

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20210701131E-02	Rev.01	Initial report	2021-11-16

2 Contents

	Page
1 VERSION	2
2 CONTENTS	3
.....	3
3 GENERAL INFORMATION	4
3.1 CLIENT INFORMATION.....	4
3.2 GENERAL DESCRIPTION OF EUT.....	4
3.3 GENERAL DESCRIPTION OF BLE.....	4
4 SAR EVALUATION	5
4.1 RF EXPOSURE COMPLIANCE REQUIREMENT.....	5
4.1.1 <i>Standard Requirement</i>	5
4.1.2 <i>Limits</i>	5
4.1.3 <i>EUT RF Exposure</i>	6

3 General Information

3.1 Client Information

Applicant:	Shenzhen DO Intelligent Technology Co., Ltd
Address of Applicant:	11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen, China
Manufacturer:	Shenzhen DO Intelligent Technology Co., Ltd
Address of Manufacturer:	11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen, China
Factory:	Shenzhen DO Intelligent Technology Co., Ltd
Address of Factory:	11th Floor, 3# Building, Guole Tech Park, Lirong Road, Dalang, Longhua District, Shenzhen, China

3.2 General Description of EUT

Product Name:	Smart Watch
Model No.:	Lynn, DR02
Test Model No.:	DR02
Trade Mark:	IDO
Hardware Version:	V1.3
Software Version:	V9
Power Supply:	lithium battery:DC3.8V, 210mAh, Charge by DC5.0V

3.3 General Description of BLE

Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK
Transfer Rate:	1Mbps
Number of Channel:	40
Product Type:	<input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Antenna Type:	FPC antenna
Antenna Gain:	-0.03dBi

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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:

$$\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \cdot \sqrt{f(\text{GHz})} \right] \leq 3.0$$
 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 BLE(1Mbps)

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.51	-1.5±1	-0.5	0.891
Middle(2440MHz)	0.05	-1±1	0	1.000
Highest(2480MHz)	0.48	-0.5±1	0.5	1.122

Worst case: GFSK mode						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune- up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-0.51	0±1	1	1.259	0.390	3.0
Middle (2440MHz)	0.05	0±1	1	1.259	0.393	
Highest (2480MHz)	0.48	1±1	2	1.585	0.499	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20210701131E-01
BLE can not simultaneous transmitting at same time.