RADIO REPORT

FCC 47 CFR Part 15C
ISED Canada RSS-247

Digital transmission systems operating within the 2400 – 2483.5 MHz band

Report Reference No	G0M-1803-7309-TFC247ZB-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A-2 DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Dräger Safety AG & Co. KGaA
Address	Revalstraße 1 23560 Lübeck GERMANY
Test Specification	According to FCC/ISED rules
Standard	47 CFR Part 15C RSS-247, Issue 2, 2017-02 RSS-Gen, Issue 5, Amendment 1, 2019-03
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Fixed Gas Detector
Model(s)	P6100
Additional Model(s)	None
Brand Name(s)	None
Hardware Version(s)	8327000-00
Software Version(s)	GSTox image 8326059 V0.12.1, SW Murata ISA 100 8328374 R1.01.13, SW Telit BLT V3.12.0002
FCC-ID	X6O-RC001
IC	5895F-RC001
Test Result	**PASSED**

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 - 25 °C	
Test Lab Humidity	20 – 45 %	
Date of receipt of test item	2019-05-21	
Report:		
Compiled by	Florian Voigt	
Tested by (+ signature) (Responsible for Test)	Florian Voigt supervised by Wilfried Treffke	F. Voigt W. Treffke
Approved by (+ signature) (Head of Lab)	Christian Weber	C. Weber
Date of Issue	2020-01-15	
Total number of pages	117	
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:		
The EUT can operate from different power sources (24 VDC or 14.4 VDC). Test mode selection is based on comparative tests. The 24 VDC power port was selected for compliance tests. Antenna 1 was used for evaluation and testing because this antenna has the highest gain and all antennas are of the same type.		

ADDITIONAL VARIANTS

Additional Variants (not tested and not evaluated variants)		
Not-tested Variant	**Description**	
1	Product Type Description	P6100 Repeater ISA
	Model name	Polytron Repeater ISA
	Brand name	Not specified
	Hardware Version	Not specified
	Software Version	Not specified
	PMN	Polytron Repeater ISA
	HVIN	RC001
	FVIN	N/A
	HMN	N/A
Comment: Those named additional variants above have not been tested. Those additional variants of the series have been declared by the manufacturer. The test report explicitly states that those variants were neither tested nor assessed nor evaluated.		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2020-01-15	Initial Release	

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
DSSS	Direct Sequence Spread Spectrum
EUT	Equipment Under Test
FCC	Federal Communications Commission
IEEE 802.15.4	MAC and PHY Layer for Wireless Personal Area Networks
ISED	Innovation, Science and Economic Development Canada
O-QPSK	Offset-Quadrature Phase Shift Keying
QPSK	Quadrature Phase Shift Keying
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V_{NOM}	Nominal supply voltage

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1 Equipment (Test Item) Under Test

Description	Fixed Gas Detector	
Model	P6100	
Additional Model(s)	None	
Brand Name(s)	None	
Serial Number(s)	ARME-0007	
Hardware Version(s)	8327000-00	
Software Version(s)	GSTox image 8326059 V0.12.1, SW Murata ISA 100 8328374 R1.01.13, SW Telit BLT V3.12.0002	
PMN	Polytron 6100 EC WL	
HVIN	RC001	
FVIN	N/A	
HMN	N/A	
FCC-ID	X6O-RC001	
IC	5895F-RC001	
Equipment type	End Product	
Radio type	Transceiver	
Assigned frequency bands	2400 - 2483.5 MHz	
Radio technology	IEEE 802.15.4	
Modulation	O-QPSK	
Number of antenna ports	1	
Radio Module IEEE 802.15.4	Type	2.4GHz ISA100 Wireless Module
	Model	LBBA0ZZ1EU-951
	Manufacturer	Murata Manufacturing Co.
	HW Version	SP-ZZ1EU
	SW Version	R1.01.13
Antenna 1	Type	external omni-directional
	Model	Sencity Omni Stick (85026220)
	Manufacturer	Huber & Suhner
	Gain	6 dBi
Antenna 2	Type	external omni-directional
	Model	Sencity Omni Stick (85065352)
	Manufacturer	Huber & Suhner
	Gain	2 dBi
Antenna 3	Type	external omni-directional
	Model	F9915KW
	Manufacturer	Yokogawa
	Gain	2 dBi
Supply Voltage 1	V_{NOM}	24.0 VDC
Supply Voltage 2	V_{NOM}	14.4 VDC (Battery)
Operating Temperature	T_{NOM}	25 °C
AC/DC-Adaptor	Not specified	
Manufacturer	Dräger Safety AG & Co. KGaA Revalstraße 1 23560 Lübeck GERMANY	

1.1 Photos – Equipment External

EUT Top view


EUT Side view

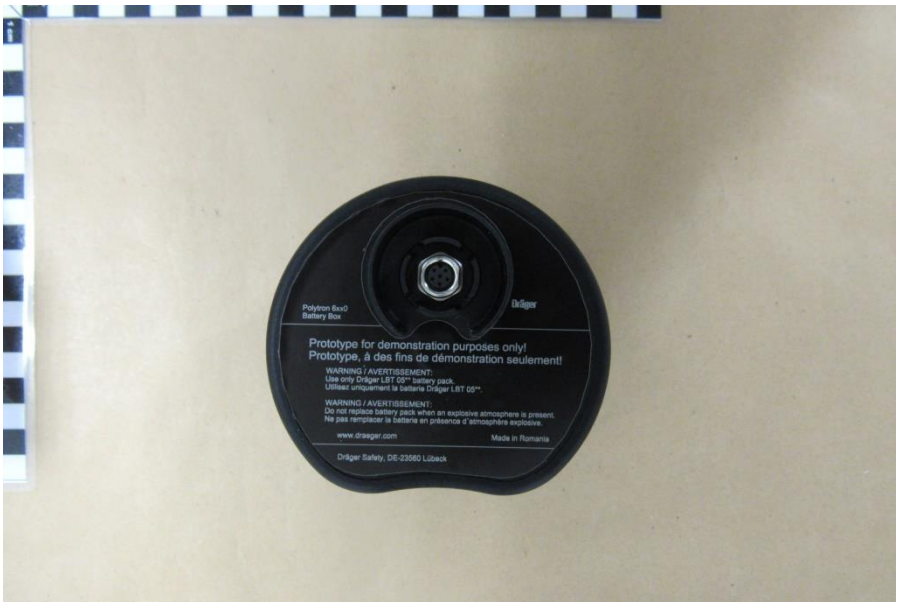

EUT Bottom view


IEEE 802.15.4 Antennas

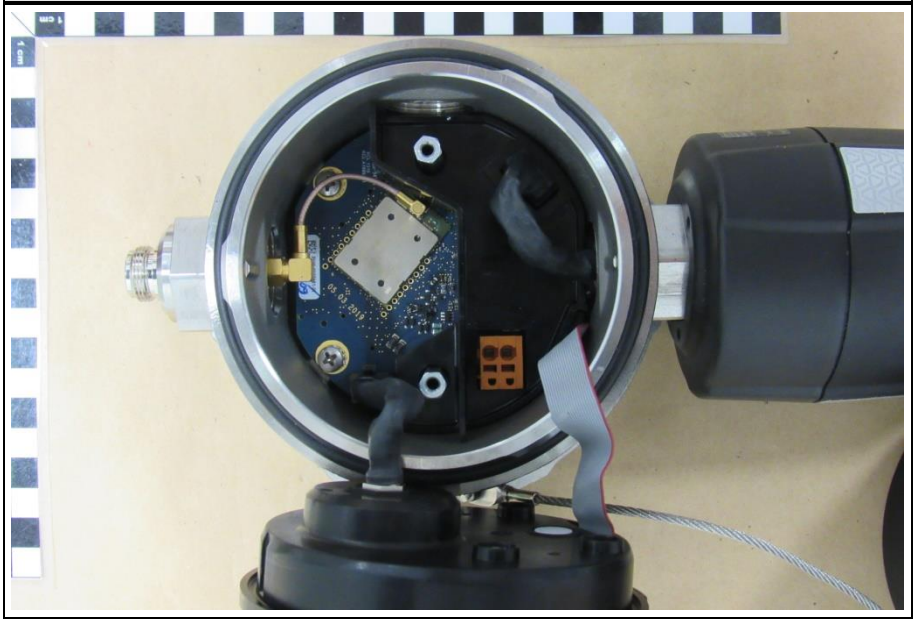

Powersupply used for testing - not part of the EUT


1.2 Photos – Equipment Internal

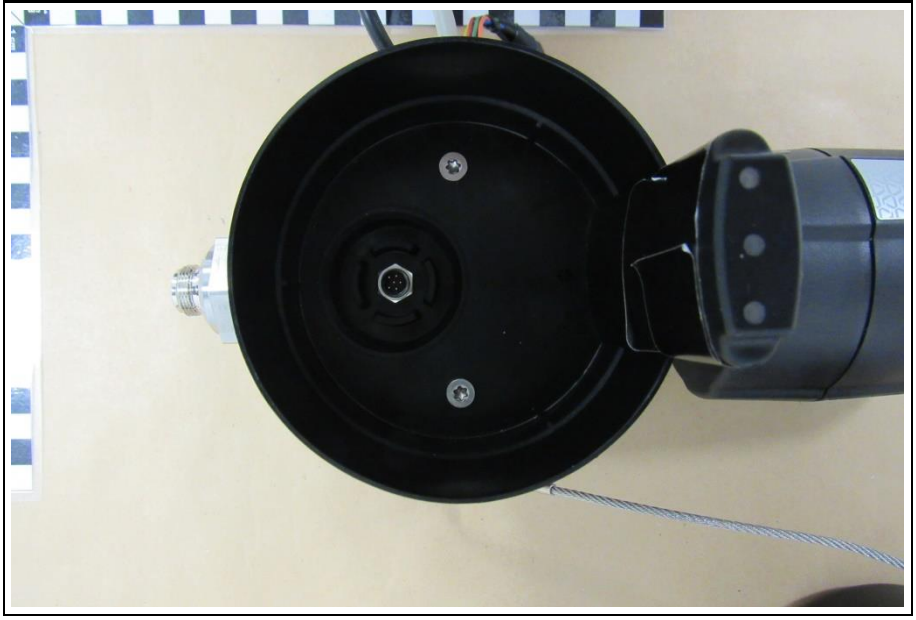
EUT Removed cover

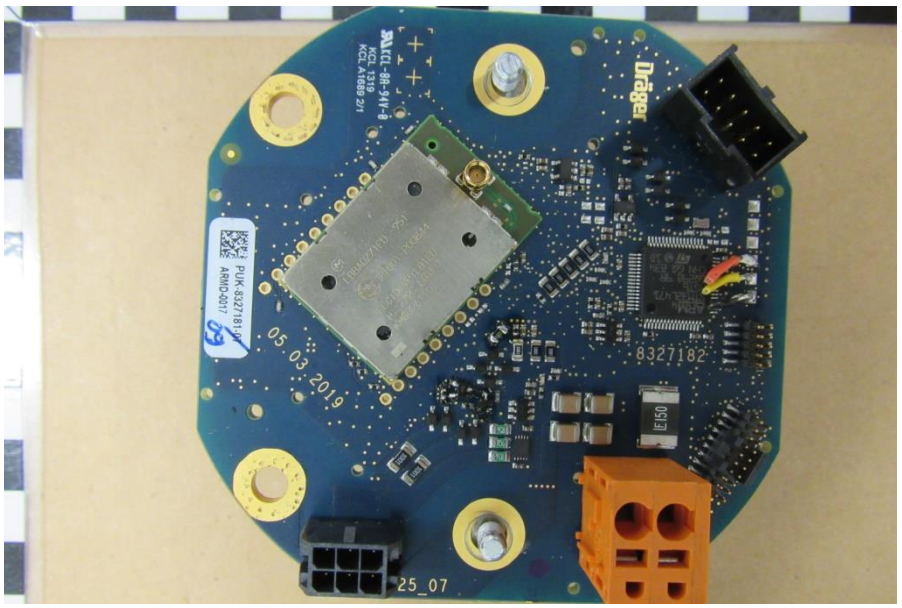

EUT Battery bottom


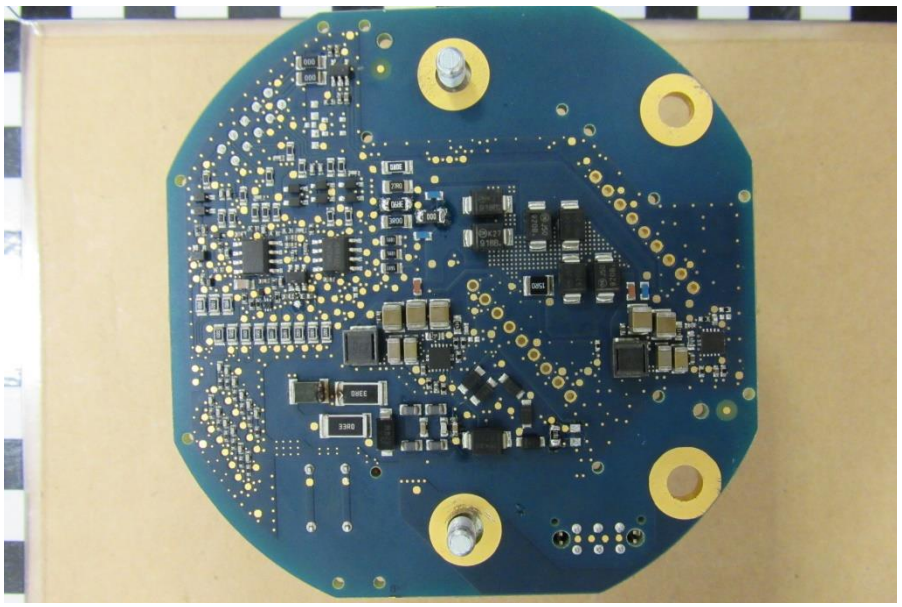
EUT internal view



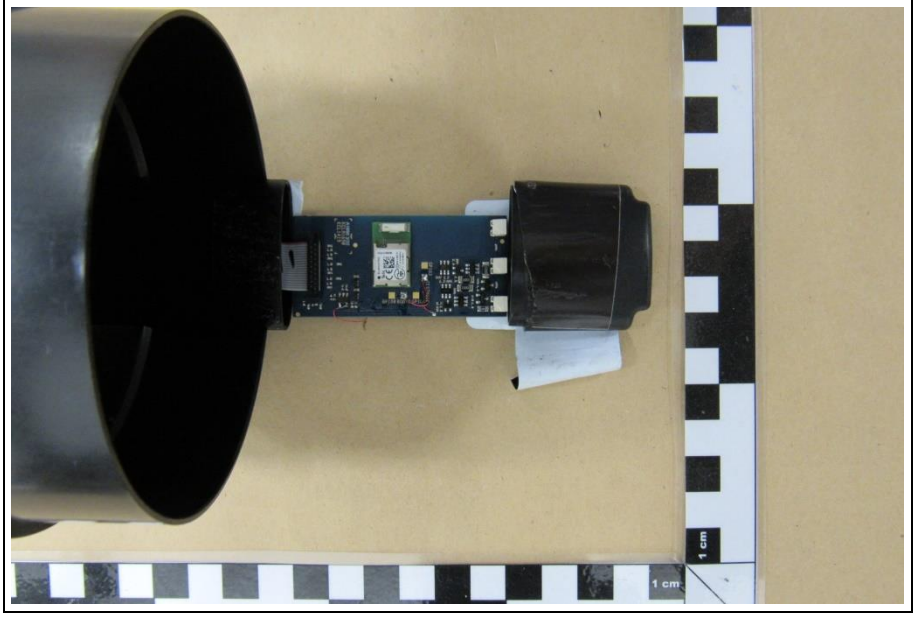
EUT Without battery

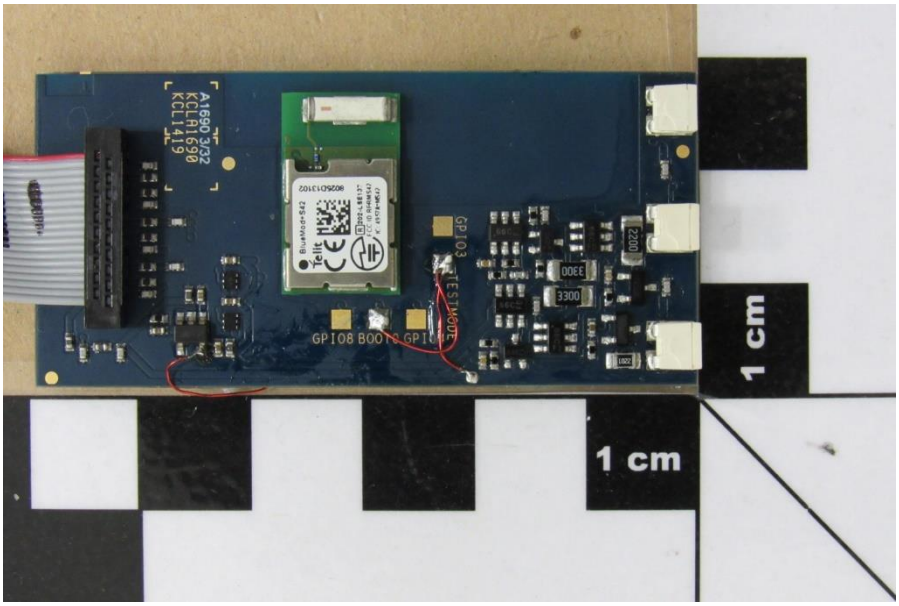


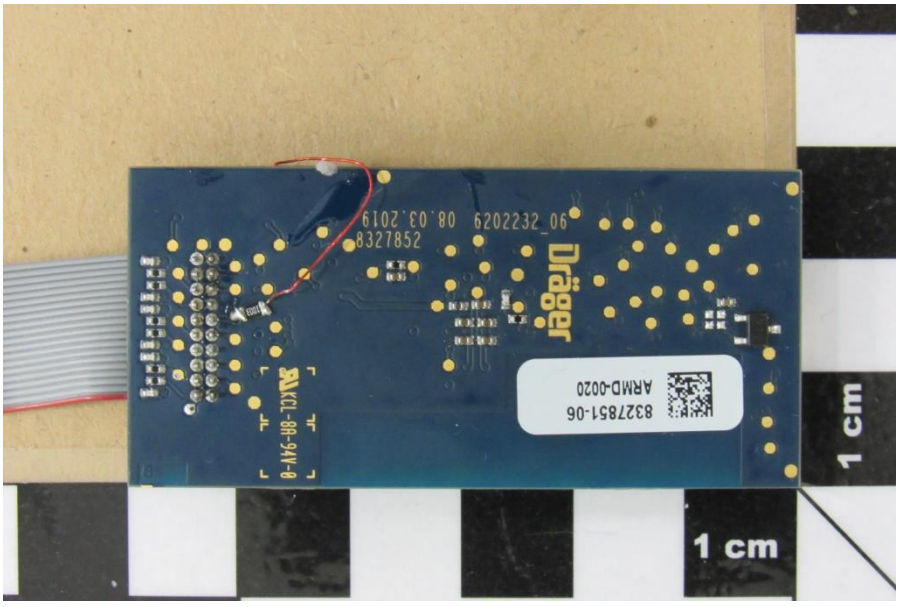
EUT Main PCB top with IEEE 802.15.14 module


