

EMC TEST REPORT

FCC 47 CFR Part 15B Industry Canada RSS-Gen

Electromagnetic compatibility - Unintentional radiators

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



P	ossi	hle	test	case	verc	licts.

- 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

Compiled by: Marcus Klein

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

Approved by (+ signature):

Head of Lab

Marcus Klein

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	



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1 Equipment (Test item) Description

Description	Wireless camera (Sta	andard 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-41078-05 Manufacturer : Globte Input : 100-240 VAC Output : 5 VDC	ek	
	Туре	WLAN / Bluetooth	
Radio module	Model	LBEP5CLWMC-633	
Manufacturer	Manufacturer BARTEC PIXAVI AS Domkirkeplassen 2 4006 Stavanger NORWAY	Murata	
Highest emission frequency	Fmax[MHz] = 5000		
Device classification	Class B		
Equipment type	Tabletop		
Number of tested samples	1		



1.1 Photos – Equipment external

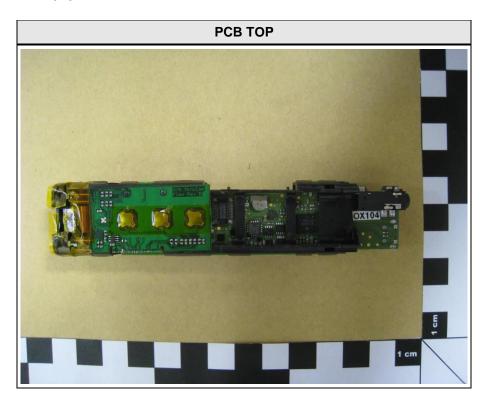


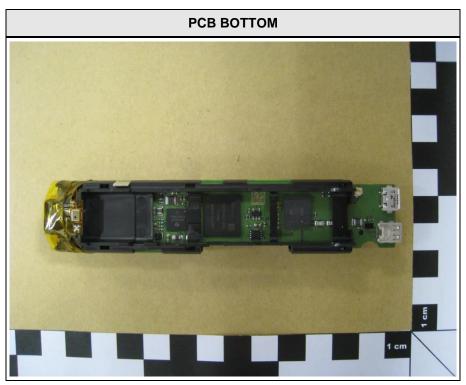


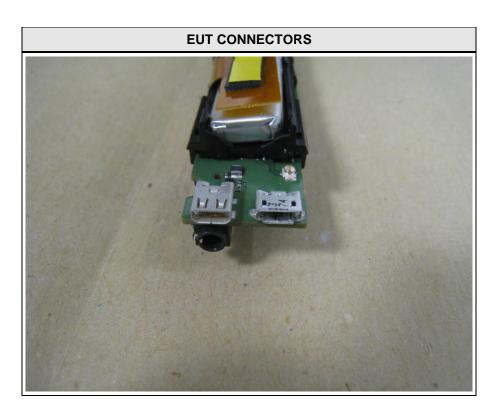


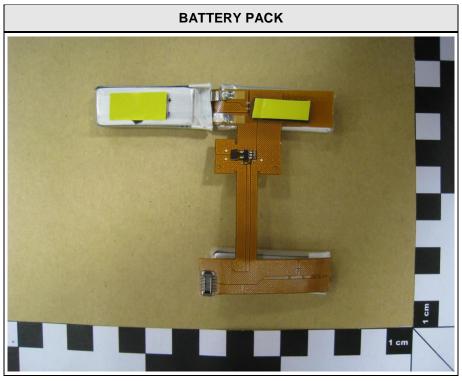


1.2 Photos – Equipment internal

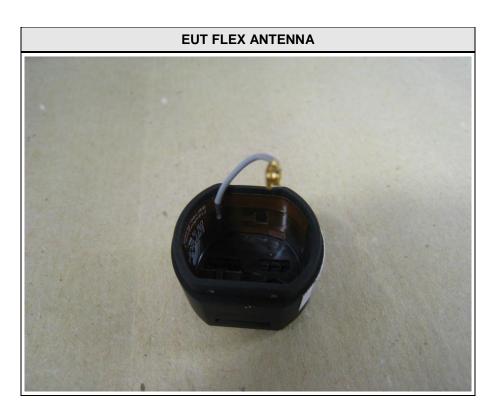


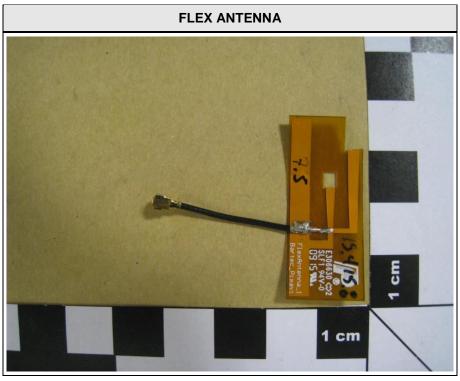






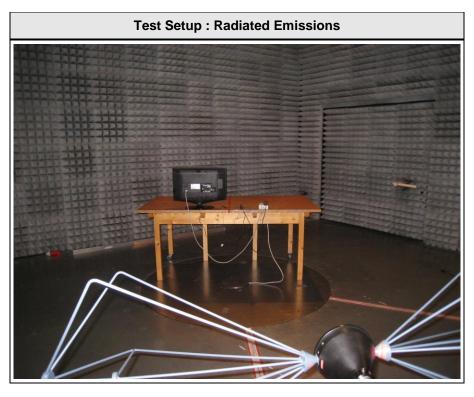


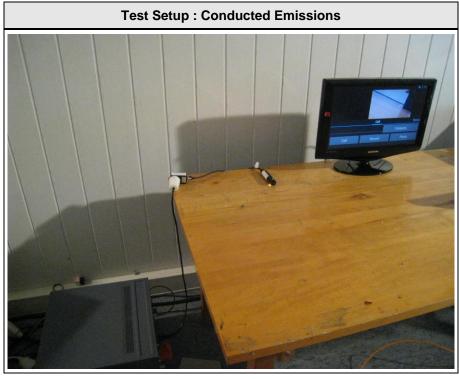






1.3 Photos - Test setup







1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
SIM	Bluetooth Tester	R&S	СВТ	•
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 $dB\mu V$. 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 (dB μ V) + A.F. (dB) = Net field strength (dB μ 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 $dB\mu V/m$). The FCC limits are given in units of $\mu V/m$. The following formula is used to convert the units of $\mu V/m$ to $dB\mu V/m$:

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

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 dB μ V + 26 dB = 47.5 dB μ V/m : 47.5 dB μ V/m - 57.0 dB μ V/m = -9.5 dB



2 Result Summary

FCC 47 CFR Part 15B, Industry Canada RSS-Gen					
Requirement – Test	Reference Method	Result	Remarks		
Radiated emissions	ANSI C 63.4	PASS			
AC power line conducted emissions	ANSI C63.4	PASS			
	Requirement – Test Radiated emissions	Requirement – Test Reference Method Radiated emissions ANSI C 63.4	Requirement – Test Reference Method Radiated emissions ANSI C 63.4 PASS		



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: PAS					PASS		
Laboratory Parameters:		Requi	equired 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		Equipm	ent class			
requirements of the 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					
	L	imits and	results Class B				
Frequency [MHz]	Quasi-Peak [dBµV/r	n] 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.



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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Rohde & Schwarz HK 116, Vertical

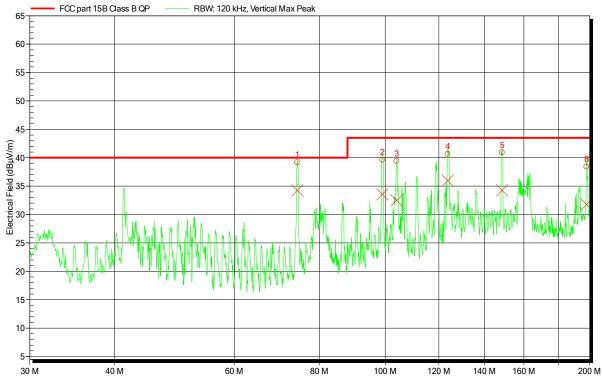
Measurement distance: 3m

Mode: USB-Data, Wifi call, HDMI

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42

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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



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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Rohde & Schwarz HK 116, Horizontal

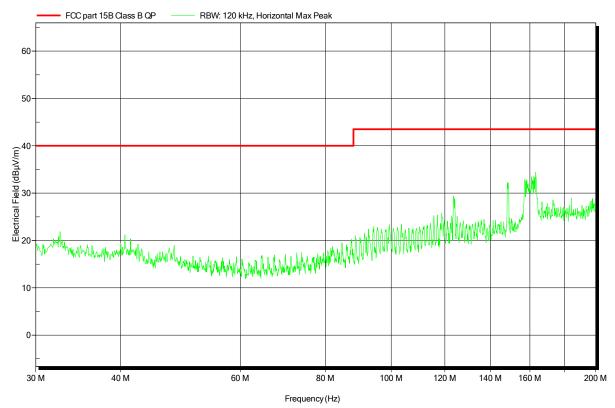
Measurement distance: 3m

Mode: USB-Data, Wifi call, HDMI

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42

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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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

