

LED Technical Data 2011



ACDC work closely with the world's leading LED chip manufacturers enabling us to deliver the world's most innovative and efficient lighting products. The XP LED is the smallest and most efficient LED at 81 lumens per Watt, although this is now being closely matched by the Cree XP-E LED. These LEDs use a new TFFC technology,

which offers significantly improved light output and efficiency, with the cool white LED delivering 100 lumens at 1.2 Watts. The LEDs can also be operated at higher currents, with 700mA producing 180 lumens, whilst still maintaining 50,000 hour lifetime, most importantly to 70% lumen maintenance.

Name	Rebel / XP-E				3 Watt		High Flux LE	
	Cold White 350mA	Warm White 350mA	Cold White 700mA	Warm White 700mA	Cold White	Warm White	Cold White	Warm White
Key LED Data								
Current	350mA		700mA		700mA		25mA	
Lumen Output	107 Lumens	80 Lumens	190 Lumens	140 Lumens	125 Lumens	100 Lumens	2 Lumens per LED	1.5 Lumens per LED
Efficacy	97 Lumens/Watt	72 Lumens/Watt	83 Lumens/Watt	60 Lumens/Watt	46 Lumens/Watt	37 Lumens/Watt	N/A	
CRI	70	90	70	90	75	90	N/A	
Lifetime	50,000 HOURS TO 70% LUMEN MAINTENANCE						50,000 HOURS TO 50% LUMEN MAINTENANCE	
Other LED Data								
LED Power	1.1 Watts		2.3 Watts		2.7 Watts		0.1 Watts	
Colour Options	R/G/B/A/27/30/42/54				R/G/B/A/WW/W		R/G/B/A/WW/W	
Dual Binned	YES				YES		YES	
Manufacturer	LUMILEDS/CREE				LUMILEDS/CREE		NICHIA	

DUAL BINNING - Guaranteed colour consistency
ACDC continue to deploy a dual binning process to overcome the inconsistencies in the colour of LEDs received from LED manufacturers. Specially designed spectrometers are used to check the exact colour make up, ensuring an accurate colour is delivered on every project.

Finally LEDs are starting to deliver their promises, with much improved lighting performance and outstanding efficiencies, well within Part L energy efficiency stipulations.

LED technology is a rapidly developing technology and this datasheet shows the lighting performance of the LEDs selected for use in ACDC products. These sheets are designed to be read in conjunction with the LED Product Portfolios and website, and will be updated on a regular basis, as performance improves and new technologies are developed.

ACDC were one of the first lighting manufacturers to work with Lumileds Lighting and are a Lumileds certified manufacturer, guaranteeing the highest quality of product and support.