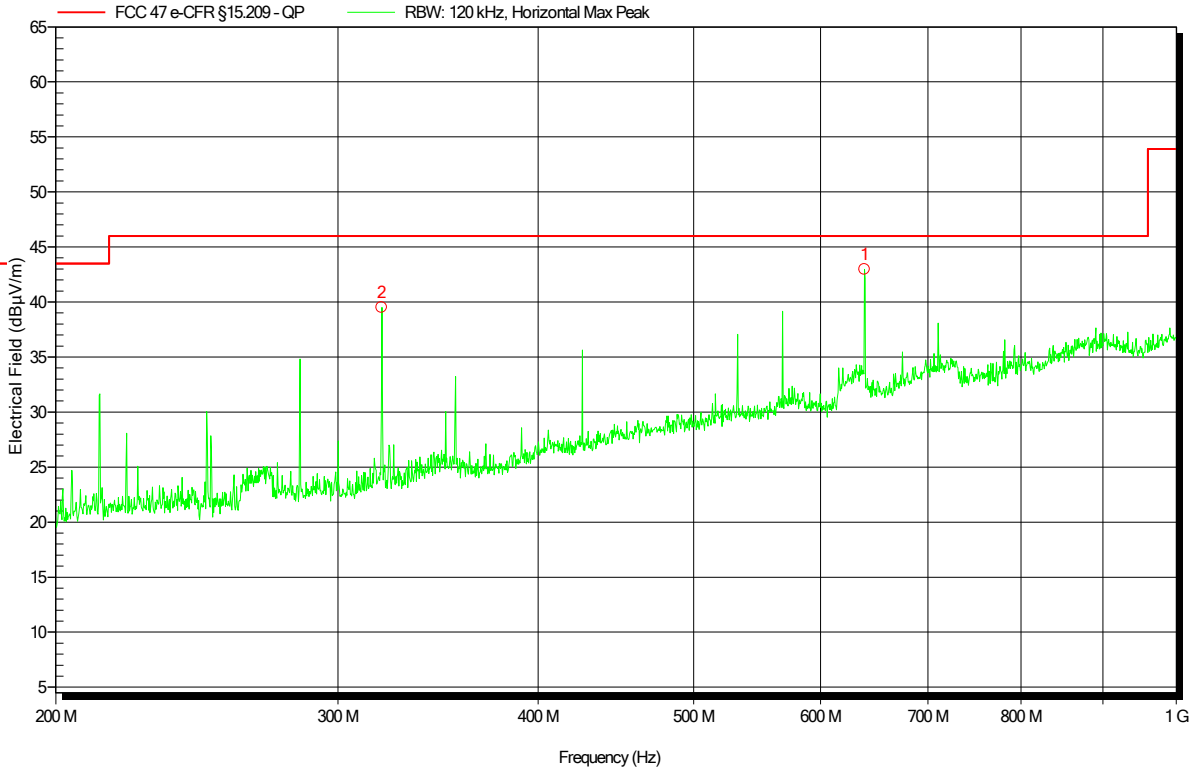

Frequency	Peak	Peak Limit	Peak Difference	Status
319.46 MHz	39.5 dBµV/m	46 dBµV/m	-6.5 dB	Pass
638.96 MHz	43 dBµV/m	46 dBµV/m	-3.03 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Weber
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-10-10
Note:	

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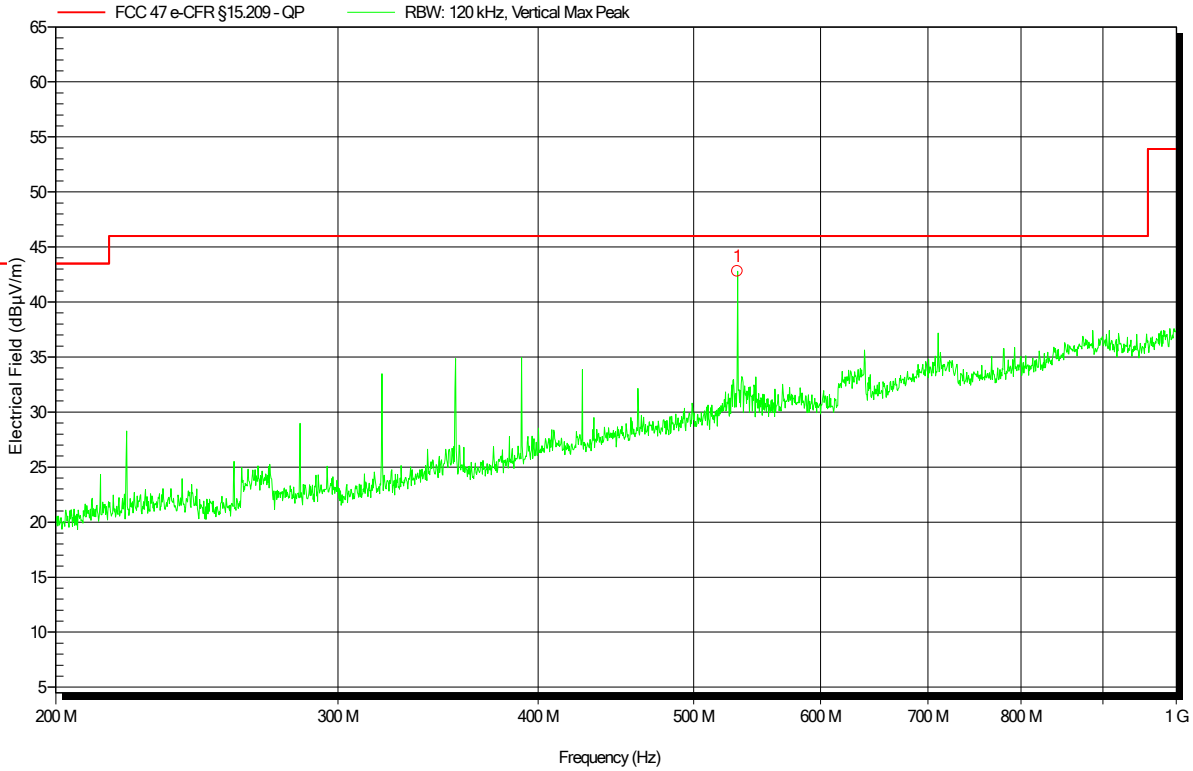

Frequency	Peak	Peak Limit	Peak Difference	Status
532.46 MHz	42.8 dBµV/m	46 dBµV/m	-3.2 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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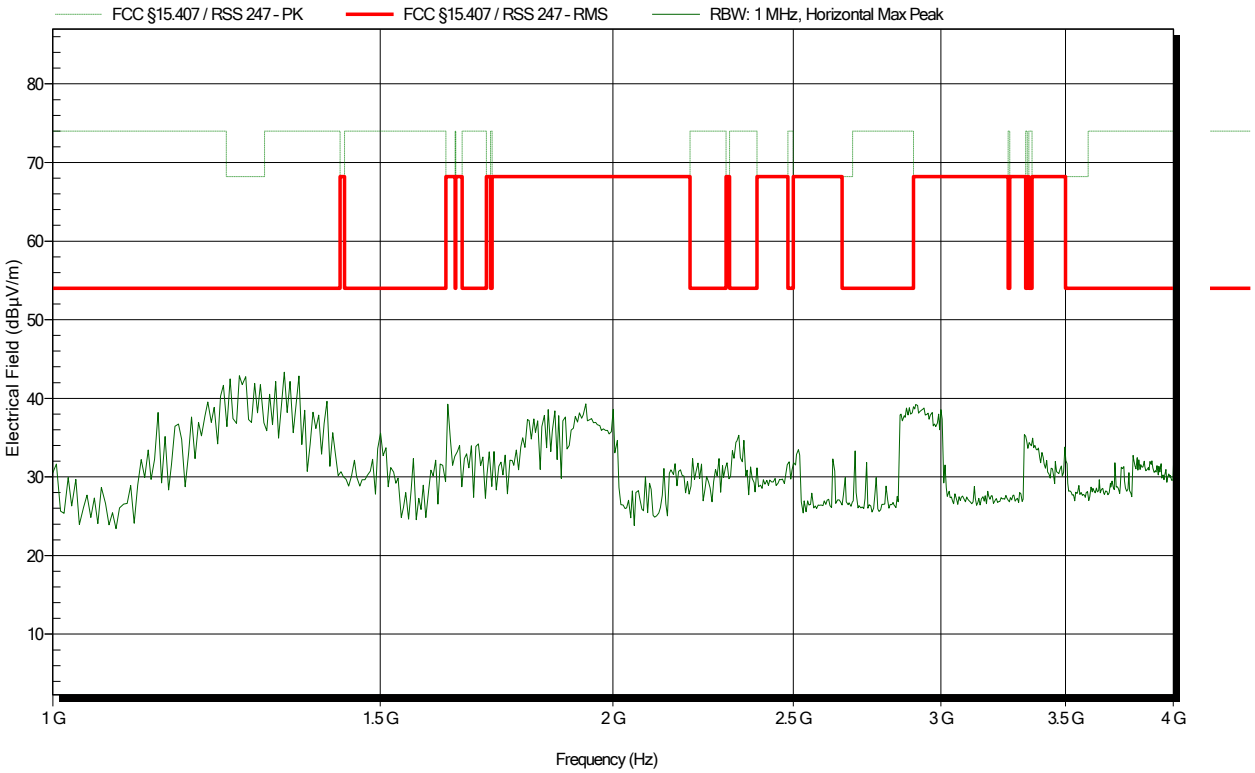

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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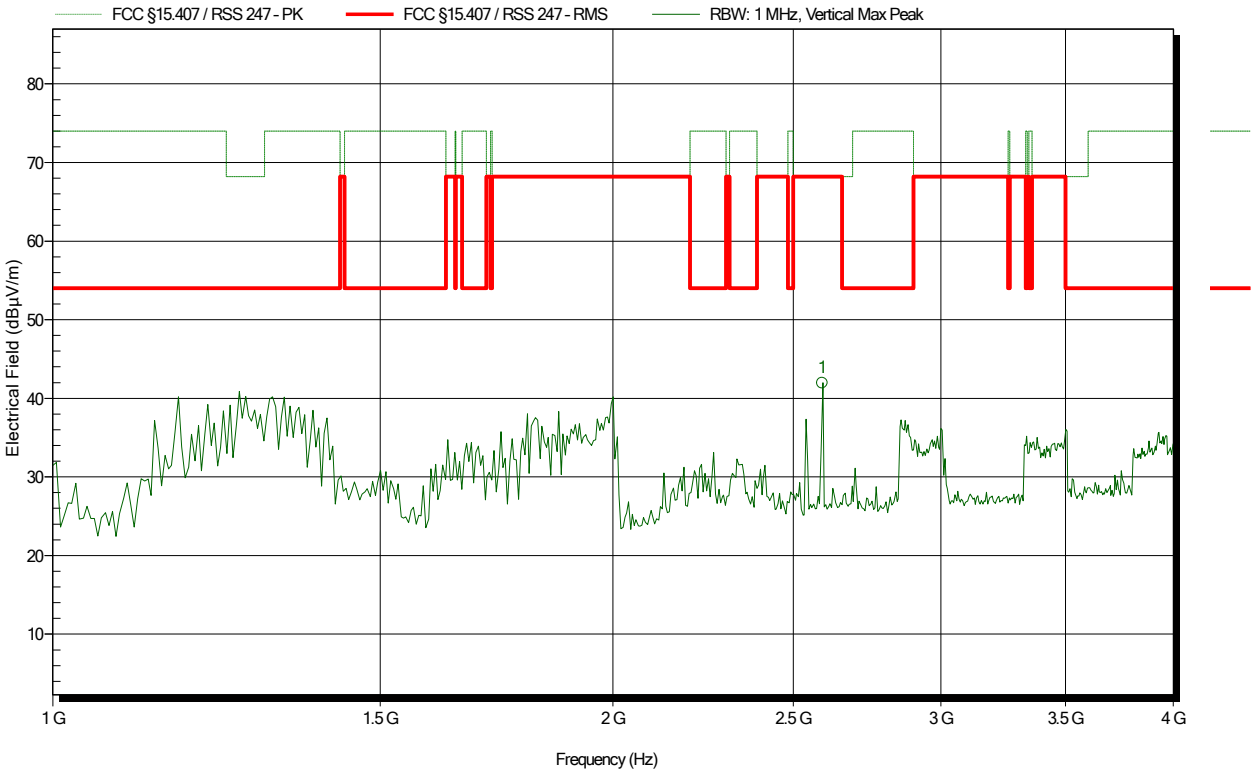

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.591 GHz	41.95 dBµV/m	68.2 dBµV/m	-26.25 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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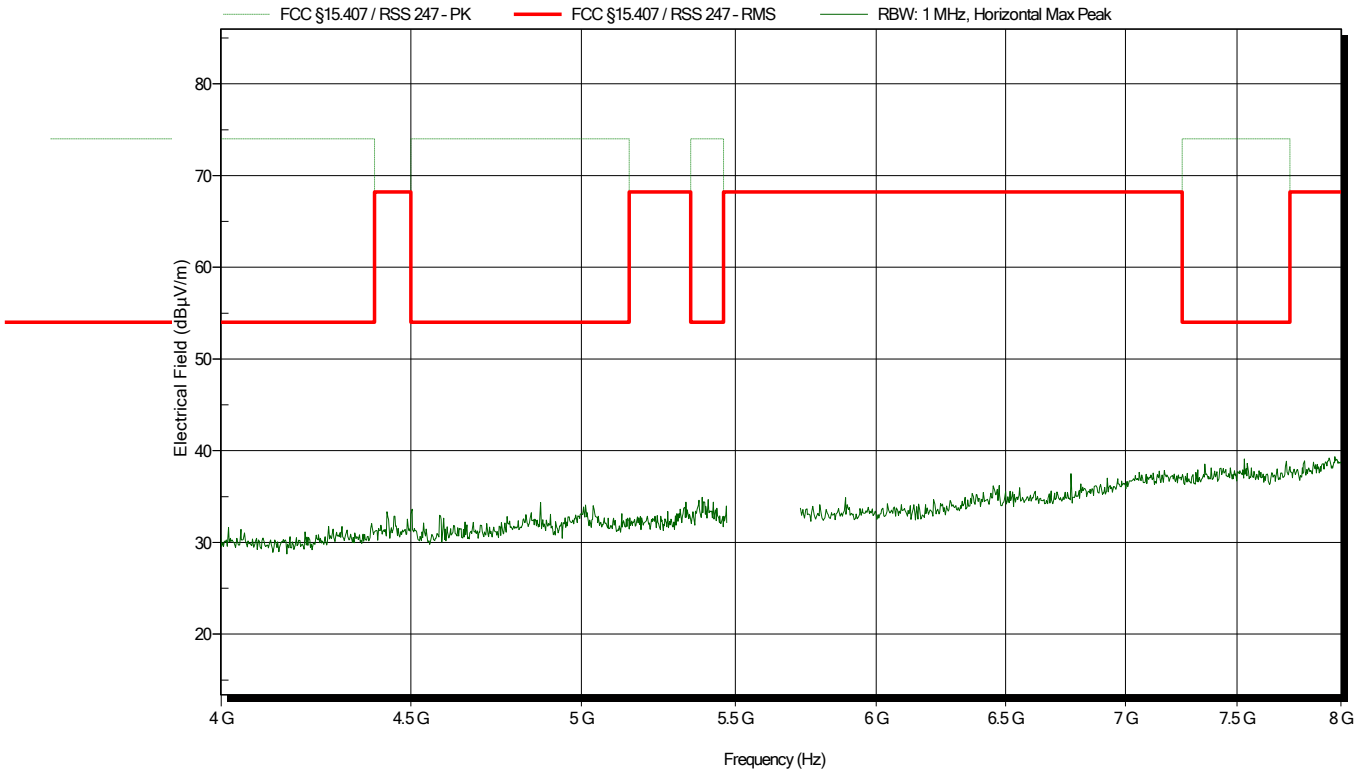

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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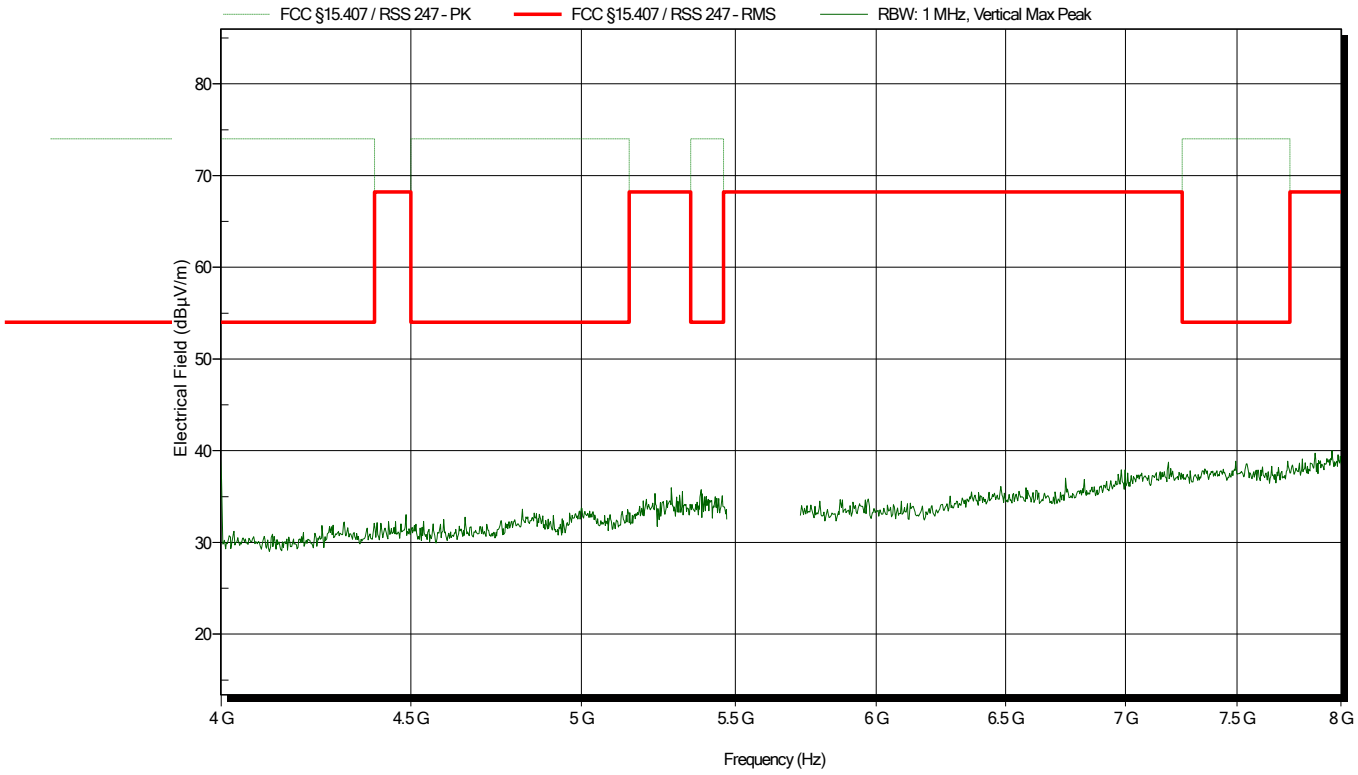

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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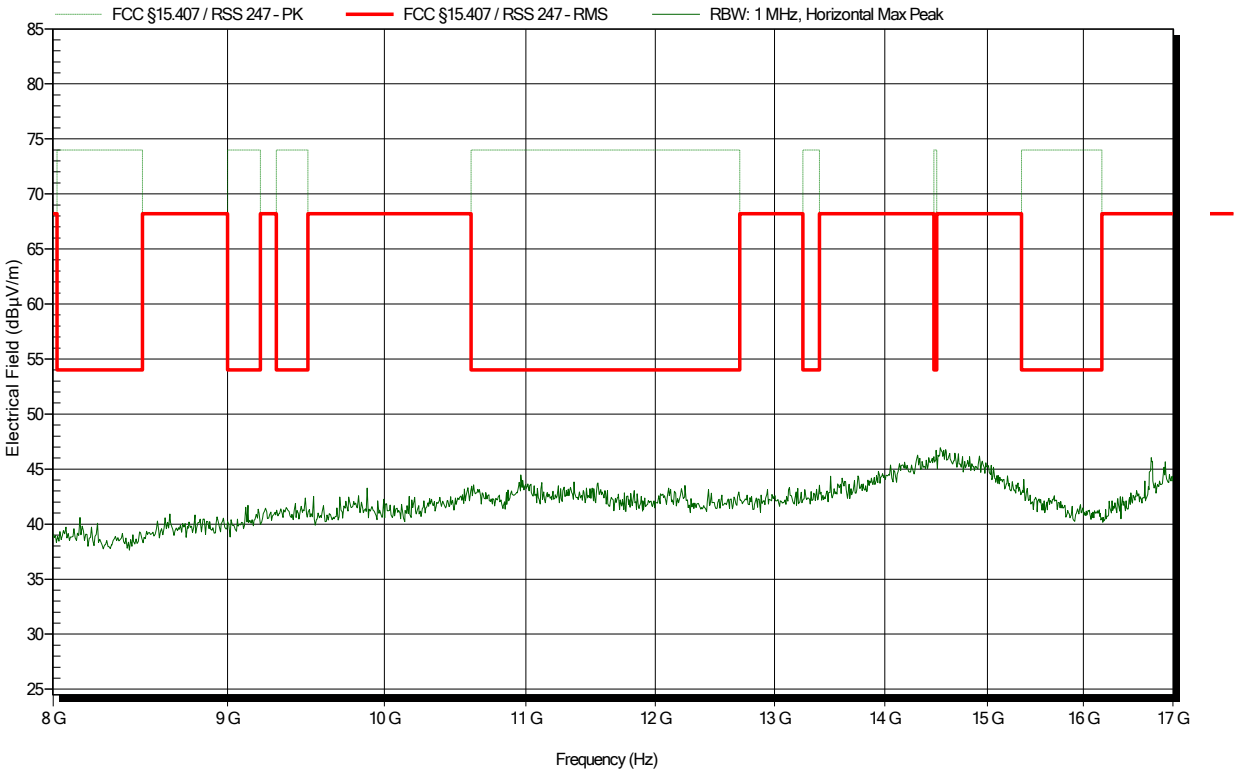

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-30
Note:	

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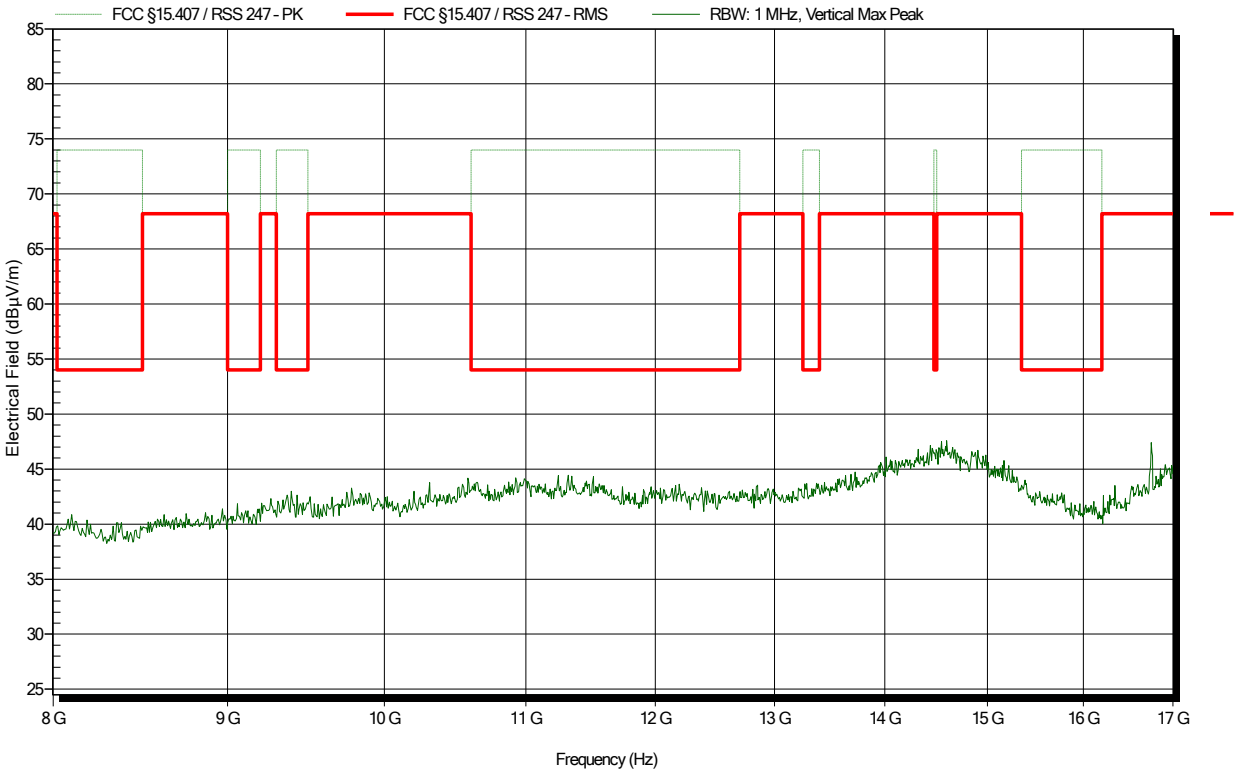

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-27
Note:	

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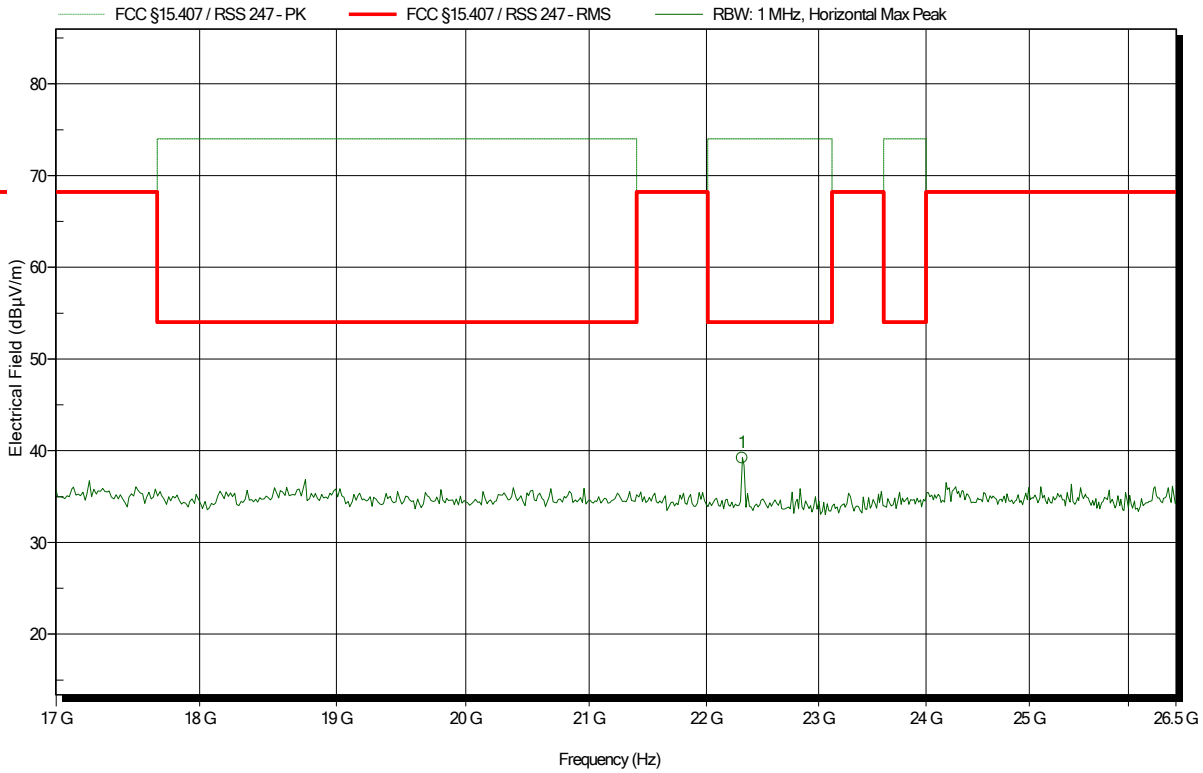

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.313 GHz	39.22 dBµV/m	54 dBµV/m	-14.78 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-27
Note:	

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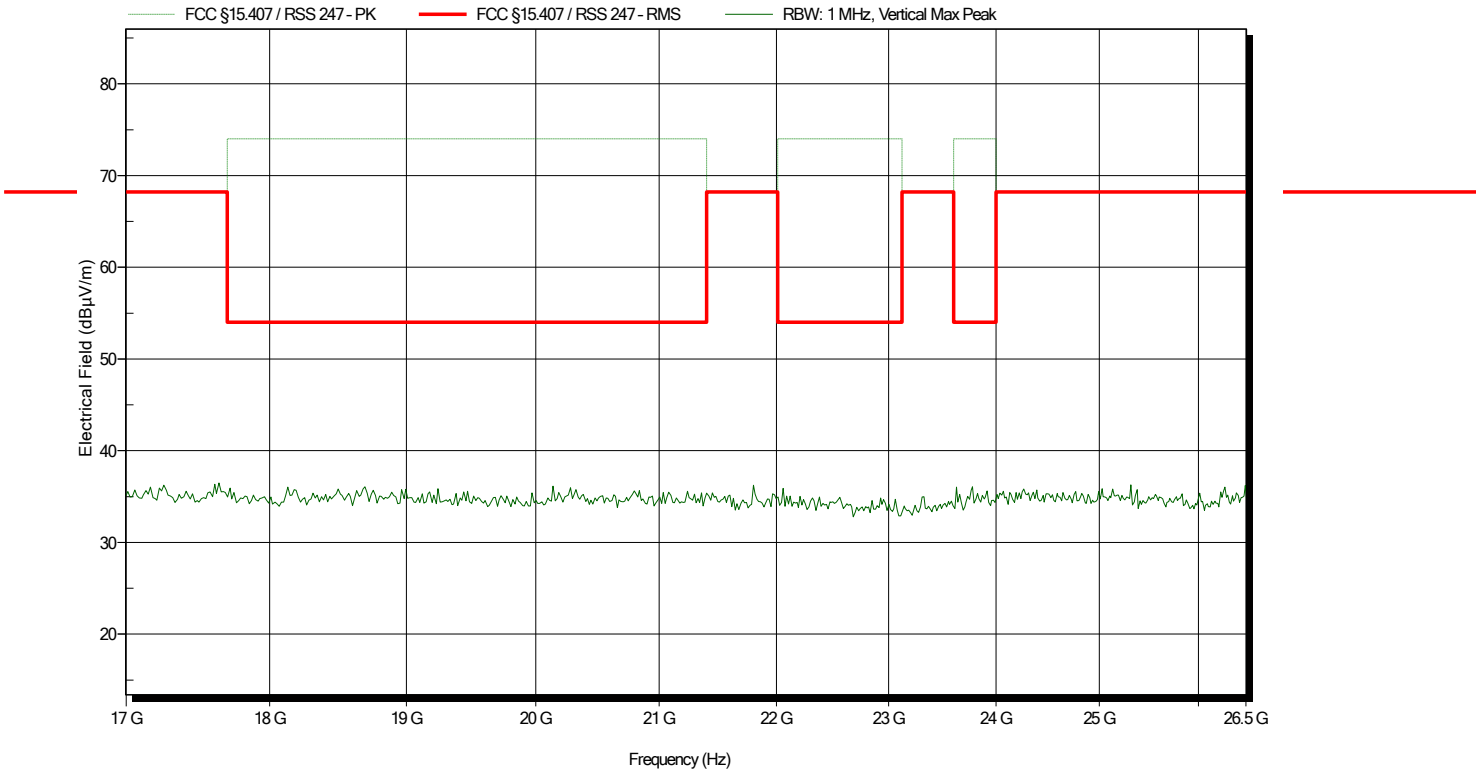

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-27
Note:	

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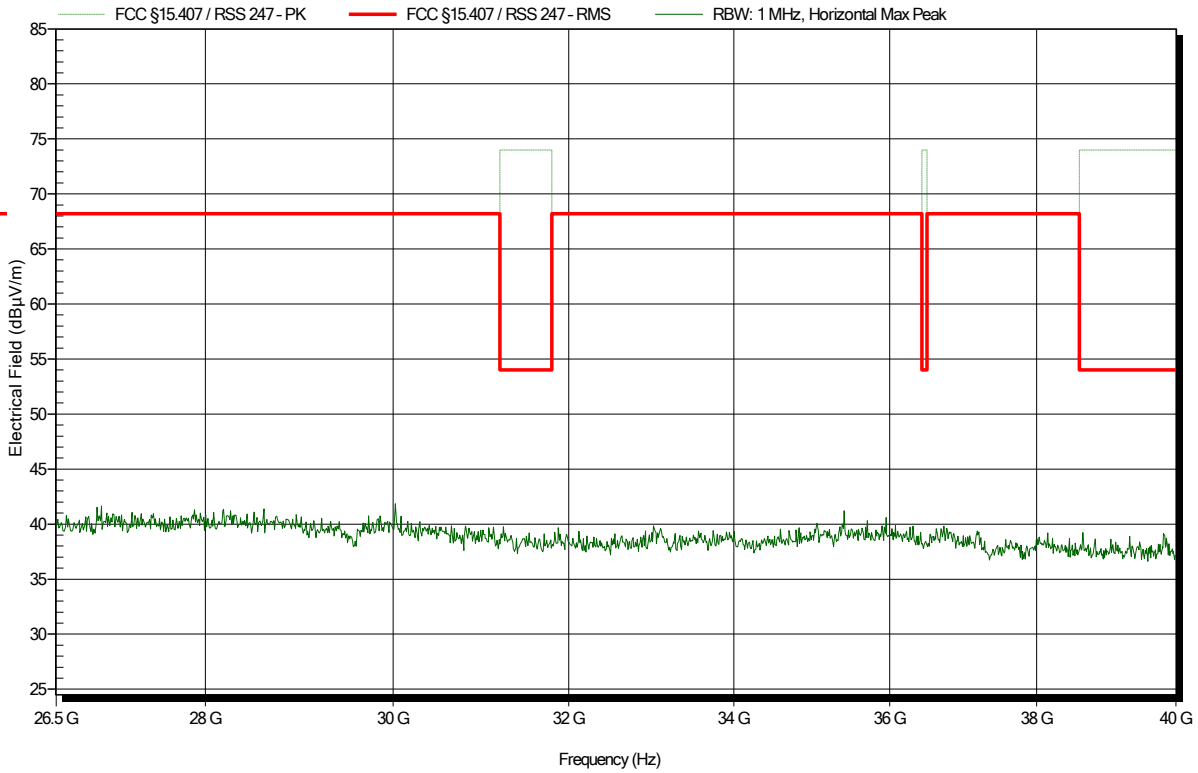

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5580 MHz
Test Date:	2019-09-27
Note:	

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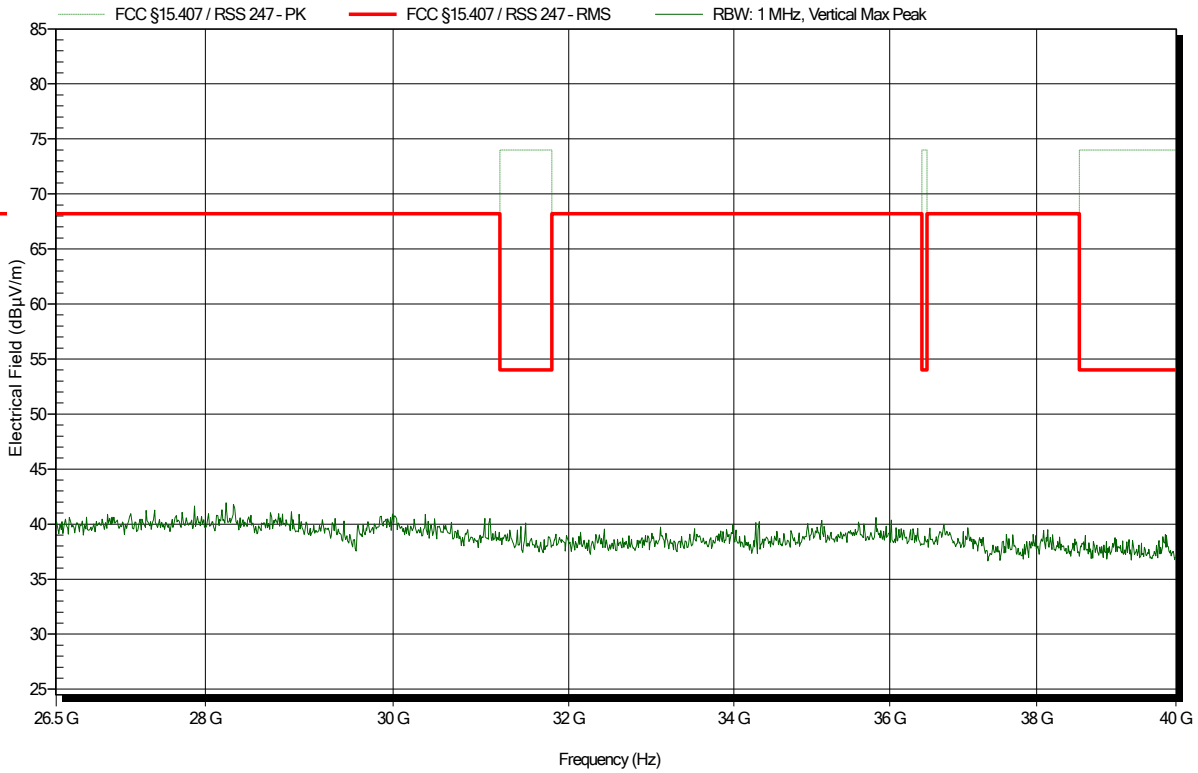

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-07-30
Note:	

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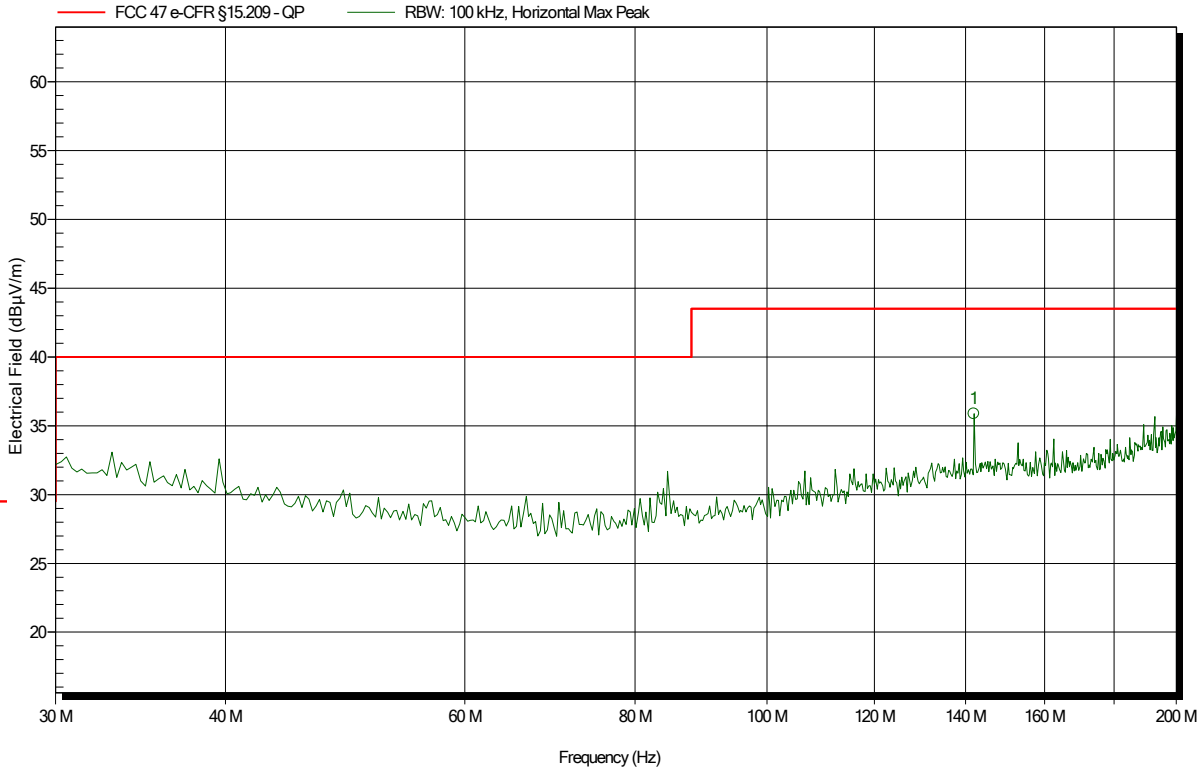

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
141.971 MHz	35.87 dBµV/m	43.5 dBµV/m	-7.63 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-07-30
Note:	

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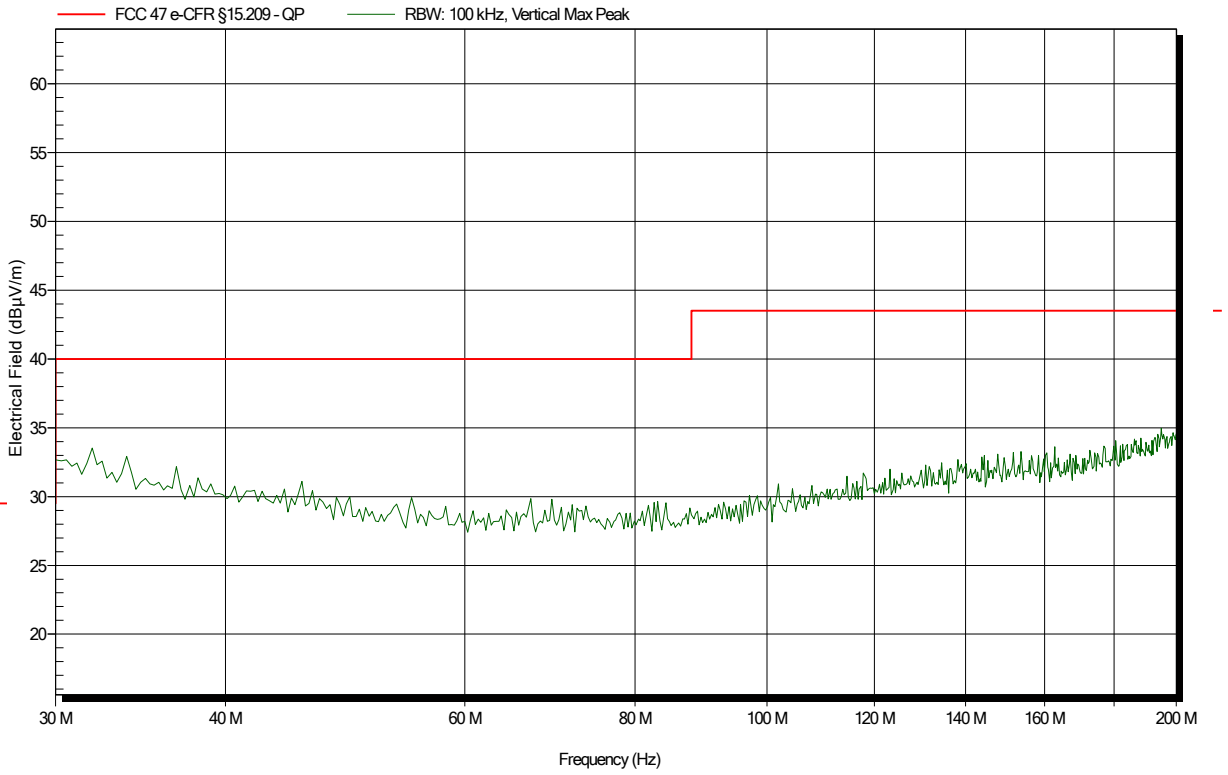

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-07-30
Note:	

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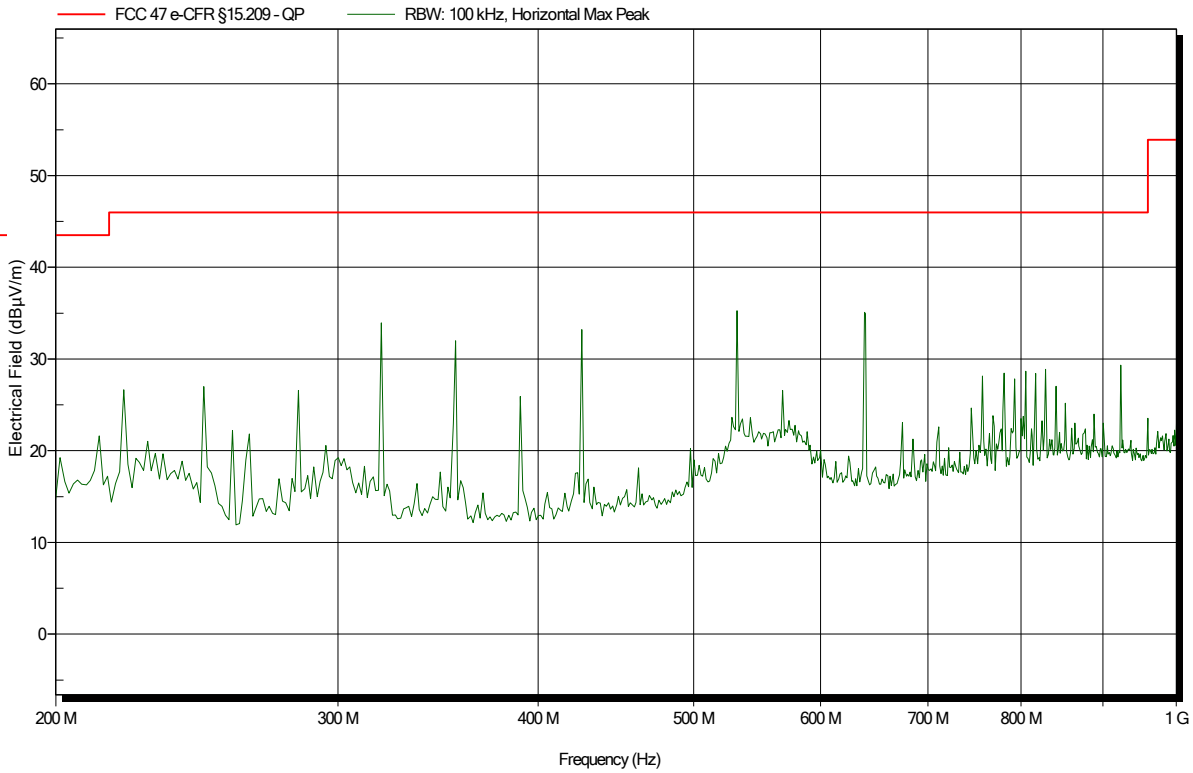

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-07-30
Note:	

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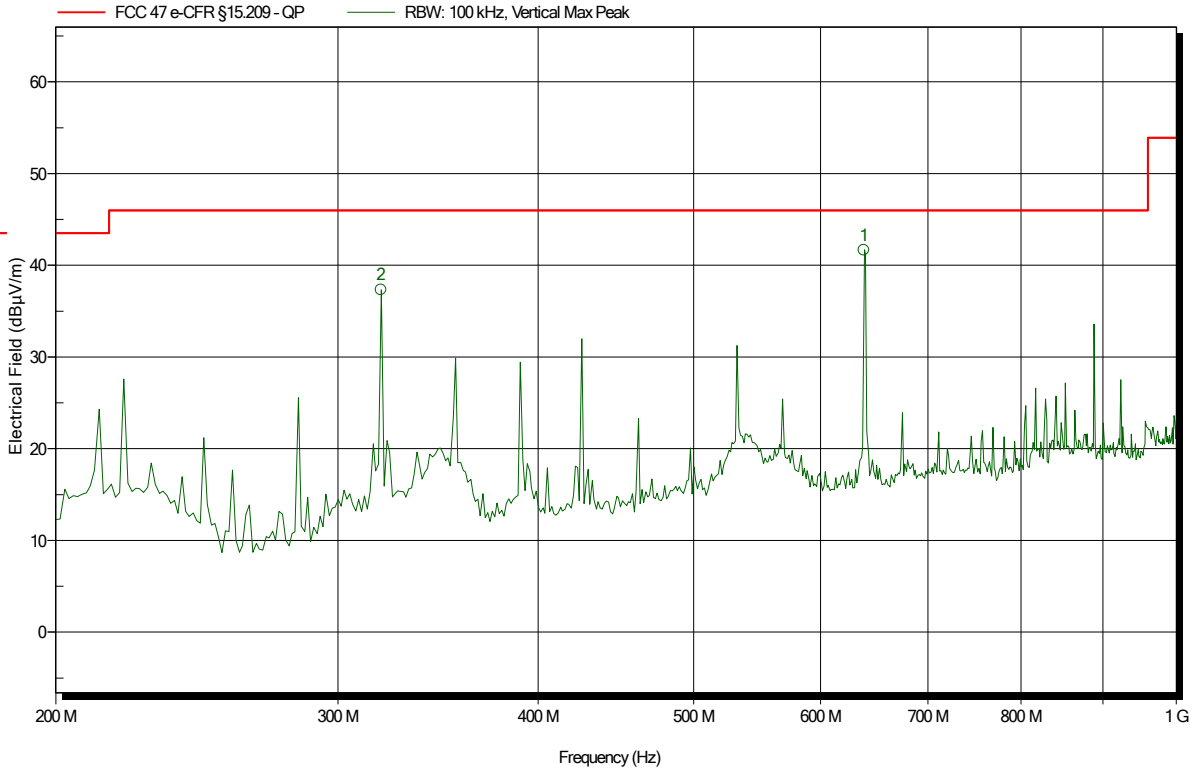

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.31 dBµV/m	46 dBµV/m	-8.69 dB	Pass
638.462 MHz	41.67 dBµV/m	46 dBµV/m	-4.33 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-08-04
Note:	

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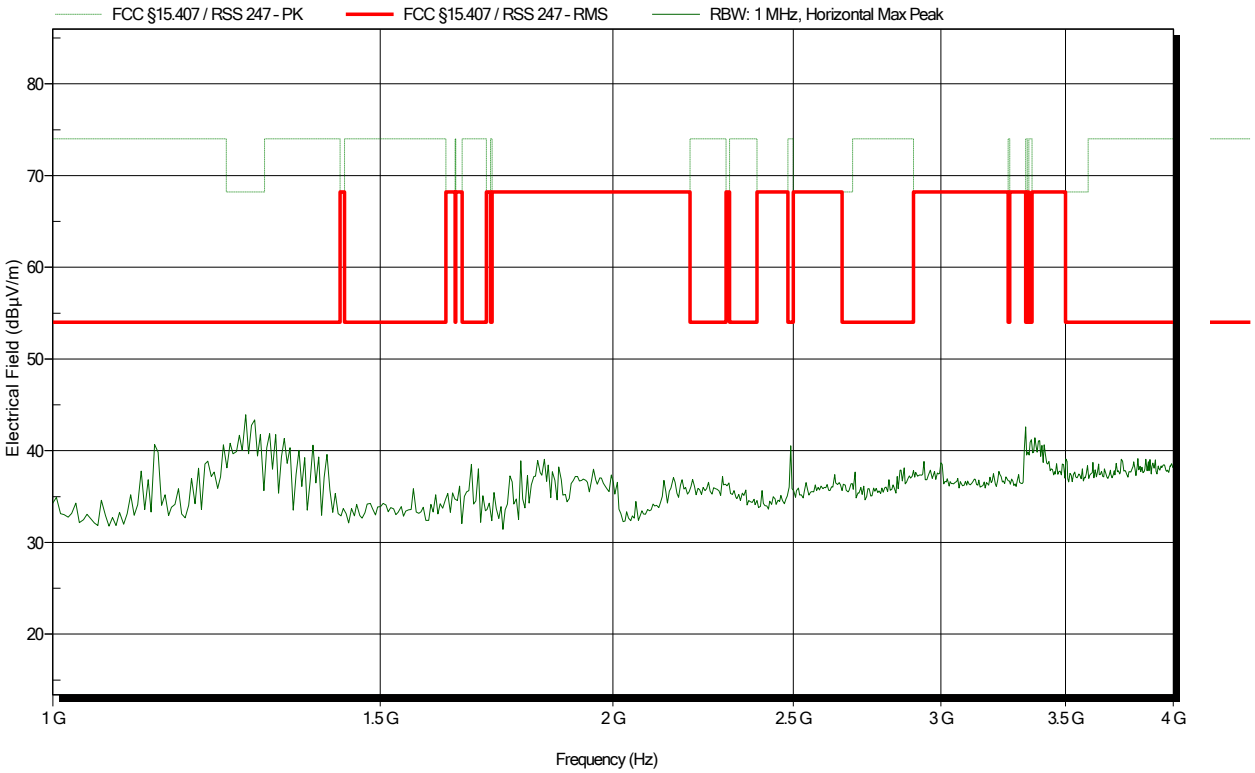

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-08-04
Note:	

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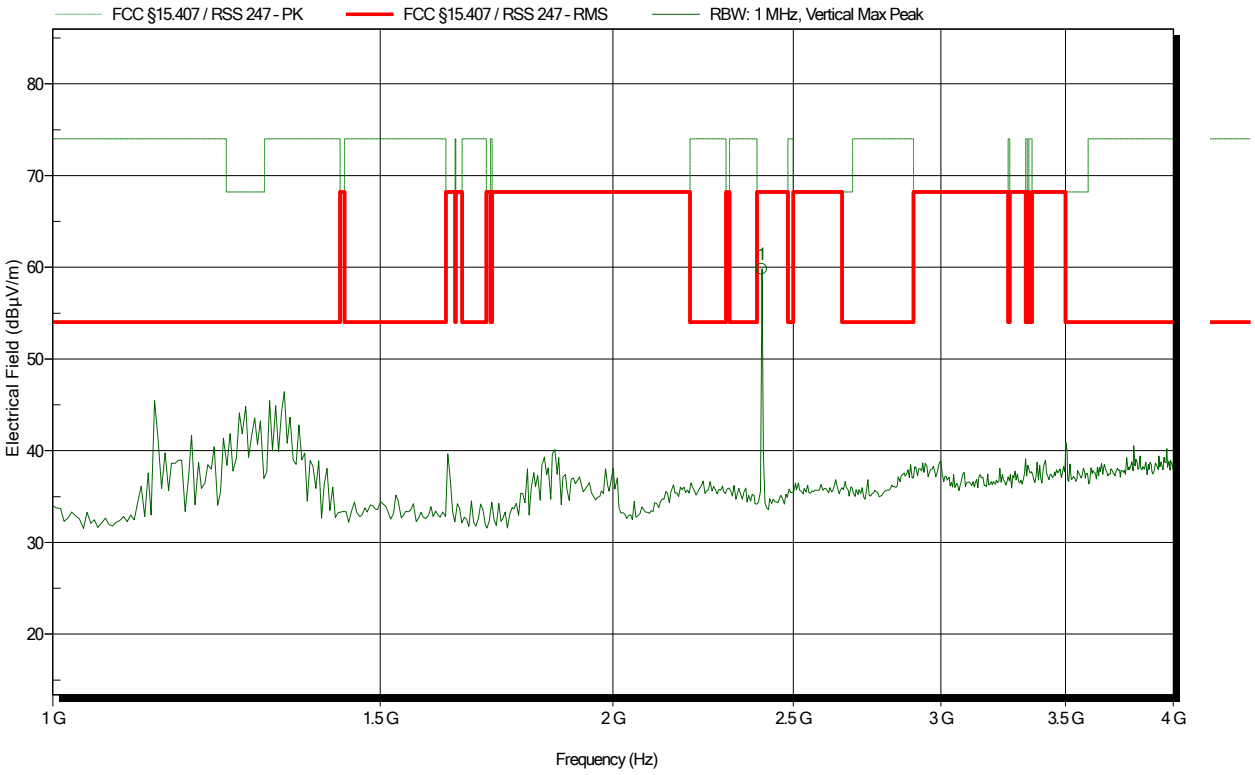

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.404 GHz	59.79 dBµV/m	68.2 dBµV/m	-8.41 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-08-04
Note:	

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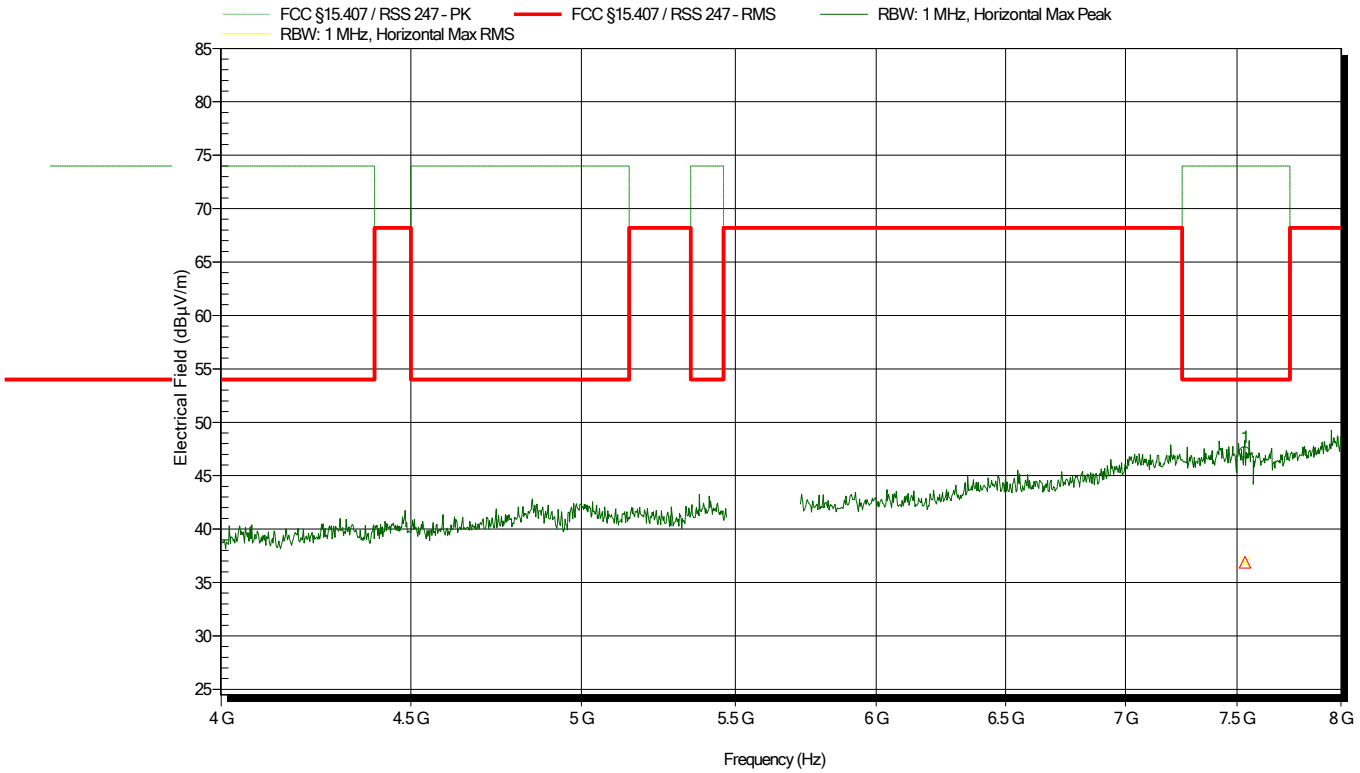

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.537 GHz	47.18 dBµV/m	74 dBµV/m	-26.82 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
7.537 GHz	36.89 dBµV/m	54 dBµV/m	-17.11 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-08-04
Note:	

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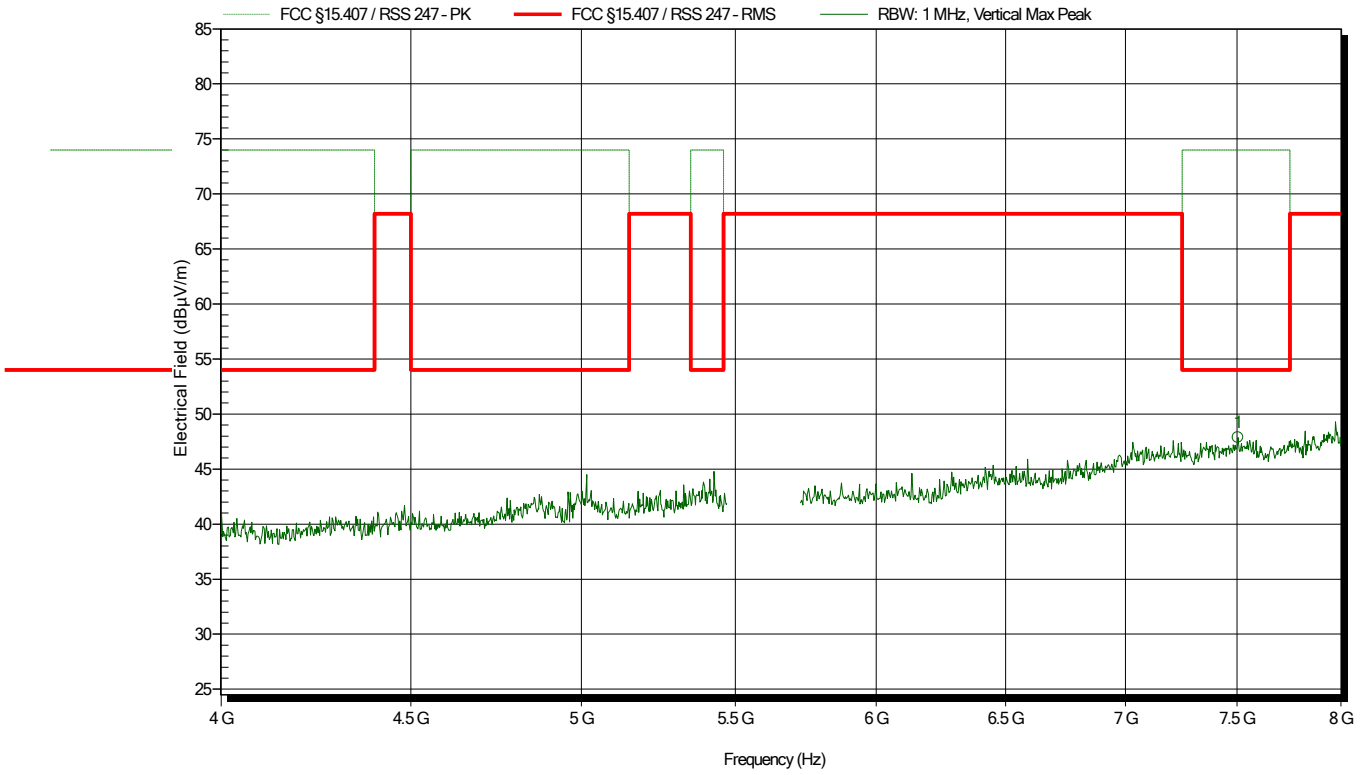

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.504 GHz	47.87 dBµV/m	74 dBµV/m	-26.13 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-19
Note:	

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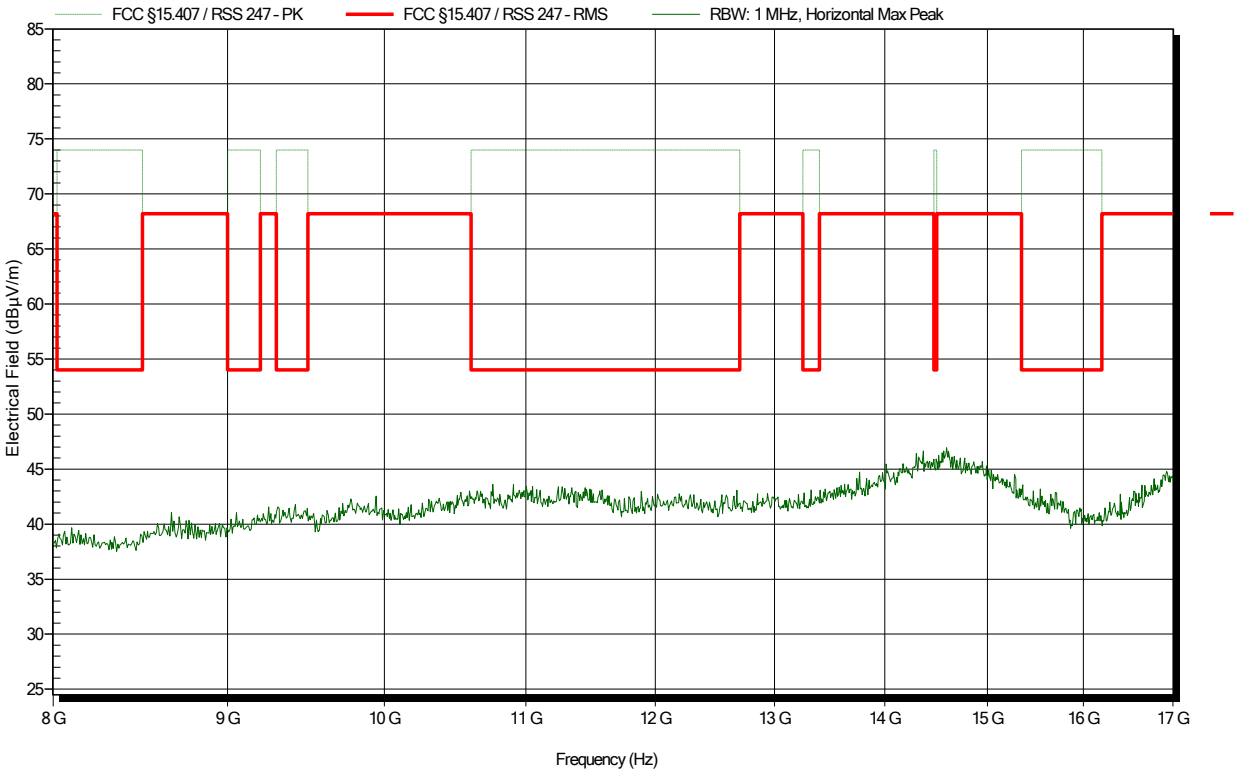

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-19
Note:	

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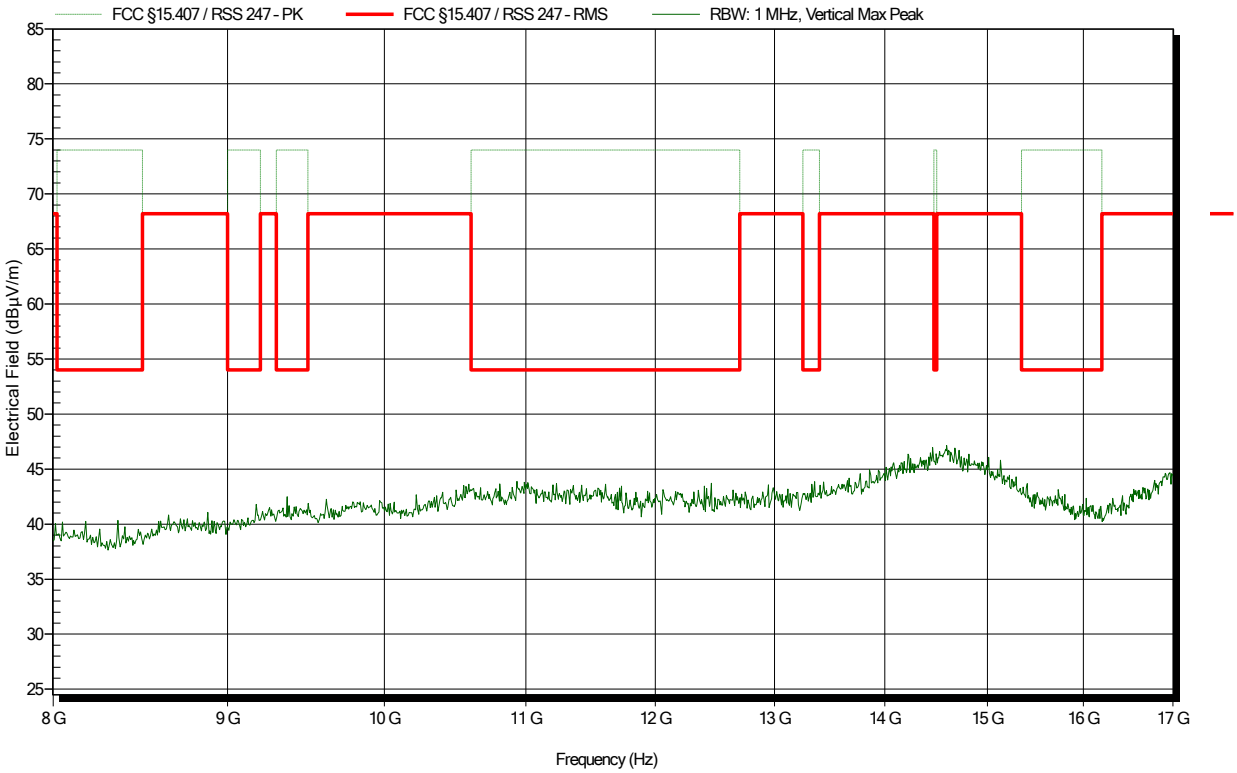

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-27
Note:	

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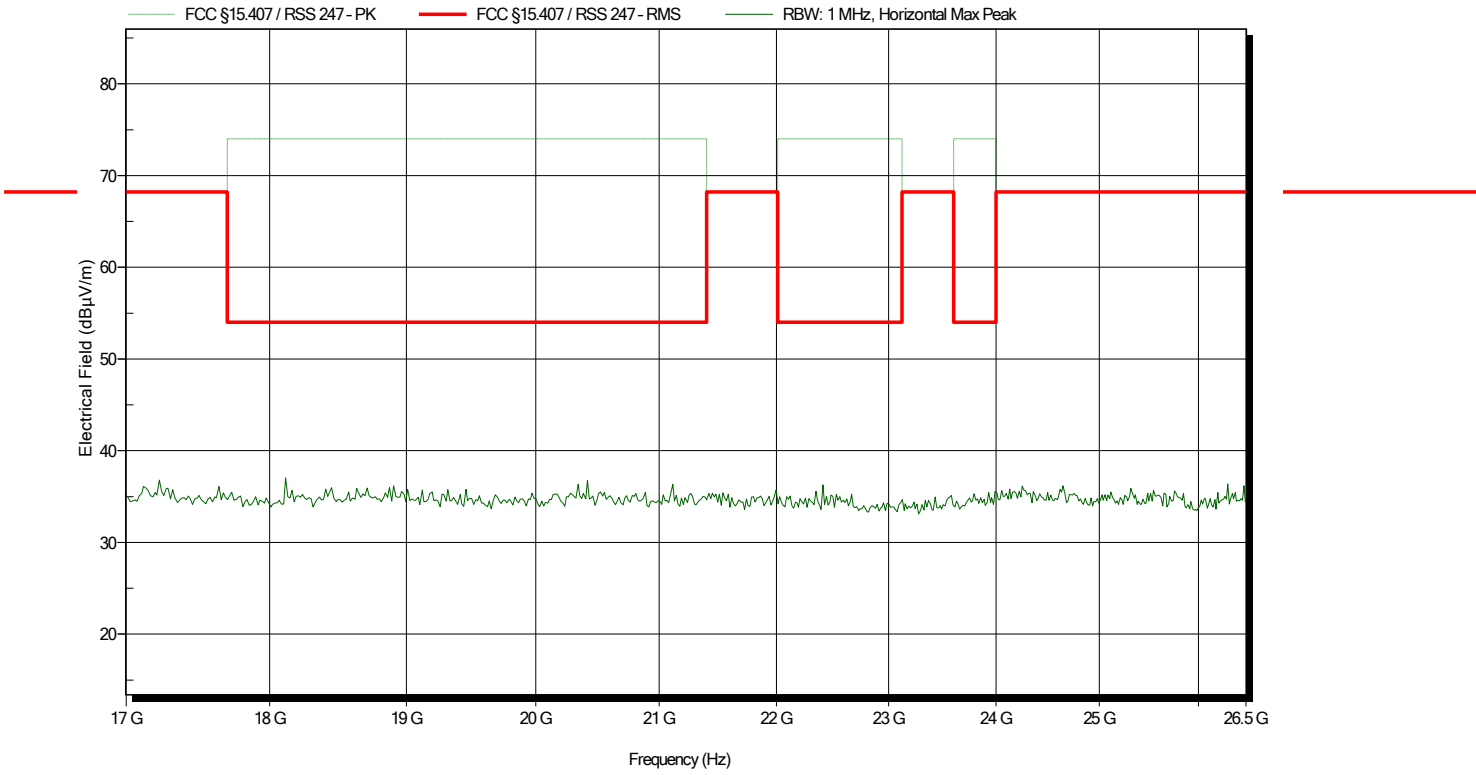

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-27
Note:	

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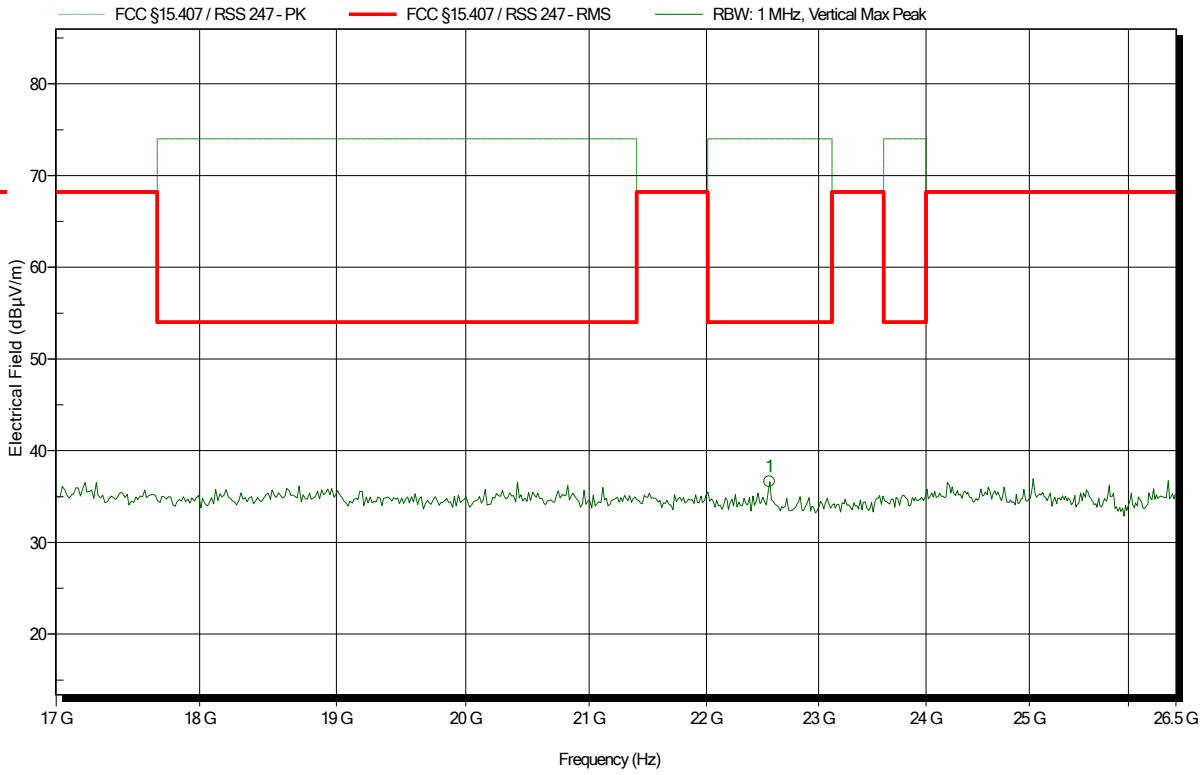

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.557 GHz	36.62 dBµV/m	54 dBµV/m	-17.38 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-27
Note:	

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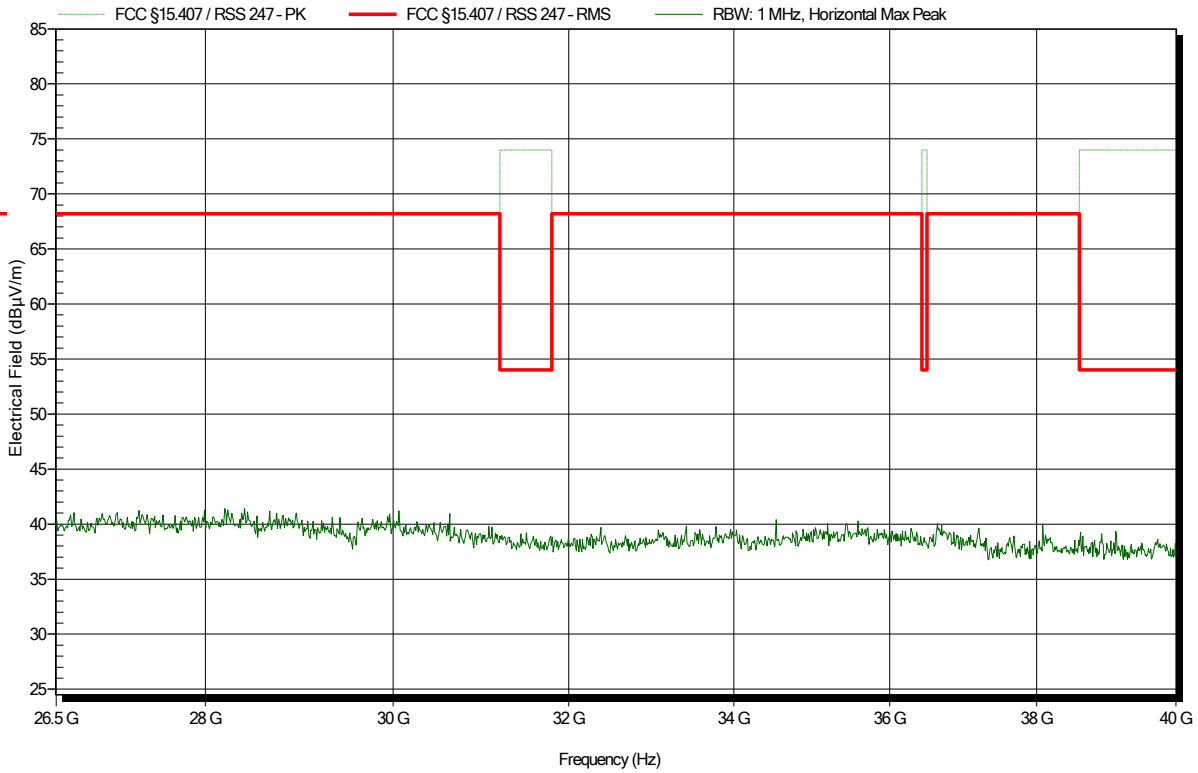

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5600 MHz
Test Date:	2019-09-27
Note:	

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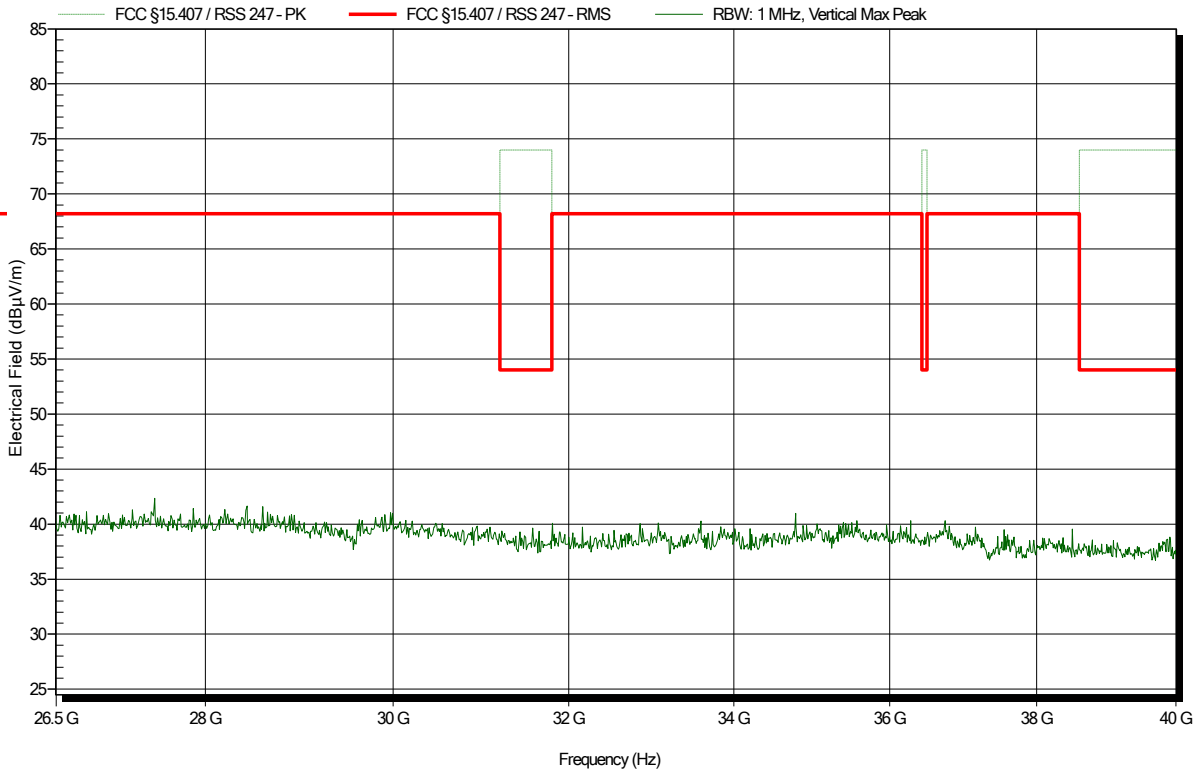

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-10-07
Note:	

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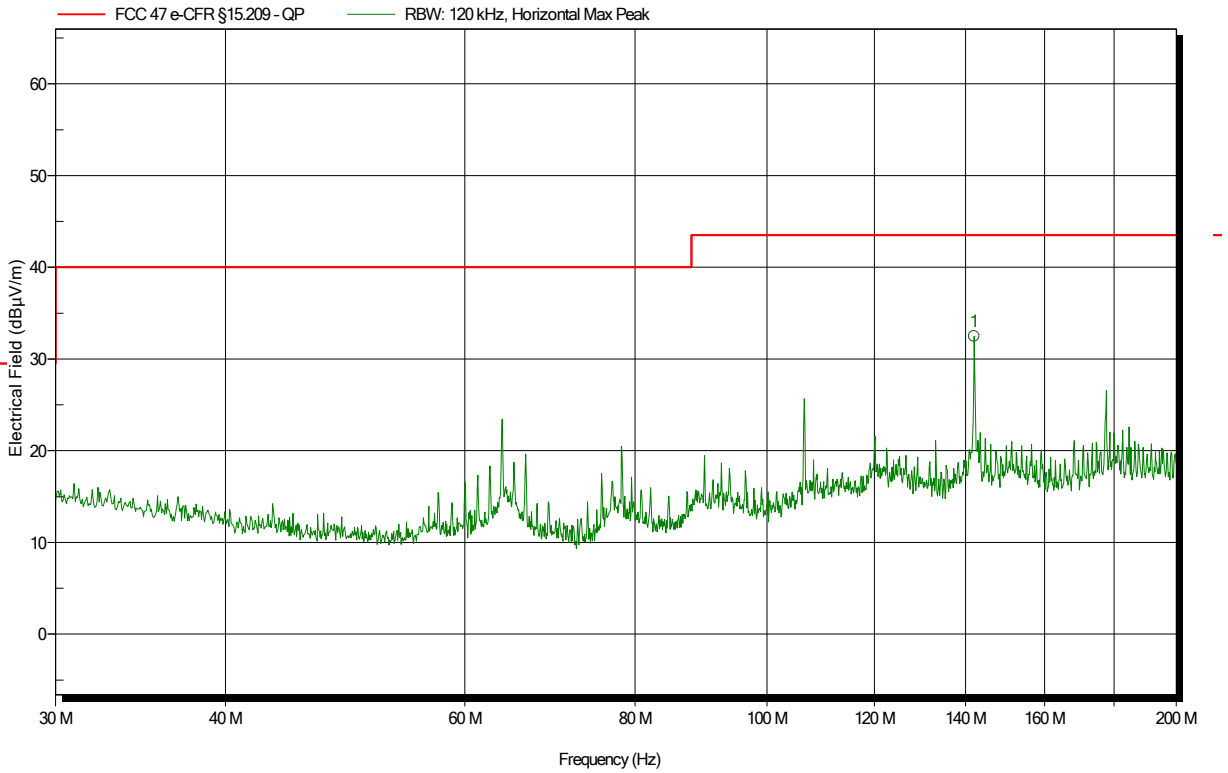

Frequency	Peak	Peak Limit	Peak Difference	Status
142.02 MHz	32.5 dBµV/m	43.5 dBµV/m	-11.04 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-10-07
Note:	

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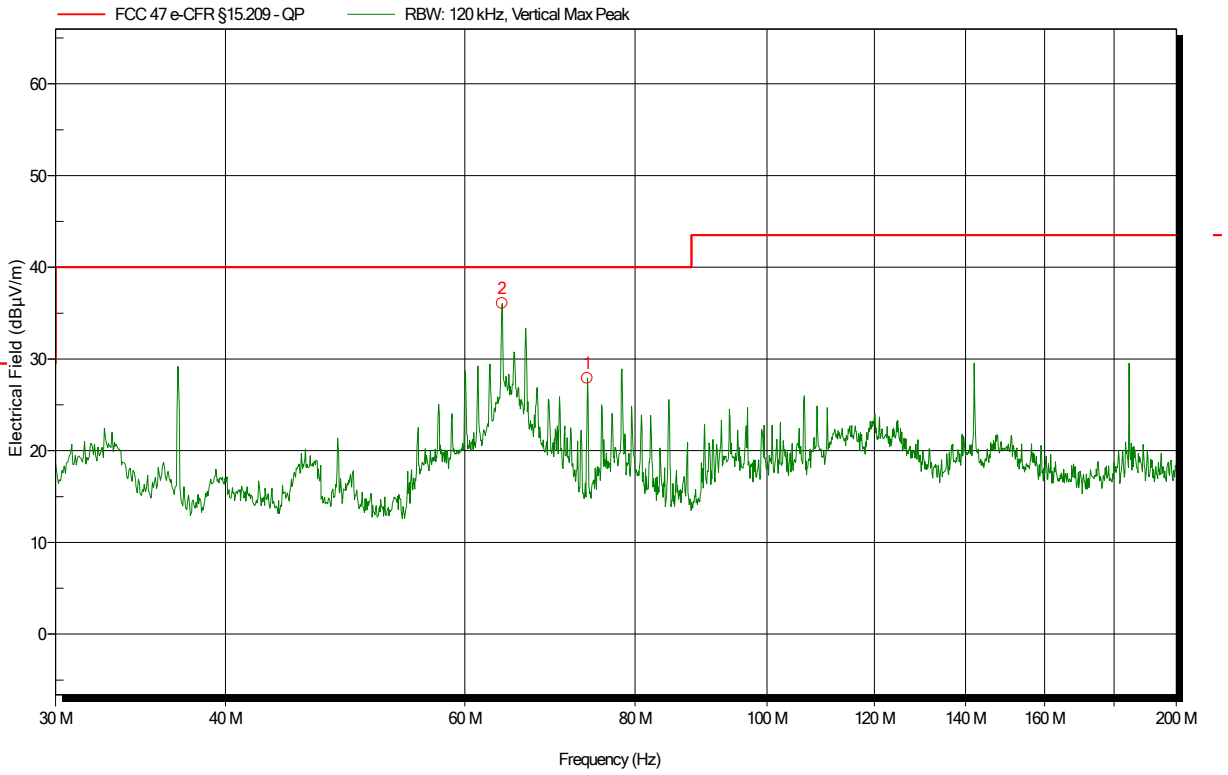

Frequency	Peak	Peak Limit	Peak Difference	Status
63.9 MHz	36.1 dBµV/m	40 dBµV/m	-3.91 dB	Pass
73.8 MHz	27.9 dBµV/m	40 dBµV/m	-12.1 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Weber
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-10-10
Note:	

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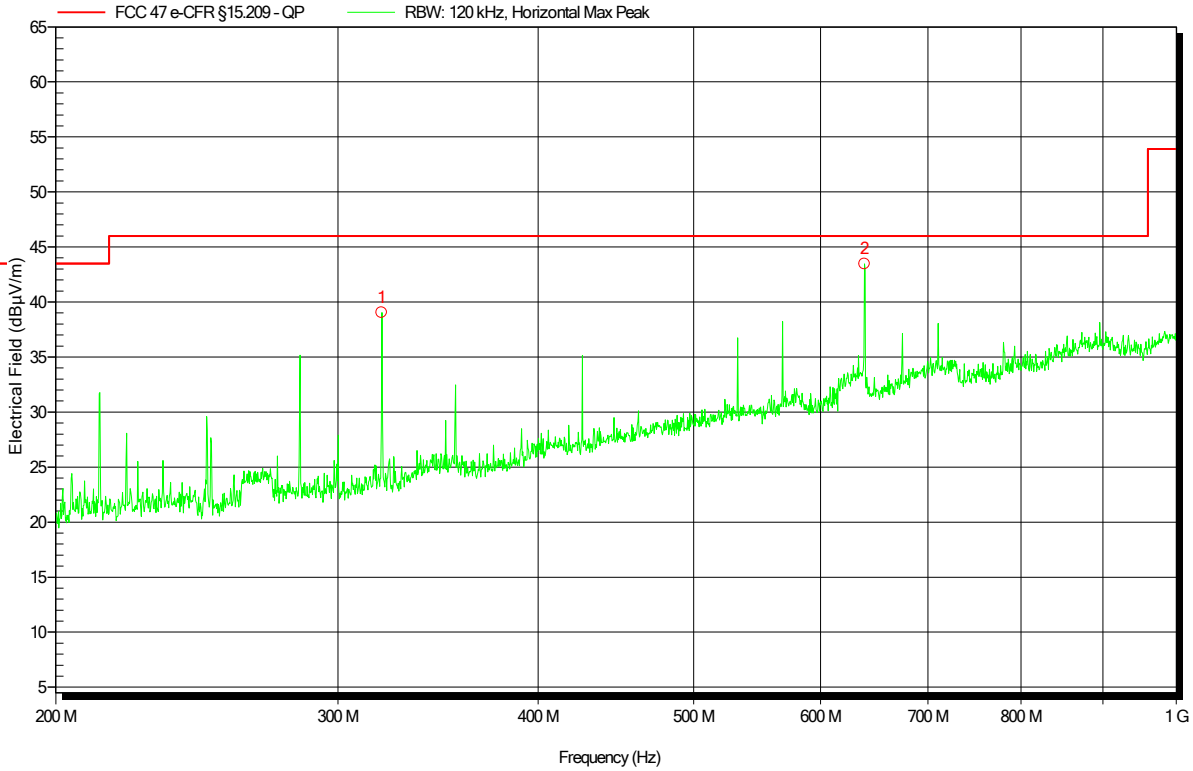

Frequency	Peak	Peak Limit	Peak Difference	Status
319.46 MHz	39.1 dBµV/m	46 dBµV/m	-6.95 dB	Pass
638.96 MHz	43.5 dBµV/m	46 dBµV/m	-2.54 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Weber
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-10-10
Note:	

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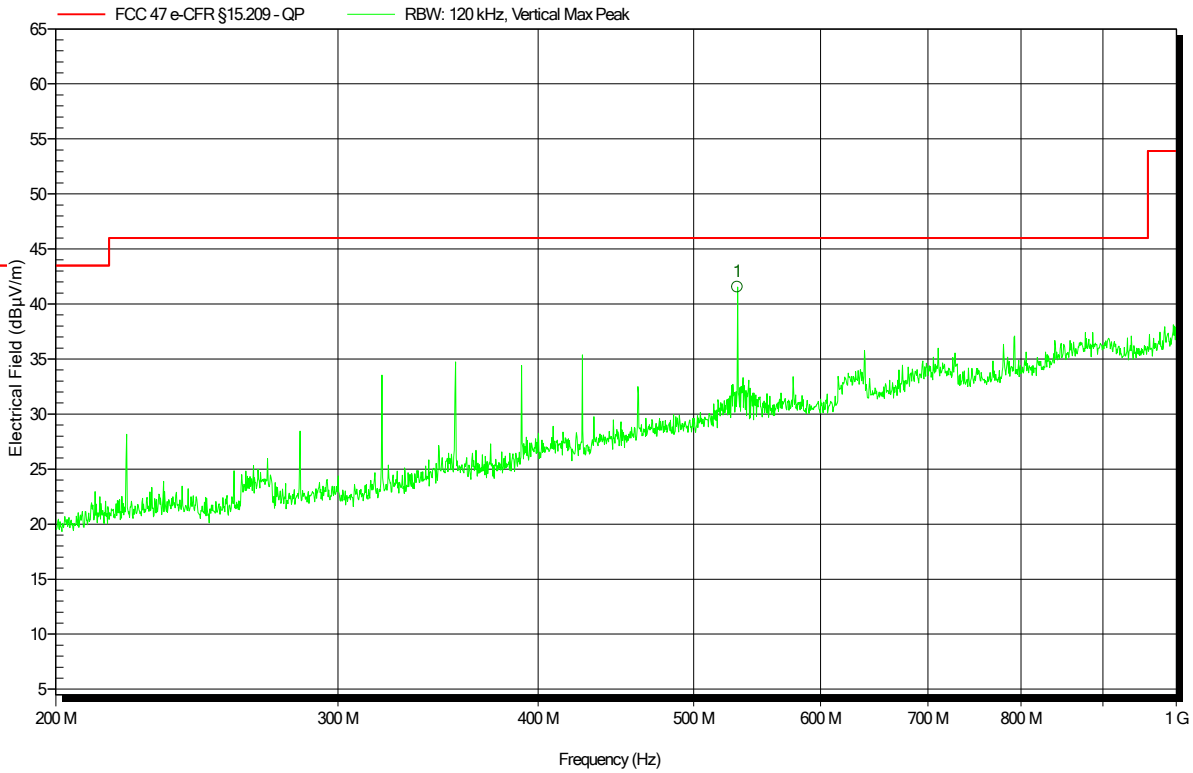

Frequency	Peak	Peak Limit	Peak Difference	Status
532.46 MHz	41.5 dBµV/m	46 dBµV/m	-4.46 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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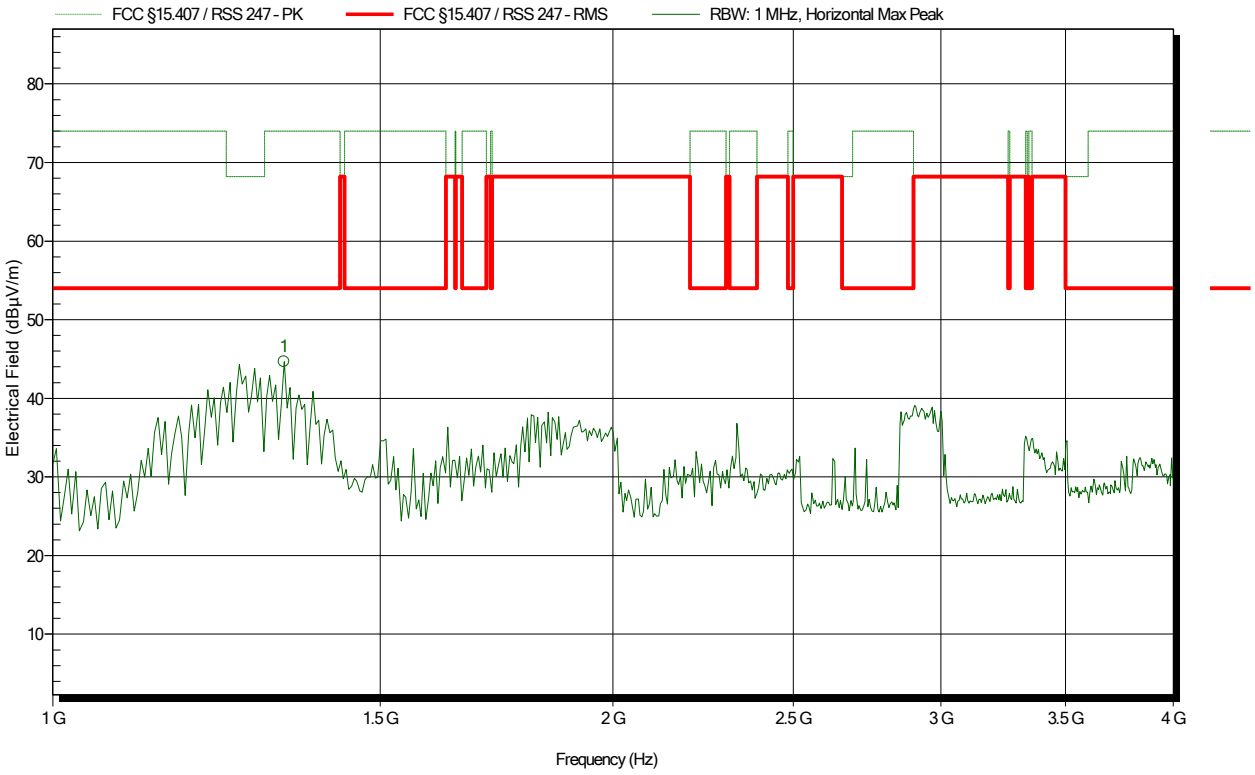

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.332 GHz	44.67 dBµV/m	54 dBµV/m	-9.33 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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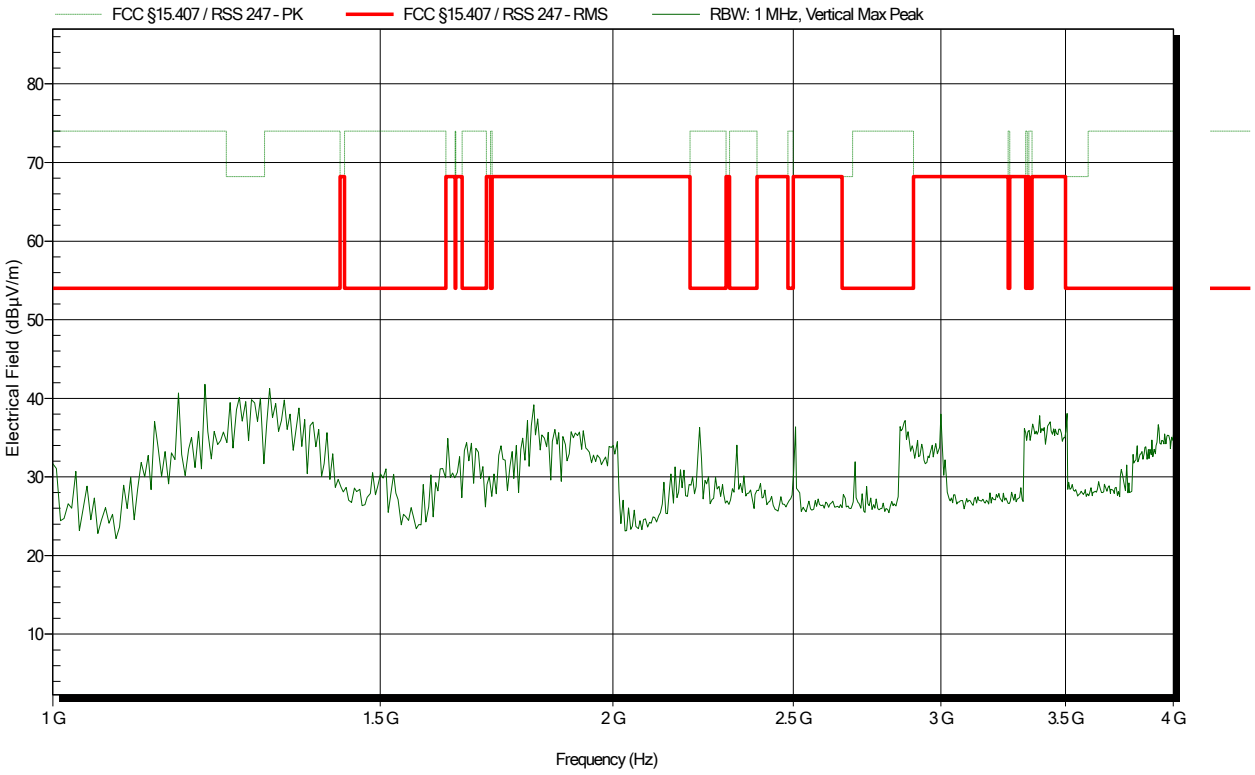

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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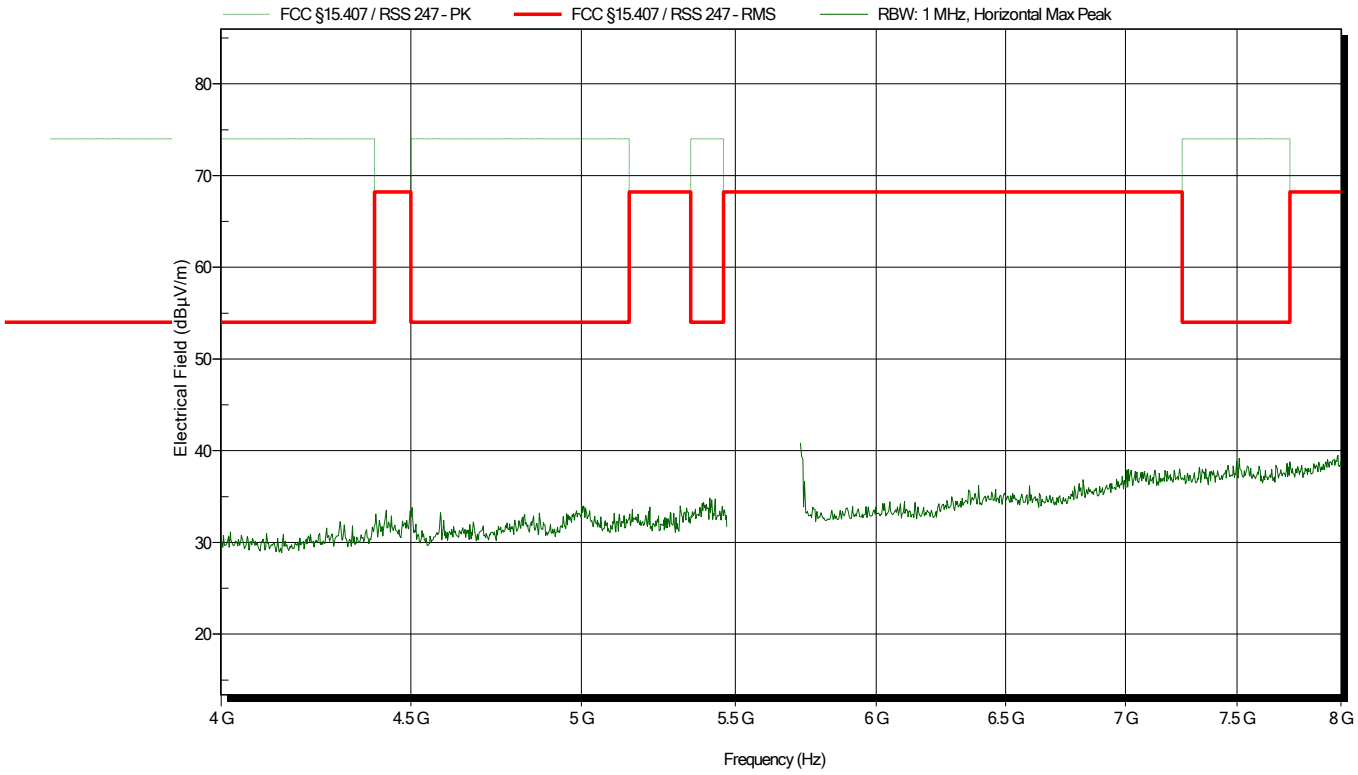

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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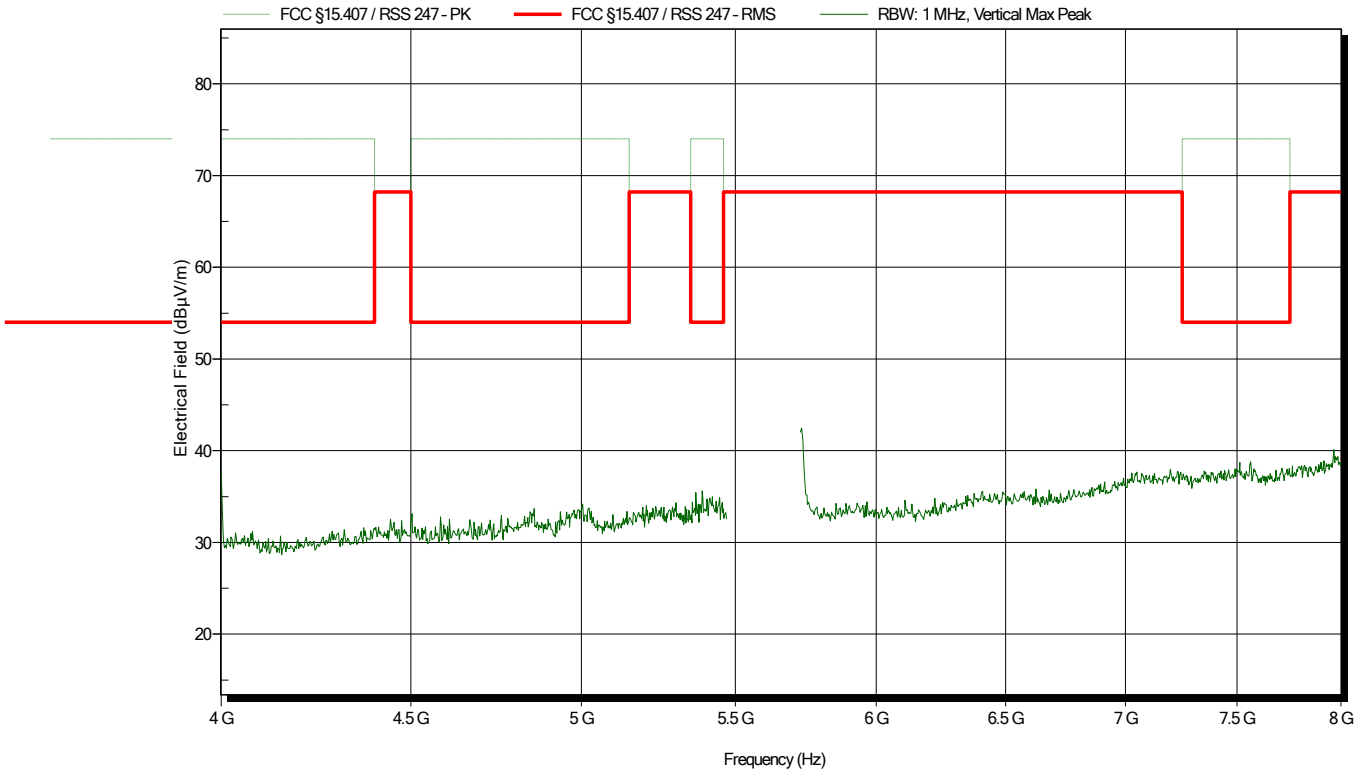

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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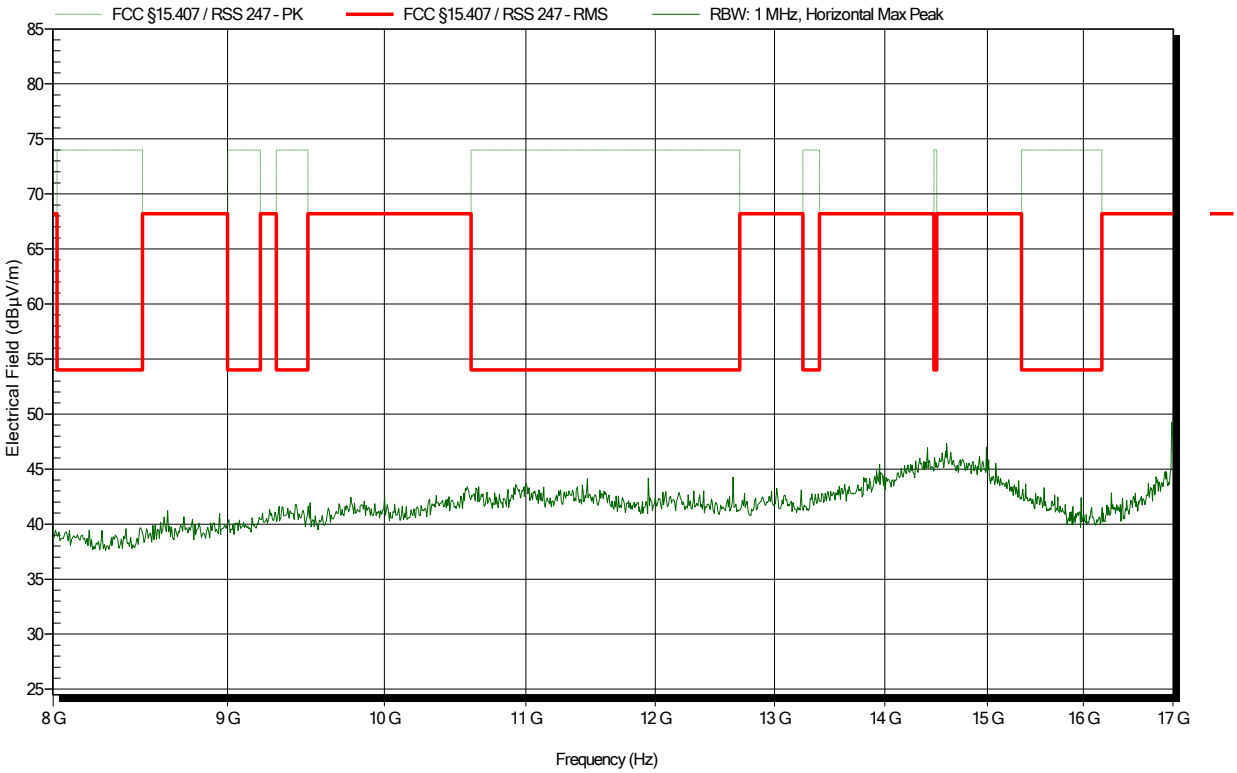

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-30
Note:	

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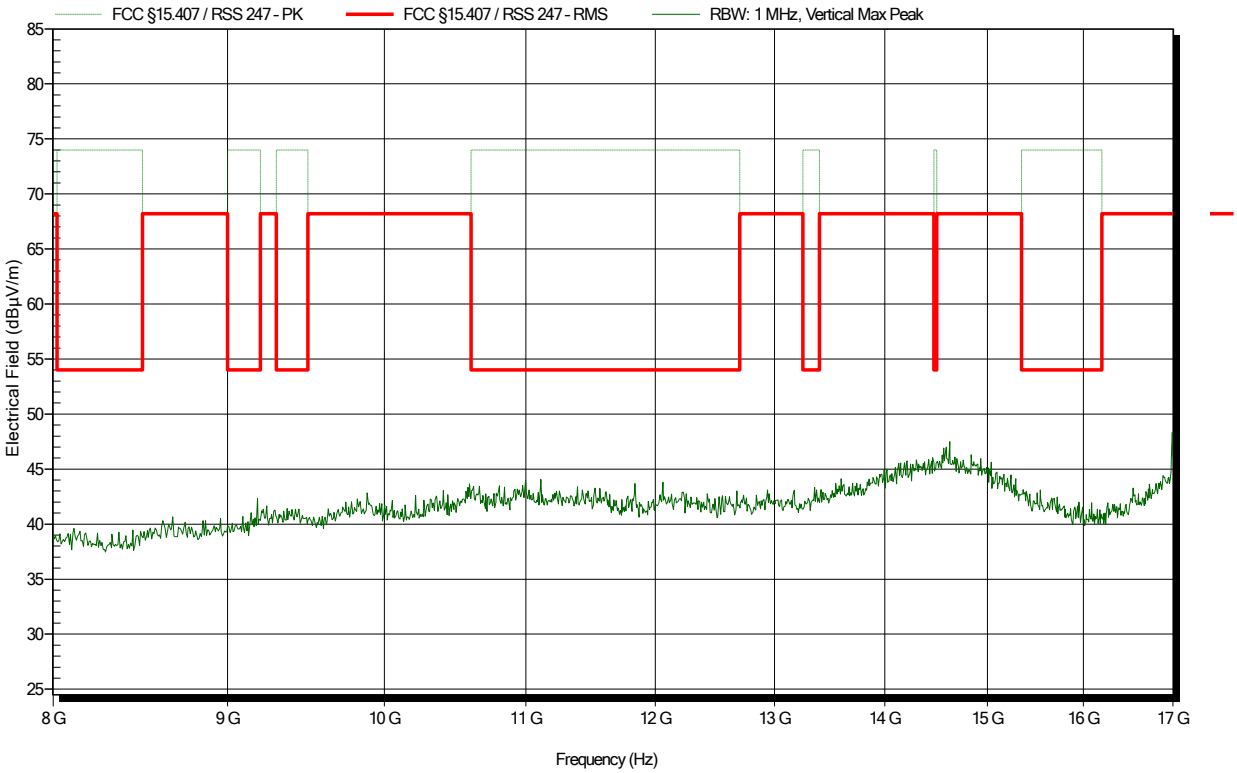

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-27
Note:	

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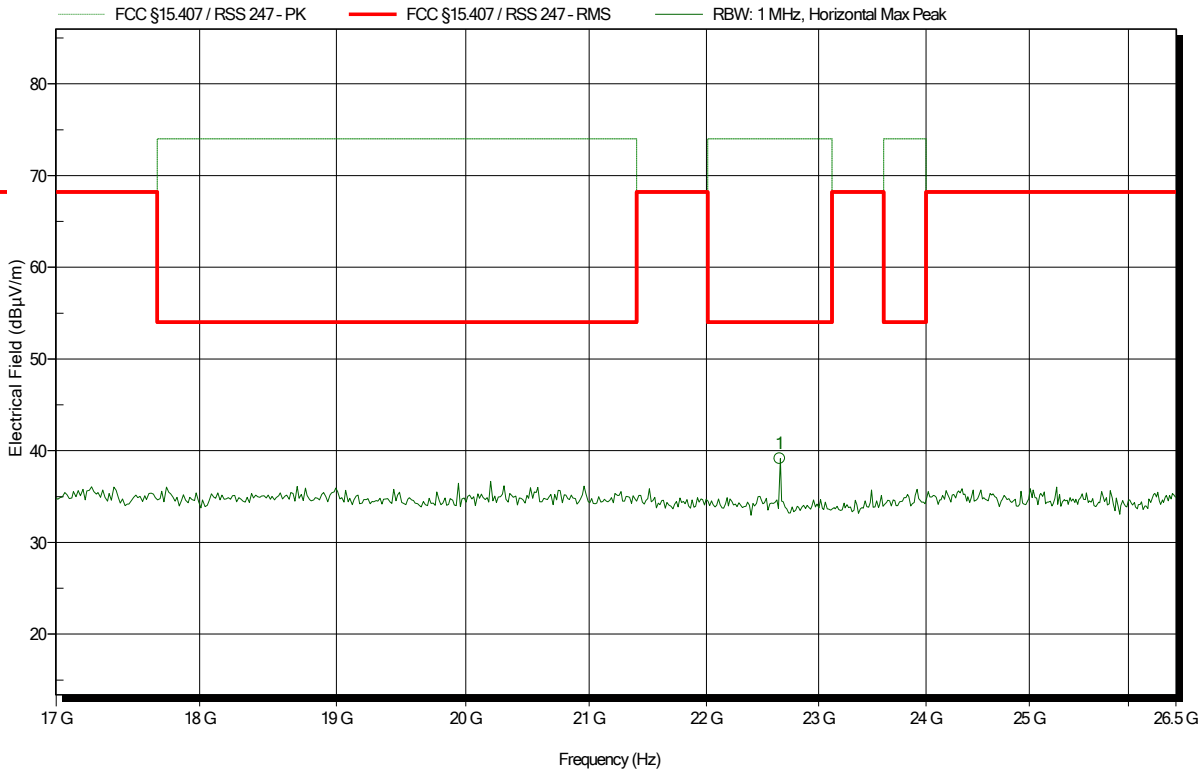

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.648 GHz	39.16 dBµV/m	54 dBµV/m	-14.84 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-27
Note:	

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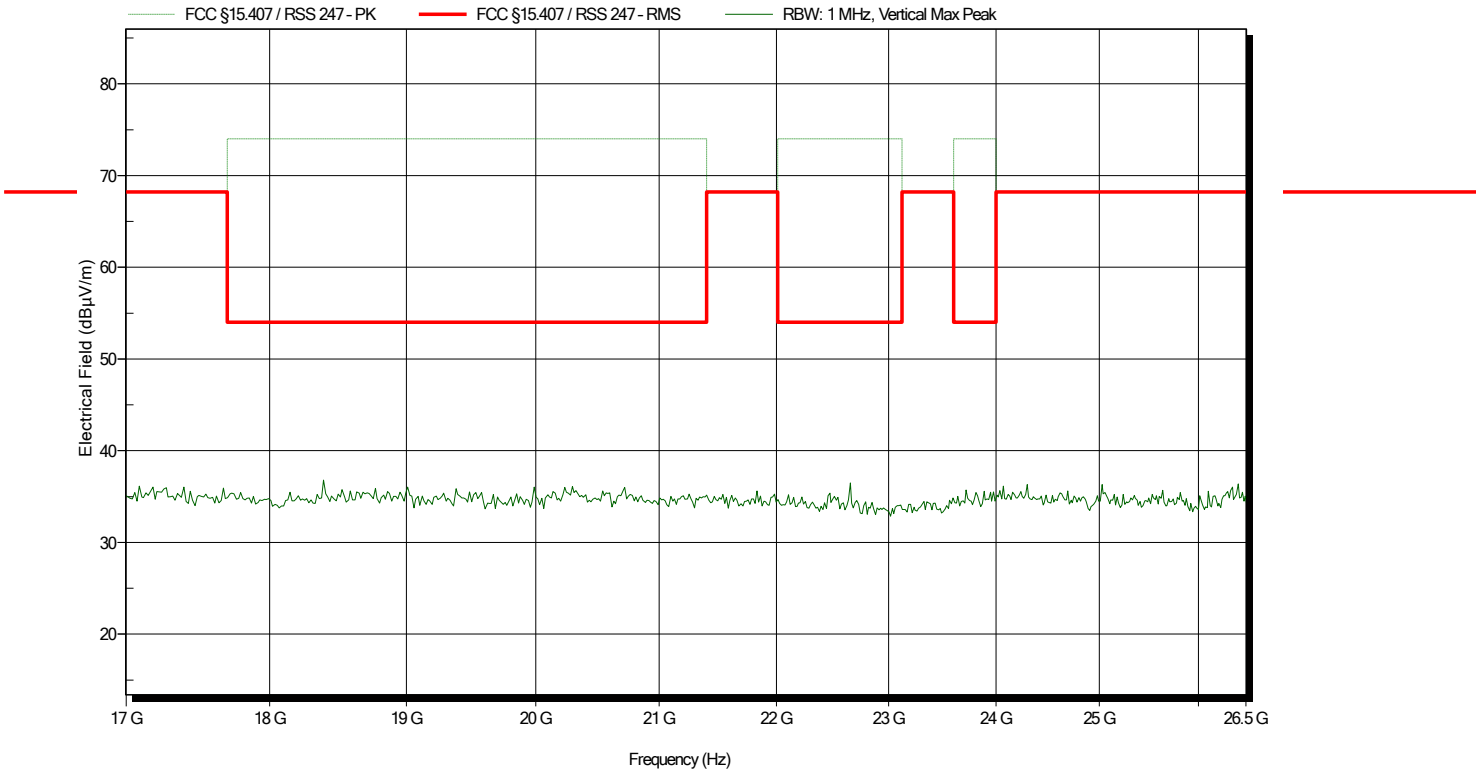

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-27
Note:	

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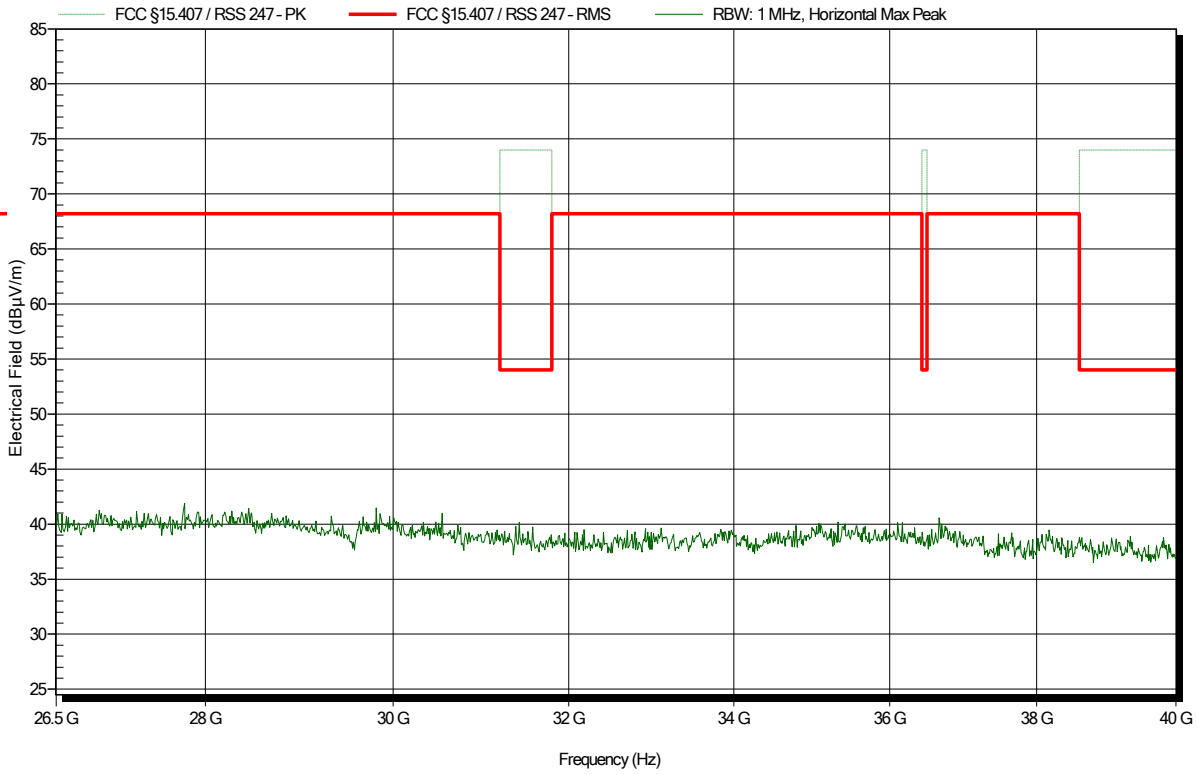

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5660 MHz
Test Date:	2019-09-27
Note:	

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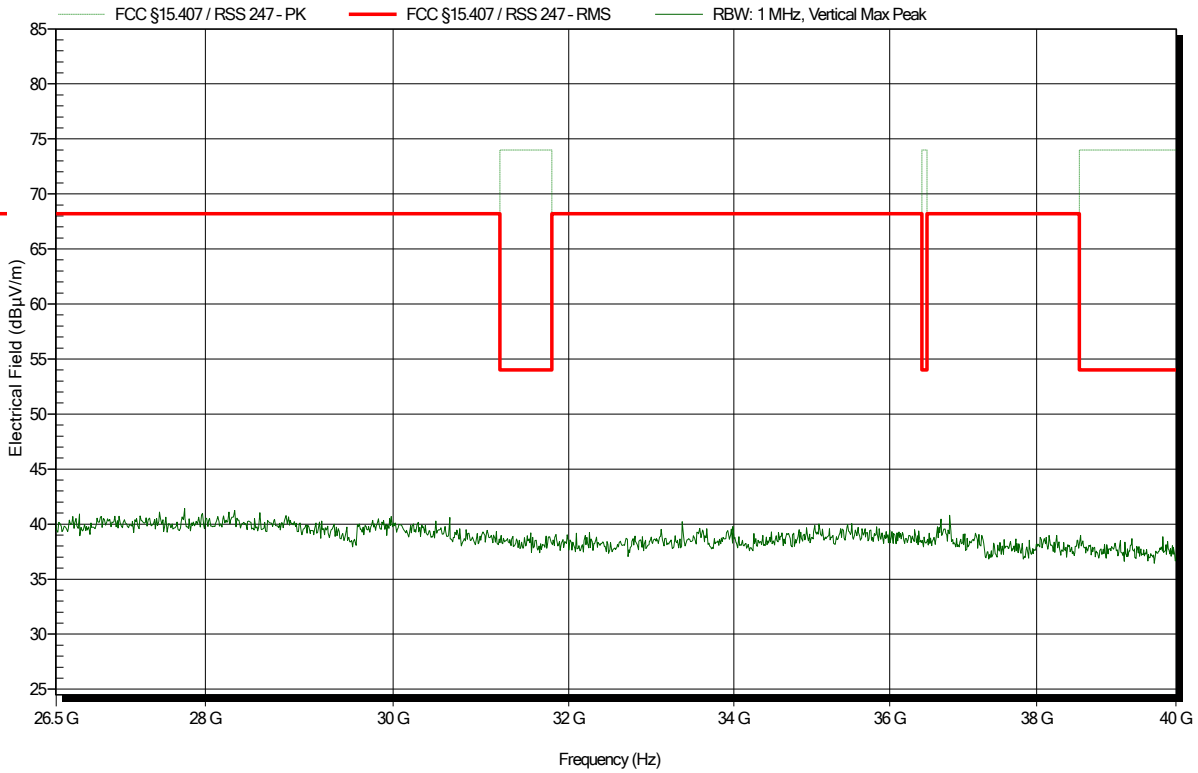

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-07-30
Note:	

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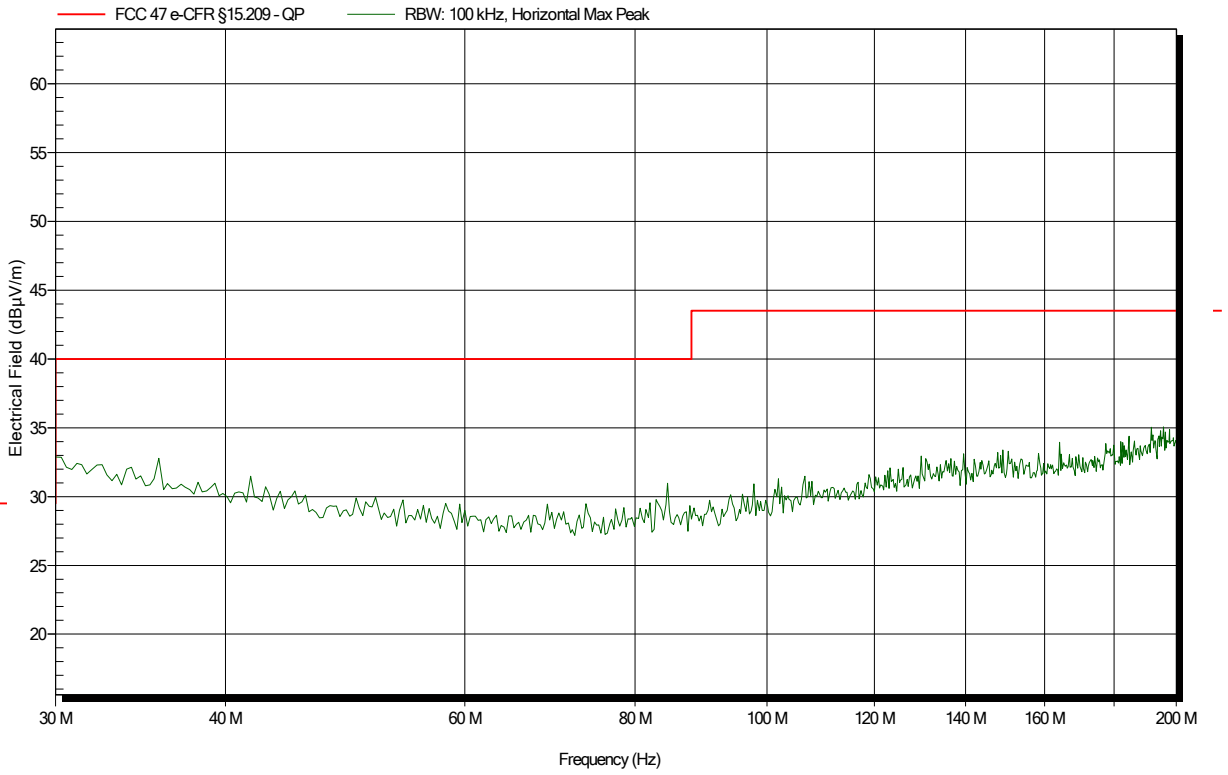

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-07-30
Note:	

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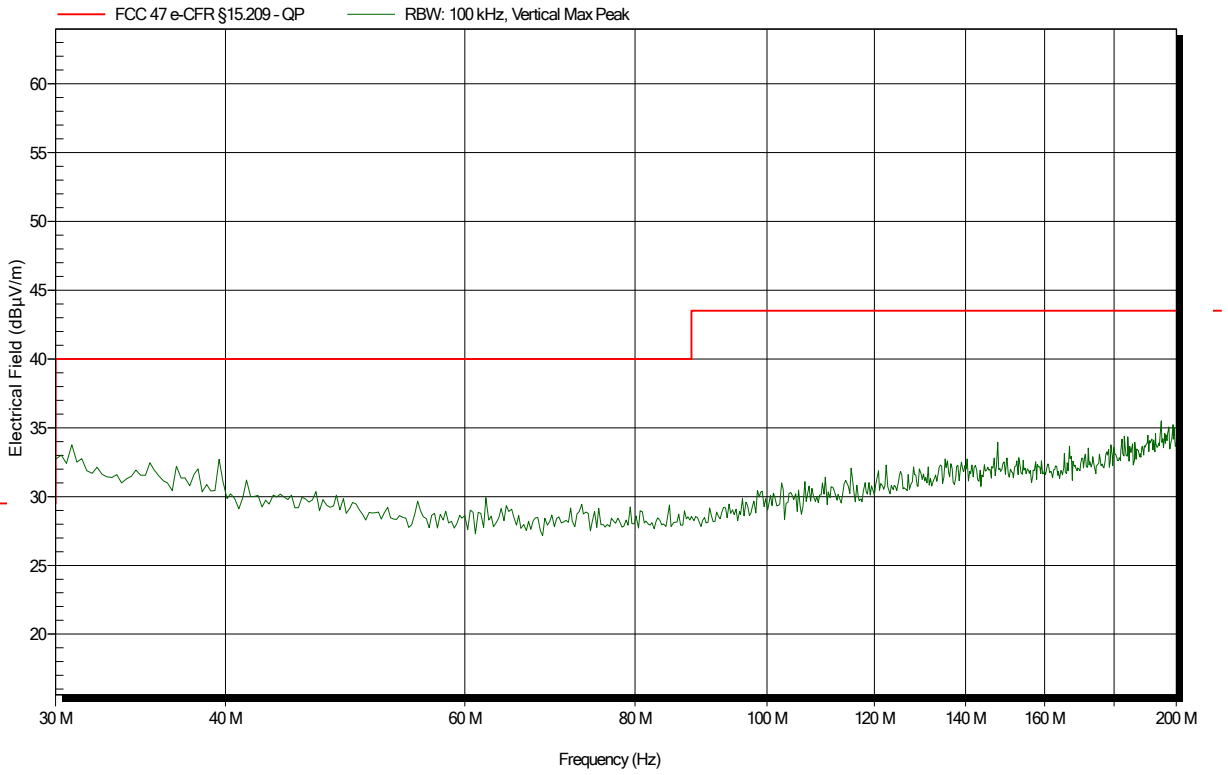

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-07-30
Note:	

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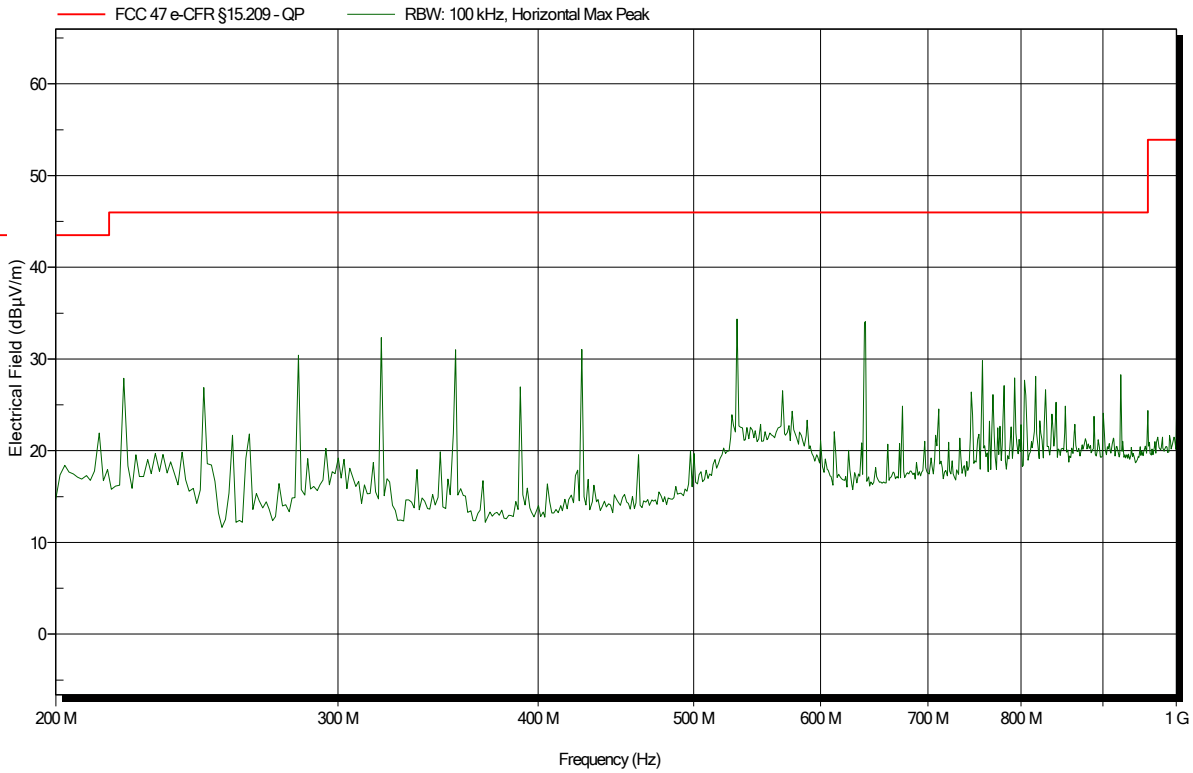

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-07-30
Note:	

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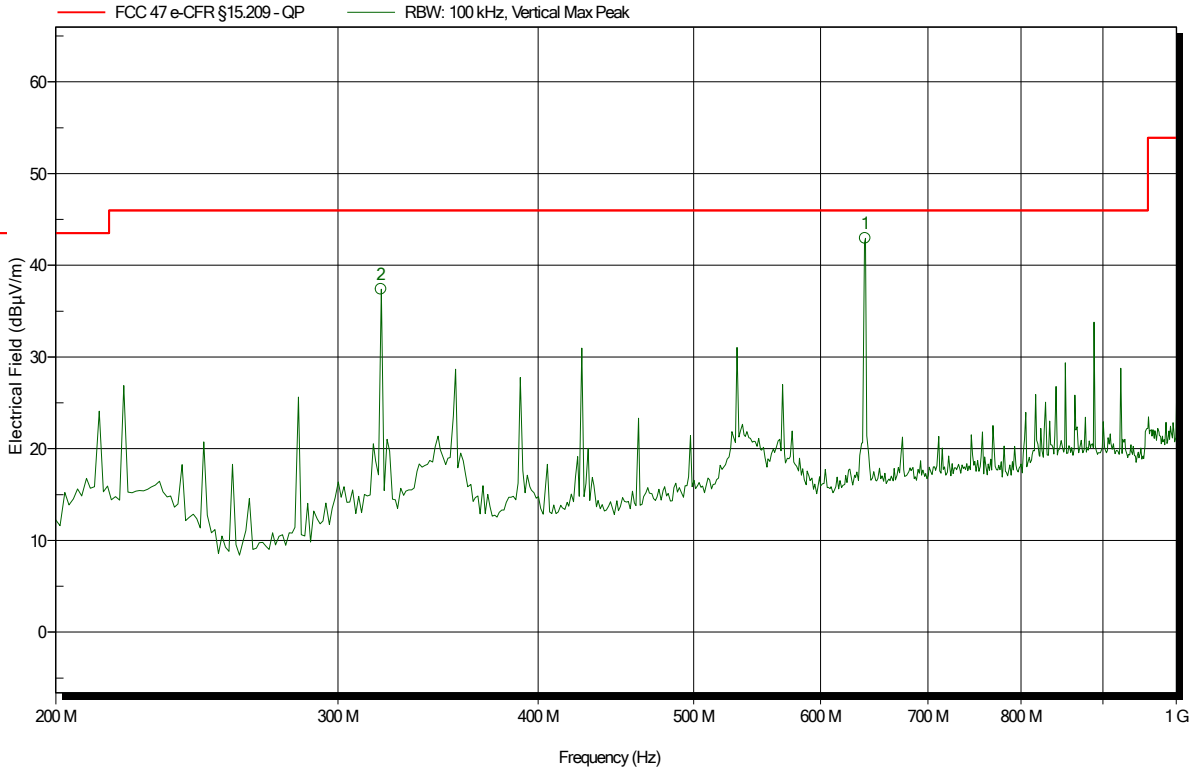

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.39 dBµV/m	46 dBµV/m	-8.61 dB	Pass
639.744 MHz	42.94 dBµV/m	46 dBµV/m	-3.06 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-17
Note:	

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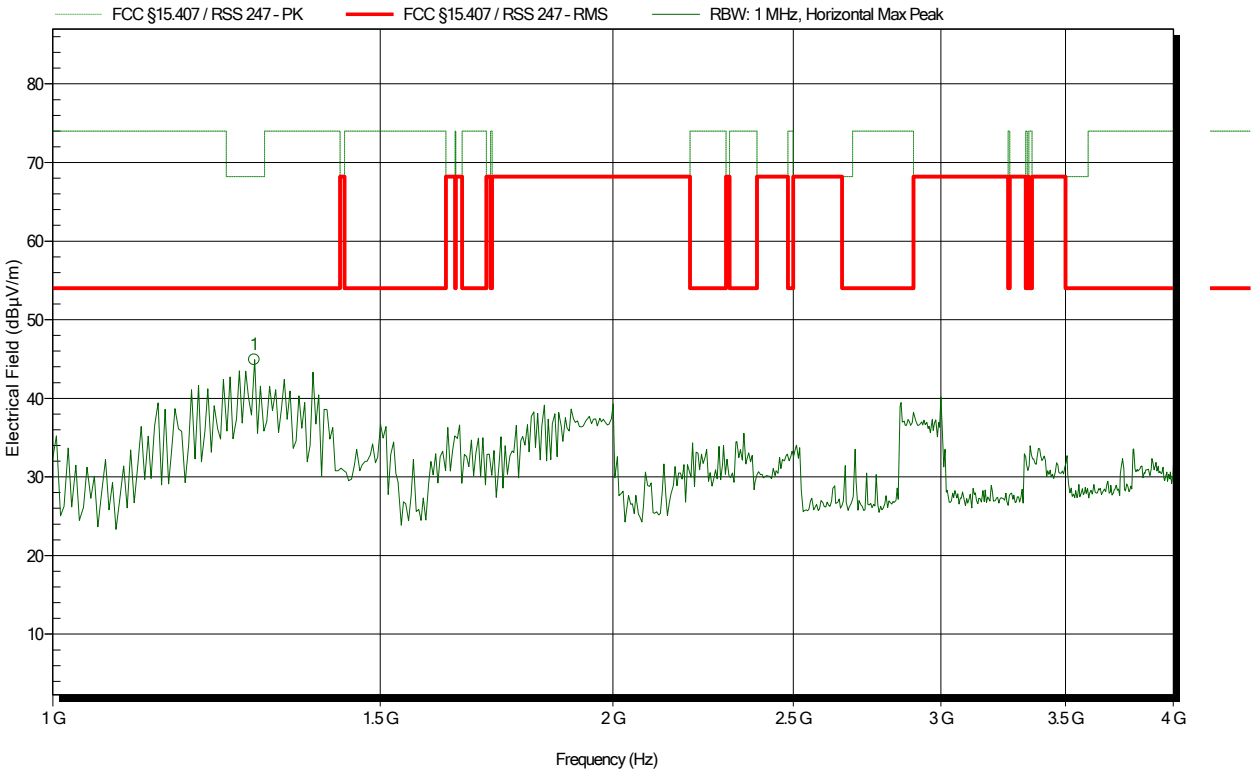

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.284 GHz	44.9 dBµV/m	54 dBµV/m	-9.1 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-19
Note:	

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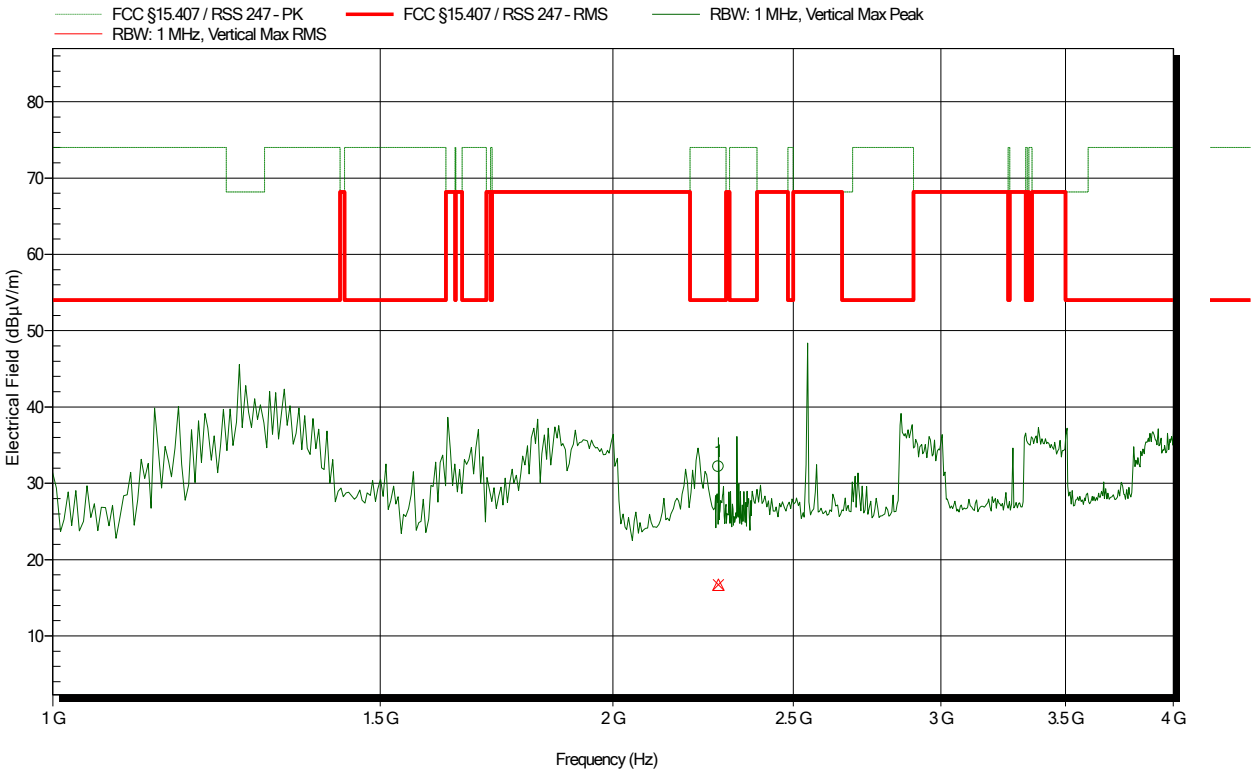

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.279 GHz	32.18 dBµV/m	54 dBµV/m	-21.82 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.279 GHz	16.71 dBµV/m	54 dBµV/m	-37.29 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-17
Note:	

