



## SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

EMC-TRF-03 Rev 1.1

Report No.: GZCR240500045803

Page: 1 of 9

FCC ID: 2AQAGEF32-42A

# RF EXPOSURE EVALUATION REPORT

**Application No.:** GZCR2405000458HS  
**Applicant:** Guangdong Paite Electrical Technology Co., Ltd.  
**Address of Applicant:** No 2, South Shenghui Rd, Nantou, Zhongshan, Guangdong, China  
**Manufacturer:** Guangdong Paite Electrical Technology Co., Ltd.  
**Address of Manufacturer:** No 2, South Shenghui Rd, Nantou, Zhongshan, Guangdong, China  
**Factory:** Guangdong Paite Electrical Technology Co., Ltd.  
**Address of Factory:** No 2, South Shenghui Rd, Nantou, Zhongshan, Guangdong, China  
**Product Name:** Electric fireplace  
**Model No.:** EF32-42A, W100-13 ♣  
**♣:** Please refer to section 2 of this report which indicates which item was actually tested and which were electrically identical.  
**Trade Mark:** Ashley  
**Standard(s) :** KDB447498D01 General RF Exposure Guidance v06  
47 CFR Part 1.1310  
**Date of Receipt:** 2024-05-10  
**Date of Evaluation:** 2024-05-28 to 2024-06-20  
**Date of Issue:** 2024-06-25

**Evaluation Result:**

**Pass\***

\* In the configuration evaluated, the EUT complied with the standards specified above.

Ricky Liu

Ricky Liu  
Manager



SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch Testing Center EEC Laboratory

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No.198, Kazhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663 t (86-20) 82155555 www.sgsgroup.com.cn  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 sgs.china@sgs.com

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| Revision Record |                  |            |          |
|-----------------|------------------|------------|----------|
| Version         | Report No.       | Date       | Remark   |
| 01              | GZCR240500045803 | 2024-06-25 | Original |
|                 |                  |            |          |
|                 |                  |            |          |

|                          |  |                                                                                      |  |
|--------------------------|--|--------------------------------------------------------------------------------------|--|
| Authorized for issue by: |  |                                                                                      |  |
|                          |  |  |  |
|                          |  | Allen Zhou/Project Engineer                                                          |  |
|                          |  |   |  |
|                          |  | Vico Cui/Reviewer                                                                    |  |

## 2 Evaluation Summary

| Item        | Standard                                               | Method                                              | Requirement        | Result |
|-------------|--------------------------------------------------------|-----------------------------------------------------|--------------------|--------|
| RF Exposure | KDB447498D01<br>General RF<br>Exposure<br>Guidance v06 | KDB447498D01<br>General RF Exposure<br>Guidance v06 | 47 CFR Part 1.1310 | Pass   |

**Note:**

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

**♣Declaration of EUT Family Grouping:**

**Model No.:** EF32-42A, W100-13

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on the model name.

Therefore only one model EF32-42A was tested in this report.



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SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch Testing & Calibration Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

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## 4 General Information

### 4.1 Details of E.U.T.

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Power supply:               | AC 120V, 60Hz for heater<br>DC 3V with CR2025 button cell for IR remote control |
| Cable(s):                   | AC mains cable: 2 wires 1.8m unshielded                                         |
| Operation Frequency:        | 2402MHz to 2480MHz                                                              |
| Modulation Type:            | GFSK, pi/4DQPSK                                                                 |
| Number of Channels:         | 79                                                                              |
| Channel Spacing:            | 1MHz                                                                            |
| Spectrum Spread Technology: | Frequency Hopping Spread Spectrum(FHSS)                                         |
| Antenna Gain                | -0.58 dBi                                                                       |
| Antenna Number              | 1                                                                               |
| Antenna Type                | Onboard Antenna                                                                 |

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

### 4.2 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou,  
Guangdong, China 510663

Tel: +86 20 82155555

No tests were sub-contracted.



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## 4.3 Facility

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

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

## 4.4 Deviation from Standards

None

## 4.5 Abnormalities from Standard Conditions

None



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Guangzhou Branch EMC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

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## 5 Technical Requirements Specification

### 5.1 General Description of Applied Standards

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.

### 5.2 RF Exposure Evaluation

#### 5.2.1 Limit & Test Method

According to FCC Part1.1310: 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 part1.1307(b)

**TABLE 1—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 Exposures</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                        |
| 300–1500 .....                                                 | .....                         | .....                         | f/300                               | 6                        |
| 1500–100,000 .....                                             | .....                         | .....                         | 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                       |
| 300–1500 .....                                                 | .....                         | .....                         | f/1500                              | 30                       |
| 1500–100,000 .....                                             | .....                         | .....                         | 1.0                                 | 30                       |

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * P_i * R^2)$

Where

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

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

G = gain of antenna in linear scale

$P_i$  = 3.1416

R = distance between observation point and center of the radiator in cm

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



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Guangzhou Branch - Testing Center EEC Laboratory

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

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t (86-20) 82155555 sgs.china@sgs.com

### 5.2.2 Conclusion

Normal use condition for Distance  
between antenna and body:

20cm declared by applicant

Antenna Gain: -0.58 dBi

| Frequency<br>(MHz) | Antenna<br>Gain<br>(Numeric) | Peak Output<br>Power (dBm) | Peak Output<br>Power (mW) | Power Density<br>(S) (mW/cm <sup>2</sup> ) | Limit of Power<br>Density (S) | Test<br>Result |
|--------------------|------------------------------|----------------------------|---------------------------|--------------------------------------------|-------------------------------|----------------|
|                    |                              |                            |                           |                                            | (mW/cm <sup>2</sup> )         |                |
| 2402               | 0.874983775                  | 0.7                        | 1.17                      | 0.00020                                    | 1                             | Complies       |
| 2441               | 0.874983775                  | 1.53                       | 1.42                      | 0.00025                                    | 1                             | Complies       |
| 2480               | 0.874983775                  | 2.1                        | 1.62                      | 0.00028                                    | 1                             | Complies       |

So SAR report is not required.

Note : Refer to report No. GZCR240500045802 for EUT test Max Conducted Peak Output Power value.



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## 6 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for GZCR2405000458HS

- End of the Report -

