



High-output, industrial, & commercial, linear fittings developed for world-class facilities

>13 optical configurations & low-glare diffusers available -3 hour emergency option, intelligent control methods, & varied installation styles

**CE international product marks** 

The most competitive, high-end solution for projects worldwide

# **Dunlop 2 Series** Temperature Resistant Linear Lights

CDN:SPEC180REV1



B.S.S.S.S.S.S.S.S.



## Technical Specifications Summary



Performance Summary:									
Module Power	DUN2A - 30W Modules			DUN2B - 40W Modules			DUN	12C - 50W Moc	lules
Code (Series-Wattage/Size)	DUN2A-90	DUN2A-120	DUN2A-150	DUN2B-120	DUN2B-160	DUN2B-200	DUN2C-150	DUN2C-200	DUN2C-250
Nominal Power	90W	120W	150W	120W	160W	200W	150W	200W	250W
Luminaire Efficacy @ CRI>70, 5000K CCT	147lm/W	149lm/W	150lm/W	142lm/W	135lm/W	133lm/W	127lm/W	124lm/W	124lm/W
Lumen Output @ CRI>70, 5000K CCT	13,230lm	17,880lm	22,500lm	17,040lm	21,600lm	26,600lm	19,050lm	24,800lm	31,000lm
Lumen Maintenance	L90B50 ≥60,000 hours @ Tj 80°C, 25°C Ambient								
Lumen Maintenance (TM21 Calculated)	L80B10 ≥100,000 hours @ Tj 80°C, 25°C Ambient								
Certification	CE								
Product Warranty	5 Years								
Light Source and Photometric F	Parameters	:							
Chip Brand, Model, & Size	Luxeon 5050								
Chip Efficacy @ CRI>70, 5000K CCT				167lm	/W @ 640mA, <sup>-</sup>	Тј 25°С			
Light Emmission	Direct								
сст	3000K, 4000K, 5000K, 5700K								
CRI	≥70, ≥80, ≥90								
SDCM	<4								
Diffusers	Clear								
Symmetric Light Distribution	25°, 40°, 60°, 90°, 120°, 150°								
Asymmetric Light Distribution	IESNA Type 2M, 3M, 3L, 4S, 4M,								
Optical Accessories	Frosted								
Electrical Parameters <sup>2</sup> :									
System Operating Power	90W	120W	150W	120W	160W	200W	150W	200W	250W
Driver Brand					Philips				
Driver Model	Xitanium 929001401680	Xitanium 929001401680	Xitanium 929001401680	Xitanium 929001401680	Xitanium 929001401680	Xitanium 929001401680 929001402280	Xitanium 929001407080	Xitanium 929001407080, 929001473980	Xitanium 929001407080, 929001407280
System Power Factor	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.98	≥0.95	≥0.98
Typical Driver Lifetime	100,000 hours 50,000 hours 100,000 hours								
Input Voltage	220-240VAC, 120-277VAC (DALI Driver)								
Input Frequency	50-60Hz								
Qty of Drivers per Light	1 1 2 1 2								
Inrush Current Per Driver @ 230VAC measured at 50% Ipeak (Peak/Duration)	46A/440µs	46A/440µs	46A/440µs	46A/440µs	46A/440µs	46A/440µs 46A/440µs	47A/320µs	47A/320μs 35A/210μs	47A/320μs 47A/320μs
Power Factor	>0.95								
тно	<20%								
Insulation Class									
Surge Protection/Fusing				10k	V/20kV (optio	nal)			

## Technical Specifications Summary

Code (Series-Wattage/Size)	DUN2A-90	DUN2A-120	DUN2A-150	DUN2B-120	DUN2B-160	DUN2B-200	DUN2C-150	DUN2C-200	DUN2C-250
Environmental Parameters:	DONLITYO	DONLINTIZO	DONLER IDO	D OTTED TEO	D ON LD TOO	0 01120 200	DONLETIO	D ONLEG LOO	D OTTLE LOO
IP Rating	IP67								
IK Rating	IK10								
Ambient Usage Tolerance		-40°C to 55°C				-40°C t	to 50°C		
Ambient Storage Tolerance		-40°C to 55°C					to 50°C		
Ambient Humidity Tolerance		10 0 10 00 0			0% to 90% RH				
Physical/Mechanical Parameter									
Product Dimensions: LxWxH (mm)	913 x 124 x 116	1187 x 124 x 116	1462 x 124 x 116	913 x 124 x 116	1187 x 124 x 116	1462 x 124 x 116	913 x 124 x 116	1187 x 124 x 116	1462 x 124 x 116
Qty of Modules	3	4	5	3	4	5	3	4	5
Electrical Connection				1	800mm Cable		-		
Fixture Weight <sup>3</sup>	3.74kg							6.70kg	
Fixture Primary Material(s)	5	5	5	-	luminium Allo	-	5	5	5
Fixture Finish			Azko	Nobel Powde	r Coated (Marii	, ne-Grade Optio	onal)		
Lens(es) Materials					bilised Polycar				
Dimming/Controls Parameters:									
Dimming Options	1-10V, DALI								
Compatible intelligent lighting systems				Wireless (	Controls and M	lonitoring			
Options/Accessories:	1								
Mounting Styles	Twin Surface Mount Brackets, Cable Suspension								
Miscellaneous Accessories	Emergency								
Available Product Colours	Black, Grey, White, Bronze								
<b>Emergency Options Summary:</b>									
Emergency Variant Code	E3R1								
Test Method	Remote-Test								
Style	Integrated - powering one LED module								
Output Power in Emergency Mode	4W								
Emergency Lumen Output @ 5000K CCT	516lm								
Emergency Correction Factor	0.044	0.033	0.026	0.033	0.025	0.020	0.026	0.020	0.016
IP Rating					IP67				
Emergency Switch Brand	BillDa								
Emergency Switch Model	BLD-CM20E-480800-4W								
Battery Chemical Composition	Li-ion								
Battery Capacity	2500mAh								
Battery Output Voltage	25-48VDC								
Output Power Duration	3 hours								
Time to Charge	≥24 hours								
Ambient Product Usage Tolerance	0°C to 40°C								
Ambient Product Storage Tolerance	-0°C to 40°C								

<sup>1</sup> UGR varies with light distribution. For further details contact our office

<sup>2</sup> Electrical Parameter data is for D1 drivers, unless otherwise stated

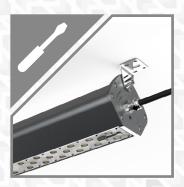
<sup>3</sup> Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

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. ©2020 Kellwood Engineering Ltd. All rights reserved.

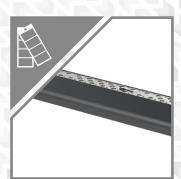


### **Features Summary**



**Mounting Options** 

Twin surface mount brackets, cable suspension



**Optional Fitting Colours** 

Grey RAL 7004, Black RAL 9011, Bronze RAL 8014, White RAL 9010, Custom availability subject to MOQ



Impact Resistance

Certified IK10 protection



**Environmental Protection** 

IP67 protection c/w minimum 100µm corrosion-resistant polyester powder coating



#### Distribution

167lm/W family efficacy, double market usage lifespan, >11 optic variations, & assured durability



**Surge Protection** 

10kV and 20kV surge protection are optional.



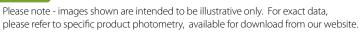
**Optional Diffusers** 

Optional frosted diffusers are available to help reduce glare

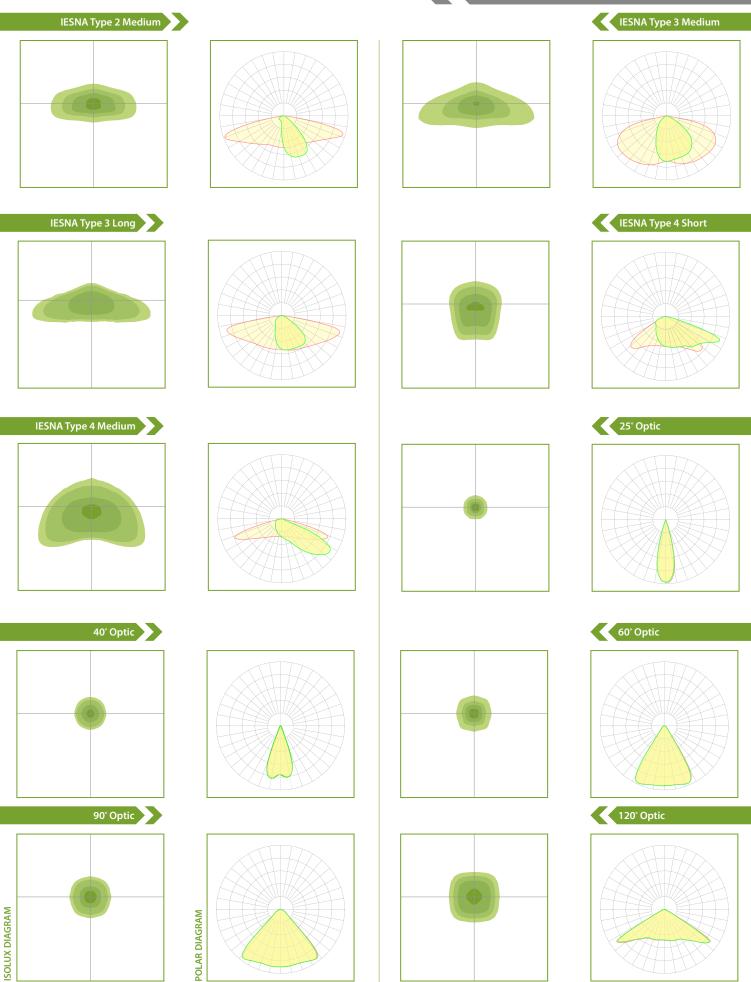


**Emergency Operation** 

3 hours, maintained, remote testing



Indicative Product Photometry



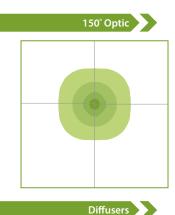
Colourations on isolux diagrams are qualitative, i.e. the same colour on any two isolux diagrams will not necessarily have the same lux value.

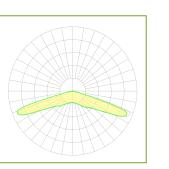
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Indicative Product Photometry



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.





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.



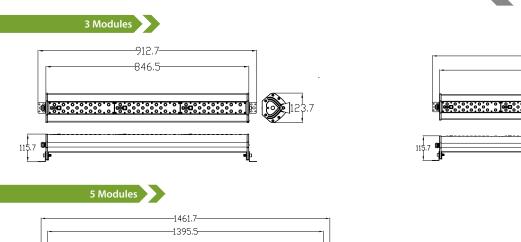
Clear Optic (Various Beam Angles)



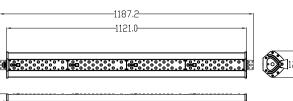
#### Backspill Guards

Optional backspill guards are available for the above Type 3 and Type 4 optics. These modify the light distribution to reduce/eliminate backward light trespass. An illustrative example is shown below:





Technical Drawings



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Standard product code fields are presented as:

Further customisation may be available - please contact us if required

CODE Description

## **Product Ordering Codes**

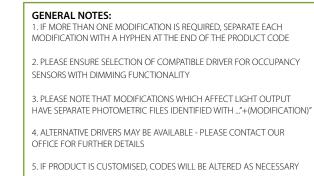
PRODUCT & POWER	CRI & CCT	ортіс –	DRIVER		COLOUR	MODIFICATIONS
DUN2A-90	<b>730</b> CRI >70, 3000K	<b>2M</b> IESNA TYPE II MEDIUM	D1 NON-DIM	TM TWIN SURFACE MOUNT BRACKETS	<b>GR</b> GREY	LI LINKABLE VARIANT
DUN2A-120	<b>740</b> CRI >70, 4000K	<b>3M</b> IESNA TYPE III MEDIUM	<b>D2</b> 1-10V	CABLE SUSPENSION	<b>BL</b> BLACK	BG BACKSPILL GUARD
DUN2A-150	<b>750</b> CRI >70, 5000K	<b>3L</b> IESNA TYPE III LONG	D3 <sup>1</sup> DALI		WH WHITE	SURGE PROTECTION DEVICE (10KV)
DUN2B-120	<b>757</b> CRI >70, 5700K	<b>4S</b> IESNA TYPE IV SHORT			GR2 <sup>2</sup> GREY - MARINE GRADE	SP2 SURGE PROTECTION DEVICE (20KV)
DUN2B-160	<b>830</b> CRI >80, 3000K	4M IESNA TYPE IV MEDIUM			BL2 <sup>2</sup> BLACK - MARINE GRADE	E3R2 INTEGRATED 3 HOUR MAINTAINED EMERGENCY (REMOTE TEST) - OUTPUT SW
DUN2B-200	<b>840</b> CRI >80, 4000K	<b>25</b> 25° CIRCULAR			WH2 <sup>1</sup> WHITE - MARINE GRADE	
DUN2C-150	<b>850</b> CRI >80, 5000K	<b>40</b> 40° CIRCULAR				
DUN2C-200	<b>857</b> CRI >80, 5700K	<b>60</b> 60° CIRCULAR				
DUN2C-250		90 90° CIRCULAR				
		<b>120</b> 120° CIRCULAR				
		<b>150</b> 150° CIRCULAR				
		FR FROSTED DIFFUSER				

#### Product Ordering Code Examples: *DUN2A-750-2M-D1-CS-BL DUN2C-850-120-D3-CS-BL-E3R2*

DRIVER MANUFACTURER						
PRODUCT POWER	D1	D2	D3			
<b>DUN2A-90</b> 90W	Philips	Philips	Philips			
<b>DUN2A-120</b> 120W	Philips	Philips	Philips			
DUN2A-150 150W	Philips	Philips	Philips			
<b>DUN2B-120</b> 120W	Philips	Philips	Philips			
<b>DUN2B-160</b> 160W	Philips	Philips	Philips			
<b>DUN2B-200</b> 200W	Philips	Philips	Philips			
DUN2C-150 150W	Philips	Philips	N/A			
<b>DUN2C-200</b> 200W	Philips	Philips	N/A			
<b>DUN2C-250</b> 250W	Philips	Philips	N/A			

<sup>1</sup> DALI drivers only available with DUN2A & DUN2B models.

<sup>2</sup> Upgraded AkzoNobel polyester powder coat for increased salt corrosion resistance.



CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS