

RF Exposure Evaluation Report

FCC ID : TTUBEOPLAYHX
Equipment : Bluetooth Headphone
Brand Name : Bang & Olufsen
Model Name : Beoplay HX
Applicant : Bang & Olufsen A/S
Bang og Olufsen Allé 1, 7600 Struer, Denmark
Manufacturer : Bang & Olufsen A/S
Bang og Olufsen Allé 1, 7600 Struer, Denmark
Standard : 47 CFR FCC Part 2 Subpart J, section 2.1093

The product was received on Sep. 02, 2020, and testing was started from Sep. 16, 2020 and completed on Sep. 29, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in KDB447498 D01 General RF Exposure Guidance v06 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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Photographs of EUT V01



History of This Test Report

Report No.	Version	Description	Issued Date
FA082805	01	Initial issue of report	Dec. 25, 2020

Reviewed by: Sam Tsai

Report Producer: Amber Chiu

1. General Description

1.1. EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
Bluetooth	2400-2483.5	2402-2480	BR / EDR: FHSS (GFSK / $\pi/4$ -DQPSK / 8DPSK) LE: DSSS (GFSK)

1.2. Testing Location Information

Testing Location		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.) TEL : 886-3-656-9065 FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.		
<input type="checkbox"/>	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL : 886-3-318-0787 FAX : 886-3-318-0287
Test site Designation No. TW1097 with FCC.		

1.3. Table for Multiple Listing

The EUT in the following table are all refer to the identical product.

EUT	Color	Description
Sample 1	Black	All the Samples are identical, The Bluetooth chip and Antenna layout are the same. The only difference is different color.
Sample 2	Brown	
Sample 3	Gray	

Note : The Sample 1 was chosen and measured during the test. The information from manufacturer.

2. RF Exposure Evaluation

2.1. Applicable Standard

In accordance with FCC 47 CFR part 2 (2.1093) this device has been defined as a portable device which is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

Portable devices must be evaluated using the specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2003.

2.2. SAR evaluation

- Per FCC KDB 447498 D01 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$$

$$[\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$

- ♦ $f_{(\text{GHz})}$ 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

Max.EIRP Power (dBm)	Tolerance (dB)	Tune-up Max. Power (dBm)	Max. Power (mW)	Test Distance (mm)	Frequency (GHz)	Exclusion Thresholds
3.00	0.00	3	2.00	5	2.402	0.62

- Per FCC KDB 447498 D01 v06 exclusion thresholds is $0.62 < 3$, RF exposure evaluation is not required.

————THE END————