Test Report issued under the responsibility of:

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EMC TEST REPORT

FCC 47 CFR Part 15B
Industry Canada RSS-Gen

Electromagnetic compatibility - Unintentional radiators

Report Reference No. ..... :	G0M21010-3765 – C-1
Testing Laboratory ..... :	Eurofins Product Service GmbH
Address ..... :	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation ..... :	FCC Filed Test Laboratory, Reg.-No.: 96970 A2LA Accredited Testing Laboratory, Certificate No.: 1983.01
Applicant's name ..... :	HARMAN Automotive
Address ..... :	Becker-Göring-Str. 16 76307 Karlsbad Germany
Test specification:	
Standard..... :	47 CFR Part 15 Subpart B RSS-Gen, Issue 3, 2010-12 ANSI C63.4:2009
Equipment under test (EUT):	
Product description	Headphone
Model No.	P214
Hardware version	serial production
Firmware / Software version	serial production
Contains	FCC-ID: T8GP214 IC: 6434A-P214
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 ..... : 07.10.2010

Date (s) of performance of tests ..... : 15.07.2011

Compiled by ..... : Christian Weber

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

Approved by (+ signature) ..... : Jens Zimmermann .....

Date of issue ..... : 26.07.2011

Total number of pages ..... : 14

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.

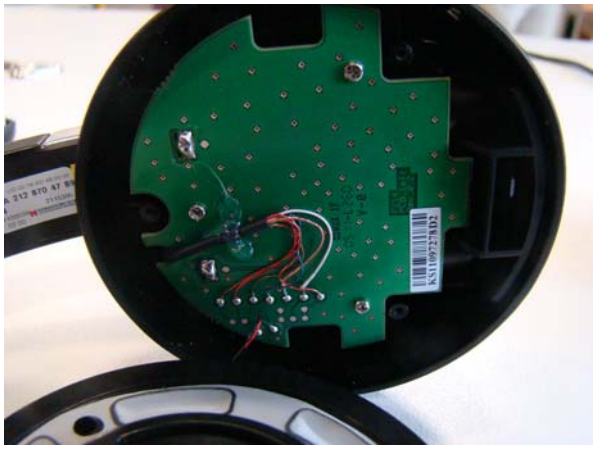
Additional comments:

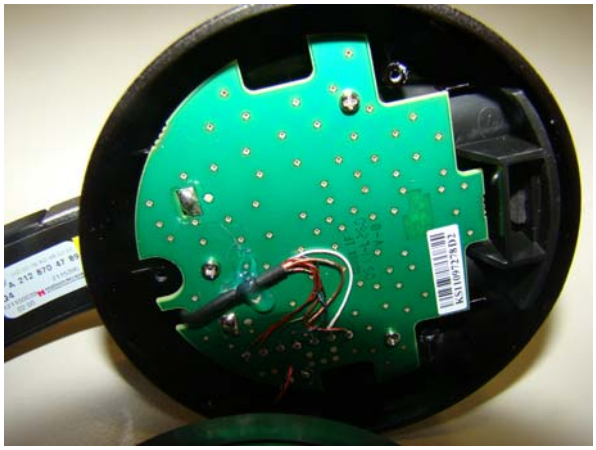
REPORT INDEX

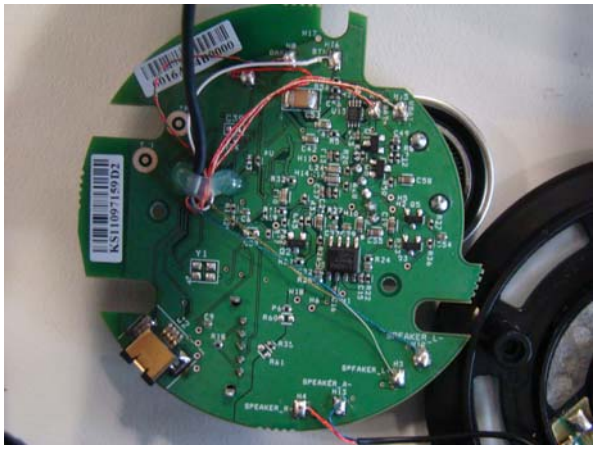
1 Equipment (Test item) Description:

