

RF Exposure Evaluation
For
Shenzhen Conex Intelligent Technology Co., Ltd.
Smart deadbolt
Test Model: DDL241X-1HW
Additional Model No.: Please Refer to Page 6

Prepared for : Shenzhen Conex Intelligent Technology Co., Ltd.
Address : Office 01, 10th Floor, B2 Building, Chuangzhi Cloud City Phase II Project,
Xiangdong Road, Xili Community, Xili Street, Nanshan District, Shenzhen,
China

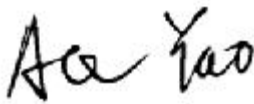
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Date of receipt of test sample : April 17, 2026
Number of tested samples : 2
Sample No. : C260415002-1, C260415002-2
Serial number : Prototype
Date of Test : April 17, 2026 ~ May 11, 2026
Date of Report : May 12, 2026

RF Exposure Evaluation	
Report Reference No.	LCSC04166069EC
Date of Issue	May 12, 2026
Testing Laboratory Name	Guangzhou LCS Compliance Testing Laboratory Ltd.
Address	No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou, Guangdong, China
Testing Location/ Procedure	Full application of Harmonised standards ☒ Partial application of Harmonised standards ☐ Other standard testing method ☐
Applicant's Name	Shenzhen Conex Intelligent Technology Co., Ltd.
Address	Office 01, 10th Floor, B2 Building, Chuangzhi Cloud City Phase II Project, Xiandong Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China
Test Specification	
Standard	FCC KDB publication 447498 D01 General RF Exposure Guidance v06 FCC CFR 47 part1 1.1310 FCC CFR 47 part2 2.1091
Test Report Form No.	TRF-4-E-215 A/0
TRF Originator	Guangzhou LCS Compliance Testing Laboratory Ltd.
Master TRF	Dated 2011-03
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Test Item Description	Smart deadbolt
Trade Mark	PHILIPS
Test Model	DDL241X-1HW
Ratings	Please Refer to Page 6
Result	Pass

Compiled by:



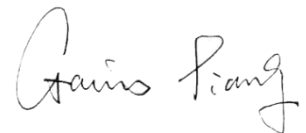
Ace Yao/ Administrator

Supervised by:



Justin Zhu/ Technique Director

Approved by:



Gavin Liang/ Manager

RF Exposure Evaluation

Test Report No. : LCSC04166069EC	<u>May 12, 2026</u> Date of issue
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Test Model.....	: DDL241X-1HW
EUT.....	: Smart deadbolt
Applicant.....	: Shenzhen Conex Intelligent Technology Co., Ltd.
Address.....	: Office 01, 10th Floor, B2 Building, Chuangzhi Cloud City Phase II Project, Xiandong Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Shenzhen Conex Intelligent Technology Co., Ltd.
Address.....	: Office 01, 10th Floor, B2 Building, Chuangzhi Cloud City Phase II Project, Xiandong Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China
Telephone.....	:
Fax.....	:
Factory.....	: Zhejiang Kaidishi Industrial Co., Ltd.
Address.....	: Building 8, Ou Hai High-tech Classes Industrial Park, No.32, Fuhai Ropad, Guoxi Street, Ou Hai District, Wenzhou City, Zhejiang, P.R.China
Telephone.....	: /
Fax.....	: /

Test Result	Pass
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	May 12, 2026	Initial Issue	---

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1. Product Information

EUT : Smart deadbolt
 Test Model : DDL241X-1HW
 Additional Model No. : DDL241X-15HW, DDLOM1041X-1HW, DDLOM1041X-15HW
 Model Declaration : See Model difference as below
 Ratings : Input: DC 6V by Battery
 Hardware Version : V1.0
 Software Version : V1.0

Bluetooth

Frequency Range : 2402MHz~2480MHz
 Bluetooth Channel Number : 40 channels for Bluetooth V5.4 (DTS)
 Bluetooth Channel Spacing : 2MHz for Bluetooth V5.4 (DTS)
 Bluetooth Modulation Type : GFSK for Bluetooth V5.4 (DTS)
 Bluetooth Version : V5.4
 Antenna Description : FPC Antenna, 4.23dBi(Max.)

