



FCC TEST REPORT FCC 47 CFR Part 15C Industry Canada RSS-210 Frequency hopping systems operating within the 2400 – 2483.5 MHz band	
Report Reference No.	G0M-1308-3117-TFC247B-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	GN Netcom A/S
Address	Lautrupbjerg 7 2750 Ballerup DENMARK
Test specification:	
Standard.....	47 CFR Part 15C RSS-210, Issue 8, 2010-12 RSS-Gen, Issue 3, 2010-12 ANSI C63.4:2009
Equipment under test (EUT):	
Product description	Bluetooth headset
Model No.	OTE16
Hardware version	28-03740
Firmware / Software version	070
	FCC-ID: BCE-OTE16 IC: 2386C-OTE16
Test result	Passed

Possible test case verdicts:


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

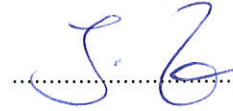
Testing:

Date of receipt of test item: 2013-08-09

Date (s) of performance of tests: 2013-08-22 – 2013-08-29

Compiled by: Antje Bartusch

Tested by (+ signature).....: Wilfried Treffke 
 (Testing Manager)

Approved by (+ signature): Jens Zimmermann 
 (Test Lab Manager)

Date of issue: 2013-10-21

Total number of pages.....: 126

General remarks:

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

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

Additional comments:

Version History

Version	Issue Date	Remarks	Revised by
01	2013-10-21	Initial Release	

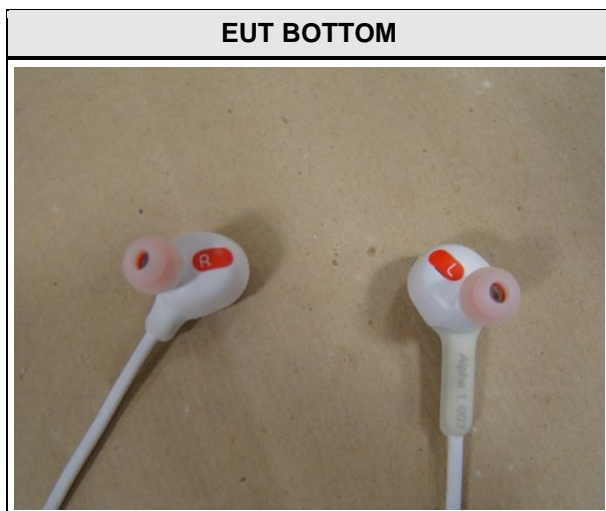
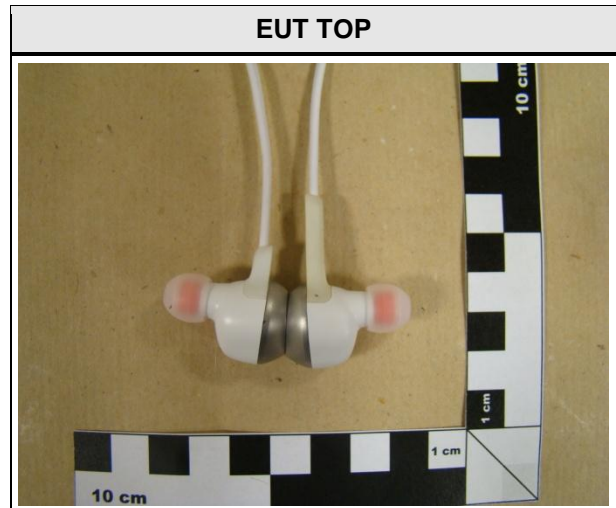
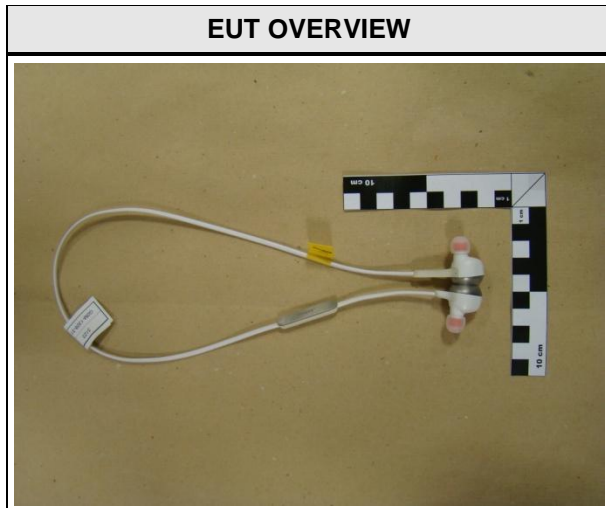
REPORT INDEX

1	EQUIPMENT (TEST ITEM) DESCRIPTION	5
1.1	Photos – Equipment External	6
1.2	Photos – Equipment internal	7
1.3	Photos – Test setup	8
1.4	Supporting Equipment Used During Testing	9
1.5	Test Modes	10
1.6	Test Equipment Used During Testing	12
1.7	Sample emission level calculation	13
2	RESULT SUMMARY	14
3	TEST CONDITIONS AND RESULTS	15
3.1	Test Conditions and Results – Occupied Bandwidth	15
3.2	Test Conditions and Results – 20 dB Bandwidth	22
3.3	Test Conditions and Results – Number of hopping frequencies	32
3.4	Test Conditions and Results – Frequency hopping channel separation	36
3.5	Test Conditions and Results – Time of occupancy (Dwell Time)	38
3.6	Test Conditions and Results – Maximum peak conducted power	40
3.7	Test Conditions and Results – AC power line conducted emissions	42
3.8	Test Conditions and Results – Band edge compliance	45
3.9	Test Conditions and Results – Conducted spurious emissions	59
3.10	Test Conditions and Results – Transmitter radiated emissions	66
3.11	Test Conditions and Results – Receiver radiated emissions	69
ANNEX A	Transmitter radiated spurious emissions	71
ANNEX B	Receiver radiated spurious emissions	119

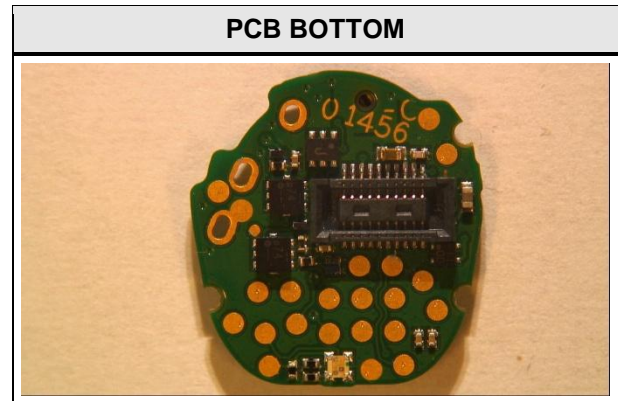
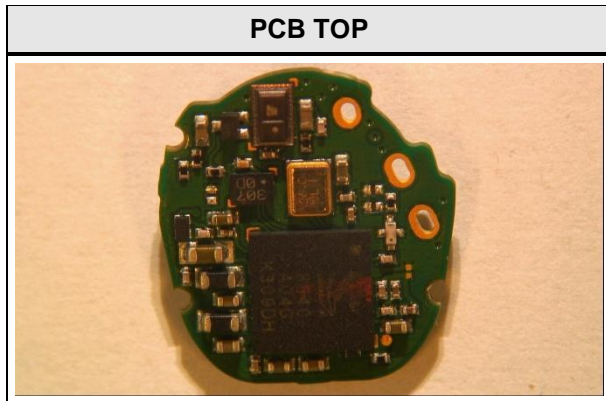
1 Equipment (Test item) Description

Description	Bluetooth headset	
Model	OTE16	
Serial number	None	
Hardware version	28-03740	
Software / Firmware version	070	
FCC-ID	BCE-OTE16	
IC	2386C-OTE16	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	Bluetooth 2.1 + EDR	
Operating frequency range	2402 - 2480 MHz	
Assigned frequency band	2400 - 2483.5 MHz	
Main test frequencies	F _{LOW}	2402 MHz
	F _{MID}	2441 MHz
	F _{HIGH}	2480 MHz
Spreading	FHSS	
Modulations	GFSK, PI/4-DQPSK, 8-PSK	
Number of channels	79 hopping channels at all	
Channel spacing	1 MHz	
Number of antennas	1	
Antenna	Type	integrated
	Model	Patch Antenna
	Manufacturer	unspecified
	Gain	-1.14 dBi (manufacturer declaration)
Manufacturer	GN Netcom A/S Lautrupbjerg 7 2750 Ballerup DENMARK	
Power supply	V _{NOM}	3.7 VDC
	V _{MIN}	3.2 VDC
	V _{MIN}	4.2 VDC
AC/DC-Adaptor	Model	None
	Vendor	None
	Input	None
	Output	None

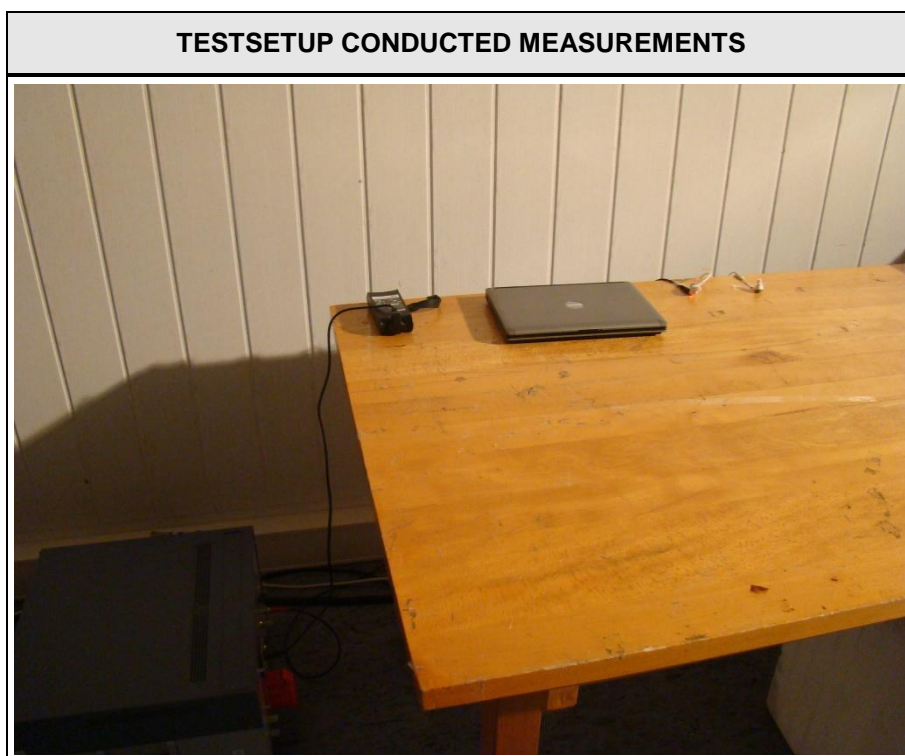
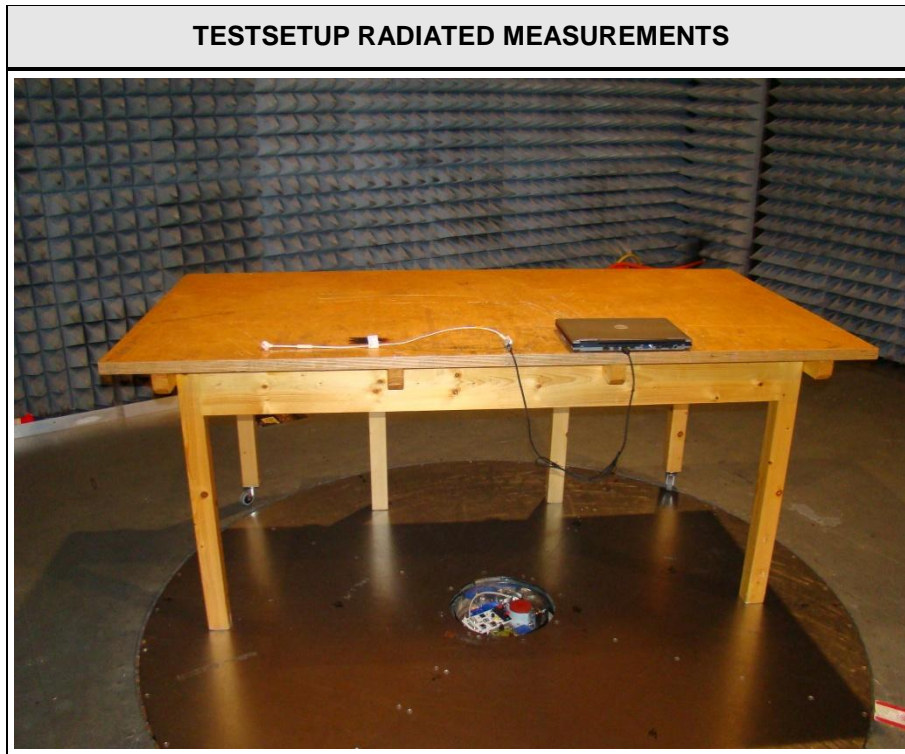
1.1 Photos – Equipment External



1.2 Photos – Equipment internal



1.3 Photos – Test setup



1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
AE	Laptop	DELL	Latitude	
<p>*Note: Use the following abbreviations:</p> <p>AE : Auxiliary/Associated Equipment, or</p> <p>SIM : Simulator (Not Subjected to Test)</p> <p>CABL : Connecting cables</p>				

1.5 Test Modes

Mode #	Description	
DH5-Sngl	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping stopped (single hopping channel) Modulation = GFSK Packet type = DH5 Data rate = 1 Mbps Duty cycle = 78 % Power level = Maximum
2DH5-Sngl	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping stopped (single hopping channel) Modulation = $\pi/4$ -DQPSK Packet type = 2DH5 Data rate = 2 Mbps Duty cycle = 78 % Power level = Maximum
3DH5-Sngl	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping stopped (single hopping channel) Modulation = 8-DPSK Packet type = 3DH5 Data rate = 3 Mbps Duty cycle = 78 % Power level = Maximum
DH5-Hop	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping Modulation = GFSK Packet type = DH5 Data rate = 1 Mbps Duty cycle = 78 % Power level = Maximum

2DH5-Hop	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping Modulation = $\pi/4$ -DQPSK Packet type = 2DH5 Data rate = 2 Mbps Duty cycle = 789 % Power level = Maximum
3DH5-Hop	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone transmit Spreading = Hopping Modulation = 8-DPSK Packet type = 3DH5 Data rate = 3 Mbps Duty cycle = 78 % Power level = Maximum
Receive	General conditions:	EUT powered and controlled via fully charged battery
	Radio conditions:	Mode = standalone receive Spreading = Hopping
AC-Powerline	General conditions:	EUT connected and powered by Notebook USB port
	Radio conditions:	Mode = standalone transmit Spreading = Hopping Power level = Maximum

1.6 Test Equipment Used During Testing

20dB Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Number of hopping frequencies					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Time of occupancy					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Maximum peak conducted power					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Band edge compliance					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Conducted spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2013-01	2014-01

Radiated spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 5	EF00395	calibration	calibration
Spectrum Analyzer	R&S	FSIQ26	EF00242	2013-06	2014-06
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD Antenna	R&S	HL 223	EF00187	2011-02	2014-02
LPD Antenna	R&S	HL 025	EF00327	2013-02	2016-02

AC powerline conducted emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AMN	R&S	ESH2-Z5	EF00182	2012-10	2014-10
AMN	R&S	ESH3-Z5	EF00036	2012-11	2014-11
EMI Test Receiver	R&S	ESCS 30	EF00295	2012-09	2013-09

Test Report No.: G0M-1308-3117-TFC247B-V01

1.7 Sample emission level calculation

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

Reading:

This is the reading obtained on the spectrum analyzer in 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 15C, IC RSS-210				
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks
RSS-Gen 4.6.1	Occupied Bandwidth	RSS-Gen 4.6.1	N/R	Informational only
FCC § 15.247(a)(1) IC RSS-210 § A8.1	20 dB Bandwidth	Public notice DA 00-705	PASS	
FCC § 15.247(a)(1)(iii) IC RSS-210 § A8.1	Number of hopping frequencies	Public notice DA 00-705	PASS	
FCC § 15.247(a)(1) IC RSS-210 § A8.1	Frequency hopping channel separation	Public notice DA 00-705	PASS	
FCC § 15.247(a)(1)(iii) IC RSS-210 § A8.1	Time of occupancy (Dwell time)	Public notice DA 00-705	PASS	
FCC § 15.247(b)(1) IC RSS-210 § A8.4	Maximum peak conducted power	Public notice DA 00-705	PASS	
47 CFR 15.207 RSS-Gen 7.2.4	AC power line conducted emissions	ANSI C63.4	PASS	
FCC § 15.247(d) IC RSS-210 § A8.5	Band edge compliance	Public notice DA 00-705	PASS	
FCC § 15.247(d) IC RSS-210 § A8.5	Conducted spurious emissions	Public notice DA 00-705	PASS	
FCC § 15.247(d) FCC § 15.209 IC RSS-210 A8.5 IC RSS-Gen 4.9 IC RSS-Gen 7.2.5	Transmitter radiated spurious emissions	Public notice DA 00-705 / ANSI C 63.4	PASS	
IC RSS-Gen 4.10 IC RSS-Gen 6.1	Receiver radiated spurious emissions	ANSI C 63.4	PASS	
Remarks:				

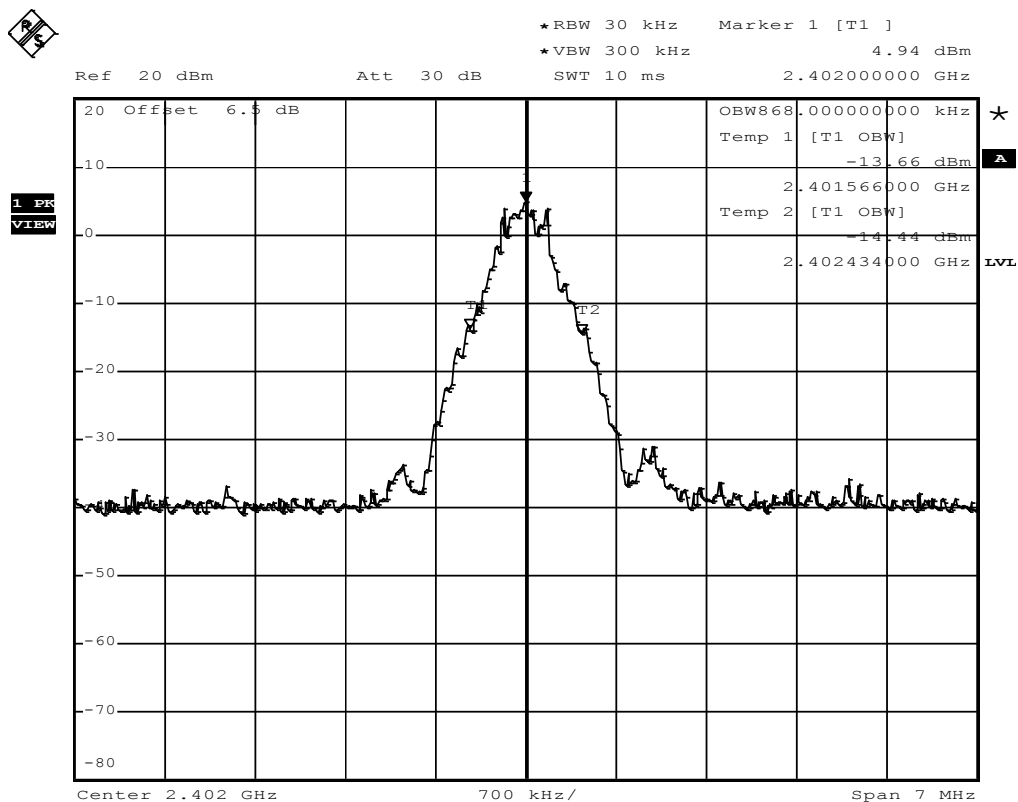
3 Test Conditions and Results

3.1 Test Conditions and Results – Occupied Bandwidth

Occupied Bandwidth acc. IC RSS-Gen		Verdict: PASS	
Test according to measurement reference	Reference Method		
	RSS-Gen 4.6.1		
Test frequency range	Tested frequencies		
	$F_{LOW} / F_{MID} / F_{HIGH}$		
Limits			
None (Informational only)			
Test setup			
 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] </pre>			
Test procedure			
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Span set to at least twice the emission spectrum 3. Resolution bandwidth set to 1 % of span 4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function 			
Test results			
Channel	Frequency [MHz]	Mode	Occupied Bandwidth [kHz]
F_{LOW}	2402	DH5-Sngl	868
F_{MID}	2441	DH5-Sngl	868
F_{HIGH}	2480	DH5-Sngl	868
F_{LOW}	2402	3DH5-Sngl	1190
F_{MID}	2441	3DH5-Sngl	1204
F_{HIGH}	2480	3DH5-Sngl	1218
Comments:			

Occupied Bandwidth – DH5-Sngl F_{Low}
**RSS Gen
Occupied Bandwidth**

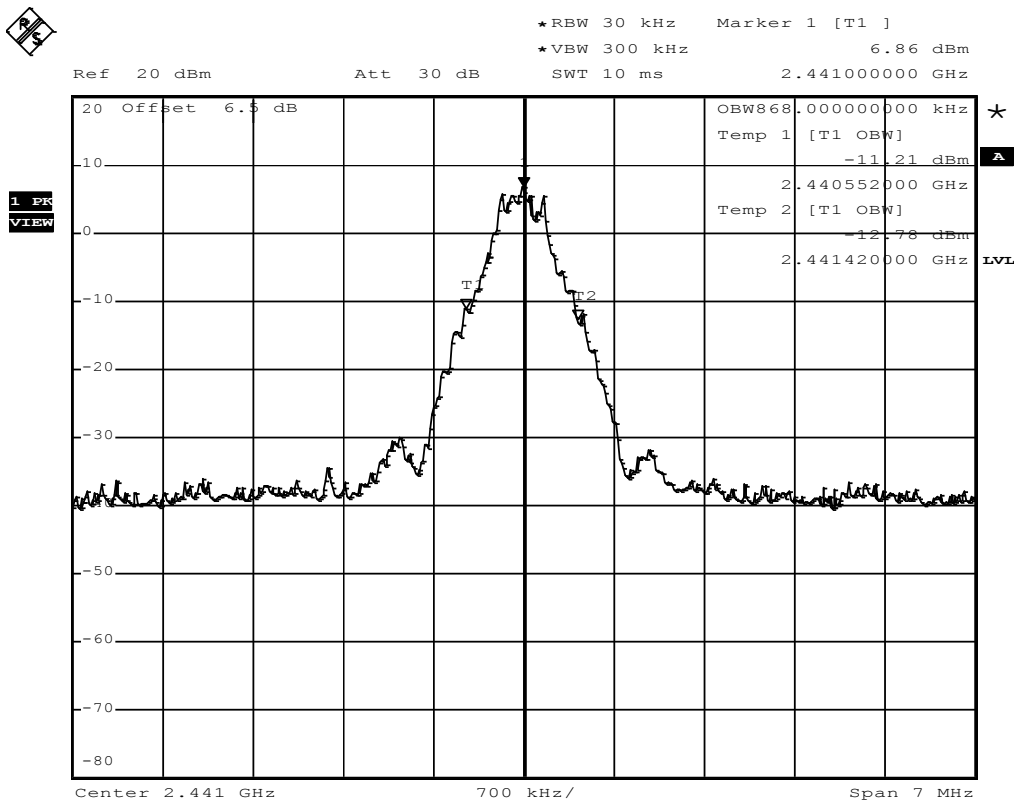
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 0 / 2402 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	GFSK



Comment: Occupied bandwidth: 868 KHz
Date: 22.AUG.2013 15:55:38

Occupied Bandwidth – DH5-Sngl F_{MID}
**RSS Gen
Occupied Bandwidth**

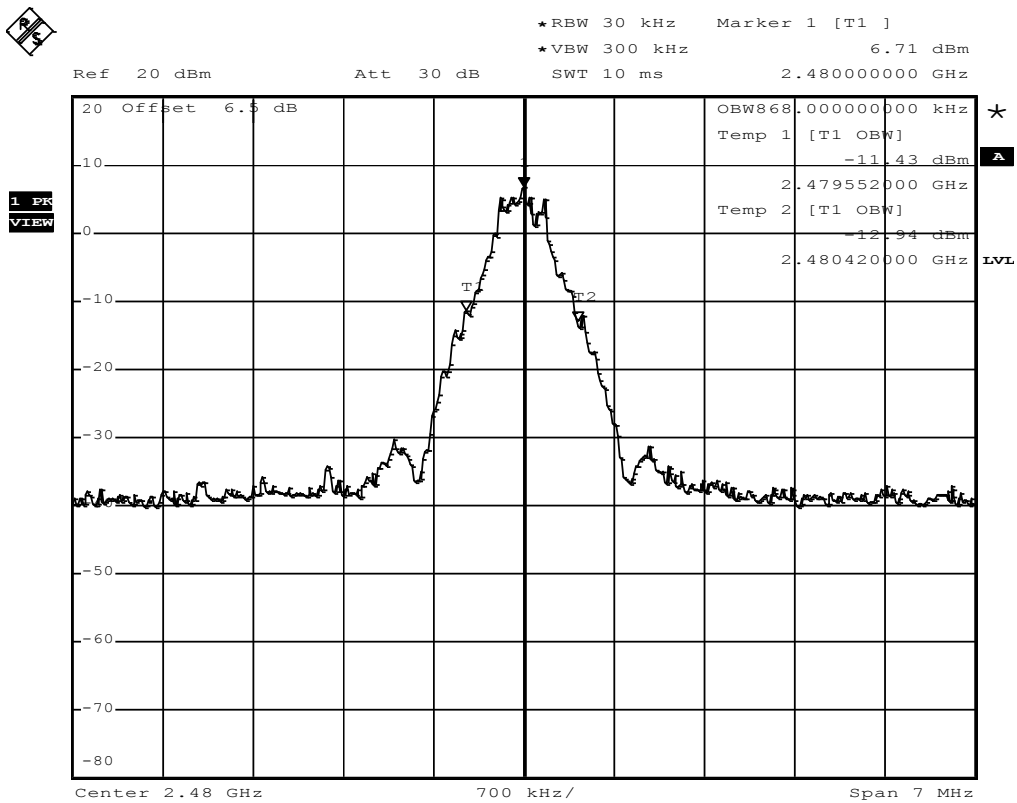
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 39 / 2441 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	GFSK



Comment: Occupied bandwidth: 868 KHz
Date: 22.AUG.2013 15:58:42

Occupied Bandwidth – DH5-Sngl F_{HIGH}
**RSS Gen
Occupied Bandwidth**

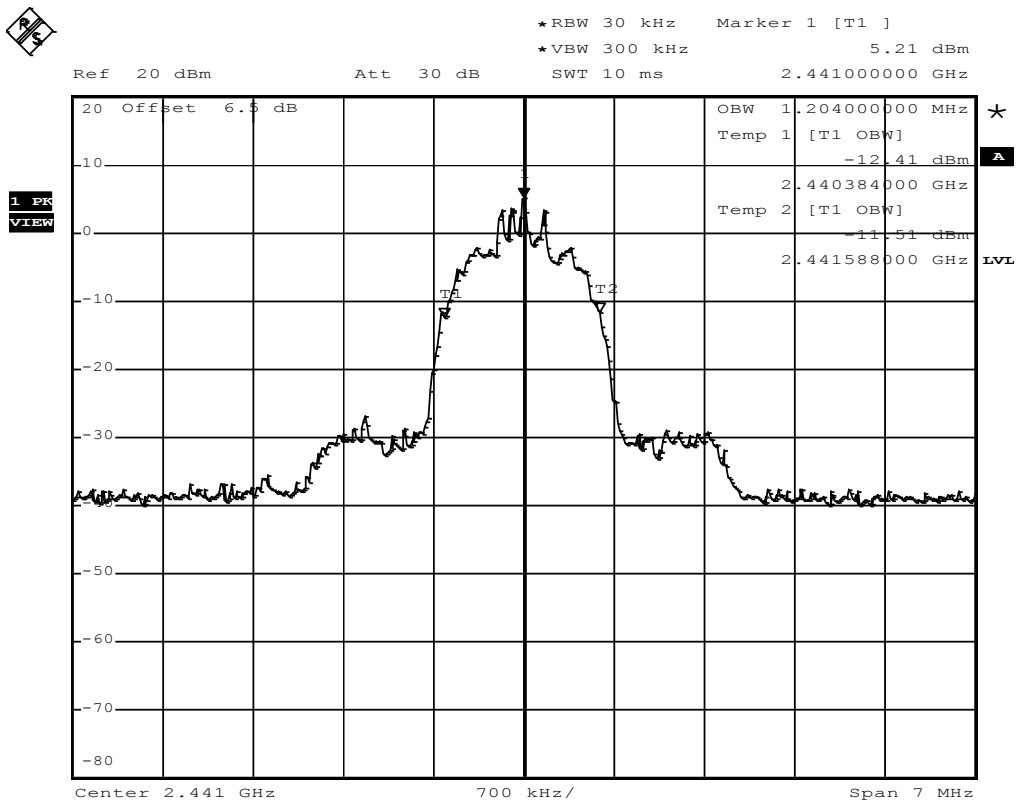
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 78 / 2480 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	GFSK



Comment: Occupied bandwidth: 868 KHz
Date: 22.AUG.2013 16:00:21


Occupied Bandwidth – 3-DH5-Sngl F_{MID}
**RSS Gen
Occupied Bandwidth**

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 39 / 2441 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	8DPSK



Comment: Occupied bandwidth: 1204 KHz
 Date: 22.AUG.2013 16:06:15

3.2 Test Conditions and Results – 20 dB Bandwidth

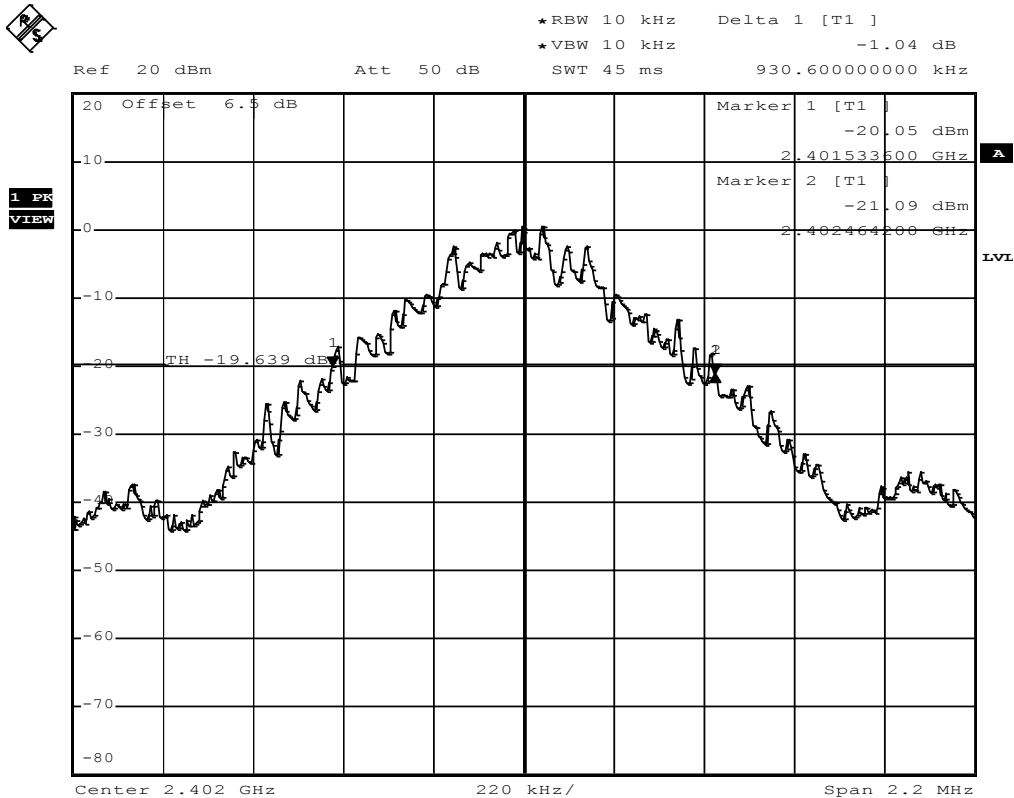
20 dB Bandwidth acc. FCC 15.247 / IC RSS-210				Verdict: PASS	
EUT requirement rule parts and clause		Reference			
		FCC 15.247(a)(1) / IC RSS-210 A8.1			
Test according to measurement reference		Reference Method			
		FCC Public Notice DA 00-705			
Test frequency range		Tested frequencies			
		$F_{LOW} / F_{MID} / F_{HIGH}$			
Limits					
Limit			Condition		
1.5 · Carrier spacing			Output power ≤ 125 mW / 21 dBm		
1.0 · Carrier spacing			125 mW / 21 dBm < Output power ≤ 1 W / 30 dBm		
Test setup					
					
Test procedure					
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -20 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -20 dB to the right of the peak 7. 20dB Bandwidth is determined by marker frequency separation 					
Test results					
Channel	Frequency [MHz]	Mode	20 dB Bandwidth [MHz]	Limit [MHz]	Result
F_{LOW}	2402	DH5-Sngl	0.930	1.5	PASS
F_{MID}	2441	DH5-Sngl	0.926	1.5	PASS
F_{HIGH}	2480	DH5-Sngl	0.926	1.5	PASS
F_{LOW}	2402	2DH5-Sngl	1.19	1.5	PASS
F_{MID}	2441	2DH5-Sngl	1.19	1.5	PASS
F_{HIGH}	2480	2DH5-Sngl	1.19	1.5	PASS
F_{LOW}	2402	3DH5-Sngl	1.243	1.5	PASS
F_{MID}	2441	3DH5-Sngl	1.238	1.5	PASS
F_{HIGH}	2480	3DH5-Sngl	1.260	1.5	PASS
Comments:					

 Test Report No.: G0M-1308-3117-TFC247B-V01

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

20 dB Bandwidth – DH5-Sngl F_{LOW}
**FCC part 15.247
20 dB bandwidth**

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 0 / 2402 MHz / GFSK
Comment 3	pass



Comment: 20 dB bandwidth: 930.6 KHz
 Date: 22.AUG.2013 14:43:14

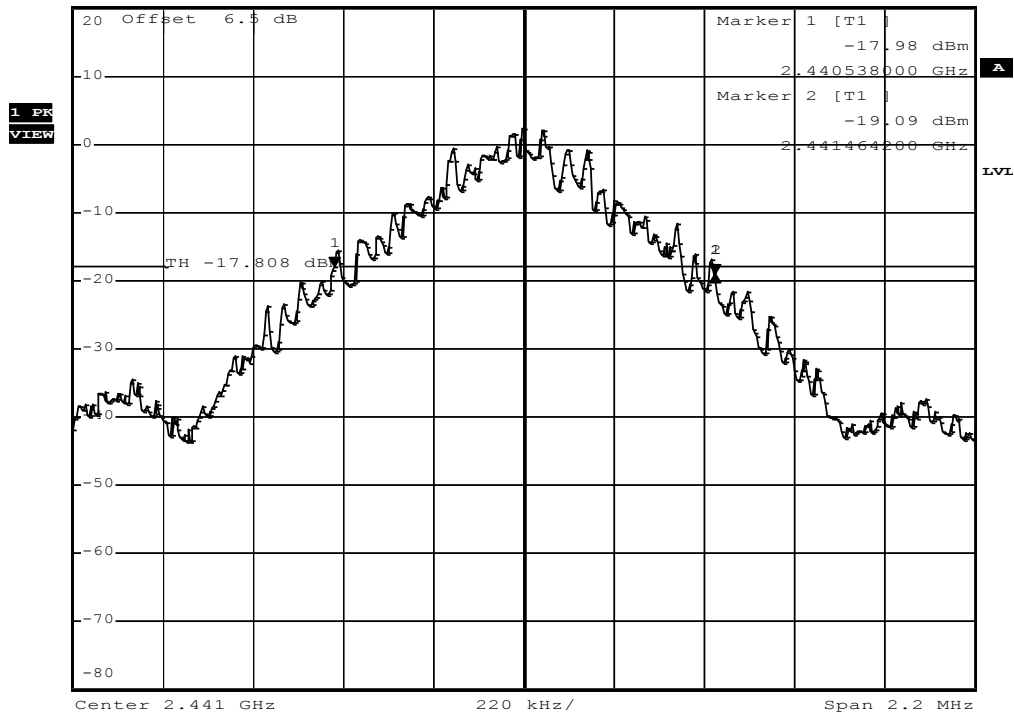
20 dB Bandwidth – DH5-Sngl F_{MID}
FCC part 15.247
20 dB bandwidth

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 39/ 2441 MHz / GFSK
Comment 3	pass



```

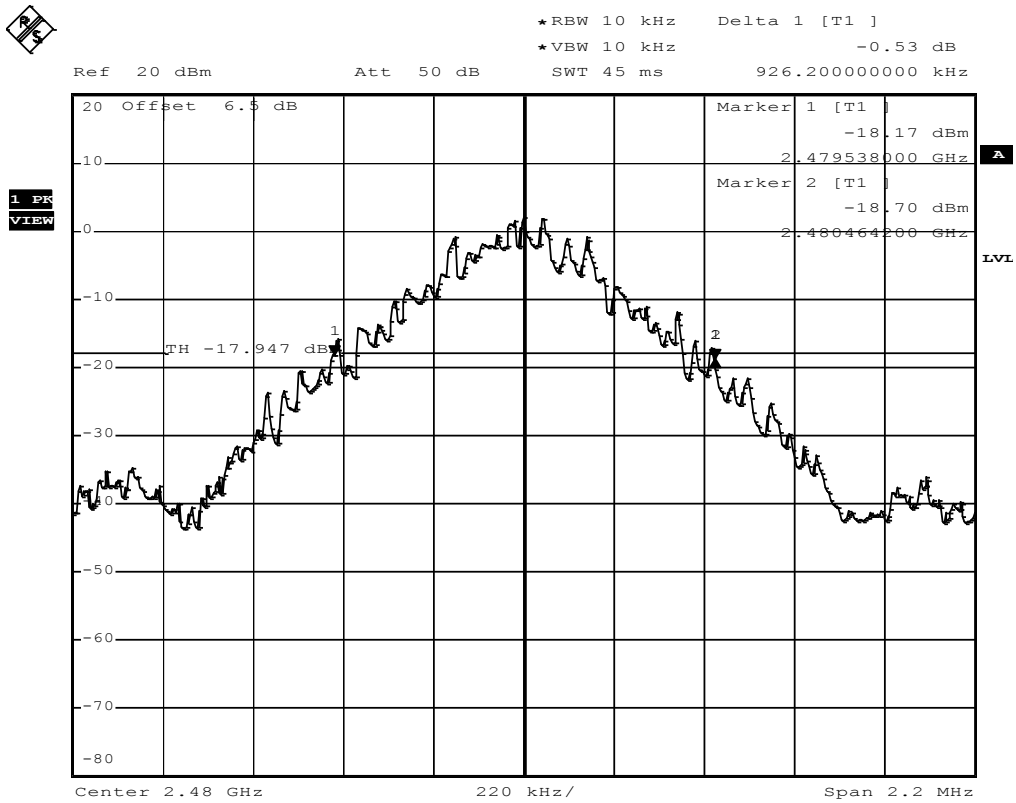
*RBW 10 kHz   Delta 1 [T1 ]
*VBW 10 kHz   -1.11 dB
Ref 20 dBm    Att 50 dB    SWT 45 ms    926.20000000 kHz
    
```