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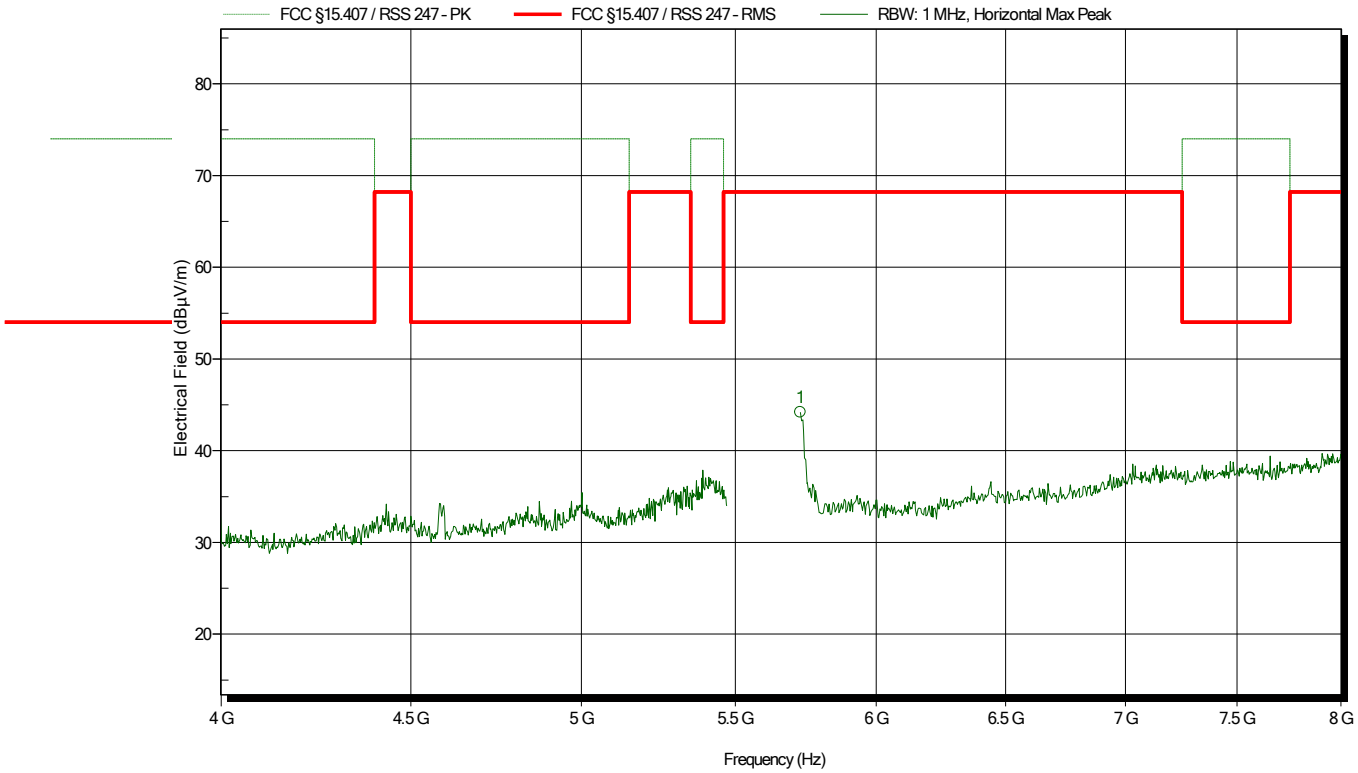

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.725 GHz	44.22 dBµV/m	68.2 dBµV/m	-23.98 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-19
Note:	

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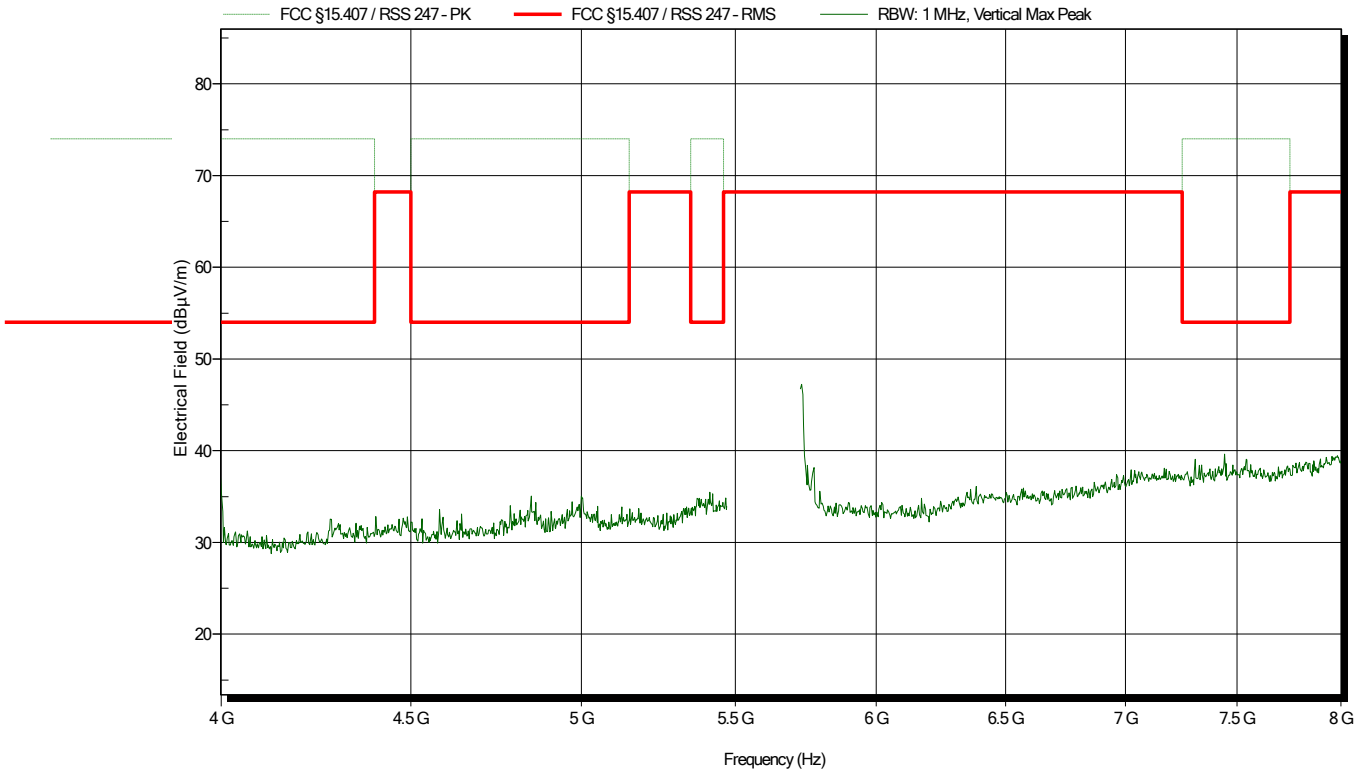

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-19
Note:	lower band area

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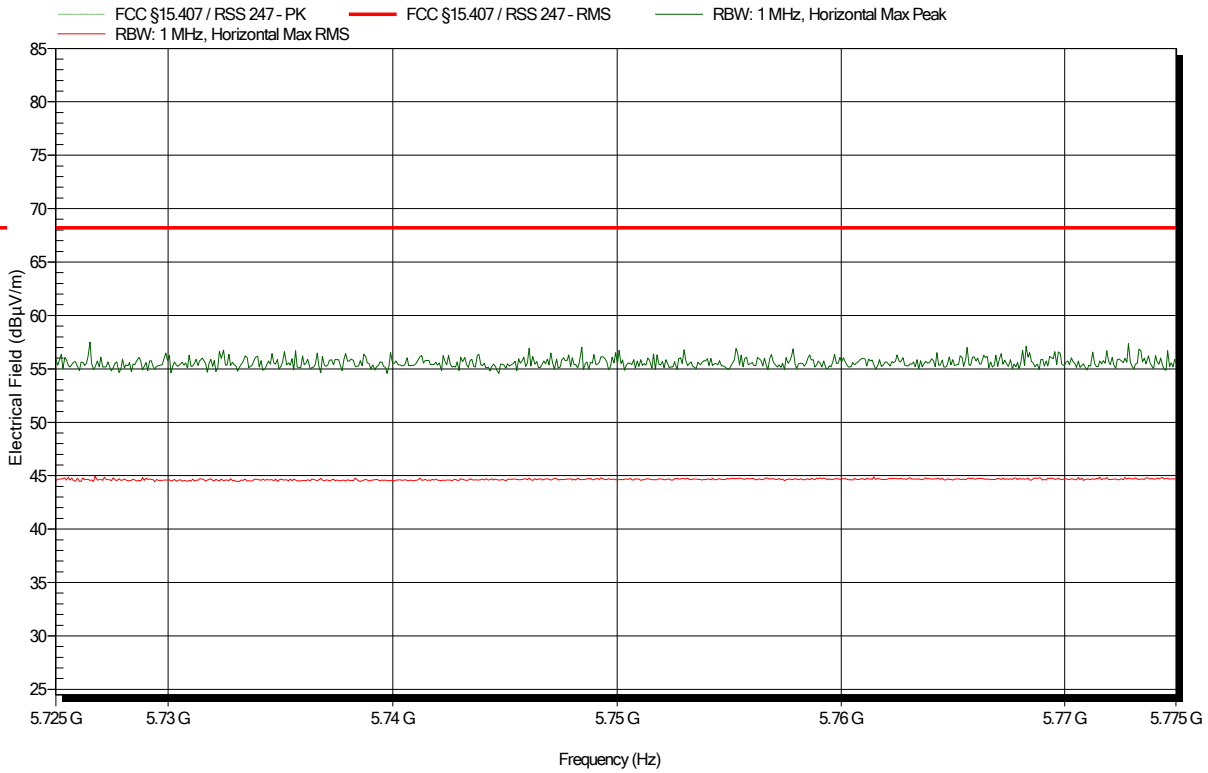

Spurious emissions according to FCC 15.407

Project number: G0M-1905-8256

Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-19
Note:	upper band area

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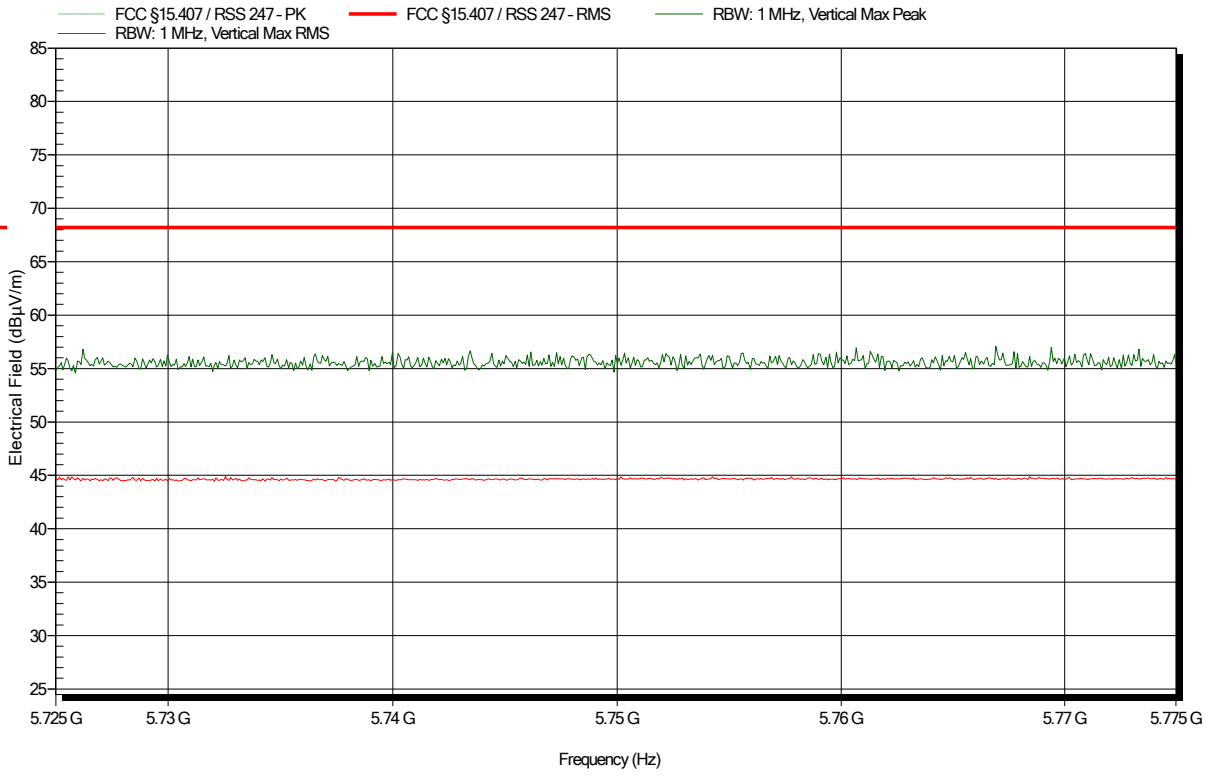

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-17
Note:	

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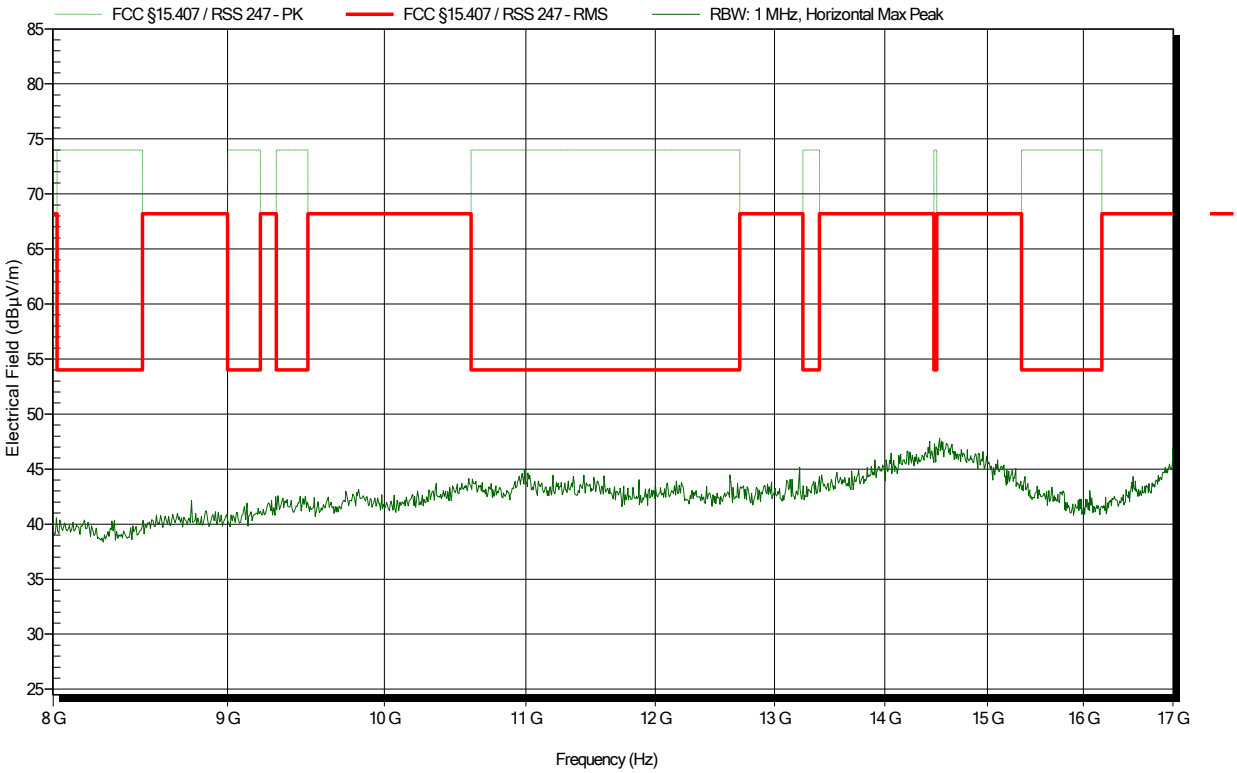

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-16
Note:	

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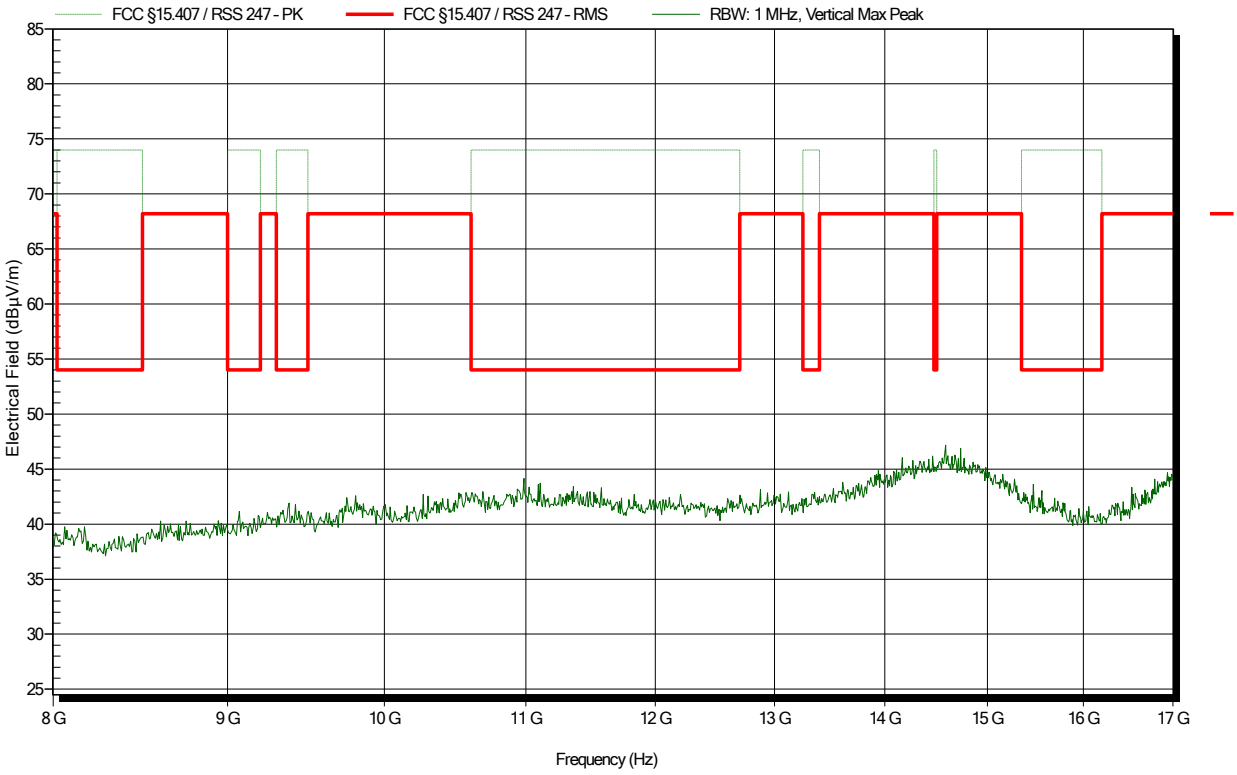

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-27
Note:	

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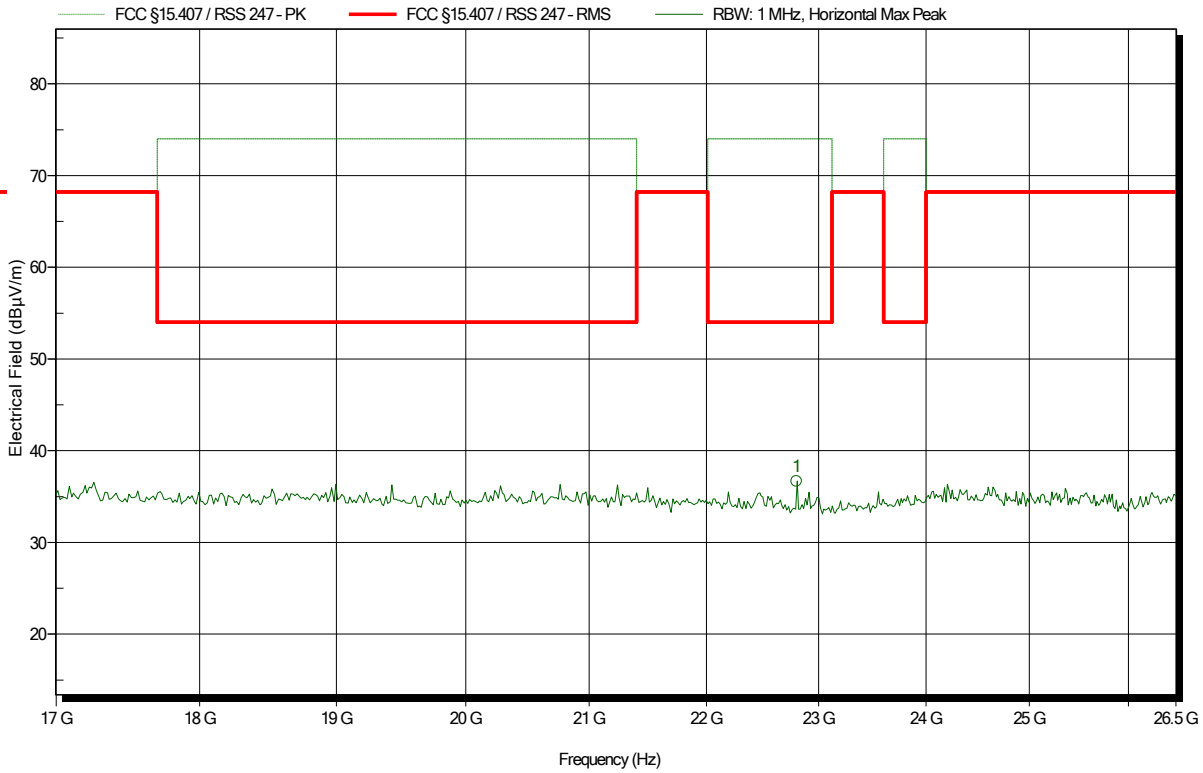

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.8 GHz	36.67 dBµV/m	54 dBµV/m	-17.33 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-27
Note:	

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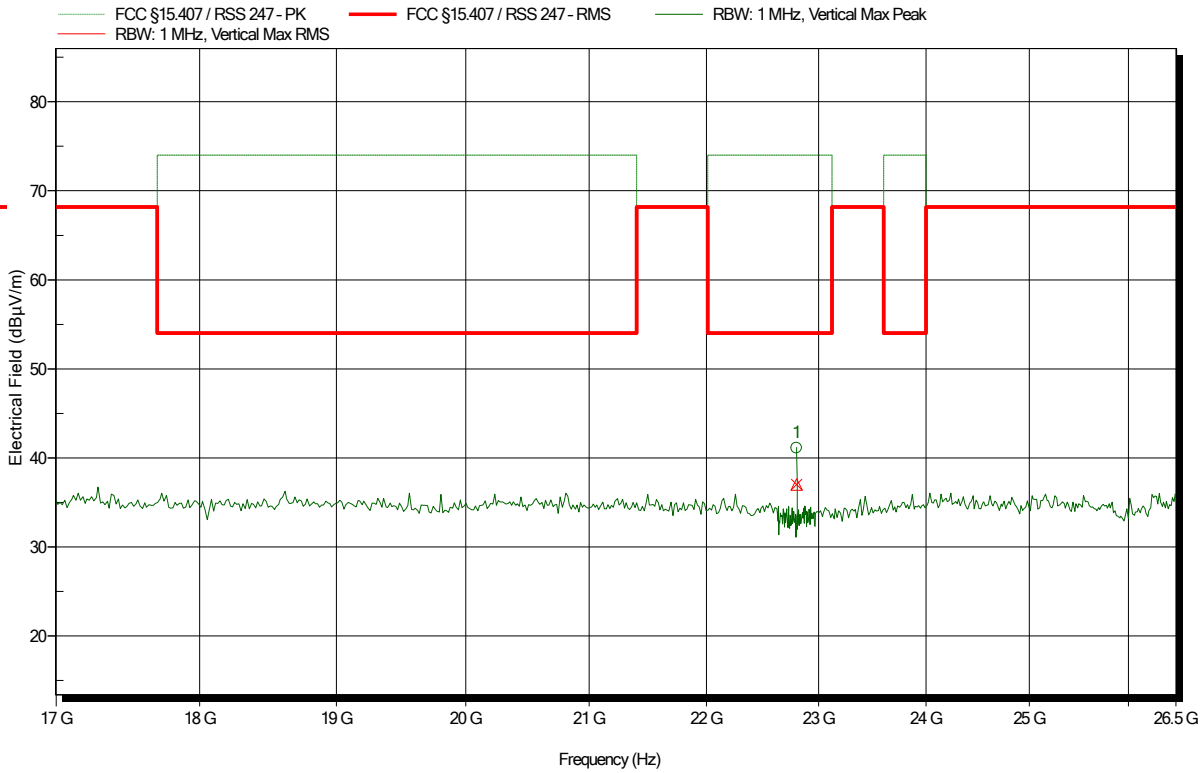

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.8 GHz	41.09 dBµV/m	54 dBµV/m	-12.91 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
22.8 GHz	37.02 dBµV/m	54 dBµV/m	-16.98 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-27
Note:	

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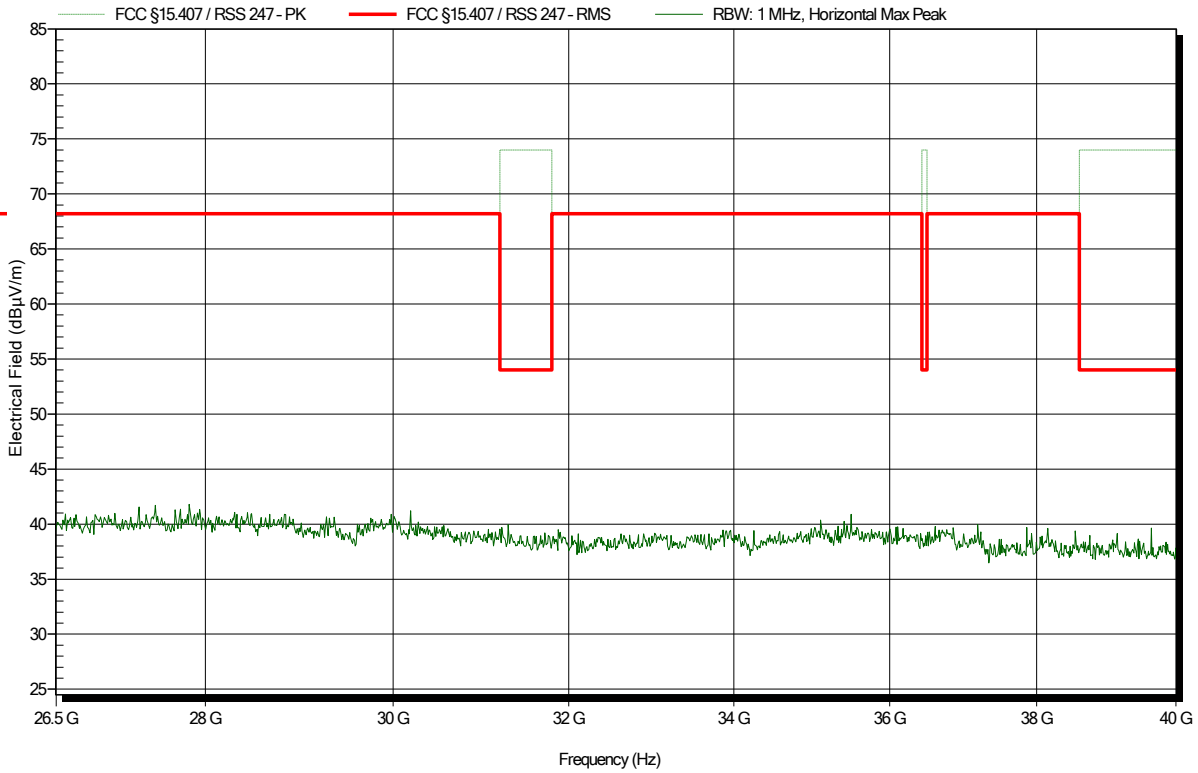

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5700 MHz
Test Date:	2019-09-27
Note:	

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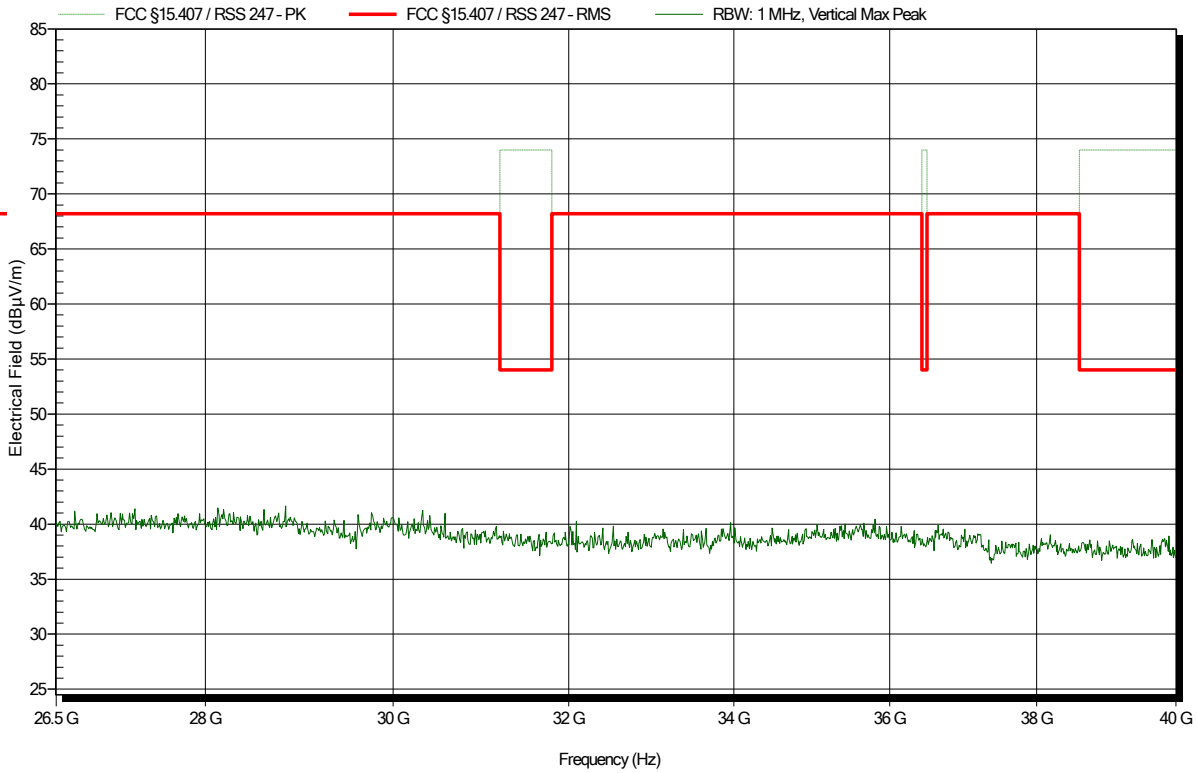

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-07-30
Note:	

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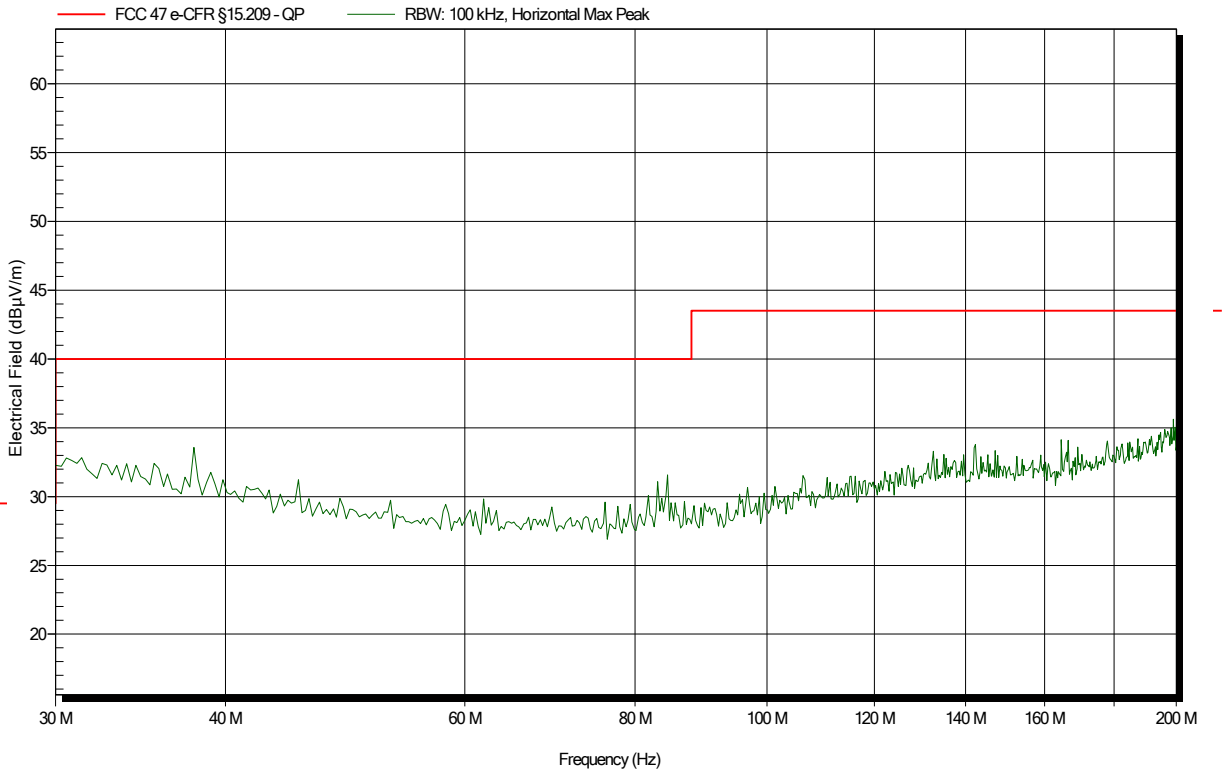

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-10-22
Note:	

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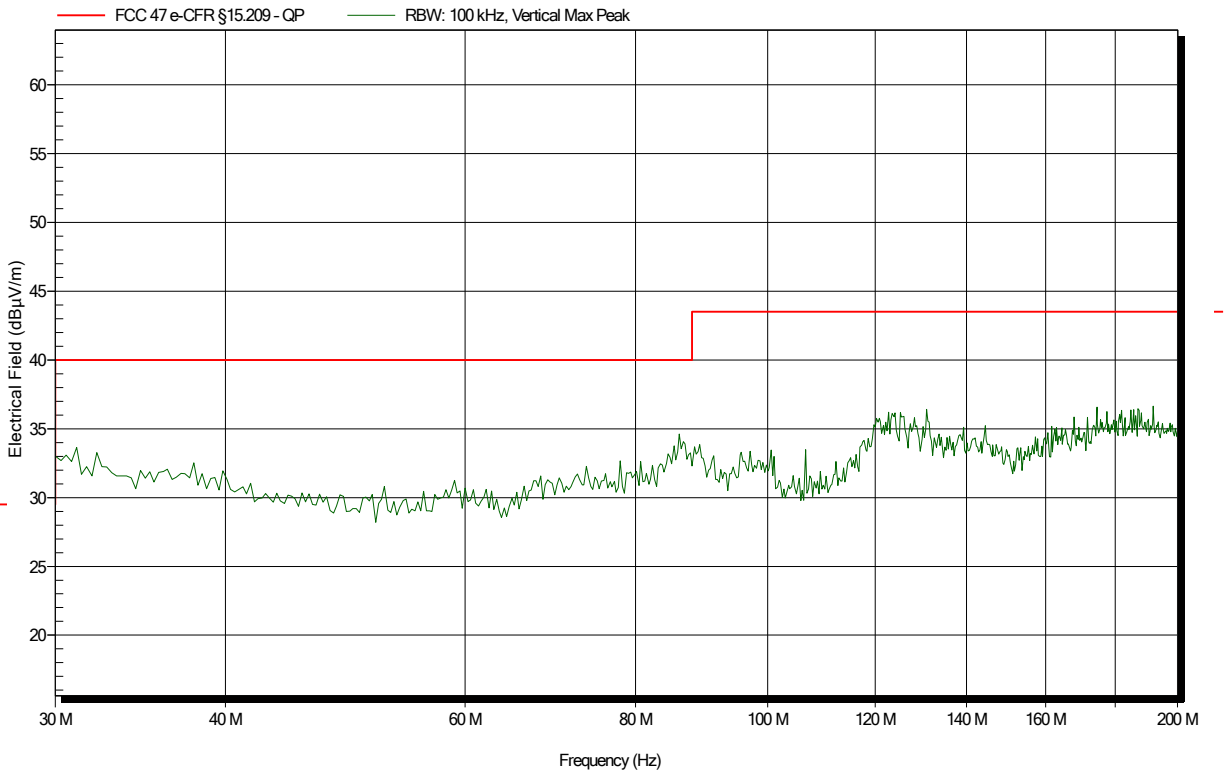

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-07-30
Note:	

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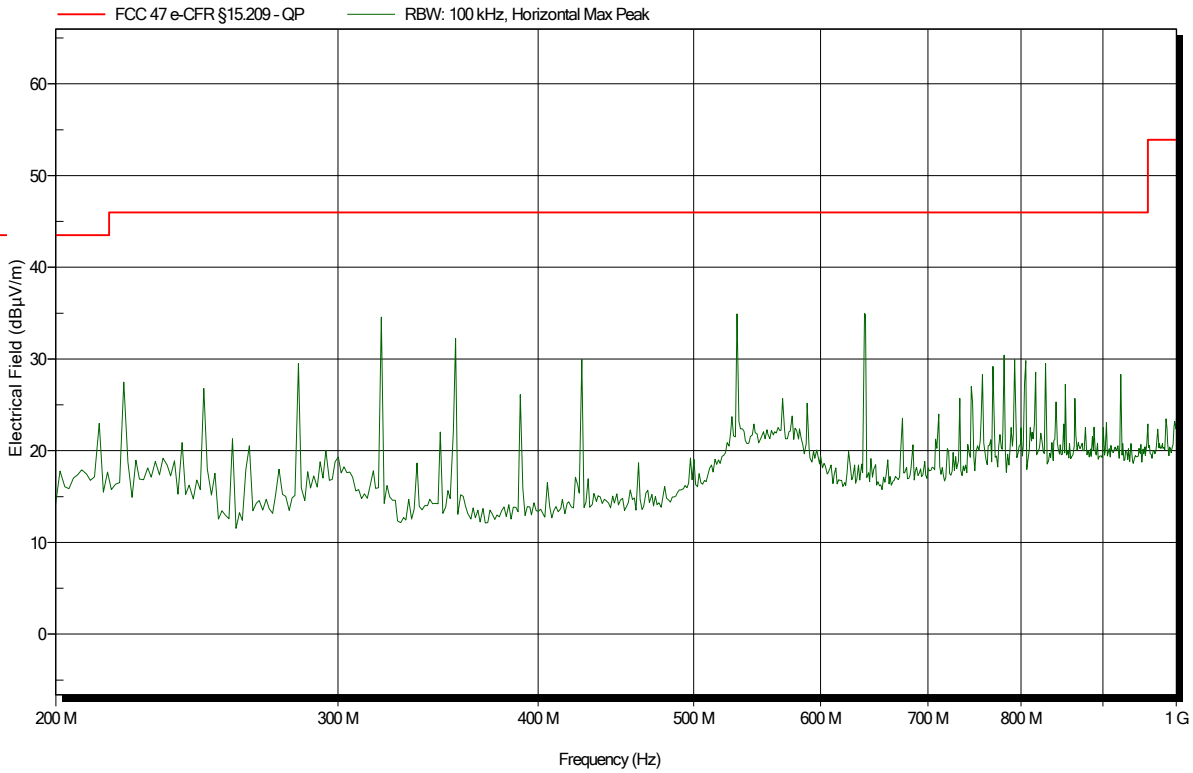

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-07-30
Note:	

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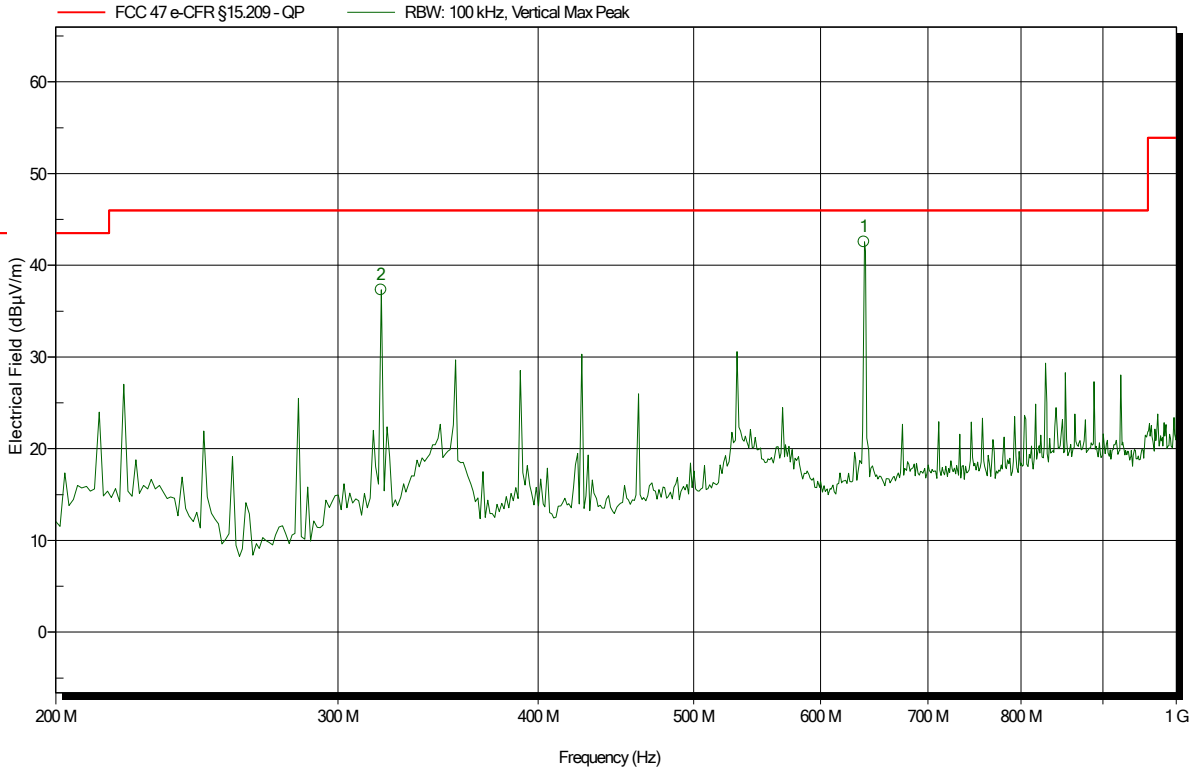

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.33 dBµV/m	46 dBµV/m	-8.67 dB	Pass
638.462 MHz	42.56 dBµV/m	46 dBµV/m	-3.44 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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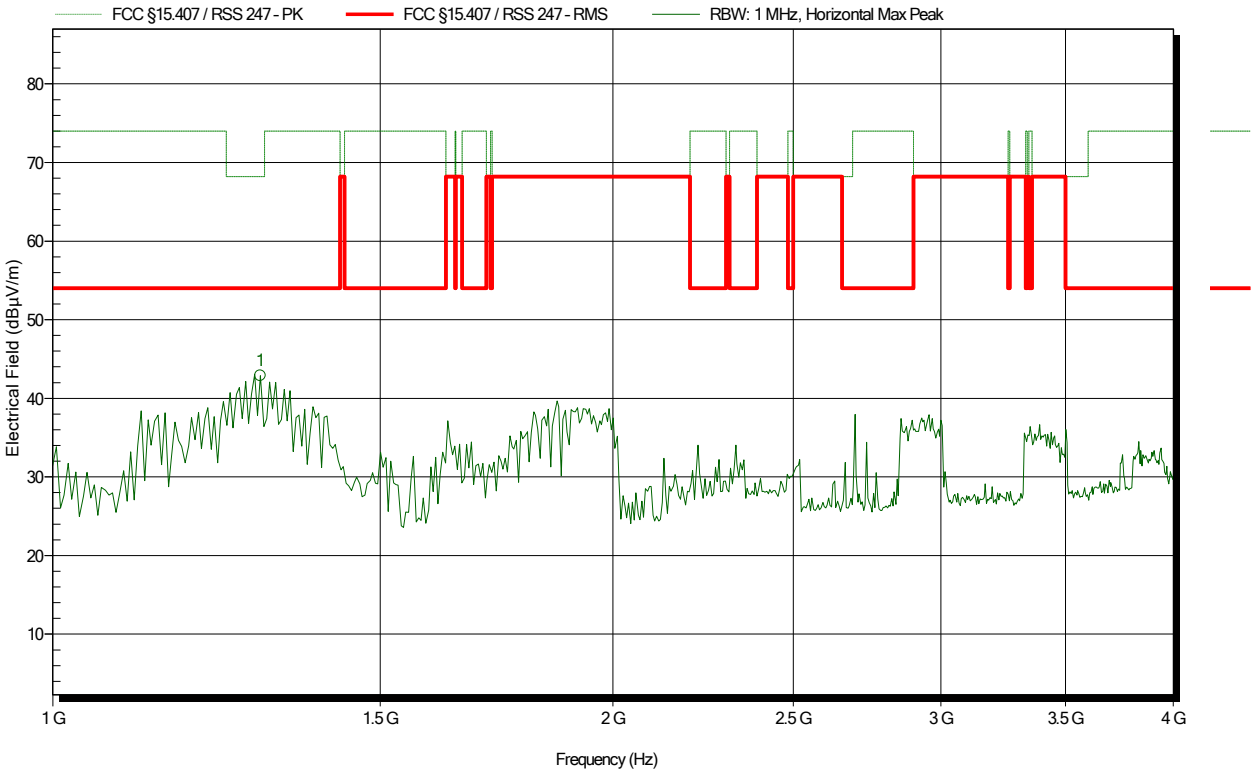

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.293 GHz	42.86 dBµV/m	54 dBµV/m	-11.14 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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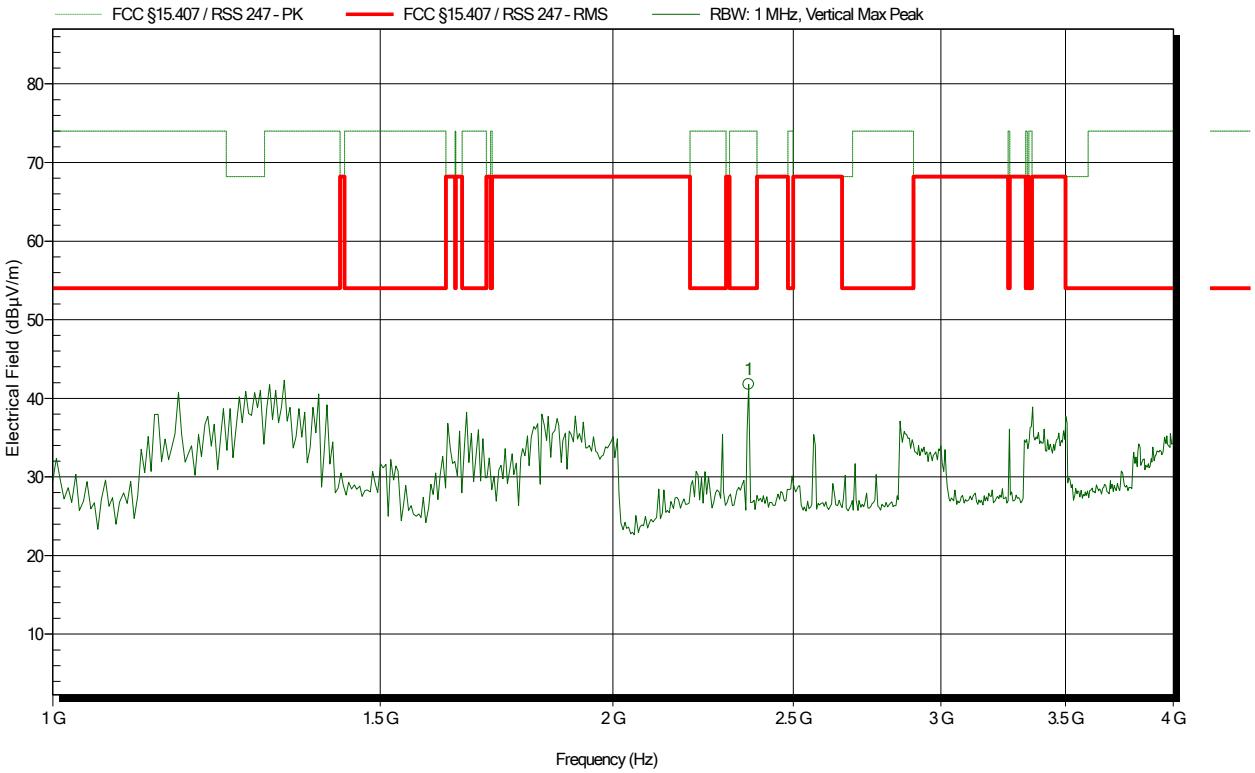

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.365 GHz	41.77 dBµV/m	54 dBµV/m	-12.23 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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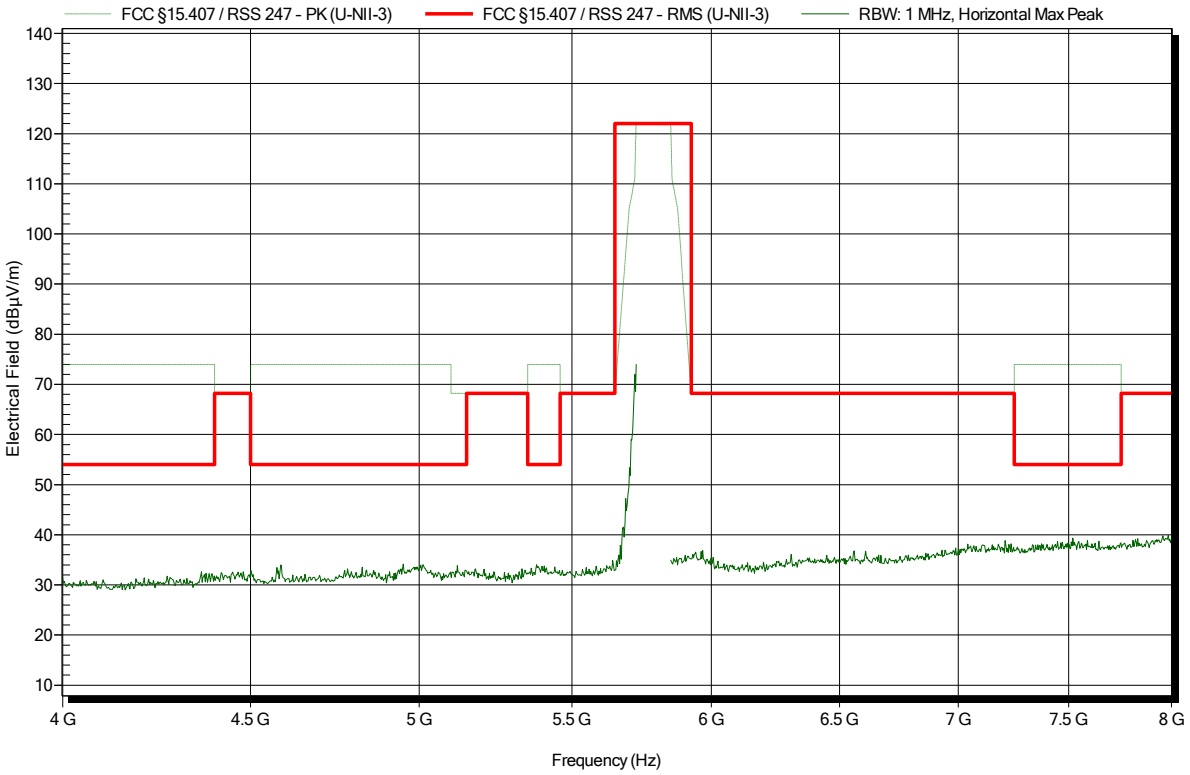

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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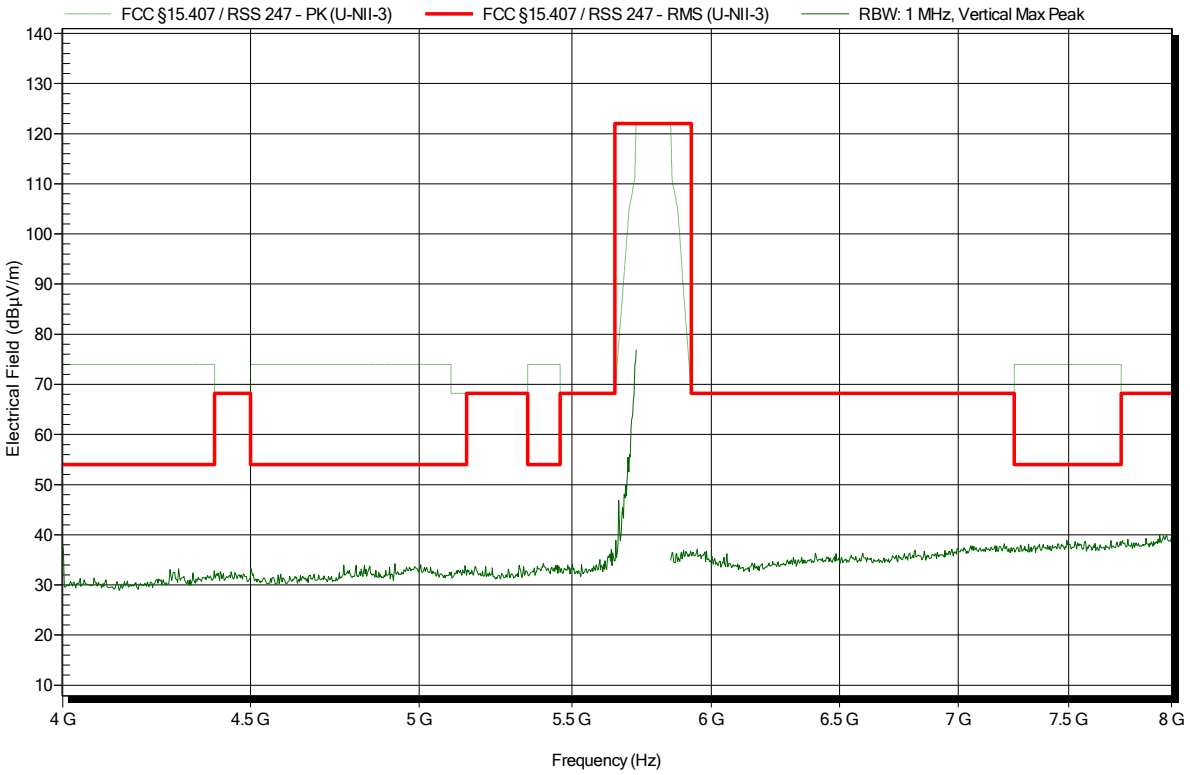

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	lower band area

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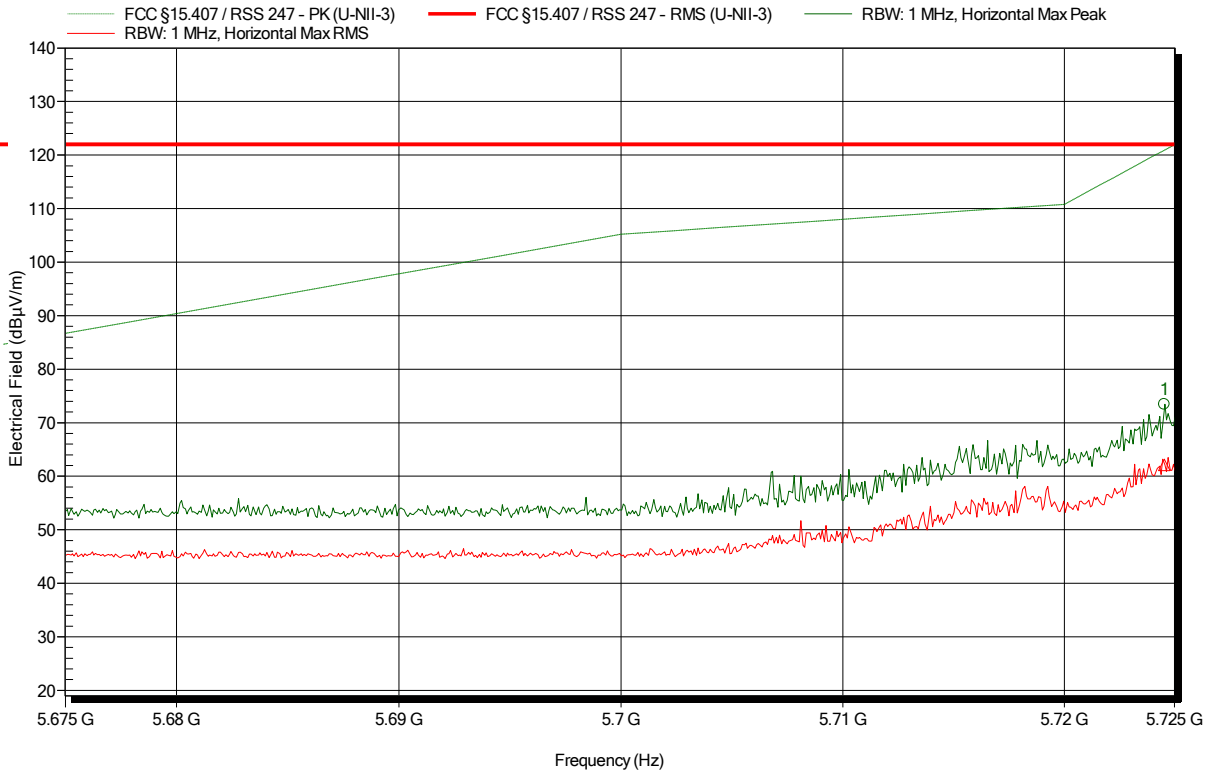

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.725 GHz	73.44 dBµV/m	120.92 dBµV/m	-47.48 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.725 GHz	62.09 dBµV/m	122 dBµV/m	-59.91 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	lower band area

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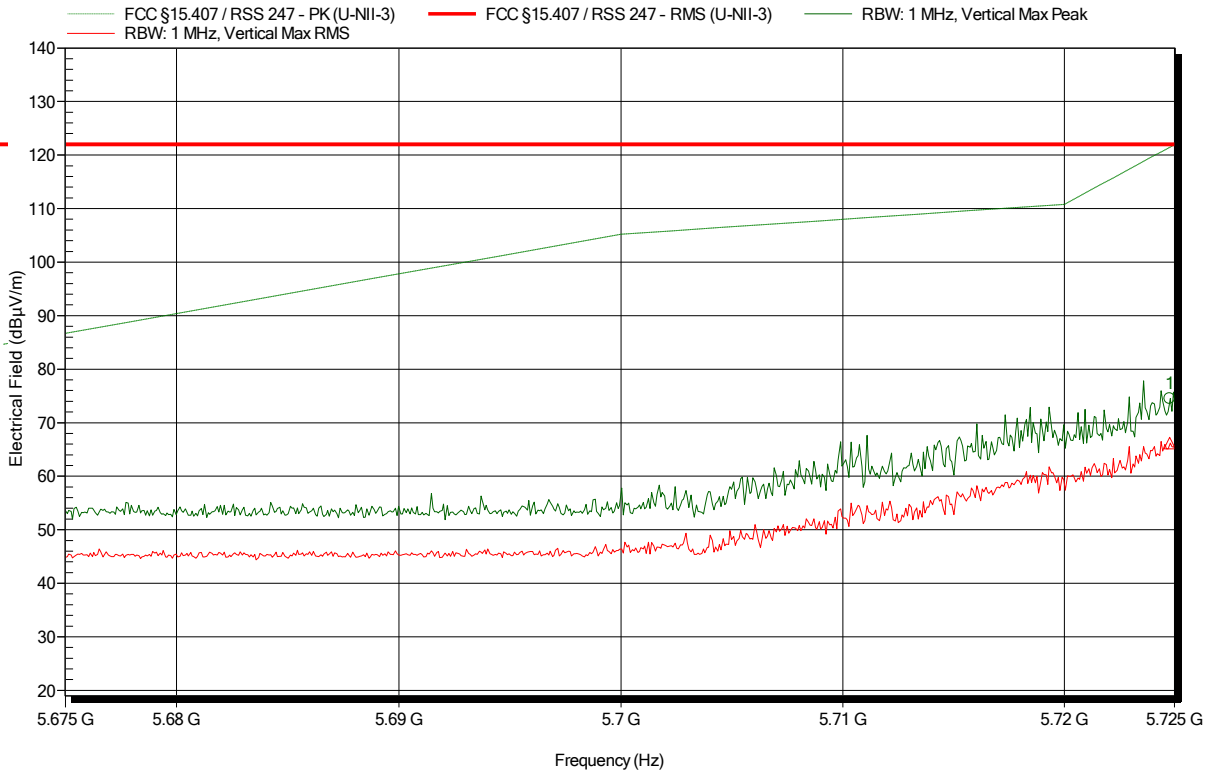

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.725 GHz	74.53 dBµV/m	121.46 dBµV/m	-46.93 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.725 GHz	66.19 dBµV/m	122 dBµV/m	-55.81 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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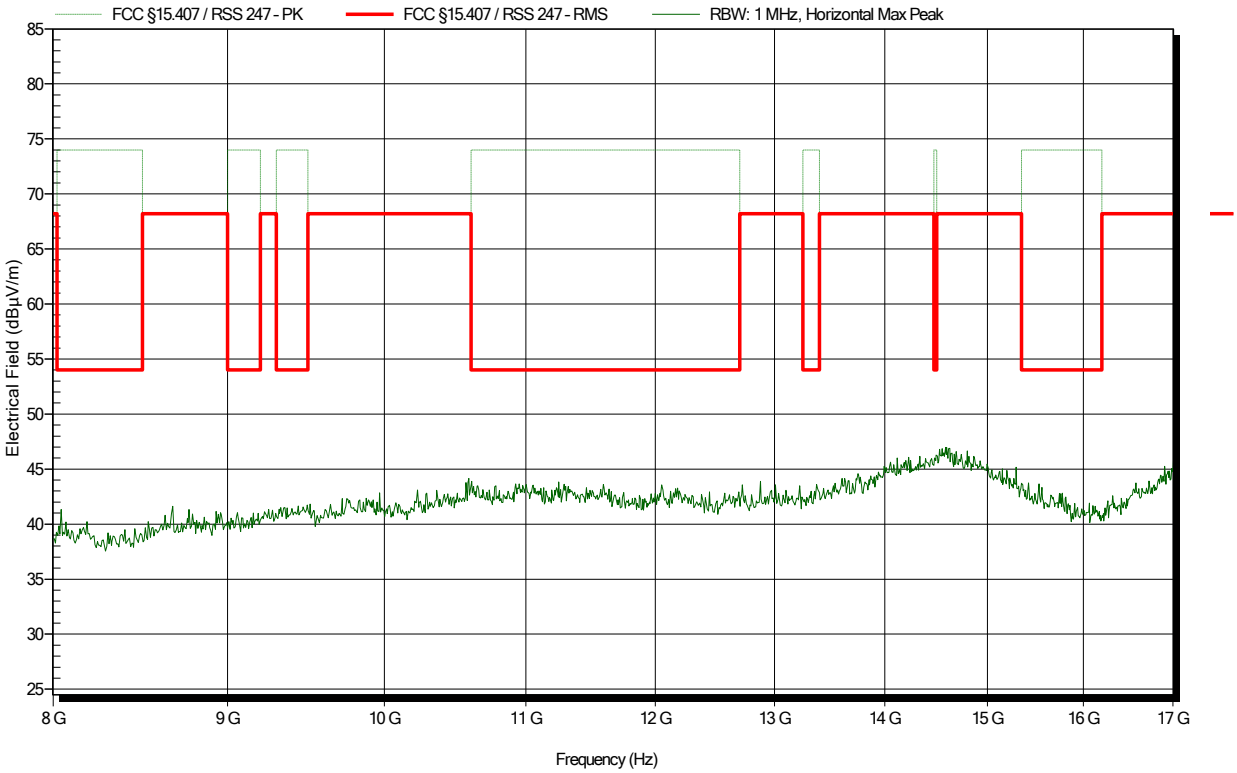

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-25
Note:	

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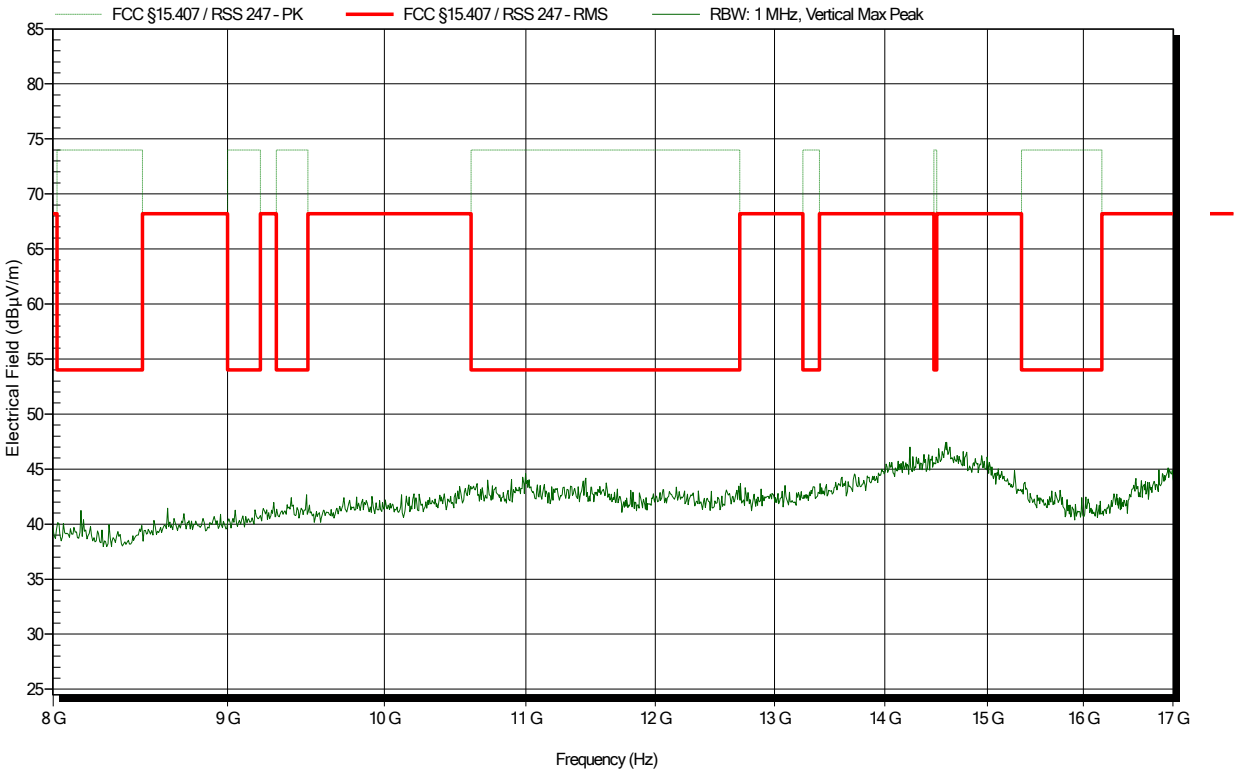

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-27
Note:	

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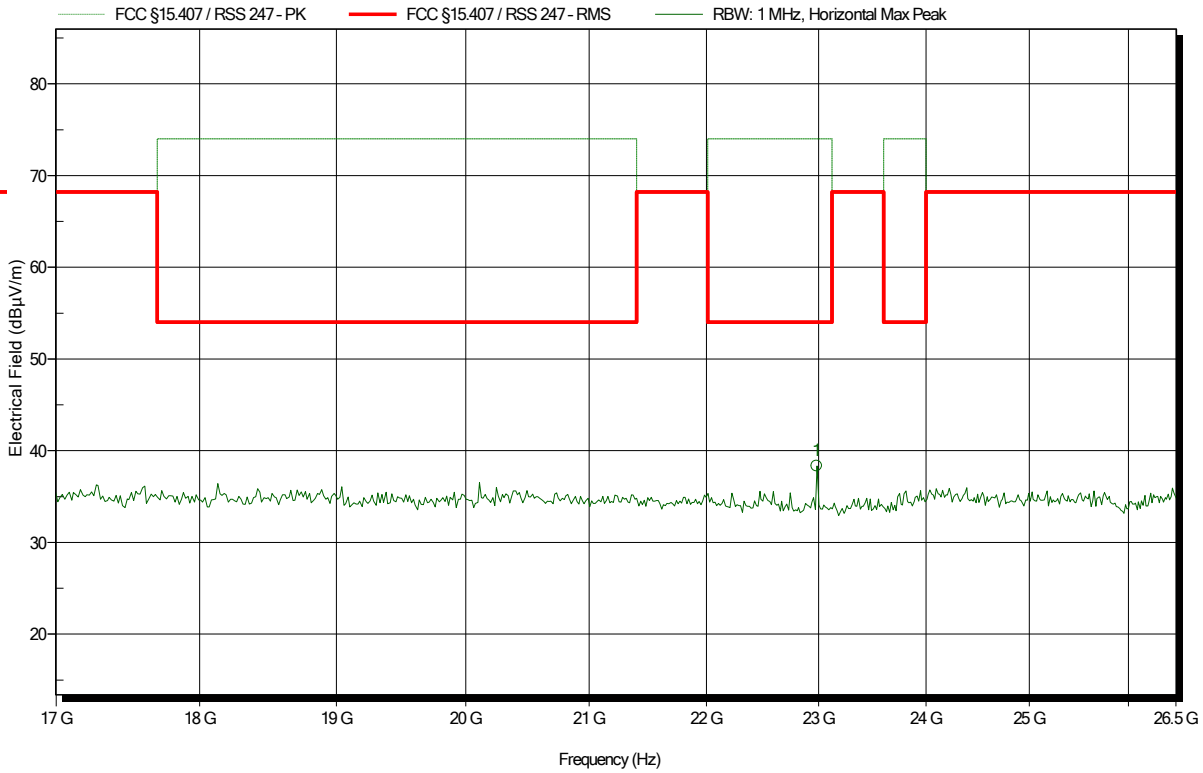

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.983 GHz	38.32 dBµV/m	54 dBµV/m	-15.68 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-27
Note:	

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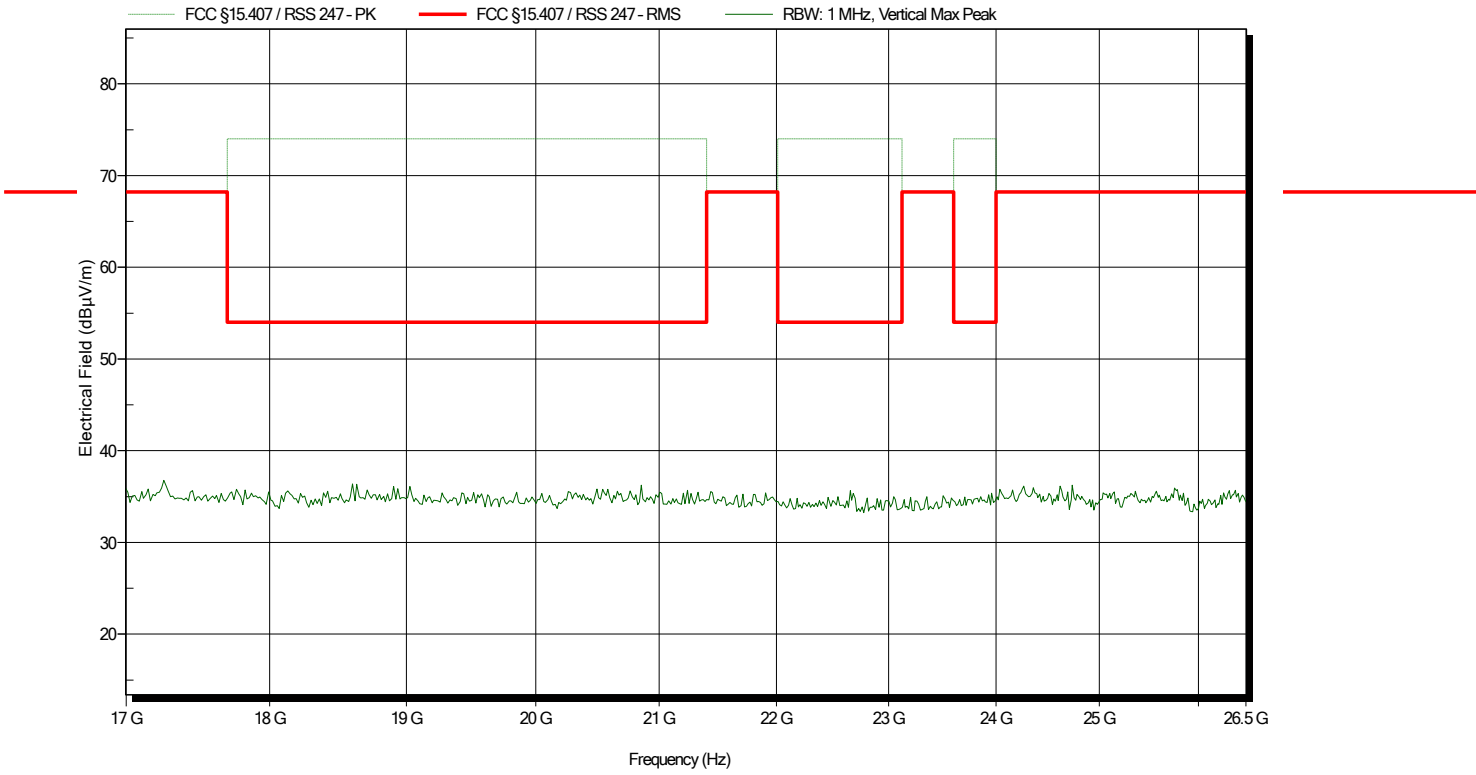

