



Solutions

FCC RF EXPOSURE REPORT

For

Movable Heater

MODEL NUMBER: TH202WH

**SERIES MODEL NUMBER: TH202, TH205,
TH202QBK, TH202WH, TH205CO, TH202Q, TH202C**

PROJECT NUMBER: 4791732510

REPORT NUMBER: 4791732510-1

FCC ID: 2ASV9TH200

IC: 24909-TH200

ISSUE DATE: MAY. 06, 2024

Prepared for

SHARKNINJA OPERATING LLC.

Prepared by

**UL-CCIC COMPANY LIMITED
No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China**
Tel: +86 512-6808 6400
Fax: +86 512-6808 4099
Website: www.ul.com

Form-ULID-008536-13 V3.0

The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products.

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	05/06/2025	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS.....	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION.....	5
4. MEASUREMENT UNCERTAINTY	6
5. REQUIREMENT	7

1. ATTESTATION OF TEST RESULTS

Applicant Information	
Company Name:	SharkNinja Operating LLC.
Address:	89 A Street Suite100 Needham MA 02494 United States
Manufacturer Information	
Company Name:	SharkNinja Operating LLC.
Address:	89 A Street Suite100 Needham MA 02494 United States
Factory Information	
Company Name:	Guangdong Cinotex Environmental Sci-Tech Co., Ltd.
Address:	No.10 Shashui Road, Shaxi Town, Zhongshan City, Guangdong Province, China
EUT Description	
Product Name:	Movable Heater
Model Number:	TH202WH
Series Model Number:	TH202, TH205, TH202QBK, TH202WH, TH205CO, TH202Q, TH202C
Model Difference:	All the modes are identical, the only difference is market and colors.
Sample Number:	8259533
Data of Receipt Sample:	Apr. 07, 2025
Date Tested:	Apr. 07, 2025~ May. 06, 2025

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Guidelines for Human Exposure IEEE C95.1	Complies

Prepared By:

Tom Tang

Tom Tang

Reviewed By:

Emily Wang

Emily Wang

Authorized By:

Kevin. Shen

Kevin Shen

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 1 Subpart I, section 1.1307 and KDB 447498 D04 Interim General RF Exposure Guidance v01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p> <p>IC (IC Designation No.: 25056; CAB No.: CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</p>
---------------------------	--

Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China.

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

4. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Output Power to Antenna	1.3 dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

5. REQUIREMENT

LIMIT AND CALCULATION METHOD

According to 447498 D04 Interim General RF Exposure Guidance v01,

2.1.4 MPE-Based Exemption

An alternative to the SAR-based exemption is provided in § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz to 100 GHz, applicable for separation distances greater or equal to $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.¹⁰ For this case, a RF source is an RF exempt device if its ERP (watts) is no more than a frequency-dependent value, as detailed tabular form in Appendix B. These limits have been derived based on the basic specifications on Maximum Permissible Exposure (MPE) considered for the FCC rules in § 1.1310(e)(1).

B.4 SAR-based Exemption

SAR-based thresholds are derived based on frequency, power, and separation distance of the RF source. The formula defines the thresholds in general for either available maximum time-averaged power or maximum time-averaged ERP, whichever is greater.

If the ERP of a device is not easily determined, such as for a portable device with a small form factor, the applicant may use the available maximum time-averaged power exclusively if the device antenna or radiating structure does not exceed an electrical length of $\lambda/4$.

As for devices with antennas of length greater than $\lambda/4$ where the gain is not well defined, but always less than that of a half-wave dipole (length $\lambda/2$), the available maximum time-averaged power generated by the device may be used in place of the maximum time-averaged ERP, where that value is not known.

The separation distance is the smallest distance from any part of the antenna or radiating structure for all persons, during operation at the applicable ERP. In the case of mobile or portable devices, the separation distance is from the outer housing of the device where it is closest to the antenna.

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula (B.2).

MPE-based Exemption

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}}(d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

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

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{cm}}$ is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

Fixed RF sources operating in the same time-averaging period- § 1.1307(b)(3)(ii)(B)

Either SAR-based or MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (Evaluated term) shall be used to determine exemption for simultaneous transmission according to Formula (C.1) [repeated from § 1.1307(b)(3)(ii)(B)].

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1 \quad (\text{C.1})$$

CALCULATED RESULTS

Operating Mode	Max. EIRP	ERP	Distance	Limit Threshold
	(mW)	(mW)	(mm)	(mW)
2.4GHz	1	0.01	5	3

Note:

1. Based on field strength 86.60 dBuV/m at 3m transmit power(eirp) of the device was calculated as 0.14 mW using free space formula.
2. Max. power 0.14 mW is closest 1 mW, so 1 mW was calculated.
3. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
4. The calculated result for the sample received is < Pass > according to < 47 CFR FCC Part 2 Subpart J, section 2.1091 > when < Simple Acceptance > decision rule is applied.

END OF REPORT