



# FCC RF EXPOSURE REPORT

**CERTIFICATION TEST REPORT** 

For HUE Smart plug

MODEL: 9290022406A

FCC ID: 2AGBW9290022406AX

REPORT NUMBER: 4789870985-3

ISSUE DATE: April 8, 2021

Prepared for

Signify (China) Investment Co., Ltd.
Building no.9, Lane 888, Tianlin Road, Minhang District Shanghai China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

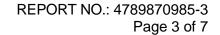
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# **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	04/08/2021	Initial Issue	





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## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Signify (China) Investment Co., Ltd.

Address: Building no.9, Lane 888, Tianlin Road, Minhang District Shanghai

China

**Manufacturer Information** 

Company Name: Signify (China) Investment Co., Ltd.

Address: Building no.9, Lane 888, Tianlin Road, Minhang District Shanghai

China

**EUT Information** 

EUT Name: HUE Smart plug Model: 9290022406A

Brand: PHILIPS

Sample Received Date: March 29, 2021

Sample Status: Normal Sample ID: 3750387

Date of Tested: March 29 ~ April 7, 2021

APPLICABLE STANDARDS			
STANDARD	TEST RESULTS		
FCC 47CFR§2.1091	PASS		

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

# 3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Declaration of Conformity (DoC) and Certification rules
	ISED (Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with
	Industry Canada. The Company Number is 21320.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.



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## 4. REQUIREMENT

#### **LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

#### **RF EXPOSURE LIMIT**

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time  E ²,  H ² or S (Minutes)
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

#### **CALCULATION METHOD**

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

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna



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#### **CALCULATED RESULTS**

BLE Mode (Worst Case)					
Frequency	Max. Tune Up Power	Output Power	Power Density	Power Density Limit	Test Result
MHz	dBm	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	-
2402 -2480	11	12.59	0.00354	1	Complies

Zigbee Mode (Worst Case)					
Frequency	Max. Tune Up Power	Output Power	Power Density	Power Density Limit	Test Result
MHz	dBm	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	
2405 -2480	11	12.59	0.00354	1	Complies

Note: 1. Antenna Gain=1.5 dBi (Numeric 1.41), π=3.141.

- 2. BLE and Zigbee cannot simultaneously transmitting.
- 3. The Power comes from operation description.
- 4. The minimum separation distance of the device is greater than 20 cm.
- 5. Calculate by WORST-CASE mode.
- 6. Owing to the maximum Calculated Result is below the limit, so it deemed to comply with the basic restrictions without testing which means that no SAR is required.

**END OF REPORT**