

## TEST REPORT

### FCC Rules Part 15.231

**Report Reference No.**.....: **MTWG2207207-H**

**FCC ID**..... : **2A8IK-SEH01**

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**Applicant's name**.....: **NINGBO WARM GARDEN ELECTRICAL APPLIANCES CO.,LTD**

Address .....: Xingguang Industrial Zone,Shiqi Town,Haishu District,Ningbo,  
315199,China

**Test specification/ Standard** .....: **47 CFR Part 1.1307**

**47 CFR Part 2.1093**

TRF Originator.....: Shenzhen Most Technology Service Co., Ltd.

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**Test item description** .....: **ELECTRIC PATIO HEATER**

Trade Mark .....: **WARM GARDEN**

Model/Type reference.....: **SEH01**

Listed Models .....: **WEH07**

Modulation Type .....: **ASK**

Operation Frequency.....: **433.92MHz**

Hardware version .....: **V1.0**

Software version .....: **V1.1**

Rating .....: **DC3V(by Batteries)**

Result.....: **PASS**

## TEST REPORT

Equipment under Test : ELECTRIC PATIO HEATER

Model /Type : SEH01

Listed Models : WEH07

Applicant : **NINGBO WARM GARDEN ELECTRICAL APPLIANCES CO.,LTD**

Address : Xingguang Industrial Zone,Shiqi Town,Haishu District,Ningbo, 315199,China

Manufacturer : **NINGBO WARM GARDEN ELECTRICAL APPLIANCES CO.,LTD**

Address : Xingguang Industrial Zone,Shiqi Town,Haishu District,Ningbo, 315199,China

|                     |             |
|---------------------|-------------|
| <b>Test Result:</b> | <b>PASS</b> |
|---------------------|-------------|

The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

**Contents****1. Revision History**

| Revision | Issue Date | Revisions     | Revised By |
|----------|------------|---------------|------------|
| 00       | 2022.08.08 | Initial Issue | Alisa Luo  |
|          |            |               |            |
|          |            |               |            |

## 2.1 RF Exposure Compliance Requirement

### 2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

#### 4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 2.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

## 2.1.3 EUT RF Exposure

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30$$

where:

PT = transmitter output power in watts,

GT = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m,  $10^{(\text{dB}\mu\text{V/m})/20} / 10^6$ ,

D = measurement distance in meters (m)---3m,

$$\text{So PT} = (\text{E} \times \text{D})^2 / 30 / \text{GT}$$

The worst case (refer to report MTWG2207207) is below:

| Antenna polarization: Horizontal |                |              |
|----------------------------------|----------------|--------------|
| Frequency (MHz)                  | Level (dBuV/m) | Polarization |
| 433.92                           | 73.69          | Peak         |
| 433.92                           | 65.93          | Average      |

| Antenna polarization: Vertical |                |              |
|--------------------------------|----------------|--------------|
| Frequency (MHz)                | Level (dBuV/m) | Polarization |
| 433.92                         | 74.96          | Peak         |
| 433.92                         | 67.20          | Average      |

For 433.92MHz wireless:

Field strength=74.96 dBuV/m

Ant gain:0dBi;so Ant numeric gain=1.0

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30 = (10^{(\text{dB}\mu\text{V/m})/20} / 10^6 * 3)^2 / 30 = 0.0000108$$

$$\text{So PT} = \text{EIRP} / \text{GT} = 0.0000108 \text{ W} = 0.0108 \text{ mW}$$

$$\text{So } (0.0108 \text{ mW} / 5 \text{ mm}) * \sqrt{0.43392 \text{ GHz}} = 0.00142$$

$$\text{exclusion} = 0.00142 < 3.0 \text{ for 1-g SAR}$$

So the SAR report is not required.