RADIO REPORT

FCC 47 CFR Part 15C
Digital transmission systems operating within the 902 – 928 MHz band

Report Reference No	G0M-1707-6700-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 Test Firm Designation Number: DE0008 IC Testing Laboratory site: 3470A-2
Applicant	Kamstrup A/S
Address	Industrivej 28 8660 Skanderborg DENMARK
Test Specification	According to FCC
Standard	47 CFR Part 15C
Non-Standard Test Method	None
Test Scope	Full compliance test
Equipment under Test (EUT):	
Product Description	Ultrasonic water meter
Model(s)	FlowIQ 2250
Additional Model(s)	FlowIQ 3250 HW: 620220101 rev 00 / RF board 55501605 rev D1
Brand Name(s)	Kamstrup
Hardware Version(s)	620120101 rev A1 / RF board 55501605 rev D1
Software Version(s)	50981336 rev E1 / 55141470 rev C1
FCC-ID	OUY-FLOWX250
IC	N/A
Test Result	**PASSED**

Possibe test case verdicts:		
required by standard but not tested	N/T	
not required by standard	N/R	
test object does meet the requirement	P(PASS)	
test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 - 23 °C	
Test Lab Humidity	32 – 38 %	
Date of receipt of test item	2017-08-21	
Report:		
Compiled by	Toralf Jahn	
Tested by (+ signature) (Responsible for Test)	Toralf Jahn	T. J .....
Approved by (+ signature) (Head of Lab)	Christian Weber	C. Weber .....
Date of Issue	2017-09-14	
Total number of pages	203	
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 following models are additional models to the series. They were neither tested nor assessed nor evaluated. FlowIQ 2250 HW:620120102 rev A1 / RF board 55501605 rev D1 FlowIQ 2250 HW:620120103 rev A1 / RF board 55501605 rev D1 FlowIQ 3250 HW:620220102 rev 00 / RF board 55501605 rev D1 FlowIQ 3250 HW:620220103 rev 00 / RF board 55501605 rev D1 FlowIQ 3250 HW:620220104 rev 00 / RF board 55501605 rev D1 FlowIQ 3250 HW:620220105 rev 00 / RF board 55501605 rev D1		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2017-09-14	Initial Release	

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V_{NOM}	Nominal supply voltage

REPORT INDEX

1 Equipment (Test Item) Under Test 6
1.1 Photos – Equipment External 7
1.2 Photos – Equipment Internal 13
1.3 Photos – Test Setup 22
1.4 Support Equipment 25
1.5 Test mode duty cycle 26
1.6 Test Modes 29
1.7 Test Frequencies 29
1.8 Sample emission level calculation 30
2 Result Summary 31
3 Test Conditions and Results 32
3.1 Test Conditions and Results - Occupied bandwidth 32
3.2 Test Conditions and Results - 6 dB bandwidth 36
3.3 Test Conditions and Results - Maximum peak conducted output power 40
3.4 Test Conditions and Results - Power spectral density 42
3.5 Test Conditions and Results - Band-edge compliance 46
3.6 Test Conditions and Results - Conducted spurious emissions 50
3.7 Test Conditions and Results - Transmitter radiated emissions 54

ANNEX A Transmitter spurious emissions 60

1 Equipment (Test Item) Under Test

Description	Ultrasonic water meter	
Model	FlowIQ 2250	
Additional Model(s)	FlowIQ 3250 HW: 620220101 rev 00 / RF board 55501605 rev D1	
Brand Name(s)	Kamstrup	
Serial Number(s)	N/A	
Hardware Version(s) FlowIQ 2250	620120101 rev A1 / RF board 55501605 rev D1	
Software Version(s)	50981336 rev E1 / 55141470 rev C1	
PMN	N/A	
HVIN	N/A	
FVIN	N/A	
HMN	N/A	
FCC-ID	OUY-FLOWX250	
IC	N/A	
Equipment type	End Product	
Radio type	Transceiver	
Assigned frequency bands	902 - 928 MHz	
Radio technology	Digital Modulation	
Modulation	2-FSK	
Number of antenna ports	1	
Antenna 1	Type	External
	Model	1653094
	Manufacturer	Kamstrup A/S
	Gain	-2 dBi
Antenna 2	Type	External
	Model	6699490
	Manufacturer	Kamstrup A/S
	Gain	-1.6 dBi
Antenna 3	Type	External
	Model	6697902
	Manufacturer	Kamstrup A/S
	Gain	2.2 dBi
Supply Voltage	V_{NOM}	3.6 VDC
Operating Temperature	T_{NOM}	22 °C
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A
Manufacturer	Kamstrup A/S Industrivej 28 8660 Skanderborg DENMARK	

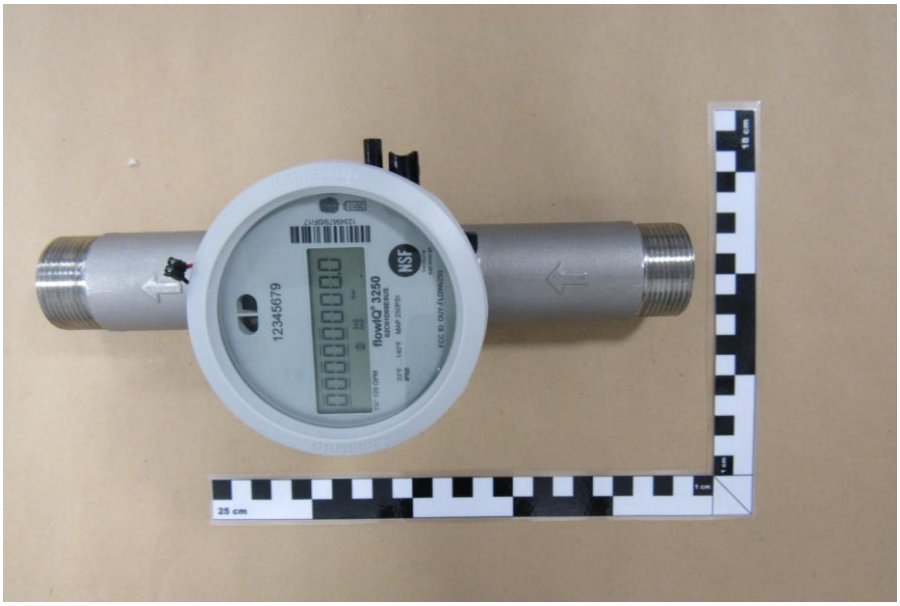
Additional information:
Antenna 2 and 3 each come in two versions. The difference between the two version are the length of the cable.
The data listed above belongs to the versions with the shortest cables and hence highest gain.
For Antenna 2 the data is presented for the wall mounted antenna version 6699490 which has a 2 meter long cable. The second version is called 6699491. This version features the same antenna as 6699490, but it has a cable up to 20 meters.
For Antenna 3 the data is presented for the pit antenna version 6697902, which has a 2 meter cable. The second version is called 6697903. This features the same antenna as 6697902, but it has a cable up to 7.5 meters.

1.1 Photos – Equipment External

FlowIQ 2250

FlowIQ 2250

FlowIQ 2250

FlowIQ 3250


FlowIQ 3250

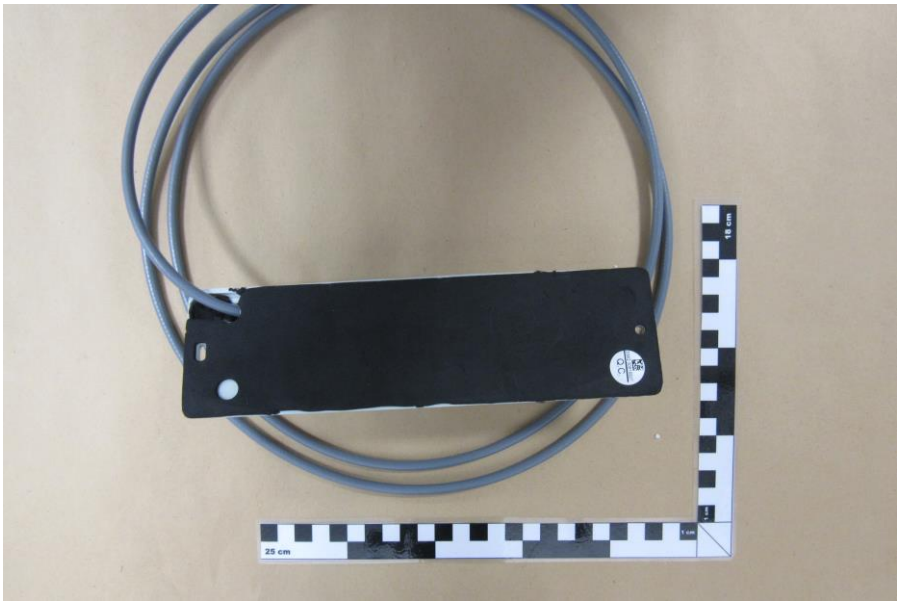
Antenna 1

Antenna 3

Antenna 3

Antenna 2

Antenna 2



Antenna 2

1.2 Photos – Equipment Internal

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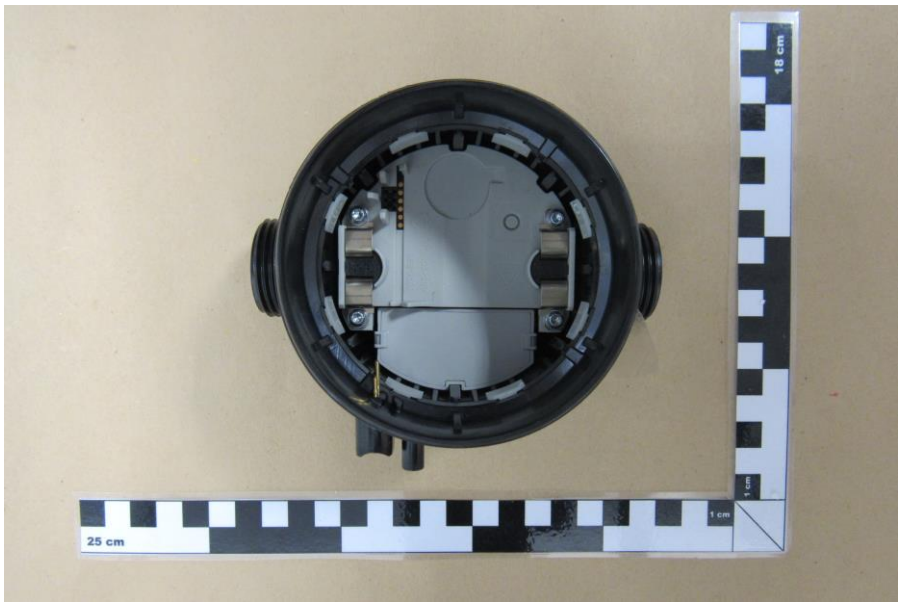
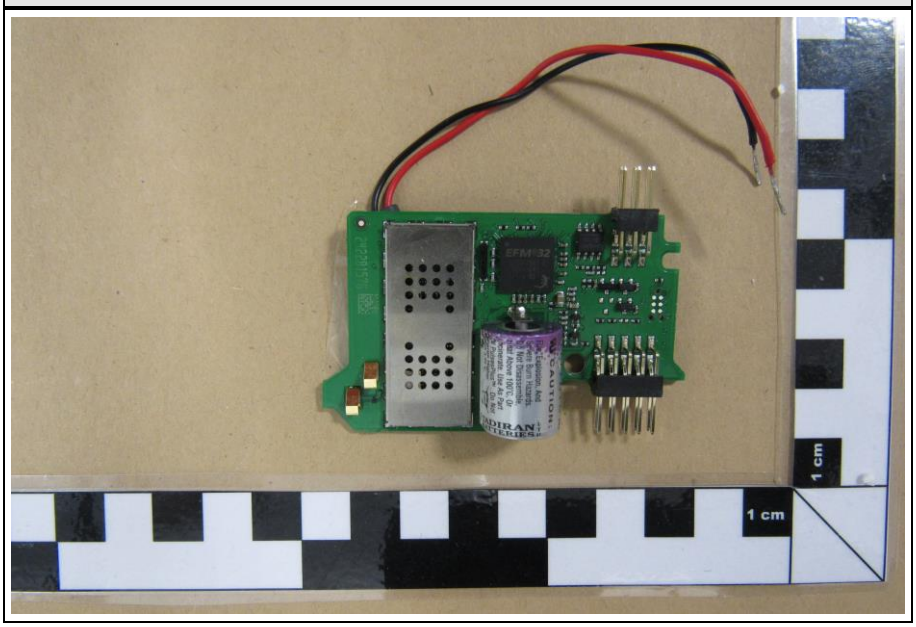
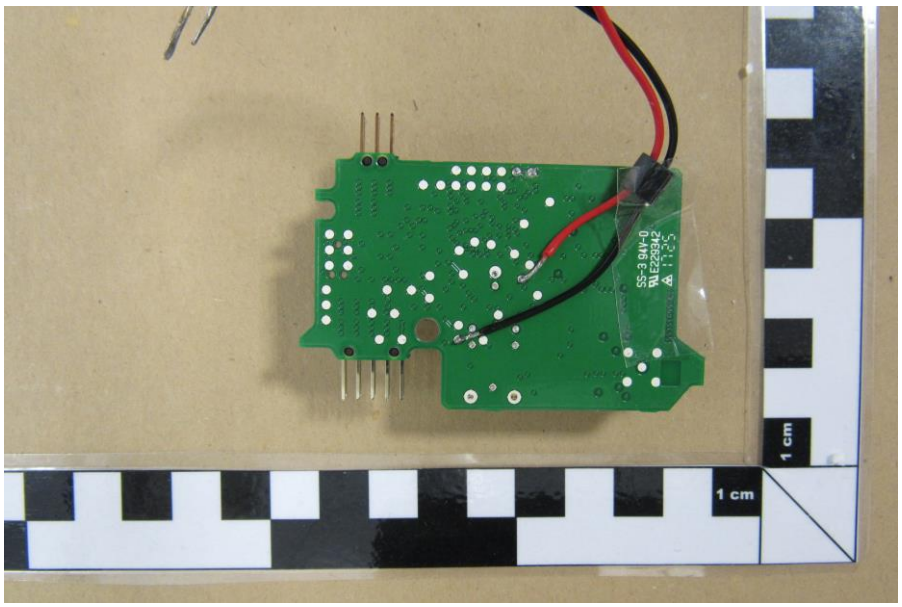


FlowIQ 2250

FlowIQ 2250

FlowIQ 2250 RF-PCB



FlowIQ 2250 RF PCB


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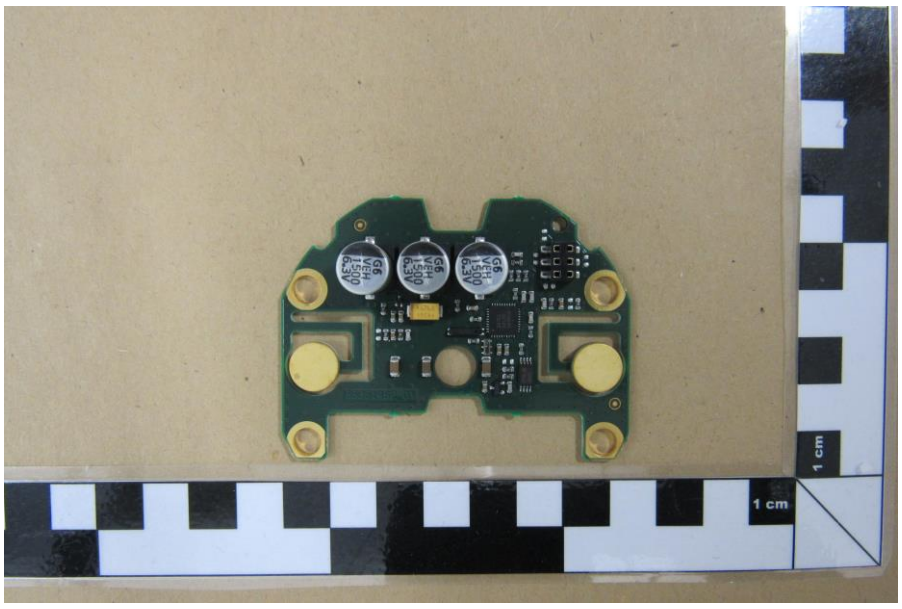

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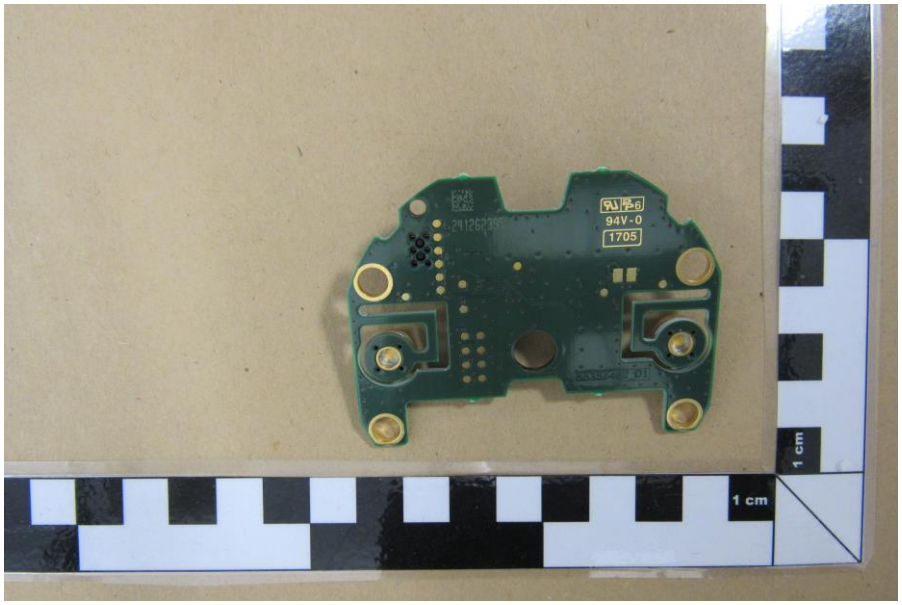

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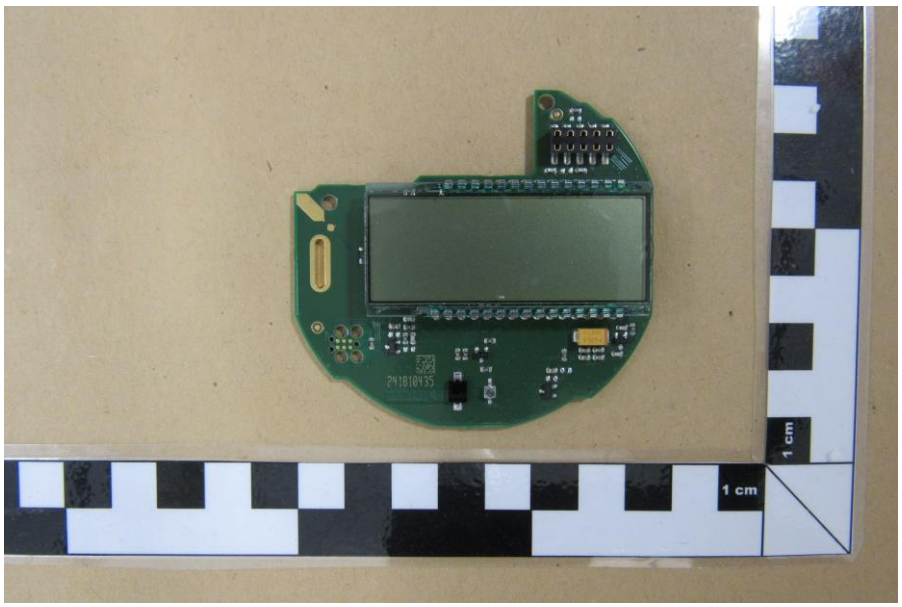
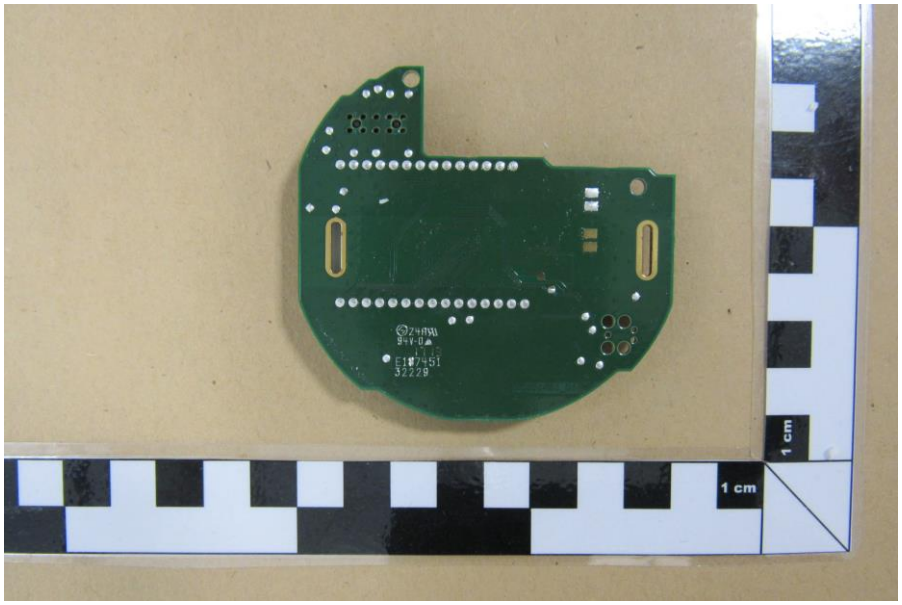


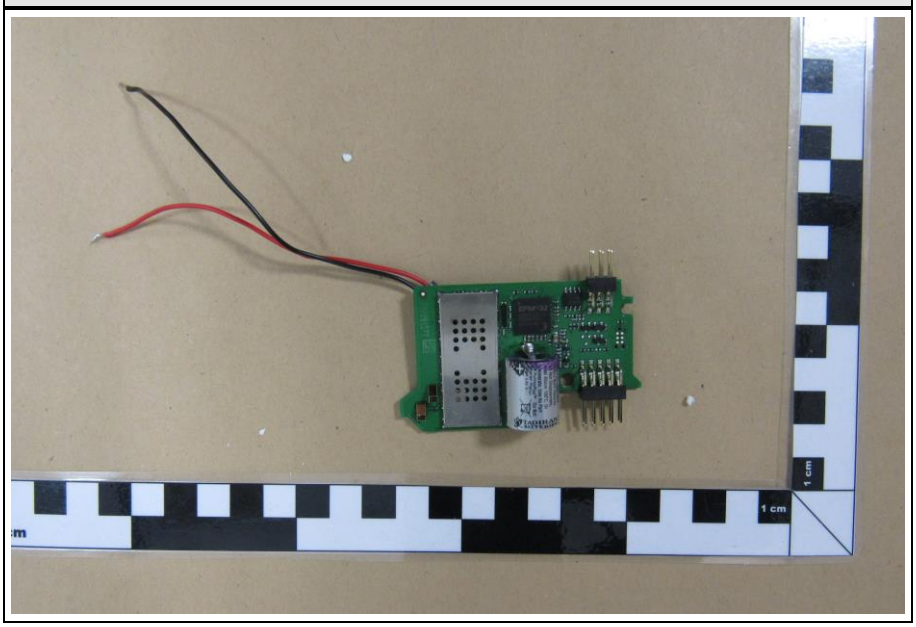
FlowIQ 2250



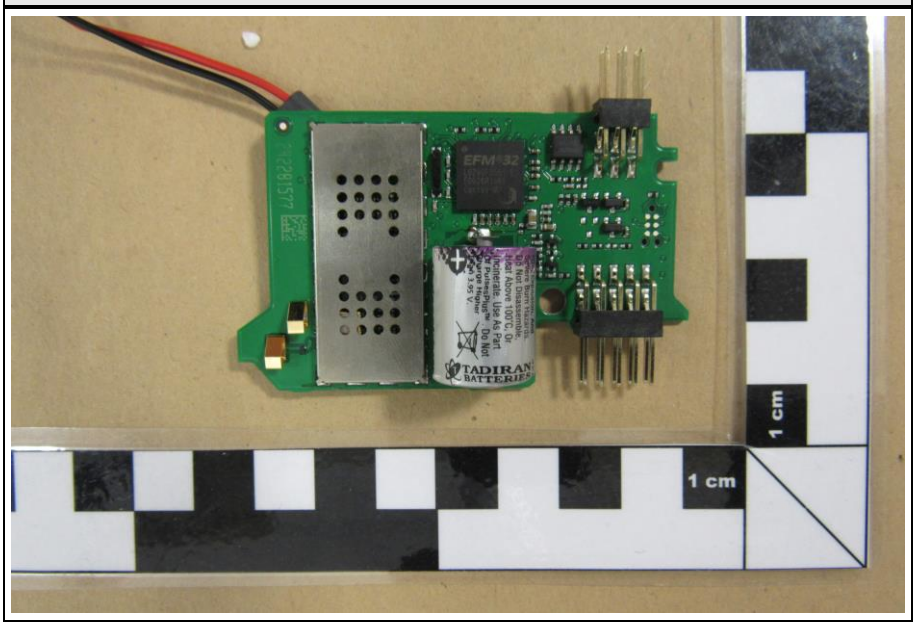
FlowIQ 3250

FlowIQ 3250

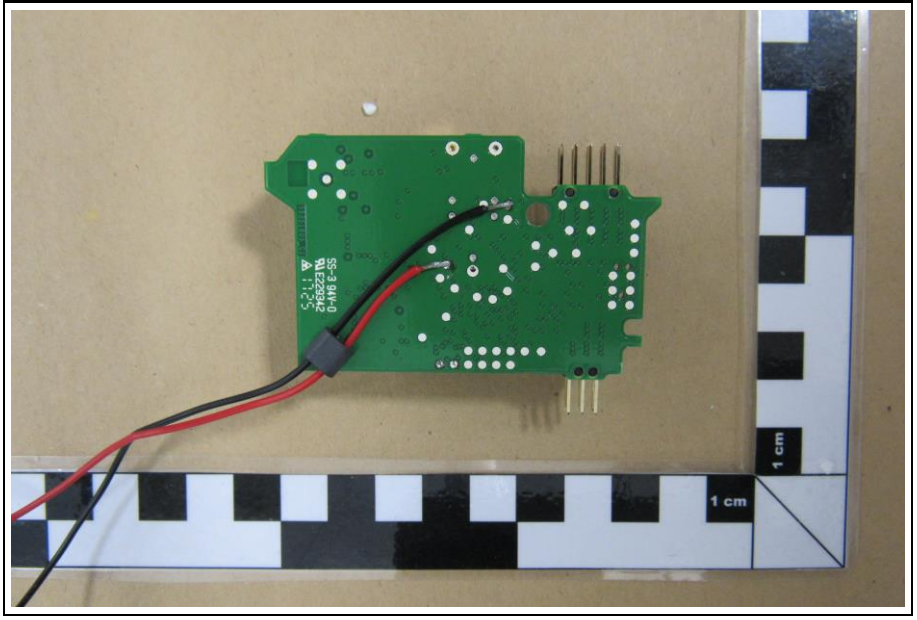
FlowIQ 3250 RF PCB

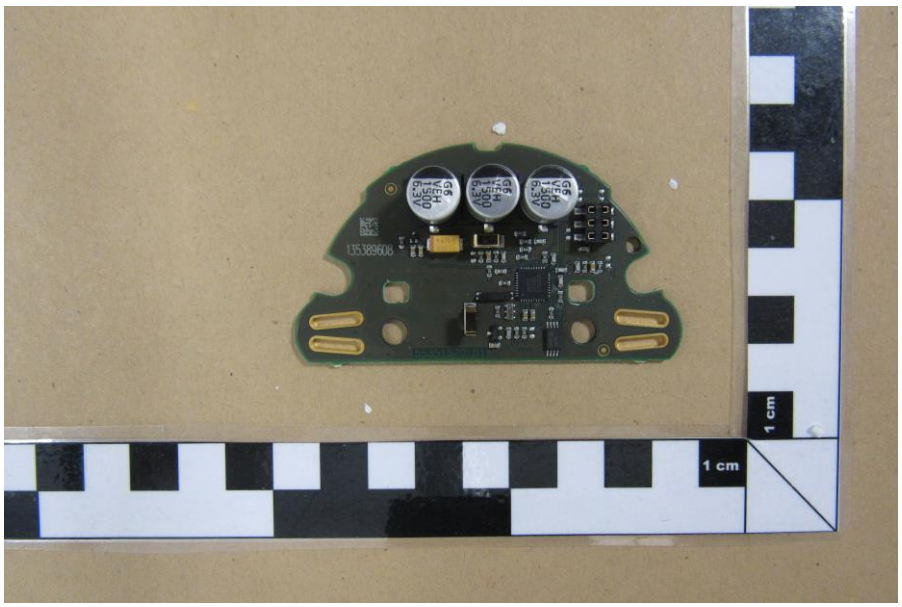


FlowIQ 3250 RF PCB



FlowIQ 3250 RF PCB



FlowIQ 3250


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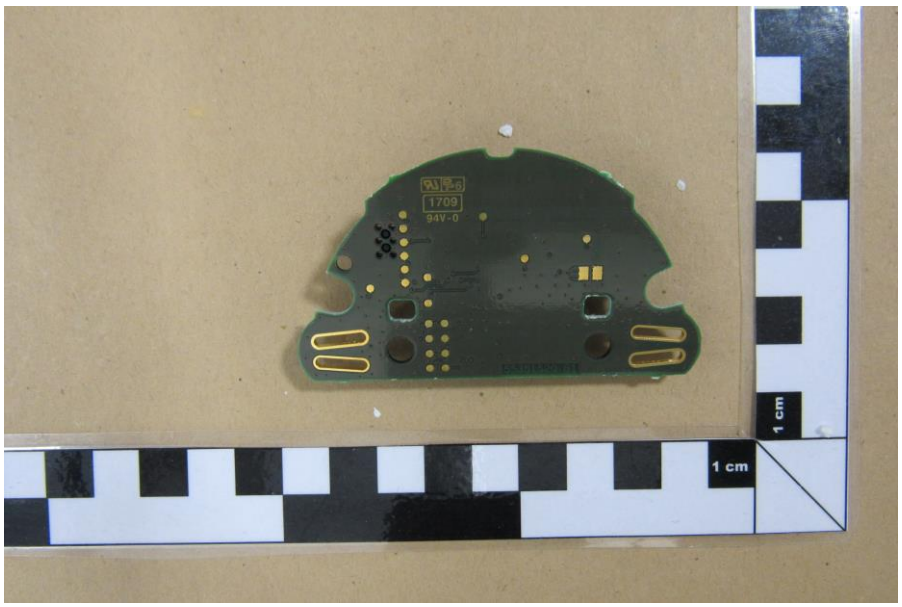

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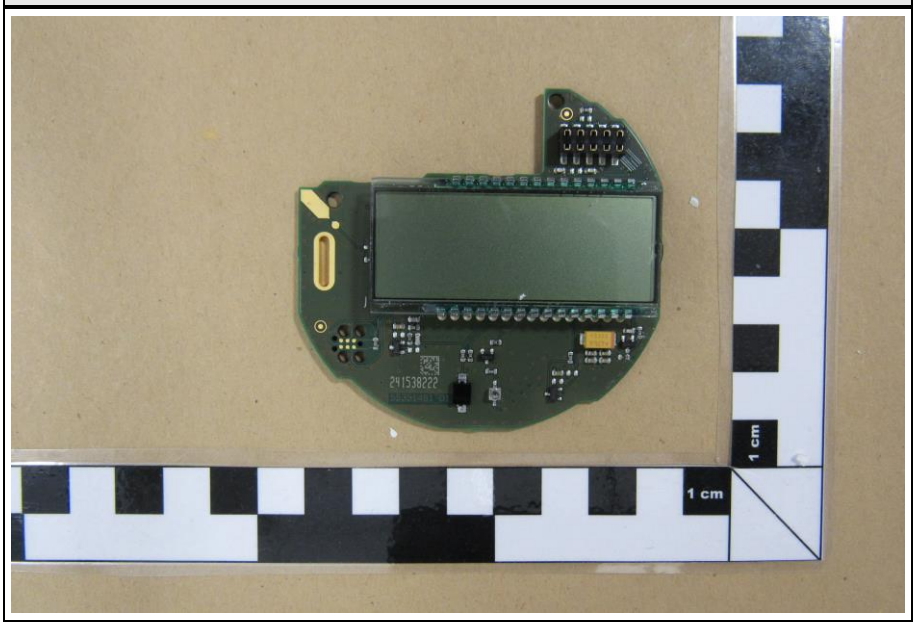
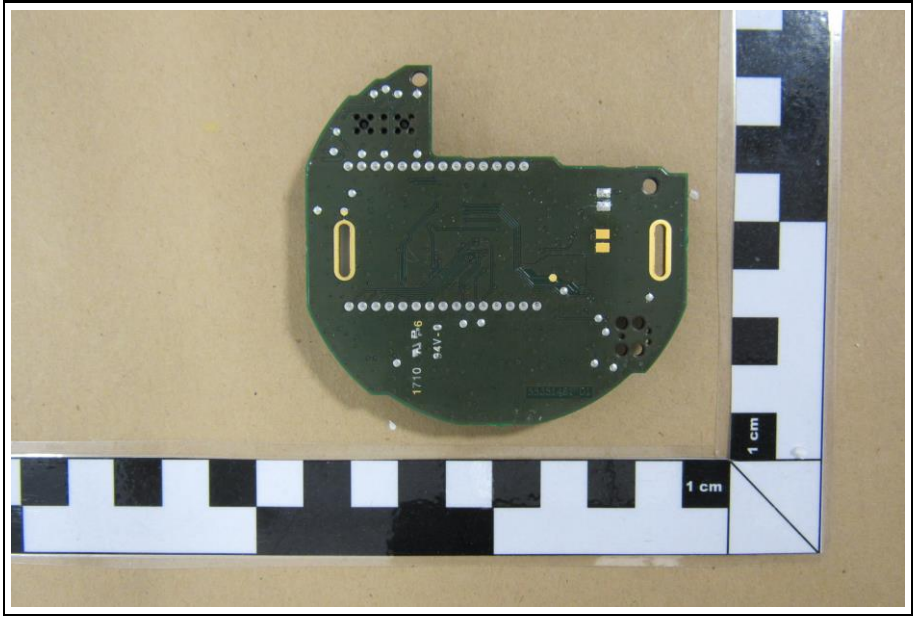


FlowIQ 3250



1.3 Photos – Test Setup

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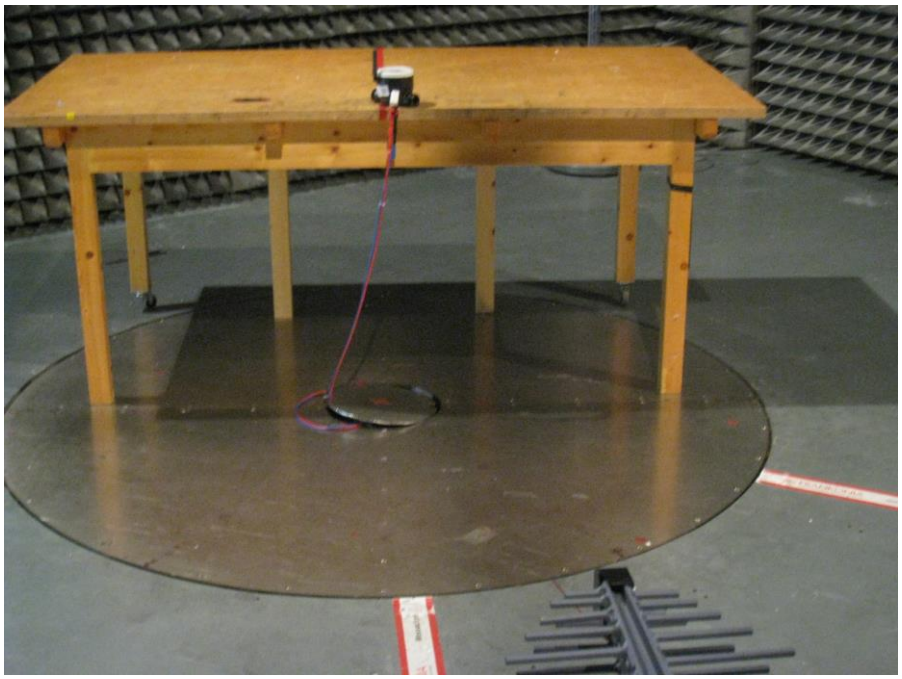
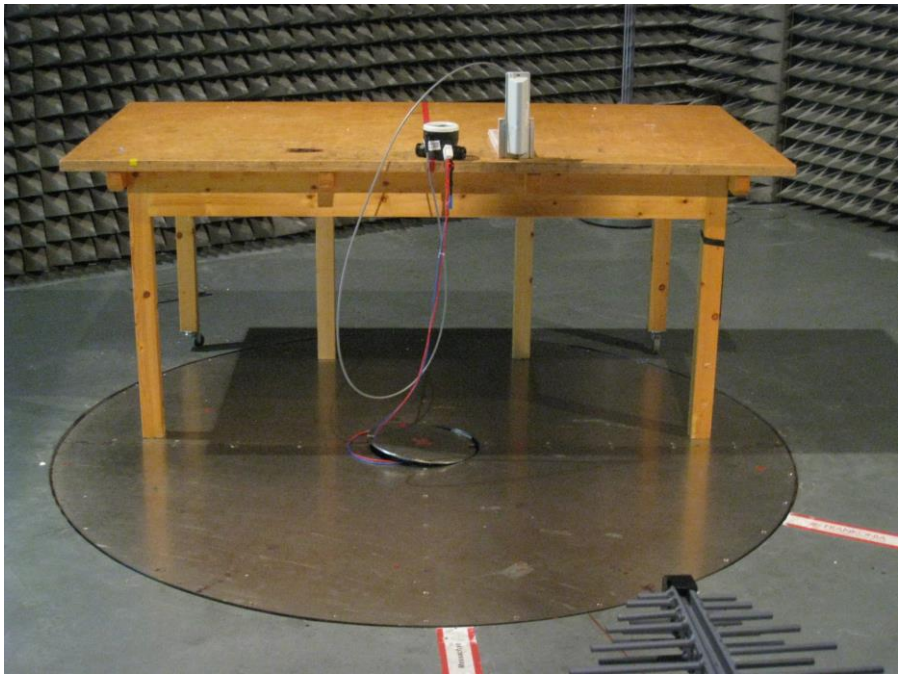
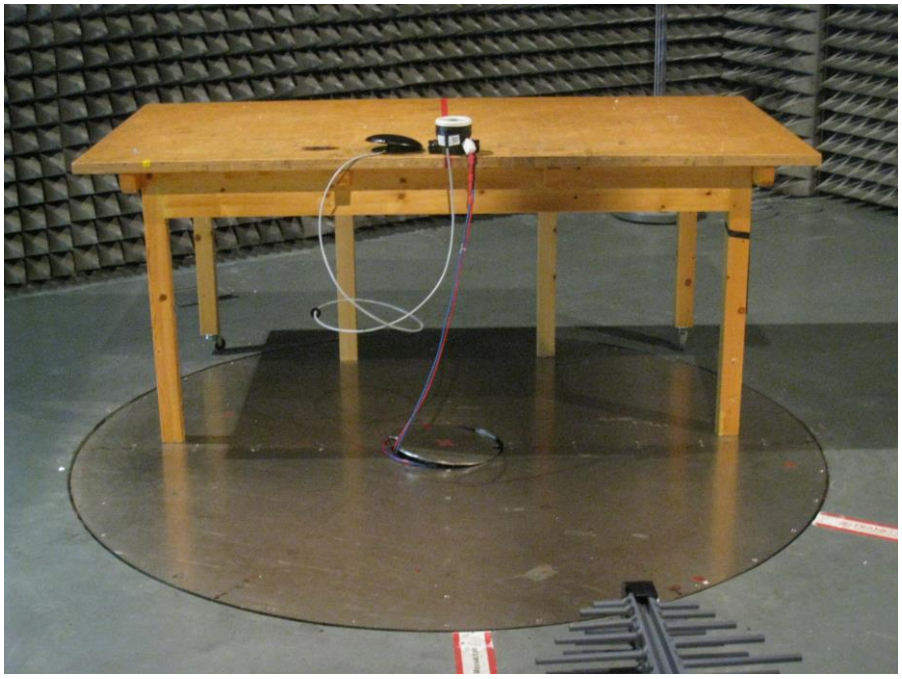
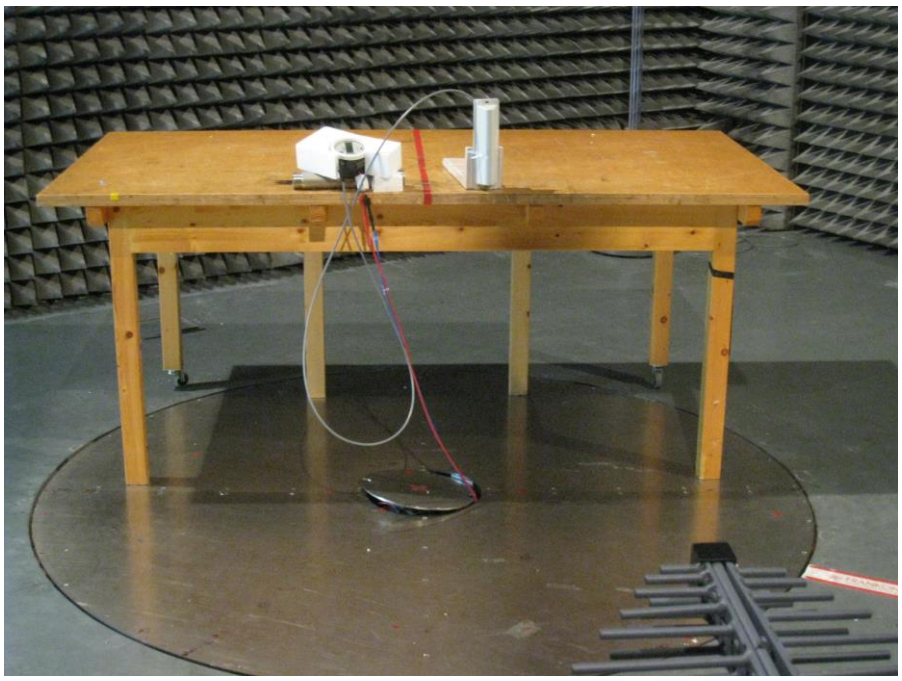


FlowIQ 2250 ANTENNA 2


FlowIQ 2250 ANTENNA 3



FlowIQ 3250 ANTENNA 1

FlowIQ 3250 ANTENNA 2


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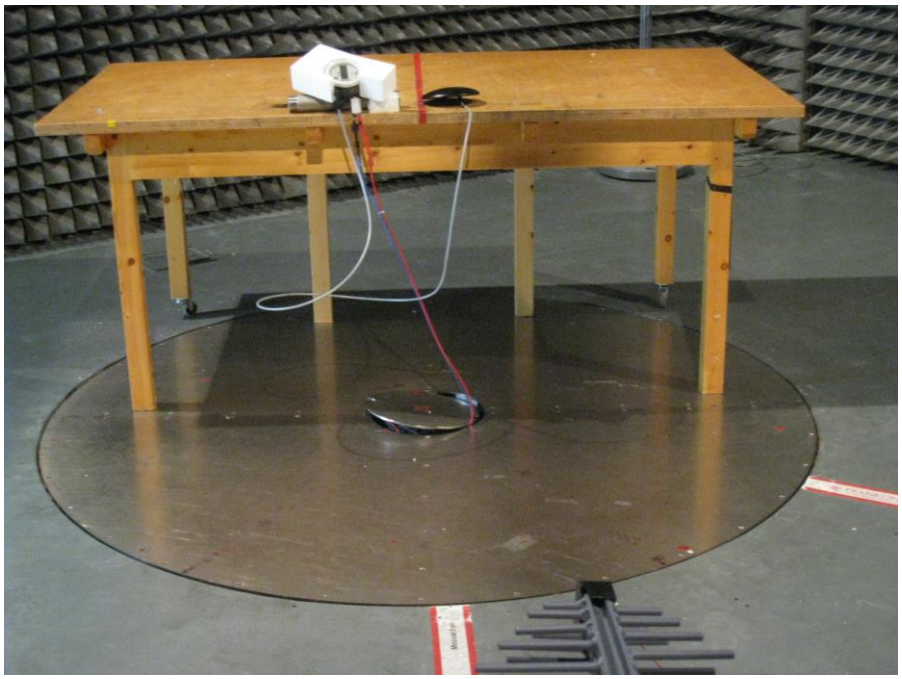


1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Laboratory power supply	Statron	2224.2	The EUT battery does not last to perform the tests. Therefore an external power supply was necessary.
CBL	Auxillary cable			To connect EUT and power supply.
Description:				
AE	Auxillary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
Comment: The EUT was prepared just for testing with a connection to be supported by an external power supply.				

1.5 Test mode duty cycle

1.5.1 Information

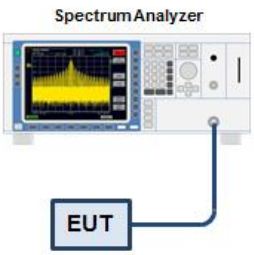
Test Information	
Measurement Method	ANSI C63.10 11.6

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	2017-07	2018-07

1.5.5 Procedure

Test Procedure

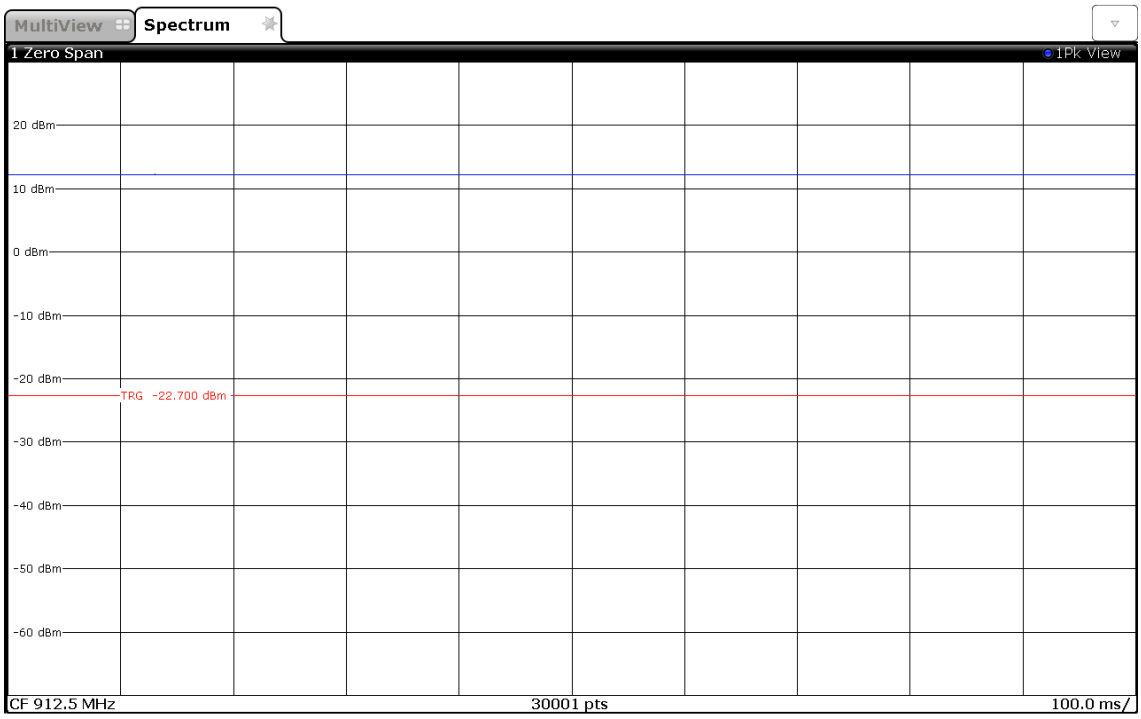
1. EUT set to test mode
2. Span is set to zero span
3. Detector set to peak
4. Sweep time is set long enough to capture at least 5 bursts
5. Envelope peak value of emission spectrum is selected
6. The maximum burst duration T_{ON} is measured using two markers set to the start and the end of the longest 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]
Transmit	100%	0

Duty Cycle

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	ANSI C63.10:2013
Reference Method:	ANSI C63.10:2013, Section 7.5
Operating Frequency:	912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Duty Cycle Period:	100
Maximum Duty Cycle:	1.00
Maximum Duty Cycle [%]:	100
Duty Cycle Correction [dB]:	0.00



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1.6 Test Modes

Mode	Description
Transmit	Mode = Transmit Modulation = 2-FSK Duty cycle = 100 %
Comment: EUT powered by laboratory power supply	

1.7 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	1	912.5
F2	Tx / Rx	2	918.5

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) = 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 = 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**
RSS-Gen 6.6	Occupied Bandwidth	ANSI C63.10	N/R	Informational only
FCC § 15.247(a)(2) ISED RSS-247 § 5.2	6 dB Bandwidth	ANSI C63.10	PASS	
FCC § 15.247(b)(3) ISED RSS-247 § 5.4	Maximum peak conducted power	ANSI C63.10	PASS	
FCC § 15.247(e) ISED RSS-247 § 5.2	Power spectral density	ANSI C63.10	PASS	
FCC § 15.207 ISED RSS-247 § 3.1	AC power line conducted emissions	ANSI C63.10	PASS	
FCC § 15.247(d) ISED RSS-247 § 5.5	Band edge compliance	ANSI C63.10	PASS	
FCC § 15.247(d) ISED RSS-247 § 5.5	Conducted spurious emissions	ANSI C63.10	PASS	
FCC § 15.247(d) FCC § 15.209 ISED RSS-GEN § 8.9	Transmitter radiated spurious emissions	ANSI C63.10	PASS	
ISED RSS-247 § 3.1	Receiver radiated spurious emissions	ANSI C63.10	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

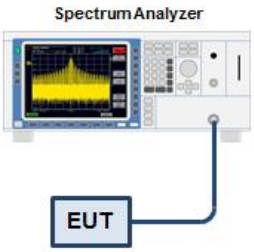
3.1.1 Information

Test Information	
Reference	ISED RSS-Gen 6.6
Measurement Method	ANSI C63.10 6.9.3
Operator	Toralf Jahn
Date	2017-08-22

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Setup

Test Setup


3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2017-07	2018-07

3.1.5 Procedure

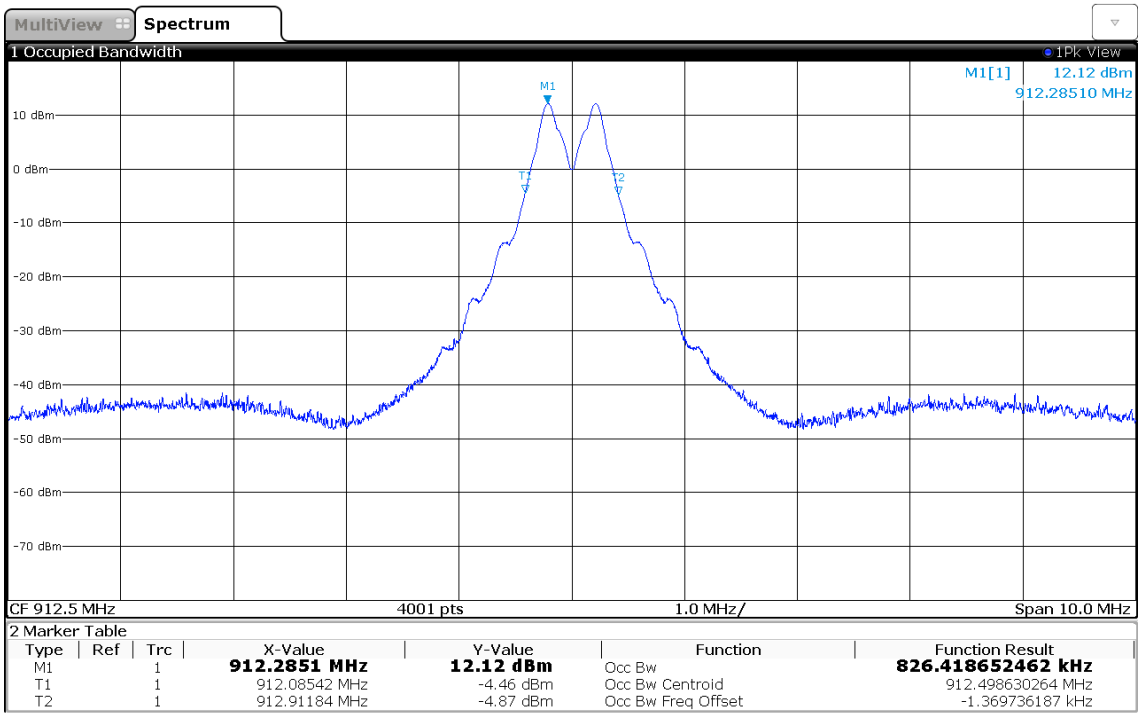
Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to 1 % of the bandwidth 4. The occupied bandwidth is measured with the build-in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

3.1.6 Results

Test Results		
Mode	Frequency [MHz]	Bandwidth [MHz]
Transmit	912.5	0.826
Transmit	918.5	0.821

Occupied Bandwidth

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	Transmit, Channel: 912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Occupied Bandwidth [MHz]:	0.826



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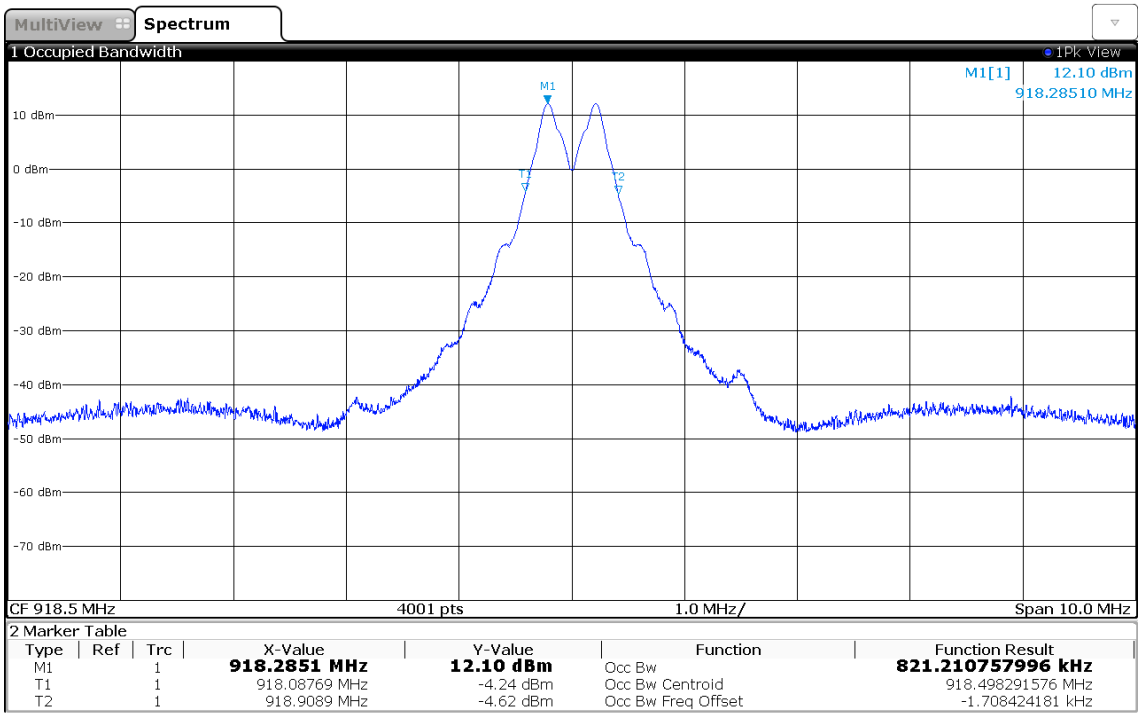
Occupied Bandwidth

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	Transmit, Channel: 918.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Occupied Bandwidth [MHz]:	0.821



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3.2 Test Conditions and Results - 6 dB bandwidth

3.2.1 Information

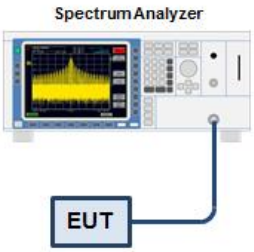
Test Information	
Reference	FCC 15.247(a)(2) / ISED RSS-247 5.2
Measurement Method	ANSI C63.10 11.8
Operator	Toralf Jahn
Date	2017-08-22

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	2017-07	2018-07

3.2.5 Procedure

Test Procedure

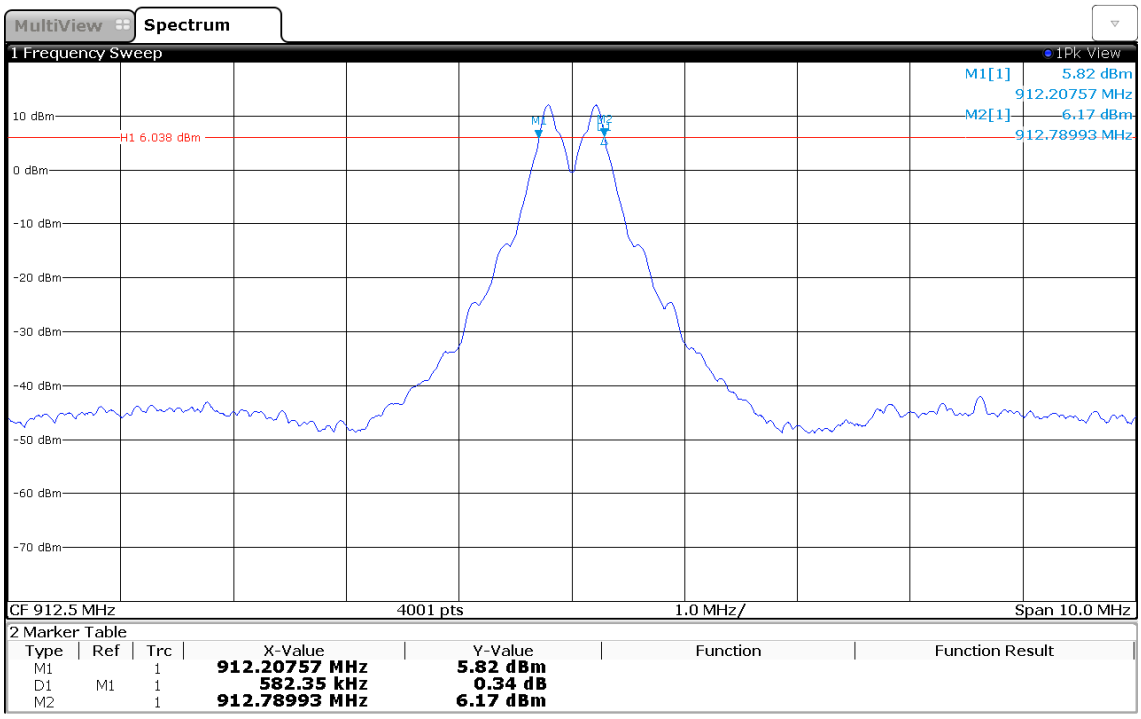
1. EUT set to test mode
2. Span set to at least twice the emission spectrum
3. Detector set to peak and max hold and RBW is set to 100 kHz
4. Envelope peak value of emission spectrum is selected
5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak
6. Marker on envelope of 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
Transmit	912.5	582.4	500	PASS
Transmit	918.5	582.4	500	PASS

DTS (6 dB) Bandwidth

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	Transmit, 912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Lower Frequency [MHz]:	912.208
Upper Frequency [MHz]:	912.790
6 dB Bandwidth [kHz]:	582.4



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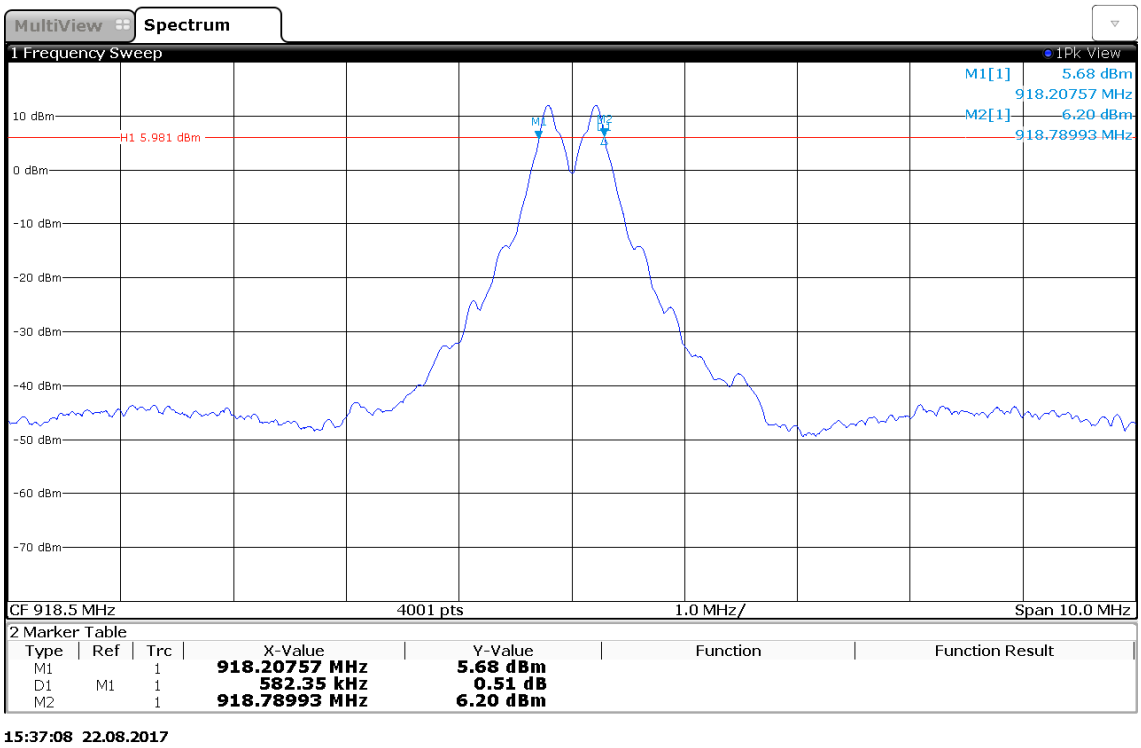
DTS (6 dB) Bandwidth

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	Transmit, Channel: 918.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Lower Frequency [MHz]:	918.208
Upper Frequency [MHz]:	918.790
6 dB Bandwidth [kHz]:	582.4



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3.3 Test Conditions and Results - Maximum peak conducted output power

3.3.1 Information

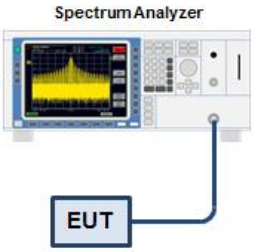
Test Information	
Reference	FCC 15.247(b)(1) / ISED RSS-247 5.4
Measurement Method	ANSI C63.10 11.9.1
Operator	Toralf Jahn
Date	2017-08-22

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	2017-07	2018-07

3.3.5 Procedure

Test Procedure

1. EUT set to test hopping 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
912.5	12.6	0.018	1.0	PASS
918.5	12.6	0.018	1.0	PASS

3.4 Test Conditions and Results - Power spectral density

3.4.1 Information

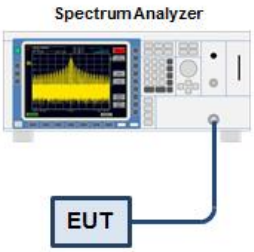
Test Information	
Reference	FCC 15.247(e) / ISED RSS-247 5.2
Measurement Method	ANSI C63.10 11.10.2, 14.3.2
Operator	Toralf Jahn
Date	2017-08-22

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	2017-07	2018-07

3.4.5 Procedure

Test Procedure

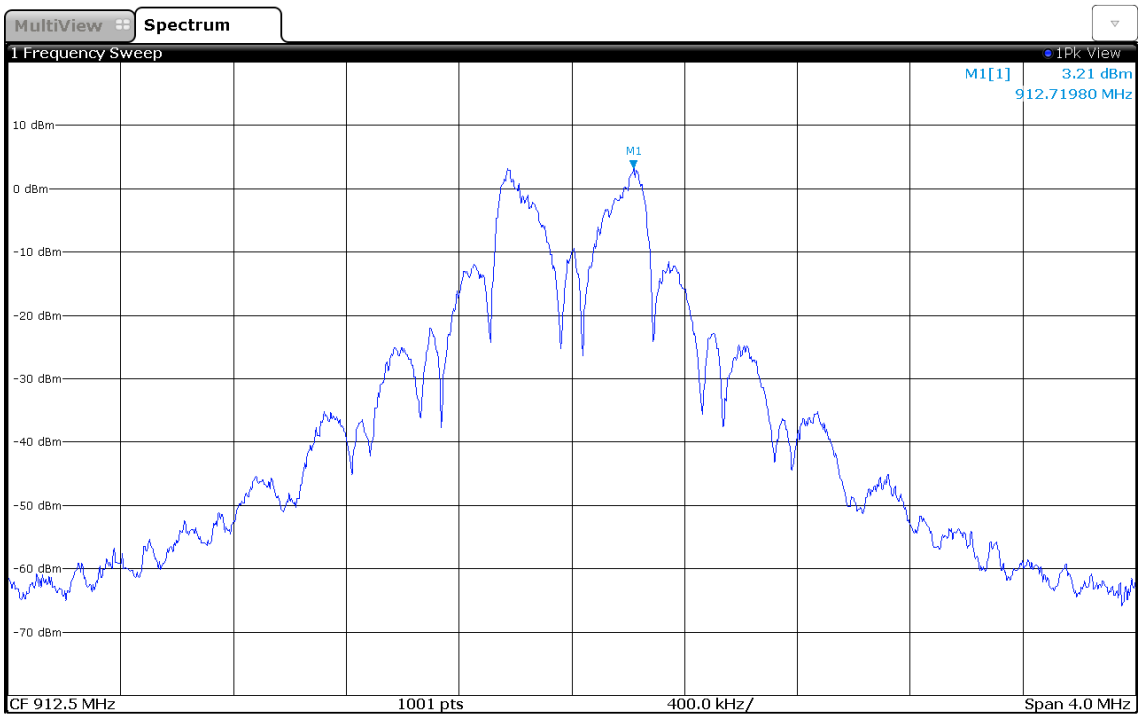
1. EUT set to test mode
2. The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth
3. The RBW is set to 100 kHz with VBW ≥ RBW and the detector is set to peak with max hold
4. After the trace has stabilized a marker is set to the envelope maximum
5. If the power 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
912.5	3.2	8.0	PASS
918.5	3.2	8.0	PASS
RBW = 3 kHz			

Peak Power Spectral Density

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	Transmit, Channel: 912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Peak Frequency [MHz]:	912.720
Spectral Density [dBm/RBW]:	3.209
Resolution Bandwidth [kHz]:	3 kHz



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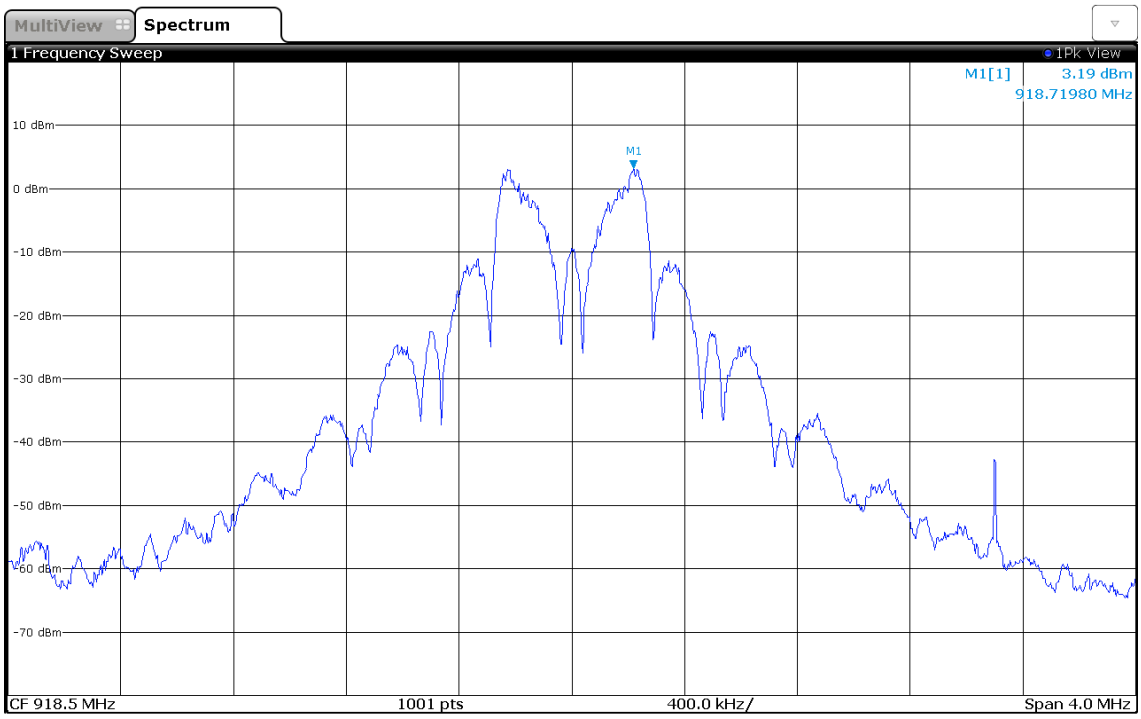
Peak Power Spectral Density

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	Transmit, Channel: 918.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Peak Frequency [MHz]:	918.720
Spectral Density [dBm/RBW]:	3.187
Resolution Bandwidth [kHz]:	3 kHz



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3.5 Test Conditions and Results - Band-edge compliance

3.5.1 Information

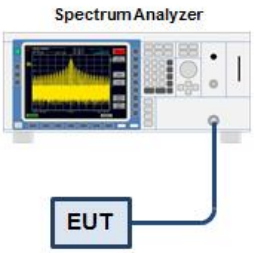
Test Information	
Reference	FCC 15.247(d) / ISED RSS-247 5.5
Measurement Method	ANSI C63.10 11.13
Operator	Toralf Jahn
Date	2017-08-22

3.5.2 Limits

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

3.5.3 Setup

Test Setup



3.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2017-07	2018-07

3.5.5 Procedure

Test Procedure

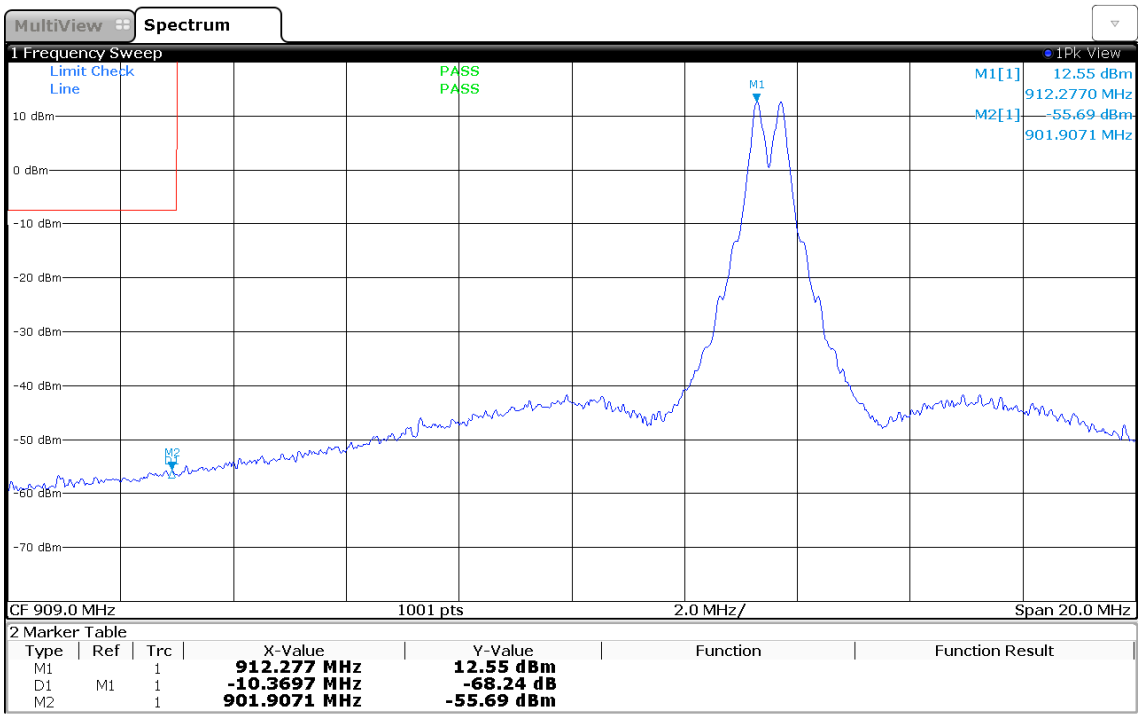
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is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

3.5.6 Results

Test Results				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
Transmit	912.5	-68.25	-20	PASS
Transmit	918.5	-66.95	-20	PASS

Band-edge Compliance

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	Transmit, Channel: 912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Band-edge	Lower
In-band Frequency [MHz]:	912.277
Max. in-band Level [dBm/100 kHz]:	12.551
Out-of-band Frequency [MHz]:	901.907
Max. out-of-band Level [dBm/100 kHz]:	-55.694
Attenuation [dB]:	-68.25



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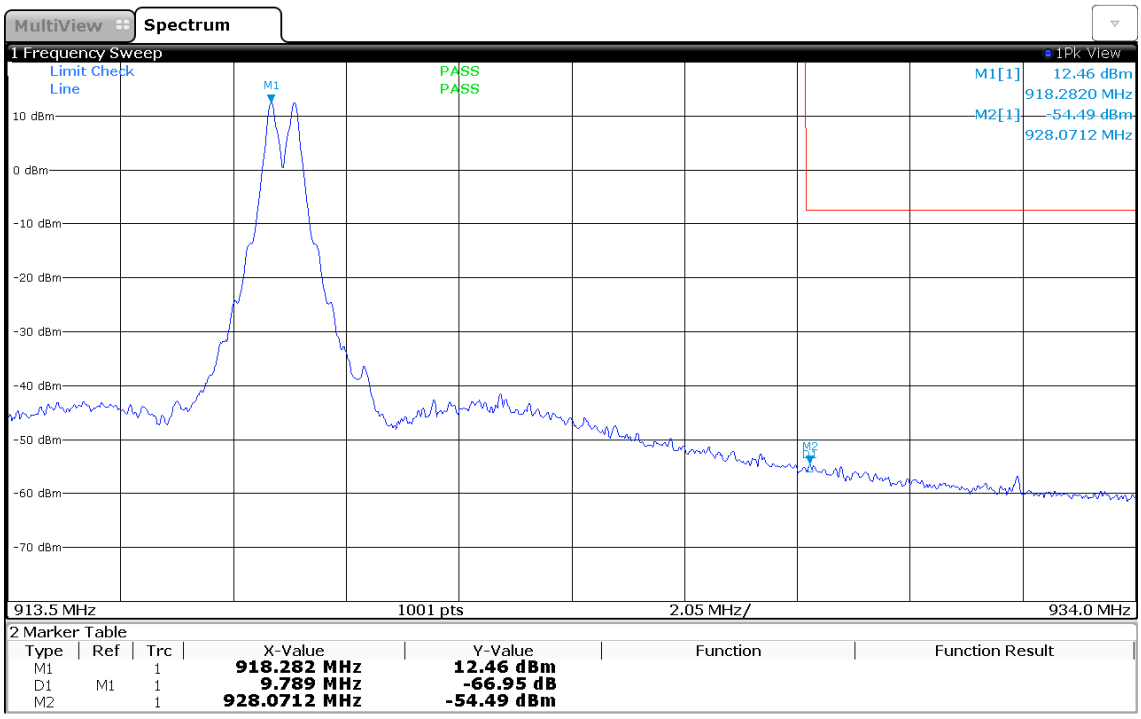
Band-edge Compliance

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	Transmit, Channel: 918.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Band-edge	Upper
In-band Frequency [MHz]:	918.282
Max. in-band Level [dBm/100 kHz]:	12.462
Out-of-band Frequency [MHz]:	928.071
Max. out-of-band Level [dBm/100 kHz]:	-54.492
Attenuation [dB]:	-66.95



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3.6 Test Conditions and Results - Conducted spurious emissions

3.6.1 Information

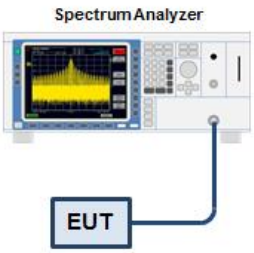
Test Information	
Reference	FCC 15.247(d) / ISED RSS-247 5.5
Measurement Method	ANSI C63.10 11.11
Operator	Toralf Jahn
Date	2017-08-22

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	2017-07	2018-07

3.6.5 Procedure

Test Procedure

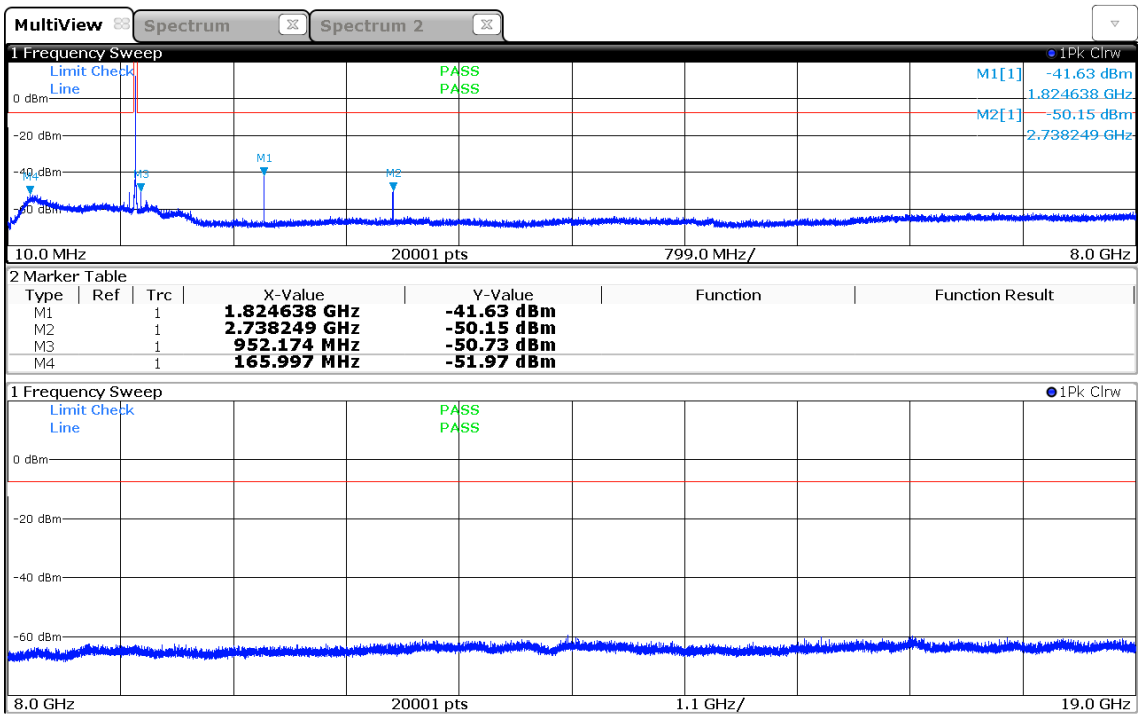
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is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

3.6.6 Results

Test Results		
Mode	Channel [MHz]	Verdict
Transmit	912.5	PASS
Transmit	918.5	PASS

Conducted Spurious Emissions

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	Transmit, Channel: 912.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Max. in-band Frequency [MHz]:	912.3
Max. in-band Level [dBm/100 kHz]:	12.5
Out-of-band Limit [dBm/100 kHz]:	-7.5



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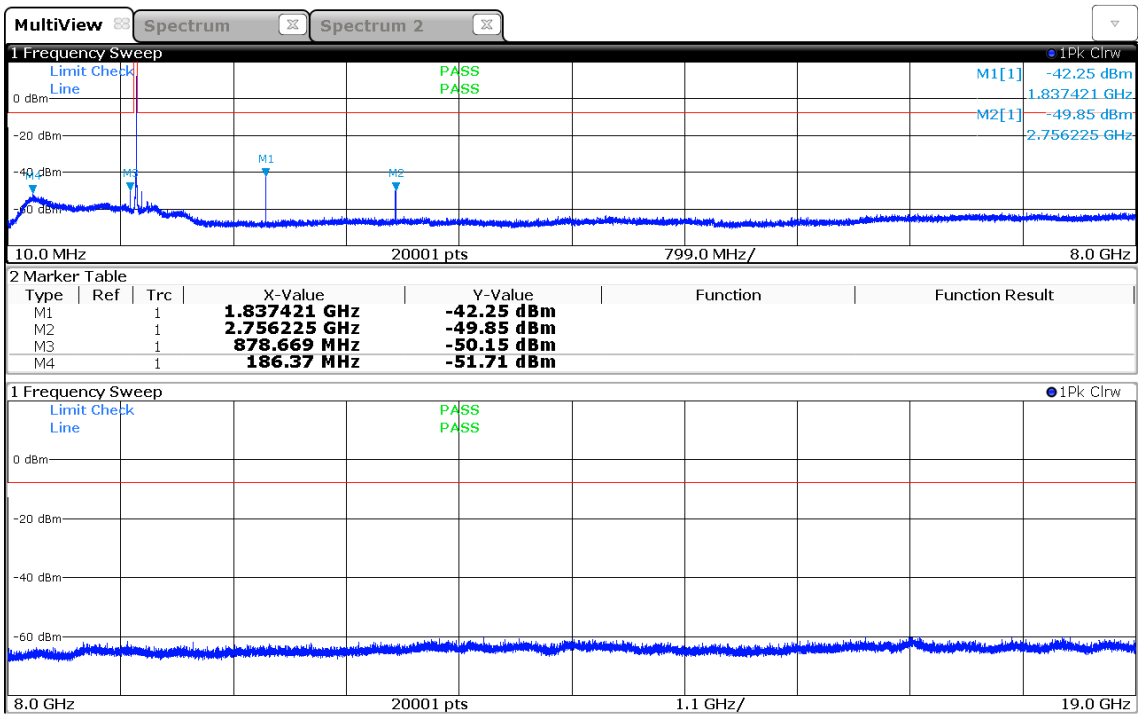
Conducted Spurious Emissions

Project Number:	G0M-1707-6700
Applicant	Kamstrup A/S
Model Description	Ultrasonic water meter
Model:	FlowIQ 2250
Test Sample ID:	14778
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	Transmit, Channel: 918.5 MHz
Operating Conditions:	Tnom/Vnom
Operator:	T. Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2017-08-22
Max. in-band Frequency [MHz]:	918.3
Max. in-band Level [dBm/100 kHz]:	12.4
Out-of-band Limit [dBm/100 kHz]:	-7.6



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3.7 Test Conditions and Results - Transmitter radiated emissions

3.7.1 Information

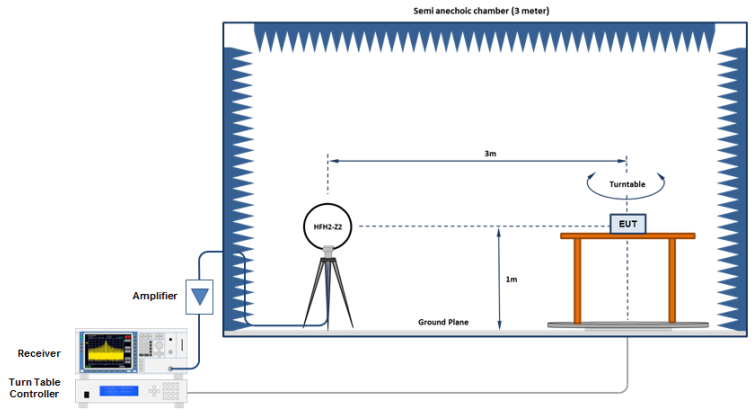
Test Information	
Reference	FCC 15.247(d) / ISED RSS-GEN 8.9
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Toralf Jahn
Date	2017-08-21

3.7.2 Limits

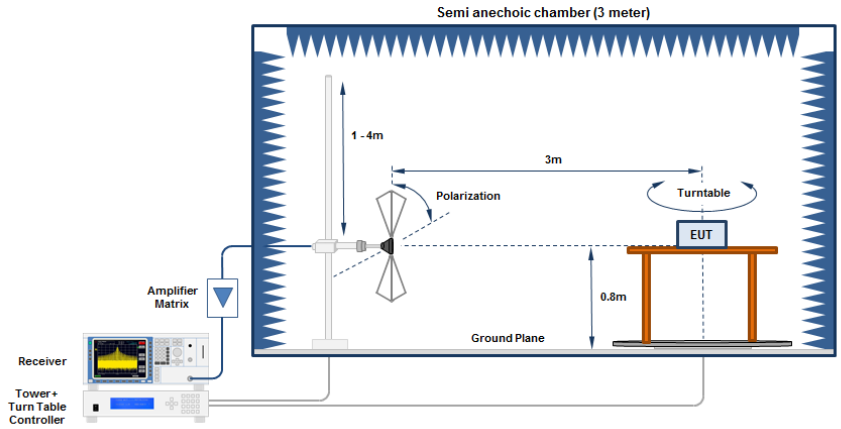
Limits			
Frequency [MHz]	Detector	Field strength [dBµV/m]	Measurement distance [m]
0.009 - 0.09	Average	2400/F[kHz]	300
0.09 - 0.110	Quasi-Peak	2400/F[kHz]	300
0.110 - 0.490	Average	2400/F[kHz]	300
0.490 - 1.705	Quasi-Peak	24000/F[kHz]	30
1.705 - 30.0	Quasi-Peak	30	30
30 - 88	Quasi-Peak	100	3
88 - 216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

3.7.3 Setup

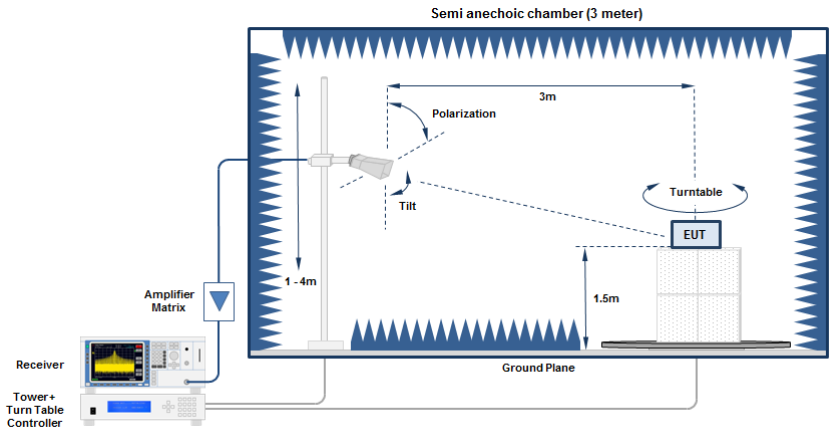
Test Setup < 30 MHz



Test Setup 30 - 1000 MHz



Test Setup > 1 GHz



3.7.4 Equipment

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2017-02	2020-02
EMI Test Receiver	R&S	ESR7	EF00943	2016-10	2017-10
Antenna	R&S	HK 116	EF00030	2016-04	2019-04
Antenna	R&S	HL 223	EF00187	2016-05	2019-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2017-02	2020-02
Spectrum Analyzer	R&S	FSIQ26	EF00151	2017-03	2018-03
Antenna	R&S	BBHA 9120D	EF00018	2016-09	2019-09
Antenna	Amplifier Research	AT4560	EF01152	2016-09	2017-09

3.7.5 Procedure

Test Procedure < 30 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 EUT is rotated through 360° 4. The emissions are measured with peak detector and max hold 5. All significant emissions are measured again using the corresponding final detector

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

3.7.6 Results

Test Results FlowIQ 2250 Antenna 1						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	1186	39.08	pk	hor	74.00	-34.92
912.5	1240	38.08	pk	ver	74.00	-35.92
912.5	1822	42.21	pk	hor	95.00	-52.79
912.5	1822	39.14	pk	ver	95.00	-55.86
912.5	2734	37.76	pk	hor	74.00	-36.24
912.5	2734	37.62	pk	ver	74.00	-36.38
912.5	7512	39.78	pk	ver	74.00	-34.22
912.5	7552	39.67	pk	hor	74.00	-34.33
912.5	9352	43.77	pk	hor	74.00	-30.23
912.5	9372	43.83	pk	ver	74.00	-30.17
918.5	1192	40.11	pk	hor	74.00	-33.89
918.5	1240	39.14	pk	ver	74.00	-34.86
918.5	1834	42.39	pk	hor	95.00	-52.61
918.5	1834	39.92	pk	ver	95.00	-55.08
918.5	2752	37.51	pk	hor	74.00	-36.49
918.5	2752	38.44	pk	ver	74.00	-35.56
918.5	7432	40.60	pk	ver	74.00	-33.40
918.5	7552	39.67	pk	hor	74.00	-34.33
918.5	9300	43.02	pk	hor	74.00	-30.98

Test Results FlowIQ 2250 Antenna 2						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	1035	37.95	RMS	ver	54.00	-16.05
912.5	1088	37.47	RMS	hor	54.00	-16.53
912.5	1822	52.35	pk	hor	95.00	-42.65
912.5	1822	54.19	pk	ver	95.00	-40.81
912.5	2737	41.26	pk	ver	74.00	-32.74
912.5	2738	39.12	RMS	hor	54.00	-14.88
912.5	3650	35.56	RMS	ver	54.00	-18.44
912.5	7552	39.64	pk	hor	74.00	-34.36
918.5	1053	38.18	RMS	hor	54.00	-15.82
918.5	1094	38.15	RMS	ver	54.00	-15.85
918.5	1834	52.34	pk	hor	95.00	-42.66
918.5	1837	53.54	pk	ver	95.00	-41.46
918.5	2756	39.25	RMS	hor	54.00	-14.75
918.5	2756	36.87	RMS	ver	54.00	-17.13
918.5	3675	32.92	RMS	ver	54.00	-21.08
918.5	7480	39.61	pk	ver	74.00	-34.39
918.5	9484	43.07	pk	ver	74.00	-30.93

Test Results FlowIQ 2250 Antenna 3						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	267.8	30.60	qpk	hor	46.00	-15.43
912.5	268.04	31.80	qpk	hor	46.00	-14.25
912.5	1048	31.26	RMS	hor	54.00	-22.74
912.5	1049	34.02	RMS	ver	54.00	-19.98
912.5	1822	47.01	pk	hor	95.00	-47.99
912.5	1822	49.77	pk	ver	95.00	-45.23
912.5	2738	35.39	RMS	hor	54.00	-18.61
912.5	2738	39.70	RMS	ver	54.00	-14.30
918.5	1049	33.85	RMS	ver	54.00	-20.15
918.5	1090	30.08	RMS	hor	54.00	-23.92
918.5	1834	47.29	pk	hor	95.00	-47.71
918.5	1834	50.74	pk	ver	95.00	-44.26
918.5	2755	41.19	pk	hor	74.00	-32.81
918.5	2755	38.05	RMS	hor	54.00	-15.95
918.5	2755	39.57	RMS	ver	54.00	-14.43

Test Results FlowIQ 3250 Antenna 1						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	1006	40.75	pk	ver	74.00	-33.25
912.5	1006	30.29	RMS	ver	54.00	-23.71
912.5	1009	42.59	pk	hor	74.00	-31.41
912.5	1009	31.88	RMS	hor	54.00	-22.12
912.5	1822	37.94	pk	ver	95.00	-57.06
912.5	1825	42.89	pk	hor	95.00	-52.11
912.5	2737	39.05	pk	hor	74.00	-34.95
912.5	2737	35.55	RMS	hor	54.00	-18.45
912.5	2737	39.69	pk	ver	74.00	-34.31
912.5	2737	36.17	RMS	ver	54.00	-17.83
918.5	1004	40.99	pk	ver	74.00	-33.01
918.5	1004	30.53	RMS	ver	54.00	-23.47
918.5	1006	42.14	pk	hor	74.00	-31.86
918.5	1006	31.37	RMS	hor	54.00	-22.63
918.5	1834	43.39	pk	hor	95.00	-51.61
918.5	1834	38.84	pk	ver	95.00	-56.16
918.5	2755	39.98	pk	hor	74.00	-34.02
918.5	2755	36.42	RMS	hor	54.00	-17.58
918.5	2755	40.01	pk	ver	74.00	-33.99
918.5	2755	36.45	RMS	ver	54.00	-17.55

Test Results FlowIQ 3250 Antenna 2						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	1046	48.70	pk	hor	74.00	-25.30
912.5	1046	37.29	RMS	hor	54.00	-16.71
912.5	1088	50.83	pk	ver	74.00	-23.17
912.5	1088	39.90	RMS	ver	54.00	-14.10
912.5	1822	54.69	pk	hor	95.00	-40.31
912.5	1822	55.22	pk	ver	95.00	-39.78
912.5	2738	42.07	pk	hor	74.00	-31.93
912.5	2738	38.67	RMS	hor	54.00	-15.33
912.5	2738	40.29	pk	ver	74.00	-33.71
912.5	2738	36.29	RMS	ver	54.00	-17.71
918.5	1055	48.17	pk	hor	74.00	-25.83
918.5	1055	37.25	RMS	hor	54.00	-16.75
918.5	1093	48.74	pk	ver	74.00	-25.26
918.5	1093	38.75	RMS	ver	54.00	-15.25
918.5	1834	51.45	pk	hor	95.00	-43.55
918.5	1834	52.67	pk	ver	95.00	-42.33
918.5	2756	42.56	pk	hor	74.00	-31.44
918.5	2756	39.24	RMS	hor	54.00	-14.76
918.5	2756	40.82	pk	ver	74.00	-33.18
918.5	2756	37.15	RMS	ver	54.00	-16.85

Test Results FlowIQ 3250 Antenna 3						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
912.5	1033	45.98	pk	ver	74.00	-28.02
912.5	1033	35.53	RMS	ver	54.00	-18.47
912.5	1052	46.82	pk	hor	74.00	-27.18
912.5	1052	36.83	RMS	hor	54.00	-17.17
912.5	1822	46.87	pk	hor	95.00	-48.13
912.5	1822	47.31	pk	ver	95.00	-47.69
912.5	2738	40.66	pk	hor	74.00	-33.34
912.5	2738	36.99	RMS	hor	54.00	-17.01
912.5	2738	39.42	pk	ver	74.00	-34.58
912.5	2738	35.65	RMS	ver	54.00	-18.35
918.5	1036	42.68	pk	ver	74.00	-31.32
918.5	1055	45.79	pk	hor	74.00	-28.21
918.5	1055	35.62	RMS	hor	54.00	-18.38
918.5	1834	47.19	pk	hor	95.00	-47.81
918.5	1834	48.22	pk	ver	95.00	-46.78
918.5	2755	45.14	pk	hor	74.00	-28.86
918.5	2755	42.56	RMS	hor	54.00	-11.44
918.5	2755	43.06	pk	ver	74.00	-30.94
918.5	2755	40.11	RMS	ver	54.00	-13.89

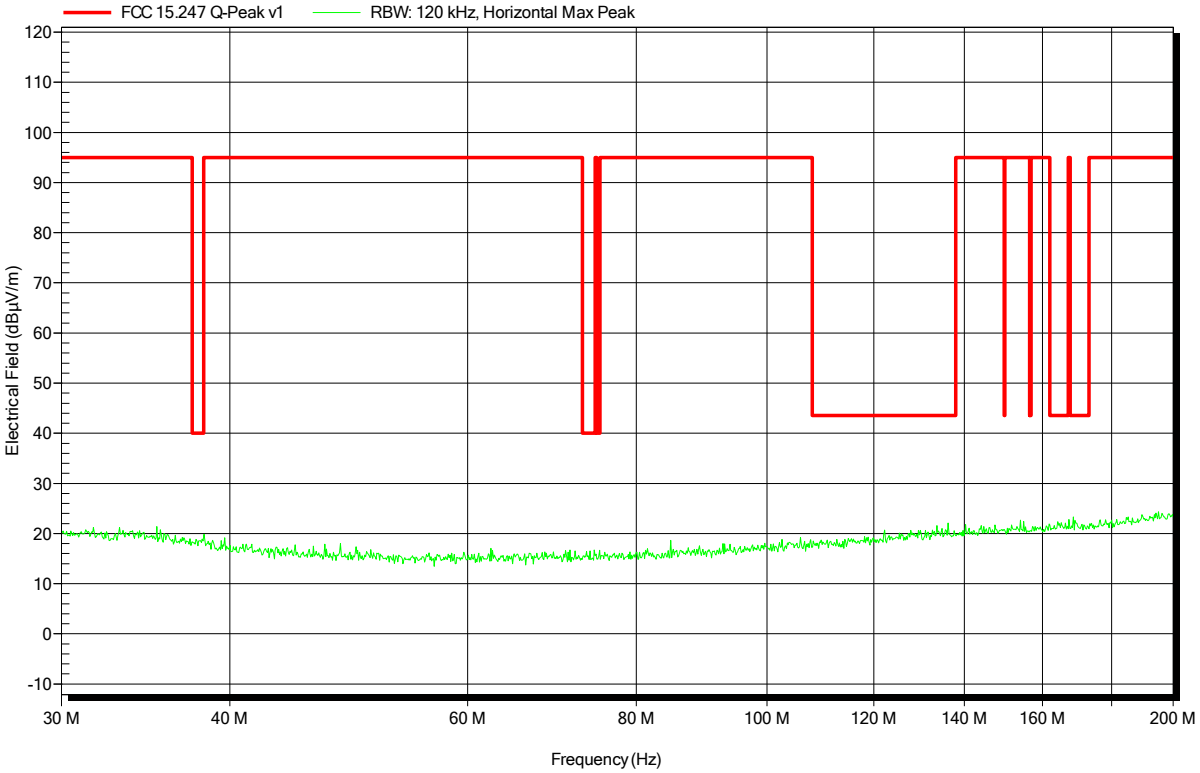
ANNEX A Transmitter spurious emissions

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 31

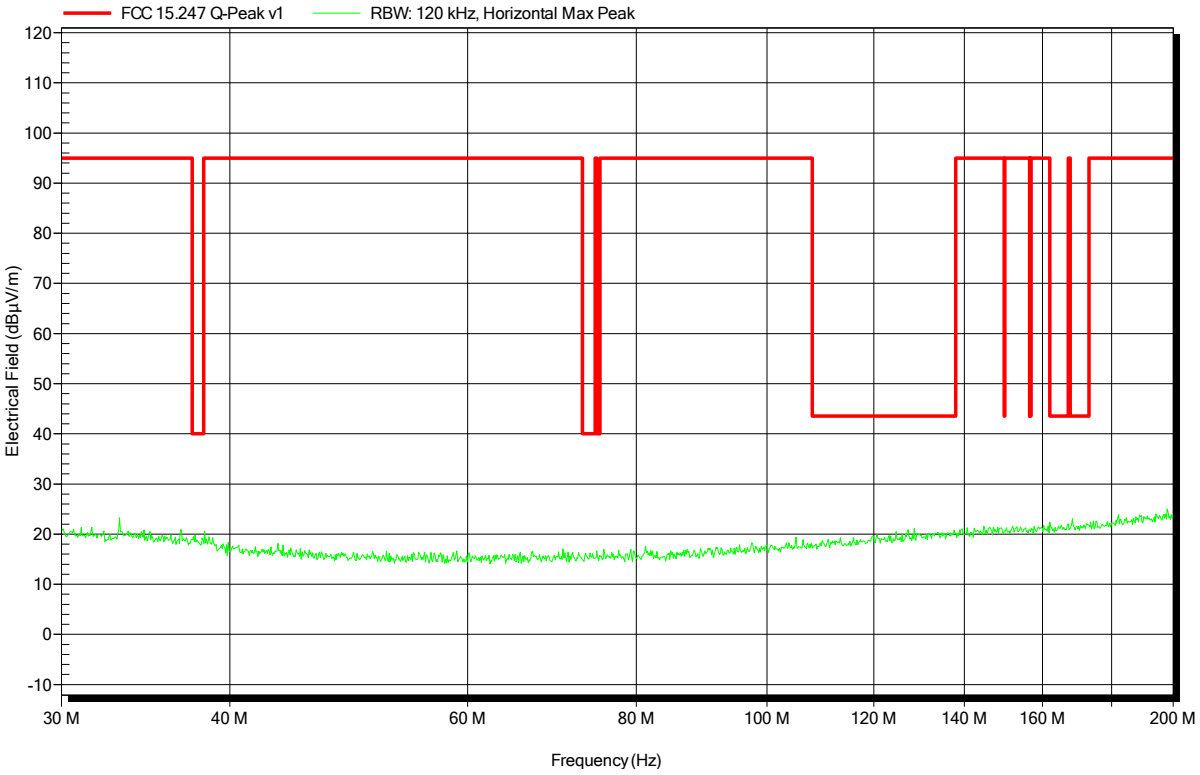


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 32

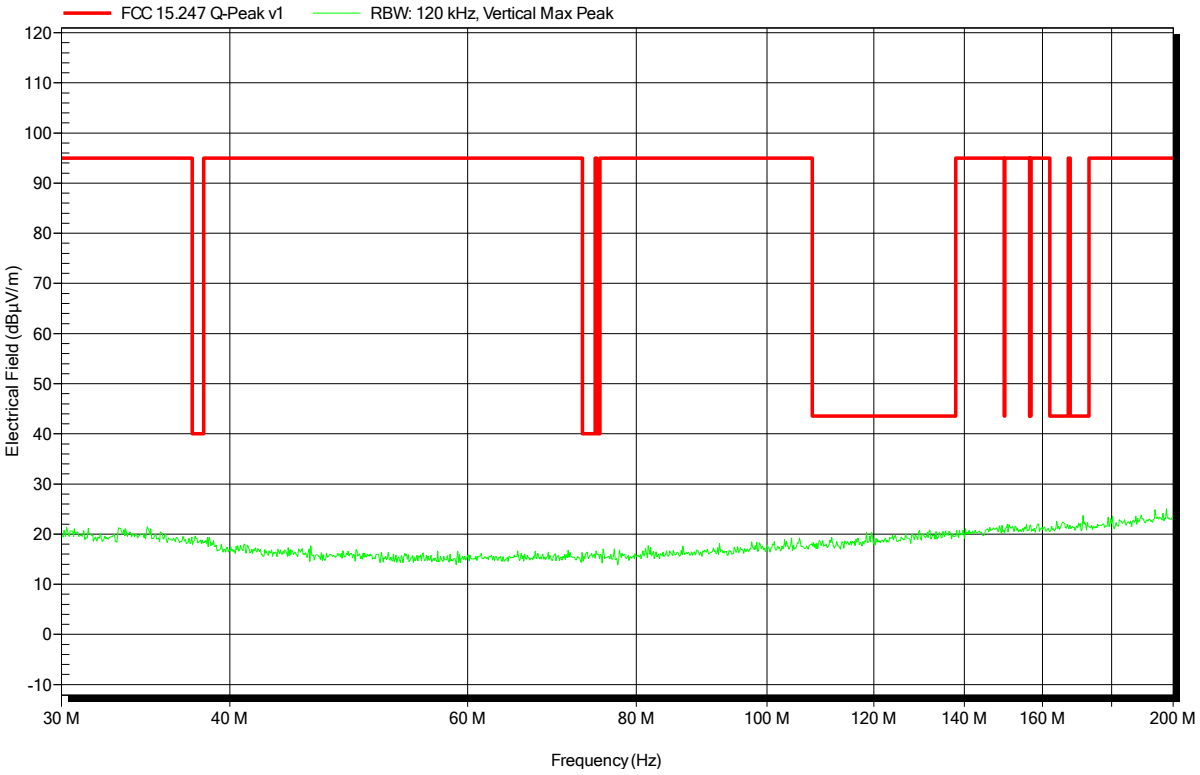


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 30

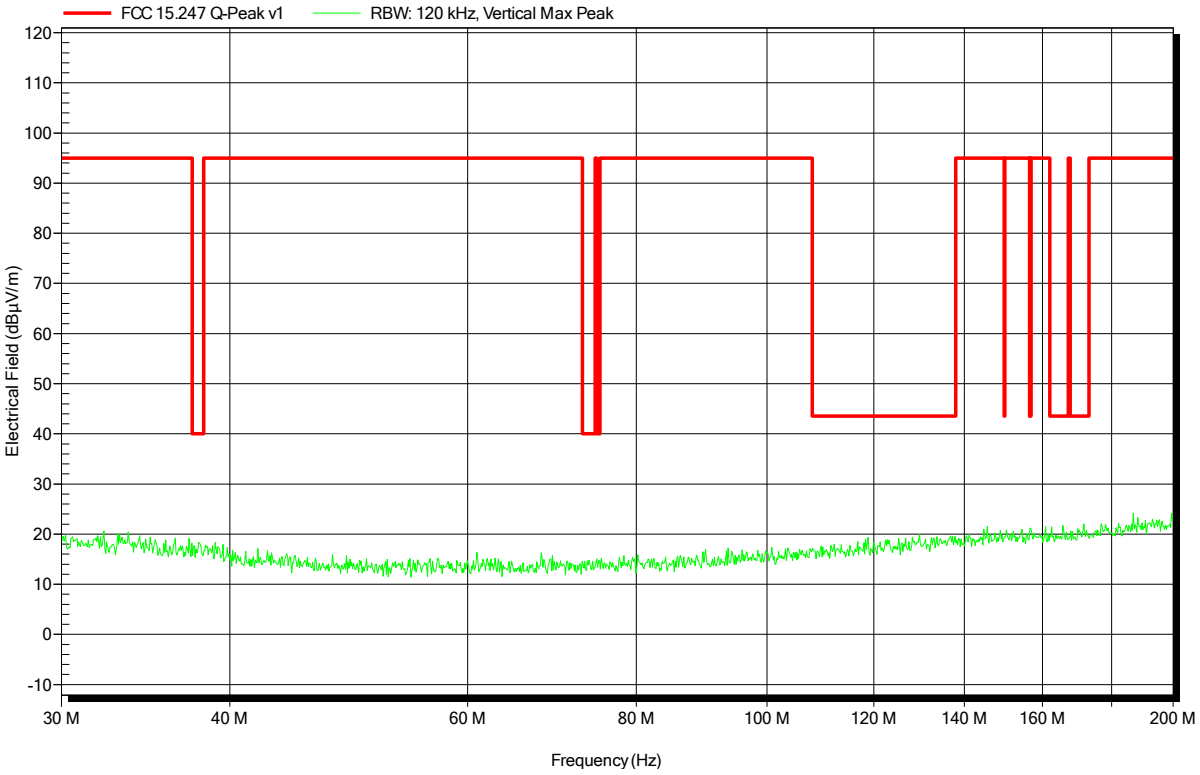


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 33

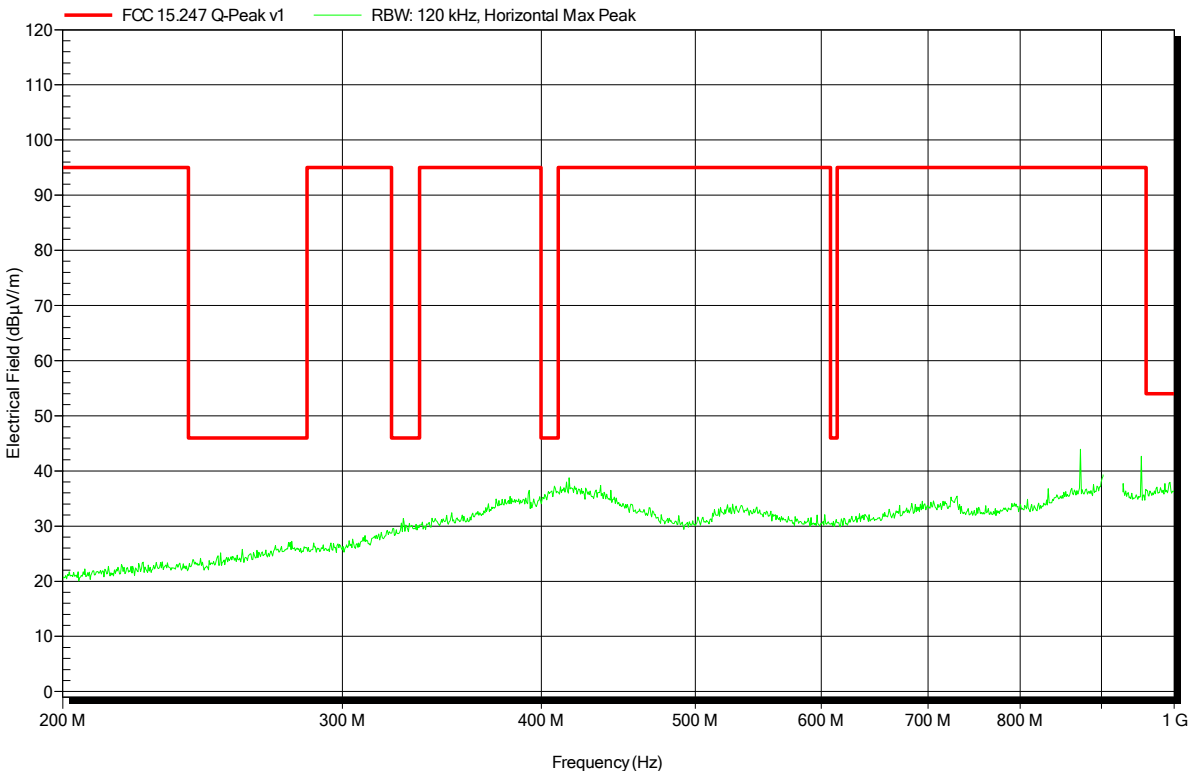


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 27

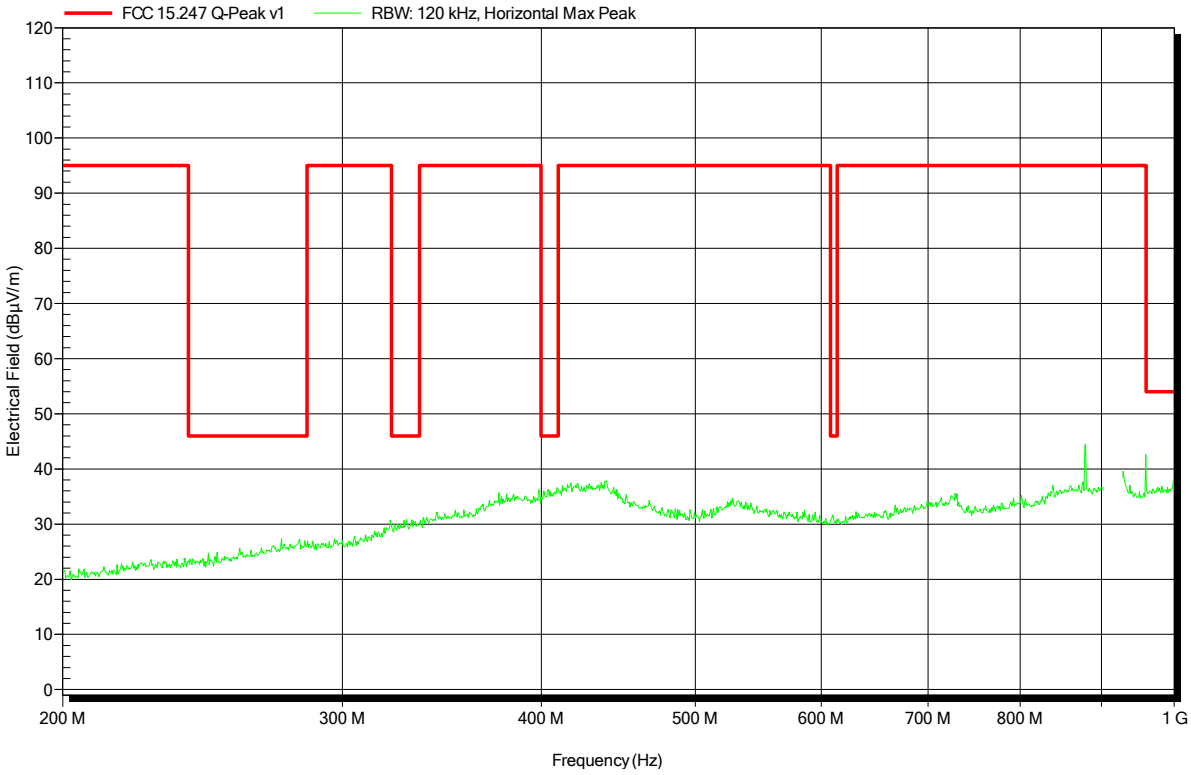


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 34

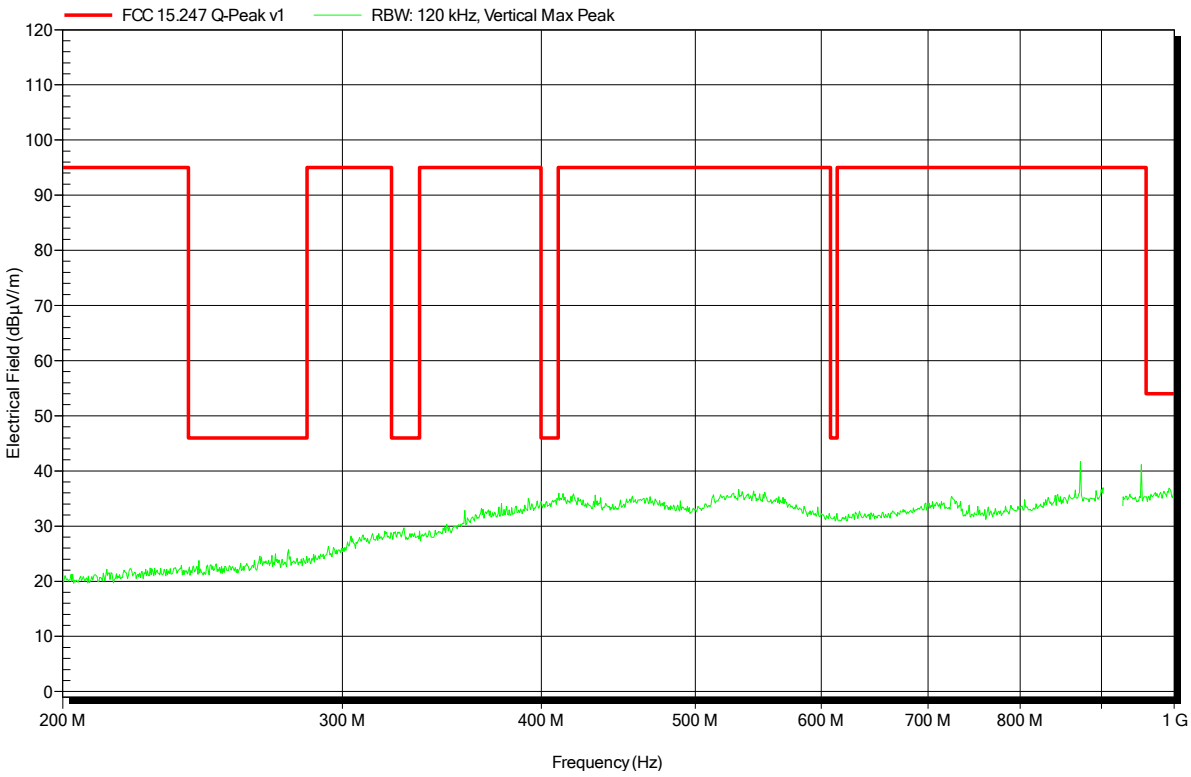


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 28

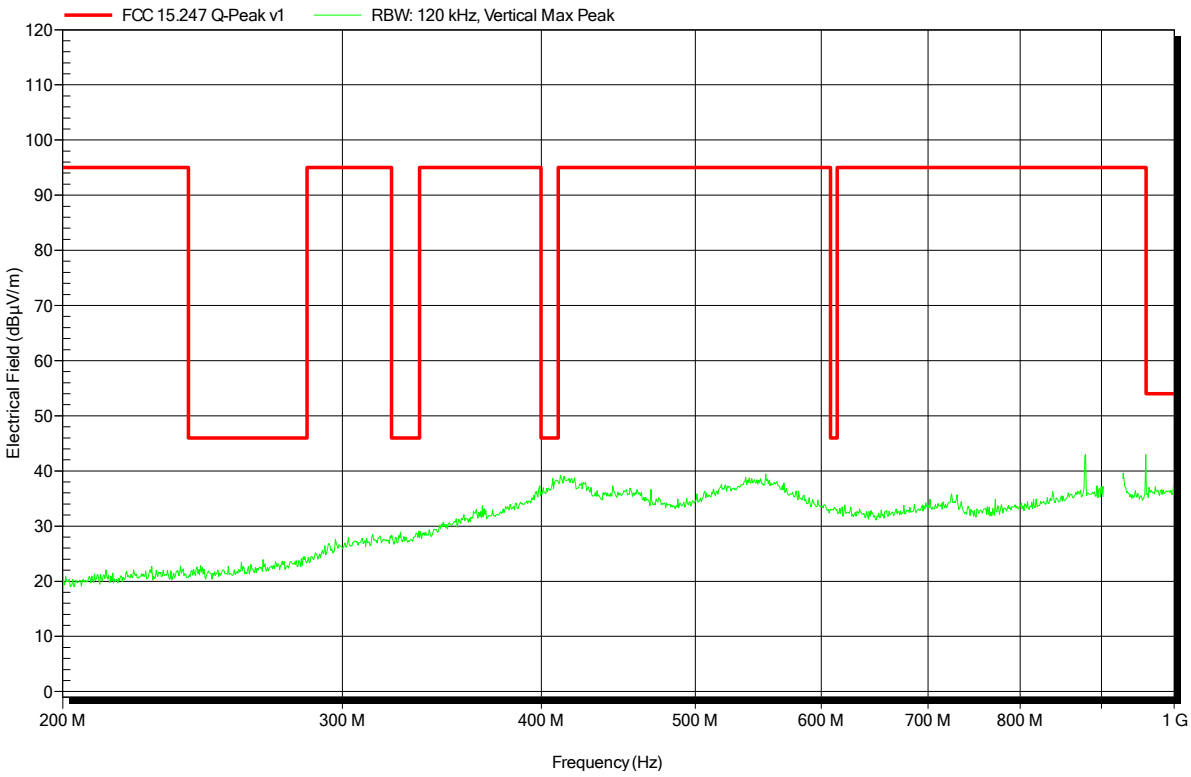


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 35

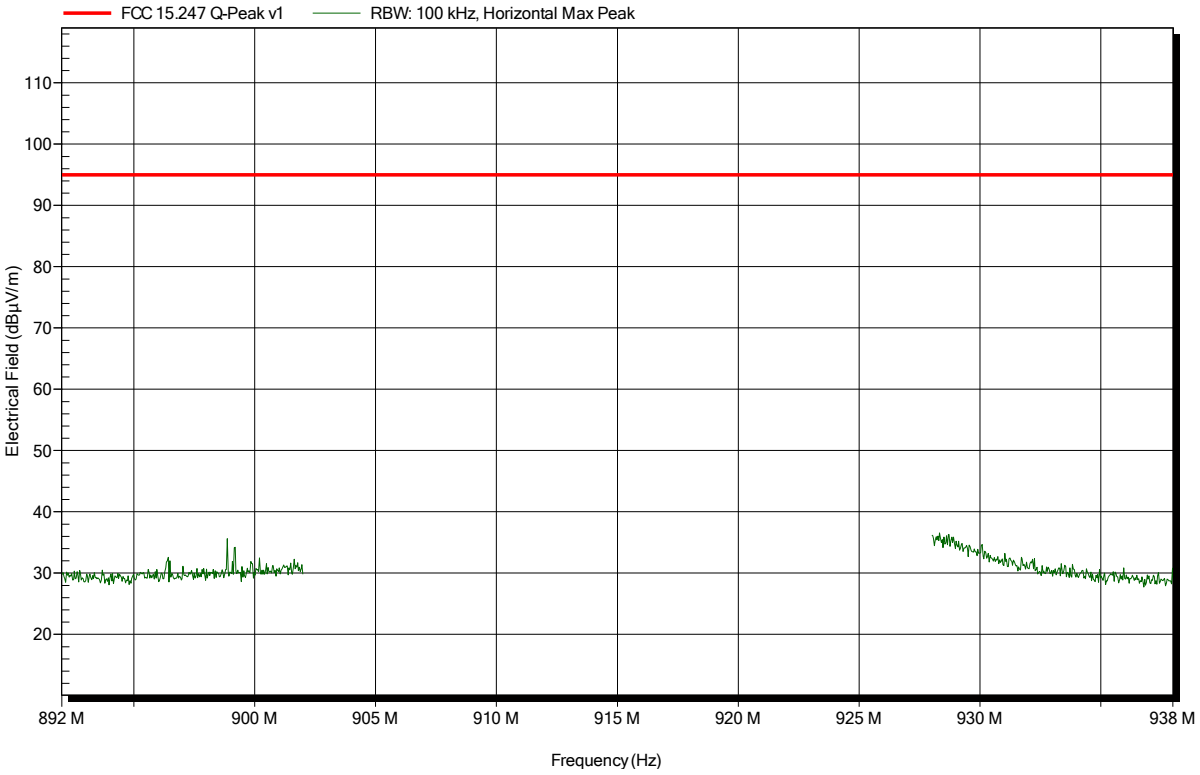


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 17

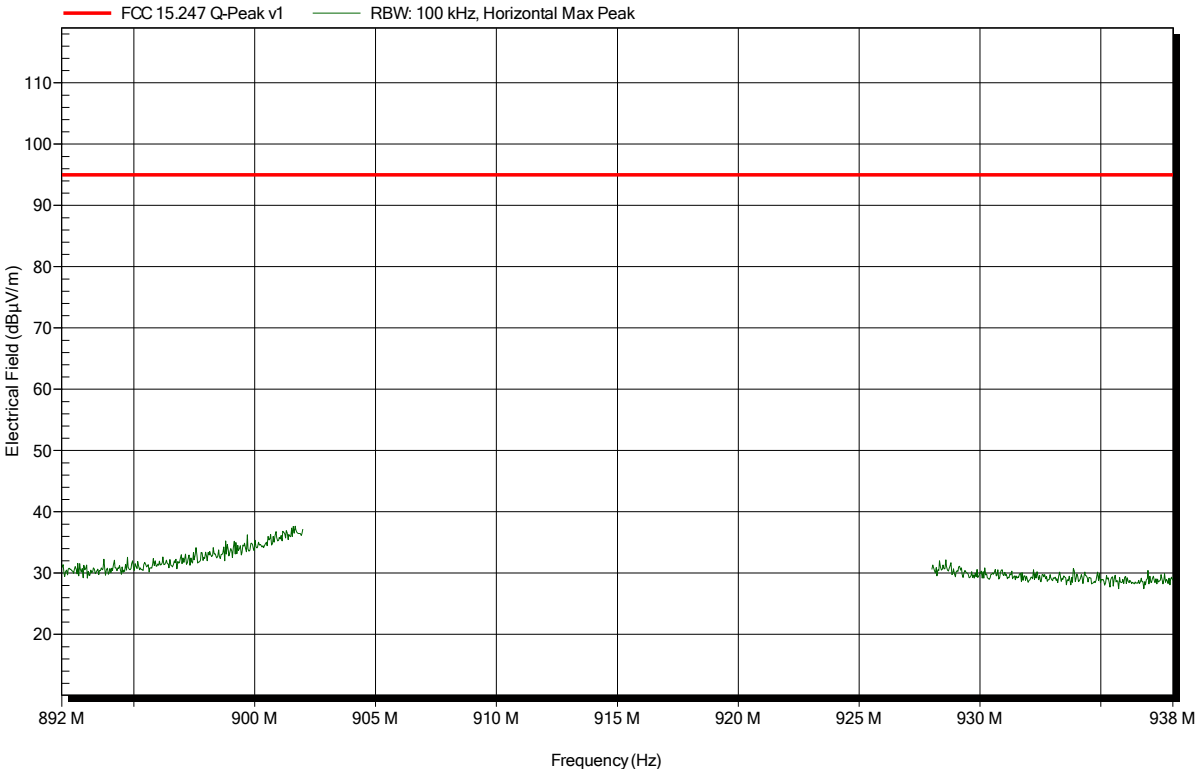


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 3

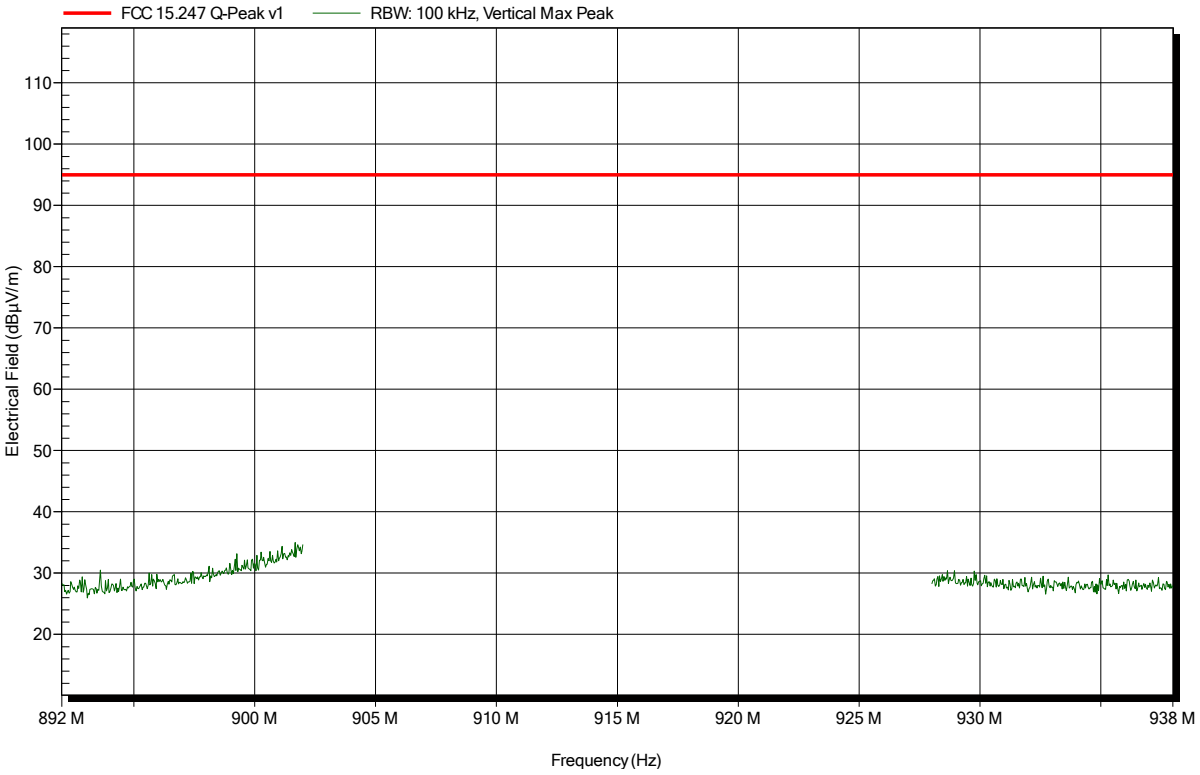


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 1

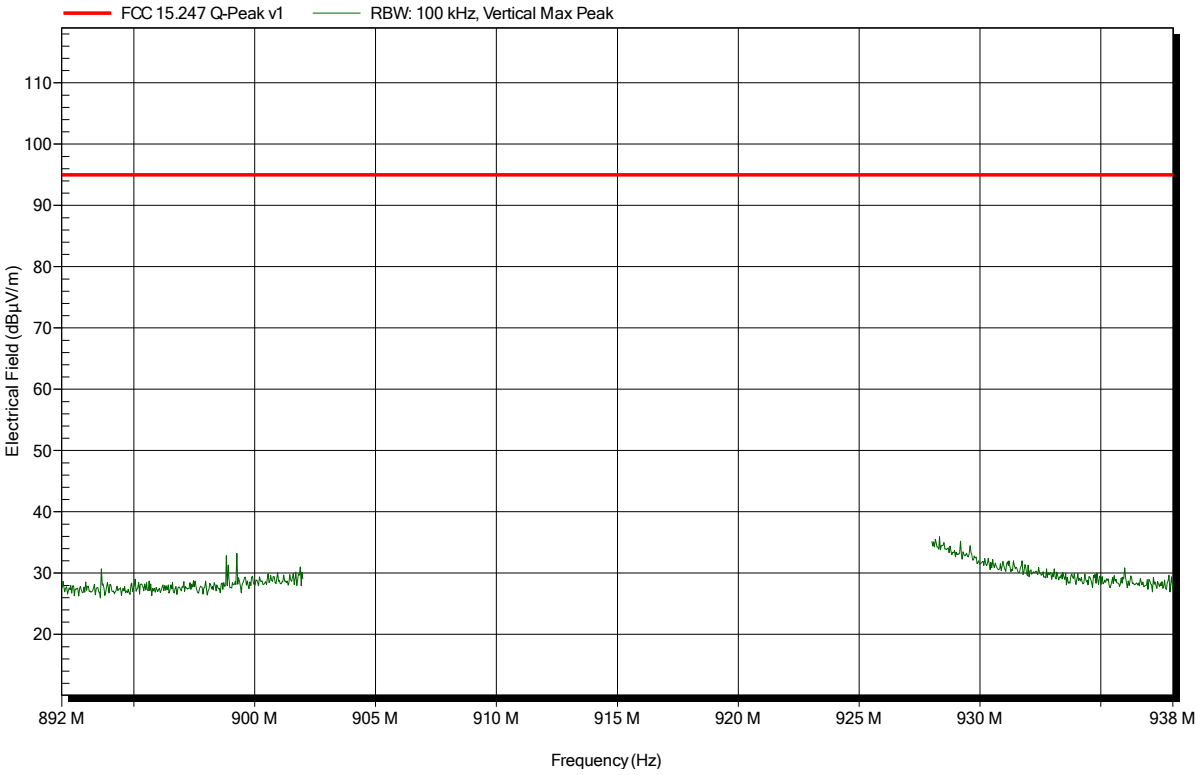


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 22

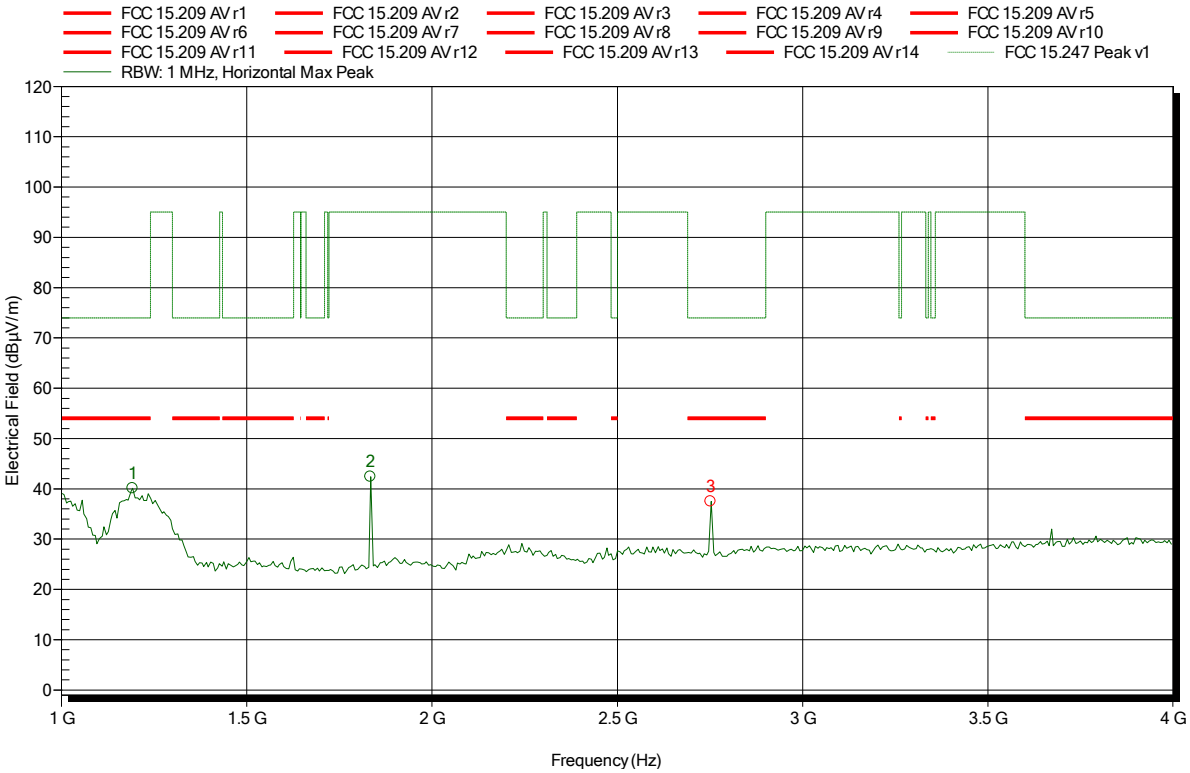


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 14



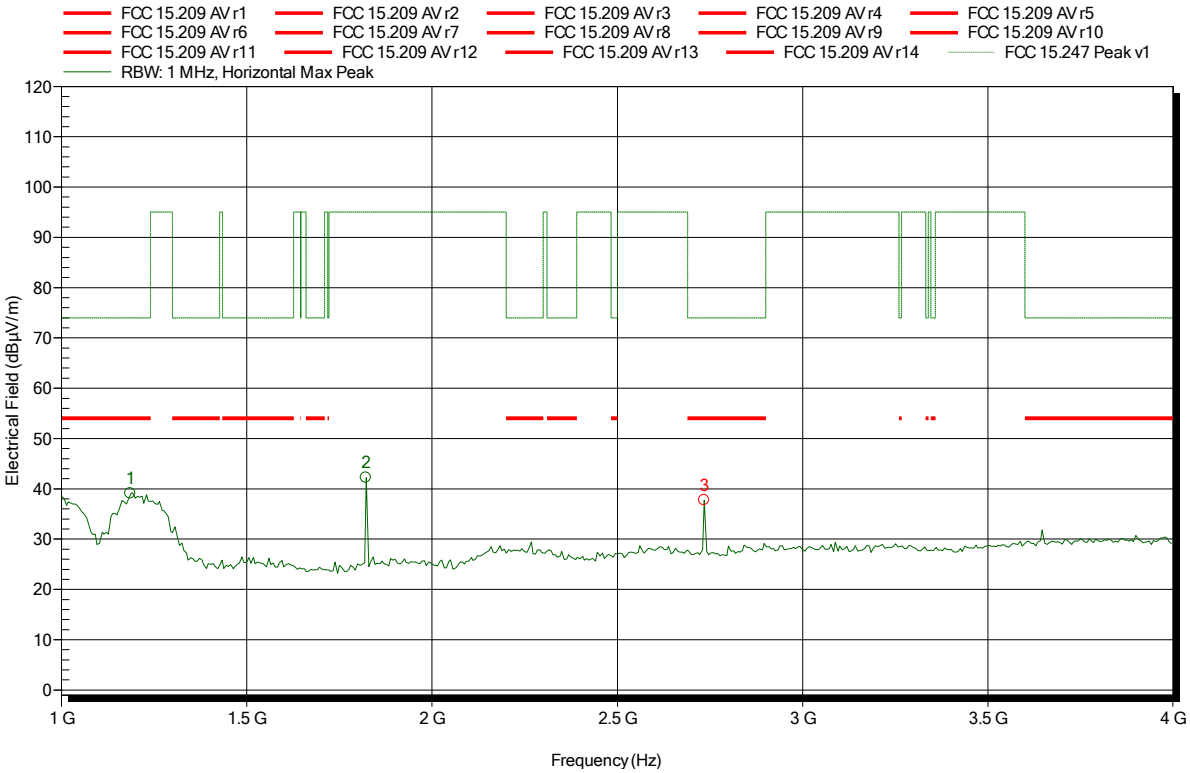
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.192 GHz	40.11 dBµV/m	74 dBµV/m	-33.89 dB	Pass
1.834 GHz	42.39 dBµV/m	95 dBµV/m	-52.61 dB	Pass
2.752 GHz	37.51 dBµV/m	74 dBµV/m	-36.49 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 7



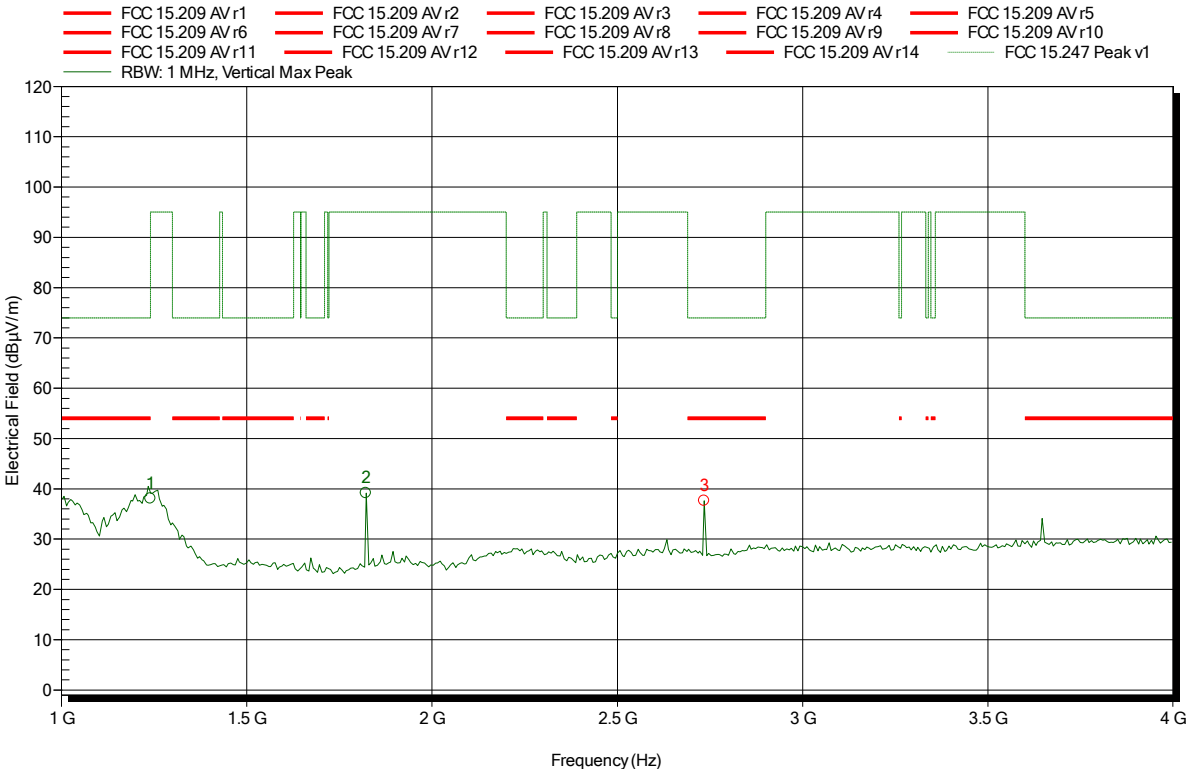
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.186 GHz	39.08 dBµV/m	74 dBµV/m	-34.92 dB	Pass
1.822 GHz	42.21 dBµV/m	95 dBµV/m	-52.79 dB	Pass
2.734 GHz	37.76 dBµV/m	74 dBµV/m	-36.24 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 10



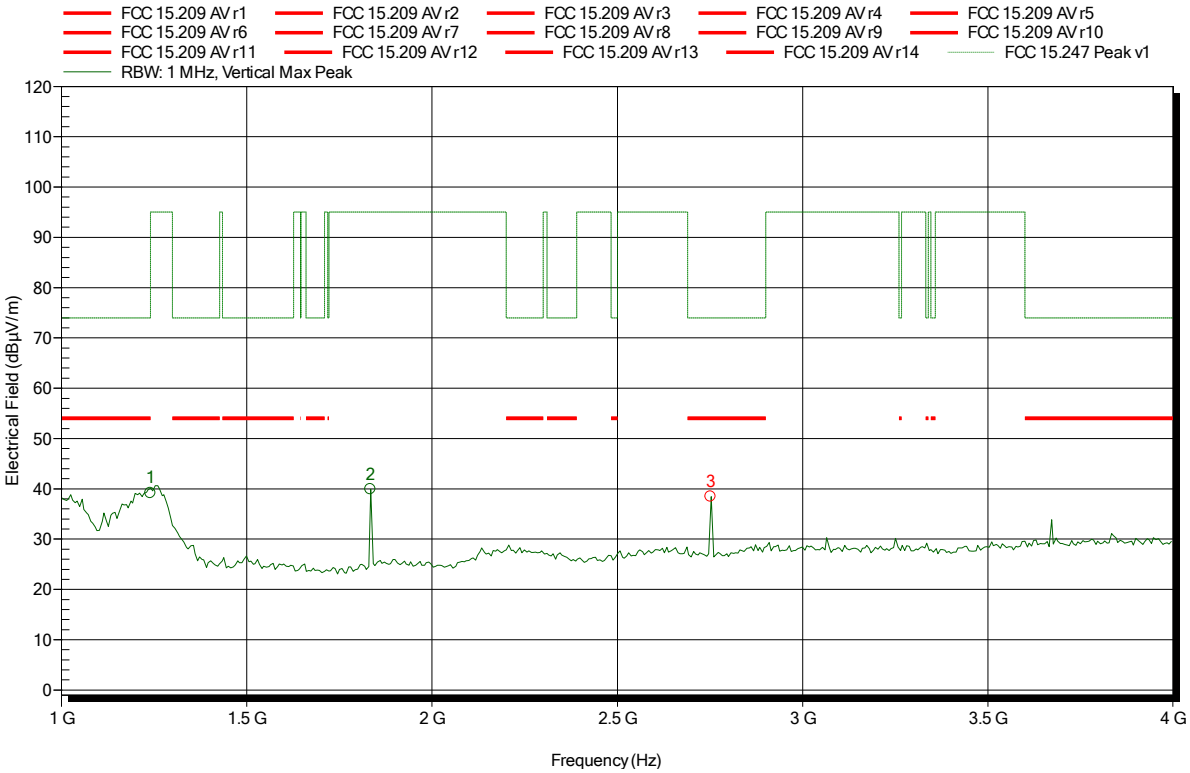
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.24 GHz	38.08 dBµV/m	74 dBµV/m	-35.92 dB	Pass
1.822 GHz	39.14 dBµV/m	95 dBµV/m	-55.86 dB	Pass
2.734 GHz	37.62 dBµV/m	74 dBµV/m	-36.38 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 23



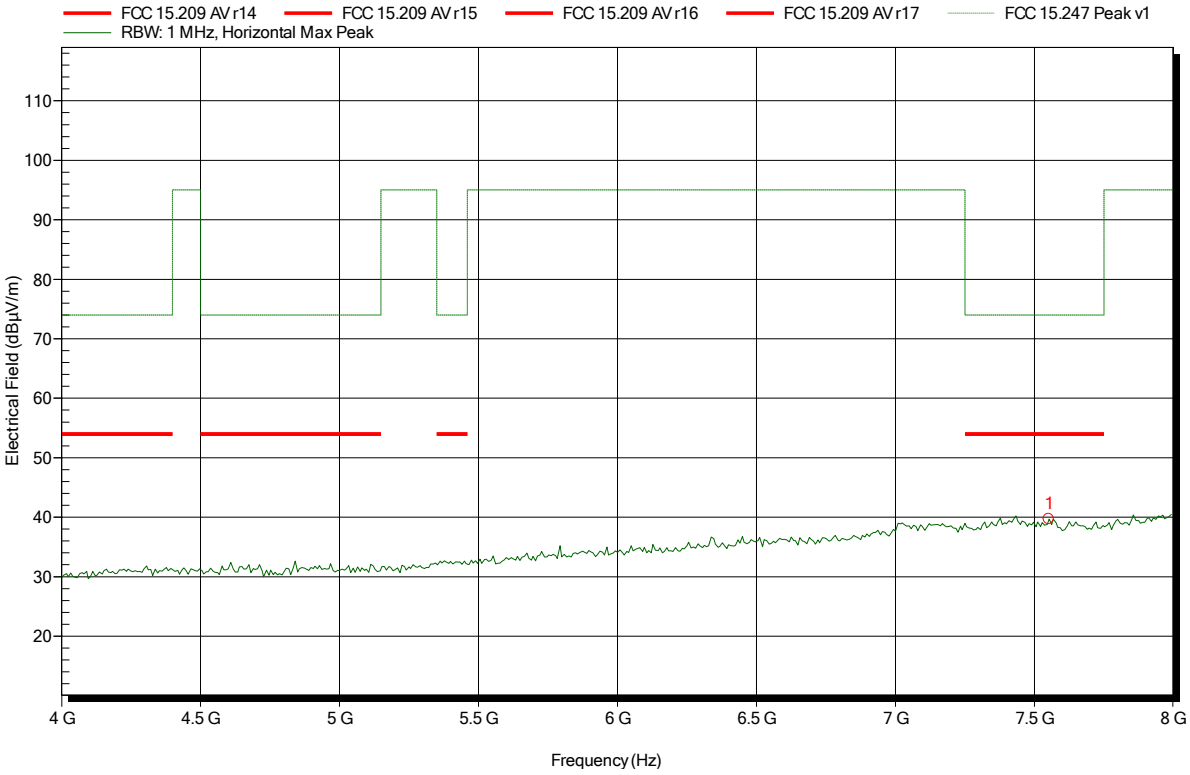
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.24 GHz	39.14 dBµV/m	74 dBµV/m	-34.86 dB	Pass
1.834 GHz	39.92 dBµV/m	95 dBµV/m	-55.08 dB	Pass
2.752 GHz	38.44 dBµV/m	74 dBµV/m	-35.56 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 15



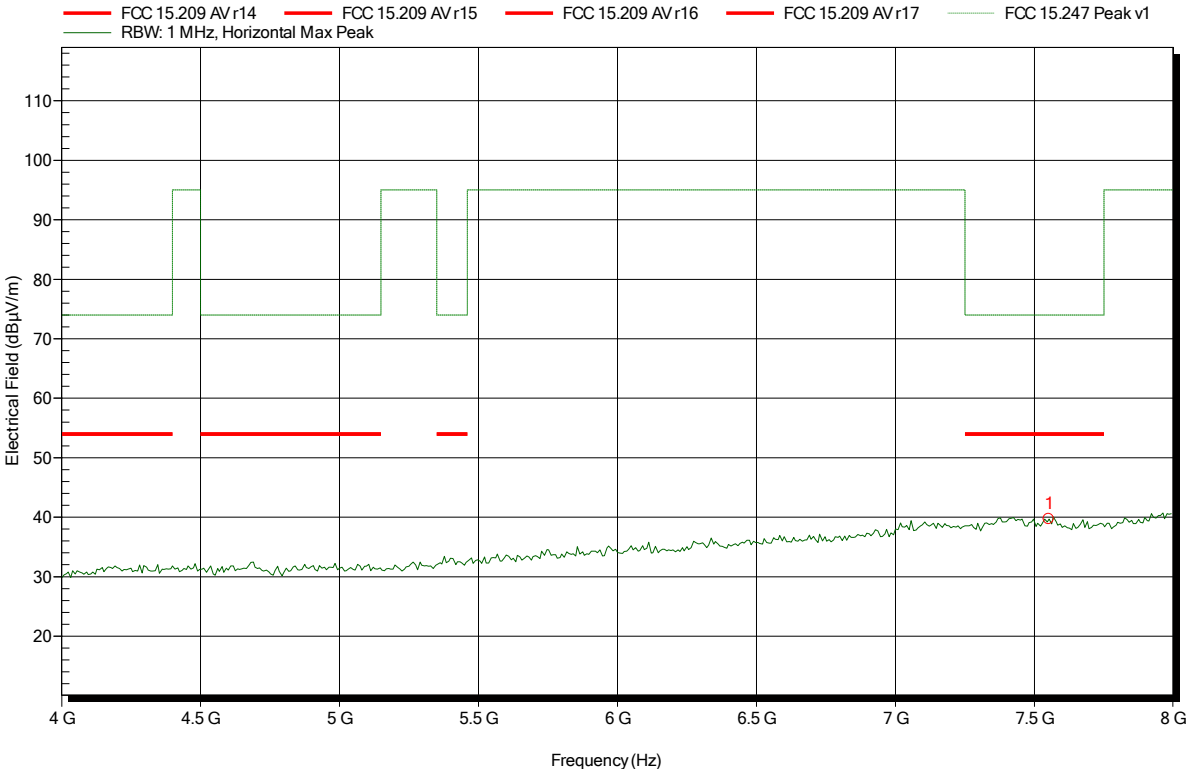
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.552 GHz	39.67 dBµV/m	74 dBµV/m	-34.33 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 8



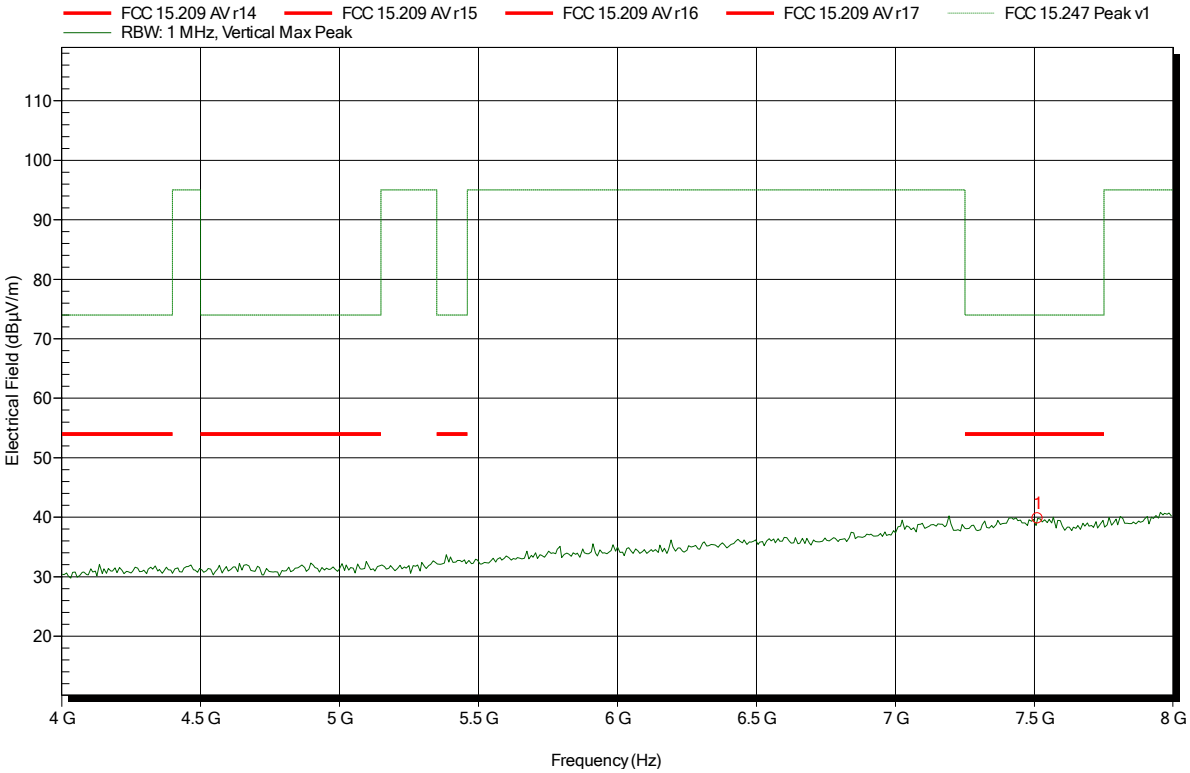
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.552 GHz	39.67 dBµV/m	74 dBµV/m	-34.33 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 11



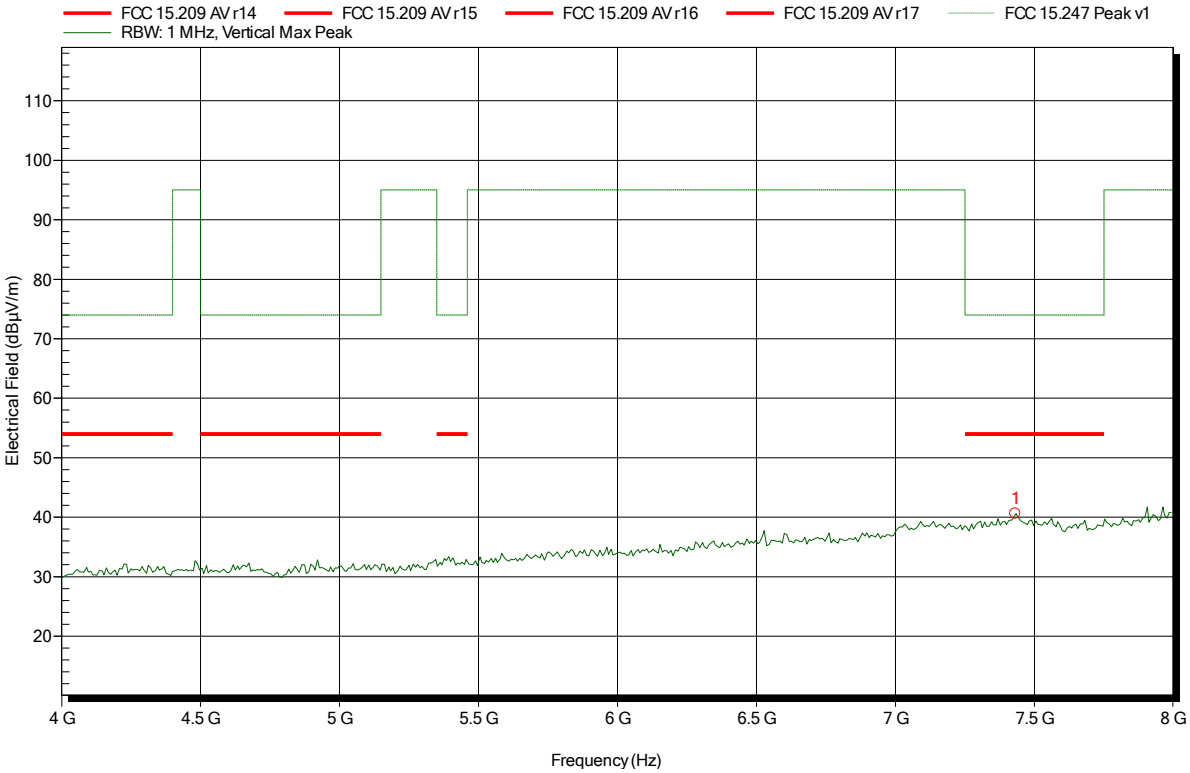
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.512 GHz	39.78 dBµV/m	74 dBµV/m	-34.22 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 24



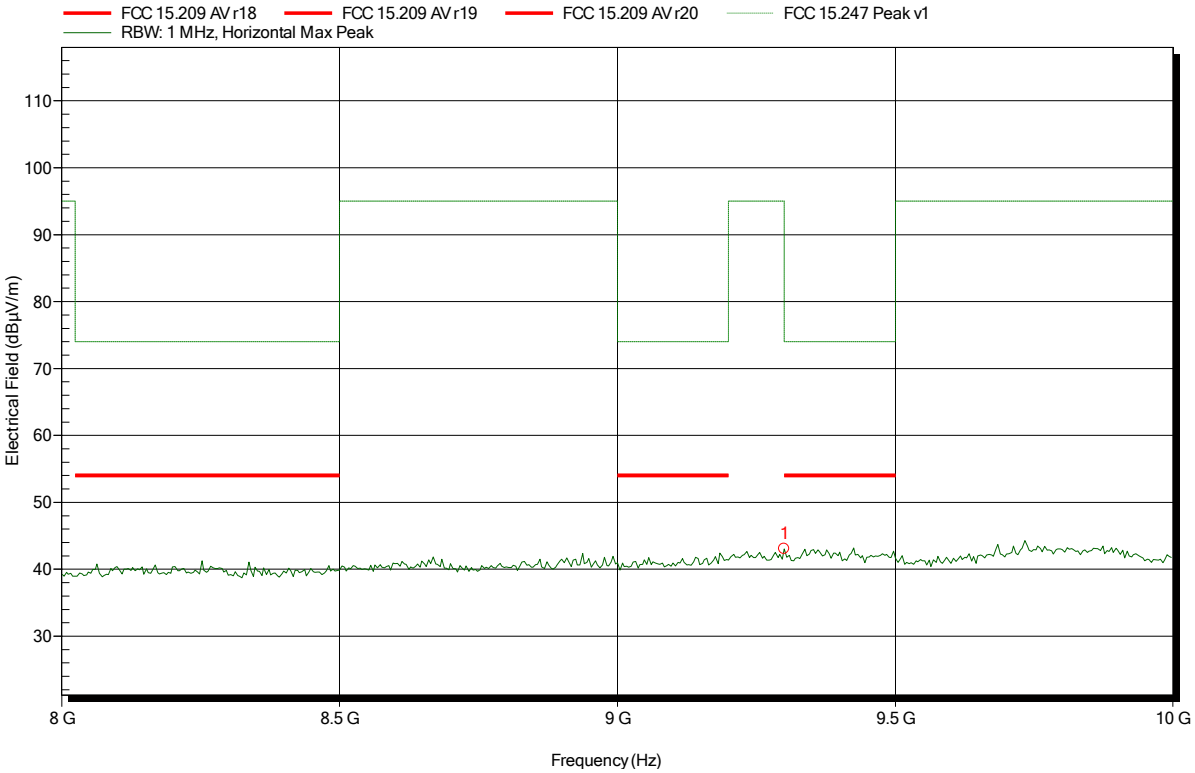
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.432 GHz	40.6 dBµV/m	74 dBµV/m	-33.4 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 16



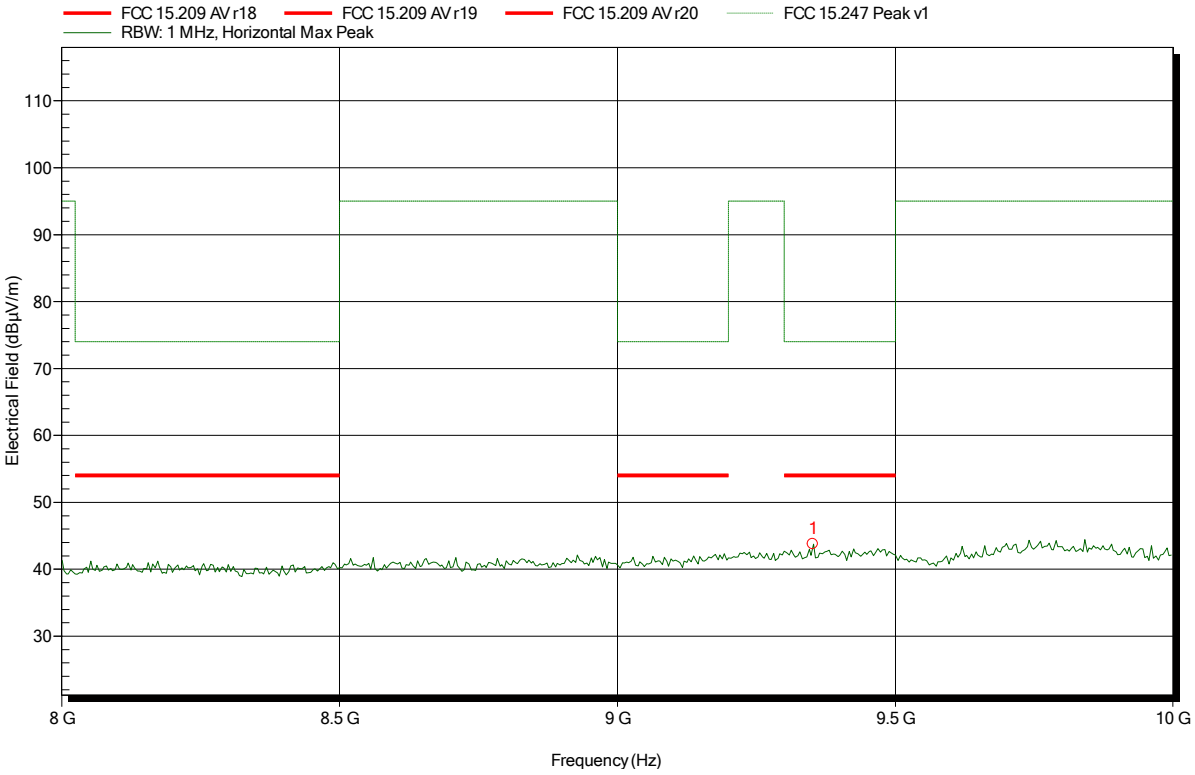
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
9.3 GHz	43.02 dBµV/m	74 dBµV/m	-30.98 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 9



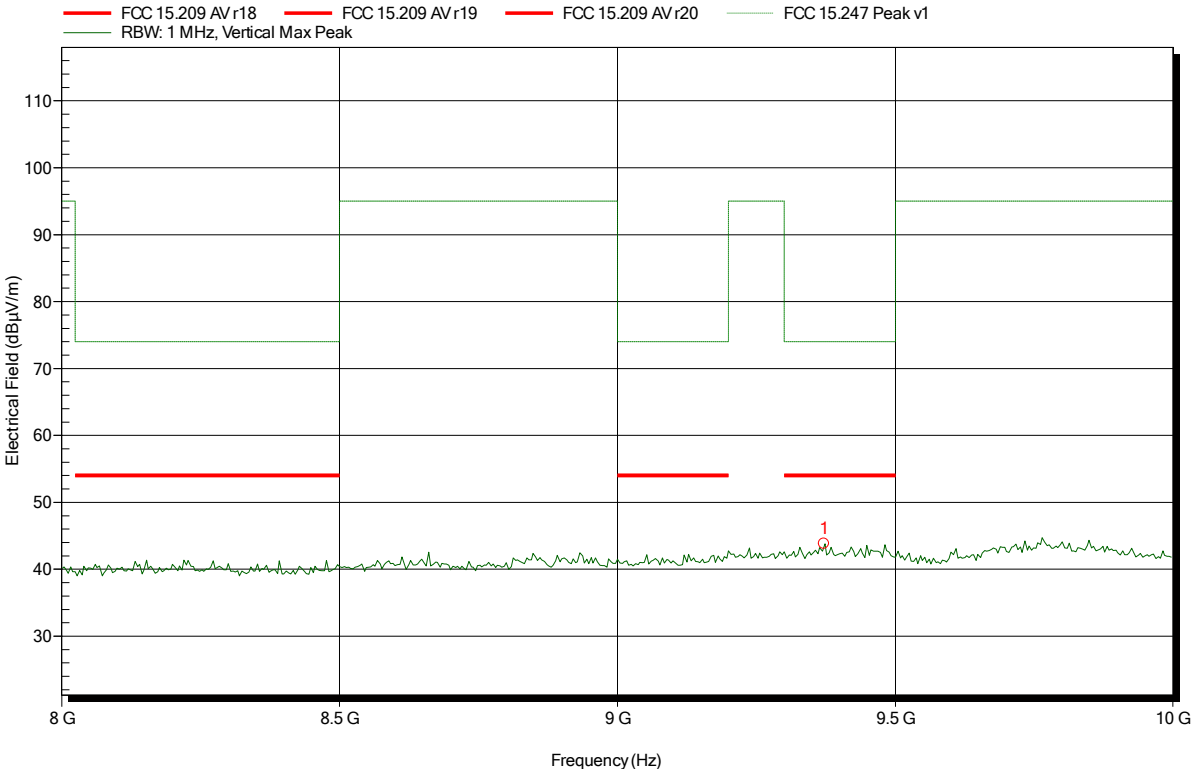
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
9.352 GHz	43.77 dBµV/m	74 dBµV/m	-30.23 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 13



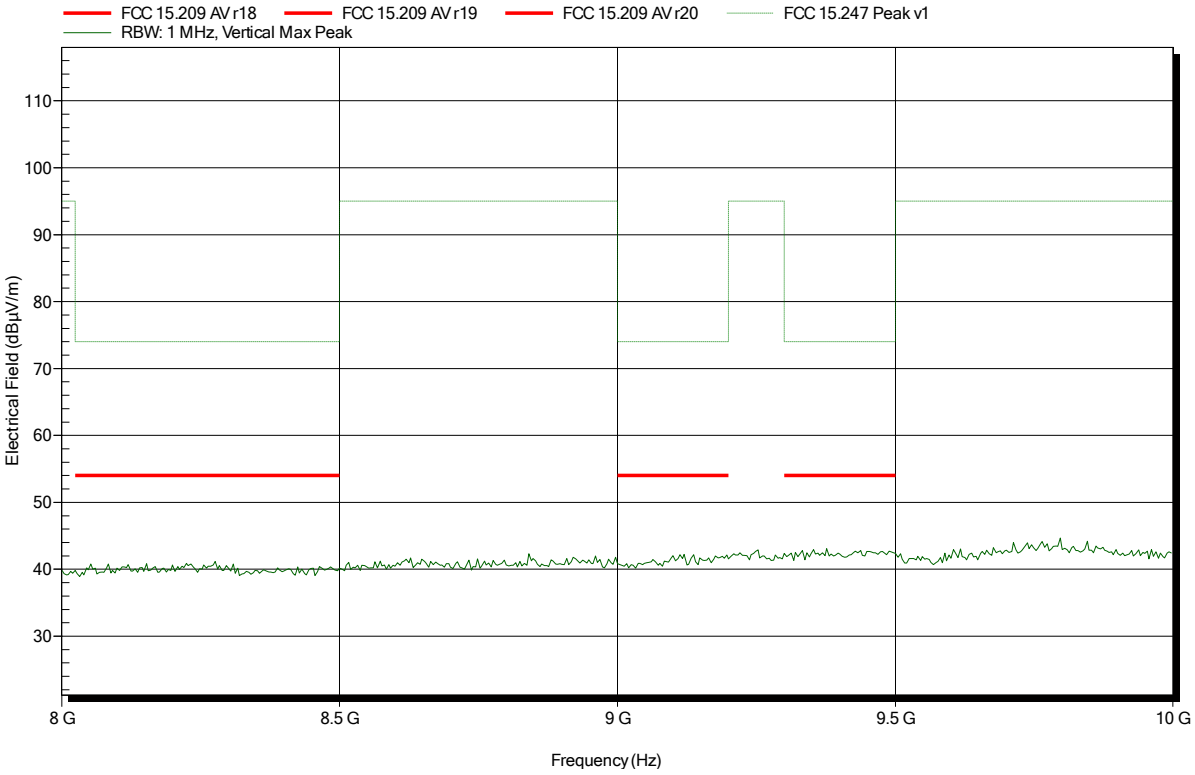
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
9.372 GHz	43.83 dBµV/m	74 dBµV/m	-30.17 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 26

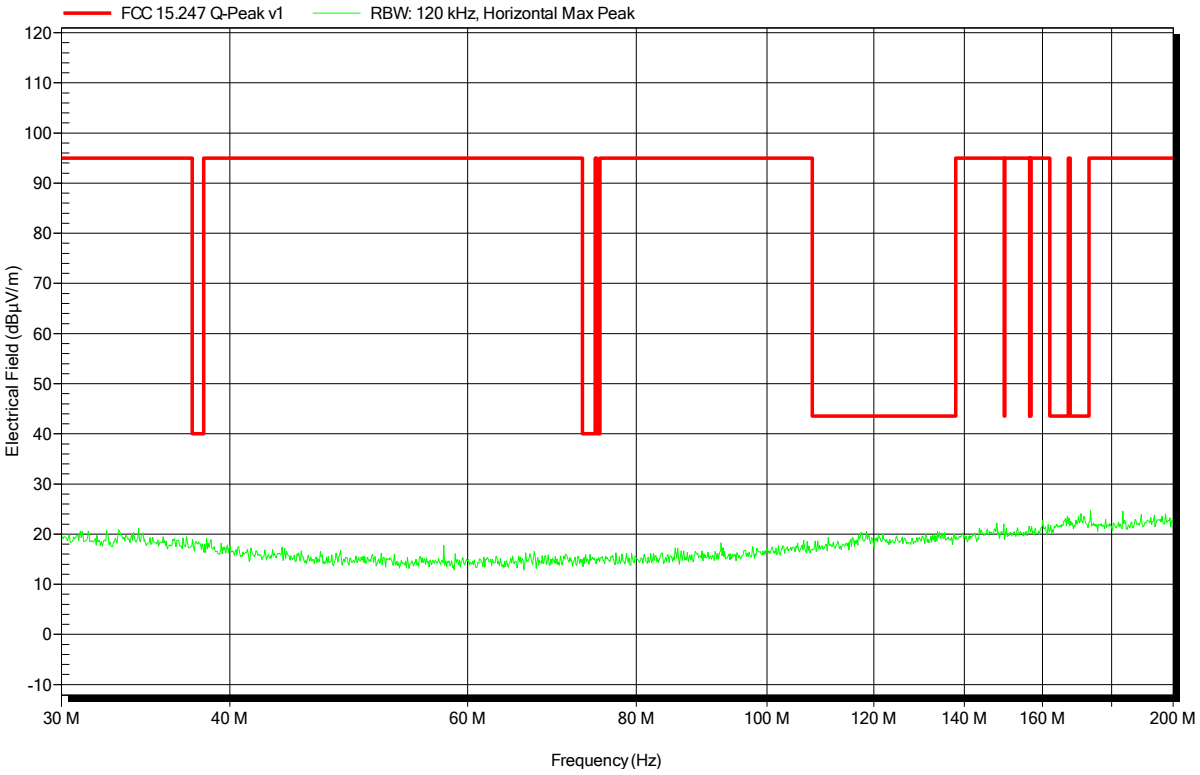


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 20

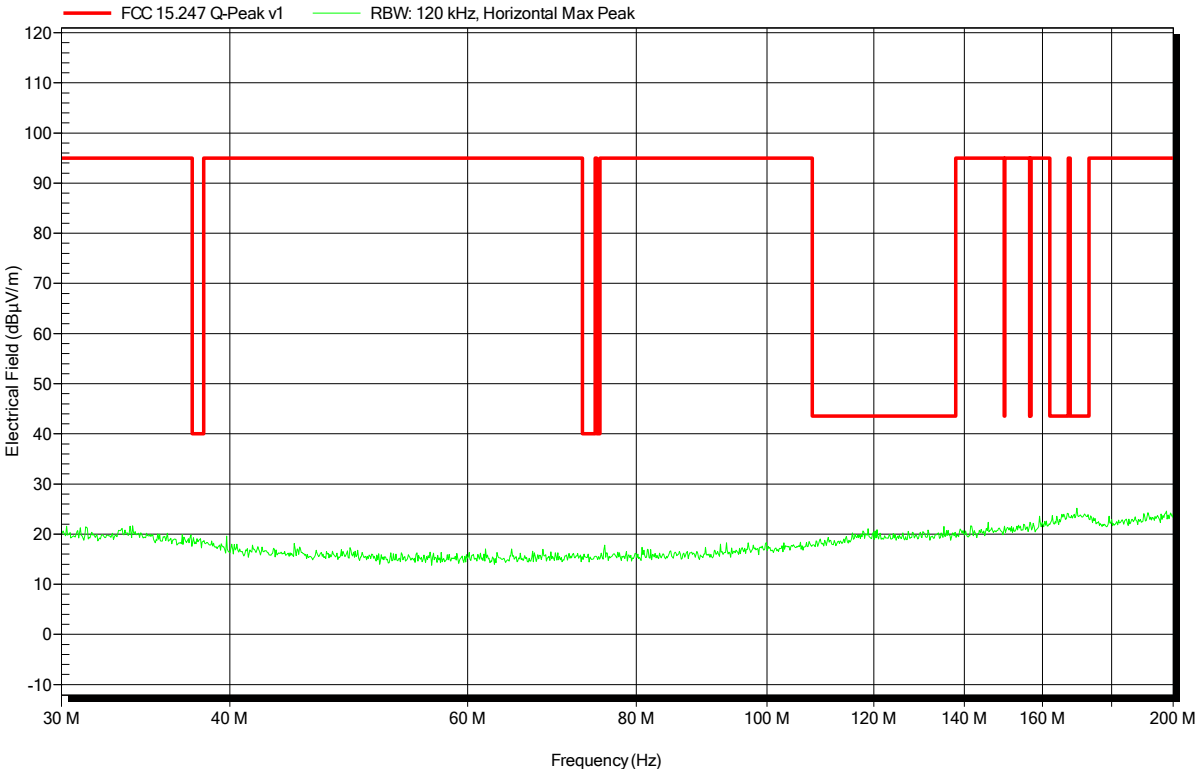


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 24

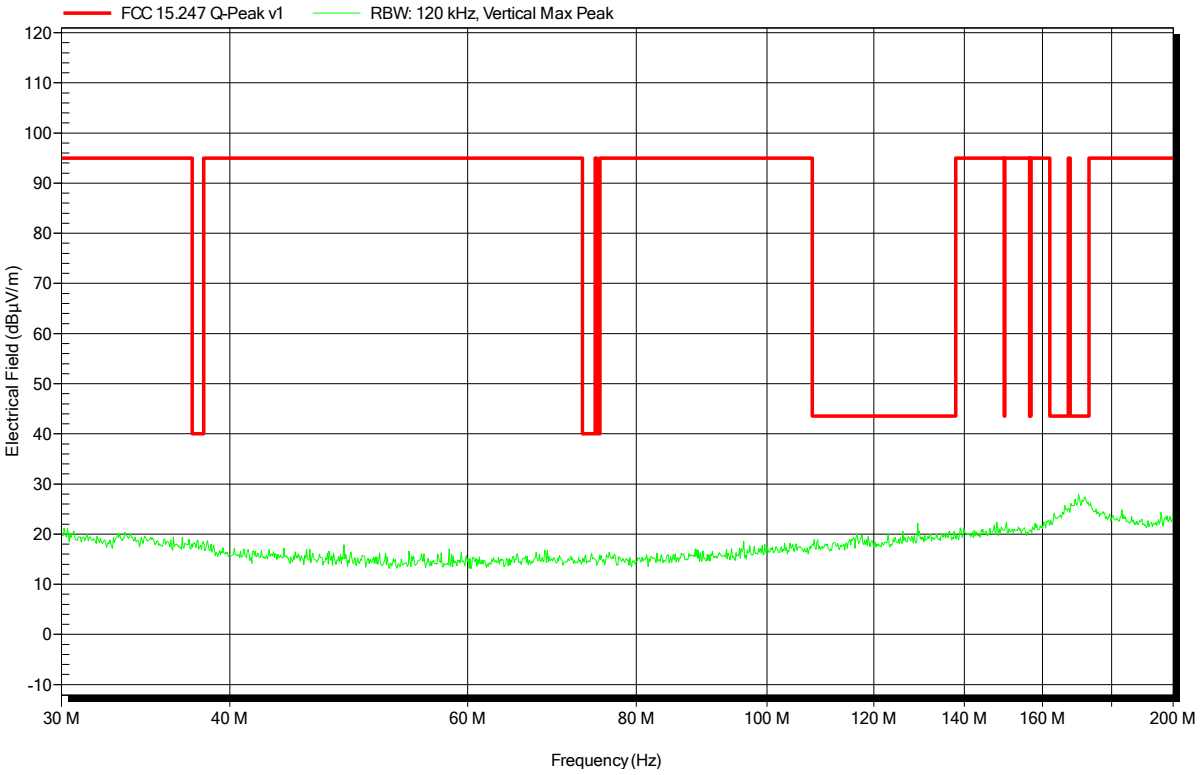


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 22

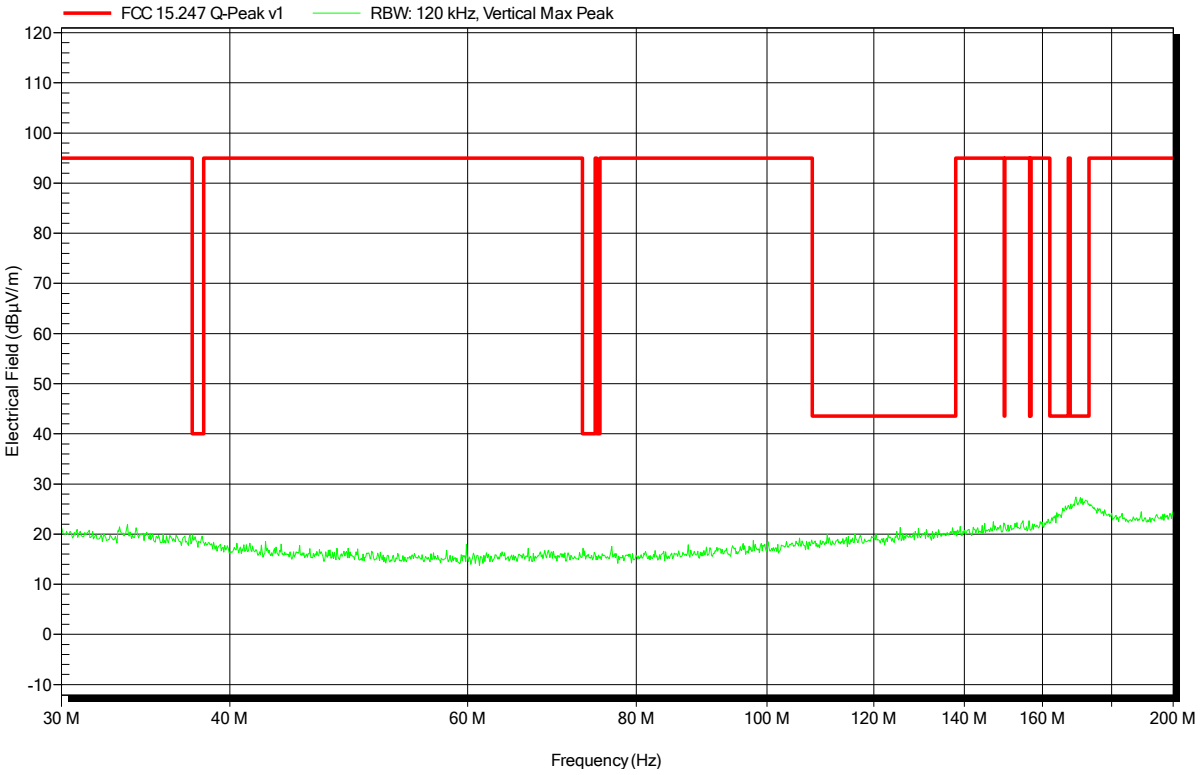


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 23

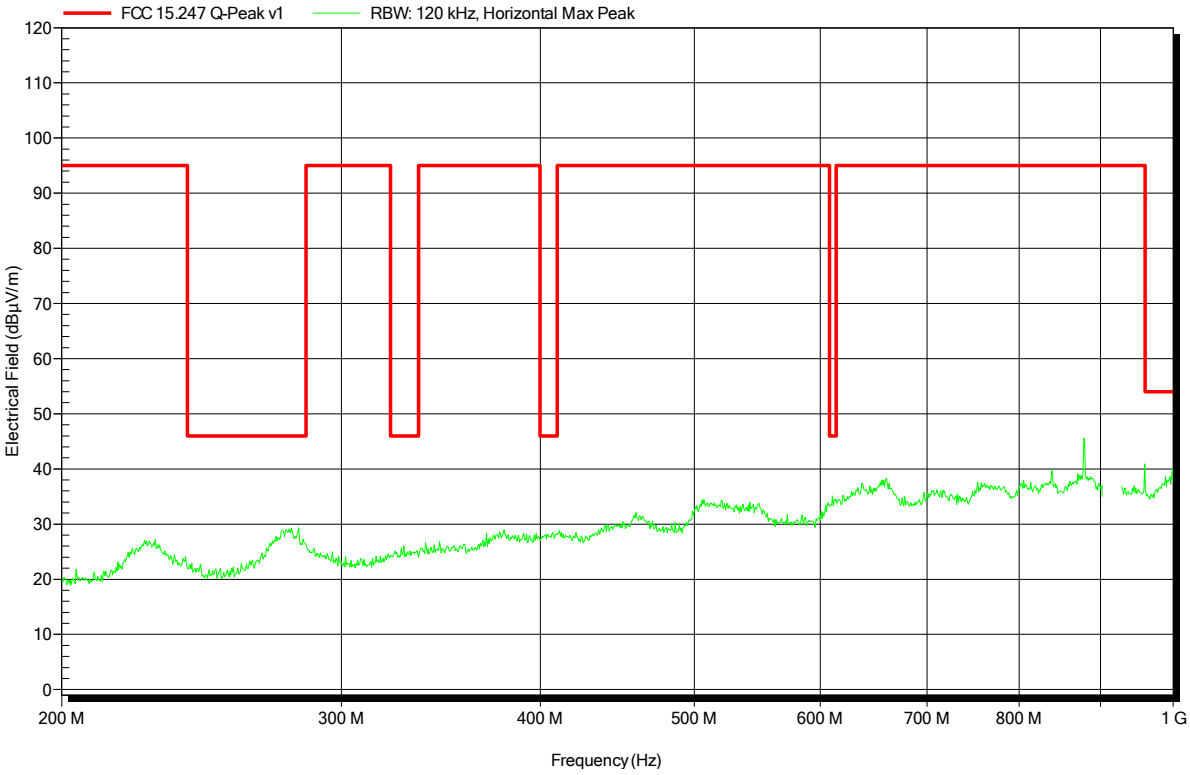


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 18

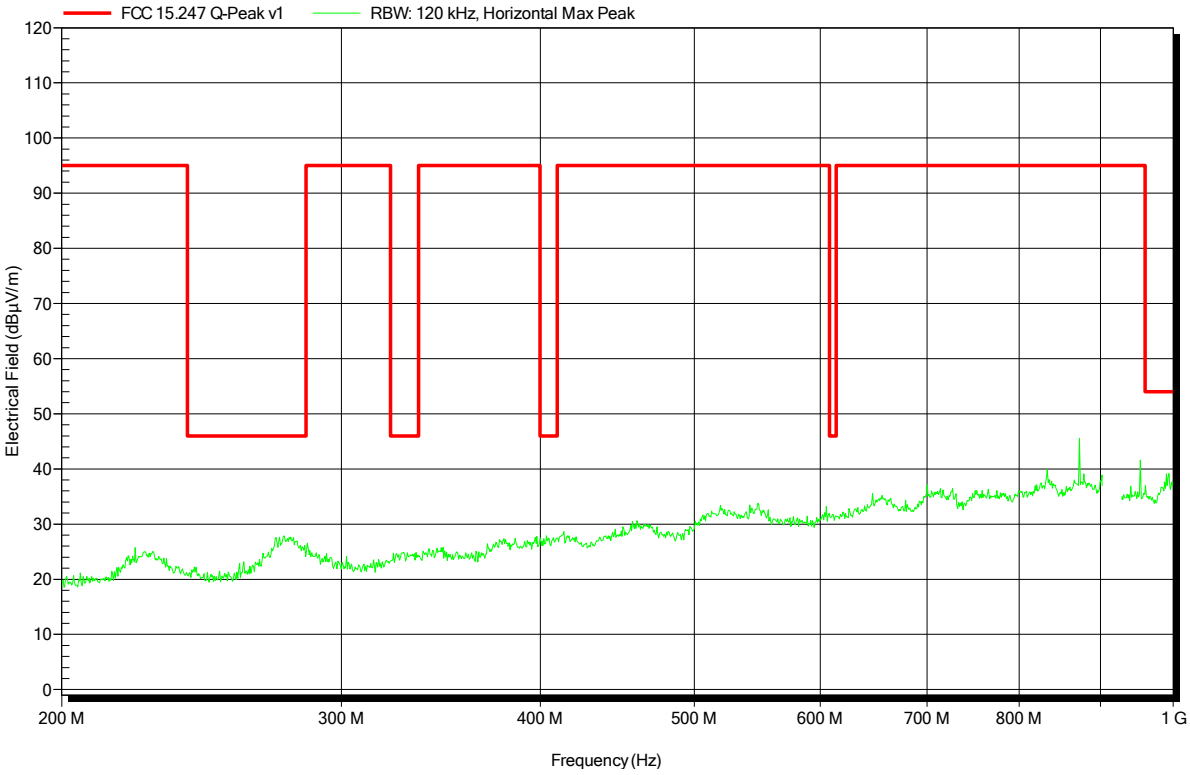


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 25

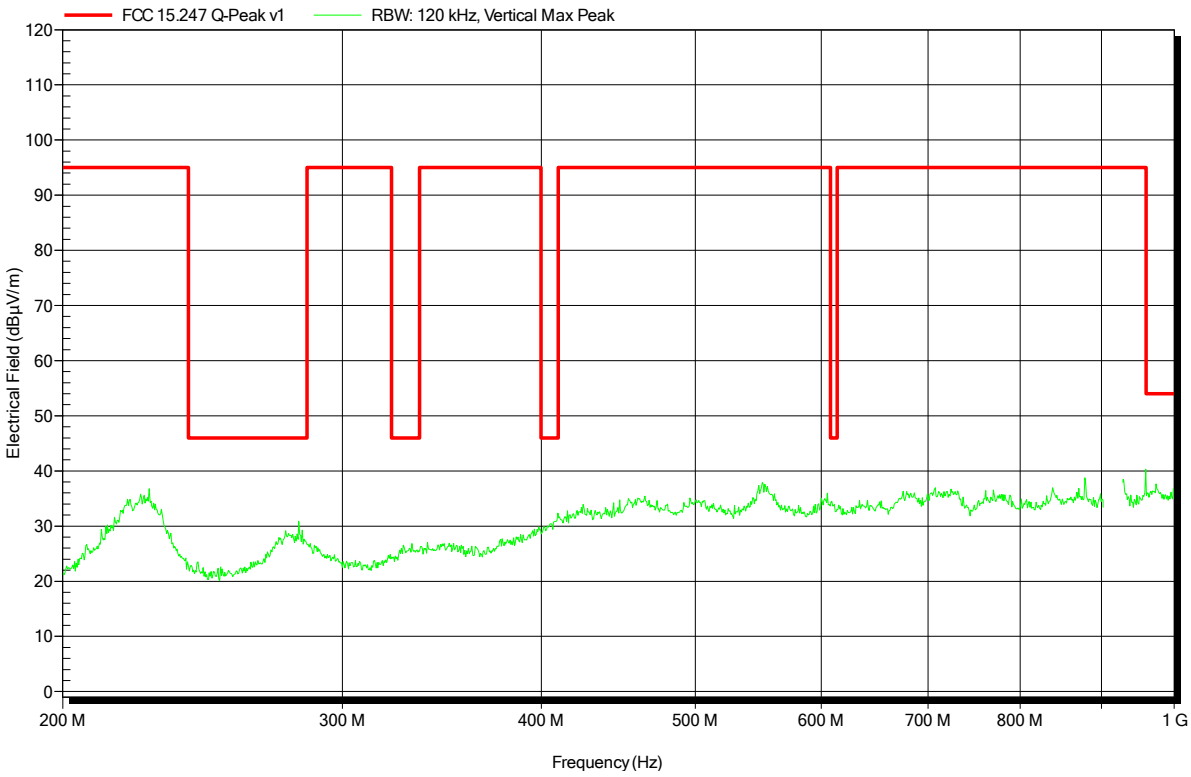


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 19

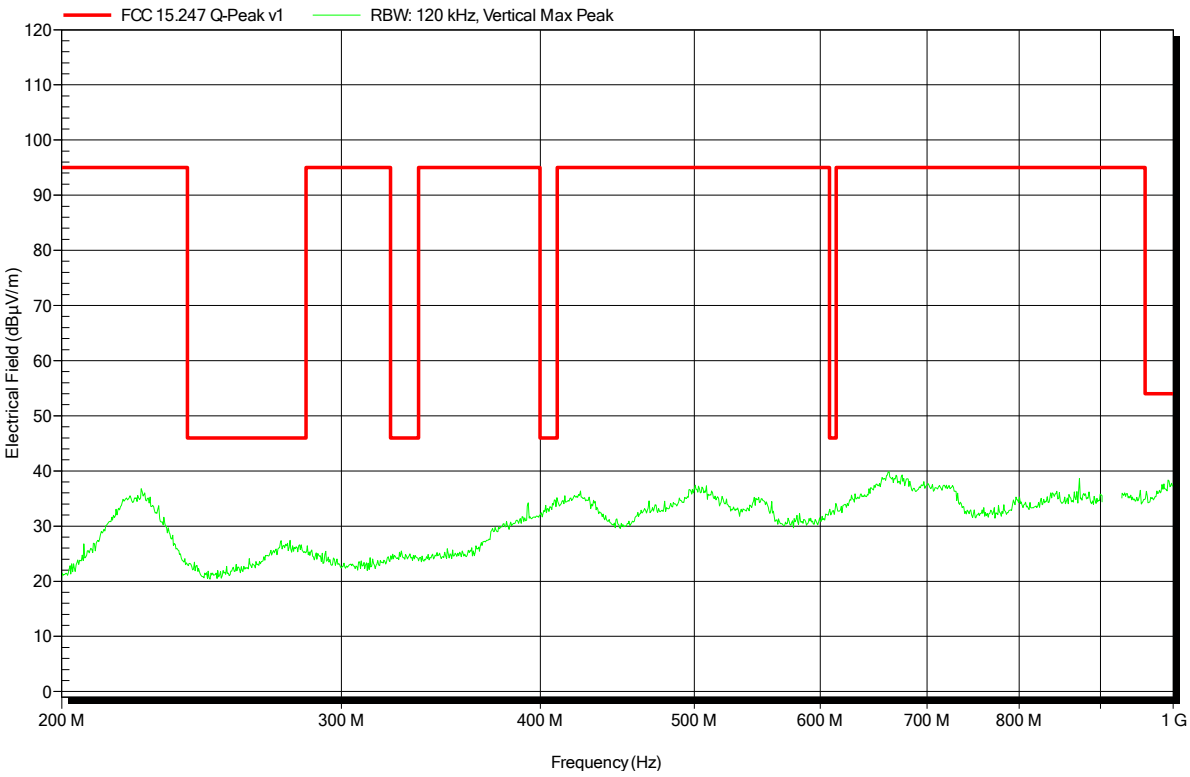


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 26

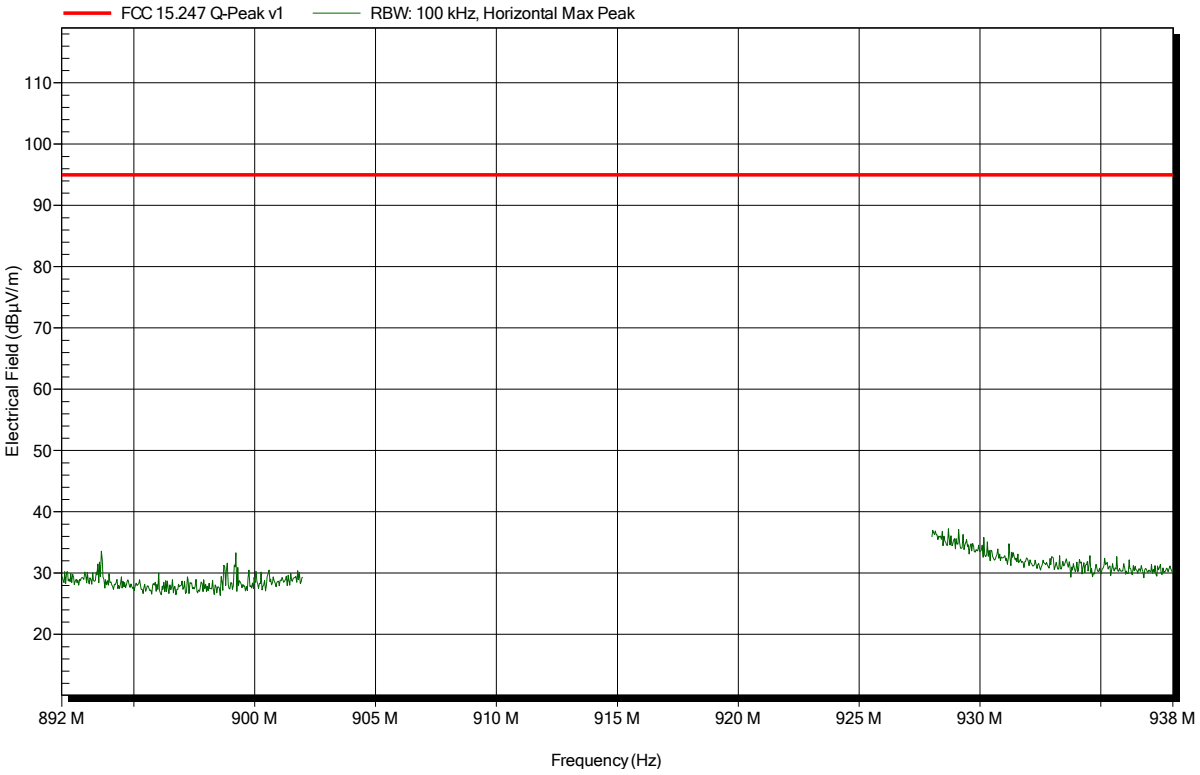


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 7

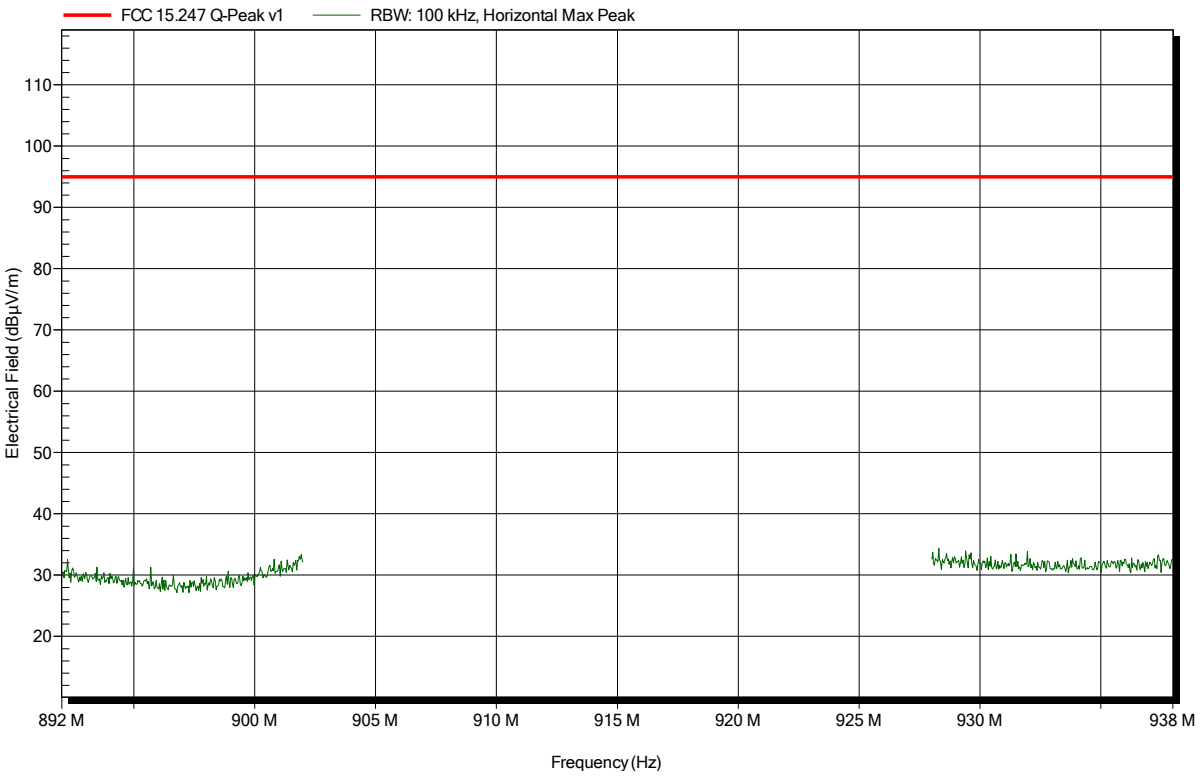


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 10

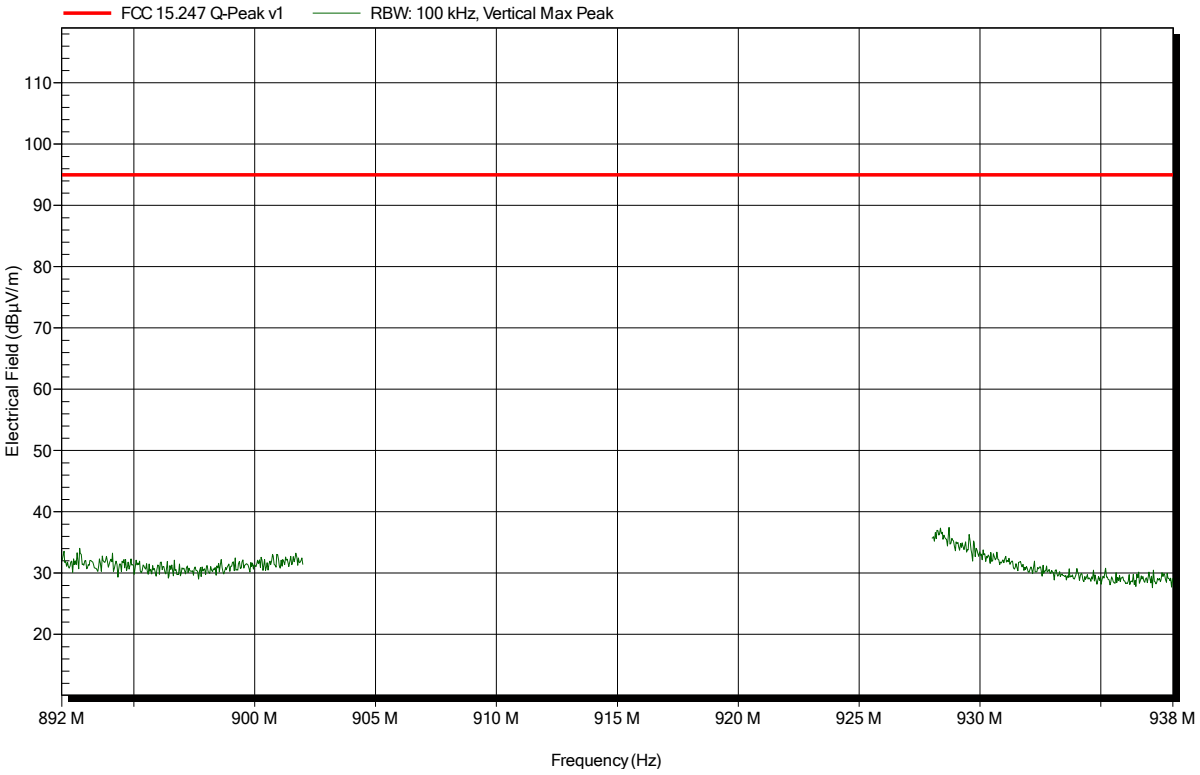


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 8

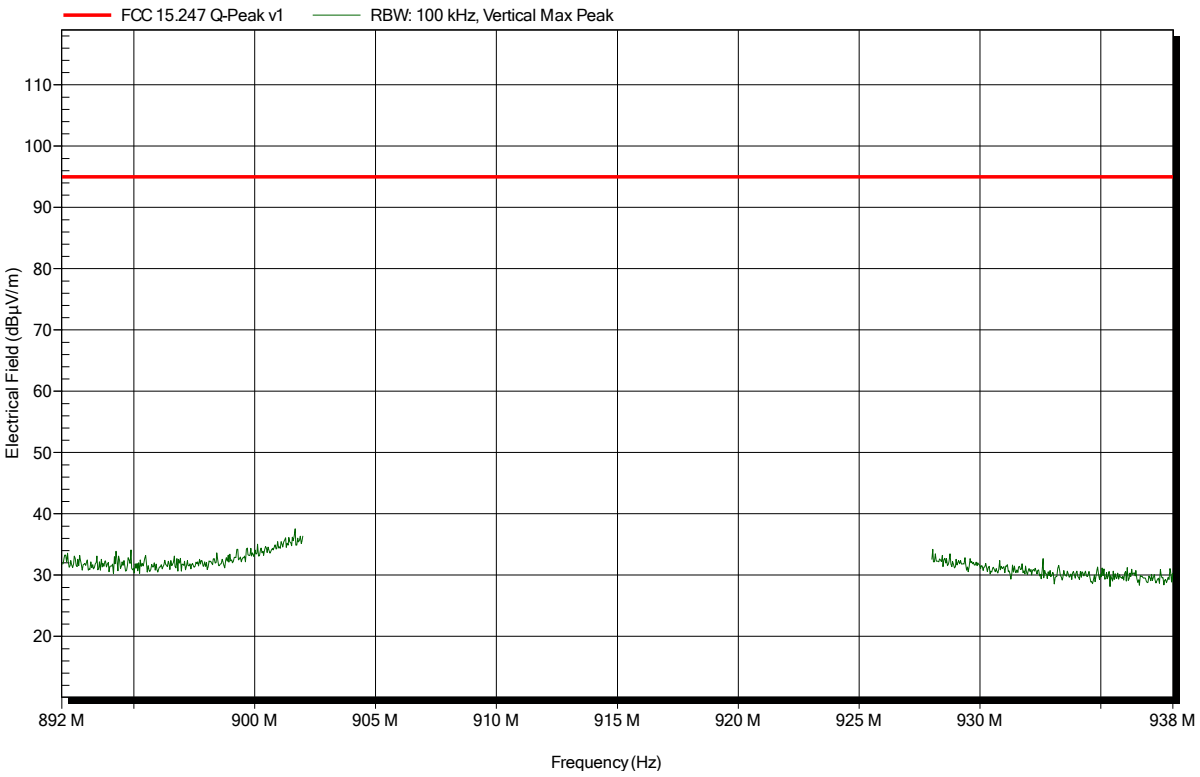


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 9

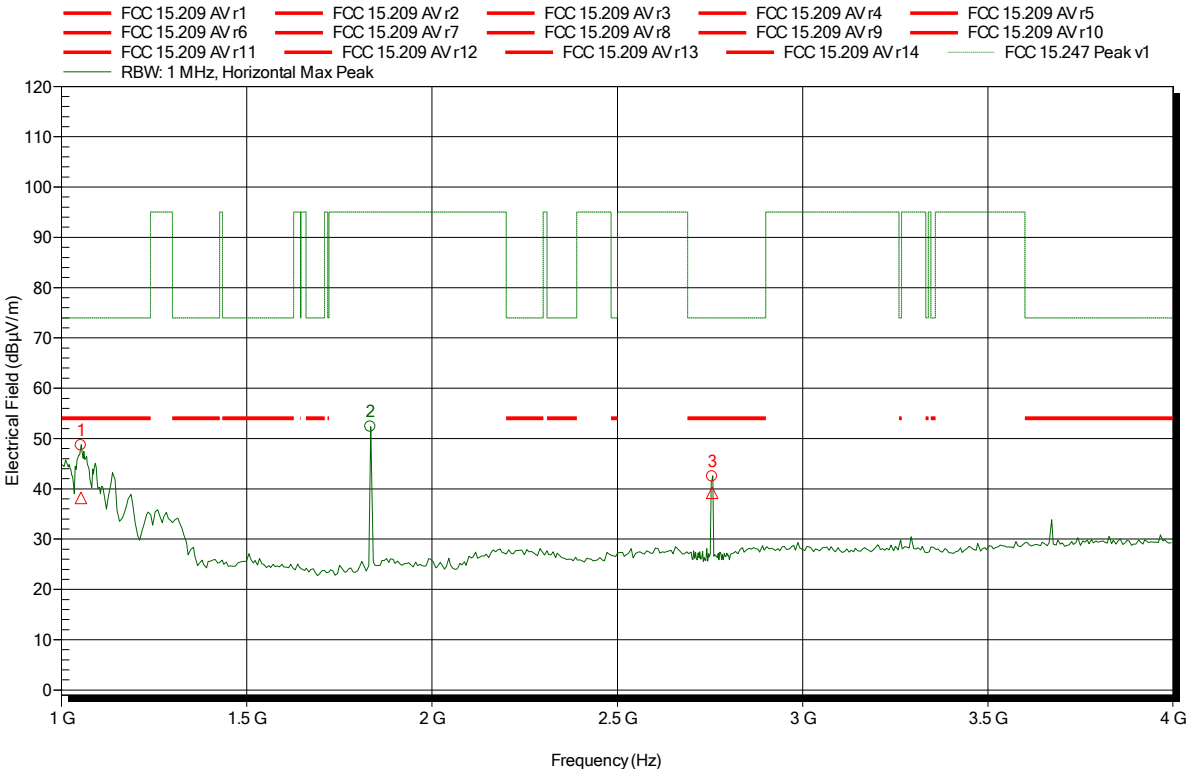


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 1



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.053 GHz	48.66 dBµV/m	74 dBµV/m	-25.34 dB	Pass
1.834 GHz	52.34 dBµV/m	95 dBµV/m	-42.66 dB	Pass
2.756 GHz	42.46 dBµV/m	74 dBµV/m	-31.54 dB	Pass

