



EMC TEST REPORT FCC 47 CFR Part 15B Industry Canada RSS-Gen Electromagnetic compatibility - Unintentional radiators	
Report Reference No.	G0M-1505-4754-EF0115B-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	<div style="text-align: center;">   </div> <p>A2LA Accredited Testing Laboratory, Certificate No.: 1983.01 FCC Filed Test Laboratory, Reg.-No.: 96970 IC OATS Filing assigned code: 3470A</p>
Applicant's name	Spectralink Europe ApS
Address	Langmarksvej 34 8700 Horsens DENMARK
Test specification:	
Standard.....	47 CFR Part 15 Subpart B RSS-Gen, Issue 4, 2014-11 ANSI C63.4:2014
Equipment under test (EUT):	
Product description	DECT handset 7722/7622/7212/7202
Model No.	K023c
Additional Models	K023d, K023e, K023f
Hardware version	PCS 04
Firmware / Software version	PCS 15J_
IDs	FCC-ID: PXA-K023B IC: 4604A-K023B
Test result	Passed

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 2015-06-01

Date (s) of performance of tests 2015-06-03 - 2015-06-04

Compiled by : Steffen Zunke

Tested by (+ signature)..... : Marcus Klein 

Approved by (+ signature) : Jens Zimmermann 

Date of issue : 2015-08-19

Total number of pages : 63

General remarks:

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

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

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

Additional comments: The difference between the model 7722 and the models 7622, 7212 and 7202 is described in following costumer document K023cdef_Variant decl_001.

Declaration of changes due to variant creation.

Applicant: Spectralink Europe ApS
Project No(s): G0M-1505-4753, G0M-1505-4754
EUT (Product): Spectralink 7722 (K023c), Spectralink 7622 (K023d)
Spectralink 7212 (K023e), Spectralink 7202 (K023f)

The difference between 7722 and 7622 is the keyboard type with corresponding plastic.
7722 use Foil-keyboard with ESD protection circuit.
7622 use Key-buttons with keyfoil.
All other components and firmware are the same.

The difference between 7722 and 7212 is the keyboard type with corresponding plastic, DECT module and EEPROM.
7722 use DECT module KT4588A00, Foil-keyboard with ESD protection circuit and 1M EEPROM.
7212 use DECT module KT4588A30, Key-buttons with keyfoil and 64K EEPROM.
All other components and firmware are the same.

The difference between 7722 and 7202 is the keyboard type, DECT module, EEPROM, headset port and vibrator.
7722 use DECT module KT4588A00, Foil-keyboard with ESD protection circuit, 1M EEPROM, headset port and vibrator.
7202 use DECT module KT4588A30, Key-buttons with keyfoil and 64K EEPROM.
7202 do not have headset port and vibrator with associated components.
All other components and firmware are the same.

Date: 2015-06-11


Henrik Birch Rasmussen

Spectralink Europe Aps.
Langmarksvej 34
8700 Horsens
Denmark

Version History

Version	Issue Date	Remarks	Revised by
V01	2015-08-19	Initial Release	

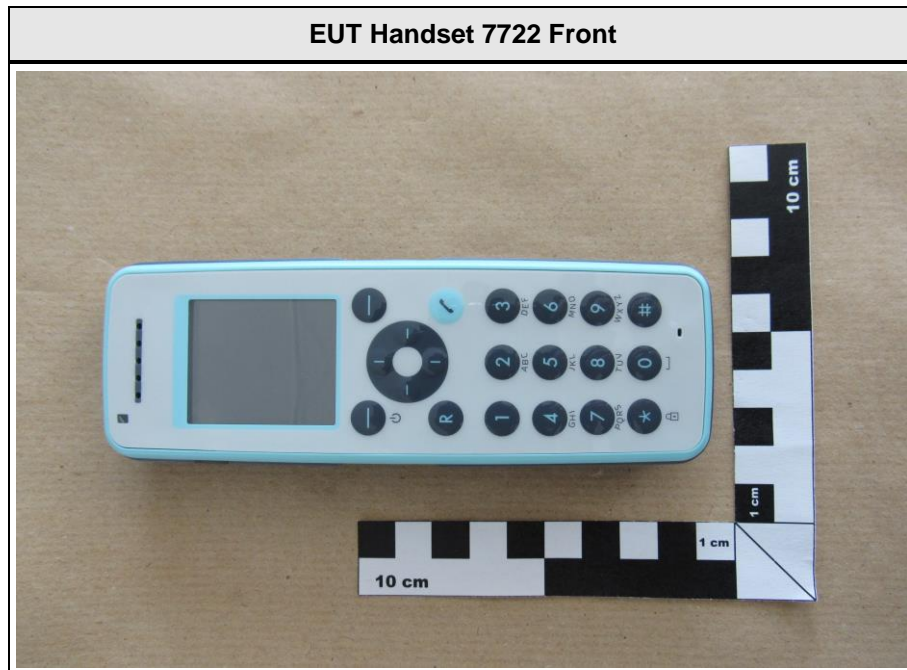
REPORT INDEX

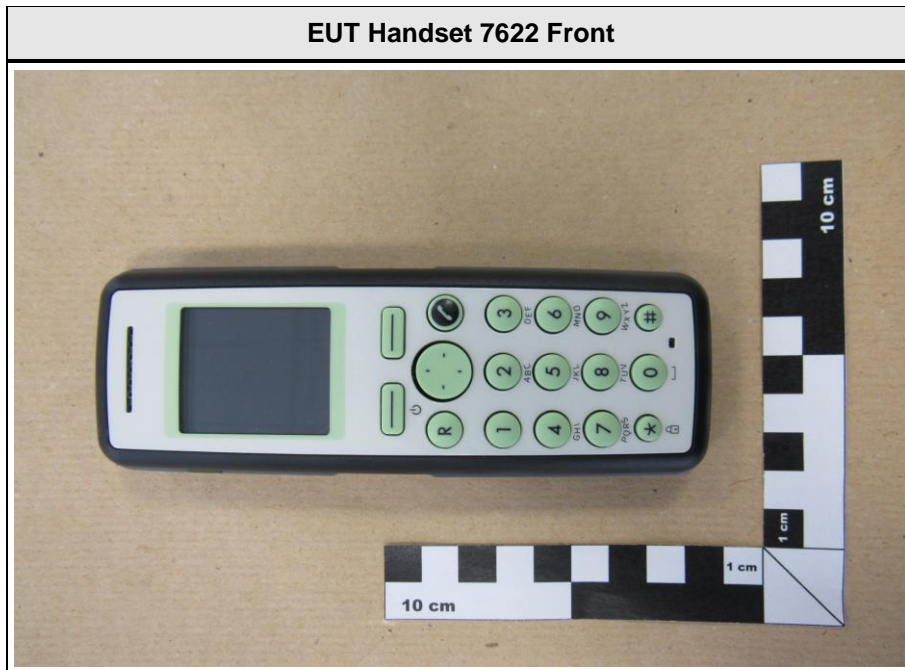
1	EQUIPMENT (TEST ITEM) DESCRIPTION	6
1.1	Photos – Equipment external	7
1.2	Photos – Equipment internal	11
1.3	Photos – Test setup	15
1.4	Supporting Equipment Used During Testing	17
1.5	Input / Output Ports	17
1.6	Operating Modes and Configurations	18
1.7	Test Equipment Used During Testing	19
1.8	Sample emission level calculation	20
2	RESULT SUMMARY	21
3	TEST CONDITIONS AND RESULTS	22
3.1	Test Conditions and Results – Radiated emissions	22
3.2	Test Conditions and Results – AC power line conducted emissions	60

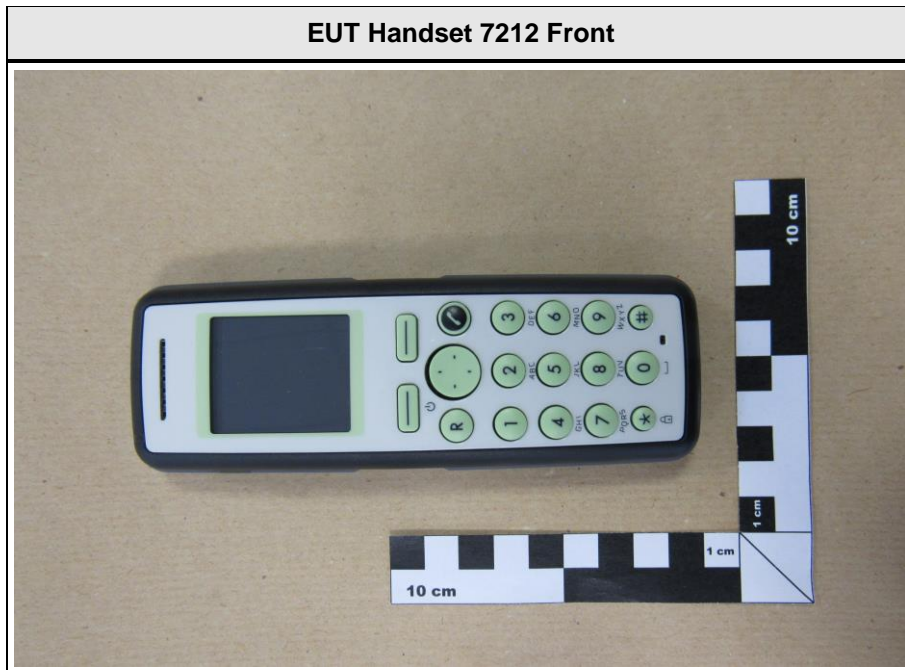
1 Equipment (Test item) Description

Description	DECT handset 7722/7622/7212/7202
Model	K023c
Additional Models	K023d, K023e, K023f
Serial number	None
Hardware version	PCS 04
Software / Firmware version	PCS 15J_
FCC-ID	PXA-K023B
IC	4604A-K023B
Power supply	3.7 VDC via rechargeable Battery
AC/DC-Adaptor	Model : UE08WCP-060100SPA Manufacturer : Fuhua Input : 100-240VAC / 50-60Hz Output : 6VDC / 1.0A
Manufacturer	Spectralink Europe ApS Langmarksvej 34 8700 Horsens DENMARK
Highest emission frequency	Fmax [MHz] = 4966
Device classification	Class B
Equipment type	Tabletop
Number of tested samples	1 of every kind

1.1 Photos – Equipment external

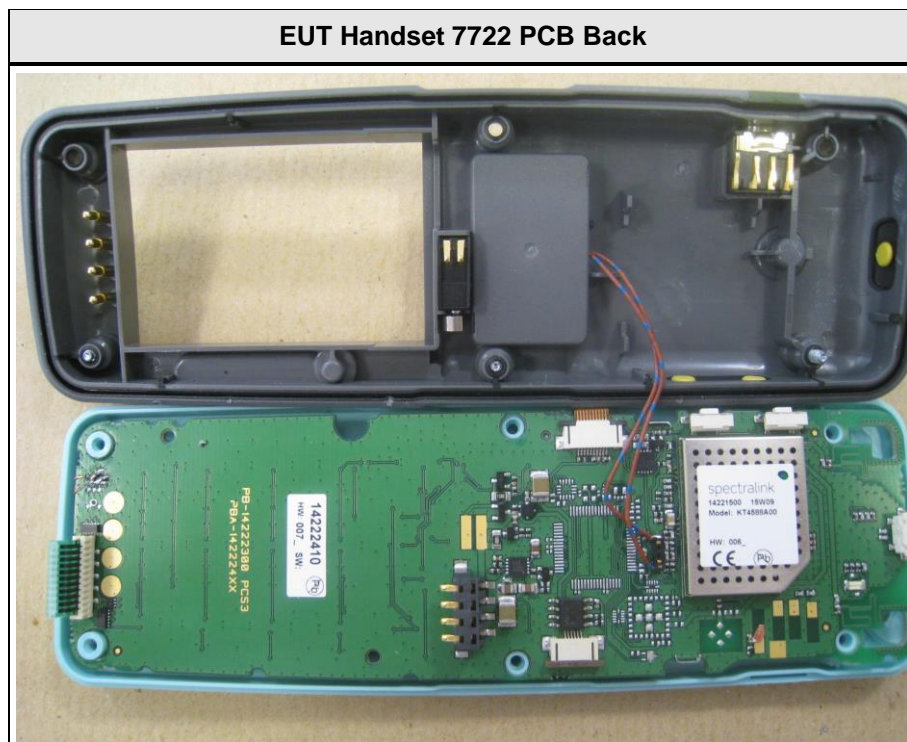
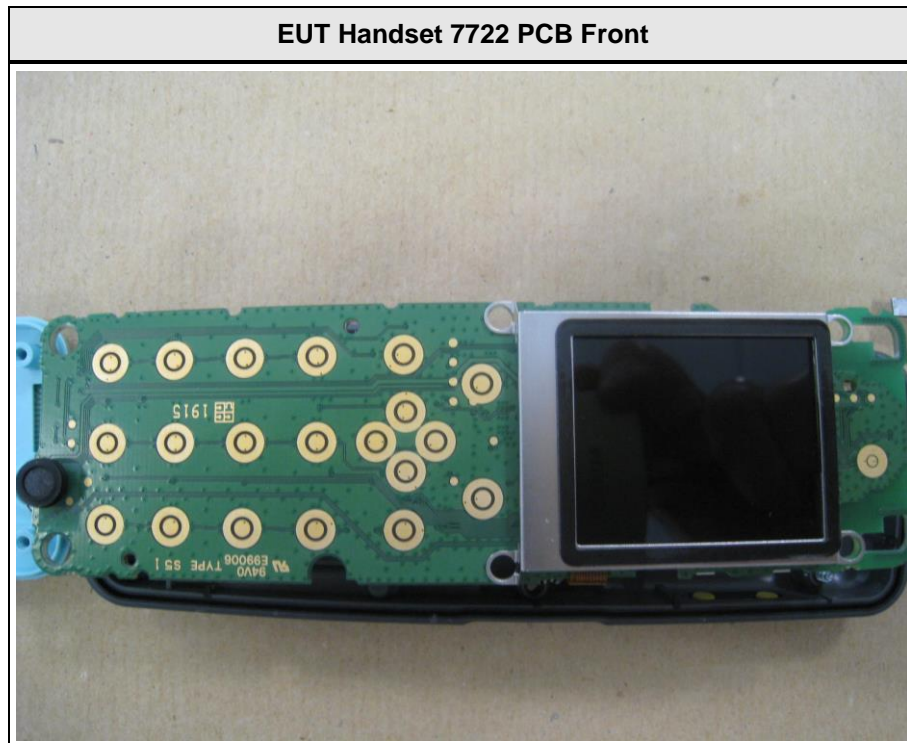




