

# Bigfoot Biomedical, Inc. **RF Exposure Exhibit**

## **SCOPE OF WORK**

EMC TESTING – Bigfoot Unity System, Model: LCAP

## **REPORT NUMBER**

104424286MPK-003A

## **ISSUE DATE**

November 20, 2020

## **REVISED DATE**

N/A

## **PAGES**

8

## **DOCUMENT CONTROL NUMBER**

Non-Specific Radio Report Shell Rev. December 2017 MPK  
© 2017 INTERTEK



**RF Exposure Exhibit  
(Portable devices)**

**Report Number:** 104424286MPK-003A

**Project Number:** G104424286

**Report Issue Date:** November 20, 2020

**Product Designation:** Bigfoot Unity System

**Model Tested:** LCAP

**FCC ID:** 2AVAYUL001

to

**47CFR 2.1093**

for

**Bigfoot Biomedical, Inc.**

**Tested by:**

Intertek  
1365 Adams Court  
Menlo Park, CA 94025 USA

**Client:**

Bigfoot Biomedical, Inc.  
1820 McCarthy Blvd  
Milpitas, CA 95035 USA

**Report prepared by:**



**Anderson Soungpanya / Project Engineer**

**Report reviewed by:**



**Krishna Vemuri / EMC Manager**

*This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.*

| Report No. 104424286MPK-003A  |                                                                      |
|-------------------------------|----------------------------------------------------------------------|
| <b>Equipment Under Test:</b>  | Bigfoot Unity System                                                 |
| <b>Trade Name:</b>            | Bigfoot Biomedical, Inc.                                             |
| <b>Model(s) Tested:</b>       | LCAP                                                                 |
| <b>Applicant:</b>             | Bigfoot Biomedical, Inc.                                             |
| <b>Contact:</b>               | Ravi Shankar                                                         |
| <b>Address:</b>               | Bigfoot Biomedical, Inc.<br>1820 McCarthy Blvd<br>Milpitas, CA 95035 |
| <b>Country:</b>               | USA                                                                  |
| <b>Tel. Number:</b>           | (925) 949-6963                                                       |
| <b>Email:</b>                 | rshankar@bigfootbiomedical.com                                       |
| <b>Applicable Regulation:</b> | 47CFR 2.1093                                                         |

## TABLE OF CONTENTS

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

**1.0 RF Exposure Summary**

| Test                                             | Reference<br>FCC | Result   |
|--------------------------------------------------|------------------|----------|
| Radio frequency Radiation<br>Exposure Evaluation | 47 CFR§2.1093    | Complies |

**2.0 RF Exposure Limits****2.1 FCC Limits**

According to FCC KDB 447498 D01 v06, at frequency 2480 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 9.525$  mW.

### 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.

#### 3.2 EIRP calculations

The Bigfoot Unity System 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             | -2.52           | 5.3                             | Conducted power measurements were taken from Report # 104424286MPK-003 |

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

### 3.4 RF Exposure Calculation for Bigfoot Unity System

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

According to FCC KDB 447498 D01 v06 at frequency 2480 MHz and separation distance of  $\leq 5$  mm SAR Exemption limit is  $\leq 9.525$  mW.

Max Peak Conducted Power measured = -2.52 dBm or 0.560mW

No duty cycle was considered.

Therefore, the Maximum EIRP calculated is -2.52 dBm (RF Conducted Power) + 5.3 dBi (Antenna Gain) = 2.78dBm or 1.897 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.***

#### 4.0 Document History

| Revision/<br>Job Number | Writer<br>Initials | Reviewers<br>Initials | Date              | Change            |
|-------------------------|--------------------|-----------------------|-------------------|-------------------|
| 1.0/ G104424286         | AS                 | KV                    | November 20, 2020 | Original document |