EUT Main PCB bottom


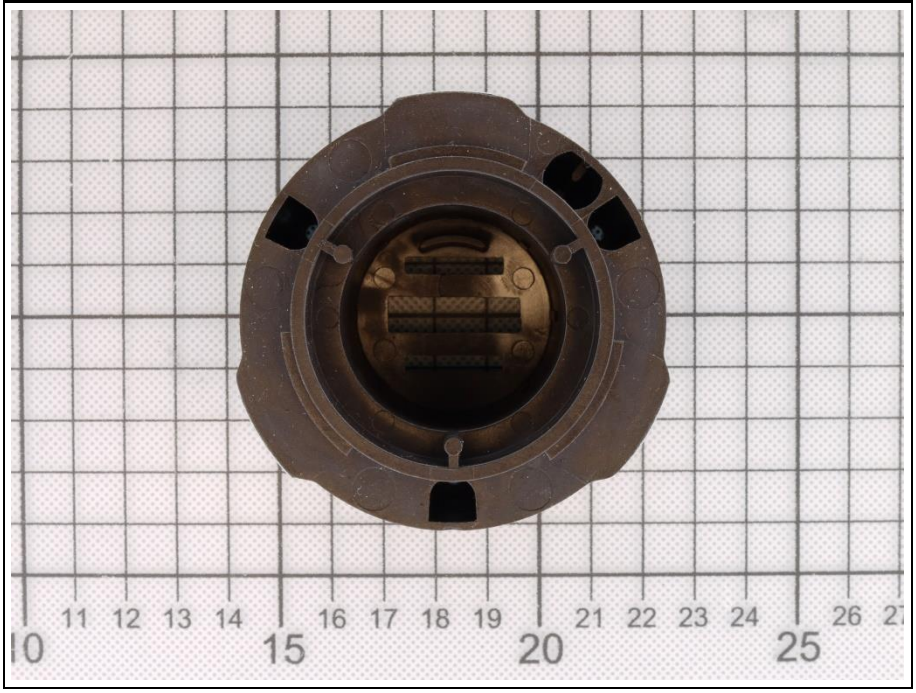
EUT without PCB


EUT BTLE PCB


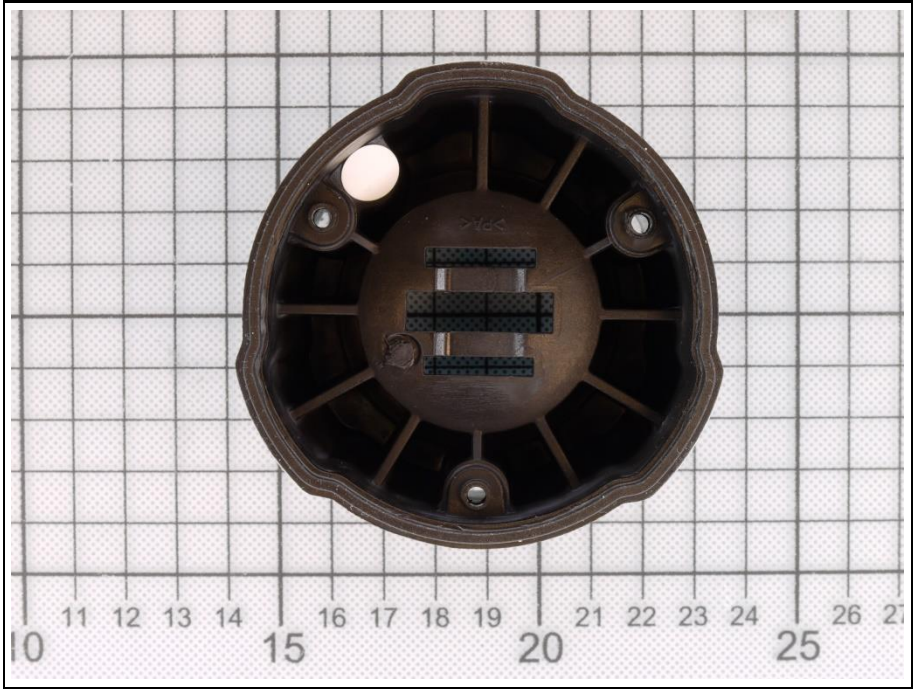
EUT BTLE PCB Top side


EUT BTLE PCB Bottom side


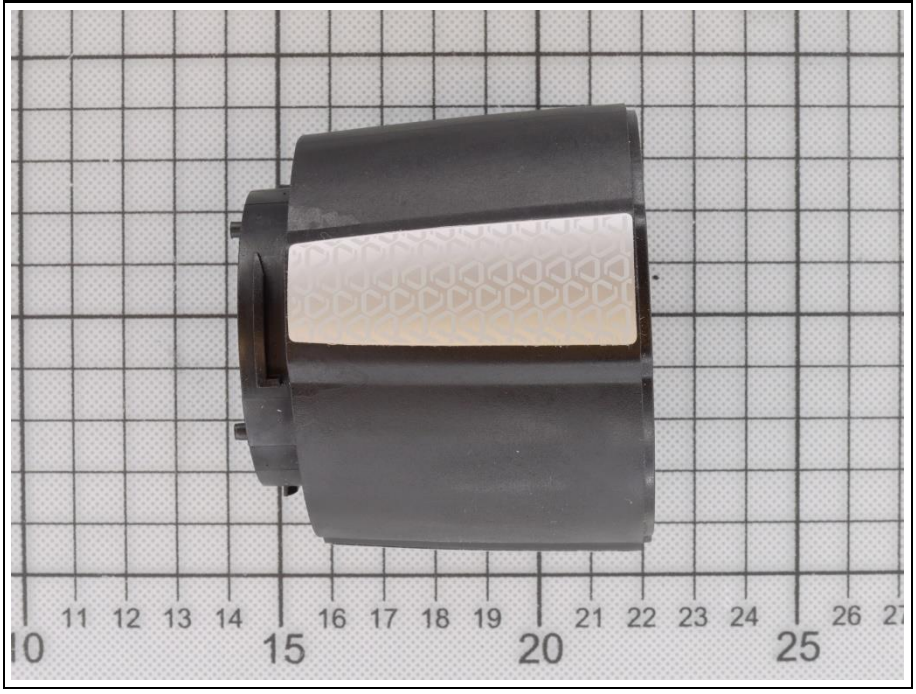
EUT Sensor view A



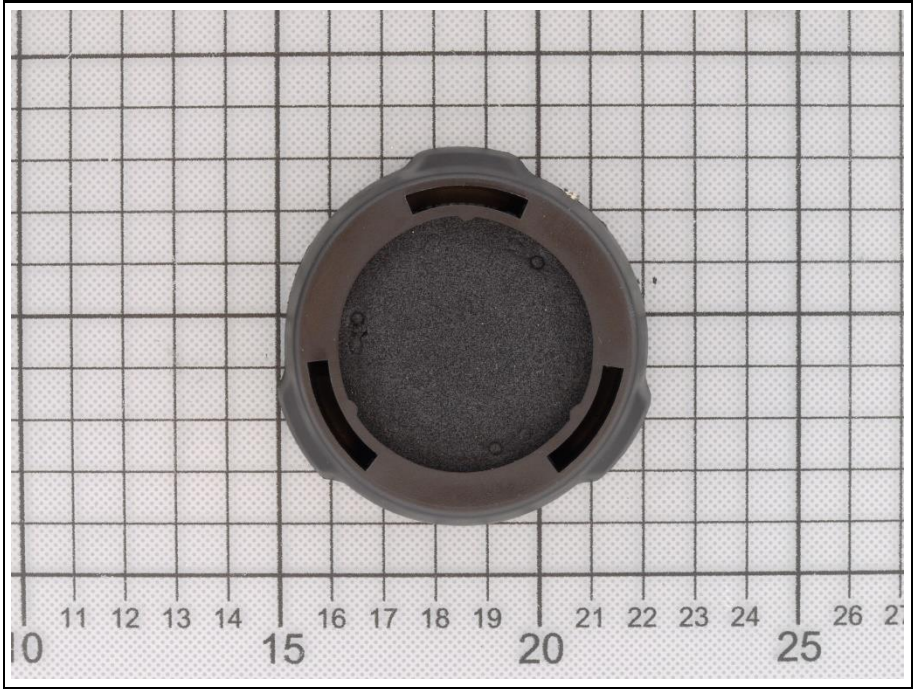
EUT Sensor view B



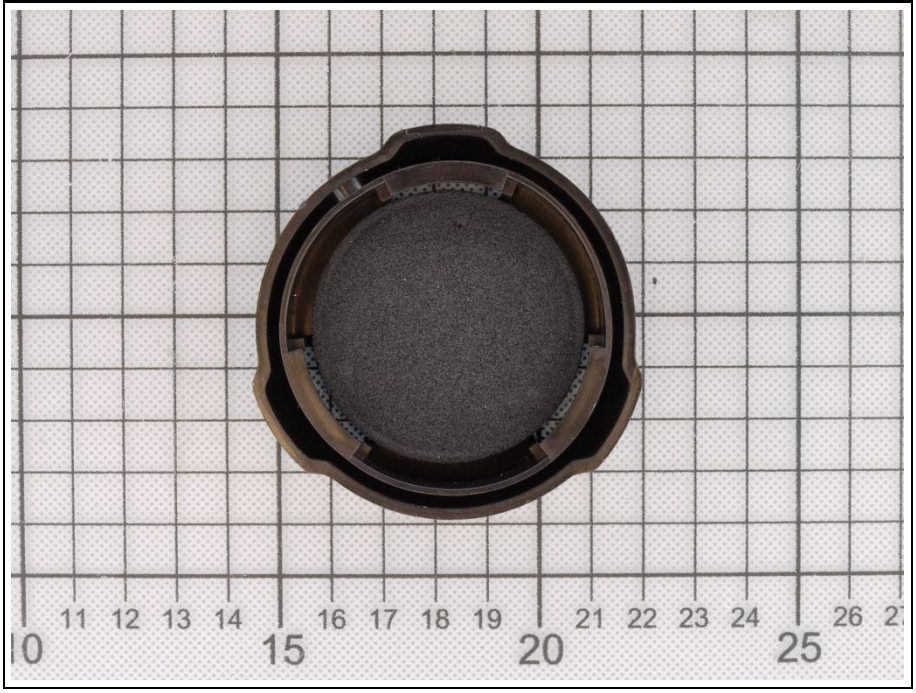
EUT Sensor view C



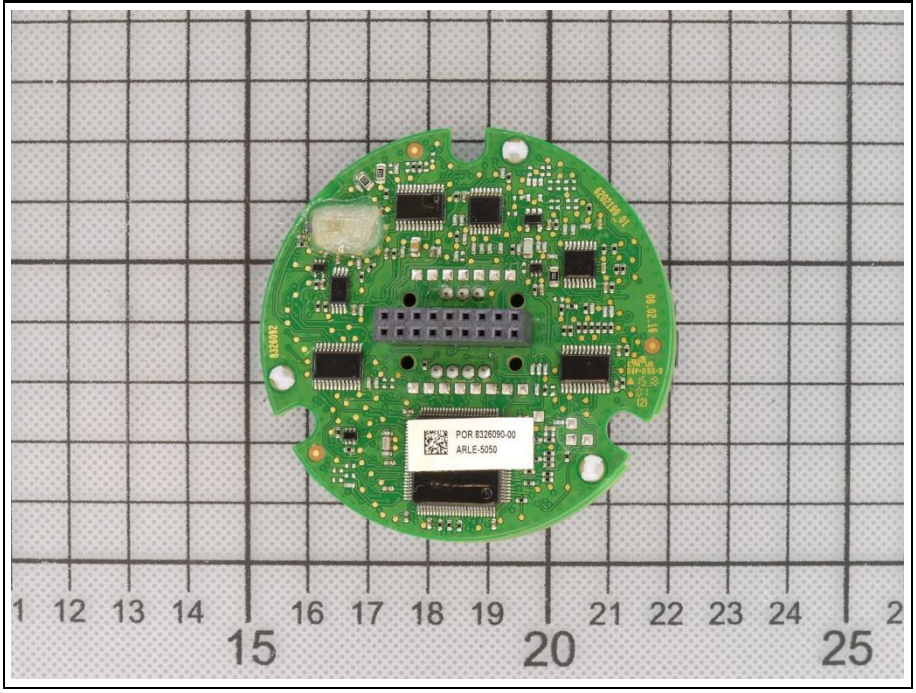
EUT Sensor view D



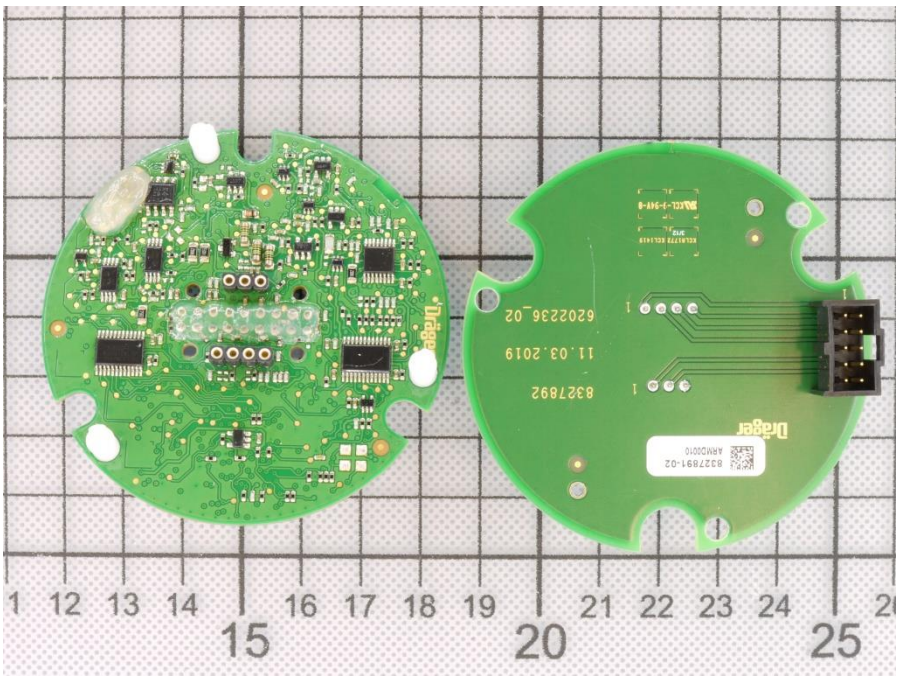
EUT Sensor view E



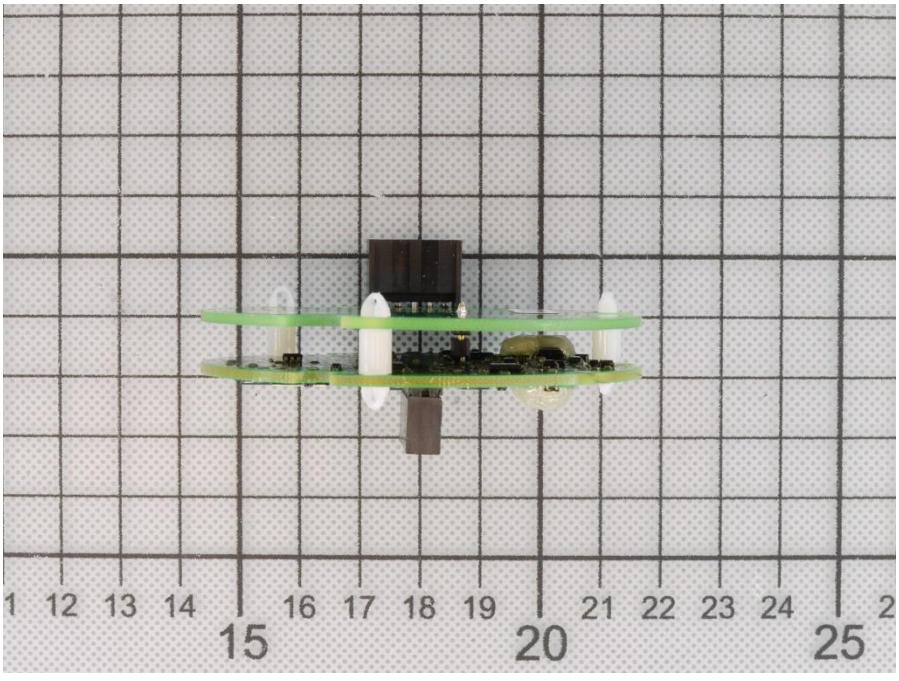
EUT Sensor PCBs A

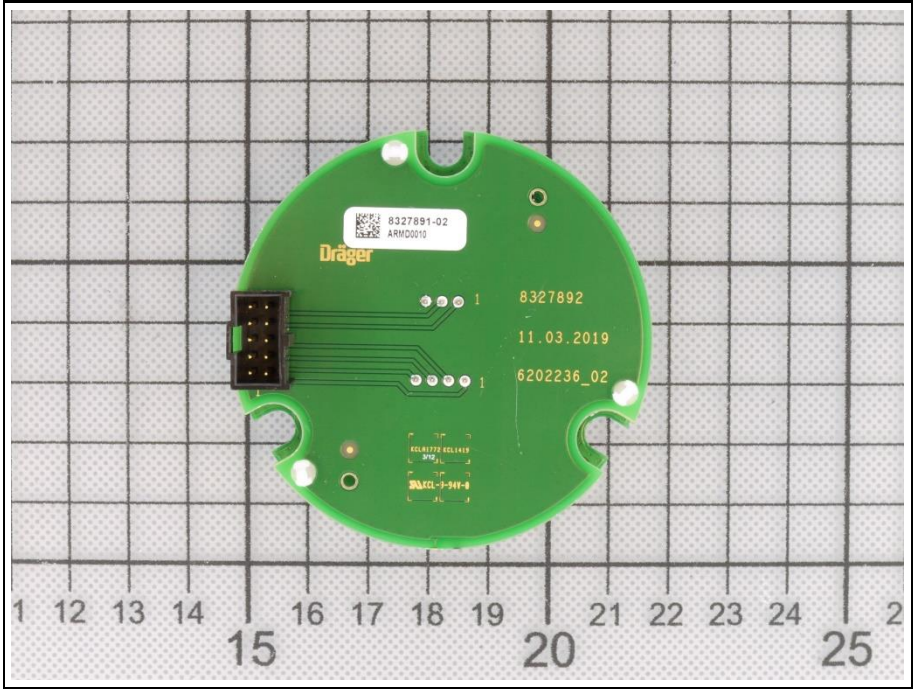


EUT Sensor PCBs B



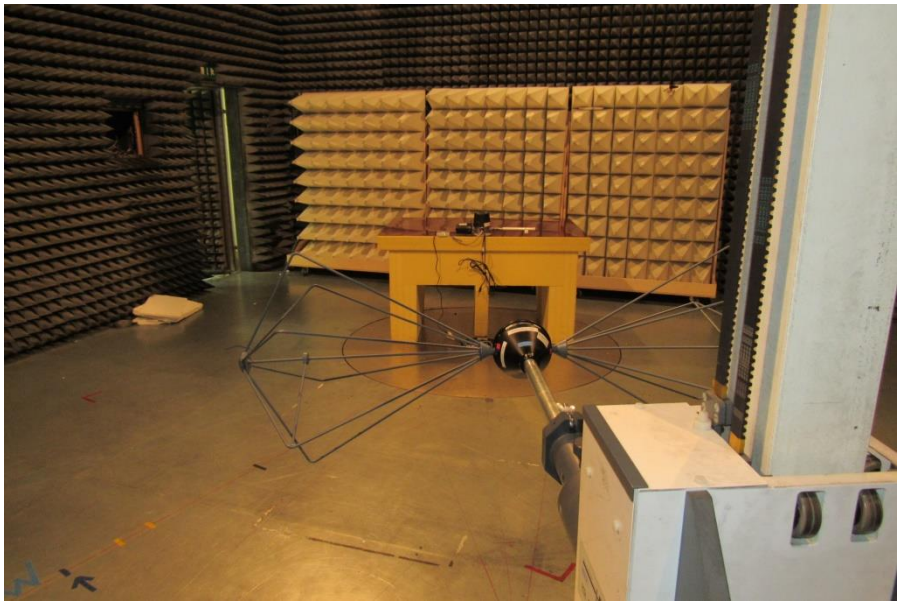
EUT Sensor PCBs side view



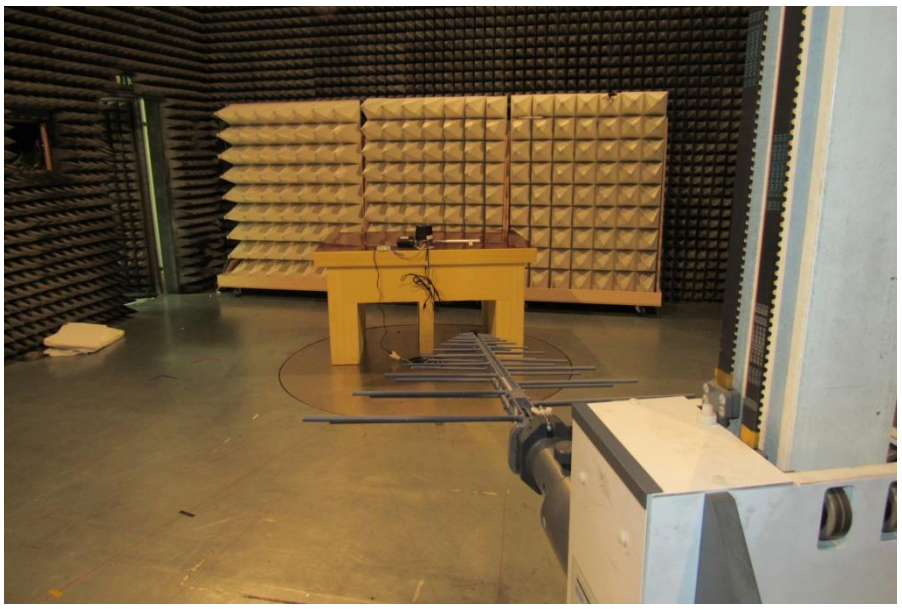
EUT Sensor PCBs


1.3 Photos – Test Setup

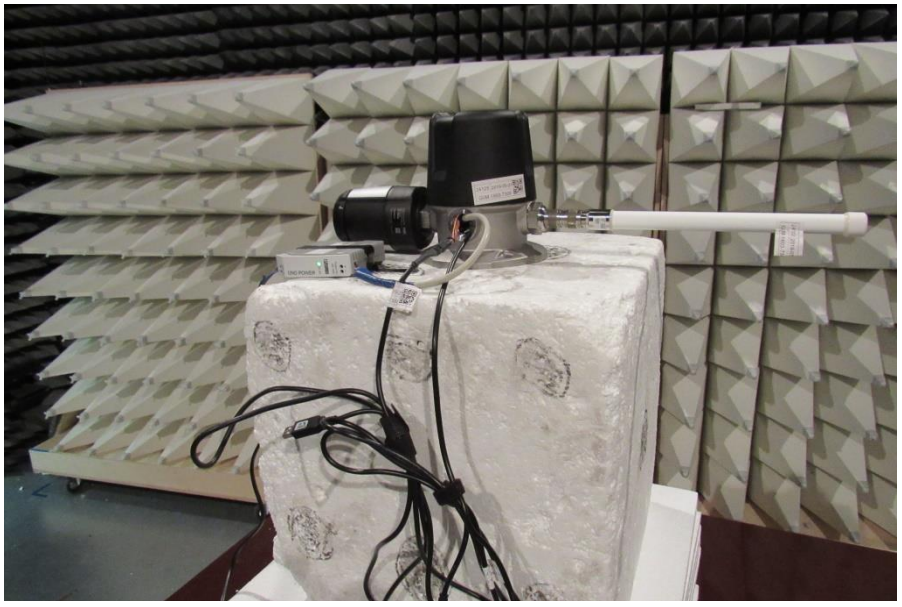
Testsetup below 1GHz EUT view

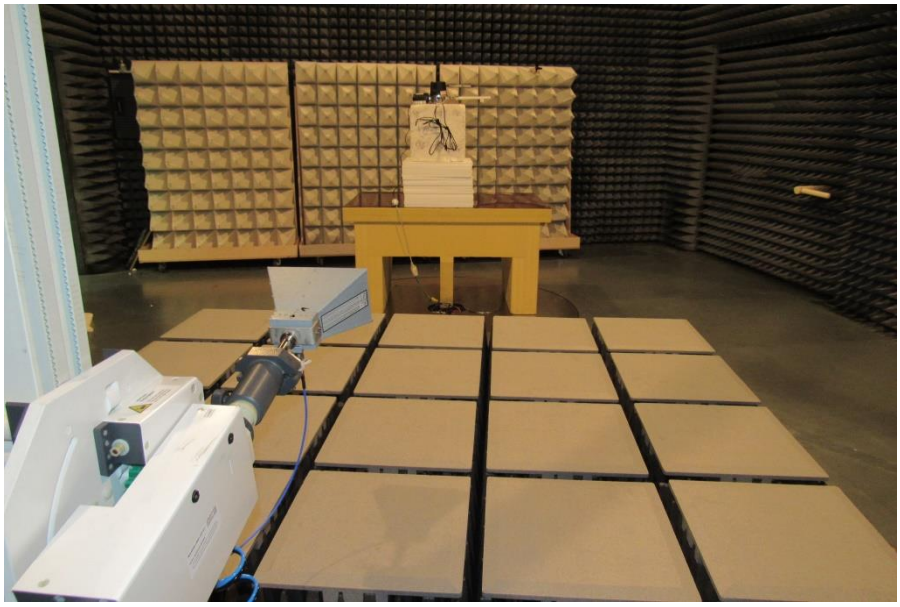

Testsetup above 30MHz


Testsetup above 200MHz

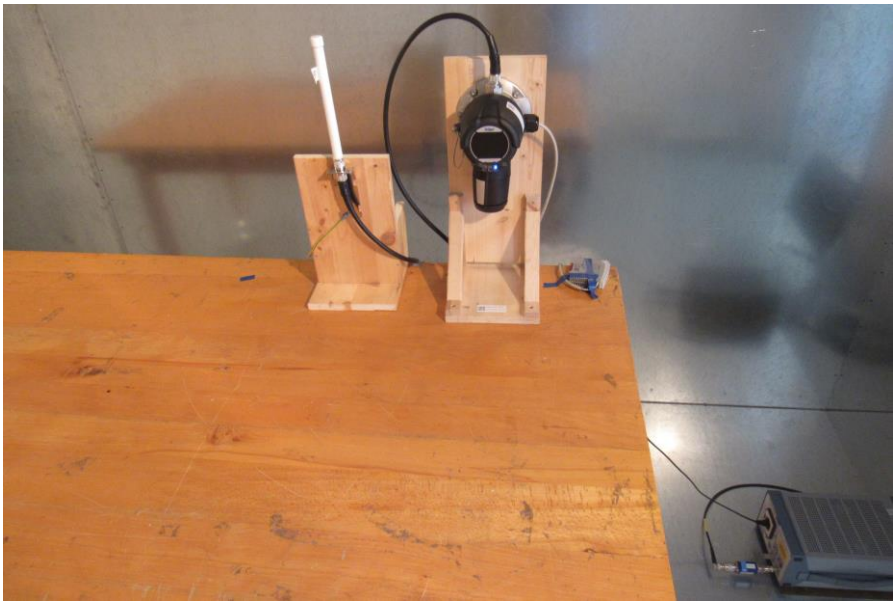


Testsetup above 1GHz EUT view



Testsetup above 1GHz


Testsetup conducted AC Powerline A



1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Laptop	Dell	Latitude 5490	Setting test modes, not connected during tests
AE	Power supply	Phoenix Contact	UNO-PS/1AC/24DC/30W (Input: 120VAC, Output: 24VDC)	Used to power EUT with 24VDC
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.5 Test mode duty cycle

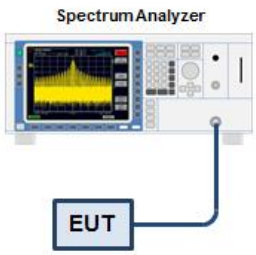
1.5.1 Information

Test Information	
Measurement Method	ANSI C63.10 11.6

1.5.2 Requirements

Requirements	
Duty cycle	Duty cycle correction
≥ 98 %	No correction required
< 98 %	Correction required (10 x Log_{10}(1/DC)

1.5.3 Setup

Test Setup


1.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

1.5.5 Procedure

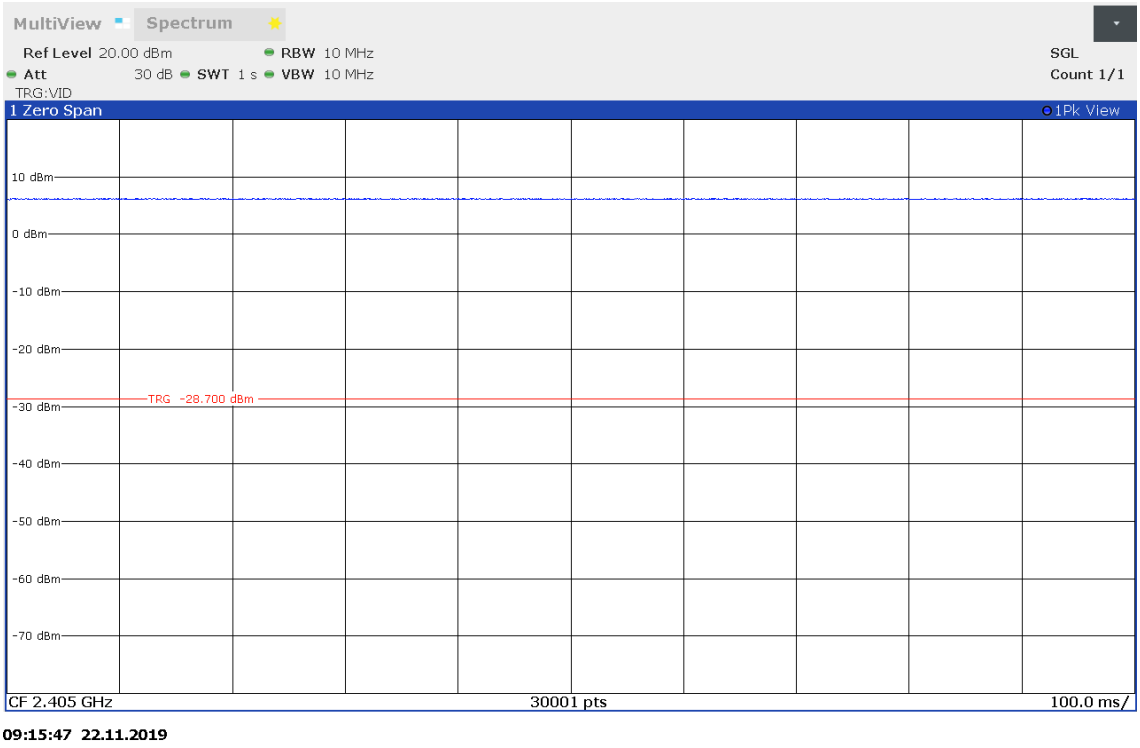
Test Procedure
1. EUT set to test mode 2. Span is set to zero span 3. Detector set to peak 4. Sweep time is set long enough to capture at least 5 bursts 5. Envelope peak value of emission spectrum is selected 6. The maximum burst duration T_{ON} is measured using two markers set to the start and the end of the longest burst 7. The minimum idle duration T_{OFF} is measured using two markers set to the start and the end of the shortest idle period 8. The duty cycle is calculated by DC = T_{ON} / (T_{ON} + T_{OFF}) 9. The duty cycle correction is calculated by DC = 10 x Log_{10}(T_{ON} / (T_{ON} + T_{OFF}))

1.5.6 Results

Duty Cycle Results		
Mode	Duty Cycle	Correction Factor [dB]
IEEE 802.15.4	1.00	0.00

Duty Cycle

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	ANSI C63.10:2013
Reference Method:	ANSI C63.10:2013, Section 7.5
Operating Frequency:	2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Duty Cycle Period:	100
Maximum Duty Cycle:	1.00
Maximum Duty Cycle [%]:	100
Duty Cycle Correction [dB]:	0.00



1.6 Test Modes

Mode	Description
O-QPSK	Mode = Transmit Modulation = O-QPSK Spreading = None Data rate = 250 kbps Duty cycle = 100% Power = Max power (Not adjustable in software)
Receive	Mode = Receive
Comment:	

1.7 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	11	2405
F2	Tx / Rx	18	2440
F3	Tx / Rx	25	2475

1.8 Sample emission level calculation

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

Reading:

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

A.F.:

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

Reading on Analyzer (dBµV) + A.F. (dB/m) = Net field strength (dBµV/m)

Net:

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

Limit:

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

Limit (dBµV/m) = 20*log (µV/m)

Margin:

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

Example only:

Reading + AF	= Net Reading	:	Net reading - FCC limit	= Margin
+21.5 dBµV + 26 dB/m	= 47.5 dBµV/m	:	47.5 dBµV/m - 57.0 dBµV/m	= -9.5 dB

2 Result Summary

FCC 47 CFR Part 15C, ISED RSS-247				
Product Standard Reference	**Requirement**	**Reference Method**	**Result**	**Remarks**
ISED RSS-Gen, Issue 5 (section 6.6)	Occupied Bandwidth	ANSI C63.10-2013	N/R	Informational only
FCC § 15.247(a)(2) ISED RSS-247, Issue 2 (section 5.2)	6 dB Bandwidth	ANSI C63.10-2013	PASS	
FCC § 15.247(b)(1) ISED RSS-247, Issue 2 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	PASS	
FCC § 15.247(e) ISED RSS-247, Issue 2 (section 5.2)	Power spectral density	ANSI C63.10-2013	PASS	
FCC § 15.207 ISED RSS-247, Issue 2 (section 3.1)	AC power line conducted emissions	ANSI C63.10-2013	PASS	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Band edge compliance	ANSI C63.10-2013	PASS	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	PASS	
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 (section 6.13)	Transmitter radiated spurious emissions	ANSI C63.10-2013	PASS	
ISED RSS-247, Issue 2 (section 3.1)	Receiver radiated spurious emissions	ANSI C63.10-2013	PASS	
Comment:				

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

3 Test Conditions and Results

3.1 Test Conditions and Results - Occupied bandwidth

3.1.1 Information

Test Information	
Reference	ISED RSS-Gen, Issue 5 (section 6.6)
Measurement Method	ANSI C63.10 6.9.3
Operator	Florian Voigt
Date	2019-11-22

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.1.4 Procedure

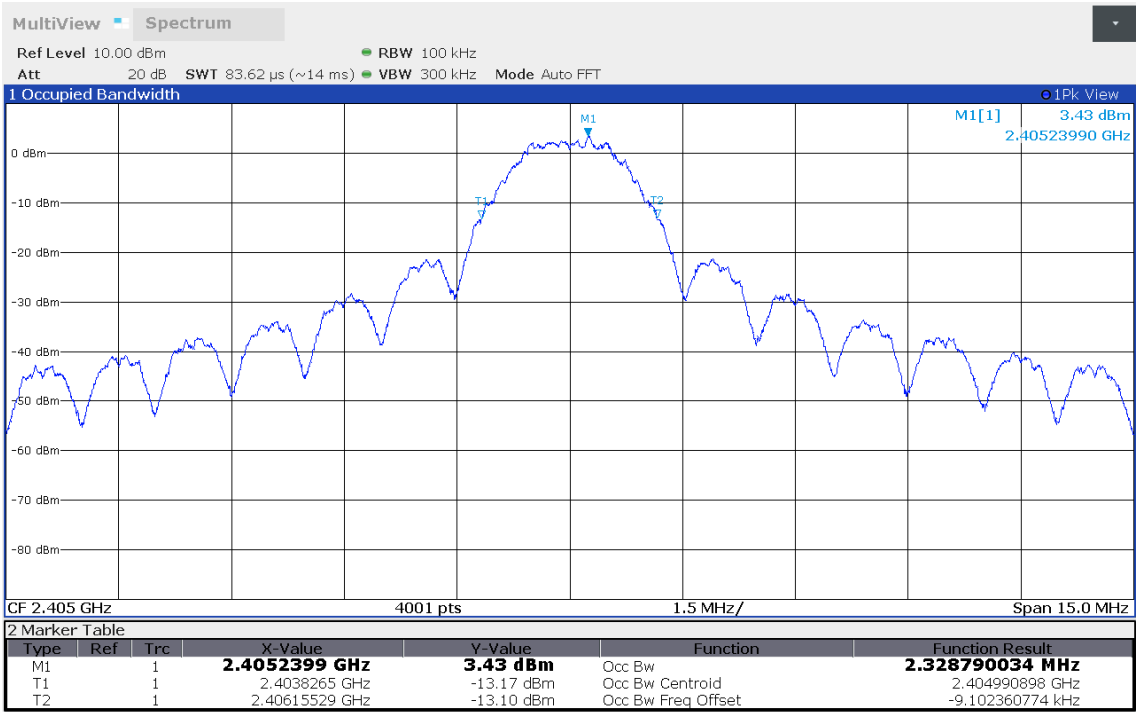
Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1 % to 5 % of the occupied bandwidth 4. The occupied bandwidth is measured with the build-in analyzer function

3.1.5 Results

Test Results		
Mode	Frequency [MHz]	Bandwidth [MHz]
O-QPSK	2405	2.329
O-QPSK	2440	2.360
O-QPSK	2475	2.411

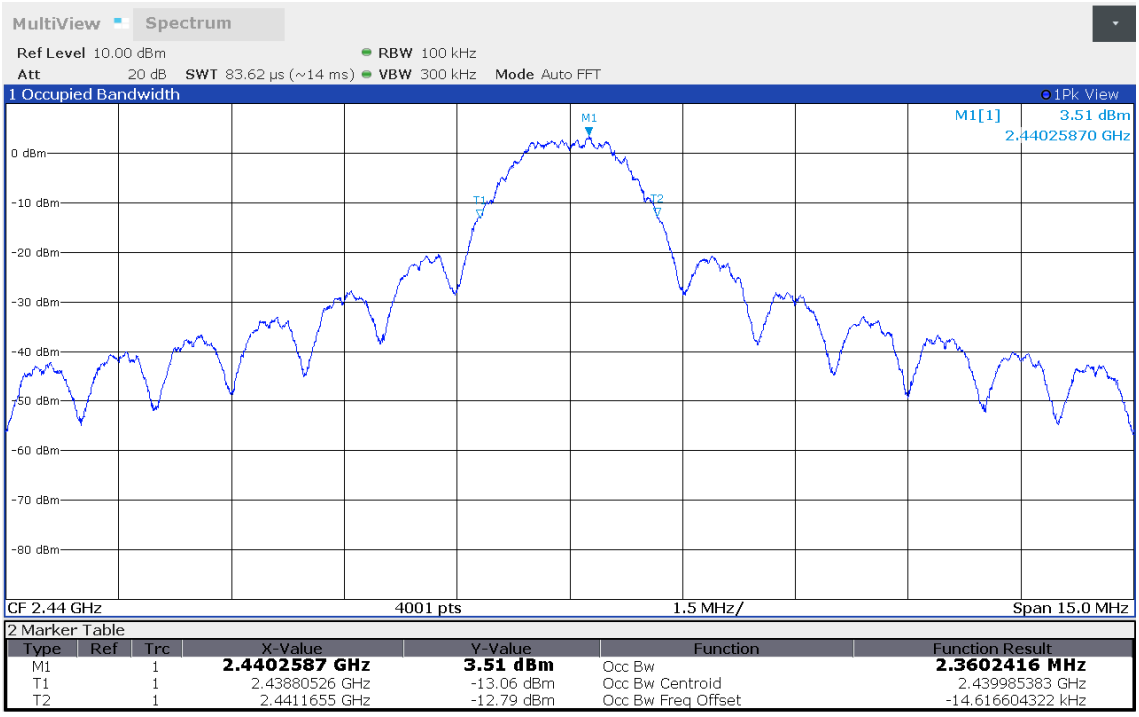
Occupied Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 11, 2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Occupied Bandwidth [MHz]:	2.329



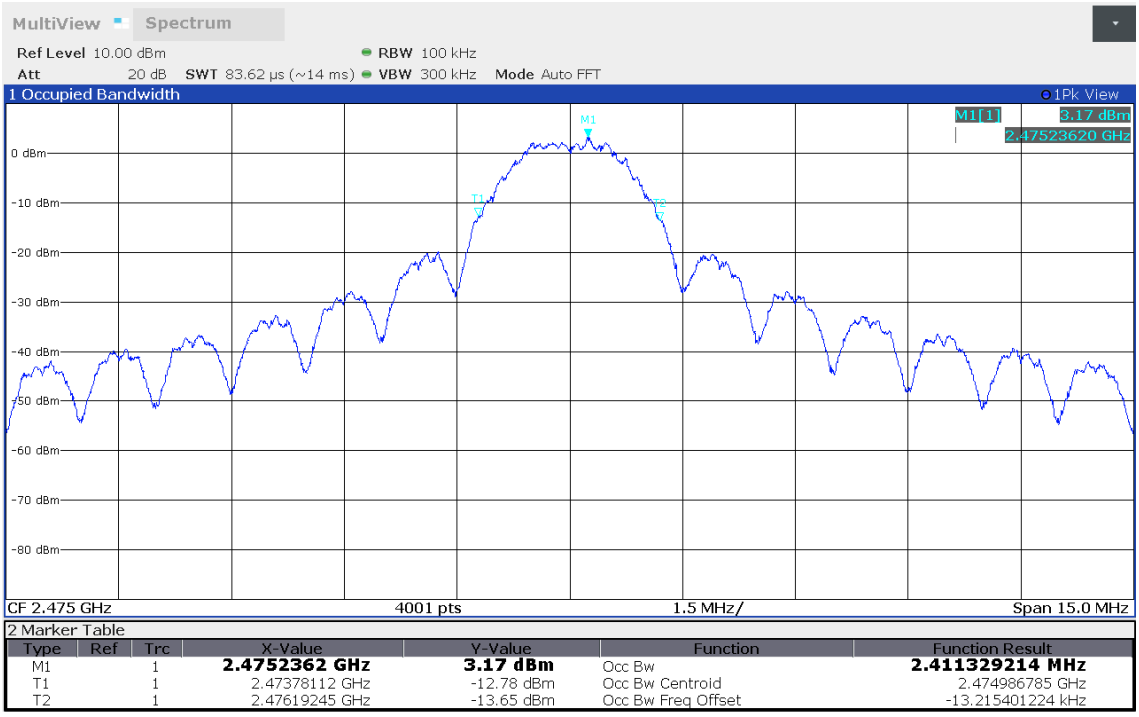
Occupied Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 18, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Occupied Bandwidth [MHz]:	2.360



Occupied Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 25, 2475 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Occupied Bandwidth [MHz]:	2.411



3.2 Test Conditions and Results - 6 dB bandwidth

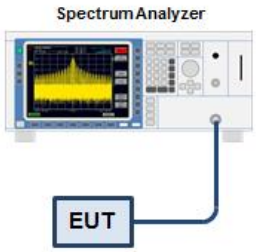
3.2.1 Information

Test Information	
Reference	FCC § 15.247(a)(2); ISED RSS-247, Issue 2 (section 5.2)
Measurement Method	ANSI C63.10 11.8
Operator	Florian Voigt
Date	2019-11-22

3.2.2 Limits

Limits
≥ 500kHz

3.2.3 Setup

Test Setup


3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.2.5 Procedure

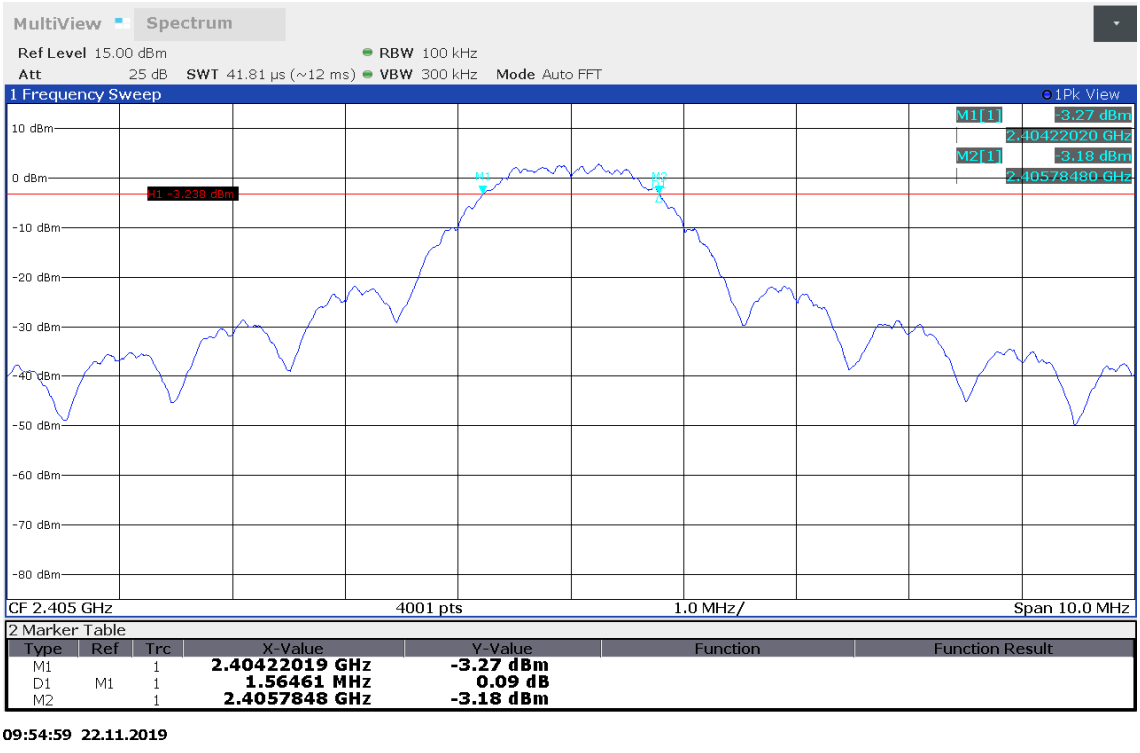
Test Procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and RBW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB Bandwidth is determined by marker frequency separation

3.2.6 Results

Test Results				
Mode	Frequency [MHz]	Bandwidth [kHz]	Limit [kHz]	Verdict
O-QPSK	2405	1564.6	500	Pass
O-QPSK	2440	1602.1	500	Pass
O-QPSK	2475	1604.6	500	Pass

