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FCC TEST REPORT

FCC 47 CFR Part 15C
Industry Canada RSS-247
Digital transmission systems operating within the 2400 – 2483.5 MHz band

Report Reference No. ..... :	G0M-1601-5302-TFC247WF-V02
Testing Laboratory ..... :	Eurofins Product Service GmbH
Address ..... :	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation ..... :	A2LA Accredited Testing Laboratory, Certificate No.: 1983.01 FCC Filed Test Laboratory, Reg.-No.: 96970 IC OATS Filing assigned code: 3470A
Applicant's name ..... :	lesswire GmbH
Address ..... :	Rudower Chaussee 30 12489 Berlin GERMANY
Test specification:	
Standard ..... :	47 CFR Part 15C RSS-247, Issue 1, 2015-05 RSS-Gen, Issue 4, 2014-11 ANSI C63.10:2013 ANSI C63.4:2014
Test scope……..... :	partial Radio compliance test
Equipment under test (EUT):	
Product description	WLAN-LTE-Router
Model No.	CCU5
Additional Model(s)	None
Brand Name(s)	None
Hardware version	C/BWIA3
Firmware / Software version	1.0.119
	FCC-ID: 2AHHACCU5 IC: N/A
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:

Test Lab Temperature ..... :	20 – 23 °C	
Test Lab Humidity ..... :	32 – 38 %	
Date of receipt of test item ..... :	2016-01-06	
Date (s) of performance of tests ..... :	2016-01-20 - 2016-02-01	
Compiled by ..... :	Burkhard Pudell	
Tested by (+ signature) ..... : (Responsible for Test)	Burkhard Pudell	B. Pudell
Approved by (+ signature) ..... : (Head of Lab)	Christian Weber	C. Weber
Date of issue ..... :	2016-03-24	
Total number of pages ..... :	171	

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:

Version History

Version	Issue Date	Remarks	Revised by
01	2016-03-08	Initial Release	
02	2016-03-24	Hard- and Software Version corrected	C. Weber

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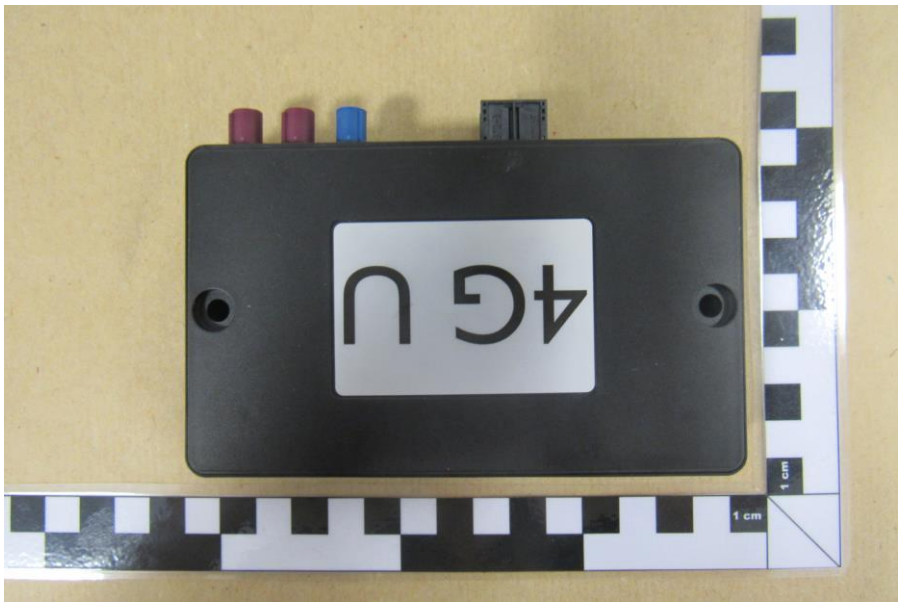
1 Equipment (Test item) Description

Description	WLAN-LTE-Router			
Model	CCU5			
Additional Model(s)	None			
Brand Name(s)	None			
Serial number	None			
Hardware version	C/BWIA3			
Software / Firmware version	1.0.119			
FCC-ID	2AHHACCU5			
IC	N/A			
Equipment type	End product			
Radio type	Transceiver			
Radio technology	IEEE 802.11 b/g/n			
Operating frequency range	2412 - 2462 MHz			
Assigned frequency band	2400 - 2483.5 MHz			
Main test frequencies	F_{LOW20}	2412 MHz	F_{LOW40}	2422 MHz
	F_{MID20}	2437 MHz	F_{MID40}	2437 MHz
	F_{HIGH20}	2462 MHz	F_{HIGH40}	2452 MHz
Spreading	CCK, DSSS, OFDM			
Modulations	BPSK, QPSK, 16-QAM, 64-QAM			
Number of channels	11			
Channel spacing	5 MHz			
Number of antennas	1			
Radio module	Type	WLAN Module		
	Model	ELLA-W131-00A		
	Manufacturer	u-blox		
	HW Version	00A-00		
	SW Version	14.44.35.p213-M2614486		
	FCC-ID	PV7-WIBEAR11n-SF1		
	IC	7738A-WB11NSF1		
Antenna	Type	integrated		
	Model	7488910245		
	Manufacturer	Würth		
	Gain	+3.0 dBi (manufacturer declaration)		
Manufacturer	lesswire GmbH Rudower Chaussee 30 12489 Berlin GERMANY			

Power supply	V_{NOM}	12.0 VDC
	V_{MIN}	N/A
	V_{MAX}	N/A
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A

1.1 Photos – Equipment External

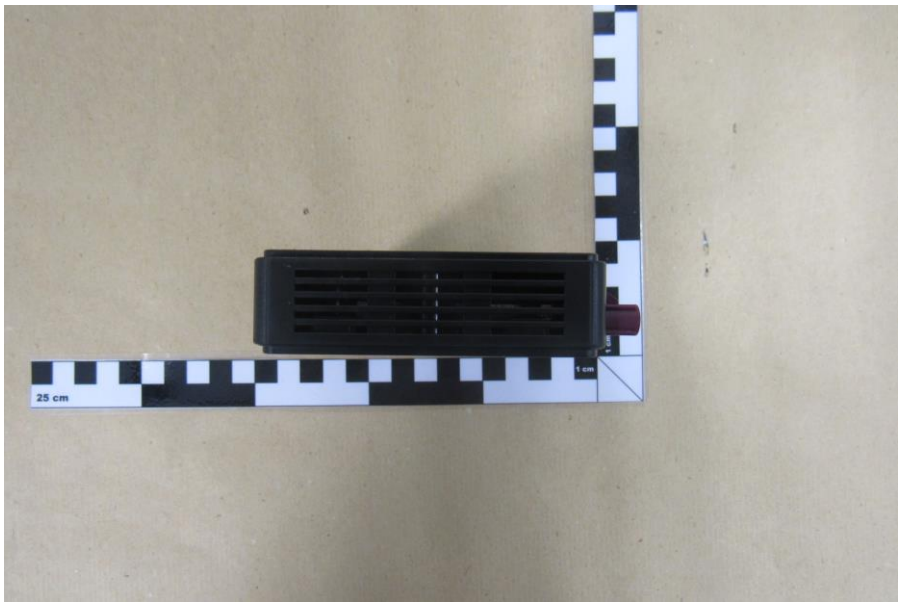
EUT FRONT

EUT BOTTOM


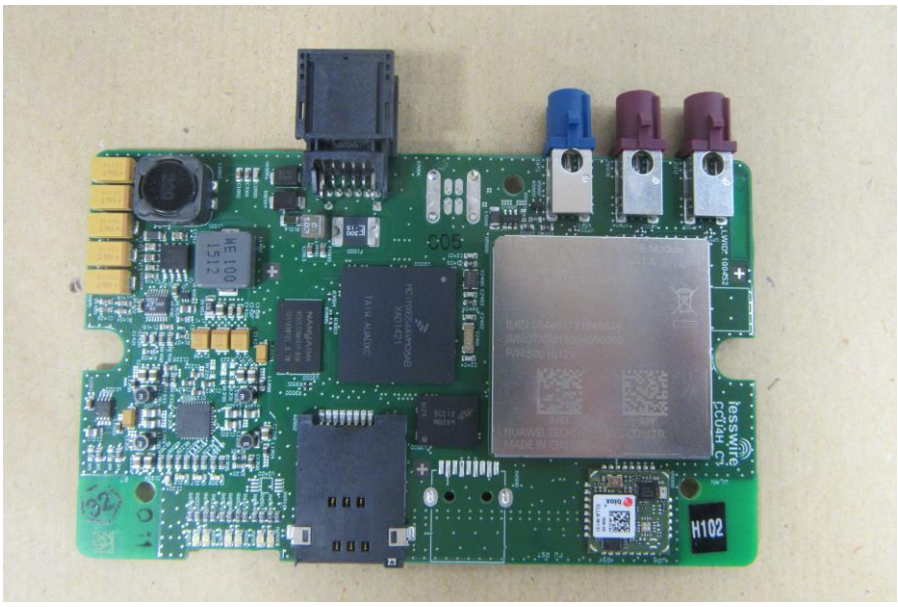
EUT TOP

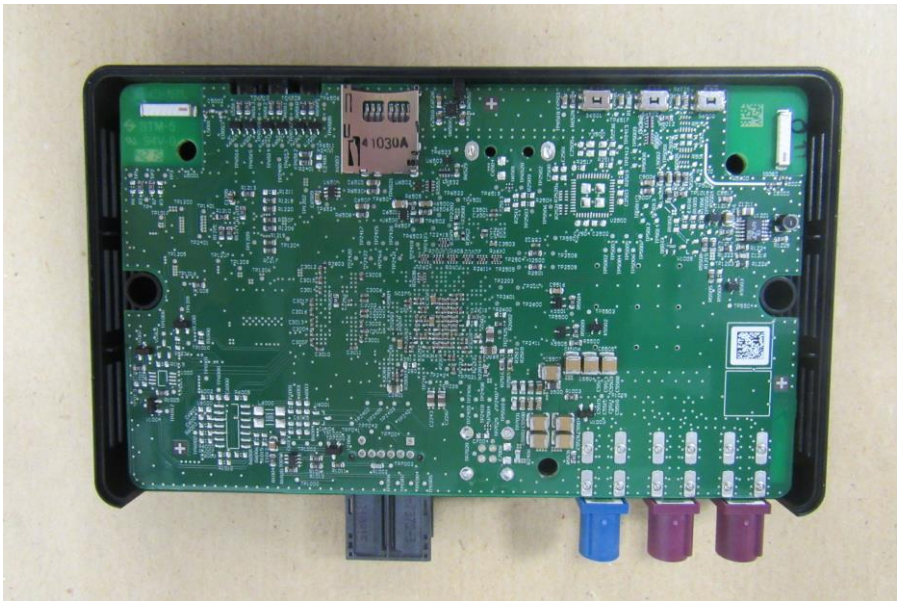
EUT BACK

EUT LEFT

EUT RIGHT


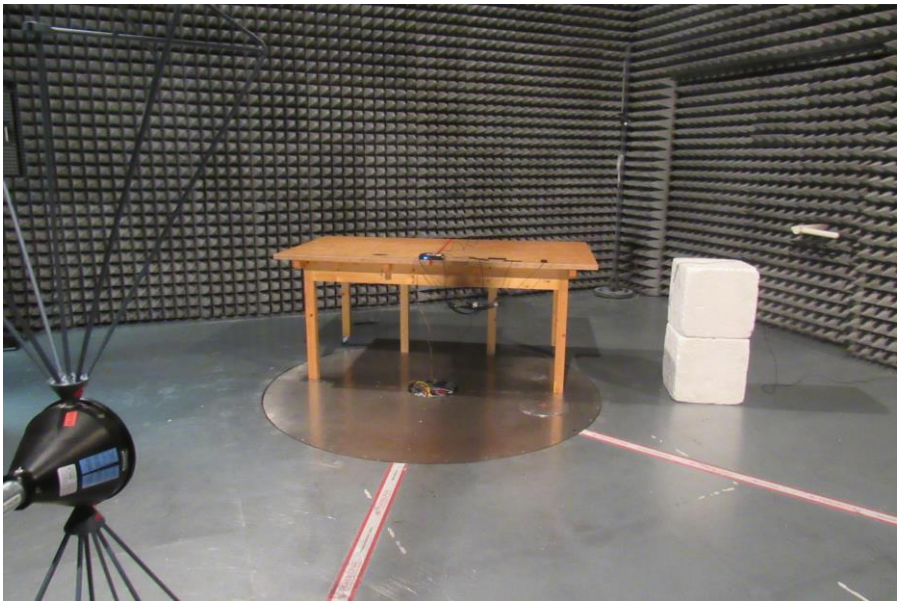
1.2 Photos – Equipment internal

EUT PCB FRONT


EUT PCB BACK


EUT WLAN MODULE FRONT

1.3 Photos – Test setup

TESTSETUP


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	
DSSS	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone transmit Spreading = DSSS Modulation = BPSK Data rate = 1 Mbps Bandwidth = 20 MHz Duty cycle = 100 % Power level = 13 dBm (Test mode setting)
HT20	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone transmit Spreading = OFDM Modulation = BPSK Data rate = MCS0 Bandwidth = 20 MHz Duty cycle = 100 % Power level = 13 dBm (Test mode setting)
HT40	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone transmit Spreading = OFDM Modulation = BPSK Data rate = MCS0 Bandwidth = 40 MHz Duty cycle = 100 % Power level = 13 dBm (Test mode setting)
Receive	General conditions:	EUT powered by laboratory power supply.
	Radio conditions:	Mode = standalone receive Spreading = DSSS / OFDM

1.6 Test Equipment Used During Testing

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

Occupied Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2015-02	2016-02

Radiated spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-
Spectrum Analyzer	R&S	FSIQ26	EF00242	2015-04	2016-04
Spectrum Analyzer	R&S	FSEK30	EF00168	2016-01	2017-01
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD Antenna	R&S	HL 223	EF00187	2014-03	2017-03
LPD Antenna	R&S	HL 025	EF00327	2015-10	2018-10

AC powerline conducted emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AMN	R&S	ESH2-Z5	EF00182	2014-11	2016-11
EMI Test Receiver	R&S	ESCS 30	EF00295	2015-10	2016-10

1.7 Sample emission level calculation

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

Reading:

This is the reading obtained on the spectrum analyzer in 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-247				
Product Specific Standard Section	**Requirement – Test**	**Reference Method**	**Result**	**Remarks**
RSS-Gen 6.6	Occupied Bandwidth	ANSI C63.10	N/R	Informational only
FCC § 15.247(a)(2) IC RSS-247 § 5.2	6dB Bandwidth	ANSI C63.10	N/R	
FCC § 15.247(b)(3) IC RSS-247 § 5.4	Maximum peak conducted power	ANSI C63.10	N/R	
FCC § 15.247(e) IC RSS-247 § 5.2	Power spectral density	ANSI C63.10	N/R	
47 CFR 15.207 IC RSS-247 § 3.1	AC power line conducted emissions	ANSI C63.4	N/R	battery only
FCC § 15.247(d) IC RSS-247 § 5.5	Band edge compliance	ANSI C63.10	N/R	
FCC § 15.247(d) IC RSS-247 § 5.5	Conducted spurious emissions	ANSI C63.10	N/R	
FCC § 15.247(d) FCC § 15.209 IC RSS-247 § 5.5	Transmitter radiated spurious emissions	ANSI C63.10	PASS	
IC RSS-247 § 3.1	Receiver radiated spurious emissions	ANSI C63.10	PASS	
Remarks:				

3 Test Conditions and Results

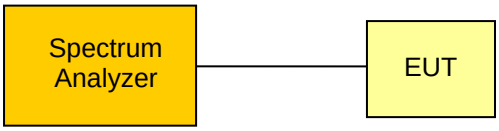
3.1 Test Conditions and Results – Occupied Bandwidth

Occupied Bandwidth acc. to IC RSS-Gen	**Verdict: N/R**
Test according to measurement reference	Reference Method
	ANSI C63.10
Test frequency range	Tested frequencies
	F_{LOW} / F_{MID} / F_{HIGH}

Limits

None (Informational only)

Test setup



Test procedure

1. EUT set to test mode (Communication tester is used if needed)
2. Span set to at least twice the emission spectrum
3. Resolution bandwidth set to 1 % of span
4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function

Test results

Channel	Frequency [MHz]	Mode	Occupied Bandwidth [MHz]
F_{LOW20}	2412	DSSS	13.527
F_{MID20}	2437	DSSS	13.587
F_{HIGH20}	2462	DSSS	13.587
F_{LOW20}	2412	OFDM	16.954
F_{MID20}	2437	OFDM	16.954
F_{HIGH20}	2462	OFDM	16.834
F_{LOW20}	2412	HT20	18.096
F_{MID20}	2437	HT20	18.096
F_{HIGH20}	2462	HT20	18.096
F_{LOW40}	2422	HT40	36.773
F_{MID40}	2437	HT40	36.773
F_{HIGH40}	2452	HT40	36.773

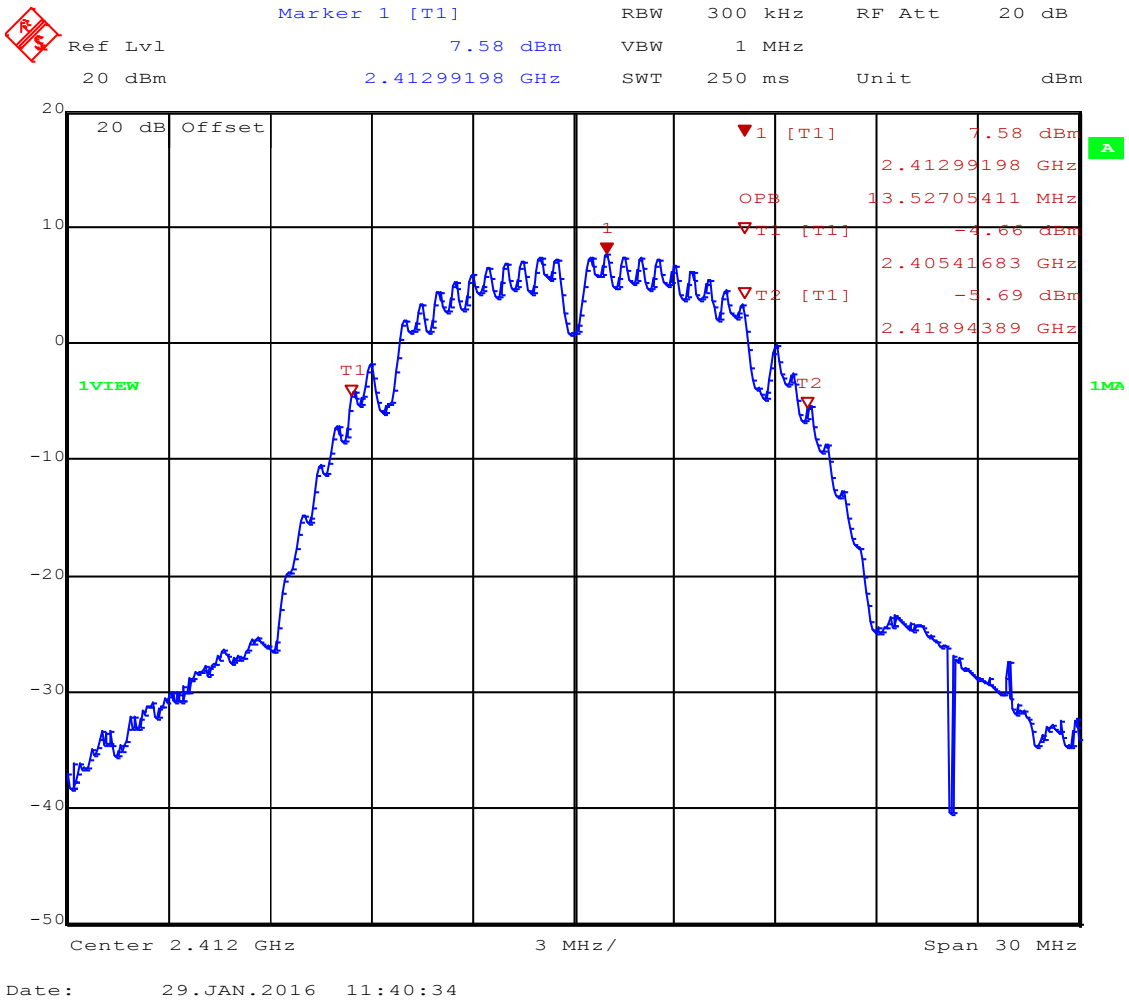
Comments:

Occupied Bandwidth – DSSS F_{LOW}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11b, 2412 MHz, DSSS 1Mbps
Test Date:	2016-01-29
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 13.527 MHz

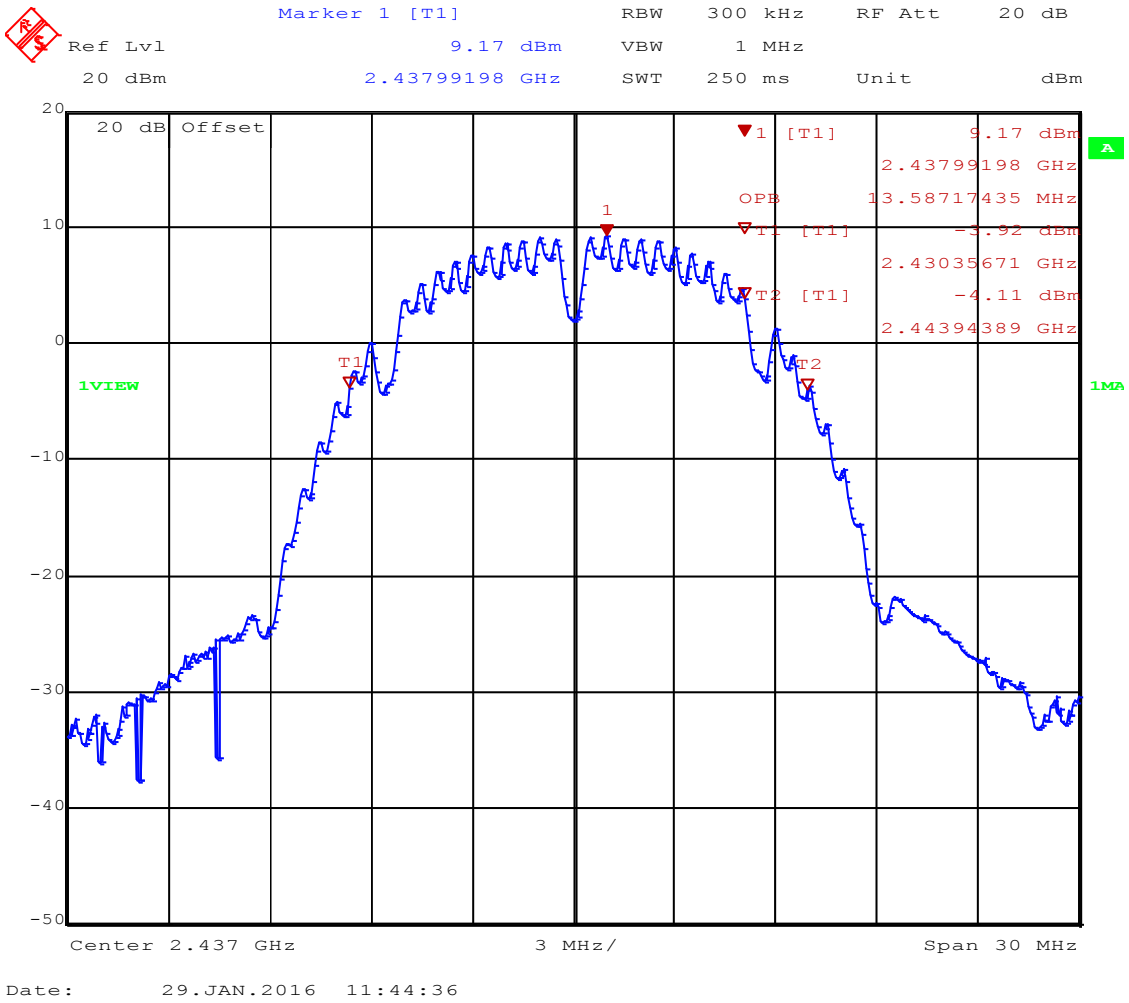


Occupied Bandwidth – DSSS F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11b, 2437 MHz, DSSS 1Mbps
Test Date:	2016-01-29
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 13.587 MHz

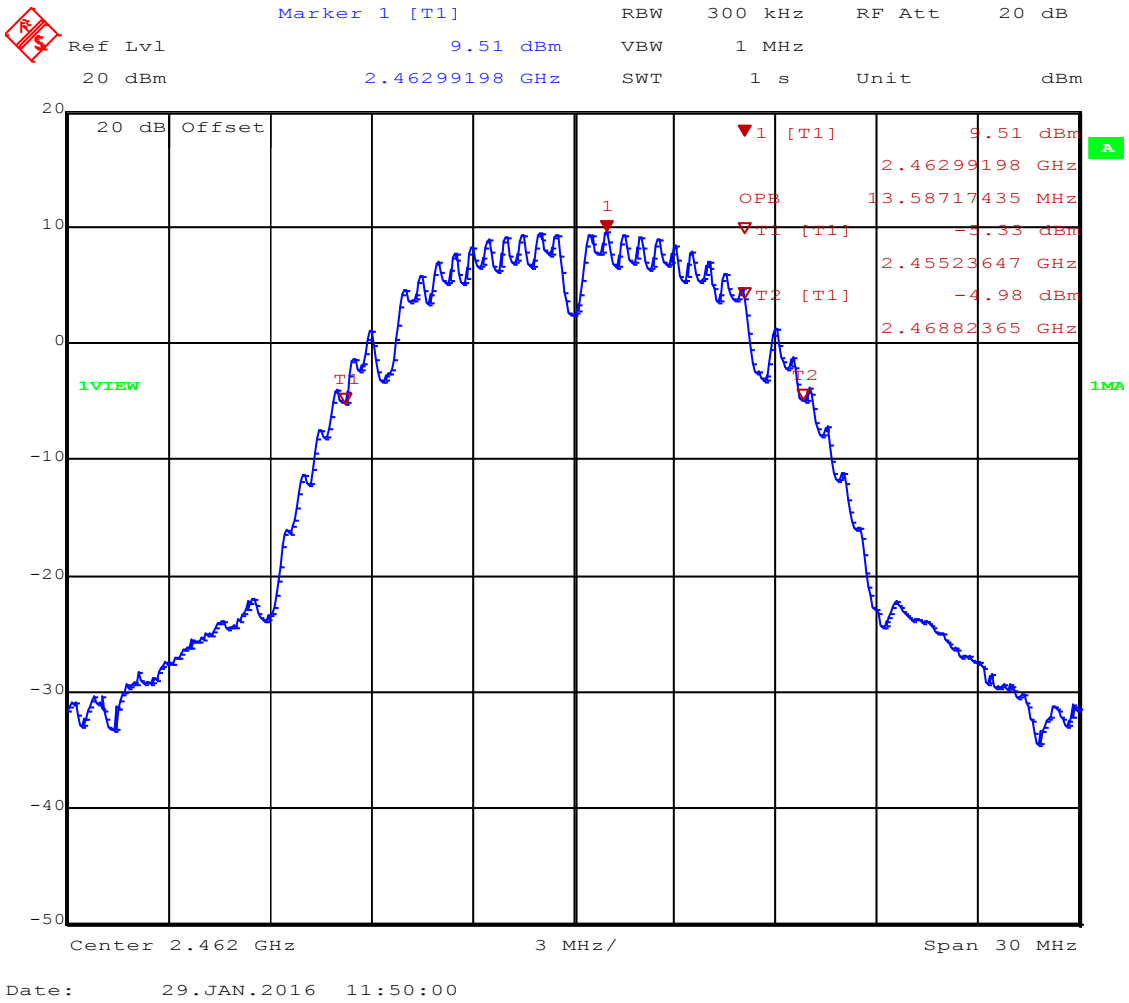


Occupied Bandwidth – DSSS F_{HIGH}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11b, 2462 MHz, DSSS 1Mbps
Test Date:	2016-01-29
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 13.587 MHz

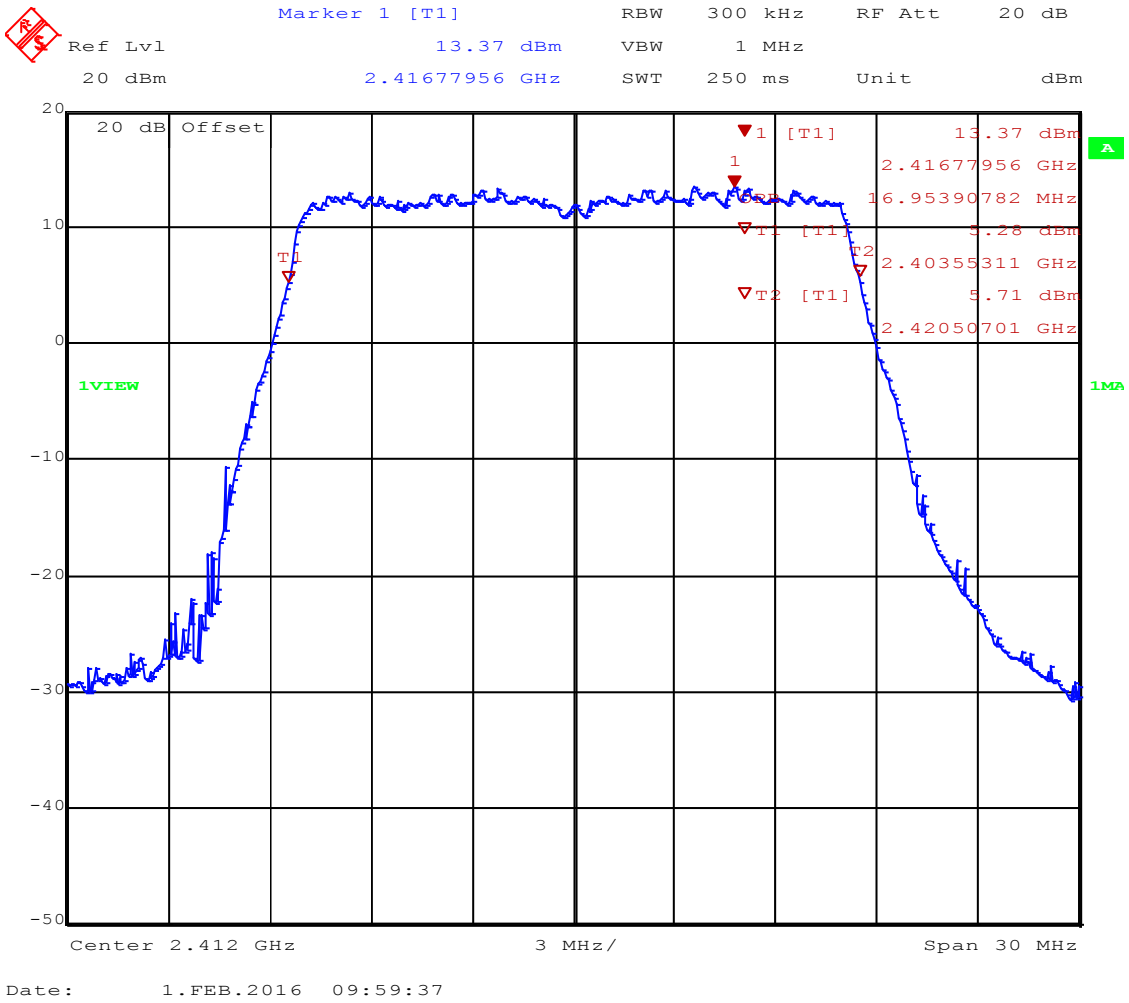


Occupied Bandwidth – OFDM F_{LOW}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11g, 2412 MHz, OFDM 6Mbps
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 16.954 MHz

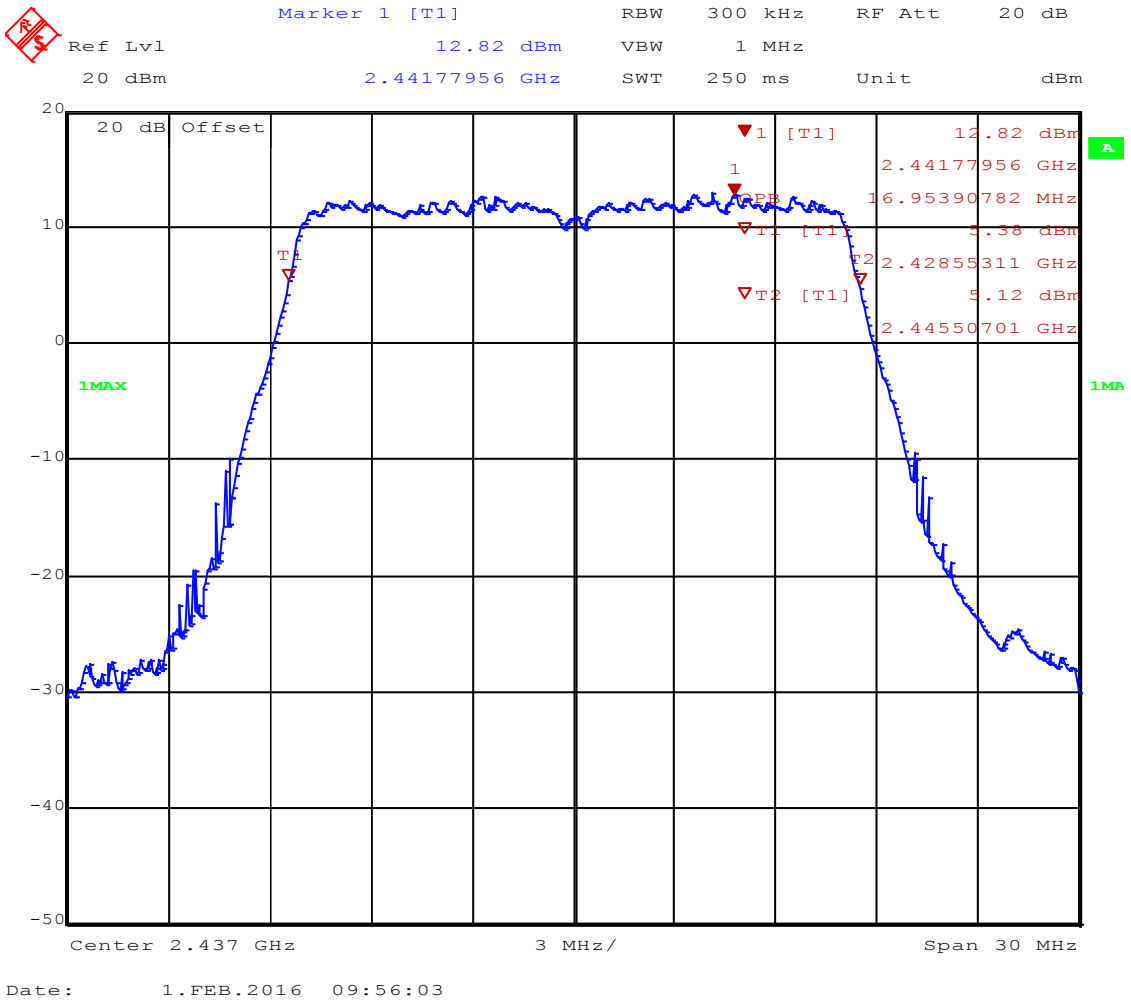


Occupied Bandwidth – OFDM F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11g, 2437 MHz, OFDM 6Mbps
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 16.954 MHz

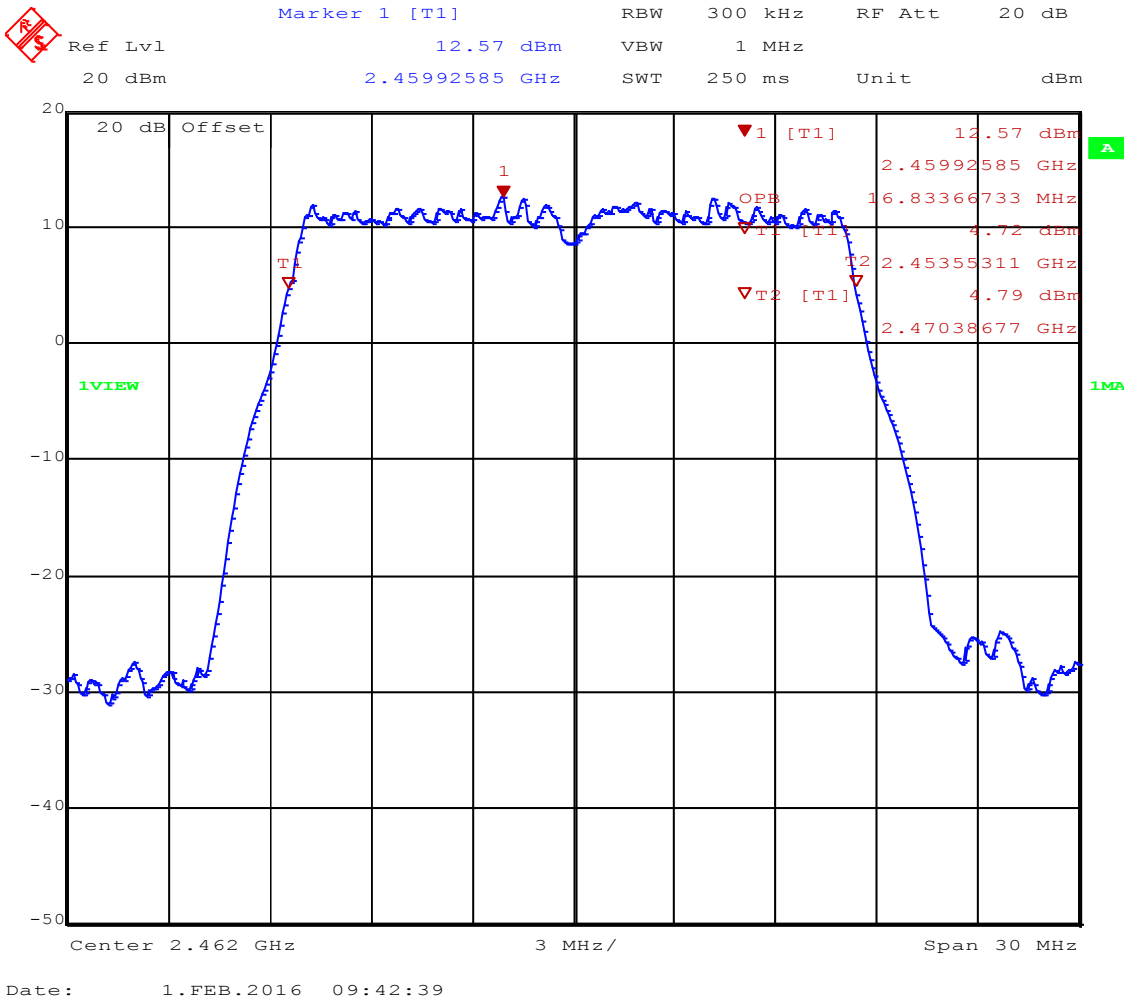


Occupied Bandwidth – OFDM F_{HIGH}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11g, 2462 MHz, OFDM 6Mbps
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 16.834 MHz

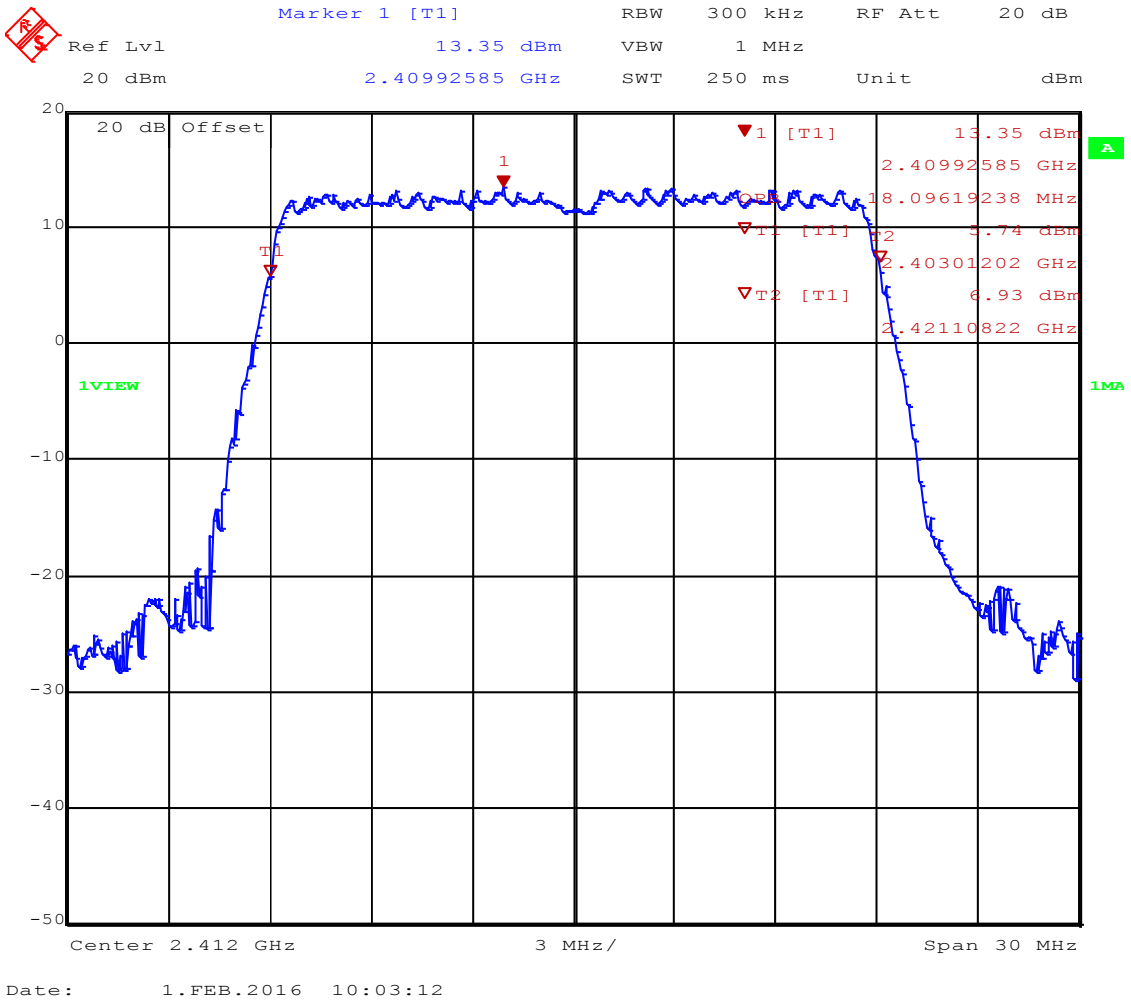


Occupied Bandwidth – HT20 F_{LOW}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2412 MHz, OFDM HT20 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 18.096 MHz

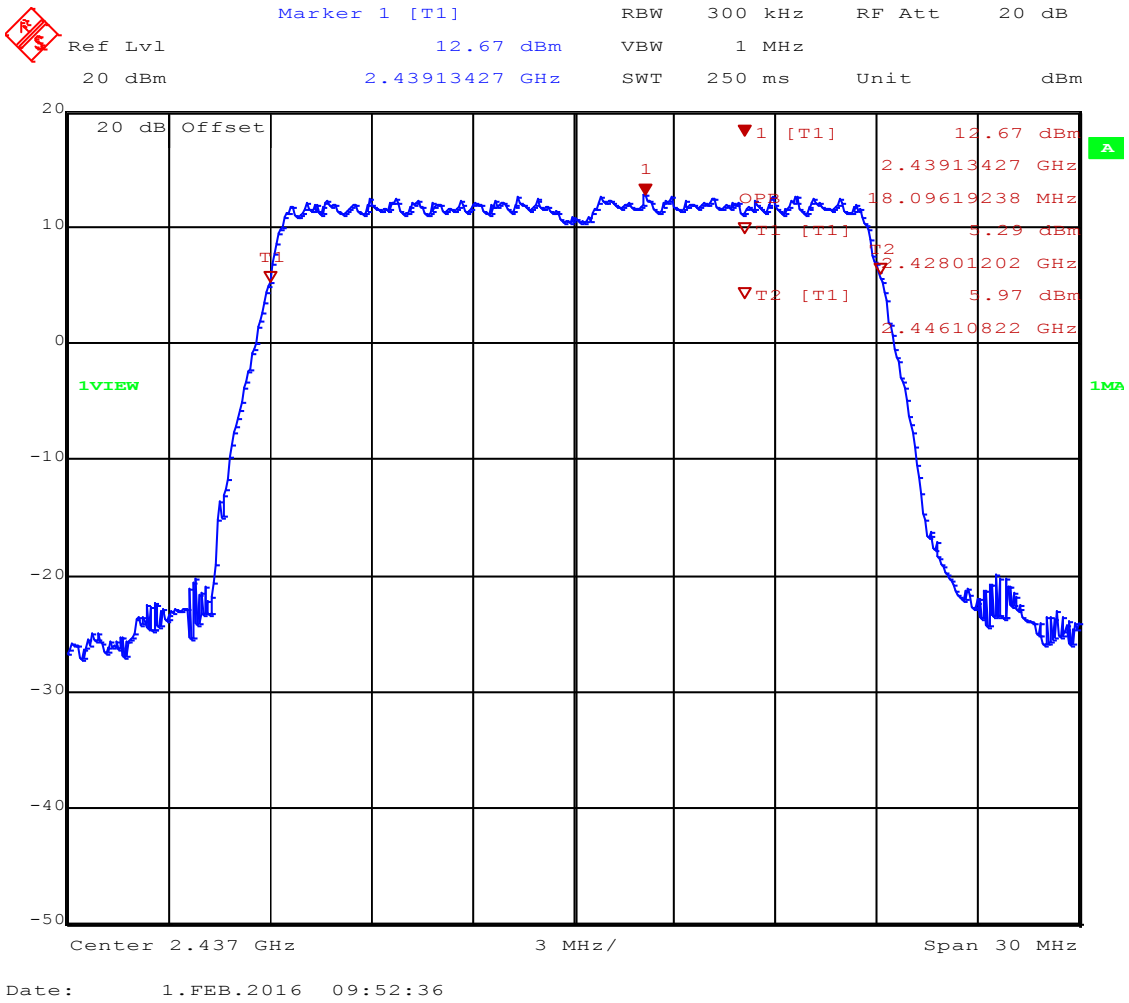


Occupied Bandwidth – HT20 F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2437 MHz, OFDM HT20 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 18.096 MHz

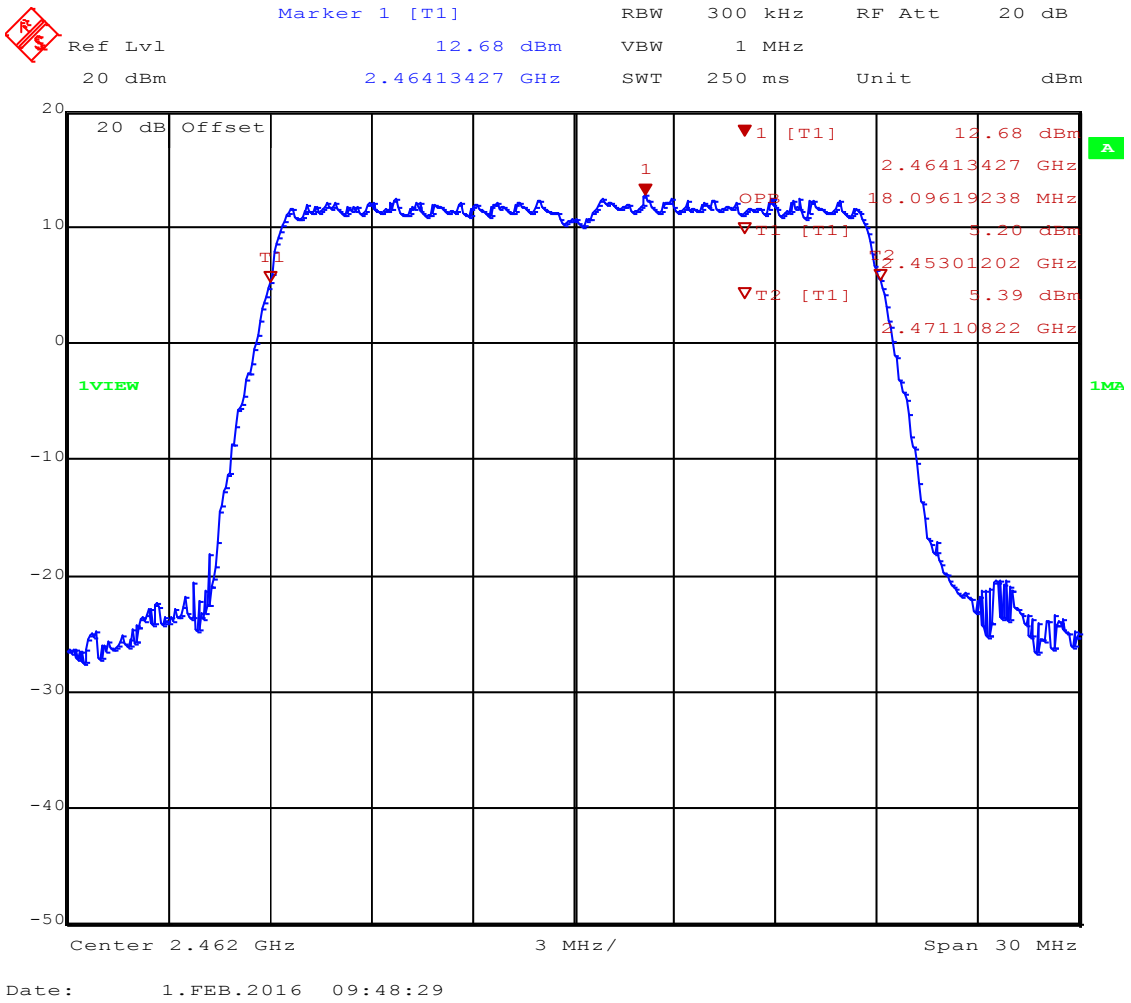


Occupied Bandwidth – HT20 F_{HIGH}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2462 MHz, OFDM HT20 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 18.096 MHz

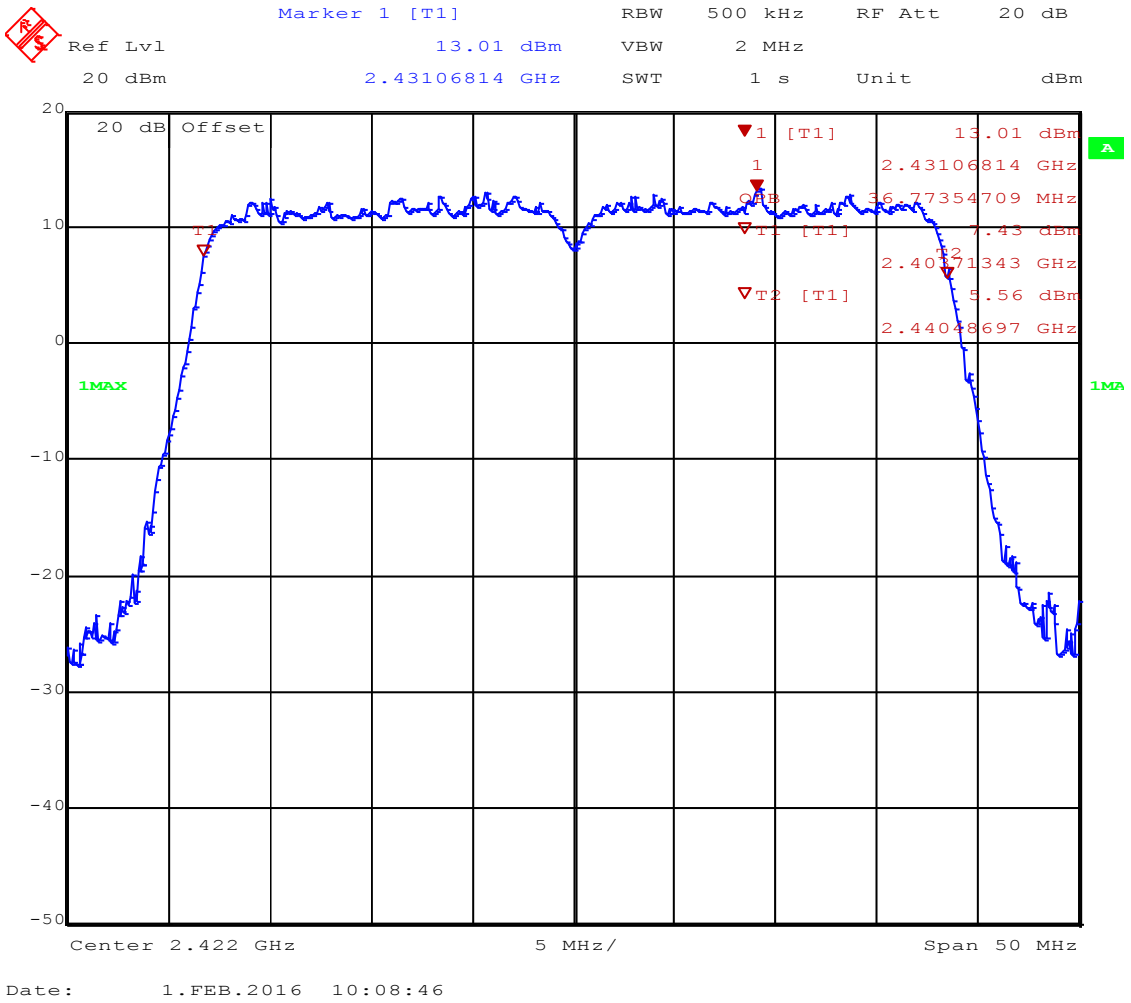


Occupied Bandwidth – HT40 F_{LOW}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2422 MHz, OFDM HT40 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 36.773 MHz

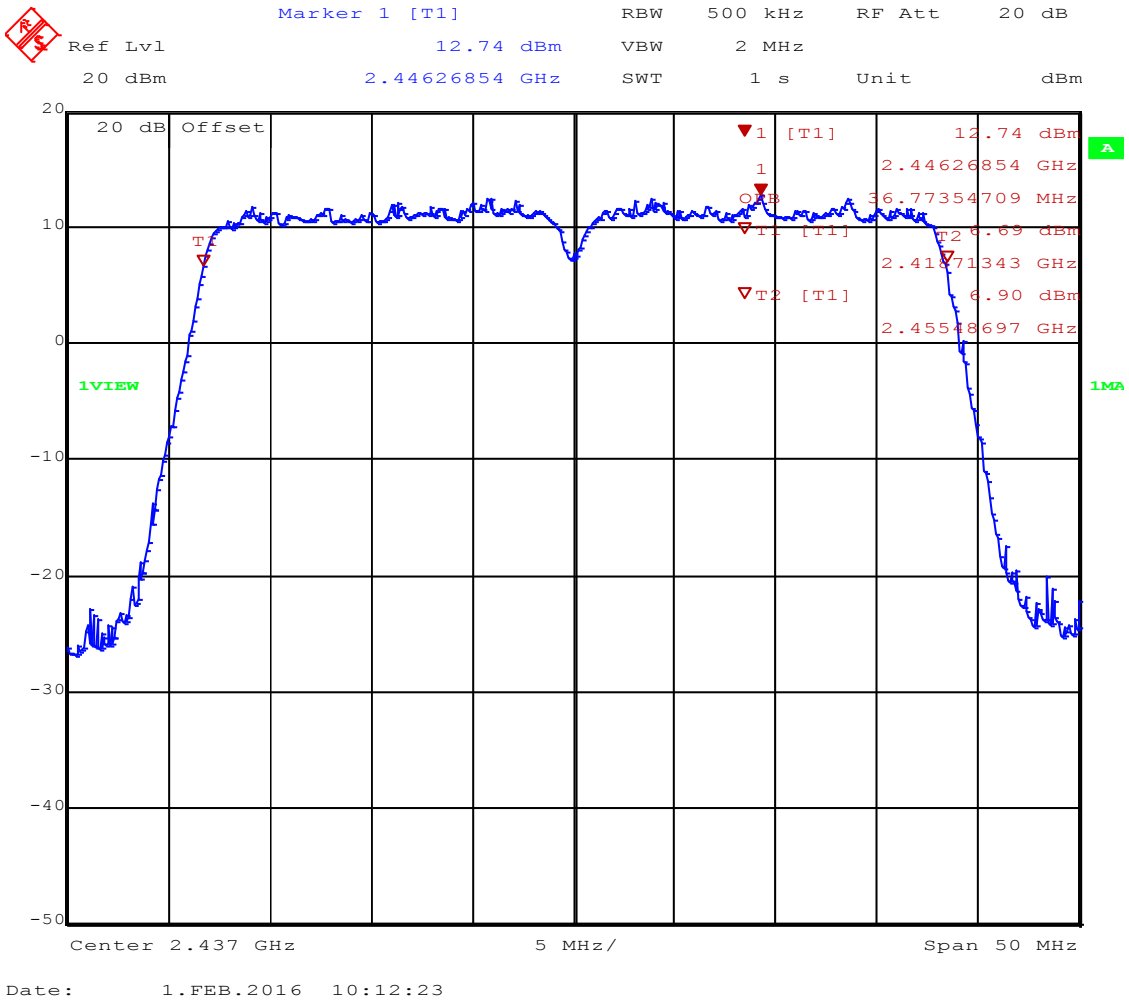


Occupied Bandwidth – HT40 F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2437 MHz, OFDM HT40 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 36.773 MHz

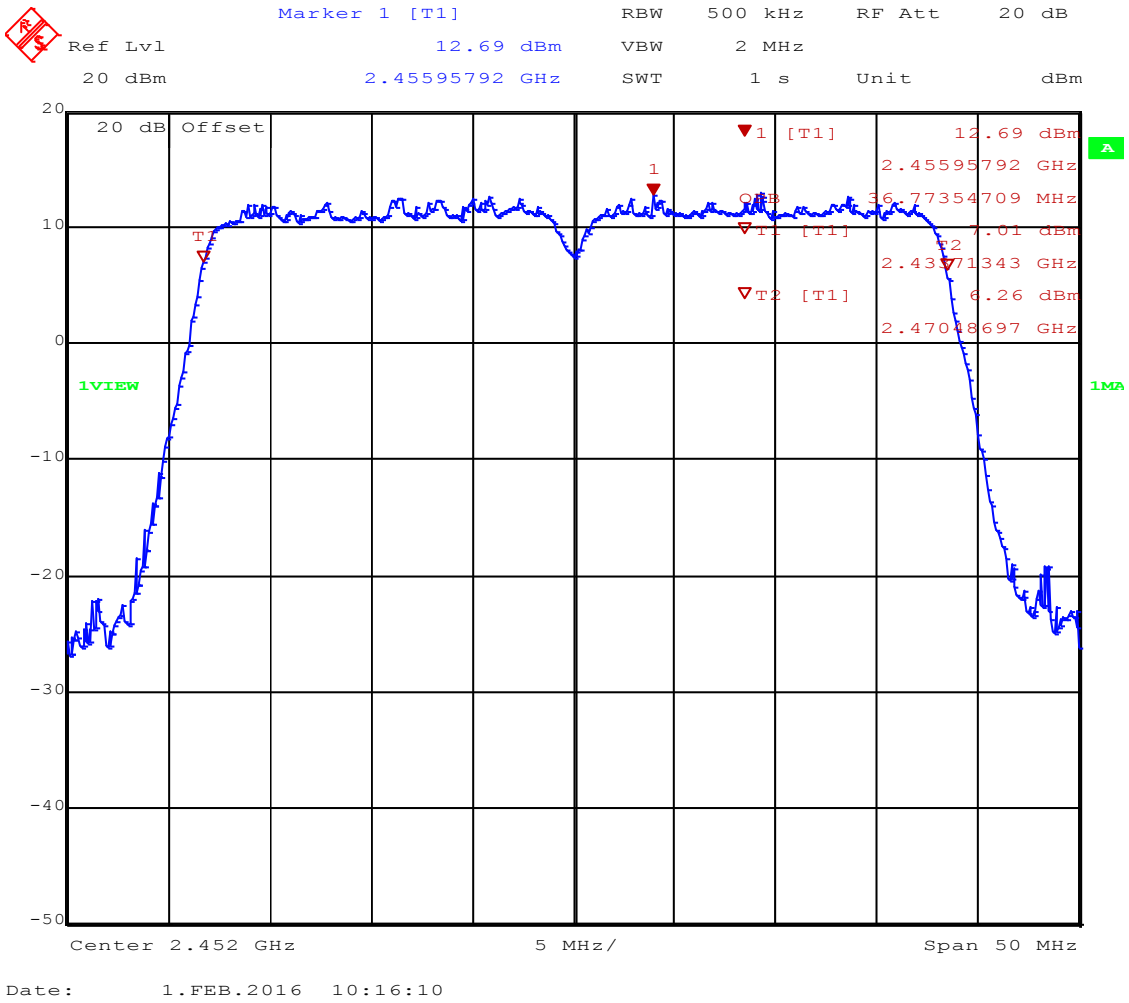


Occupied Bandwidth – HT40 F_{HIGH}

Occupied Bandwidth acc. to RSS-Gen

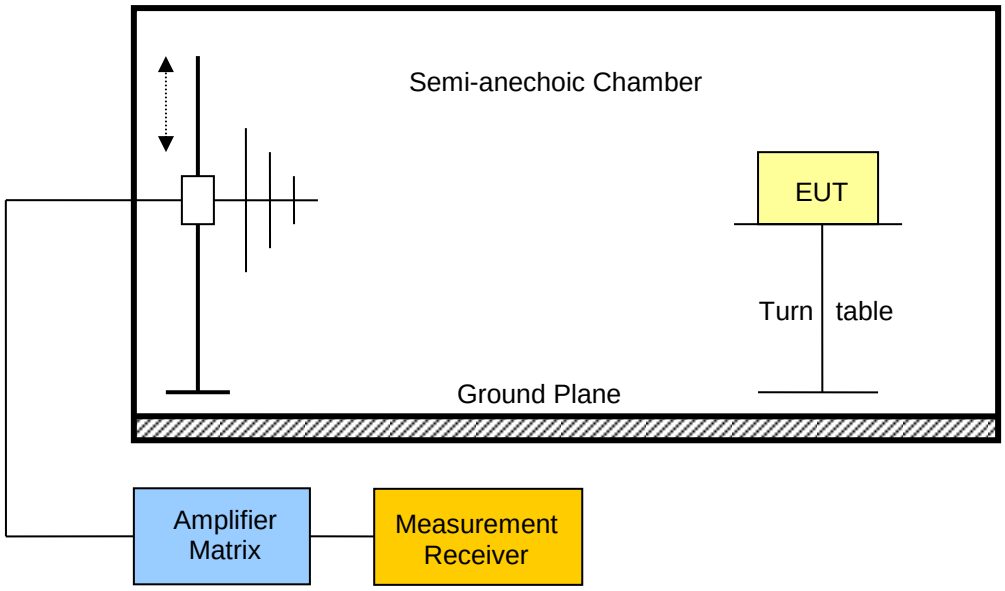
Project Number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	Tx, IEEE 802.11n, 2452 MHz, OFDM HT40 MCS0
Test Date:	2016-02-01
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW= 36.773 MHz