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

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



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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Rohde & Schwarz HK 116, Horizontal

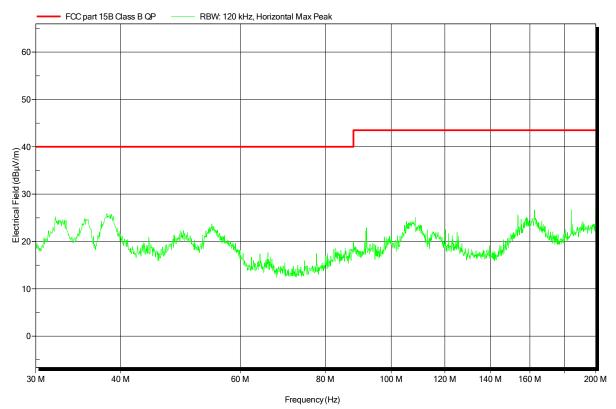
Measurement distance: 3m

Mode: USB-Charger; Video rec.; LED Lights

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42

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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. 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

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Frequency (Hz))
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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



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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Rohde & Schwarz HL 223, Horizontal

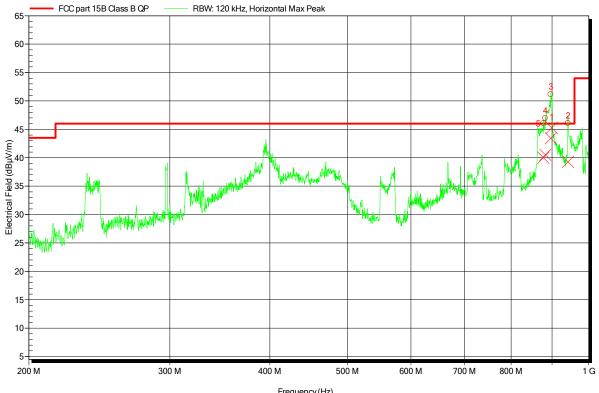
Measurement distance: 3m

Mode: USB-Data, Wifi call, HDMI

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42

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Frequency (Hz)

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



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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

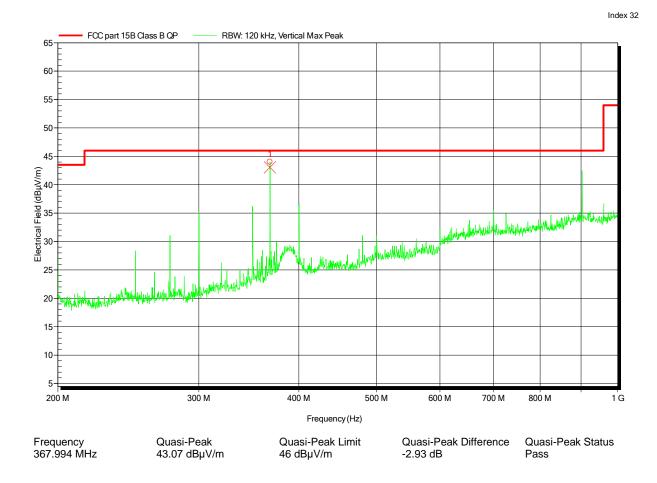
Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3m

Mode: USB-Charger; Video rec.; LED Lights

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42





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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

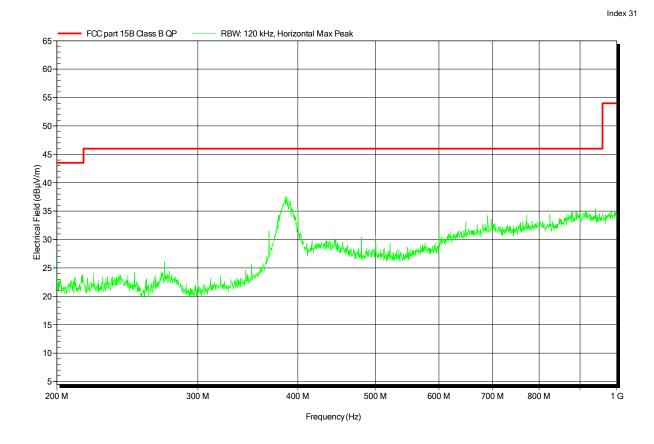
Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3m

Mode: USB-Charger; Video rec.; LED Lights

Test Date: 2015-06-24

Note: 2 x Ferrit Würth 742 711 42





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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3m

80

70

Electrical Field (dBµV/m)