Comment: 20 dB bandwidth: 926.2 KHz
 Date: 22.AUG.2013 14:45:09

20 dB Bandwidth – DH5-Sngl F_{HIGH}
FCC part 15.247
20 dB bandwidth

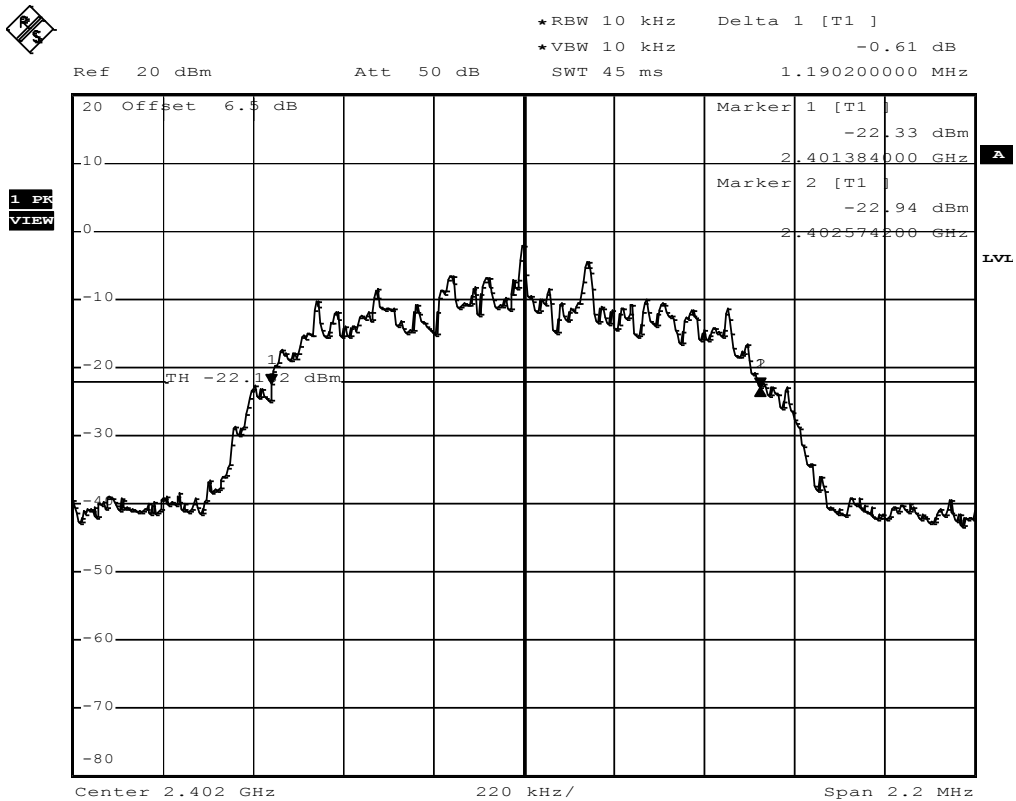
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 78/ 2480 MHz / GFSK
Comment 3	pass



Comment: 20 dB bandwidth: 926.2 KHz
 Date: 22.AUG.2013 14:46:55

20 dB Bandwidth – 2-DH5-Sngl F_{Low}
FCC part 15.247
20 dB bandwidth

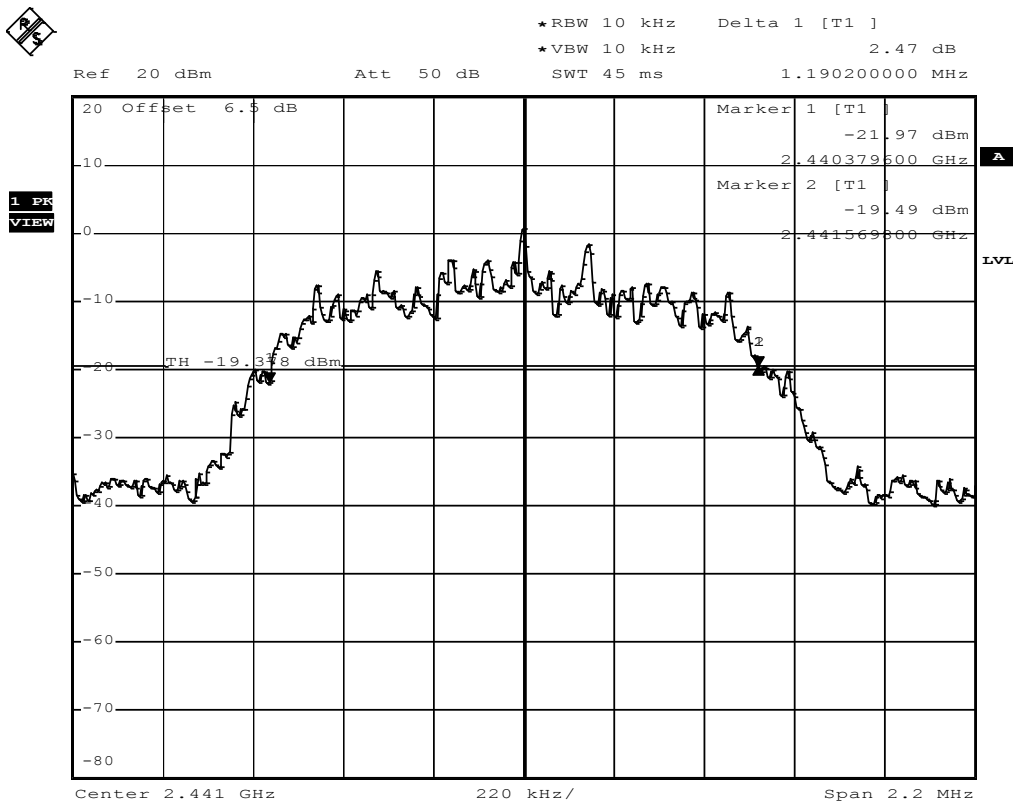
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 0/ 2402 MHz / Pi/4-DQPSK
Comment 3	pass



Comment: 20 dB bandwidth: 1190.2 KHz
 Date: 22.AUG.2013 14:49:04

20 dB Bandwidth – 2-DH5-Sngl F_{MID}
FCC part 15.247
20 dB bandwidth

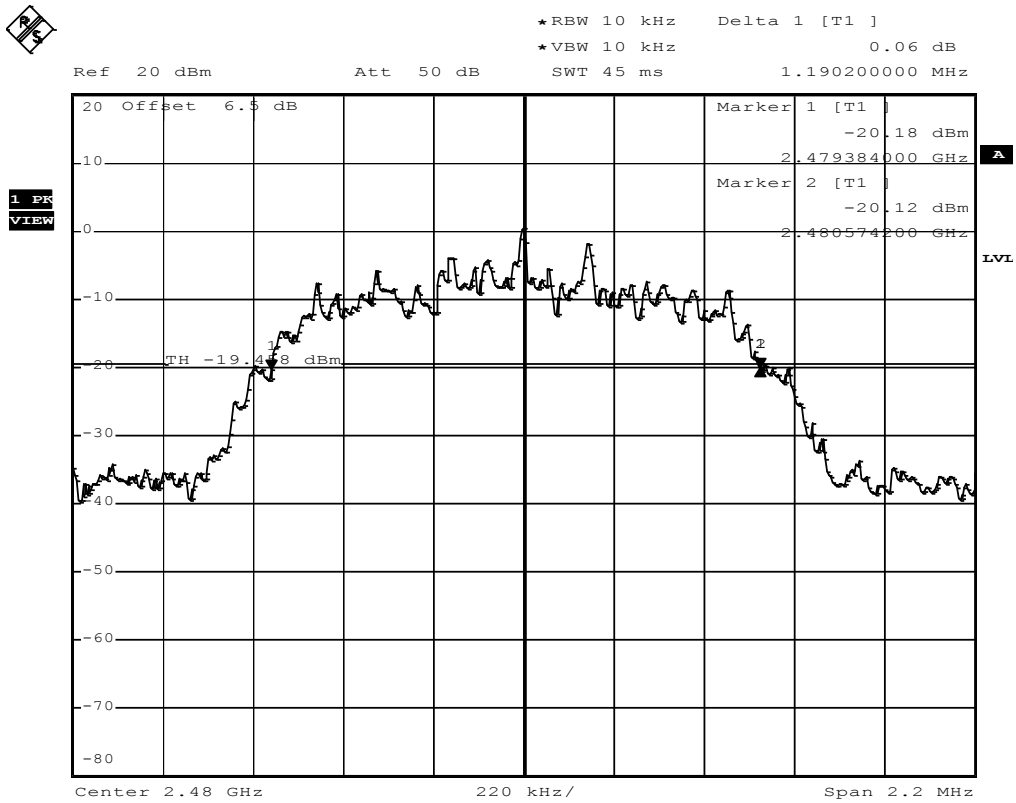
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 39/ 2441 MHz / Pi/4-DQPSK
Comment 3	pass



Comment: 20 dB bandwidth: 1190.2 KHz
 Date: 22.AUG.2013 14:50:42

20 dB Bandwidth – 2-DH5-Sngl F_{HIGH}
FCC part 15.247
20 dB bandwidth

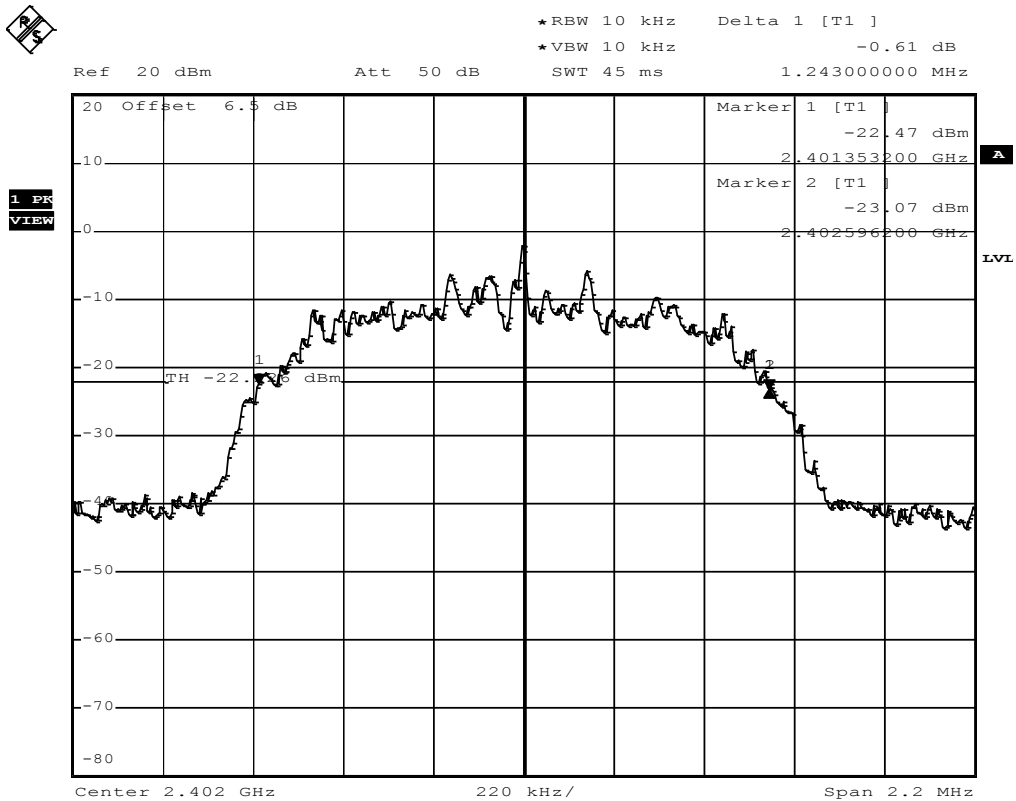
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 78/ 2480 MHz / Pi/4-DQPSK
Comment 3	pass



Comment: 20 dB bandwidth: 1190.2 KHz
 Date: 22.AUG.2013 14:52:31

20 dB Bandwidth – 3-DH5-Sngl F_{Low}
FCC part 15.247
20 dB bandwidth

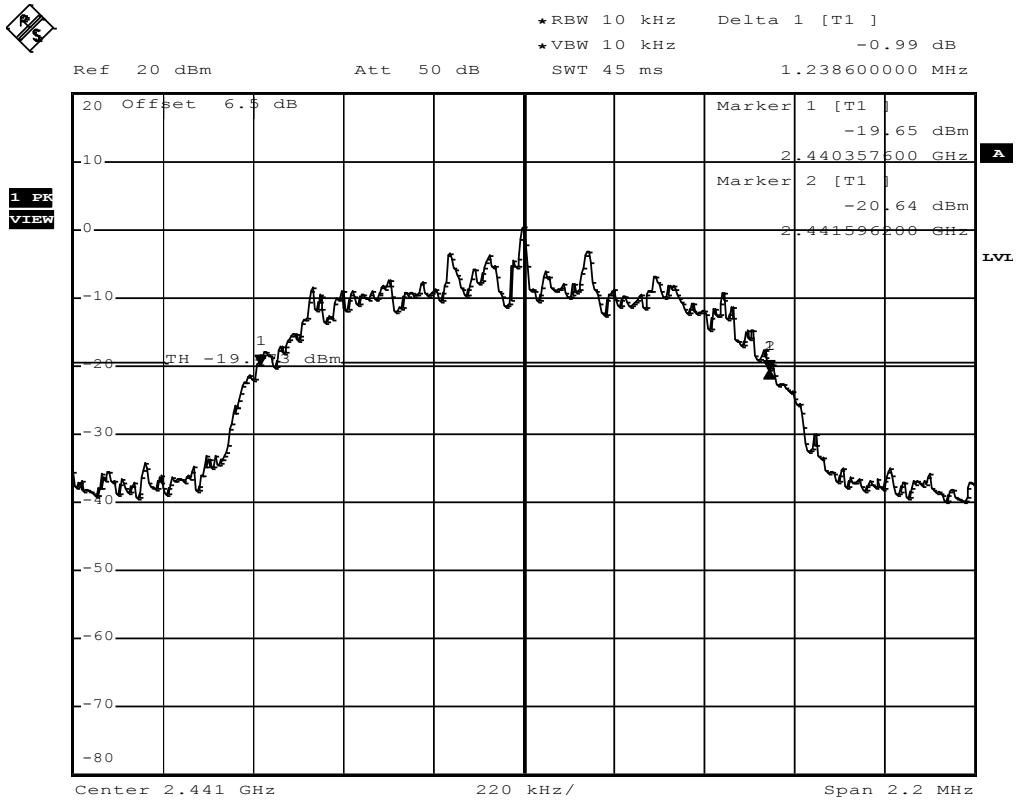
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 0/ 2402 MHz / 8DPSK
Comment 3	pass



Comment: 20 dB bandwidth: 1243 KHz
 Date: 22.AUG.2013 14:54:38

20 dB Bandwidth – 3-DH5-Sngl F_{MID}
**FCC part 15.247
20 dB bandwidth**

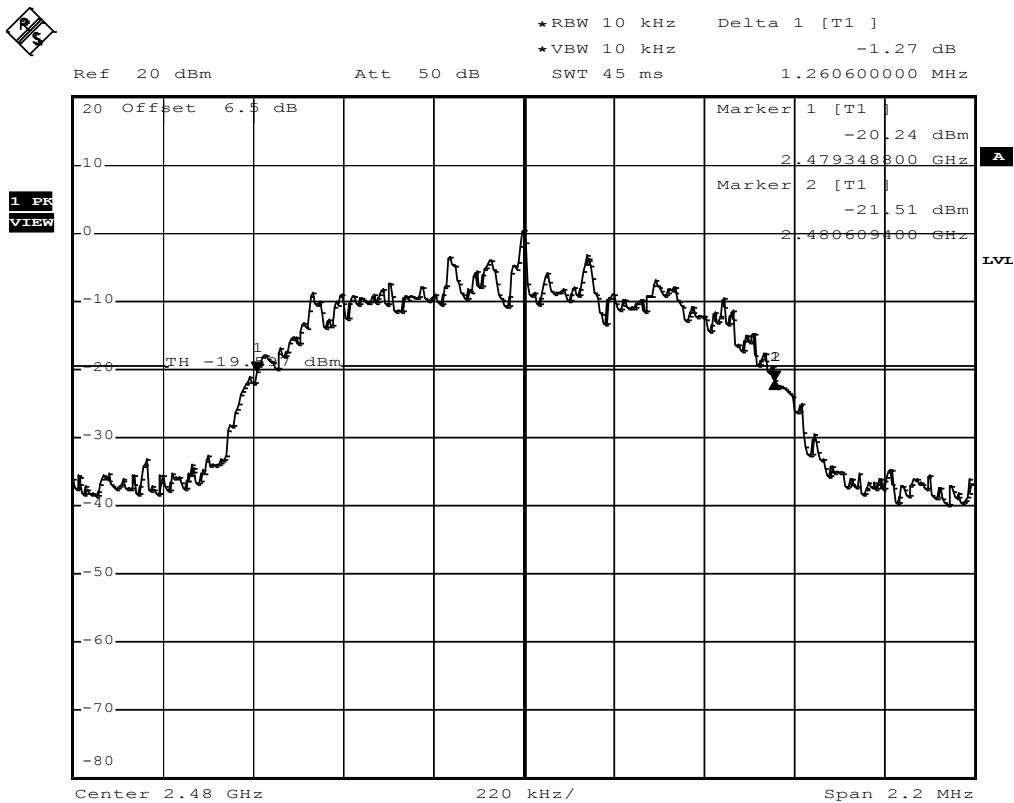
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 39/ 2441 MHz / 8DPSK
Comment 3	pass



Comment: 20 dB bandwidth: 1238.6 KHz
 Date: 22.AUG.2013 14:56:16

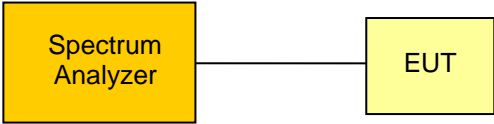
20 dB Bandwidth – 3-DH5-Sngl F_{HIGH}
FCC part 15.247
20 dB bandwidth

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 78/ 2480 MHz / 8DPSK
Comment 3	pass



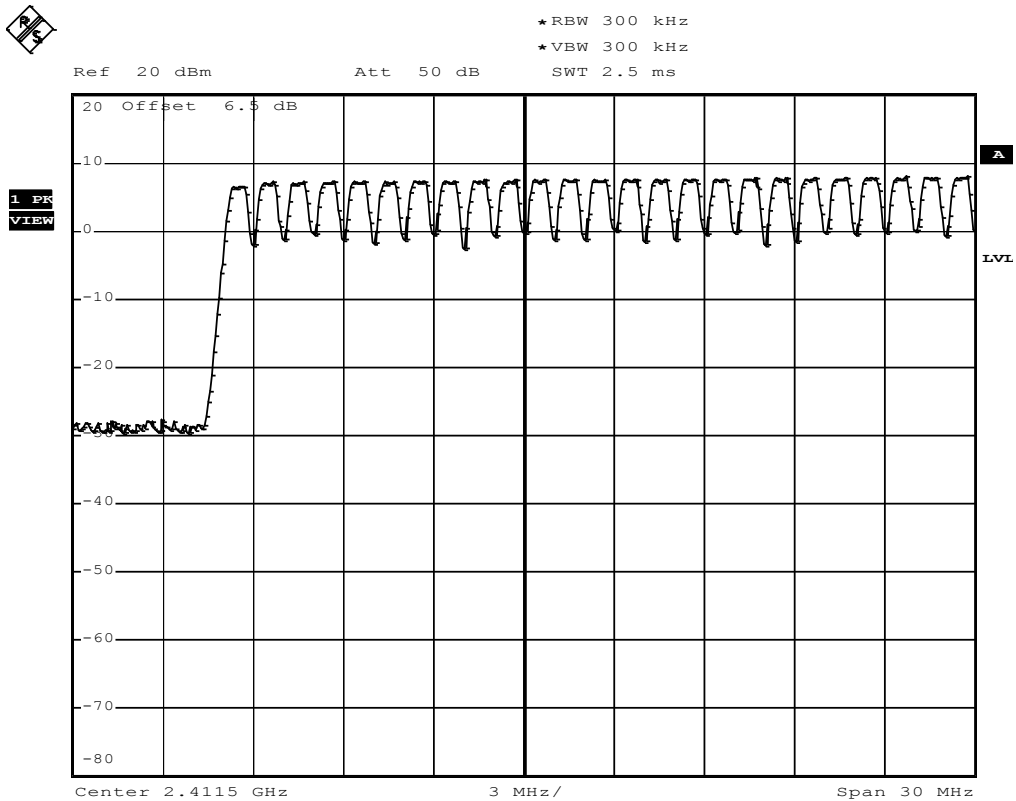
Comment: 20 dB bandwidth: 1260.6 KHz
 Date: 22.AUG.2013 14:57:36

3.3 Test Conditions and Results – Number of hopping frequencies

Number of hopping frequencies acc. FCC 15.247 / IC RSS-210		Verdict: PASS
EUT requirement rule parts and clause	Reference	
	FCC 15.247(a)(1)(iii) / IC RSS-210 A8.1	
Test according to measurement reference	Reference Method	
	FCC Public Notice DA 00-705	
Test frequency range	Tested frequencies	
	$F_{LOW} - F_{HIGH}$	
EUT test mode	DH5-Hop	
Limits		
Limit	Condition	
Number of hopping channels ≥ 15	Output power ≤ 125 mW / 21 dBm	
Number of hopping channels ≥ 75	125 mW / 21 dBm < Output power ≤ 1 W / 30 dBm	
Test setup		
 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] </pre>		
Test procedure		
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Span set to measurement frequency range 3. Detector set to peak and max hold 4. Resolution bandwidth is set small enough to resolve hopping channel emission spectra 5. The number of peaks is counted to determine number of hopping frequencies 		
Test results		
Number of hopping frequencies	Limit	Result
79	≥ 15	PASS
Comments:		

Number of hopping frequencies - Range A
FCC part 15.247
Number of hopping frequencies

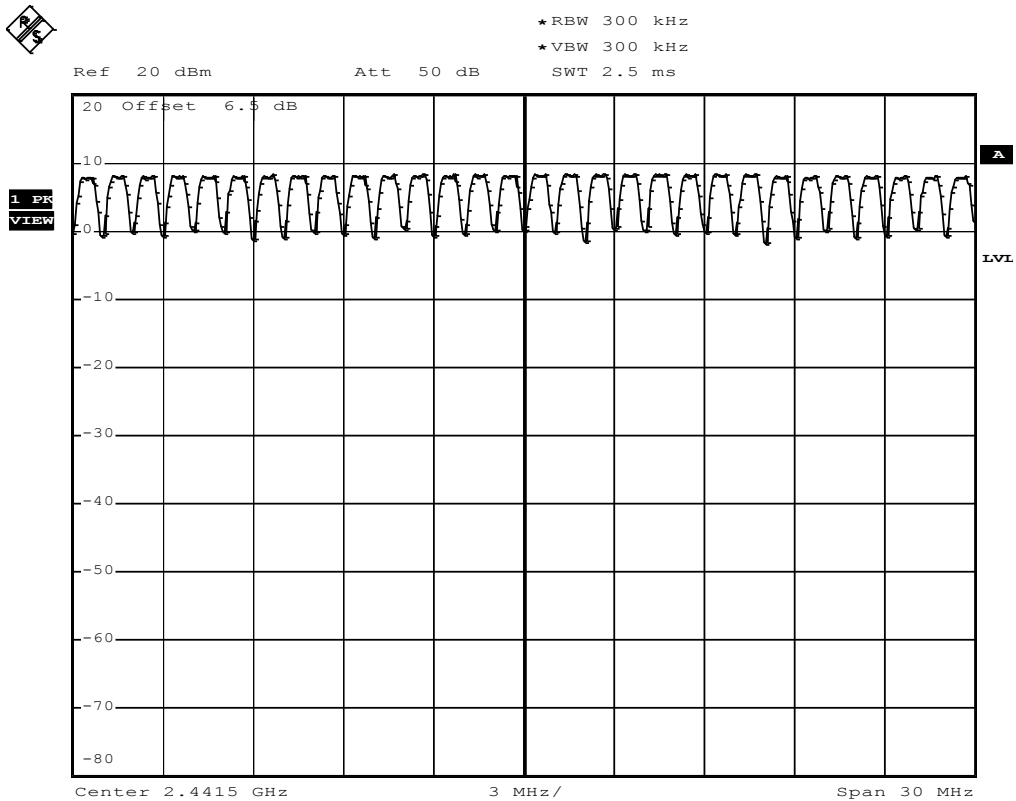
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 0-24
Comment 3	pass



Comment: Number of hopping frequencies
 Date: 22.AUG.2013 15:46:10

Number of hopping frequencies - Range B
FCC part 15.247
Number of hopping frequencies

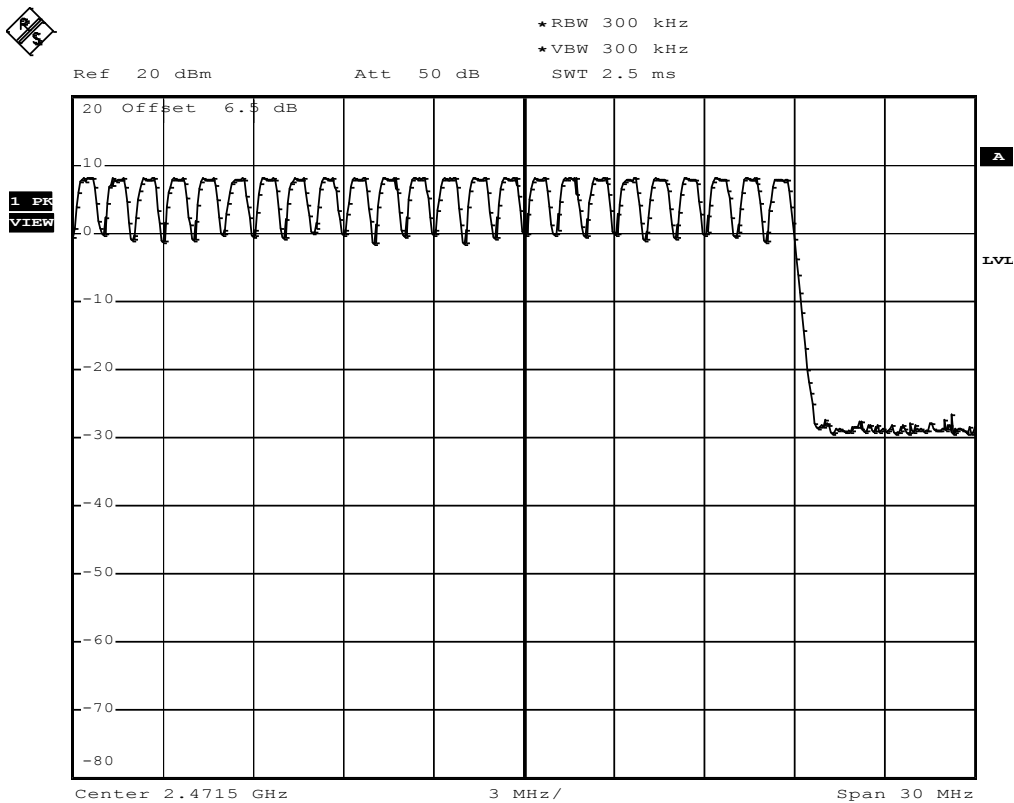
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 25-54
Comment 3	pass



Comment: Number of hopping frequencies
 Date: 22.AUG.2013 15:48:32

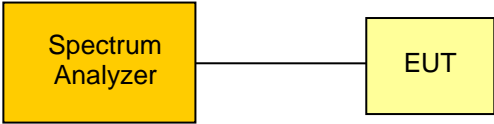
Number of hopping frequencies - Range C
FCC part 15.247
Number of hopping frequencies

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 55-78
Comment 3	pass



Comment: Number of hopping frequencies
 Date: 22.AUG.2013 15:50:07

3.4 Test Conditions and Results – Frequency hopping channel separation

Frequency hopping channel separation acc. FCC 15.247 / IC RSS-210		Verdict: PASS
EUT requirement rule parts and clause	Reference	
	FCC 15.247(a)(1) / IC RSS-210 A8.1	
Test according to measurement reference	Reference Method	
	FCC Public Notice DA 00-705	
Test frequency range	Tested frequencies	
	2441 & 2442 MHz	
EUT test mode	DH5-Hop	
Limits		
Limit	Condition	
≥ 25 kHz or $\frac{2}{3}$ of 20 dB bandwidth	Output power ≤ 125 mW / 21 dBm	
≥ 25 kHz or 20 dB bandwidth	125 mW / 21 dBm < Output power ≤ 1 W / 30 dBm	
Test setup		
 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] </pre>		
Test procedure		
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Span set to measurement frequency range 3. Detector set to peak and max hold 4. Resolution bandwidth is set small enough to resolve hopping channel emission spectra 5. The two adjacent channel peaks are marked 6. Channel separation is determined from frequency separation of markers 		
Test results		
Channel separation [kHz]	Limit [kHz]	Result
1000	$\geq \frac{2}{3} \cdot 1238 = 825.33$	PASS
Comments:		

Frequency hopping channel separation
FCC part 15.247
Carrier frequency separation

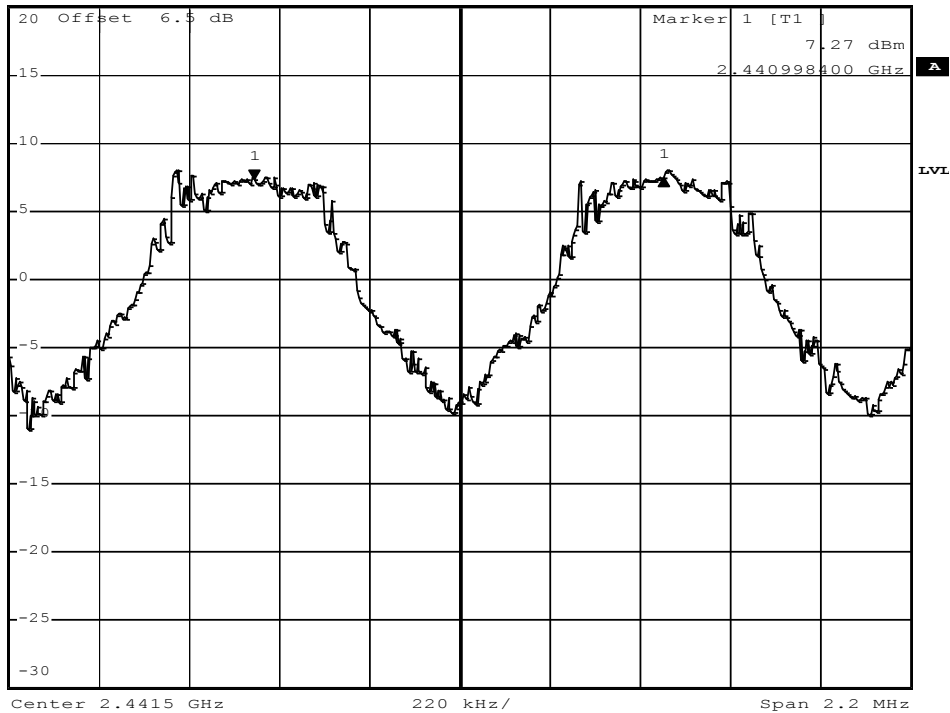
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(a)(1)
Comment 1	Carrier frequency separation
Comment 2	Channel.: 39/40 / 2441/2442 MHz
Comment 3	Hopping mode



*RBW 100 kHz Delta 1 [T1]


*VBW 100 kHz 0.18 dB

Ref 20 dBm Att 50 dB SWT 2.5 ms 1.000000000 MHz



Comment: Limit: > two-thirds of the 20 dB bandwidth ; Result: Pass
 Date: 22.AUG.2013 15:42:04

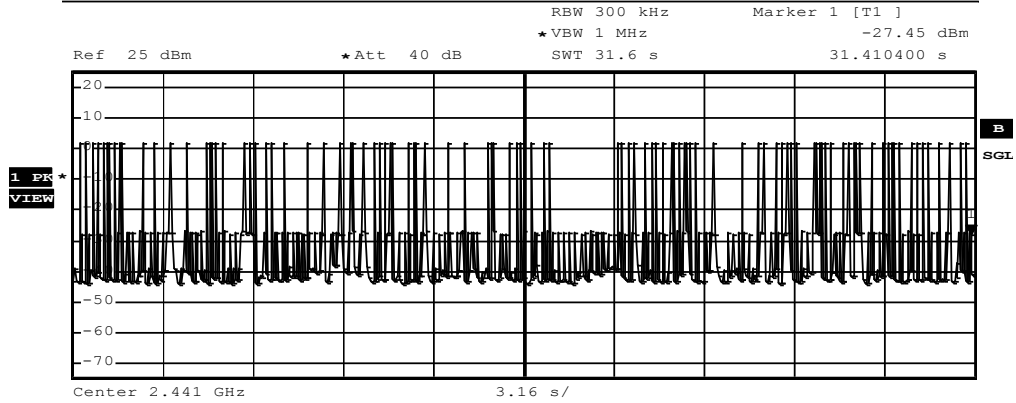
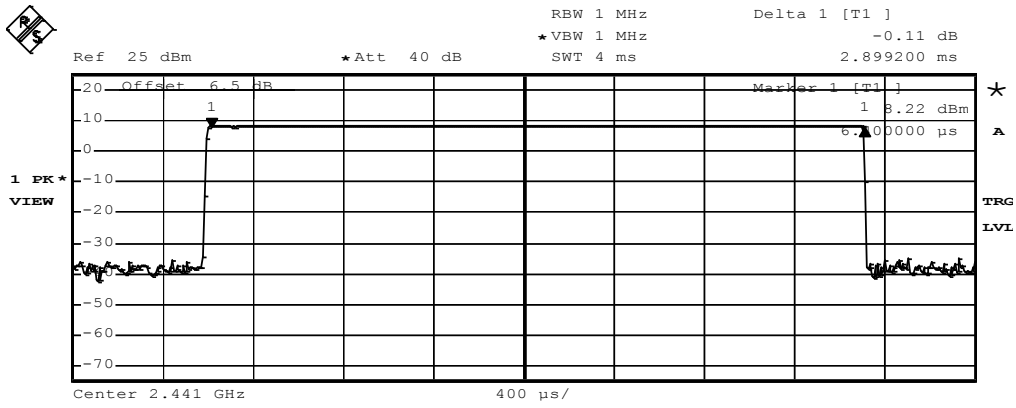
3.5 Test Conditions and Results – Time of occupancy (Dwell Time)

Time of occupancy (Dwell time) acc. FCC 15.247 / IC RSS-210				Verdict: PASS	
EUT requirement rule parts and clause	Reference				
	FCC 15.247(a)(1)(iii) / IC RSS-210 A8.1				
Test according to measurement reference	Reference Method				
	FCC Public Notice DA 00-705				
Test frequency range	Tested frequencies				
	2441 MHz				
EUT test mode	DH5-Hop				
Limits					
Limit					
Time of occupancy ≤ 0.4 s within 0.4 s · Number of hopping channels					
Test setup					
					
Test procedure					
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Center frequency set to test channel center frequency 3. Span set to zero span and detector to peak and max hold 4. Resolution bandwidth is set to 100kHz and sweep time to observation period 5. Time of occupancy determined from number of peaks multiplied by single hop dwell time 					
Test results					
Observation period [s]	No. of hops	Dwell time/hop [s]	Time of occupancy [s]	Limit [s]	Result
31.2	112	0.0029	0.324	≤ 0.4	PASS
Comments:					

Time of occupancy

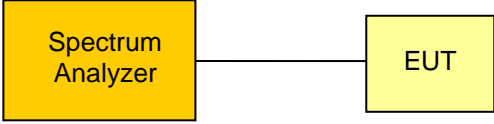
**FCC part 15.247
Time of occupancy (dwell time)**

EUT Bluetooth headset
 Model OET16
 Approval Holder GN-Netcon A/S
 Temperature / Voltage tnom
 Test Site / Operator Eurofins / Mr. Treffke
 Test Specification FCC part 15 section 247(a)
 Comment 1 Time of occupancy
 Comment 2 Channel.: 39 / 2441 MHz (Hopping mode)
 Comment 3 112 events * 2.899 ms result: 324.7 ms



Comment: Burst length=2.8992 ms
 Date: 22.AUG.2013 16:20:11

3.6 Test Conditions and Results – Maximum peak conducted power

Maximum peak conducted power acc. FCC 15.247 / IC RSS-210		Verdict: PASS
EUT requirement rule parts and clause	Reference	
	FCC 15.247(b)(1) / IC RSS-210 A8.4	
Test according to measurement reference	Reference Method	
	FCC Public Notice DA 00-705	
Test frequency range	Tested frequencies	
	$F_{LOW} / F_{MID} / F_{HIGH}$	
Measurement mode	Peak	
Maximum antenna gain	-1.41 dBi \Rightarrow Limit correction = 0 dB	
Limits		
Limit	Condition	
1 W (30 dBm)	Number of hopping channels \geq 75	
0.125 W (21 dBm)	75 > Number of hopping channels \geq 15	
<p>The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</p>		
Test setup		
		
Test procedure		
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Center frequency set to test channel center frequency 3. Span set to twice the 20 dB bandwidth and detector to peak and max hold 4. Resolution bandwidth is set to 3 MHz 5. Peak conducted power is determined from peak of spectrum envelope 		

Test results								
Channel	Frequency [MHz]	Voltage	Mode	Peak power [dbm]	Peak power [W]	Limit [dBm]	Margin [dB]	Result
F _{LOW}	2402	3.7 VDC	DH5-Sngl	6.9	0.005	30	-23.10	PASS
F _{MID}	2441	3.7 VDC	DH5-Sngl	8.6	0.007	30	-21.40	PASS
F _{HIGH}	2480	3.7 VDC	DH5-Sngl	8.42	0.007	30	-21.58	PASS
F _{LOW}	2402	3.7 VDC	2DH5-Sngl	4.78	0.003	30	-25.22	PASS
F _{MID}	2441	3.7 VDC	2DH5-Sngl	7.32	0.005	30	-22.68	PASS
F _{HIGH}	2480	3.7 VDC	2DH5-Sngl	7.41	0.006	30	-22.59	PASS
F _{LOW}	2402	3.7 VDC	3DH5-Sngl	5.15	0.003	30	-24.85	PASS
F _{MID}	2441	3.7 VDC	3DH5-Sngl	7.54	0.006	30	-22.46	PASS
F _{HIGH}	2480	3.7 VDC	3DH5-Sngl	7.42	0.006	30	-22.58	PASS
Comments:								

3.7 Test Conditions and Results – AC power line conducted emissions

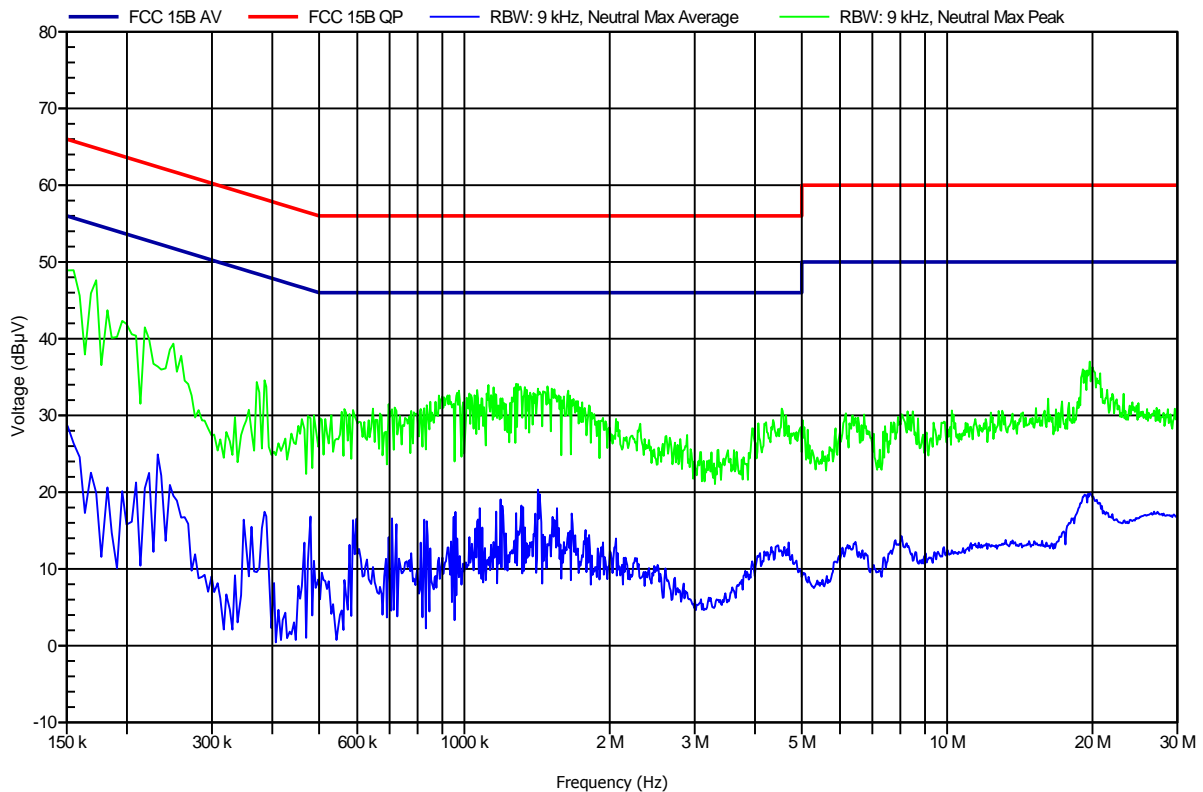
Power line conducted emissions acc. FCC 47 CFR 15.207 / IC RSS-Gen		Verdict: PASS		
Test according referenced standards	Reference Method			
	ANSI C63.4			
Fully configured sample scanned over the following frequency range	Frequency range			
	0.15 MHz to 30 MHz			
Points of Application	Application Interface			
AC Mains	LISN			
EUT test mode	AC-Powerline			
Limits and results				
Frequency [MHz]	Quasi-Peak [dB μ V]	Result	Average [dB μ V]	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.				

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

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 3,7 V DC (battery)
 LISN: ESH2-Z5 N
 Mode: active; charging USB
 Test Date: 2013-08-19
 Note:

Index 1

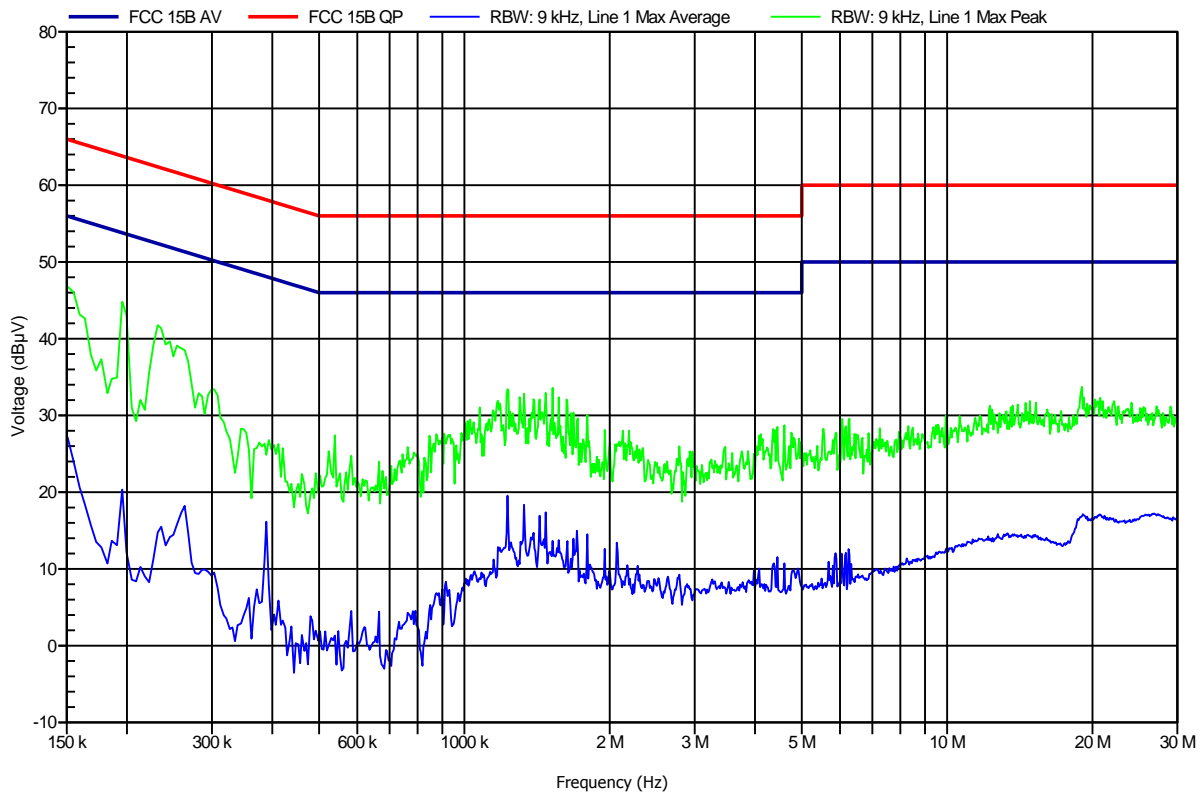


Conducted Emissions
EMI voltage test in the ac-mains according to FCC part 15B


Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 3,7 V DC (battery)
 LISN: ESH2-Z5 L
 Mode: active; charging USB
 Test Date: 2013-08-19
 Note:

Index 2



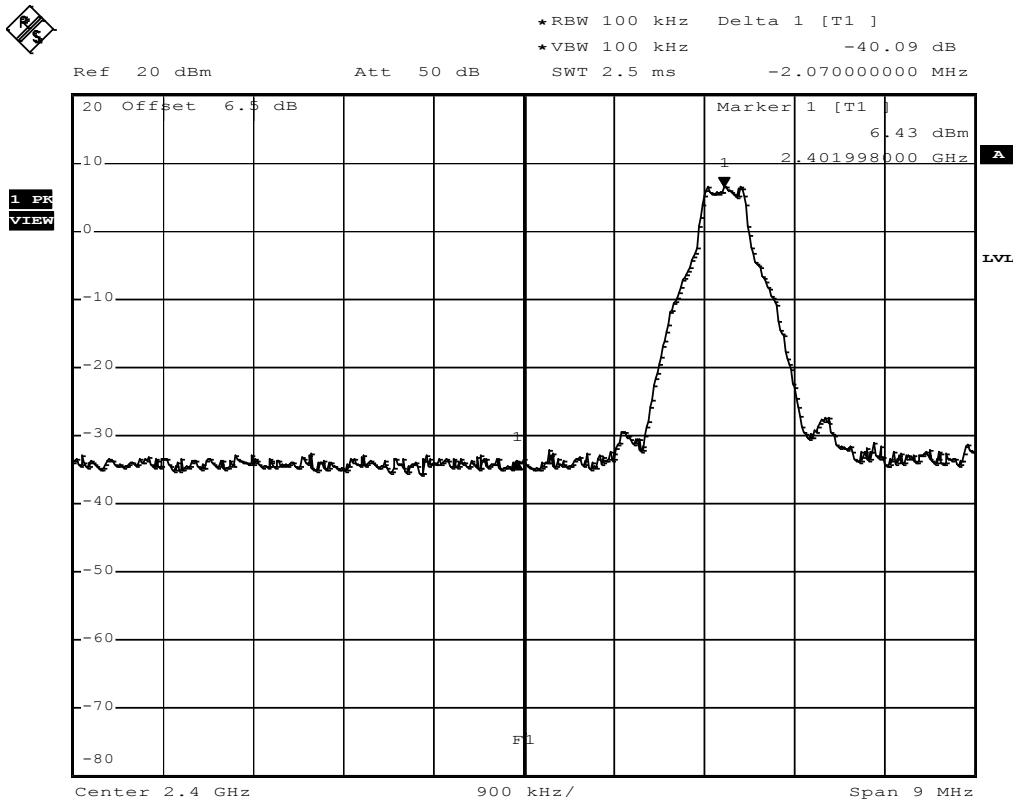
3.8 Test Conditions and Results – Band edge compliance

Band-edge compliance acc. FCC 15.247 / IC RSS-210				Verdict: PASS		
EUT requirement rule parts and clause	Reference					
	FCC 15.247(d) / IC RSS-210 A8.5					
Test according to measurement reference	Reference Method					
	FCC Public Notice DA 00-705					
Test frequency range	Tested frequencies					
	F_{LOW} / F_{HIGH}					
Measurement mode	Peak					
Limits						
Limit			Condition			
≤ -20 dB/100 kHz			Peak power measurement detector = Peak			
≤ -30 dB/100 kHz			Peak power measurement detector = RMS			
Test setup						
 <pre> graph LR SA[Spectrum Analyzer] --- EUT[EUT] </pre>						
Test procedure						
<ol style="list-style-type: none"> EUT set to test mode (Communication tester is used if needed) Span set around lower band edge and detector is set to peak and max hold Resolution bandwidth is set to 100 kHz Markers are set to peak emission levels within frequency band and outside frequency band Band edge attenuation is determined from level difference 						
Test results						
Channel	Frequency [MHz]	Mode	Level [dBc]	Limit [dBc]	Margin [dB]	Result
F_{LOW}	2402	DH5-Sngl	-40.09	-20	-20.09	PASS
F_{HIGH}	2480	DH5-Sngl	-40.55	-20	-20.55	PASS
F_{LOW}	2402	DH5-Hop	-38.27	-20	-18.27	PASS
F_{HIGH}	2480	DH5-Hop	-39.72	-20	-19.72	PASS
F_{LOW}	2402	2DH5-Sngl	-37.60	-20	-17.60	PASS
F_{HIGH}	2480	2DH5-Sngl	-38.85	-20	-18.85	PASS
F_{LOW}	2402	2DH5-Hop	-36.38	-20	-16.38	PASS
F_{HIGH}	2480	2DH5-Hop	-37.01	-20	-17.01	PASS

F _{LOW}	2402	3DH5-Sngl	-36.92	-20	-16.92	PASS
F _{HIGH}	2480	3DH5-Sngl	-38.58	-20	-18.58	PASS
F _{LOW}	2402	3DH5-Hop	-38.58	-20	-18.58	PASS
F _{HIGH}	2480	3DH5-Hop	-39.23	-20	-19.23	PASS
Comments:						

Band-edge compliance – DH5-Sngl F_{Low}
FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz / GFSK
Comment 3	Single frequency mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:09:20

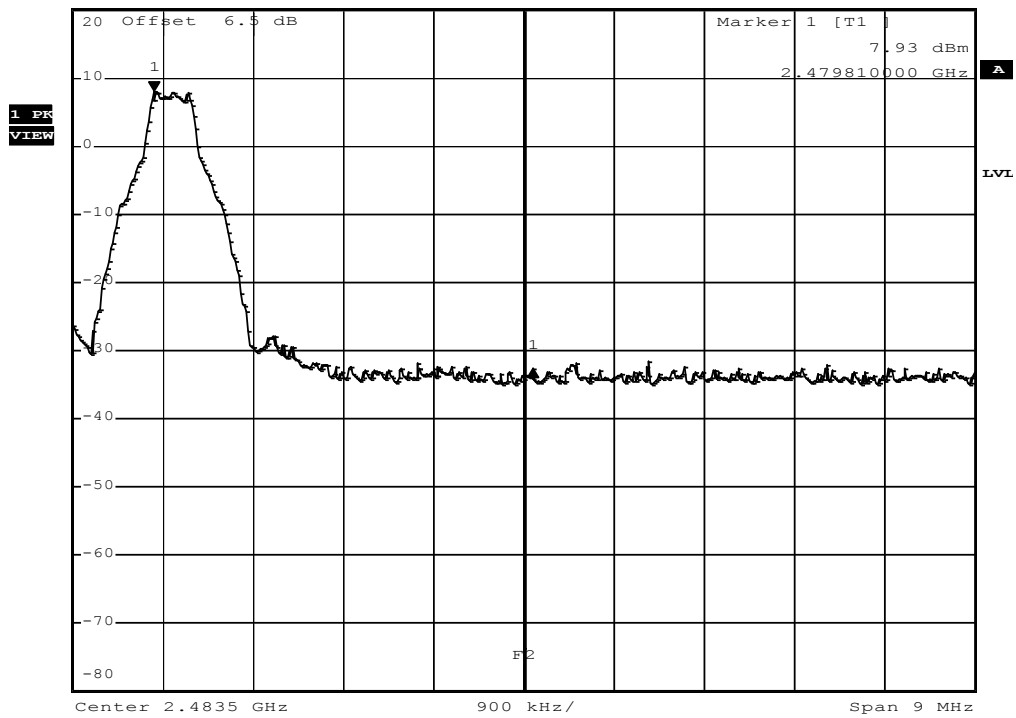
Band-edge compliance – DH5-Sngl F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / GFSK
Comment 3	Single frequency mode



```

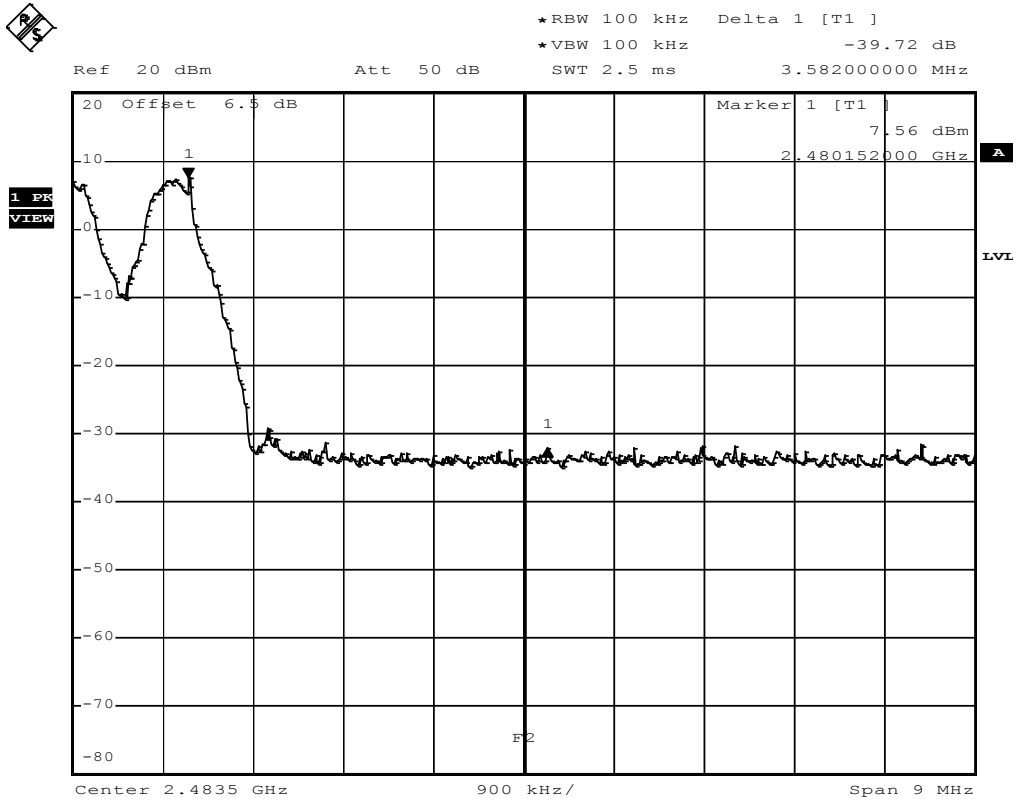
*RBW 100 kHz  Delta 1 [T1 ]
*VBW 100 kHz  -40.55 dB
Ref 20 dBm      Att 50 dB      SWT 2.5 ms      3.780000000 MHz
  
```



Comment: Limit: Marker Delta value >20 dB; Result: PASS
Date: 22.AUG.2013 15:12:52

Band-edge compliance – DH5-Hop F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

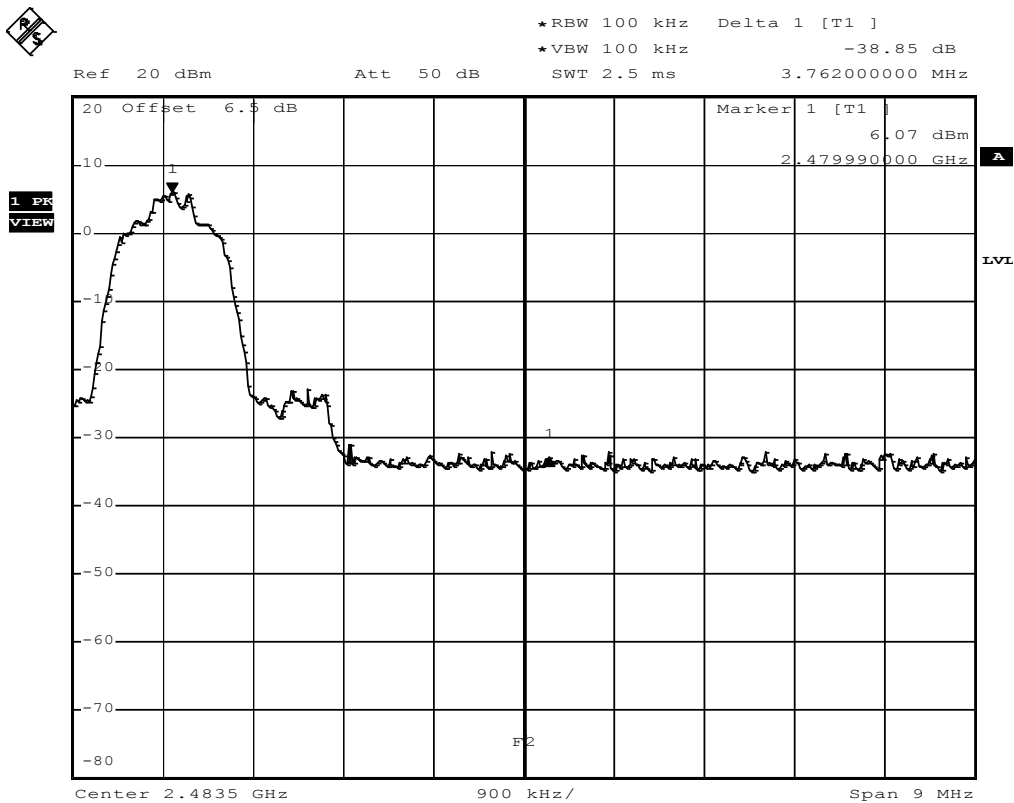
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / GFSK
Comment 3	Hopping mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:29:17

Band-edge compliance – 2-DH5-Sngl F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

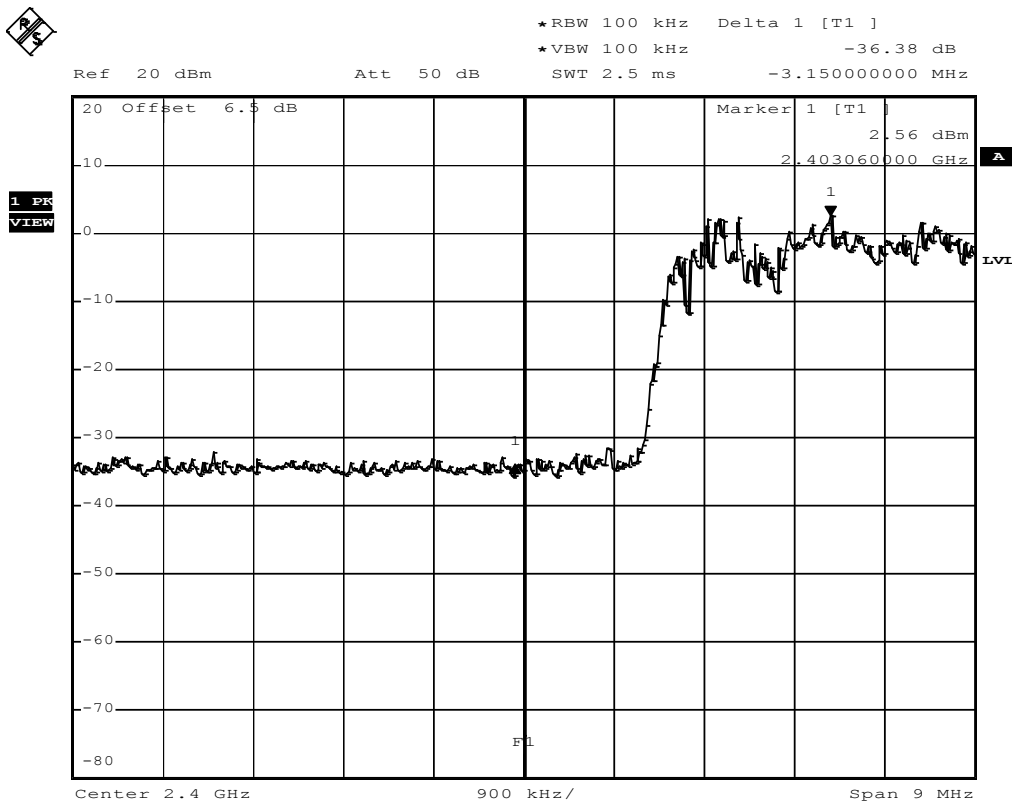
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / Pi/4-DQPSK
Comment 3	Single frequency mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:17:29

Band-edge compliance – 2-DH5-Hop F_{LOW}
FCC part 15.247
Band-edge compliance of RF conducted emissions

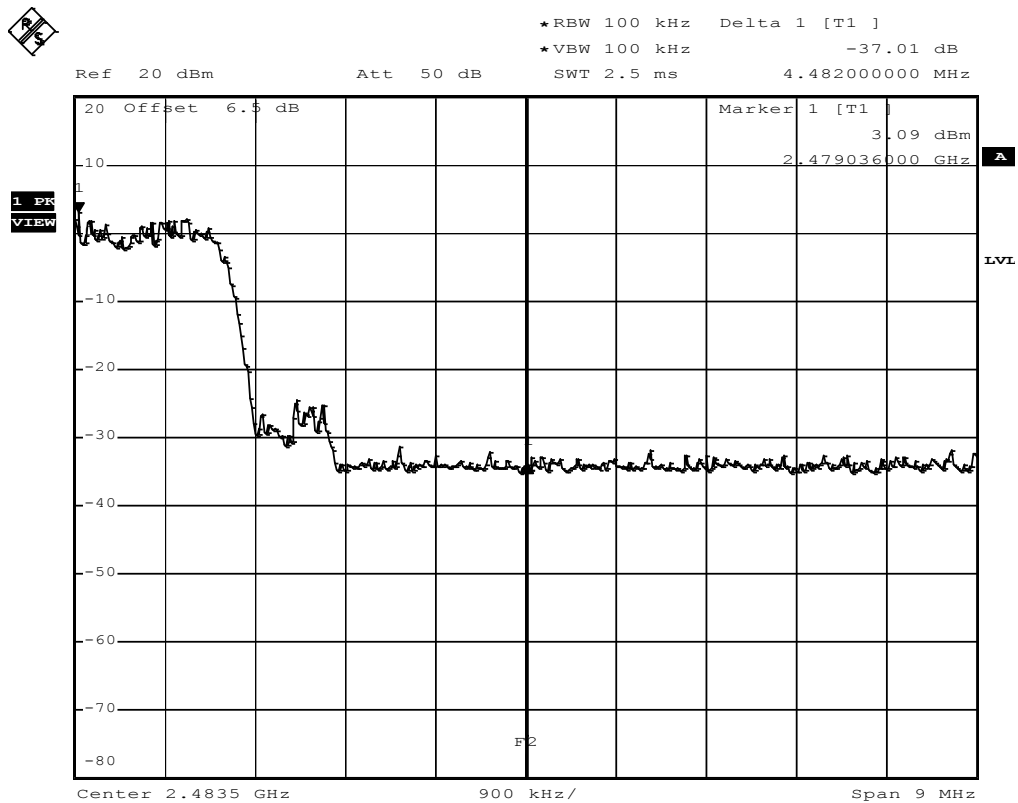
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz / Pi/4-DQPSK
Comment 3	Hopping mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:31:42

Band-edge compliance – 2-DH5-Hop F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

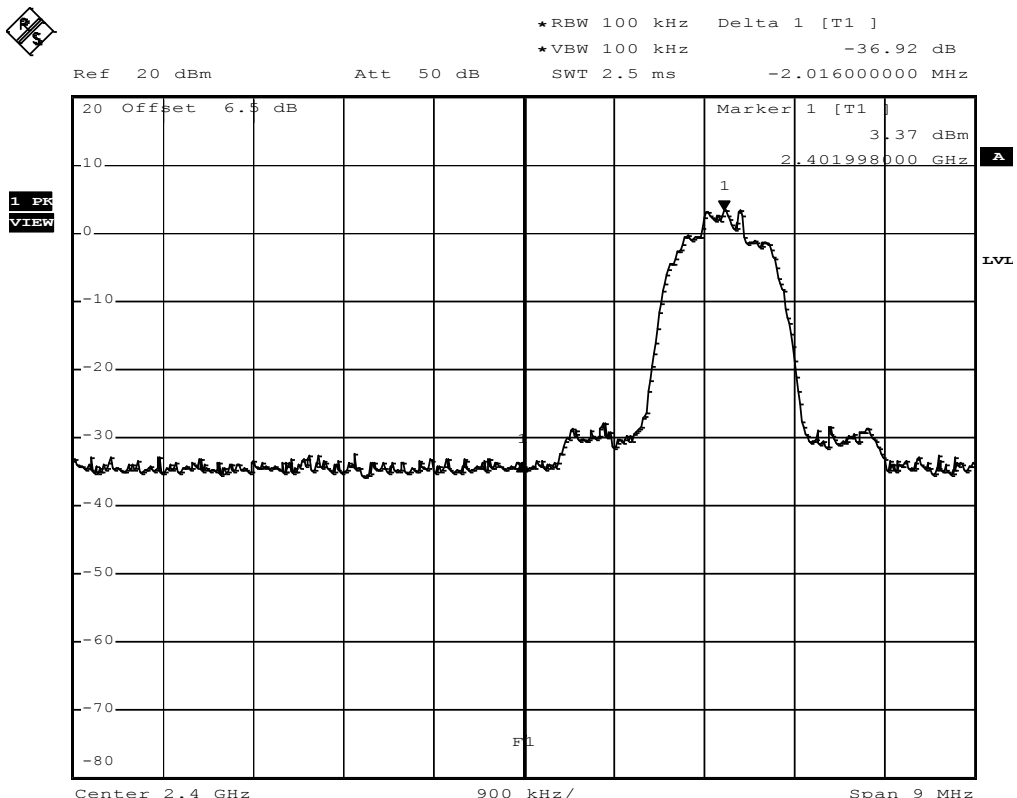
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / Pi/4-DQPSK
Comment 3	Hopping mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:33:16

Band-edge compliance – 3-DH5-Sngl F_{LOW}
FCC part 15.247
Band-edge compliance of RF conducted emissions

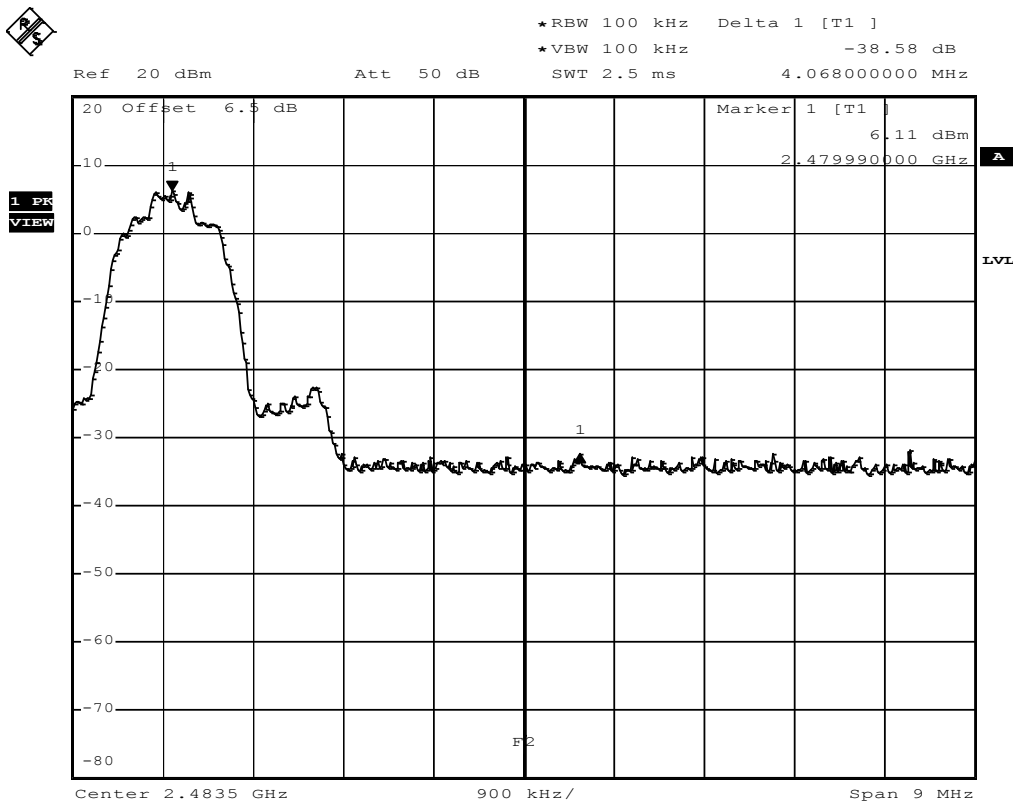
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz / 8DPSK
Comment 3	Single frequency mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:20:33

Band-edge compliance – 3-DH5-Sngl F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

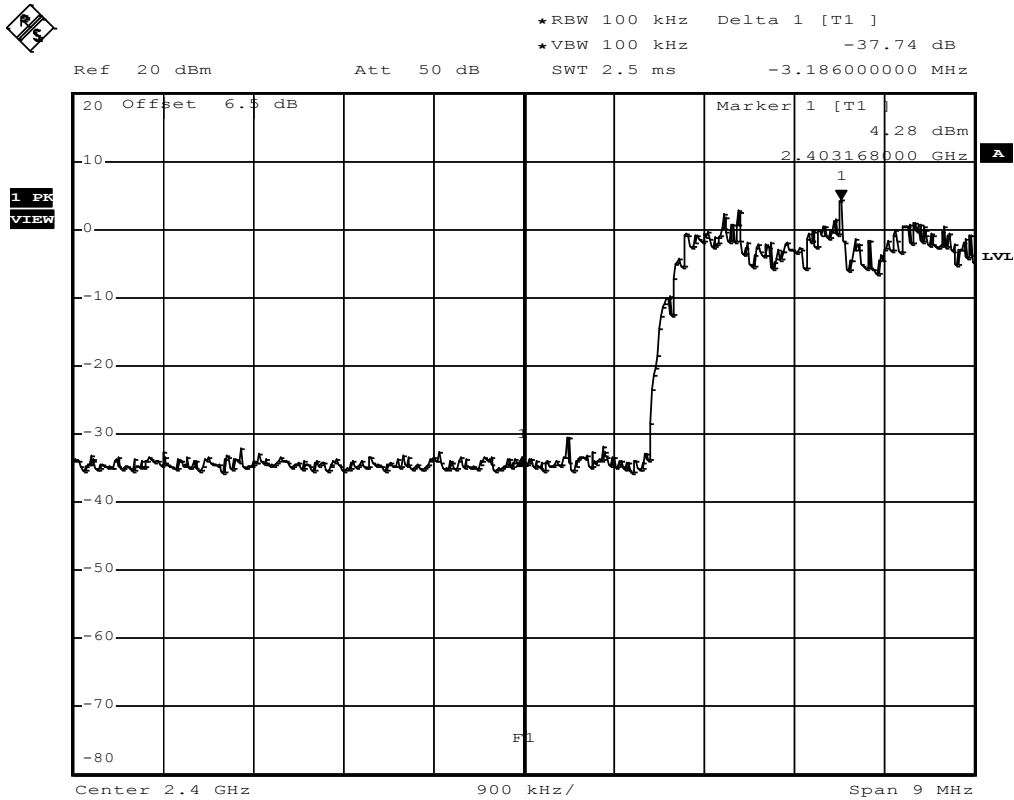
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / 8DPSK
Comment 3	Single frequency mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:22:40

Band-edge compliance – 3-DH5-Hop F_{LOW}
FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz / 8DPSK
Comment 3	Hopping mode



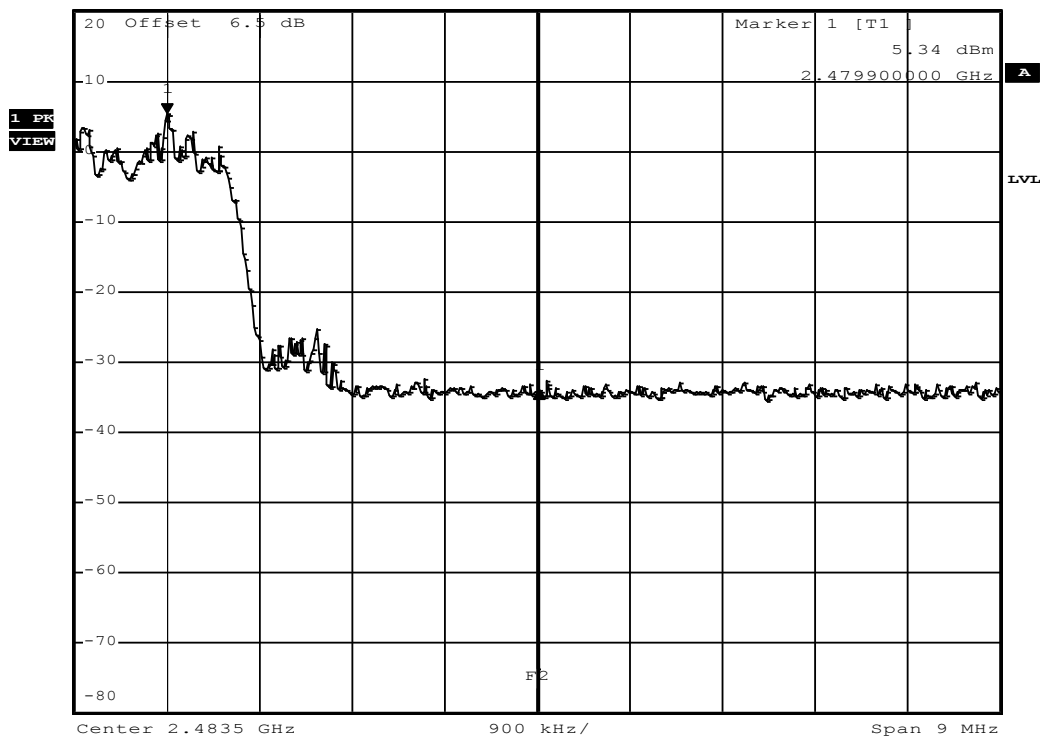
Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 22.AUG.2013 15:35:02

Band-edge compliance – 3-DH5-Hop F_{HIGH}
FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz / 8DPSK
Comment 3	Hopping mode

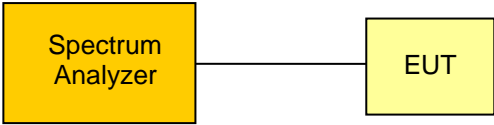


*RBW 100 kHz Delta 1 [T1]
 *VBW 100 kHz -39.23 dB
 Ref 20 dBm Att 50 dB SWT 2.5 ms 3.61800000 MHz



