

## RF EXPOSURE REPORT



**Applicant:** Peloton Interactive Inc.  
125 W 25th Street, 11 FL, New York, NY, 10001, USA  
**Product Name:** Peloton Console  
**Brand Name:** Peloton  
**Model No.:** PLTN-RB1VQ-2  
**Model Difference:** N/A  
**Report Number:** E2/2021/70058  
**FCC ID** 2AA3N-RB1VQ2  
**IC:** 21377-RB1VQ2  
**Issue Date:** August 27, 2021  
**Date of EUT Received:** July 13, 2021

Approved By

John Yeh

**We hereby certify that:**

The above equipment was evaluate by SGS Taiwan Ltd. The evaluation in this report is in compliance with FCC Rule Part §2.1091 and RSS-102.

The results of this report relate only to the sample identified in this report.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## Revision History

| Report Number | Revision | Description | Issue Date      | Revised By |
|---------------|----------|-------------|-----------------|------------|
| E2/2021/70058 | 00       | Original    | August 27, 2021 | Yuri Tsai  |
|               |          |             |                 |            |
|               |          |             |                 |            |
|               |          |             |                 |            |
|               |          |             |                 |            |
|               |          |             |                 |            |
|               |          |             |                 |            |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## Contents

|   |                                                 |   |
|---|-------------------------------------------------|---|
| 1 | DESCRIPTION OF EQUIPMENT UNDER TEST (EUT) ..... | 4 |
| 2 | MAXIMUM PERMISSIBLE EXPOSURE (MPE) .....        | 6 |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

### 1.1 Product Description

|                   |                       |
|-------------------|-----------------------|
| Product Name:     | Peloton Console       |
| Brand Name:       | Peloton               |
| Model No.:        | PLTN-RB1VQ-2          |
| Model Difference: | N/A                   |
| Hardware Version: | N/A                   |
| Firmware Version: | N/A                   |
| EUT Series No.:   | QAPLBK2104190030      |
| Power Supply:     | 12Vdc from power cord |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**1.2 Antenna Information:****1.2.1 ANT+**

| Antenna Type | Supplier | Antenna Part No. | Freq. (MHz) | Peak Antenna Gain (dBi) |
|--------------|----------|------------------|-------------|-------------------------|
| PIFA         | ACON     | APP8P-100005     | 2403-2480   | -1.72                   |

Note: Antenna information is provided by the applicant.

**1.2.2 BT / WLAN 2.4GHz**

BT:

| Antenna Type | Supplier | Antenna Part No. | Freq. (MHz) | Peak Antenna Gain (dBi) |
|--------------|----------|------------------|-------------|-------------------------|
| PIFA         | ACON     | APP8P-100003     | 2402-2480   | 1.58                    |

Note: Antenna information is provided by the applicant.

**WLAN 2.4GHz**

| Antenna Type | Supplier | Antenna Part No. | Freq. (MHz) | Peak Antenna Gain (dBi) | Directional Gain (dBi) |
|--------------|----------|------------------|-------------|-------------------------|------------------------|
| PIFA         | ACON     | APP8P-100003     | 2.4GHz      | 1.58                    | 4.57                   |
|              |          | APP8P-100004     | 2.4GHz      | 1.54                    | 4.57                   |

Note: Antenna information is provided by the applicant.

**1.2.3 WLAN 5GHz**

| Antenna Type | Supplier | Antenna Part No. | Freq. (MHz) | Peak Antenna Gain (dBi) | Directional Gain (dBi) |
|--------------|----------|------------------|-------------|-------------------------|------------------------|
| PIFA         | ACON     | APP8P-100003     | 5150~5250   | 1.97                    | 4.30                   |
|              |          |                  | 5250~5350   | 1.25                    | 3.61                   |
|              |          |                  | 5470~5725   | 1.31                    | 3.37                   |
|              |          |                  | 5725~5850   | 1.82                    | 4.57                   |
| PIFA         | ACON     | APP8P-100004     | 5150~5250   | 0.56                    | 4.30                   |
|              |          |                  | 5250~5350   | -0.10                   | 3.61                   |
|              |          |                  | 5470~5725   | -0.70                   | 3.37                   |
|              |          |                  | 5725~5850   | 1.30                    | 4.57                   |

Note: Antenna information is provided by the applicant.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 2 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### 2.1 FCC Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissible Exposure (MPE)

| Frequency Range<br>(MHz)                            | Electric Field<br>Strength (V/m) | Magnetic Field<br>Strength (A/m) | Power Density<br>(mW/cm <sup>2</sup> ) | Averaging Time<br>(minute) |
|-----------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------|----------------------------|
| Limits for General Population/Uncontrolled Exposure |                                  |                                  |                                        |                            |
| 0.3-1.34                                            | 614                              | 1.63                             | *(100)                                 | 30                         |
| 1.34-30                                             | 824/f                            | 2.19/f                           | *(180/f <sup>2</sup> )                 | 30                         |
| 30-300                                              | 27.5                             | 0.073                            | 0.2                                    | 30                         |
| 300-1500                                            | /                                | /                                | f/1500                                 | 30                         |
| 1500-100000                                         | /                                | /                                | 1.0                                    | 30                         |

f = frequency in MHz

\* = Plane-wave equipment power density

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 2.2 ISED Standard Applicable

This submittal(s) (test report) is intended to comply with RSS-102 issue 5 Radio frequency Radiation Exposure requirement.

This is a Mobile device, the MPE is required.

