



Fangguang Inspection & Testing Co., Ltd.



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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Reports Inquiry : <https://grgtest.com>

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 ²)	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 Output Power (dBm)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm ²)
RFID	902.25~927.75	14.83	0.0076	0.6

Note: /

CONCLUSION:

The Max Power Density at R (20 cm) = 0.0076mW/cm² < 0.6mW/cm².

So the EUT complies with the requirement.

————— The End —————