Maximum Permissible Exposure Report

Product	:	GlucoSure Link Blood Glucose Monitoring System
Model Name	:	BGM024
FCC ID	:	2AV24BGM024
Test Regulation	:	47 CFR FCC Part 2.1091
Received Date	:	2021/3/23
Issued Date	:	2021/5/19
Applicant	:	Apex Biotechnology Corp. No. 7, Li-Hsin Rd. V, Hsinchu Science Park, Hsinchu, Taiwan, R.O.C.
Issued By	:	Underwriters Laboratories Taiwan Co., Ltd. Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Testing Laboratory
3398

REVISION HISTORY

Original Test Report No.: 4789856090-US-R1-V0

Rev.	Test report No.	Date	Page revised	Contents
Original	4789856090-US-R1-V0	2021/5/19	-	Initial issue

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1. Attestation of Test Results

APPLICANT:	Apex Biotechnology Corp. No. 7, Li-Hsin Rd. V, Hsinchu Science Park, Hsinchu, Taiwan, R.O.C.
MANUFACTURER:	Apex Biotechnology Corp. No. 7, Li-Hsin Rd. V, Hsinchu Science Park, Hsinchu, Taiwan, R.O.C.
EUT DESCRIPTION:	GlucoSure Link Blood Glucose Monitoring System
BRAND:	ApexBio
MODEL:	BGM024
SAMPLE STAGE:	Identical Prototype

APPLICABLE STANDARDS	
STANDARD	**Test Results**
47 CFR FCC PART 2.1091	PASS

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

Sally Lu Date : 2021/5/19
Project Handler

Approved and Authorized By:

Waternil Guan Date : 2021/5/19
Engineer

2. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

3. Facilities and Accreditation

Test Location	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398. The full scope of accreditation can be viewed at http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398

4. Equipment Under Test

4.1. Description of EUT

Product Name	GlucoSure Link Blood Glucose Monitoring System	
Brand Name	ApexBio	
Model Name	BGM024	
Operating Frequency	Bluetooth LE	2402MHz ~ 2480MHz
Modulation	Bluetooth LE	GFSK
Number of Channel	Bluetooth LE	40
Normal Voltage	3Vdc from Battery	
S/N	BGM024	
Hardware Version	N/A	
Software Version	N/A	

Note:
1. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

4.2. Description of Available Antennas

Ant. No.	Transmitter Circuit	Brand Name	Model Name	Ant. Type	Maximum Gain (dBi)
1	Chain (0)	APEX BIOTECHNOLOGY	APEX_BGM024 PCB ANT	PCB	0

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual.

5. Requirement

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
- f(GHz) is the RF channel transmit frequency in GHz.
- Power and distance are rounded to the nearest mW and mm before calculation.
- The result is rounded to one decimal place for comparison The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
a) [Threshold at 50 mm in step 1) + (test separation distance - 50mm)·(f(MHz)/150)] mW, at 100MHz to 1500 MHz
b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz

3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by ½ for test separation distances ≤ 50 mm.
c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

6. Radio Frequency Radiation Exposure Evaluation

Bluetooth LE

Operating Mode	Evaluation Frequency (MHz)	Max. Average power (dBm)	Antenna Gain (dBi)	Min. test separation distance (mm)	SAR test exclusion calculation value	1-g SAR test exclusion thresholds	Result
BT LE_1Mbps	2402 ~ 2480	-4.01	0	5	0.125	≦3	PASS
BT LE_2Mbps	2402 ~ 2480	-4.03	0	5	0.124	≦3	PASS

Note:
1. Max. EIRP (dBm) = Max. Average power (dBm) + Antenna Gain (dBi)
2. Max. EIRP (mW) = $10^{(\text{Max. EIRP (dBm)} / 10)}$
3. Calculate SAR test exclusion thresholds from section 5.1 formulas.

Conclusion:

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

END OF REPORT