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-30
Note:	

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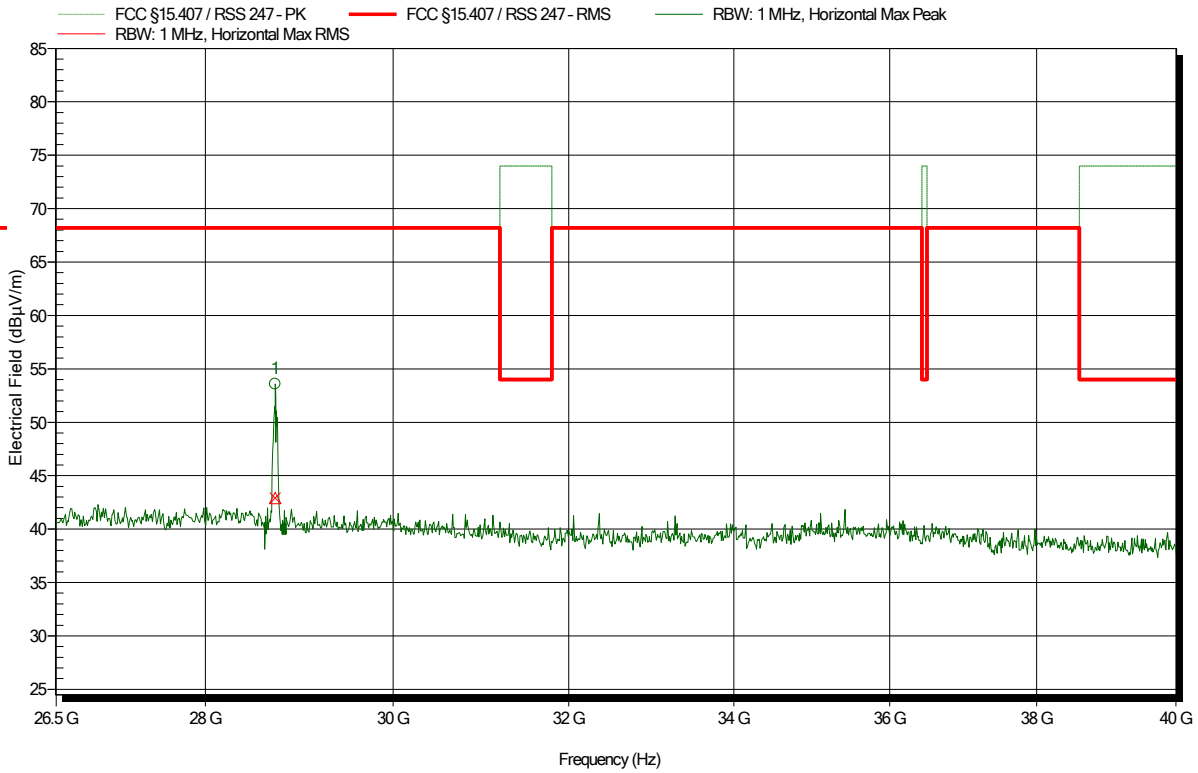

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
28.728 GHz	53.59 dBµV/m	68.2 dBµV/m	-14.61 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
28.728 GHz	42.9 dBµV/m	68.2 dBµV/m	-25.3 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5745 MHz
Test Date:	2019-09-30
Note:	

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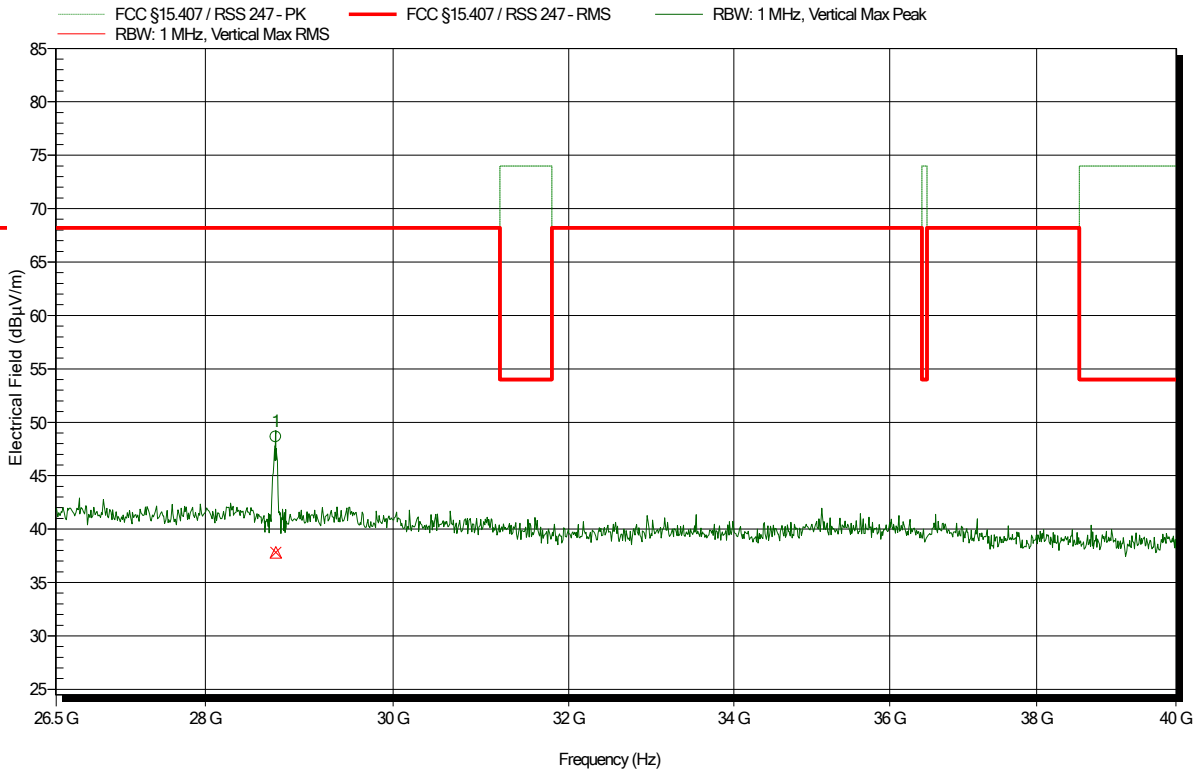

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
28.735 GHz	48.63 dBµV/m	68.2 dBµV/m	-19.57 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
28.735 GHz	37.83 dBµV/m	68.2 dBµV/m	-30.37 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-07-30
Note:	

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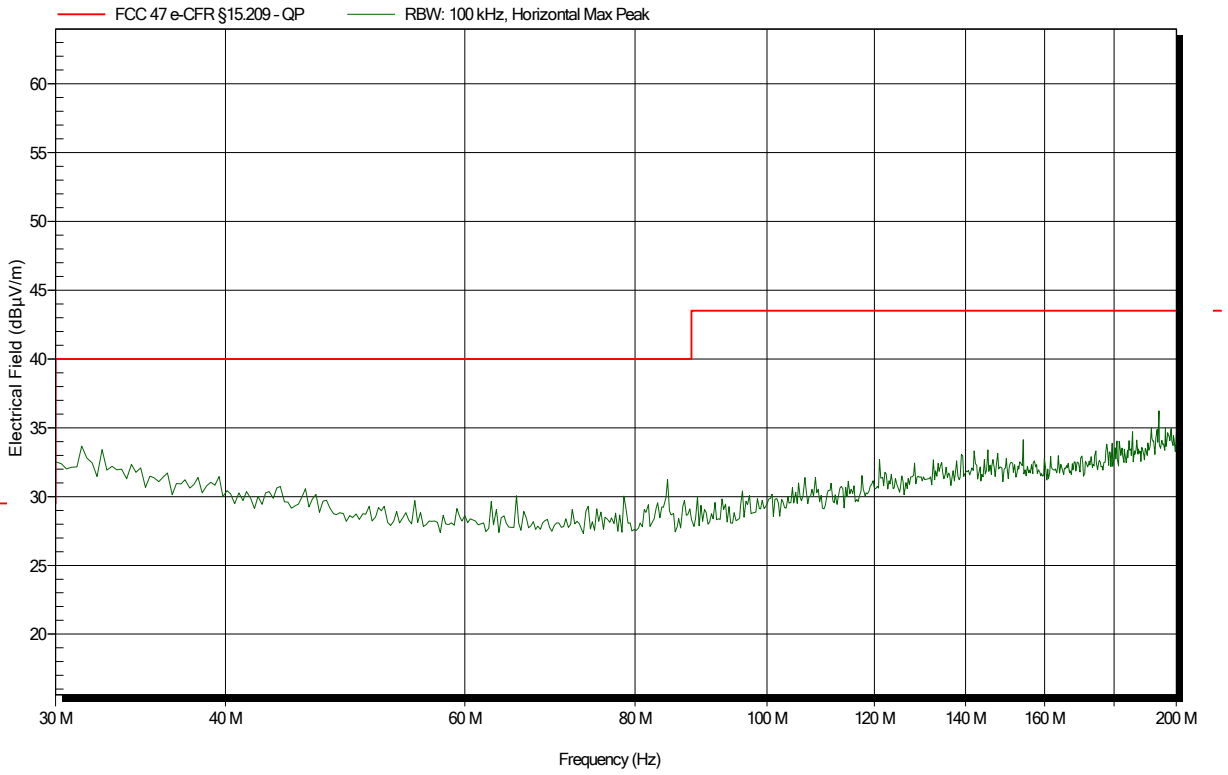

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-07-30
Note:	

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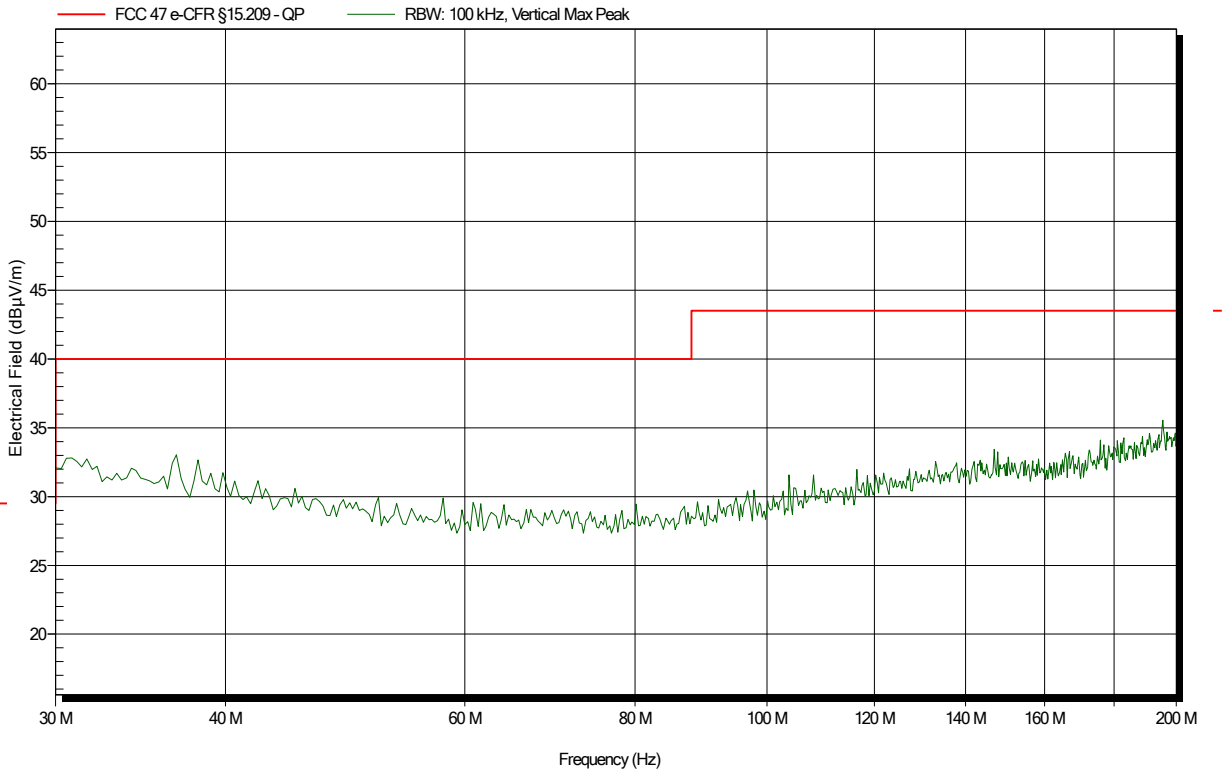

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-07-30
Note:	

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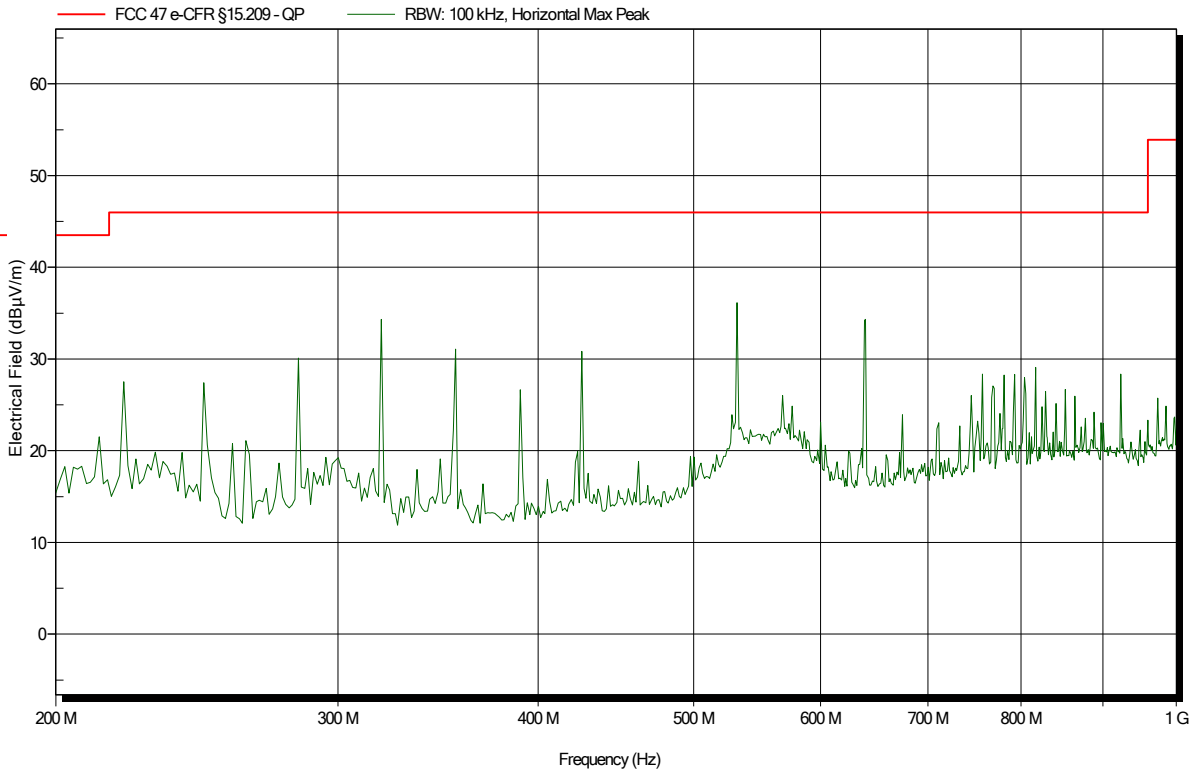

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-07-30
Note:	

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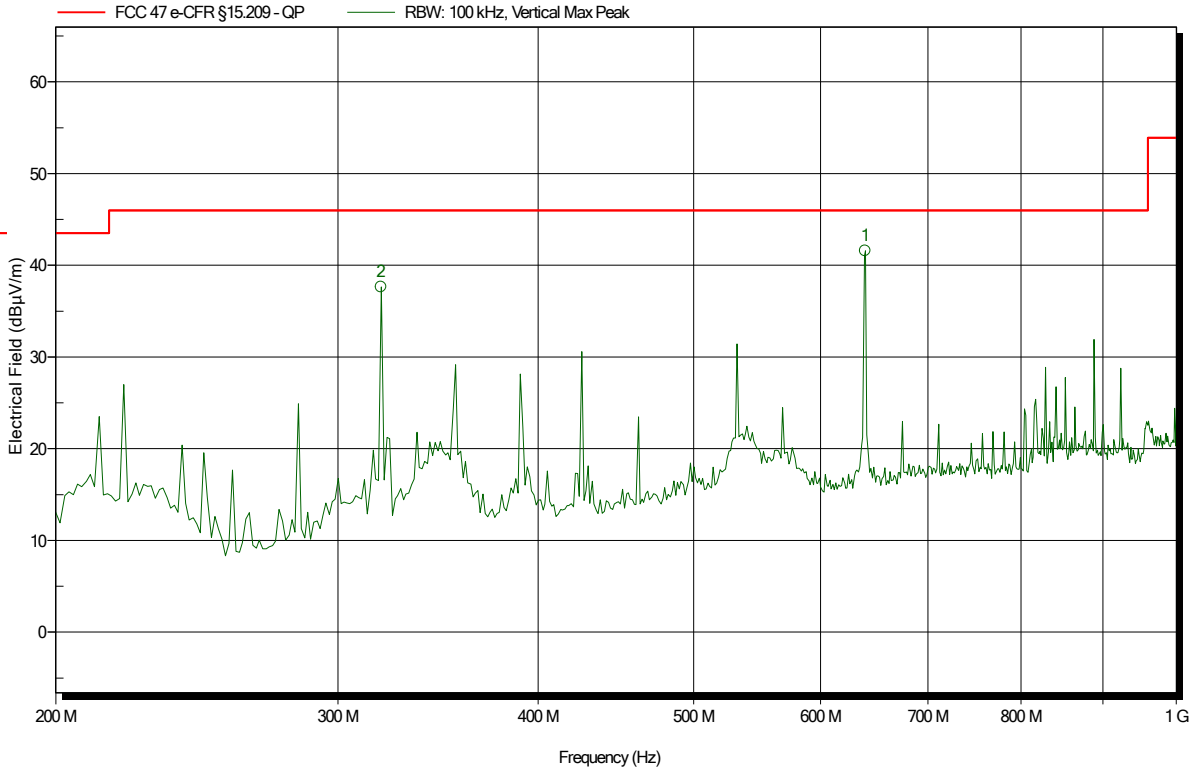

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
319.231 MHz	37.62 dBµV/m	46 dBµV/m	-8.38 dB	Pass
639.744 MHz	41.58 dBµV/m	46 dBµV/m	-4.42 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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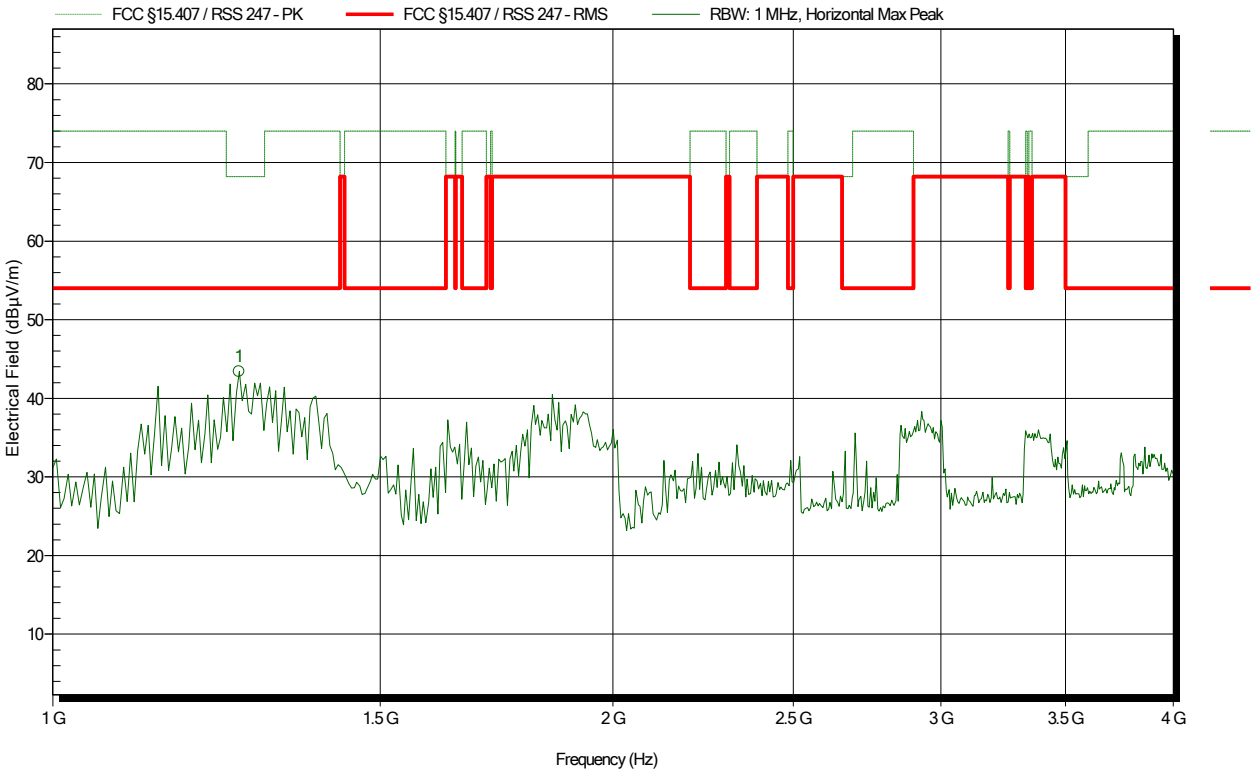

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.26 GHz	43.43 dBµV/m	54 dBµV/m	-10.57 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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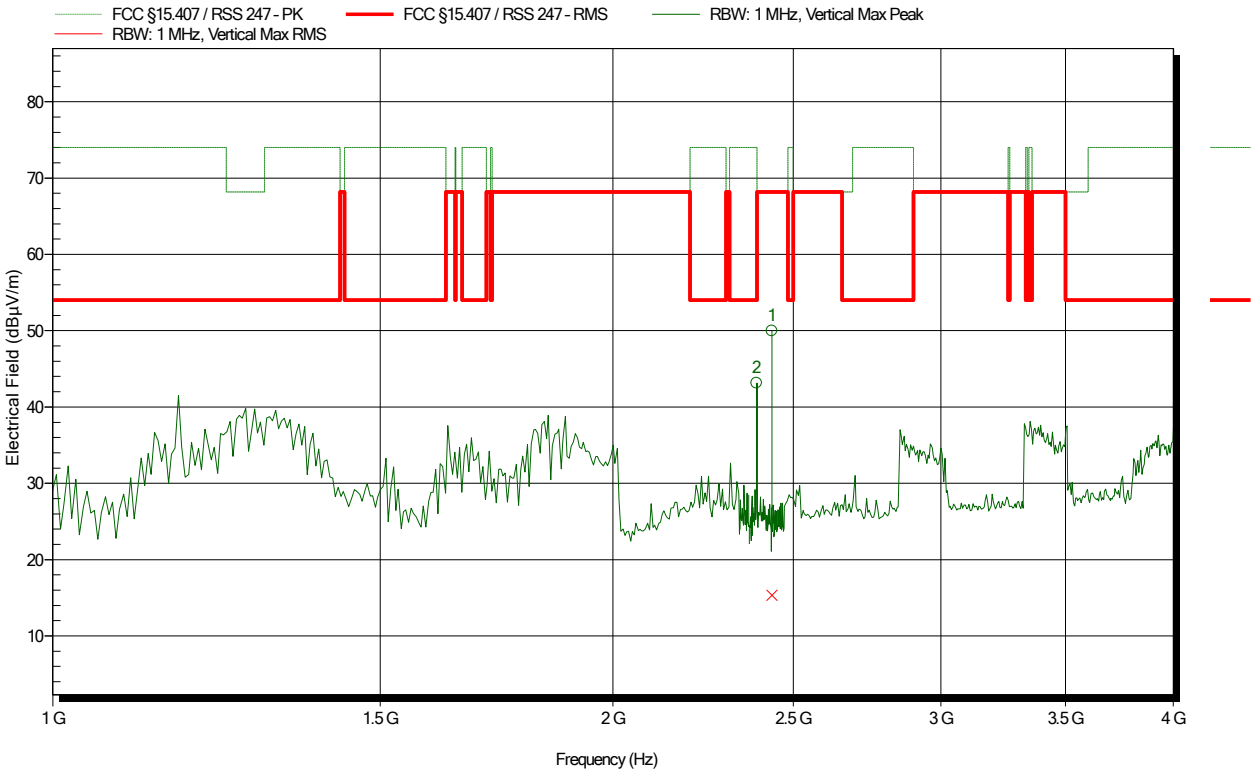

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.389 GHz	43.15 dBµV/m	54 dBµV/m	-10.85 dB	Pass
2.435 GHz	49.97 dBµV/m	68.2 dBµV/m	-18.23 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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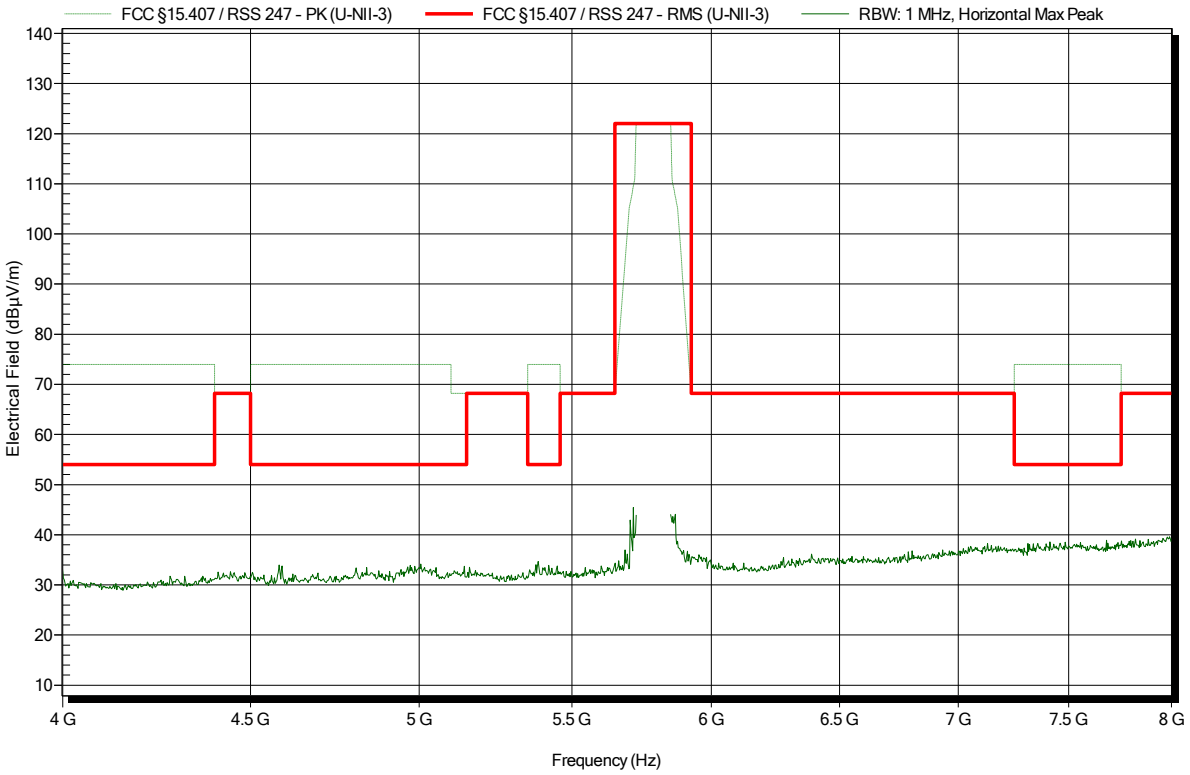

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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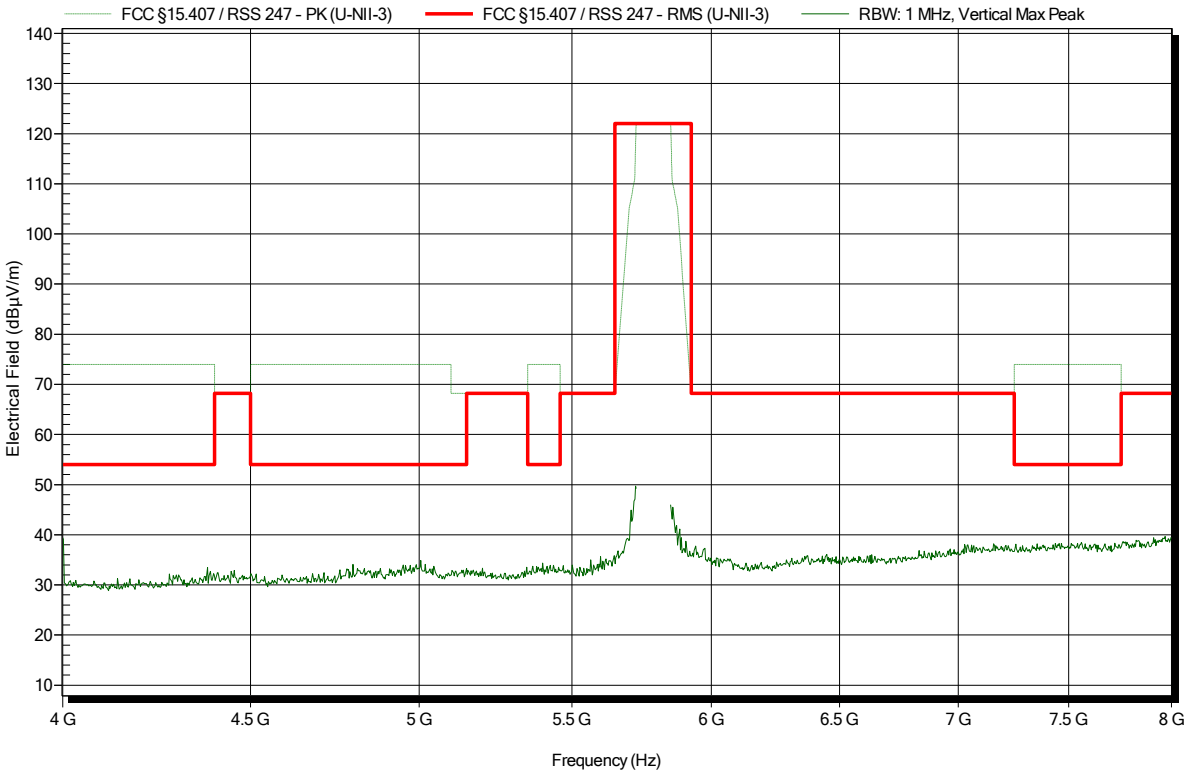

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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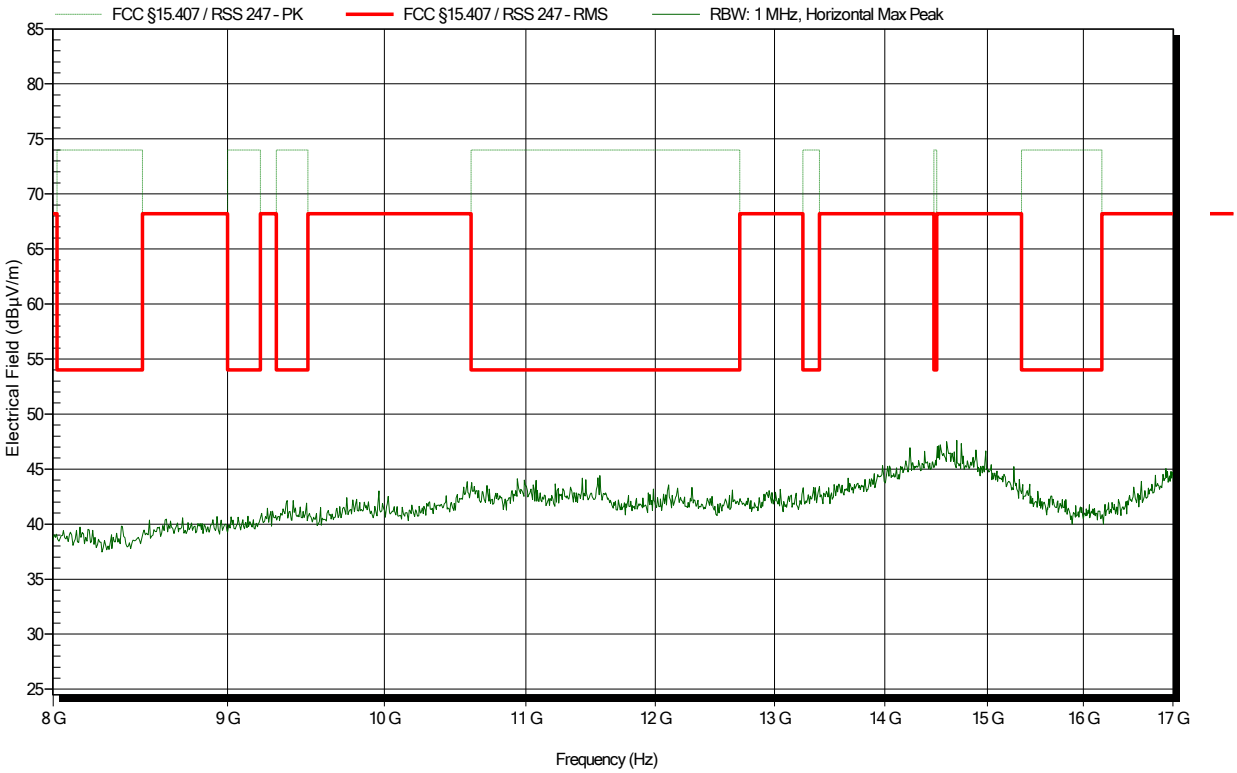

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-25
Note:	

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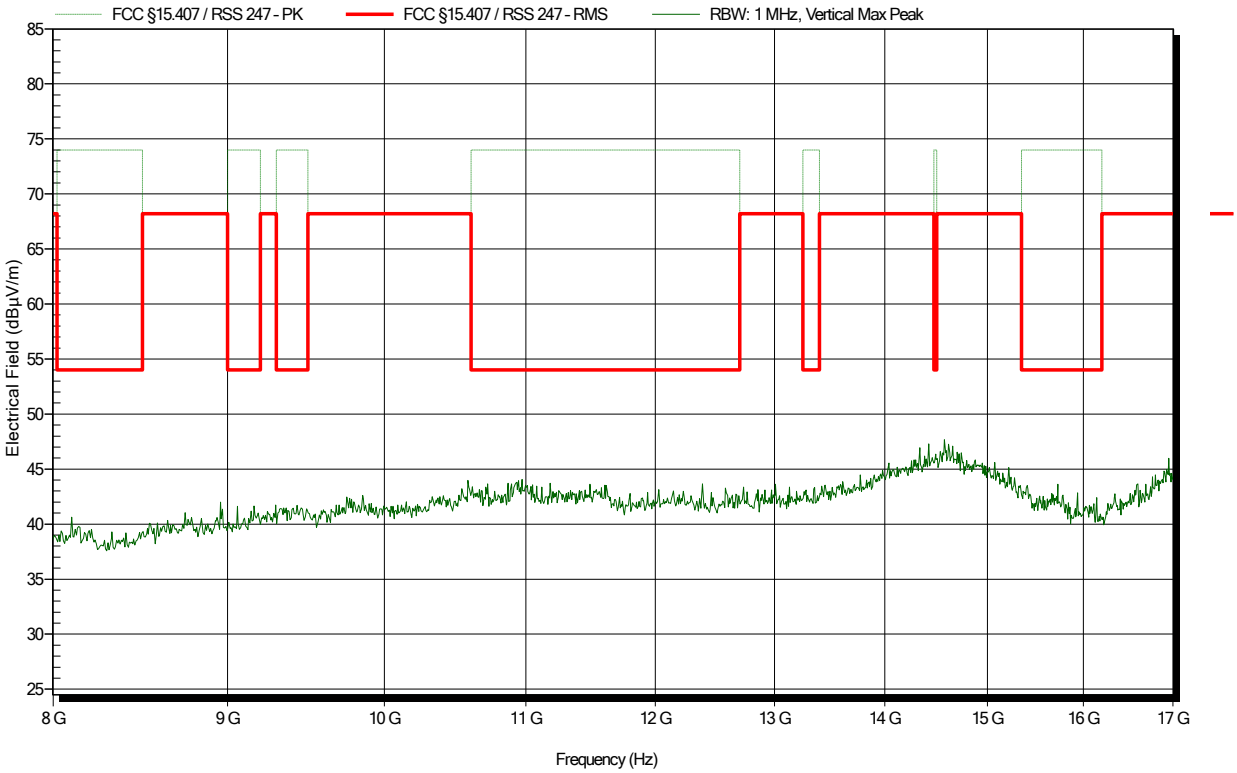

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-27
Note:	

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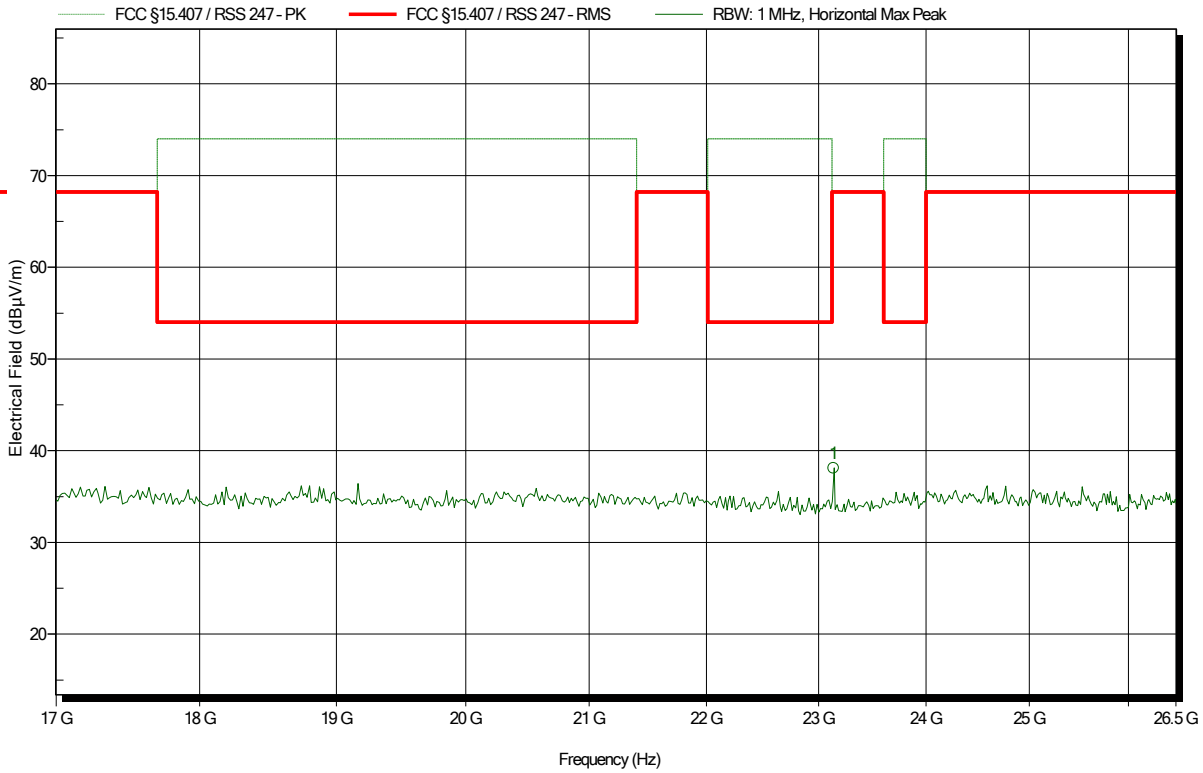

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
23.135 GHz	38.1 dBµV/m	68.2 dBµV/m	-30.1 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-27
Note:	

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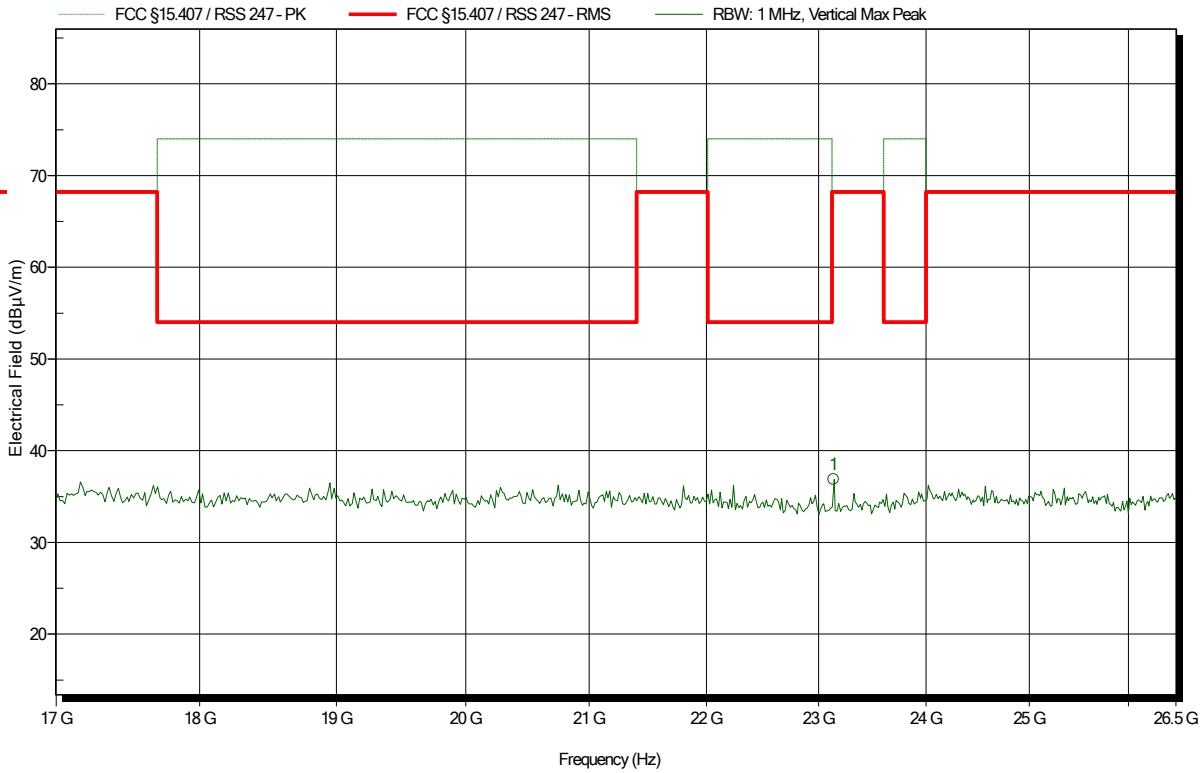

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
23.135 GHz	36.86 dBµV/m	68.2 dBµV/m	-31.34 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-30
Note:	

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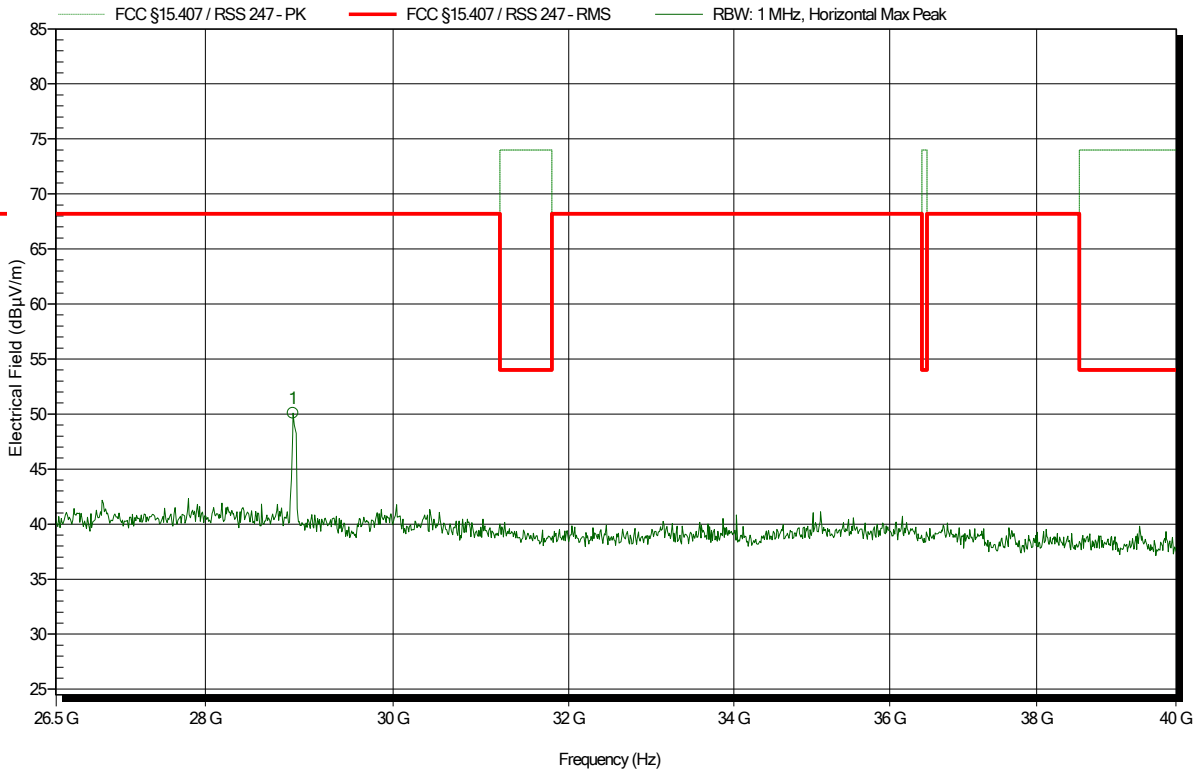

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
28.917 GHz	50.08 dBµV/m	68.2 dBµV/m	-18.12 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5785 MHz
Test Date:	2019-09-30
Note:	

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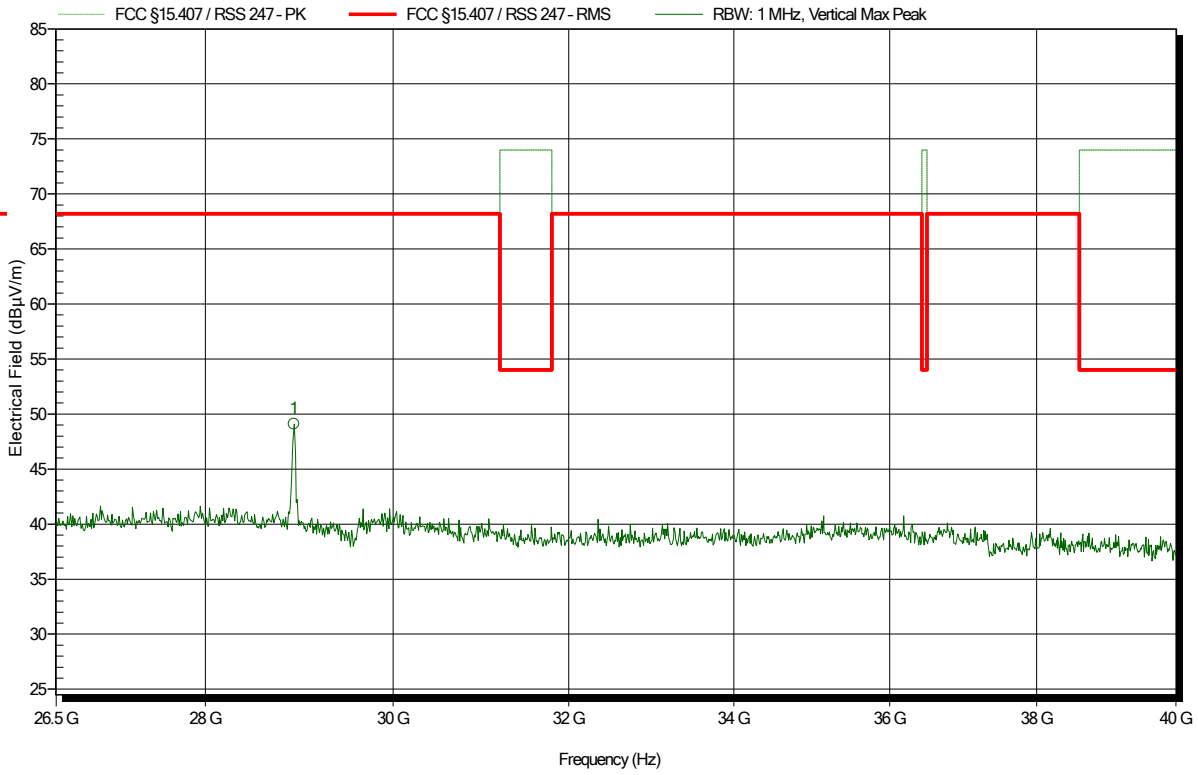

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
28.927 GHz	49.09 dBµV/m	68.2 dBµV/m	-19.11 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-07-30
Note:	

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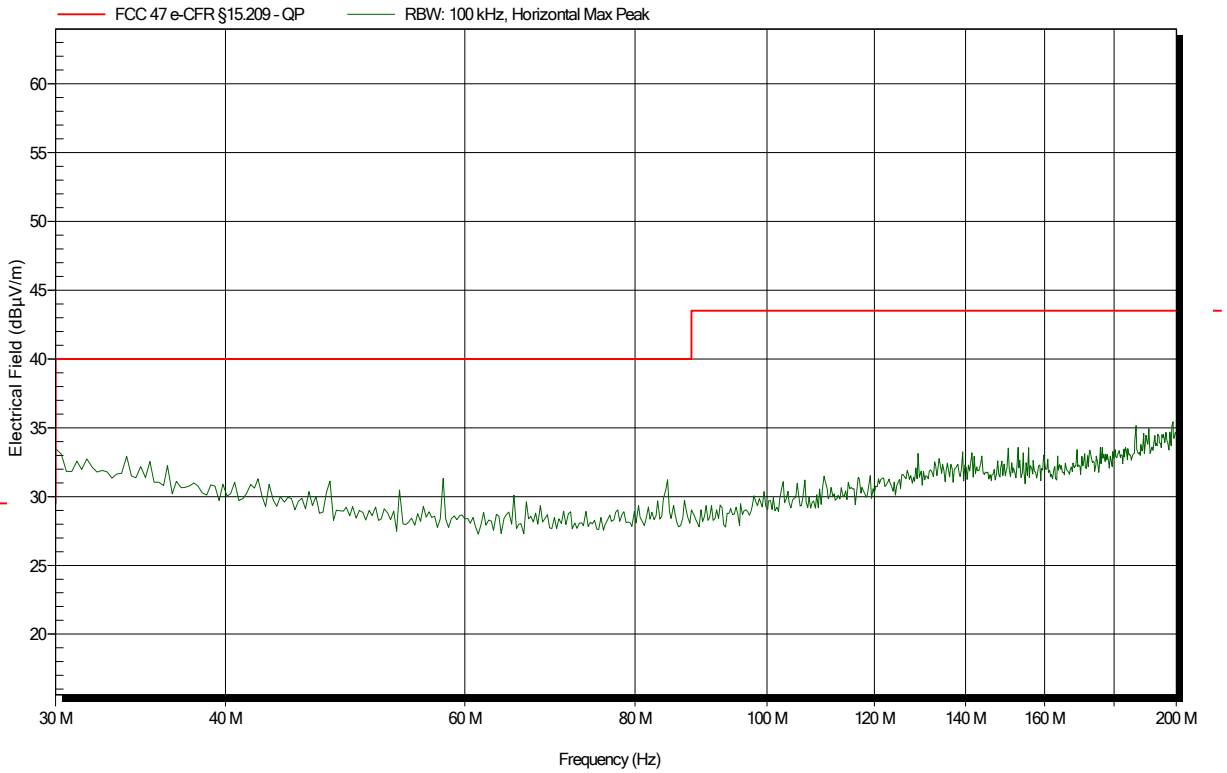

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-07-30
Note:	

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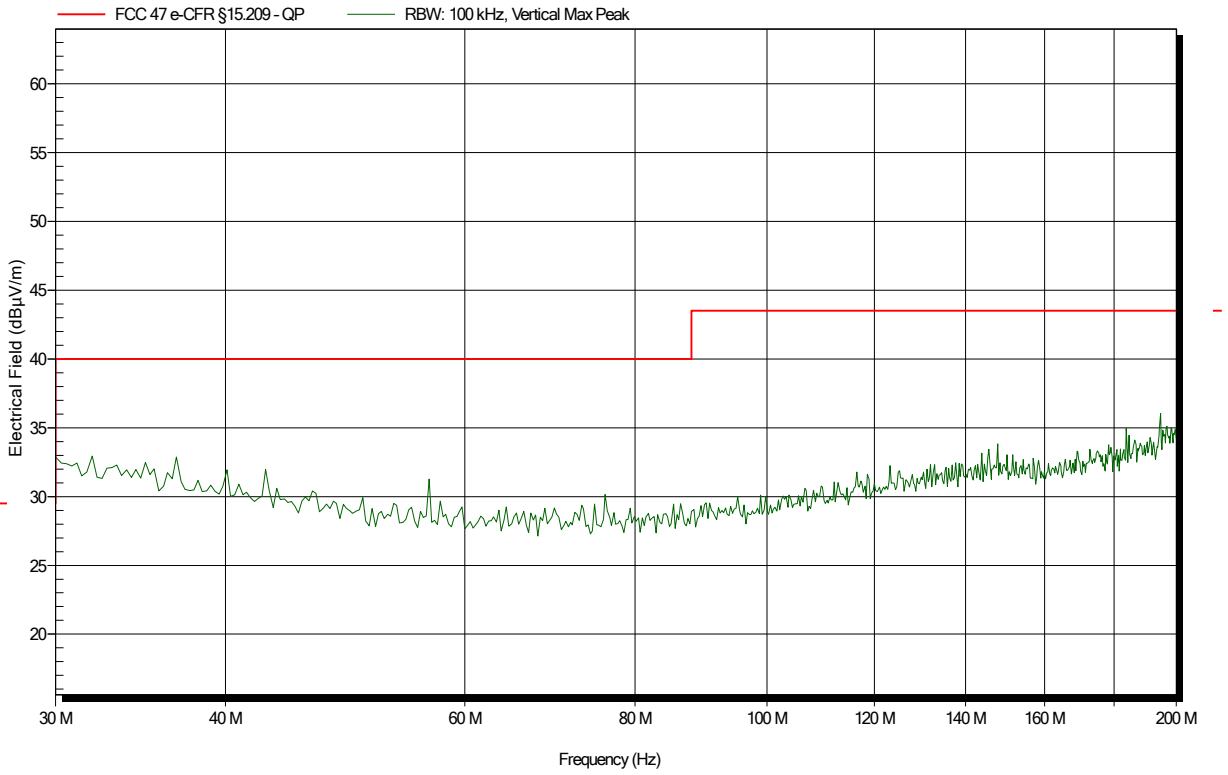

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-07-30
Note:	

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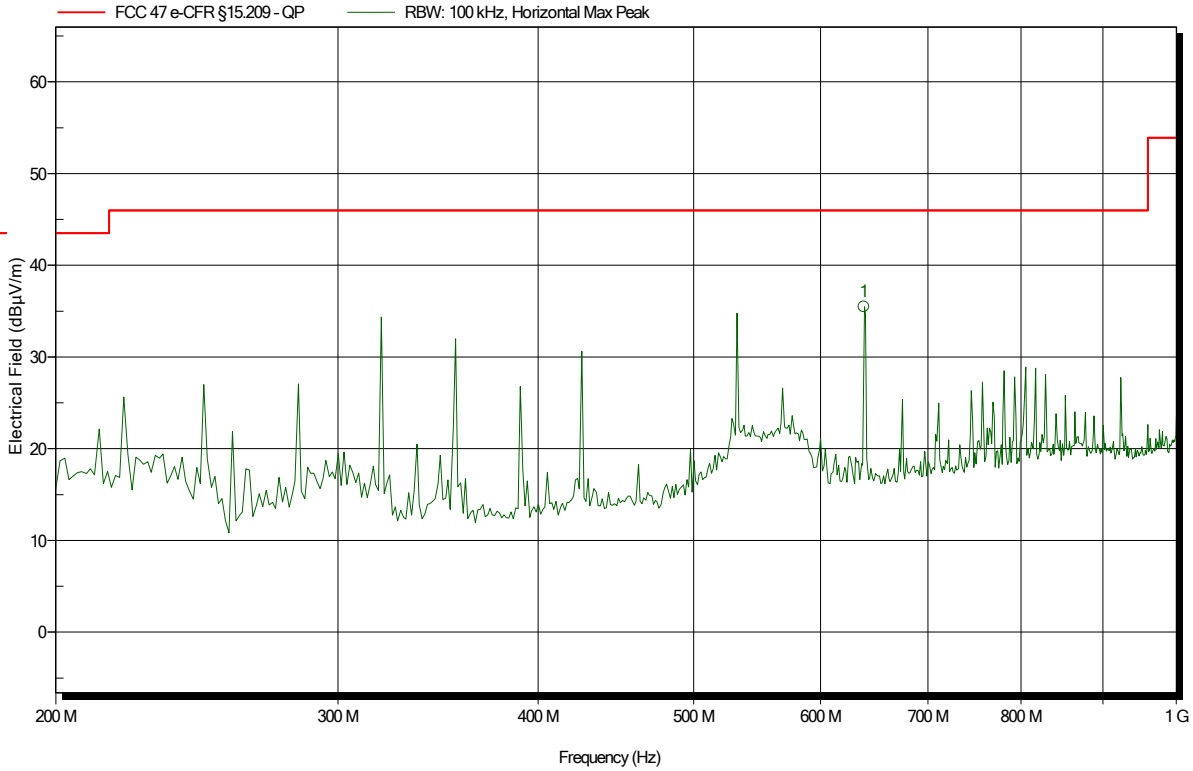

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
638.462 MHz	35.47 dBµV/m	46 dBµV/m	-10.53 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Abdullah Al Jamal
Test Conditions:	Tnom: 24.8°C, Vnom: 120 VAC (external power supply)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-07-30
Note:	

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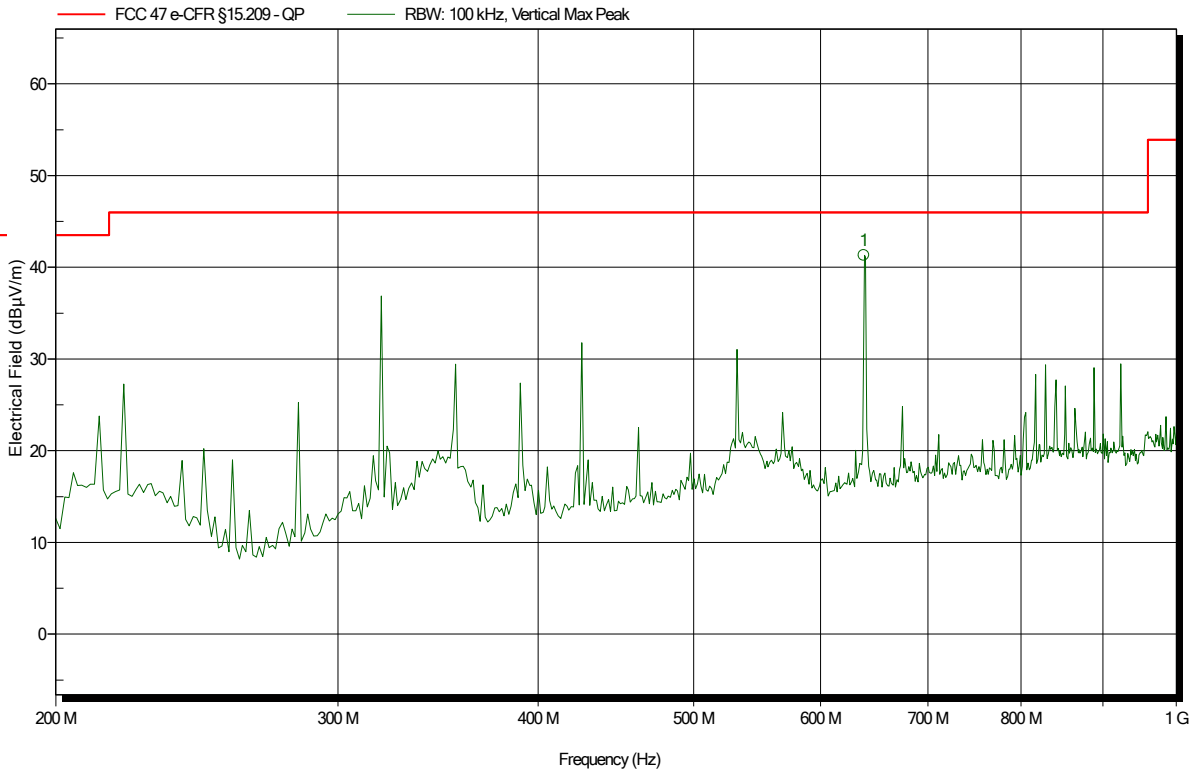

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
638.462 MHz	41.3 dBµV/m	46 dBµV/m	-4.7 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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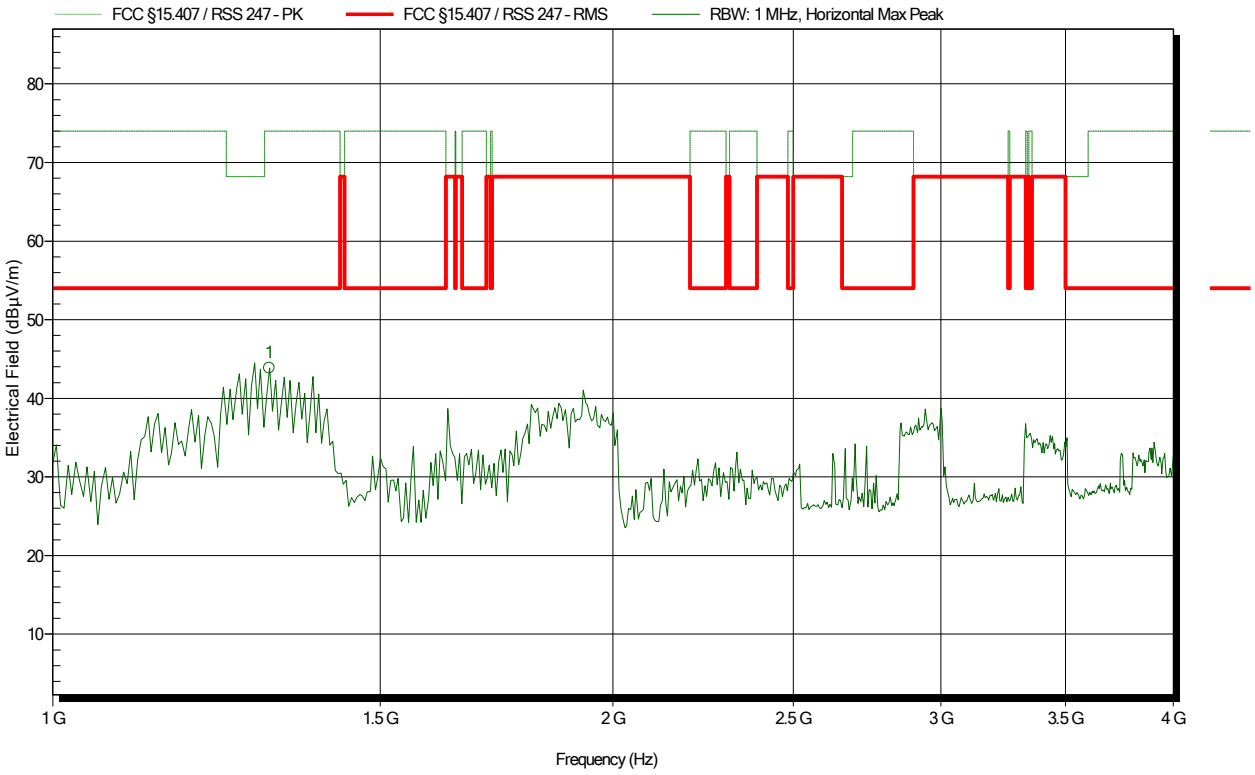

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.308 GHz	43.87 dBµV/m	54 dBµV/m	-10.13 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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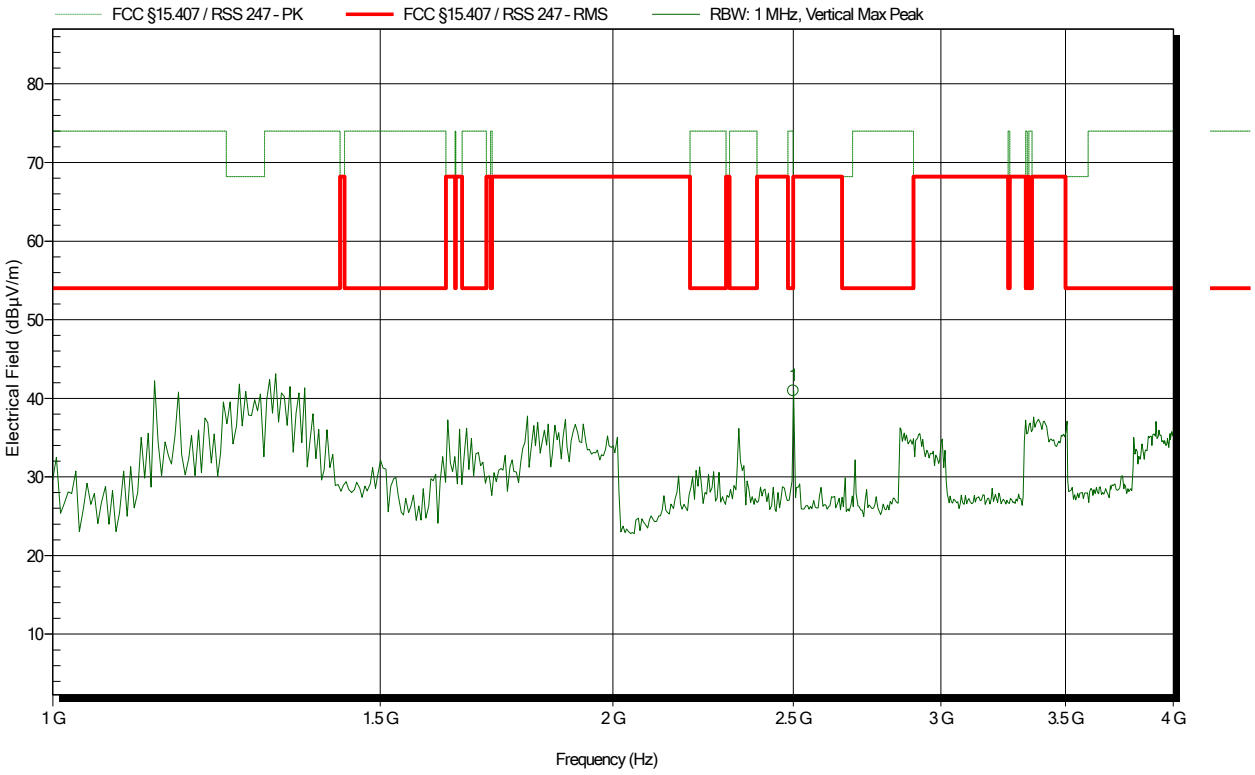

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.5 GHz	40.96 dBµV/m	54 dBµV/m	-13.04 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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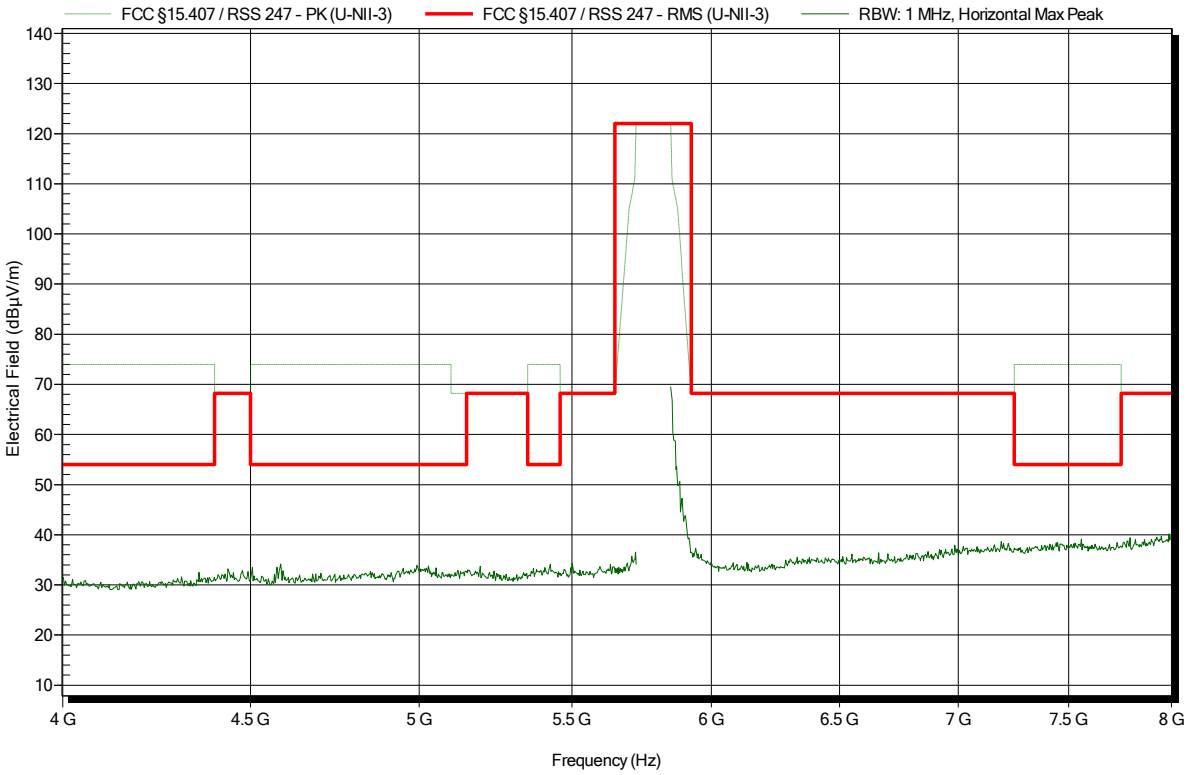

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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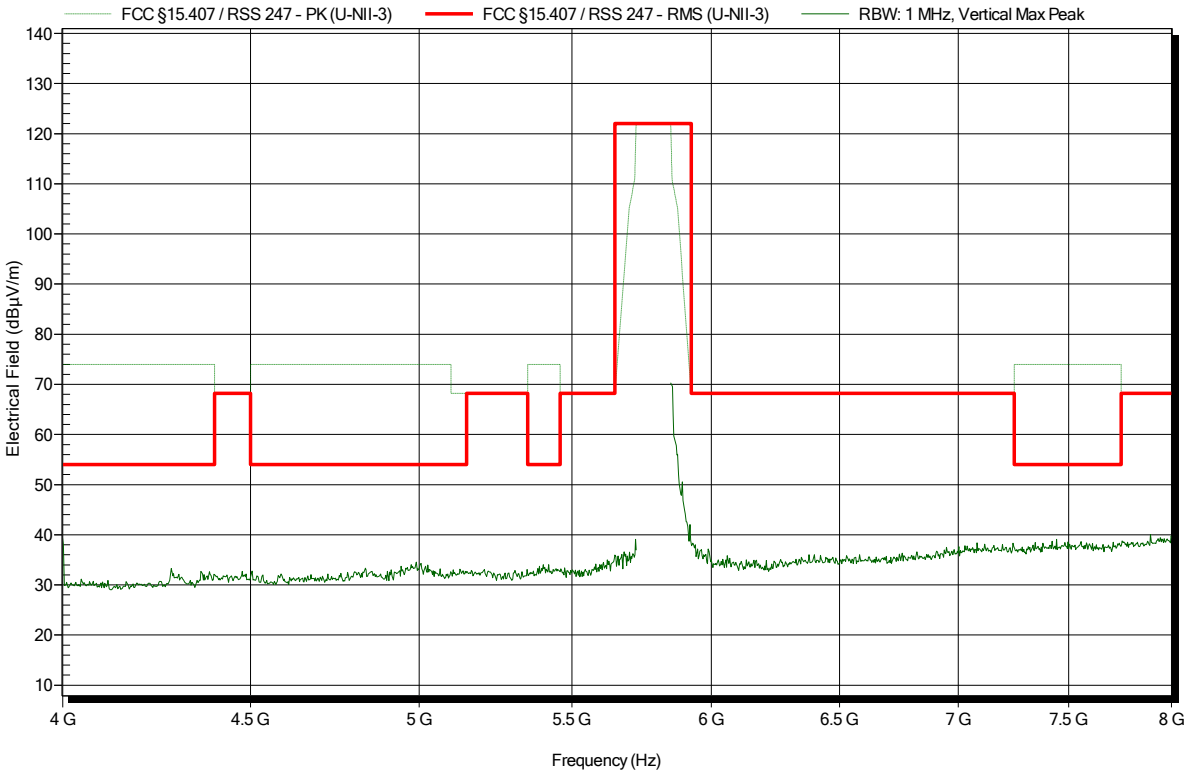