1 G

Mode: USB-Data, Wifi call, HDMI

Test Date: 2015-06-24

Note: Peak 1 = Wifi Link; 2 x Ferrit Würth 742 711 42

2 G

FCC part 15B Class B AV FCC part 15B Class B Peak RBW: 1 MHz, Vertical Max Average

RBW: 1 MHz, Vertical Max Peak

3G 4G 5G 6G

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

Frequency (Hz)

8 G

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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. Belz

Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC adaptor)

Antenna: Schwarzbeck BBHA 9120D, Horizontal

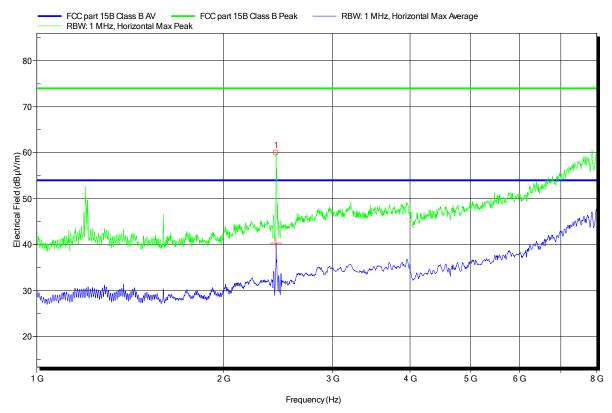
Measurement distance: 3m

Mode: USB-Data, Wifi call, HDMI

Test Date: 2015-06-24

Note: Peak 1 = Wifi Link; 2 x Ferrit Würth 742 711 42

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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 HK 116, Vertical

Measurement distance: 3m

Mode: USB Datatrans.;WLAN(TX); Video recording

Test Date: 2015-05-15

Note:

Index 9 RBW: 120 kHz, Vertical Max Peak FCC part 15B Class B QP 60 50 Electrical Field (dBµV/m) 10 0 40 M 60 M 80 M 100 M 120 M 140 M 160 M 200 M 30 M Frequency (Hz)



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

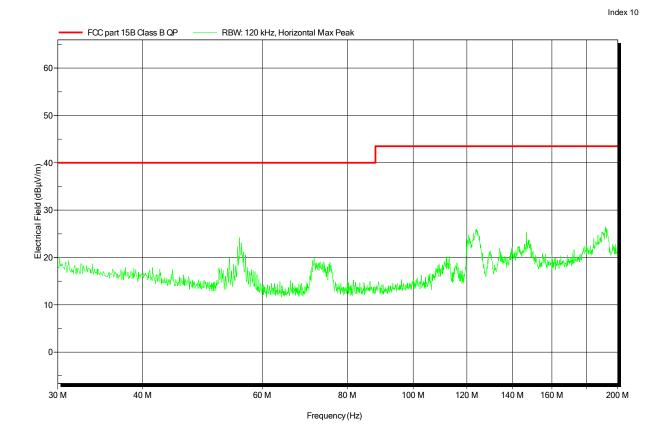
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Rohde & Schwarz HK 116, Horizontal Antenna:

Measurement distance:

USB Datatrans.;WLAN(TX); Video recording Mode:

Test Date: 2015-05-15





Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
EUT Name: Wireless camera

Model: OrbitY EY

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 HK 116, Vertical

Measurement distance: 3m

Mode: using Charger.;WLAN(TX); Video recording

Test Date: 2015-05-15

Note:

Frequency Quasi-Peak Outsi-Peak Status Pass 30.06 MHz 36.33 dBµV/m 40 dBµV/m

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

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

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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

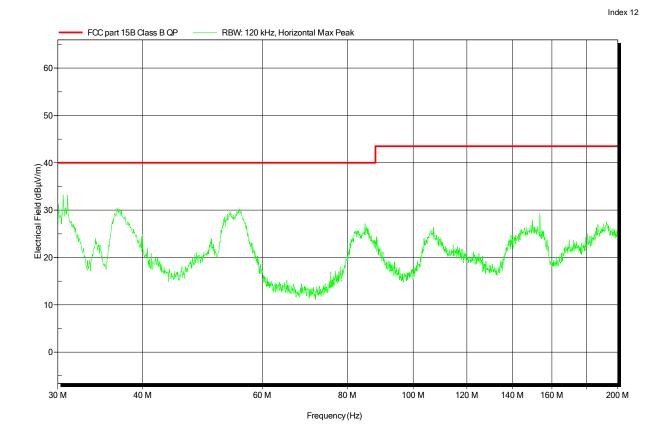
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Rohde & Schwarz HK 116, Horizontal Antenna:

