

RF Exposure Evaluation Report

Product : Smart Health Monitoring Ring
Trade mark : N/A
Model/Type reference : See content 3.2
Serial Number : N/A
Report Number : EED32O81611002
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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:	Guangdong Jiuzhi Technology Co., Ltd
Address of Applicant:	411-18, Building C, Innovation Center, Xiangshan Avenue, Cuiheng New District, zhongshan City, China
Manufacturer:	Guangdong Jiuzhi Technology Co., Ltd
Address of Manufacturer:	411-18, Building C, Innovation Center, Xiangshan Avenue, Cuiheng New District, zhongshan City, China
Factory:	Huizhou Speed Wireless Technology Co., Ltd
Address of Factory:	138 Huize Avenue, Dongjiang Hi tech Industrial Park, Zhongkai Hi tech Zone, Huizhou

4.2 General Description of EUT

Product Name:	Smart Health Monitoring Ring
Model No.(EUT):	BOR-01-9, BOR-01-6, BOR-01-7, BOR-01-8, BOR-01-10, BOR-01-11, BOR-01-12, BOR-01-13, BOR-01-14
Test Model No.:	BOR-01-9
Trade Mark:	N/A

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	bgtool
Antenna Type:	Ceramic Antenna
Antenna Gain:	2.5dBi
Power Supply:	DC 3.8V
Max Conducted Peak Output Power:	0.05dBm
Sample Received Date:	Oct. 14, 2022
Sample tested Date:	Oct. 14, 2022 to Oct. 19, 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: BOR-01-9, BOR-01-6, BOR-01-7, BOR-01-8, BOR-01-10, BOR-01-11, BOR-01-12, BOR-01-13, BOR-01-14

Only the model BOR-01-9 was tested. The similarities between these models are that they use the same electronic components, but the differences are the product inner diameter.

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

1) For Bluetooth LE

Measurement Data:

BLE 1M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	0.04	0.0±0.5	0.5	1.122
Middle(2441MHz)	-0.43	0.0±0.5	0.5	1.122
Highest(2480MHz)	-0.19	0.0±0.5	0.5	1.122

BLE 2M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	0.05	0.0±0.5	0.5	1.122
Middle(2441MHz)	-0.41	0.0±0.5	0.5	1.122
Highest(2480MHz)	-0.16	0.0±0.5	0.5	1.122

Worst case is BLE: 2M

Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	0.05	0.0±0.5	0.5	1.122	0.353	3.0
Middle (2441MHz)	-0.41	0.0±0.5	0.5	1.122	0.353	
Highest (2480MHz)	-0.16	0.0±0.5	0.5	1.122	0.353	

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

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32O81611001.

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 ***