



- Utility street lighting products for general application in urban & industrial environments
- Ingress & impact resistant luminaire with indexable, 6-position quick-select head positioning system
- CE, RoHS, CB, UL, DLC, SAA & TUV, international product marks
- The most competitive, high-end solution for projects worldwide



## *McAlpine 3 Series* **Utility Street Lights**

CDN:SPEC157REV1

## Technical Specifications Summary



### Performance Summary:

Code (Series-Wattage/Size)	MCA3A-40	MCA3A-80	MCA3A-120	MCA3A-160	MCA3A-200
Nominal Power	40W	80W	120W	160W	200W
Luminaire Efficacy @ CRI>70, 4000K CCT	164lm/W	165lm/W	155lm/W	164lm/W	165lm/W
Lumen Output @ CRI>70, 4000K CCT	6,560lm	13,200lm	18,600lm	26,240lm	33,000lm
Lumen Maintenance (TM21 Reported)	L70B50 ≥42,000 hours @ Tc 105°C				
Lumen Maintenance (TM21 Calculated)	L70B50 ≥101,000 hours @ Tc 105°C				
Certification	CE, RoHS, CB, UL, DLC, SAA, TUV				
Product Warranty	7 Years				

### Electrical Parameters<sup>1</sup>:

System Operating Power	40W	80W	120W	160W	200W
Driver Brand	Mean Well				
Driver Model	HLG-40H	HLG-80H	HLG-120H	HLG-185H	HLG-240H
System Power Factor	>0.9				
Typical Driver Lifetime	50,000 hours				
Input Voltage	100-277VAC				
Input Frequency	50-60Hz				
Qty of Drivers per Light	1				
Inrush Current Per Driver @ 230VAC measured at 50% I <sub>peak</sub> (Peak/Duration)	50A/210µs	70A/485µs	60A/375µs	65A/445µs	75A/570µs
Power Factor	>0.9				
THD	<20% (100-277VAC)				
Insulation Class	Class I				
Surge Protection/Fusing	10kV				

### Physical/Mechanical Parameters:

Product Dimensions: LxWxH (mm)	478 x 319 x 139	551 x 319 x 139	697 x 319 x 139
Qty of Modules	1	2	4
Windage	0.181m <sup>2</sup>	0.209m <sup>2</sup>	0.264m <sup>2</sup>
Electrical Connection	Terminal Block		
Fixture Weight <sup>2</sup>	5.75kg	6.55kg	8.65kg
Fixture Primary Material(s)	Aluminium Alloy		
Fixture Finish	Anodised, Powder Coated		
Lens(es) Materials	UV Stabilised Polycarbonate		

<sup>1</sup> Electrical Parameter data is for D1 drivers, unless otherwise stated

<sup>2</sup> Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

## Technical Specifications Summary



### Performance Summary:

Code (Series-Wattage/Size)	MCA3B-50	MCA3B-100	MCA3B-150	MCA3B-200	MCA3B-240
Nominal Power	50W	100W	150W	200W	240W
Luminaire Efficacy @ CRI>70, 4000K CCT	160lm/W	160lm/W	160lm/W	160lm/W	160lm/W
Lumen Output @ CRI>70, 4000K CCT	8,000lm	16,000lm	24,000lm	27,900lm	38,400lm
Lumen Maintenance (TM21 Reported)	L70B50 ≥42,000 hours @ Tc 105°C				
Lumen Maintenance (TM21 Calculated)	L70B50 ≥101,000 hours @ Tc 105°C				
Certification	CE, RoHS, CB, UL, DLC, SAA, TUV				
Product Warranty	7 Years				

### Electrical Parameters<sup>1</sup>:

System Operating Power	50W	100W	150W	200W	240W
Driver Brand	Mean Well				
Driver Model	HLG-60H	HLG-120H	HLG-150H	HLG-240H	
System Power Factor	>0.9				
Typical Driver Lifetime	50,000 hours				
Input Voltage	100-277VAC				
Input Frequency	50-60Hz				
Qty of Drivers per Light	1				
Inrush Current Per Driver @ 230VAC measured at 50% I <sub>peak</sub> (Peak/Duration)	55A/365μs	60A/375μs	65A/425μs	75A/570μs	
Power Factor	>0.9				
THD	<20% (100-277VAC)				
Insulation Class	Class I				
Surge Protection/Fusing	10kV				

### Physical/Mechanical Parameters:

Product Dimensions: LxWxH (mm)	478 x 319 x 139	551 x 319 x 139	624 x 319 x 139	697 x 319 x 139	770 x 319 x 139
Qty of Modules	1	2	3	4	5
Windage	0.181m <sup>2</sup>	0.209m <sup>2</sup>	0.237m <sup>2</sup>	0.264m <sup>2</sup>	0.291m <sup>2</sup>
Electrical Connection	Terminal Block				
Fixture Weight <sup>2</sup>	5.75kg	6.55kg	7.75kg	8.65kg	9.45kg
Fixture Primary Material(s)	Aluminium Alloy				
Fixture Finish	Anodised, Powder Coated				
Lens(es) Materials	UV Stabilised Polycarbonate				

