TEST REPORT

Report No. : AY0035016(4) Date : 26 Jun 2019

Application No. : LY016183 (8)

Applicant : KODA ELECTRONICS (HK) CO., LTD.
2/F MANDARIN COMMERCIAL HOUSE,
38 MORRISON HILL ROAD, WANCHAI,
HONG KONG

Sample Description : One(1) item of submitted sample stated to be

Sample description	Model No
Qi Wireless Charging Tray Clock	CA-80WC

Sample registration No. : RY038537-001
Radio Frequency : 128kHz wireless charging
Supply voltage : AC100-240 to DC5V adaptor (Model: GQ12-050200-AU)

No. of submitted sample : (One) set(s)

Date Received : 27 May 2019.

Test Period : 27 May 2019 to 17 Jun 2019.

Test Requested : RF Exposure

Test standard : KDB 680106 D01 RF Exposure Wireless Charging App v03
47 CFR Part 2 section 2.1091

Test Result : See attached sheet(s) from page 2 to 13.

Conclusion : The submitted sample complies with RF Exposure requirements.

Remark : Nil.

For and on behalf of
CMA Industrial Development Foundation Limited

Authorized Signature : _____

Mr. WONG Lap-pong, Andrew
Manager

FCC ID: 2ADLI-CA-80WC

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1 General Information

1.1 General Description

The Qi Wireless Charging Tray Clock is a digital clock with alarm clock, Wireless and USB charging functions. It was powered by AC100-240V to DC5V adaptor with maximum 2A output current.

Once the Time and Alarm set correctly, the current time and setting will be showing on the LED display. The end user can access all functions by pressing SNOOZE/DIMMER, Alarm and Backlight switch.

One USB charging ports are located at the back panel and one wireless charging pad located on the top of upper case.

The USB symbol provides 1A charging current and the maximum power of wireless charging pad is maximum 5W. No data communication for both USB ports and wireless charging pad for portable devices.

The brief circuit description is listed as follows:

- LED and its associated circuit act as LED Display.
- USC2025B and its associated circuit act as MCU controller.
- X2 (32.768KHz) crystal and its associated circuit act as oscillator for MCU USC2025B.
- BAT,EC12 and its associated circuit act as backup battery for alarm clock.
- U2 and its associated circuit act as voltage controller.
- Q2, Q3 and its associated circuit act as voltage controller of LED display.
- IC (U1), (D01), Coil and its associated circuit act as voltage controller for wireless charging pad.

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1.2 Location of the test site

FCC Accredited Lab (Designation Number: HK0004)
Room 1302, Yan Hing Centre, 9 - 13 Wong Chuk Yeung Street, Fo Tan Shatin, New Territories, Hong Kong.

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2014. A Semi-Anechoic Chamber Testing Site is set up for investigation and located at:

Ground Floor, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
Fo Tan, Shatin,
New Territories,
Hong Kong.

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 – 2014. A shielded room is located at :

Ground Floor, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
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1.3 List of measuring equipment

Equipment	Manufacturer	Model No.	Serial No.	Calibration Due Date	Calibration Period
Field meter	Wave control	SMP2	17SN0649	19 Dec 2019	2 years
Field probes	Wave control	WP400	17WP100 365	19 Dec 2019	2 years

Supporting equipment:

1) USB dummy loading 1A
2) Wireless dummy loading 10W
3) AC100-240 to DC5V adaptor (Model: GQ12-050200-AU)

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1.4 Measurement Uncertainty

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

RF Exposure

Test Item	Uncertainty
Electric Field Strength (E)	+/- 4.3%
Magnetic Field Strength (H)	+/- 4.3%

1.5 Test Summary

Test Item	FCC Reference	Result
Electric Field Strength (E) (V/m)	47 CFR Part 1, 1.1310	Comply
Magnetic Field Strength (H) (A/m)	47 CFR Part 1, 1.1310	Comply

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2 Description of the radiated emission test

2.1 Test Procedure

Electric Field Strength (E) (V/m) and Magnetic Field Strength (H) (A/m) are investigated and taken pursuant to the procedures of KDB 680106 D01 RF Exposure Wireless Charging App v03.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 0.4m x 0.8m (L x W x H) above the reference ground plane.

The aggregate H-field and E-Field strengths measured at 15 cm surrounding the EUT and 20 cm above the top surface from all simultaneous transmitting coils. Measurements made from all sides and the top of the primary/client pair, with the 15cm or 20cm distance between center of the probe(s) and edge of the device.

A dummy wireless loading was placed on the top of transmitting coil for charging mode operation.

