



Weather-proof and corrosion-resistant die-cast aluminium bulkheads, for use in general and extreme environments.

Designed for wide-spread internal and external applications, including stairwells, security zones, underpasses, swimming pools, and logistics areas.

Chromate surface treatment applied as standard, and available with optional vandle-resistant fixing accessories.

Remote, and DALI-self-test emergency (c/w LiFePO4 battery), and occupancy sensors are supported

Four-way perimeter conduit entry and twin rear cable entries offers complete installation flexibility.



Bell 2 Series

Corrosion-Resistant Die-Cast LED Bulkheads

CDN:SPEC154REV3

Technical Specifications Summary



Performance Summary:

Code (Series-Wattage/Size)	BEL2-20
Nominal Power	20W
Luminaire Efficacy @ CRI>80, 5000K CCT	120 lm/W
Lumen Output (Open Frame)	2400lm
Luminaire Efficacy @ CRI>80, 4000K CCT	112 lm/W
Lumen Output (Open Frame)	2,230lm
Luminaire Efficacy @ CRI>80, 5000K CCT	99 lm/W
Lumen Output (Eyelid Cover)	1,980 lm
Luminaire Efficacy @ CRI>80, 4000K CCT	95 lm/W
Lumen Output (Eyelid Cover)	1,900 lm
Lumen Maintenance (TM21 Calculated)	L80 ≥88,000 hours @ 40°C
Lumen Maintenance (TM21 Calculated)	L70 ≥187,000 hours @ 25°C
Certification	CE
Product Warranty	5 Years
Emergency Warranty	3 Years

Light Source and Photometric Parameters:

Chip Brand, Model, & Size	Samsung LH351B 3535
Light Emission	Direct
CCT	5000K, 4000K
CRI	≥80Ra
SDCM	<5 (<3 optional - MOQs may Apply)
Diffusers	Opal
Symmetric Light Distribution	150°
Optical Accessories	Open Frame, (Eyelid Cover, Grid Frame optional)

Electrical Parameters¹:

System Operating Power	20W
Driver Brand	Inventronics (Tridonic DALI-dimming optional)
Driver Model	EUC-026S070DS
Input Voltage	120-277VAC
Typical Driver Lifetime (Case Temp.)	120,000 hours @Tc 55°C
Input Frequency	50-60Hz
Qty of Drivers per Light	1
Inrush Current	0.043 A ² s @ 220Vac 25°C. Duration 100µs, 10%Ipk-10%Ipk
Power Factor	>0.9
THD	<20% (120-277VAC)
Insulation Class	Class I
Surge Protection/Fusing	2kV Line to Line

Environmental Parameters:

IP Rating	IP66
IK Rating ²	IK09 ²
Ambient Usage Tolerance	-40°C to 50°C
Ambient Storage Tolerance	-40°C to 50°C
Ambient Humidity Tolerance	10% to 85% RH

Technical Specifications Summary

Code (Series-Wattage/Size)	BEL2-20
Physical/Mechanical Parameters:	
Product Dimensions: ØxH (mm)	318 x 111
Qty of LED Chips	48
Electrical Connection and Cable Entries	Internal electrical connection - 4 Perimeter Conduit Entries, 2 Rear Cable Entries (cable through-seals included for rear-entry)
Wire-In-Wire-Out Installation	Yes
Fixture Weight ³	3.2kg
Fixture Primary Material(s)	Die Cast Aluminium Alloy
Fixture Finish	Chromate Conversion Coating and Powder Coated
Lens(es) Materials	UV Stabilised Polycarbonate
Dimming/Controls Parameters:	
Dimming Options	0-10V, DALI
Built-in Controls	Photocell, Microwave Sensor
Compatible intelligent lighting systems	Wireless Controls and Monitoring
Options/Accessories:	
Mounting Styles	Surface Mounted
Miscellaneous Accessories	Vandal-resistant Screws
Available Product Colours	Black (RAL9005), Other colours optional

¹ Electrical Parameter data is for D1 drivers, unless otherwise stated

² Pending 3rd-party test

³ Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

Emergency Options Summary:

Emergency Variant Code	E3R1	E3S1
Test Method	Remote-Test	DALI, Self-Test
Style	Integrated	
Output Power in Emergency Mode	2W	
Emergency Lumen Output @ CRI>80 5000K	240lm (Open Face)	
Emergency Correction Factor	0.10	
Emergency Switch Brand	LitePlan	
Emergency Switch Model	NLP	DNA
Battery Brand	LitePlan	
Battery Chemical Composition	LiFePO4	
Battery Configuration	Stick - 90mm x 28mm (LxØ)	
Battery Capacity	3.8Ah	
Battery Output Voltage	3.2V	
Battery Output max Current	900mA nominal	
Output Power Duration	3 hours	
Time to Charge	24 hours	
Standby Energy Consumption	0.4W	
Ambient Product Usage Tolerance	0°C to 50°C	
Ambient Product Storage Tolerance	0°C to 50°C	
Emergency Warranty	3 Years	

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.

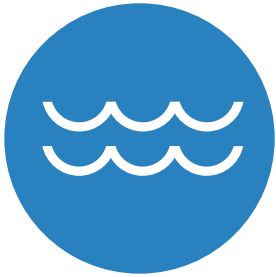
This datasheet & corresponding certification should be reviewed by a competent person to ensure project suitability.

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Features Summary

Chromate Coating

A chromate coating is applied to provide protection from corrosion. It enhances the ability of paint & adhesives to bond with the aluminium. It further prolongs both the product finish and luminaire chassis lifetime.



Cable Entry

Flexible cabling solutions are provided through two rear cable entries and four perimeter conduit entries (conduit entries are drilled and tapped).



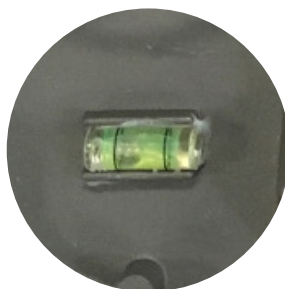
Wire-In Wire-Out

Wire-In and Wire-Out comes as standard, and includes rear cable seals.



Internal Spirit Level

An integrated internal spirit level aids installation, and ensures eyelid and grill covers are level.



Ingress Protection

The Bell 2 Series includes a unique gasket to ensure high ingress protection in wet environments.



Lumen Maintenance

Thermal design helps to stabilise the lumen performance of the Samsung 3535 LED chips.

Lumen maintenance (calculated) of the LED chips is $L70 \geq 187,000$ hours @ 25°C.

Cover

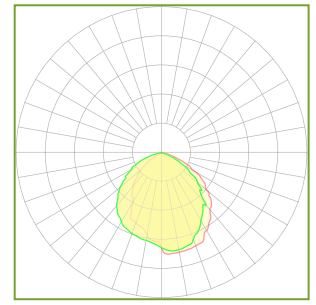
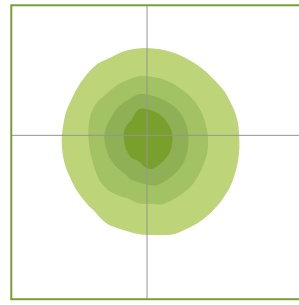
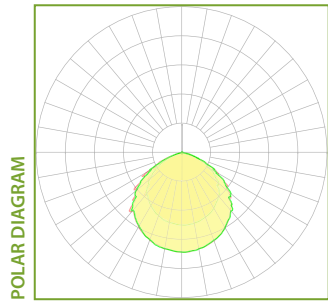
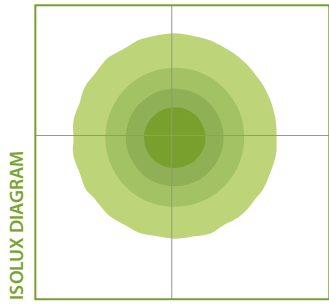
Three optical covers are available: open face, eyelid cover and grid frame.





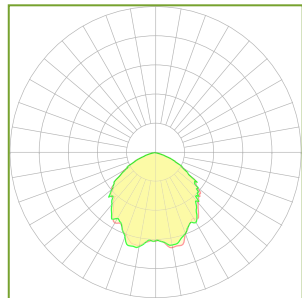
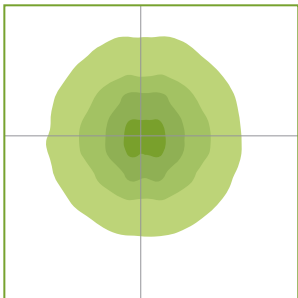
Indicative Product Photometry

Open Frame



Eyelid Cover

Grid Frame



Covers

This series is available with the following diffusers. Each diffuser will have a varying effect on photometric distribution and intensity. Please refer to downloadable photometrics for exact data.



Open Frame



Eyelid Cover

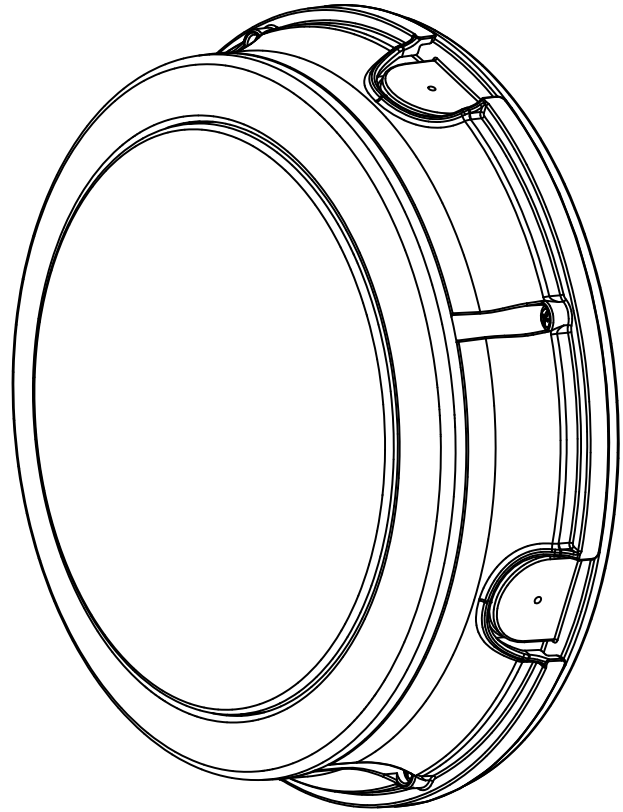
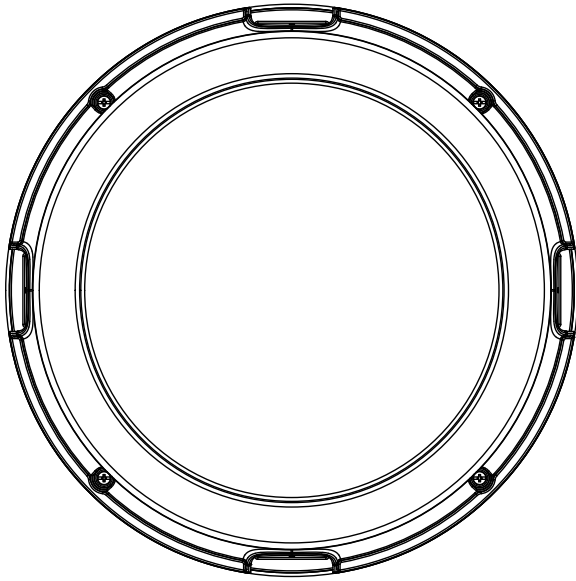
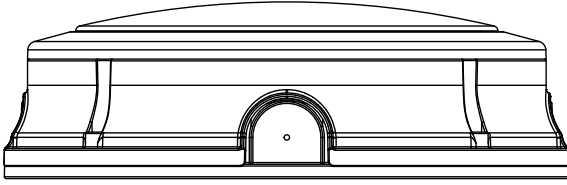


Grid Frame

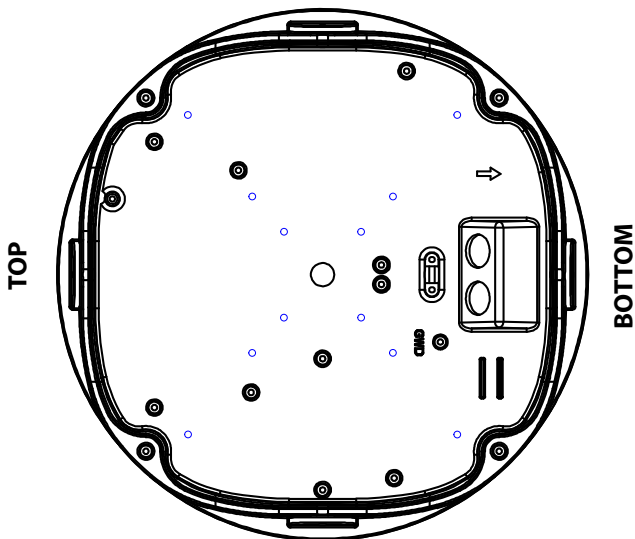


Dimensional Drawings

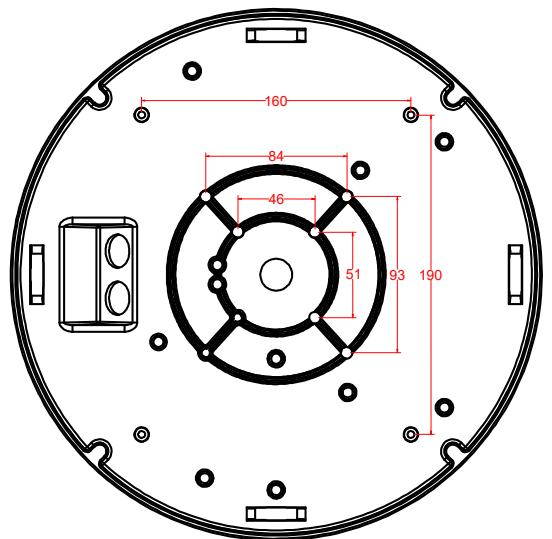
Open Frame



Mounting Plate - Front Elevation



Mounting Plate - Rear Elevation



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	DRIVER	COLOUR	MODIFICATIONS
BEL2	20 20W	740 CRI >70, 4000K	D1 NON-DIM	BL BLACK	EY EYELID COVER
		750 CRI >70, 5000K	D3 DALI	WH WHITE	GR GRID FRAME
		840 CRI >80, 4000K	"BLANK" IF EMERGENCY PACK ACCESSORY IS SELECTED		M1 MICROWAVE SENSOR
		850 CRI >80, 5000K			E3R1 INTEGRATED 3 HOUR MAINTAINED EMERGENCY (REMOTE TEST) - OUTPUT 2.0W
					E3S1 INTEGRATED 3 HOUR MAINTAINED EMERGENCY (SELF TEST) - OUTPUT 2.0W

Product Ordering Code Examples:

BEL2-20-750-D1-BL

BEL2-20-840-D3-BL-GR-E3R1

DRIVER MANUFACTURER		
POWER	D1	D3
20 20W	Inventronics	Tridonic

CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS

GENERAL NOTES:

- IF MORE THAN ONE MODIFICATION IS REQUIRED, SEPARATE EACH MODIFICATION WITH A HYPHEN AT THE END OF THE PRODUCT CODE
- PLEASE ENSURE SELECTION OF COMPATIBLE DRIVER FOR OCCUPANCY SENSORS WITH DIMMING FUNCTIONALITY
- PLEASE NOTE THAT MODIFICATIONS WHICH AFFECT LIGHT OUTPUT HAVE SEPARATE PHOTOMETRIC FILES IDENTIFIED WITH "...+(MODIFICATION)"
- ALTERNATIVE DRIVERS MAY BE AVAILABLE - PLEASE CONTACT OUR OFFICE FOR FURTHER DETAILS
- IF PRODUCT IS CUSTOMISED, CODES WILL BE ALTERED AS NECESSARY

ACCESSORIES

BEL2-E3R1-"DRIVER"

3HR MAINTAINED NLP EMERGENCY PACK - REMOTE TEST WITH LiFePO4 BATTERY AND IP65 ENCLOSURE - 2.0W OUTPUT

BEL2-E3S1-"DRIVER"

3HR MAINTAINED DNA EMERGENCY PACK - SELF TEST, DALI WITH LiFePO4 BATTERY AND IP65 ENCLOSURE - 2.0W OUTPUT

