

RF Exposure Report

Report No.: SABDKG-WTW-P21060161

FCC ID: JNZB00037

Test Model: B00037

Received Date: June 04, 2021

Test Date: June 23, 2021

Issued Date: July 29, 2021

Applicant: LOGITECH FAR EAST LTD.

Address: 7700 Gateway Boulevard Newark California United States

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

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**FCC Registration /
Designation Number:** 723255 / TW2022



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Release Control Record

Issue No.	Description	Date Issued
SABDKG-WTW-P21060161	Original release.	July 29, 2021

1 Certificate of Conformity

Product: Charger case

Brand: Jaybird

Test Model: B00037

Sample Status: Engineering sample

Applicant: LOGITECH FAR EAST LTD.

Test Date: June 23, 2021

Standards: FCC Part 2 (Section 2.1093)

KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :



Date: July 29, 2021

Claire Kuan / Specialist

Approved by :



Date: July 29, 2021

Clark Lin / Technical Manager

2 Evaluation Result

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) 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:
$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot [\sqrt{f(\text{GHz})}]$$
$$\leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
 - $f(\text{GHz})$ 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. The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50mm) · (f(MHz)/150)] mW, at 100MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
 - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
 - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
 - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

3 SAR Test Exclusion Thresholds

BT-EDR Avg. Power Table

GFSK

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	1.592	2.02
39	2441	1.51	1.79
78	2480	1.483	1.71

8DPSK

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	1.56	1.93
39	2441	1.462	1.65
78	2480	1.442	1.59

For BT-EDR SAR Test Exclusion Thresholds

Frequency (MHz)	Max Avg. Power (dBm)	Max Avg. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value ^(NOTE 1)	1-g SAR test exclusion thresholds	Result
2402 ~ 2480	2.02	1.592	5	0.501	3	Pass

Note:

1. Calculate SAR test exclusion thresholds from condition "1" formulas.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

BT-LE Avg. Power Table

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
0	2402	5.943	7.74
19	2440	5.875	7.69
39	2480	5.702	7.56

For BT-LE SAR Test Exclusion Thresholds

Frequency (MHz)	Max Avg. Power (dBm)	Max Avg. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value ^(NOTE 1)	1-g SAR test exclusion thresholds	Result
2402 ~ 2480	7.74	5.943	5	1.872	3	Pass

Note:

1. Calculate SAR test exclusion thresholds from condition "1" formulas.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

4 Conclusion

Simultaneous Transmission Evaluation:

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required.

When standalone SAR is not required to be measured, per FCC KDB 447498 D01 V06 4.3.2 b), the following equations must be used to estimate the standalone 1-g SAR, respectively, for simultaneous transmission assessment involving that transmitter.

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5} * \frac{(\text{Max Power of channel, mw})}{\text{Min. Separation Distance, mm}}$$

Mode	Frequency (GHz)	Maximum Allowed Power (mW)	Separation Distance (mm)	Estimated SAR (W/kg)
BT-EDR	2.402	1.592	5	0.066
BT-LE	2.402	5.943	5	0.246

Mode	BT-EDR SAR (W/kg)	BT-LE SAR (W/kg)	Σ SAR (W/kg)	SAR test exclusion thresholds (W/kg)	Result
Simultaneous Transmission Scenario	0.066	0.246	0.312	0.4	Pass

--- END ---