

Prüfbericht - Nr.: 14013983 001		Seite 1 von 10	
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Auftraggeber: <i>Applicant</i>		Classic Tech Development Ltd. 12/F., Yu Xiu Industrial Building, 87 Hung To Road, Kwun Tong, Kowloon Hong Kong	
Gegenstand der Prüfung: 900MHz Receiver Headphone <i>Test item</i>			
Bezeichnung: <i>Identification</i>		Serien-Nr.: Engineering sample <i>Serial No.</i>	
HP3392			
Wareneingangs-Nr.: <i>Receipt No.</i>		Eingangsdatum: 01.08.2006 <i>Date of receipt</i>	
060801015			
Prüfört: <i>Testing location</i>		TÜV Rheinland Hong Kong Ltd. Unit 8, 25 th Floor, Skyline Tower, 39 Wang Kwong Road, Kowloon Bay Kowloon, Hong Kong Hong Kong Productivity Council HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	
Prüfgrundlage: <i>Test specification</i>		FCC Part 15, Subpart B	
Prüfergebnis: <i>Test Result</i>		Das vorstehend beschriebene Gerät wurde geprüft und entspricht oben genannter Prüfgrundlage. The above mentioned product was tested and passed .	
geprüft / tested by:		kontrolliert / reviewed by:	
08.08.2006	Derek Leung Project Manager	08.08.2006	Thomas Berns Manager
Datum <i>Date</i>	Name <i>Name</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>
Sonstiges: FCC ID: REDHP3390-001R <i>Other Aspects</i>			
Abkürzungen:		Abbreviations:	
OK, Pass, P	= entspricht Prüfgrundlage	OK, Pass, P	= passed
Fail, F	= entspricht nicht Prüfgrundlage	Fail, F	= failed
N/A	= nicht anwendbar	N/A	= not applicable
N/T	= nicht getestet	N/T	= not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicate in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

Test Summary

Spurious Radiated Emissions

Result: Pass

Conducted Emissions

Result: Pass

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List of Test and Measurement Instruments

Kind of Equipment	Manufacturer	Type	S/N
Test Receiver	Rohde & Schwarz	ESVS30	842807/009
Biconical Antenna	Rohde & Schwarz	HK116	841489/015
Log.-Periodic Antenna	Rohde & Schwarz	HL223	841516/017
Double Ridge Horn Antenna	EMCO	3115	9002-3347
Spectrum Analyzer	Rohde & Schwarz	FSP30	1093.4495K30
LISN	Rohde & Schwarz	ESH 3-Z5	849876/026

General Product Information

Product Function and Intended Use

The EUT is a receiver of a 900MHz Wireless Headphone system.

The operating frequencies of the associated transmitter are 912.00MHz, 912.50MHz and 913.00MHz. The user can select the frequency manually by a switch on the transmitter.

There is a "scan" button on the EUT for detecting and then receiving the signal from the associated transmitter.

The transmit frequency of channel 2: 912.50MHz has been chosen for the testing in this report.

Ratings and System Details:

FCCID	:	REDHP3390-001R
Brand Name	:	Arkon
Number of channel	:	3
Nominal Frequencies	:	Channel 1: 912.00MHz Channel 2: 912.50MHz Channel 3: 913.00MHz
Modulation scheme	:	Frequency Modulation
Type of antenna	:	Internal integral antenna
Power supply	:	AAA battery x 2 . Nominal voltage: 3.0Volt Remark: If put rechargeable batteries into the battery apartments, the EUT also support battery charging when put the EUT on the associated transmitter.
Port	:	Battery charging port.

Independent Operation Modes

The basic operation mode:

- receives audio signal from the associated transmitter model: HP3391.

For further information refer to User Manual

Submitted Documents

- Block diagram
- User manual
- Bill of material
- Schematic circuit diagram

Test Set-up and Operation Mode

Principle of Configuration Selection

Emission: The test was performed under normal operating mode to obtain the maximum emission.

Test Operation and Test Software

Test operation should refer to test methodology.

- There was no special software to exercise the device.

Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

- none

Countermeasures to achieve EMC Compliance

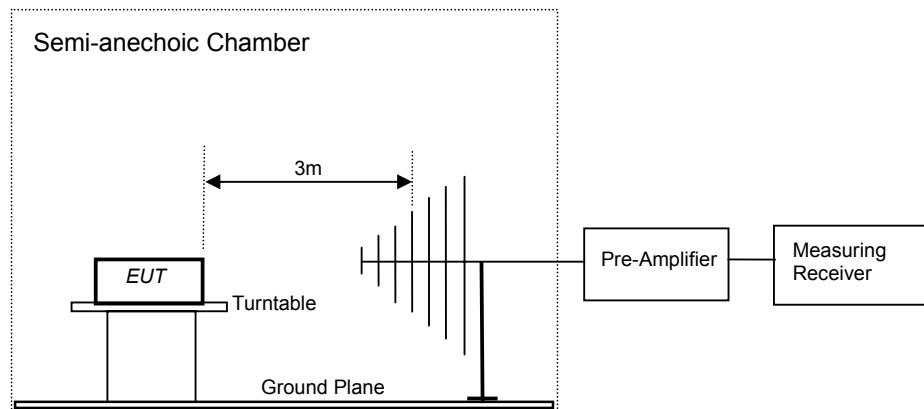
- none

Test Methodology

Radiated Emission

The radiated emission measurements were performed according to the procedures in ANSI C63.4-2003. The equipment under test (EUT) was placed at the middle of the 80 cm height turntable, and the turntable is 3 meters far from the measuring antenna. The EUT was tested in three orthogonal planes and the turntable was rotated 360° for obtaining the maximum emission. The antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained.

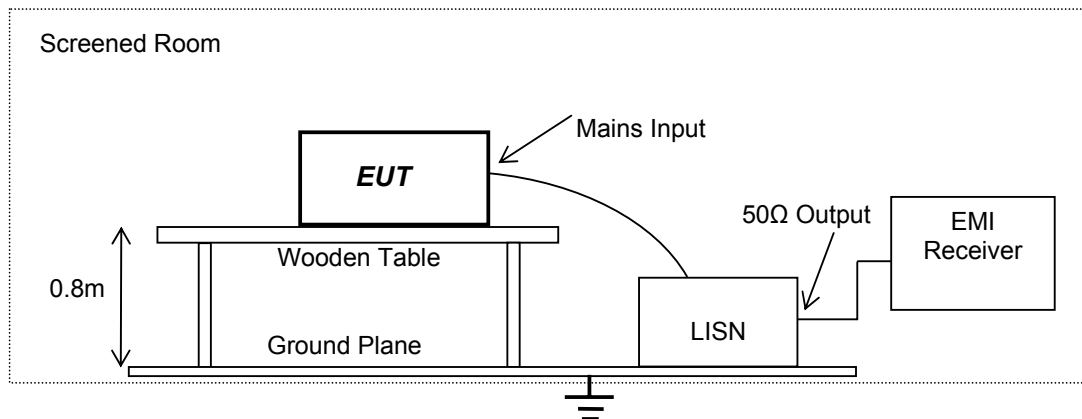
Test Setup:



Conducted Emission

The conducted emission measurements were performed according to the procedures in ANSI C63.4-2003. Initial measurements were performed in peak and average detection modes on the live line. Any emission(s) recorded within 30dB below the relevant limit lines were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

Test Setup:



Test Results

Spurious Radiated Emissions

Section 15.109

RESULT:

Pass

Test Specification : FCC Part 15 Section 15.109
 Test Method : ANSI C63.4-2003
 Measurement Location : Semi Anechoic Chamber
 Detector Function : QP for frequency < 1000MHz, Average for frequency > 1000MHz.
 Supply Voltage : Battery operated
 Measuring Frequency Range : 30MHz– 5GHz
 Measuring Distance : 3m
 EUT frequency selected : 912.5MHz

Spurious Emission (MHz)	Antenna Polarization	Field strength (dB μ V/m)
30 - 901.8	H and V	*
901.8	H and V	*
901.8 - 5000	H and V	*

* All emissions are at least 20dB below the limit.

Limit for radiated emission test under Section 15.109:

Frequency (MHz)	Field strength (μ V/m) at 3m	Field strength (dB μ V/m) at 3m
30-88	100	40.00
88-216	150	43.52
216-960	200	46.02
Above 960	500	53.98

Conducted Emissions**Section 15.107****RESULT:****Pass**

Test Specification : FCC Part 15 Section 15.107
 Test Method : ANSI C63.4-2003
 Measurement Location : Semi Anechoic Chamber
 Detector Function : QP and average
 Supply Voltage : 110Volt
 Measuring Frequency Range : 0.15MHz – 30MHz
 Mode of operation : charging

Conductor	Frequency (MHz)	Quasi Peak Value (dB μ V)	Average Value (dB μ V)
L	--	*	*
N	--	*	*

***All emissions are at least 30dB below the limits**

Limit for conducted emission test under Section 15.107:

Frequency Range (MHz)	dB μ V	
	QP	Average
0.15 – 0.5	*66 to 56	*56 to 46
0.50 – 5.0	56	46
5.0 – 30	60	50
Remark: The lower limit shall apply at the transition frequencies. *The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		