



SPECIFICATION FOR APPROVAL

Model : FDR-84/54R

Direct Ring Illumination – Red

Model P/N : GL-FDR8454R

Customer :

Date : Jul. 23, 2013

Authorized Signature

| Approved By | Reviewed By | Prepared By |
|---|---|---|
|  |  |  |

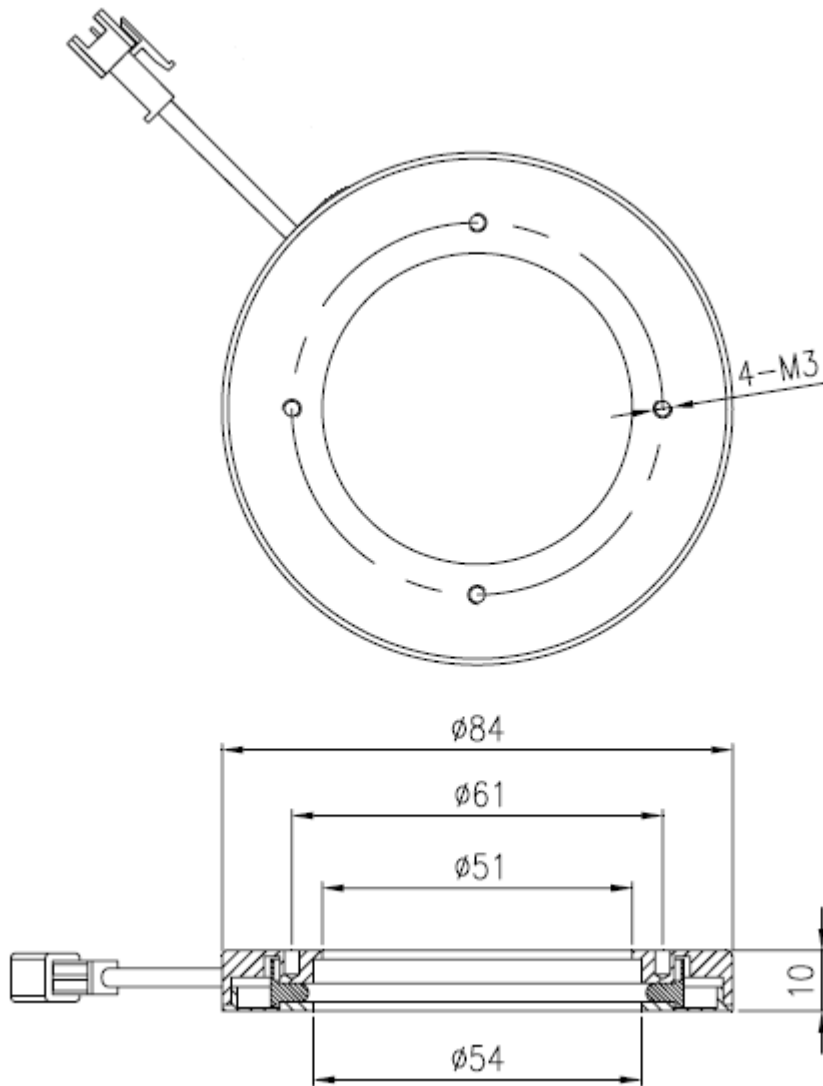
丞基技研股份有限公司 3AMechatronic Co., LTD.


Add.: 7F-7, No. 12, Lane 609, Sec. 5, Chongxin Rd., Sanchong Dist.,
New Taipei City 241, Taiwan (R.O.C)

TEL: +886-2-29997331

FAX: +886-2-22787113

1. Dimensions



| | |
|---------------------------|--|
| Material | Aluminum (Main Part) |
| Surface Treatment | Anodic Treatment (Black, Main Part) |
| Unit | mm |
| Tolerance | ±0.3 |
| Connector Type | J.S.T connector SM type-2Pin |
| Connector Pin Def. |  |

Note: Owing to the different series of lights, the length of wires is about 25 – 30cm.

2. Guarantee

Under the normal use of the product, it will keep more than 50% of its initial brightness within a year from the date of delivery.

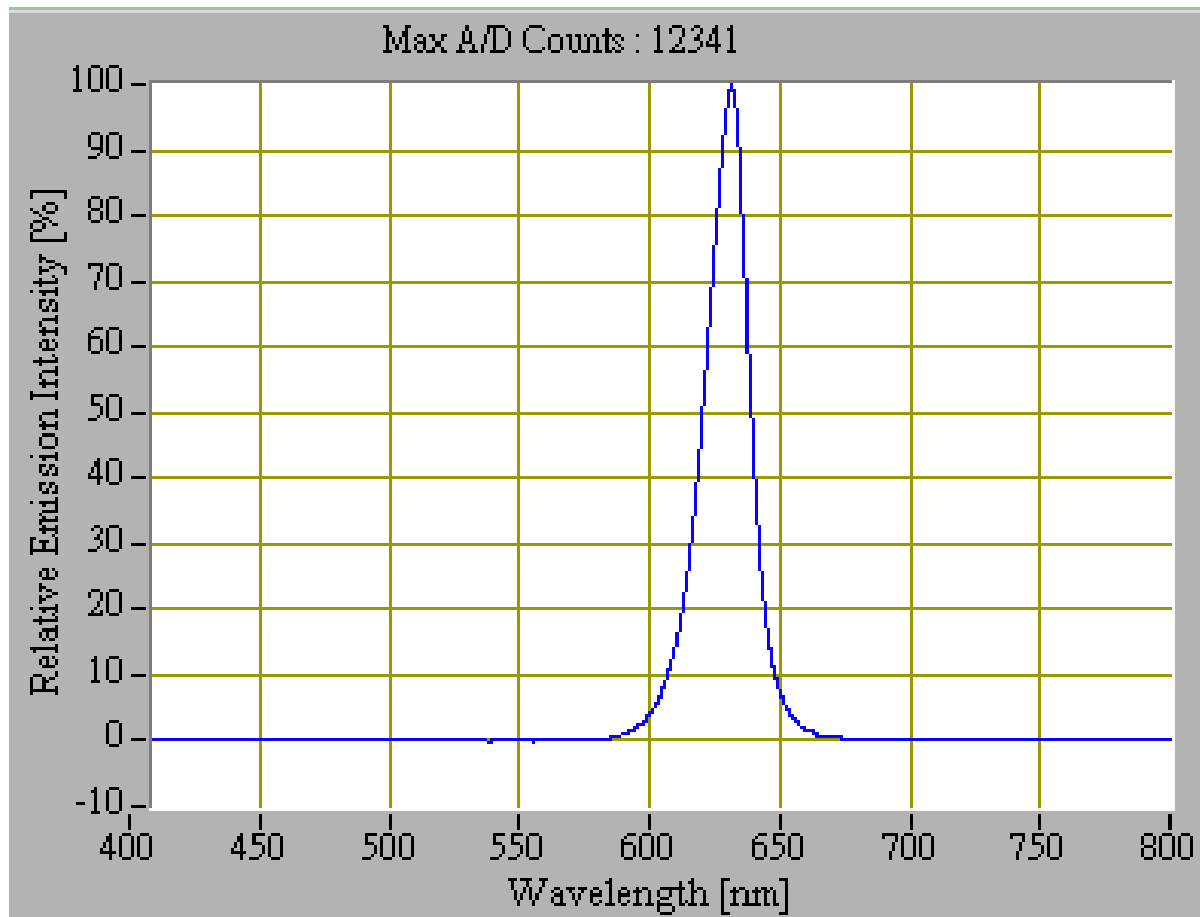
3. Specification

| | | |
|------------------------------|----------------|-----------------------|
| Input Voltage | DC 8.4 – 12.0V | Tolerance: $\pm 0.1V$ |
| Max Power Consumption | 1.92W | LED consumption only. |
| Operating Condition | Temperature | 0 – 40°C |
| | Humidity | 20 – 80%RH |
| | Cooling Method | Natural Air Cooling |
| Quantity of LEDs | 48 pieces | |

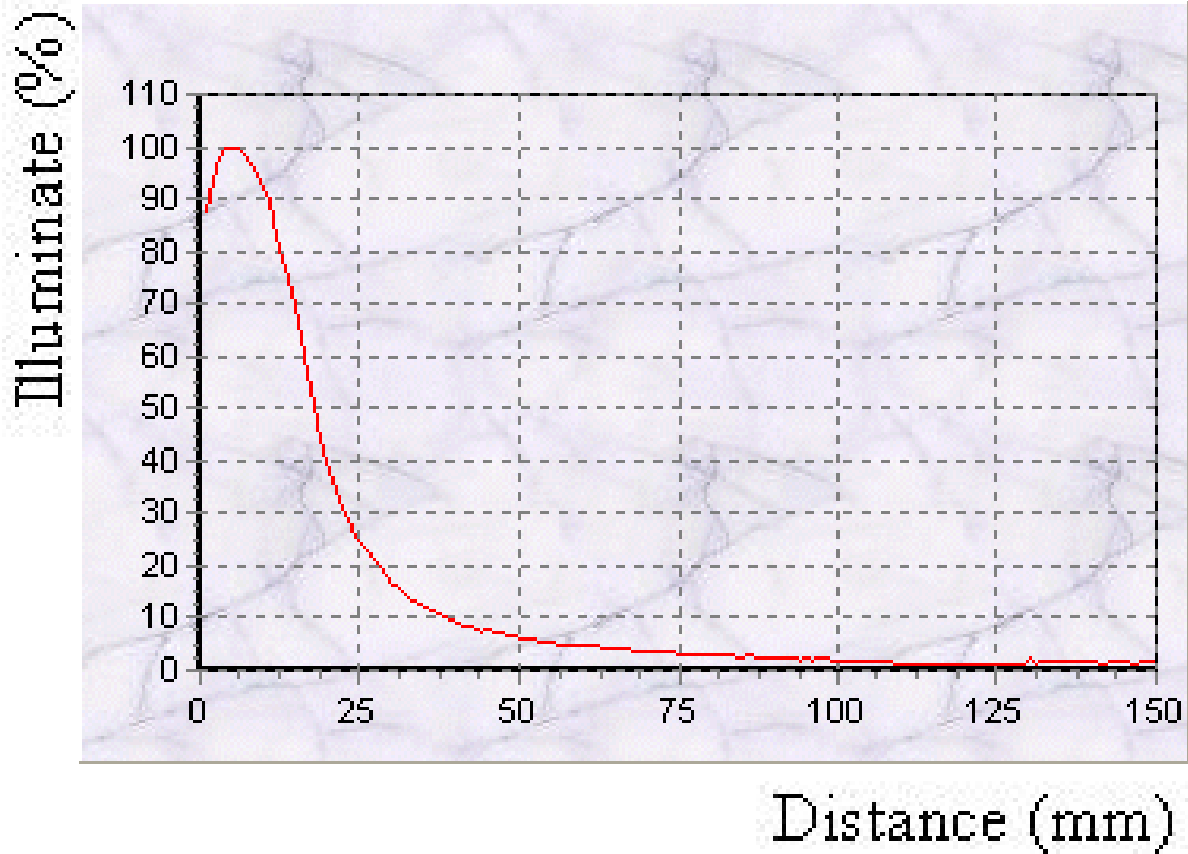
4. Specification of LED

Chip Source: NICHIA, CREE, OSRAM, SAMSUNG, or PHILIPS

Spectrogram:

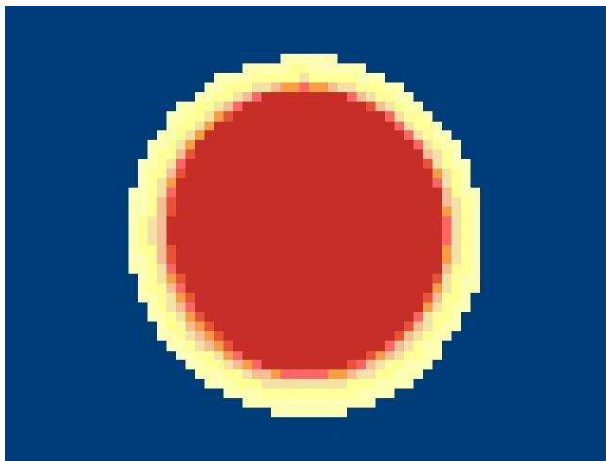


5. Illuminance Curve

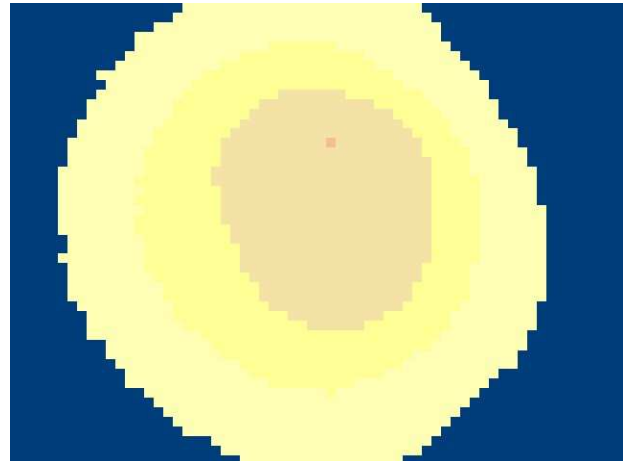


6. Brightness Distribution for FDR8454 Series

0cm



3cm



7.CE Certification

SGS Taiwan Ltd.
Electronics & Communication
Laboratory

134, Wu Kung Road,
WuKu Industrial Zone,
Taipei County, Taiwan 248
Tel: +886-2-2299-3279
Fax: +886-2-2298-2698



SGS

Verification No.: **EM/2007/70058C**

VERIFICATION OF EMC COMPLIANCE

Model No. : 3AM-DR-90/50W; 3AM-PR-136/108-W; 3AM-DO-54/11W;
3AM-DM-60/60W; 3AM-LDM-60/60W; 3AM-IFV-50W

Added Model(s) : Please see the ANNEX(—)

Product Name : LED LIGHT

Applicant : 3A MECHATRONIC CO., LTD.

Address of Applicant : 7FL.-7, NO.12, LANE 609, SEC.5, CHUNGSHIN RD., SANGHUNG CITY,
TAIPEI, TAIWAN 241, R.O.C.

Based on SGS EMC Test Report Number(s) : EM/2007/70058

Date of Receipt : 17 July 2007
Date of Test(s) : 17 July ~ 21 August 2007
Date of Issue : 21 August 2007
Test(s) Required :

Standards:

| | |
|-------------------------------------|-----------------------------|
| EN55015 : 2000+A1:2001+A2:2002 | |
| EN61547 : 1995+A1:2000 | |
| IEC61000-4-2 : 1995+A1:1998+A2:2000 | IEC61000-4-3 : 2002+A1:2002 |
| IEC61000-4-8 : 1993+A1:2000 | |

Conclusion

The apparatus meets the requirements of the above standards and hence fulfills the requirements of EMC Directive 2004/108/EC requirements.

*This certificate is only valid for the equipment and configuration described, and in conjunction with the test report as detailed above.

Authorized Signatory:



Victor Wen
SGS TAIWAN LTD.
Victor Wen

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Member of SGS Group (Societe Generale de Surveillance)

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SGSPAPER

04249853



All of our LED lights have obtained CE certification.

8. RoHS Certification



8, Lane 29, Wen-Ming Rd., Lo-Shan Tsun
Kui-Shan, Taoyuan County, Taiwan 33383
<http://www.etc.org.tw>
03-328-0026

Certificate

of Conformity for Directive 2002/95/EC (RoHS)

This is to certify enclosure(s) are in compliance with Directive 2002/95/EC on the Restriction of The Use of Certain Hazardous Substance (RoHS) in Electrical and Electronic Equipment.

Applicant: 3A Mechatronic Co., Ltd.

7F-7, No. 12, Lane 609, Chung-Hsin Rd., Sec.
5, San-Chung City, Taipei Hsien, Taiwan

Product/Sample: Shadowless Type LED

**Style/Type: PR-67/39R 、 PR-67/39W 、 PR-67/39B 、 PR-67/39G 、
PR-67/39Y 、 PR-67/39UV 、 PR-67/39IR 、 PR-90/58R 、
PR-90/58W 、 PR-90/58B 、 PR-90/58G 、 PR-90/58Y 、
PR-90/58UV 、 PR-90/58IR 、 PR-136/108R 、 PR-136/108W 、
PR-136/108B 、 PR-136/108G 、 PR-136/108Y 、
PR-136/108UV 、 PR-136/108IR**

Certificate No: 08-09-QAC-186

Date of Issue: October 17, 2008

This certificate of conformity is based on evaluated sample(s) of the product mentioned above. It does not imply the assessment of production of the product. The result of this evaluation is available on the RoHS Assessment Report, which is in conformity with 2005/618/EC Article 1, amending RoHS Directive 2002/95/EC.

Peter Huang
Manager
Electronics Testing Center, Taiwan

To pursue excellence in service quality with a dedicated working attitude.

All of our LED lights have obtained RoHS certification.