

RF EXPOSURE REPORT

FOR

Applicant	:	Dongguan Laccess Electronic Technology Co., Ltd.
Address	:	No. 2 Xiangyang Road, Tian Xin Huaxing Industrial Area, Qiaotou town, Dongguan, China
Equipment under Test	:	WIRELESS HEADPHONES
Model No.	:	HA-S22W, HA-S23W
Trade Mark	:	JVC
FCC ID	:	2AD8P-HAS2223
IC	:	12709A-HAS2223
Manufacturer	:	Dongguan Laccess Electronic Technology Co., Ltd.
Address	:	No. 2 Xiangyang Road, Tian Xin Huaxing Industrial Area, Qiaotou town, Dongguan, China

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: +86-0769-38826678, **E-mail:** ddt@dgddt.com, <http://www.dgddt.com>

REPORT

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	:	Dongguan Laccess Electronic Technology Co., Ltd.
Address	:	No. 2 Xiangyang Road, Tian Xin Huaxing Industrial Area, Qiaotou town, Dongguan, China
Equipment under Test	:	WIRELESS HEADPHONES
Model No.	:	HA-S22W, HA-S23W
Trade mark	:	JVC
Manufacturer	:	Dongguan Laccess Electronic Technology Co., Ltd.
Address	:	No. 2 Xiangyang Road, Tian Xin Huaxing Industrial Area, Qiaotou town, Dongguan, China

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-R19091610-1E9		
Date of Receipt:	Oct. 09, 2019	Date of Test:	Oct. 09, 2019 ~ Oct. 25, 2019

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	Oct. 25, 2019	

1. General information

1.1. Description of Equipment

EUT* Name	: WIRELESS HEADPHONES
Model Number	: HA-S22W, HA-S23W
Difference of model number	: HA-S22W, HA-S23W are all the same except for the shell color, so the test is performed on HA-S22W.
EUT function description	: Please reference user manual of this device
Power supply	: DC 5V by USB : DC 3.7V by Polymer Li-ion built-in battery
Radio Specification	: Bluetooth 5.0
Operation frequency	: 2402 MHz-2480 MHz
Modulation	: GFSK, $\pi/4$ -DQPSK, 8DPSK
Data rate	: 1 Mbps, 2 Mbps, 3 Mbps
Antenna Type	: Integral PCB antenna, maximum PK gain: 0 dBi
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: +86-0769-38826678, <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:

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

$f(\text{GHz})$ 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

Manufacturing Tolerance

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-3	-5	-6
Tolerance \pm (dB)	1	1	1
$\pi/4$ DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-4	-6	-4

Tolerance ±(dB)	1	1	1
8DPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-1	-3	-3
Tolerance ±(dB)	1	1	1

Estimtion Result

Worse case is as below: [2402MHz, -1.16 dBm, 0.77 mW) output power]

$(0.77/5) \cdot [\sqrt{2.402(\text{GHz})}] = 0.239 < 3.0$ for 1-g SAR

Then SAR evaluation is not required

END OF REPORT