FCC SAR TEST REPORT

FCC ID	:	**TTUBEOPLAYPLPC**
Equipment	:	**Wireless Gaming Headphones**
Brand Name	:	**Bang & Olufsen**
Model Name	:	**Beoplay Portal PC PS**
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	:	**FCC 47 CFR Part 2 (2.1093)**

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

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.

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History of this test report

Report No.	Version	Description	Issued Date
FA191611	01	Initial issue of report	Jan. 11, 2022

1. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards.

- FCC 47 CFR Part 2 (2.1093)
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06

2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Equipment Name	Wireless Gaming Headphones
Brand Name	Bang & Olufsen
Model Name	Beoplay Portal PC PS
FCC ID	TTUBEOPLAYPLPC
Wireless Technology and Frequency Range	Bluetooth: 2400 MHz ~ 2483.5 MHz SRD: 2400 MHz ~ 2480 MHz
Mode	Bluetooth BR/EDR/LE SRD: GFSK
EUT Stage	Identical Prototype

Reviewed by: Jason Wang
Report Producer: Daisy Peng

3. Bluetooth / SRD Exclusions Applied

Note:

1. Per KDB 447498 D01v06, 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*)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
   - 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

Antenna	Max Power (dBm)	Separation Distance (mm)	Frequency (GHz)	Limit thresholds	exclusion thresholds	SAR Testing
Bluetooth	0.5	< 5	2.48	3	0.353	Not Required
SRD	6.5	< 5	2.48	3	1.408	Not Required

4. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Head
1.	Bluetooth + SRD	Yes

General Note:

1. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
   iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
2. For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01v06 based on the formula below.
   i) (*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)]·[√f(GHz)/*x*] W/kg for *test separation distances* ≤ 50 mm; where *x* = 7.5 for 1-g SAR, and *x* = 18.75 for 10-g SAR.
   ii) When the minimum separation distance is < 5mm, the distance is used 5mm to determine SAR test exclusion.
   iii) 0.4 W/kg for 1-g SAR and 1.0 W/kg for 10-g SAR, when the *test separation distances* is > 50 mm.

Bluetooth	Exposure Position	Head
Max Power	Test separation	0 mm
0.5 dBm	Estimated SAR (W/kg)	0.047 W/kg

SRD	Exposure Position	Head
Max Power	Test separation	0 mm
6.5 dBm	Estimated SAR (W/kg)	0.188 W/kg

4.1 Head Exposure Conditions

Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
	SRD	Bluetooth	
	Estimated 1g SAR (W/kg)	Estimated 1g SAR (W/kg)	
Head	0.188	0.047	**0.235**

5. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[3] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.