

# Ningbo EverFlourish Smart Technology Corp., Ltd

# **MPE ASSESSMENT REPORT**

## **Report Type:**

FCC MPE assessment report

#### Model:

EW26-UL, EW26-UL1, EW26-2UL, EW26-2UL1

#### **REPORT NUMBER:**

210702452SHA-002

#### **ISSUE DATE:**

Mar 24, 2022

#### **DOCUMENT CONTROL NUMBER:**

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

Telephone: 86 21 6127 8200

www.intertek.com

Report no.: 210702452SHA-002

Applicant: Ningbo EverFlourish Smart Technology Corp., Ltd

77 Wuxiang East Road, Yinzhou, Ningbo, Zhejiang, 31511 China

Manufacturer: Ningbo EverFlourish Smart Technology Corp., Ltd

77 Wuxiang East Road, Yinzhou, Ningbo, Zhejiang, 31511 China

FCC ID: VBA-EFEW26

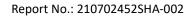
#### **SUMMARY:**

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 Part2.1093 FCC Part1.1307(b)

PREPARED BY:	REVIEWED BY:		
Teddy yin	Damed Than		
Project Engineer	Reviewer		
Teddy Yin	Daniel Zhao		

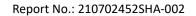
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# **Revision History**

Report No.	Version	Description	Issued Date
210702452SHA-002	Rev. 01	Initial issue of report	Mar 24, 2022





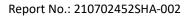
## **1 GENERAL INFORMATION**

# 1.1 Description of Equipment Under Test (EUT)

Product name:	indoor Wi-Fi outlet switch	
Type/Model/PMN/HVIN:	EW26-UL, EW26-UL1, EW26-2UL, EW26-2UL1	
	EUT is an indoor Wi-Fi outlet switch. EUT supports WIFI function. All	
	models use the same WIFI modular. EW26-UL1 is same as EW26-UL except EW26-UL1 uses an extensional push button actuating member.	
	EW26-2UL1 is same as EW26-2UL except EW26-2UL1 uses an	
Description of EUT:	extensional push button actuating member.	
Rating:	125V~, 60Hz, 15A/1875W resistive, 10A tungsten, 1/2 HP	
Category of EUT:	Class B	
EUT type:	☐ Table top ☐ Floor standing	
Software Version:	V1.0	
Hardware Version:	V1.0	
Sample No.:	0210913-11-001/002/003/004	
Sample received date:	Aug 1, 2021	
Date of test:	Aug 2, 2021~Feb 25, 2022	

# 1.2 Technical Specification

Frequency Range:	2412MHz ~ 2462MHz		
Support Standards:	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n-HT20, IEEE 802.11n-HT40		
	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)		
Type of Modulation:	IEEE 802.11n-HT40: OFDM (64-QAM, 16-QAM, QPSK, BPSK)		
	11 Channels for 802.11b, 802.11g and 802.11n(HT20)		
Channel Number:	7 Channels for 802.11n(HT40)		
	IEEE 802.11b: Up to 11 Mbps		
	IEEE 802.11g: Up to 54 Mbps		
	IEEE 802.11n-HT20: Up to MCS7		
Data Rate:	IEEE 802.11n-HT40: Up to MCS7		
Channel Separation:	5 MHz		
Antenna Information:	OdBi, PCB antenna		

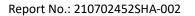




# 1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai		
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	CNAS Accreditation Lab
recognized,	Registration No. CNAS L0139
certified, or	FCC Accordited Lob
accredited by these	FCC Accredited Lab
	Designation Number: CN0175
organizations:	
	IC Registration Lab
	CAB identifier.: CN0051
	VCCI Registration Lab
	Registration No.: R-14243, G-10845, C-14723, T-12252
	Negistration No.: N-14243, G-10043, C-14723, I-12232
	A2LA Accreditation Lab
	Certificate Number: 3309.02





### 2 MPE Assessment

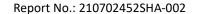
Test result: Pass

## 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 <sub>eq</sub> (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





#### 2.2 Assessment Results

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

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

Where  $S = power density in mW/cm^2$ 

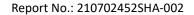
P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 210702452SHA-001: The maximum radiated power = 20.78dBm = 119.67 mW; Here R is chosen to be 20cm,

 $S = PG / (4\pi R^2) = 119.67 / (4 * 3.14 * 20 * 20) = 0.0238 mW/cm^2 < 1 mW/cm^2$ 





## 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.