

## FCC TEST REPORT

**FCC 47 CFR Part 15C  
Industry Canada RSS-247**

**Frequency hopping systems operating within the 2400 – 2483.5 MHz band**

**Report Reference No.** ..... : G0M-1504-4714-TFC247BT-V02

**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

**Applicant's name** ..... : Dräger Safety AG & Co. KGaA

**Address** ..... : Revalstraße 1  
23560 Lübeck  
GERMANY

### Test specification:

**Standard**..... : 47 CFR Part 15C  
RSS-247, Issue 1, 2015-05  
RSS-Gen, Issue 4, 2014-11  
ANSI C63.10:2013  
ANSI C63.4:2014

**Test scope**..... : complete Radio compliance test

### Equipment under test (EUT):

Product description	Powered Air Purifying Respirator
Model No.	R59500
Additional Model(s)	None
Brand Name(s)	Dräger X-plore 8500 (IP)
Hardware version	V05.00
Firmware / Software version	V00.26
	FCC-ID: X6O-XPLORE8500    IC: 5895F-XPLORE8500

**Test result** ..... **Passed**

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

**Possible test case verdicts:**

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

**Testing:**

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

Test Lab Humidity ..... : 32 – 38 %

Date of receipt of test item ..... : 2015-05-07

Date (s) of performance of tests ..... : 2015-08-17 - 2015-08-24

Compiled by ..... : Toralf Jahn

Tested by (+ signature) ..... : Toralf Jahn  
(Responsible for Test)

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

Date of issue ..... : 2016-03-24

Total number of pages ..... : 80



**General remarks:**

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

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

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

**Additional comments:**

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## Version History

Version	Issue Date	Remarks	Revised by
01	2015-10-01	Initial Release	
02	2016-03-24	FCC ID for the radio module corrected.	T. Jahn

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## 1 Equipment (Test item) Description

Description	Powered Air Purifying Respirator	
Model	R59500	
Additional Model(s)	None	
Brand Name(s)	Dräger X-plore 8500 (IP)	
Serial number	None	
Hardware version	V05.00	
Software / Firmware version	V00.26	
FCC-ID	X6O-XPLORE8500	
IC	5895F-XPLORE8500	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	Bluetooth	
Operating frequency range	2402 - 2480 MHz	
Assigned frequency band	2400 - 2483.5 MHz	
Main test frequencies	F <sub>LOW</sub>	2402 MHz
	F <sub>MID</sub>	2441 MHz
	F <sub>HIGH</sub>	2480 MHz
Spreading	FHSS	
Modulations	GFSK	
Number of channels	79 hopping channels at all	
Channel spacing	1 MHz	
Number of antennas	1	
Radio module	Type	Bluetooth Module
	Model	PAN1026
	Manufacturer	Panasonic
	HW Version	unspecified
	SW Version	unspecified
	FCC-ID	T7VPAN10
	IC	216Q-PAN10
Antenna	Type	integrated
	Model	unspecified
	Manufacturer	unspecified
	Gain	unspecified

<b>Manufacturer</b>	MSC Technologies Systems GmbH Munzingerstr. 3 79111 Freiburg Germany	
<b>Power supply (battery)</b>	$V_{\text{NOM}}$	unspecified
	$V_{\text{MIN}}$	9.0 VDC
	$V_{\text{MIN}}$	12.6 VDC

#### 1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
SIM	Bluetooth Tester	Rohde & Schwarz	CBT	
<p><b>*Note:</b> Use the following abbreviations:</p> <p>AE : Auxiliary/Associated Equipment, or</p> <p>SIM : Simulator (Not Subjected to Test)</p> <p>CABL : Connecting cables</p>				

## 1.5 Test Modes

Mode #	Description	
DH5-Sngl	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone transmit Spreading = Hopping stopped (single hopping channel) Modulation = GFSK Packet type = DH5 Data rate = 1 Mbps Duty cycle = 77 % Power level = Maximum
Receive	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone receive Spreading = Hopping



## 1.6 Test Equipment Used During Testing

Measurement Software			
Description	Manufacturer	Name	Version
EMC Test Software	Dare Instruments	Radimation	2014.1.15

Occupied Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSEK30	EF00168	2015-01	2016-01

Radiated spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-
Spectrum Analyzer	R&S	FSIQ26	EF00242	2015-04	2016-04
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD Antenna	R&S	HL 223	EF00187	2014-03	2017-03
LPD Antenna	R&S	HL 025	EF00327	2013-02	2016-02

## 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 dB $\mu$ V. 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 dB $\mu$ V/m). The FCC limits are given in units of  $\mu$ V/m. The following formula is used to convert the units of  $\mu$ V/m to dB $\mu$ V/m:

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

Margin:

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

Example only:

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

## 2 Result Summary

FCC 47 CFR Part 15C, IC RSS-247				
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks
RSS-Gen 6.6	Occupied Bandwidth	ANSI C63.10	N/R	Informational only
FCC § 15.247(a)(1) IC RSS-247 § 5.1	20 dB Bandwidth	ANSI C63.10	N/R	
FCC § 15.247(a)(1)(iii) IC RSS-247 § 5.1	Number of hopping frequencies	ANSI C63.10	N/R	
FCC § 15.247(a)(1) IC RSS-247 § 5.1	Frequency hopping channel separation	ANSI C63.10	N/R	
FCC § 15.247(a)(1)(iii) IC RSS-247 § 5.1	Time of occupancy (Dwell time)	ANSI C63.10	N/R	
FCC § 15.247(b)(1) IC RSS-247 § 5.4	Maximum peak conducted power	ANSI C63.10	N/R	
47 CFR 15.207 IC RSS-247 § 3.1	AC power line conducted emissions	ANSI C63.4	N/R	No AC connection
FCC § 15.247(d) IC RSS-247 § 5.5	Band edge compliance	ANSI C63.10	N/R	
FCC § 15.247(d) IC RSS-247 § 5.5	Conducted spurious emissions	ANSI C63.10	N/R	
FCC § 15.247(d) FCC § 15.209 IC RSS-247 § 5.5	Transmitter radiated spurious emissions	ANSI C63.10	PASS	
IC RSS-247 § 3.1	Receiver radiated spurious emissions	ANSI C63.10	PASS	
Remarks:				

### 3 Test Conditions and Results

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

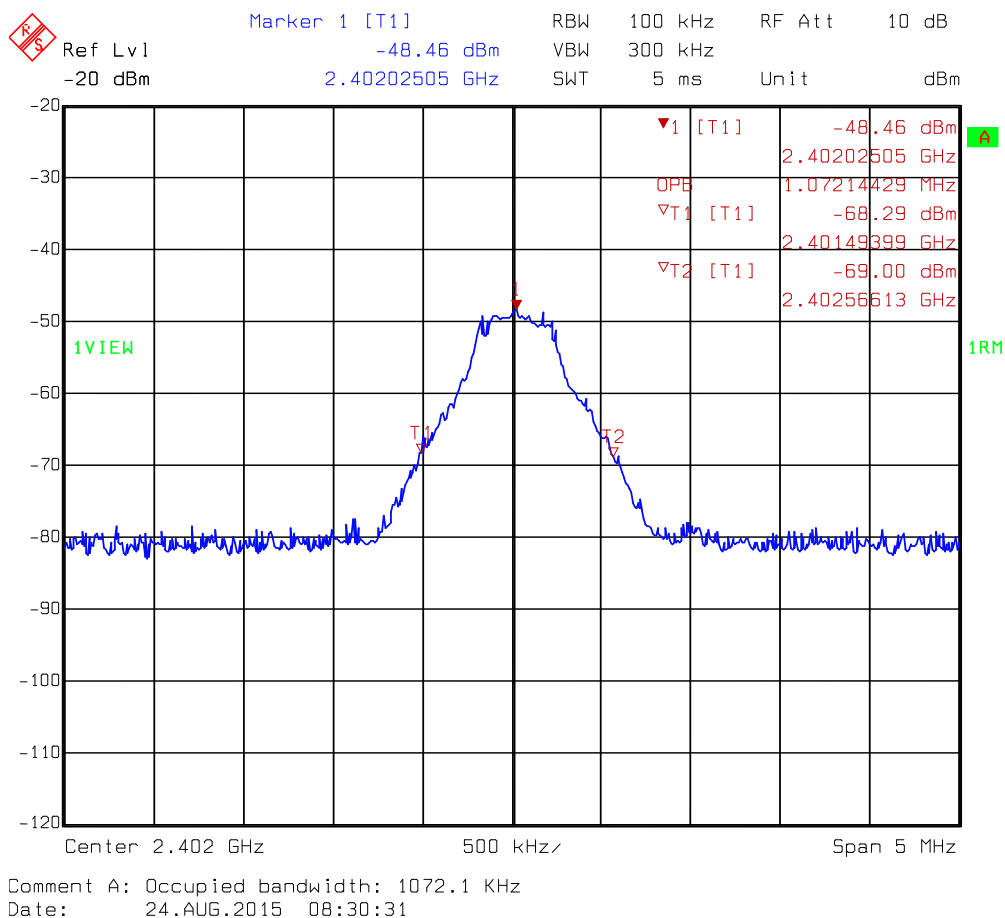
Occupied Bandwidth acc. to IC RSS-Gen			Verdict: PASS
Test according to measurement reference	Reference Method		
	ANSI C63.10		
Test frequency range	Tested frequencies		
	F <sub>LOW</sub> / F <sub>MID</sub> / F <sub>HIGH</sub>		
Limits			
None (Informational only)			
Test setup			
<div><div>Spectrum Analyzer</div><div>EUT</div></div>			
Test procedure			
<div>1. EUT set to test mode (Communication tester is used if needed)</div> <div>2. Span set to at least twice the emission spectrum</div> <div>3. Resolution bandwidth set to 1 % of span</div> <div>4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function</div>			
Test results			
Channel	Frequency [MHz]	Mode	Occupied Bandwidth [kHz]
F <sub>LOW</sub>	2402	DH5-Sngl	1072.1
F <sub>MID</sub>	2441	DH5-Sngl	971.9
F <sub>HIGH</sub>	2480	DH5-Sngl	971.9
Comments:			

# Occupied Bandwidth – DH5-Sngl F<sub>Low</sub>

## Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1504-4714

Applicant: Dräger Safety AG & Co. KGaA  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Toralf Jahn  
Test Conditions: T<sub>nom</sub> / V<sub>nom</sub>  
Mode: Tx, BR, DH5, 2402 MHz  
Test Date: 2015-08-24  
Verdict: NONE (INFORMATION ONLY)  
Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used  
Note 2: radiated measurement



Test Report No.: G0M-1504-4714-TFC247BT-V02

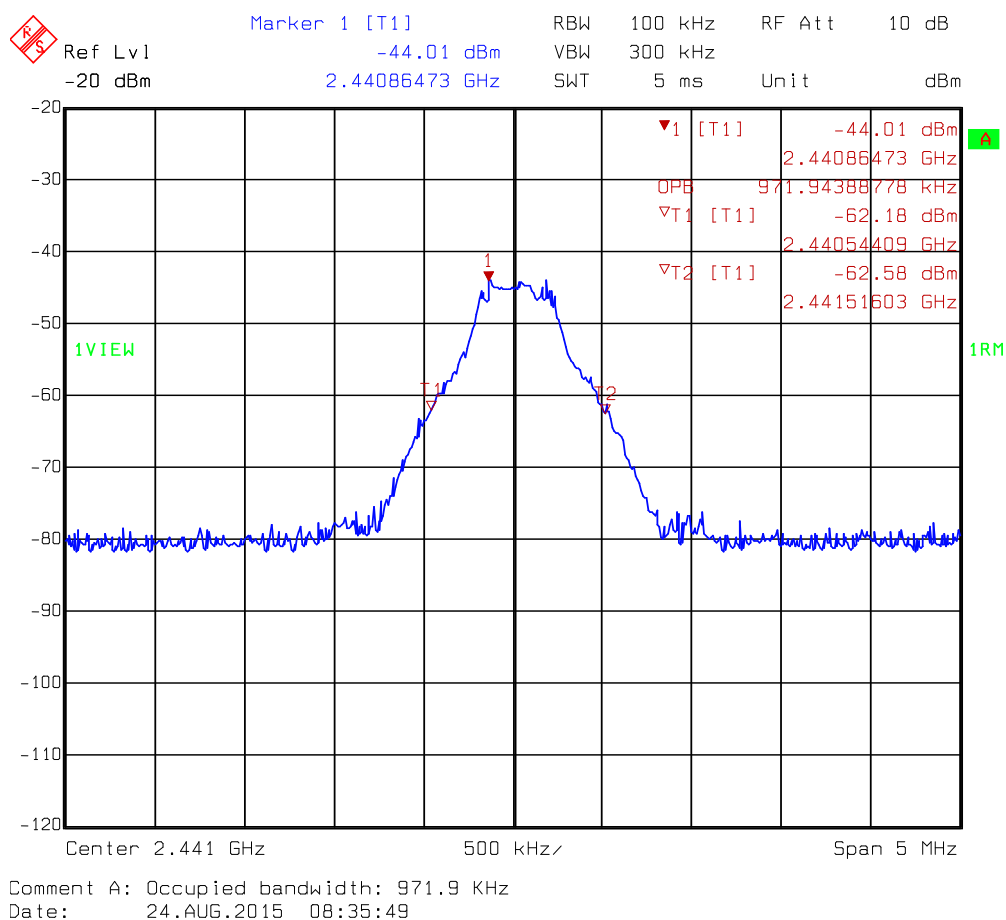
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

# Occupied Bandwidth – DH5-Sngl F<sub>MID</sub>

## Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1504-4714

Applicant: Dräger Safety AG & Co. KGaA  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Toralf Jahn  
Test Conditions: Tnom / Vnom  
Mode: Tx, BR, DH5, 2441 MHz  
Test Date: 2015-08-24  
Verdict: NONE (INFORMATION ONLY)  
Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used  
Note 2: radiated measurement



Test Report No.: G0M-1504-4714-TFC247BT-V02

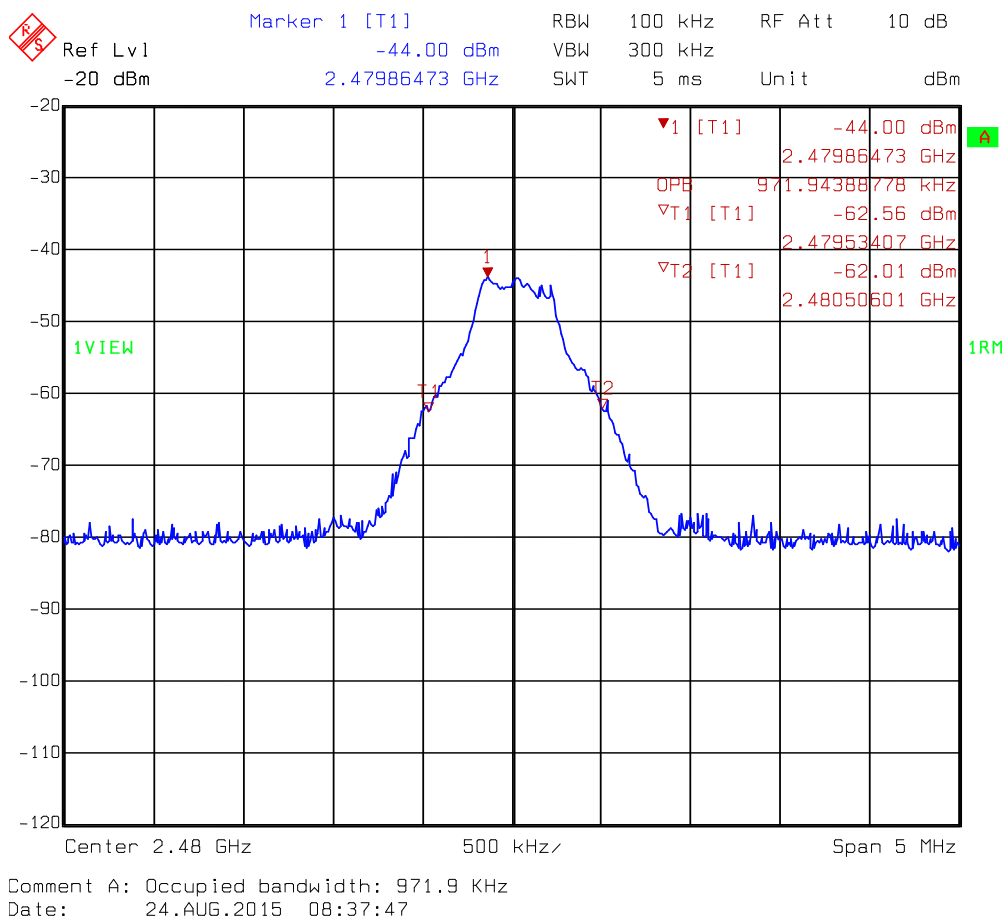
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

# Occupied Bandwidth – DH5-Sngl F<sub>HIGH</sub>

## Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1504-4714

Applicant: Dräger Safety AG & Co. KGaA  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Toralf Jahn  
Test Conditions: Tnom / Vnom  
Mode: Tx, BR, DH5, 2480 MHz  
Test Date: 2015-08-24  
Verdict: NONE (INFORMATION ONLY)  
Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used  
Note 2: radiated measurement



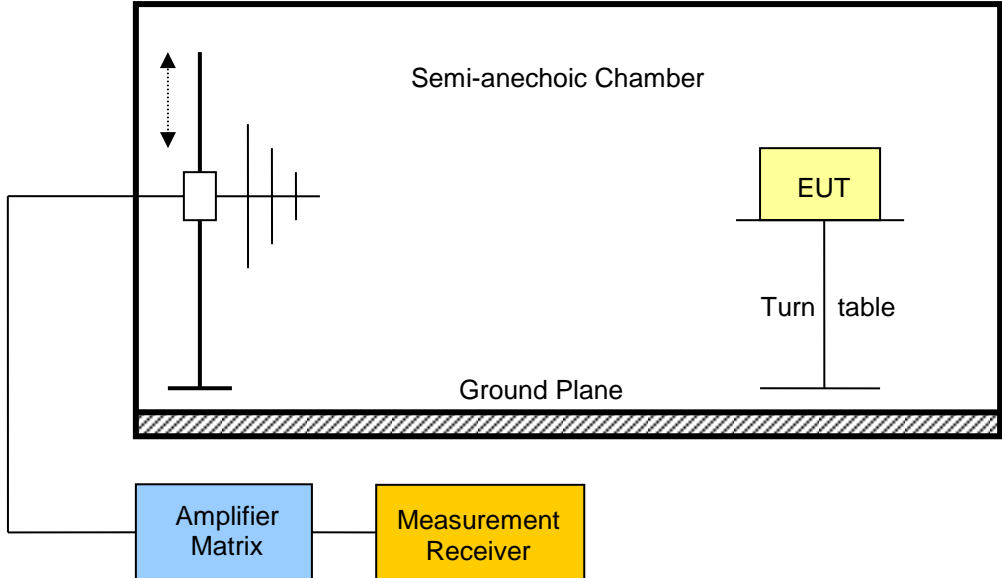
Test Report No.: G0M-1504-4714-TFC247BT-V02

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

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

Transmitter radiated emissions acc. to FCC 47 CFR 15.247 / IC RSS-247				Verdict: PASS
Test according referenced standards	Reference Method			
	FCC 15.247(d) / IC RSS-247 5.5			
Test according to measurement reference	Reference Method			
	ANSI C63.10			
Test frequency range	Tested frequencies			
	30 MHz – 10 <sup>th</sup> Harmonic			
Limits				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3

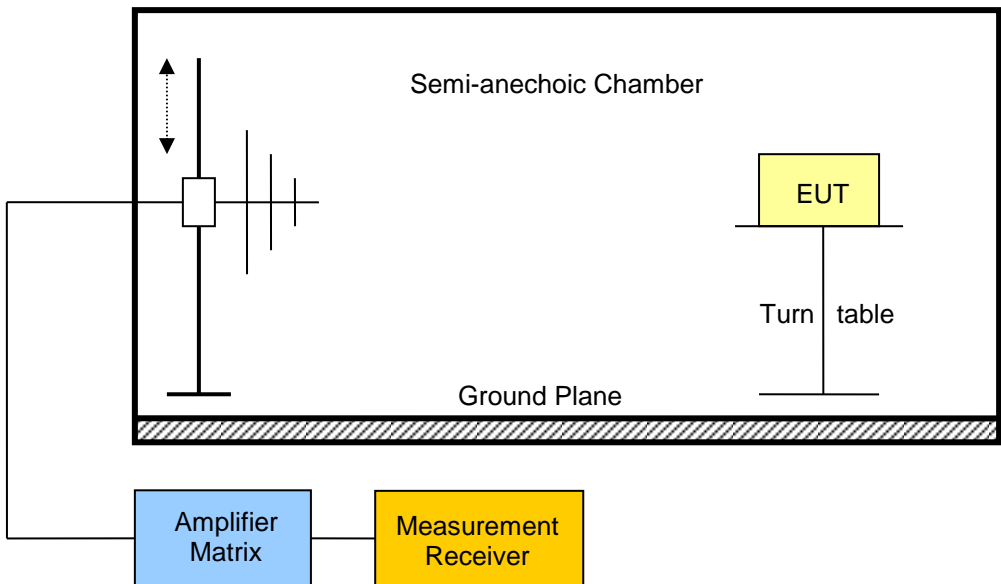
Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

Test setup	
	



Test procedure									
<ol style="list-style-type: none"> <li>1. EUT set to test mode (Communication tester is used if needed)</li> <li>2. Span it set according to measurement range</li> <li>3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz</li> <li>4. Markers are set to peak emission levels within restricted bands</li> </ol>									
Test results – Internal Antenna									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Limit dist. [m]*	Margin [dB]
F <sub>LOW</sub>	2402	DH5-Sngl	2376	49.63	pk	hor	74.00	3	-24.37
F <sub>LOW</sub>	2402	DH5-Sngl	2376	39.39	RMS	hor	54.00	3	-14.61
F <sub>LOW</sub>	2402	DH5-Sngl	2376	49.62	pk	ver	74.00	3	-24.38
F <sub>LOW</sub>	2402	DH5-Sngl	2376	39.38	RMS	ver	54.00	3	-14.62
F <sub>LOW</sub>	2402	DH5-Sngl	17964	48.87	pk	hor	74.00	3	-25.13
F <sub>LOW</sub>	2402	DH5-Sngl	17988	48.83	pk	ver	74.00	3	-25.17
F <sub>MID</sub>	2441	DH5-Sngl	17964	48.76	pk	ver	74.00	3	-25.24
F <sub>MID</sub>	2441	DH5-Sngl	17988	48.67	pk	hor	74.00	3	-25.33
F <sub>HIGH</sub>	2480	DH5-Sngl	37.82	27.35	pk	ver	40.00	3	-12.65
F <sub>HIGH</sub>	2480	DH5-Sngl	2483.5	65.78	pk	hor	74.00	3	-08.22
F <sub>HIGH</sub>	2480	DH5-Sngl	2483.5	42.74	RMS	hor	54.00	3	-11.26
F <sub>HIGH</sub>	2480	DH5-Sngl	2483.5	64.50	pk	ver	74.00	3	-09.50
F <sub>HIGH</sub>	2480	DH5-Sngl	2483.5	42.32	RMS	ver	54.00	3	-11.68
F <sub>HIGH</sub>	2480	DH5-Sngl	17964	48.36	pk	hor	74.00	3	-25.64
F <sub>HIGH</sub>	2480	DH5-Sngl	17964	49.24	pk	ver	74.00	3	-24.76
Comments: * Physical distance between EUT and measurement antenna.									

