

EMC TEST REPORT

FCC 47 CFR Part 15B
Industry Canada RSS-Gen

Electromagnetic compatibility - Unintentional radiators

Report Reference No. : G0M-1503-4620-EF01-V01

Testing Laboratory : Eurofins Product Service GmbH

Address : Storkower Str. 38c
15526 Reichenwalde
Germany

Accreditation :



A2LA Accredited Testing Laboratory, Certificate No.: 1983.01
FCC Filed Test Laboratory, Reg.-No.: 96970
IC OATS Filing assigned code: 3470A

Applicant's name : BARTEC PIXAVI AS

Address : Domkirkeplassen 2
4006 Stavanger
NORWAY

Test specification:

Standard..... : 47 CFR Part 15 Subpart B
ICES-003, Issue 5:2012
ANSI C63.4:2014

Equipment under test (EUT):

Product description Wireless camera (Standard version)

Model No. OrbitX ST

Additional Models OrbitX EX

Hardware version Rev 2

Firmware / Software version 478

FCC-ID: YML-ORBITX

IC: 9249A-ORBITX

Test result Passed

Test Report No.: G0M-1503-4620-EF01-V01

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Possible test case verdicts:

- not applicable to test object: N/A
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

Testing:

Date of receipt of test item: 2015-04-21

Date (s) of performance of tests: 2015-05-13 – 2015-06-24

Compiled by: Marcus Klein

Tested by (+ signature).....: Marco Belz / Andreas Pflug

Approved by (+ signature): Marcus Klein

Head of Lab

Date of issue: 2015-08-28

Total number of pages: 52


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
V01	2015-08-28	Initial Release	

REPORT INDEX

1	EQUIPMENT (TEST ITEM) DESCRIPTION	5
1.1	Photos – Equipment external	6
1.2	Photos – Equipment internal	8
1.3	Photos – Test setup	11
1.4	Supporting Equipment Used During Testing	12
1.5	Input / Output Ports	12
1.6	Operating Modes and Configurations	13
1.7	Test Equipment Used During Testing	14
1.8	Sample emission level calculation	15
2	RESULT SUMMARY	16
3	TEST CONDITIONS AND RESULTS	17
3.1	Test Conditions and Results – Radiated emissions	17
3.2	Test Conditions and Results – AC power line conducted emissions	47

1 Equipment (Test item) Description

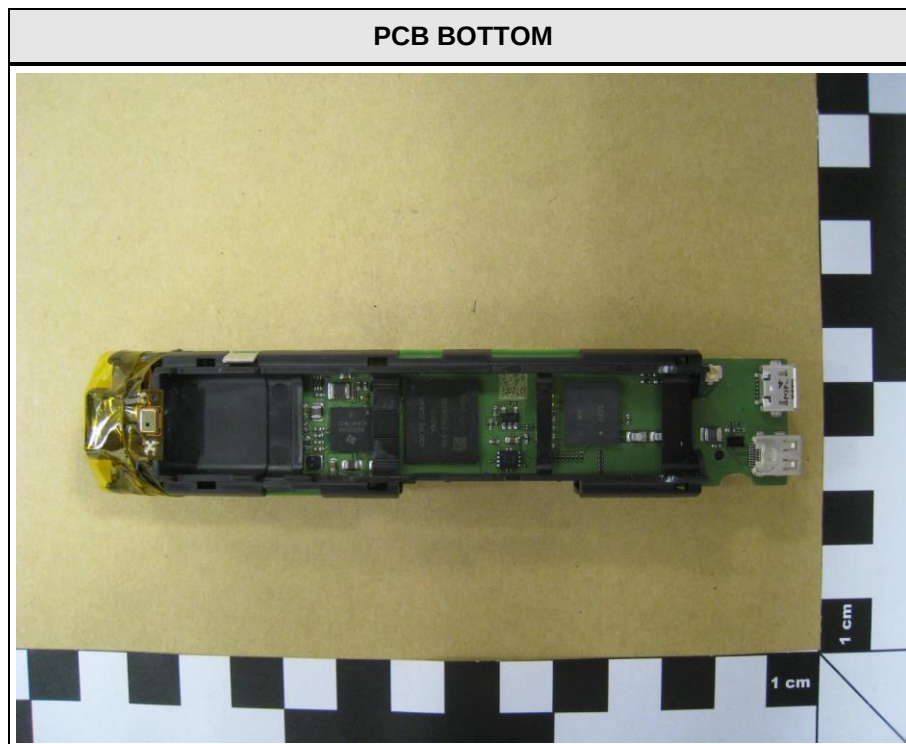
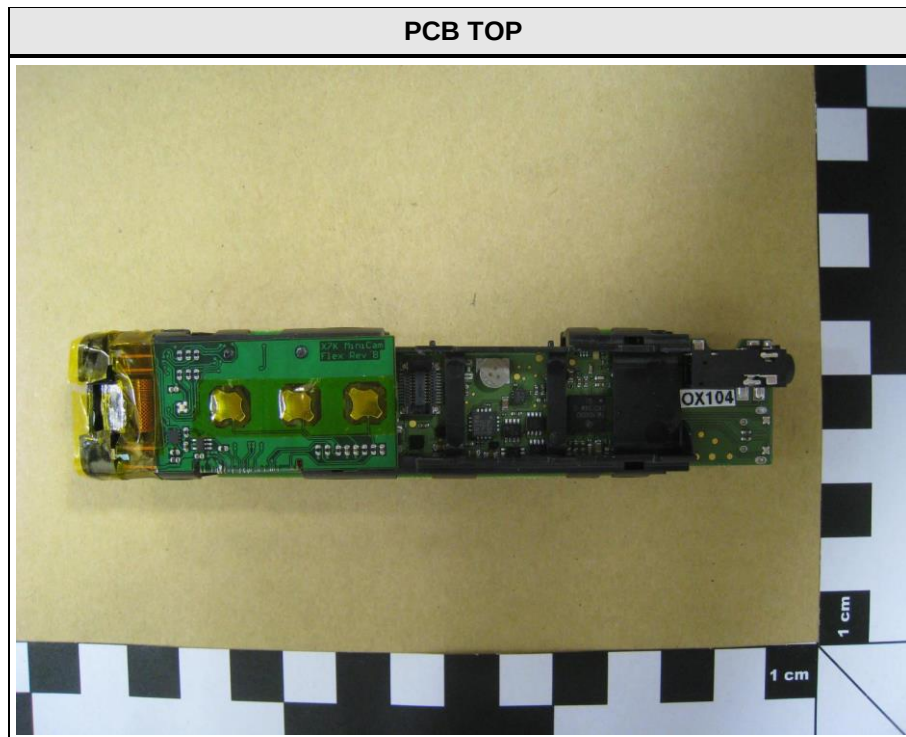
Description	Wireless camera (Standard version)	
Model	OrbitX ST	
Additional Models	OrbitX EX	
Serial number	None	
Hardware version	Rev 2	
Software / Firmware version	478	
FCC-ID	YML-ORBITX	
IC	9249A-ORBITX	
Power supply	3.7 VDC internal Battery	
AC/DC-Adaptor	Model : GT-41078-0506-0.4-USB Manufacturer : Globtek Input : 100-240 VAC / 50-60Hz Output : 5 VDC	
Radio module	Type	WLAN / Bluetooth
	Model	LBEP5CLWMC-633
	Manufacturer	Murata
Manufacturer	BARTEC PIXAVI AS Domkirkeplassen 2 4006 Stavanger NORWAY	
Highest emission frequency	Fmax[MHz] = 5000	
Device classification	Class B	
Equipment type	Tabletop	
Number of tested samples	1	

1.1 Photos – Equipment external





1.2 Photos – Equipment internal



EUT CONNECTORS



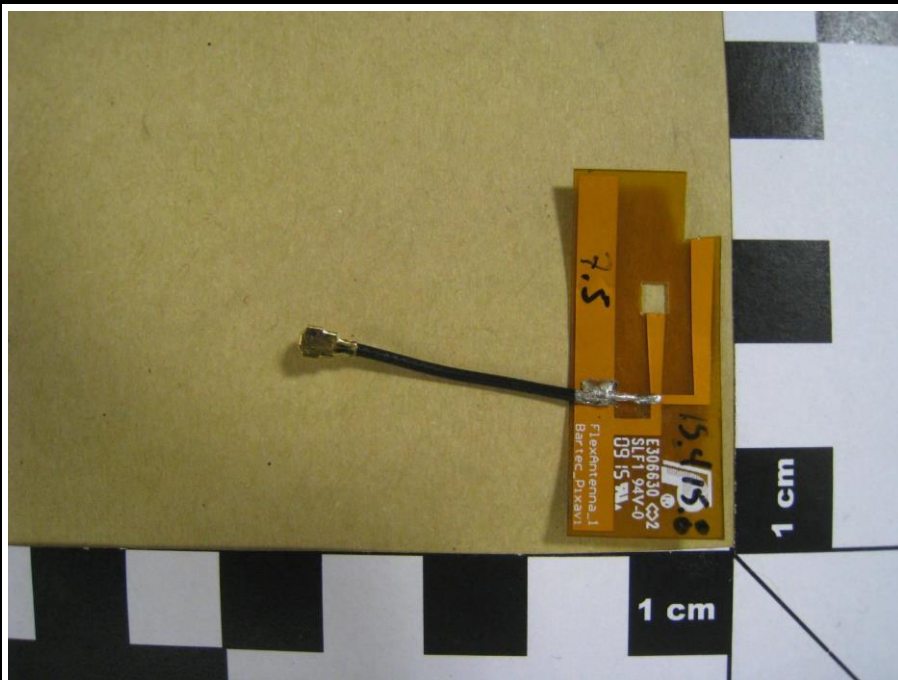
BATTERY PACK



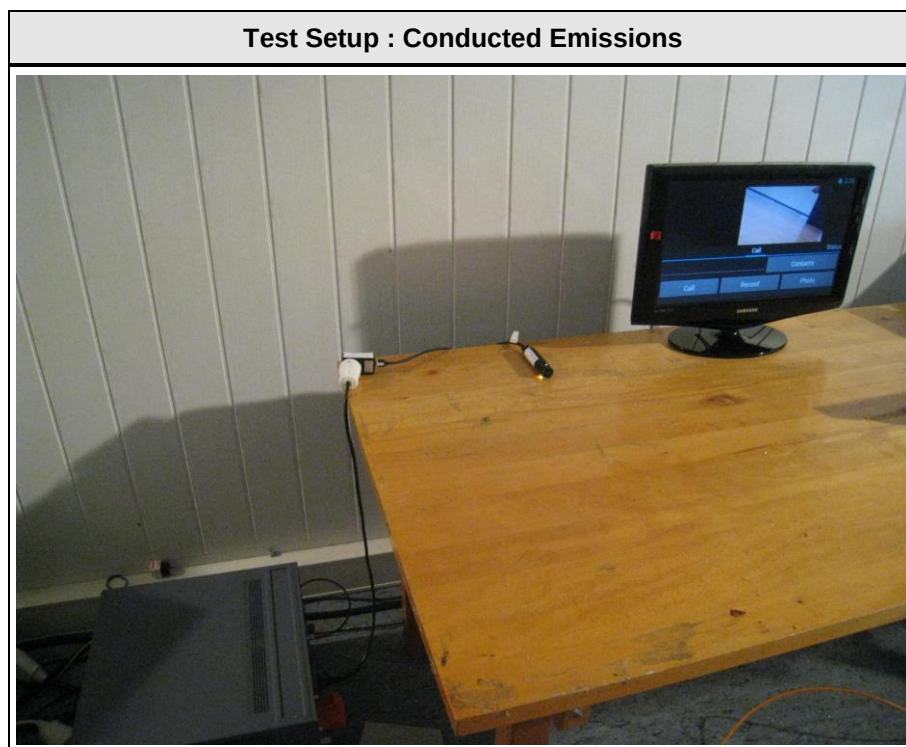
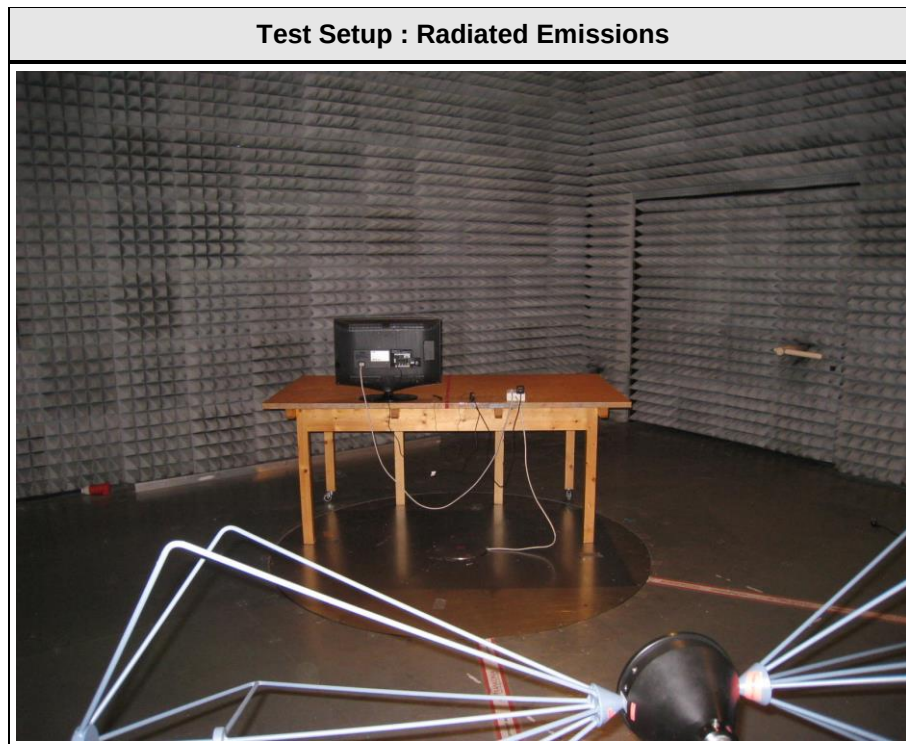
EUT FLEX ANTENNA



FLEX ANTENNA



1.3 Photos – Test setup



1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
SIM	Bluetooth Tester	R&S	CBT	-
AE	Laptop	Dell	Latitude E8420	-
*Note: Use the following abbreviations: AE : Auxiliary/Associated Equipment, or SIM : Simulator (Not Subjected to Test) CABL : Connecting cables				

1.5 Input / Output Ports

Port #	Name	Type*	Max. Cable Length	Cable Shielded	Comments
1	USB Micro-B	I/O	0.6 m	Yes	
2	Audio Jack	I/O	< 3m	No	
3	AC Mains	AC	> 3m	No	
4	HDMI	I/O	> 3m	Yes	OrbitX ST only
*Note: Use the following abbreviations: AC : AC power port DC : DC power port N/E : Non electrical I/O : Signal input or output port TP : Telecommunication port					

1.6 Operating Modes and Configurations

Mode #	Description
1	USB-Data connection, WiFi (Tx), Video rec., Laserspot + LED
2	USB-Charger, WiFi (Tx), Video rec, Laserspot + LED
3	USB-Data connection, BT active, Video rec, Laserspot + LED

Configuration #	EUT Configuration
1	EUT configured with USB as data connection to notebook
2	EUT configured with USB charger in charging mode

1.7 Test Equipment Used During Testing

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

Radiated emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD-Antenne	R&S	HL 223	EF00187	2014-03	2017-03
Horn antenna	Schwarzbeck	BBHA 9120D	EF00018	2013-09	2016-09
EMI Test Receiver	R&S	ESU26	EF00887	2015-01	2016-01

Conducted emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AMN	R&S	ESH2-Z5	EF00182	2014-11	2016-11
AMN	R&S	ESH3-Z5	EF00036	2014-12	2016-12
EMI Test Receiver	R&S	ESCS 30	EF00295	2014-10	2015-10

1.8 Sample emission level calculation

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

Reading:

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

A.F.:

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

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

Net:

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

Limit:

This is the FCC Class B radiated emission limit (in units of 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:

$$\text{Limit (dB}\mu\text{V/m)} = 20 * \log (\mu\text{V/m})$$

Margin:

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

Example only:

Reading	+	AF	=	Net Reading	:	Net reading - FCC limit	=	Margin
21.5 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 15B, Industry Canada RSS-Gen				
Product Specific Standard	Requirement – Test	Reference Method	Result	Remarks
47 CFR 15.109 RSS-Gen 6.13	Radiated emissions	ANSI C 63.4	PASS	
47 CFR 15.107 RSS-Gen 8.8	AC power line conducted emissions	ANSI C63.4	PASS	
Remarks:				

3 Test Conditions and Results

3.1 Test Conditions and Results – Radiated emissions

Radiated emissions acc. FCC 47 CFR 15.109 / IC RSS-Gen				Verdict: PASS		
Laboratory Parameters:		Required prior to the test		During the test		
Ambient Temperature		15 to 35 °C		23°C		
Relative Humidity		30 to 60 %		55%		
Test according referenced standards		Reference Method				
		ANSI C63.4				
Sample is tested with respect to the requirements of the equipment class		Equipment class				
		Class B				
Test frequency range determined from highest emission frequency		Highest emission frequency				
		Fmax[MHz] = 5000				
Fully configured sample scanned over the following frequency range		Frequency range				
		30 MHz to 33 GHz				
Operating mode		2 / 3				
Configuration		1 / 2				
Limits and results Class B						
Frequency [MHz]	Quasi-Peak [dBµV/m]	Result	Average [dBµV/m]	Result	Peak [dBµV/m]	Result
30 – 88	40	PASS	-		-	-
88 – 216	43.5	PASS	-		-	-
216 – 960	46	PASS	-		-	-
960 – 1000	54	PASS	-		-	-
> 1000	-	-	54	PASS	74	PASS
Comments:						

Test Procedure:

The test site is in accordance with ANSI C63-4:2009 requirements and is listed by FCC.

