

RF Exposure Evaluation Report

Product : Blood Pressure Monitor
Trade mark : N/A
Model/Type reference : BP1S, BP1SA
Serial Number : N/A
Report Number : EED32N81308502
FCC ID : 2AD XK-8612
Date of Issue : Dec. 20, 2021
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

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1 Version

Version No.	Date	Description
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3 General Information

3.1 Client Information

Applicant:	Shenzhen Viatom Technology Co.,Ltd.
Address of Applicant:	4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China
Manufacturer:	Shenzhen Viatom Technology Co.,Ltd.
Address of Manufacturer:	4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China
Factory:	Shenzhen Viatom Technology Co., Ltd.
Address of Factory:	4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China

3.2 General Description of EUT

Product Name:	Blood Pressure Monitor
Model No.:	BP1S,BP1SA
Trade Mark:	N/A
Bluetooth Version:	V4.2
Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK
Transfer Rate:	<input checked="" type="checkbox"/> 1Mbps <input type="checkbox"/> 2Mbps
Number of Channel:	40
Product Type:	<input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Antenna Type:	Monopole Antenna
Antenna Gain:	3.19dBi
Power Supply:	Lithium battery: DC 3.7V,130mAh,0.481Wh
Test Voltage:	DC 3.7V
Sample Received Date:	Dec. 07, 2021
Sample tested Date:	Dec. 07, 2021 to Dec. 16, 2021
<p>Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.</p> <p>Model No.:BP1S,BP1SA</p> <p>Only the model BP1S was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, the only difference is the enclosure color, BP1S is light silver, while BP1SA is dark silver.</p>	

3.3 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

3.4 Deviation from Standards

None.

3.5 Abnormalities from Standard Conditions

None.

3.6 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 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.

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:

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

$f(\text{GHz})$ 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

4.1.2 EUT RF Exposure

1) For BLE

Measurement Data

GFSK mode(1Mbps)				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-5.09	-6.00±1	-5.00	0.316
Middle(2440MHz)	-4.47	-5.00±1	-4.00	0.398
Highest(2480MHz)	-4.23	-5.00±1	-4.00	0.398

Worst case: GFSK mode(1Mbps)						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-5.09	-6.00±1	-5.00	0.316	0.098	3.0
Middle (2440MHz)	-4.47	-5.00±1	-4.00	0.398	0.124	
Highest (2480MHz)	-4.23	-5.00±1	-4.00	0.398	0.125	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N81308501.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32N81308501 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***