

# Helio

## Industrial Lighting / LED Street Light



DAVIS LIGHTING

The Helio series is a top-line luminaire suitable for street and industrial lighting applications. The slim modern design appeals to current aesthetics while its smooth curvature top prevent the build up of debris and leaves. A wide range of optics and advanced thermal management capabilities means that Helio is able to serve in a range of applications. Helio is also designed for easy installation and maintenance with a tool-free design and a drop protector ensures safety during strong winds and installation.

### Features

- Elegant & super-slim aesthetics
- Super luminaire efficiency up to 150 lm/w
- 7 kinds of optics and advanced thermal management
- UP to ME1 lighting class application
- Dark sky friendly, up to G6 glare rating
- Marine grade aluminium option available
- Flexible and intelligent drivers for smart city
- Low wind area and drop protector
- Tool free installation and maintenance
- Sleek design & robust
- SPD up to 20kA/kV
- IP66 and IK09

### Applications

- Residential areas
- Road and street lighting
- Highway, Airport, Parking place
- Pathway, Pedestrians
- Smart city option

### Standards

- Manufactured under ISO 9001:2015 to standards
- IEC 60598-1
- IEC 60598-2-3
- IEC 62722
- IEC CISPR 15



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DAVIS LIGHTING



SLH7



SLH5



SLH3



SLH1



### Product Code Key

Model	Power	Colour Temp.	Dimming	Receptacle	Distribution Pattern
SLH1	20W = 20W	3KD = 3000K	D06 = 1-10V + PWM + Resistor	N05 = NEMA 7 pin	Z01 = Type I -M
	30W = 30W	4KD = 4000K		N06 = NEMA 7 pin + Shorting cap	Z02 = Type II -M A
	40W = 40W	5KD = 5000K		N11 = Zhaga based	Z03 = Type II -M B
	60W = 60W	6KD = 5700K			Z04 = Type III -M
SLH3	80W = 80W				Z05 = Type IV -S
	100W = 100W				Z06 = Type III -M (JKR)
	120W = 120W				Z07 = Type II -M C
SLH5	150W = 150W				Z08 = Type II -M D
	180W = 180W				Z09 = Type II -M E
	200W = 200W				Z10 = Type III -L
SLH7	220W = 220W				Z11 = Type V -S
	240W = 240W				
	250W = 250W				
	280W = 280W				
	300W = 300W			omit code for standard no NEMA socket	
	320W = 320W				

e.g. SLH5180W4KD-D06N05Z01 = SLH5 series 180W 4000K with 1-10V, PWM, Resistor dimming, NEMA 7 pin & Type I -M distribution

### General Specifications

Parameter	Technical Data
Light Source	SMD LED Module
Colour Temperature	3000K / 4000K / 5000K / 5700K
Colour Stability	3 or 5 MacAdam steps for all standard LED colours
Colour Rendering Index (CRI)	> 70 or > 80 (neutral white and cool white)
Power Factor	> 0.90
Luminous Flux (Led flux @ Ta=25C outdoor)	from 1800 to 45000 lm
Power	from 10W up to 350W
Luminaire Efficiency	130-155 lm/W
Constant Lumen Output (CLO)	as requirement
Optics Material	PC
Optical Cover	Tempered glass (5mm)
ULOR (%)	0% for flat glass versions
Spigot Diameter	60 mm
Electrical Class	Class I and Class II (According to IEC-EN 60598)
Colour	RAL7024 as standard (RAL or AKZO Future colours available)
IP Rating	IP66
IK Rating	IK09 (according to IEC - EN 62262)
Operating Temperature Range	-40°C < ta ≤ 50°C
Lifespan	> 50,000 hrs
LED Module Thermal Protection	Yes
Driver Thermal Protection	Yes
Surge Protection	20kA / 20kV
Options	mini Photocell and NEMA socket, including cable
Certifications	CE CB ENEC (in certification)
Material	ADC12 / Lower copper contents



### Model Specific Specifications

#### SLH1 range

Model	SLH120WxKD	SLH130WxKD	SLH140WxKD	SLH160WxKD
Nominal Power (W)	20	30	40	60
Input Voltage	220 - 240 VAC 50 / 60 Hz			
Luminaire Flux (lm)*	3006	4598	5794	9114
Efficacy (lm/W)*	150	153	145	152
Windage (m <sup>2</sup> )	0.023			
Mounting Height (m)	3 - 6 (recommended)			
Weight (kg)	5.7			

#### SLH3 range

Model	SLH380WxKD	SLH3100WxKD	SLH3120WxKD
Nominal Power (W)	80	100	120
Input Voltage	220 - 240 VAC 50 / 60 Hz		
Luminaire Flux (lm)*	12,234	14,933	16,114
Efficacy (lm/W)*	153	149	134
Windage (m <sup>2</sup> )	0.048		
Mounting Height (m)	4 - 8 (recommended)		
Weight (kg)	7.9		

#### SLH5 range

Model	SLH5150WxKD	SLH5180WxKD	SLH5200WxKD
Nominal Power (W)	150	180	200
Input Voltage	220 - 240 VAC 50 / 60 Hz		
Luminaire Flux (lm)*	21,629	24,414	27,039
Efficacy (lm/W)*	144	136	135
Windage (m <sup>2</sup> )	0.058		
Mounting Height (m)	6 - 12 (recommended)		
Weight (kg)	13.0		

#### SLH7 range

Model	SLH7220WxKD	SLH7240WxKD	SLH7250WxKD	SLH7280WxKD	SLH7300WxKD	SLH7320WxKD
Nominal Power (W)	220	240	250	280	300	320
Input Voltage	220 - 240 VAC 50 / 60 Hz					
Luminaire Flux (lm)*	33,511	36,105	38,069	44,083	47,266	48,304
Efficacy (lm/W)*	152	150	152	157	158	151
Windage (m <sup>2</sup> )	0.088					
Mounting Height (m)	12 - 15 (recommended)					
Weight (kg)	19.0					

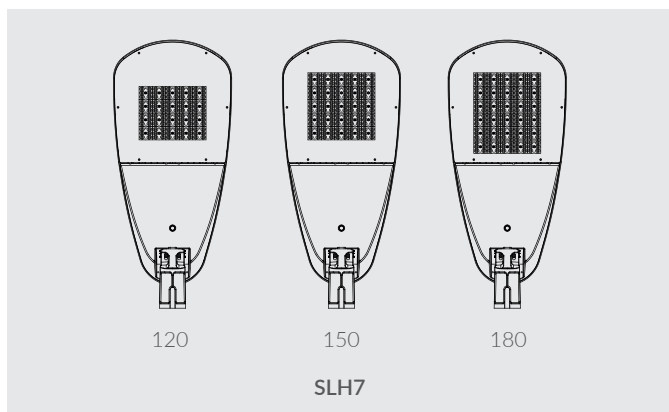
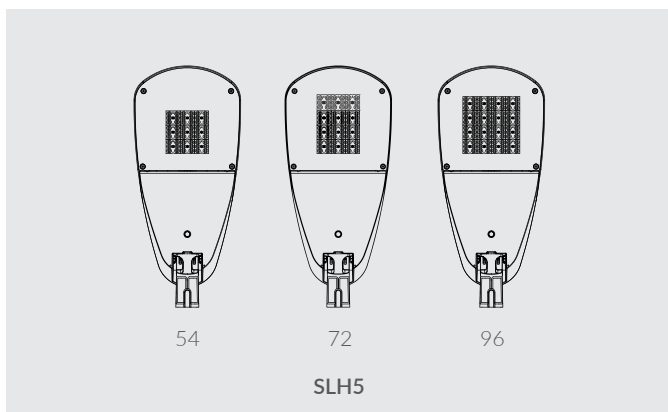
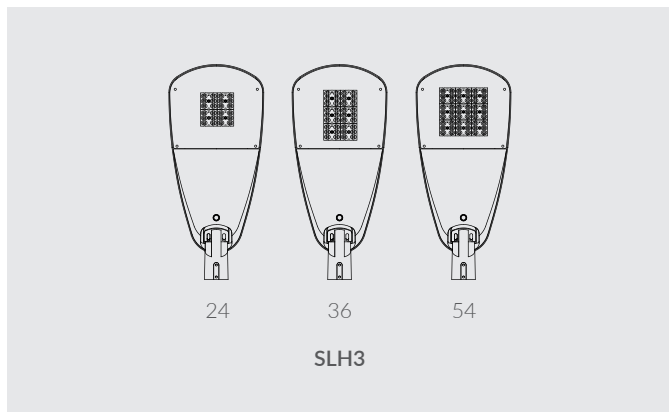
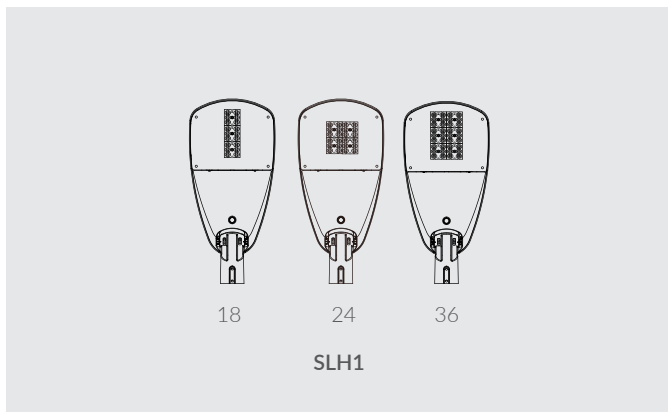
"x" denotes CCT, 3 = 3000 K ; 4 = 4000 K ; 5 = 5000 K ; 6 = 5700 K

\* Specifications shown for 4000K, Type I -M



## LED Specifications

Range	LED	Power (W)	LUXEON 5050		L90B10 at 25°C	L70 at 25°C
		Min / Max	Min (lm)	Max (lm)	IESNA TM-21-11	IESNA TM-21-11
SLH1	18	15 - 30	2250	3900	> 40,000 hrs	> 100,000 hrs
	24	20 - 40	3000	5200	> 40,000 hrs	> 100,000 hrs
	36	35 - 70	5250	9100	> 40,000 hrs	> 100,000 hrs
SLH3	24	20 - 40	3000	5200	> 40,000 hrs	> 100,000 hrs
	36	30 - 60	4500	7800	> 40,000 hrs	> 100,000 hrs
	54	50 - 100	7500	13,000	> 40,000 hrs	> 100,000 hrs
SLH5	54	50 - 100	7500	13,000	> 40,000 hrs	> 100,000 hrs
	72	70 - 150	10,500	19,500	> 40,000 hrs	> 100,000 hrs
	96	100 - 200	15,000	26,000	> 40,000 hrs	> 100,000 hrs
SLH7	120	120 - 240	18,000	31,200	> 40,000 hrs	> 100,000 hrs
	150	150 - 300	22,500	39,000	> 40,000 hrs	> 100,000 hrs
	180	200 - 350	30,000	45,500	> 40,000 hrs	> 100,000 hrs



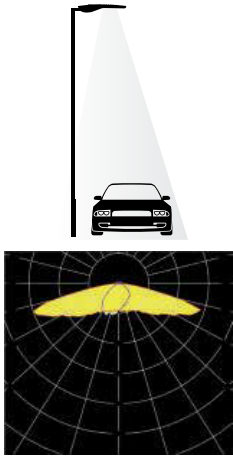
High efficacy and lumens in a multi-die, high power package, enabling low system costs



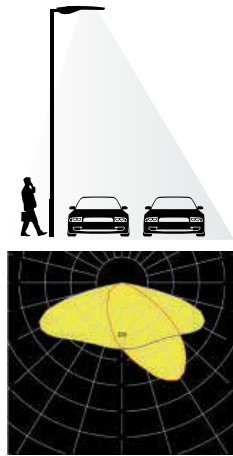


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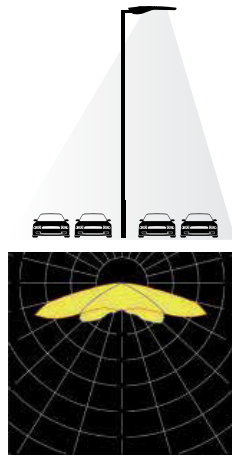
TYPE I -M  
65035001



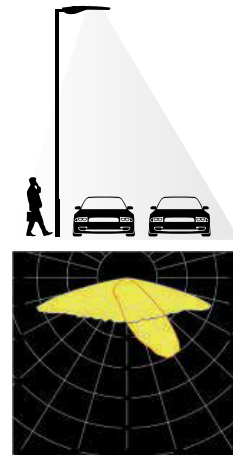
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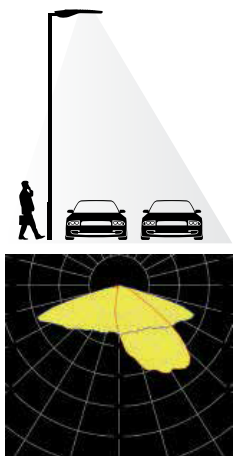
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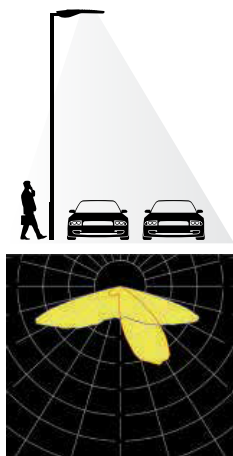
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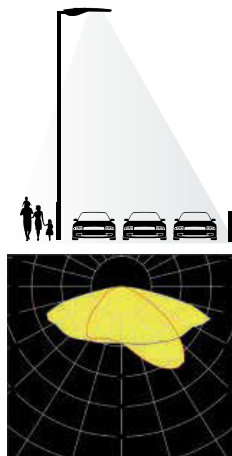
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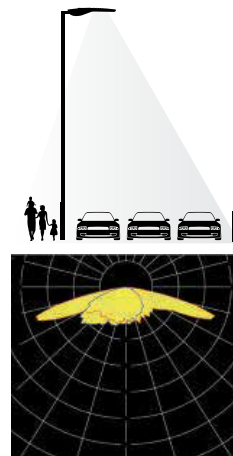
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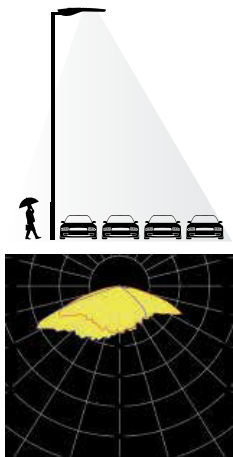
TYPE III -L  
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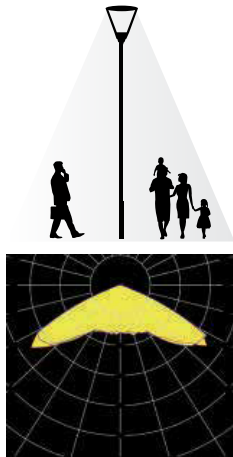
TYPE III -M  
65035004



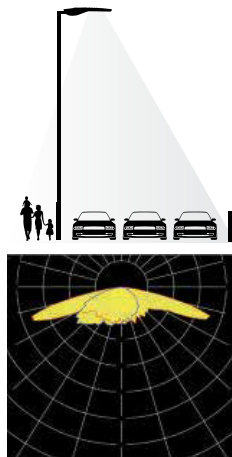
TYPE IV -S  
65035005



TYPE V -S  
65035011



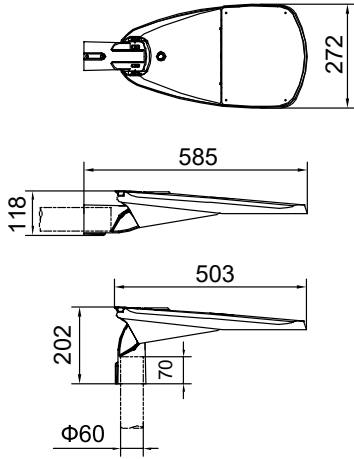
TYPE III -M (JKR)  
65035006



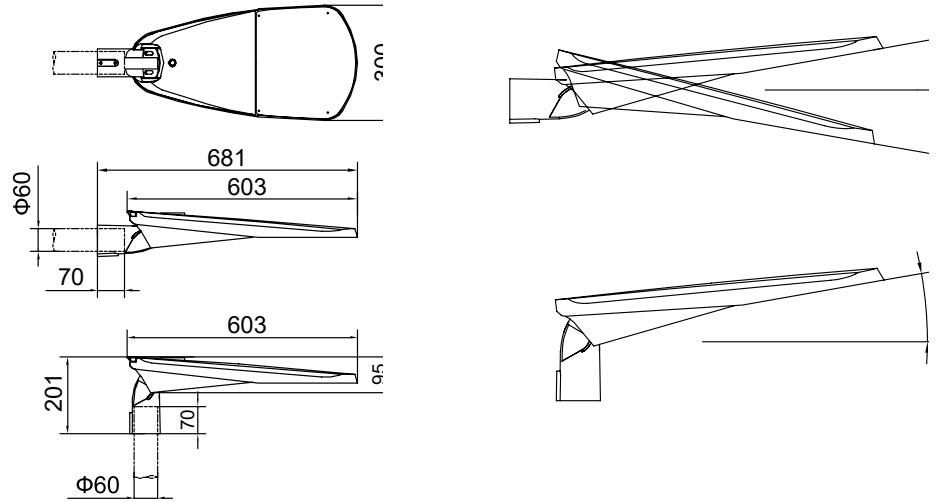


## Dimensions

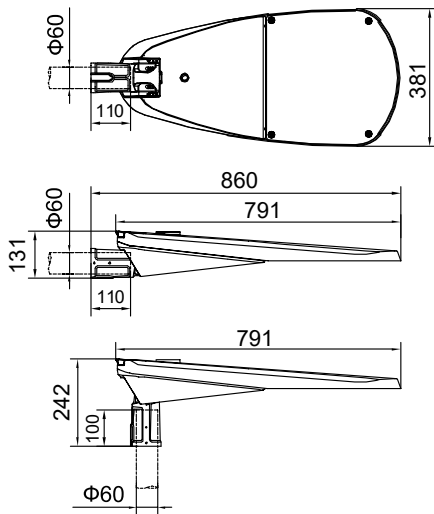
SLH1



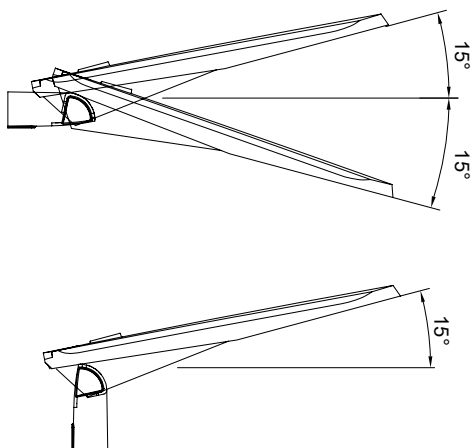
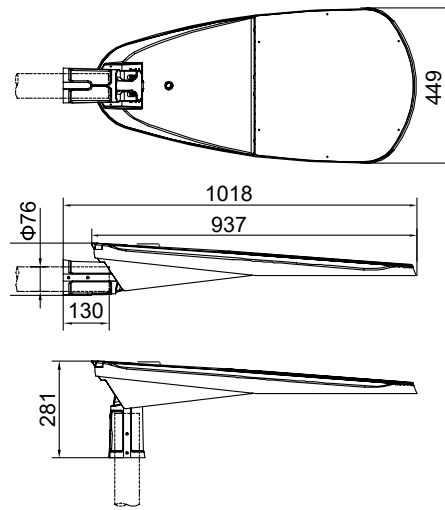
SLH3



SLH5



SLH7



Smooth surface / Self-cleaning

\*60mm standard spigot.  
Other diameters can be ordered upon request



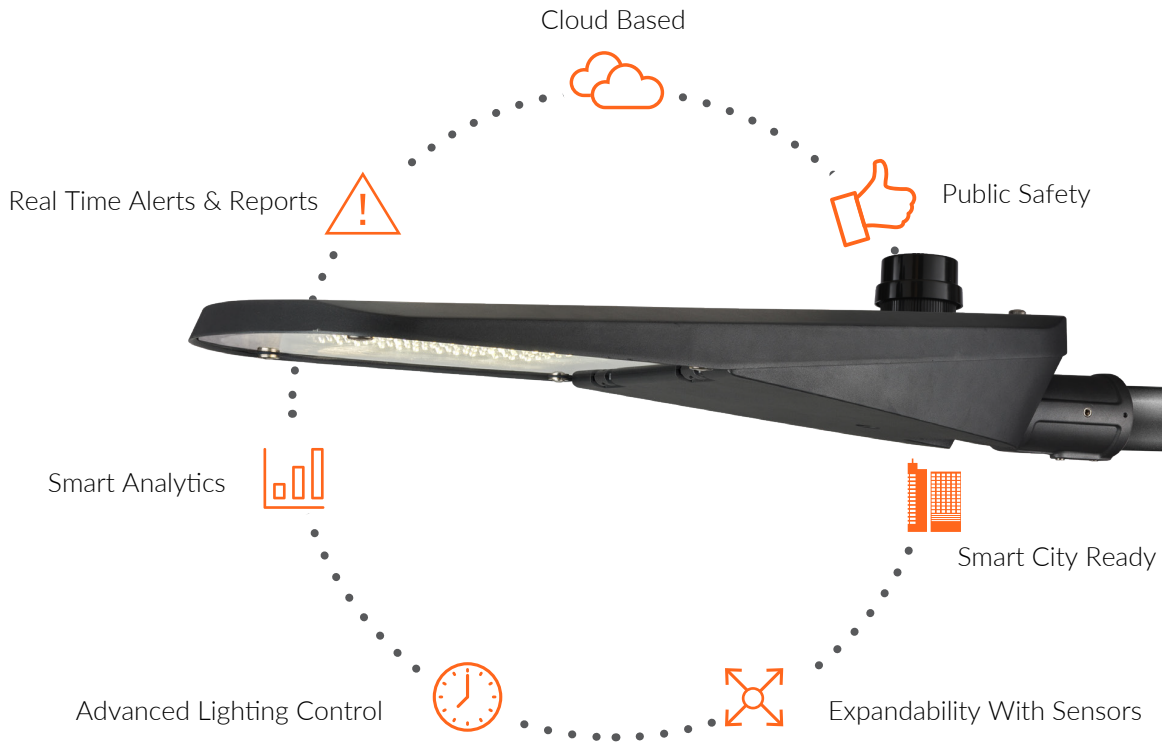
## Mounting Height

Model	Recommended Mounting Height
SLH1	3-6 m
SLH3	4-8 m
SLH5	6-12 m
SLH7	12-15 m

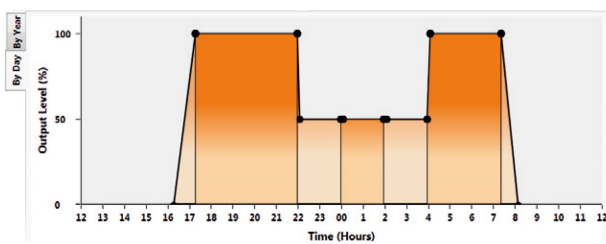




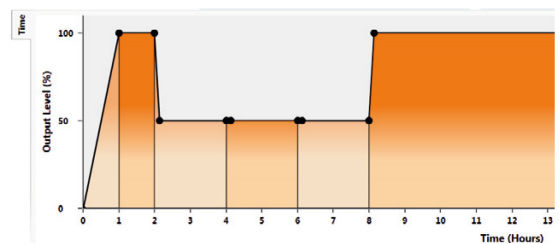
## Smart Lighting Ready



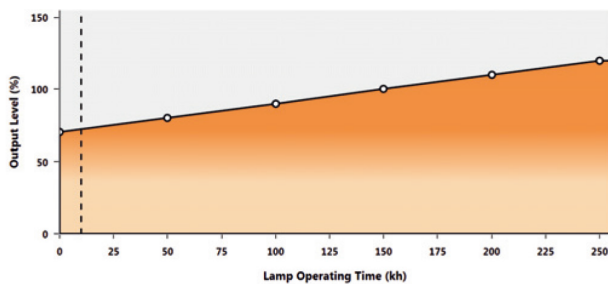
Astro-Dim



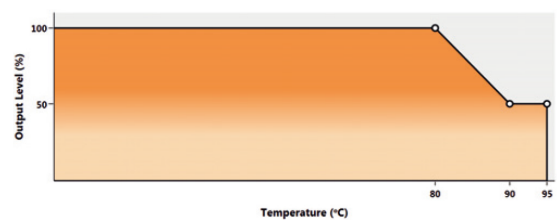
Time-Based-Dim



Constant lumen programming graph  
(operating time = 10 kh)



NTC sample behavior





### Accessories



#### Shorting Cap

Standard: ANSI C136.10-1996  
Part Number: NEMA-SC



#### Wall mounting bracket

Spigot size 40 - 60 mm  
Horizontal  
Part Number: HWBH60



#### Photocell

Standard: ANSIC136.10-2010  
Part Number: NEMA-PC



#### Wall mounting bracket

Spigot size 40 - 60 mm  
Vertical  
Part Number: HWBV60



#### Console Adapter

Spigot size 60 - 76 mm  
Part Number: HCA6076



Electrical connection CLASS II: Neutral /Phase are connected to safety switch; for Class I earth wire to be connected on earth stud in housing. 1-10V or DALI incoming wiring is connected to a separate termination block.

Gear with INVENTRONICS driver programmable

Silicon gasket

Level gauge

Mounting with two stainless steel bolts (extra-long bolts for small column can be ordered with luminaire).

Spigot made of die-cast aluminium, standard in same colour as body. Universal post top / side entry spigot for Ø60mm / 76mm / 50mm.

Flat toughened glass to prevent upward light. Fixed to the frame with metal clips for easy replaceability. Very high light transmission to optimise the Light Output Ratio.

Housing is made of very corrosion resistant die-cast aluminium. Polyester powder coated painting after chemical washing treatment. Marine grade aluminium option available.

