

Report No.: DDT-R18031408-1E11

■Issued Date: May 07, 2018

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. ONG	-	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

Tel: +86-0769-89201699, **E-mail:** ddt@dgddt.com, http://www.dgddt.com



TABLE OF CONTENTS

	Test report declares	3
1.	General information	5
1.1.	Description of Equipment	5
1.2.	Assess laboratory	5
2.	RF Exposure evaluation for FCC	5

TEST REPORT DECLARE

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	
Manufacturer	:	Harman International Industries, Incorporated	
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-R18031408-1E11		
Date of Receipt:	Mar. 16, 2018	Date of Test:	Mar. 16, 2018 ~ May 07, 2018

Prepared By:

Sam Li/Engineer

Kevin Feng/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	

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

Tel: +86-0769-89201699, http://www.dgddt.com, Email: ddt@dgddt.com

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 ≤ 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