

FCC TEST REPORT FCC 47 CFR Part 15C Industry Canada RSS-210 Intentional radiator operating within the bands 902 – 928 MHz, 2400 – 2483.5 MHz and 5725 – 5875 MHz	
Report Reference No.	G0M-1805-7424-TFC249-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	  A2LA Accredited Testing Laboratory, Certificate No.: 1983.01 FCC Filed Test Laboratory, Reg.-No.: 96970 IC OATS Filing assigned code: 3470A-2
Applicant's name	Liftup A/S
Address	Hagensvej 21 DK- 9530 Støvring DENMARK
Test specification: Standard..... : 47 CFR Part 15C RSS-210, Issue 9, 2016-08 RSS-Gen, Issue 4, 2014-11 ANSI C63.10, 2013 Test scope..... : complete Radio compliance test	
Equipment under test (EUT): Product description : Radio module for Liftup A/S products Model No. : MODULE1 Additional Model(s) : None Brand Name(s) : Liftup Hardware version : C Firmware / Software version : 0.14 FCC-ID: 2AK8H-MODULE1 IC: 22516-MODULE1	
Test result	Passed

Possible test case verdicts:

- required by standard but not appl. to test object : N/A
- required by standard but not tested : N/T
- not required by standard for the test object : N/R
- test object does meet the requirement : P (Pass)
- test object does not meet the requirement : F (Fail)

Testing:

Test Lab Temperature : 20 – 23 °C

Test Lab Humidity : 32 – 38 %

Date of receipt of test item : 2018-07-02

Date (s) of performance of tests : 2018-07-09 – 2018-07-13

Compiled by : Sebastian Suckow

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

Approved by (+ signature) : Toralf Jahn
(Deputy Head of Lab)

Date of issue : 2018-08-17

Total number of pages : 82



General remarks:

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

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

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

Additional comments:

Version History

Version	Issue Date	Remarks	Revised by
01	2018-08-17	Initial Release	

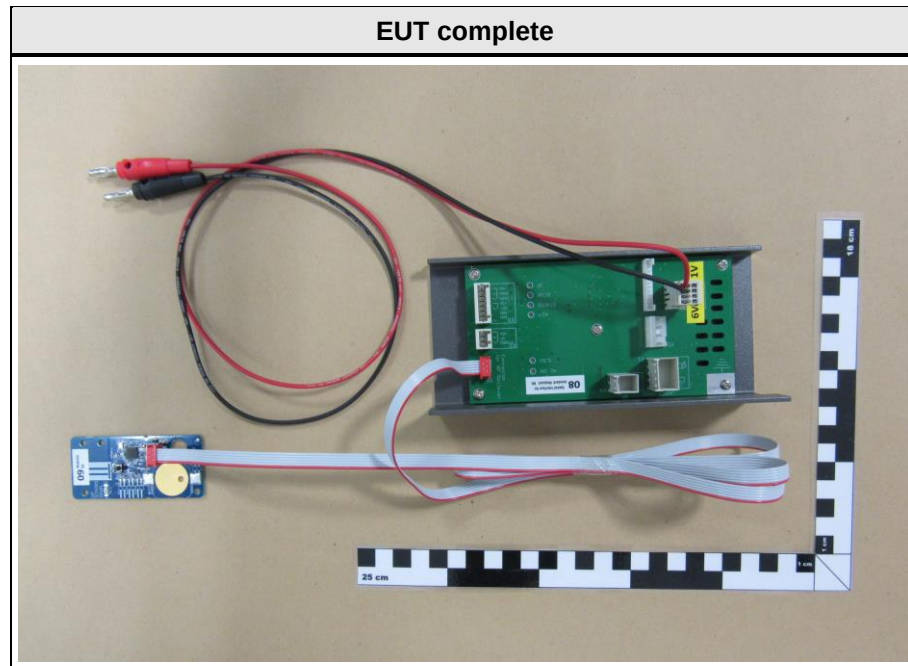
REPORT INDEX

1	EQUIPMENT (TEST ITEM) DESCRIPTION:	5
1.1	Photos – Equipment External	6
1.2	Photos – Equipment internal	7
1.3	Photos – Test setup	8
1.4	Supporting Equipment Used During Testing	9
1.5	Test Modes	10
1.6	Test Equipment Used During Testing	11
1.7	Sample emission level calculation	12
2	RESULT SUMMARY	13
3	TEST CONDITIONS AND RESULTS	14
3.1	Test Conditions and Results – Occupied Bandwidth	14
3.2	Test Conditions and Results – Duty Cycle	18
3.3	Test Conditions and Results – Fundamental field strength emissions	20
3.4	Test Conditions and Results – Emissions radiated outside the specified frequency band	22
3.5	Test Conditions and Results – Receiver radiated emissions	24
3.6	Test Conditions and Results – AC power line conducted emissions	26
ANNEX A	Transmitter radiated spurious emissions	29
ANNEX B	Receiver radiated spurious emissions	73

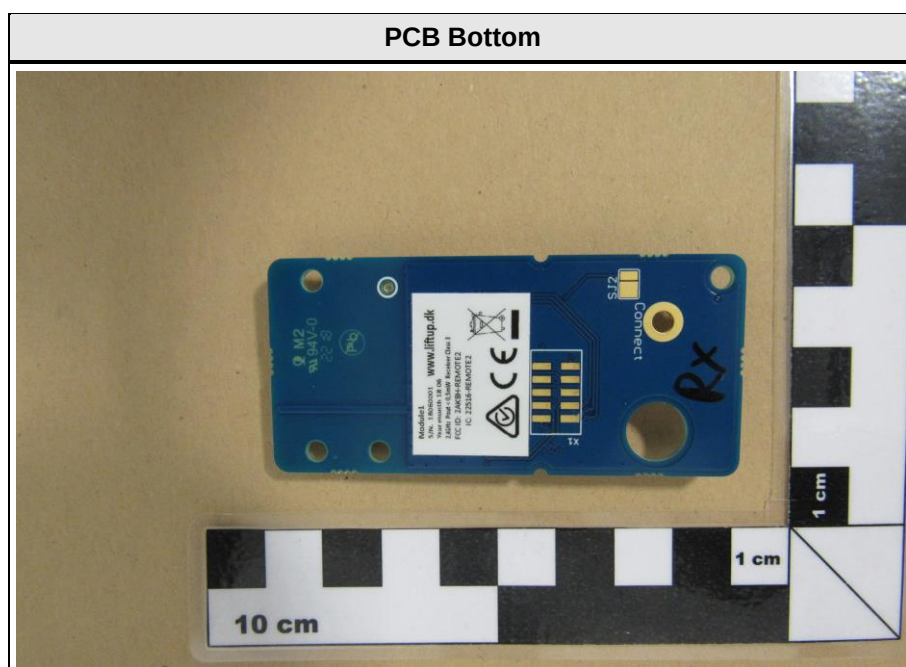
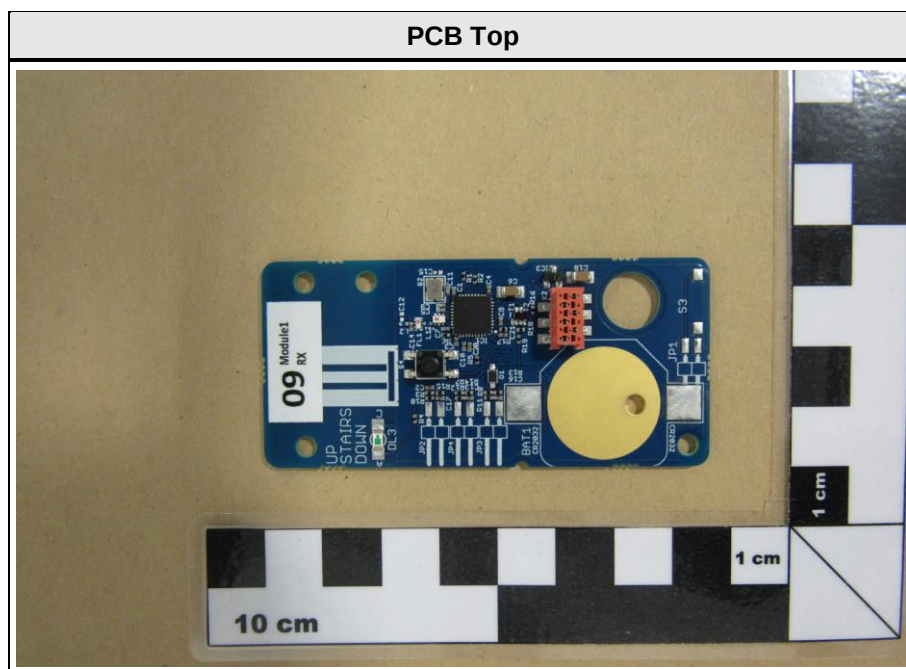
1 Equipment (Test item) Description:

Description	Radio module for Liftup A/S products	
Model	MODULE1	
Additional Model(s)	None	
Brand Name(s)	Liftup	
Serial number	None	
Hardware version	C	
Software / Firmware version	0.14	
PMN	MODULE1	
HVIN	MODULE1	
FVIN	N/A	
HMN	N/A	
FCC-ID	2AK8H-MODULE1	
IC	22516-MODULE1	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	custom	
Operating frequency range	2410 - 2460 MHz	
Assigned frequency band	2400 - 2483.5 MHz	
Frequency range	F _{LOW}	2410 MHz
	F _{MID}	2435 MHz
	F _{HIGH}	2460 MHz
Spreading	None	
Modulations	GFSK	
Number of channels	3	
Channel spacing	25 MHz	
Number of antennas	1	
Antenna	Type	integrated
	Model	PCB
	Manufacturer	Liftup A/S
	Gain	0.72 dBi
Manufacturer	Liftup A/S Hagensvej 21 DK- 9530 Støvring DENMARK	
Power supply	V _{NOM}	5.6 VDC
	V _{MIN}	N/A
	V _{MIN}	N/A

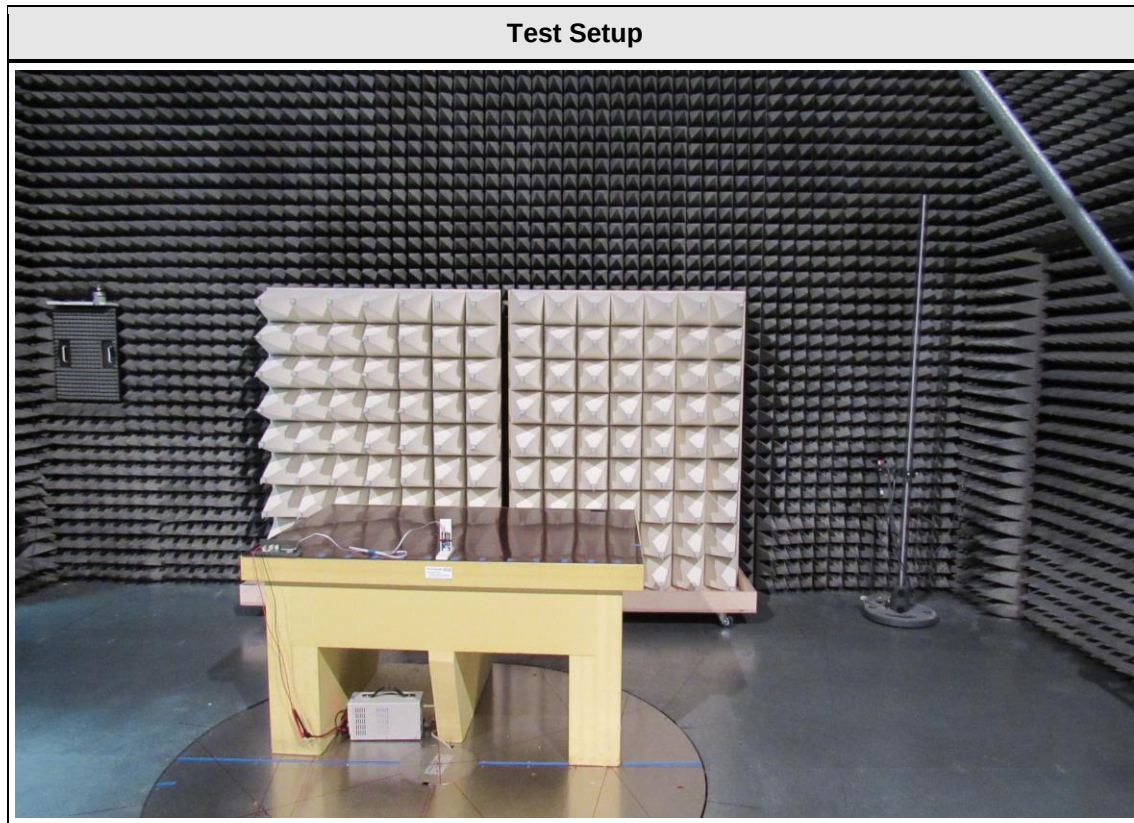
1.1 Photos – Equipment External



1.2 Photos – Equipment internal



1.3 Photos – Test setup



1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
None				
*Note: Use the following abbreviations: AE : Auxiliary/Associated Equipment, or SIM : Simulator (Not Subjected to Test) CABL : Connecting cables				

1.5 Test Modes

Mode #	Description	
Transmit	General conditions:	Specially prepared test mode with 100% duty cycle.
	Radio conditions:	Mode = standalone transmit Modulation = GFSK Power level = Maximum
Receive	General conditions:	EUT powered by fully charged battery
	Radio conditions:	Mode = standalone receive Modulation = GFSK

1.6 Test Equipment Used During Testing

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

Occupied Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU 26	EF01003	2017-07	2018-07

Duty Cycle					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU 26	EF01003	2017-07	2018-07

Field strength emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-
MXE EMI Receiver	Keysight Technologies	N9038A-526/WXP	EF01070	2017-08	2018-08
Biconical Antenna	R&S	HK 116	EF00203	2018-06	2020-06
LPD Antenna	R&S	HL 223	EF00187	2016-05	2019-05
Horn antenna	Schwarzbeck	BBHA 9120D	EF00019	2016-09	2018-09

1.7 Sample emission level calculation

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

Reading:

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

A.F.:

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

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

Net:

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

Limit:

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

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

Margin:

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

Example only:

$$\begin{array}{rclclcl} \text{Reading} & + & \text{AF} & = & \text{Net Reading} & : & \text{Net reading - FCC limit} & = & \text{Margin} \\ 21.5 \text{ dB}\mu\text{V} & + & 26 \text{ dB} & = & 47.5 \text{ dB}\mu\text{V/m} & : & 47.5 \text{ dB}\mu\text{V/m} - 57.0 \text{ dB}\mu\text{V/m} & = & -9.5 \text{ dB} \end{array}$$

2 Result Summary

FCC 47 CFR Part 15C, IC RSS-210				
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks
RSS-Gen 6.6	Occupied Bandwidth	RSS-Gen 6.6	N/R	Informational only
FCC 15.35(c) RSS-Gen 6.10	Duty Cycle	ANSI C63.10	N/R	Informational only
FCC 15.249(a),(c),(e) RSS-210 B.10(a)	Fundamental field strength emissions	ANSI C63.10	PASS	
FCC 15.249(a),(c),(d),(e) RSS-210 B.10(b)	Emission radiated outside the specified frequency band	ANSI C63.10	PASS	
RSS-Gen 7.1	Receiver radiated spurious emissions	ANSI C63.10	PASS	
FCC § 15.207 RSS-Gen 8.8	AC power line conducted emissions	ANSI C63.10	PASS	
Remarks:				

3 Test Conditions and Results

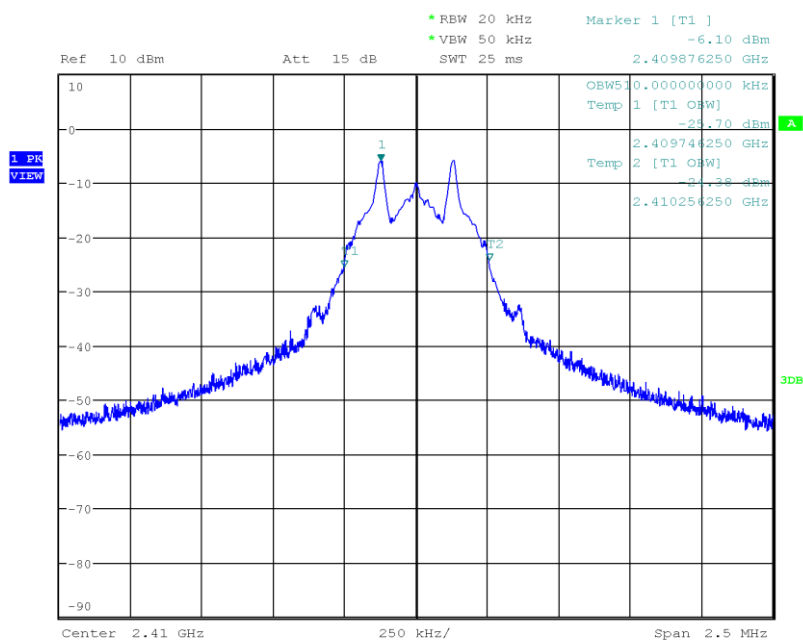
3.1 Test Conditions and Results – Occupied Bandwidth

Occupied Bandwidth acc. to IC RSS-Gen			Verdict: N/R
Test according to measurement reference		Reference Method	
		RSS-Gen 6.6	
Test frequency range		Tested frequencies	
		F _{LOW} , F _{MID} , F _{HIGH}	
EUT test mode		Transmit	
Limits			
None (Informational only)			
Test setup			
Spectrum Analyzer EUT			
Test procedure			
1. EUT set to test mode (Communication tester is used if needed) 2. Span set to at least twice the emission spectrum 3. Resolution bandwidth set to 1 % of span 4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function			
Test results			
Channel	Frequency [MHz]	Occupied Bandwidth [kHz]	
F _{LOW}	2410	510	
F _{MID}	2435	504	
F _{HIGH}	2460	509	
Comments:			

Occupied Bandwidth - F_{Low}

Occupied Bandwidth acc. to ISED RSS-Gen 6.6

Project Number: G0M-1805-7423
 Applicant: Liftup A/S
 Model Description: Radio module for Liftup A/S products
 Model: MODULE1
 Test Sample ID: 19142
 Operator: S. Suckow
 Test Site: Eurofins Product Service GmbH
 Test Date: 2018-07-09
 Operating Conditions: Tnom/Vnom
 Mode: TX 2410 MHz GFSK

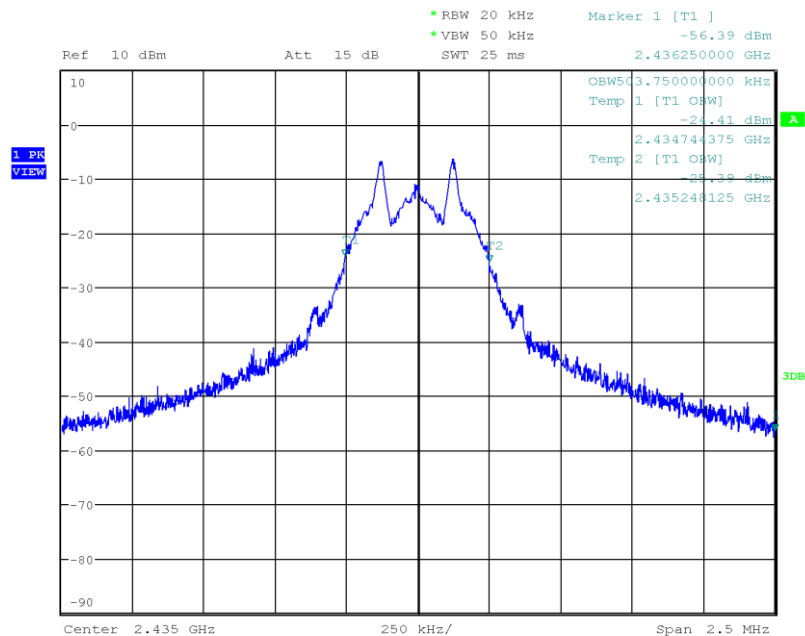


Date: 9.JUL.2018 09:52:13

Occupied Bandwidth - F_{MID}

Occupied Bandwidth acc. to ISED RSS-Gen 6.6

Project Number: G0M-1805-7423
 Applicant: Liftup A/S
 Model Description: Radio module for Liftup A/S products
 Model: MODULE1
 Test Sample ID: 19142
 Operator: S. Suckow
 Test Site: Eurofins Product Service GmbH
 Test Date: 2018-07-09
 Operating Conditions: Tnom/Vnom
 Mode: TX 2435 MHz GFSK

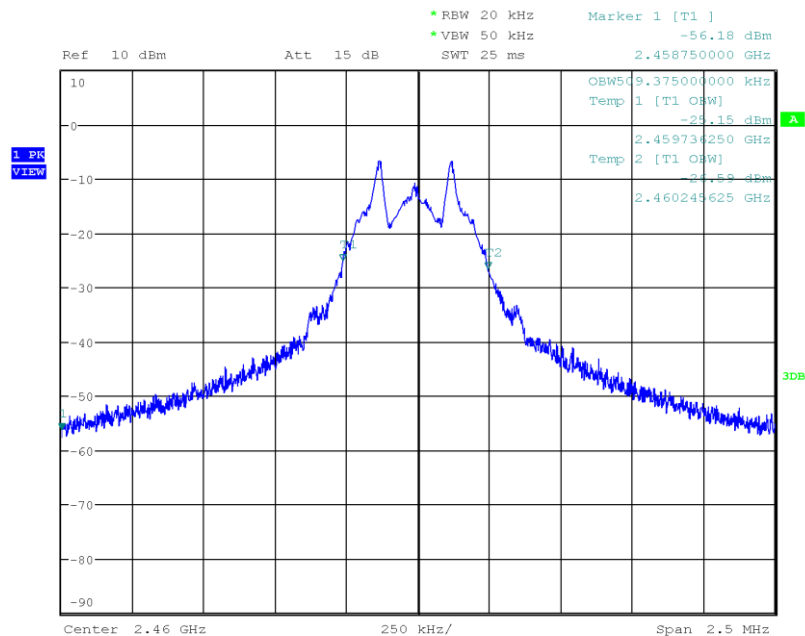


Date: 9.JUL.2018 09:55:30

Occupied Bandwidth - F_{HIGH}

Occupied Bandwidth acc. to ISED RSS-Gen 6.6

Project Number: G0M-1805-7423
 Applicant: Liftup A/S
 Model Description: Radio module for Liftup A/S products
 Model: MODULE1
 Test Sample ID: 19142
 Operator: S. Suckow
 Test Site: Eurofins Product Service GmbH
 Test Date: 2018-07-09
 Operating Conditions: Tnom/Vnom
 Mode: TX 2460 MHz GFSK



Date: 9.JUL.2018 09:54:12

Test Report No.: G0M-1805-7424-TFC249-V01

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

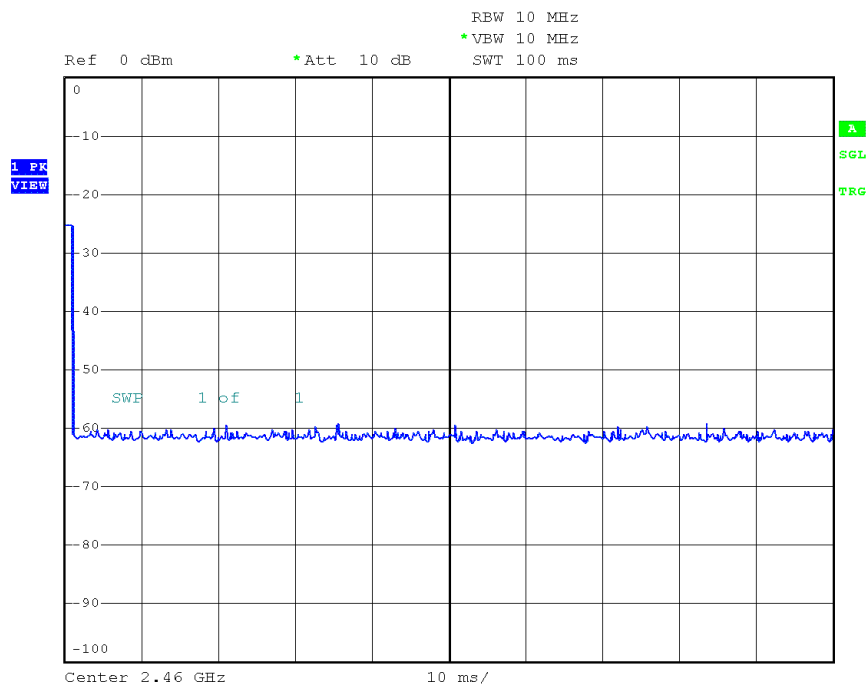
3.2 Test Conditions and Results – Duty Cycle

Duty cycle acc. to FCC 47 CFR 15.35(c) / ISED RSS-Gen 6.10			Verdict: N/R
Test according referenced standards	Reference Method		
	FCC 15.35(c) / ISED RSS-Gen 6.10		
Test according to measurement reference	Reference Method		
	non specific		
Test frequency range	Tested frequencies		
	F _{HIGH}		
EUT test mode	Transmit		
Limits			
None (only for peak to average correction, 20dB max)			
Test setup			
Spectrum Analyzer EUT			
Test procedure			
1. EUT set to test mode 2. Center frequency is set to test frequency 3. Span it set to zero span 4. Resolution bandwidth is set large enough to accurately capture transmission bursts 5. Total transmission time is measured			
Test results			
Channel	Frequency [MHz]	Duty Cycle [% @ 100ms]	Duty Cycle correction [dB]
F _{HIGH}	2460	1	40 -> 20
Comments: Duty cycle correction is used if pulsed operation is employed and field strength limits are expressed in terms of average value.			

