



Certification Exhibit

FCC ID: JQ6-IOBADGEV2

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 721013332

Manufacturer: HID Global Corporation
Model Name / Number: Badge

RF Exposure

General Information:

Applicant: HID Global Corporation
 Device Category: Portable
 Environment: General Population/Uncontrolled Exposure

Technical Information

Frequency Range (MHz): 2402 - 2480
 Antenna Type: Chip Antenna
 Antenna Gains: 2.72 dBi
 Maximum Transmitter Conducted Power: 0.3dBm, 1.07mW
 Maximum System EIRP: 3.02dBm, 2.00mW
 Exposure Conditions: 5 mm

Note: The device does not support simultaneous transmissions

RF Exposure Calculation**Table 1: Device Characteristics (2.4GHz Proprietary)**

Technical Parameters	Device 1
Frequency (GHz)	2.45
Frequency (MHz)	2450
Separation Distance (cm)	0.5
Separation Distance (m)	0.0050
Antenna Gain (dBi)	2.72
ERP Easily Determined	YES
1-g body or 10-g extremity	Body
Conducted Power (dBm)	0.30
Conducted Power (mW)	1.07
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	1.07
Maximum (Source-Based) Time-Averaged ERP (mW)	1.22
Maximum (Source-Based) Time-Averaged EIRP (mW)	2.00
Maximum Output (mW)	1.22

Test Exemption Criteria

Test exemption is determined by 47 CFR 1.1307(b)(3)(i)(B) where single RF source is exempt if:

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. Pth is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

Table 2: 47 CFR 1.1307(b)(3)(i)(B) SAR-Based Exemption Pth (mW) – (2.4GHz Proprietary)

Technical Parameters	Device 1
x	1.90
ERP(mW)	3060.00
Maximum Output (mW)	1.222
Pth (mW)	2.744
Exemption	YES
Contribution Ratio (P / Pth)	0.445
Distance to Limit (cm) (See Note 9)	0.327