



# RF Exposure Evaluation Declaration

Product Name: Wondercise Wireless Tracker Charger

Model No. : TC-01

FCC ID : 2AQIRWDCTC-01

Applicant: WONDERCISE LIMITED

Address: 15/F LOCKHART CTR, 301-307 LOCKHART RD,

WANCHAI, Hong Kong, China

Date of Receipt: May. 21, 2021

Test Date : May. 21, 2021 ~ Jun. 20, 2021

Issued Date : Jun. 26, 2021

Report No. : 2150702R-RF-US-P20V01

Report Version: V1.0

The test results presented in this report relate only to the object tested.

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.

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## Test Report Certification

Issued Date: Jun. 26, 2021 Report No.: 2150702R-RF-US-P20V01

**DEKRA** 

Product Name : Wondercise Wireless Tracker Charger

Applicant : WONDERCISE LIMITED

Address : 15/F LOCKHART CTR, 301-307 LOCKHART RD, WANCHAI,

Hong Kong, China

Manufacturer : Yan Tai FuHuaDa Precision Electronics Co., Ltd.

Address : A-7 Section, Yantai Economic & Technological Development

Area, Shan Dong

Model No. : TC-01

FCC ID : 2AQIRWDCTC-01

EUT Voltage : DC 5V

Applicable Standard : KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Test Result : Complied

Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.

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**History of This Test Report** 

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
2150702R-RF-US-P20V01	V1.0	Initial Issued Report	Jun. 26, 2021



#### 1. General Information

### 1.1. EUT Description

Product Name	Wondercise Wireless Tracker Charger
Model No.	TC-01
Hardware Version	V1.0
Software Version	V1.0
S/N	2150702R-03
Working Voltage	DC 5V
Testing Voltage	AC 120V/60Hz
Frequency Range	667 kHz
Type of Modulation	ASK

Note: We use a standard AC 100~240V 50/60Hz to 5V USB adaptor for the test, so the test voltage is AC 120V/50Hz.



### 1.2. Antenna information

Model No.	N/A					
Antenna manufacturer	N/A					
Antenna Delivery	$\boxtimes$	1*TX+1*R	1*TX+1*RX			
Antenna technology	$\boxtimes$	SISO				
		МІМО		Basic		
				CDD		
				Sectorized		
				Beam-forming		
Antenna Type	E	External		Dipole		
				Sectorized		
		Internal		PIFA		
				PCB		
				Ceramic Chip Antenna		
			$\boxtimes$	Loop antenna		
				Type F antenna		



#### 1.3. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode

Mode 1: Transmit

#### Note:

- 1. Regards to the frequency band operation: the lowest middle and highest frequency of channel were selected to perform the test, then shown on this report.
- 2. For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.



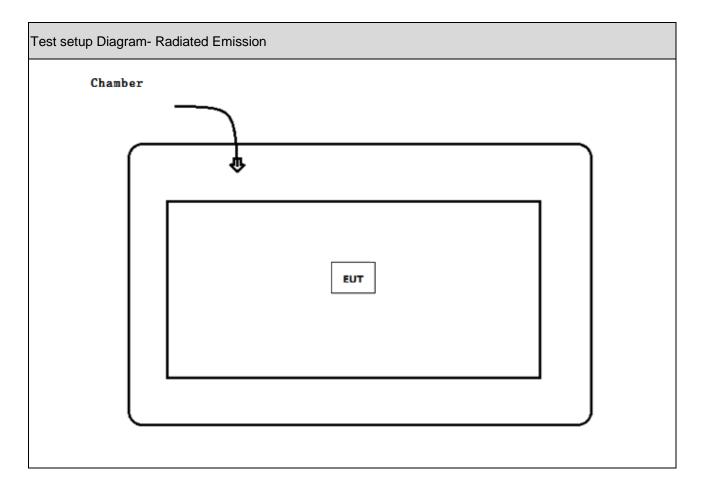
### 1.4. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 N/A	N/A	N/A	N/A	N/A



## 1.5. Configuration of Tested System





### 1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Start to continue transmit.

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### 2. Technical Test

#### 2.1. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000



### 3. Electric Field Strength / Magnetic Field Strength

### 3.1. Test Equipment

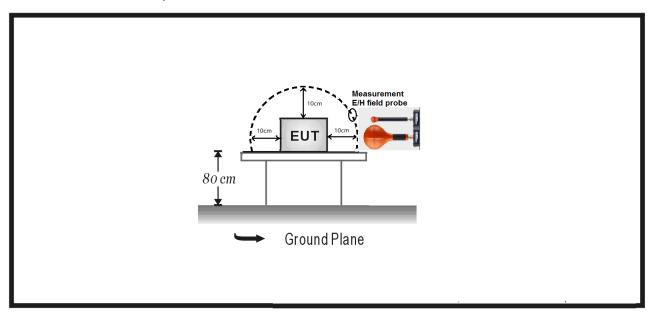
Electric Field Strength / Magnetic Field Strength / AC-6						
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date	
Field Meter	WAVECONTROL	SMP2	20SN1286	2020.06.28	2021.06.27	
Probe	WAVECONTROL	WPF3	20WP030374	2020.06.28	2021.06.27	
Probe	WAVECONTROL	WP400	20WP100630	2020.06.28	2021.06.27	
Probe	WAVECONTROL	WPH60	20WP110056	2020.06.28	2021.06.27	
Temperature/Humidity Meter	RTS	RTS-8S	RF06	2020.08.13	2021.08.12	

Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.



### 3.2. Test Setup

3kHz~10MHz Test Setup:





#### 3.3. **Limit**

According to KDB 680106 D01v03r01 Clause 3.c: For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m.

#### 3.4. Test Procedure

- a. Set the measurement frequency of the measurement probe to the fundamental frequency of the device under test.
- b. Set the span to encompass the entire emission bandwidth.
- c. Set the RBW greater than the 99% OBW of the fundamental emission.

Note: This step is not required for a broadband measurement probe that integrates the entire frequency range.

- d. Set the detector to Peak and trace display to Max-Hold.
- e. Allow the probe meter to fill; for pulsing devices this may require an increased monitoring period.
- f. Using a marker, set it to the maximum level of the spectral envelope.
- g. Repeat steps (b) to (f) while scanning a parallel plane at the measurement distance of 15cm each loaded condition of each position of the slot to find the peak level.

Note: When scanning around the entire device, the location found to be the maximum for the E- or H-field may not be the same location as the opposite field.

#### 3.5. Uncertainty

The measurement uncertainty is defined as ± 3.10 dB



#### 3.6. Test Result

Test Location	Test Separation Distance (cm)	Maximum Electric Field Level (V/m)	Maximum Magnetic Field Level (A/m)	Electric Field Limit (V/m)	Magnetic Field Limit (A/m)	Result
Тор	10	1.08	0.004	83	1.63	Pass
Front	10	1.49	0.006	83	1.63	Pass
Back	10	1.38	0.004	83	1.63	Pass
Left	10	0.85	0.004	83	1.63	Pass
Right	10	1.43	0.005	83	1.63	Pass



## **RF Exposure Evaluation**

WPT	Device requirement
$\boxtimes$	Wireless power transfer frequency is below 1 MHz.
$\boxtimes$	Output power from each primary coil is less than or equal to 15 watts.
$\boxtimes$	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.
$\boxtimes$	Client device is placed directly in contact with the transmitter.
$\boxtimes$	Mobile exposure conditions only (portable exposure conditions are not covered by this
	exclusion).
	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.

Note: The WPT device can meet all the six requirement	s above.
The End	