

Report No.: DDT-R18052302-1E11

■Issued Date: Jun. 12, 2018

## RF EXPOSURE REPORT

#### **FOR**

Applicant	:	Harman International Industries, Inc.	
Address	••	8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES	
Equipment under Test	• •	WIRELESS SPEAKER	
Model No. ONG DI	1	ONYX STUDIO 5	
Trade Mark		Harman/Kardon	
FCC ID	•	APIHKONYXST5	
IC		6132A-HKONYXST5	
Manufacturer		Harman International Industries, Inc.	
Address		8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES	

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

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#### TEST REPORT DECLARE

Applicant	:	Harman International Industries, Inc.	
Address	:	8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES	
Equipment under Test	:	: WIRELESS SPEAKER	
Model No.	:	ONYX STUDIO 5	
Trade mark	:	Harman/Kardon	
Manufacturer	:	Harman International Industries, Inc.	
Address	:	8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES	

Standard Used: KDB447498 D01 General RF Exposure Guidance v06

#### We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

	DDT-R18052302-1E11				
Date of Receipt:	Mar. 16, 2018 and 05, 2018	d Jun.	Date of Test:	Mar. 16, 2018 ~ May 07, 2018	

Prepared By:

Sam Li/Engineer

Damon Hu/EMC Manager

Approved B

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

# **Revision history**

Rev.	Revisions	Issue Date	Revised By
	Initial issue	May 07, 2018	
V1.0	Replace the heat sink	Jun. 12, 2018	Sam Li

#### 1. General information

#### 1.1. Description of Equipment

EUT* Name	:	WIRELESS SPEAKER
Model Number	:	ONYX STUDIO 5
EUT function description		Please reference user manual of this device
Power supply		DC 19V from external AC Adapter DC 3.635V 3283mAh Lithium-ion built-in battery
Radio Specification		Bluetooth V4.2
Operation frequency		2402MHz -2480MHz
Modulation		GFSK, π/4-DQPSK, 8DPSK
Data rate	:	1Mbps, 2Mbps, 3Mbps
Antenna Type	:	FPC antenna, maximum PK gain: 2.63dBi
Sample Type	:	Series production

#### 1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,

Guangdong Province, China, 523808

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#### 2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where:

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

Worse case is as below: [2441MHz, 6.82dBm (4.81mW) output power]

 $(4.81/5) \cdot [\sqrt{2.441} \text{ (GHz)}] = 1.503 < 3.0 \text{ for } 1-\text{g SAR}$ 

Then SAR evaluation is not required

#### **END OF REPORT**