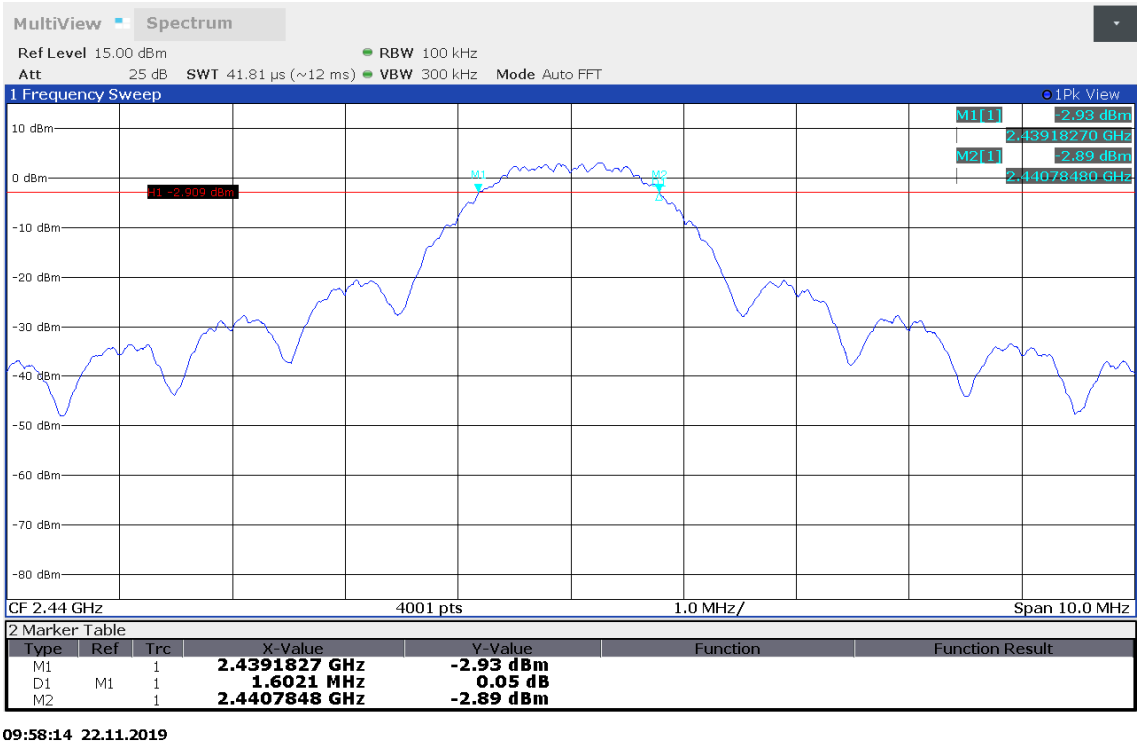
DTS (6 dB) Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 11, 2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Lower Frequency [MHz]:	2404.220
Upper Frequency [MHz]:	2405.785
6 dB Bandwidth [kHz]:	1564.6



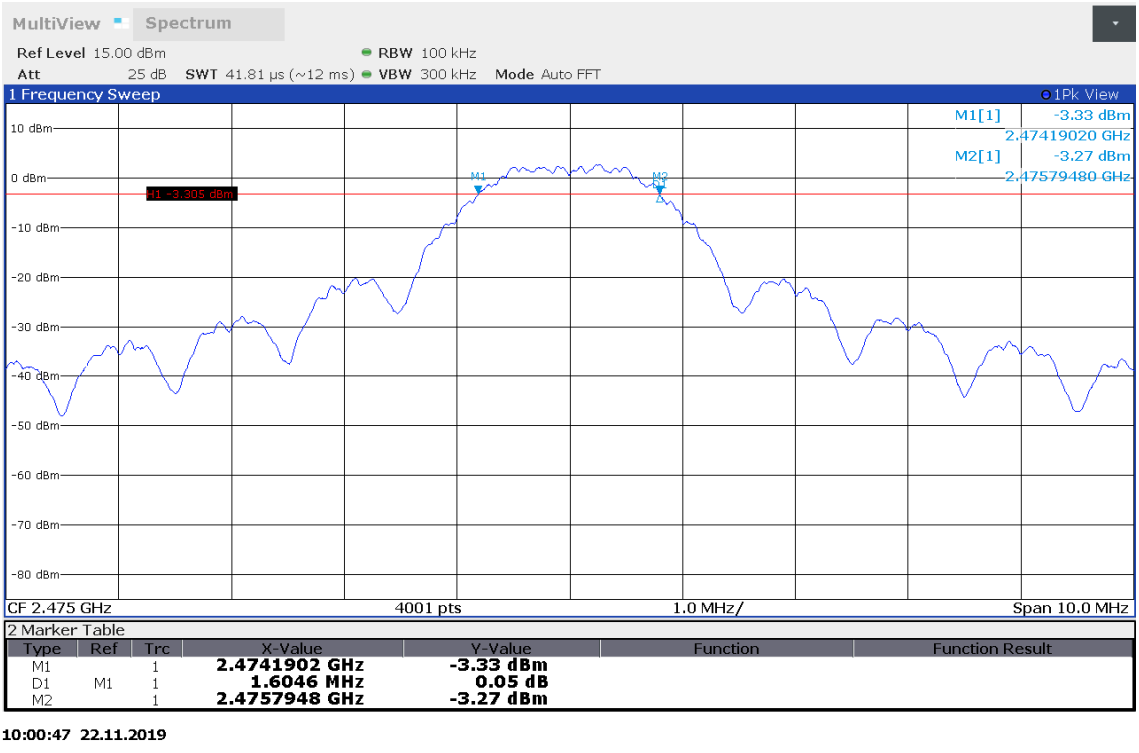
DTS (6 dB) Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 18, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Lower Frequency [MHz]:	2439.183
Upper Frequency [MHz]:	2440.785
6 dB Bandwidth [kHz]:	1602.1



DTS (6 dB) Bandwidth

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 25, 2475 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Lower Frequency [MHz]:	2474.190
Upper Frequency [MHz]:	2475.795
6 dB Bandwidth [kHz]:	1604.6



3.3 Test Conditions and Results - Maximum peak conducted output power

3.3.1 Information

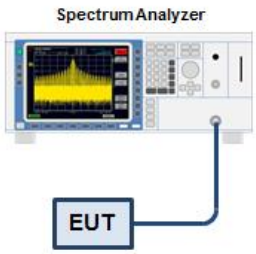
Test Information	
Reference	FCC § 15.247(b)(1); ISED RSS-247, Issue 2 (section 5.4)
Measurement Method	ANSI C63.10 11.9.1
Operator	Florian Voigt
Date	2019-11-22

3.3.2 Limits

Limits
1 W (30 dBm)
The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.3 Setup

Test Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.3.5 Procedure

Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Analyzer resolution bandwidth is set ≥ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After the trace has stabilized a marker is set to peak of envelope

3.3.6 Results

Test Results				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
2405	6.892	0.0049	1.0	PASS
2440	6.943	0.0049	1.0	PASS
2475	7.097	0.0051	1.0	PASS

3.4 Test Conditions and Results - Power spectral density

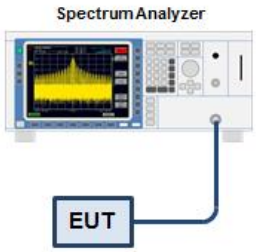
3.4.1 Information

Test Information	
Reference	FCC § 15.247(e); ISED RSS-247, Issue 2 (section 5.2)
Measurement Method	ANSI C63.10 11.10.2, 14.3.2
Operator	Florian Voigt
Date	2019-11-22

3.4.2 Limits

Limits
8 dBm / 3 kHz

3.4.3 Setup

Test Setup


3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.4.5 Procedure

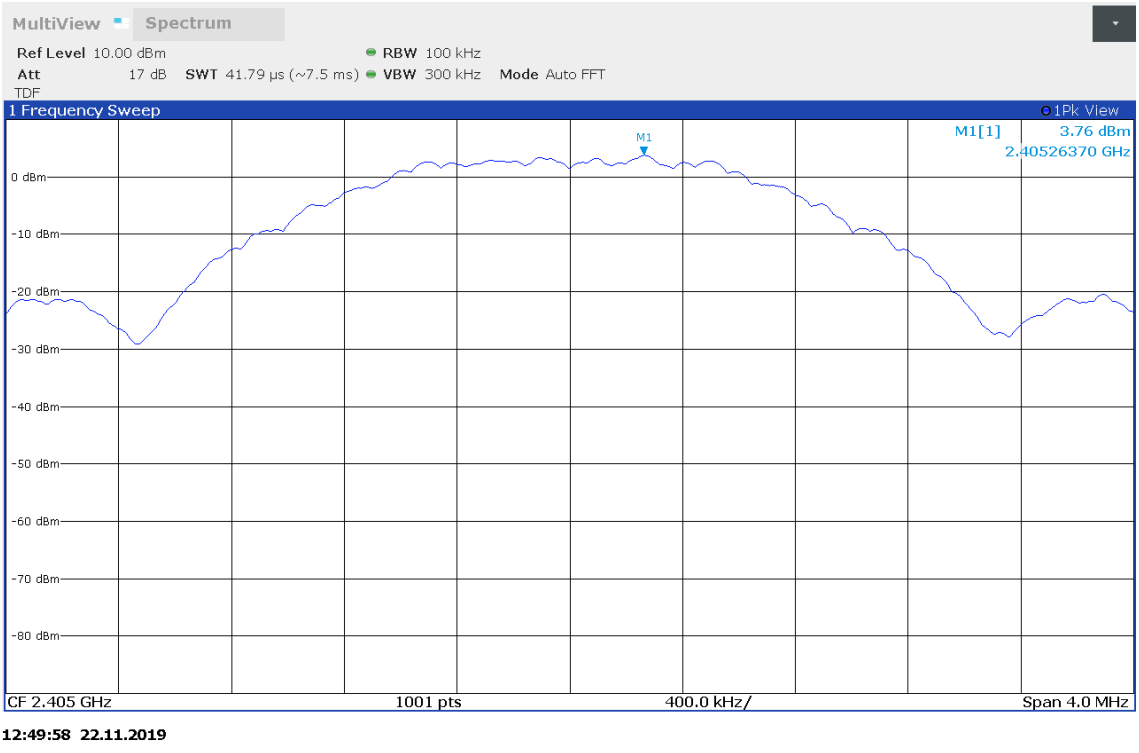
Test Procedure
1. EUT set to test mode 2. The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth 3. The RBW is set to 100 kHz with VBW ≥ RBW and the detector is set to peak with max hold 4. After the trace has stabilized a marker is set to the envelope maximum 5. If the power spectral density is above the limit the RBW is reduced (not lower than 3 kHz) and the measurement is repeated 6. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain

3.4.6 Results

Test Results			
Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
2405	3.758	8.0	PASS
2440	3.691	8.0	PASS
2475	3.424	8.0	PASS
RBW = 100 kHz			

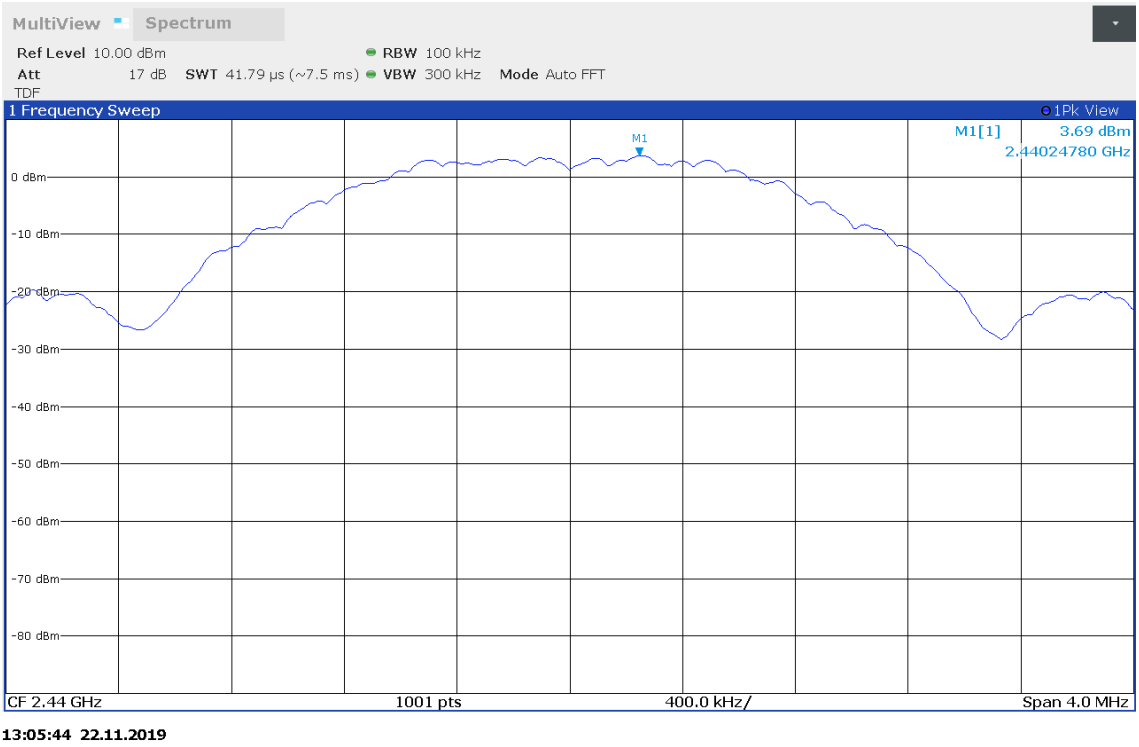
Peak Power Spectral Density

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 11, 2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Peak Frequency [MHz]:	2405.264
Spectral Density [dBm/RBW]:	3.758
Resolution Bandwidth [kHz]:	100 kHz



Peak Power Spectral Density

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 18, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Peak Frequency [MHz]:	2440.248
Spectral Density [dBm/RBW]:	3.691
Resolution Bandwidth [kHz]:	100 kHz



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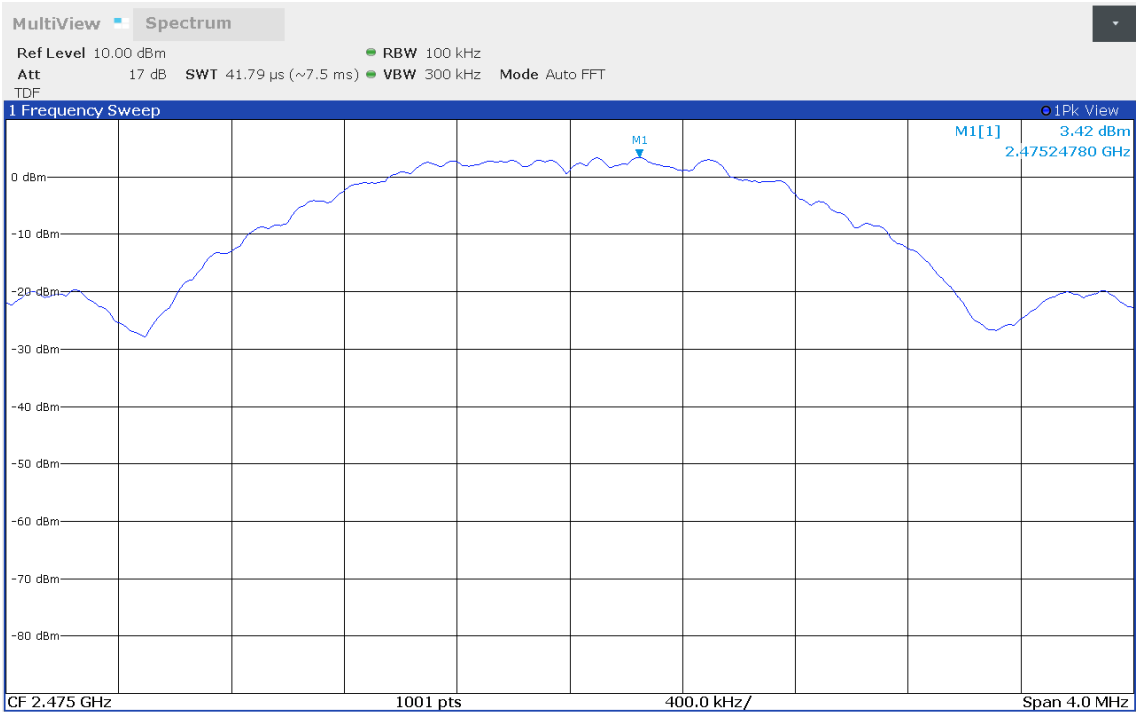
Peak Power Spectral Density

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	IEEE 802.15.4 (250 kbps), Channel: 25, 2475 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Peak Frequency [MHz]:	2475.248
Spectral Density [dBm/RBW]:	3.424
Resolution Bandwidth [kHz]:	100 kHz



3.5 Test Conditions and Results - AC powerline conducted emissions

3.5.1 Information

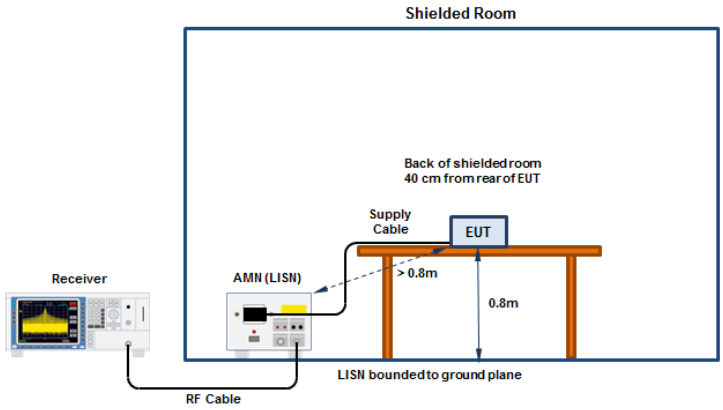
Test Information	
Reference	FCC § 15.207; ISED RSS-247, Issue 2 (section 3.1)
Measurement Method	ANSI C63.10 6.2
Operator	Florian Voigt
Date	2019-11-22
Comment: IEEE 802.15.4 and BTLE was enabled	

3.5.2 Limits

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

3.5.3 Setup

Test Setup



3.5.4 Equipment

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

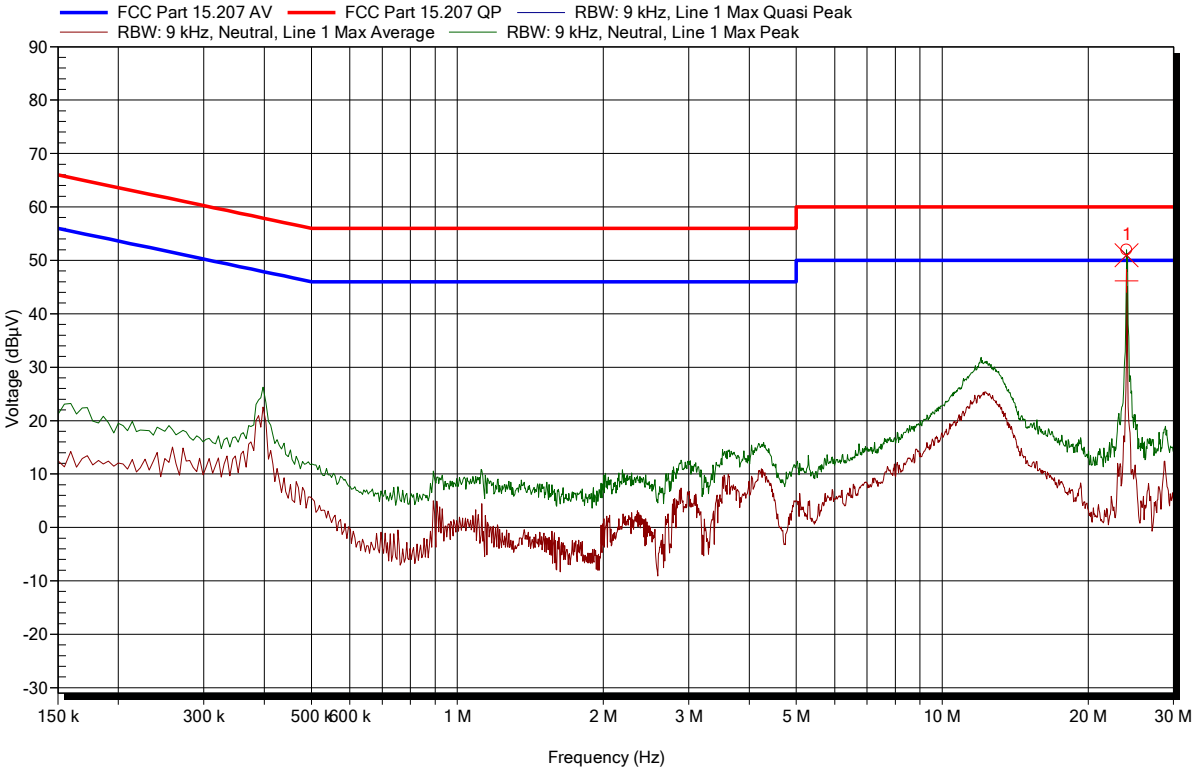
Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
LISN	R&S	ESH3-Z5	EF00036	2019-07	2021-07
EMI Test Receiver	R&S	ESR7	EF00943	2019-10	2020-10

EMI voltage test in the ac-mains according to FCC 47 e-CFR §15.207

Project number: G0M-1803-7309

Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P610
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 22.9°C, Unom: 120 VAC
LISN:	Rohde & Schwarz ESH3-Z5
Mode:	ZB: 2405MHz, BTLE: 2402MHz
Test Date:	2019-11-22
Note:	

Index 1



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	24.001 MHz	50.95 dBµV	60 dBµV	-9.05 dB	Pass

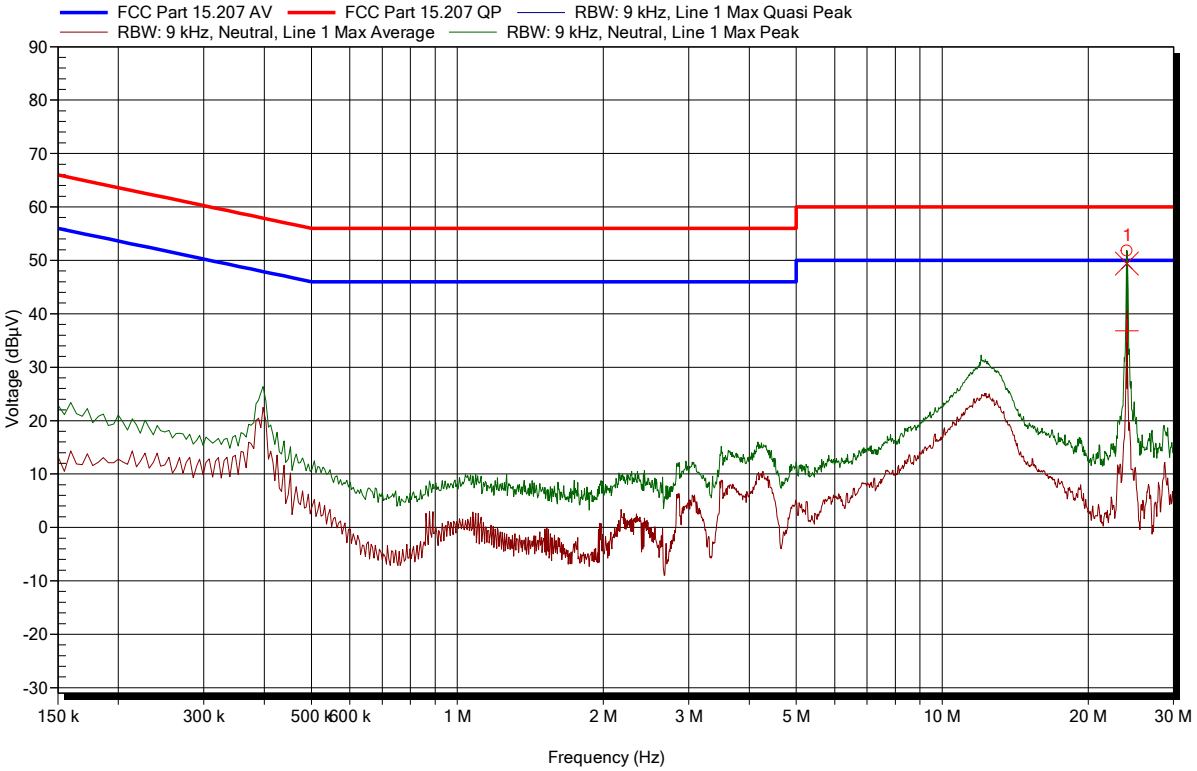
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	24.001 MHz	46.19 dBµV	50 dBµV	-3.81 dB	Pass

EMI voltage test in the ac-mains according to FCC 47 e-CFR §15.207

Project number: G0M-1803-7309

Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P610
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 22.9°C, Unom: 120 VAC
LISN:	Rohde & Schwarz ESH3-Z5
Mode:	ZB: 2440MHz, BTLE: 2402MHz
Test Date:	2019-11-22
Note:	

Index 2



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	24.04 MHz	49.38 dBµV	60 dBµV	-10.62 dB	Pass

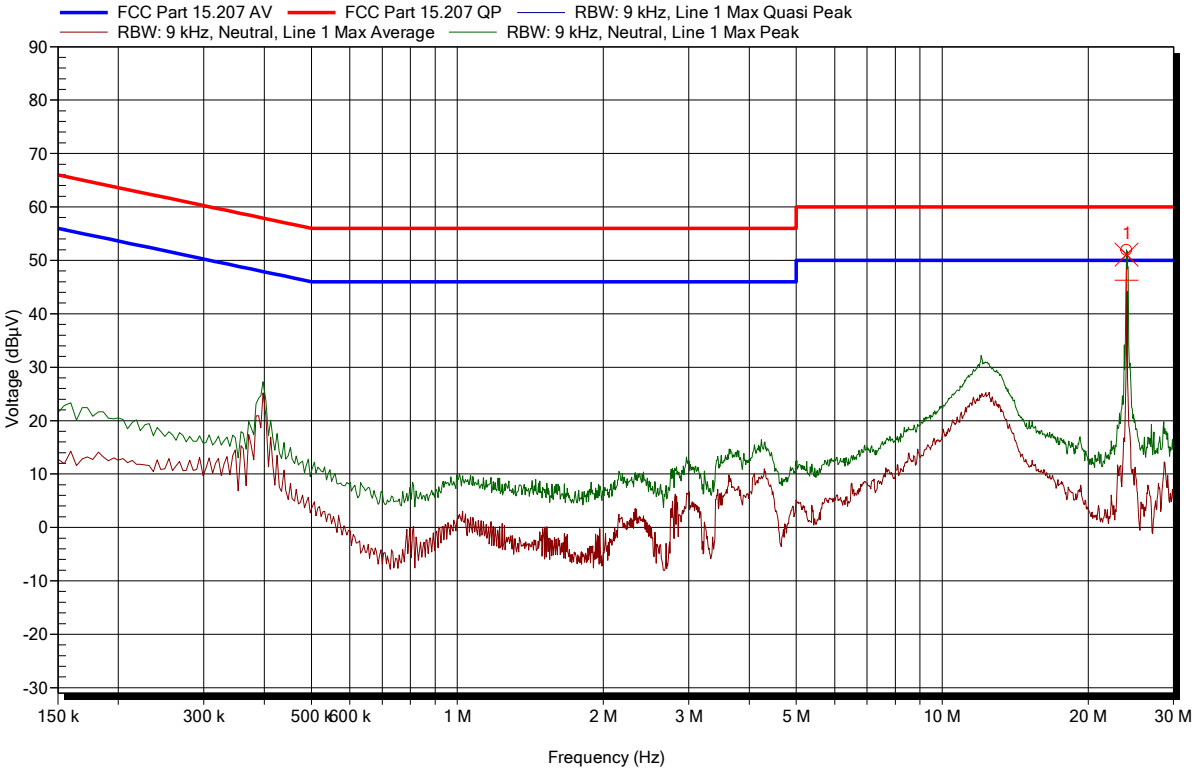
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	24.04 MHz	36.78 dBµV	50 dBµV	-13.22 dB	Pass

EMI voltage test in the ac-mains according to FCC 47 e-CFR §15.207

Project number: G0M-1803-7309

Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P610
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Voigt
Test Conditions:	Tnom: 22.9°C, Unom: 120 VAC
LISN:	Rohde & Schwarz ESH3-Z5
Mode:	ZB: 2475MHz, BTLE: 2402MHz
Test Date:	2019-11-22
Note:	

Index 3



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	24.001 MHz	51.09 dBµV	60 dBµV	-8.91 dB	Pass

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	24.001 MHz	46.3 dBµV	50 dBµV	-3.7 dB	Pass

3.6 Test Conditions and Results - Band-edge compliance

3.6.1 Information

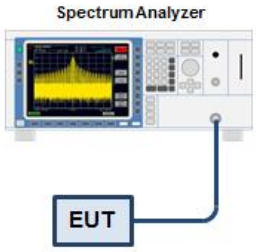
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 2 (section 5.5)
Measurement Method	ANSI C63.10 11.13
Operator	Florian Voigt
Date	2019-11-22

3.6.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.6.3 Setup

Test Setup



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.6.5 Procedure

Test Procedure

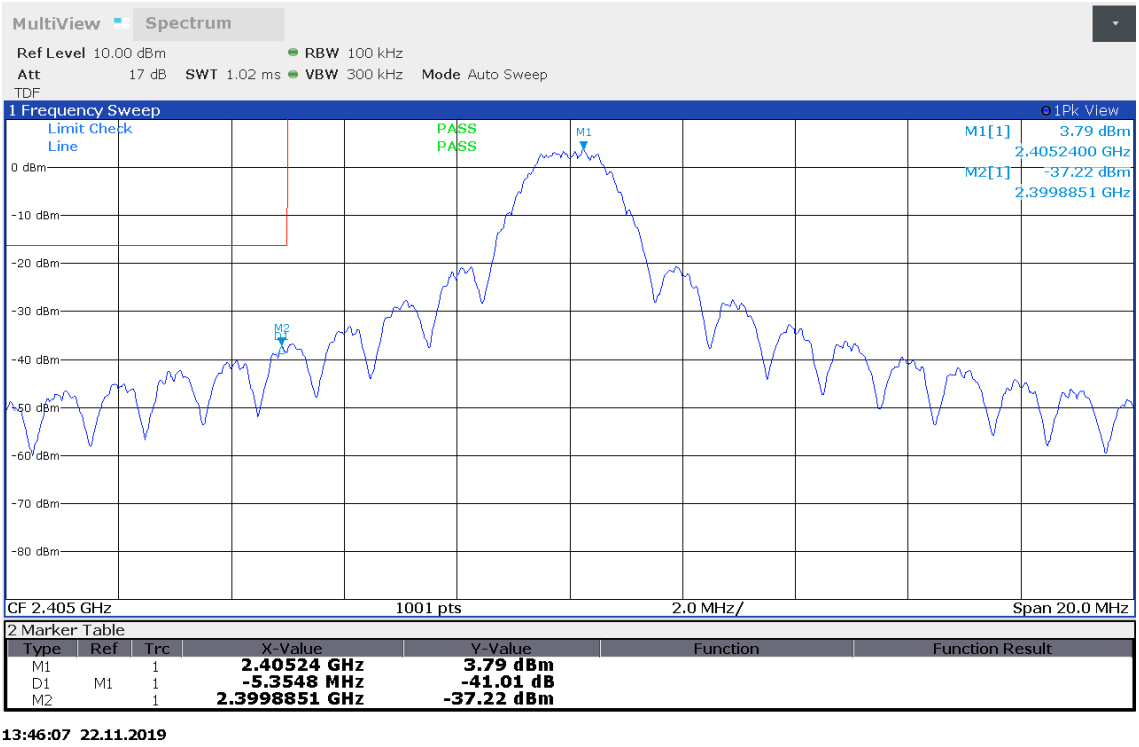
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is determined from level difference

3.6.6 Results

Test Results				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
O-QPSK	2405	-41.01	-20	PASS
O-QPSK	2475	-49.58	-20	PASS

Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.15.4 (DSSS/250 kbps), Channel: 11, 2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Band-edge	Lower
In-band Frequency [MHz]:	2405.24
Max. in-band Level [dBm/100 kHz]:	3.791
Out-of-band Frequency [MHz]:	2399.885
Max. out-of-band Level [dBm/100 kHz]:	-37.222
Attenuation [dB]:	-41.01



