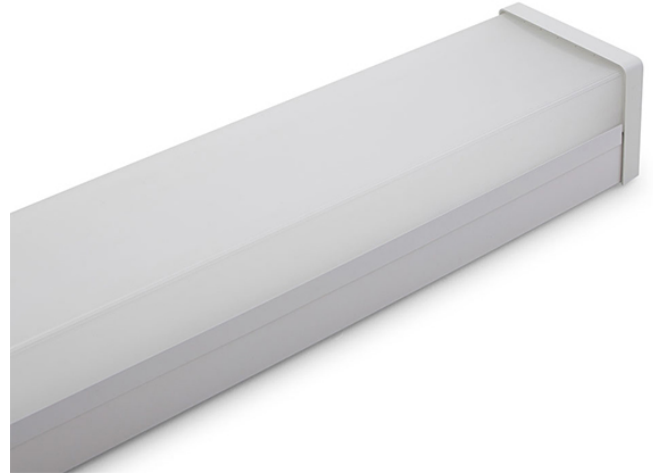


UMBRA PROFESSIONAL DIFFUSED

Professional Diffused Batten, DALI

- Smartest and most feature inclusive batten on the market. Provides long life and unrivaled control.
- Flicker-free dimming throughout the dimming range which allows light level adjustment to gain maximum power savings.
- LED lifetime >102,000 hours (L70), >102,000 hours (L80) and 55,000 hours (L90).
- 12 years design life at max. ambient
- DALI (IEC62386)
- Full support for DALI and DALI-2 (IEC 62386) DT6 (LED).
- Emergency models fully compliant (AS/NZS 2293.3) and supports DALI DT1 (EM).
- Soft-start battery charger to reduce building load, allowing the building to stabilize before adding additional load.
- High quality lithium battery (LiFePO4) and smart charger to ensure long battery service life.
- Power monitoring (DT51) allows control systems to monitor and report active power and total power consumption.
- Built-in DALI-2 switch can be used for standalone control or unlimited control with DALI-2 compliant control systems.



ORDERING INFORMATION

Order code	12238
Description	UMBRA PRO 1200mm Diffused LED Emergency batten
Driver Type	DALI DT6 LED Driver
DALI DT6 ~ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-UMBRA-PRO-DIFF-1200-EM

EFFICIENCIES

Total System Efficiency	142 lm/W
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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

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

ELECTRICAL

Working Temp Range	0 to 40 °C
Input Frequency	50 Hz
Switch Type	Inbuilt Mains Rated DALI Switch
A Terminal input has been provided to allow the wiring of a Main rated switch input. This input can be programmed to switch any controlled area when using a DALI-2 compliant control system. This input supports IEC62386-301 (momentary or rocker switches), IEC62386-302 (on /off switches) and IEC62386-303 (mains rated sensor inputs).	
Power Factor	0.95
Maximum Wattage	33 W
System Max Wattage	34 W
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%



Standby Power 0.3 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.

LAMP

Colour Rendering Index (CRI)	>84
CCT Configuration	Single
Macadam Steps (SDCM)	3-step MacAdam Ellipse
Lamp/LED voltage	36 V
Lamp/LED Current	850 mA

LED LIFETIME

LED Lifetime >102000 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
L90B10	55000 hrs	55000 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 17000 hrs

COLOUR TEMPERATURE

Luminaire Lumens 4800 lm

All photometric data has a tolerance of ±10%. Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

CCT 4000 K

DRIVER

Driver Type DALI DT6 LED Driver

DALI DT6 ~ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Driver Included Yes

Integrated Driver No

Dimmable Yes

Wiring Type Re-wireable terminal block (6 pin)

Driver Mode Constant Current

Power Monitoring DALI Device type 51 power monitoring

Inbuilt DALI-2 support for Device type 51 - Power monitoring for use with DALI-2 compliant control systems which allows the reporting of the products total power consumption for power aggregation and measurements.

Driver Current 850 mA

PSTLM 0.08

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 0.018

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.

EMERGENCY (EM SUFFIX)

Emergency Mode Maintained

Emergency Classification C0:D40, C90:D25

Emergency Output Power 1900 mW

Replacement Battery Code 01302

Emergency Duration 90 mins

Emergency Lumen Output 350 lm

Emergency Control DALI Monitored (DT1)

DALI Monitored ~ Supports Emergency test and monitoring over DALI (IEC62386) with full compliance to IEC62386-202.

COMPLIANCE

Product Design Life 12 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.

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 IEC 62386-102 IEC 62386-103
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