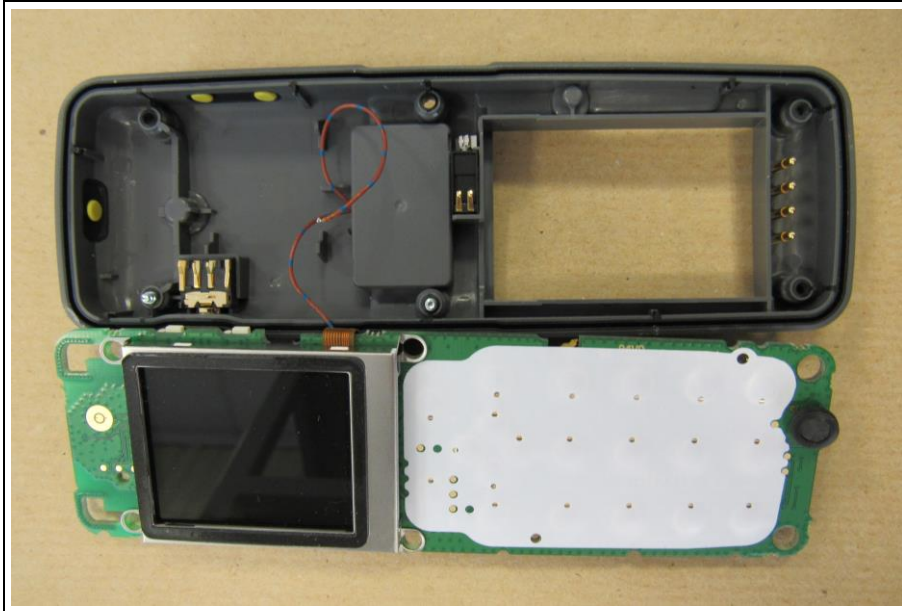




1.2 Photos – Equipment internal



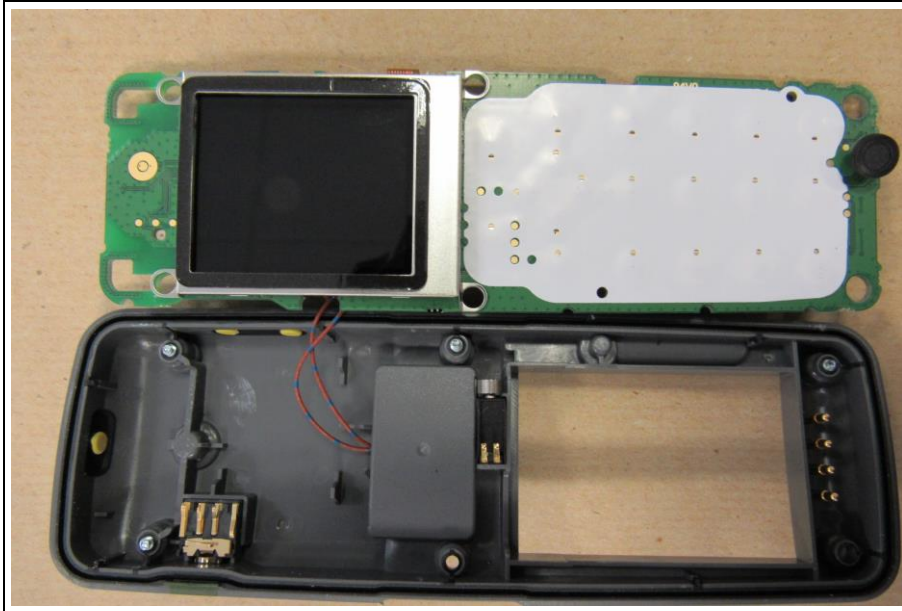
EUT Handset 7622 PCB Front



EUT Handset 7622 PCB Back



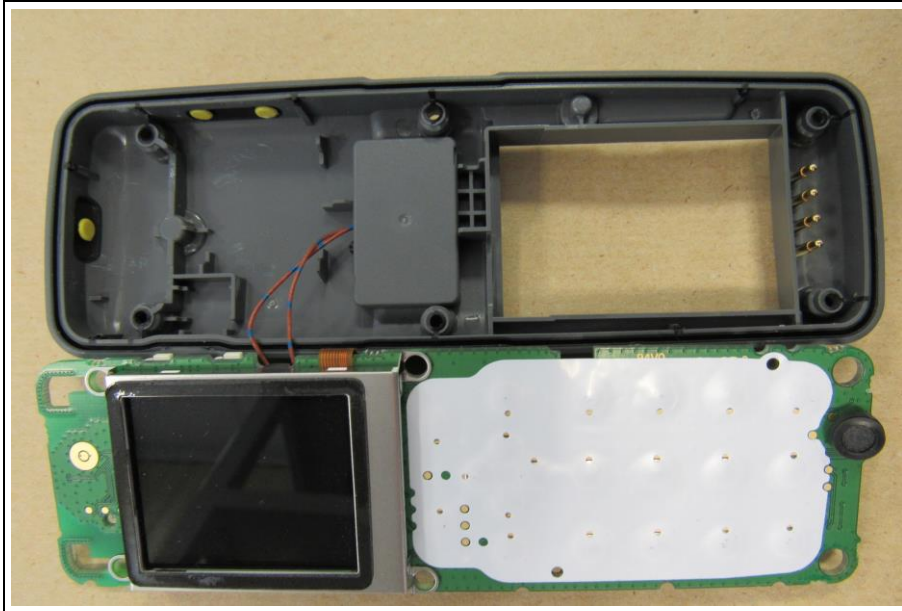
EUT Handset 7212 PCB Front



EUT Handset 7212 PCB Back



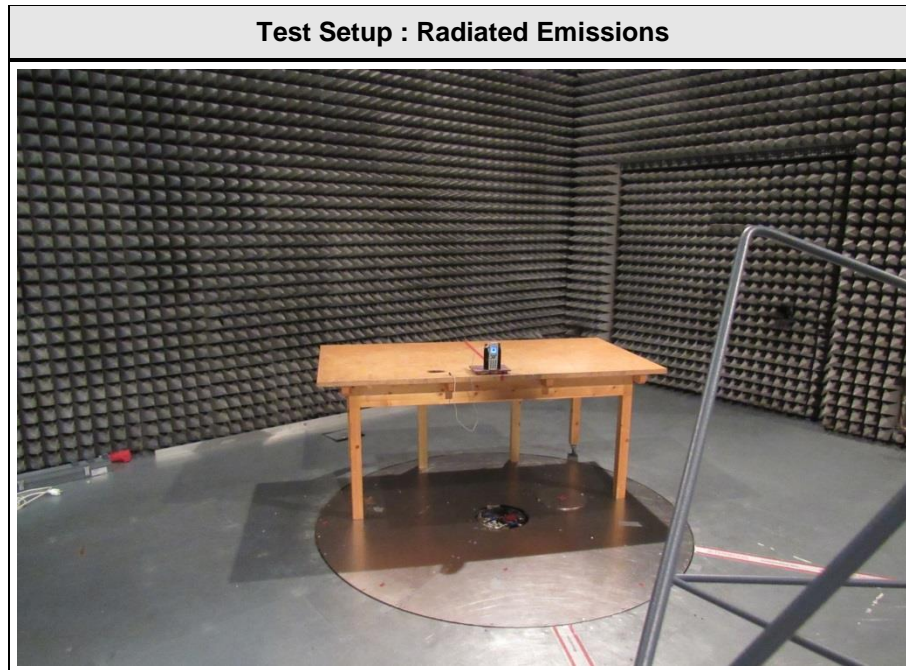
EUT Handset 7202 PCB Front



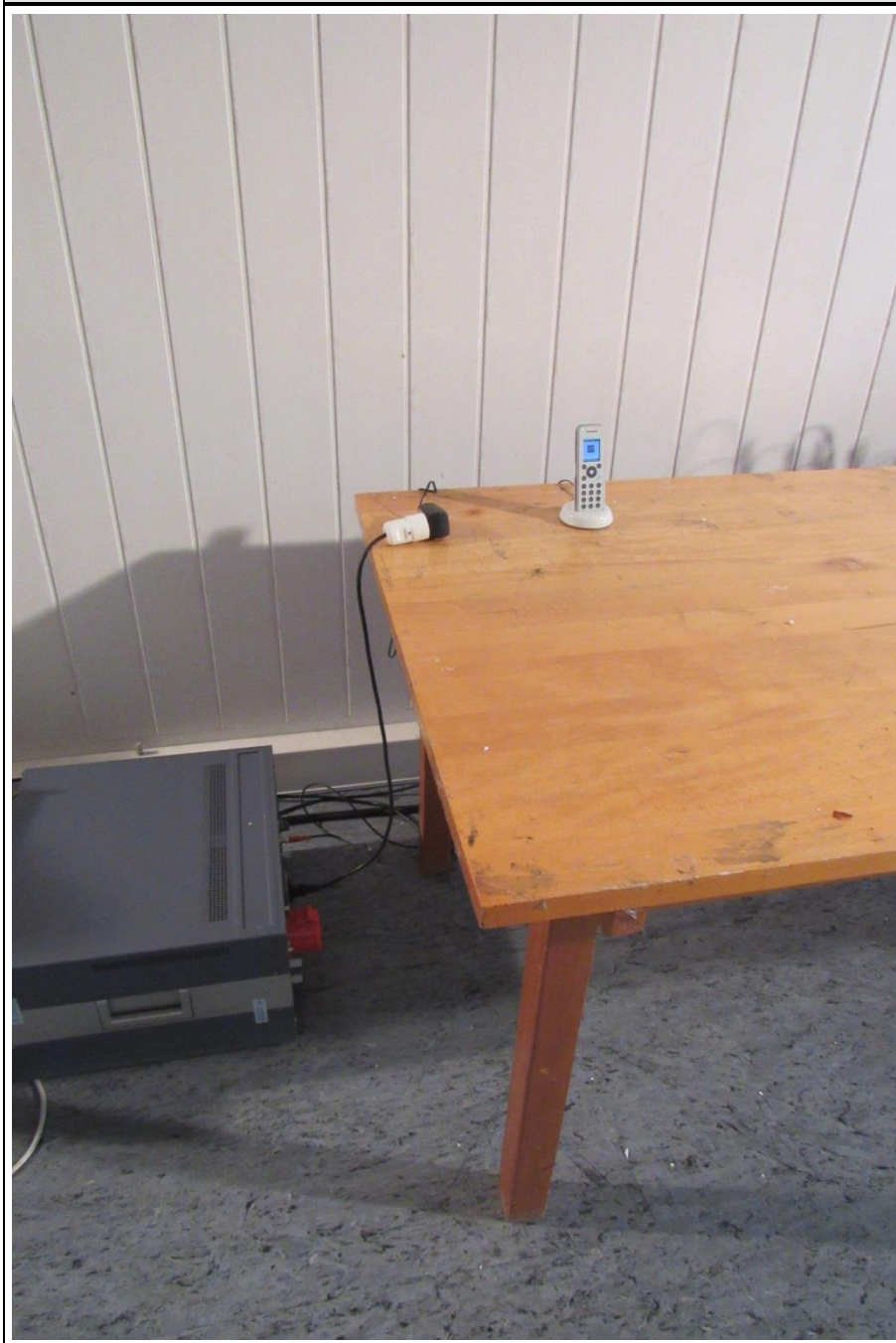
EUT Handset 7202 PCB Back



1.3 Photos – Test setup



Test Setup : Conducted Emissions



1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
AE	Charger, single	Spectralink	84642493	-
AE	Charger, single, USB	Spectralink	84642494	-
AE	Power adaptor	Fuhua	UE08WCP-060100SPA	-
AE	DECT Base	Spectralink	IP-DECT Server 400	-
AE	Companion device	Spectralink	7722	-
*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	Headset	I/O	<3m	No	-
2	USB	I/O	<3m	Yes	@charger, service only
3	AC Mains	I/O	<3m	No	@charger
*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	DECT handset 7722, EUT battery powered, DECT link to companion device
2	DECT handset 7722, EUT at charging mode, DECT link to companion device
3	DECT handset 7622, EUT battery powered, DECT link to companion device
4	DECT handset 7212, EUT battery powered, DECT link to companion device
5	DECT handset 7202, EUT battery powered, DECT link to companion device

Configuration #	EUT Configuration
1	DECT handset 7722 fully assembled
2	DECT handset 7622 fully assembled
3	DECT handset 7212 fully assembled
4	DECT handset 7202 fully assembled

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 μ 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:

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

Net:

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

Limit:

This is the FCC Class B radiated emission limit (in units of dB μ V/m). The FCC limits are given in units of μ V/m. The following formula is used to convert the units of μ V/m to dB μ V/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:

$$\begin{array}{rclcl} \text{Reading} & + & \text{AF} & = & \text{Net Reading} & : & \text{Net reading - FCC limit} & = & \text{Margin} \\ 21.5 \text{ dB}\mu\text{V} & + & 26 \text{ dB} & = & 47.5 \text{ dB}\mu\text{V/m} & : & 47.5 \text{ dB}\mu\text{V/m} - 57.0 \text{ dB}\mu\text{V/m} & = & -9.5 \text{ dB} \end{array}$$

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		24°C		
Relative Humidity		30 to 60 %		42%		
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] = 4966				
Fully configured sample scanned over the following frequency range		Frequency range				
		30 MHz to 25 GHz				
Operating mode		1 / 2 / 3 / 4 / 5				
Configuration		1 / 2 / 3 / 4				
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:						
Over 18 GHz were no relevant emission detected. The report shows results up to 18 GHz only. For the radiated emission the charger 84642494 was detected as worst case. This report shows results with this charger only.						

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:

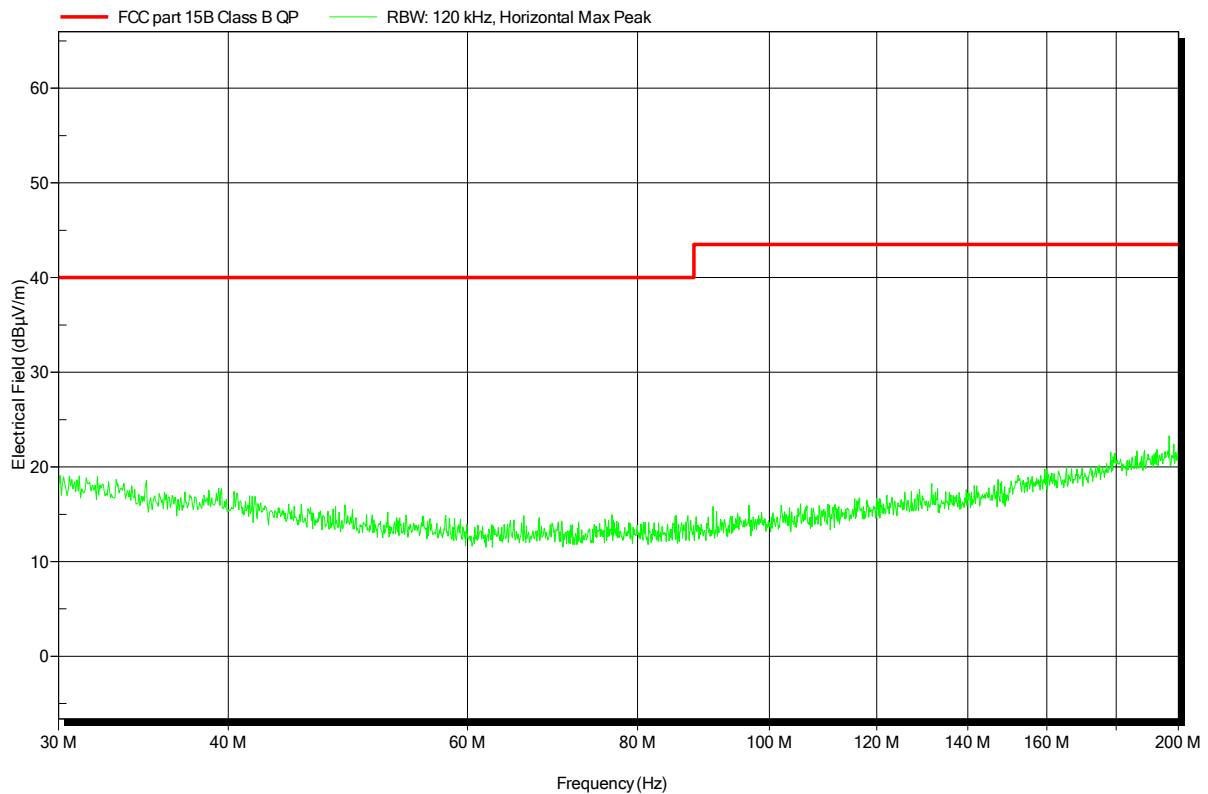
- 1) The EUT was placed on a 0.8 m non conductive table at a 3 m distance from the receive antenna (ANSI C63.4: 2009 item 6.2)
- 2) The antenna output was connected to the measurement receiver
- 3) A biconical antenna was used for the frequency range 30 – 200 MHz, a logarithmic periodical antenna was 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 Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 32