The measurement procedure is as follows:

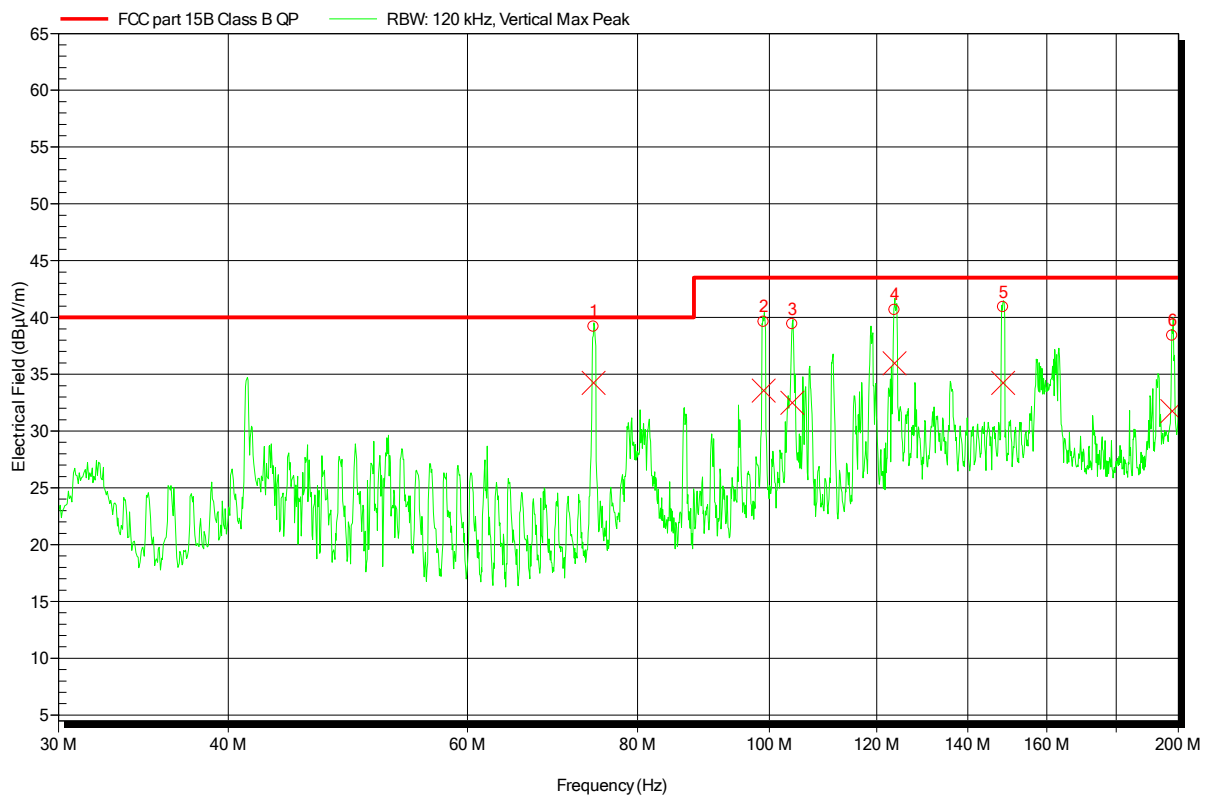
- 1) The EUT was placed on a 0.8 m non conductive table at a 3 m distance from the receive antenna (ANSI C63.4: 2009 item 6.2)
- 2) The antenna output was connected to the measurement receiver
- 3) A biconical antenna was used for the frequency range 30 – 200 MHz, a logarithmic periodical antenna was used for the frequency range from 200 – 1000 MHz. Above one 1 GHz a Double Ridged Broadband Horn antenna was used. The antenna was placed on an adjustable height antenna mast
- 4) Emissions were maximized at each frequency by rotating the EUT and adjusting the receive antenna height and polarization. The maximum values were recorded.

Spurious emissions under normal conditions according to FCC 15B

Project number: GOM-1503-4620

Applicant: BARTEC PIXAVI AS
EUT Name: Wireless camera (Standard version)
Model: OrbitX ST
Test Site: Eurofins Product Service GmbH
Operator: Mr. Belz
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3m
Mode: USB-Data, Wifi call, HDMI
Test Date: 2015-06-24
Note: 2 x Ferrit Würth 742 711 42

Index 27



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
74.28 MHz	34.24 dBµV/m	40 dBµV/m	-5.76 dB	Pass
99.06 MHz	33.57 dBµV/m	43.5 dBµV/m	-9.93 dB	Pass
103.998 MHz	32.49 dBµV/m	43.5 dBµV/m	-11.01 dB	Pass
123.66 MHz	35.96 dBµV/m	43.5 dBµV/m	-7.54 dB	Pass
148.584 MHz	34.25 dBµV/m	43.5 dBµV/m	-9.25 dB	Pass
197.856 MHz	31.75 dBµV/m	43.5 dBµV/m	-11.75 dB	Pass

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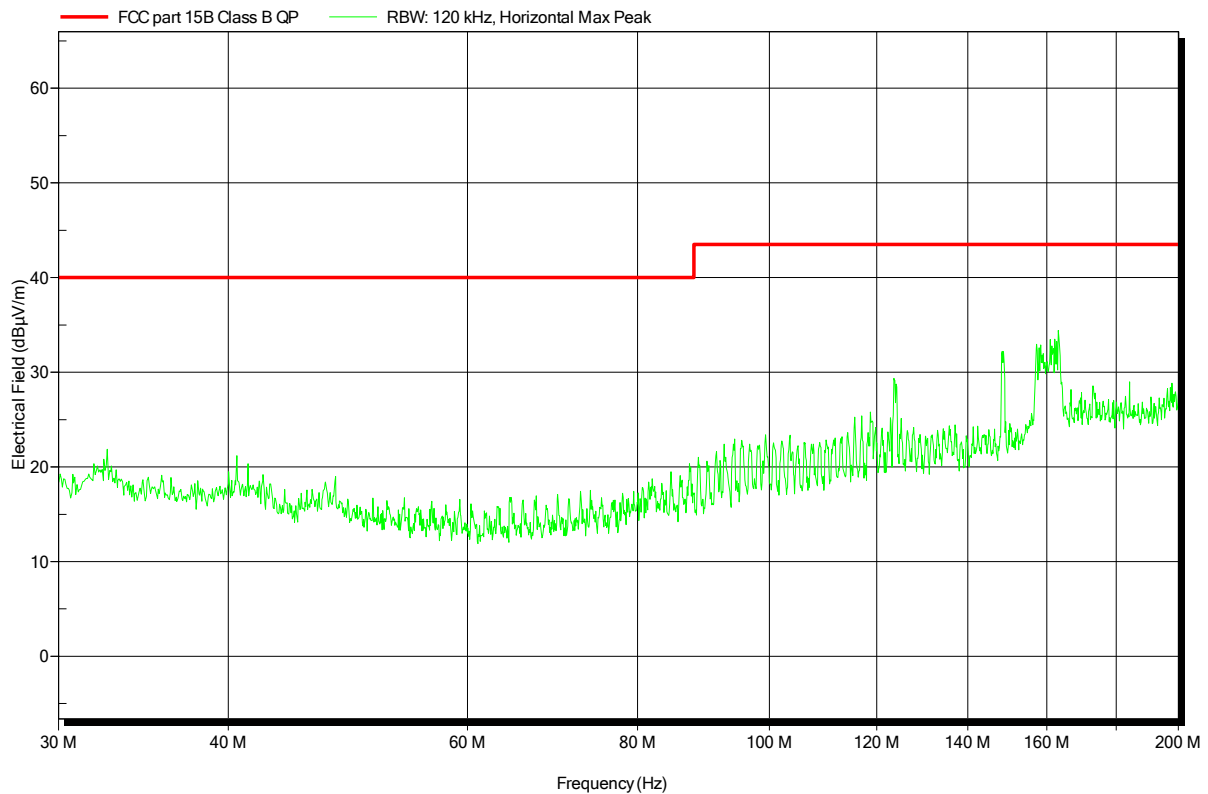
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Belz
Test Conditions:	Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	USB-Data, Wifi call, HDMI
Test Date:	2015-06-24
Note:	2 x Ferrit Würth 742 711 42

Index 28

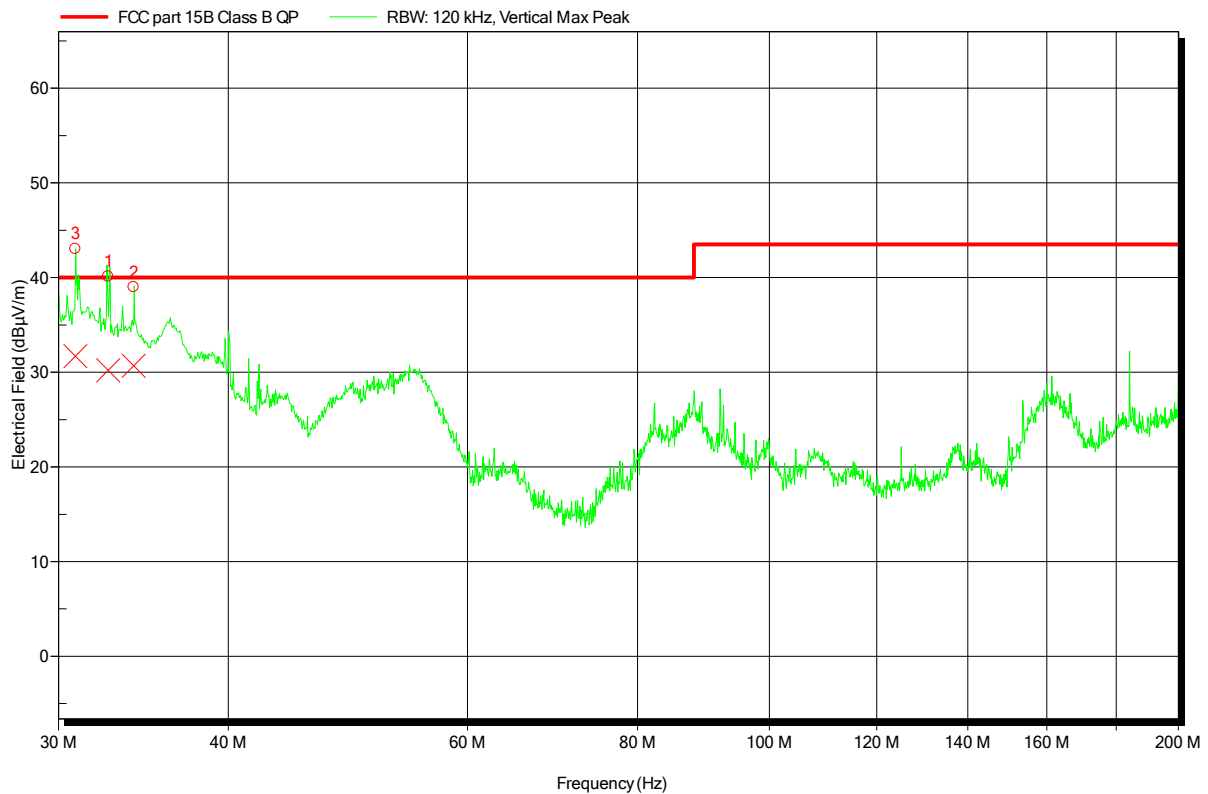


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 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3m
 Mode: USB-Charger; Video rec.; LED Lights
 Test Date: 2015-06-24
 Note: 2 x Ferrit Würth 742 711 42

Index 33



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
30.882 MHz	31.71 dBµV/m	40 dBµV/m	-8.29 dB	Pass
32.64 MHz	30.2 dBµV/m	40 dBµV/m	-9.8 dB	Pass
34.08 MHz	30.7 dBµV/m	40 dBµV/m	-9.3 dB	Pass

Test Report No.: G0M-1503-4620-EF01-V01

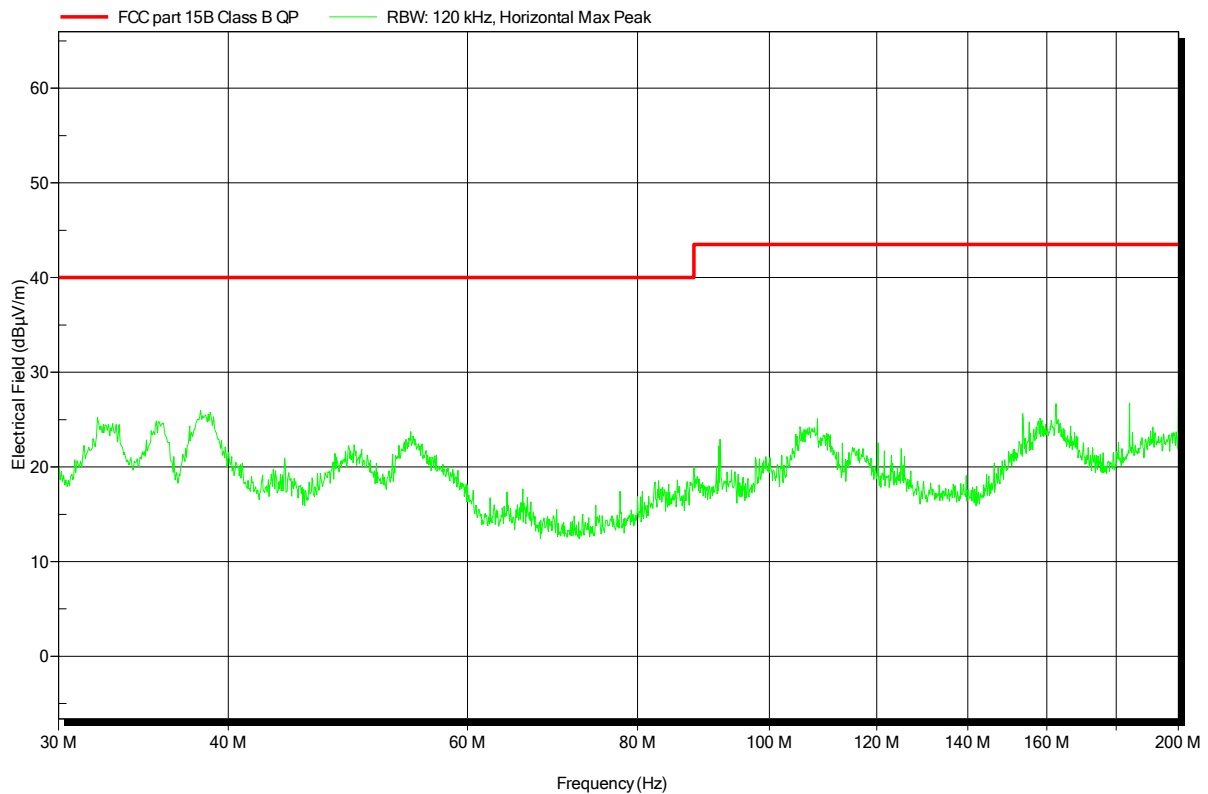
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Measurement distance:	3m
Mode:	USB-Charger; Video rec.; LED Lights
Test Date:	2015-06-24
Note:	2 x Ferrit Würth 742 711 42

Index 34

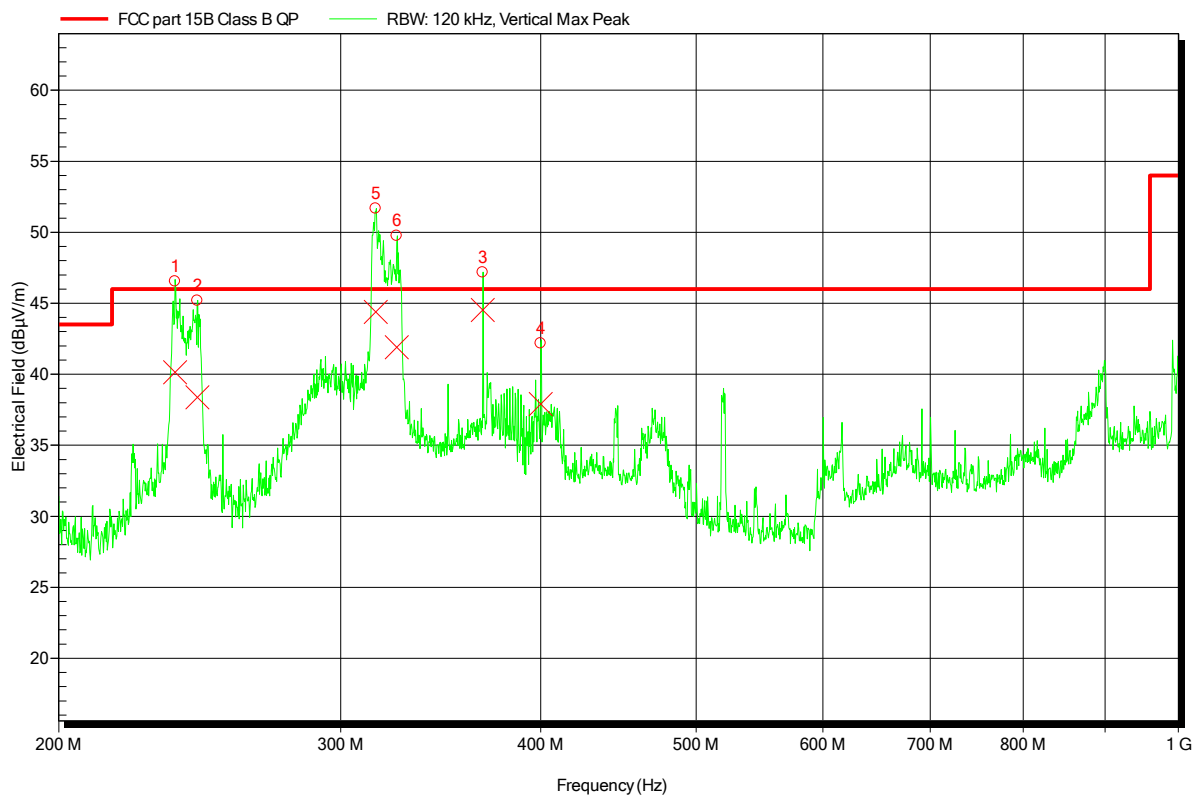


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 Model: OrbitX ST
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3m
 Mode: USB-Data, Wifi call, HDMI
 Test Date: 2015-06-24
 Note: 2 x Ferrit Würth 742 711 42

Index 30



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
236.48 MHz	40.15 dBμV/m	46 dBμV/m	-5.85 dB	Pass
244.202 MHz	38.37 dBμV/m	46 dBμV/m	-7.63 dB	Pass
315.56 MHz	44.4 dBμV/m	46 dBμV/m	-1.6 dB	Pass
325.274 MHz	41.9 dBμV/m	46 dBμV/m	-4.1 dB	Pass
368.006 MHz	44.53 dBμV/m	46 dBμV/m	-1.47 dB	Pass
400.022 MHz	37.89 dBμV/m	46 dBμV/m	-8.11 dB	Pass

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 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3m
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Index 29



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
878.05 MHz	40.01 dBμV/m	46 dBμV/m	-5.99 dB	Pass
882.7 MHz	40.52 dBμV/m	46 dBμV/m	-5.48 dB	Pass
896.8 MHz	43.42 dBμV/m	46 dBμV/m	-2.58 dB	Pass
899.2 MHz	45.27 dBμV/m	46 dBμV/m	-0.73 dB	Pass
941.95 MHz	39.26 dBμV/m	46 dBμV/m	-6.74 dB	Pass

Test Report No.: GOM-1503-4620-EF01-V01

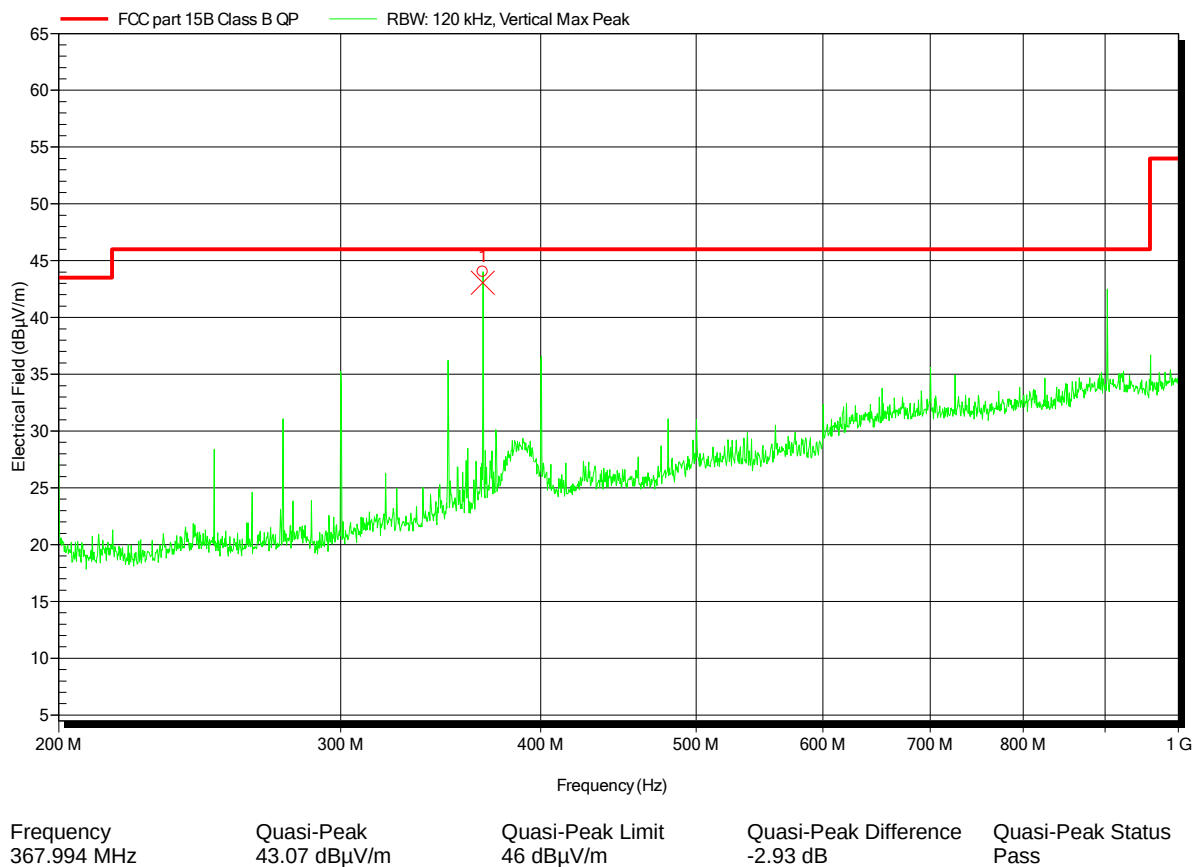
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Index 32



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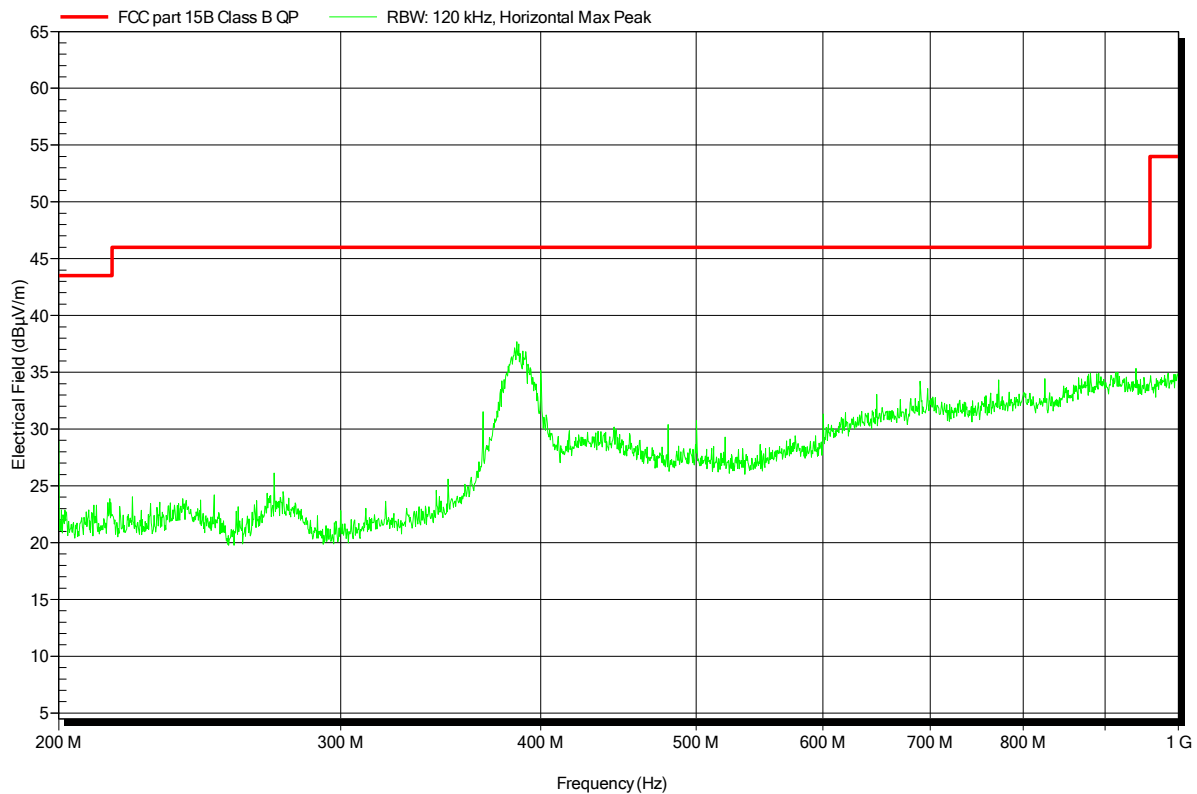
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Measurement distance:	3m
Mode:	USB-Charger; Video rec.; LED Lights
Test Date:	2015-06-24
Note:	2 x Ferrit Würth 742 711 42

Index 31

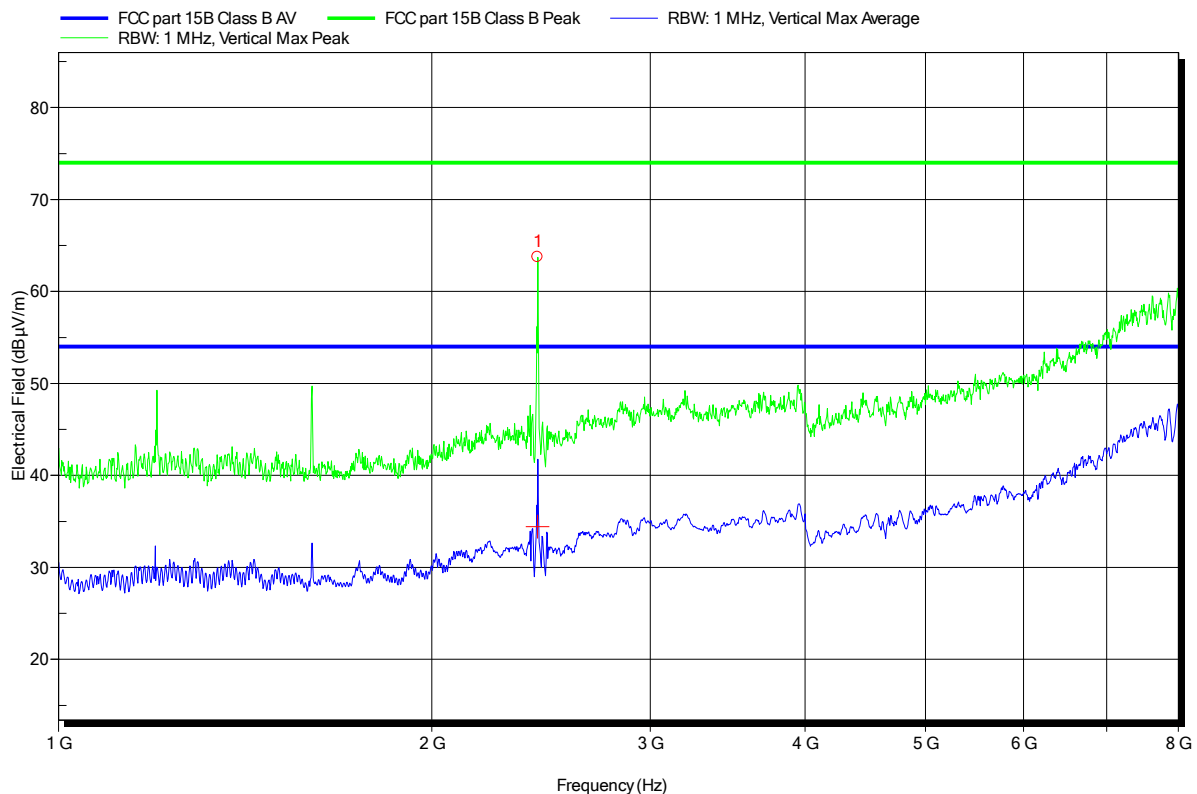


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 Model: OrbitX ST
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3m
 Mode: USB-Data, Wifi call, HDMI
 Test Date: 2015-06-24
 Note: Peak 1 = Wifi Link; 2 x Ferrit Würth 742 711 42

Index 35

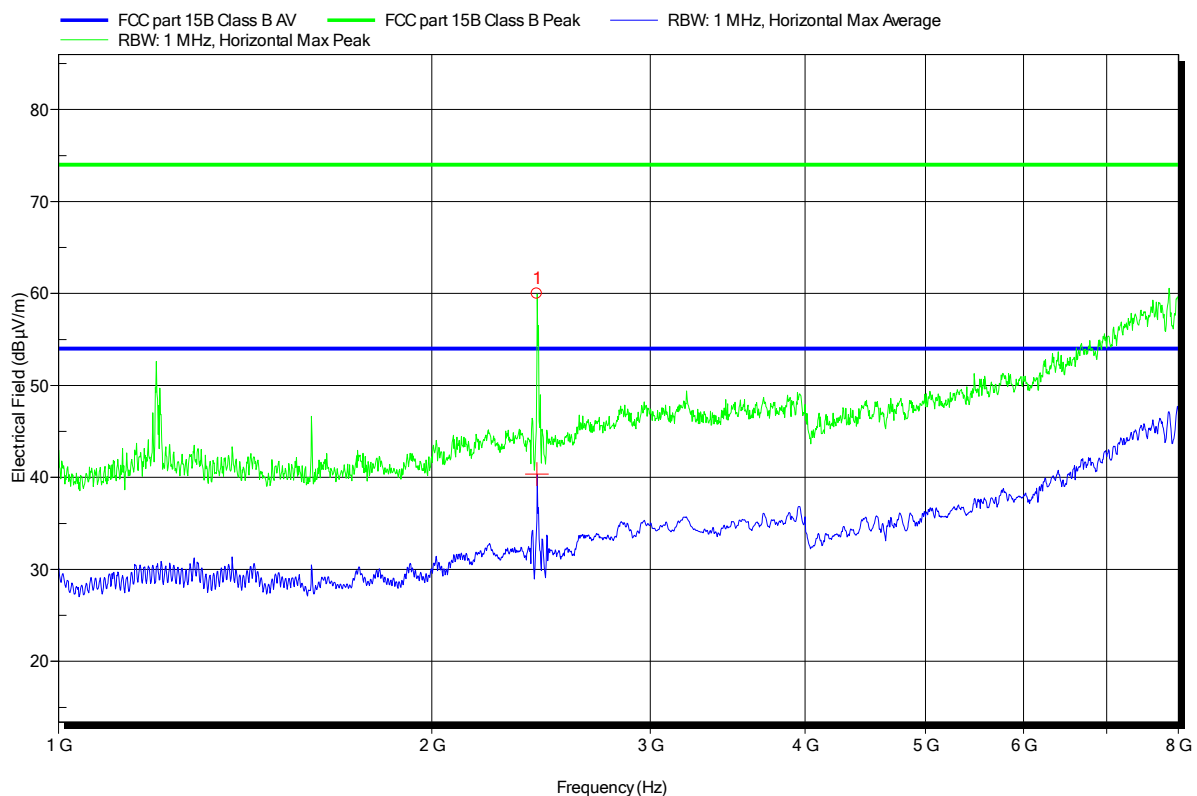


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 Measurement distance: 3m
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Index 36



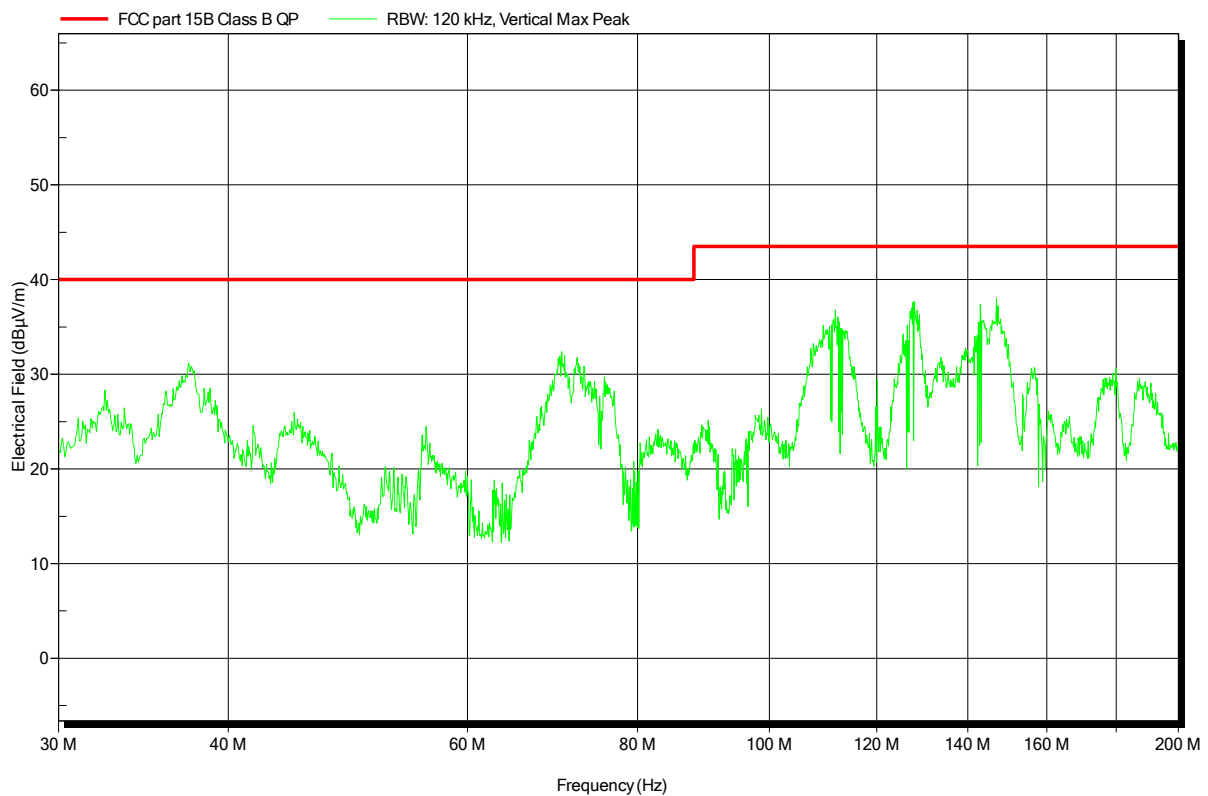
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 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3m
 Mode: USB Datatrans.; WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note:

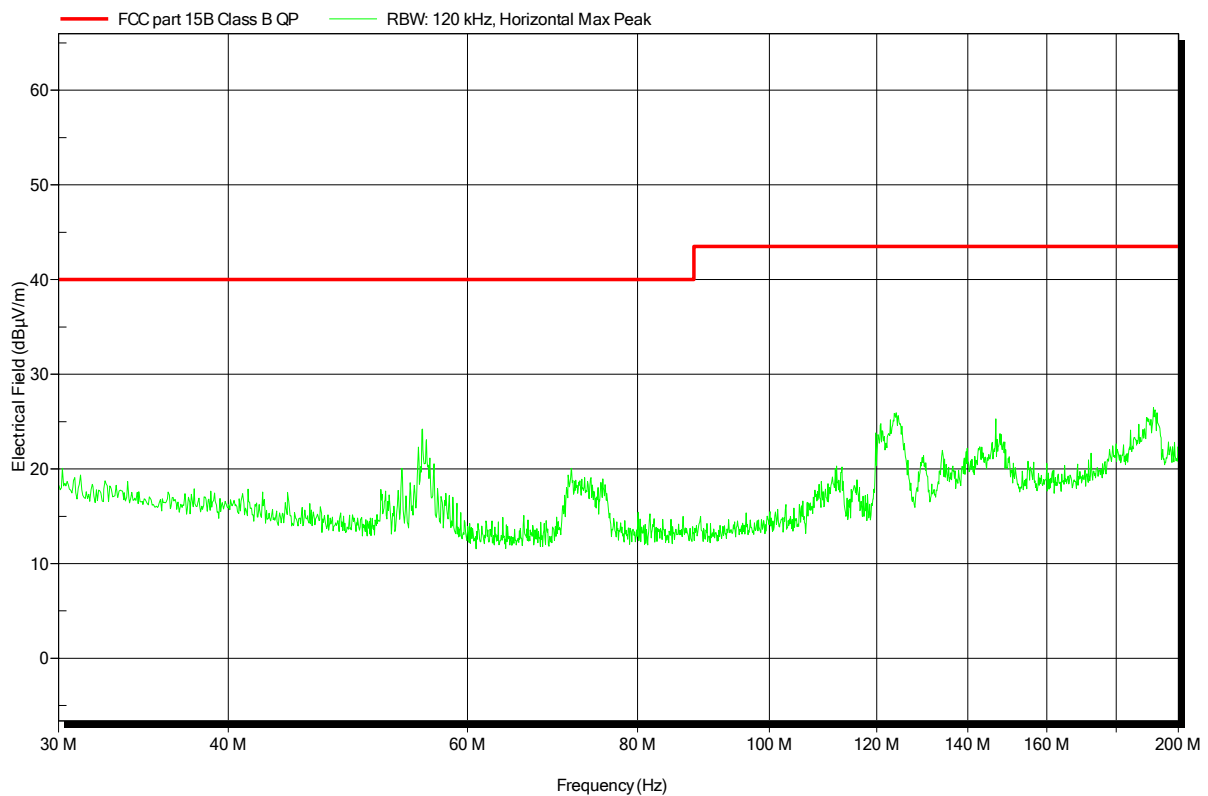
Index 9



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 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3m
 Mode: USB Datatrans.; WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note:

Index 10

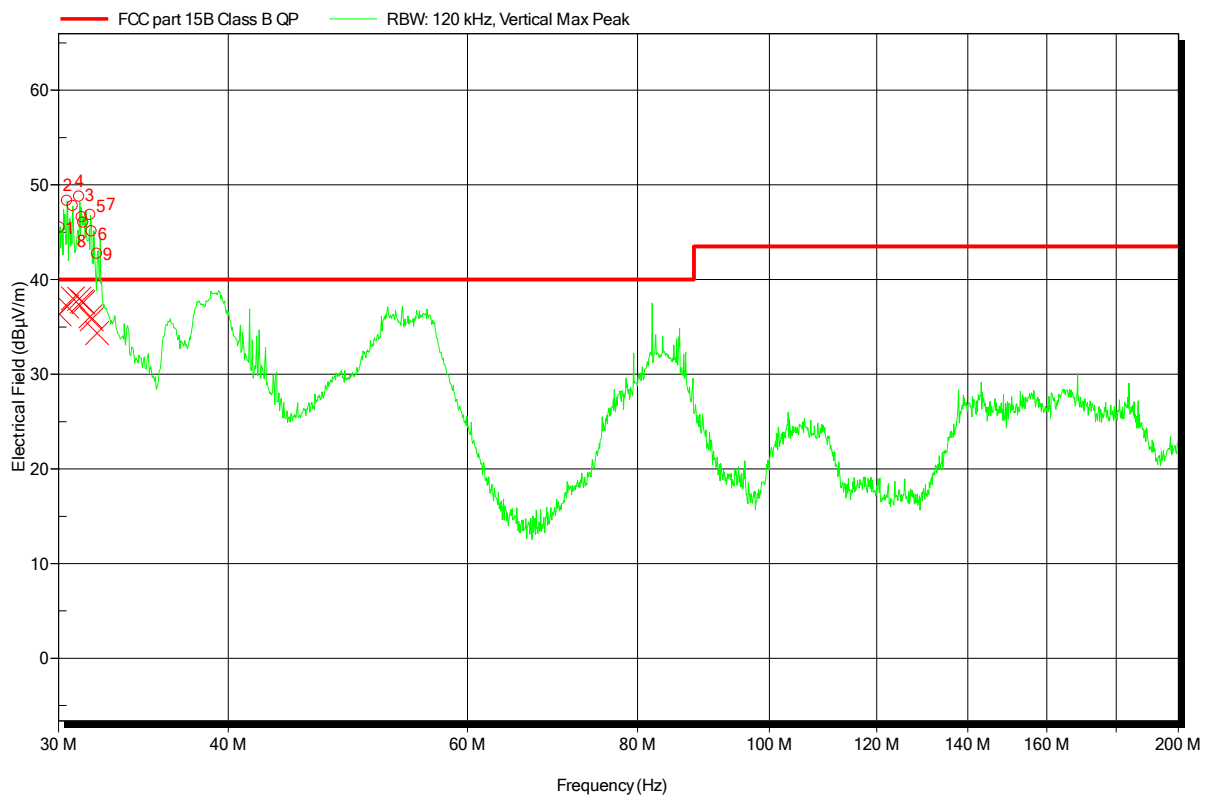


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Measurement distance: 3m
Mode: using Charger.; WLAN(TX); Video recording
Test Date: 2015-05-15
Note:

Index 11



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
30.06 MHz	36.33 dBµV/m	40 dBµV/m	-3.67 dB	Pass
30.444 MHz	37.16 dBµV/m	40 dBµV/m	-2.84 dB	Pass
30.738 MHz	37.99 dBµV/m	40 dBµV/m	-2.01 dB	Pass
31.086 MHz	37.97 dBµV/m	40 dBµV/m	-2.03 dB	Pass
31.212 MHz	37.72 dBµV/m	40 dBµV/m	-2.28 dB	Pass
31.296 MHz	37.61 dBµV/m	40 dBµV/m	-2.39 dB	Pass
31.668 MHz	36.12 dBµV/m	40 dBµV/m	-3.88 dB	Pass
31.734 MHz	35.8 dBµV/m	40 dBµV/m	-4.2 dB	Pass
32.04 MHz	34.34 dBµV/m	40 dBµV/m	-5.66 dB	Pass

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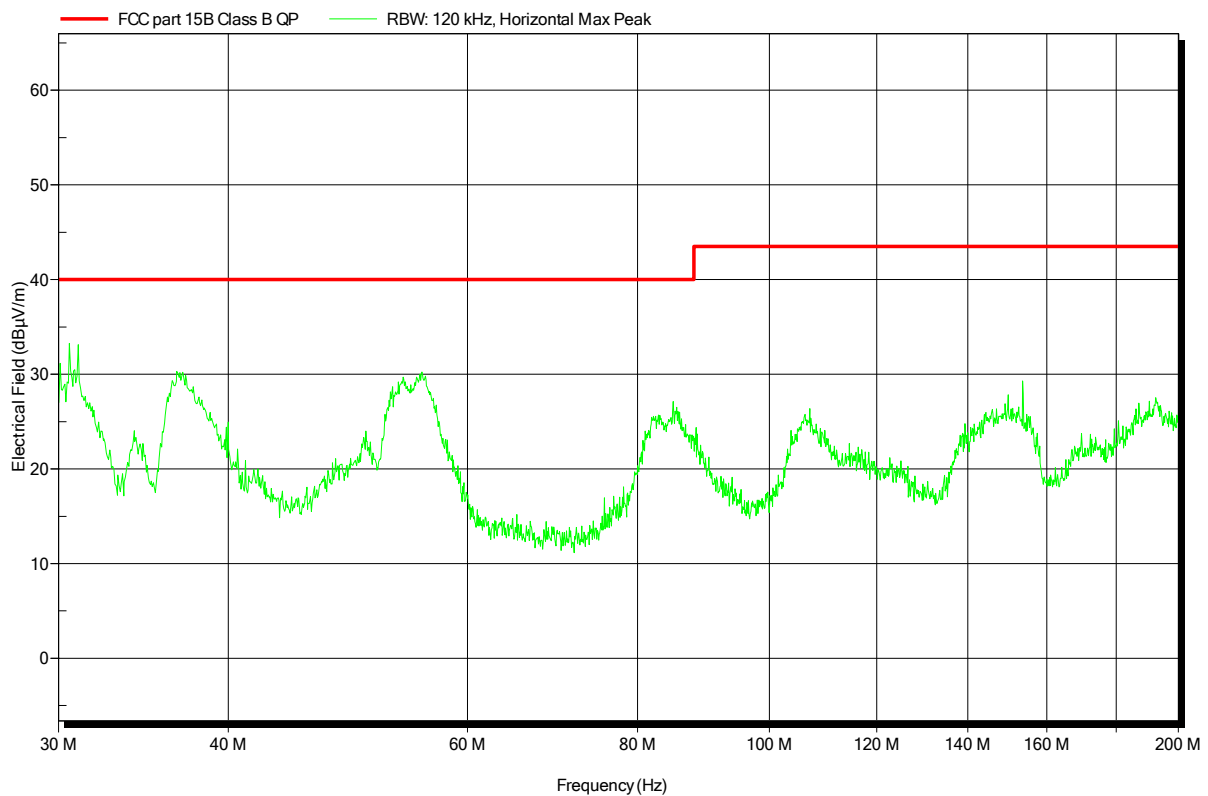
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 Note:

Index 12

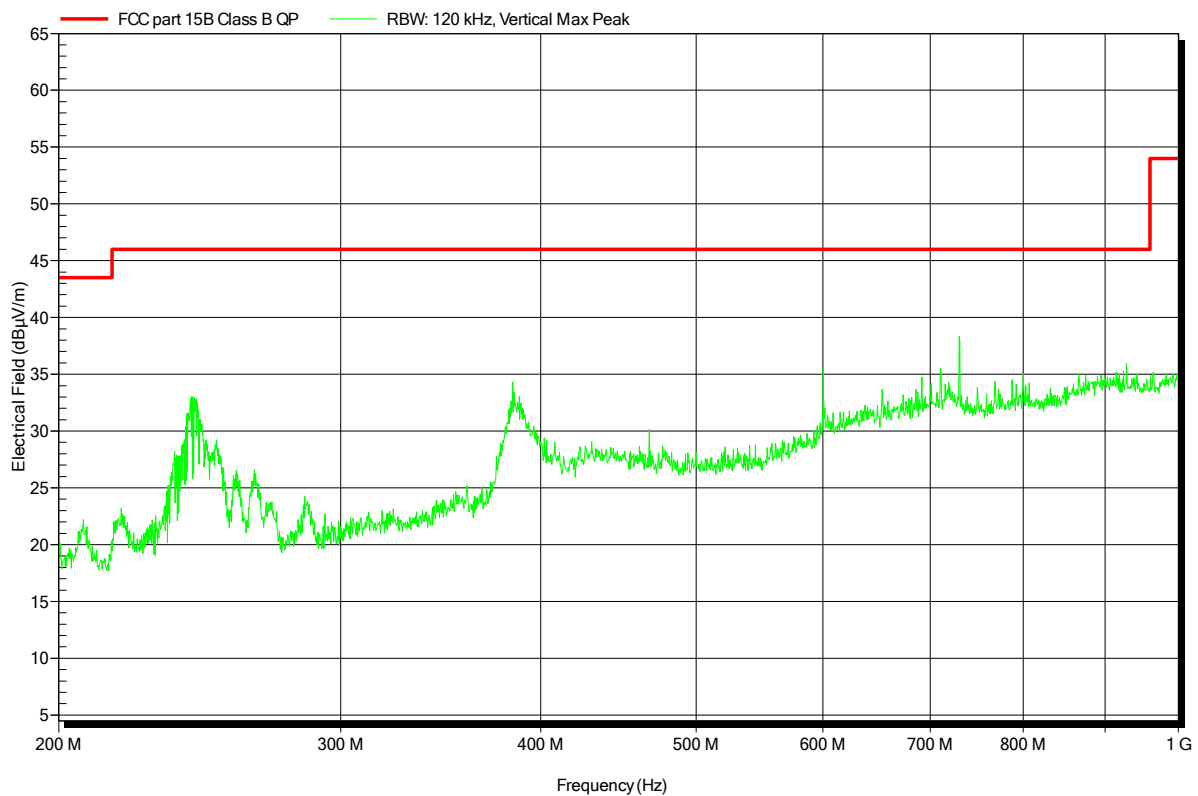


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3m
 Mode: USB-Datatrans.;WLAN(TX); Video recording
 Test Date: 2015-05-13
 Note:

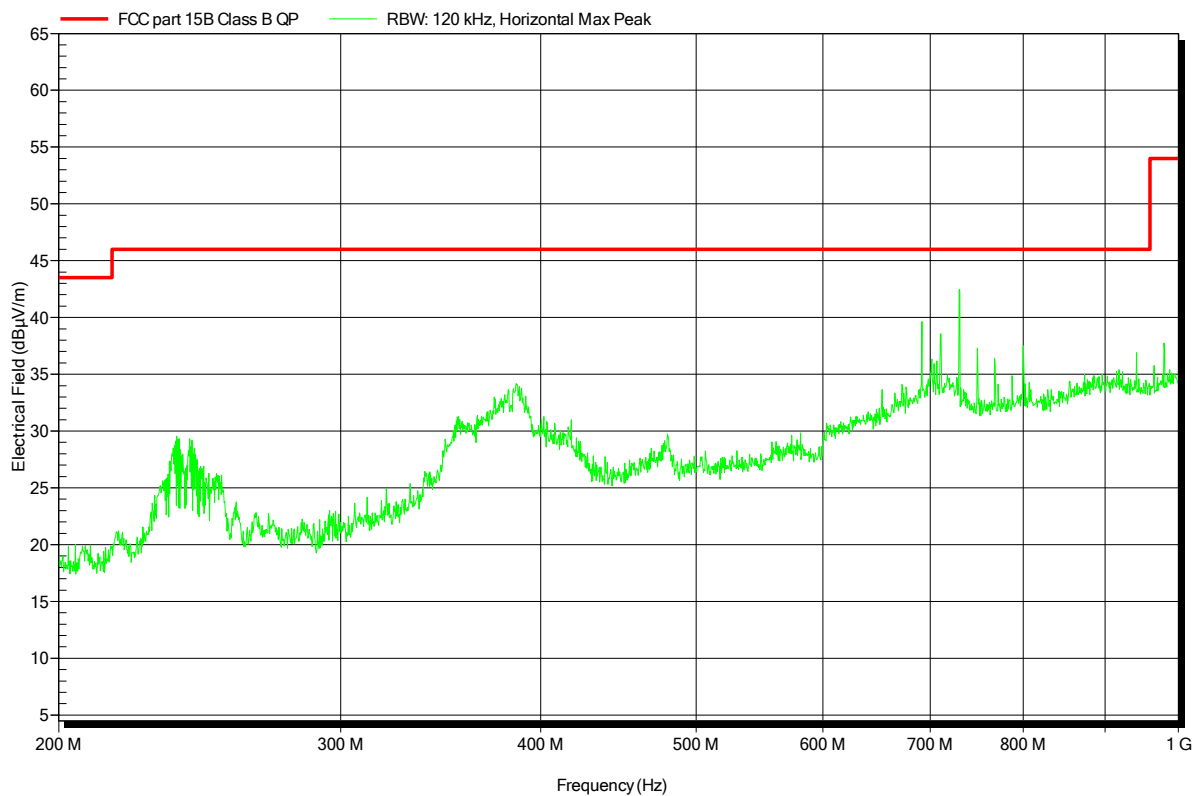
Index 5



Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620
 Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3m
 Mode: USB-Datatrans; WLAN(TX); Video recording
 Test Date: 2015-05-13
 Note:

Index 4

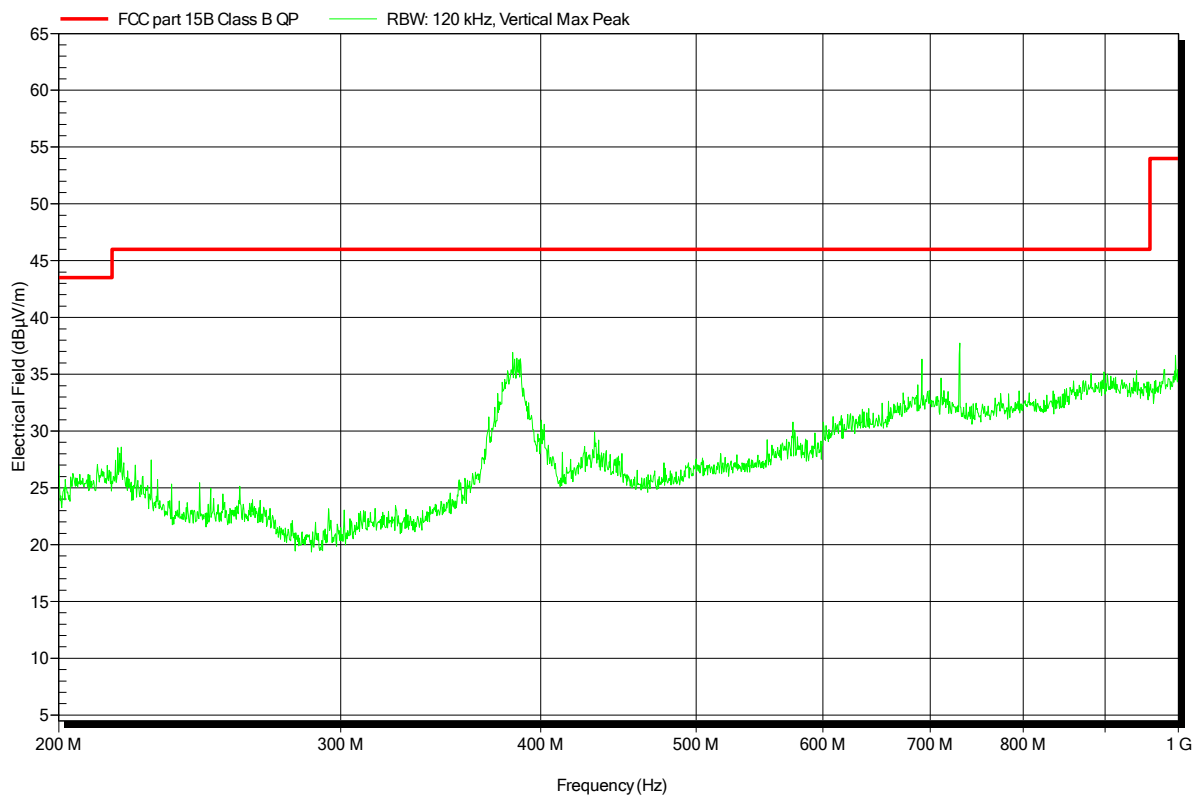


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3m
 Mode: using Charger;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note:

Index 8

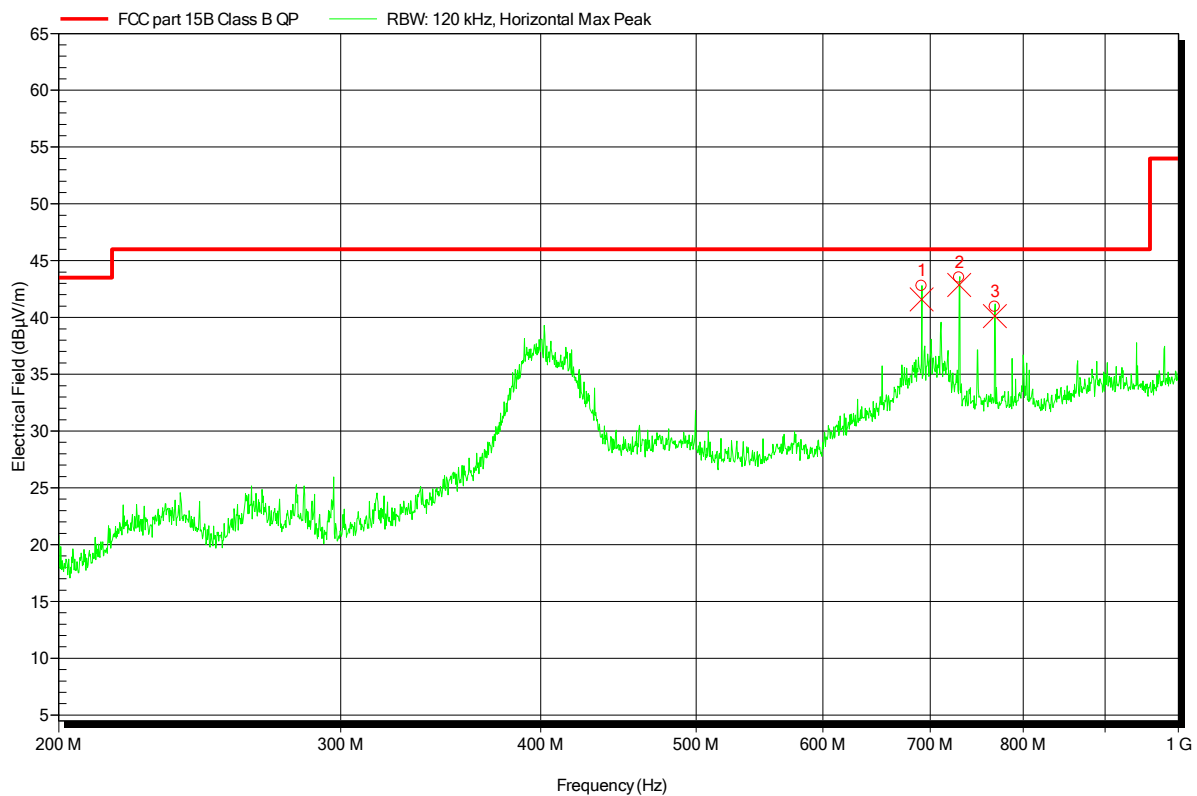


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
EUT Name: Wireless camera
Model: OrbitX EX
Test Site: Eurofins Product Service GmbH
Operator: Mr. Belz
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
Antenna: Rohde & Schwarz HL 223, Horizontal
Measurement distance: 3m
Mode: using Charger;WLAN(TX); Video recording
Test Date: 2015-05-13
Note:

Index 7



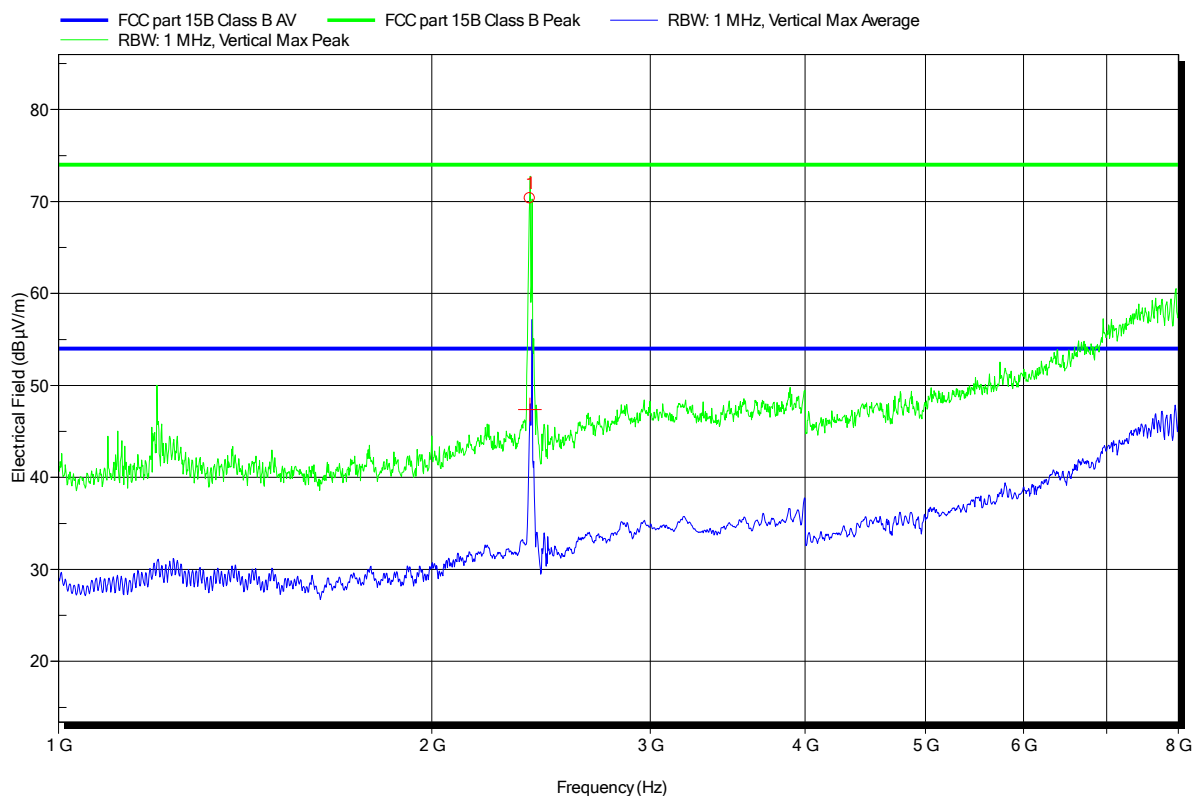
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
691.35 MHz	41.59 dBμV/m	46 dBμV/m	-4.41 dB	Pass
729.725 MHz	42.87 dBμV/m	46 dBμV/m	-3.13 dB	Pass
768.145 MHz	40.12 dBμV/m	46 dBμV/m	-5.88 dB	Pass

Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3m
 Mode: USB-Datatrans.;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note: Peak 1 = Wifi TX

Index 3

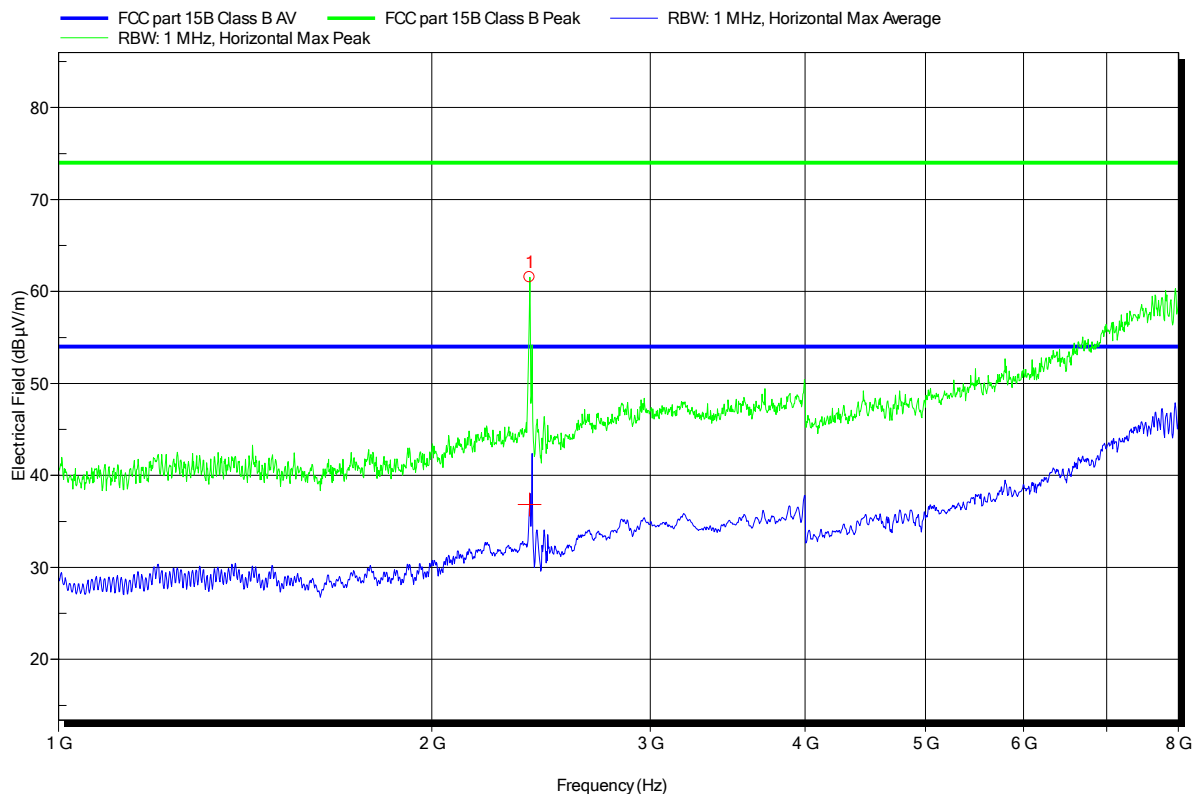


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3m
 Mode: USB-Datatrans.;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note: Peak 1 = Wifi Tx

Index 6

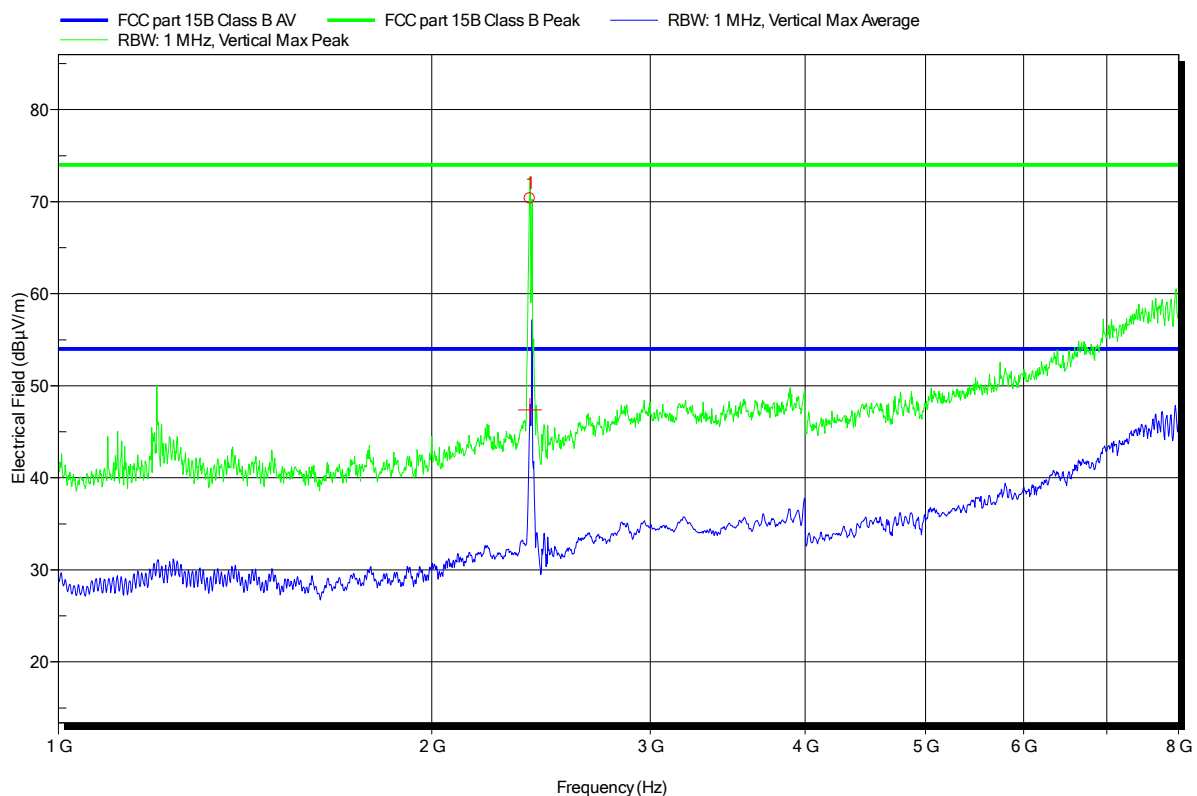


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3m
 Mode: using charger;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note: Peak 1 = Wifi TX

Index 14

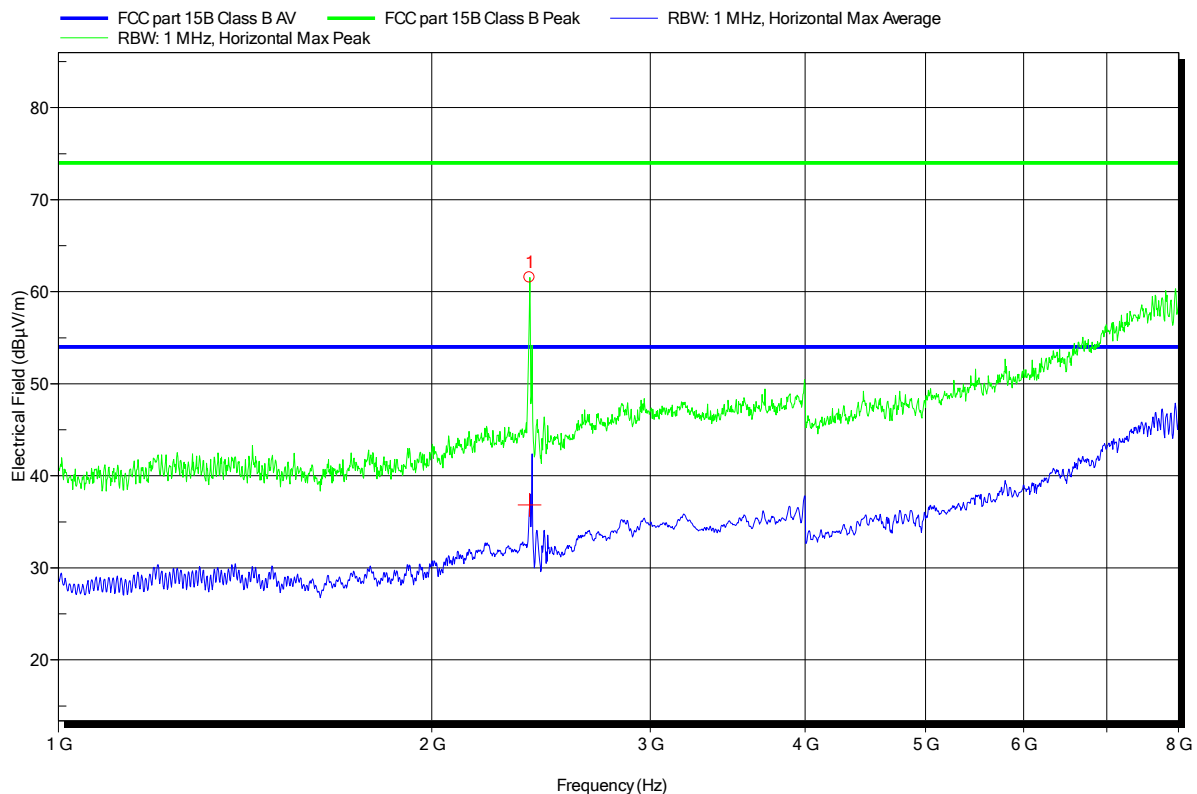


Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3m
 Mode: using charger;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note: Peak 1 = Wifi Tx

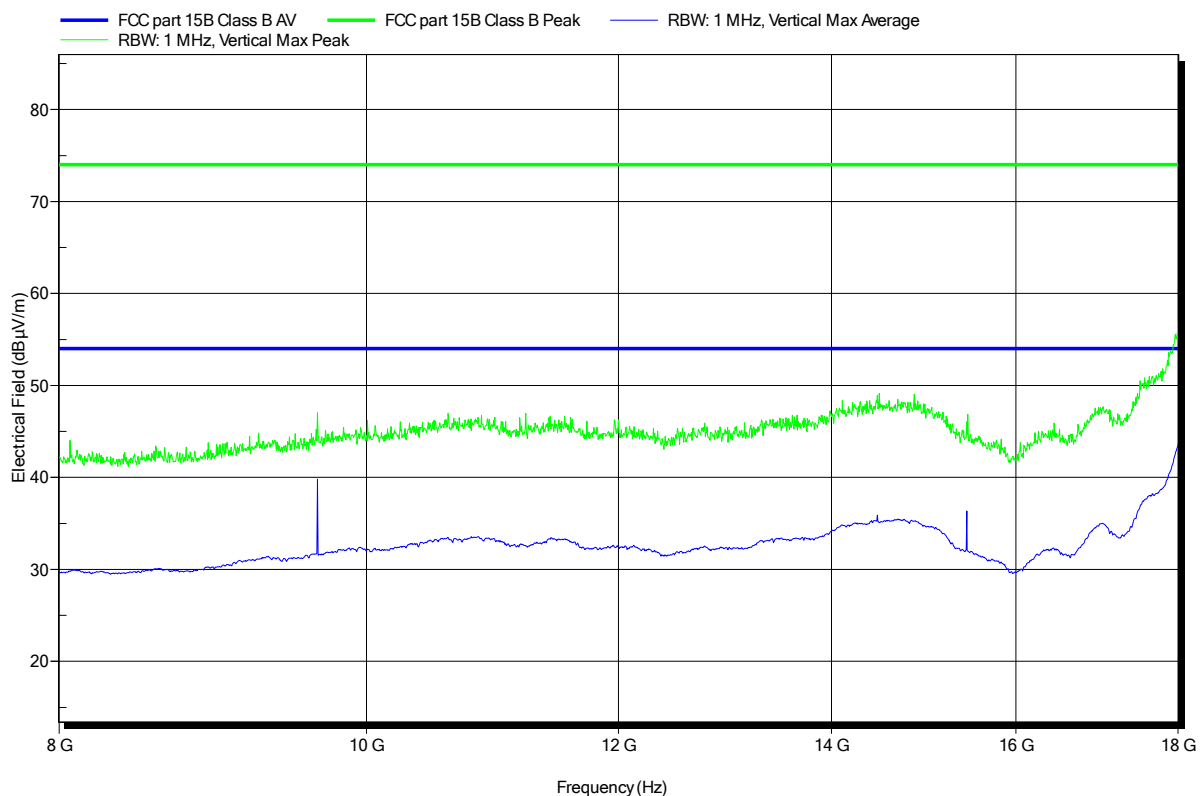
Index 13



Spurious emissions under normal conditions according to FCC 15B

Project number: G0M-1503-4620
 Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3m
 Mode: USB-Datatrans.;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note:

Index 15

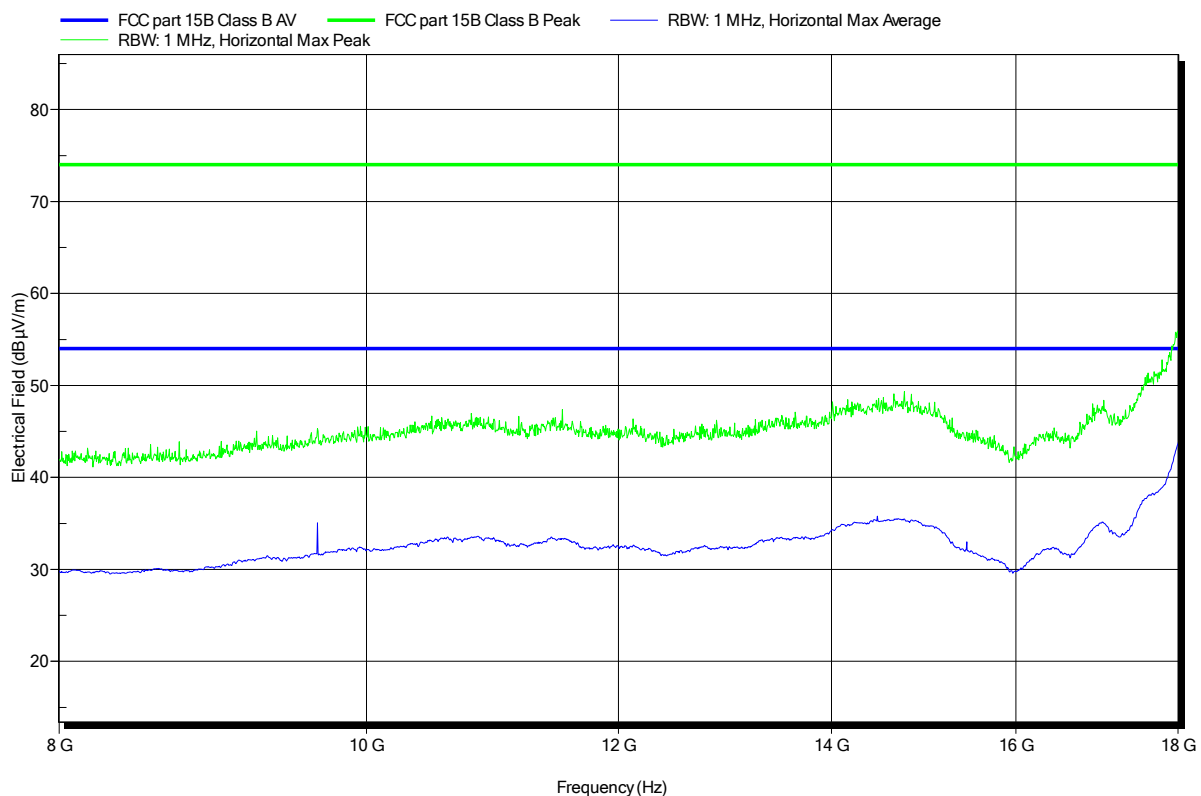


Spurious emissions under normal conditions according to FCC 15B

Project number: GOM-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3m
 Mode: USB-Datatrans.;WLAN(TX); Video recording
 Test Date: 2015-05-15
 Note:

Index 16

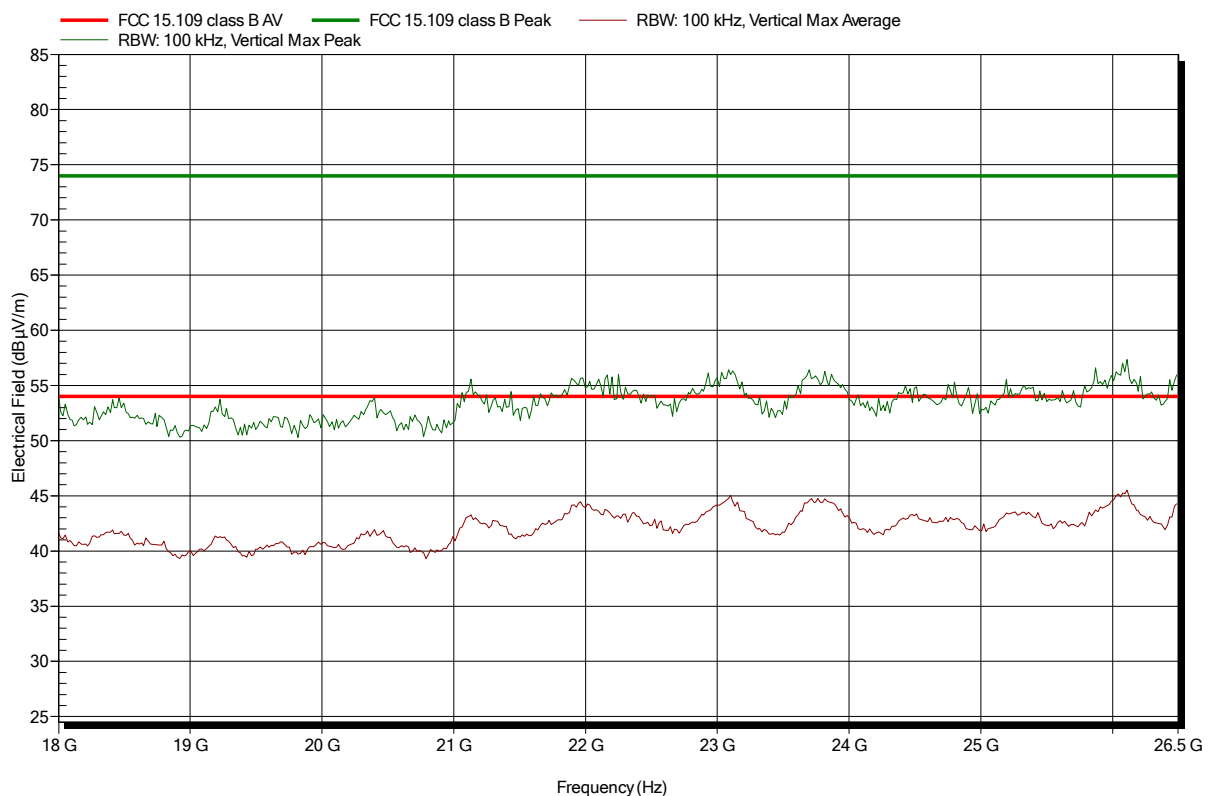


Spurious emissions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: charging;WLAN(TX); Video recording,
 Test Date: 2015-06-23
 Note:

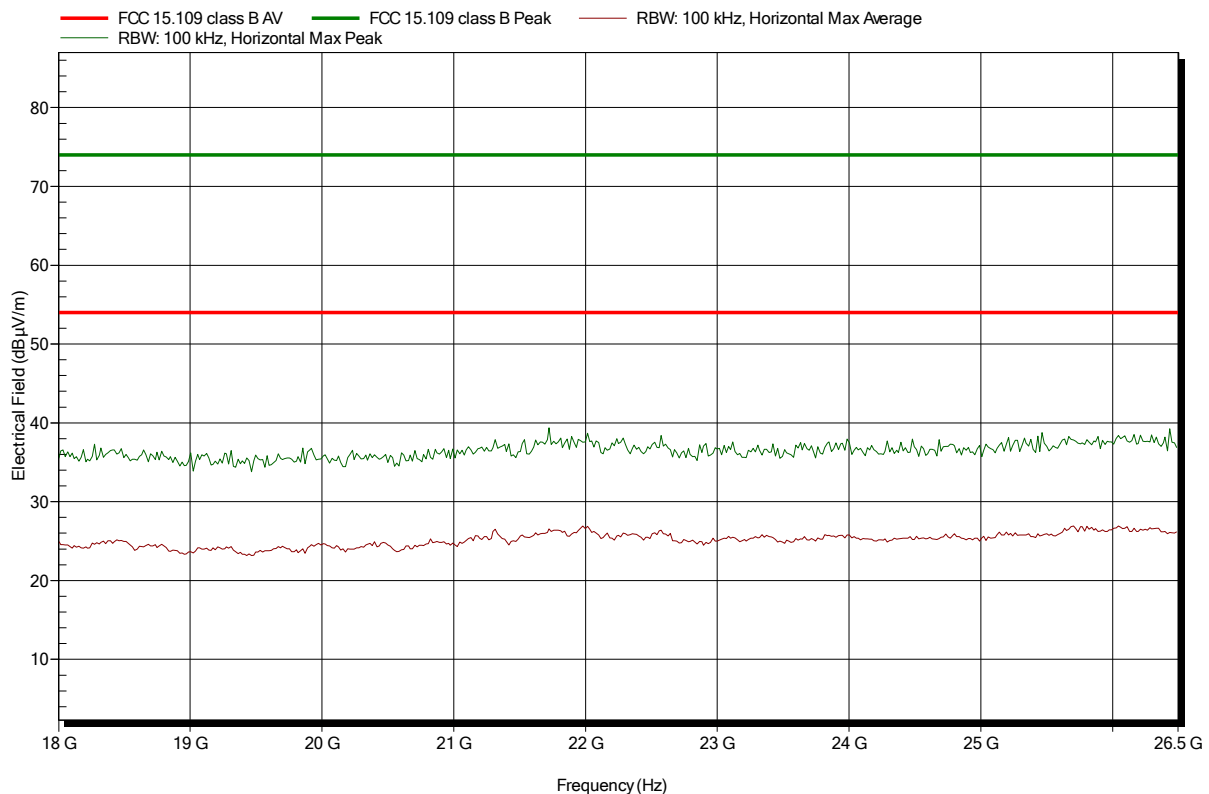
Index 20



Spurious emissions according to FCC 15B

Project number: G0M-1503-4620
 Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: charging; WLAN(TX); Video recording, laser "on"
 Test Date: 2015-06-23
 Note:

Index 21

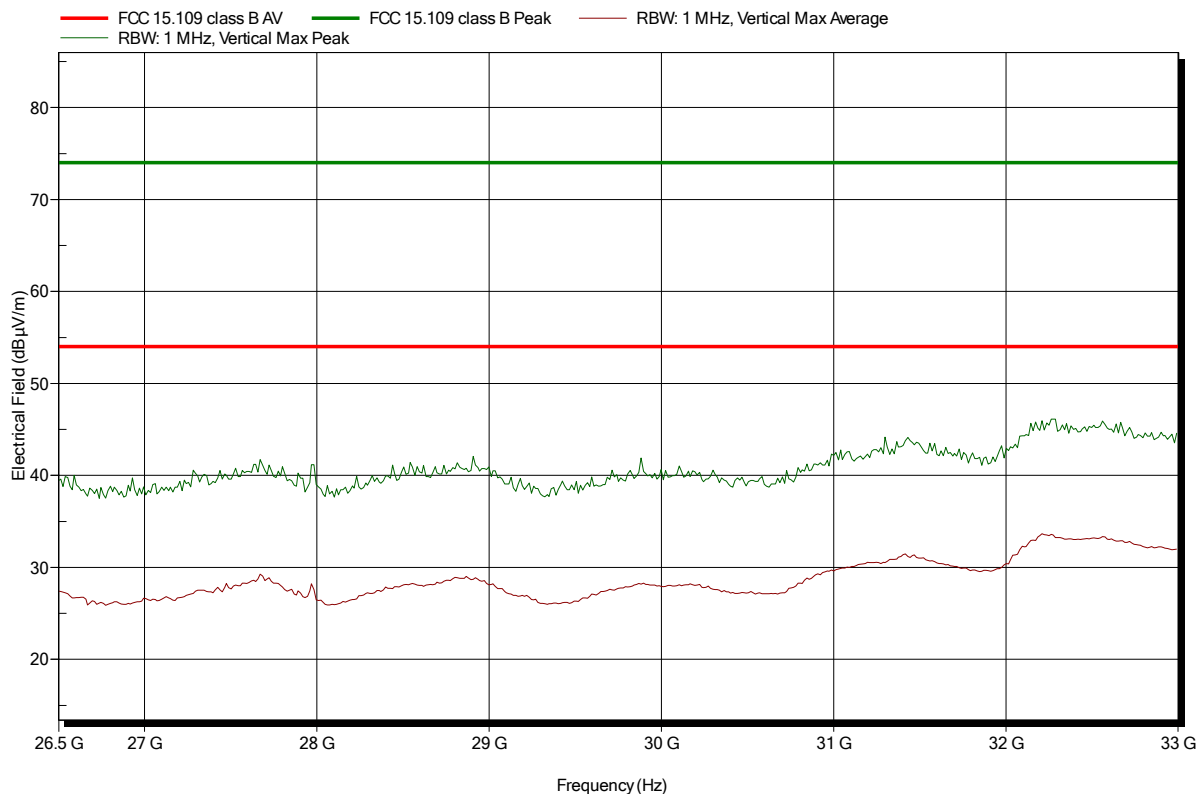


Spurious emissions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)
 Antenna: 22240-25, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: charging;WLAN(TX); Video recording, laser "on"
 Test Date: 2015-06-23
 Note:

Index 18

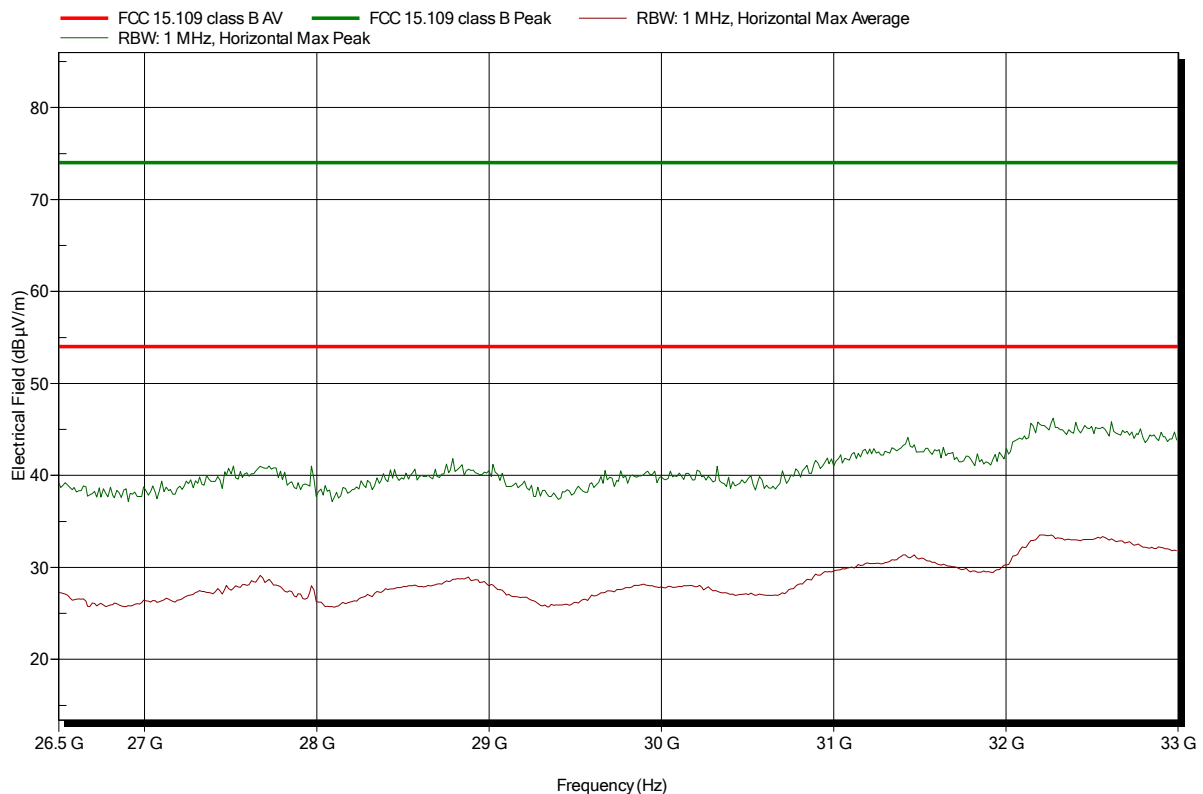


Spurious emissions according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)
 Antenna: 22240-25, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: charging;WLAN(TX); Video recording, laser "on"
 Test Date: 2015-06-23
 Note:

Index 19



3.2 Test Conditions and Results – AC power line conducted emissions

Conducted emissions acc. FCC 47 CFR 15.107 / IC RSS-Gen			Verdict: PASS	
Laboratory Parameters:		Required prior to the test		During the test
Ambient Temperature		15 to 35 °C		23°C
Relative Humidity		30 to 60 %		55%
Test according referenced standards		Reference Method		
		ANSI C63.4		
Fully configured sample scanned over the following frequency range		Frequency range		
		0.15 MHz to 30 MHz		
Sample is tested with respect to the requirements of the equipment class		Equipment class		
		Class B		
Points of Application		Application Interface		
AC Mains		LISN		
Operating mode		2		
Configuration		2		
Limits and results Class B				
Frequency [MHz]	Quasi-Peak [dBµV]	Result	Average [dBµV]	Result
0.15 to 5	66 to 56*	PASS	56 to 46*	PASS
0.5 to 5	56	PASS	46	PASS
5 to 30	60	PASS	50	PASS
Comments:				
* Limit decreases linearly with the logarithm of the frequency.				

Test Procedure:

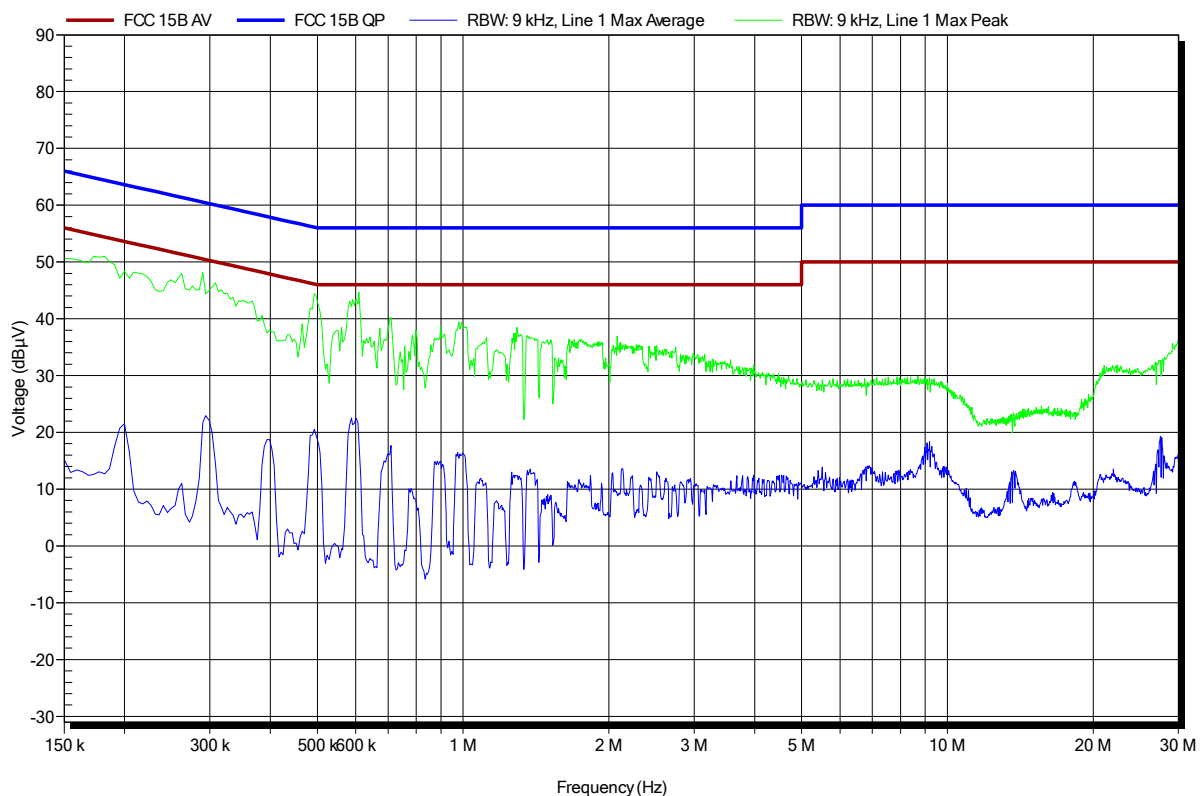
- 1) The EUT was placed on a non conductive table 0.8 m above the reference ground plane and 0.4 m away from the vertical conducting plane (ANSI C63.4: 2009 item 7.3.1)
- 2) The power cord that is normally supplied or recommended by the manufacturer was connected to the LISN.
- 3) The distance between the outer edge of the EUT and the LISN shall be set to 0.8 m. A longer power cord shall be bundled to this length (bundling shall not exceed 40 cm in length).
- 4) The LISN measurement port was connected to a measurement receiver
- 5) I/O cables were bundled not longer than 0.4 m
- 6) Measurement was performed in the frequency range 0.15 – 30MHz on each current-carrying conductor

EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 LISN: ESH2-Z5 L
 Mode: charging; WLAN(TX); Video recording
 Test Date: 2015-05-13
 Note:

Index 1

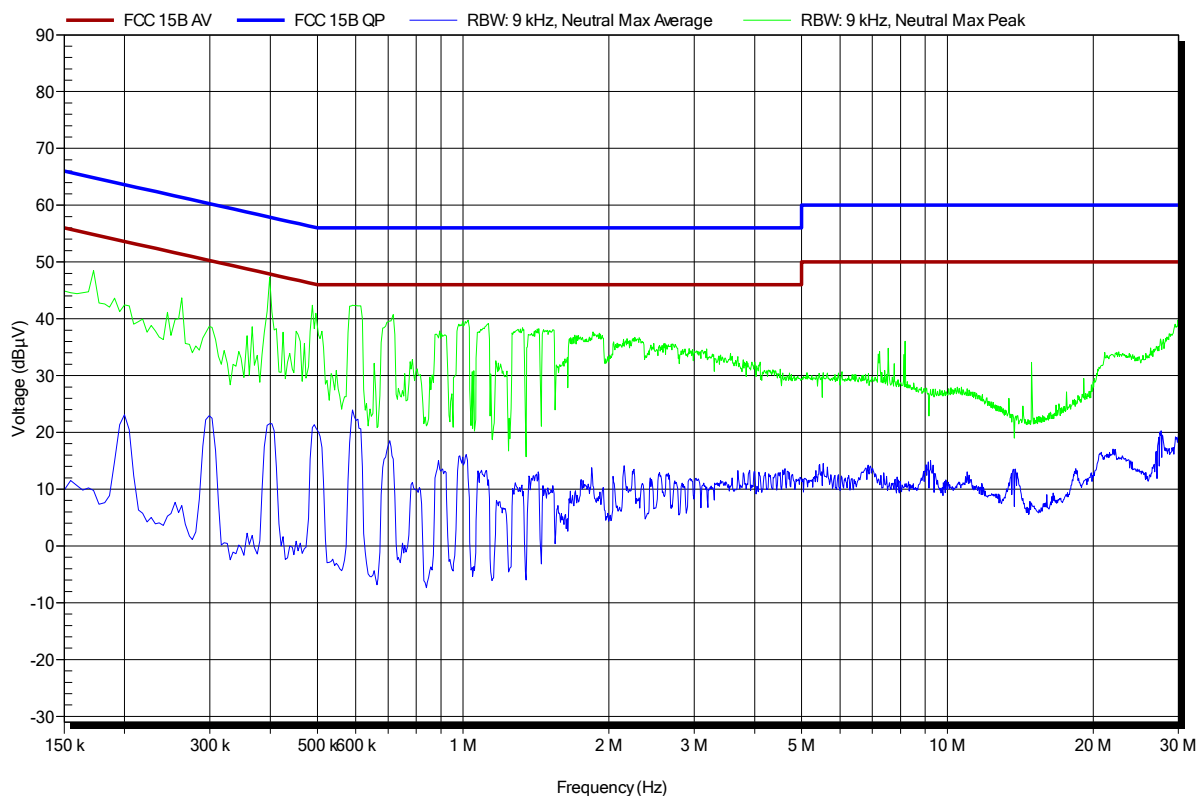


EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera
 Model: OrbitX EX
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)
 LISN: ESH2-Z5 N
 Mode: charging;WLAN(TX); Video recording
 Test Date: 2015-05-13
 Note:

Index 2

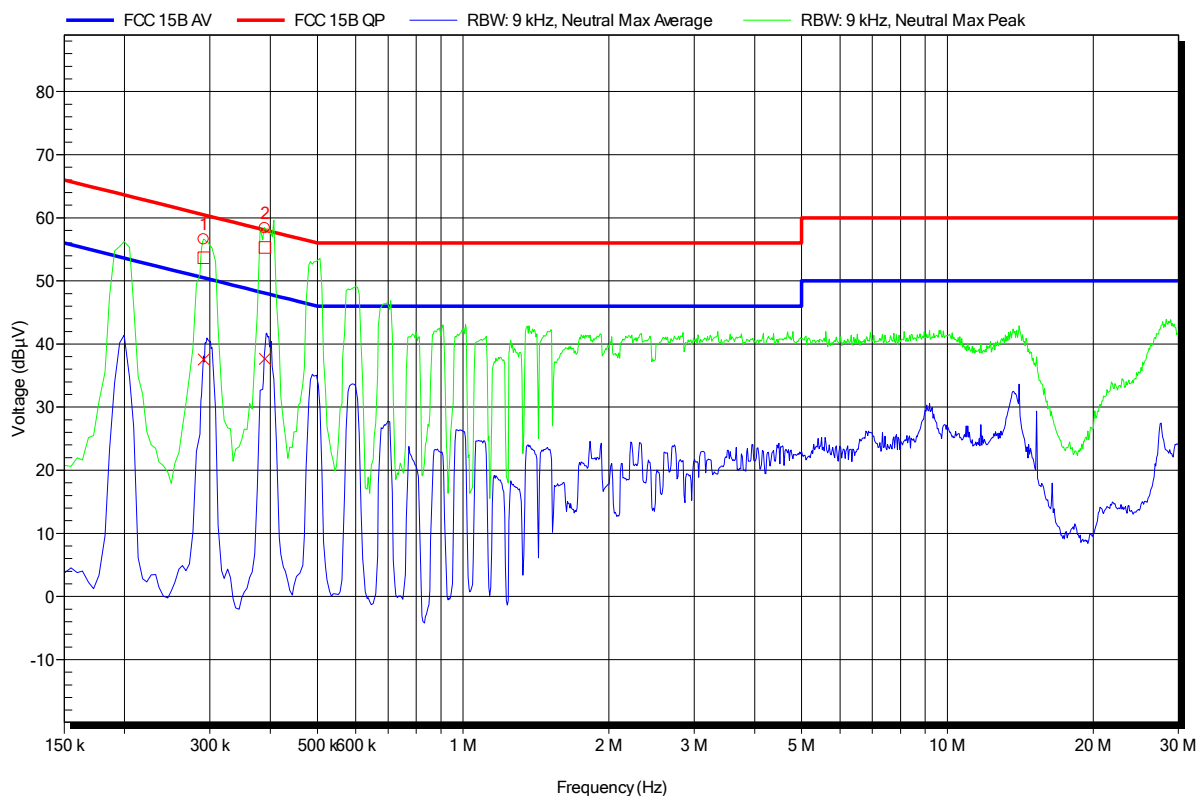


EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera (Standard version)
 Model: OrbitX ST
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
 LISN: ESH2-Z5 N
 Mode: charging, Wlan (ping), HDMI-Monitor
 Test Date: 2015-05-05
 Note:

Index 1



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
291.3 kHz	53.68 dBμV	60.49 dBμV	-6.81 dB	Pass
389.4 kHz	55.3 dBμV	58.08 dBμV	-2.78 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
291.3 kHz	37.56 dBμV	50.49 dBμV	-12.93 dB	Pass
389.4 kHz	37.64 dBμV	48.08 dBμV	-10.44 dB	Pass

Test Report No.: G0M-1503-4620-EF01-V01

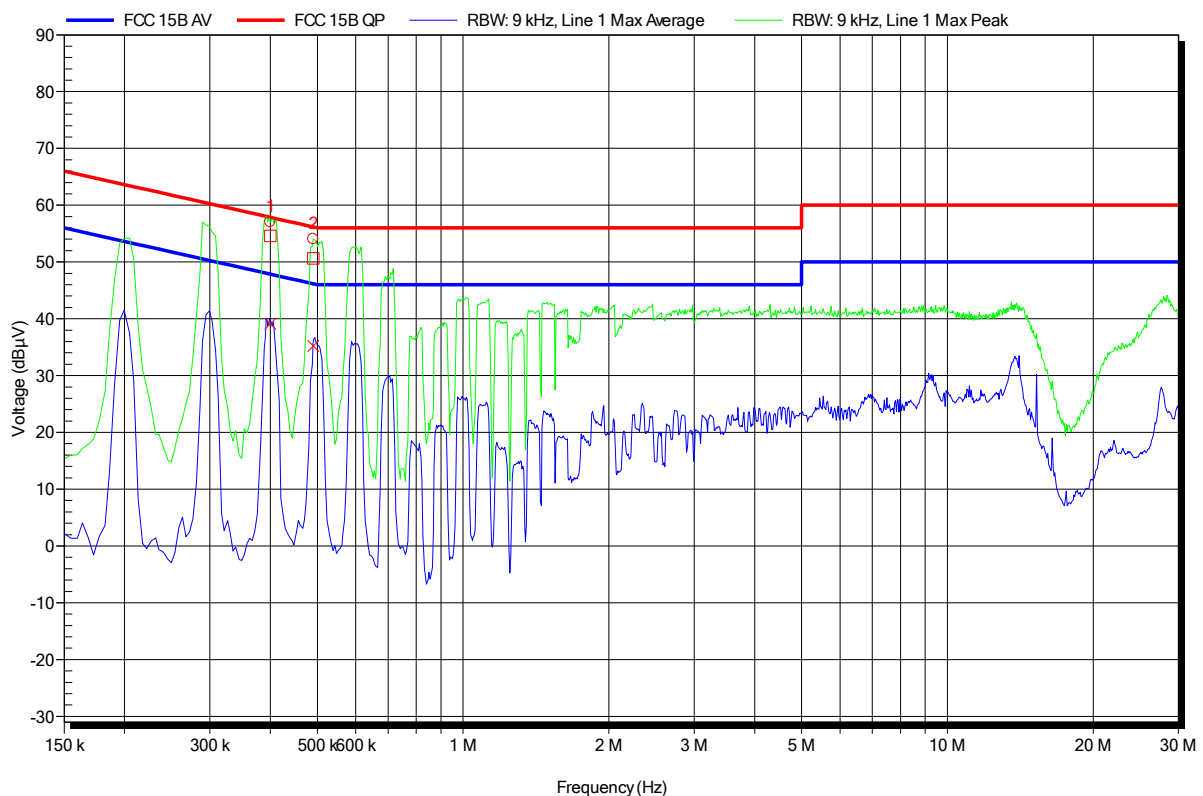
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
 EUT Name: Wireless camera (Standard version)
 Model: OrbitX ST
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)
 LISN: ESH2-Z5 L
 Mode: charging, Wlan (ping), HDMI-Monitor
 Test Date: 2015-05-05
 Note:

Index 2



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
399.75 kHz	54.58 dBμV	57.86 dBμV	-3.28 dB	Pass
490.65 kHz	50.62 dBμV	56.16 dBμV	-5.54 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
399.75 kHz	39.09 dBμV	47.86 dBμV	-8.77 dB	Pass
490.65 kHz	35.21 dBμV	46.16 dBμV	-10.95 dB	Pass

Test Report No.: G0M-1503-4620-EF01-V01

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany