

FCC TEST REPORT

FCC 47 CFR Part 15C Industry Canada RSS-210

Digital transmission systems operating within the 902 - 928 MHz band

Report Reference No..... G0M-1407-3996-TFC247DT-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

Applicant's name Dräger Safety AG & Co. KGaA

Address...... Revalstraße 1

23560 Lübeck GERMANY

Test specification:

Standard 47 CFR Part 15C

KDB Publication No. 558074 RSS-210, Issue 8, 2010-12 RSS-Gen, Issue 3, 2010-12

ANSI C63.4:2009

Equipment under test (EUT):

Product description Portable Alarm Amplifier

Model No. AAC 00xx

Additional Model(s) None

Brand Name(s) Draeger X-zone 5500

Hardware version 8324825

Firmware / Software version 2.24

FCC-ID: X6O-AAC00XX IC: 5895F-AAC00XX

Test result Passed

Test Report No.: G0M-1407-3996-TFC247DT-V01

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:	1
Test Lab Temperature	: 20 – 23 °C
Test Lab Humidity	: 32 – 38 %
Date of receipt of test item	: 2014-07-14
Date (s) of performance of tests	: 2014-08-12
Compiled by: Christian	Weber
Tested by (+ signature) Christian (Responsible for Test)	Weber C. Cueber
Approved by (+ signature): Toralf Jah	
Date of issue: 2014-09-0	01

General remarks:

Total number of pages: 55

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	2014-09-01	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	g
1.5	Test Modes	10
1.6	Test Equipment Used During Testing	11
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 – Transmitter radiated emissions	18
ANN	EX A Transmitter radiated spurious emissions	20



1 Equipment (Test item) Description

Description	Portable Alarm	Amp	olifier
Model	AAC 00xx		
Additional Model(s)	None		
Brand Name(s)	Draeger X-zon	e 550	00
Serial number	ARFH-0042		
Hardware version	8324825		
Software / Firmware version	2.24		
FCC-ID	X6O-AAC00XX	(
IC	5895F-AAC00	ΚX	
Equipment type	Radio module		
Radio type	Transceiver		
Radio technology	custom		
Operating frequency range	917 - 926 MHz		
Assigned frequency band	902 - 928 MHz		
	F _{LOW}		917 MHz
Frequency range	F _{MID}		921.5 MHz
	F _{HIGH}		926 MHz
Spreading	None		
Modulations	FSK		
Number of antennas	1		
Antenna	Туре	inte	grated
Antenia	Gain +1.0) dBi
Manufacturer	Dräger Safety AG & Co. KGaA Revalstraße 1 23560 Lübeck GERMANY		
	V _{NOM}		6.0 VDC
Power supply	V _{MIN}		N/A
	V _{MIN}		N/A
	Model		N/A
AC/DC-Adaptor	Vendor		N/A
AOIDO-Adaptol	Input		N/A
	Output		N/A



1.1 Photos – Equipment External

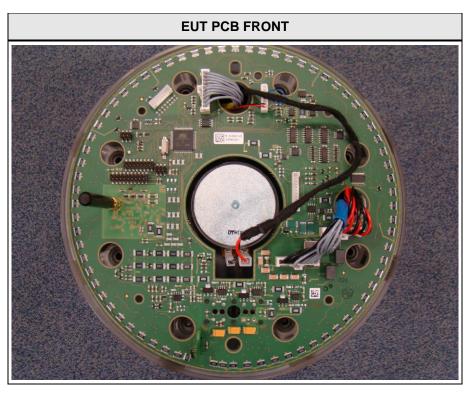


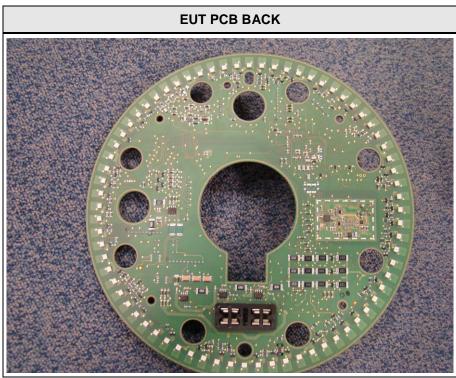


Test Report No.: G0M-1407-3996-TFC247DT-V01



1.2 Photos – Equipment internal

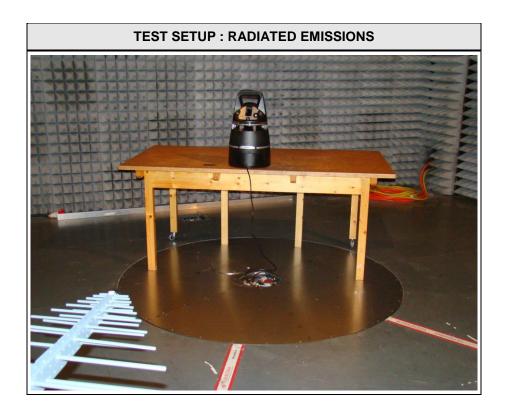




Test Report No.: G0M-1407-3996-TFC247DT-V01



1.3 Photos – Test setup





1.4 Supporting Equipment Used During Testing

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



1.5 Test Modes

Mode #	Description				
	General conditions:	EUT powered by laboratory power supply			
Single	Radio conditions:	Mode = standalone transmit Spreading = None Modulation = FSK Duty cycle = 100 % Power level = Maximum			



1.6 Test Equipment Used During Testing

Measurement Software				
Description	Manufacturer	Name	Version	
EMC Test Software Dare Instruments Radimation 20				

Occupied Bandwidth						
Description Manufacturer Model Identifier Cal. Date Cal. Du						
Spectrum Analyzer	R&S	FSP 30	EF00312	2014-02	2015-02	

Radiated spurious emissions							
Description Manufacturer Model Identifier Cal. Date							
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-		
Spectrum Analyzer	R&S	FSIQ26	EF00242	2014-03	2015-03		
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		



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:

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

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 $dB\mu V/m$:

Limit (dB μ V/m) = 20*log (μ V/m)

Margin:

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

Example only:

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



2 Result Summary

FCC 47 CFR Part 15C, IC RSS-210					
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks	
RSS-Gen 4.6.1	Occupied Bandwidth	RSS-Gen 4.6.1	N/R	Informational only	
FCC § 15.247(a)(2) IC RSS-210 § A8.2	6 dB Bandwidth	KDB Publication No. 558074	N/N		
FCC § 15.247(b)(3) IC RSS-210 § A8.4	Maximum peak conducted power	KDB Publication No. 558074	N/N		
FCC § 15.247(e) IC RSS-210 § A8.2	Power spectral density	KDB Publication No. 558074	N/N		
47 CFR 15.207 RSS-Gen 7.2.4	AC power line conducted emissions	KDB Publication No. 558074 / ANSI C63.4	N/N		
FCC § 15.247(d) IC RSS-210 § A8.5	Band edge compliance	KDB Publication No. 558074	N/N		
FCC § 15.247(d) IC RSS-210 § A8.5	Conducted spurious emissions	KDB Publication No. 558074	N/N		
FCC § 15.247(d) FCC § 15.209 IC RSS-210 A8.5 IC RSS-Gen 4.9 IC RSS-Gen 7.2.5	Transmitter radiated spurious emissions	KDB Publication No. 558074 / ANSI C 63.4	PASS		
IC RSS-Gen 4.10 IC RSS-Gen 6.1	Receiver radiated spurious emissions	ANSI C 63.4	N/N		

Test Report No.: G0M-1407-3996-TFC247DT-V01



3 Test Conditions and Results

3.1 Test Conditions and Results - Occupied Bandwidth

Occupied Bandwi	Occupied Bandwidth acc. IC RSS-Gen Verdict: PASS					
Test according to		Reference Method				
measuremer	nt reference	RSS-Gen 4.6.1				
Toot frague	nnov rongo	Tested frequencies				
Test freque	ency range	F _{LOW} / F _{MID} / F _{HIGH}				
EUT tes	st mode	Single				
		Limits				
	1	None (Informational only)				
		Test setup				
		pectrum nalyzer EUT				
		Test procedure				
	•	ation tester is used if needed)				
•	at least twice the emis andwidth set to 1 % o	•				
		surement with spectrum analyzer built in measurement function				
		Test results				
Channel	Frequency [MHz]	Occupied Bandwidth [kHz]				
F _{LOW}	917	675.33				
F _{MID}	921.5	655.35				
F _{HIGH}	926	671.33				
Comments:	Comments:					



Occupied Bandwidth - FLOW

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Christian Weber Test Conditions: Tnom / Vnom

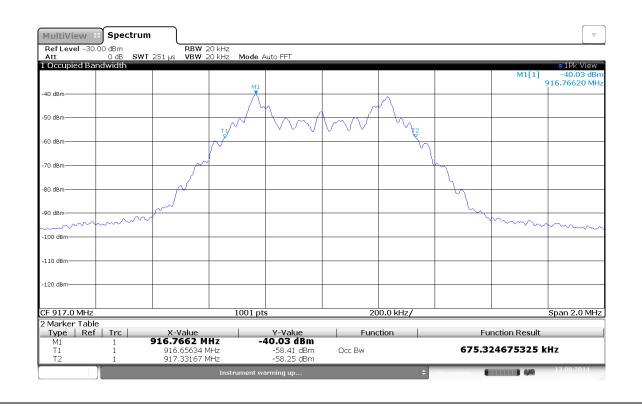
Mode: Tx, FSK, 917 MHz, 125 kbps

Test Date: 2014-08-12

Verdict: NONE (INFORMATION ONLY)

Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used

Note 2: OBW= 675.33 kHz





Occupied Bandwidth - F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Christian Weber Test Conditions: Tnom / Vnom

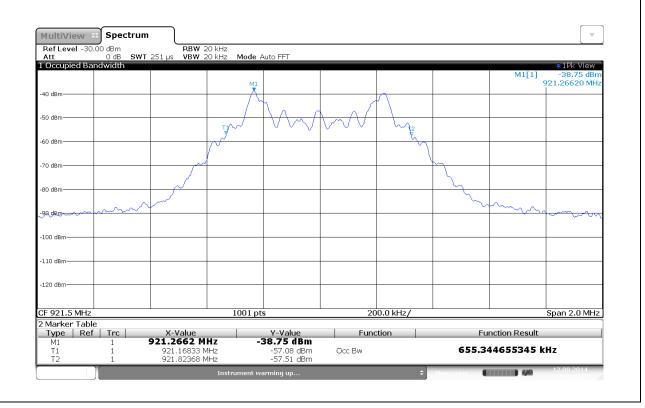
Mode: Tx, FSK, 921.5 MHz, 125 kbps

Test Date: 2014-08-12

Verdict: NONE (INFORMATION ONLY)

Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used

Note 2: OBW= 655.35 kHz





Occupied Bandwidth - F_{HIGH}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Christian Weber Test Conditions: Tnom / Vnom

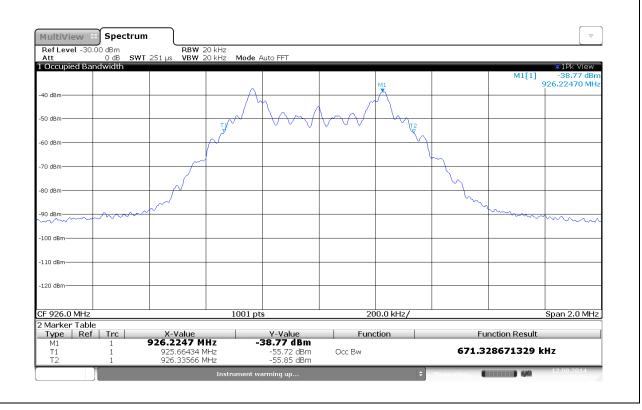
Mode: Tx, FSK, 926 MHz, 125 kbps

Test Date: 2014-08-12

Verdict: NONE (INFORMATION ONLY)

Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used

Note 2: OBW= 671.33 kHz



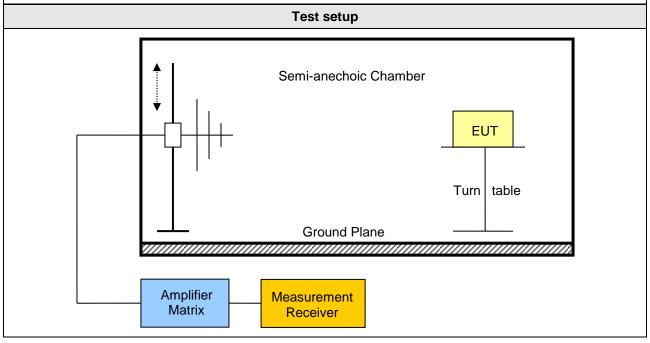


3.2 Test Conditions and Results - Transmitter radiated emissions

Transmitter radiated emissions acc. FCC 47 CFR 15.247 / IC RSS-210 Verdict: PASS						
Test according referenced		Reference Method				
standards		F	CC 15.247(d) / IC R	SS-210 A8.5		
Test according	to		Reference Me	thod		
measurement refe	rence	FCC KE	OB Publication No. 55	58074 / ANSI C63.4		
Toot from your out re	222		Tested frequer	ncies		
rest frequency ra	Test frequency range		30 MHz – 10 th Harmonic			
EUT test mod	е		Single	Single		
		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 Report No.: G0M-1407-3996-TFC247DT-V01



Test procedure

- 1. EUT set to test 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 within restricted bands

Test results – Internal Antenna								
Channel	Frequency [MHz]	Emission [MHz]	Level [dbµV/m]	Detector	Pol.	Limit [dbµV/m]	Limit distance [m]*	Margin [dB]
F_{LOW}	917	1834	46.99	pk	hor	95.00	3	-48.01
F _{LOW}	917	1834	59.49	pk	ver	95.00	3	-35.51
F _{LOW}	917	2746	43.51	pk	hor	74.00	3	-30.49
F _{LOW}	917	2750	52.44	pk	ver	74.00	3	-21.56
F _{LOW}	917	2750	46.23	avg	ver	54.00	3	-07.77
F _{LOW}	917	3664	44.33	pk	hor	74.00	3	-29.67
F _{LOW}	917	3664	51.27	pk	ver	74.00	3	-22.73
F _{MID}	921.5	1840	47.30	pk	hor	95.00	3	-47.70
F _{MID}	921.5	1840	61.95	pk	ver	95.00	3	-33.05
F _{MID}	921.5	2758	43.66	pk	hor	74.00	3	-30.34
F _{MID}	921.5	2764	45.69	pk	ver	74.00	3	-28.31
F_{MID}	921.5	2764	37.90	avg	ver	54.00	3	-16.10
F _{MID}	921.5	3682	44.02	pk	hor	74.00	3	-29.98
F _{MID}	921.5	3682	52.06	pk	ver	74.00	3	-21.94
F _{HIGH}	926	928	69.44	pk	ver	95.00	3	-25.56
F _{HIGH}	926	928.144	75.33	pk	hor	95.00	3	-19.67
F _{HIGH}	926	1852	48.31	pk	hor	95.00	3	-46.69
F _{HIGH}	926	1852	62.88	pk	ver	95.00	3	-32.12
F _{HIGH}	926	2776	44.55	pk	hor	74.00	3	-29.45
F _{HIGH}	926	2777	52.74	pk	ver	74.00	3	-21.26
F _{HIGH}	926	2777	46.28	avg	ver	54.00	3	-07.72
F _{HIGH}	926	3700	43.63	pk	hor	74.00	3	-30.37
F _{HIGH}	926	3700	51.96	pk	ver	74.00	3	-22.04

Comments: $\,^*$ Physical distance between EUT and measurement antenna.



ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC 15.247

Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

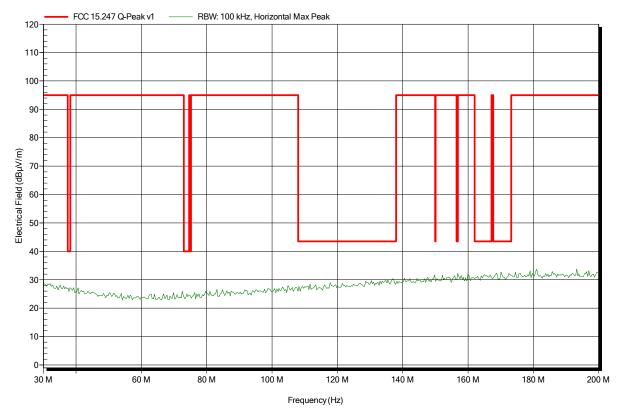
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HK 116, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

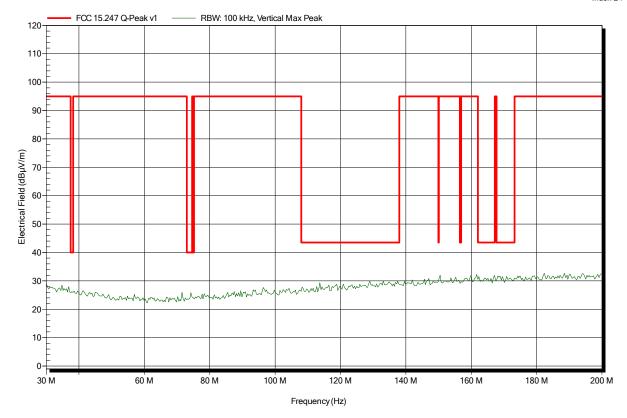
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HK 116, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

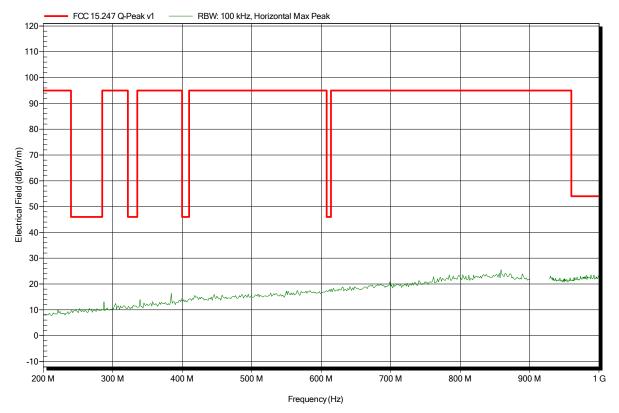
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

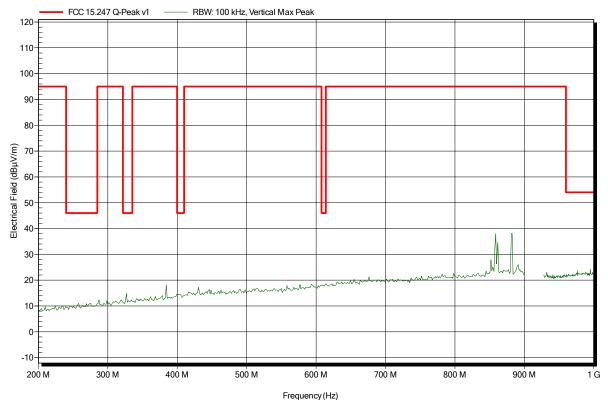
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





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Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

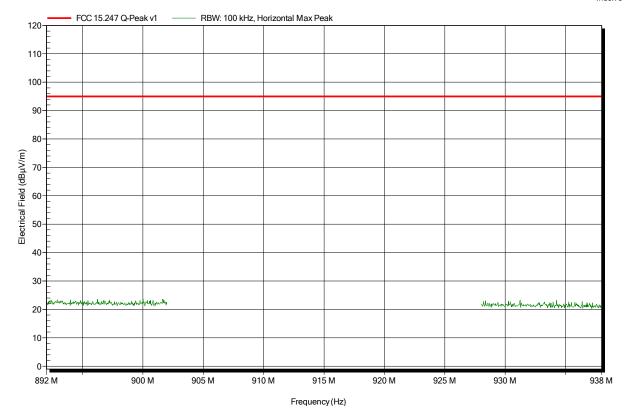
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





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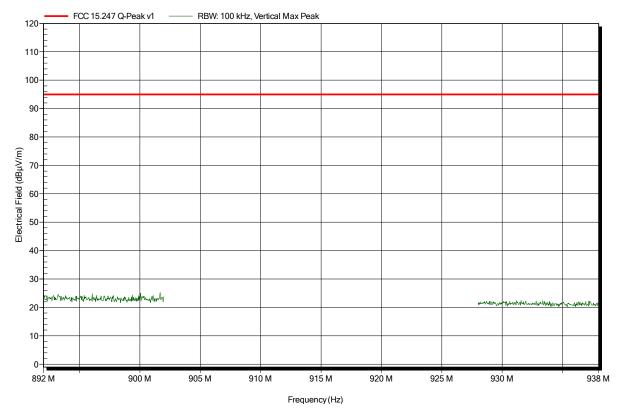
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

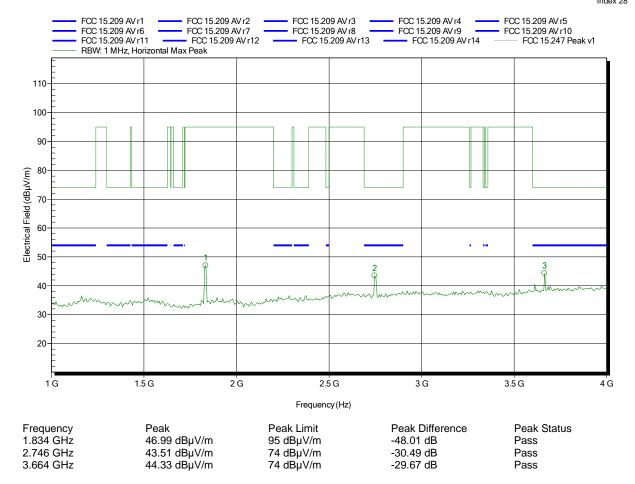
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

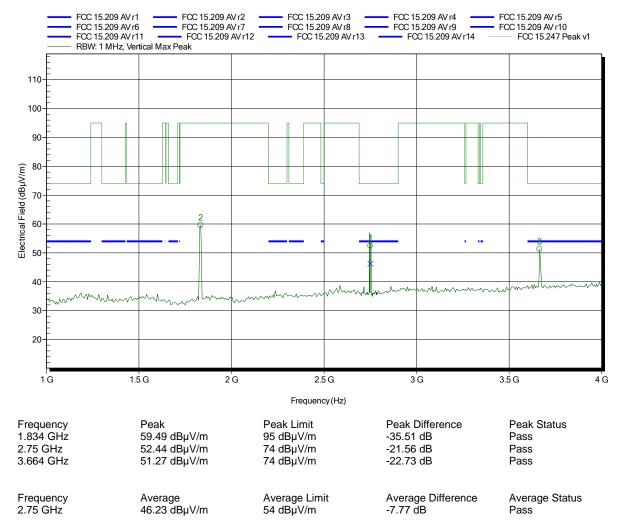
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





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Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

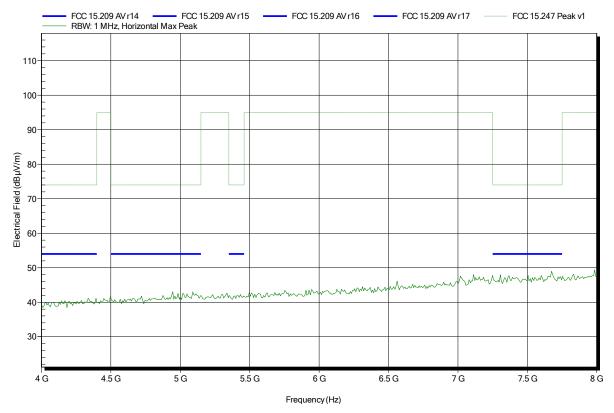
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





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Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

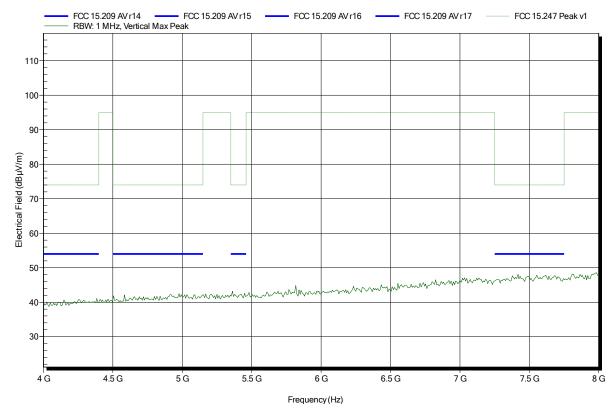
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

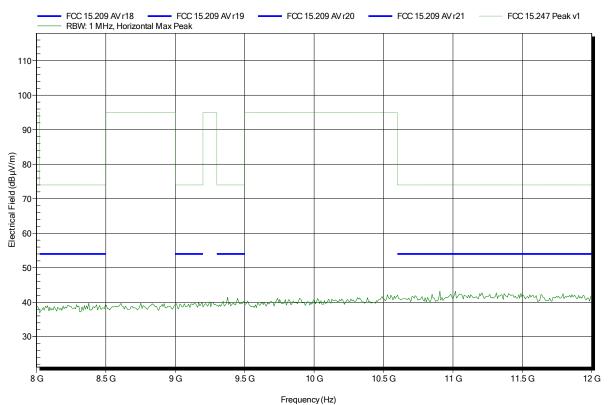
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

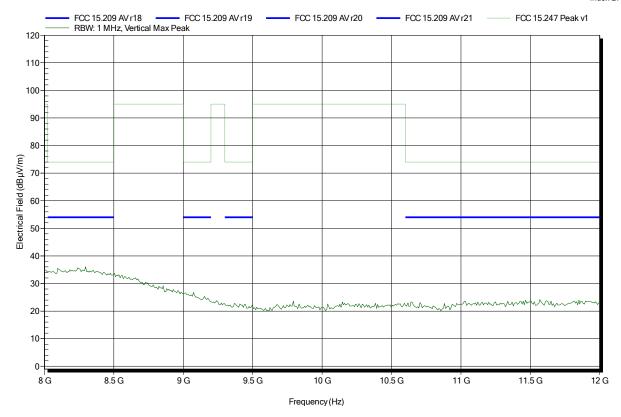
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 917 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

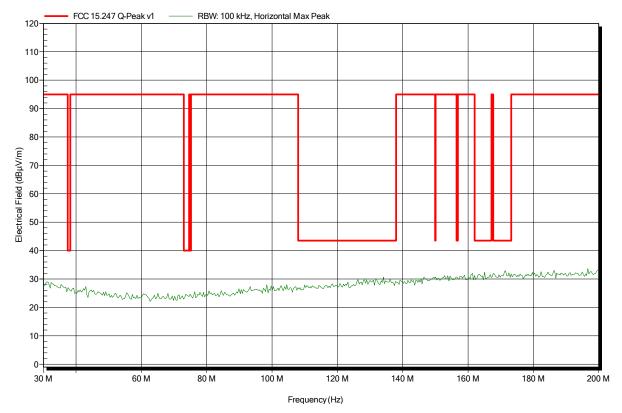
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HK 116, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

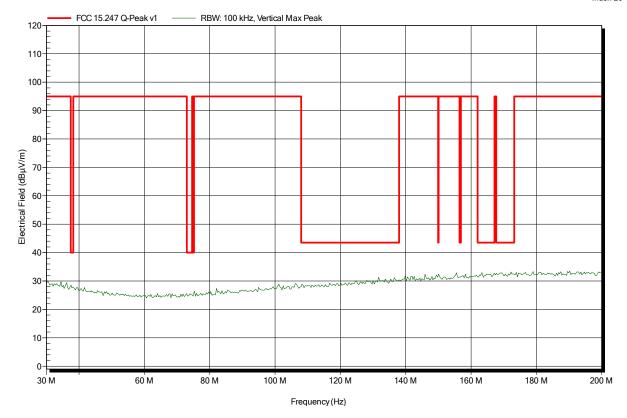
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HK 116, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

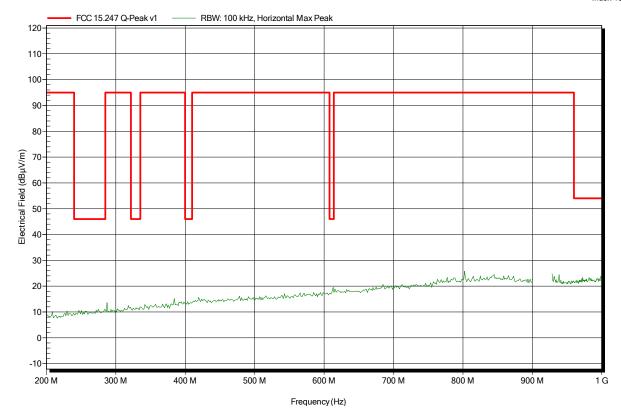
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

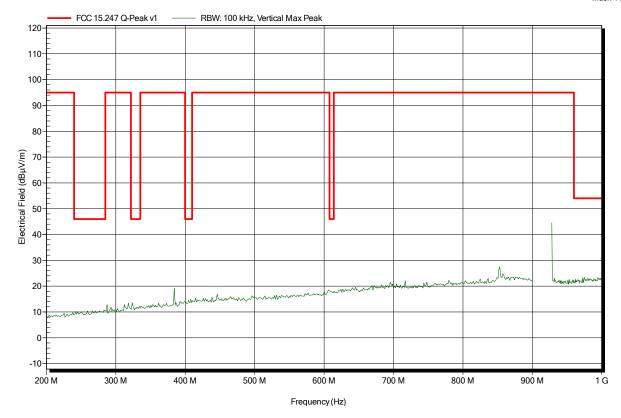
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

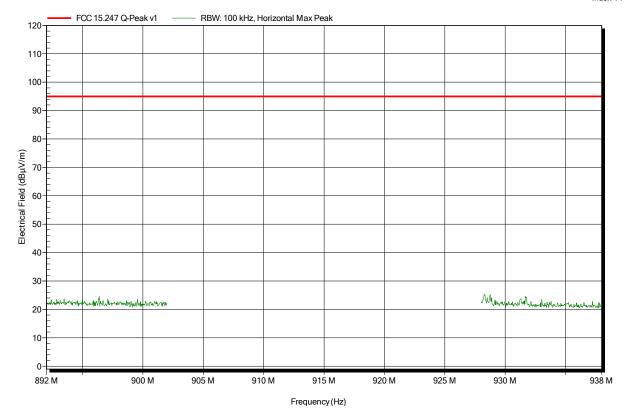
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

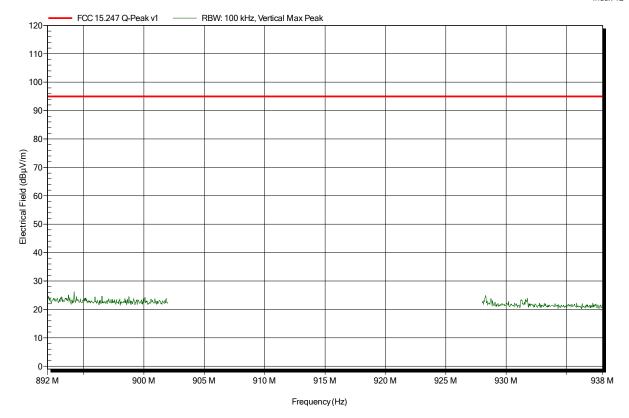
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

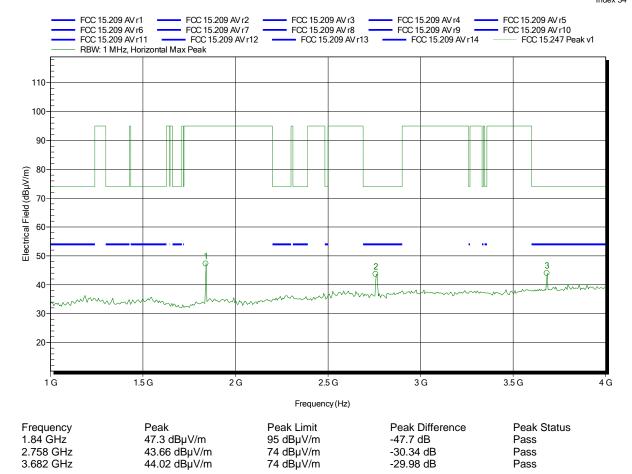
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12
Note: EUT vertical





Project number: G0M-1407-3996

Dräger Safety AG & Co. KGaA Applicant: **EUT Name:** Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance:

FCC 15 209 AV r1 FCC 15.209 AV r6 FCC 15.209 AV r11

Mode: TX; FSK, 921.5 MHz, 125 kBps

FCC 15.209 AV r2

FCC 15.209 AV r12

FCC 15.209 AV r7

Test Date: 2014-08-12 Note: **EUT** vertical

RBW: 1 MHz, Vertical Max Peak

FCC 15.209 AV r5

FCC 15.209 AV r10

FCC 15.247 Peak v1

FCC 15 209 AV r4

FCC 15.209 AV r9

FCC 15.209 AV r14

Index 31

110	2 0		G 30	·	3 0 0 4G
Frequency (Hz)					
Frequency 1.84 GHz 2.764 GHz 3.682 GHz	Peak 61.95 dBμV/m 45.69 dBμV/m 52.06 dBμV/m	Peak Limit 95 dBµV/m 74 dBµV/m 74 dBµV/m	Peak D -33.05 c -28.31 c -21.94 c	dB dB	Peak Status Pass Pass Pass

FCC 15 209 AV r3

FCC 15.209 AV r8

FCC 15.209 AV r13

Frequency Average Average Limit Average Difference Average Status 2.764 GHz 37.9 dBµV/m 54 dBµV/m -16.1 ďB Pass



Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

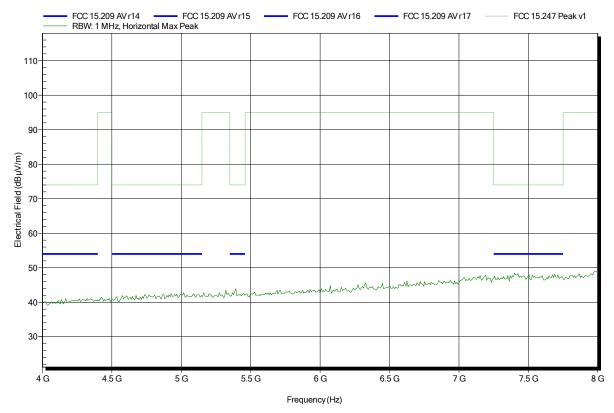
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

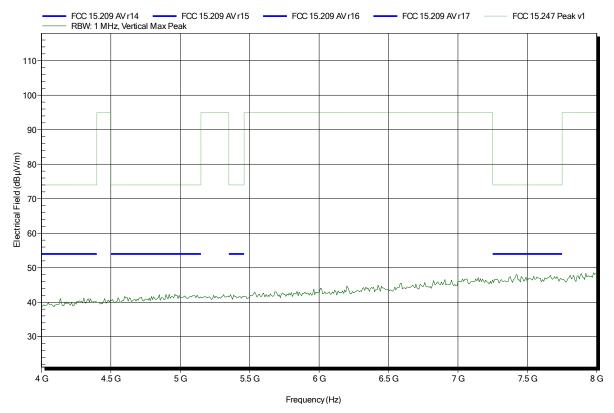
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

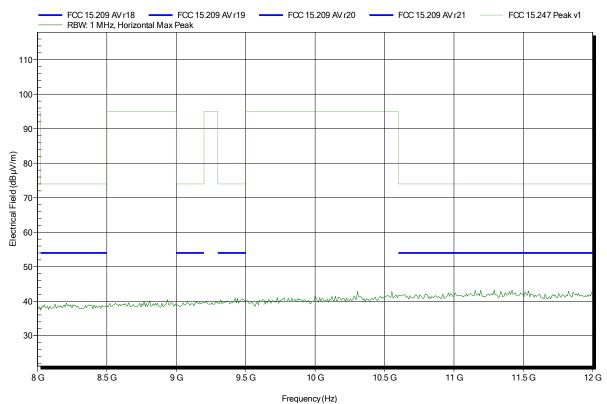
Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical







Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

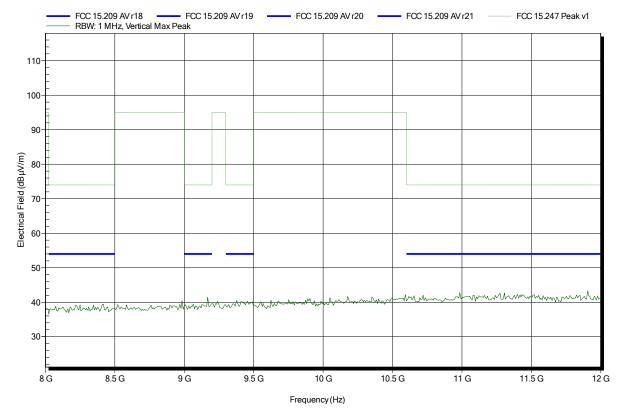
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 921.5 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

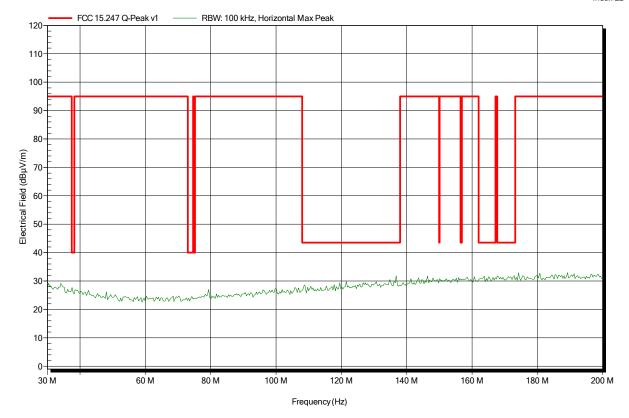
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HK 116, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

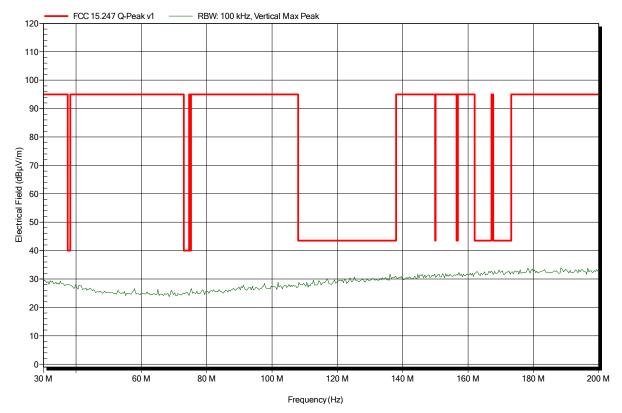
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HK 116, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

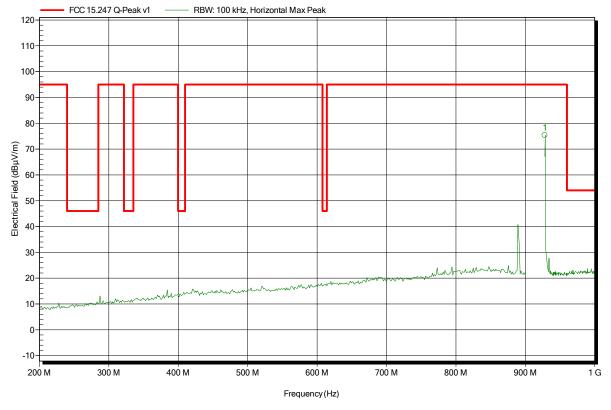
Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical

Index 15



Frequency 928.144 MHz Peak 75.33 dBµV/m Peak Limit 95 dBµV/m Peak Difference -19.67 dB Peak Status Pass



Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

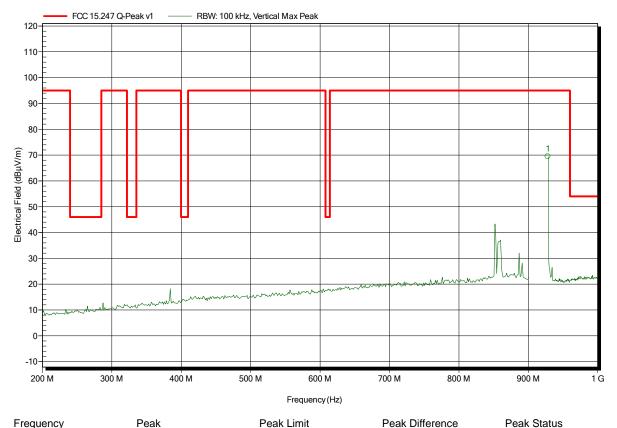
928 MHz

Mode: TX; FSK, 926 MHz, 125 kBps

69.44 dBµV/m

Test Date: 2014-08-12 Note: EUT vertical

Index 18



95 dBµV/m

-25.56 dB

Test Report No.: G0M-1407-3996-TFC247DT-V01

Pass



Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

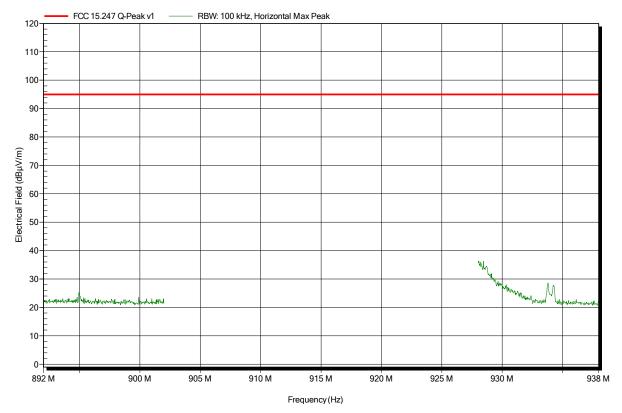
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

