RF Exposure Evaluation Declaration

FCC ID:	LM6-LF10WQWC
Application:	Life Fitness
Application Type:	Certification
Product:	Life Fitness 10W Wireless Charger
Model No.:	1011883-0001
Brand Name:	Life Fitness
FCC Classification:	Part 15 Low Power Transmitter Below 1705 kHz (DCD)
Test Date:	December 15 ~ 22, 2020

Reviewed By : (Kevin Guo)

Approved By : (Robin Wu)

Revision History

Report No.	Version	Description	Issue Date	Note
2012RSU048-U1	Rev. 01	Initial Report	12-30-2020	

CONTENTS

1. General Information

1.1. Applicant

Life Fitness

10601 W. Belmont, Franklin Park, Illinois 60131, United States

1.2. Manufacturer

Promate Solutions Corporation.

1F, No. 30, Section 1, Huanshan Road. Neihu District, Taipei, 11442 Taiwan.

1.3. Testing Facility

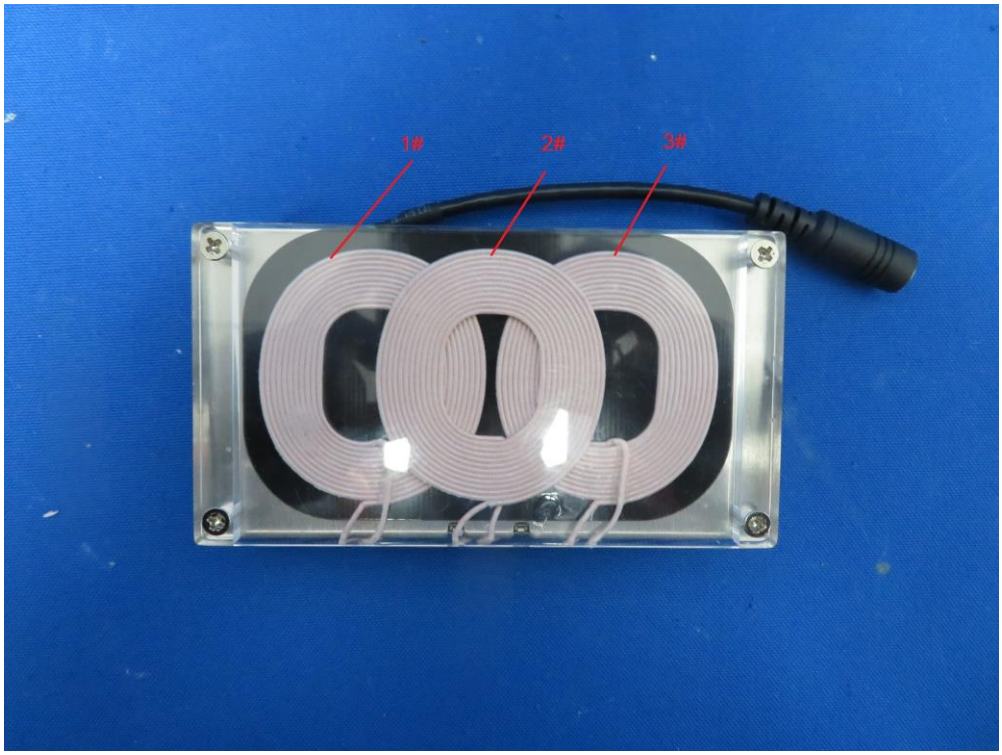
☒	**Test Site – MRT Suzhou Laboratory**	
	Laboratory Location (Suzhou – Wuzhong)	
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China	
	Laboratory Location (Suzhou – SIP)	
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China	
	Laboratory Accreditations	
	A2LA: 3628.01	CNAS: L10551
	FCC: CN1166	ISED: CN0001
	VCCI: R-20025, G-20034, C-20020, T-20020	
☐	**Test Site – MRT Shenzhen Laboratory**	
	Laboratory Location (Shenzhen)	
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China	
	Laboratory Accreditations	
	A2LA: 3628.02	CNAS: L10551
	FCC: CN1284	ISED: CN0105
☐	**Test Site – MRT Taiwan Laboratory**	
	Laboratory Location (Taiwan)	
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
	Laboratory Accreditations	
	TAF: L3261-190725	
	FCC: 291082, TW3261	ISED: TW3261

2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	Life Fitness 10W Wireless Charger
Model No.	1011883-0001
Brand Name	Life Fitness
Working Frequency Range	120kHz ~ 130kHz
Modulation Type	FSK
Working Temperature Range	-10 ~ 45°C
Input	12V⎓1.5A Max
Output	10W MAX

2.2. Description of Coil

The location of coil


3. TEST EQUIPMENT CALIBRATION DATE

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
CARRIES SENSOR	narda	EMR-20	MRTSUE10033	1 year	2021/06/15

4. RF EXPOSURE EVALUATION

4.1. Limits

§1.1310 Radiofrequency radiation exposure limits.

Below sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Averaging Time (Minutes)
(A) Limits for Occupational/ Control 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
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
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
300-1,500	--	--	f/1500	30
1,500-100,000	--	--	1.0	30

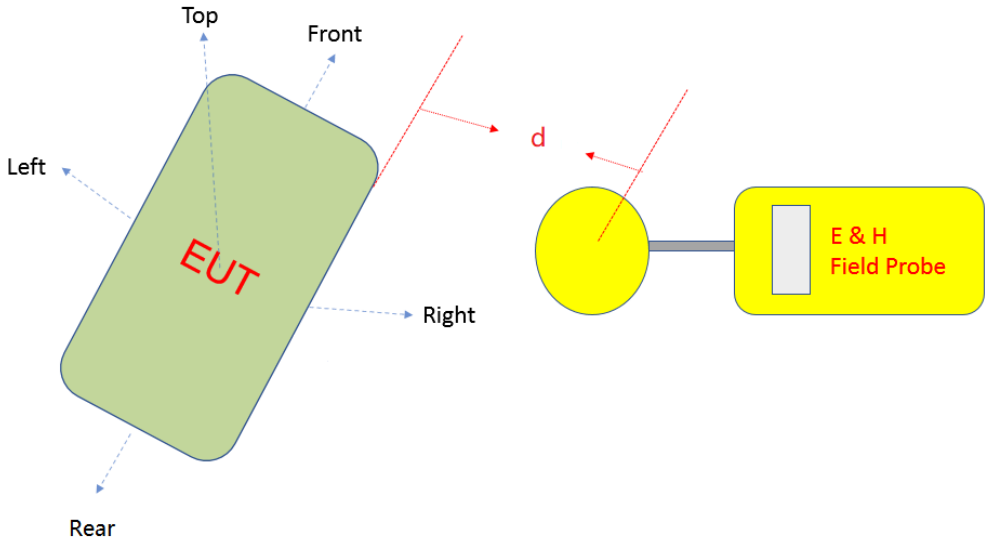
f= Frequency in MHz

* = Plane-wave equivalent power density

4.2. EQUIPMENT APPROVAL CONSIDERATIONS ON KDB 680106 D01v03

EQUIPMENT APPROVAL CONSIDERATIONS	COMPLY
1) Power transfer frequency is less than 1 MHz	Yes. Wireless operating frequency range: 120kHz ~ 130kHz
2) Output power from each primary coil is less than or equal to 15 watts.	No. Wireless maximum transmitted power: 10W Max.
3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes. Only single primary.
4) Client device is placed directly in contact with the transmitter.	Yes. Placed directly.
5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes. Mobile exposure conditions only.
6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	Yes.

4.3. Test Setup



Note:

1. This shall be measured as the distance from the edge of the device to the center of the measurement probe.
2. d is the test distance at cm. Detailed information please refer to clause 2.3 of this report.

4.4. Test System Details

Auxiliary Equipment Used during Test:

Description	Manufacturer	Model No.	Serial No.	Power Cord
Wireless Charger Receiver	E-charging	N/A	N/A	N/A

Note:

1. The Wireless Charger Receiver is provided by manufacturer and it can control the EUT to be at the maximum output power state.
2. Measurements at different power levels of 0 10 50 and 90% for charging mobile phone mode has been evaluated. The worst-case data was shown in this report.

Test Mode:

1. Charging Mode

The test results shown in this report represent the worst-case data.

4.5. Test Result of RF Exposure Evaluation

Product	Life Fitness 10W Wireless Charger
Test Item	RF Exposure Evaluation – 1#
Note: Communicate with Wireless Charger Receiver	

Electric Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	0.74	614	307	Pass
Rear	15	0.78	614	307	Pass
Right	15	0.61	614	307	Pass
Left	15	0.98	614	307	Pass
Top	15	1.64	614	307	Pass
Magnetic Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Front	15	0.032	1.63	0.815	Pass
Rear	15	0.036	1.63	0.815	Pass
Right	15	0.028	1.63	0.815	Pass
Left	15	0.041	1.63	0.815	Pass
Top	15	0.075	1.63	0.815	Pass

Product	Life Fitness 10W Wireless Charger
Test Item	RF Exposure Evaluation – 2#
Note: Communicate with Wireless Charger Receiver	

Electric Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	0.88	614	307	Pass
Rear	15	0.90	614	307	Pass
Right	15	1.04	614	307	Pass
Left	15	1.01	614	307	Pass
Top	15	1.71	614	307	Pass
Magnetic Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Front	15	0.037	1.63	0.815	Pass
Rear	15	0.042	1.63	0.815	Pass
Right	15	0.052	1.63	0.815	Pass
Left	15	0.051	1.63	0.815	Pass
Top	15	0.063	1.63	0.815	Pass

Product	Life Fitness 10W Wireless Charger
Test Item	RF Exposure Evaluation – 3#
Note: Communicate with Wireless Charger Receiver	

Electric Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	0.73	614	307	Pass
Rear	15	0.83	614	307	Pass
Right	15	0.92	614	307	Pass
Left	15	0.64	614	307	Pass
Top	15	1.27	614	307	Pass
Magnetic Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Front	15	0.042	1.63	0.815	Pass
Rear	15	0.046	1.63	0.815	Pass
Right	15	0.069	1.63	0.815	Pass
Left	15	0.049	1.63	0.815	Pass
Top	15	0.074	1.63	0.815	Pass

The End

Appendix A - Test Setup Photograph

Refer to “2012RSU048-UT” file.