

Flare Jewelry, Inc.

RF Exposure Exhibit

SCOPE OF WORK

EMC TESTING – Flare Bracelet Model: FJ6002MSCSP

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104716705MPK-010

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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	
Equipment Under Test:	Flare Bracelet
Trade Name:	Flare Jewelry, Inc.
Model(s) Tested:	FJ6002MSCSP
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Applicable Regulation:	47CFR 2.1093 RSS-102 Issue 5

TABLE OF CONTENTS

1.0	<i>RF Exposure Summary</i>	5
2.0	<i>RF Exposure Limits</i>	5
3.0	<i>Test Results (Portable Configuration)</i>	6
4.0	<i>Document History</i>	8

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 ≤ 5 mm SAR Exemption limit is ≤ 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 ≤ 5 mm SAR Exemption limit is ≤ 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 ¹ (dBi)	Note
2402-2480	-4.08	-3.7	Conducted power measurements were taken from Report # 104716705MPK-002.

¹As 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