Date: 22.AUG.2013 15:36:28

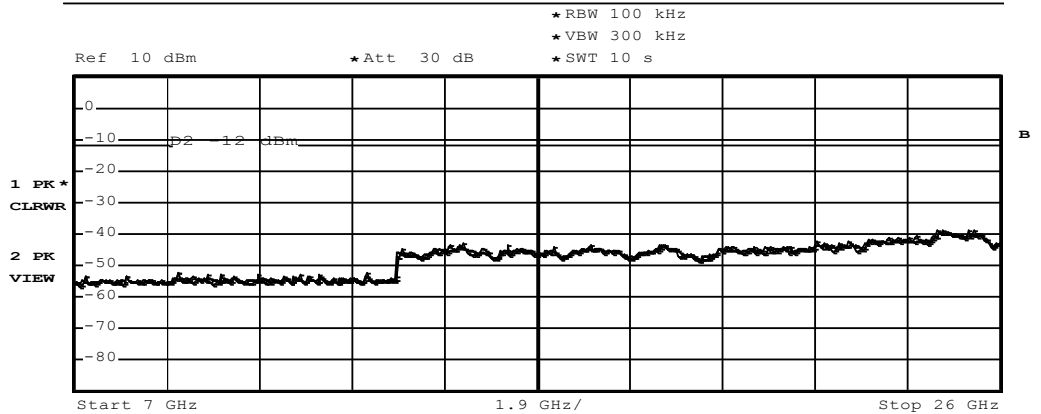
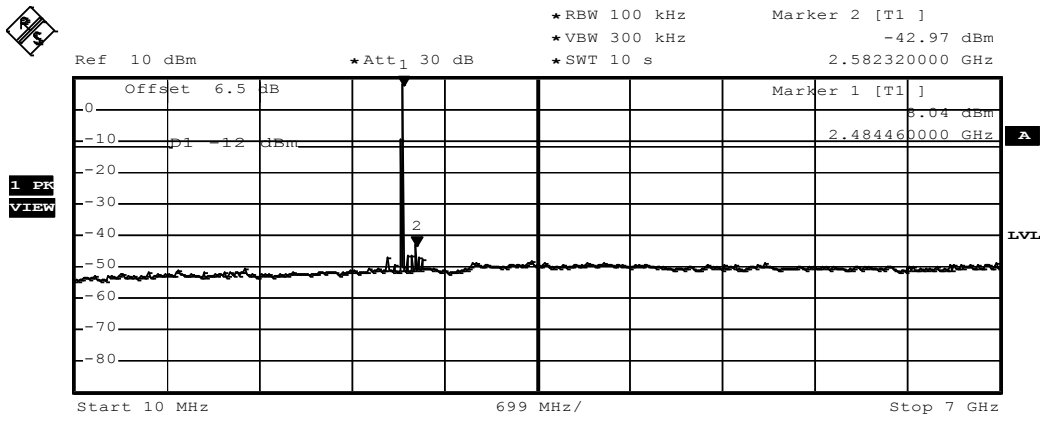
3.9 Test Conditions and Results – Conducted spurious emissions

Conducted spurious emissions acc. FCC 15.247 / IC RSS-210						Verdict: PASS		
EUT requirement rule parts and clause		Reference						
		FCC 15.247(d) / IC RSS-210 A8.5						
Test according to measurement reference		Reference Method						
		FCC Public Notice DA 00-705						
Test frequency range		Tested frequencies						
		10 MHz – 10 th Harmonic						
Measurement mode		Peak						
Limits								
Limit				Condition				
≤ -20 dB/100 kHz				Peak power measurement detector = Peak				
≤ -30 dB/100 kHz				Peak power measurement detector = RMS				
Test setup								
								
Test procedure								
<ol style="list-style-type: none"> 1. EUT set to test mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth is set to 100 kHz and detector to peak and max hold 4. Markers are set to peak emission levels within frequency band 5. Emission level is determined by second marker on emission peak 6. Attenuation is determined from level difference 								
Test results								
Channel	Frequency [MHz]	Mode	Emission [MHz]	Emission Level [dbm]	Peak power [dBm]	Limit [dBm]	Margin [dB]	Result
F _{LOW}	2402	DH5-Sngl	2498	-43.66	5.71	-14.3	-20.01	PASS
F _{MID}	2441	DH5-Sngl	2540	-43.14	7.62	-12.4	-20.02	PASS
F _{HIGH}	2480	DH5-Sngl	2582	42.97	8.04	-12.0	-20.04	PASS
F _{LOW}	2402	3DH5-Sngl	2498	-44.82	0.53	-19.5	-20.03	PASS
F _{MID}	2441	3DH5-Sngl	2540	-45.37	3.32	-16.7	-20.02	PASS
F _{HIGH}	2480	3DH5-Sngl	2540	-46.49	3.00	-17.0	-20.00	PASS
Comments:								

Conducted spurious emissions – DH5-Sngl F_{HIGH}

FCC part 15.247 (d)
Spurious Emissions

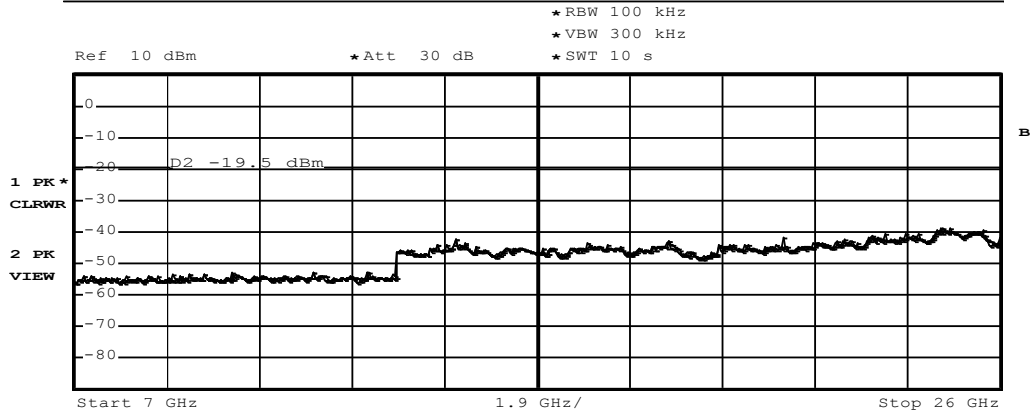
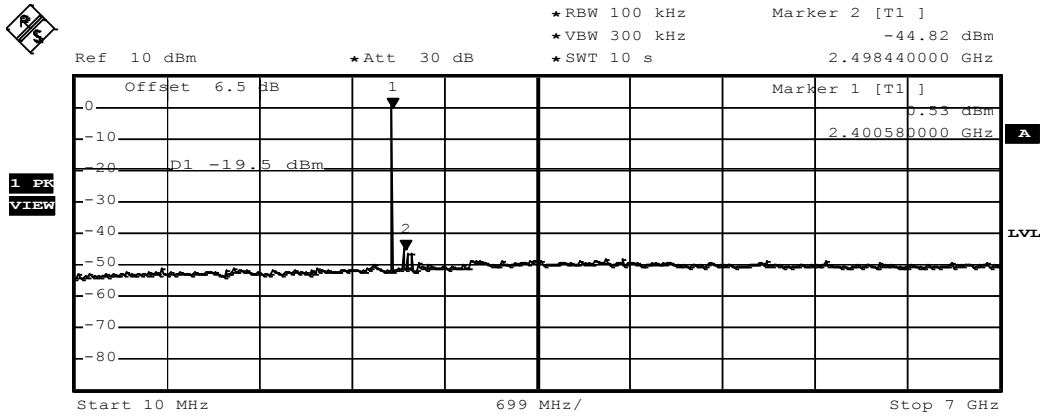
EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2480 MHz
Comment 3	GFSK



Date: 22.AUG.2013 16:47:43

Conducted spurious emissions – 3-DH5-Sngl F_{Low}
**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2402 MHz
Comment 3	8DPSK

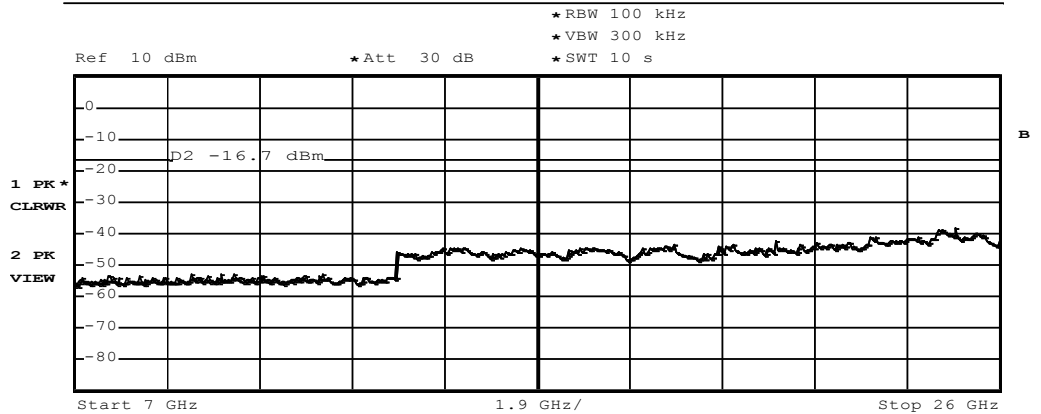
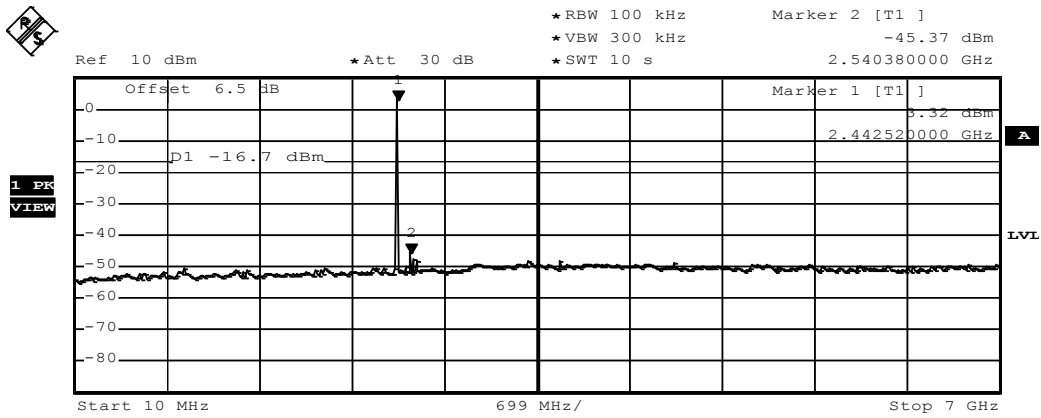


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Conducted spurious emissions – 3-DH5-Sngl F_{MID}

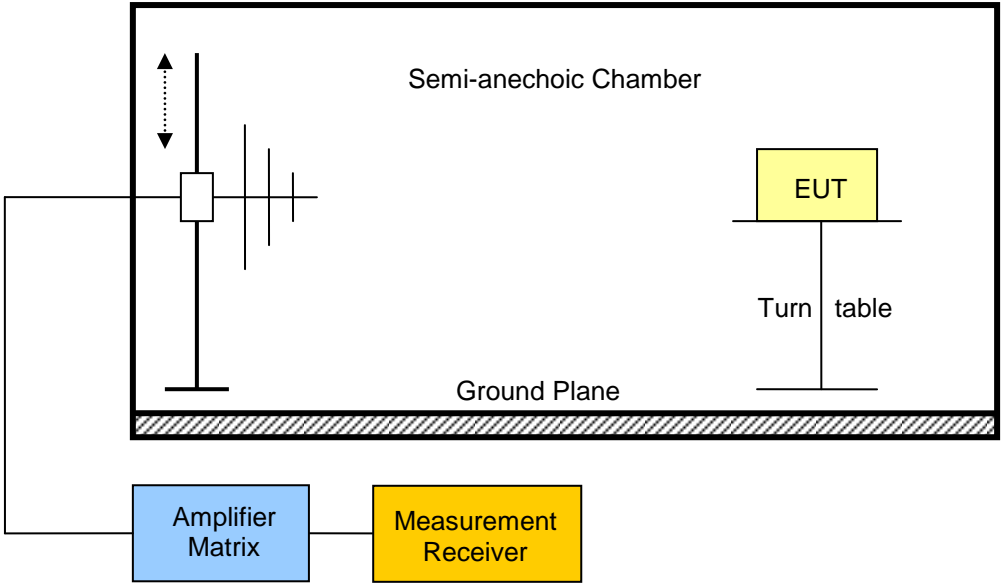
FCC part 15.247 (d)
Spurious Emissions

EUT	Bluetooth headset
Model	OET16
Approval Holder	GN-Netcon A/S
Temperature / Voltage	tnom
Test Site / Operator	Eurofins / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2441 MHz
Comment 3	8DPSK



Date: 22.AUG.2013 16:53:21

3.10 Test Conditions and Results – Transmitter radiated emissions

Transmitter radiated emissions acc. FCC 47 CFR 15.247 / IC RSS-210				Verdict: PASS	
Test according referenced standards		Reference Method			
		FCC 15.247(d) / IC RSS-210 A8.5			
Test according to measurement reference		Reference Method			
		FCC Public Notice DA 00-705 / ANSI C63.4			
Test frequency range		Tested frequencies			
		30 MHz – 10 th Harmonic			
Limits					
Frequency range [MHz]	Detector	Limit [μ V/m]	Limit [dB μ V/m]	Limit Distance [m]	
30 – 88	Quasi-Peak	100	40	3	
88 – 216	Quasi-Peak	150	43.5	3	
216 – 960	Quasi-Peak	200	46	3	
960 – 1000	Quasi-Peak	500	54	3	
> 1000	Average	500	54	3	
<p>Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).</p> <p>When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.</p>					
Test setup					
 <p>The diagram illustrates the test setup within a Semi-anechoic Chamber. A Ground Plane is at the base. An Amplifier Matrix (blue box) is connected to a Measurement Receiver (yellow box) outside the chamber. Inside the chamber, the EUT (Equipment Under Test, yellow box) is placed on a Turn table. A vertical antenna is positioned to the left of the chamber, connected to the Amplifier Matrix. A dashed vertical line with arrows indicates the height of the antenna.</p>					

Test procedure

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

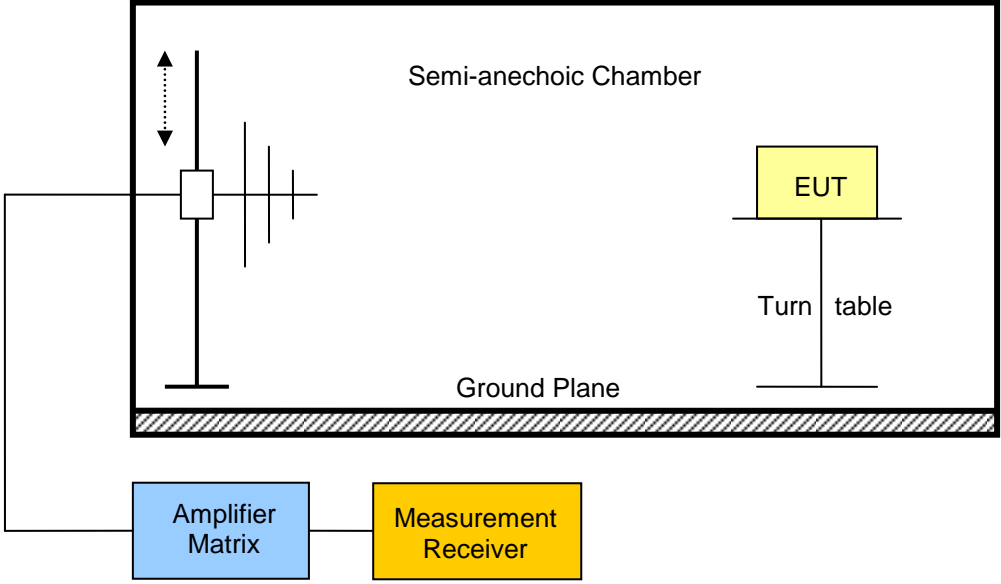
Test results

Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dB μ V/m]	Det.	Pol.	Limit [dB μ V/m]	Limit dist. [m]*	Margin [dB]
F _{LOW}	2402	DH5	2324	43.51	pk	hor	74.00	3	-30.49
F _{LOW}	2402	DH5	2324	38.17	RMS	hor	54.00	3	-15.83
F _{LOW}	2402	DH5	2350	43.16	pk	hor	74.00	3	-30.84
F _{LOW}	2402	DH5	2350	38.00	RMS	hor	54.00	3	-16.00
F _{LOW}	2402	DH5	2350	42.76	pk	ver	74.00	3	-31.24
F _{LOW}	2402	DH5	2350	37.26	RMS	ver	54.00	3	-16.74
F _{LOW}	2402	DH5	2386	45.18	pk	ver	74.00	3	-28.82
F _{LOW}	2402	DH5	2386	23.97	RMS	ver	54.00	3	-30.03
F _{LOW}	2402	DH5	4804	54.43	pk	hor	74.00	3	-19.57
F _{LOW}	2402	DH5	4804	49.04	avg	hor	54.00	3	-04.96
F _{MID}	2441	DH5	4882	56.90	pk	hor	74.00	3	-17.10
F _{MID}	2441	DH5	4882	51.35	avg	hor	54.00	3	-02.65
F _{MID}	2441	DH5	4882	55.18	pk	ver	74.00	3	-18.82
F _{MID}	2441	DH5	4882	50.77	avg	ver	54.00	3	-03.23
F _{MID}	2441	DH5	7322	59.89	pk	hor	74.00	3	-14.11
F _{MID}	2441	DH5	7322	53.13	avg	hor	54.00	3	-00.87
F _{MID}	2441	DH5	7323	57.30	pk	ver	74.00	3	-16.70
F _{MID}	2441	DH5	7323	50.30	avg	ver	54.00	3	-03.70
F _{HIGH}	2480	DH5	2483.5	59.16	pk	hor	74.00	3	-14.84
F _{HIGH}	2480	DH5	2483.5	50.37	RMS	hor	54.00	3	-03.63
F _{HIGH}	2480	DH5	2483.5	59.67	pk	ver	74.00	3	-14.33
F _{HIGH}	2480	DH5	2483.5	50.95	RMS	ver	54.00	3	-03.05
F _{HIGH}	2480	DH5	4960	58.28	pk	hor	74.00	3	-15.72
F _{HIGH}	2480	DH5	4960	53.60	avg	hor	54.00	3	-00.40
F _{HIGH}	2480	DH5	4960	57.72	pk	ver	74.00	3	-16.28
F _{HIGH}	2480	DH5	4960	53.47	avg	ver	54.00	3	-00.53
F _{HIGH}	2480	DH5	7440	59.74	pk	hor	74.00	3	-14.26
F _{HIGH}	2480	DH5	7440	53.47	avg	hor	54.00	3	-00.53

F _{HIGH}	2480	DH5	7440	56.66	pk	ver	74.00	3	-17.34
F _{HIGH}	2480	DH5	7440	48.99	avg	ver	54.00	3	-05.01
F _{LOW}	2402	3DH5	2390	46.25	pk	ver	74.00	3	-27.75
F _{LOW}	2402	3DH5	2390	23.78	RMS	ver	54.00	3	-30.22
F _{MID}	2441	3DH5	4882	54.78	pk	hor	74.00	3	-19.22
F _{MID}	2441	3DH5	4882	46.79	avg	hor	54.00	3	-07.21
F _{HIGH}	2480	3DH5	2483.5	60.54	pk	hor	74.00	3	-13.46
F _{HIGH}	2480	3DH5	2483.5	48.69	RMS	hor	54.00	3	-05.31
F _{HIGH}	2480	3DH5	2483.5	61.27	pk	ver	74.00	3	-12.73
F _{HIGH}	2480	3DH5	2483.5	49.23	RMS	ver	54.00	3	-04.77
F _{HIGH}	2480	3DH5	4960	55.40	pk	hor	74.00	3	-18.60
F _{HIGH}	2480	3DH5	4960	47.56	avg	hor	54.00	3	-06.44
F _{HIGH}	2480	3DH5	4960	55.50	pk	ver	74.00	3	-18.50
F _{HIGH}	2480	3DH5	4960	47.63	avg	ver	54.00	3	-06.37

Comments: * Physical distance between EUT and measurement antenna.

3.11 Test Conditions and Results – Receiver radiated emissions

Receiver radiated emissions acc. IC RSS-210			Verdict: PASS	
Test according referenced standards	Reference Method			
	IC RSS-210 A8.5			
Test according to measurement reference	Reference Method			
	ANSI C63.4			
Test frequency range	Tested frequencies			
	30 MHz – 3 th Harmonic			
EUT test mode	Receive			
Limits				
Frequency range [MHz]	Detector	Limit [μ V/m]	Limit [dB μ V/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3
Test setup				
				

Test procedure

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

Test results

Channel	Frequency [MHz]	Emission [MHz]	Emission Level [dB μ V/m]**	Emission Level [μ V/m]	Det.	Limit [μ V/m]	Margin [μ V/m]
F _{MID}	2440	7679	48.97	280.87	pk	500	-219.13

Comments:

* Physical distance between EUT and measurement antenna.

** Emission level corresponds to ambient noise floor

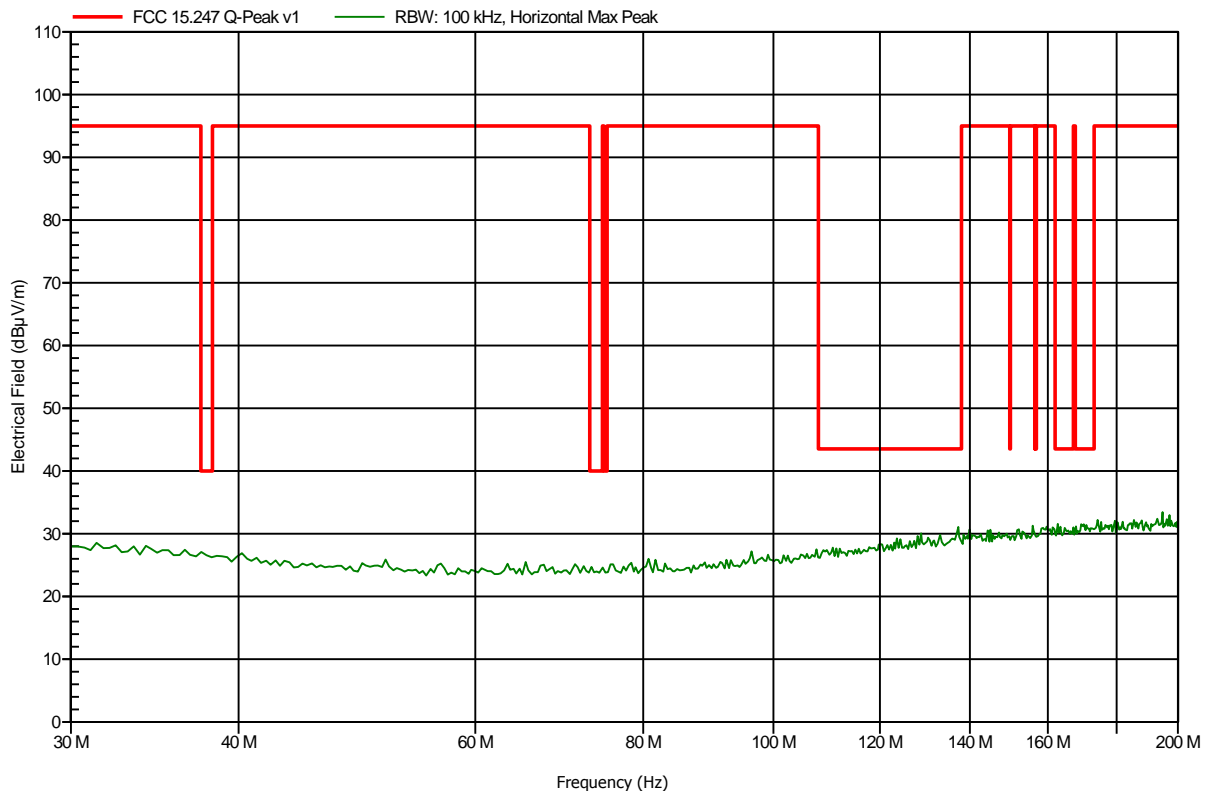
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3.7 V DC (battery)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; basic, DH5; 2402 MHz
Test Date:	2013-08-29
Note:	worst case

Index 67

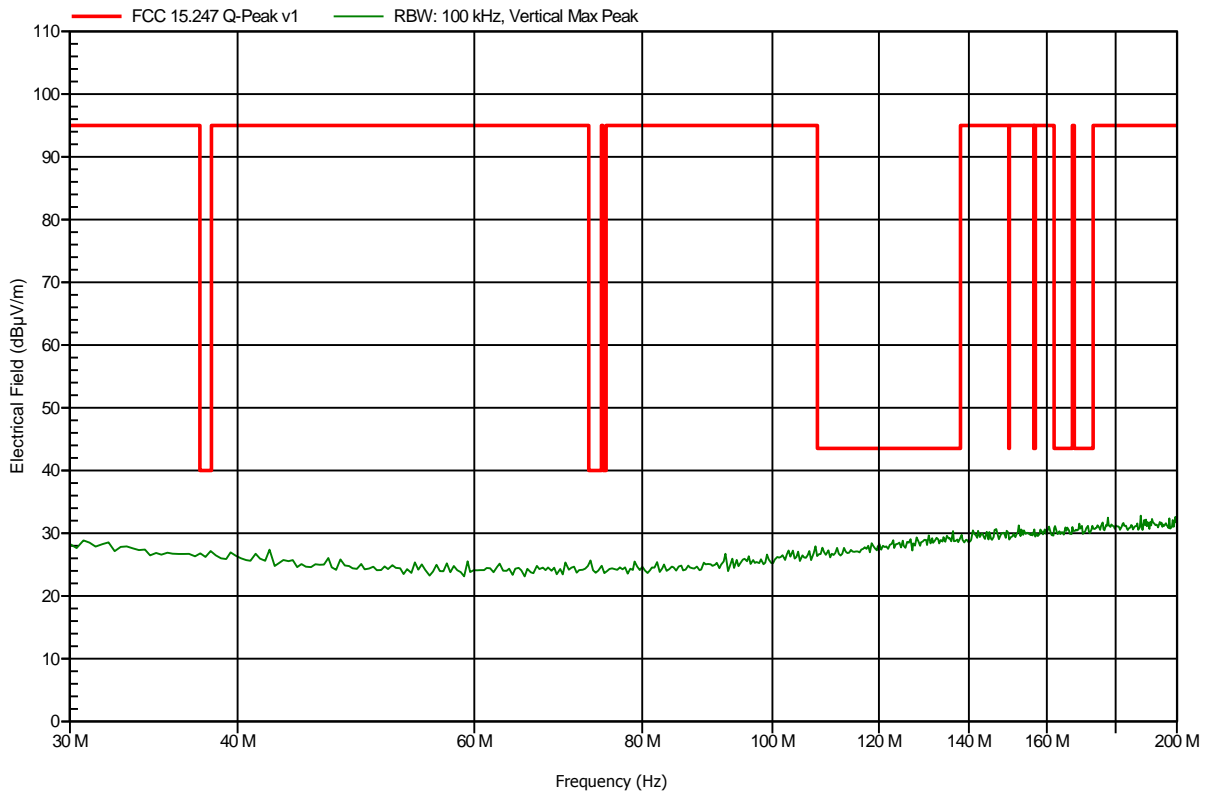


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; basic, DH5; 2402 MHz
Test Date:	2013-08-29
Note:	worst case

Index 68

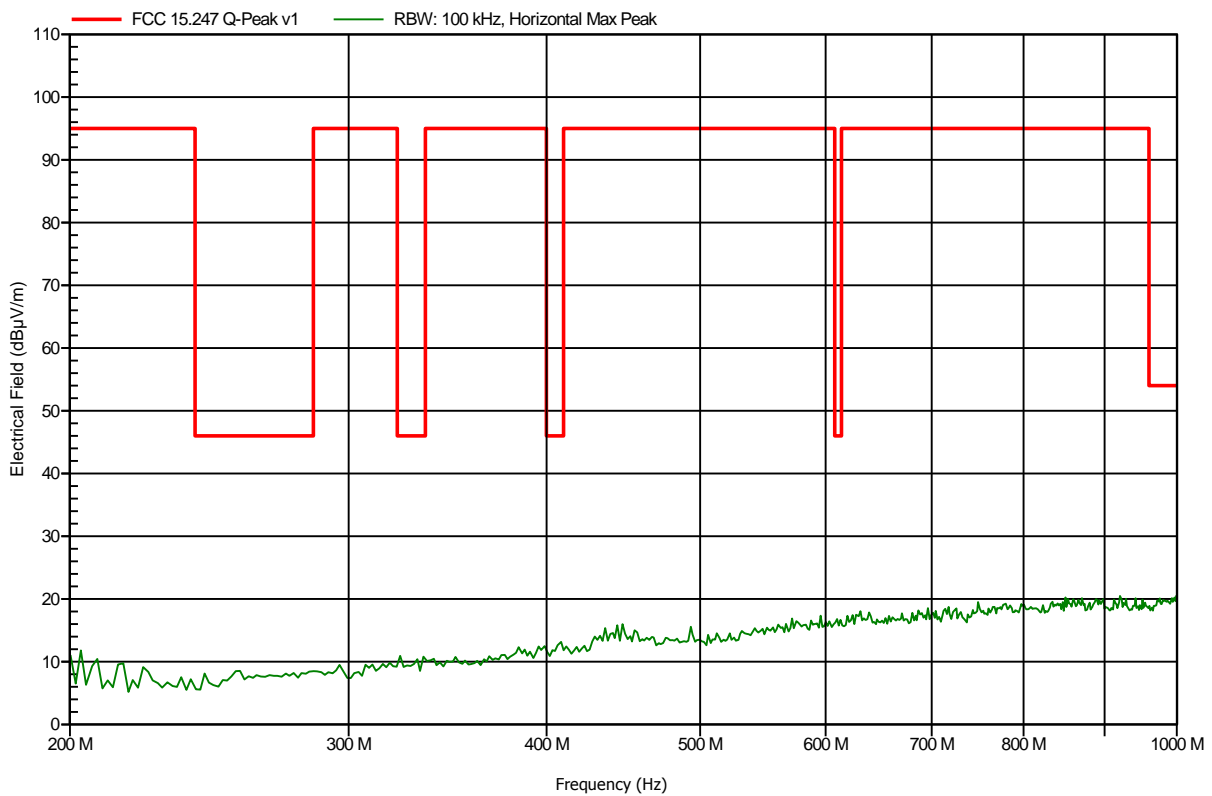


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; basic, DH5; 2402 MHz
Test Date:	2013-08-29
Note:	worst case

Index 65

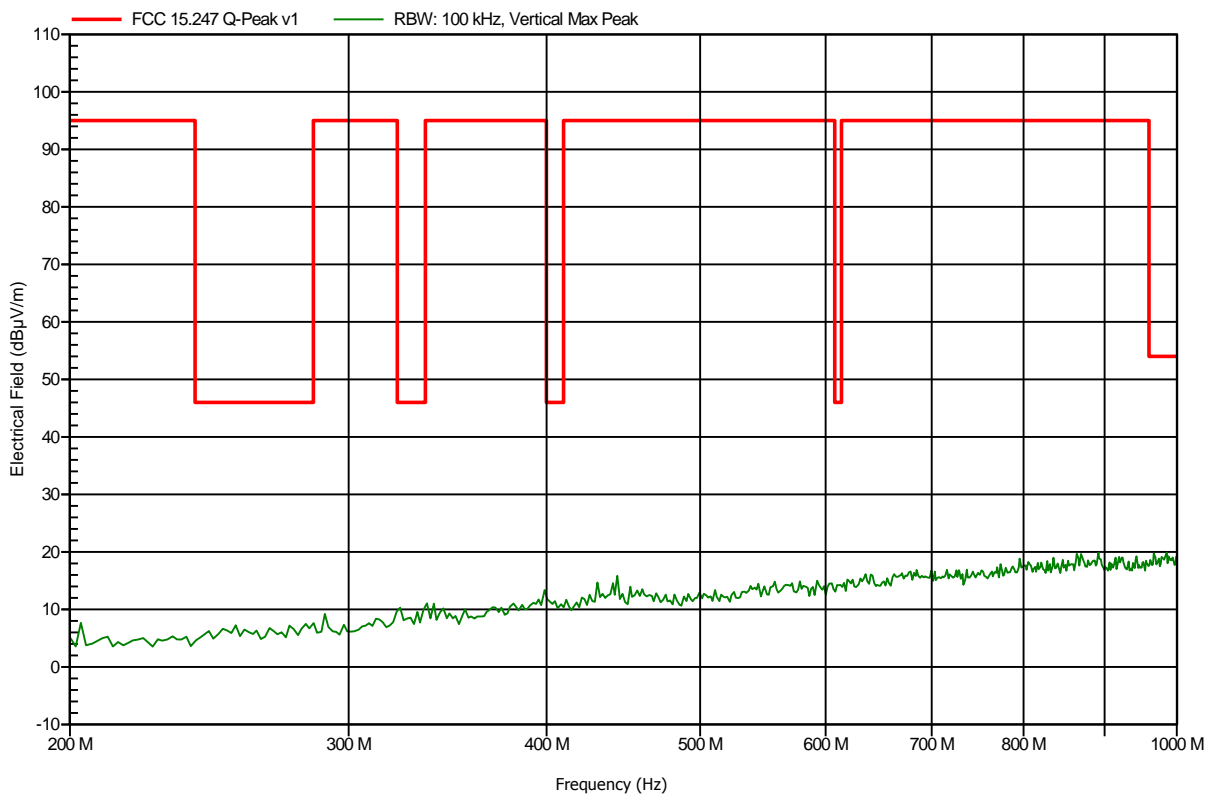


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; basic, DH5; 2402 MHz
Test Date:	2013-08-29
Note:	Worst case

Index 66

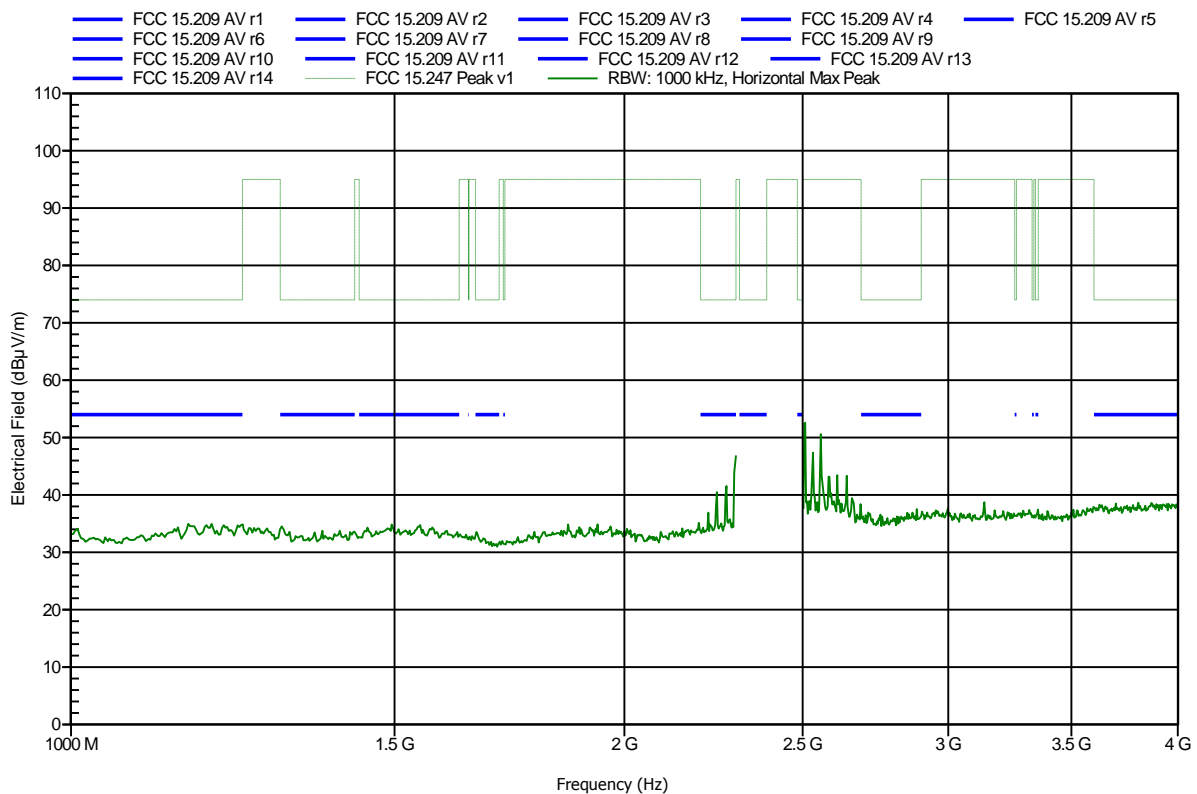


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 17

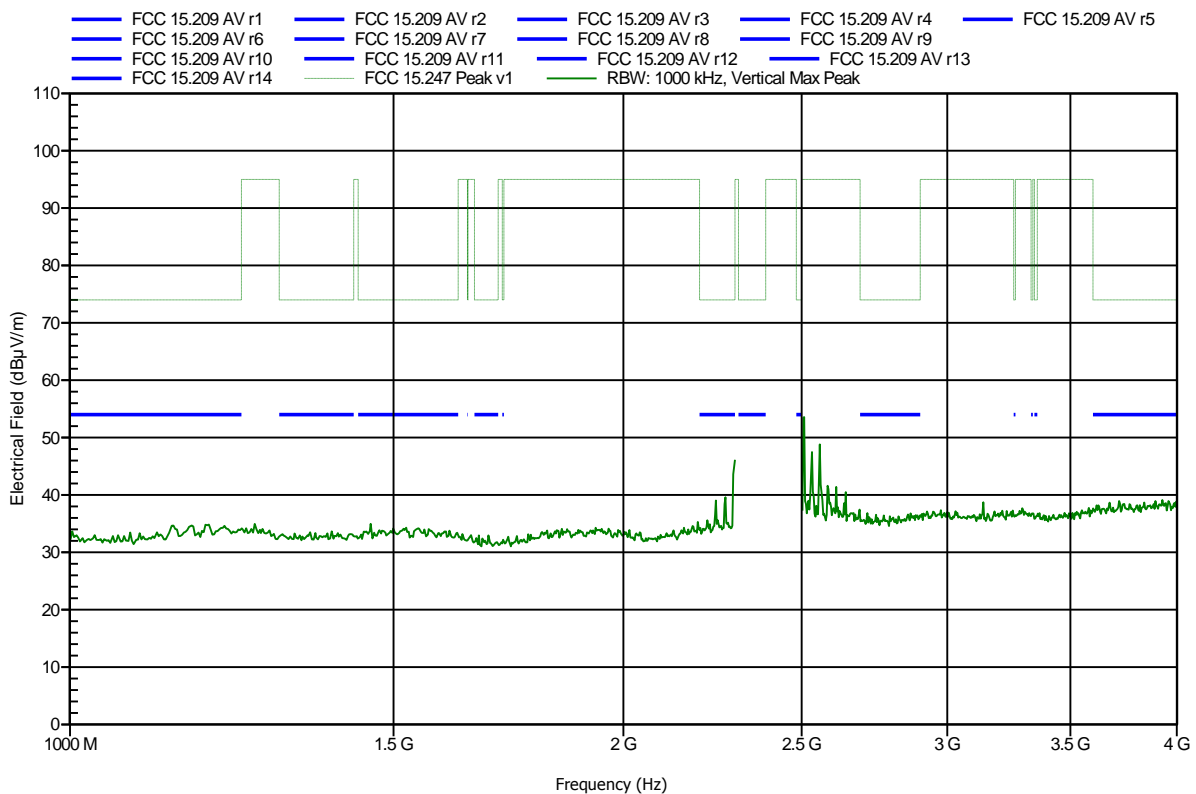


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 20

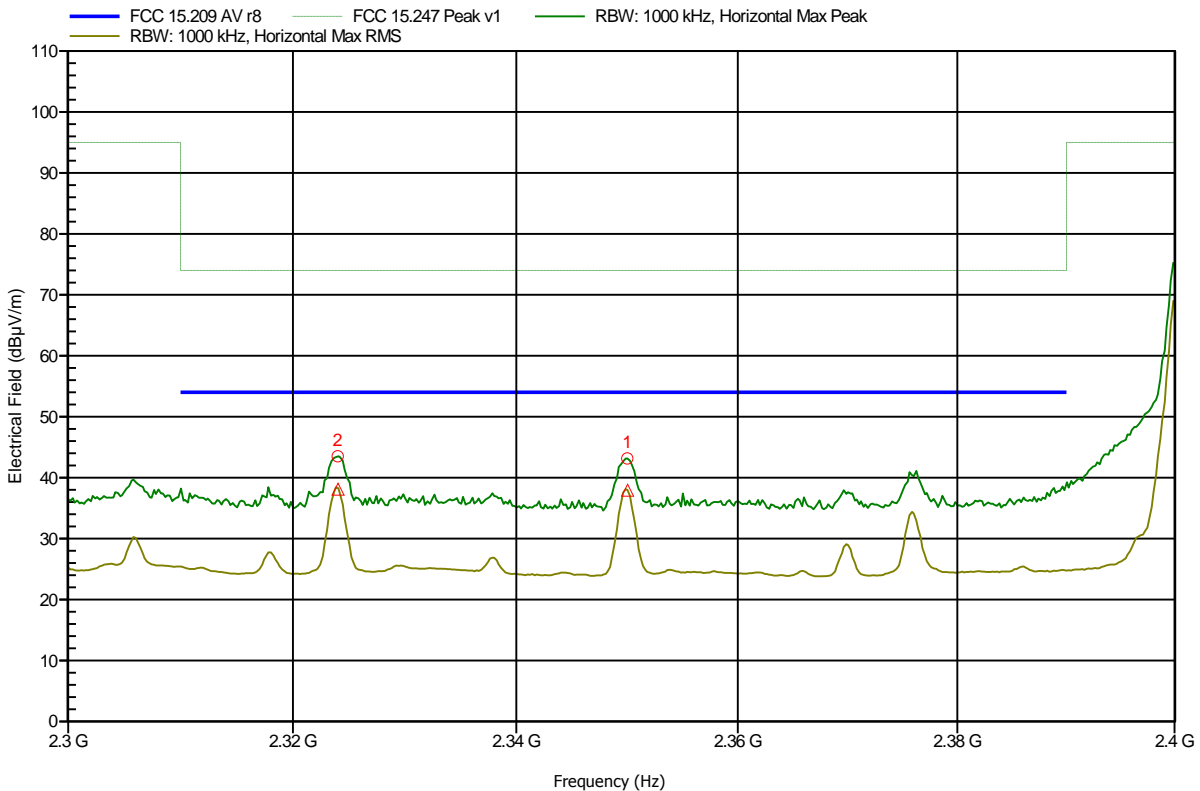


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note: lower bandedge

Index 18



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.324 GHz	43.51 dBµV/m	74 dBµV/m	-30.49 dB	Pass
2.35 GHz	43.16 dBµV/m	74 dBµV/m	-30.84 dB	Pass

