



Human Exposure Report

Application No.: SHEM2106005683CR
FCC ID: 2AMIN-WPB15PDZM
Applicant: ZIMI CORPORATION
Address of Applicant: Room A913, No.159 Chengjiang Road, Jiangyin City, Jiangsu Province, 214431, P.R.C
Manufacturer: ZIMI CORPORATION
Address of Manufacturer: Room A913, No.159 Chengjiang Road, Jiangyin City, Jiangsu Province, 214431, P.R.C
Equipment Under Test (EUT):
EUT Name: Xiaomi 10W Wireless Power Bank 10000
Model No.: WPB15PDZM
Trade Mark: Mi
Standards: 47 CFR PART 1, Subpart I, Section 1.1310
Date of Receipt: 2021-06-08
Date of Test: 2021-06-08 to 2021-07-22
Date of Issue: 2021-07-23

Test Result :	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Parlan Zhan

Parlan Zhan
Laboratory Manager

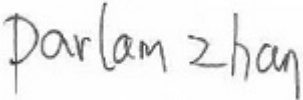
The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.



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Revision Record			
Version	Description	Date	Remark
00	Original	2021-07-23	/

Authorized for issue by:			
			
		<u>Micheal Niu / Project Engineer</u>	
			
		<u>Parlam Zhan / Reviewer</u>	



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3 General Information

3.1 Details of E.U.T.

Cell Capacity: 37Wh, 3.7V, 10000mAh

Rated Capacity: 5600mAh (5 V/3 A)

Port: Input Port: Type-C,
Output Port: USB-A/Type-C

Input Parameters: Type-C Input (Single): 5V, 3A; 9V, 2.5 A
Type-C Input (simultaneous USB-A Output): 5V, 3A
Type-C Input (simultaneous Wireless Output): 5V,2A; 9V, 2A; 12V, 1.5A
Type-C Input (simultaneous USB-A and Wireless Output): 5V, 3A

Wired Output: (USB-A) 5V, 3A; 9V, 2.23A; 12V, 1.67A; 10V, 2.25A Max.
(Type-C) 5V, 3A; 9V, 2.23A; 12V, 1.67A;10V, 2.25A Max.
(Dual-port) 5V, 3A

Wireless Output: 10W Max.

Remark: Simultaneous wired and wireless output: 15W

Test voltage: AC 120V/60Hz

Antenna Type: Loop Antenna

Modulation Type: Load Modulation

Operation Frequency: 127.5kHz

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
AC Adapter	MI	AD651	N/A
Load	N/A	N/A	N/A
MobilePhone	MI	MI 9	/
MobilePhone	Apple	Iphone 12	/



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3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

• **FCC (Designation Number: CN1172)**

Compliance Certification Services Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• **ISED (CAB identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

CAB Identifier: CN0072.

• **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-1600, C-1707, T-1499, G-10216 respectively.

3.5 Deviation from Standards

None

3.6 Abnormalities from Standard Conditions

None



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4 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal date	Cal. Due date
1	3m Semi-Anechoic Chamber	ST	N/A	KSEM078-2	2020-07-21	2023-07-20
2	Electromagnetic Field Probe	Narda	EHP-200AC	KSEM0907	2021-04-10	2022-04-09



5 Test Results

5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15 cm for surrounding the device and 20 cm for above the top surface.

Limit:

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/Controlled 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
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).



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5.2 E.U.T. Operation

5.2.1 Operating Environment

Temperature: 24.0 °C Humidity: 52% RH Atmospheric Pressure: 1015 mbar

5.2.2 EUT Operation:

5.2.3 Simulation Load Mode

Pre-test modes: a: Wireless Output(The load shall be set at full, half, empty load (10W/5W/0W) respectively) + Type-C Input + USB-A Output mode.

b: Wireless Output(The load shall be set at full, half, empty load (10W/5W/0W) respectively) + Type-C Output + USB-A Output mode.

The worst case a: Wireless Output(The load shall be set at full, half, empty load (10W/5W/0W) for final test: respectively) + Type-C Input + USB-A Output mode.

Measurement Data:

Electric Field Emissions

Test Position	Operating Frequency	Test Distance (cm)	Test Data (V/m)			Limit(V/m)/ 50%Limit(V/m)
			Empty load	Half load	Full load	
Side 1	127.5KHz	15	6.60	6.77	7.20	614/307
Side 2	127.5KHz	15	6.65	7.20	7.17	614/307
Side 3	127.5KHz	15	6.85	7.12	7.65	614/307
Side 4	127.5KHz	15	6.81	6.97	7.20	614/307
Top	127.5KHz	20	6.85	7.12	7.65	614/307
Bottom	127.5KHz	15	7.28	7.16	7.49	614/307

Magnetic Field Emissions

Test Position	Operating Frequency	Test Distance (cm)	Test Data (A/m)			Limit(A/m)/ 50%Limit(A/m)
			Empty load	Half load	Full load	
Side 1	127.5KHz	15	0.0842	0.1143	0.1264	1.63/0.815
Side 2	127.5KHz	15	0.0782	0.1329	0.1444	1.63/0.815
Side 3	127.5KHz	15	0.1032	0.1399	0.1522	1.63/0.815
Side 4	127.5KHz	15	0.1084	0.1310	0.1559	1.63/0.815
Top	127.5KHz	20	0.1633	0.1733	0.1793	1.63/0.815
Bottom	127.5KHz	15	0.1322	0.1533	0.1659	1.63/0.815



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5.2.4 Mobile phone Load Mode

Pre-test modes: a: Wireless Output(The load shall be set at full, half, empty load (10W/5W/0W) respectively) + Type-C Input + USB-A Output mode.

b: Wireless Output(The load shall be set at full, half, empty load (10W/5W/0W) respectively) + Type-C Output + USB-A Output mode.

The worst case a: Wireless Output(The load shall be set at full, half, empty load (10W) for final test: respectively) + Type-C Input + USB-A Output mode.

Measurement Data:

Electric Field Emissions

Test Position	Operating Frequency	Test Distance (cm)	Test Data (V/m)	Limit (V/m)	50% Limit (V/m)
Side 1	127.5KHz	15	6.36	614	307
Side 2	127.5KHz	15	6.42	614	307
Side 3	127.5KHz	15	6.55	614	307
Side 4	127.5KHz	15	6.28	614	307
Top	127.5KHz	20	6.62	614	307
Bottom	127.5KHz	15	6.41	614	307

Magnetic Field Emissions

Test Position	Operating Frequency	Test Distance (cm)	Test Data (A/m)	Limit (A/m)	50% Limit (A/m)
Side 1	127.5KHz	15	0.124	1.63	0.815
Side 2	127.5KHz	15	0.133	1.63	0.815
Side 3	127.5KHz	15	0.138	1.63	0.815
Side 4	127.5KHz	15	0.096	1.63	0.815
Top	127.5KHz	20	0.147	1.63	0.815
Bottom	127.5KHz	15	0.135	1.63	0.815



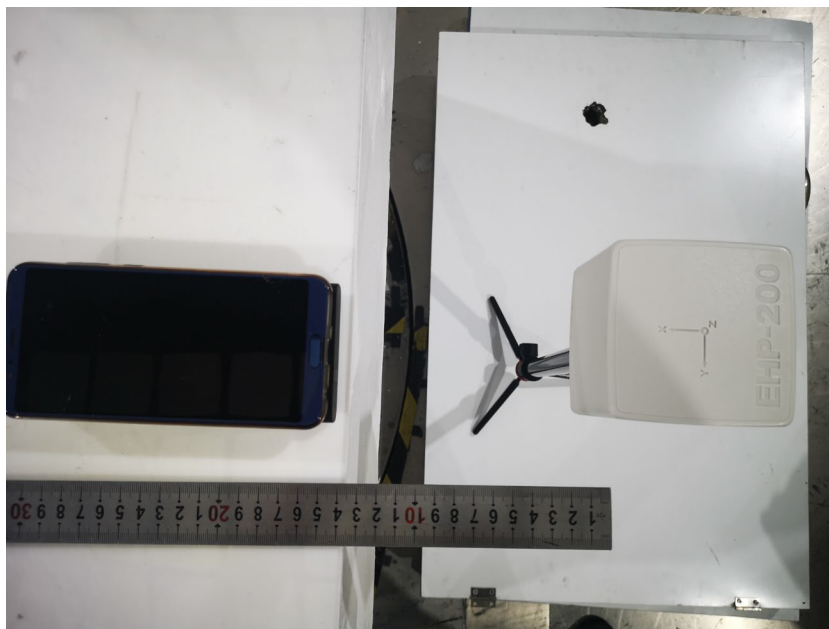
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6 Photographs

6.1 Test photos

Side 1



Side 2



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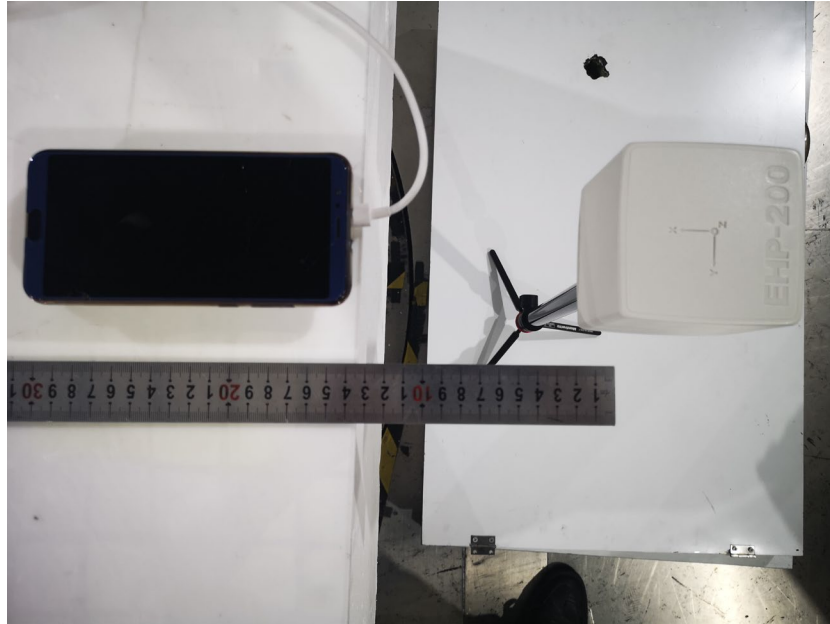
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Side 3



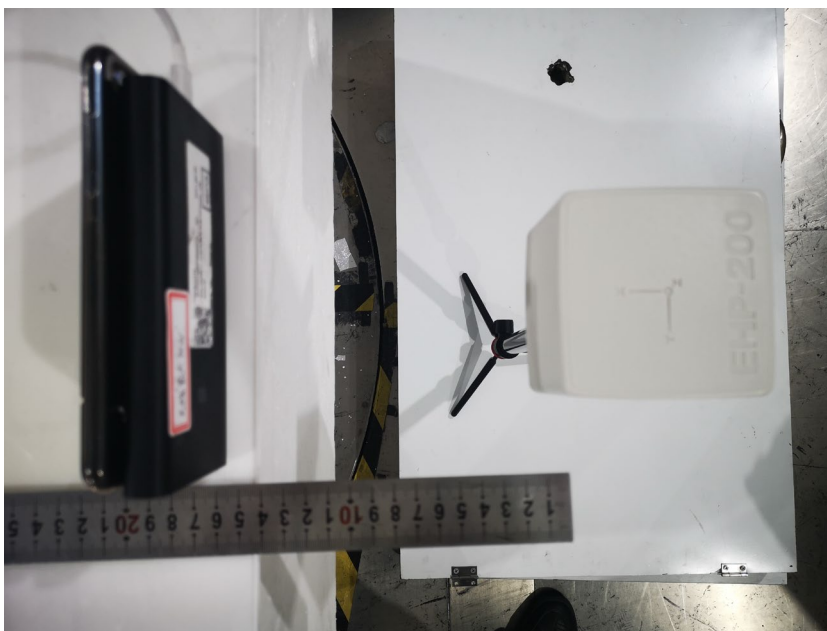
Side 4



Top



Bottom



- End of the Report -



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