

# **MPE Test Report**

Report No.: AAOG-ESH-P21124224B-3

FCC ID: 2ABEU-YLYK01YL

**Product:** Yeelight Remote Control

Test Model: YLYK01YL

Received Date: Dec.20, 2021

**Test Date:** Dec.20, 2021 to Jan.10, 2022

Issued Date: Feb.15, 2022

Applicant: Qingdao Yeelink Information Technology Co., Ltd.

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## **Release Control Record**

Issue No.	Description	Date Issued
AAOG-ESH-P21124224B-3	Original release	Feb.15, 2022



# 1 Certificate of Conformity

Product: Yeelight Remote Control

Brand: YEELIGHT

Test Model: YLYK01YL

Applicant: Qingdao Yeelink Information Technology Co., Ltd.

Test Date: Dec.20, 2021 to Jan.10, 2022

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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Approved by :	Daniel SUN  EMC Lab Manager	, Date: 	Feb.15, 2022



# 2 General Information

# 2.1 General Description of EUT

Product	Yeelight Remote Control
Brand	YEELIGHT
Model	YLYK01YL
Difference	
Power Rating	DC 3.0V
Modulation Type	GFSK
Modulation Technology	Bluetooth Low Energy 5.0
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Output Power	6.25dBm
Antenna Type	PCB Antenna
Antenna Connector	
Antenna Gain	2dBi

## Note:

1. For more details, please refer to the User's manual of the EUT.



## 3 RF Exposure

The corresponding SAR Exclusion Threshold condition, listed below:

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where

- •f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- •The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
- a) [Threshold at 50 mm in step1) + (test separation distance 50 mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
- b) [Threshold at 50 mm in step1) + (test separation distance 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by
- $[1 + \log(100/f(MHz))]$  for test separation distances > 50 mm and < 200 mm.
- b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by ½ for test separation distances ≤ 50 mm.
- c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

#### 3.1 Classification

The antenna of this product, under normal use condition, is at less than 20cm from the body of the user. So the device is classified as **Portable Device**.

#### 3.2 SAR Test Exclusion Thresholds

The tuned conducted Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-LE(GFSK)	2402-2480	5.5	±1	4.5	6.5

The measured conducted Power

Mode	Frequency (MHz)	Max. Conducted Output power(dBm)
BT-LE(GFSK)	2402	6.25

#### SAR Test Exclusion Thresholds

Frequency Band (MHz)	Max. Conducted output power(dBm)	Distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g Extremity SAR	Verdict
2402-2480	6.5	5	1.3846	3	7.5	Exempt from SAR

### Conclusion:

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

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