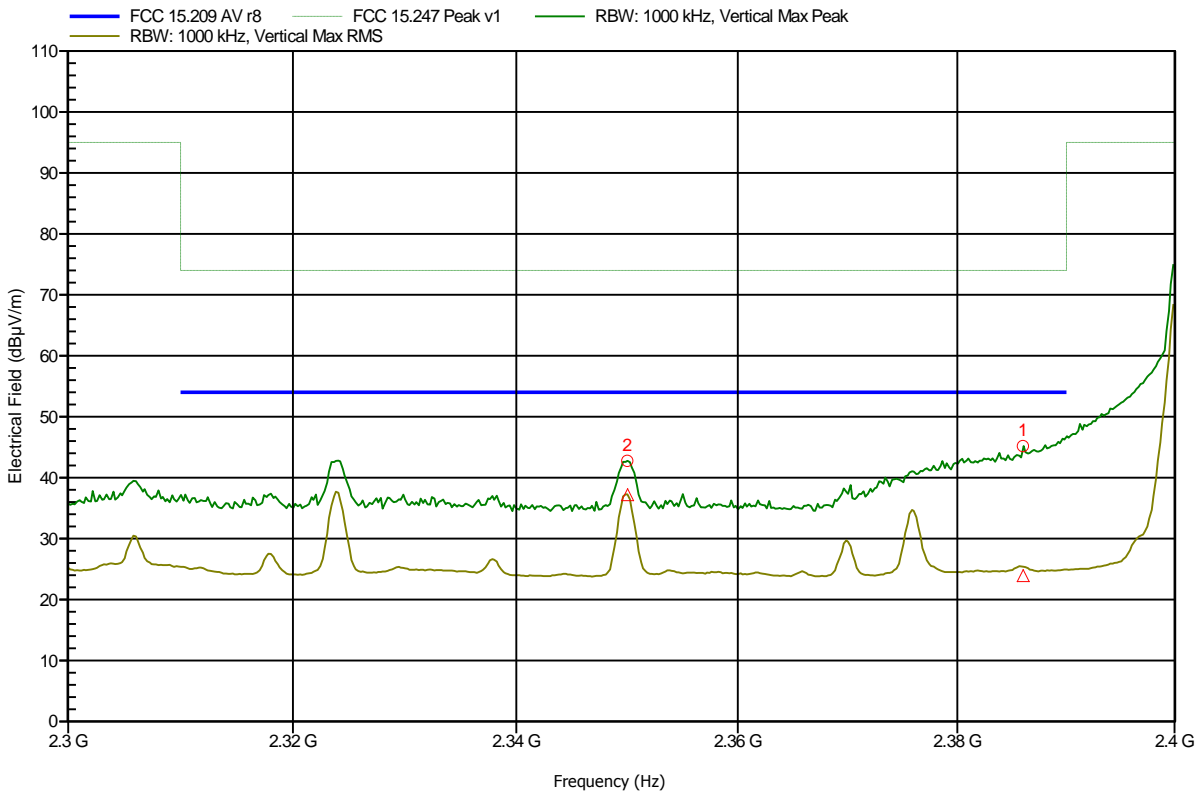
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.324 GHz	38.17 dBµV/m	54 dBµV/m	-15.83 dB	Pass
2.35 GHz	38 dBµV/m	54 dBµV/m	-16 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note: lower bandedge

Index 21



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.35 GHz	42.76 dBµV/m	74 dBµV/m	-31.24 dB	Pass
2.386 GHz	45.18 dBµV/m	74 dBµV/m	-28.82 dB	Pass

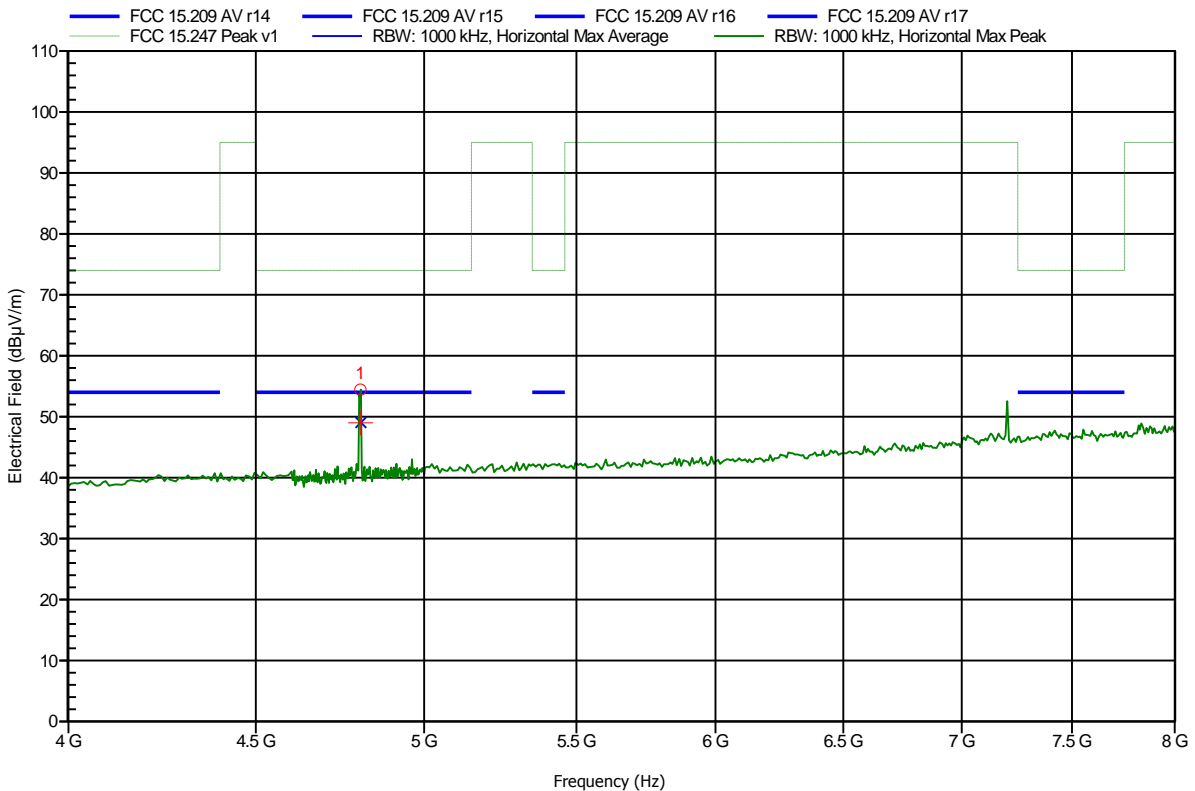
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.35 GHz	37.26 dBµV/m	54 dBµV/m	-16.74 dB	Pass
2.386 GHz	23.97 dBµV/m	54 dBµV/m	-30.03 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 19



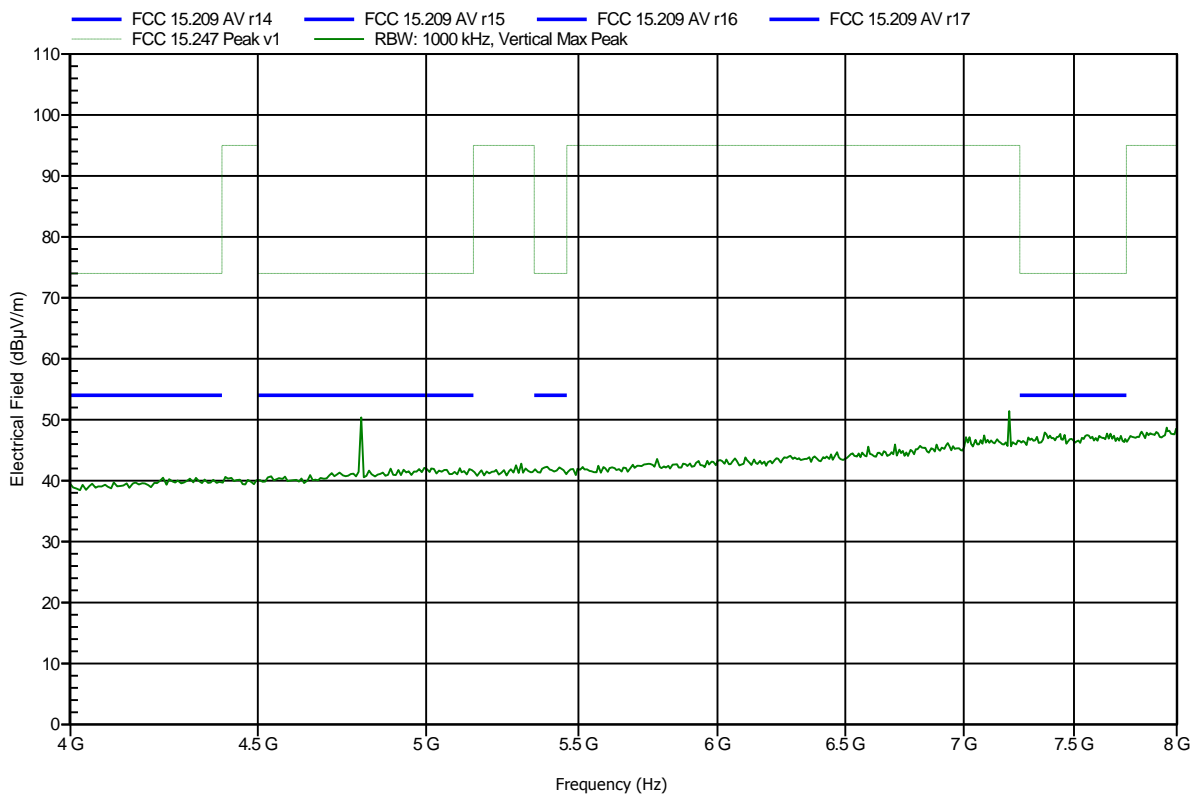
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.804 GHz	54.43 dBµV/m	74 dBµV/m	-19.57 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
4.804 GHz	49.04 dBµV/m	54 dBµV/m	-4.96 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 22

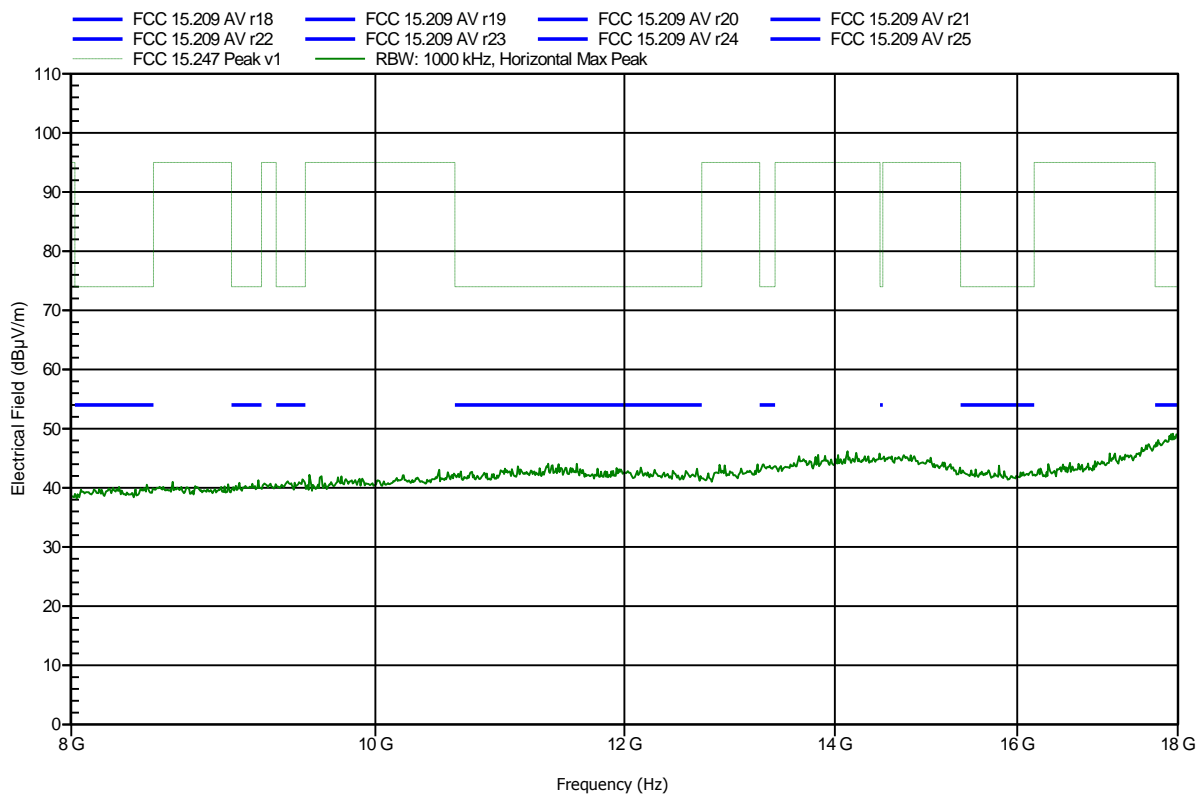


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-29
 Note:

Index 53

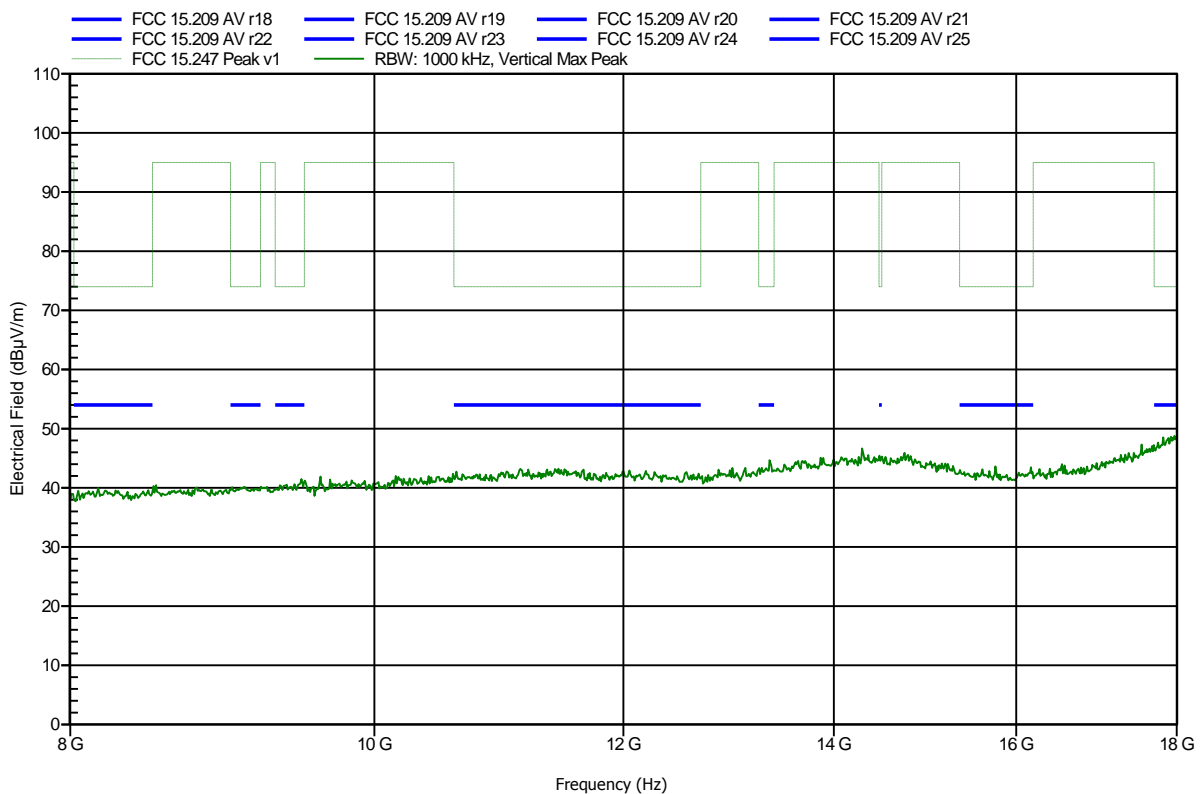


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-29
 Note:

Index 55

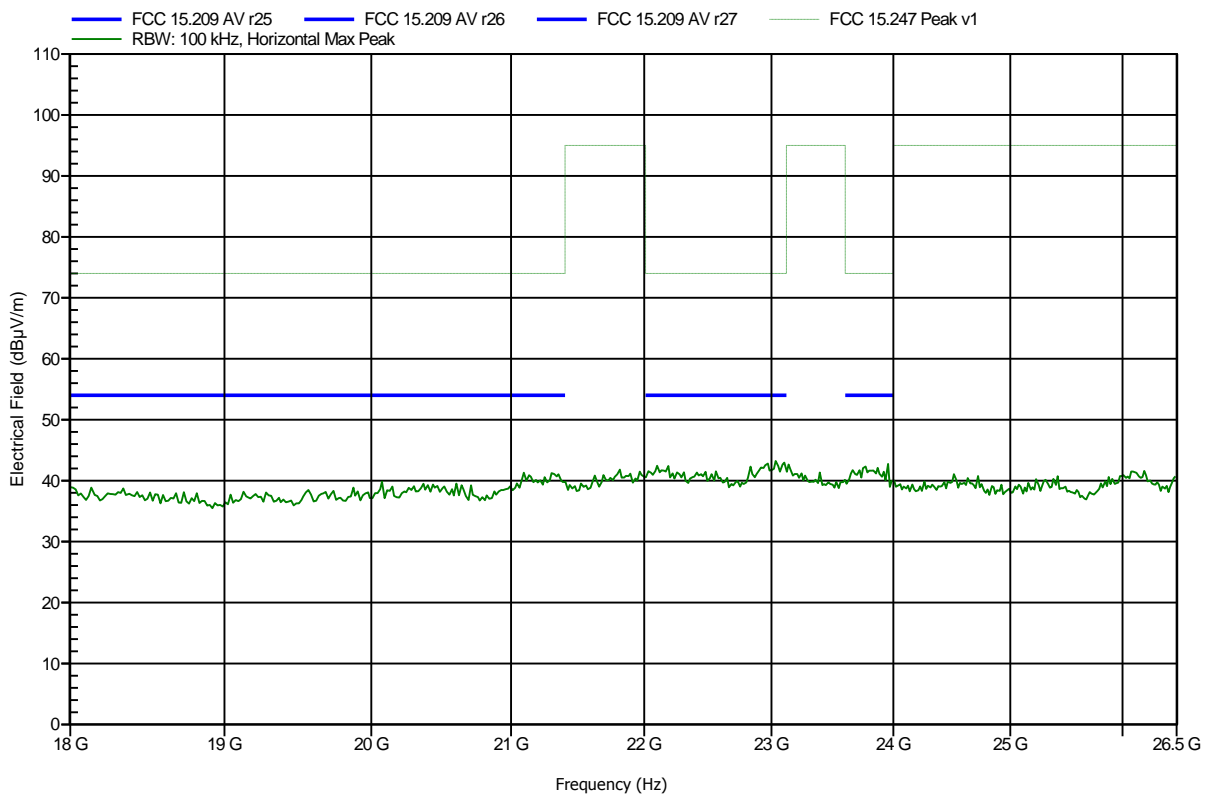


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 100 cm
 Mode: TX; basic, DH5; 2402 MHz
 Test Date: 2013-08-29
 Note:

Index 54

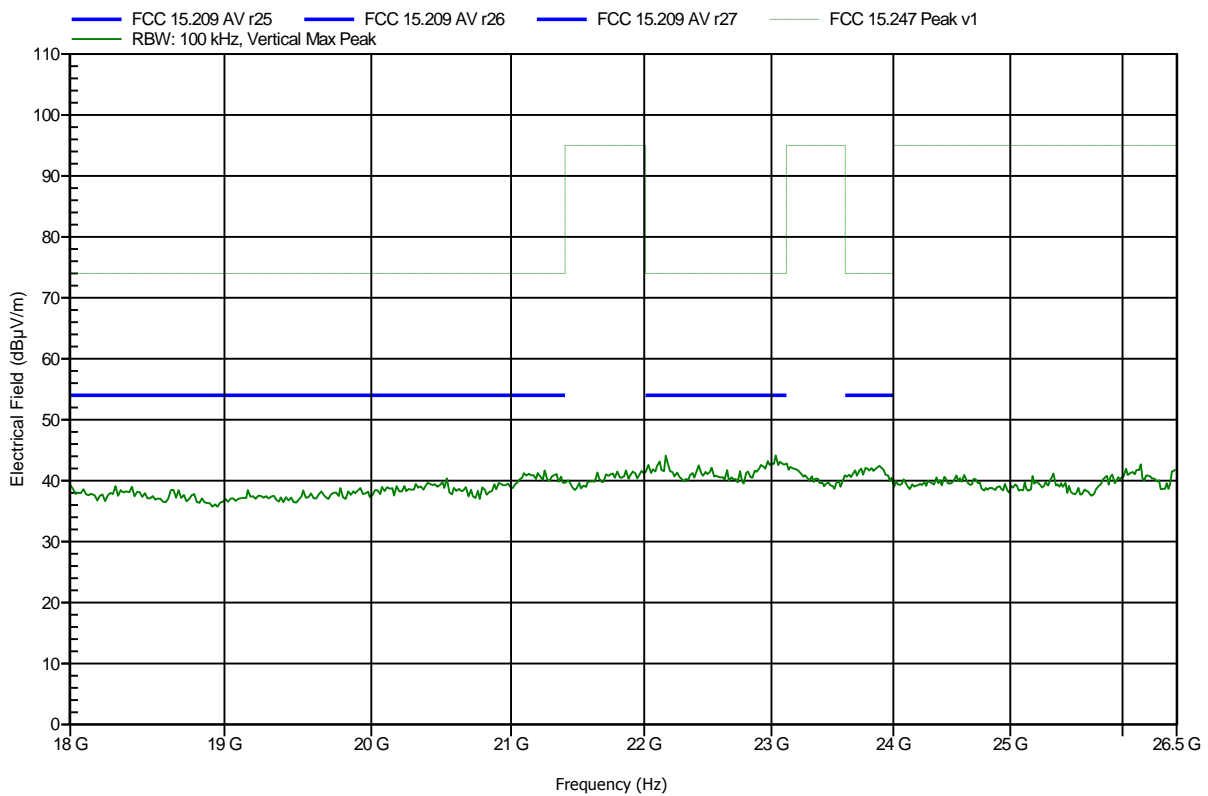


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	100 cm
Mode:	TX; basic, DH5; 2402 MHz
Test Date:	2013-08-29
Note:	

Index 56

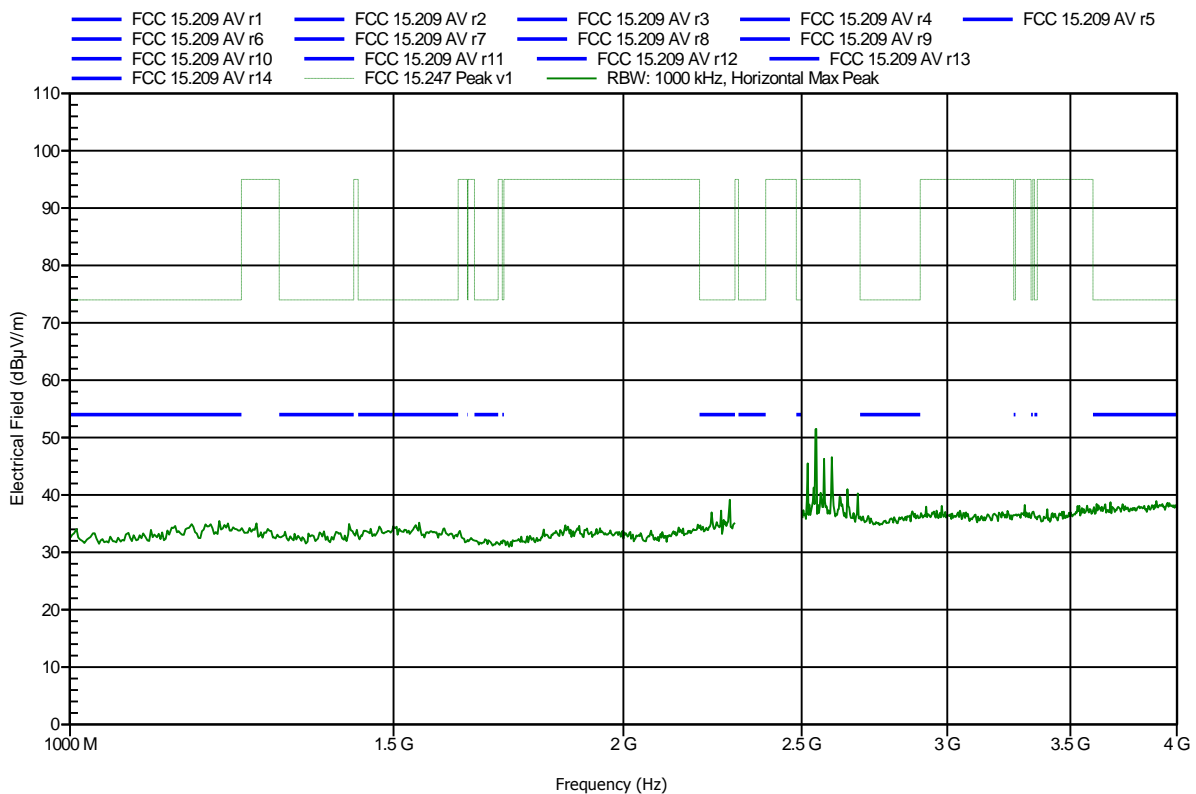


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 23

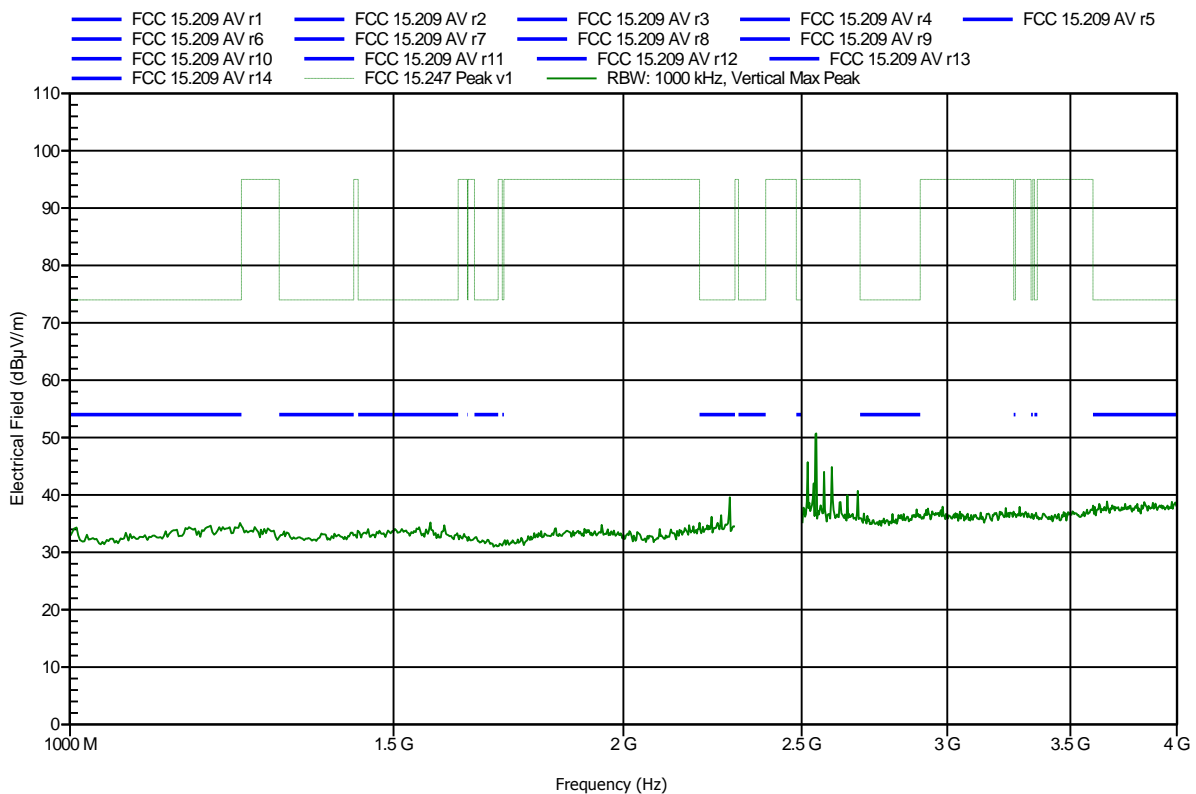


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 25

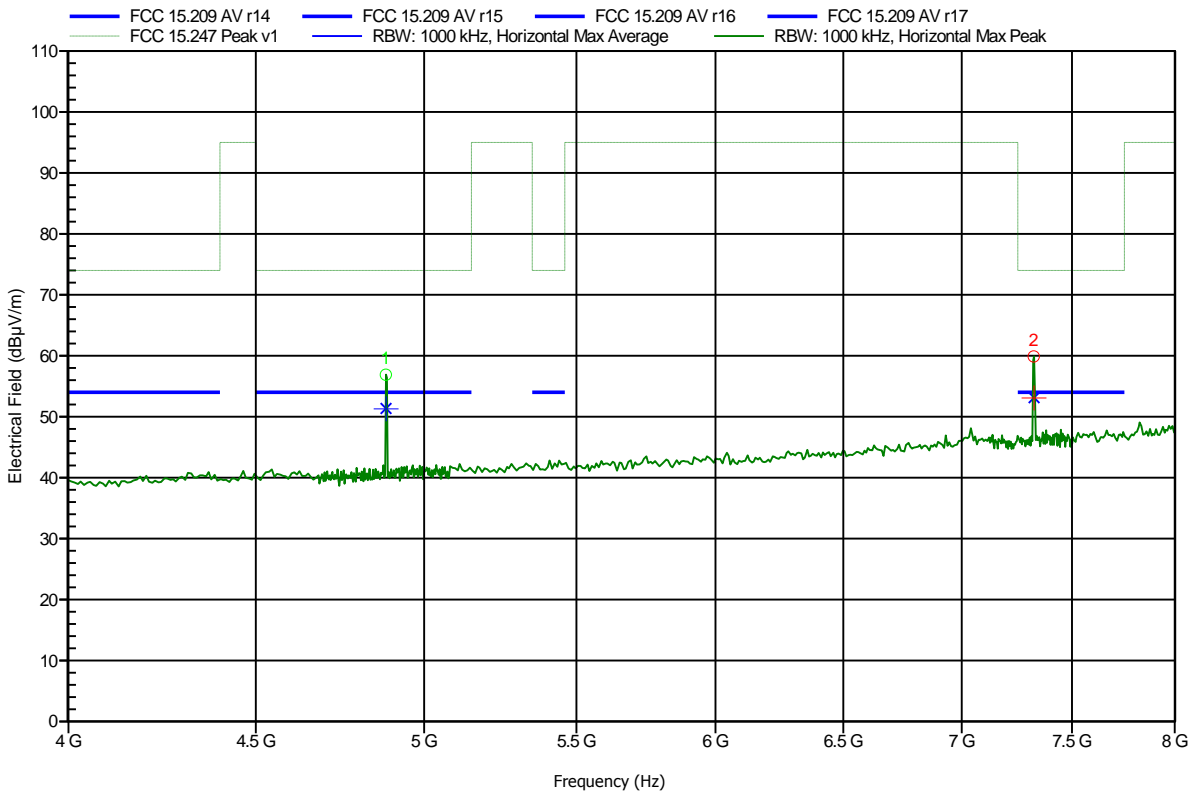


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 24



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.882 GHz	56.9 dBµV/m	74 dBµV/m	-17.1 dB	Pass
7.322 GHz	59.89 dBµV/m	74 dBµV/m	-14.11 dB	Pass

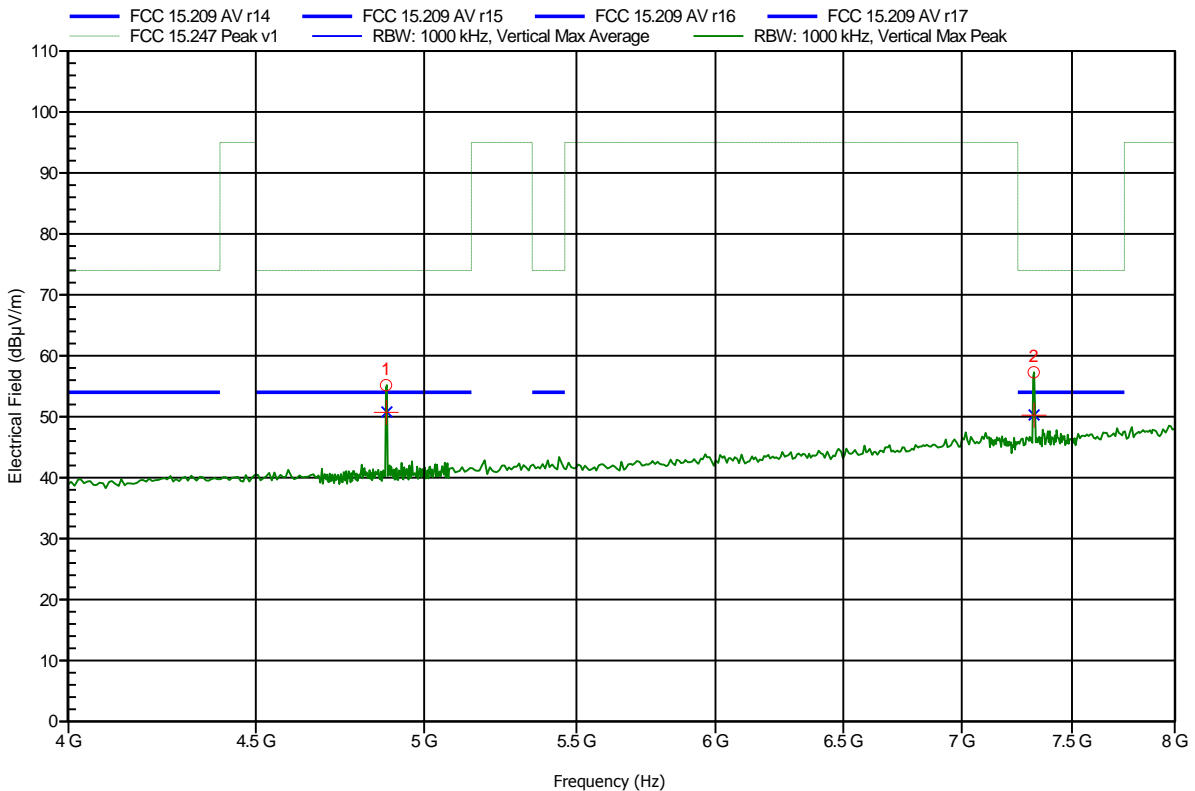
Frequency	Average	Average Limit	Average Difference	Average Status
4.882 GHz	51.35 dBµV/m	54 dBµV/m	-2.65 dB	Pass
7.322 GHz	53.13 dBµV/m	54 dBµV/m	-0.87 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 26



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.882 GHz	55.18 dBµV/m	74 dBµV/m	-18.82 dB	Pass
7.323 GHz	57.3 dBµV/m	74 dBµV/m	-16.7 dB	Pass

