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FCC TEST REPORT

FCC 47 CFR Part 15C
Industry Canada RSS-210

Digital transmission systems operating within the 2400 – 2483.5 MHz band

Report Reference No. ..... :	G0M-1302-2616-TFC247C-V01
Testing Laboratory ..... :	Eurofins Product Service GmbH
Address ..... :	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation ..... :	A2LA Accredited Testing Laboratory, Certificate No.: 1983.01 FCC Filed Test Laboratory, Reg.-No.: 96970 IC OATS Filing assigned code: 3470A
Applicant's name ..... :	Agilion GmbH
Address ..... :	Blankenauer Str. 74 09113 Chemnitz GERMANY
Test specification:	
Standard..... :	47 CFR Part 15C KDB Publication No. 558074 RSS-210, Issue 8, 2010-12 RSS-Gen, Issue 3, 2010-12 ANSI C63.4:2009
Test scope…….. ..... :	partial Radio compliance test based on valid modular approval
Equipment under test (EUT):	
Product description	WIRELESS TAG DRIVE
Model No.	6021318
Hardware version	1.0
Firmware / Software version	2.0
	FCC-ID: SCF6021318
Test result	**Passed**

Possible test case verdicts:

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

Testing:

Date of receipt of test item ..... :	2013-02-21	
Date (s) of performance of tests ..... :	2013-02-21 - 2013-02-22	
Compiled by ..... :	Christian Weber	
Tested by (+ signature)..... : (Testing Manager)	Wilfried Treffke	W. Treffke
Approved by (+ signature) ..... : (Test Lab Manager)	Toralf Jahn	T. J.
Date of issue ..... :	2013-04-09	
Total number of pages ..... :	39	

General remarks:

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

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

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

Additional comments:

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1 Equipment (Test item) Description

Description	WIRELESS TAG DRIVE	
Model	6021318	
Serial number	None	
Hardware version	1.0	
Software / Firmware version	2.0	
FCC-ID	SCF6021318	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	Chirp Spread Spectrum (CSS)	
Operating frequency range	2407 - 2476 MHz	
Assigned frequency band	2400 - 2483.5 MHz	
Main test frequencies	F_{MID}	2441.75 MHz
Spreading	CSS	
Modulations	none	
Number of channels	1	
Number of antennas	2	
Radio module	Type	CHIRP Spread Spectrum
	Model	nanoPAN 5375
	Manufacturer	Nanotron Technologies GmbH
	HW Version	unspecified
	SW Version	unspecified
	FCC-ID	SIFNANOPAN5375V1
Antenna 1	Type	external dedicated Colinear mobile whip antenna
	Model	MU 2404-LX
	Manufacturer	PROCOM
	Gain	2.0 dBi (manufacturer declaration)
Antenna 2	Type	external dedicated Small omni-directional outdoor antenna for WiFi applications
	Model	Omni-S
	Manufacturer	unspecified
	Gain	6.0 dBi (manufacturer declaration)
Manufacturer	Agilion GmbH Blankenauer Str. 74 09113 Chemnitz GERMANY	

Power supply	V_{NOM}	24 VDC
	V_{MIN}	-- VDC
	V_{MAX}	-- VDC
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A

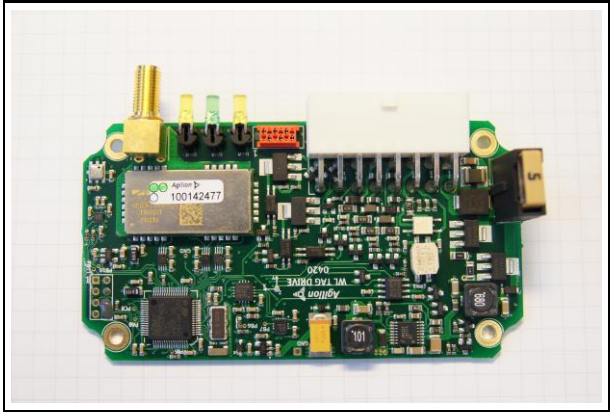
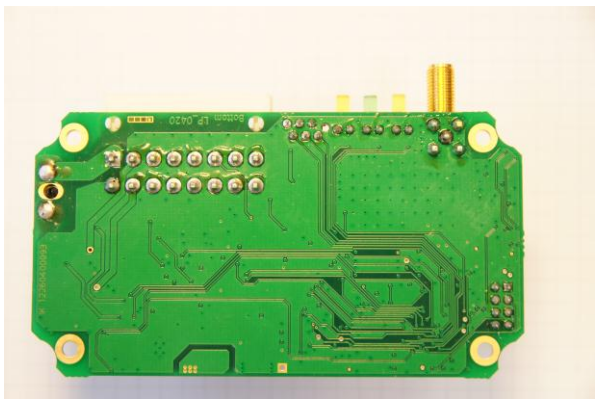
1.1 Photos – Equipment External

EUT TOP

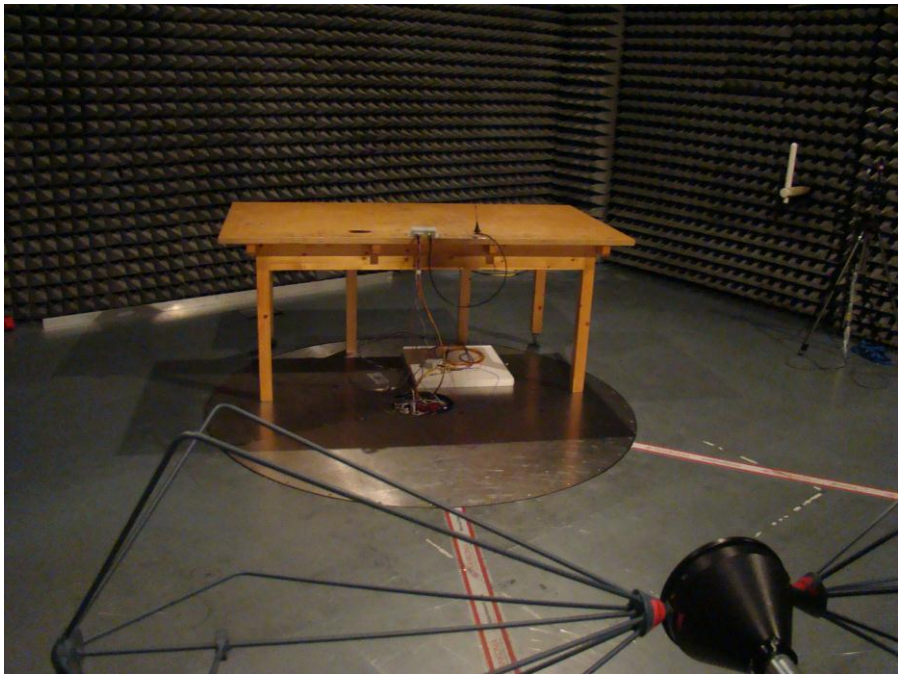
EUT BOTTOM

EUT SIDE VIEW

1.2 Photos – Equipment internal

EUT TOP	EUT BOTTOM
	

1.3 Photos – Test Setup

TESTSETUP RADIATED MEASUREMENT


1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
None				

***Note:** Use the following abbreviations:

AE : Auxiliary/Associated Equipment, or

SIM : Simulator (Not Subjected to Test)

CABL : Connecting cables

1.5 Test Modes

Mode #	Description	
CHIRP	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone transmit Spreading = Chirp Modulation = None Data rate = 1 Mbps Duty cycle = 100 % Power level = Maximum
Receive	General conditions:	EUT powered on
	Radio conditions:	Mode = standalone receive

1.6 Test Equipment Used During Testing

Radiated spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 5	EF00395	calibration	calibration
Spectrum Analyzer	R&S	FSIQ26	EF00151	2012-12	2013-12
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD Antenna	R&S	HL 223	EF00187	2011-02	2014-02
LPD Antenna	R&S	HL 025	EF00327	2013-02	2016-02

Sample emission level calculation

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

Reading:

This is the reading obtained on the spectrum analyzer in 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

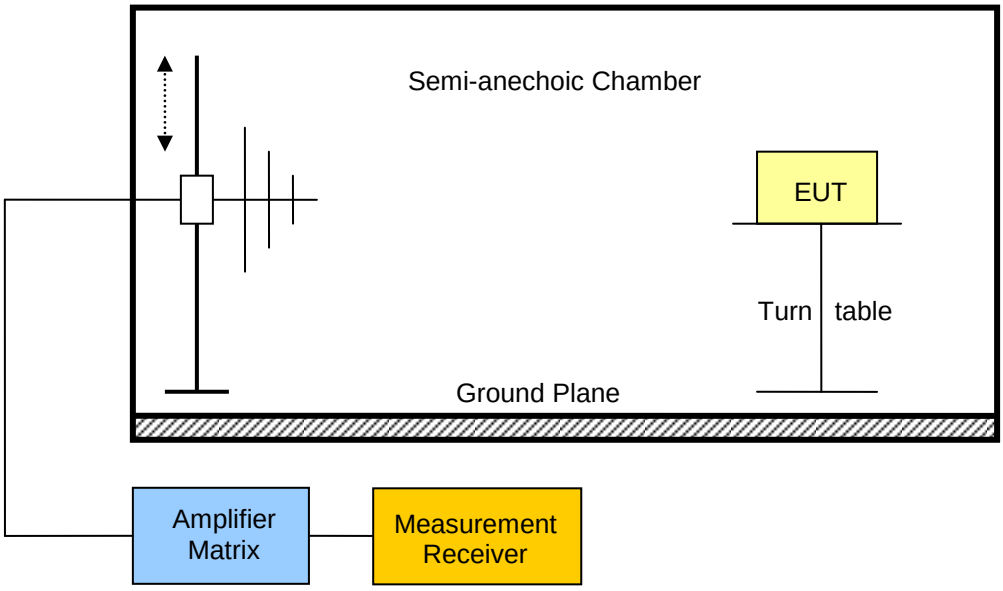
2 Result Summary

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

3 Test Conditions and Results

3.1 Test Conditions and Results – Transmitter radiated emissions

Transmitter radiated emissions acc. FCC 47 CFR 15.247 / IC RSS-210				**Verdict: PASS**
Test according referenced standards		Reference Method		
		FCC 15.247(d) / IC RSS-210 A8.5		
Test according to measurement reference		Reference Method		
		FCC KDB Publication No. 558074 / ANSI C63.4		
Test frequency range		Tested frequencies		
		30 MHz – 10th Harmonic		
Limits				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3
Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.				
Test setup				



Test procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to peak emission levels within restricted bands

Test results – Internal Antenna MU2404-LX

Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbµV/m]	Det.	Pol.	Limit [dbµV/m]	Limit dist. [m]*	Margin [dB]
F_{MID}	2441.75	CSS	2369.2	62.16	pk	ver	74.00	3	-11.84
F_{MID}	2441.75	CSS	2385	55.81	pk	hor	74.00	3	-18.19
F_{MID}	2441.75	CSS	2385	43.11	avg	hor	54.00	3	-10.89
F_{MID}	2441.75	CSS	2484.5	68.62	pk	ver	74.00	3	-05.38
F_{MID}	2441.75	CSS	2486	61.29	pk	hor	74.00	3	-12.71
F_{MID}	2441.75	CSS	2486	48.63	avg	hor	54.00	3	-05.37
F_{MID}	2441.75	CSS	4832	51.21	pk	hor	74.00	3	-22.79
F_{MID}	2441.75	CSS	4834	53.70	pk	ver	74.00	3	-20.30
F_{MID}	2441.75	CSS	4834	42.58	avg	ver	54.00	3	-11.42
F_{MID}	2441.75	CSS	7393	57.24	pk	ver	74.00	3	-16.76
F_{MID}	2441.75	CSS	7393	45.93	avg	ver	54.00	3	-08.07
F_{MID}	2441.75	CSS	12086	57.13	pk	ver	74.00	3	-16.87

