

RF Exposure Evaluation Report

Product : Lingolet ONE
Trade mark : Lingolet ONE
Model/Type reference : ONE Mini, Lingolet ONE
Serial Number : N/A
Report Number : EED32L00279903
FCC ID : 2AU9ICSYLW1199
Date of Issue : Jan. 03, 2020
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF Exposure Guidance v06
Test result : PASS

Prepared for:

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2 Version

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4 General Information

4.1 Client Information

Applicant:	IOL (WUHAN) INFORMATION TECHNOLOGY CO., LTD
Address of Applicant:	Room1302,13F, Bldg.B2, Future City, No.999 Gaoxin Ave., Wuhan
Manufacturer:	IOL (WUHAN) INFORMATION TECHNOLOGY CO., LTD
Address of Manufacturer:	Room1302,13F, Bldg.B2, Future City, No.999 Gaoxin Ave., Wuhan
Factory:	IOL (WUHAN) INFORMATION TECHNOLOGY CO., LTD
Address of Factory:	Room1302,13F, Bldg.B2, Future City, No.999 Gaoxin Ave., Wuhan

4.2 General Description of EUT

Product Name:	Lingolet ONE
Model No.(EUT):	ONE Mini, Lingolet ONE
Test Mode No.:	ONE Mini
Trade Mark:	Lingolet ONE
EUT Supports Radios application:	BT 5.0 Dual mode, 2402MHz to 2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Test Power Grade:	TXGC: 40, Tx power LCH: 50 MCH: 45 HCH: 45
Test Software of EUT:	Airoha AB152x (verC) LAB TestTool-Version 2.1.0.11688
Antenna Type:	Ceramic Antenna
Antenna Gain:	2.64 dBi
Power Supply:	Battery XC--351525, 3.7V,100mAh
Max Conducted Peak Output Power:	3.7dBm The Max Conducted Peak Output Power data refer to the report EED32L00279902
Sample Received Date:	Sep. 29, 2019
Sample tested Date:	Sep. 29, 2019 to Nov. 18, 2019

The tested sample(s) and the sample information are provided by the client.

Model No.: ONE Mini, Lingolet ONE

We hereby declare the following products: Lingolet ONE comes in two models

Main test model: ONE Mini, sales region: Europe, South Korea and America, four colors (red, black, silver and green) are the same model, no other differences

Additional model: Lingolet ONE. Sales region: Europe, Korea and America, four colors (red, black, silver and green) are the same model, the difference between the two models above is only in color, model are differences.

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

The tune-up power is 3 dBm +/- 1dB, therefore the highest tune-up power is

3.700 (2.34 mW) @ 2480 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$\left(\frac{2.34}{5\text{mm}} \right) * \left(2.480\text{GHz}^{0.5} \right) = 0.7$$

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] * \left[\sqrt{f(\text{GHz})} \right] = 0.7 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32L00279901 for EUT external and internal photos.

*** End of Report ***

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