



## RF Exposure Evaluation Declaration

Report No.: S20221129093615

Issue Date: 03-31-2023

**Applicant:** SBOT Technologies LLC  
**Address:** 230 W 39th St, 8th FL, New York United States 10018  
**FCC ID:** 2A3Q4-JRD-4035  
**Application Type:** Certification  
**Product:** Caper Cart M3 RFID  
**Model No.:** JRD-4035  
**Trade Mark:** /  
**FCC Rule Part(s):** CFR 47, FCC Part 2.1091  
**Test Date:** Mar 13 ~ Mar 23, 2023

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The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

### Revision History

| Report No.      | Version | Description | Issue Date |
|-----------------|---------|-------------|------------|
| S20221129093615 | Rev. 01 | /           | 03-31-2023 |
|                 |         |             |            |

## 1. PRODUCT INFORMATION

### 1.1. Equipment Description

|                      |                    |
|----------------------|--------------------|
| Product Name:        | Caper Cart M3 RFID |
| Model Name:          | JRD-4035           |
| Trade Mark:          | /                  |
| Input Voltage Range: | DC 5V              |

### 1.2. Product Specification Subjective to this Standard

|                      |                    |
|----------------------|--------------------|
| Operating Frequency: | 902.25~927.75MHz   |
| Channel Number:      | 52                 |
| Type of modulation:  | FHSS               |
| Antenna Type:        | Dielectric Antenna |
| Antenna Gain:        | 1dBi               |

## 2. RF Exposure Evaluation

### 2.1. Limit

Per user manual, based on 47 CFR 2.1091, this device belongs to mobile device category with General Population/Uncontrolled exposure.

#### Mobile Devices:

47 CFR 2.1091(b) For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. In this context, the term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

#### General Population/Uncontrolled Exposure:

The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

Limits for General Population/Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength(H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
|-----------------------|-----------------------------------|----------------------------------|---|--------------------------|
| 0.3-1.34              | 614                               | 1.63                             | (100)*                                  | 30                       |
| 1.34-30               | 824/f                             | 2.19/f                           | (180/f)*                                | 30                       |
| 30-300                | 27.5                              | 0.073                            | 0.2                                     | 30                       |
| 300-1500              | /                                 | /                                | F/1500                                  | 30                       |
| 1500-100,000          | /                                 | /                                | 1.0                                     | 30                       |

Note: f=frequency in MHz; \*Plane-wave equivalent power density

## 2.2. Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to anisotropic radiator

R=distance to the center of radiation of the antenna

From the EUT RF output power, the minimum mobile separation distance, d=20cm, as well as the maximum gain of the used as following information, the RF power density can be obtained.

### 3. Estimation Result

#### 3.1. Result of RF Exposure Evaluation

|           |                        |
|-----------|------------------------|
| Product   | Caper Cart M3 RFID     |
| Test Item | RF Exposure Evaluation |

| Test Mode | Frequency Band (MHz) | Maximum Conducted OutputPower (dBm) | Power Density at R = 20 cm (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|-----------|----------------------|-------------------------------------|--|-----------------------------|
| RFID      | 902.25~927.75        | 14.83                               | 0.0076   | 0.6                         |
| Note: /   |                      |                                     |  |                             |

#### CONCULISON:

The Max Power Density at R (20 cm) = 0.0076mW/cm<sup>2</sup> < 0.6mW/cm<sup>2</sup>.

So the EUT complies with the requirement.

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