

- Group II, Zone 2, hazardous area floodlight, canopy light, & high bay
- Product marking summary
Ex II 3 GD
Ex nR IIC T5 or T6 Gc
Ex tc IIIC T95°C or T85°C Dc
- CE, RoHS, & ATEX international product marks
- The most competitive, high-end solution for projects worldwide



Somerville 3 Series

Explosion Proof Floodlights & High Bays

CDN:SPEC130REV10



◀ Technical Specifications Summary



Performance Summary:

Code (Series-Wattage/Size)	SOM3-80	SOM3-100	SOM3-120	SOM3-150
Nominal Power	80W	100W	120W	150W
Luminaire Efficacy @ CRI>70, 5700K CCT	136lm/W	136lm/W	136lm/W	136lm/W
Lumen Output @ CRI>70, 5700K CCT	10,880lm	13,600lm	16,320lm	20,400lm
Chip Lumen Maintenance (TM21 Reported)	L80B10 ≥67,029 hours @ 25°C Ambient			
Chip Lumen Maintenance (TM21 Calculated)	L80B10 ≥86,468 hours @ 25°C Ambient			
Certification	CE, RoHS, ATEX			
Product Warranty	5 Years			

Light Source and Photometric Parameters:

Chip Brand, Model, & Size	Luxeon 5050
Chip Efficacy @ CRI>70, 5700K CCT	166 lm/W @ 160mA, Tj=25°C
Light Emission	Direct
CCT	5700K, (3000K, 4000K, 5000K optional)
CRI	≥70Ra, (≥80Ra optional)
Diffusers	Clear
Symmetric Light Distribution	120°, (80° optional)

Electrical Parameters¹:

System Operating Power	80W	100W	120W	150W
Input Voltage	100-277VAC			
Input Frequency	50-60Hz			
Inrush Current @100-277VAC	60A	60A	65A	65A
Power Factor	>0.98			
THD	<10% (100-277VAC)			
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)	336 x 336 x 164	336 x 336 x 164	336 x 336 x 164	336 x 336 x 164
Qty of LED Chips	42	56	60	72
Electrical Connection	Terminal Block 1mm ² to 4mm ² - 0.7m 1mm ² 3-Core Cable (Note: 1mm ² to 2mm ² if installed as Wire-In-Wire-Out configuration)			
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 = 9.5-15.9mm, NPT3/4" = 12.5-20.5mm			
Fixture Weight ⁶	10.3kg	10.4kg	10.4kg	10.5kg
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	Restricted breathing			





Technical Specifications Summary

Code (Series-Wattage/Size)	SOM3-80	SOM3-100	SOM3-120	SOM3-150
Options/Accessories:				
Mounting Styles	Recessed Mount, Surface Mount Bracket, Universal Bracket, Slip Fit			
Available Product Colours	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	Zone 2 & 22				
Product Marking	<div>Ex II 3 GD</div> <div>Ex nR IICT* or T* Gc</div> <div>Ex tc IIIC T* or T* Dc</div> <div>*for further information please see temperate table</div>				
Temperature Table					
Product	Rated Power (Watts)	Temperature Class			
		-40° to 55°C (Ta)		-40°C to 65°C (Ta)	
		Gas	Dust	Gas	Dust
Somerville Series	80W	T6	T85°C	T5	T95°C
	100W	T5	T95°C	-	-
	120W				
	150W				
Certificate Number					
ATEX	TUV 15 ATEX 7672 X				

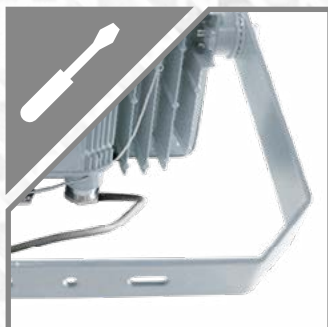
All stated values should be considered indicative only. Technical data is provided from sample luminaires and construction components as assessed by OEM(s) under industry-standard, laboratory conditions. In practice, stated values can vary. Kellwood Lighting operates a policy of continual product improvement. 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, universal bracket, slip fit, recessed mount, & custom



Distribution

2no. optic variants are available for general & task-specific applications



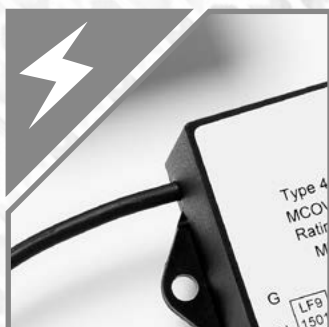
Environmental Protection

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



Impact Protection

IK10 body, IK08 tempered glass front-face



Electrical Protection

Custom-built PSU incorporates 5kV surge protection - Output voltage overload protection 61-67VDC