Test results – Internal Antenna OMNI-S

Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbµV/m]	Det.	Pol.	Limit [dbµV/m]	Limit dist. [m]*	Margin [dB]
F_{MID}	2441.75	CSS	2373.4	56.50	pk	ver	74.00	3	-17.50
F_{MID}	2441.75	CSS	2373.4	41.77	avg	ver	54.00	3	-12.23
F_{MID}	2441.75	CSS	2484	62.28	pk	hor	74.00	3	-11.72
F_{MID}	2441.75	CSS	2484	48.82	avg	hor	54.00	3	-05.18
F_{MID}	2441.75	CSS	2485.7	64.08	pk	ver	74.00	3	-09.92
F_{MID}	2441.75	CSS	2485.7	49.84	avg	ver	54.00	3	-04.16
F_{MID}	2441.75	CSS	7390	53.12	pk	ver	74.00	3	-20.88
F_{MID}	2441.75	CSS	7390	41.02	avg	ver	54.00	3	-12.98
F_{MID}	2441.75	CSS	12086	57.99	pk	ver	74.00	3	-16.01
F_{MID}	2441.75	CSS	12086	47.34	avg	ver	54.00	3	-06.66

Comments: * Physical distance between EUT and measurement antenna.

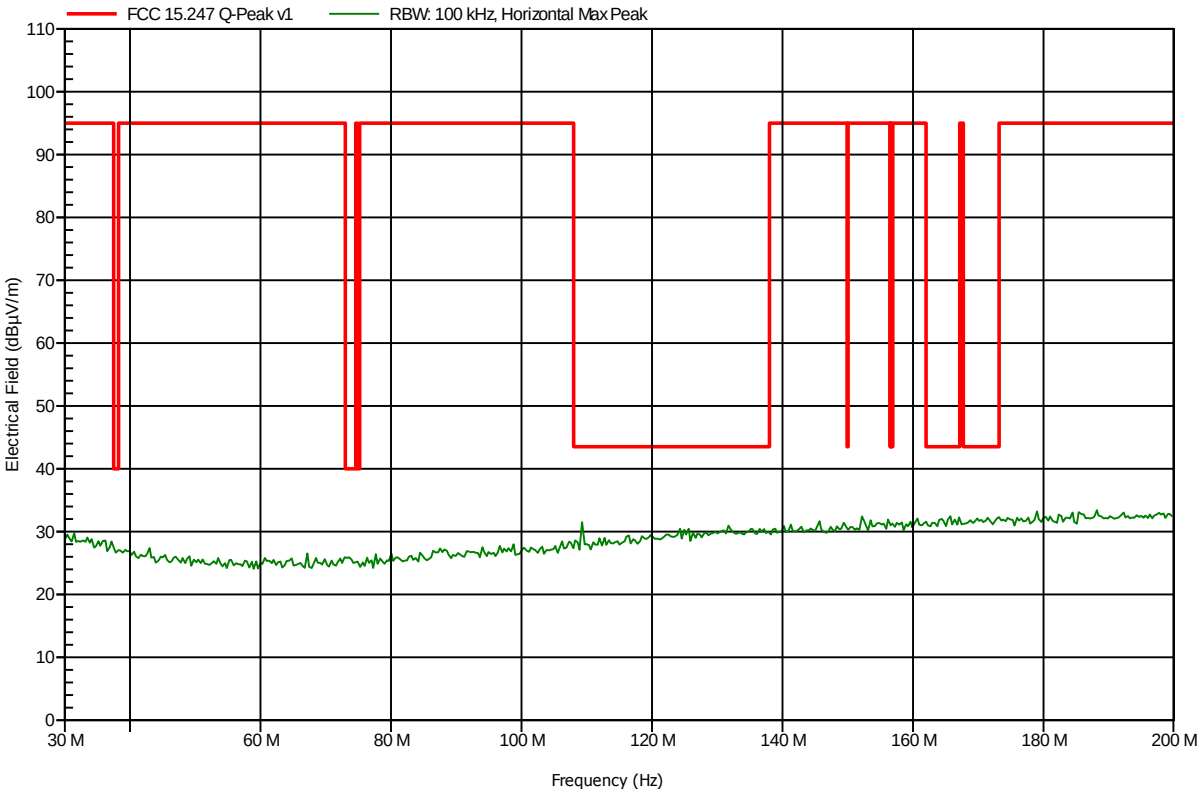
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

