

RF Exposure Evaluation Report

Product : Pulse Oximeter
Trade mark : Viatom
Model/Type reference : PO6B, PO6C
Serial Number : N/A
Report Number : EED32O80030602
FCC ID : 2AD XK-1631
Date of Issue : Mar. 14, 2022
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

Shenzhen Viatom Technology Co., Ltd.
4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road,
Baoan District, Shenzhen, China

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China
TEL: +86-755-3368 3668
FAX: +86-755-3368 3385

Compiled by:

mark.chen.

Reviewed by:

Aaron Ma

Approved by:

Mark Chen
David Wang

Date:

Aaron Ma
Mar. 14, 2022

David Wang

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2 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:	501, Building B, Ganghongji High-tech Intelligent Industrial Park, No.1008 Songbai Road, Xili Street, Nanshan District, 518055 Shenzhen, China
Factory:	Shenzhen Viatom Technology Co., Ltd.
Address of Factory:	501, Building B, Ganghongji High-tech Intelligent Industrial Park, No.1008 Songbai Road, Xili Street, Nanshan District, 518055 Shenzhen, China

3.2 General Description of EUT

Product Name:	Pulse Oximeter
Model No.(EUT):	PO6B, PO6C
Test Model No.:	PO6B
Trade Mark:	Viatom

3.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	PhyPlusKit
Antenna Type:	PCB Antenna
Antenna Gain:	0 dBi
Power Supply:	DC 3V
Max Conducted Peak Output Power:	3.87 dBm
	The Max Conducted Peak Output Power data refer to the report EED32O80030601
Sample Received Date:	Jan. 10, 2022
Sample tested Date:	Jan. 10, 2022 to Jan. 27, 2022
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. Model No.: PO6B,PO6C Only the model PO6B was tested,The appearance structure and key components of PO6B and PO6C are the same. Among them, PO6B has the most complete configuration, so PO6B can cover the PO6C in the test.	

3.4 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

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 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.

4.1.2 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:

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

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

4.1.3 EUT RF Exposure

1) For Bluetooth Classic

Measurement Data:

BLE 1M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	3.87	3±1	4	2.512
Middle(2440MHz)	2.82	3±1	4	2.512
Highest(2480MHz)	2.2	3±1	4	2.512

BLE 2M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	3.77	3±1	4	2.512
Middle(2440MHz)	2.77	3±1	4	2.512
Highest(2480MHz)	2.19	3±1	4	2.512

Worst case is BLE 1M: GFSK

Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	3.87	3±1	4	2.512	0.791	3.0
Middle (2441MHz)	2.82	3±1	4	2.512	0.791	
Highest (2480MHz)	2.2	3±1	4	2.512	0.791	

Conclusion: the calculated value ≤3.0, SAR is exempted.

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32O80030601.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32O80030601 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 ***