

UMBRA ADVANCED DIFFUSED

Advanced Diffused Batten, Dual Power, Tri-CCT

- Tri-colour selection
- Long life electronics
- LED lifetime >60,000 hours
- 8 years design life at max. ambient
- Increased ambient temperature of 40 degrees
- Increased lumen efficiency
- Exclusive 5 year warranty
- Emergency models fully compliant (AS/NZS 2293.3)
- High quality lithium battery (LiFePO4) and smart charger included with emergency models



ORDERING INFORMATION

Order code	12183
Description	UMBRA ADVANCED 600mm Diffused LED Em batten - Tri-CCT w sensor
Driver Type	Fixed output
Item Code	EV-UMBRA-ADV-DIFF-600-EM-S-TRI

EFFICIENCIES

Total System Efficiency 107 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

Body Material	Powder Coated Steel
Diffuser Material	PMMA
Fitting Colour	White
Installation Type	Surface mount
IP Rating	IP20

ELECTRICAL

Electrical Rating	Class I
Input Current	0.1 A
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	24 W
Power Factor	0.9
Standby Power	1 W

Standby power for non-maintained/switched maintained emergency devices is measured when the light is off and the charger is in standby mode. For maintained emergency devices, standby power is measured when the light is on and the charger is in standby mode. Typically, charging occurs for the first 16 hours after the device is powered or after a battery discharge.

Switch Type	Inline
Working Temp Range	0 to 40 °C

LAMP

Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	TRI-CCT
Colour Rendering Index (CRI)	>80
Lamp/LED Current	480 mA
Lamp/LED voltage	36 V



LED LIFETIME

LED Lifetime >60000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor 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

L70B10 >60000 hrs >60000 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

12 Watts

4000 K 1200 lm

5000 K 1250 lm

6500 K 1200 lm

22 Watts

4000 K 2250 lm

5000 K 2350 lm

6500 K 2200 lm

DRIVER

Dimmable No

Driver Included Yes

Integrated Driver No

Driver Mode Constant Current

Driver Type Fixed output

Wiring Type Re-wireable terminal block (4 pin)

PSTLM 0.09

Short Term Light Modulation (PstLM): The requirement is that PstLM should be less than or equal to 1.0. This metric measures the short-term flicker severity and ensures that flicker is not perceptible or is at a level that does not cause discomfort or health issues.

SVM 0.012

Stroboscopic Visibility Measure (SVM): The requirement for SVM is that it should be less than or equal to 0.4. The SVM metric assesses the visibility of the stroboscopic effect, which can make moving objects appear to be stationary or moving in discrete steps, thus ensuring that this effect is minimized in lighting environments to prevent visual discomfort and safety hazards.

SENSOR (S SUFFIX)

Adjustable Detection Area / Sensitivity Yes

Adjustable Hold Time Yes

Adjustable Standby Level Yes

Adjustable Standby Period Yes

Corridor Function Yes

Detection Range 10 m

Dusk Mode Yes

Lux Adjustment Yes

Sensor Type Microwave

Switched Output No

Time Delay 5s-14mins

EMERGENCY (EM SUFFIX)

Replacement Battery Code 01302

Emergency Classification C0:D63, C90:D32

Emergency Duration 90 mins

Emergency Lumen Output 400 lm

Emergency Mode Maintained

Emergency Output Power 3400 mW

ENERGY SAVINGS SCHEME

Ipert Approval Yes

REES Approval Yes

VEU Approval Yes

COMPLIANCE

Product Design Life 8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

Daily Use 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards AS/NZS 60598.1
AS 60598.2.22
AS/NZS 61347.1
AS/NZS 61347.2.13
AS CISPR 15
AS/NZS 2293.3
AS/NZS 4268



WARRANTY

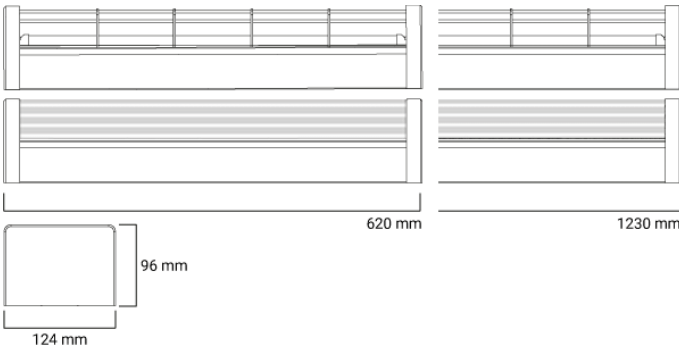
Commercial Use Warranty	5Y return to base on General lighting components 6Y return to base on Emergency lighting components First 2Y includes an exclusive onsite warranty
VIP Warranty	2 Onsite, 3 RTB (Total 5 Years)
VIP warranty is available to registered users and is subjected to additional terms and conditions.	
Warranty Operating Hours	25000 hrs
This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).	

DIMENSIONS

Product Height	93 mm
Product Length	620 mm
Product Width	130 mm

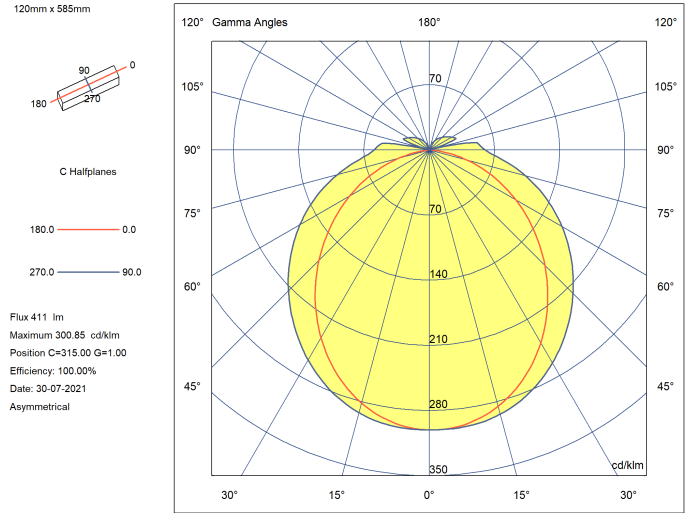
LINE DRAWINGS

EV/UMBRA/ADV/DIFF

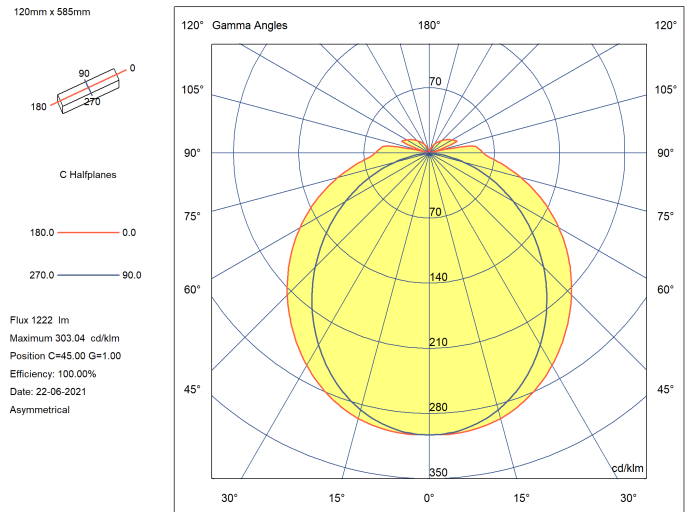


PHOTOMETRICS

EV/UMBRA/ADV/DIFF/600/EM (EM)



EV/UMBRA/ADV/DIFF/600 (Half Power / 4000K)



EV/UMBRA/ADV/DIFF/600 (Full Power / 6500K)

