

<b>Prüfbericht - Nr.:</b>	<b>14013983 001</b>		<b>Seite 1 von 10</b>																		
<i>Test Report No.</i>																					
<b>Auftraggeber:</b> <b>Classic Tech Development Ltd.</b> <i>Applicant</i> 12/F., Yu Xiu Industrial Building, 87 Hung To Road, Kwun Tong, Kowloon Hong Kong																					
<b>Gegenstand der Prüfung:</b> <b>900MHz Receiver Headphone</b> <i>Test item</i>																					
<b>Bezeichnung:</b> <i>Identification</i>	<b>HP3392</b>	<b>Serien-Nr.:</b> <i>Serial No.</i>	<b>Engineering sample</b>																		
<b>Wareneingangs-Nr.:</b> <i>Receipt No.</i>	<b>060801015</b>	<b>Eingangsdatum:</b> <b>01.08.2006</b> <i>Date of receipt</i>																			
<b>Prüfort:</b> <i>Testing location</i>	<b>TÜV Rheinland Hong Kong Ltd.</b> Unit 8, 25 <sup>th</sup> Floor, Skyline Tower, 39 Wang Kwong Road, Kowloon Bay Kowloon, Hong Kong																				
	<b>Hong Kong Productivity Council</b> HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong																				
<b>Prüfgrundlage:</b> <i>Test specification</i>	<b>FCC Part 15, Subpart B</b>																				
<b>Prüfergebnis:</b> <b>Das vorstehend beschriebene Gerät wurde geprüft und entspricht oben genannter Prüfgrundlage.</b> <i>Test Result</i> The above mentioned product was tested and <b>passed</b> .																					
<b>geprüft / tested by:</b>		<b>kontrolliert / reviewed by:</b>																			
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>	Name <i>Name</i>	Unterschrift <i>Signature</i>																
<b>Sonstiges:</b> <b>FCC ID: REDHP3390-001R</b> <i>Other Aspects</i>																					
<b>Abkürzungen:</b> <table> <tr> <td>OK, Pass, P</td> <td>= entspricht Prüfgrundlage</td> </tr> <tr> <td>Fail, F</td> <td>= entspricht nicht Prüfgrundlage</td> </tr> <tr> <td>N/A</td> <td>= nicht anwendbar</td> </tr> <tr> <td>N/T</td> <td>= nicht getestet</td> </tr> </table>			OK, Pass, P	= entspricht Prüfgrundlage	Fail, F	= entspricht nicht Prüfgrundlage	N/A	= nicht anwendbar	N/T	= nicht getestet	<b>Abbreviations:</b> <table> <tr> <td>OK, Pass, P</td> <td>= passed</td> </tr> <tr> <td>Fail, F</td> <td>= failed</td> </tr> <tr> <td>N/A</td> <td>= not applicable</td> </tr> <tr> <td>N/T</td> <td>= not tested</td> </tr> </table>			OK, Pass, P	= passed	Fail, F	= failed	N/A	= not applicable	N/T	= not tested
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<b>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.</b>																					
<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**

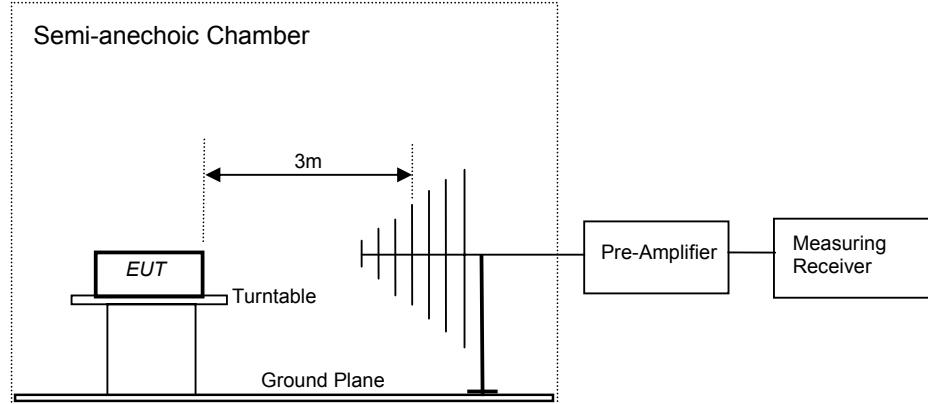
- none

## 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.

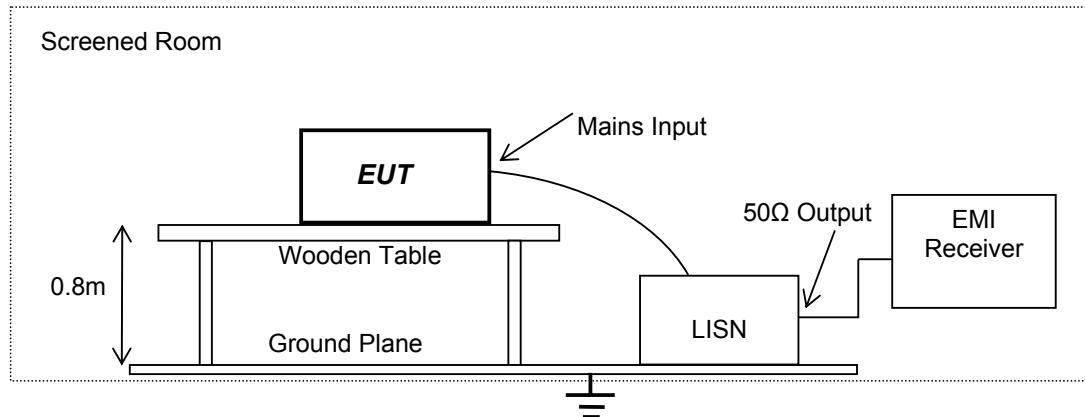
### Test Setup:



### 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 $\mu$ 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 ( $\mu$ V/m) at 3m	Field strength (dB $\mu$ 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 $\mu$ V)	Average Value (dB $\mu$ 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 $\mu$ 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.