Measurement distance:

using Charger.;WLAN(TX); Video recording Mode:

2015-05-15 Test Date:





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





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

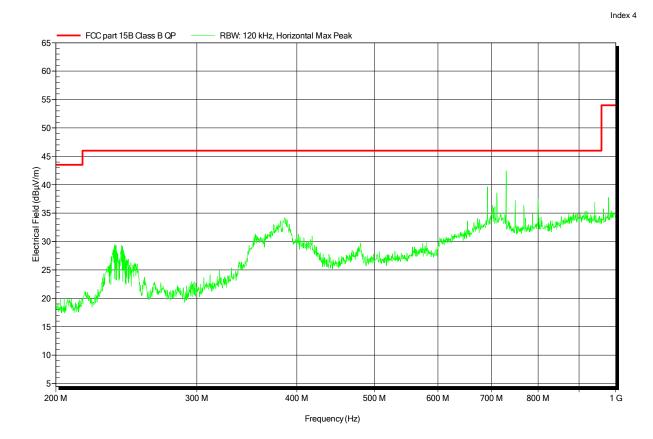
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3m

Mode: USB-Datatrans;WLAN(TX); Video recording

Test Date: 2015-05-13





Project number: G0M-1503-4620

Applicant: BARTEC PIXAVI AS
EUT Name: Wireless camera

Model: OrbitY EY

Model: OrbitX EX

Test Site: Eurofins Product Service GmbH

Operator: Mr. Belz

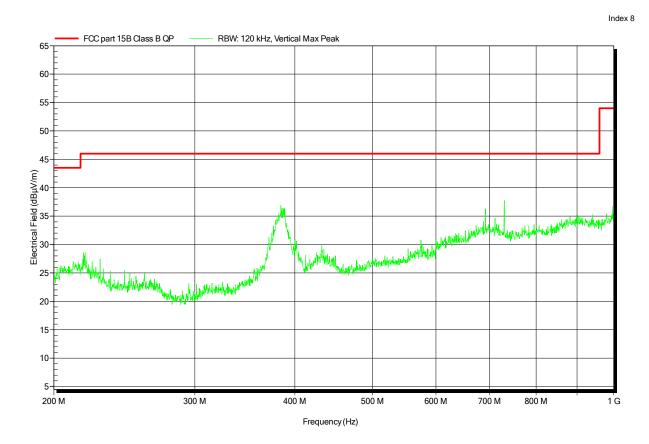
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Antenna: Rohde & Schwarz HL 223, Vertical

Measurement distance: 3m

Mode: using Charger; WLAN(TX); Video recording

Test Date: 2015-05-15





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)

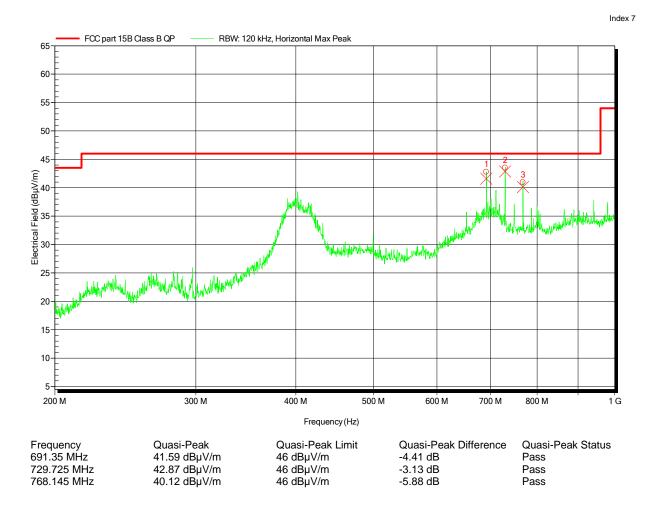
Antenna: Rohde & Schwarz HL 223, Horizontal

Measurement distance: 3m

Mode: using Charger;WLAN(TX); Video recording

Test Date: 2015-05-13

Note:





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

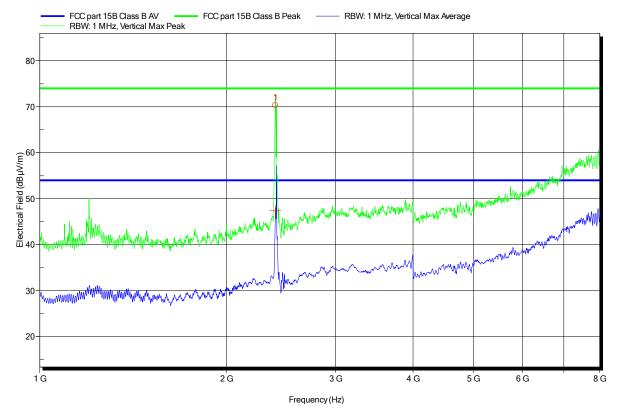
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Schwarzbeck BBHA 9120D, Vertical Antenna:

Measurement distance:

USB-Datatrans.;WLAN(TX); Video recording Mode:

Test Date: 2015-05-15 Peak 1 = Wifi TX Note:





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

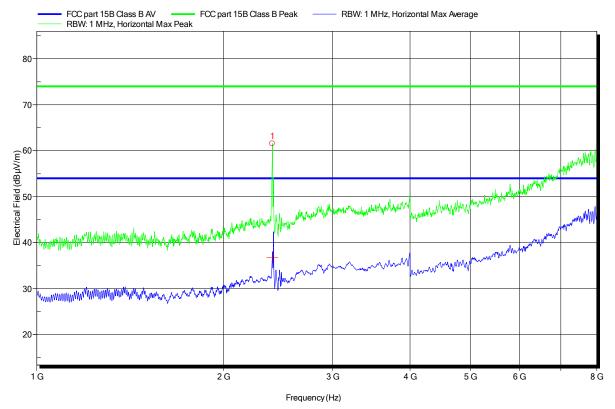
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

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





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

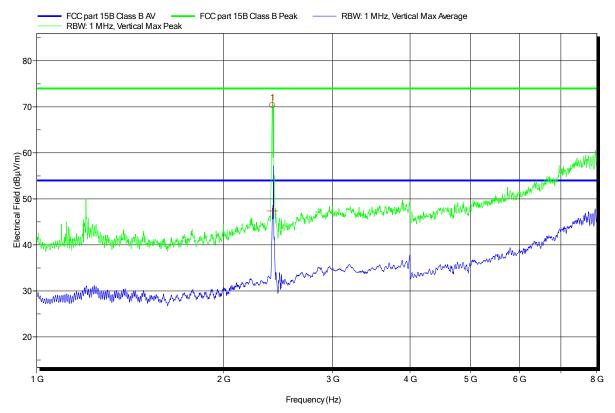
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Schwarzbeck BBHA 9120D, Vertical Antenna:

Measurement distance:

using charger; WLAN(TX); Video recording Mode:

2015-05-15 Test Date: Peak 1 = Wifi TX Note:





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

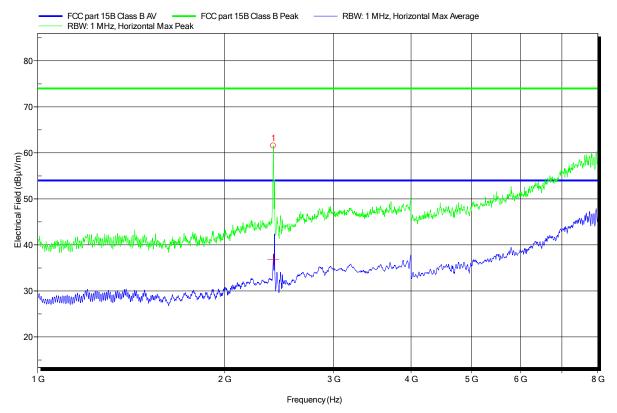
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

Schwarzbeck BBHA 9120D, Horizontal Antenna:

Measurement distance:

using charger; WLAN(TX); Video recording Mode:

2015-05-15 Test Date: Peak 1 = Wifi Tx Note:





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)

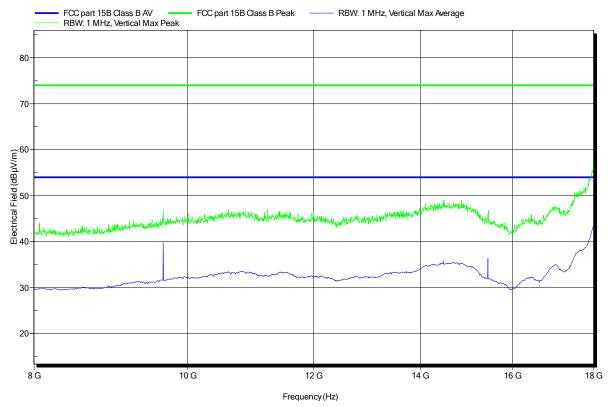
Antenna: Schwarzbeck BBHA 9120D, Vertical

Measurement distance: 3m

Mode: USB-Datatrans.;WLAN(TX); Video recording

Test Date: 2015-05-15

Note:





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)