Index 1

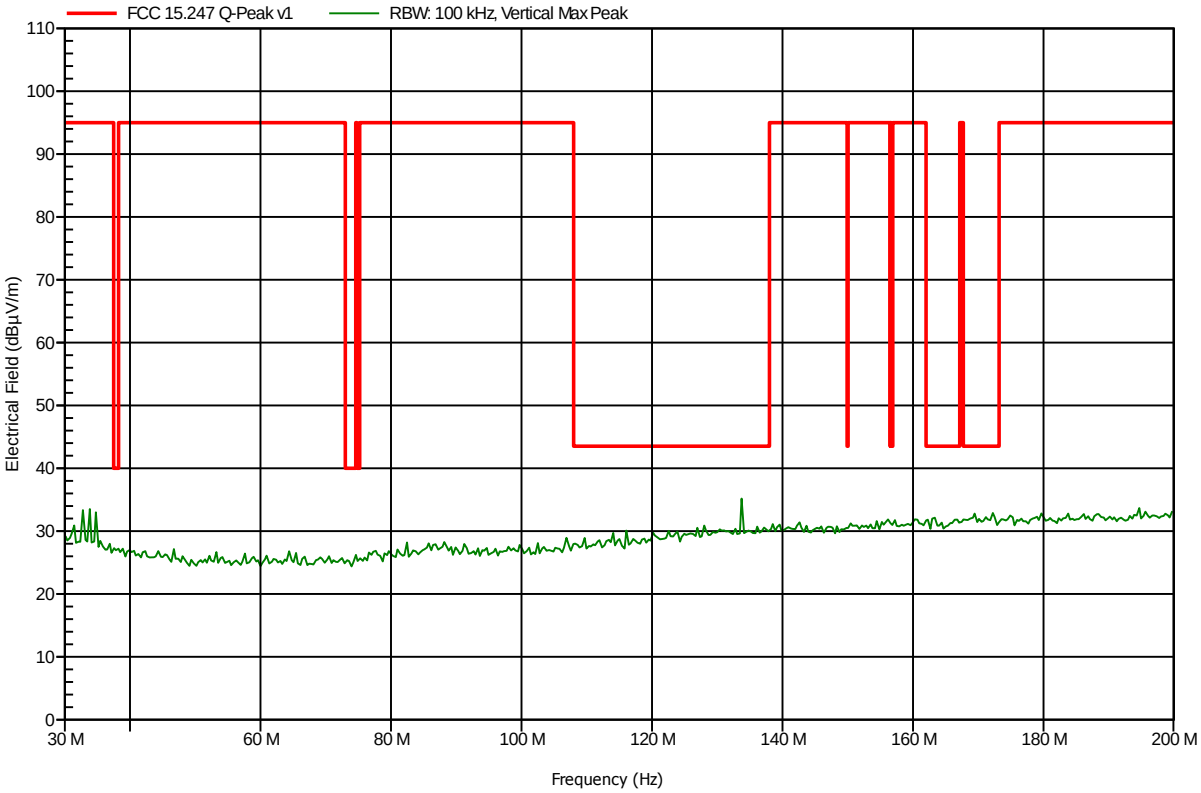


Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

Index 2

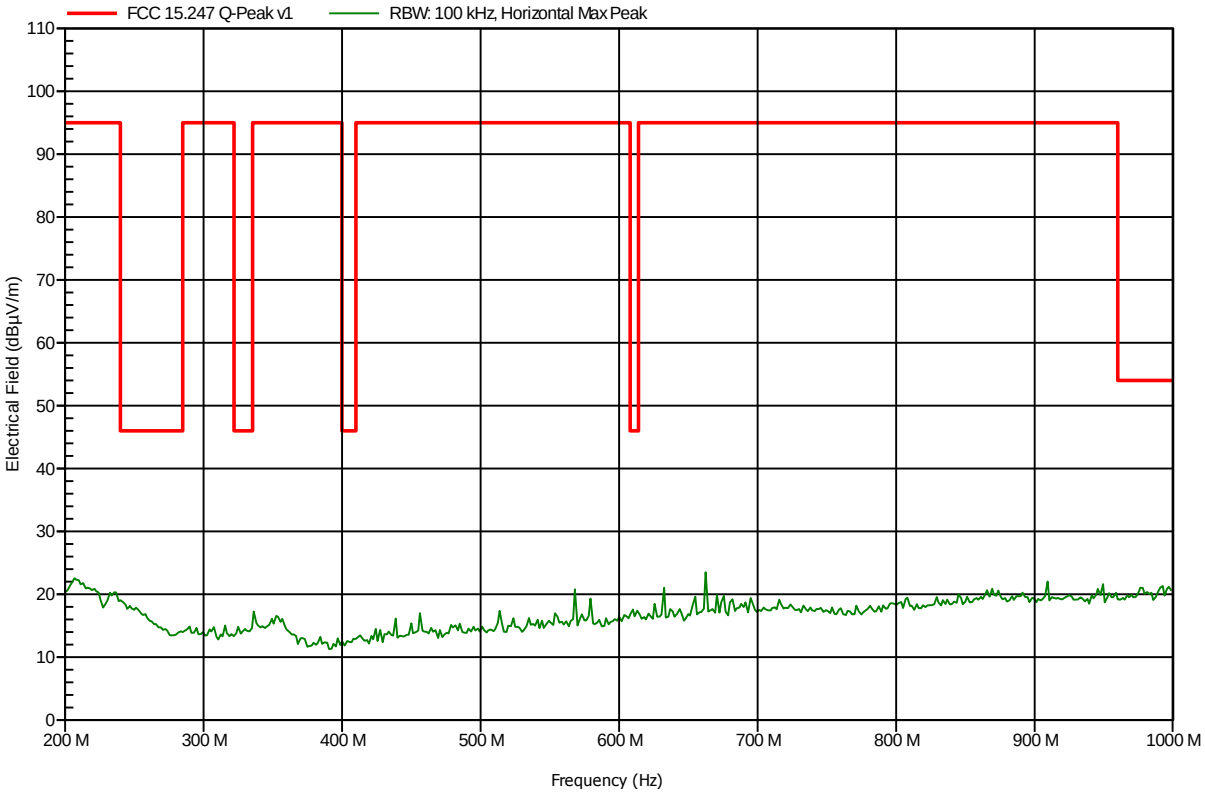


Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

Index 3



Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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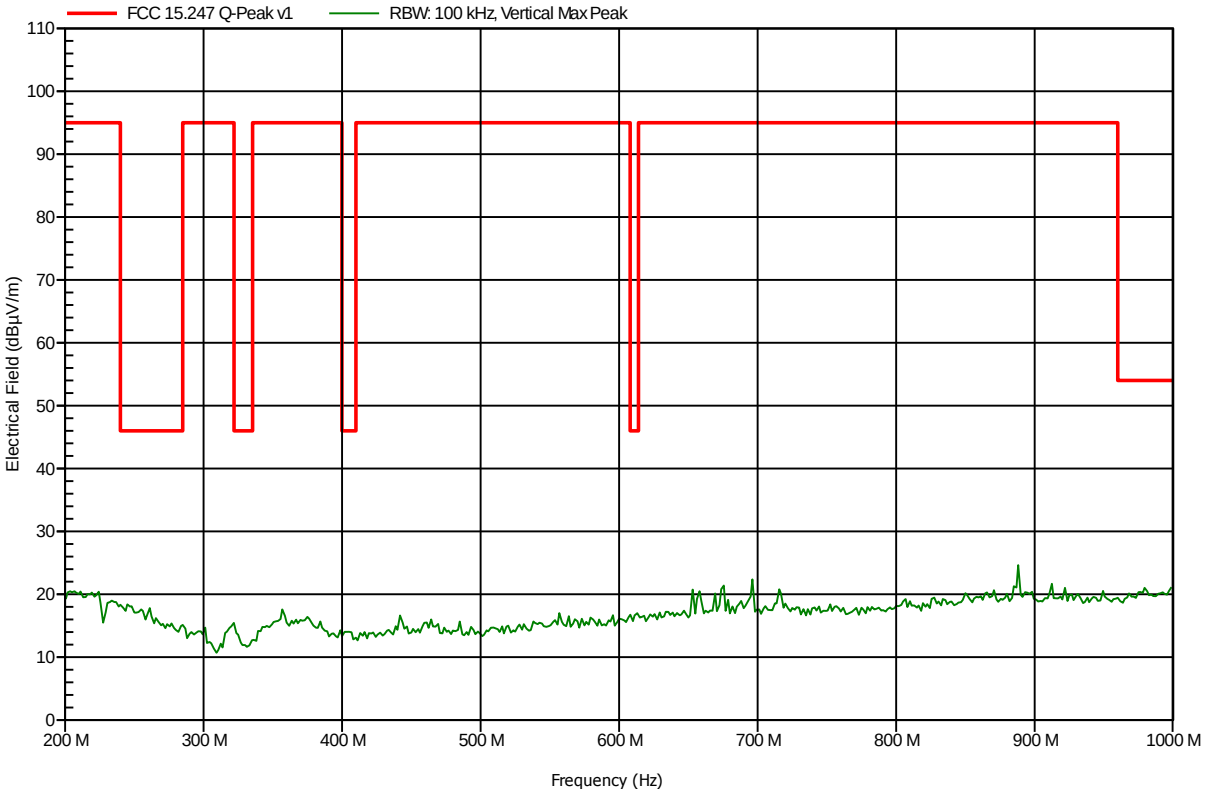
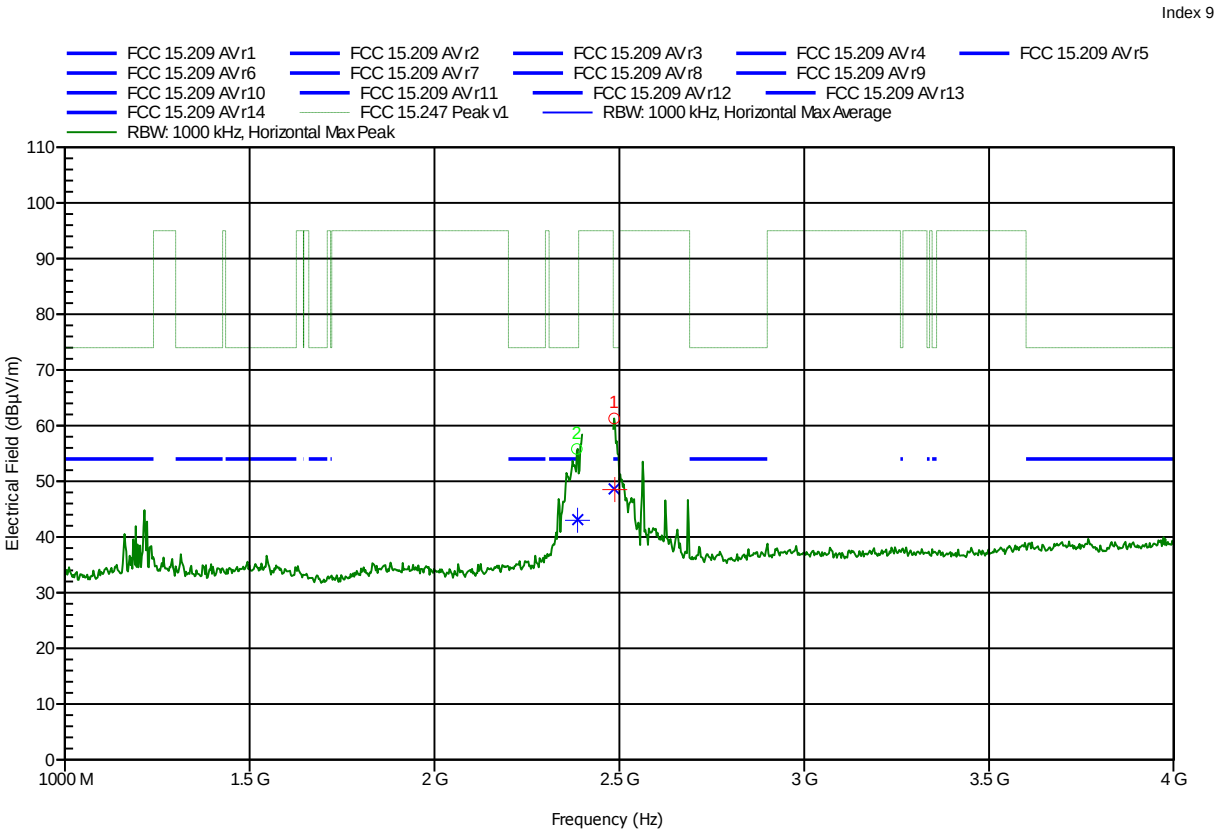


Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.385 GHz	55.81 dBµV/m	74 dBµV/m	-18.19 dB	Pass
2.486 GHz	61.29 dBµV/m	74 dBµV/m	-12.71 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
2.385 GHz	43.11 dBµV/m	54 dBµV/m	-10.89 dB	Pass
2.486 GHz	48.63 dBµV/m	54 dBµV/m	-5.37 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

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EUT Name:	WIRELESS TAG DRIVE
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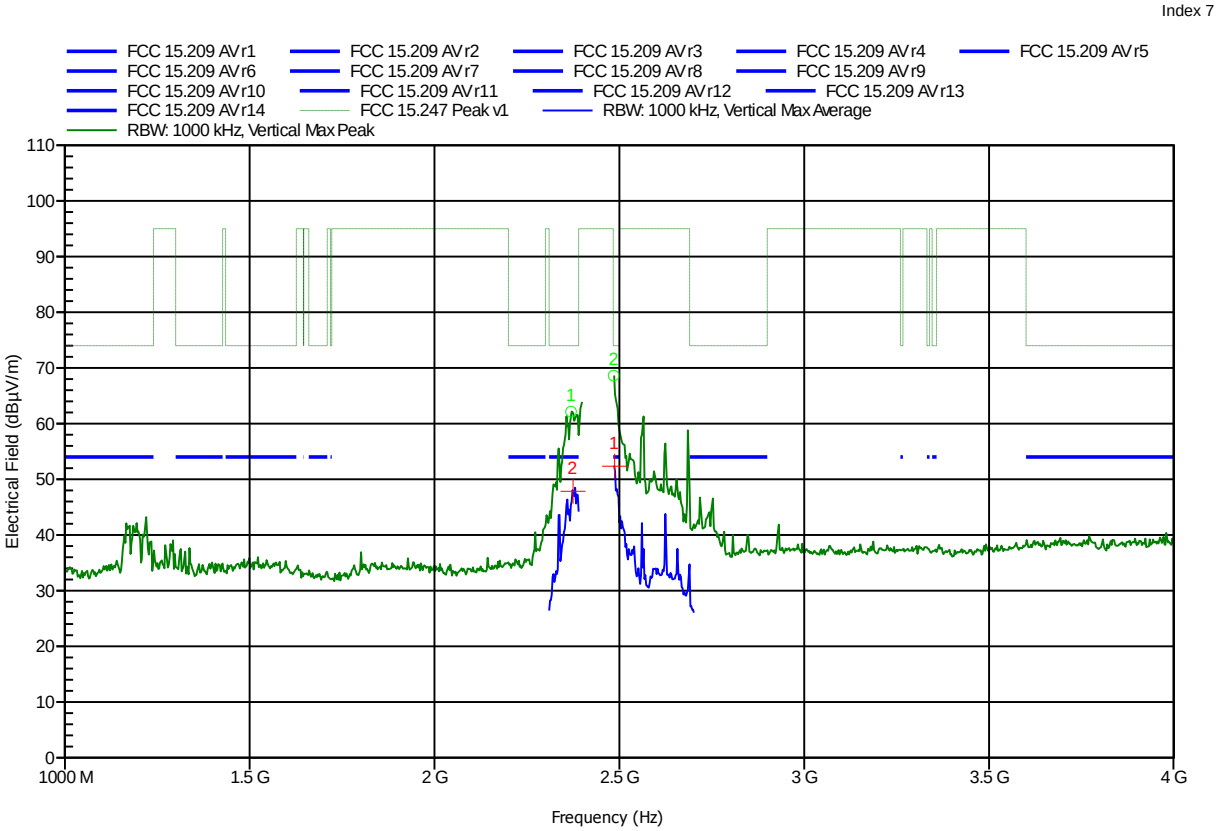
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.3692 GHz	62.16 dBµV/m	74 dBµV/m	-11.84 dB	Pass
2.4845 GHz	68.62 dBµV/m	74 dBµV/m	-5.38 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
2.373 GHz	47.97 dBµV/m	54 dBµV/m	-6.03 dB	Pass
2.4854 GHz	52.47 dBµV/m	54 dBµV/m	-1.53 dB	Pass