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	lower band area

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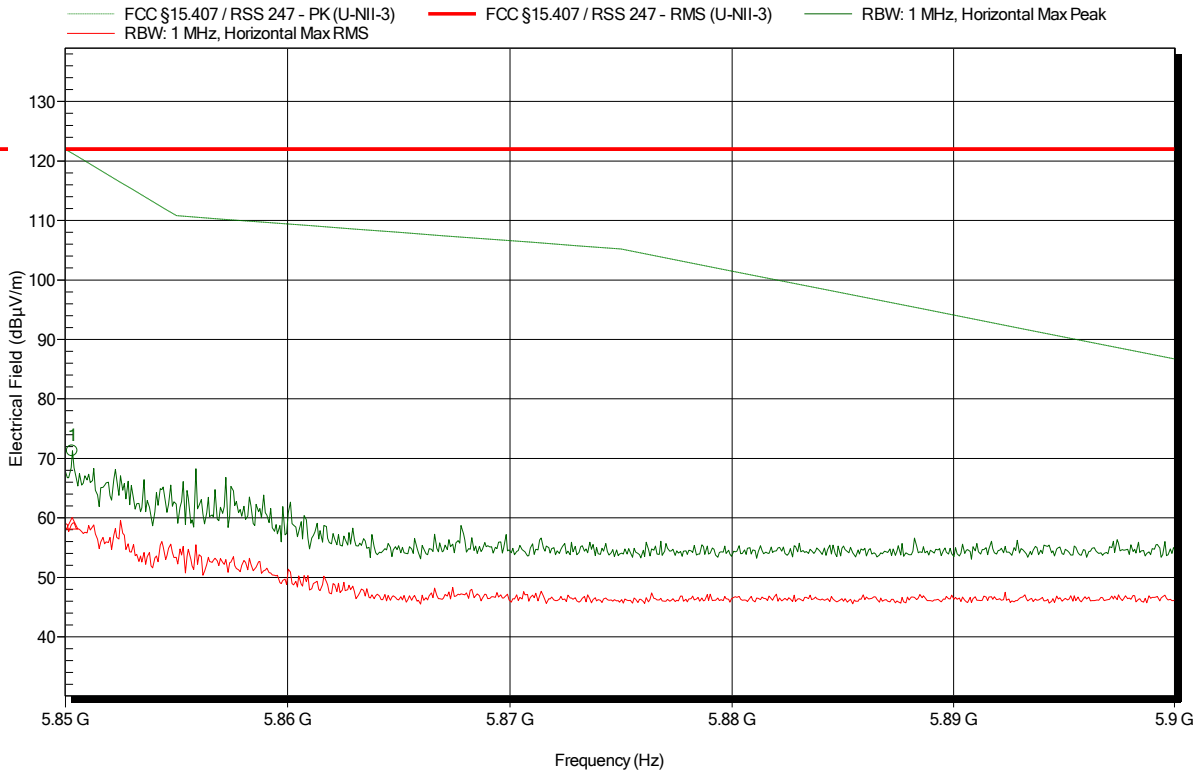

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.85 GHz	71.3 dBµV/m	121.28 dBµV/m	-49.98 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.85 GHz	59.1 dBµV/m	122 dBµV/m	-62.9 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	lower band area

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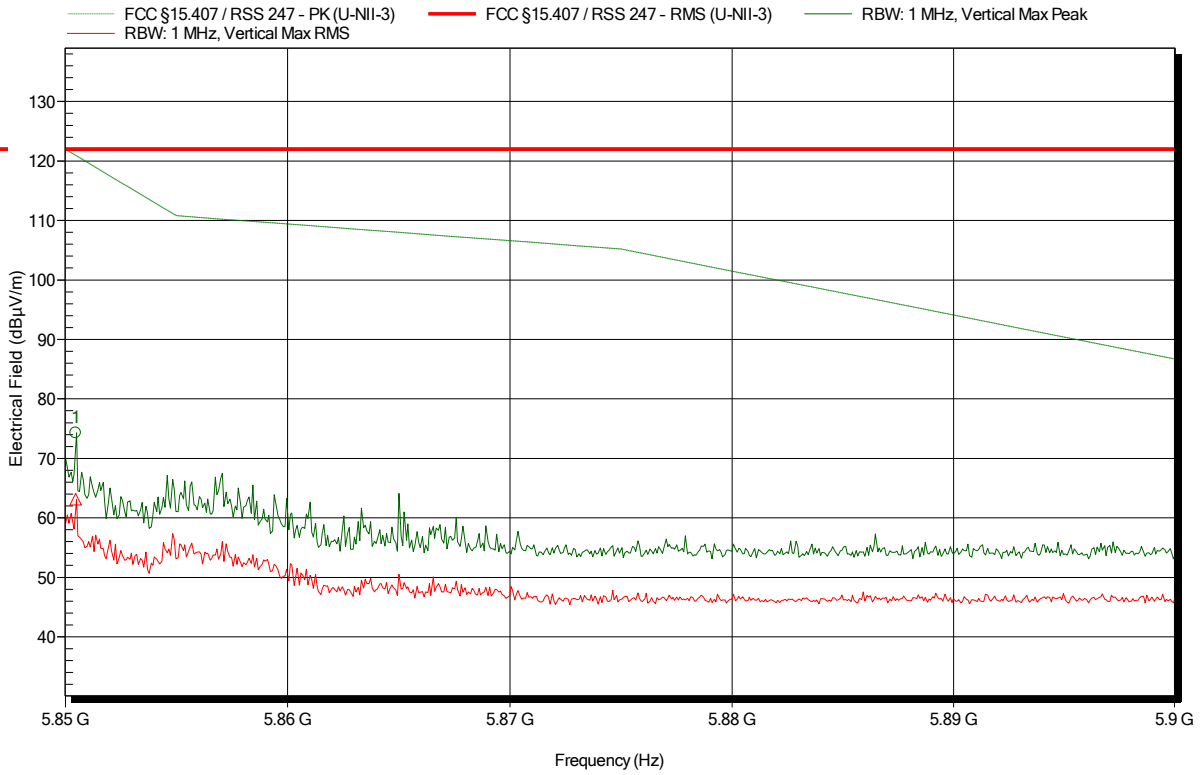

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.85 GHz	74.28 dBµV/m	120.92 dBµV/m	-46.64 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.85 GHz	63.16 dBµV/m	122 dBµV/m	-58.84 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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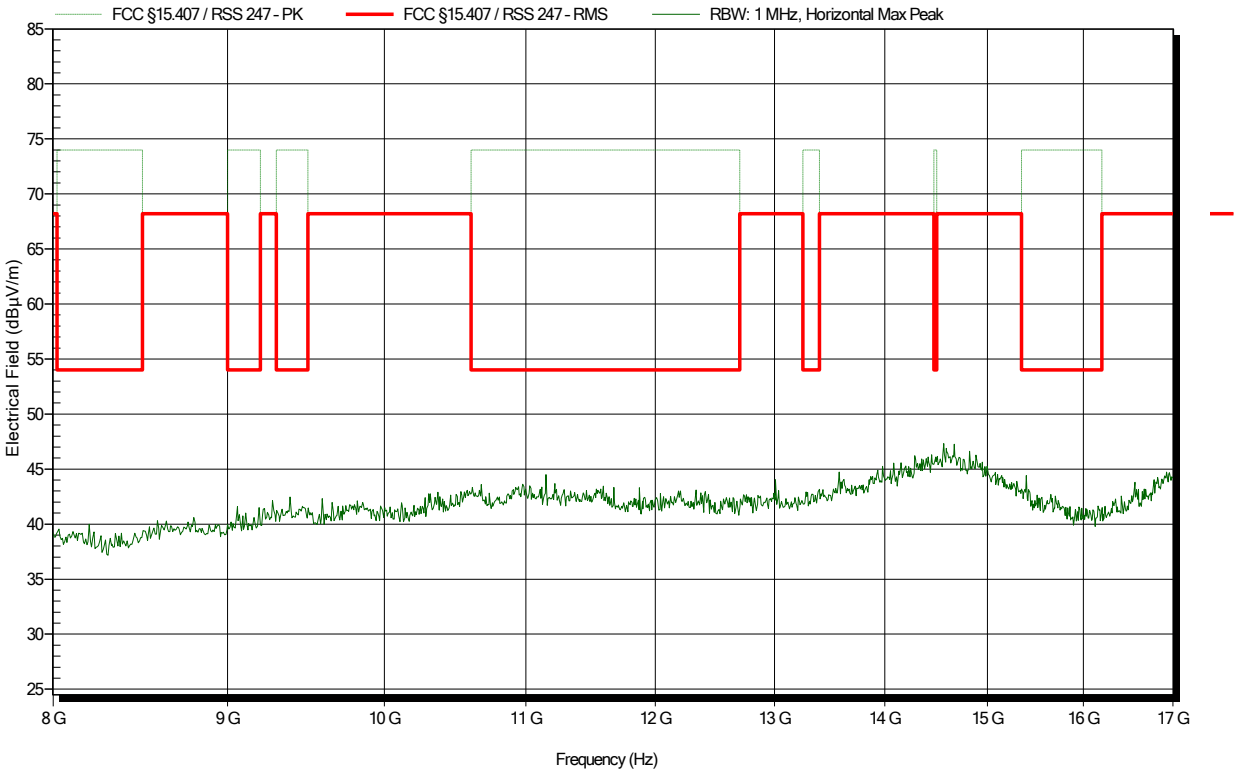

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-25
Note:	

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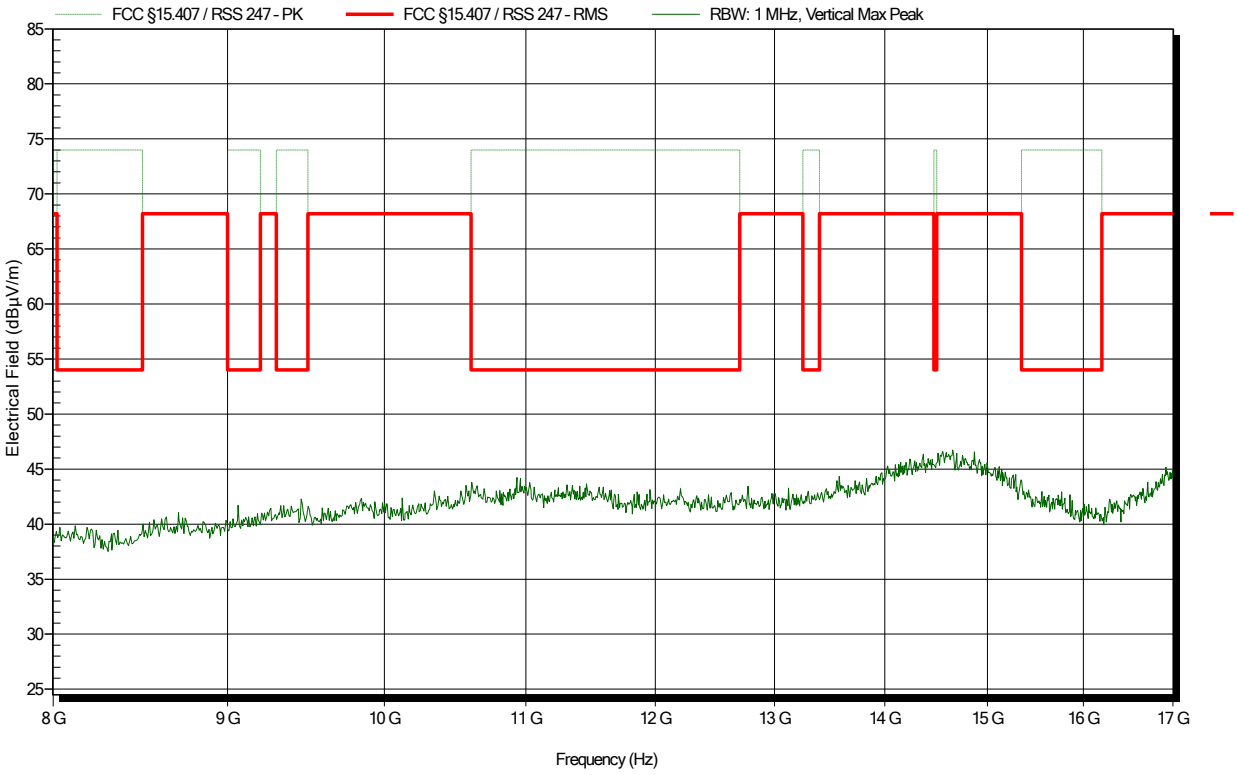

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-27
Note:	

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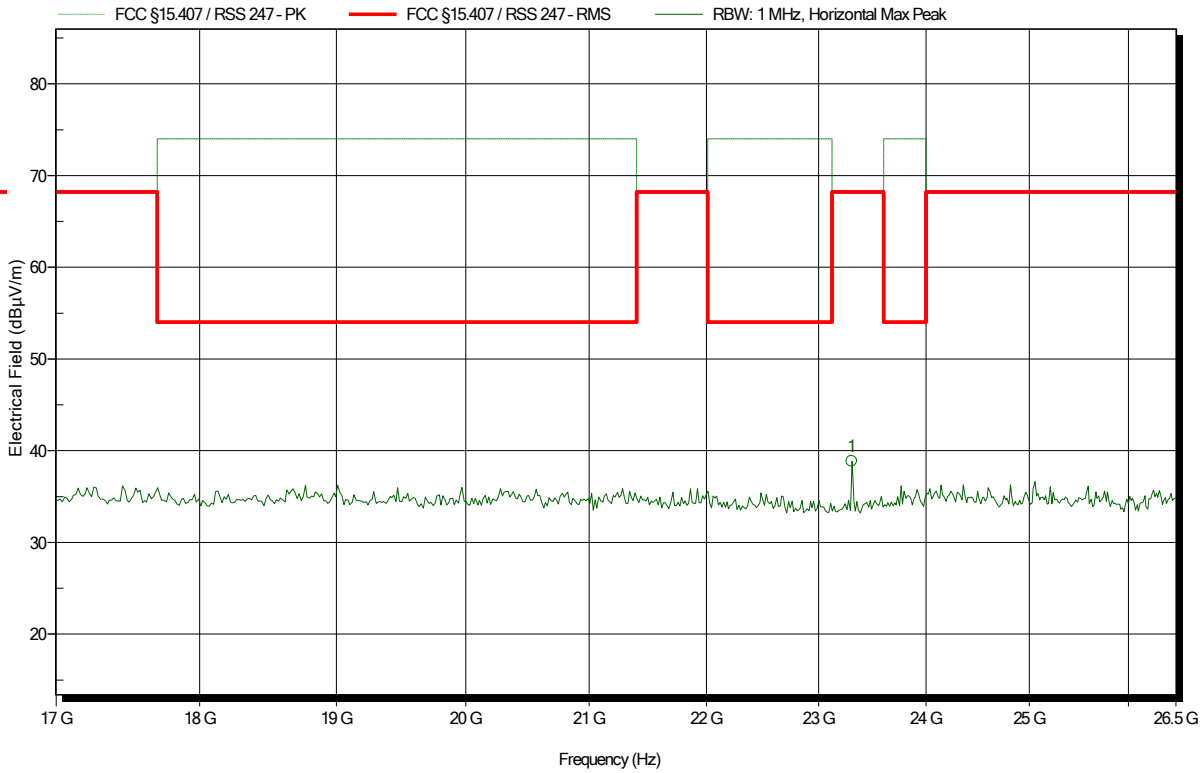

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
23.303 GHz	38.85 dBµV/m	68.2 dBµV/m	-29.35 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-27
Note:	

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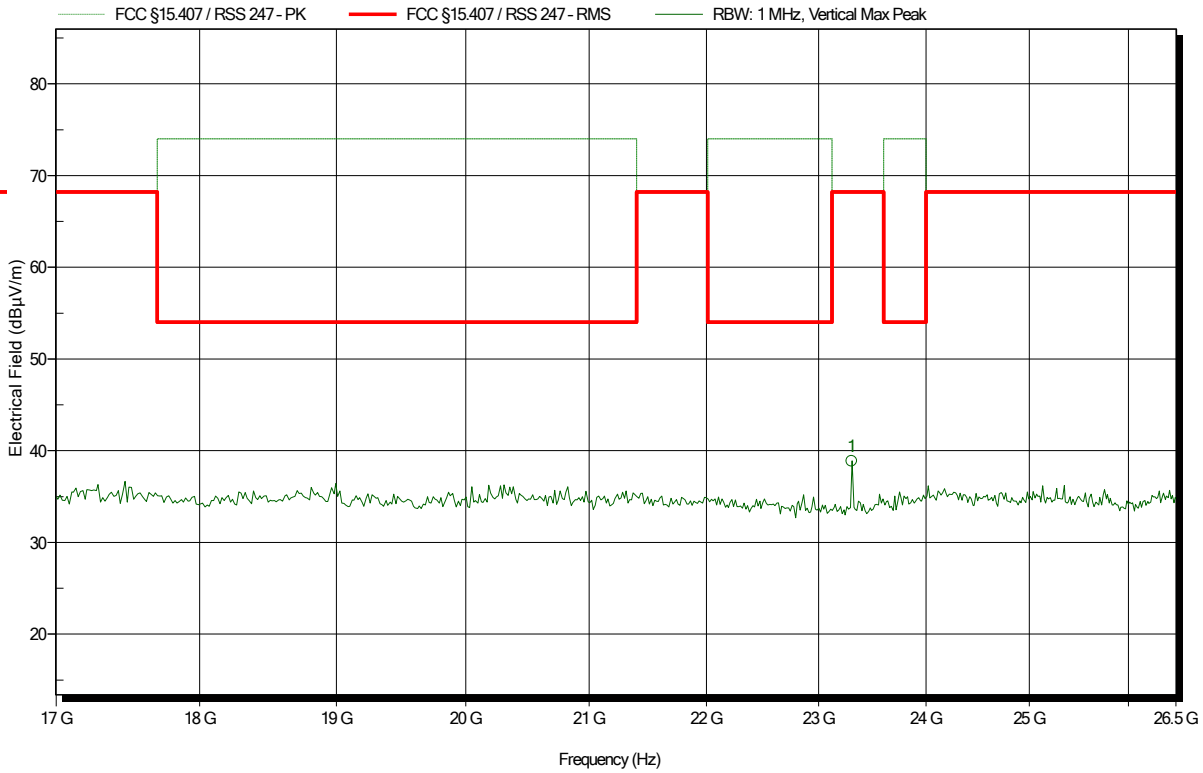

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
23.303 GHz	38.88 dBµV/m	68.2 dBµV/m	-29.32 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-30
Note:	

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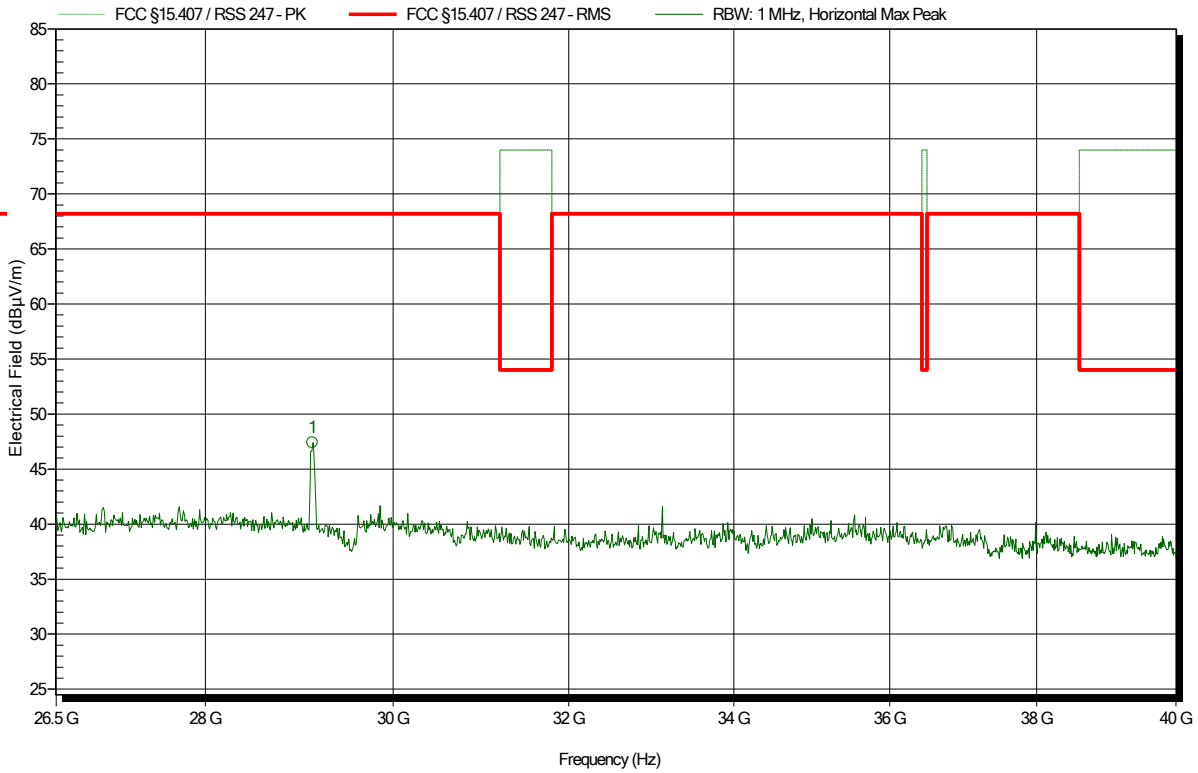

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
29.125 GHz	47.41 dBµV/m	68.2 dBµV/m	-20.79 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a – 9 MBit/s – 5825 MHz
Test Date:	2019-09-30
Note:	

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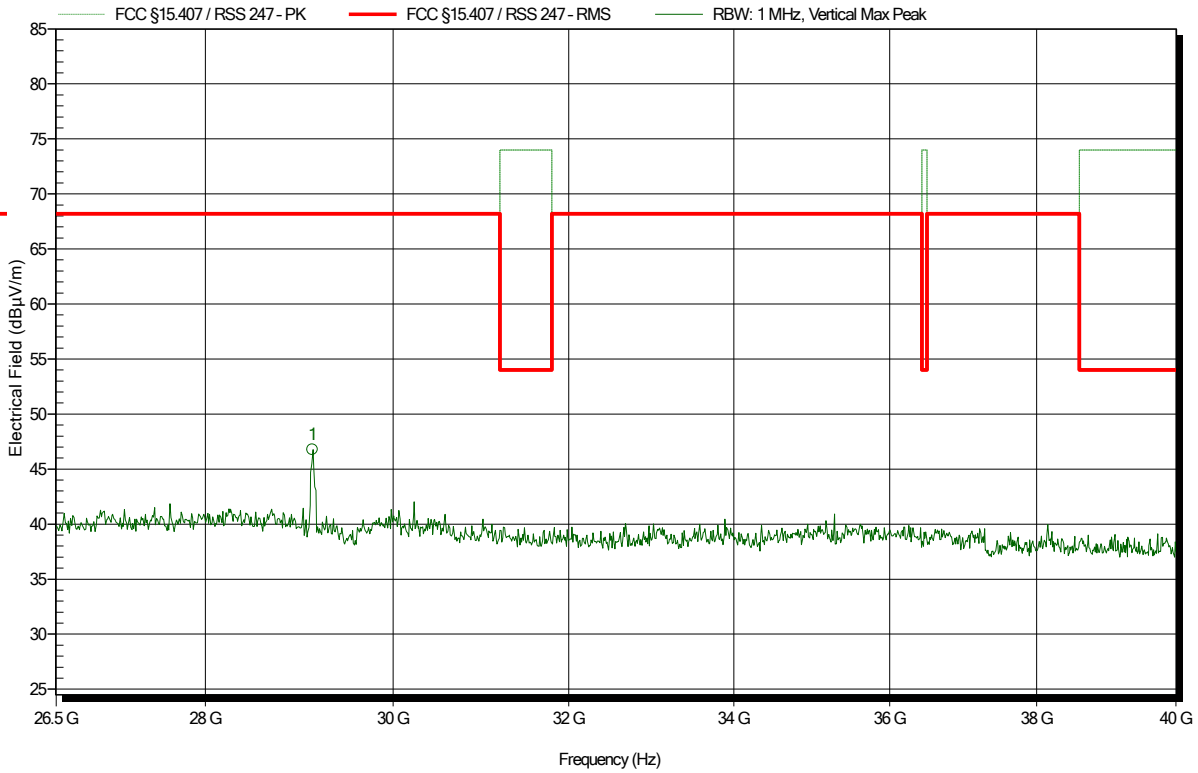

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
29.125 GHz	46.75 dBµV/m	68.2 dBµV/m	-21.45 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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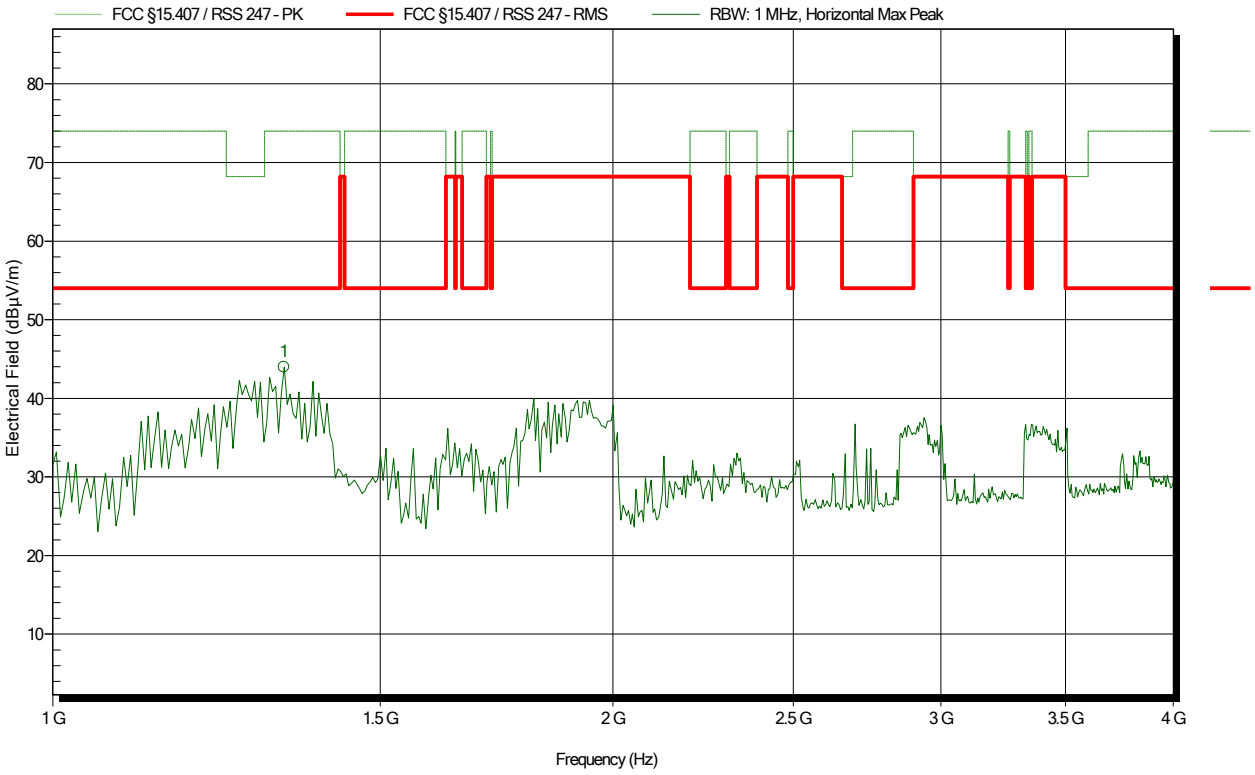

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.332 GHz	44 dBµV/m	54 dBµV/m	-10 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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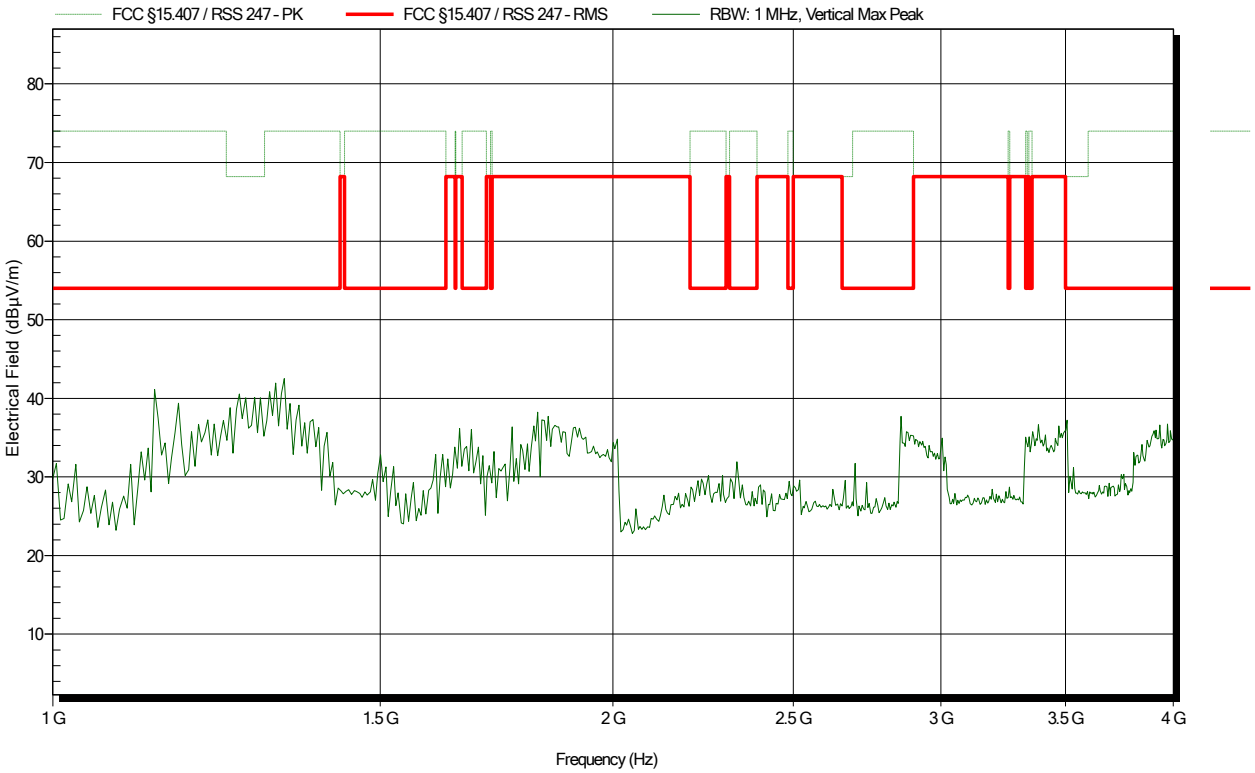

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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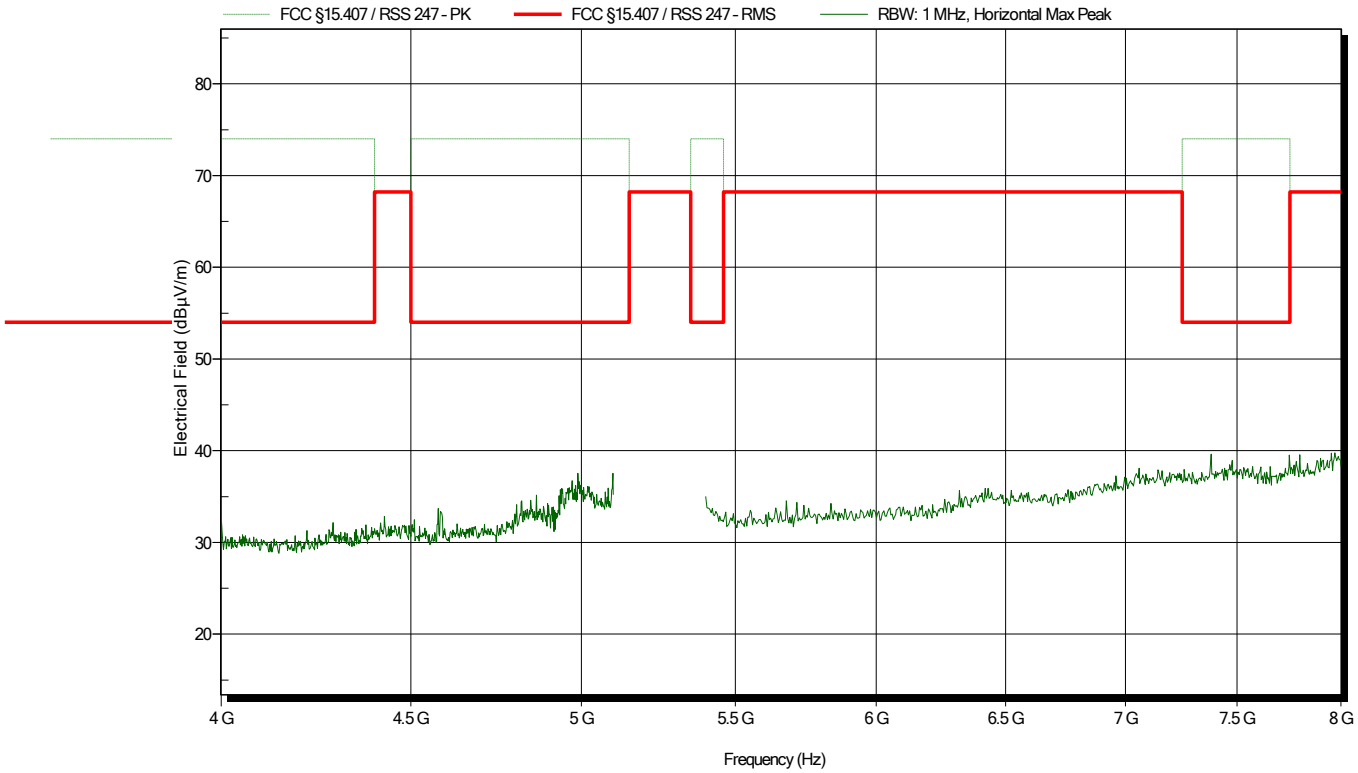

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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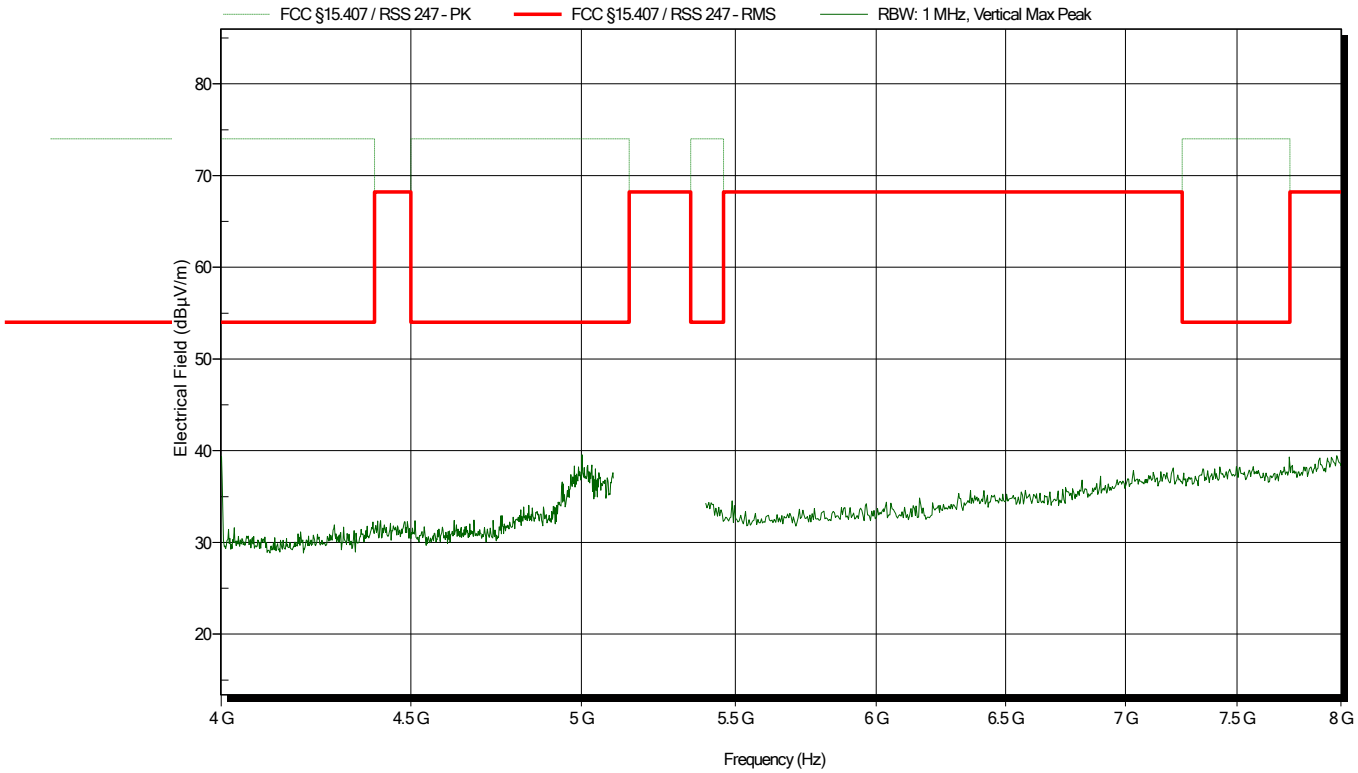

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	lower band area

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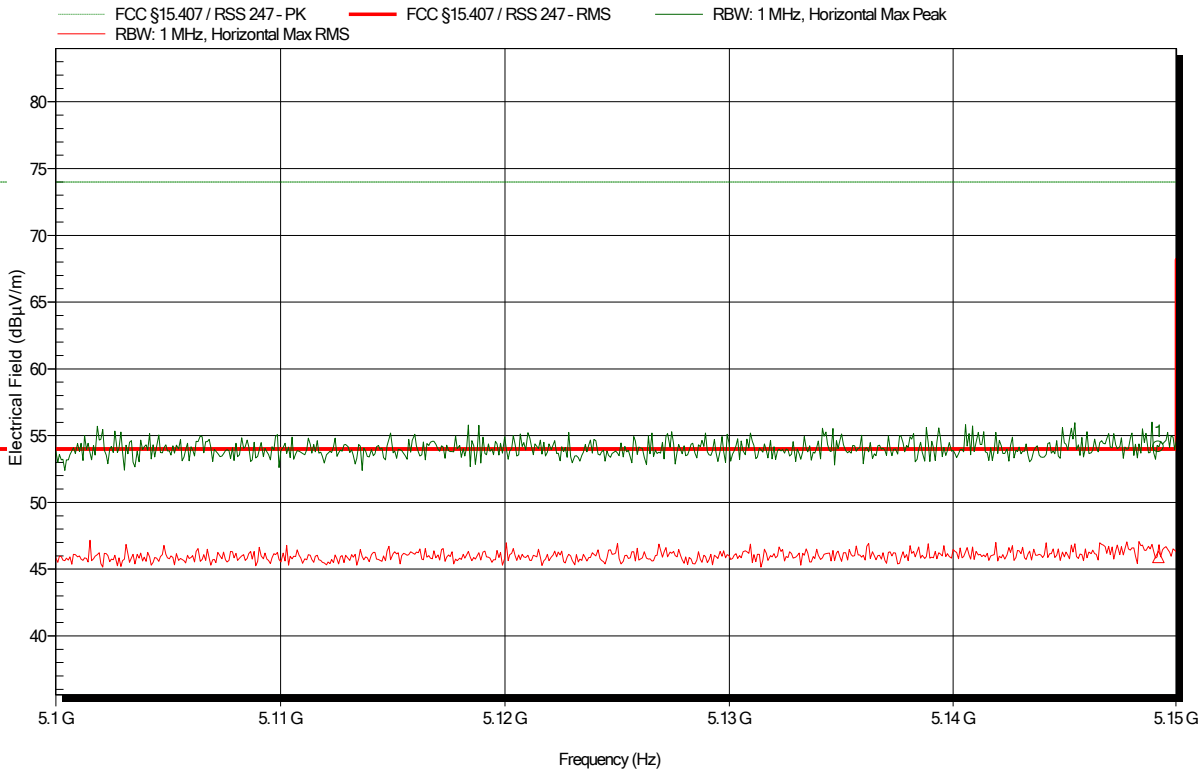

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.149 GHz	54.17 dBµV/m	74 dBµV/m	-19.83 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.149 GHz	45.91 dBµV/m	54 dBµV/m	-8.09 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	lower band area

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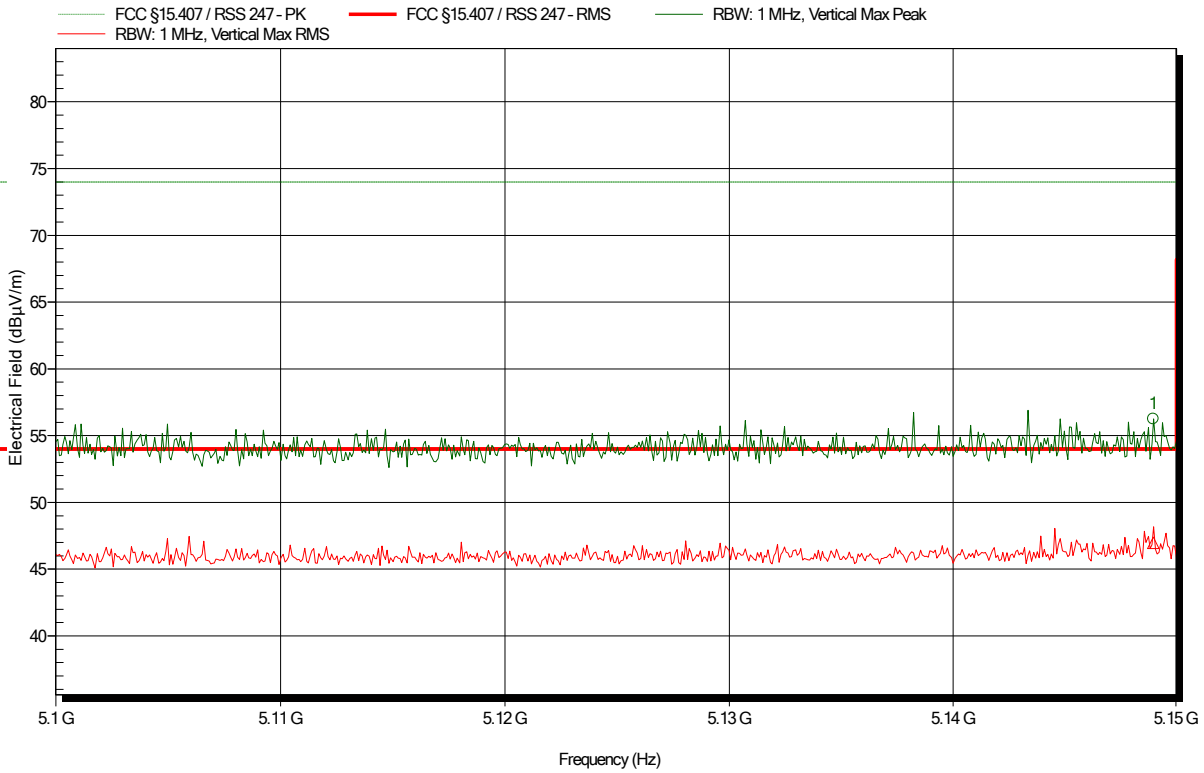

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.149 GHz	56.26 dBµV/m	74 dBµV/m	-17.74 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.149 GHz	46.96 dBµV/m	54 dBµV/m	-7.04 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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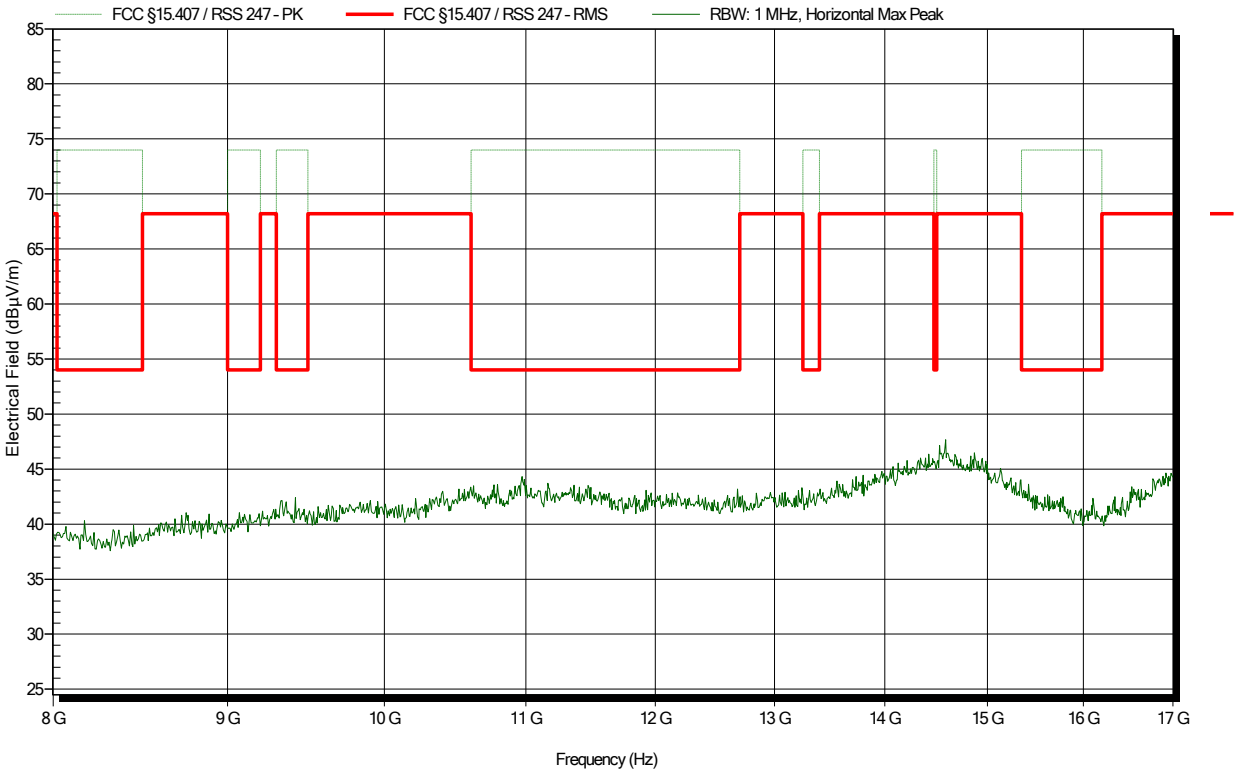

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-25
Note:	

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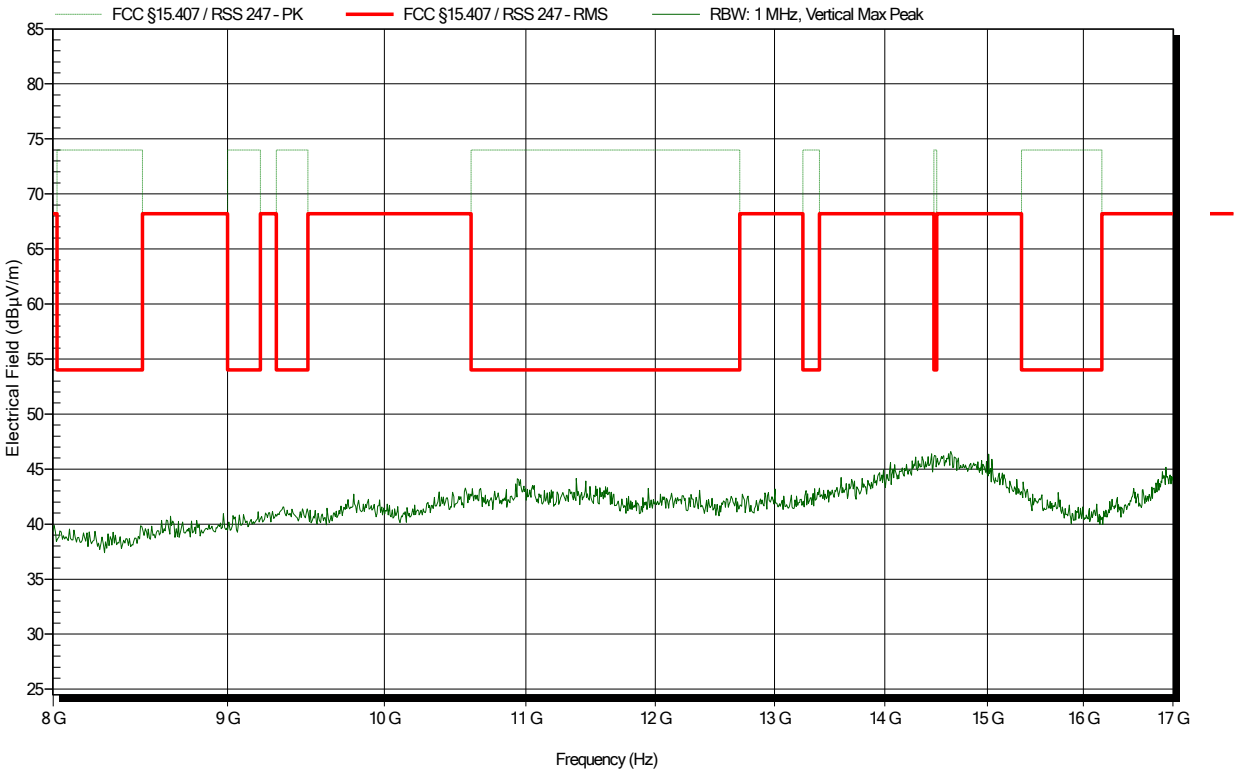

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-27
Note:	

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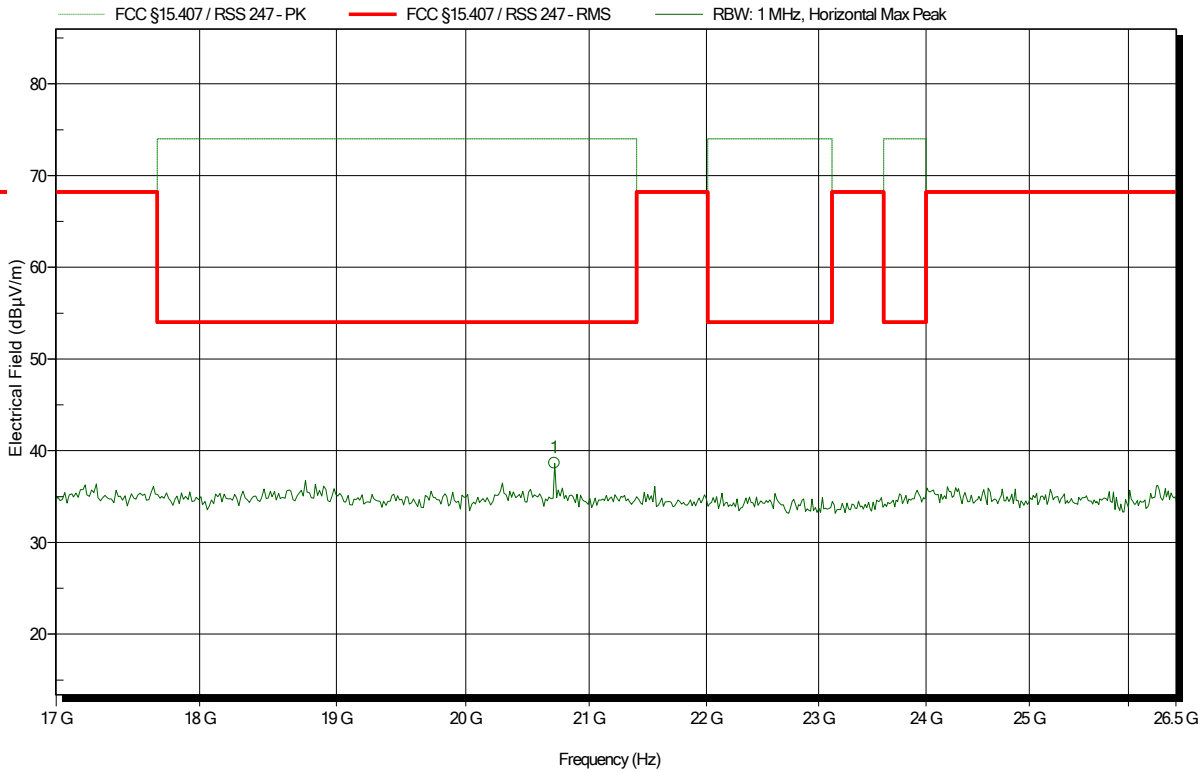

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.715 GHz	38.65 dBµV/m	54 dBµV/m	-15.35 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-27
Note:	

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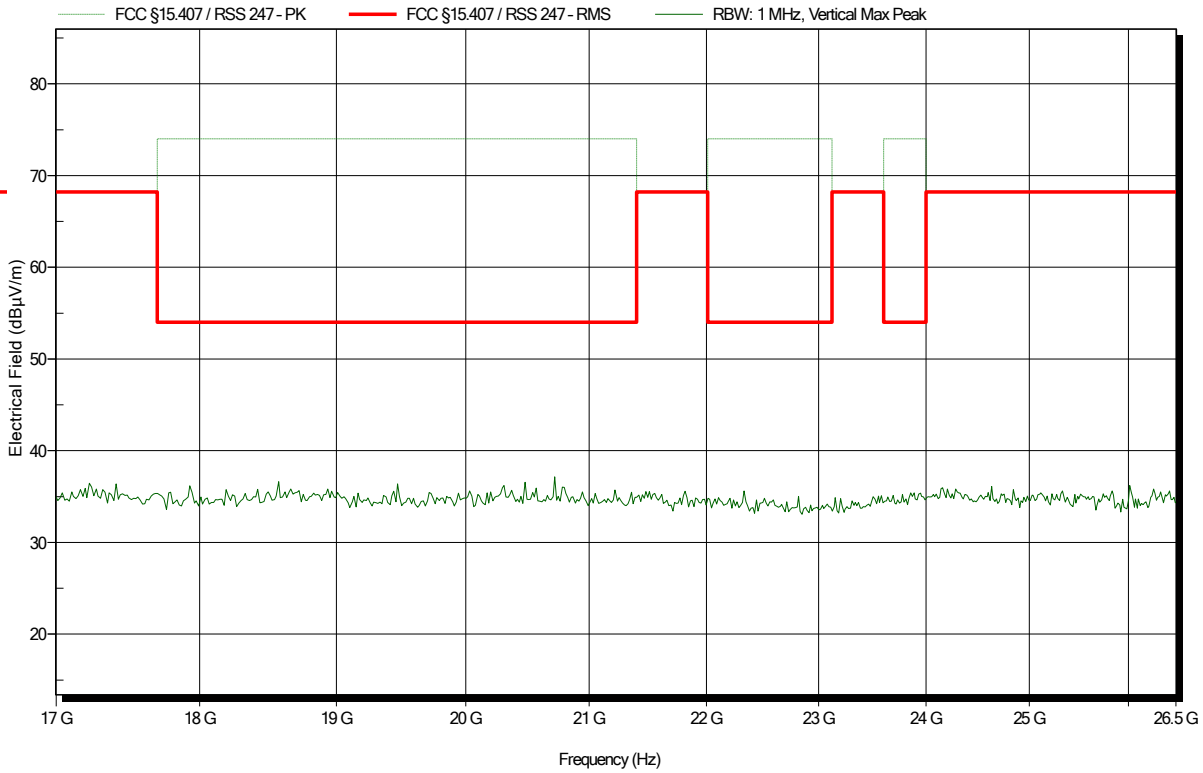

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-30
Note:	

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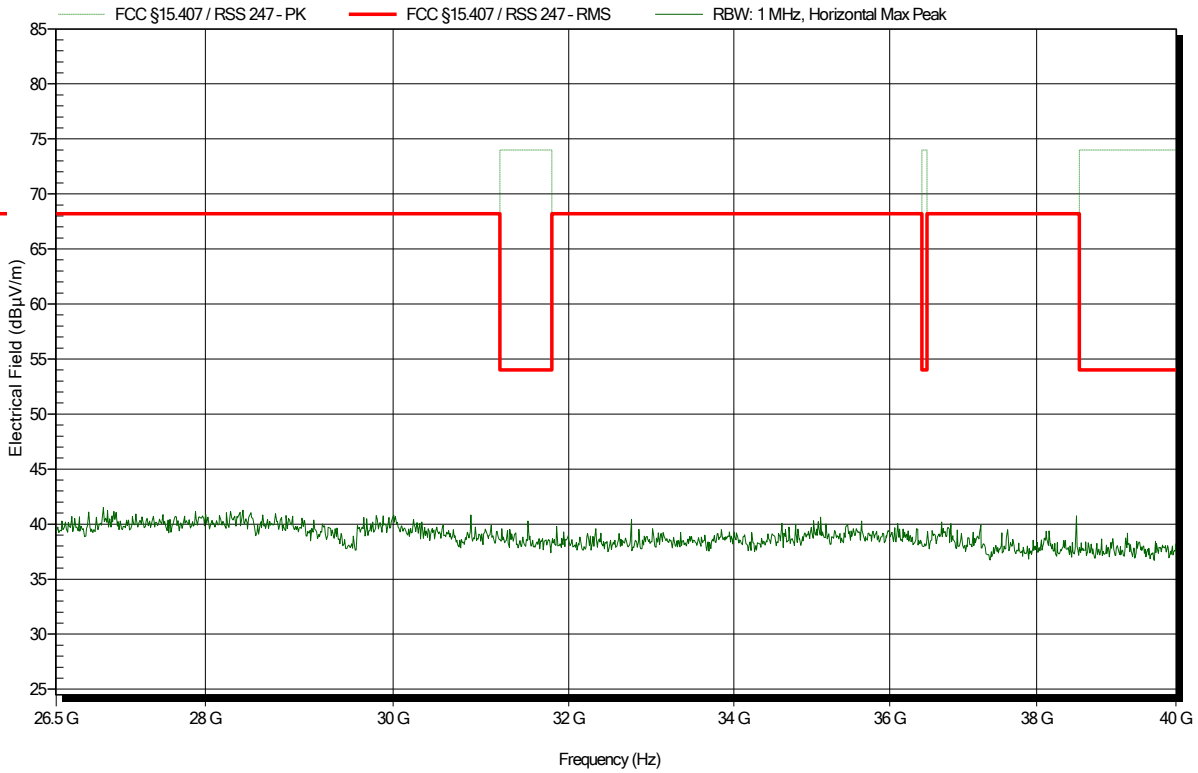

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5180 MHz
Test Date:	2019-09-30
Note:	

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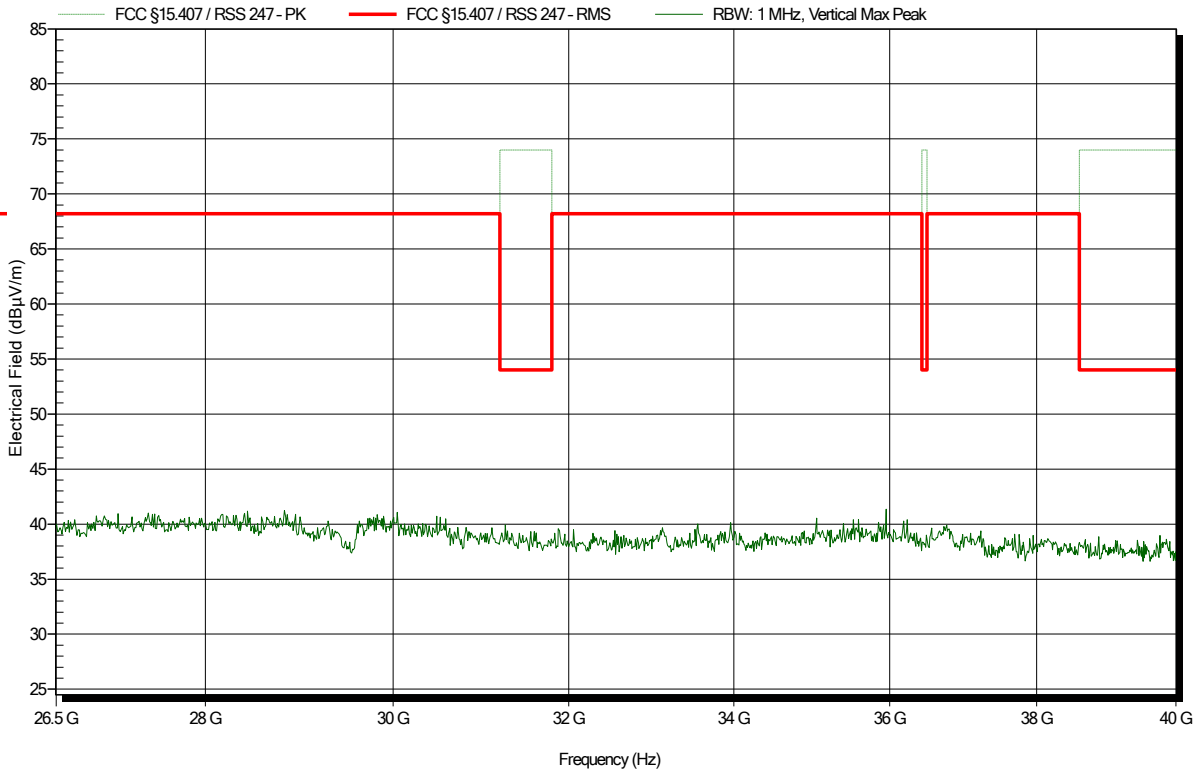

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-25
Note:	

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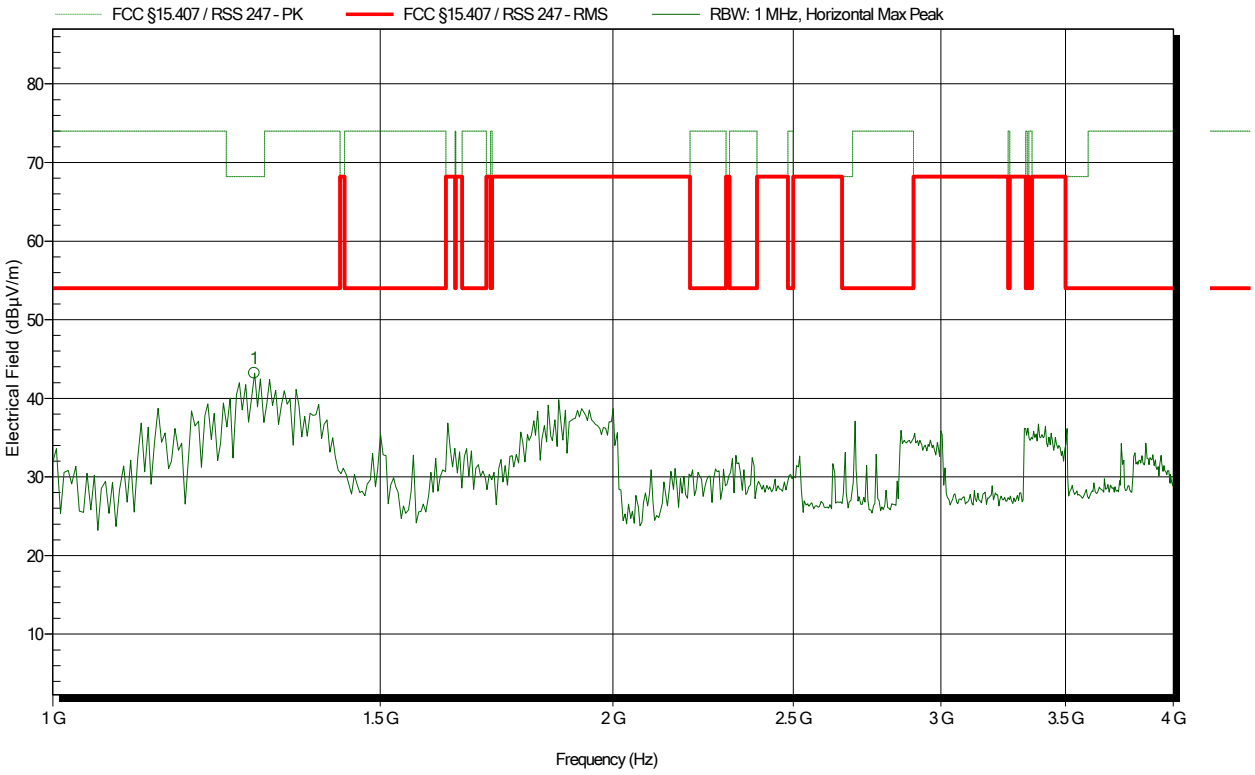

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.284 GHz	43.21 dBµV/m	54 dBµV/m	-10.79 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-25
Note:	

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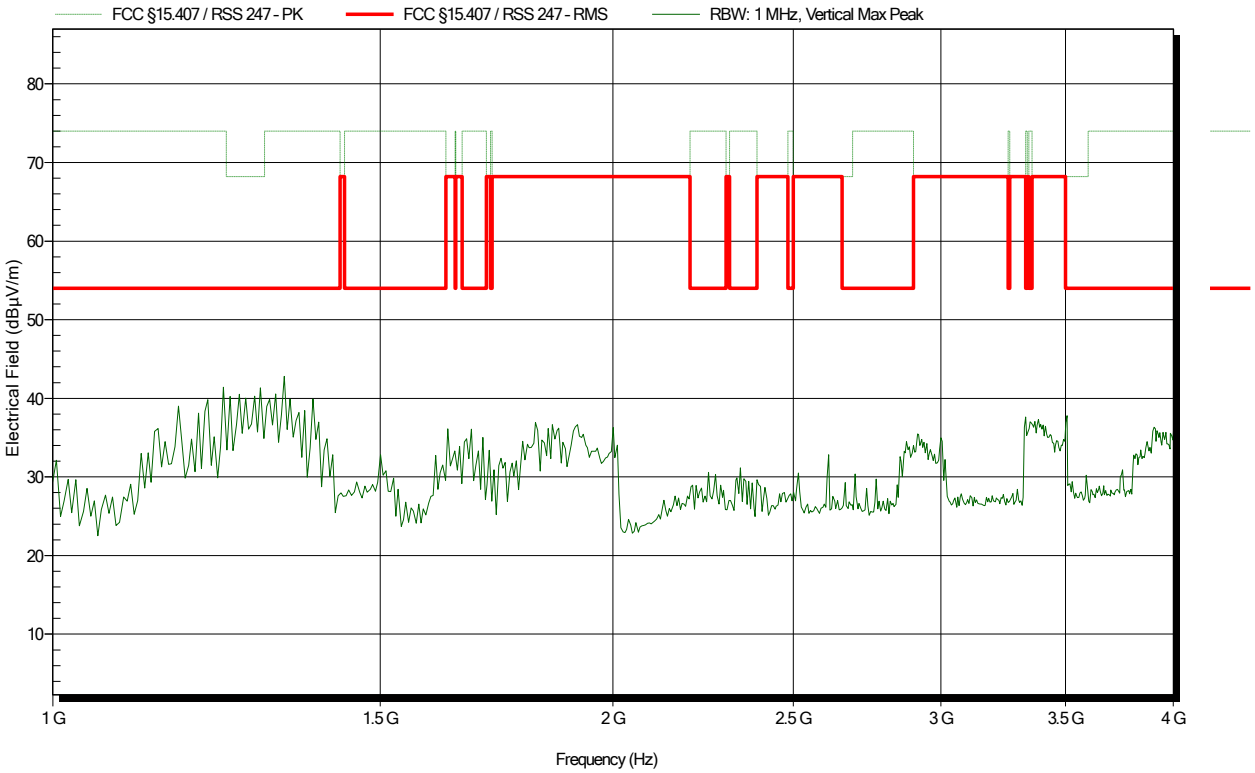

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-25
Note:	

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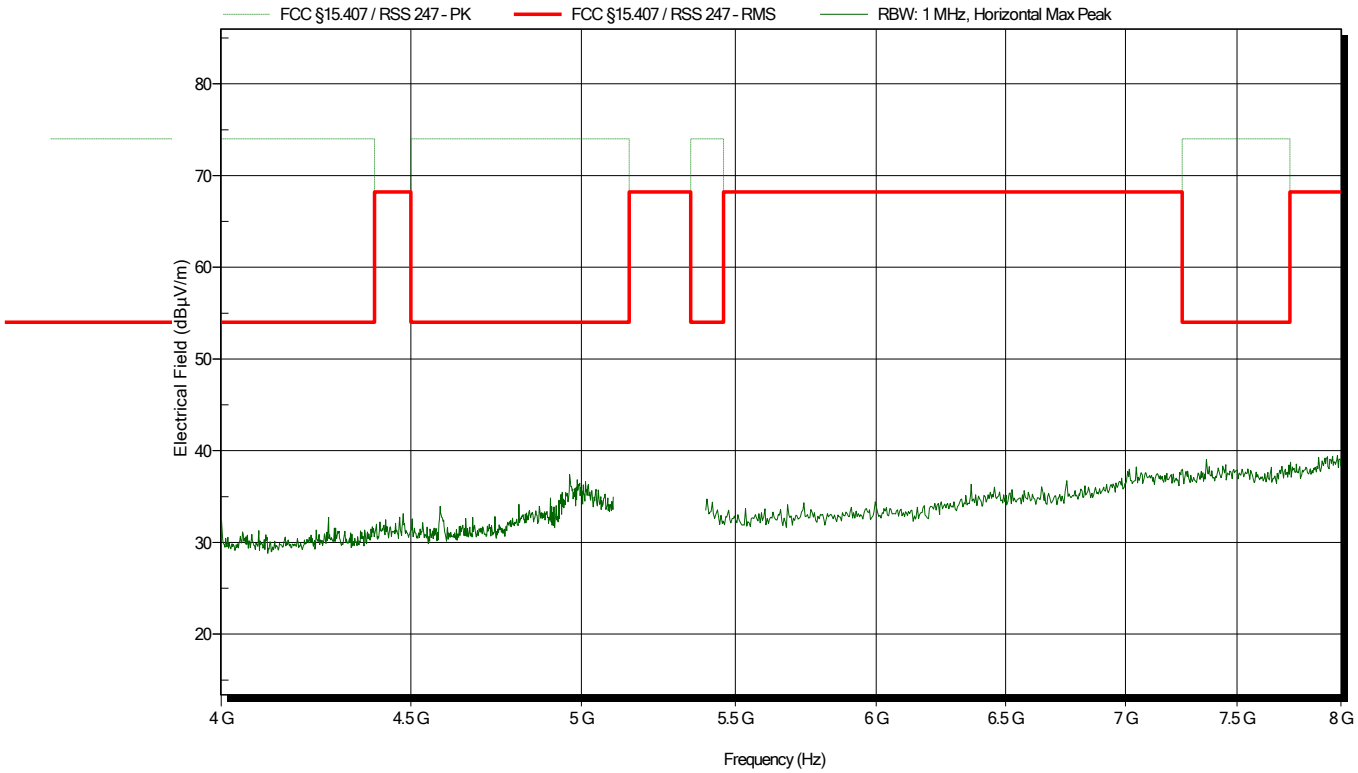

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-25
Note:	

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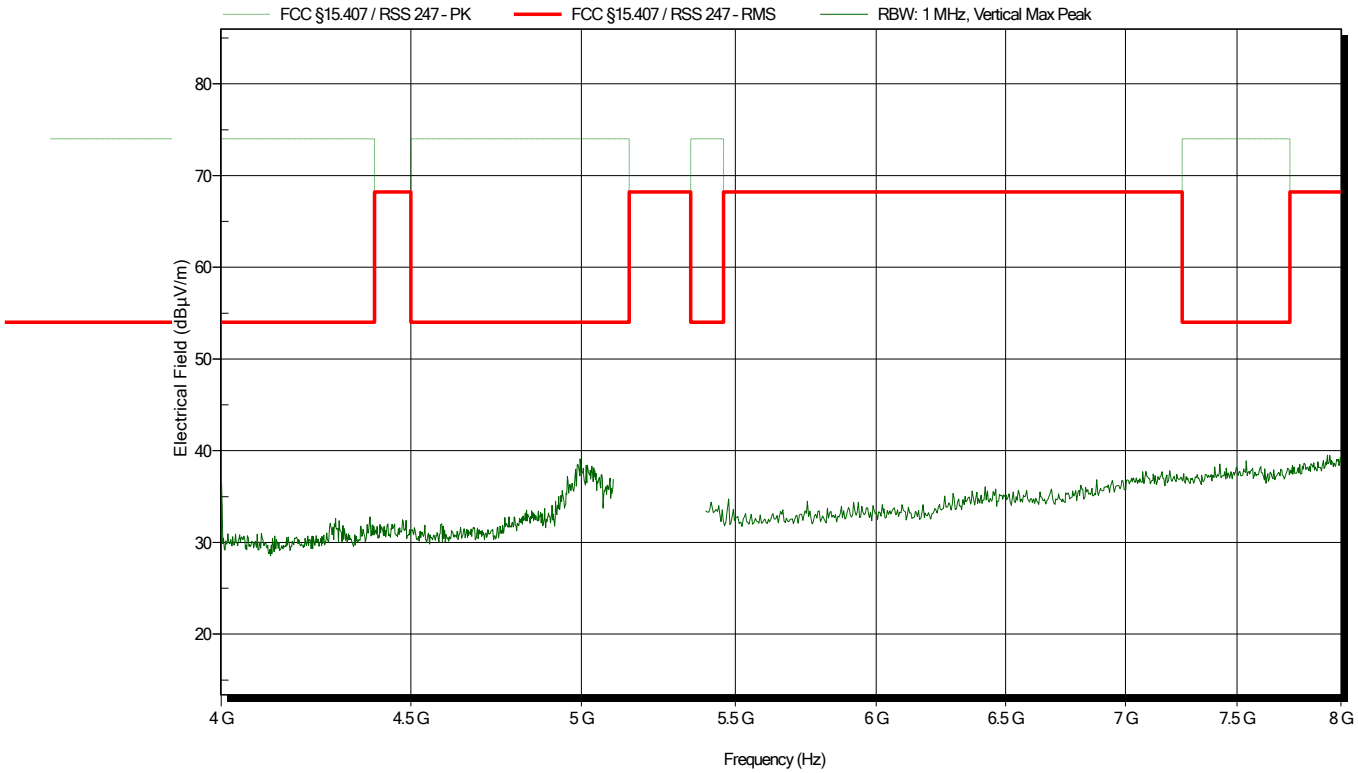

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-03
Note:	

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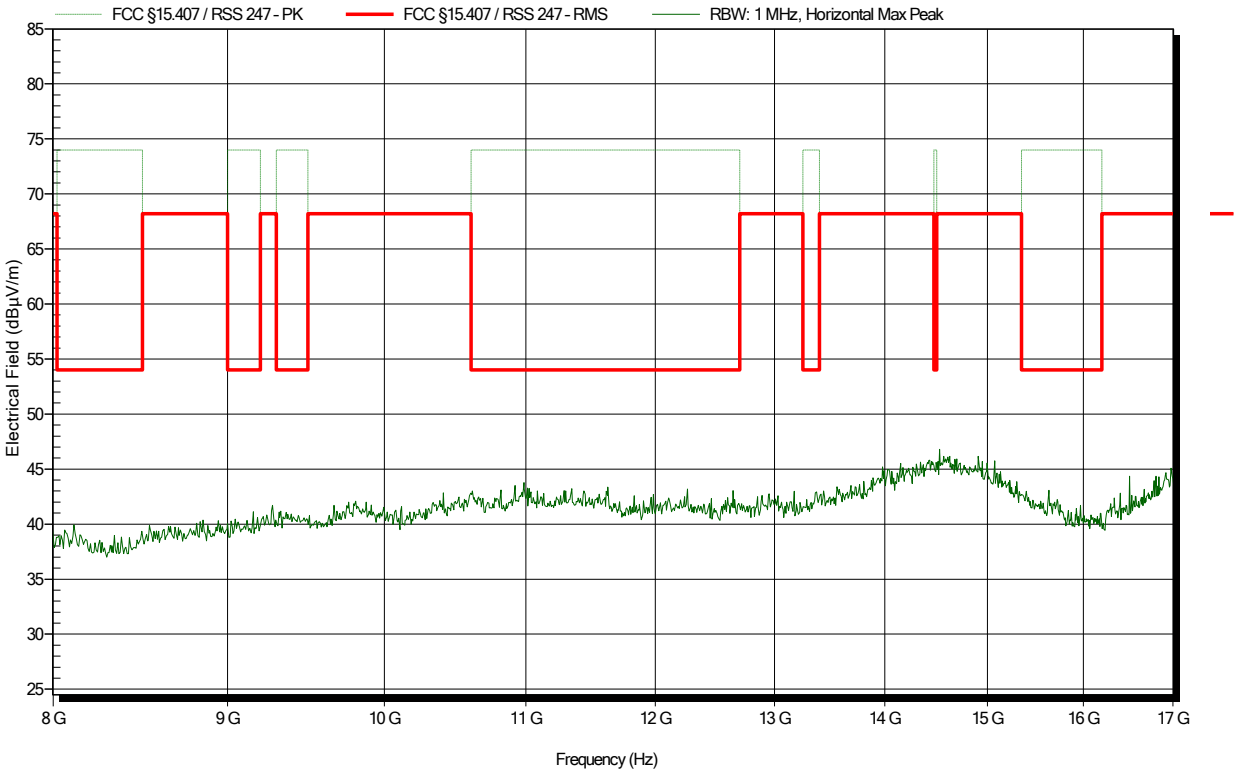

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5240 MHz
Test Date:	2019-09-03
Note:	

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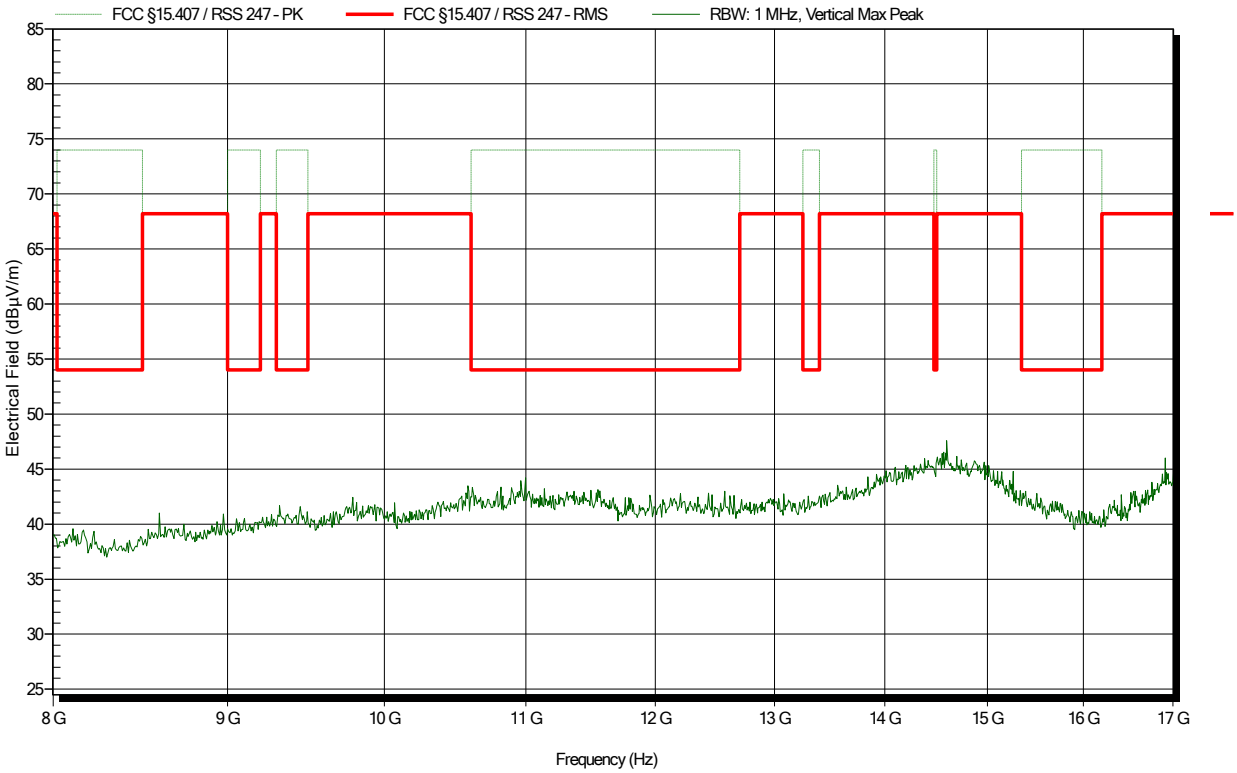

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	

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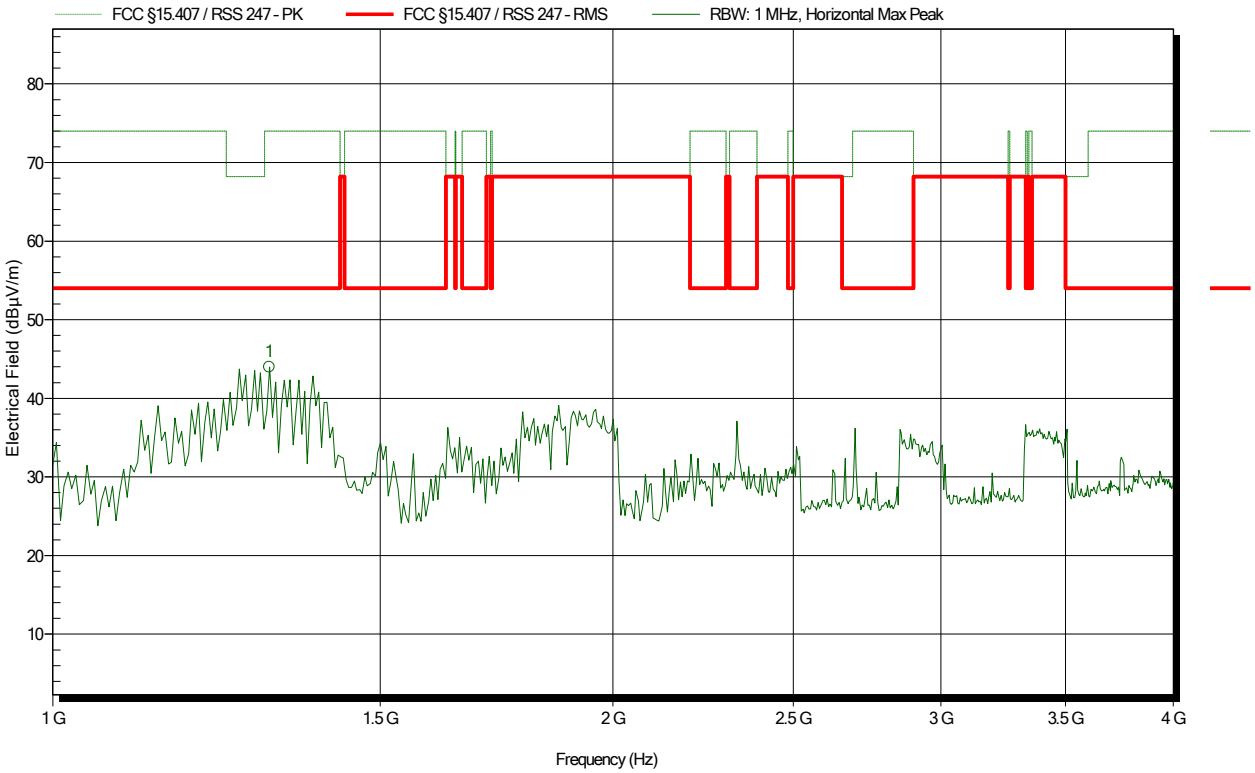

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.308 GHz	43.99 dBµV/m	54 dBµV/m	-10.01 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	

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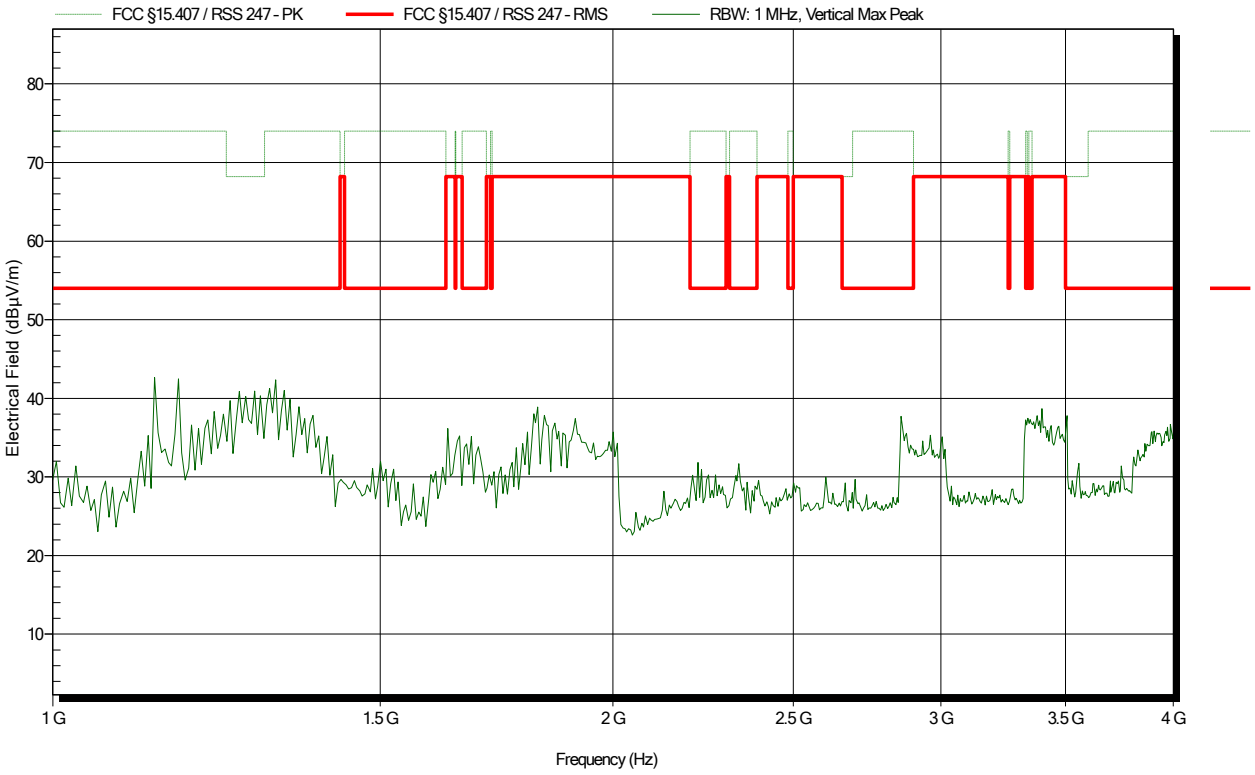

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	

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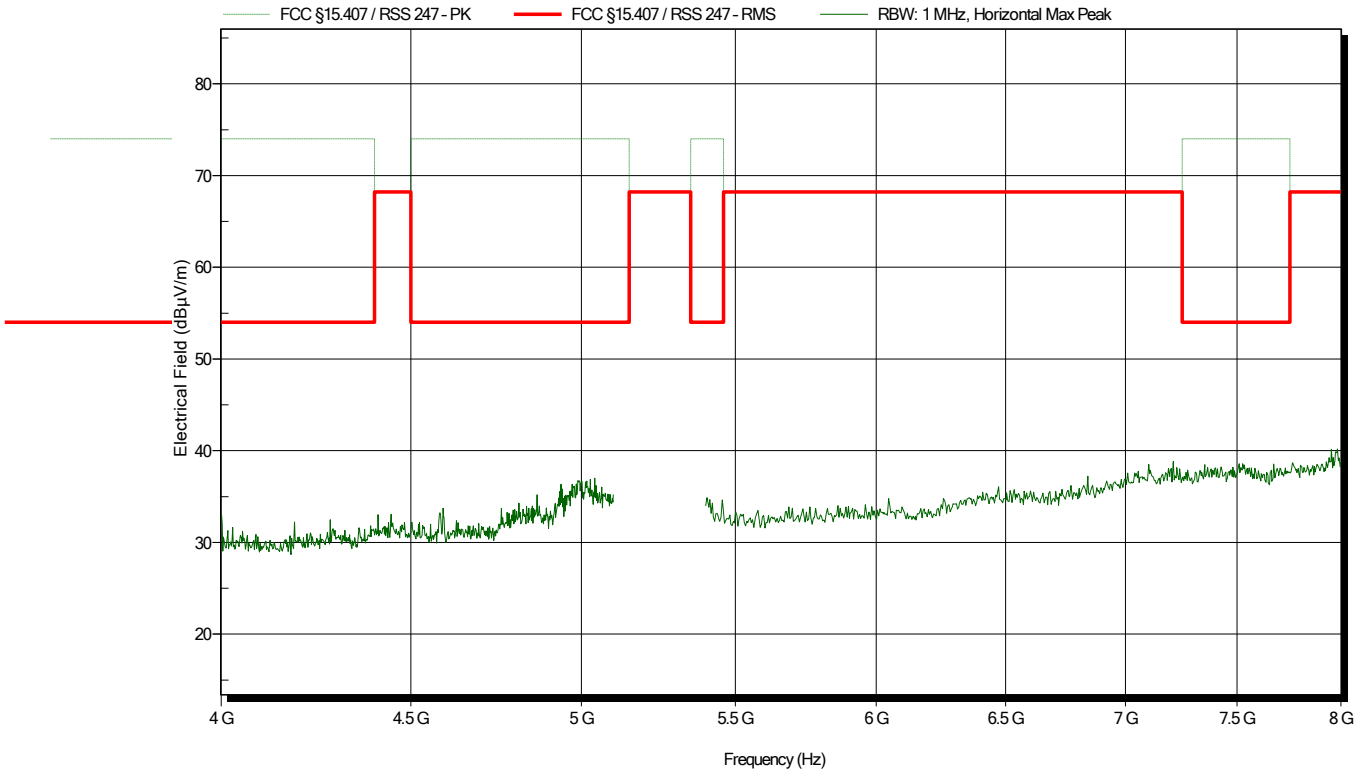

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	

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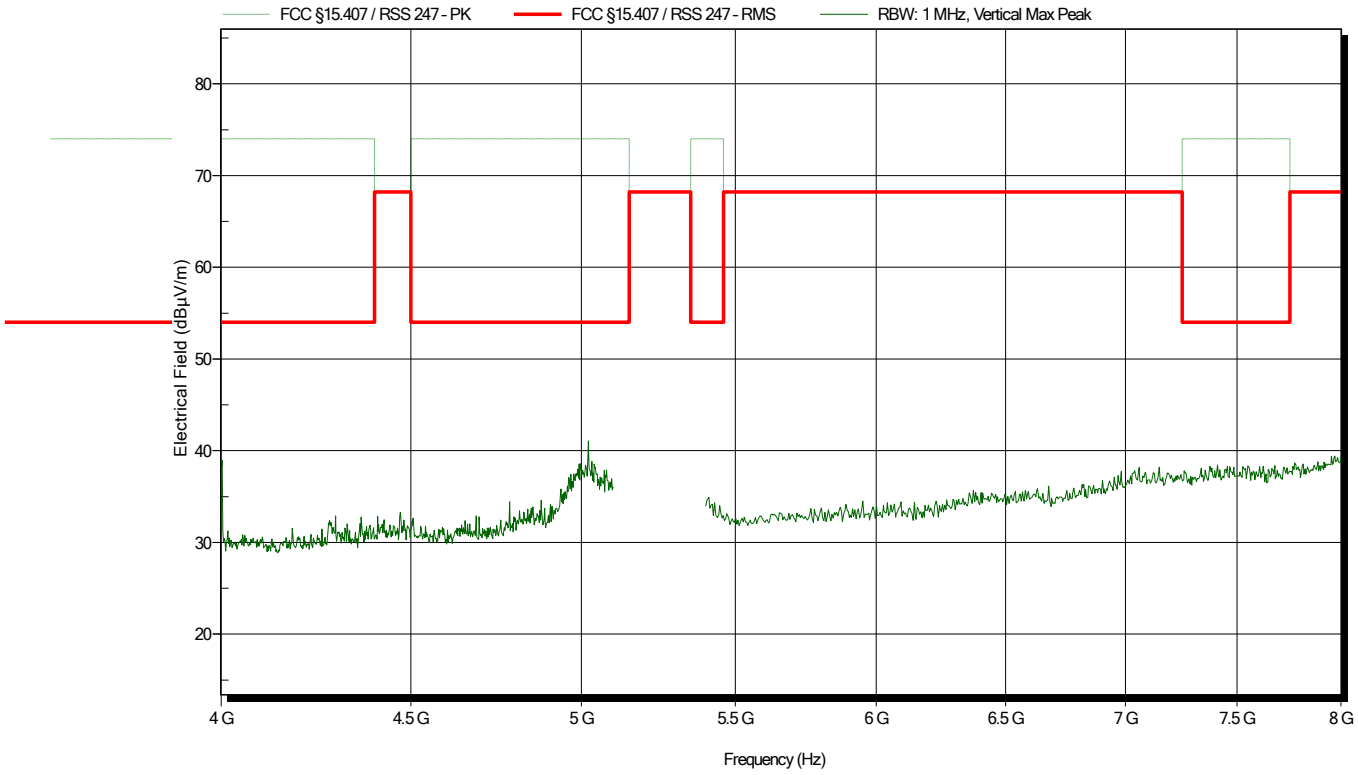

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	upper bandedge

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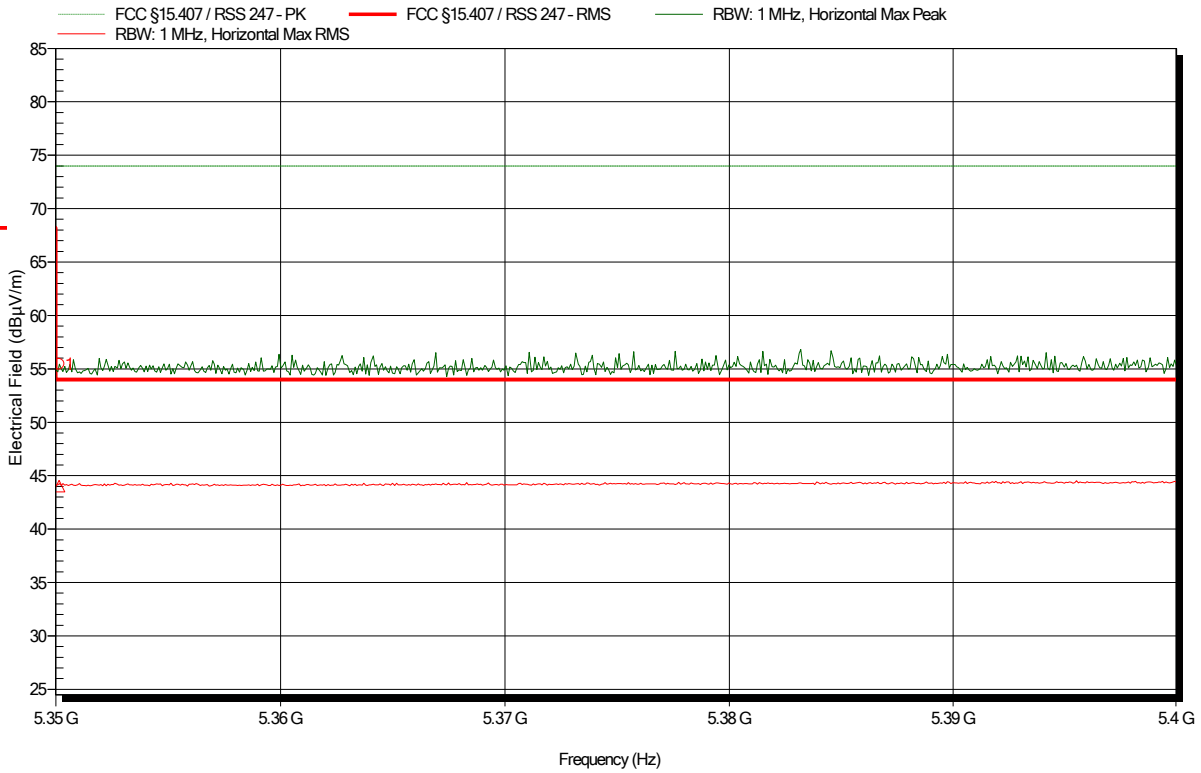

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.35 GHz	55.43 dBµV/m	74 dBµV/m	-18.57 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.35 GHz	44.02 dBµV/m	54 dBµV/m	-9.98 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-25
Note:	upper bandedge

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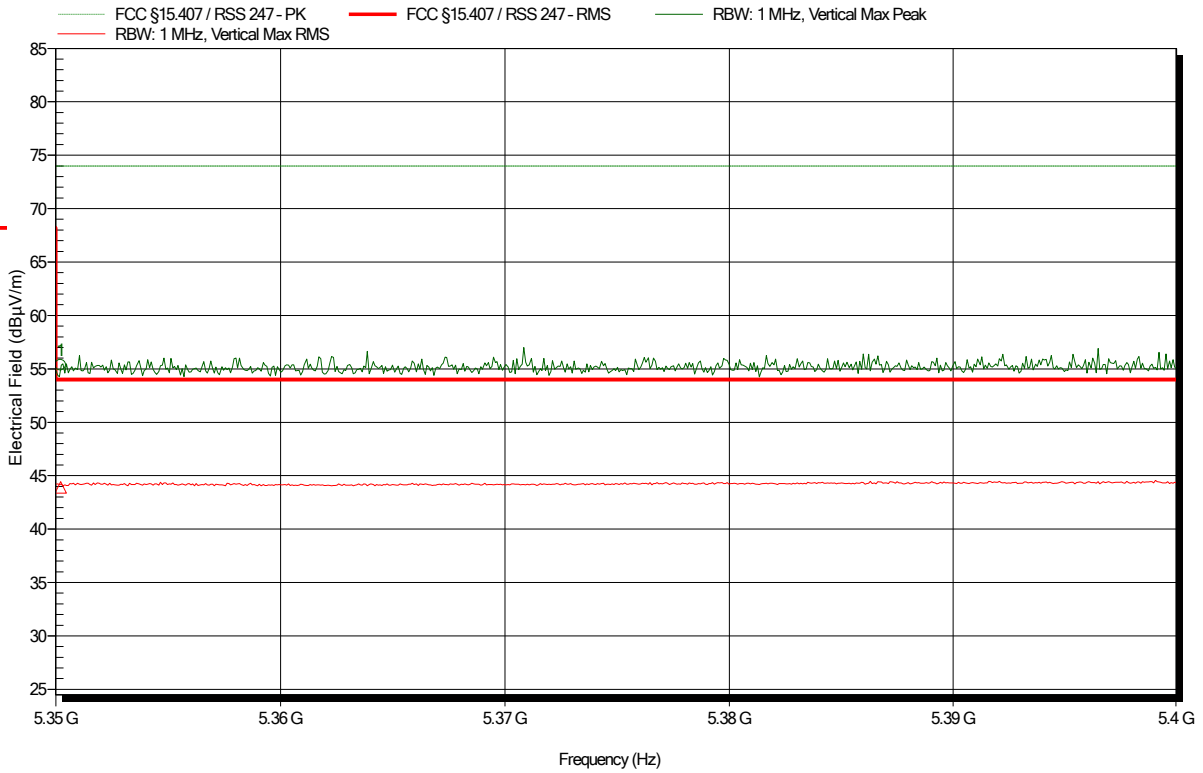

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.35 GHz	55.35 dBµV/m	74 dBµV/m	-18.65 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.35 GHz	43.92 dBµV/m	54 dBµV/m	-10.08 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-03
Note:	

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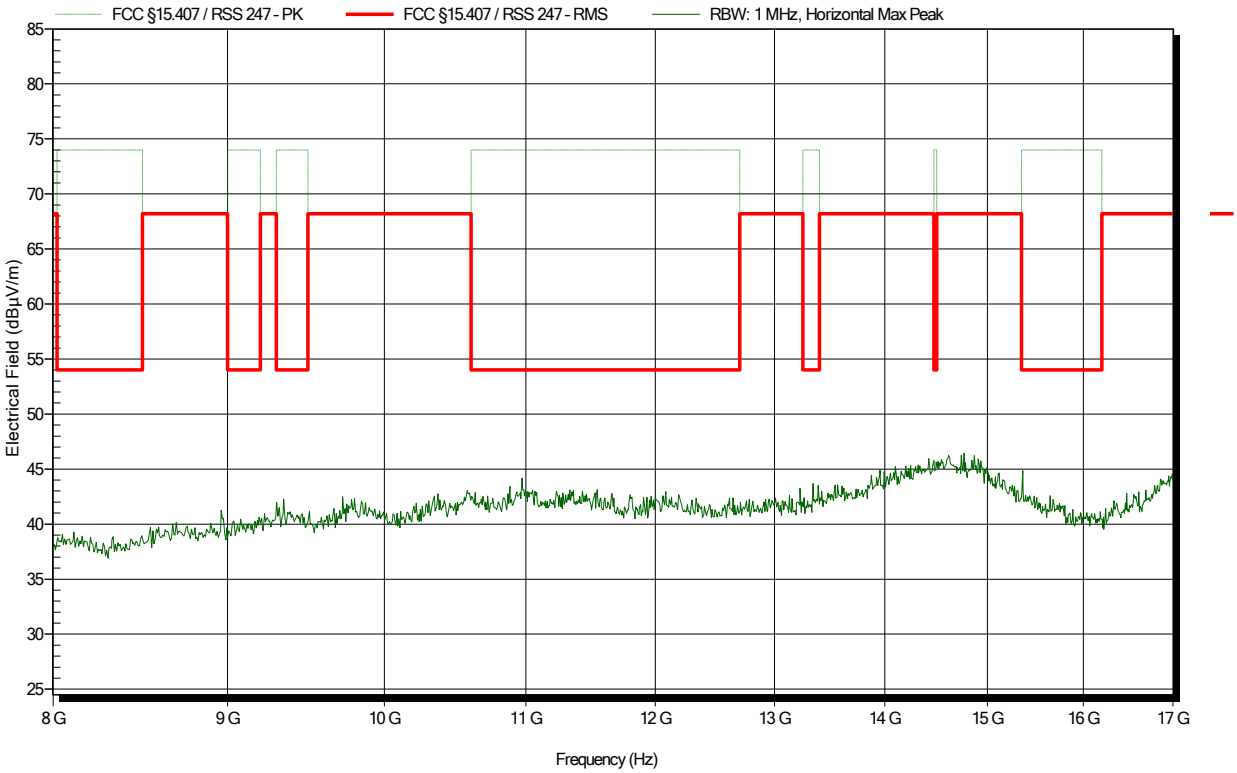

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5320 MHz
Test Date:	2019-09-03
Note:	

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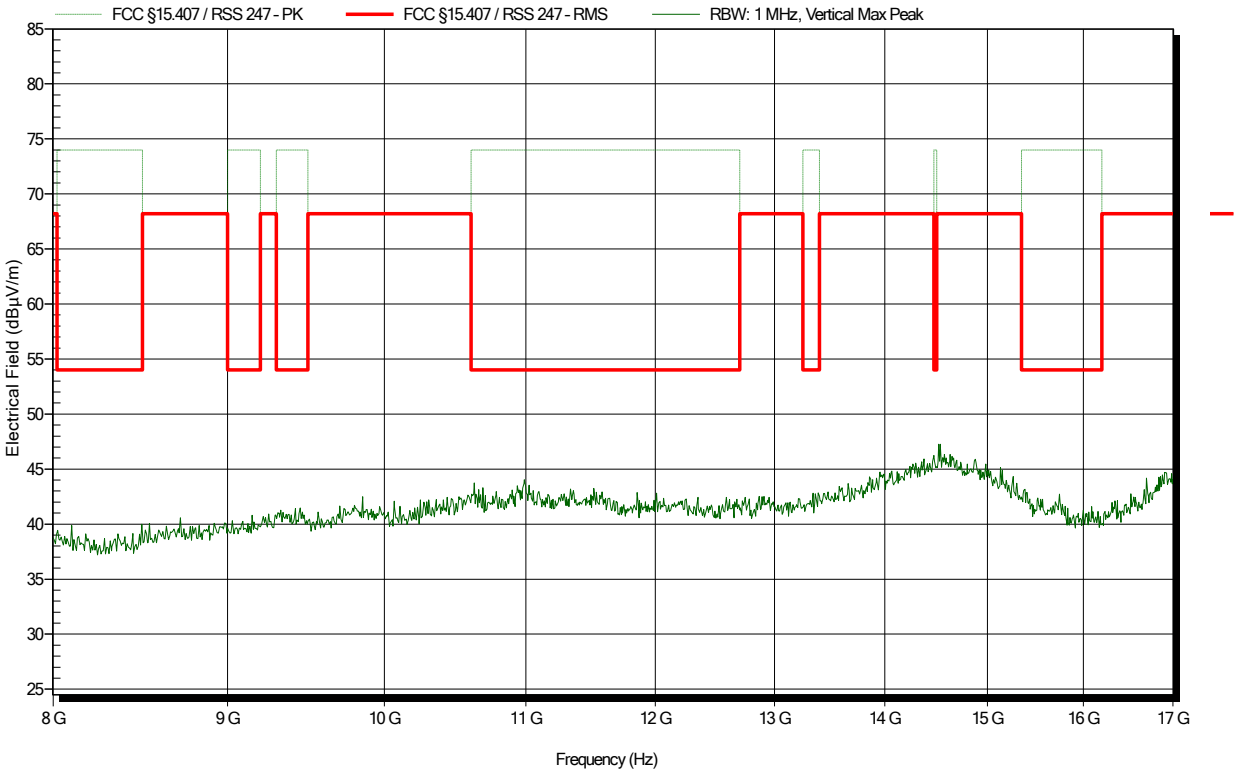

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	

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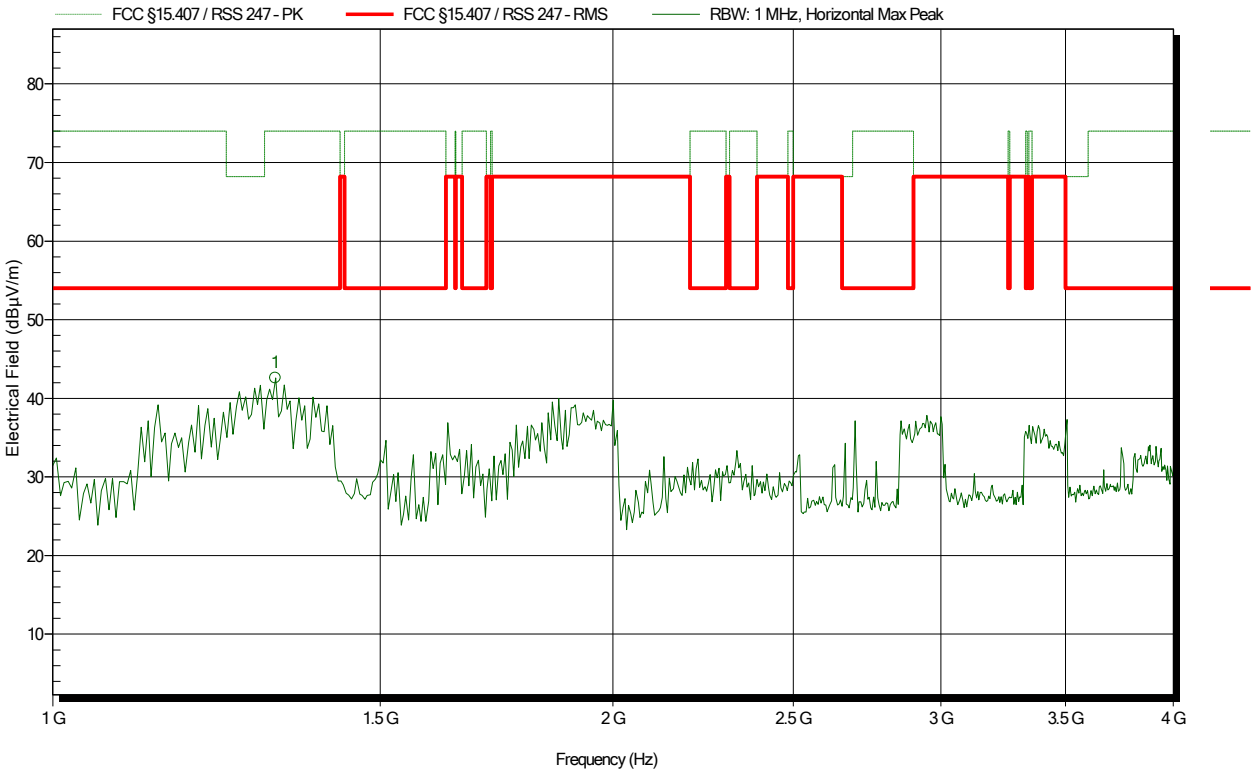

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.317 GHz	42.61 dBµV/m	54 dBµV/m	-11.39 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	

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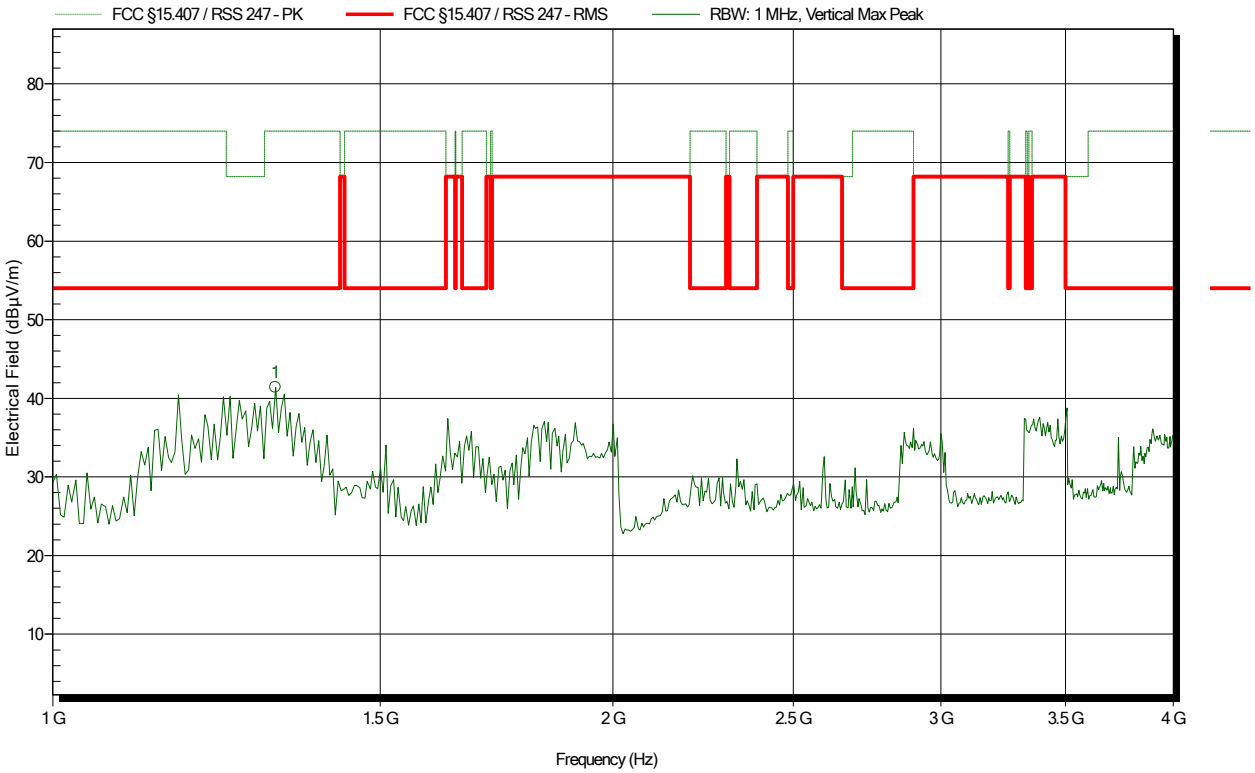

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.317 GHz	41.43 dBµV/m	54 dBµV/m	-12.57 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	

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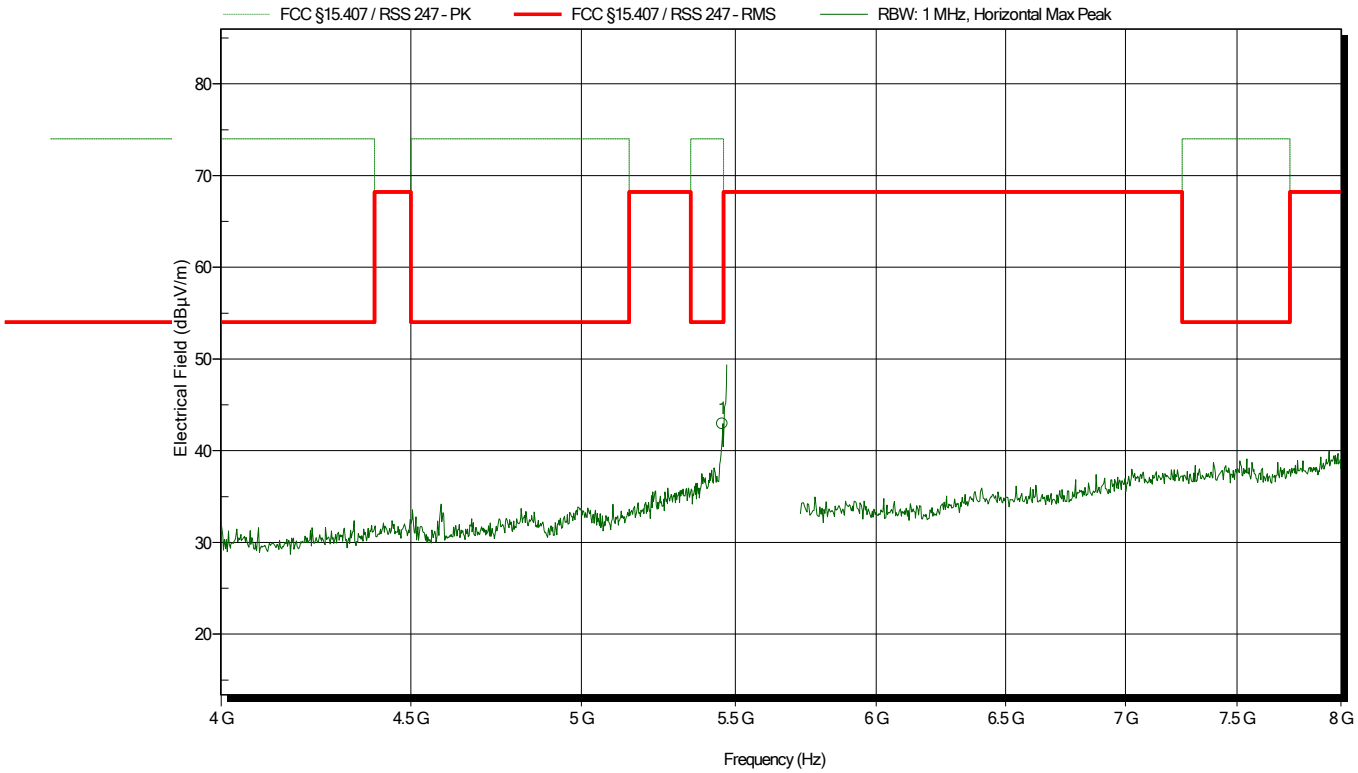

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.456 GHz	42.95 dBµV/m	54 dBµV/m	-11.05 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	

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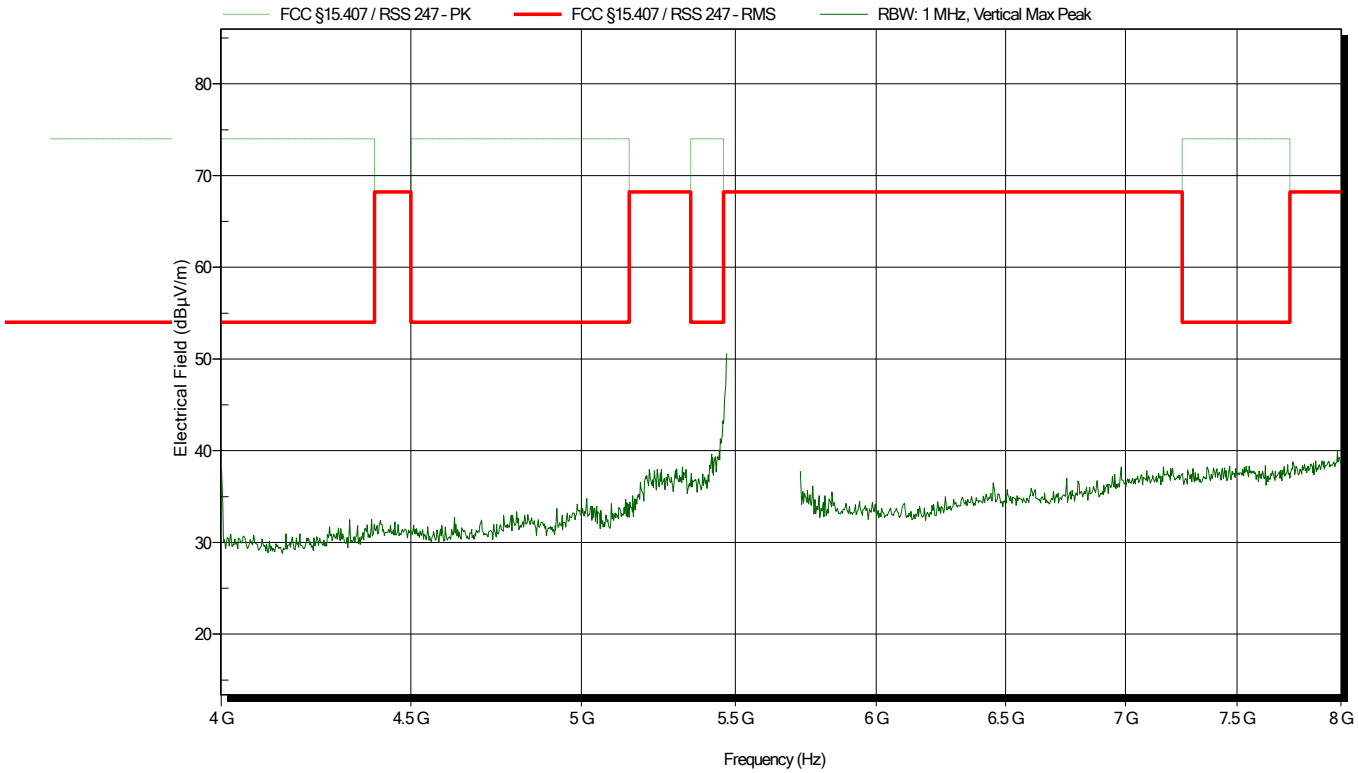

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	lower band area

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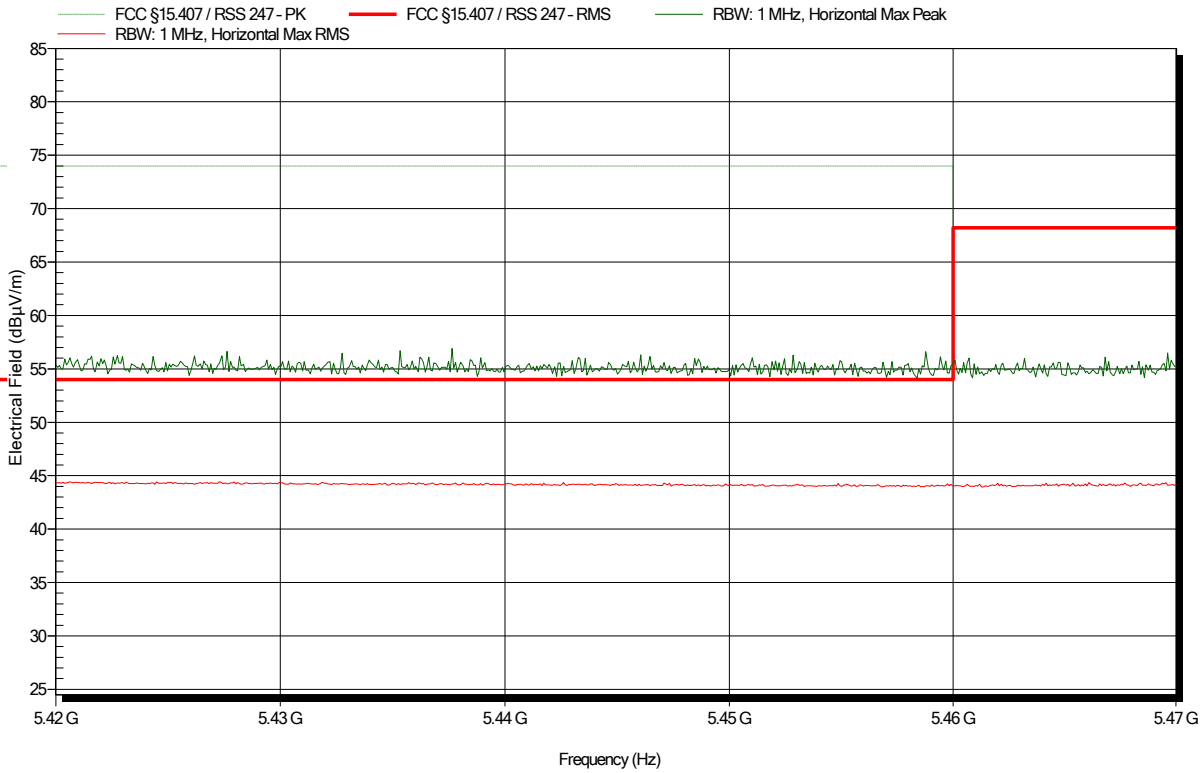

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	RX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-25
Note:	lower band area

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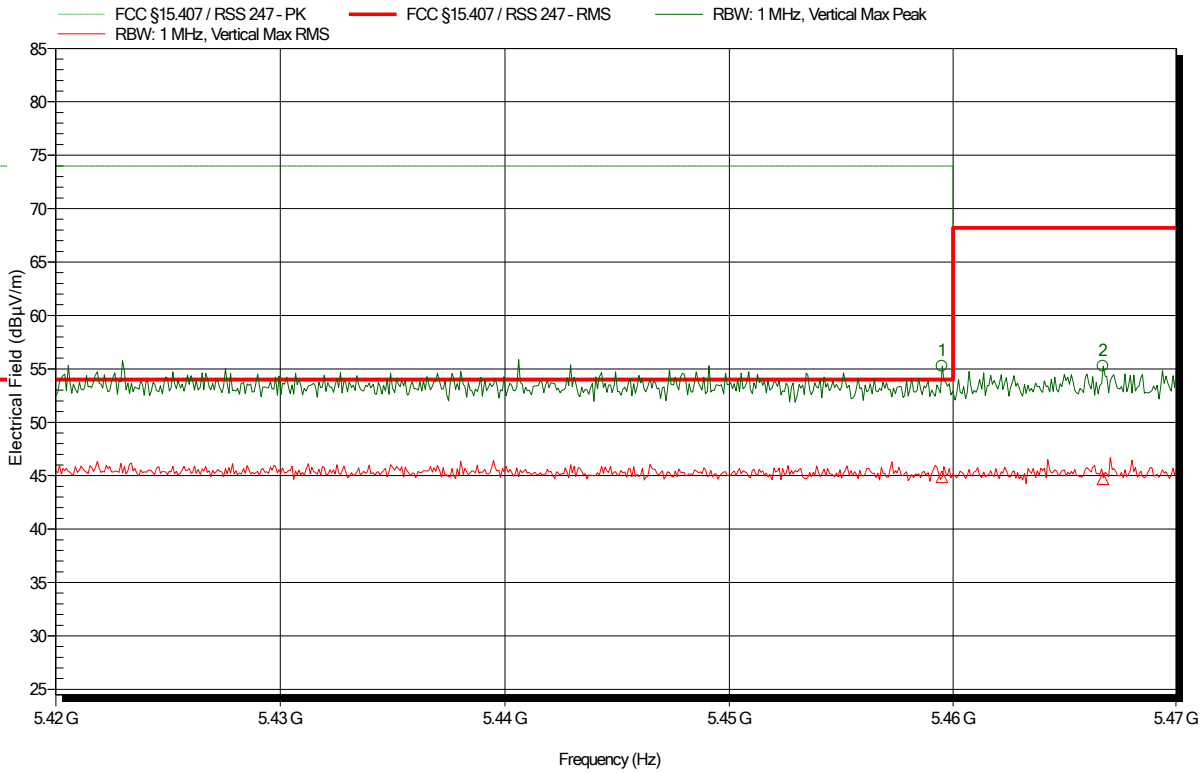

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.46 GHz	55.27 dBµV/m	74 dBµV/m	-18.73 dB	Pass
5.467 GHz	55.25 dBµV/m	68.2 dBµV/m	-12.95 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.46 GHz	44.9 dBµV/m	54 dBµV/m	-9.1 dB	Pass
5.467 GHz	44.71 dBµV/m	68.2 dBµV/m	-23.49 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-03
Note:	

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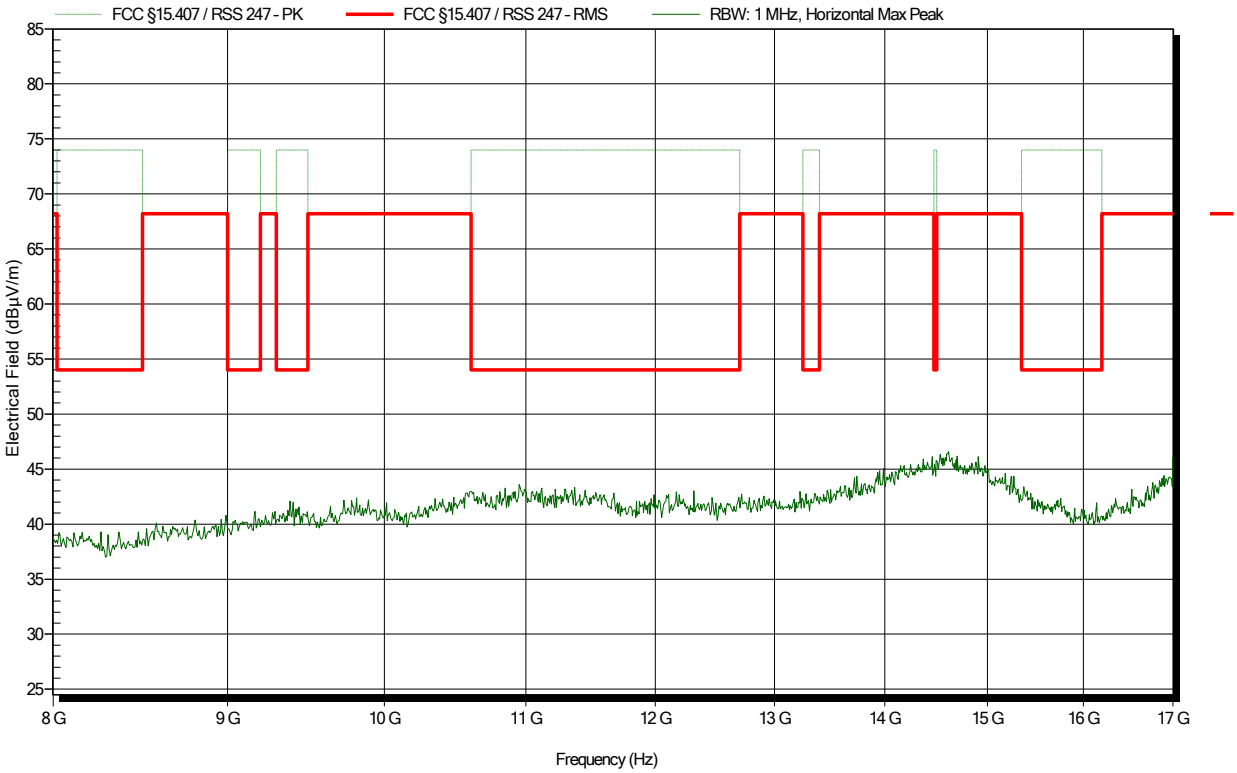

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5500 MHz
Test Date:	2019-09-03
Note:	

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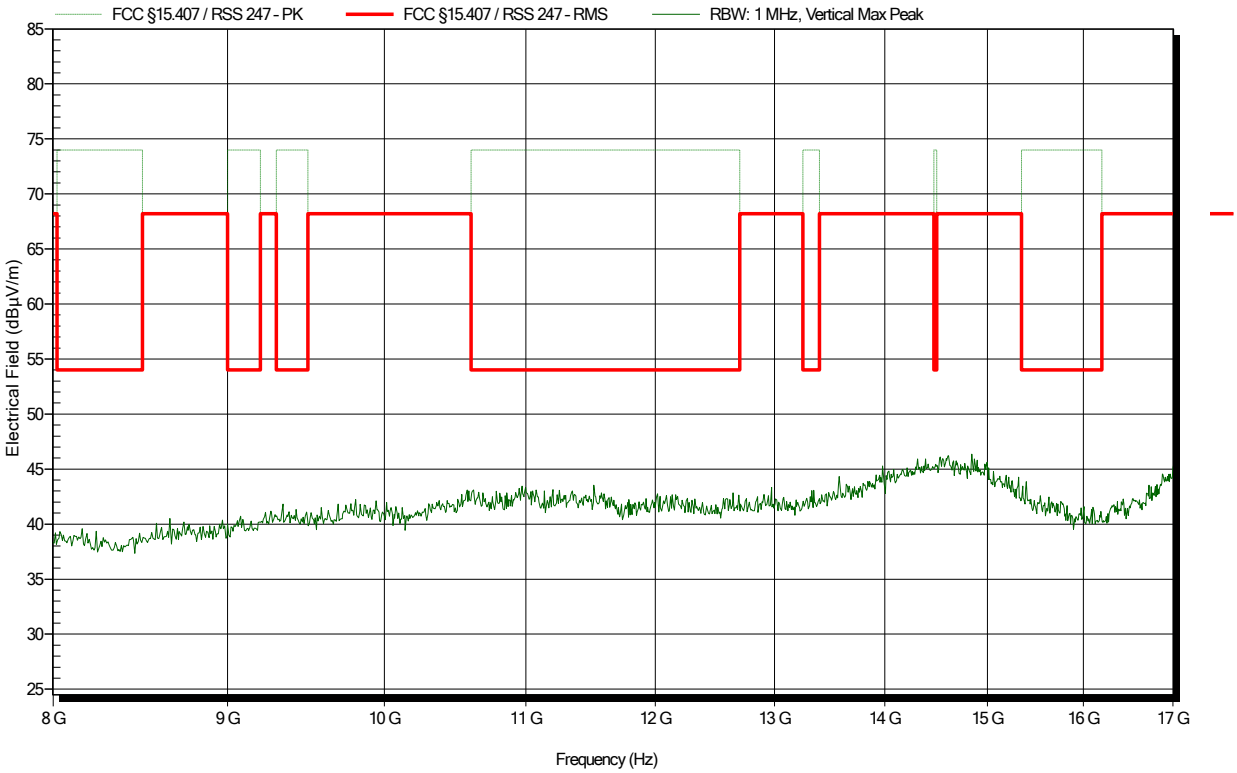

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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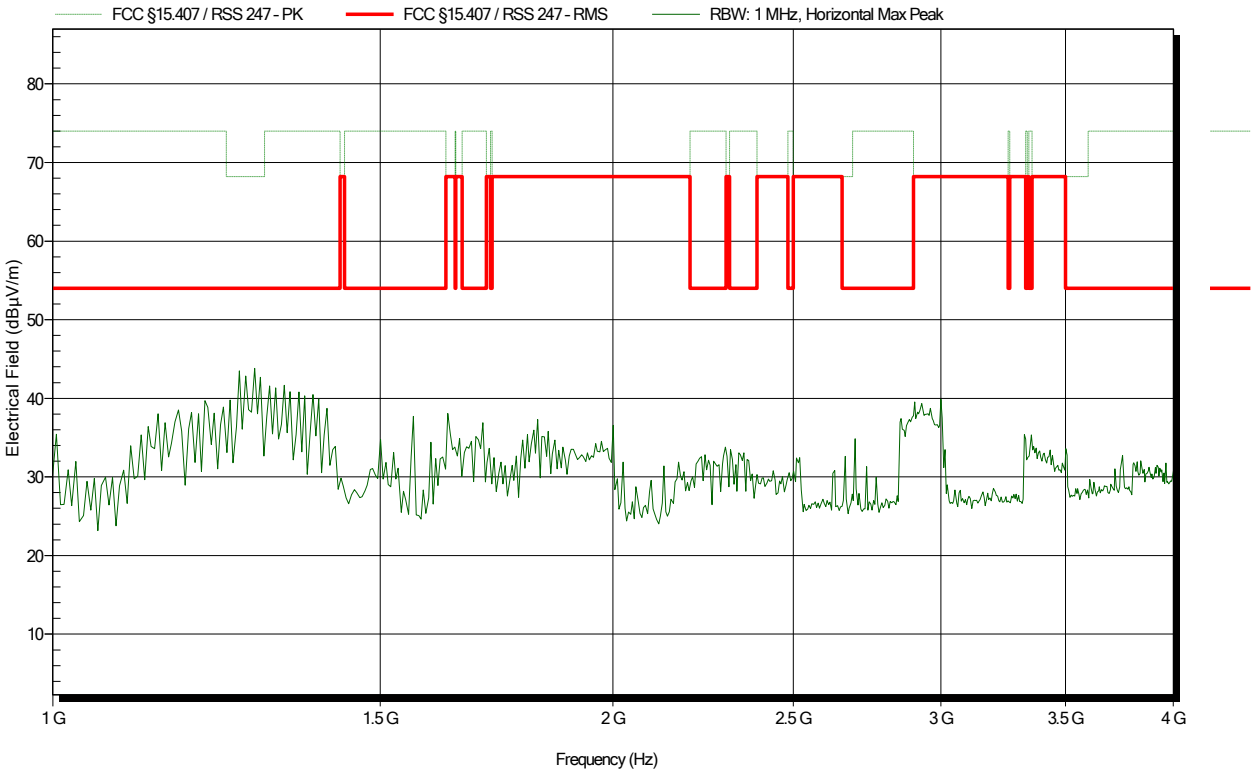

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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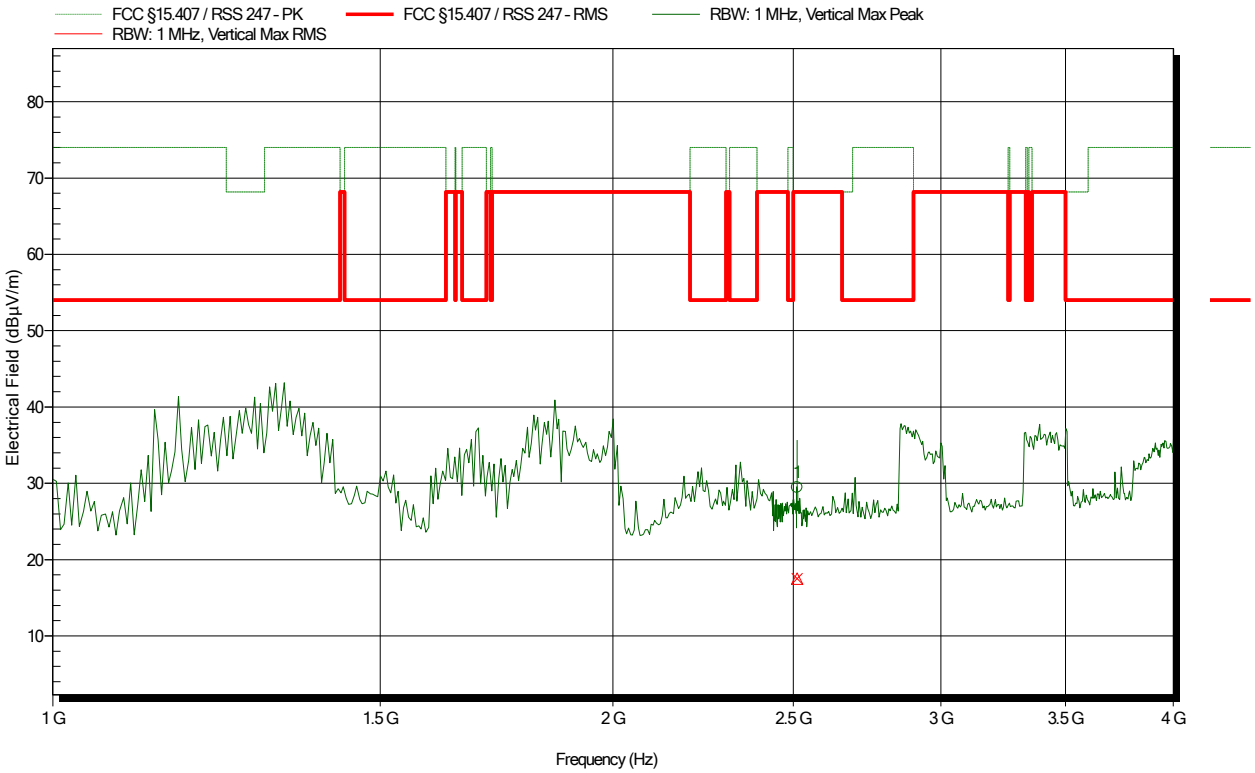

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.511 GHz	29.46 dBµV/m	68.2 dBµV/m	-38.74 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.511 GHz	17.49 dBµV/m	68.2 dBµV/m	-50.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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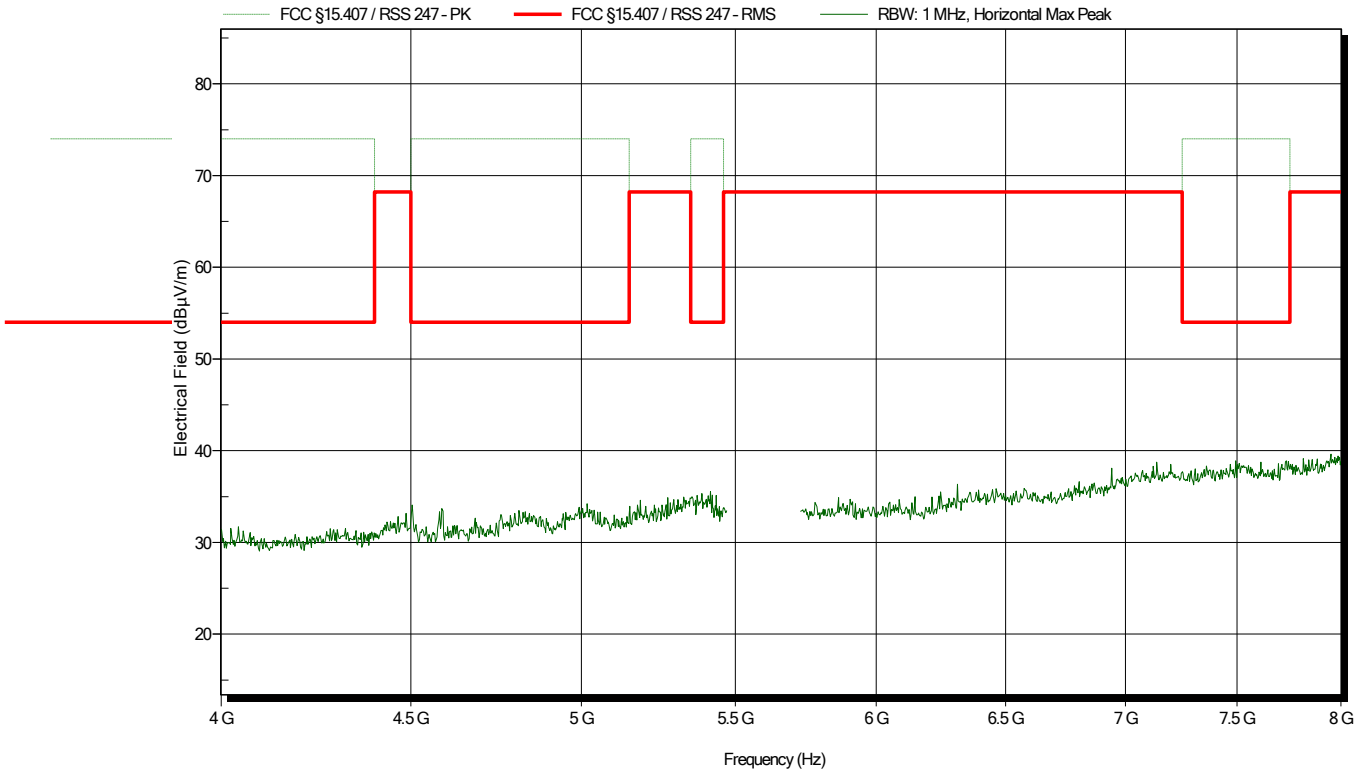

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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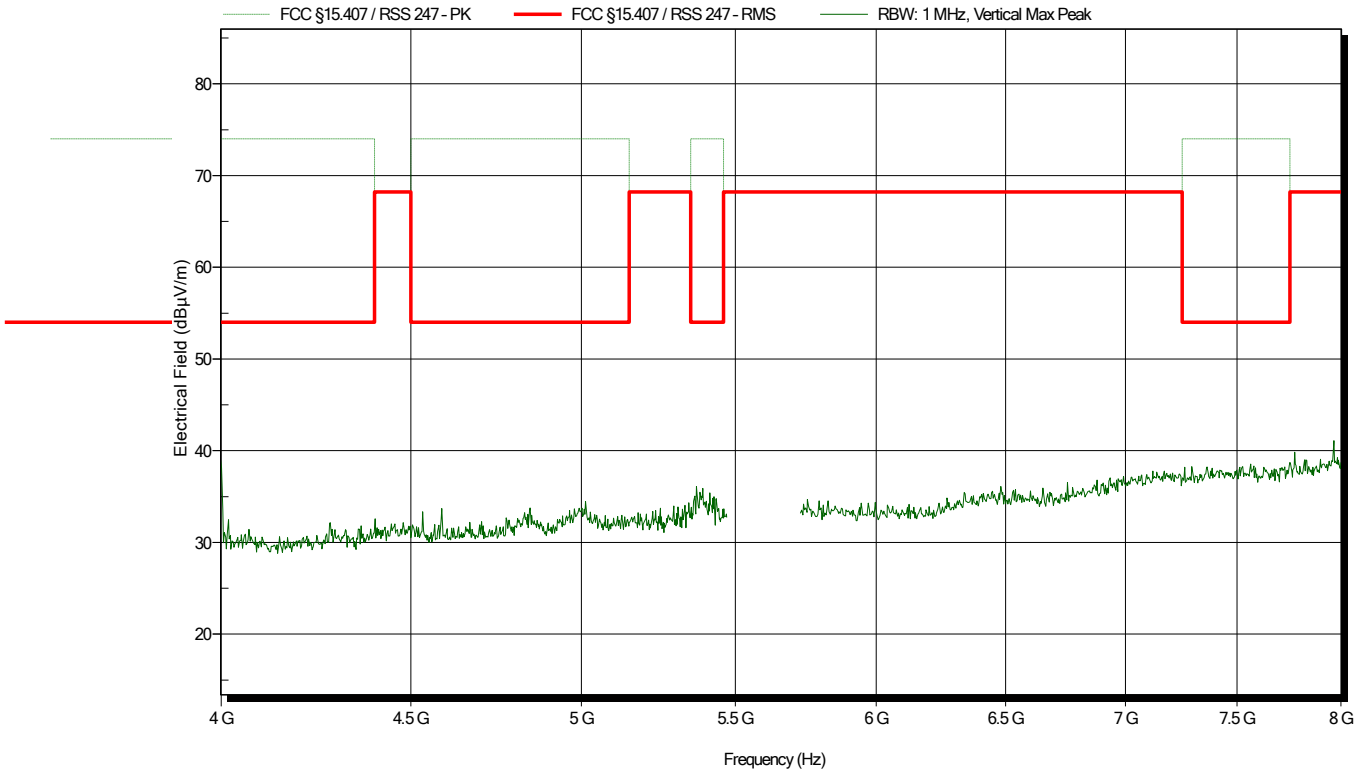

