

SAR Evaluation Report

Product : Blood Glucose Meter
Trade mark : N/A
Model/Type reference : G-427B
Serial Number : N/A
Report Number : EED32K00051802
FCC ID : 2AHLE-BGMB002
Date of Issue : Apr. 24, 2018
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 v06
Test result : PASS

Prepared for:

Bioland Technology Ltd.

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Prepared by:

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Check No.:3177478674

2 Version

Version No.	Date	Description
00	Apr. 24, 2018	Original

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4 General Information

4.1 Client Information

Applicant:	Bioland Technology Ltd.
Address of Applicant:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China
Manufacturer:	Bioland Technology Ltd.
Address of Manufacturer:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China
Factory:	Bioland Technology Ltd.
Address of Factory:	A6b7 (Block G), Shangrong Ind. Zone Baolong 5th Rd, Longgang District, Shenzhen, guangdong, China

4.2 General Description of EUT

Product Name:	Blood Glucose Meter
Mode No.(EUT):	G-427B
Trade Mark:	N/A
EUT Supports Radios application:	2402-2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	Bluetooth
Number of Channels:	40
Test Power Grade:	4(manufacturer declare)
Test Software of EUT:	Bluetooth TI Tool (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	2.81dBi
Power Supply:	DC 3V (Alkaline Battery AAA *2)
Conducted Peak Output Power:	-1.513dBm
	The Conducted Peak Output Power data refer to the report EED32K00051801
Sample Received Date:	Mar. 15, 2018
Sample tested Date:	Mar. 15, 2018 to Apr. 24, 2018
The tested sample(s) and the sample information are provided by the client.	

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4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax: +86 (0) 755 3368 3385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Test Facility

None.

4.6 Deviation from Standards

None.

4.7 Abnormalities from Standard Conditions

None.

4.8 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
$$f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$$

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

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

5.1.3 EUT RF Exposure

The Max Conducted Peak Output Power is -1.513dBm in Lowest channel(2.402GHz);

The best case gain of the antenna is 2.81dBi.

$\text{EIRP} = -1.513\text{dBm} + 2.81\text{dBi} = 1.297\text{dBm}$

1.297dBm logarithmic terms convert to numeric result is nearly 1.35mW

According to the formula. calculate the EIRP test result:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})}$$

General RF Exposure = $(1.35\text{mW} / 5 \text{ mm}) \times \sqrt{2.402\text{GHz}} = 0.418$ ①

SAR requirement:

$S = 3.0$

② ;

① < ②.

So the SAR report is not required.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32K00051801 for EUT external and internal photos.

*** End of Report ***

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