

# RF EXPOSURE Test Report

**Report No.** : MTi260123018-0109E3  
**Date of Issue** : 2026-06-26  
**Applicant** : Changsha Hotone Audio Co.,LTD  
**Product** : Effects Processor  
**Model(s)** : NeonGlow  
**FCC ID** : 2AHJSNX-200

**Shenzhen Microtest Co., Ltd.**

# TEST REPORT

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## TEST REPORT

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| Test Result Certification |                                                                                                           |                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------|-------------------|
| Applicant                 | Changsha Hotone Audio Co.,LTD                                                                             |                   |
| Applicant Address         | Room 201, East Block, Hunan University Science Park, No.186, Guyuan Rd. Yue Lu District, Changsha, China. |                   |
| Manufacturer              | Changsha Hotone Audio Co.,LTD                                                                             |                   |
| Manufacturer Address      | #101, Building 1, No.20 Qingshan Road, Yuelu District, Changsha City, Hunan Province, China.              |                   |
| Factory                   | Changsha Hotone Audio Co.,LTD                                                                             |                   |
| Factory Address           | #101, Building 1, No.20 Qingshan Road, Yuelu District, Changsha City, Hunan Province, China.              |                   |
| Product description       |                                                                                                           |                   |
| Product name              | Effects Processor                                                                                         |                   |
| Trademark                 | HOTONE                                                                                                    |                   |
| Model name                | NeonGlow                                                                                                  |                   |
| Series Model(s)           | N/A                                                                                                       |                   |
| Standards                 | 47 CFR Part 2.1091                                                                                        |                   |
| Test method               | KDB 447498 D01 v06                                                                                        |                   |
| Testing Information       |                                                                                                           |                   |
| Date of test              | 2026-03-12 to 2026-06-23                                                                                  |                   |
| Test Result               | Pass                                                                                                      |                   |
| Prepared by:              | Yanice.Xie                                                                                                | <i>Yanice Xie</i> |
| Reviewed by:              | David Lee                                                                                                 | <i>David. Lee</i> |
| Approved by:              | Lewis Lian                                                                                                | <i>Lewis Lian</i> |

## 1 RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz)                                          | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|----------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| <b>(A) Limits for Occupational/Controlled Exposure</b>         |                               |                               |                                     |                          |
| 0.3-3.0                                                        | 614                           | 1.63                          | *100                                | 6                        |
| 3.0-30                                                         | 1842/f                        | 4.89/f                        | *900/f <sup>2</sup>                 | 6                        |
| 30-300                                                         | 61.4                          | 0.163                         | 1.0                                 | 6                        |
| 300-1,500                                                      |                               |                               | f/300                               | 6                        |
| 1,500-100,000                                                  |                               |                               | 5                                   | 6                        |
| <b>(B) Limits for General Population/Uncontrolled Exposure</b> |                               |                               |                                     |                          |
| 0.3-1.34                                                       | 614                           | 1.63                          | *100                                | 30                       |
| 1.34-30                                                        | 824/f                         | 2.19/f                        | *180/f <sup>2</sup>                 | 30                       |
| 30-300                                                         | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300-1,500                                                      |                               |                               | f/1500                              | 30                       |
| 1,500-100,000                                                  |                               |                               | 1.0                                 | 30                       |

f = frequency in MHz \* = Plane-wave equivalent power density

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

$P_d$  = Power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = Numeric gain of the antenna relative to isotropic antenna

$\pi$  = 3.1415926

$R$  = distance between observation point and center of the radiator in cm (20cm)

$P_d$  the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## 2 Measurement Result

BT&BLE Operation Frequency: 2402-2480MHz,  
Power density limited: 1mW/ cm<sup>2</sup>  
Antenna Type: FPC Antenna  
Antenna gain: 2.41dBi  
R=20cm  
mW=10<sup>^(dBm/10)</sup>  
Antenna 1 gain Numeric=10<sup>^(dBi/10)</sup>= 10<sup>^(2.41/10)</sup>=1.74

### Bluetooth DSS

| Channel Freq. (MHz) | modulation | conducted power | Tune-up power (dBm) | Max                 |       | Antenna    |         | Evaluation result (mW/cm <sup>2</sup> ) | Power density Limits (mW/cm <sup>2</sup> ) |
|---------------------|------------|-----------------|---------------------|---------------------|-------|------------|---------|-----------------------------------------|--------------------------------------------|
|                     |            | (dBm)           |                     | tune-up power (dBm) | (mW)  | Gain (dBi) | Numeric |                                         |                                            |
| 2402                | GFSK       | -3.27           | (-3) ±1             | -2                  | 0.631 | 2.41       | 1.74    | 0.0002                                  | 1                                          |
| 2441                |            | -3.39           | (-3) ±1             | -2                  | 0.631 | 2.41       | 1.74    | 0.0002                                  | 1                                          |
| 2480                |            | -2.31           | (-3) ±1             | -2                  | 0.631 | 2.41       | 1.74    | 0.0002                                  | 1                                          |
| 2402                | π/4-DQPSK  | -1.19           | (-1) ±1             | 0                   | 1.000 | 2.41       | 1.74    | 0.0003                                  | 1                                          |
| 2441                |            | -1.40           | (-1) ±1             | 0                   | 1.000 | 2.41       | 1.74    | 0.0003                                  | 1                                          |
| 2480                |            | -0.36           | (-1) ±1             | 0                   | 1.000 | 2.41       | 1.74    | 0.0003                                  | 1                                          |
| 2402                | 8DPSK      | -0.89           | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |
| 2441                |            | -0.99           | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |
| 2480                |            | 0.17            | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |

### BLE

| Channel Freq. (MHz) | modulation | conducted power | Tune-up power (dBm) | Max                 |       | Antenna    |         | Evaluation result (mW/cm <sup>2</sup> ) | Power density Limits (mW/cm <sup>2</sup> ) |
|---------------------|------------|-----------------|---------------------|---------------------|-------|------------|---------|-----------------------------------------|--------------------------------------------|
|                     |            | (dBm)           |                     | tune-up power (dBm) | (mW)  | Gain (dBi) | Numeric |                                         |                                            |
| 2402                | GFSK       | -0.71           | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |
| 2440                |            | -0.41           | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |
| 2480                |            | 0.16            | 0±1                 | 1                   | 1.259 | 2.41       | 1.74    | 0.0004                                  | 1                                          |

### Conclusion:

For the max result: 0.0004 ≤ 1.0 test exclusion threshold, No SAR is required.

## Statement

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2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
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5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

\*\*\*\*\* END OF REPORT \*\*\*\*\*