



## RF Exposure Evaluation Declaration

Product Name : Connected Sleep & Wake-up light  
Model No. : HF3670, HF3671, HF3672,  
HF3673, HF3674  
FCC ID : 2APFC-HF367X

Applicant : Philips Consumer Lifestyle B.V.

Address : Tussendiepen 4, 9206 AD Drachten, The Netherlands

Date of Receipt : Oct. 13, 2021

Issued Date : Nov. 18, 2021

Report No. : 21A0342R-RF-US-P20V01

Report Version : V1.0

This report is only referred to the item that has undergone the test.

This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.

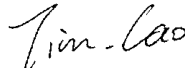
# Test Report Certification

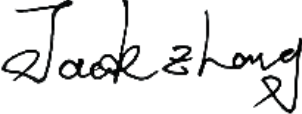
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Product Name : Connected Sleep & Wake-up light  
Applicant : Philips Consumer Lifestyle B.V.  
Address : Tussendiepen 4, 9206 AD Drachten, The Nertherlands  
Manufacturer : Philips Consumer Lifestyle B.V.  
Address : Tussendiepen 4, 9206 AD Drachten, The Nertherlands  
Model No. : HF3670, HF3671, HF3672, HF3673, HF3674  
FCC ID : 2APFC-HF367X  
EUT Voltage : 100-240Vac, 50/60Hz, 24W  
Test Voltage : AC 120V/60Hz  
Applicable Standard : KDB 447498D01V06  
FCC Part1.1310  
Test Result : Complied  
Performed Location : DEKRA Testing and Certification (Suzhou) Co., Ltd.  
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006,  
Jiangsu, China  
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Designation Number: CN1199

Documented By :   
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(Project Engineer: Tim Cao)

Approved By :   
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(Supervisor: Jack Zhang )

## 1. RF Exposure Evaluation

### 1.1.Limits

According to FCC 1.1310: 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 1.1307(b)

#### 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> )	Average Time (Minutes)
<b>(A) Limits for Occupational/ Control Exposures</b>				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
<b>(B) Limits for General Population/ Uncontrolled Exposures</b>				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * r^2)$

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

$\pi$  = 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.

## 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	:	Connected Sleep & Wake-up light
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

### ● Antenna Information:

Model No.	N/A				
Antenna manufacturer	N/A				
Antenna Delivery	<input type="checkbox"/>	1*TX+1*RX	<input checked="" type="checkbox"/> 2*TX+2*RX	<input type="checkbox"/>	3*TX+3*RX
Antenna technology	<input checked="" type="checkbox"/>	SISO			
	<input type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic	
			<input type="checkbox"/>	CDD	
			<input type="checkbox"/>	Sectorized	
			<input type="checkbox"/>	Beam-forming	
Antenna Type	<input checked="" type="checkbox"/>	External	<input checked="" type="checkbox"/>	Metal	
			<input type="checkbox"/>	Sectorized	
	<input checked="" type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA	
			<input checked="" type="checkbox"/>	PCB	
			<input type="checkbox"/>	Ceramic Chip Antenna	
			<input type="checkbox"/>	Metal plate type F antenna	
	Antenna Technology	Ant1: Integral PCB antenna, Max. 3,0 dBi Ant2: External antenna, Max. 3.3 dBi			

- **Power Density:**

**The maximum conducted tune-up power is 23.53dBm.**

Test Mode	Frequency Band (MHz)	EIRP (dBm)	Limit of Power Density S(mW/cm <sup>2</sup> )	Power Density at R = 20 cm (mW/cm <sup>2</sup> )
802.11b/g/n(20MHz)	2412~2462	26.83	1	0.096

Note:

1. The maximum power of related plane is calculated for simultaneous MPE.
2. The power density is 0.096mW/cm<sup>2</sup> for Connected Sleep & Wake-up light without any other radio equipment.

————— The End —————