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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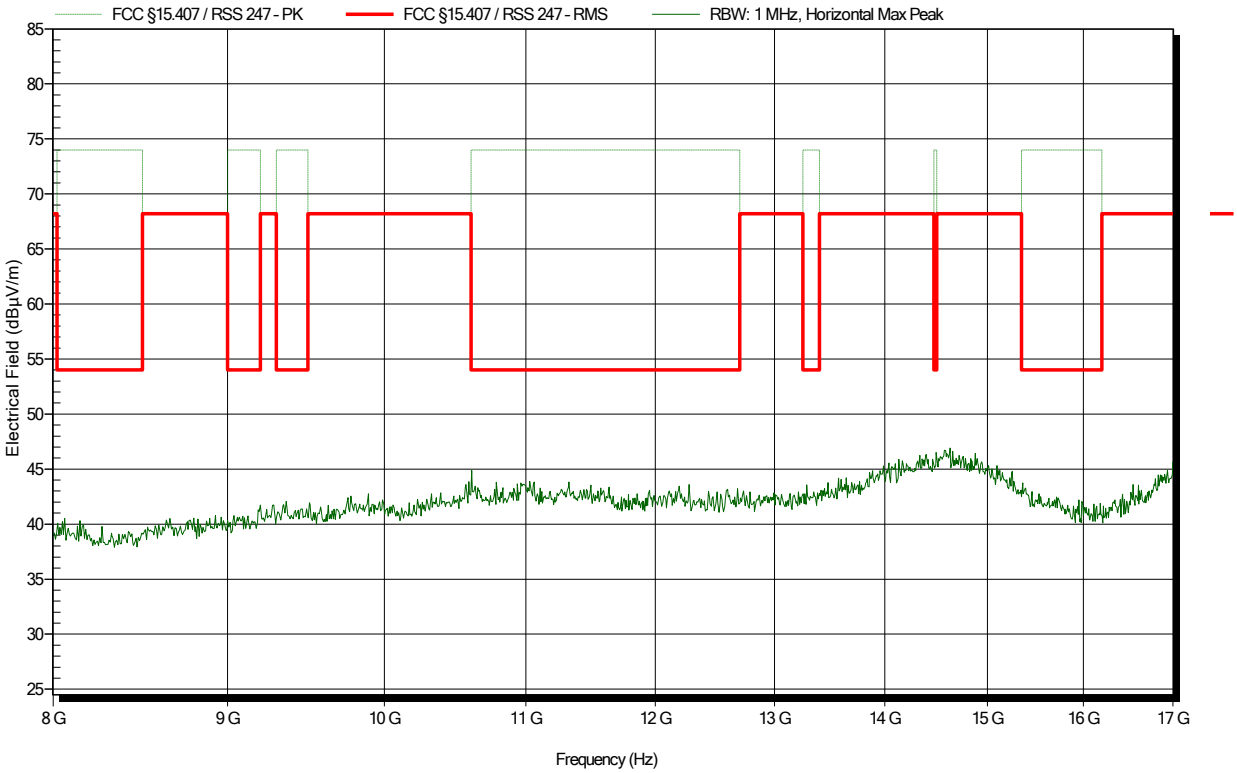

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-10-02
Note:	

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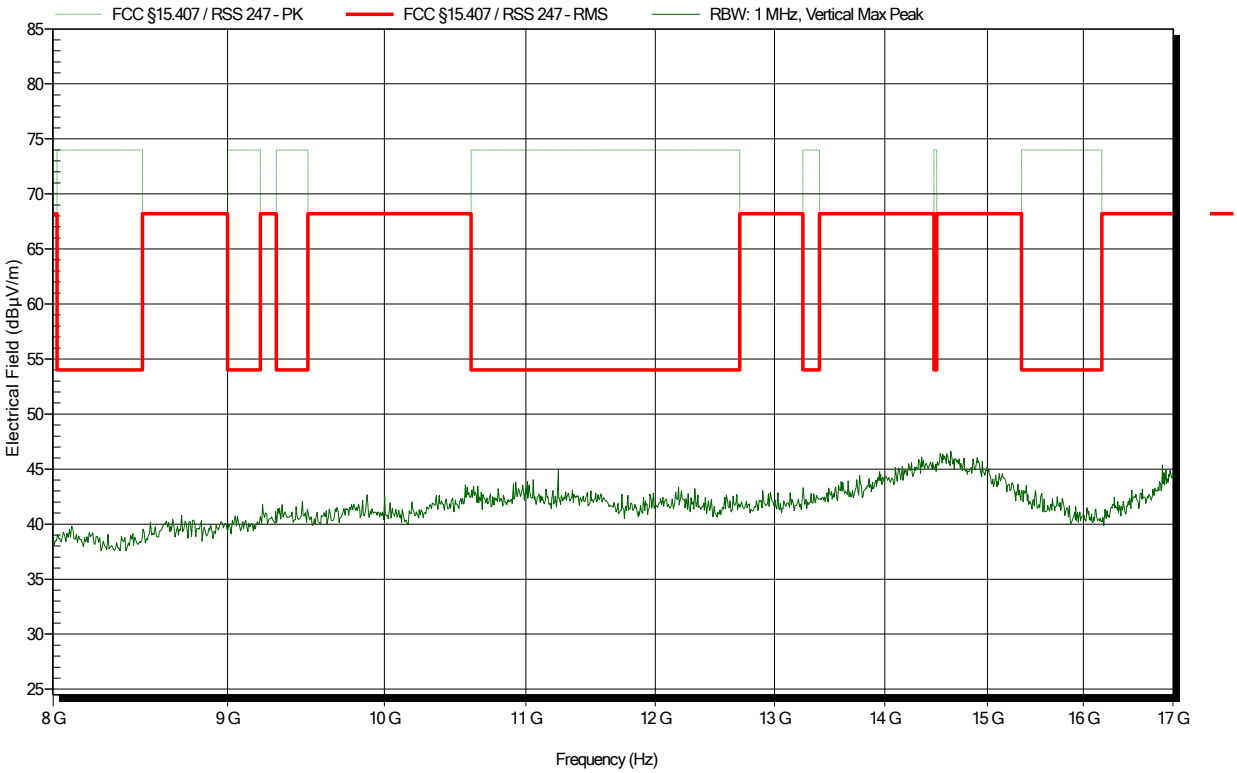

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-09-30
Note:	

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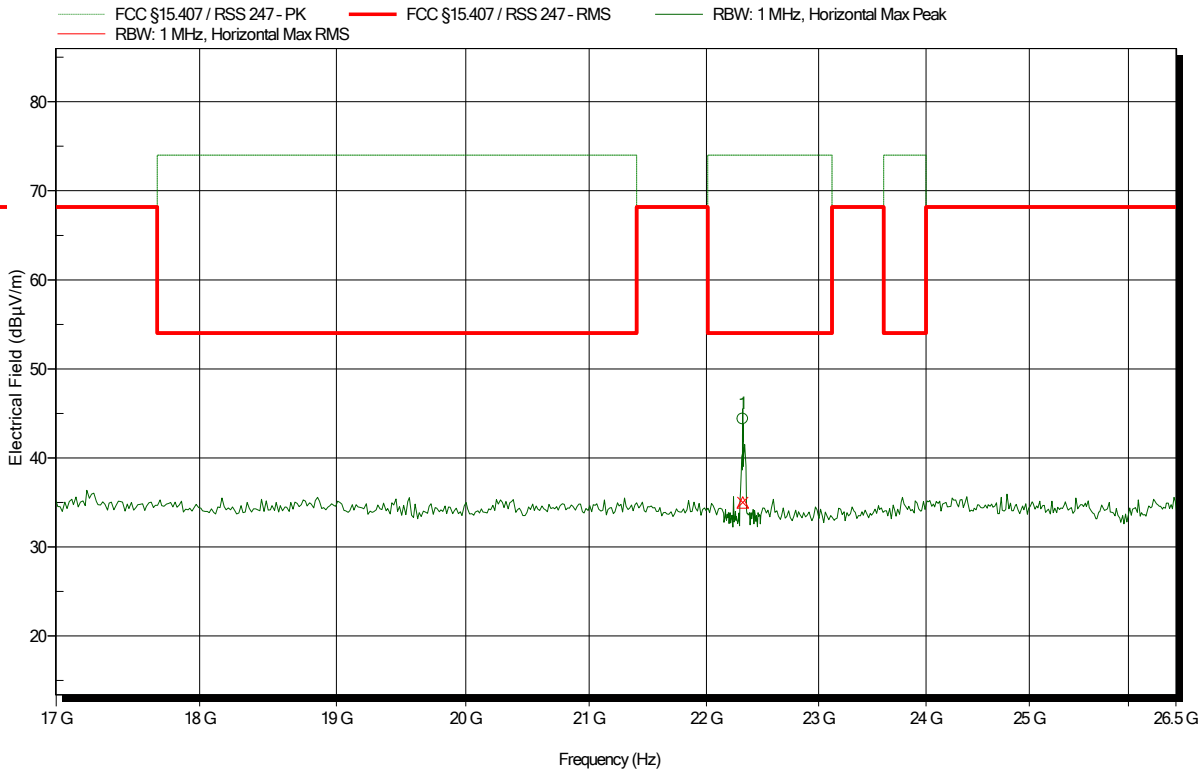

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.32 GHz	44.39 dBµV/m	54 dBµV/m	-9.61 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
22.32 GHz	35 dBµV/m	54 dBµV/m	-19 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-09-30
Note:	

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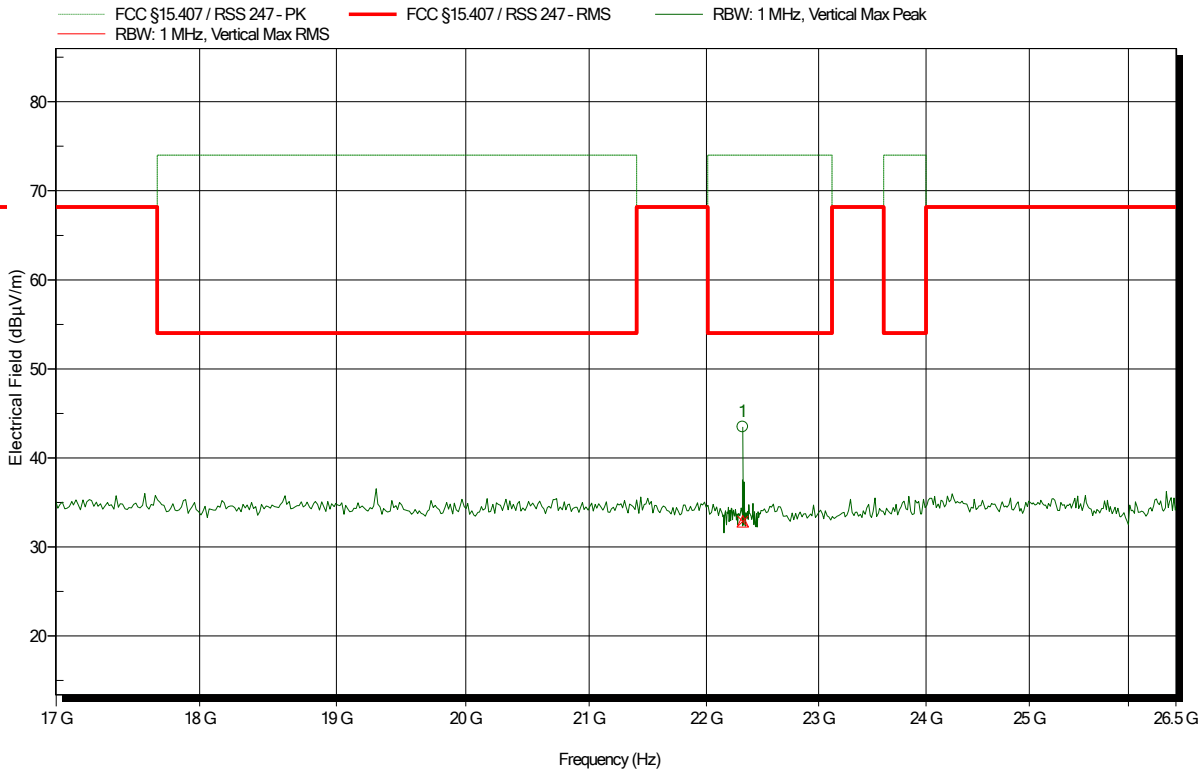

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.32 GHz	43.5 dBµV/m	54 dBµV/m	-10.5 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
22.32 GHz	32.87 dBµV/m	54 dBµV/m	-21.13 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-09-30
Note:	

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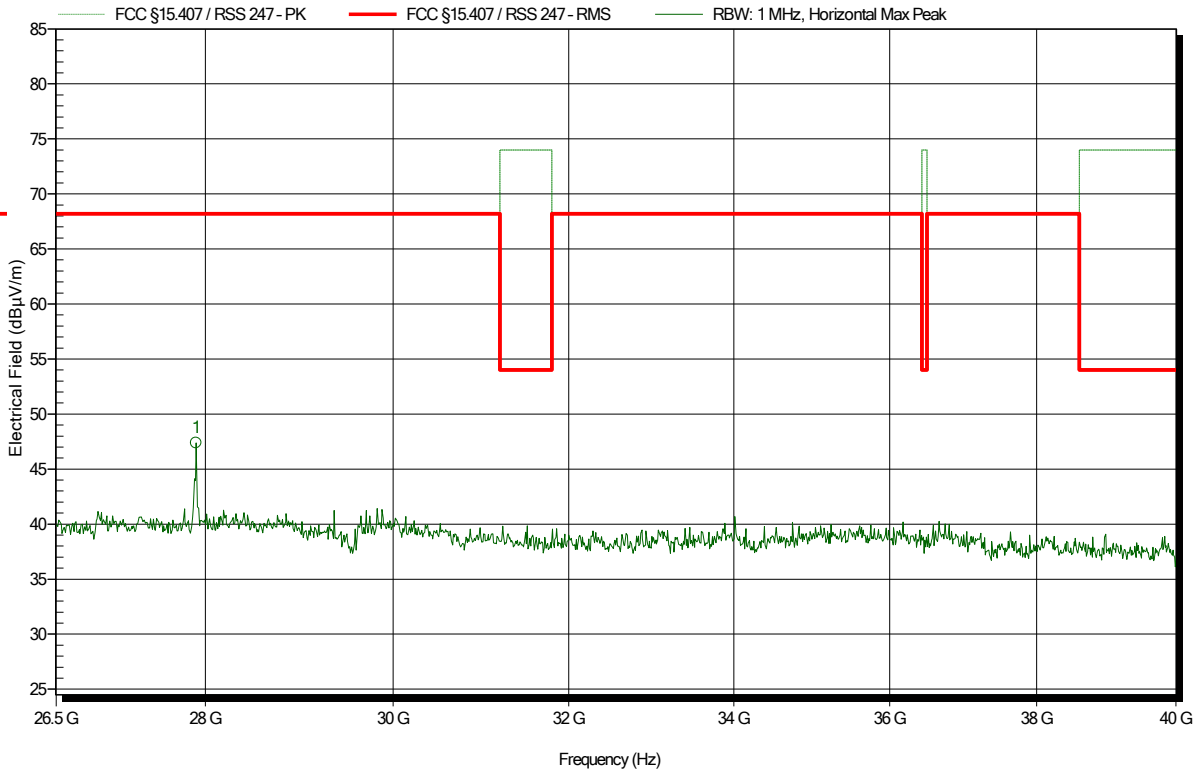

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
27.906 GHz	47.38 dBµV/m	68.2 dBµV/m	-20.82 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5580 MHz
Test Date:	2019-09-30
Note:	

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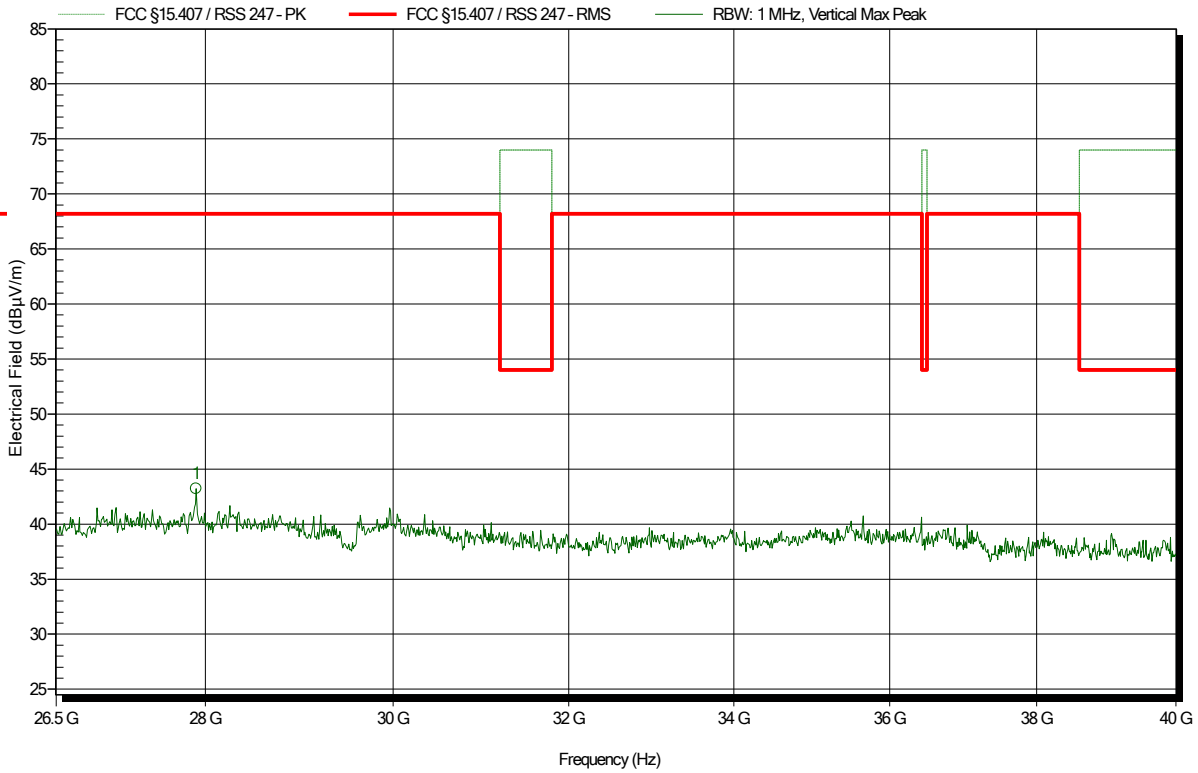

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
27.906 GHz	43.22 dBµV/m	68.2 dBµV/m	-24.98 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-25
Note:	

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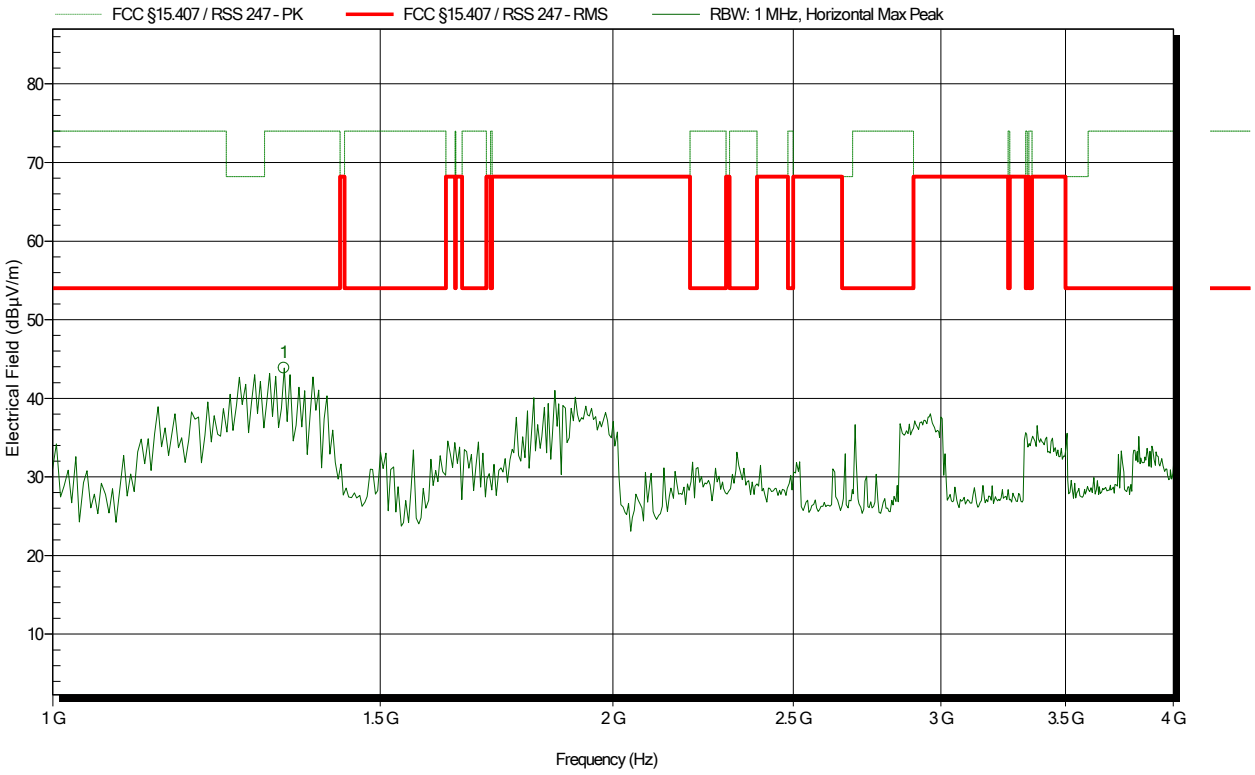

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.332 GHz	43.87 dBµV/m	54 dBµV/m	-10.13 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-25
Note:	

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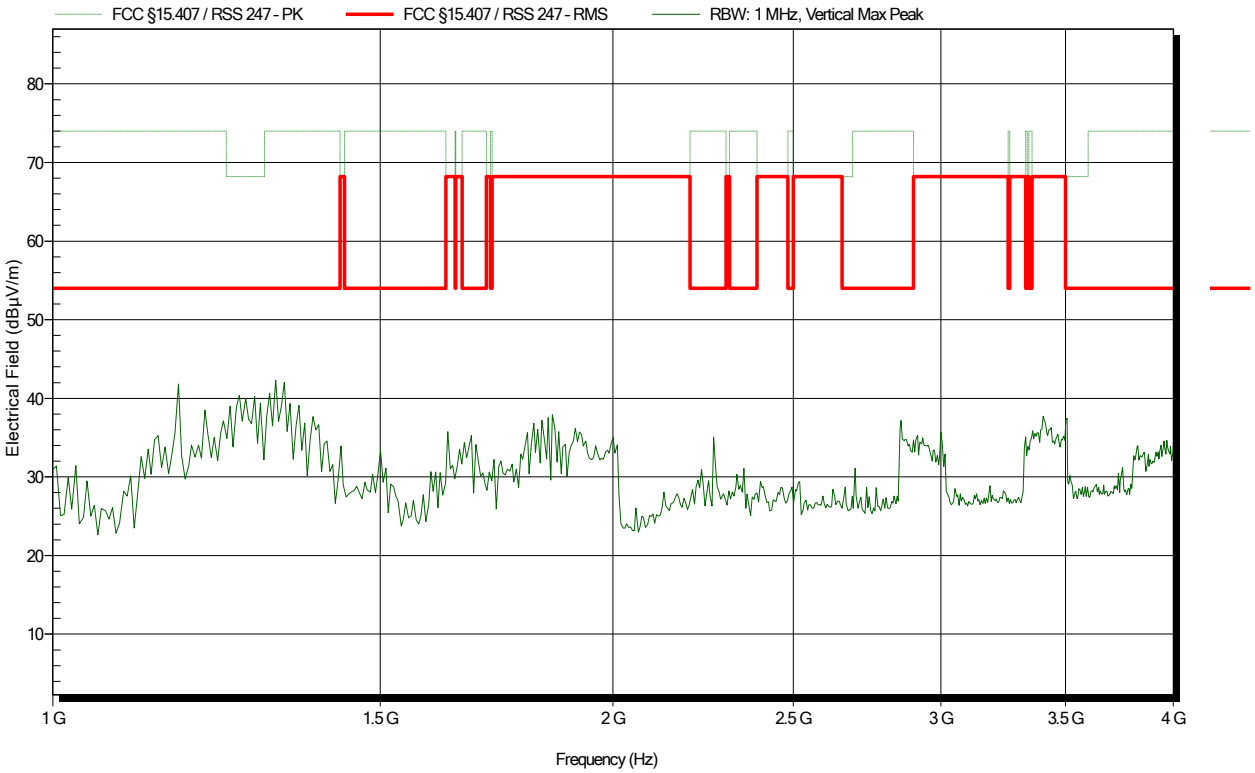

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-25
Note:	

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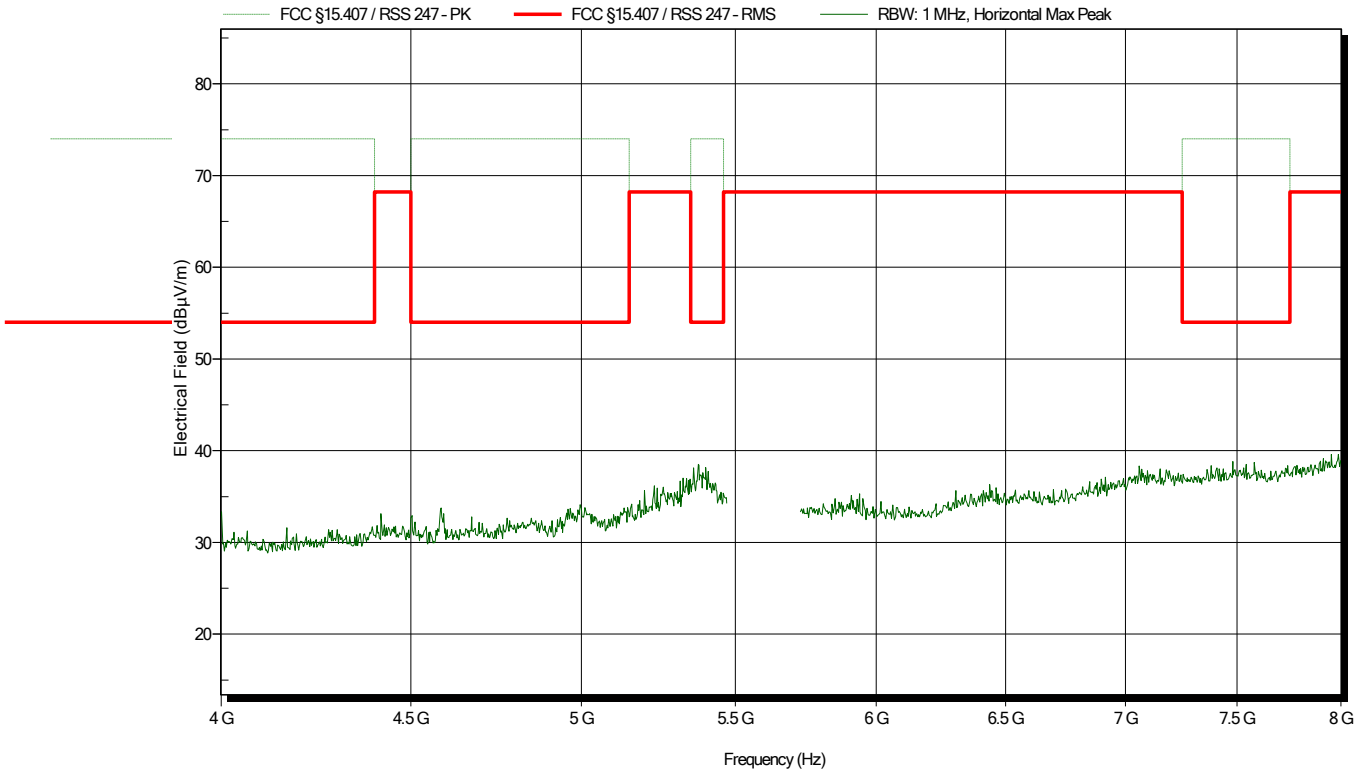

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-25
Note:	

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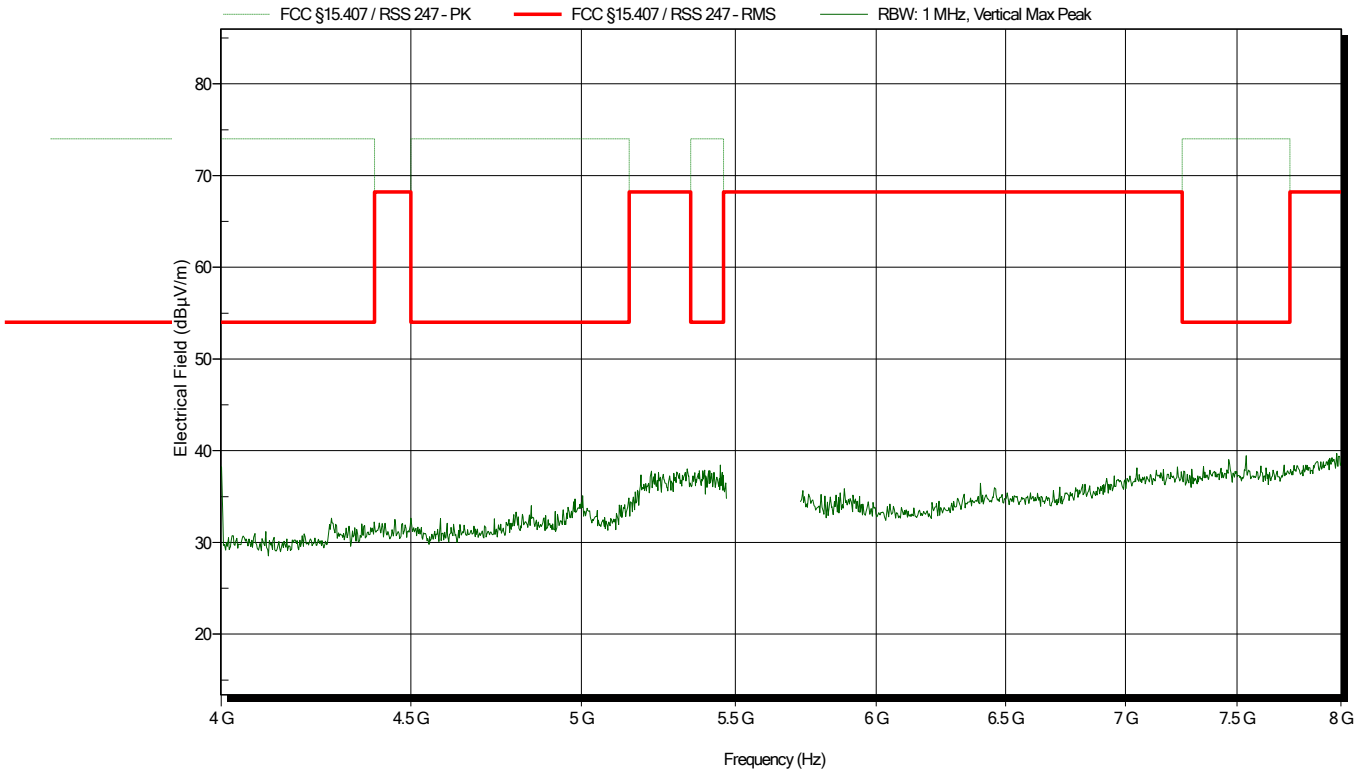

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-03
Note:	

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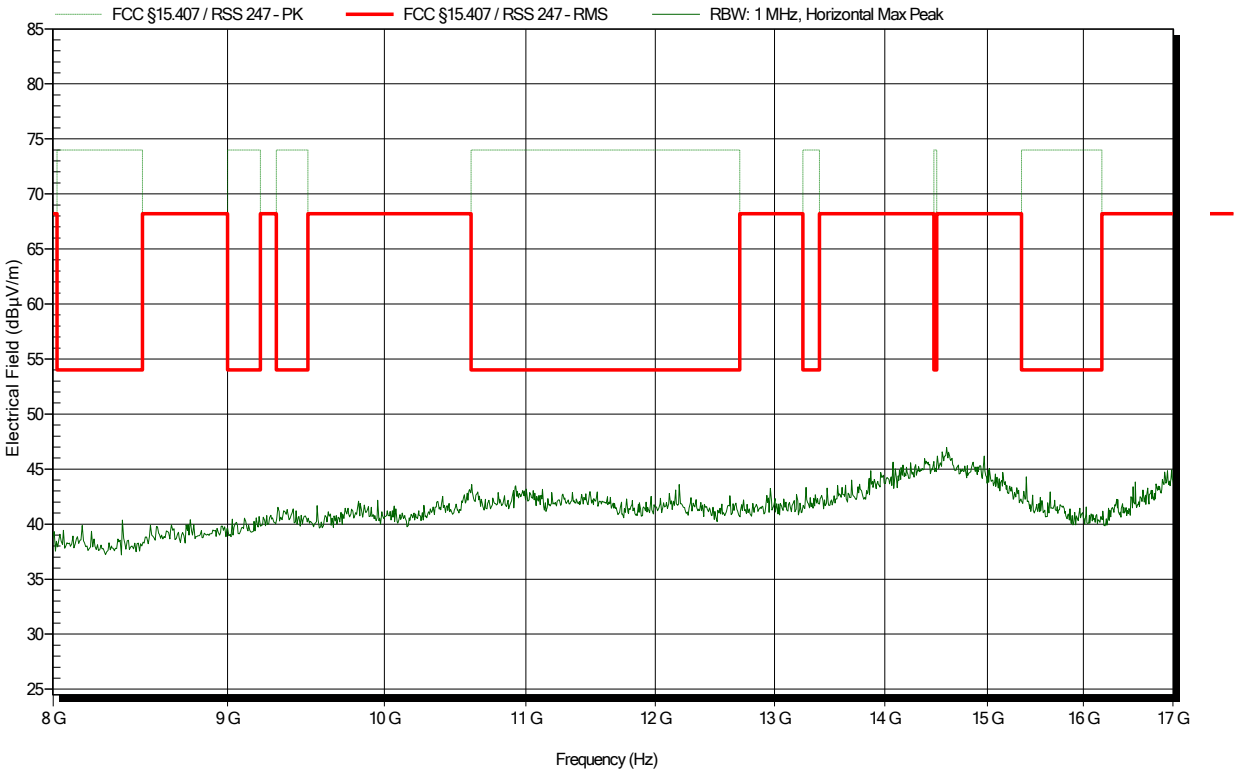

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5600 MHz
Test Date:	2019-09-03
Note:	

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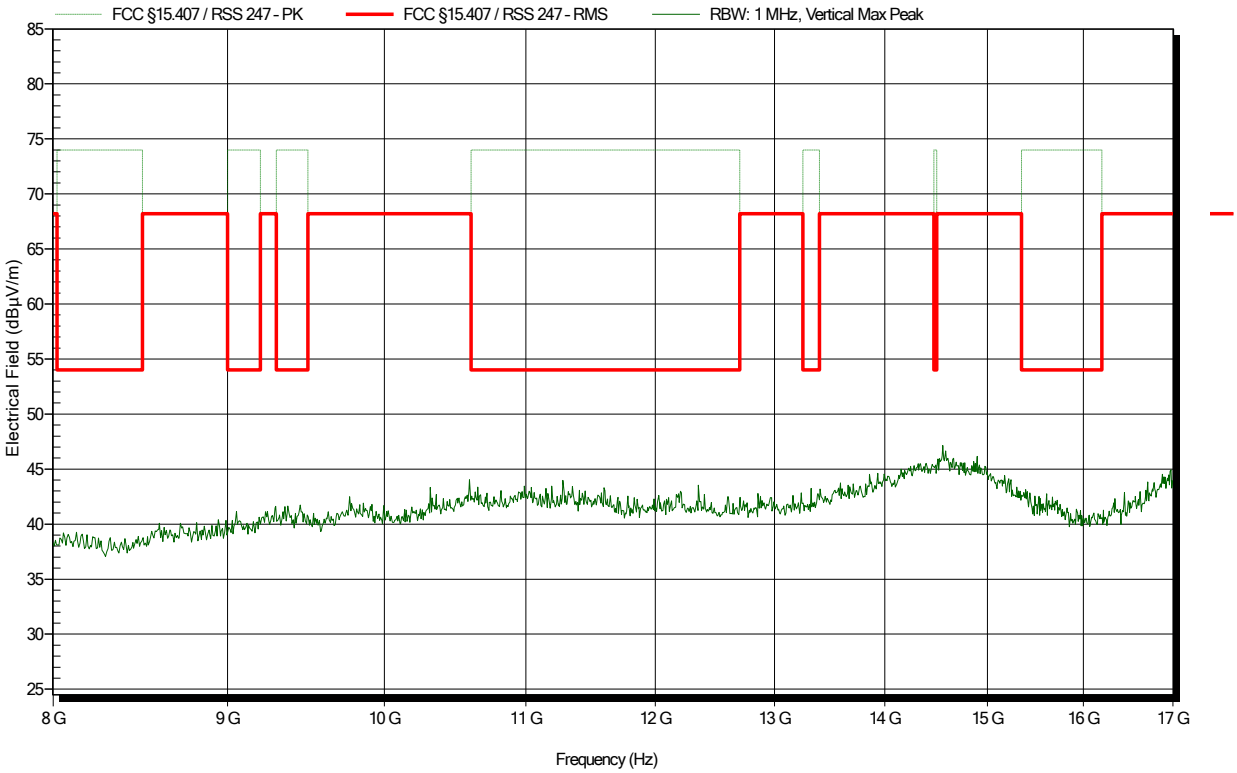

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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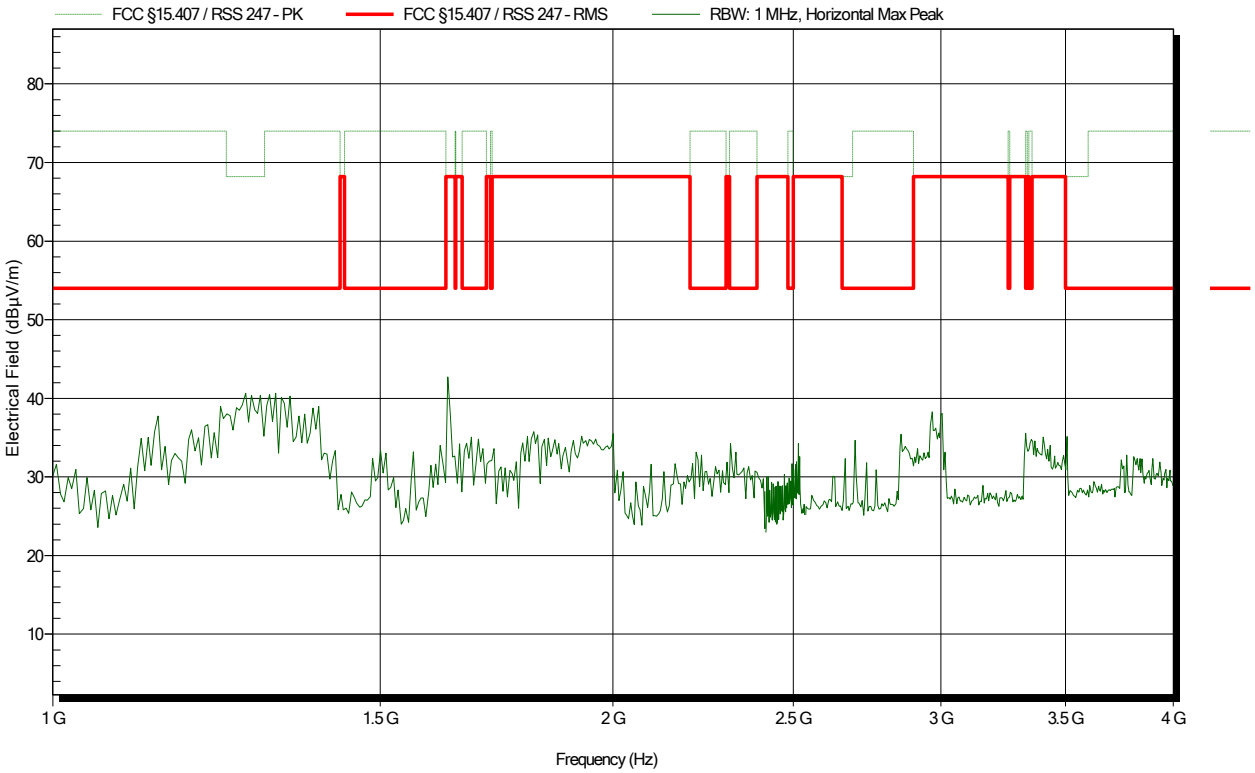

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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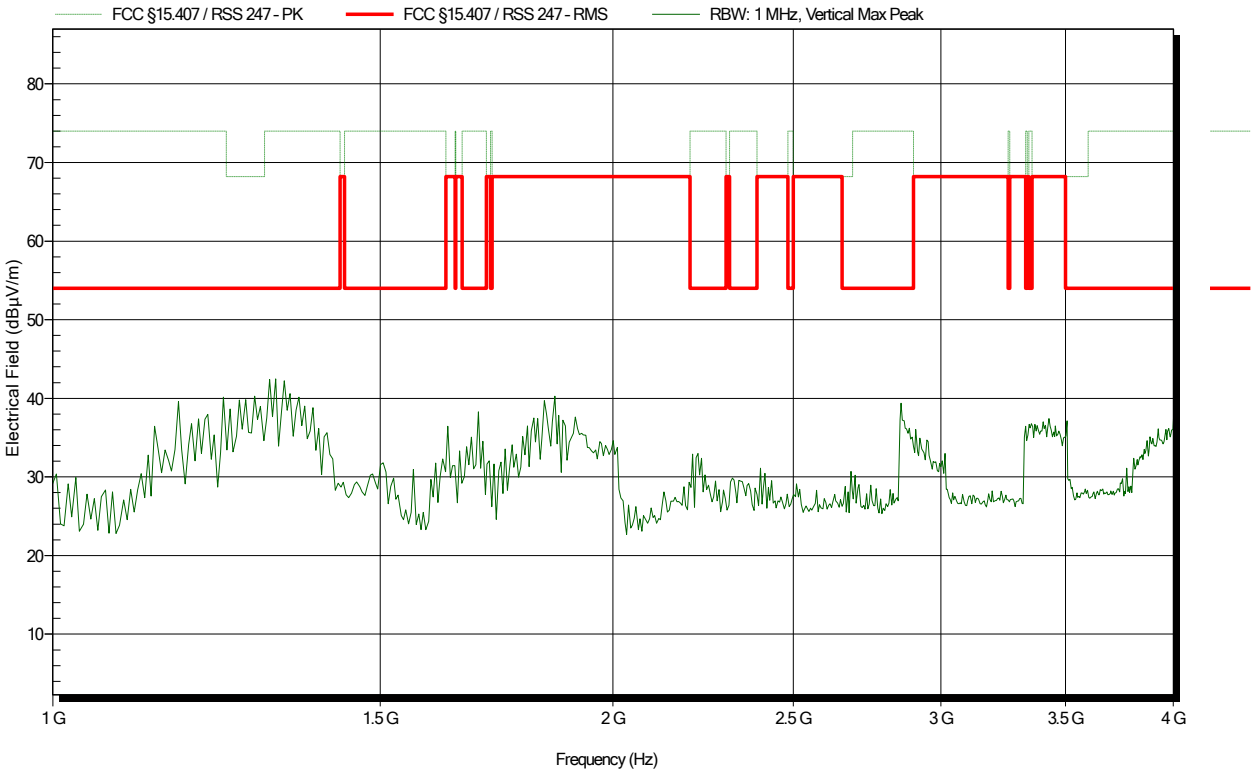

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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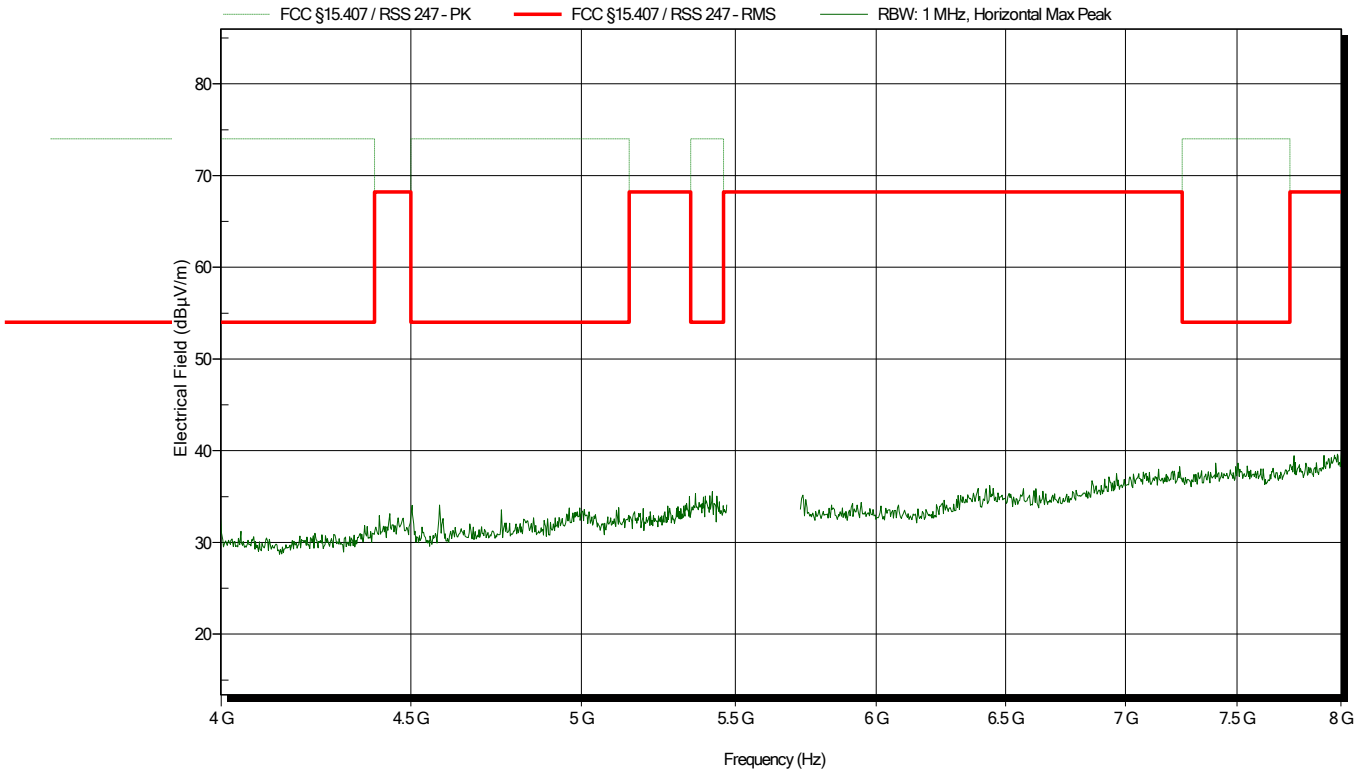

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
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Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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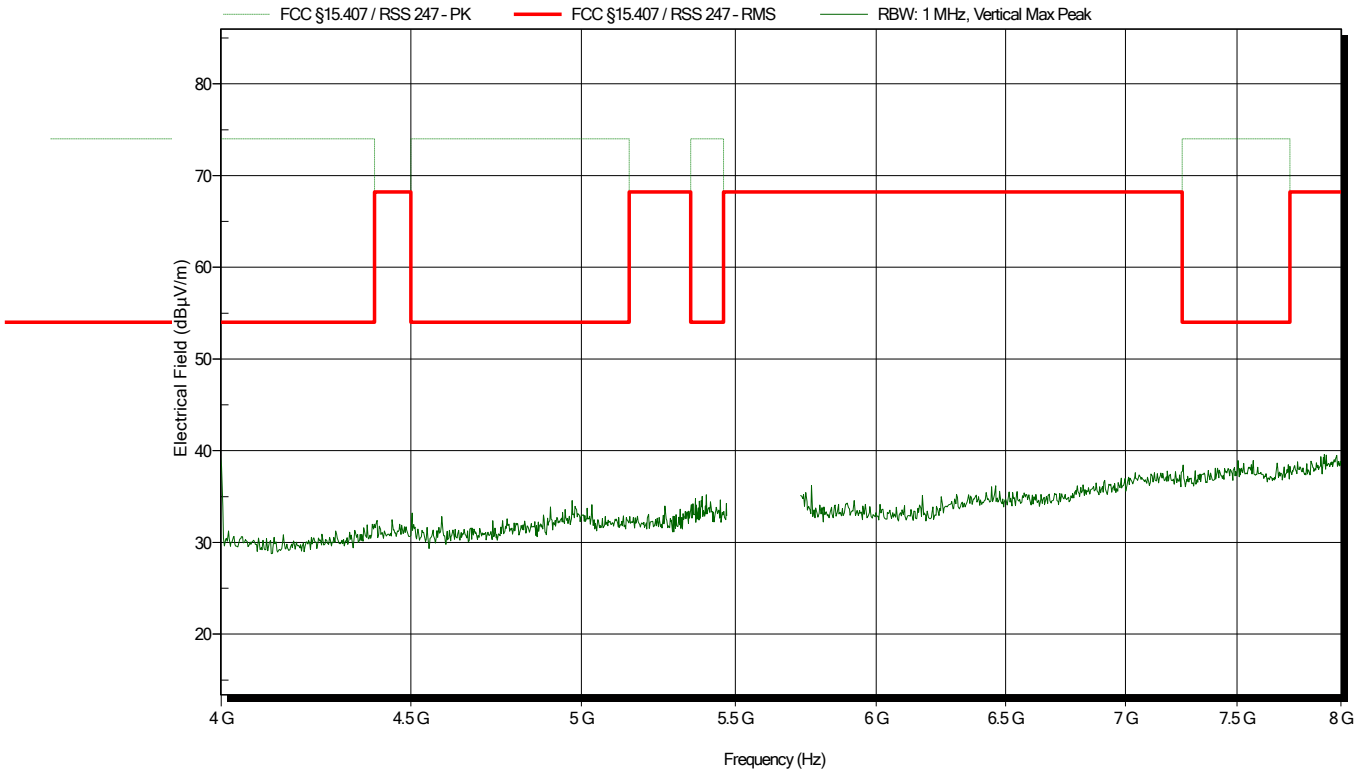

Spurious emissions according to FCC 15.407

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Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
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Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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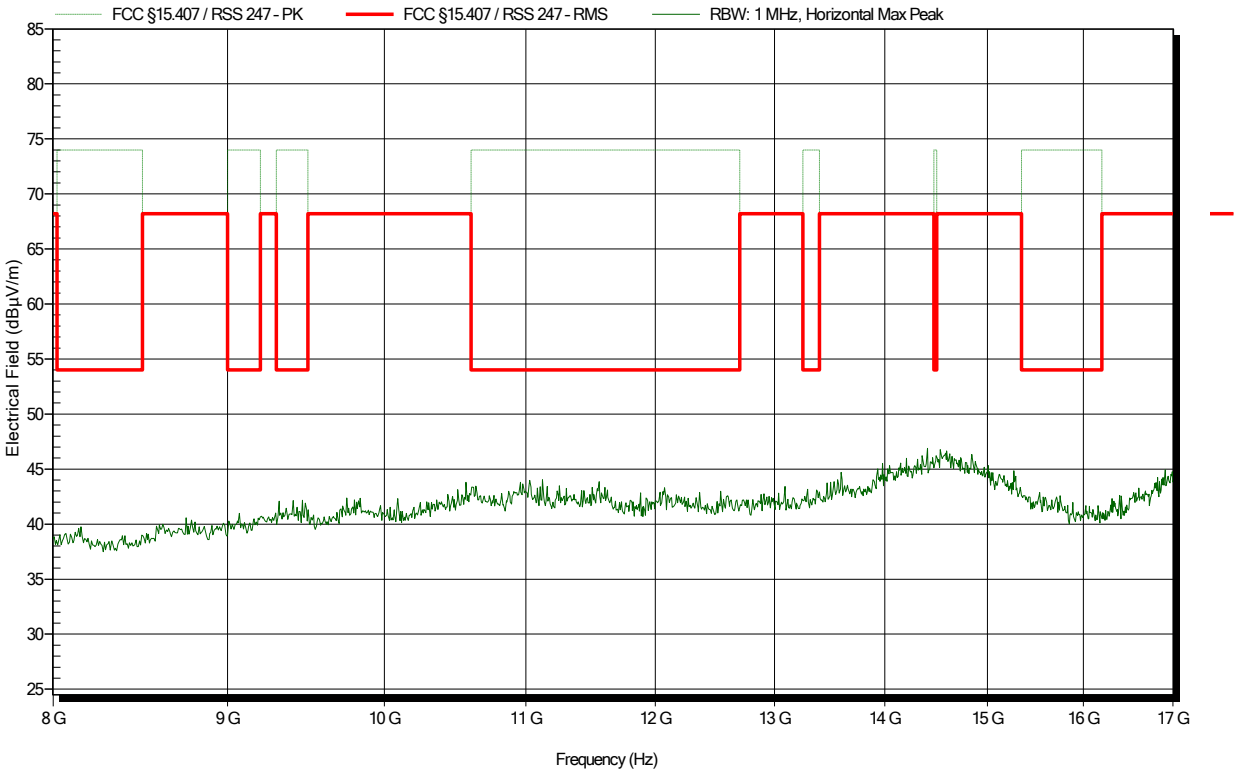

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
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Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5660 MHz
Test Date:	2019-10-02
Note:	

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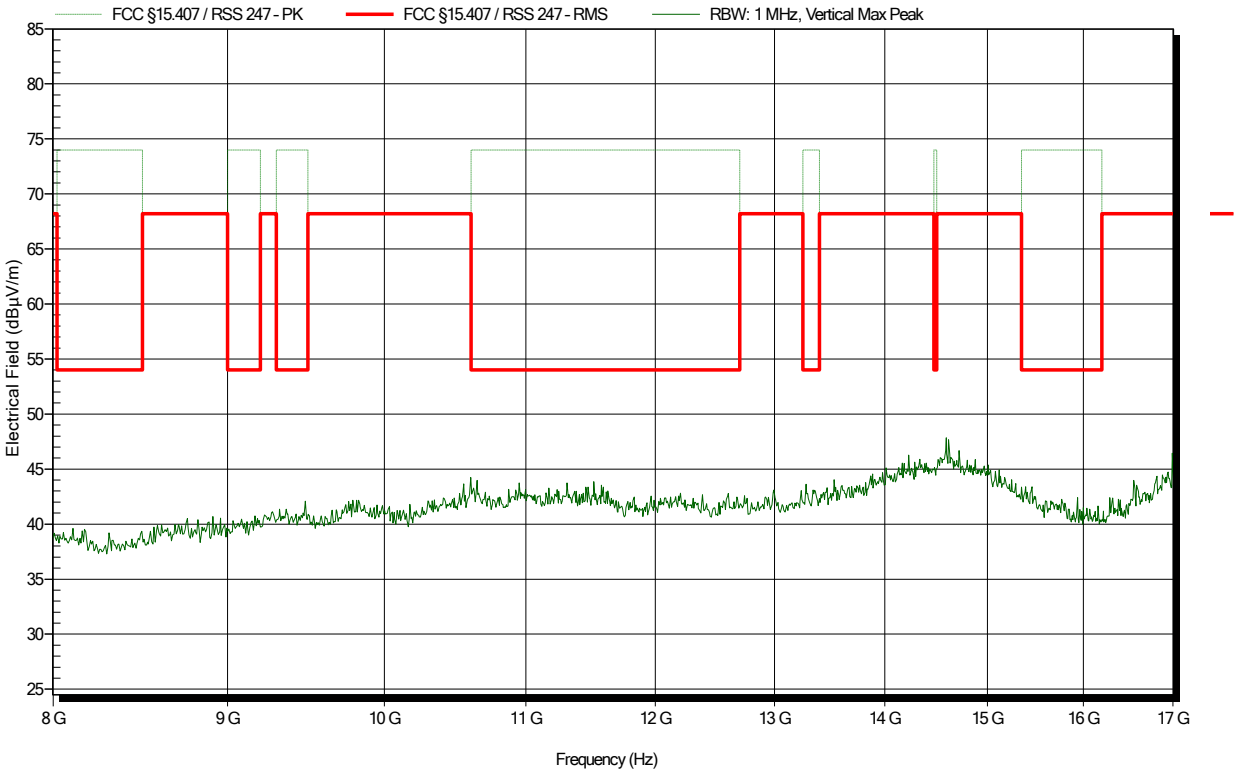

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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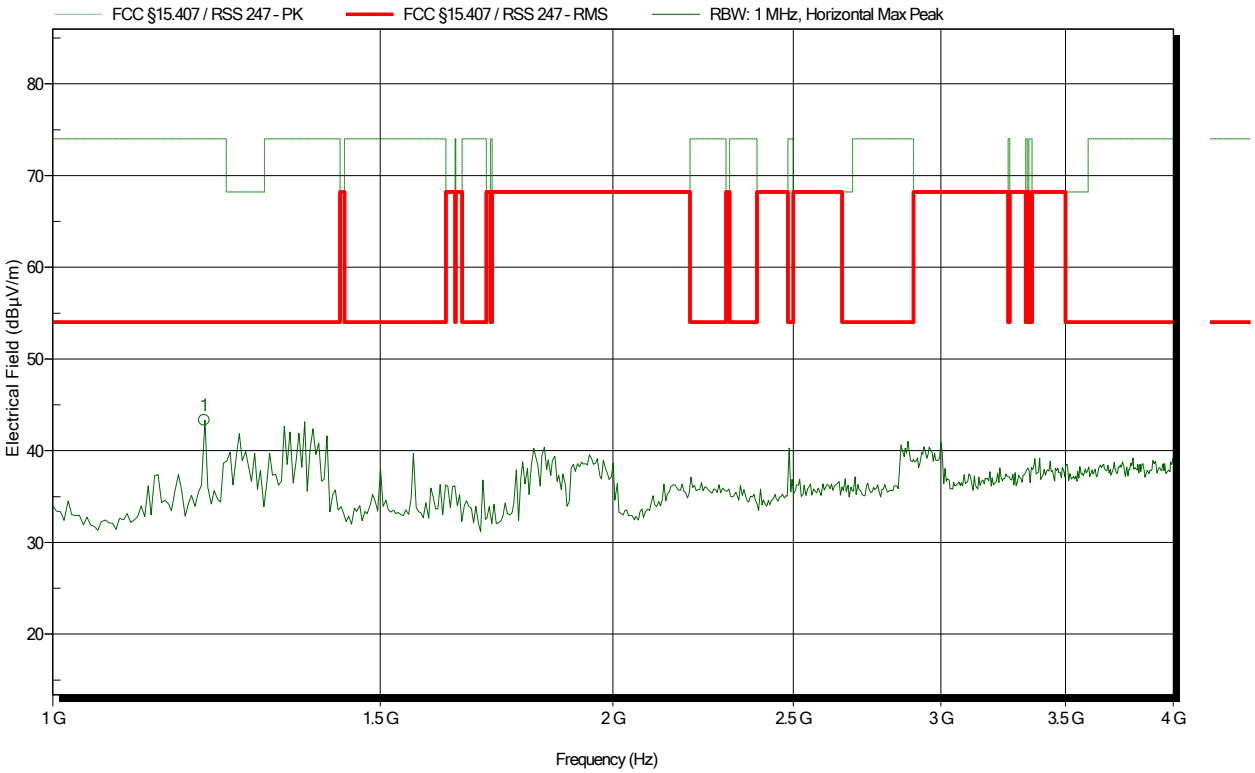

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.207 GHz	43.33 dBµV/m	74 dBµV/m	-30.67 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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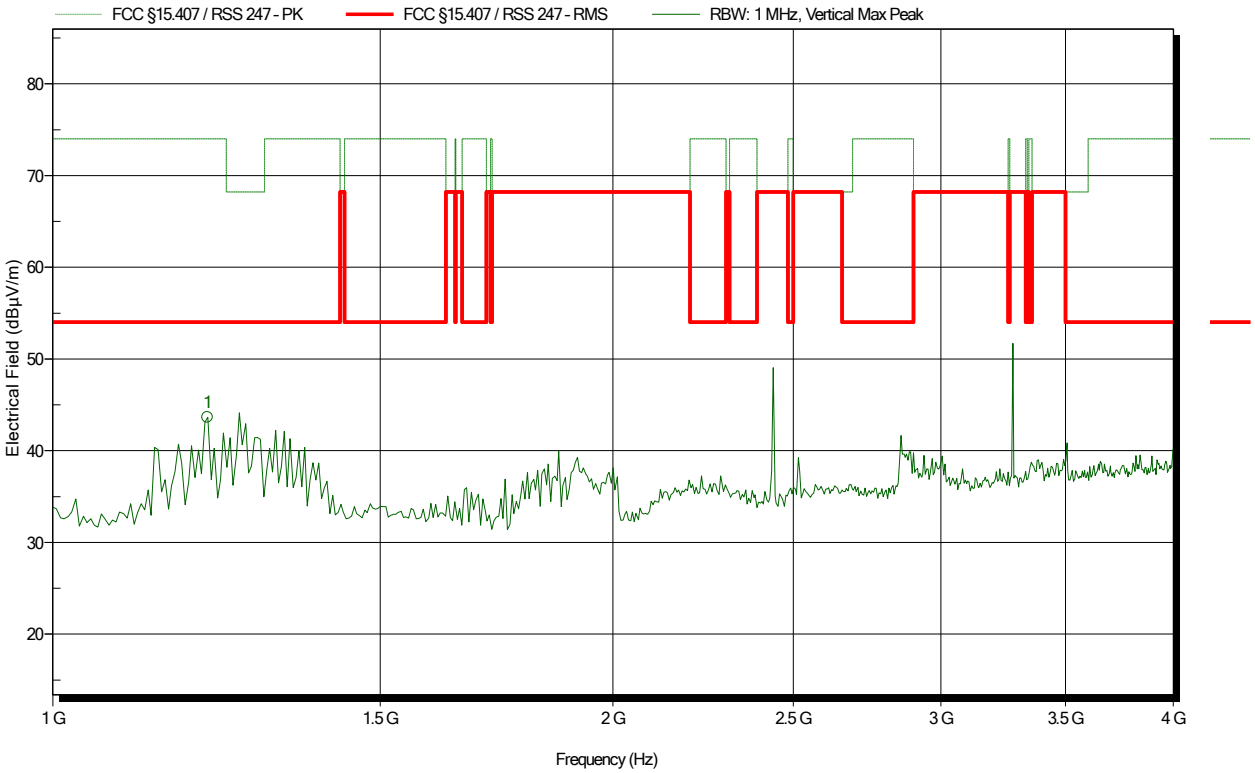

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.212 GHz	43.63 dBµV/m	74 dBµV/m	-30.37 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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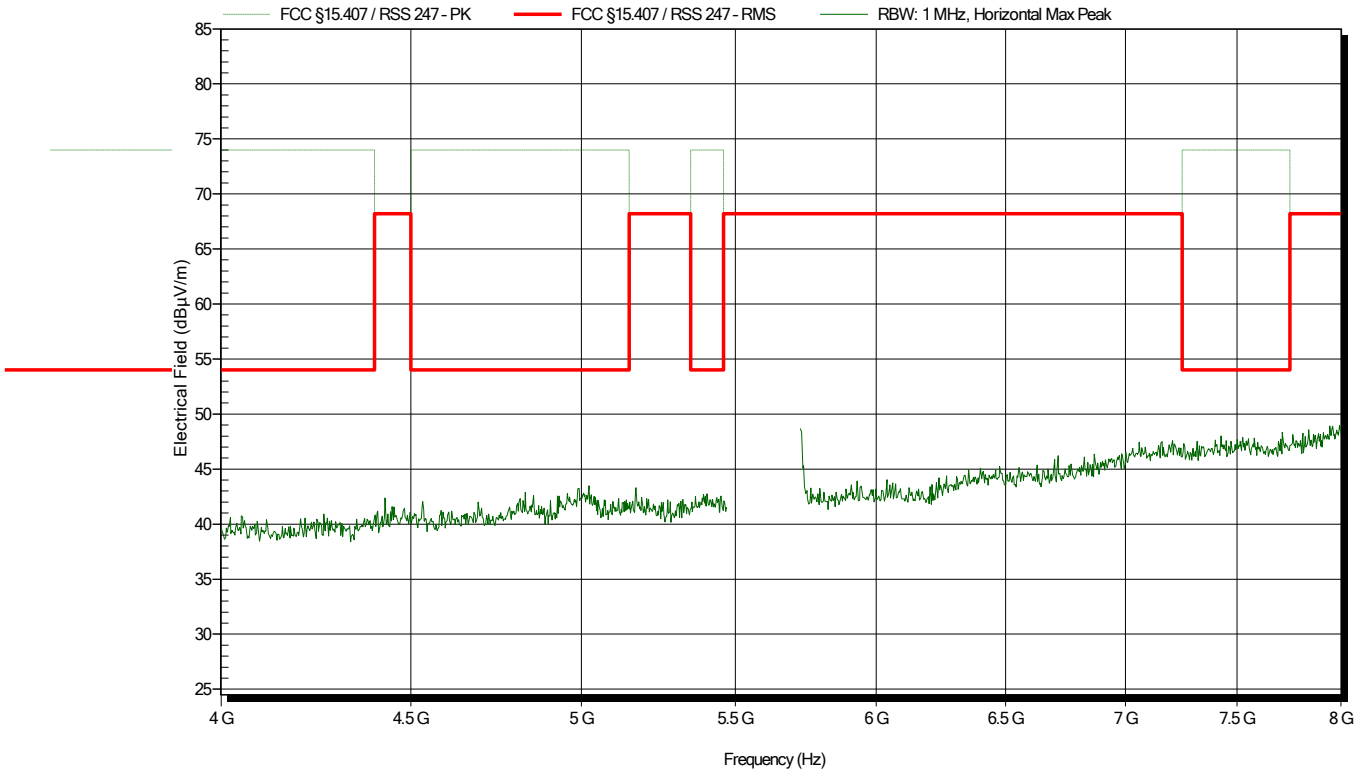

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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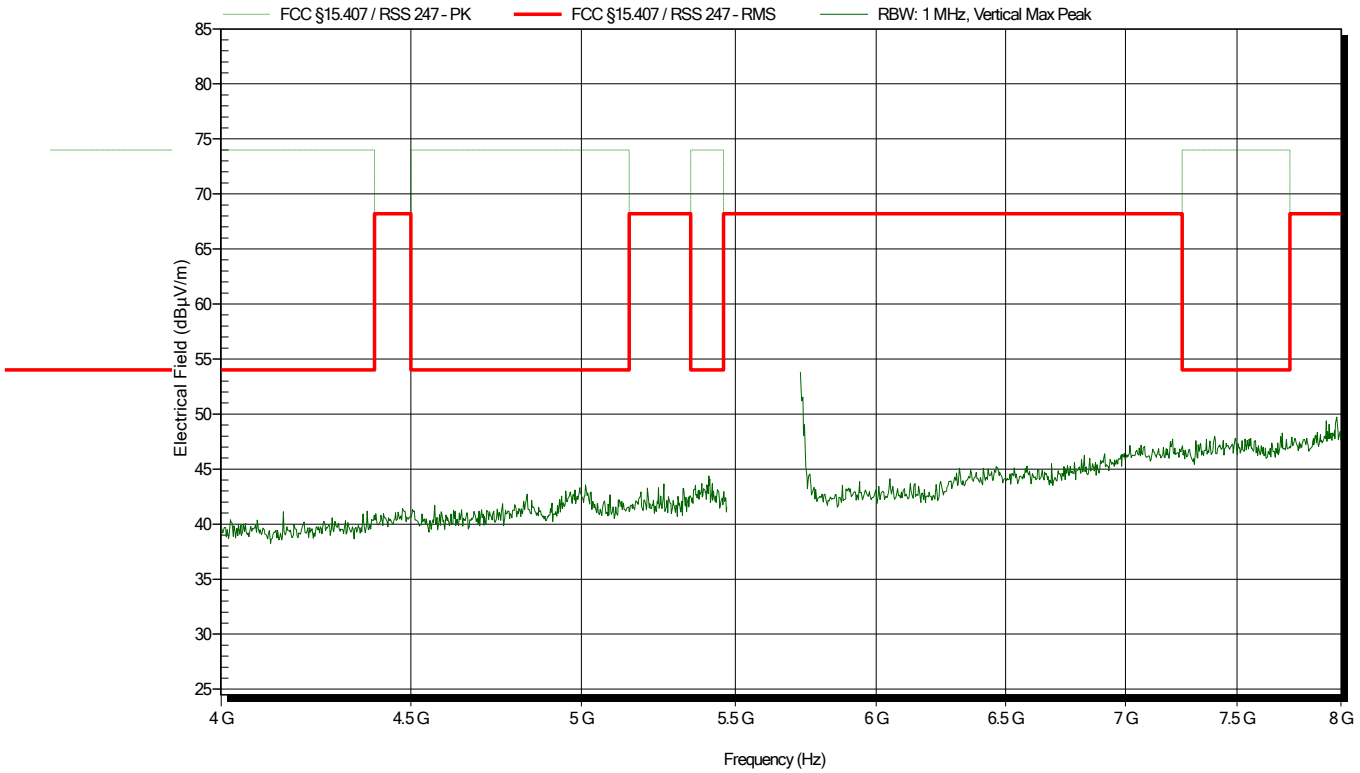

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	upper band area

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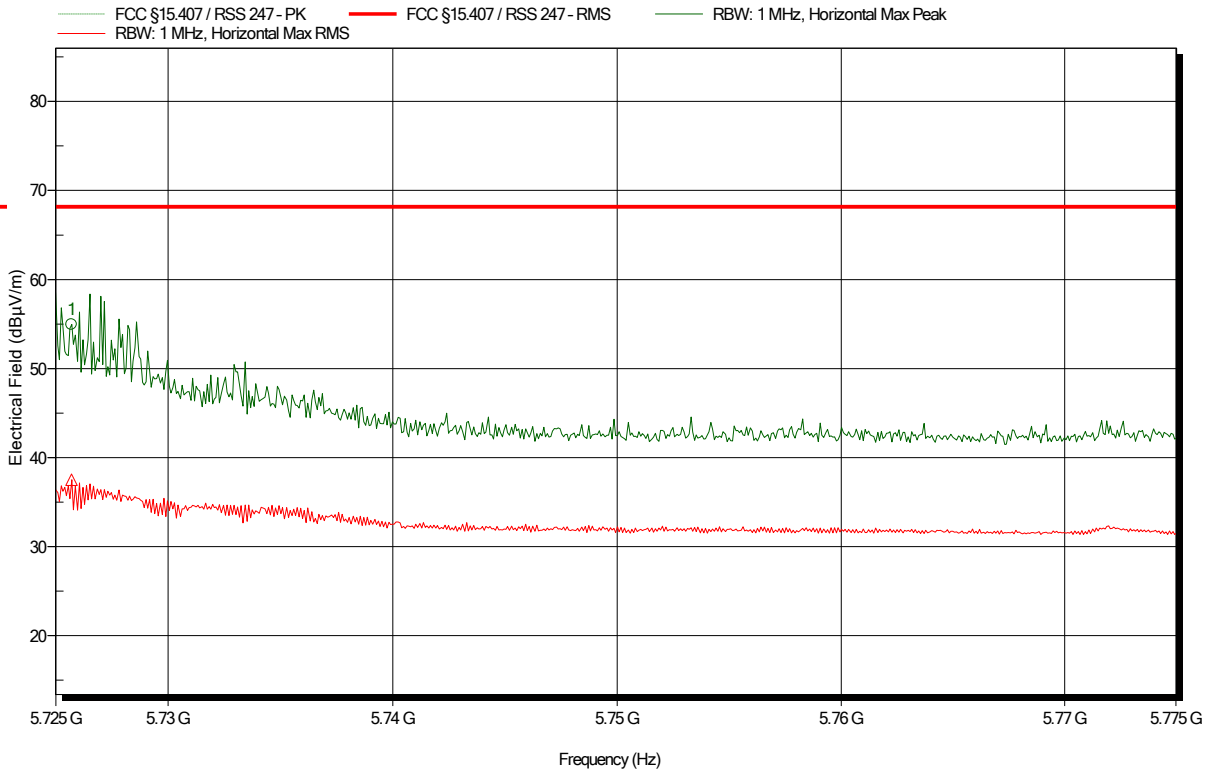

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.726 GHz	54.96 dBµV/m	68.2 dBµV/m	-13.24 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.726 GHz	37.53 dBµV/m	68.2 dBµV/m	-30.67 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	upper band area

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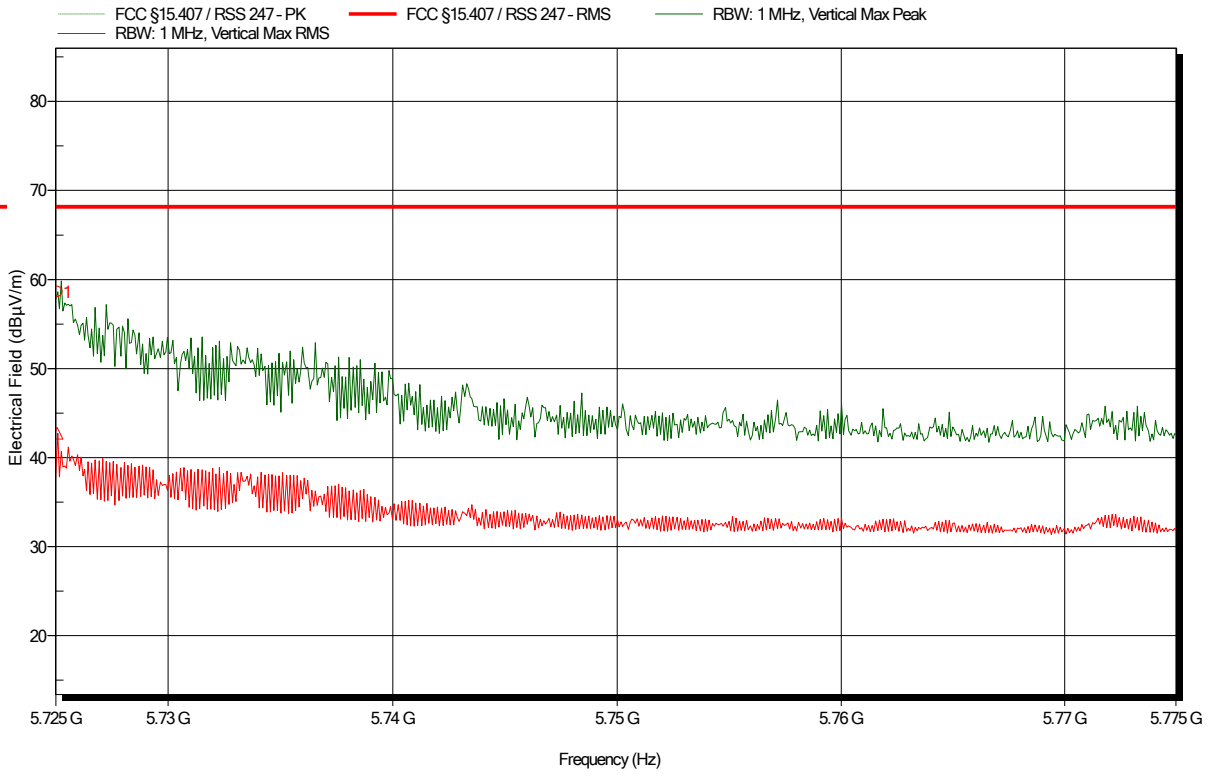

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.725 GHz	58.6 dBµV/m	68.2 dBµV/m	-9.6 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.725 GHz	42.74 dBµV/m	68.2 dBµV/m	-25.46 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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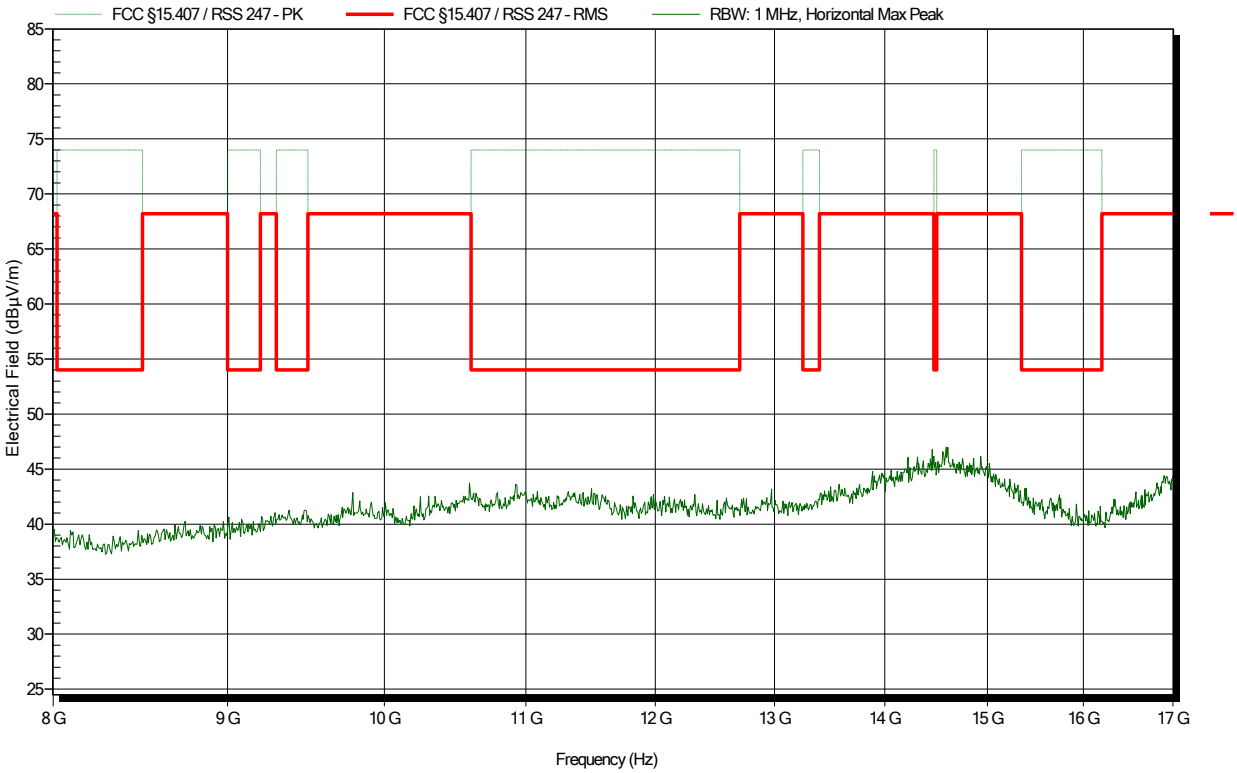

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5700 MHz
Test Date:	2019-09-03
Note:	

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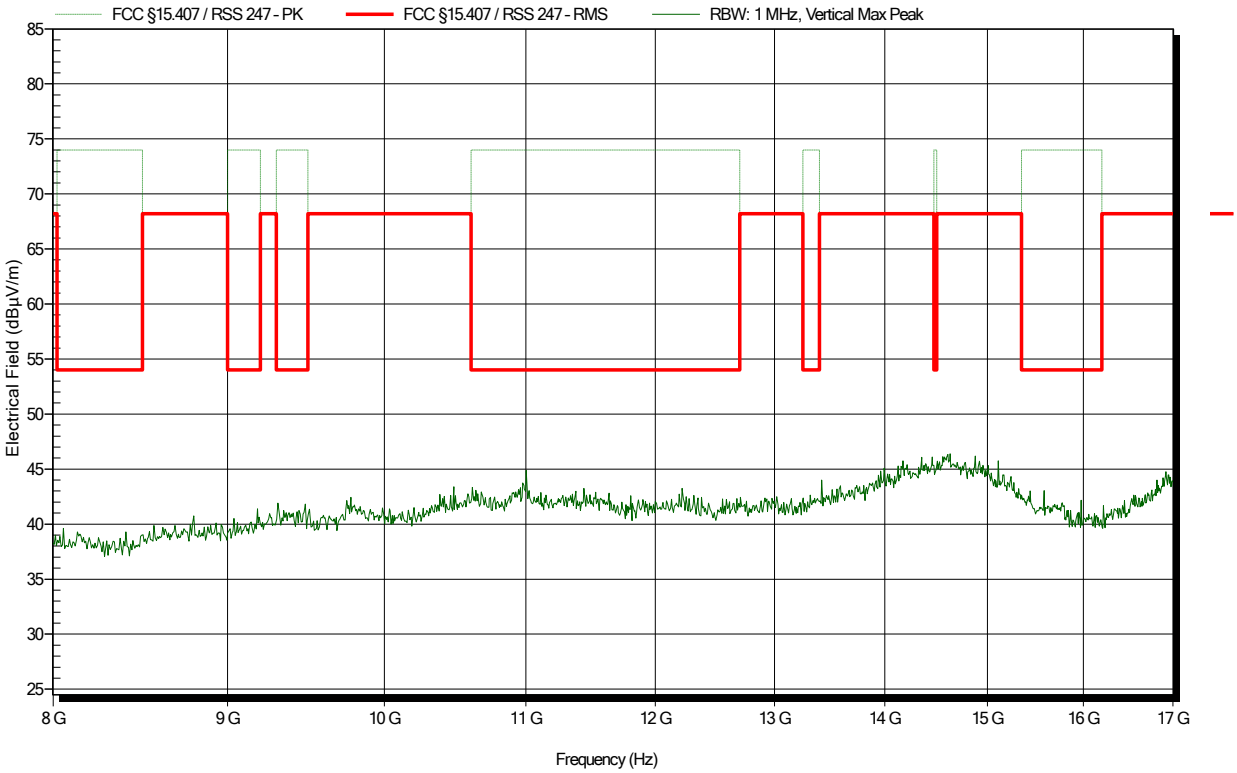

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-03
Note:	

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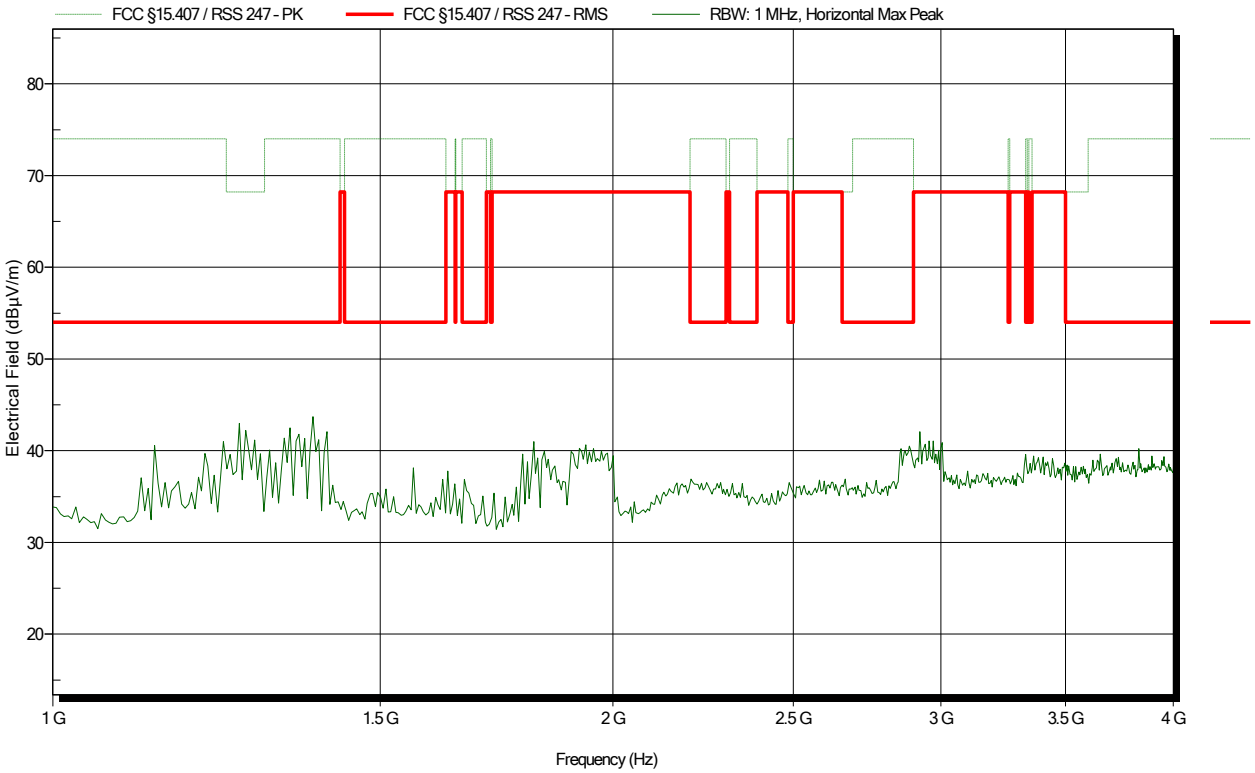

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-03
Note:	

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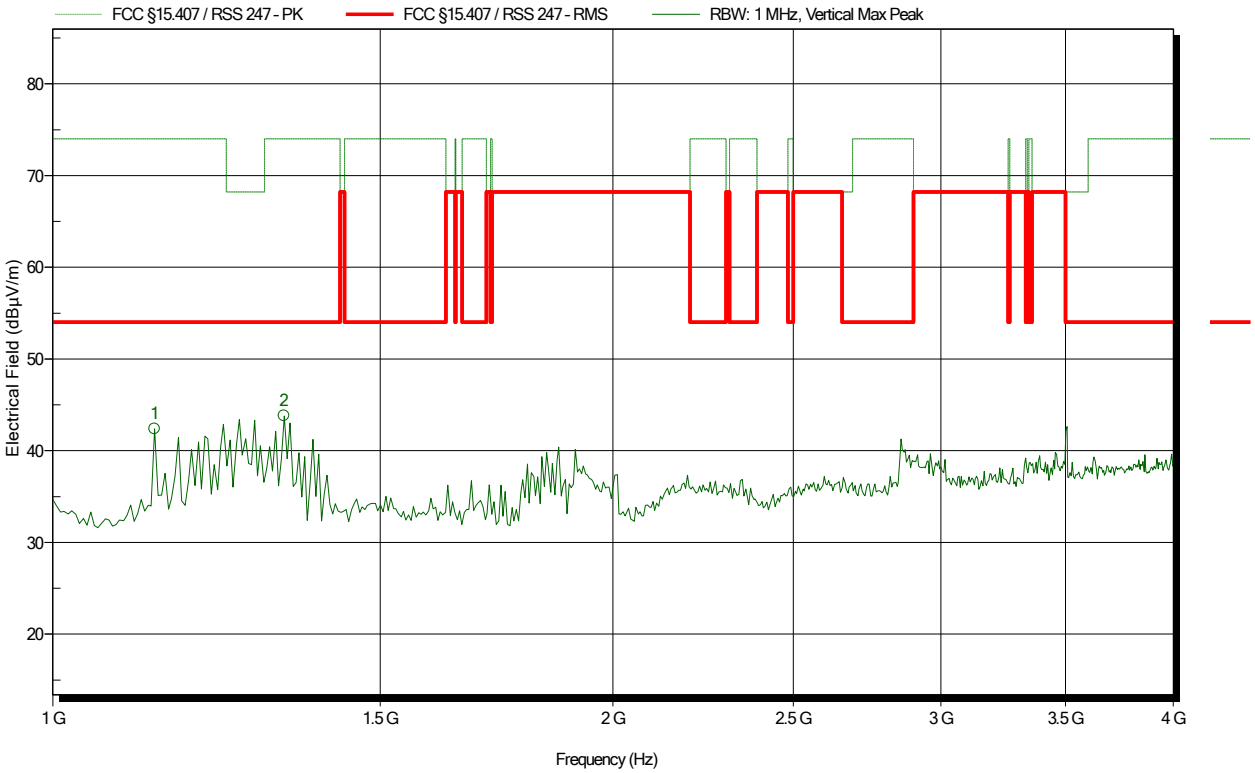

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.135 GHz	42.38 dBµV/m	74 dBµV/m	-31.62 dB	Pass
1.332 GHz	43.81 dBµV/m	74 dBµV/m	-30.19 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-02
Note:	

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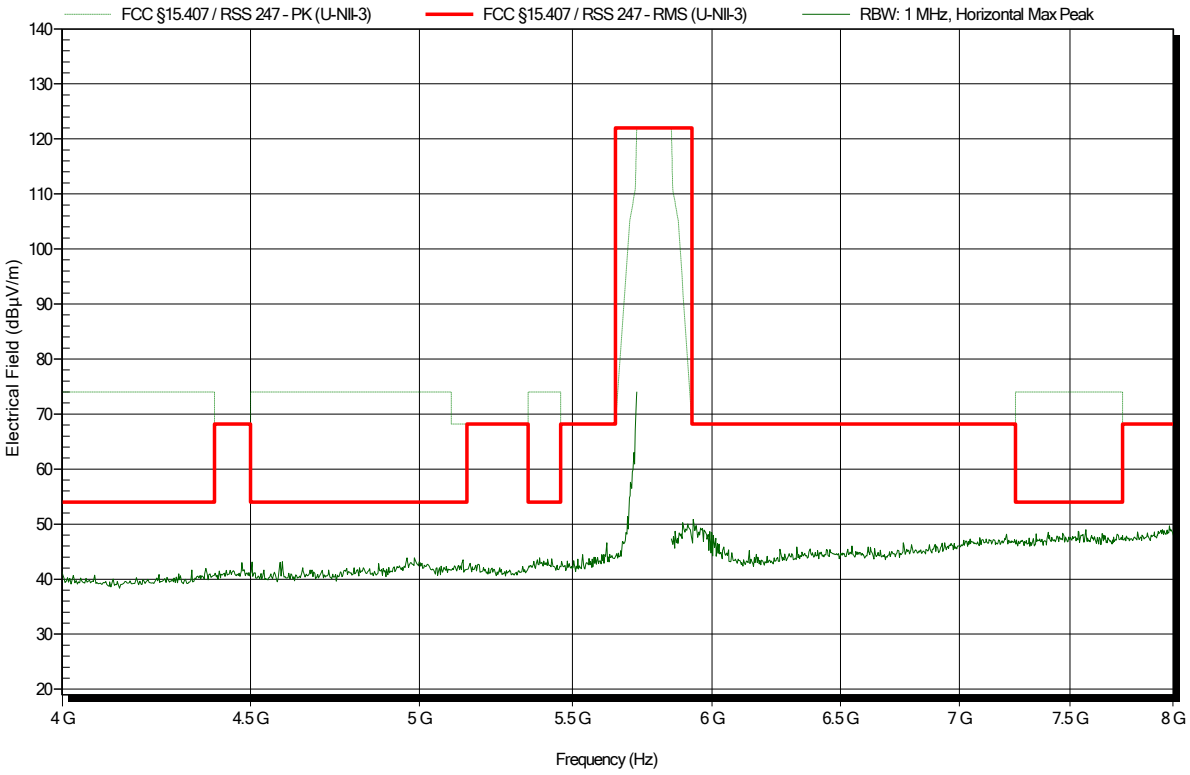

Spurious emissions according to FCC 15.407

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Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-02
Note:	

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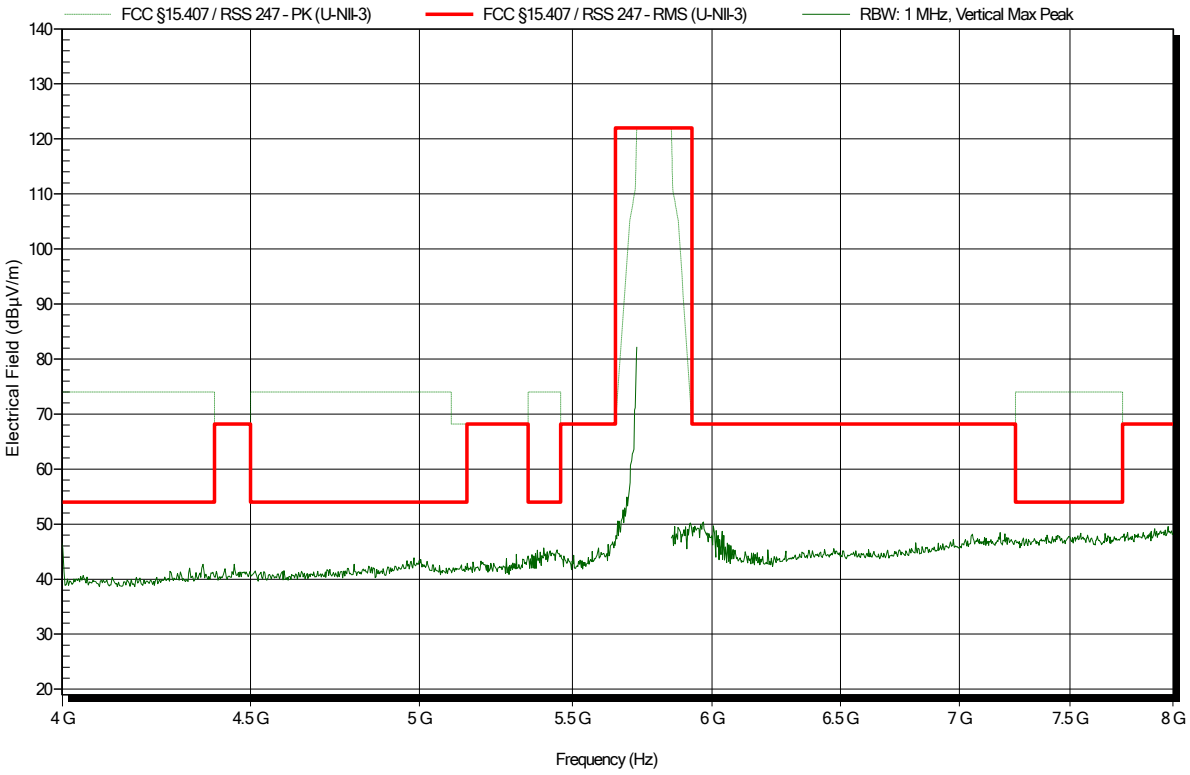

Spurious emissions according to FCC 15.407

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Model:	Renamic Neo
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Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-03
Note:	lower band area

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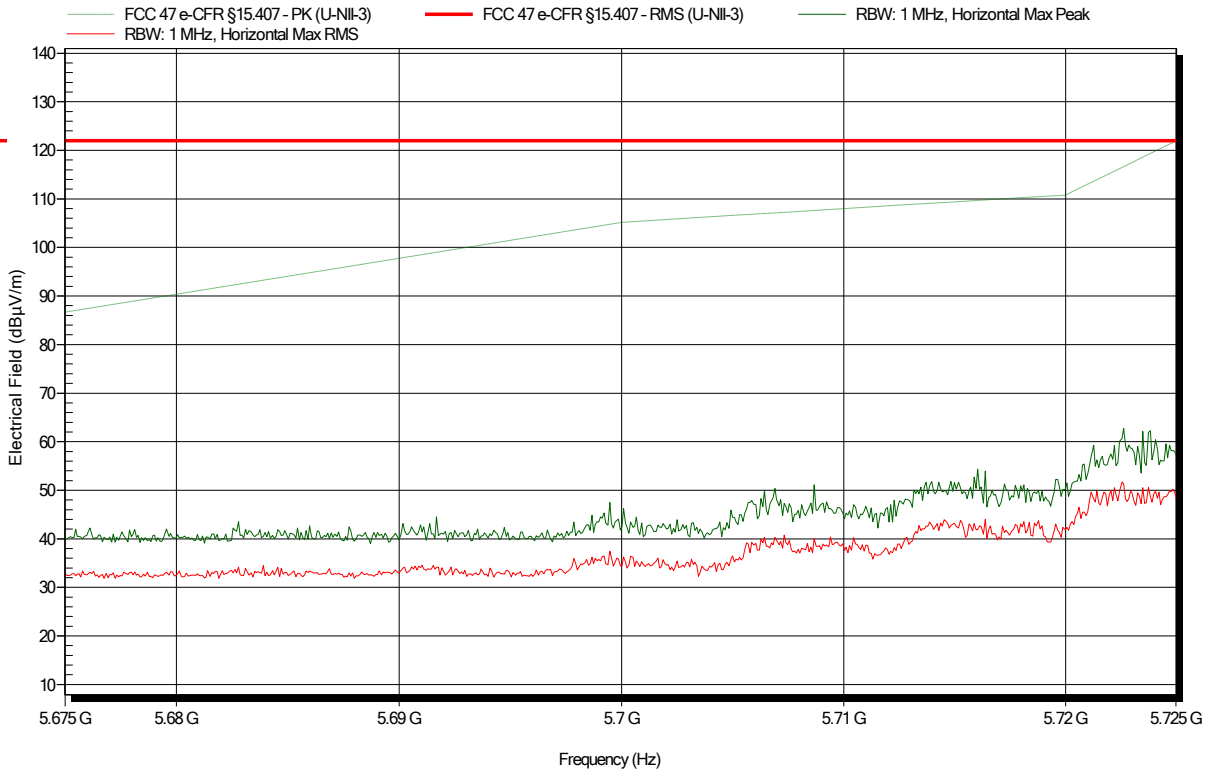

Spurious emissions according to FCC 15.407

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EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
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Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-02
Note:	lower band area

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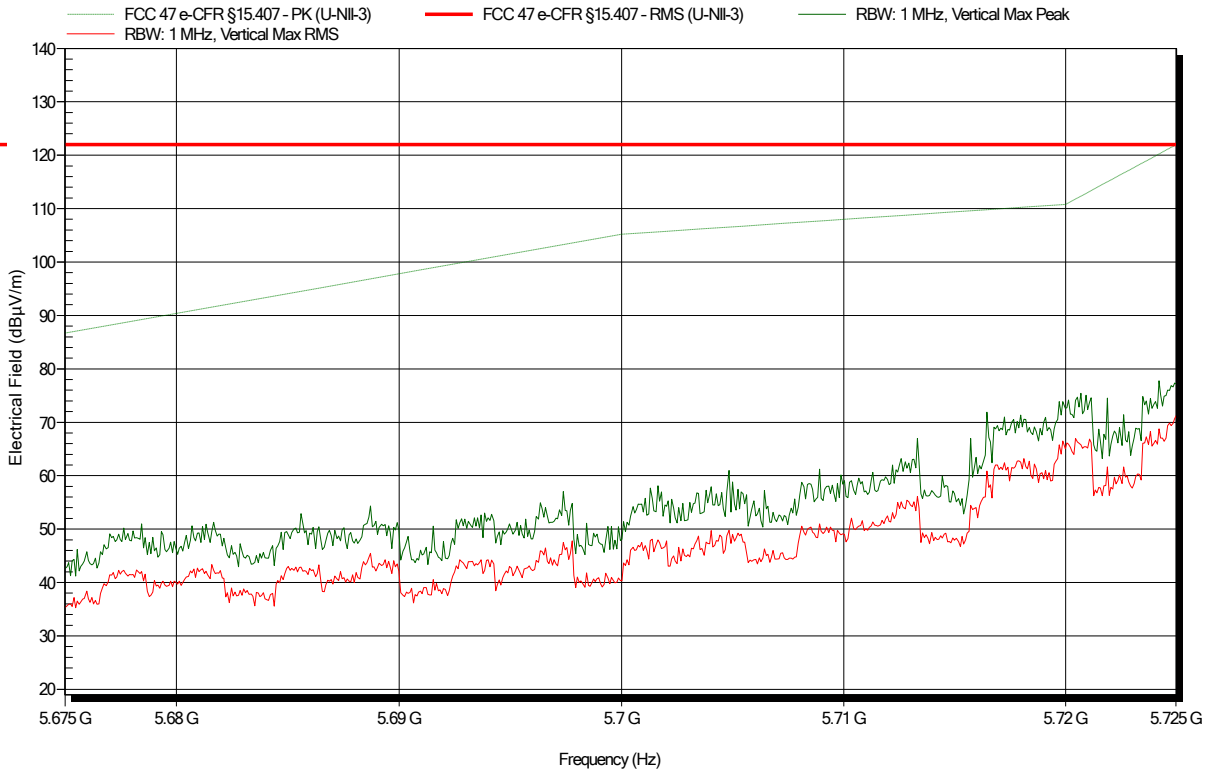

Spurious emissions according to FCC 15.407

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Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-02
Note:	

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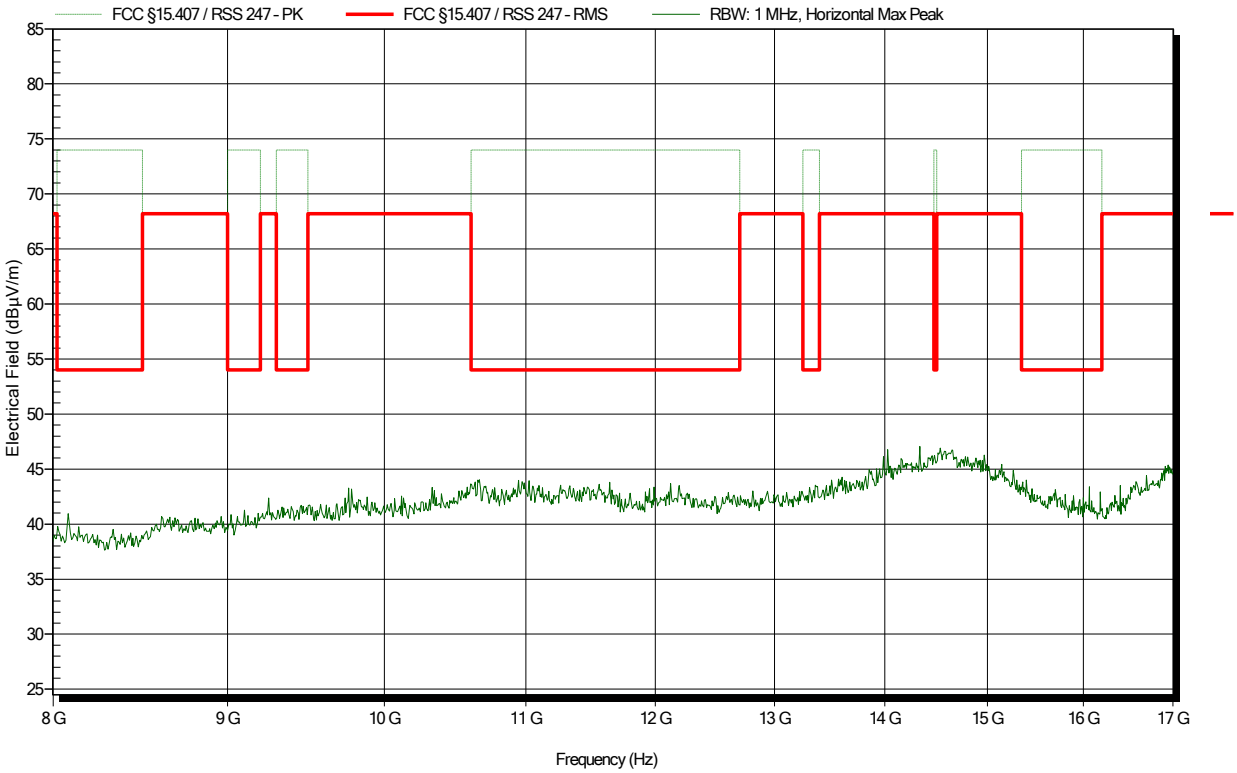

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
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EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
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Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5745 MHz
Test Date:	2019-09-02
Note:	

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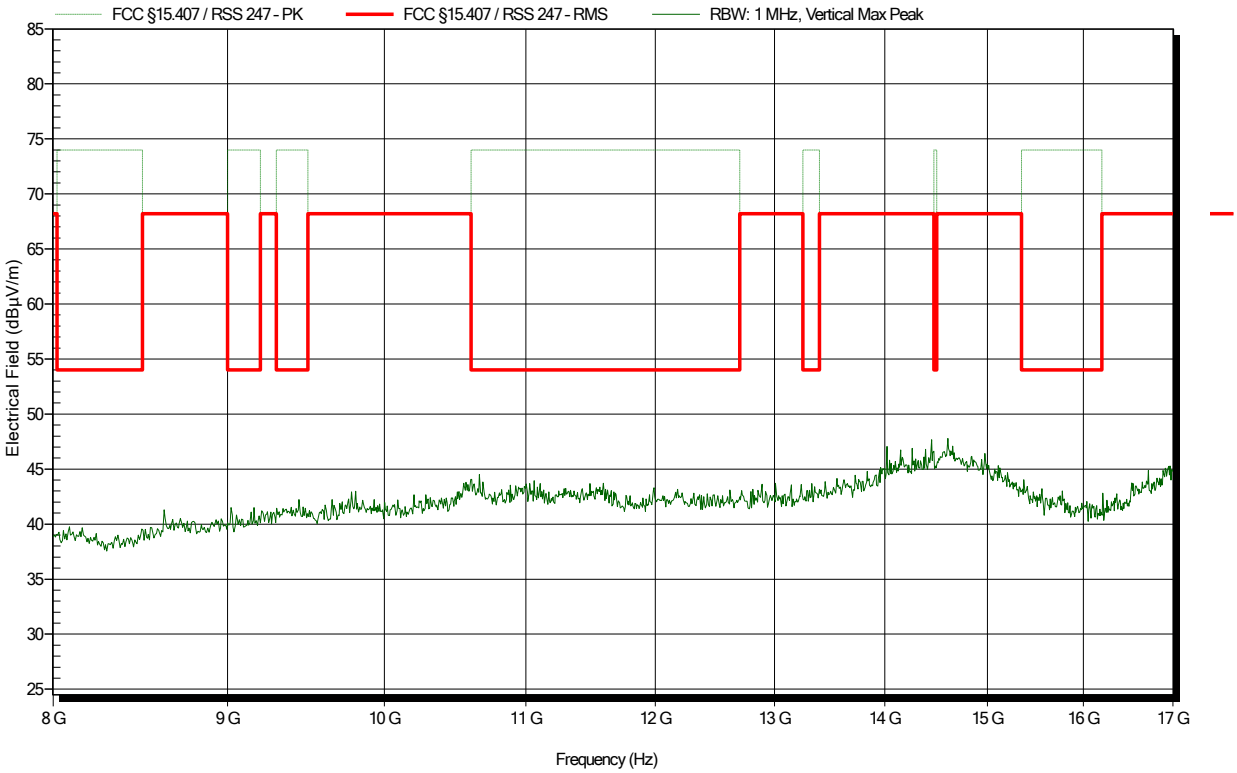

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-03
Note:	

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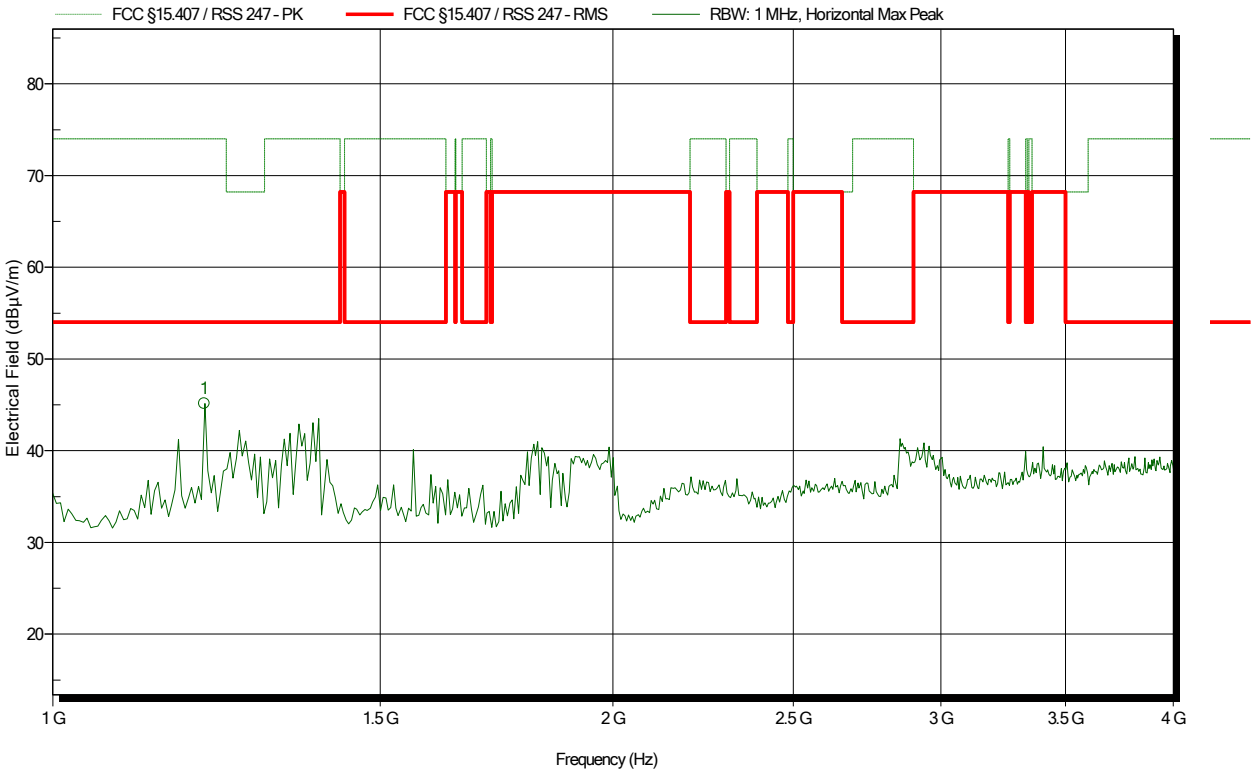

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.207 GHz	45.14 dBµV/m	74 dBµV/m	-28.86 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-03
Note:	

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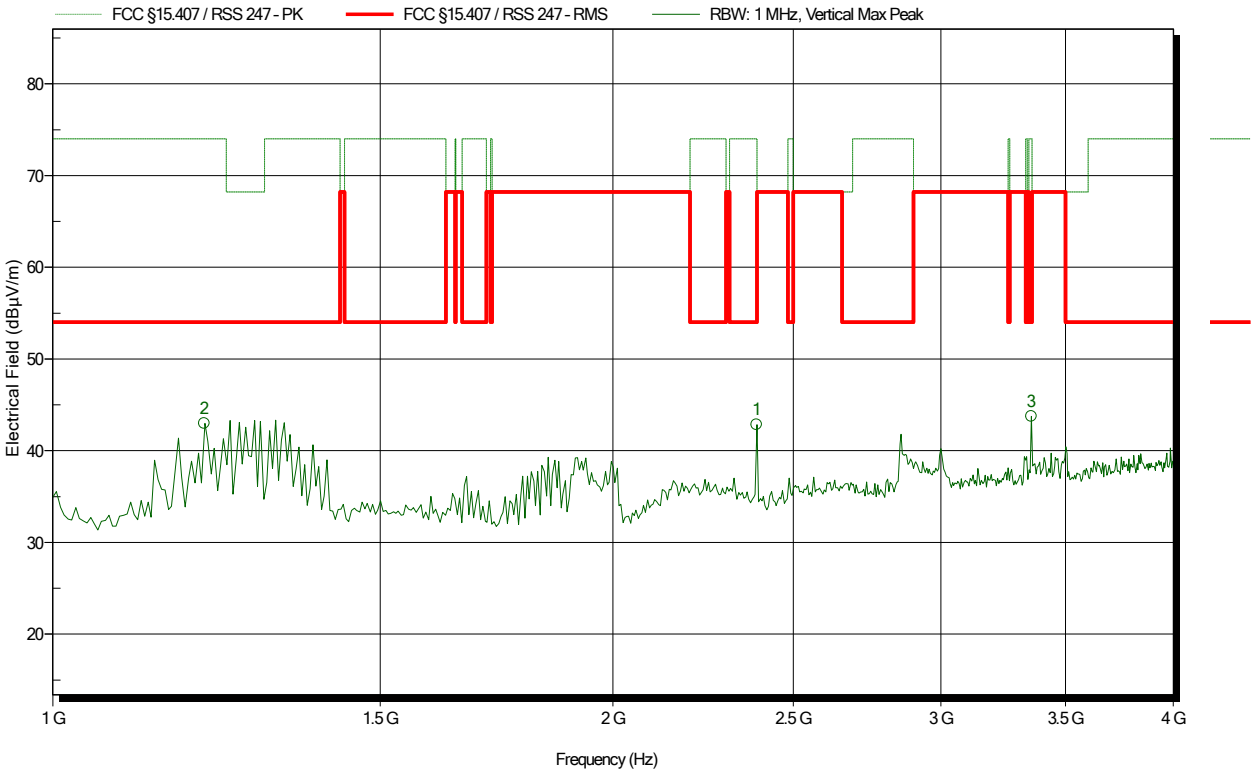

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.207 GHz	42.97 dBµV/m	74 dBµV/m	-31.03 dB	Pass
2.389 GHz	42.86 dBµV/m	74 dBµV/m	-31.14 dB	Pass
3.356 GHz	43.73 dBµV/m	74 dBµV/m	-30.27 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-25
Note:	

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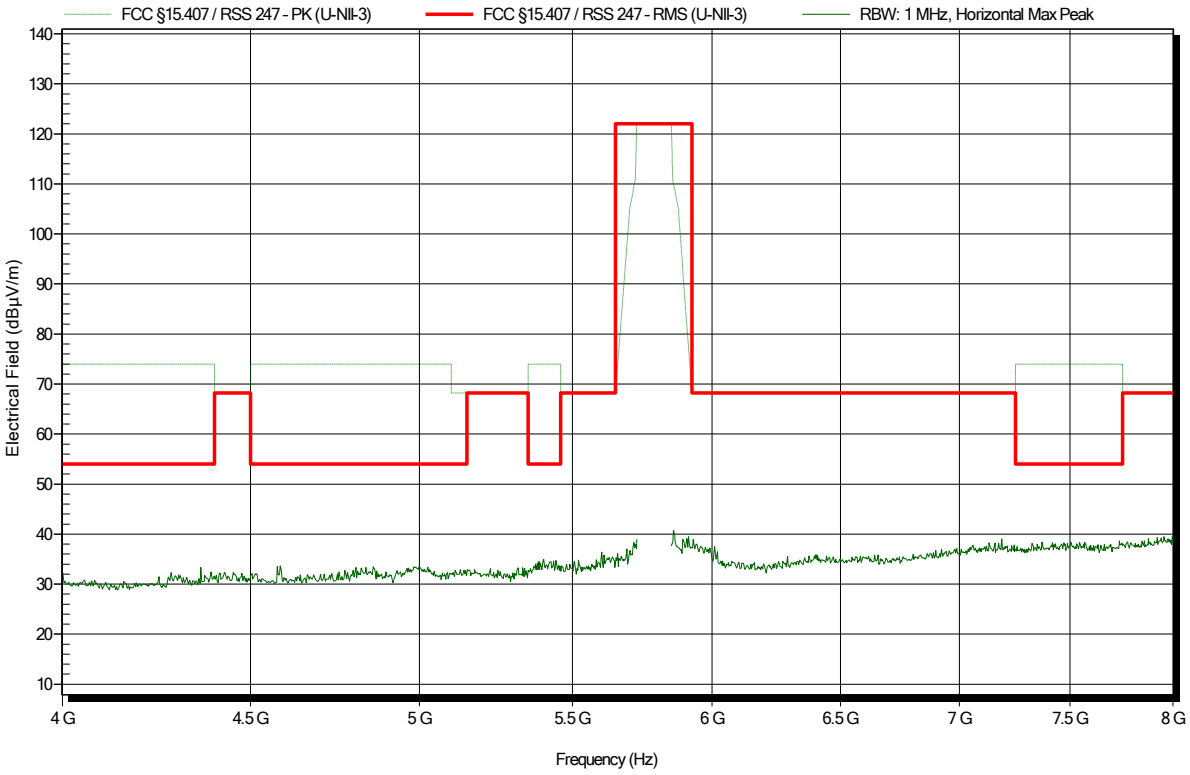

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-02
Note:	

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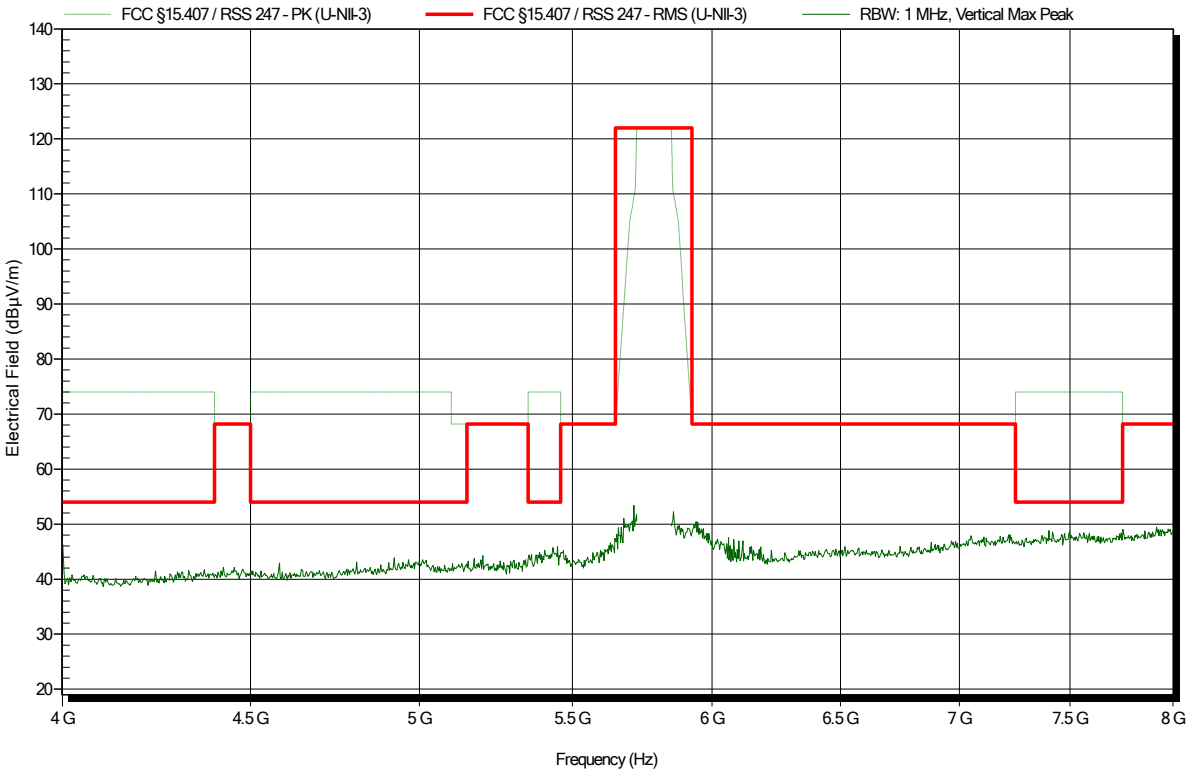

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-03
Note:	

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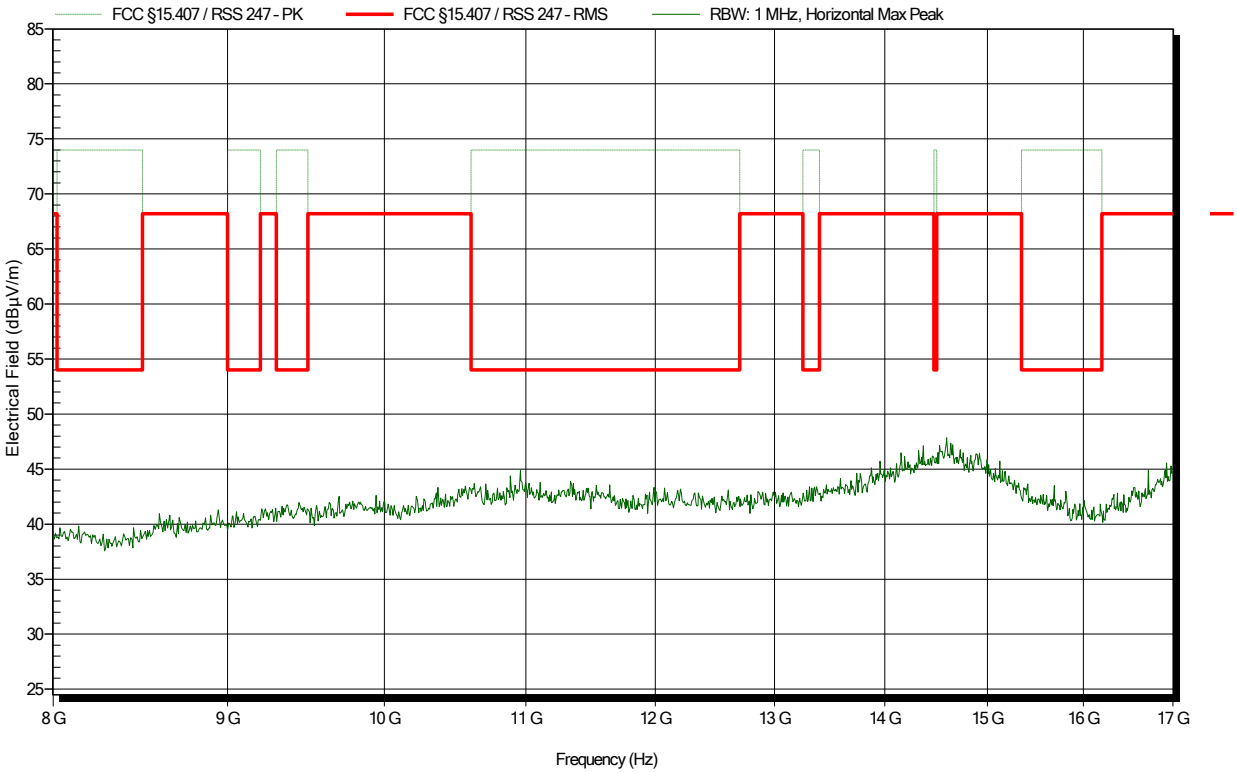

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5785 MHz
Test Date:	2019-09-03
Note:	

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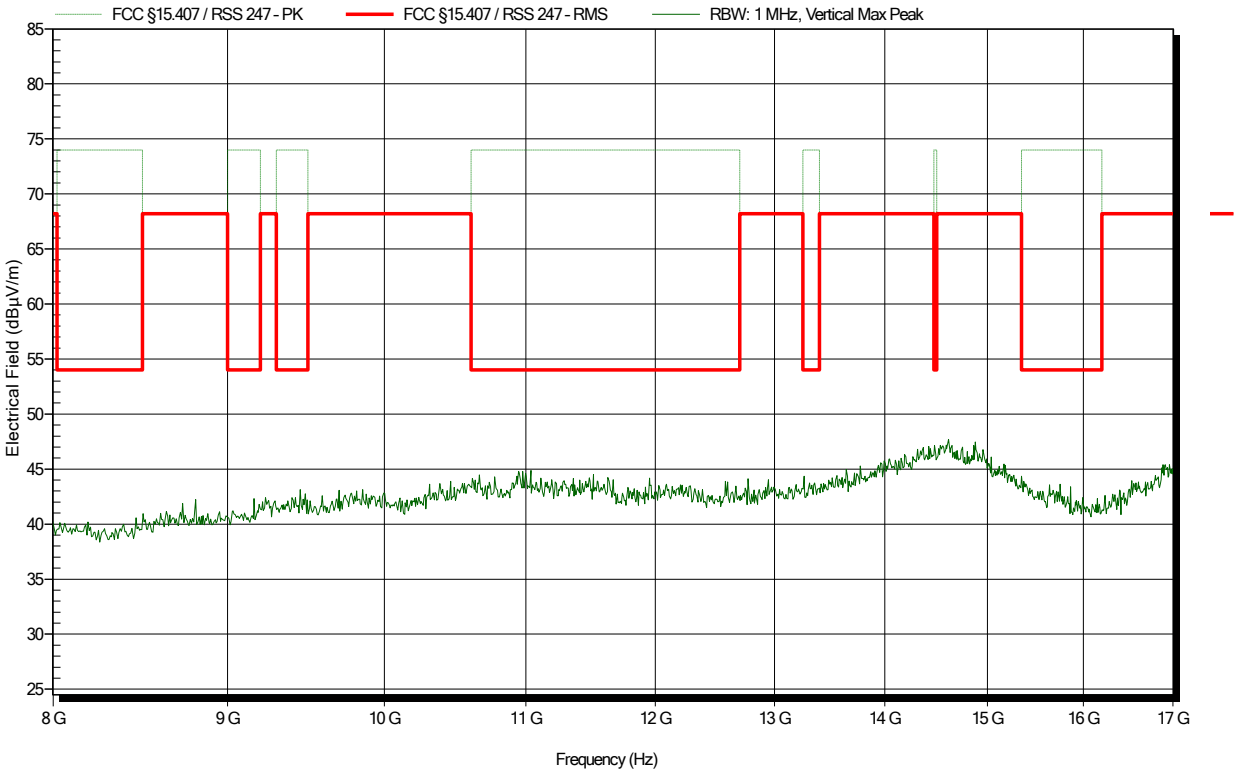

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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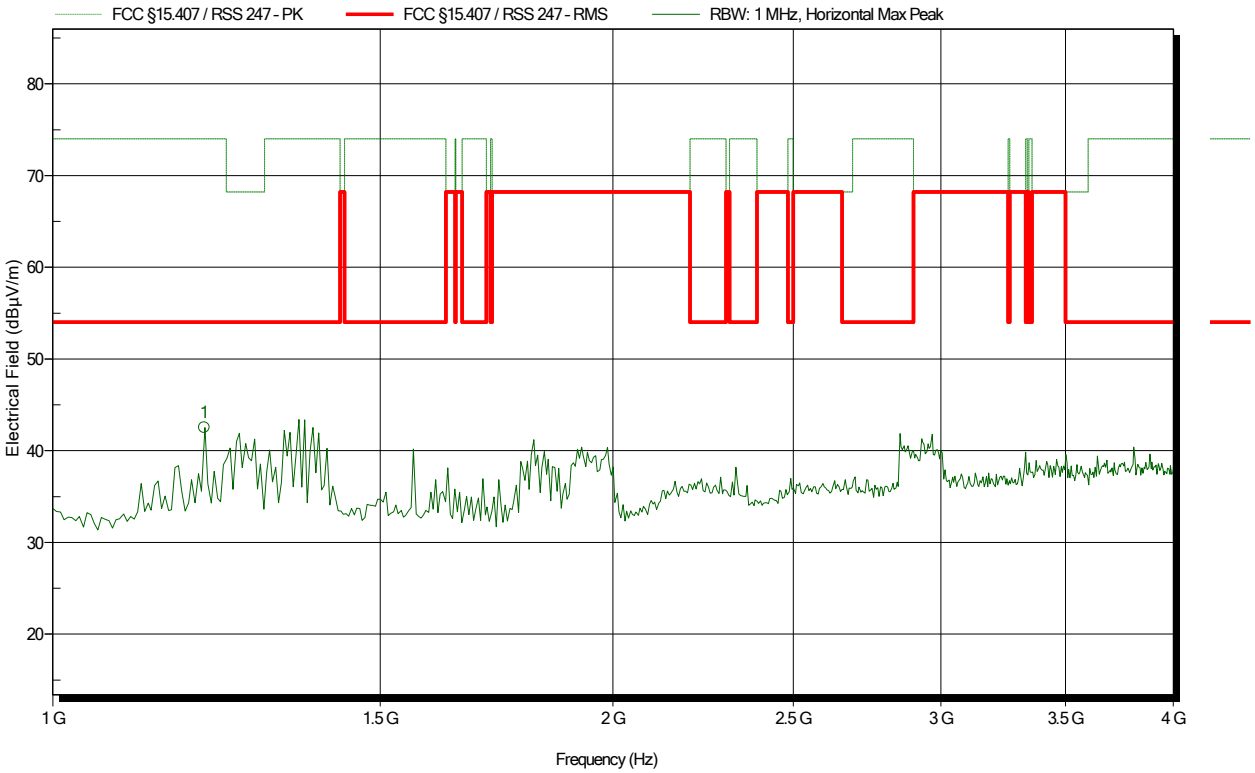

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.207 GHz	42.54 dBµV/m	74 dBµV/m	-31.46 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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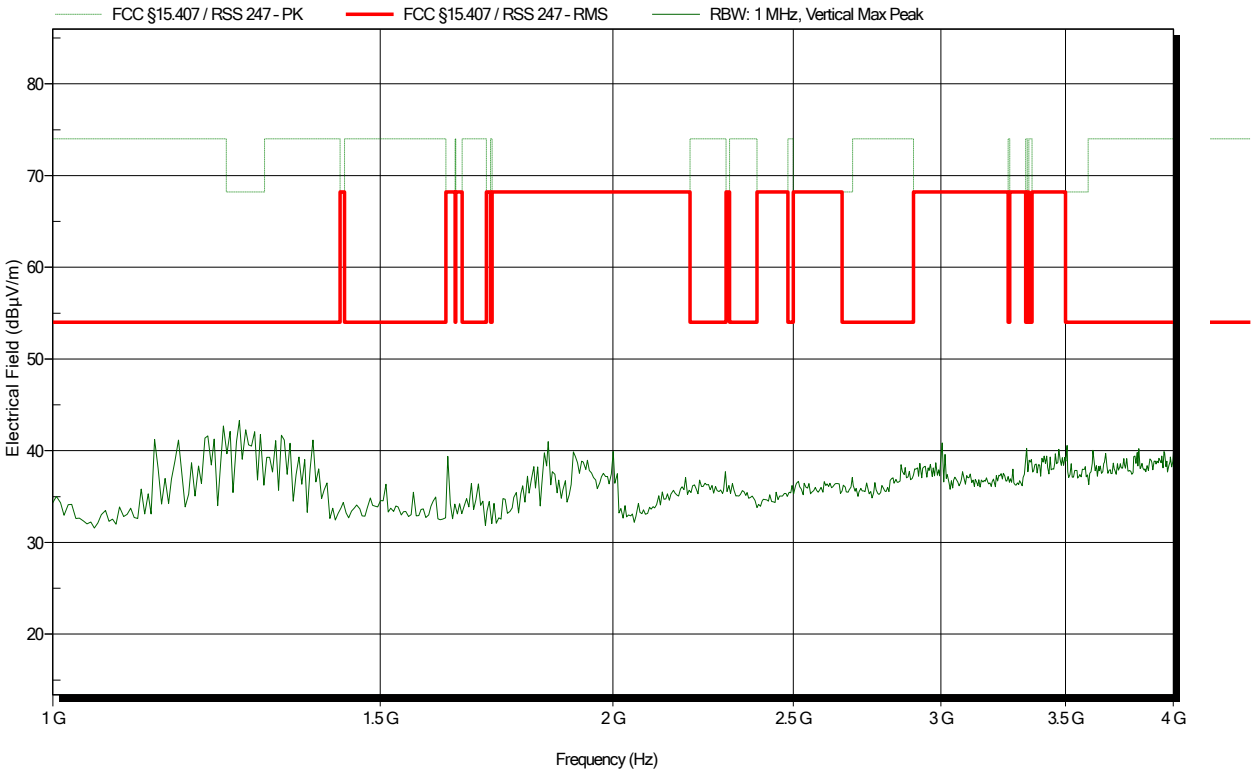

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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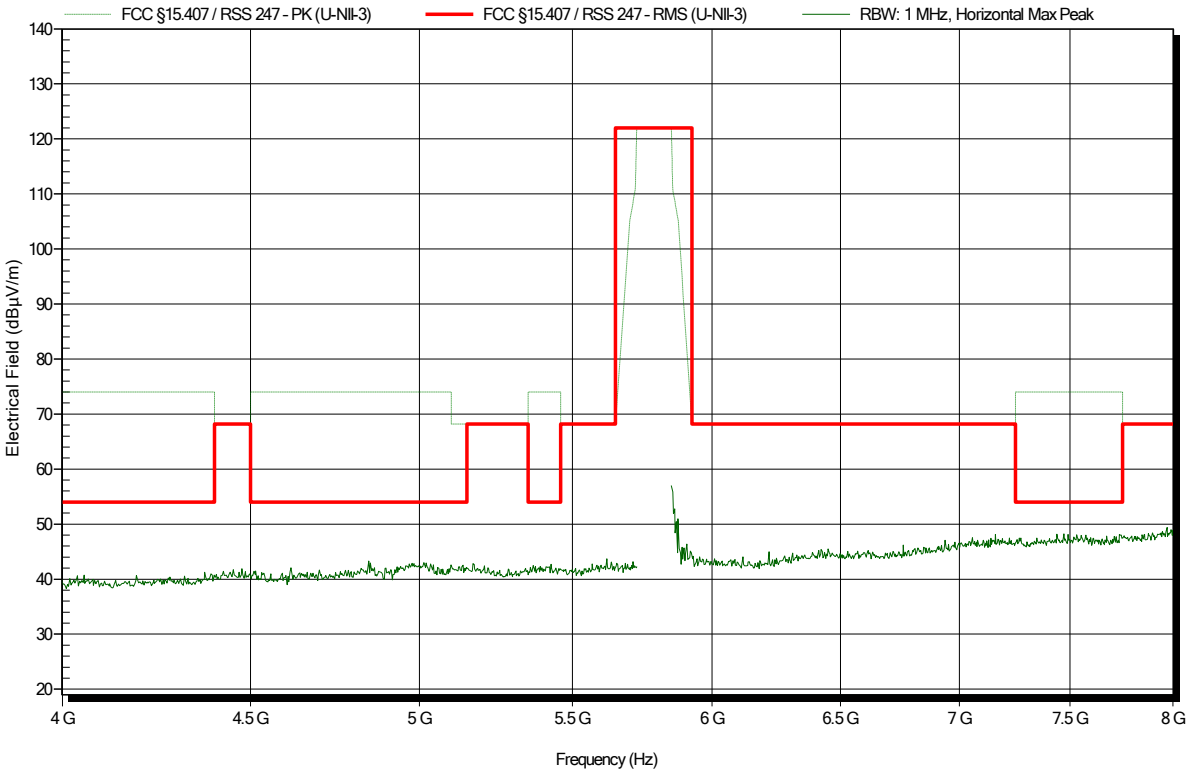

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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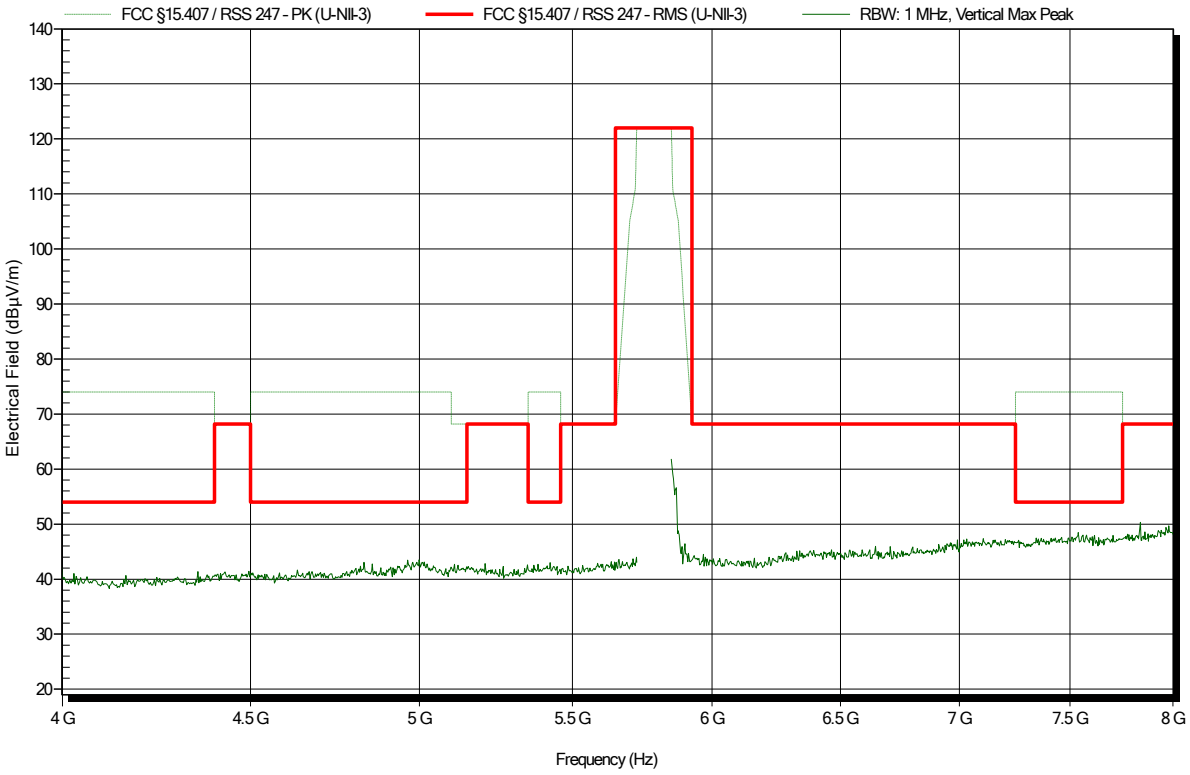

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	upper band area

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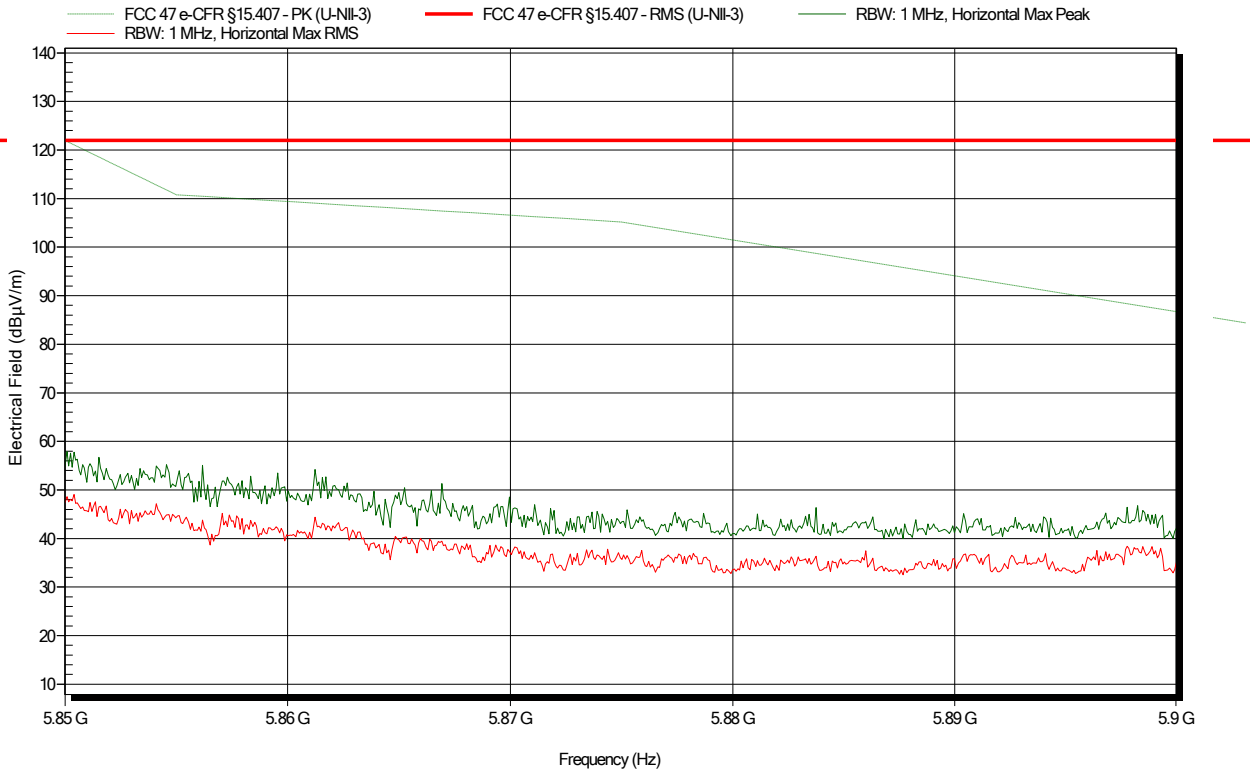

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
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Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	upper band area

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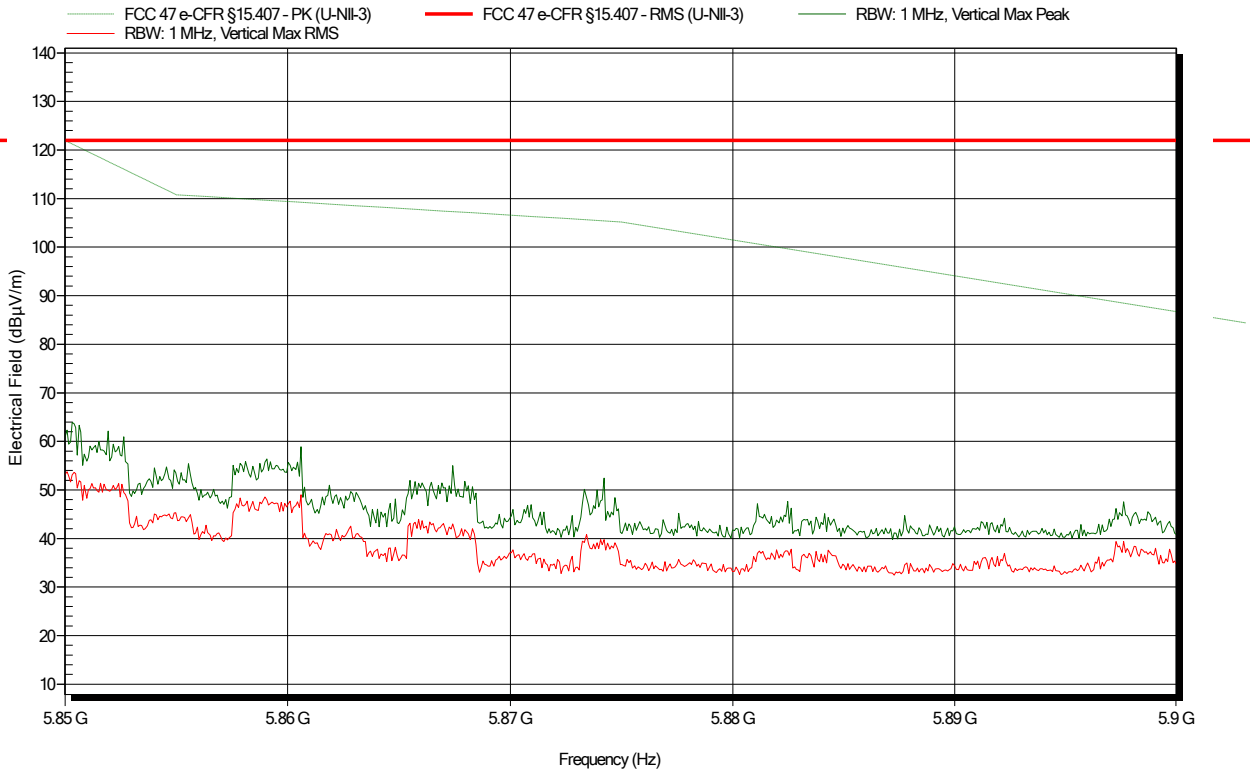

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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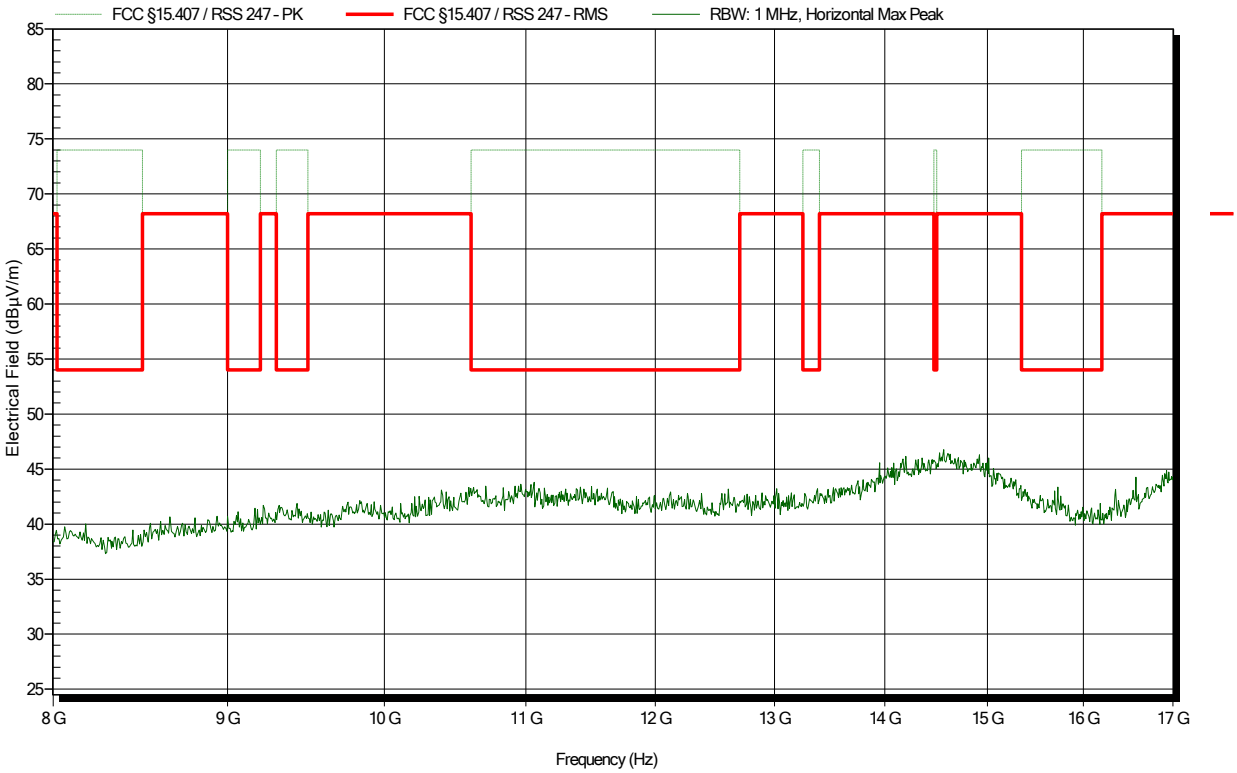

Spurious emissions according to FCC 15.407

Project number:	G0M-1905-8256
Applicant:	BIOTRONIK SE & Co. KG
EUT Name:	Renamic Neo Programming Device
Model:	Renamic Neo
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 23.6°C, Vnom: 120 VAC (external power supply)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11ac – 13 MBit/s MCS0 2Streams – 5825 MHz
Test Date:	2019-09-03
Note:	

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