



中国认可  
国际互认  
检测  
TESTING  
CNAS L5313



DEKRA

## RF Exposure Evaluation Declaration

Product Name : A19 Color  
Model No. : 74484  
FCC ID : 2AKGT-LDVA19C

Applicant : LEDVANCE LLC  
Address : 200 Ballardvale, Wilmington, MA, 01887

Date of Receipt : Mar. 21st, 2017  
Test Date : Mar. 21st, 2017~ May. 19th, 2017  
Issued Date : May. 23rd, 2017  
Report No. : 1732093R-RF-US-P20V01  
Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF or any agency of the government.

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


# Test Report Certification

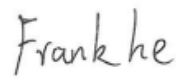
Issued Date : May. 23rd, 2017


Report No. : 1732093R-RF-US-P20V01



Product Name : A19 Color  
Applicant : LEDVANCE LLC  
Address : 200 Ballardvale, Wilmington, MA, 01887  
Manufacturer : LEDVANCE LLC  
Address : 200 Ballardvale, Wilmington, MA, 01887  
Model No. : 74484  
FCC ID : 2AKGT-LDVA19C  
EUT Voltage : DC 3V ~ 3.6V  
Test Voltage : AC 120V/60Hz  
Applicable Standard : KDB 447498D01V06  
FCC Part1.1310  
Test Result : Complied  
Performed Location : DEKRA Testing & 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 Registration Number: 800392

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Reviewed By :   
(Senior Engineer: Frank He )

Approved By :   
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## 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)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

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

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 and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	:	A19 Color
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

### ● Antenna Information

Model No.	N/A				
Antenna manufacturer	N/A				
Antenna Delivery	<input checked="" type="checkbox"/>	1*TX+1*RX	<input 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 type="checkbox"/>	External	<input type="checkbox"/>	Dipole	
			<input type="checkbox"/>	Sectorized	
	<input checked="" type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA	
			<input type="checkbox"/>	PCB	
			<input type="checkbox"/>	Ceramic Chip Antenna	
			<input checked="" type="checkbox"/>	Metal housing Antenna	
	Antenna Technology		Ant Gain (dBi)		
<input checked="" type="checkbox"/>	SISO	0.5			

- **Power Density**

**Standalone modes:**

Test Mode	Frequency Band (MHz)	EIRP (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit of Power Density S(mW/cm <sup>2</sup> )
BLE	2402 ~ 2480	8.49	0.0014	1

Note: The standalone transmission power density is 0.0014mW/cm<sup>2</sup> for A19 Color without any other radio equipment.

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