KELLWOOD LIGHTING

- Group II, Zone 1, hazardous area low bay & pendant light
- Product marking summary
  Ⓔx II 2 G D
  Ex d IIB T5 or T6 Gb
  Ex t IIIC T95°C or T80°C Db IP66
- CE, RoHS, ATEX & IECEx International product marks
- The most competitive, high-end solution for projects worldwide

# *Rankine Series*

# *Explosion Proof Low Bay & Pendant Lights*

CDN:SPEC42REV24

EST. 1985

ENGINEERING
ELECTRICAL
LED LIGHTING

# Technical Specifications Summary

| Performance Summary: | | |
|---|---|---|
| **Code (Series-Wattage/Size)** | RAN-30 | RAN-60 |
| **Nominal Power** | 30W | 60W |
| **Luminaire Efficacy** @ CRI>70, 5700K CCT | 103lm/W | 103lm/W |
| **Lumen Output** @ CRI>70, 5700K CCT | 3,090lm | 5,940lm |
| **Chip Lumen Maintenance** (TM21 Reported) | L80B10 ≥42,000 hours @ 25°C Ambient | |
| **Chip Lumen Maintenance** (TM21 Calculated) | L80B10 ≥70,000 hours @ 25°C Ambient | |
| **Certification** | CE, RoHS, ATEX, IECEx | |
| **Product Warranty** | 5 Years | |
| **Light Source and Photometric Parameters:** | | |
| **Chip Brand, Model, & Size** | Osram Oslon SSL 3030 | |
| **Chip Efficacy** @ CRI>70, 5700K CCT | 130lm/W @ 600mA | |
| **Light Emmission** | Direct | |
| **CCT** | 5700K, (3000K, 4000K, 5000K optional) | |
| **CRI** | ≥70, ≥80 | |
| **Diffusers** | Clear | |
| **Symmetric Light Distribution** | 15° | |
| **Electrical Parameters[1]:** | | |
| **System Operating Power** | 30W | 60W |
| **Input Voltage** | 100-240VAC | |
| **Input Frequency** | 50-60Hz | |
| **Inrush Current @ 100-240VAC** | 30A | 30A |
| **Power Factor** | >0.98 | |
| **THD** | <10% (100VAC-240VAC) | |
| **Insulation Class** | I | |
| **Surge Protection/Fusing** | 5kV | |
| **Environmental Parameters:** | | |
| **IP Rating** | IP66 | |
| **IK Rating[2]** | IK10/IK08 or IK10/IK10 | |
| **Ambient Usage Tolerance** | -40°C to 55°C | |
| **Ambient Storage Tolerance** | -40°C to 55°C | |
| **Ambient Humidity Tolerance** | 0% to 90% RH | |
| **Physical/Mechanical Parameters:** | | |
| **Product Dimensions: LxWxH (mm)** | 311 x 284 x 190 | 311 x 284 x 190 |
| **Qty of LED Chips** | 28 | 28 |
| **Electrical Connection** | Recommended 1mm² to 4mm² | |
| **Wire-In-Wire-Out Installation** | Yes | |
| **Inlet Thread** | M20 (M20x1.5), M25 (M25x1.5), NPT3/4" | |
| **Gland Type[3,4]** | Brass with Nickel Plated Non-Armoured (Armoured optional) | |
| **Suitable Cable Size (ø)[5]** | M20 = 6.1-13.2mm, M25 = 12.5-20.5mm, NPT3/4" = 12.5-20.5mm | |
| **Fixture Weight[6]** | 5.3kg | 5.3kg |
| **Fixture Primary Material(s)** | ADC12 Aluminium Alloy (1.5-3.5% Copper) and 316 Stainless Steel Fixings | |
| **Fixture Finish** | Epoxy Powder Coated | |
| **Lens(es) Materials** | Tempered Glass | |
| **Protection Method** | Flame proof | |

# Technical Specifications Summary

| Code (Series-Wattage/Size) | RAN-30 | RAN-60 |
|---|---|---|
| **Options/Accessories:** | | |
| **Mounting Styles** | Universal Bracket, Eye Bolt, Surface Mount Bracket, Pipe Clamp Mount | |
| **Miscellaneous Accessories** | Wire Grill | |
| **Available Product Colours** | Orange (RAL2011), Grey (RAL7040) | |

