

# The LED Downlighter Range of Luminaires

## Description:

The Morgan Hope LED Downlights are designed with the latest high output SMD/LED Chips providing products that incorporate the benefits of the ongoing improvements in LED technology and offering not only extended life patterns but also improved output for lower consumption.

The range of LED Downlights from Morgan Hope is extensive and diverse and the basis of this brochure is to outline a limited number of the more popular items. From the smaller models covered in the Astrid Range to the larger diameter Sapphire LedLite, the products are suitable for most applications covering accent and localised lighting, through to open plan areas requiring high levels of illumination.



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**morganhope**  
INDUSTRIES LTD

Light **Where** you need it, **When** you need it

## Astrid Range

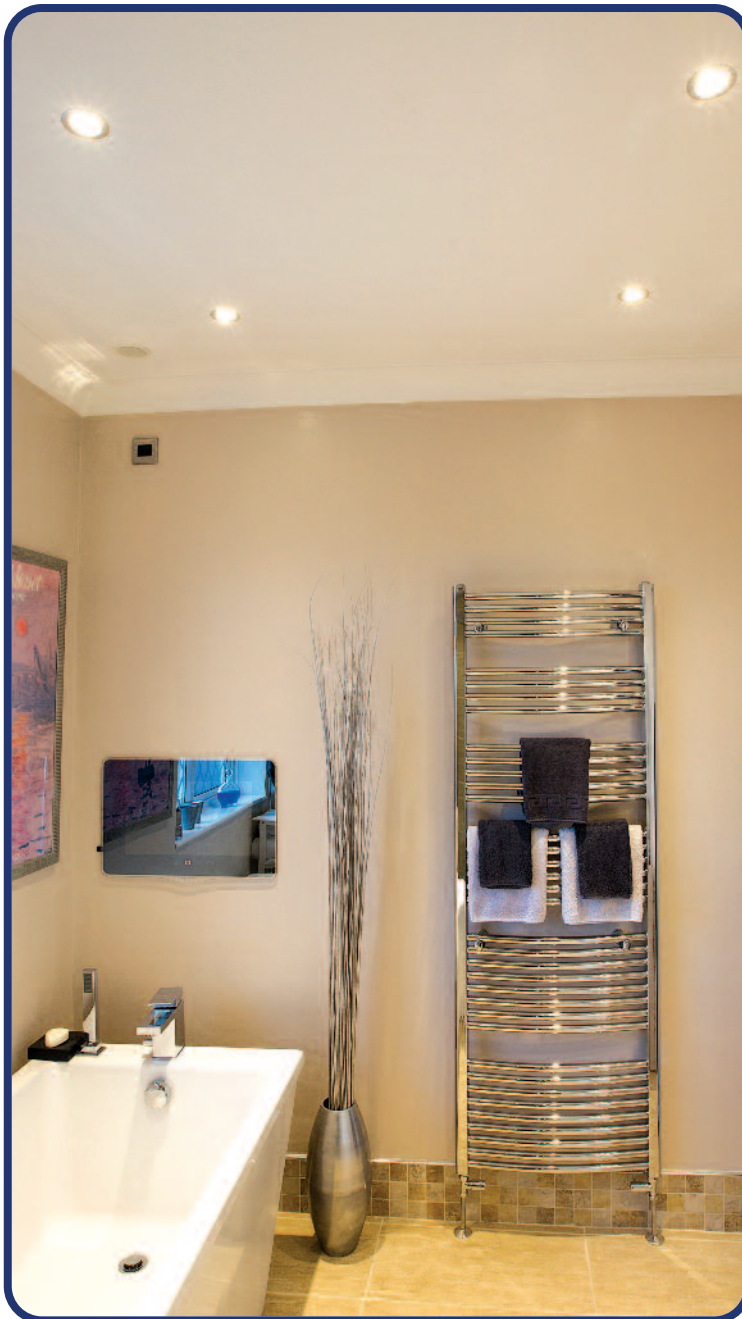
**Astrid K1004** – a compact fitting incorporating 3 x 3 Watt LEDs and generally specified as a replacement of the 50W Halogen lamps. It is supplied complete with driver and is available with either a Satin Silver or White bezel.

### Rated Specs: Astrid K1004

Item:	Model: Astrid K1004-9W
Power Rating Input	220V to 240V
Voltage (V)	10V
Working current (mA)	700mA
Total Watt (W)	8W
Power Factor	≥0.8
Lumens per Watt	
Warm White	55 lm/W (30°)
Natural White	58 lm/W (30°)
Cool White	61 lm/W (30°)

### Rated Specs: Astrid K1004

Item:	Model: Astrid K1004-9W
Total Lumen Output	
Warm White	437 lm/W (30°)
Natural White	460 lm/W (30°)
Cool White	483 lm/W (30°)
CRI	≥80
Beam Angle	15°/30°/45°/60°
Colour Temperature	3000K-6000K
Cut-out size	65mm Diam
Overall size	77mm Diam x 102mm Height





**Astrid Pixie** – a compact fitting designed with LED single chip technology and is available with 9 Watt or 15 Watt output. It is ideal as a replacement Downlighter for 50 Watt Halogen lamps and where higher lumen output is required the Astrid Pixie can be supplied in 15 Watt. It is supplied complete with driver and is available with either a Satin Silver or White bezel.



### Electrical Specification: Astrid Pixie

Item:	Model: Astrid Pixie-9W	Model: Astrid Pixie-15W
Power Rating Input	220V to 240V	220V to 240V
Voltage (V)	40V	31V
Working current (mA)	200mA	450mA
Total Watt (W)	9W	15W
Power Factor	≥0.8	≥0.8
Lumens per Watt		
Warm White	70 lm/W (40°)	66 lm/W (40°)
Natural White	74 lm/W (40°)	69 lm/W (40°)
Cool White	78 lm/W (40°)	73 lm/W (40°)
Total Lumen Output		
Warm White	632 lm/W (40°)	988 lm/W (40°)
Natural White	665 lm/W (40°)	1040 lm/W (40°)
Cool White	698 lm/W (40°)	1092 lm/W (40°)
CRI	≥80	≥80
Beam Angle	20°/40°/55°	20°/40°/55°
Colour Temperature	Warm White 3000K	Warm White 3000K
	Natural White 4000K	Natural White 4000K
	Cool White 6000K	Cool White 6000K
Cut-out size	65mm Diam	65mm Diam
Overall size	90mm Diam x 57mm Height	90mm Diam x 90mm height

**Astrid Luna** – a unique compact fitting designed with LED single chip technology, which is driverless with direct 220V to 240V mains supply. It is supplied with 6 Watt output and is ideal as a replacement Downlighter for 50 Watt Halogen lamps, with the advantage

of being compatible with most Leading and Trailing Edge dimmer switches. Available with a Satin Silver or White bezel that is adjustable to allow for directional accent lighting and fitted with spring clips.

#### Electrical Specification: Astrid Luna

Item:	Model: Astrid Luna-6W		
Power Rating Input Voltage (V)	220V to 240V		
Total Watt (W)	6W		
Power Factor	0.9		
Colour Temperature	Cool White 6000K	Natural White 4000K	Warm White 3000K
Lumens per Watt	70 lm/W	66 lm/W	63 lm/W
Total Lumen Output	420 lm	400 lm	380 lm
CRI	>75	>78	>80
Beam Angle	38° - 60°		
Cut-out size	70 mm Diam		
Overall size	80mm Diam x 48mm Height		



Astrid Luna

## Sapphire LedLite Range

The Sapphire LedLite Range is based on one style of housing providing a choice of two sizes covering 190mm and 230mm Diameter. The Sapphire LedLite is available in outputs of 20 Watt and 30 Watt with multi operational options from standard fixed output to various controlled systems.

The LedLite PCB is designed with a twin circuit PCB board that can be supplied linked to a single driver for fixed output or two drivers for controlled systems requiring a combination of full output illumination during occupancy, dropping to single circuit background comfort light when unoccupied. Other options include Dali Dimming or with a constant voltage circuit for the Morgan Hope DC2DC Emergency Back-up.

### Model References

**Sapphire-LedLite-30W** – a decorative recessed circular luminaire with nominal return of specula flat silver reflector and recessed opal glass diffuser. The luminaire is fitted with the Morgan Hope LedLite PCB and single driver for fixed output lighting

**Sapphire-LedLite-30W-1/1** – a decorative recessed circular luminaire with nominal return of specula flat silver reflector and recessed opal glass diffuser. The luminaire is fitted with the Morgan Hope LedLite PCB based on a twin circuit LED layout (outer circuit 26w and inner circuit 4 watt) and related twin Drivers to enable occupancy controlled lighting, from remote detectors, to switch the higher output outer circuit, leaving the inner circuit to operate at full output for background health and safety comfort light.

**Sapphire-LedLite-Dali Dim** – a decorative recessed circular luminaire with nominal return of specula flat silver reflector and recessed opal glass diffuser. The luminaire is fitted with the Morgan Hope LedLite PCB



fitted with Dali Dim Driver linked to both circuits and suitable for switch or occupancy and daylight controlled dimming.

**Sapphire-LedLite-30W-DC2DC** – a decorative recessed circular luminaire with nominal return of specula flat silver reflector and recessed opal glass diffuser. The luminaire is fitted with the Morgan Hope LedLite PCB based on a twin circuit LED layout; however whilst the 26W outer circuit is based on Constant Current and connected to a single driver for remote “On/Off” switching, the inner low wattage circuit is Constant Voltage for operation via the Morgan Hope DC2DC Converter Driver for emergency back-up via a standard 24V battery and charger unit. (See the Morgan Hope DC2DC technical Data Sheet for more information)





The **20 Watt Sapphire LedLite range** is available in a lower output 20W version based on the above specification detail. For this model simply replace the “30W” in the code with “20W”.

**Drop Glass** – the Sapphire LedLite is suitable for Drop Glass accessories and whilst a broad range can be made available the DG006/195 and DG003/195 are the standard glasses available:

### Electrical Specification: Sapphire LedLite Range

Item:	Model: Sapphire LedLite	Sapphire LedLite 1/1	Sapphire LedLite Dali Dim	Sapphire LedLite-30W-DC2DC
Power Rating Input Voltage (V)	220V to 240V	220V to 240V	220V to 240V	220V to 240V
Total Watts Model Ref: 20W	20 Watts	20 Watts	20 Watts	20 Watts
Total Watts Model Ref: 30W	30 Watts	30 Watts	30 Watts	30 Watts
Driver detail 20W Primary Circuit Secondary Circuit DC2DC-0.5A	20 Watts 580mA	16 Watts 500mA	16 Watts 500mA 4 Watts 285mA	**16 Watts 500mA 4 Watts 285mA
Driver detail 30W Primary Circuit Secondary Circuit DC2DC-0.5A	30 Watts 850mA	26 Watts 860mA	26 Watts 860mA 4 Watts 285mA	**26 Watts 860mA 4 Watts 285mA
Power Factor	0.9	0.9	0.9	0.9
Lumens per Watt (W)				
Warm White	80 lm/W	80 lm/W	80 lm/W	80 lm/W
Natural White	85 lm/W	85 lm/W	85 lm/W	85 lm/W
Cool White	90 lm/W	90 lm/W	90 lm/W	90 lm/W
Total Lumen Output				
Model Ref: 20W				
Warm White	1600 lm/W	1600 lm/W	1600 lm/W	1600 lm/W
Natural White	1700 lm/W	1700 lm/W	1700 lm/W	1700 lm/W
Cool White	1800 lm/W	1800 lm/W	1800 lm/W	1800 lm/W
Model Ref: 30W				
Warm White	2400 lm/W	2400 lm/W	2400 lm/W	2400 lm/W
Natural White	2550 lm/W	2550 lm/W	2550 lm/W	2550 lm/W
Cool White	2700 lm/W	2700 lm/W	2700 lm/W	2700 lm/W
CRI	80	80	80	80
Beam Angle	100	100	100	100
Colour Temperature		3000K-6000K	3000K-6000K	3000K-6000K 3000K-6000K
Cut-out size – 190mm model	175mm Diam	175mm Diam	175mm Diam	175mm Diam
Overall size – 190mm model	190mm Diam x 110mm height	190mm Diam x 110mm height	190mm Diam x 110mm height	190mm Diam x 110mm height
Cut-out size – 230mm model	210mm Diam	210mm Diam	210mm Diam	210mm Diam
Overall size – 230mm model	230mm Diam x 110mm height	230mm Diam x 110mm height	230mm Diam x 110mm height	230mm Diam x 110mm height

**Note:** The Sapphire 190mm is the standard model. Where 230mm is required, this should be noted in the specification reference.

**DG006/195 (for 190mm bezel)** – DG006/235 (for 230mm bezel) - Circular Halo frosted Drop Glass with inner circle cut-out and supplied with Chrome Pillars

**DG003/195 (for 190mm bezel)** – DG003/235 (for 230mm bezel) - Circular Drop Glass with outer clear and centre frosted and supplied with Chrome Pillars

## Sapphire LedLite LP and Sapphire Surface Mount Range

The **Sapphire LedLite LP** is designed for applications where a Slimline fitment would be more suited and at just 28mm deep the Low Profile is suitable for shallow ceiling voids where flush mounting to a ceiling is preferred for a discreet lighting effect. Constructed within a shallow die cast aluminium housing and finished with a white trim bezel, the Sapphire LedLite Low Profile provides high output performance but with an innovative heat dissipation system. The driver is remote and connected to the luminaire by a fly-lead.

The **Sapphire LedLite SM** is designed for surface mounting where the effect of a Downlighter is required but the ceiling is solid or not suitable for recessing. The housing consists of two components, with the driver and LED array located on the ceiling mounting plate, which is then enclosed with the twist and lock cover, finished in white, with an integrated opal diffuser.

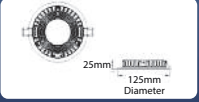
Sapphire LedLite LP



Sapphire LedLite SM



### Electrical Specification: Sapphire LedLite LP and Surface Mount Range

Model Reference	Wattage	CCT/Lumen	Beam Angle	Colour/ Type	LED Driver	Dimensions (mm)	Cut Out
Sapphire LedLite LP - 18W/230	18W	4000K 1660-lm/W±5%	90°	White - Recessed	Externally Mounted 350mA		200mm
Sapphire LedLite LP - 11W/160	11W	4000K 965-lm/W±5%	90°	White - Recessed	Externally Mounted 350mA		110mm
Sapphire LedLite SM - 18W/170	18W	4000K 1660-lm/W±5%	90°	White - Surface	Internally Mounted 350mA		NA



## Emergency Back-up

With the exception of the Astrid Luna, the range of Astrid and Sapphire Downlights are suitable for Emergency Battery Back-up, mounted in a remote box or Sock Pack and if required suffix the product code "EM3". In reference to the Astrid Luna, as this is driverless and powered directly with 220V to 240V, it is not suitable for battery back-up.



## Occupancy and Daylight Detection

Morgan Hope provides a range of occupancy and daylight control detectors and whilst the optimum product for use with the LedLite PCB Range is the MicroTect, Microwave, options are also available using the MicroDim, Dali Dim and MCD-PIR Detectors for dimming requirements. For details on the range contact our Helpline. Full information is available in the relevant Product Data Sheets.



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Always ensure the fitting is fully earthed. **Important:** Installation must only be carried out by a Qualified Electrician. Morgan Hope Ltd reserves the right to change specification details without notice.