WIFI(2.4G Band)

Frequency Range : 2412MHz-2462MHz
 Channel Number : 11 Channels for 20MHz bandwidth (2412~2462MHz)
 7 Channels for 40MHz bandwidth (2422~2452MHz)
 Channel Spacing : 5MHz
 Modulation Type : IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK)
 IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
 IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK)
 Antenna Description : FPC Antenna, 4.23dBi(Max.)
 Exposure category : General population/uncontrolled environment
 EUT Type : Production Unit
 Device Type : Mobile Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.

Model difference

PMN	Model No.	With/Without Fingerprint unlock function	Sales Channel
Smart deadbolt	DDL241X-1HW	With	Amazon
	DDLOM1041X-1HW	With	offline sales
	DDL241X-15HW	Without	Amazon
	DDLOM1041X-15HW	Without	offline sales

2. Evaluation Method

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

In accordance with KDB447498D01 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modelled or measured field strengths or power density, is ≤ 1.0 . The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3. Limit

3.1 Refer Evaluation Method

[ANSI C95.1-2019](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

[FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06](#): Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices.

3.2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure				
Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0– 30	614	1.63	(100) *	6
30 – 300	1842/f	4.89/f	(900/f ²)*	6
300 – 1500	61.4	0.163	1.0	6
1500 – 100,000	/	/	f/300	6
	/	/	5	6
Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure				
Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Uncontrolled Exposure				
0.3 – 3.0 – 30	614	1.63	(100) *	30
30 – 300	824/f	2.19/f	(180/f ²)*	30
300 – 1500	27.5	0.073	0.2	30
1500 – 100,000	/	/	f/1500	30
	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

4. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

5. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Internal/ External Identification	Antenna type and antenna number	Operate frequency band	Maximum antenna gain	Notes
Internal	FPC Antenna	2400MHz ~ 2500MHz	Bluetooth/2.4GWIFI: 4.23dBi	Bluetooth/WIFI Antenna

6. Conducted Power

[BLE_1M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	4.26
	19	2440	4.78
	39	2480	5.29

[BLE_2M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	4.17
	19	2440	4.70
	39	2480	5.19

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Output Power (dBm)
IEEE 802.11b	1	2412	15.30
	6	2437	15.32
	11	2462	18.42
IEEE 802.11g	1	2412	17.64
	6	2437	17.84
	11	2462	17.45
IEEE 802.11n HT20	1	2412	16.21
	6	2437	16.42
	11	2462	15.90
IEEE 802.11n HT40	3	2422	14.41
	6	2437	15.19
	9	2452	15.17

7. Manufacturing Tolerance

[BLE_1M]

GFSK(Peak)

Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	4.0	4.0	5.0
Tolerance ± (dB)	1.0	1.0	1.0

[BLE_2M]

GFSK(Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	4.0	4.0	5.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[2.4G WIFI]

IEEE 802.11b (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	15.0	15.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11g (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	17.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	16.0	16.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
IEEE 802.11n HT40(Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

8. Measurement Results

8.1 Standalone MPE Evaluation

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r=20\text{cm}$, as well as the gain of the used antenna refer to antenna information, the RF power density can be obtained.

[BT LE]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
[BLE_1M]	6.0	3.9811	4.23	2.6485	0.0021	1.0000
[BLE_2M]	6.0	3.9811	4.23	2.6485	0.0021	1.0000

[2.4G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11b	19.0	79.4328	4.23	2.6485	0.0400	1.0000
IEEE 802.11g	18.0	63.0957	4.23	2.6485	0.0318	1.0000
IEEE 802.11n HT20	17.0	50.1187	4.23	2.6485	0.0252	1.0000
IEEE 802.11n HT40	16.0	39.8107	4.23	2.6485	0.0200	1.0000

Remark:

1. Output power including tune-up tolerance;
2. Output power was adjusted to duty cycle at 100% if measured duty cycle less than 98%;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer.

8.2 Simultaneous Transmission MPE Evaluation

The EUT equipped with one module and one antenna. So no need consider simultaneous transmission.

9. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

10. Description of Test Facility

CNAS Registration Number is L11555
A2LA Certificate Number: 5099.01
FCC Designation Number is CN1379
Test Firm Registration Number: 729882

11. Measurement Uncertainty

BLE/2.4GWIFI:

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	±0.57dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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