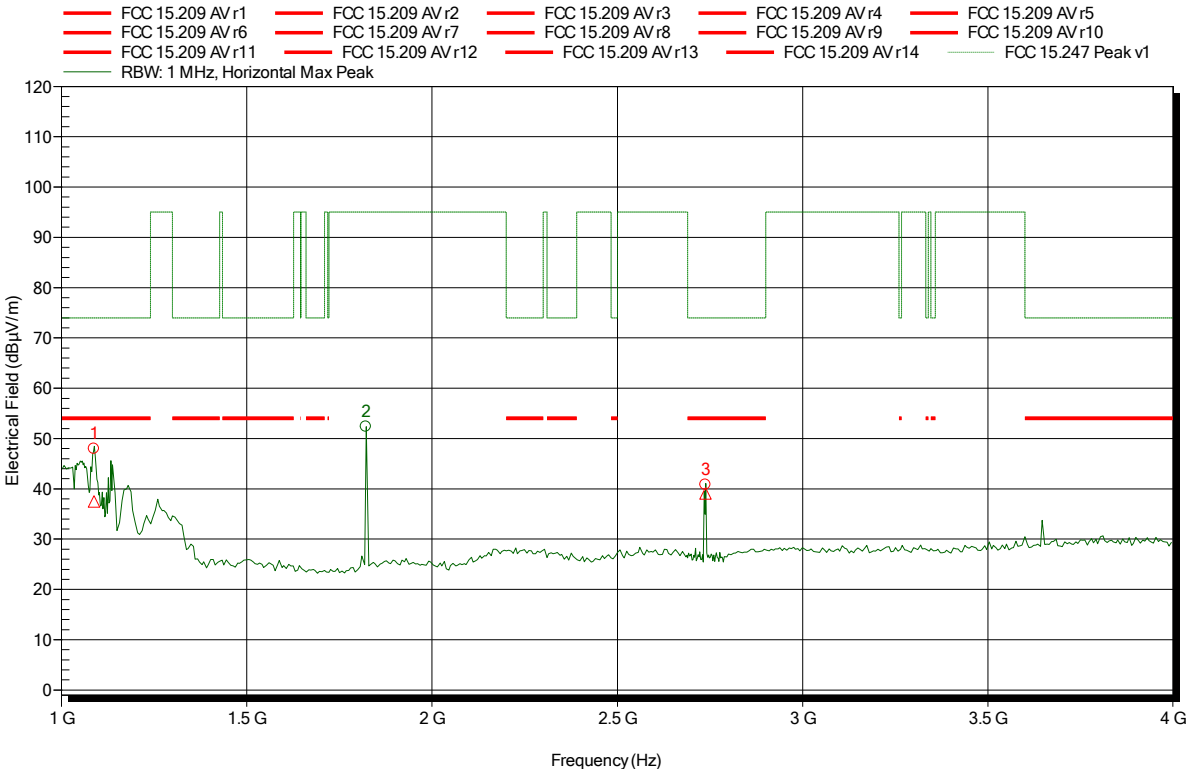
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.053 GHz	38.18 dBµV/m	54 dBµV/m	-15.82 dB	Pass
1.834 GHz				
2.756 GHz	39.25 dBµV/m	54 dBµV/m	-14.75 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 11



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.088 GHz	47.95 dBµV/m	74 dBµV/m	-26.05 dB	Pass
1.822 GHz	52.35 dBµV/m	95 dBµV/m	-42.65 dB	Pass
2.738 GHz	40.82 dBµV/m	74 dBµV/m	-33.18 dB	Pass

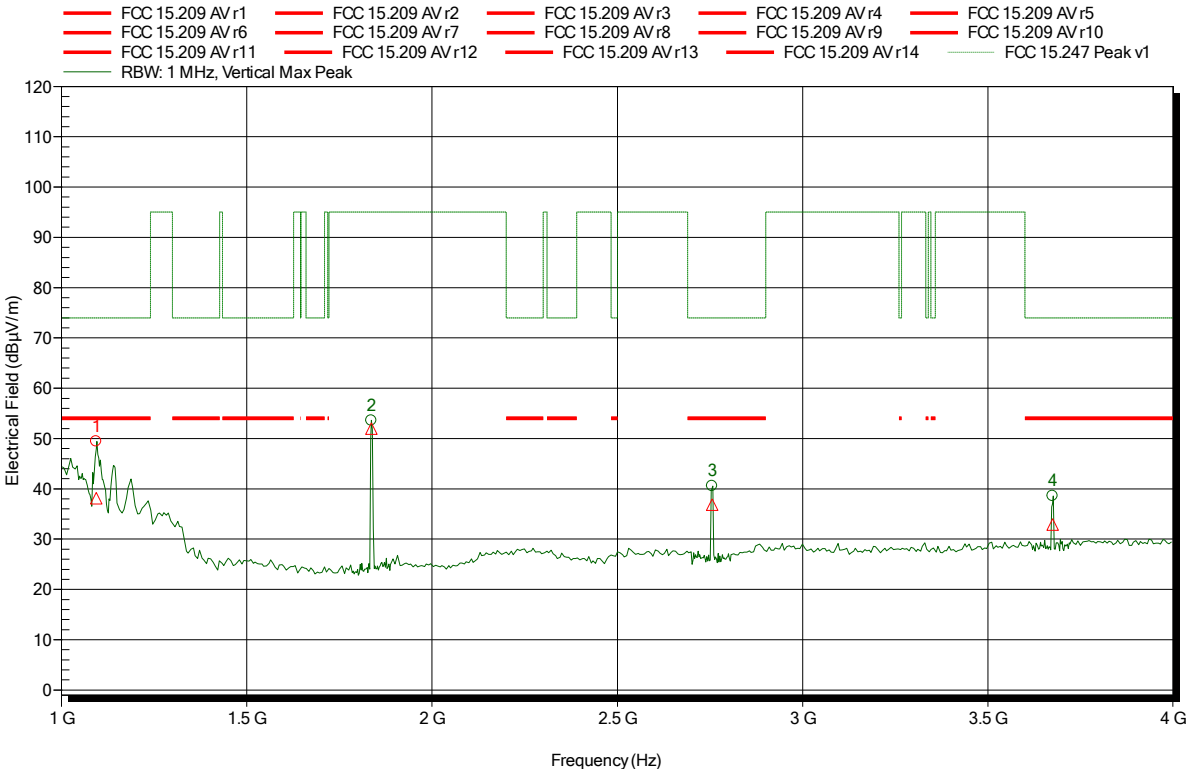
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.088 GHz	37.47 dBµV/m	54 dBµV/m	-16.53 dB	Pass
1.822 GHz				
2.738 GHz	39.12 dBµV/m	54 dBµV/m	-14.88 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 4



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.094 GHz	49.42 dBµV/m	74 dBµV/m	-24.58 dB	Pass
1.837 GHz	53.54 dBµV/m	95 dBµV/m	-41.46 dB	Pass
2.756 GHz	40.53 dBµV/m	74 dBµV/m	-33.47 dB	Pass
3.675 GHz	38.56 dBµV/m	74 dBµV/m	-35.44 dB	Pass

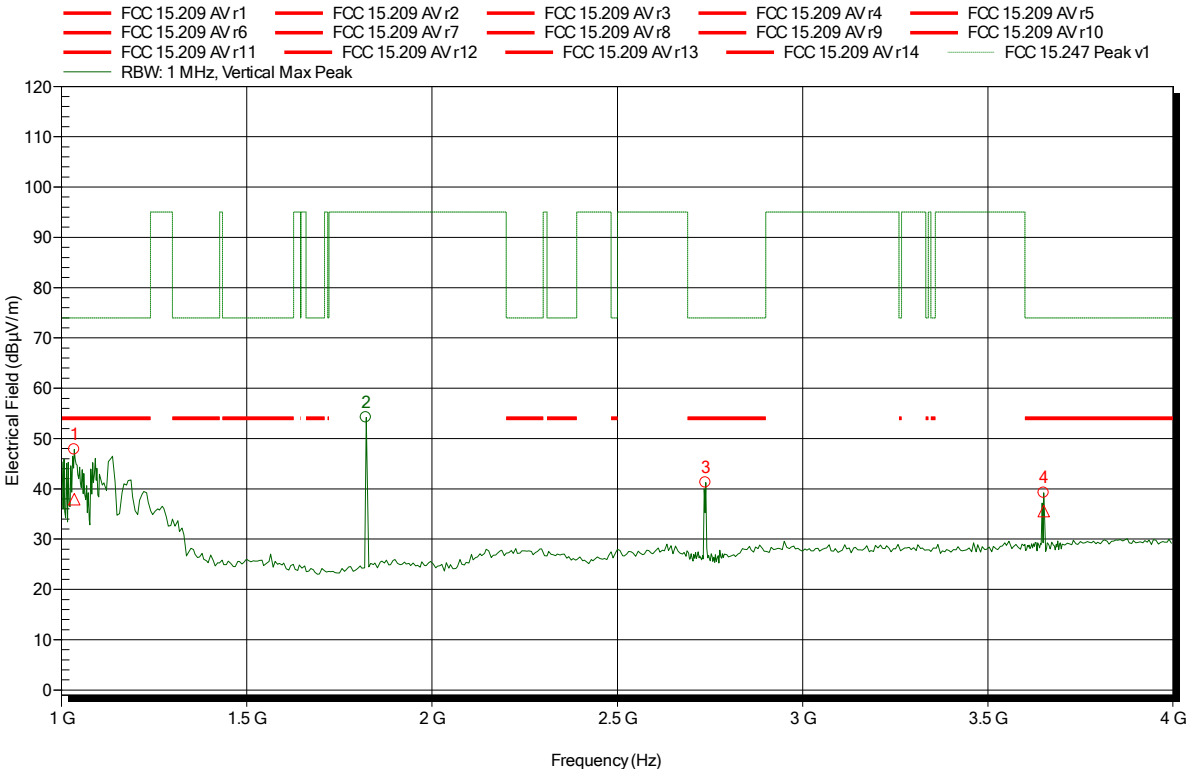
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.094 GHz	38.15 dBµV/m	54 dBµV/m	-15.85 dB	Pass
1.837 GHz	52 dBµV/m			
2.756 GHz	36.87 dBµV/m	54 dBµV/m	-17.13 dB	Pass
3.675 GHz	32.92 dBµV/m	54 dBµV/m	-21.08 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 15



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.035 GHz	47.85 dBµV/m	74 dBµV/m	-26.15 dB	Pass
1.822 GHz	54.19 dBµV/m	95 dBµV/m	-40.81 dB	Pass
2.737 GHz	41.26 dBµV/m	74 dBµV/m	-32.74 dB	Pass
3.65 GHz	39.21 dBµV/m	74 dBµV/m	-34.79 dB	Pass

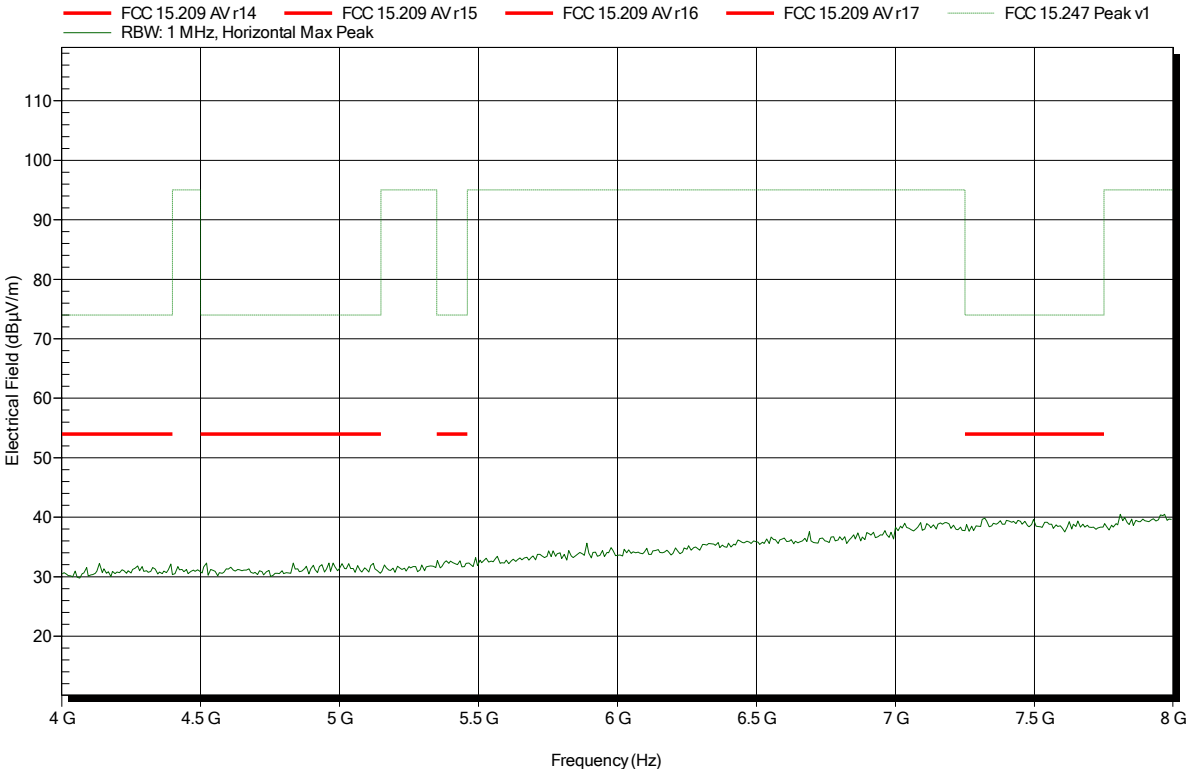
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.035 GHz	37.95 dBµV/m	54 dBµV/m	-16.05 dB	Pass
1.822 GHz				
2.737 GHz				
3.65 GHz	35.56 dBµV/m	54 dBµV/m	-18.44 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 2

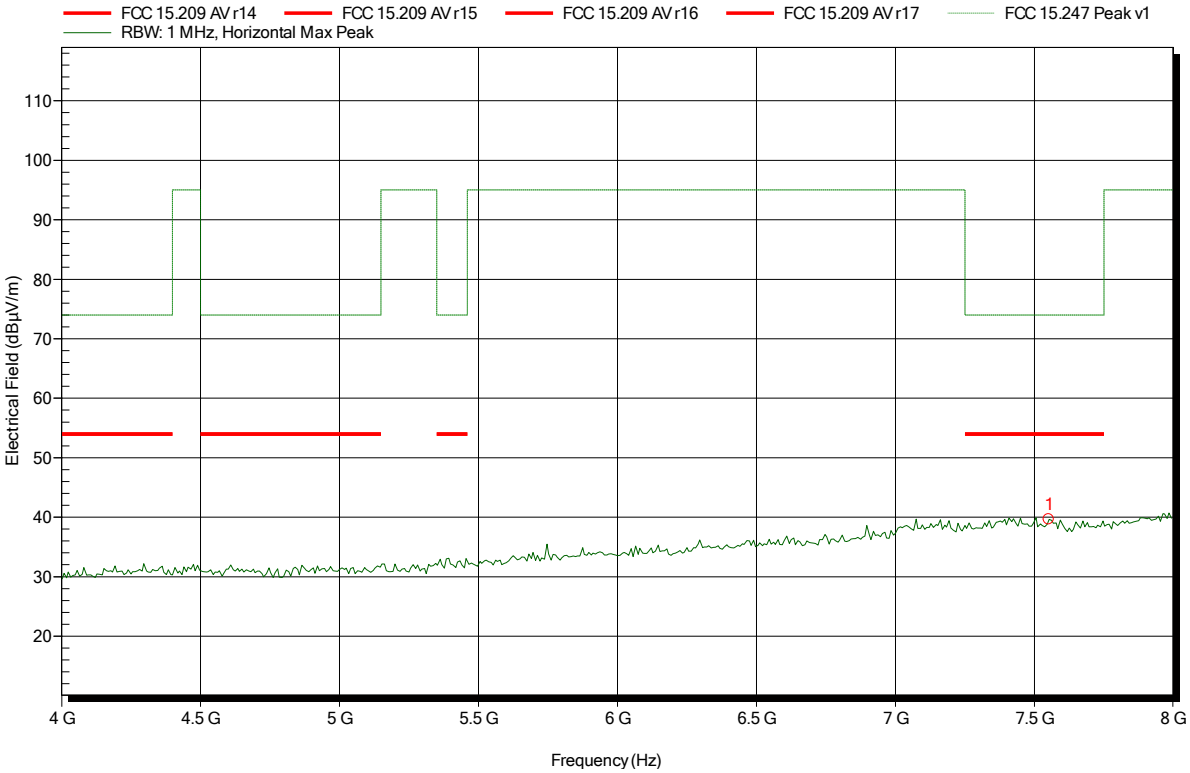


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 12



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.552 GHz	39.64 dBµV/m	74 dBµV/m	-34.36 dB	Pass

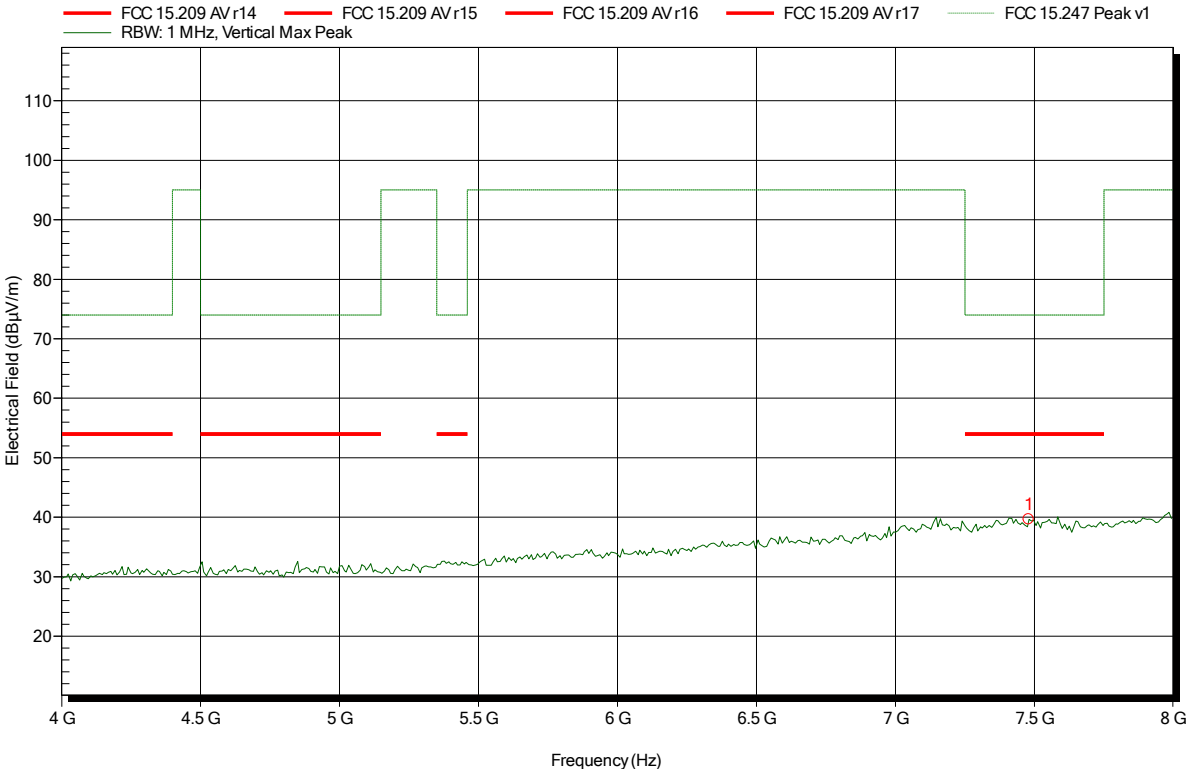
Frequency
7.552 GHz

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 5



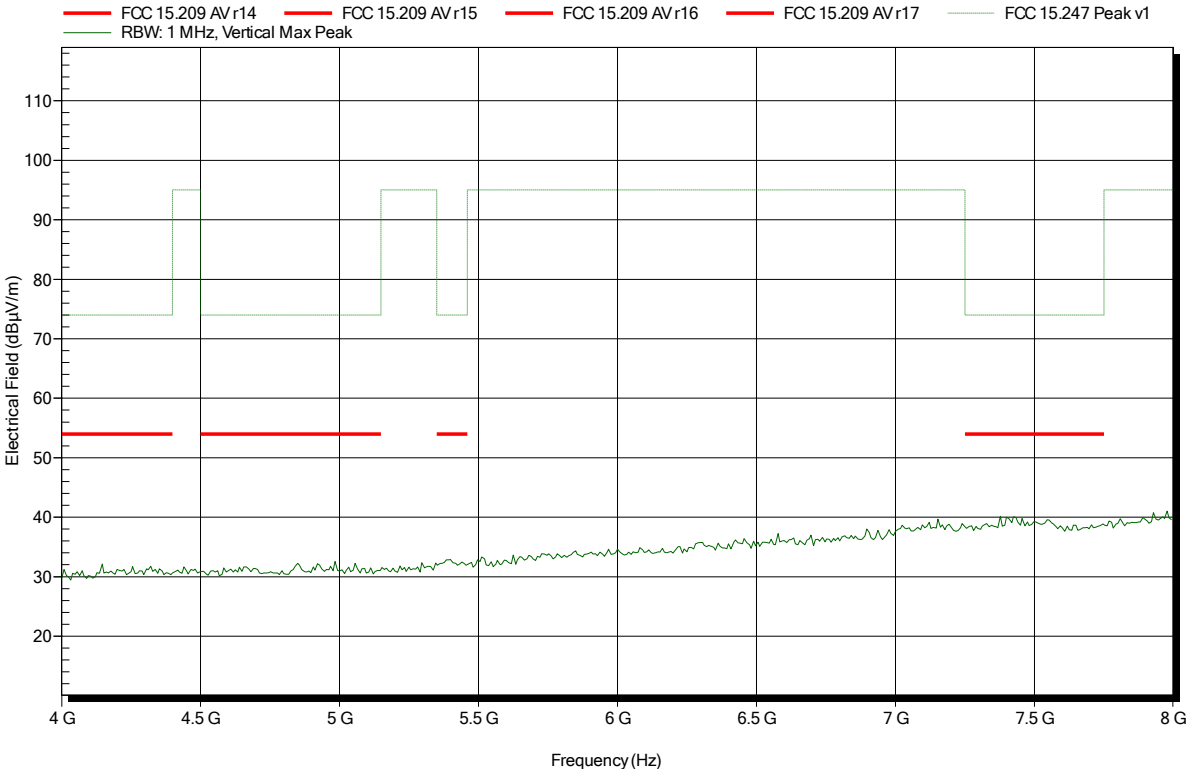
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.48 GHz	39.61 dBµV/m	74 dBµV/m	-34.39 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 16

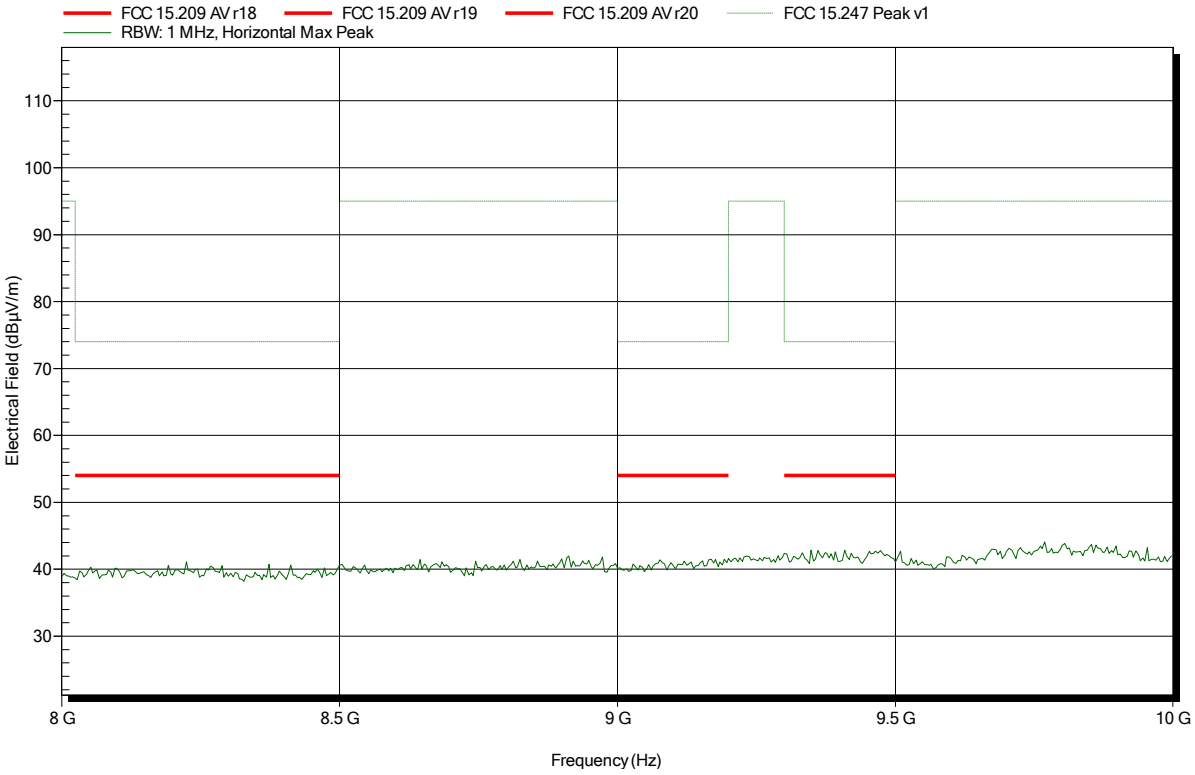


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 3

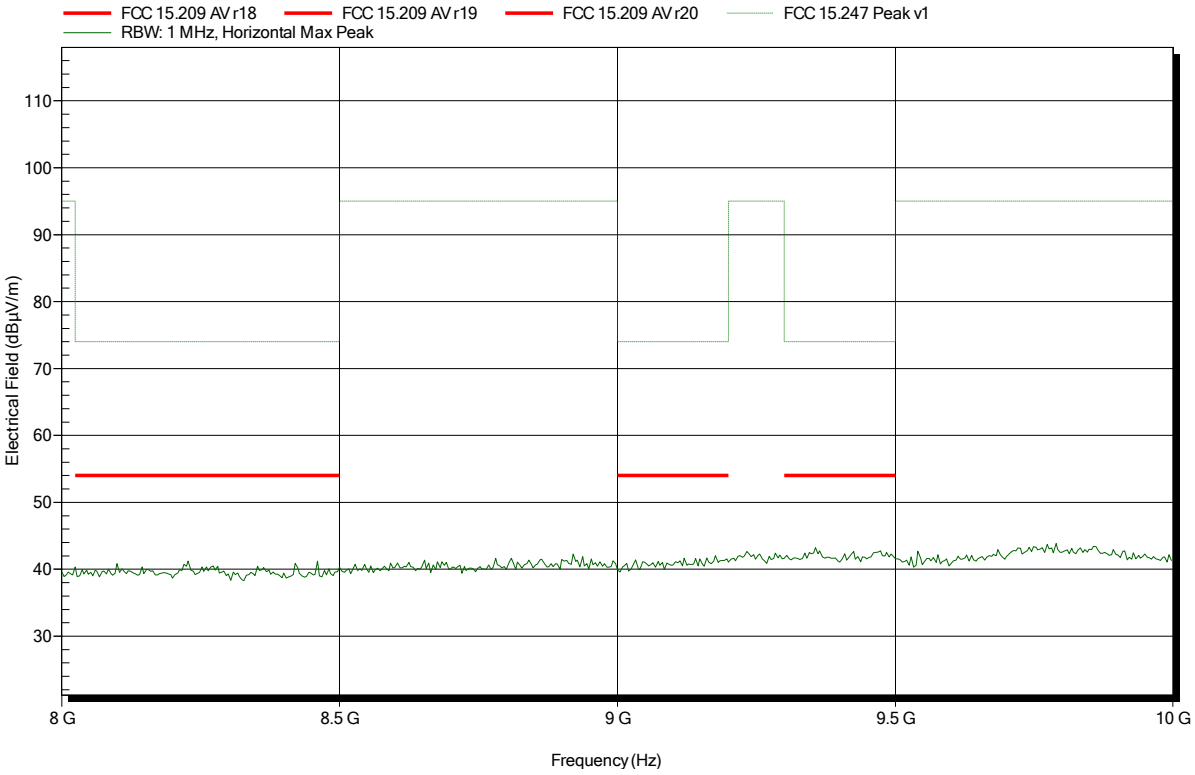


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 13

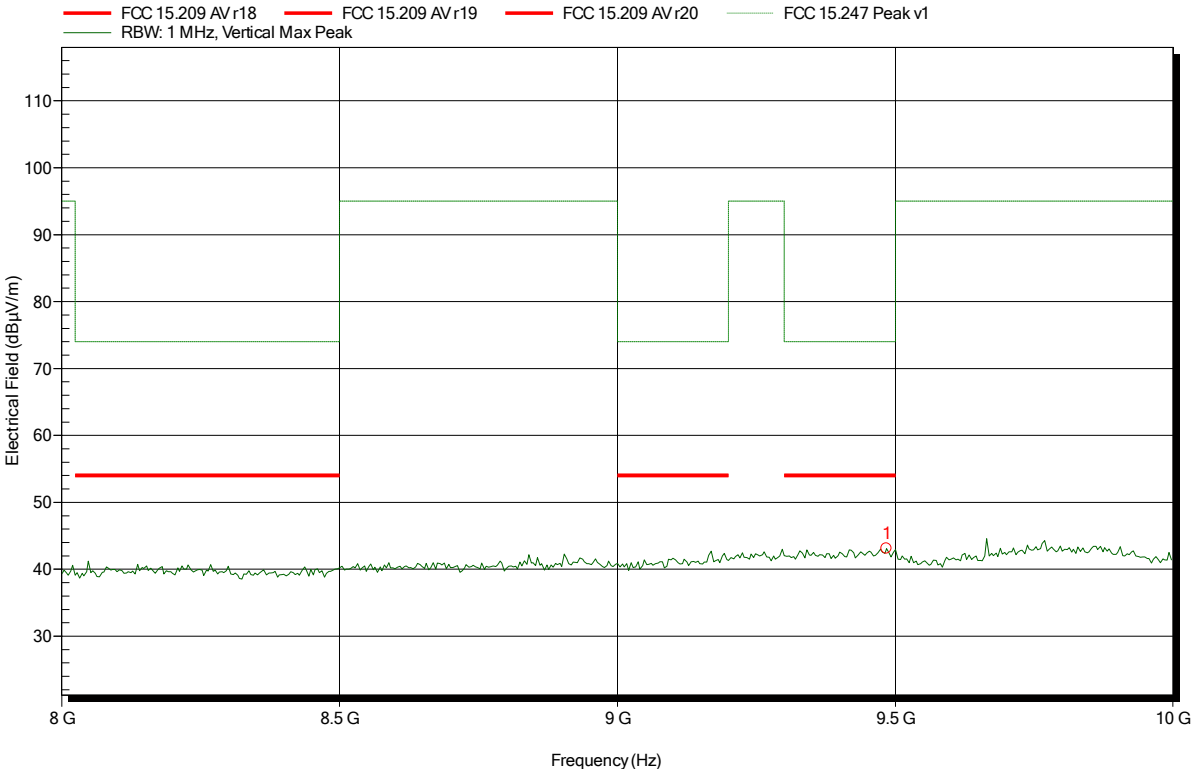


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-21
Note:	

Index 6



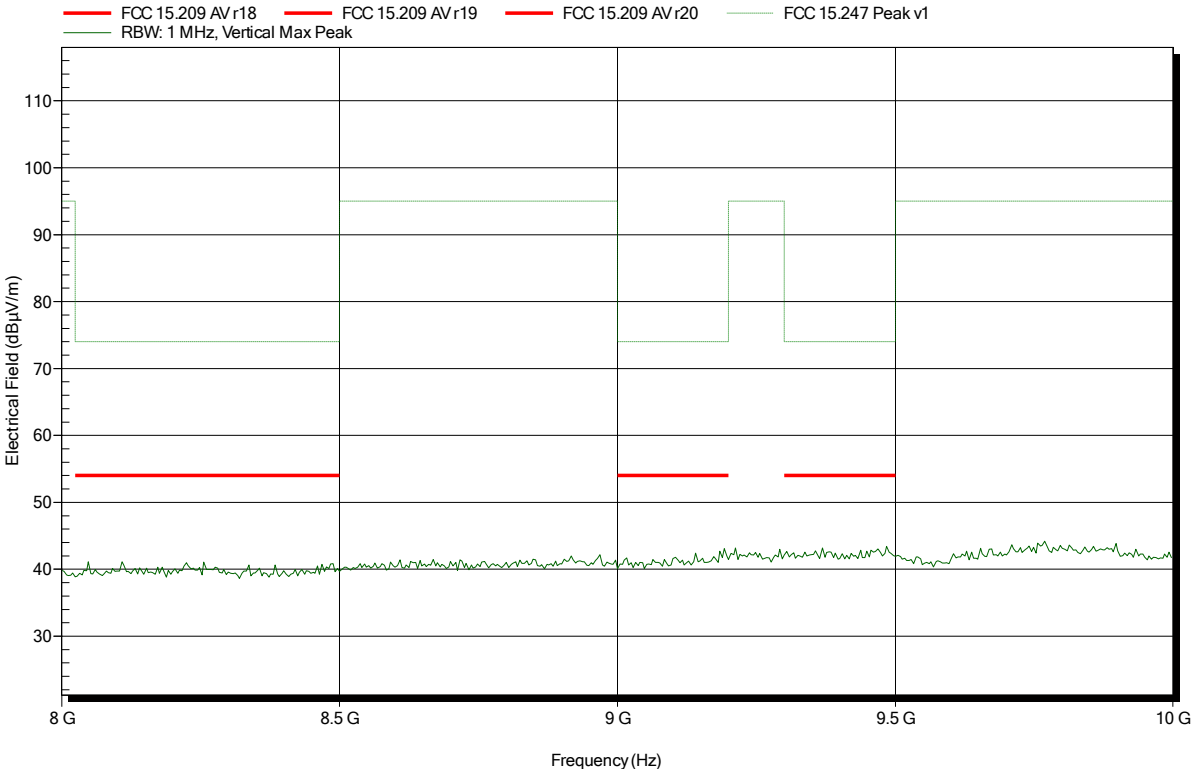
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
9.484 GHz	43.07 dBµV/m	74 dBµV/m	-30.93 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-21
Note:	

Index 17

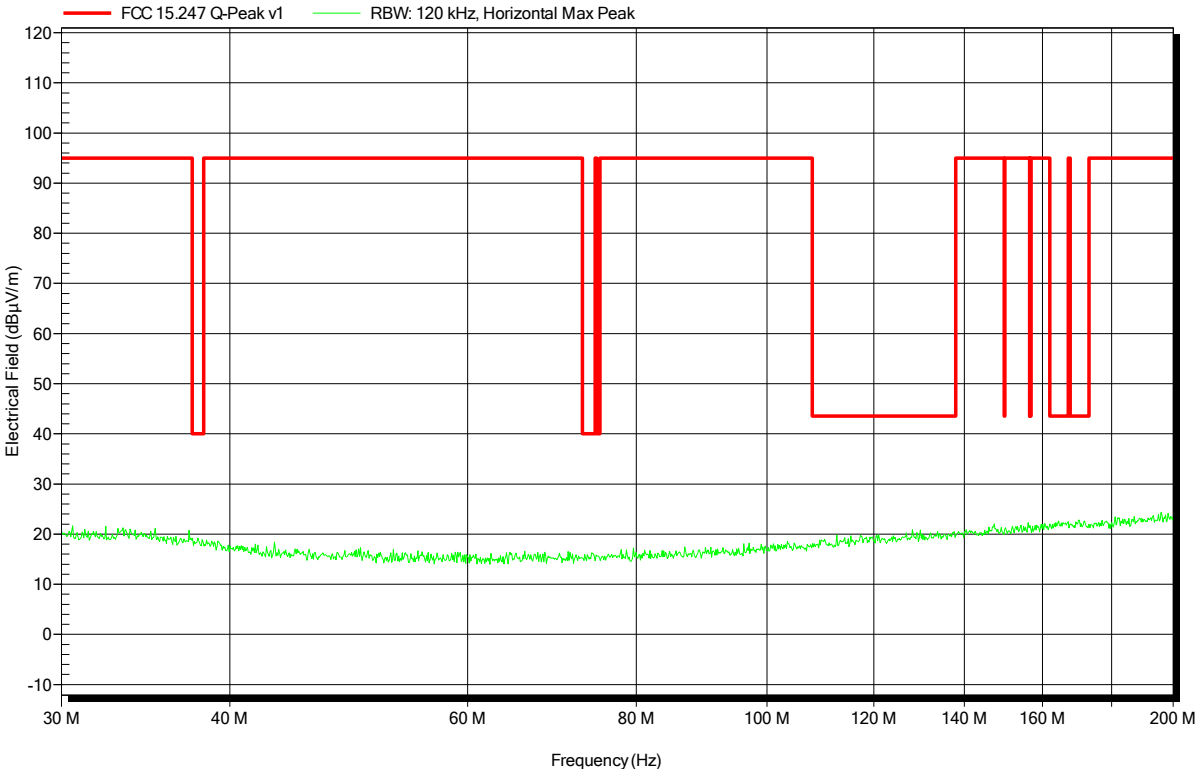


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 23

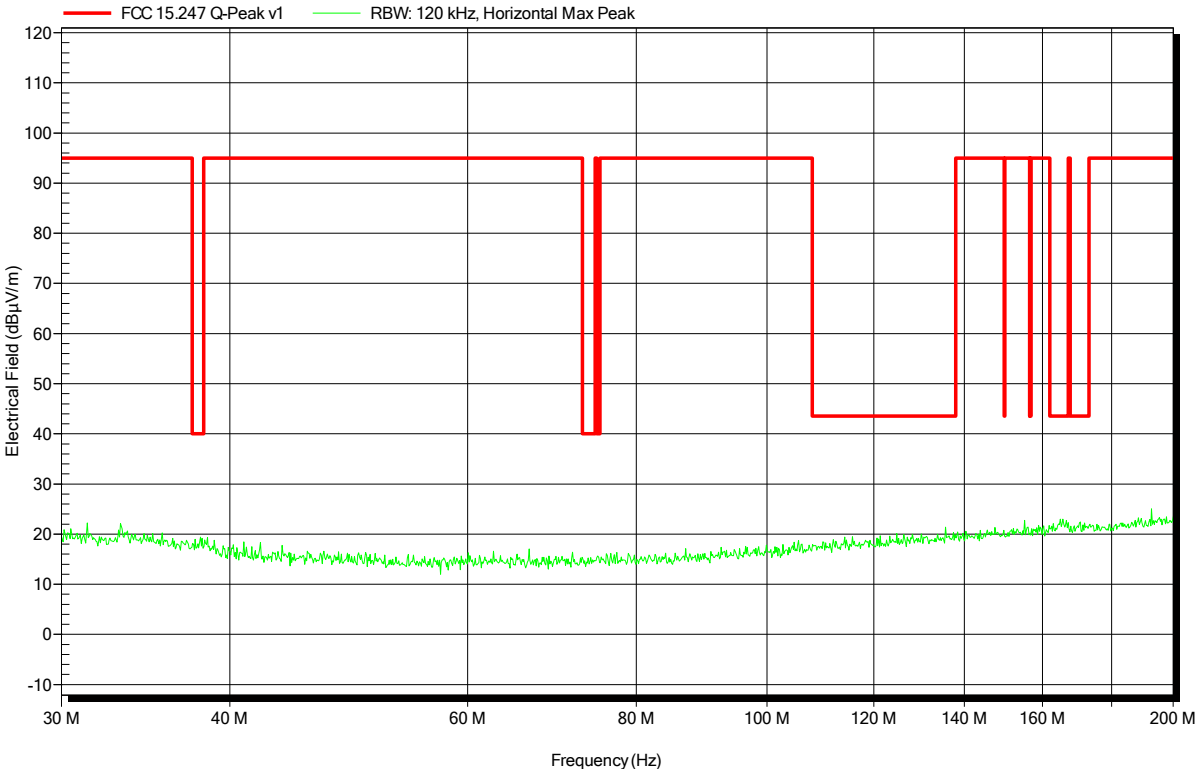


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 24

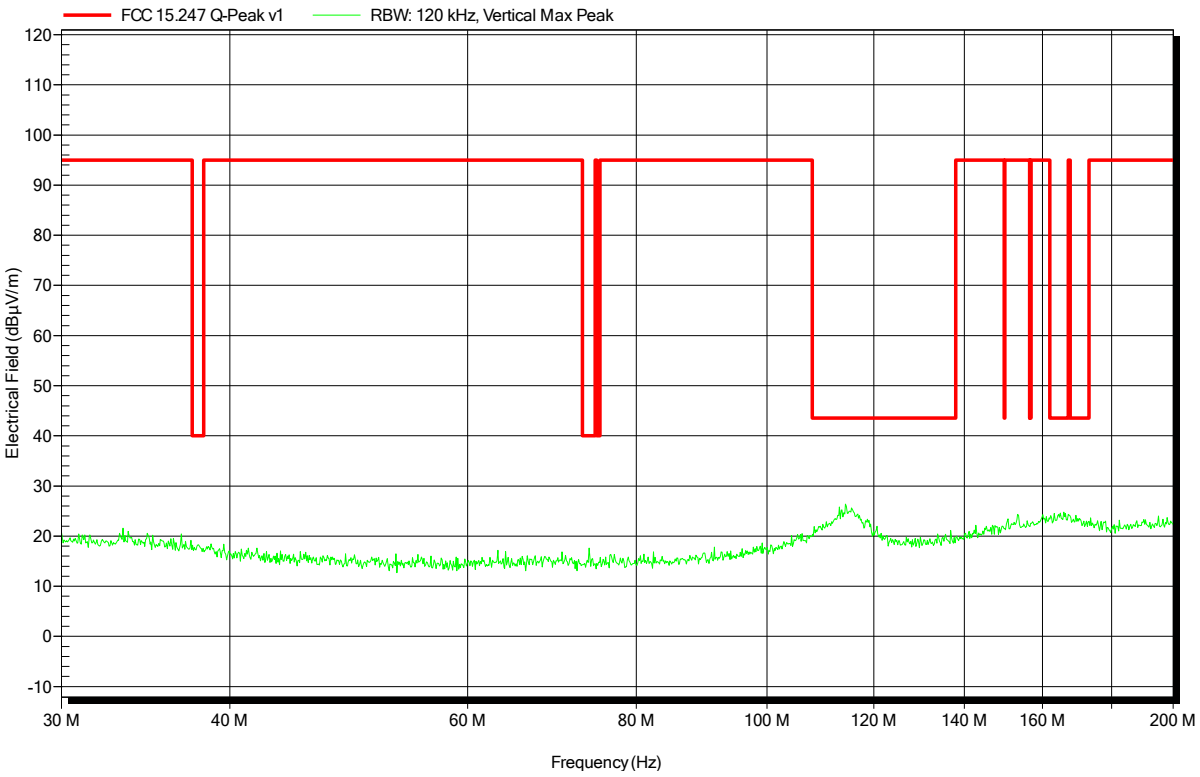


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 22

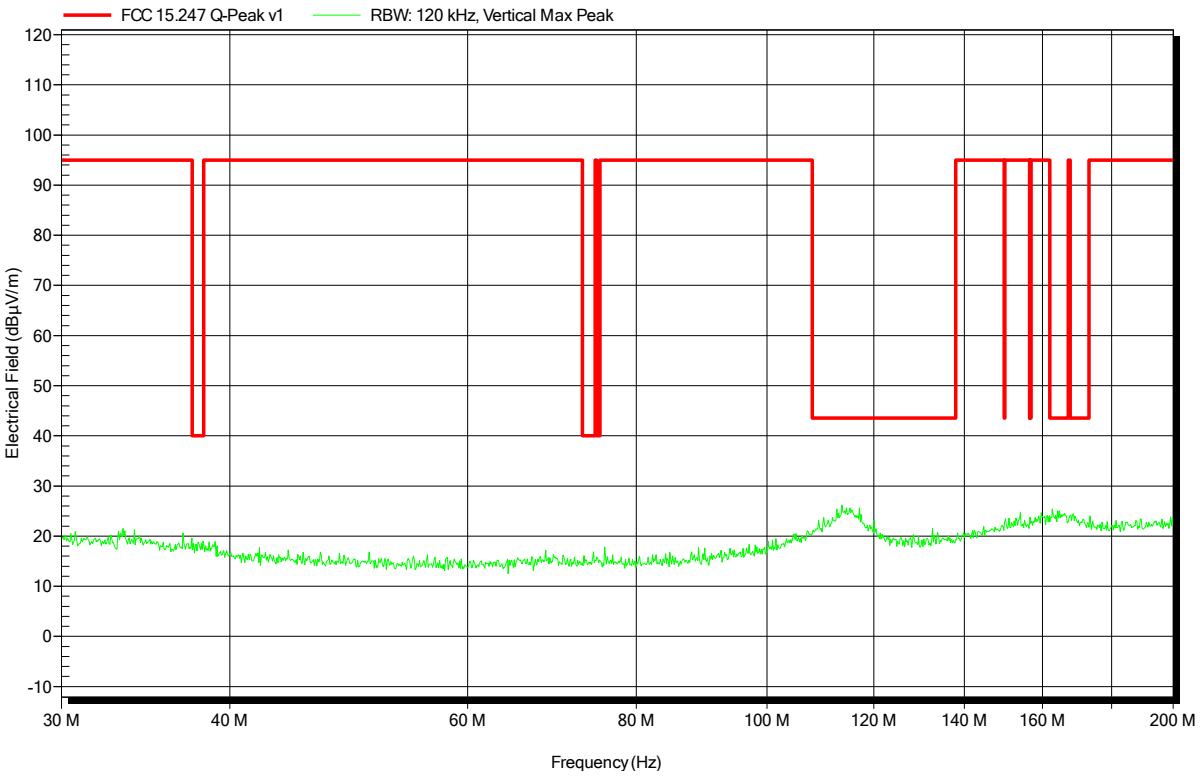


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 25

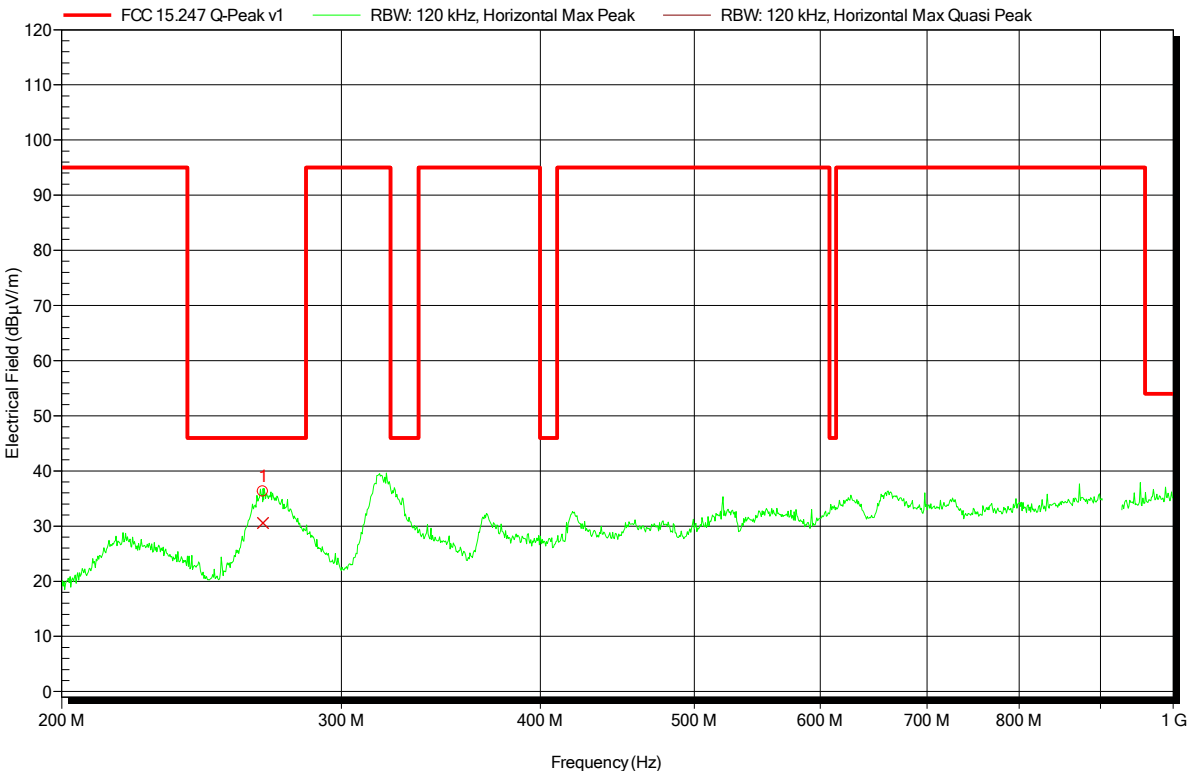


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 20



Frequency	Peak	Peak Limit	Peak Difference	Status
267.8 MHz	36.3 dBµV/m	46 dBµV/m	-9.73 dB	Pass

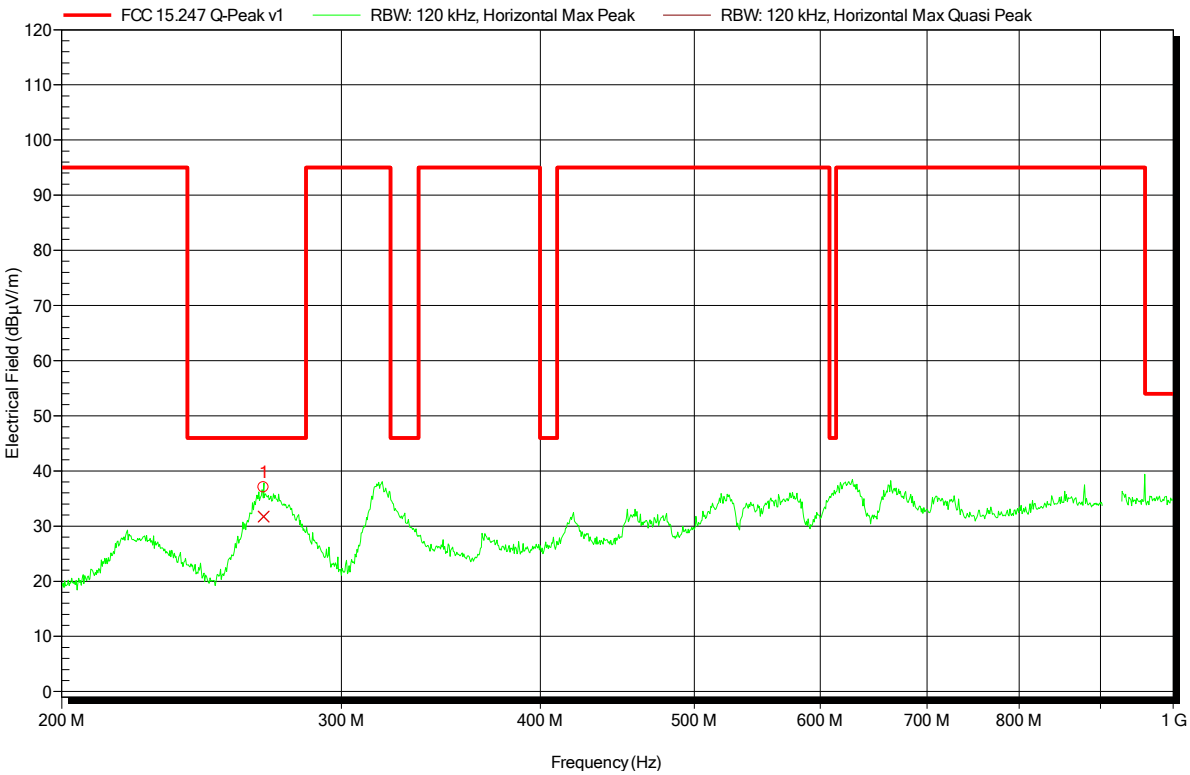
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
267.8 MHz	30.6 dBµV/m	46 dBµV/m	-15.43 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 27



Frequency	Peak	Peak Limit	Peak Difference	Status
268.04 MHz	37 dBµV/m	46 dBµV/m	-9 dB	Pass

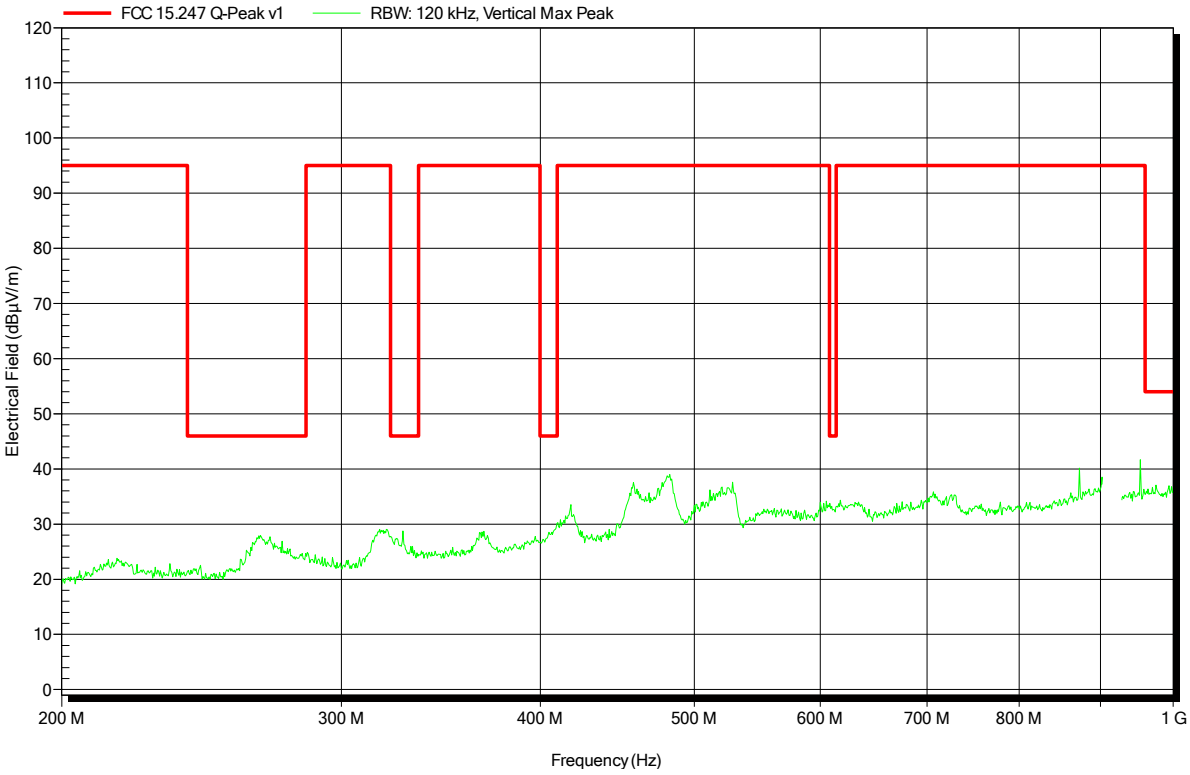
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
268.04 MHz	31.8 dBµV/m	46 dBµV/m	-14.25 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 21

