FCC Maximum Permissible Exposure(MPE) Estimation Report

For

Velasso Inc
5855 Horton St Suite 507 Emeryville, CA 94608

Model: **LK-B100，LK-C100, LK-A100**

Test Engineer:	Mist Peng
Report Number:	FCC16063712-3
Report Date:	2016-06-29
FCC ID	2AHTG-LK10
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Modified History

REV.	Modification Description	Issued Date	Remark
REV.1.0	Initial Test Report Relesse	2016-06-29	

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1. General information

1.1. Notes

The test results of this test report relate exclusively to the test item specified in this test report. World Standardization Certification & Testing CO., LTD does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report is not to be reproduced or published in full without the prior written permission.

1.2. Application details

Date of receipt of test item: 2016-06-03

Start of test: 2016-06-20

End of test: 2016-06-29

1.3. EUT Description

Device Information：			
DUT Name:	LK-B100 & LK-C100&LK-A100		
Model Difference	The only differences are the color.		
Trade Mark：	N/A		
Applicant:	**Velasso Inc**		
Address	5855 Horton St Suite 507 Emeryville, CA 94608		
Manufacturer:	**Velasso Inc**		
Address	5855 Horton St Suite 507 Emeryville, CA 94608		
Device Type :	LINKA Smart Lock		
Exposure Category:	Uncontrolled environment/general population		
Hardware Version :	v1.24		
Software Version :	v6.0		
Antenna Type :	Integral Antenna		
Device Operating Configurations:			
Supporting Mode(s)	BT		
Test Modulation	GFSK		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	BT	2402~2480	2402~2480

2. Test specification(s)

SUPPLEMENT C Edition 01-01 to OET65c	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields – Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions
ANSI Std C95.1-1992	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)
RSS-102	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands (Issue 4 of March 2010))
KDB 447498 D01v05	General RF Exposure Guidance

3 Testing laboratory

TEST SITE	World Standardization Certification & Testing(Shenzhen) Co., Ltd.
Test Location	Building A, Baoshi Science & Technology Park, Baoshi Road, Bao'an District, Shenzhen, Guangdong, China
Telephone	+86-755-26996192
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4 Ambient Condition

Ambient temperature	20℃ – 24℃
Relative Humidity	30% – 70%

5 RF Exposure Requirements

When the device is less than or equal to 20 cm, exemption limits is :

1) 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:

   [(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[25] where

   - $f_{(GHz)}$ is the RF channel transmit frequency in GHz
   - Power and distance are rounded to the nearest mW and mm before calculation[26]
   - The result is rounded to one decimal place for comparison
   - 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

   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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

2) At 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following, and as illustrated in Appendix B:[27]

a) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·($f_{(MHz)}$/150)] mW, at 100 MHz to 1500 MHz

b) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz

6 RF Exposure Evaluation

6.1. Operation in BT

(uplink: 2402-2480MHz, downlink: 2402-2480MHz)

$EIRP_{max}$* (dBm)	$EIRP_{max}$ (mW)	MPE Limit	Conclusion
3.73	2.4	3.00	PASS

Note:*- based on the maximum tune-up tolerance limit declared by manufacturer

According to the Table, We can draw such a conclusion:
According to the formula to calculate the result is:0.744W/m which is below the uncontrolled exposure limit of 3.0 at 2400MHz, so we can conclude it is into compliance.

------END OF REPORT------