

AT9012 TRI

11W LED Downlight Tri-Colour Supplied With

Dimmable Driver

- Ideal for residential, retail, showroom and decorative lighting applications
- Supplied with a dimmable LED driver
- Long life and durability
- Suitable for 24 hour use
- Easy to install



ORDERING INFORMATION

Order code	11060
Description	11W LED Downlight with Dimmable Driver - 90 degree beam - Black - TRI - SER II
Driver Power	12 W
Driver Type	Dimmable (Phase cut)
Item Code	AT9012/BLK/TRI

EFFICIENCIES

Total System Efficiency 114 lm/W

The performance of each component of a luminaire is demonstrated through its efficiencies, which together determine the total system efficiency of the product. The output of the LED chip is first multiplied by the optical and thermal efficiencies to calculate the Luminaire efficiency. However, this calculation does not consider the driver efficiency. To determine the overall efficiency of the system, the Luminaire efficiency must be multiplied by the driver efficiency, which accounts for all losses in the system.

MECHANICAL

Adjustability	Fixed
Body Material	Aluminium
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	Black
IC Rating	IC-4

IC-4 rating has been conducted at the products maximum working Temperature Range (C) in line with Australian standards. This provides the required safety when covered with insulation and used in Australian Environments.

Installation Type	Recessed
IP Rating	IP44 Front Face Only

ELECTRICAL

Electrical Rating	Class II
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	
Maximum Wattage	11 W
Power Factor	0.9
Switch Type	Inline
Working Temp Range	0 to 40 °C

LAMP

Macadam Steps (SDCM)	4-step MacAdam Ellipse
Beam Angle	90 °
CCT Configuration	TRI-CCT
Colour Rendering Index (CRI)	>80
Lamp/LED Current	350 mA
LED Type	Diffused
Number of Lamps	1

LED LIFETIME

LED Lifetime >60000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Atom does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C) 25 °C 40 °C

L90B10 35000 hrs 35000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours 10000 hrs

COLOUR TEMPERATURE

Warm White (3000 K) 1150 lm
Cool White (4000 K) 1250 lm
DayLight (6000 K) 1200 lm

DRIVER

Dimmable Yes

Driver Code 10974

Driver Included Yes

Integrated Driver No

Driver Type Dimmable (Phase cut)

Driver Warranty 3 Yr

Flex & Plug or Lead Length 120 mm

Wiring Type Re-wireable Flex & Plug (2 pin)

ENERGY SAVINGS SCHEME

Ipart Approval Yes

REES Approval Yes

VEU Approval Yes

COMPLIANCE

Standards AS/NZS 60598.1
AS/NZS 60598.2.2
AS/NZS 61347.1
AS/NZS 61347.2.13
AS CISPR 15

WARRANTY

Domestic Use Warranty 3 RTB (Total 3 Years)

Operational Lifetime 50000 hrs

VIP Warranty 2 Onsite, 3 RTB (Total 5 Years)

VIP warranty is available to registered users and is subjected to additional terms and conditions.

DIMENSIONS

Cutout 92 mm

Product Diameter 110 mm

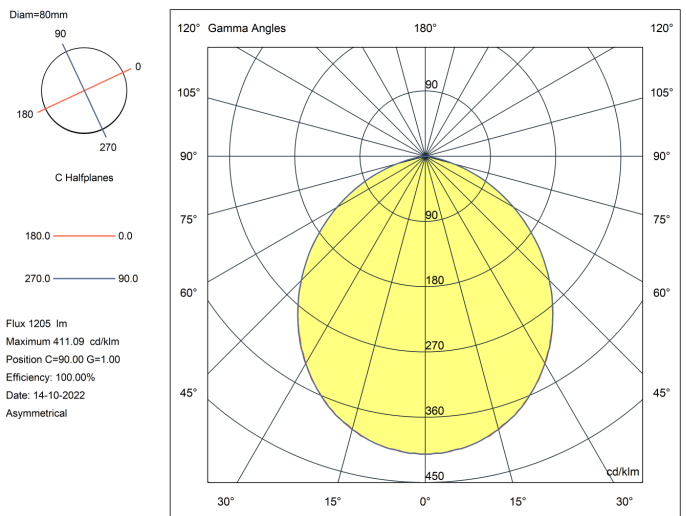
Product Height 38 mm

LINE DRAWINGS

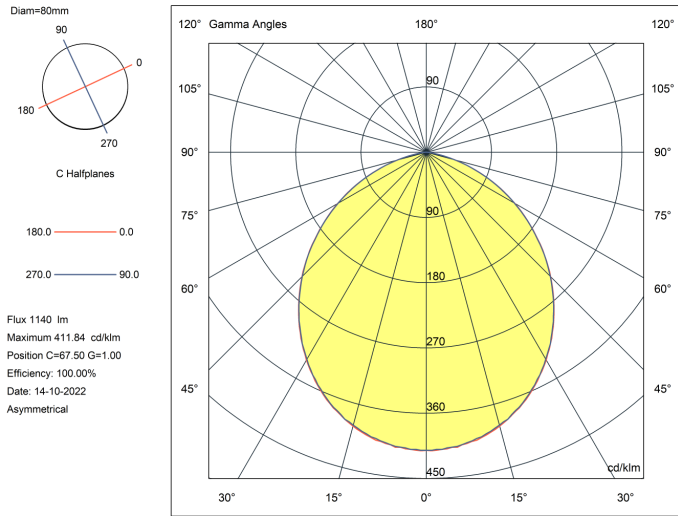
AT9012/TRI

PHOTOMETRICS

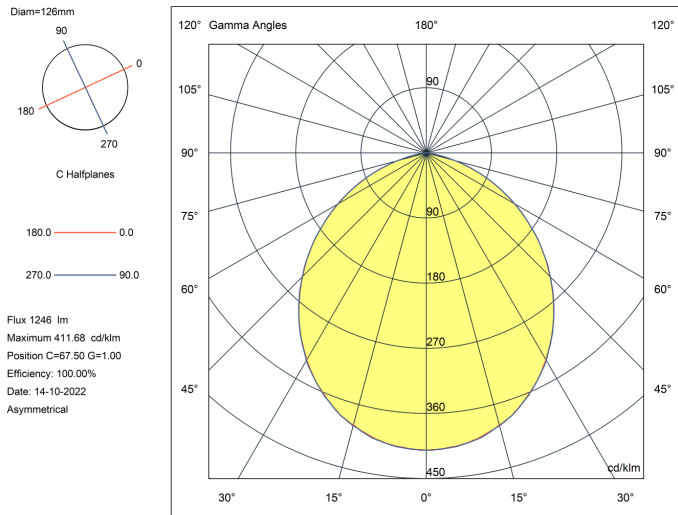
AT9012/TRI (6000K)



AT9012/TRI (3000K)



AT9012/TRI (4000K)



ACCESSORIES

Order code	10117
Description	140mm Downlight Extension Plate - Black
Item Code	AT9018/BLK