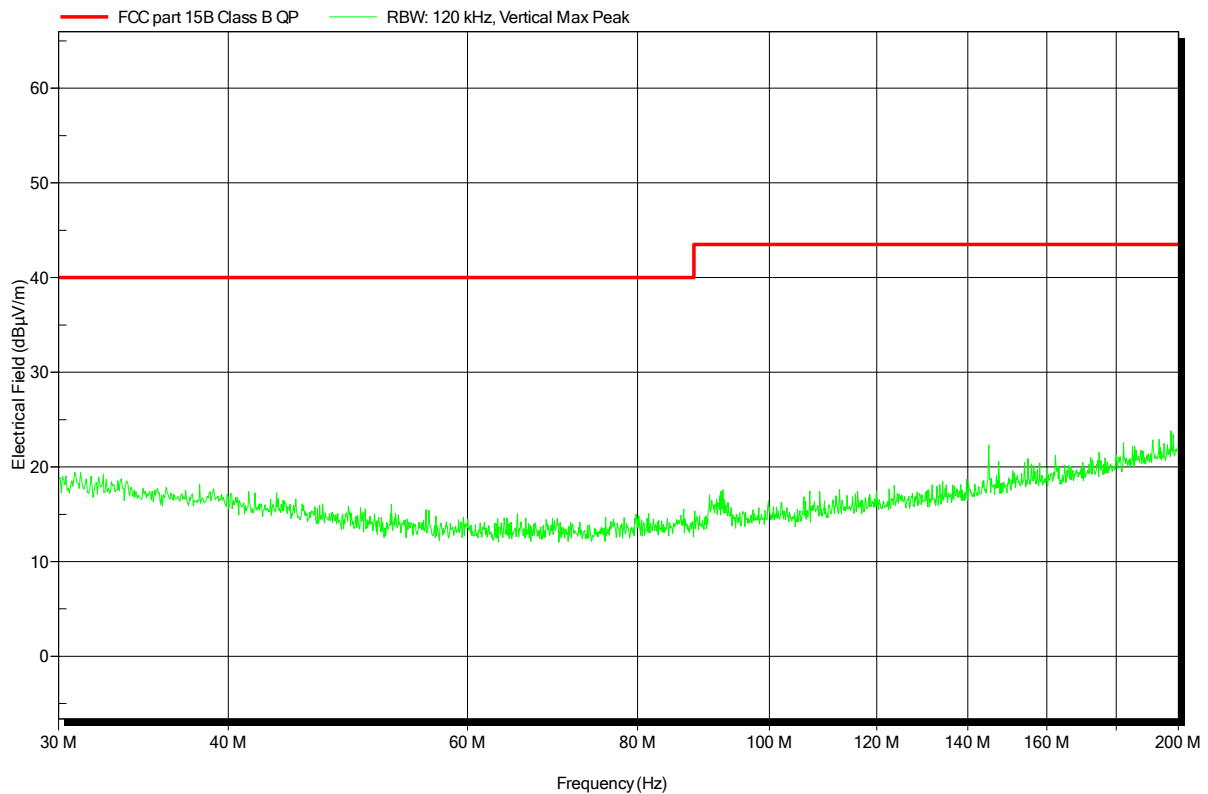


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 31

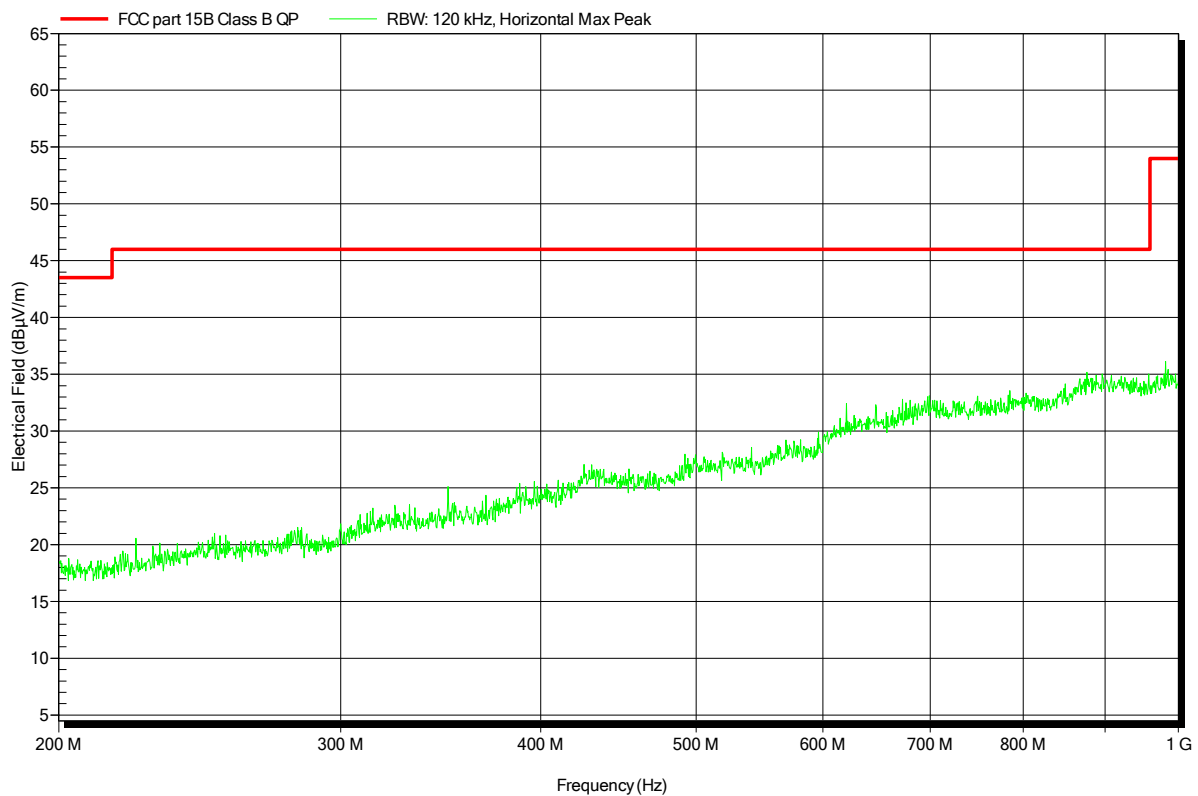


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 29

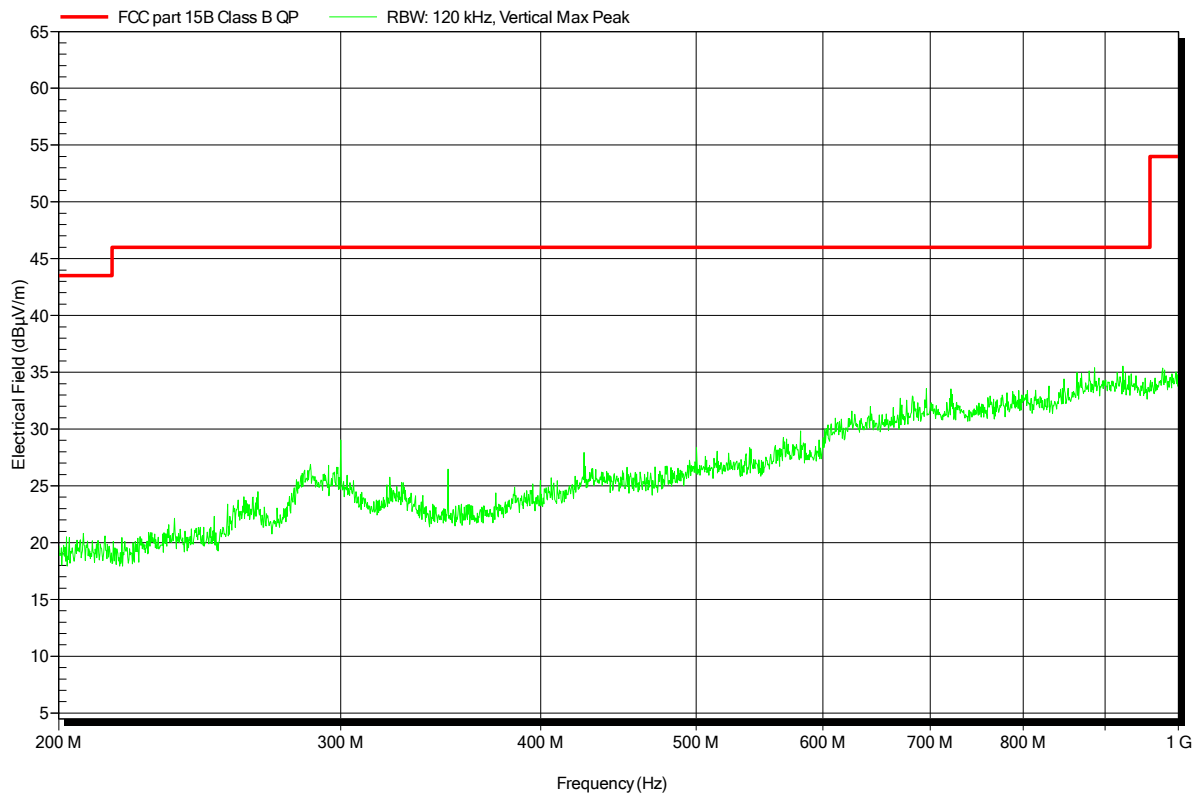


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 30

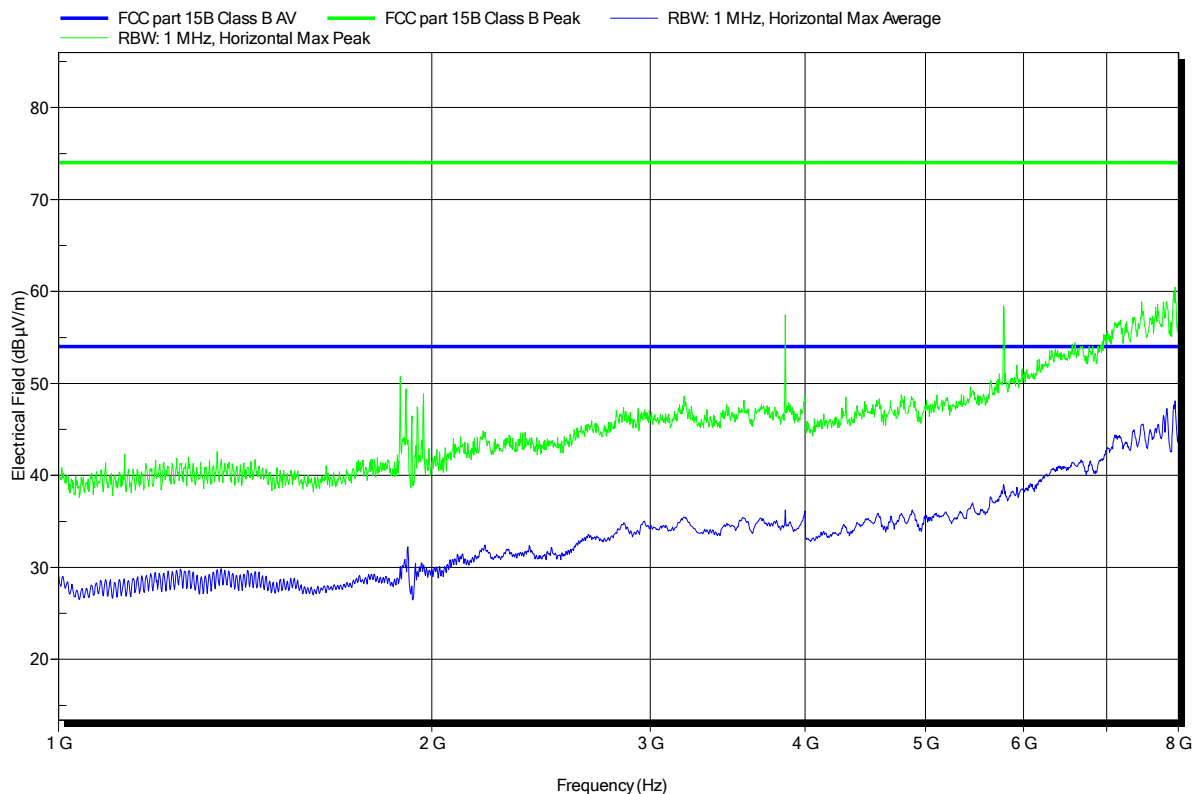


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 28

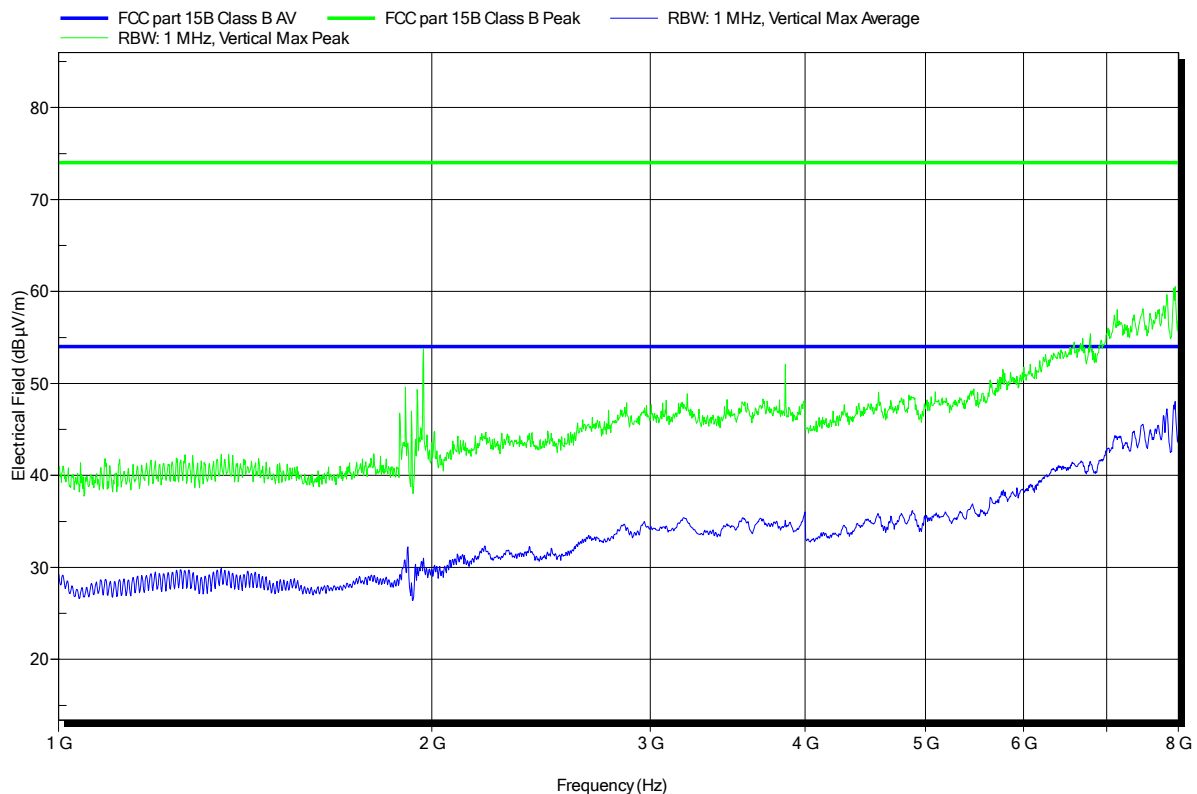


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 27

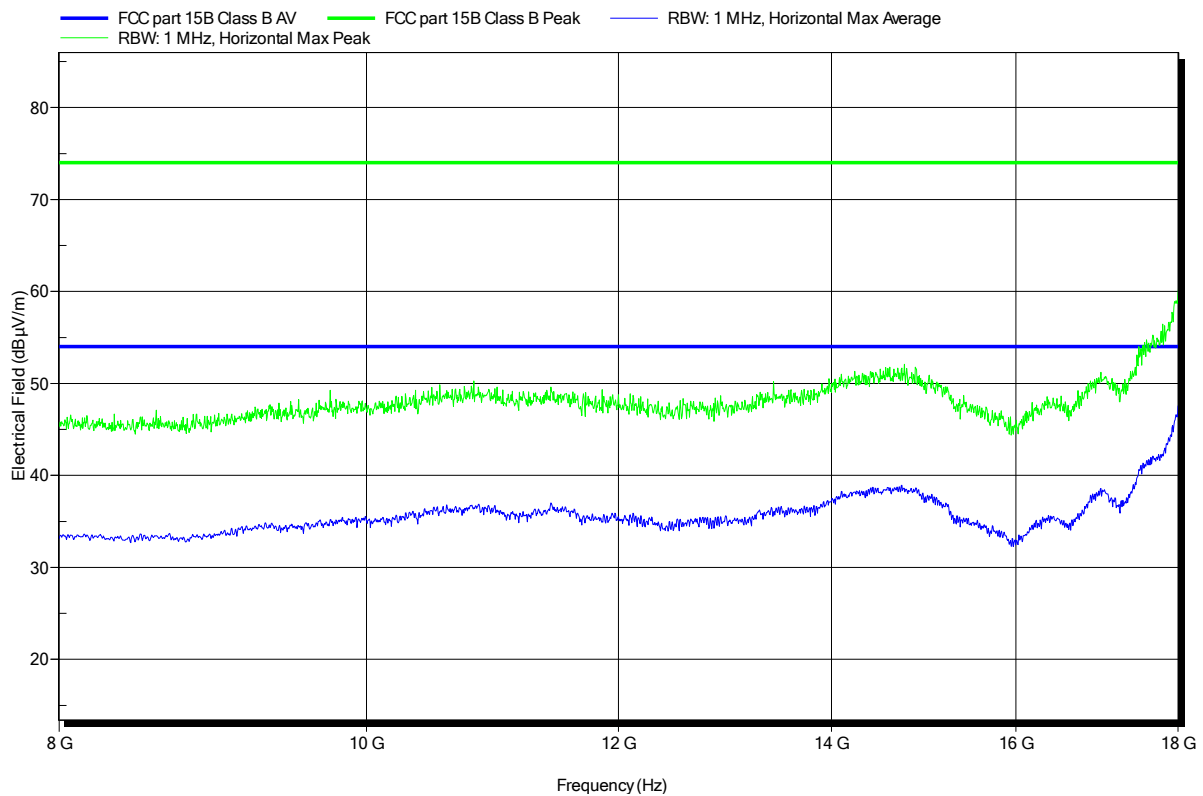


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 25

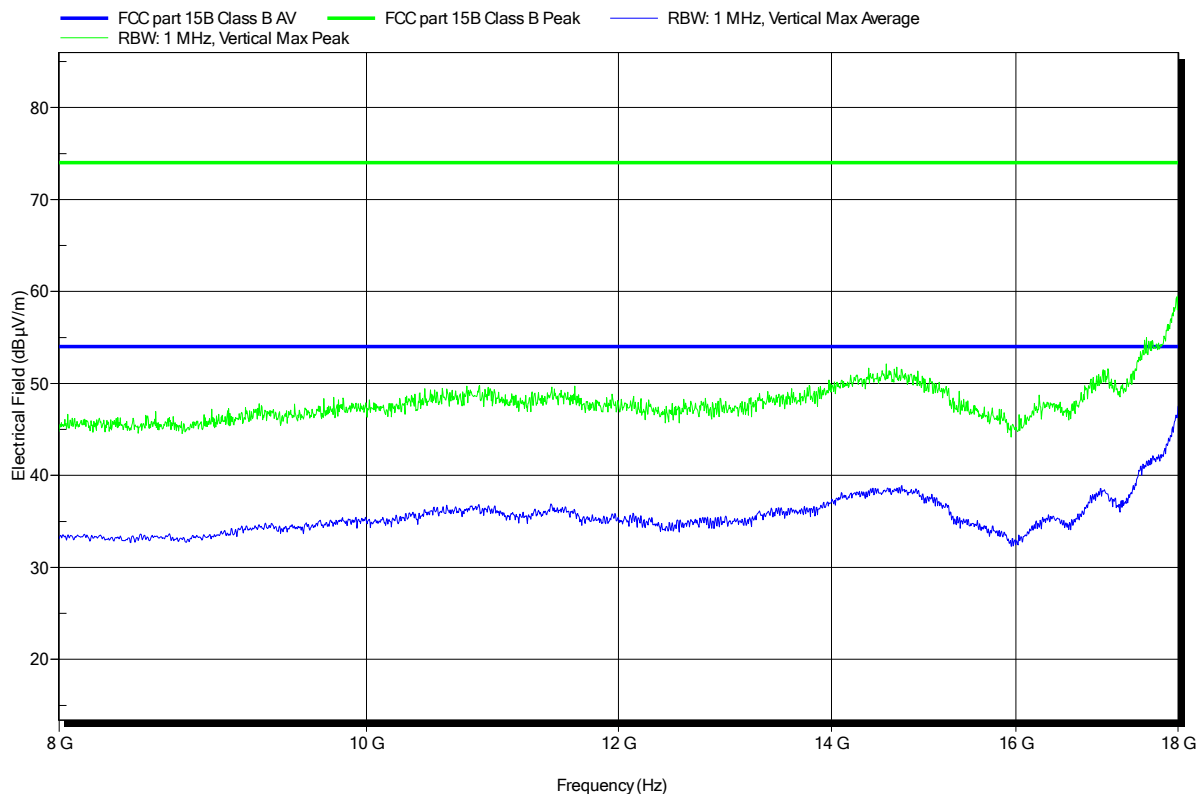


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC Battery
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 26

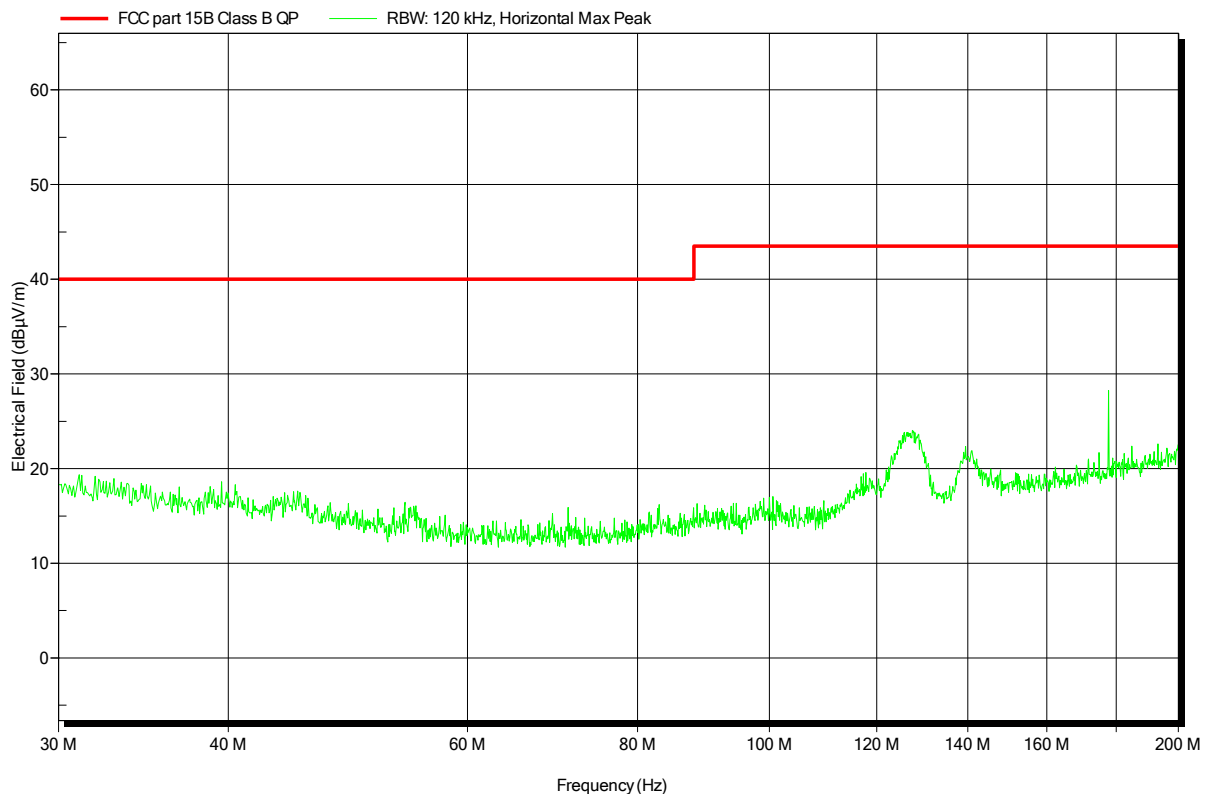


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 120 VAC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device, charging
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 33

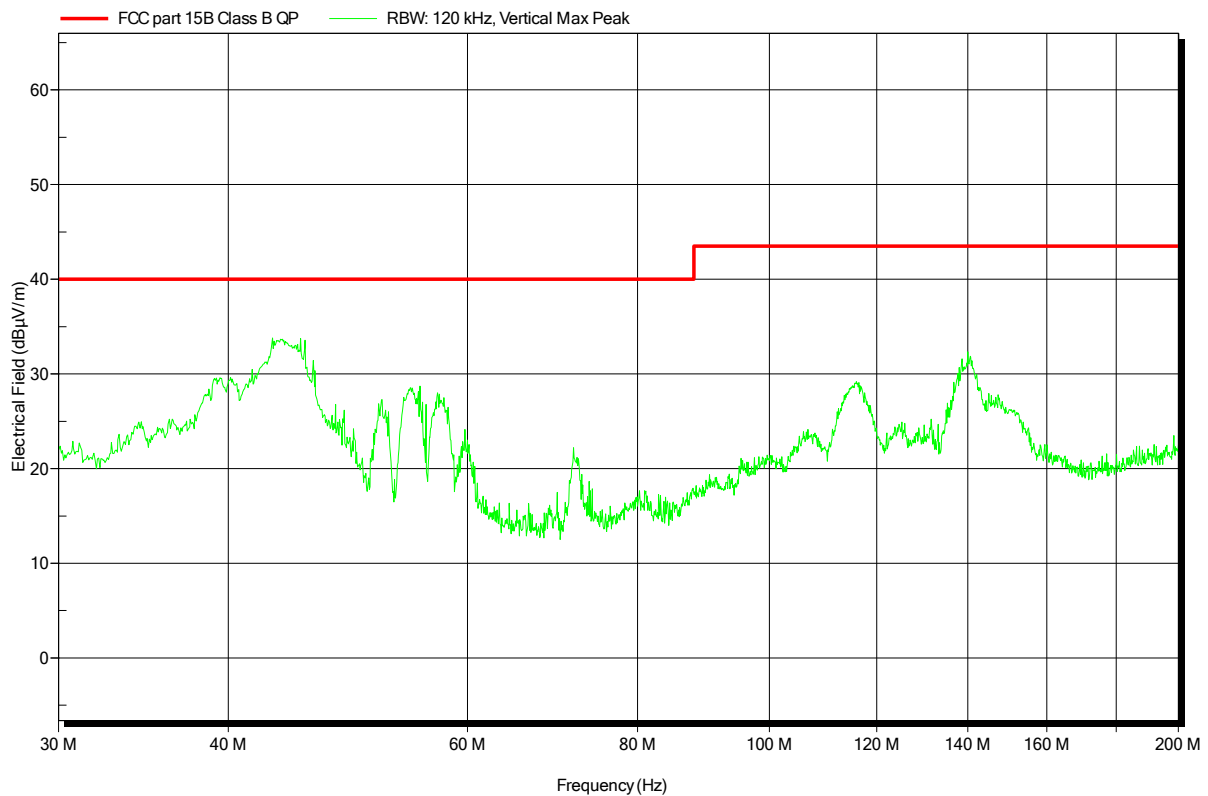


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 120 VAC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device, charging
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 34

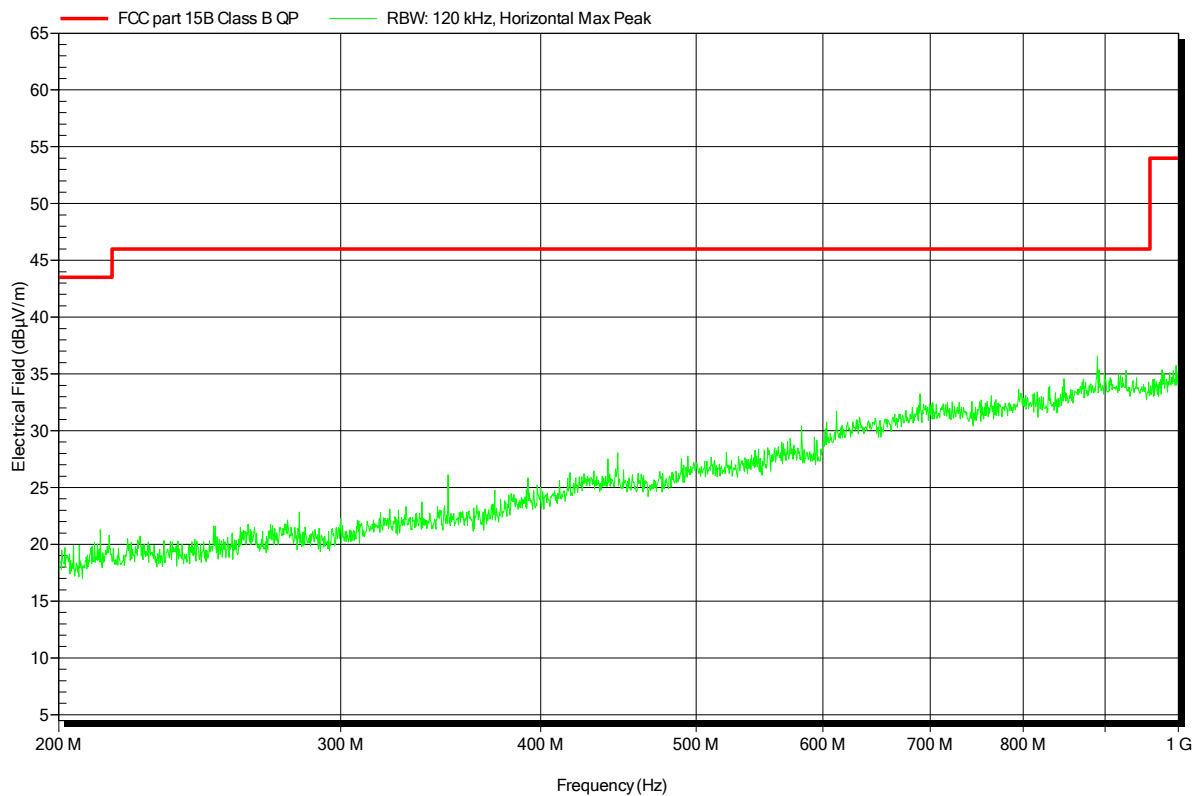


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 120 VAC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device, charging
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 36

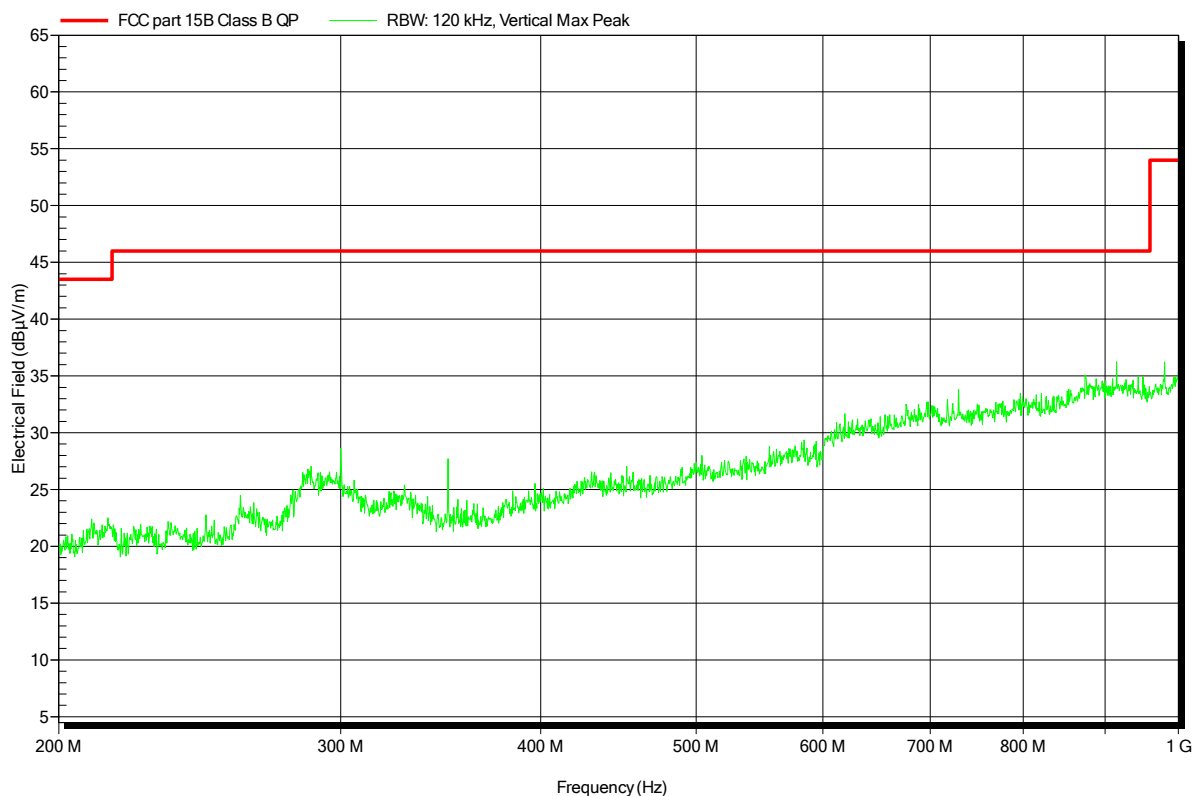


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023c
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 120 VAC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3m
Mode:	7722, Sample B04, DECT link to Base and Companion device, charging
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 35

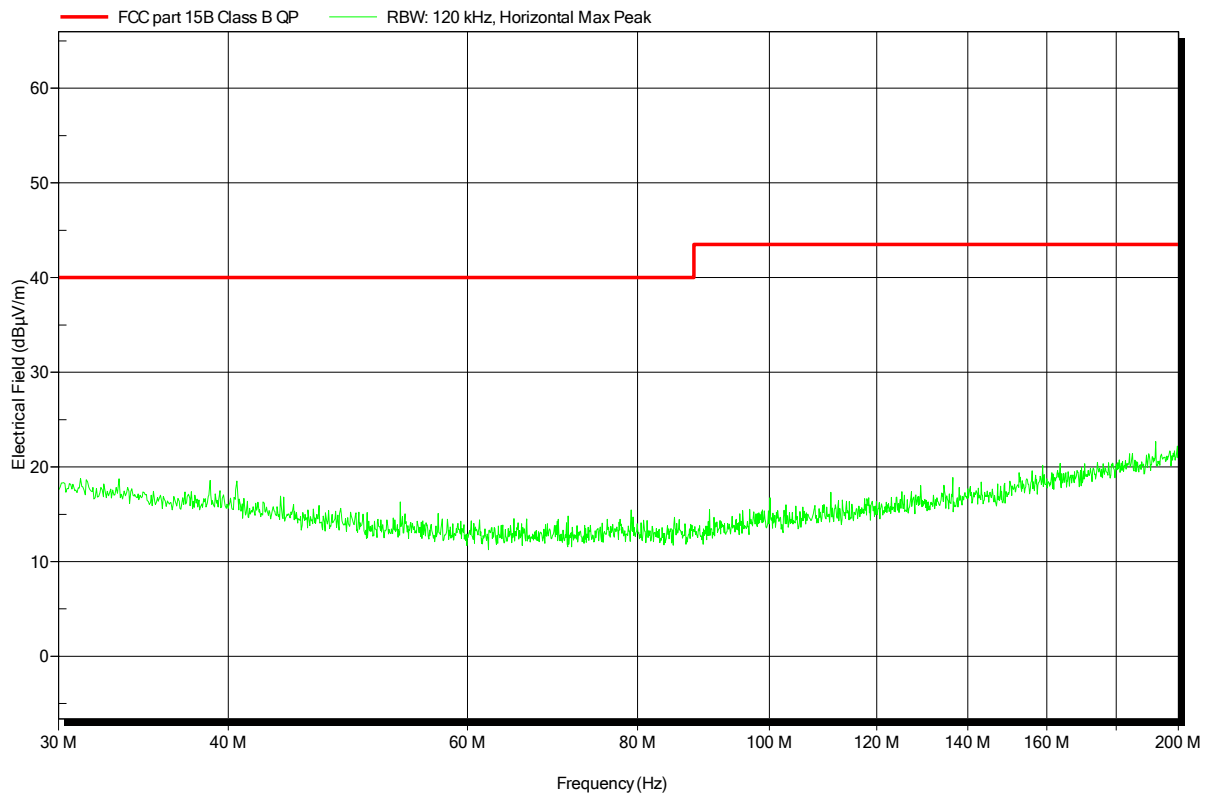


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 17

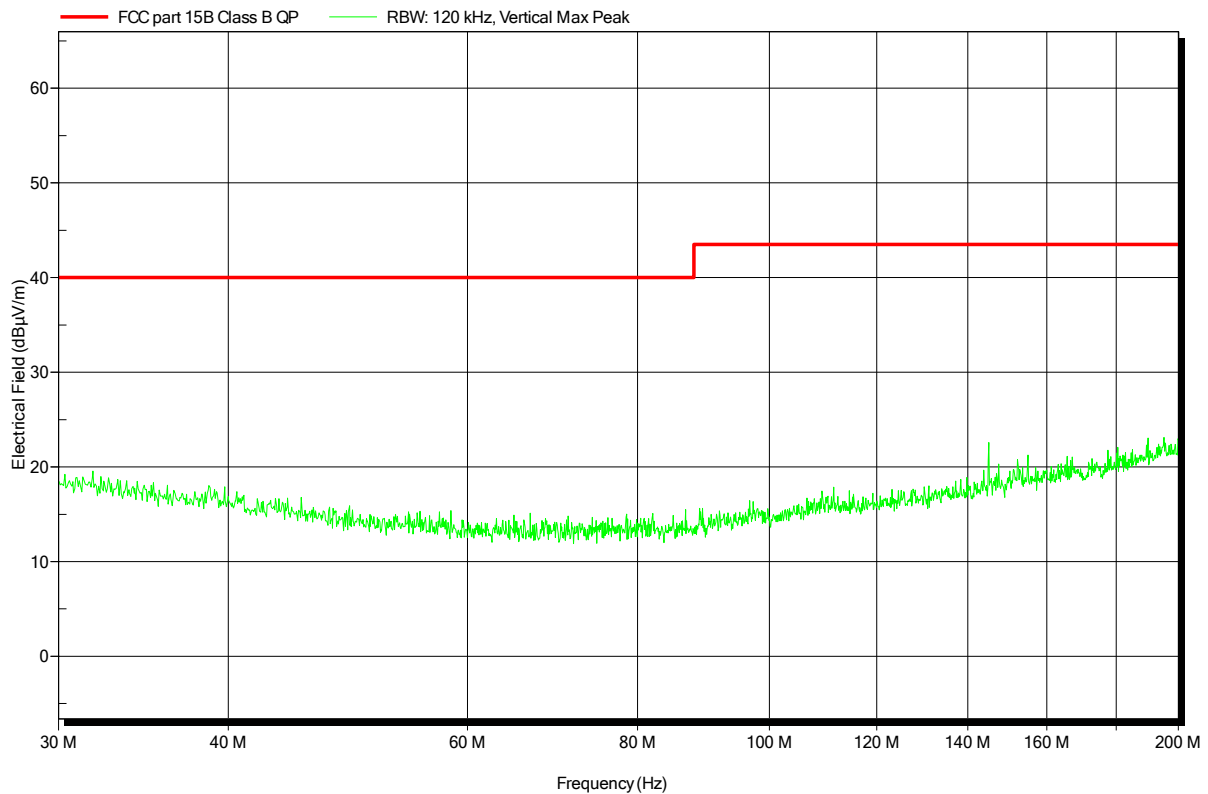


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 18

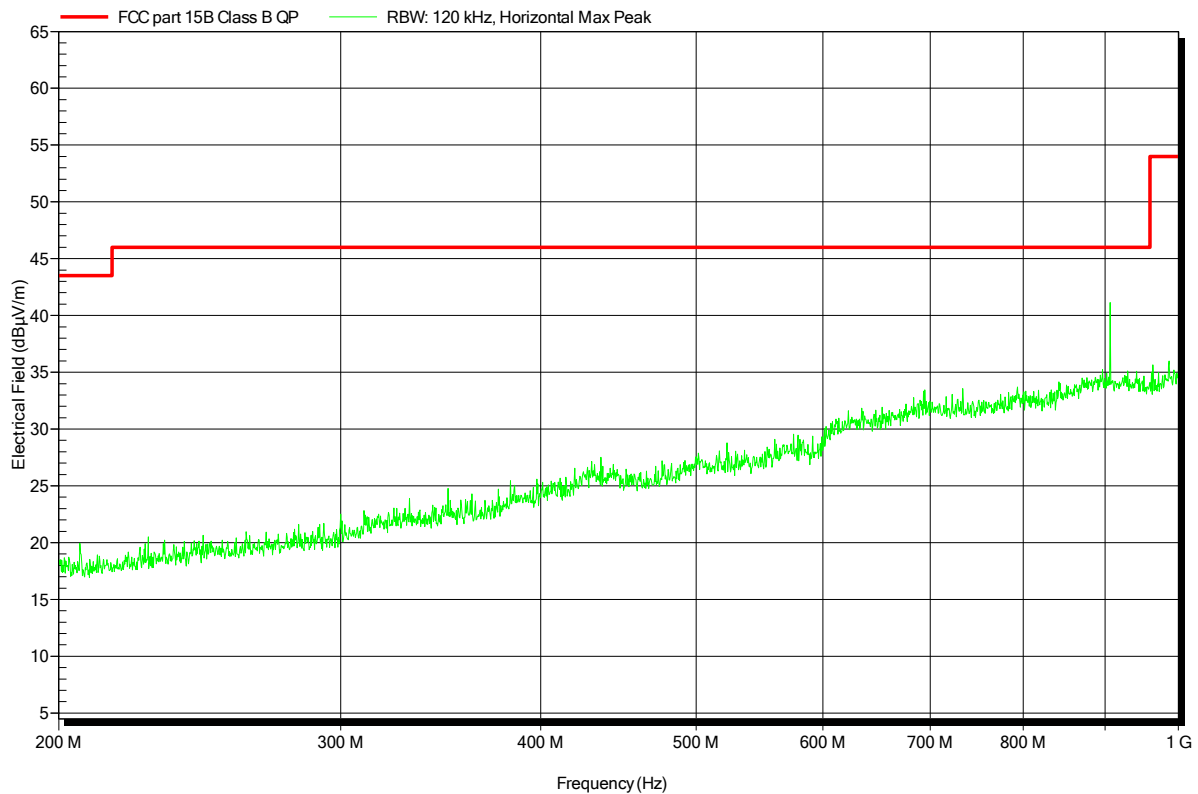


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 20

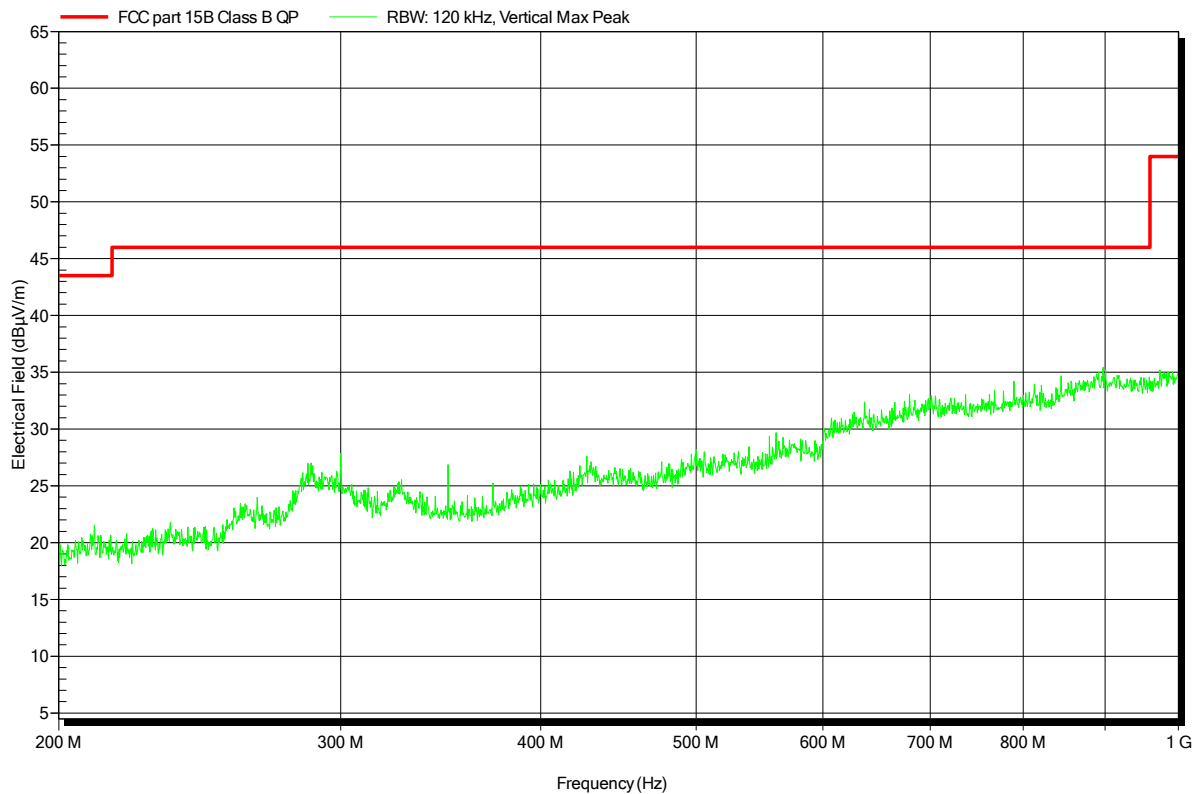


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 19



Test Report No.: G0M-1505-4754-EF0115B-V01

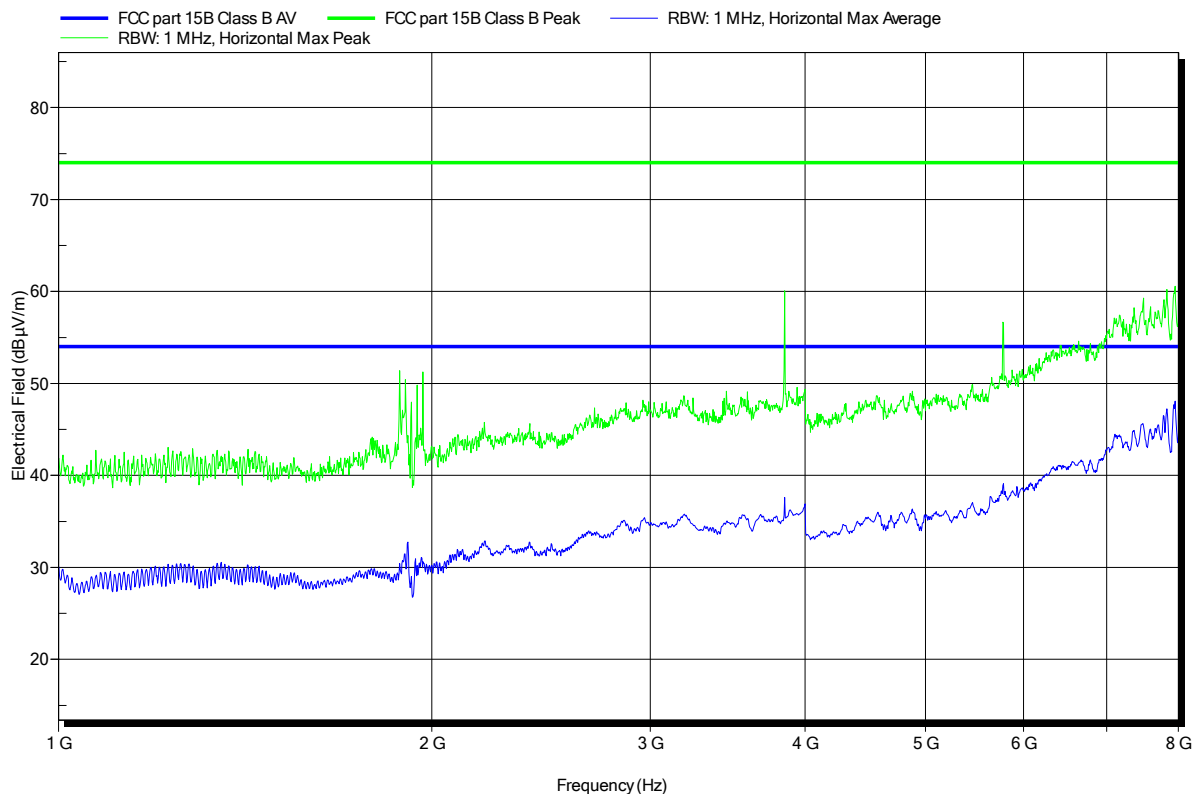
 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 21

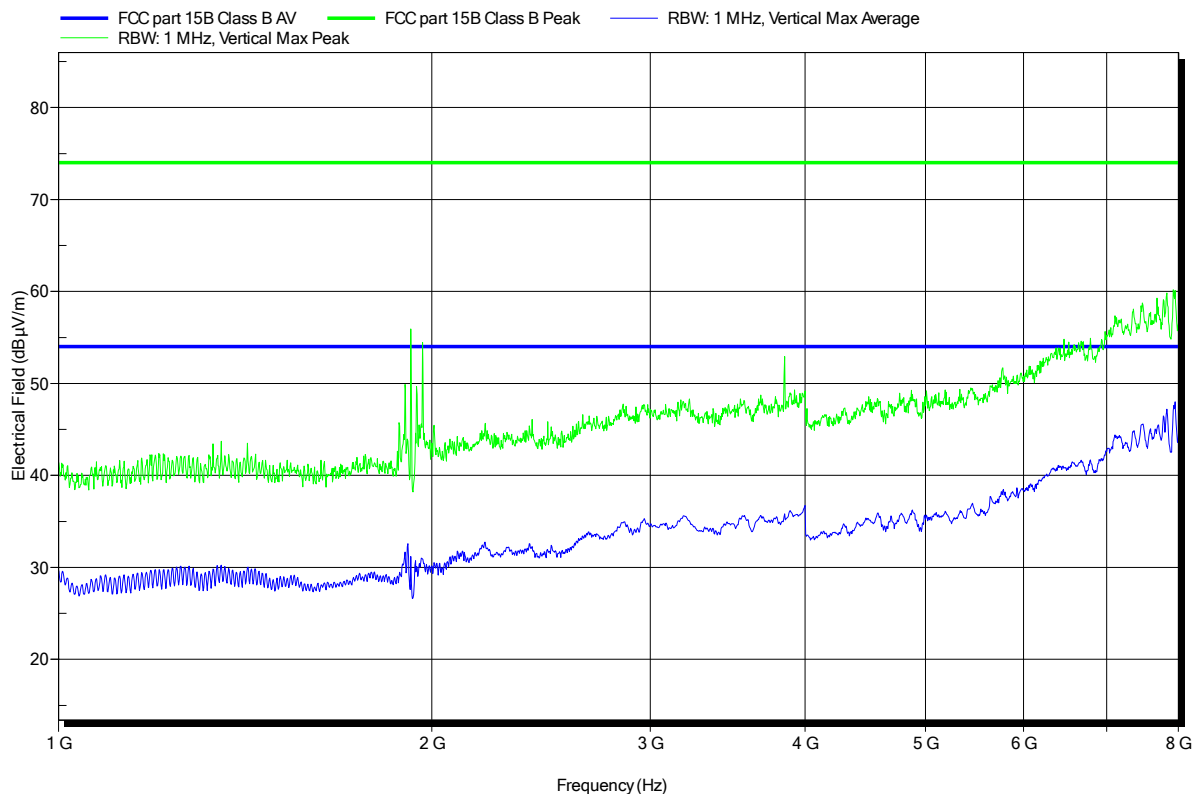


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 22

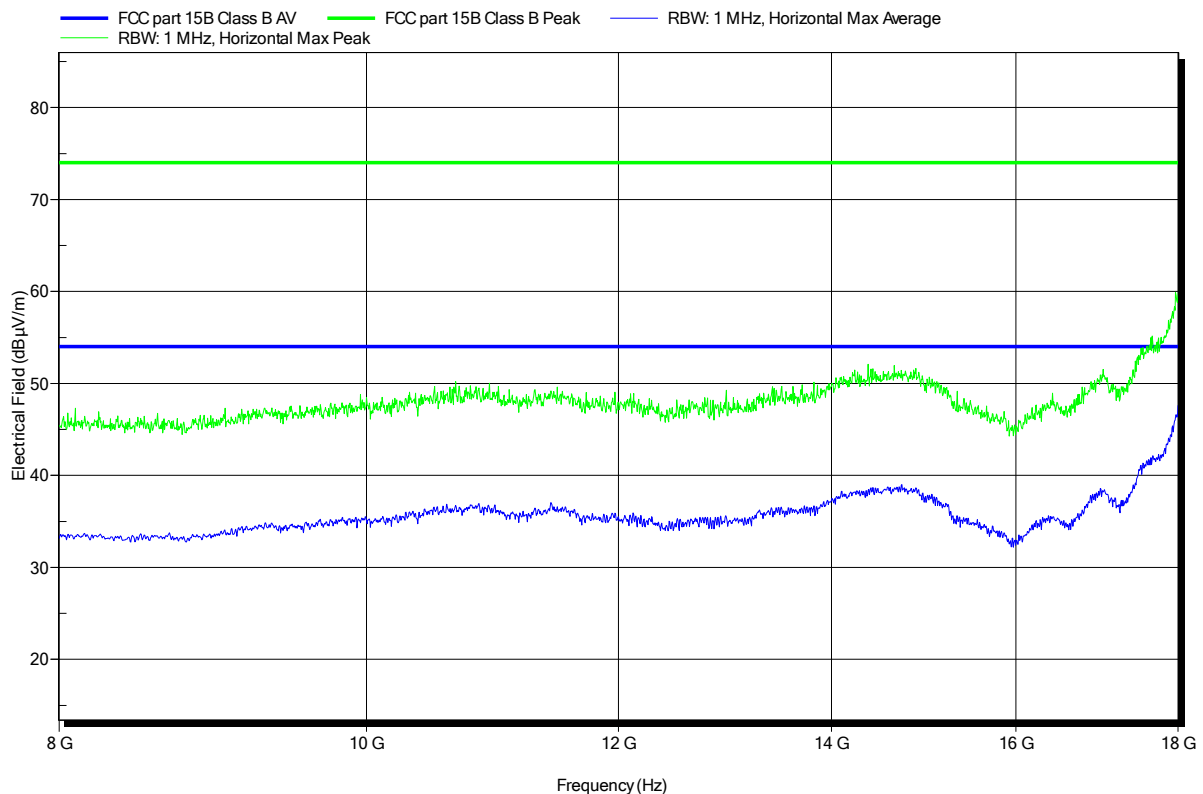


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 24

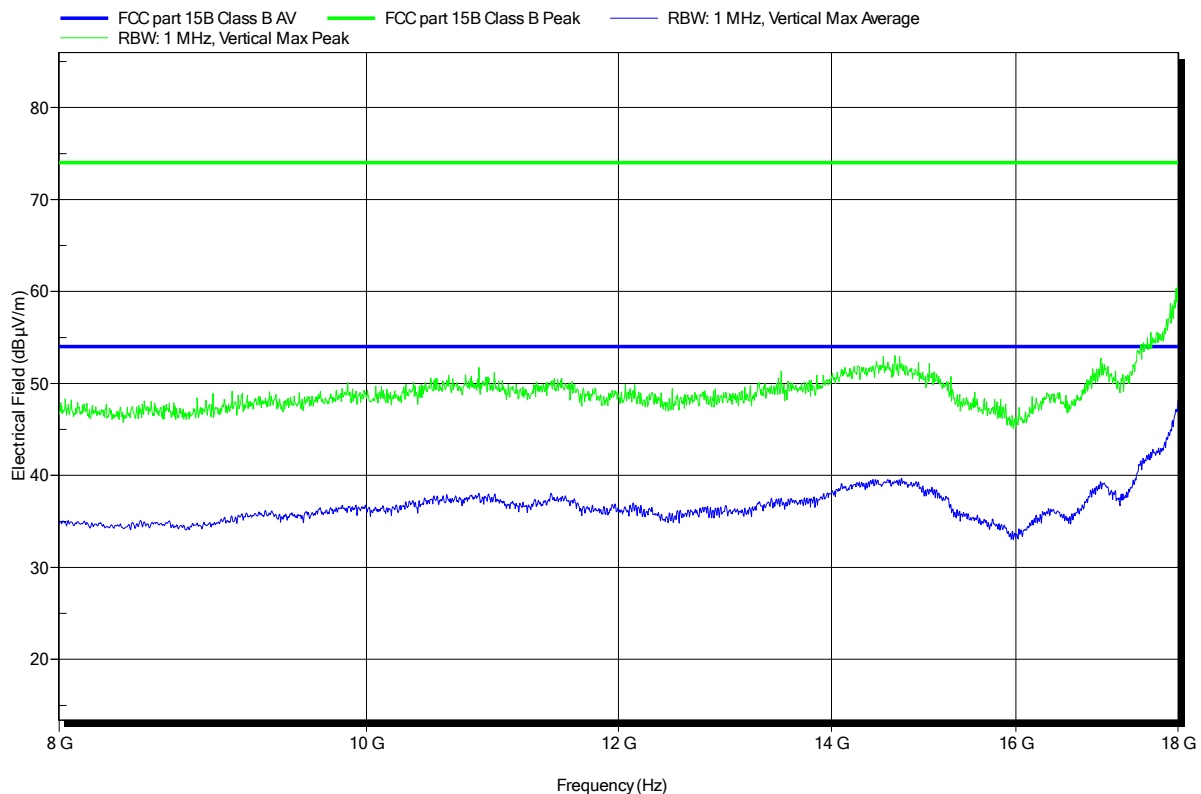


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023d
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7622, Sample B07, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 23

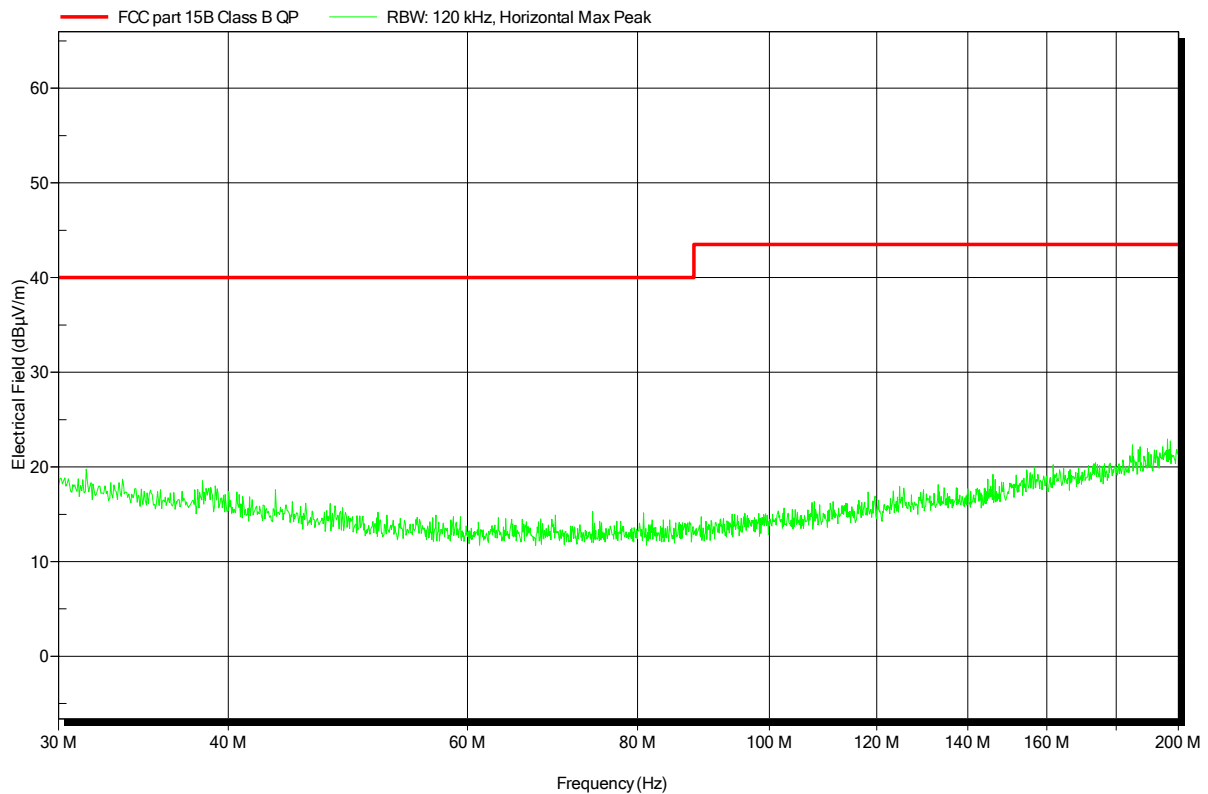


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 16

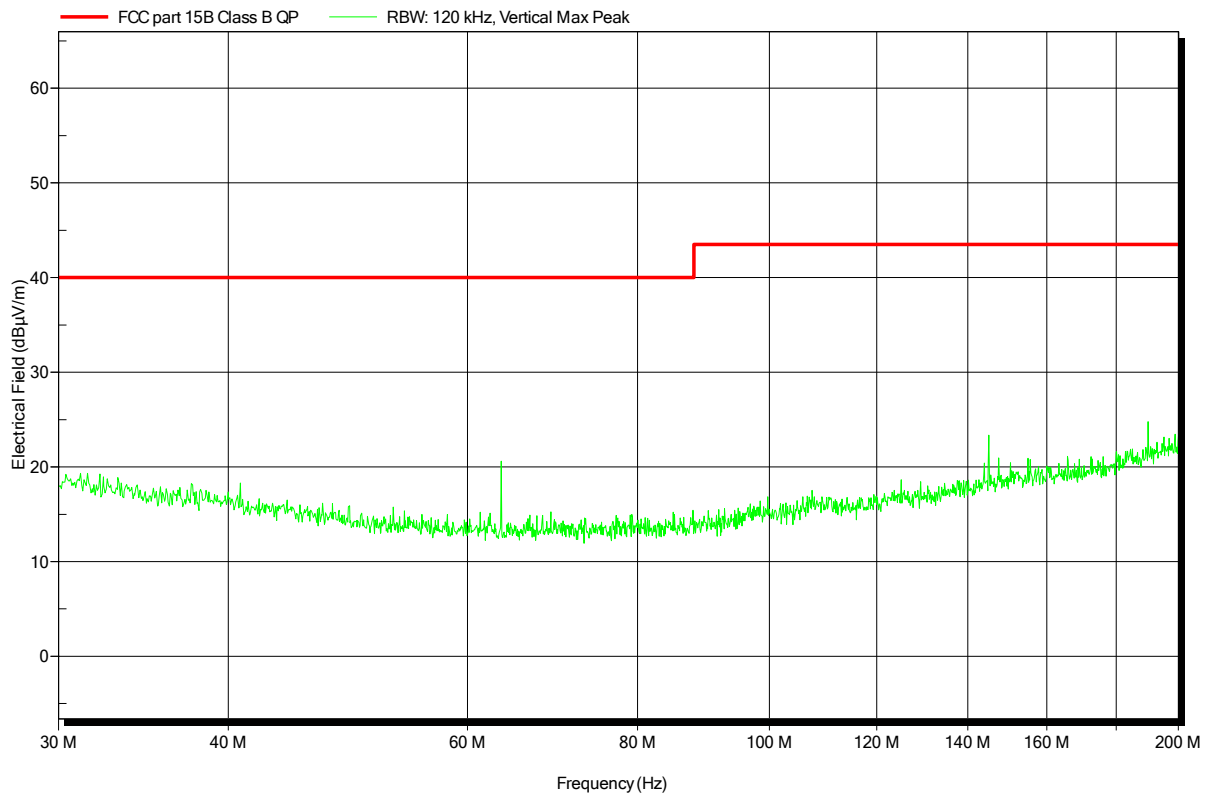


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 15

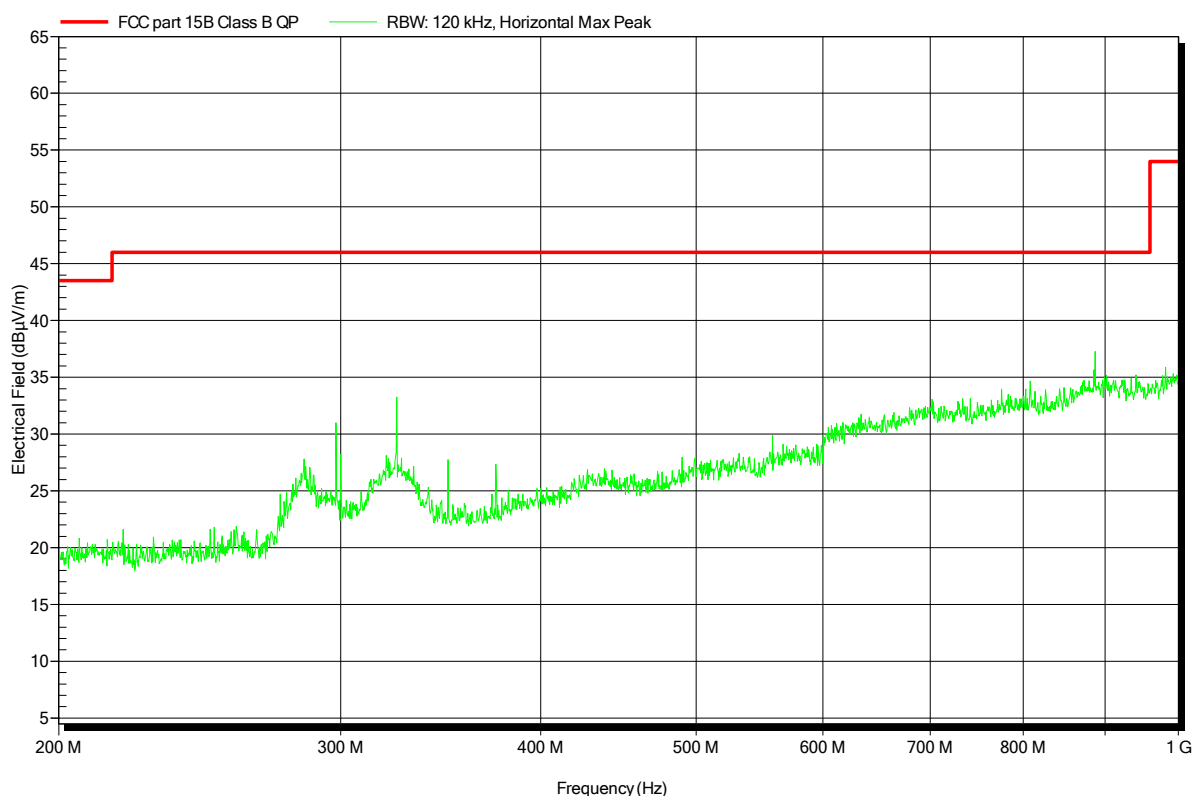


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 14

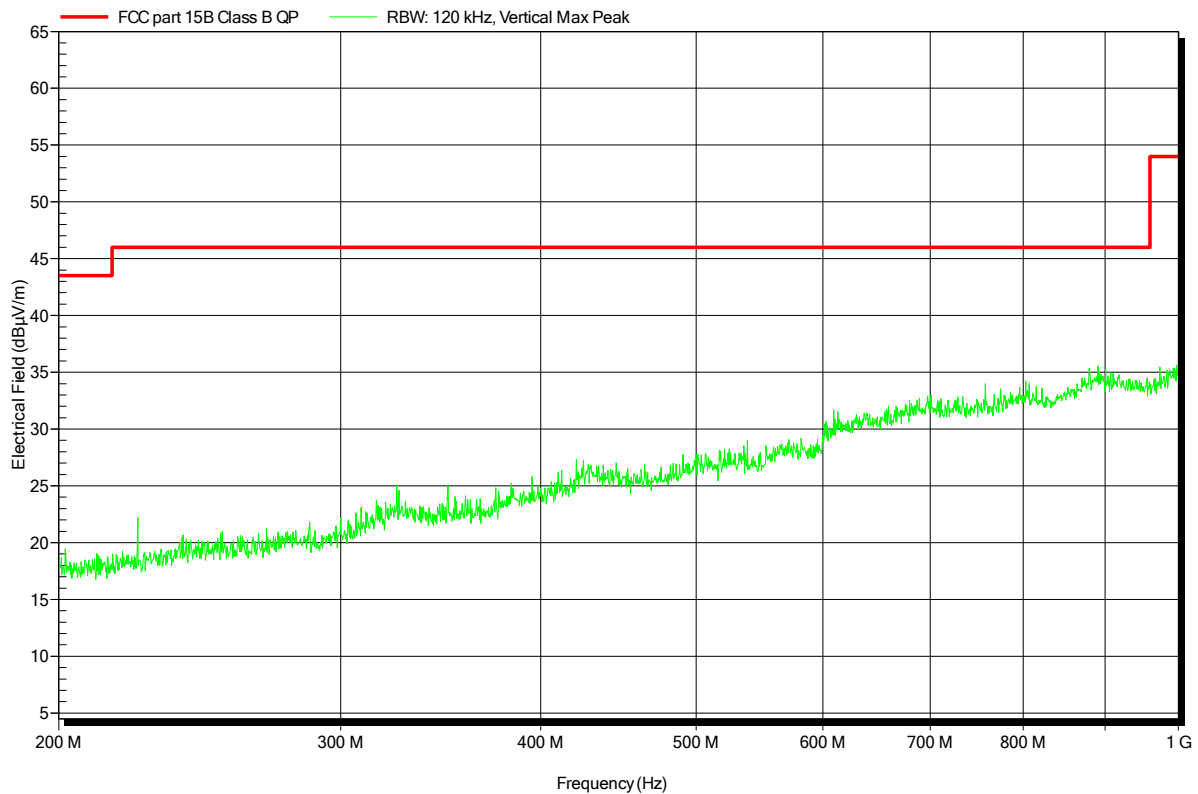


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 13

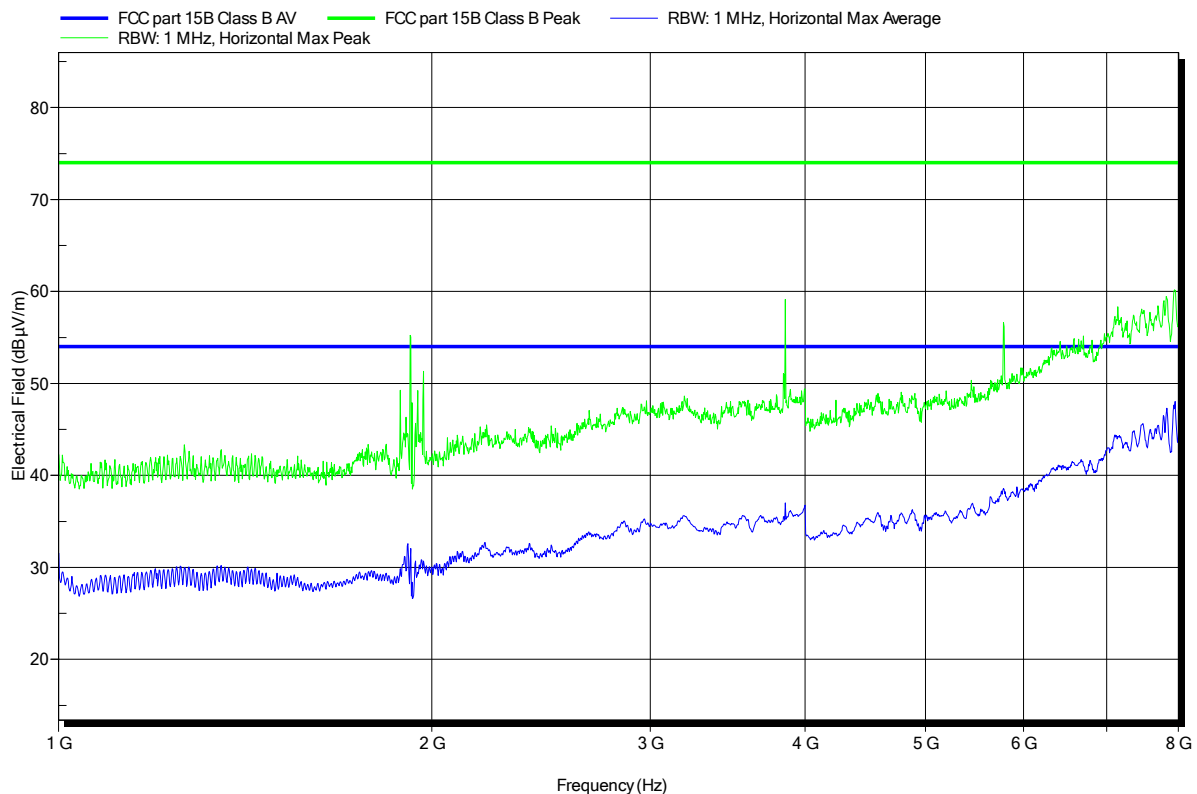


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 12

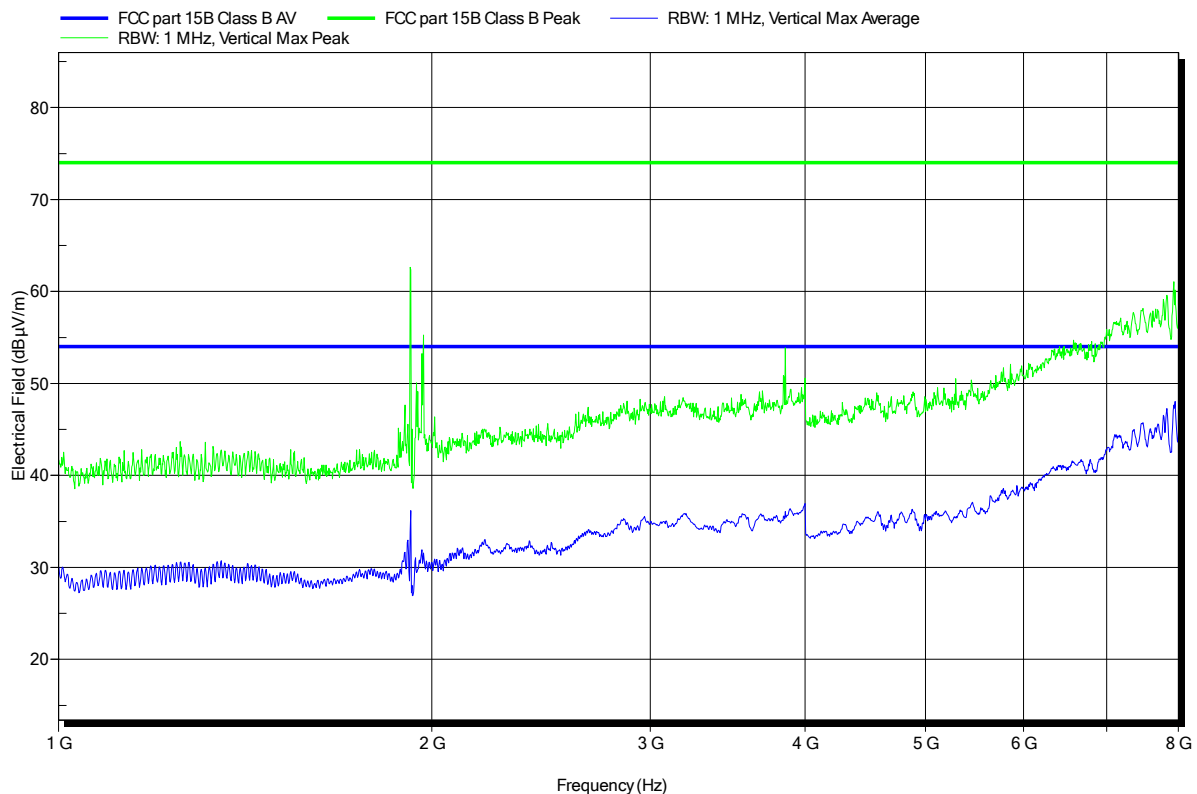


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 11

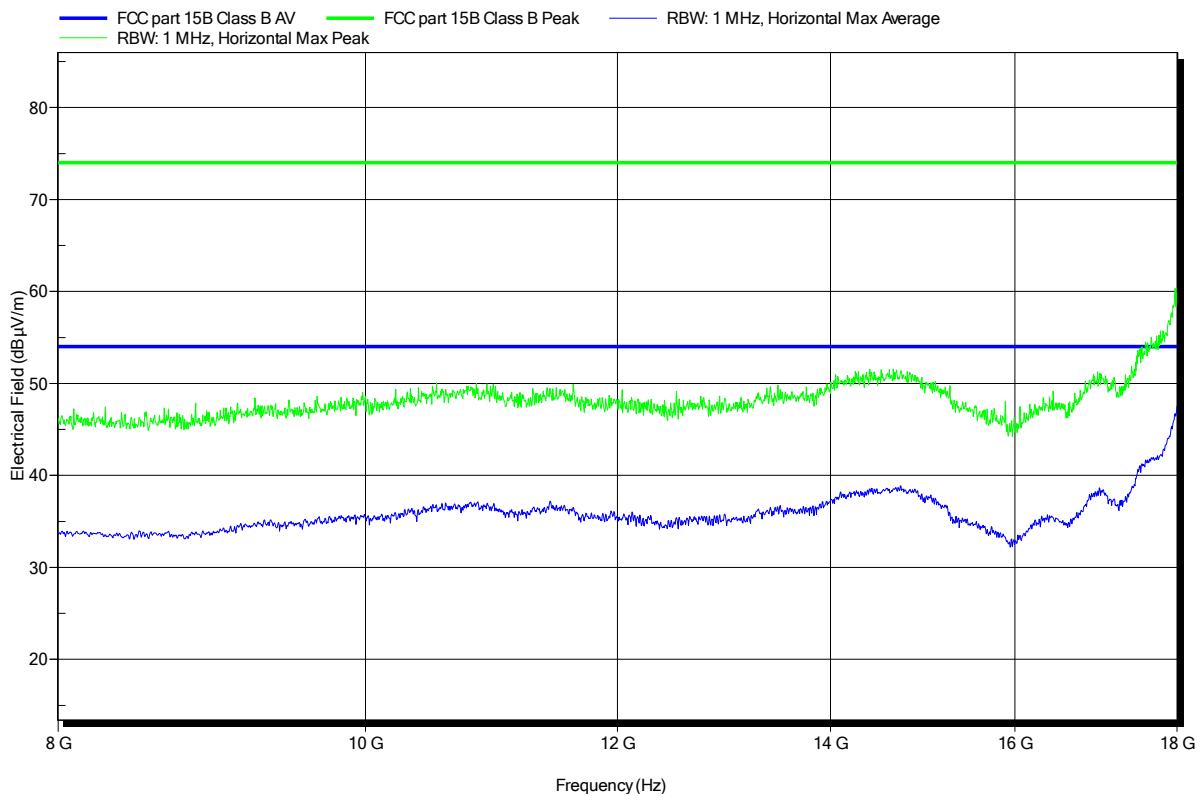


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 9

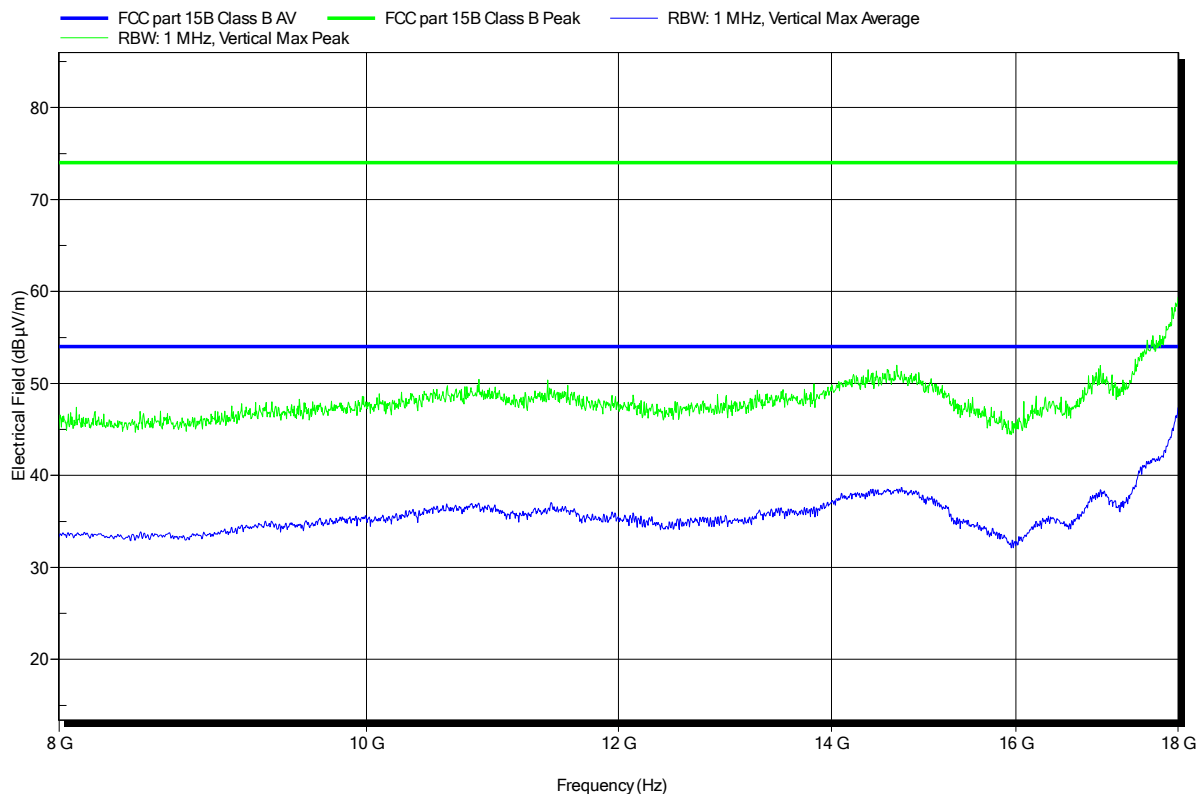


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023e
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7212, Sample B12, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 10

