Report No.: NTC1808088F-1

FCC ID: 2AOU9-001



# RF EXPOSURE REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results, data evaluation, test procedures, and equipment of configurations shown in this report were made in accordance with the procedures in ANSI C63.10(2013).

Applicant : Annex Products Pty Ltd

Address : Suite 201/168 Greville St Prahran Australia 3181

Manufacturer : Production-Partners

Address Room# 710-711, Building A, New Century Plaza, North Second Street,

Shixia, Futian Dist, Shenzhen, China - 518017

Factory : Huizhou HongKai Electronic Technology Co., Ltd

Address 3F, Building A, Taosheng industrial park, TongQiao industrial base,

Zhongkai High-tech Zone, Huizhou, China, 516239

E.U.T. : Wireless Charge Head

Brand Name : QUAD LOCK

Model No. : QLA-WCH

FCC ID : 2AOU9-001

Measurement Standard : FCC PART 15 Subpart C

Date of Receiver : August 04, 2018

Date of Test : August 04, 2018 to August 23, 2018

Date of Report : August 23, 2018

In the configuration tested, the EUT complied with the standards specified above.

This test report is for the customer shown above and their specific product only. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

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#### 1. GENERAL INFORMATION

## 1.1 Product Description for Equipment under Test

E.U.T. : Wireless Charge Head

Main model number : QLA-WCH

Additional Model

number

N/A

Brand Name : QUAD LOCK

Rating : Input: DC 5V 2A or DC 9V 1.7A

Output: DC 5V 1A or DC 9V 1.1A

Adapter : N/A

Test voltage : AC 120V 60Hz Adapter input

Cable : USB Line: 1.00m shielded

Description of model:

difference

N/A

Remark : N/A

# **Technical Specification:**

Frequency Range : 110.5-204.5KHz

Test channel : 204.5KHz

Modulation

Type

: ASK

Antenna Type : Coil antenna

Antenna Gain 0 dBi (Declaration by manufacturer)

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## 1.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2AOU9-001** filing to comply with FCC Part 15 (2016), Subpart C Rule.

# 1.3 Test Facility and Location

Site Description

EMC Lab: Listed by CNAS, August 13, 2018

The certificate is valid until August 13, 2024

The Laboratory has been assessed and proved to

be in compliance with CNAS/CL01

The Certificate Registration Number is L5795.

Listed by A2LA, November 01, 2017

The certificate is valid until December 31, 2019
The Laboratory has been assessed and proved to

be in compliance with ISO17025

The Certificate Registration Number is 4429.01

Listed by FCC, November 06, 2017
The Designation Number is CN1214
Test Firm Registration Number: 907417

Listed by Industry Canada, June 08, 2017

The Certificate Registration Number. Is 46405-9743

Name of Firm : Dongguan Nore Testing Center Co., Ltd.

(Dongguan NTC Co., Ltd.)

Site Location : Building D, Gaosheng Science & Technology Park,

Zhouxi Longxi Road, Nancheng District, Dongguan

City, Guangdong Province, China



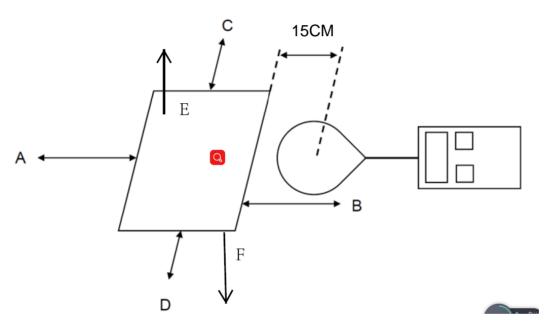
## 2. Method of measurement

## 2.1 Applicable standard

According to 1.1307(b)(1), system operating under the provisions of this section shall be operated in amnner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

According to 1.1310 and 2.1093 RF exposure is calculated. According to KDB680106 D01V03: RF exposure wireless charging apps v03.

# 2.2 Test Setup



#### 2.3 Test procedure

These testing were performed at test configuration as above diagram.

EUT was placed on a table, and the measure probe was placed at a measurement distance of 15cm surrounding the device and 20cm above the top surface.

The EUT was put in different directions (Left, Right, Front, Rear, Top and Bottom) to obtain the maximum reading.

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# 2.4 Equipment approval considerations

- 1. The EUT dose comply with item 5.2 of KDB 680106D01V03
- a, Power transfer frequency is less than 1MHz. YES; the device operated in the frequency range from 110.5-205KHz.
- b, Output power from each primary coil is less than or equal to 15 watts YES; the maximum output power of the primary coil is 5W<15W.
- c, The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that able to detect and allow coupling only between individual pair of coils.

  YES; the transfer system includes only single primary and secondary coils.
- d, Client device is placed directly in contact with the transmitter. YES; Client device is placed directly in contact with the transmitter.
- e, Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
  YES:
- f, The aggregate H-field strengths at 15cm surrounding the device and 20cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

YES; The EUT field strength levels are less than 50% x MPE limits.

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# 2.5 E and H field strength Limit

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)			
(A) Limits for Occupational/Controlled Exposures							
0.3-3.0	614	1.63	*(100)	6			
3.0-30	1842/f	4.89/f	*(900/f2)	6			
30-300	61.4	0.163	1.0	6			
300-1500	/	/	f/300	6			
1500-100,000	/	/	5	6			
(B) Limits for General Population/Uncontrolled Exposure							
0.3-1.34	614	1.63	*(100)	30			
1.34-30	824/f	2.19/f	*(180/f2)	30			
30-300	27.5	0.073	0.2	30			
300-1500	/	/	f/1500	30			
1500-100,00	/	/	1.0	30			

F=frequency in MHz

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

#### **Test Result**

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

#### **Electric Field Emissions**

Operation	Toot	Test	Probe	Limit	50%		
frequency	Test Position	Distance (cm)	zero charge	intermediate charge	full charge	(V/m)	Limit (V/m)
112.2KHz	Side A	15	3.33	3.40	3.39	614	307
	Side B	15	3.35	3.62	3.19	614	307
	Side C	15	3.70	3.45	3.00	614	307
	Side D	15	3.72	3.08	3.51	614	307
	Side E	20	2.10	2.25	2.44	614	307

**Magnetic Field Emissions** 

Operation	Test Position	Test	Probe Measure Result(A/m)			Limit	50%
Operation frequency		Distance (cm)	zero charge	intermediate charge	full charge	(A/m)	Limit (A/m)
112.2KHz	Side A	15	0.0732	0.0766	0.0785	1.63	0.815
	Side B	15	0.0711	0.0713	0.0783	1.63	0.815
	Side C	15	0.0736	0.0749	0.0760	1.63	0.815
	Side D	15	0.0772	0.0742	0.0742	1.63	0.815
	Side E	20	0.0422	0.0438	0.0533	1.63	0.815

<sup>\*=</sup>Plane-wave equivalent power density



# 2.6 Test Photo



# 2.7 Test equipment list

Description	Manufacturer	Model Number	Serial Number	Calibration Date	Calibration Due Date
3m semi-anechoic chamber	Zhongyu electron	9.2*6.2*63.4	N/A	July 03,2015	July 02, 2020
Exposure lever tester	Narda	ELT-400	N-0231	June 28,2018	June 27, 2019
Magnetic field probe 100cm <sup>2</sup>	Narda	ELT Probe 100cm <sup>2</sup>	M0675	June 28,2018	June 27, 2019