

## RF Exposure Report (FCC)

**Report No.:** WIR124171-FCC-RF Exposure Rev. 1

**Test Model:** UWT-7020

**Received Date:** October 14, 2022

**Test Date:** February 24, 2023

**Issued Date:** March 23, 2023

**Applicant:** Zebra Technologies Corporation

**Address:** 1 Zebra Plaza, Holtsville, NY 11742

**Issued By:** Eurofins Electrical and Electronic Testing NA, Inc.

**Lab Address:** 914 W. Patapsco Avenue, Baltimore, MD 21230



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## 1. Certificate of Conformity

**Product:** UWT-7020

**Brand:** Zebra Technologies Corporation

**Test Model:** UWT-7020

**FCC ID:** UZ7UWT7020

**Sample Status:** EMC

**Applicant:** Zebra Technologies Corporation

**Test Date:** February 24, 2023

**Standard:** 47 CFR FCC Part 2.1093



Donald Salguero  
Wireless Laboratory Engineer

**Engineering Statement:** The measurements shown in this report were made in accordance with the procedures indicated. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements.



Michael Griffiths  
Manager, Wireless Laboratory

**Report Status Sheet**

| Revision | Report Date    | Reason for Revision                        |
|----------|----------------|--------------------------------------------|
| Ø        | March 1, 2023  | Initial Issue.                             |
| 1        | March 23, 2023 | Updated customer address;<br>Added FCC ID. |

## 2. RF Exposure

### Requirement:

47 CFR 2.1093(d)(1)

Applications for equipment authorization of portable RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in § 1.1310 of this chapter as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. The SAR limits specified in § 1.1310(a) through (c) of this chapter shall be used for evaluation of portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1) of this chapter. A minimum separation distance applicable to the operating configurations and exposure conditions of the device shall be used for the evaluation. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.

**EUT Frequency of operation:** 643.3MHz OBW centered at 7.5GHz

SAR –

Per § 2.1093 (d)(1), equipment with a transmit frequency above 6GHz shall be evaluated in terms of MPE

$$S_{\text{limit}} = 1 \text{ mW/cm}^2$$

$$S = \frac{P * G}{4 * \pi * r^2}$$

Where

S = power density in mW/cm<sup>2</sup>

P = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Measured average EIRP = -44.99dBm/MHz = 0.000032 mW = P\*G

Minimum Separation distance = 0.5cm

$$S = 0.000032 / (4 * 3.1416 * (0.5)^2) = 0.000010 \text{ mW/cm}^2$$

$$S_{\text{limit}} > S$$

EUT complies to RF exposure at 5mm