Duty Cycle – F_{HIGH}

Duty Cycle

Project Number: G0M-1805-7423
 Applicant: Liftup A/S
 Model Description: Radio module for Liftup A/S products
 Model: MODULE1
 Test Sample ID: 16140
 Reference Standards: ANSI C63.10:2013
 Reference Method: ANSI C63.10:2013, Section 7.5
 Operating Frequency: 2460 MHz
 Operating Conditions: Tnom/Vnom
 Operator: S. Suckow
 Test Site: Eurofins Product Service GmbH
 Test Date: 2018-07-12
 Duty Cycle Period: 100
 Maximum Duty Cycle: 0.01
 Maximum Duty Cycle [%]: 1
 Duty Cycle Correction [dB]: -40.00

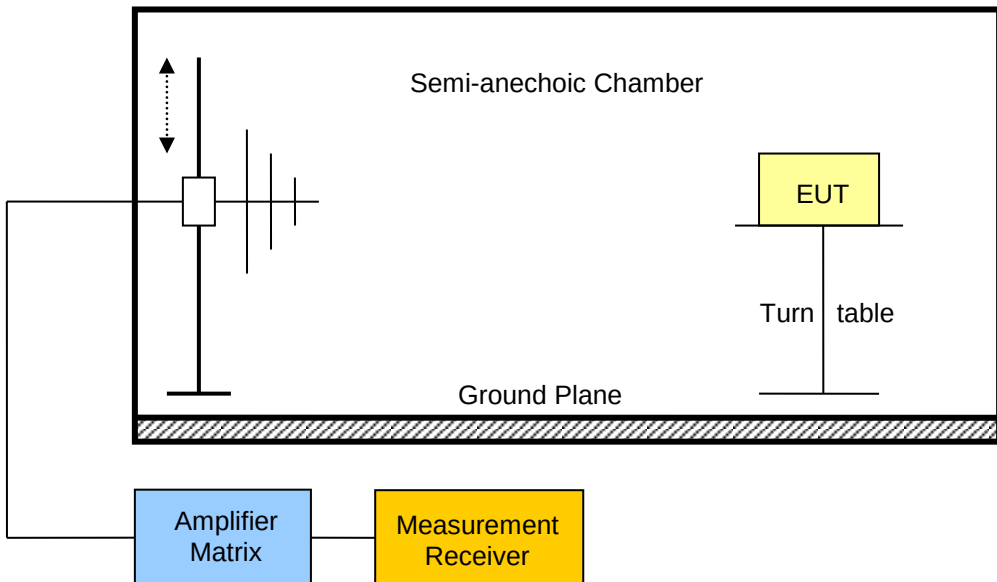


Date: 12.JUL.2018 16:04:12

Test Report No.: G0M-1805-7424-TFC249-V01

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

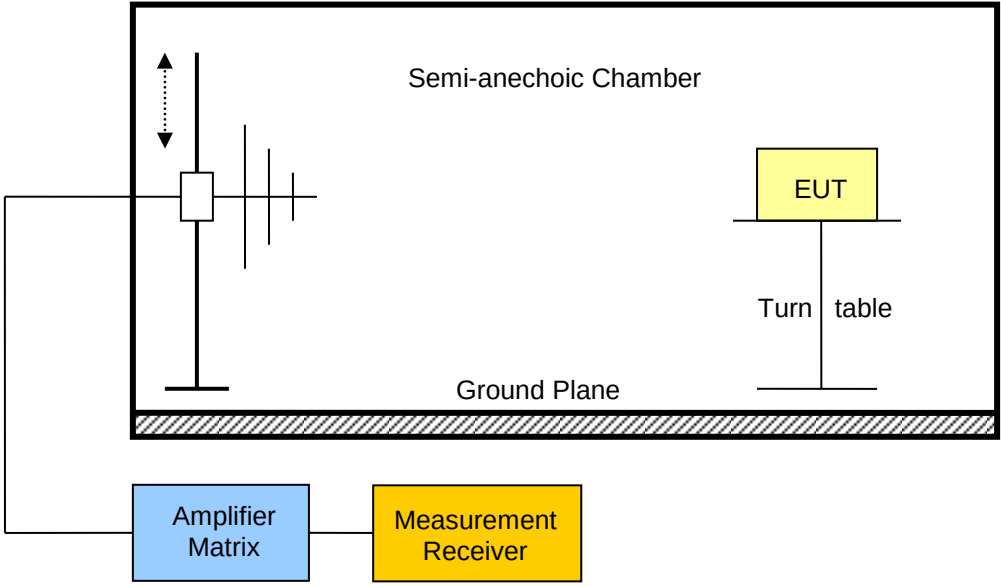
3.3 Test Conditions and Results – Fundamental field strength emissions

Field strength emissions acc. to FCC 47 CFR 15.249 / IC RSS-210				Verdict: N/R
Test according referenced standards	Reference Method			
	FCC 15.249(a),(c),(e) / IC RSS-210 B.10(a)			
Test according to measurement reference	Reference Method			
	ANSI C63.10			
Test frequency range	Tested frequencies			
	F_{LOW} , F_{MID} , F_{HIGH}			
EUT test mode	Transmit			
Limits				
Frequency range [MHz]	Detector	Limit [mV/m]	Limit [dBμV/m]	Limit Distance [m]
902 – 928	Quasi-Peak	50	94	3
2400 – 2483.5	Average	50	94	3
5725 - 5875	Average	50	94	3
FCC 15.249(e) : for frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.				
Below 1GHz a CISPR quasi-peak detector is used.				
Test setup				
				

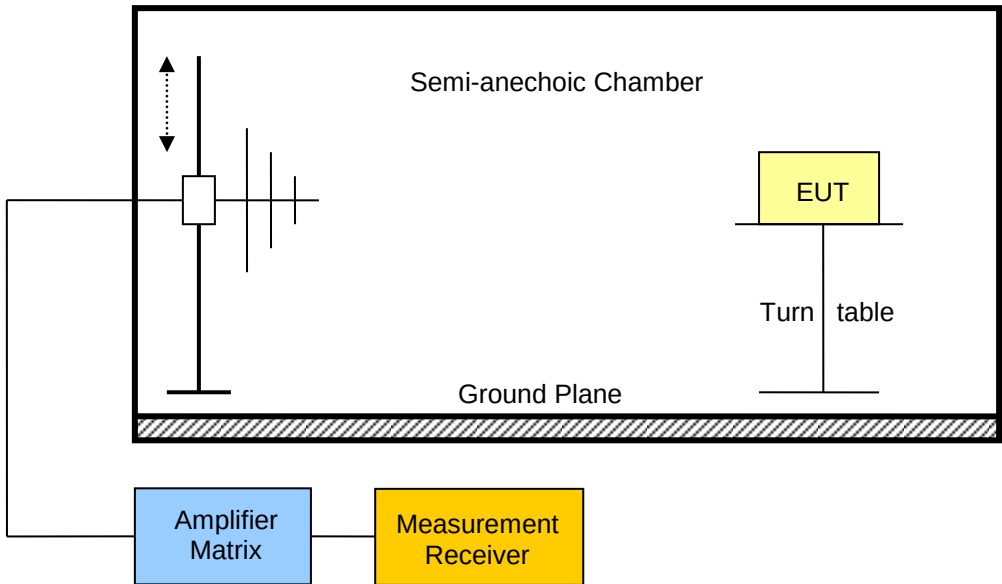
Test procedure								
1. EUT set to test mode 2. Span it set according to measurement range 3. Below 1 GHz the resolution bandwidth is set according to CISPR 16 to 120 kHz with peak/quasi-peak detector. 4. Above 1 GHz the resolution bandwidth is set to 1 MHz with peak/average detector. Pulsed emissions are averaged over 100 ms with duty cycle correction. 5. Markers are set to maximum emission levels								
Test results pulsed emissions > 1 GHz								
Channel	Frequency [MHz]	Pol.	Peak Level [dB μ V/m]	Duty Cycle Correct. [dB]	Average Level [dB μ V/m]	Average Limit [dB μ V/m]	Limit distance [m]*	Margin [dB]
F _{LOW}	2410	hor	86.41	20	66.41	94	3	-27.59
F _{LOW}	2410	ver	98.07	20	78.07	94	3	-15.93
F _{MID}	2435	hor	90.49	20	70.49	94	3	-23.51
F _{MID}	2435	ver	96.60	20	76.60	94	3	-17.40
F _{HIGH}	2460	hor	90.64	20	70.64	94	3	-23.36
F _{HIGH}	2460	ver	96.32	20	76.32	94	3	-17.68
Comments: * Physical distance between EUT and measurement antenna.								

3.4 Test Conditions and Results – Emissions radiated outside the specified frequency band

Radiated out-of-band band emissions acc. to FCC 47 CFR 15.249 / IC RSS-210				Verdict: PASS
Test according referenced standards	Reference Method			
	FCC 15.249(a),(c),(d),(e) / IC RSS-210 B.10(b)			
Test according to measurement reference	Reference Method			
	ANSI C63.10			
Test frequency range	Tested frequencies			
	30 MHz – 10 th harmonic			
EUT test mode	Transmit			
Limits - Harmonics				
The field strength of harmonic emissions, measured at 3 m, shall not exceed 500 µV/m (54 dBµV/m).				
Limits - General				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3
For frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.				
Except the higher order harmonics, emission radiated outside the specified frequency band shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in 15.209 / RSS-Gen, whichever is less stringent.				

Test setup							
							
Test procedure							
1. EUT set to test mode 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to maximum emission levels							
Test results							
Channel	Frequency [MHz]	Emission [MHz]	Level [dB μ V/m]	Detector	Pol.	Limit [dB μ V/m]	Margin [dB]
F _{LOW}	2410	4819	41.37	pk	hor	74.00	-32.63
F _{MID}	2435	4867	41.52	pk	hor	74.00	-32.48
F _{HIGH}	2460	4919	42.09	pk	hor	74.00	-31.91
Comments: * Physical distance between EUT and measurement antenna.							

3.5 Test Conditions and Results – Receiver radiated emissions

Receiver radiated emissions acc. to IC RSS-210				Verdict: PASS
Test according referenced standards	Reference Method			
	RSS-Gen 7.1			
Test according to measurement reference	Reference Method			
	ANSI C63.10			
Test frequency range	Tested frequencies			
	30 MHz – 5 th Harmonic			
EUT test mode	Receive			
Limits				
Frequency range [MHz]	Detector	Limit [μV/m]	Limit [dBμV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3
Test setup				
				

Test procedure							
1. EUT set to receive mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to peak emission levels							
Test results							
Channel	Frequency [MHz]	Emission [MHz]	Level [dB μ V/m]	Detector	Pol.	Limit [dB μ V/m]	Margin [dB]
F _{MID}	2435	36.0049	37.30	qpk	ver	40.00	-02.70
The stated emission level corresponds to ambient noise floor. No real spurious emission has been measured.							

3.6 Test Conditions and Results – AC power line conducted emissions

Power line conducted emissions acc. to FCC 47 CFR 15.207 / IC RSS-Gen				Verdict: PASS	
Test according referenced standards		Reference Method			
		ANSI C63.10			
Fully configured sample scanned over the following frequency range		Frequency range			
		0.15 MHz to 30 MHz			
Points of Application		Application Interface			
AC Mains		LISN			
EUT test mode		AC-Powerline			
Limits and results					
Frequency [MHz]	Quasi-Peak [dBµV]	Result	Average [dBµV]	Result	
0.15 to 5	66 to 56*	PASS	56 to 46*	PASS	
0.5 to 5	56	PASS	46	PASS	
5 to 30	60	PASS	50	PASS	
Comments:					
* Limit decreases linearly with the logarithm of the frequency.					

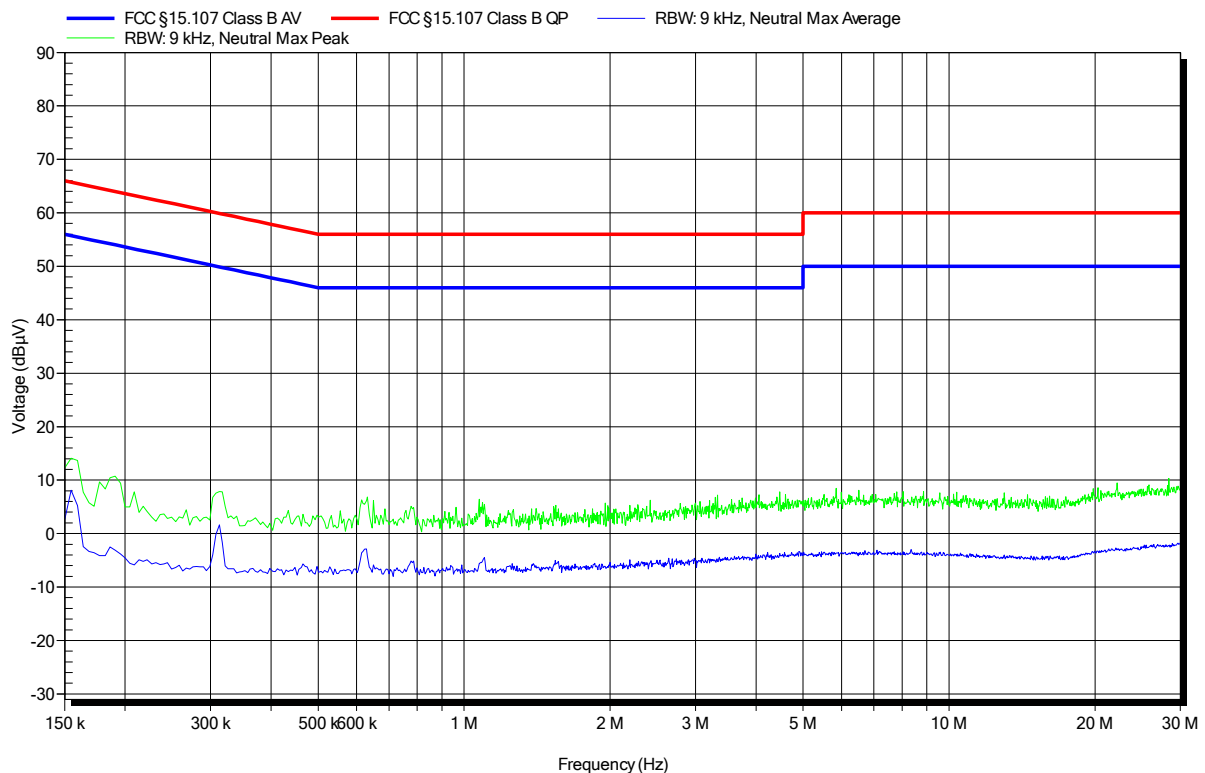
Conducted Emissions

EMI voltage test in the ac-mains according to FCC part 15B

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Unom: 5.6 VDC
 LISN: ESH2-Z5 N
 Mode: TX FHSS 2435 MHz GFSK
 Test Date: 2018-07-16
 Note: Minus

Index 1

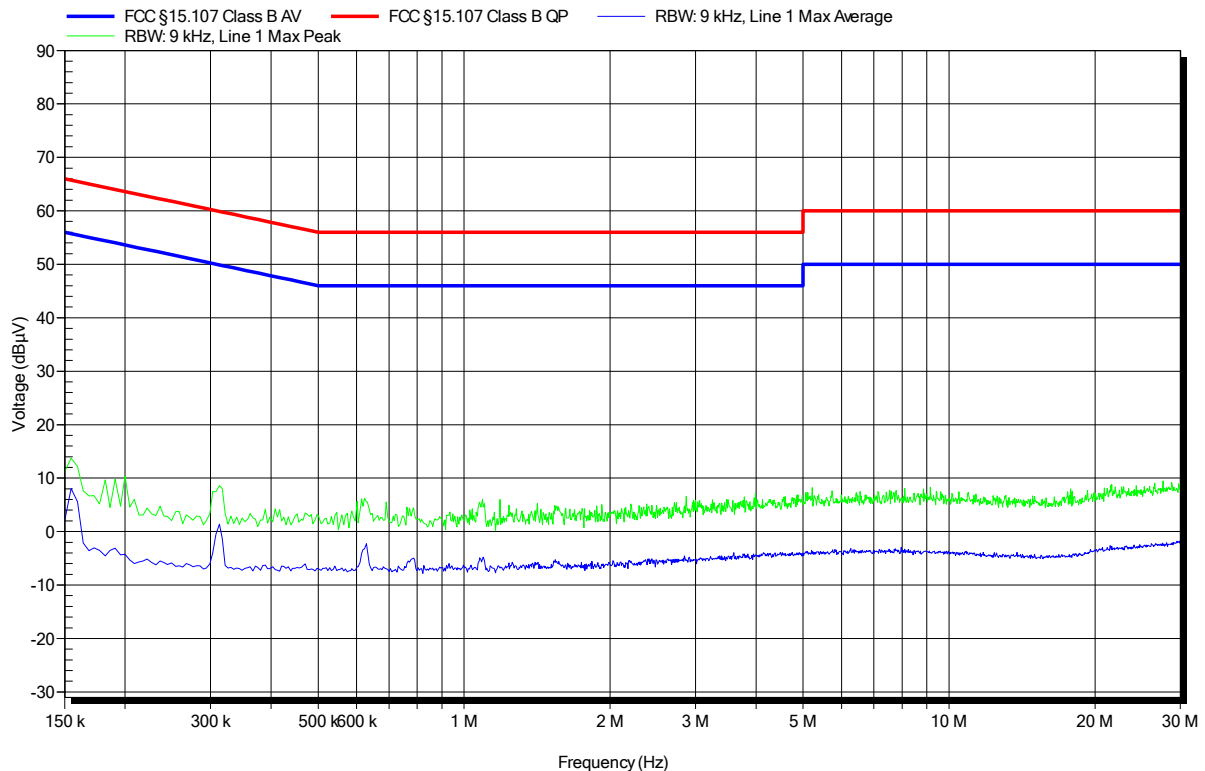


Conducted Emissions
EMI voltage test in the ac-mains according to FCC part 15B

Project number: G0M-1805-7424

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Suckow
Test Conditions:	Tnom: 24°C, Unom: 5.6 VDC
LISN:	ESH2-Z5 L
Mode:	TX FHSS 2435 MHz GFSK
Test Date:	2018-07-16
Note:	Plus

Index 2



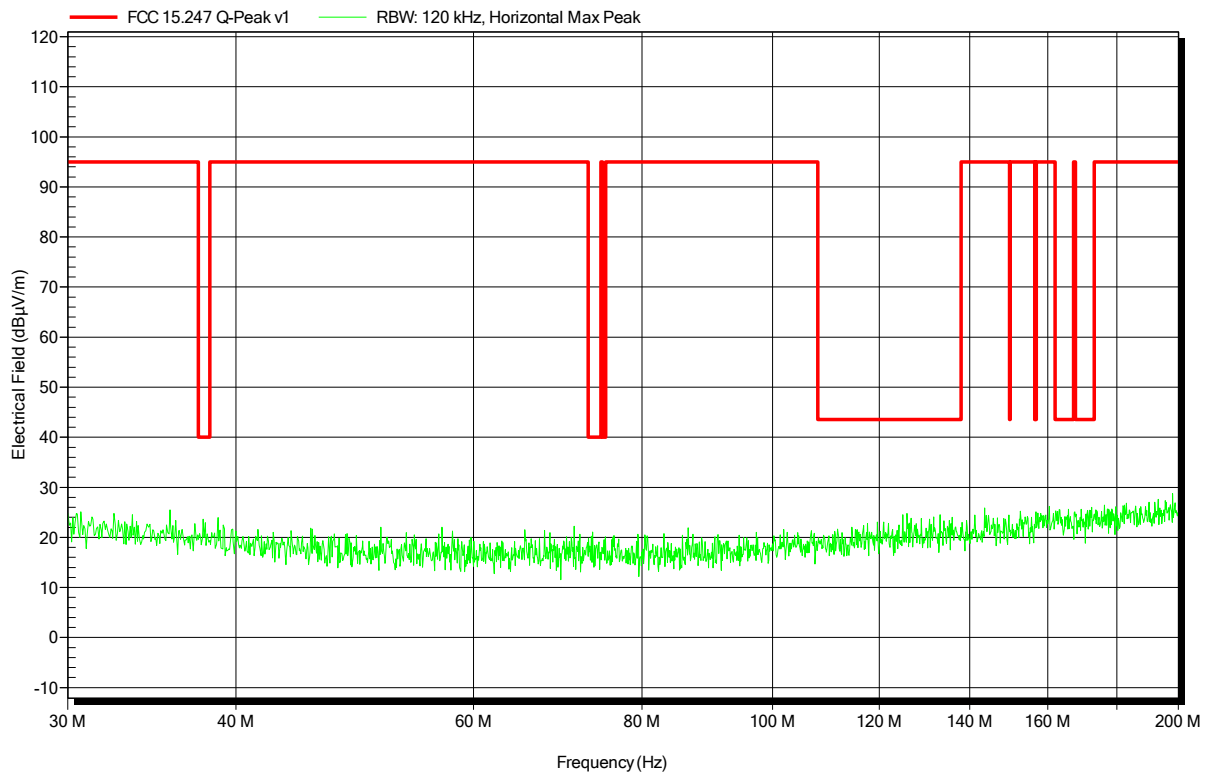
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-13
 Note:

Index 2

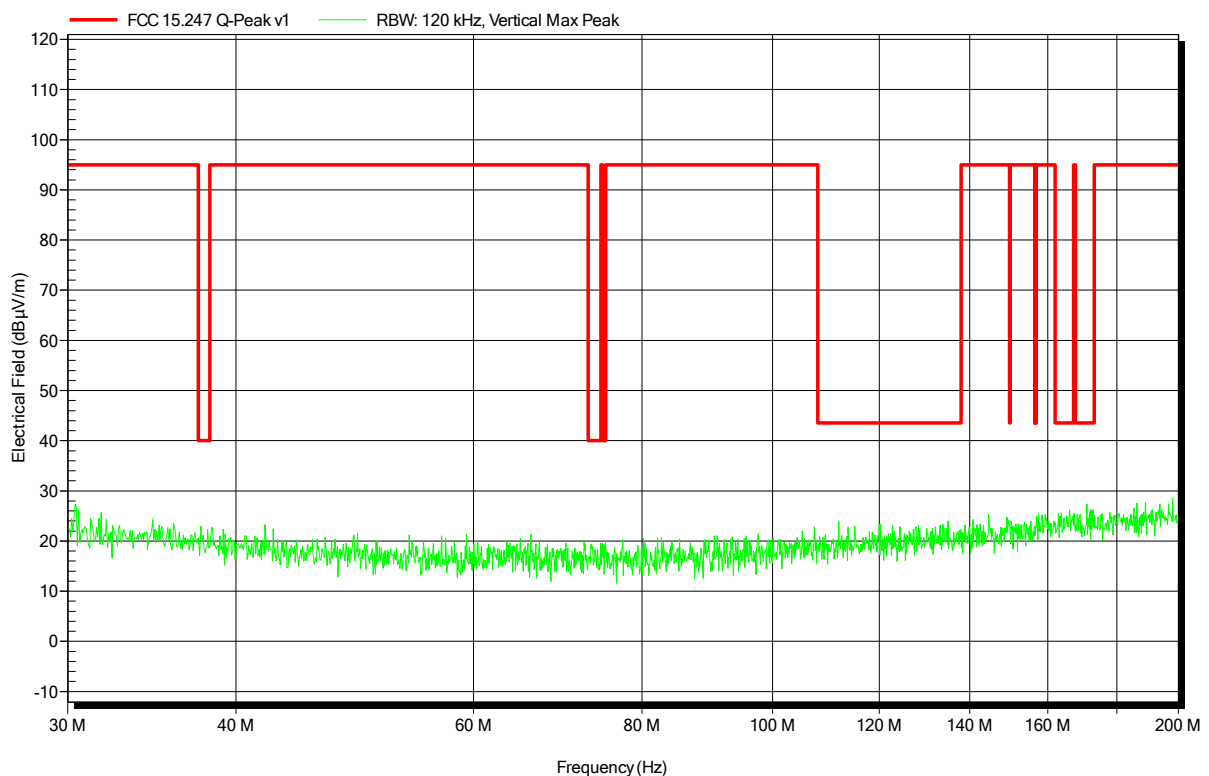


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-13
 Note:

Index 3

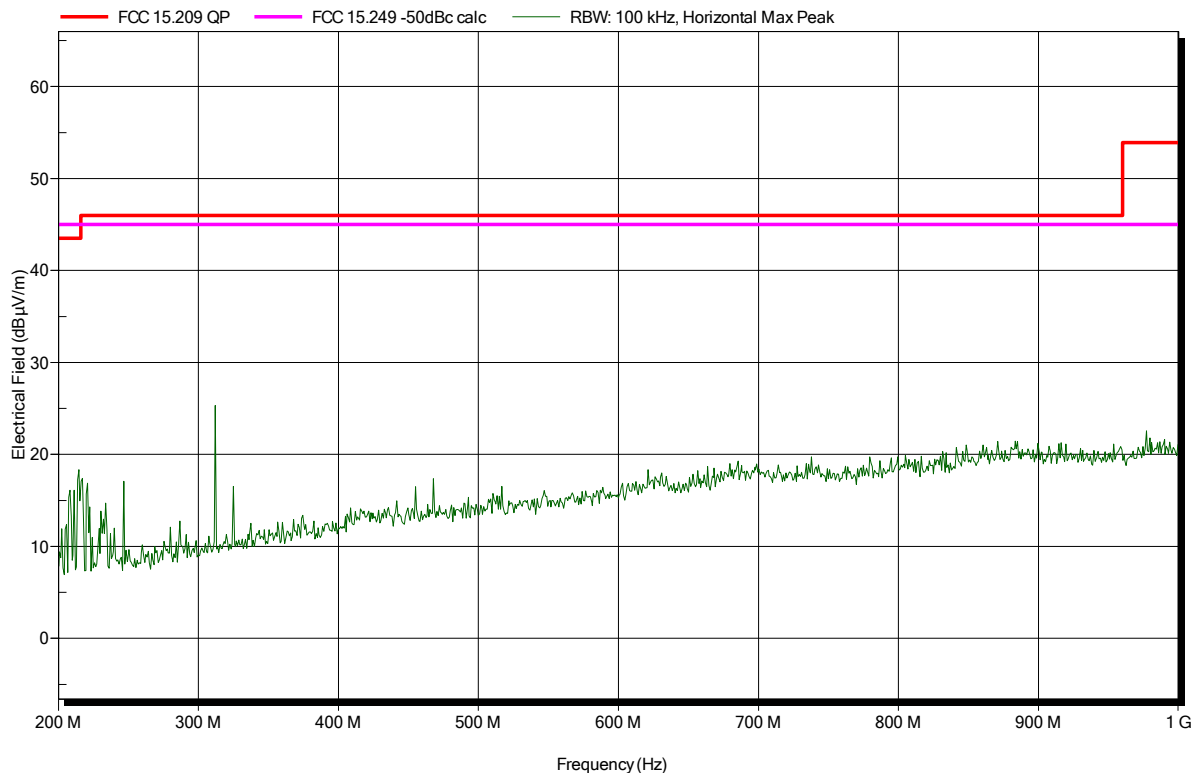


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
EUT Name: Radio module for Liftup A/S products
Model: MODULE1
Test Site: Eurofins Product Service GmbH
Operator: Sebastian Suckow
Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
Antenna: Rohde & Schwarz HL 223, Horizontal
Measurement distance: 3 m
Mode: TX; FHSS GFSK 2410 MHz
Test Date: 2018-07-12
Note:

Index 49

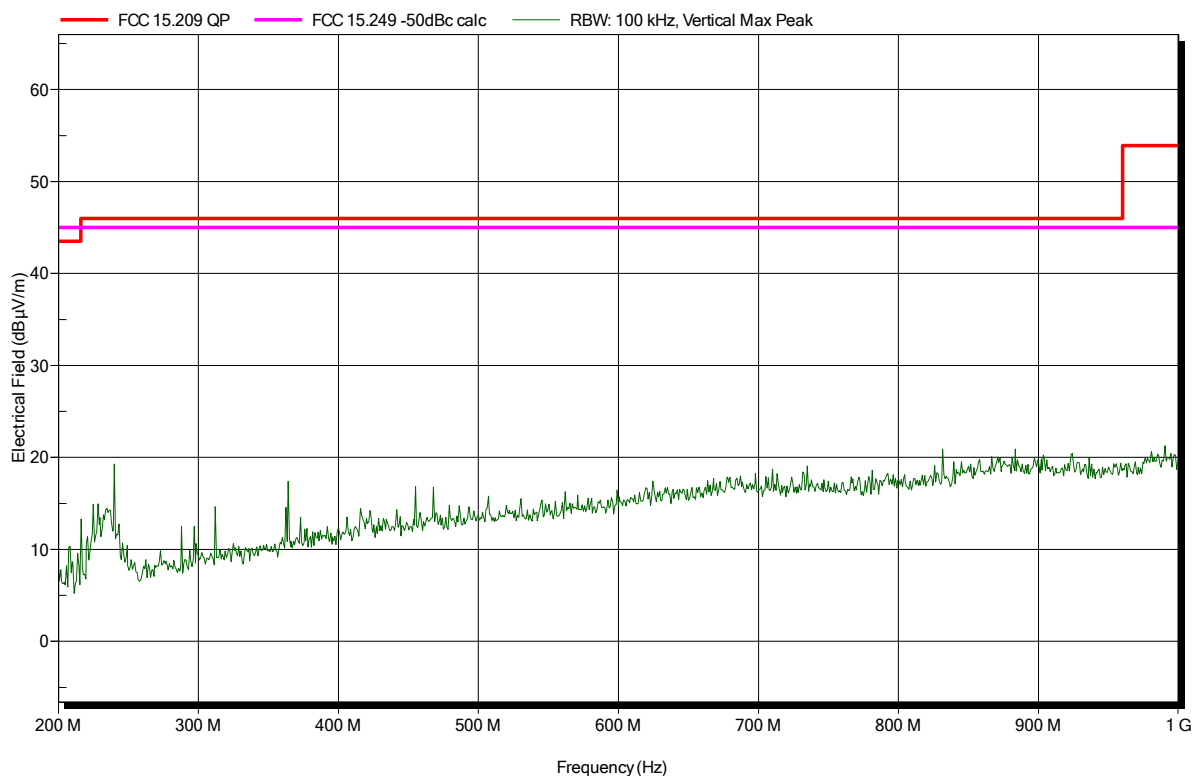


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 56

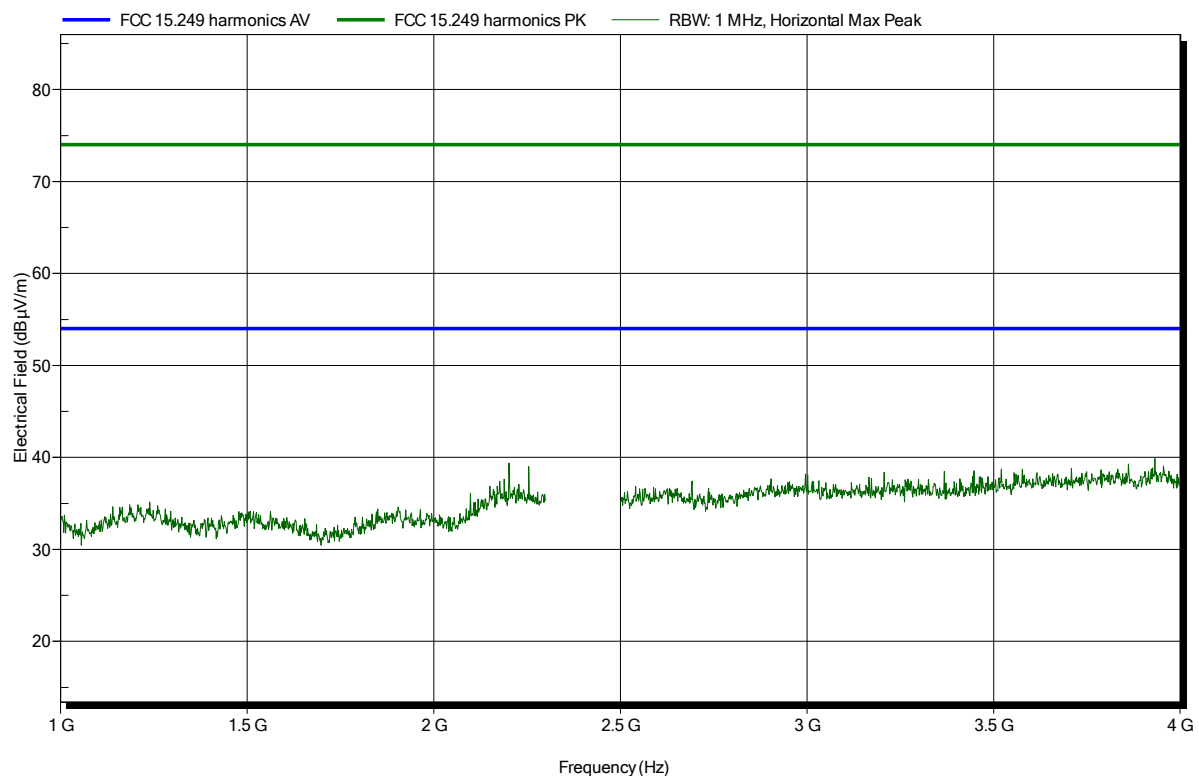


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 17

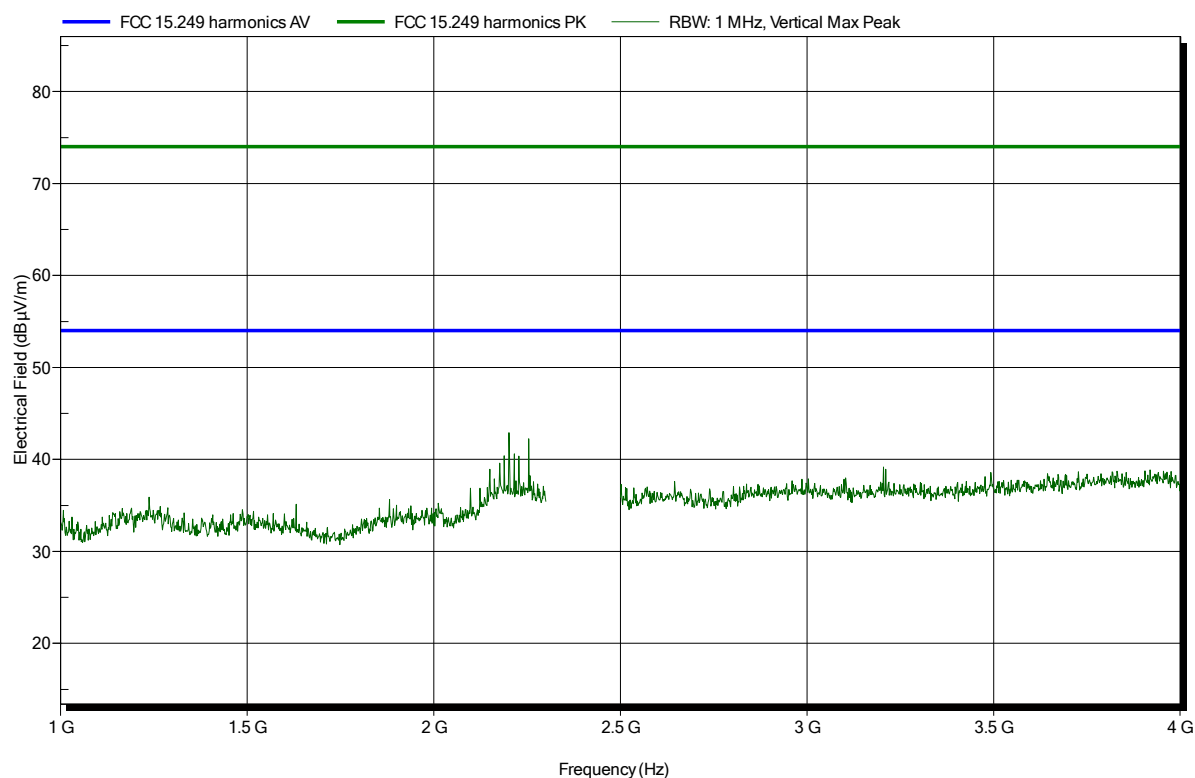


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 22

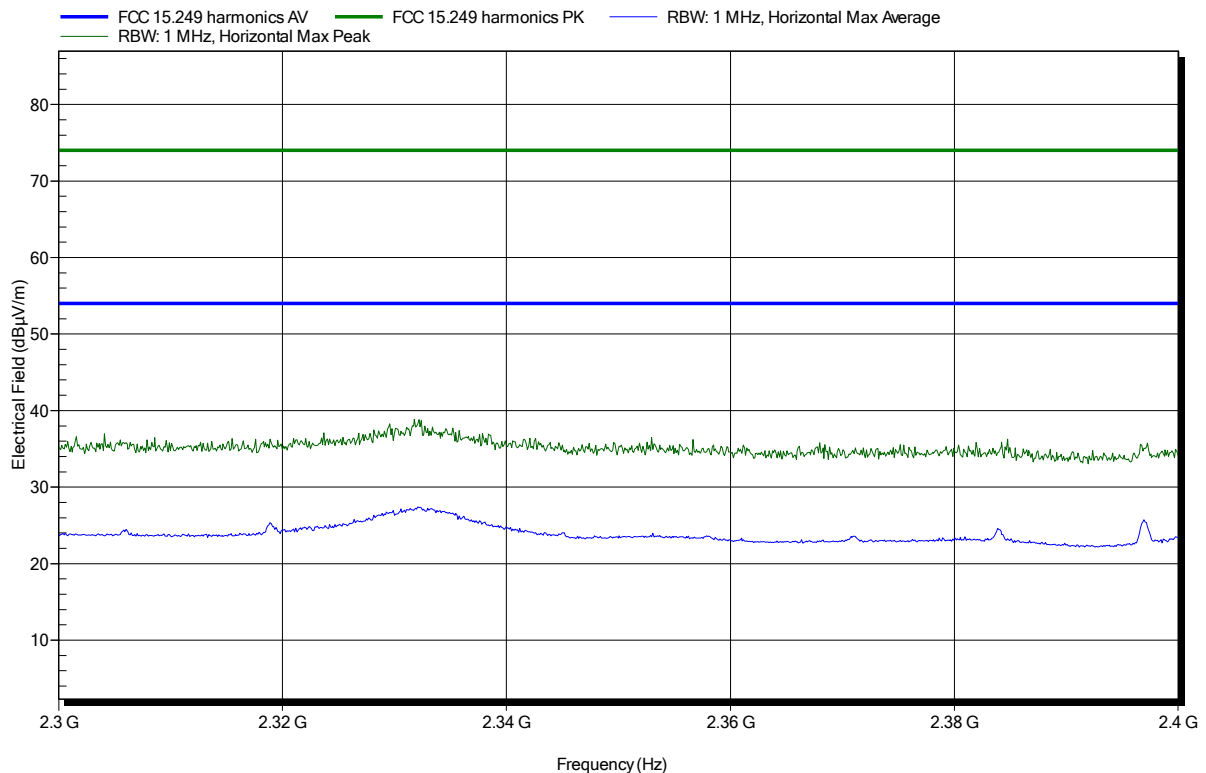


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

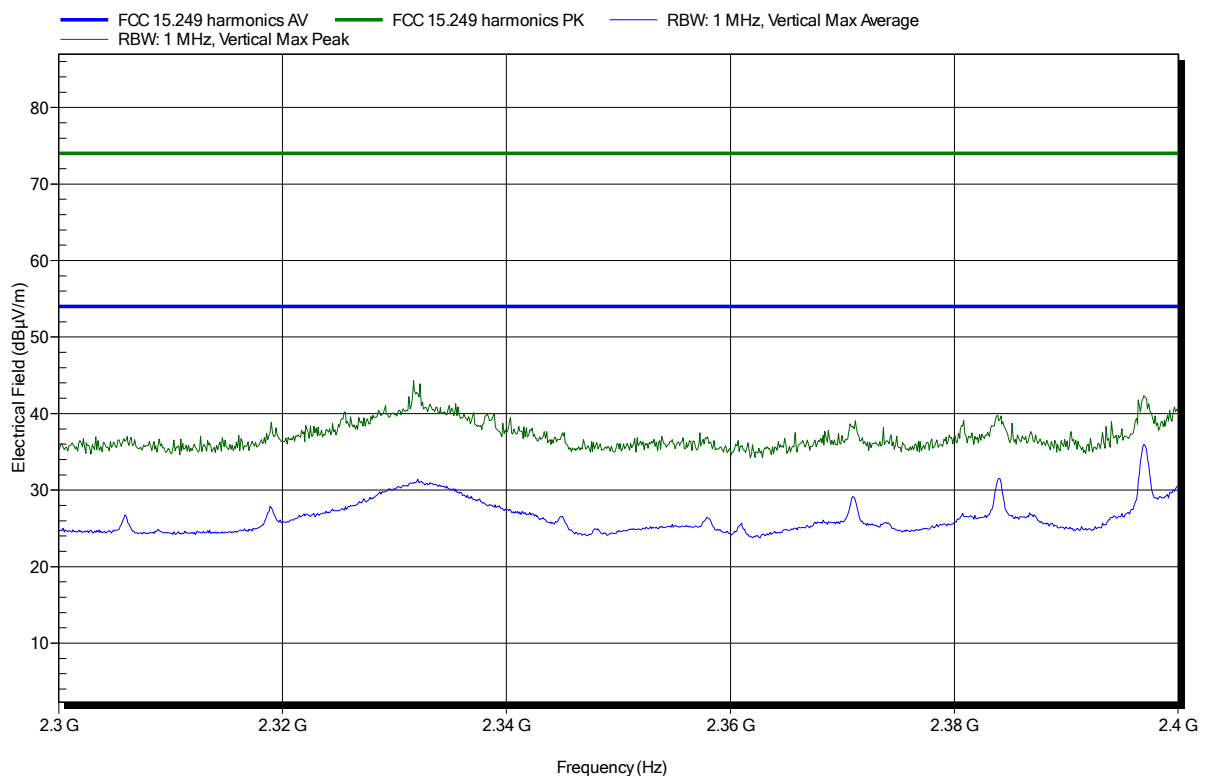
Index 18



Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423
 Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

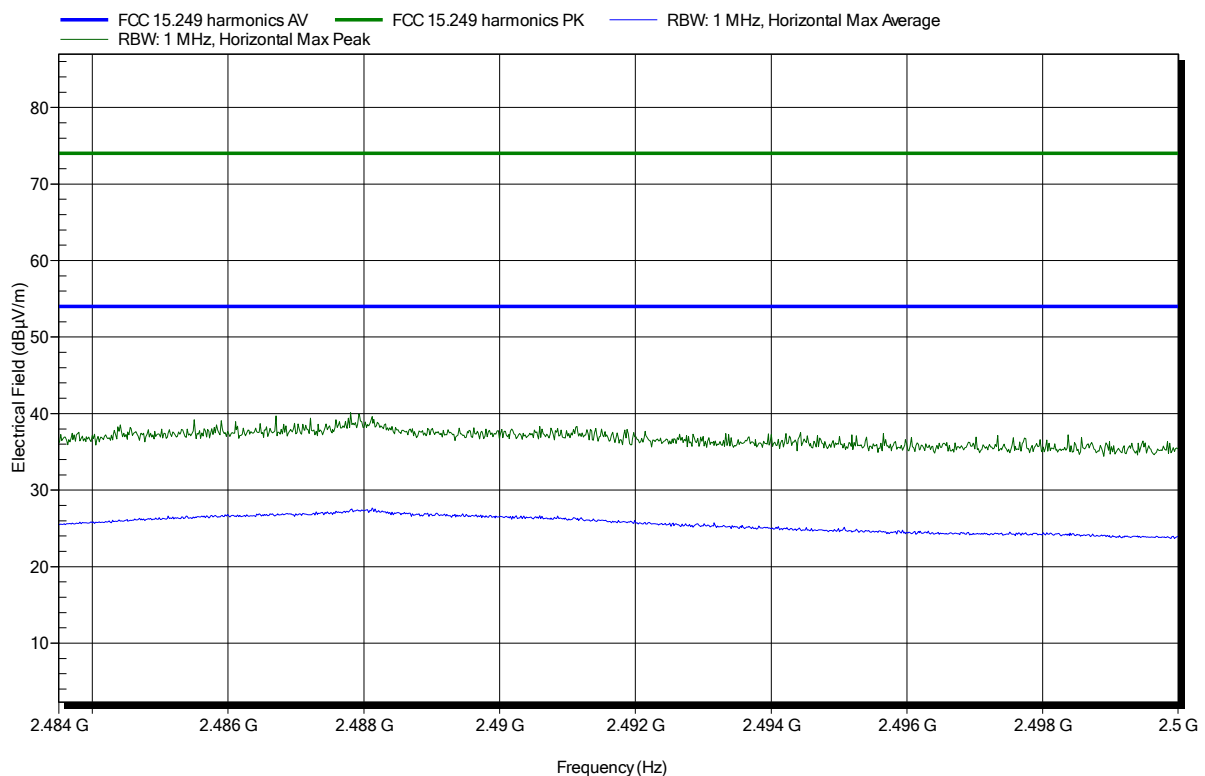
Index 23



Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423
 Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 19

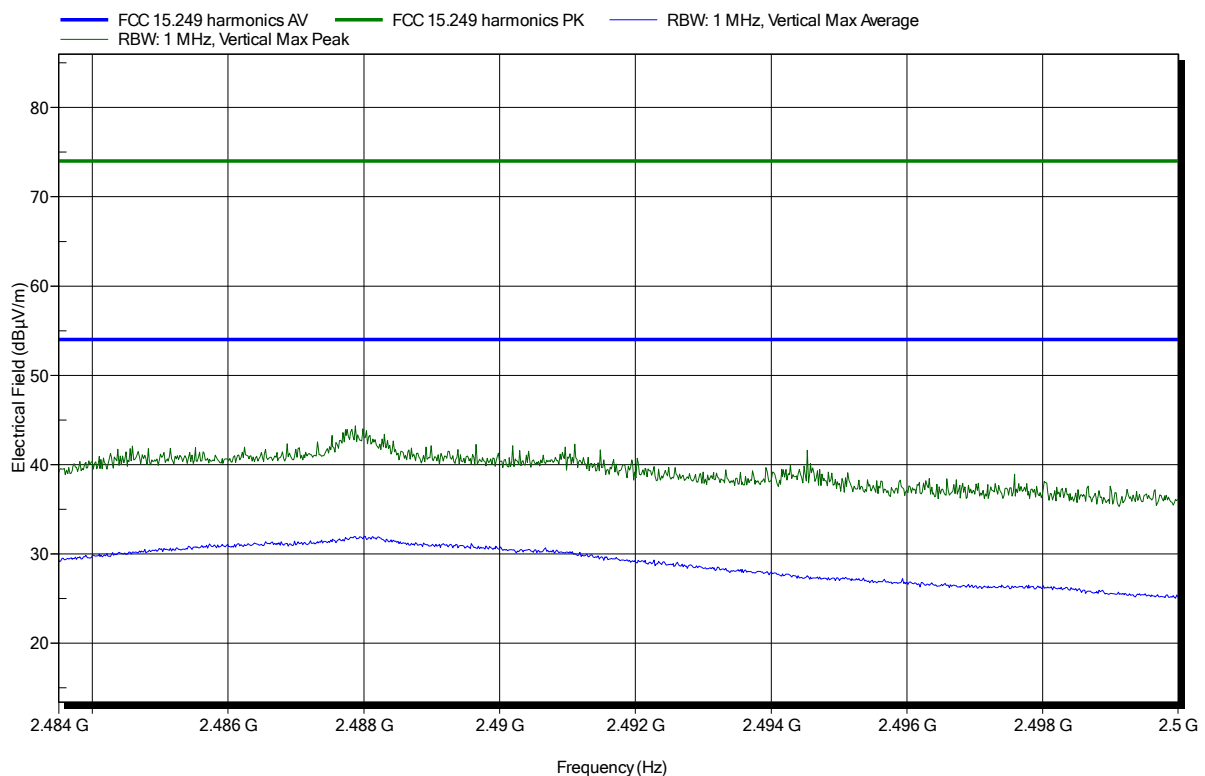


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 24

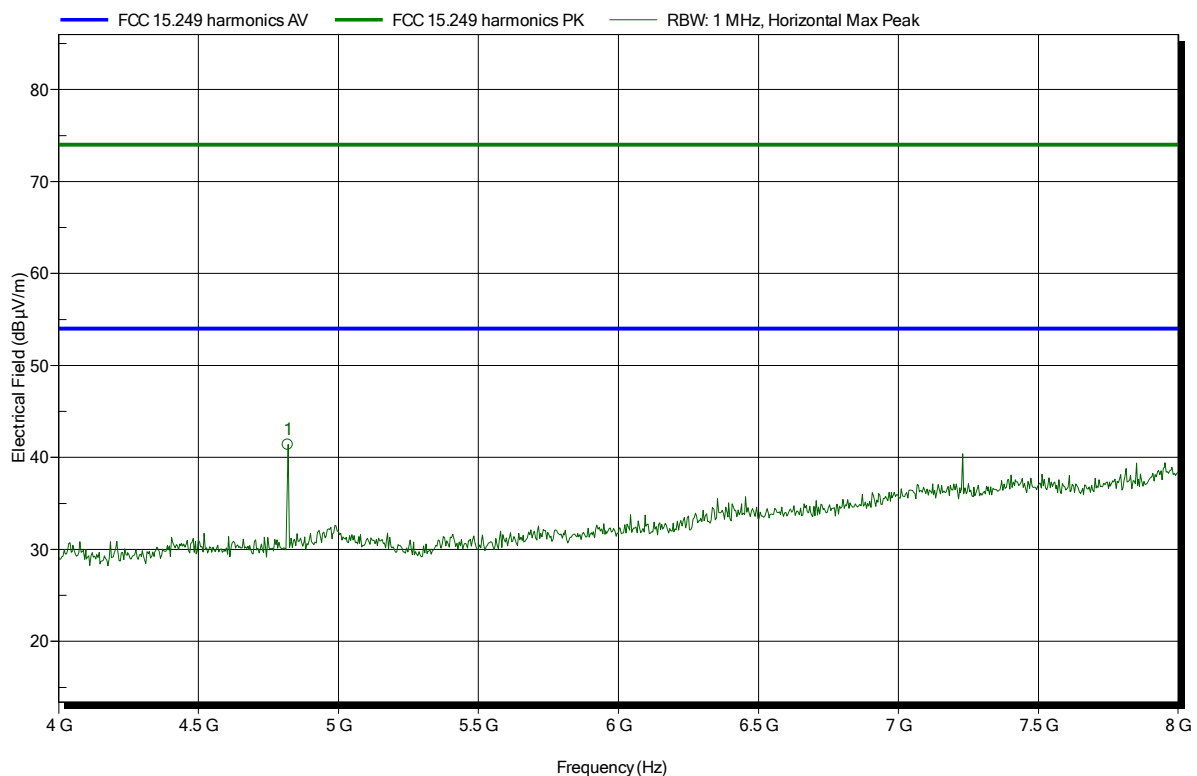


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 39



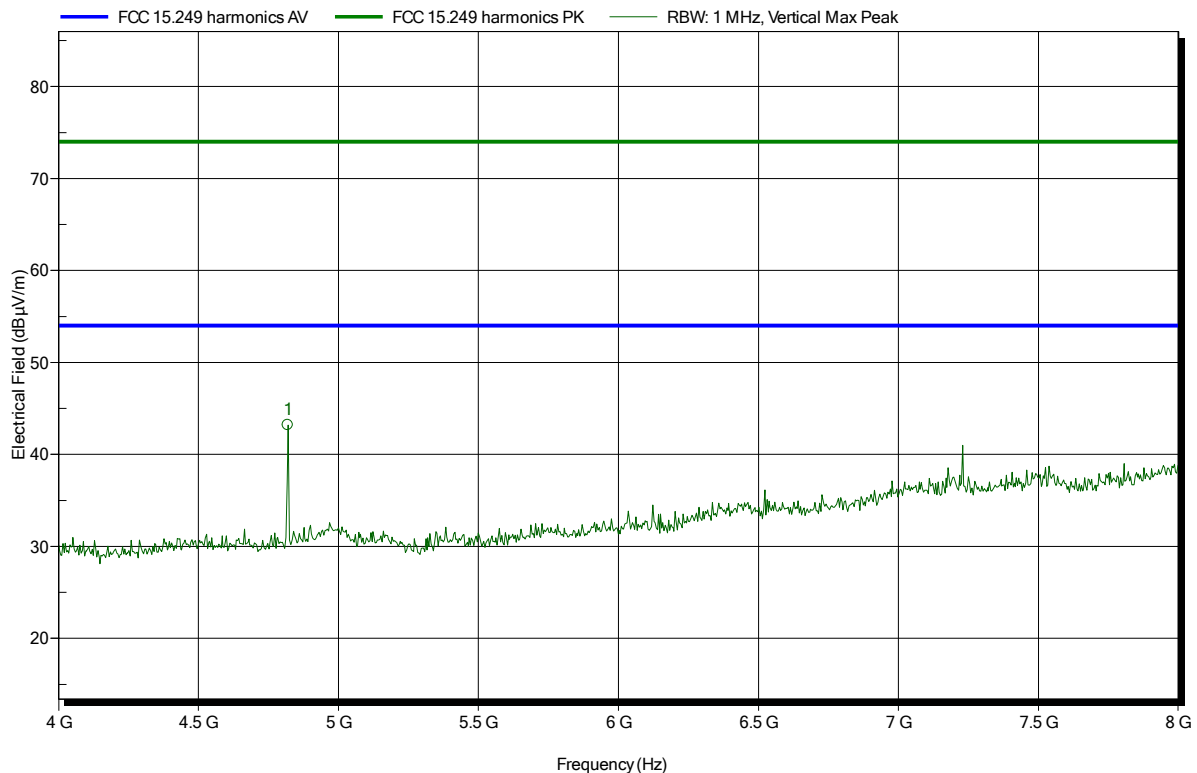
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.819 GHz	41.37 dBµV/m	74 dBµV/m	-32.63 dB	Pass