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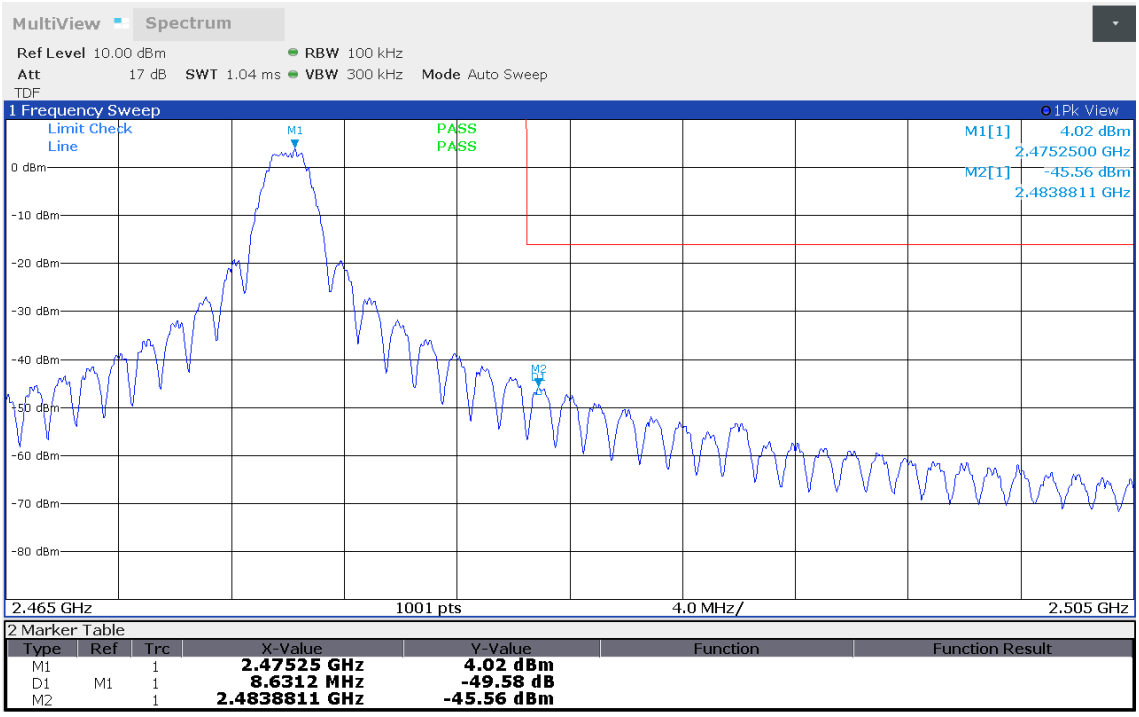
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.15.4 (DSSS/250 kbps), Channel: 25, 2475 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Band-edge	Upper
In-band Frequency [MHz]:	2475.25
Max. in-band Level [dBm/100 kHz]:	4.017
Out-of-band Frequency [MHz]:	2483.881
Max. out-of-band Level [dBm/100 kHz]:	-45.563
Attenuation [dB]:	-49.58



3.7 Test Conditions and Results - Conducted spurious emissions

3.7.1 Information

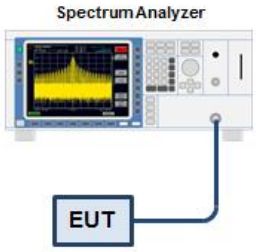
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 2 (section 5.5)
Measurement Method	ANSI C63.10 11.11
Operator	Florian Voigt
Date	2019-11-22

3.7.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.7.3 Setup

Test Setup



3.7.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.7.5 Procedure

Test Procedure

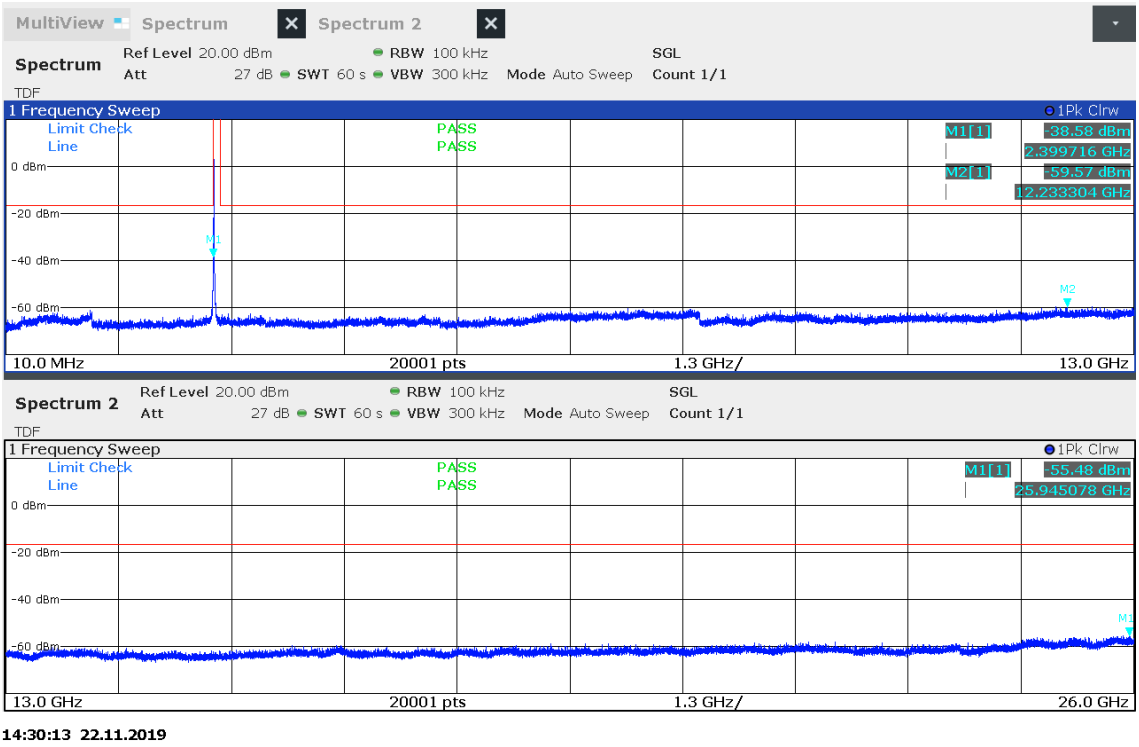
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is determined from level difference

3.7.6 Results

Test Results		
Mode	Channel [MHz]	Verdict
O-QPSK	2405	PASS
O-QPSK	2440	PASS
O-QPSK	2475	PASS

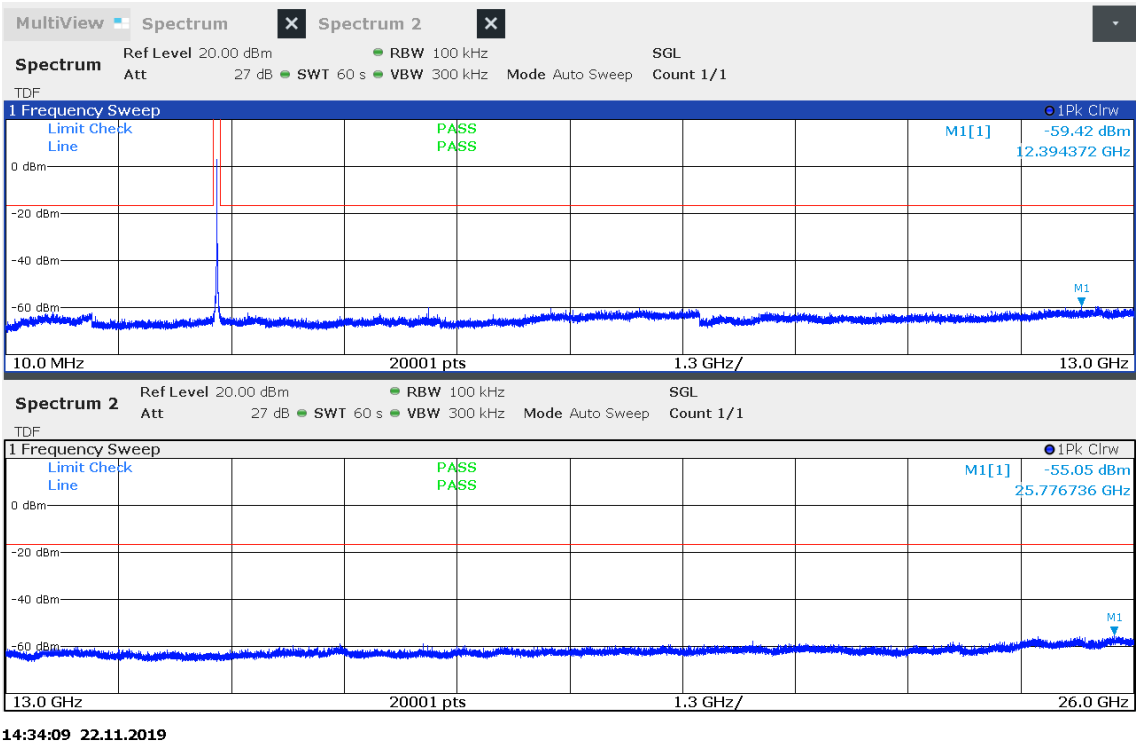
Conducted Spurious Emissions

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.15.4 (DSSS/250 kbps), Channel: 11, 2405 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Max. in-band Frequency [MHz]:	2404.8
Max. in-band Level [dBm/100 kHz]:	3.3
Out-of-band Limit [dBm/100 kHz]:	-16.7



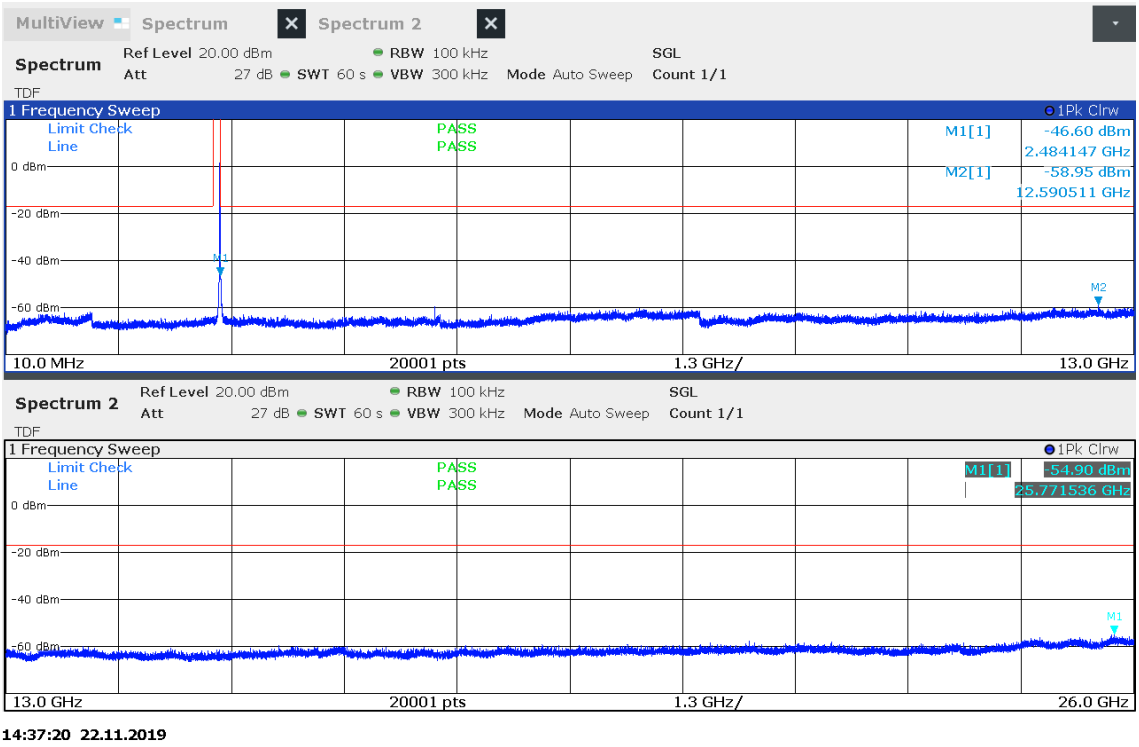
Conducted Spurious Emissions

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.15.4 (DSSS/250 kbps), Channel: 18, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Max. in-band Frequency [MHz]:	2440.3
Max. in-band Level [dBm/100 kHz]:	3.3
Out-of-band Limit [dBm/100 kHz]:	-16.7



Conducted Spurious Emissions

Project Number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
Model Description:	Fixed Gas Detector
Model:	P6100
Test Sample ID:	24125
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.15.4 (DSSS/250 kbps), Channel: 25, 2475 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Florian Voigt
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-11-22
Max. in-band Frequency [MHz]:	2475.2
Max. in-band Level [dBm/100 kHz]:	3.2
Out-of-band Limit [dBm/100 kHz]:	-16.8



3.8 Test Conditions and Results - Transmitter radiated emissions

3.8.1 Information

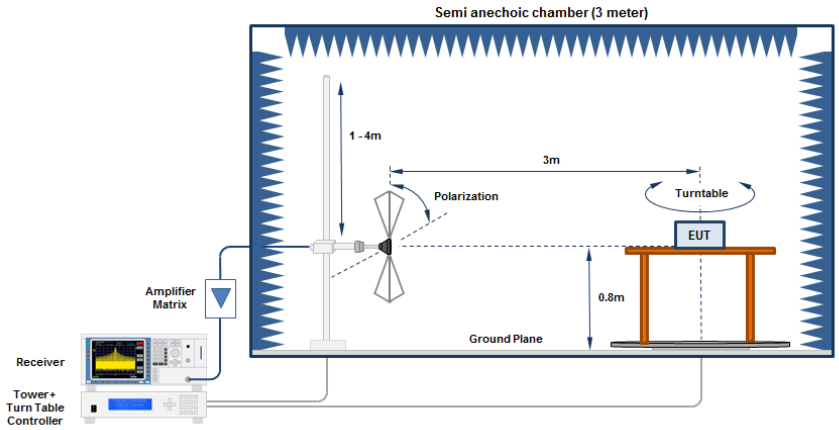
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISED RSS-Gen, Issue 5 (section 6.13)
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Florian Voigt
Date	2019-11-21

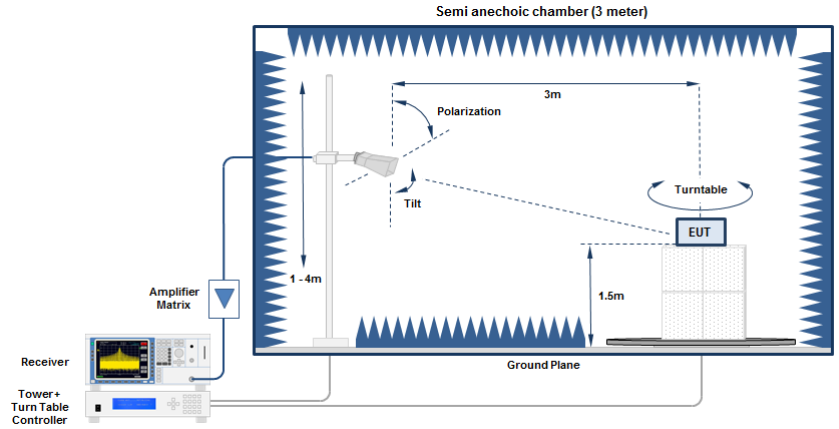
3.8.2 Limits

Limits			
Frequency [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
0.009 - 0.09	Average	2400/F[kHz]	300
0.09 - 0.110	Quasi-Peak	2400/F[kHz]	300
0.110 - 0.490	Average	2400/F[kHz]	300
0.490 - 1.705	Quasi-Peak	24000/F[kHz]	30
1.705 - 30.0	Quasi-Peak	30	30
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.8.3 Setup

Test Setup 30 - 1000 MHz



Test Setup > 1 GHz


3.8.4 Equipment

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

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Spectrum analyzer	R&S	FSU 26	EF01003	2019-07	2020-07
Antenna	R&S	HK 116	EF00030	2019-04	2022-04
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Spectrum analyzer	R&S	FSU 26	EF01003	2019-07	2020-07
Antenna	Schwarzbeck	BBHA 9120D	EF01153	2019-10	2020-10
Antenna	Amplifier Research	AT4560	EF00302	2019-05	2020-05

3.8.5 Procedure

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

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

3.8.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
2440	269.688	03.81	qpk	hor	46.00	-42.19
2440	272.104	03.75	qpk	ver	46.00	-42.25
2440	275.495	04.32	qpk	hor	46.00	-41.68
2440	276.92	04.03	qpk	ver	46.00	-41.97
2440	278.939	03.89	qpk	ver	46.00	-42.11
2440	283.906	03.63	qpk	hor	46.00	-42.37
2440	286.069	03.85	qpk	hor	95.00	-91.15
2475	2483.9	61.22	pk	hor	74.00	-12.78
2475	2483.9	53.04	RMS	hor	54.00	-00.96

3.9 Test Conditions and Results - Receiver radiated emissions

3.9.1 Information

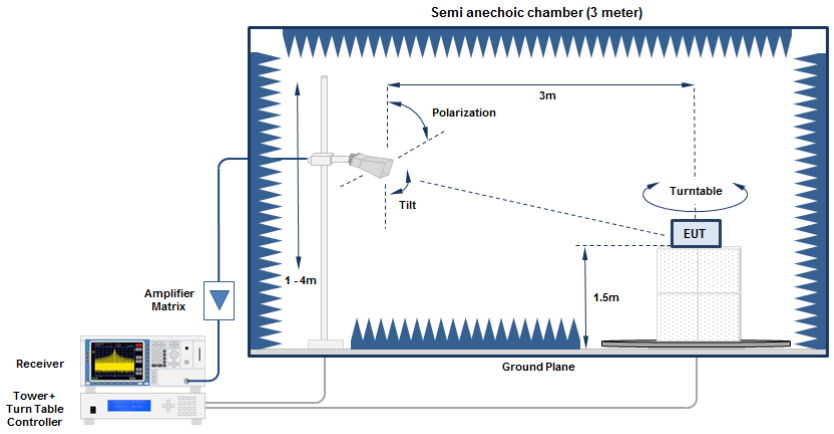
Test Information	
Reference	ISED RSS-247, Issue 2 (section 3.1)
Measurement Method	ANSI C63.10 6.5, 6.6, 11.12
Operator	Florian Voigt
Date	2019-11-22

3.9.2 Limits

Limits			
Frequency [MHz]	Detector	Field strength [dBµV/m]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.9.3 Setup

Test Setup > 1 GHz



3.9.4 Equipment

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Spectrum analyzer	R&S	FSU 26	EF01003	2019-07	2020-07
Antenna	R&S	HK 116	EF00030	2019-04	2022-04
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Spectrum analyzer	R&S	FSU 26	EF01003	2019-07	2020-07
Antenna	Schwarzbeck	BBHA 9120D	EF01153	2019-10	2020-10
Antenna	Amplifier Research	AT4560	EF00302	2019-05	2020-05

3.9.5 Procedure

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

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

3.9.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
2440	201.451	01.51	qpk	hor	43.50	-41.99
2440	203.846	01.42	qpk	ver	43.50	-42.08
2440	207.433	01.22	qpk	hor	43.50	-42.28
2440	209.897	01.73	qpk	hor	43.50	-41.77
2440	221.254	02.04	qpk	ver	46.00	-43.96
2440	222.957	02.34	qpk	hor	46.00	-43.66
2440	251.224	02.97	qpk	ver	46.00	-43.03
2440	274.637	04.13	qpk	hor	46.00	-41.87
2440	278.439	04.19	qpk	hor	46.00	-41.81
2440	289.198	03.87	qpk	hor	46.00	-42.13
2440	340.555	05.53	qpk	hor	46.00	-40.47

ANNEX A Transmitter spurious emissions

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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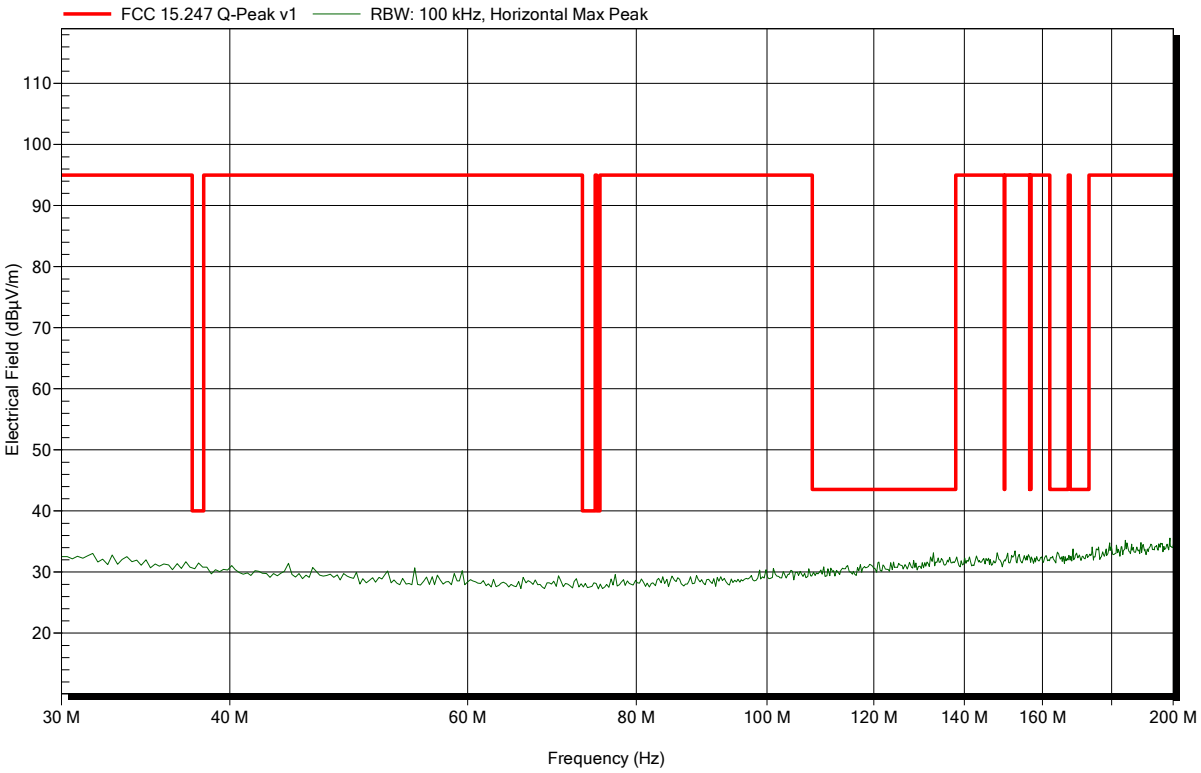

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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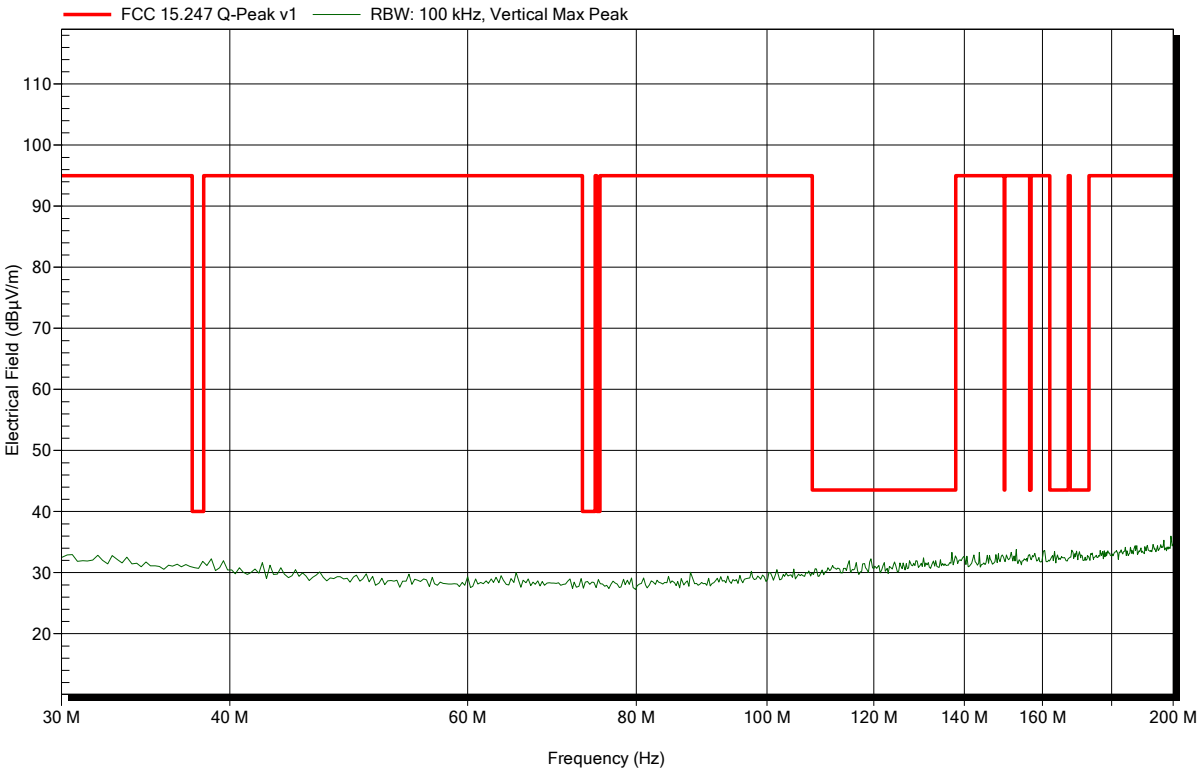

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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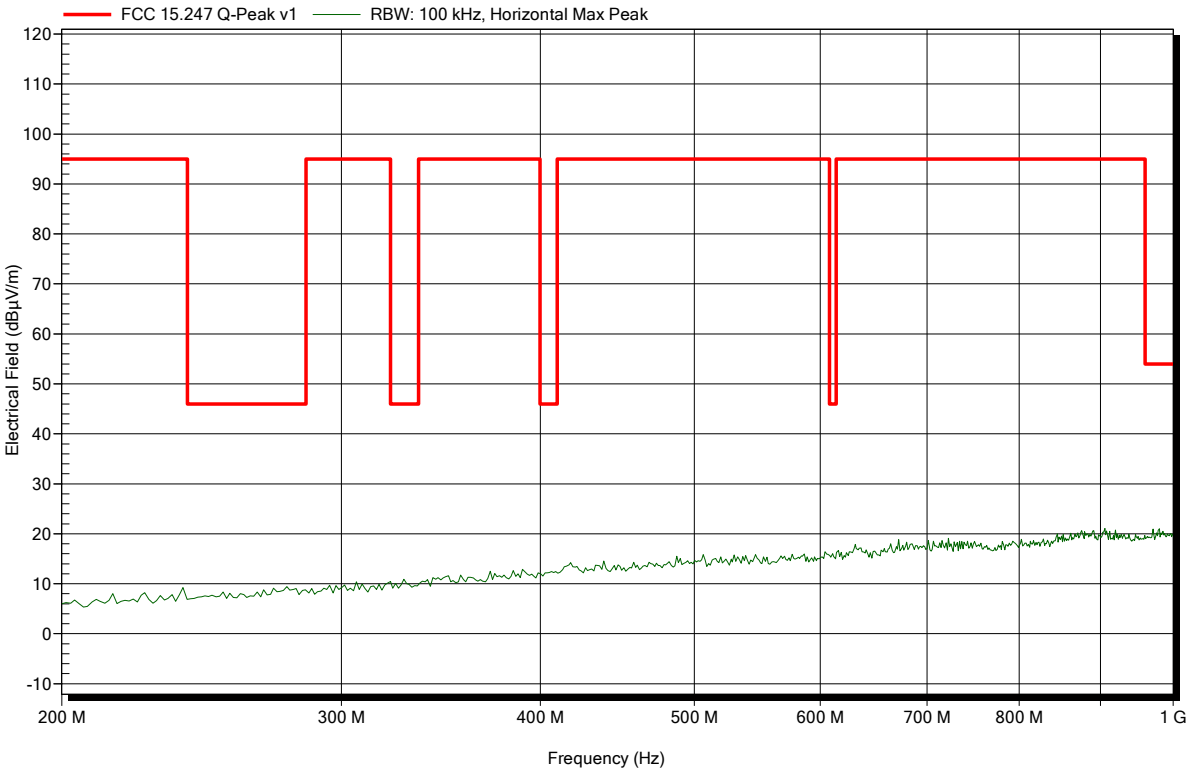

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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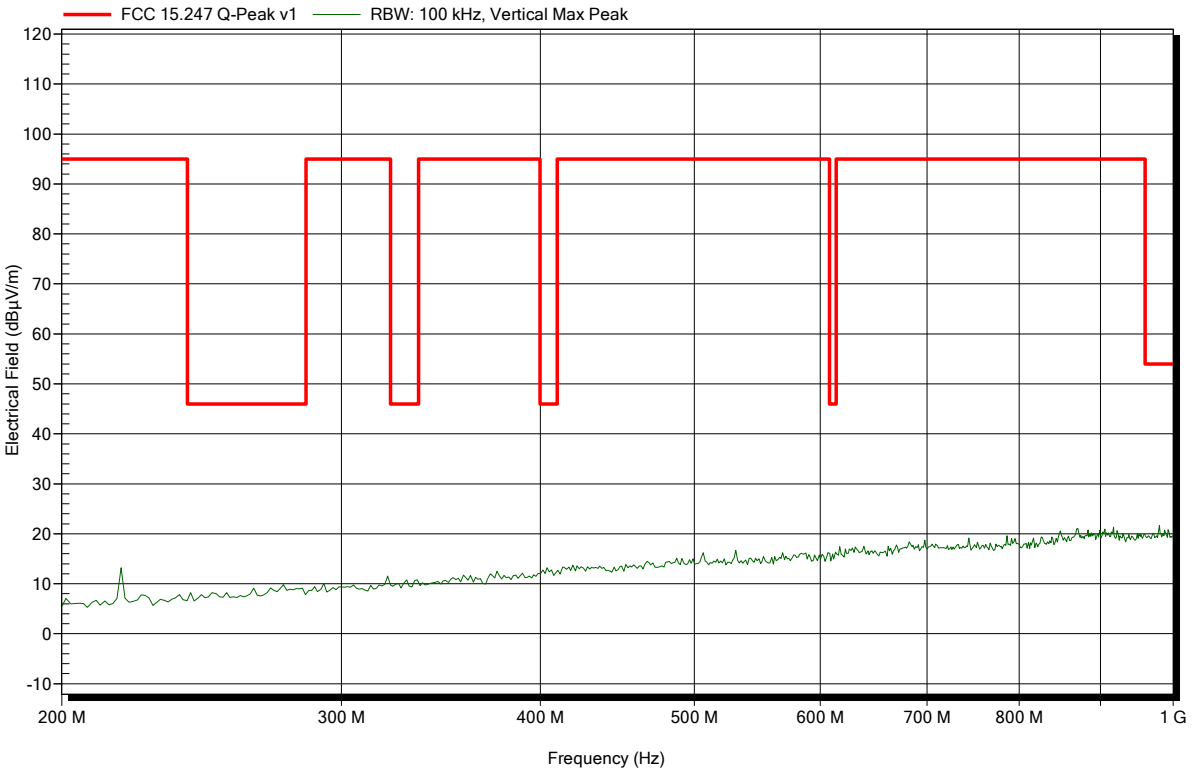

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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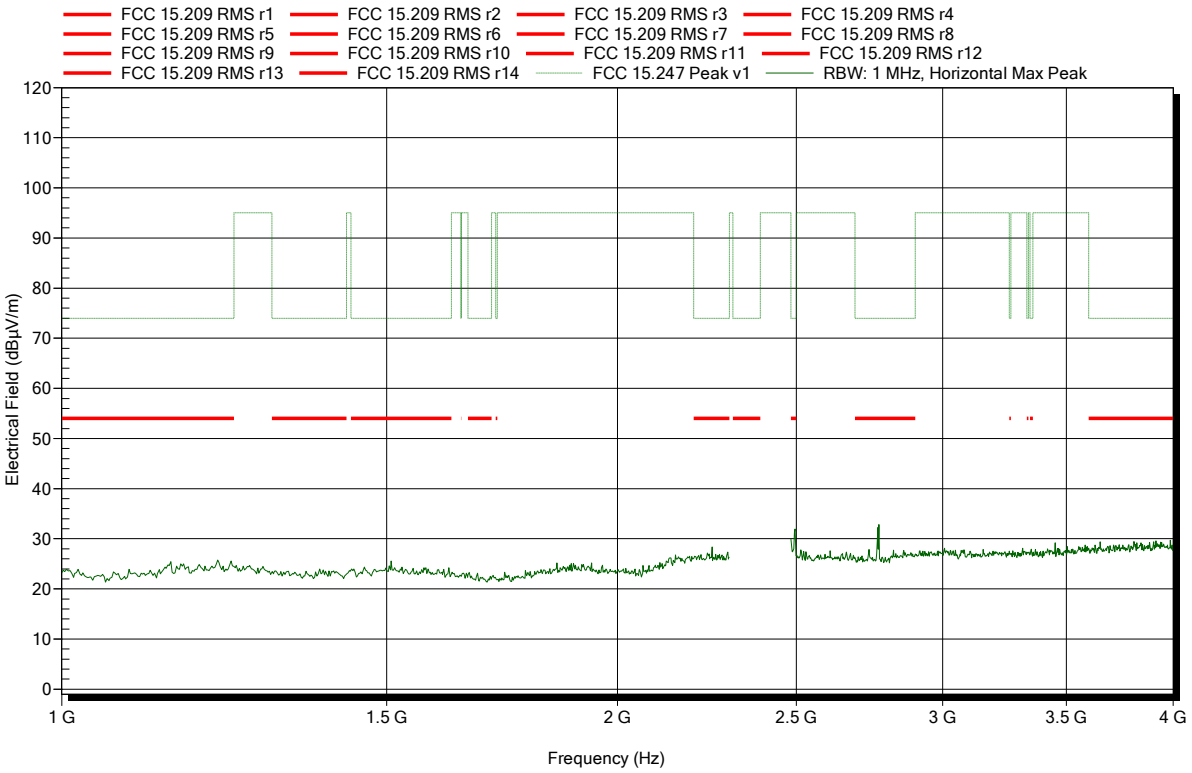

