

RF EXPOSURE REPORT

Applicant	:	Omni Power Technology, Inc.
Address	:	5055 Wilshire Blvd. Ste 835 Los Angeles, CA 90036 US USA
Equipment under Test	:	PORTABLE POWER BANK
Model No.	:	Omni 80C+, Power 80C+
Trade Mark	:	N/A
FCC ID	:	2BOQC-80CPLUS
Manufacturer	:	Omni Power Technology, Inc.
Address	:	No.3 JinPing Street, Ya An Road, Nankai District, Tianjin, 300190 China
Report No.	:	DDT-B24121712-2E02
Issue Date	:	Apr. 09, 2025
Issued By	:	Tianjin Dongdian Testing Service Co., Ltd.
Address	:	Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China. Tel: +86-22-58098033, E-mail: ddt@dgddt.com, http://www.ddttest.com



REPORT

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TEST REPORT DECLARE

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Standard Used: Code of Federal Regulations 47 Subchapter A, Part 1, Subpart 1 §1.1310

We Declare:

The equipment described above is assessed by Tianjin Dongdian Testing Service Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Tianjin Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No:	DDT-B24121712-2E02		
Date of Receipt:	Mar. 13, 2024	Date of Test:	Mar. 13, 2024 ~ Apr. 09, 2024

Prepared By:

Sunny Zhang

Sunny Zhang/Engineer

Approved By:

Aaron Zhang

Aaron Zhang/Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Tianjin Dongdian Testing Service Co., Ltd.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Apr. 09, 2024	

1. General information

1.1. Description of Equipment

EUT* Name	: PORTABLE POWER BANK
Model Number	: Omni 80C+, Power 80C+
EUT function description	: Please reference user manual of this device
Power Supply	: DC 3.3V by Polymer Li-ion built-in battery
Radio Specification	: Bluetooth (LE)
Operation Frequency	: 2402 MHz - 2480 MHz
Modulation	: GFSK
Data Rate	: 1 Mbps, 2 Mbps
Antenna Type	: PBC antenna, maximum PK gain: 3.37dBi
Exposure category	: General population/uncontrolled environment
Device Type	: Mobile Device

1.2. Assess laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: ddt@dgddt.com

NVLAP (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

CNAS (China National Accreditation Service for Conformity Assessment) CODE: L13402

FCC Designation Number: CN5004; FCC Test Firm Registration Number: 368676

ISED (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

VCCI Facility Registration Number: C-20089, T-20093, R-20125, G-20122

2. RF Exposure Evaluation

2.1. Requirement

According 1.1307(b)(3)(i)

For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

2.2. Estimation result

According ANSI C63.10-2020, Convert the electric field strength to an equivalent EIRP using the following relationship:

$$\text{EIRP} = E + 20\log(d) - 104.8$$

where

E is the electric field strength in dB μ V/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

Mode	Frequency (MHz)	Maximum PK Field Strength (dB μ V/m)	EIRP (dBm)
BLE 1M	2402	89.46	-5.80
BLE 1M	2440	88.42	-6.84
BLE 1M	2480	87.66	-7.60
BLE 2M	2402	88.43	-6.83
BLE 2M	2440	88.88	-6.38
BLE 2M	2480	86.26	-9.00

Max turn-up EIRP is -4dBm = 0.4mW < 1mW

Conclusion: The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the RF Exposure of portable device.

END OF REPORT