Description	Headphone
Model	P214
Serial number	Unspecified
Hardware version	serial production
Software / Firmware version	serial production
Contains FCC-ID	T8GP214
Contains IC	6434A-P214
Power supply	2.7VDC (Battery only)
AC/DC-Adaptor	None
Highest emission frequency	Fmax [MHz] = 22.576649
Device classification	Class B
Equipment type	Tabletop
Number of tested samples	1

1.1 Equipment photos

EUT	PCB
	

PCB	EUT OPEN
	

PCB	PCB
	

1.2 Supporting Equipment Used During Testing:

Product Type*	Device	Manufacturer	Model No.	Comments

***Note:** Use the following abbreviations:

AE : Auxiliary/Associated Equipment, or

SIM : Simulator (Not Subjected to Test)

CABL : Connecting cables

1.3 Test Equipment Used During Testing

Radiated emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Biconical Antenna	R&S	HK 116	Inv. No. 0012	Jan 10	Jan 13
LPD-Antenne	R&S	HL 223	Inv. No. 0295	Feb 11	Feb 13
LPD-Antenna	R&S	HL 025	Inv. No. 0512	Feb 10	Feb 13
EMI Test Receiver	R&S	ESCS30	Inv. No. 0474	Jun 11	Jun 12

2 Result Summary

FCC 47 CFR Part 15B, Industry Canada RSS-Gen				
Product Specific Standard	**Requirement – Test**	**Reference Method**	**Result**	**Remarks**
47 CFR 15.107 RSS-Gen 4.9 & 4.10	Radiated emissions	ANSI C 63.4	PASS	
47 CFR 15.109 RSS-Gen 7.2.4	AC power line conducted emissions	ANSI C63.4	N/A	
Remarks:				

3 Test Conditions and Results

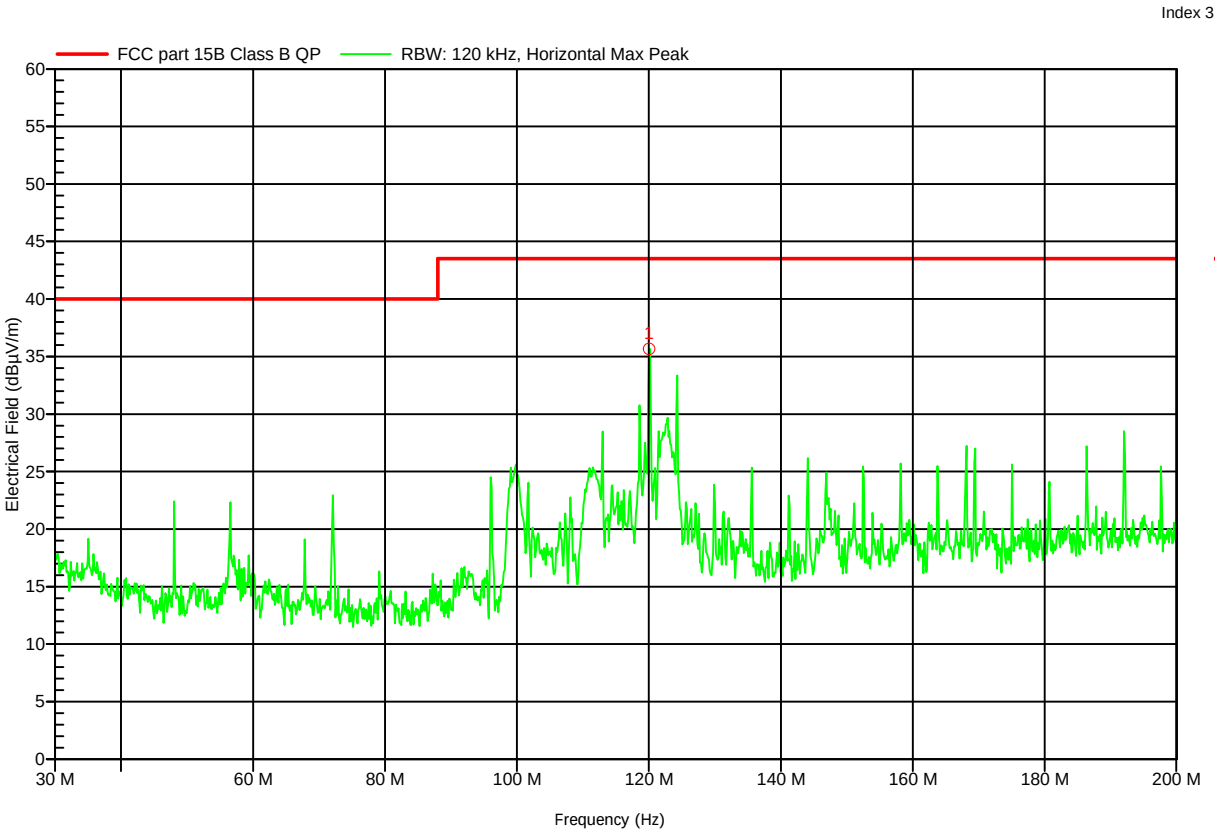
3.1 Test Conditions and Results – Radiated emissions