[1] Details are for standard non-dimming driver
[2] (Format: "IK Rating: Housing" / "IK Rating: Front Face") – IK10 if fitted with wire guard accessory
[3] Wire-in-wire-out compatible products supplied with one non-armoured ATEX certified gland and one ATEX certified blanking plug.
[4] Armoured Cable gland available as a optional accessory. Please contact Kellwood for more information.
[5] Stated cable size is applicable to standard gland. Armoured cable may vary, contact Kellwood for more information.
[6] Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

| Certifications | | | | | |
|---|---|---|---|---|---|
| **Division** | **ATEX Zone 1 & 21 and 2 & 22** | | | | |
| **Product Marking** | **Ⓔx II 2 G D**<br>**Ex d IIB T* or T* Gb**<br>**Ex t IIIC T* or T* Db IP66**<br>*for further information please see temperate table | | | | |
| **Temperature Table** | | | | | |
| **Product** | **Rated Power (Watts)** | **Temperature Class** | | | |
| | | **-40° to 40°C (Ta)** | | **-40°C to 55°C (Ta)** | |
| | | **Gas** | **Dust** | **Gas** | **Dust** |
| **Rankine Series** | 30W | - | - | T6 | T80°C |
| | 60W | T6 | T80°C | T5 | T95°C |
| **Certificate Number** | | | | | |
| **ATEX** | **LCIE 12 ATEX 3070 X** | | | | |
| **IECEx** | **IECEx CQM 12.0033X** | | | | |

All stated values should be considered indicative only. Technical data is provided from sample luminaires and construction components as assessed by OEM(s) under industry-standard, laboratory conditions. In practice, stated values can vary. Kellwood Lighting operates a policy of continual product improvement. Our luminaires' capabilities are regularly enhanced to outperform in-class market alternatives. Please contact our technical team directly for clarifications prior to purchase. All images depicted should be considered indicative only. Stated product warranty periods do not include associated labour costs. Stated product warranty periods are for UK projects only. For international projects, please contact our offices directly. Optional upgrades can often affect or supersede unit technical parameters, capabilities, and warranties. It is the responsibility of the purchasing authority to ensure selected hardware is suitable for application. For further documentation, including Returns Policy and Conditions of Unit Failure, please contact our offices. Hazardous area documentation (eg. ATEX) are issued to OEM codes. WEEE compliance reference code: WEE/MP3838PR/SCH. Please do not look directly at LED lighting products during operation.
This datasheet & corresponding certification should be reviewed by a competent person to ensure project suitability.
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# Features Summary

**Mounting Options**

Surface mount bracket, pipe clamp mount, universal bracket, eye bolt, & custom

**Distribution**

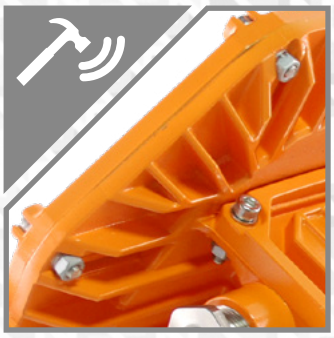
1no. optic available

**User Friendly**

Terminal block enclosure covers are secured to the luminaire for easier installation & faster maintenance

**Environmental Protection**

IP66, aluminium body c/w corrosion resistant paint finish - Salt spray testing reports available



**Impact Protection**

IK09 body, IK08 tempered glass front-face - Wire guard accessory increases front-face impact protection from IK08 to IK10

**Electrical Protection**

Custom-built PSU incorporates 5kV surge protection - Output voltage overload protection 48-51VDC

**Reduced Glare**

Recessed & spaced light engines also allow for excellent heat dissipation & low junction temperature

**Optional Fitting Colours**

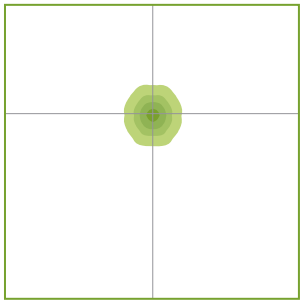
Orange, grey, custom - Available subject to MOQ

Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

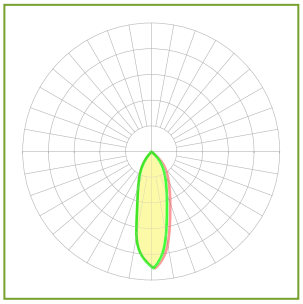
## Indicative Product Photometry

S - 15°

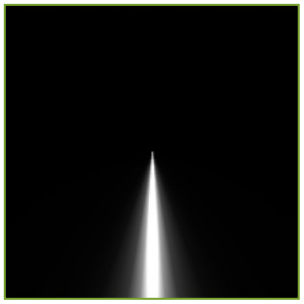
ISOLUX DIAGRAM



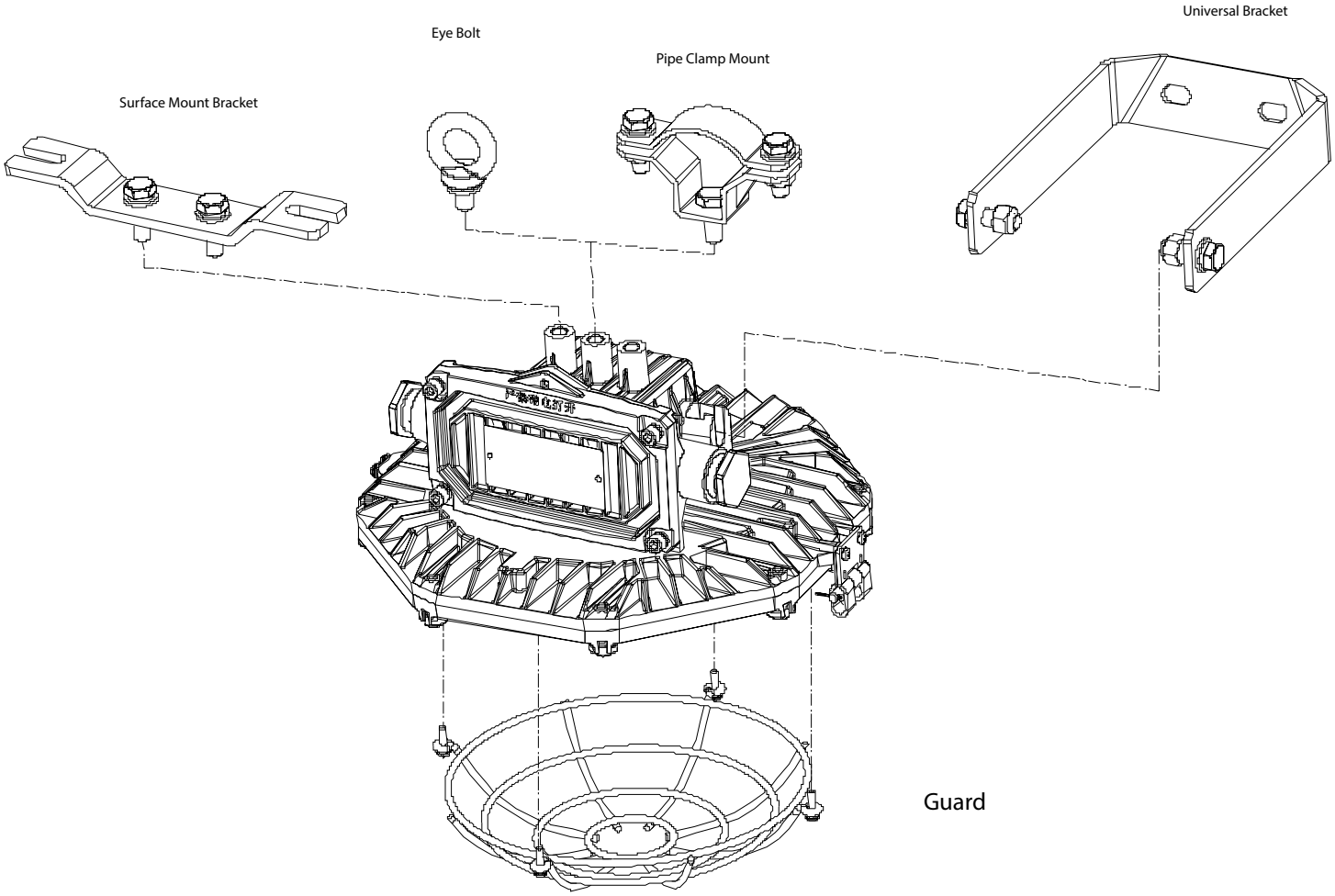
POLAR DIAGRAM



3D VISUAL RENDER

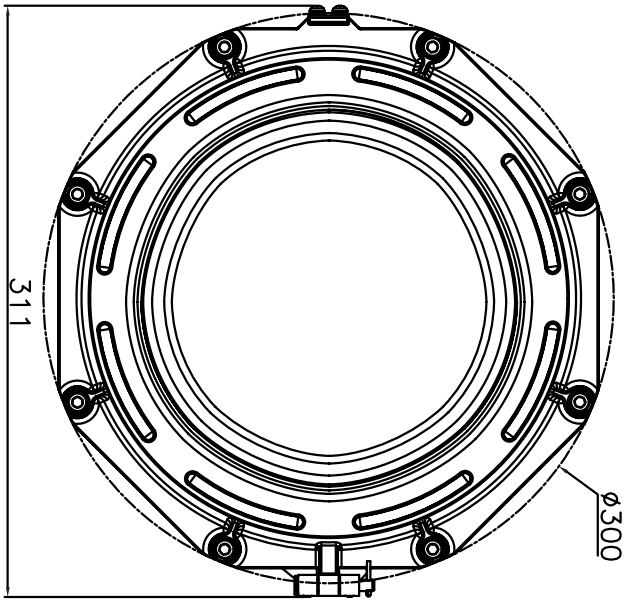


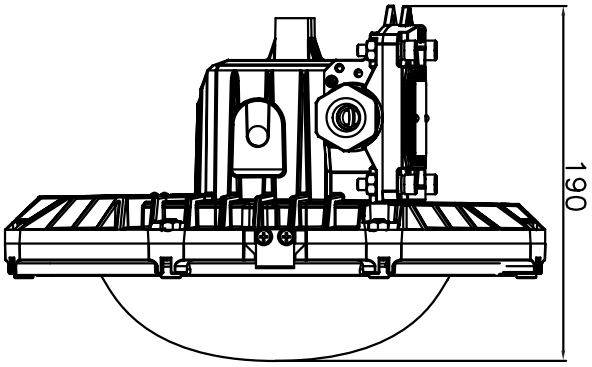
## Bracketry



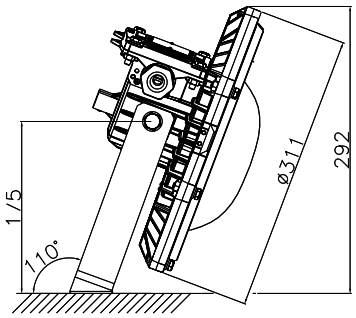

*All units are in mm*

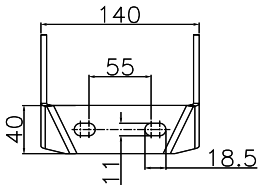
# Dimensional Drawings



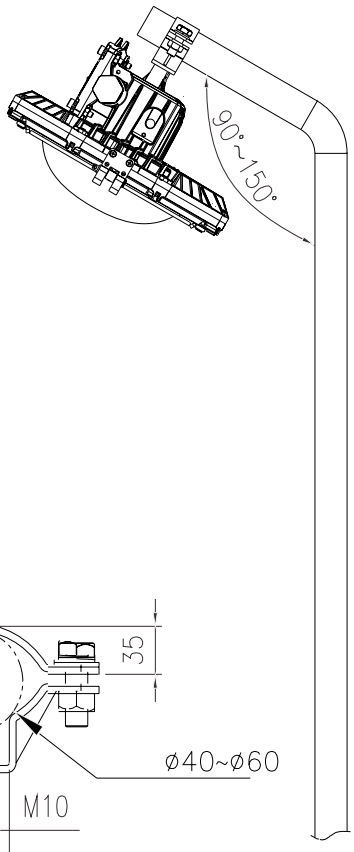




## Universal Bracket

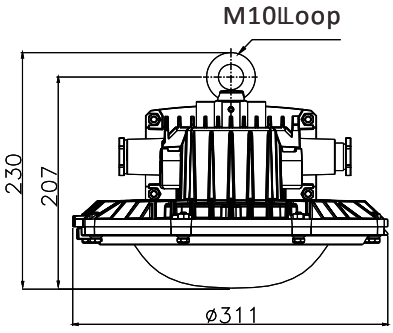


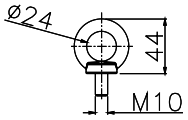



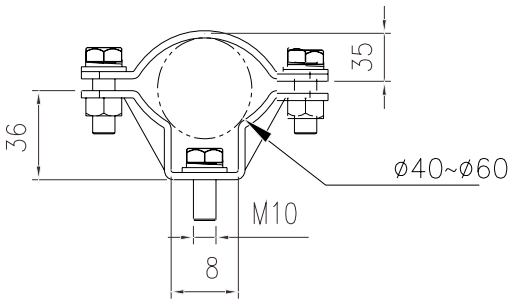

## Pipe Clamp Mount



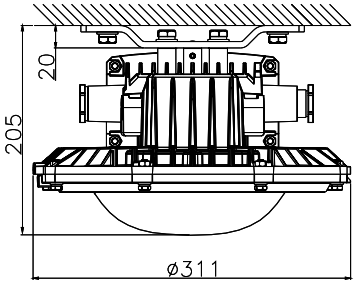

## Eye Bolt

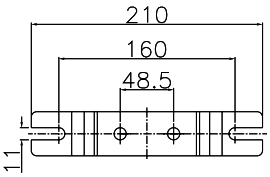


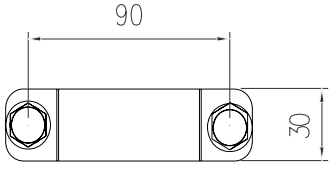




## Surface Mount Bracket




*All units are in mm*

# Product Ordering Codes

Standard product code fields are presented as:
*Further customisation may be available - please contact us if required*

| PRODUCT | POWER | CRI & CCT | OPTIC | DRIVER | MOUNTING | COLOUR | THREAD | MODIFICATIONS |
|---|---|---|---|---|---|---|---|---|
| **RAN** | **30**<br>30W | **740**<br>CRI >70, 4000K | **15**<br>15° CIRCULAR (S) | **V1**<br>INPUT VOLTAGE 100-240 VAC | **UB**<br>UNIVERSAL BRACKET | **OR**<br>ORANGE | **I1**<br>M25 INLET THREAD | **WG**<br>WIRE GRILL |
| | **60**<br>60W | **750**<br>CRI >70, 5000K | | | **EB**<br>EYE BOLT | **GR**<br>GREY | **I2**<br>NPT3/4" INLET THREAD | |
| | | **757**<br>CRI >70, 5700K | | | **SM**<br>SURFACE MOUNT BRACKET | | **I4**<br>M20 INLET THREAD | |
| | | **830**<br>CRI >80, 3000K | | | **PC**<br>PIPE CLAMP MOUNT | | | |

Product Ordering Code Examples:
*RAN-30-757-15-V1-UB-OR-I1*
*RAN-60-740-15-V1-SM-GR-I2-WG*

| BRACKETS & ACCESSORIES | |
|---|---|
| **CODE** | **DESCRIPTION** |
| **RAN-UB** | UNIVERSAL BRACKET FOR RANKINE SERIES |
| **RAN-EB** | EYE BOLT FOR RANKINE SERIES |
| **RAN-SM** | SURFACE MOUNT BRACKET FOR RANKINE SERIES |
| **RAN-PC** | PIPE CLAMP FOR RANKINE SERIES |
| **RAN-WG** | WIRE GRILL |

CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS

**GENERAL NOTES:**
1. IF MORE THAN ONE MODIFICATION IS REQUIRED, SEPARATE EACH MODIFICATION WITH A HYPHEN AT THE END OF THE PRODUCT CODE

2. PLEASE ENSURE SELECTION OF COMPATIBLE DRIVER FOR OCCUPANCY SENSORS WITH DIMMING FUNCTIONALITY

3. PLEASE NOTE THAT MODIFICATIONS WHICH AFFECT LIGHT OUTPUT HAVE SEPARATE PHOTOMETRIC FILES IDENTIFIED WITH ..."+(MODIFICATION)"

4. ALTERNATIVE DRIVERS MAY BE AVAILABLE - PLEASE CONTACT OUR OFFICE FOR FURTHER DETAILS

5. IF PRODUCT IS CUSTOMISED, CODES WILL BE ALTERED AS NECESSARY - HAZARDOUS AREA CERTIFIED PRODUCT MODIFICATIONS ARE TYPICALLY LIMITED TO BRACKETRY (TO ENSURE COMPLIANCE WITH CERTIFICATION)

6. HAZARDOUS AREA CERTIFIED PRODUCTS ARE LISTED USING KELLWOOD'S STANDARD ORDERING CODE TEMPLATE FOR MARKETING PURPOSES. PRODUCTS WILL BE SUPPLIED WITH OEM NAMEPLATES, CODES & DOCUMENTATION CORRESPONDING TO PRODUCT CERTIFICATION

NOTE: 2017 Product Code Updates
This product series previously used ordering codes starting with LED/HAZ-RAN/... Please contact us if you require further information on corresponding codes.