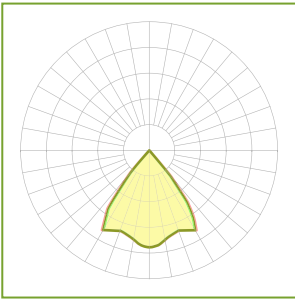
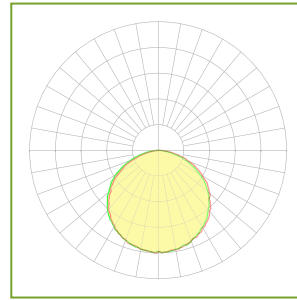
Reduced Glare

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



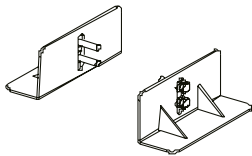
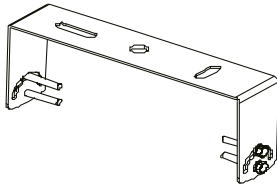
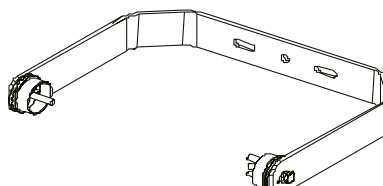
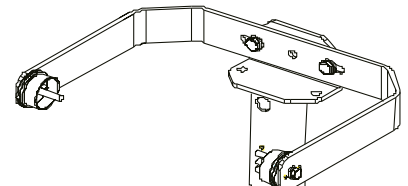
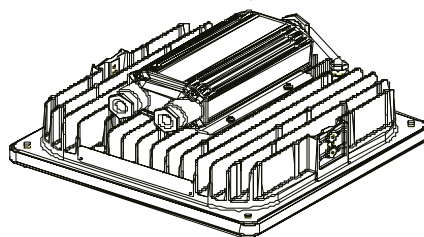
Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

Indicative Product Photometry

H5V5 - 80°**POLAR DIAGRAM****3D VISUAL RENDER****H6V6 - 120°**

Colourations on isolux diagrams are qualitative, i.e. the same colour on any two isolux diagrams will not necessarily have the same lux value.

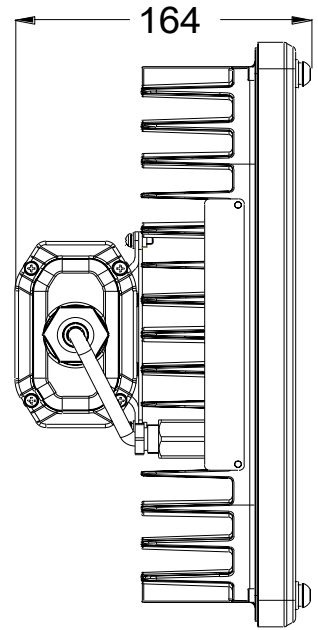
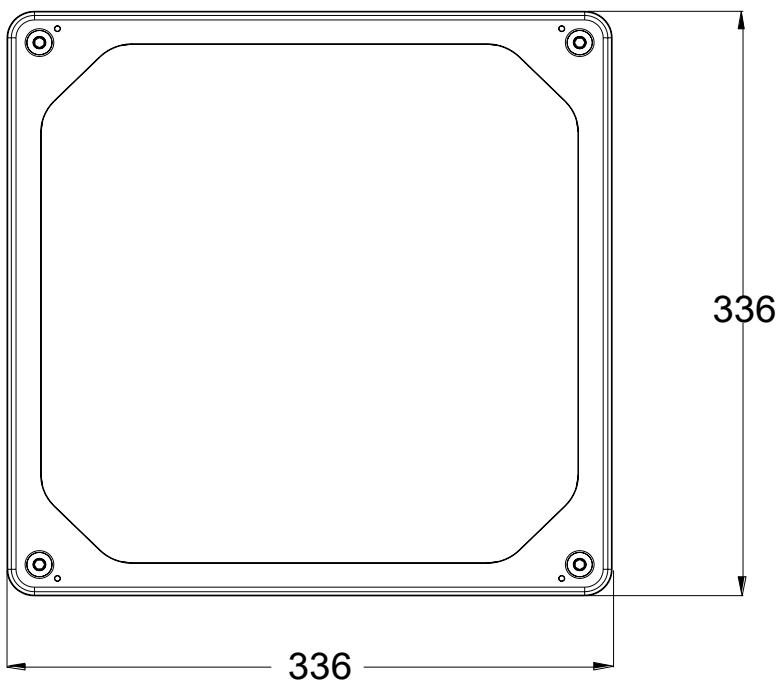
Bracketry

**Recessed Mount****Surface Mount Bracket****Universal Bracket****Slip Fit****Luminaire**

All units are in mm

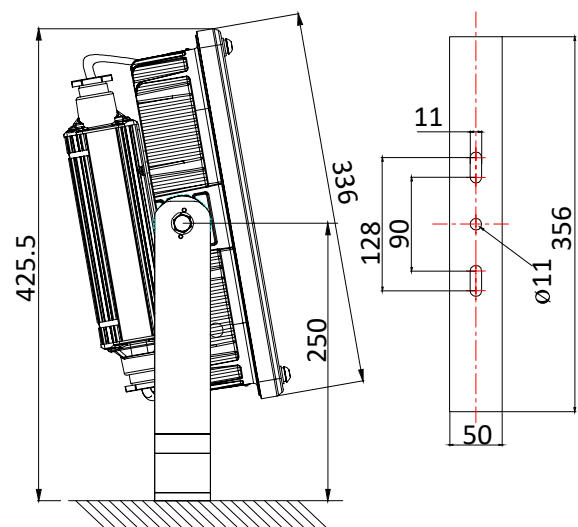
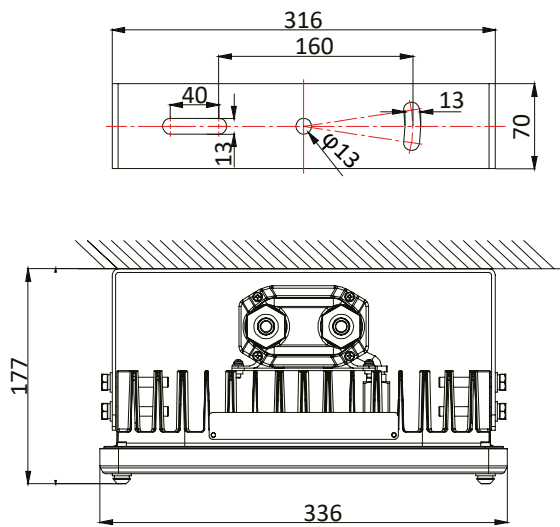


Dimensional Drawings



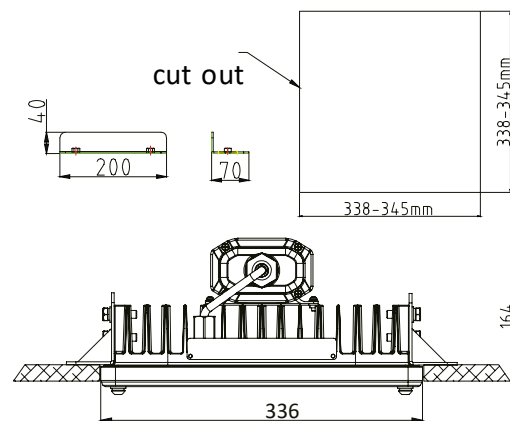
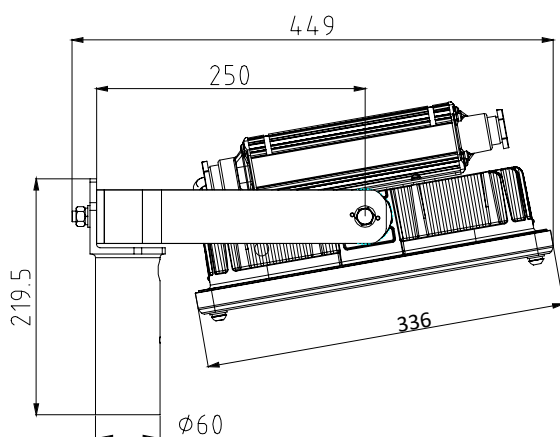
Surface Mount Bracket

Universal Bracket



Slip Fit

Recessed Mount



All units are in mm



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



Product Ordering Codes

PRODUCT	POWER	CRI & CCT	OPTIC	DRIVER	MOUNTING	COLOUR	THREAD
SOM3	80 80W	740 CRI >70, 4000K	80 80° CIRCULAR (H5V5)	V4 INPUT VOLTAGE 100-277 VAC	RM RECESSED MOUNT	GR GREY	I1 M25 INLET THREAD
	100 100W	750 CRI >70, 5000K	120 120° CIRCULAR (H6V6)		SM SURFACE MOUNT BRACKET		I2 NPT3/4" INLET THREAD
	120 120W	757 CRI >70, 5700K	UB UNIVERSAL BRACKET		I4 M20 INLET THREAD		
	150 150W	830 CRI >80, 3000K			SF SLIP FIT		

Product Ordering Code Examples:

SOM3-100-757-120-V4-UB-GR-I1

SOM3-150-757-120-V4-SM-GR-I2

BRACKETS & ACCESSORIES	
CODE	DESCRIPTION
SOM3-RM	RECESSED MOUNT FOR SOMERVILLE 3 SERIES
SOM3-SM	SURFACE MOUNT BRACKET FOR SOMERVILLE 3 SERIES
SOM3-UB	UNIVERSAL BRACKET FOR SOMERVILLE 3 SERIES
SOM3-SF	SLIP-FIT FOR SOMERVILLE 3 SERIES

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

