1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Wai Hang Electronic Co Ltd
Address of Applicant:	18/F, 1807-1808, New Trade Plaza, Blk B 6 On Ping Street, Siu Lek Yuen, Shatin, NT, Hong Kong.
Manufacturer:	Weiliheng Electronics (Shenzhen) Co., Ltd.
Address of Manufacturer:	No. 32 Chang Long East Road, Fuchengao Village, Pinghu Town, Longgang District, Shenzhen City, Guangdong Province, China. Postal Code : 518111

1.2 EUT INFORMATION

Product Name:	DUAL ALARM CLOCK RADIO WITH WIRELESS CHARGING
Model No.:	Qi-1110
	Morning Call 5Q, MORCAL5Q, MORCAL5QXXYY (XX=VERSION, UL , BS, VE, SA..etc; YY=COLOR CODE, BK-black, WH-white..etc)
Trade Mark:	WAI HANG
	iLuv
DUT Stage:	Identical Prototype
Operating Frequency Range:	110KHz-205KHz
Antenna Type:	Coil antenna
Power Supply	100-240 V~50/60 Hz 0.35 A
Sample Received Date:	May 15, 2018
Sample Tested Date:	May 15, 2018 to May 21, 2018

1.3 OTHER INFORMATION

Support Equipment

Description	Manufacturer	Model No.	Input/ Output
Mobile phone	XIAOMI	M1803D5XA	N/A
Adapter	Yuanshuai	YeS12W-0500210US	100-240 V~50/60 Hz 0.35 A /5.0 V ⎓ 2.1A

1.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC 47 CFR Part 1 Subpart I
All test items have been performed and recorded as per the above standards

1.5 DEVIATION FROM STANDARDS

None.

1.6 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

2. EQUIPMENT LIST

Conducted Emission Test Equipment List						
Used	**Equipment**	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm dd, yyyy)**	**Cal. Due date (mm dd, yyyy)**
☑	E-Field Probe	narda	EMR-20	2244/90.21 AH-0001	Jan. 29, 2018	Jan. 28, 2019
☑	EM radiation meter	narda	EMR-20	AF-0024	Jan. 29, 2018	Jan. 28, 2019
☑	B-Field Probe	narda	ELT-400	C-0014 2300/90.10	Mar. 08, 2018	Mar. 08, 2019
☑	Broadband Field Meter	narda	ELT-400	C-0014 0304/03	Mar. 08, 2018	Mar. 08, 2019
☑	3M Chamber & Accessory Equipment	ETS-LINDGREN	3M	N/A	Dec. 20, 2015	Dec. 19, 2018

3. MPE EVALUATION

3.1 REFERENCE DOCUMENTS FOR EVALUATION

No.	Identity	Document Title
1	FCC 47 CFR Part 1 Subpart I	PROCEDURES IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

3.2 MPE COMPLIANCE REQUIREMENT

3.2.1 Limits

3.2.1.1 Error! Reference source not found.

According to §1.1307(b)(1), system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

Limits for Occupational / Controlled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	F/300	6
1500-100000	/	/	5	6

Limits for General Population/Uncontrolled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500	/	/	f/1500	30
1,500-100,000	/	/	1.0	30

Note: f = frequency in MHz: * = Plane-wave equivalents power density.

3.2.2 Test Procedure

Enabled the EUT to transmit and receive data continue

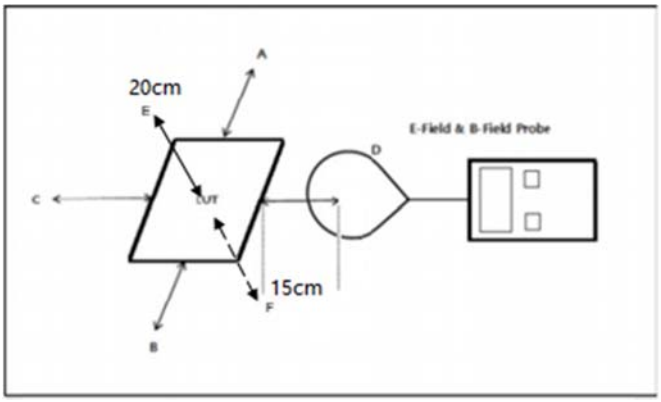
a. The field strength of both E-field and H-field was measured at 15 cm surrounding the device and 20 cm above the top surface using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.

b. The RF power density was measured with the battery at 3 different charge conditions: battery at less than 1 % , battery at 50% charger, battery at 99% charger,.

c. Maximum E-field and H-field measurements were made 15cm from each side of the EUT. Along the side of the EUT and still 15cm away from the edge of the EU T, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.

d. This device uses a wireless charging circuit for power transfer operating at the frequency of 110KHz-205kHz . Thus, the 300 kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

3.2.3 Test setup



Note
- The RF exposure test is performed in the shield room
- The test distance is between the edge of the charger and the geometric center of probe
- The aggregate at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated.

3.3 TEST DATA

Test Mode	Battery status	Probe Position A (V/m)	Probe Position B (V/m)	Probe Position C (V/m)	Probe Position D (V/m)	Probe Position E (V/m)	Probe Position F (V/m)	Limits (V/m)
Mode 1	<1% Battery status	0.13	0.15	0.12	0.08	0.19	0.12	614
Mode 2	50% Battery status	0.09	0.13	0.10	0.06	0.14	0.08	614
Mode 3	99% Battery status	0.11	0.16	0.13	0.09	0.18	0.13	614

E-Field Strength

Test Mode	Battery status	Probe Position A (A/m)	Probe Position B (A/m)	Probe Position C (A/m)	Probe Position D (A/m)	Probe Position E (A/m)	Probe Position F (A/m)	Limits (A/m)
Mode 1	<1% Battery status	0.397	0.293	0.354	0.171	0.368	0.296	1.63
Mode 2	50% Battery status	0.392	0.290	0.345	0.167	0.385	0.289	1.63
Mode 3	99% Battery status	0.394	0.296	0.351	0.179	0.388	0.293	1.63

H-Field Strength

Remark:
The device meets the mobile RF exposure limit at a 15cm and 20cm separation distance as specified in &2.1091 of the FCC Rules.

All simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

*** End of Report ***