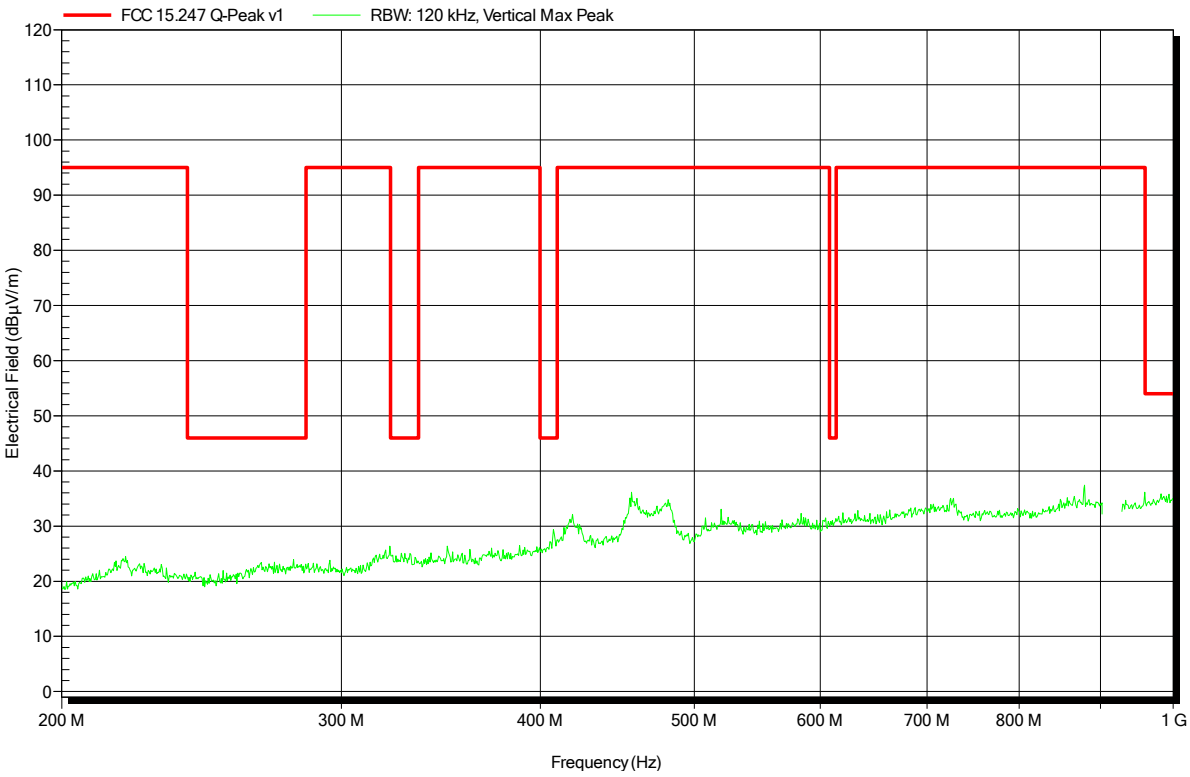


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 26

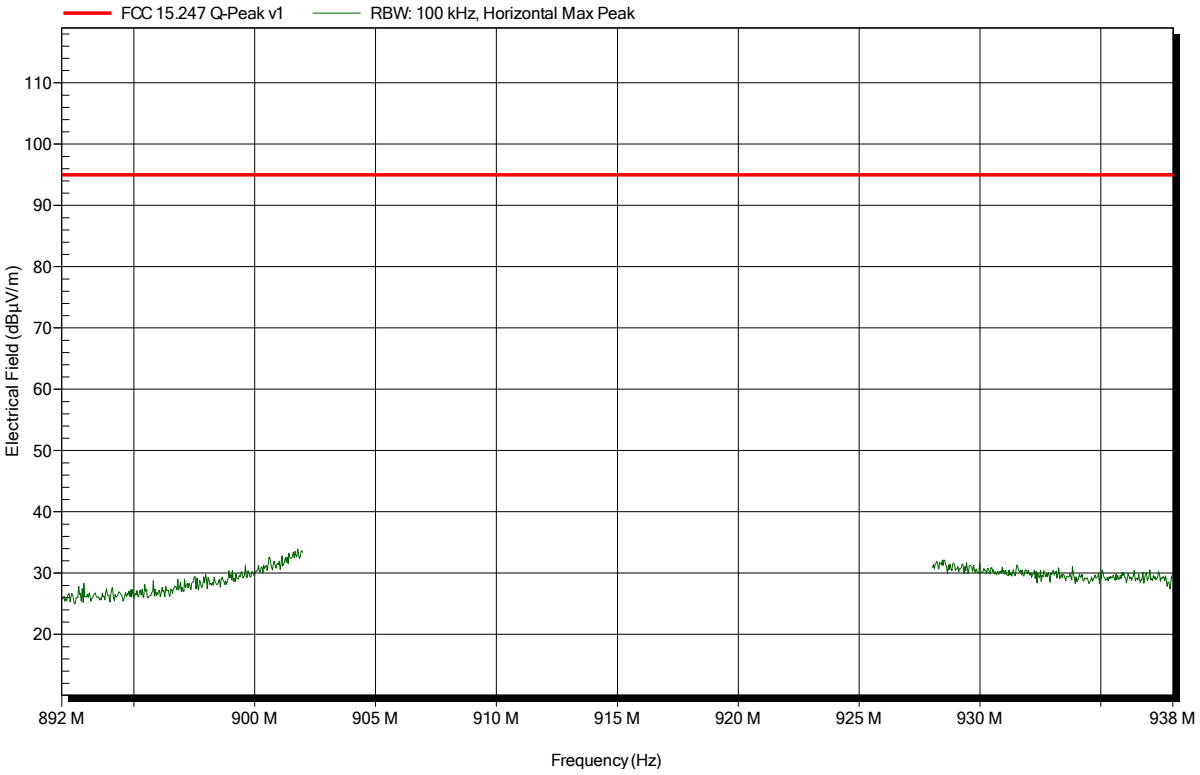


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 9

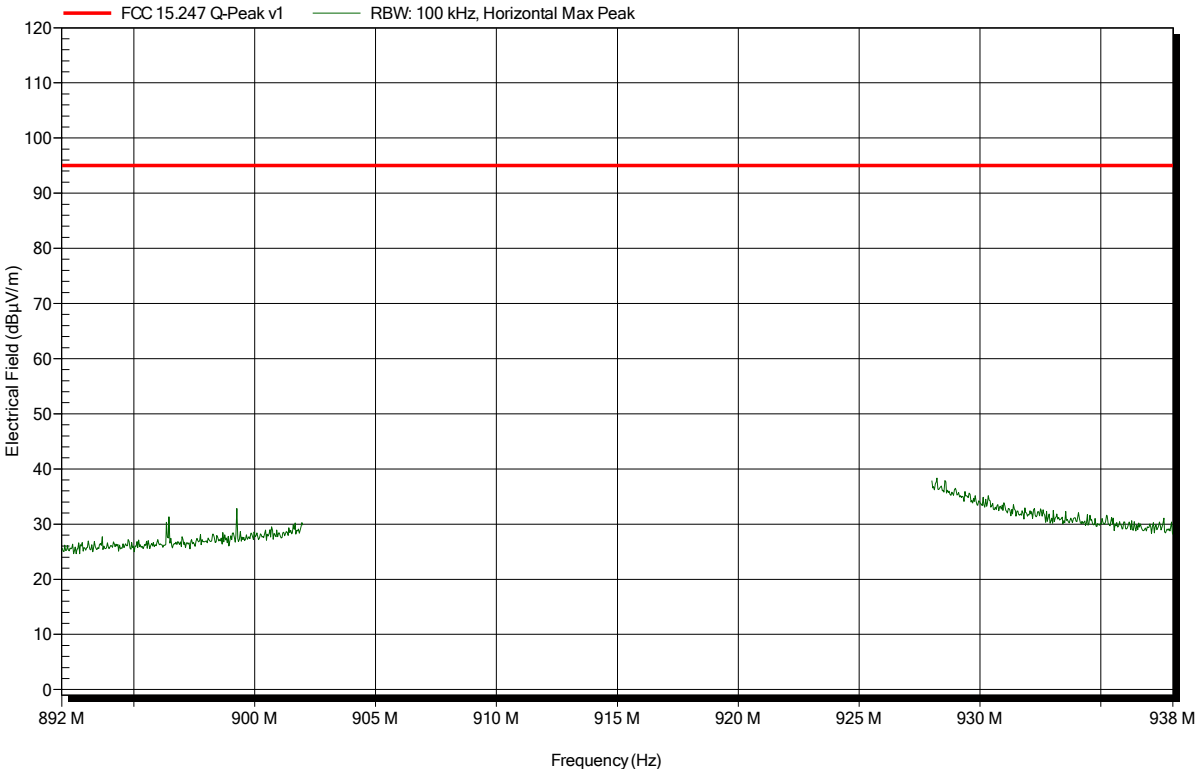


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 11

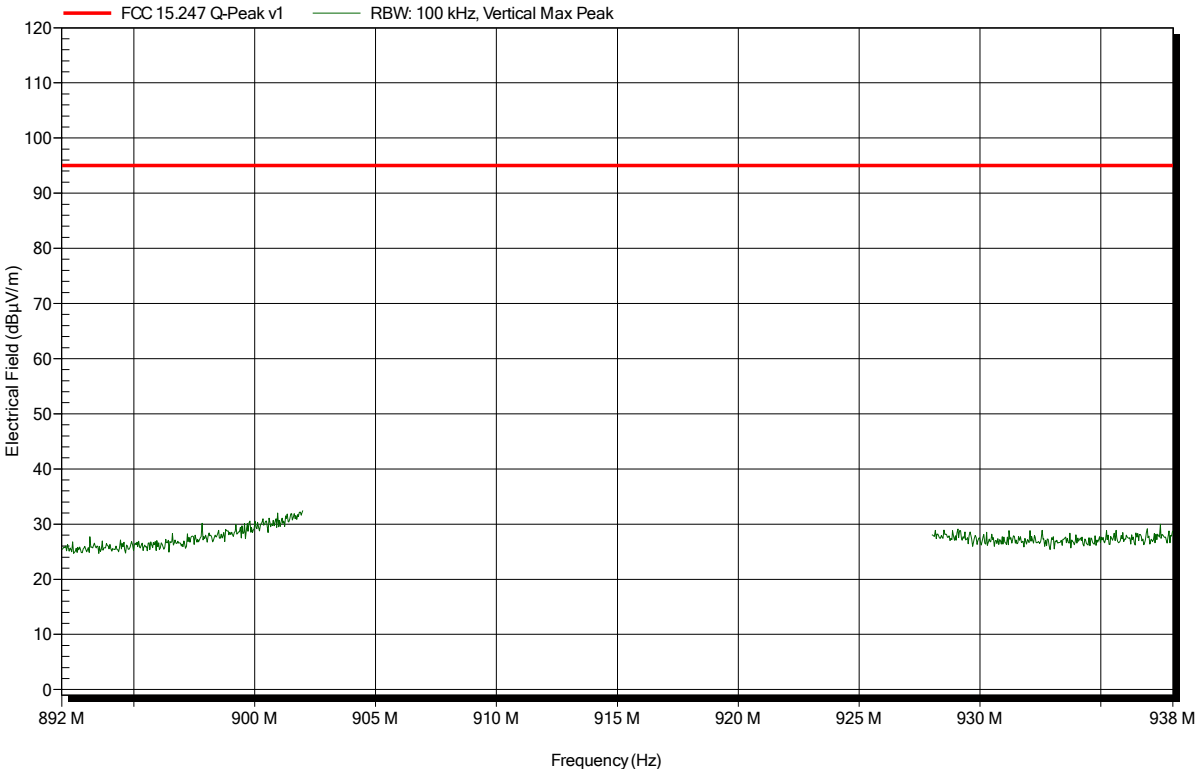


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 10

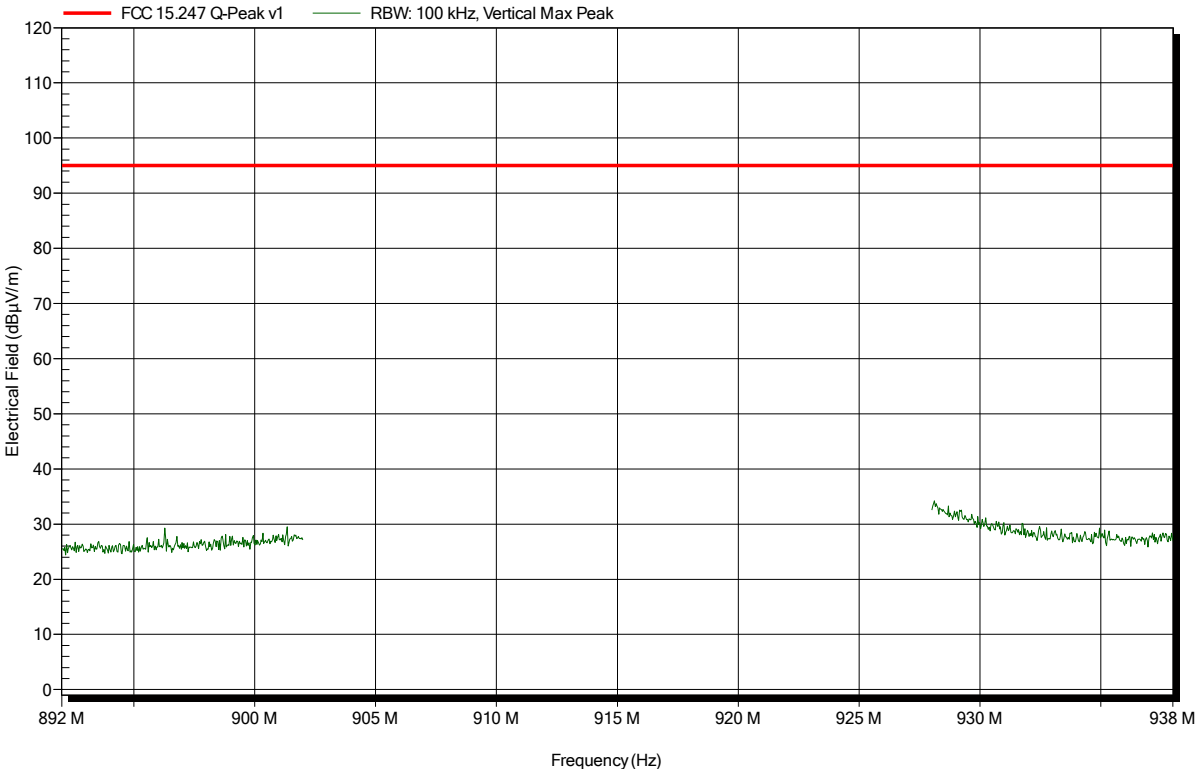


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 12

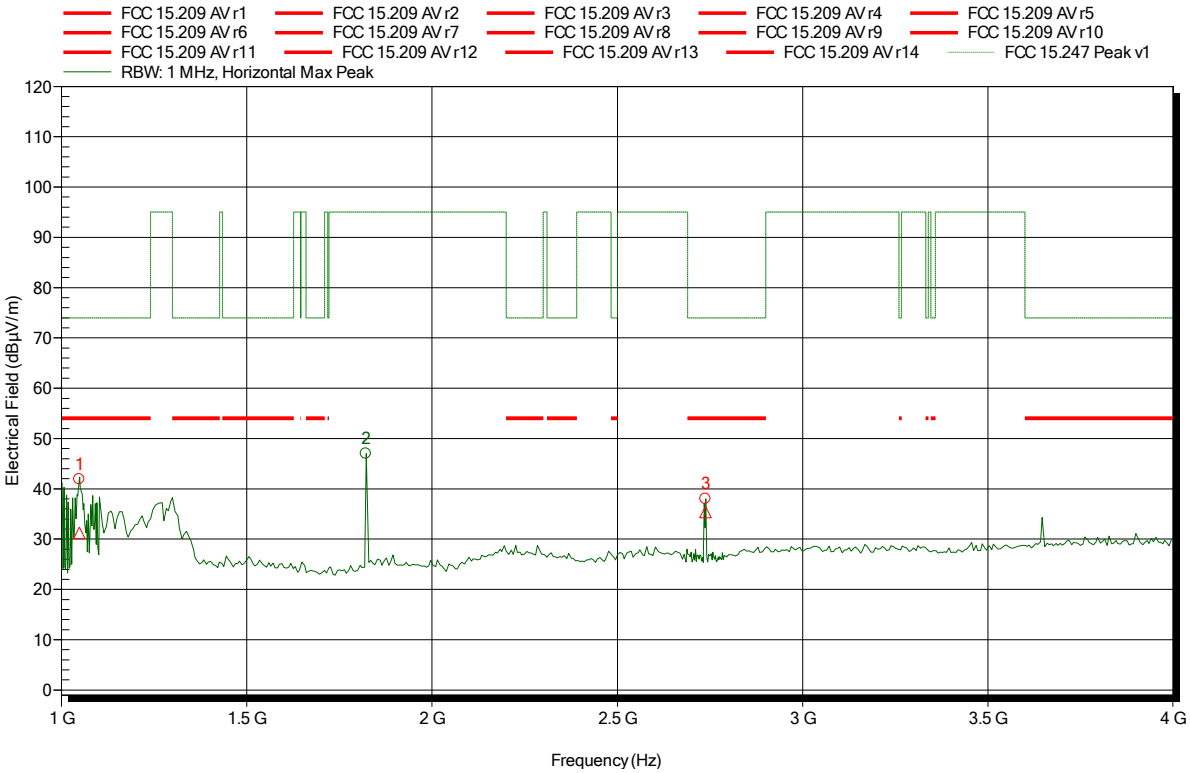


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 3



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.048 GHz	41.9 dBµV/m	74 dBµV/m	-32.1 dB	Pass
1.822 GHz	47.01 dBµV/m	95 dBµV/m	-47.99 dB	Pass
2.738 GHz	38 dBµV/m	74 dBµV/m	-36 dB	Pass

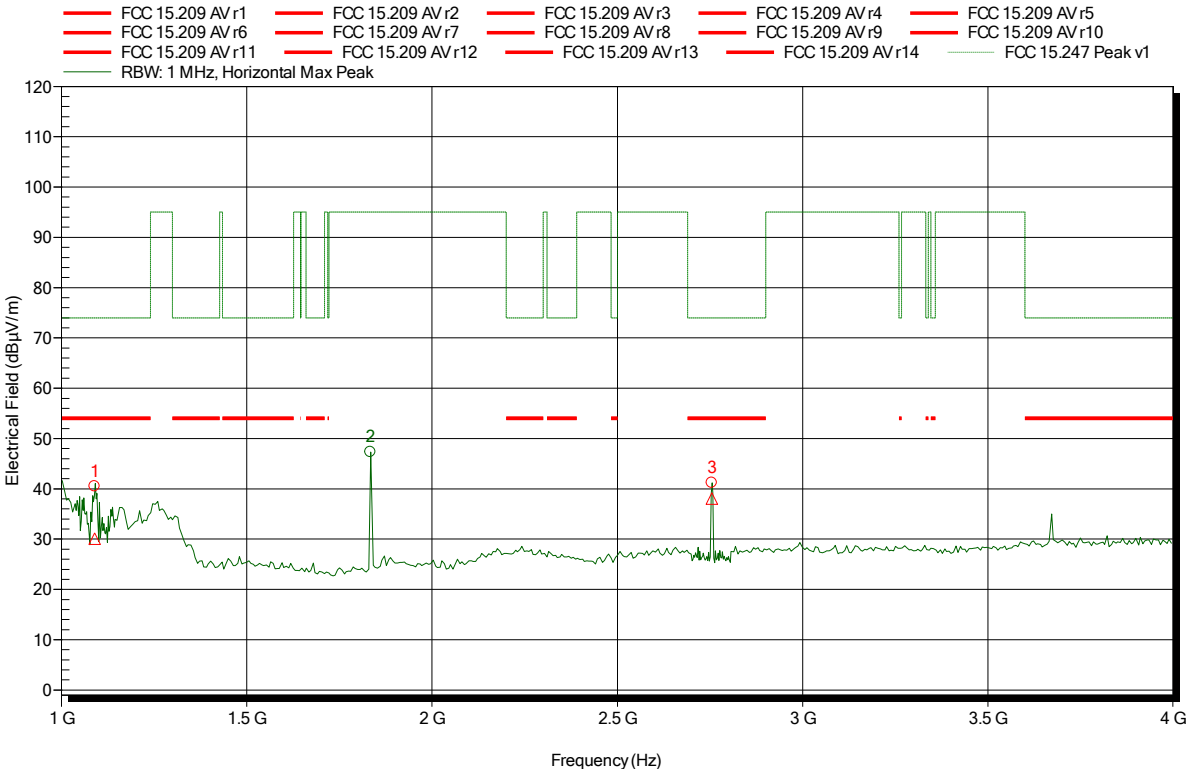
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.048 GHz	31.26 dBµV/m	54 dBµV/m	-22.74 dB	Pass
1.822 GHz				
2.738 GHz	35.39 dBµV/m	54 dBµV/m	-18.61 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 13



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.09 GHz	40.47 dBµV/m	74 dBµV/m	-33.53 dB	Pass
1.834 GHz	47.29 dBµV/m	95 dBµV/m	-47.71 dB	Pass
2.755 GHz	41.19 dBµV/m	74 dBµV/m	-32.81 dB	Pass

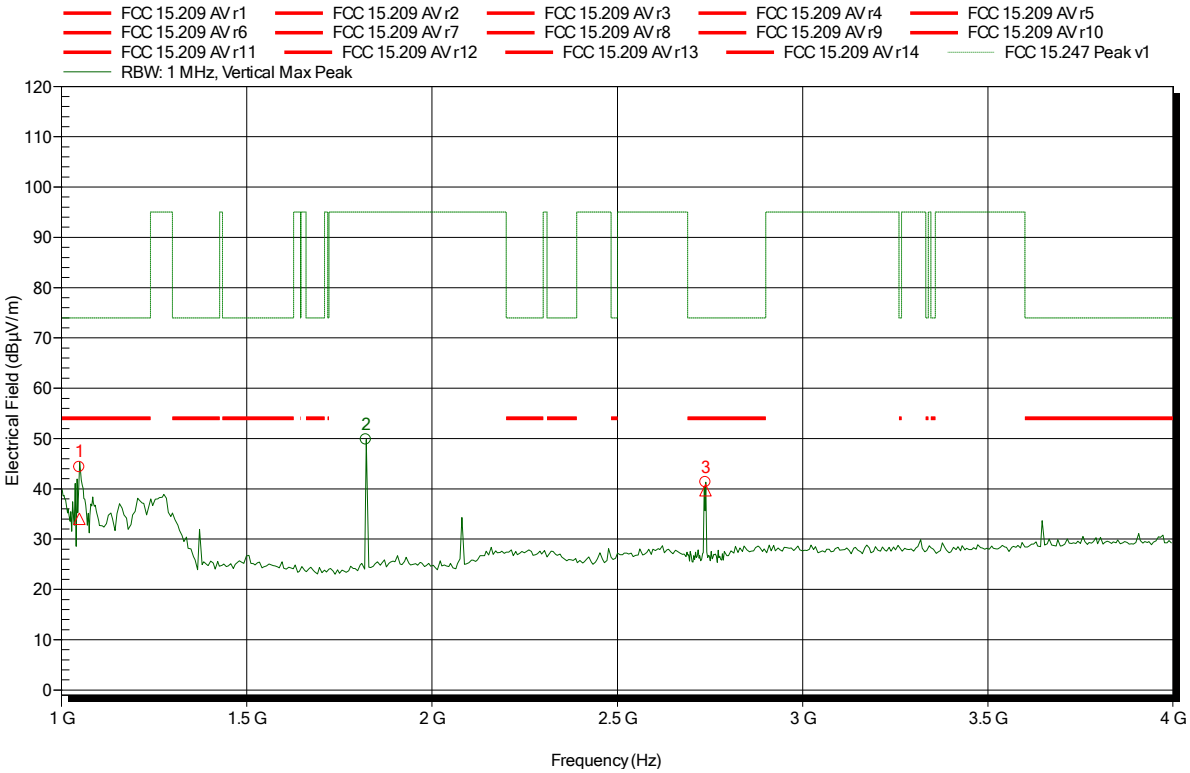
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.09 GHz	30.08 dBµV/m	54 dBµV/m	-23.92 dB	Pass
1.834 GHz				
2.755 GHz	38.05 dBµV/m	54 dBµV/m	-15.95 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 6



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.049 GHz	44.3 dBµV/m	74 dBµV/m	-29.7 dB	Pass
1.822 GHz	49.77 dBµV/m	95 dBµV/m	-45.23 dB	Pass
2.738 GHz	41.31 dBµV/m	74 dBµV/m	-32.69 dB	Pass

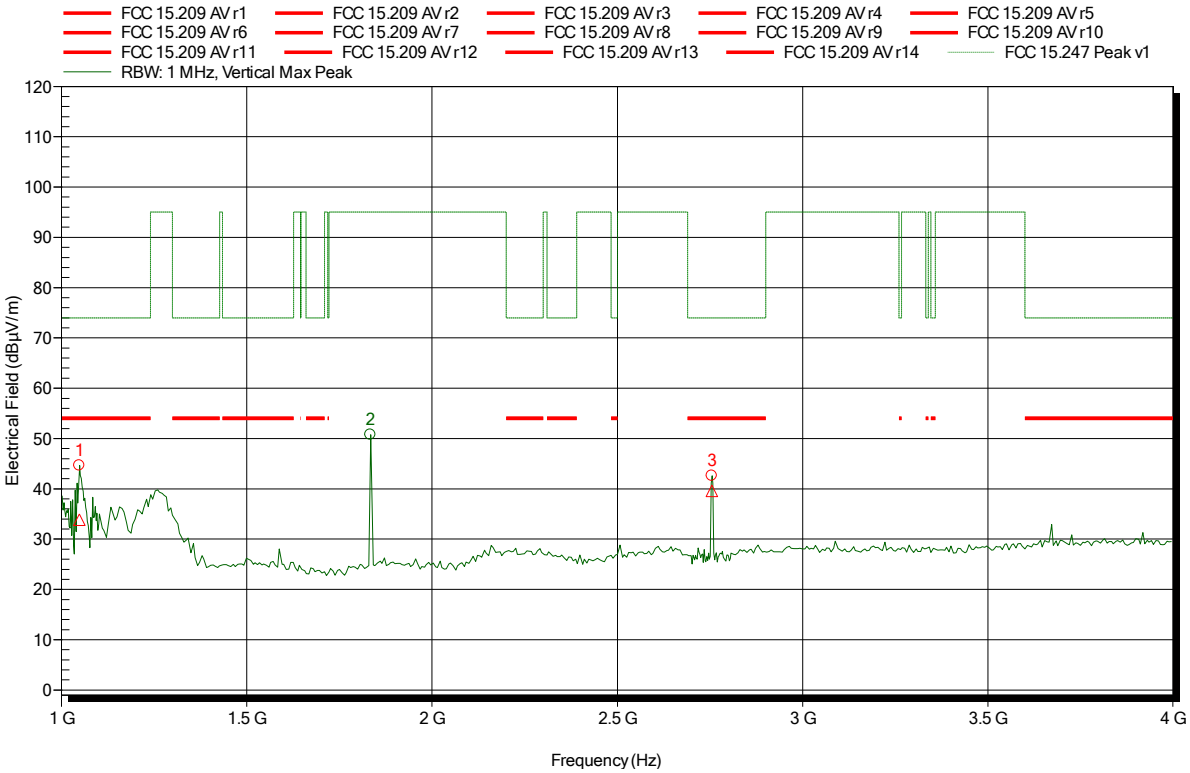
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.049 GHz	34.02 dBµV/m	54 dBµV/m	-19.98 dB	Pass
1.822 GHz				
2.738 GHz	39.7 dBµV/m	54 dBµV/m	-14.3 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 17



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.049 GHz	44.65 dBµV/m	74 dBµV/m	-29.35 dB	Pass
1.834 GHz	50.74 dBµV/m	95 dBµV/m	-44.26 dB	Pass
2.755 GHz	42.58 dBµV/m	74 dBµV/m	-31.42 dB	Pass

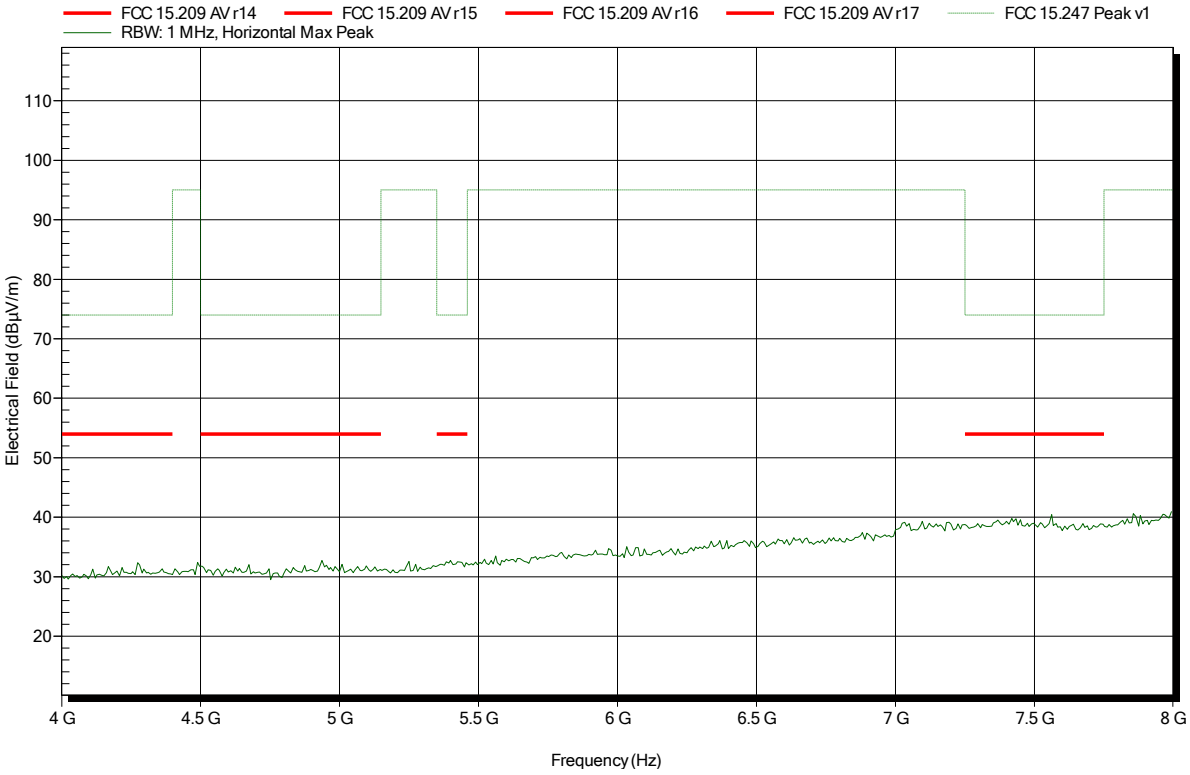
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.049 GHz	33.85 dBµV/m	54 dBµV/m	-20.15 dB	Pass
1.834 GHz				
2.755 GHz	39.57 dBµV/m	54 dBµV/m	-14.43 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 4

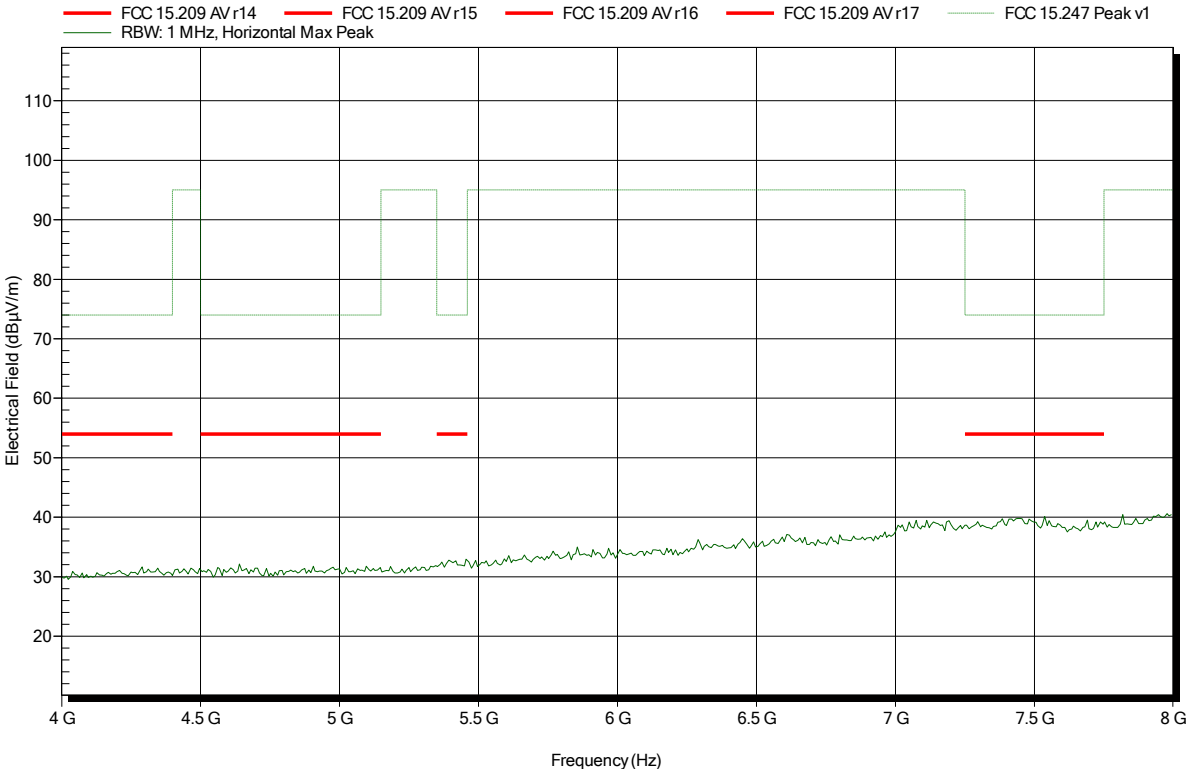


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 15

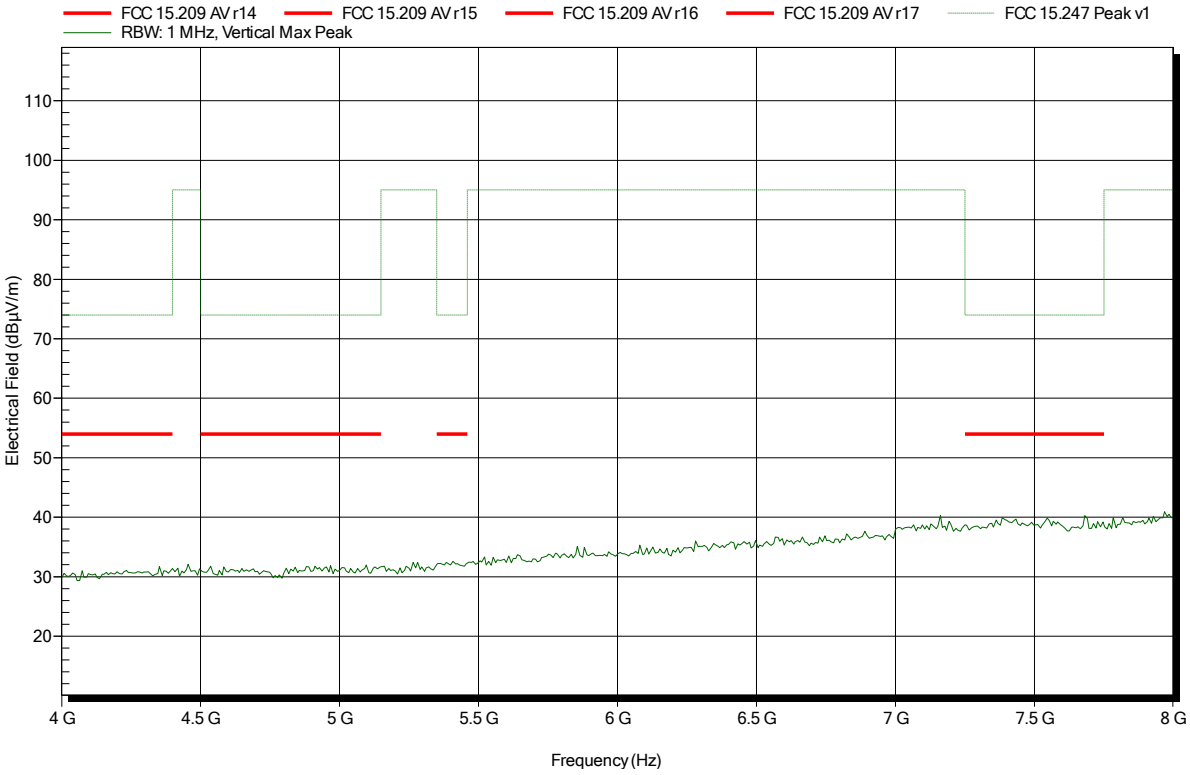


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 7

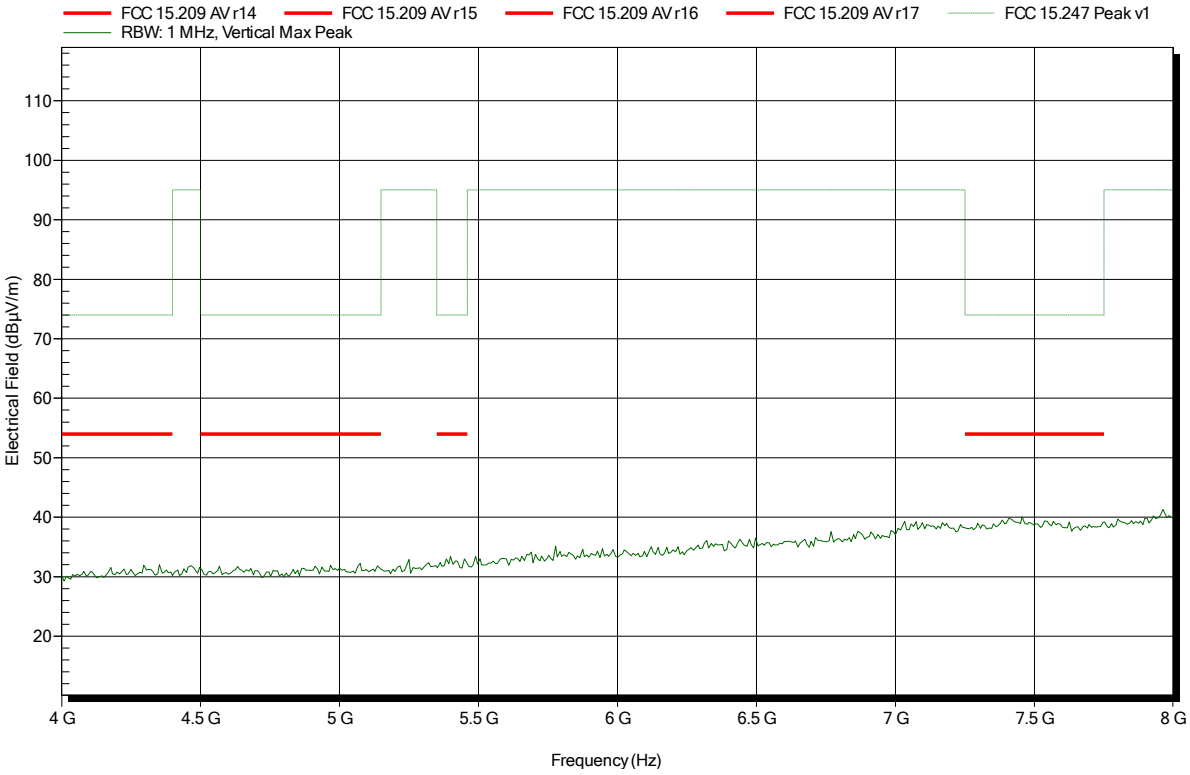


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 18

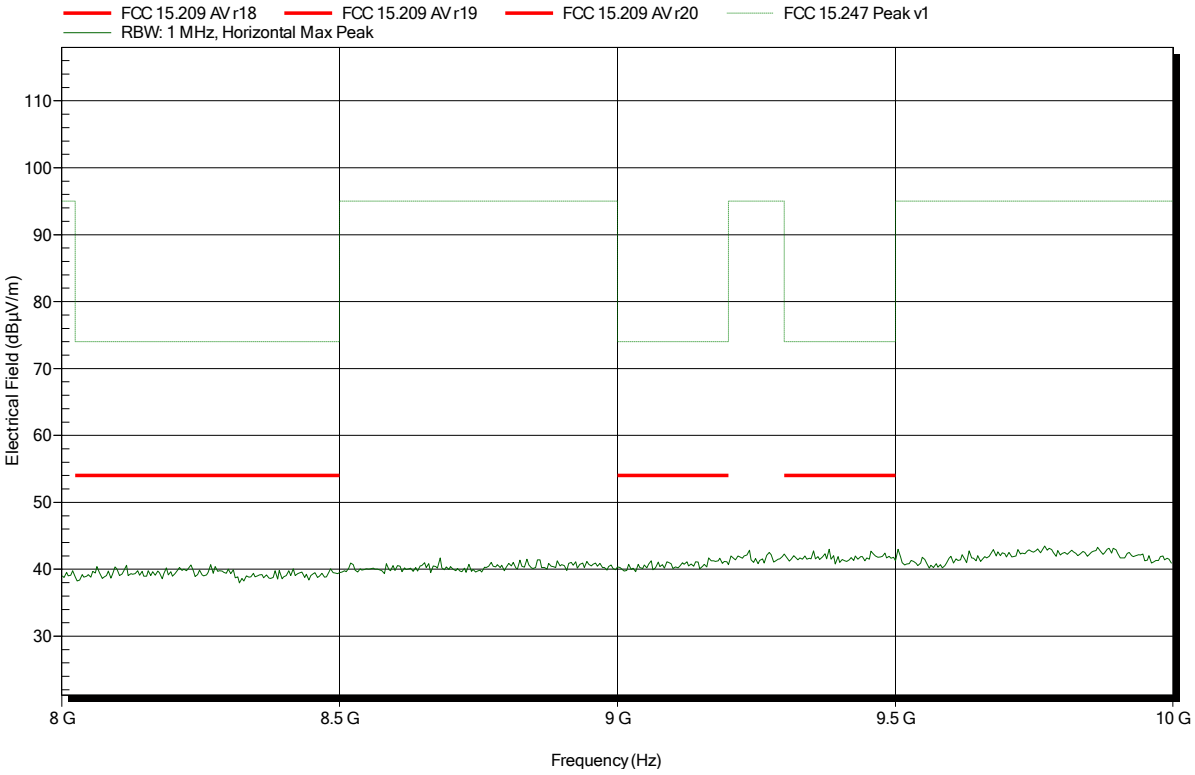


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 5

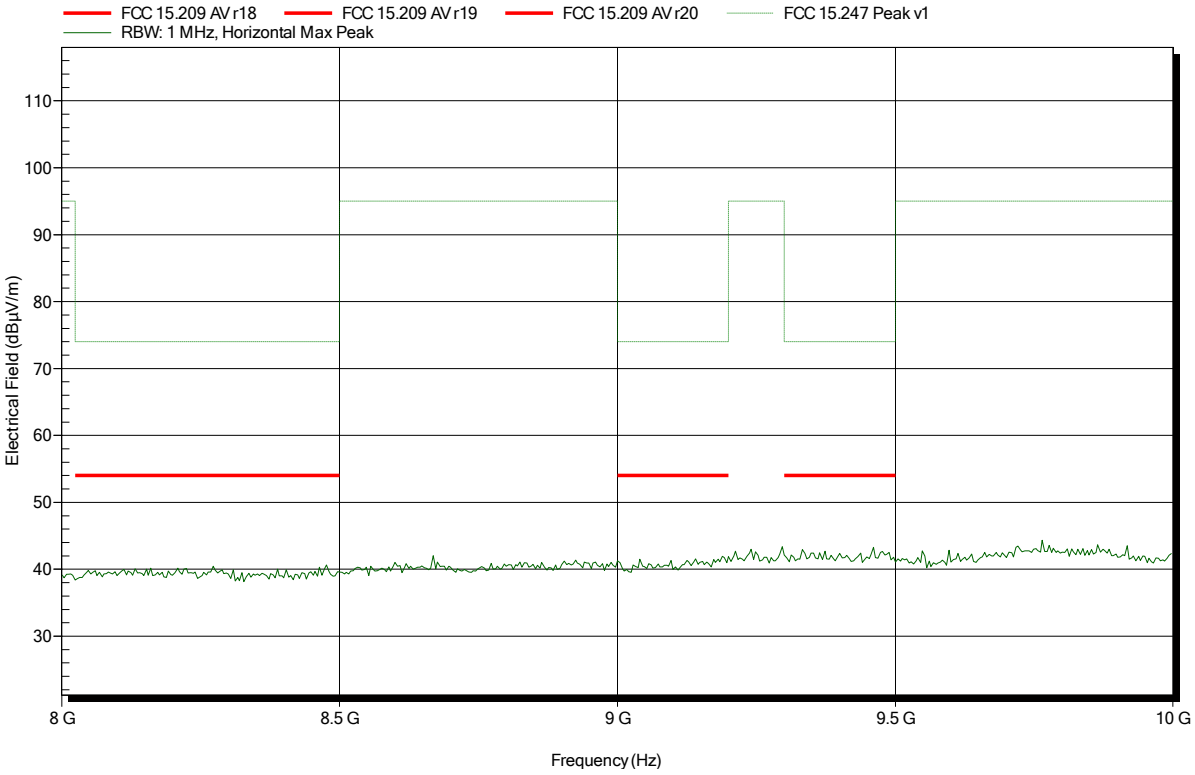


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 16

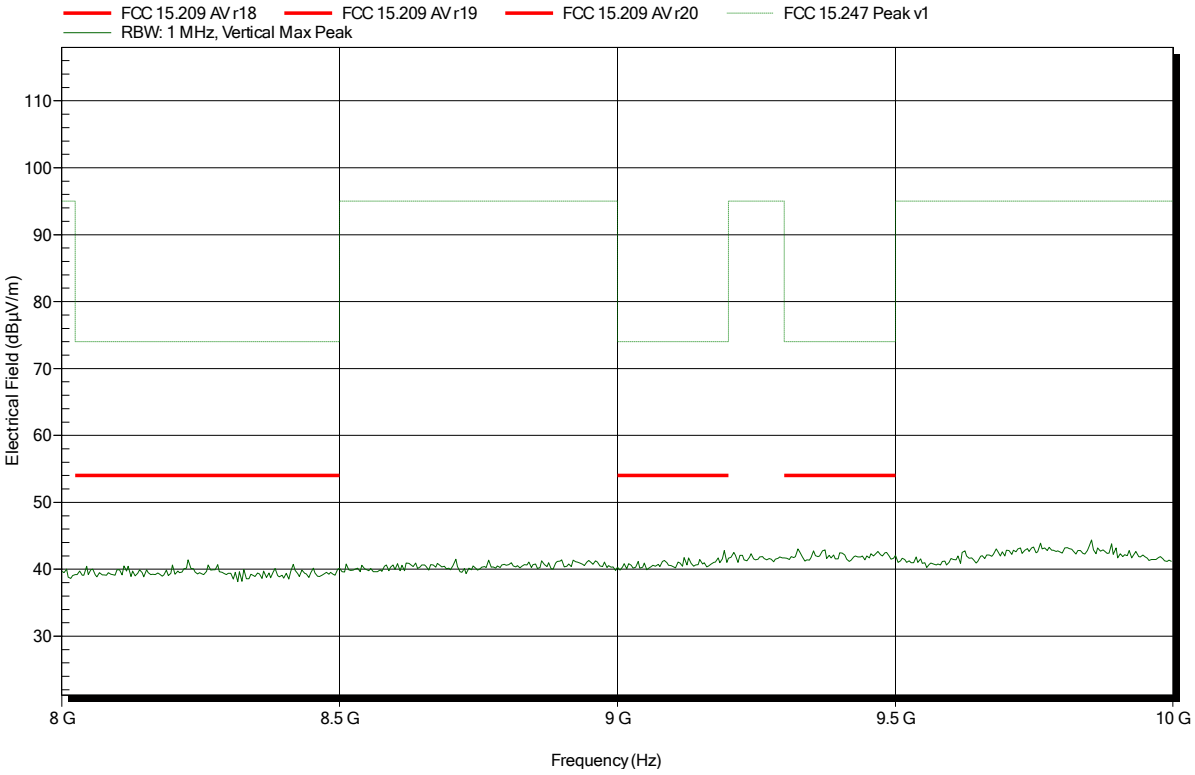


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-21
Note:	

Index 8

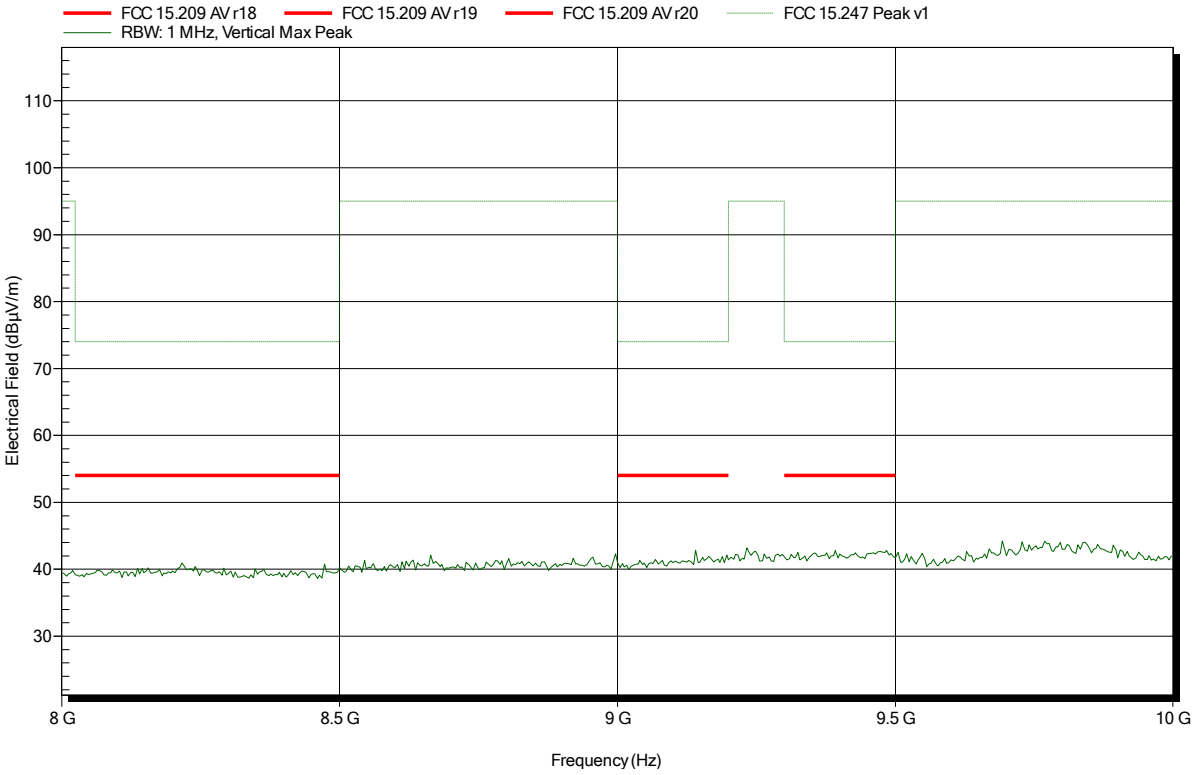


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 2250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-21
Note:	

Index 19

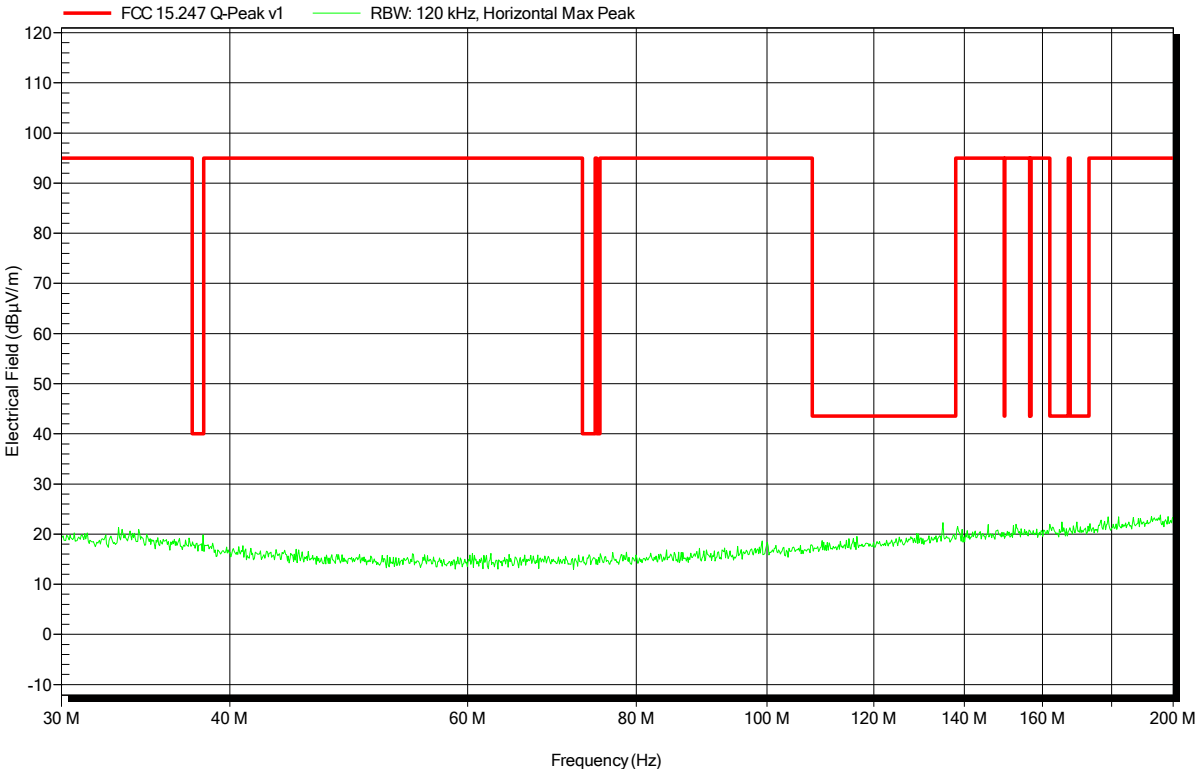


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 38

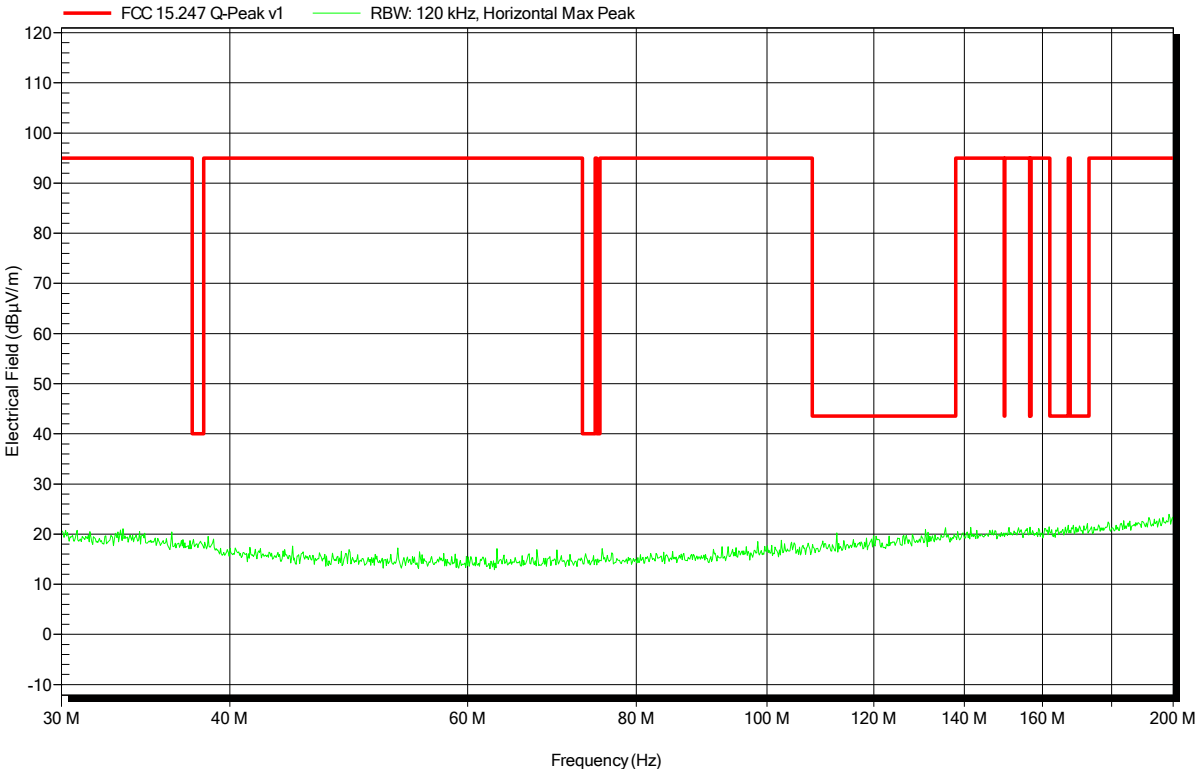


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 39

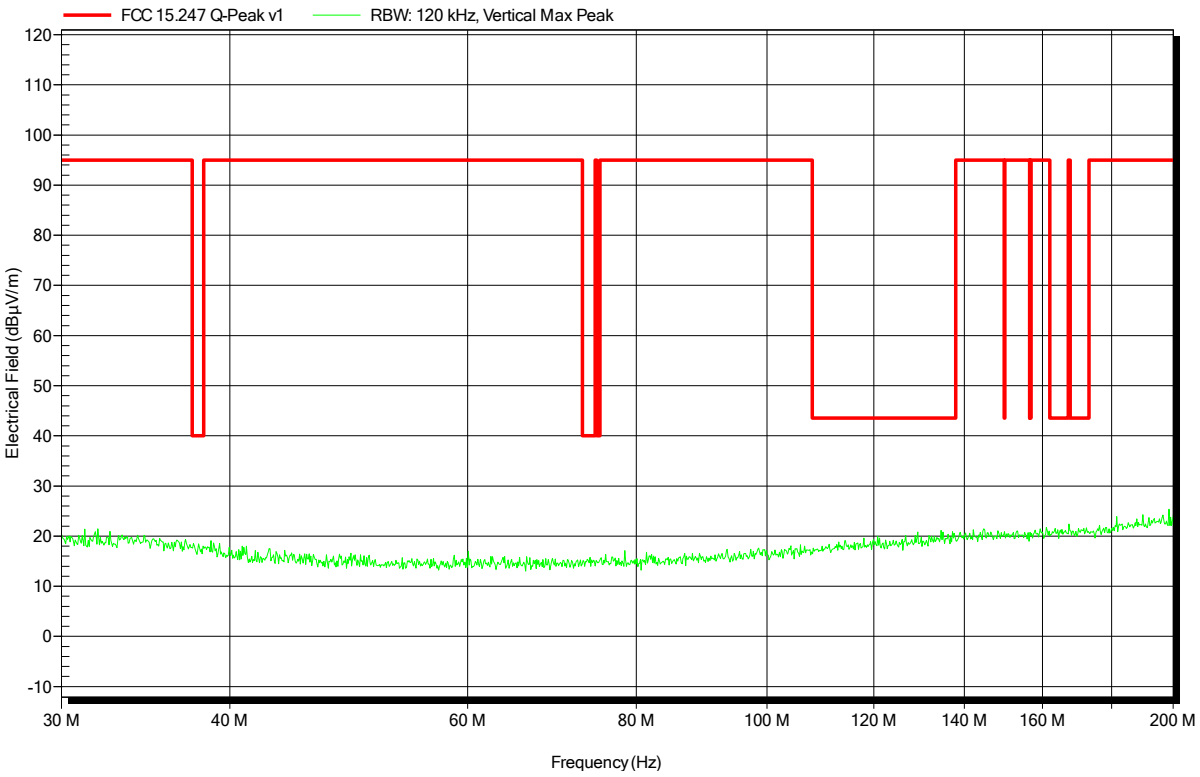


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 37

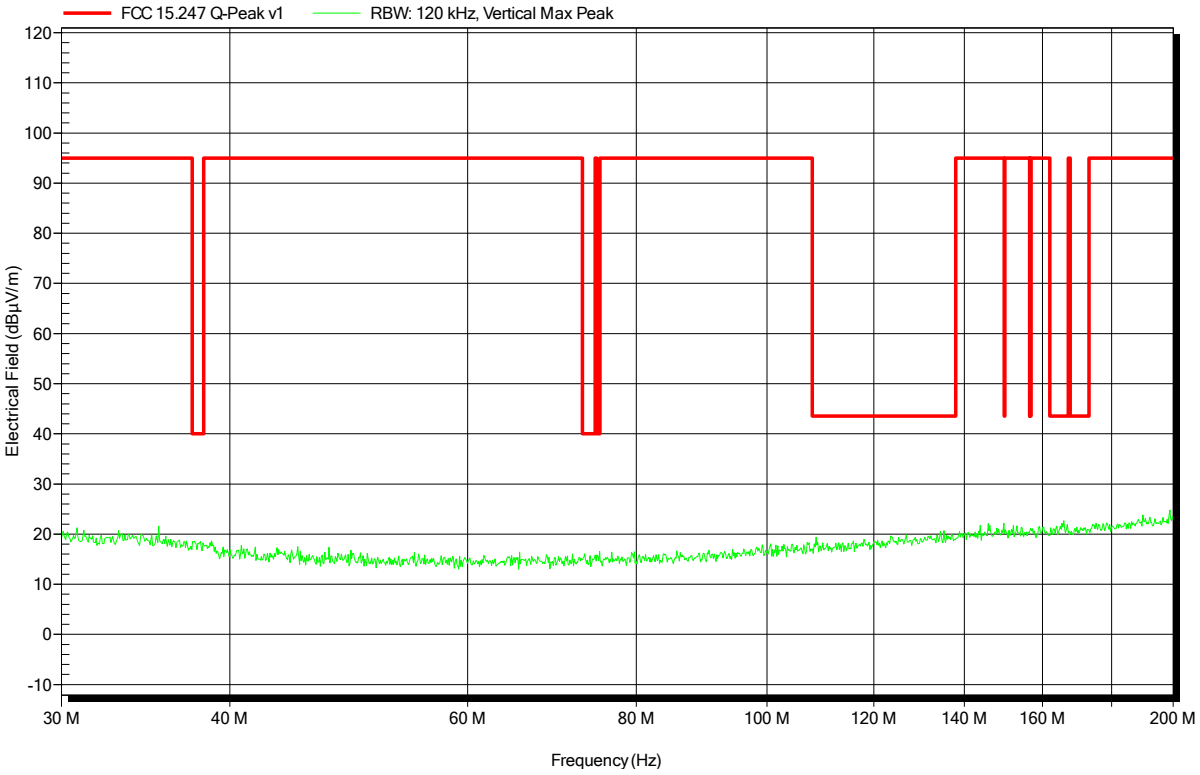


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 40

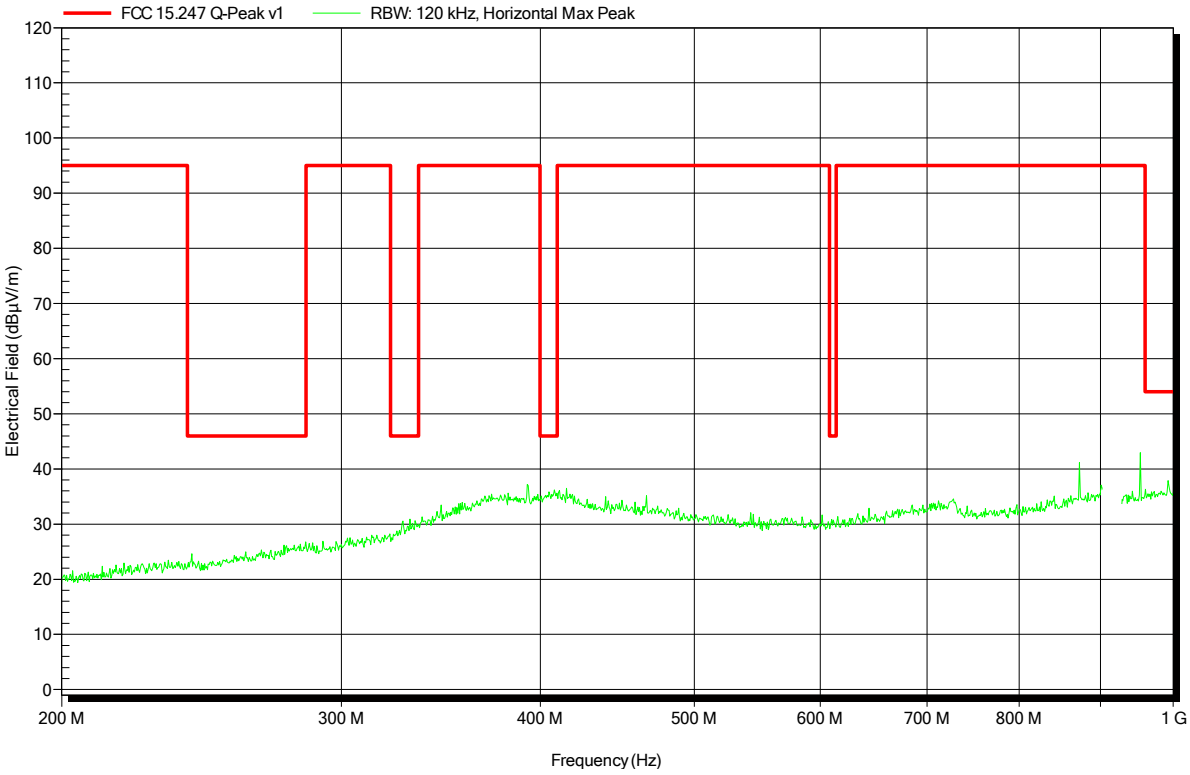


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 35

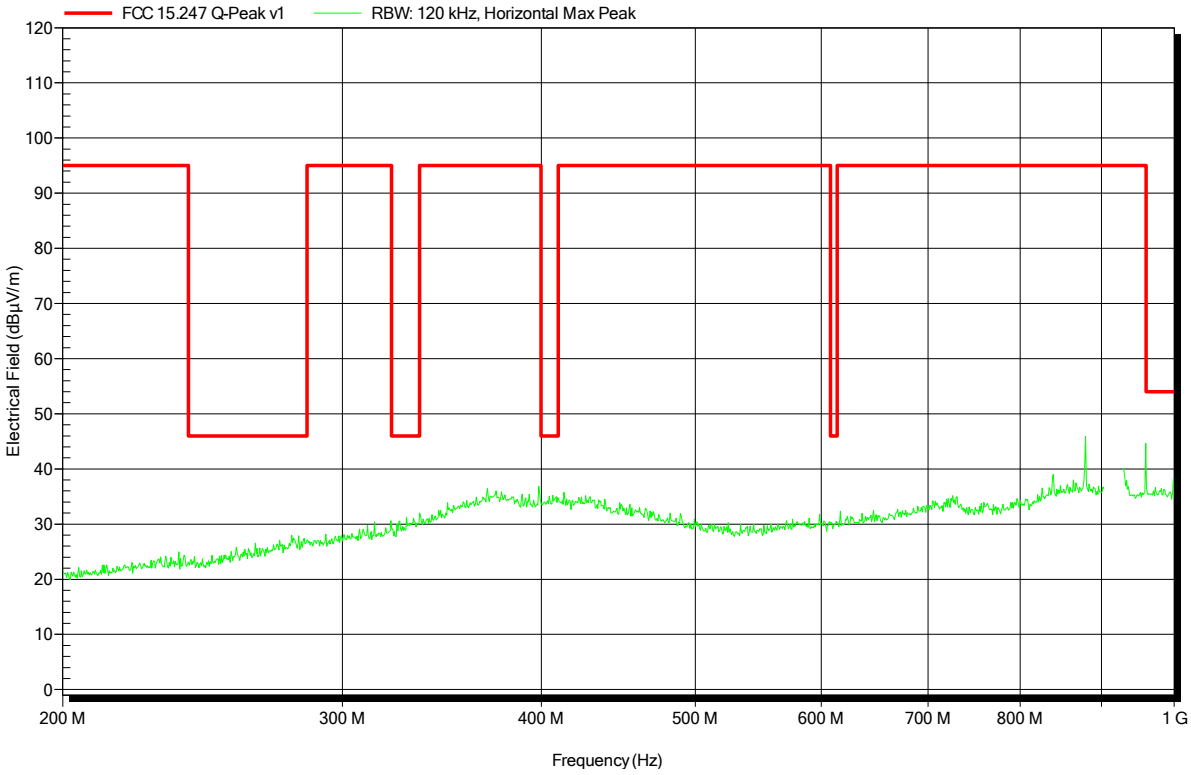


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 42

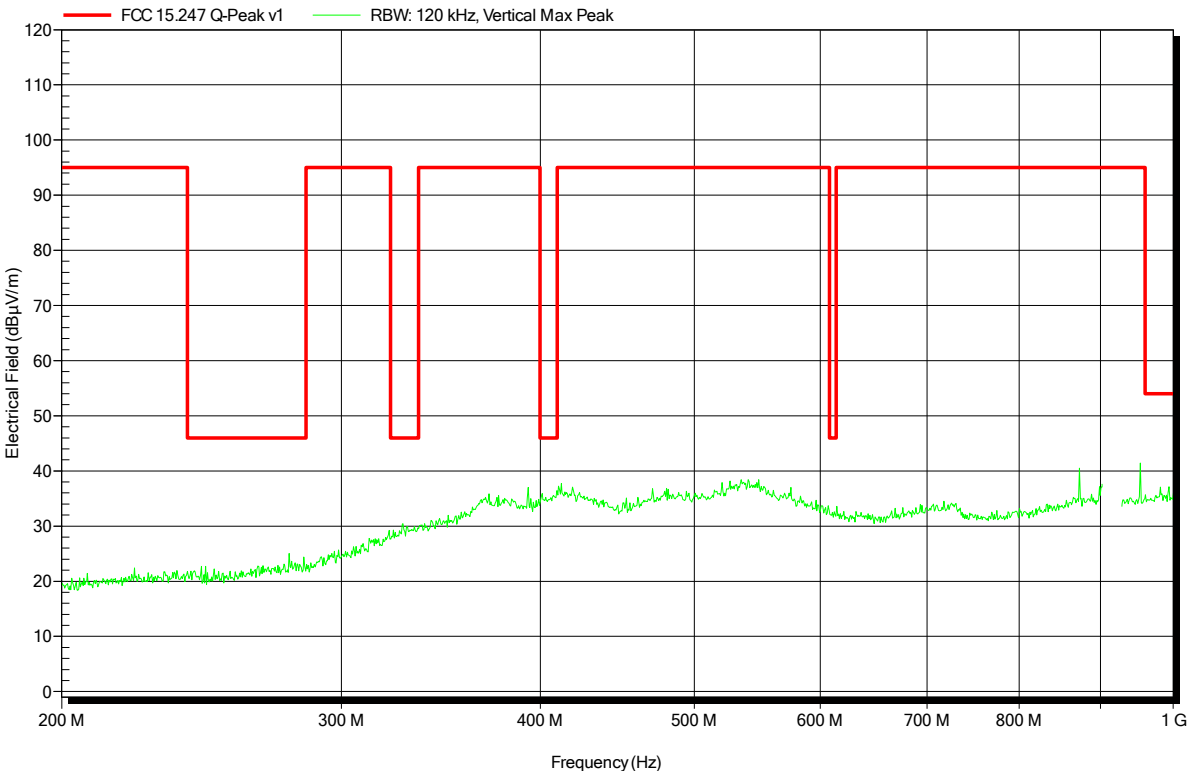


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-23
Note:	