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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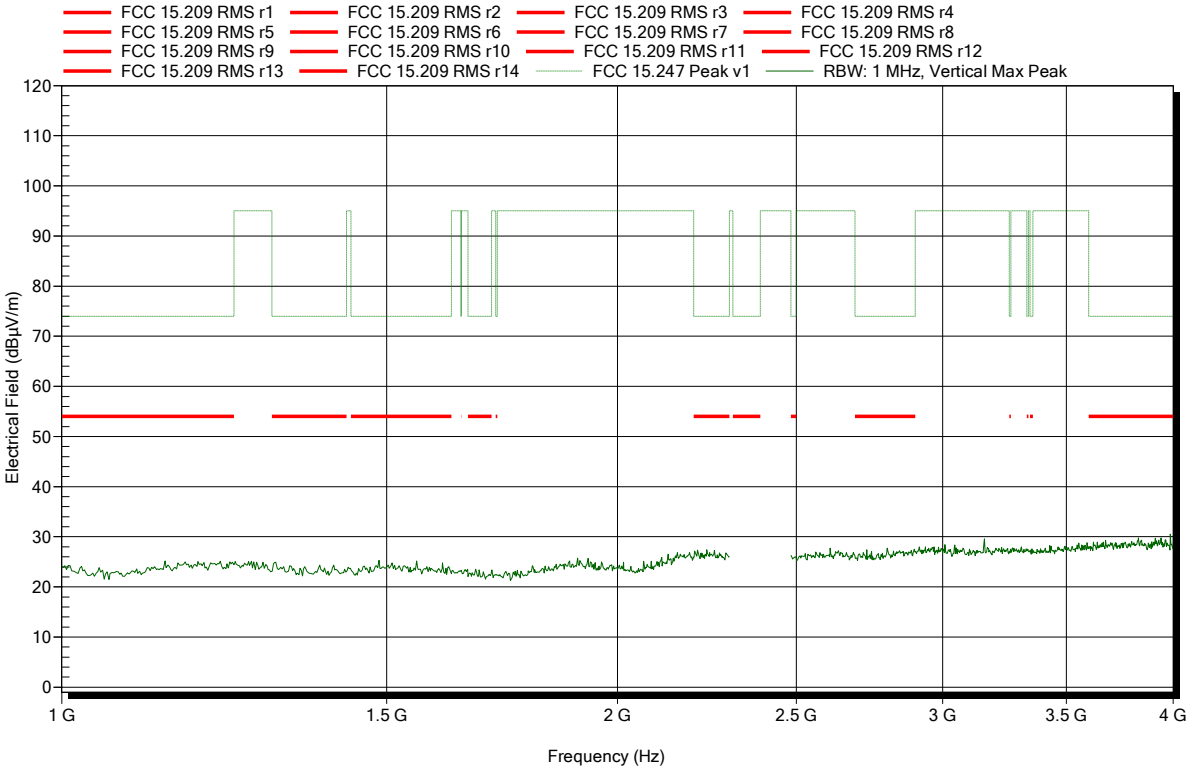

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	lower bandedge

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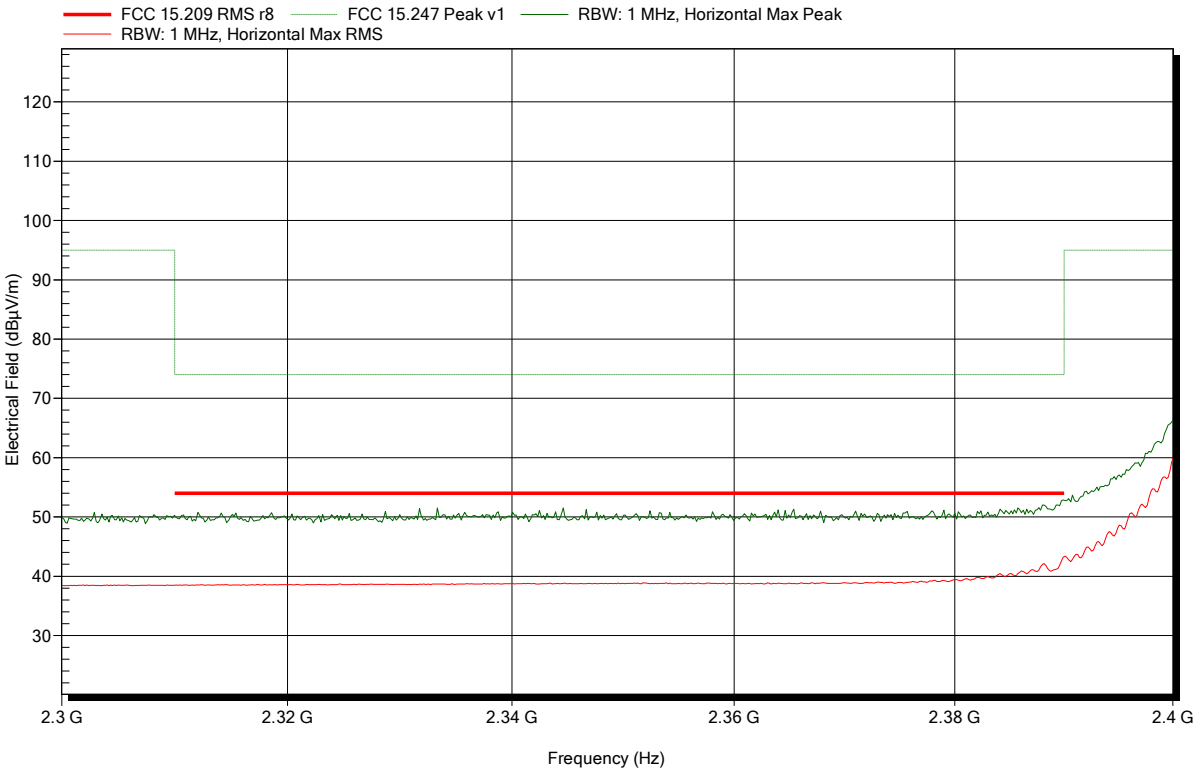

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	lower bandedge

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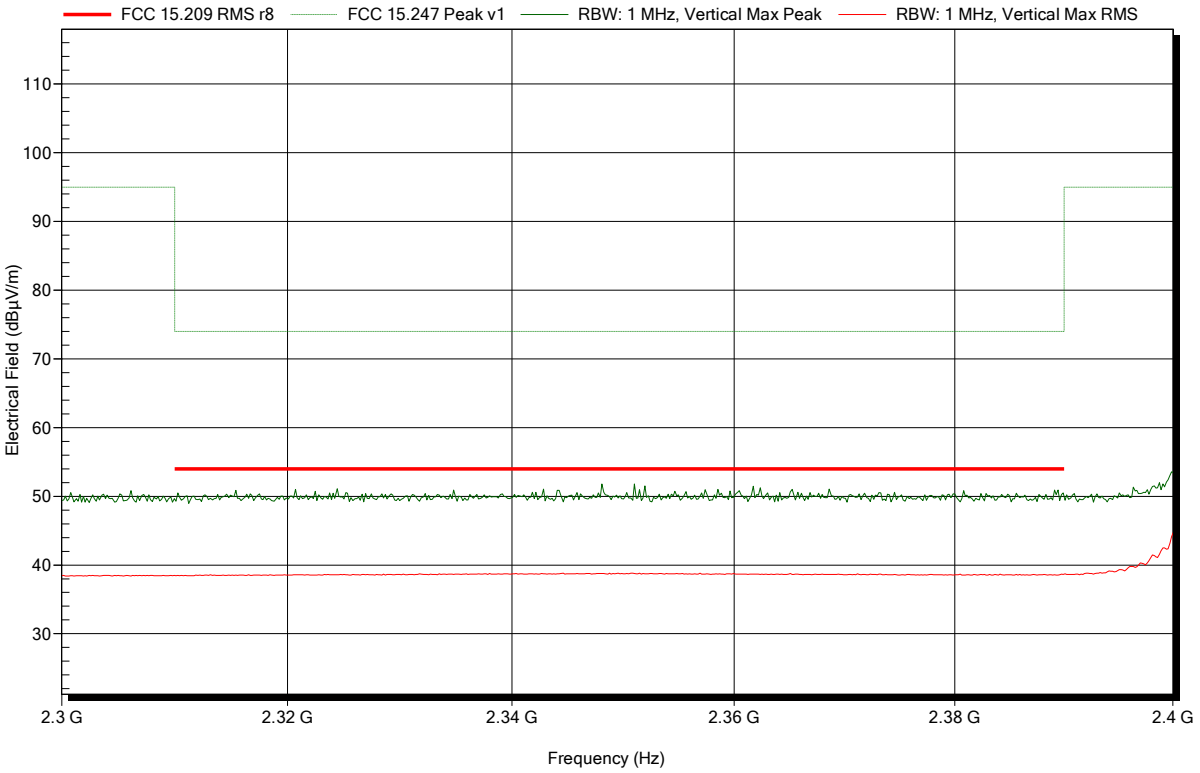

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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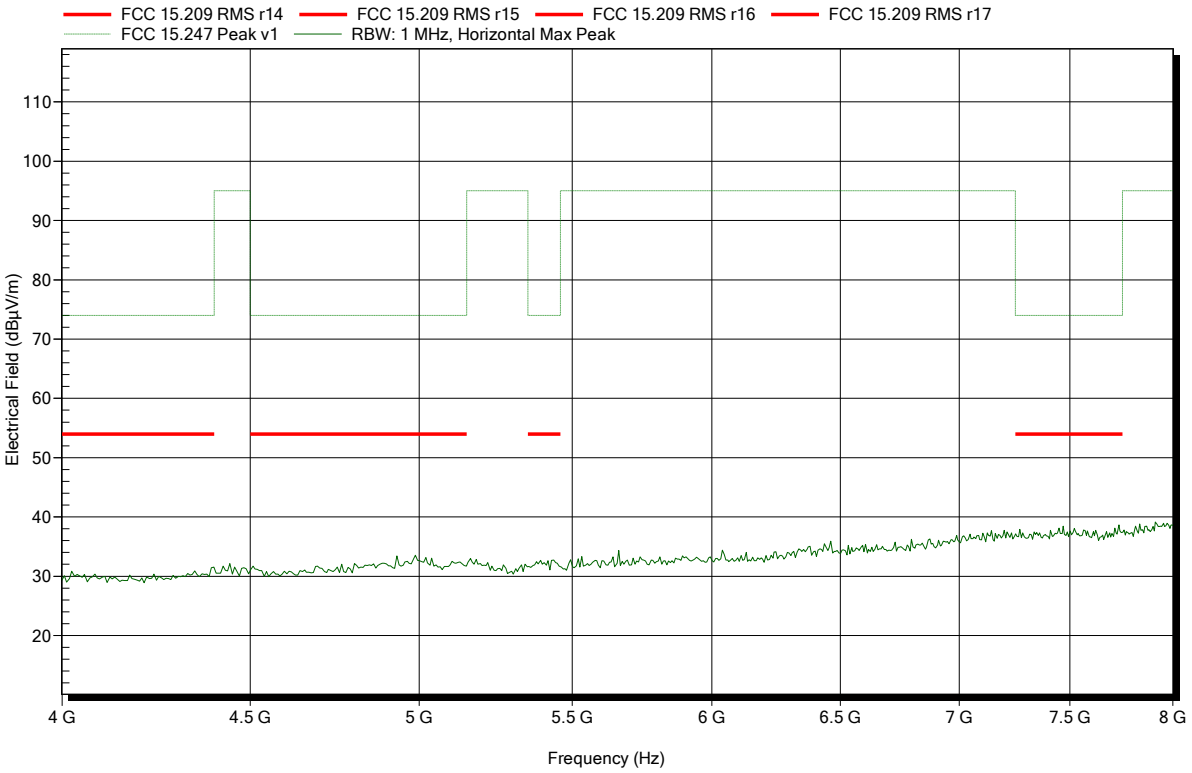

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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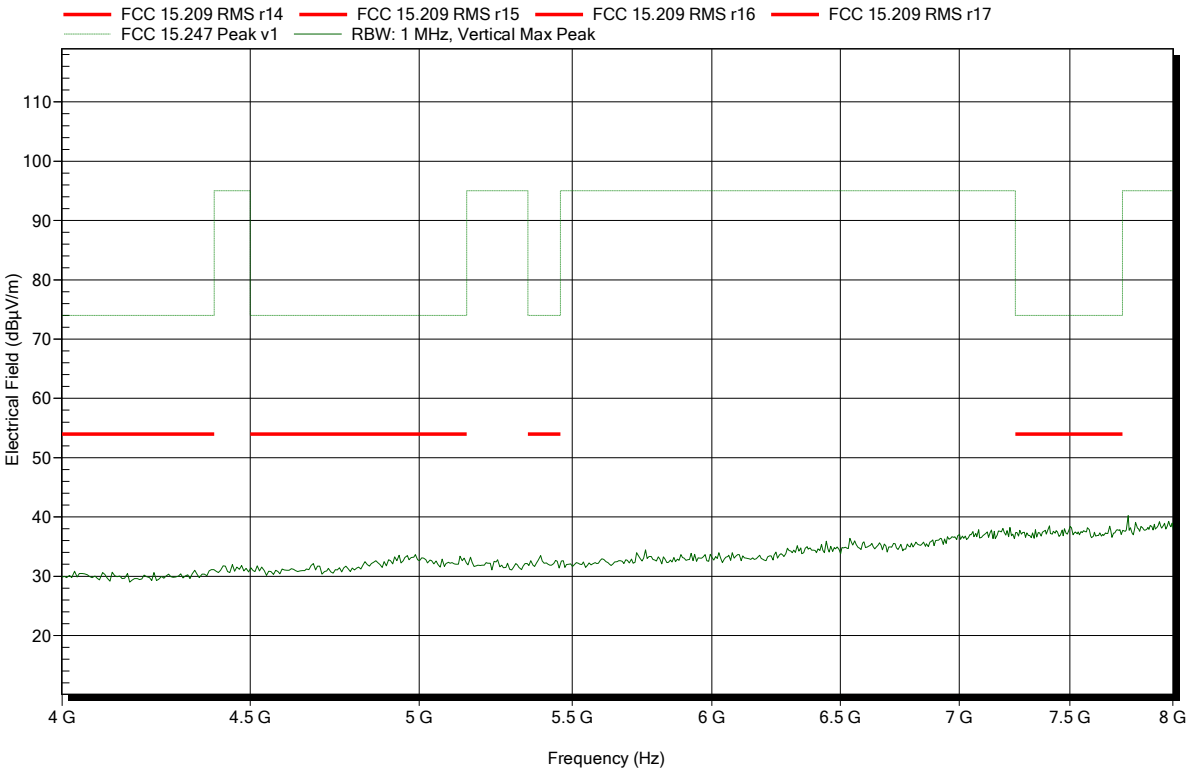

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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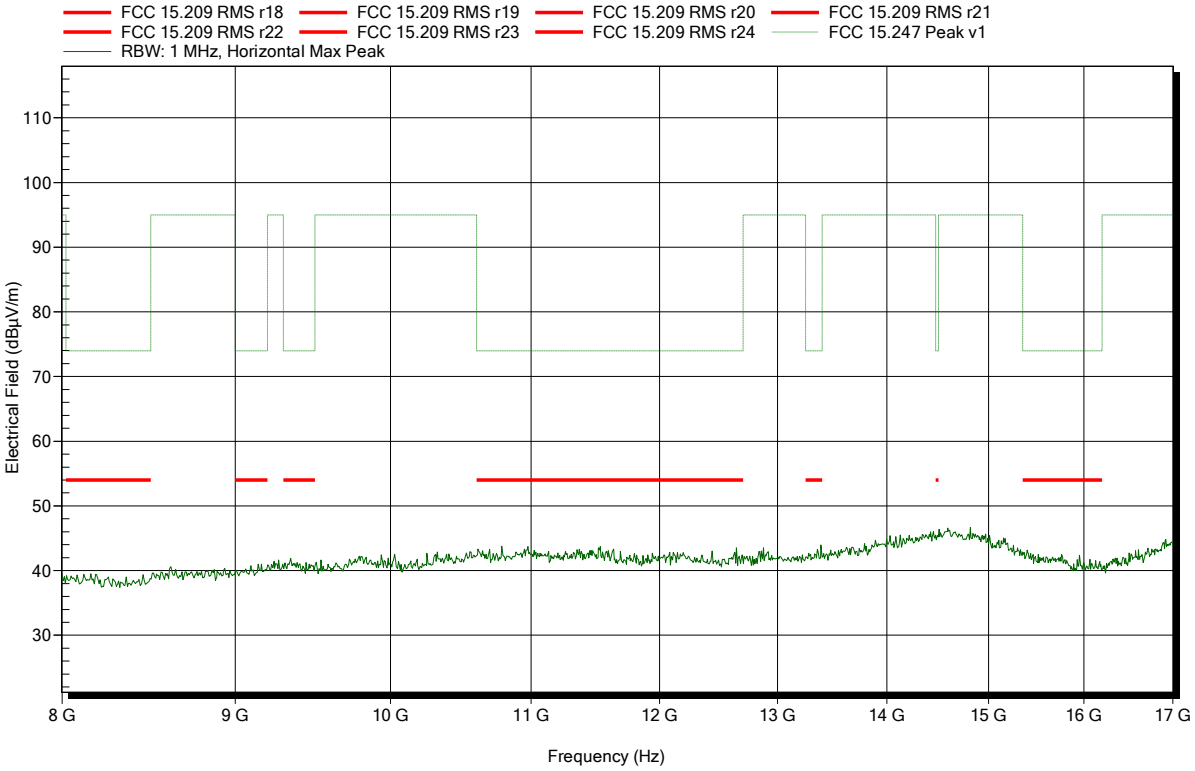

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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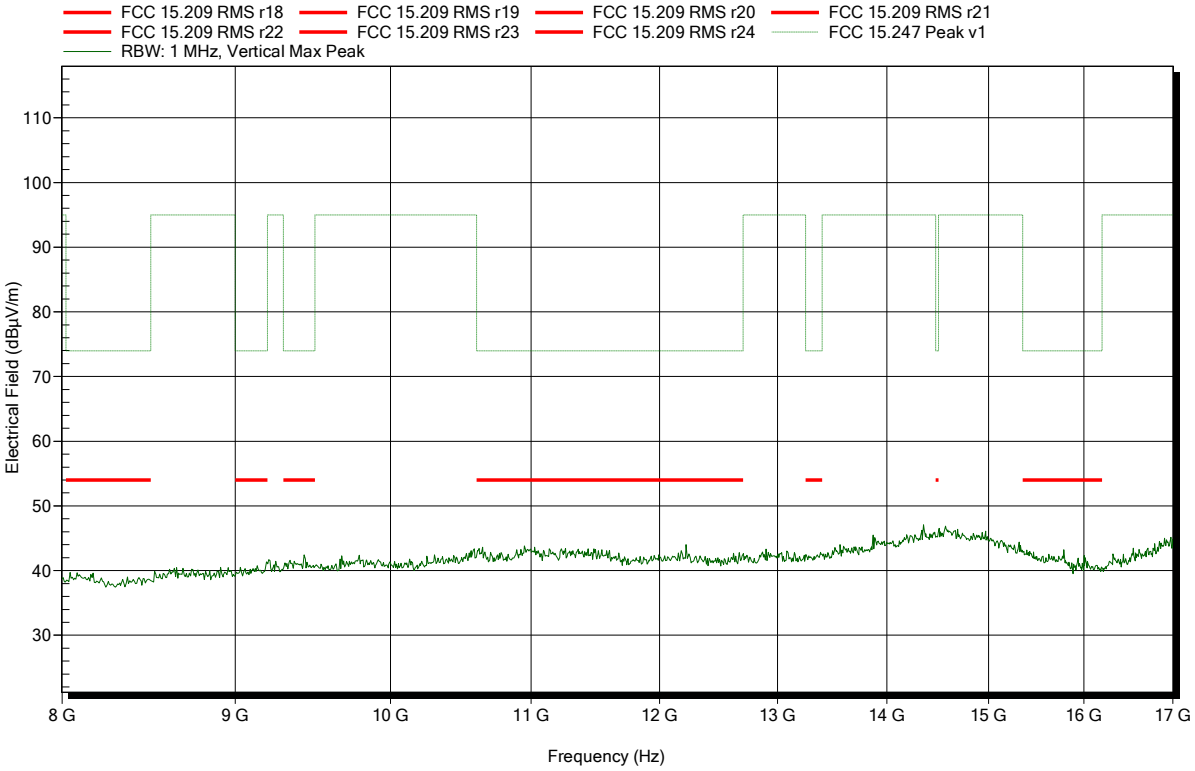

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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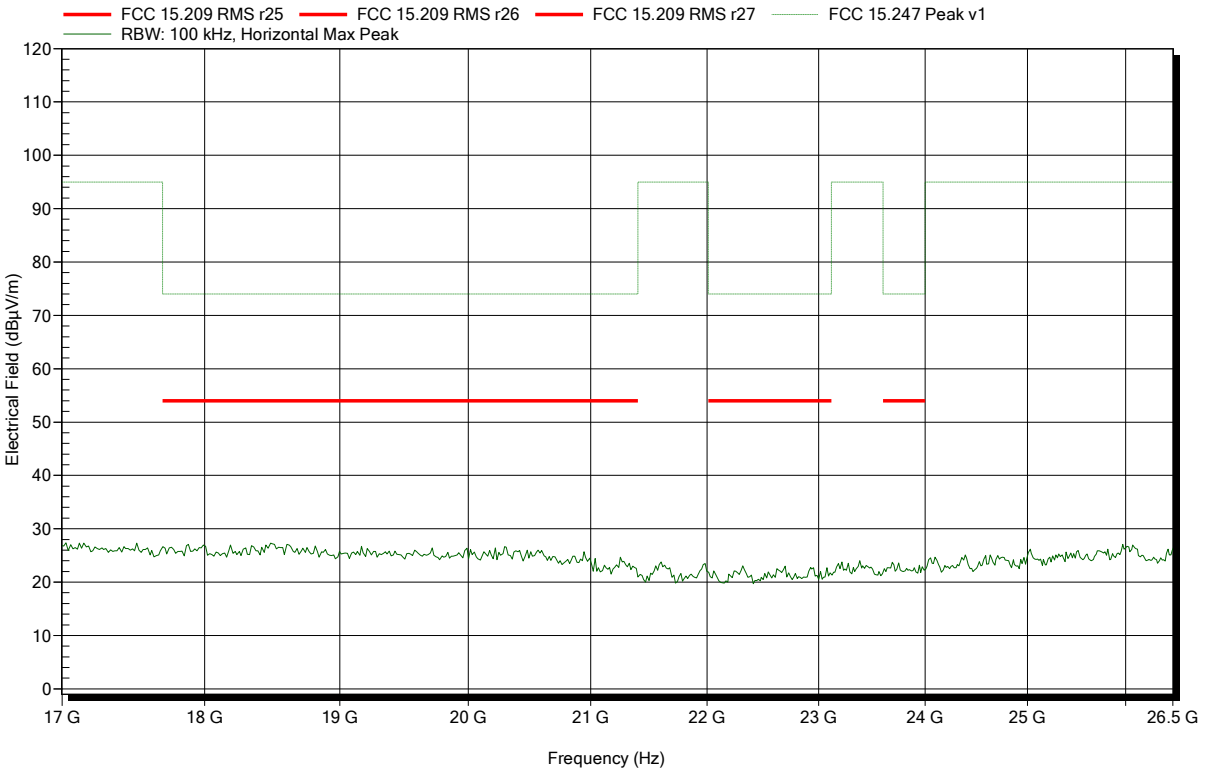

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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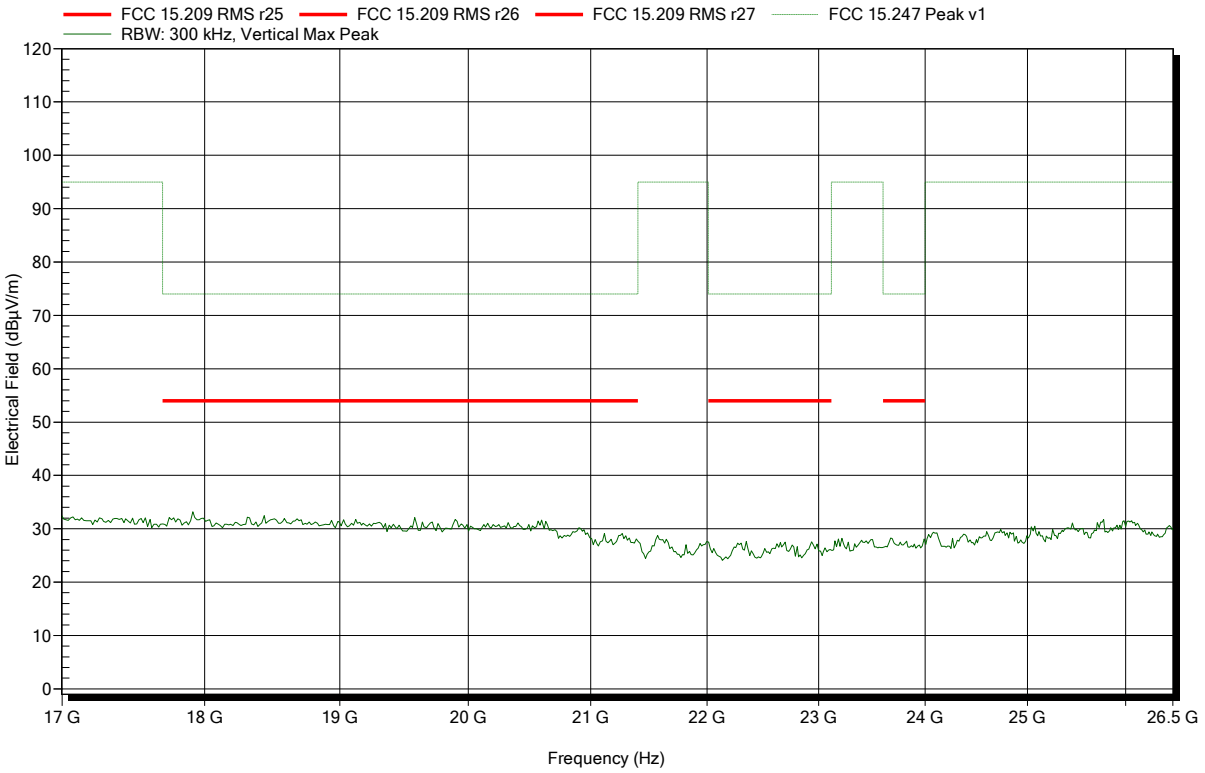
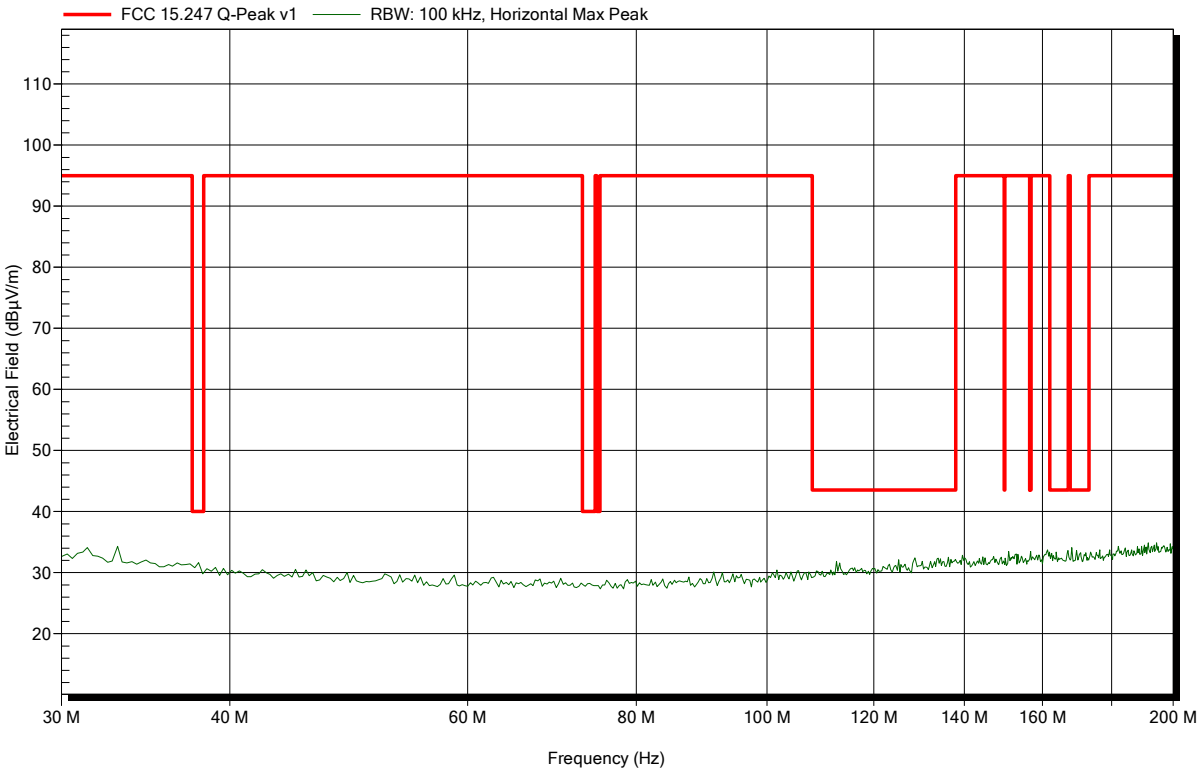


Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

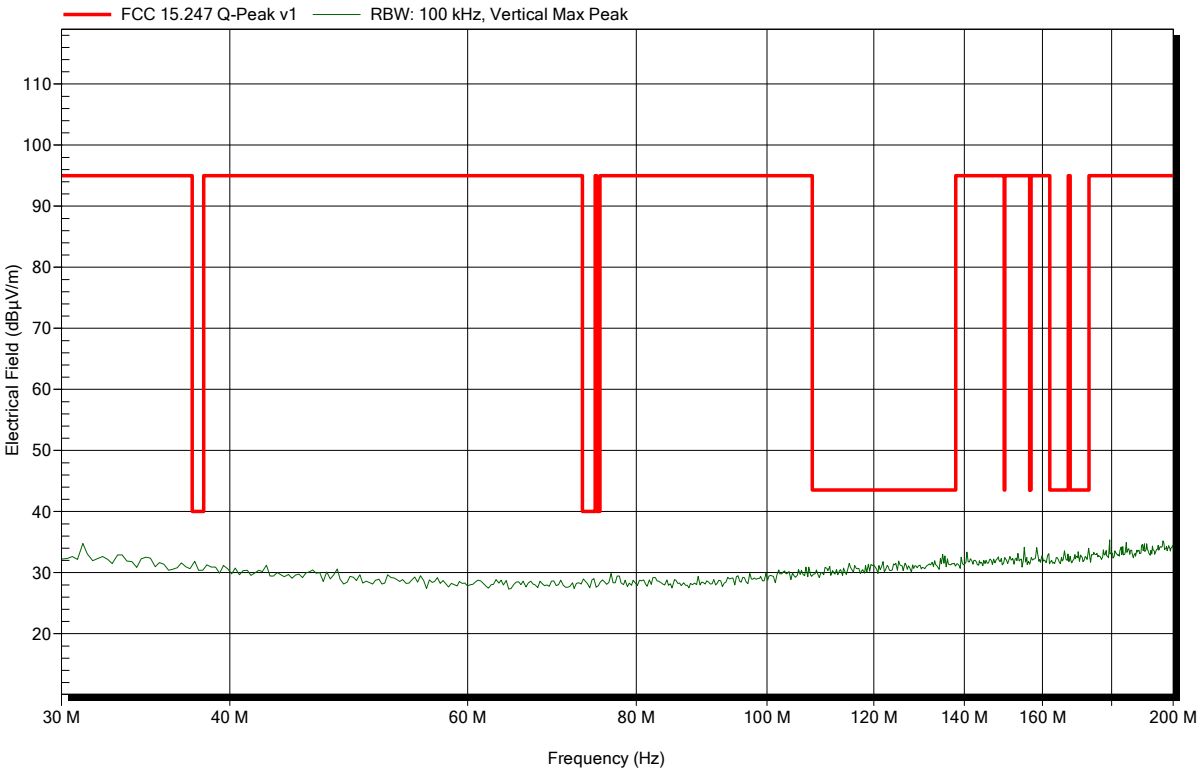
Index 1



Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

Index 2



Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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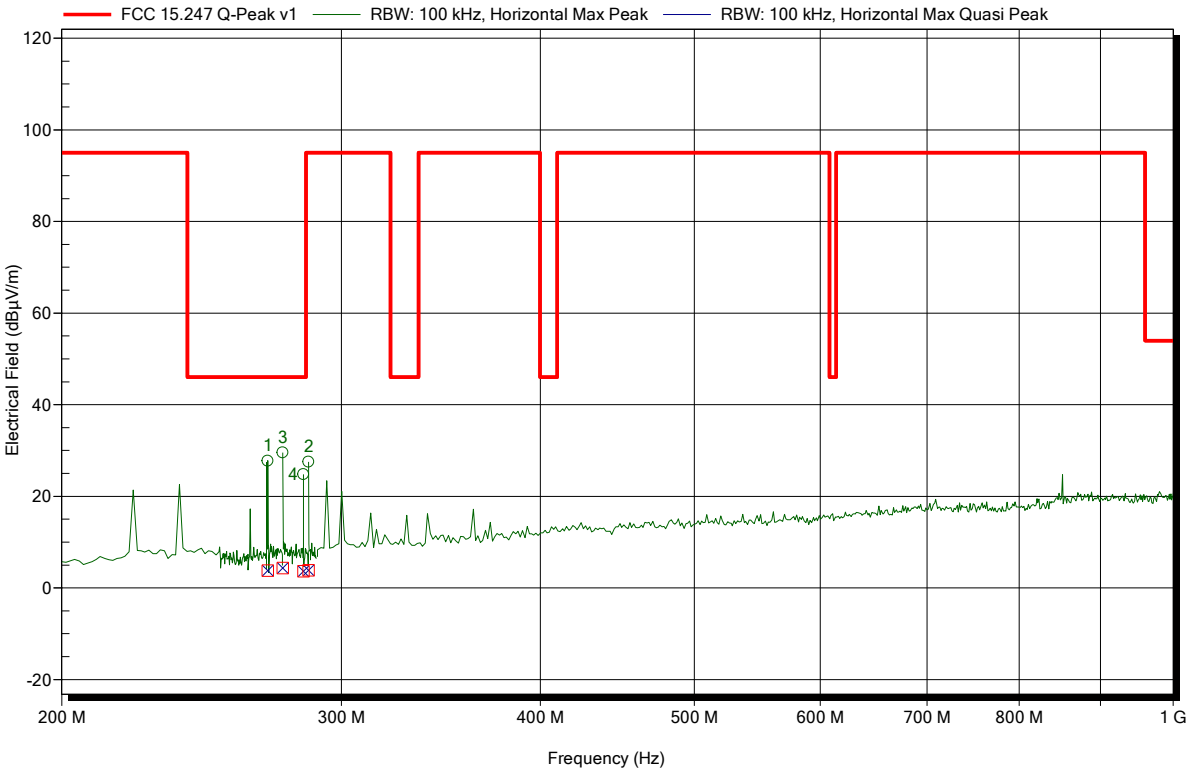