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2410 MHz
 Test Date: 2018-07-12
 Note:

Index 31



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.819 GHz	43.18 dBµV/m	74 dBµV/m	-30.82 dB	Pass

Test Report No.: G0M-1805-7424-TFC249-V01

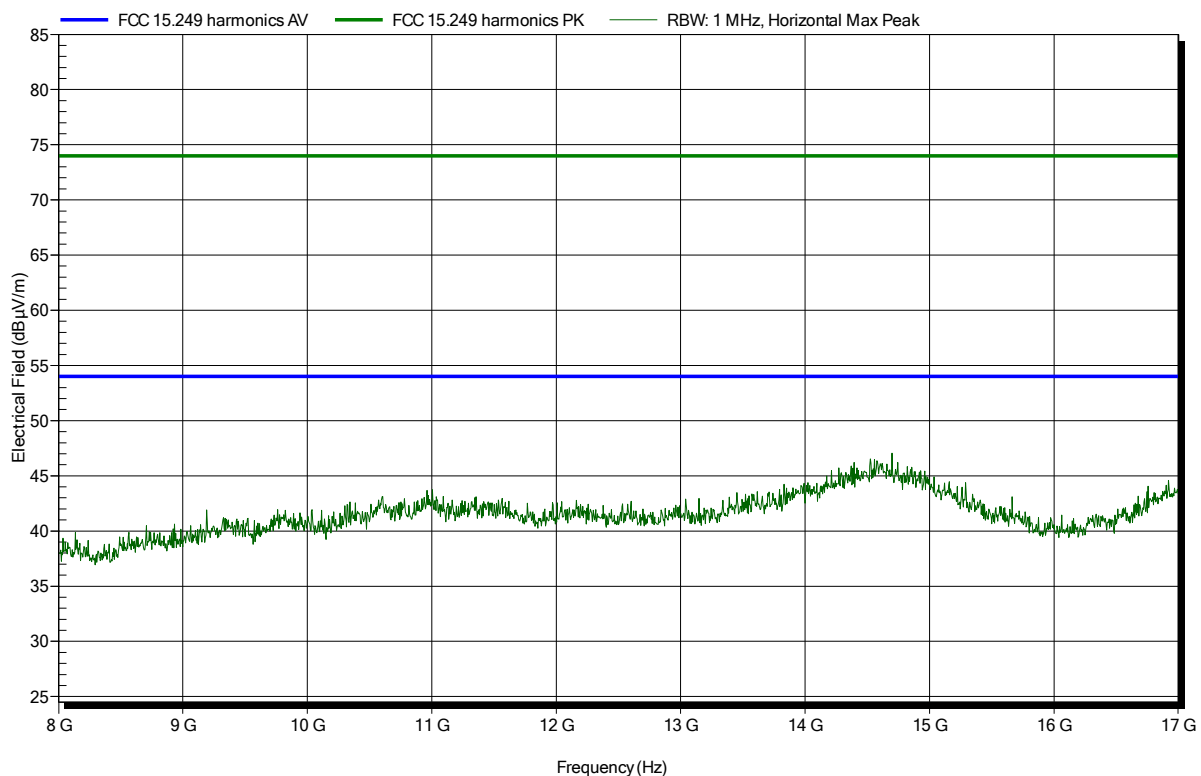
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2410 MHz
Test Date:	2018-07-12
Note:	

Index 38

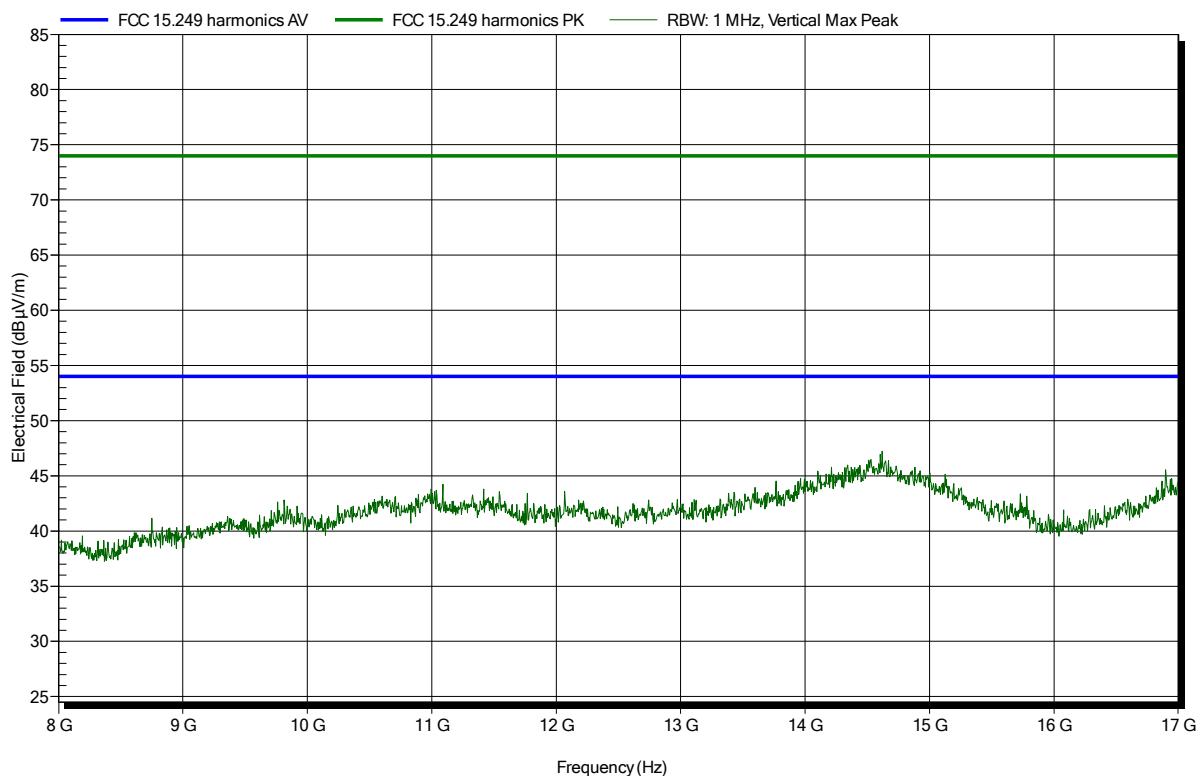


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2410 MHz
Test Date:	2018-07-12
Note:	

Index 30

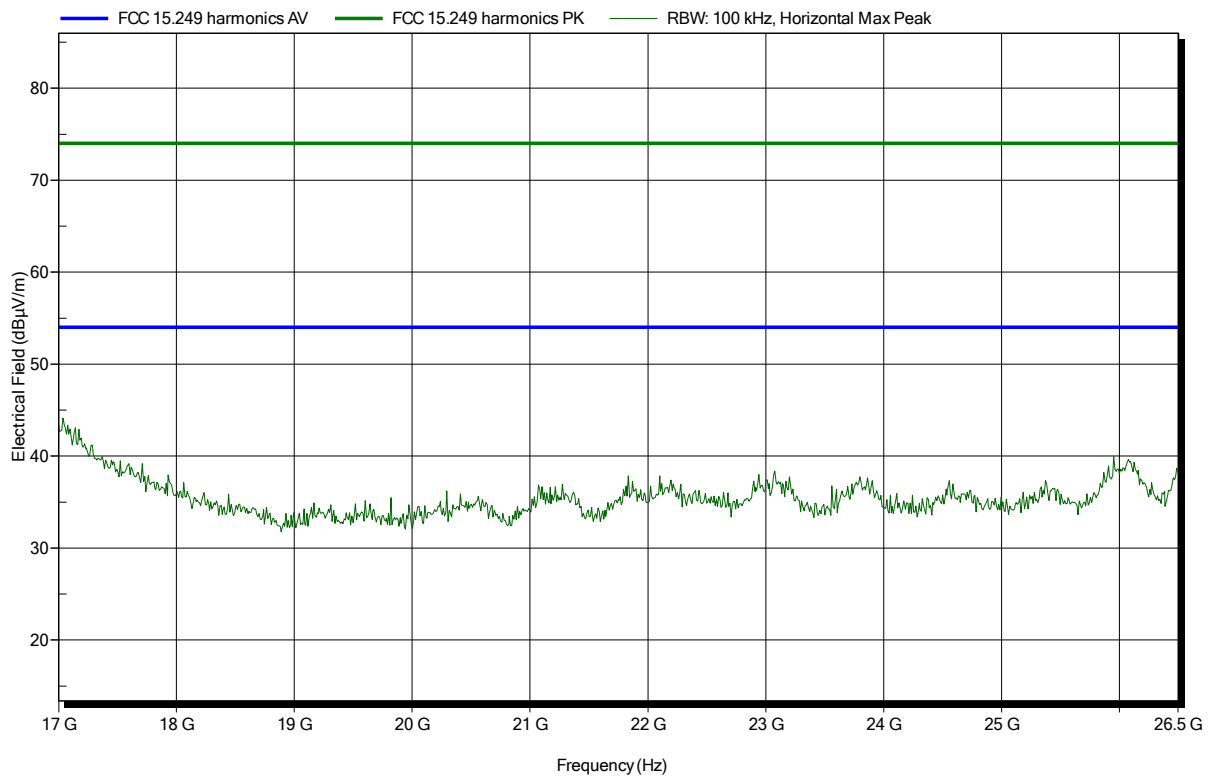


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Horizontal	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2410 MHz
Test Date:	2018-07-12
Note:	

Index 40

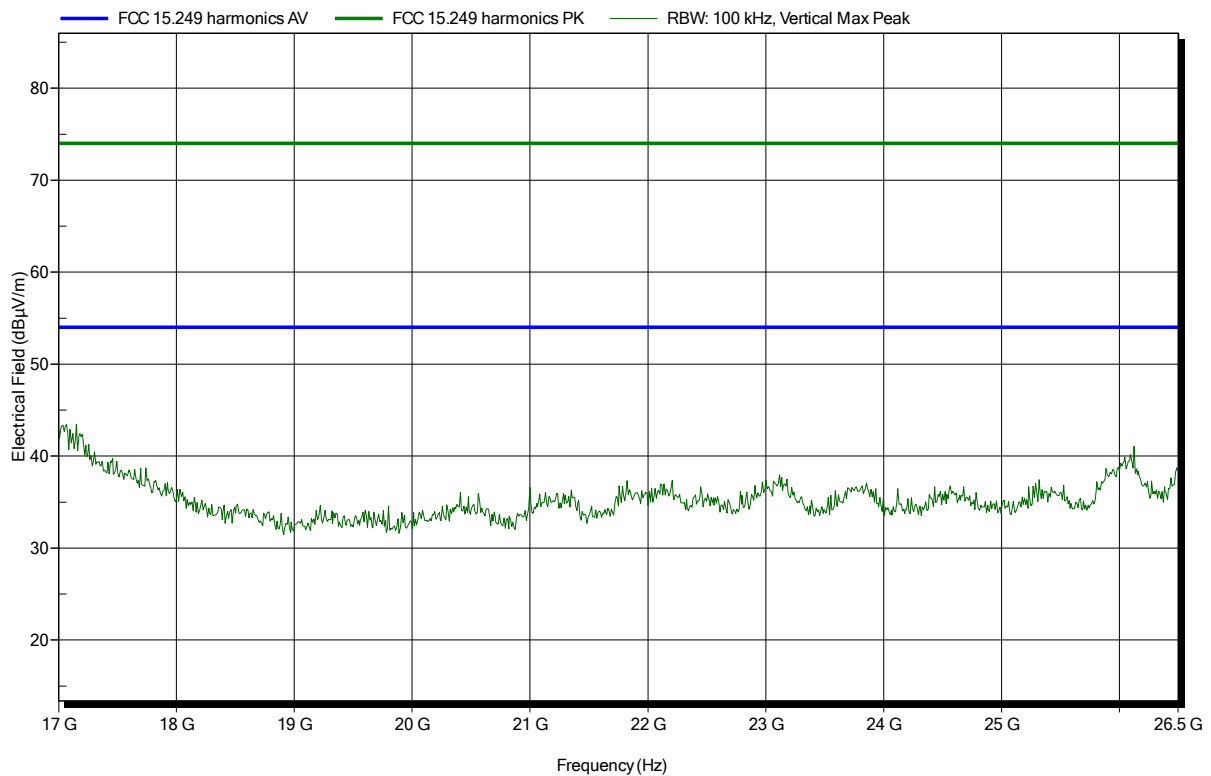


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Vertical	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2410 MHz
Test Date:	2018-07-12
Note:	

Index 41

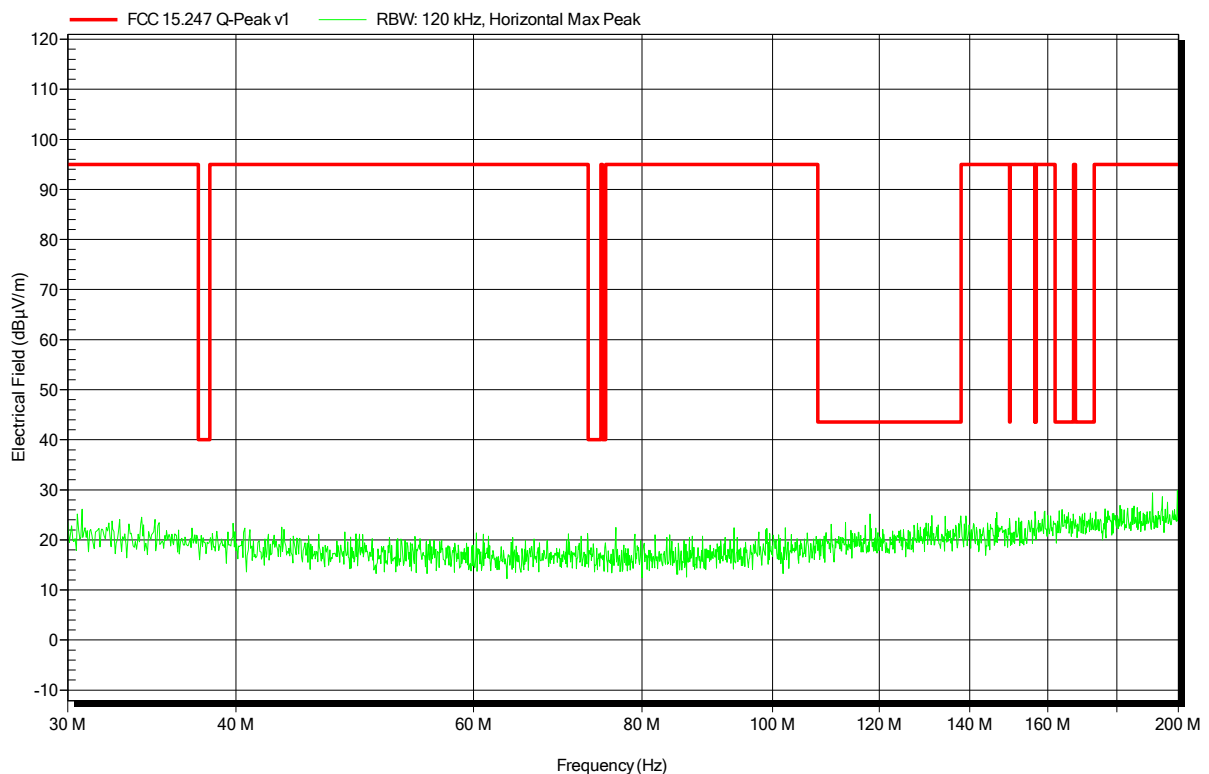


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; TX, FHSS, 2435 MHz
 Test Date: 2018-07-13
 Note:

Index 6

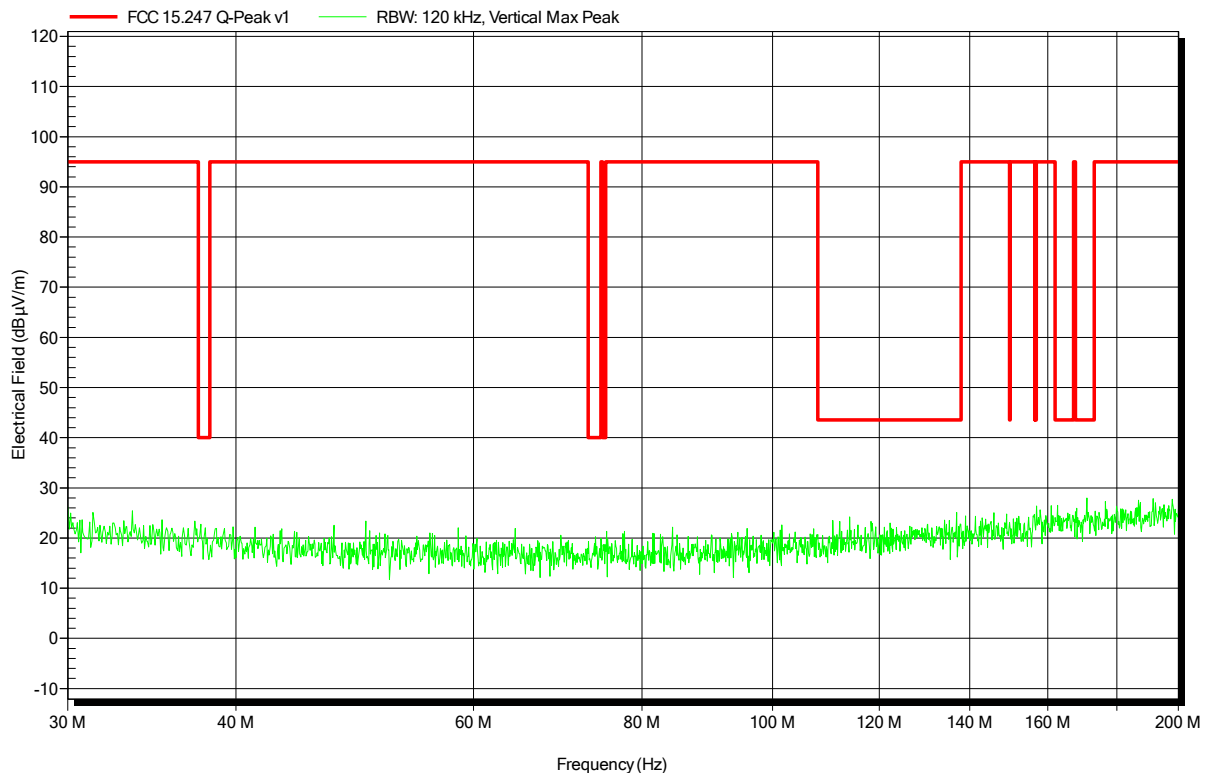


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3 m
 Mode: TX; TX, FHSS, 2435 MHz
 Test Date: 2018-07-13
 Note:

Index 7

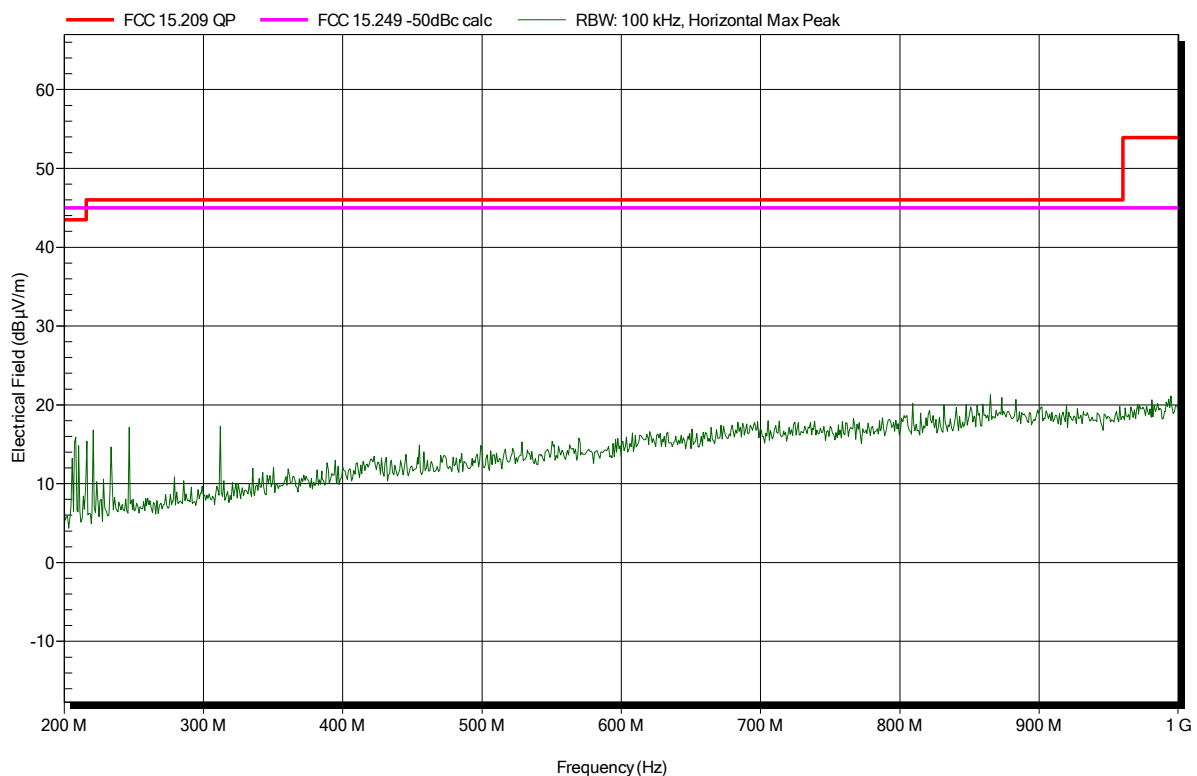


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 52

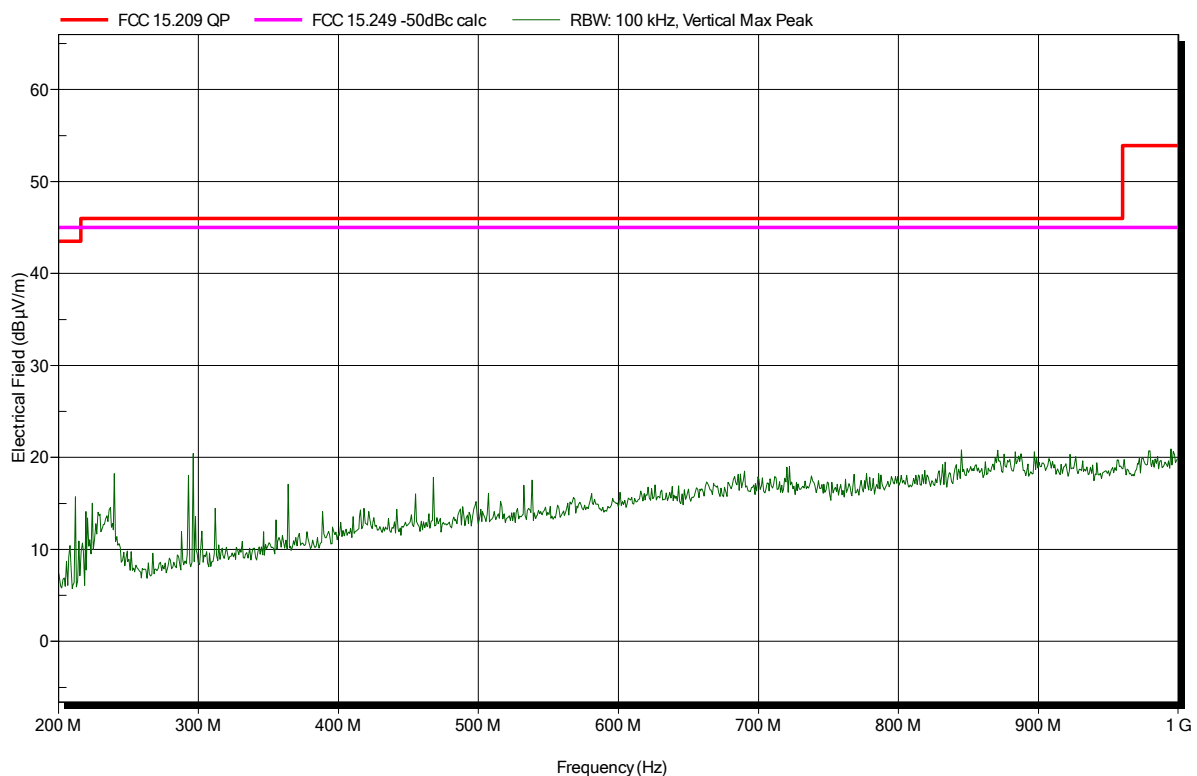


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 58

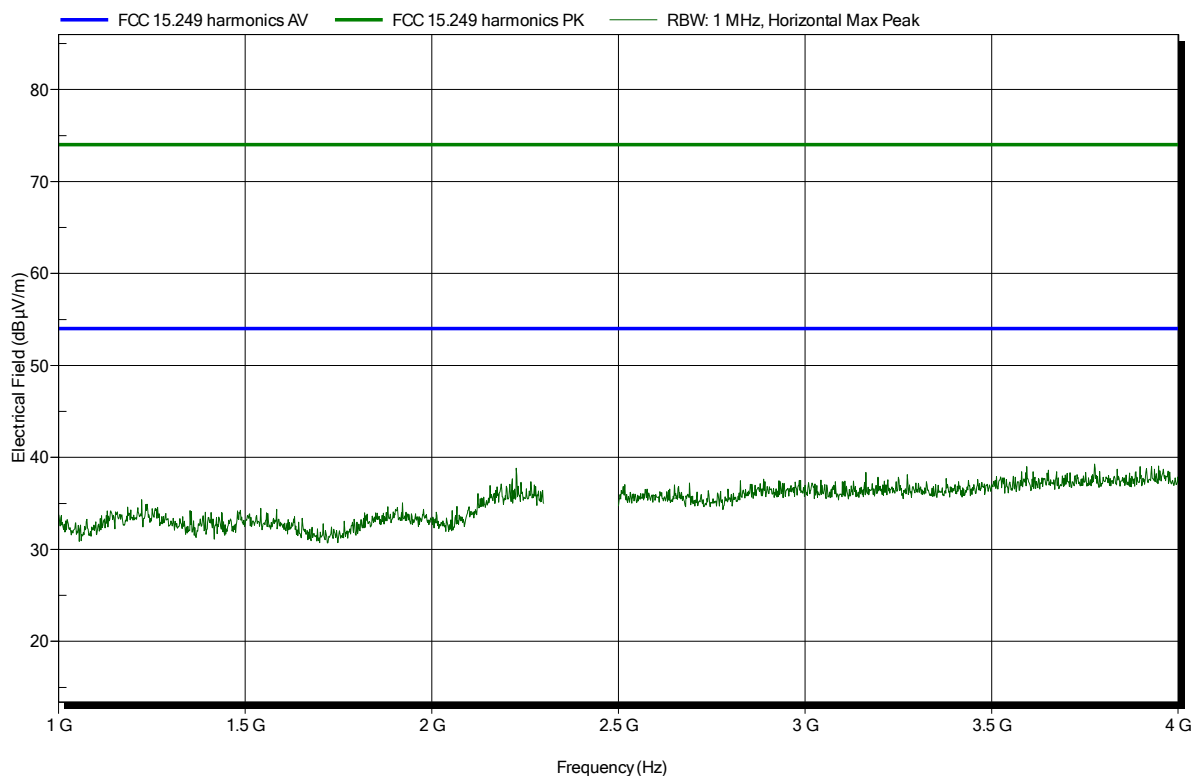


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 20

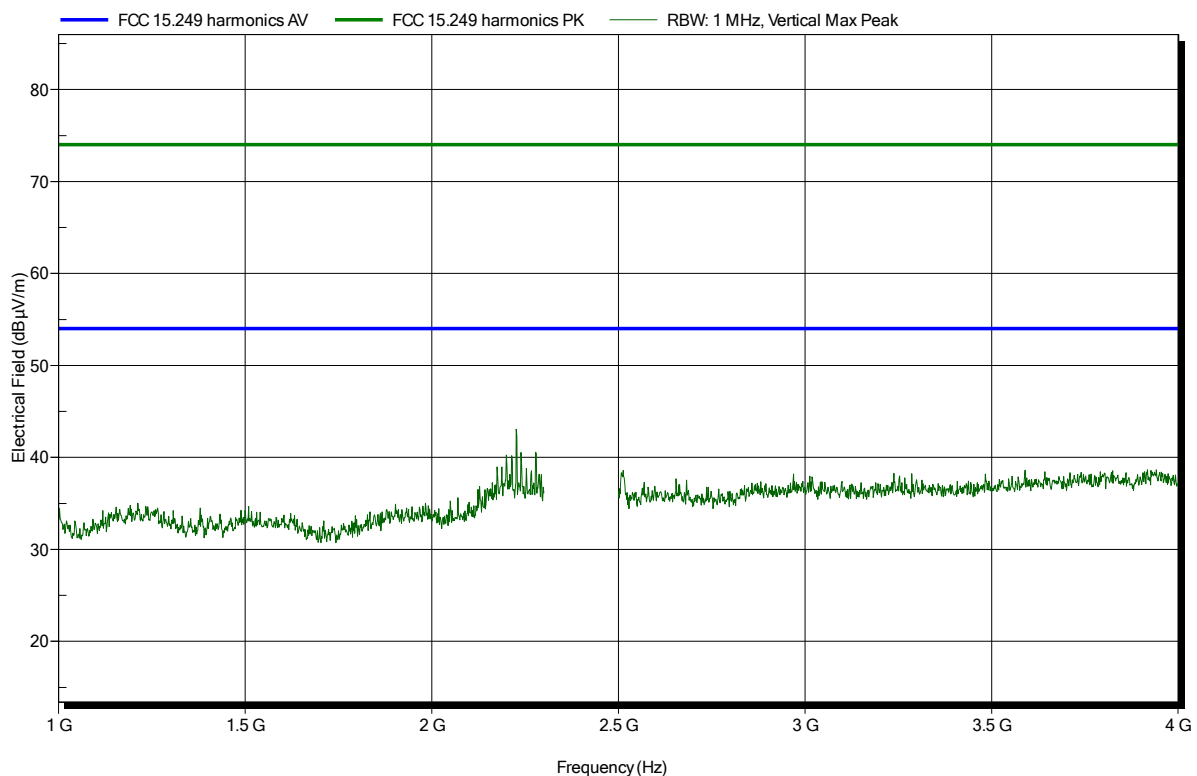


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 21

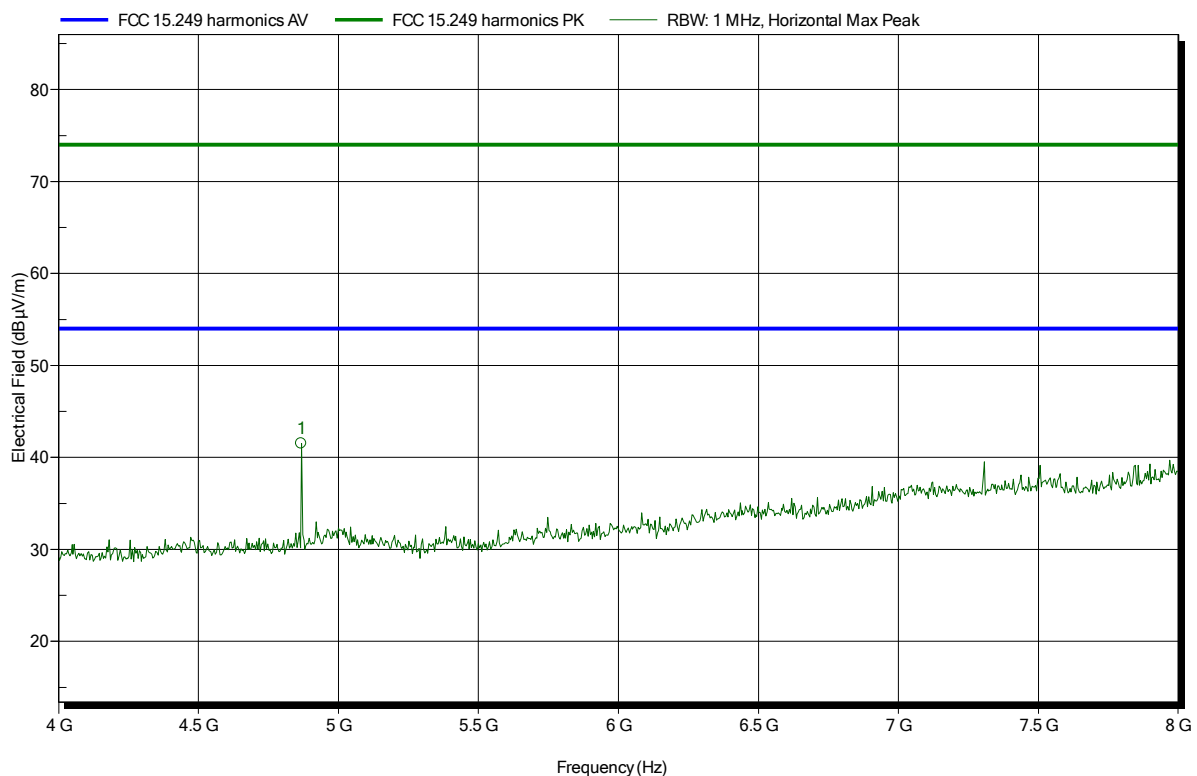


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 35



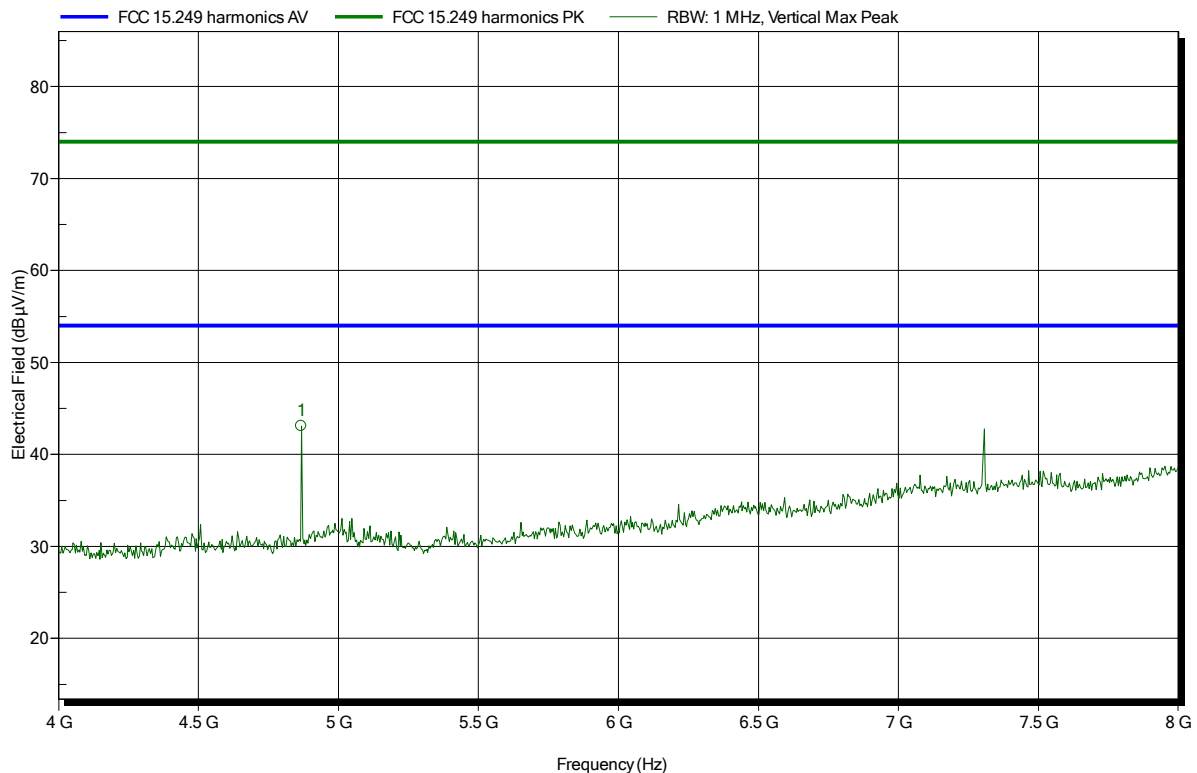
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.867 GHz	41.52 dBµV/m	74 dBµV/m	-32.48 dB	Pass

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 32



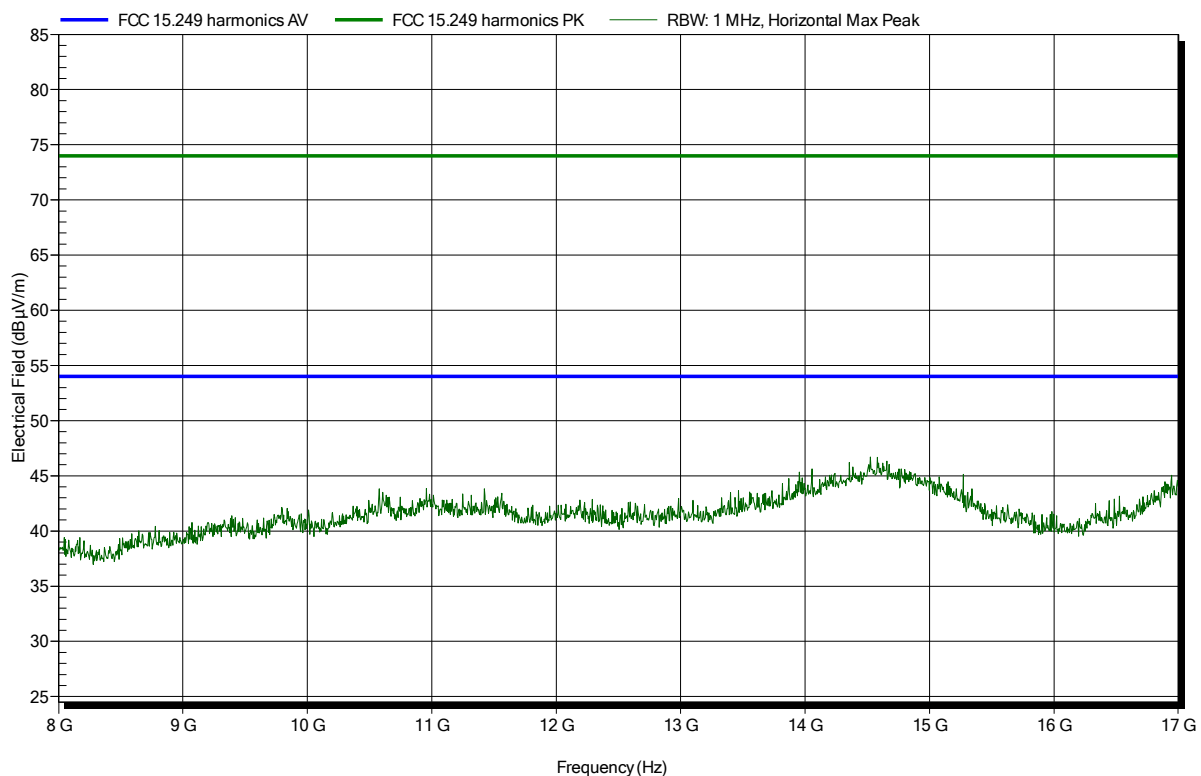
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.867 GHz	43.09 dBµV/m	74 dBµV/m	-30.91 dB	Pass

Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2435 MHz
Test Date:	2018-07-12
Note:	

Index 34

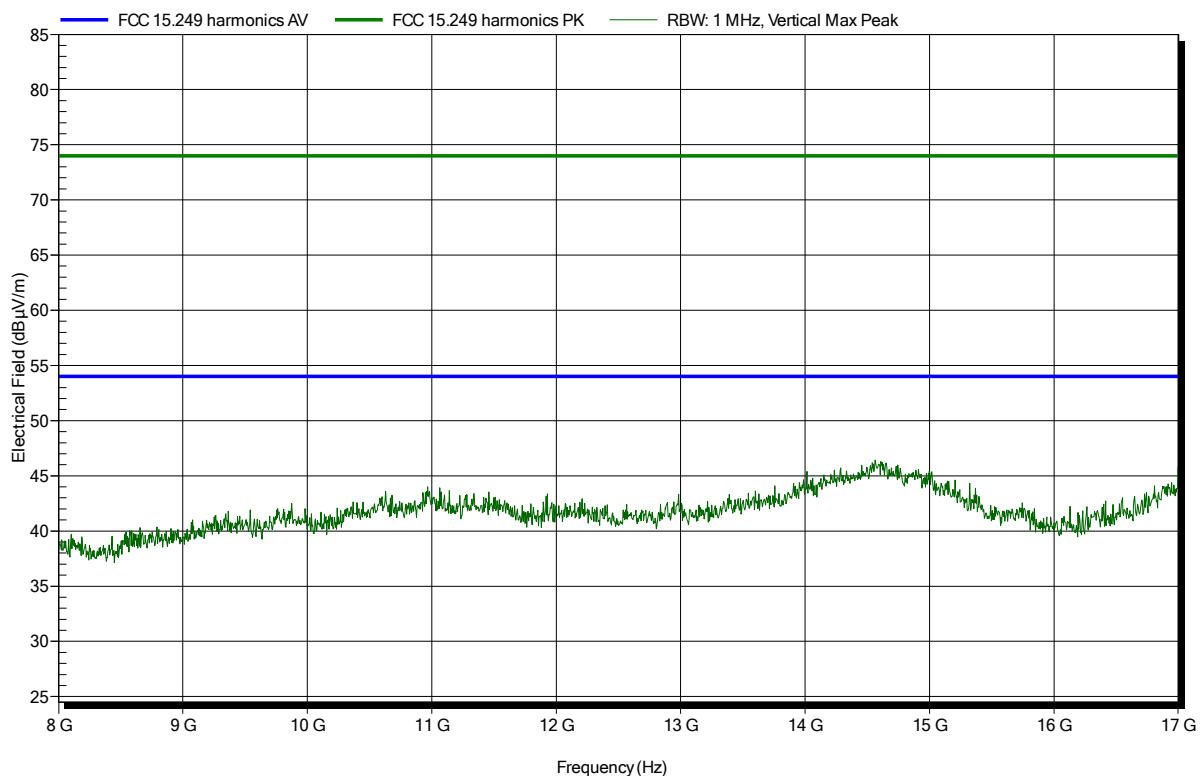


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 33

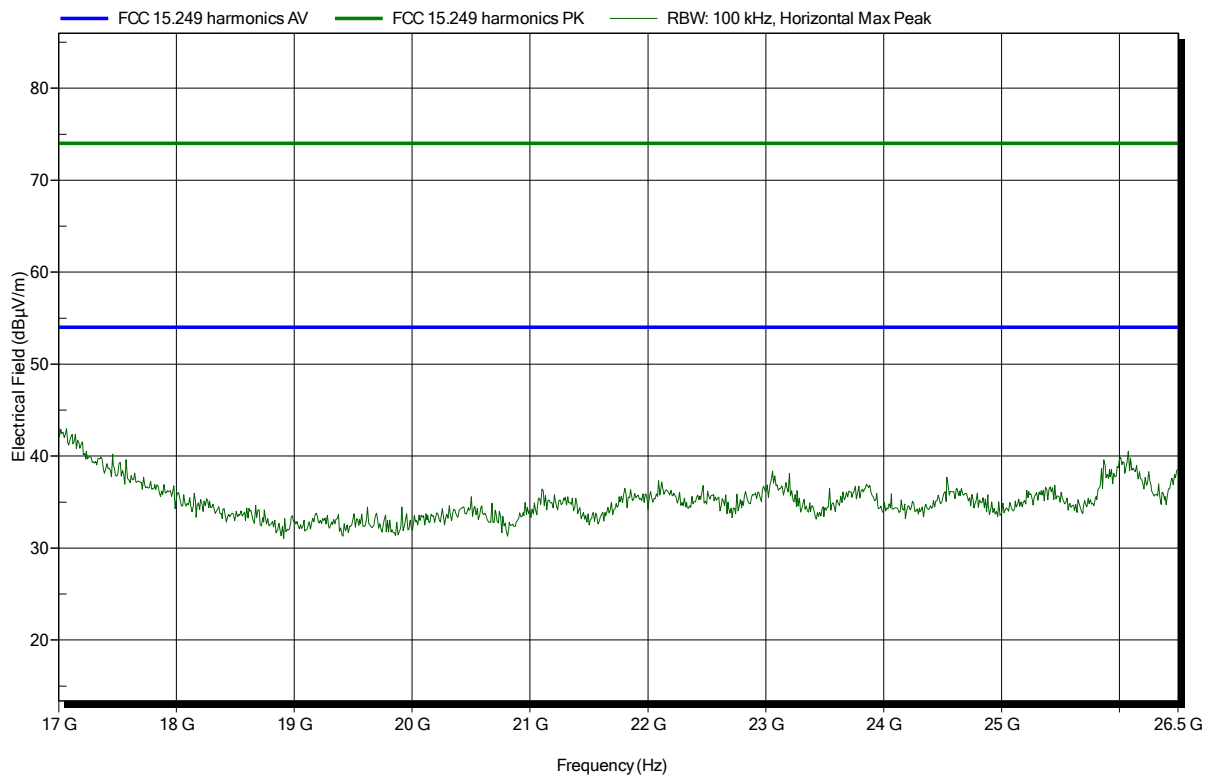


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Horizontal	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2435 MHz
Test Date:	2018-07-12
Note:	

Index 44

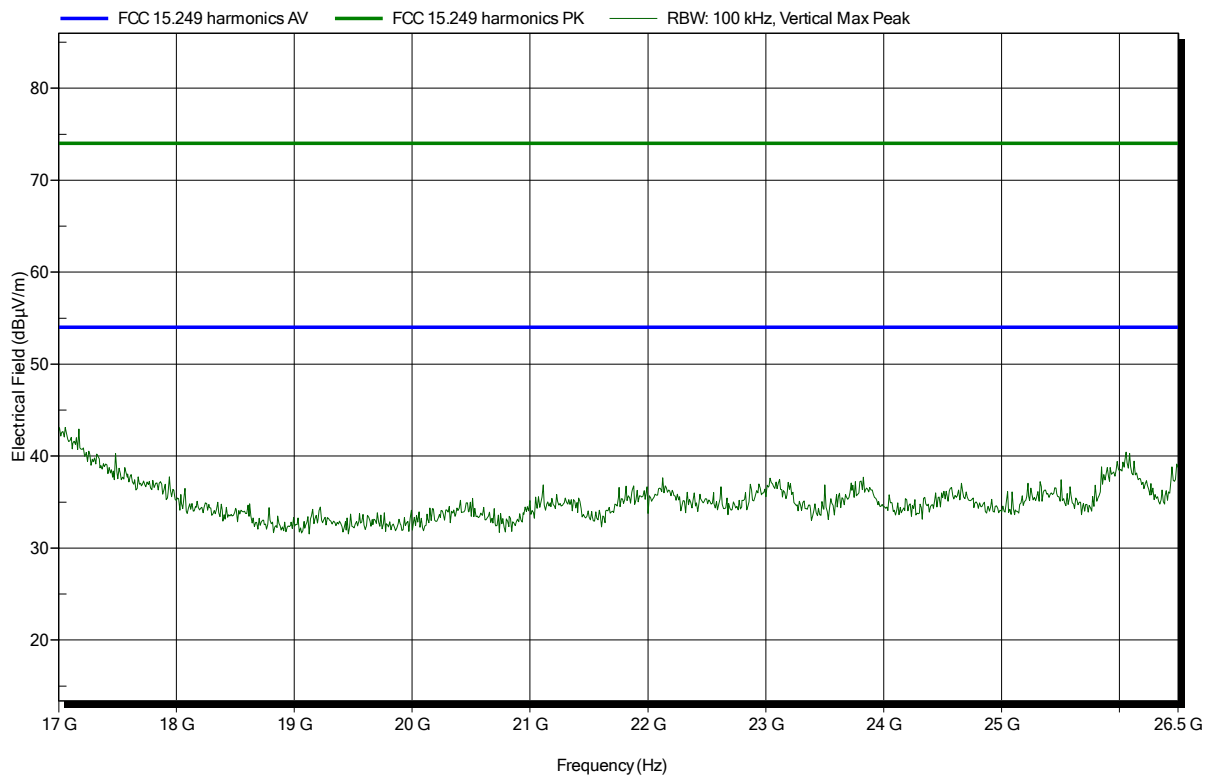


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Vertical	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2435 MHz
Test Date:	2018-07-12
Note:	

Index 45

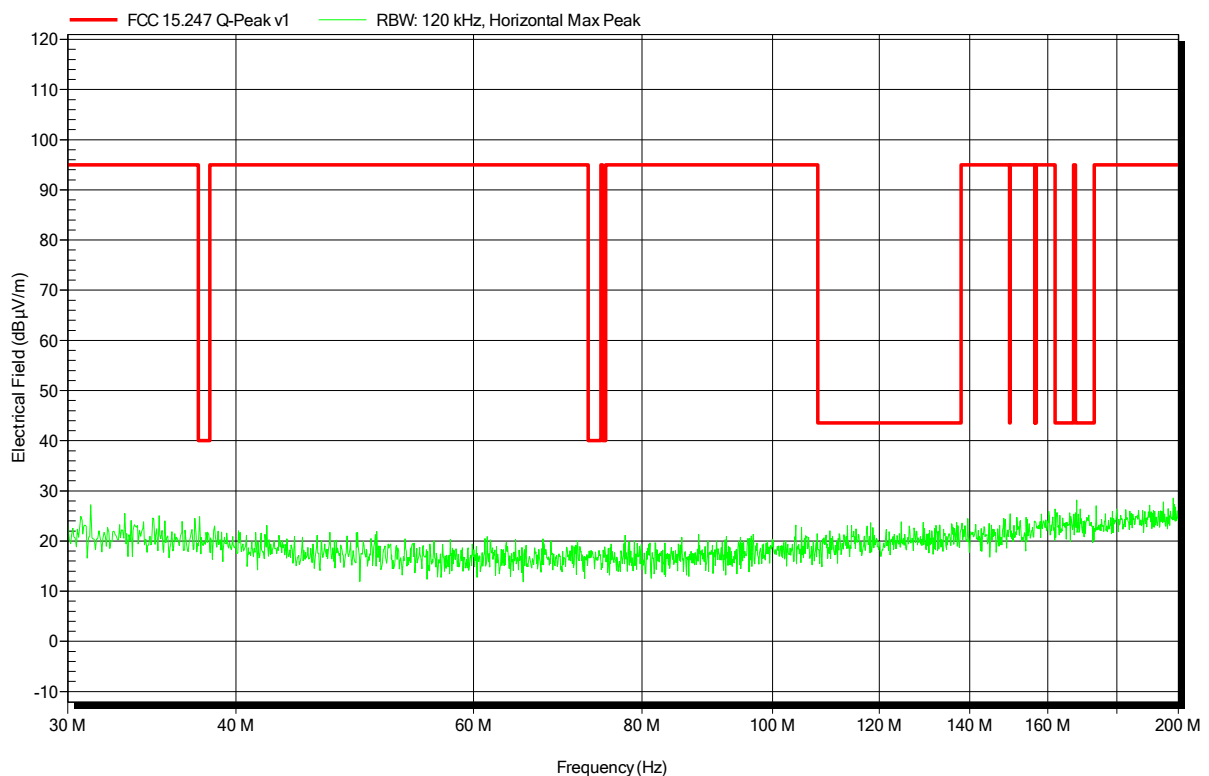


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Remote Control for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-13
 Note:

Index 5

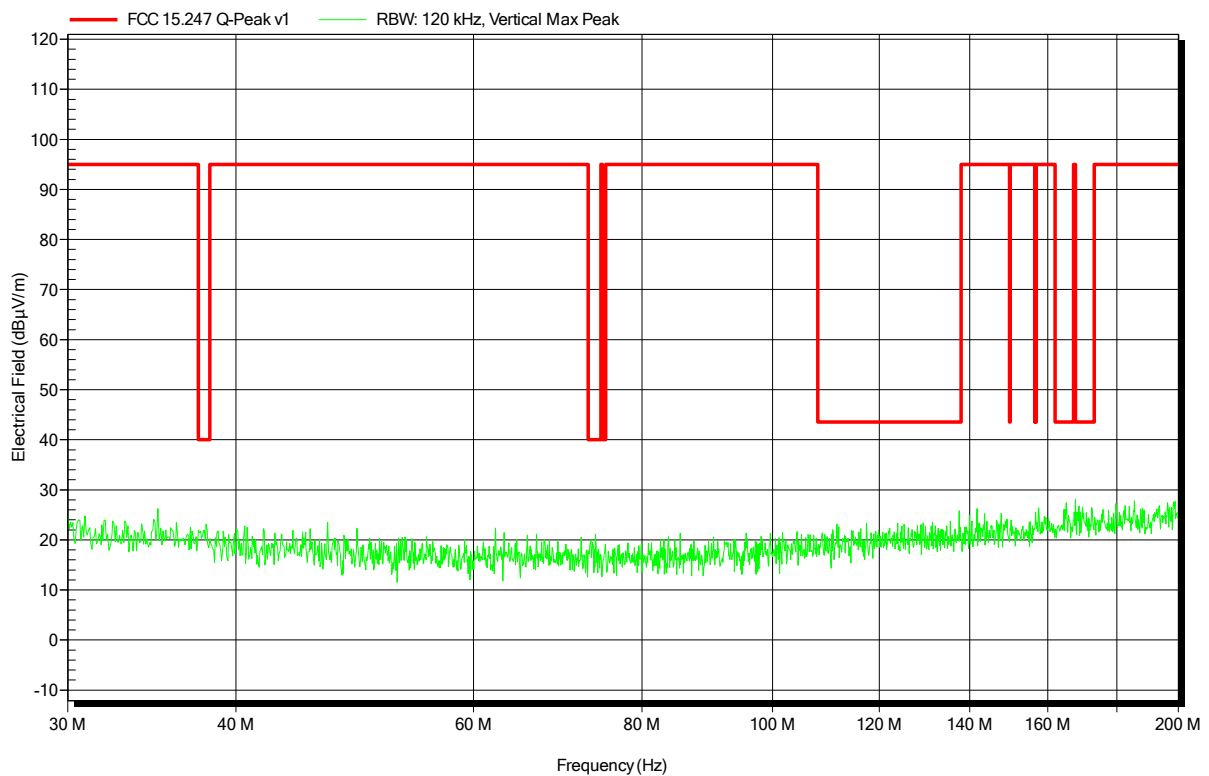


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Remote Control for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-13
 Note:

Index 4

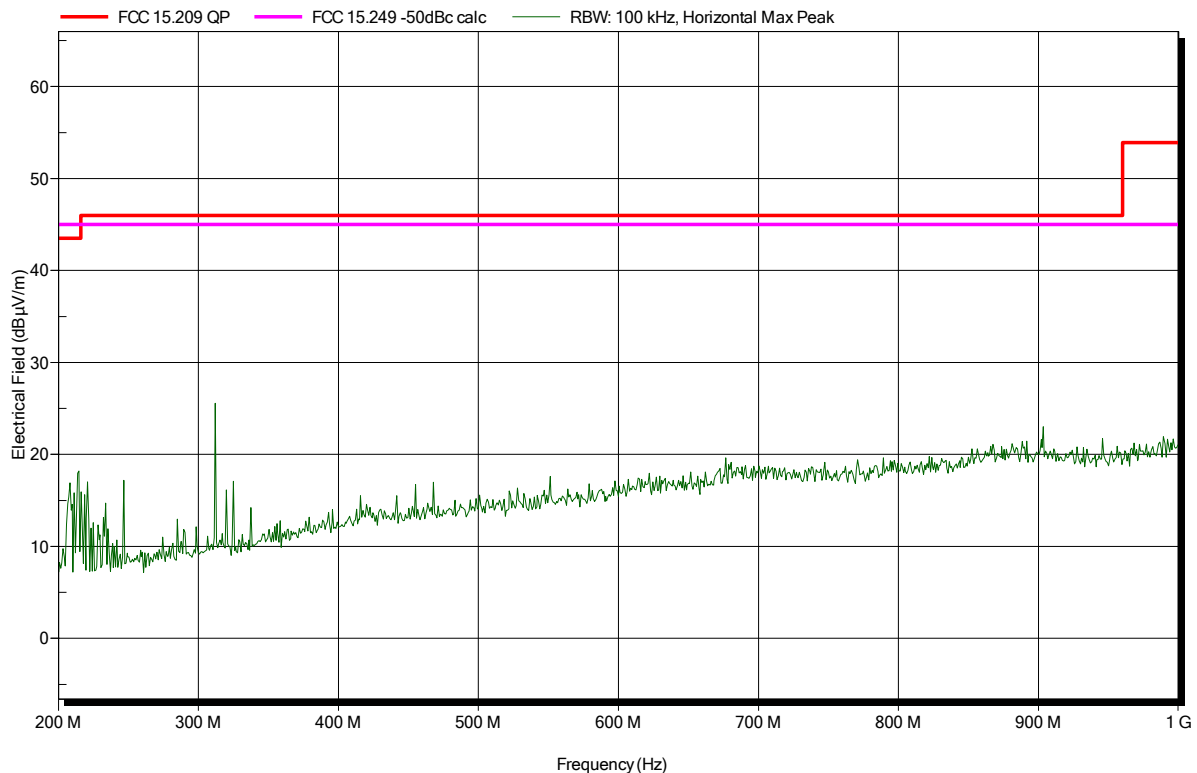


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 50

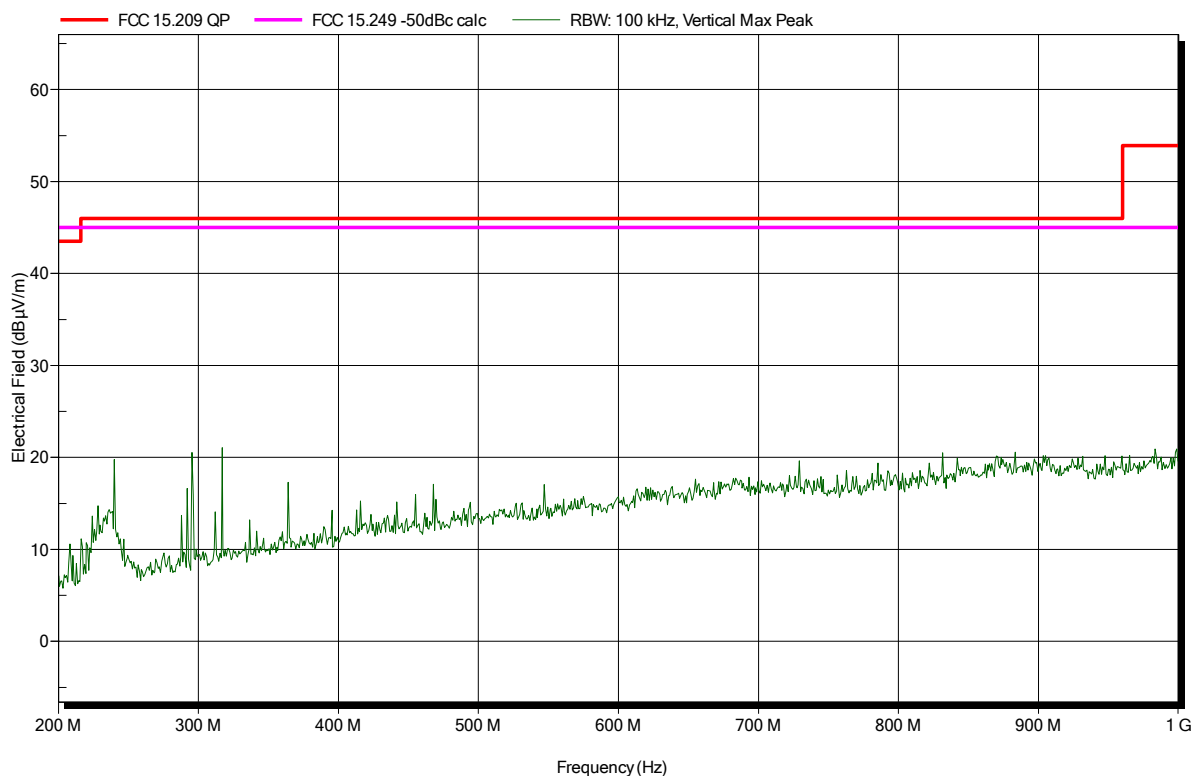


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 57

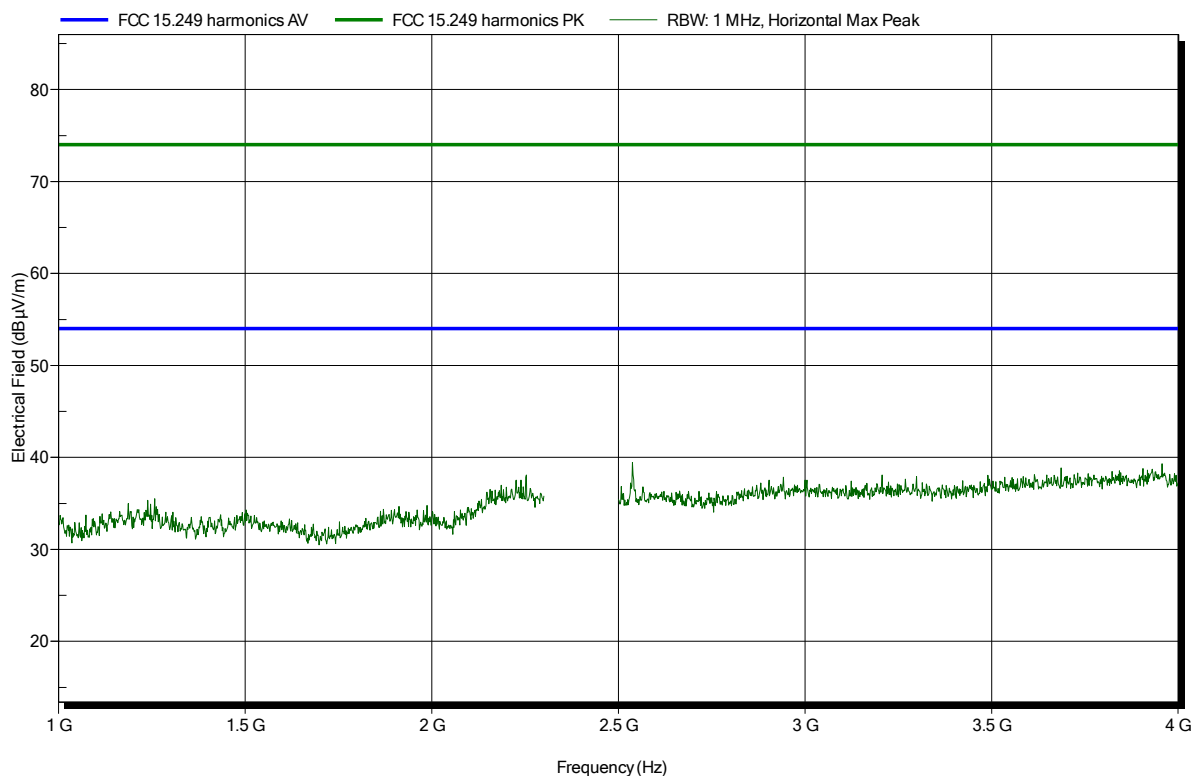


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 12

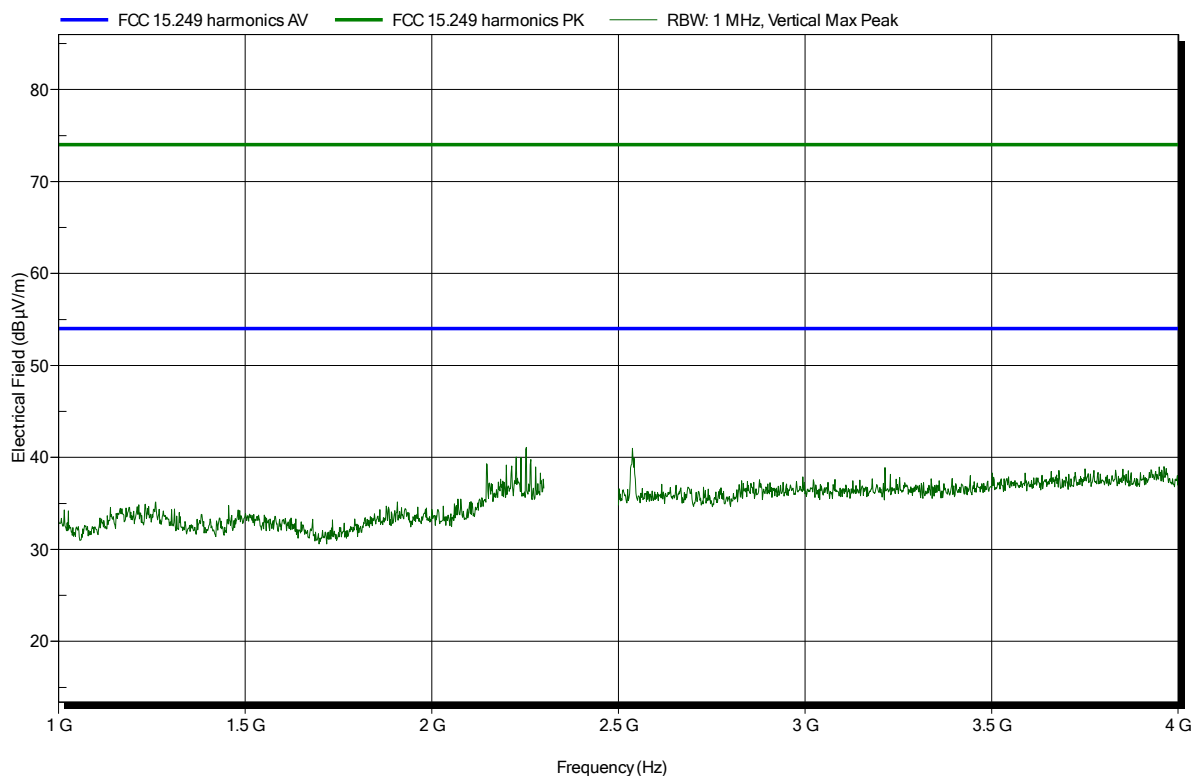


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 27

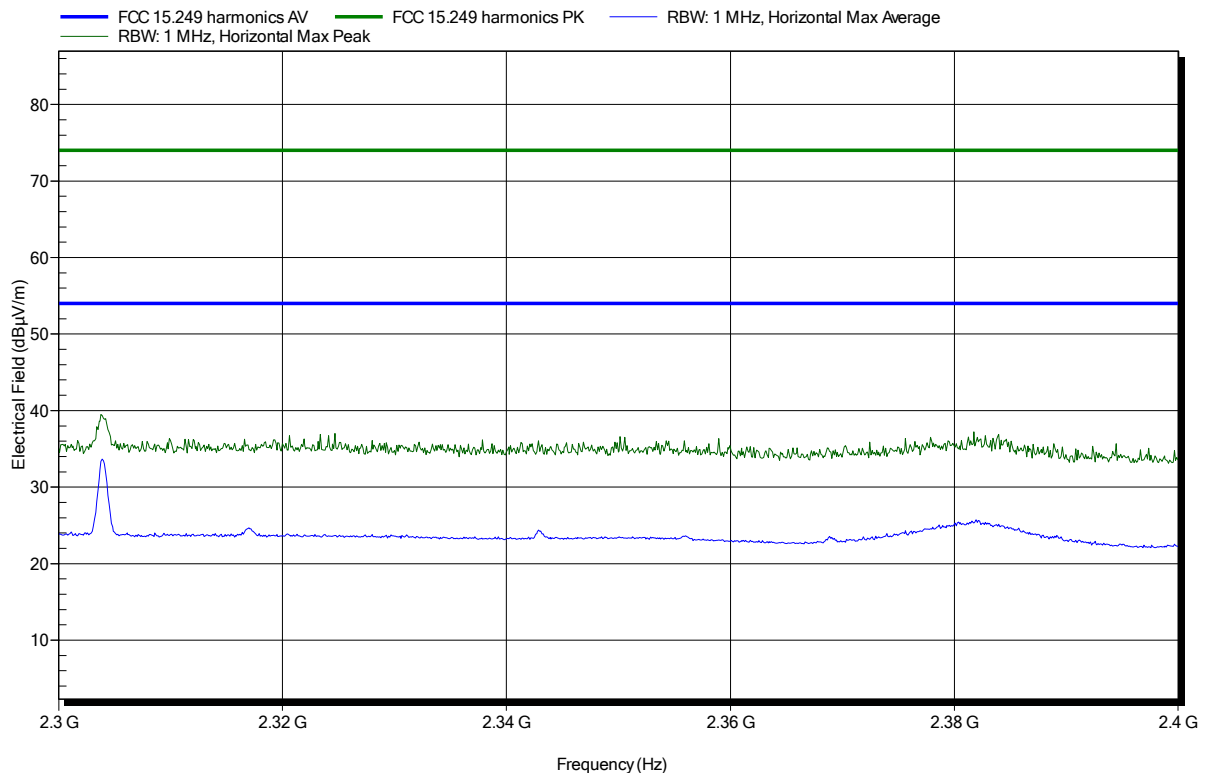


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 16

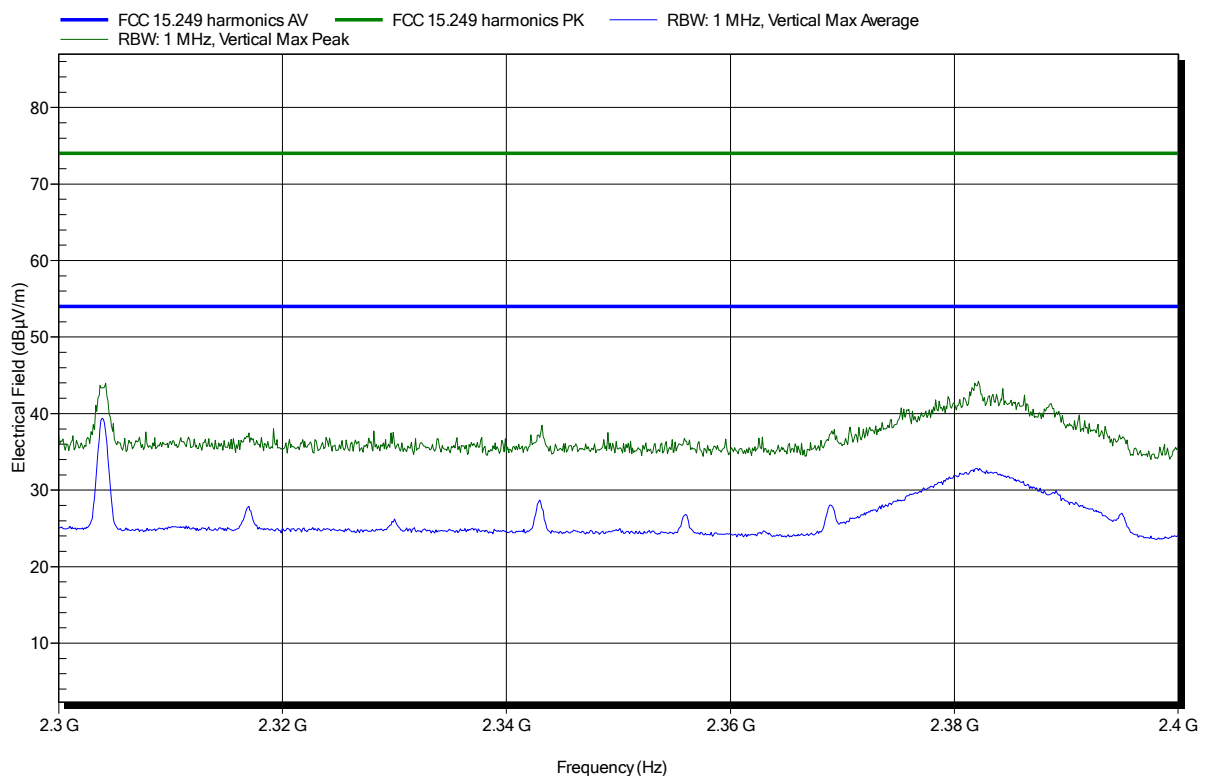


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

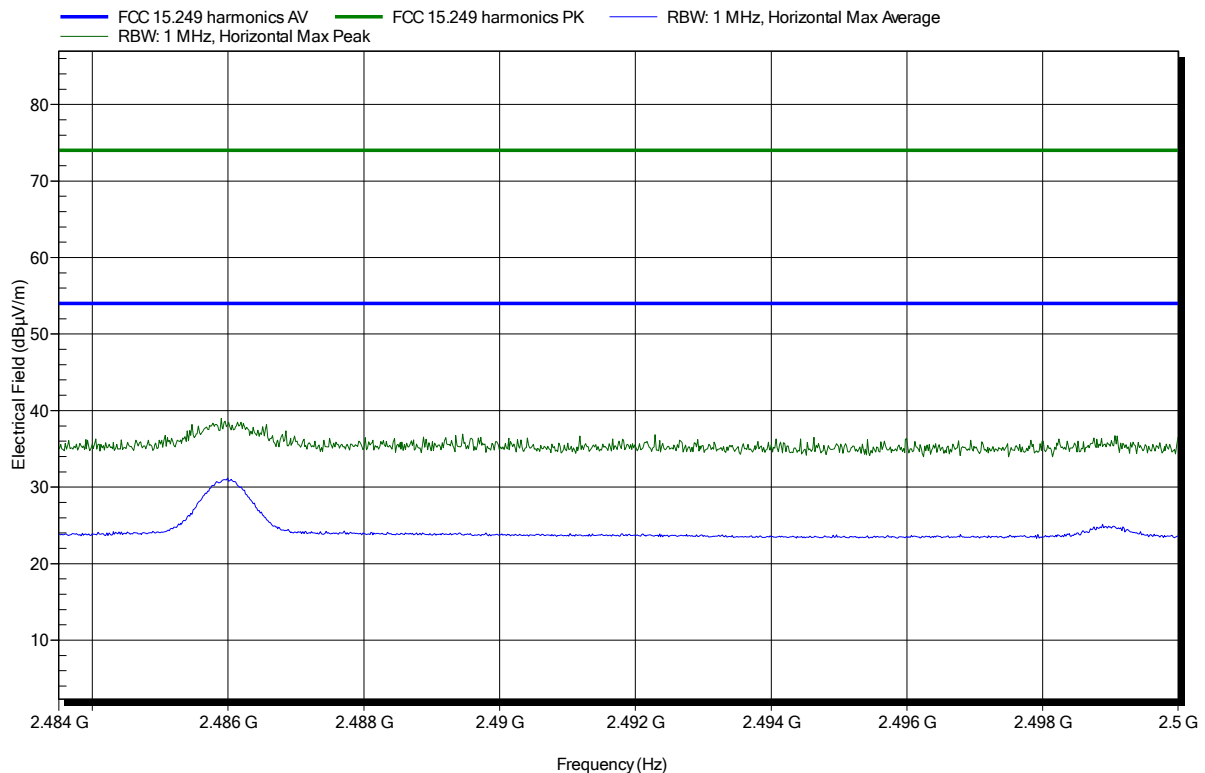
Index 26



Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423
 Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 15