Index 36

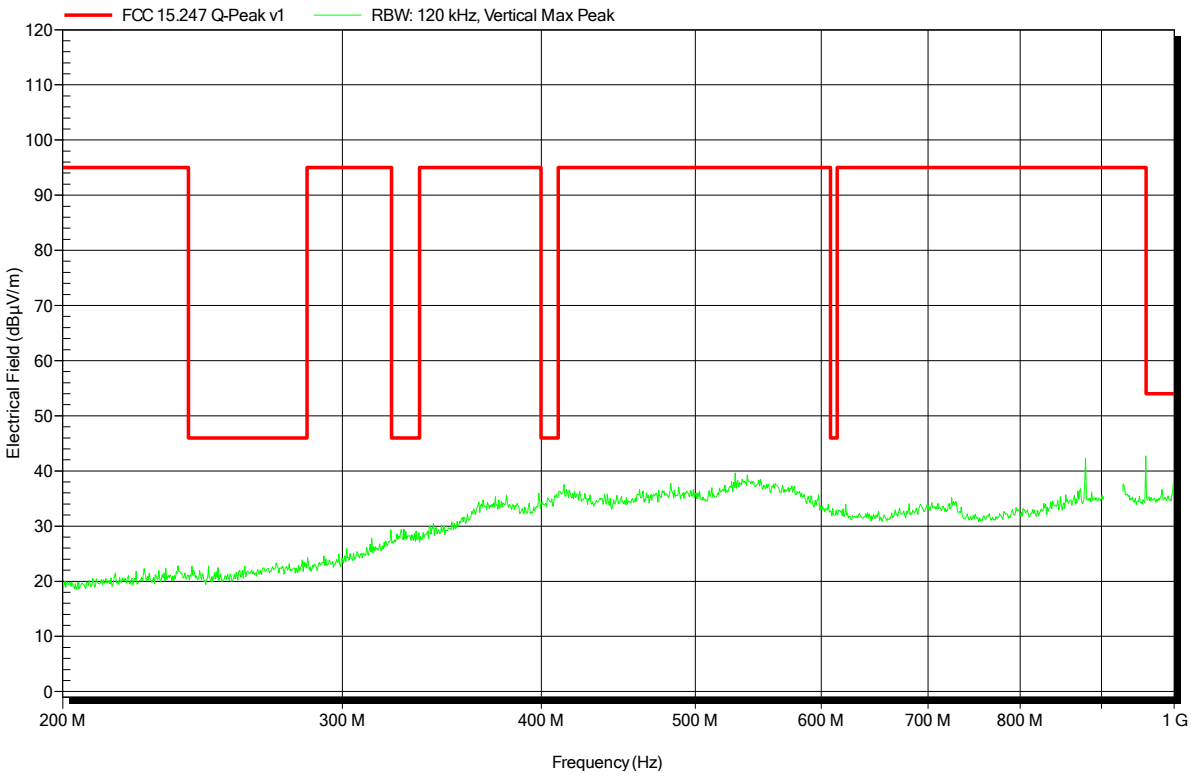


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-23
Note:	

Index 41

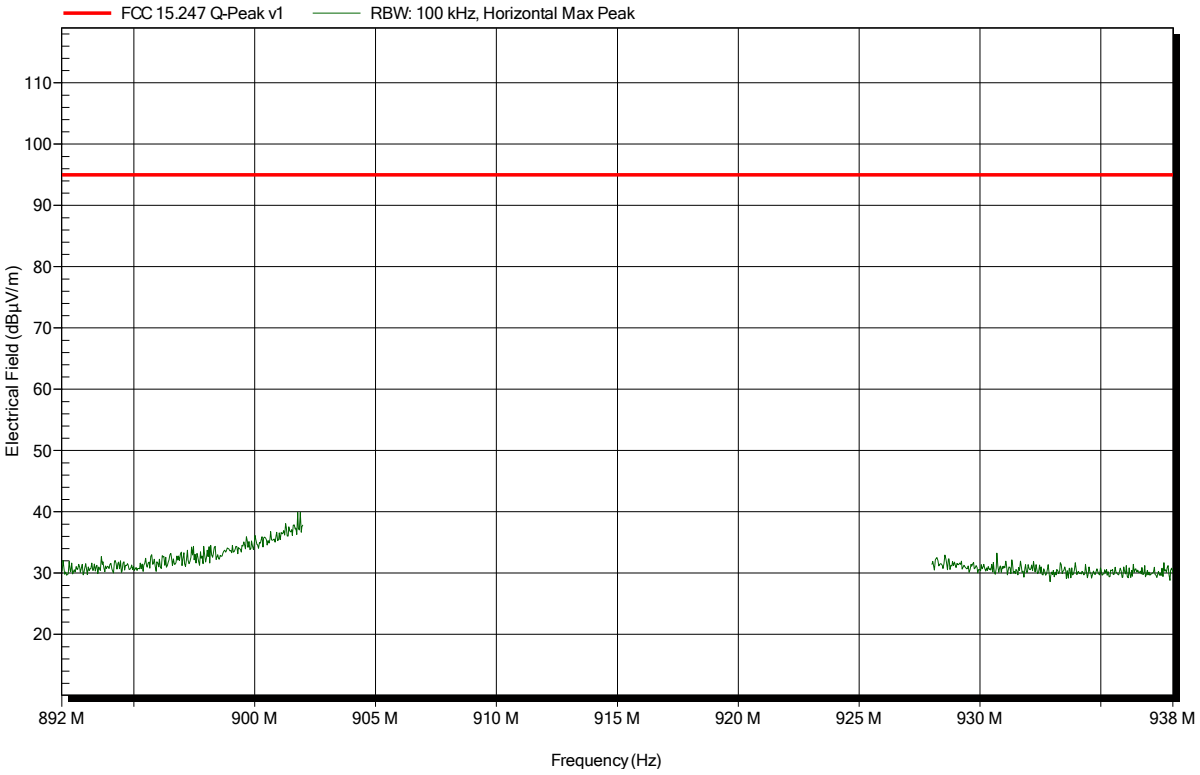


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 24

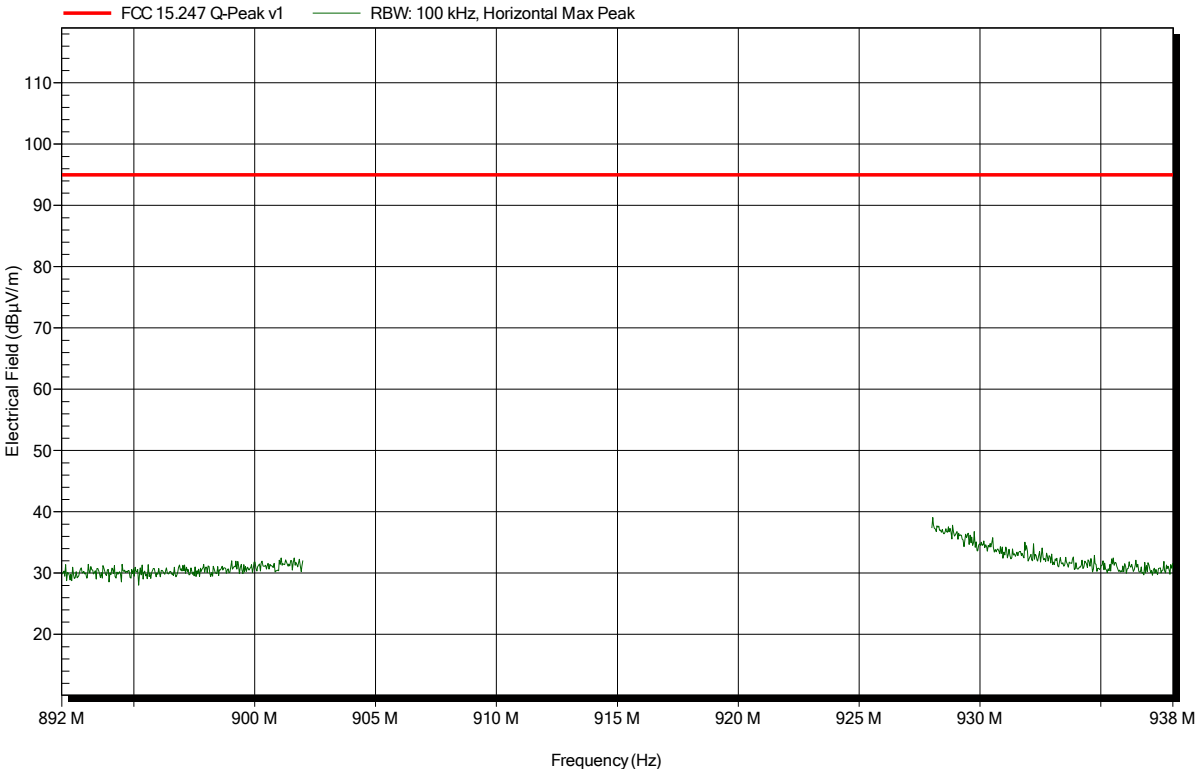


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 26

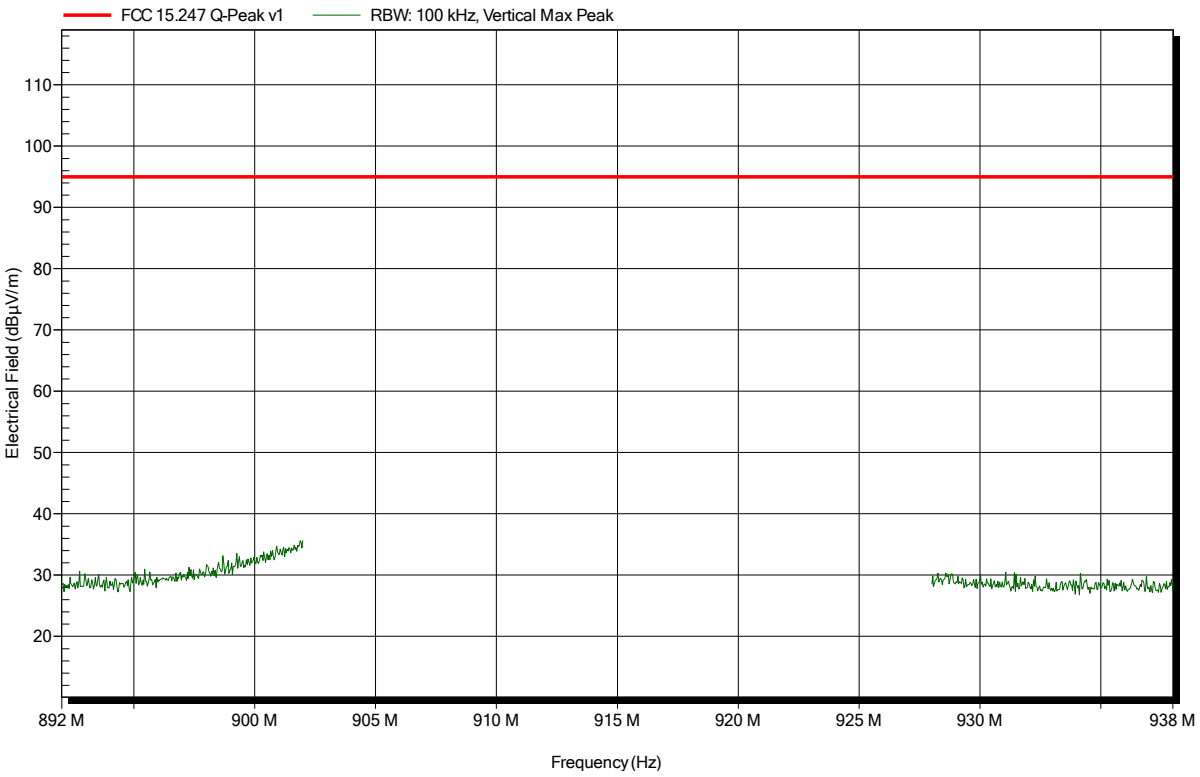


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	band-edge

Index 25

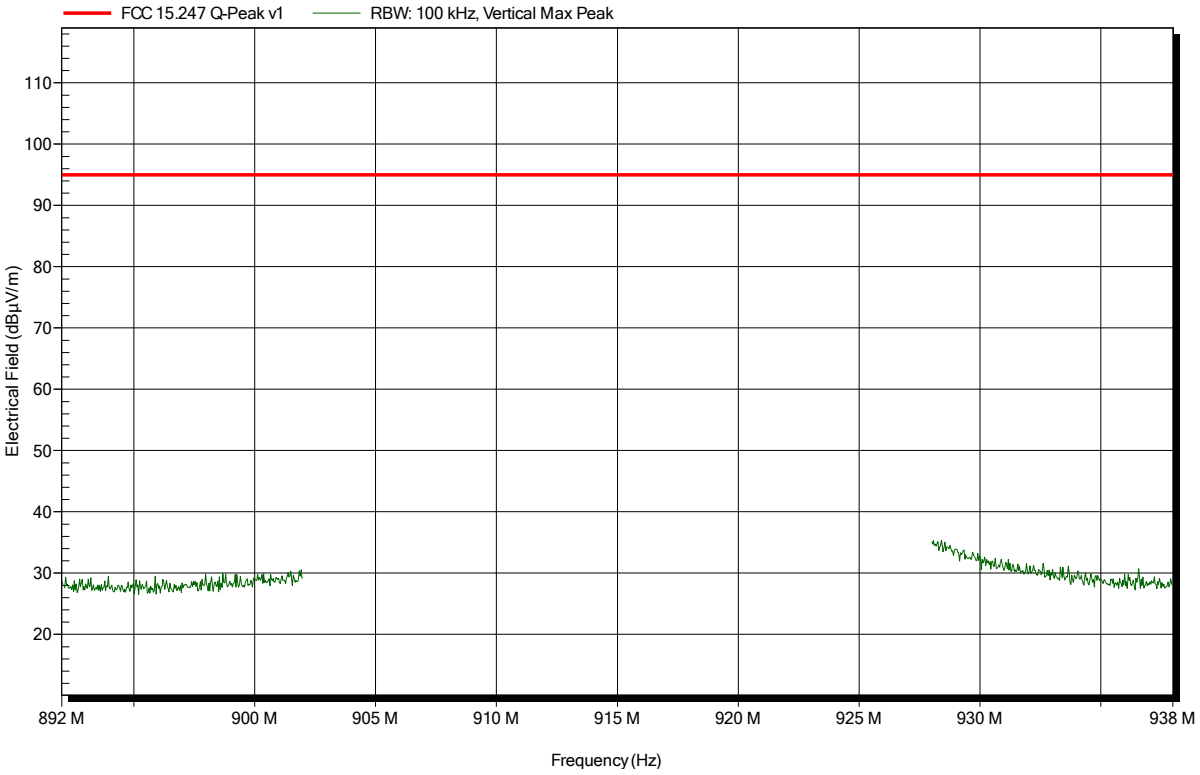


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	band-edge

Index 27

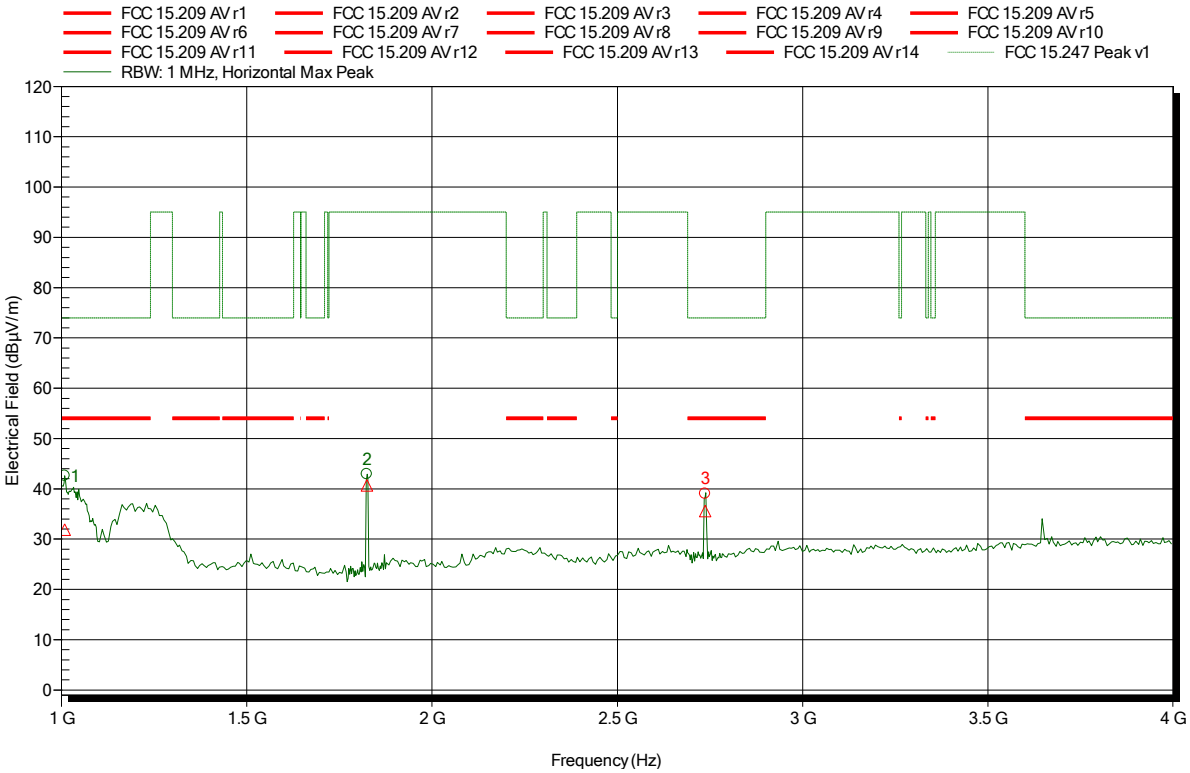


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 18



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.009 GHz	42.59 dBµV/m	74 dBµV/m	-31.41 dB	Pass
1.825 GHz	42.89 dBµV/m	95 dBµV/m	-52.11 dB	Pass
2.737 GHz	39.05 dBµV/m	74 dBµV/m	-34.95 dB	Pass

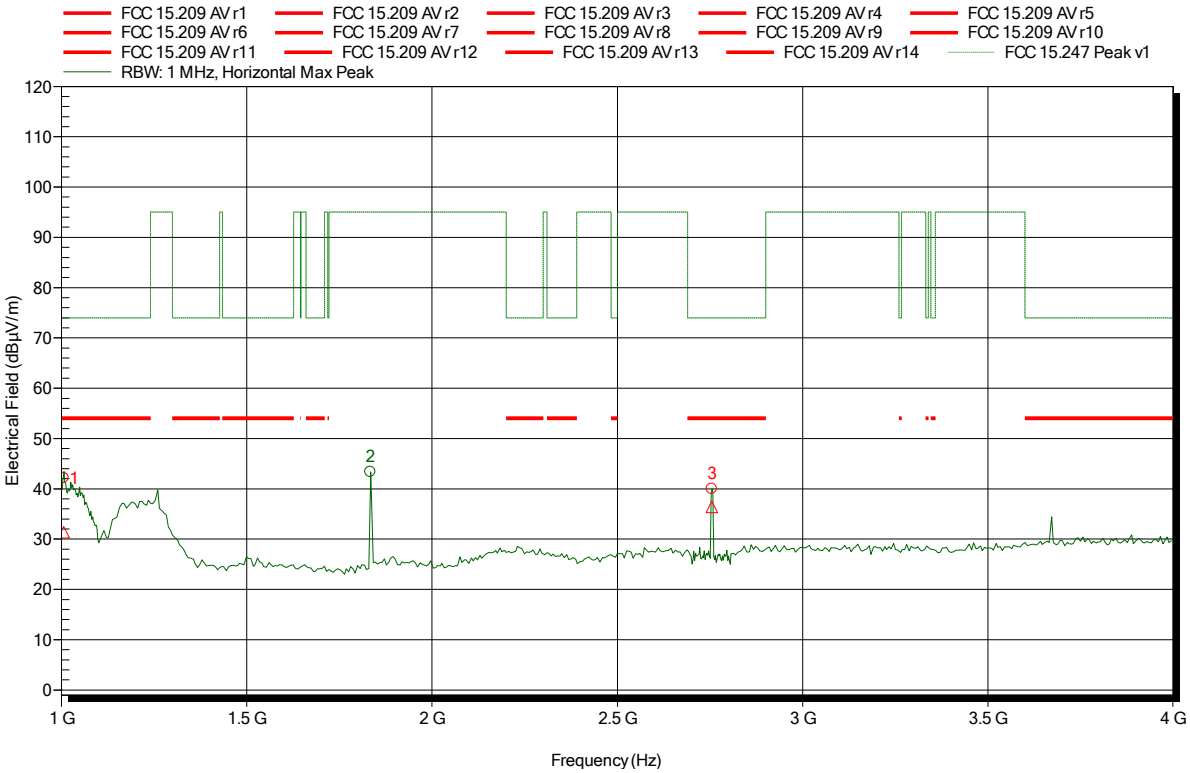
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.009 GHz	31.88 dBµV/m	54 dBµV/m	-22.12 dB	Pass
1.825 GHz	40.7 dBµV/m			
2.737 GHz	35.55 dBµV/m	54 dBµV/m	-18.45 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 28



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.006 GHz	42.14 dBµV/m	74 dBµV/m	-31.86 dB	Pass
1.834 GHz	43.39 dBµV/m	95 dBµV/m	-51.61 dB	Pass
2.755 GHz	39.98 dBµV/m	74 dBµV/m	-34.02 dB	Pass

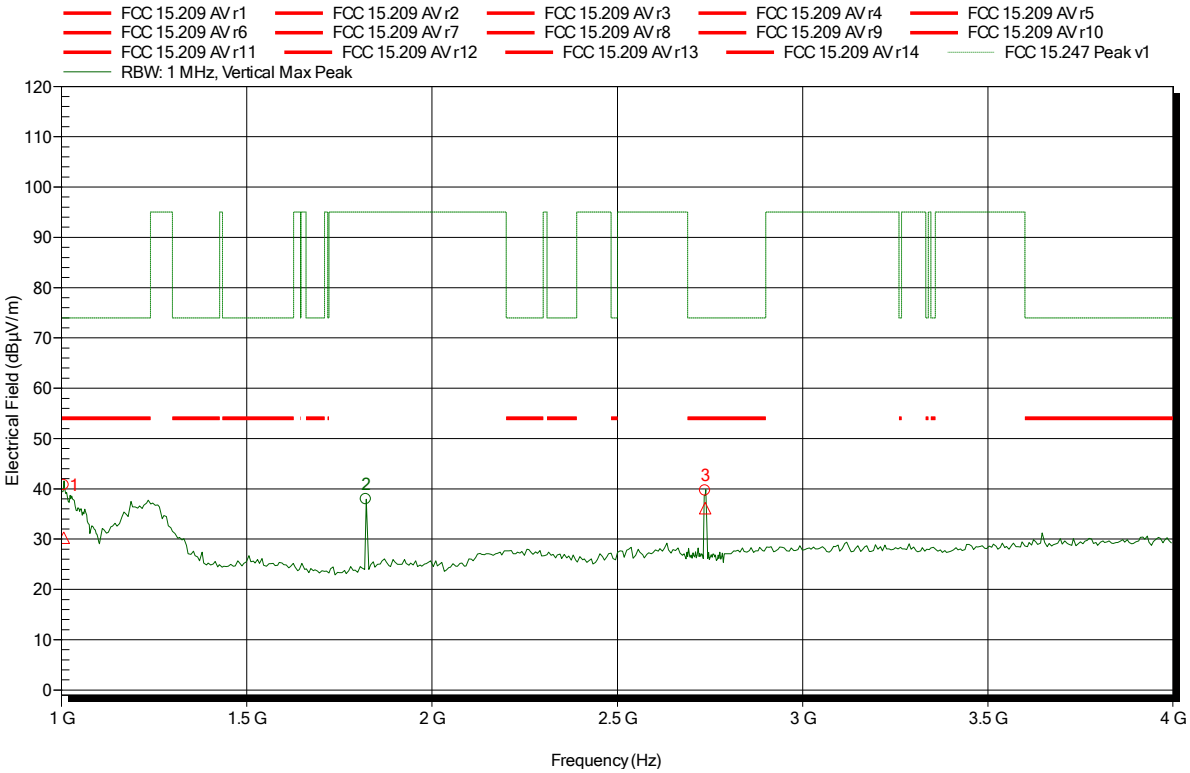
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.006 GHz	31.37 dBµV/m	54 dBµV/m	-22.63 dB	Pass
1.834 GHz				
2.755 GHz	36.42 dBµV/m	54 dBµV/m	-17.58 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 21



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.006 GHz	40.75 dBµV/m	74 dBµV/m	-33.25 dB	Pass
1.822 GHz	37.94 dBµV/m	95 dBµV/m	-57.06 dB	Pass
2.737 GHz	39.69 dBµV/m	74 dBµV/m	-34.31 dB	Pass

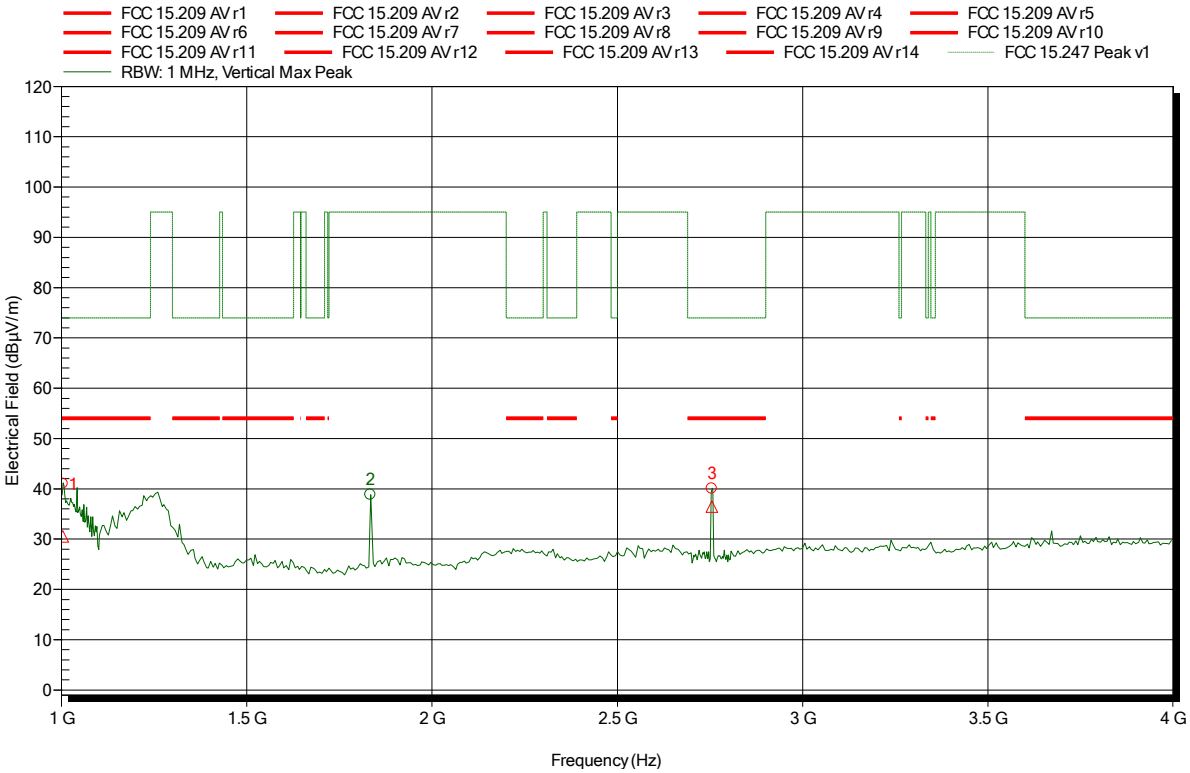
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.006 GHz	30.29 dBµV/m	54 dBµV/m	-23.71 dB	Pass
1.822 GHz				
2.737 GHz	36.17 dBµV/m	54 dBµV/m	-17.83 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 32



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.004 GHz	40.99 dBµV/m	74 dBµV/m	-33.01 dB	Pass
1.834 GHz	38.84 dBµV/m	95 dBµV/m	-56.16 dB	Pass
2.755 GHz	40.01 dBµV/m	74 dBµV/m	-33.99 dB	Pass

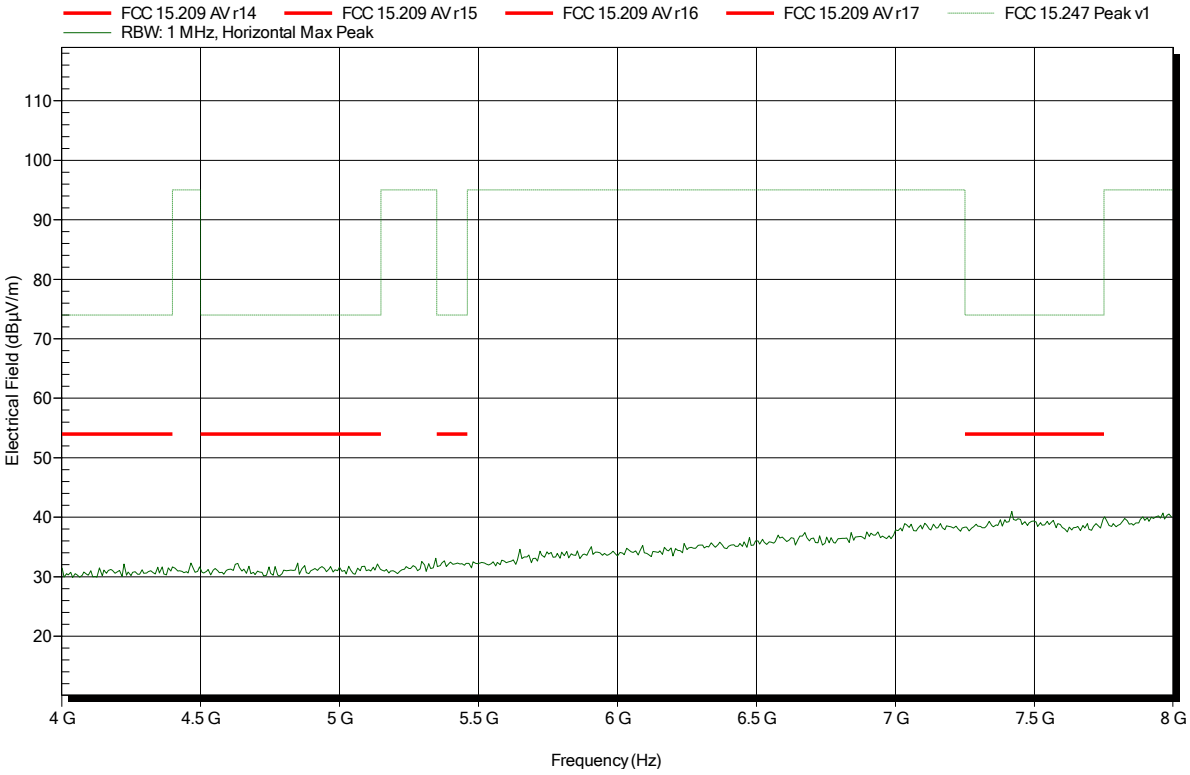
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.004 GHz	30.53 dBµV/m	54 dBµV/m	-23.47 dB	Pass
1.834 GHz				
2.755 GHz	36.45 dBµV/m	54 dBµV/m	-17.55 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 19

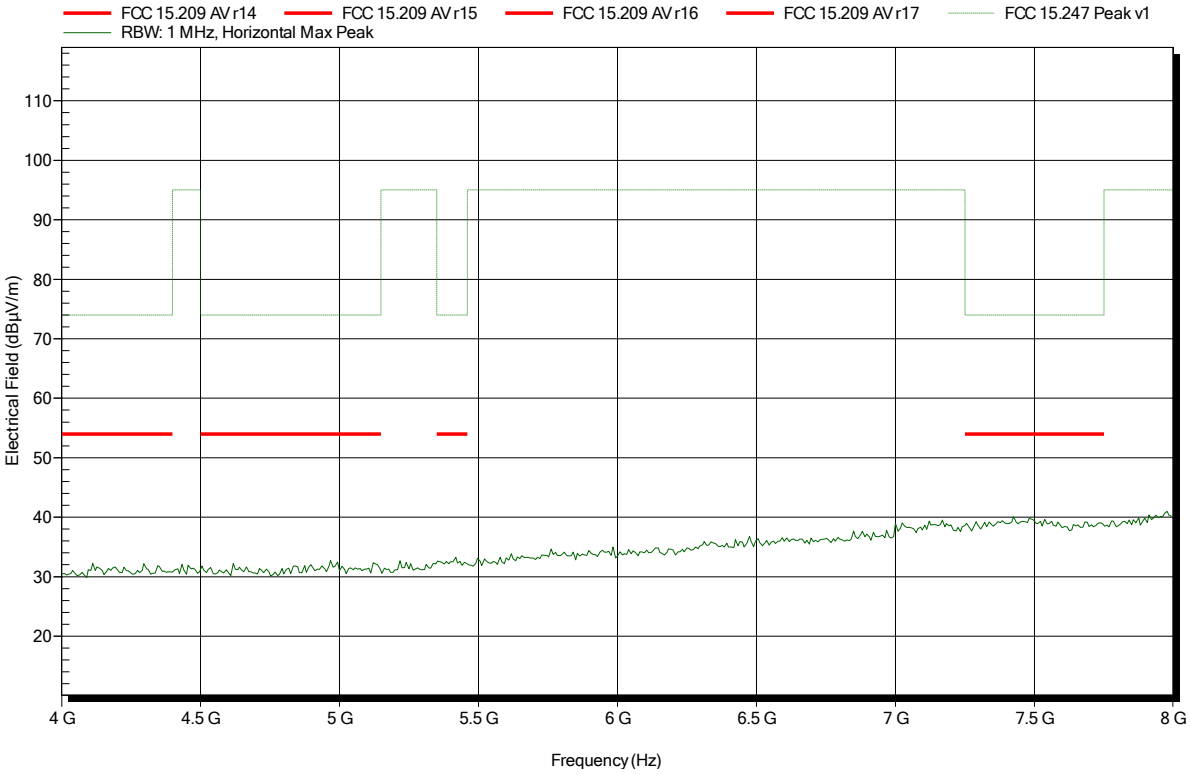


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 29

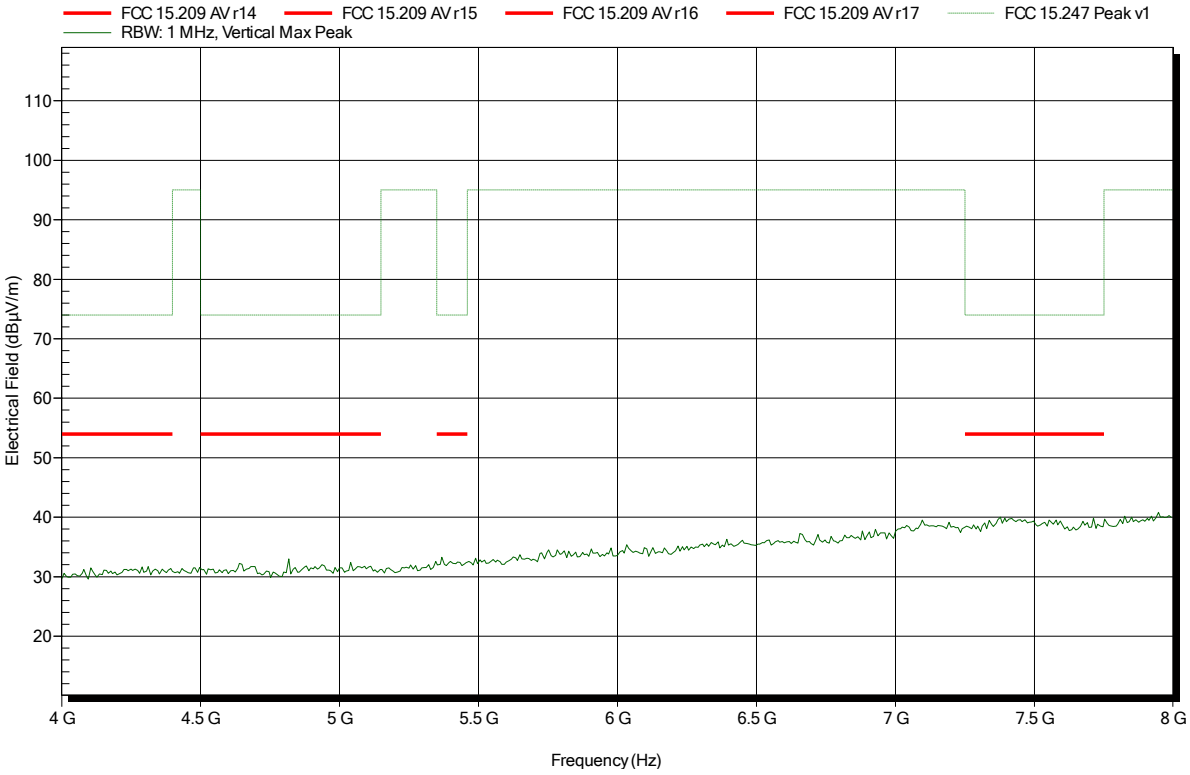


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 22

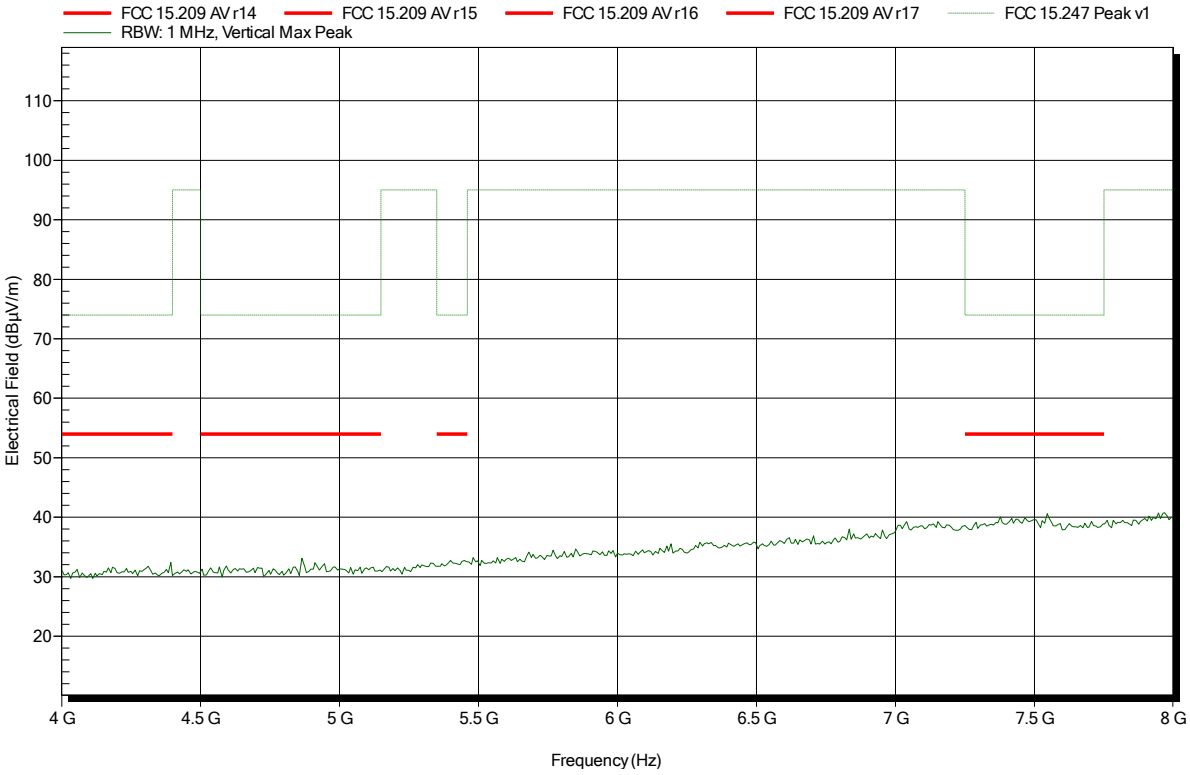


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 33

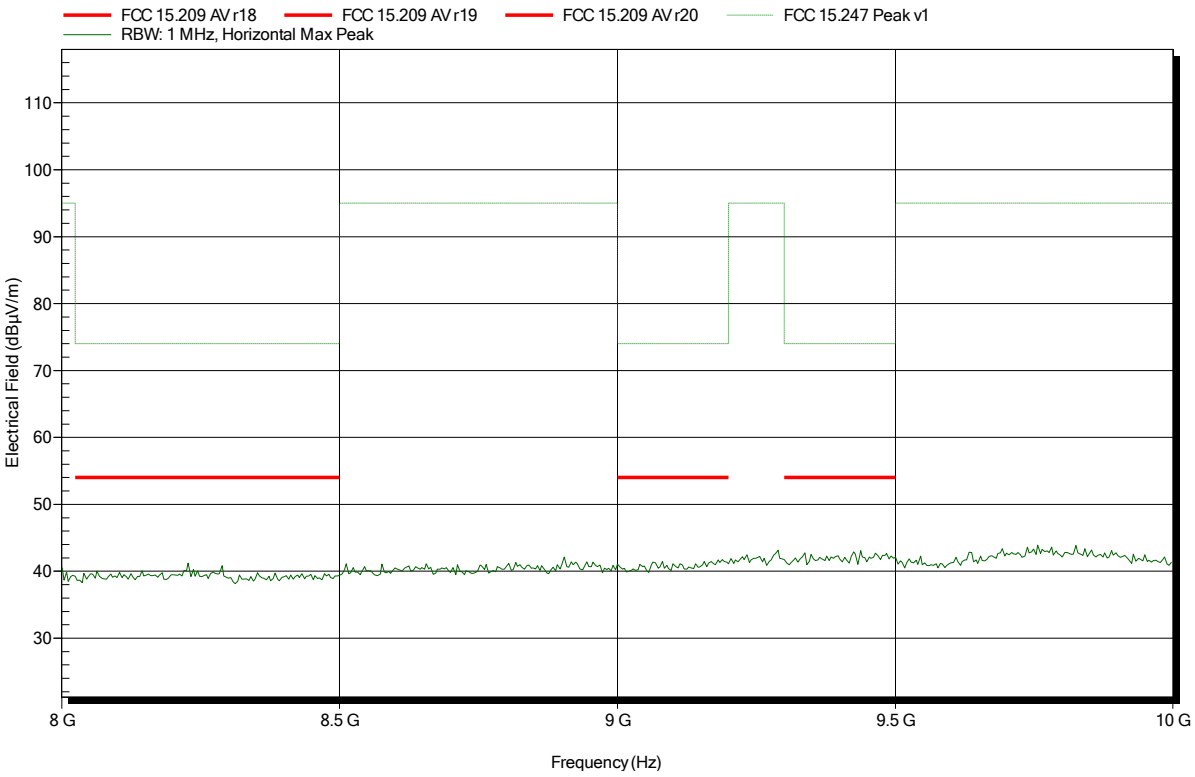


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 20

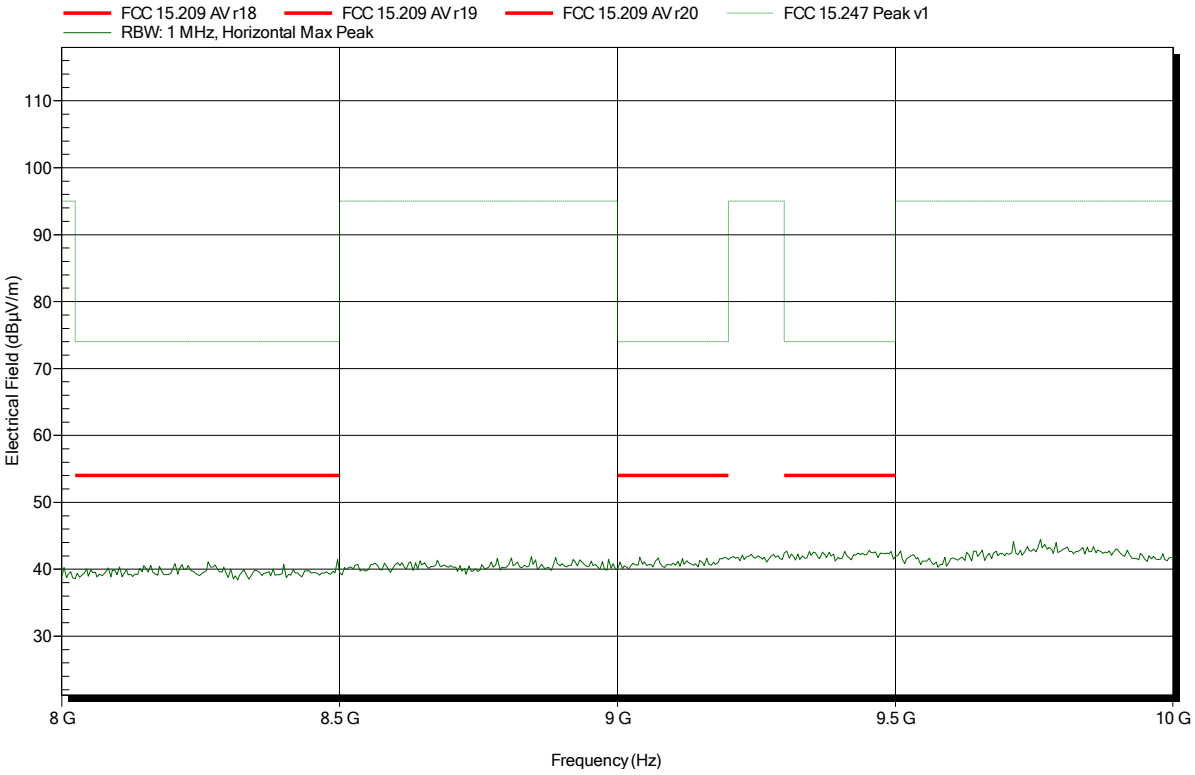


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 30

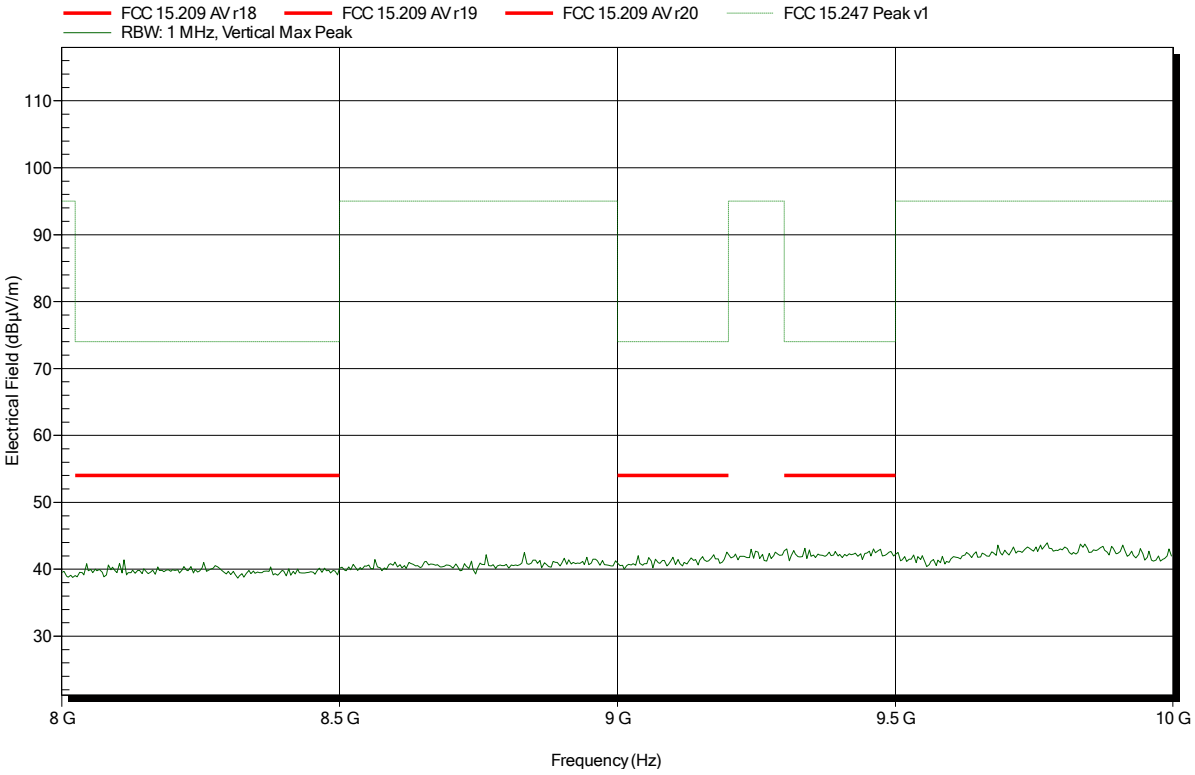


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Flow
Test Date:	2017-08-21
Note:	

Index 23

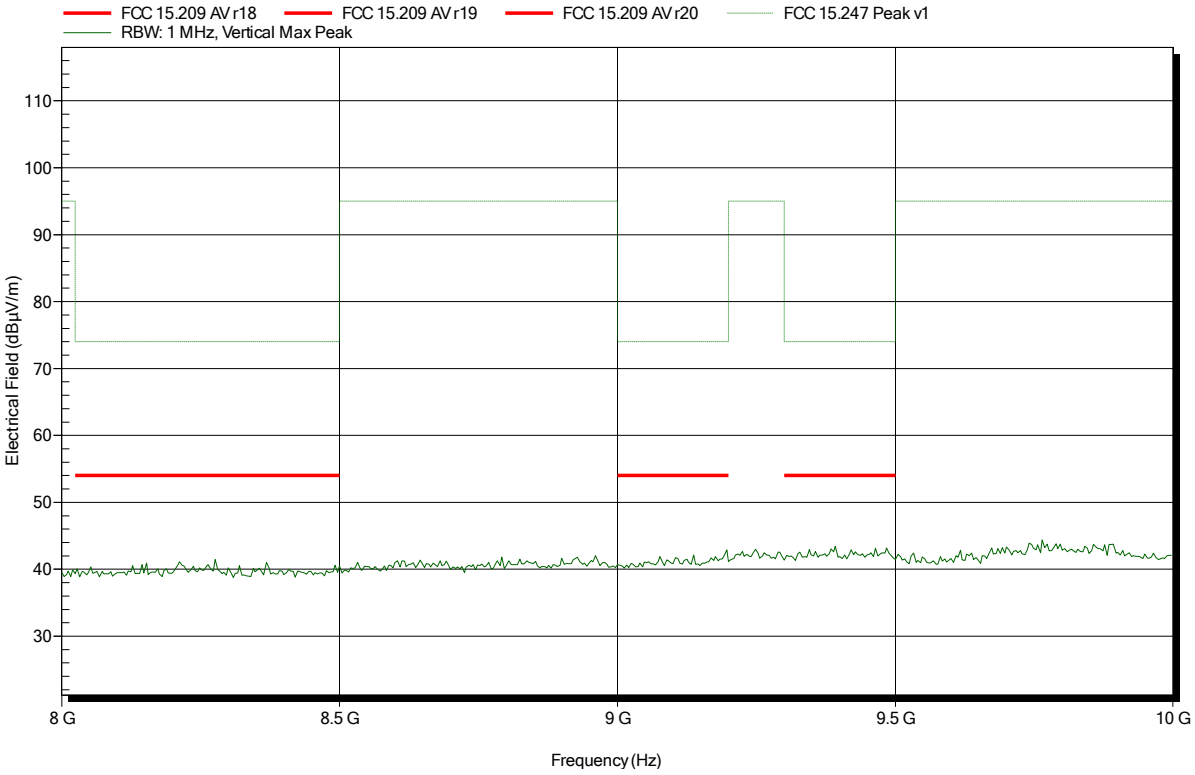


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 1653094, Fhigh
Test Date:	2017-08-21
Note:	

Index 34

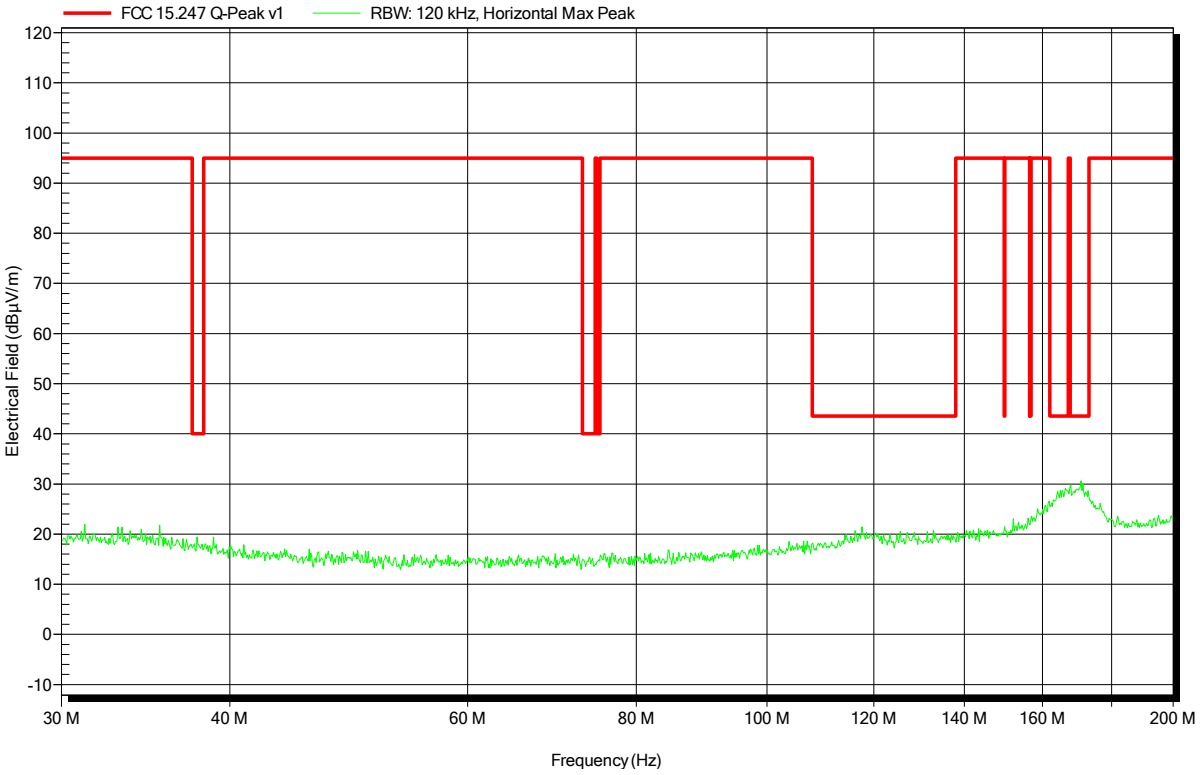


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 37

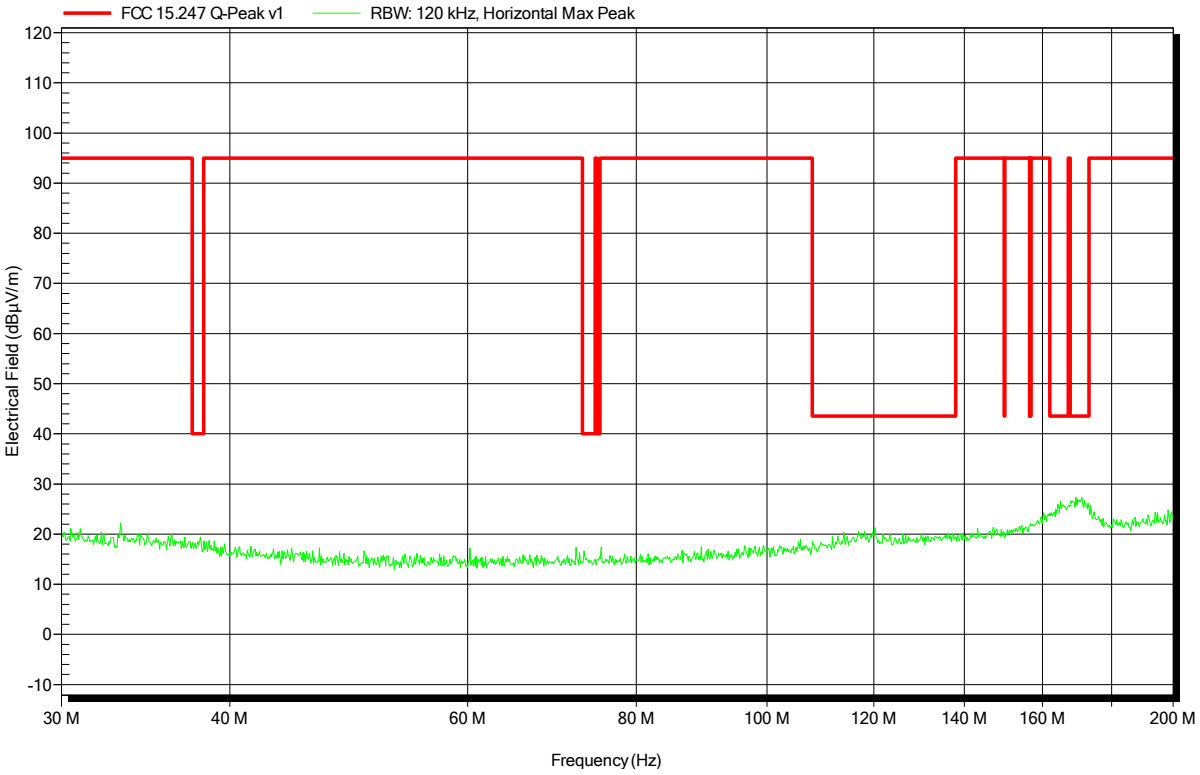


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 38

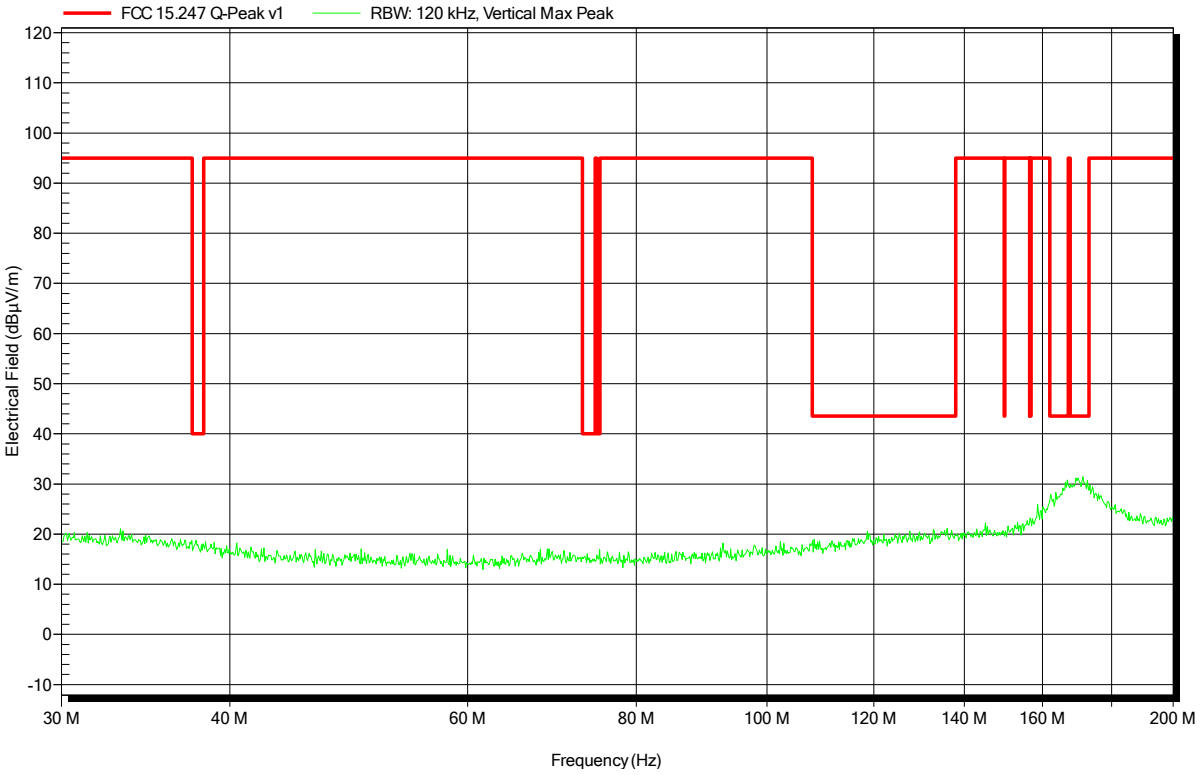


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 36

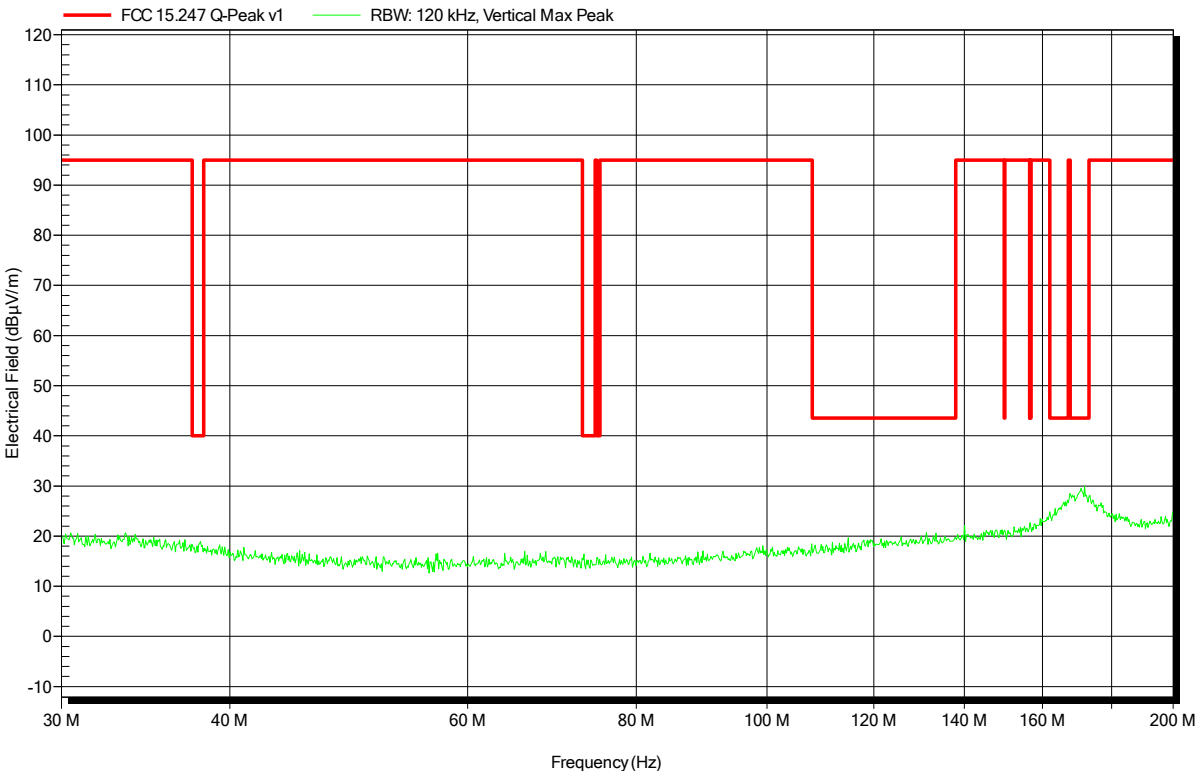


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 39

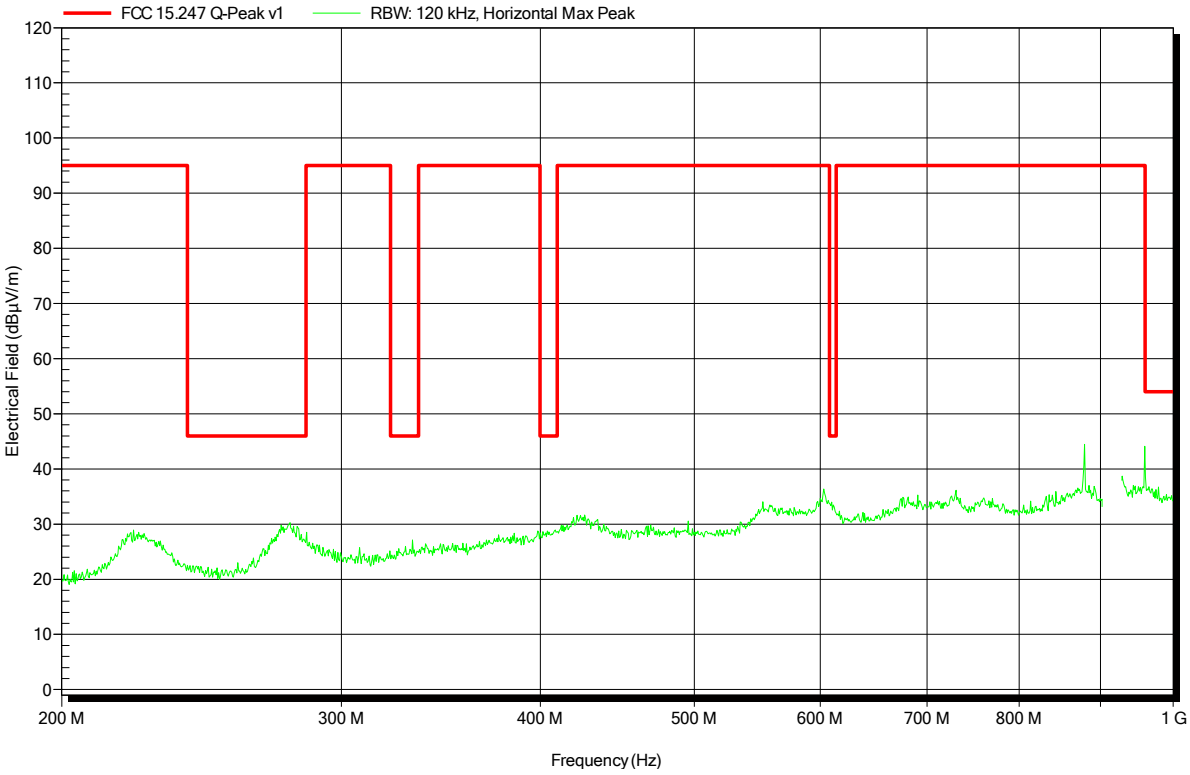


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 34

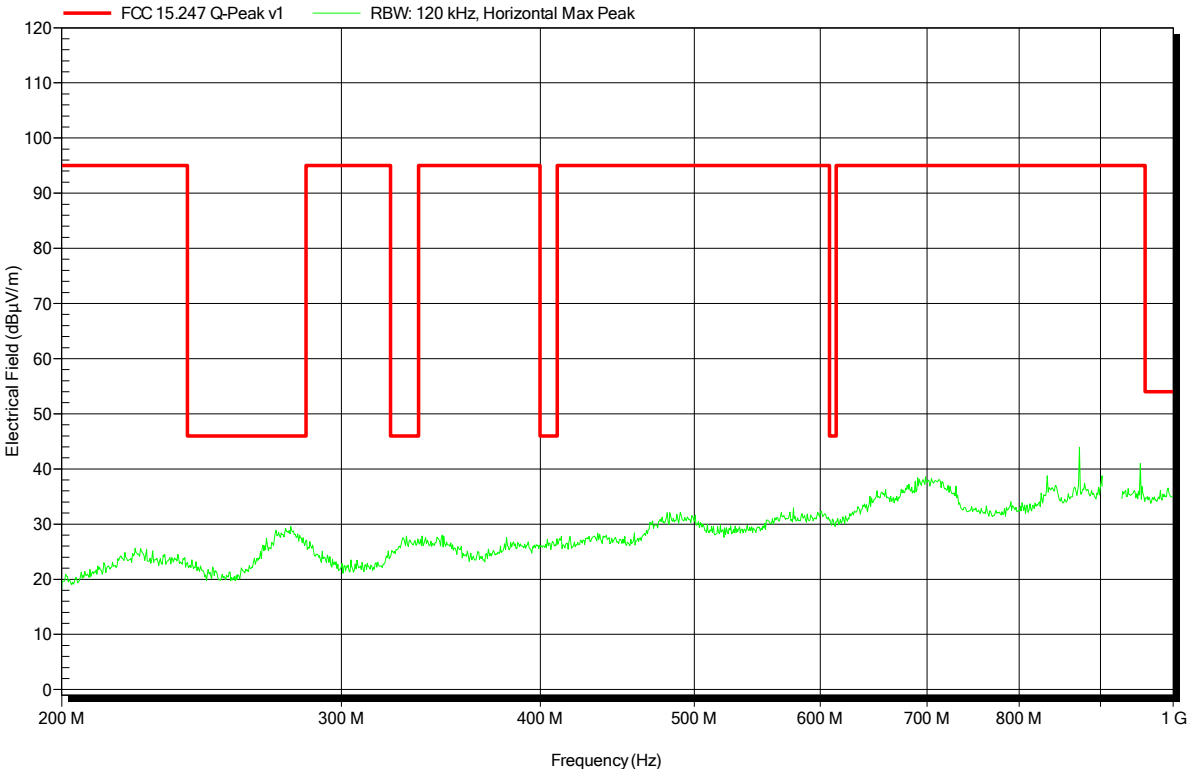


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 41

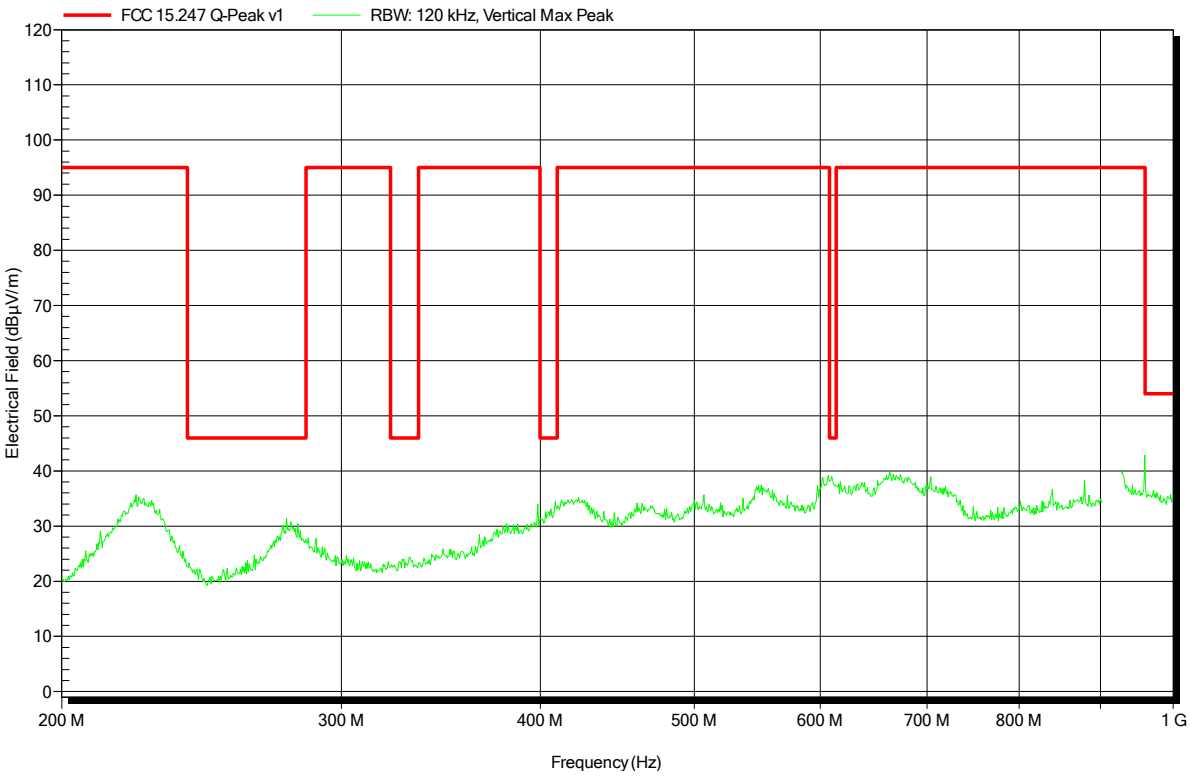


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-23
Note:	

Index 35

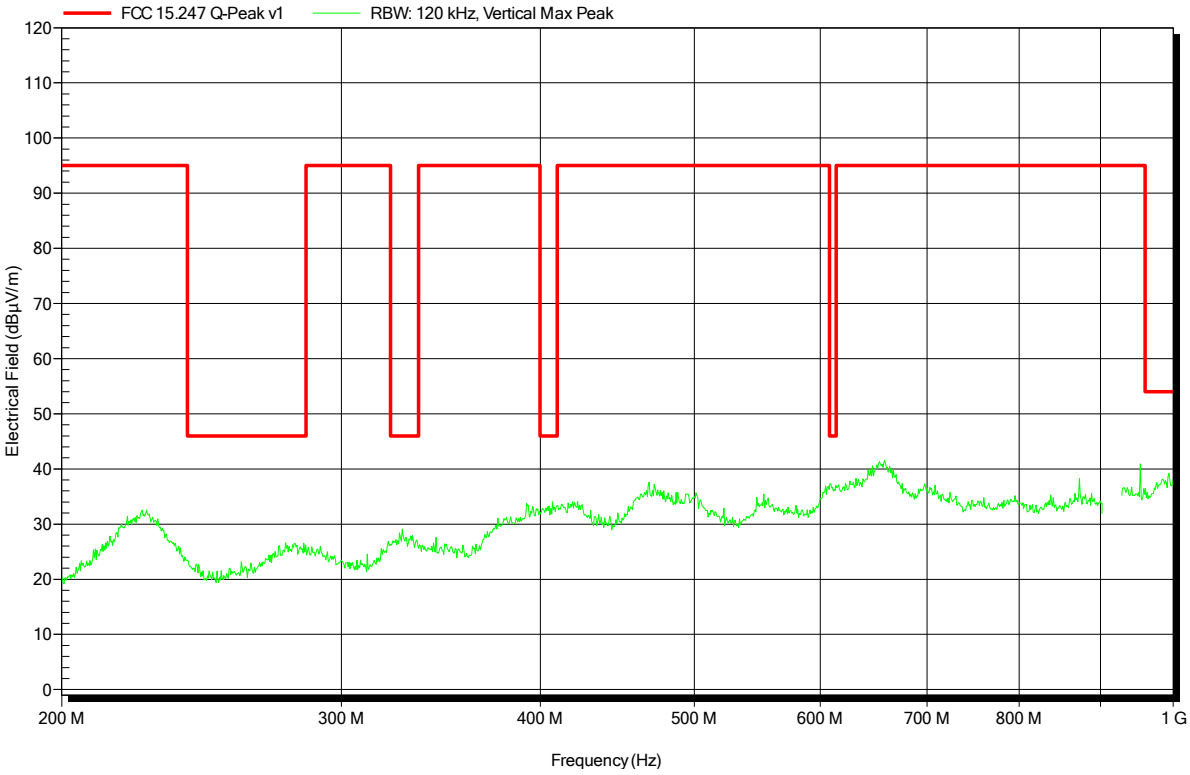


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-23
Note:	

Index 40

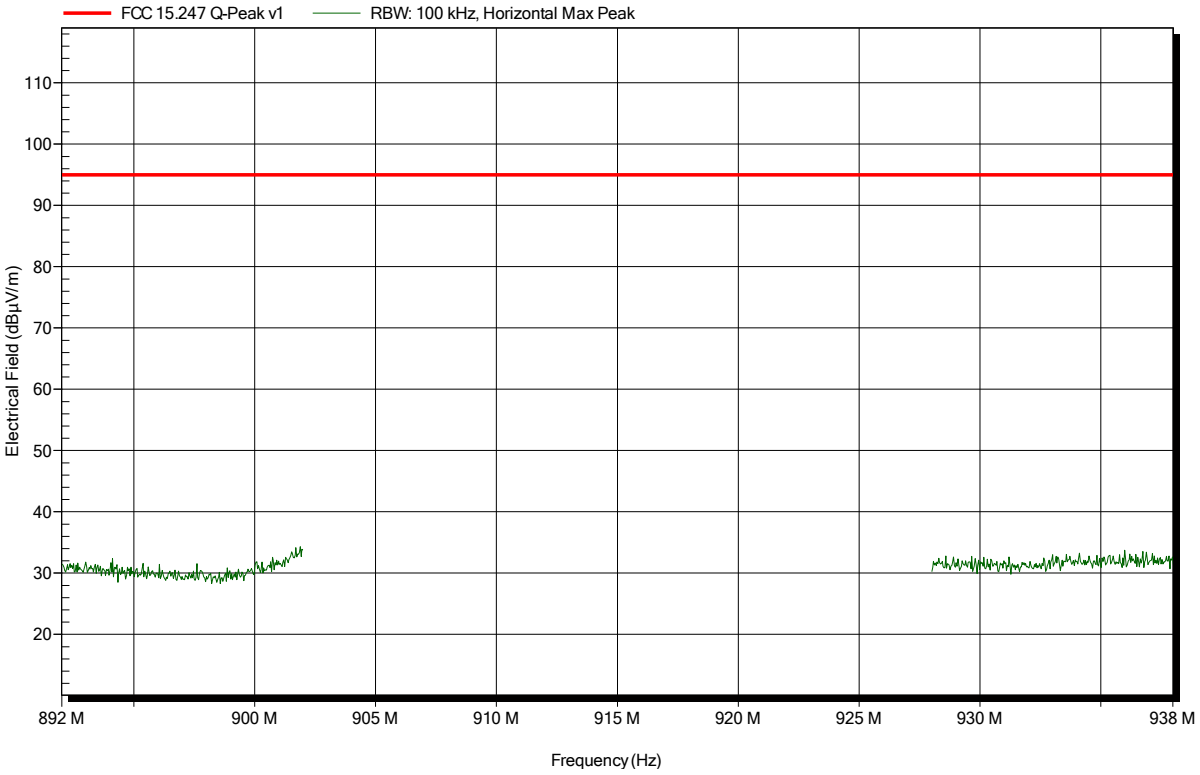


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	band-edge

Index 24

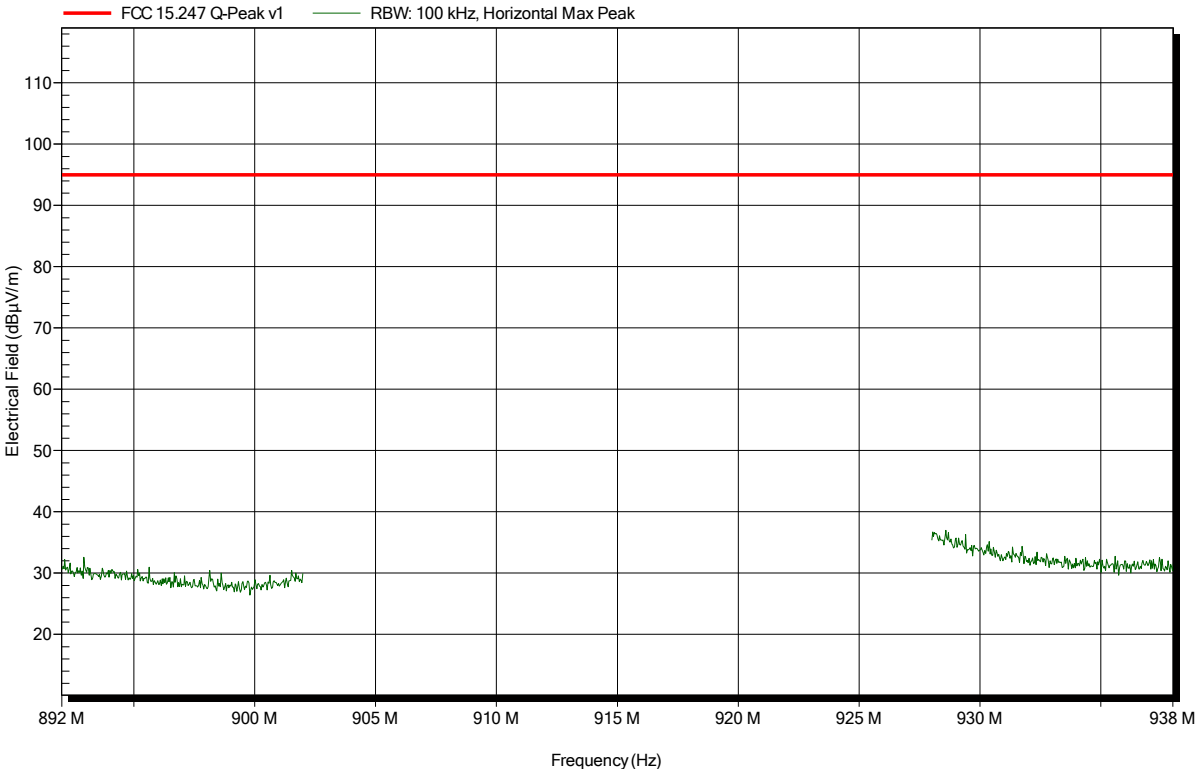


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	band-edge

Index 27

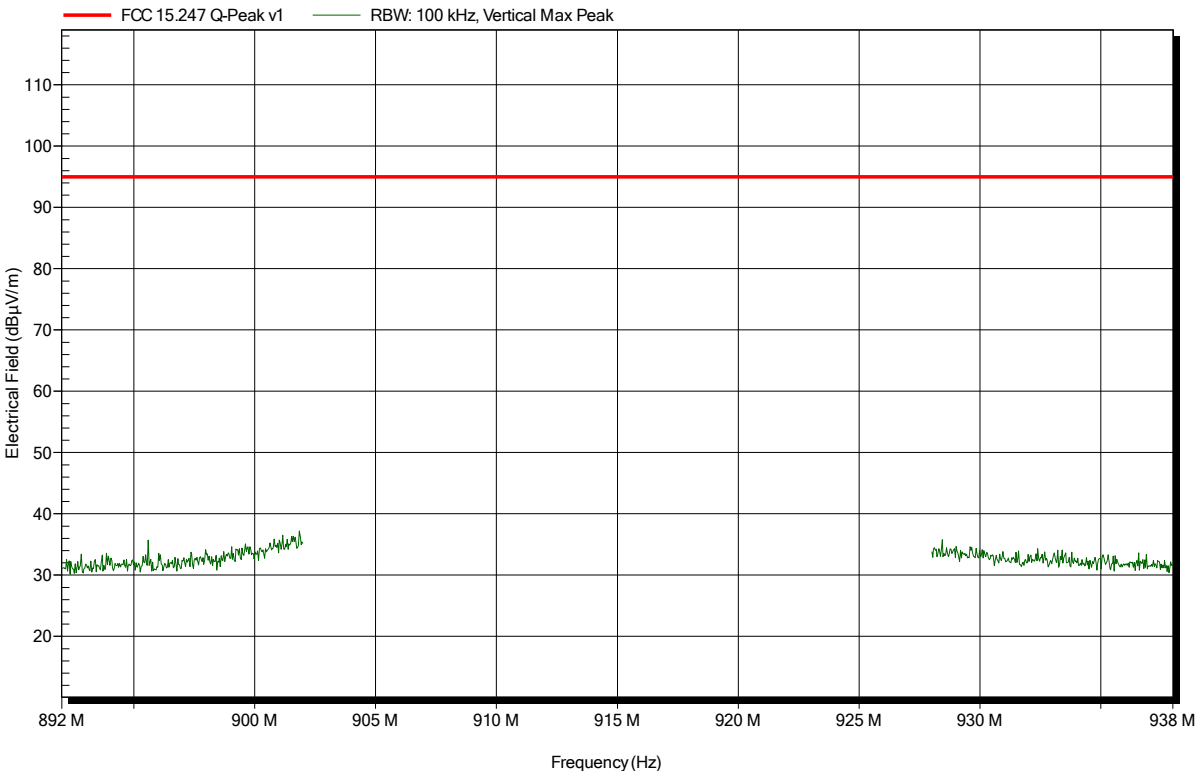


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	band-edge

Index 25

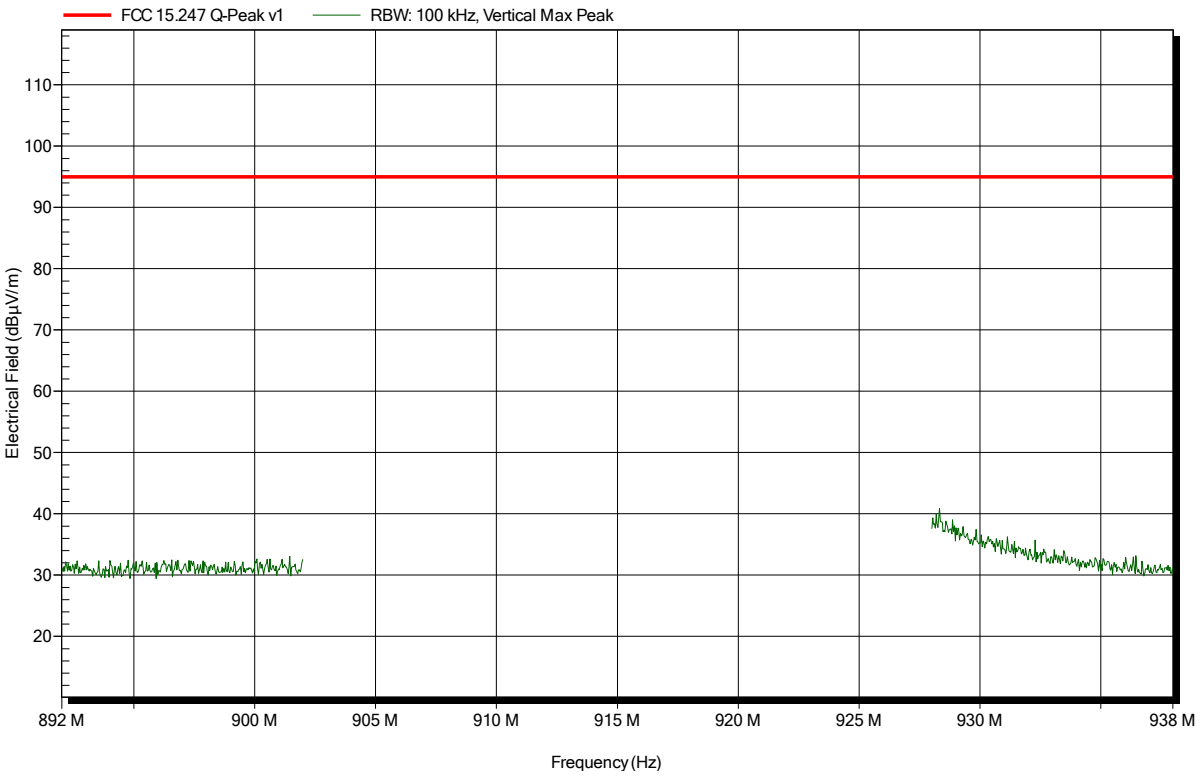


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	band-edge

Index 26

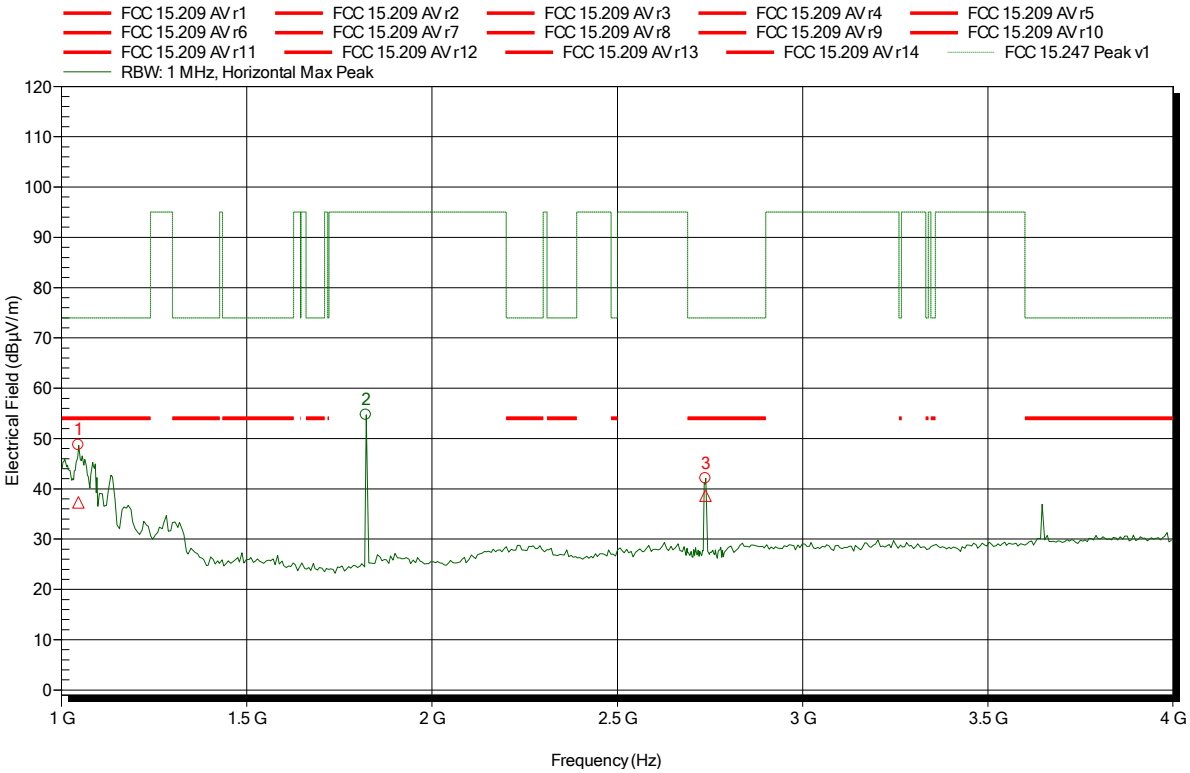


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 18



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.046 GHz	48.7 dBµV/m	74 dBµV/m	-25.3 dB	Pass
1.822 GHz	54.69 dBµV/m	95 dBµV/m	-40.31 dB	Pass
2.738 GHz	42.07 dBµV/m	74 dBµV/m	-31.93 dB	Pass

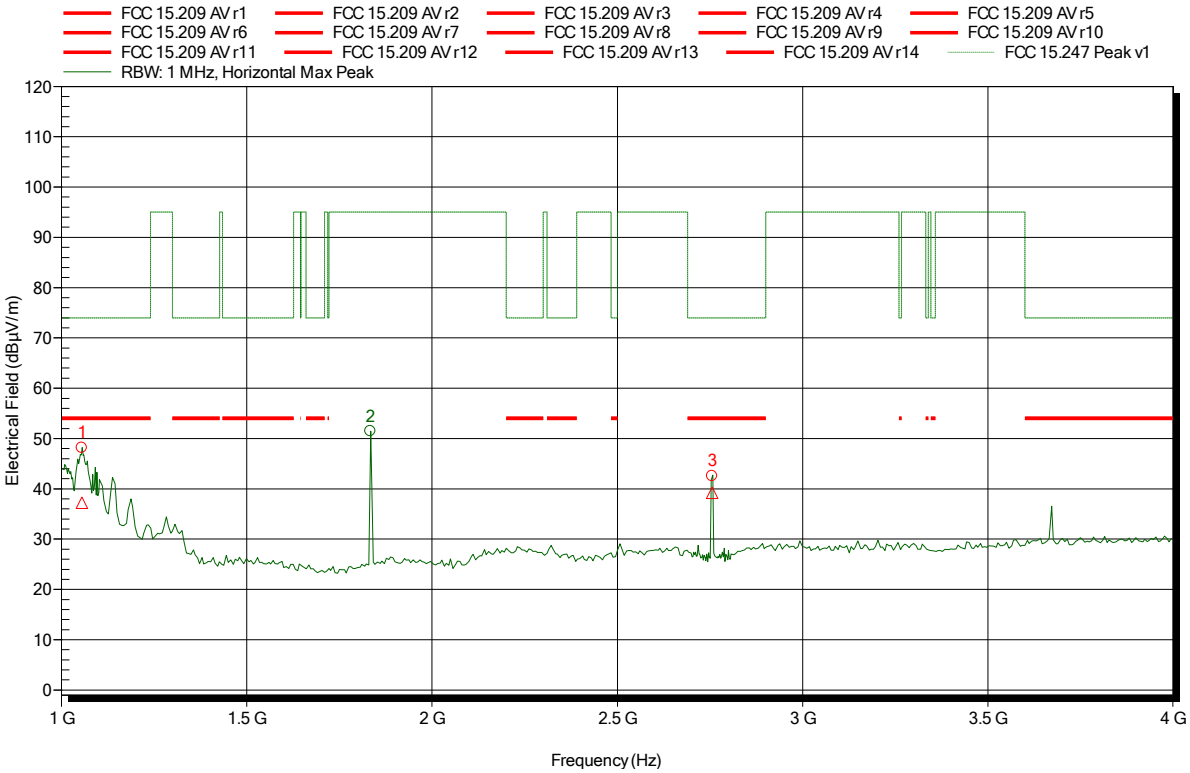
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.046 GHz	37.29 dBµV/m	54 dBµV/m	-16.71 dB	Pass
1.822 GHz				
2.738 GHz	38.67 dBµV/m	54 dBµV/m	-15.33 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 28



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.055 GHz	48.17 dBµV/m	74 dBµV/m	-25.83 dB	Pass
1.834 GHz	51.45 dBµV/m	95 dBµV/m	-43.55 dB	Pass
2.756 GHz	42.56 dBµV/m	74 dBµV/m	-31.44 dB	Pass

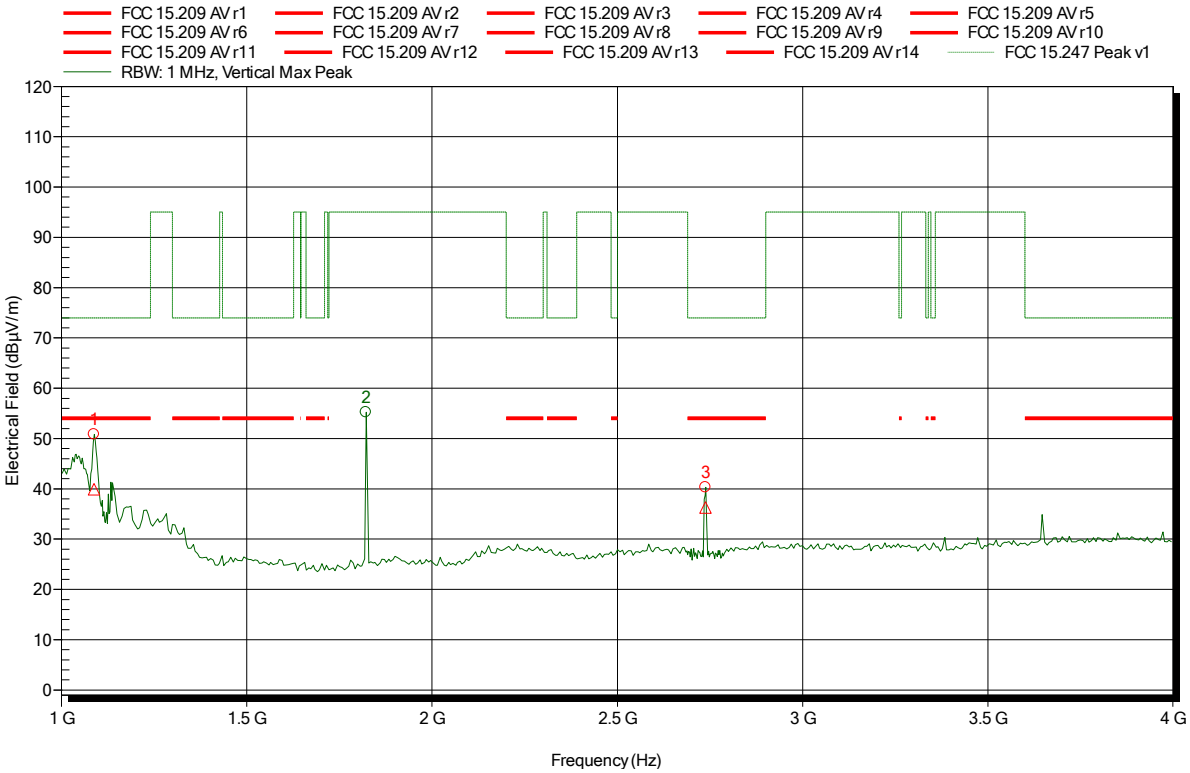
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.055 GHz	37.25 dBµV/m	54 dBµV/m	-16.75 dB	Pass
1.834 GHz				
2.756 GHz	39.24 dBµV/m	54 dBµV/m	-14.76 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 21



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.088 GHz	50.83 dBµV/m	74 dBµV/m	-23.17 dB	Pass
1.822 GHz	55.22 dBµV/m	95 dBµV/m	-39.78 dB	Pass
2.738 GHz	40.29 dBµV/m	74 dBµV/m	-33.71 dB	Pass

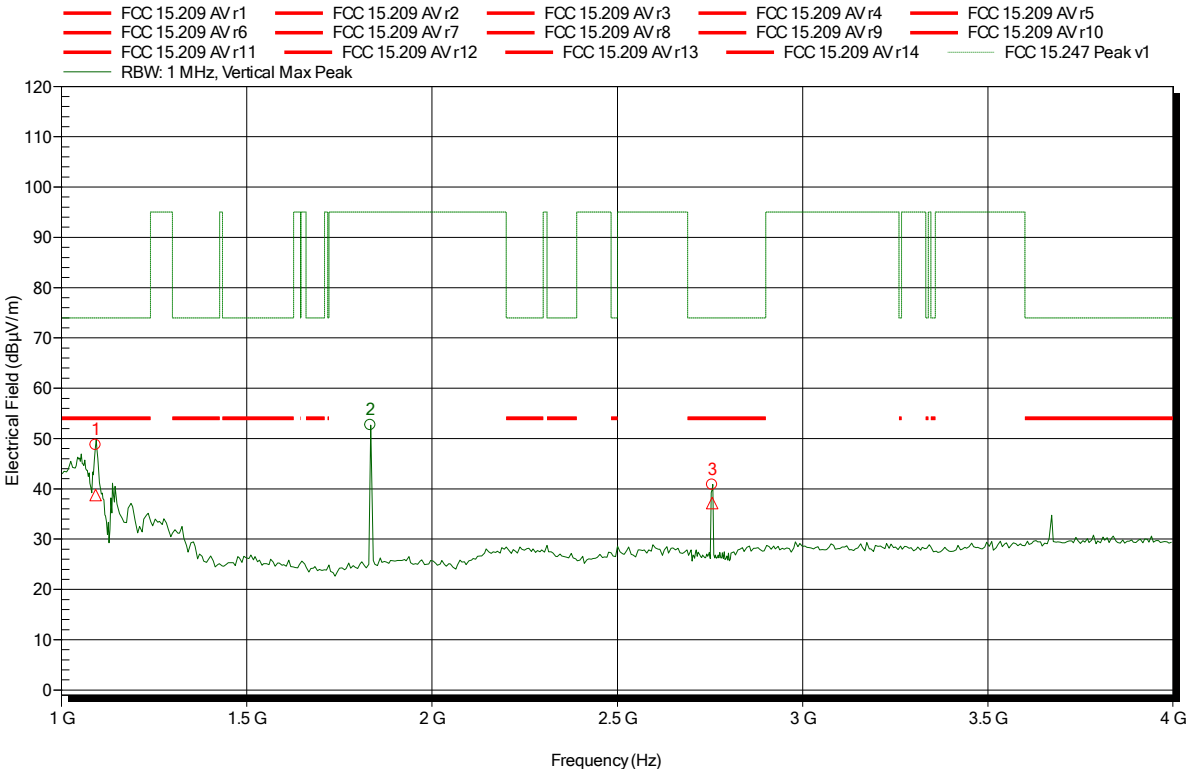
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.088 GHz	39.9 dBµV/m	54 dBµV/m	-14.1 dB	Pass
1.822 GHz				
2.738 GHz	36.29 dBµV/m	54 dBµV/m	-17.71 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 31



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.093 GHz	48.74 dBµV/m	74 dBµV/m	-25.26 dB	Pass
1.834 GHz	52.67 dBµV/m	95 dBµV/m	-42.33 dB	Pass
2.756 GHz	40.82 dBµV/m	74 dBµV/m	-33.18 dB	Pass

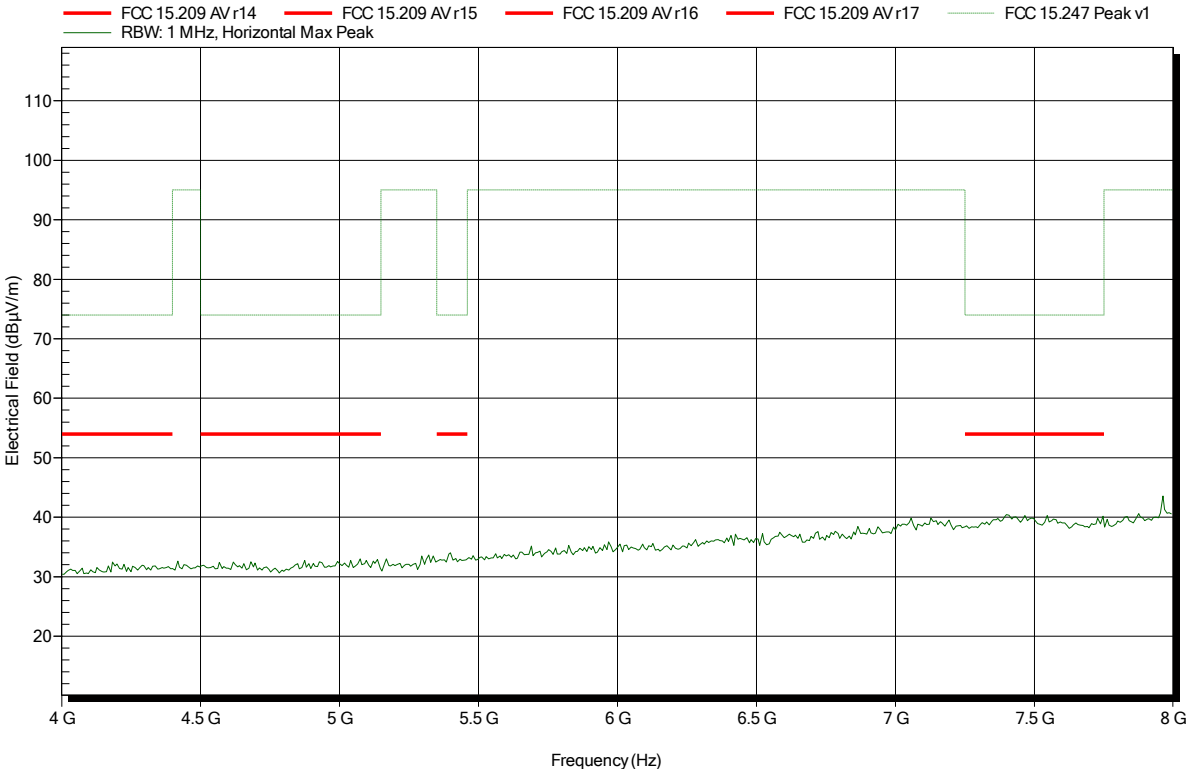
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.093 GHz	38.75 dBµV/m	54 dBµV/m	-15.25 dB	Pass
1.834 GHz				
2.756 GHz	37.15 dBµV/m	54 dBµV/m	-16.85 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 19

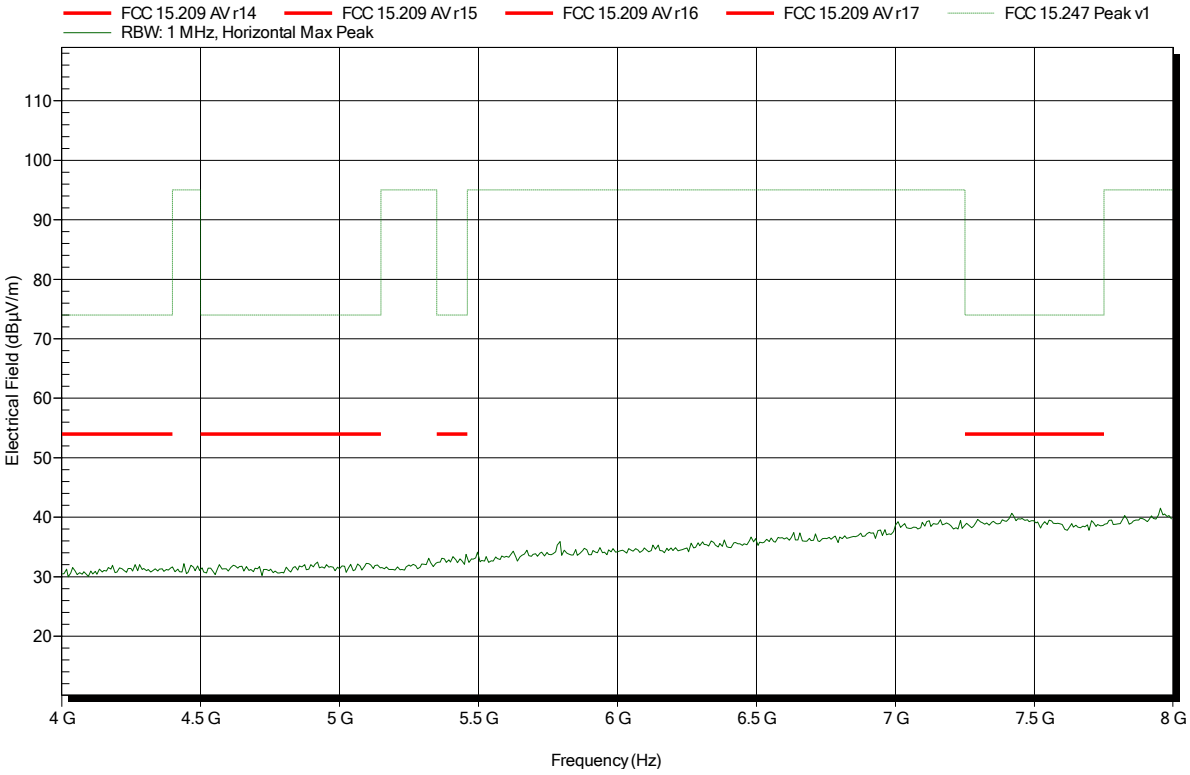


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 29

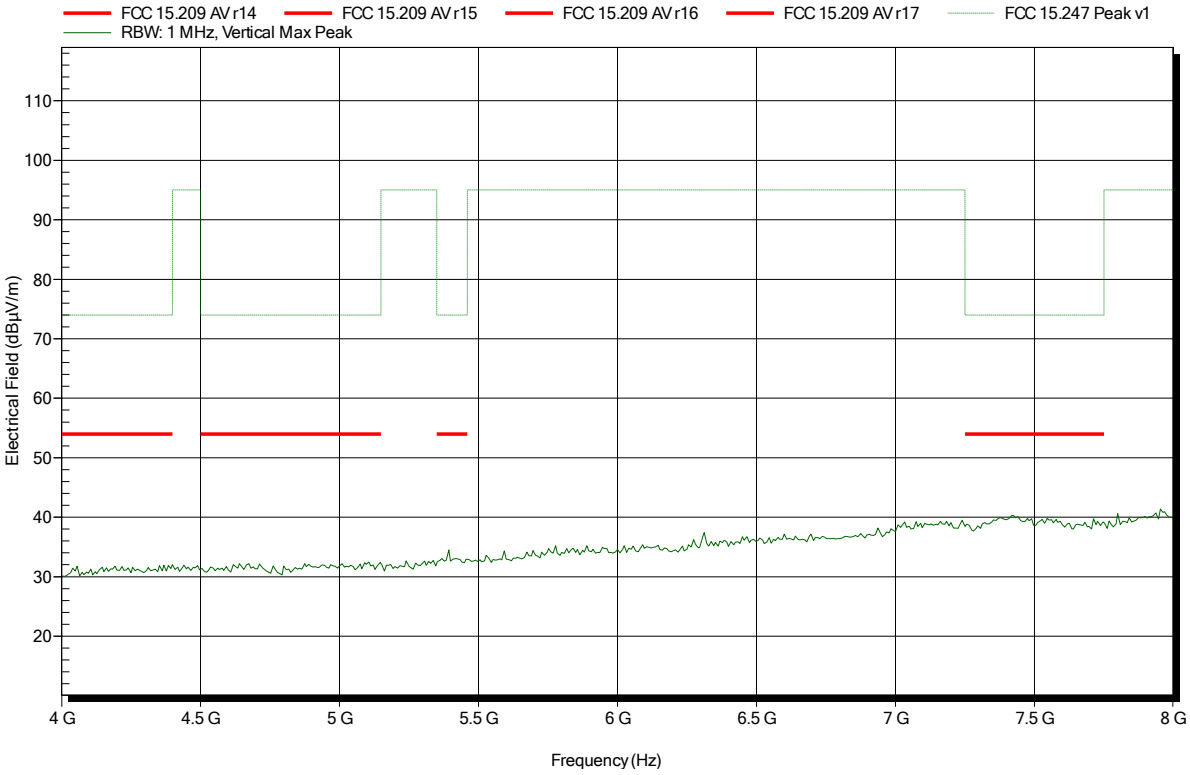


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 22

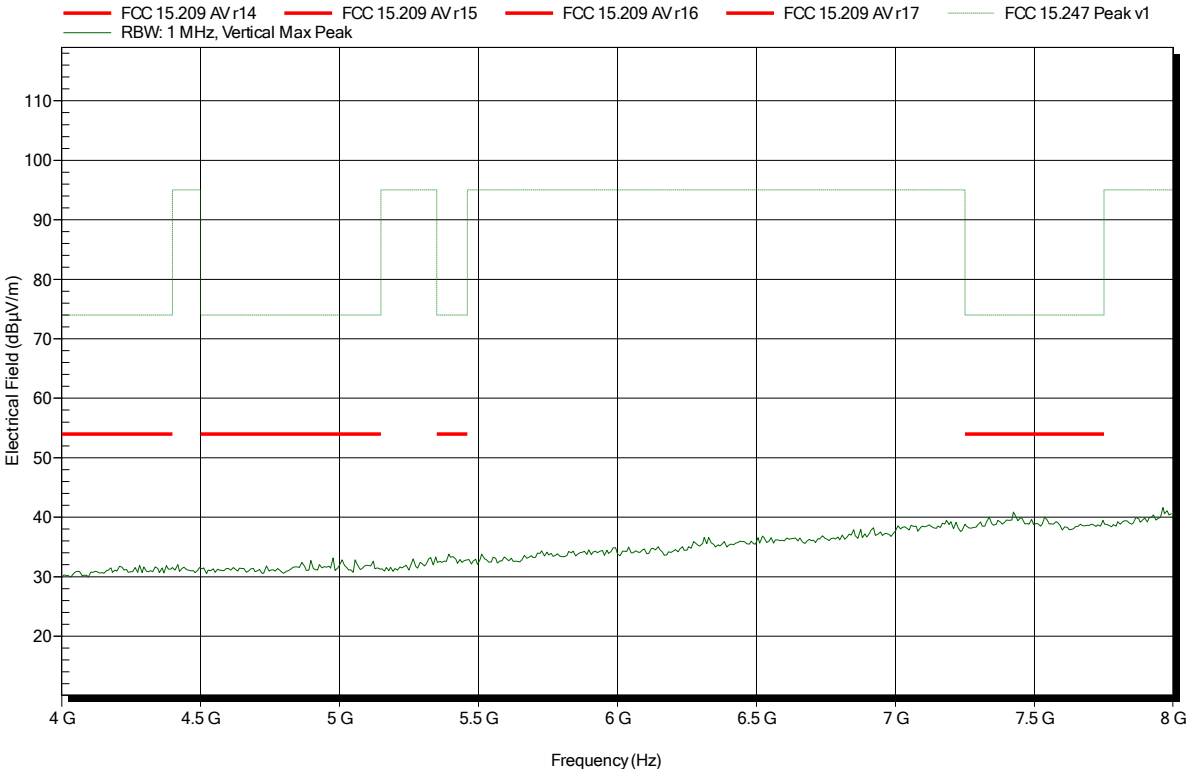


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 32

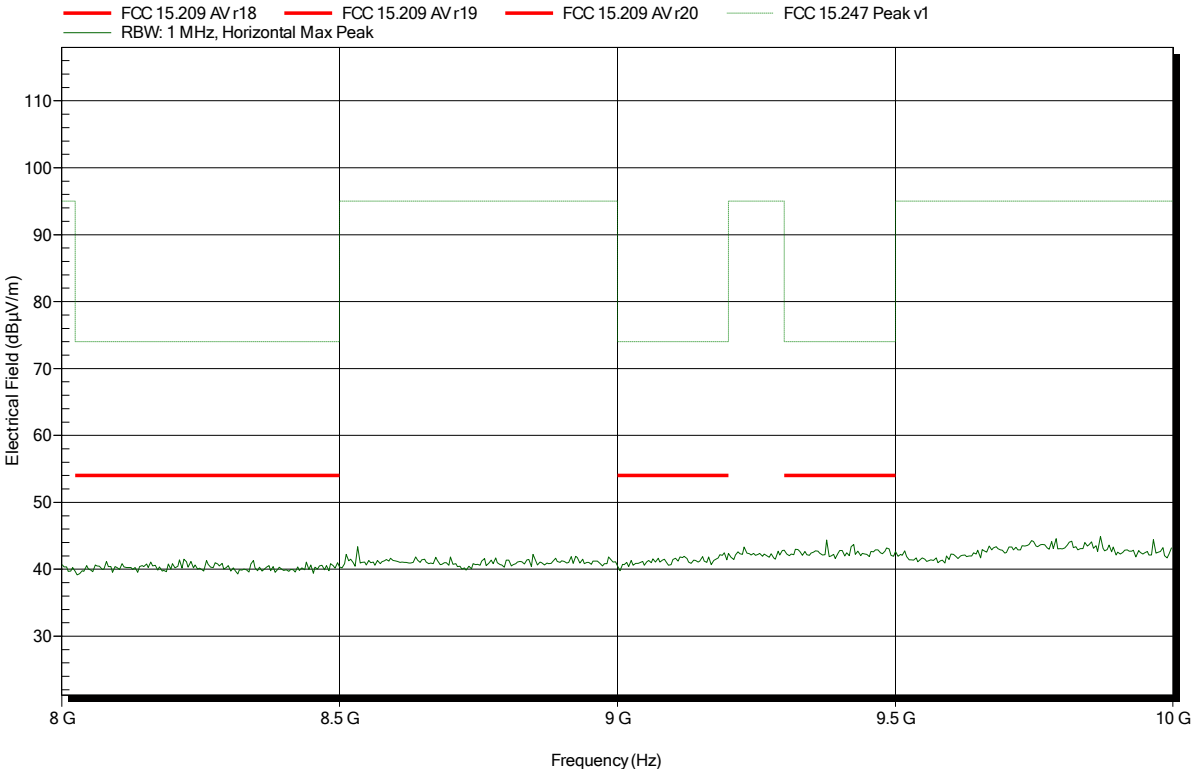


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 20

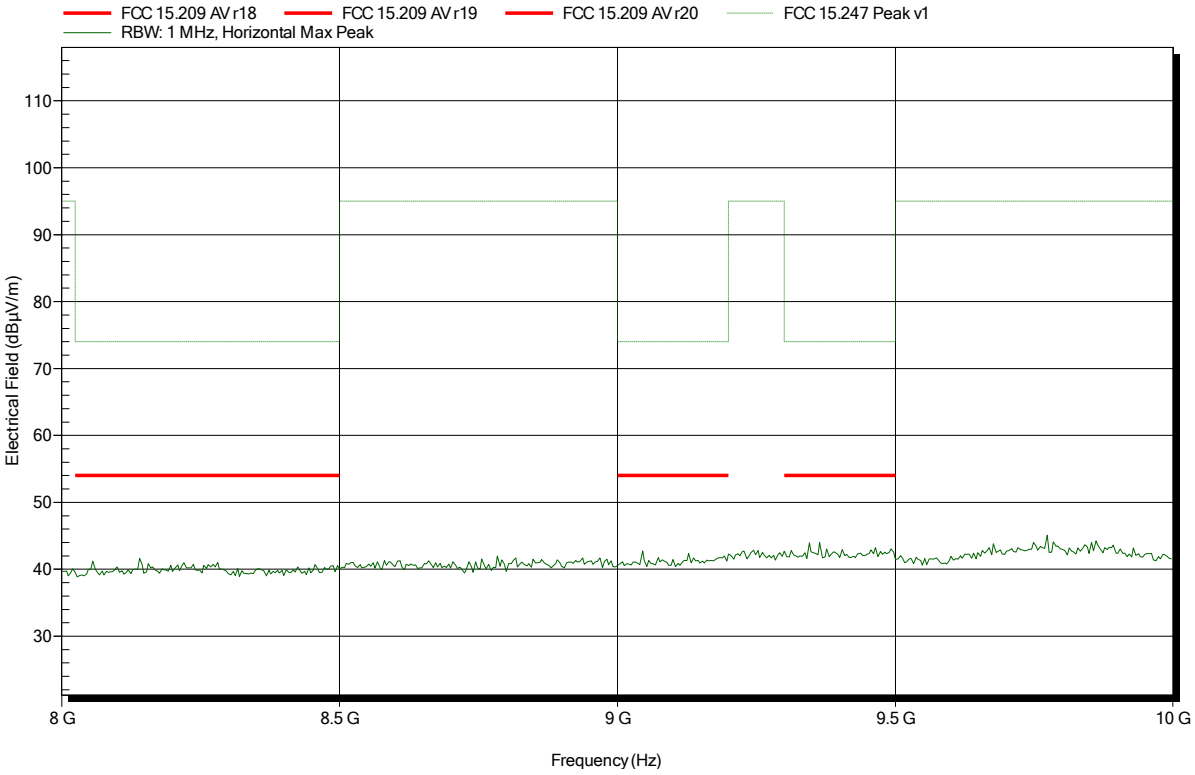


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 30

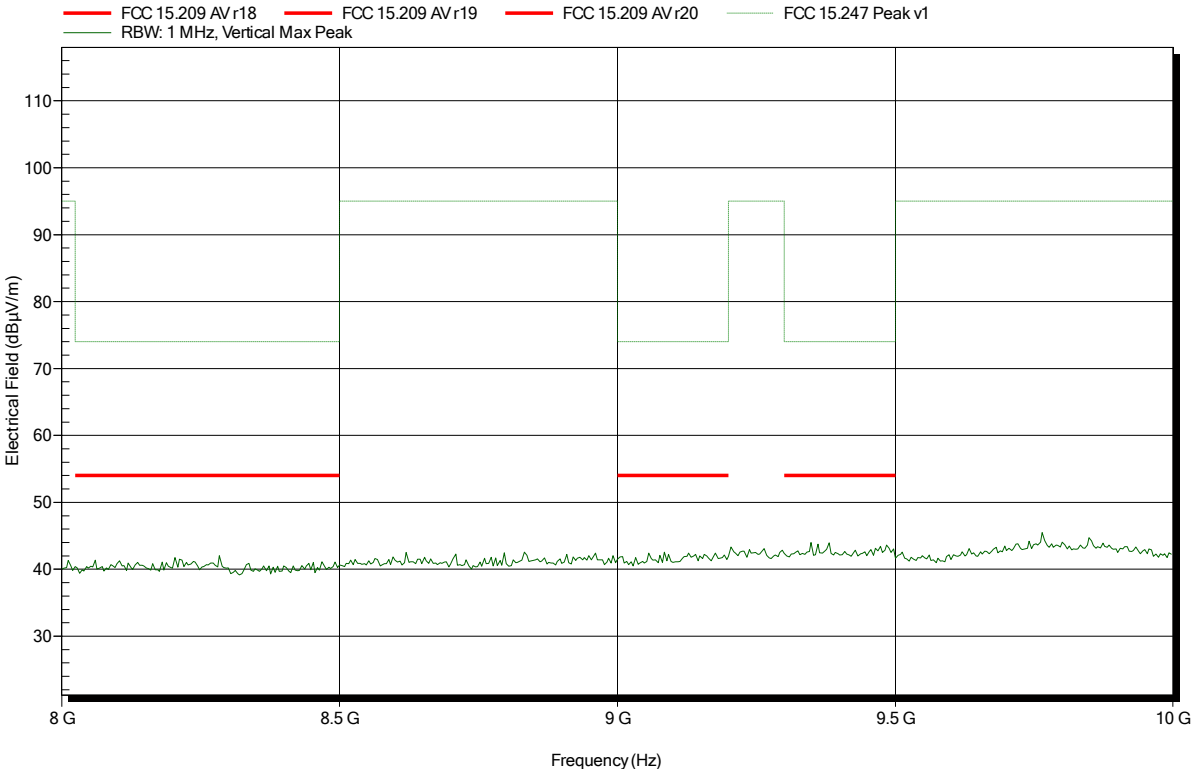


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Flow
Test Date:	2017-08-22
Note:	

Index 23

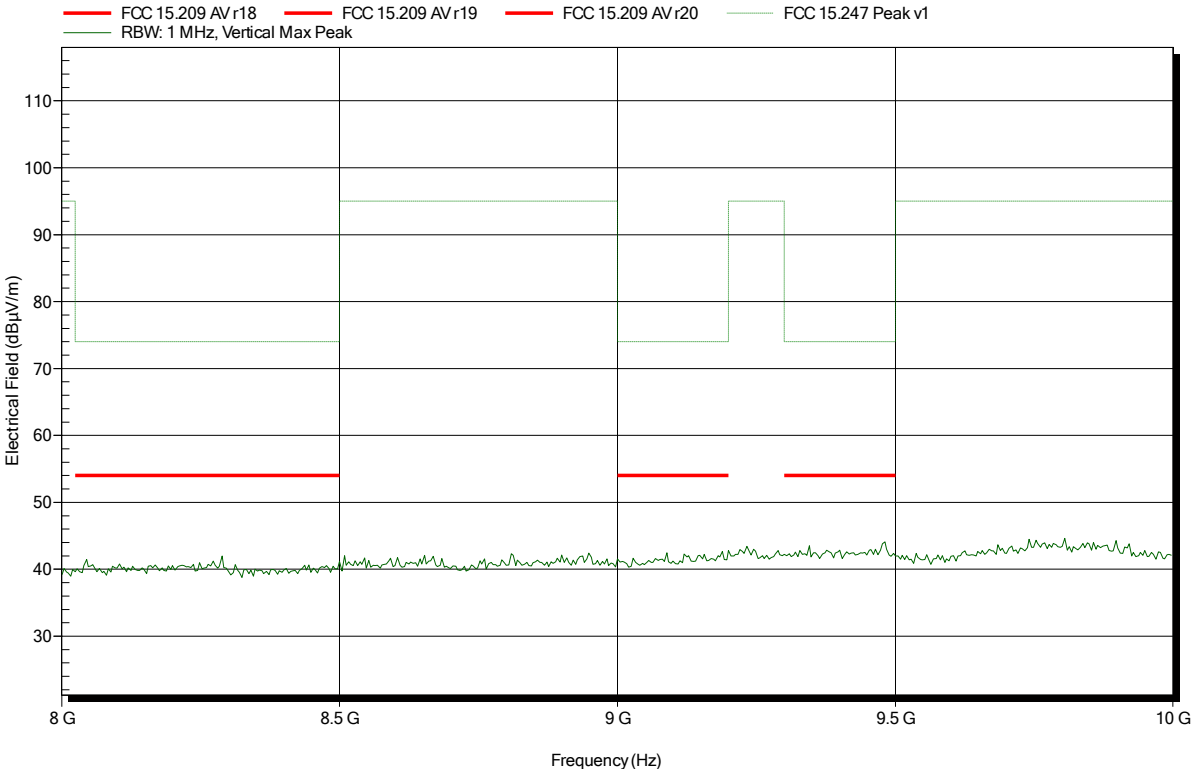


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6699490, Fhigh
Test Date:	2017-08-22
Note:	

