



RF Exposure Evaluation Declaration

FCC ID: 2AUXNWCP2

Applicant: A-Champs Ltd.

Application Type: Certification

Product: Interactive Training System

Model No.: WCP2

FCC Classification: Part 15 Low Power Transmitter Below 1705 kHz (DCD)

Test Date: August 28, 2021

Reviewed By:

Vincent Yu

Approved By:

Robin Wu



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2102RSU069-U2	Rev. 01	Initial Report	12-11-2021	Valid

CONTENTS

Description	Page
1. GENERAL INFORMATION	4
1.1. Applicant.....	4
1.2. Manufacturer	4
1.3. Testing Facility	4
1.4. Product Information	5
2. TEST EQUIPMENT CALIBRATION DATE	6
3. RF EXPOSURE EVALUATION.....	7
3.1. Limits	7
3.2. EQUIPMENT APPROVAL CONSIDERATIONS ON KDB 680106 D01v03r01	8
3.3. Test Setup	9
3.4. Test Mode	9
3.5. Test System Details	9
3.6. Test Environment Condition	9
3.7. Test Result	10
Appendix A - EUT Photograph.....	12
Appendix B - Test Setup Photograph.....	13

1. GENERAL INFORMATION

1.1. Applicant

A-Champs Ltd.

22/F., Bupa Centre, 141 Connaught Road West, HONG KONG, P.R.China

1.2. Manufacturer

A-Champs Ltd.

22/F., Bupa Centre, 141 Connaught Road West, HONG KONG, P.R.China

1.3. Testing Facility

<input checked="" type="checkbox"/>	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: <input type="checkbox"/> R-20025 <input type="checkbox"/> G-20034 <input type="checkbox"/> C-20020 <input type="checkbox"/> T-20020
	<input type="checkbox"/> R-20141 <input type="checkbox"/> G-20134 <input type="checkbox"/> C-20103 <input type="checkbox"/> T-20104
<input type="checkbox"/>	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
<input type="checkbox"/>	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

1.4. Product Information

Product Name	Interactive Training System
Model No.	WCP2
Operation Frequency	110 kHz ~ 148 kHz
Operating temperature	0 ~ 50 °C
Accessory	
Adapter	Model: ST190 Manufacturer: Blue Power TECHNOLOGY CO. LIMITED Input: AC 100-240V Max 600MA Output: 5V DC, 4A
Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

2. TEST EQUIPMENT CALIBRATION DATE

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Exposure Level Tester	narda	ELT-400	MRTSUE06920	3 years	2023/11/29
Broadband EM Field Meter	ar	SM40G	MRTSUE06358	3 years	2024/05/05
E-field sensor head	ar	SHE100K6z5G	MRTSUE06444	3 years	2024/05/05
Probe	narda	B-Field	MRTSUE06919	3 years	2024/02/14
Thermohygrometer	testo	608-H1	MRTSUE06402	1 year	2022/06/28

3. RF EXPOSURE EVALUATION

3.1. 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/f ²	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/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

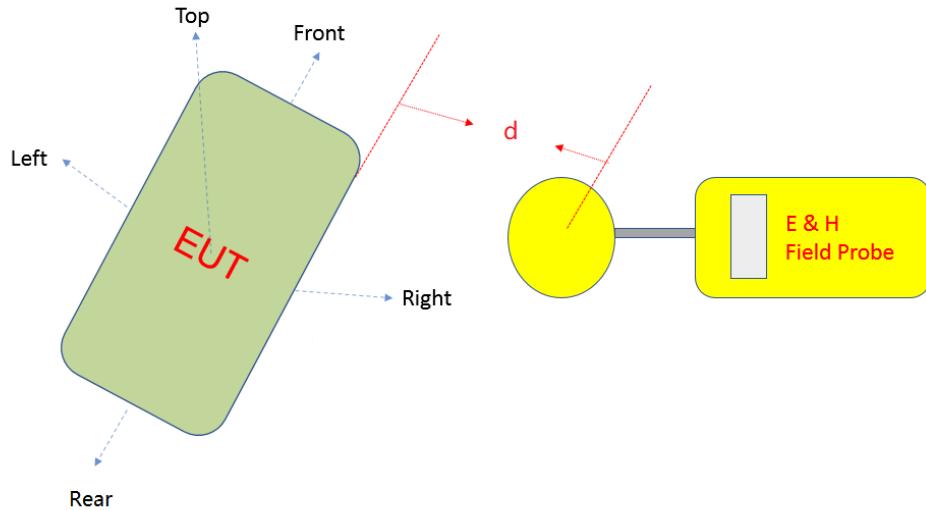
f= Frequency in MHz

* = Plane-wave equivalent power density

3.2. EQUIPMENT APPROVAL CONSIDERATIONS ON KDB 680106 D01v03r01

EQUIPMENT APPROVAL CONSIDERATIONS	COMPLY
1) Power transfer frequency is less than 1 MHz	Yes. Wireless operating frequency range: 110kHz ~ 148kHz
2) Output power from each primary coil is less than or equal to 15 watts.	No. Wireless maximum transmitted power: 20W Max.
3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.	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 anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.	Yes.

3.3. 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 3.7 of this report.

3.4. Test Mode

Test Mode
Mode 1: Communicate with 20W Wireless Charger Receiver
Mode 2: Standby Mode

Note: The 20W Wireless Charger Receiver is provided by the manufacturer, and it can control the EUT to be at the maximum output power state.

3.5. Test System Details

Auxiliary Equipment Used during Test:

Description	Manufacturer	Model No.
AC/DC Adapter	Blue Power TECHNOLOGY CO. LIMITED	ST190
Wireless Charger Receiver	CONVENIENT POWER	CPS510ATE-01(T60)

3.6. Test Environment Condition

Ambient Temperature	15°C ~ 35°C
Relative Humidity	20%RH ~ 75%RH

3.7. Test Result

Product	Interactive Training System	Test Engineer	Chase Zhu
Test Item	RF Exposure Evaluation	Test Site	SIP-AC3
Test Mode	Mode 1		

Electric Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	0.84	614	307	Pass
Rear	15	3.15	614	307	Pass
Left	15	0.74	614	307	Pass
Right	15	3.58	614	307	Pass
Top	20	1.39	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	0.32	1.63	0.815	Pass
Rear	15	0.31	1.63	0.815	Pass
Left	15	0.33	1.63	0.815	Pass
Right	15	0.31	1.63	0.815	Pass
Top	20	0.31	1.63	0.815	Pass

Product	Interactive Training System	Test Engineer	Chase Zhu
Test Item	RF Exposure Evaluation	Test Site	SIP-AC3
Test Mode	Mode 1		

Electric Field Emissions					
Test Position	Test Distance (d) (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Front	15	0.56	614	307	Pass
Rear	15	0.74	614	307	Pass
Left	15	0.85	614	307	Pass
Right	15	0.49	614	307	Pass
Top	20	0.88	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	0.30	1.63	0.815	Pass
Rear	15	0.30	1.63	0.815	Pass
Left	15	0.31	1.63	0.815	Pass
Right	15	0.30	1.63	0.815	Pass
Top	20	0.32	1.63	0.815	Pass

The End

Appendix A - EUT Photograph

Refer to "2102RSU069-UE" file.

Appendix B - Test Setup Photograph

Refer to "2108RSU069-UT" file.