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
269.688 MHz	3.81 dBµV/m	46 dBµV/m	-42.19 dB	Pass
275.495 MHz	4.32 dBµV/m	46 dBµV/m	-41.68 dB	Pass
283.906 MHz	3.63 dBµV/m	46 dBµV/m	-42.37 dB	Pass
286.069 MHz	3.85 dBµV/m	95 dBµV/m	-91.15 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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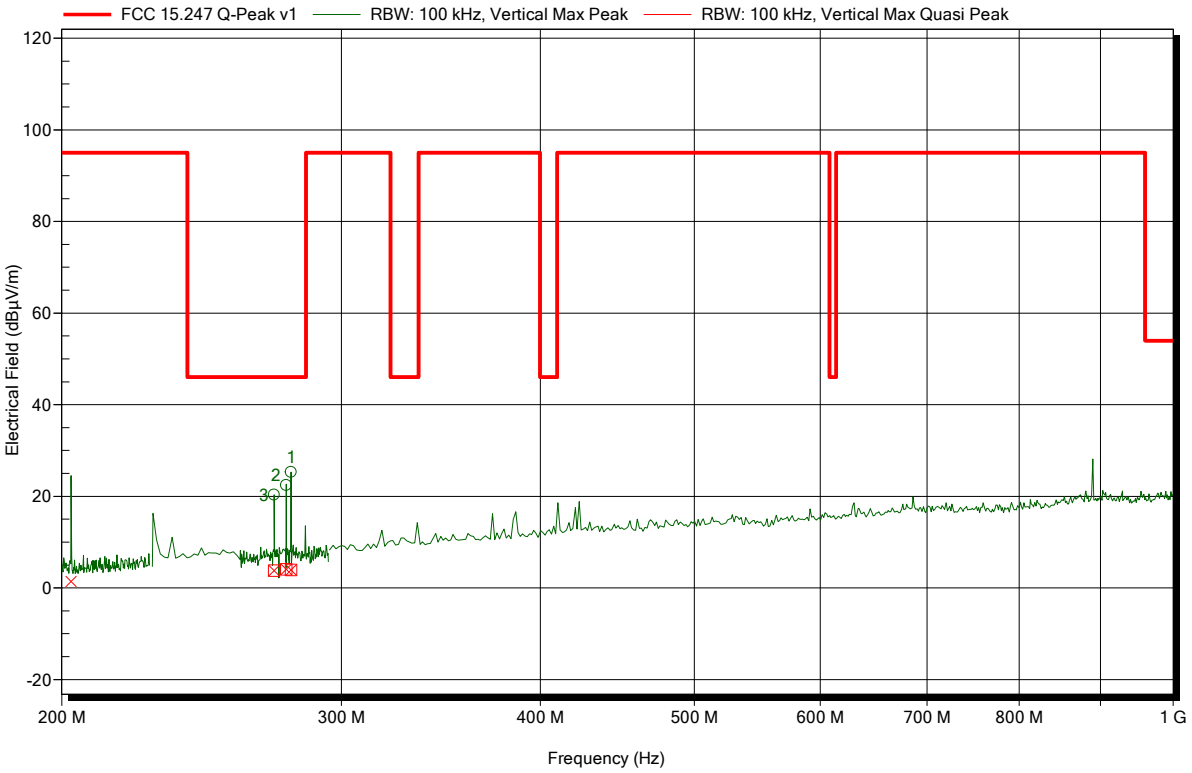

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
272.104 MHz	3.75 dBµV/m	46 dBµV/m	-42.25 dB	Pass
276.92 MHz	4.03 dBµV/m	46 dBµV/m	-41.97 dB	Pass
278.939 MHz	3.89 dBµV/m	46 dBµV/m	-42.11 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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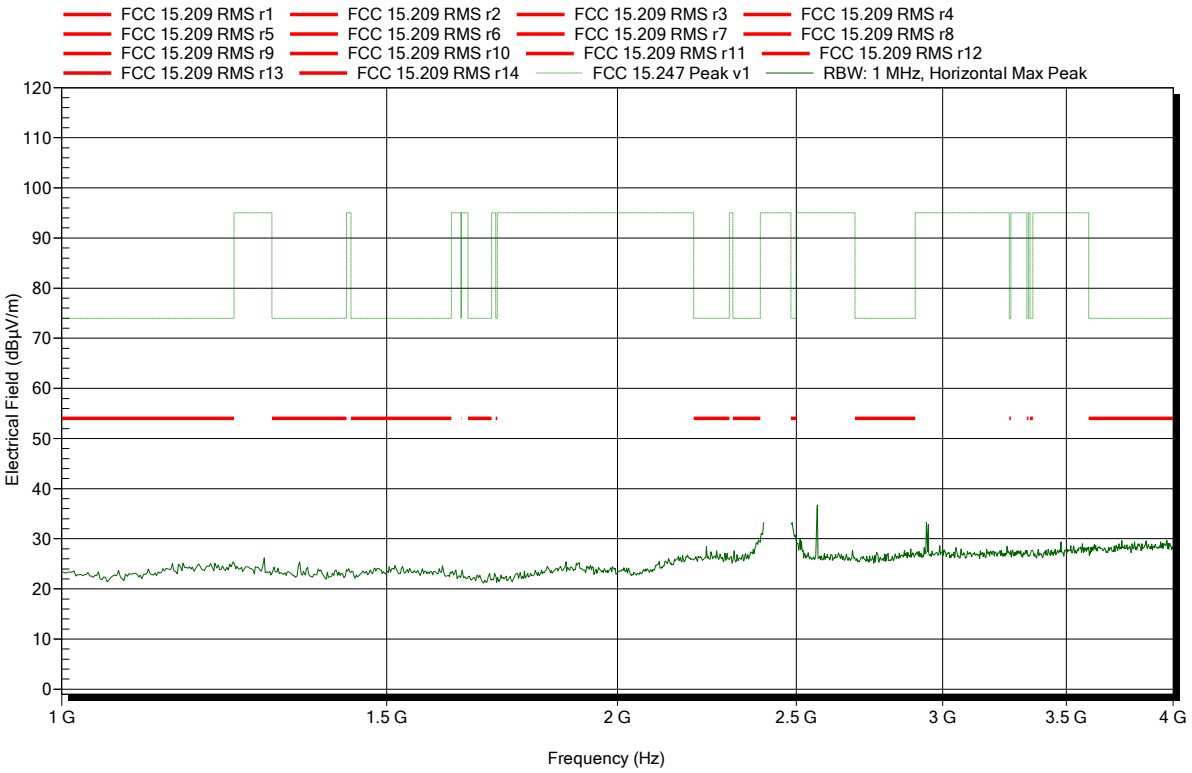

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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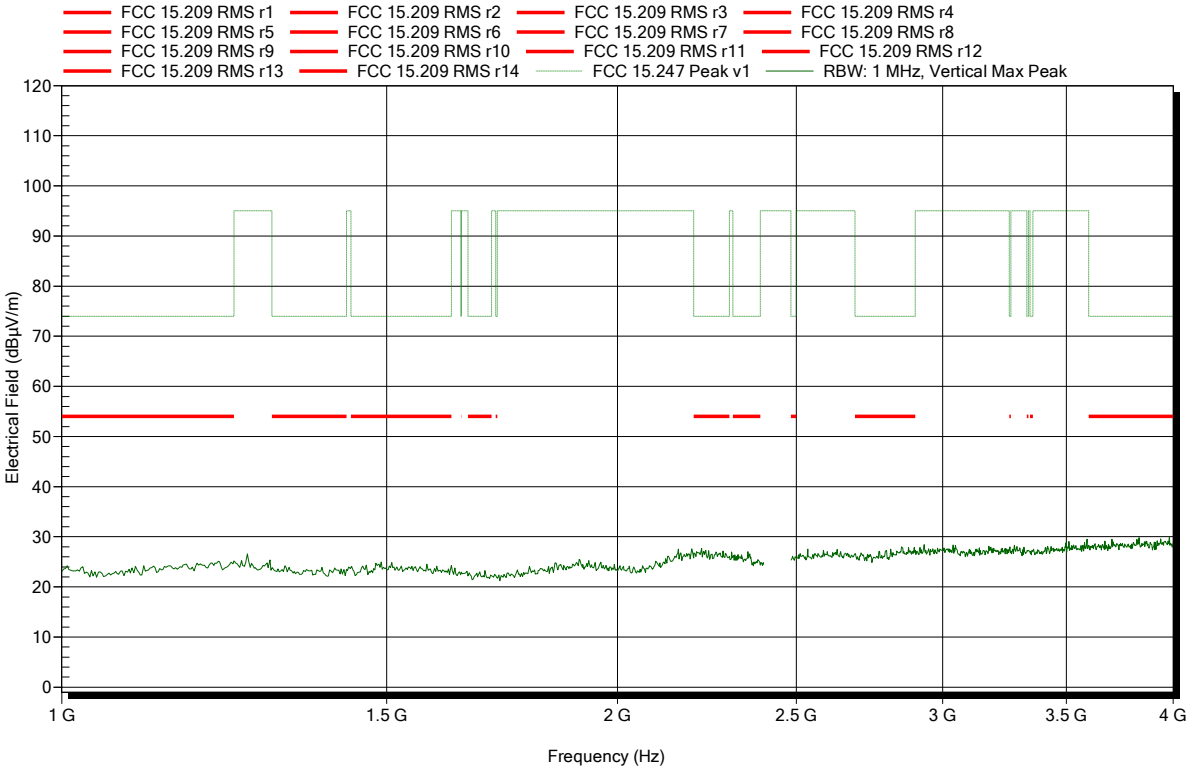

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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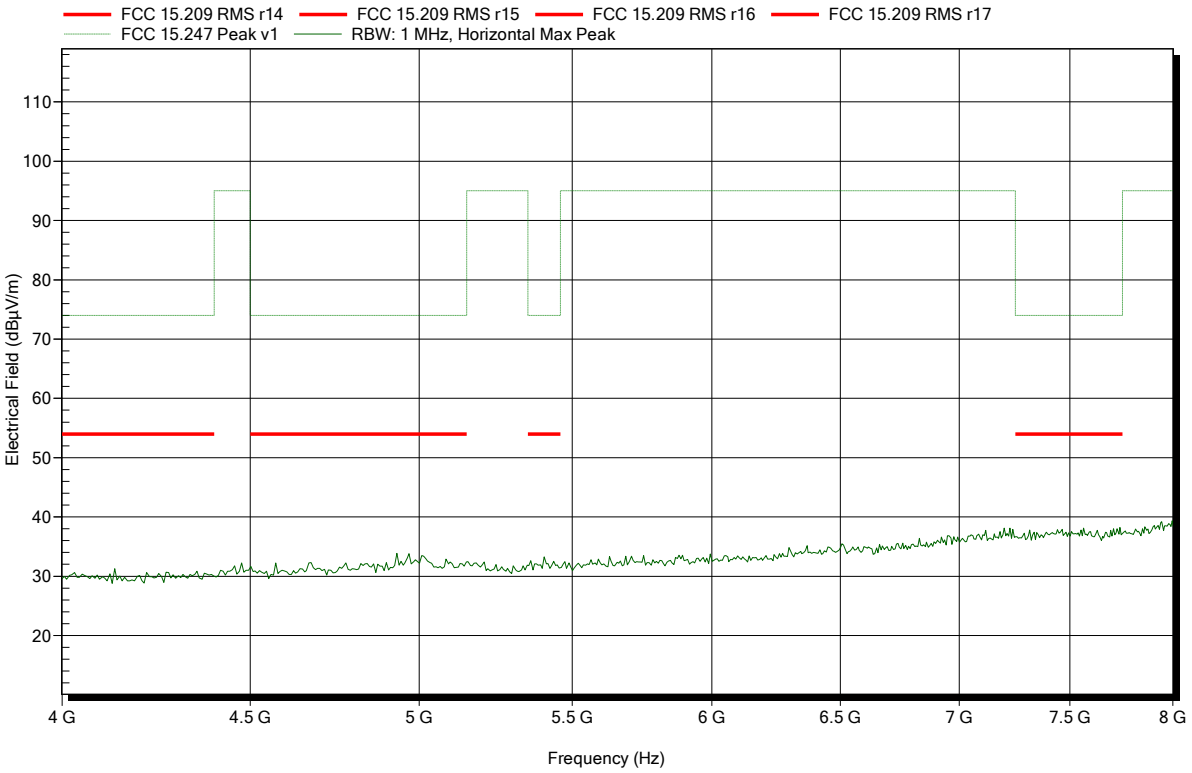

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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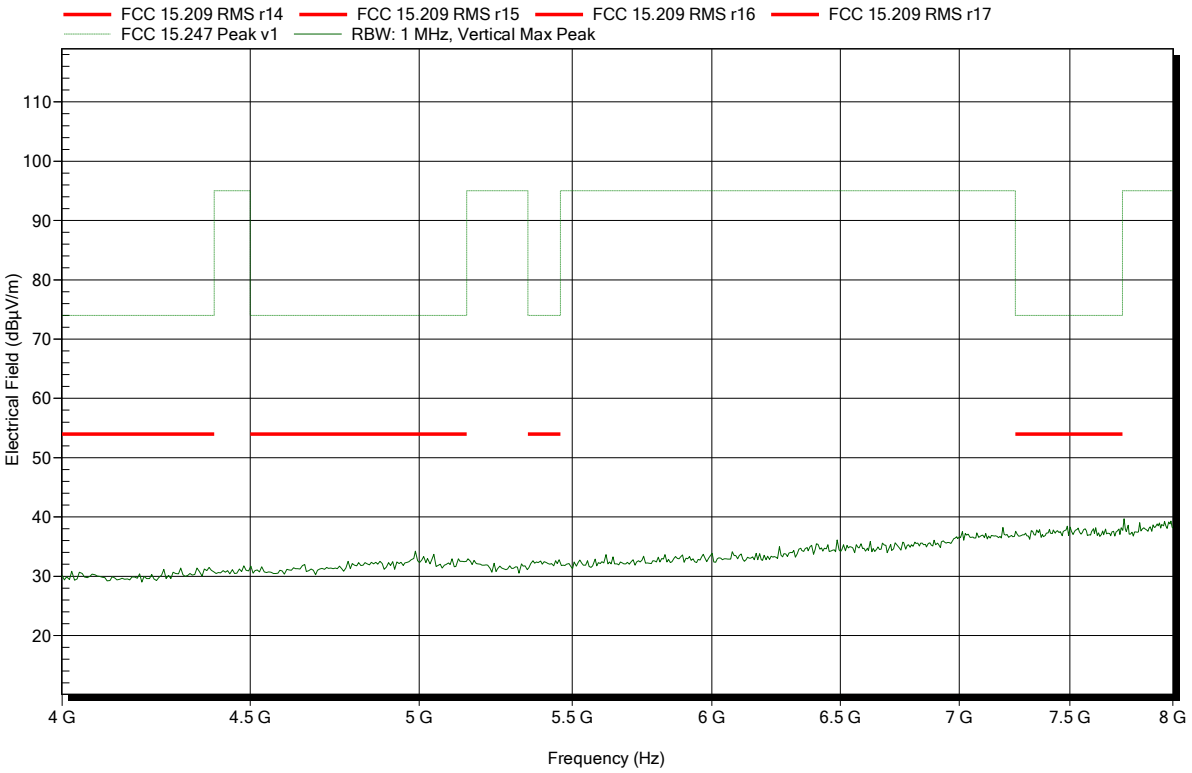

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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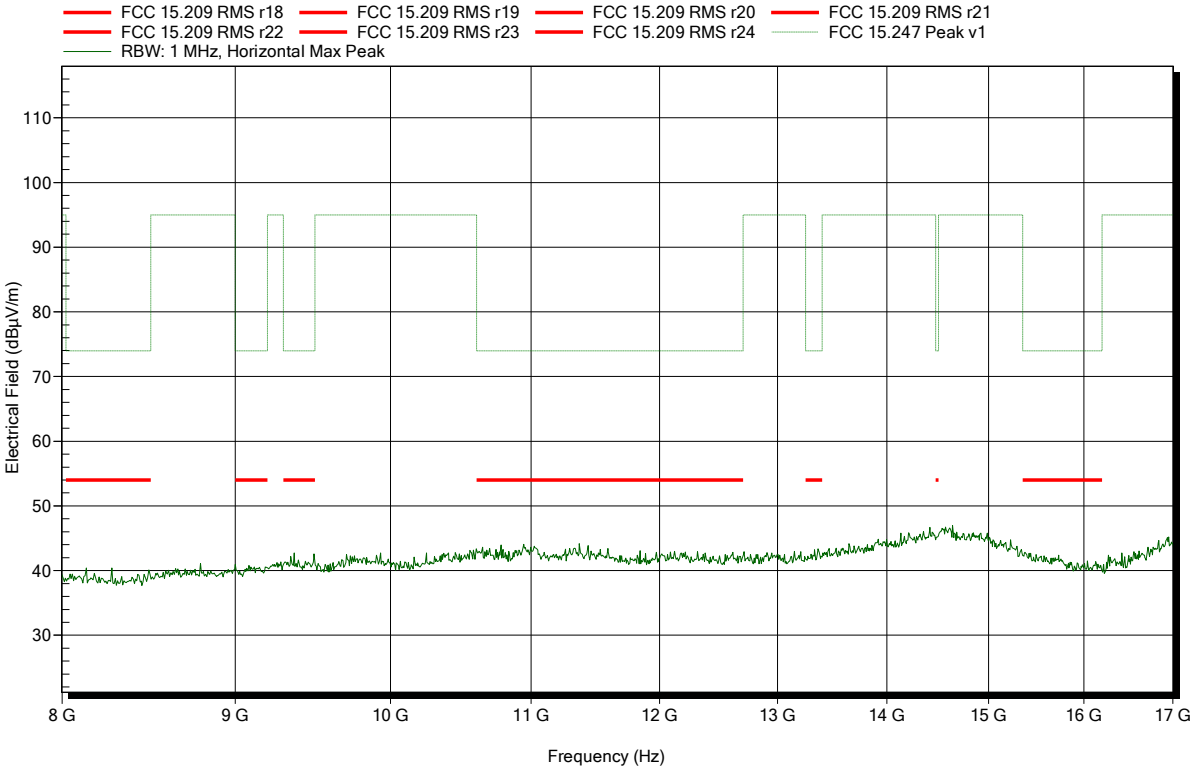

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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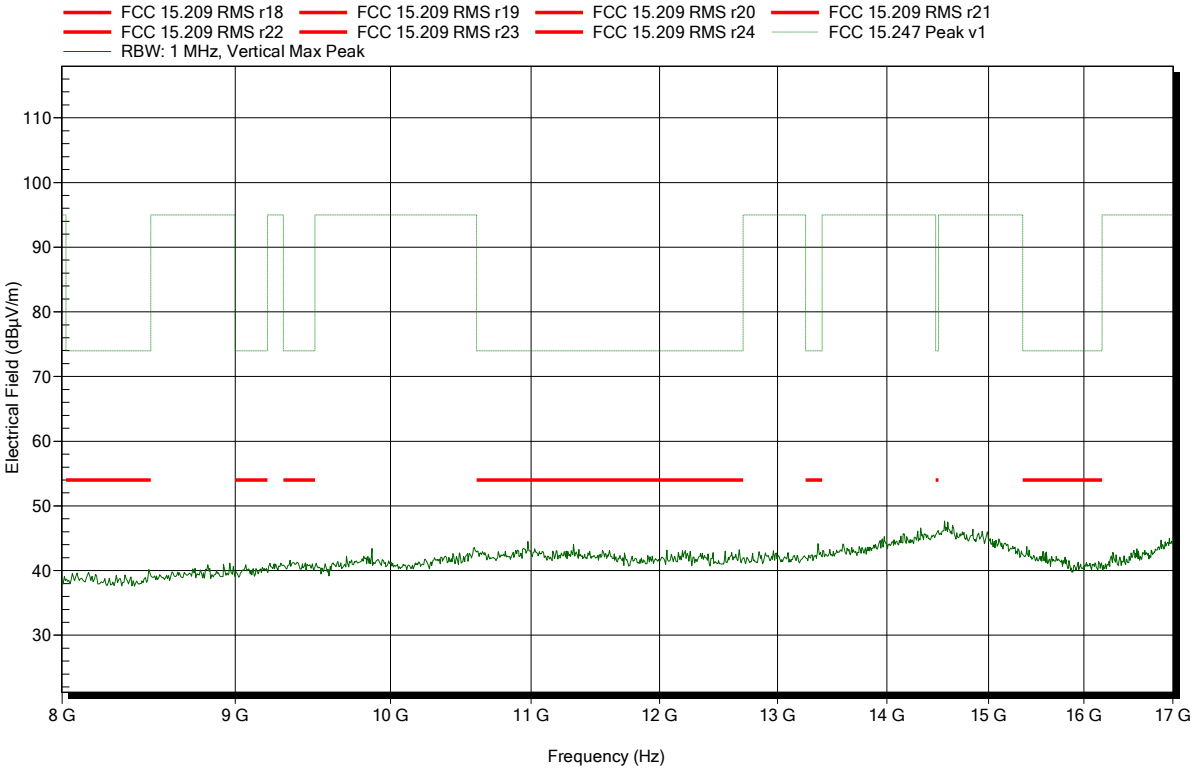

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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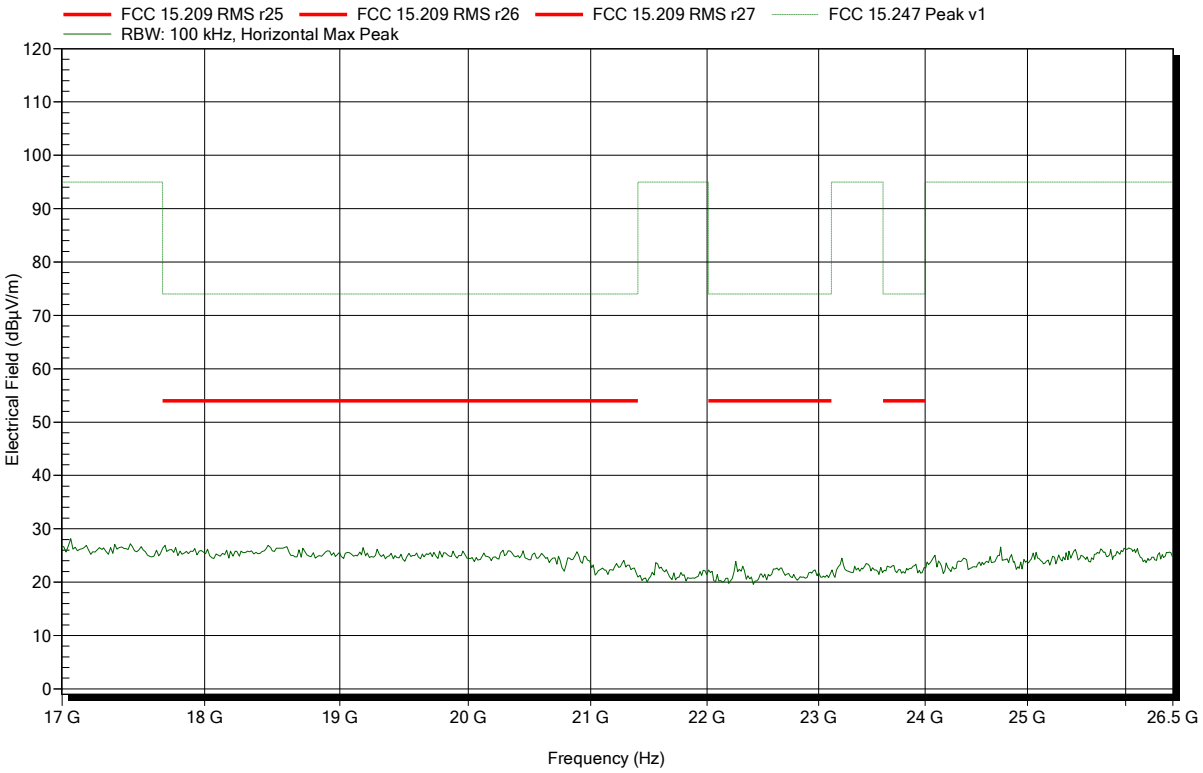

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2440MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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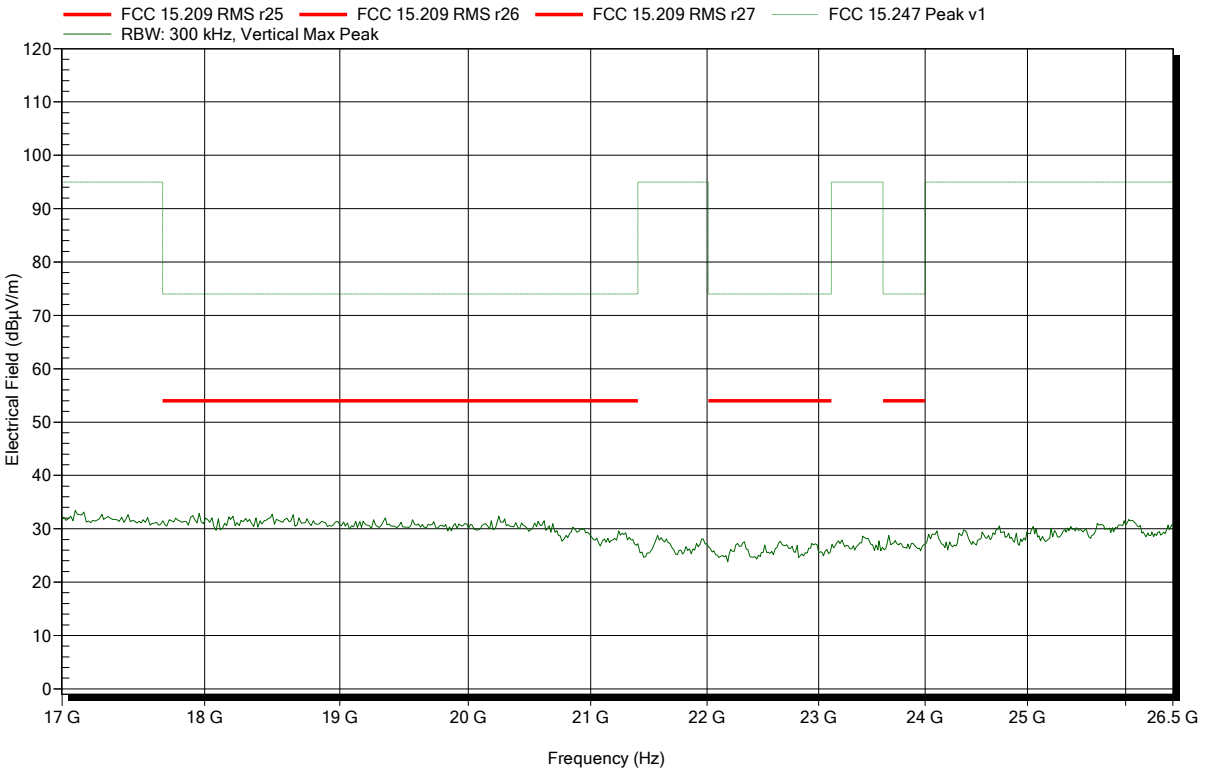

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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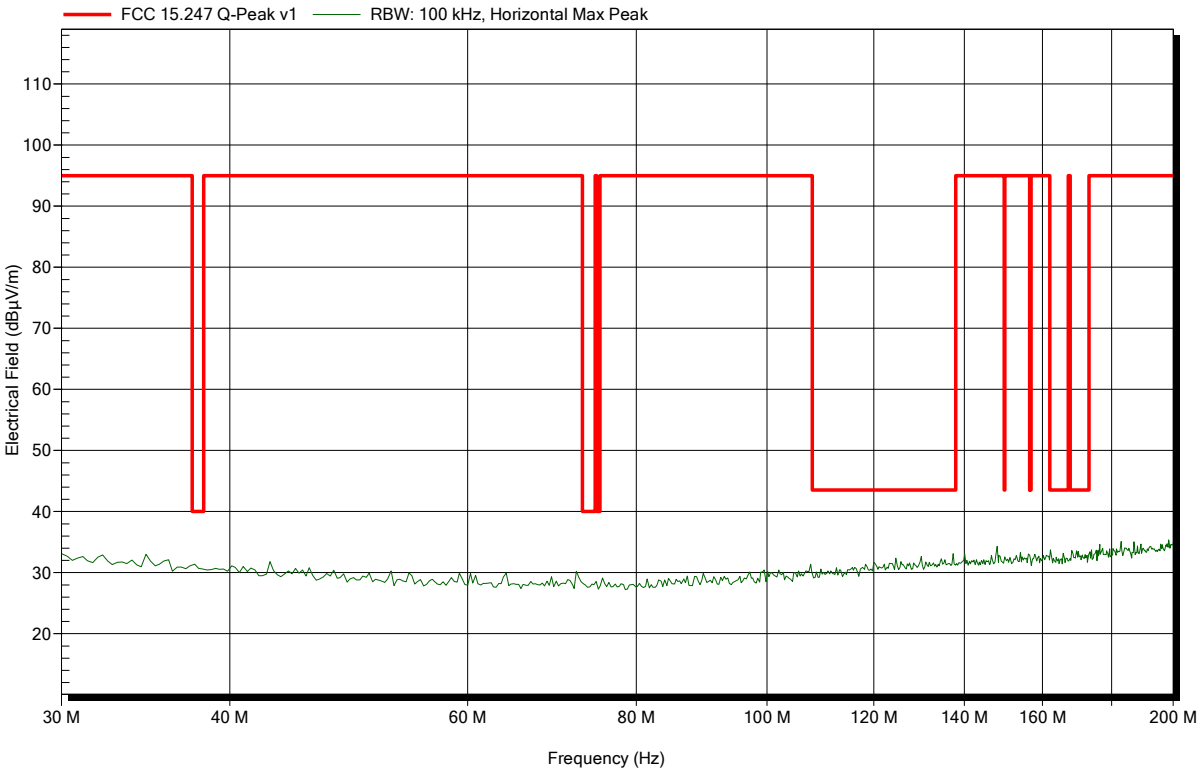