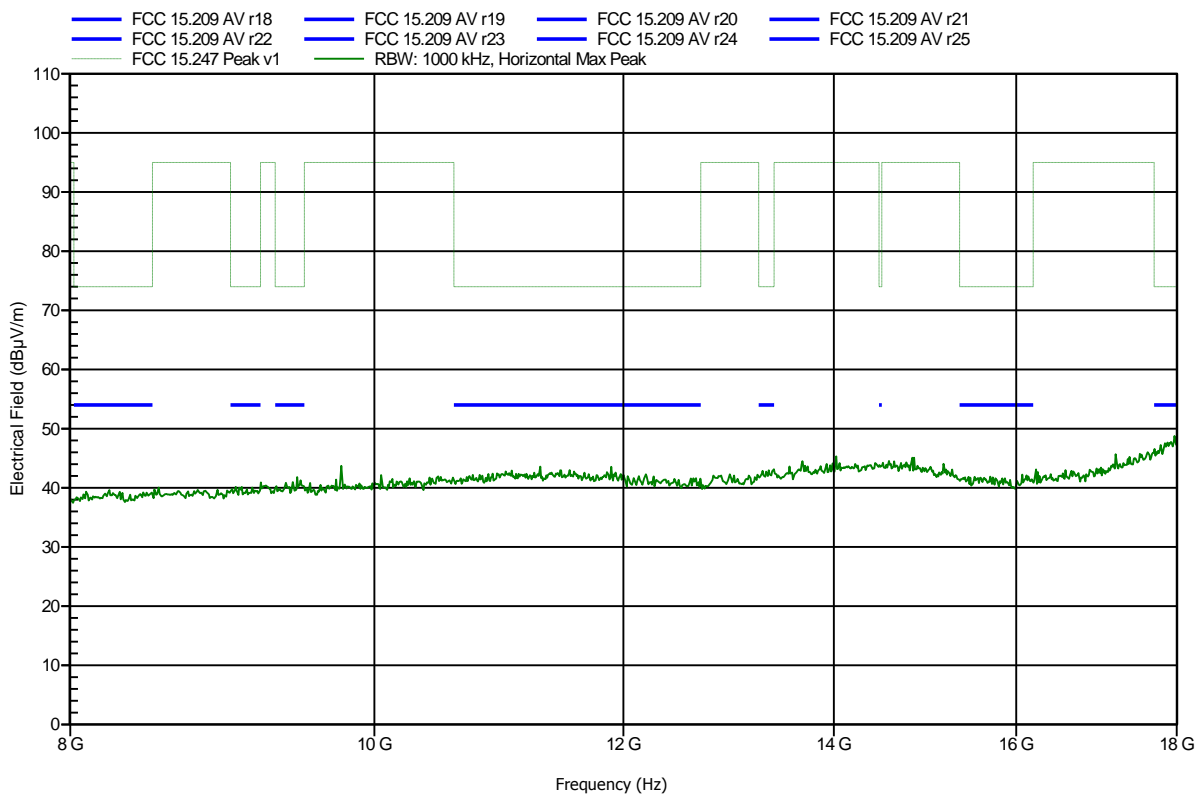
Frequency	Average	Average Limit	Average Difference	Average Status
4.882 GHz	50.77 dBµV/m	54 dBµV/m	-3.23 dB	Pass
7.323 GHz	50.3 dBµV/m	54 dBµV/m	-3.7 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-29
 Note:

Index 57

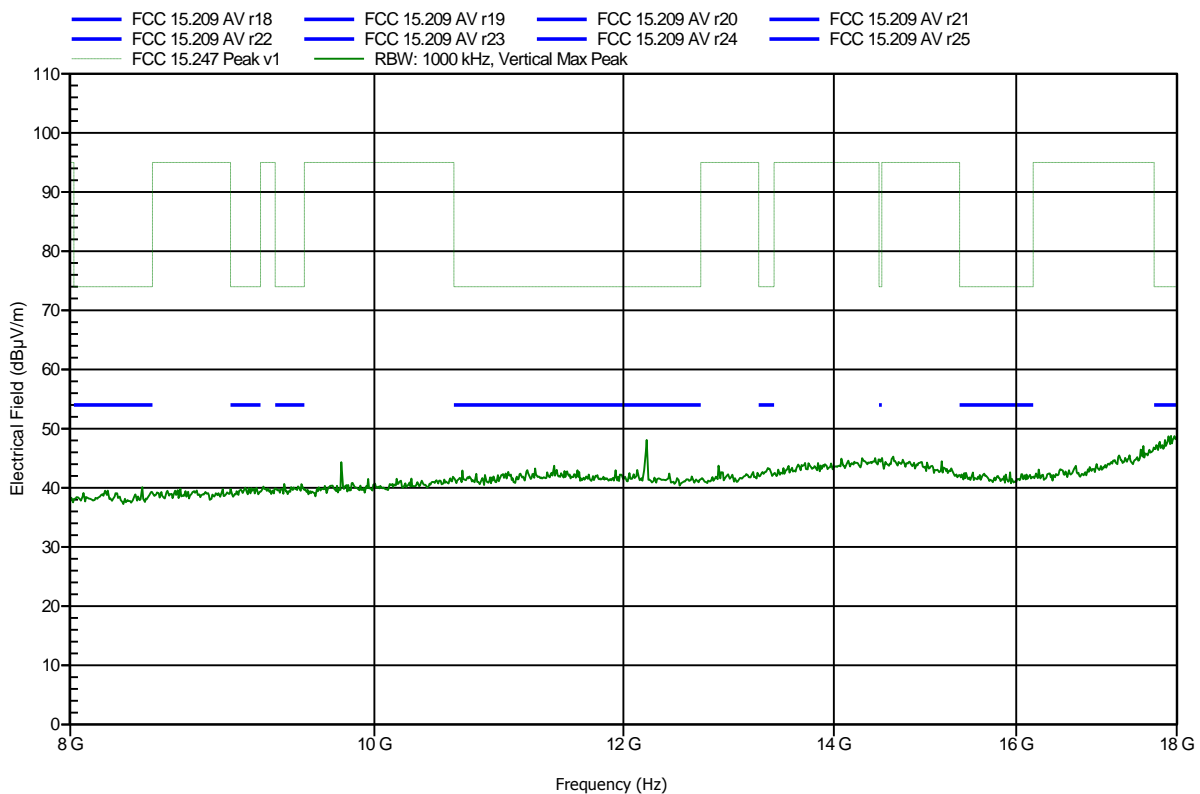


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-29
 Note:

Index 59

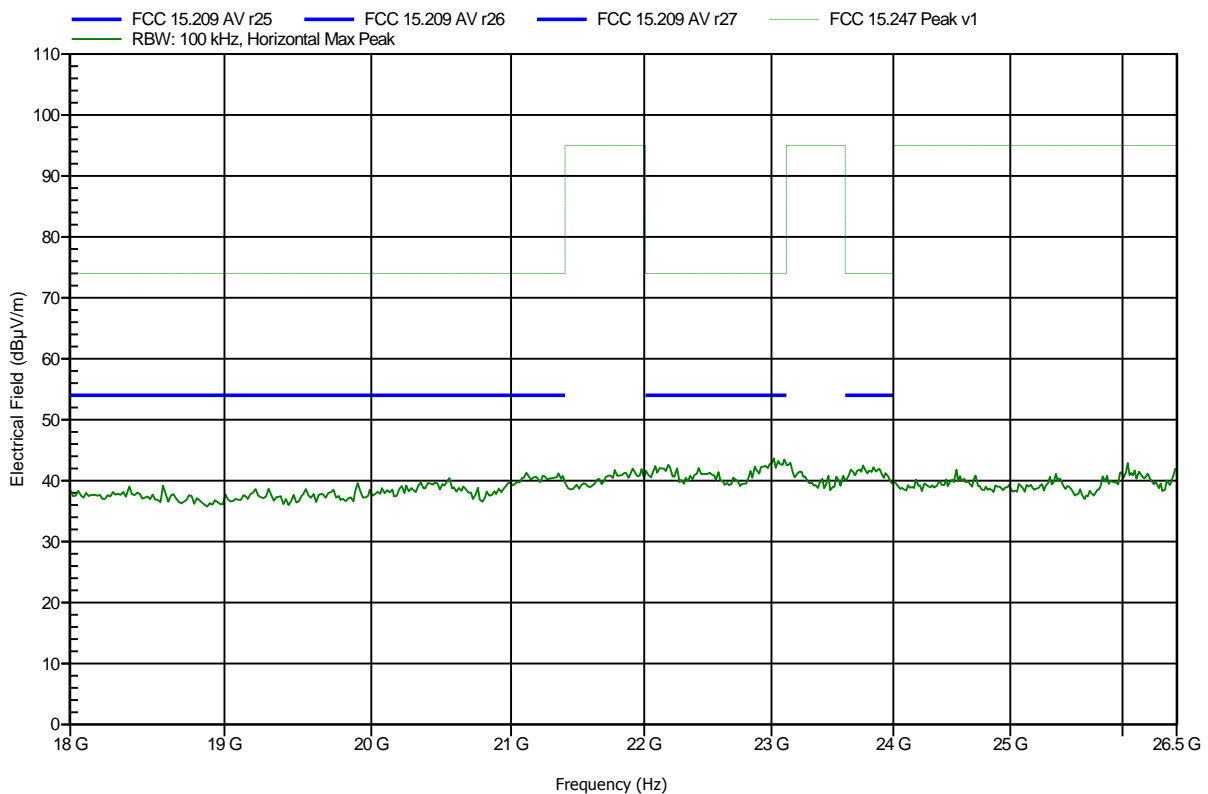


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 100 cm
 Mode: TX; basic, DH5; 2441 MHz
 Test Date: 2013-08-29
 Note:

Index 58

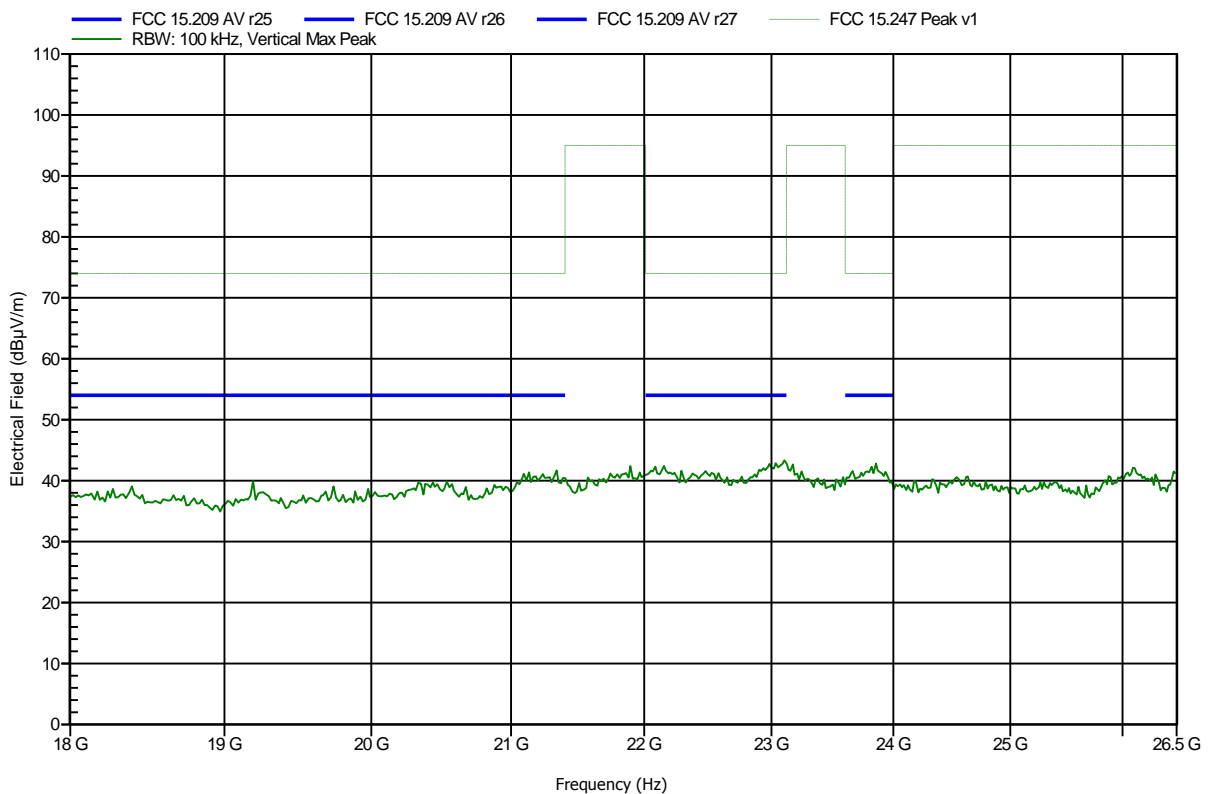


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	100 cm
Mode:	TX; basic, DH5; 2441 MHz
Test Date:	2013-08-29
Note:	

Index 60

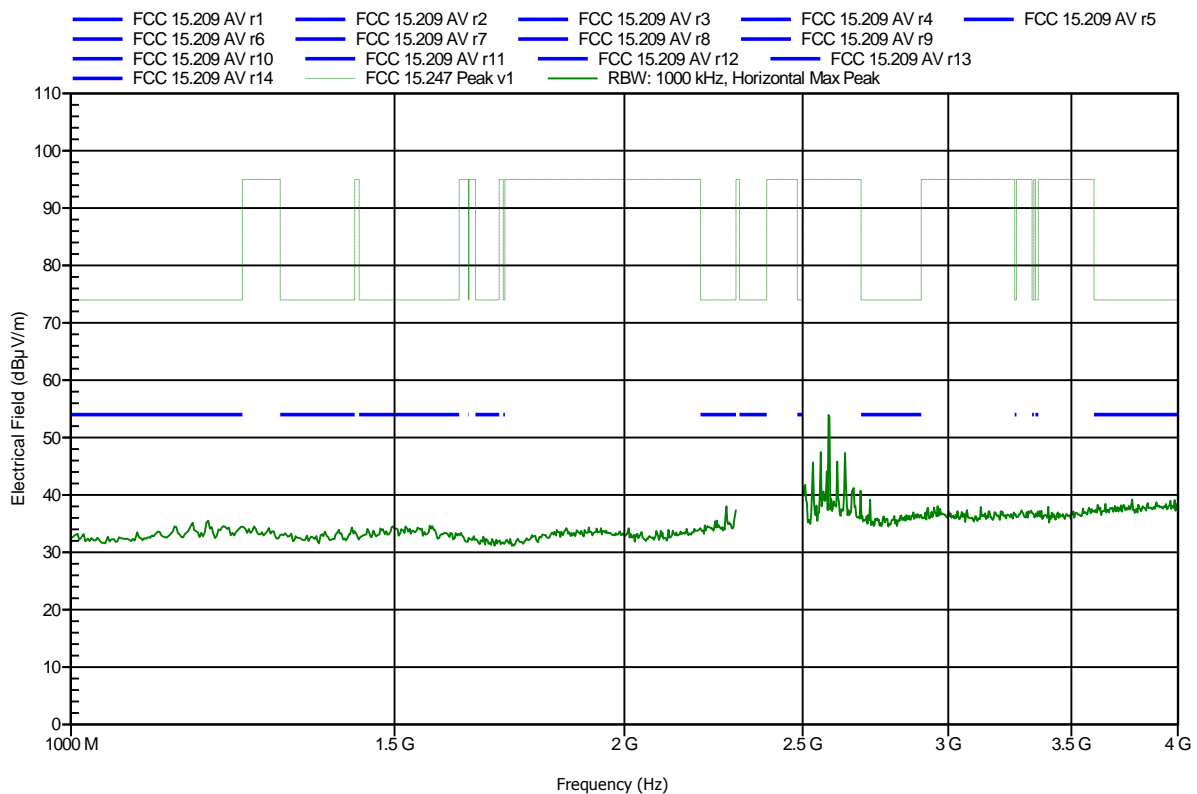


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 27

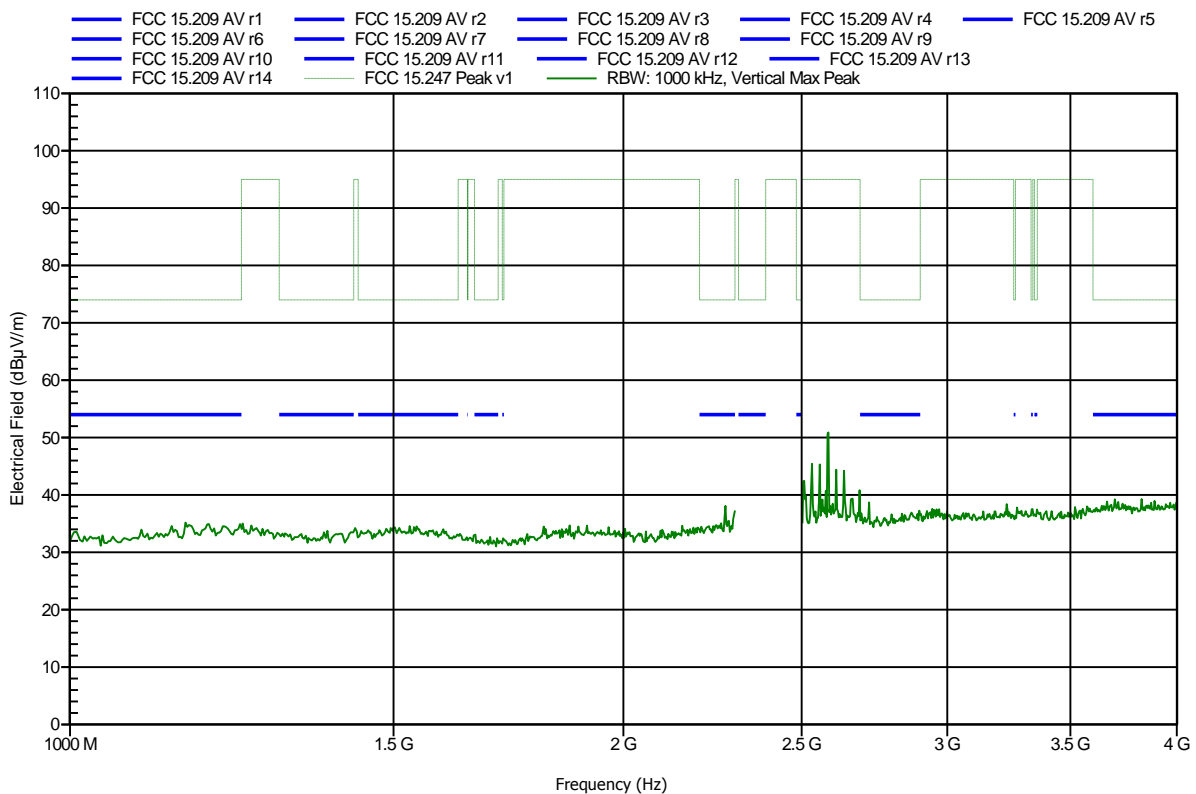


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 31

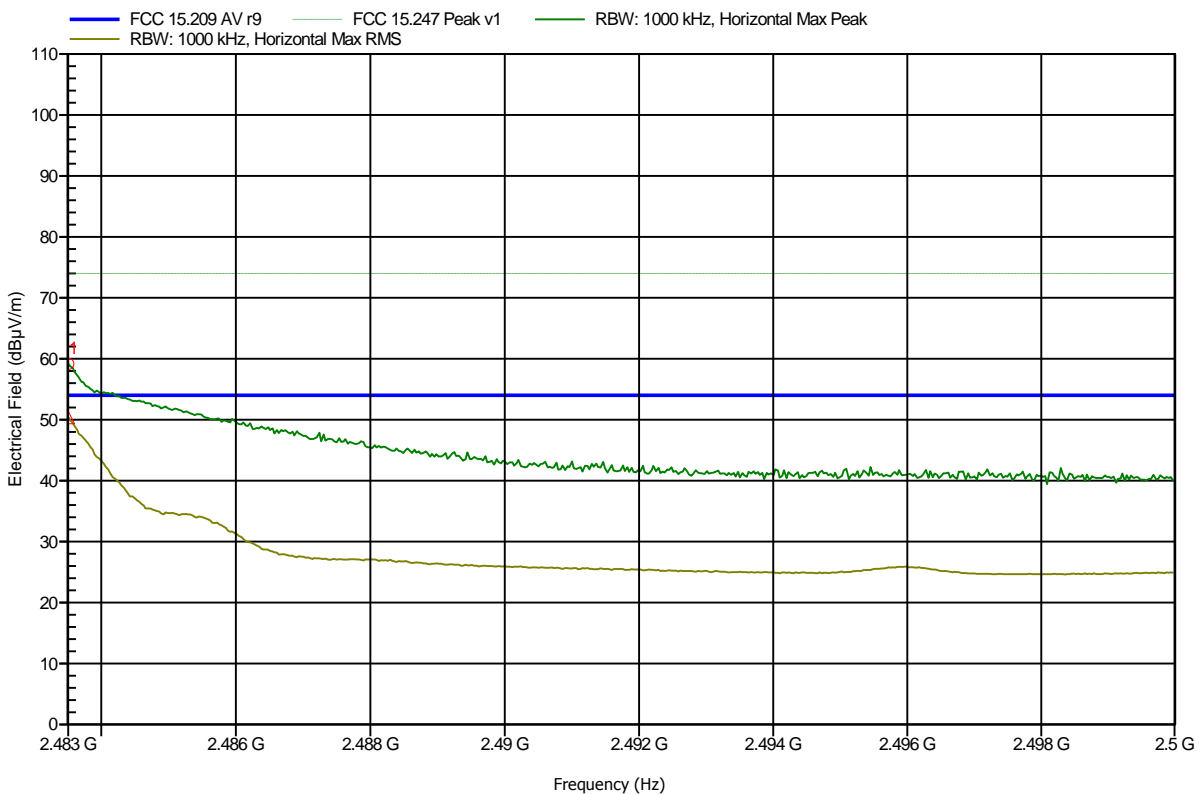


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note: upper bandedge

Index 28



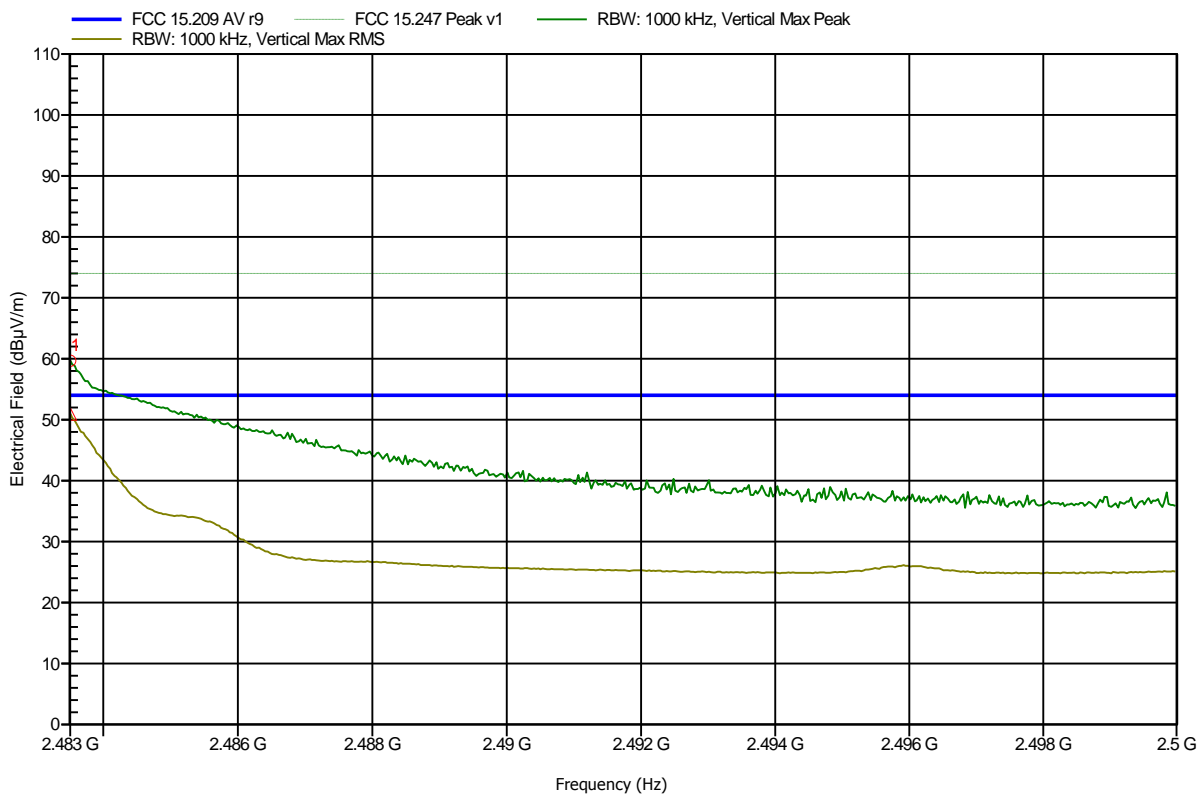
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.4835 GHz	59.16 dBµV/m	74 dBµV/m	-14.84 dB	Pass
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.4835 GHz	50.37 dBµV/m	54 dBµV/m	-3.63 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note: upper bandedge

Index 32



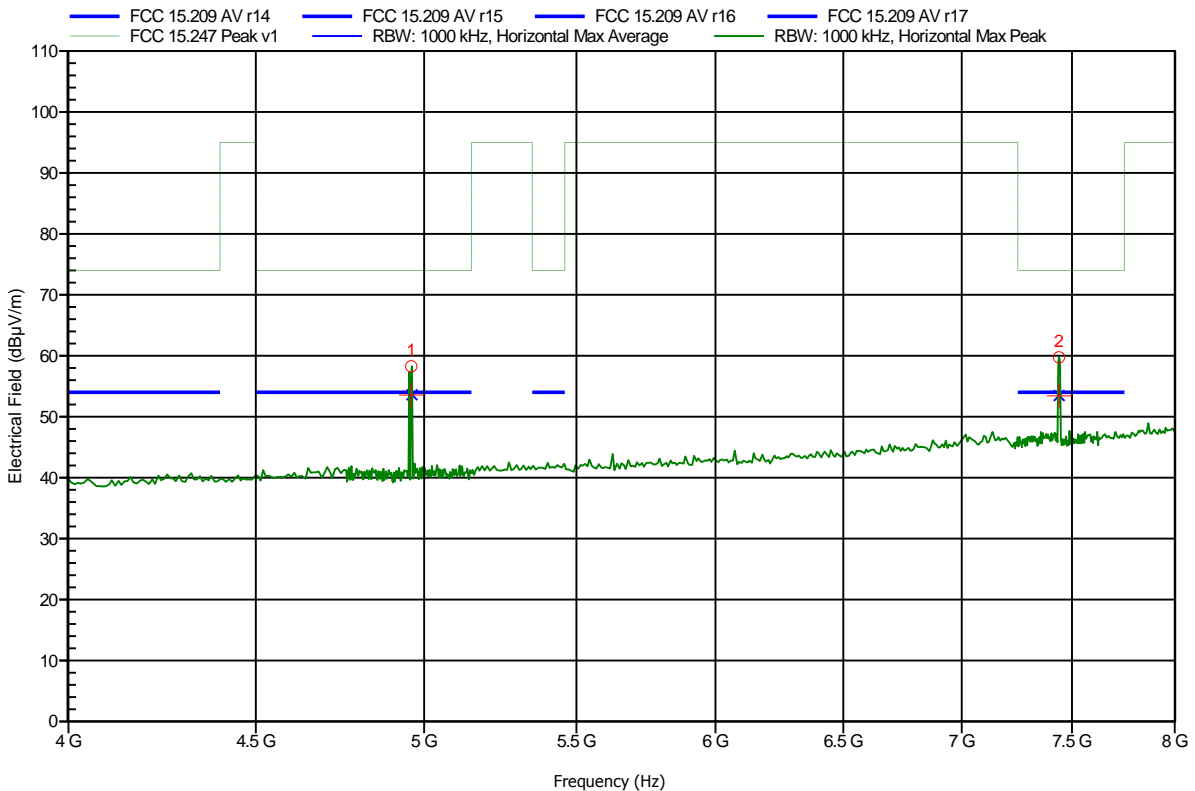
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.4835 GHz	59.67 dBµV/m	74 dBµV/m	-14.33 dB	Pass
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.4835 GHz	50.95 dBµV/m	54 dBµV/m	-3.05 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.96 GHz	58.28 dBµV/m	74 dBµV/m	-15.72 dB	Pass
7.44 GHz	59.74 dBµV/m	74 dBµV/m	-14.26 dB	Pass

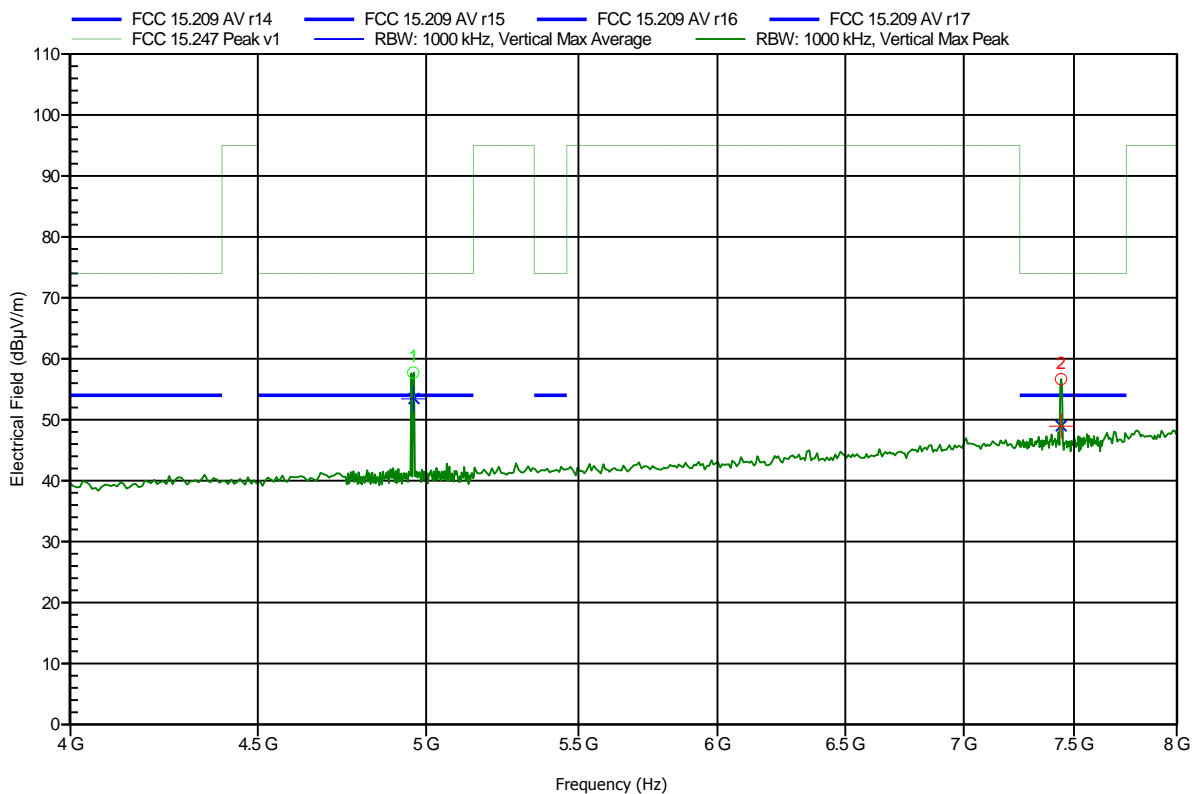
Frequency	Average	Average Limit	Average Difference	Average Status
4.96 GHz	53.6 dBµV/m	54 dBµV/m	-0.4 dB	Pass
7.44 GHz	53.47 dBµV/m	54 dBµV/m	-0.53 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 33



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.96 GHz	57.72 dBµV/m	74 dBµV/m	-16.28 dB	Pass
7.44 GHz	56.66 dBµV/m	74 dBµV/m	-17.34 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
4.96 GHz	53.47 dBµV/m	54 dBµV/m	-0.53 dB	Pass
7.44 GHz	48.99 dBµV/m	54 dBµV/m	-5.01 dB	Pass

Test Report No.: G0M-1308-3117-TFC247B-V01

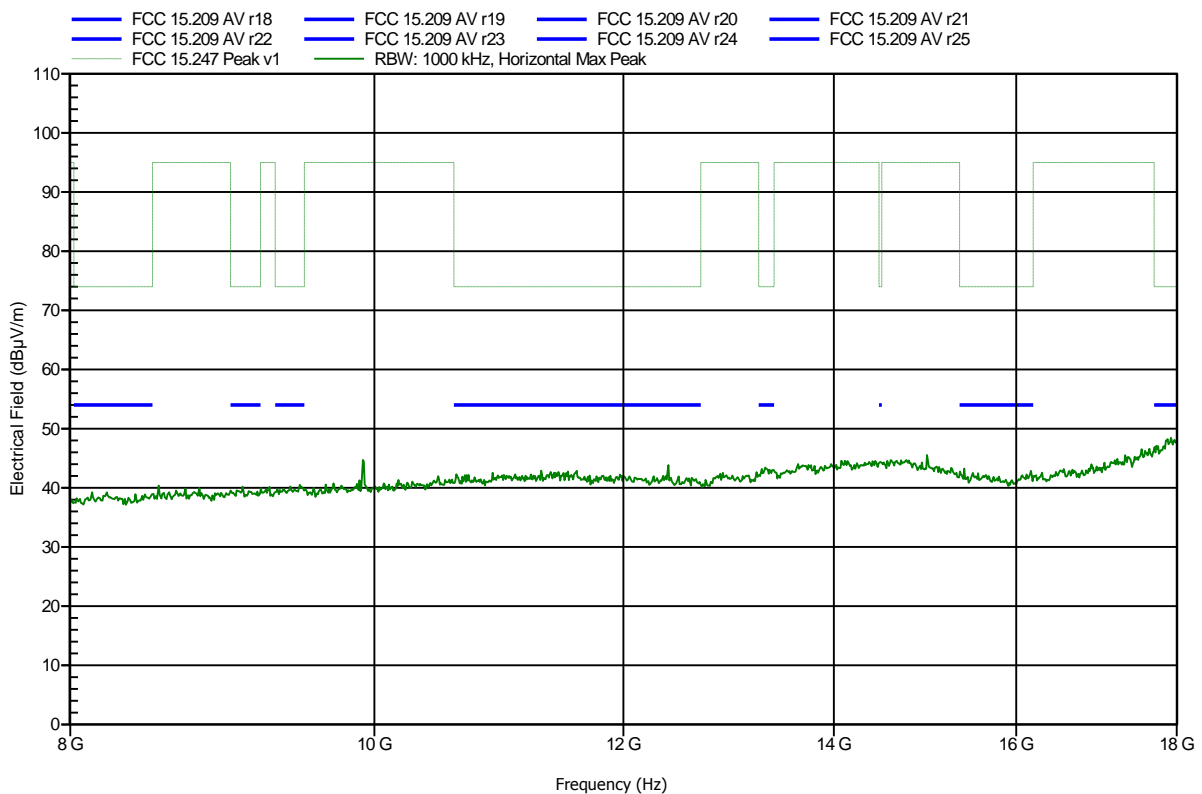
 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-29
 Note:

Index 61

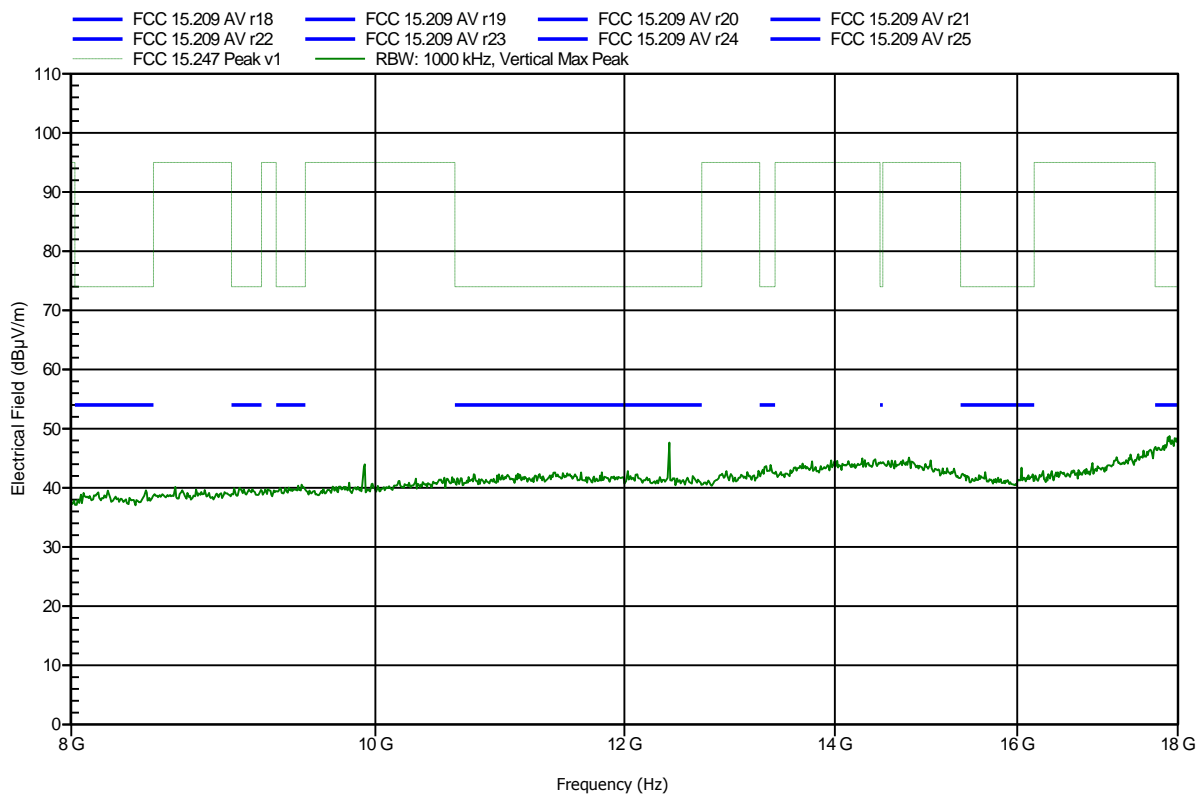


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 100 cm converted to 3m
 Mode: TX; basic, DH5; 2480 MHz
 Test Date: 2013-08-29
 Note:

Index 63

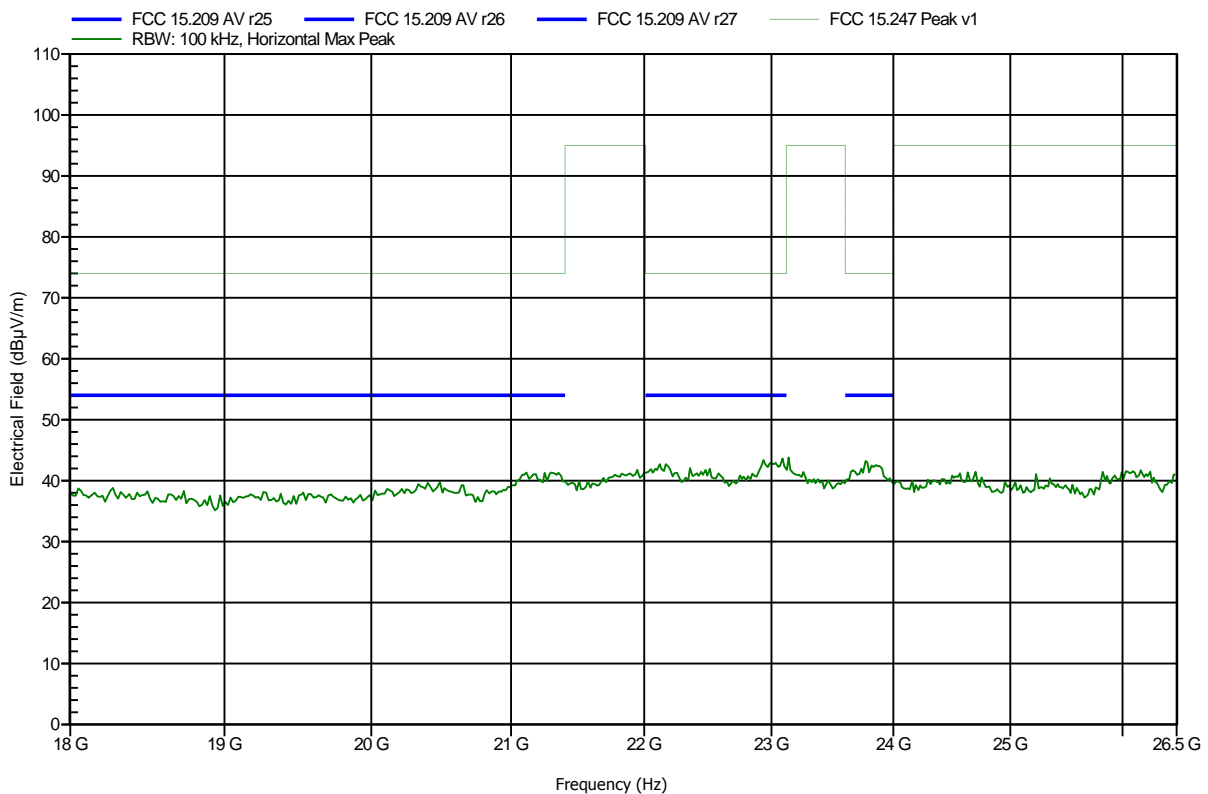


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	100 cm
Mode:	TX; basic, DH5; 2480 MHz
Test Date:	2013-08-29
Note:	

Index 62

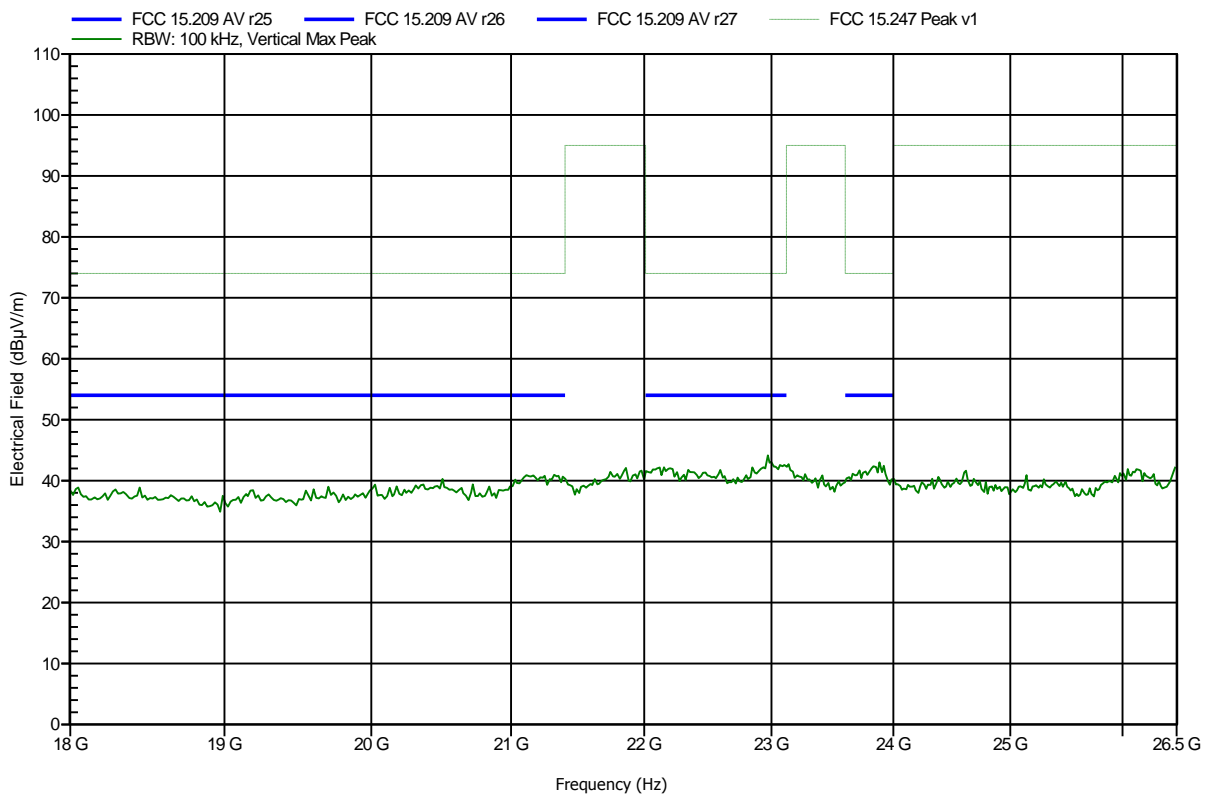


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	100 cm
Mode:	TX; basic, DH5; 2480 MHz
Test Date:	2013-08-29
Note:	

Index 64

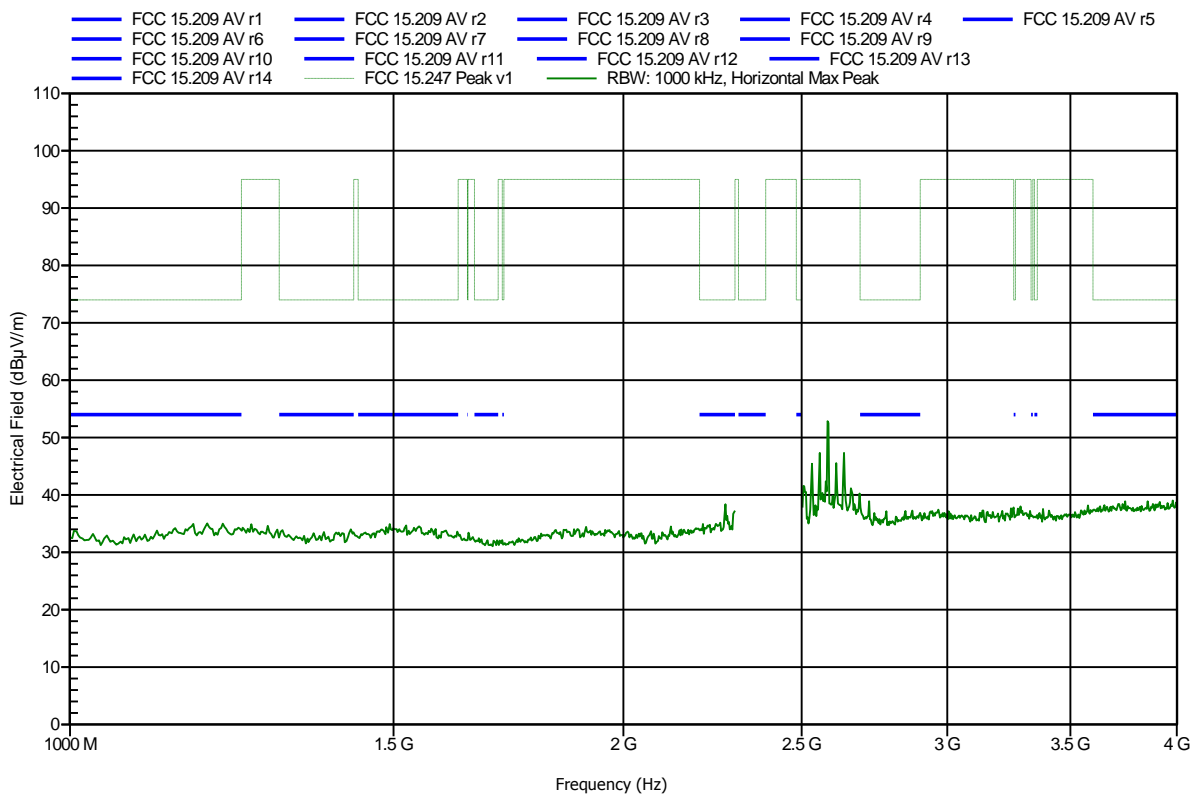


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 35

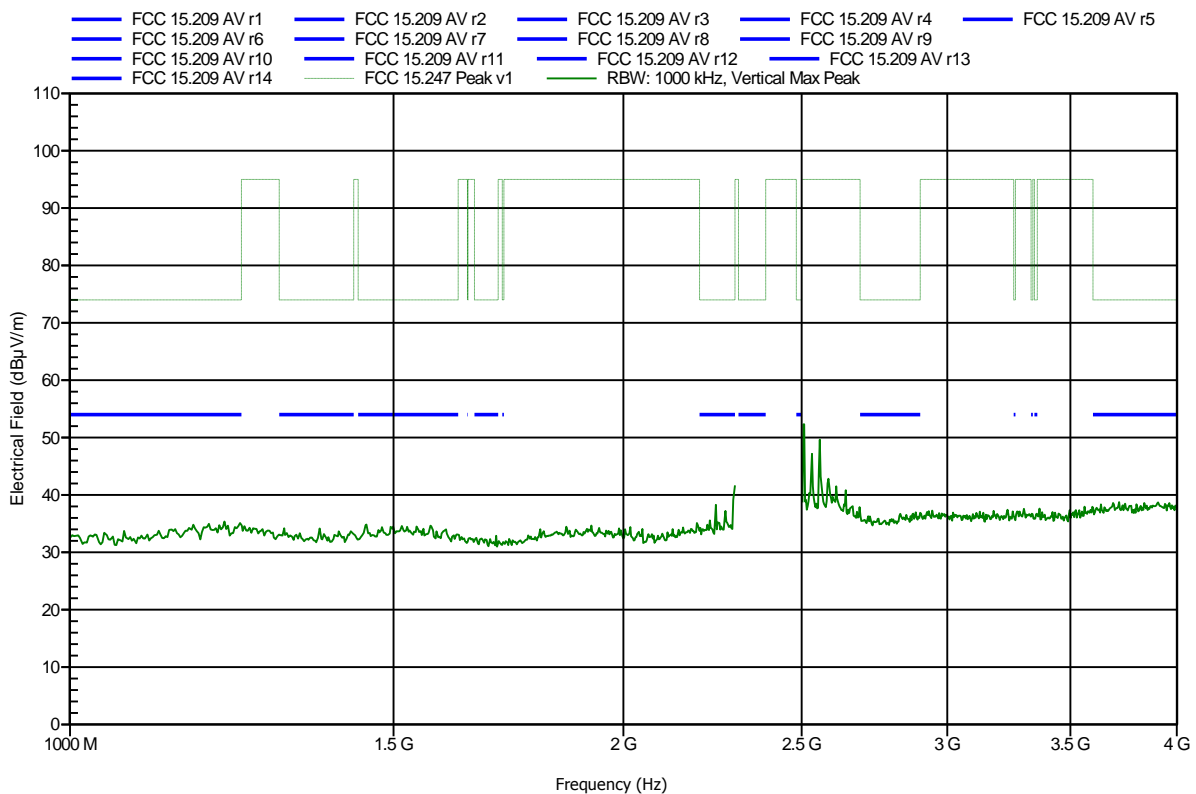


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 38

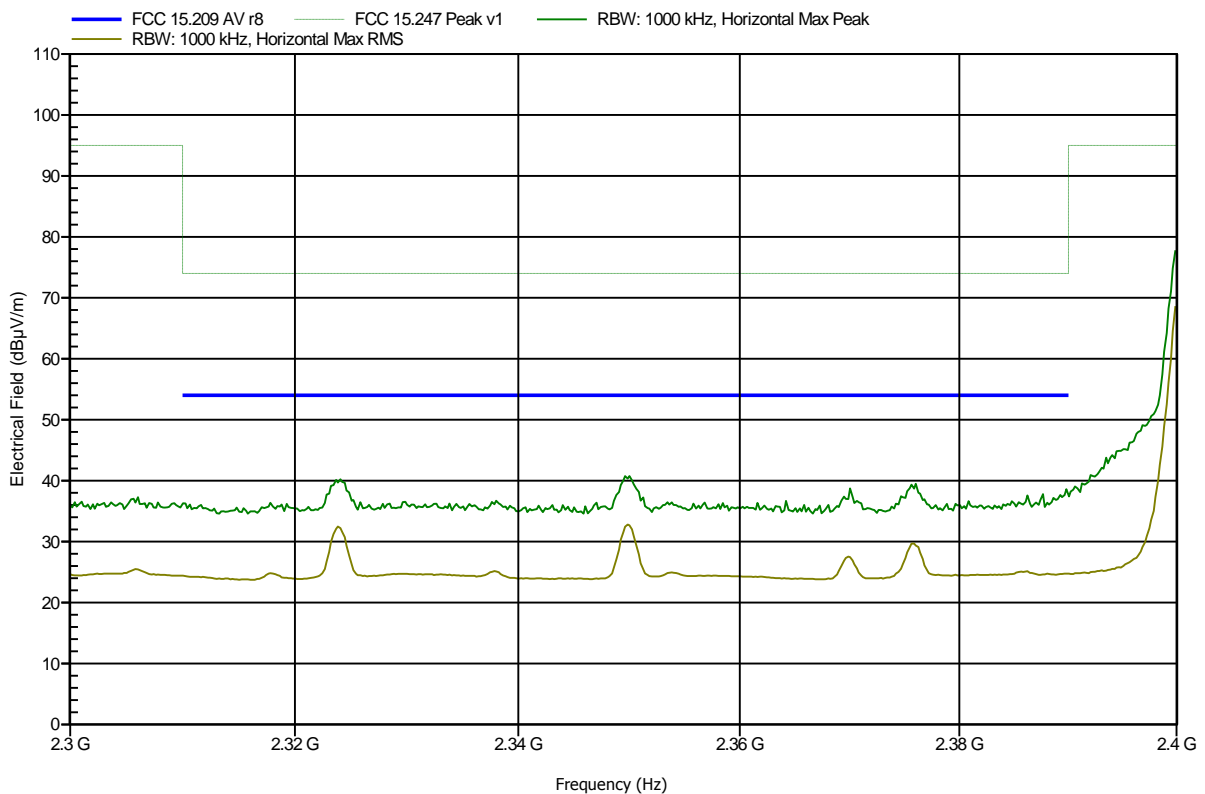


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; EDR, 3DH5; 2402 MHz
Test Date:	2013-08-28
Note:	lower bandedge

Index 41

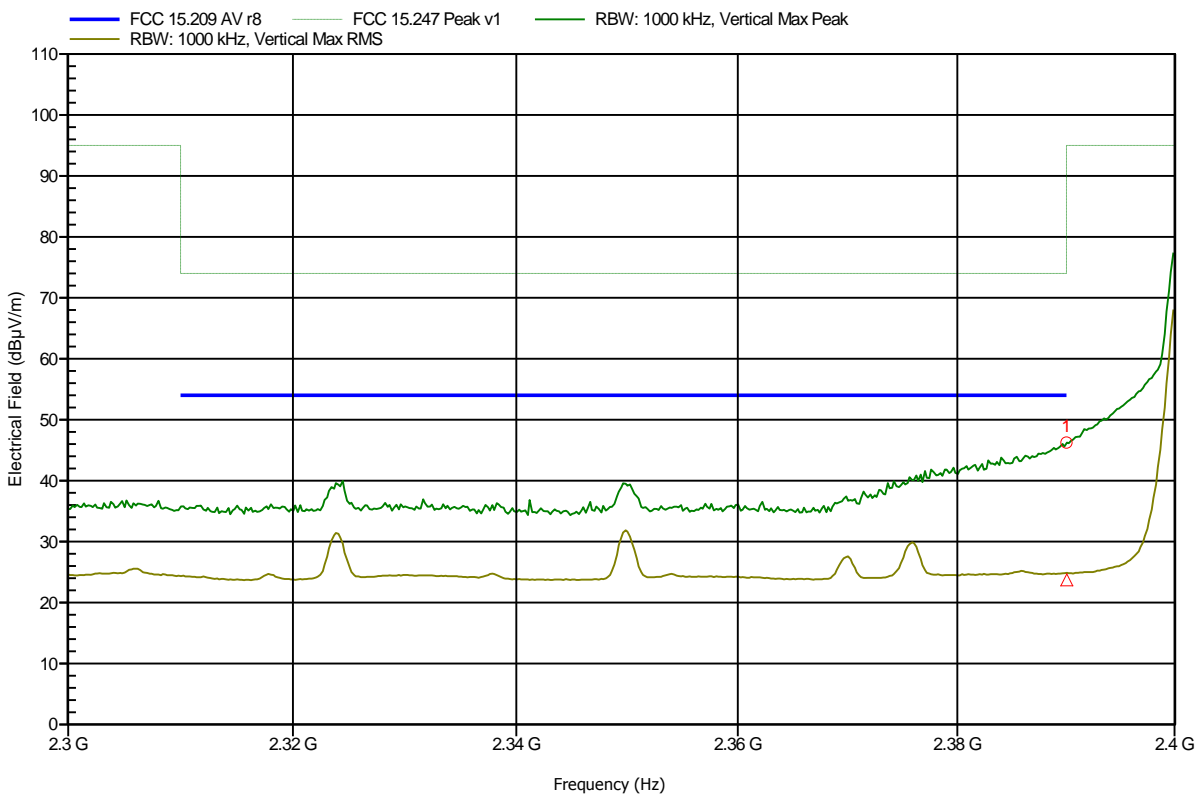


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2402 MHz
 Test Date: 2013-08-28
 Note: lower bandedge

Index 39



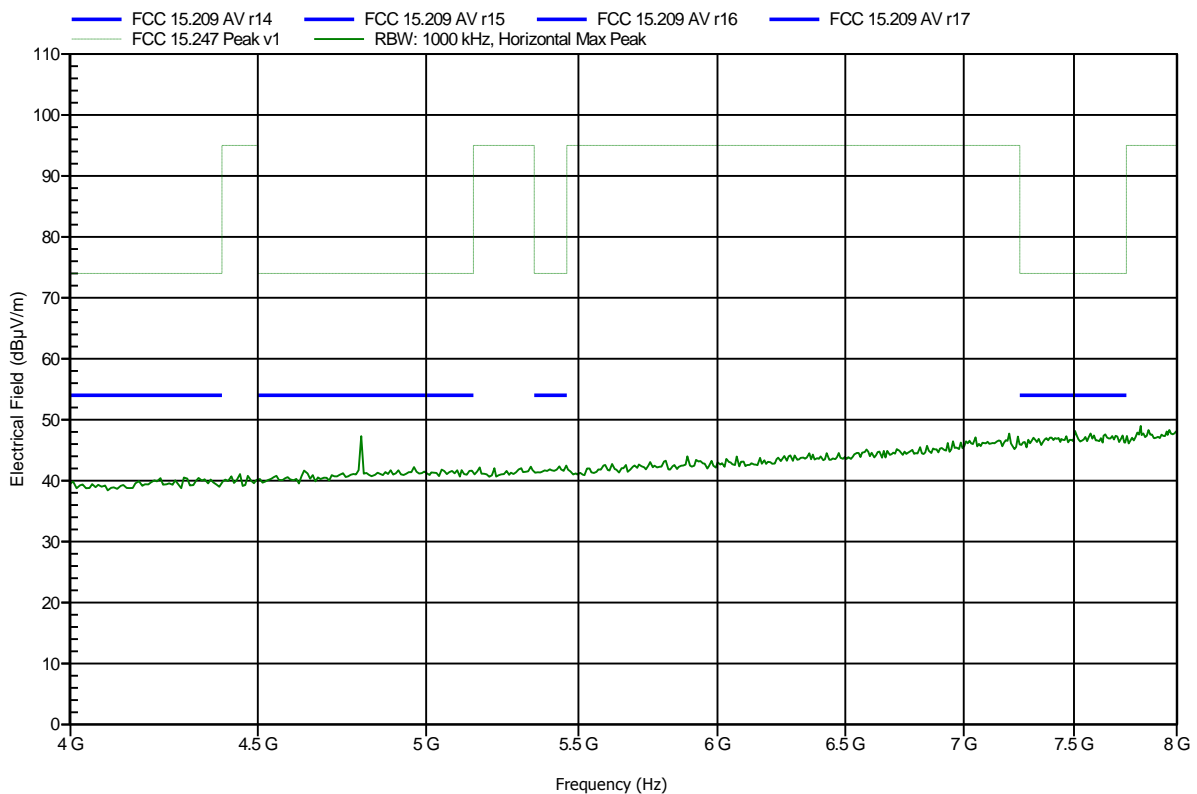
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.39 GHz	46.25 dBµV/m	74 dBµV/m	-27.75 dB	Pass
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.39 GHz	23.78 dBµV/m	54 dBµV/m	-30.22 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 42

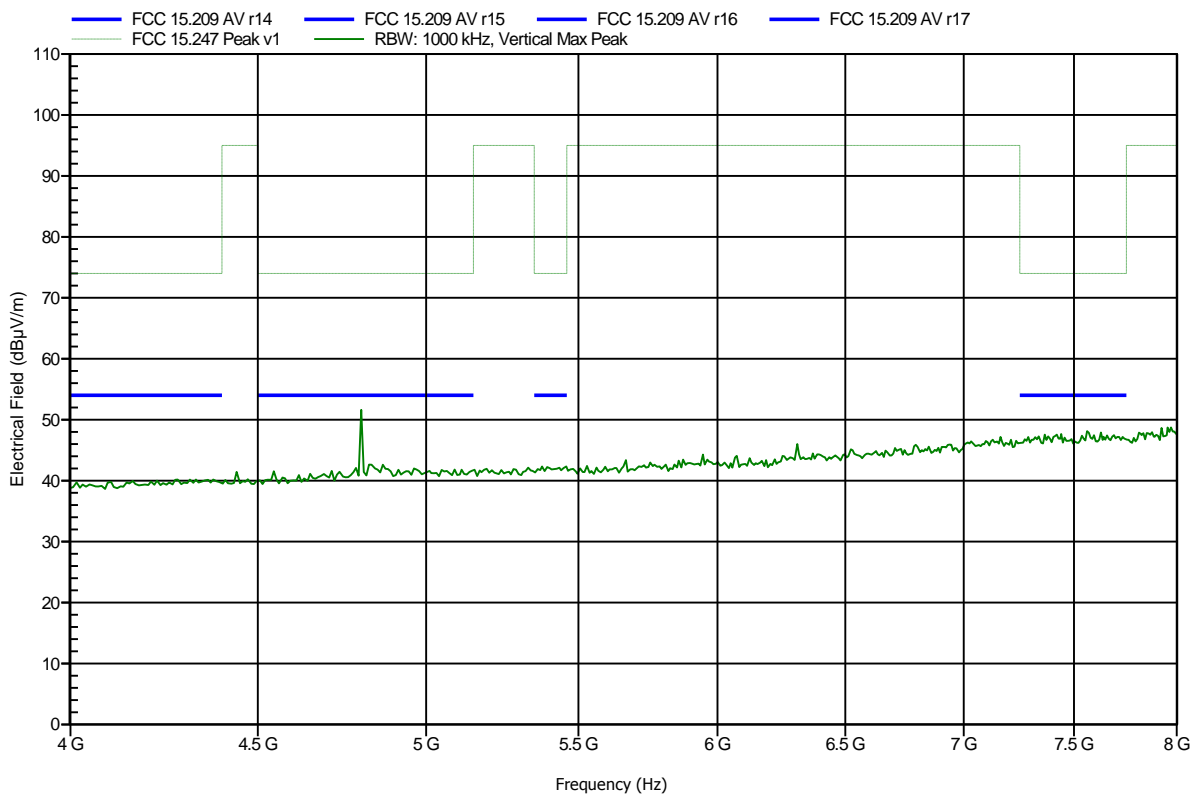


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2402 MHz
 Test Date: 2013-08-28
 Note:

Index 40

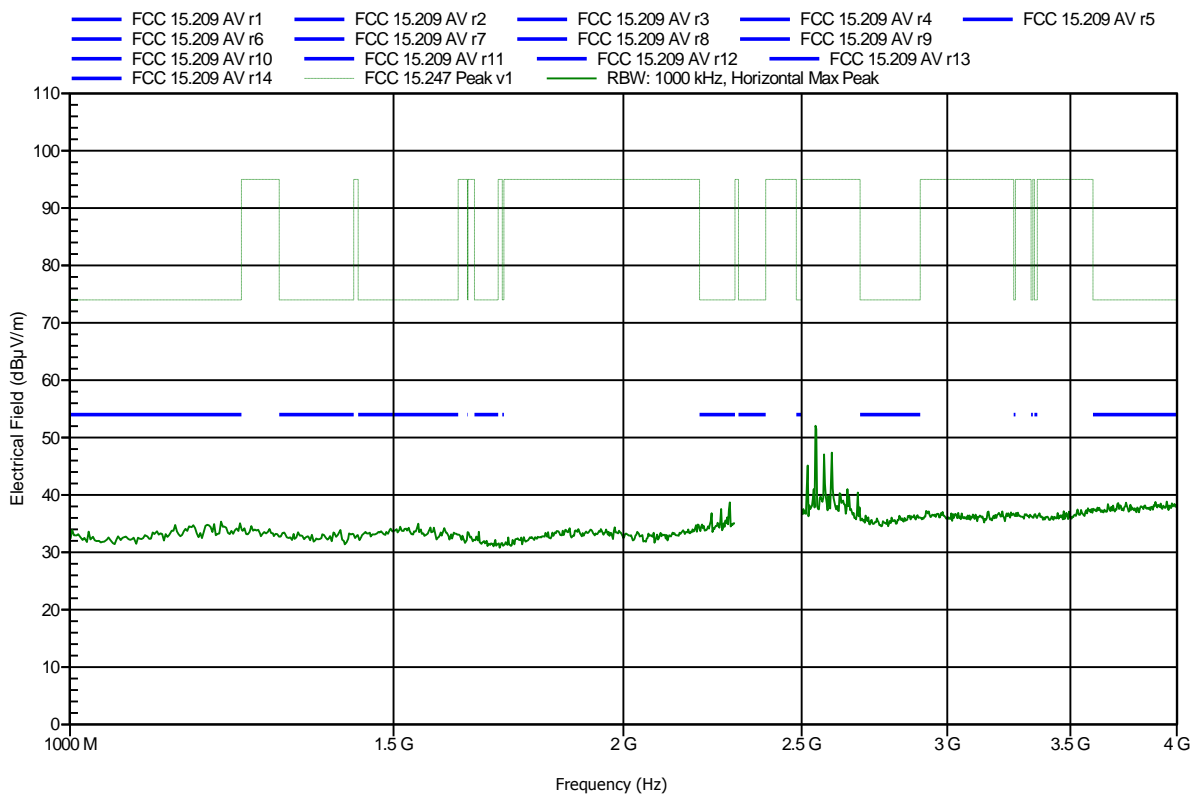


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 43

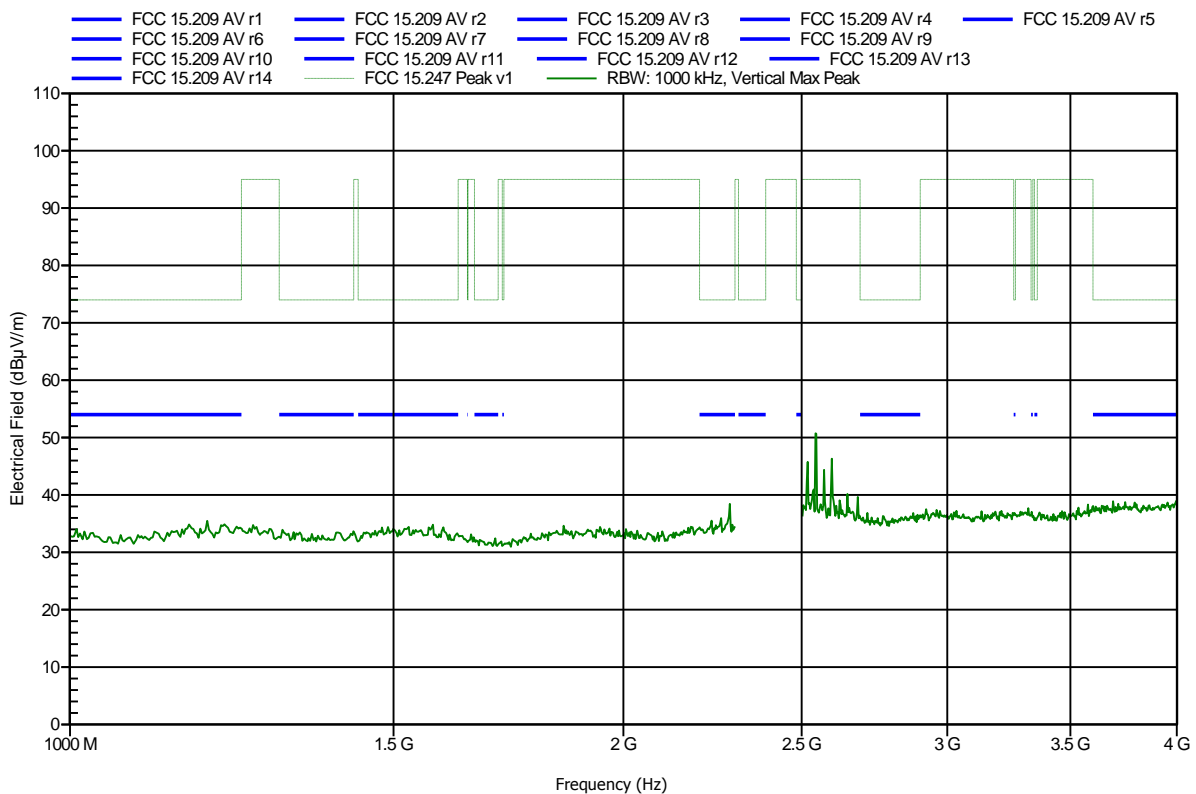


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 45

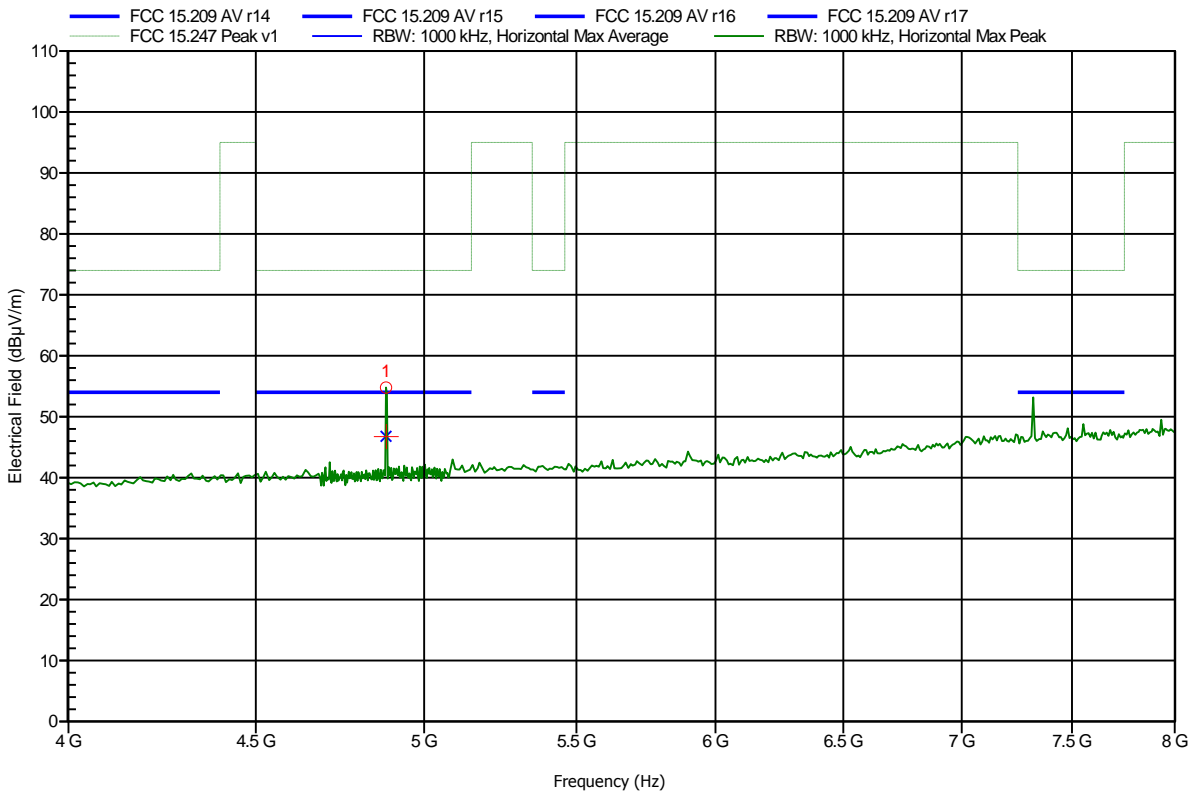


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 44



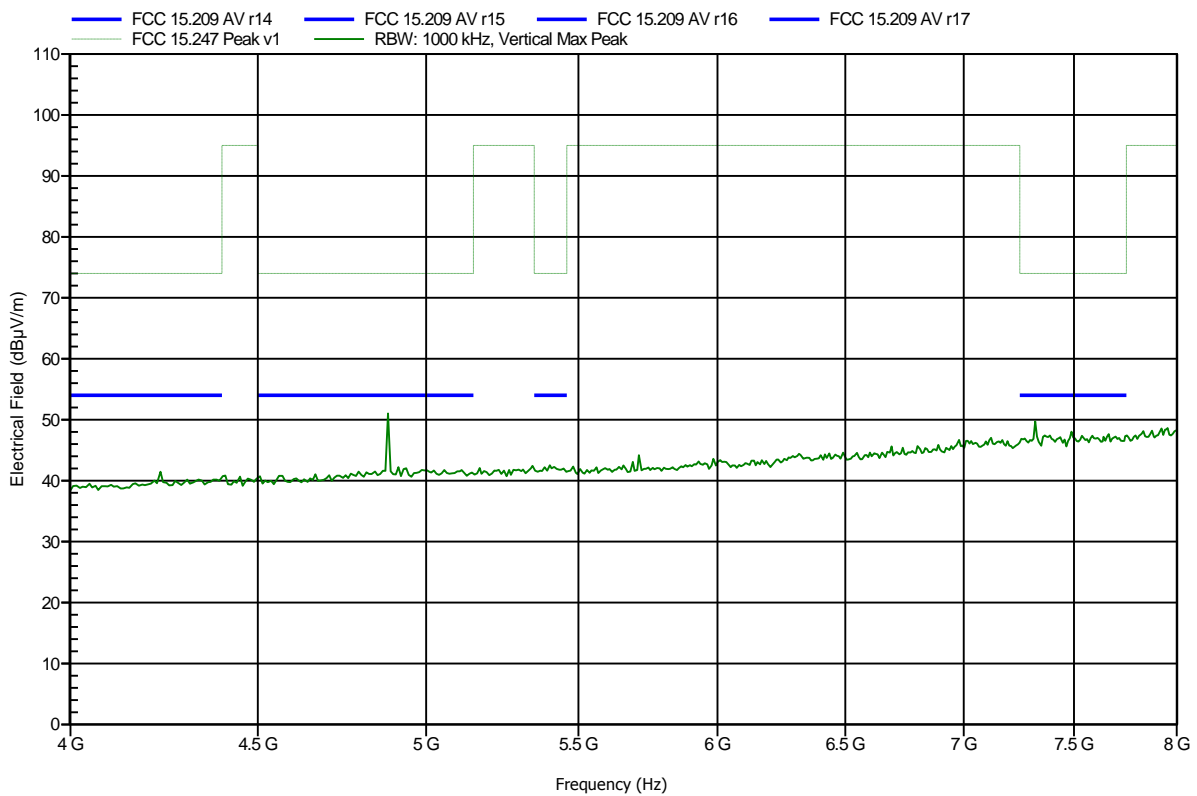
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.882 GHz	54.78 dBµV/m	74 dBµV/m	-19.22 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
4.882 GHz	46.79 dBµV/m	54 dBµV/m	-7.21 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2441 MHz
 Test Date: 2013-08-28
 Note:

Index 46

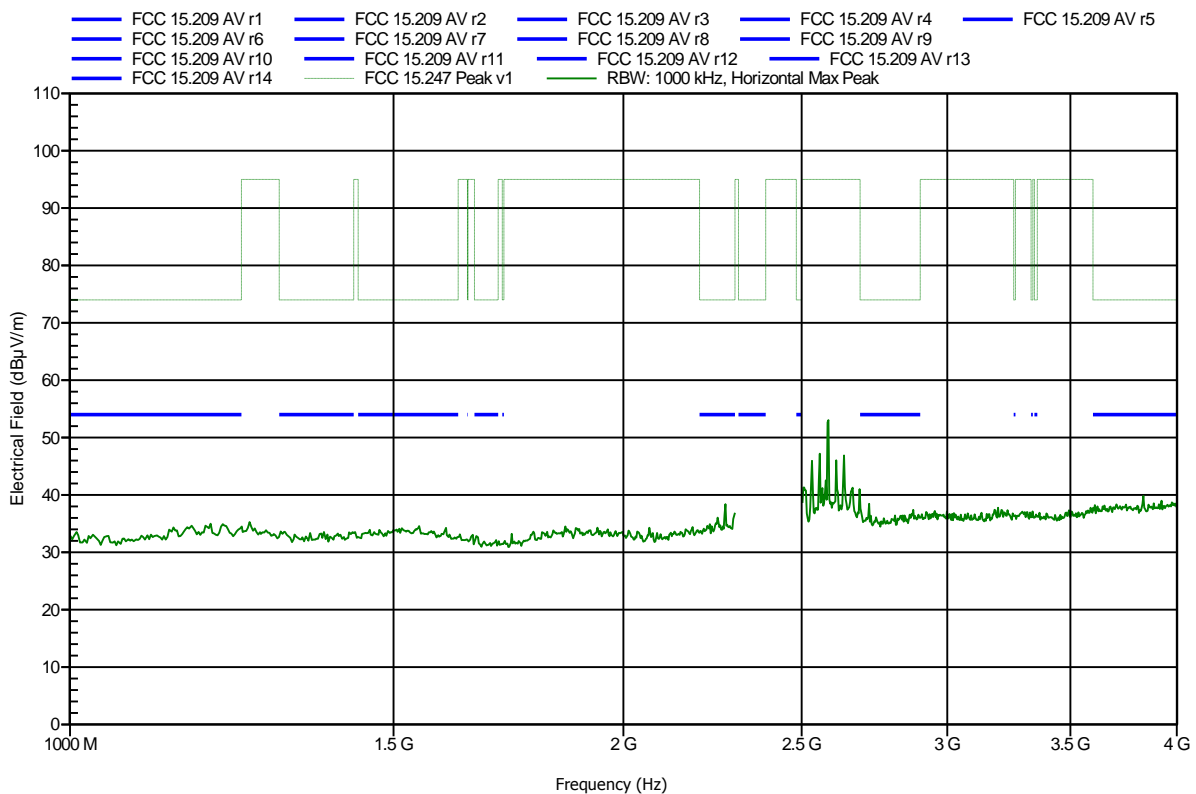


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 47

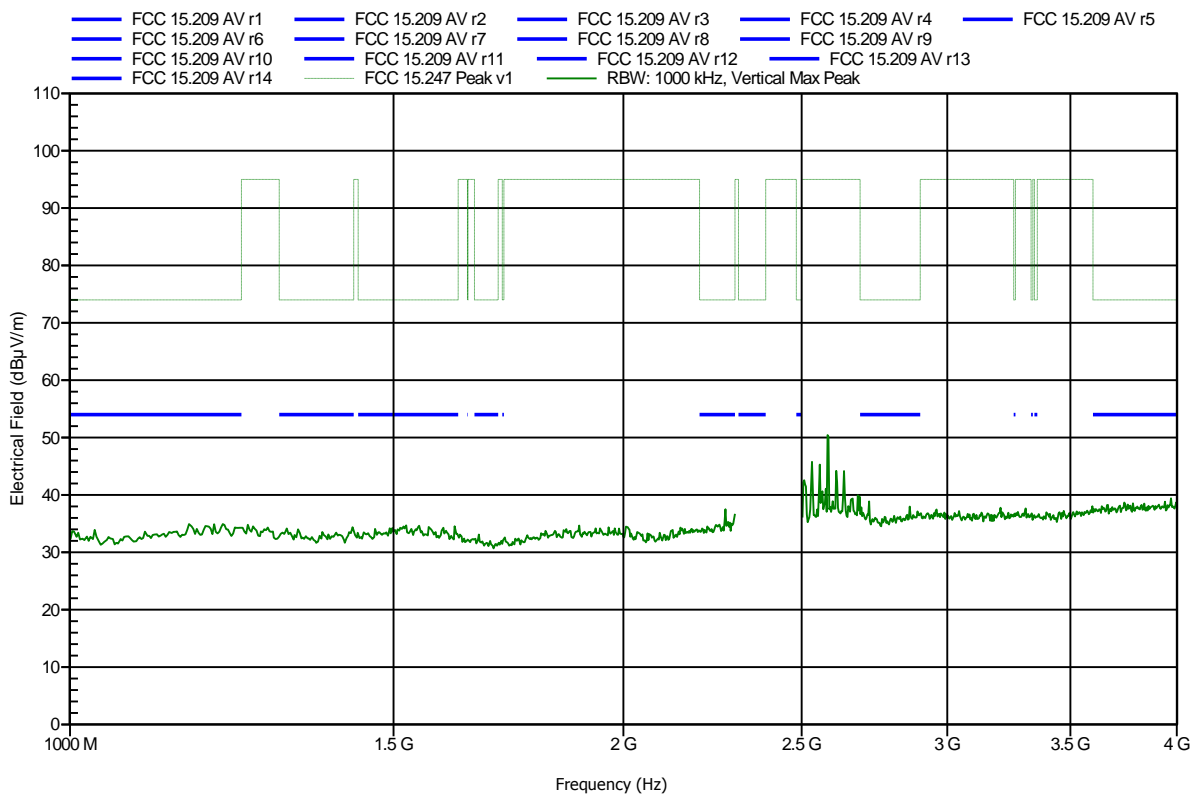


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 50

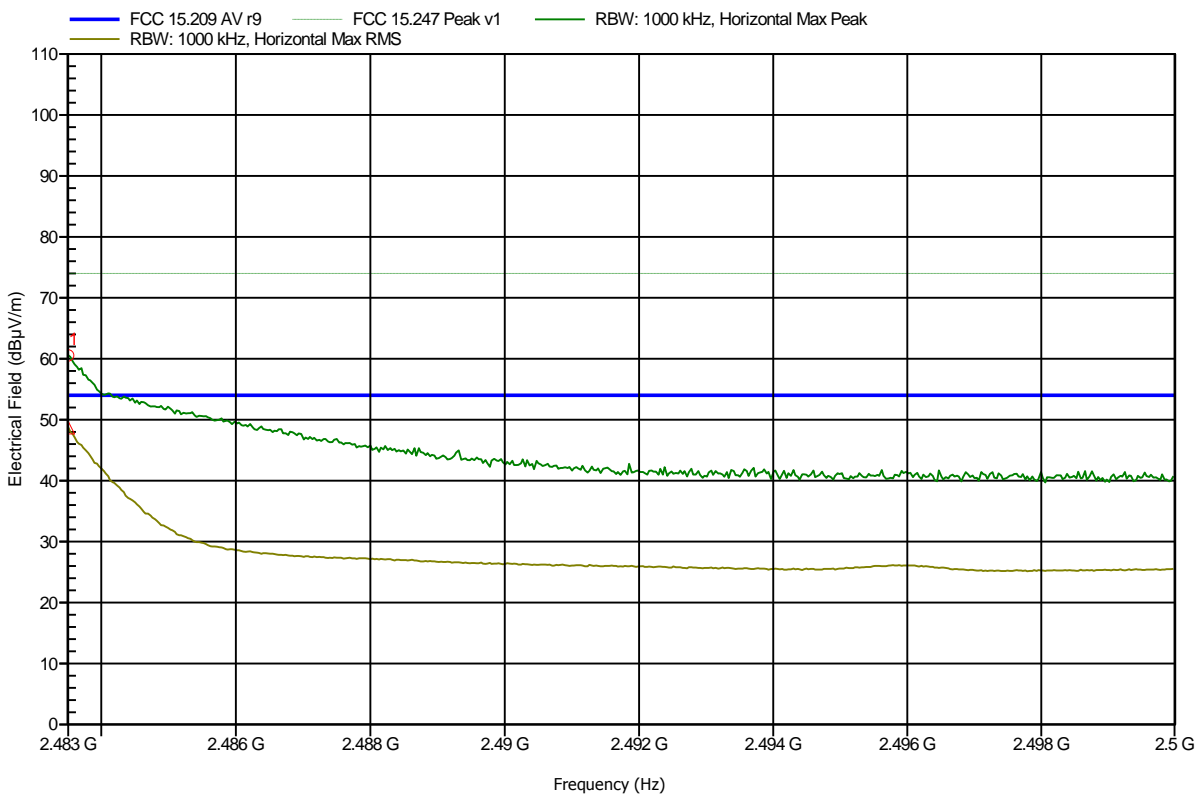


Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note: upper bandedge

Index 48



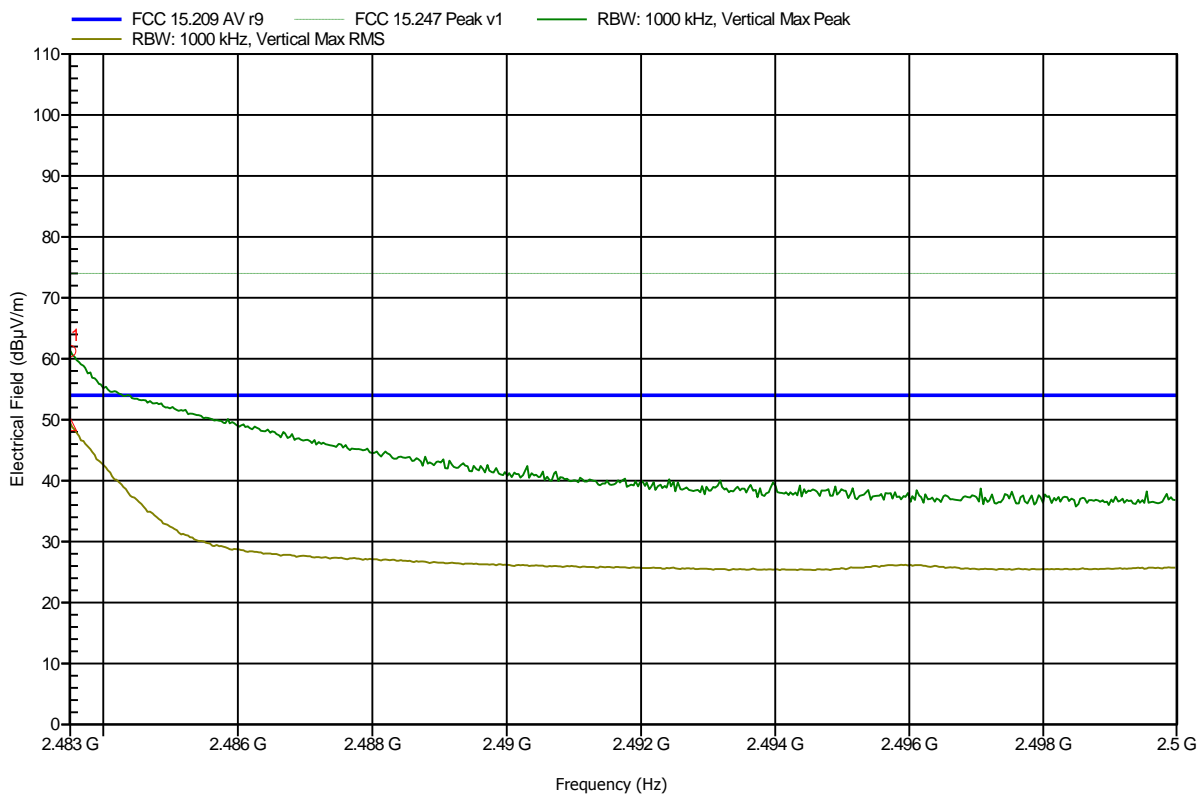
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.4835 GHz	60.54 dBµV/m	74 dBµV/m	-13.46 dB	Pass
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.4835 GHz	48.69 dBµV/m	54 dBµV/m	-5.31 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note: upper bandedge

Index 51



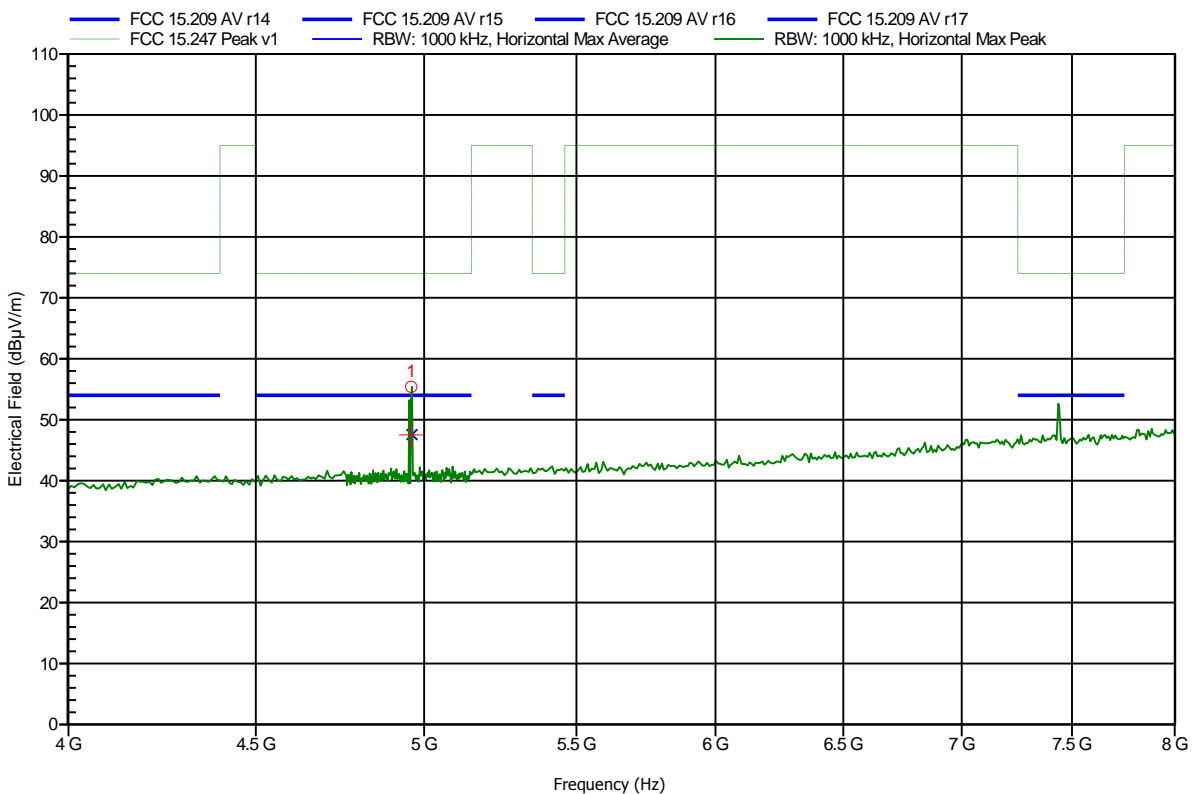
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.4835 GHz	61.27 dBµV/m	74 dBµV/m	-12.73 dB	Pass
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.4835 GHz	49.23 dBµV/m	54 dBµV/m	-4.77 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 49



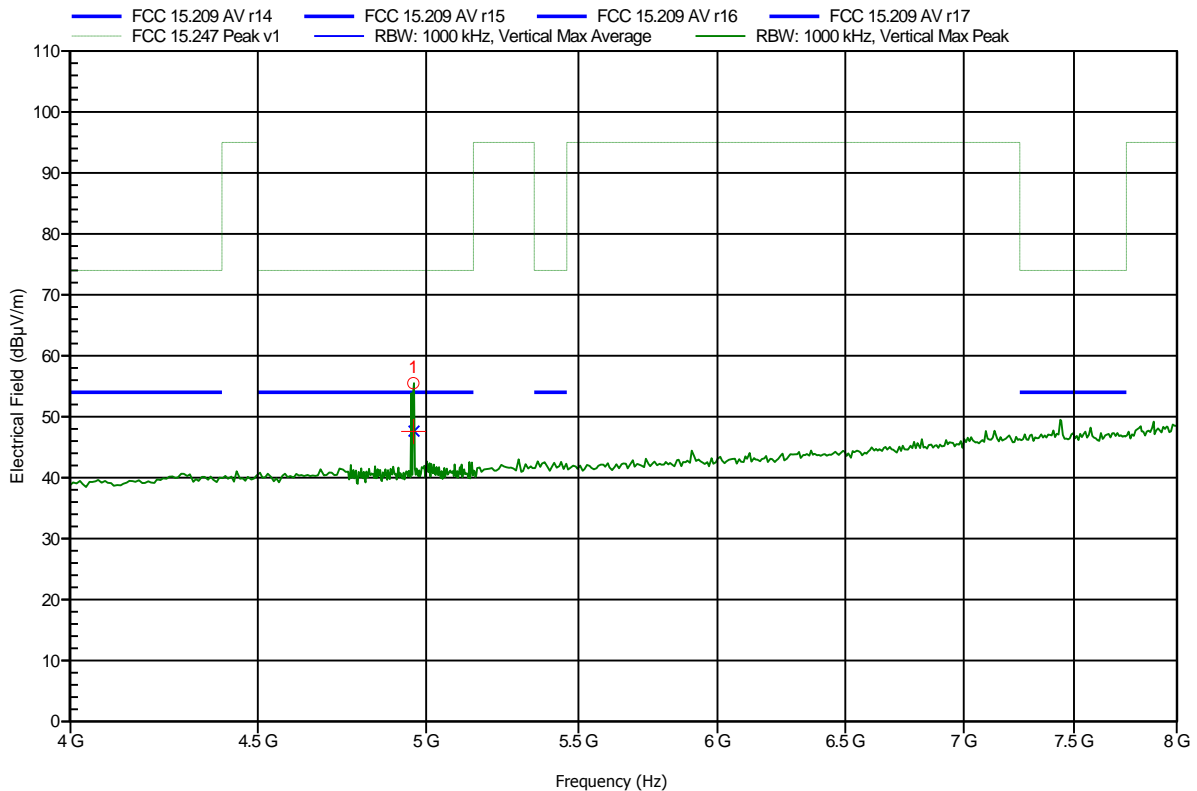
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.96 GHz	55.4 dBµV/m	74 dBµV/m	-18.6 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
4.96 GHz	47.56 dBµV/m	54 dBµV/m	-6.44 dB	Pass

Spurious emissions according to FCC 15.247

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: TX; EDR, 3DH5; 2480 MHz
 Test Date: 2013-08-28
 Note:

Index 52



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.96 GHz	55.5 dBµV/m	74 dBµV/m	-18.5 dB	Pass
Frequency	Average	Average Limit	Average Difference	Average Status
4.96 GHz	47.63 dBµV/m	54 dBµV/m	-6.37 dB	Pass

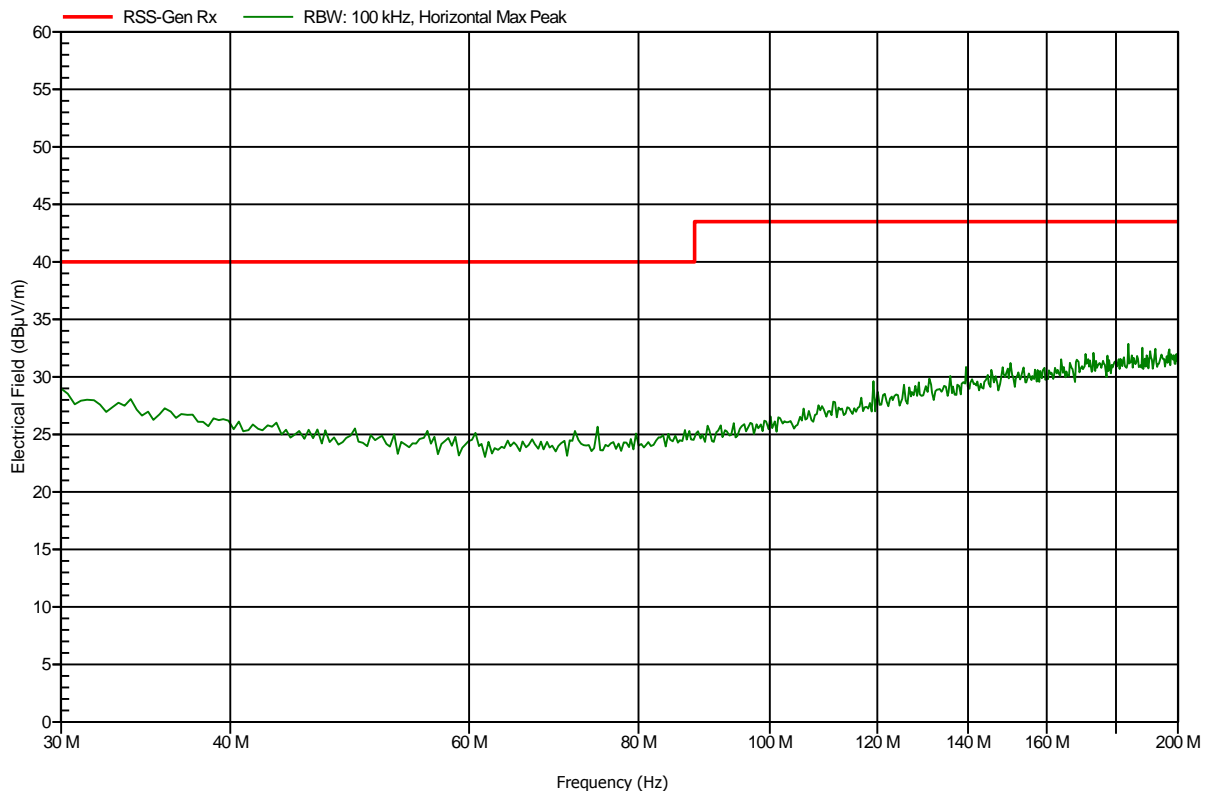
ANNEX B Receiver radiated spurious emissions

Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: RX; scan mode
 Test Date: 2013-08-29
 Note:

Index 15

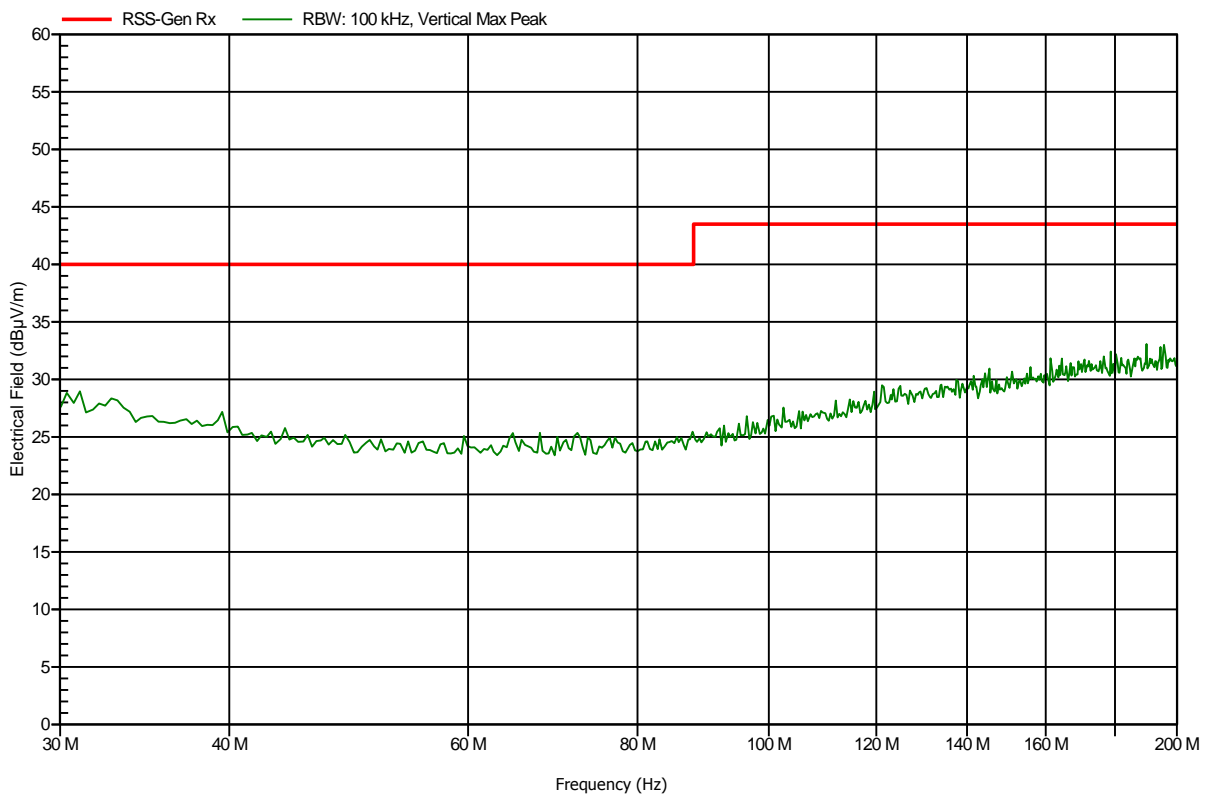


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 16

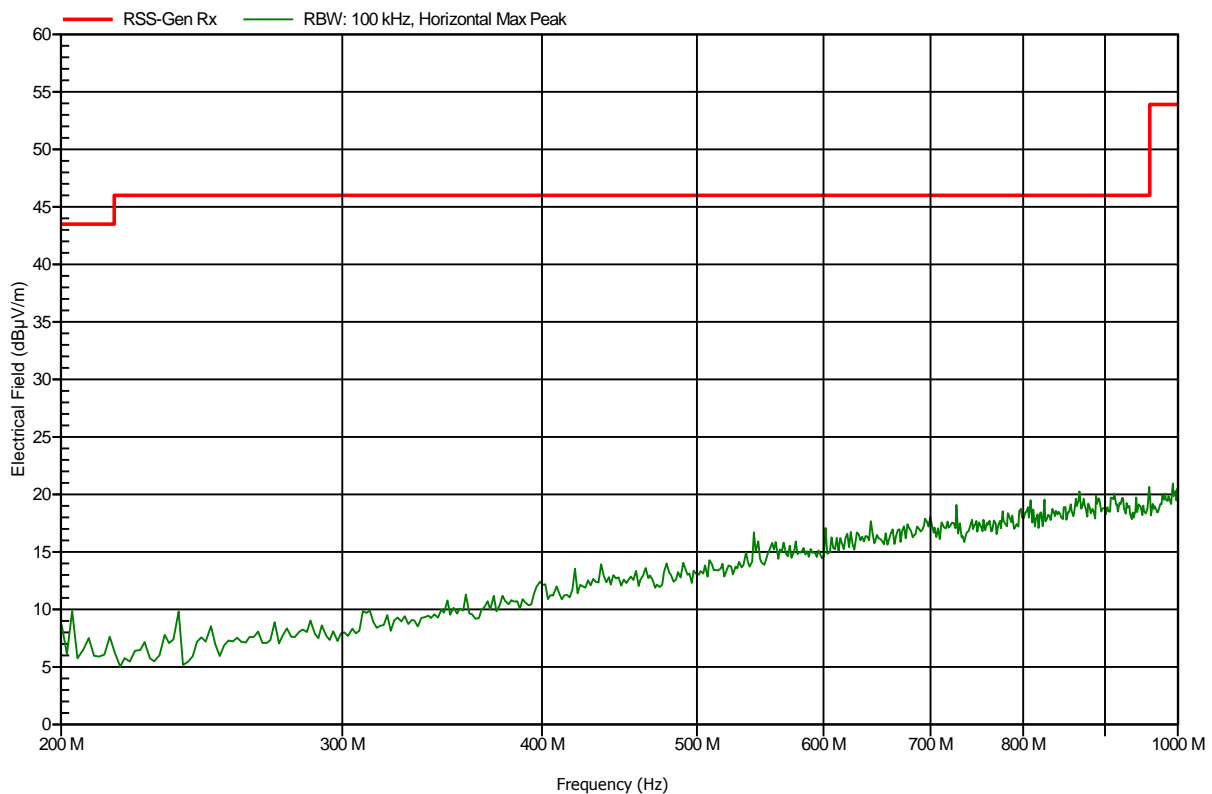


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 17

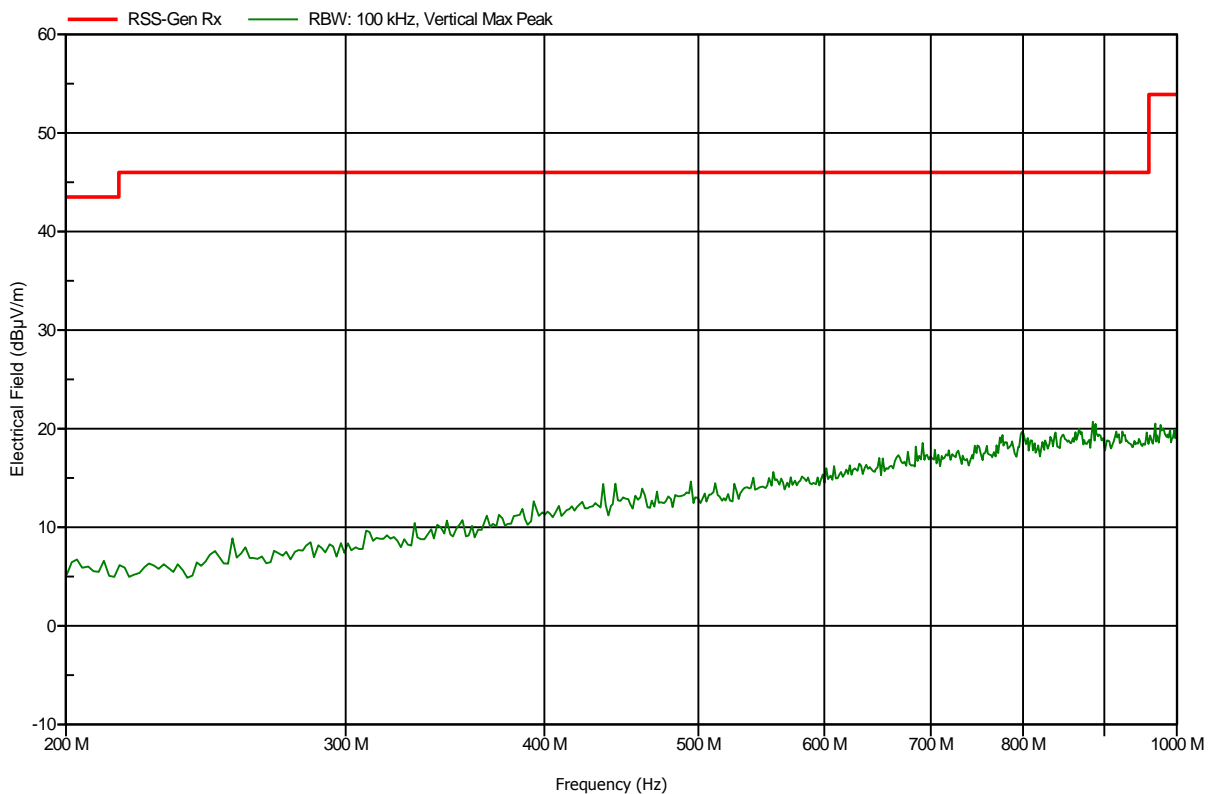


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 18

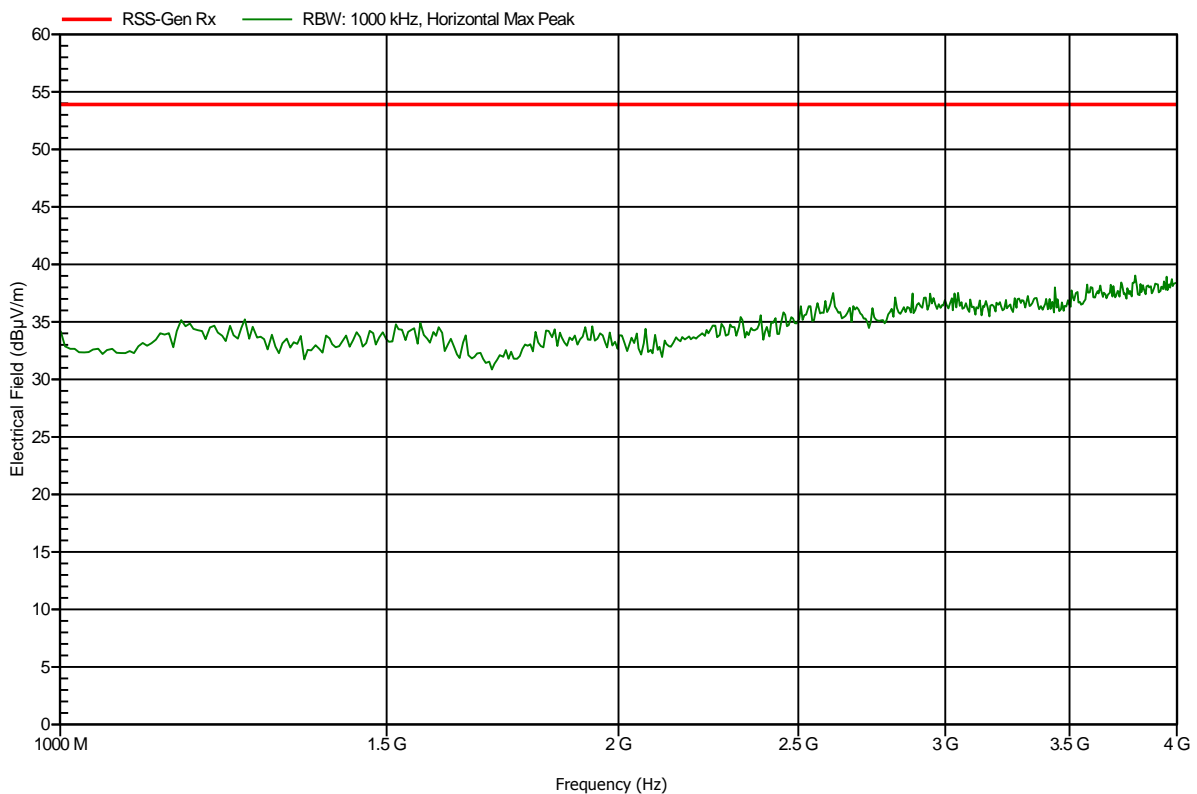


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 19

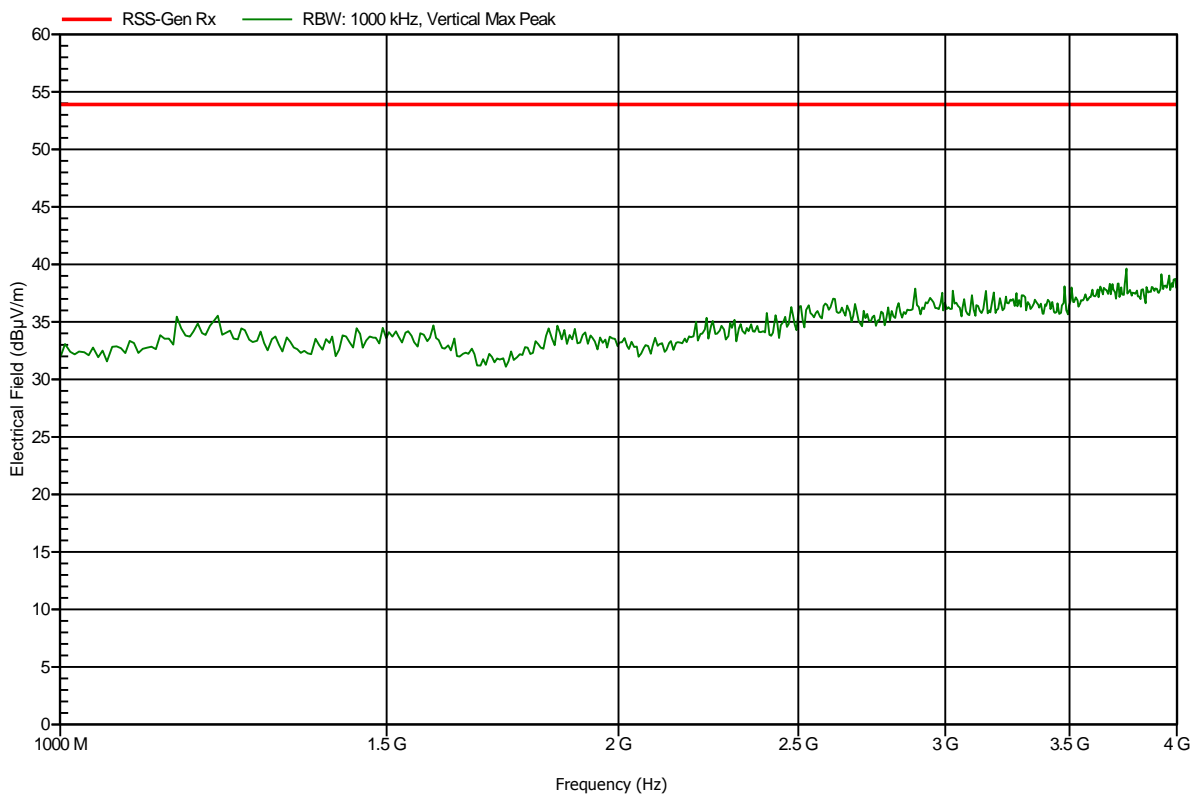


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 21

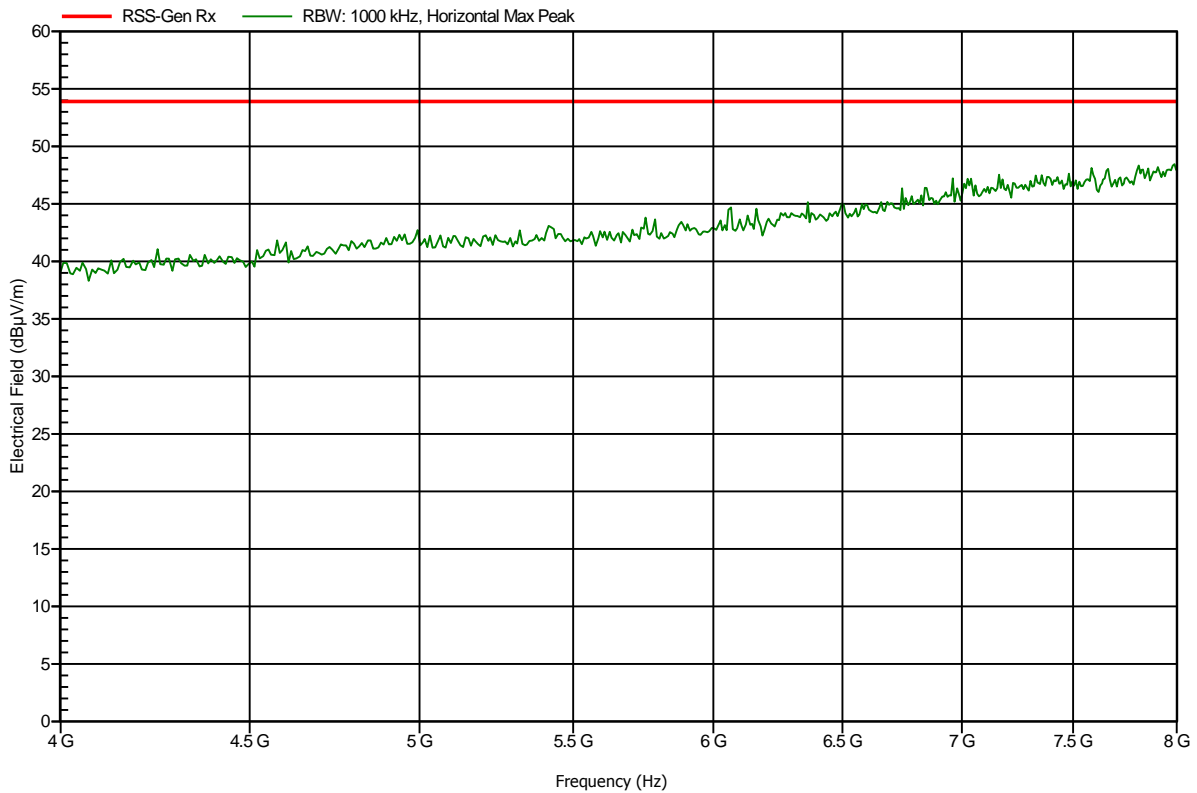


Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer: GN Netcom A/S
 EUT Name: Bluetooth Headset
 Model: OTE16
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Treffke
 Test Conditions: Tnom: 25°C, Vnom: 3,7 V DC (battery)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: RX; scan mode
 Test Date: 2013-08-29
 Note:

Index 20



Spurious emissions according to RSS-GEN

Project number: G0M-1308-3117

Manufacturer:	GN Netcom A/S
EUT Name:	Bluetooth Headset
Model:	OTE16
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 25°C, Vnom: 3,7 V DC (battery)
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	RX; scan mode
Test Date:	2013-08-29
Note:	

Index 22