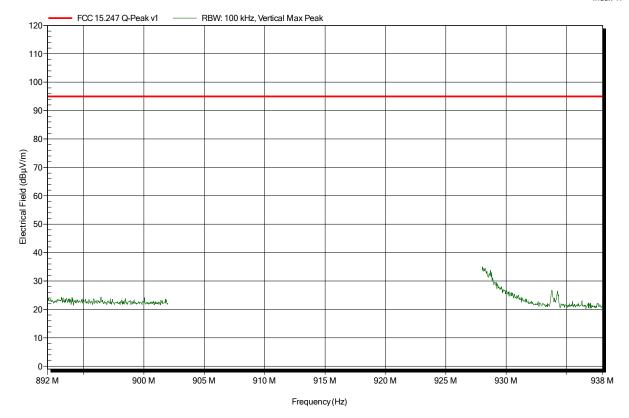
Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

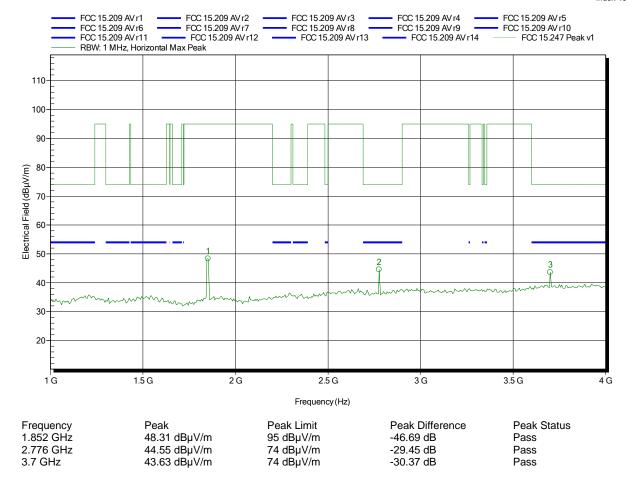
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

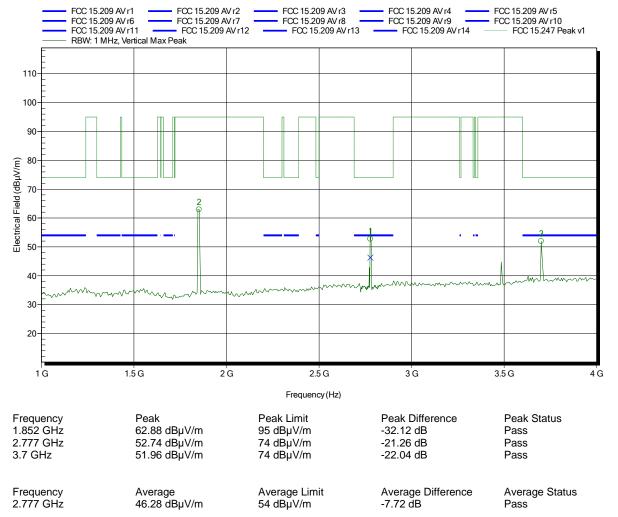
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12
Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

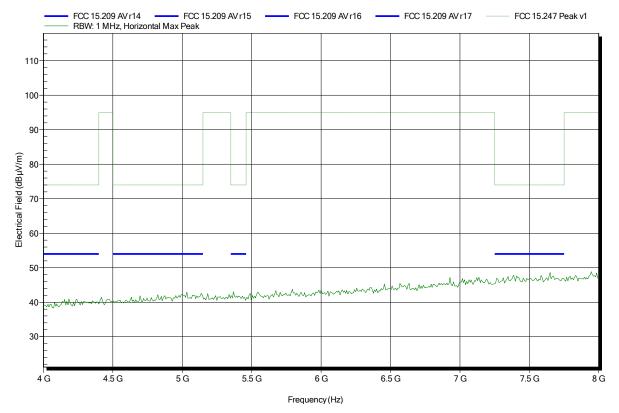
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

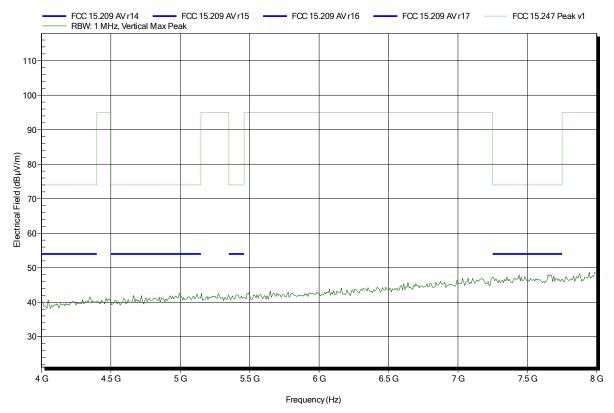
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3 m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

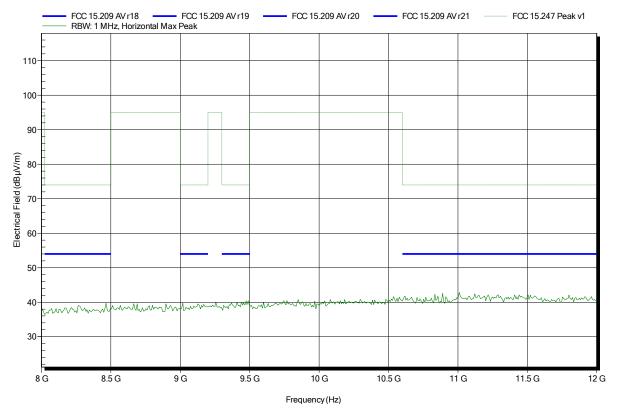
Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Horizontal

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical





Project number: G0M-1407-3996

Applicant: Dräger Safety AG & Co. KGaA EUT Name: Portable Alarm Amplifier

Model: AAC 00XX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Weber

Test Conditions: Tnom: 24°C, Vnom: 6.0 VDC

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 1 m converted to 3m

Mode: TX; FSK, 926 MHz, 125 kBps

Test Date: 2014-08-12 Note: EUT vertical

