

LED
EVOLUTION

revolution
through evolution

the architectural LED downlight that will **revolutionise** the lighting industry

ACDC 



REVOLUTION THROUGH EVOLUTION



LED EVOLUTION

Evolution is an LED based architectural recessed downlight designed and manufactured by ACDC for the professional lighting specifier. The product takes LEDs to the next level, finally providing a power output which competes with more conventional light sources, offering light outputs genuinely equivalent to 50 Watt MR16 lamps in warm white, and even 35 Watt metal halide in cold white.

Designed around revolutionary thermo dynamic technology, Evolution utilises liquid cooling to dissipate the heat away from the LED, and deliver outstanding product performance.

Evolution works with the ACDC LED Engine 50, which produces an amazing 900 lumens in warm white using around 20 Watts, and is incredibly energy efficient with an outstanding efficacy of 45 lumens per Watt, in line with Part L energy efficiency guidelines. The cold white performance is even more amazing, with 1440 lumens at 20 Watts, offering an amazing 75 lumens per Watt. LED lifetime is not impaired by the incredible light output, with an expected 70% lumen maintenance at 50,000 hours.

The basic model is available at 100mm diameter, with adjustable versions which feature fully lockable pan and tilt movements, allowing the designer complete control in focusing. A trimless version is also available for seamless incorporation into ceiling plaster ceilings, for an incredibly minimalist, low glare design.

Evolution features super efficient LED optics specially designed by ACDC, with narrow, medium, wide and extra wide beam options, harnessing over 90% of the light output to deliver a truly outstanding lighting performance. All of these optics can be interchanged on site with relative ease, along with the LED boards (and not the whole luminaire) should LED change be necessary.

Emergency versions are also available, whereby one of the compact LEDs onboard is illuminated during emergency operation, giving suitable emergency light powered by the compact emergency driver adjacent to the luminaire.



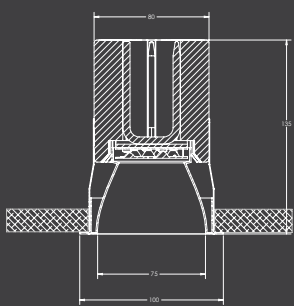
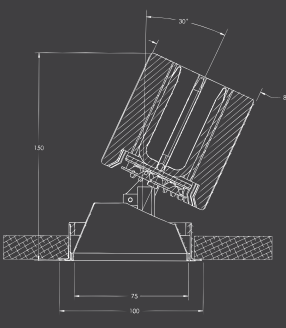
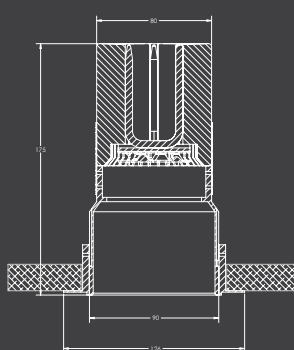
KEY PRODUCT FEATURES

- Outstanding Lighting performance with 960/1400 Lumens in Warm White/Neutral White
- Part L compliant at 45 lumens per Watt minimum
- Interchangeable 12, 24 36, 48 degree optics
- Long life at 50,000 hours to 70% lumen maintenance
- Operating to ambient temperatures up to 40°C
- Fully dimmable
- Emergency options available



These images are not actual LED projects but show potential areas for application of LED Evolution. Images courtesy of Lucent Lighting.

Technical Specification

Name	EVO 100	EVO 100 ADJ	EVO 90 TL
Description	Fixed position LED downlight	Adjustable LED downlight	Trimless LED downlight
Features	<ul style="list-style-type: none"> Minimal white ceiling trim Low glare 40° visual cutoff Designed to accept a range of media accessories Reflectors available in other finishes to order: White, Black, semi-specular & champagne gold IP44 version available Optic options narrow, medium, wide and extra wide <p>Compatible with ACDC LED Engine 50</p>	<ul style="list-style-type: none"> Minimal white ceiling trim Low glare 40° visual cutoff Hot aim & lock Locking tilt to 35° with locking 360° rotation Reflector with retaining spring to ensure correct installation Reflectors available in other finishes to order: White, Black, semi-specular & champagne gold IP44 version available Optic options narrow, medium, wide and extra wide <p>Compatible with ACDC LED Engine 50</p>	<ul style="list-style-type: none"> For plaster ceilings Minimal white ceiling trim Low glare 40° visual cutoff Designed to accept a range of media accessories Reflectors available in other finishes to order: White, Black, semi-specular & champagne gold IP44 version available Optic options narrow, medium, wide and extra wide <p>Compatible with ACDC LED Engine 50</p>
CAD	Overall diameter: 100mm Ceiling cutout: 90mm Maximum height: 155mm 	Overall diameter: 100mm Ceiling cutout: 90mm Maximum height: 155mm 	Overall diameter: 100mm Ceiling cutout: 90mm Maximum height: 180mm 

ACDC LED ENGINE 50 – LIGHTING PERFORMANCE DATA

Light source	Optimum Performance Rebel LED		
LED Quantity	9	9	9
Output	Warm White	Neutral White	Cold White
700mA – 2 Watt	960 Lumens	1200 Lumens	1440 Lumens
350mA – 1 Watt	600 Lumens	630 Lumens	810 Lumens
Efficacy – 700mA – 2 Watt	45 Lumens per Watt	60 Lumens per Watt	70 Lumens per Watt
Efficacy – 350mA – 1 Watt	60 Lumens per Watt	63 Lumens per Watt	81 Lumens per Watt
Colour rendering	85 CRI	80 CRI	75 CRI
Lifetime	50,000 hours to 70% lumen maintenance		

ELECTRICAL DATA

Driver type	ACDC 1928	ACDC 1920
Input current	700mA	350mA
Input power	20 Watts	10 Watts
Driver type	230 Volt driver with luminaire	
Connection type	Terminal block on driver	
Dimmable options – 1-10 Volt	ACDC 1929	ACDC 1914