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Report No.: 2301TW8601-U3
Report Version: 1.0
Issue Date: 2023-05-04

RF Exposure Evaluation

FCC ID	:	UV3SPW-62B
APPLICANT	:	AViTA Corporation
Product	:	Pulse Oximete
Model No.	:	SP62B
Brand Name	:	AViTA
FCC Rule Part(s):	:	Part 2.1093 (Portable)
Received Date	:	April 24 ,2023
Tested By	:	Fran Chen
		(Fran Chen)
Reviewed By	:	Paddy Chen
		(Paddy Chen)
Approved By	:	Chenz Ker
		(Chenz Ker)

Testing Laboratory
3261

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.
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Revision History

Report No.	Version	Description	Issue Date	Note
2301TW8601-U3	1.0	Original Report	2023-05-04	

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Pulse Oximete
Model No.	SP62B
Brand Name	AViTA
Supports Radios Spec.	**WPAN:** Bluetooth Single Mode: V4.0

1.2. Antenna Description

No.	Brand	Part No.	Antenna Type	Peak Gain
1	AViTA	BLEM01	PCB	1.22dBi

2. RF Exposure Evaluation

2.1. FCC Limits

According to FCC KDB 447498 D04V01 - SAR-Based Exemption

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by Formula .

$$P_{\text{th}}\ (\text{mW}) = \begin{cases} ERP_{20\ \text{cm}}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ \text{cm}} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases}$$

where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ \text{cm}}\sqrt{f}}\right)$$

and f is in GHz, d is the separation distance (cm), and ERP_{20cm} is per Formula.

$$P_{\text{th}}\ (\text{mW}) = ERP_{20\ \text{cm}}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

The example values shown as below are for illustration only.

Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Note: when 10-g extremity SAR applies, SAR test exemption may be considered by applying a factor of 2.5 to the SAR-based exemption thresholds.

2.2. Test Result of RF Exposure Evaluation

Mode	Frequency Band (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	EIRP (mW)	FCC SAR Test Exclusion Threshold (mW)
BLE	2402~2480	0.07	1.02	1.22	1.67	3

Use separation distance 5mm for calculation, this device can comply the SAR test exclusion.

The End