

# Flare Jewelry, Inc.

## RF Exposure Exhibit

**SCOPE OF WORK**

EMC TESTING – Flare Bracelet Model: FJ6002MSCSP

**REPORT NUMBER**

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**RF Exposure Exhibit  
(Portable devices)**

**Report Number: 104716705MPK-010**

**Project Number: G104716705**

**Report Issue Date: July 28, 2021**

**Product Designation: Flare Bracelet**

**Model Tested: FJ6002MSCSP**

**FCC ID: 2A2D9-FJ6002MSCSP**

**IC: 27430-FJ6002MSCSP**

**to**

**47CFR 2.1093**

**RSS-102 Issue 5**

**for**

**Flare Jewelry, Inc.**

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Report No. 104716705MPK-010	
<b>Equipment Under Test:</b>	Flare Bracelet
<b>Trade Name:</b>	Flare Jewelry, Inc.
<b>Model(s) Tested:</b>	FJ6002MSCSP
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<b>Applicable Regulation:</b>	47CFR 2.1093 RSS-102 Issue 5

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## 1.0 RF Exposure Summary

Test	Reference FCC	Reference Industry Canada	Result
Radio frequency Radiation Exposure Evaluation	47 CFR§2.1093	RSS-102 Issue 5	Complies

## 2.0 RF Exposure Limits

### 2.1 FCC Limits

According to FCC KDB 447498 D01 v06 Appendix A, at frequency 2450 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 10$  mW.

Note: 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds indicated above.

### 2.2 Industry Canada Limits

According to RSS-102 sec. 2.5.1 table 1, at frequency 2450 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 4$  mW.

Note: For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 of RSS-102 are multiplied by a factor of 2.5.

### 3.0 Test Results (Portable Configuration)

#### 3.1 Classification

For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user. Per the applicant, Flare Bracelet is intended to be worn on the arm.

#### 3.2 EIRP calculations

The Flare Bracelet consists of Bluetooth Low Energy radio.

#### 3.3 Maximum RF Power

Frequency Range (MHz)	RF Output (dBm)	Antenna Gain <sup>1</sup> (dBi)	Note
2402-2480	-4.08	-3.7	Conducted power measurements were taken from Report # 104716705MPK-002.

<sup>1</sup>As declared by the manufacturer.

### 3.4 RF Exposure Calculation for Flare Bracelet

#### 3.4.1 RF Exposure calculation for FCC KDB 447498 D01 v06

According to FCC KDB 447498 D01 v06 Appendix A, at frequency 2450 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 25$  mW (limb-worn device limit).

Max Peak Conducted Power measured = -4.08 dBm or 0.3908 mW

No duty cycle was considered.

Therefore, the Maximum EIRP calculated is - 4.08 dBm (RF Conducted Power) + 0 dBi (Antenna Gain) = -4.08 dBm or 0.3908 mW.

***Results: SAR evaluation is not required since the higher of the maximum conducted or equivalent isotopically radiated power (EIRP) source-based, time averaged output power is below the exemption limit.***

Note: Antenna gains below 0 are considered as 0dBi.

#### 3.4.2 RF Exposure calculation for RSS-102 Issue 5

According to RSS-102 sec. 2.5.1, at frequency 2450 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 10$  mW (limb-worn device limit).

Max Peak Conducted Power measured = -4.08 dBm or 0.3908 mW

No duty cycle was considered.

Therefore, the Maximum EIRP calculated is -4.08 dBm (RF Conducted Power) + 0 dBi (Antenna Gain) = -4.08 dBm or 0.3908 mW.

***Results: SAR evaluation is not required since the higher of the maximum conducted or equivalent isotopically radiated power (EIRP) source-based, time averaged output power is below the exemption limit.***

Note: Antenna gains below 0 are considered as 0dBi.

#### 4.0 Document History

Revision/ Job Number	Writer Initials	Reviewers Initials	Date	Change
1.0/ G104716705	AK	KV	July 28, 2021	Original document