UMBRA CORE IP65

Core IP65 Weatherproof Batten, Dual Power, Tri-CCT

- Tri-colour selection
- Selectable output power
- Increased ambient temperature of 40 degrees
- IP65 weatherproof rating and IK08 impact rating
- High efficiency design >130lm/W
- Excellent LED lifetime for energy efficient lighting designs

ORDERING INFORMATION

Order code	14502
Description	UMBRA CORE 50W 1500mm LED Emergency Batten - Tri CCT
Driver Power	50 W
Driver Type	Fixed output
Item Code	EV-UMBRA-CORE-IP65-1500-EM-TRI

EFFICIENCIES

Total System Efficiency	132 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	Polycarbonate
Diffuser Material	Polycarbonate
Fitting Colour	Grey
IK Rating	IK08
Installation Type	Surface mount
IP Rating	IP65

ELECTRICAL

Electrical Rating	Class I
Input Current	0.23 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%

Power Factor	0.95
Switch Type	Inline
Working Temp Range	-20 to 40 °C

LAMP

Macadam Steps (SDCM)	6-step MacAdam Ellipse
CCT Configuration	TRI-CCT
Colour Rendering Index (CRI)	>80

LED LIFETIME

LED Lifetime	>72000 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
L80B10	>72000 hrs	>72000 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	12000 hrs

COLOUR TEMPERATURE

50 Watts	
4000 K	6100 lm
5000 K	6600 lm
6500 K	6150 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	0.1

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	0.4

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)

Replacement Battery Code	18096
Emergency Classification	C0:D40, C90:D20
Emergency Duration	90 mins
Emergency Lumen Output	250 lm
Emergency Mode	Combined
Emergency Output Power	2000 mW

ENERGY SAVINGS SCHEME

Ipart Approval	Yes
REES Approval	Yes
VEU Approval	Yes

COMPLIANCE

Product Design Life	6 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/NZS 60598.2.22 AS/NZS 61347.1 AS/NZS 61347.2.13 AS CISPR 15 AS/NZS 2293.3

WARRANTY

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

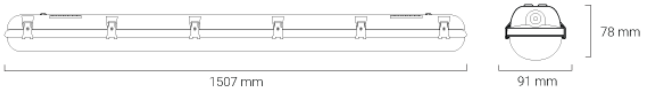
VIP warranty is available to registered users and is subjected to additional terms and conditions.

DIMENSIONS

Product Height	78 mm
Product Length	1507 mm
Product Width	91 mm

LINE DRAWINGS

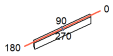
EV/UMBRA/CORE/IP65/1500



PHOTOMETRICS

EV/UMBRA/CORE/IP65/1500 (Full Power / 5000K)

75mm x 1490mm

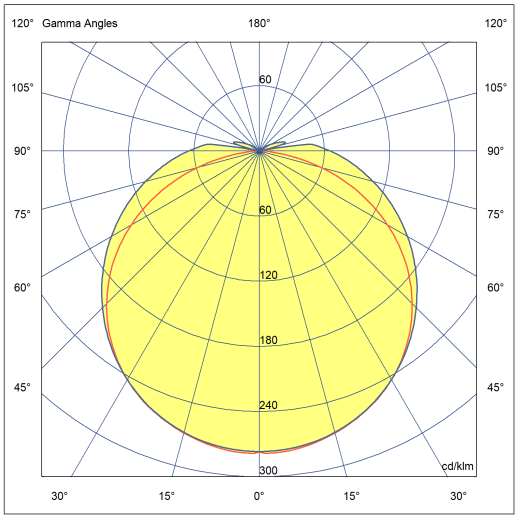


C Halfplanes

180.0 0.0

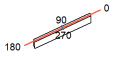
270.0 90.0

Flux 6667 lm
Maximum 278.65 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500 (Half Power / 6500K)

75mm x 1490mm

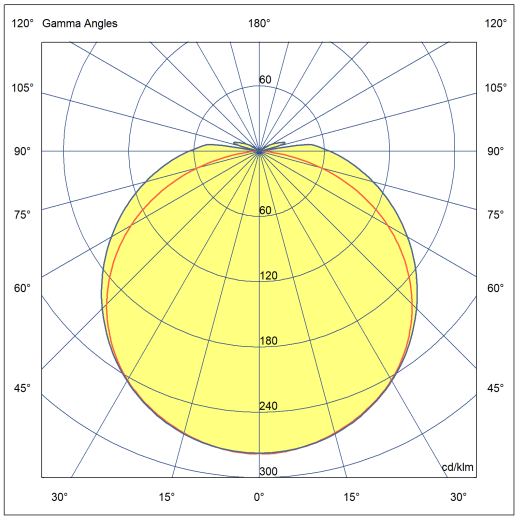


C Halfplanes

180.0 0.0

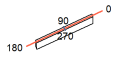
270.0 90.0

Flux 3872 lm
Maximum 278.22 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500 (Full Power / 6500K)