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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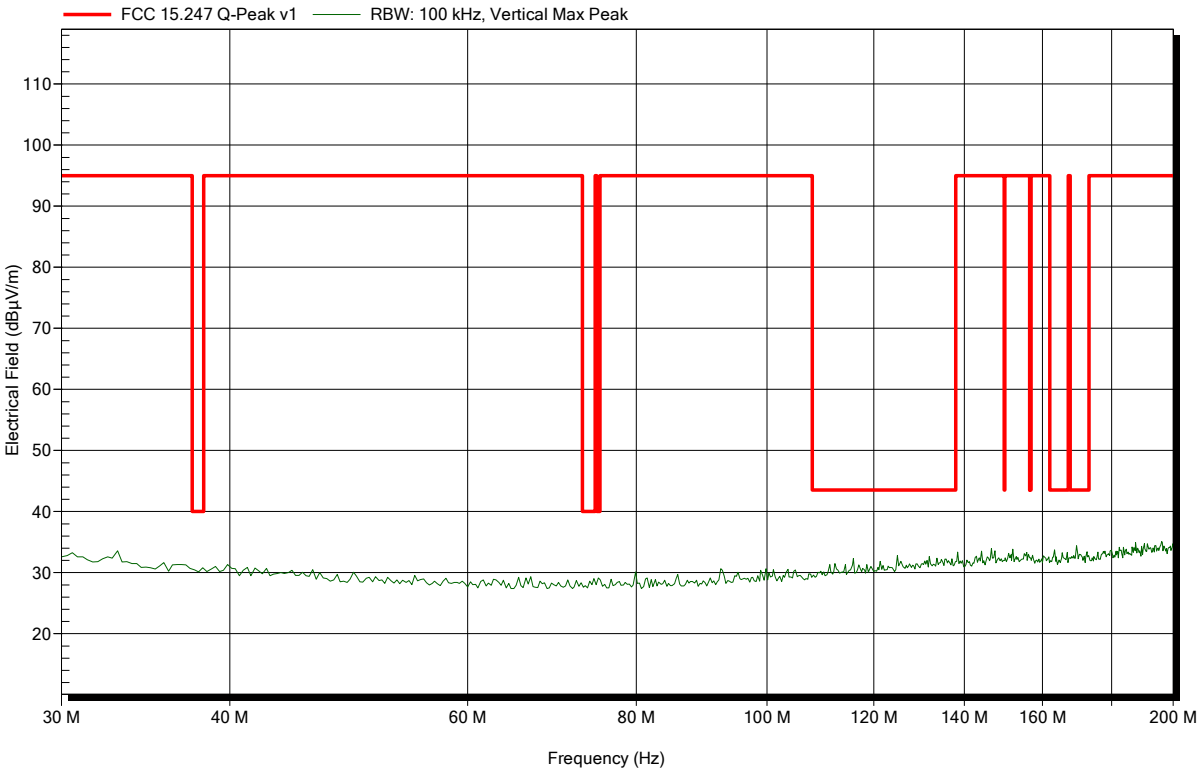

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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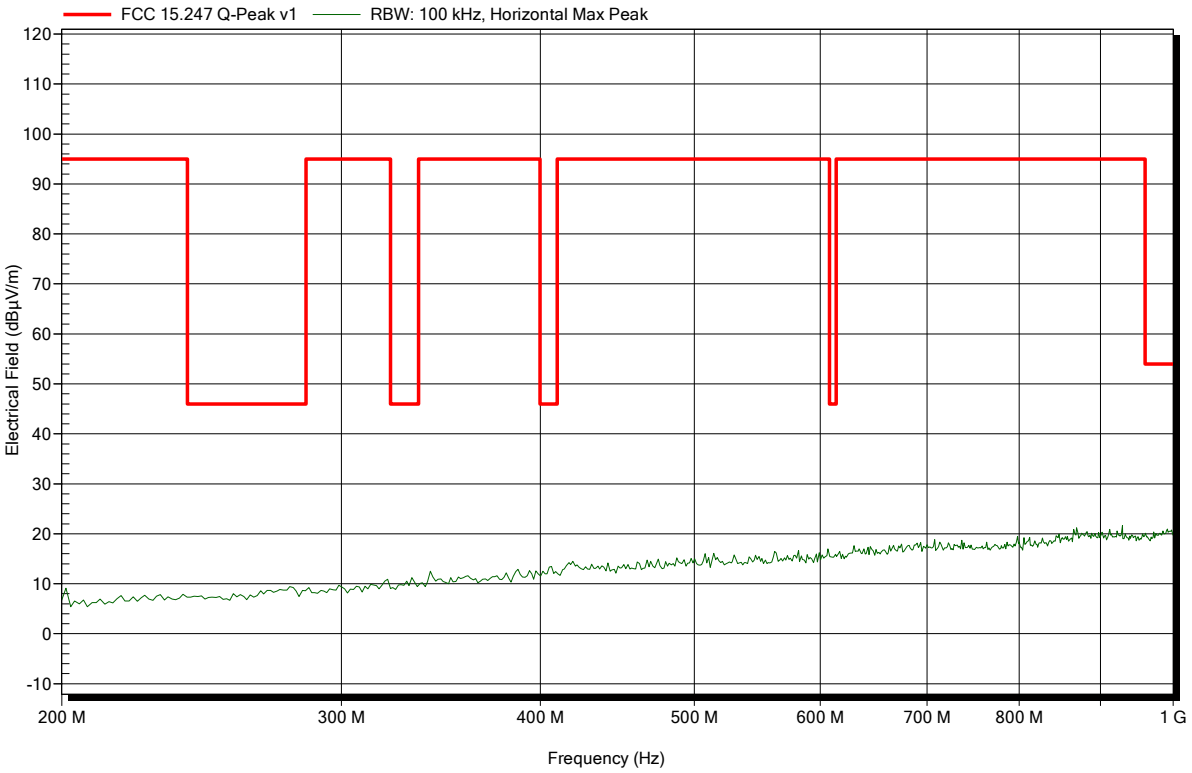

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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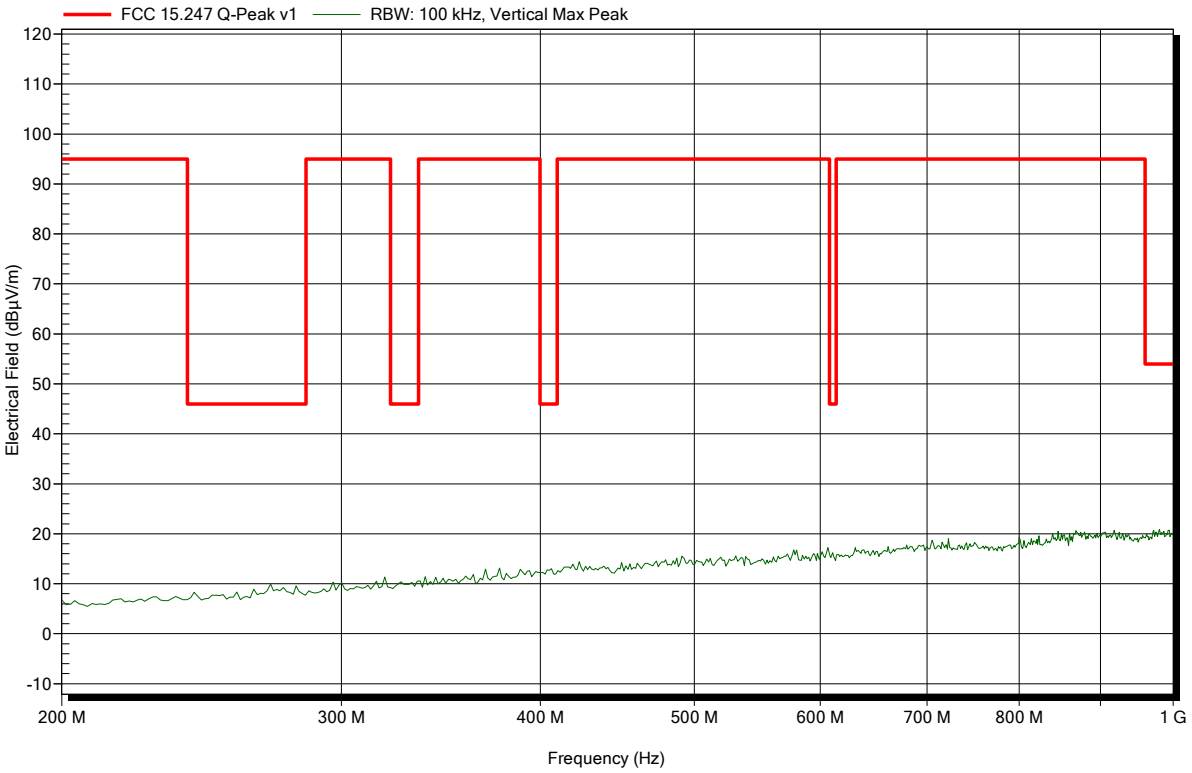

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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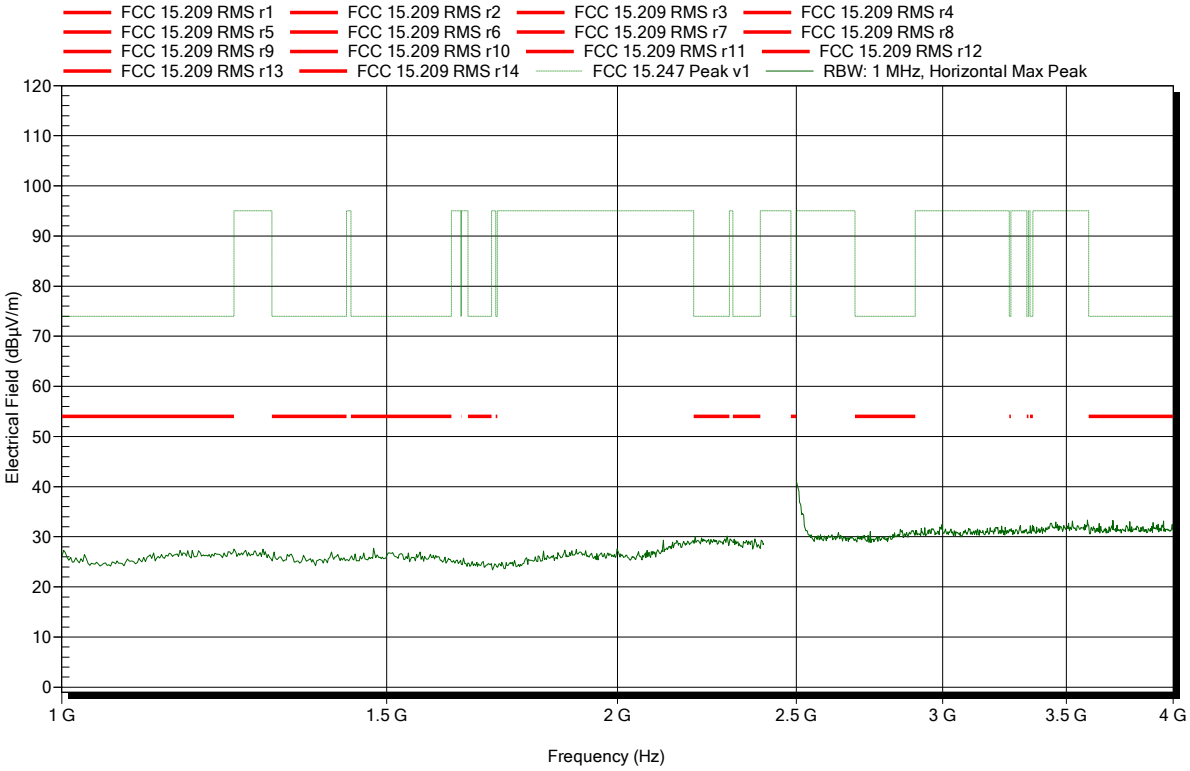

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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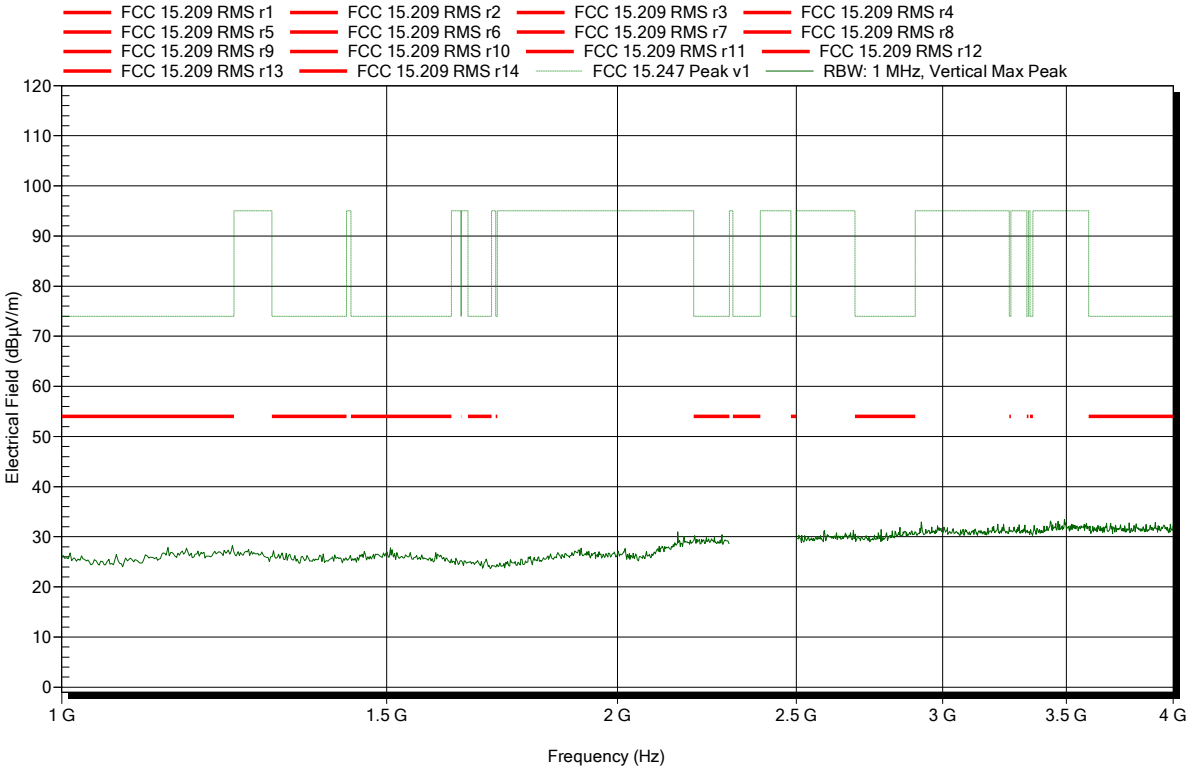

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	upper bandedge

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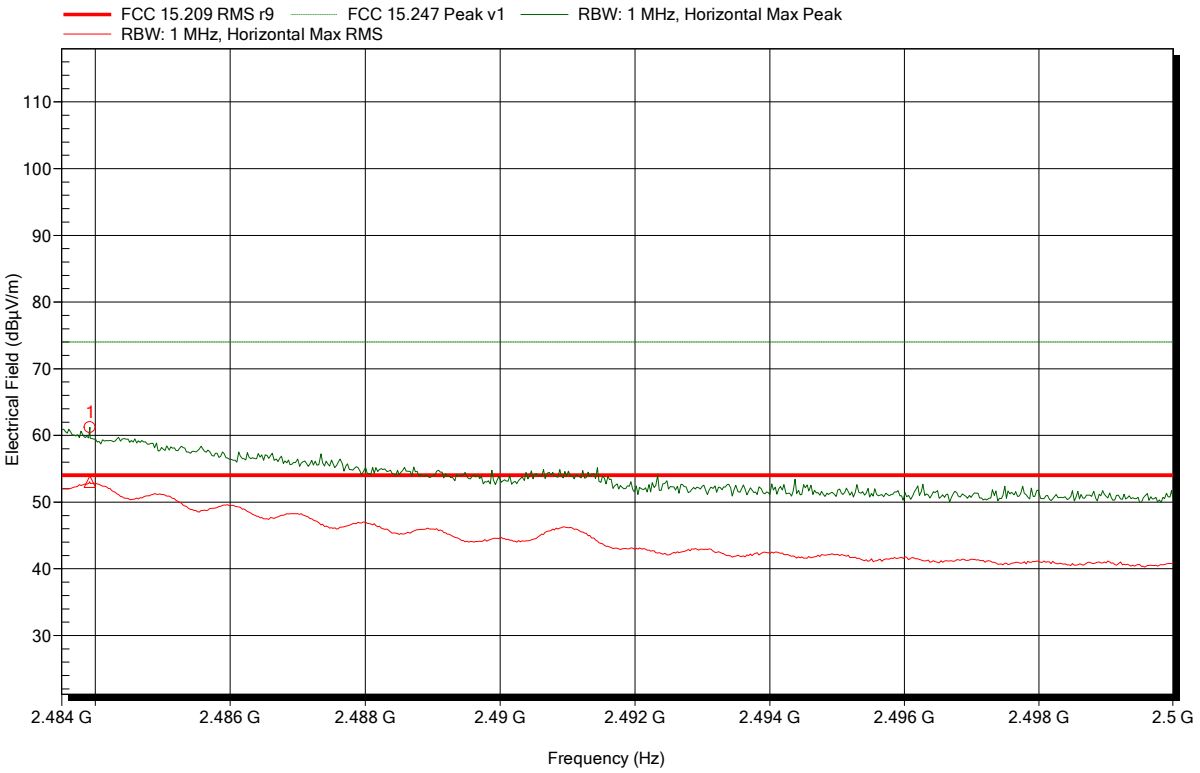

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.4839 GHz	61.22 dBµV/m	74 dBµV/m	-12.78 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.4839 GHz	53.04 dBµV/m	54 dBµV/m	-0.96 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	upper bandedge

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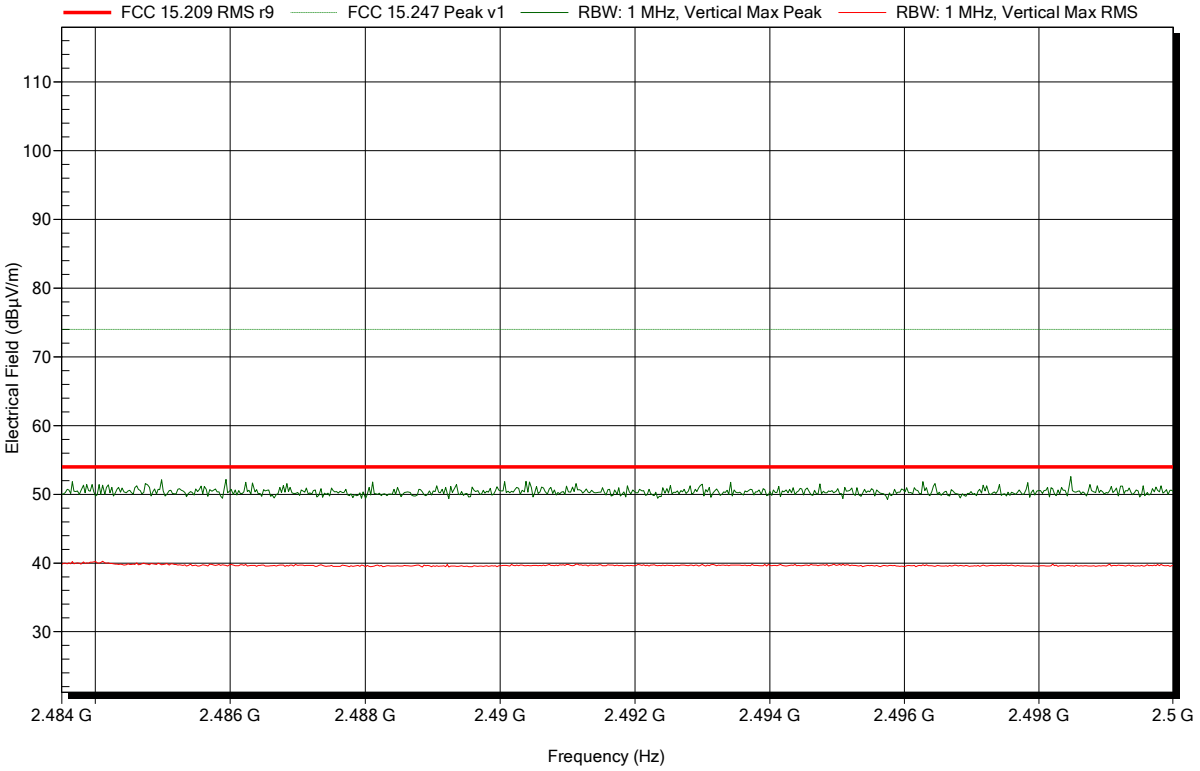

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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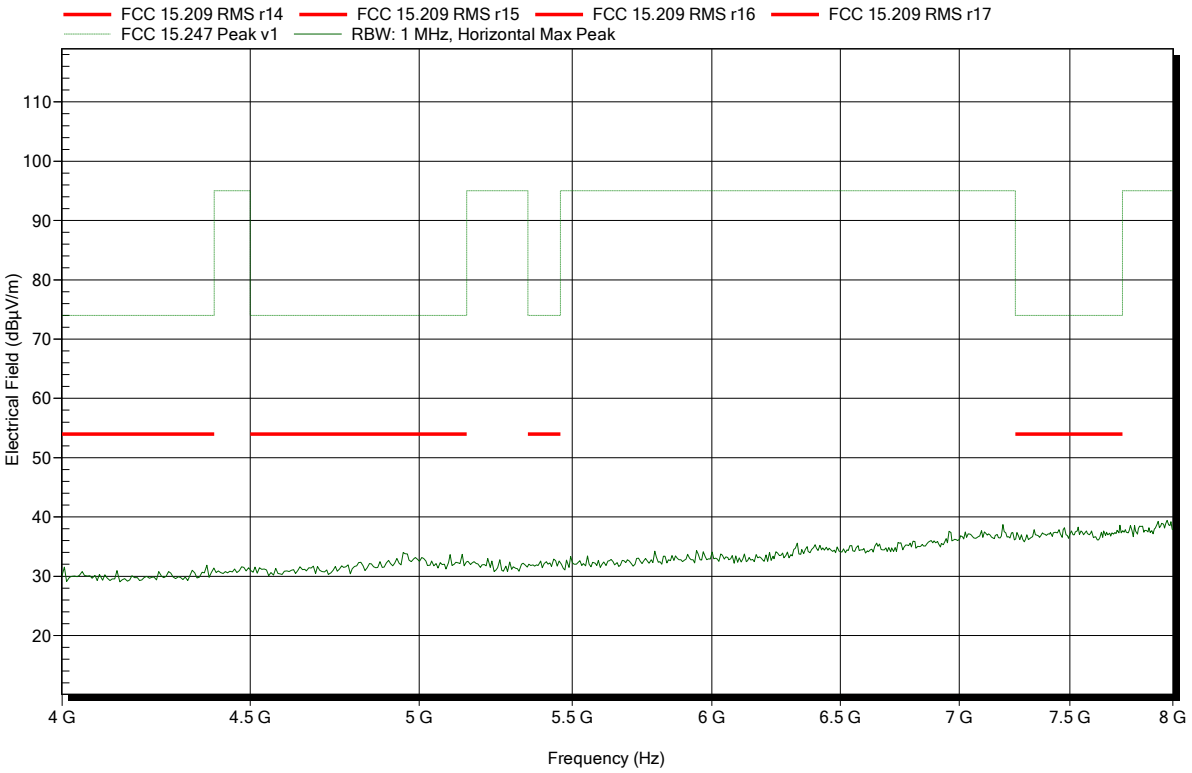

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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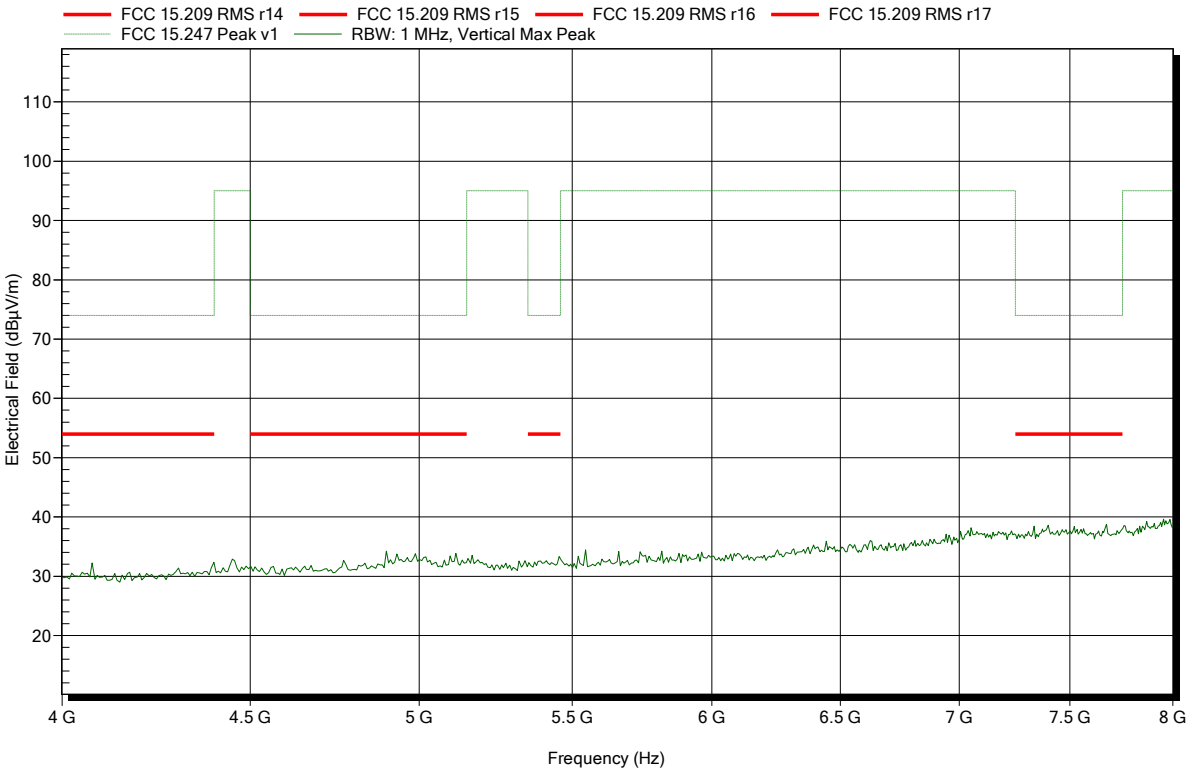

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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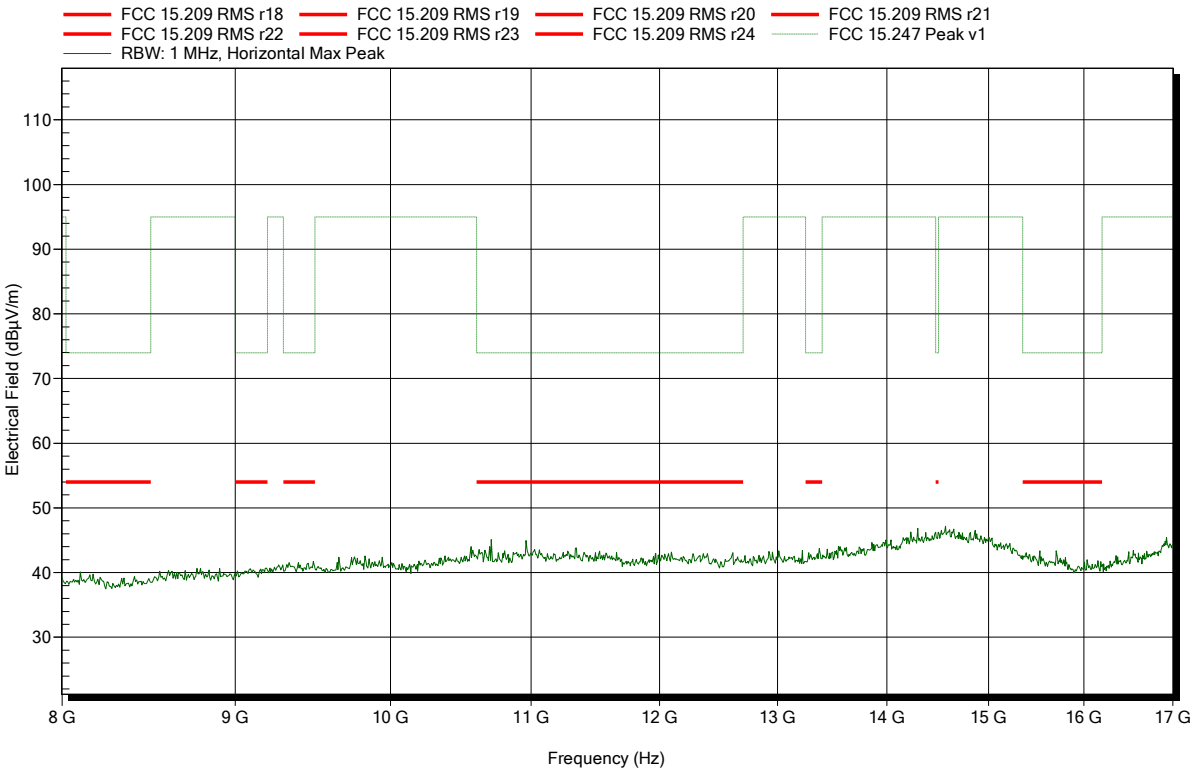

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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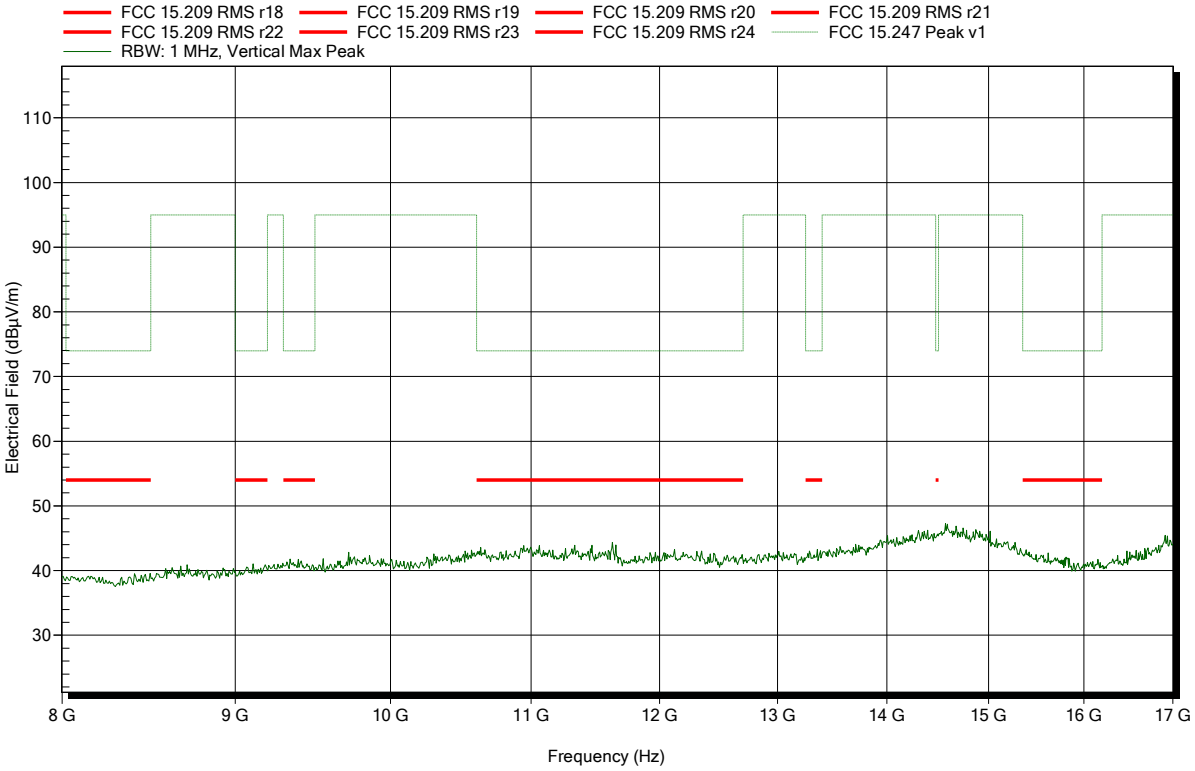

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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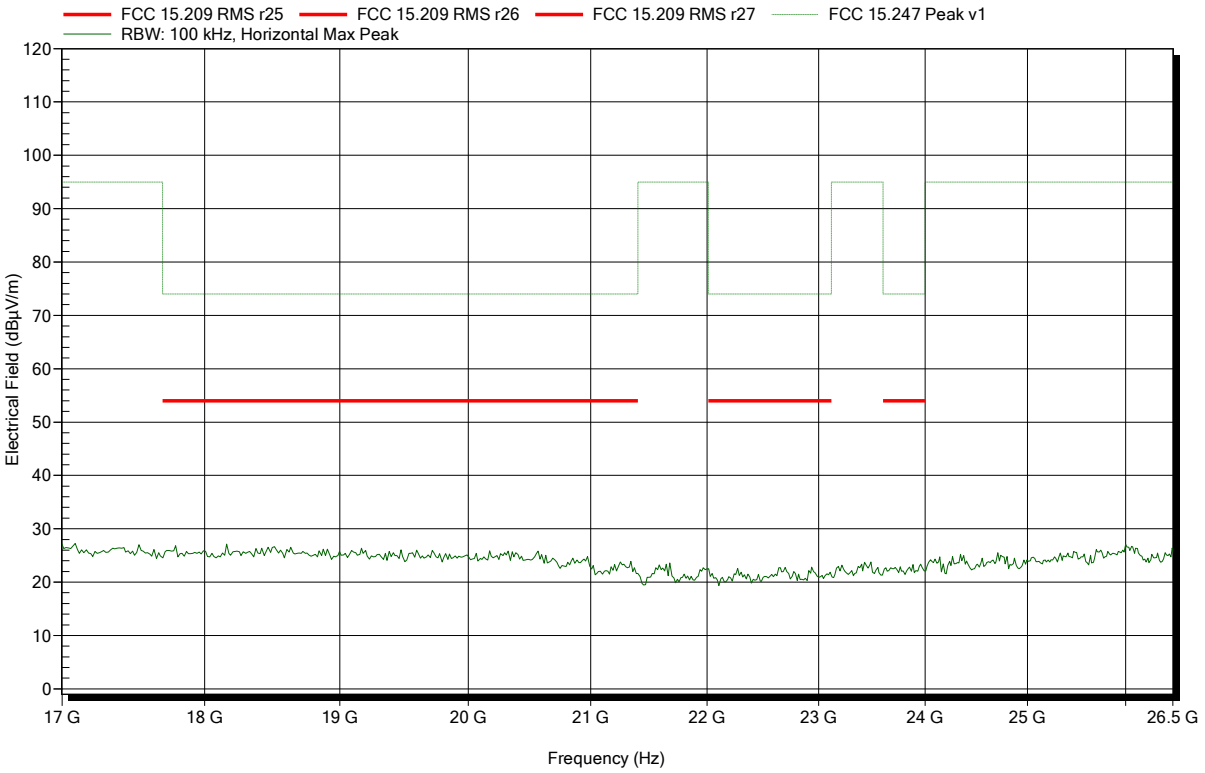

Spurious emissions according to FCC 47 e-CFR §15.247

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 22.7°C, Vnom: 14.4 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2475MHz, EUT ver.
Test Date:	2019-11-21
Note:	

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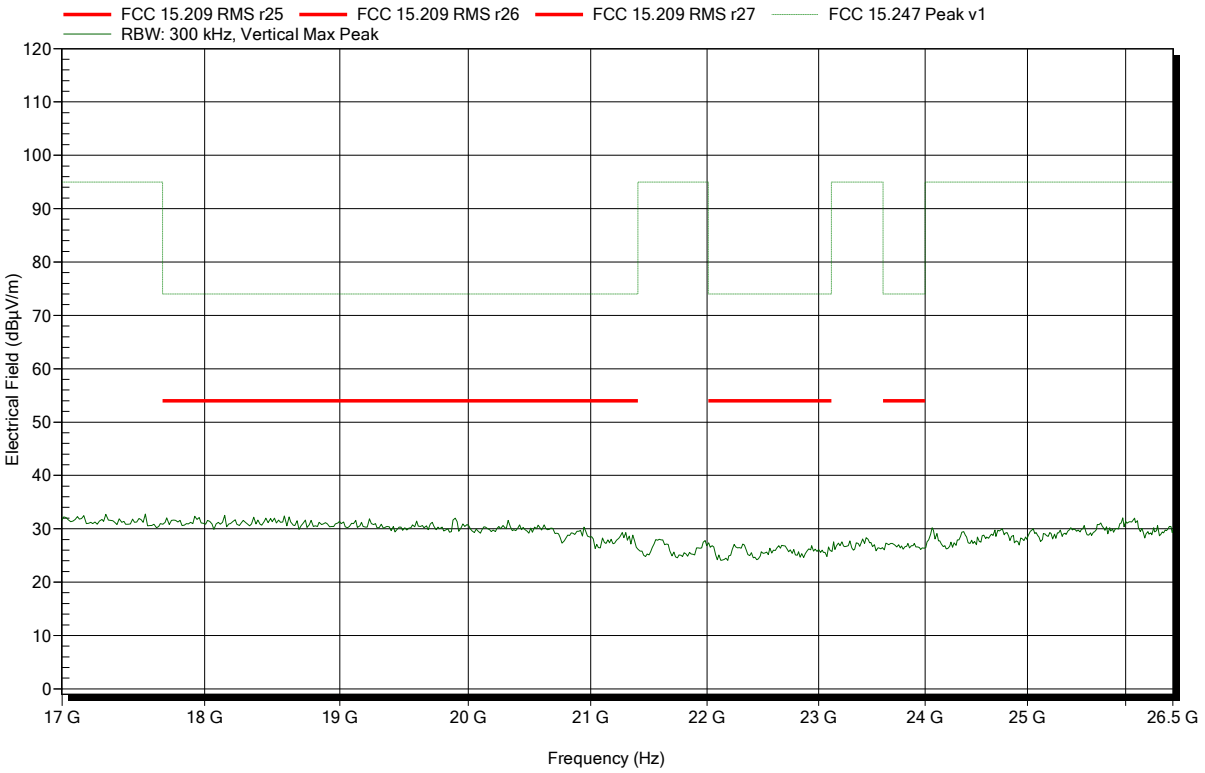

ANNEX B Receiver spurious emissions

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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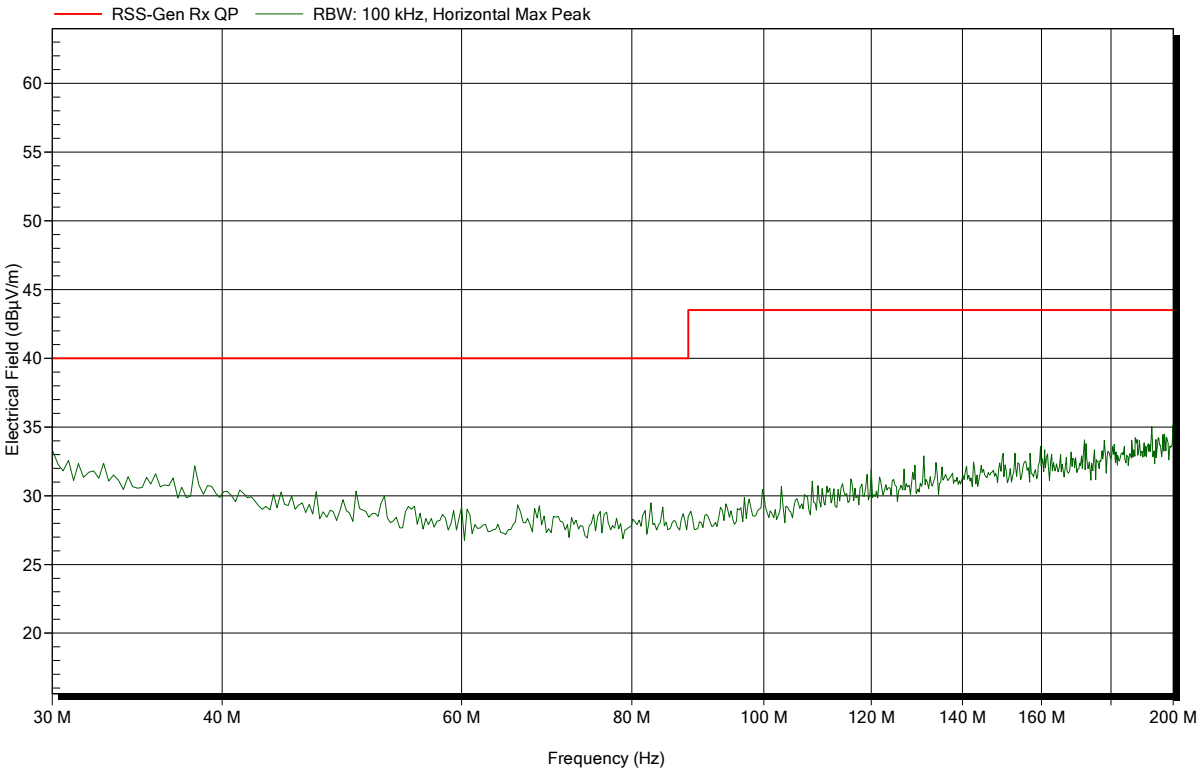

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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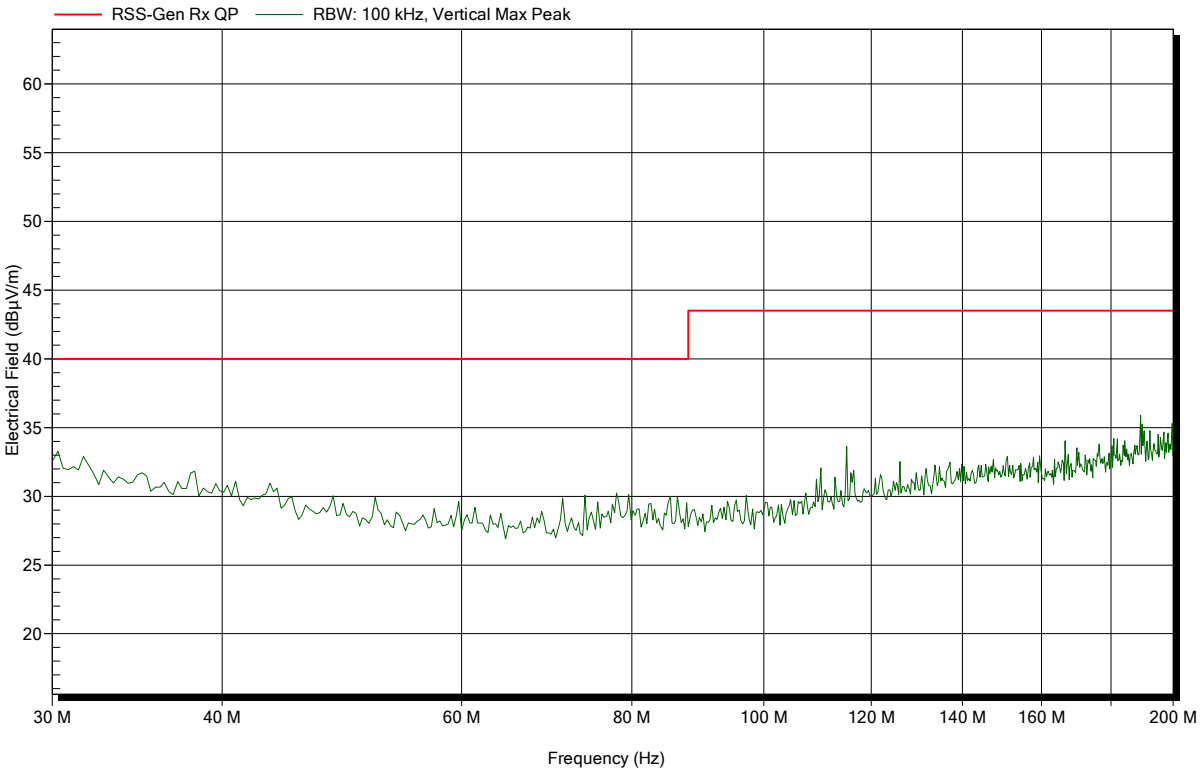

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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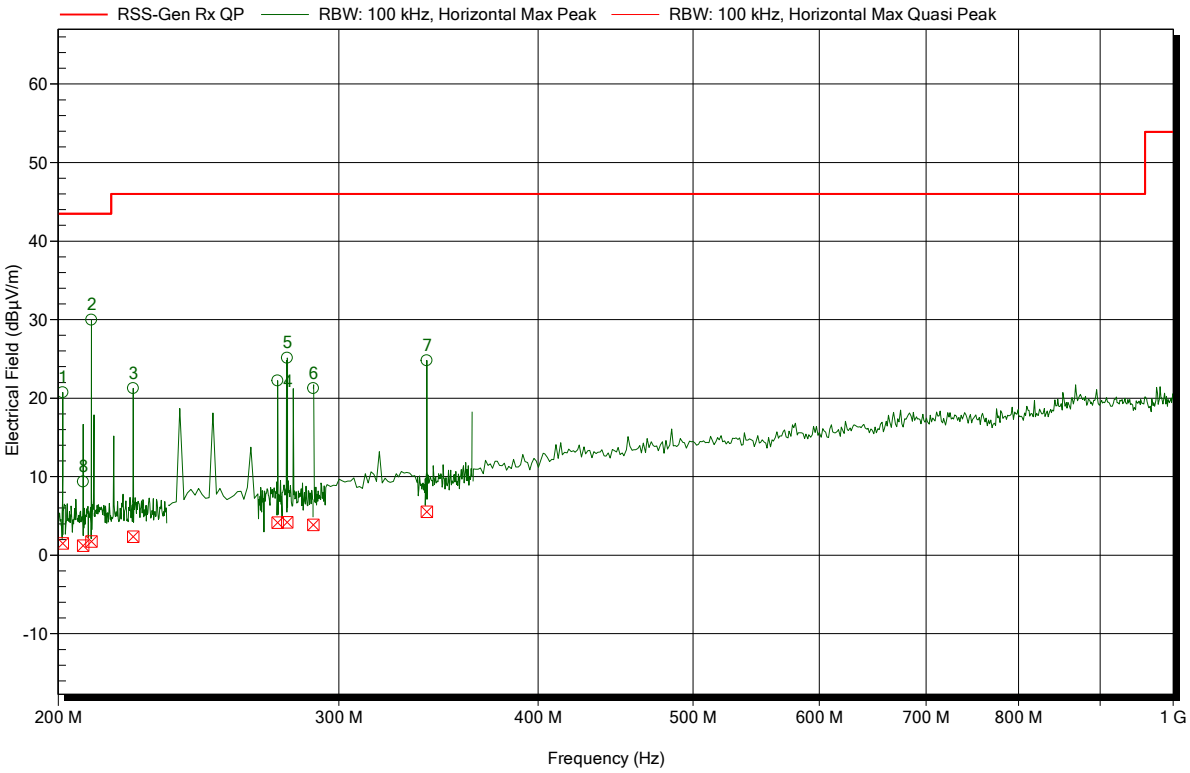

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
201.451 MHz	1.51 dBµV/m	43.5 dBµV/m	-41.99 dB	Pass	293 Degree	1.2 m
207.433 MHz	1.22 dBµV/m	43.5 dBµV/m	-42.28 dB	Pass	-60 Degree	1.2 m
209.897 MHz	1.73 dBµV/m	43.5 dBµV/m	-41.77 dB	Pass	220 Degree	1.2 m
222.957 MHz	2.34 dBµV/m	46 dBµV/m	-43.66 dB	Pass	163 Degree	1.2 m
274.637 MHz	4.13 dBµV/m	46 dBµV/m	-41.87 dB	Pass	100 Degree	1.2 m
278.439 MHz	4.19 dBµV/m	46 dBµV/m	-41.81 dB	Pass	146 Degree	1.2 m
289.198 MHz	3.87 dBµV/m	46 dBµV/m	-42.13 dB	Pass	264 Degree	1.2 m
340.555 MHz	5.53 dBµV/m	46 dBµV/m	-40.47 dB	Pass	126 Degree	1.2 m

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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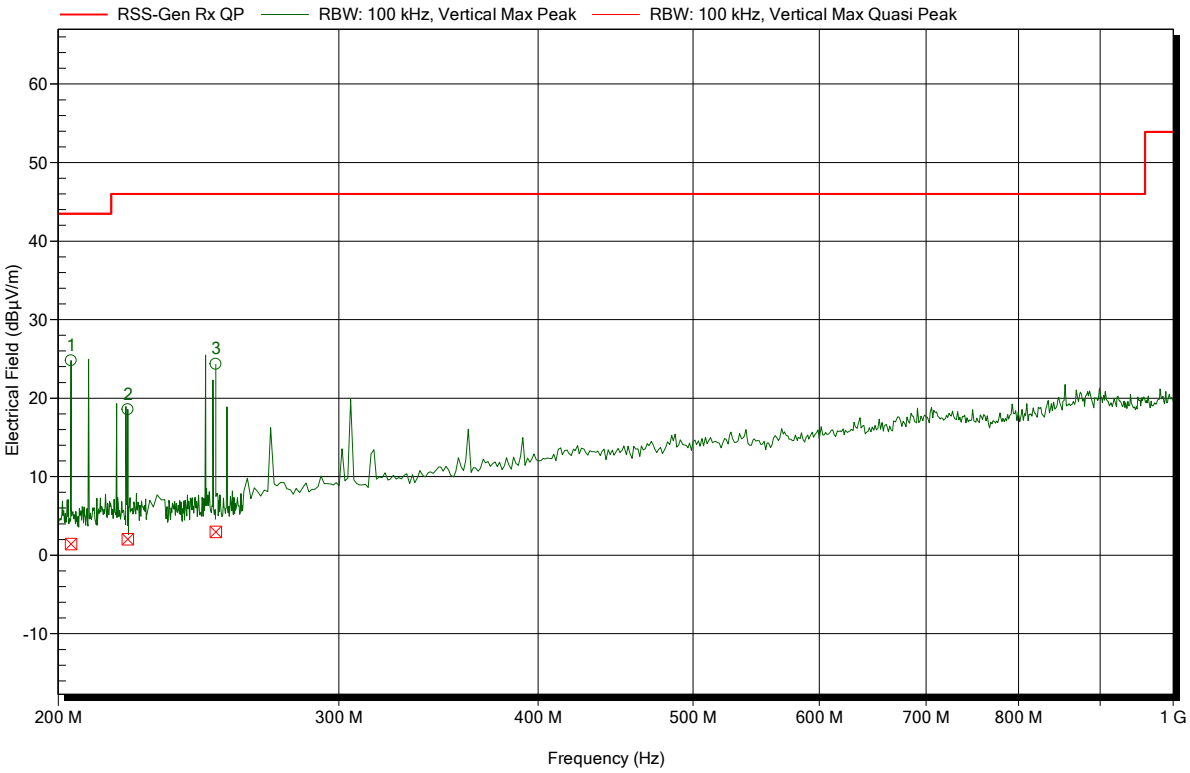

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
203.846 MHz	1.42 dBµV/m	43.5 dBµV/m	-42.08 dB	Pass	53 Degree	1.2 m
221.254 MHz	2.04 dBµV/m	46 dBµV/m	-43.96 dB	Pass	27 Degree	1.2 m
251.224 MHz	2.97 dBµV/m	46 dBµV/m	-43.03 dB	Pass	9 Degree	1.2 m

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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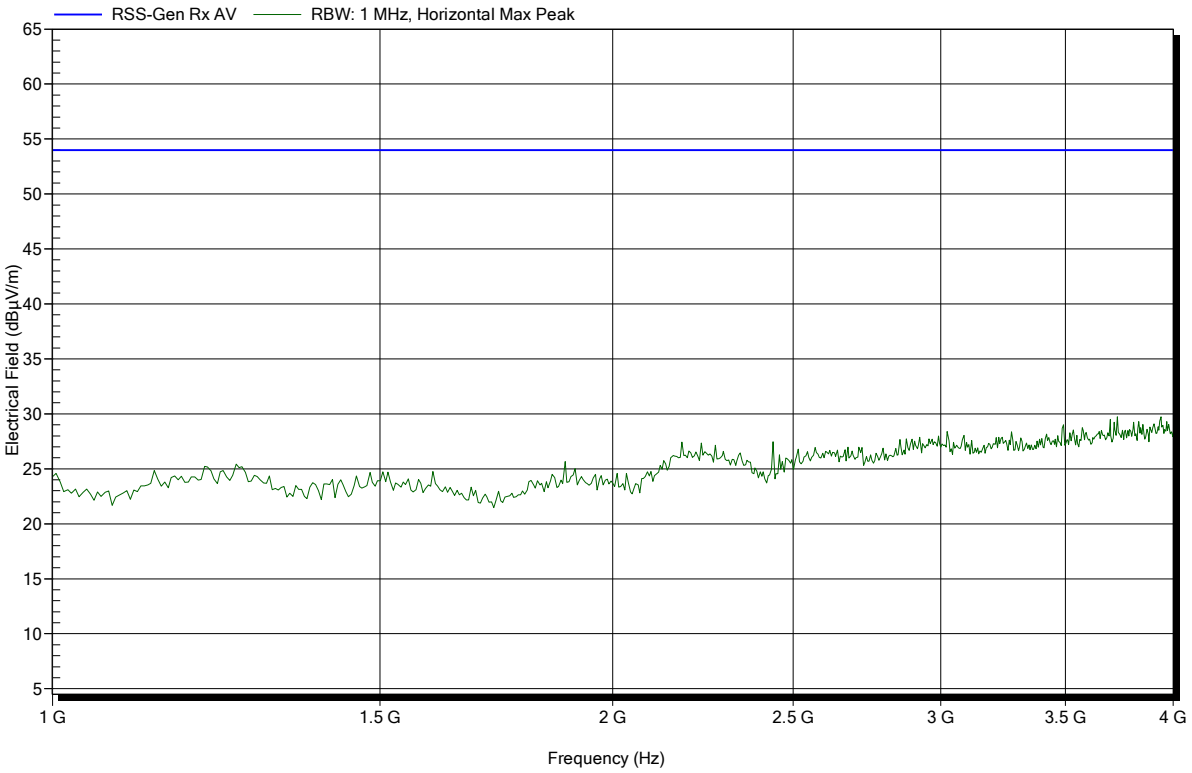

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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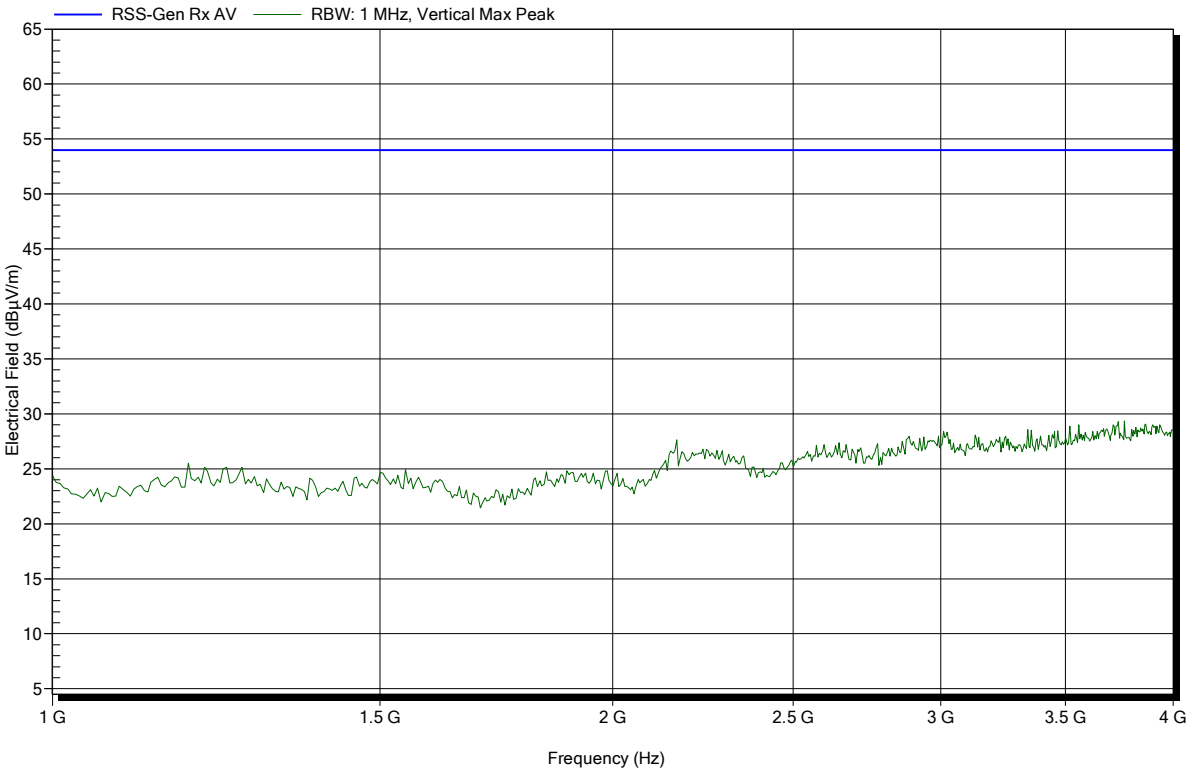

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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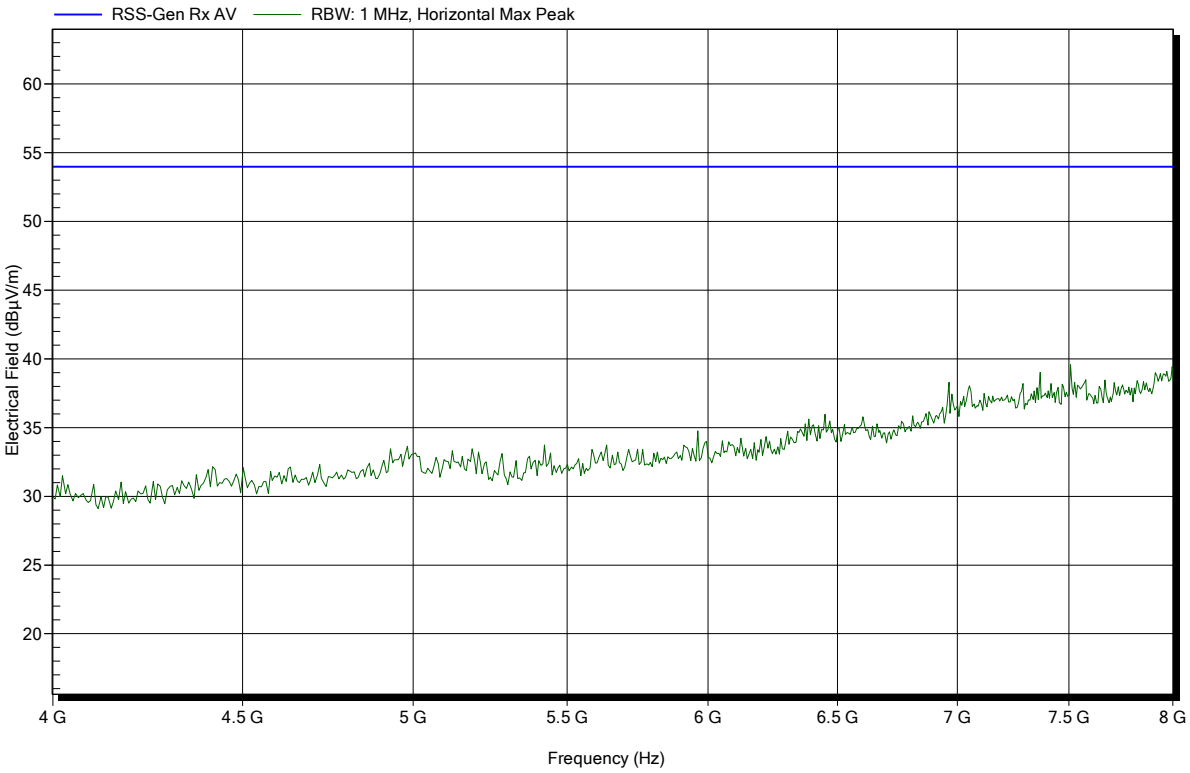

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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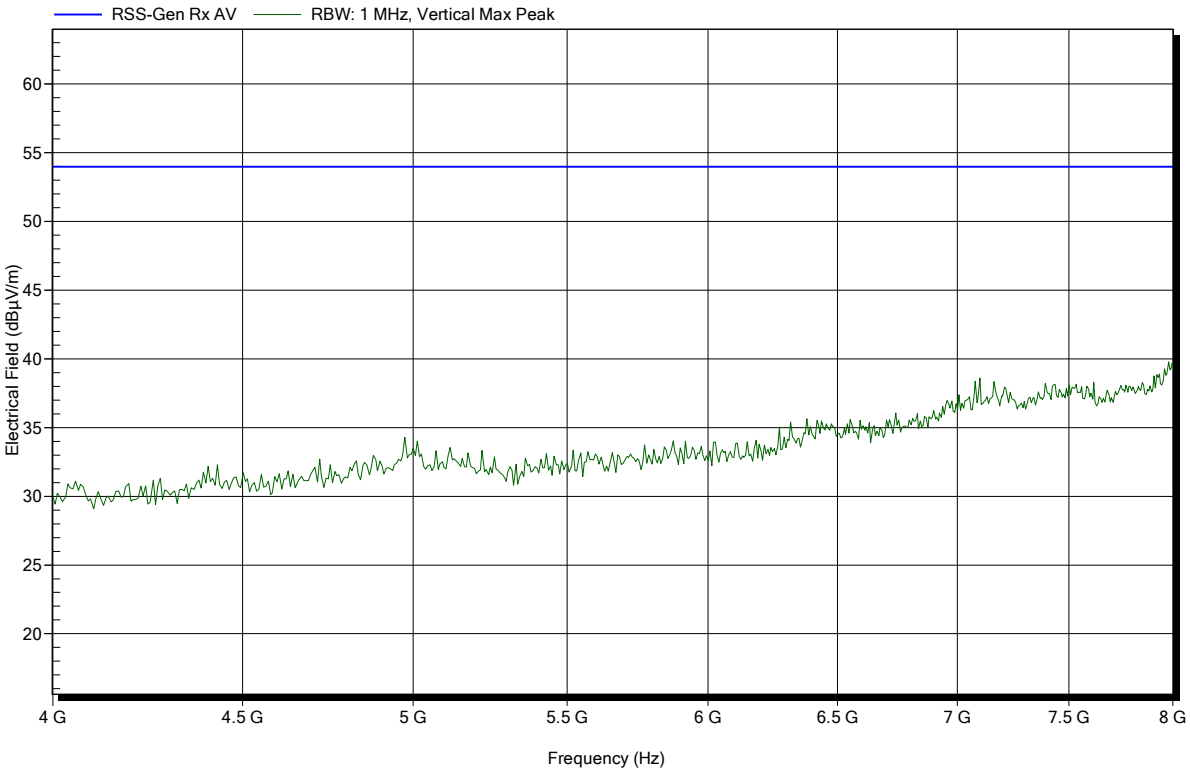

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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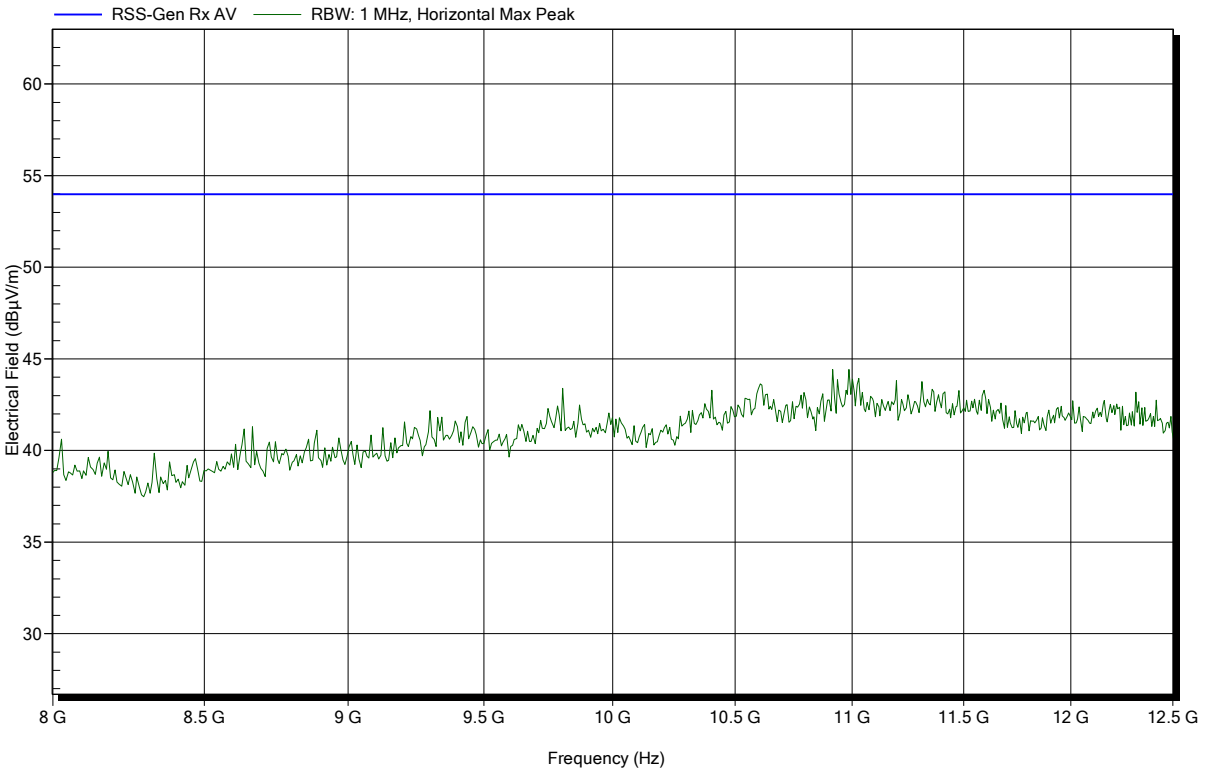

Spurious emissions according to RSS-247 Issue 2

Project number:	G0M-1803-7309
Applicant:	Dräger Safety AG & Co. KGaA
EUT Name:	Fixed Gas Detector
Model:	P6100
Test Site:	Eurofins Product Service GmbH
Operator:	Florian Voigt
Test Conditions:	Tnom: 24.5°C, Vnom: 14.4 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	RX; 2440MHz
Test Date:	2019-11-21
Note:	

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