

RF EXPOSURE REPORT

FOR

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

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TEST REPORT DECLARE

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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.

Report No:	DDT-R18051010-1E9		
Date of Receipt:	Mar. 16, 2018 and May 16, 2018	Date of Test:	Mar. 16, 2018 ~ May 07, 2018 and May 16, 2018 ~ May 28, 2018

Prepared By:

Sam Li

Sam Li/Engineer

Approved By:



Damon Hu/EMC Manager

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	Add a battery factory	May 28, 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, $\pi/4$ -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

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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:

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

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

Then SAR evaluation is not required

END OF REPORT