Spurious emissions according to FCC 15.247

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Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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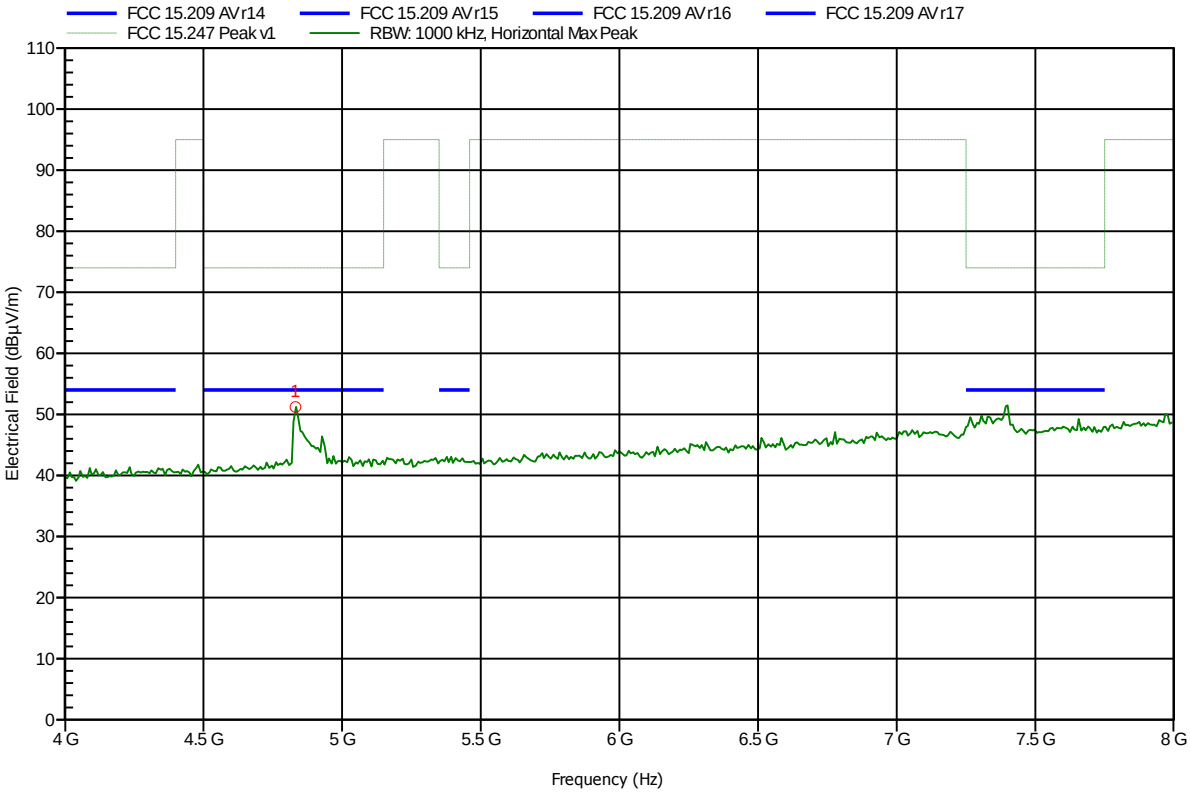

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.832 GHz	51.21 dBµV/m	74 dBµV/m	-22.79 dB	Pass

Spurious emissions according to FCC 15.247

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Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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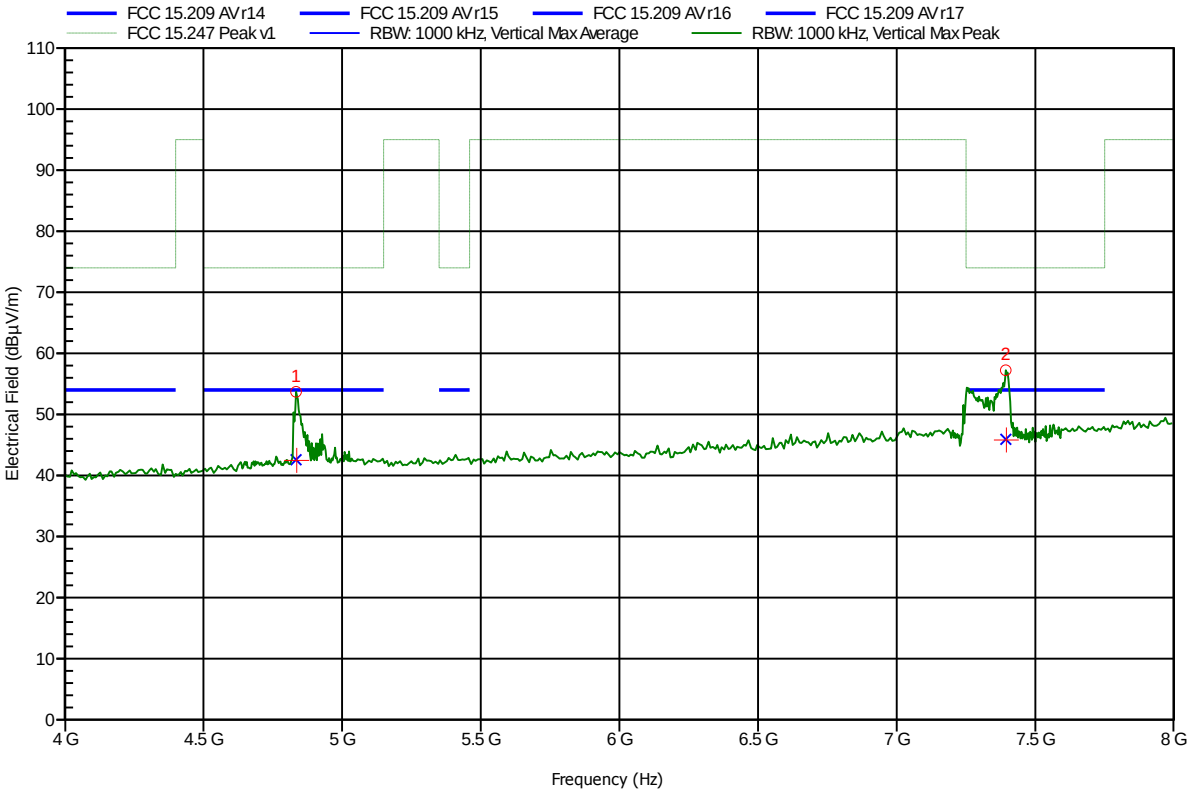

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.834 GHz	53.7 dBµV/m	74 dBµV/m	-20.3 dB	Pass
7.393 GHz	57.24 dBµV/m	74 dBµV/m	-16.76 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
4.834 GHz	42.58 dBµV/m	54 dBµV/m	-11.42 dB	Pass
7.393 GHz	45.93 dBµV/m	54 dBµV/m	-8.07 dB	Pass

Spurious emissions according to FCC 15.247

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Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	100 cm converted to 3m
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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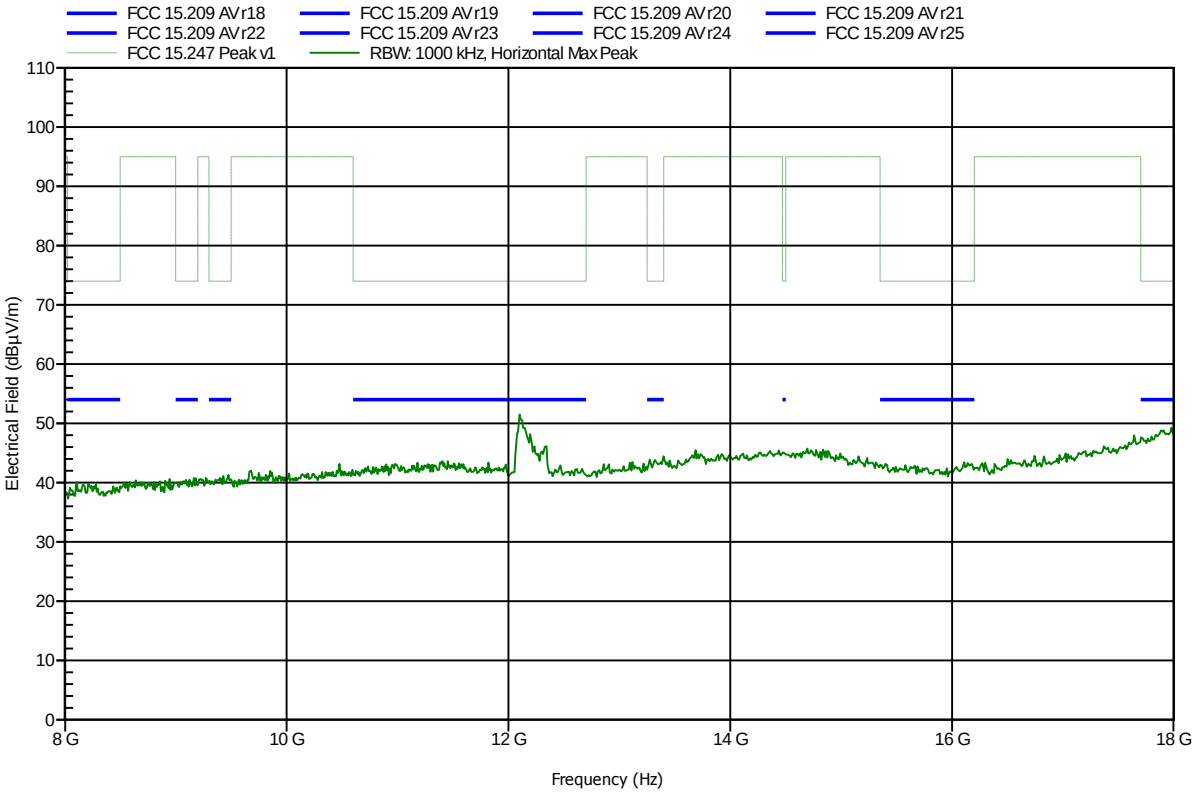

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Note:	

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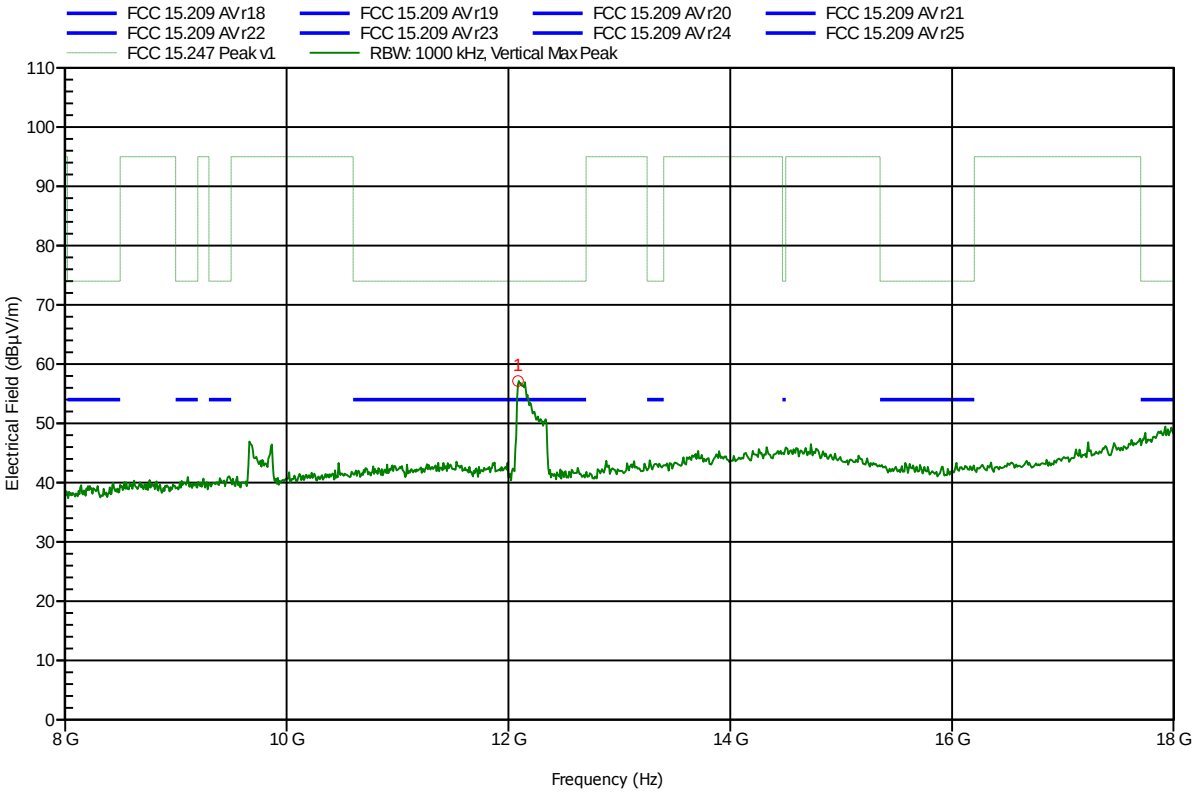

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
12.086 GHz	57.13 dBµV/m	74 dBµV/m	-16.87 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	100 cm
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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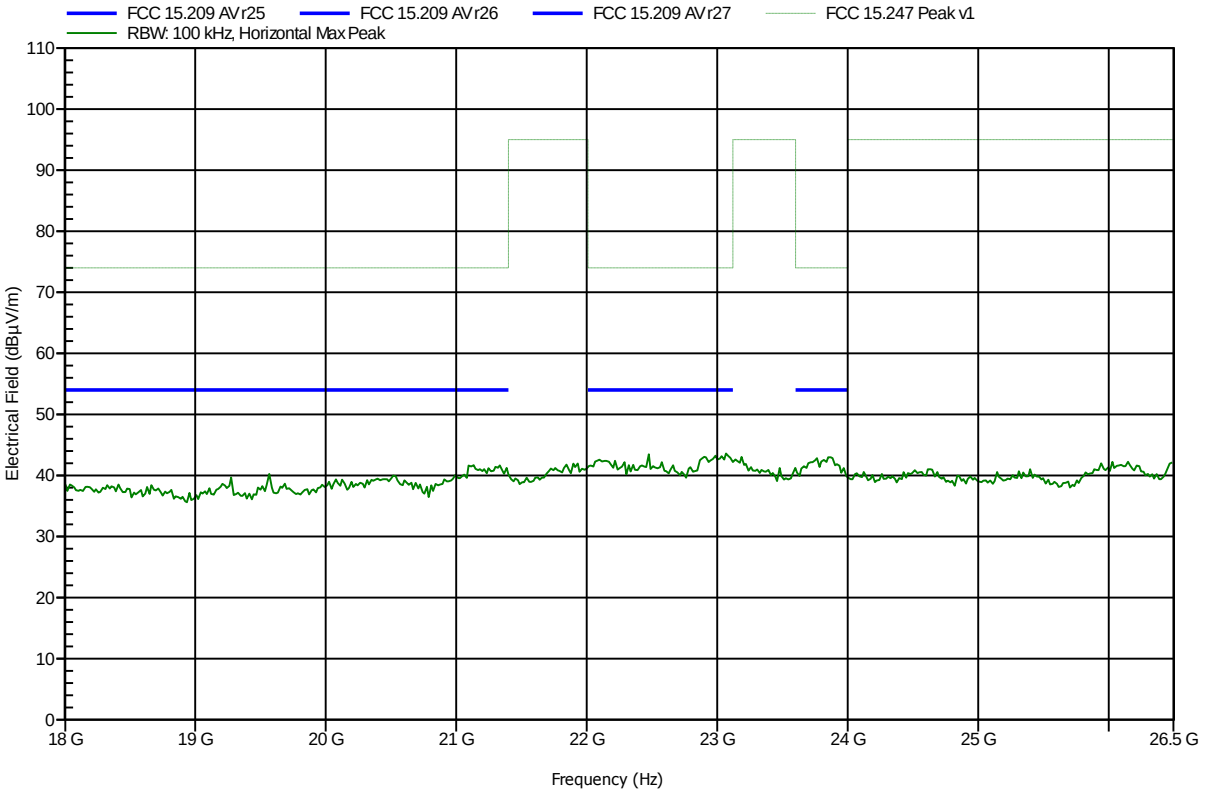

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	100 cm
Mode:	TX; CSS; antenna MU2404-LX
Test Date:	2013-02-21
Note:	

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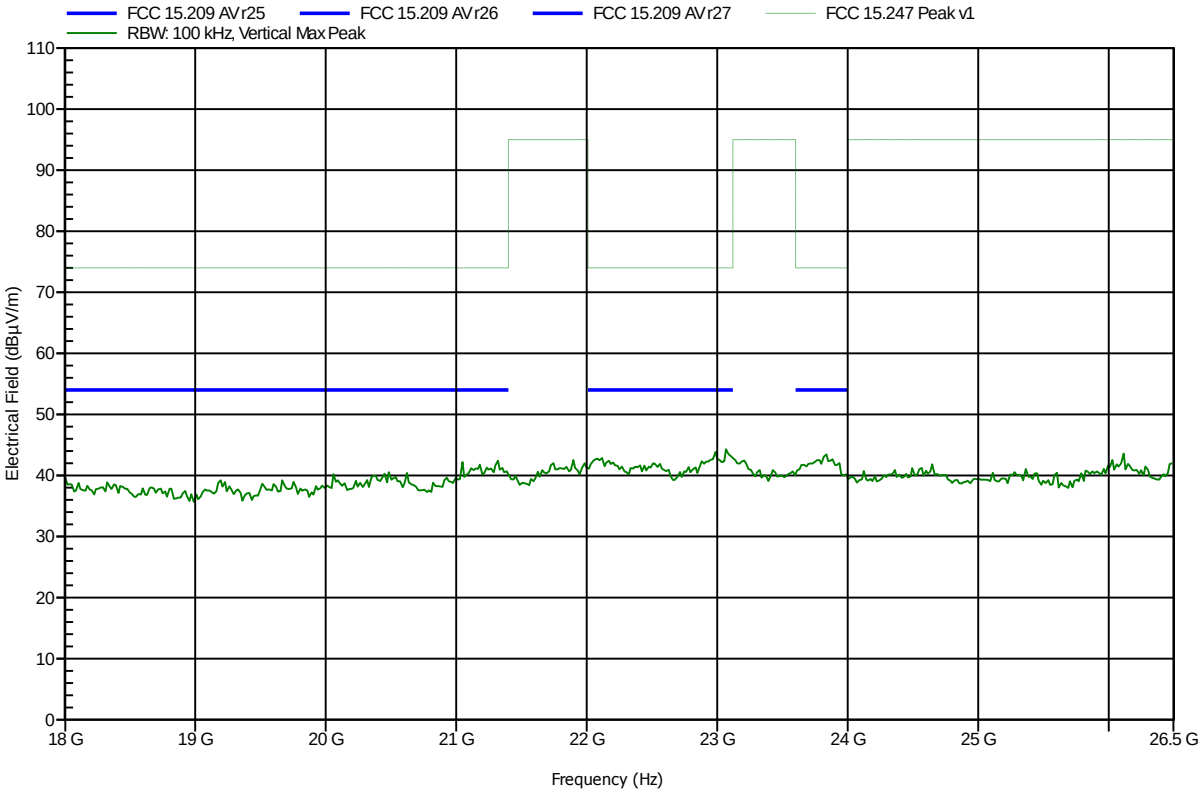

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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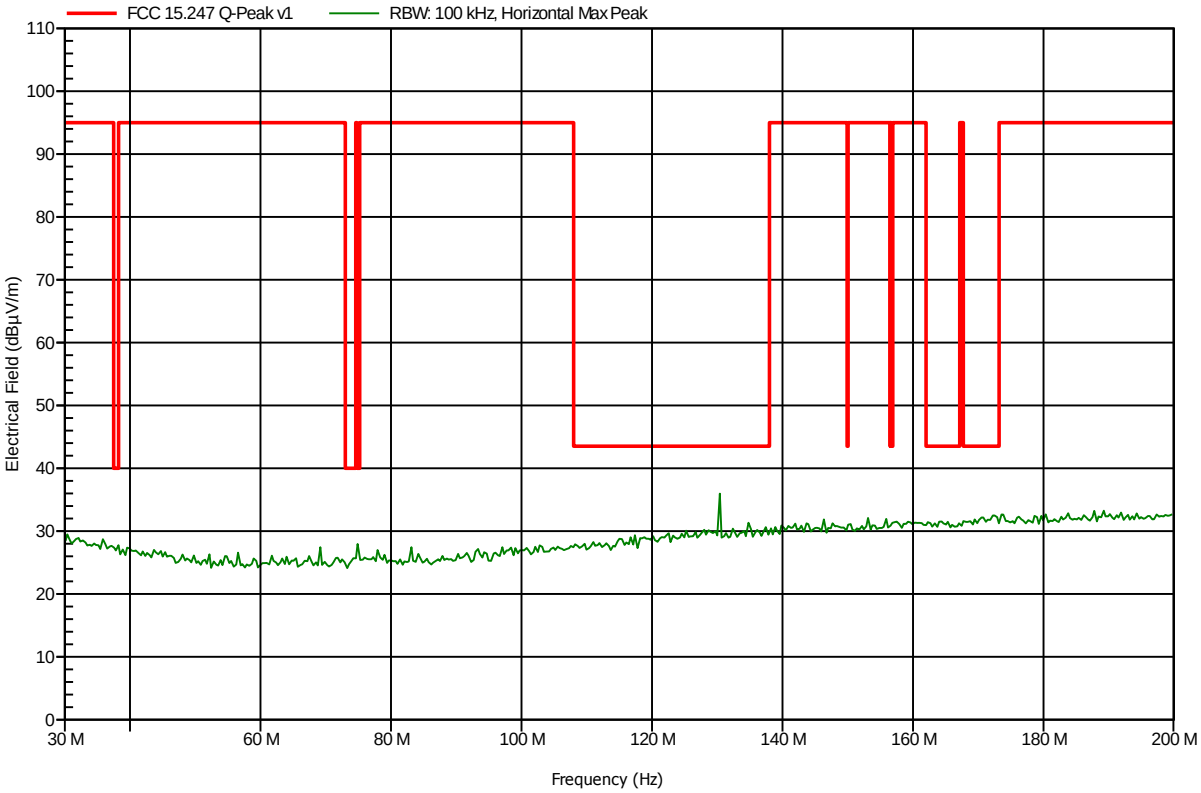

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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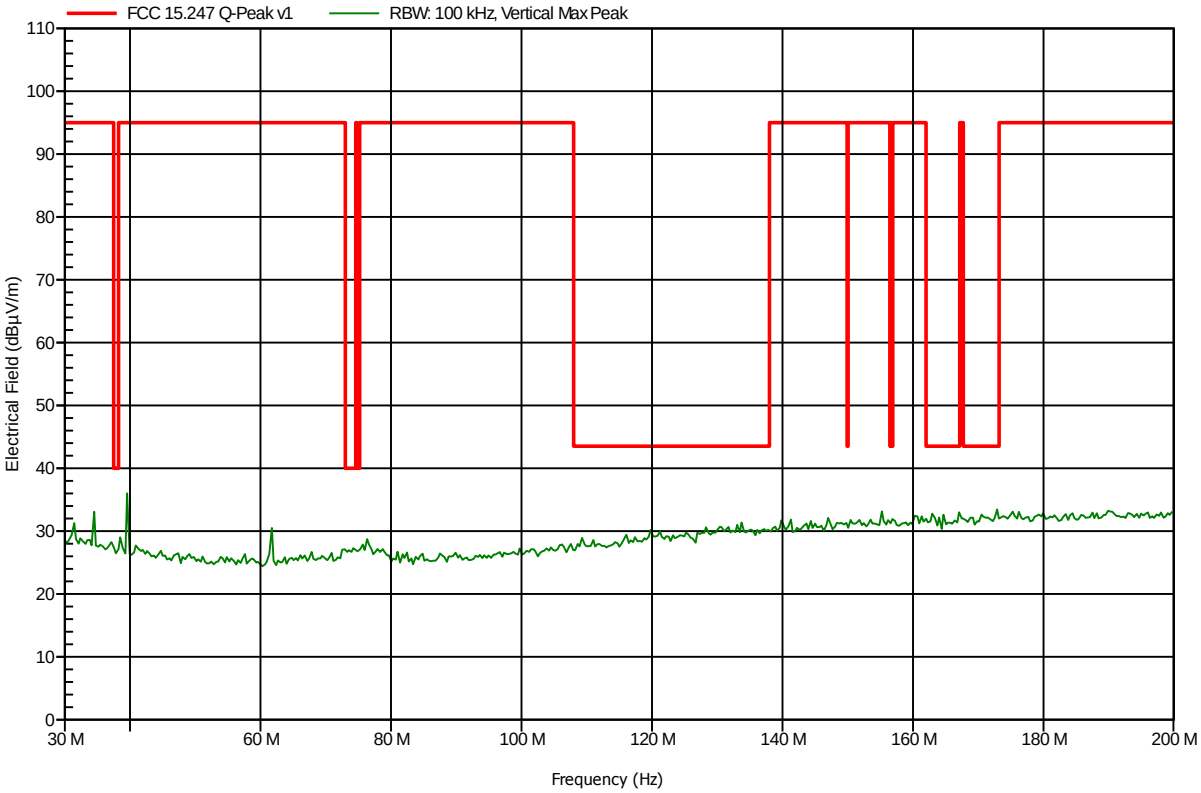

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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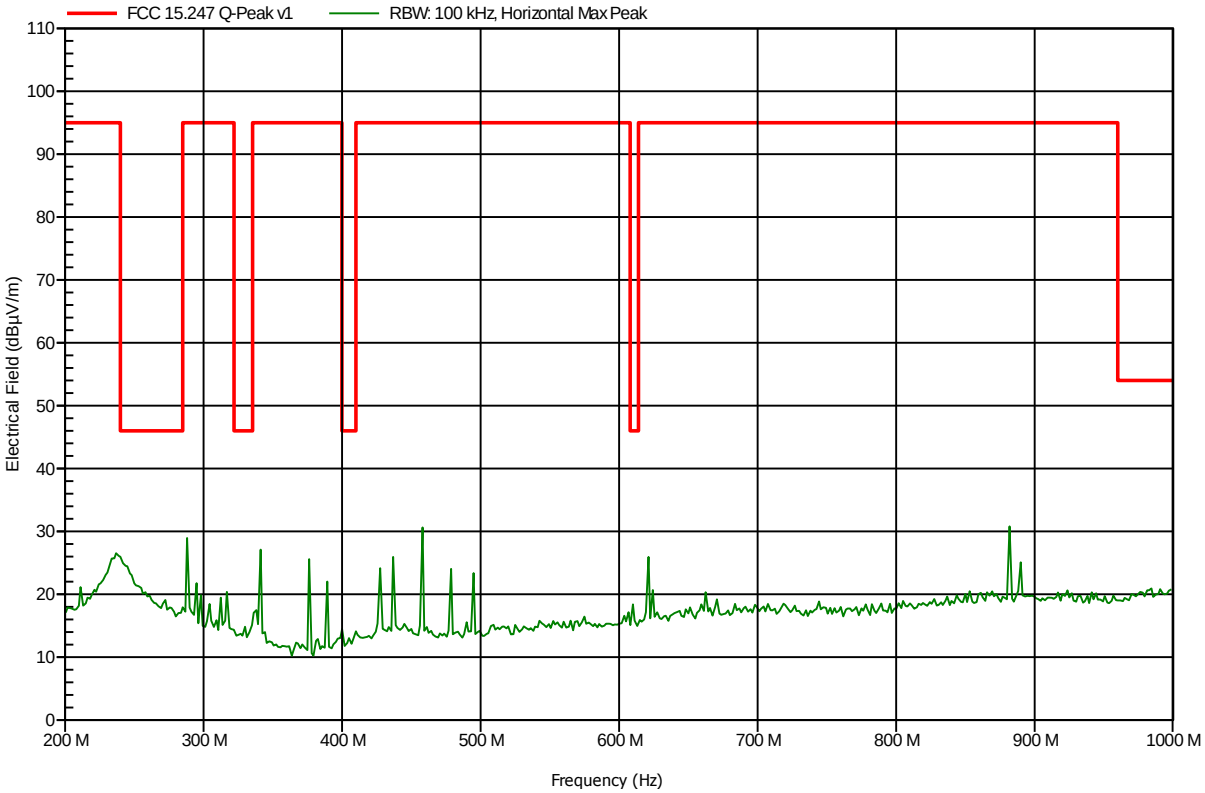

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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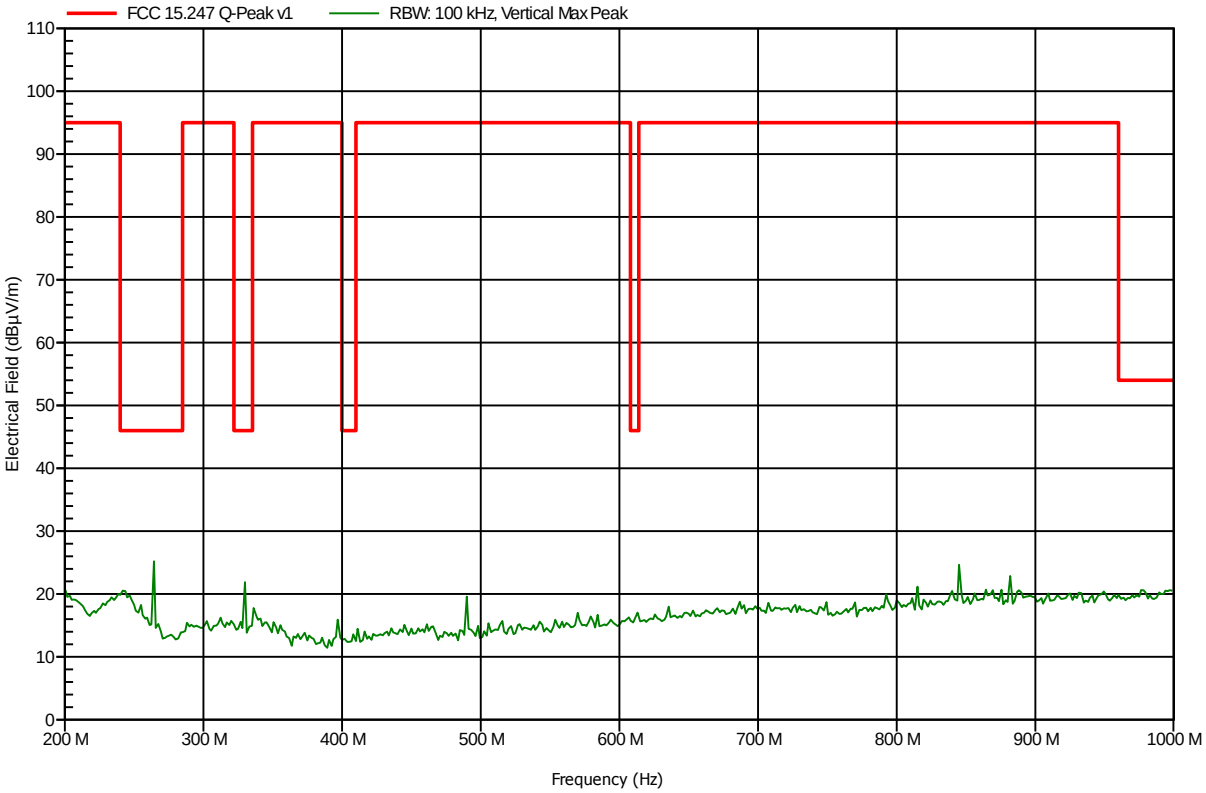

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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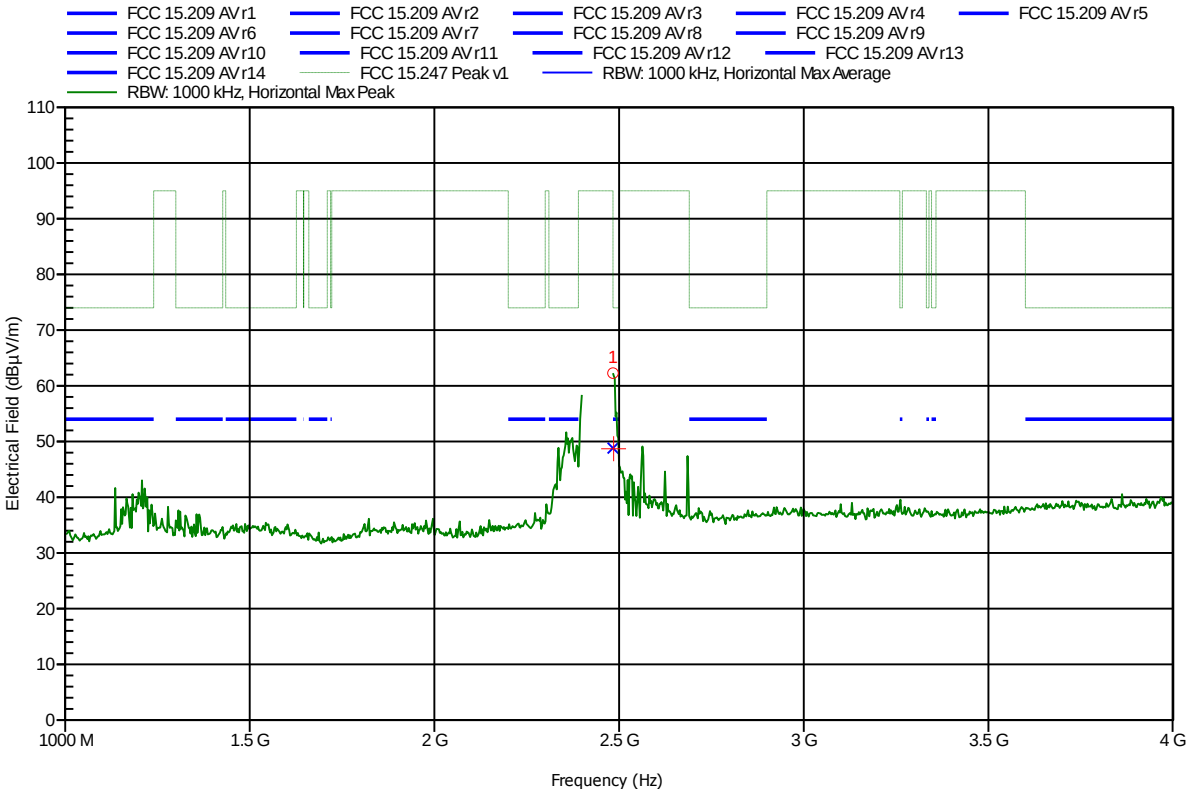

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	62.28 dBµV/m	74 dBµV/m	-11.72 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
2.484 GHz	48.82 dBµV/m	54 dBµV/m	-5.18 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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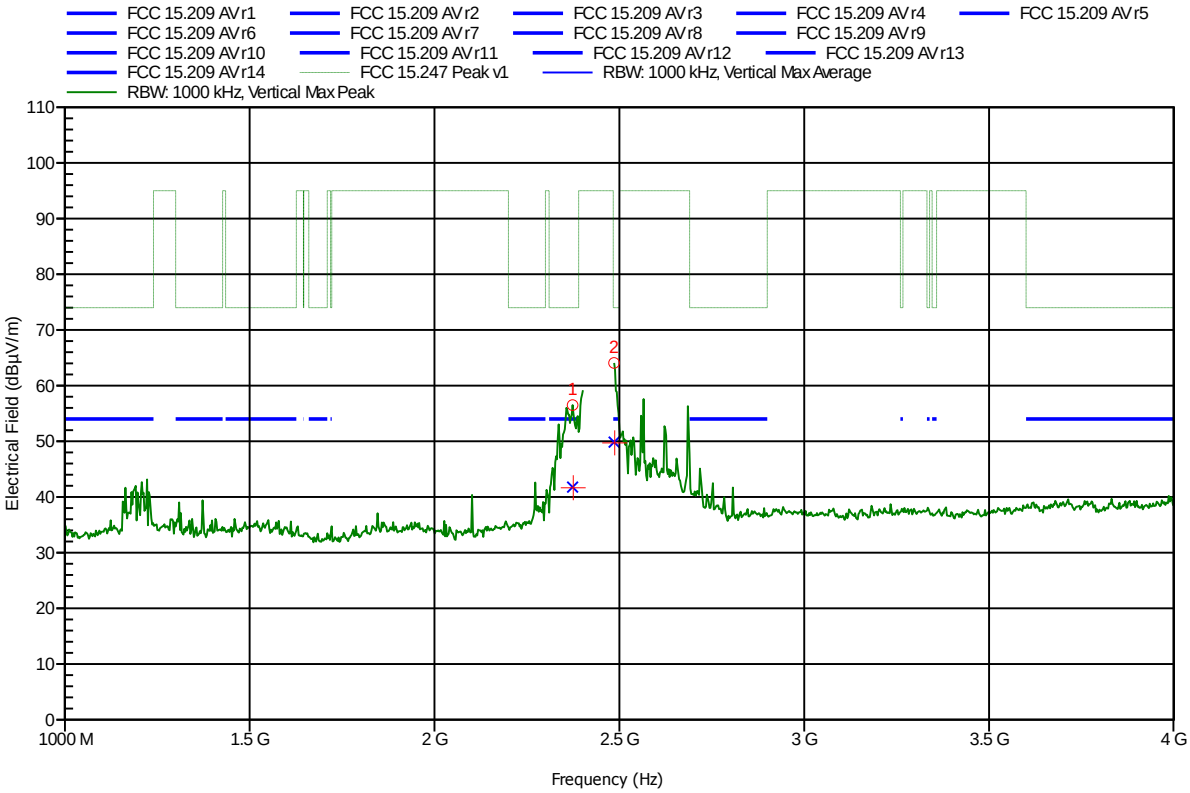

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.3734 GHz	56.5 dBµV/m	74 dBµV/m	-17.5 dB	Pass
2.4857 GHz	64.08 dBµV/m	74 dBµV/m	-9.92 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
2.3734 GHz	41.77 dBµV/m	54 dBµV/m	-12.23 dB	Pass
2.4857 GHz	49.84 dBµV/m	54 dBµV/m	-4.16 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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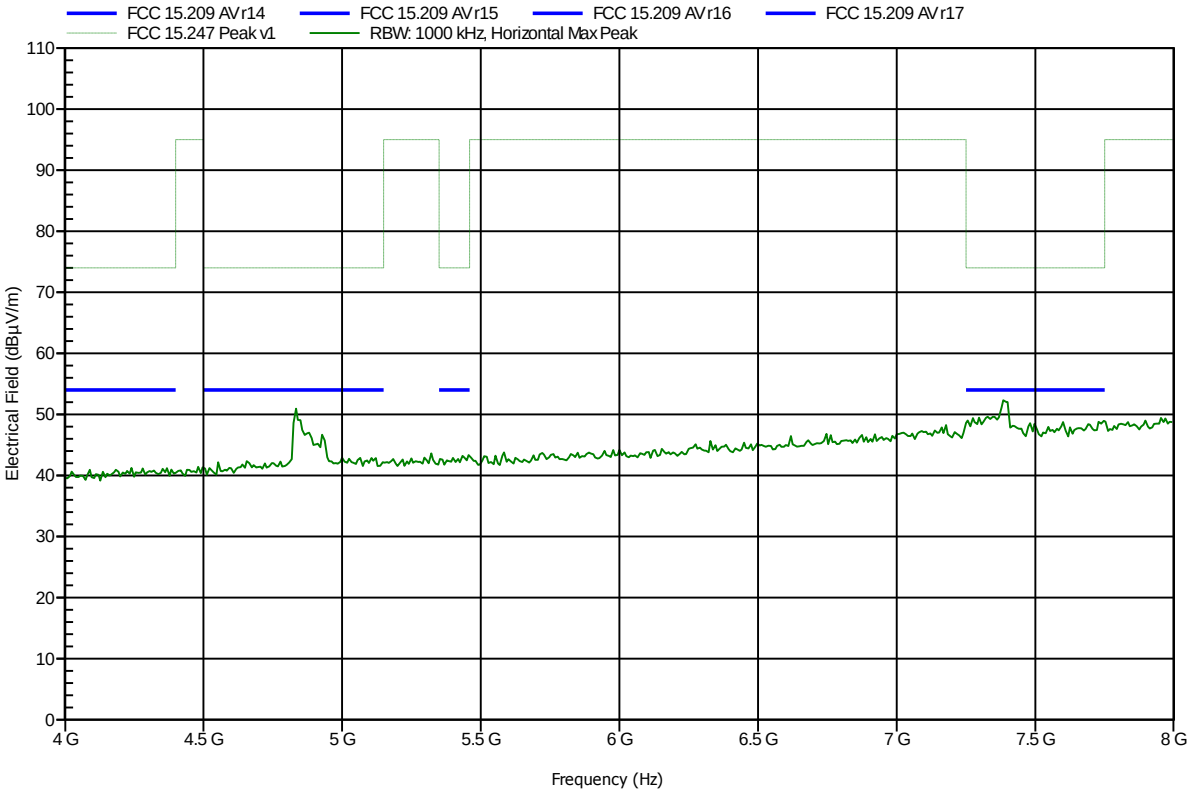

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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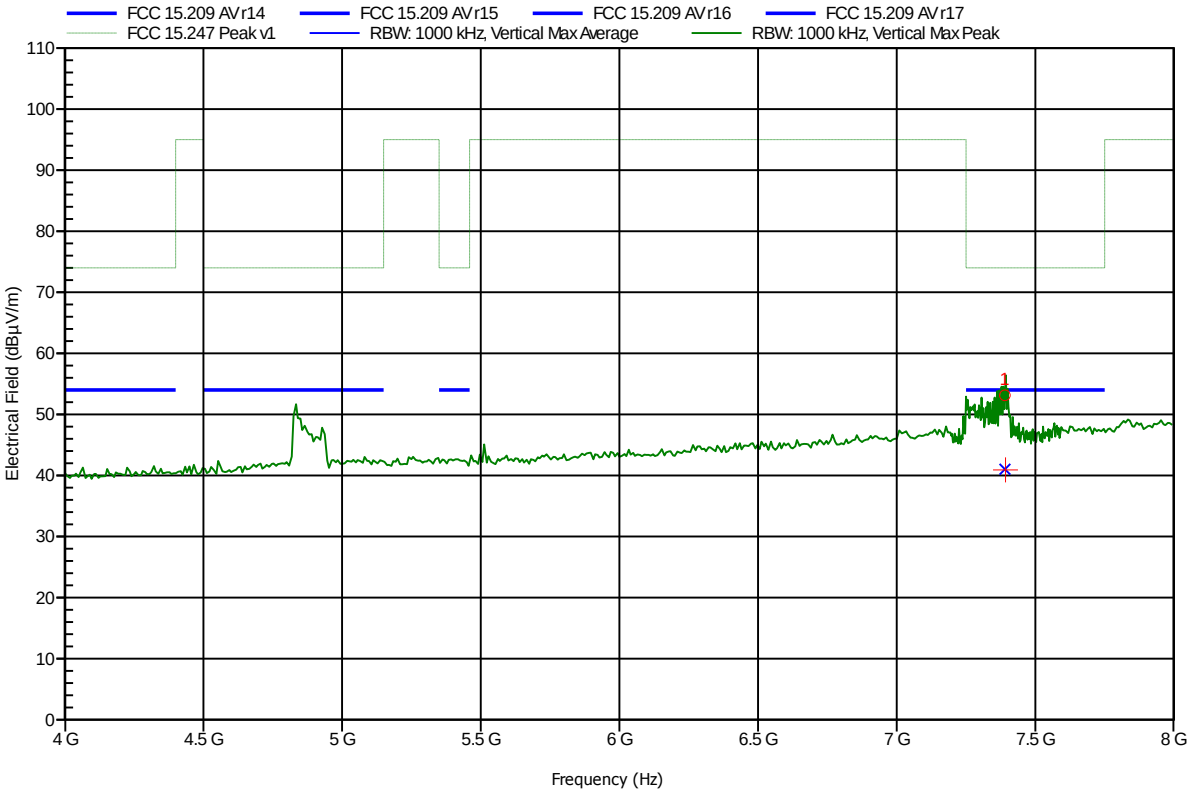

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.39 GHz	53.12 dBµV/m	74 dBµV/m	-20.88 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
7.39 GHz	41.02 dBµV/m	54 dBµV/m	-12.98 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	100 cm converted to 3m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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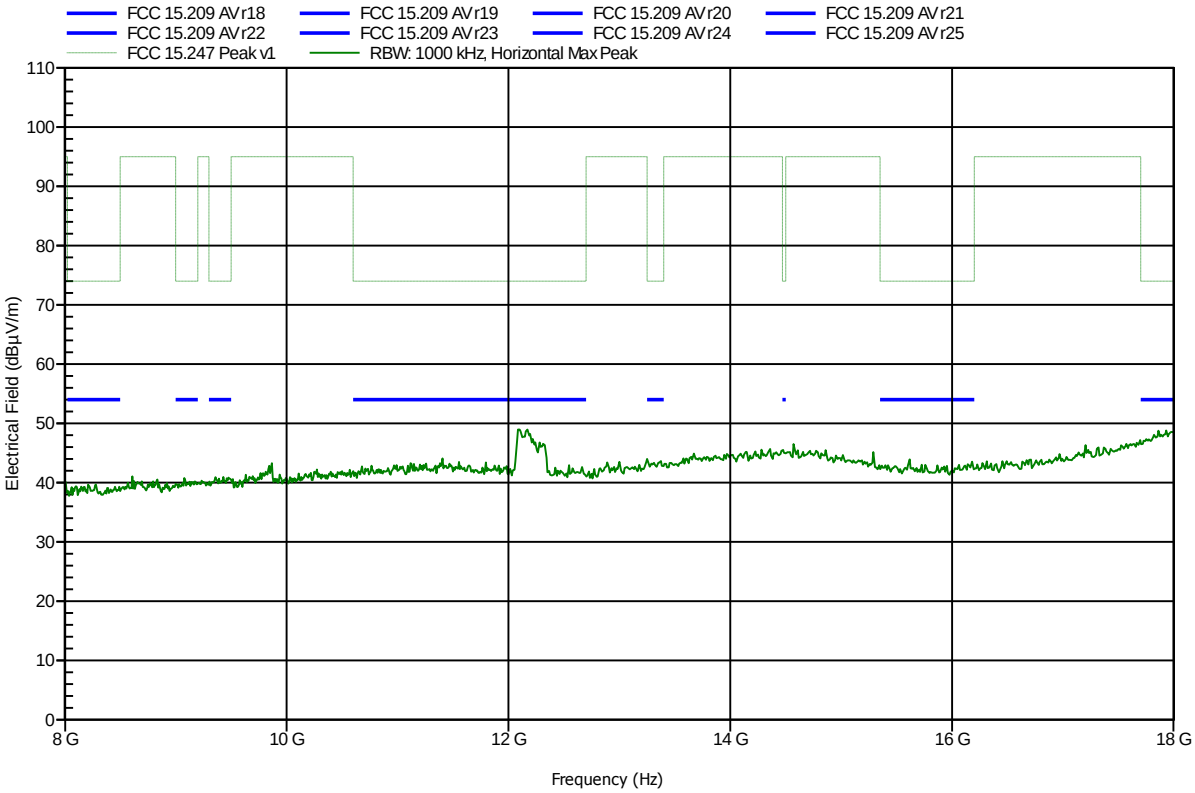