<sup>1</sup> Electrical Parameter data is for D1 drivers, unless otherwise stated

<sup>2</sup> Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

## Technical Specifications Summary



### Performance Summary:

Code (Series-Wattage/Size)	MCA3C-60	MCA3C-120	MCA3C-180	MCA3C-240
Nominal Power	60W	120W	180W	240W
Luminaire Efficacy @ CRI>70, 4000K CCT	155lm/W	155lm/W	155lm/W	155lm/W
Lumen Output @ CRI>70, 4000K CCT	9,300lm	18,600lm	27,900lm	37,200lm
Lumen Maintenance (TM21 Reported)	L70B50 ≥42,000 hours @ Tc 105°C			
Lumen Maintenance (TM21 Calculated)	L70B50 ≥101,000 hours @ Tc 105°C			
Certification	CE, RoHS, CB, UL, DLC, SAA, TUV			
Product Warranty	7 Years			

### Electrical Parameters<sup>1</sup>:

System Operating Power	60W	120W	180W	240W
Driver Brand	Mean Well			
Driver Model	HLG-60H	HLG-120H	HLG-185H	HLG-240H
System Power Factor	>0.9			
Typical Driver Lifetime	50,000 hours			
Input Voltage	100-277VAC			
Input Frequency	50-60Hz			
Qty of Drivers per Light	1			
Inrush Current Per Driver @ 230VAC measured at 50% Ipeak (Peak/Duration)	55A/265μs	60A/375μs	65A/445μs	75A/570μs
Power Factor	>0.9			
THD	<20% (100-277VAC)			
Insulation Class	Class I			
Surge Protection/Fusing	10kV			

### Physical/Mechanical Parameters:

Product Dimensions: LxWxH (mm)	478 x 319 x 139	551 x 319 x 139	624 x 319 x 139	697 x 319 x 139
Qty of Modules	1	2	3	4
Windage	0.181m <sup>2</sup>	0.209m <sup>2</sup>	0.237m <sup>2</sup>	0.264m <sup>2</sup>
Electrical Connection	Terminal Block			
Fixture Weight <sup>2</sup>	5.75kg	6.55kg	7.75kg	8.65kg
Fixture Primary Material(s)	Aluminium Alloy			
Fixture Finish	Anodised, Powder Coated			
Lens(es) Materials	UV Stabilised Polycarbonate			

<sup>1</sup> Electrical Parameter data is for D1 drivers, unless otherwise stated

<sup>2</sup> Excludes bracketry. Refer to the Packaging Weights & Dimensions data sheet for bracketry and accessory weights

# Technical Specifications Summary

## Common Light Source and Photometric Parameters:

Chip Brand, Model, & Size	Philips Lumileds 5050
Chip Efficacy @ CRI>70, 4000K CCT	153lm/W @ 160mA
Light Emission	Direct
CCT	4000K, (3000K, 5000K, 5700K optional)
CRI	≥70
Diffusers	Clear
Asymmetric Light Distribution	IESNA Type 1M, 2M, 3M, 5S

## Common Environmental Parameters:

IP Rating	IP66
IK Rating	IK08
Ambient Usage Tolerance	-40°C to 50°C
Ambient Storage Tolerance	-40°C to 80°C
Driver automatic turn-off temperature	85°C
Ambient Humidity Tolerance	10% to 90% RH

## Common Dimming/Controls Parameters:

Built-in Controls	Photocell
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## Options/Accessories:

Mounting Styles	Slip Fit
Available Product Colours	Light Silver, Dark Grey

<sup>1</sup> Electrical Parameter data is for D1 drivers, unless otherwise stated

<sup>2</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.

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# Features Summary



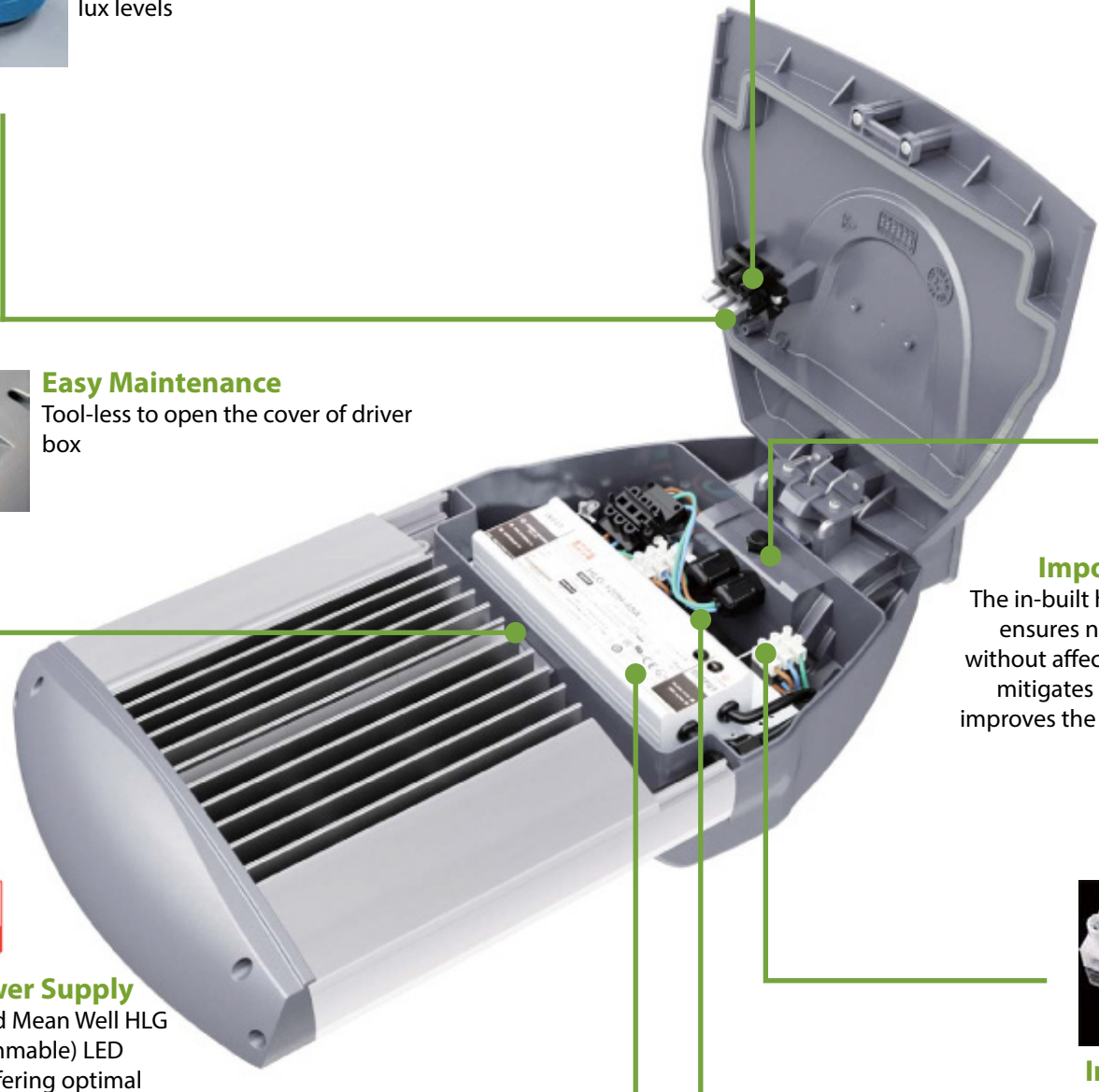
**Photocell available**  
Lamp will automatically turn on and off according to daylight - ambient lux levels



**Auto-Disconnect**  
The internal components are automatically electrically disconnected when the housing is opened during maintenance - offering Increased personnel safety



**Easy Maintenance**  
Tool-less to open the cover of driver box



**Imported Breather**  
The in-built housing's breather ensures neutral air-pressure without affecting IP rating. This mitigates condensation and improves the light's service life.



**D1 Power Supply**  
High-end Mean Well HLG (non-dimmable) LED driver offering optimal stability, performance, and lifespan



**Internal Wiring**  
Terminal block ensures simple maintenance



**D4 Power Supply**  
High-end Inventronics (programmable) LED driver offering optimal stability, performance, and lifespan



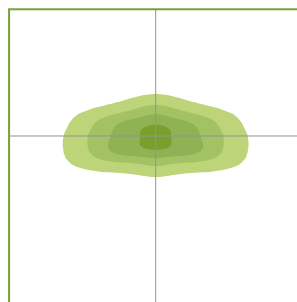
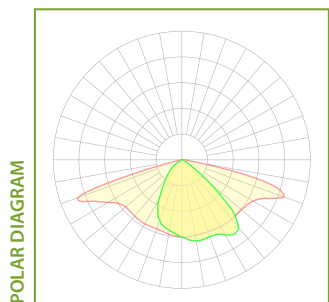
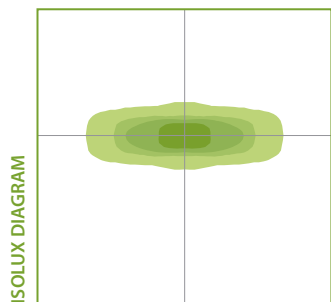
**Surge protection device (10KV)**  
Helps to protect internal electrical components and extend product life, in the event of excessive power surges



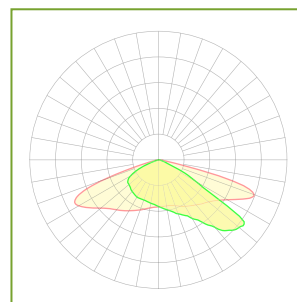
Please note - images shown are intended to be illustrative only. For exact data, please refer to specific product photometry, available for download from our website.

# Indicative Product Photometry

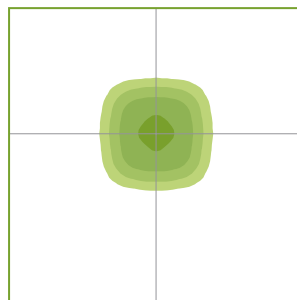
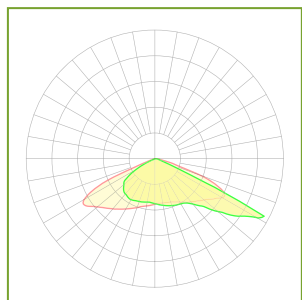
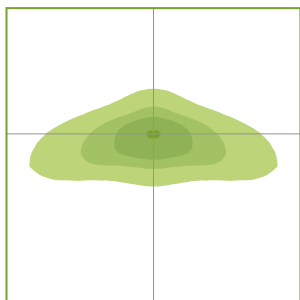
IESNA Type 1M >>



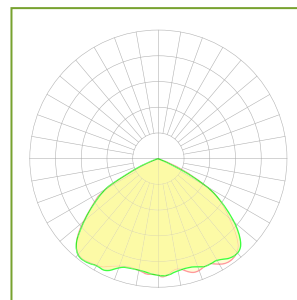
<< IESNA Type 2M



IESNA Type 3M >>



<< IESNA Type 4S



## Diffusers >>

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)



Clear Optic (Various Beam Angles)



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



## Product Ordering Codes

PRODUCT & POWER <sup>1</sup>	CRI & CCT	OPTIC	DRIVER	COLOUR	MODIFICATIONS
<b>MCA3A-40</b>	<b>730</b> CRI >70, 3000K	<b>1M</b> IESNA TYPE I MEDIUM	<b>D1</b> NON-DIM	<b>GR</b> GREY	<b>PH1</b> PHOTOCELL
<b>MCA3B-50</b>	<b>740</b> CRI >70, 4000K	<b>2M</b> IESNA TYPE II MEDIUM	<b>D4</b> PROGRAMMABLE	<b>BL</b> BLACK	
<b>MCA3C-60</b>	<b>750</b> CRI >70, 5000K	<b>3M</b> IESNA TYPE III MEDIUM			
<b>MCA3A-80</b>	<b>757</b> CRI >70, 5700K	<b>4S</b> IESNA TYPE IV SHORT			
<b>MCA3B-100</b>					
<b>MCA3C-120</b>					
<b>MCA3A-120</b>					
<b>MCA3B-150</b>					
<b>MCA3C-180</b>					
<b>MCA3A-160</b>					
<b>MCA3B-200</b>					
<b>MCA3C-240</b>					
<b>MCA3A-200</b>					
<b>MCA3B-240</b>					

<sup>1</sup>Product power code structure :  
MCA3A = 500mA drive current  
MCA3B = 600mA drive current  
MCA3C = 750mA drive current

### 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

Product Ordering Code Examples:

*MCA3A-120-740-2M-D1-GR*

*MCA3C-240-757-3M-D4-BL-PH1*

DRIVER MANUFACTURER		
POWER	D1	D4
<b>40</b> 40W	<b>Mean Well</b>	<b>Inventronics</b>
<b>50</b> 50W	<b>Mean Well</b>	<b>Inventronics</b>
<b>60</b> 60W	<b>Mean Well</b>	<b>Inventronics</b>
<b>80</b> 80W	<b>Mean Well</b>	<b>Inventronics</b>
<b>100</b> 100W	<b>Mean Well</b>	<b>Inventronics</b>
<b>120</b> 120W	<b>Mean Well</b>	<b>Inventronics</b>
<b>150</b> 150W	<b>Mean Well</b>	<b>Inventronics</b>
<b>160</b> 160W	<b>Mean Well</b>	<b>Inventronics</b>
<b>180</b> 180W	<b>Mean Well</b>	<b>Inventronics</b>
<b>200</b> 200W	<b>Mean Well</b>	<b>Inventronics</b>
<b>240</b> 240W	<b>Mean Well</b>	<b>Inventronics</b>

CONTACT OUR OFFICE FOR FURTHER INFORMATION ON DRIVER PARAMETERS