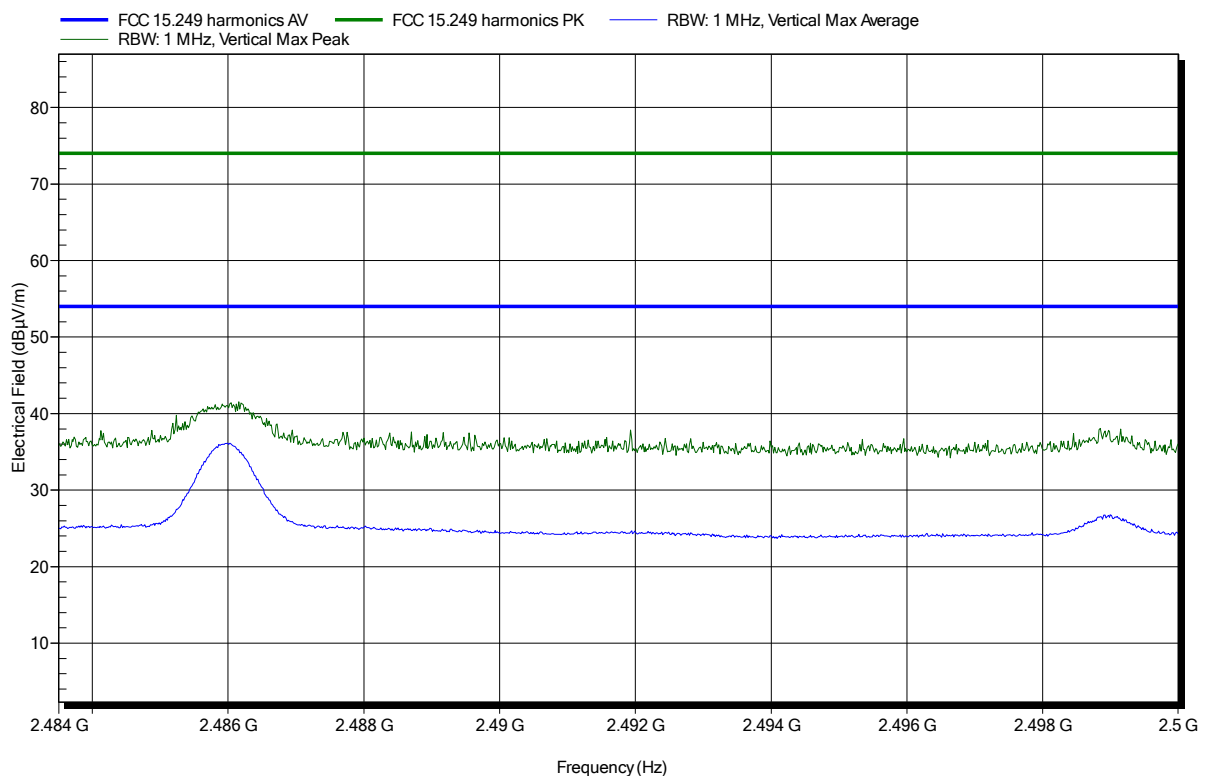


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
EUT Name: Radio module for Liftup A/S products
Model: MODULE1
Test Site: Eurofins Product Service GmbH
Operator: Sebastian Suckow
Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 3 m
Mode: TX; FHSS GFSK 2460 MHz
Test Date: 2018-07-12
Note:

Index 25

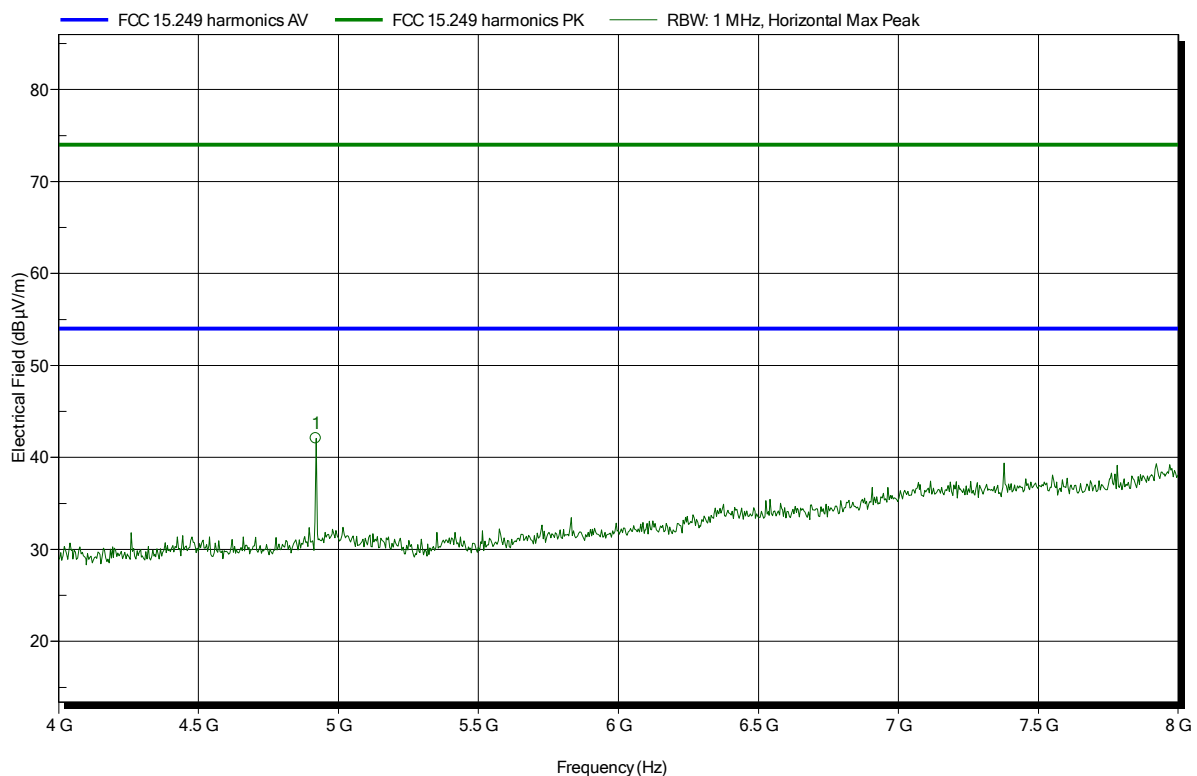


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 36



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.919 GHz	42.09 dBµV/m	74 dBµV/m	-31.91 dB	Pass

Test Report No.: G0M-1805-7424-TFC249-V01

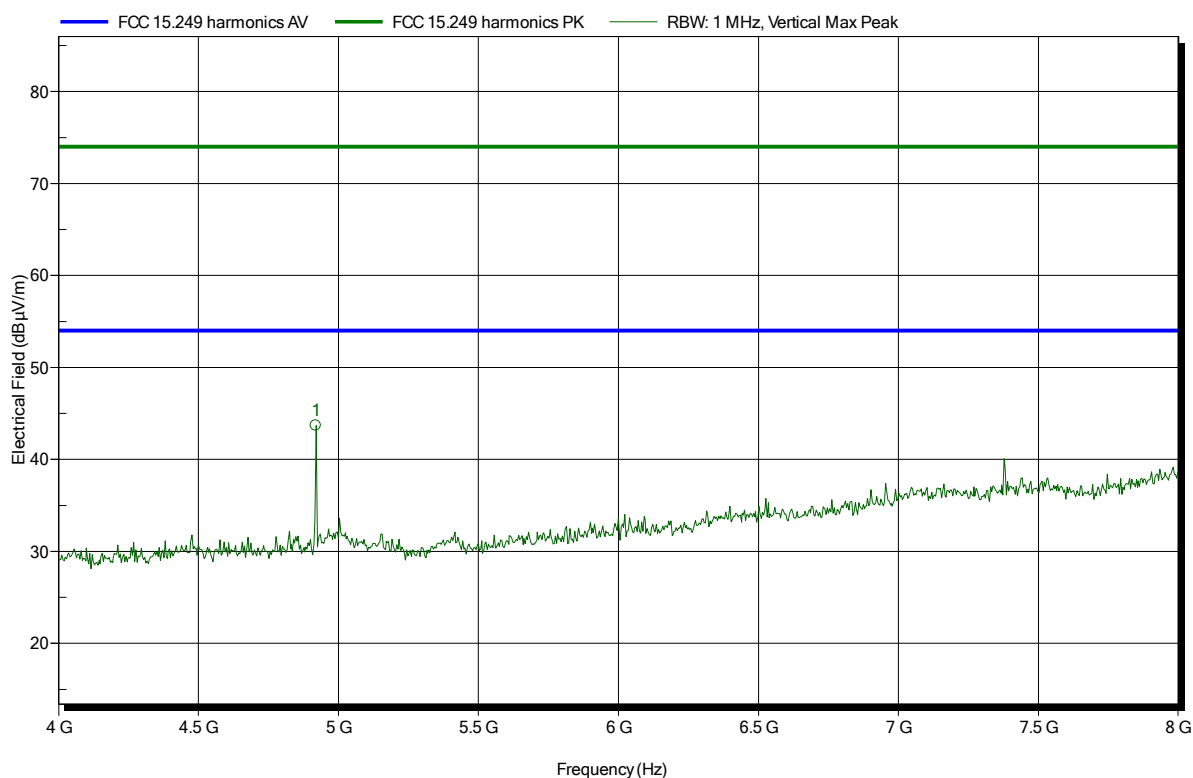
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 25°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; FHSS GFSK 2460 MHz
 Test Date: 2018-07-12
 Note:

Index 28



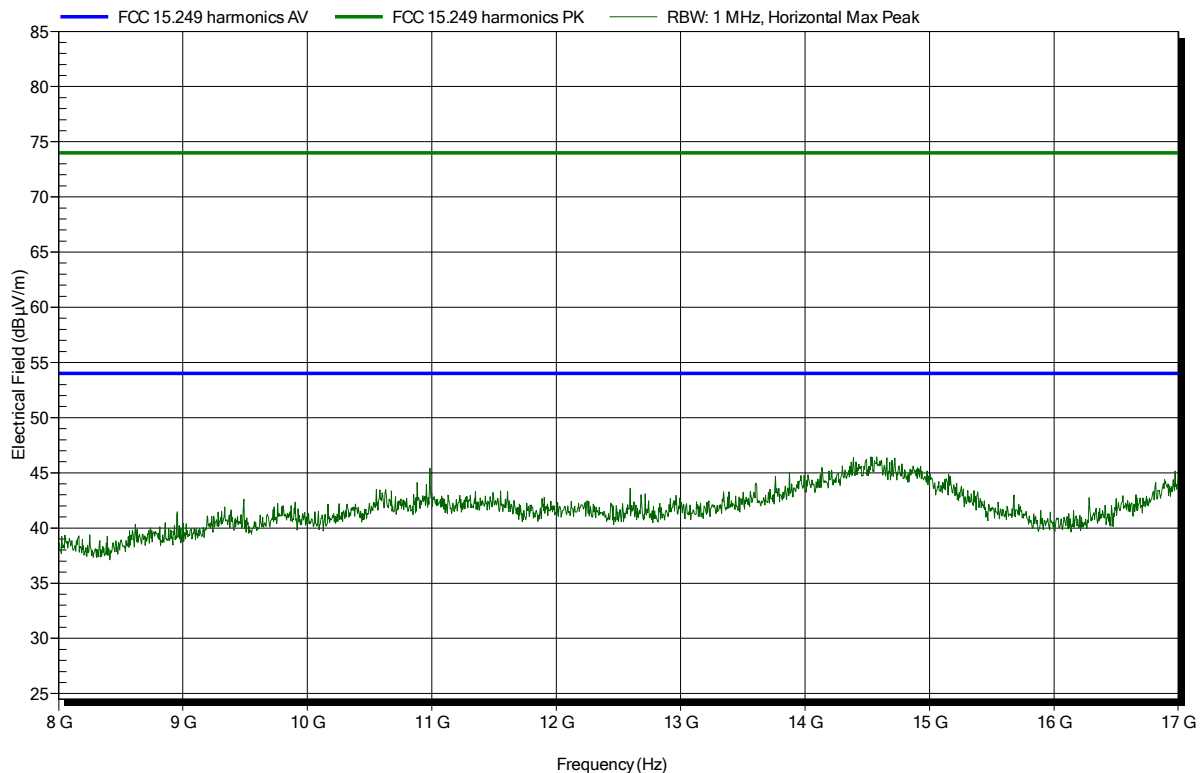
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.919 GHz	43.68 dBµV/m	74 dBµV/m	-30.32 dB	Pass

Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2460 MHz
Test Date:	2018-07-12
Note:	

Index 37

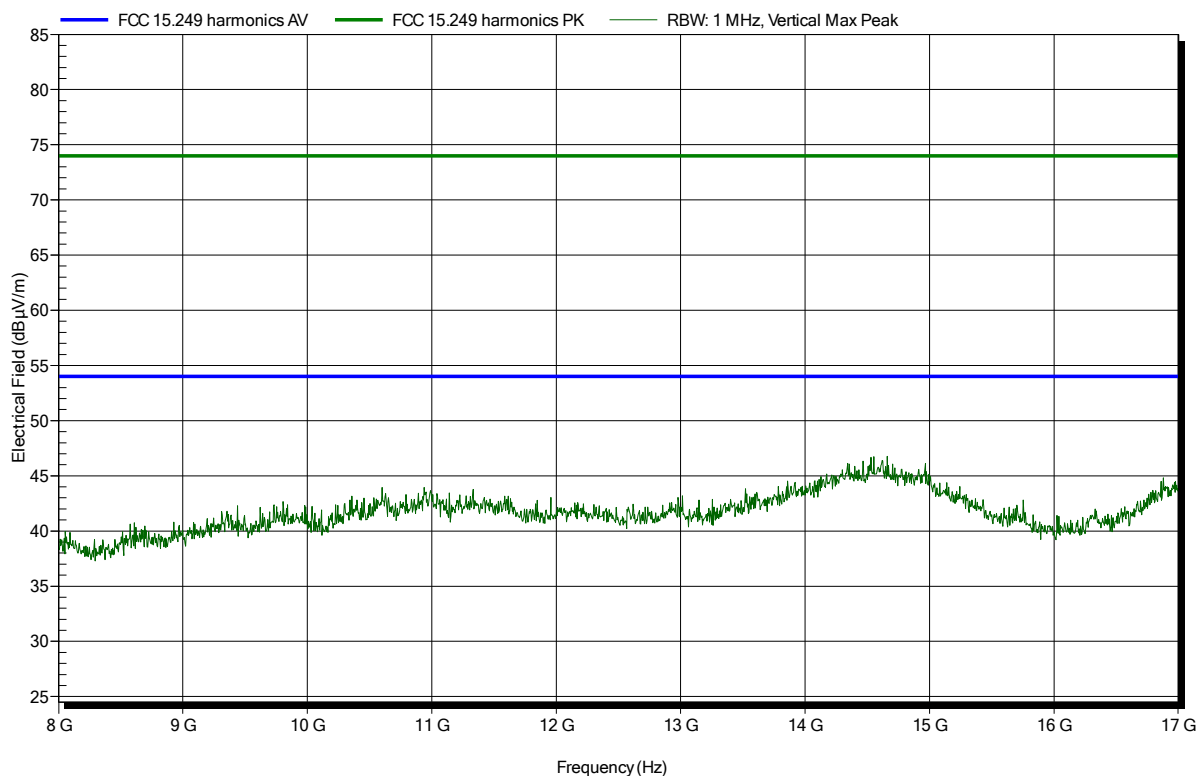


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2460 MHz
Test Date:	2018-07-12
Note:	

Index 29

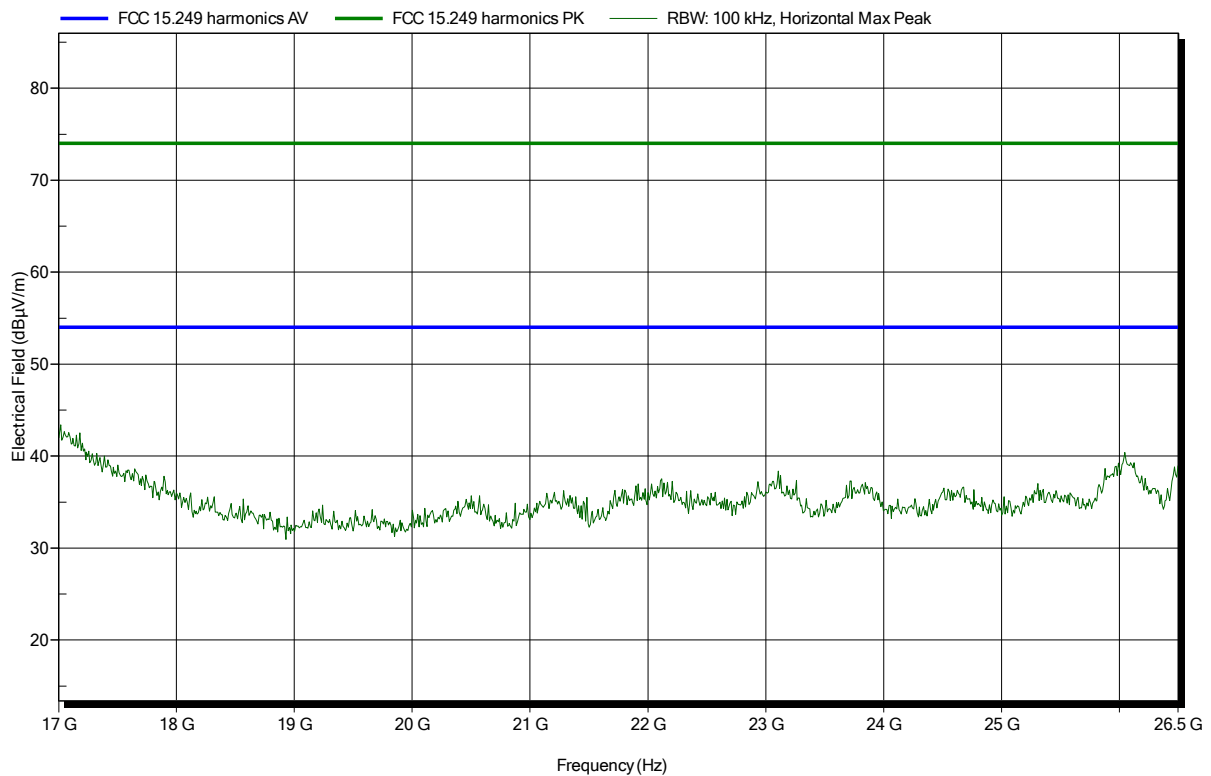


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Horizontal	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2460 MHz
Test Date:	2018-07-12
Note:	

Index 43

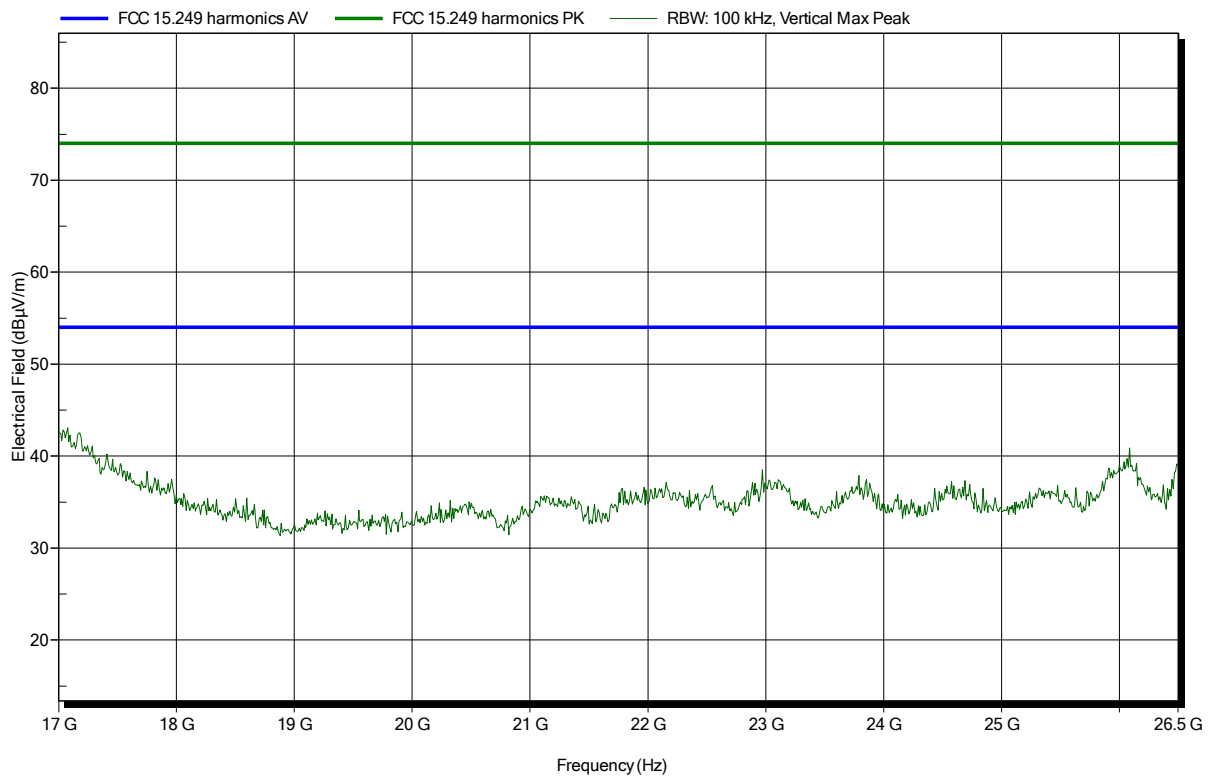


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7423

Applicant:	Liftup A/S
EUT Name:	Radio module for Liftup A/S products
Model:	MODULE1
Test Site:	Eurofins Product Service GmbH
Operator:	Sebastian Suckow
Test Conditions:	Tnom: 25°C, Vnom: 5.6 VDC
Antenna:	Amplifier Research AT 4560 (old name) / ATH18G40 (new name),
Vertical	
Measurement distance:	1 m converted to 3m
Mode:	TX; FHSS GFSK 2460 MHz
Test Date:	2018-07-12
Note:	

Index 42



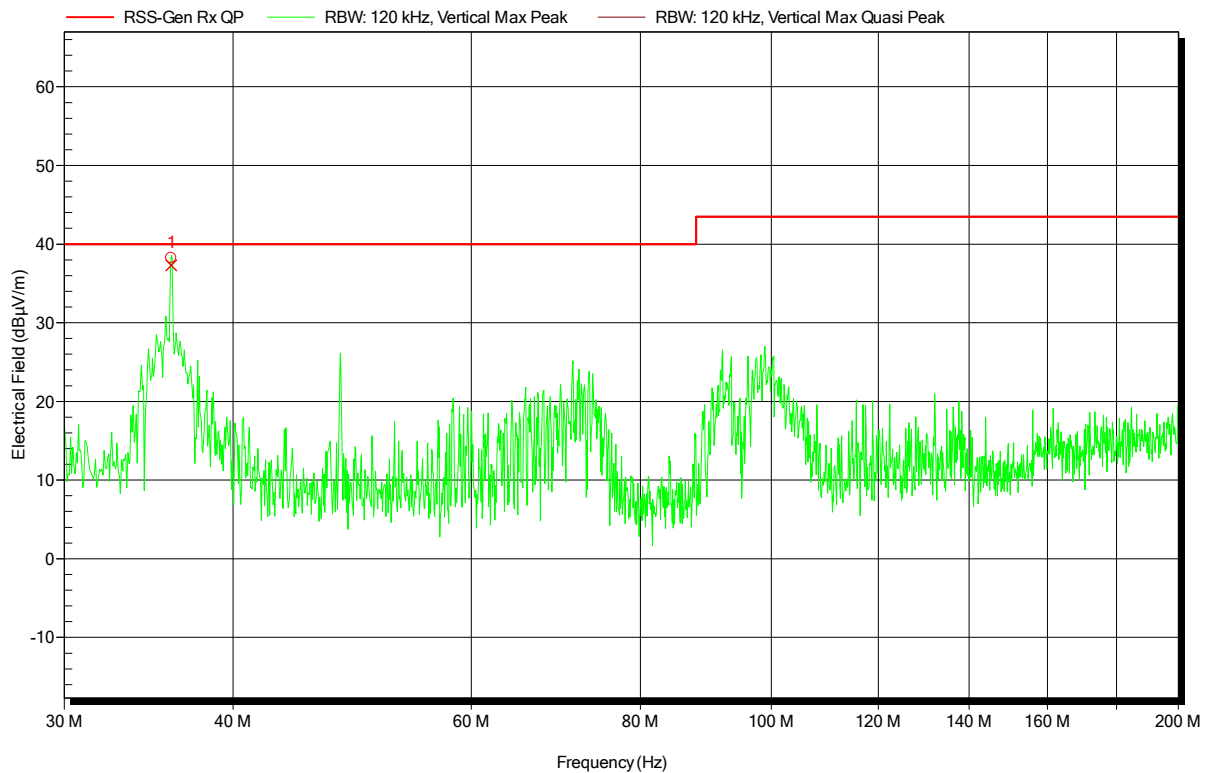
ANNEX B Receiver radiated spurious emissions