Radiated emissions acc. FCC 47 CFR 15.109 / IC RSS-Gen				**Verdict: PASS**
Laboratory Parameters:	Required prior to the test	During the test		
Ambient Temperature	15 to 35°C	23°C		
Relative Humidity	30 to 60%	38%		
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] = 22.576649			
Fully configured sample scanned over the following frequency range	Frequency range			
	30MHz to 1GHz			
Limits and results Class B				
Frequency [MHz]	Quasi-Peak [dBµV/m]	Result	Average [dBµV/m]	Result
30 – 88	40	PASS	-	-
88 – 216	43.5	PASS	-	-
216 – 960	46	PASS	-	-
960 – 1000	54	PASS	-	-
Comments:				

Spurious emissions under normal conditions according to FCC Part 15b

Order number: G0M21010-3765

Manufacturer:	HARMAN Automotive
EUT Name:	Headphone
Model:	P214
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 23°C, Unom: 3VDC (Battery)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3m
Mode:	active
Test Date:	15.07.2011
Note:	



Frequency
120.06 MHz

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Model:	P214
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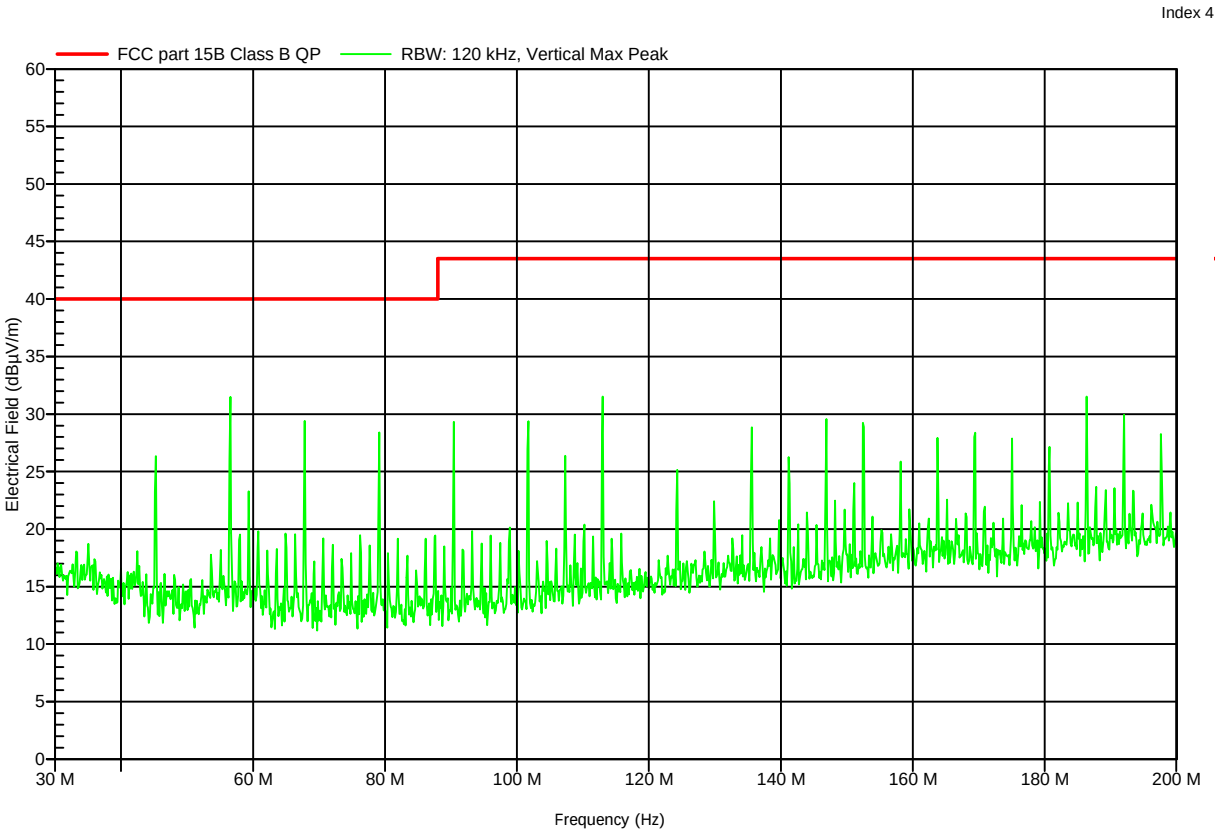
Operator:	Mr. Klein
Test Conditions:	Tnom: 23°C, Unom: 3VDC (Battery)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3m
Mode:	active
Test Date:	15.07.2011
Note:	



Spurious emissions under normal conditions according to FCC Part 15b

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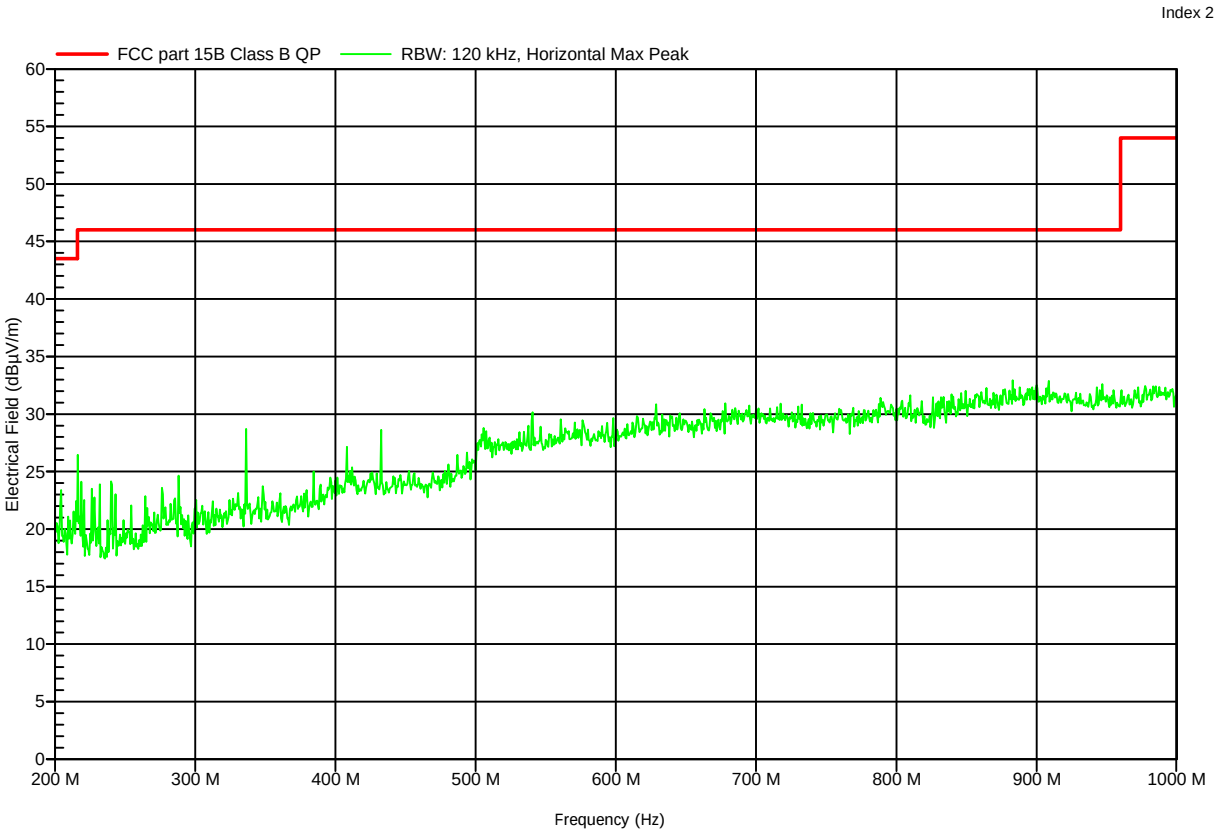
EUT Name:	Headphone
Model:	P214
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Klein
Test Conditions:	Tnom: 23°C, Unom: 3VDC (Battery)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3m
Mode:	active
Test Date:	15.07.2011
Note:	



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