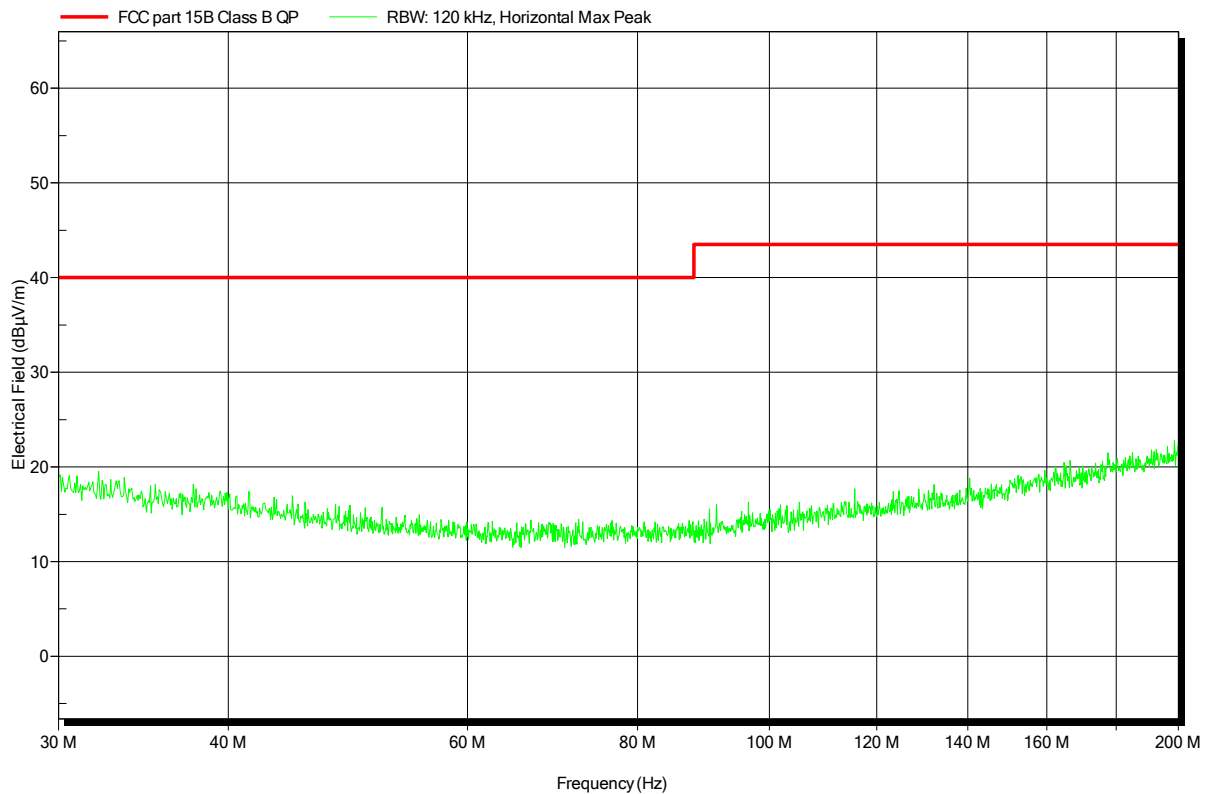


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 5

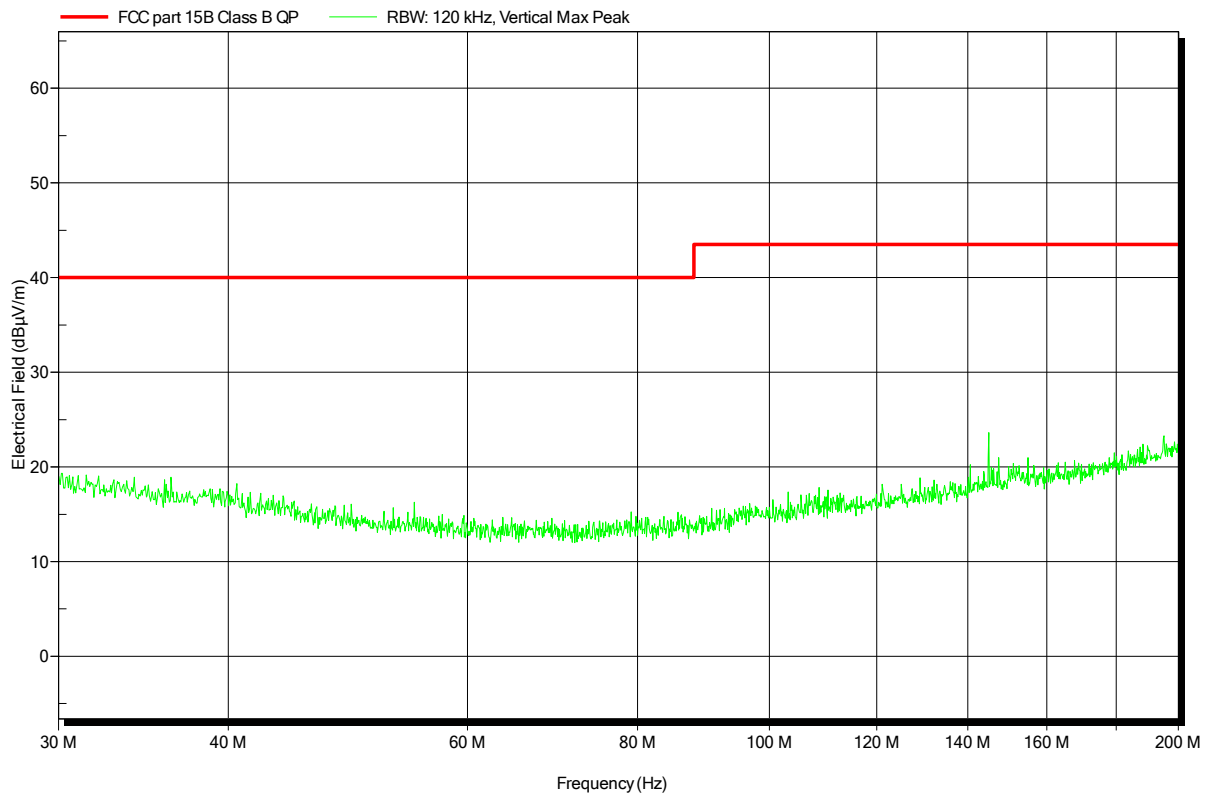


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 6

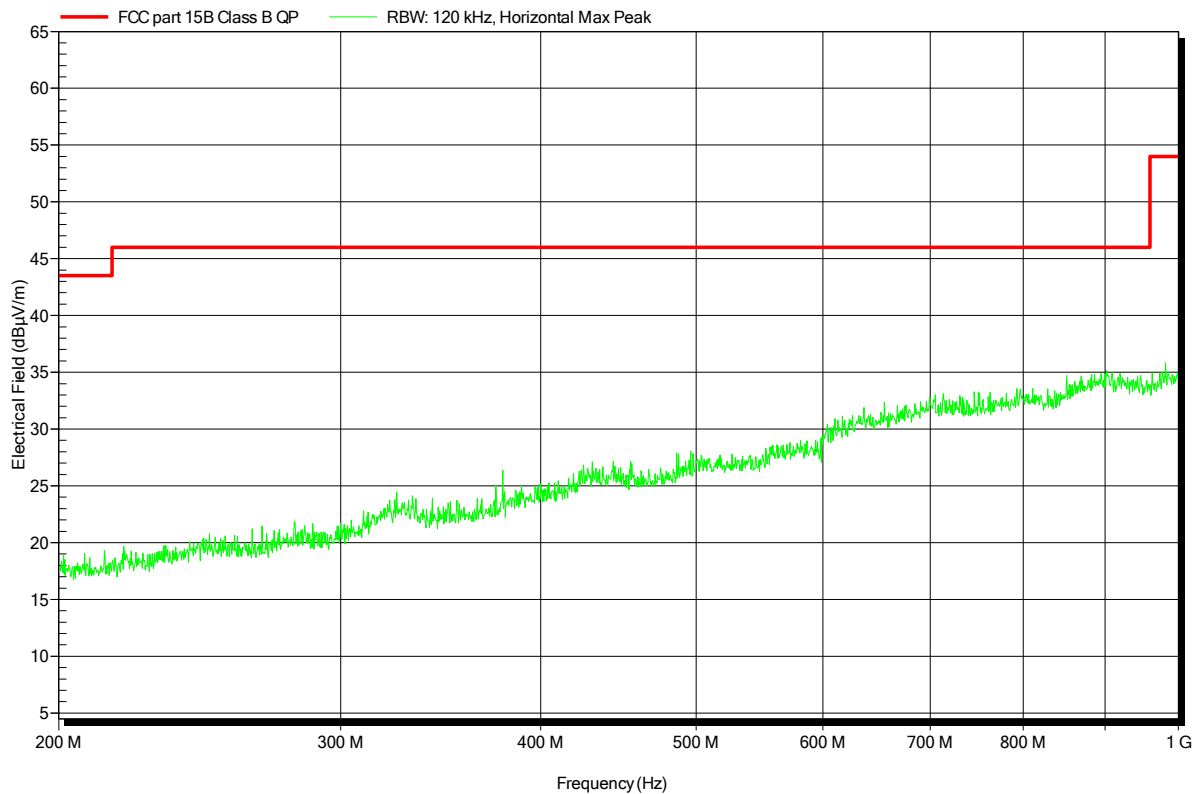


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 4

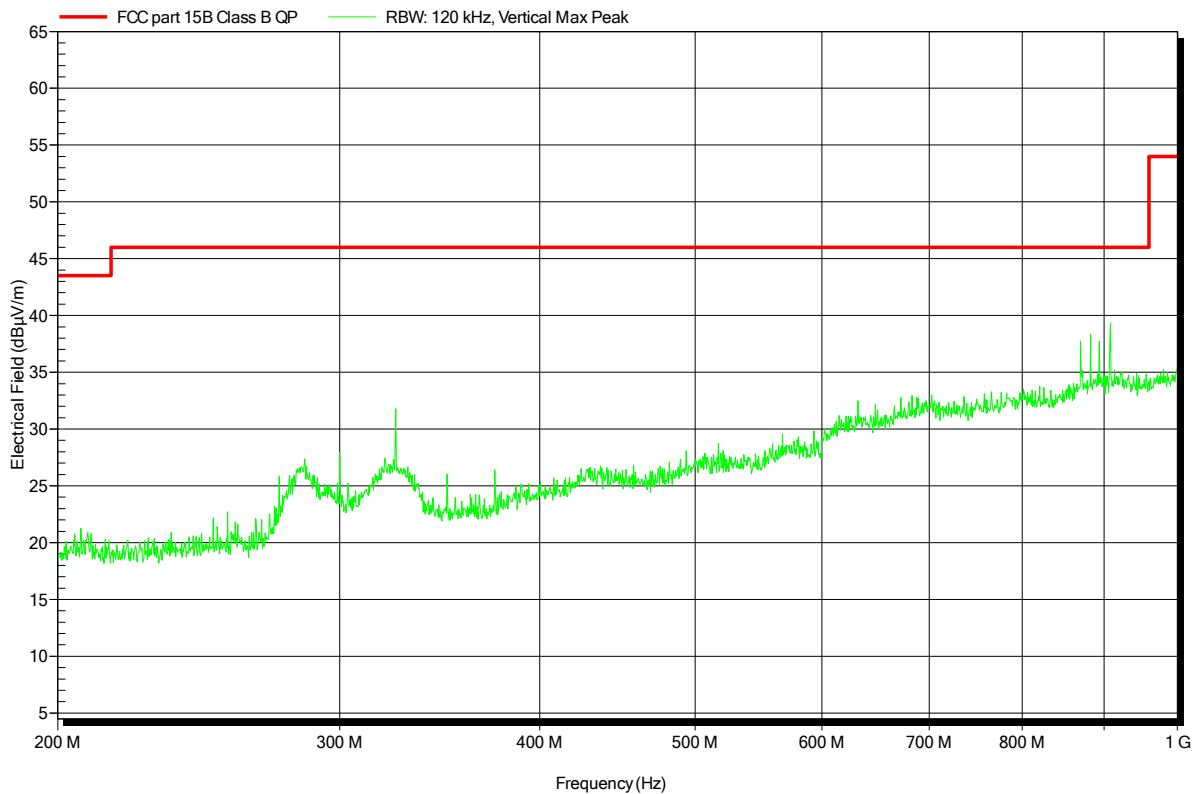


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 3

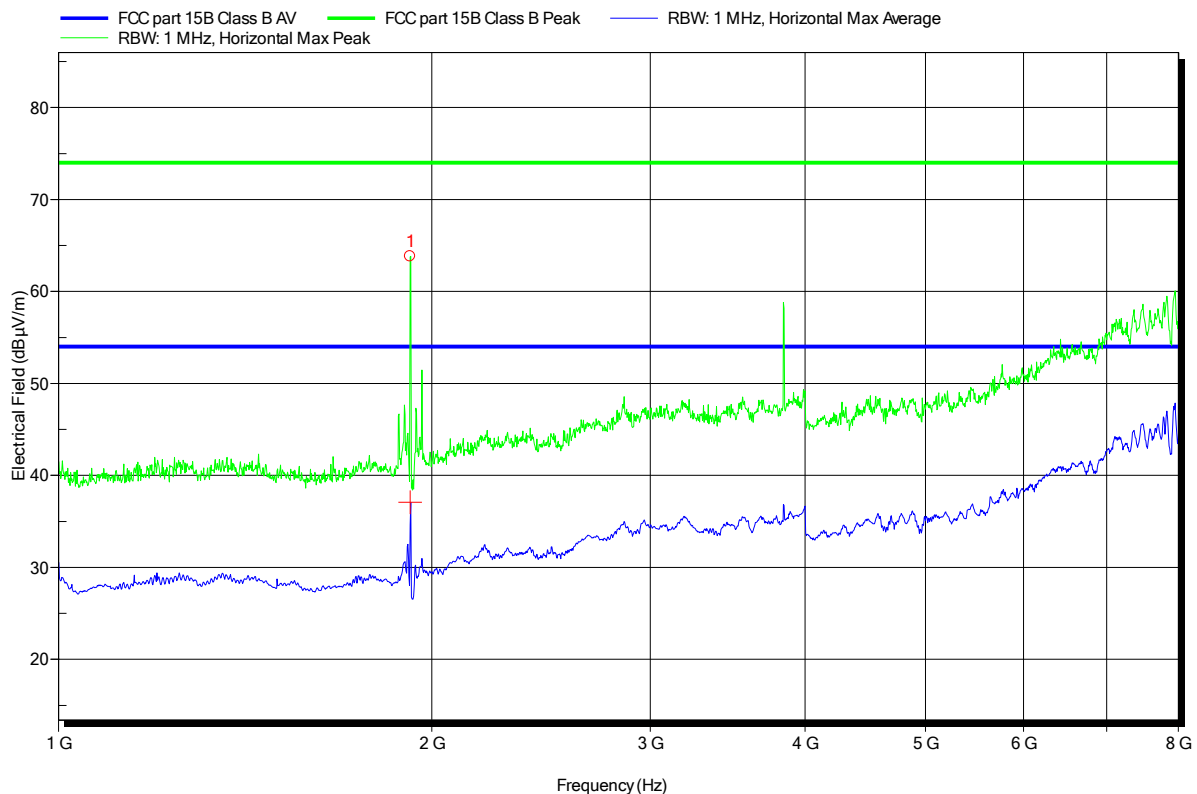


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant: Spectralink Europe ApS
 EUT Name: DECT handset 7722/7622/7212/7202
 Model: K023f
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Klein
 Test Conditions: Tnom: 24°C, Unom: 3.7 VDC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3m
 Mode: 7202, Sample B17, DECT link to Base and Companion device
 Test Date: Mittwoch, 3. Juni 2015
 Note: Peak 1: DECT Carrier