Limits for Maximum Permissible Exposure (MPE)

| RF Field Strength Limits for Devices Used by the General Public<br>(Uncontrolled Environment) |                          |                                   |                                   |                            |
|-----------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|-----------------------------------|----------------------------|
| Frequency Range (MHz)                                                                         | Electric Field (V/m rms) | Magnetic Field Strength (A/m rms) | Power Density (W/m <sup>2</sup> ) | Reference Period (minutes) |
| 0.003-10                                                                                      | 83                       | 90                                | -                                 | Instantaneous*             |
| 0.1-10                                                                                        | -                        | $0.73/f$                          | -                                 | 6**                        |
| 1.1-10                                                                                        | $87/f^{0.5}$             | -                                 | -                                 | 6**                        |
| 10-20                                                                                         | 27.46                    | 0.0728                            | 2                                 | 6                          |
| 20-48                                                                                         | $58.07/f^{0.25}$         | $0.1540/f^{0.25}$                 | $8.944/f^{0.5}$                   | 6                          |
| 48-300                                                                                        | 22.06                    | 0.05852                           | 1.291                             | 6                          |
| 300-6000                                                                                      | $3.142 f^{0.3417}$       | $0.008335 f^{0.3417}$             | $0.02619 f^{0.6834}$              | 6                          |
| 6000-15000                                                                                    | 61.4                     | 0.163                             | 10                                | 6                          |
| 15000-150000                                                                                  | 61.4                     | 0.163                             | 10                                | $616000/f^{1.2}$           |
| 150000-300000                                                                                 | $0.158 f^{0.5}$          | $4.21 \times 10^{-4} f^{0.5}$     | $6.67 \times 10^{-5} f$           | $616000/f^{1.2}$           |

F = frequency in MHz

\* = Based on nerve stimulation (NS).

\*\* = Based on specific absorption rate (SAR)

Maximum Permissible Exposure (MPE) Evaluation

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

## 2.3 Power Density Calculation (Worst Case)

### FCC Standalone MPE

| Operation Mode | Evaluation Frequency (MHz) | Operation Distance (cm) | Max. output Power (dBm) | Antenna Gain (dBi) | Max. output Power EIRP (mW) | Power Density (PD) (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) | Pass / Fail | Power Density / Limit | Collocated MPE |
|----------------|----------------------------|-------------------------|-------------------------|--------------------|-----------------------------|------------------------------------------|-----------------------------|-------------|-----------------------|----------------|
| ANT+           | 2480                       | 20                      | 7.16                    | -1.72              | 3.50                        | 0.0007                                   | 1.000                       | Pass        | 0.001                 |                |
| BT             | 2402                       | 20                      | 8.09                    | 1.58               | 9.27                        | 0.0018                                   | 1.000                       | Pass        | 0.002                 | V              |
| WLAN 2.4G      | 2412                       | 20                      | 20.15                   | 4.57               | 296.48                      | 0.059                                    | 1.000                       | Pass        | 0.059                 | V              |
| WLAN 5G        | 5240                       | 20                      | 16.43                   | 4.30               | 118.30                      | 0.024                                    | 1.000                       | Pass        | 0.024                 |                |

### ISED Standalone MPE

| Operation Mode | Evaluation Frequency (MHz) | Operation Distance (cm) | Max. output Power (dBm) | Antenna Gain (dBi) | Output Power EIRP (mW) | Power Density (PD) (W/m <sup>2</sup> ) | Limit (W/m <sup>2</sup> ) | Pass / Fail | Power Density / Limit | Collocated MPE |
|----------------|----------------------------|-------------------------|-------------------------|--------------------|------------------------|----------------------------------------|---------------------------|-------------|-----------------------|----------------|
| ANT+           | 2480                       | 20                      | 7.16                    | -1.72              | 3.50                   | 0.007                                  | 5.469                     | Pass        | 0.001                 |                |
| BT             | 2402                       | 20                      | 8.09                    | 1.58               | 9.27                   | 0.018                                  | 5.351                     | Pass        | 0.003                 | V              |
| WLAN 2.4G      | 2412                       | 20                      | 20.15                   | 4.57               | 296.48                 | 0.590                                  | 5.366                     | Pass        | 0.110                 | V              |
| WLAN 5G        | 5240                       | 20                      | 16.43                   | 4.30               | 118.30                 | 0.235                                  | 9.119                     | Pass        | 0.026                 |                |

## 2.4 Collocated Power Density Calculation

### FCC Collocated MPE

| Max BT PD / Limit | Max WLAN PD / Limit | Max ANT+ PD / Limit | $\Sigma$ (Power Density / Limit) of BT+ WLAN + ANT+ |
|-------------------|---------------------|---------------------|-----------------------------------------------------|
| 0.002             | 0.059               | 0.001               | 0.062                                               |

### ISED Collocated MPE

| Max BT PD / Limit | Max WLAN PD / Limit | Max ANT+ PD / Limit | $\Sigma$ (Power Density / Limit) of BT+ WLAN + ANT+ |
|-------------------|---------------------|---------------------|-----------------------------------------------------|
| 0.003             | 0.110               | 0.001               | 0.114                                               |

### Note:

1.  $\Sigma$ (E- Power Density / Limit): This is a summation of [(E- Power Density for each transmitter/antenna included in the simultaneous transmission) / (corresponding MPE limit)].
2. Considering the collocated transmitters, the aggregated (E- Power Density /limit) is smaller than 1, and MPE of collocated transmitters is compliant

~ End of Report ~

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.