3.3 Test Conditions and Results – Transmitter radiated emissions

Transmitter radiated emissions acc. to FCC 47 CFR 15.247 / IC RSS-247				**Verdict: PASS**
Test according referenced standards		Reference Method		
		FCC 15.247(d) / IC RSS-247 5.5		
Test according to measurement reference		Reference Method		
		ANSI C63.10		
Test frequency range		Tested frequencies		
		30 MHz – 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 DSSS

Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbµV/m]	Det.	Pol.	Limit [dbµV/m]	Limit dist. [m]*	Margin [dB]
F_{LOW}	2412	1 Mbps	2389	54.71	pk	hor	74.00	3	-19.29
F_{LOW}	2412	1 Mbps	2389	38.30	RMS	hor	54.00	3	-15.70
F_{LOW}	2412	1 Mbps	2390	55.16	pk	hor	74.00	3	-18.84
F_{LOW}	2412	1 Mbps	2390	40.32	RMS	hor	54.00	3	-13.68
F_{MID}	2437	no significant spurious emission							
F_{HIGH}	2462	no significant spurious emission							

Test results HT20

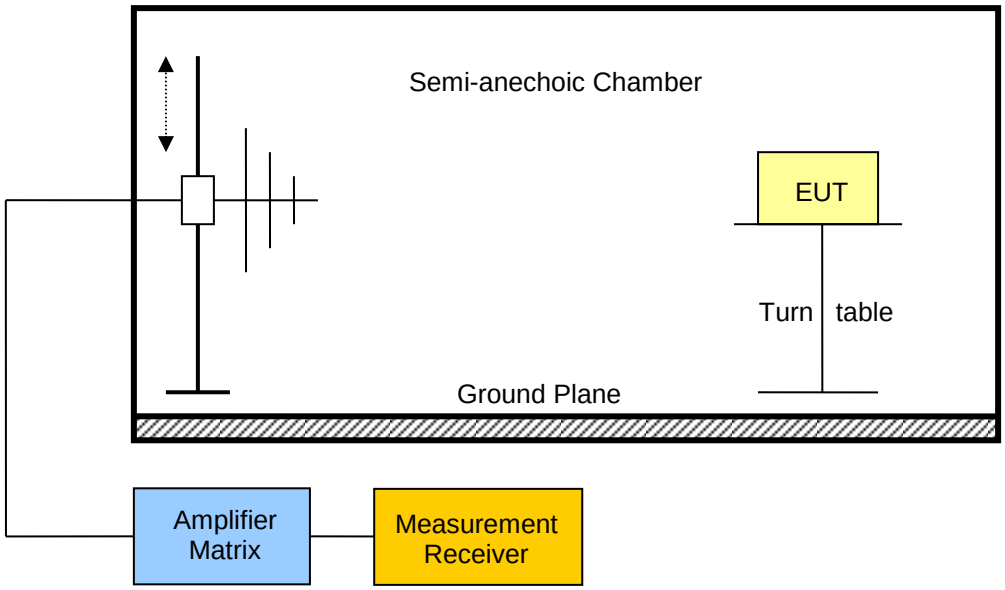
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbµV/m]	Det.	Pol.	Limit [dbµV/m]	Limit dist. [m]*	Margin [dB]
F_{LOW}	2412	MCS0	2387	54.34	pk	hor	74.00	3	-19.66
F_{LOW}	2412	MCS0	2387	33.65	RMS	hor	54.00	3	-20.35
F_{LOW}	2412	MCS0	2389	58.07	pk	hor	74.00	3	-15.93
F_{LOW}	2412	MCS0	2389	35.34	RMS	hor	54.00	3	-18.66
F_{LOW}	2412	MCS0	2389	59.56	pk	hor	74.00	3	-14.44
F_{LOW}	2412	MCS0	2389	35.34	RMS	hor	54.00	3	-18.66
F_{LOW}	2412	MCS0	2390	55.96	pk	hor	74.00	3	-18.04
F_{LOW}	2412	MCS0	2390	37.31	RMS	hor	54.00	3	-16.69
F_{MID}	2437	no significant spurious emission							
F_{HIGH}	2462	MCS0	2484	54.88	pk	ver	74.00	3	-19.12
F_{HIGH}	2462	MCS0	2484	33.22	RMS	ver	54.00	3	-20.78
F_{HIGH}	2462	MCS0	2484	55.79	pk	ver	74.00	3	-18.21
F_{HIGH}	2462	MCS0	2484	33.22	RMS	ver	54.00	3	-20.78
F_{HIGH}	2462	MCS0	2484	55.36	pk	ver	74.00	3	-18.64
F_{HIGH}	2462	MCS0	2484	33.22	RMS	ver	54.00	3	-20.78
F_{HIGH}	2462	MCS0	2484	69.84	pk	hor	74.00	3	-04.16
F_{HIGH}	2462	MCS0	2484	46.93	RMS	hor	54.00	3	-07.07
F_{HIGH}	2462	MCS0	2484	71.79	pk	hor	74.00	3	-02.21
F_{HIGH}	2462	MCS0	2484	46.93	RMS	hor	54.00	3	-07.07
F_{HIGH}	2462	MCS0	2484	71.72	pk	hor	74.00	3	-02.28

F_{HIGH}	2462	MCS0	2484	46.93	RMS	hor	54.00	3	-07.07
F_{HIGH}	2462	MCS0	2484	69.62	pk	hor	74.00	3	-04.38
F_{HIGH}	2462	MCS0	2484	46.93	RMS	hor	54.00	3	-07.07
F_{HIGH}	2462	MCS0	2485	56.53	pk	ver	74.00	3	-17.47
F_{HIGH}	2462	MCS0	2485	35.07	RMS	ver	54.00	3	-18.93
F_{HIGH}	2462	MCS0	2485	53.11	pk	ver	74.00	3	-20.89
F_{HIGH}	2462	MCS0	2485	35.07	RMS	ver	54.00	3	-18.93
F_{HIGH}	2462	MCS0	2485	69.66	pk	hor	74.00	3	-04.34
F_{HIGH}	2462	MCS0	2485	45.79	RMS	hor	54.00	3	-08.21
Test results HT40									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbµV/m]	Det.	Pol.	Limit [dbµV/m]	Limit dist. [m]*	Margin [dB]
F_{LOW}	2412	MCS0	2379	55.38	pk	hor	74.00	3	-18.62
F_{LOW}	2412	MCS0	2379	35.20	RMS	hor	54.00	3	-18.80
F_{LOW}	2412	MCS0	2381	58.99	pk	hor	74.00	3	-15.01
F_{LOW}	2412	MCS0	2381	36.31	RMS	hor	54.00	3	-17.69
F_{LOW}	2412	MCS0	2383	58.00	pk	hor	74.00	3	-16.00
F_{LOW}	2412	MCS0	2383	34.27	RMS	hor	54.00	3	-19.73
F_{LOW}	2412	MCS0	2386	60.10	pk	hor	74.00	3	-13.90
F_{LOW}	2412	MCS0	2386	38.13	RMS	hor	54.00	3	-15.87
F_{LOW}	2412	MCS0	2390	54.95	pk	ver	74.00	3	-19.05
F_{LOW}	2412	MCS0	2390	36.04	RMS	ver	54.00	3	-17.96
F_{LOW}	2412	MCS0	2390	59.49	pk	hor	74.00	3	-14.51
F_{LOW}	2412	MCS0	2390	39.02	RMS	hor	54.00	3	-14.98
F_{MID}	2437	MCS0	2484	60.03	pk	hor	74.00	3	-13.97
F_{MID}	2437	MCS0	2484	62.88	pk	hor	74.00	3	-11.12
F_{HIGH}	2462	MCS0	2485	61.32	pk	ver	74.00	3	-12.68
F_{HIGH}	2462	MCS0	2485	42.27	RMS	ver	54.00	3	-11.73
F_{HIGH}	2462	MCS0	2485	71.76	pk	hor	74.00	3	-02.24
F_{HIGH}	2462	MCS0	2485	48.04	RMS	hor	54.00	3	-05.96
F_{HIGH}	2462	MCS0	2486	71.95	pk	hor	74.00	3	-02.05
F_{HIGH}	2462	MCS0	2486	47.80	RMS	hor	54.00	3	-06.20
F_{HIGH}	2462	MCS0	2487	62.22	pk	ver	74.00	3	-11.78
F_{HIGH}	2462	MCS0	2487	41.42	RMS	ver	54.00	3	-12.58
F_{HIGH}	2462	MCS0	2488	71.47	pk	hor	74.00	3	-02.53
F_{HIGH}	2462	MCS0	2488	46.63	RMS	hor	54.00	3	-07.37
F_{HIGH}	2462	MCS0	2489	62.05	pk	ver	74.00	3	-11.95

F_{HIGH}	2462	MCS0	2489	40.61	RMS	ver	54.00	3	-13.39
F_{HIGH}	2462	MCS0	2489	71.07	pk	hor	74.00	3	-02.93
F_{HIGH}	2462	MCS0	2489	46.65	RMS	hor	54.00	3	-07.35
F_{HIGH}	2462	MCS0	2491	70.72	pk	hor	74.00	3	-03.28
F_{HIGH}	2462	MCS0	2491	46.24	RMS	hor	54.00	3	-07.76
F_{HIGH}	2462	MCS0	2493	57.36	pk	ver	74.00	3	-16.64
F_{HIGH}	2462	MCS0	2493	35.67	RMS	ver	54.00	3	-18.33
F_{HIGH}	2462	MCS0	2495	70.96	pk	hor	74.00	3	-03.04
F_{HIGH}	2462	MCS0	2495	44.95	RMS	hor	54.00	3	-09.05
F_{HIGH}	2462	MCS0	2497	58.13	pk	ver	74.00	3	-15.87
F_{HIGH}	2462	MCS0	2497	33.42	RMS	ver	54.00	3	-20.58
Comments: * Physical distance between EUT and measurement antenna.									

3.4 Test Conditions and Results – Receiver radiated emissions

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



Test procedure
1. EUT set to receive 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

Test results

Channel	Frequency [MHz]	Emission [MHz]	Emission Level [dbµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dBµV/m]
F_{MID}	2437	790.4	28.48	pk	hor	46.00	-17.52 dB
F_{MID}	2437	6976	51.62	pk	hor	53.98	-2.36 dB
F_{MID}	2437	17748	49.97	pk	hor	53.98	-4.01 dB
F_{MID}	2437	17856	50.37	pk	ver	53.98	-3.61 dB

Comments:
* Physical distance between EUT and measurement antenna.
** Emission level corresponds to ambient noise floor

ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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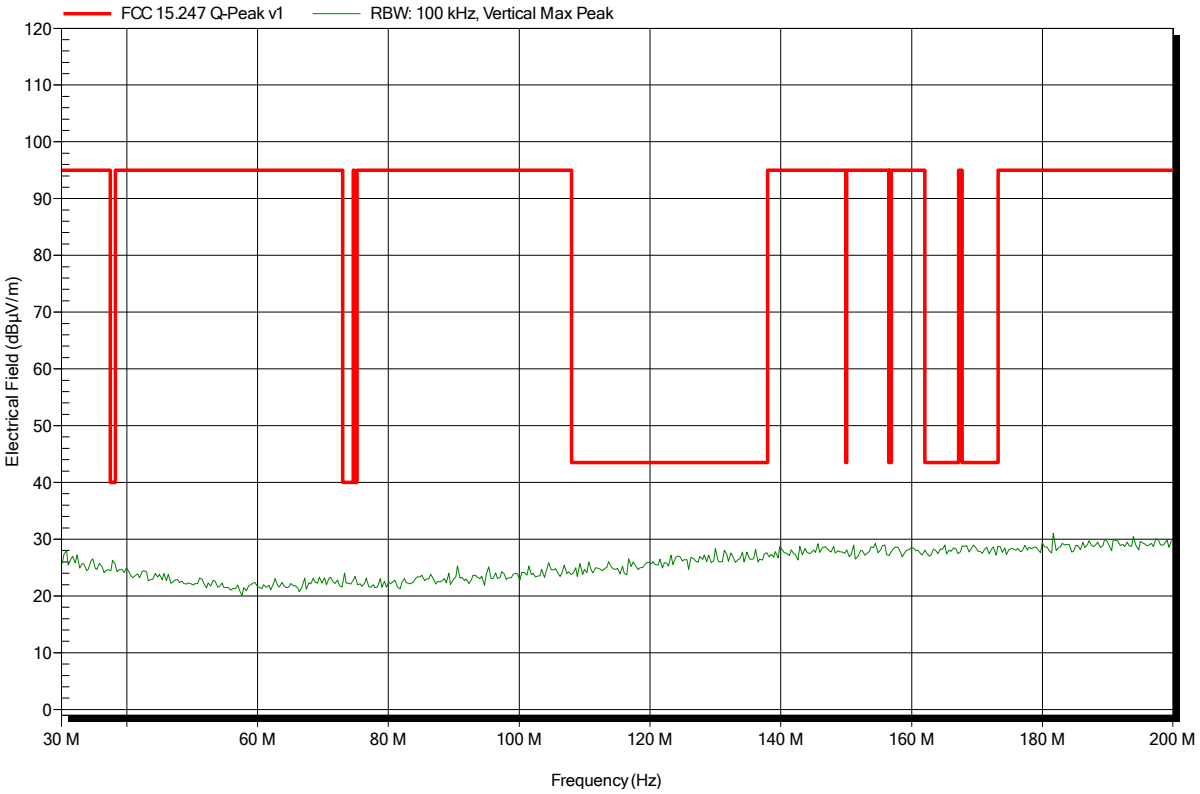

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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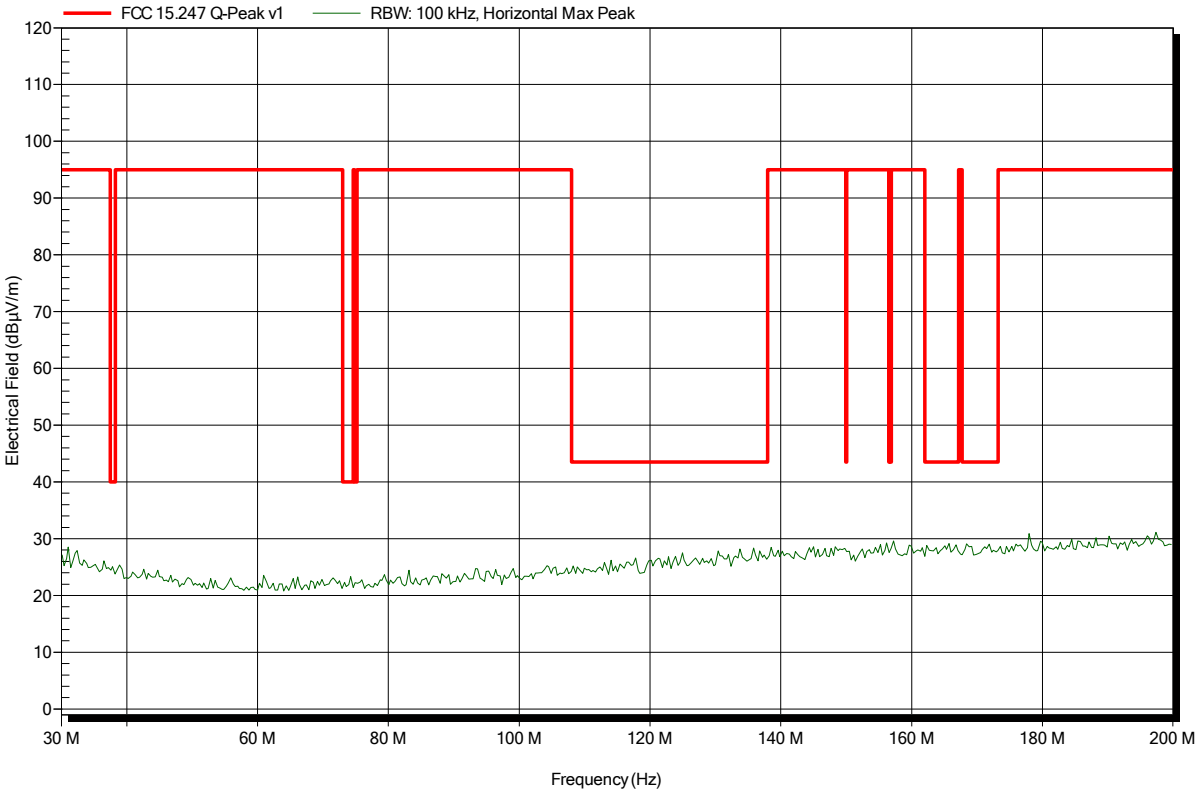

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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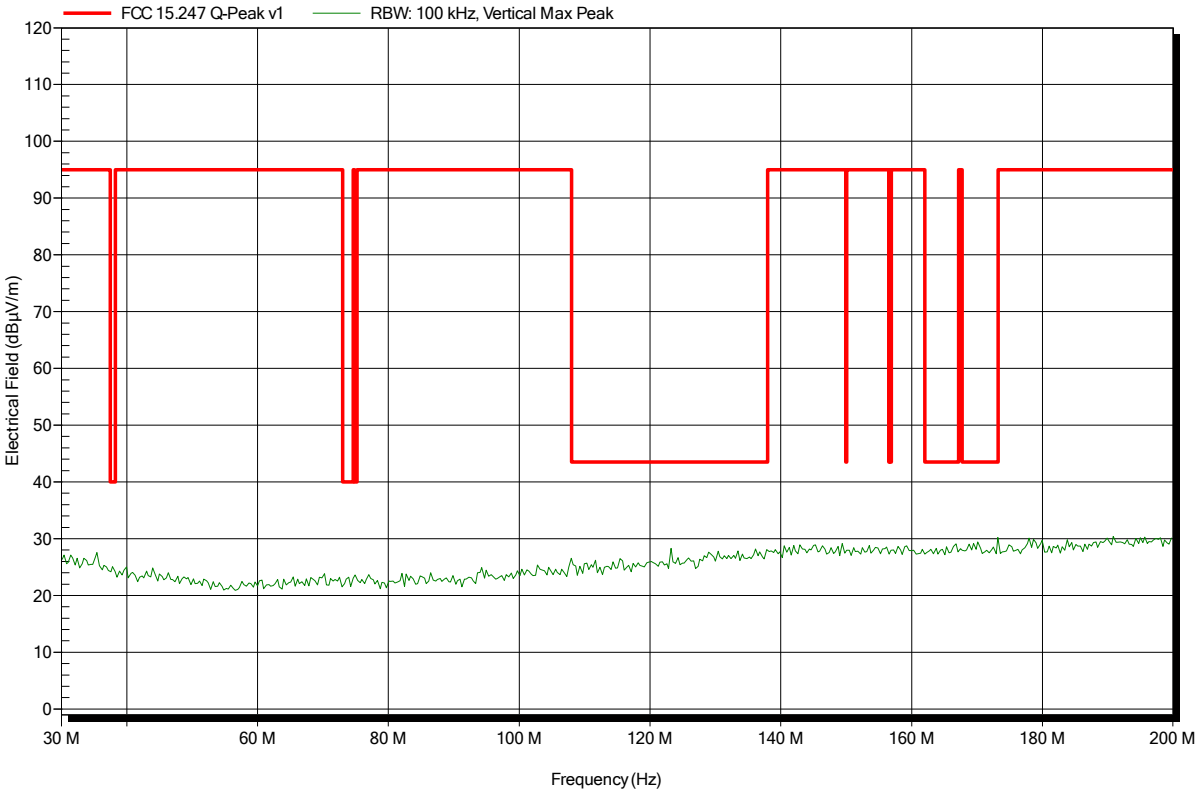

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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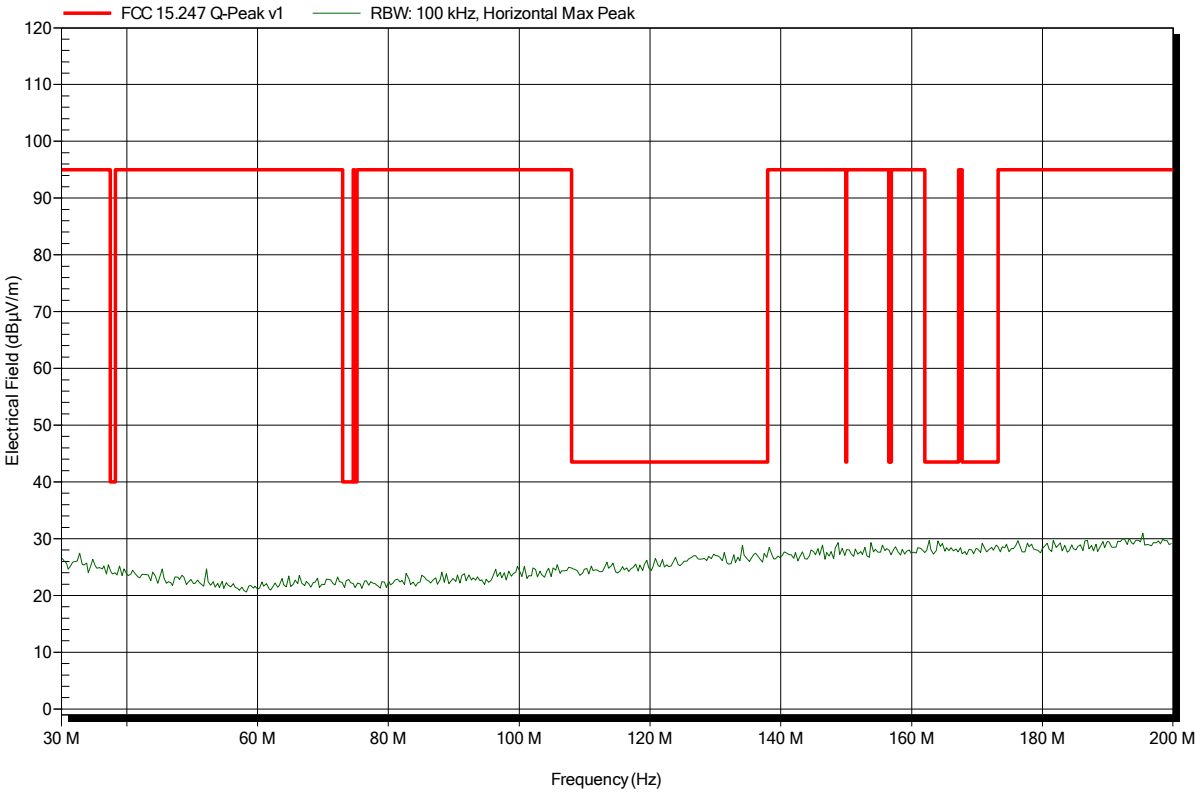

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Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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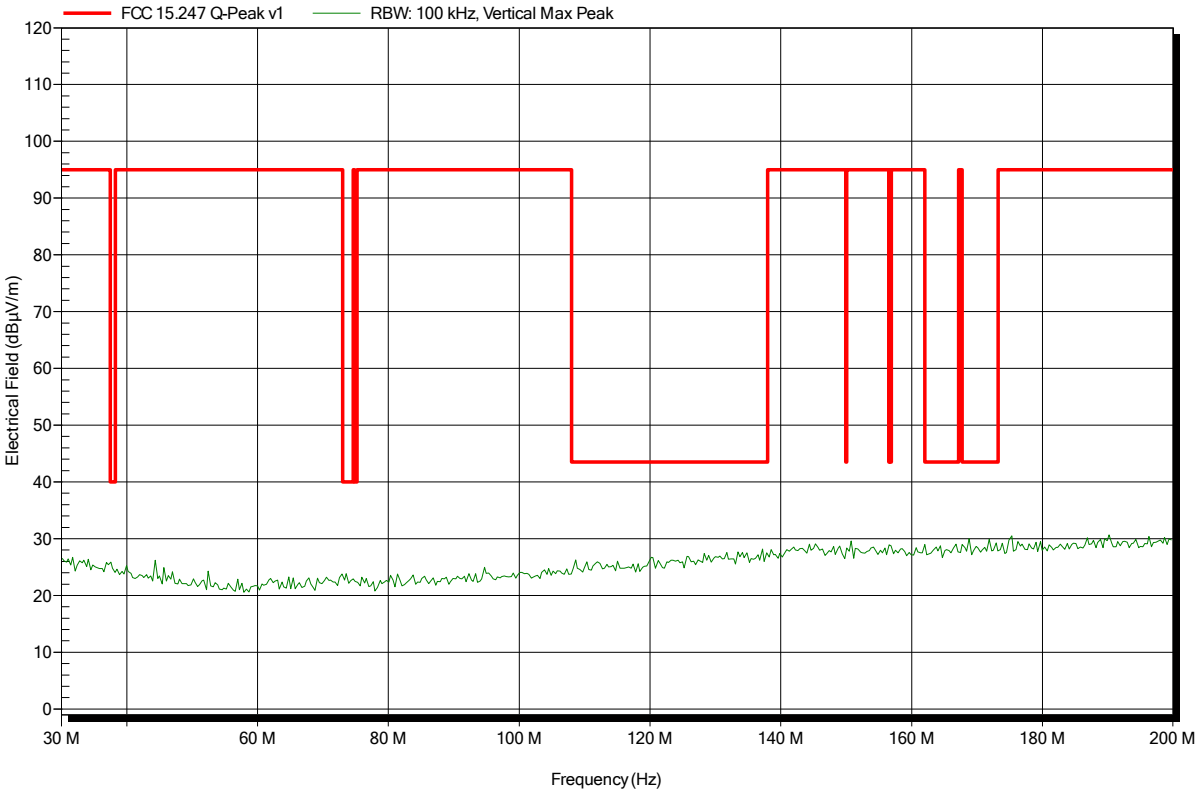

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Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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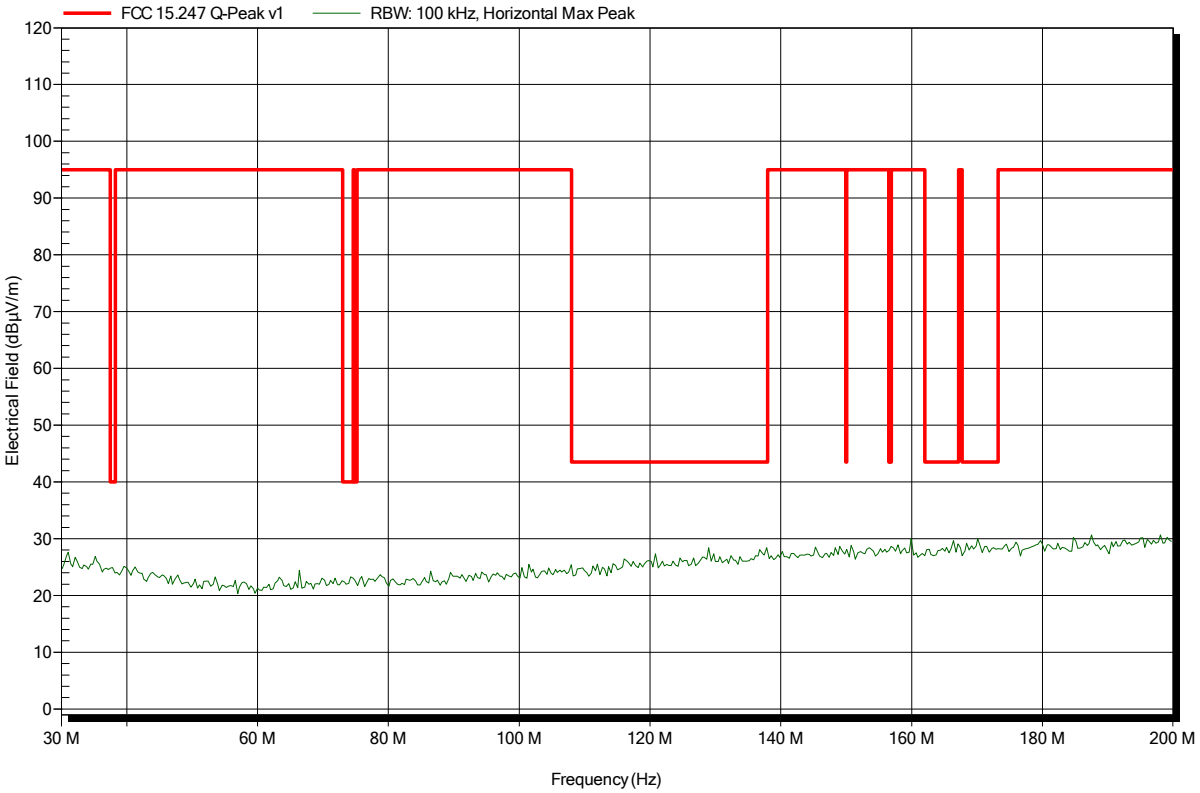

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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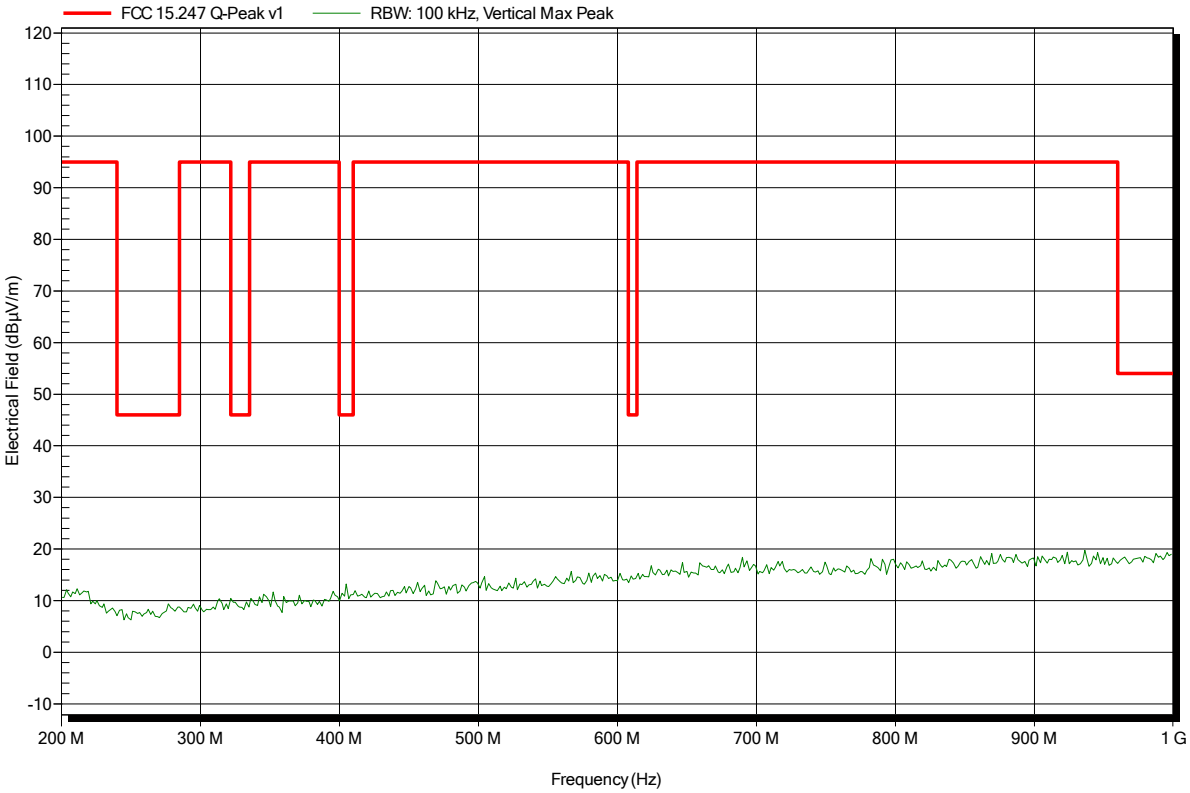

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

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Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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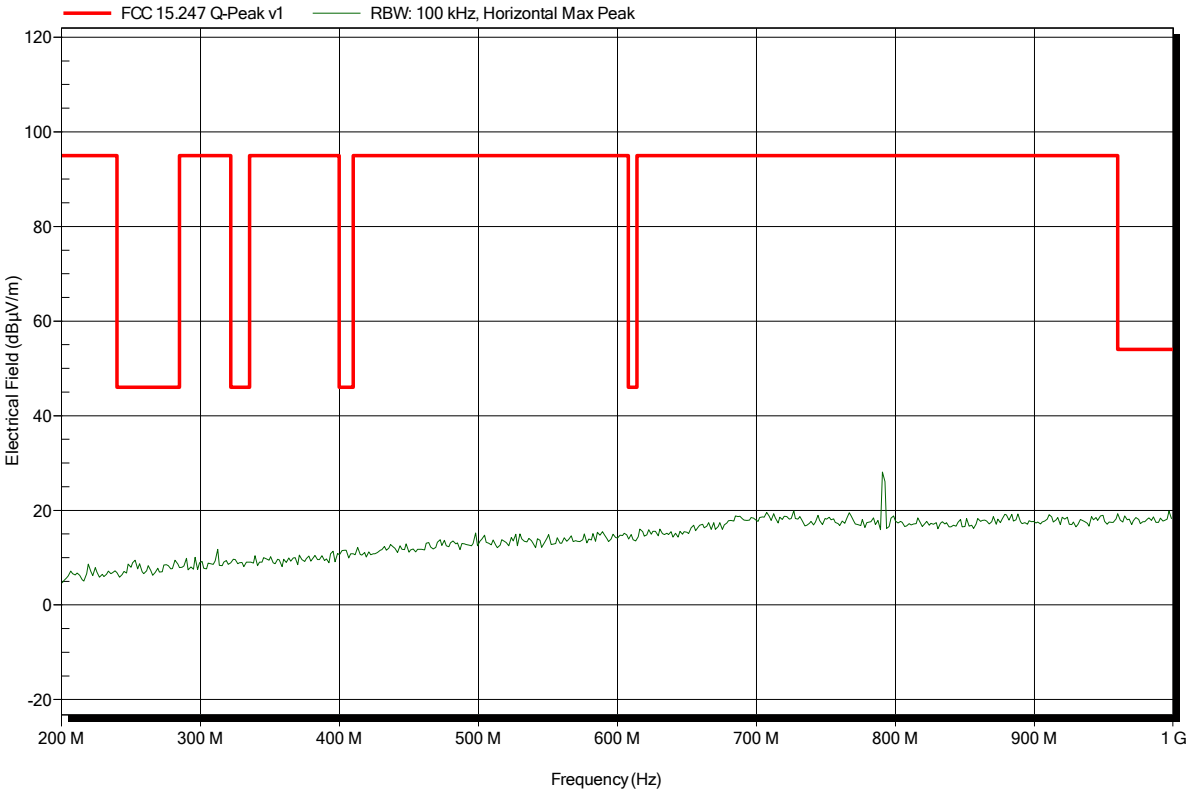

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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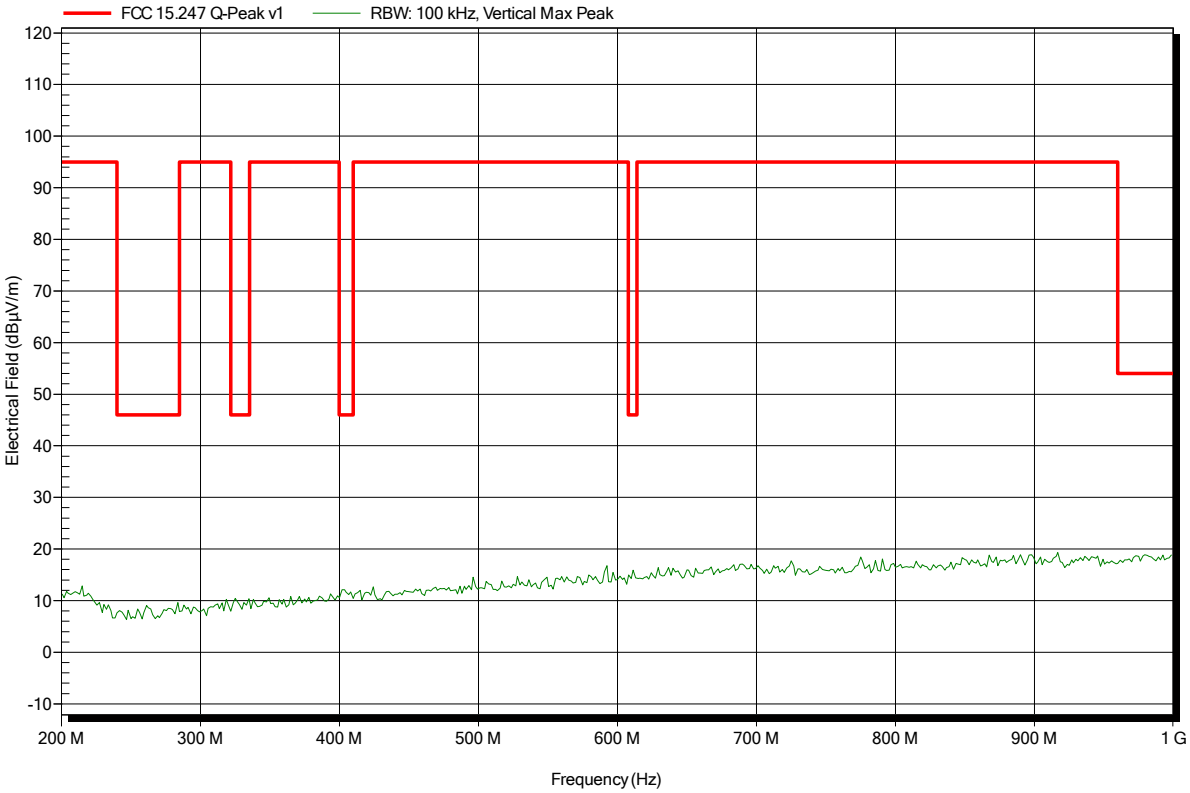

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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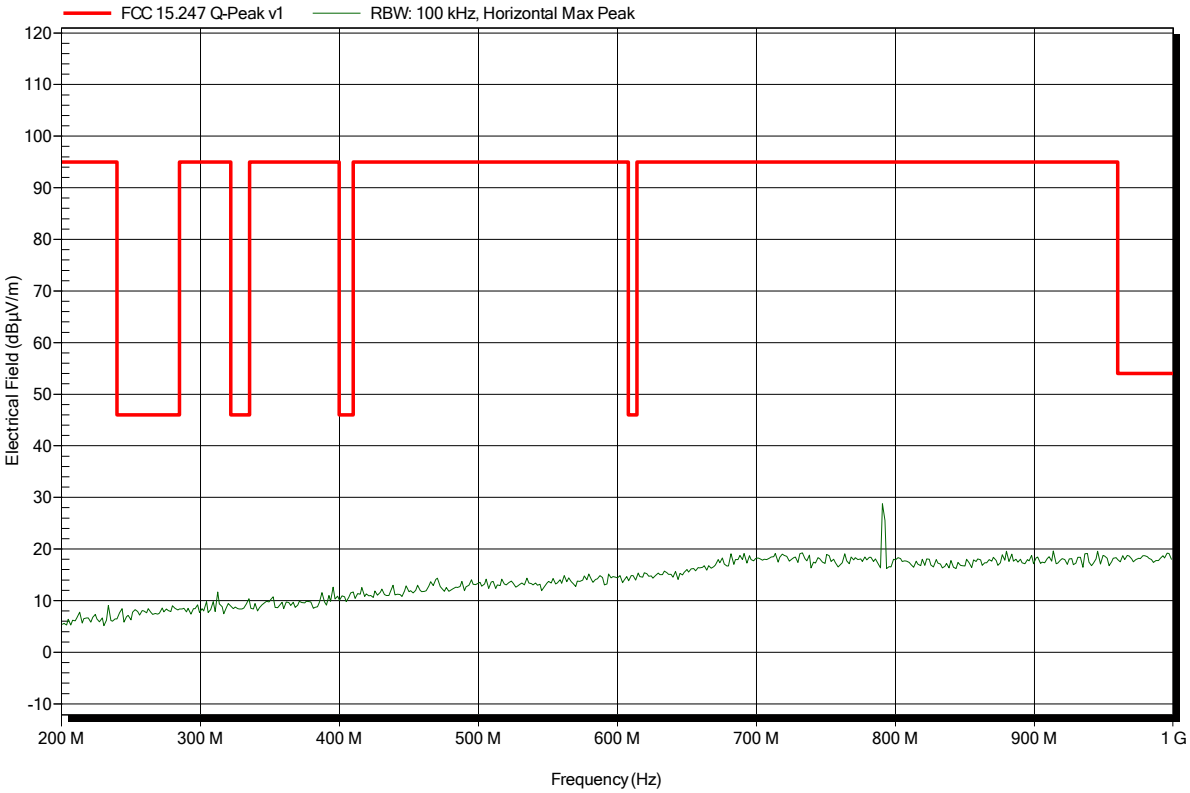

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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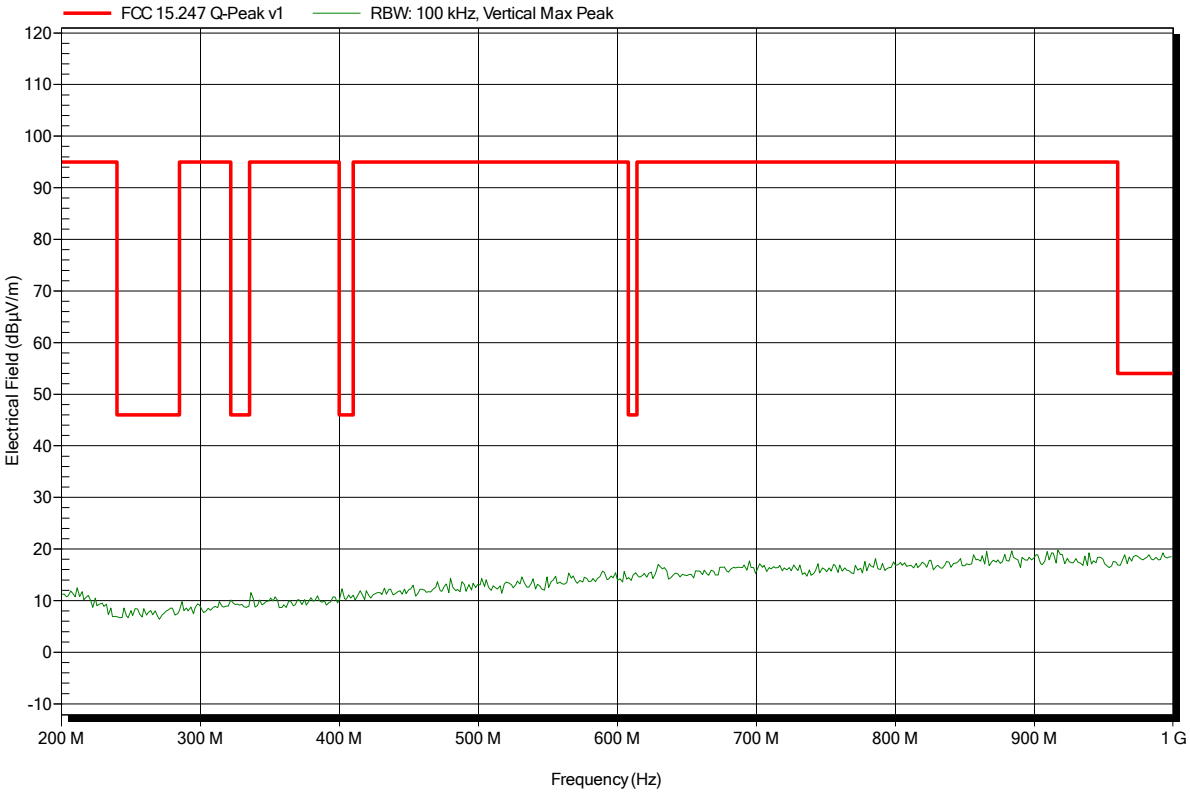

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-21
Note:	EUT horizontal

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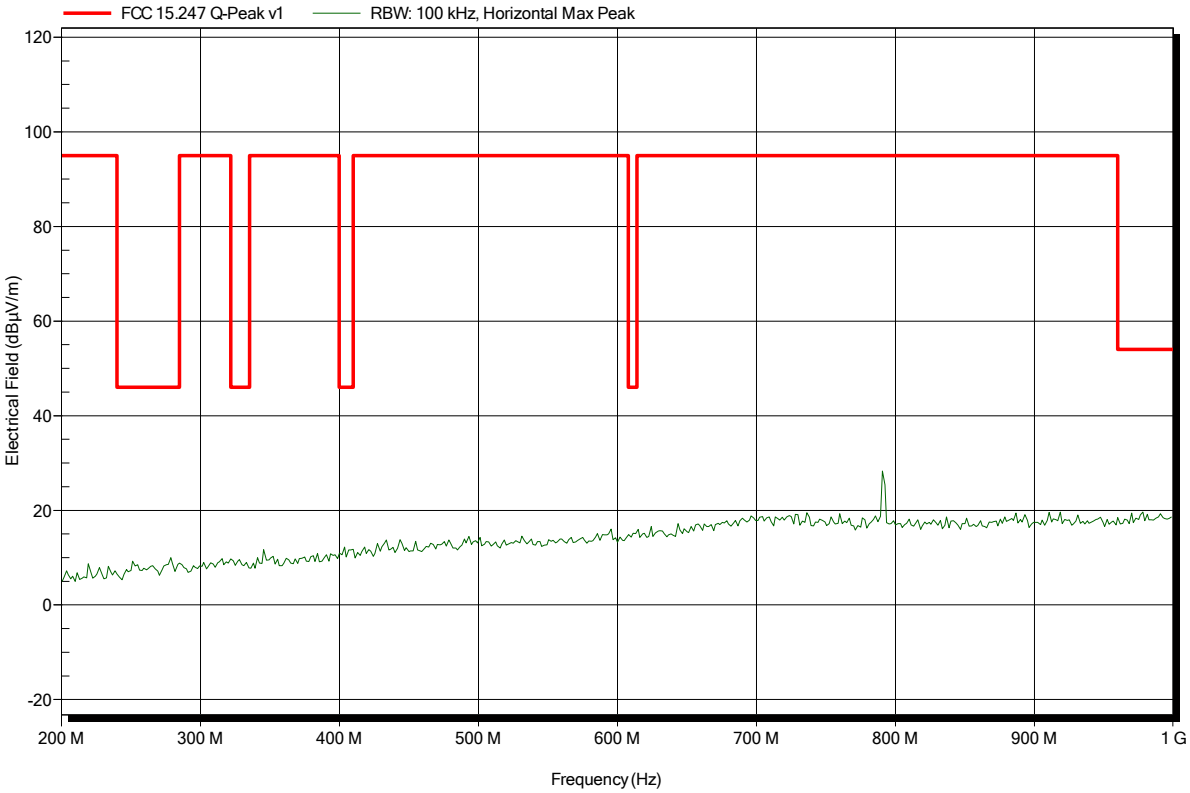

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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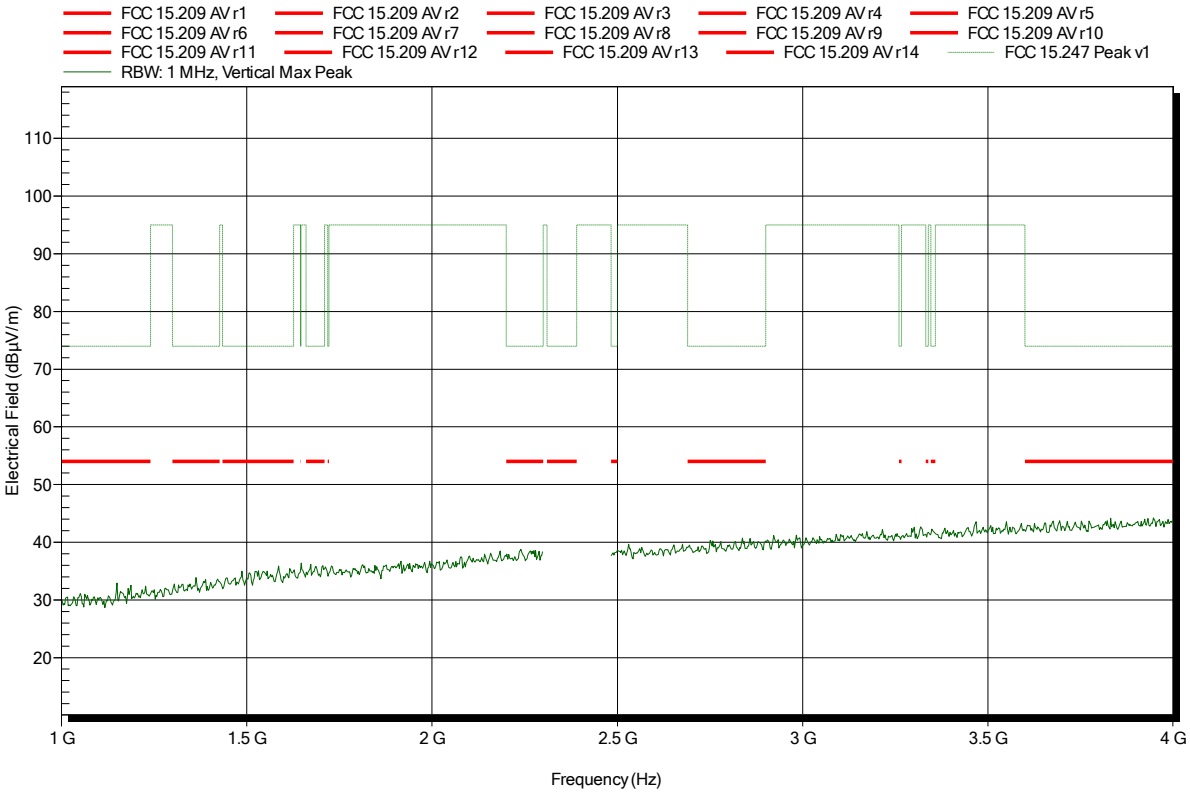

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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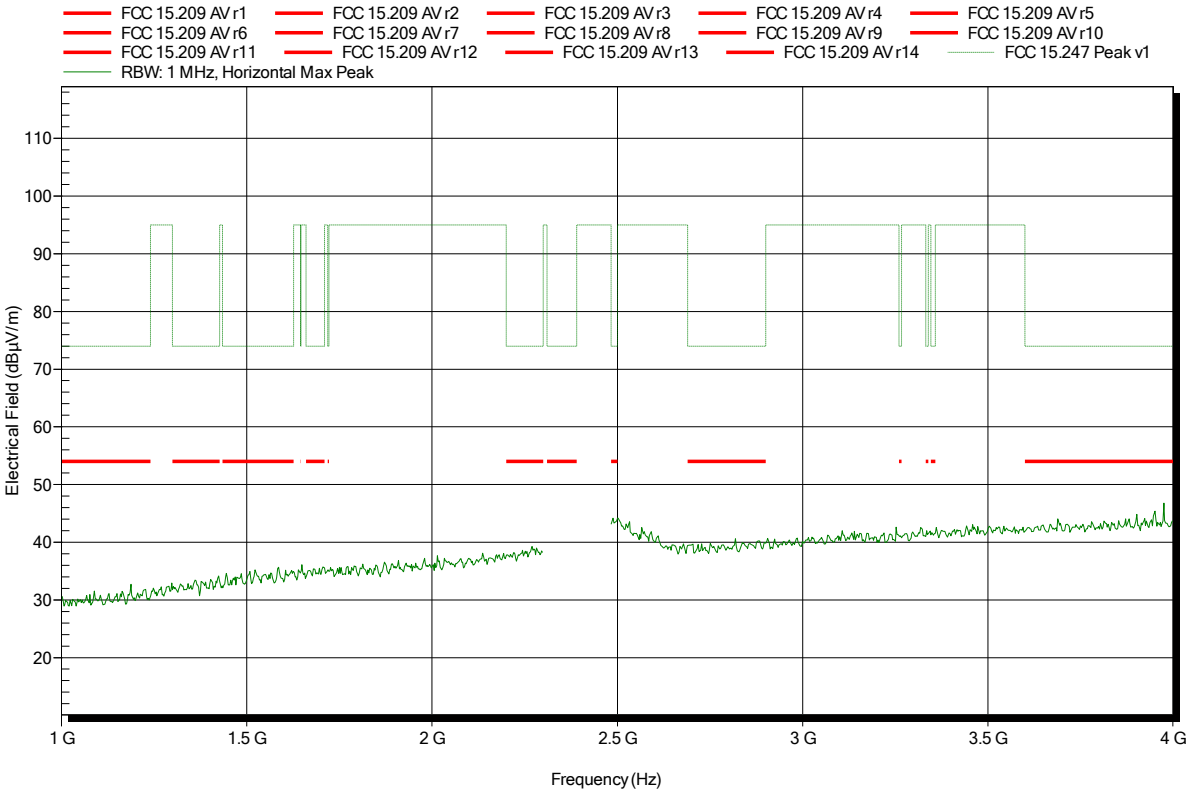

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal; lower bandedge

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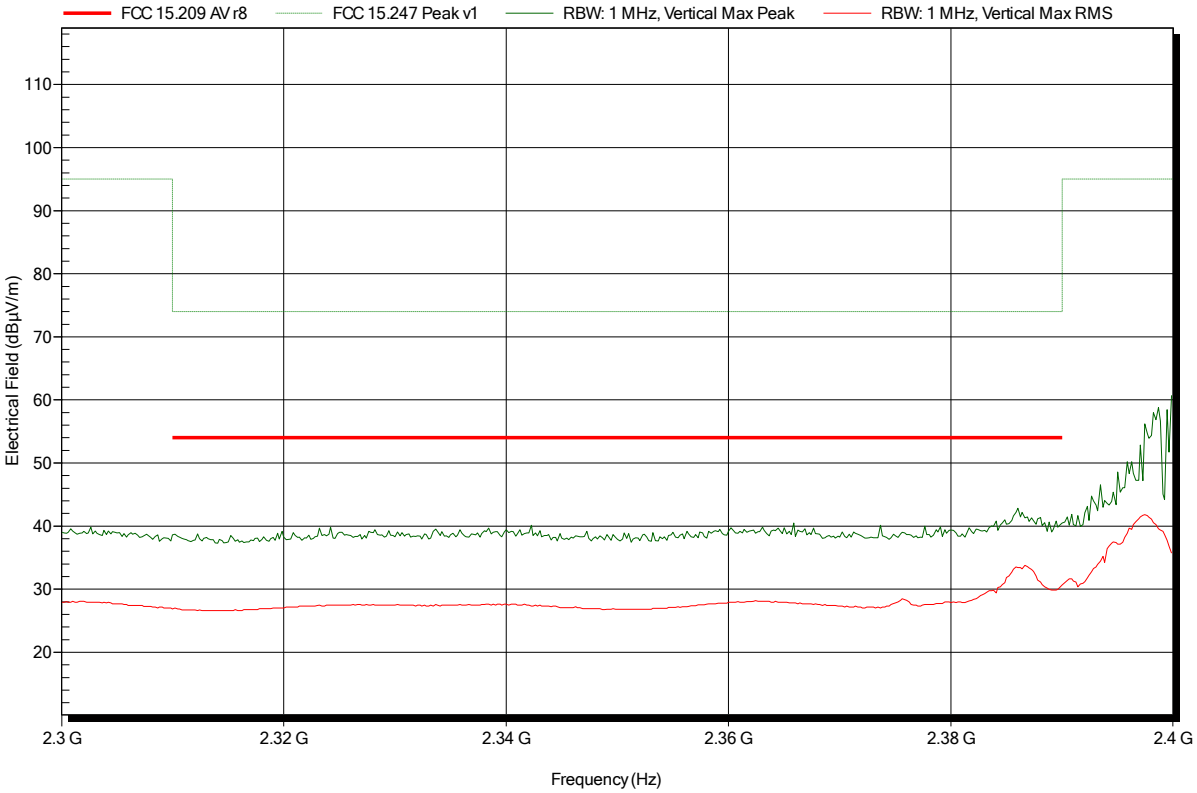

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal; lower bandedge

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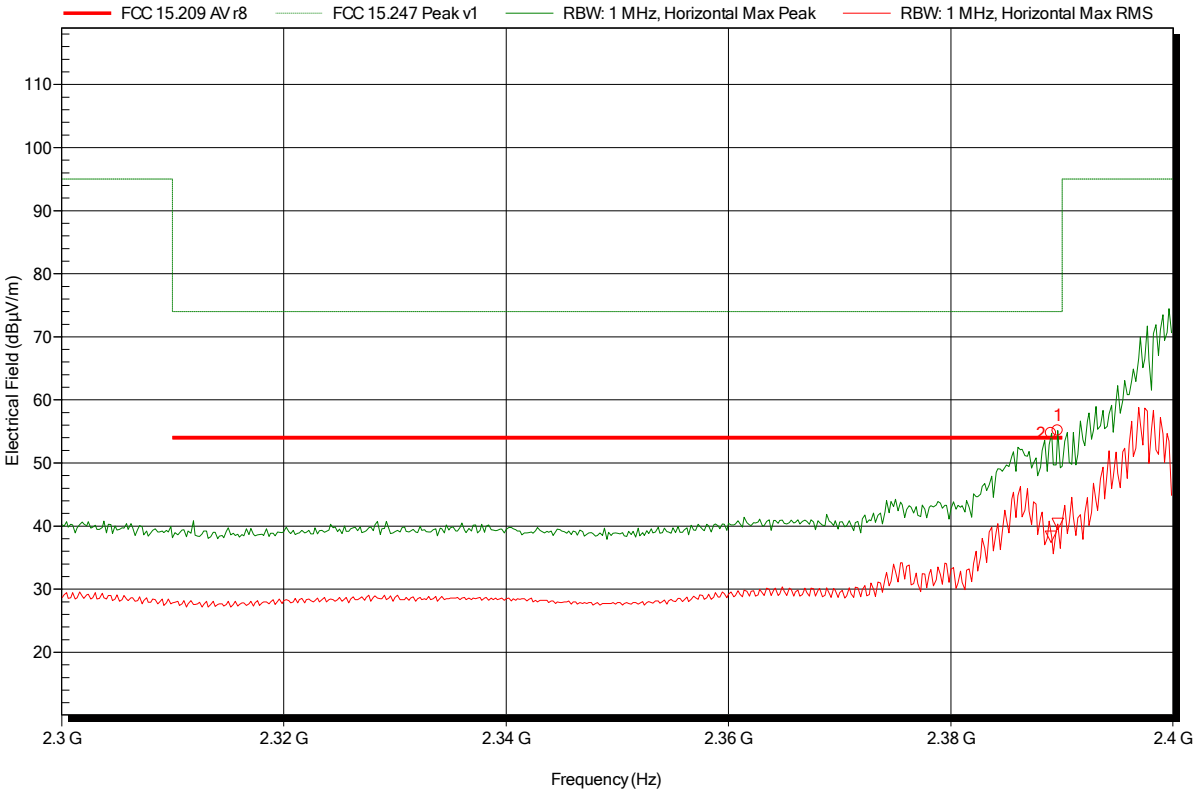

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.389 GHz	54.71 dBµV/m	74 dBµV/m	-19.29 dB	Pass
2.39 GHz	55.16 dBµV/m	74 dBµV/m	-18.84 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.389 GHz	38.3 dBµV/m	54 dBµV/m	-15.7 dB	Pass
2.39 GHz	40.32 dBµV/m	54 dBµV/m	-13.68 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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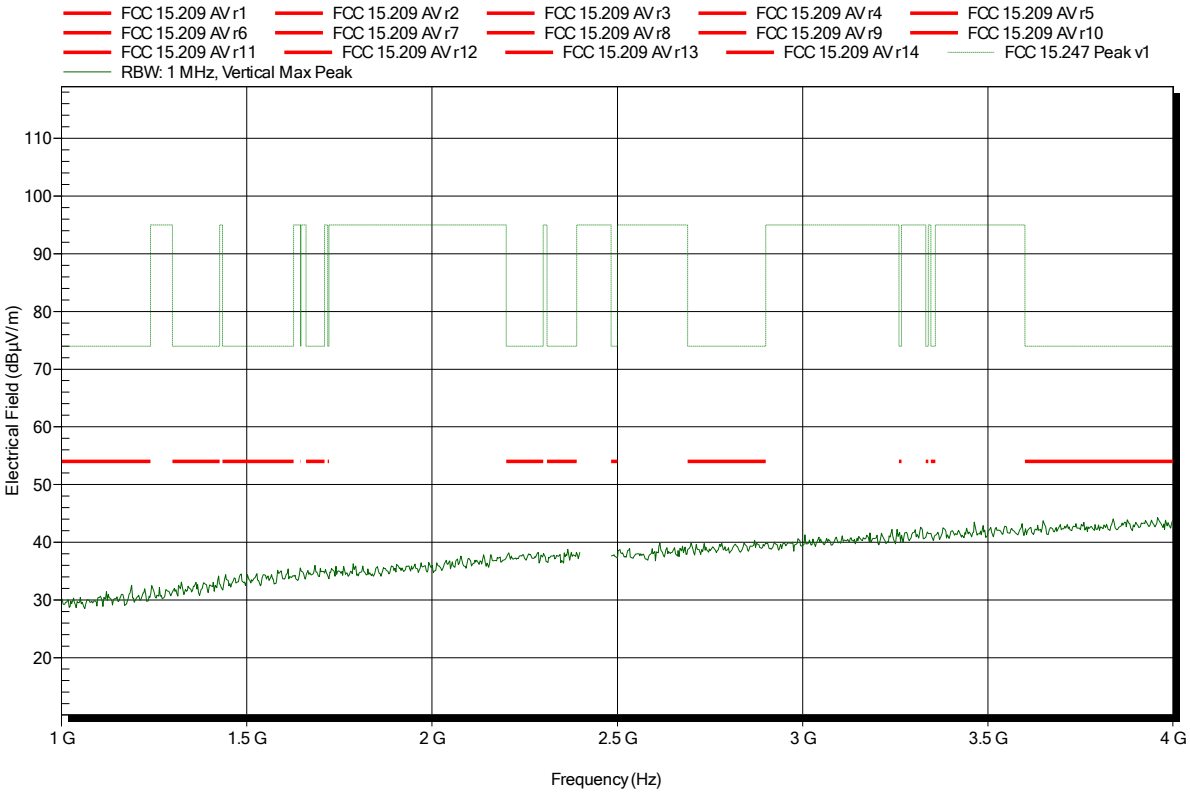

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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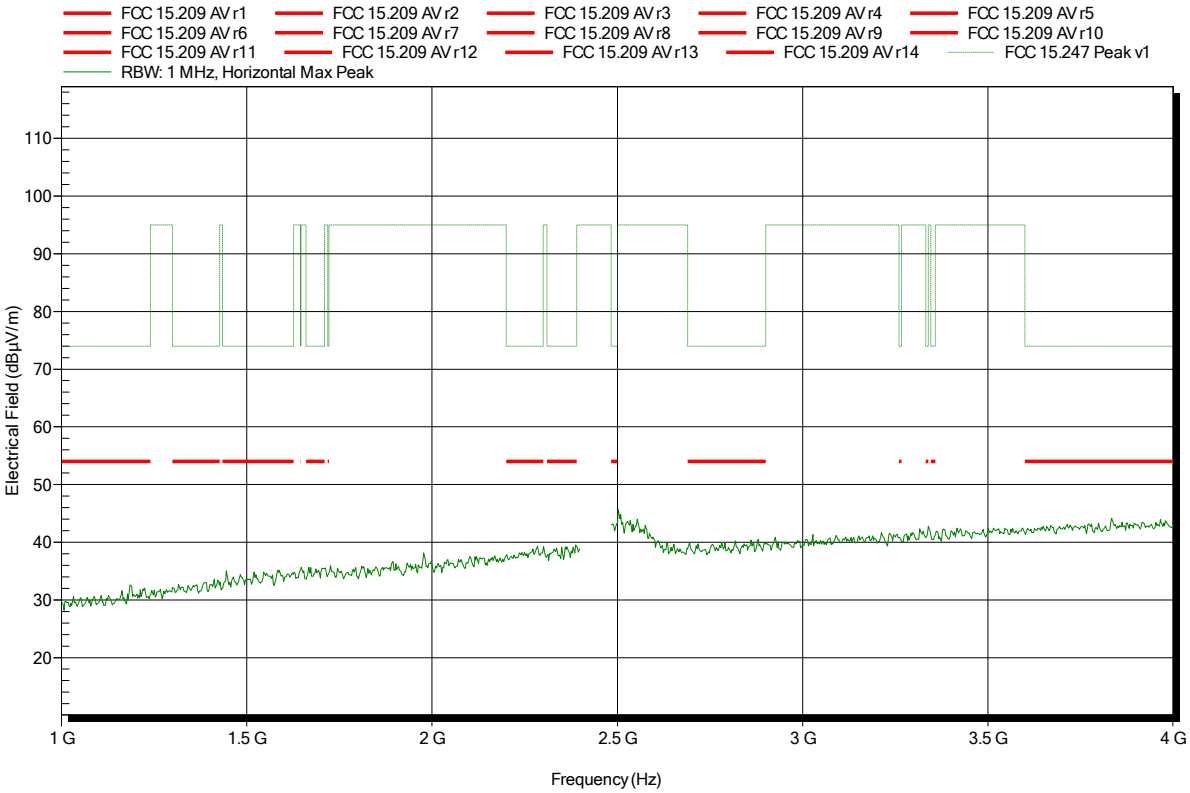

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-28
Note:	EUT horizontal

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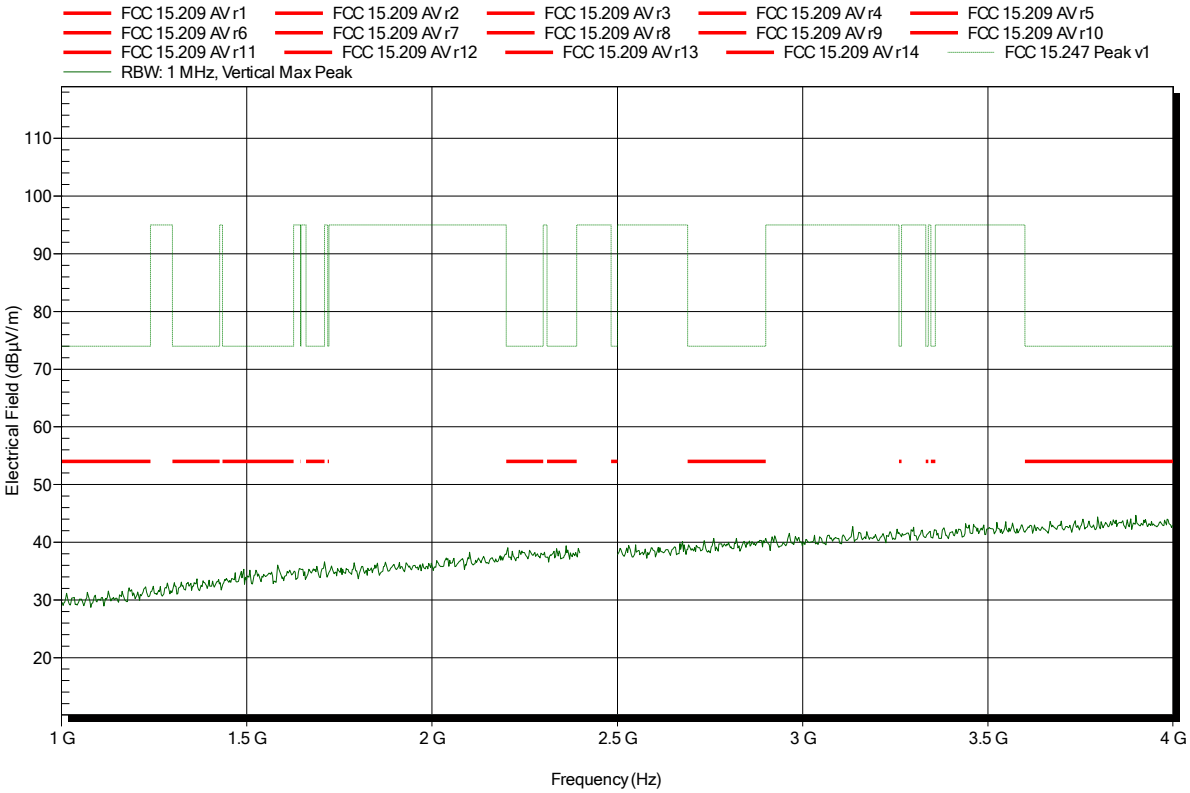

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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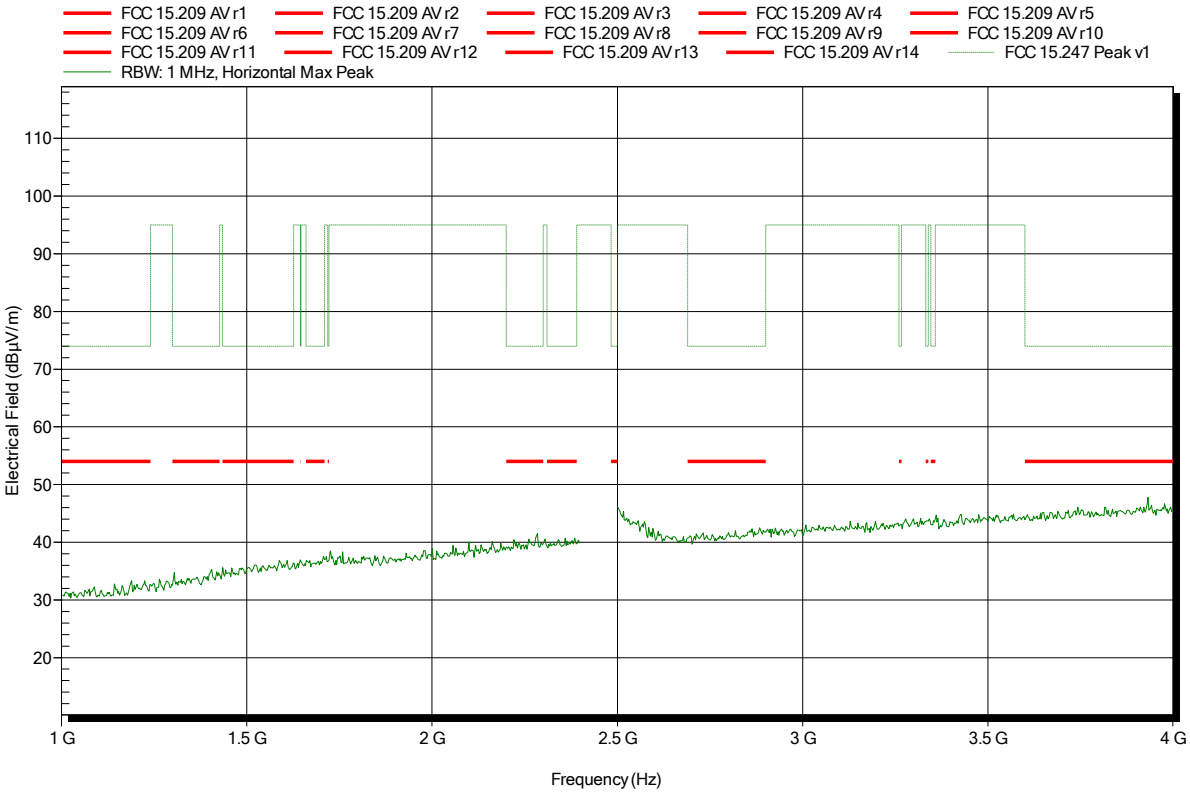

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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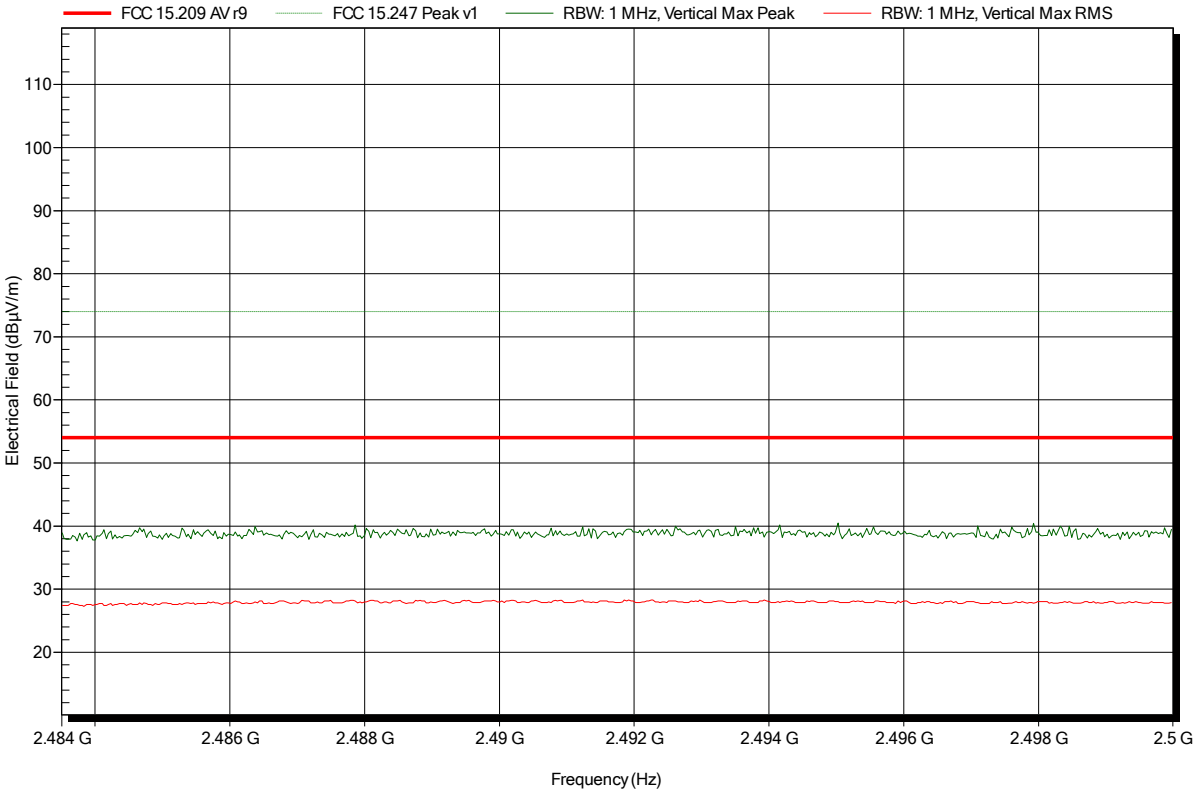

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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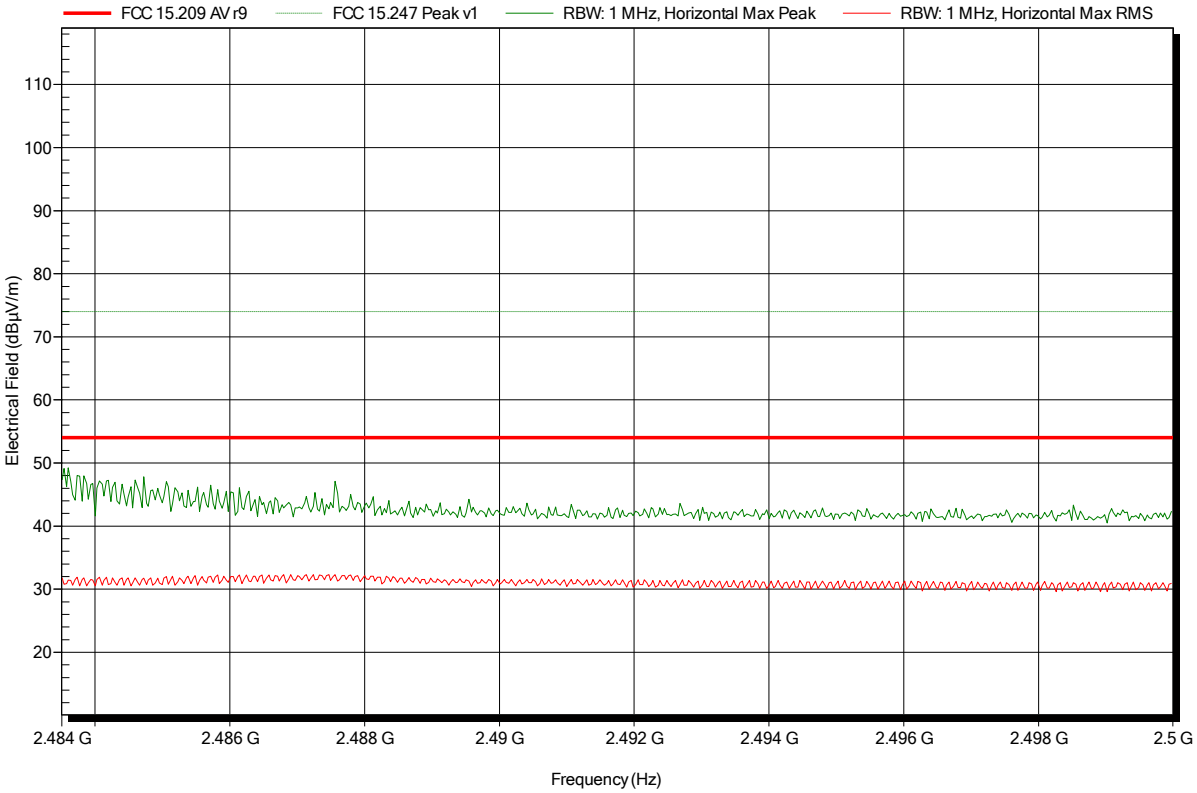

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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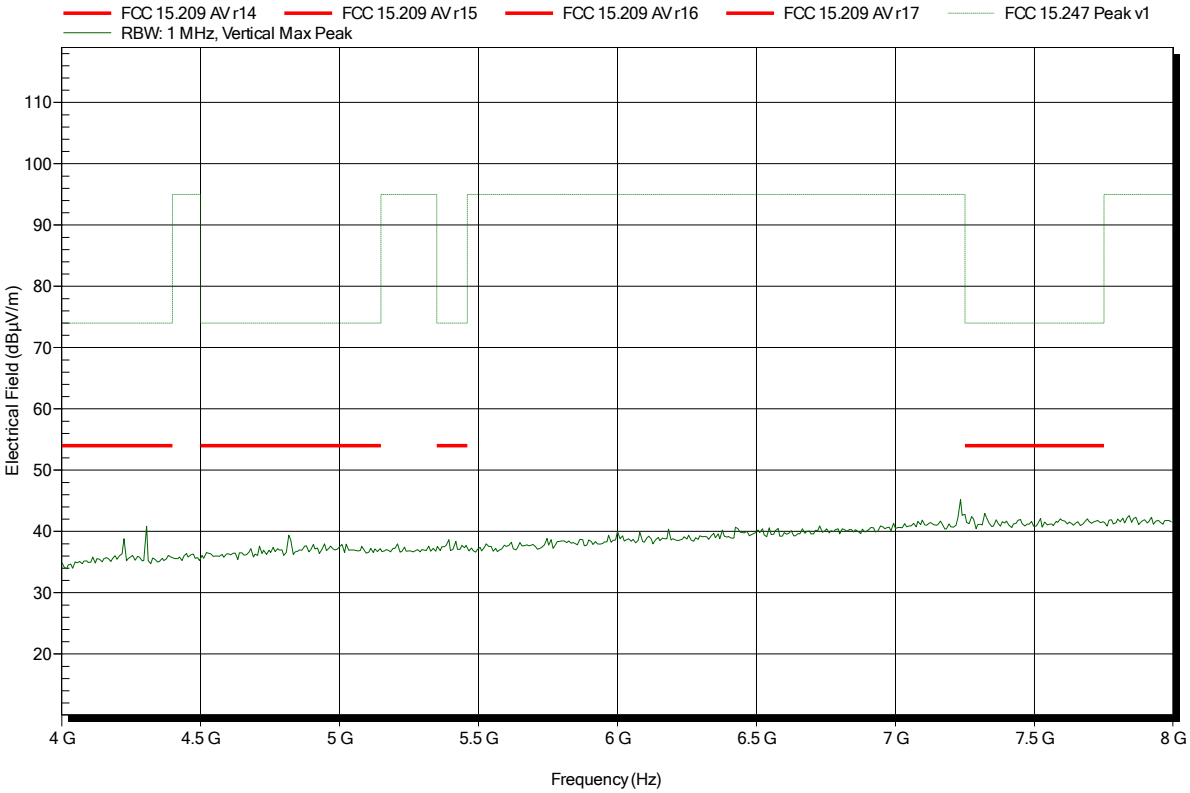

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Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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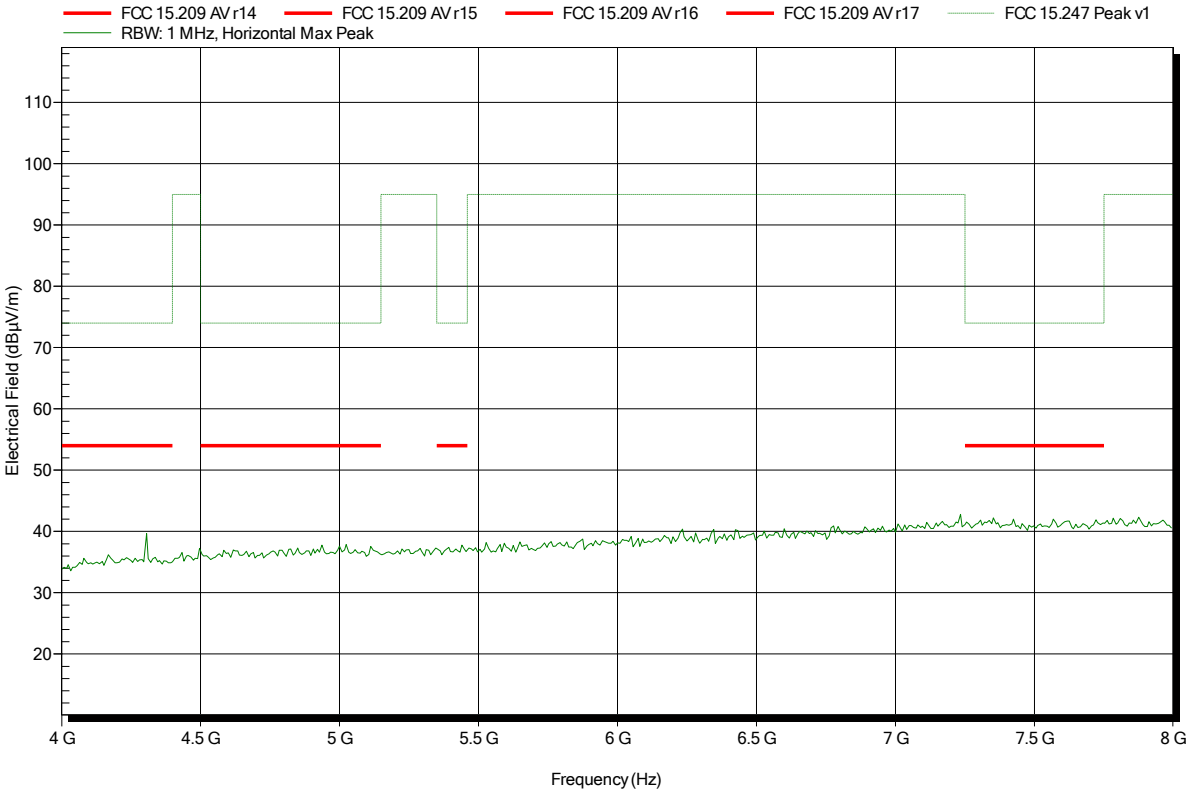

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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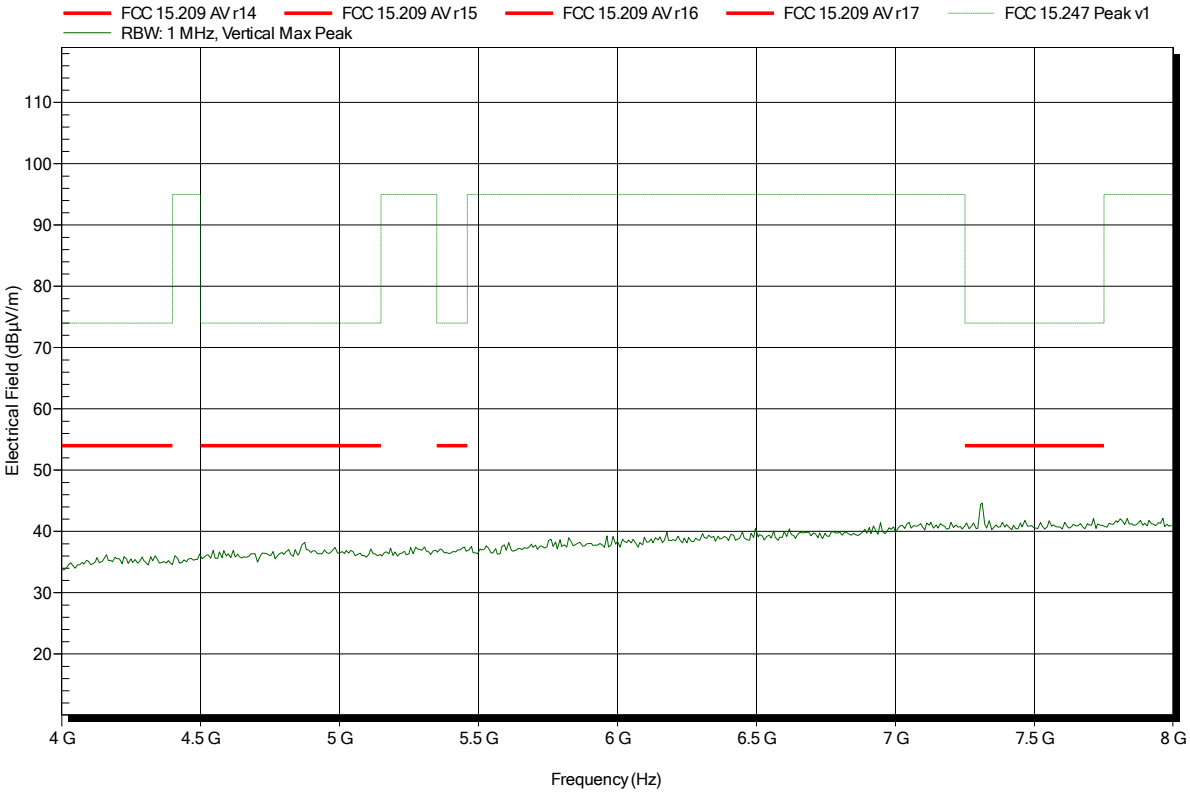

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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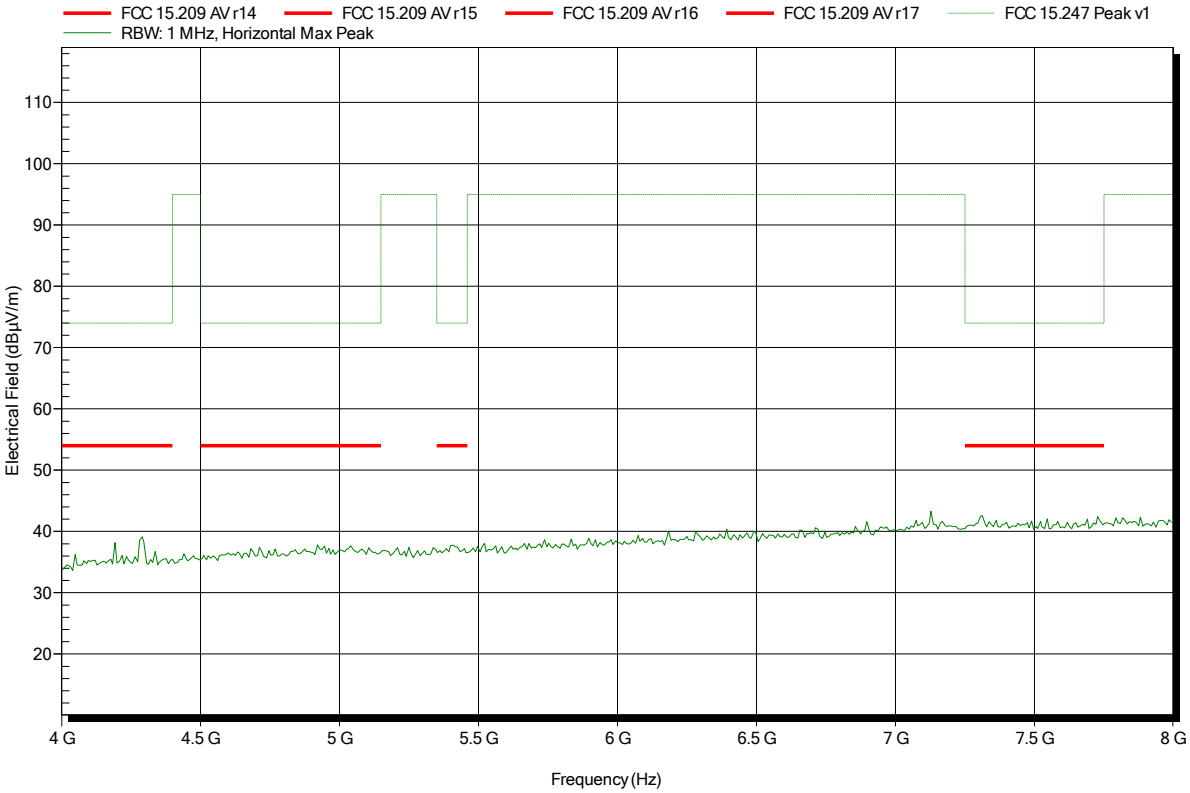

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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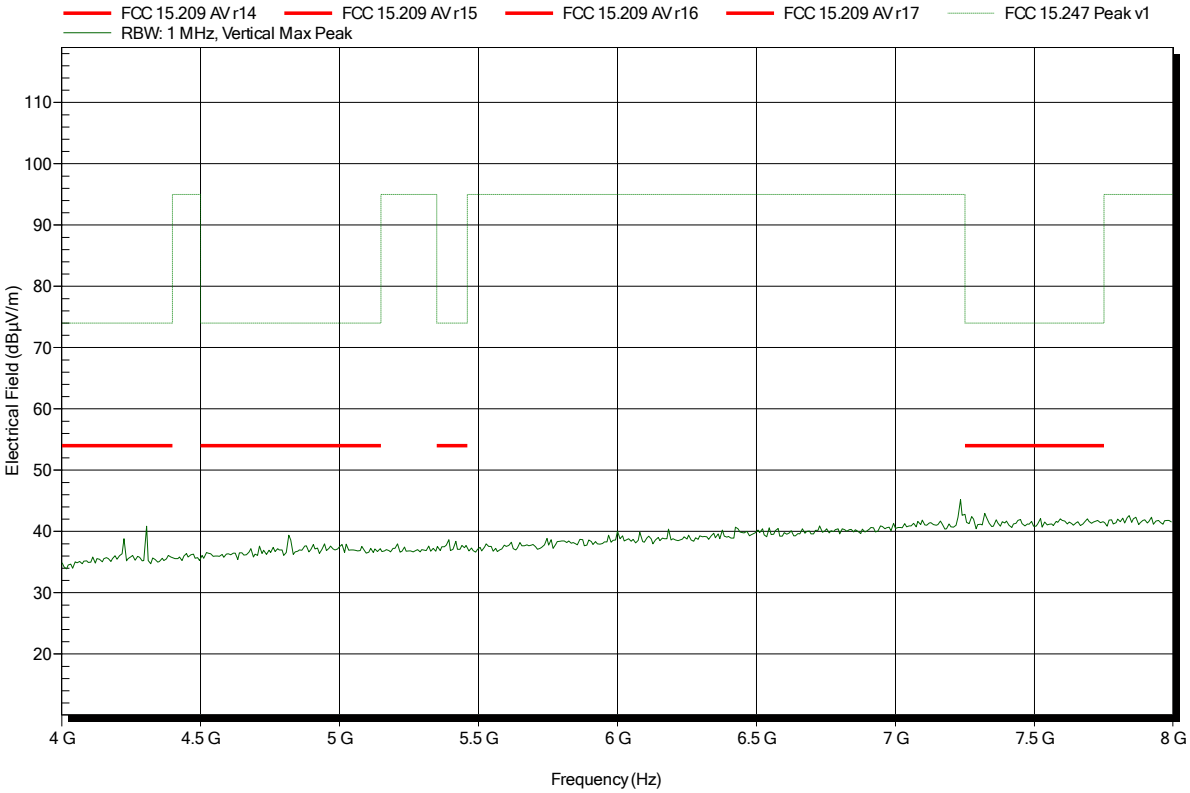

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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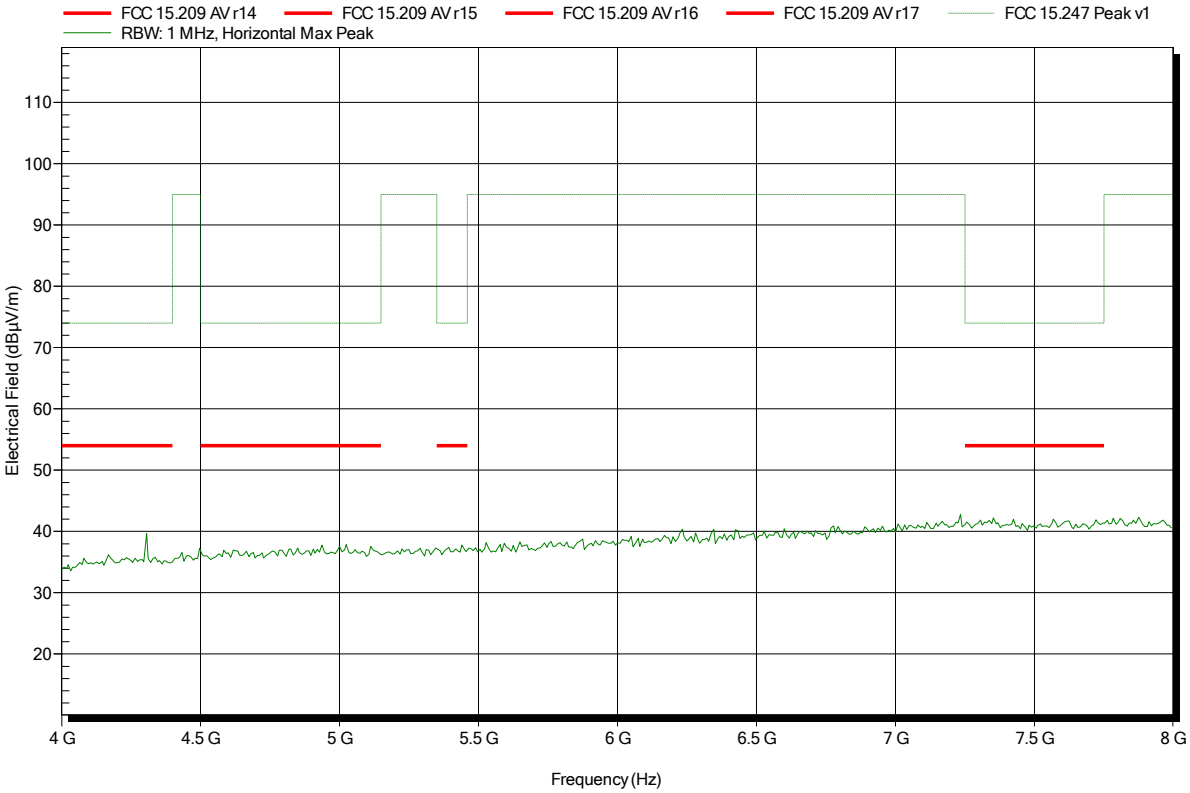

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EUT Name:	2G/3G/4G WLAN Hotspot
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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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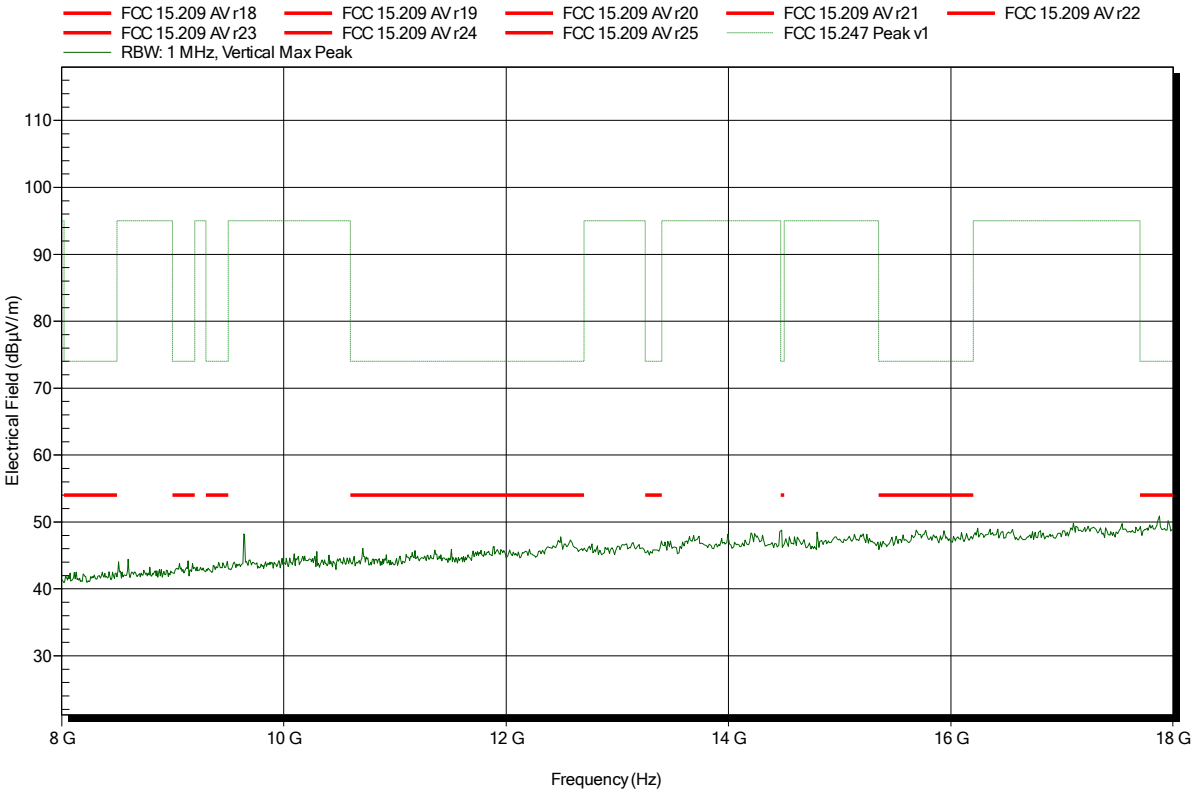

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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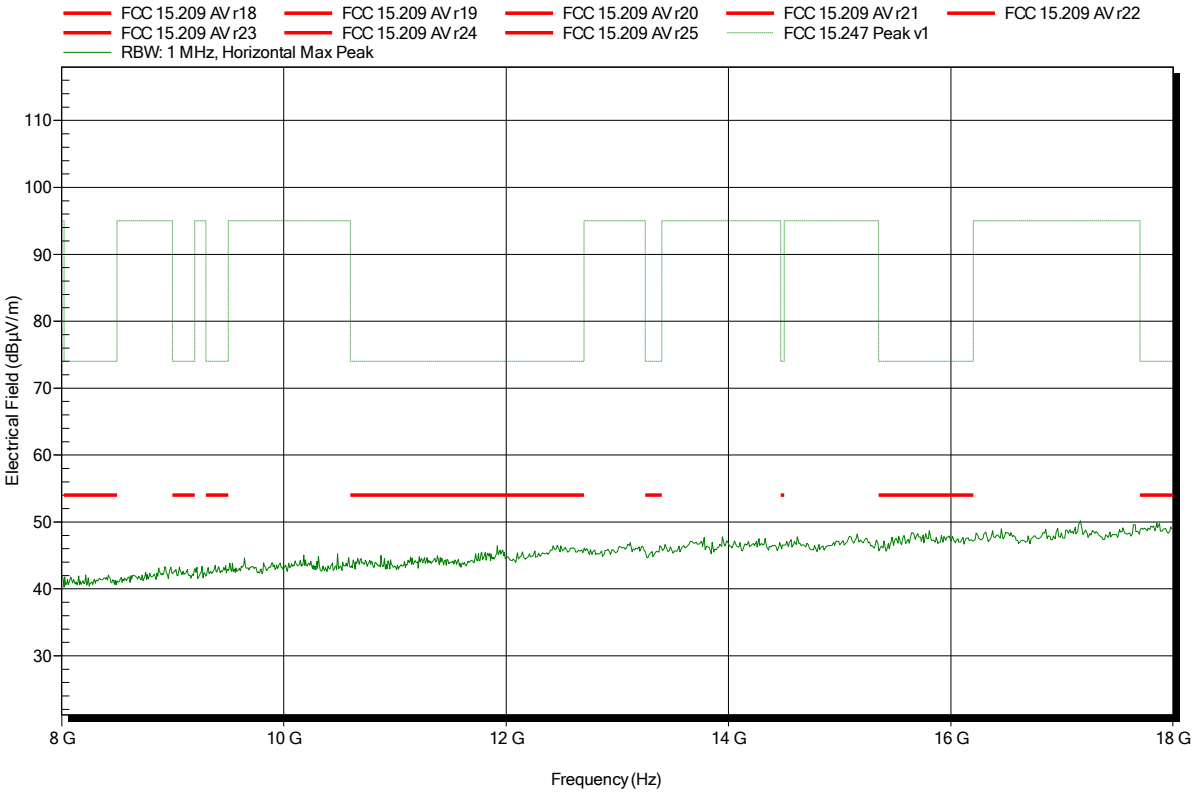

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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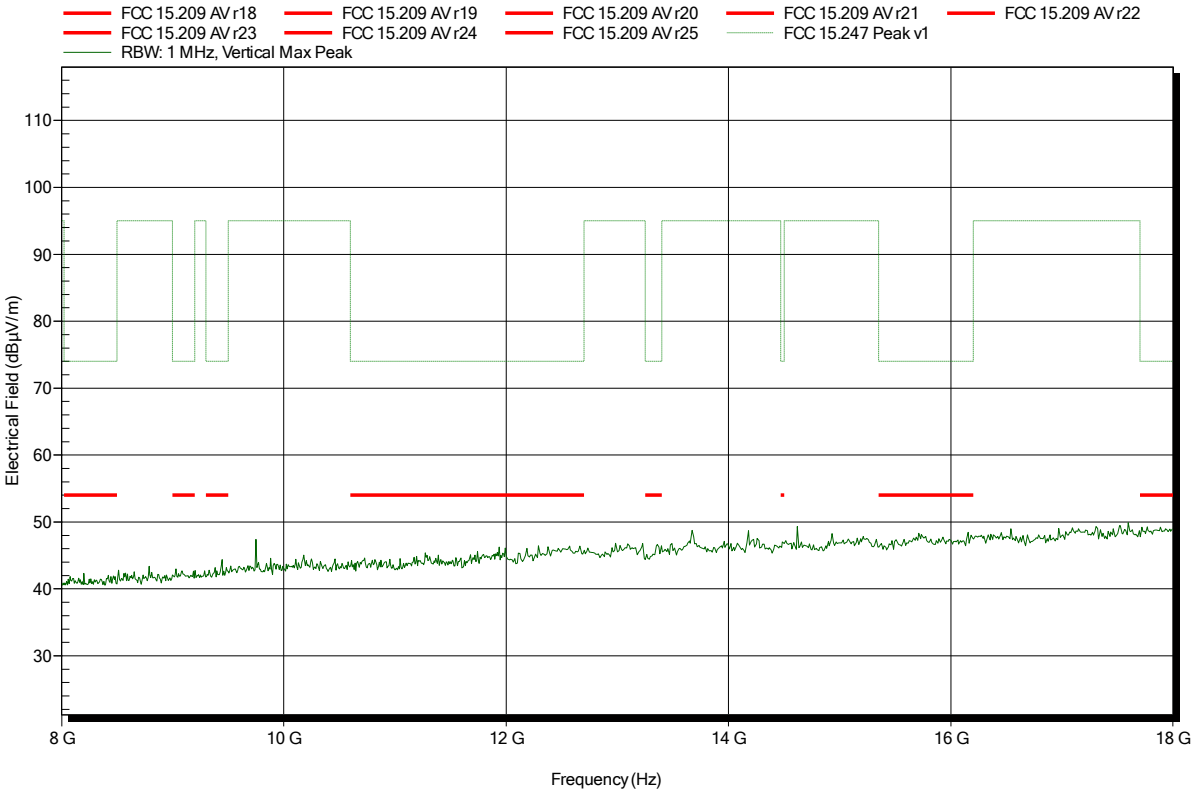

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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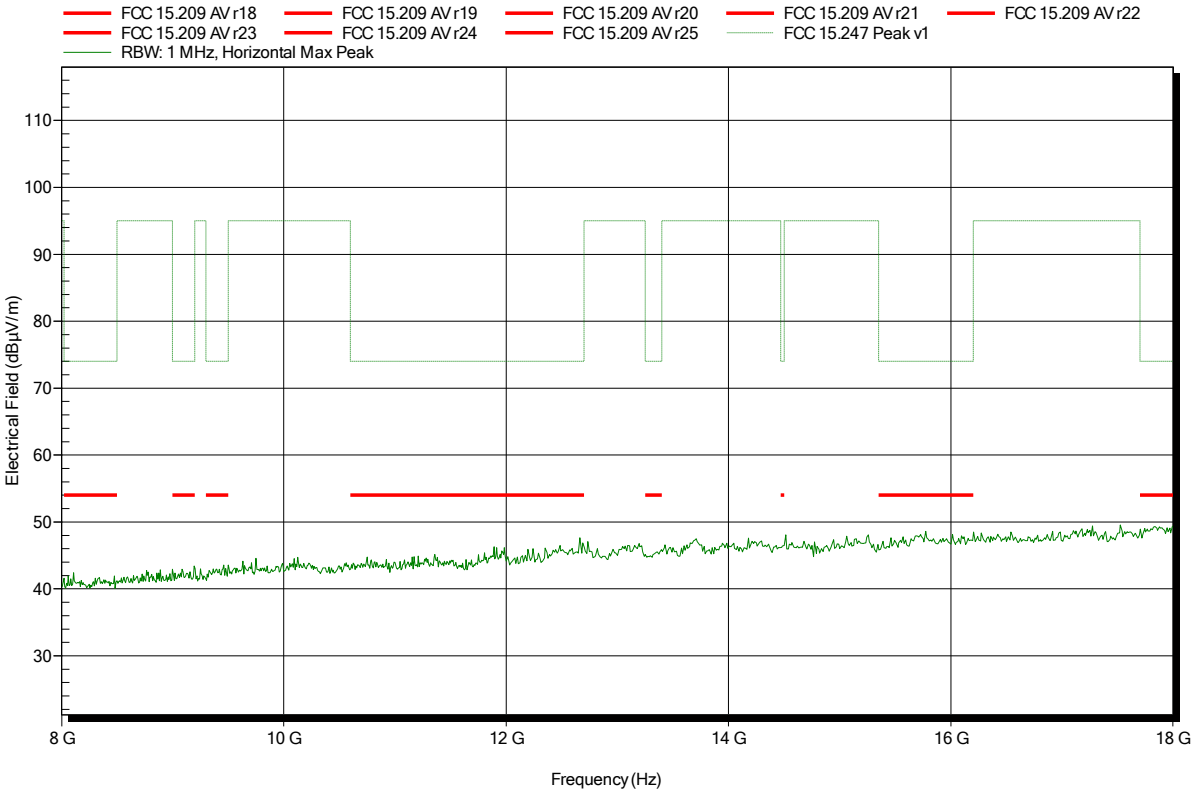

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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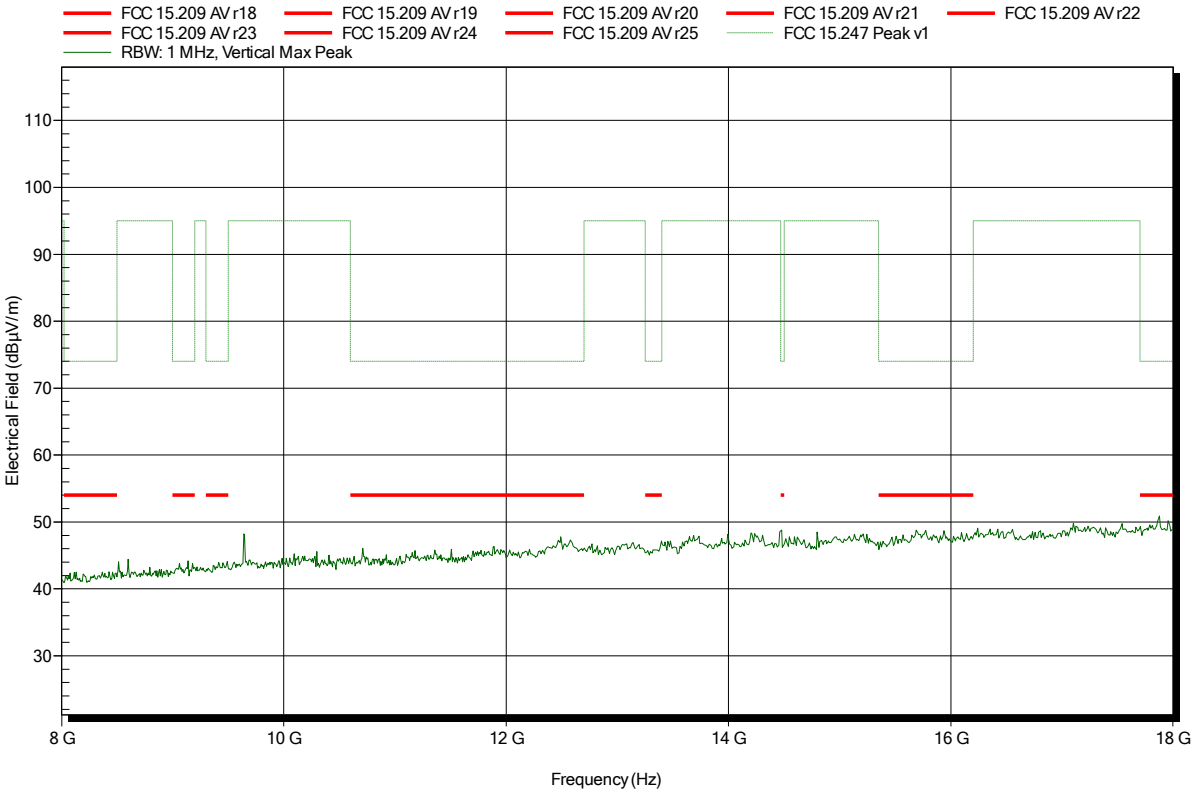

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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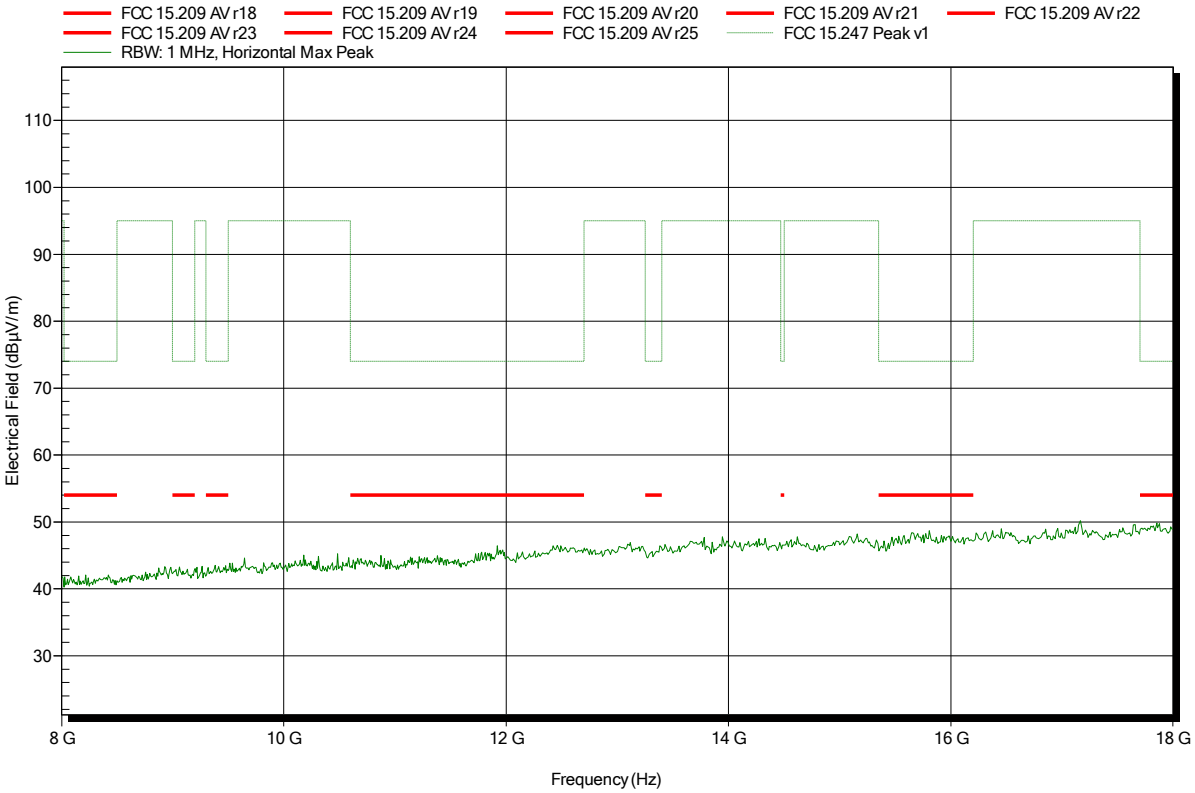

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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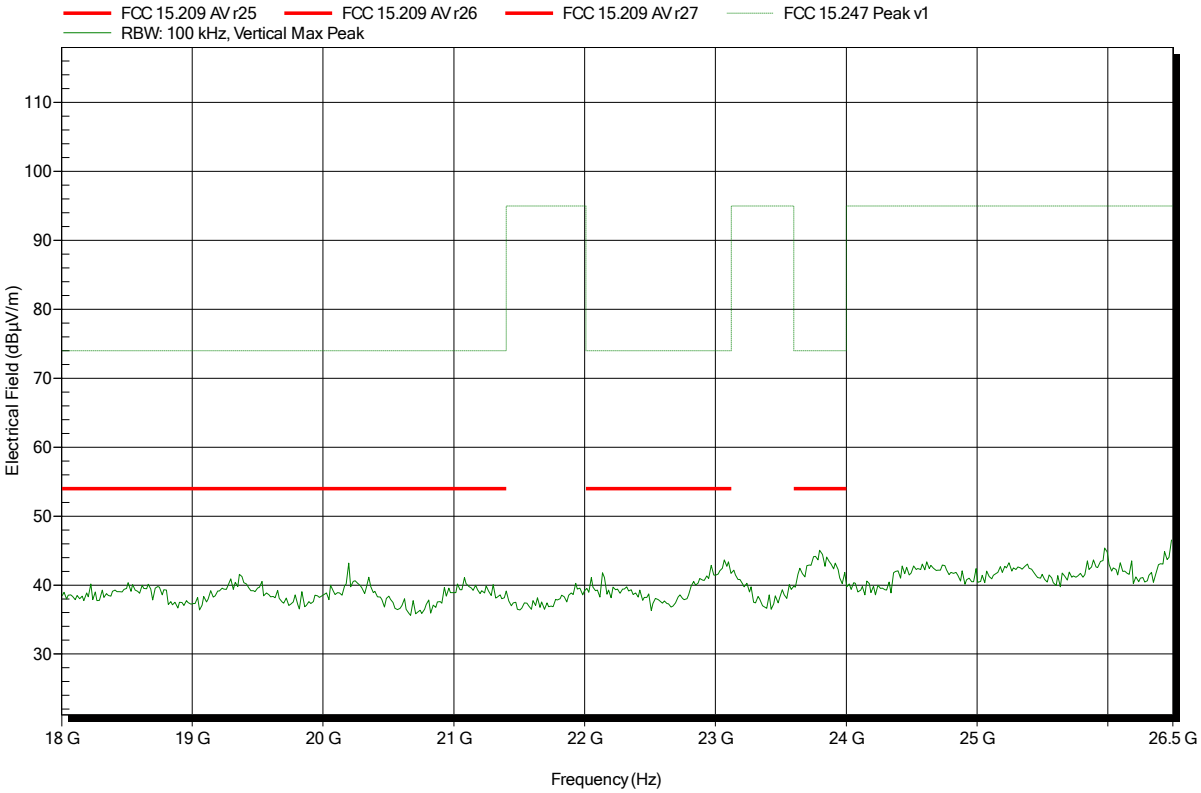

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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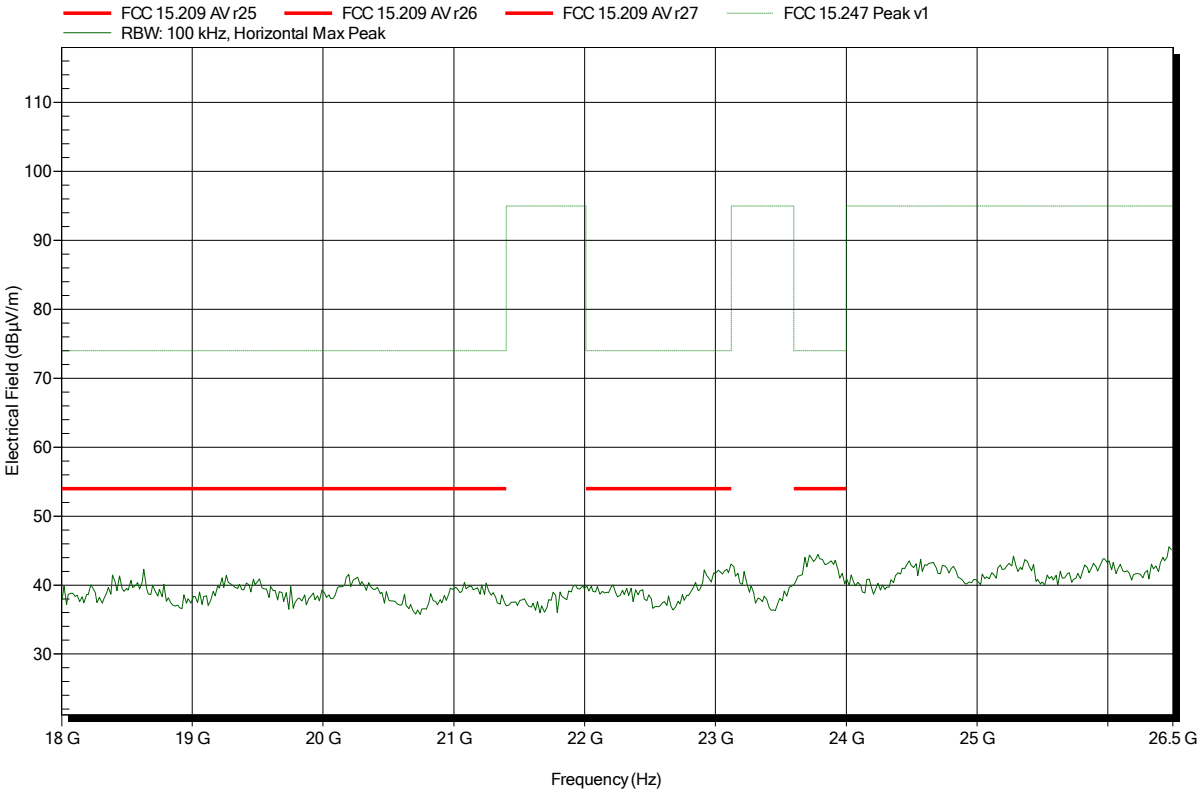

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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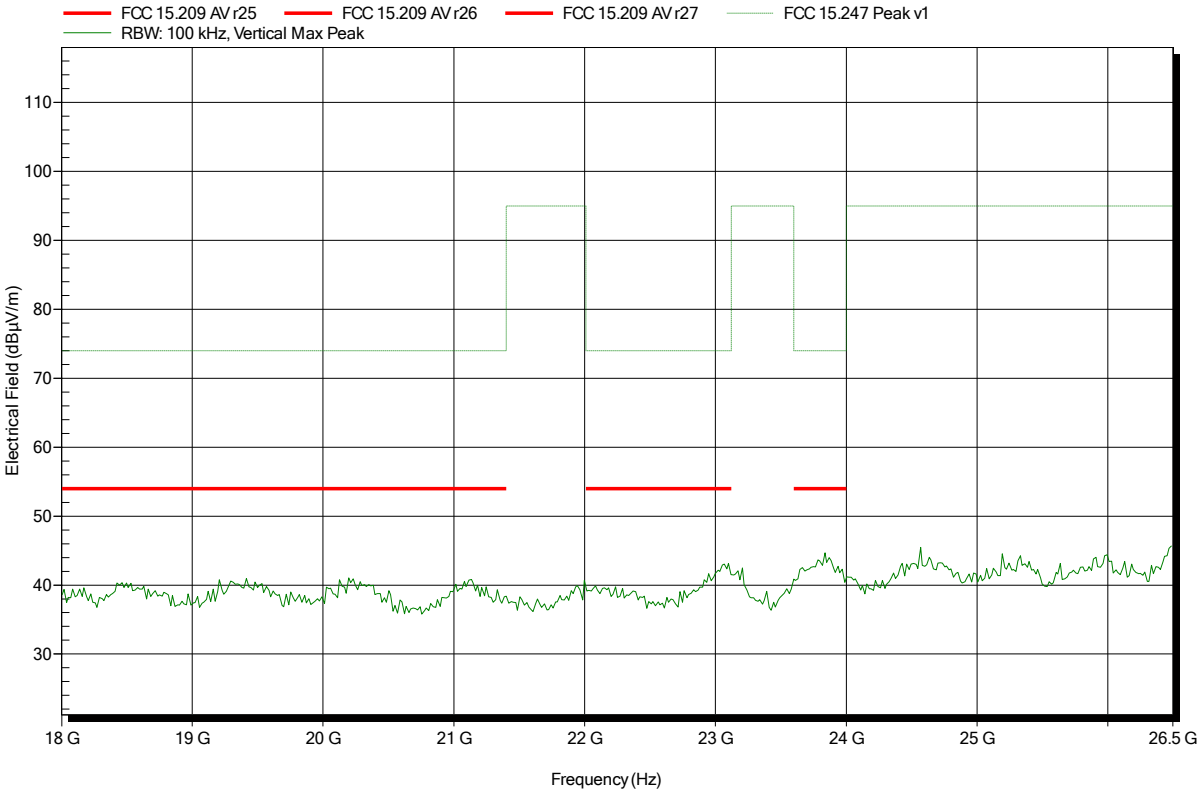

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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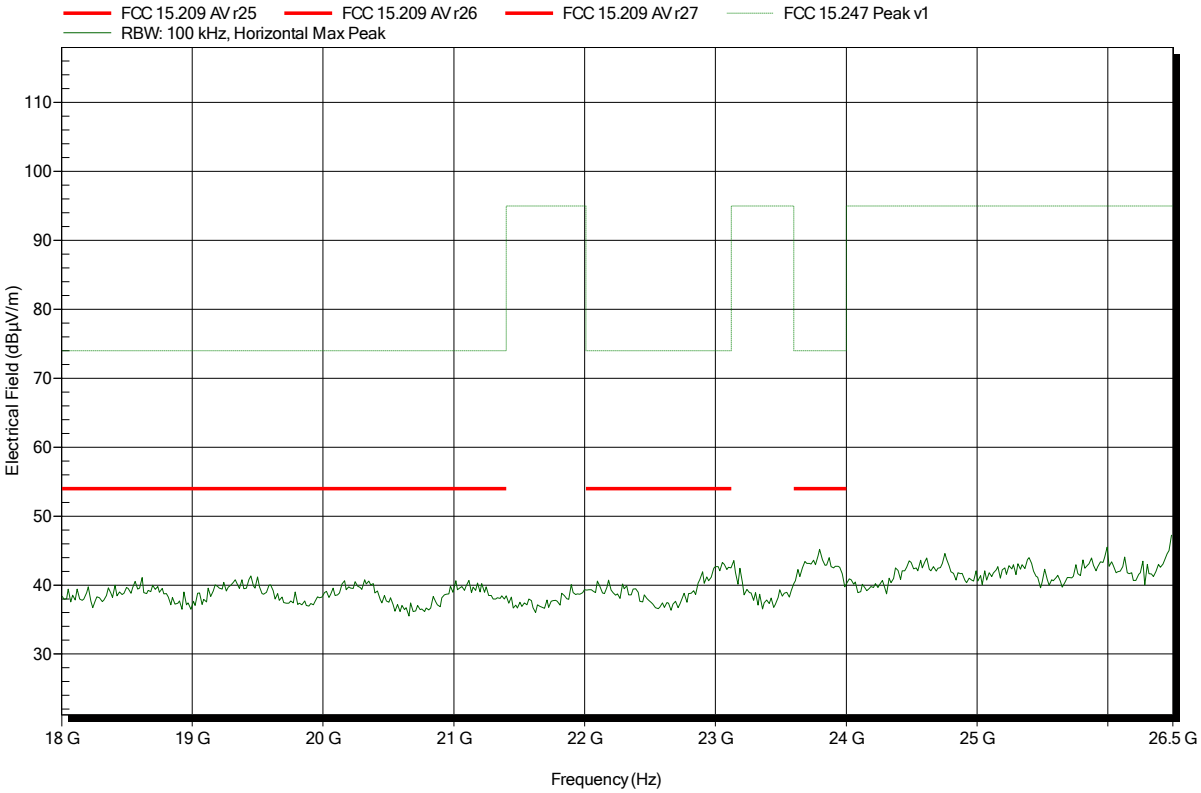

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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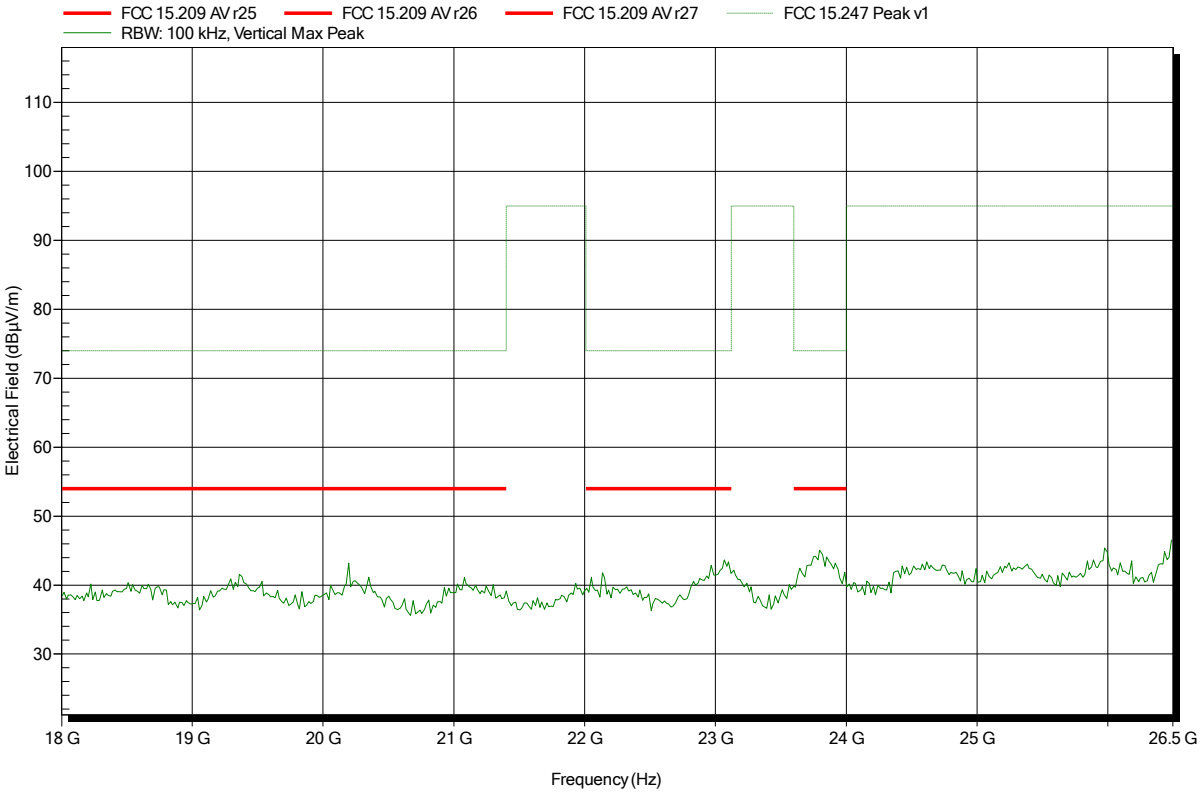

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; DSSS 1Mbps
Test Date:	2016-01-20
Note:	EUT horizontal

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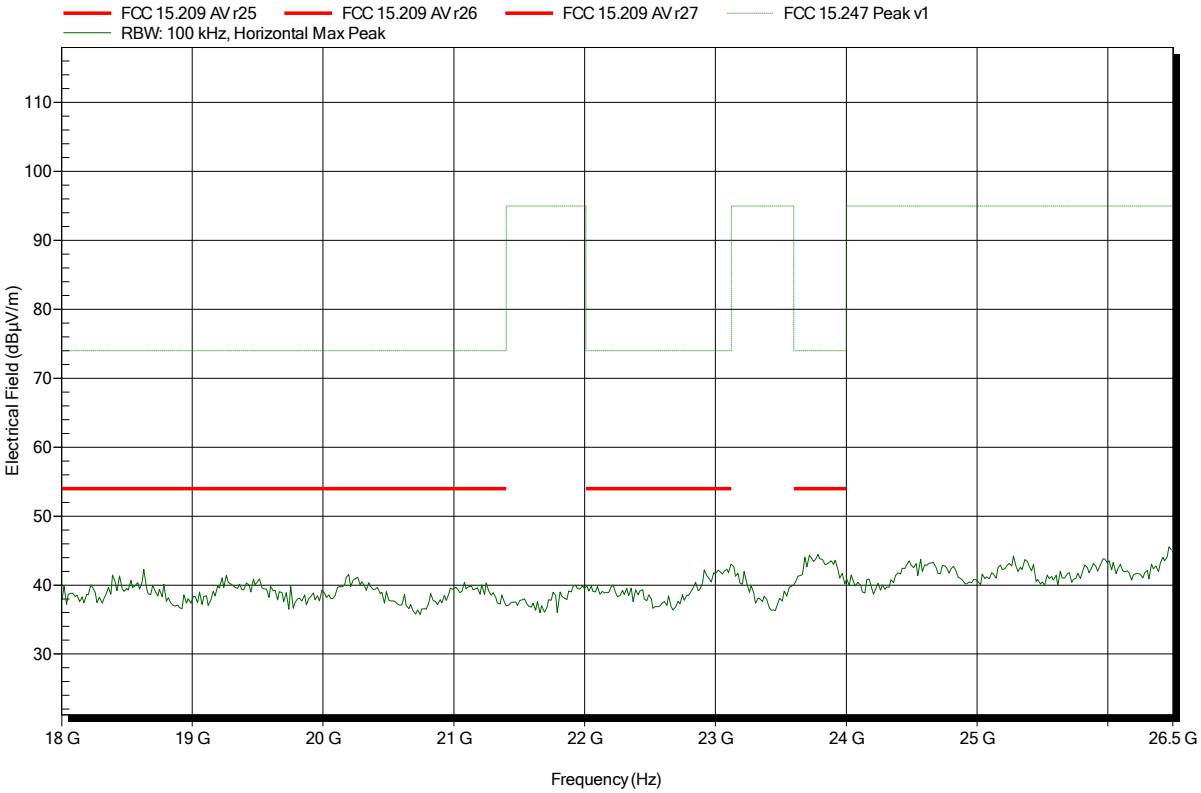

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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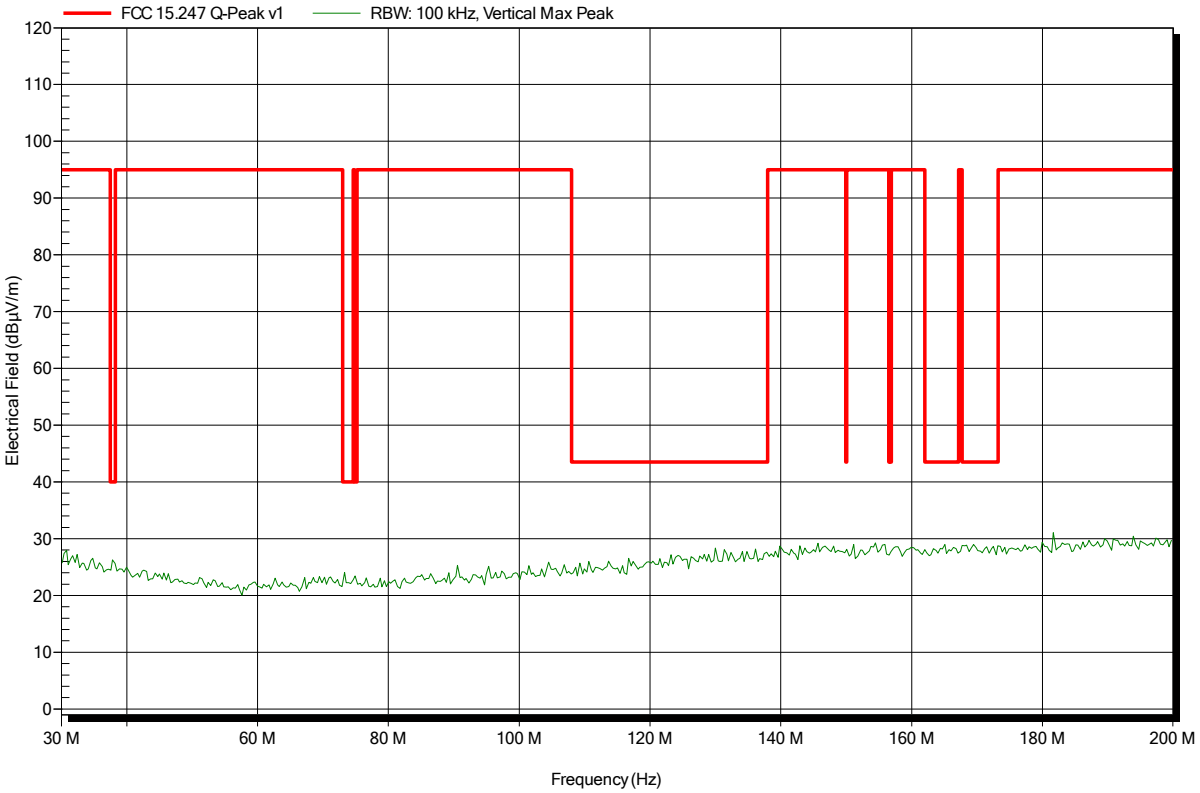

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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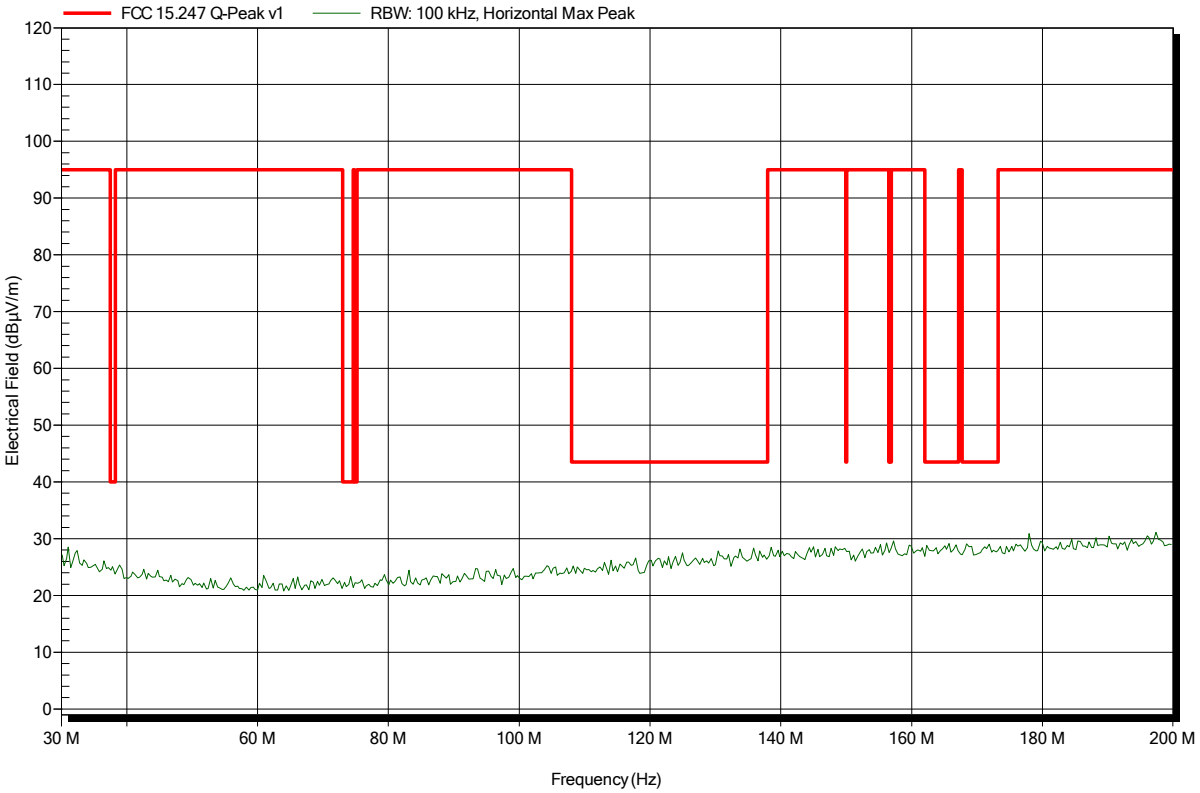

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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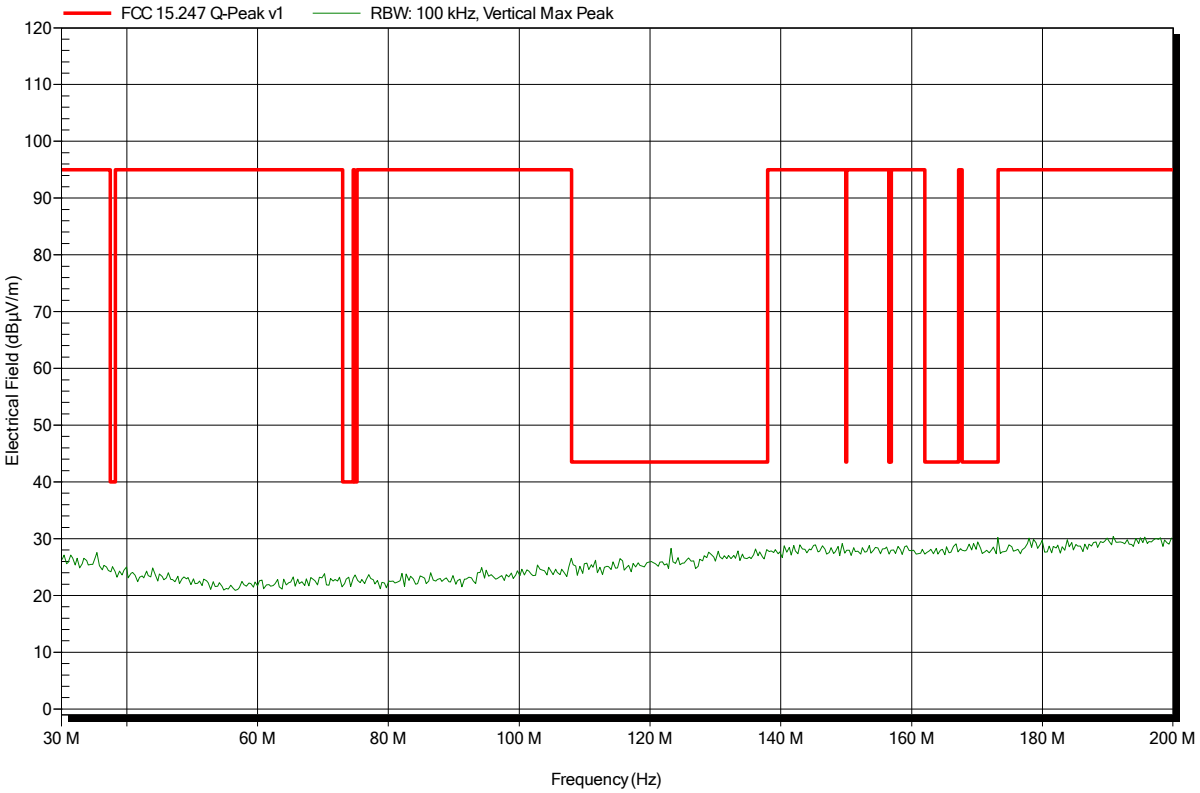

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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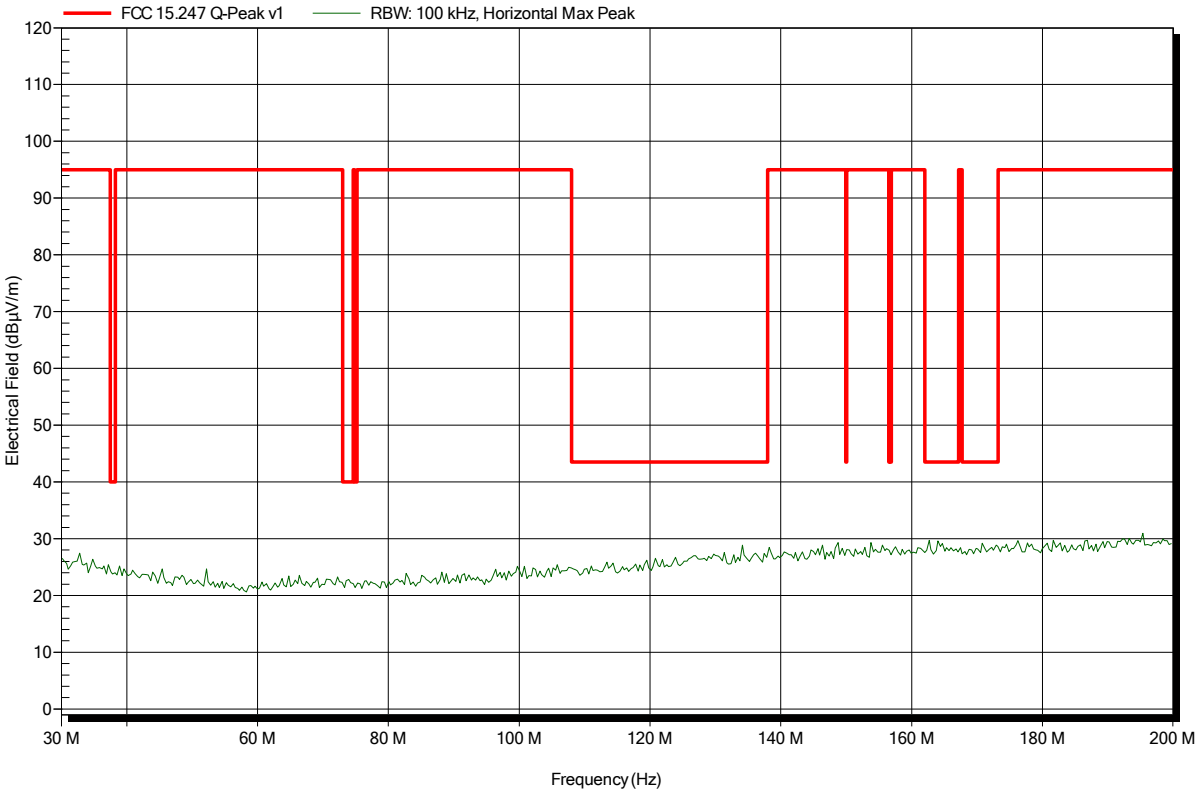

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Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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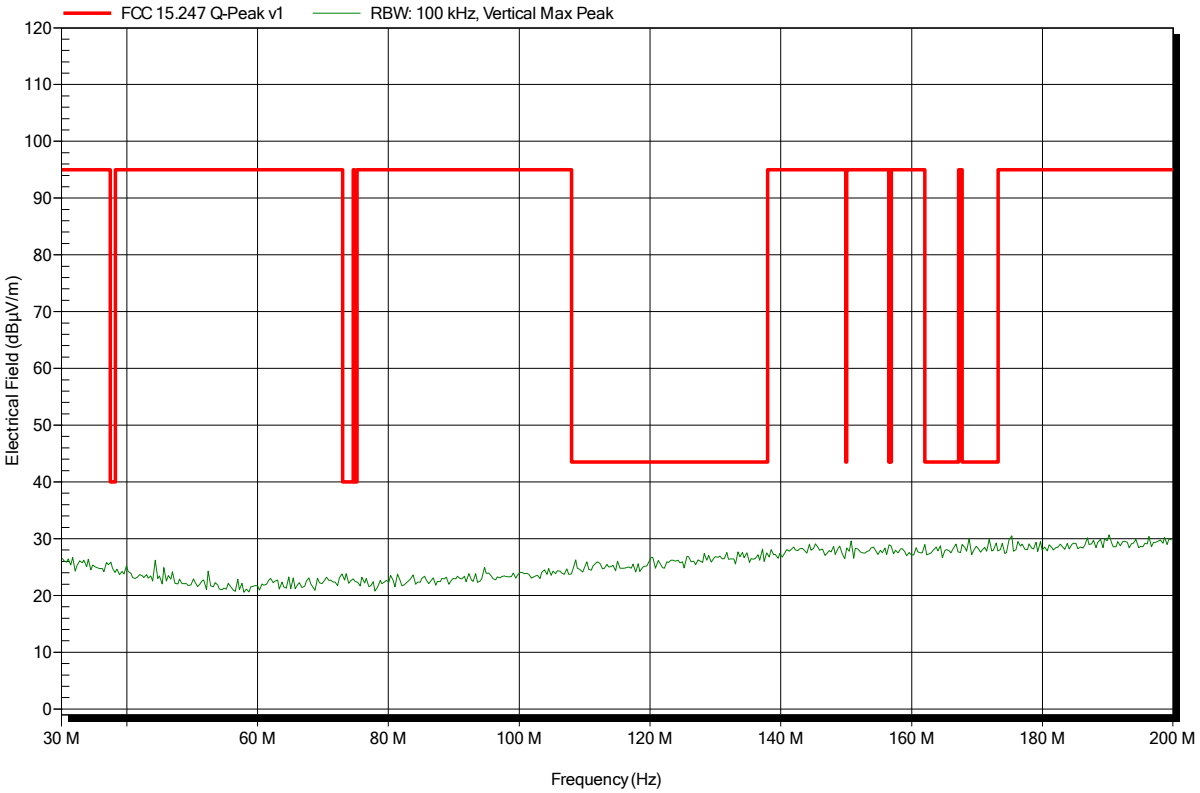

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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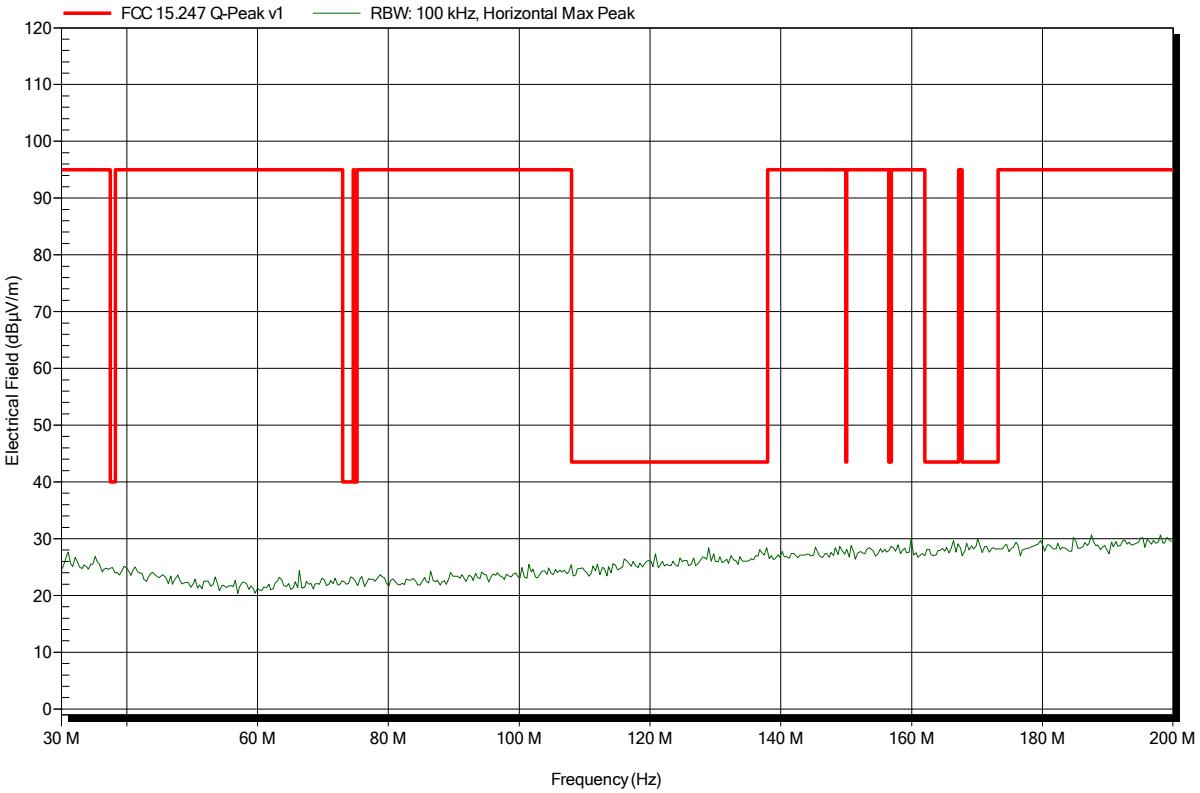

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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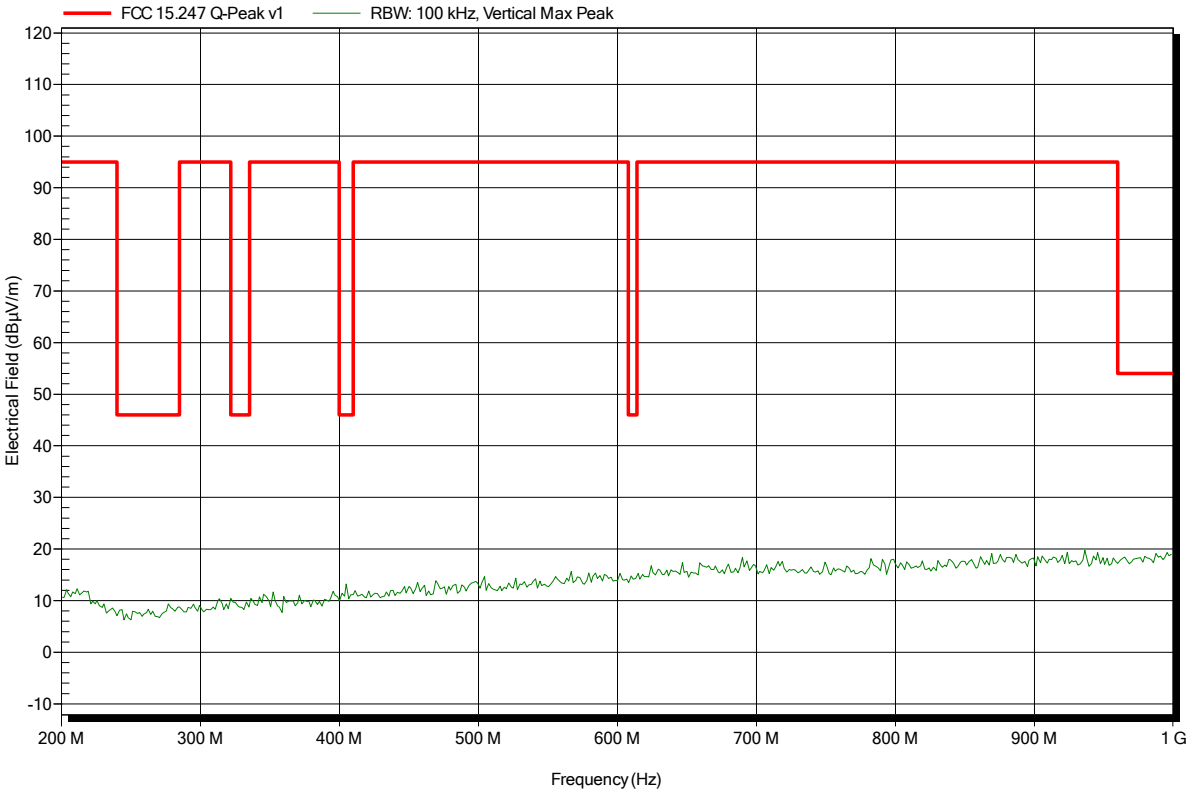

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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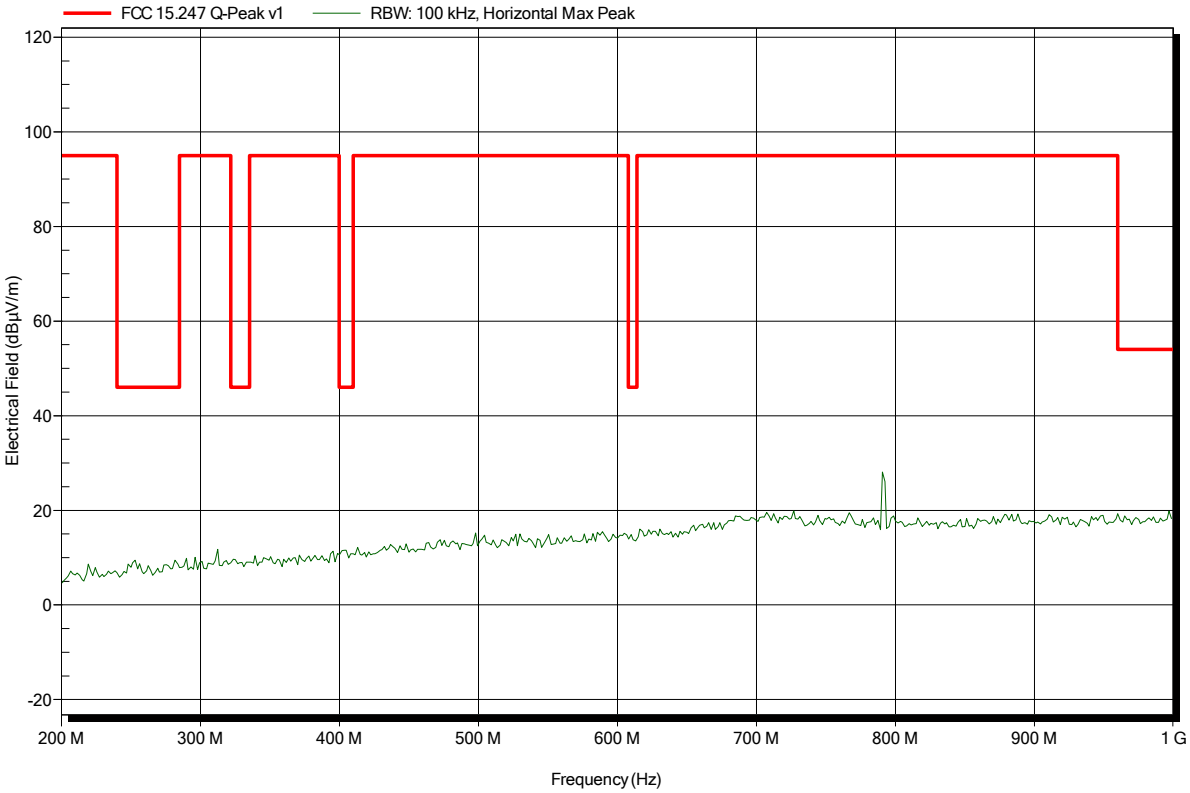

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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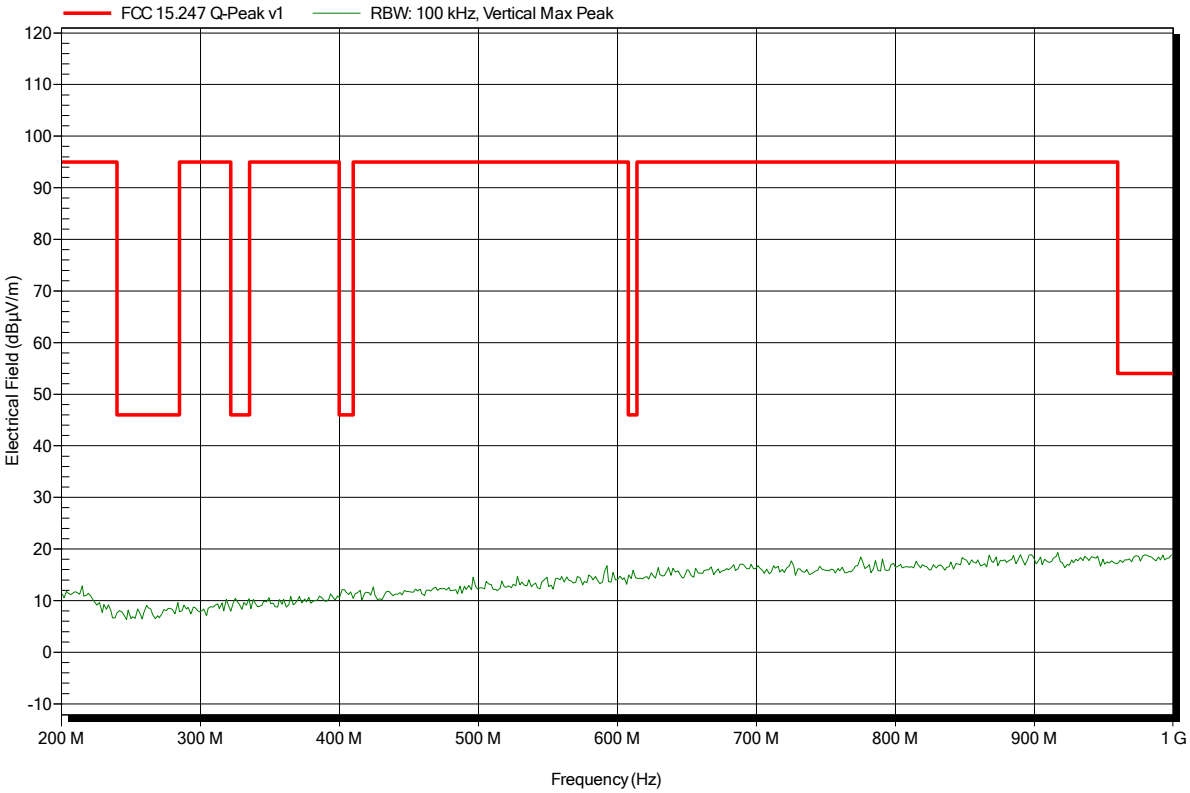

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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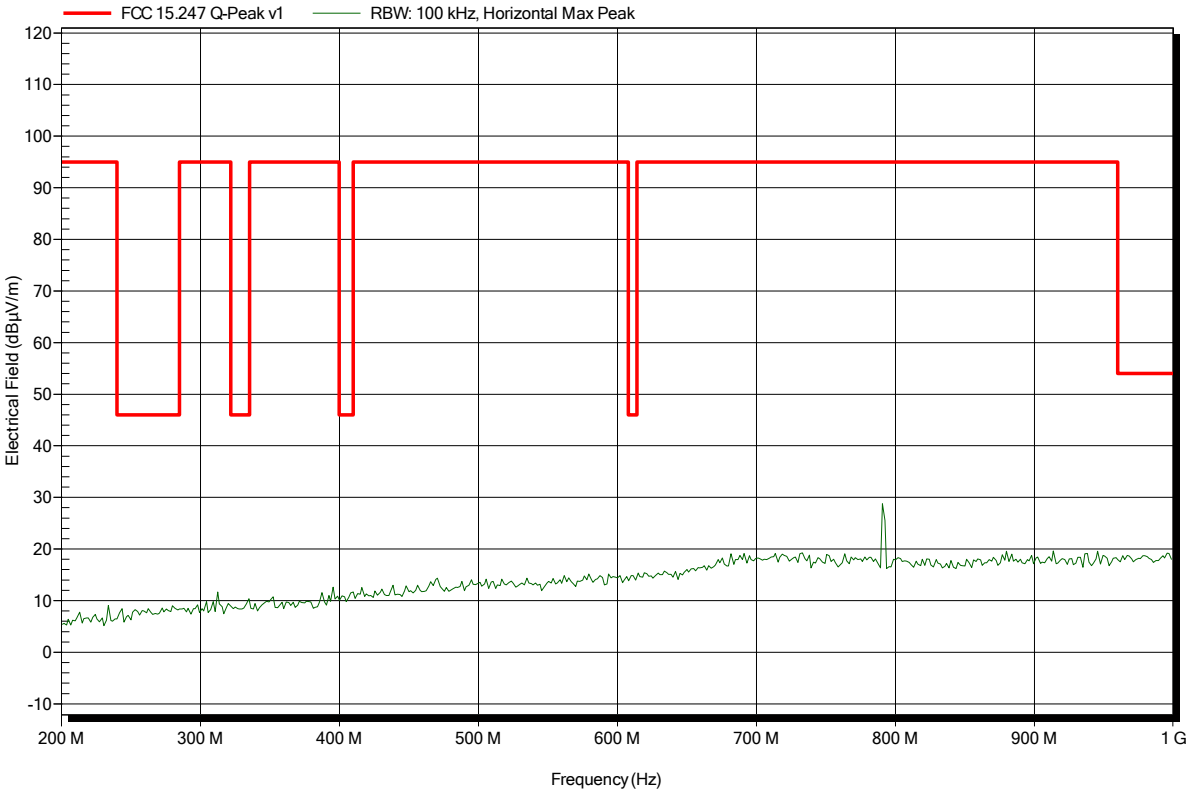

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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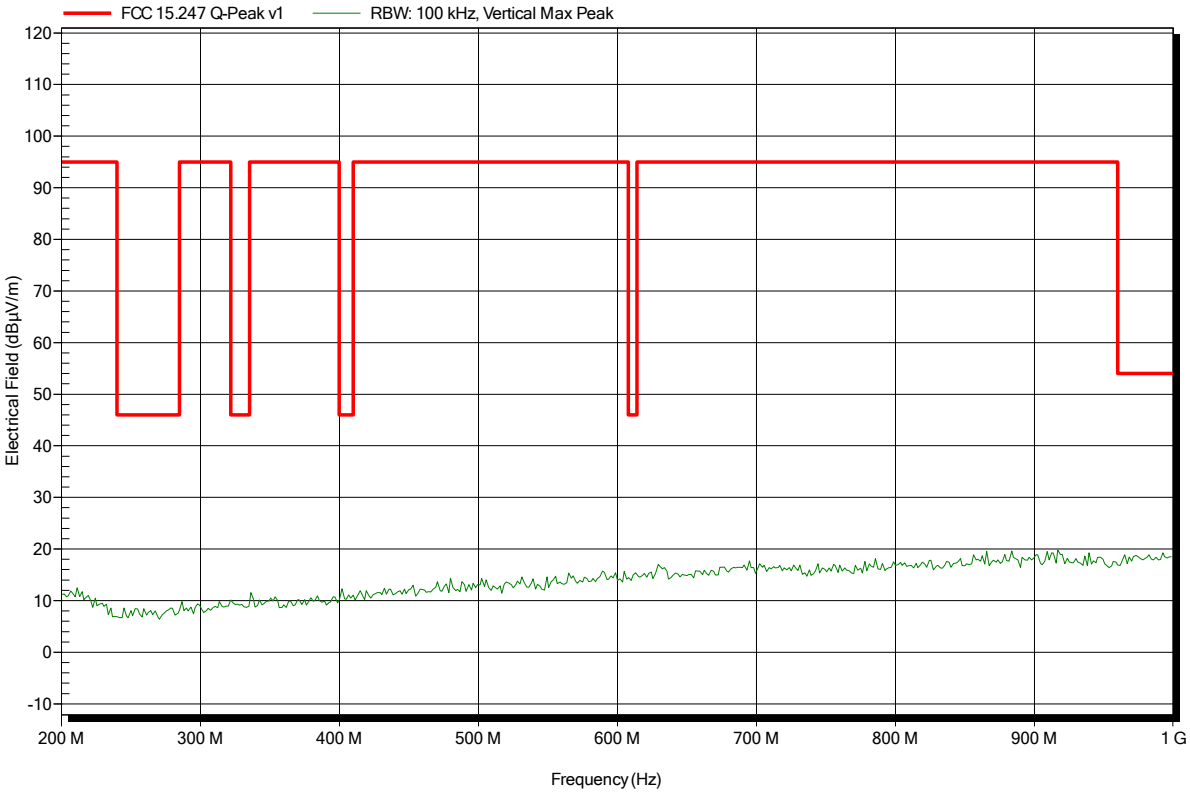

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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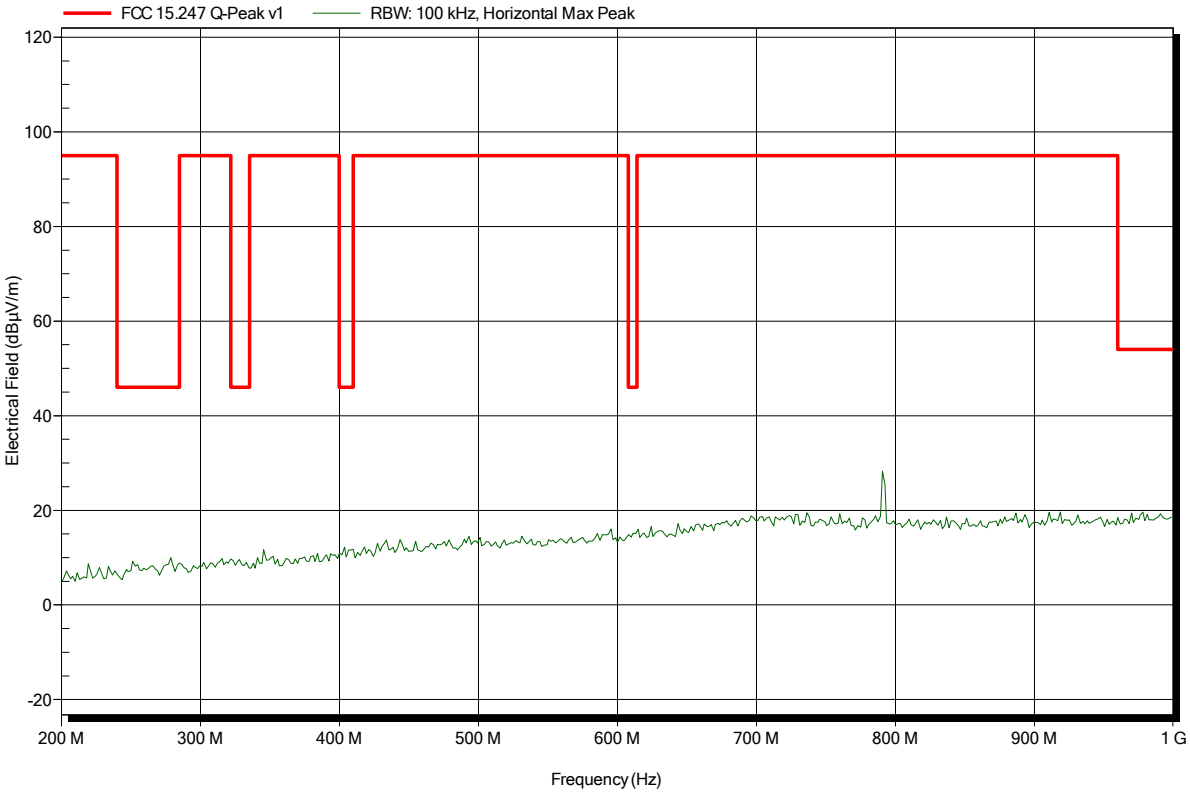

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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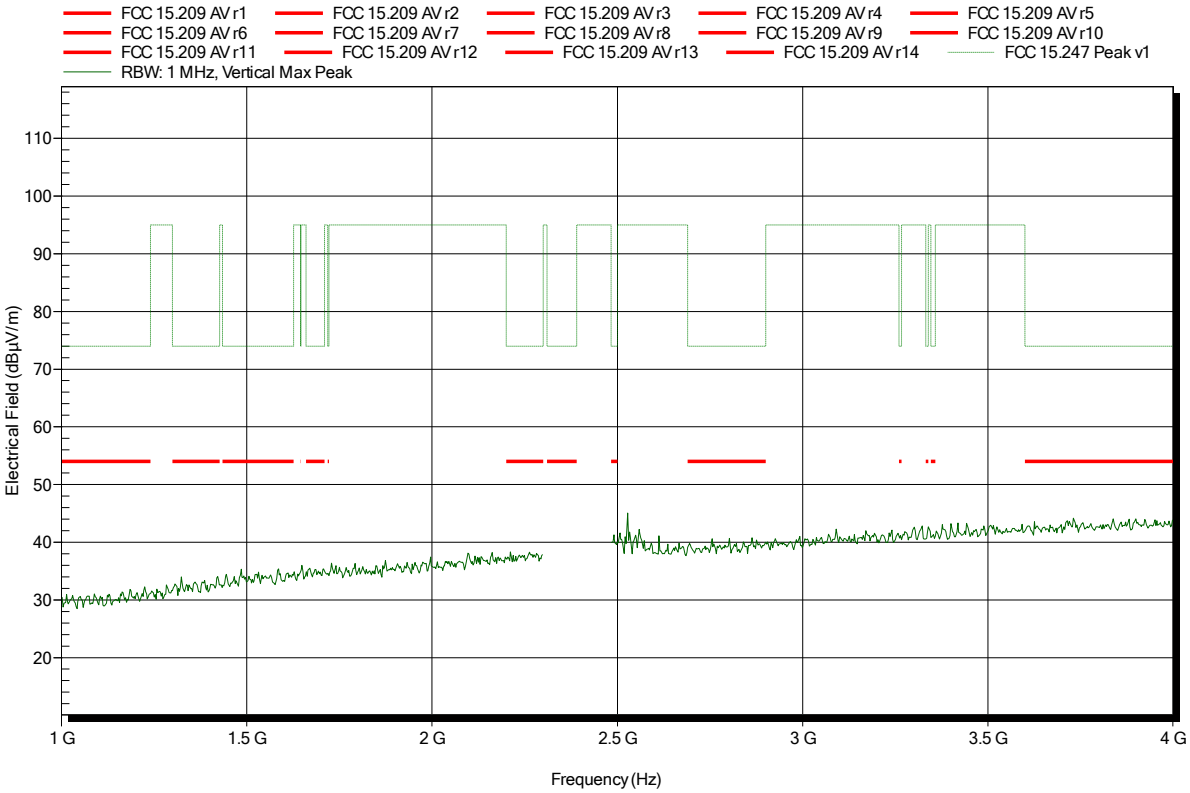

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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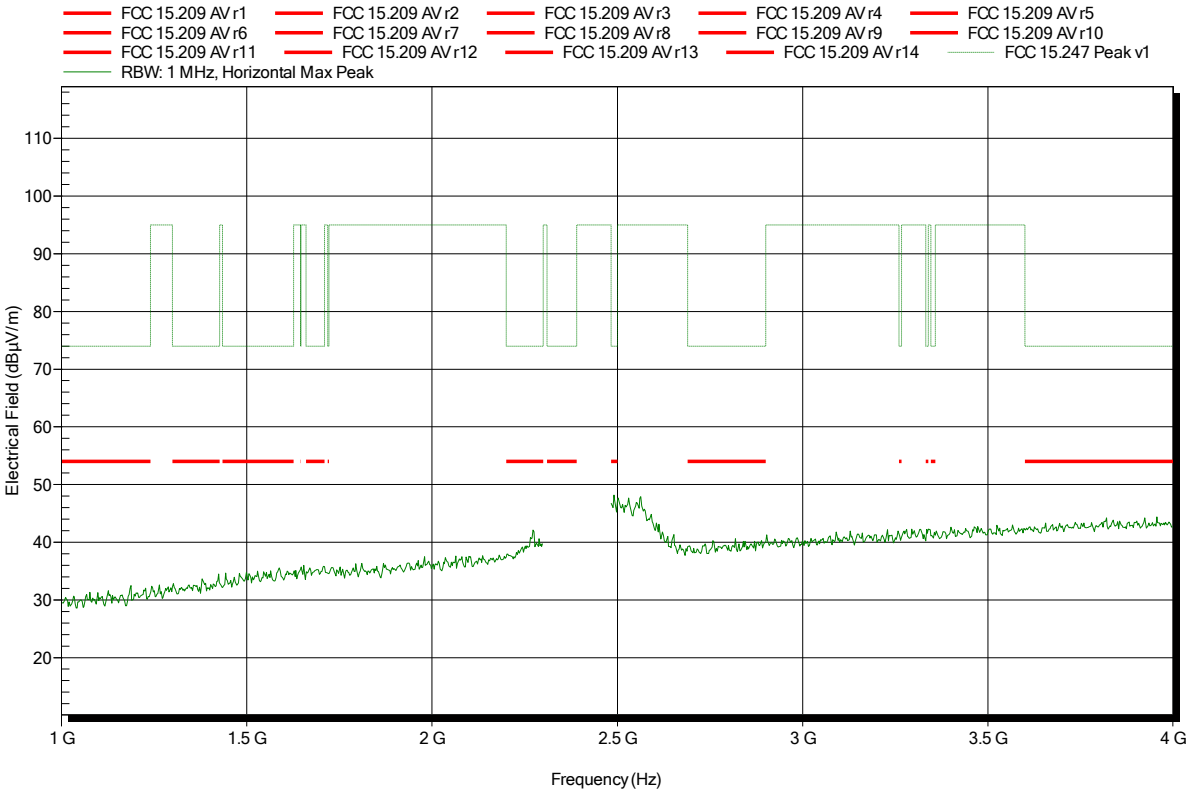

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; lower bandedge

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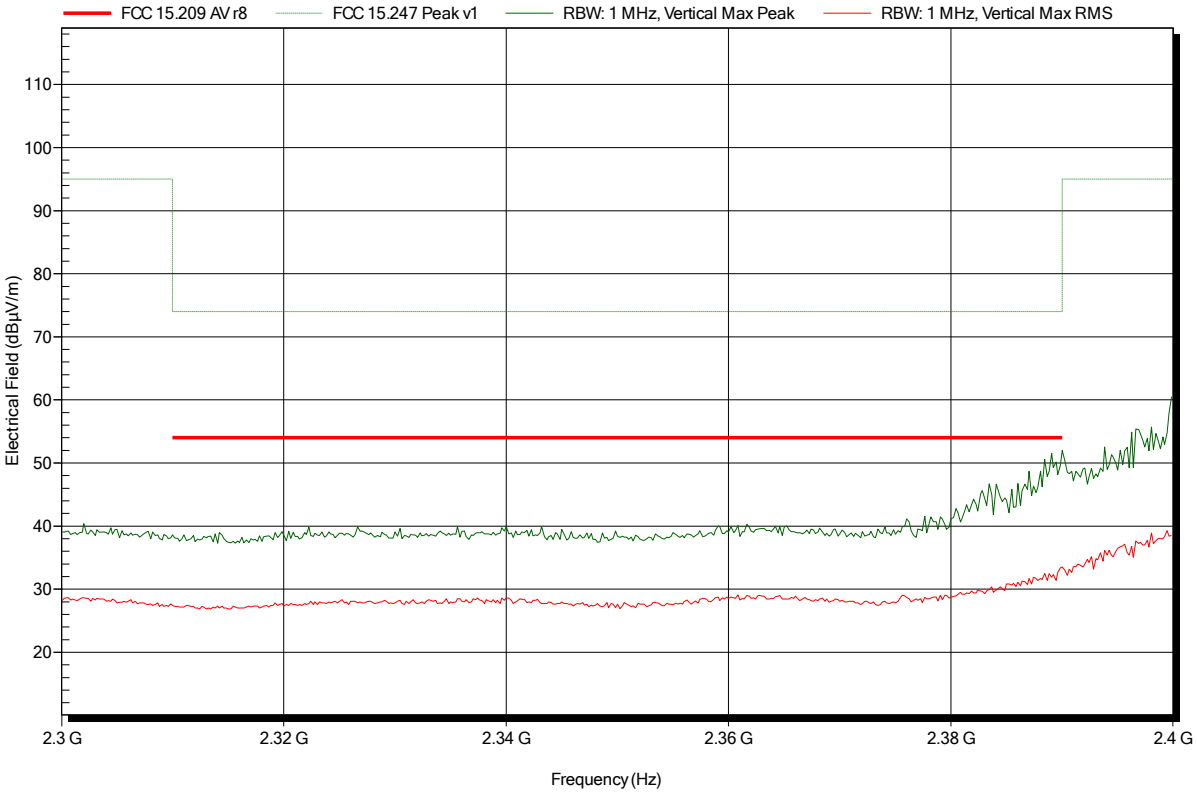

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; lower bandedge

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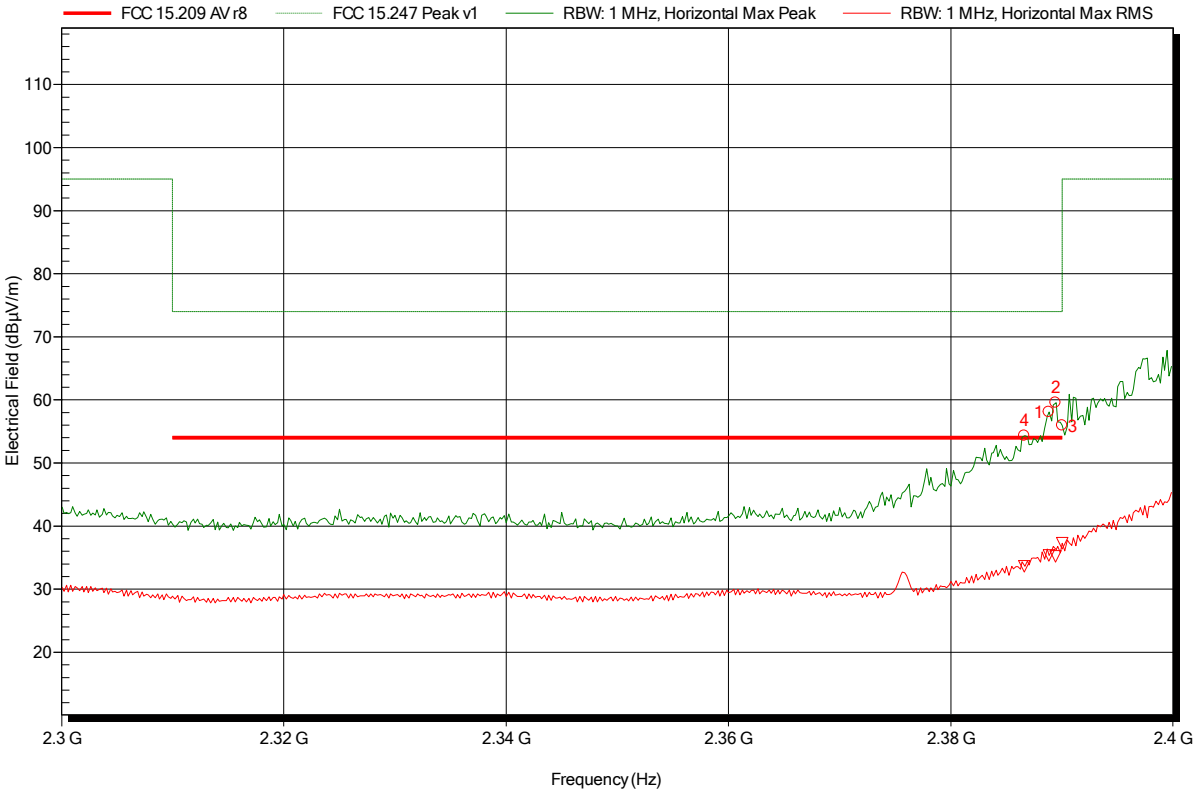

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.387 GHz	54.34 dBµV/m	74 dBµV/m	-19.66 dB	Pass
2.389 GHz	58.07 dBµV/m	74 dBµV/m	-15.93 dB	Pass
2.389 GHz	59.56 dBµV/m	74 dBµV/m	-14.44 dB	Pass
2.39 GHz	55.96 dBµV/m	74 dBµV/m	-18.04 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.387 GHz	33.65 dBµV/m	54 dBµV/m	-20.35 dB	Pass
2.389 GHz	35.34 dBµV/m	54 dBµV/m	-18.66 dB	Pass
2.389 GHz	35.18 dBµV/m	54 dBµV/m	-18.82 dB	Pass
2.39 GHz	37.31 dBµV/m	54 dBµV/m	-16.69 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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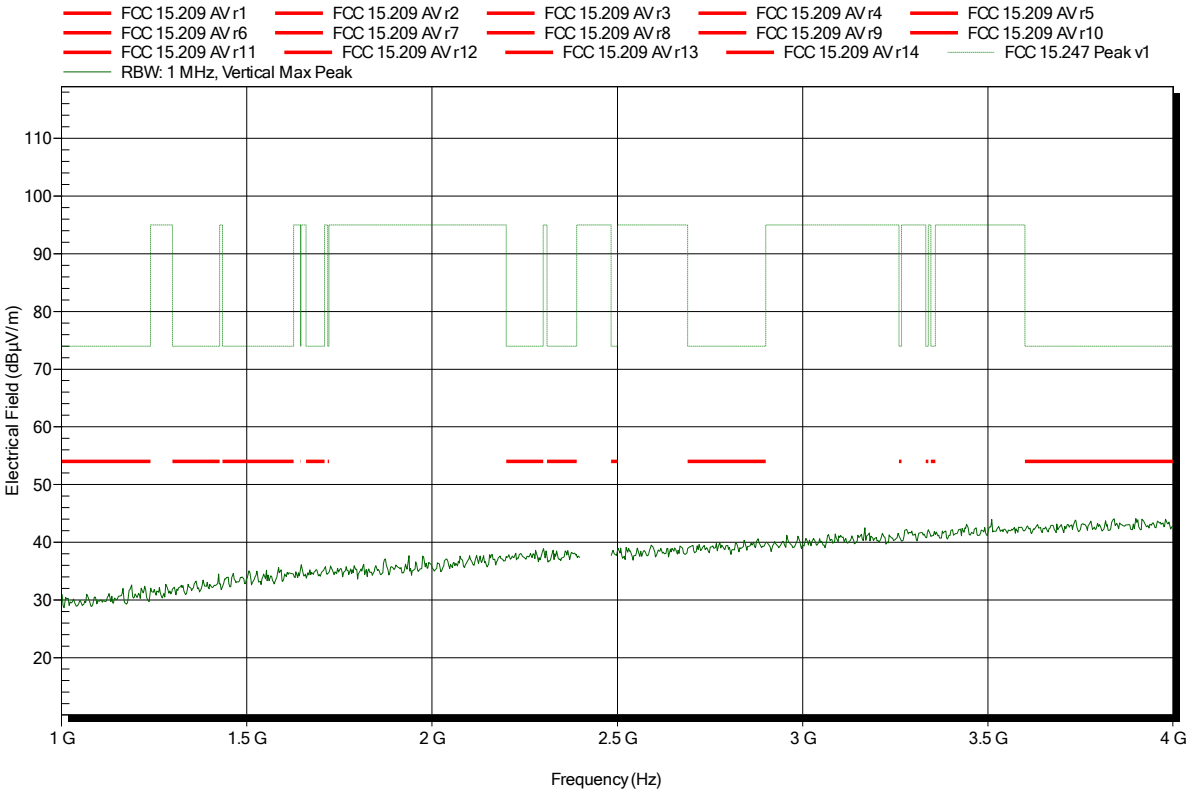

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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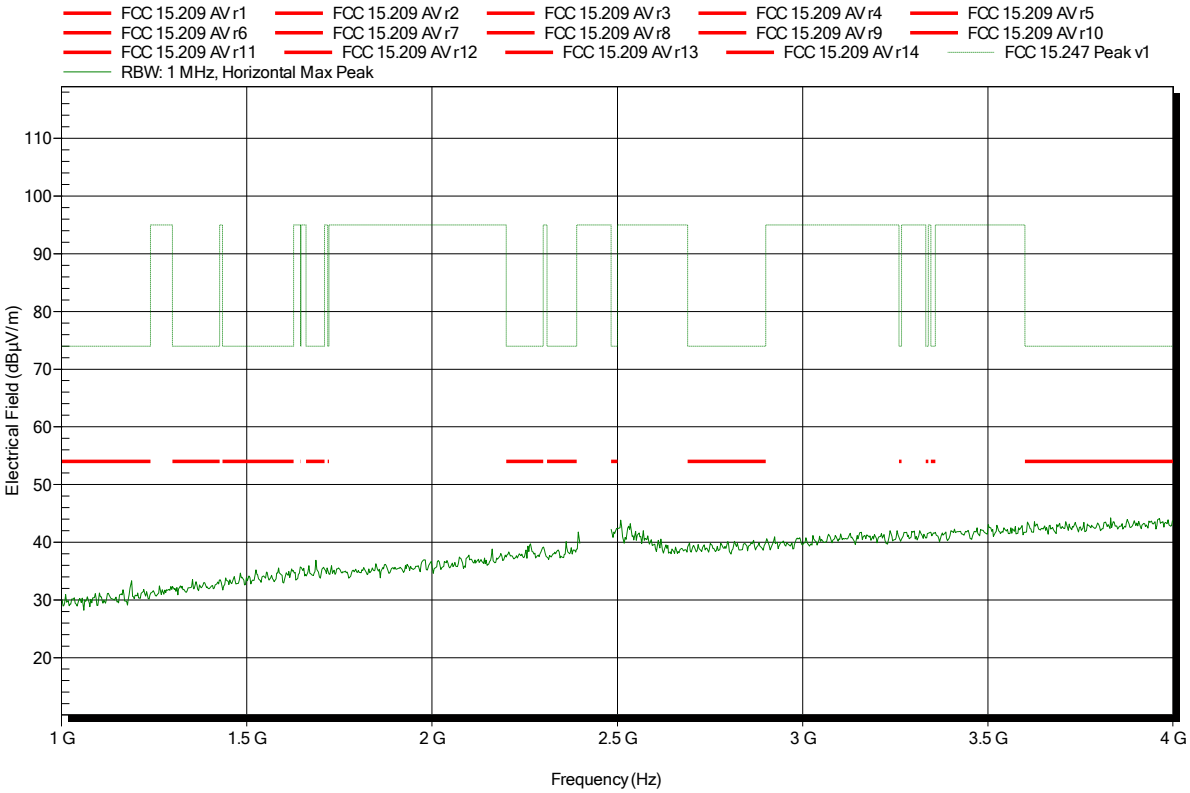

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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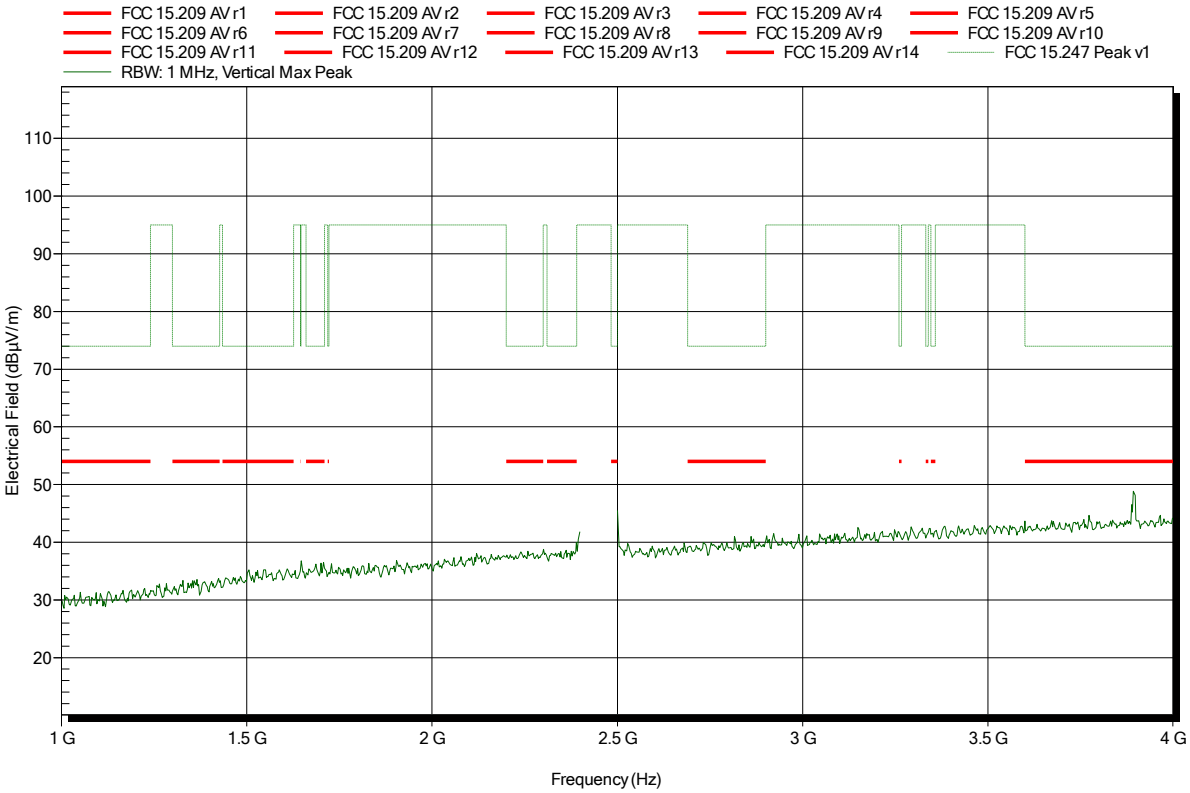

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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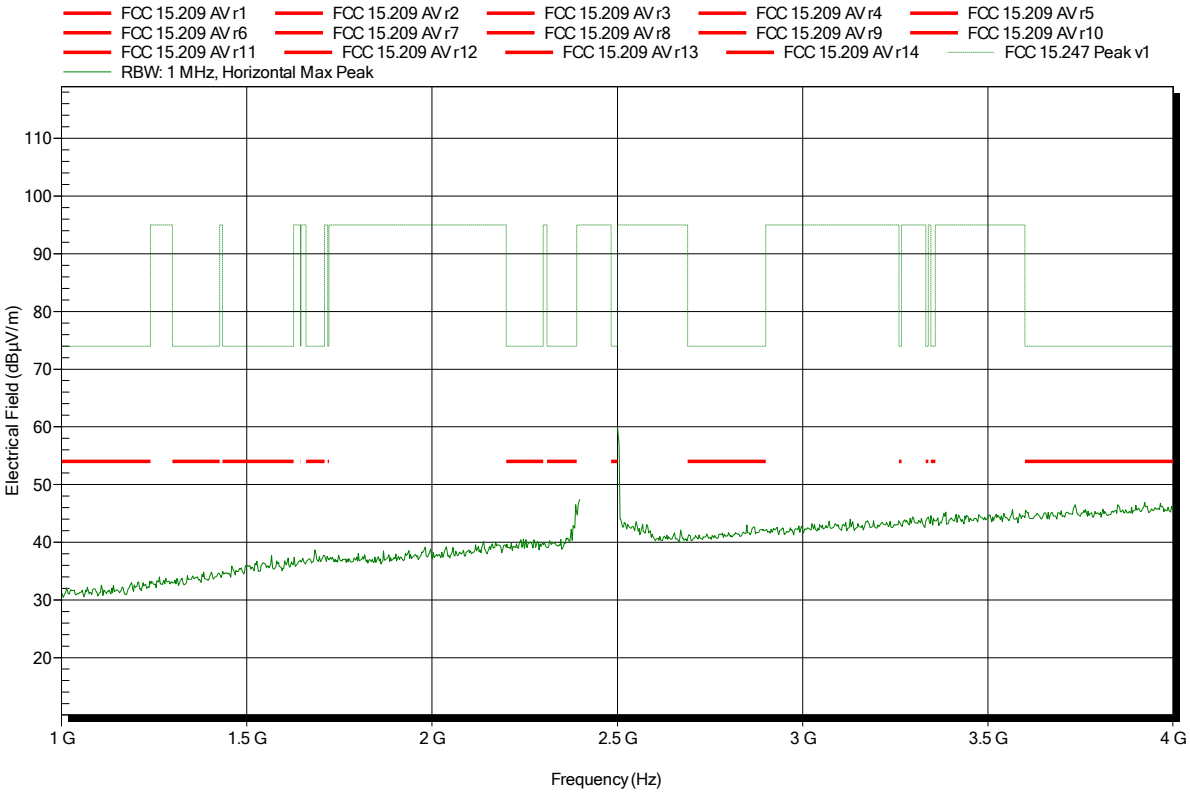

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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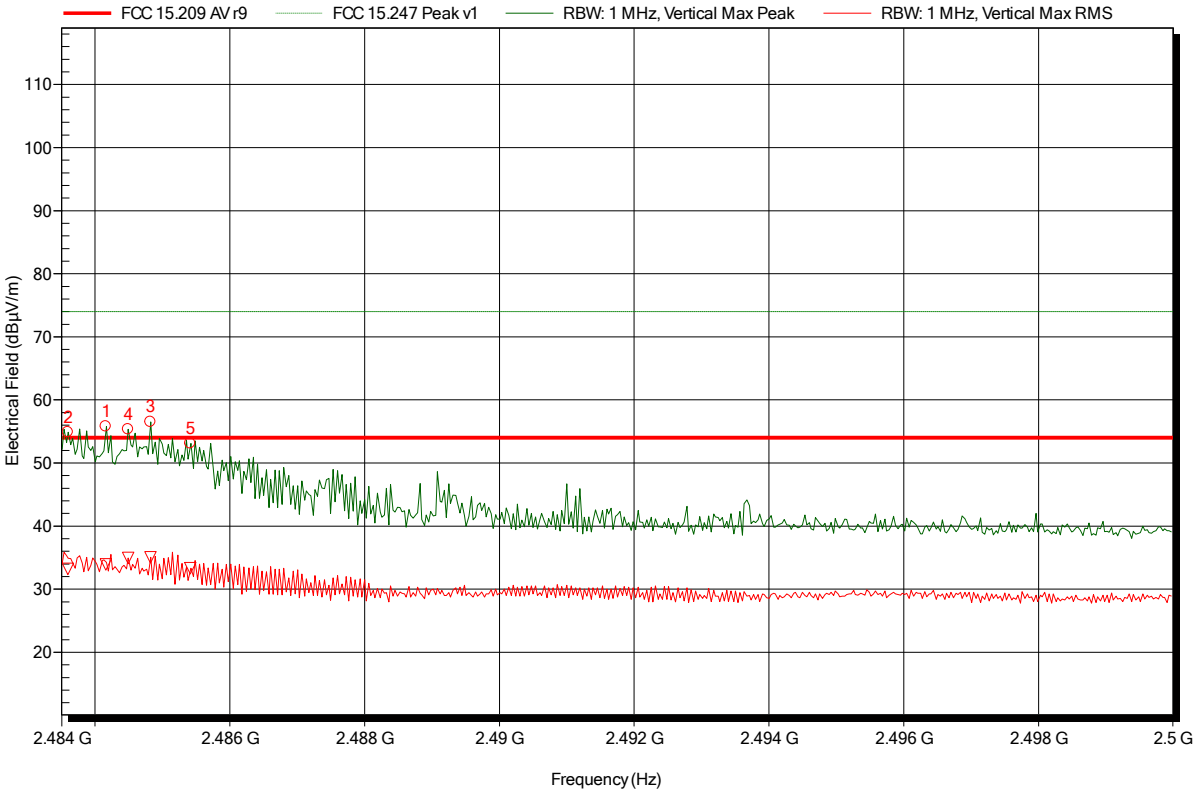

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	54.88 dBµV/m	74 dBµV/m	-19.12 dB	Pass
2.484 GHz	55.79 dBµV/m	74 dBµV/m	-18.21 dB	Pass
2.484 GHz	55.36 dBµV/m	74 dBµV/m	-18.64 dB	Pass
2.485 GHz	56.53 dBµV/m	74 dBµV/m	-17.47 dB	Pass
2.485 GHz	53.11 dBµV/m	74 dBµV/m	-20.89 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	33.22 dBµV/m	54 dBµV/m	-20.78 dB	Pass
2.484 GHz	33.93 dBµV/m	54 dBµV/m	-20.07 dB	Pass
2.484 GHz	34.95 dBµV/m	54 dBµV/m	-19.05 dB	Pass
2.485 GHz	35.07 dBµV/m	54 dBµV/m	-18.93 dB	Pass
2.485 GHz	33.3 dBµV/m	54 dBµV/m	-20.7 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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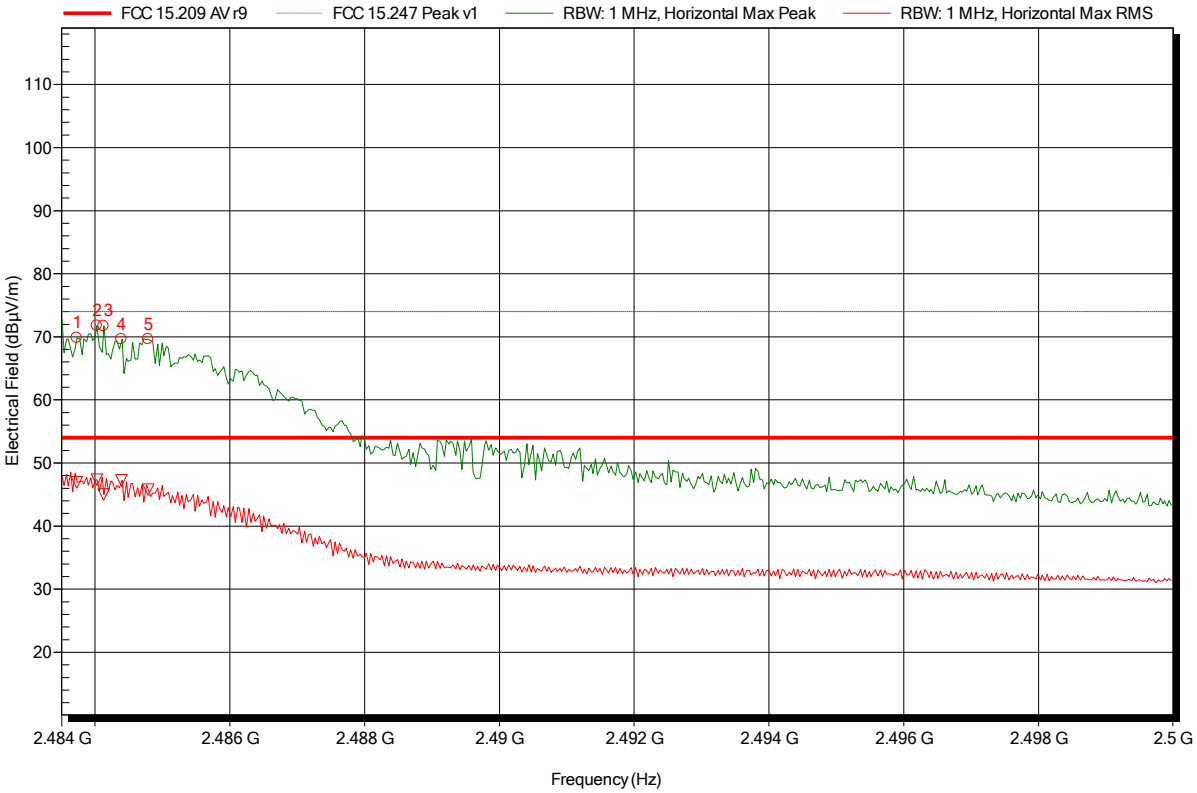

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	69.84 dBµV/m	74 dBµV/m	-4.16 dB	Pass
2.484 GHz	71.79 dBµV/m	74 dBµV/m	-2.21 dB	Pass
2.484 GHz	71.72 dBµV/m	74 dBµV/m	-2.28 dB	Pass
2.484 GHz	69.62 dBµV/m	74 dBµV/m	-4.38 dB	Pass
2.485 GHz	69.66 dBµV/m	74 dBµV/m	-4.34 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	46.93 dBµV/m	54 dBµV/m	-7.07 dB	Pass
2.484 GHz	47.35 dBµV/m	54 dBµV/m	-6.65 dB	Pass
2.484 GHz	45.01 dBµV/m	54 dBµV/m	-8.99 dB	Pass
2.484 GHz	47.27 dBµV/m	54 dBµV/m	-6.73 dB	Pass
2.485 GHz	45.79 dBµV/m	54 dBµV/m	-8.21 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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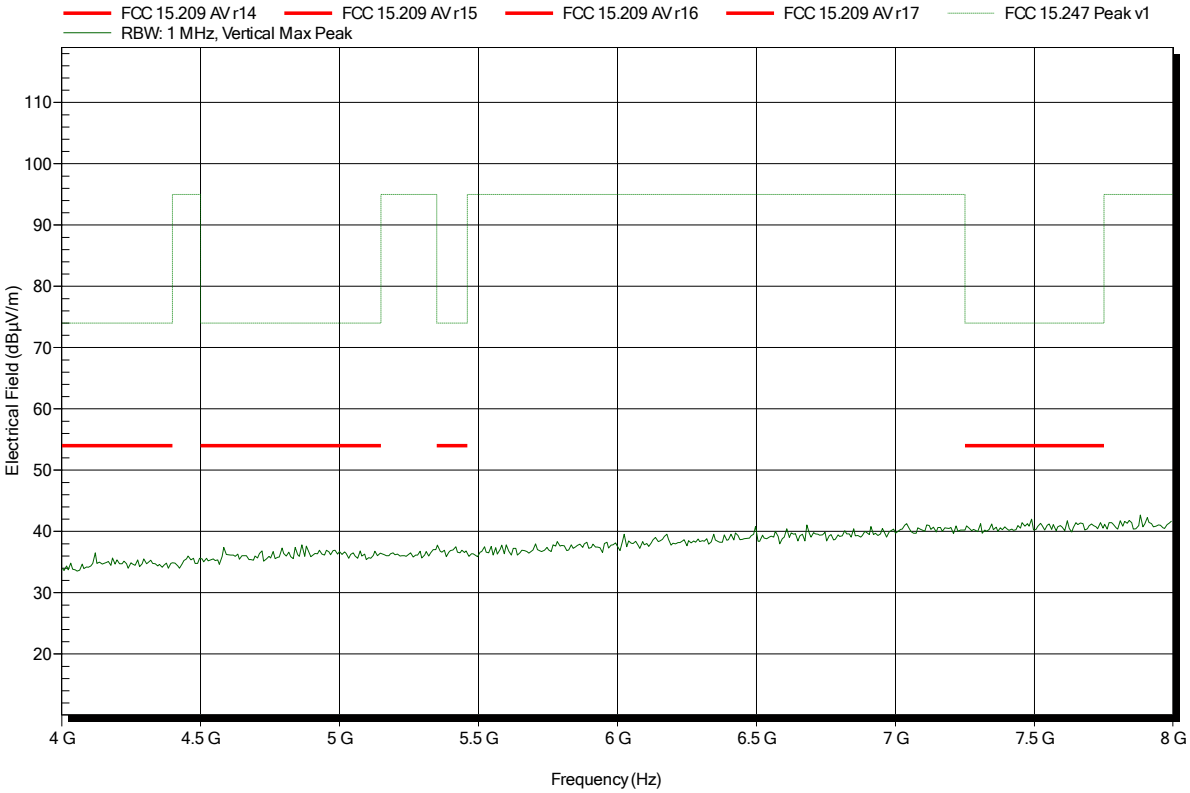

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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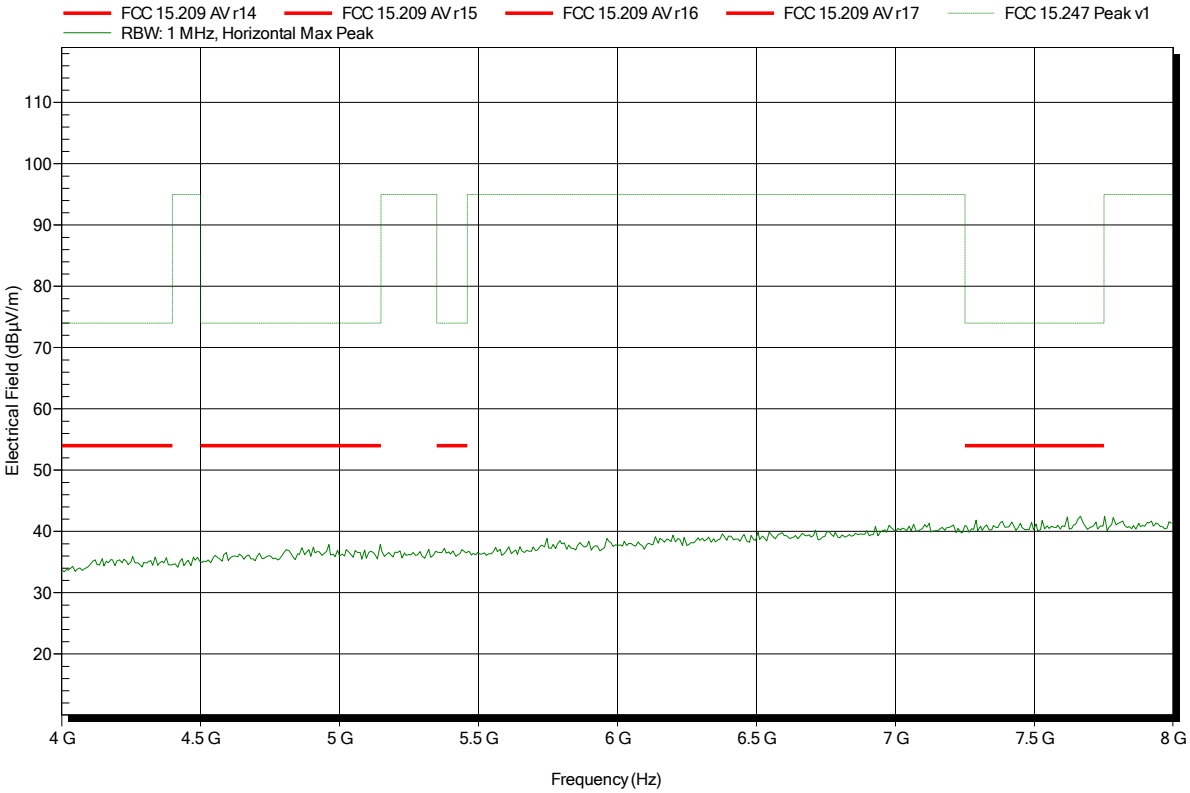

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Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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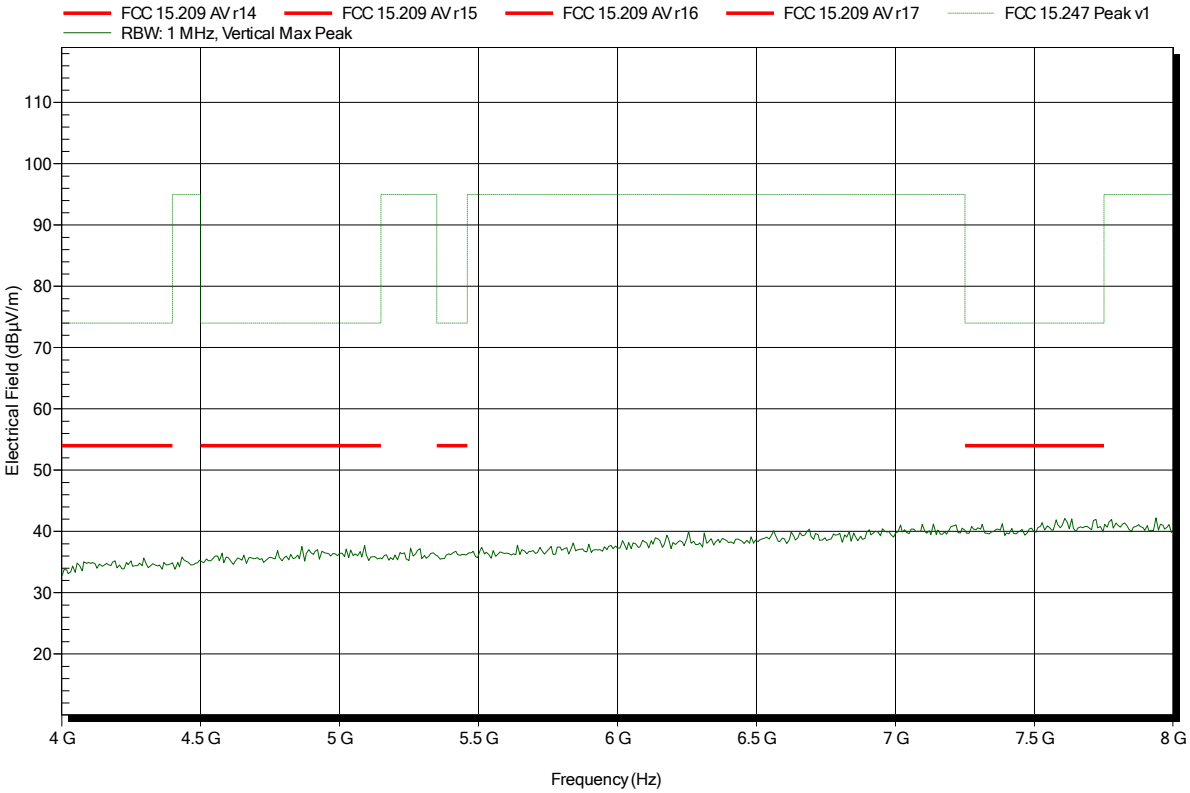

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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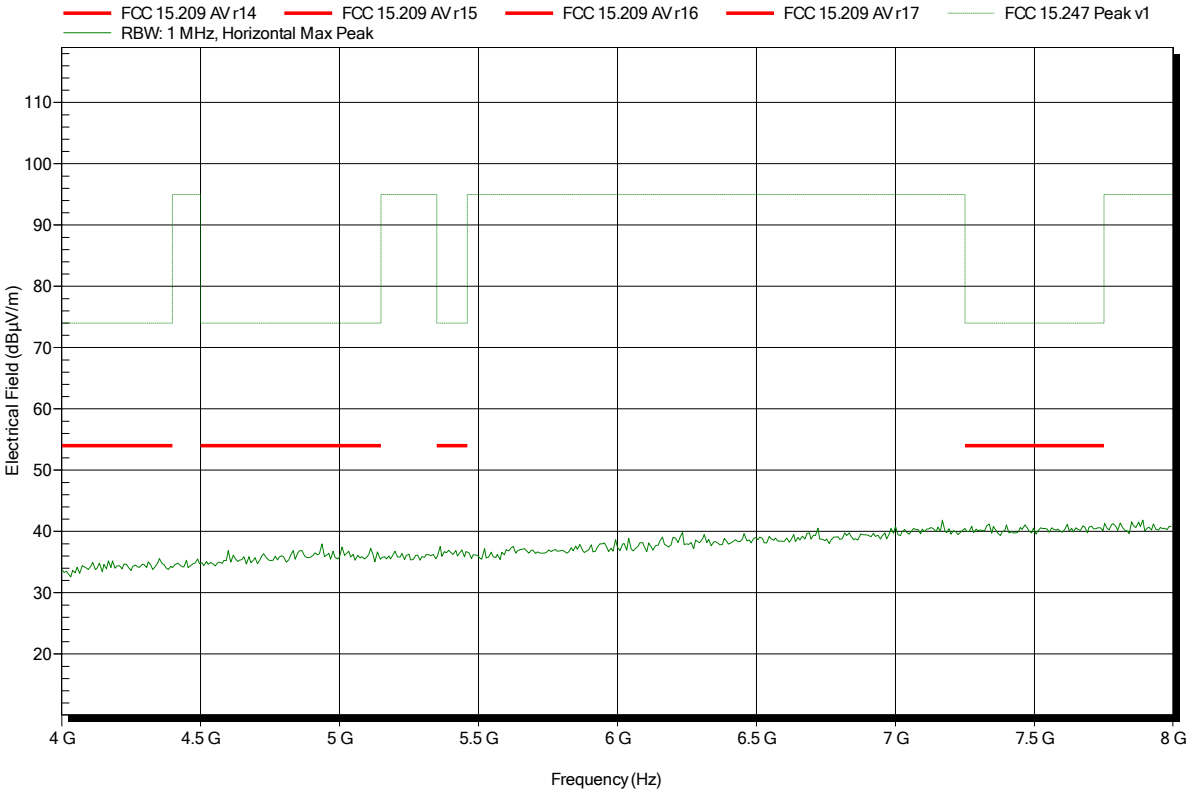

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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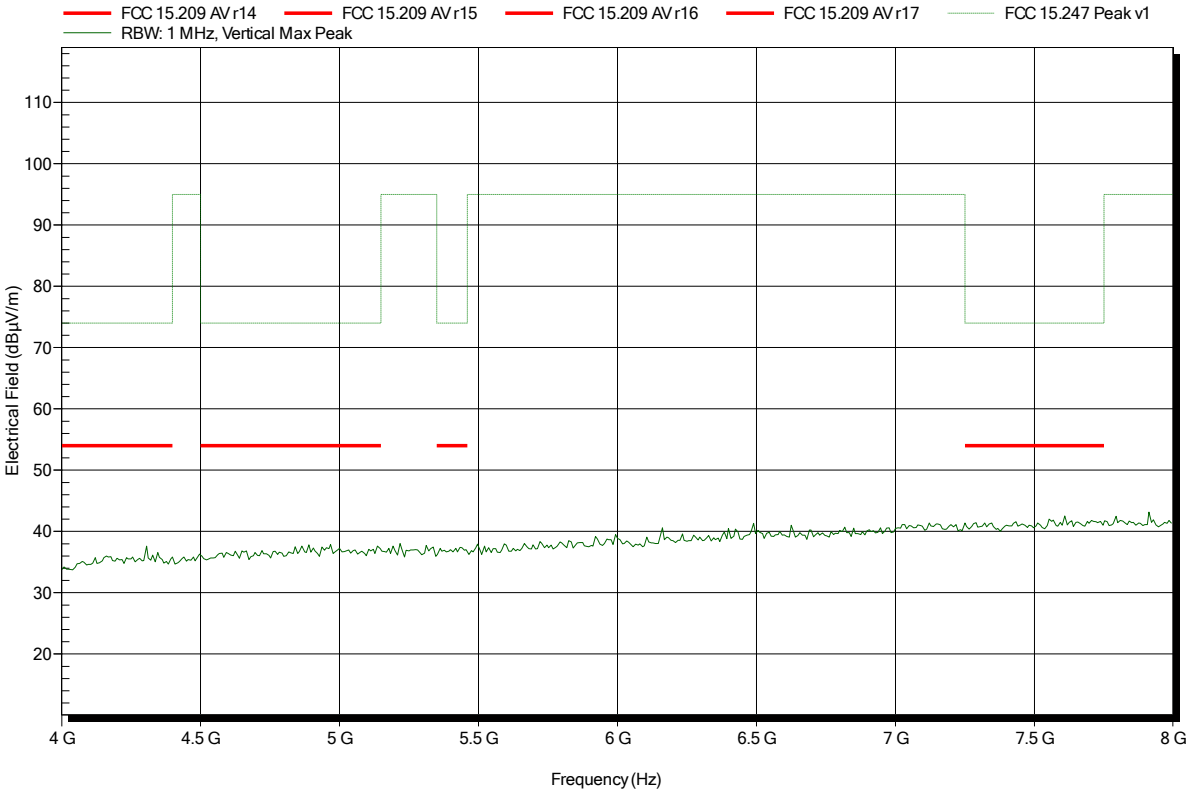

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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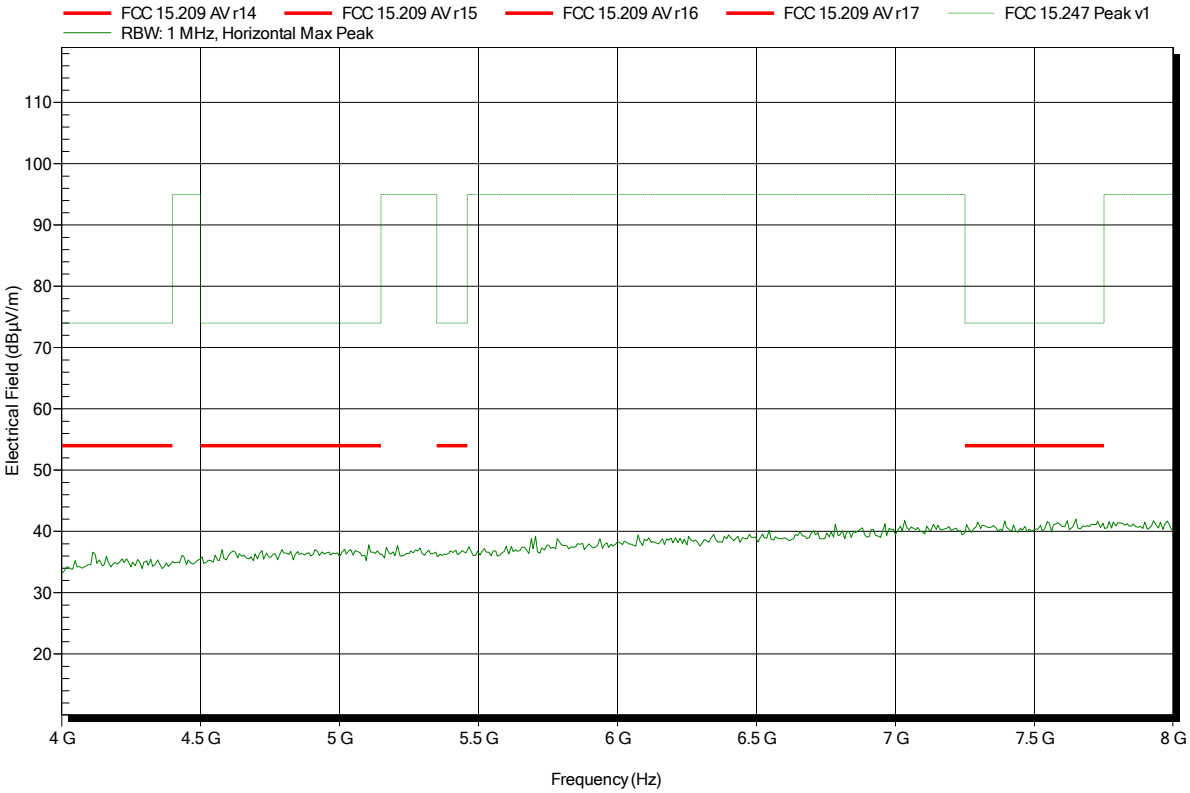

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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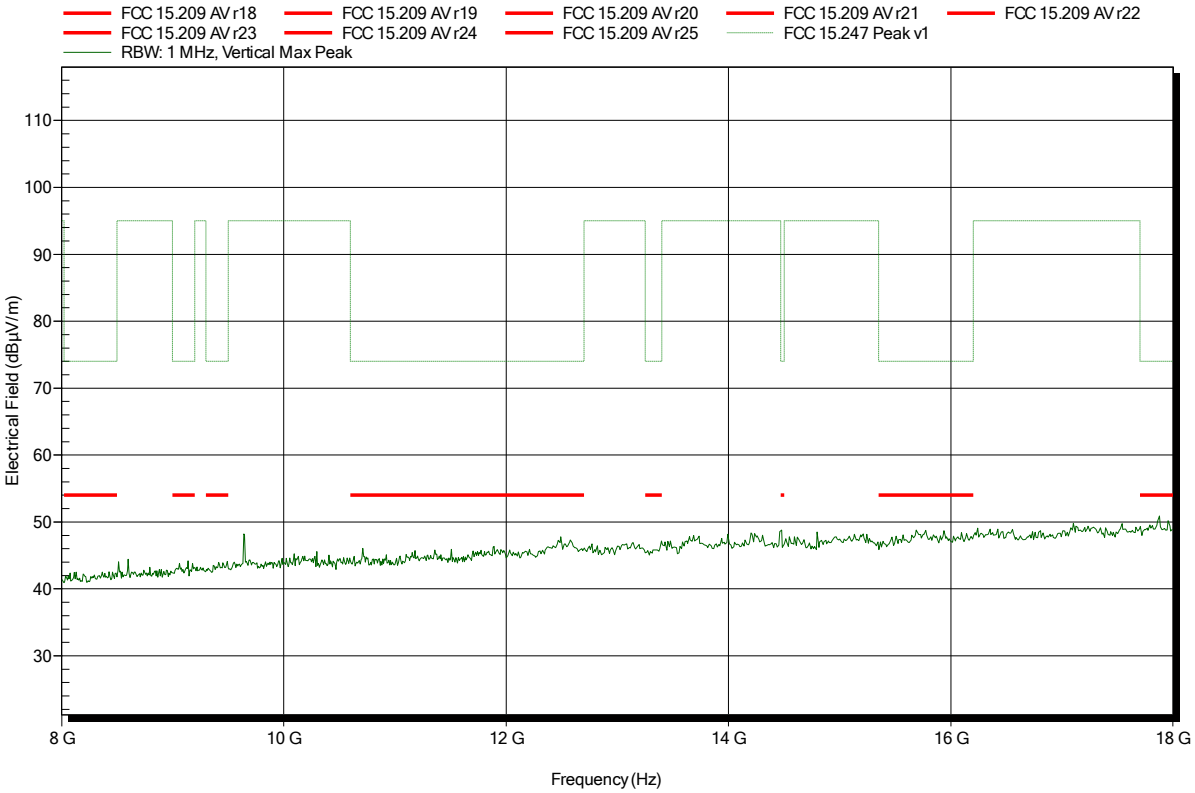

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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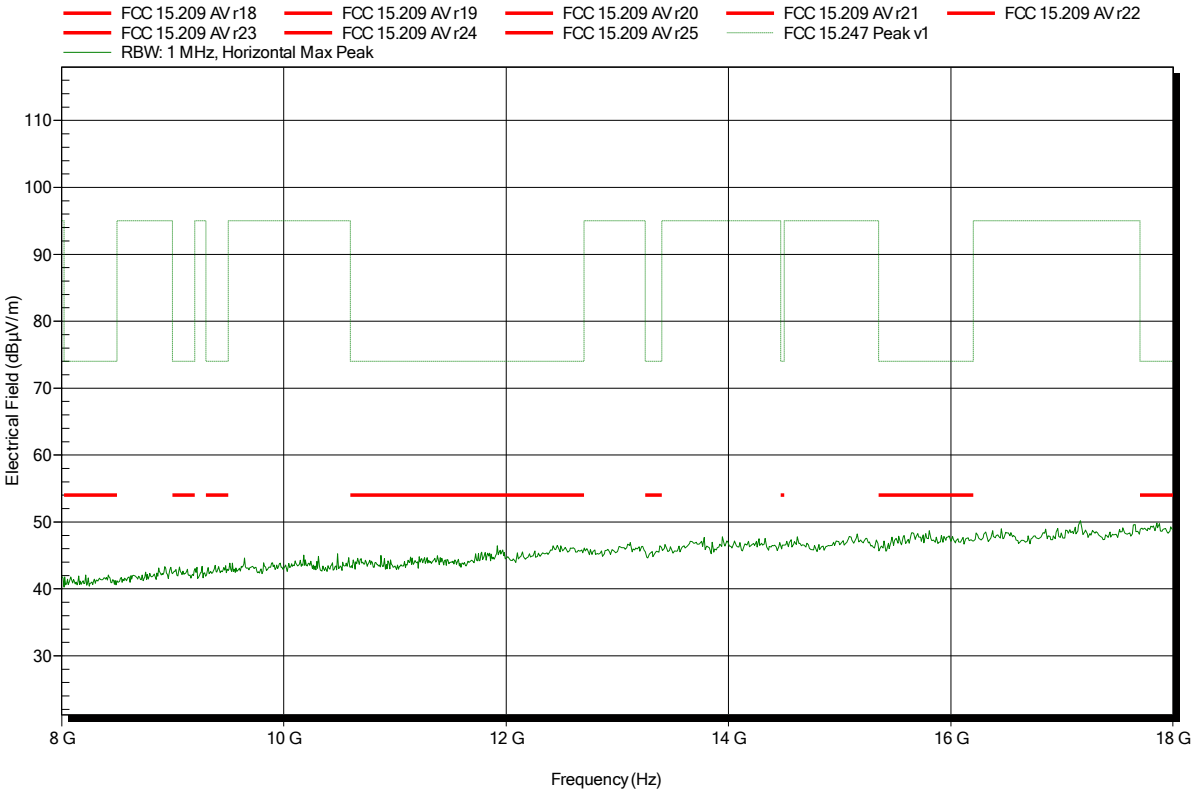

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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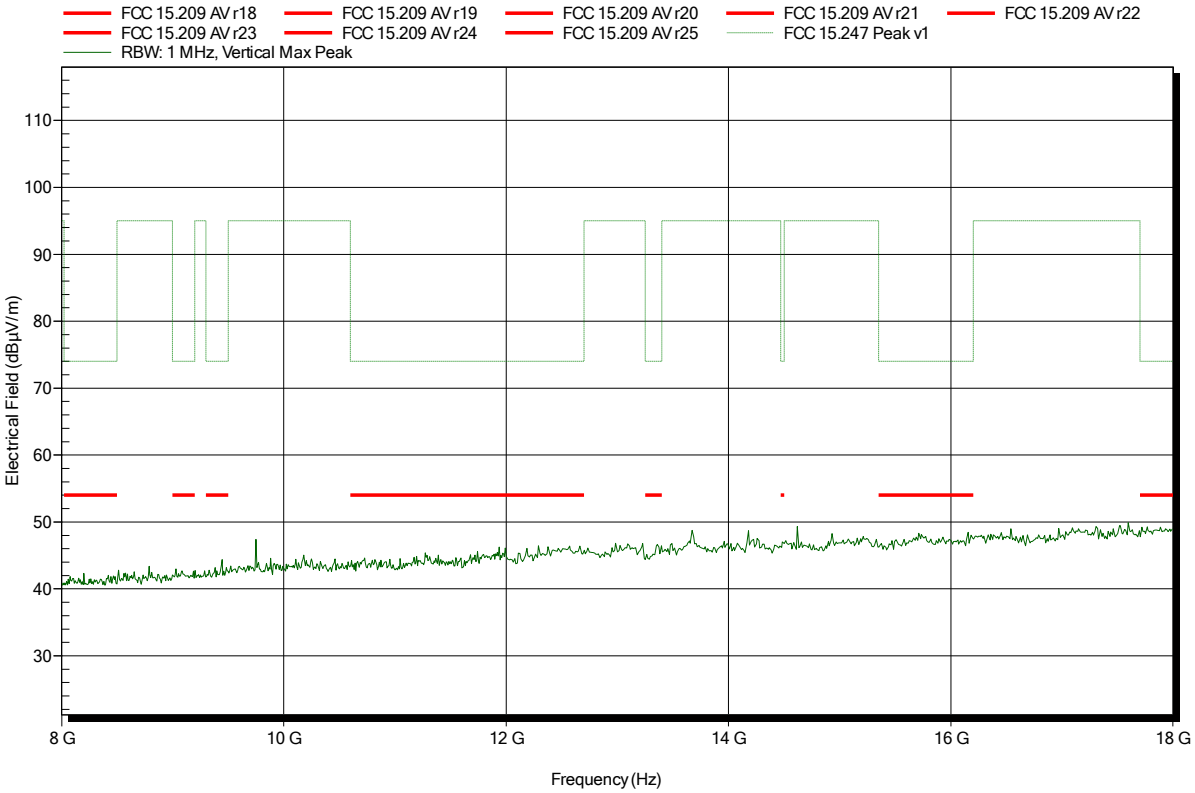

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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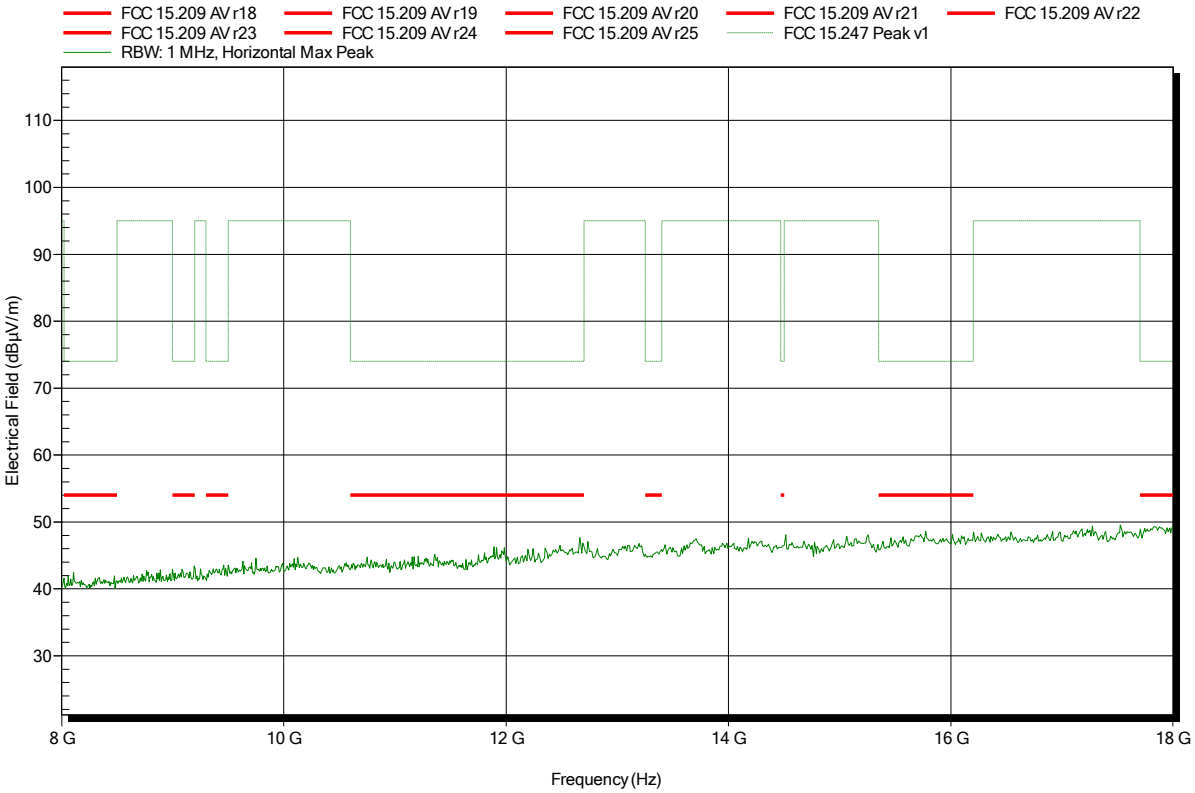

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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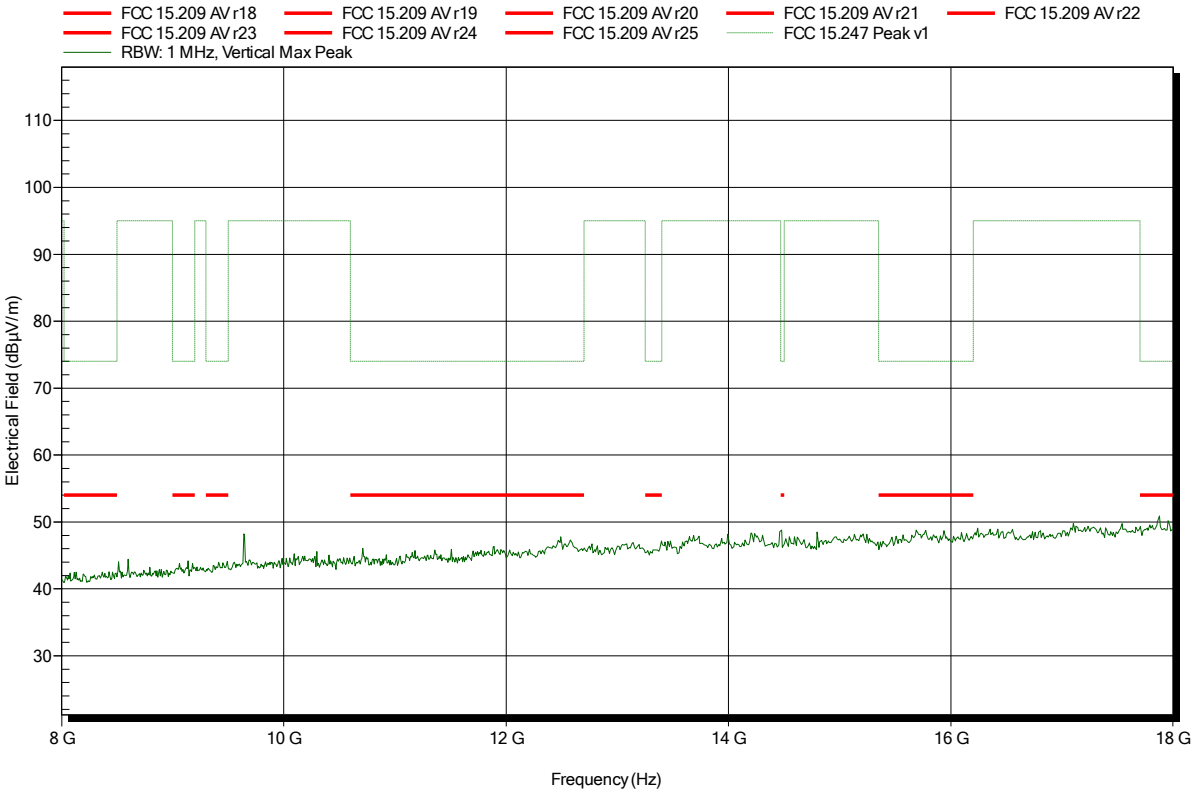

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Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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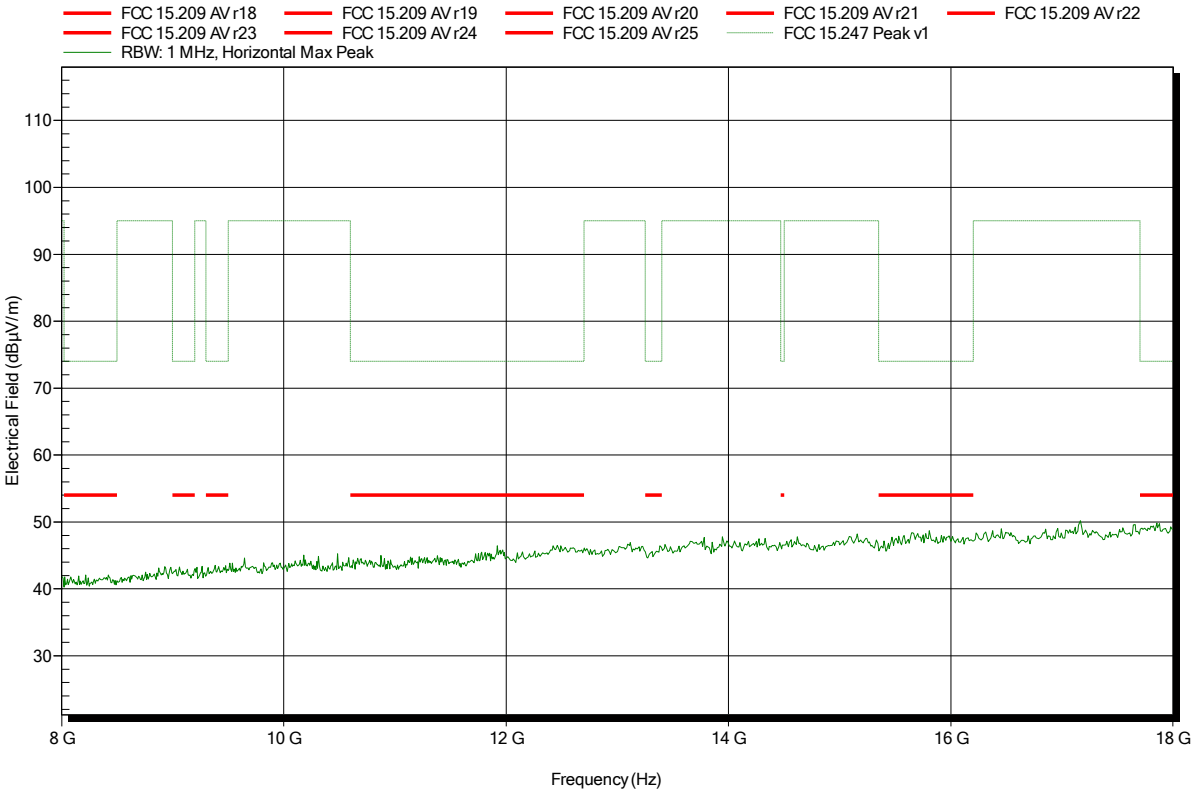

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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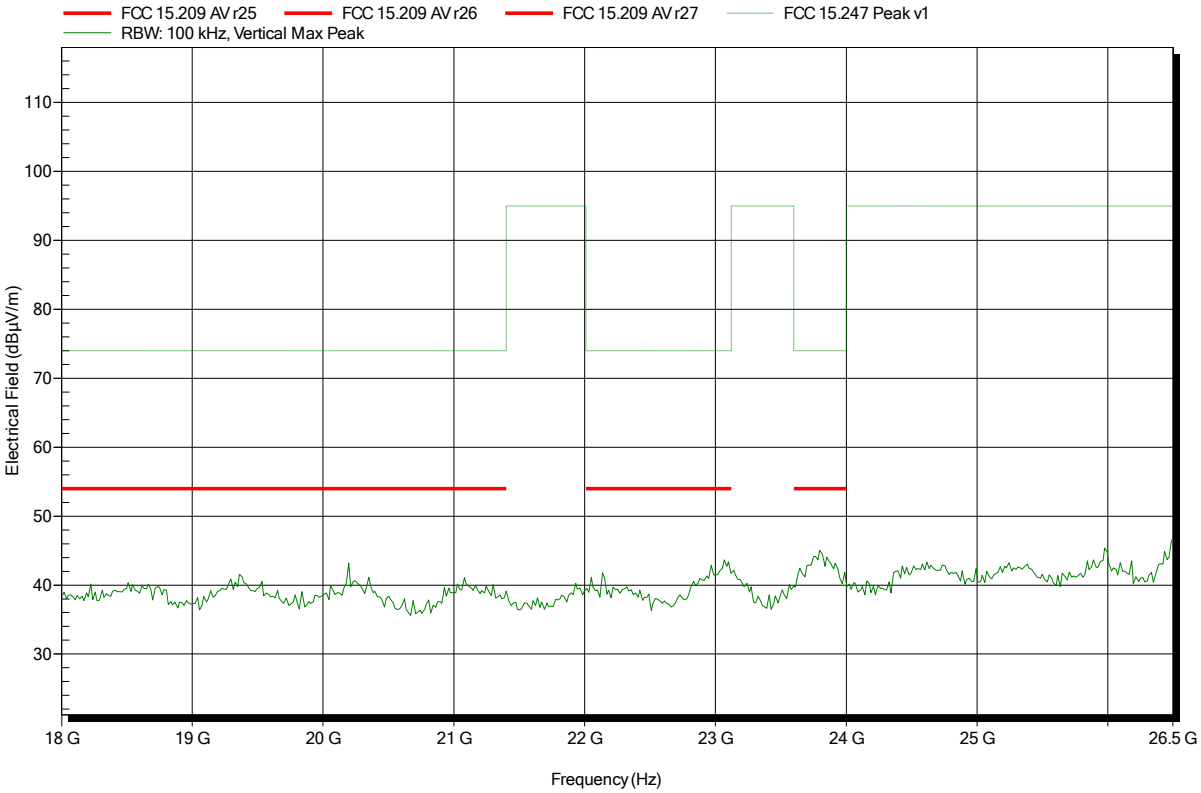

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Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 1; 2412 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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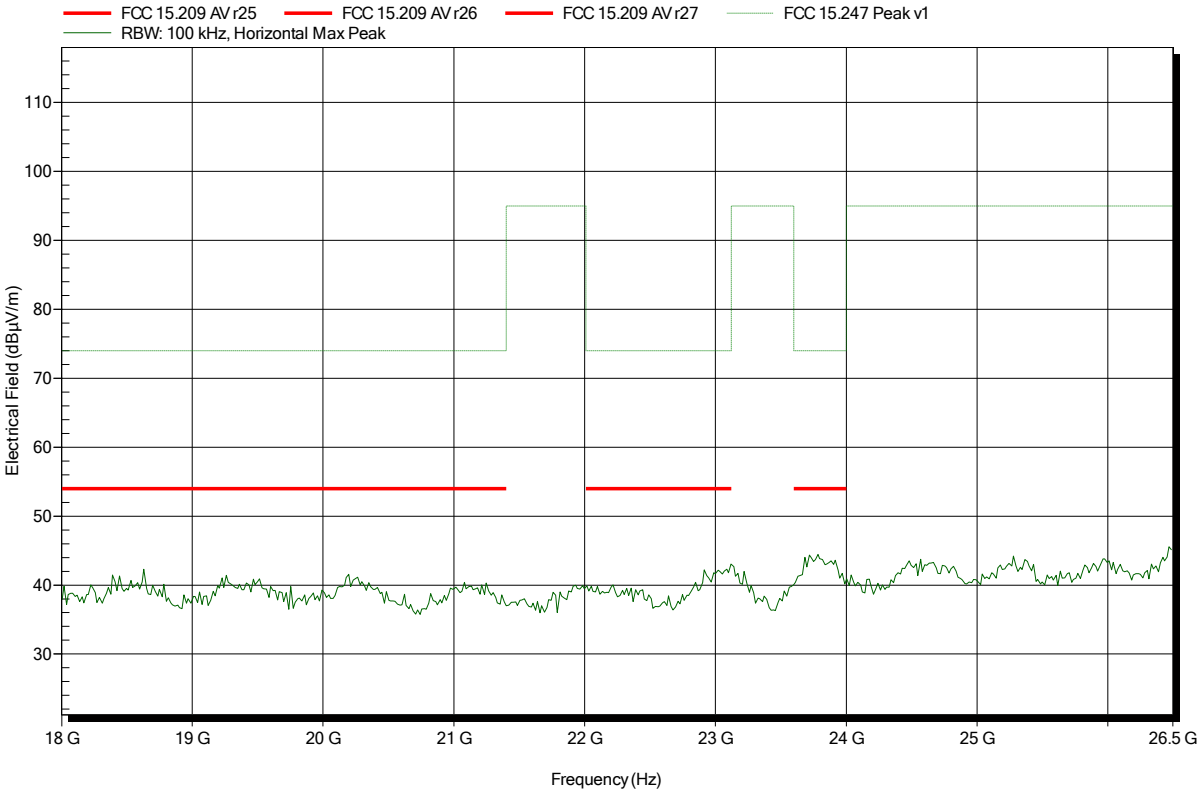

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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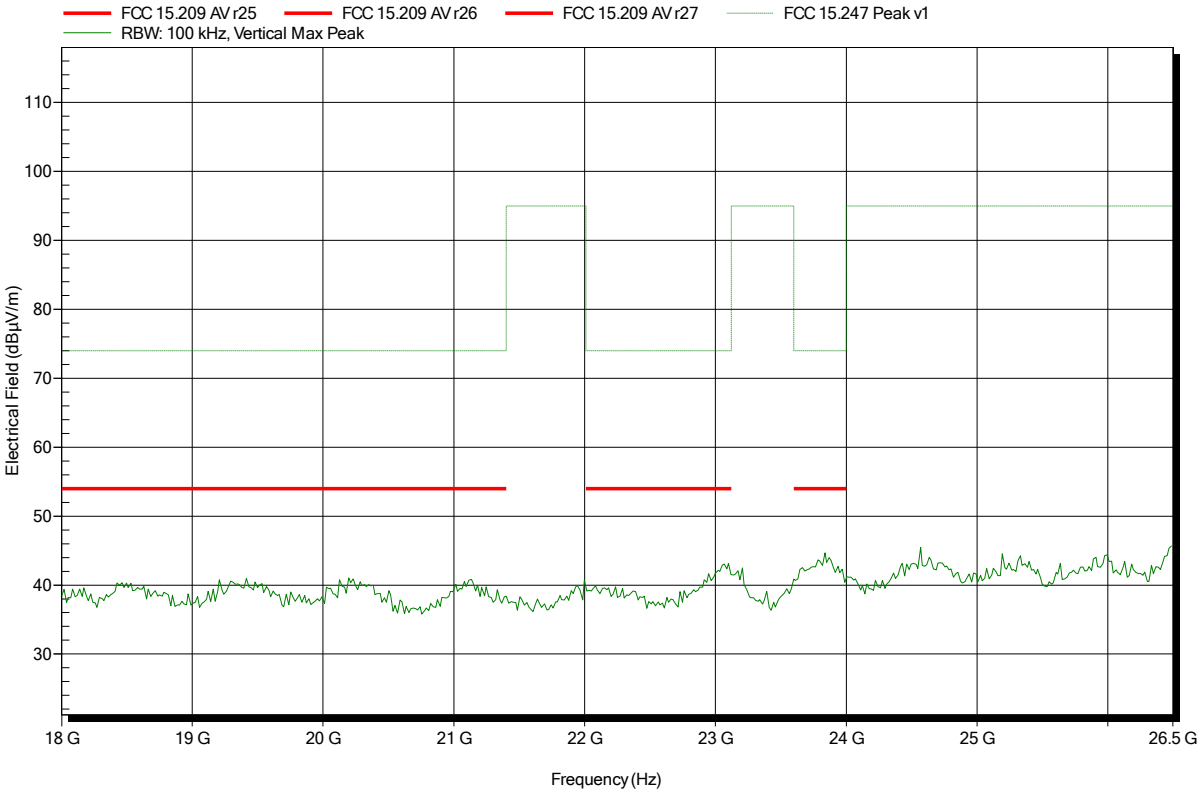

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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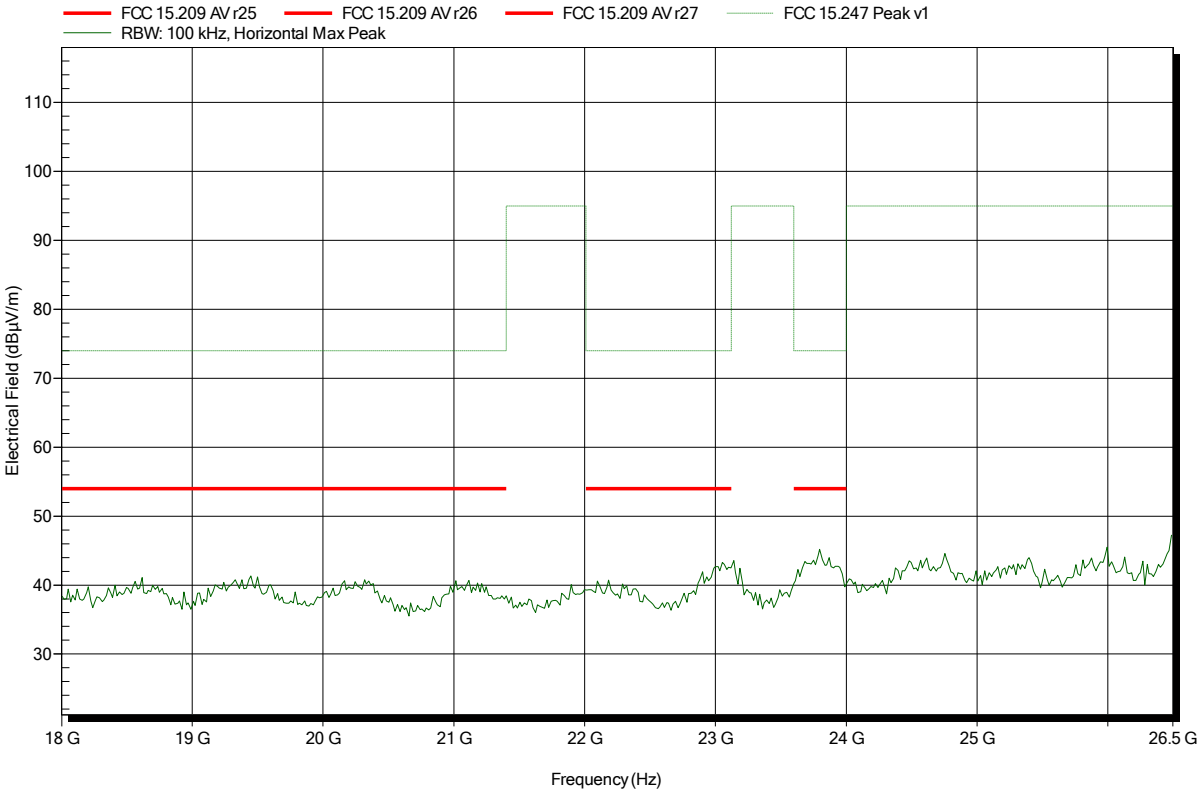

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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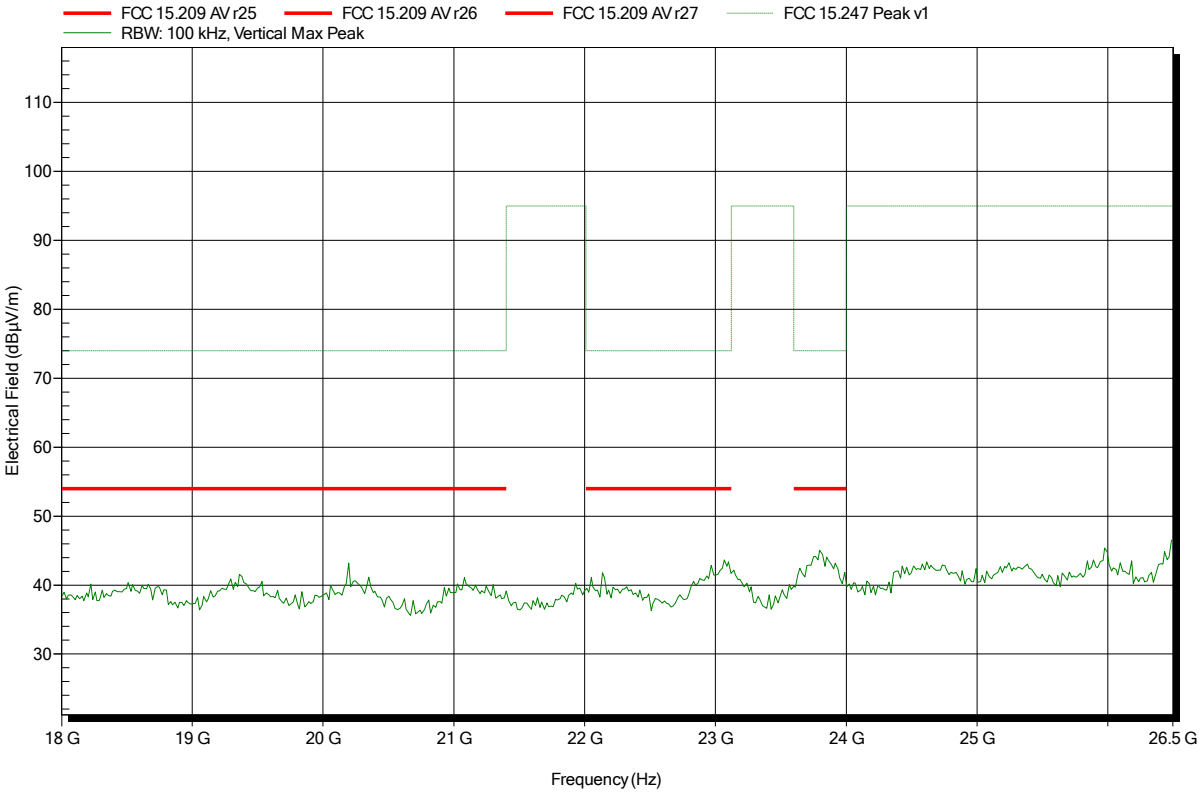

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 11; 2462 MHz; TX-Testmode; HT20 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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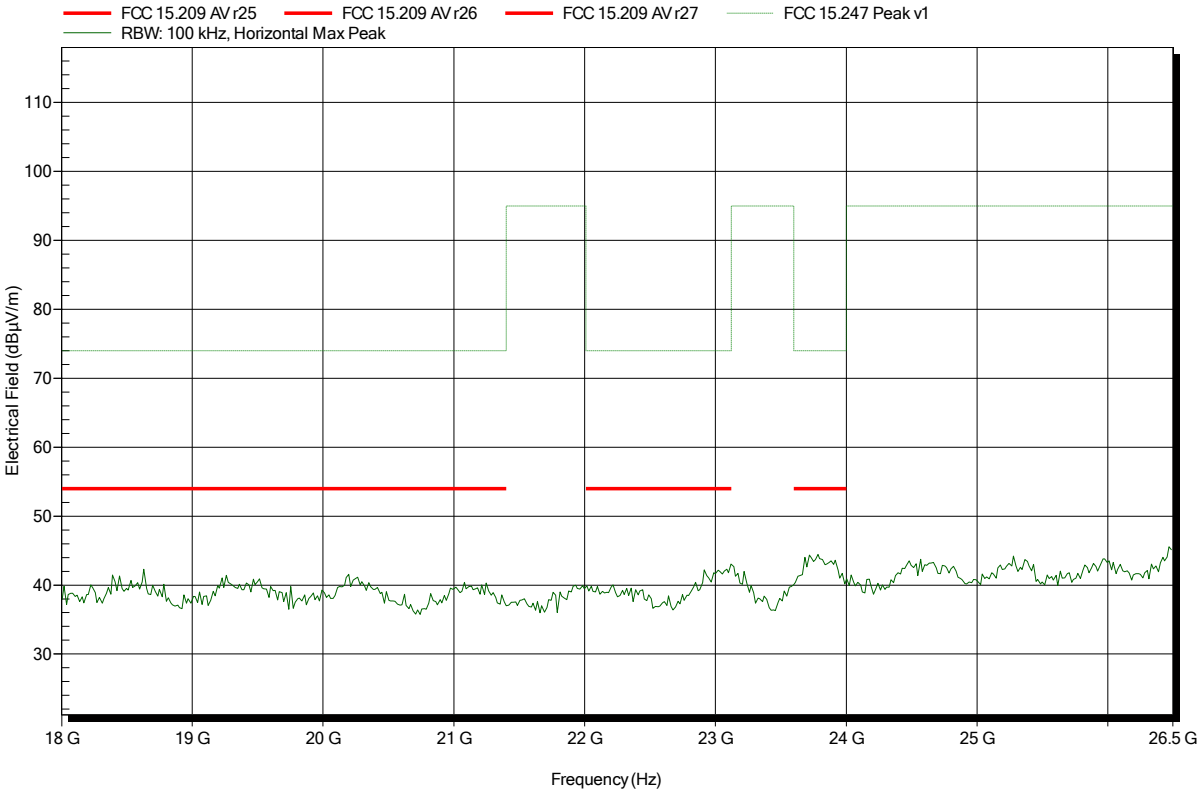

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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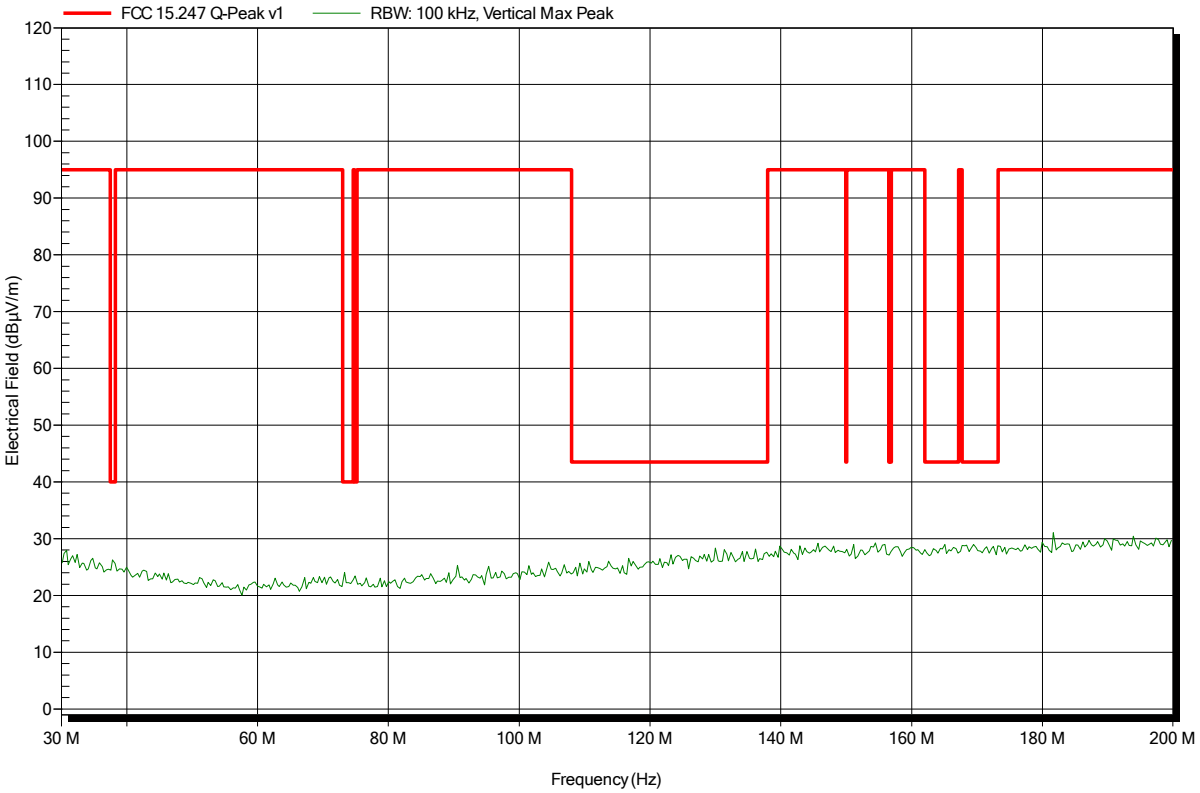

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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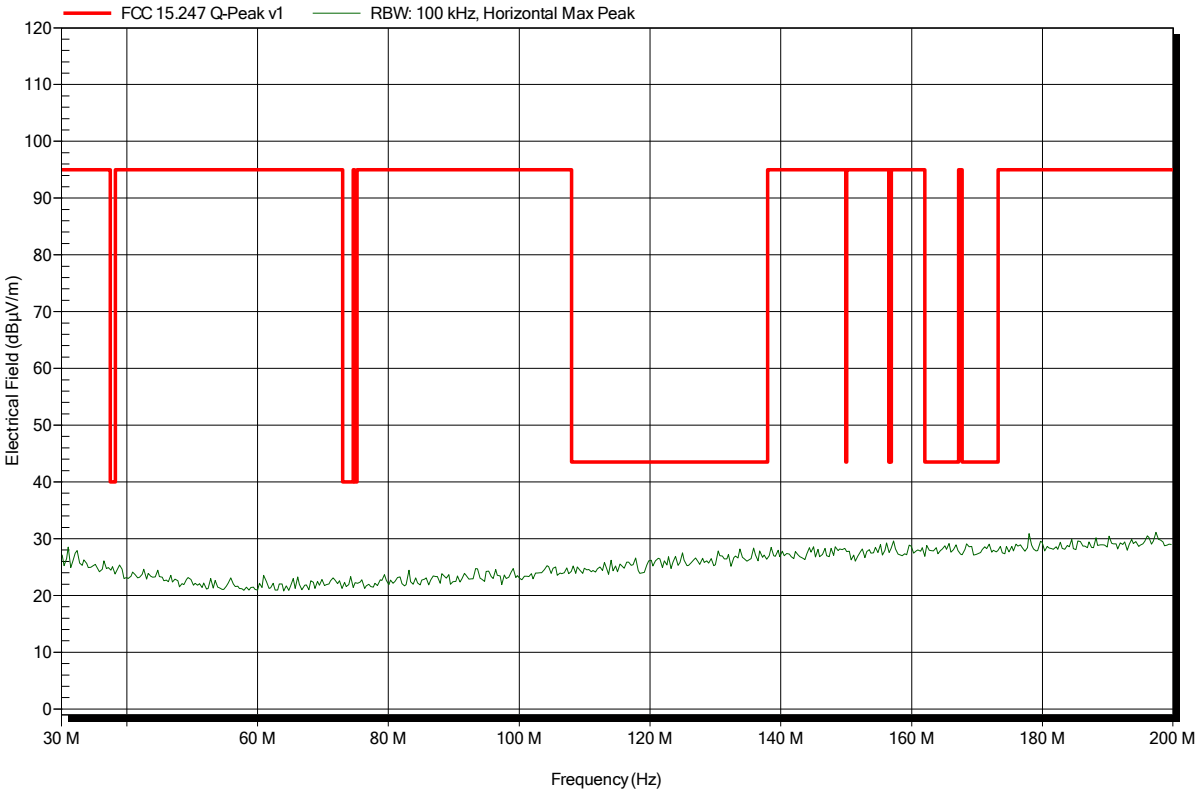

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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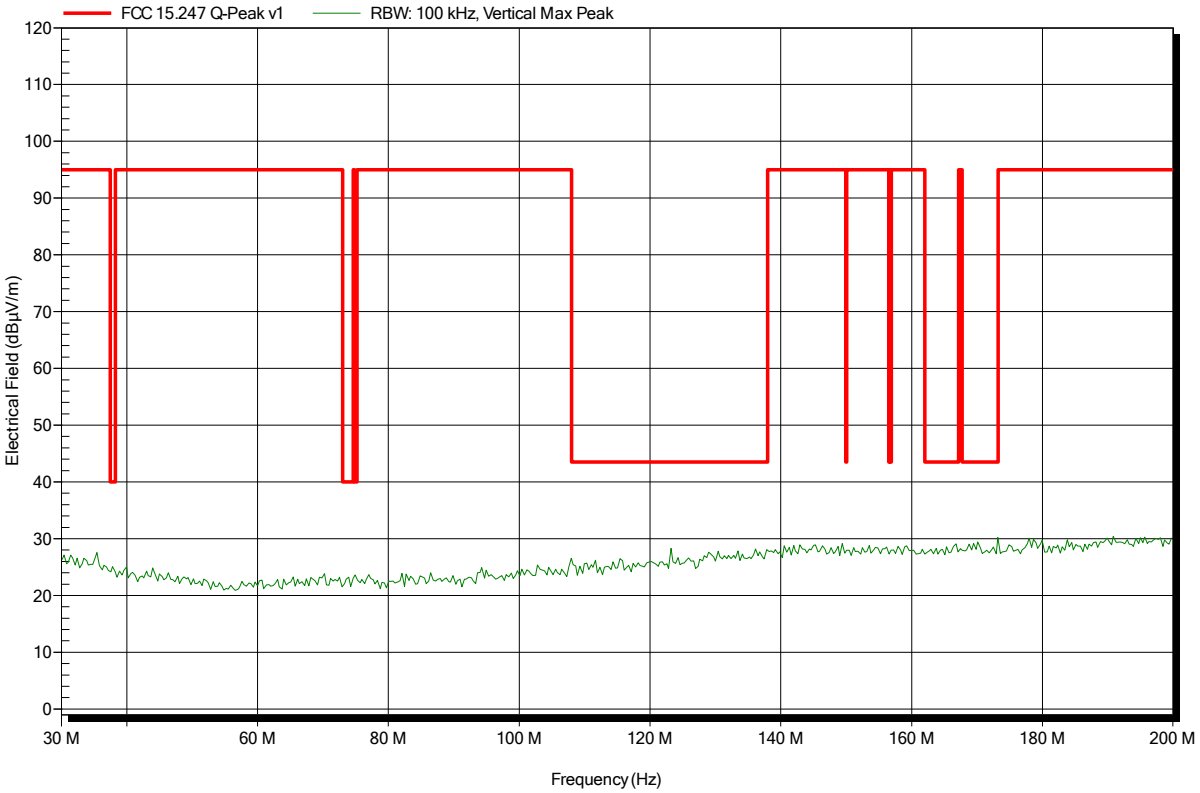

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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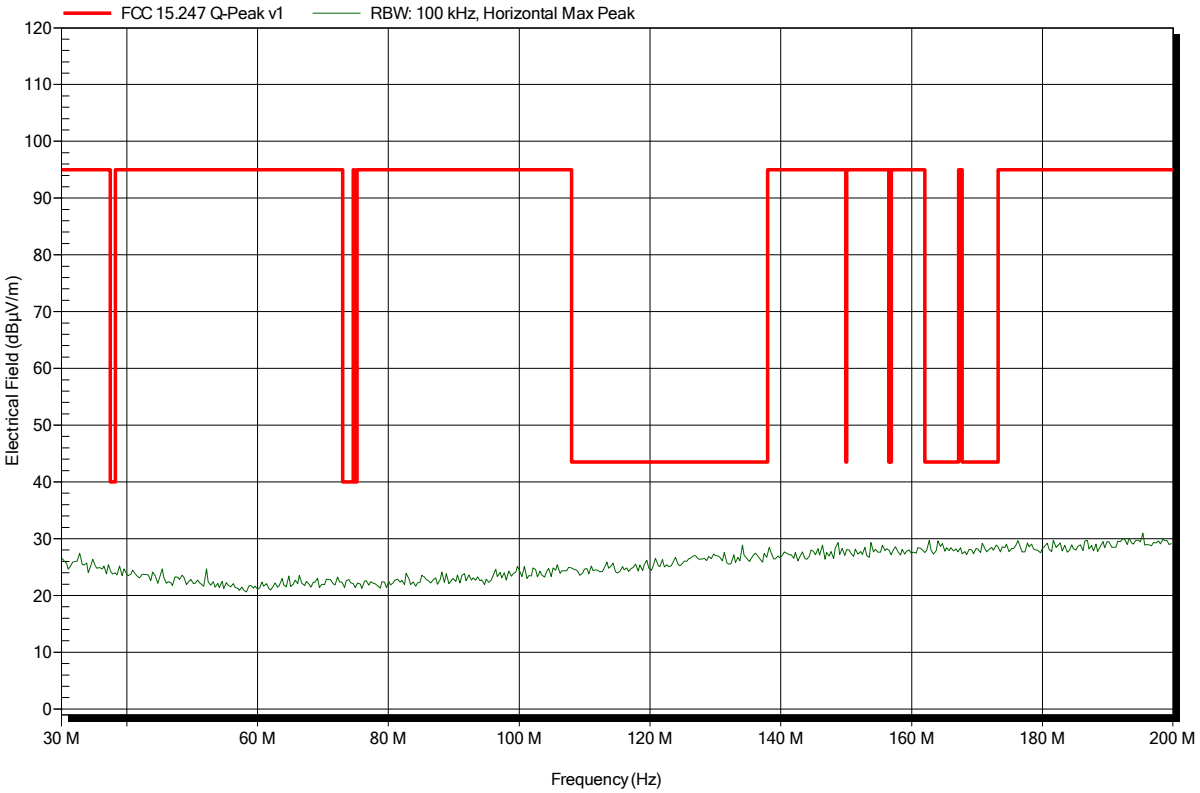

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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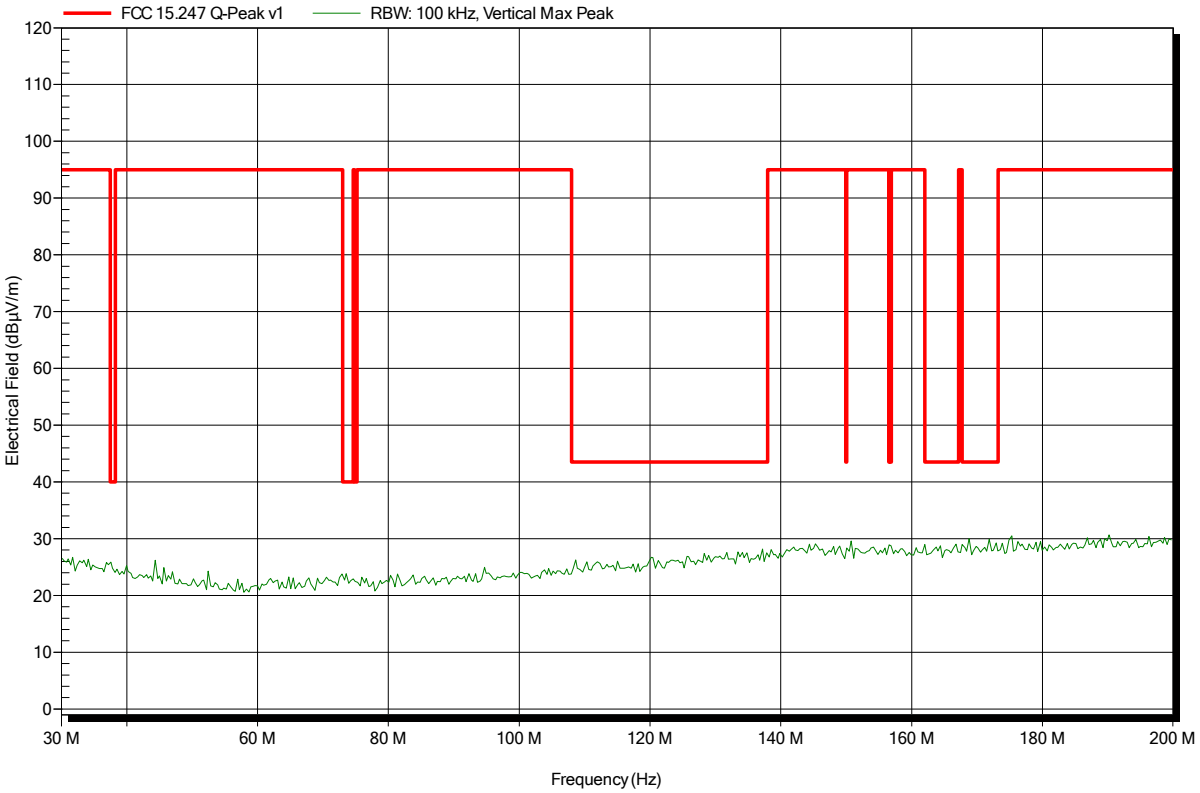

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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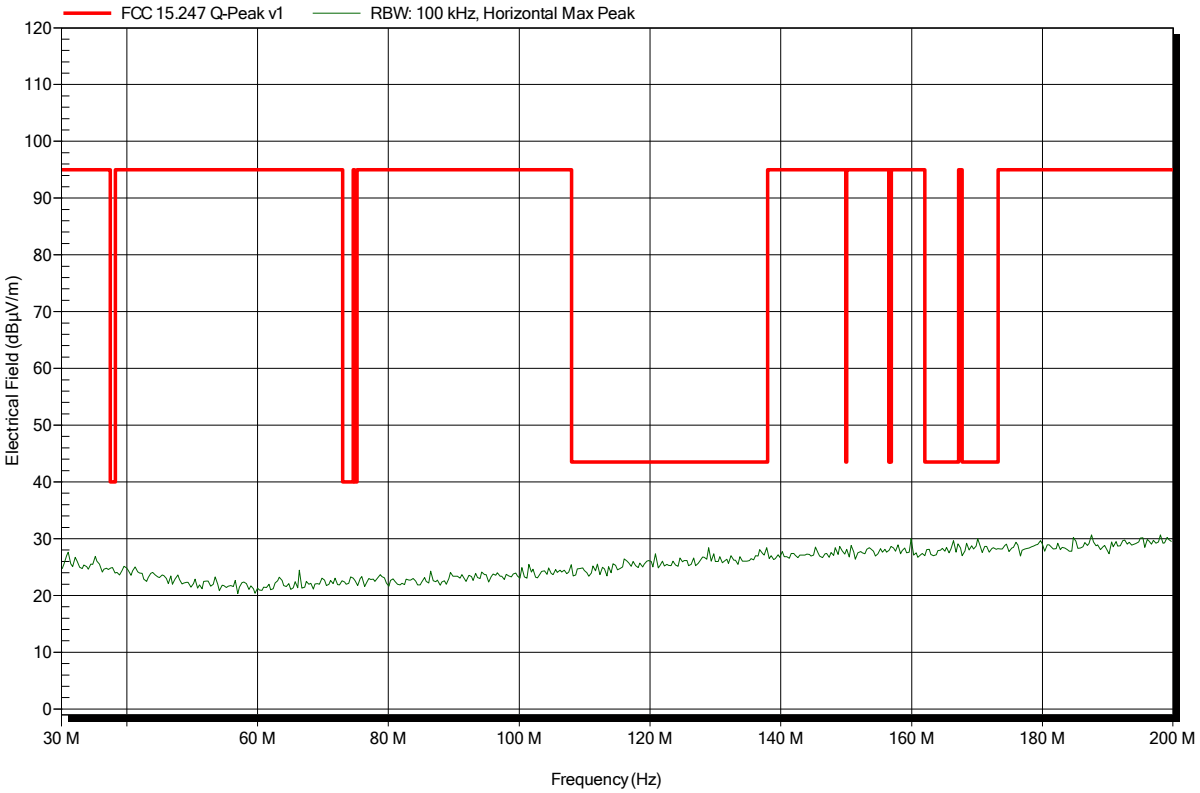

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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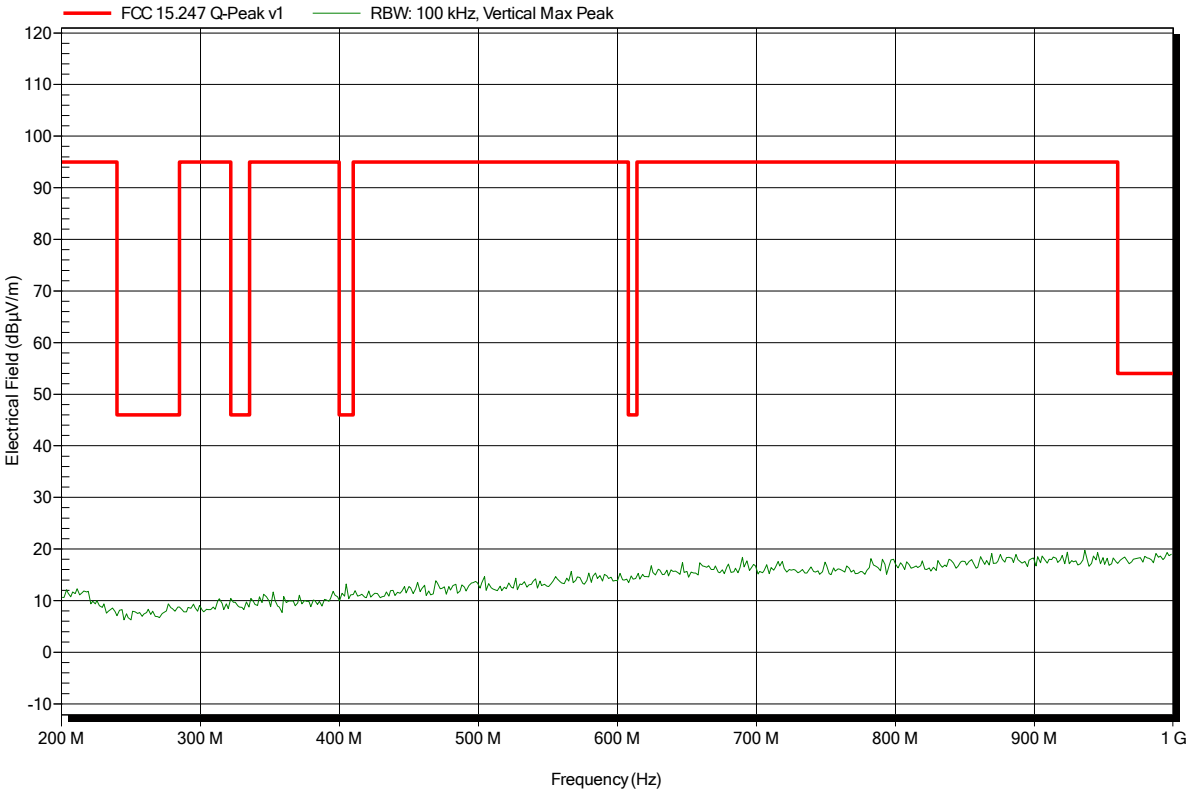

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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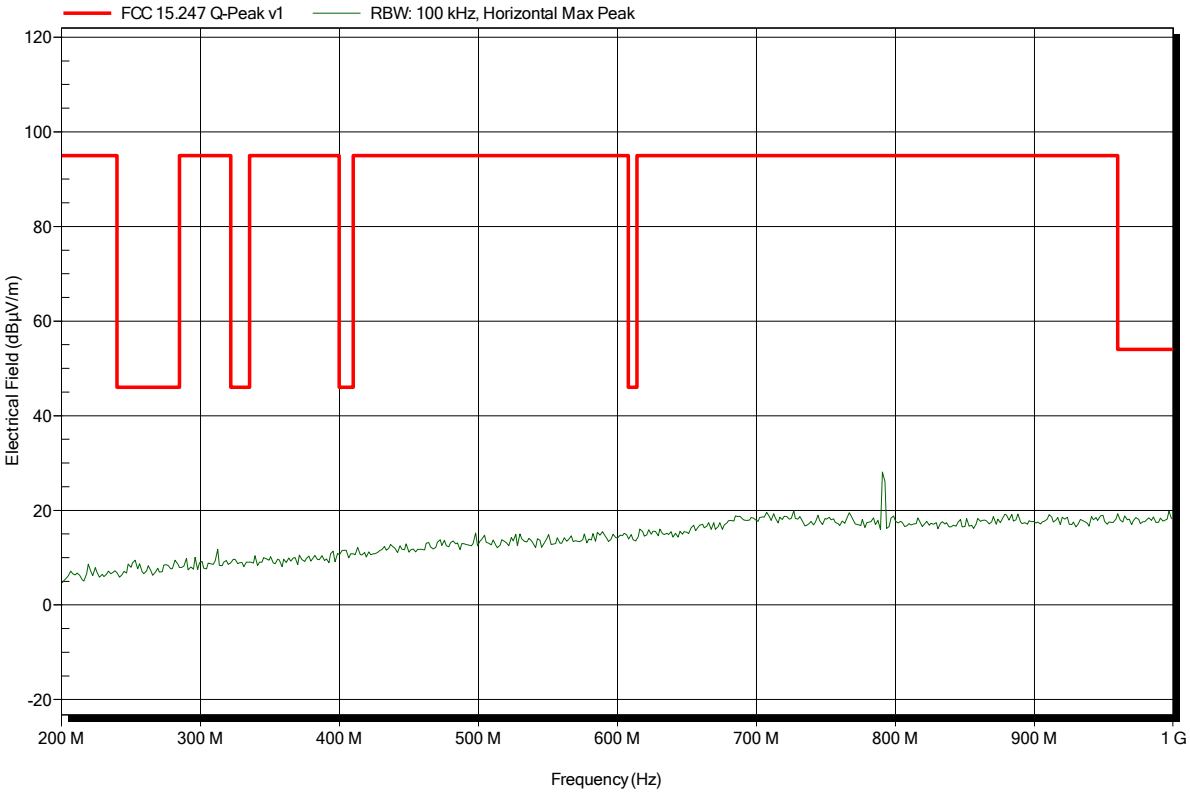

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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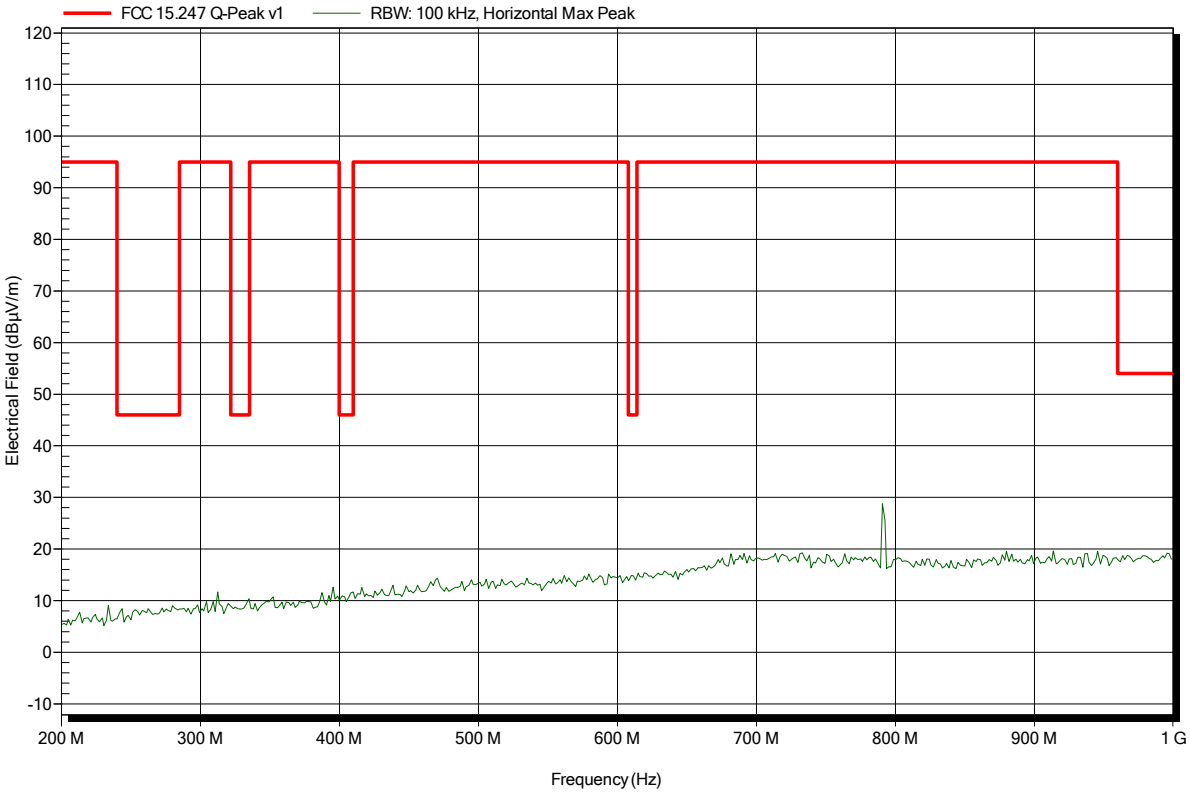

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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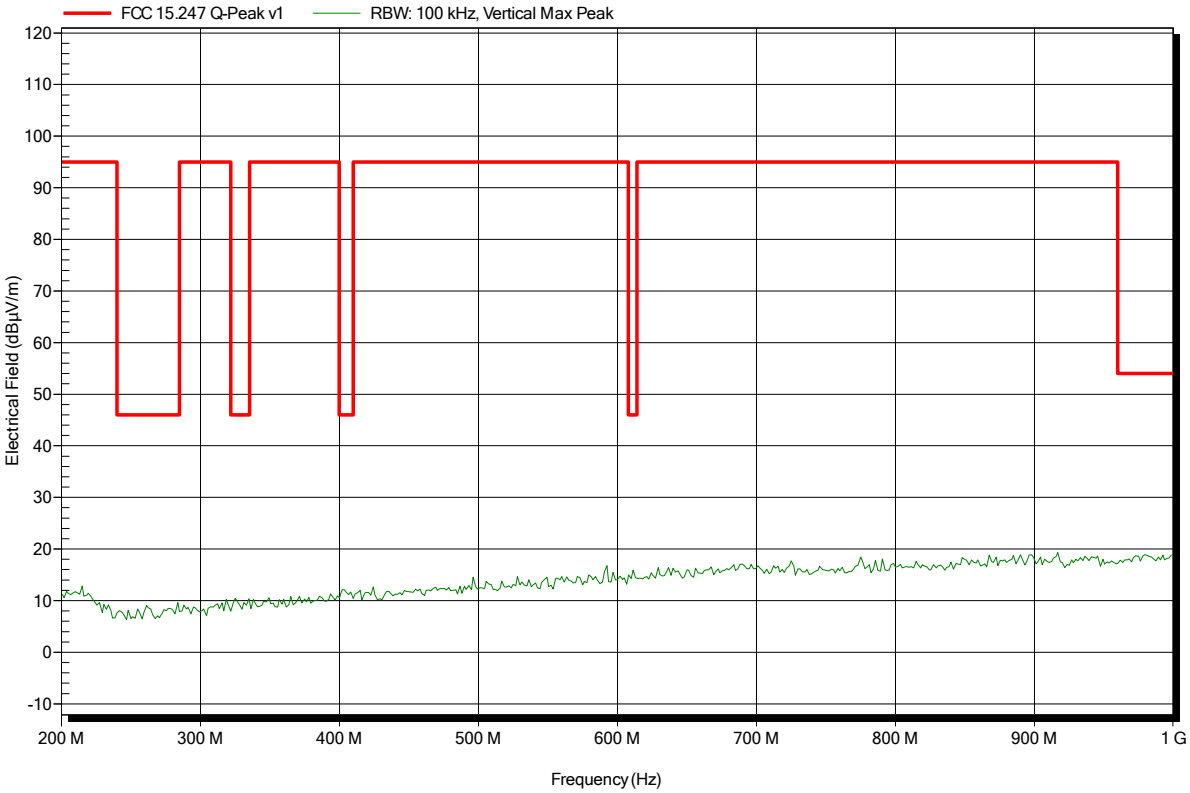

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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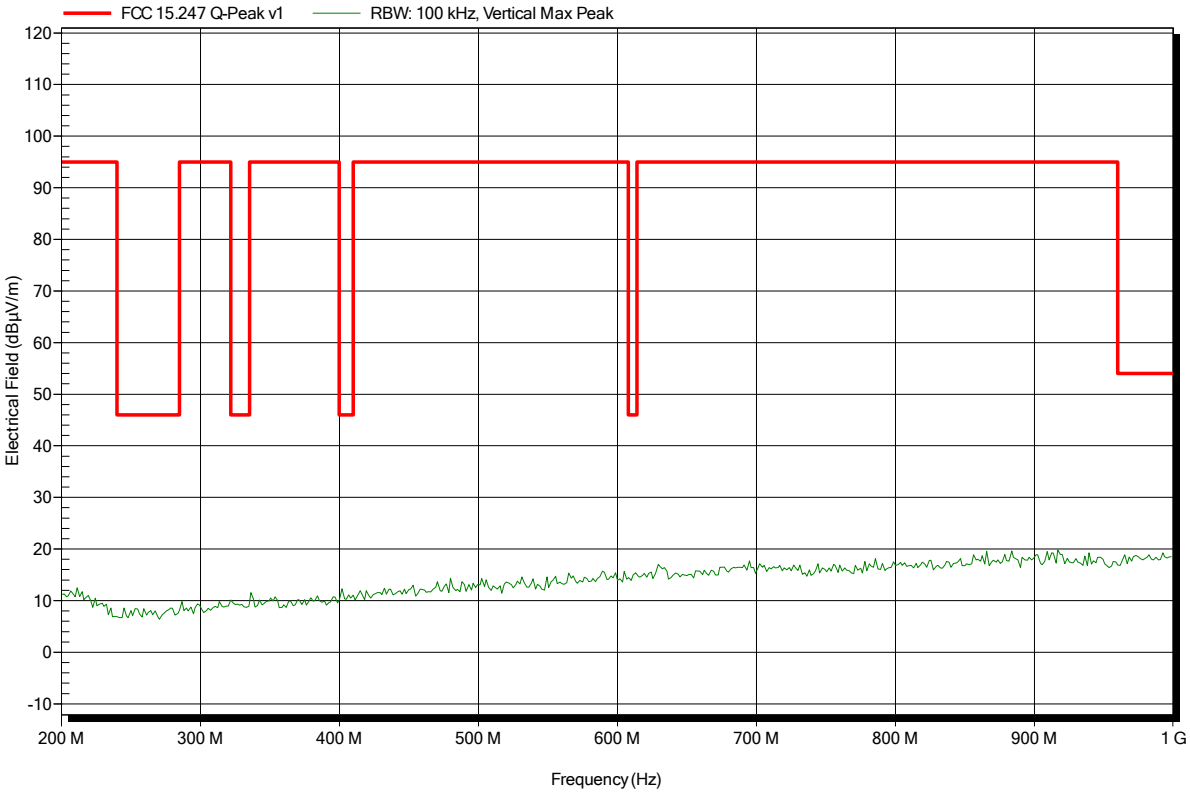

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-21
Note:	EUT horizontal

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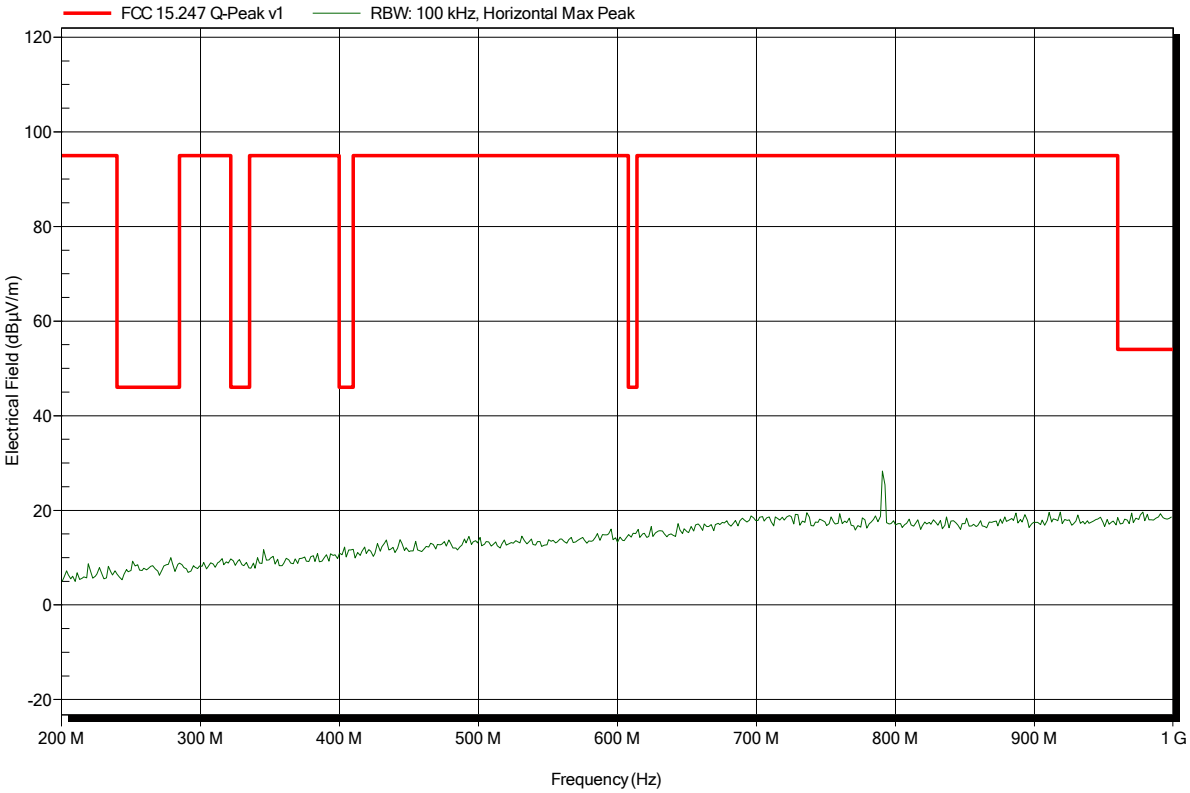

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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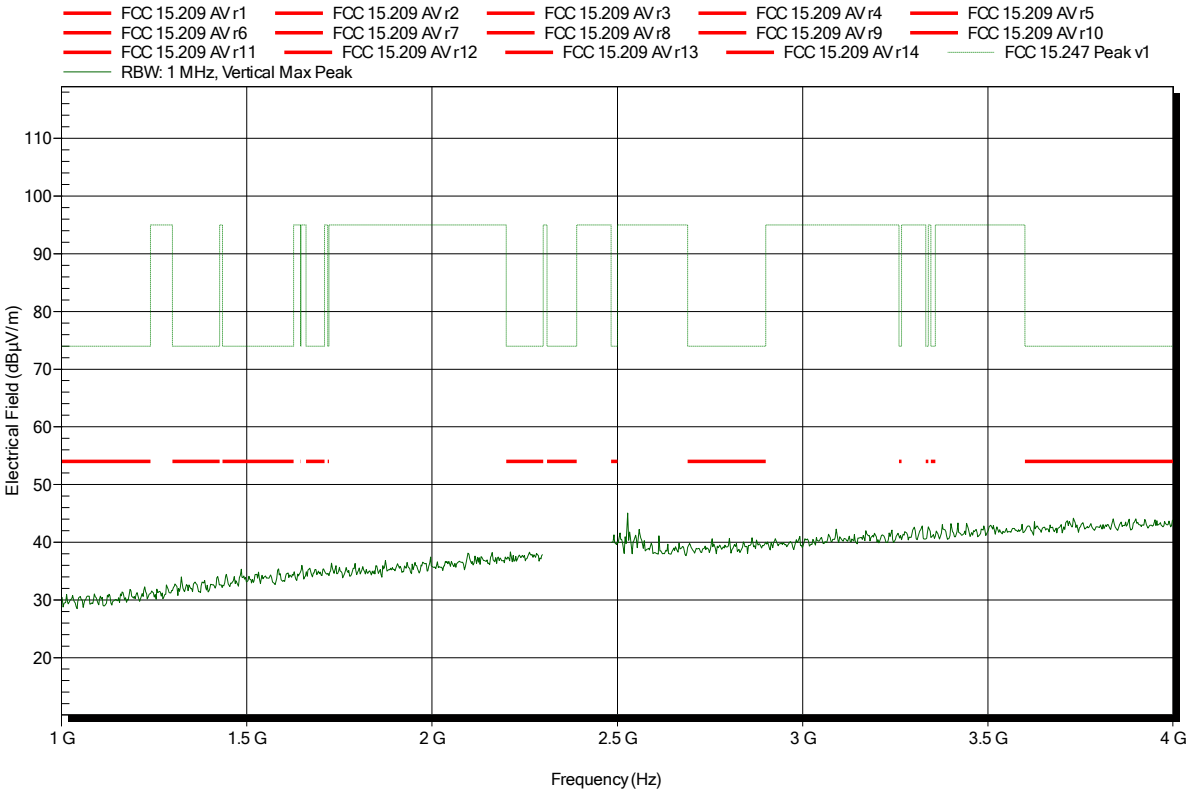

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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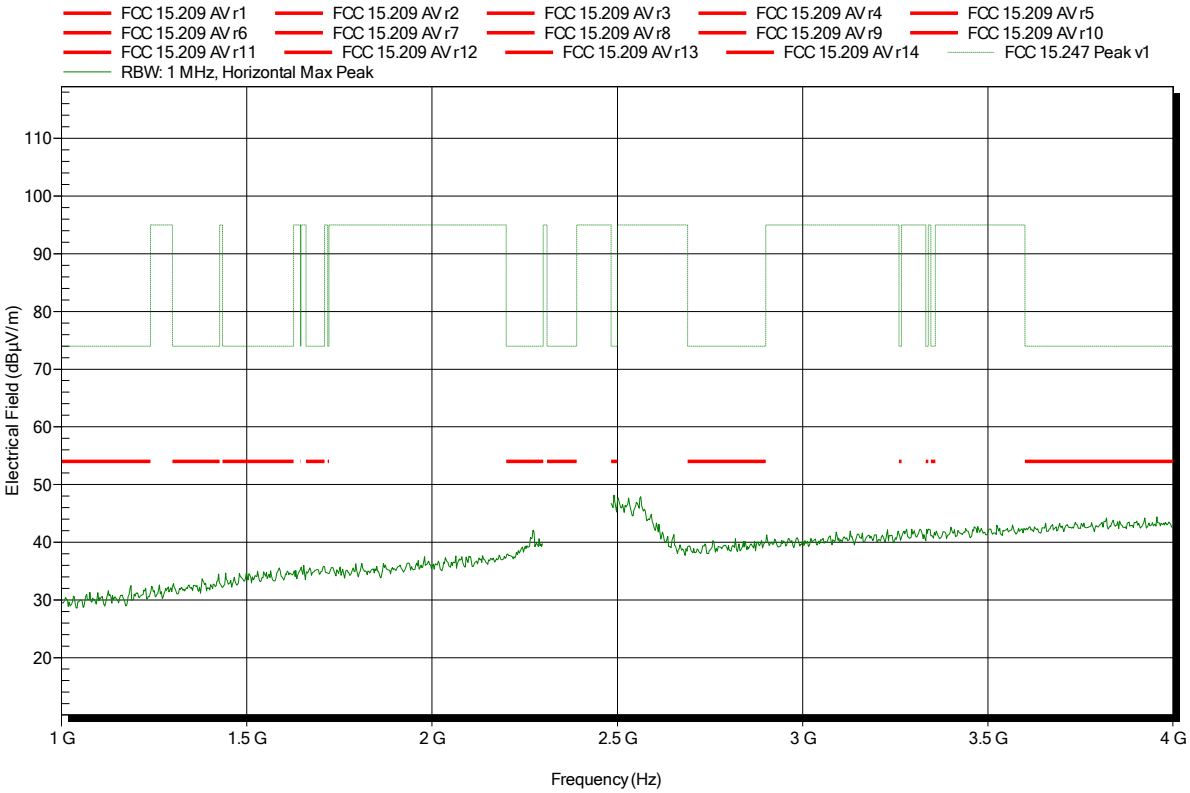

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; lower bandedge

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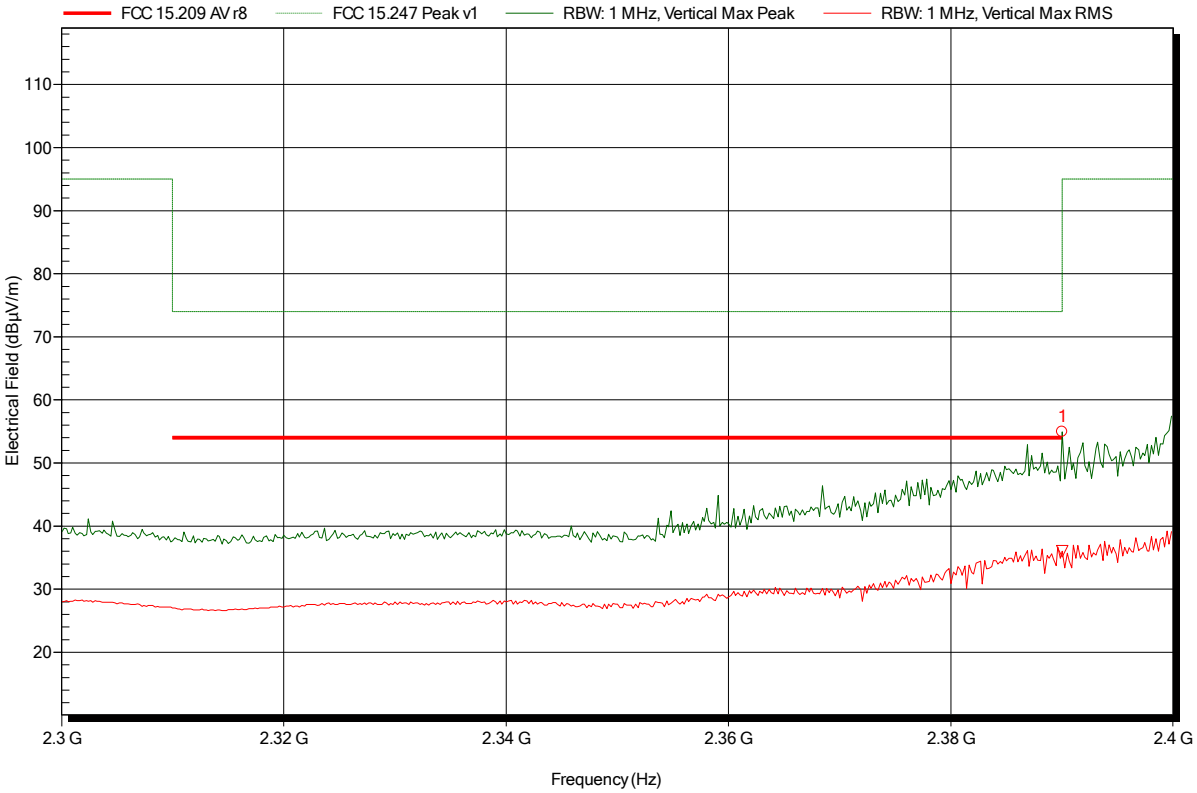

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.39 GHz	54.95 dBµV/m	74 dBµV/m	-19.05 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.39 GHz	36.04 dBµV/m	54 dBµV/m	-17.96 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; lower bandedge

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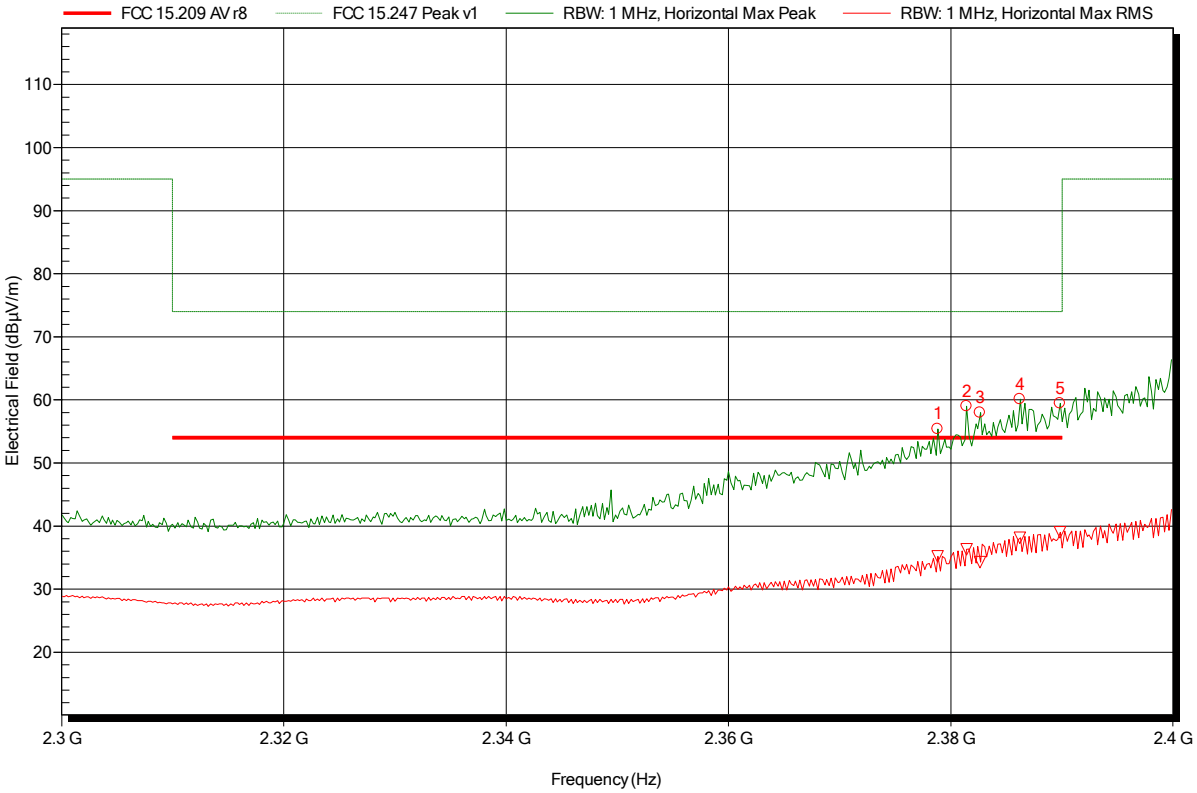

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.379 GHz	55.38 dBµV/m	74 dBµV/m	-18.62 dB	Pass
2.381 GHz	58.99 dBµV/m	74 dBµV/m	-15.01 dB	Pass
2.383 GHz	58 dBµV/m	74 dBµV/m	-16 dB	Pass
2.386 GHz	60.1 dBµV/m	74 dBµV/m	-13.9 dB	Pass
2.39 GHz	59.49 dBµV/m	74 dBµV/m	-14.51 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.379 GHz	35.2 dBµV/m	54 dBµV/m	-18.8 dB	Pass
2.381 GHz	36.31 dBµV/m	54 dBµV/m	-17.69 dB	Pass
2.383 GHz	34.27 dBµV/m	54 dBµV/m	-19.73 dB	Pass
2.386 GHz	38.13 dBµV/m	54 dBµV/m	-15.87 dB	Pass
2.39 GHz	39.02 dBµV/m	54 dBµV/m	-14.98 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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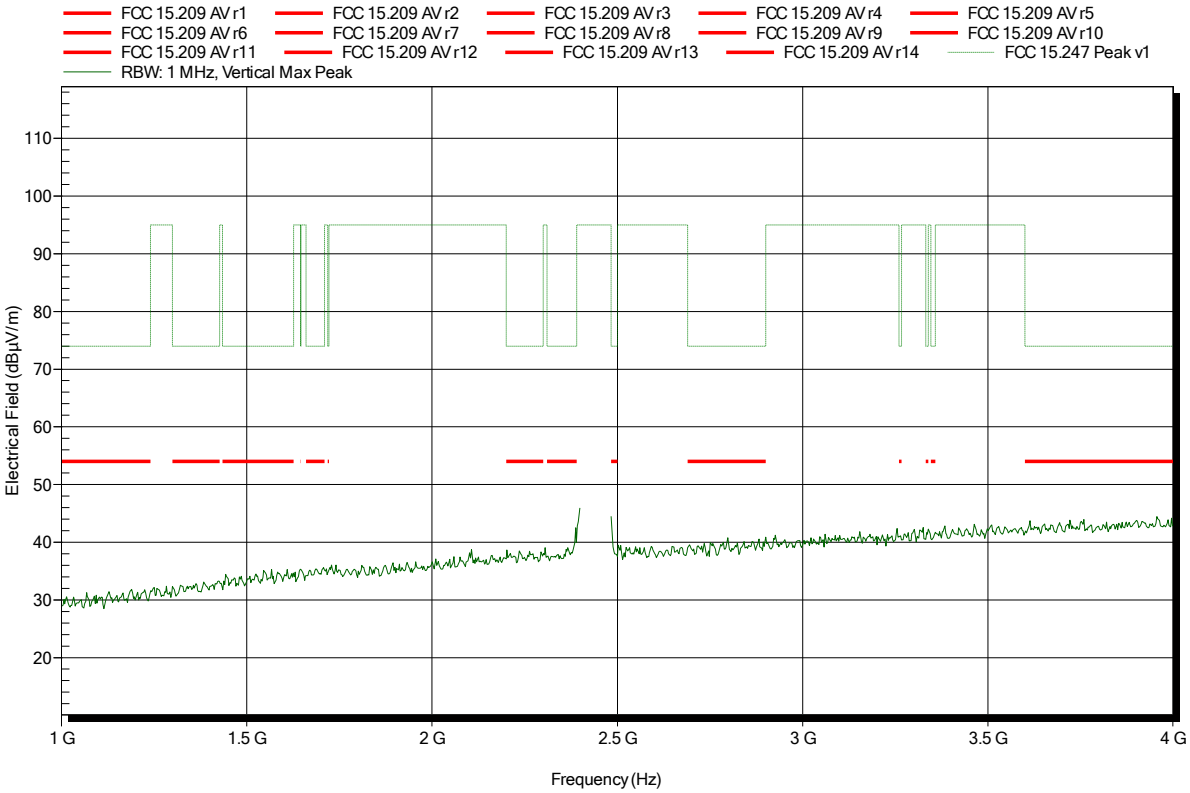

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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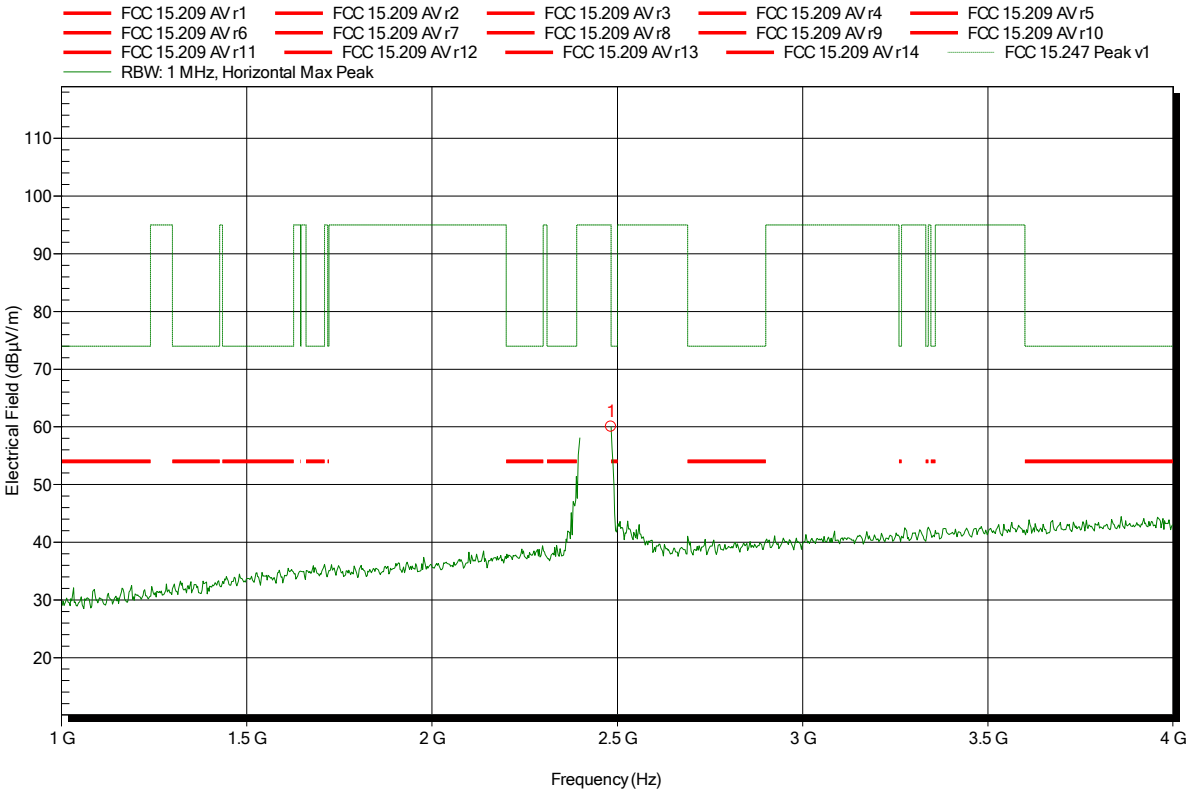

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	60.03 dBµV/m	74 dBµV/m	-13.97 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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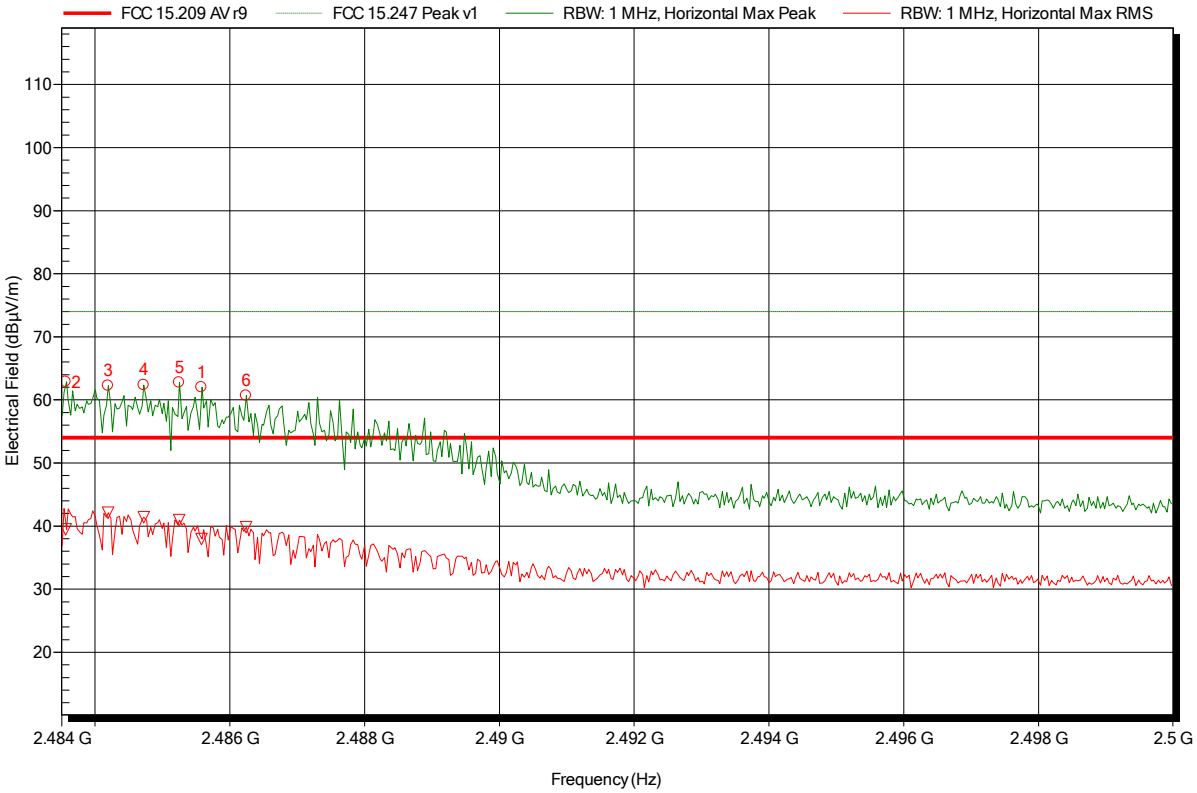

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	62.88 dBµV/m	74 dBµV/m	-11.12 dB	Pass
2.484 GHz	62.26 dBµV/m	74 dBµV/m	-11.74 dB	Pass
2.485 GHz	62.39 dBµV/m	74 dBµV/m	-11.61 dB	Pass
2.485 GHz	62.77 dBµV/m	74 dBµV/m	-11.23 dB	Pass
2.486 GHz	61.99 dBµV/m	74 dBµV/m	-12.01 dB	Pass
2.486 GHz	60.67 dBµV/m	74 dBµV/m	-13.33 dB	Pass

Frequency	RMS
2.484 GHz	39.45 dBµV/m
2.484 GHz	42.1 dBµV/m
2.485 GHz	41.42 dBµV/m
2.485 GHz	40.94 dBµV/m
2.486 GHz	37.96 dBµV/m
2.486 GHz	39.85 dBµV/m

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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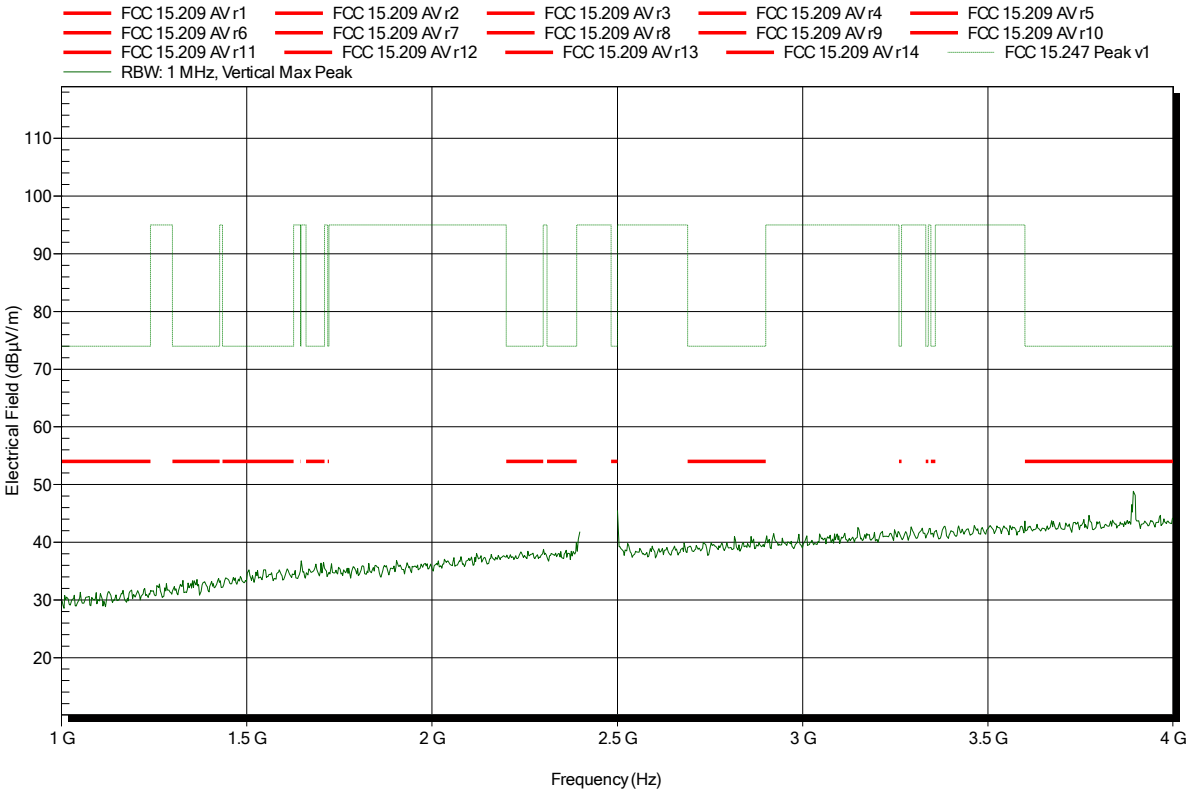

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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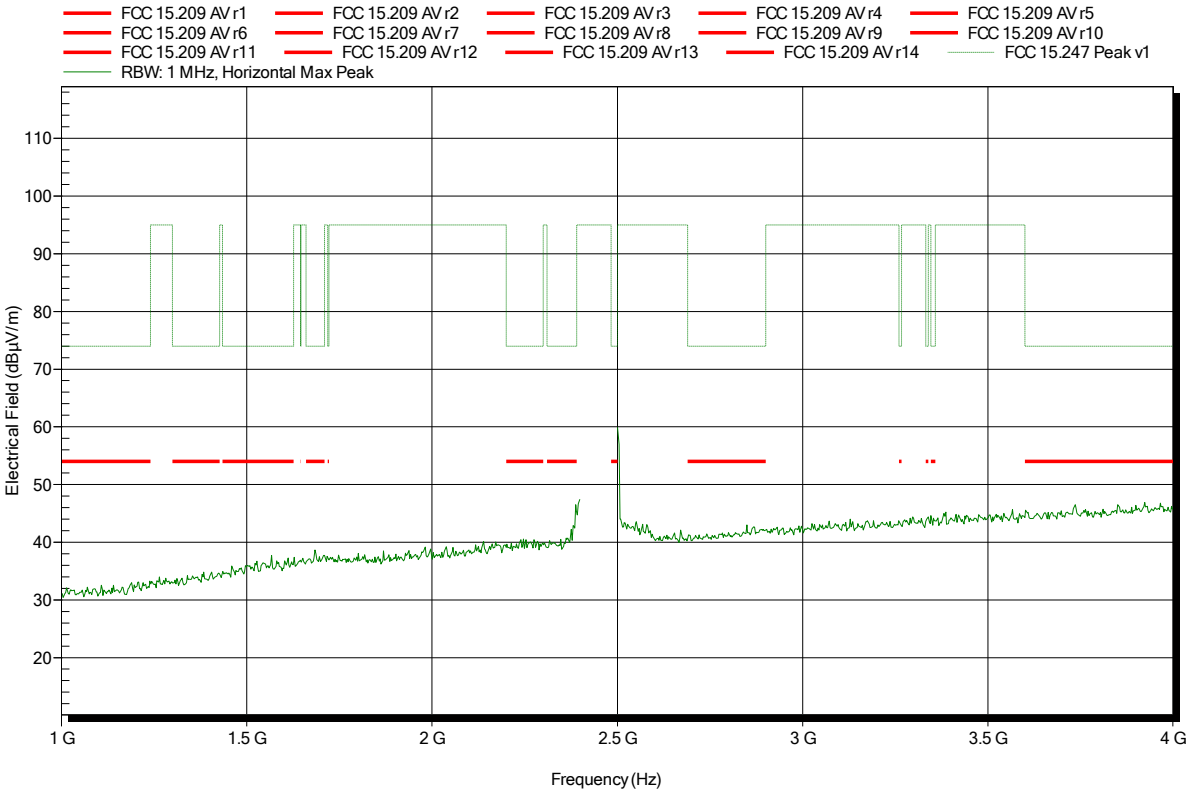

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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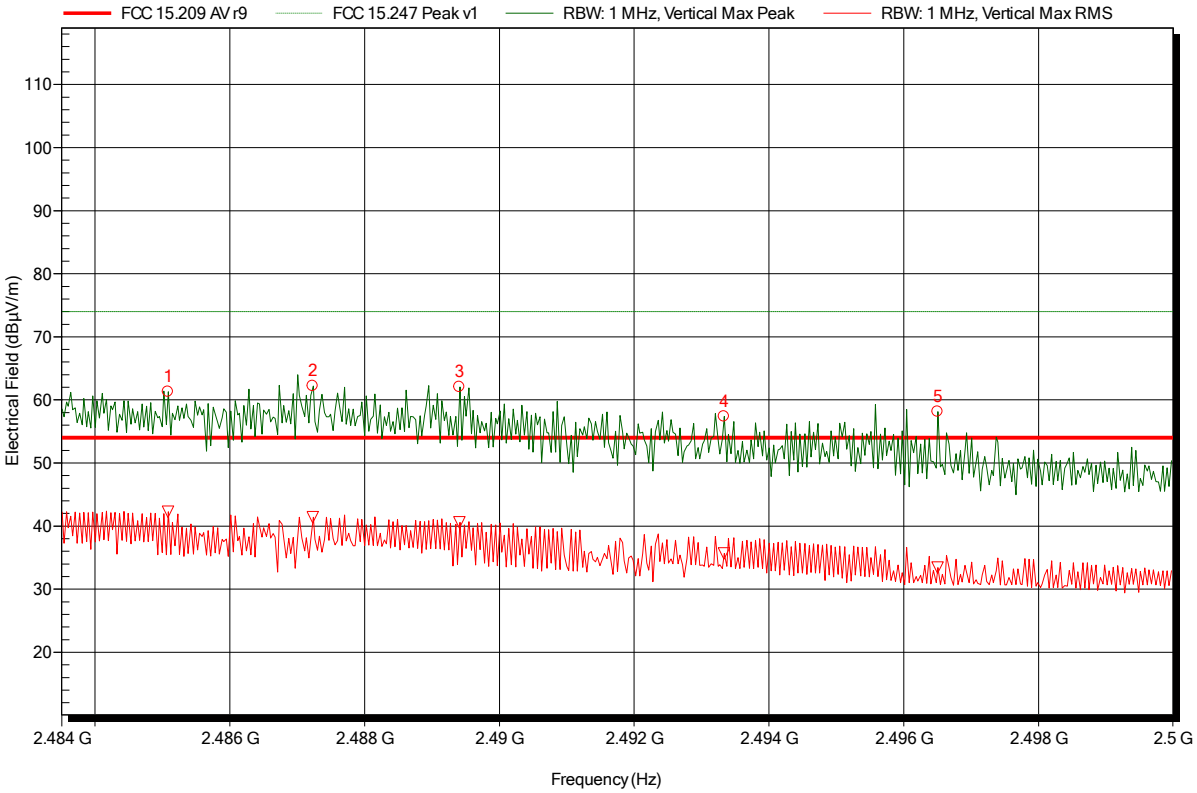

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.485 GHz	61.32 dBµV/m	74 dBµV/m	-12.68 dB	Pass
2.487 GHz	62.22 dBµV/m	74 dBµV/m	-11.78 dB	Pass
2.489 GHz	62.05 dBµV/m	74 dBµV/m	-11.95 dB	Pass
2.493 GHz	57.36 dBµV/m	74 dBµV/m	-16.64 dB	Pass
2.497 GHz	58.13 dBµV/m	74 dBµV/m	-15.87 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.485 GHz	42.27 dBµV/m	54 dBµV/m	-11.73 dB	Pass
2.487 GHz	41.42 dBµV/m	54 dBµV/m	-12.58 dB	Pass
2.489 GHz	40.61 dBµV/m	54 dBµV/m	-13.39 dB	Pass
2.493 GHz	35.67 dBµV/m	54 dBµV/m	-18.33 dB	Pass
2.497 GHz	33.42 dBµV/m	54 dBµV/m	-20.58 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal; higher bandedge

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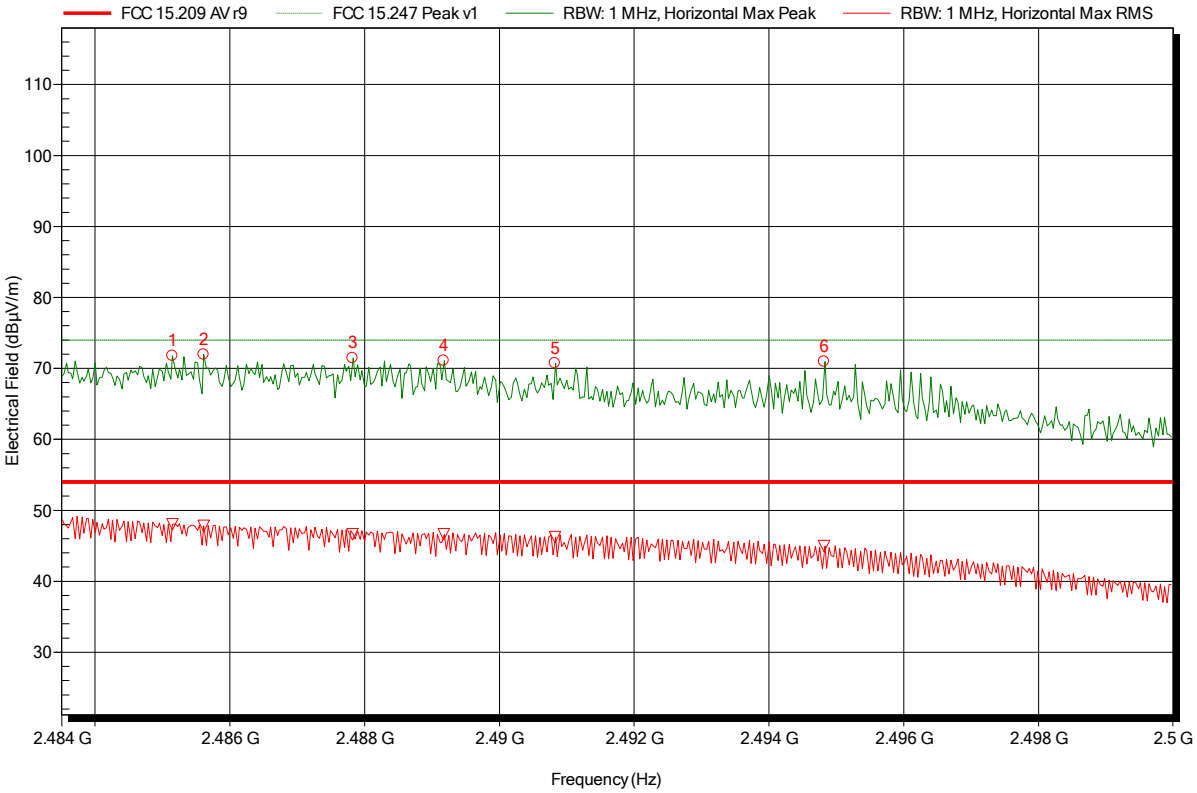

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.485 GHz	71.76 dBµV/m	74 dBµV/m	-2.24 dB	Pass
2.486 GHz	71.95 dBµV/m	74 dBµV/m	-2.05 dB	Pass
2.488 GHz	71.47 dBµV/m	74 dBµV/m	-2.53 dB	Pass
2.489 GHz	71.07 dBµV/m	74 dBµV/m	-2.93 dB	Pass
2.491 GHz	70.72 dBµV/m	74 dBµV/m	-3.28 dB	Pass
2.495 GHz	70.96 dBµV/m	74 dBµV/m	-3.04 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.485 GHz	48.04 dBµV/m	54 dBµV/m	-5.96 dB	Pass
2.486 GHz	47.8 dBµV/m	54 dBµV/m	-6.2 dB	Pass
2.488 GHz	46.63 dBµV/m	54 dBµV/m	-7.37 dB	Pass
2.489 GHz	46.65 dBµV/m	54 dBµV/m	-7.35 dB	Pass
2.491 GHz	46.24 dBµV/m	54 dBµV/m	-7.76 dB	Pass
2.495 GHz	44.95 dBµV/m	54 dBµV/m	-9.05 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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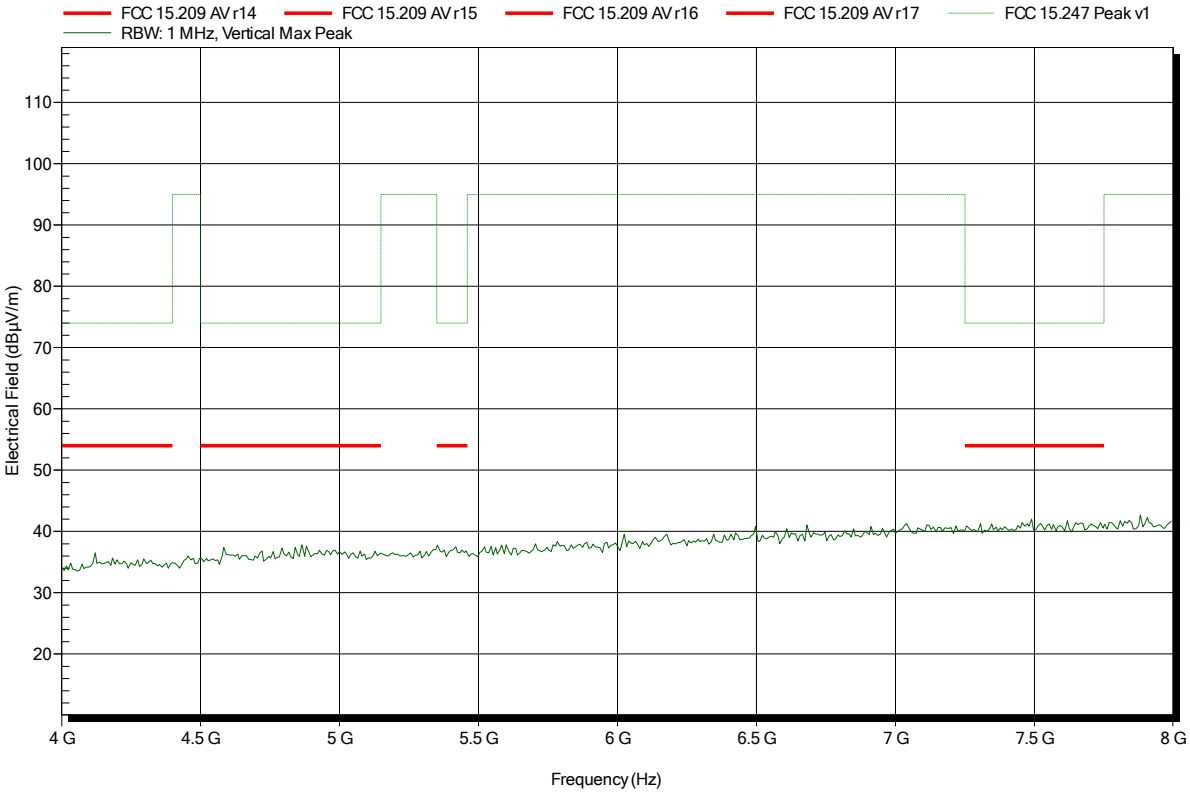

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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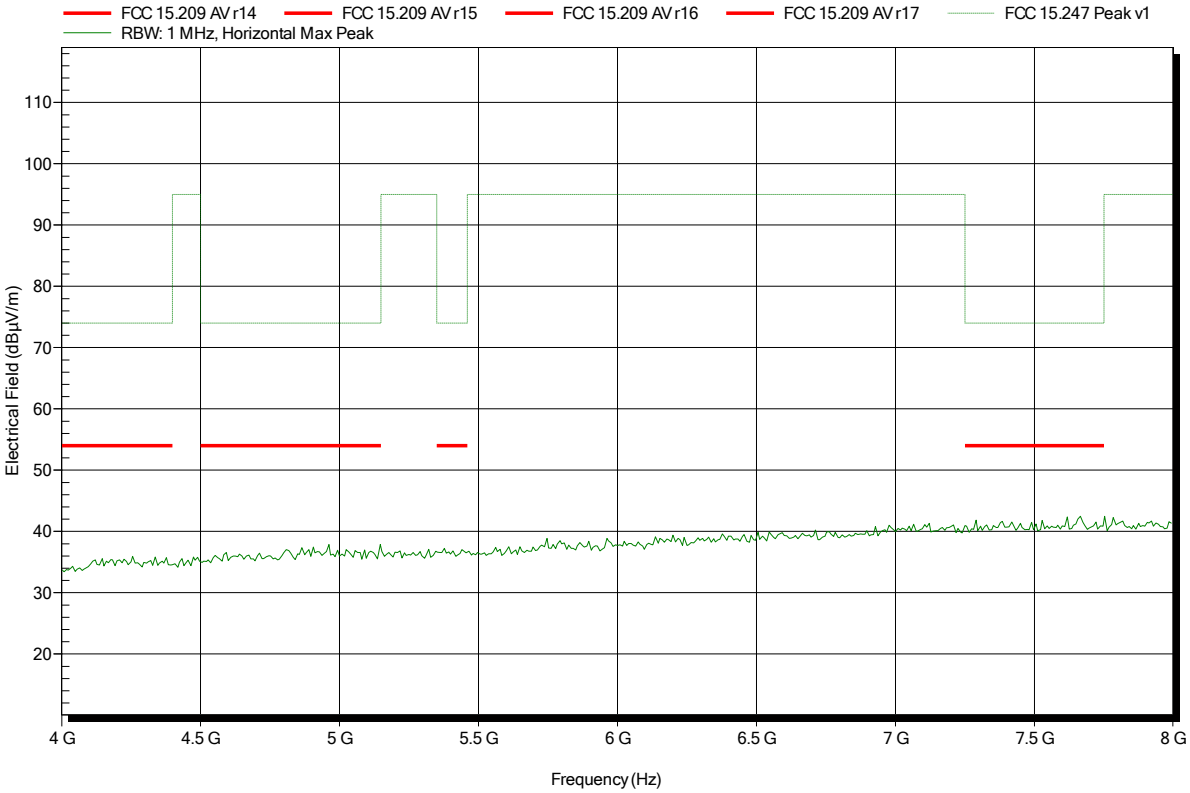

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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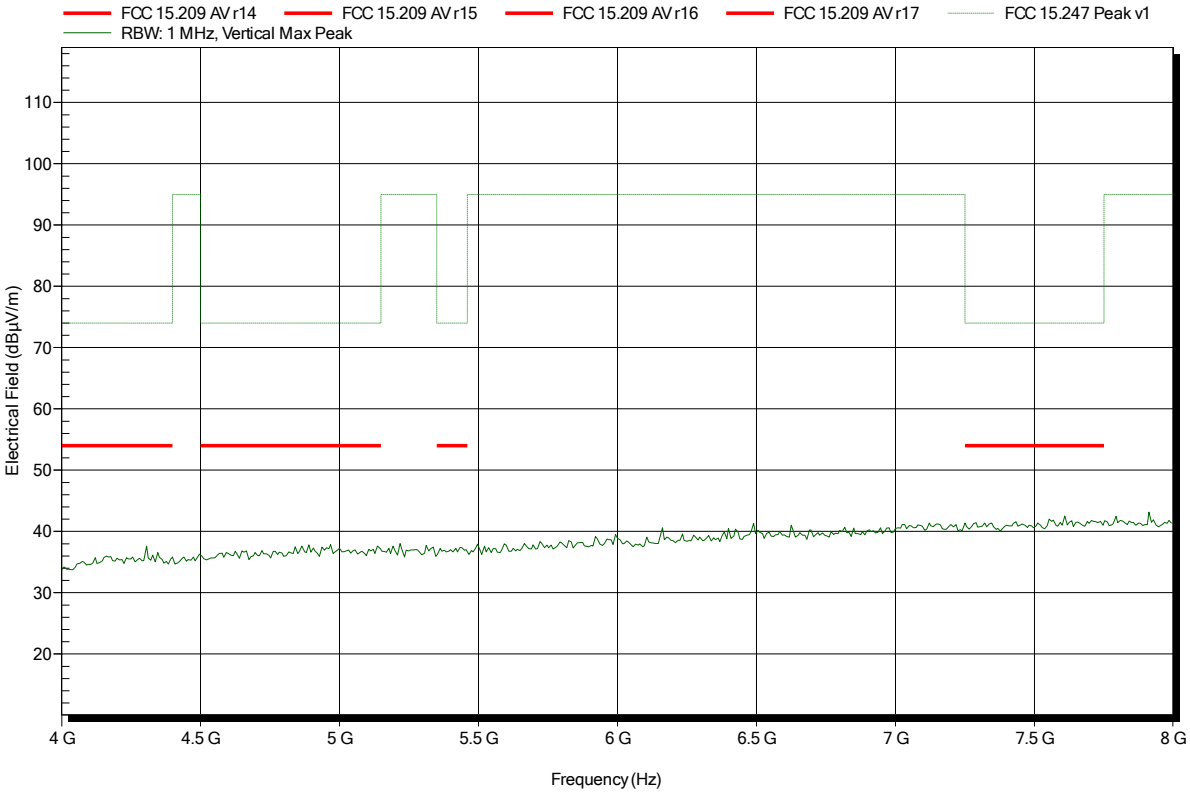

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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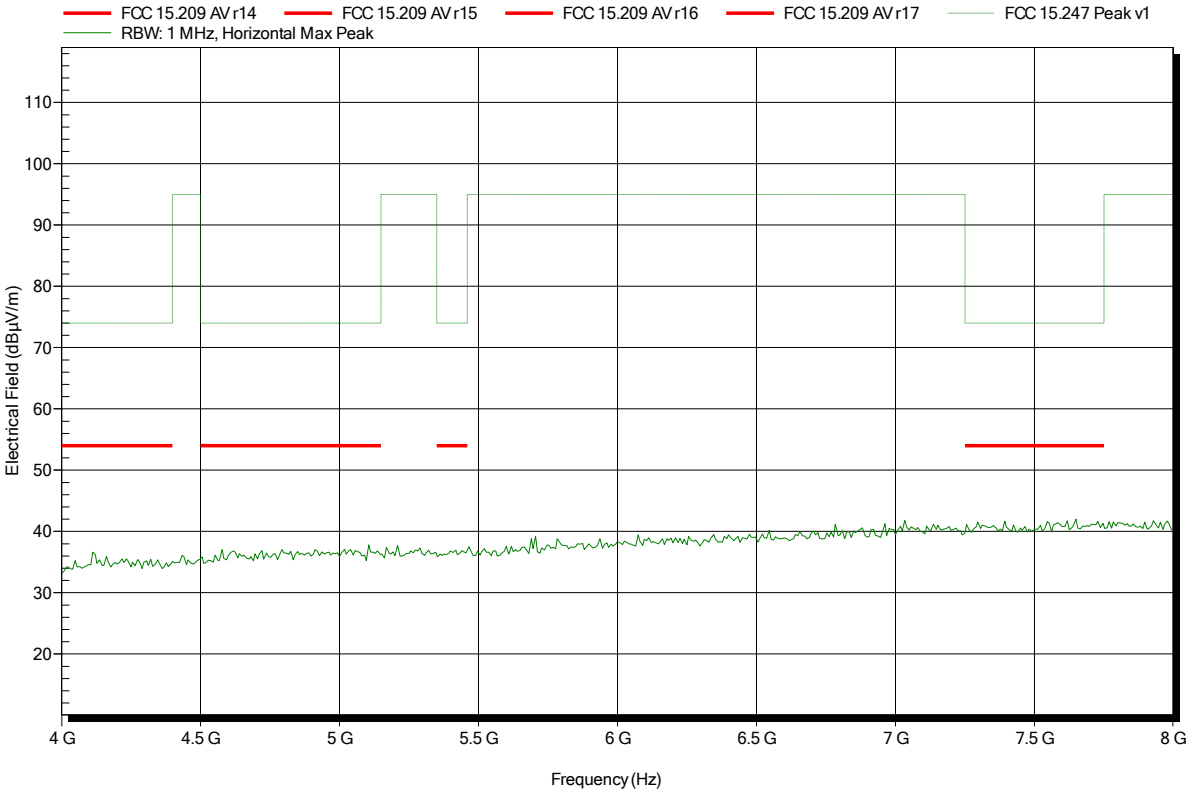

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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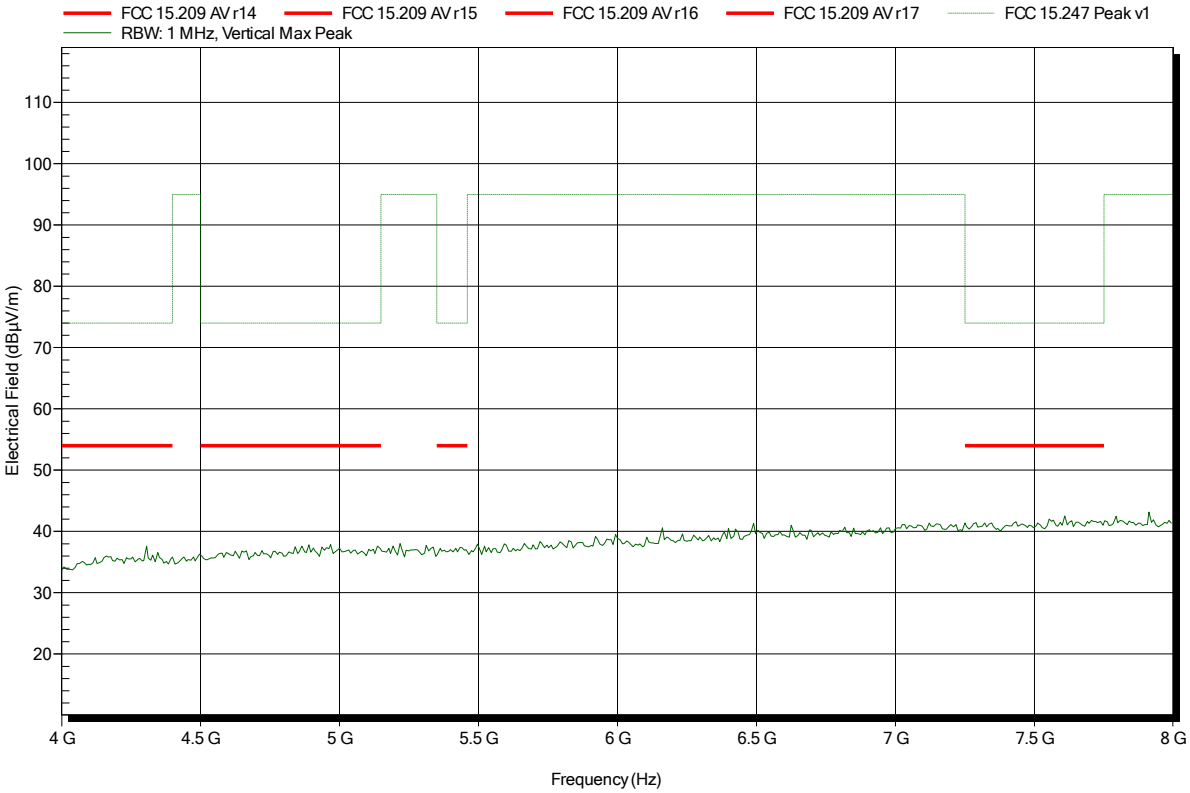

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

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Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-28
Note:	EUT horizontal

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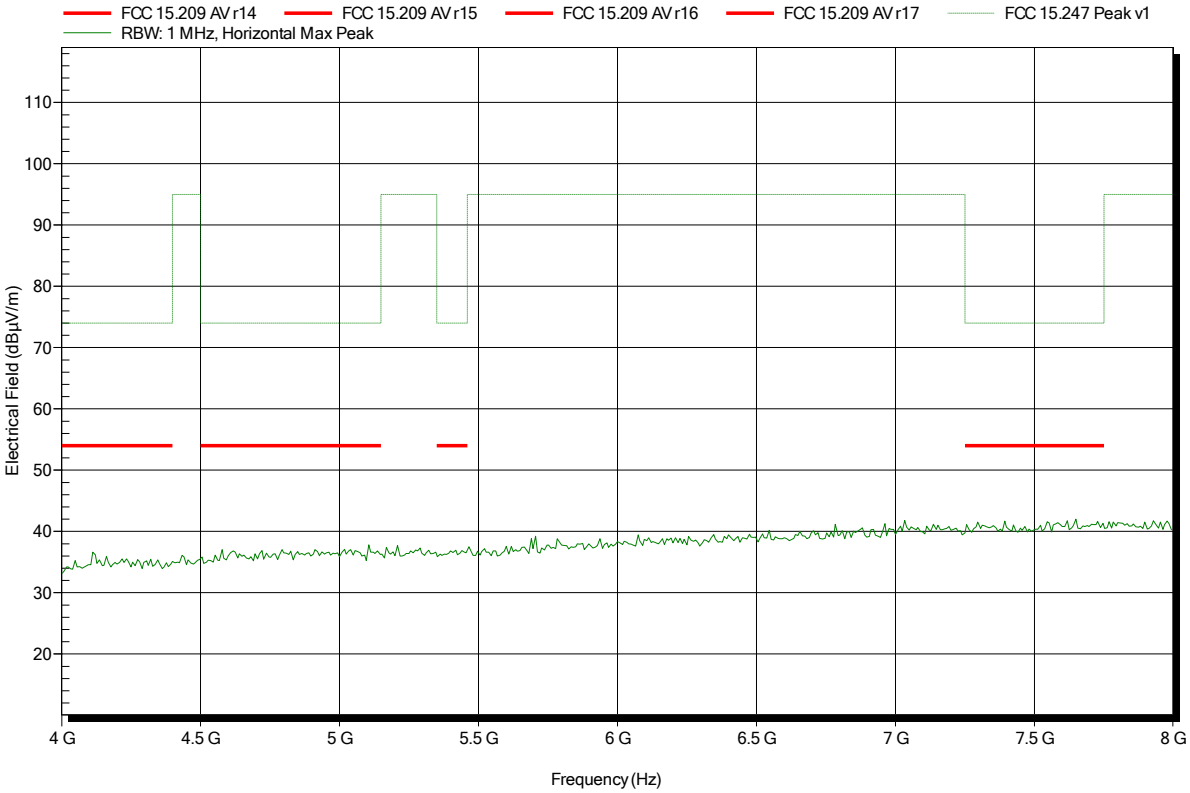

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Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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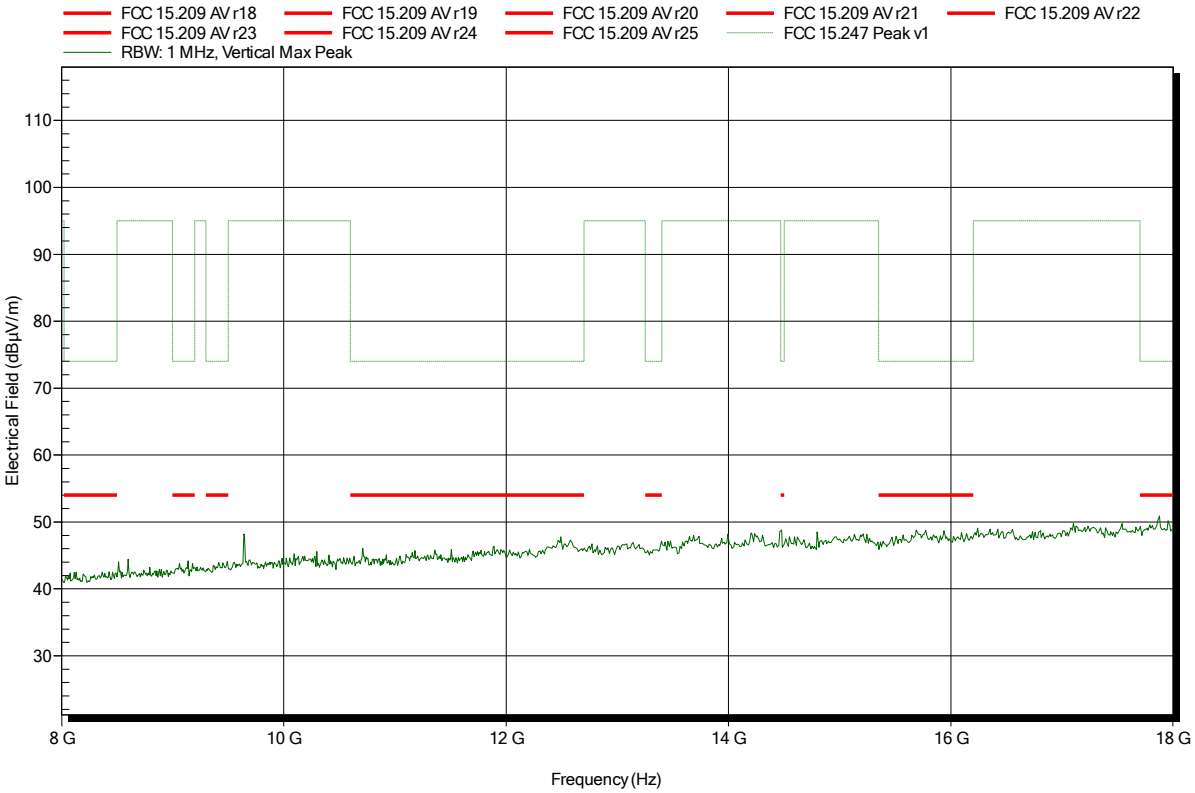

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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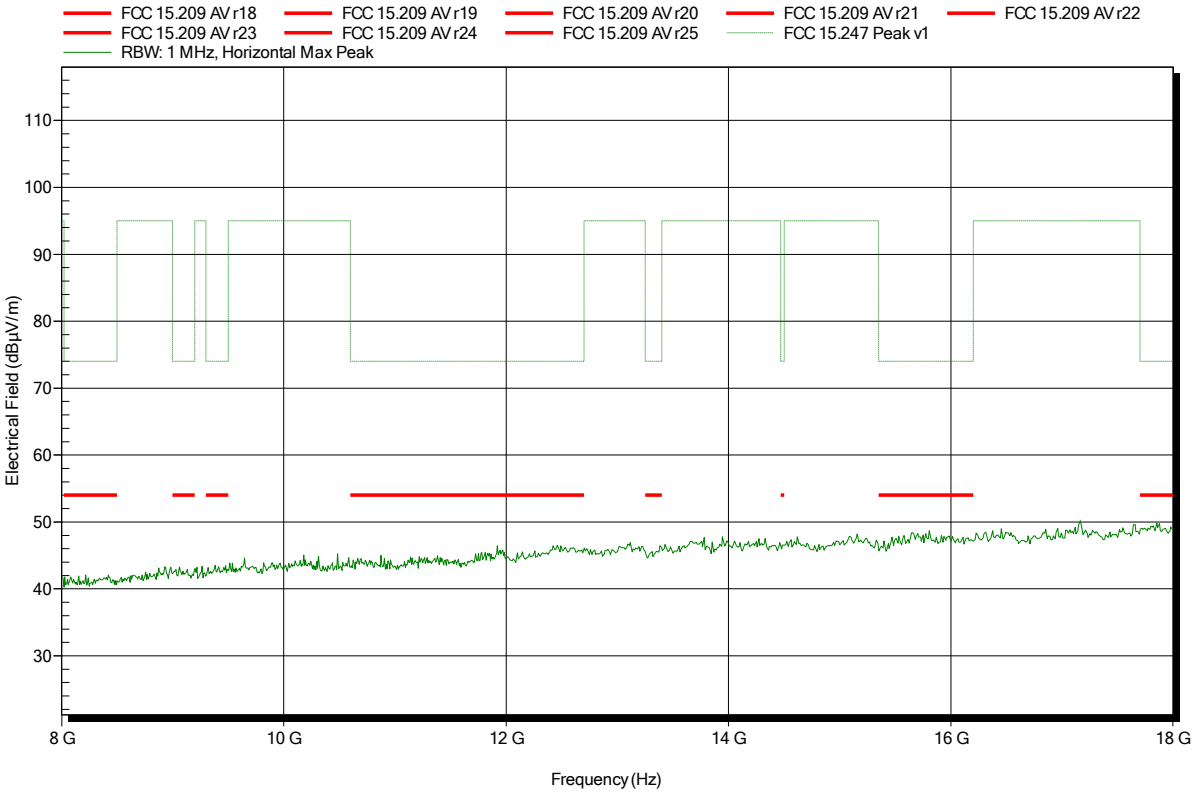

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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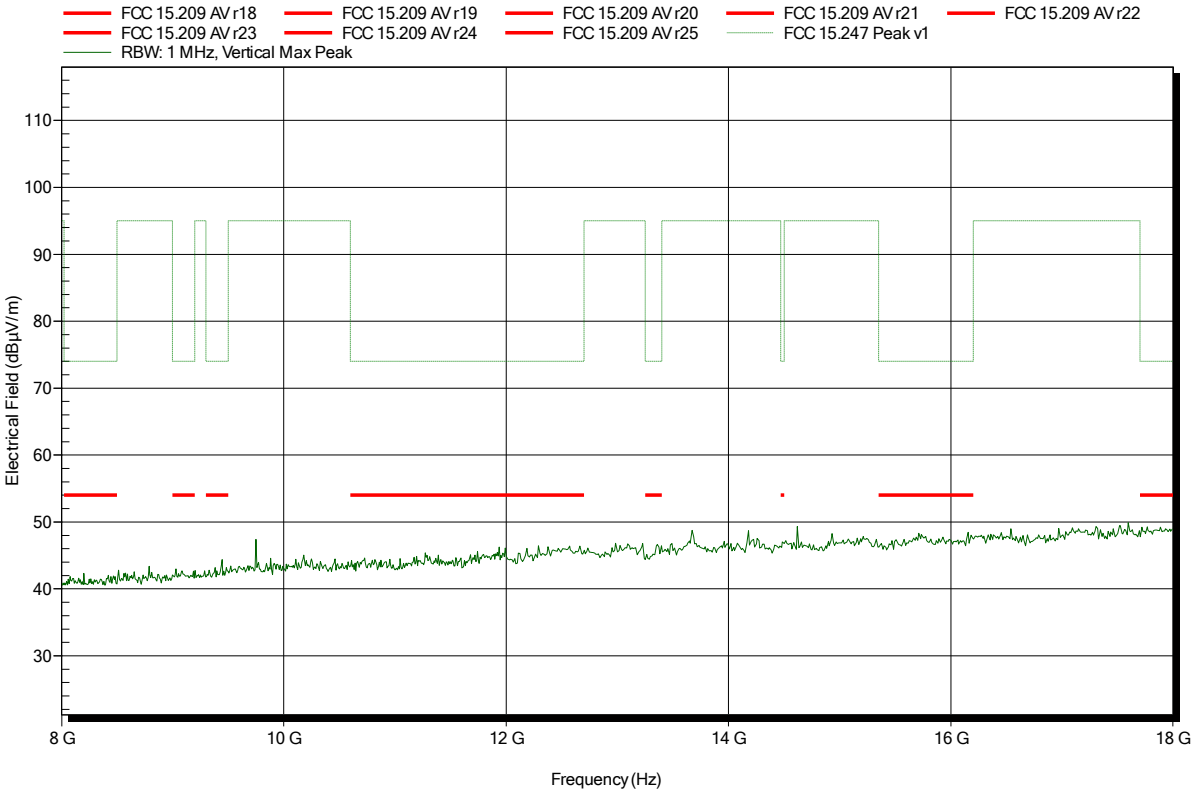

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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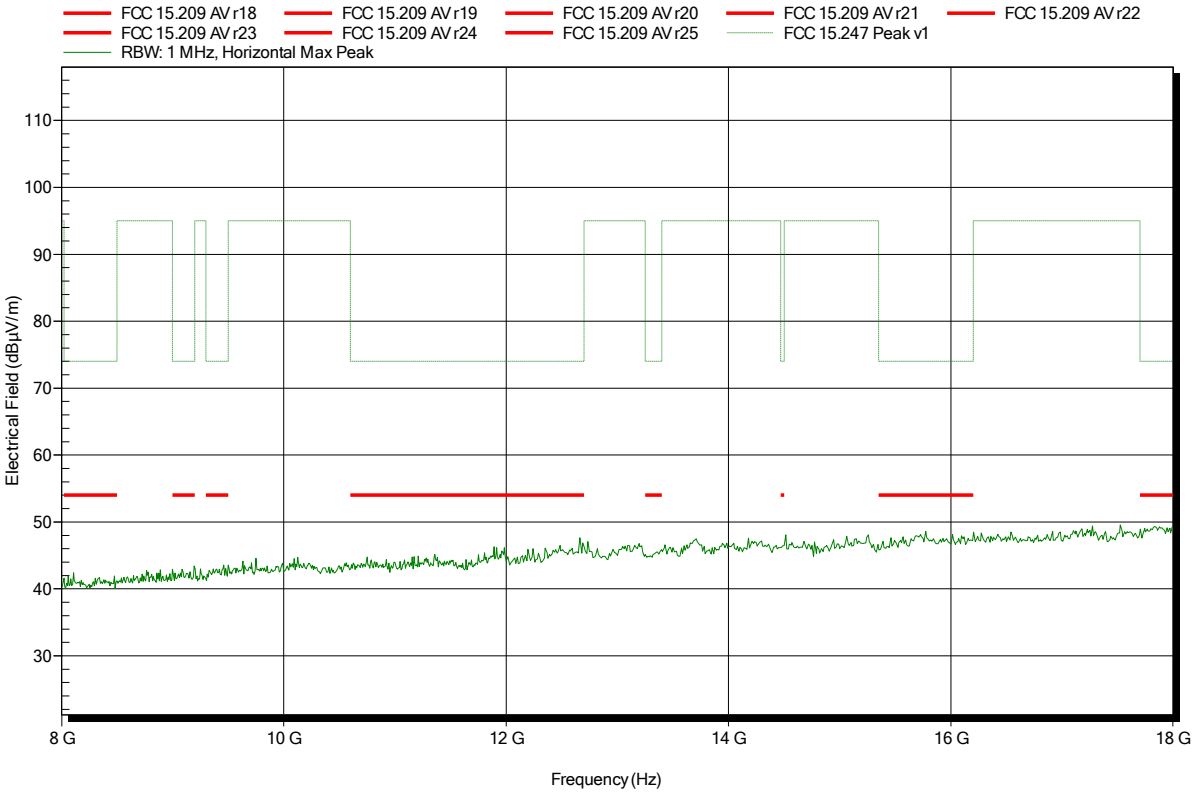

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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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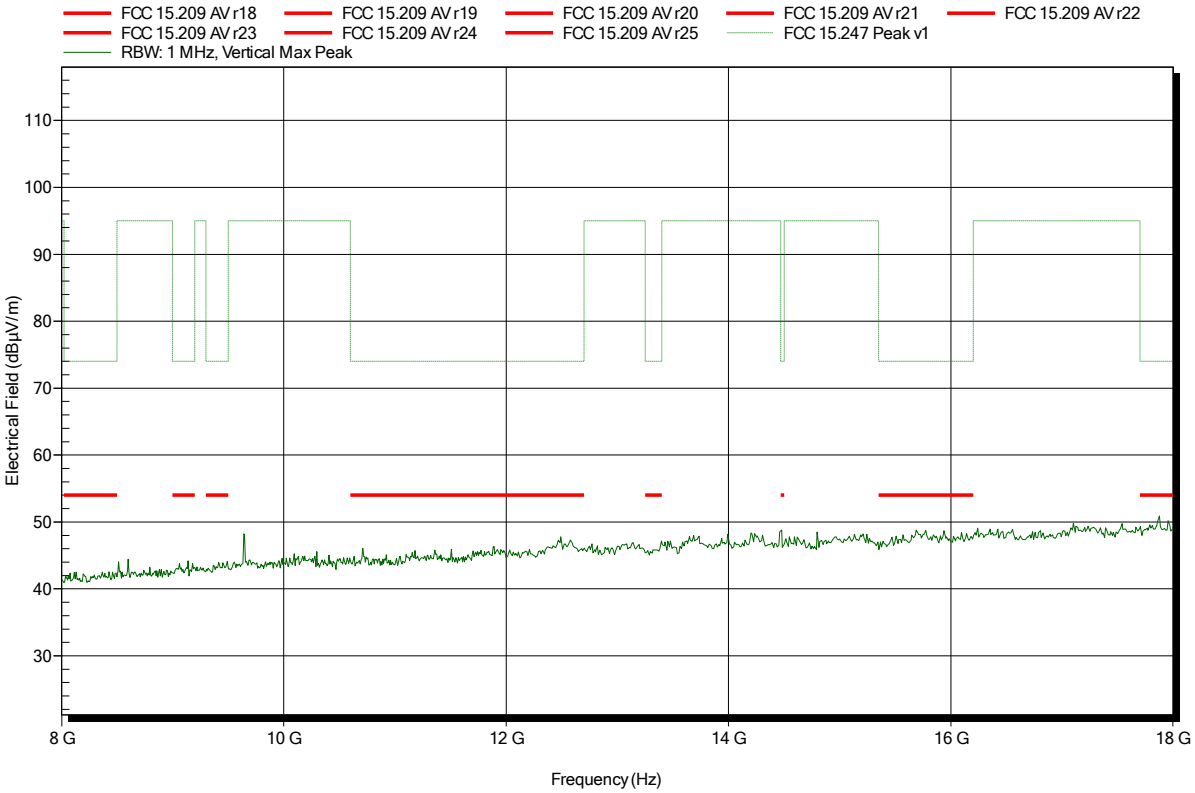

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Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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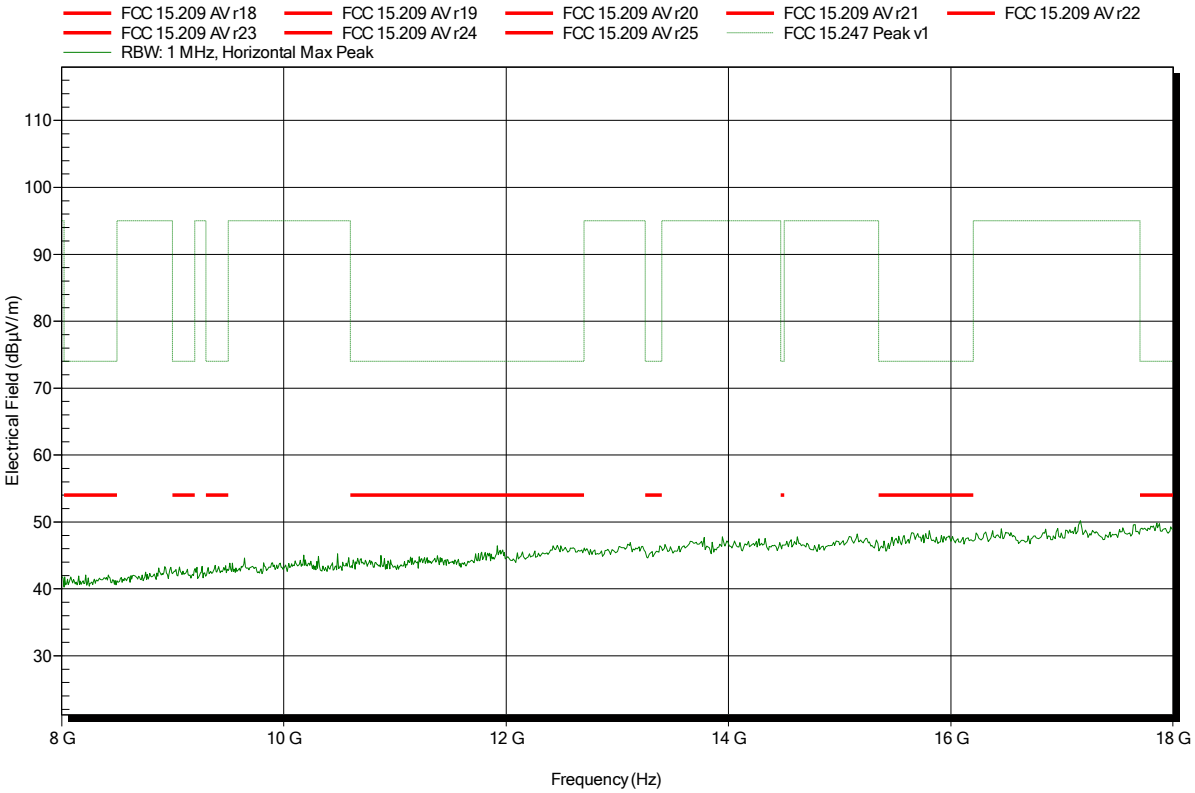

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Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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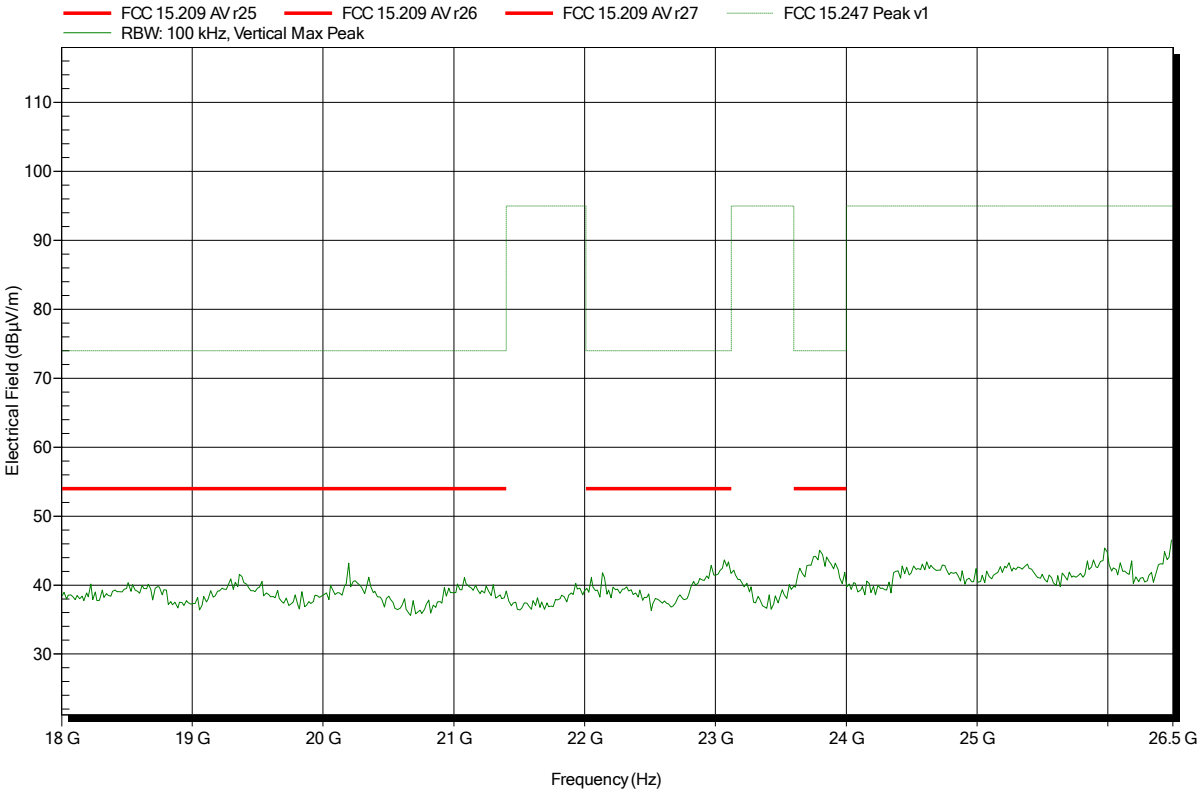

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EUT Name:	2G/3G/4G WLAN Hotspot
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Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 3; 2422 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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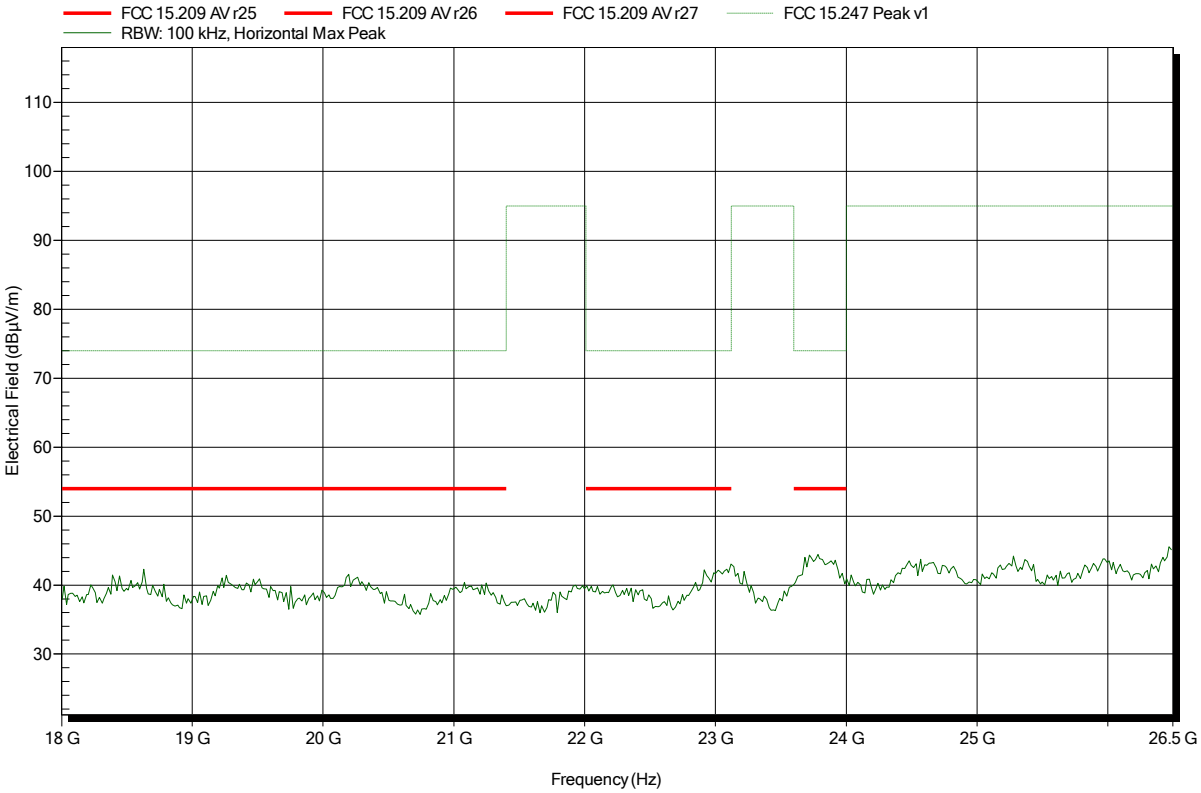

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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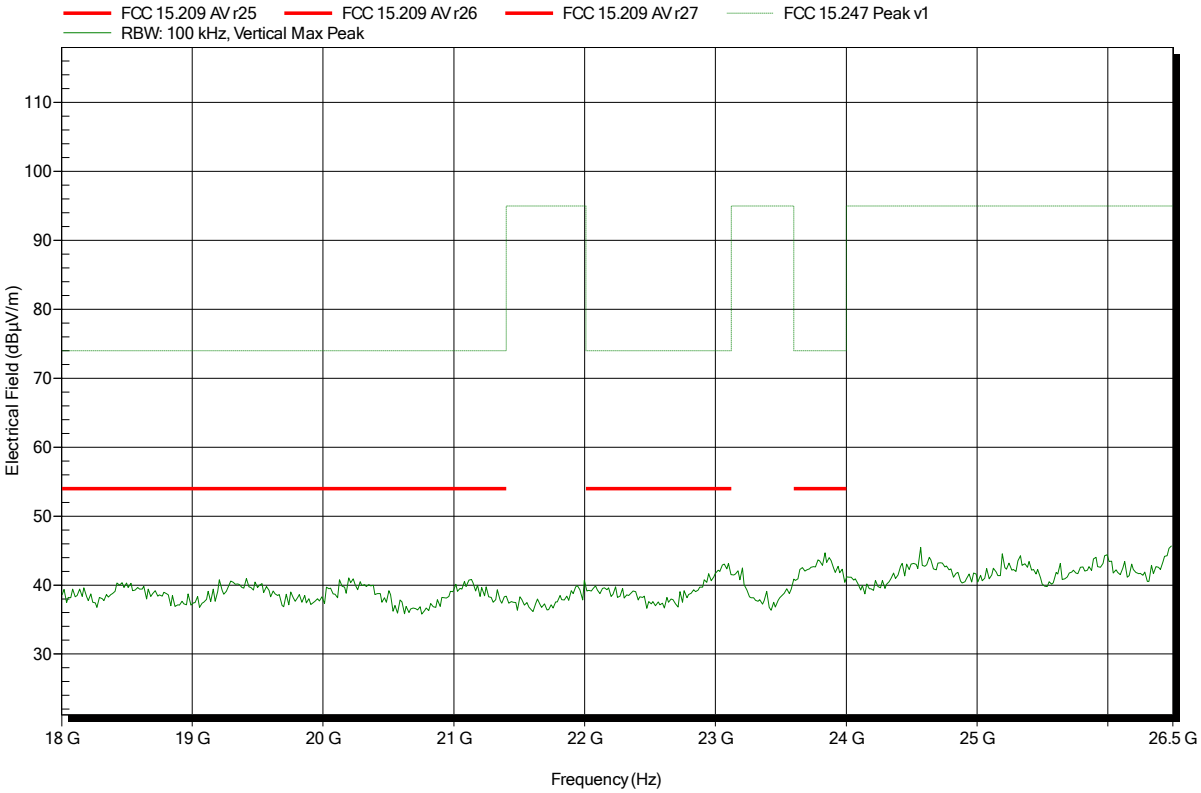

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 6; 2437 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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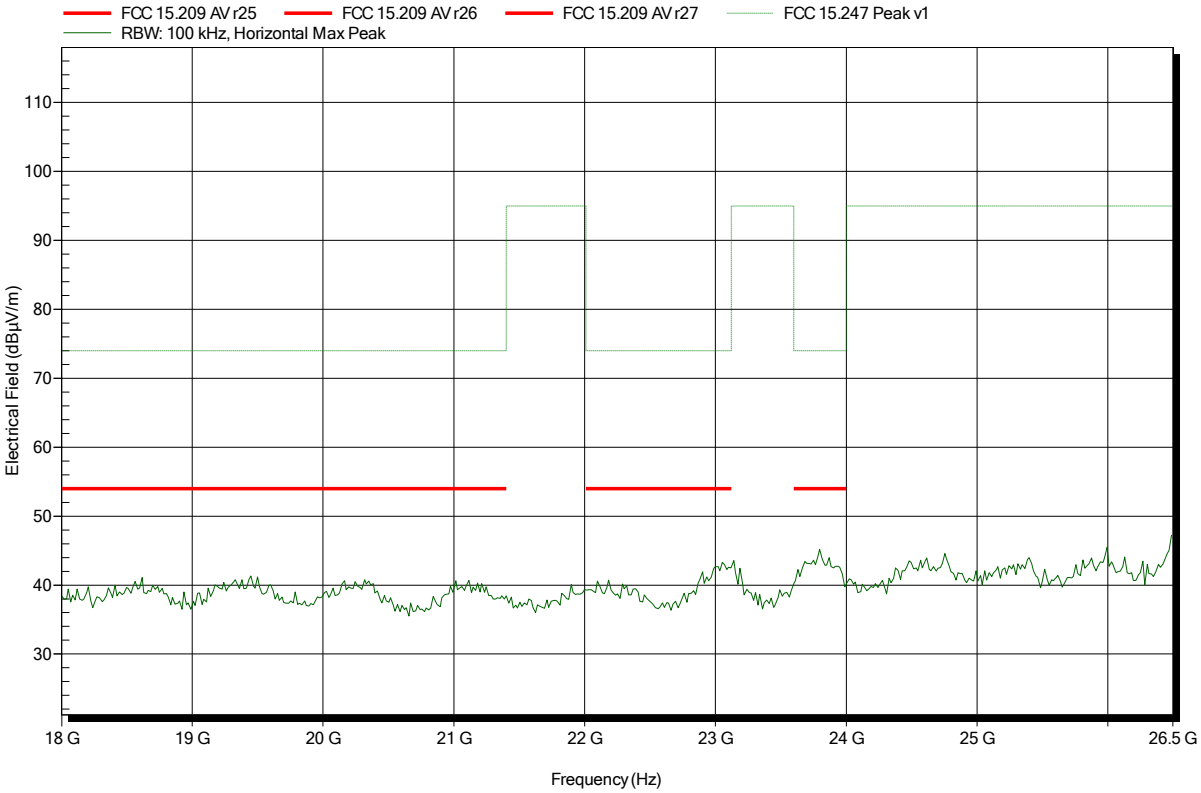

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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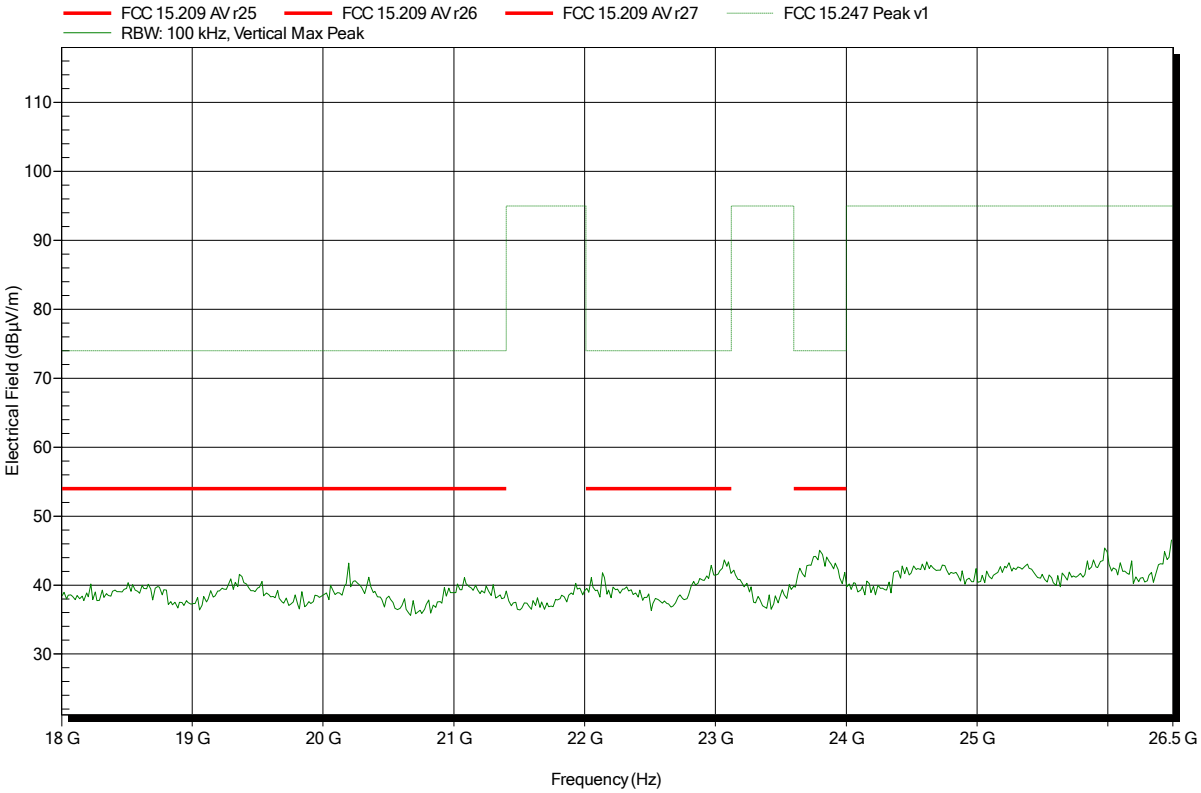

Spurious emissions according to FCC part 15 Subpart C § 15.247, IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; WLAN; CH: 9; 2452 MHz; TX-Testmode; HT40 MCS0
Test Date:	2016-01-20
Note:	EUT horizontal

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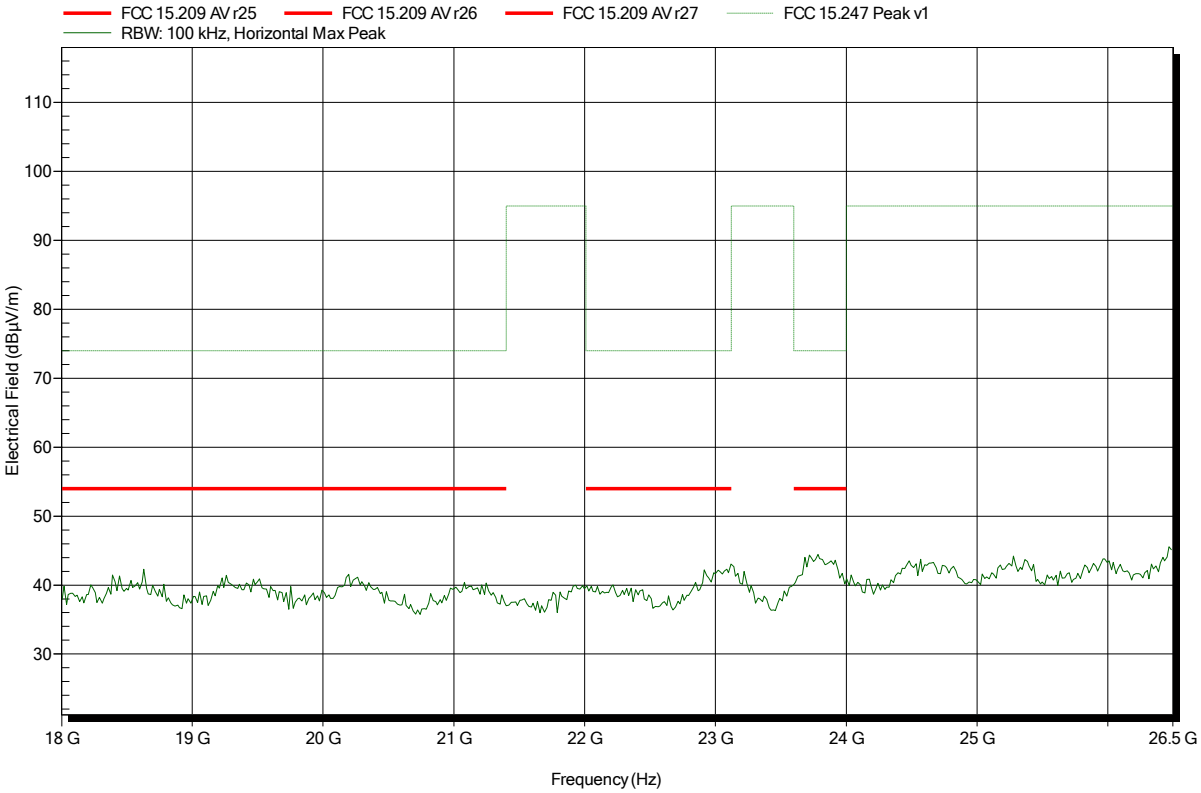

ANNEX B Receiver radiated spurious emissions

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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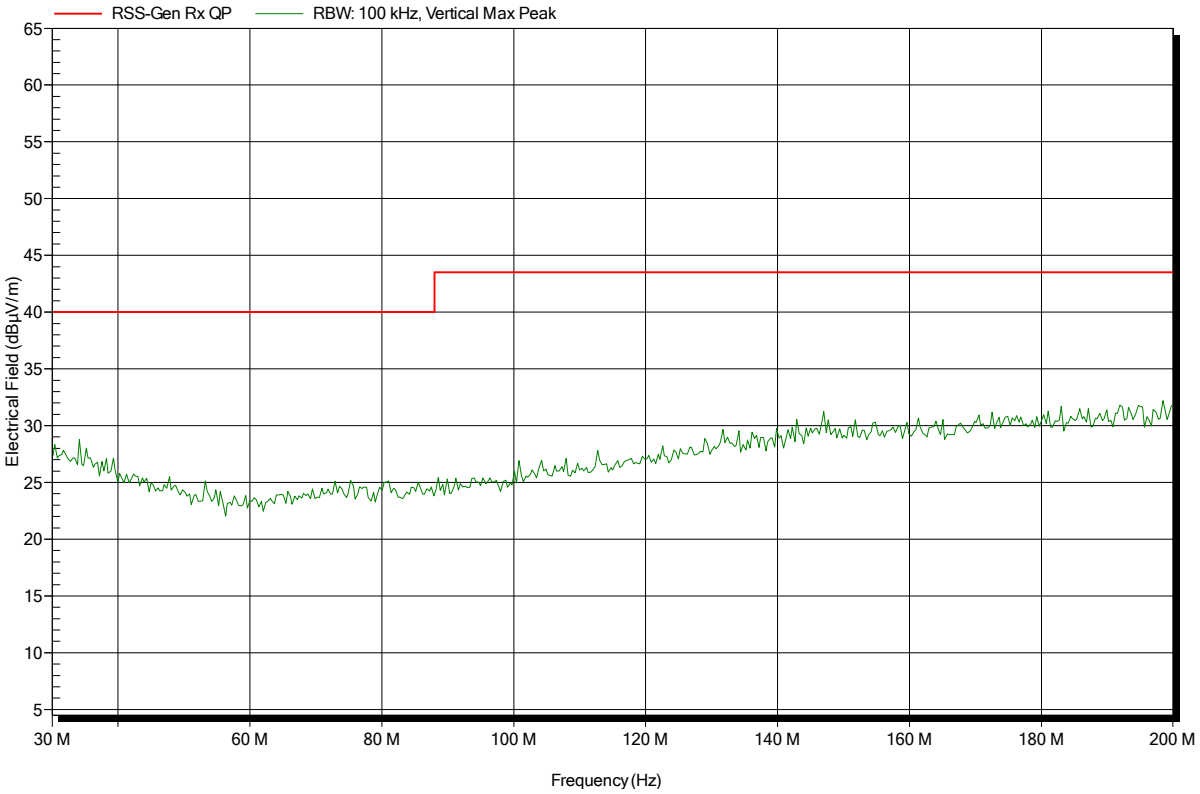

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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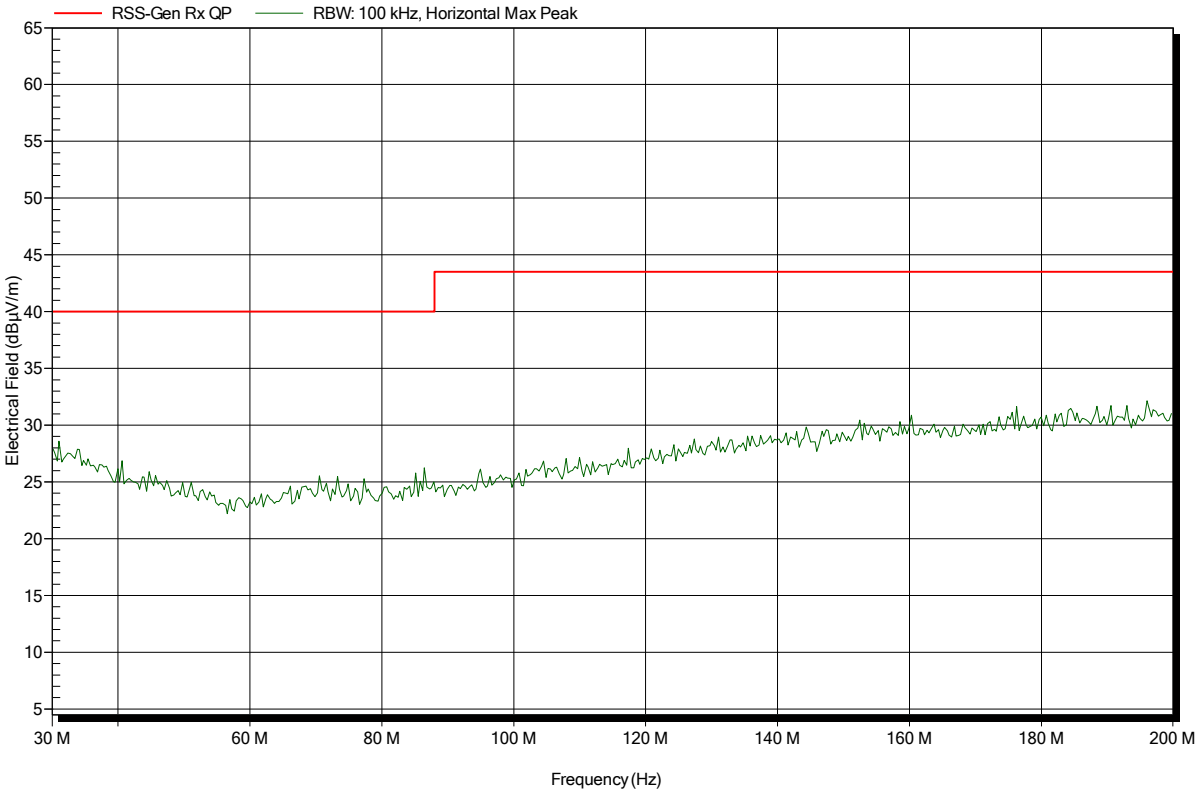

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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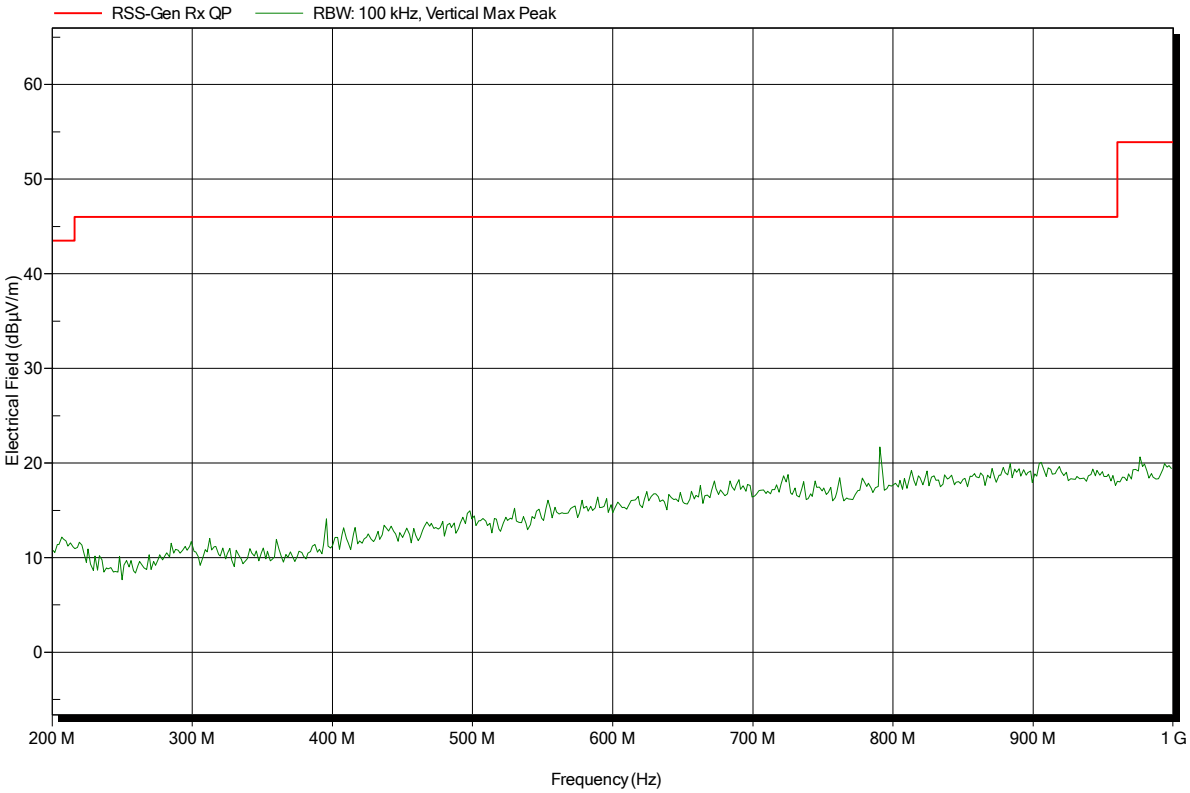

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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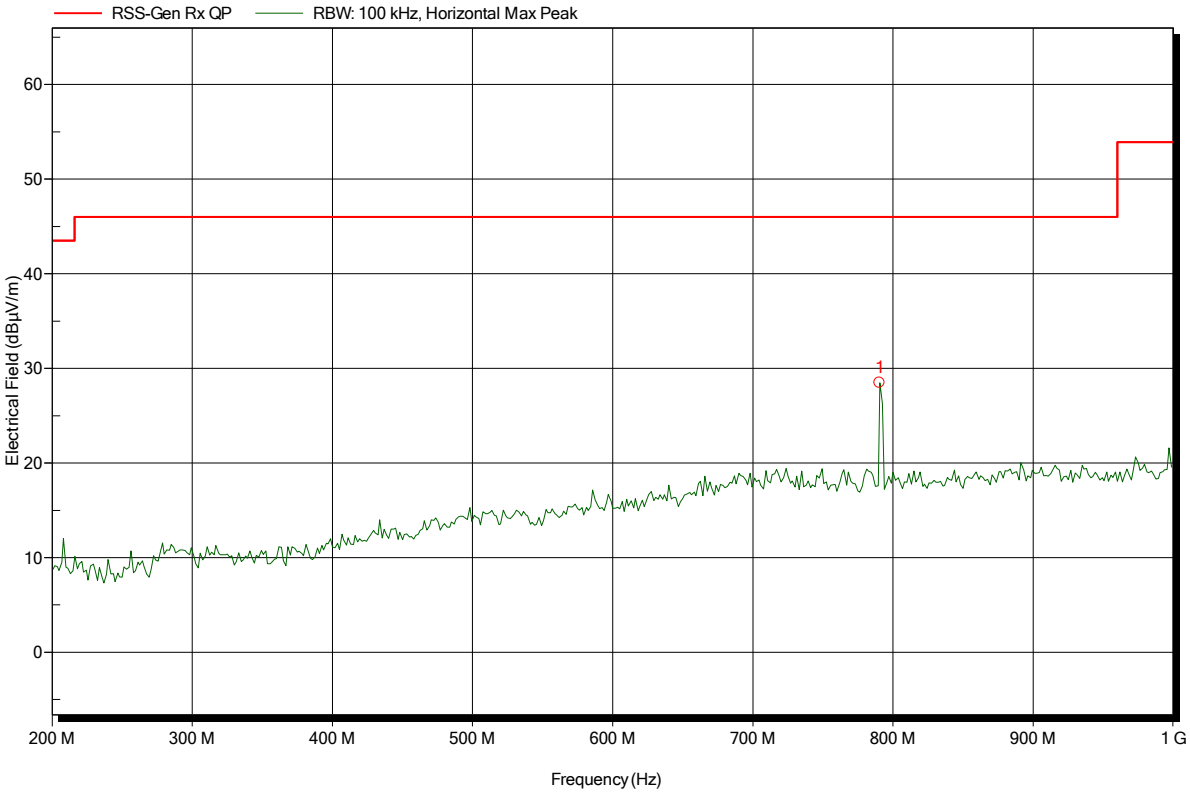

Frequency	Peak	Peak Limit	Peak Difference	Status
790.4 MHz	28.48 dBµV/m	46 dBµV/m	-17.52 dB	Pass

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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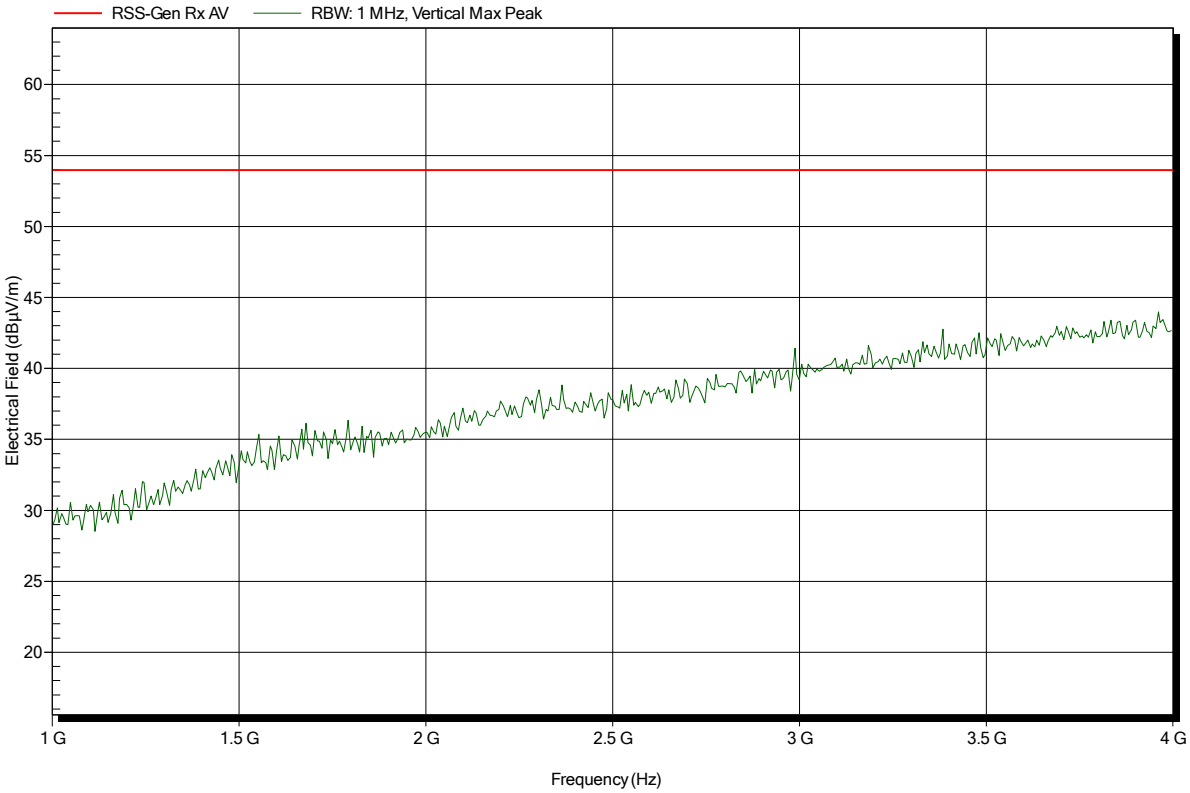

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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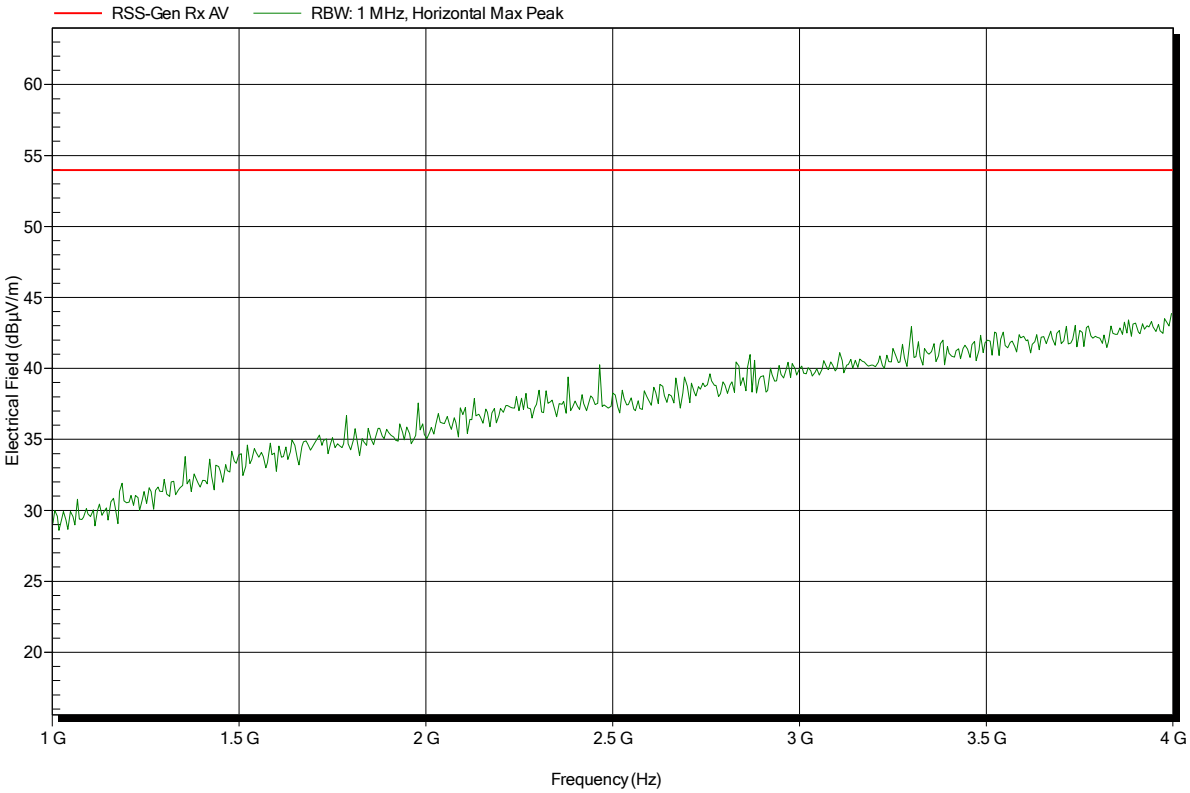

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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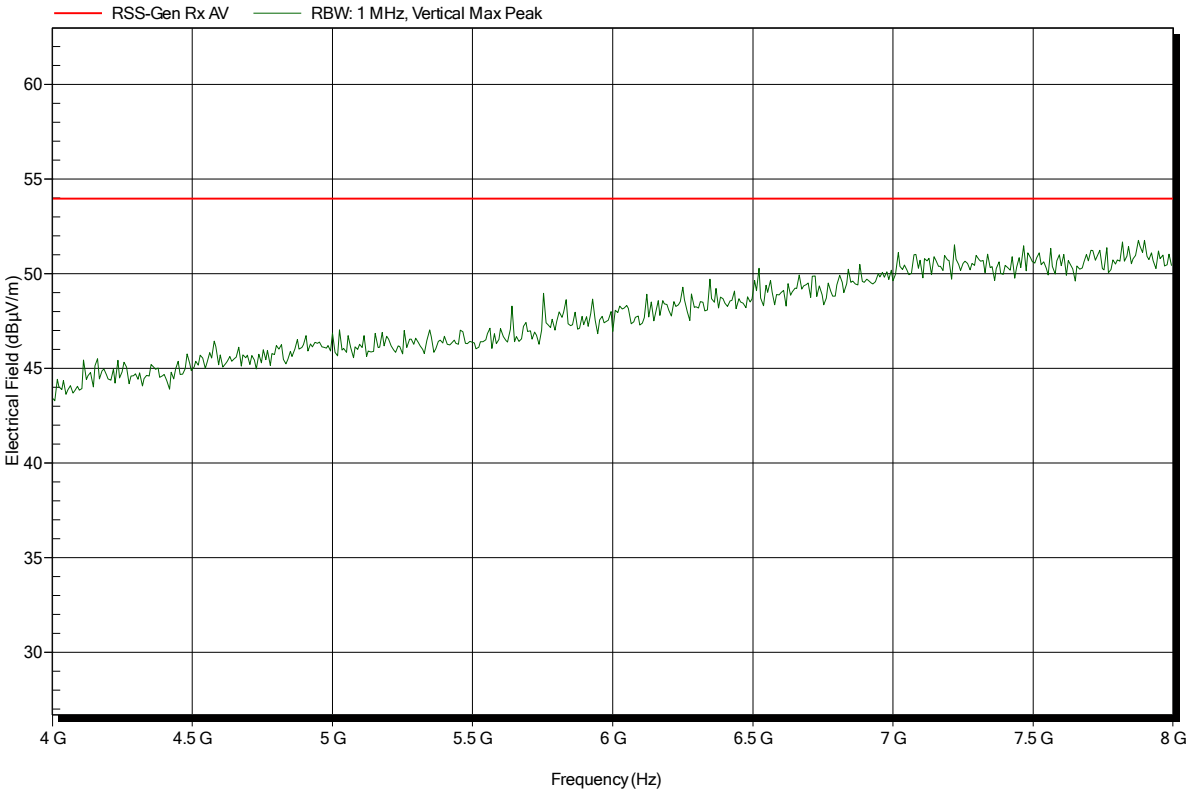

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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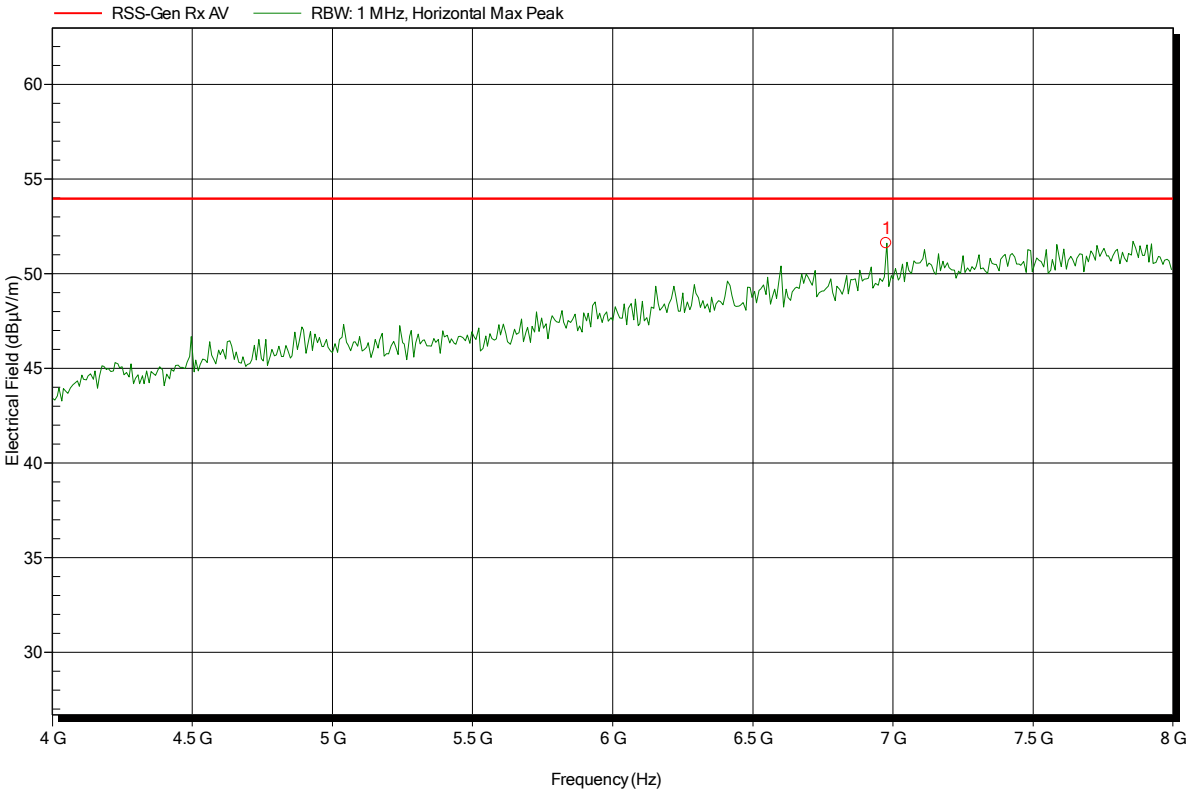

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
6.976 GHz	51.62 dBµV/m	53.98 dBµV/m	-2.36 dB	Pass

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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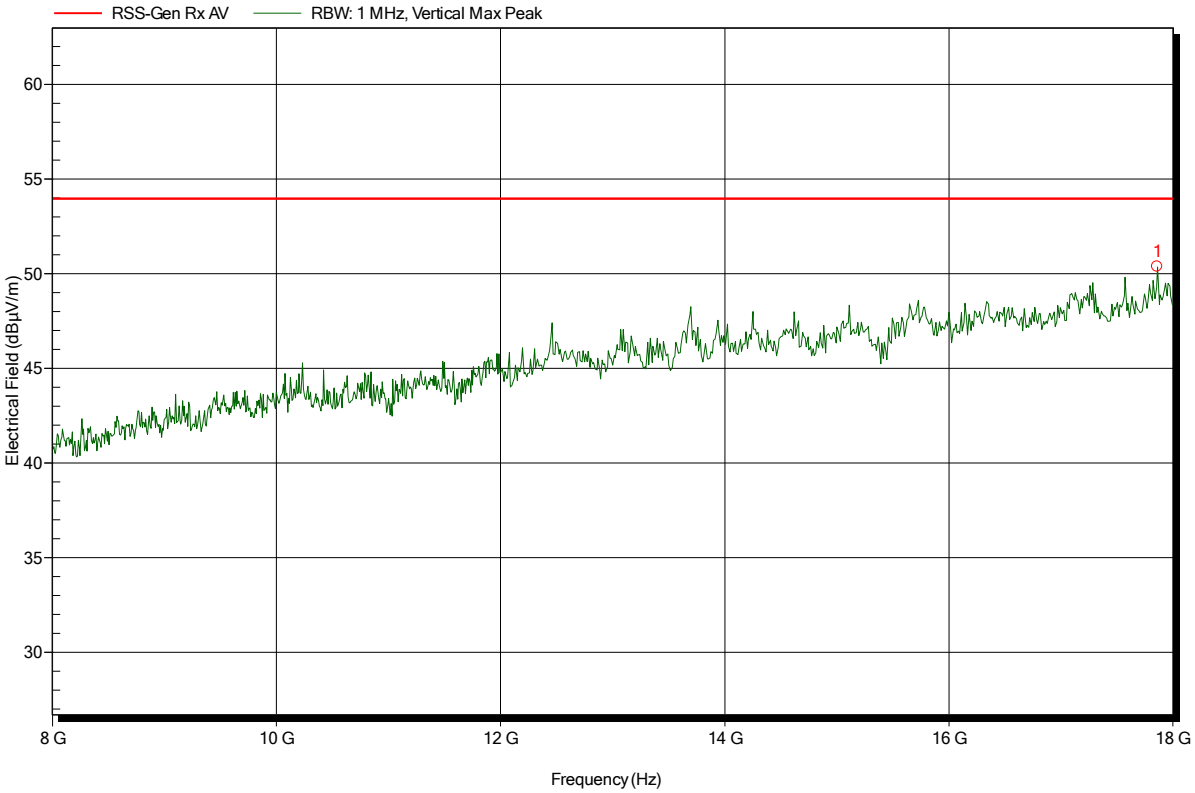

Frequency	Peak	Peak Limit	Peak Difference	Status
17.856 GHz	50.37 dBµV/m	53.98 dBµV/m	-3.61 dB	Pass

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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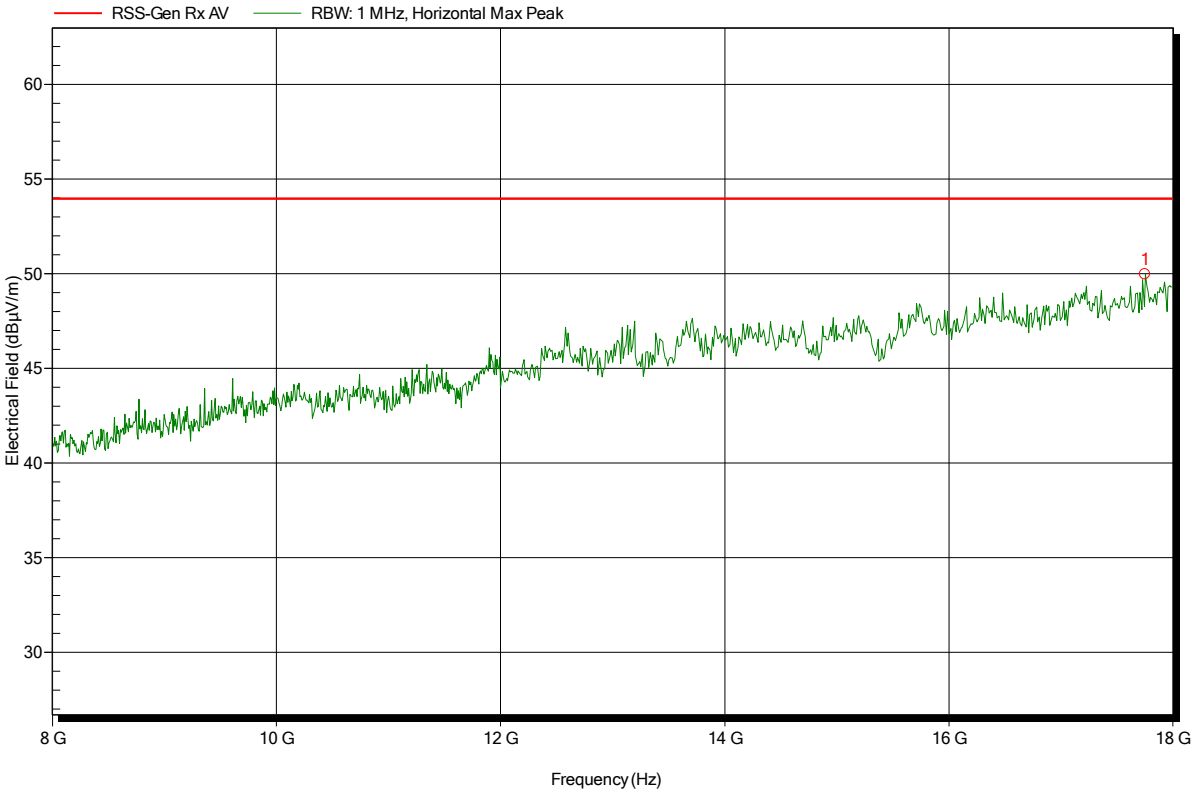

Frequency	Peak	Peak Limit	Peak Difference	Status
17.748 GHz	49.97 dBµV/m	53.98 dBµV/m	-4.01 dB	Pass

Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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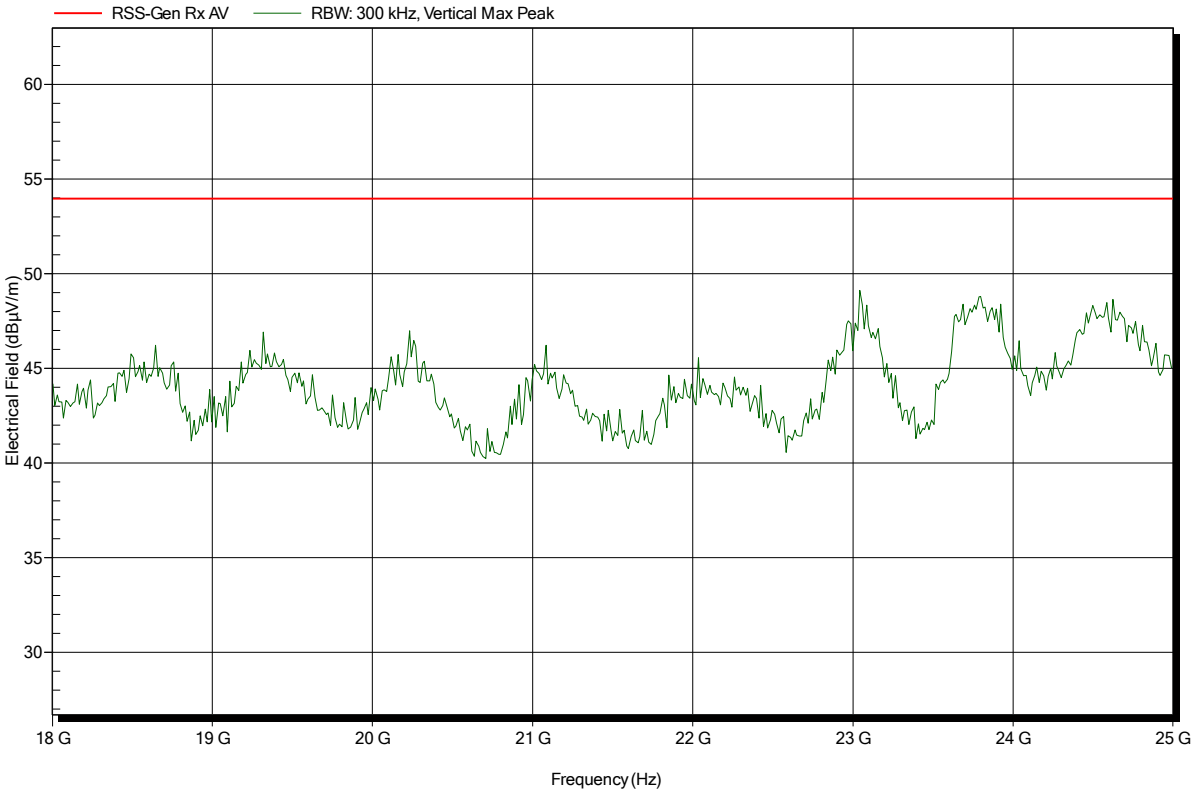
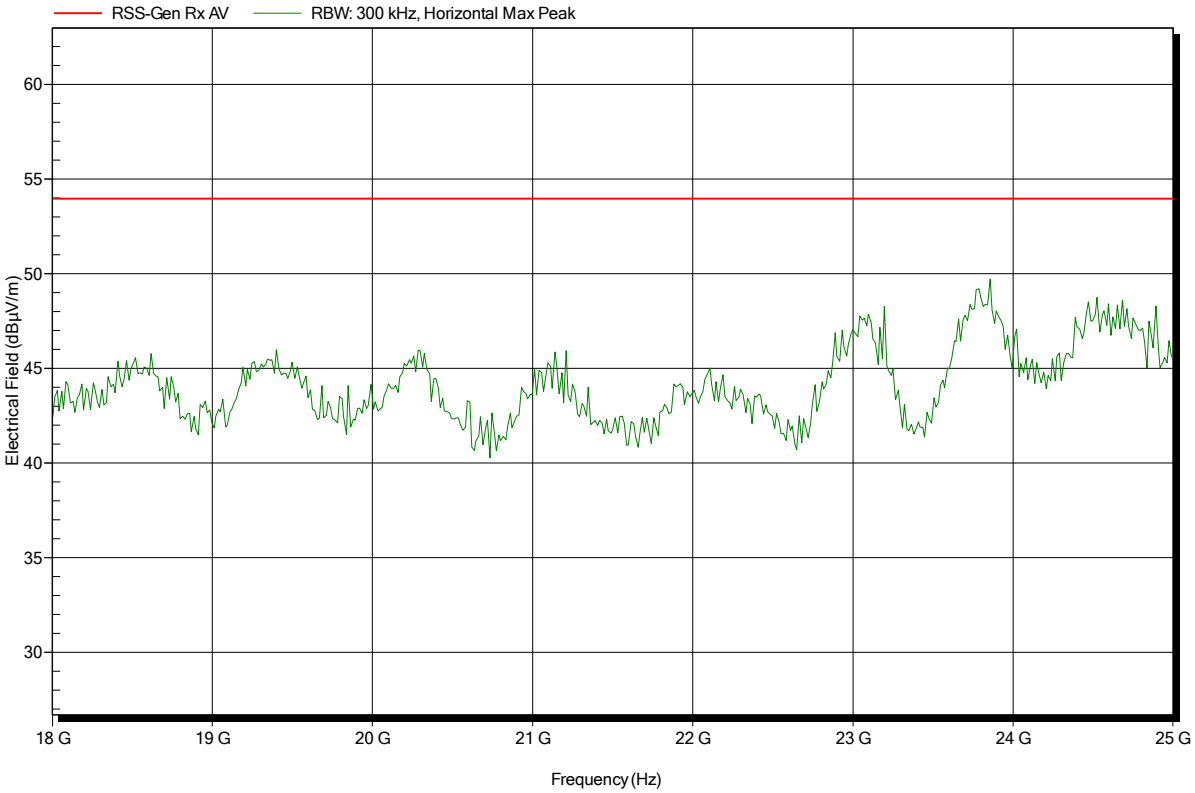


Spurious emissions according to IC RSS-247, I1

Project number: G0M-1601-5302

Applicant:	lesswire GmbH
EUT Name:	2G/3G/4G WLAN Hotspot
Model:	CCU5.3.1 (BWIA3)
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 12.0 V DC (car powered)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	RX; WLAN; CH: 6; 2437 MHz; RX-Testmode; ANT integral
Test Date:	2016-01-21
Note:	EUT horizontal

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