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	100 cm converted to 3m
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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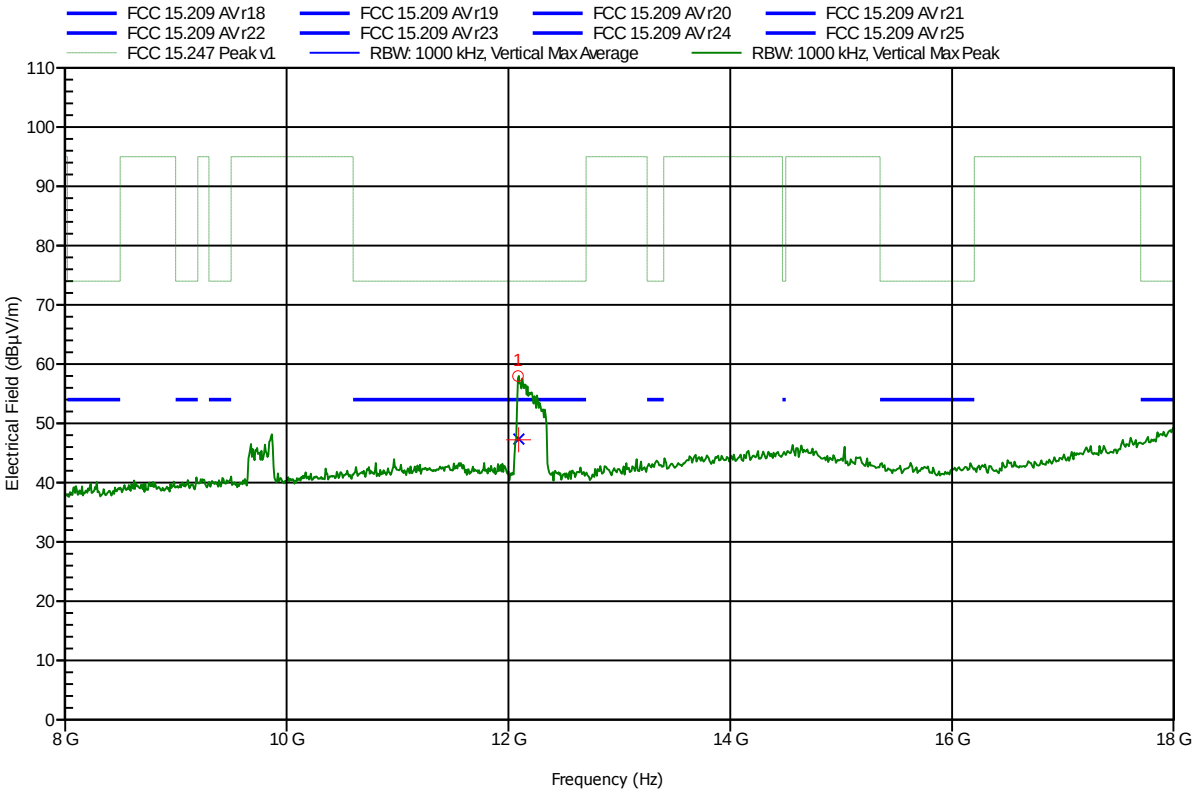

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
12.086 GHz	57.99 dBµV/m	74 dBµV/m	-16.01 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
12.086 GHz	47.34 dBµV/m	54 dBµV/m	-6.66 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	100 cm
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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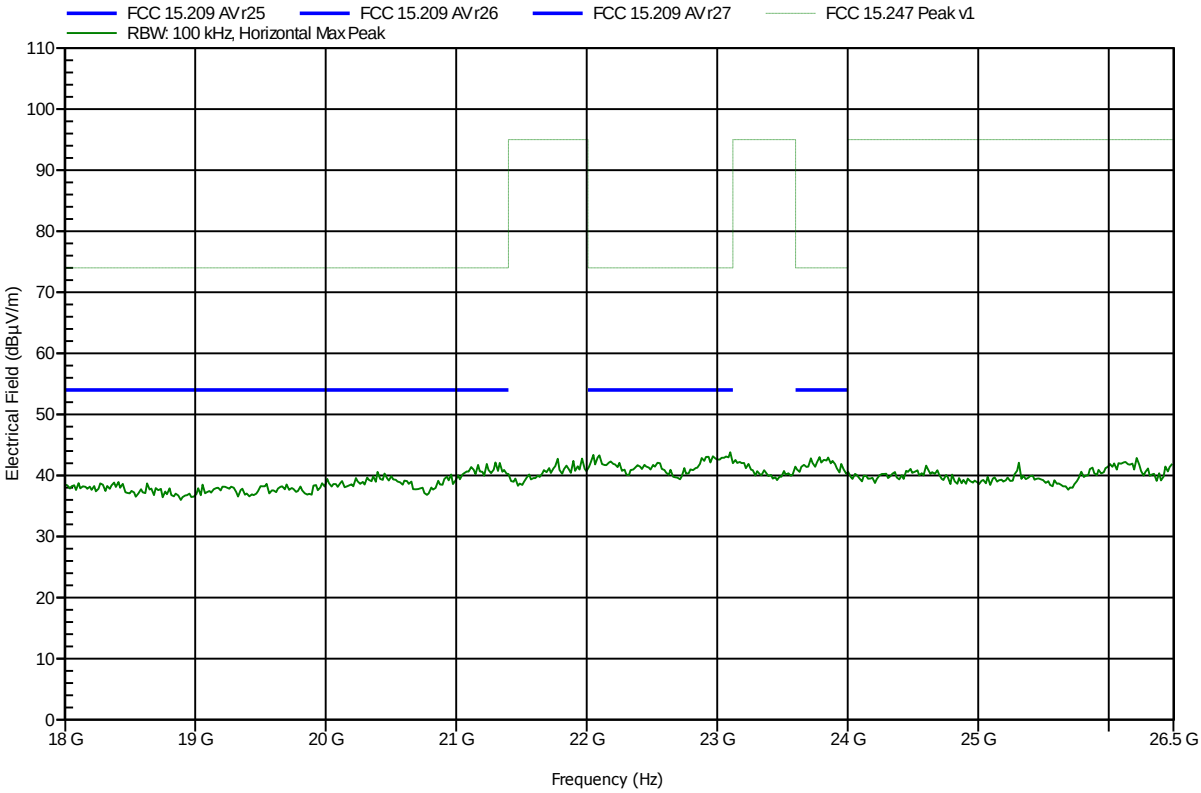
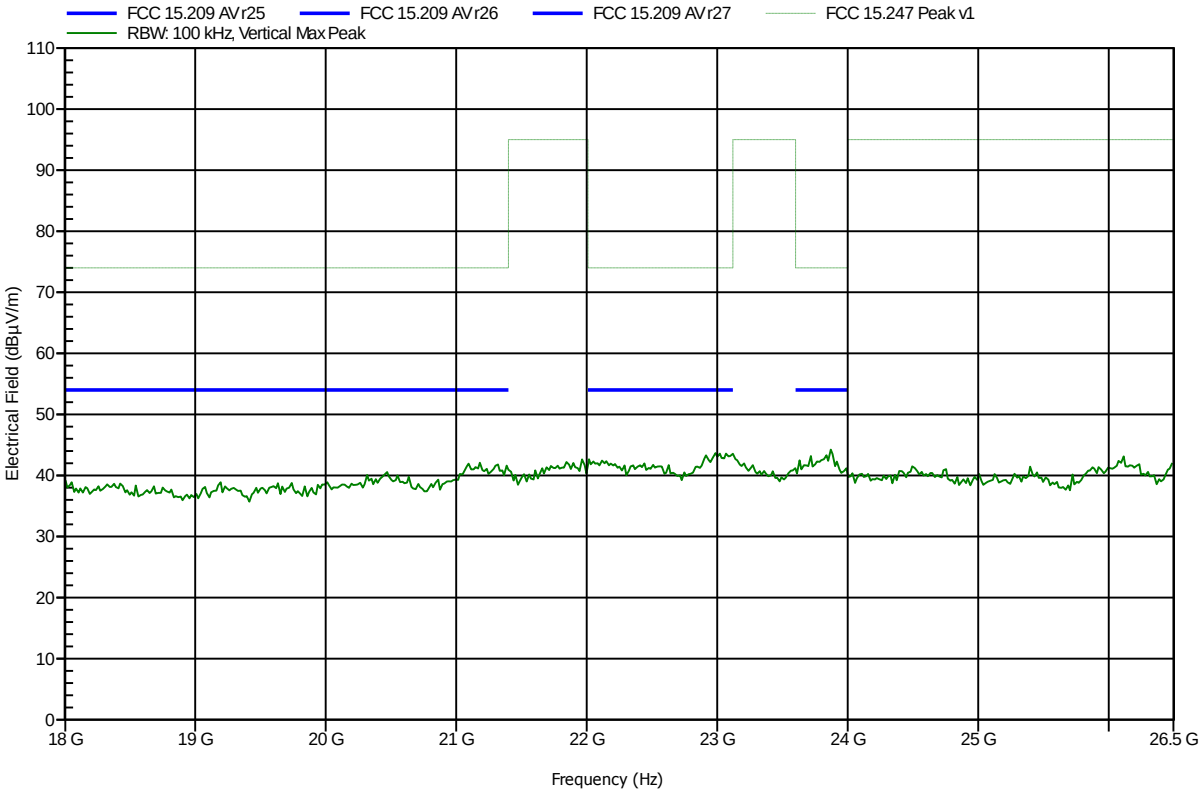


Spurious emissions according to FCC 15.247

Project number: G0M-1302-2616

Manufacturer:	Agilion GmbH
EUT Name:	WIRELESS TAG DRIVE
Model:	6021317
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 24°C, Vnom: 24 V DC (external)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	100 cm
Mode:	TX; CSS, OMNI-S Antenna 1399.17.0108
Test Date:	2013-02-22
Note:	

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