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

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

Test procedure							
<ol style="list-style-type: none"> <li>1. EUT set to receive mode (Communication tester is used if needed)</li> <li>2. Span it set according to measurement range</li> <li>3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz</li> <li>4. Markers are set to peak emission levels</li> </ol>							
Test results							
Channel	Frequency [MHz]	Emission [MHz]	Emission Level [dB $\mu$ V/m]	Polarisation	Det.	Limit [dB $\mu$ V/m]	Margin [dB $\mu$ V/m]
F <sub>MID</sub>	2441	189.8	33.34	hor	pk	43.50	-10.16 dB
F <sub>MID</sub>	2441	199.66	34.19	ver	pk	43.50	-9.31 dB
F <sub>MID</sub>	2441	889.6	26.13	ver	pk	46.00	-19.87 dB
F <sub>MID</sub>	2441	905.737	29.15	hor	pk	46.00	-16.85 dB
F <sub>MID</sub>	2441	3802	39.85	hor	pk	53.98	-14.13 dB
F <sub>MID</sub>	2441	3958	40.21	ver	pk	53.98	-13.77 dB
F <sub>MID</sub>	2441	7944	49.83	hor	pk	53.98	-4.15 dB
F <sub>MID</sub>	2441	7968	48.93	ver	pk	53.98	-5.05 dB
F <sub>MID</sub>	2441	11031	43.54	ver	pk	53.98	-10.44 dB
F <sub>MID</sub>	2441	11393	43.92	hor	pk	53.98	-10.06 dB
Comments: * Physical distance between EUT and measurement antenna. ** Emission level corresponds to ambient noise floor							

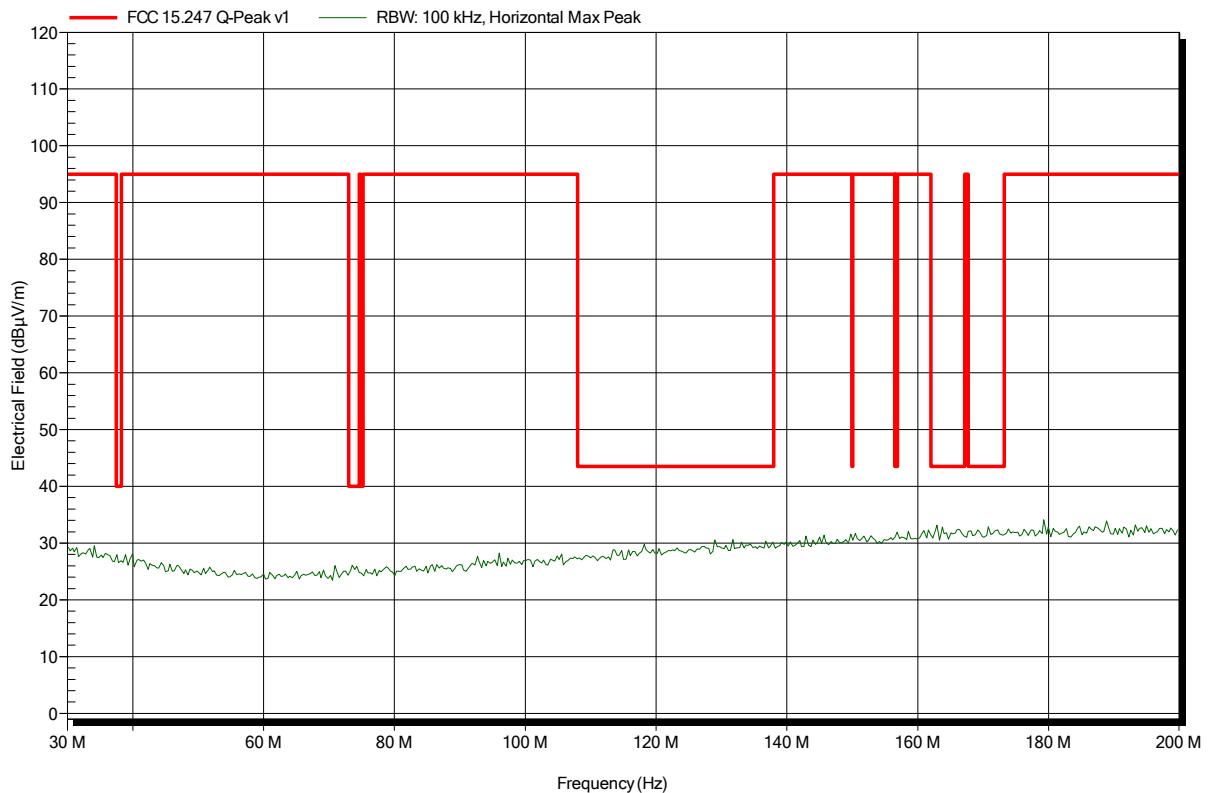
## ANNEX A Transmitter radiated spurious emissions

### Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HK 116, Horizontal  
 Measurement distance: 3 m  
 Mode: TX; Ch 40, EUT vertical  
 Test Date: 2015-08-18  
 Note:

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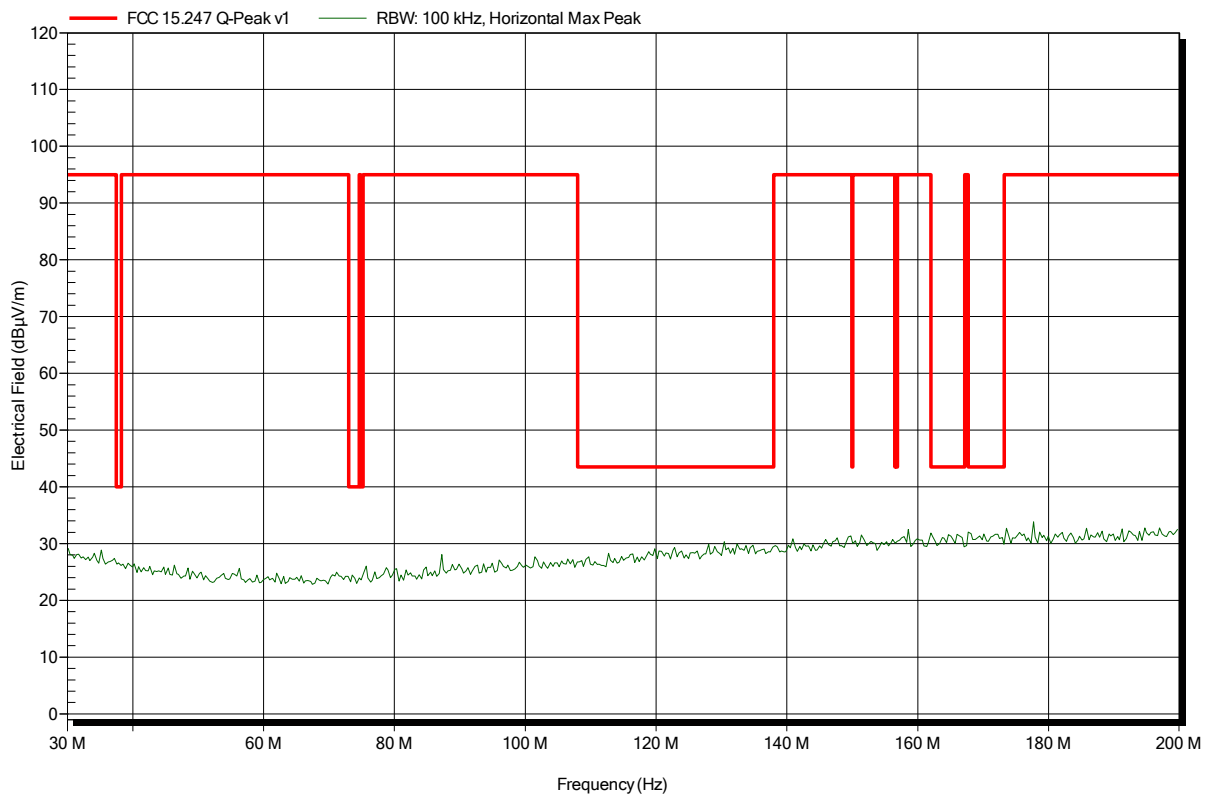


**Spurious emissions according to FCC 15.247**

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HK 116, Horizontal  
 Measurement distance: 3 m  
 Mode: TX; Ch 0, EUT vertical  
 Test Date: 2015-08-18  
 Note:

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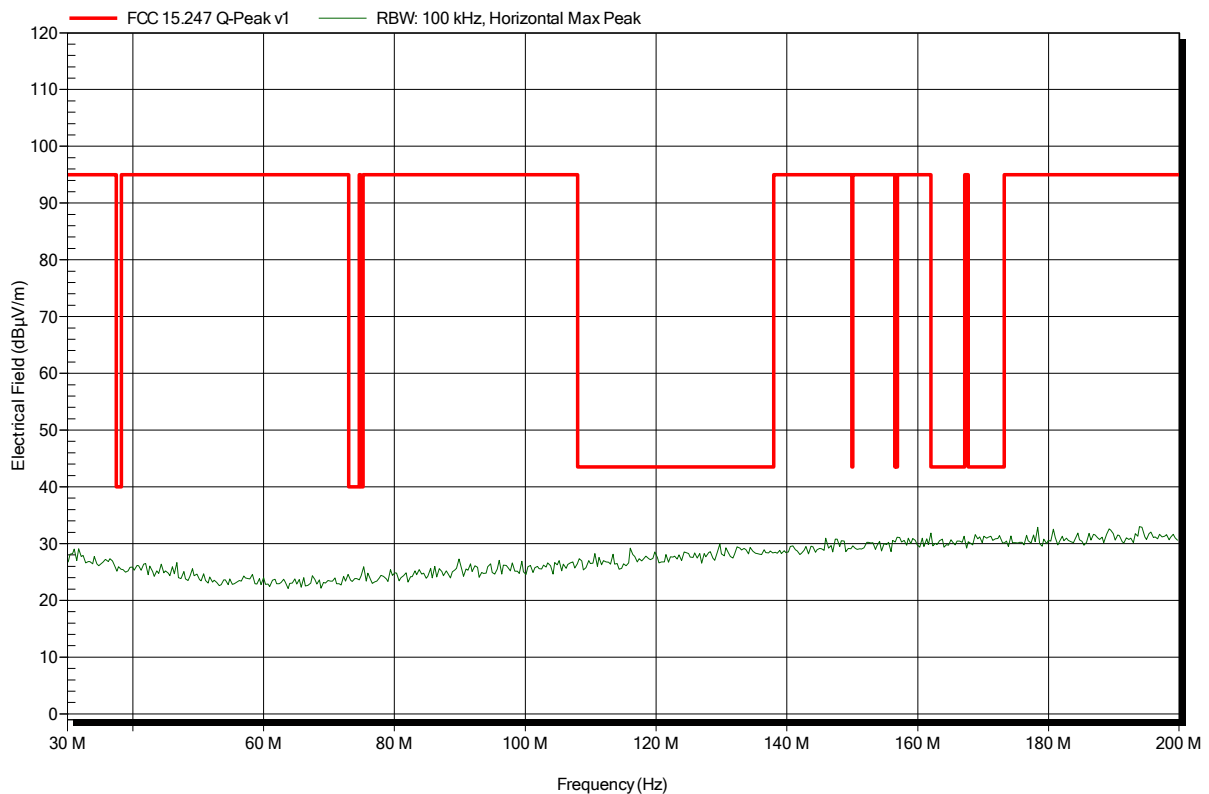


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HK 116, Horizontal  
Measurement distance: 3 m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-18  
Note:

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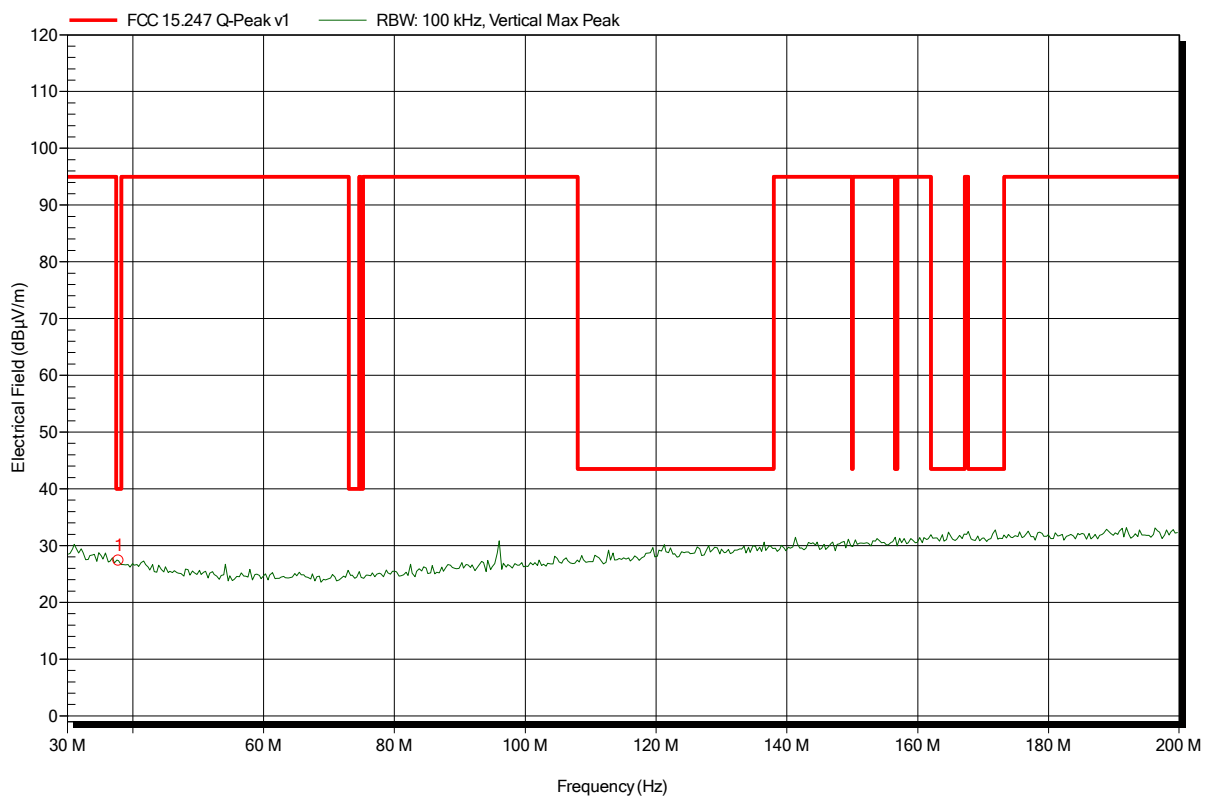


**Spurious emissions according to FCC 15.247**

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HK 116, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
37.82 MHz	27.35 dBµV/m	40 dBµV/m	-12.65 dB	Pass

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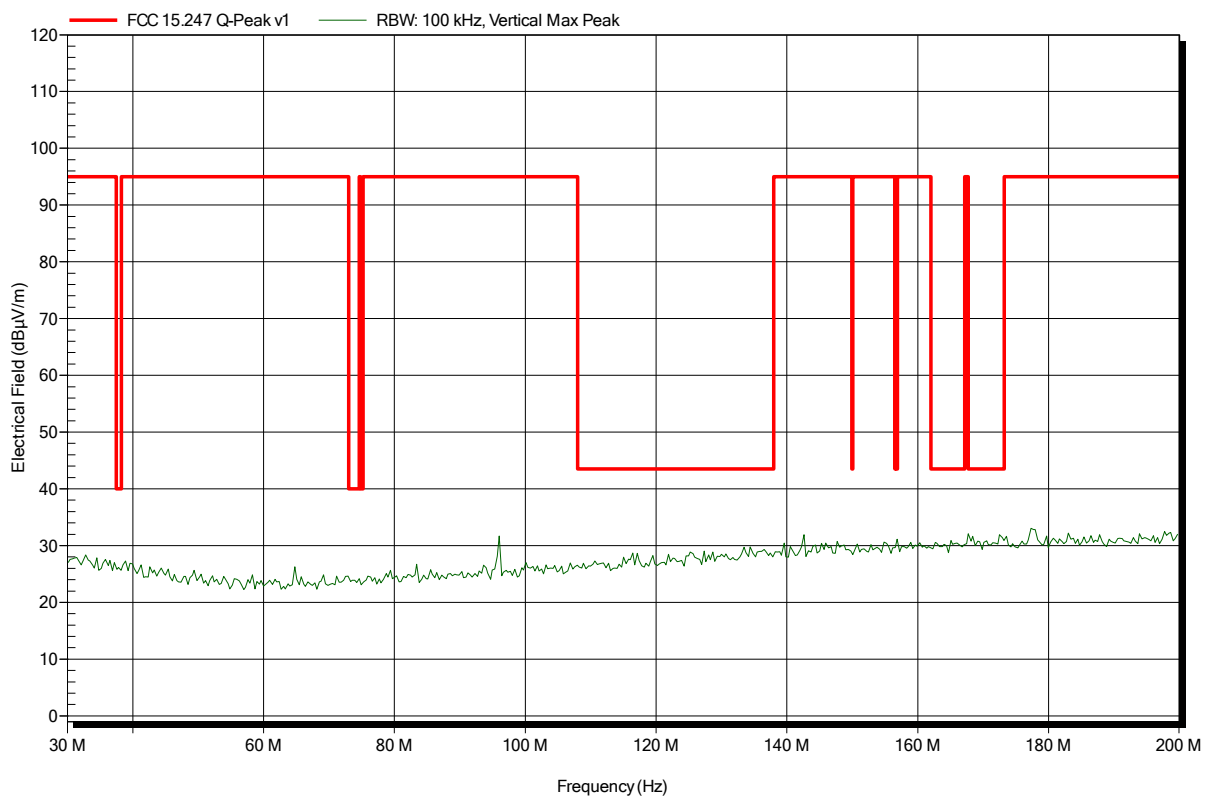
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

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Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HK 116, Vertical  
 Measurement distance: 3 m  
 Mode: TX; Ch 0, EUT vertical  
 Test Date: 2015-08-18  
 Note:

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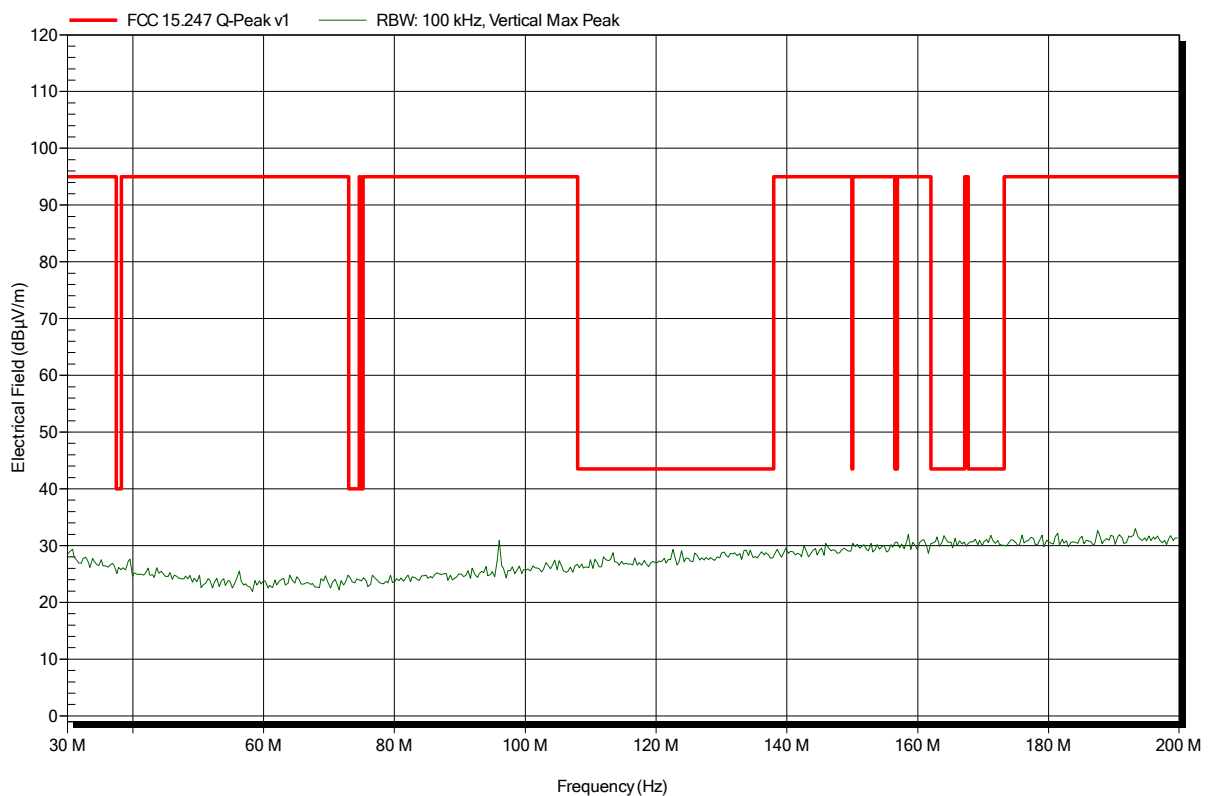


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HK 116, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-18  
Note:

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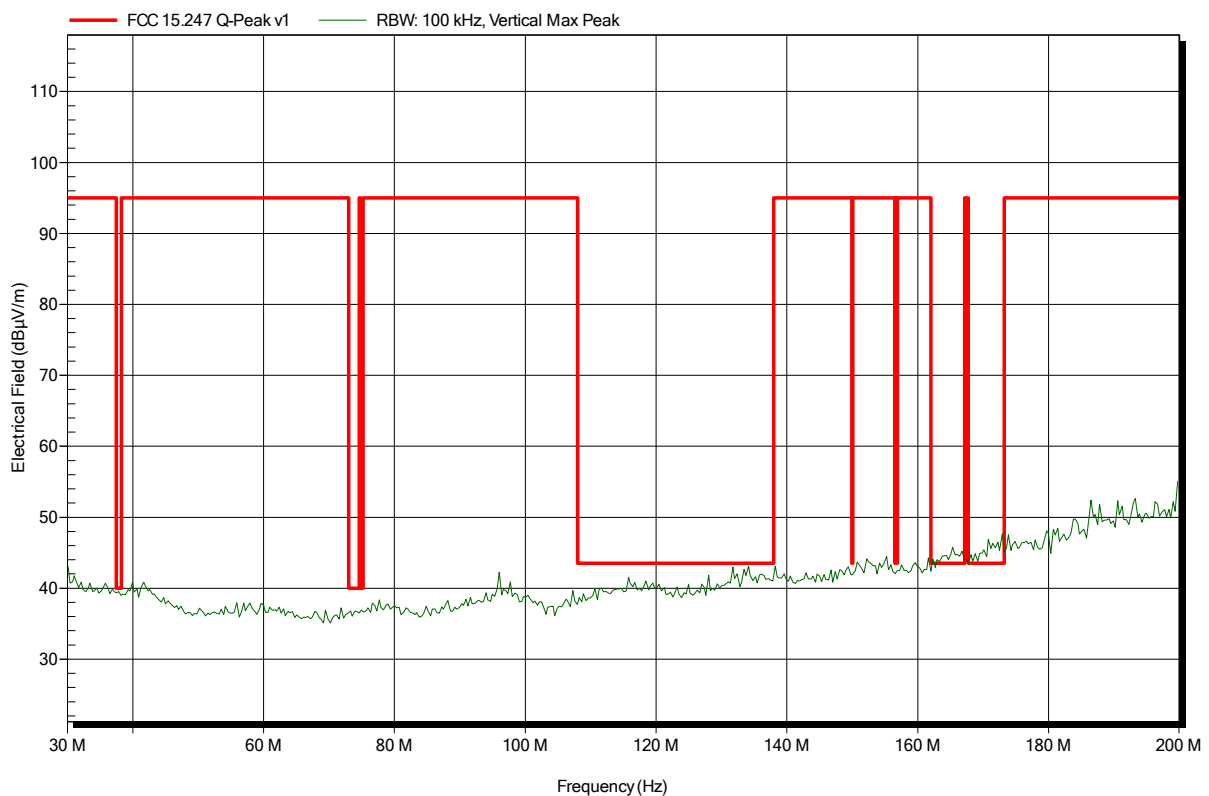


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HK 116, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-18  
Note:

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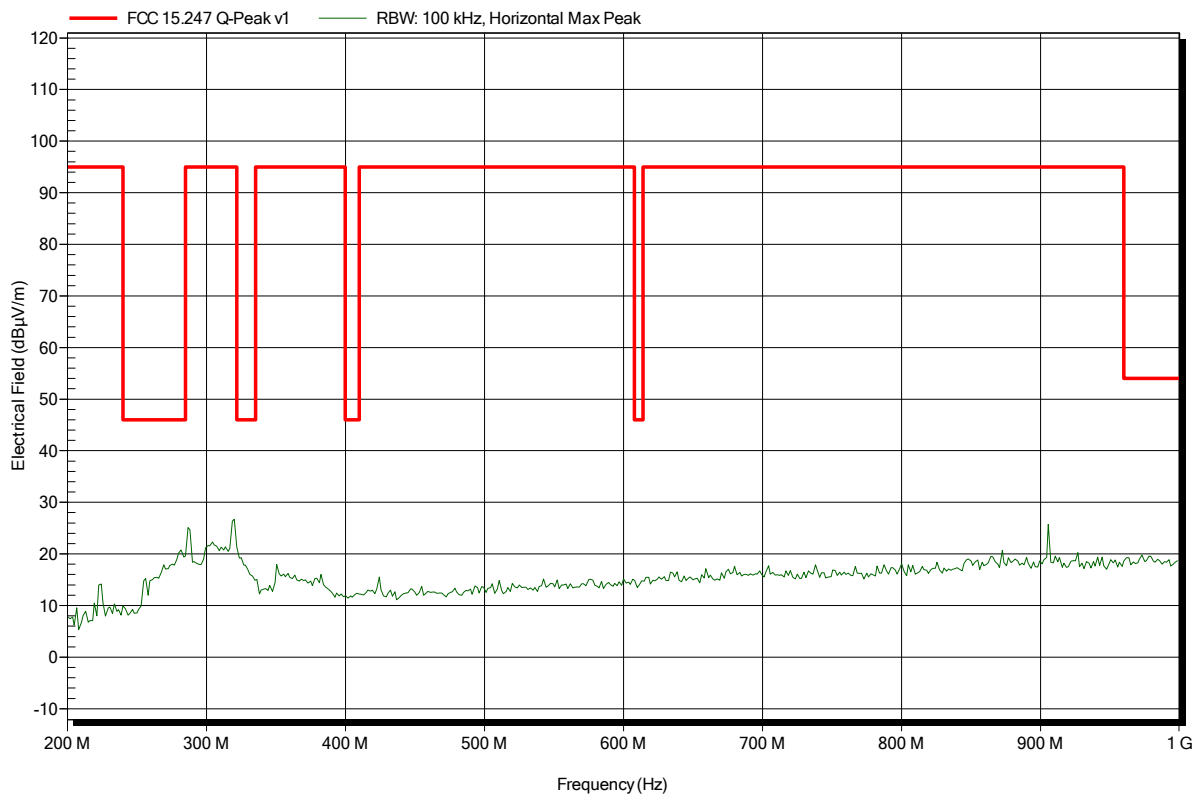


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Horizontal  
Measurement distance: 3 m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-18  
Note:

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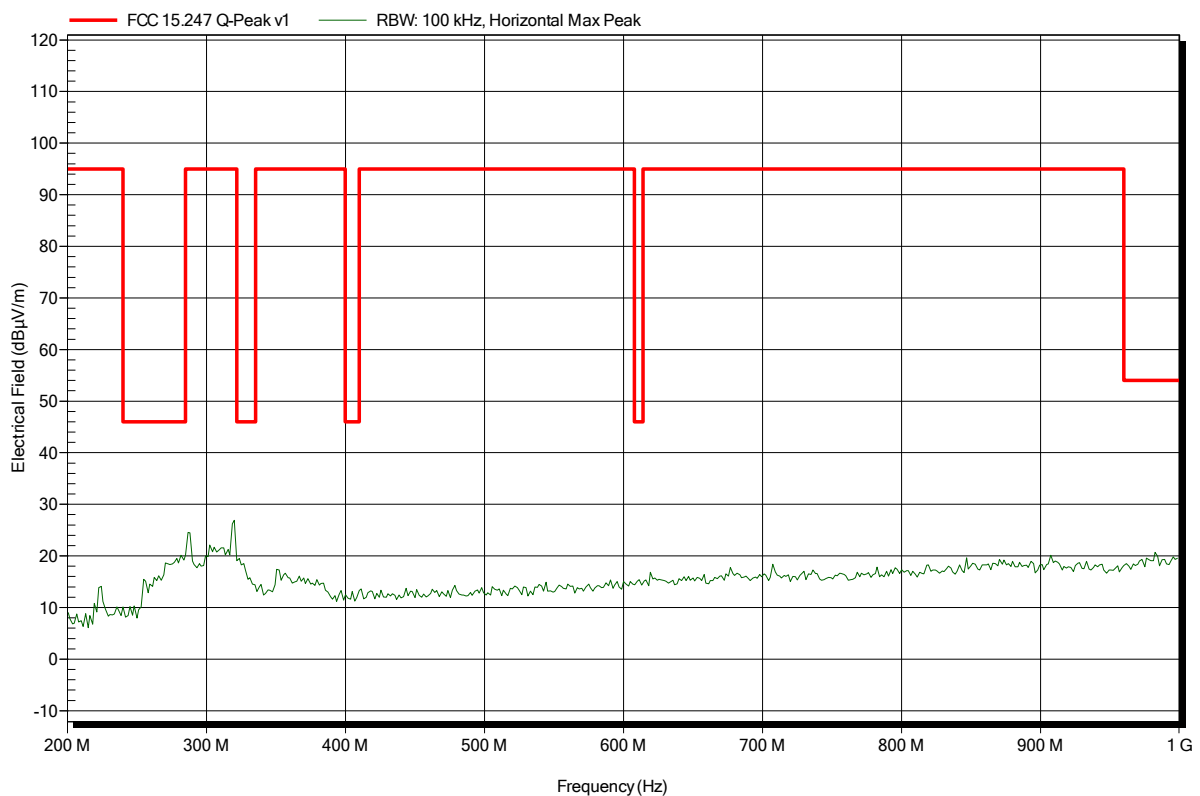


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HL 223, Horizontal  
 Measurement distance: 3 m  
 Mode: TX; Ch 40, EUT vertical  
 Test Date: 2015-08-18  
 Note:

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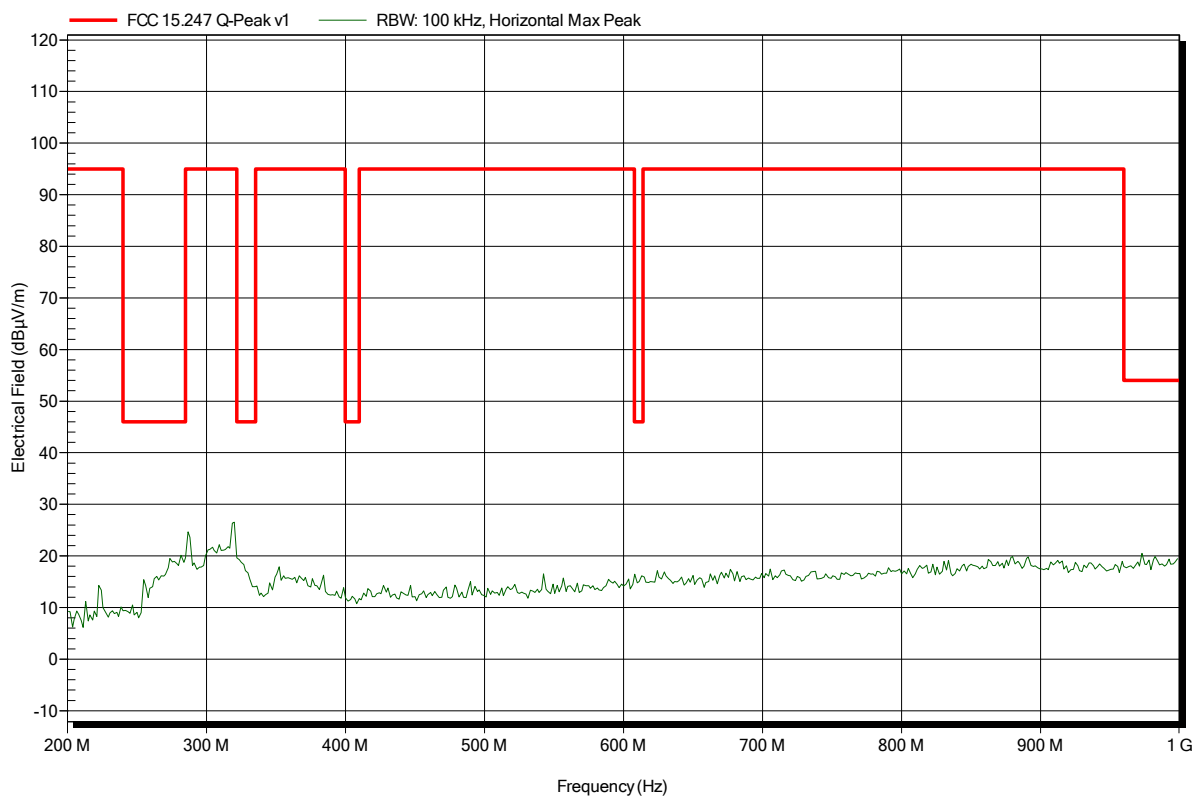


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Horizontal  
Measurement distance: 3 m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-18  
Note:

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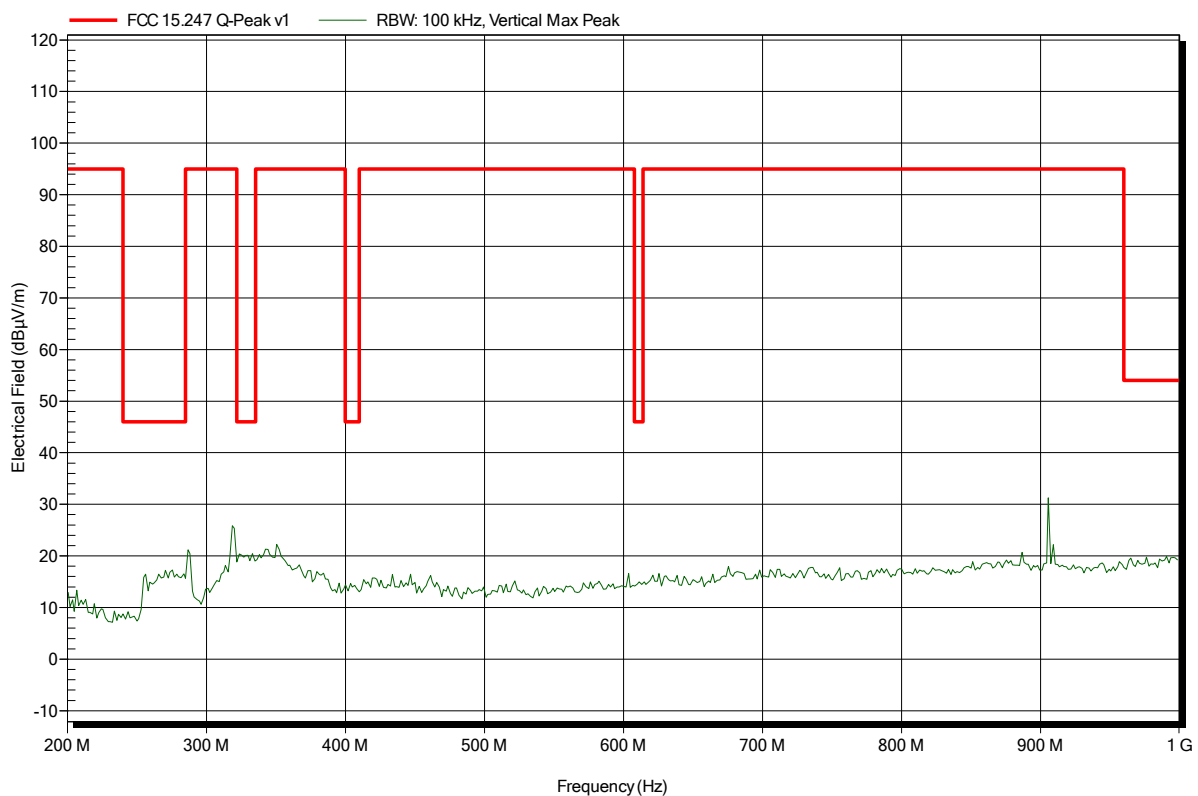


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-18  
Note:

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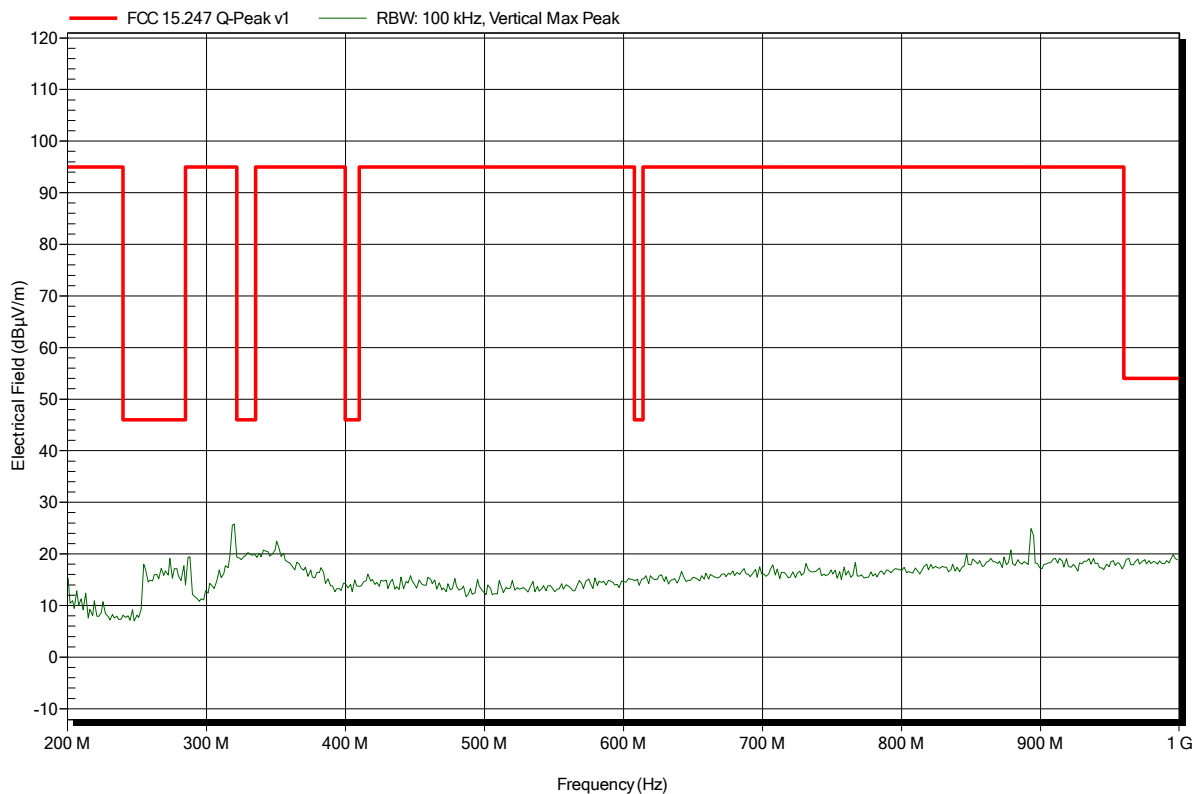


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-18  
Note:

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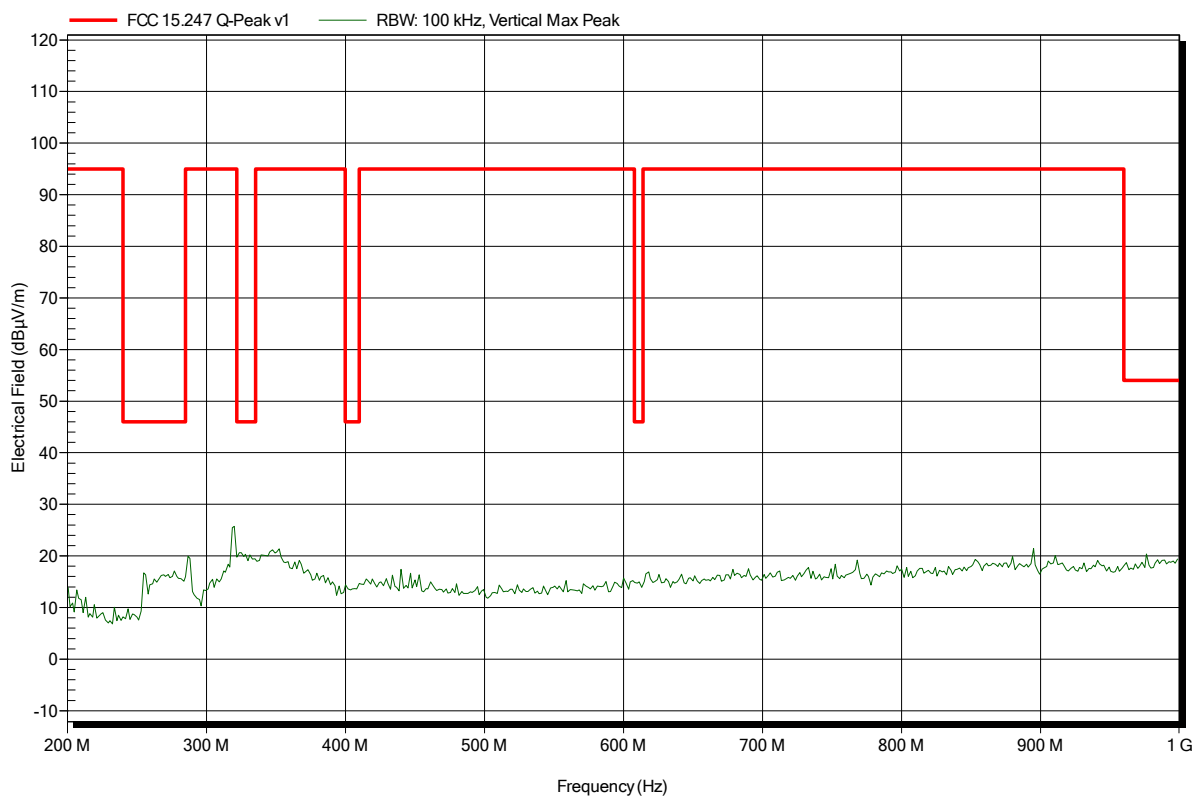


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HL 223, Vertical  
 Measurement distance: 3 m  
 Mode: TX; Ch 0, EUT vertical  
 Test Date: 2015-08-18  
 Note:

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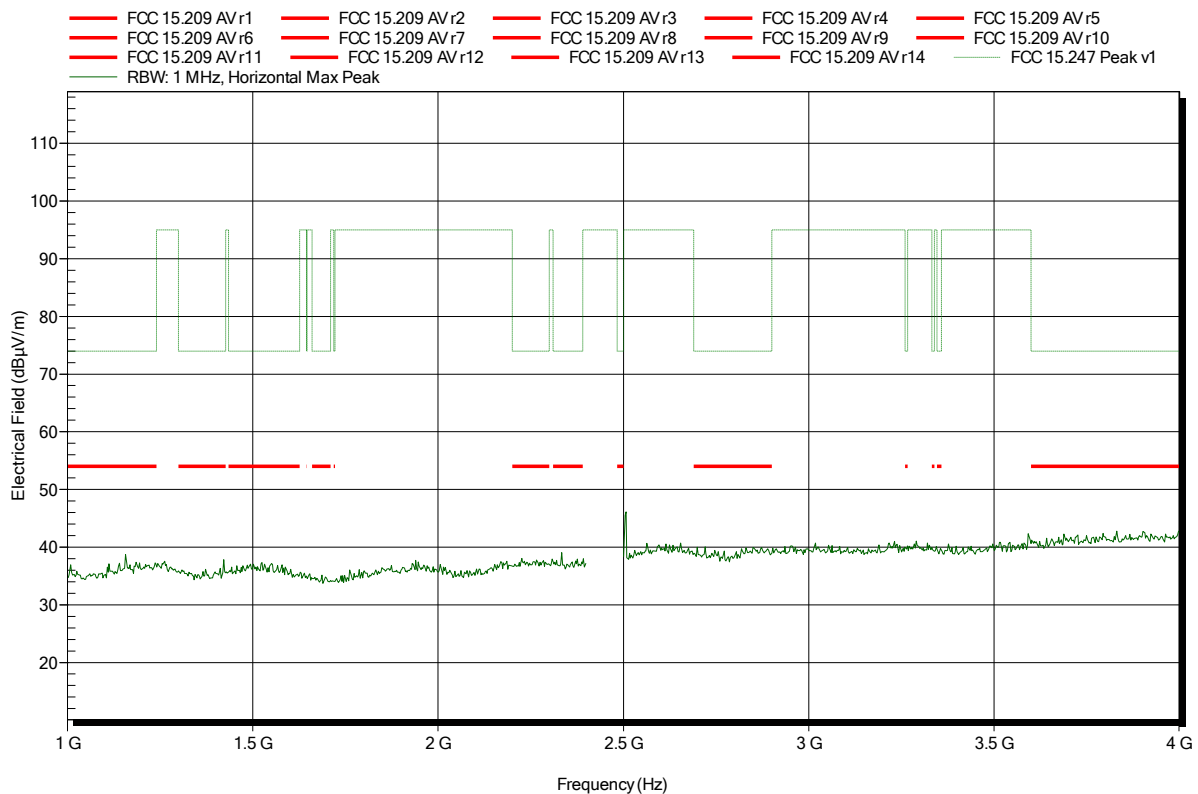


**Spurious emissions according to FCC 15.247**

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 3 m  
 Mode: TX; Ch 78, EUT vertical  
 Test Date: 2015-08-17  
 Note:

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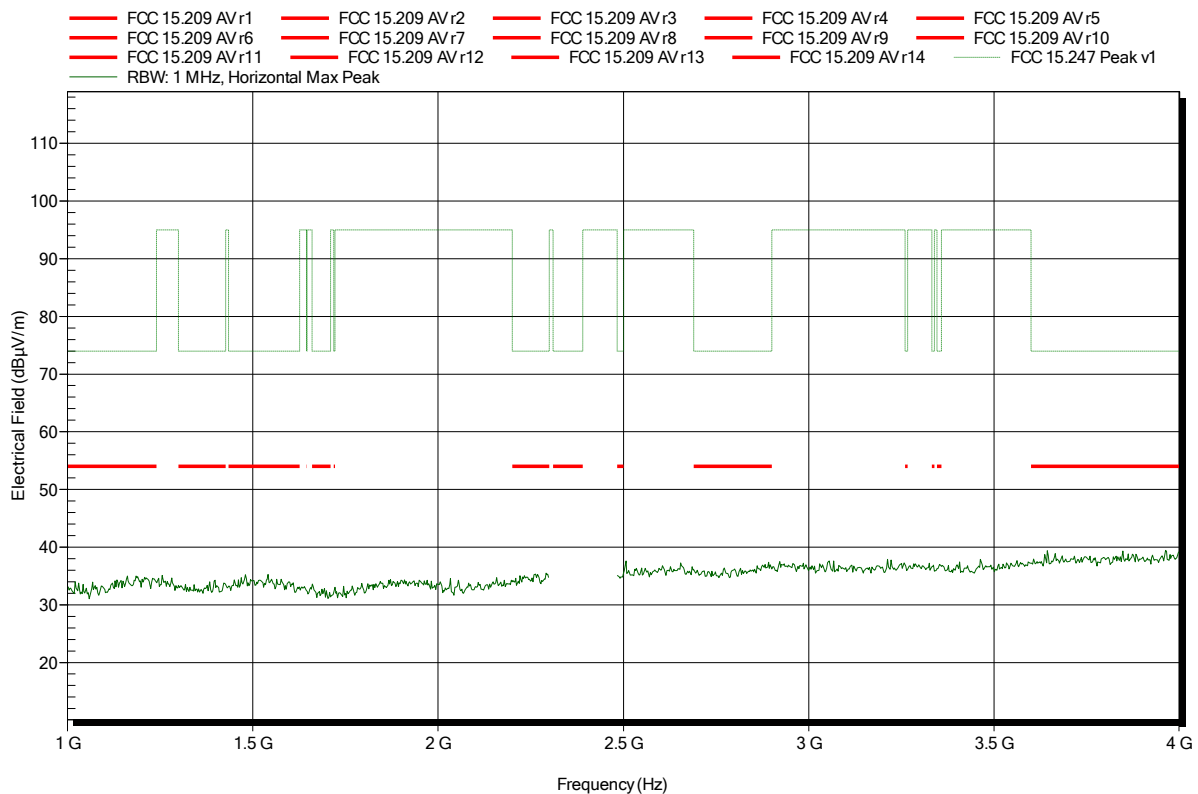


**Spurious emissions according to FCC 15.247**

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 3 m  
 Mode: TX; Ch 0, EUT vertical  
 Test Date: 2015-08-17  
 Note:

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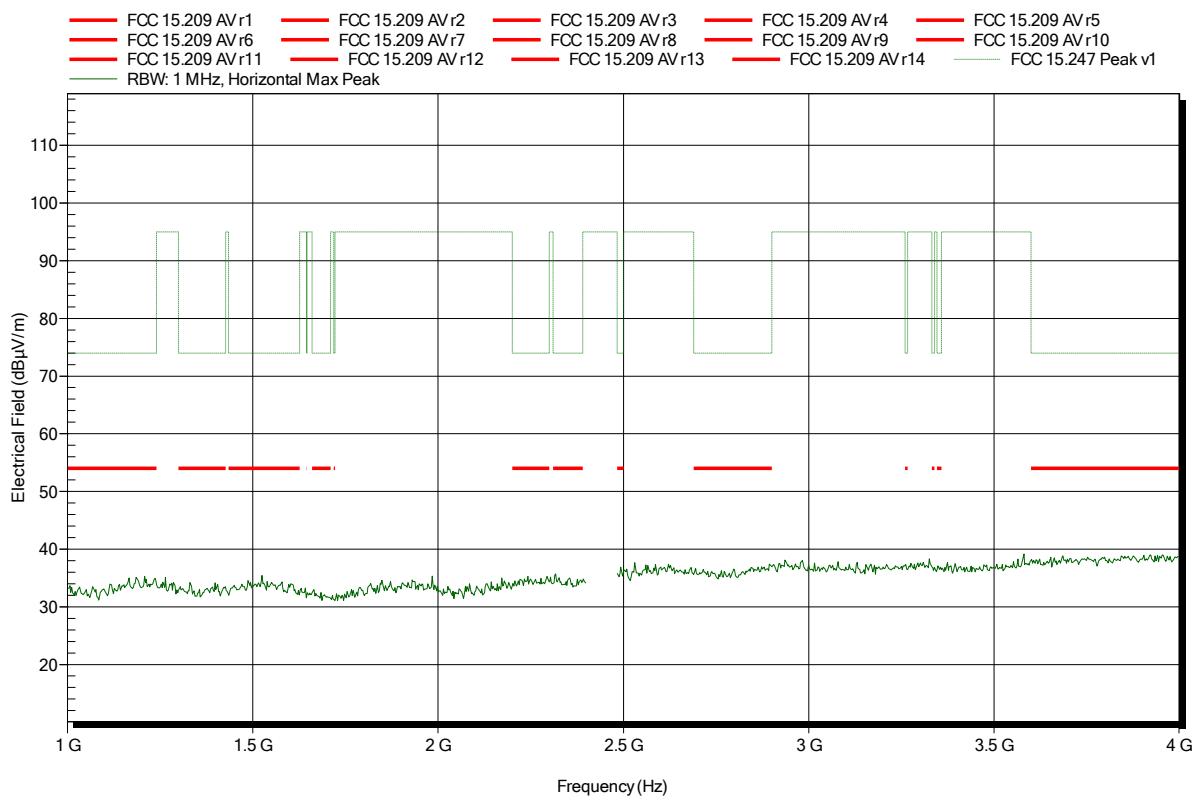


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 3 m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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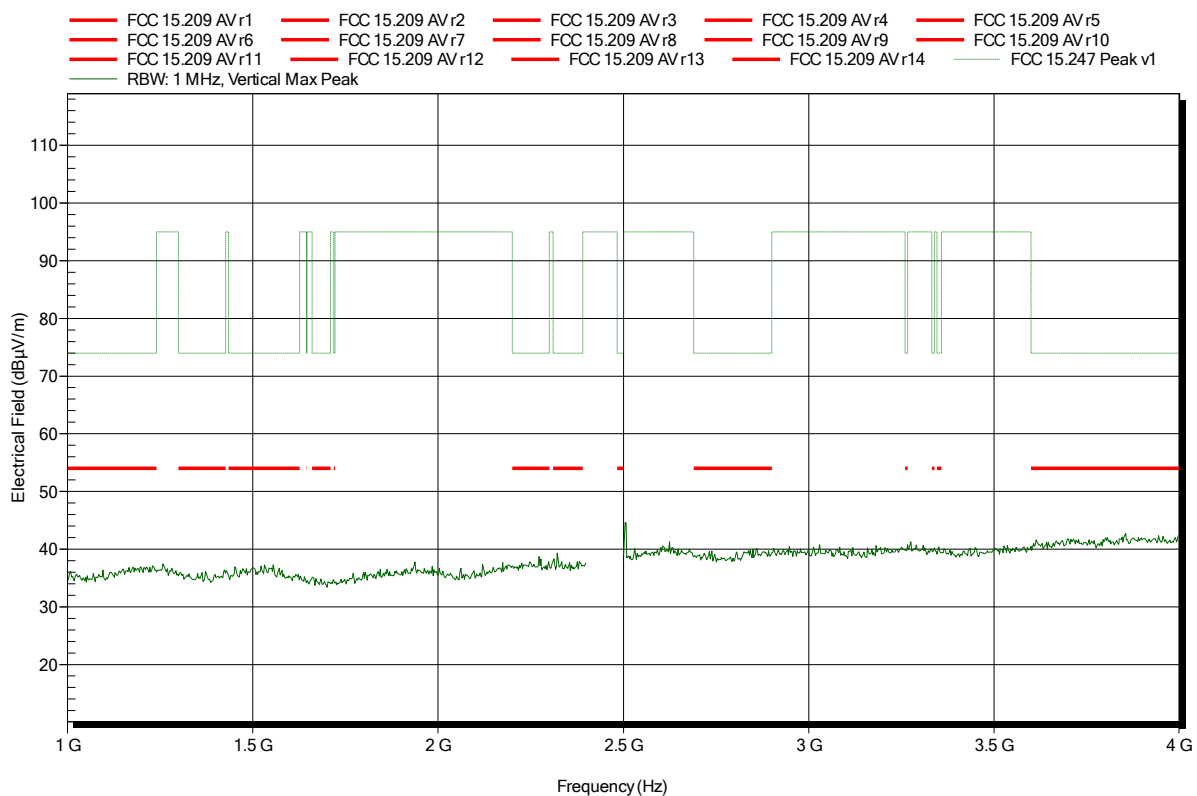


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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Test Report No.: G0M-1504-4714-TFC247BT-V02

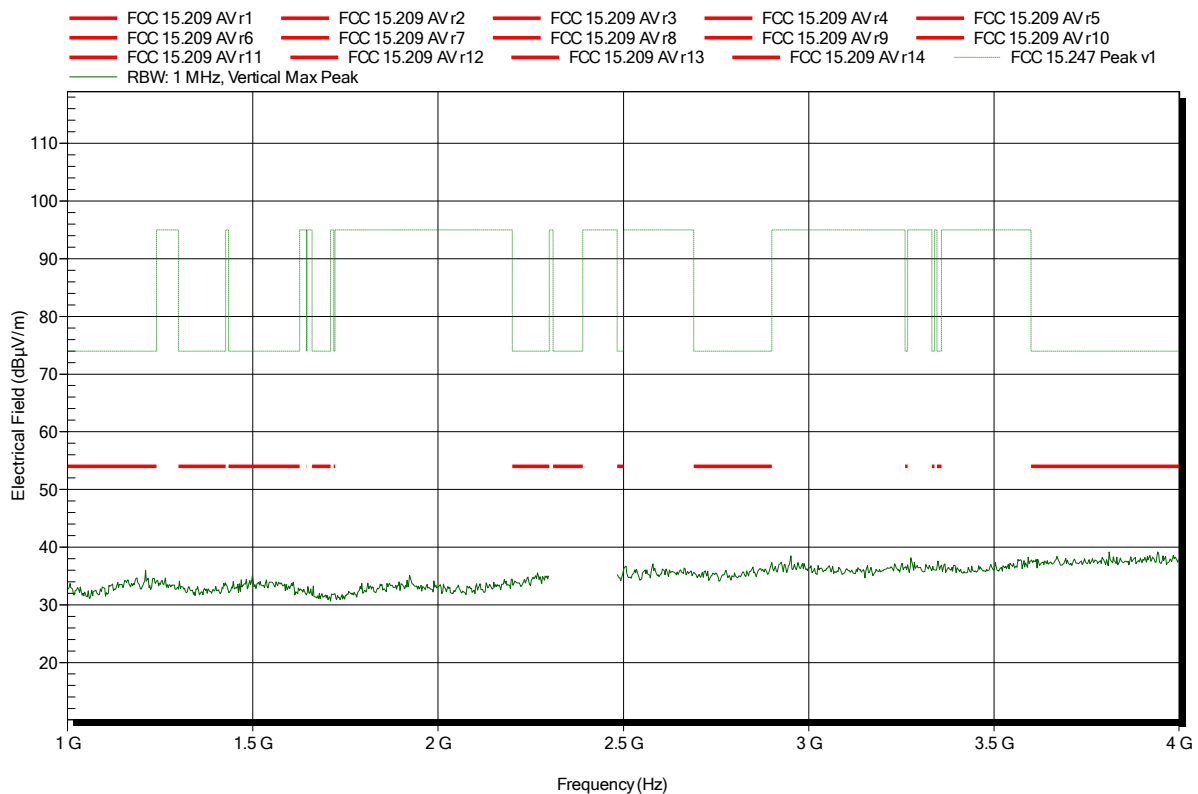
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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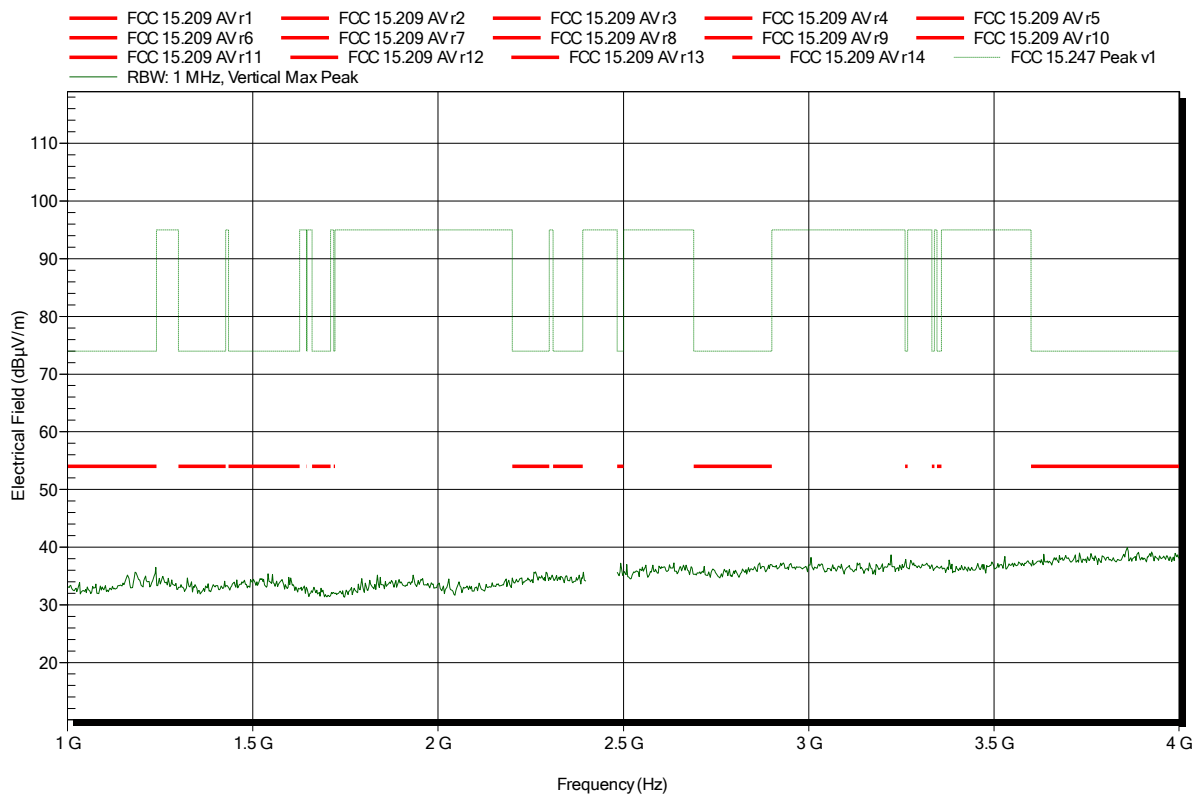


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 3 m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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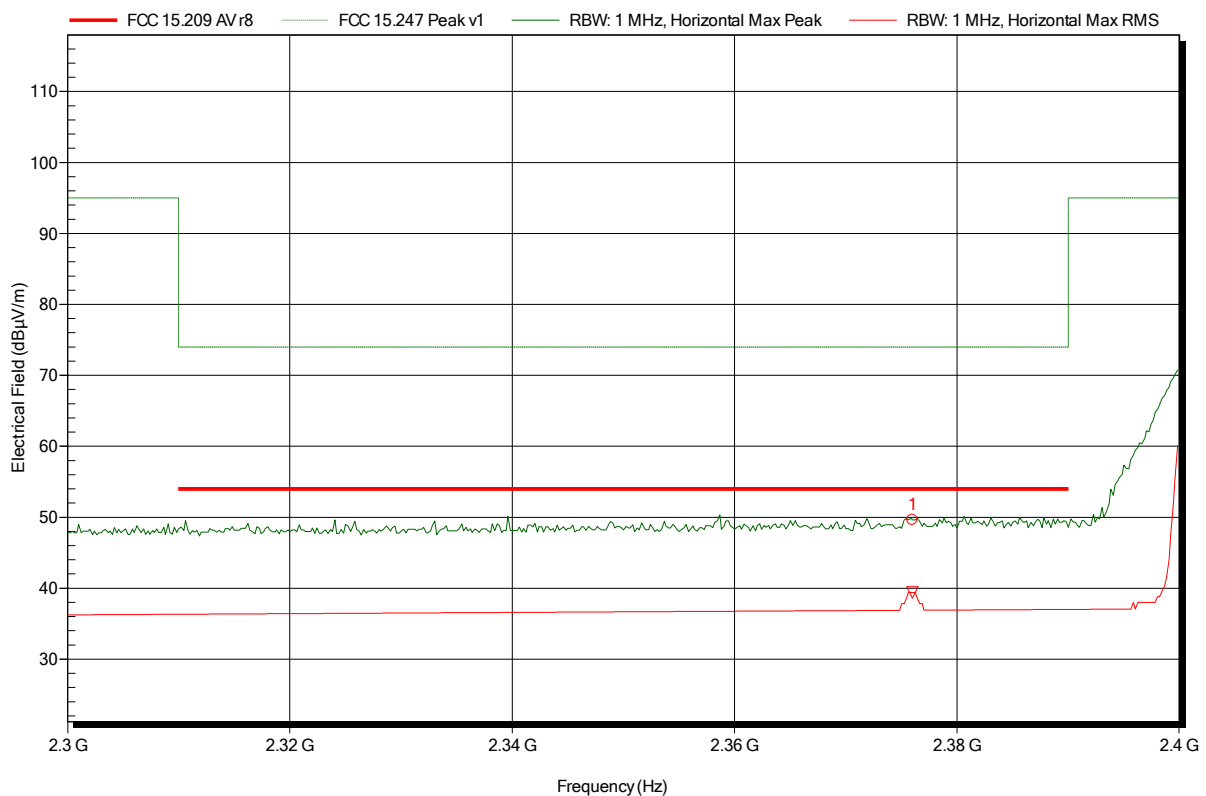


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note: lower bandedge

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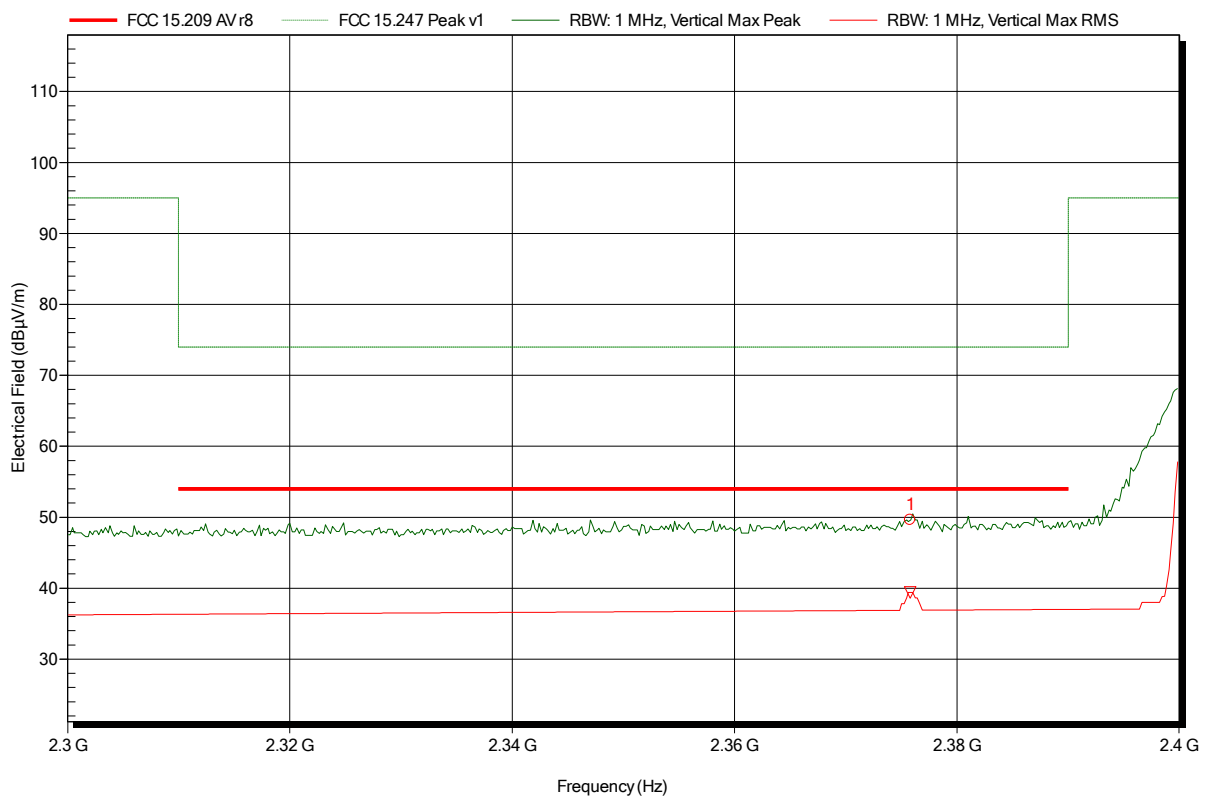
Frequency 2.376 GHz	Peak 49.63 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -24.37 dB	Peak Status Pass
Frequency 2.376 GHz	RMS 39.39 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -14.61 dB	RMS Status Pass

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note: lower bandedge

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Frequency 2.376 GHz	Peak 49.62 dBμV/m	Peak Limit 74 dBμV/m	Peak Difference -24.38 dB	Peak Status Pass
Frequency 2.376 GHz	RMS 39.38 dBμV/m	RMS Limit 54 dBμV/m	RMS Difference -14.62 dB	RMS Status Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

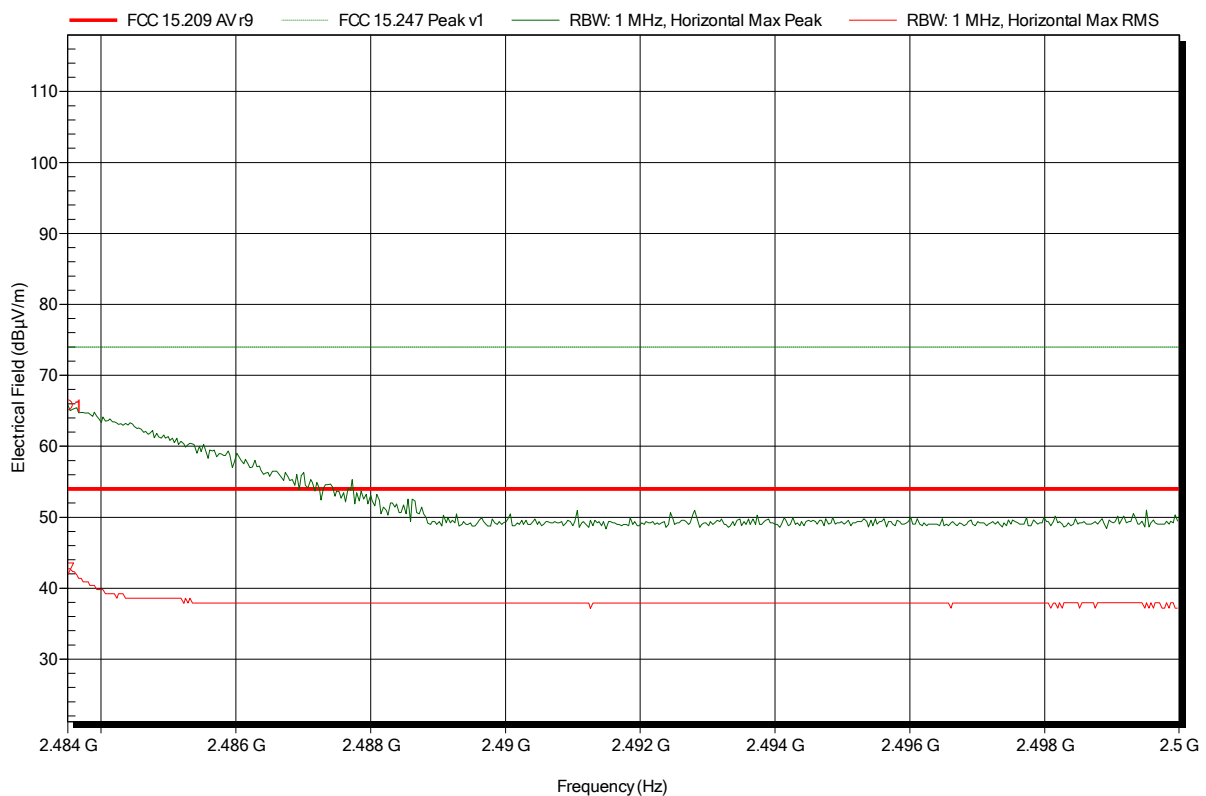


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note: upper bandedge

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Frequency 2.4835 GHz	Peak 65.78 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -8.22 dB	Peak Status Pass
Frequency 2.4835 GHz	RMS 42.74 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -11.26 dB	RMS Status Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

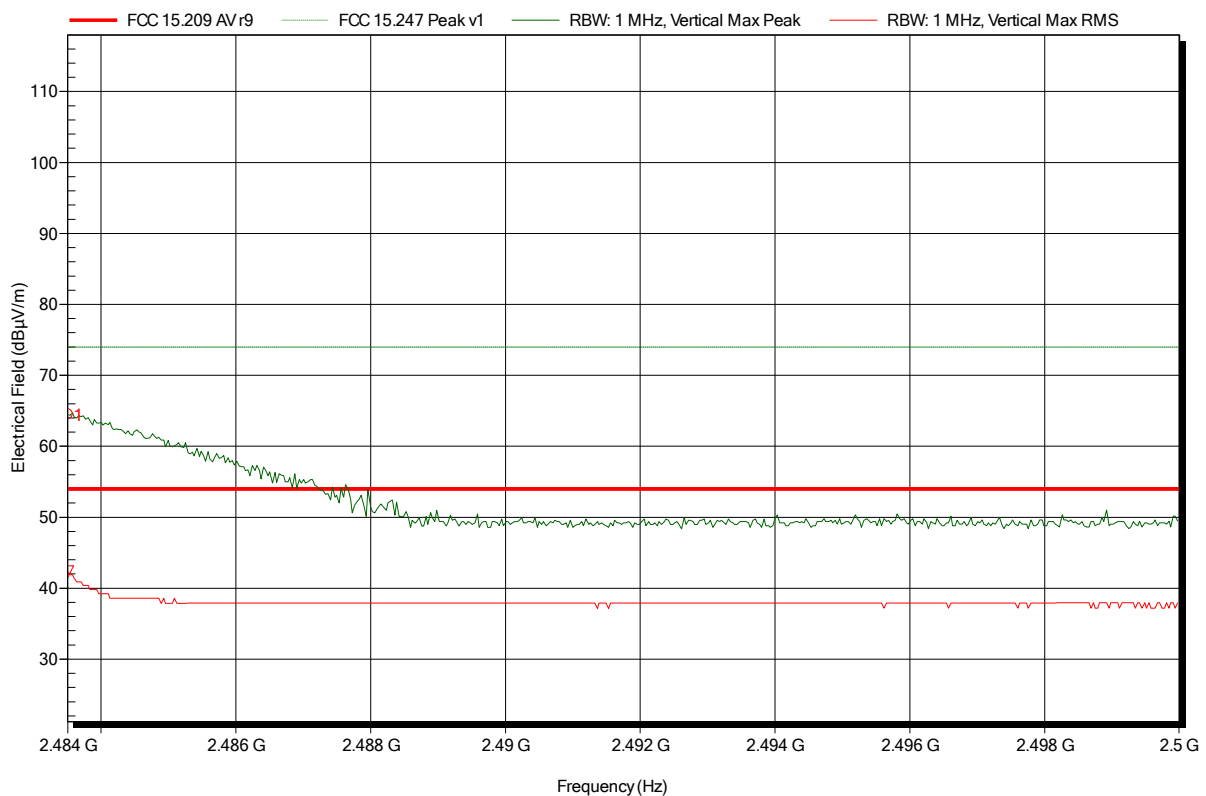
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note: upper bandedge

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Frequency 2.4835 GHz	Peak 64.5 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -9.5 dB	Peak Status Pass
Frequency 2.4835 GHz	RMS 42.32 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -11.68 dB	RMS Status Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

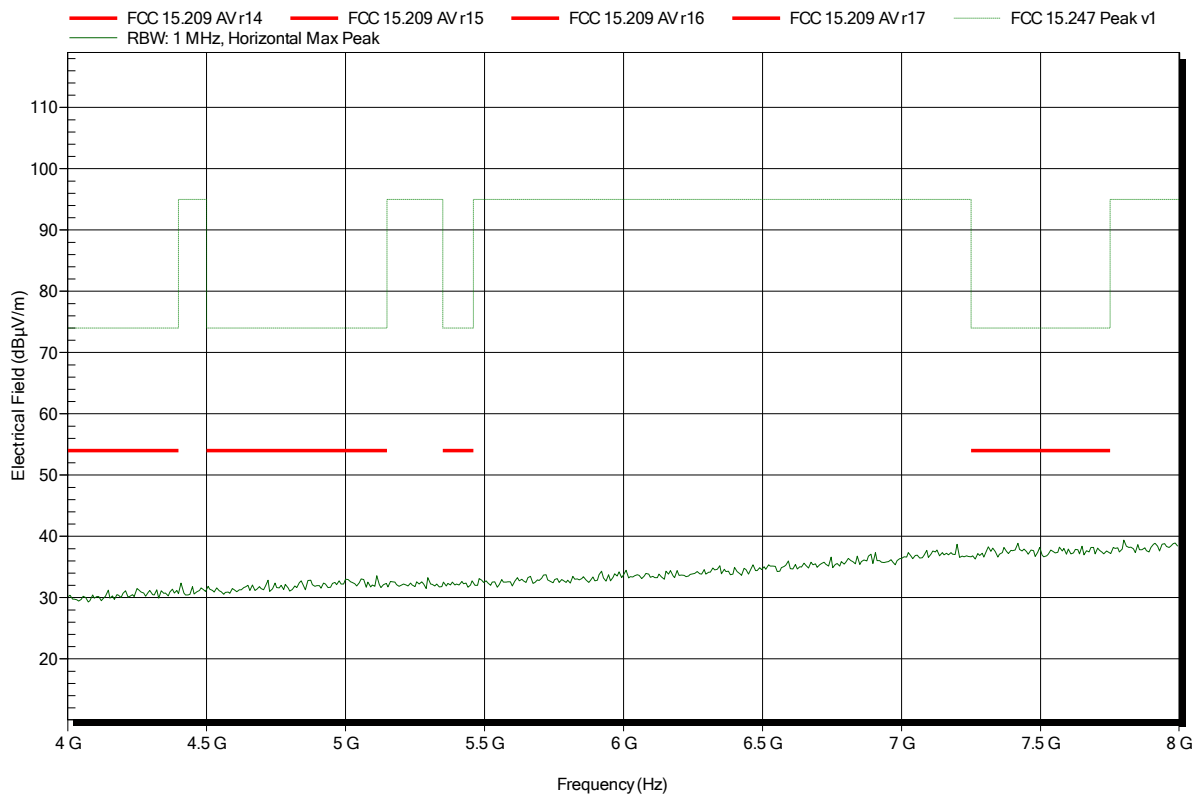
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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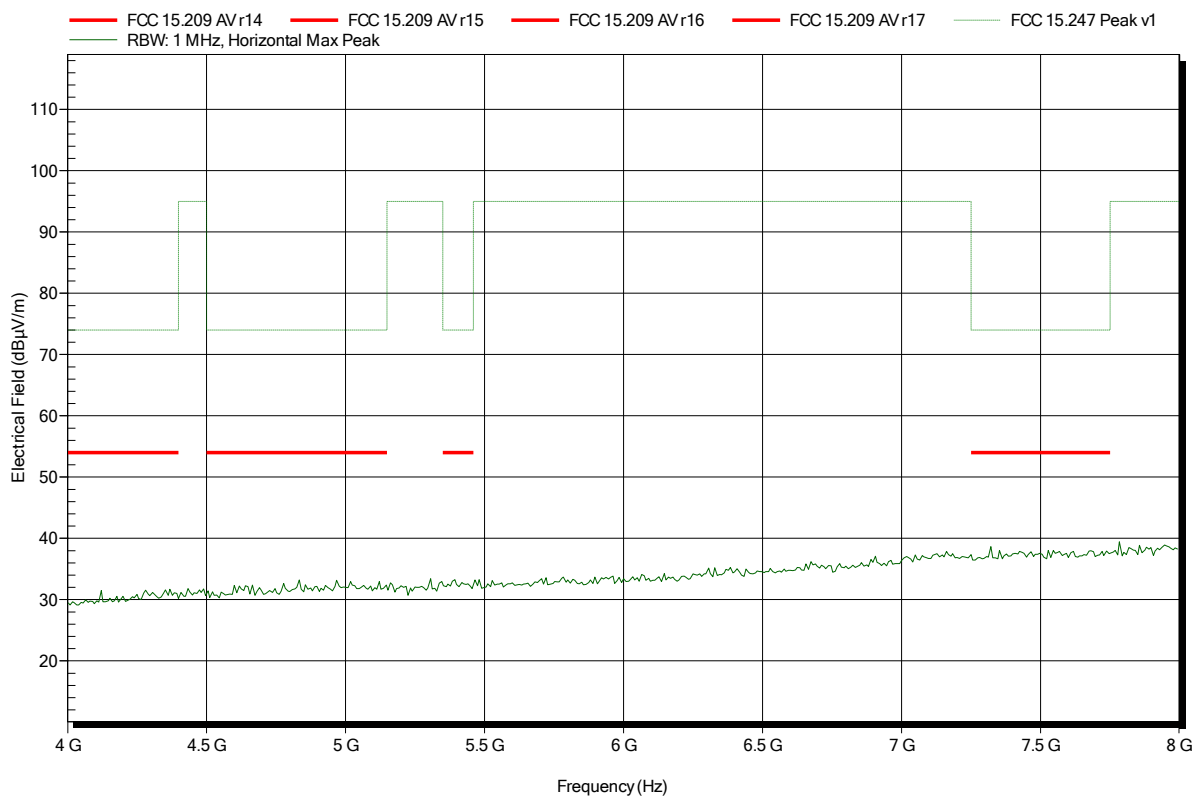


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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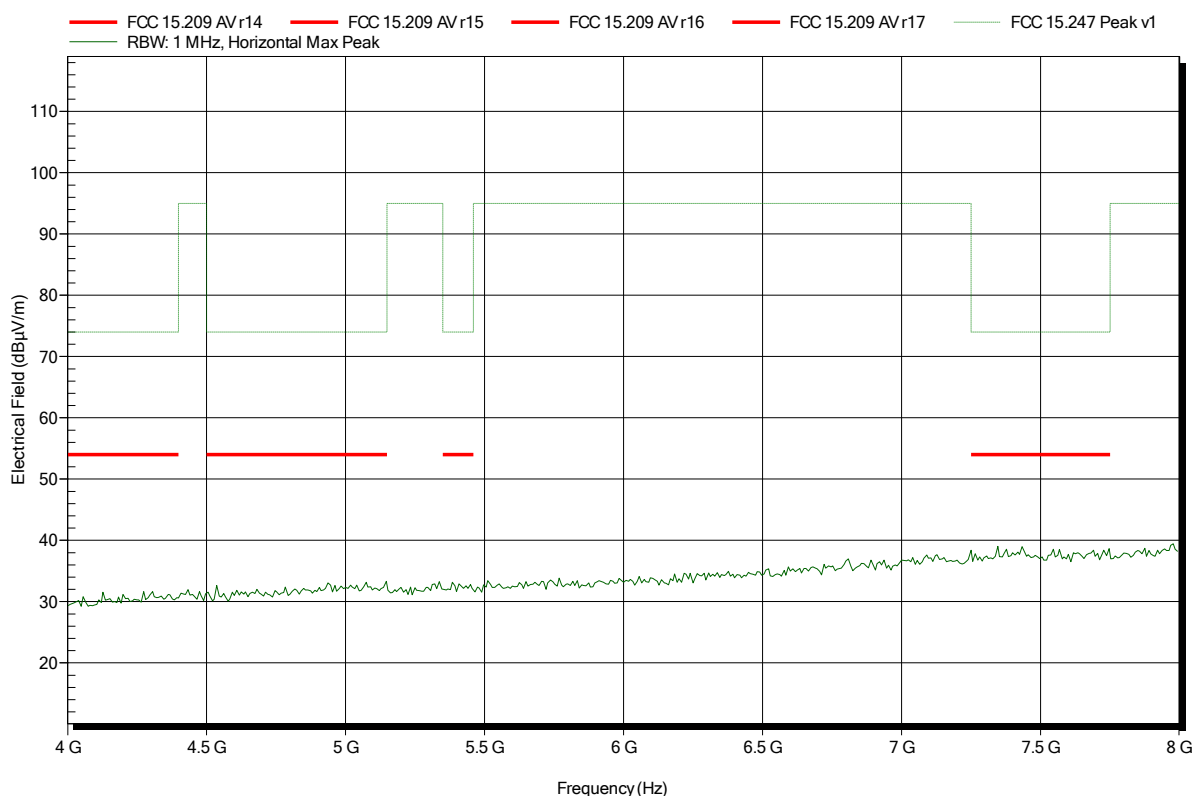


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; Ch 78, EUT vertical  
 Test Date: 2015-08-17  
 Note:

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Test Report No.: G0M-1504-4714-TFC247BT-V02

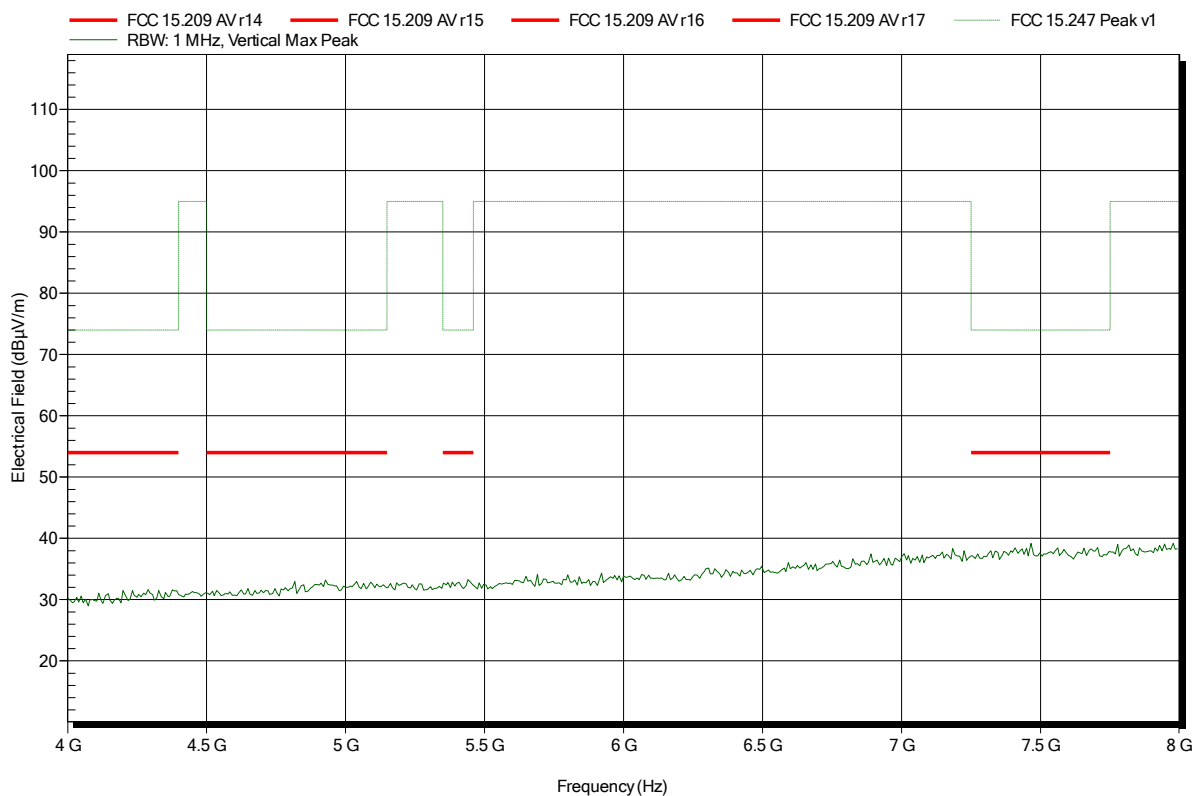
Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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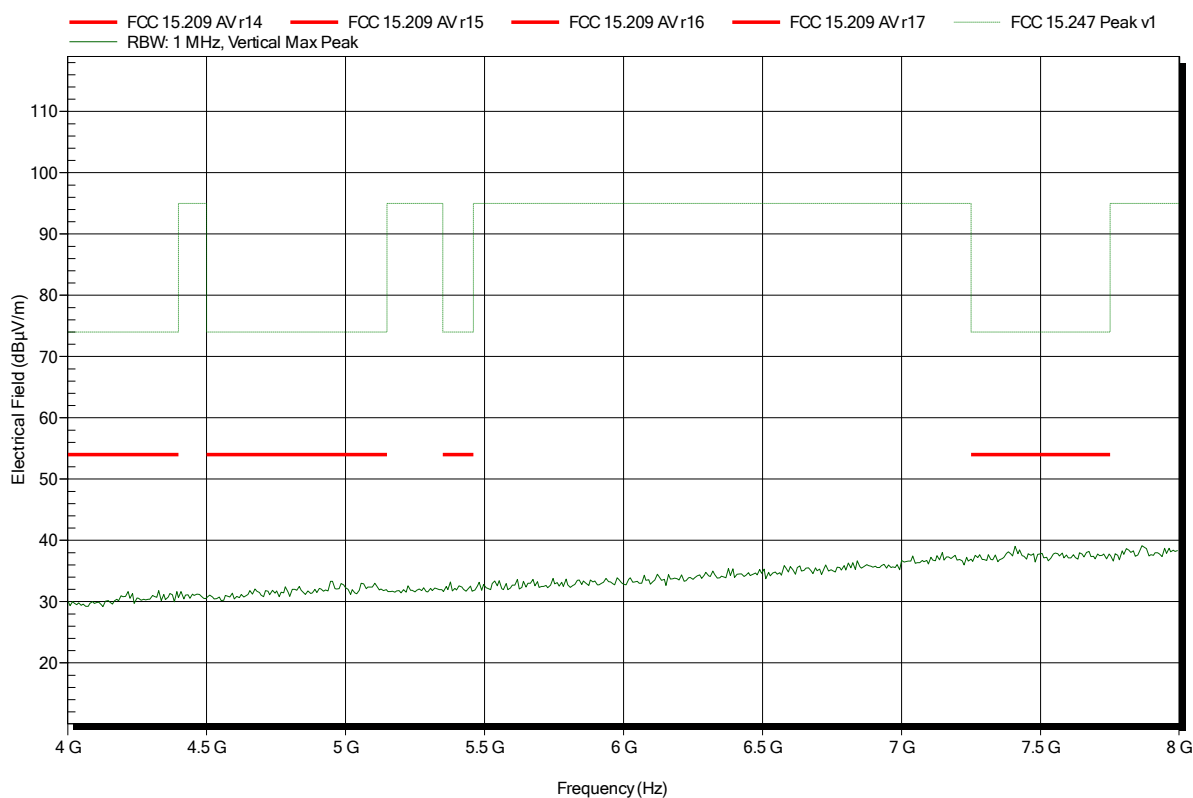


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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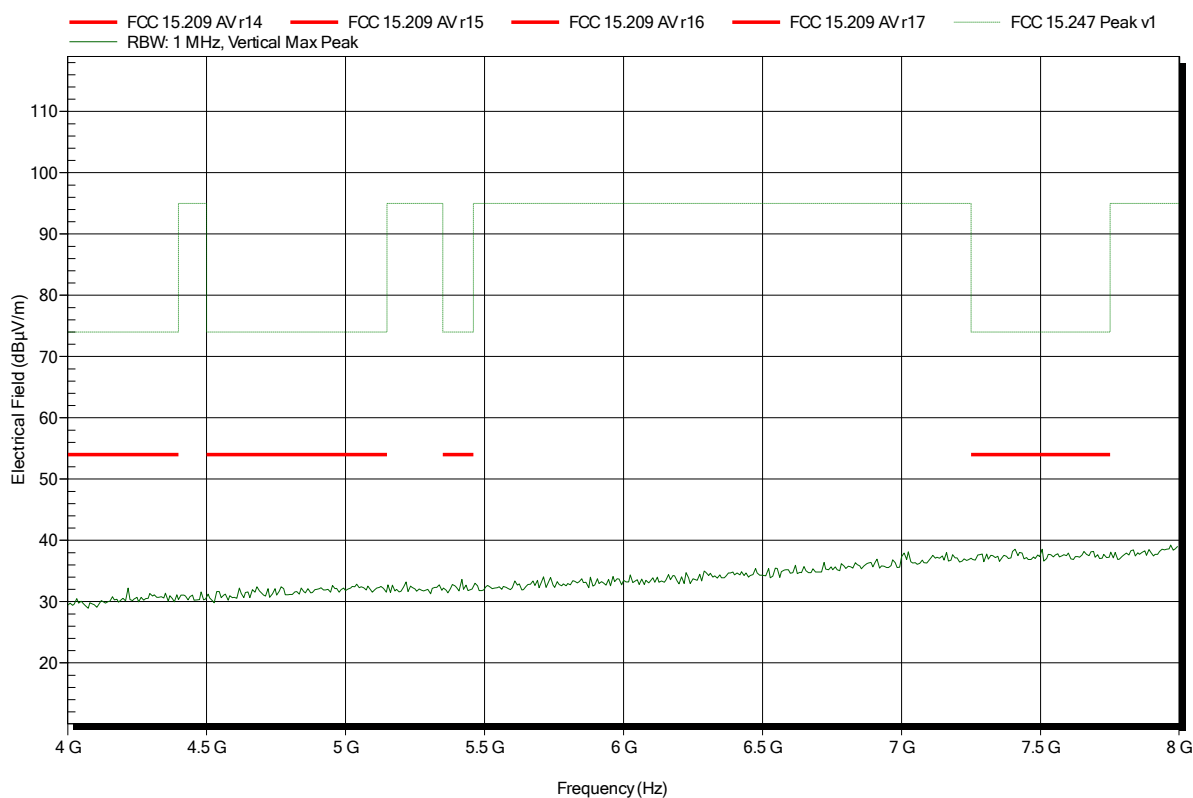


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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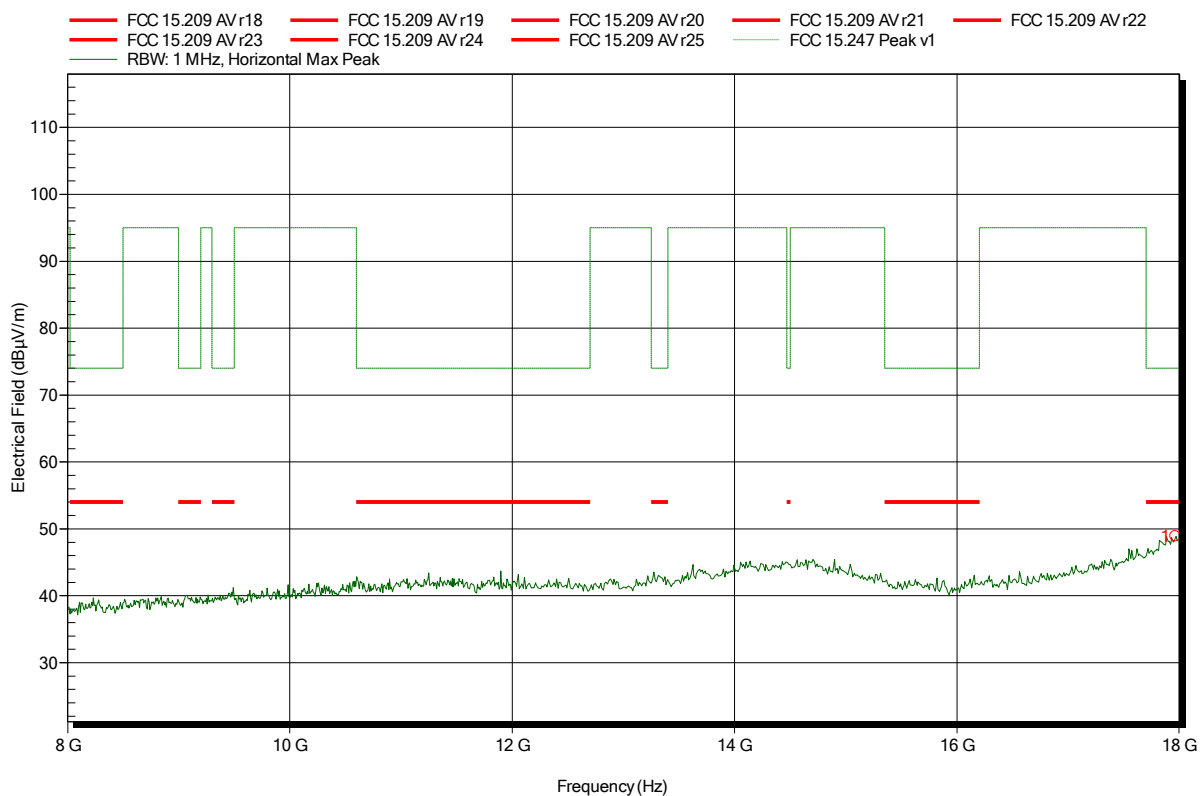


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.964 GHz	48.87 dBμV/m	74 dBμV/m	-25.13 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

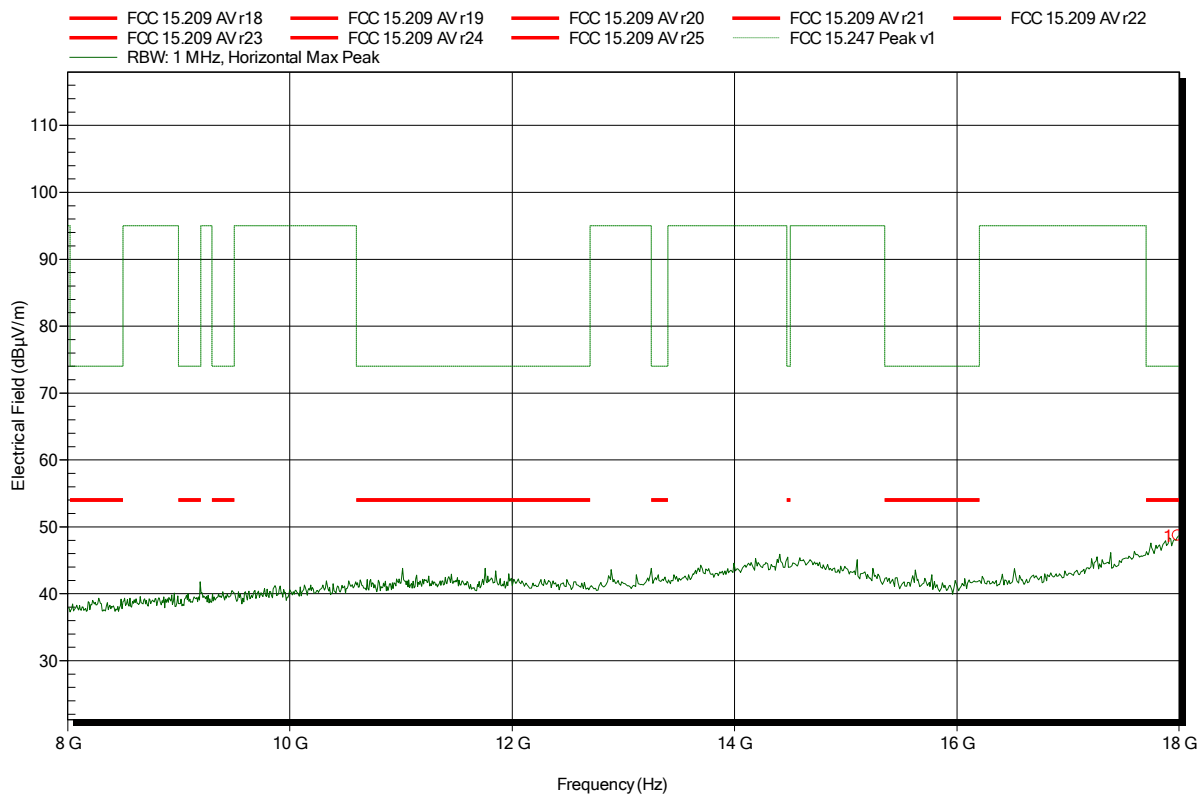
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.988 GHz	48.67 dBµV/m	74 dBµV/m	-25.33 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

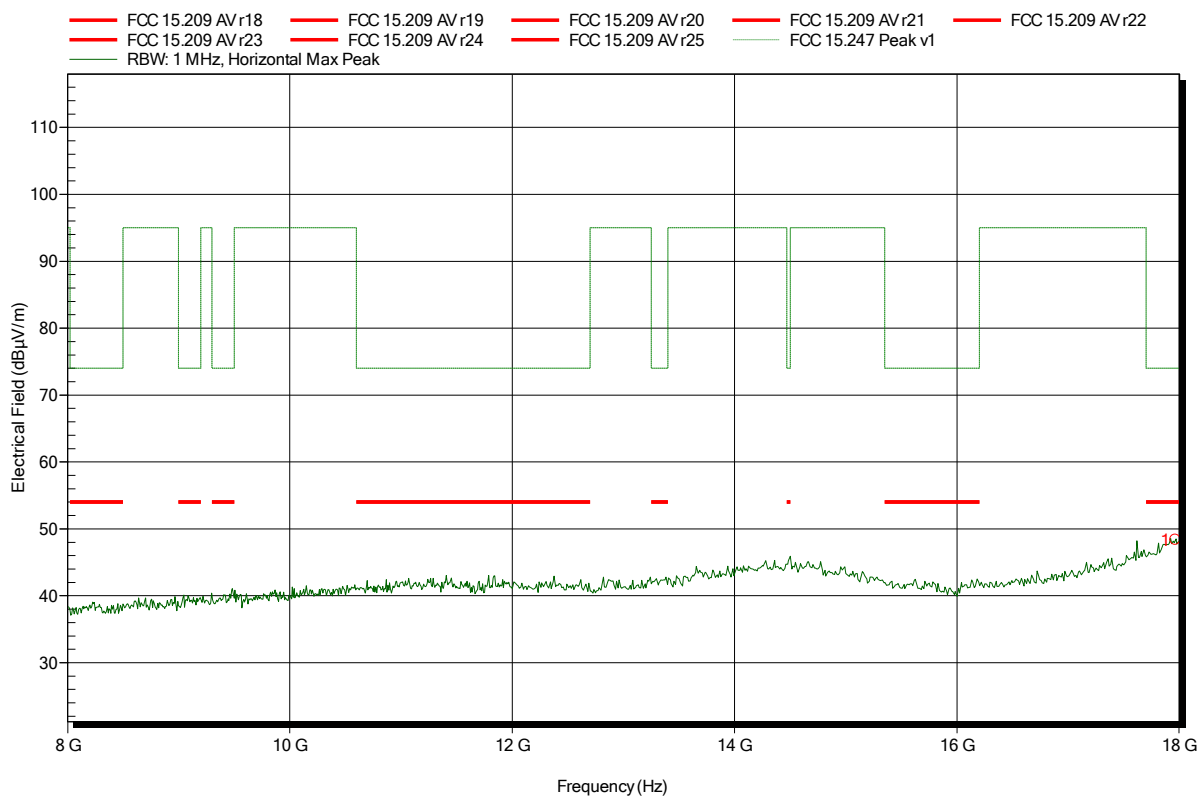
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.964 GHz	48.36 dBµV/m	74 dBµV/m	-25.64 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

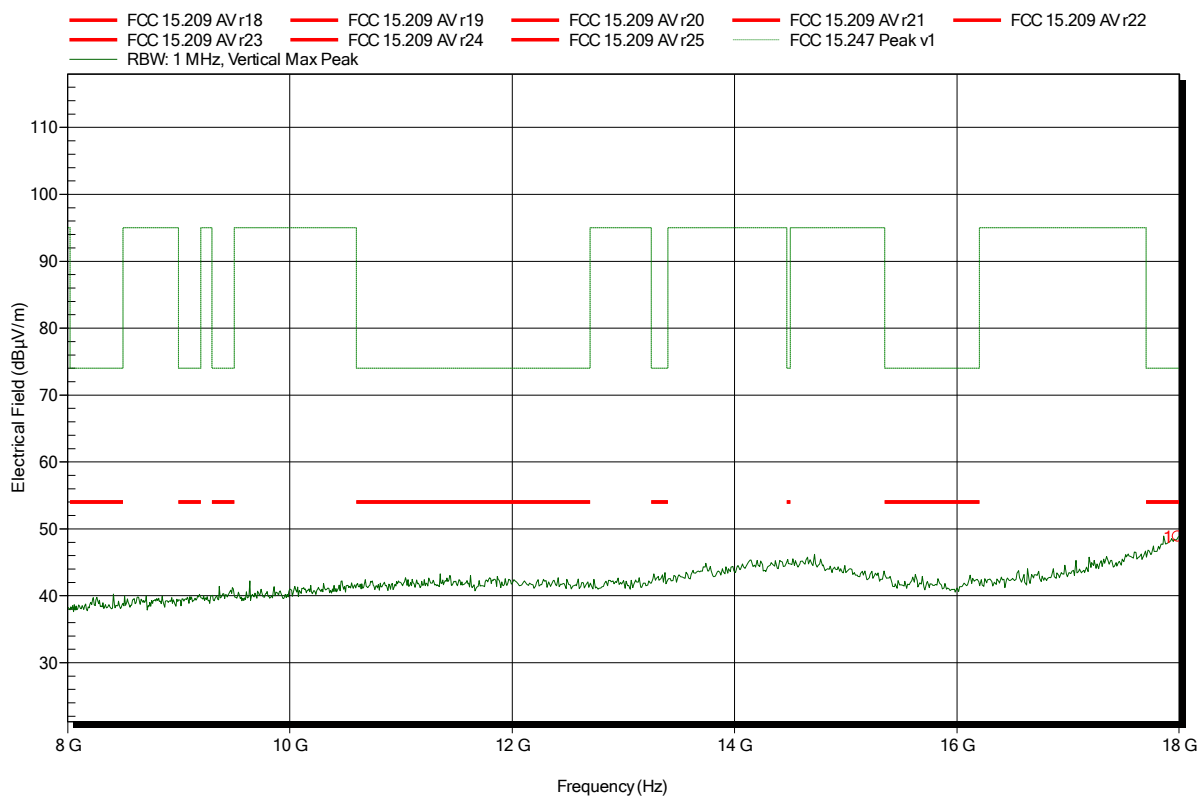
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.988 GHz	48.83 dBµV/m	74 dBµV/m	-25.17 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

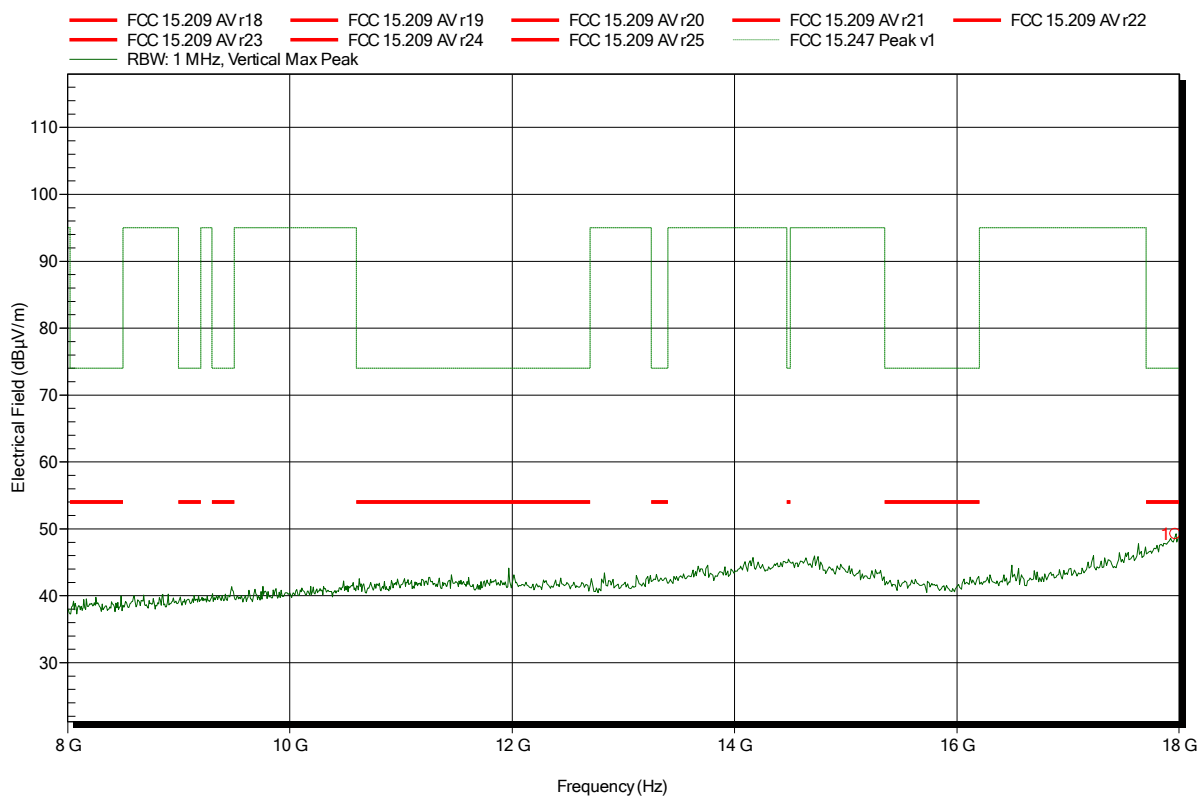
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.964 GHz	49.24 dBµV/m	74 dBµV/m	-24.76 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

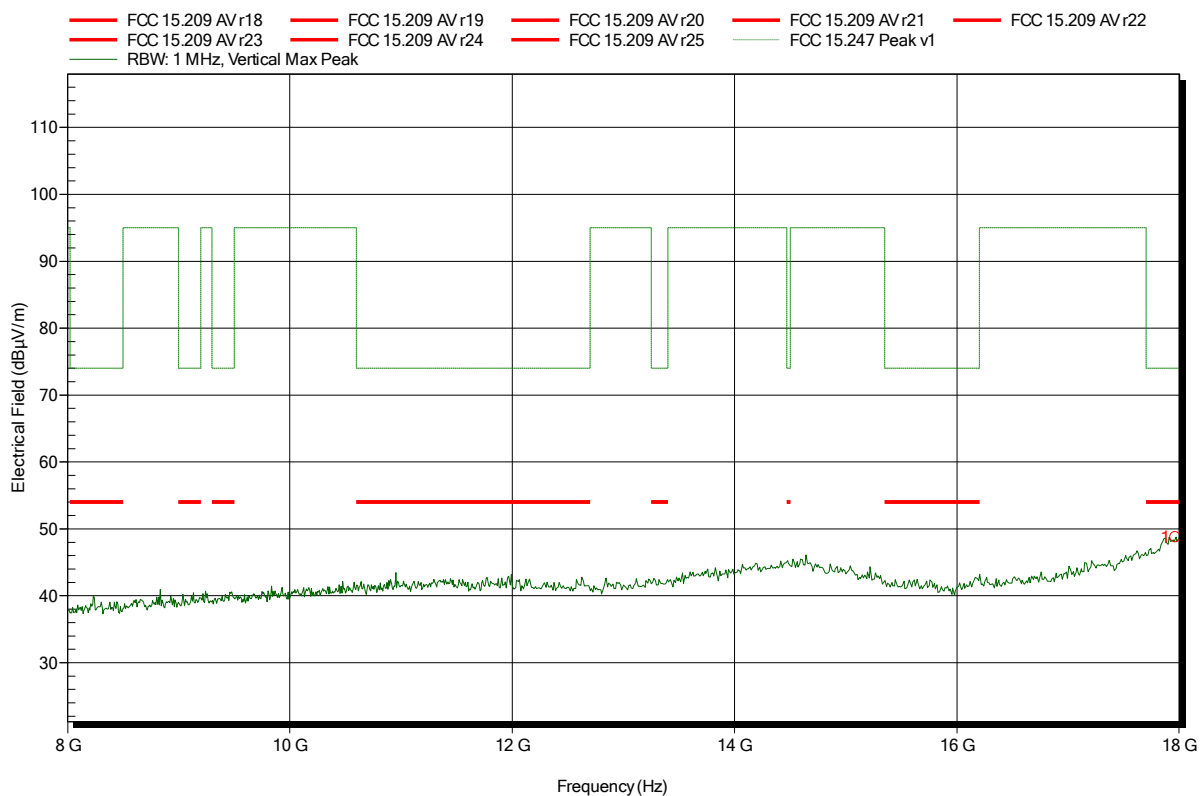


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
17.964 GHz	48.76 dBµV/m	74 dBµV/m	-25.24 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

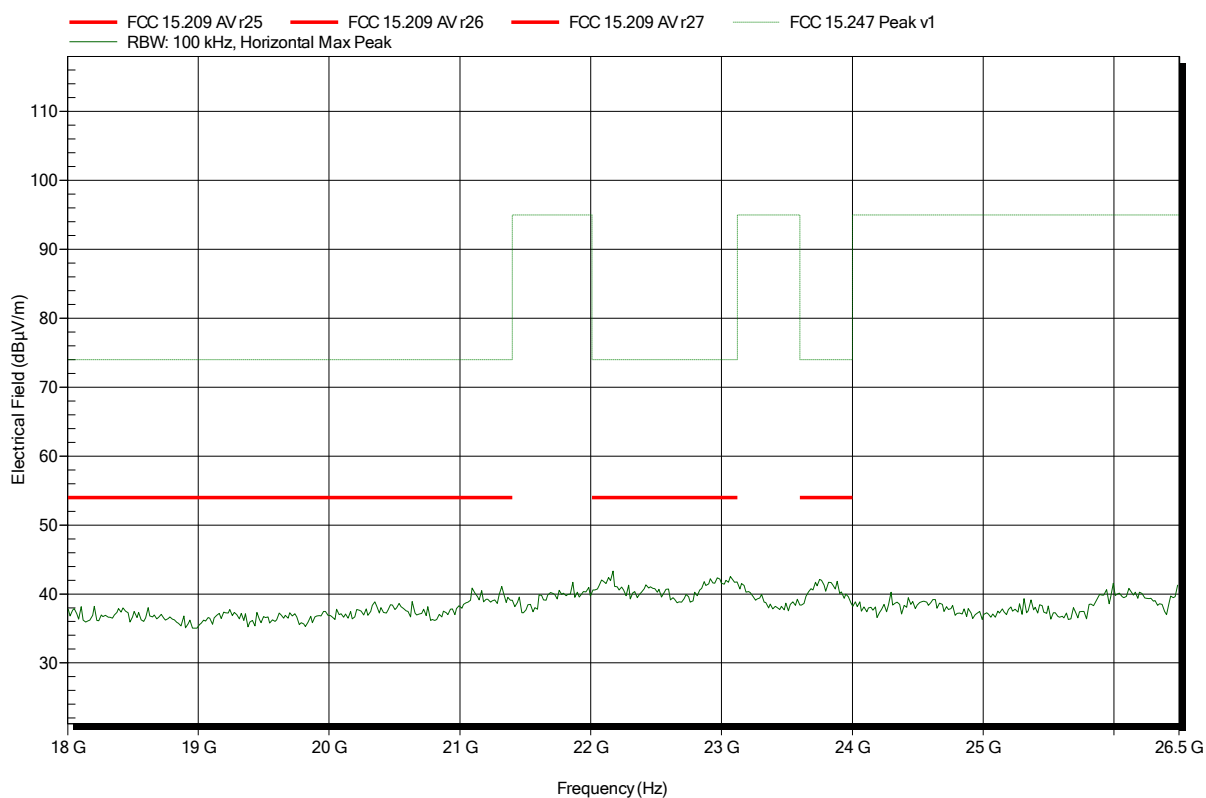
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HL 025, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: TX; Ch 0, EUT vertical  
 Test Date: 2015-08-17  
 Note:

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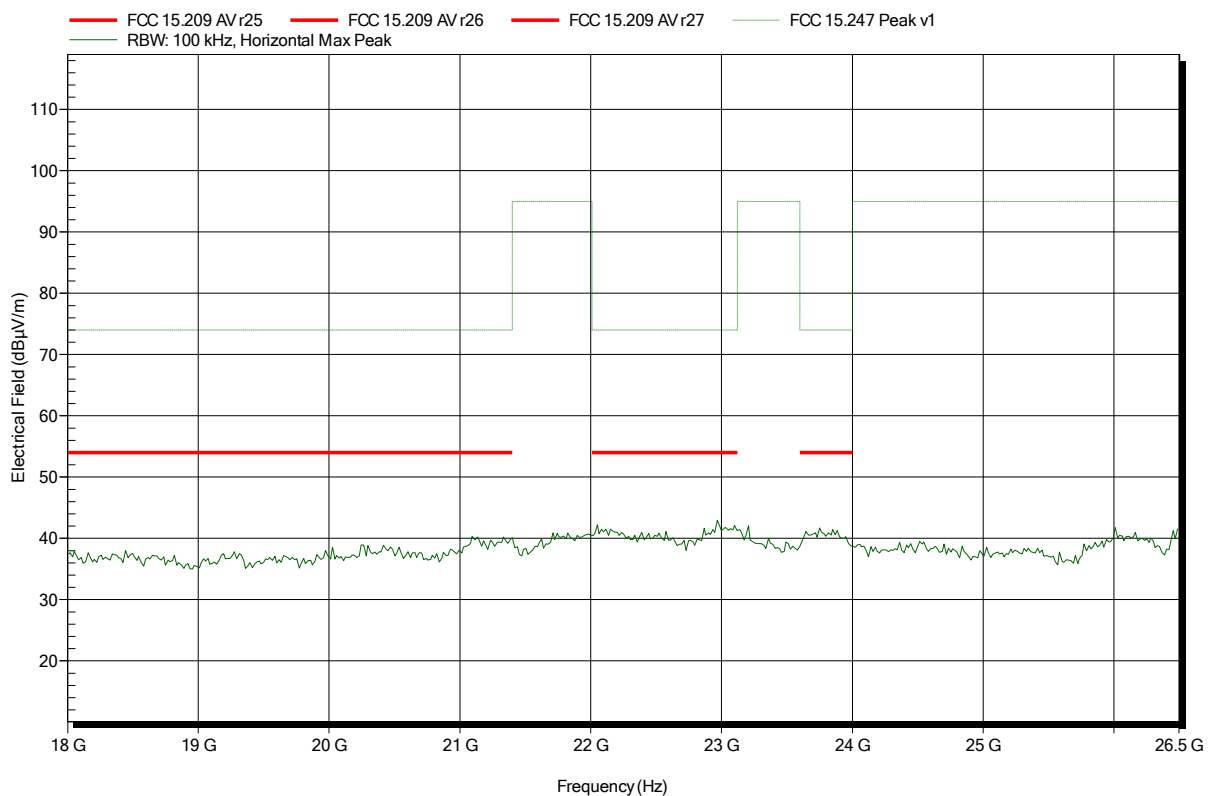


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 025, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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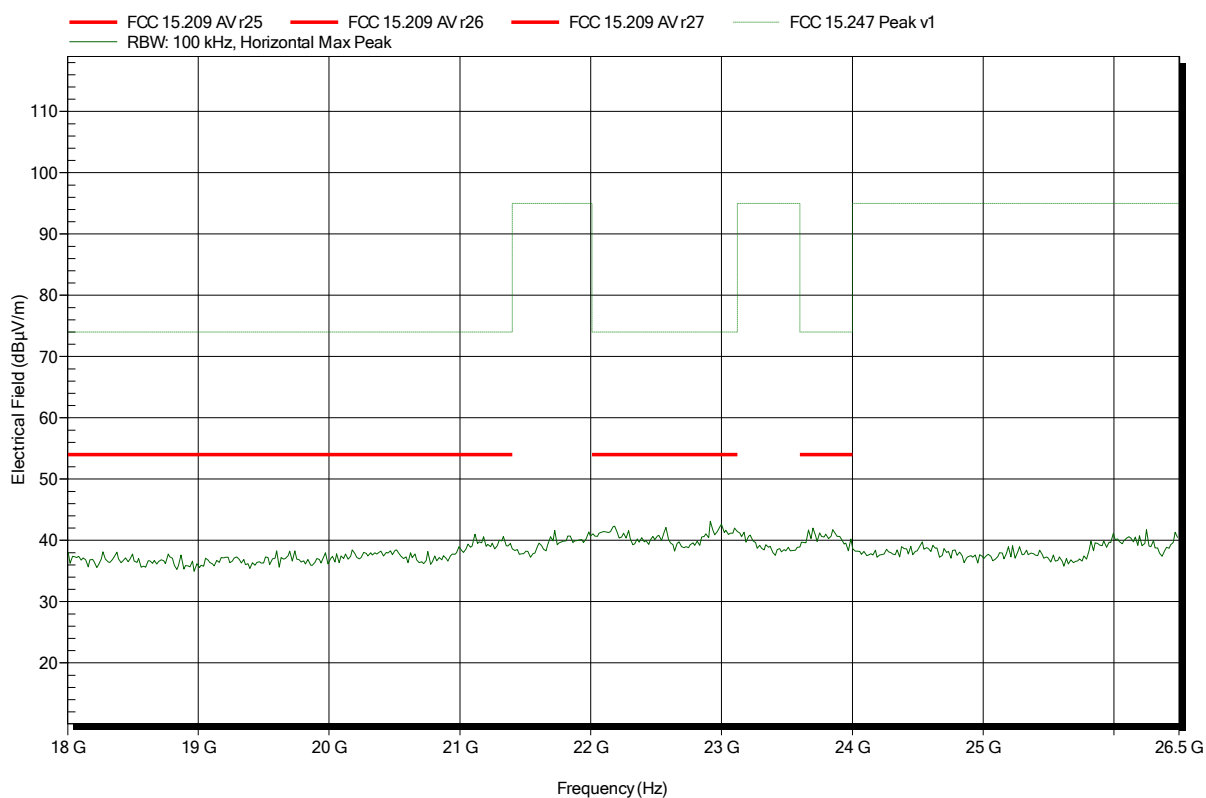


## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 025, Horizontal  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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Test Report No.: G0M-1504-4714-TFC247BT-V02

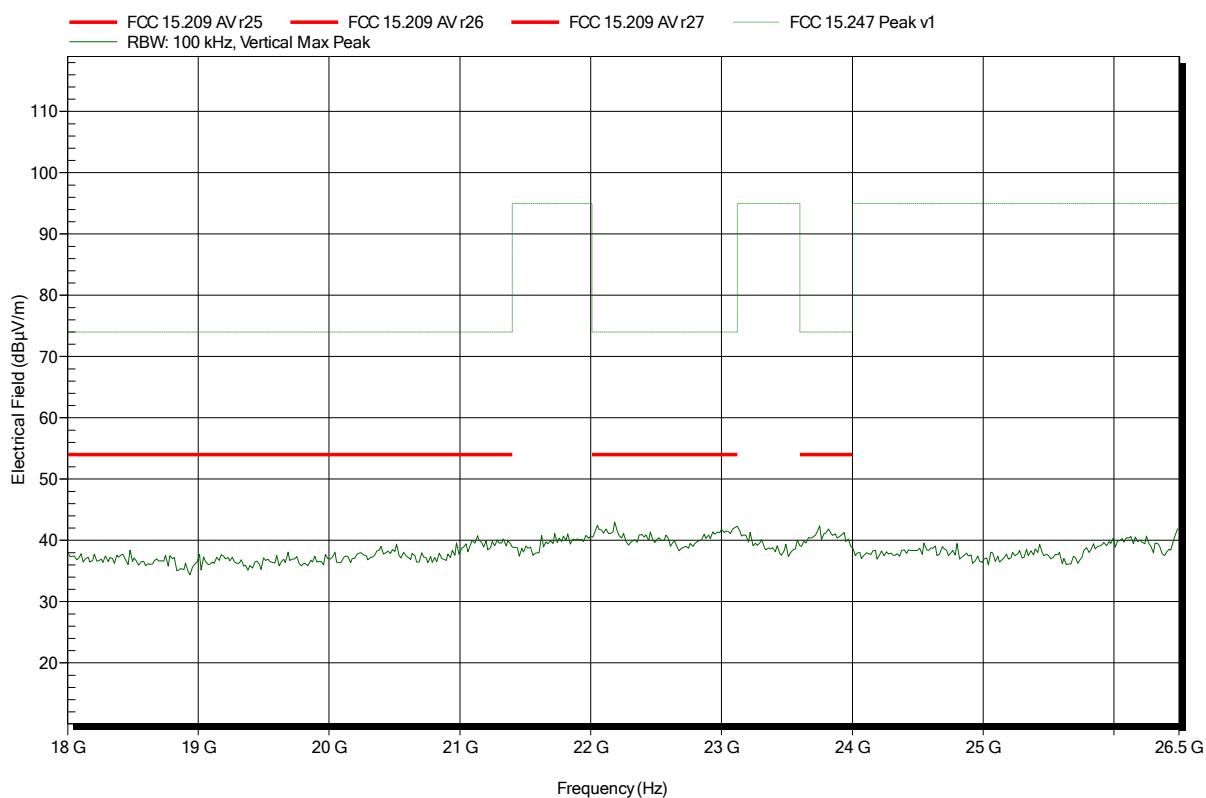
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 025, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 0, EUT vertical  
Test Date: 2015-08-17  
Note:

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Test Report No.: G0M-1504-4714-TFC247BT-V02

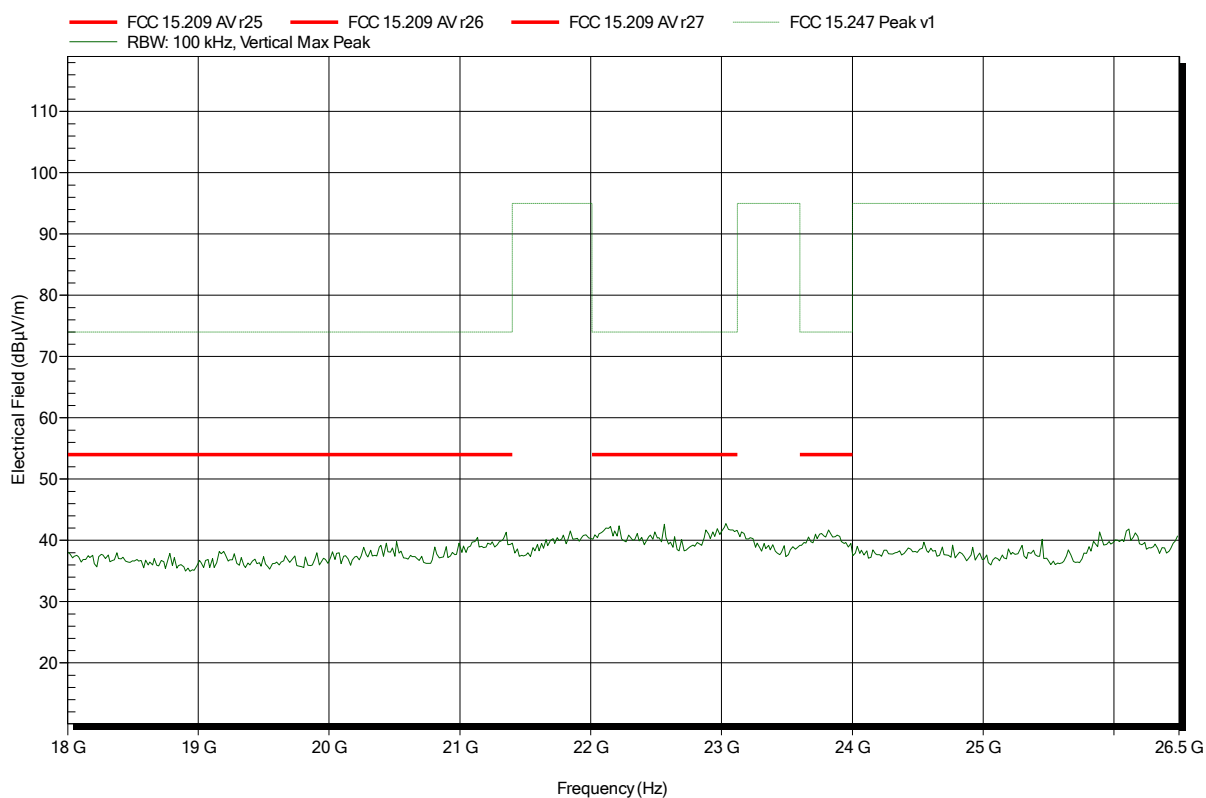
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to FCC 15.247

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 025, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 78, EUT vertical  
Test Date: 2015-08-17  
Note:

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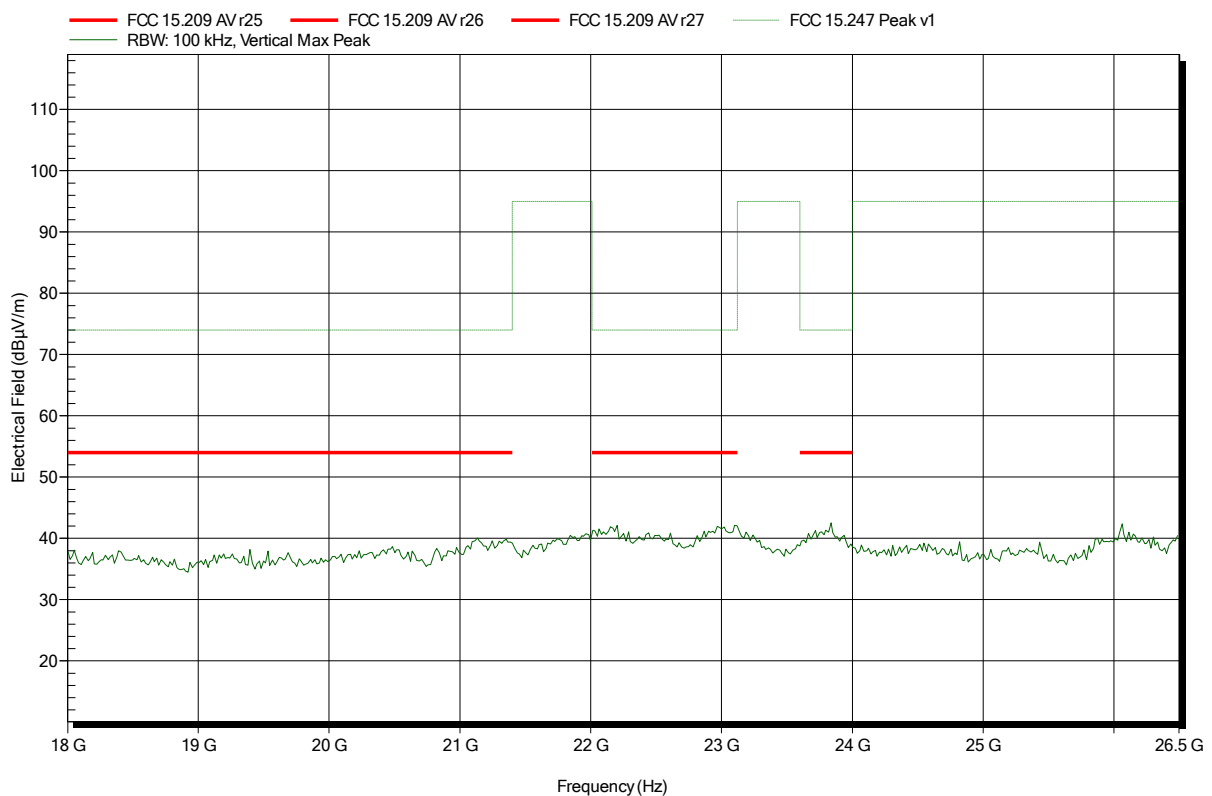


**Spurious emissions according to FCC 15.247**

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 025, Vertical  
Measurement distance: 1 m converted to 3m  
Mode: TX; Ch 40, EUT vertical  
Test Date: 2015-08-17  
Note:

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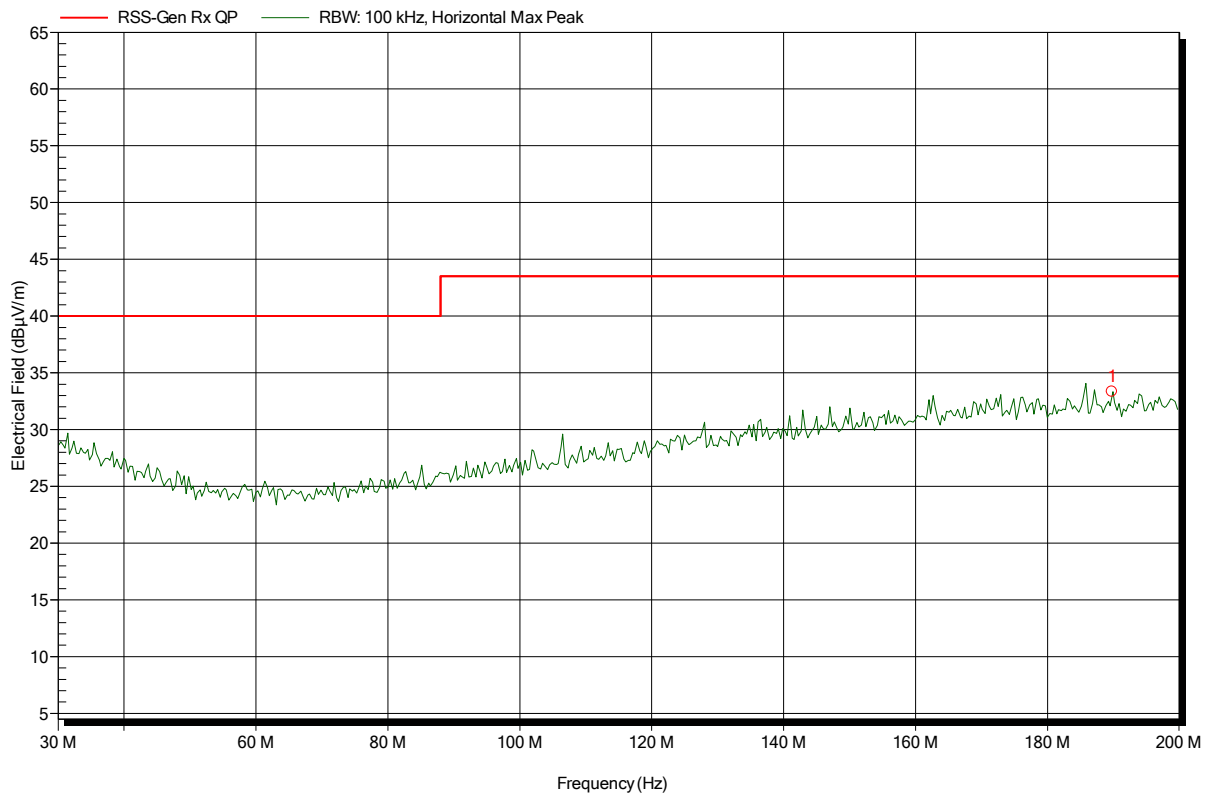
## ANNEX B Receiver radiated spurious emissions

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

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Rohde & Schwarz HK 116, Horizontal  
 Measurement distance: 3 m  
 Mode: RX; Rx scan mode  
 Test Date: 2015-08-18  
 Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
189.8 MHz	33.34 dBµV/m	43.5 dBµV/m	-10.16 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

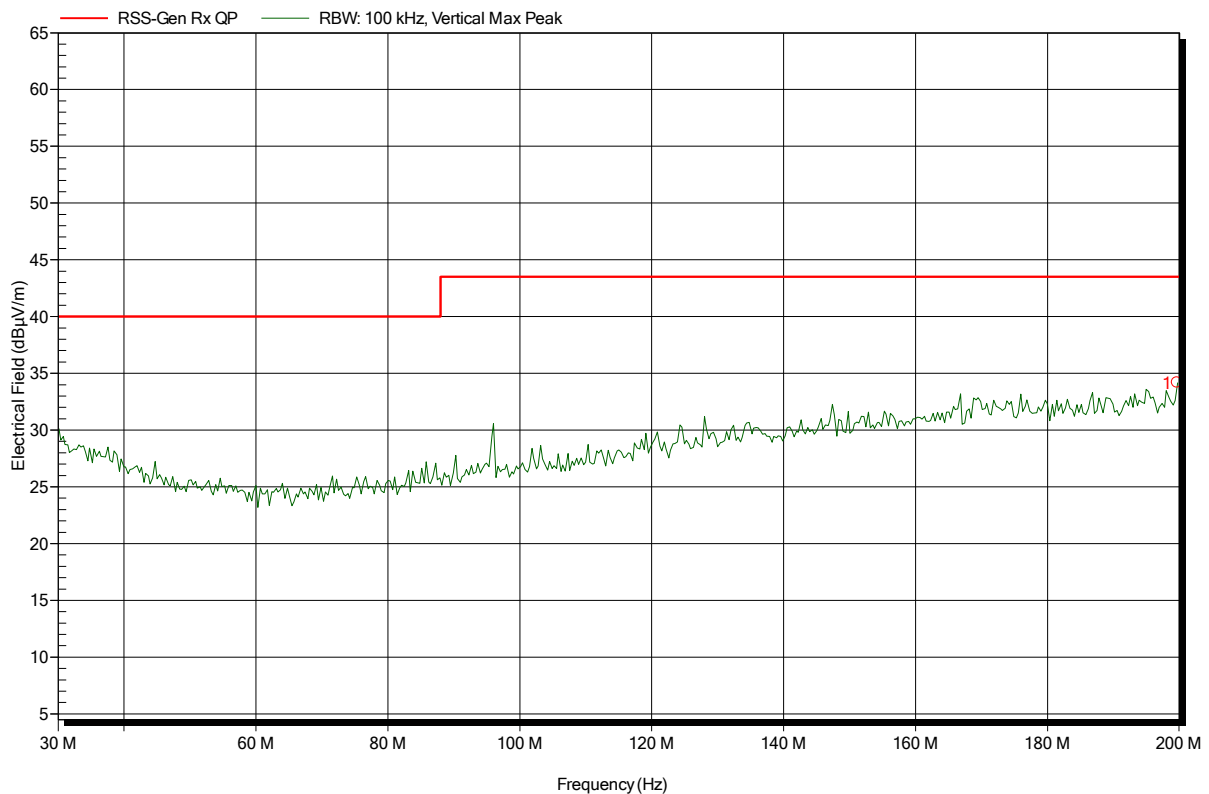
Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HK 116, Vertical  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
199.66 MHz	34.19 dBµV/m	43.5 dBµV/m	-9.31 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

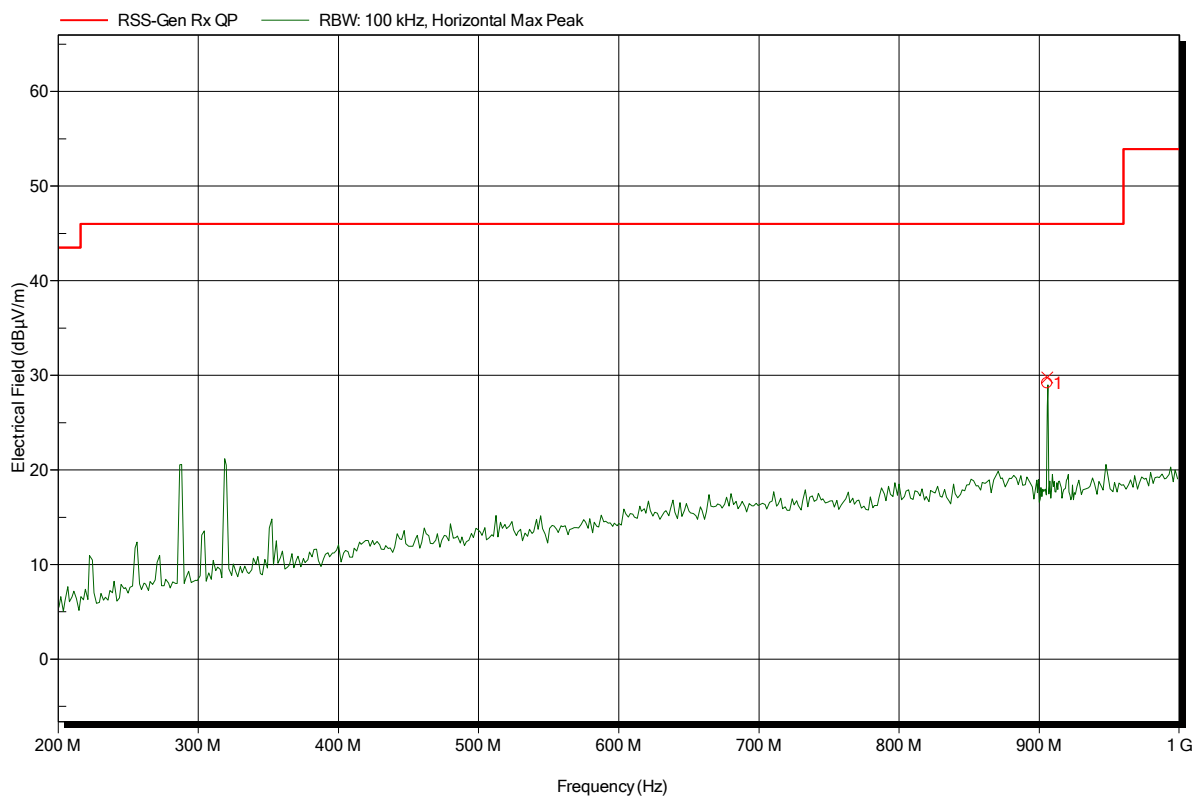
Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Horizontal  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
905.737 MHz	29.15 dBµV/m	46 dBµV/m	-16.85 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