Spurious emissions according to RSS-Gen

Project number: G0M-1805-7424

Applicant: Liftup A/S
EUT Name: Radio module for Liftup A/S products
Model: MODULE1
Test Site: Eurofins Product Service GmbH
Operator: Mr. Suckow
Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: RX; FHSS, 2435 MHz
Test Date: 2018-07-13
Note:

Index 2



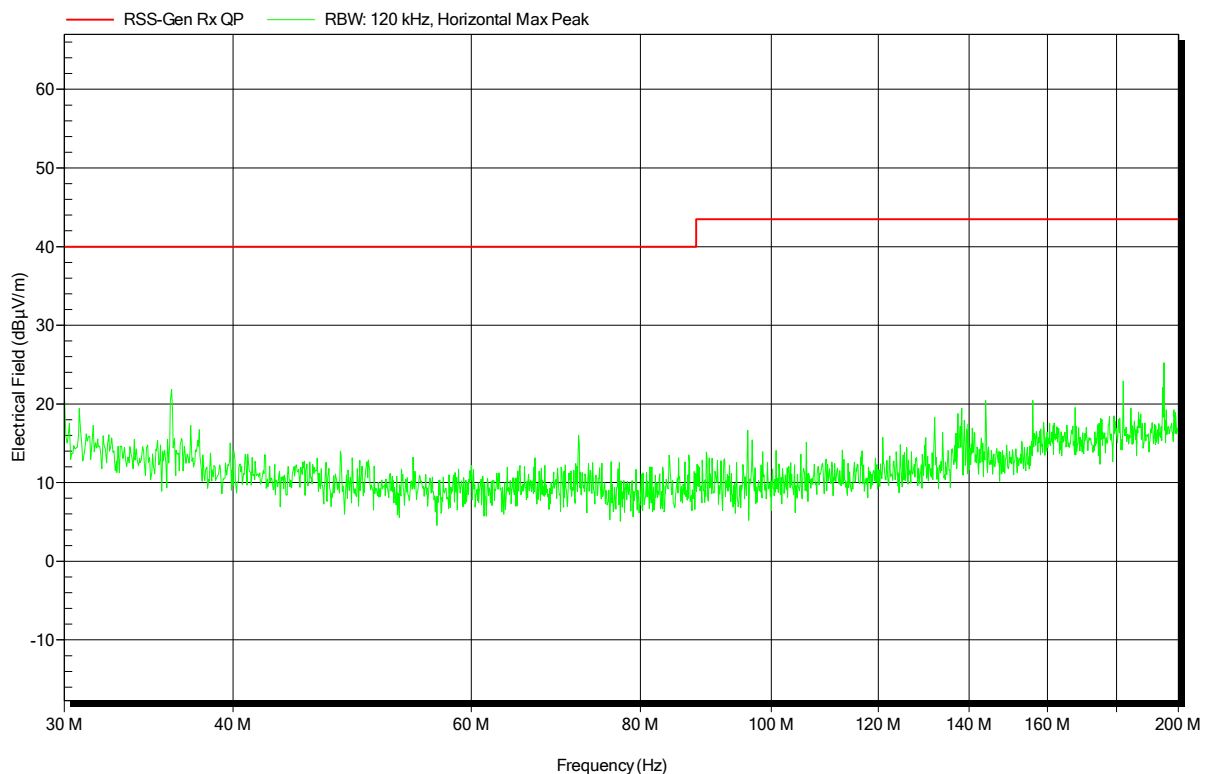
Frequency	Quasi-Peak	Quasi-Peak	Quasi-Peak	Quasi-Peak	Angle	Height
36.0049 MHz	37.3 dBμV/m	Limit	Difference	Status	0 Degree	1 m
		40 dBμV/m	-2.7 dB	Pass		

Spurious emissions according to RSS-Gen

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Suckow
 Test Conditions: Tnom: 24°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-13
 Note:

Index 3

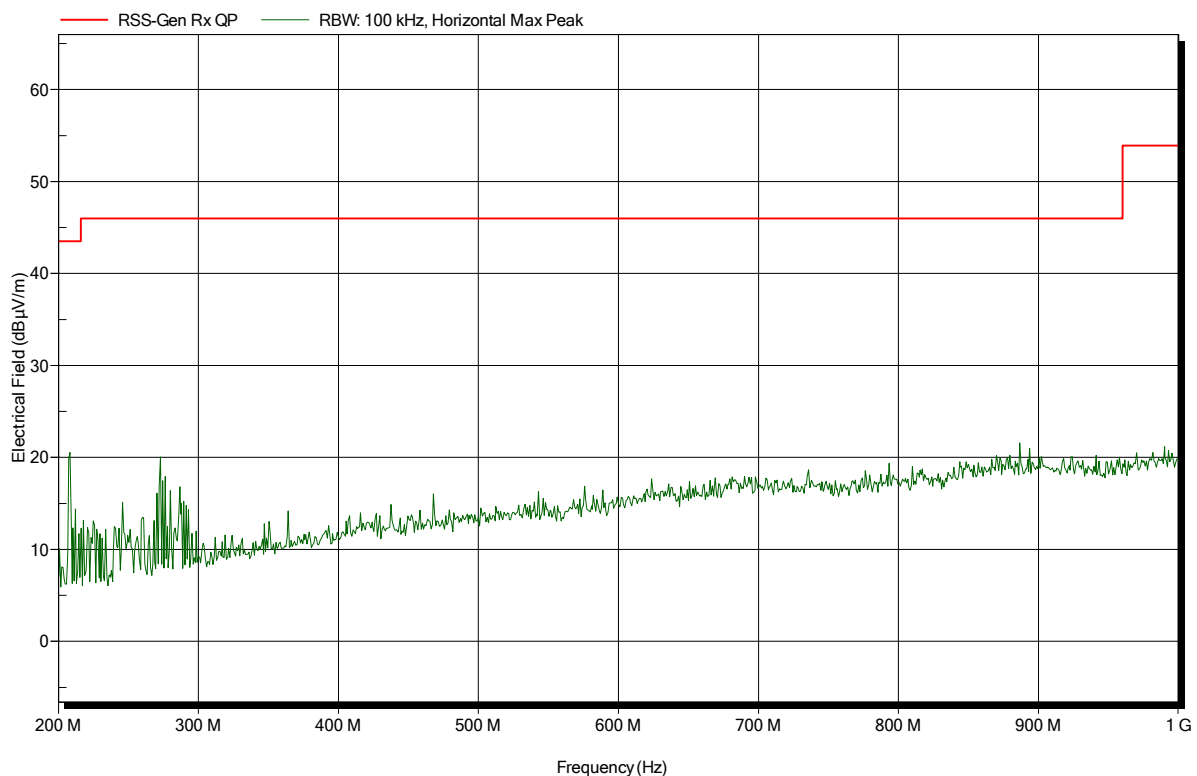


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 2

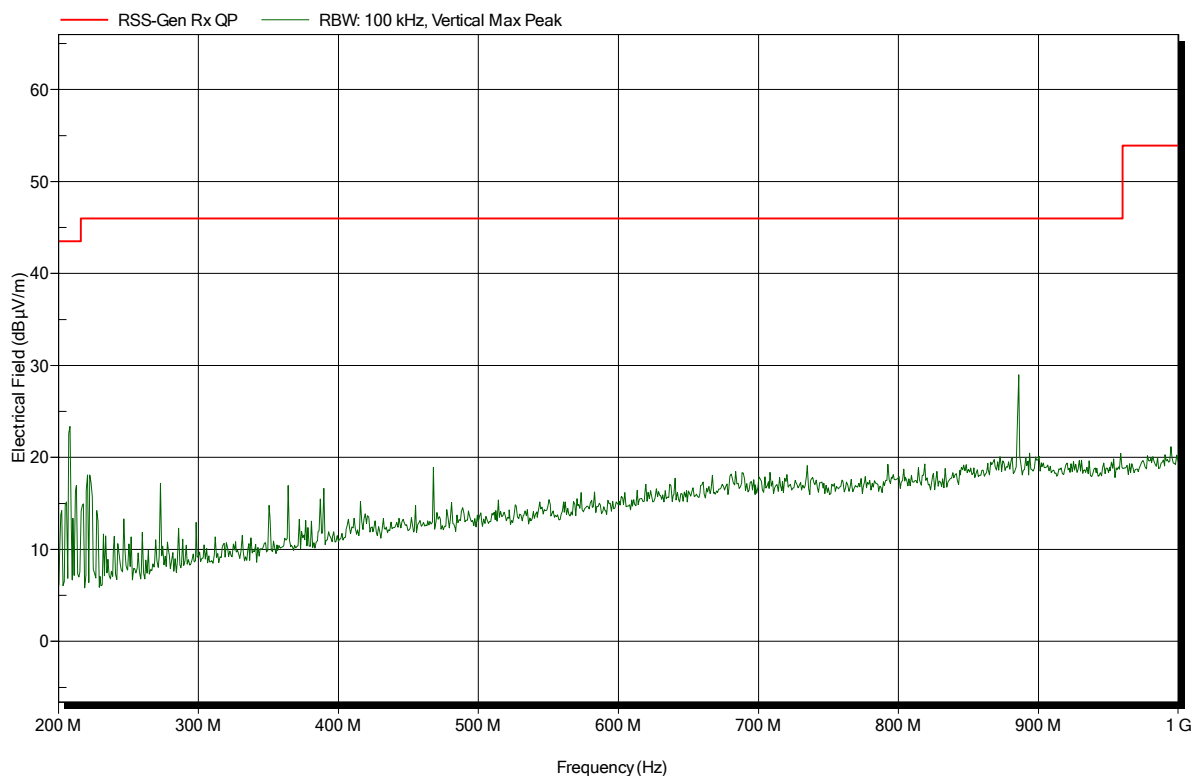


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 1

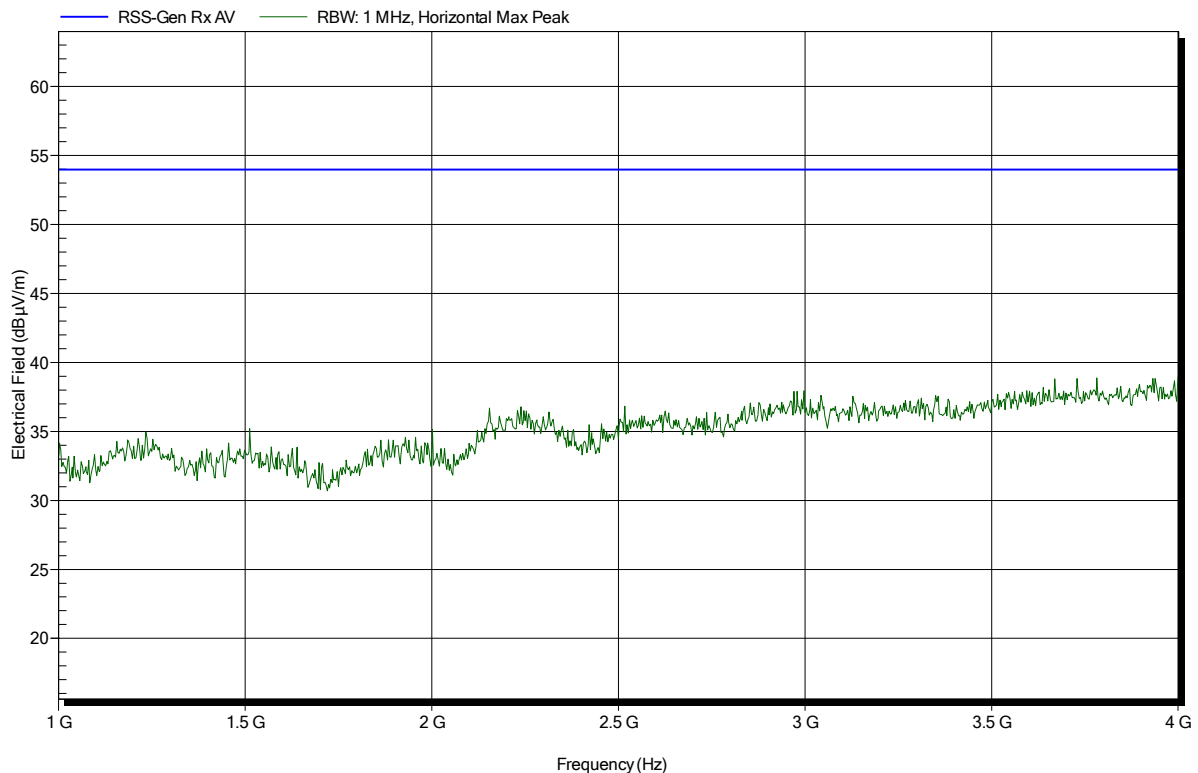


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 3

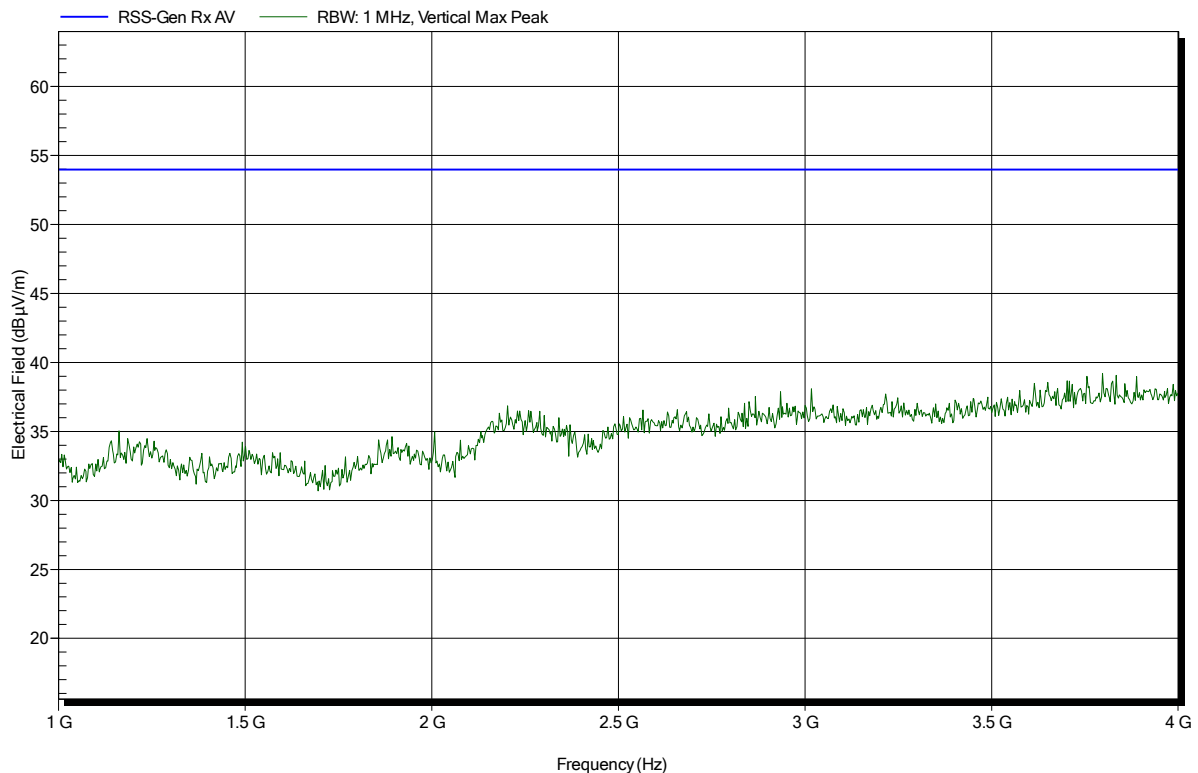


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 6

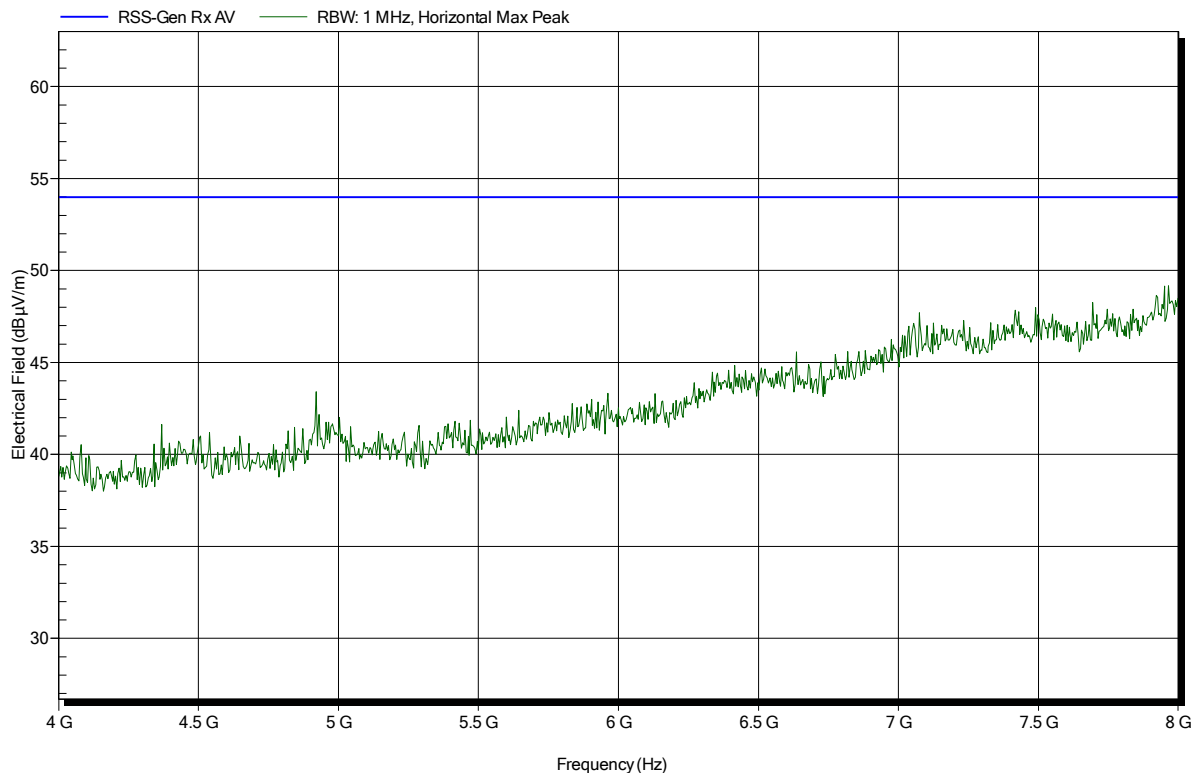


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 4

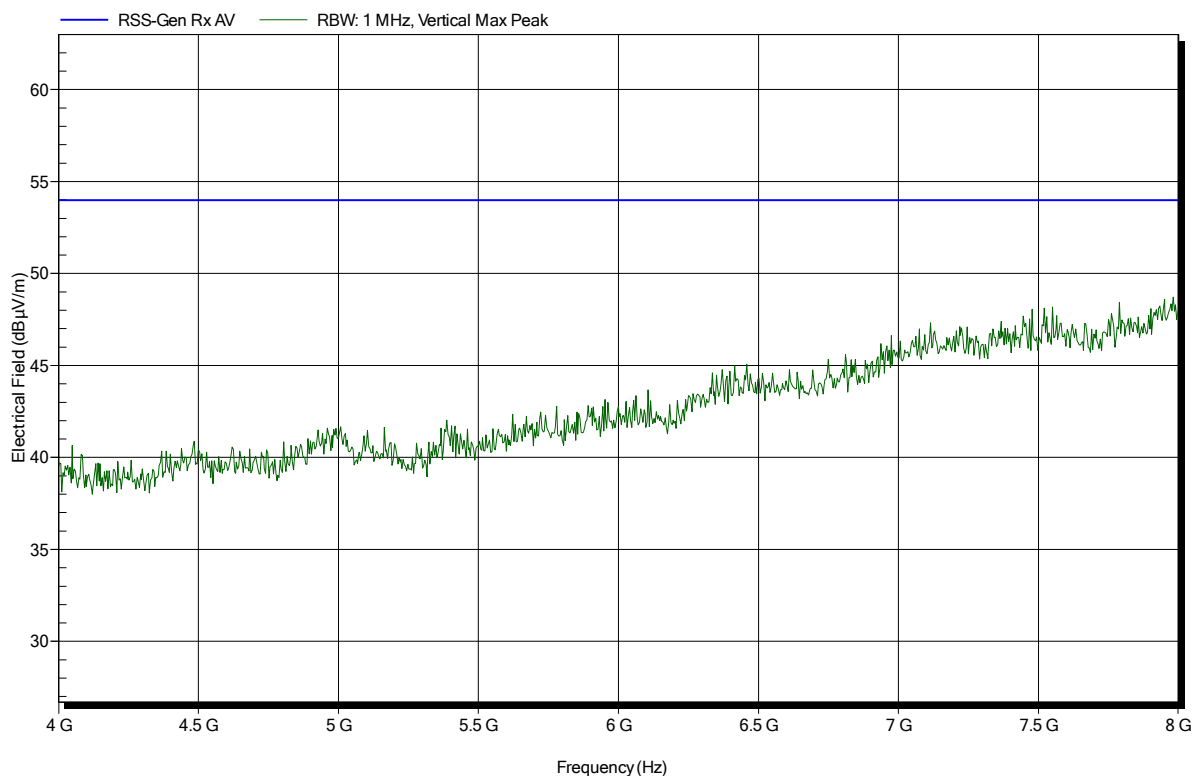


Spurious emissions according to FCC 15.249

Project number: GOM-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 5

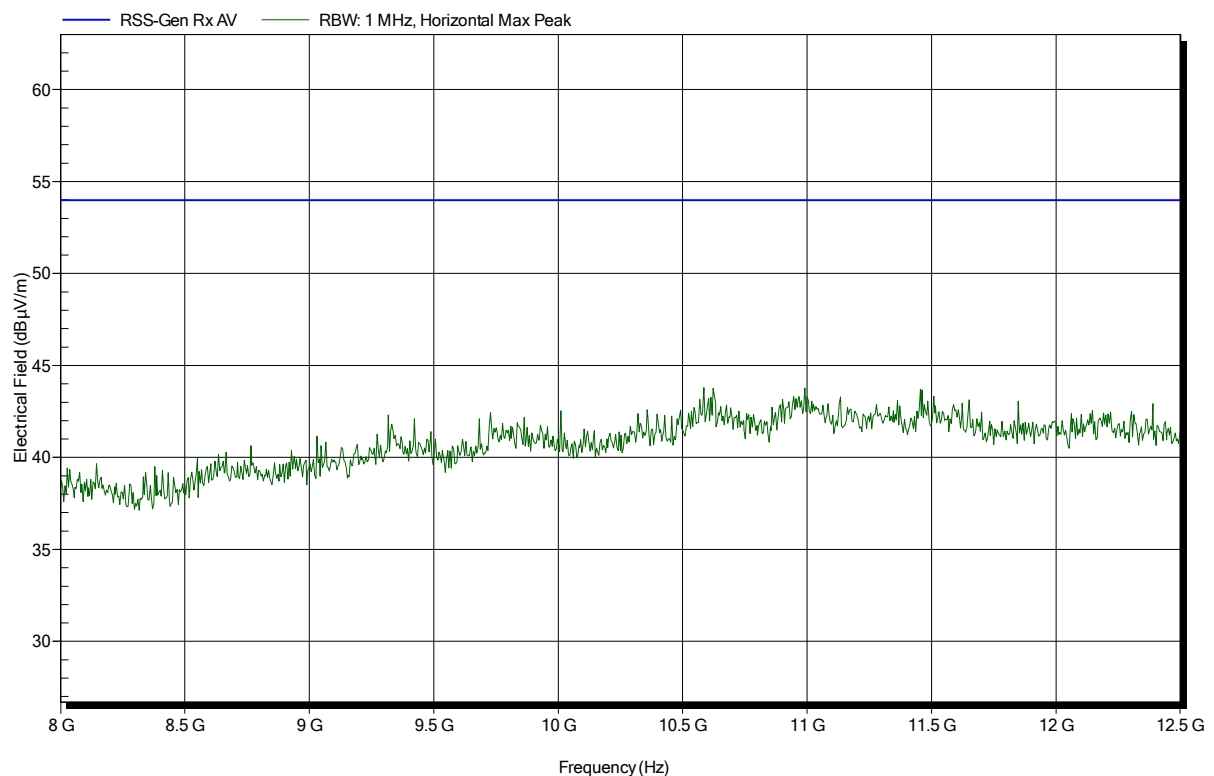


Spurious emissions according to FCC 15.249

Project number: G0M-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 8



Spurious emissions according to FCC 15.249

Project number: GOM-1805-7424

Applicant: Liftup A/S
 EUT Name: Radio module for Liftup A/S products
 Model: MODULE1
 Test Site: Eurofins Product Service GmbH
 Operator: Sebastian Suckow
 Test Conditions: Tnom: 26°C, Vnom: 5.6 VDC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: RX; FHSS, 2435 MHz
 Test Date: 2018-07-12
 Note:

Index 7