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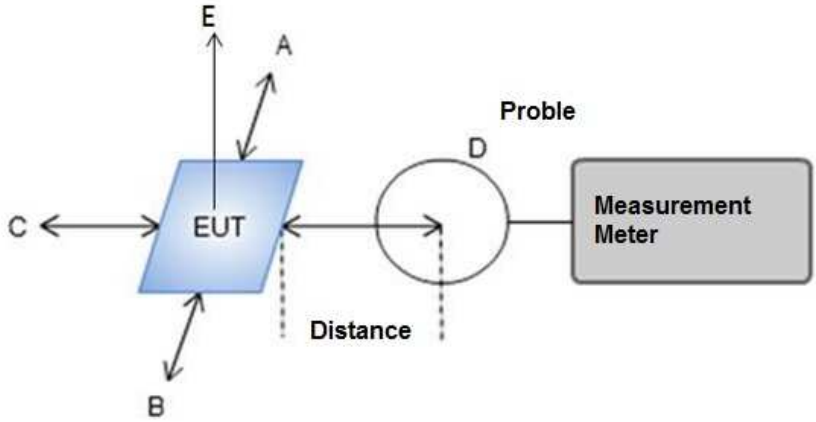
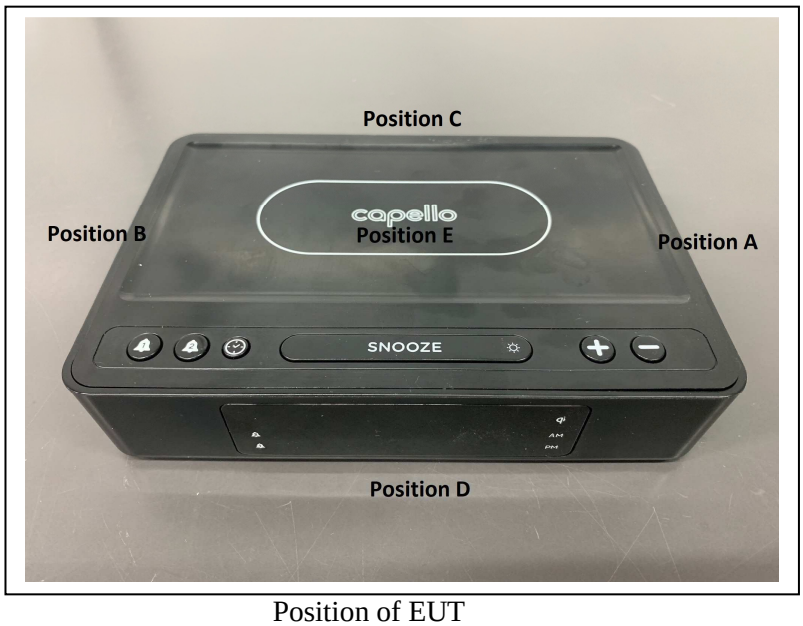
2.2 Test Setup





Position of EUT

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2.3 RF Exposure Measurement Data

Environmental conditions:
Ambient temperature: 24.5 ° C
Relative humidity: 69.2 %

Operation Mode: Charging mode

Electric field

Maximum Permissible Exposure				
Probe from EUT position	Separation	E-field (V/m)	E-field limit (V/m)	E-field margin (V/m)
A	15cm	2.16	614.0	-611.84
B	15cm	2.79	614.0	-611.21
C	15cm	3.80	614.0	-610.20
D	15cm	3.55	614.0	-610.45
E	20cm	2.73	614.0	-611.27

Magnetic Field

Maximum Permissible Exposure				
Probe from EUT position	Separation	H-field (A/m)	H-field limit (A/m)	H-field margin (A/m)
A	15cm	0.02	1.630	-1.610
B	15cm	0.03	1.630	-1.600
C	15cm	0.04	1.630	-1.590
D	15cm	0.02	1.630	-1.610
E	20cm	0.07	1.630	-1.560

Test Result:

It was found that the EUT meet the FCC requirements

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Environmental conditions:
Ambient temperature: 24.5 ° C
Relative humidity: 69.2 %

Operation Mode: Standby mode

Electric field

Maximum Permissible Exposure				
Probe from EUT position	Separation	E-field (V/m)	E-field limit (V/m)	E-field margin (V/m)
A	15cm	2.08	614.0	-611.92
B	15cm	2.03	614.0	-611.97
C	15cm	2.61	614.0	-611.39
D	15cm	2.30	614.0	-611.70
E	20cm	1.95	614.0	-612.05

Magnetic Field

Maximum Permissible Exposure				
Probe from EUT position	Separation	H-field (A/m)	H-field limit (A/m)	H-field margin (A/m)
A	15cm	0.03	1.630	-1.60
B	15cm	0.02	1.630	-1.61
C	15cm	0.03	1.630	-1.60
D	15cm	0.02	1.630	-1.61
E	20cm	0.07	1.630	-1.56

Test Result:

It was found that the EUT meet the FCC requirements.

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3 Appendices

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A1. External Photo

External Photo

External Photo

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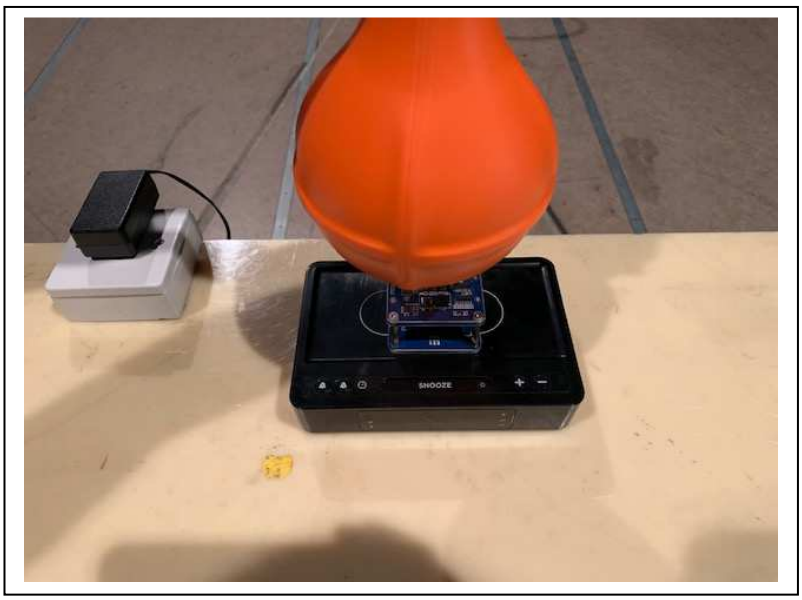
A2. Test Setup



Charging mode

Standby mode

***** End of Report *****

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