

RF Exposure Evaluation Report

Product : Smart Body Fat Scale
Trade mark : Homebuds/Vitafit
HB902, HB9027, HB9028, VT701, VT702, VT7027,
Model/Type reference : VT7028, VT717U, VT7177, VT716, VT7166,
VT7167, VT719, VT7193, VT7195, VT729,
VT7298, HB909, HB9097, HB9098, VT7018, VT7019,
HB920, HB9203, HB9205
Serial Number : N/A
Report Number : EED32O81371802
FCC ID : 2A2DS-HB902
Date of Issue : Oct. 20, 2022
47 CFR Part 1.1307
Test Standards : 47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

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2 Version

Version No.	Date	Description
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4 General Information

4.1 Client Information

Applicant:	Shenzhen Shine Industrial Co., Ltd.
Address of Applicant:	2-3/F, Bldg 5, 1st Industrial Zone, Changzhen Community, Yutang town, Guangming District, Shenzhen, Guangdong, China
Manufacturer:	Shenzhen Shine Industrial Co., Ltd.
Address of Manufacturer:	2-3/F, Bldg 5, 1st Industrial Zone, Changzhen Community, Yutang town, Guangming District, Shenzhen, Guangdong, China
Factory:	Shenzhen Shine Industrial Co., Ltd.
Address of Factory:	2-3/F, Bldg 5, 1st Industrial Zone, Changzhen Community, Yutang town, Guangming District, Shenzhen, Guangdong, China

4.2 General Description of EUT

Product Name:	Smart Body Fat Scale
Model No.(EUT):	HB902, HB9027, HB9028, VT701, VT702, VT7027, VT7028, VT717U, VT7177, VT716, VT7166, VT7167, VT719, VT7193, VT7195, VT729, VT7298, HB909, HB9097, HB9098, VT7018, VT7019, HB920, HB9203, HB9205
Test Model No.:	HB902
Trade Mark:	Homebuds/Vitafit

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	Lekit
Antenna Type:	PCB Antenna
Antenna Gain:	2.6dBi
Power Supply:	DC 4.5V
Sample Received Date:	Sep. 01, 2022
Sample tested Date:	Sep. 01, 2022 to Sep. 06, 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.:HB902, HB9027, HB9028, VT701, VT702, VT7027, VT7028, VT717U, VT7177, VT716, VT7166, VT7167,VT719, VT7193, VT7195, VT729, VT7298, HB909, HB9097, HB9098, VT7018, VT7019, HB920, HB9203, HB9205 Only the model HB902 was tested. Their electrical circuit design, layout, components used and internal wiring are identical. Only the appearance pattern and model names are different.	

4.4 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

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 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:

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

$[\sqrt{f(\text{GHz})}] \leq 3.0$ 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

5.1.3 EUT RF Exposure Evaluation

BLE 1M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.21	0±1	1	1.259
Middle(2441MHz)	-0.31	0±1	1	1.259
Highest(2480MHz)	-0.70	0±1	1	1.259

BLE 2M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.21	0±1	1	1.259
Middle(2441MHz)	-0.30	0±1	1	1.259
Highest(2480MHz)	-0.71	0±1	1	1.259

Worst case is BLE: 1M

Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-0.21	0±1	1	1.259	0.397	3.0
Middle (2440MHz)	-0.31	0±1	1	1.259	0.397	
Highest (2480MHz)	-0.70	0±1	1	1.259	0.397	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32O81371801.

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*** End of Report ***