Index 33

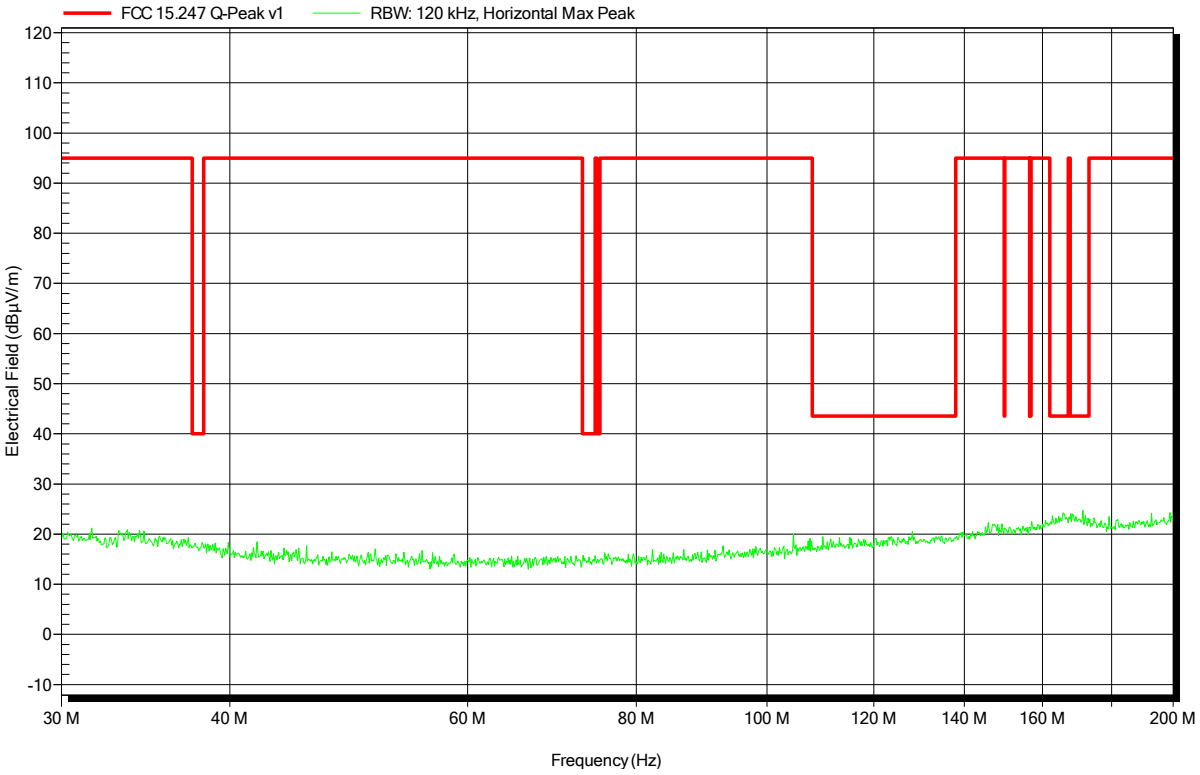


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 37

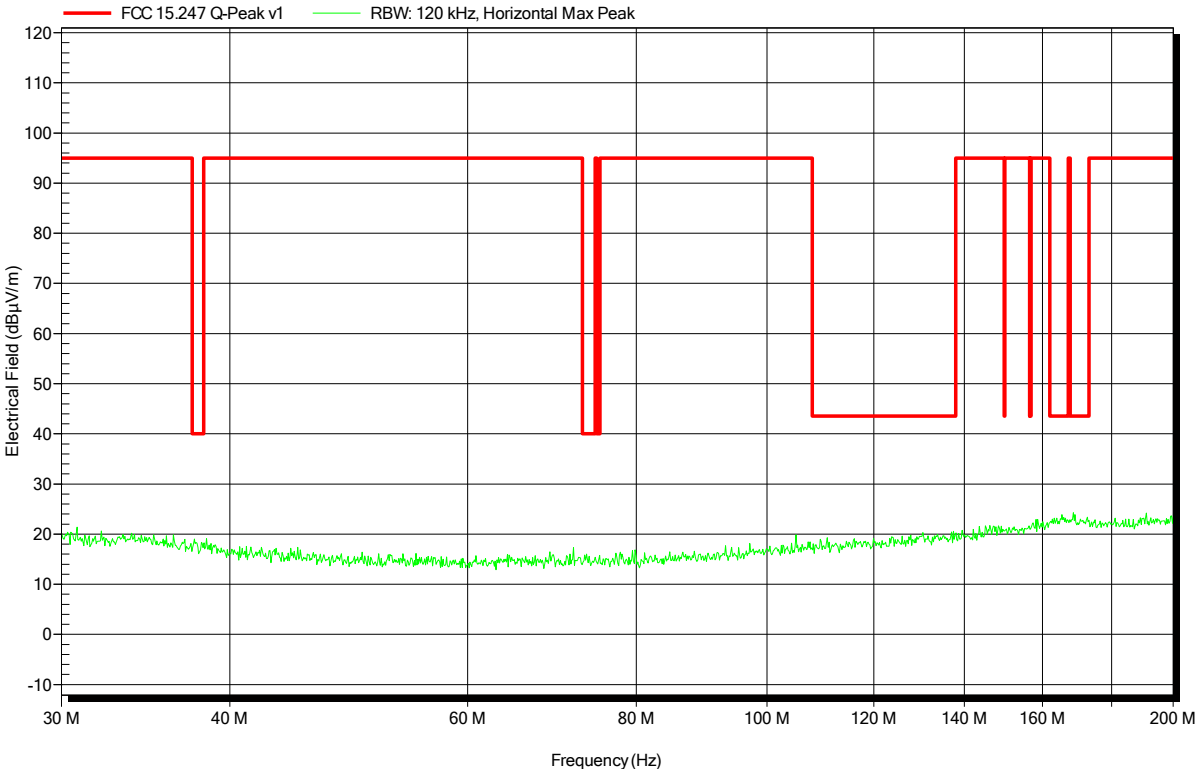


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 38

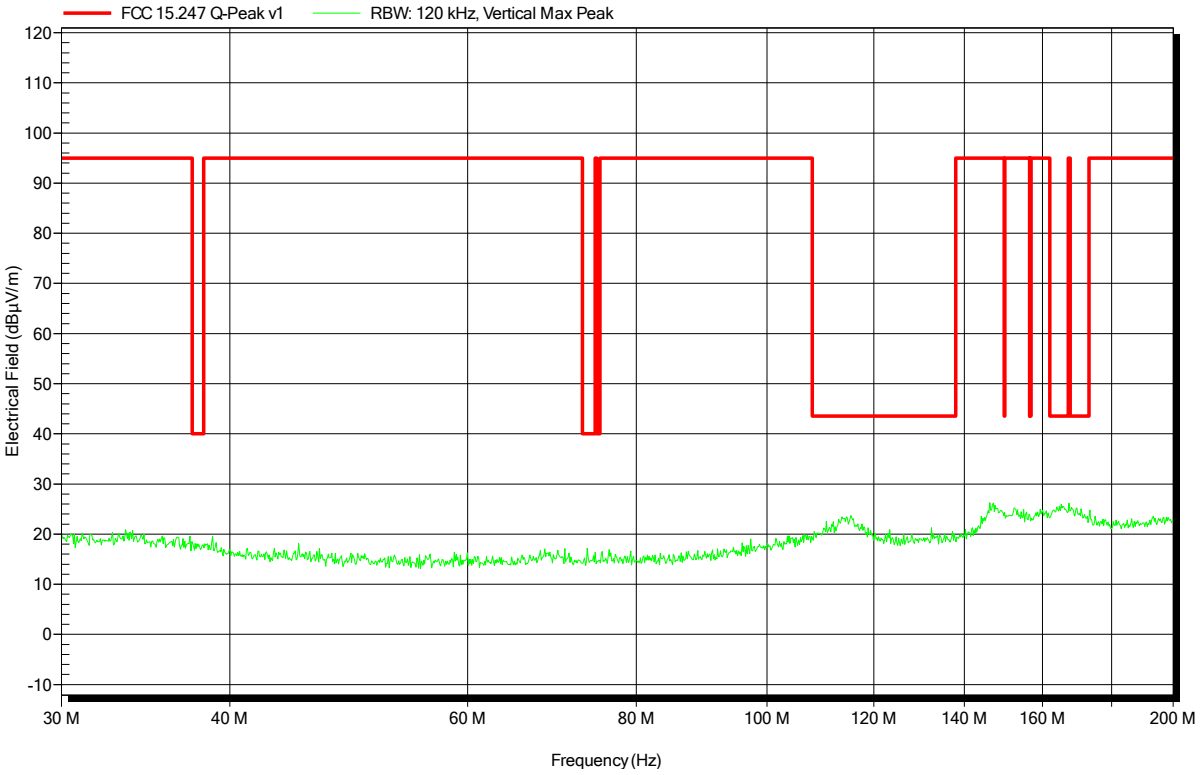


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 36

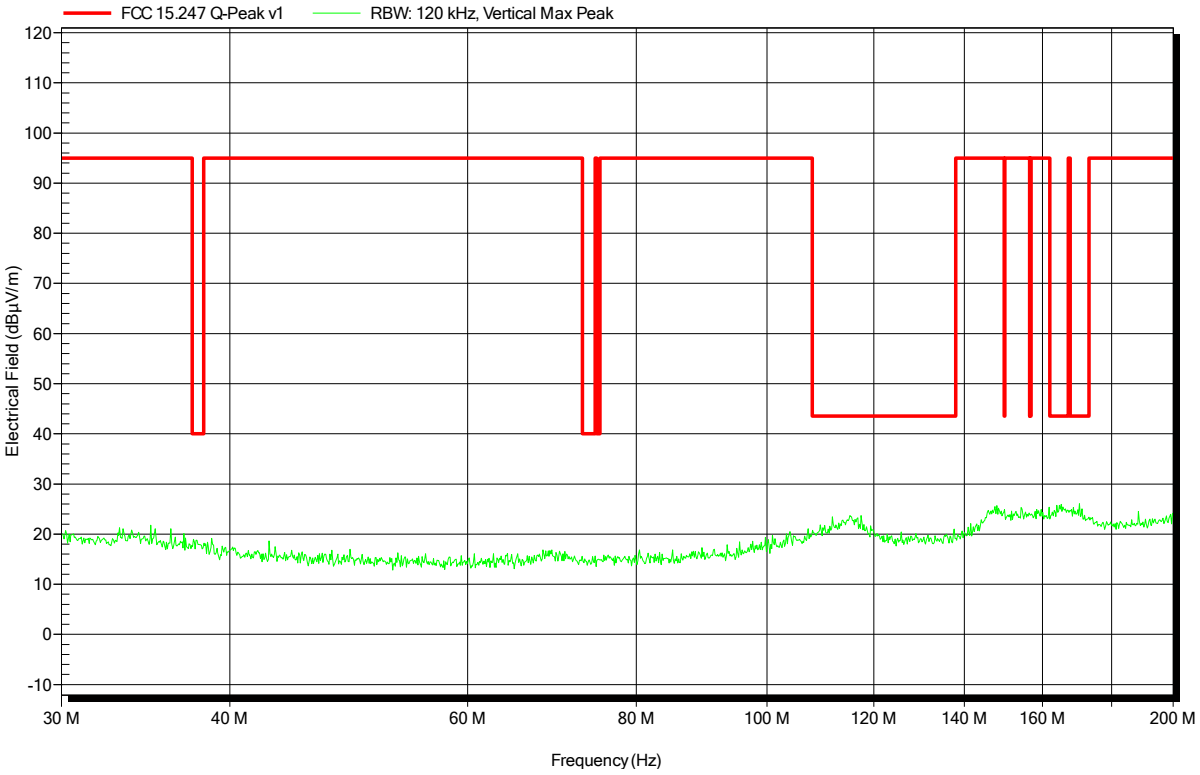


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 39

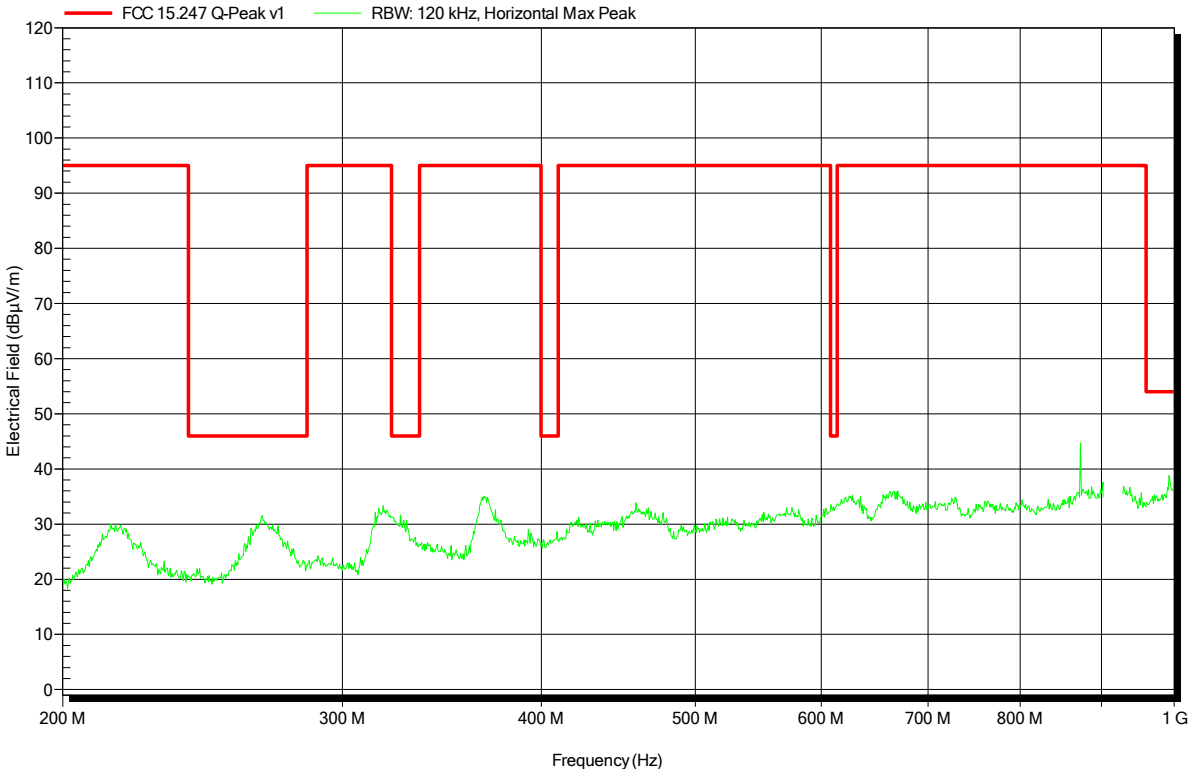


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 34

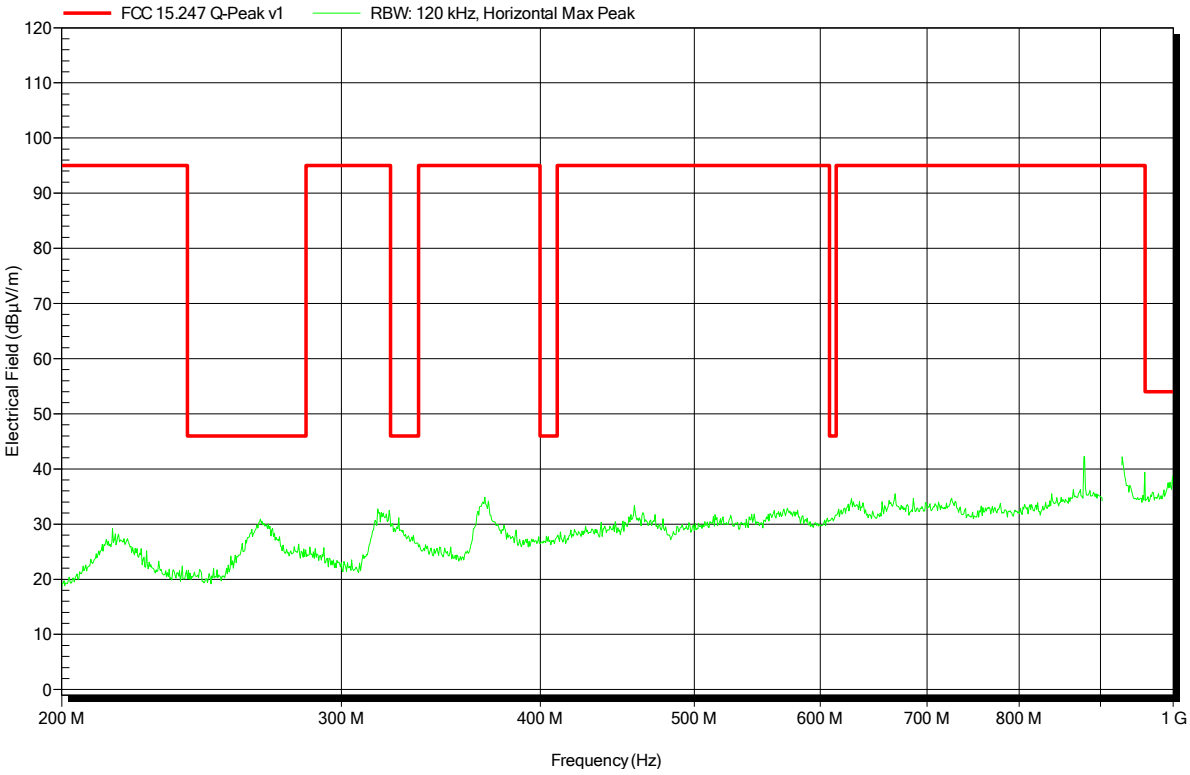


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 41

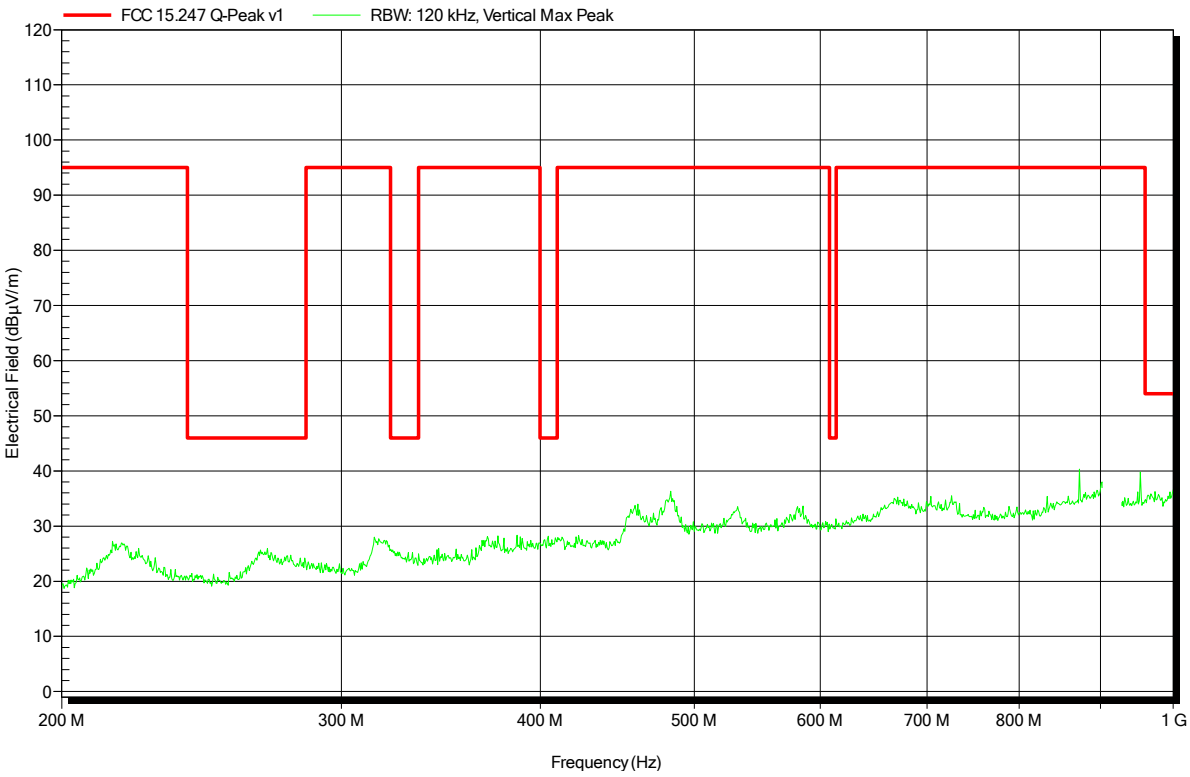


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-23
Note:	

Index 35

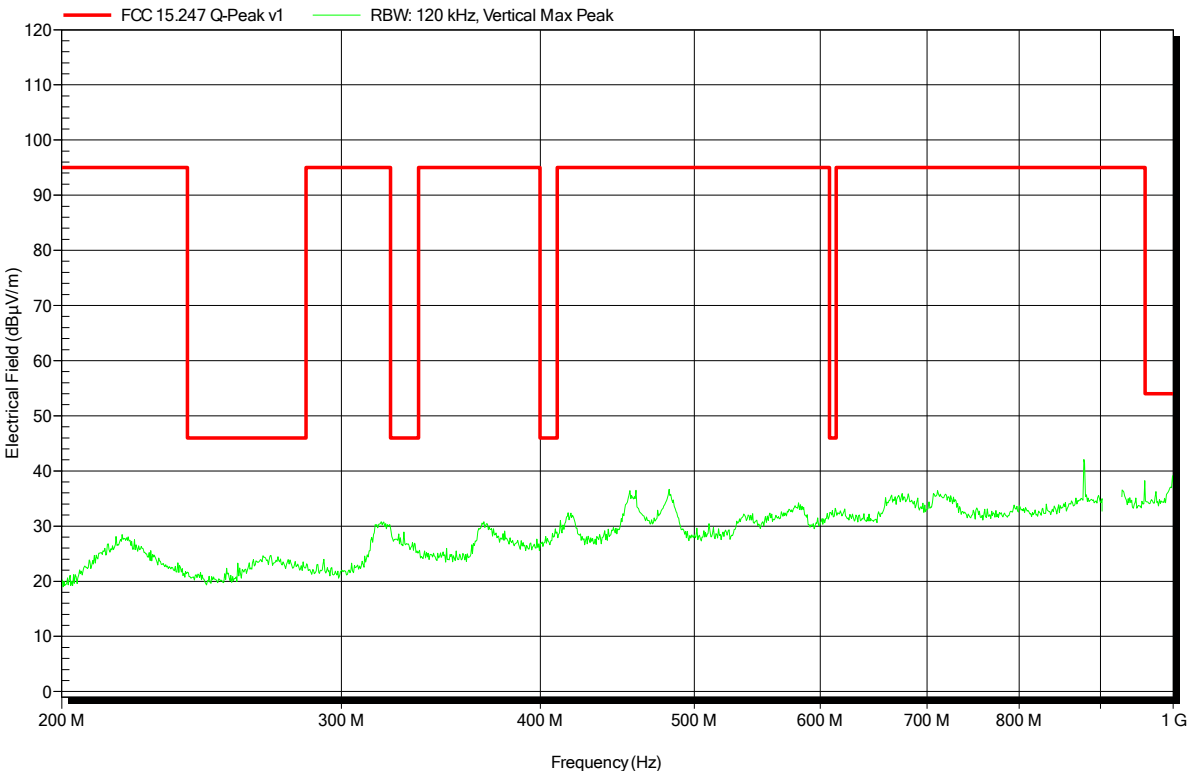


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-23
Note:	

Index 40

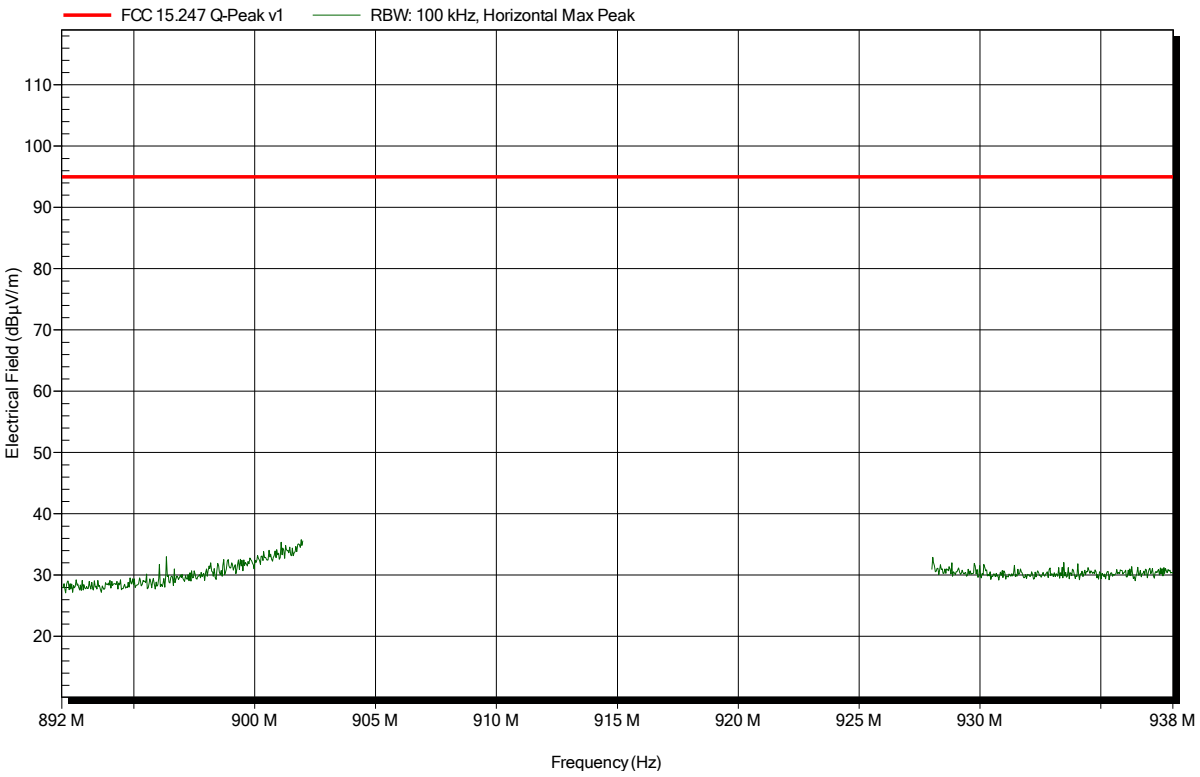


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	band-edge

Index 24

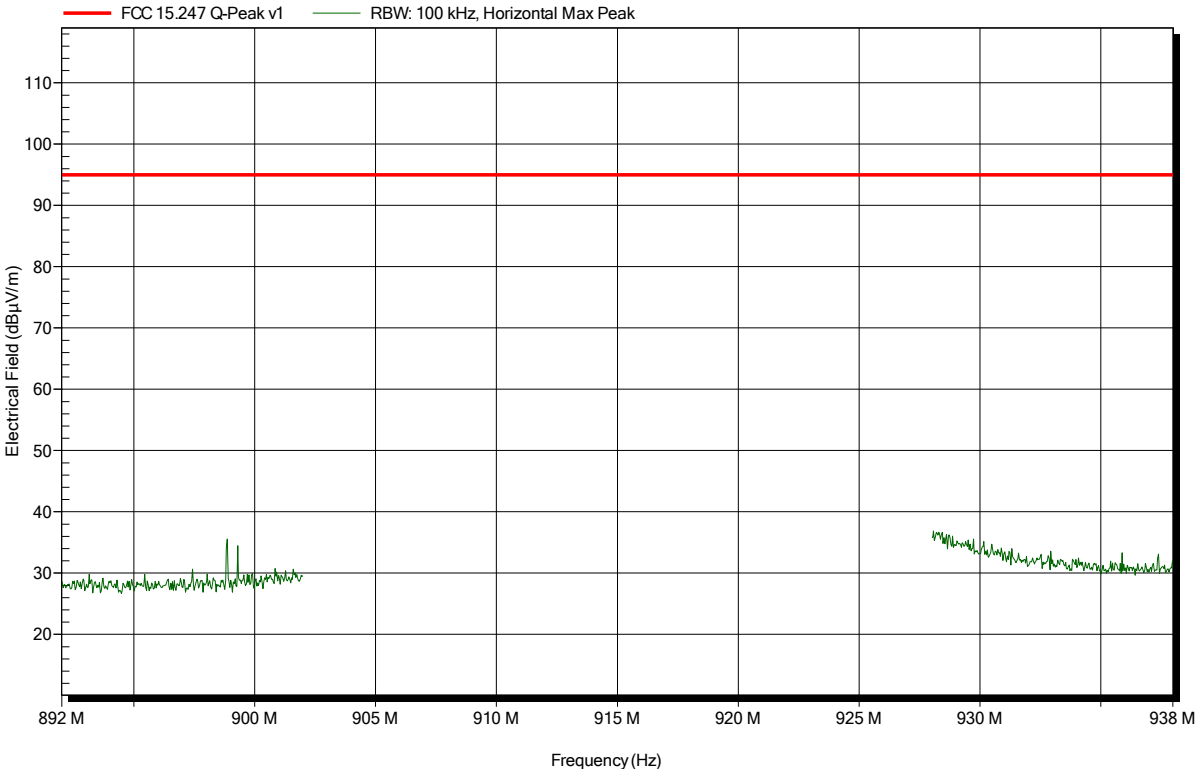


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	band-edge

Index 27

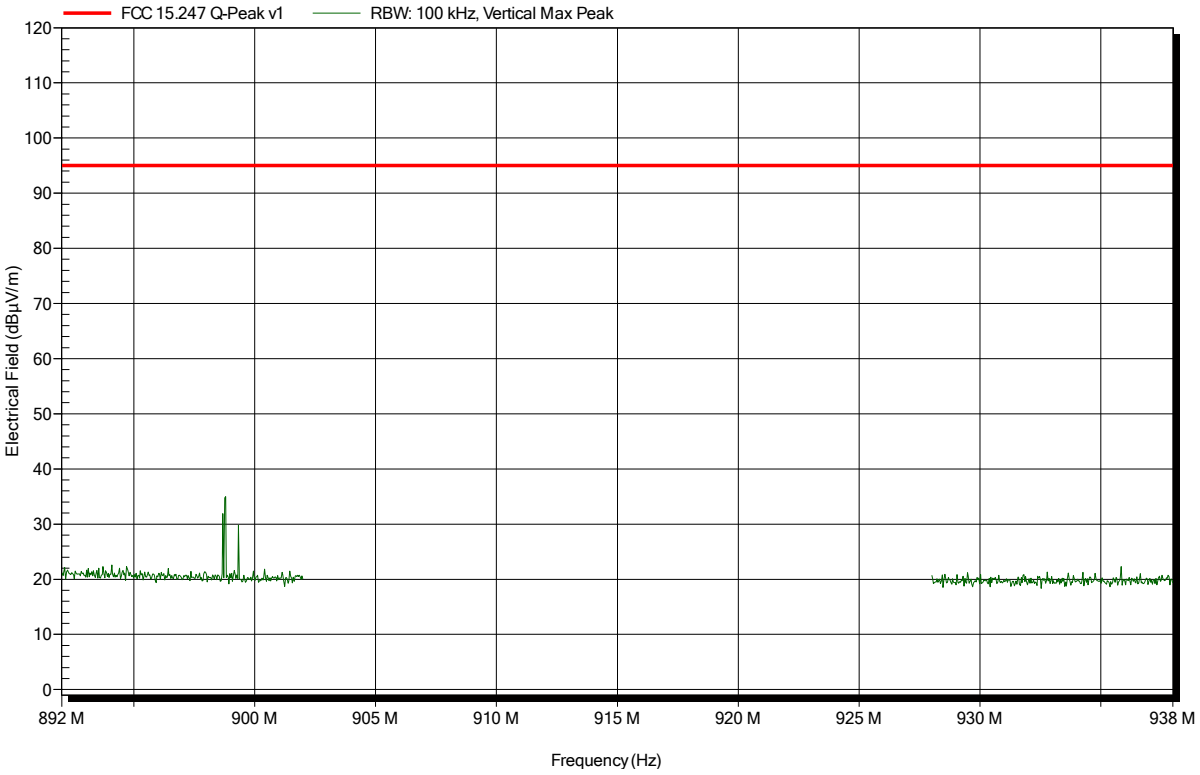


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	band-edge

Index 25

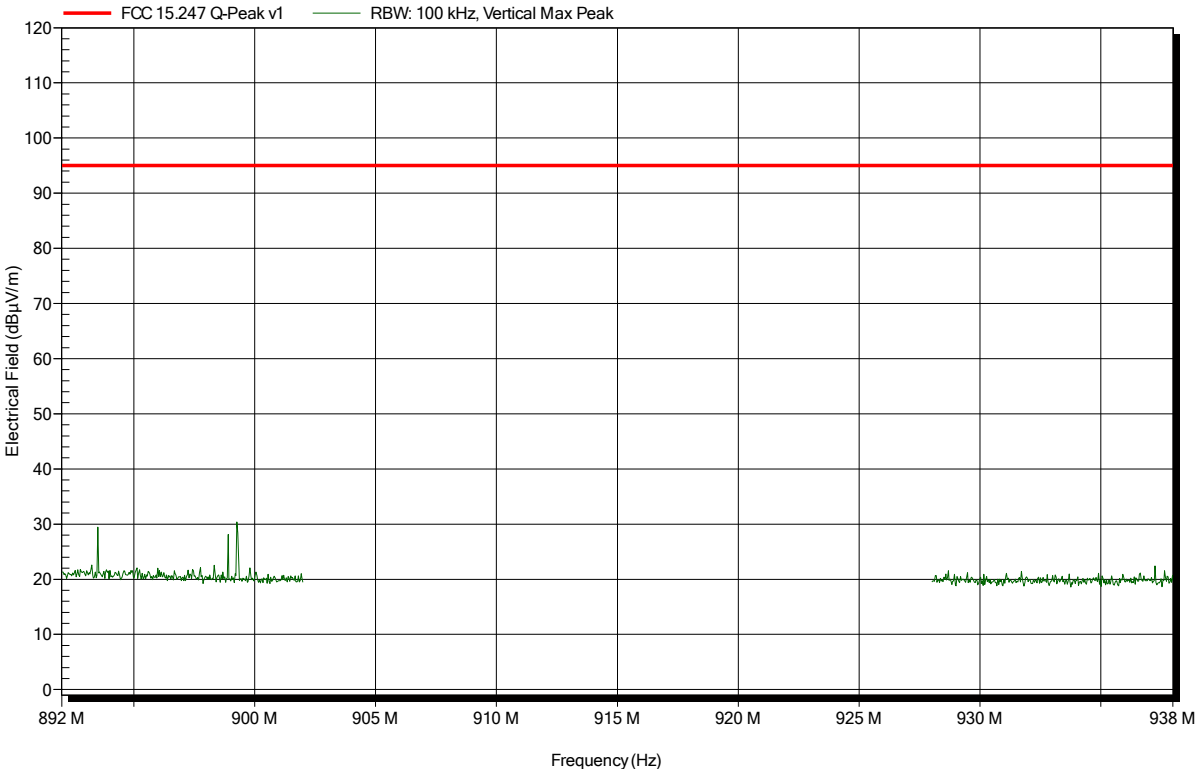


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	band-edge

Index 26

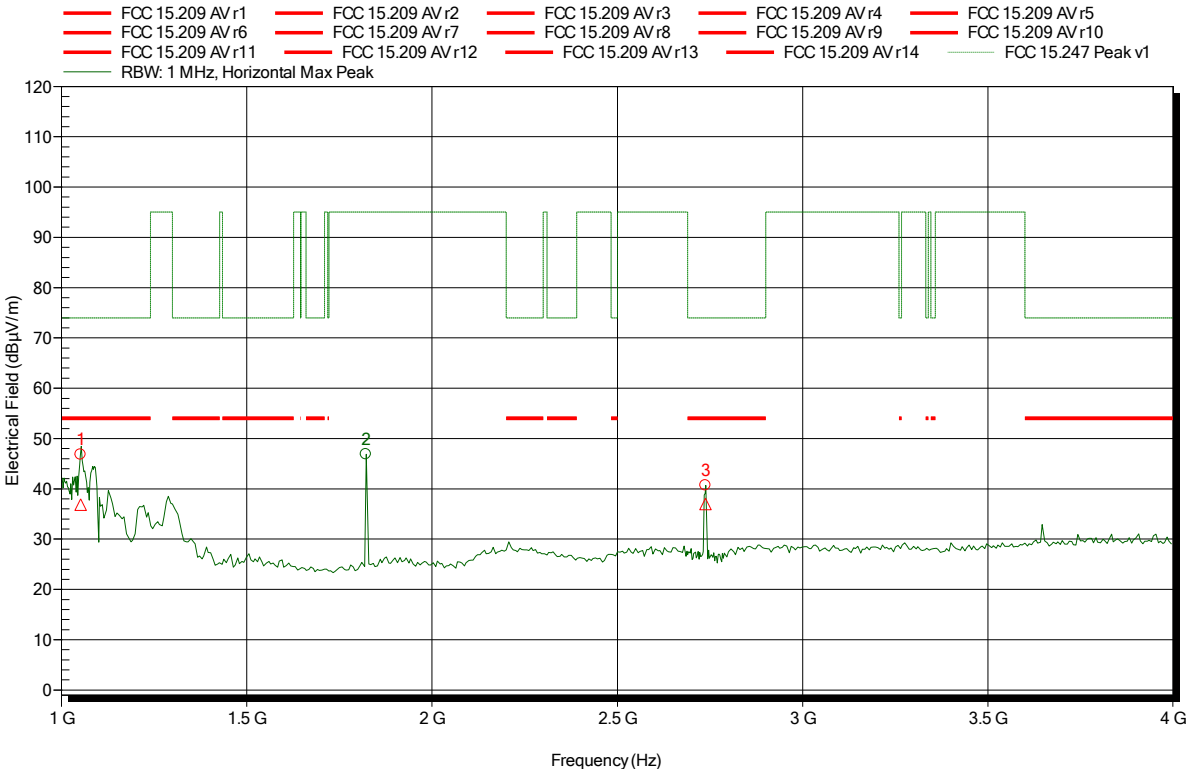


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	

Index 18



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.052 GHz	46.82 dBµV/m	74 dBµV/m	-27.18 dB	Pass
1.822 GHz	46.87 dBµV/m	95 dBµV/m	-48.13 dB	Pass
2.738 GHz	40.66 dBµV/m	74 dBµV/m	-33.34 dB	Pass

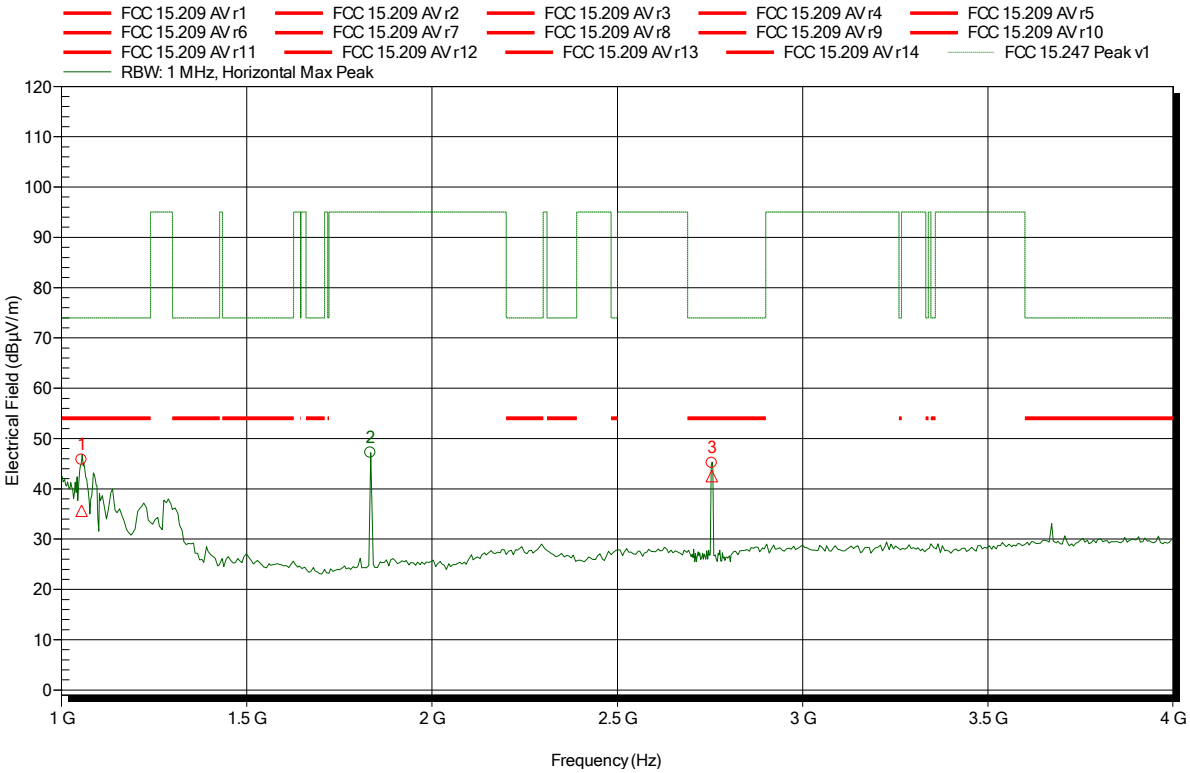
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.052 GHz	36.83 dBµV/m	54 dBµV/m	-17.17 dB	Pass
1.822 GHz				
2.738 GHz	36.99 dBµV/m	54 dBµV/m	-17.01 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	

Index 28



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.055 GHz	45.79 dBµV/m	74 dBµV/m	-28.21 dB	Pass
1.834 GHz	47.19 dBµV/m	95 dBµV/m	-47.81 dB	Pass
2.755 GHz	45.14 dBµV/m	74 dBµV/m	-28.86 dB	Pass

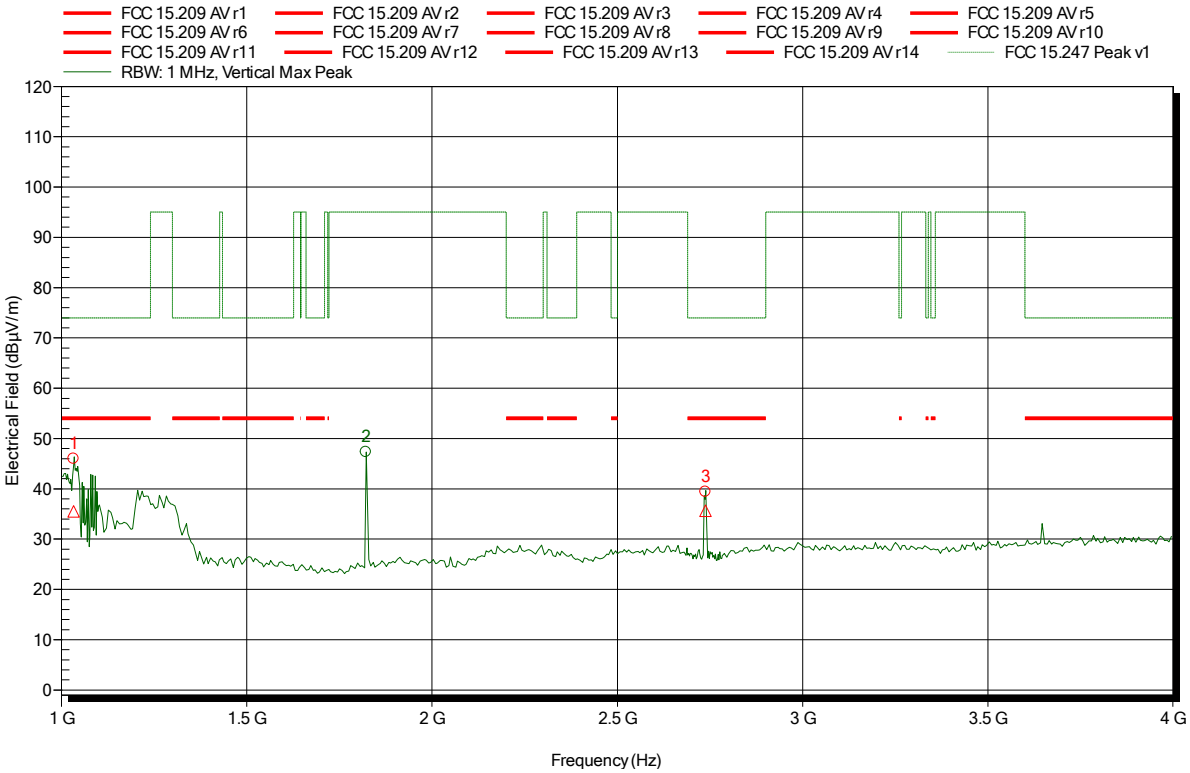
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.055 GHz	35.62 dBµV/m	54 dBµV/m	-18.38 dB	Pass
1.834 GHz				
2.755 GHz	42.56 dBµV/m	54 dBµV/m	-11.44 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	

Index 21



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.033 GHz	45.98 dBµV/m	74 dBµV/m	-28.02 dB	Pass
1.822 GHz	47.31 dBµV/m	95 dBµV/m	-47.69 dB	Pass
2.738 GHz	39.42 dBµV/m	74 dBµV/m	-34.58 dB	Pass

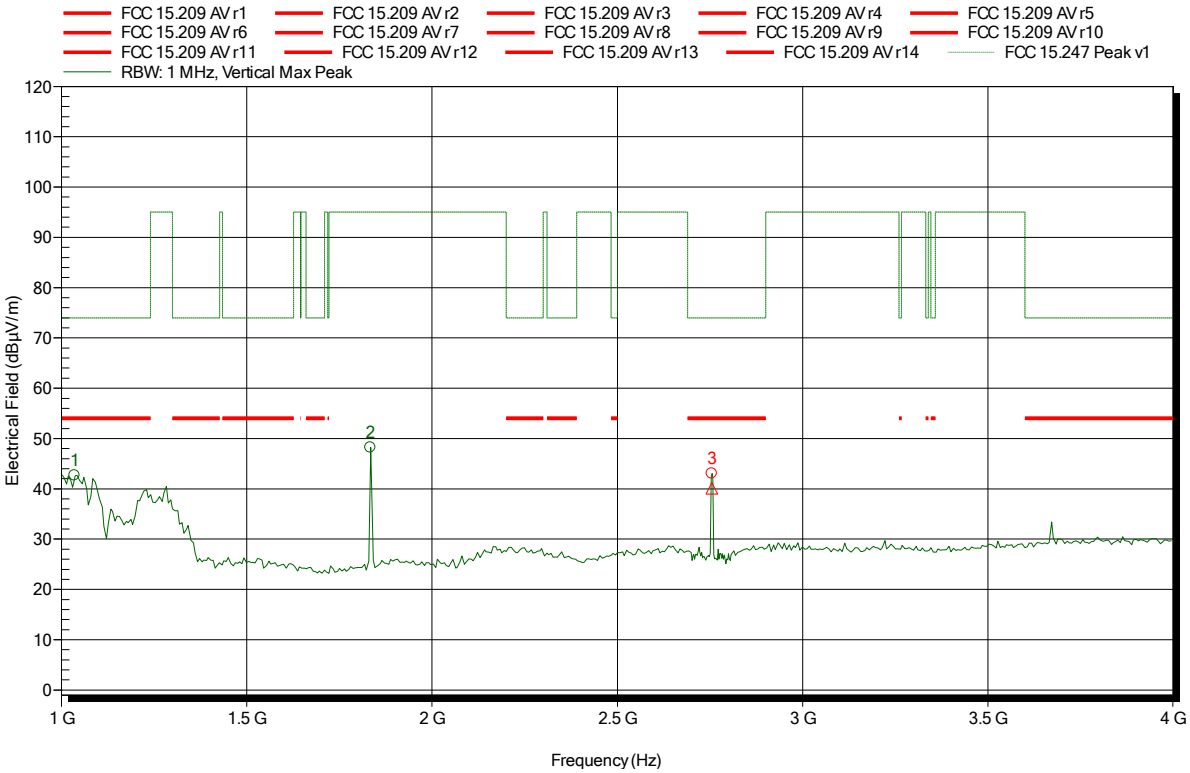
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.033 GHz	35.53 dBµV/m	54 dBµV/m	-18.47 dB	Pass
1.822 GHz				
2.738 GHz	35.65 dBµV/m	54 dBµV/m	-18.35 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	

Index 31



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.036 GHz	42.68 dBµV/m	74 dBµV/m	-31.32 dB	Pass
1.834 GHz	48.22 dBµV/m	95 dBµV/m	-46.78 dB	Pass
2.755 GHz	43.06 dBµV/m	74 dBµV/m	-30.94 dB	Pass

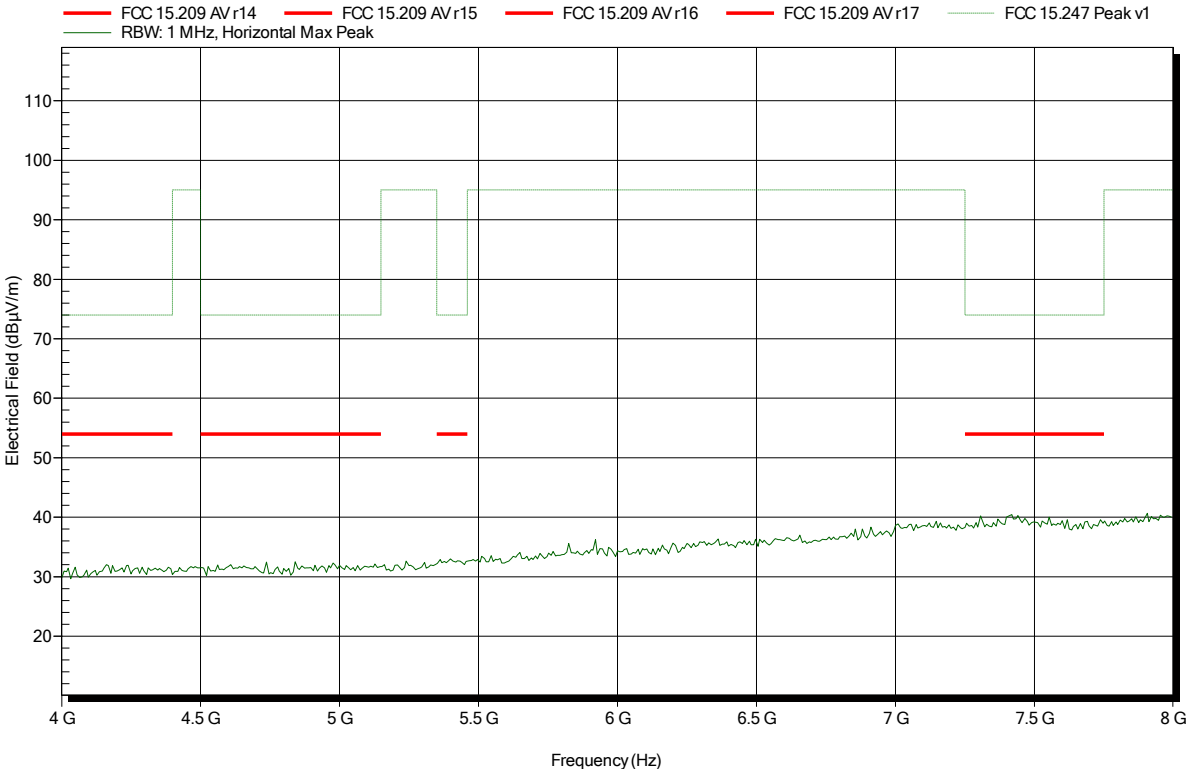
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.036 GHz				
1.834 GHz				
2.755 GHz	40.11 dBµV/m	54 dBµV/m	-13.89 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	

Index 19

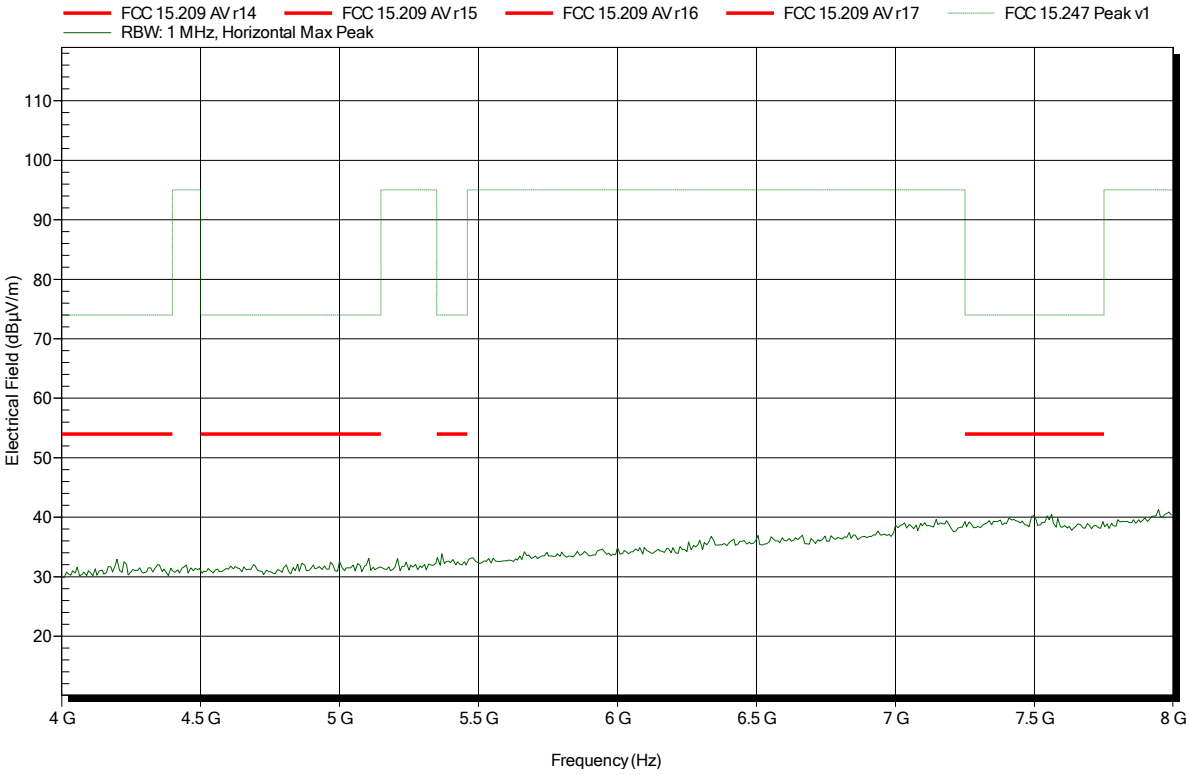


Spurious emissions according to FCC 15.247

Project number: G0M-1707-6700

Applicant:	Kamstrup A/S
EUT Name:	Ultrasonic water meter
Model:	FlowIQ 3250
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 22°C, Vnom: 3.6 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	

Index 29



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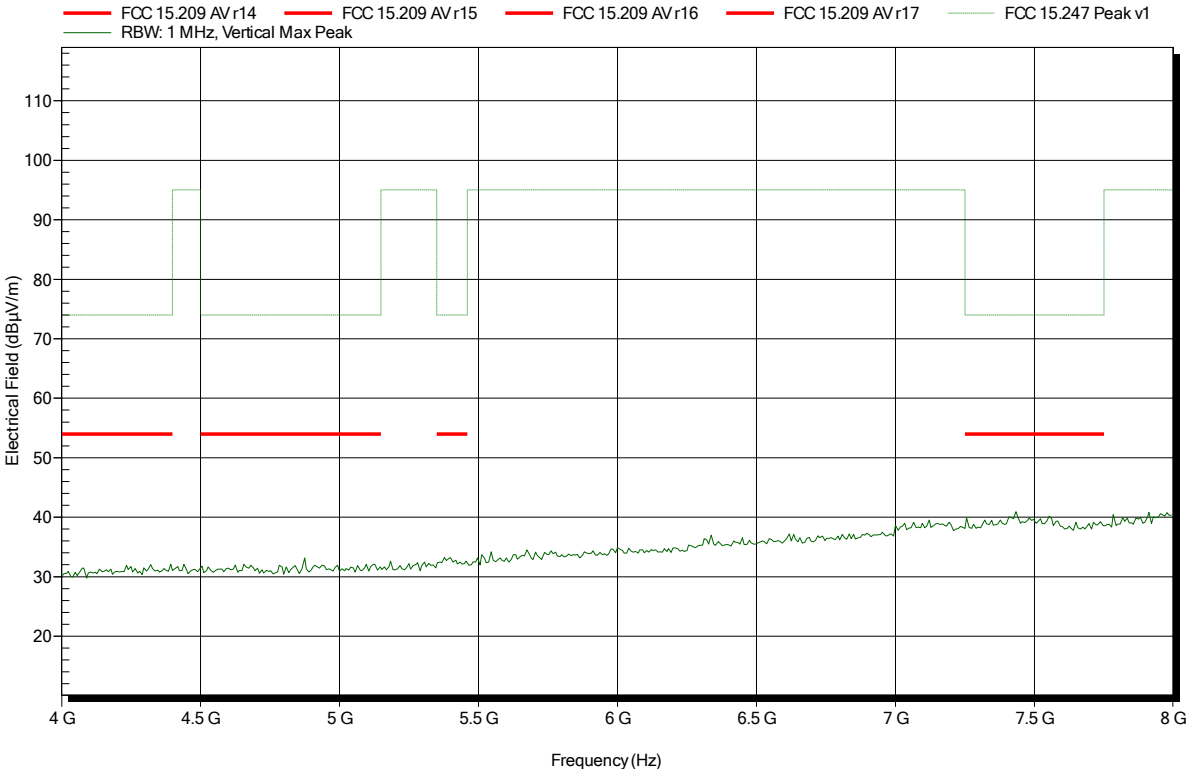
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	

Index 22



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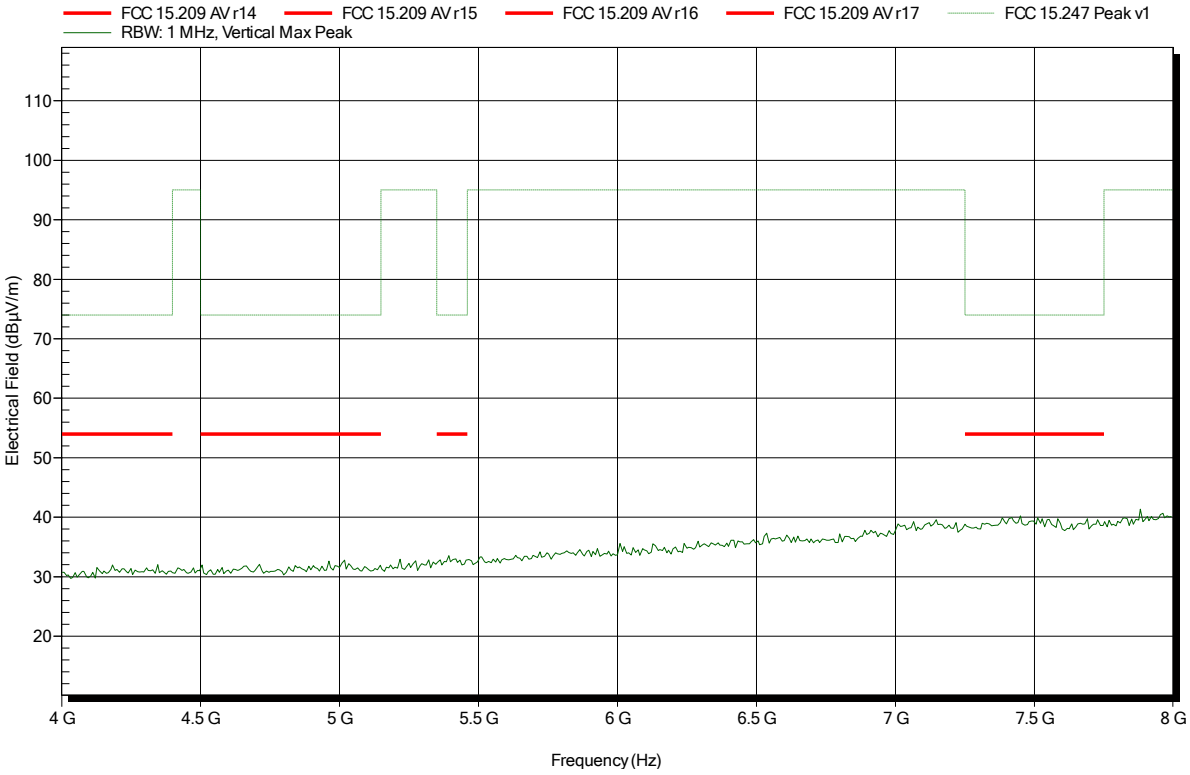
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Fhigh
Test Date:	2017-08-22
Note:	

Index 32



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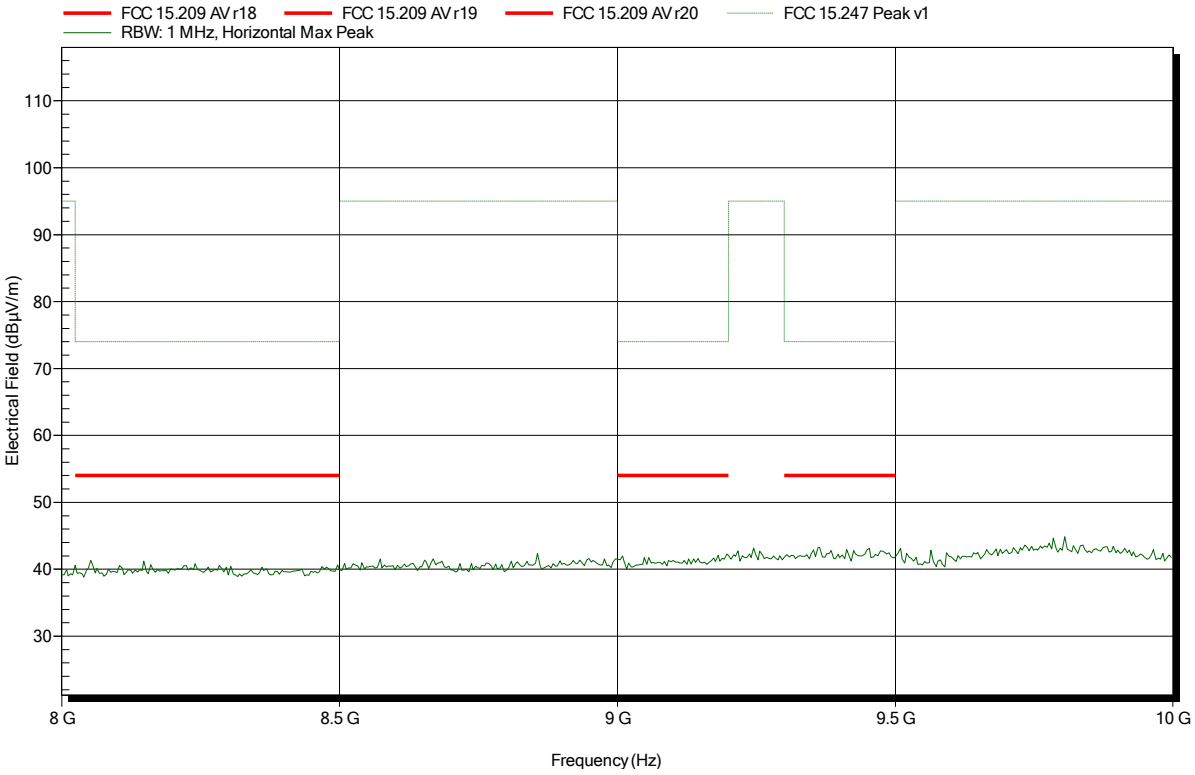
Measurement distance:	1 m converted to 3m
Mode:	TX; Antenna 6697902, Flow
Test Date:	2017-08-22
Note:	

Index 20



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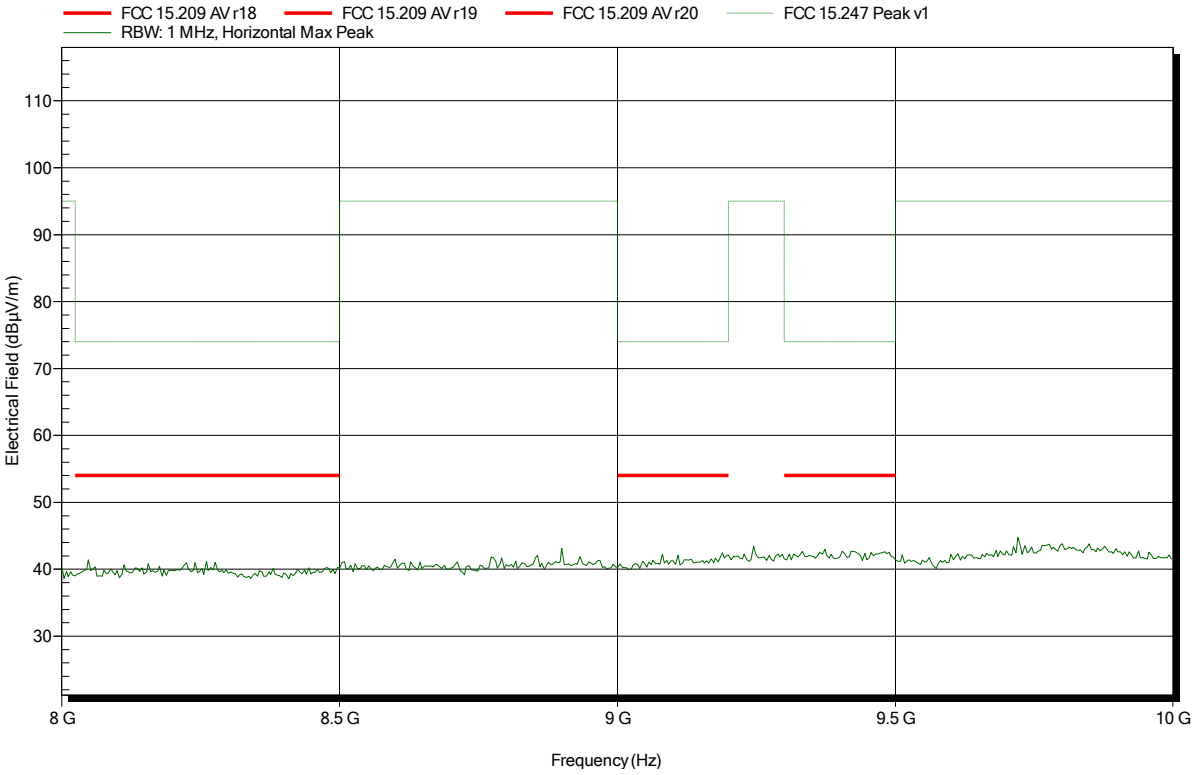
Index 30



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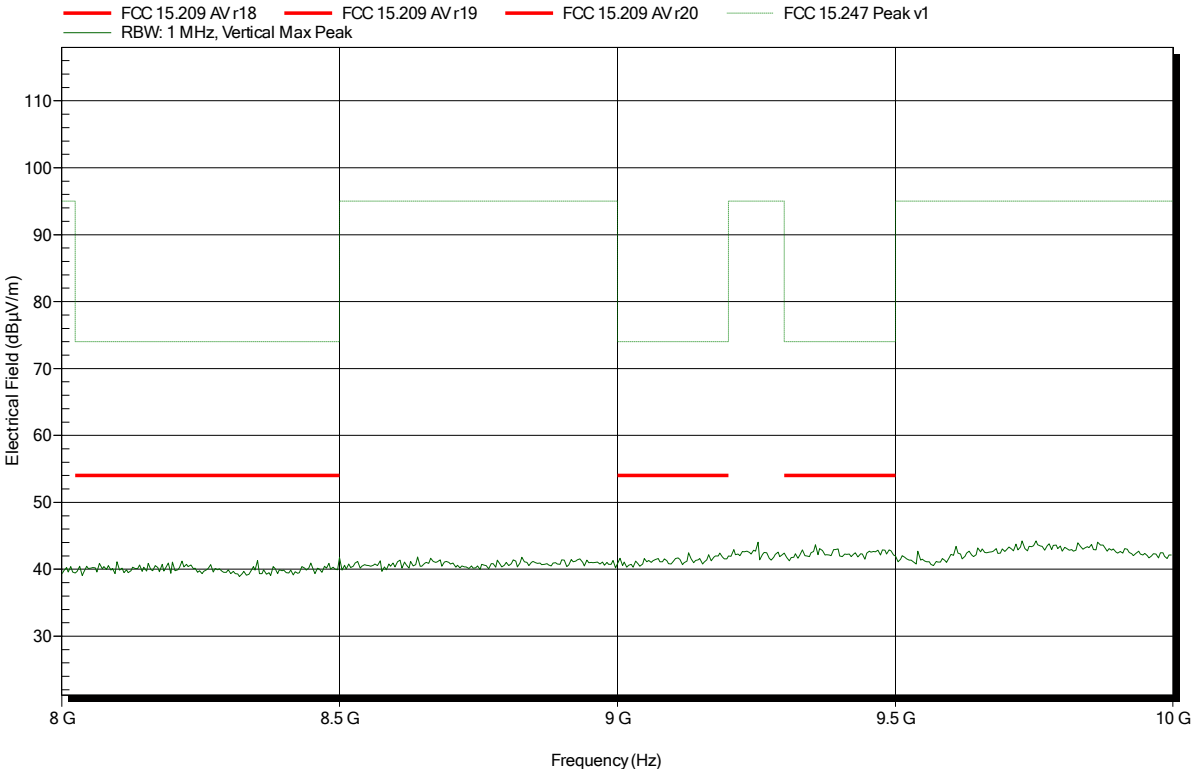
Note:	

Index 23



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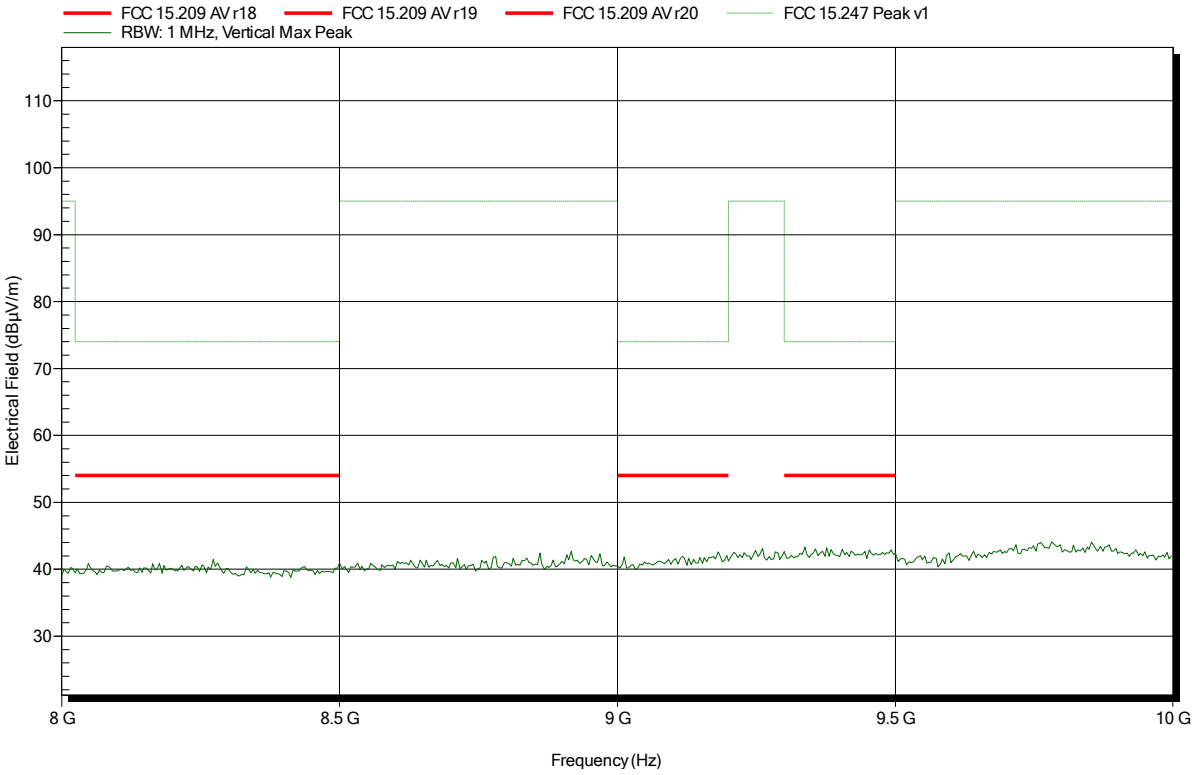
Index 33