KELLWOOD
LIGHTING

CARBON TRUST | ACCREDITED SUPPLIER   Scottish Engineering   UVDB Registered

Hazardous area lighting technology developed for application in volatile warehouse, factory, workshop, & production environments - Ideally suited to the petro-chemical, marine, oil & gas, & heavy industry sectors

30W, 45W, & 60W power classes - Impact, ingress, & corrosion, resistant fitting - >95lm/W family efficacy - 1no asymmetric variants - 4no. mounting options

CE, RoHS, ATEX, & IECEx, international product marks

Product marking summary
⟨Ex⟩ II 2 G D
Ex db IIC T* Gb
Ex tb IIIC T* Db

Stirling Series
Explosion Proof, Pendant & Floodlights

CDN:SPEC98REV14

EST. 1985

ENGINEERING ≪
ELECTRICAL ≪
LED LIGHTING ≪

Technical Specifications Summary

Performance Summary:

Code (Series-Wattage/Size)	STI-30	STI-45	STI-60
Nominal Power	30W	45W	60W
Luminaire Efficacy @ CRI>70, 5700K CCT	97lm/W	90lm/W	97lm/W
Lumen Output @ CRI>70, 5700K CCT	2,910lm	4,050lm	5,820lm
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		
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 optional)		
CRI	≥70		
Diffusers	Clear		
Asymmetric Light Distribution	FW (110°x120°)		

Electrical Parameters[1]:

System Operating Power	30W	45W	60W
Input Voltage	100-277VAC, (24-48VAC, 10-30VAC optional)		
Input Frequency	50-60Hz		
Inrush Current @ 100-277VAC	30A		
Power Factor	>0.98		
THD	<10% (100VAC-277VAC)		
Insulation Class	I (100-277VAC), III (24-48VAC, 10-30VAC)		
Surge Protection/Fusing	6kV		

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)	236 x 220 x 303	236 x 220 x 303	236 x 220 x 303
Qty of LED Chips	20	24	30
Electrical Connection	Terminal Block 1mm² to 4mm²		
Inlet Thread	M25 (M25x1.5), NPT3/4"		
Gland Type[3,4]	Brass with Nickel Plated Non-Armoured (Armoured optional)		
Suitable Cable Size (ø)[5]	M25 = 9.5-15.9mm, NPT3/4" = 12.5-20.5mm		
Fixture Weight[6]	5kg	5kg	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	Flame proof		

Technical Specifications Summary

Code (Series-Wattage/Size)	STI-30	STI-45	STI-60
Options/Accessories:			
Mounting Styles	Universal Bracket, Eye Bolt, Surface Mount Bracket, In-Line Pipe Connector		
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	⟨Ex⟩ **II 2 G D** **Ex db IIC T* Gb** **Ex tb IIIC T* Db** *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
Stirling Series	30W	T6	T80°C	T5	T95°C
	45W	T6	T80°C	T5	T95°C
	60W	T5	T95°C	T4	T130°C

Certificate Number	
ATEX	**EPT 18 ATEX 2977 X issue 2**
IECEx	**IECEx CQM 15.0039X**

Features Summary

Mounting Options

Surface mount bracket, universal bracket, eye bolt, in-line pipe connector

Optional Fitting Colours

Orange, grey, custom (subject to MOQ)

Environmental Protection

IP66, aluminium chassis c/w corrosion-resistant powder coat - Salt spray testing reports available - 304 stainless steel exposed fixtures

Impact Protection

IK09 body, IK08 tempered glass front -face - IK10 front-face wire guard accessory available

Portable Task Lighting

Cable-powered temporary floodlighting configuration available - See 'Stirling 2 Portable' Series

Cable Entry

Rear cable entry only

Distribution

Forward throw asymmetric optic only
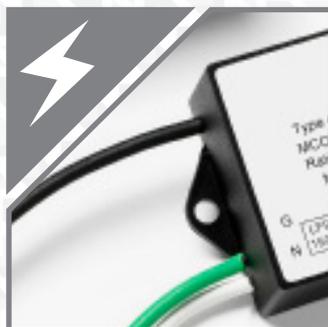
Electrical Protection

Custom-built PSU incorporates 6kV surge protection - Onboard output voltage overload protection 48-51VDC

Dimensional Drawings

Eye Bolt
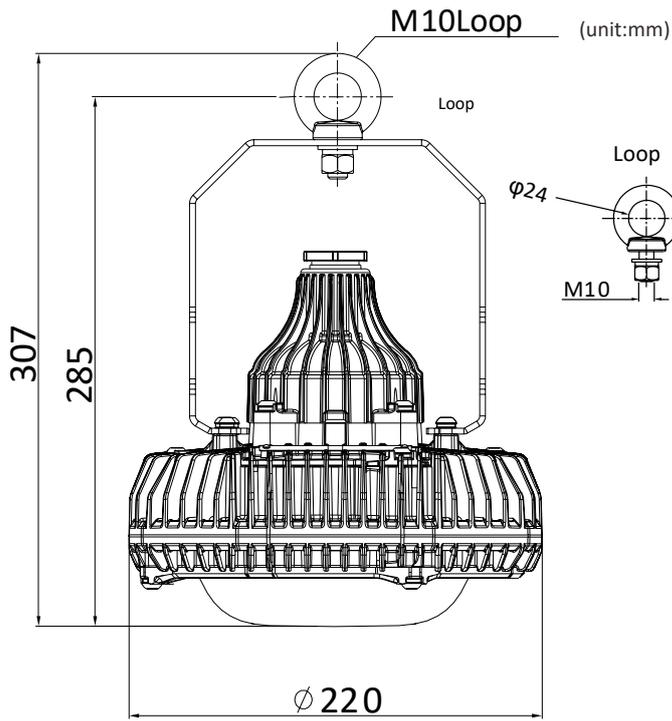
M10Loop (unit:mm)

Loop

307
285

∅220

Loop

φ24

M10

Surface Mount Bracket

(unit:mm)   263

∅220

150
60

φ9   45

Universal Bracket

(unit:mm)   244

215

∅220

180
100

In-Line Pipe Connector

(unit:mm)

64   40

∅220

∅220

Eye Bolt

Dimensional Drawings

Surface Mount Bracket

Universal Bracket

Lamp

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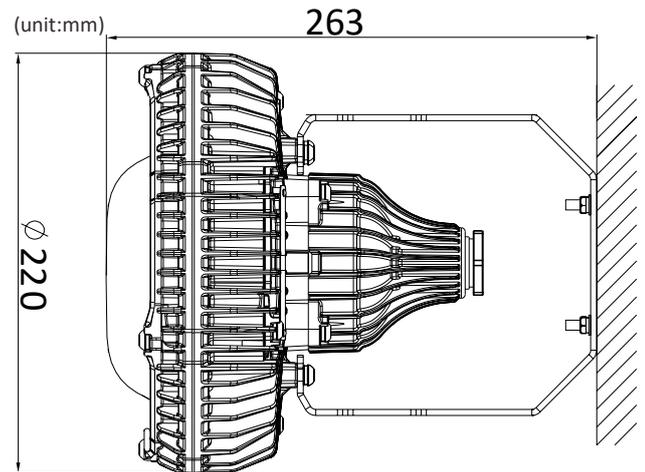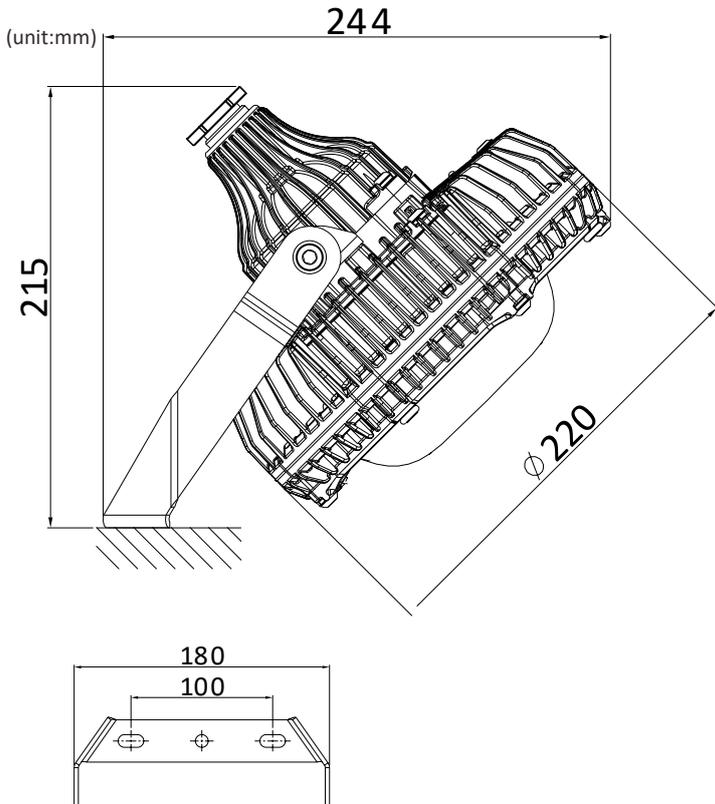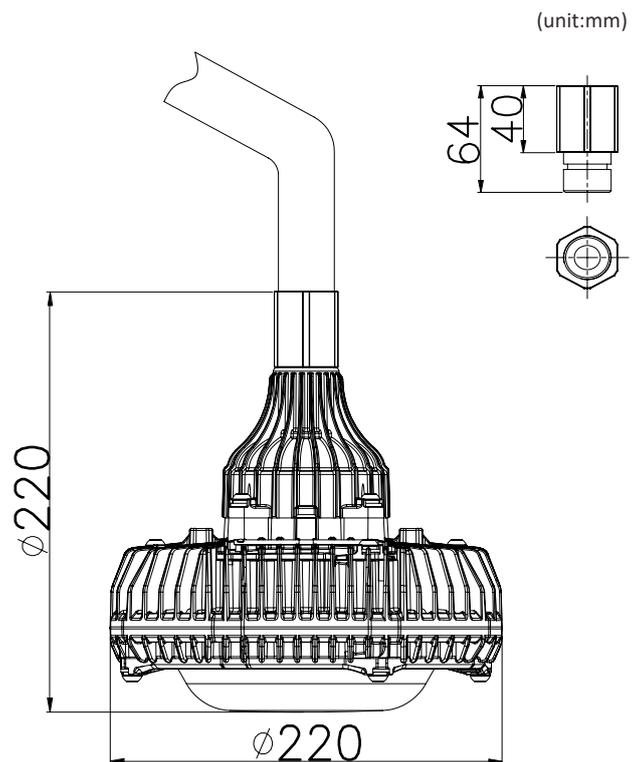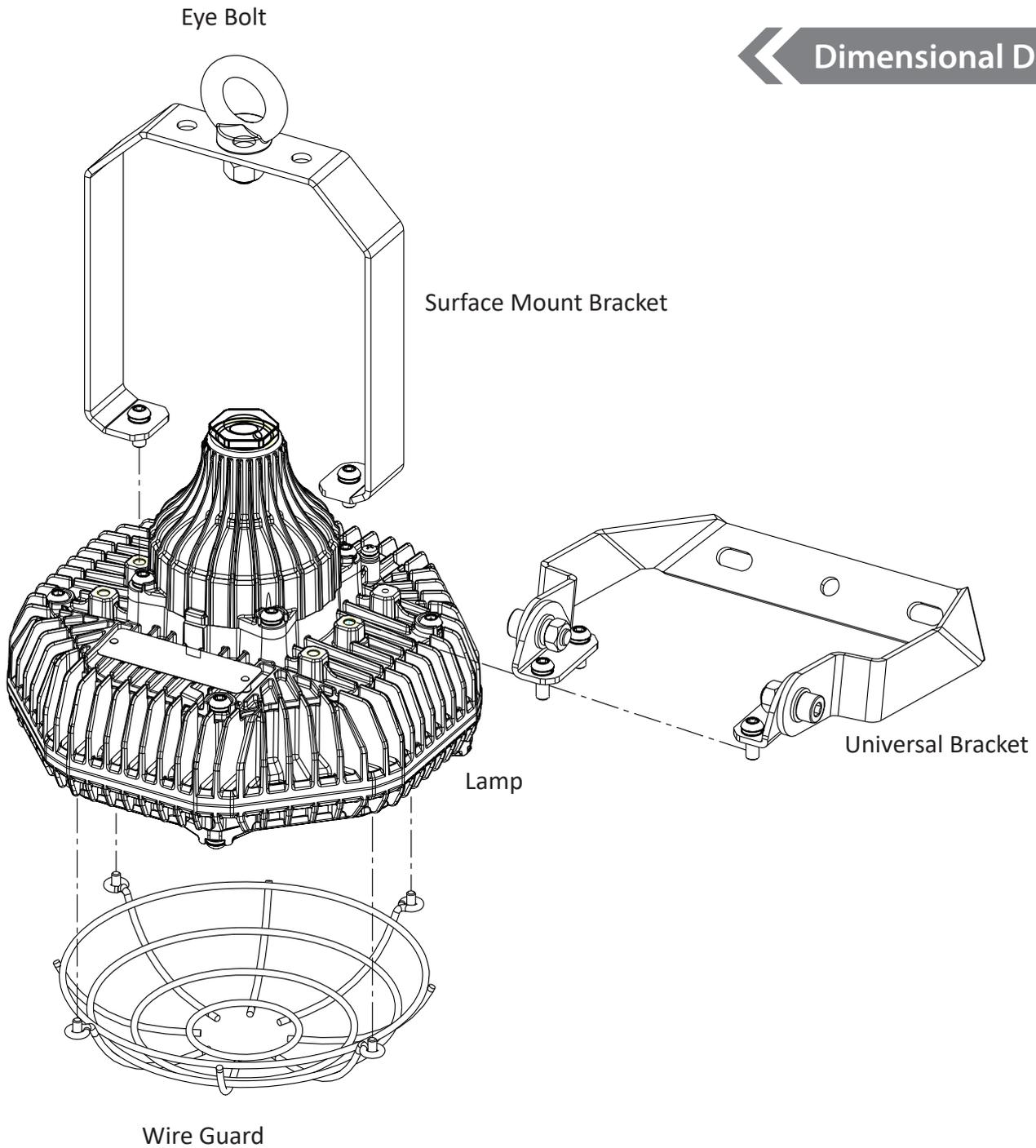
Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

Indicative Product Photometry

FW - 110° x 120°

ISOLUX DIAGRAM

POLAR DIAGRAM

3D VISUAL RENDER
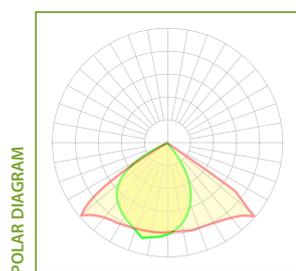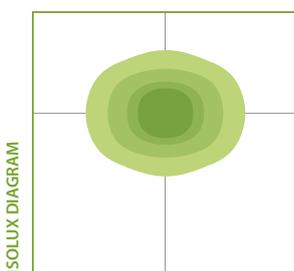
Standard product code fields are presented as:
Further customisation may be available - please contact us if required

CODE
Description

740
CRI>70, 4000K

Product Ordering Codes

PRODUCT	POWER	CRI & CCT	OPTIC	DRIVER	MOUNTING	COLOUR	THREAD	CONFIGURABLE OPTIONS
STI	**30** 30W	**730** CRI >70, 3000K	**FW** FORWARD THROW	**V4** INPUT VOLTAGE 100-277 VAC	**UB** UNIVERSAL BRACKET	**OR** ORANGE	**I1** M25 INLET THREAD	**WG** WIRE GRILL
	45 45W	**740** CRI >70, 4000K		**V5** INPUT VOLTAGE 24-48 VAC/DC	**EB** EYE BOLT	**GR** GREY	**I2** NPT3/4" INLET THREAD	
	60 60W	**757** CRI >70, 5700K		**V6** INPUT VOLTAGE 10-30 VDC	**SM** SURFACE MOUNT BRACKET			
					IP IN-LINE PIPE CONNECTOR			

Product Ordering Code Examples:
STI-30-757-FW-V4-UB-OR-I1
STI-60-740-FW-V4-EB-GR-I2-WG

BRACKETS & ACCESSORIES	
CODE	**DESCRIPTION**
STI-UB	UNIVERSAL BRACKET FOR STIRLING SERIES
STI-EB	EYE BOLT FOR STIRLING SERIES
STI-SM	SURFACE MOUNT FOR STIRLING SERIES
STI-IP	IN-LINE PIPE CONNECTOR
STI-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