Index 1



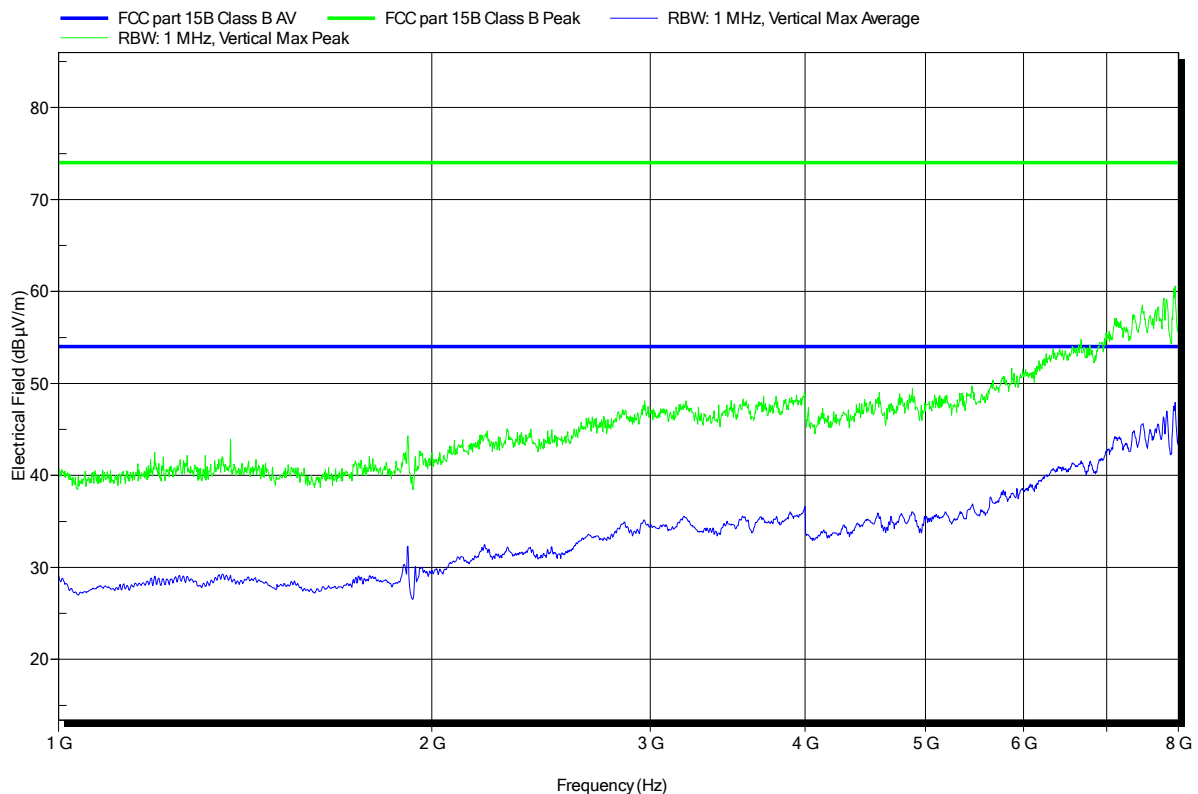
Frequency	Average	Average Limit	Average Difference	Average Status
1,922 GHz	37,09 dBµV/m	54 dBµV/m	-16,91 dB	Pass

Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 2

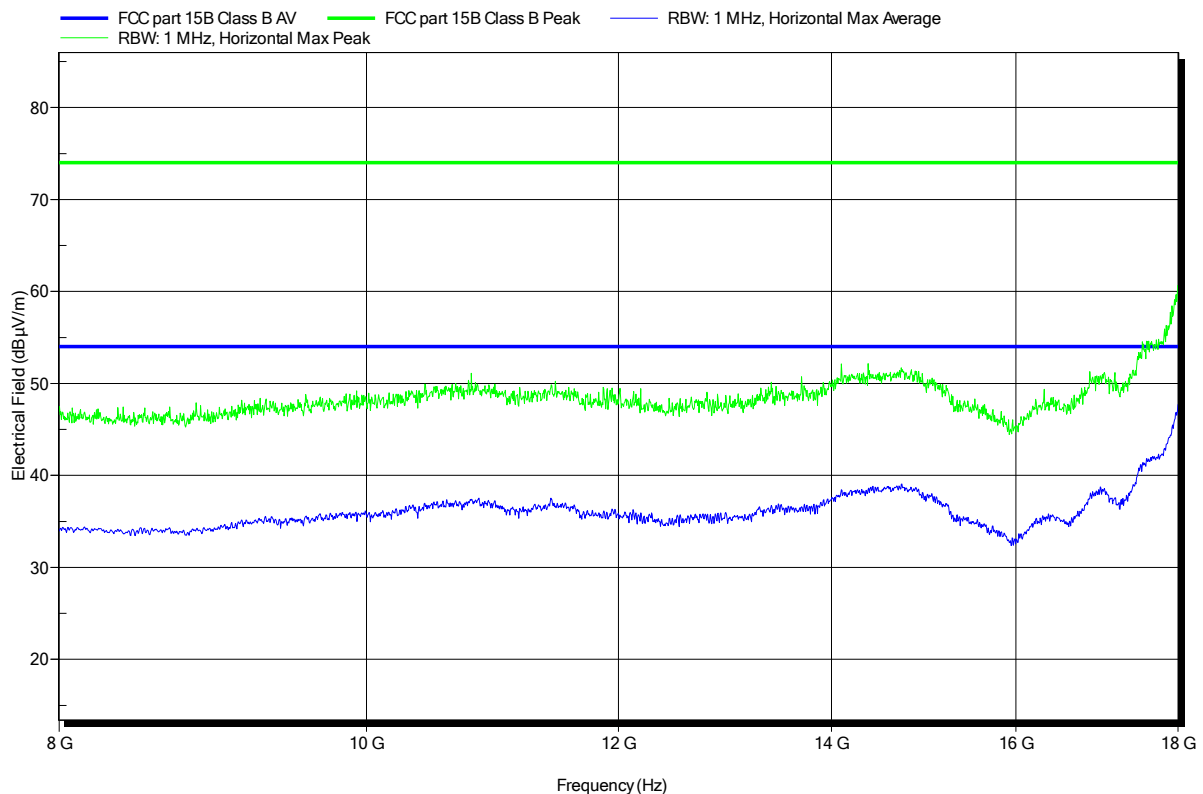


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 8

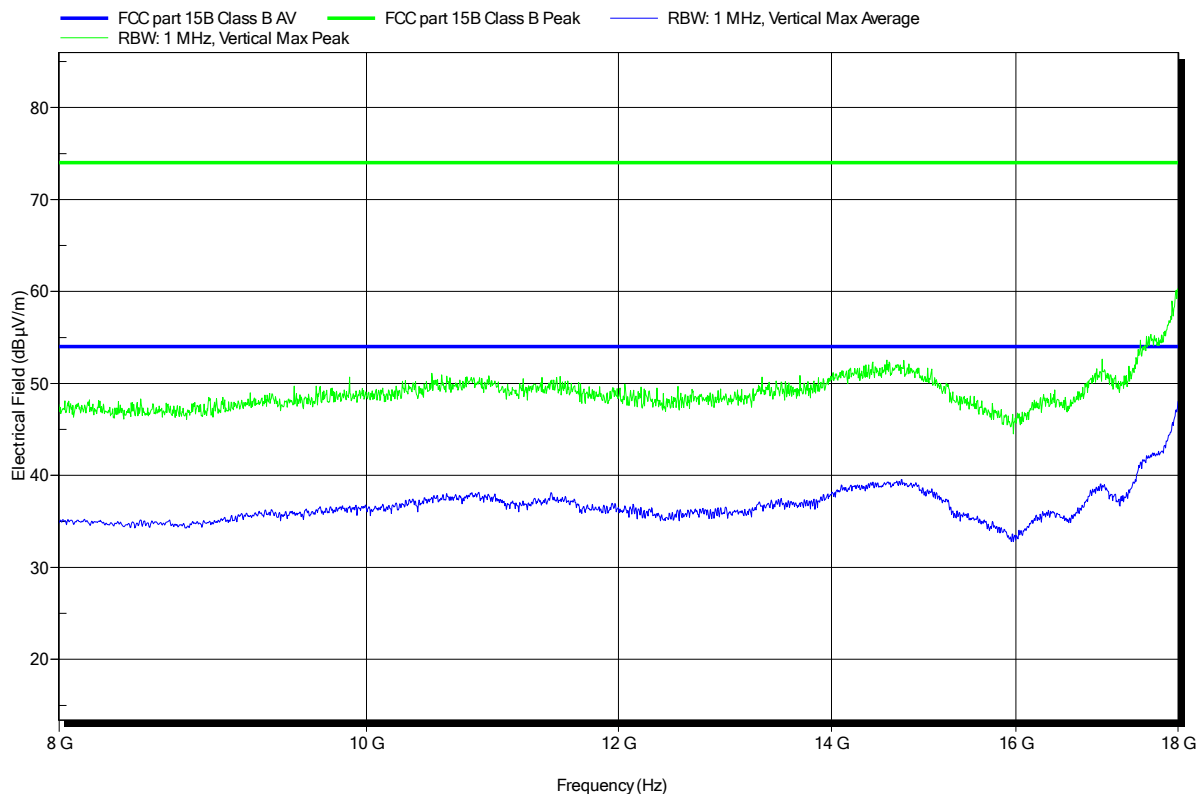


Spurious emissions under normal conditions according to FCC Part 15b

Project number: G0M-1505-4754

Applicant:	Spectralink Europe ApS
EUT Name:	DECT handset 7722/7622/7212/7202
Model:	K023f
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 24°C, Unom: 3.7 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3m
Mode:	7202, Sample B17, DECT link to Base and Companion device
Test Date:	Mittwoch, 3. Juni 2015
Note:	

Index 7



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	24°C		
Relative Humidity	30 to 60 %	42%		
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	1			
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. For the conducted emission the charger 84642494 was detected as worst case. This report shows results with this charger only.				

Test Procedure:

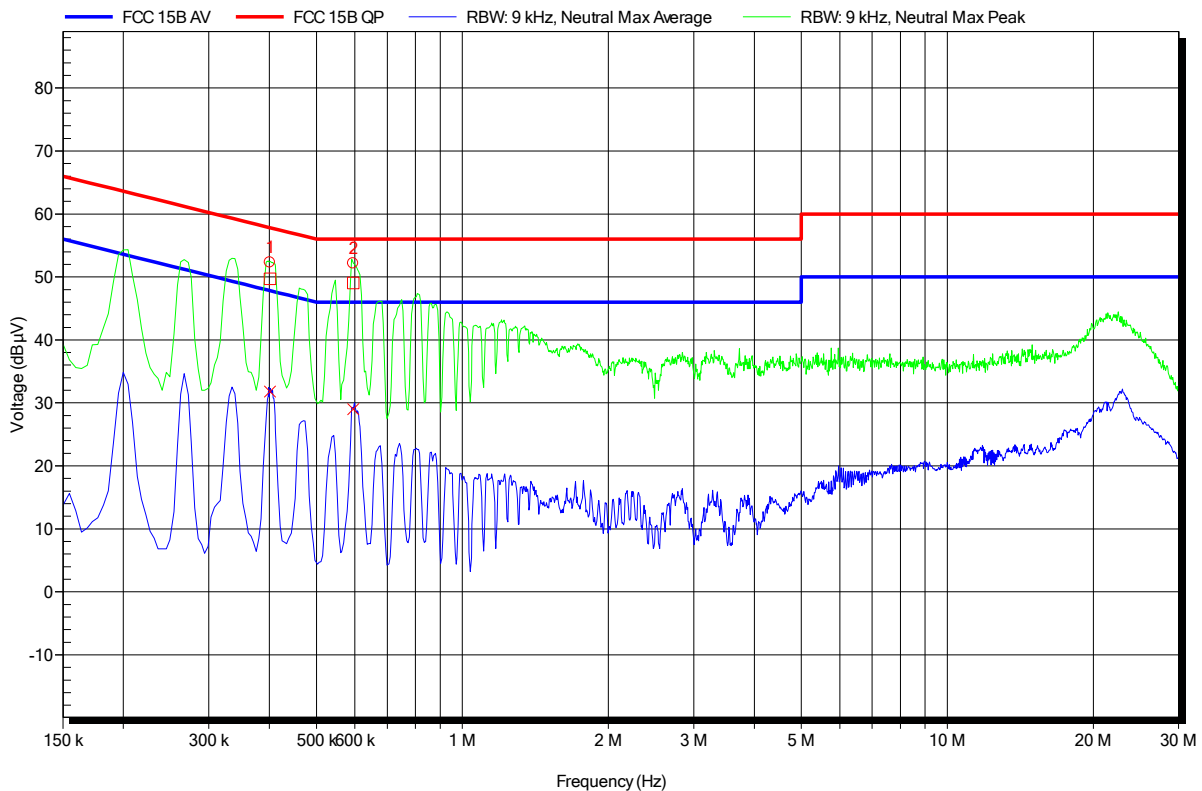
- 1) The EUT was placed on a non conductive table 0.8 m above the reference ground plane and 0.4 m away from the vertical conducting plane (ANSI C63.4: 2009 item 7.3.1)
- 2) The power cord that is normally supplied or recommended by the manufacturer was connected to the LISN.
- 3) The distance between 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 Part 15b

Project number: G0M-1505-4754

Applicant: Spectralink Europe ApS
 EUT Name: DECT handset 7722/7622/7212/7202
 Model: K023c
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Klein
 Test Conditions: Tnom: 24°C, Unom: 120 VAC / Battery
 LISN: ESH2-Z5 N
 Mode: 7722, Sample B04, DECT link to Base and Companion device, charging
 Test Date: Mittwoch, 3. Juni 2015
 Note:

Index 37



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
401,1 kHz	49,69 dBµV	57,83 dBµV	-8,14 dB	Pass
595,5 kHz	49,02 dBµV	56 dBµV	-6,98 dB	Pass

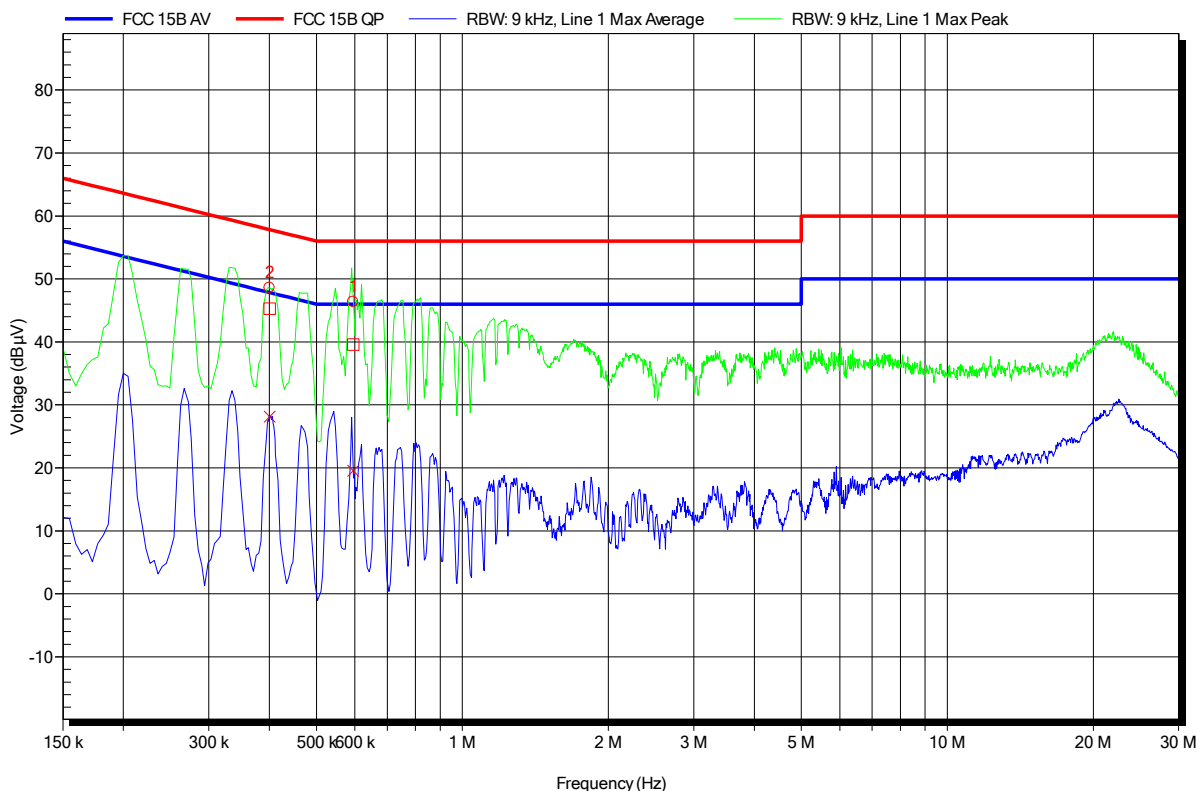
Frequency	Average	Average Limit	Average Difference	Average Status
401,1 kHz	31,8 dBµV	47,83 dBµV	-16,03 dB	Pass
595,5 kHz	29,02 dBµV	46 dBµV	-16,98 dB	Pass

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

Project number: G0M-1505-4754

Applicant: Spectralink Europe ApS
 EUT Name: DECT handset 7722/7622/7212/7202
 Model: K023c
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Klein
 Test Conditions: Tnom: 24°C, Unom: 120 VAC / Battery
 LISN: ESH2-Z5 L
 Mode: 7722, Sample B04, DECT link to Base and Companion device, charging
 Test Date: Mittwoch, 3. Juni 2015
 Note:

Index 38



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
400,2 kHz	45,28 dBµV	57,85 dBµV	-12,57 dB	Pass
595,5 kHz	39,57 dBµV	56 dBµV	-16,43 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
400,2 kHz	28,15 dBµV	47,85 dBµV	-19,7 dB	Pass
595,5 kHz	19,55 dBµV	46 dBµV	-26,45 dB	Pass