



## RF EXPOSURE REPORT

|                                |   |                                                                                                                                                           |
|--------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>               | : | Harman International Industries, Inc.                                                                                                                     |
| <b>Address of Applicant</b>    | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>UNITED STATES                                                                                             |
| <b>Manufacturer</b>            | : | Harman International Industries, Inc.                                                                                                                     |
| <b>Address of Manufacturer</b> | : | 8500 Balboa Boulevard, Northridge, CA 91329,<br>UNITED STATES                                                                                             |
| <b>Equipment under Test</b>    | : | Multi-Channel Soundbar with wireless subwoofer                                                                                                            |
| <b>Model No.</b>               | : | BAR 1300XMK2                                                                                                                                              |
| <b>FCC ID</b>                  | : | APIBAR1300MK2                                                                                                                                             |
| <b>Test Standard(s)</b>        | : | KDB447498 D01 General RF Exposure Guidance<br>v06                                                                                                         |
| <b>Report No.</b>              | : | DDT-RE24111520-1E49                                                                                                                                       |
| <b>Issue Date</b>              | : | 2025/03/14                                                                                                                                                |
| <b>Issue By</b>                | : | Guangdong Dongdian Testing Service Co., Ltd.<br>Unit 2, Building 1, No. 17, Zongbu 2nd Road,<br>Songshan Lake Park, Dongguan, Guangdong, China,<br>523808 |

# REPORT

Table of Contents

1. General Test Information..... 5

1.1. Description of EUT..... 5

1.2. Accessories of EUT ..... 5

1.3. Test laboratory ..... 5

2. RF Exposure evaluation for FCC..... 6

2.1. Assessment procedure ..... 6

2.2. Assess result..... 7

Test Report Declare

|                         |   |                                                            |
|-------------------------|---|------------------------------------------------------------|
| Applicant               | : | Harman International Industries, Inc.                      |
| Address of Applicant    | : | 8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES |
| Equipment under Test    | : | Multi-Channel Soundbar with wireless subwoofer             |
| Model No.               | : | BAR 1300XMK2                                               |
| Manufacturer            | : | Harman International Industries, Inc.                      |
| Address of Manufacturer | : | 8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES |

Test Standard Used:  
KDB447498 D01 General RF Exposure Guidance v06

We Declare:  
The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

|                  |                     |               |                         |
|------------------|---------------------|---------------|-------------------------|
| Report No.:      | DDT-RE24111520-1E49 |               |                         |
| Date of Receipt: | 2024/11/26          | Date of Test: | 2024/11/26 - 2025/03/14 |

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Created: Bobo Chen                                                                  | Reviewed: Ella Gong                                                                 | Approved: Damon Hu                                                                    |
|  |  |  |
| 2025/03/14                                                                          | 2025/03/14                                                                          | 2025/03/14                                                                            |

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

Revision History

| Rev. | Revisions     | Issue Date | Revised By |
|------|---------------|------------|------------|
| ---  | Initial issue | 2025/03/14 |            |
|      |               |            |            |

## 1. General Test Information

### 1.1. Description of EUT

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| EUT Name                 | : Multi-Channel Soundbar with wireless subwoofer |
| Model Number             | : BAR 1300XMK2                                   |
| EUT Function Description | : Please reference user manual of this device    |
| Power Supply             | : AC 100-240V, 50/60Hz, 160W                     |

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual.

### 1.2. Accessories of EUT

| Accessories    | Manufacturer | Model number | Description                            |
|----------------|--------------|--------------|----------------------------------------|
| AC cable       | Harman       | N/A          | Length: 150cm                          |
| HDMI cable     | Harman       | N/A          | Length: 120cm, with two magnetic rings |
| Remote control | Harman       | N/A          | N/A                                    |

### 1.3. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com).

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

## 2. RF Exposure evaluation for FCC

### 2.1. Assessment procedure

#### Requirement:

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

#### Limits for General Population/Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------------|-------------------------------------------------------------------|
| 0.3-1.34              | 614                               | 1.63                              | (100)*                                  | 30                                                                |
| 1.34-30               | 824/f                             | 2.19/f                            | (180/f)*                                | 30                                                                |
| 30-300                | 27.5                              | 0.073                             | 0.2                                     | 30                                                                |
| 300-1500              |                                   |                                   | F/1500                                  | 30                                                                |
| 1500-100000           |                                   |                                   | 1.0                                     | 30                                                                |

Note: f= frequency in MHz; \*Plane-wave equivalent power density

#### Calculation method

$$E(\text{V/m}) = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } S(\text{mW/cm}^2) = \frac{E^2}{377}$$

**E** = Electric field (V/m)

**P** = Peak RF output power (mW)

**G** = EUT Antenna numeric gain (numeric)=

**d** = Separation distance between radiator and human body (m)

The formula can be changed to

We can change the formula to:

$$S = \frac{30 \times P \times G}{377 \times d^2} \quad \text{or, } d = \sqrt{\frac{30 \times P \times G}{377 \times S}}$$

From the peak EUT RF output power, the minimum mobile separation distance,  $d=0.2$  m, as well as the gain of the used antenna, the RF power density can be obtained.

## 2.2. Assess result

| Mode        | Output power (dBm) | Output power (mW) | Tune up power (dBm) | Tune up power (mW) | Antenna Gain (dBi) | Antenna Gain (linear) | MPE Values (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|-------------|--------------------|-------------------|---------------------|--------------------|--------------------|-----------------------|----------------------------------|---------------------------------|
| BT          | 13.30              | 21.38             | 15                  | 31.62              | 2.43               | 1.75                  | 0.0110                           | 1                               |
| BLE         | 11.57              | 14.35             | 13                  | 19.95              | 2.43               | 1.75                  | 0.0069                           | 1                               |
| 2.4G WiFi   | 17.95              | 62.37             | 19                  | 79.43              | 2.39               | 1.73                  | 0.0273                           | 1                               |
| 5G WiFi     | 19.66              | 92.47             | 21                  | 125.89             | 2.46               | 1.76                  | 0.0441                           | 1                               |
| 5G Wireless | 19.58              | 90.78             | 21                  | 125.89             | 2.40               | 1.74                  | 0.0436                           | 1                               |

Simultaneous transmit evaluation result:  $0.0110+0.0441+0.0436=0.099 < 1$ .

Note 1: The estimation distance is 20 cm

Note 2: 2.4GHz WiFi and 5GHz WiFi cannot be transmitted simultaneously.

Conclusion: MPE evaluation required since transmitter power is below FCC threshold

-----End Report-----