

**Ningbo Gengmei Electric Appliance Tech  
Co.,Ltd.**

# **MPE ASSESSMENT REPORT**

**Report Type:**

FCC Part §2.1091 and §1.1307(b) assessment report

**Model:**

EF-ab, SF-ab, SX-ab, IF-ab, IF-13ab, WF-ab,  
WF-13ab, GM2000-ab, GM20a-b, ZCRa13b  
(a=11,13,15,18,22,23,25,26,28,30,32,34,36,  
40,42,43,45,47,48,50,60,70,72,80,90,100,200;  
b=blank, A~Z, AM, AJ, BE, BS, FK, GF, GM, KL, PM,  
TS, WD, XW, YM, YX, ZQ, AKF, A(KT), AGM, CCS,  
FSB, FUR, KMC, MJY, TCL, TST)

**REPORT NUMBER:**

2410B0712SHA-002

**ISSUE DATE:**

October 23, 2024

**DOCUMENT CONTROL NUMBER:**

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## TEST REPORT

Intertek Testing Services (Shanghai FTZ) Co., Ltd  
Building No.86, 1198 Qinzhou Road (North)  
Caohejing Development Zone  
Shanghai 200233, China

Telephone: 86 21 6127 8200  
[www.intertek.com](http://www.intertek.com)

Report no.: 2410B0712SHA-002

**Applicant:** Ningbo Gengmei Electric Appliance Tech Co.,Ltd.

Guangxi Industrial Estate ,Yinjiang Town,Haishu District,Ningbo,China

**Manufacturer:** Ningbo Gengmei Electric Appliance Tech Co.,Ltd.

Guangxi Industrial Estate ,Yinjiang Town,Haishu District,Ningbo,China

**Factory:** Ningbo Gengmei Electric Appliance Tech Co.,Ltd.

Guangxi Industrial Estate ,Yinjiang Town,Haishu District,Ningbo,China

**FCC ID:** 2BK9W-NBGMEF24CN

### SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

KDB447498 D01 General RF Exposure Guidance v06

FCC Part2.1091, FCC Part1.1307(b)

**PREPARED BY:**

Project Engineer  
Damon Ding

**REVIEWED BY:**

Reviewer  
Eric Li

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**TEST REPORT****Revision History**

Report No.	Version	Description	Issued Date
2410B0712SHA-002	Rev. 01	Initial issue of report	October 23, 2024

**TEST REPORT****1 GENERAL INFORMATION****1.1 Description of Equipment Under Test (EUT)**

Product name:	Electric Fireplace
Type/Model:	EF-ab, SF-ab, SX-ab, IF-ab, IF-13ab, WF-ab, WF-13ab, GM2000-ab, GM20a-b, ZCRa13b (a=11,13,15,18,22,23,25,26,28,30,32,34,36,40,42,43,45,47,48,50,60,70,72,80,90,100,200; b=blank, A~Z, AM, AJ, BE, BS, FK, GF, GM, KL, PM, TS, WD, XW, YM, YX, ZQ, AKF, A(KT), AGM, CCS, FSB, FUR, KMC, MJY, TCL, TST)
Description of EUT:	EUT is a Wireless Electric Fireplace with WIFI functions. The WIFI module has been approved with FCC ID: 2ANDL-WBR2. All models are identical except for appearance. We test IF-1350 as representative and list the worst results in this report.
Rating:	120V, 60Hz, 1500W
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	/
Hardware Version:	/
Sample received date:	October 8, 2024
Date of test:	October 8, 2024 ~ October 17, 2024

**1.2 Technical Specification**

Frequency Band:	2400MHz ~ 2483.5MHz
Support Standards:	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20)
Type of Modulation:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n(HT20): OFDM (64-QAM, 16-QAM, QPSK, BPSK)
Operating Frequency:	2412MHz to 2462MHz for IEEE 802.11b/g/n(HT20)
Channel Number:	11 Channels for 802.11b, 802.11g and 802.11n(HT20)
Channel Separation:	5 MHz
Antenna:	PCB Antenna, 2.5dBi

**TEST REPORT**

Frequency Band:	2402MHz to 2480MHz
Support Standards:	Bluetooth Low Energy
Type of Modulation:	GFSK
Channel Number:	40
Date Rate	1Mbps
Channel Separation:	2MHz
Antenna Information:	PCB antenna, 2.5dBi

**1.3 Description of Test Facility**

Name:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L21189
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Member No: 3598 (Registration No.: R-14243, G-10845, C-14723, T-12252)
	A2LA Accreditation Lab Certificate Number: 3309.02

**TEST REPORT****2 MPE Assessment****Test result:** Pass**2.1 MPE Assessment Limit**

Mobile device exposure for standalone operations:

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (uT)	Equivalent plane wave power density $S_{eq}$ (W/m <sup>2</sup> )
0-1 Hz	-	$3,2 \times 10^4$	$4 \times 10^4$	-
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	-
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	-
0,025-0,8 kHz	250/f	4/f	5/f	-
0,8-3 kHz	250/f	5	6,25	-
3-150 kHz	87	5	6,25	-
0,15-1 MHz	87	0,73/f	0,92/f	-
1-10 MHz	87/f <sup>1/2</sup>	0,73/f	0,92/f	-
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	1,375 f <sup>1/2</sup>	0,0037 f <sup>1/2</sup>	0,0046 f <sup>1/2</sup>	f/200
2-300 GHz	61	0,16	0,20	10

Mobile device exposure for simultaneous transmission operations: **the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is  $\leq 1.0$**

**TEST REPORT****2.2 Assessment Results**

Power density (S) is calculated according to the formula:

$$S = PG / (4\pi R^2)$$

Where S = power density in  $\text{mW/cm}^2$

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 708881974886-00 & 708881974873-00:

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

Mode	Frequency band	Max Power	Antenna Gain	R	S	Limits
	(MHz)	dBm	dBi	(cm)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )
Bluetooth	2402 -2480	6.76	2.5	20	0.0925	1
WIFI	2412-2462	24.28	2.5	20	0.0028	1

Note: 1  $\text{mW/cm}^2$  from 1.310 Table 1

The sum of the MPE ratios for all simultaneously transmitting is  $0.0925/1 + 0.0028/1 = 0.0953 < 1.0$

For the device can support simultaneous transmission, according to 447498 D01 General RF Exposure Guidance v06,

**TEST REPORT****Appendix I**

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.

To ensure compliance, operations at closer than this distance is not recommended.

\*\*\*\*\* END \*\*\*\*\*