75mm x 1490mm

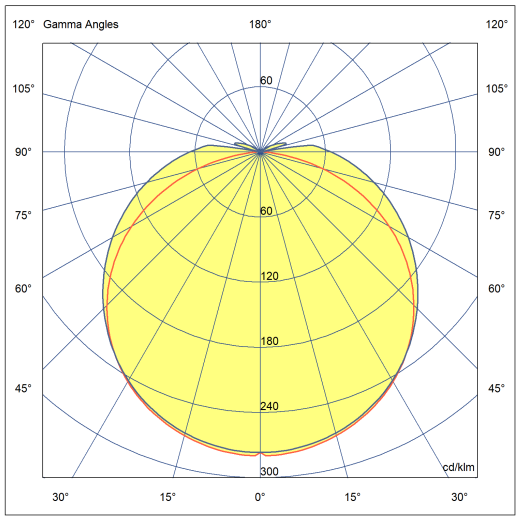


C Halfplanes

180.0 0.0

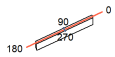
270.0 90.0

Flux 6128 lm
Maximum 279.83 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500 (Full Power / 4000K)

75mm x 1490mm

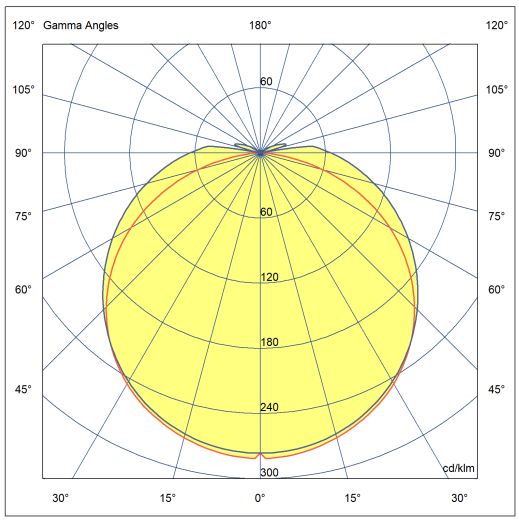


C Halfplanes

180.0 0.0

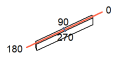
270.0 90.0

Flux 6227 lm
Maximum 281.26 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500 (Half Power / 5000K)

75mm x 1490mm

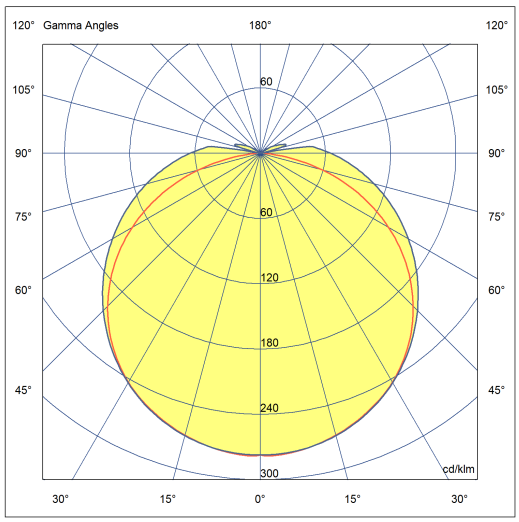


C Halfplanes

180.0 0.0

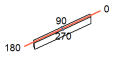
270.0 90.0

Flux 4076 lm
Maximum 278.38 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500 (Half Power / 4000K)

75mm x 1490mm

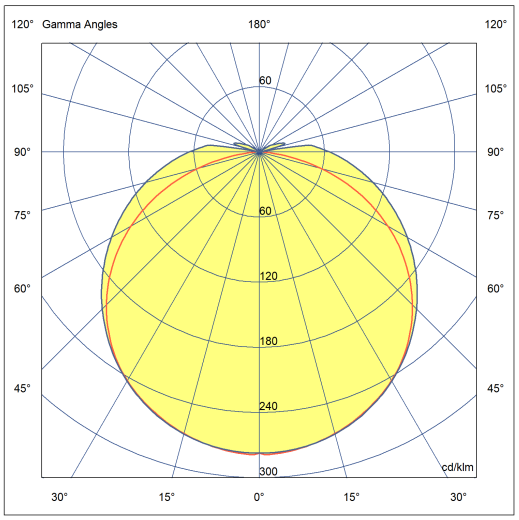


C Halfplanes

180.0 — 0.0

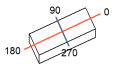
270.0 — 90.0

Flux 3894 lm
Maximum 278.77 cd/klm
Position C=0.00 G=1.00
Efficiency: 100.00%
Date: 11-01-2023
Asymmetrical



EV/UMBRA/CORE/IP65/1500/EM (EM)

75mm x 200mm



C Halfplanes

180.0 — 0.0

270.0 — 90.0

Flux 280 lm
Maximum 299.28 cd/klm
Position C=180.00 G=1.00
Efficiency: 100.00%
Date: 30-11-2022
Asymmetrical