

CR90-RGBW

Premium Quality 12W RGBW LED Downlight
Utilising a UK Manufactured Light Engine
fitted with CREE LEDs



CE

Introduction

The long-established NS80 has been recently updated and upgraded by the fitting of a brand-new UK-manufactured light engine fitted with CREE LEDs, along with a larger heatsink. In addition, the CR90 is offered as RGBW as standard, ie a dedicated high power white LED built into the red/green/blue array.

The CR90RGBW downlight is designed for areas that require bright, functional light for cleaning or food preparation but also require a softer, colour-programmable light for entertaining purposes. The CR90 is also ideal for sensory rooms.

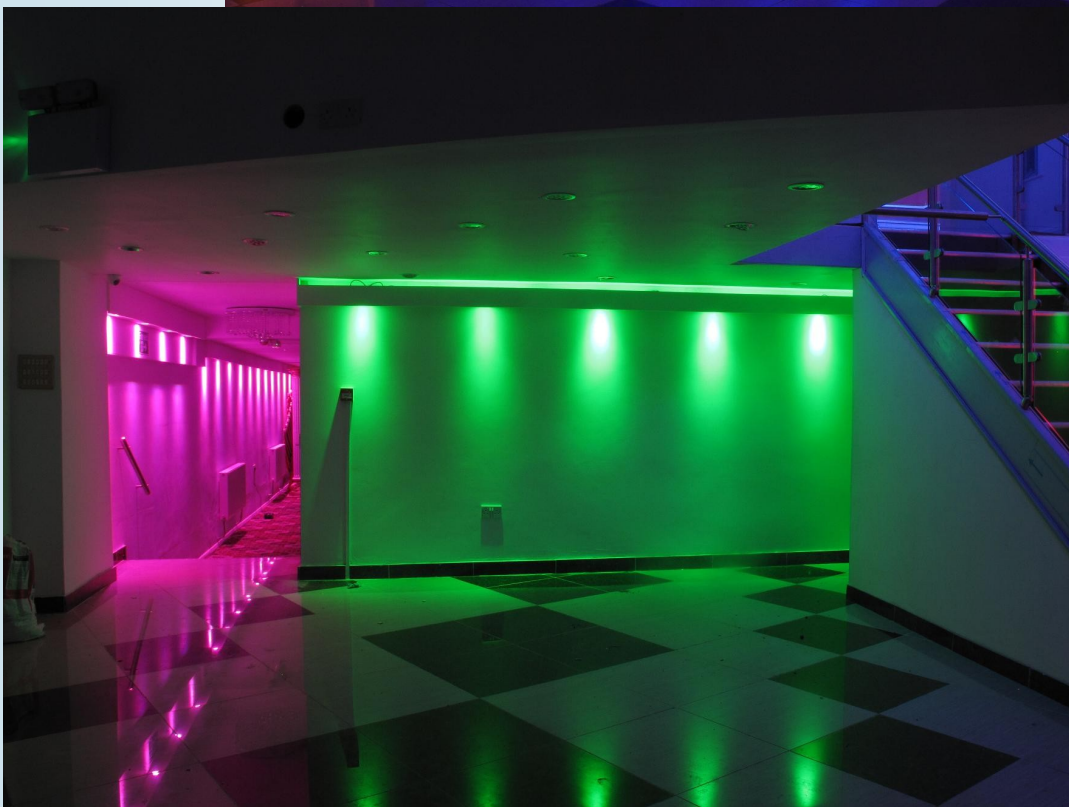
The CR90 comprises a high efficiency 5W 6000K white LED that is capable of 360 lumens of pure, functional white lighting without the colour-fringing that is normally associated with white light derived from RGB. There is also a 9W RGB array for generating vivid coloured light.

To avoid overdriving there is a built-in protection circuit that ensures that the fitting can never exceed a safe limit, even when all four channels are driven at 100%.

The CR90 is offered with convenient 12v operation, making it compatible with a wide range of LED drivers and controllers and is covered by a five year warranty. For plug and play operation a DIN plug is available as an option. The light is finished in silver with white as an option.

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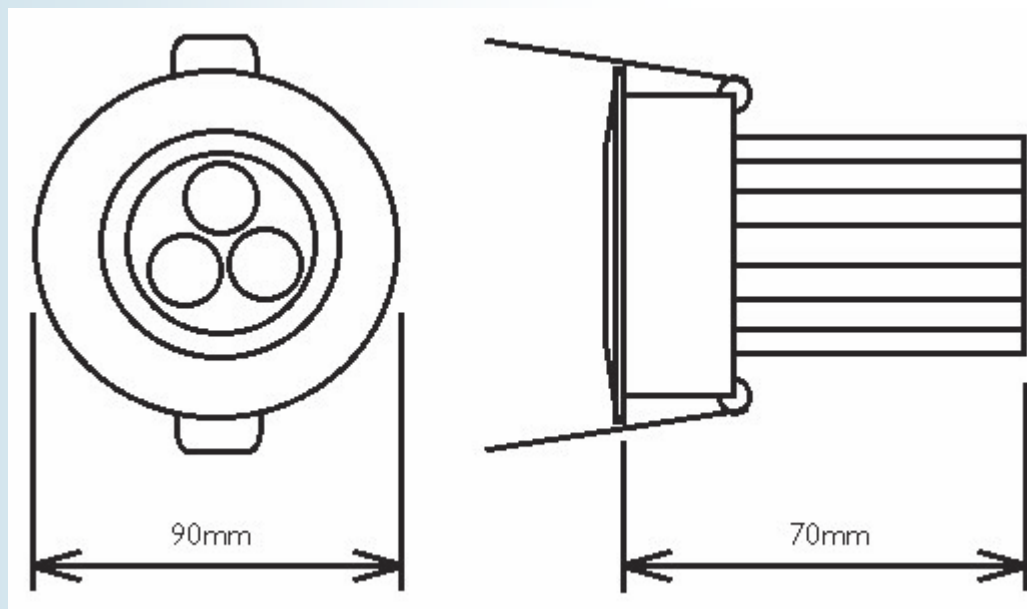
Product Images



Absolute Maximum Ratings

Input voltage	12v DC
Wattage: White die	6.6W
Wattage: Red die	4.2W
Wattage: Green die	4.2W
Wattage: Blue die	4.2W
Operating Temperature	0-35C

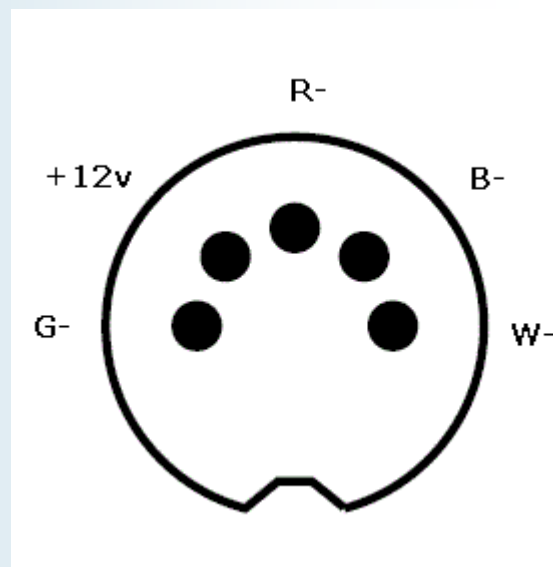
Outline Drawing



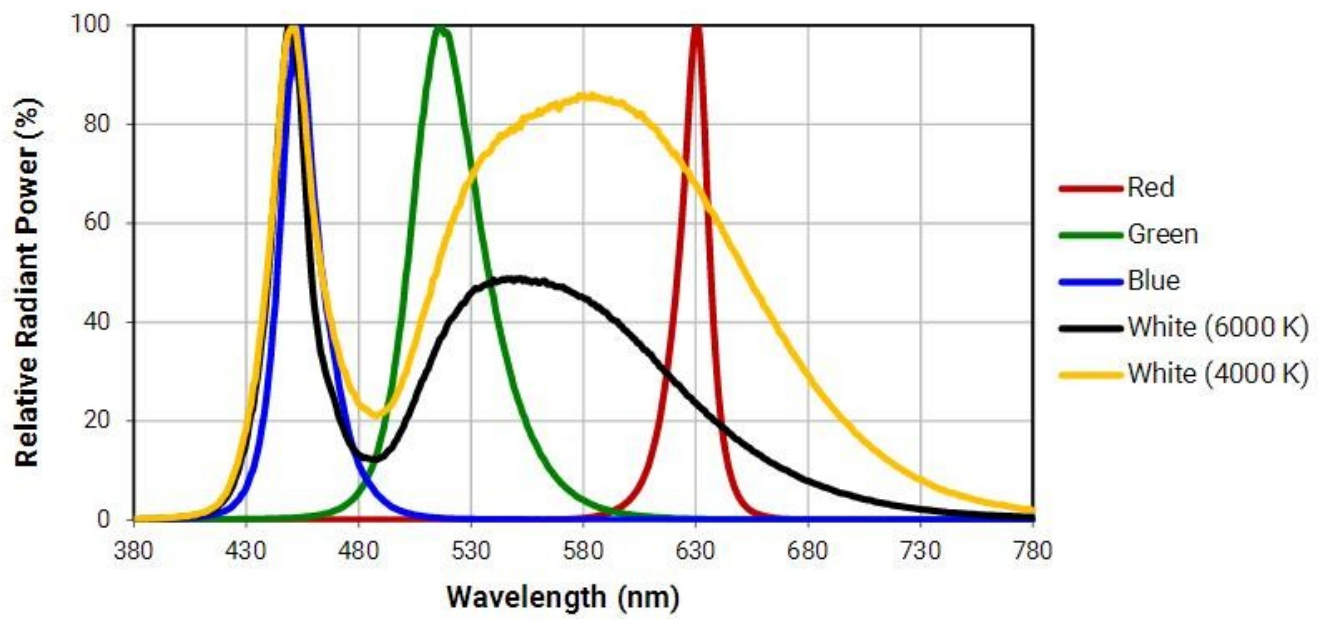
Connection Details

Cable Colour	Connect To
Red	Red-
Green	Green-
Blue	Blue-
White	White-
Black	12v

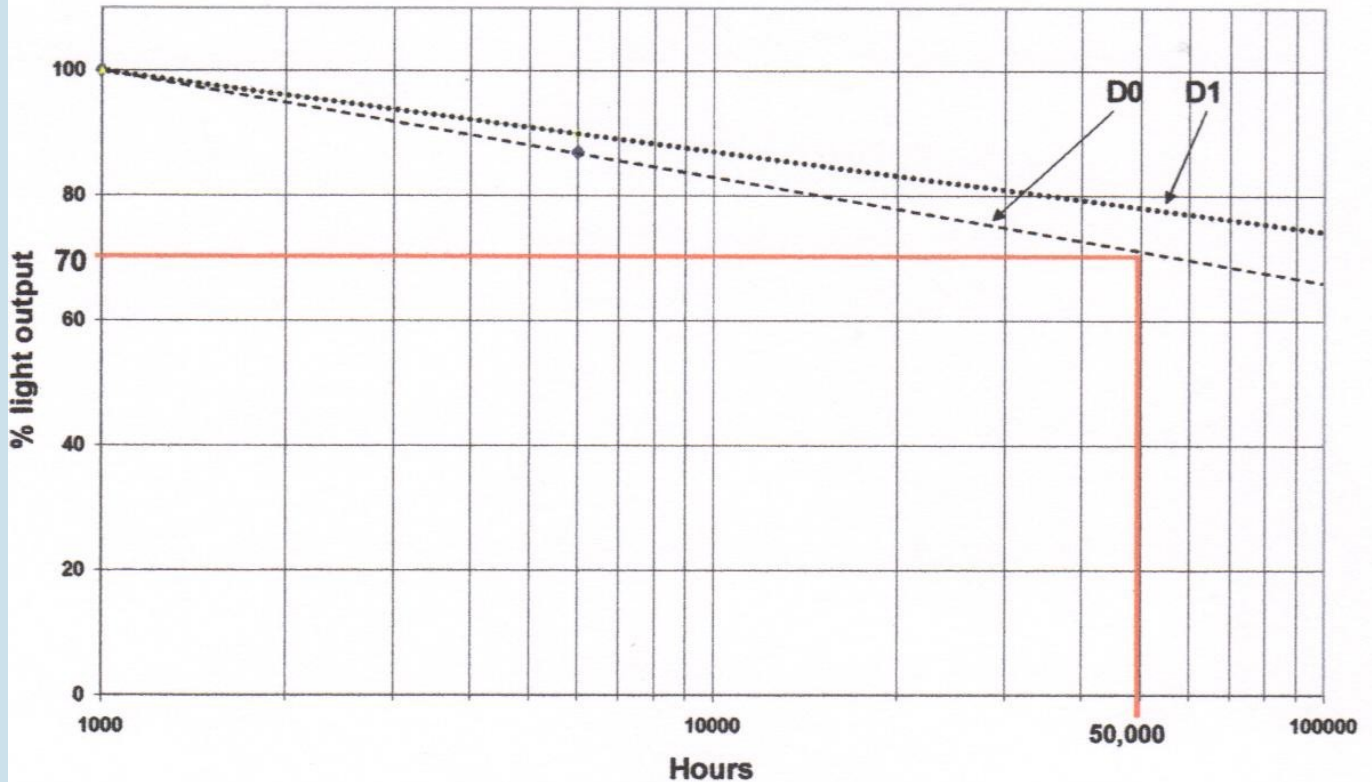
DIN Connector Details



Spectral Density



Lumen Maintenance Graphs



Lumen maintenance for CR90RGBW Per LRC LED Life Test Vol1

Conventional light sources and LEDs both experience lumen depreciation over time, even when operated within specified conditions. Therefore, when considering the useful life of very long life products lumen depreciation must be taken into account.

Lumen maintenance is dependant upon many factors but junction temperature is a major factor. The LEDs used in the CR90 are soldered to an aluminium PCB for maximum heat transfer.

Part Number Variants

The CR90 RGBW is available in cool white and warm white versions. Furthermore, it is available with cable tails or, for ease of installation, a DIN Connector.

The part numbers are as follows:

CR90-RGBW 6000K White LED

CR90-RGBWW 4000K White LED

Apply suffix -DIN to specify a DIN Connector



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Warranty

LED Lighting Products Ltd warrants that the product it manufactures and sells will be free from defects in materials and workmanship for a period of 5 years from the date of despatch. If the device proves defective within the respective period, LED Lighting will repair or replace the defective hardware at its sole discretion. If the failure is due to an operator error the user accepts to pay for any charge relating to the diagnosis of the hardware, faulty parts or shipping from our factory.

LED Lighting Products Ltd makes no warranty of any kind, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose. In no event shall LED Lighting Products Ltd be liable for indirect, special or consequential damages.

Opening the unit voids the warranty as described above.

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