

# TEST REPORT

Product Name : READING LAMP Remote control  
Model Number : RS-DW31, RS-DW32, RS-DW52,  
RS-DW63, RS-DW64  
FCC ID : 2BA8Q-RS-DW32

Prepared for : NINGBO JIANGBEI REALSHINE ELECTRONICS CO.,  
LTD  
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Report Number : ENB2407310255W00902R  
Date(s) of Tests : July 31, 2024 to August 20, 2024  
Date of Issue : August 29, 2024

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## Test Report Description

Applicant : NINGBO JIANGBEI REALSHINE ELECTRONICS CO., LTD  
Address : 4F, 1 Building, No.6 Hongxing Rd, Hongtang Street, Jiangbei District, Ningbo City  
Manufacturer : NINGBO JIANGBEI REALSHINE ELECTRONICS CO., LTD  
Address : 4F, 1 Building, No.6 Hongxing Rd, Hongtang Street, Jiangbei District, Ningbo City  
EUT : READING LAMP Remote control  
Model Name : RS-DW31, RS-DW32, RS-DW52, RS-DW63, RS-DW64  
Trademark : N/A

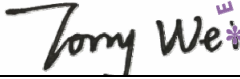
The device described above is tested by EMTEK (NINGBO) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. This report shows the EUT to be technically compliant with the FCC 1.1310 and KDB 447498 D01 General RF Exposure Guidance v07 requirements. The test results are contained in this report and EMTEK (NINGBO) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (NINGBO) CO., LTD.

Date of Test : July 31, 2024 to August 20, 2024

Prepared by :   
June Gao/Engineer

Reviewer :   
Lucas Xu/Supervisor

Approved & Authorized Signer :   
Tony Wei/Manager



## Modified Information

| Version | Report No.           | Revision Date | Summary         |
|---------|----------------------|---------------|-----------------|
| /       | ENB2407310255W00902R | /             | Original Report |



## 1. Facilities And Accreditations

### 1.1. Test Facility

All measurement facilities used to collect the measurement data are located at  
EMTEK (NINGBO) CO., LTD.

No. 8, Building 8, Lane 216, Qingyi Road, Ningbo Hi-Tech Zone, Ningbo, Zhejiang, China  
The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 32.

### 1.2. LABORATORY ACCREDITATIONS AND LISTINGS

Site Description  
EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L6666.

The Laboratory has been assessed and proved to be in compliance with  
CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)

**Designation by FCC**

Designation Number: CN1354

Test Firm Registration Number: 427606

**Accredited by A2LA**

The Certificate Number is 4321.03.

The certificate is valid until May 31, 2025

**Designation by Industry Canada**

The Conformity Assessment Body Identifier is CN0114

Name of Firm

: EMTEK (NINGBO) CO., LTD.

Site Location

: No. 8, Building 8, Lane 216, Qingyi Road, Hi-Tech Zone, Ningbo,  
Zhejiang, China

## 2. General Product Information

| Characteristics             | Description                                                                                                                                                                                                                                                                                               |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>             | READING LAMP Remote control                                                                                                                                                                                                                                                                               |
| <b>Model Number:</b>        | RS-DW31, RS-DW32, RS-DW52, RS-DW63, RS-DW64<br>(Note: RS-DW31/RS-DW52/RS-DW63 is a monochrome remote control, RS-DW32/RS-DW64 is a two-color (can achieve three color temperature color) remote control. In addition, the PCB Layout and schematic design are the same. We chose RS-DW32 for RF testing.) |
| <b>Sample Number:</b>       | ENB2407310255W009-1-1                                                                                                                                                                                                                                                                                     |
| <b>Modulation:</b>          | ASK                                                                                                                                                                                                                                                                                                       |
| <b>Operating Frequency:</b> | 433.92MHz                                                                                                                                                                                                                                                                                                 |
| <b>Number of Channels:</b>  | 1 channel                                                                                                                                                                                                                                                                                                 |
| <b>Max Transmit Power:</b>  | 65.12 dBuV/m                                                                                                                                                                                                                                                                                              |
| <b>Antenna Type :</b>       | PCB Antenna                                                                                                                                                                                                                                                                                               |
| <b>Antenna Gain:</b>        | -2.93 dBi                                                                                                                                                                                                                                                                                                 |
| <b>Power supply:</b>        | DC 3V for Battery                                                                                                                                                                                                                                                                                         |
| <b>Temperature Range:</b>   | -40°C ~ +85°C                                                                                                                                                                                                                                                                                             |
| <b>Date of Received:</b>    | July 31, 2024                                                                                                                                                                                                                                                                                             |

*Note: for more details, please refer to the User's manual of the EUT.*

### 3. Limit

According to §15.249(i) and §1.1307(b)(1), systems operating under the provisions of this 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.

According to KDB447498 D01 General RF Exposure Guidance V07

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

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

$f(\text{GHz})$  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.

We use 5mm as separation distance to calculate.



## 4. Test Results

Maximum measured transmitter power:  
 $EIRP = E + 20\log(d) - 104.7 = 65.12 + 9.54 - 104.7 = -30.04 \text{ dBm}$

| Transmit Frequency (MHz) | Mode | EIRP Power (dBm) | tune up maximum power(dBm) | Result calculation | 1-g SAR |
|--------------------------|------|------------------|----------------------------|--------------------|---------|
| 433.92                   | ASK  | -30.04           | -30.0                      | 0.00031            | 3       |

Conclusion:  
 For the max result :  $0.00031 \leq 3.0$  for 1-g SAR extremity SAR.

\*\*\* End of Report \*\*\*





## 声明 Statement

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