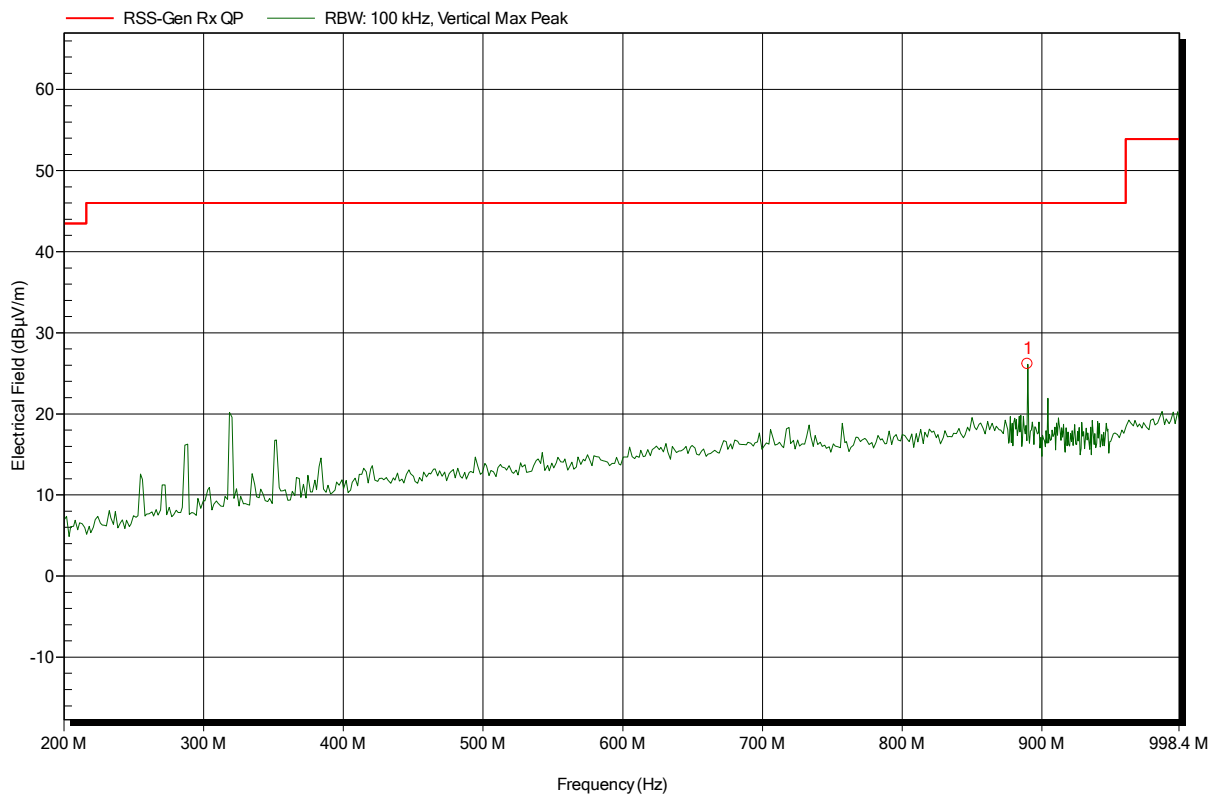


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Rohde & Schwarz HL 223, Vertical  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
889.6 MHz	26.13 dBµV/m	46 dBµV/m	-19.87 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

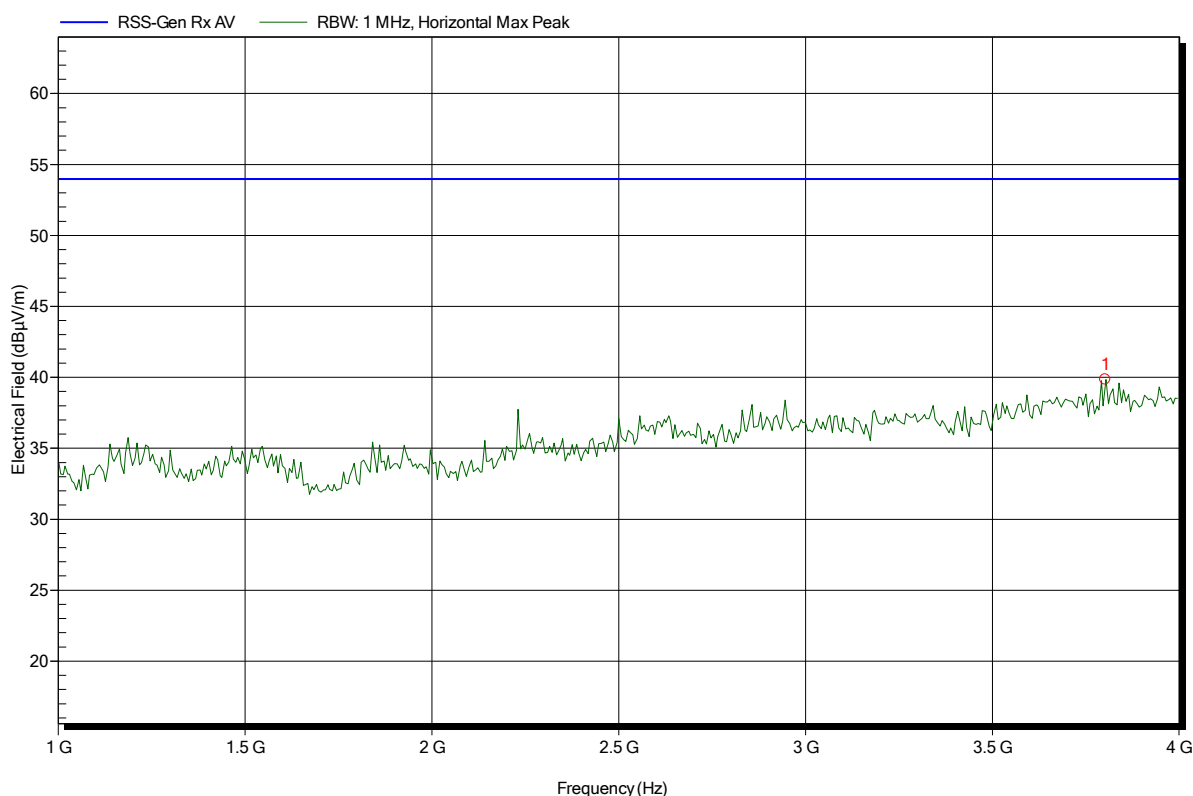


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 3 m  
 Mode: RX; Rx scan mode  
 Test Date: 2015-08-18  
 Note:

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.802 GHz	39.85 dBµV/m	53.98 dBµV/m	-14.13 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

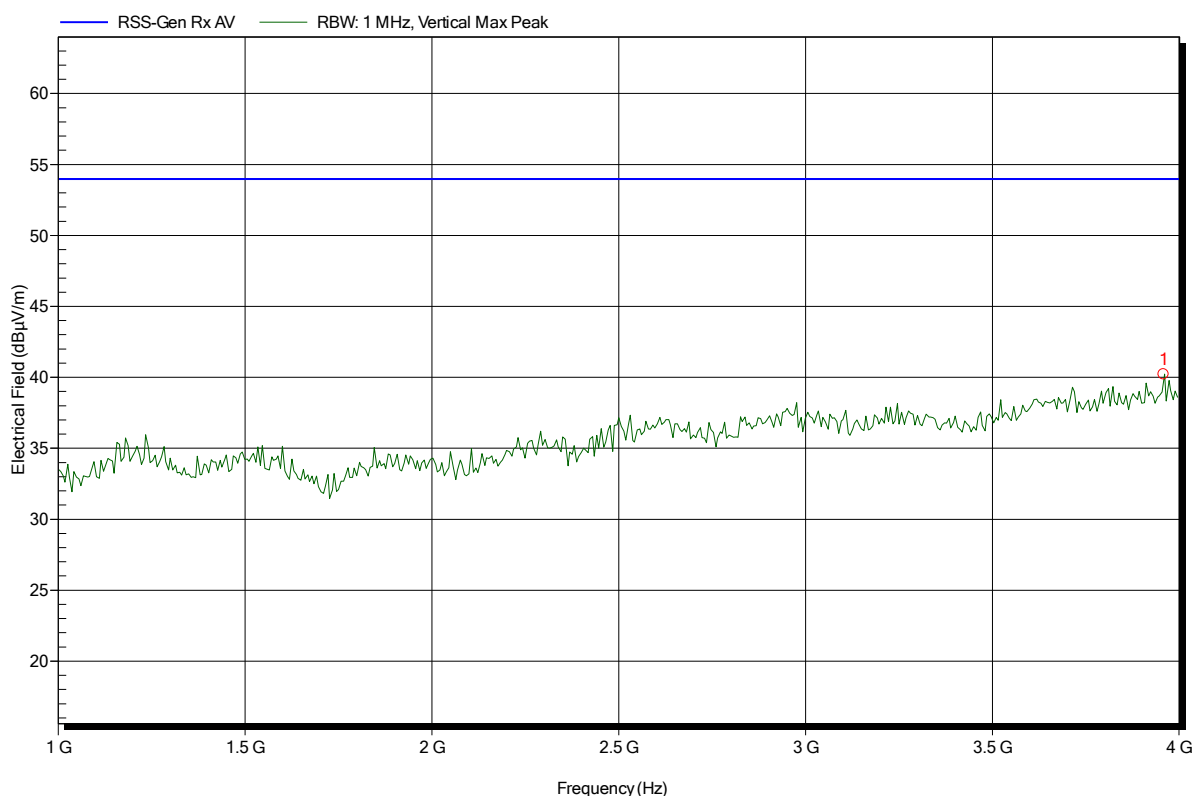


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.958 GHz	40.21 dBµV/m	53.98 dBµV/m	-13.77 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

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

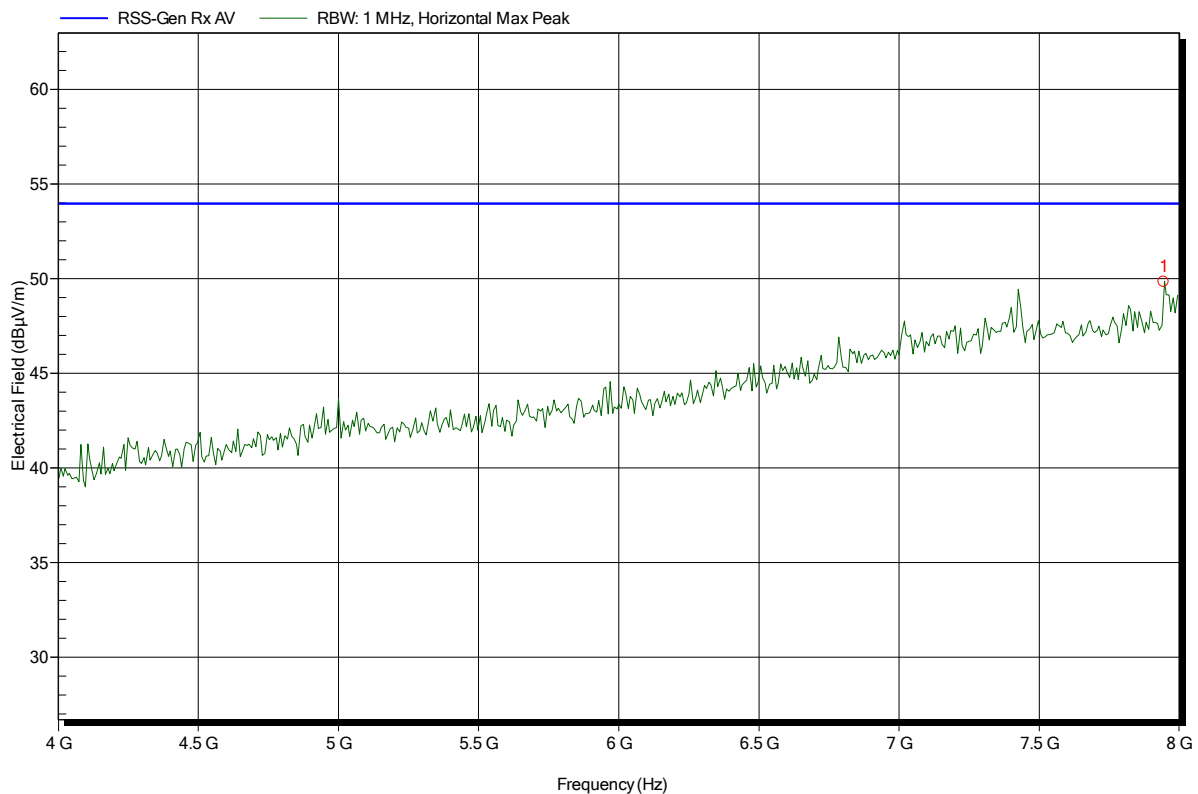


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Horizontal  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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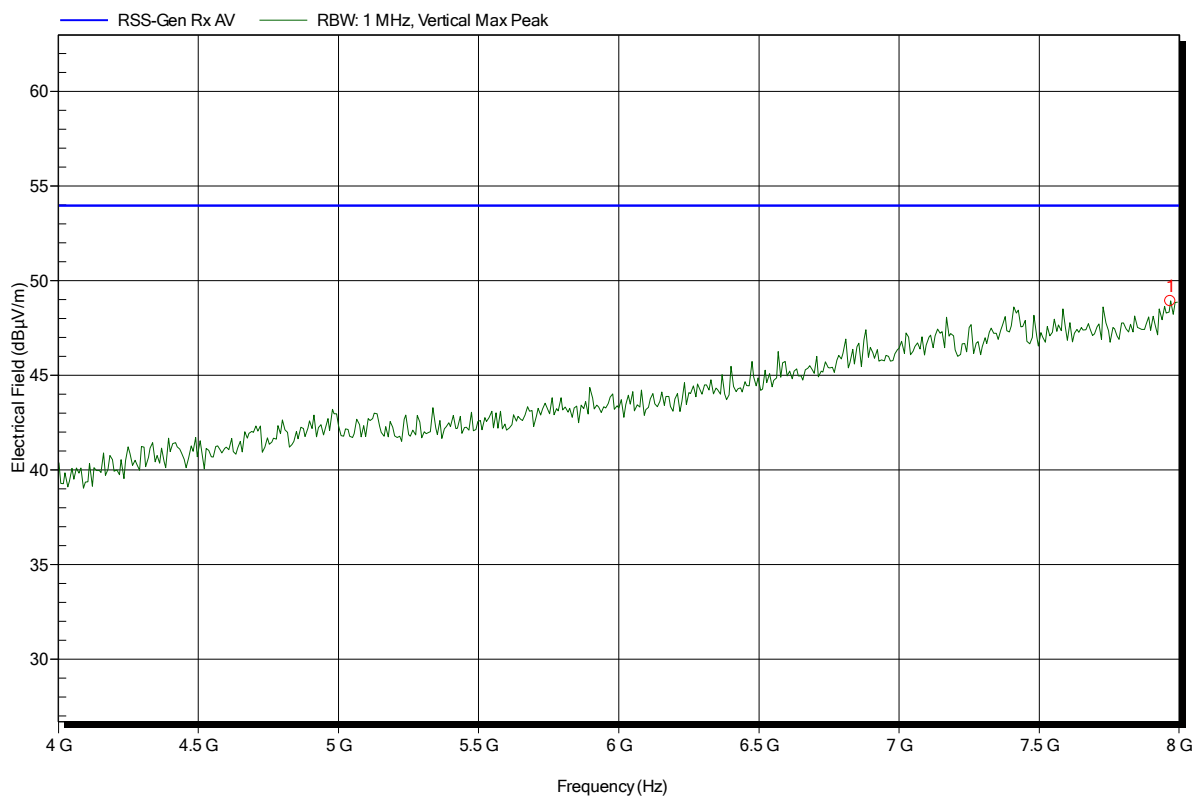
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.944 GHz	49.83 dBµV/m	53.98 dBµV/m	-4.15 dB	Pass

## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
EUT Name: Powered Air Purifying Respirator  
Model: R59500  
Test Site: Eurofins Product Service GmbH  
Operator: Mr. Jahn  
Test Conditions: Tnom: 24°C, Vnom: 12VDC  
Antenna: Schwarzbeck BBHA 9120D, Vertical  
Measurement distance: 3 m  
Mode: RX; Rx scan mode  
Test Date: 2015-08-18  
Note:

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.968 GHz	48.93 dBµV/m	53.98 dBµV/m	-5.05 dB	Pass



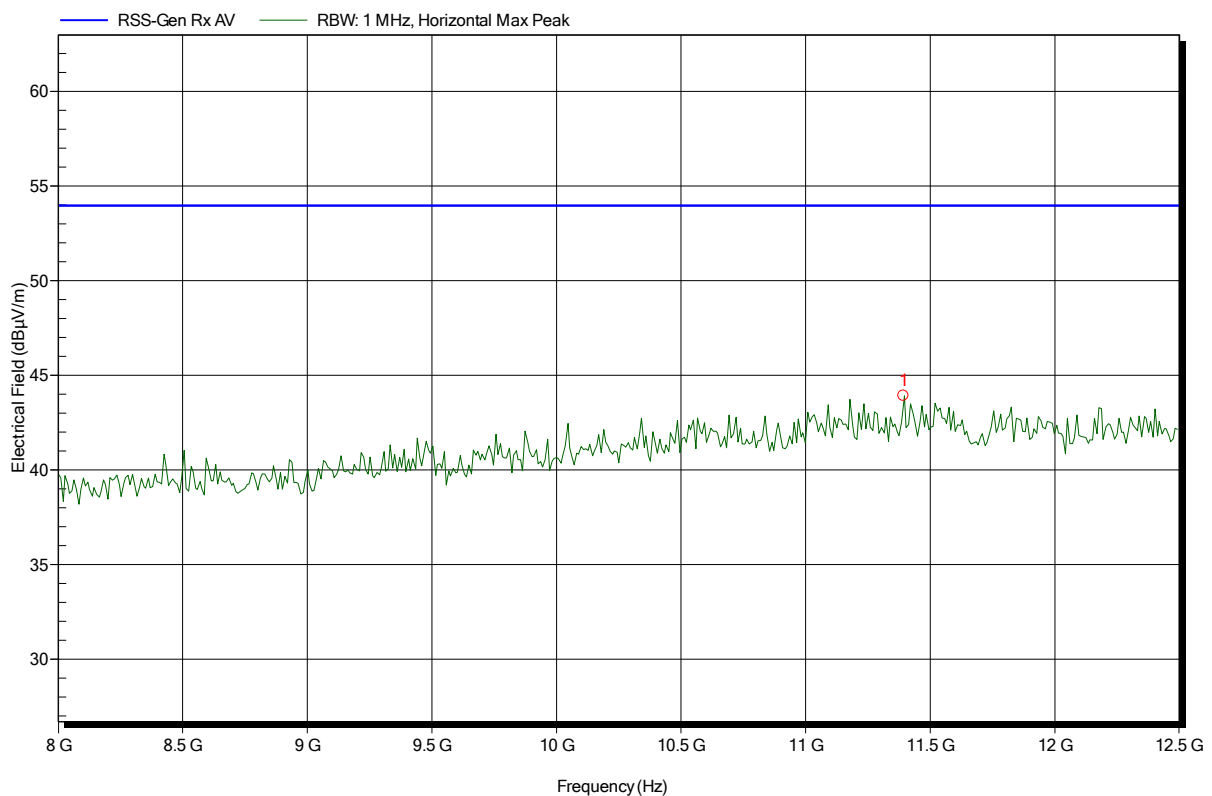


## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Horizontal  
 Measurement distance: 1 m converted to 3m  
 Mode: RX; Rx scan mode  
 Test Date: 2015-08-18  
 Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
11.393 GHz	43.92 dBµV/m	53.98 dBµV/m	-10.06 dB	Pass

Test Report No.: G0M-1504-4714-TFC247BT-V02

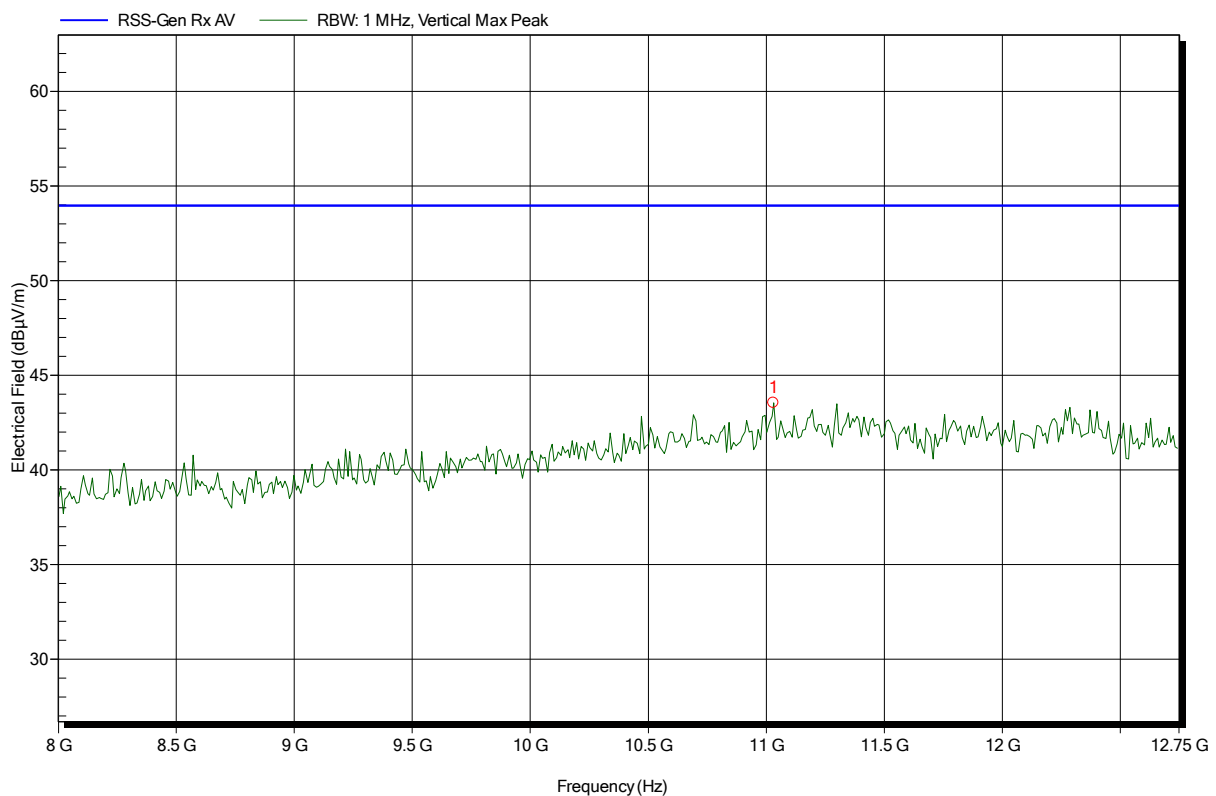
Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

## Spurious emissions according to RSS-247 Issue 1

Project number: G0M-1504-4714

Applicant:  
 EUT Name: Powered Air Purifying Respirator  
 Model: R59500  
 Test Site: Eurofins Product Service GmbH  
 Operator: Mr. Jahn  
 Test Conditions: Tnom: 24°C, Vnom: 12VDC  
 Antenna: Schwarzbeck BBHA 9120D, Vertical  
 Measurement distance: 1 m converted to 3m  
 Mode: RX; Rx scan mode  
 Test Date: 2015-08-18  
 Note:

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Frequency	Peak	Peak Limit	Peak Difference	Status
11.031 GHz	43.54 dBµV/m	53.98 dBµV/m	-10.44 dB	Pass