

TEST REPORT

Product Name : Automatic Upper Arm Blood Pressure Monitor
BA-831X, BA-832X, BA-833X, BA-837X,
BA-838X, BA-842X, BA-843X, BA-845X,
Model Number : BA-847X, BA-849X, BA-851X, BA-852X,
BA-855X, BA-835, BA-836, BA-839, BA-840,
BA-856,
FCC ID : 2BE44-ET24BLE

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Report Number : EDG2402040009E00102R
Date(s) of Tests : February 19, 2024 to March 06, 2024
Date of issue : March 06, 2024

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1. TEST RESULT CERTIFICATION

Applicant : DONGGUAN E-TEST TECHNOLOGY CO., LTD.
Address : Room 201,301, Building 1, Changping Section No.1, Dongshen Road, Changping Town, Dongguan City, Guangdong, China
Manufacturer : DONGGUAN E-TEST TECHNOLOGY CO., LTD.
Address : Room 201,301, Building 1, Changping Section No.1, Dongshen Road, Changping Town, Dongguan City, Guangdong, China
EUT : Automatic Upper Arm Blood Pressure Monitor
Model Name : BA-831X, BA-832X, BA-833X, BA-837X, BA-838X, BA-842X, BA-843X, BA-845X, BA-847X, BA-849X, BA-851X, BA-852X, BA-855X, BA-835, BA-836, BA-839, BA-840, BA-856
Trademark : N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
§ 15.247(i), § 2.1093	PASS

The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC § 15.247(i), § 2.1093.

The test results of this report relate only to the tested sample identified in this report

Date of Test : February 19, 2024 to March 06, 2024

Prepared by :

Warren Deng

Warren Deng /Editor

Reviewer :

Tim Dong

Tim Dong /Supervisor

Approve & Authorized Signer :

Sam Lv

Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2402040009E00102R	/	Original Report



2. EUT Specification

Characteristics	Description
Product:	Automatic Upper Arm Blood Pressure Monitor
Model Number:	BA-831X, BA-832X, BA-833X, BA-837X, BA-838X, BA-842X, BA-843X, BA-845X, BA-847X, BA-849X, BA-851X, BA-852X, BA-855X, BA-835, BA-836, BA-839, BA-840, BA-856 All models are the same except the model name and color. Here, BA-831X is selected for all tests.
Sample:	1#
Data Rate:	1Mbps, 2Mbps
Modulation:	GFSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	40 channels
Transmit Power Max:	-10.11 dBm(0.000097 W)
Antenna Gain:	1.13 dBi
Power supply:	DC 6V from battery
Evaluation applied:	☐ MPE Evaluation ☒ SAR Evaluation

3. Test Requirement

SAR Evaluation

According to 447498 D01 V06, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f_{(\text{GHz})}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,²⁴ where

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁵
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval. One antenna is available for the EUT. The minimum separation distance is 5mm.

4. Measurement Result

Antenna gain: 1.13 dBi

Transmit Frequency(MHz)	Rate	Mode	Measured Power (dBm)	E.I.R.P (dBm)	Tune upPower (dBm)	Max tune up power (dBm)	Calculation Result	Calculation threshold (1-g SAR)
2402	1M	GFSK	-11.44	-10.31	-11±1	-10	0.0309968	3
2440		GFSK	-10.05	-8.92	-9±1	-8	0.0495238	3
2480		GFSK	-10.04	-8.91	-9±1	-8	0.0499178	3
2402	2M	GFSK	-11.55	-10.42	-11±1	-10	0.0309968	3
2440		GFSK	-10.11	-8.98	-9±1	-8	0.0495238	3
2480		GFSK	-10.11	-8.98	-9±1	-8	0.0499178	3

According to KDB 447498 D01 V06, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

*** End of Report ***