

## RF EXPOSURE REPORT

### FOR

|                             |   |   |
|-----------------------------|---|---|
| <b>Applicant</b>            | : | Harman International Industries, Incorporated                 |
| <b>Address</b>              | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>UNITED STATES |
| <b>Equipment under Test</b> | : | Portable Bluetooth Speaker                                    |
| <b>Model No.</b>            | : | S20   |
| <b>Trade Mark</b>           | : | AKG   |
| <b>FCC ID</b>               | : | APIAKGS20   |
| <b>IC</b>                   | : | 6132A-AKGS20  |
| <b>Manufacturer</b>         | : | Harman International Industries, Incorporated                 |
| <b>Address</b>              | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>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

|                             |   |  |
|-----------------------------|---|--|
| <b>Applicant</b>            | : | Harman International Industries, Incorporated              |
| <b>Address</b>              | : | 8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES |
| <b>Equipment under Test</b> | : | Portable Bluetooth Speaker                                 |
| <b>Model No.</b>            | : | S20  |
| <b>Trade mark</b>           | : | AKG  |
| <b>Manufacturer</b>         | : | Harman International Industries, Incorporated              |
| <b>Address</b>              | : | 8500 Balboa Boulevard, 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.**

|                         |                   |                      |                              |
|-------------------------|-------------------|----------------------|------------------------------|
| <b>Report No:</b>       | DDT-R18041612-1E8 |                      |                              |
| <b>Date of Receipt:</b> | Apr. 16, 2018     | <b>Date of Test:</b> | Apr. 16, 2018~ Apr. 28, 2018 |

**Prepared By:**

*Ella Gong*

**Ella Gong/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 | Apr. 28, 2018 |            |
|      |               |               |            |

## 1. General information

### 1.1. Description of Equipment

|                          |   |
|--------------------------|---|
| EUT* Name                | : Portable Bluetooth Speaker  |
| Model Number             | : S20   |
| EUT function description | : Please reference user manual of this device   |
| Power supply             | : DC 5V from external AC Adapter<br>Lithium-ion polymer(3.7V/ 1000mAh) built-in battery |
| Radio Specification      | : Bluetooth V4.1  |
| Operation frequency      | : 2402MHz -2480MHz  |
| Modulation               | : GFSK, $\pi/4$ -DQPSK, 8DPSK   |
| Data rate                | : 1Mbps, 2Mbps, 3Mbps   |
| Antenna Type             | : Integrated PCB antenna, maximum PK gain:2.65dBi                                       |
| 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](mailto: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  $\leq 50$  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  $\leq 7.5$  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

Worse case is as below: [2402MHz, 8.75dBm (7.5mW) output power]

$(7.5/5) \cdot [\sqrt{2.402(\text{GHz})}] = 2.325 < 3.0$  for 1-g SAR

Then SAR evaluation is not required

**END OF REPORT**