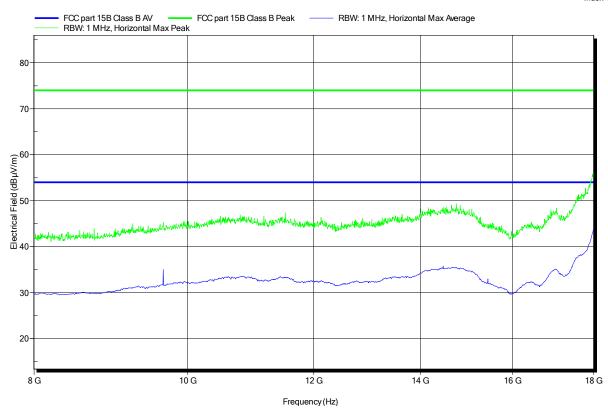
Schwarzbeck BBHA 9120D, Horizontal Antenna:

Measurement distance:

USB-Datatrans.;WLAN(TX); Video recording Mode:

Test Date: 2015-05-15

Note:





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)

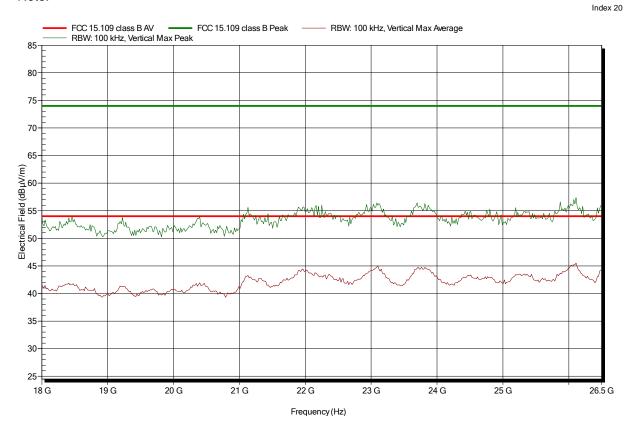
Antenna: Rohde & Schwarz HL 025, Vertical

Measurement distance: 1 m converted to 3m

Mode: charging; WLAN(TX); Video recording,

Test Date: 2015-06-23

Note:





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)

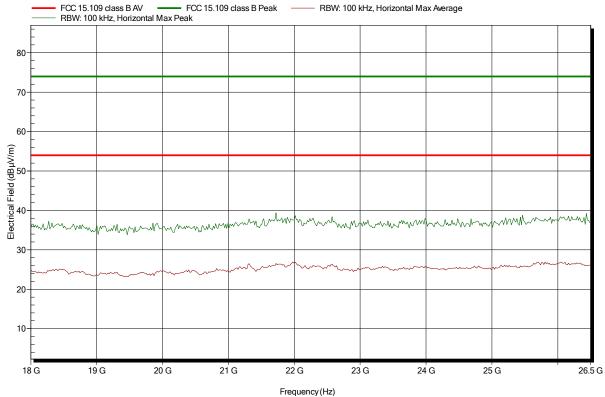
Antenna: Rohde & Schwarz HL 025, Horizontal

Measurement distance: 1 m converted to 3m

Mode: charging; WLAN(TX); Video recording, laser "on"

Test Date: 2015-06-23

Note:





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

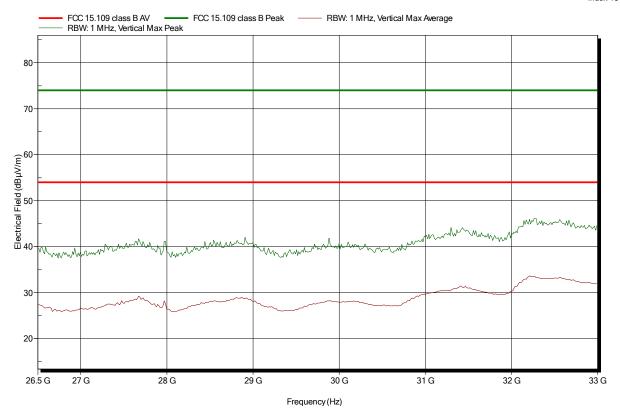
Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)

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:





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

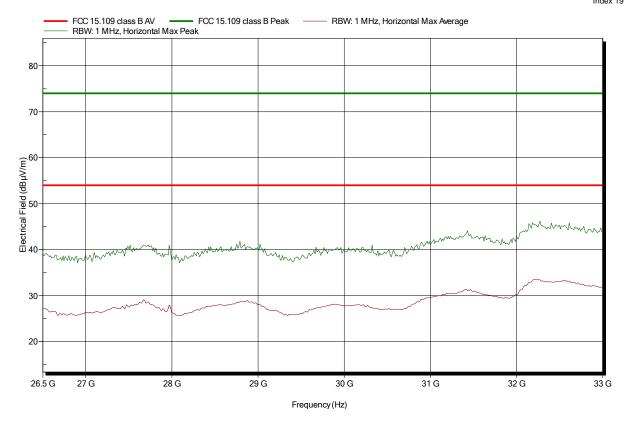
Test Conditions: Tnom: 22°C, Vnom: 120 V AC (AC/DC Adapter)

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:





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:		Requ	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					
	L	imits and	l results Class B				
Frequency [MHz]	Quasi-Peak [dBµV]		Result	Avera	age [dBµV]	Result	
0.15 to 5	66 to 56*		PASS	56	6 to 46*	PASS	
0.5 to 5	56		PASS		46	PASS	
5 to 30	60		PASS		50	PASS	

^{*} 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



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

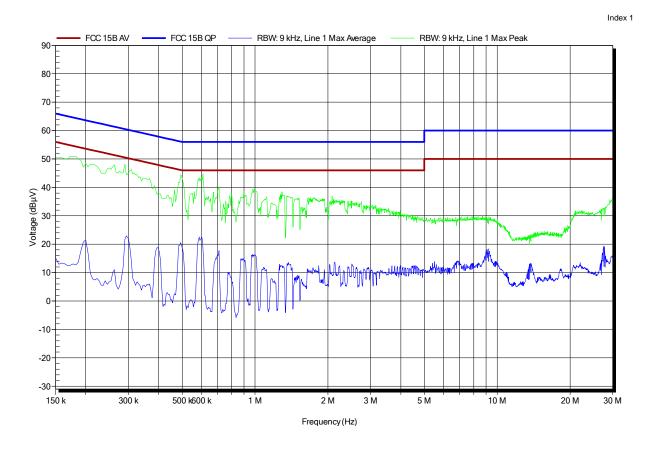
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

LISN: ESH2-Z5 L

Mode: charging; WLAN(TX); Video recording

Test Date: 2015-05-13

Note:





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

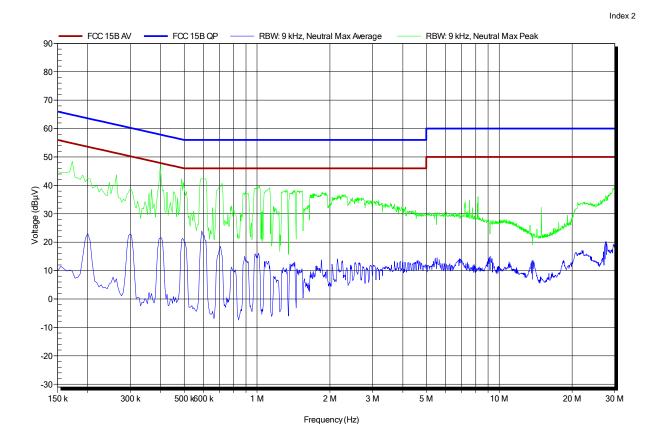
Test Conditions: Tnom: 22°C, Unom: 120 V AC (AC/DC Adapter)

LISN: ESH2-Z5 N

Mode: charging;WLAN(TX); Video recording

Test Date: 2015-05-13

Note:





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:

389.4 kHz

37.64 dBµV

FCC 15B AV RBW: 9 kHz, Neutral Max Average FCC 15B QP RBW: 9 kHz, Neutral Max Peak 80 70 60 50 Voltage (dBµV) 20 10 0 -10 150 k 300 k 500 k600 k 1 M 2 M 5 M 10 M 20 M 30 M Frequency (Hz) 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 Average Status Average Difference Frequency Average Average Limit 291.3 kHz 37.56 dBµV 50.49 dBµV -12.93 dB Pass

-10.44 dB

 $48.08~dB\mu V$

Pass



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:

FCC 15B AV FCC 15B QP RBW: 9 kHz, Line 1 Max Average RBW: 9 kHz, Line 1 Max Peak 80 70 60 50 40 Voltage (dBµV) 30 20 10 0 -10 -20 -30 300 k 500 k600 k 1 M 2 M 5 M 10 M 20 M 150 k 30 M Frequency (Hz) Frequency Quasi-Peak Quasi-Peak Limit Quasi-Peak Difference Quasi-Peak Status 54.58 dBµV 399.75 kHz 57.86 dBµV -3.28 dB Pass 490.65 kHz 50.62 dBµV 56.16 dBµV -5.54 dB Pass Average Status Average Difference Average Limit Frequency Average 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