

# RF Exposure Evaluation Report

**FCC ID** : 2AGBW9290022230AX  
**Equipment** : Smart button  
**Brand Name** : PHILIPS  
**Model Name** : 9290022230A  
**Applicant** : Signify (China) Investment Co., Ltd.  
Building 9, Lane 888, Tianlin Road, Minhang  
District, Shanghai 200233 China  
**Manufacturer** : Signify (China) Investment Co., Ltd.  
Building 9, Lane 888, Tianlin Road, Minhang  
District, Shanghai 200233 China  
**Standard** : 47 CFR FCC Part 2 Subpart J, section 2.1093

The product was received on Mar. 17, 2022, and testing was started from Mar. 28, 2022 and completed on Mar. 28, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in KDB 447498 D04 Interim General RF Exposure Guidance v01 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Jackson Tsai

**SPORTON INTERNATIONAL INC. Hsinhua Laboratory**

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### Photographs of EUT V01



## 1. General Description

### 1.1. EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
ZigBee	2400-2483.5	2405-2480	DSSS (O-QPSK)

### 1.2. Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	INPAQ	WAG-M-LA-00-048	Metal	I-PEX	-1.93

Note 1: The EUT has one antenna.

**For Zigbee function:**

For Zigbee mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive.

### 1.3. Table for Multiple Listing

There are two sources of flash for EUT.

Flash	Brand Name	Model Name
Main source	GD	GD25WQ40EEIGR
2nd source	MXIC	MX25R4035FZUILO

### 1.4. Accessories

Accessories				
Wall Pate (Round)	Brand Name	-	Model Name	-
Wall Pate (Square)	Brand Name	-	Model Name	-
Wall Pate (Rectangle)	Brand Name	-	Model Name	-

Reminder: Regarding to more detail and other information, please refer to user manual.

### 1.5. Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory			
<input checked="" type="checkbox"/>	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.) TEL: 886-3-327-3456 FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.			
<input type="checkbox"/>	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: 886-3-318-0787 FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.			

## 2. RF Exposure Evaluation

### 2.1. Applicable Standard

In accordance with FCC 47 CFR part 2 (2.1093) this device has been defined as a portable device which is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

Portable devices must be evaluated using the specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2003.

### 2.2. SAR evaluation

- Per KDB 447498 D04 Interim General RF Exposure Guidance v01, Option (B): 1.1307(b)(3)(i)(B): Device operates between 300 MHz and 6 GHz and the maximum time-averaged power or effective radiated power (ERP), whichever is greater,  $\leq P_{th}$ .

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}}(d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

$d$  = the separation distance (cm);

Mode	DG (dBi)	Power (dBm)	Duty (%)	Power with Duty (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	Option	TL Pth (dBm)
2.4G;G1D	-1.93	6.96	2.84	-8.50	0.5	-8.00	0.5	B	4.454

- Per KDB 447498 D04 Interim General RF Exposure Guidance v01 exclusion thresholds is  $-8.00 < 4.454$ , RF exposure evaluation is not required.

—————THE END—————