

# Concava

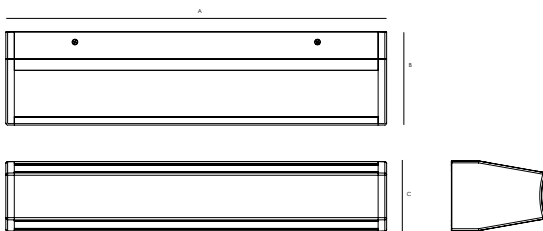


## Key Family Details

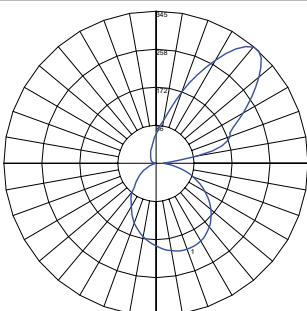
Optical System:	Combination of Clear acrylic cover and Opalescent optical layer
Mounting Type:	Surface (Wall) Mounted
Colour Consistency Initial:	3 SDCM
Finish Options:	Antimicrobial Gloss White
System Warranty:	5 years
CCT:	Direct: 3000K, 3500K, 4000K Indirect: 3000K, 3500K, 4000K
CRI (Ra):	90+
R9:	60+
COI Compliant:	Models without a 3000K component are compliant

## Mechanical Drawing

Physical Parameters	Luminaire Dimensions			Aperture Size		Cutout Size		Weight
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	A <sub>cut</sub> [mm]	B <sub>cut</sub> [mm]	
Code								[kg]
EL-CON-1100-244	628	154	115					5.0
EL-CON-1101-244	628	154	115					5.0
EL-CON-1102-244	628	154 <td 115					5.0	
EL-CON-1103-244	628	154	115					5.2
EL-CON-1500-244	908	154	115					7.0
EL-CON-1501-244	908	154	115					7.0
EL-CON-1502-244	908	154	115					7.0
EL-CON-1503-244	908	154	115					7.2



## Polar Curve 900x150 940



Maximum Candela = 345cd/klm  
Located At Horizontal Angle = 0, Vertical Angle = 137.5

## Application:

Concava is an aesthetically pleasing surface mounted overbed light, designed for hospitals, aged care and nursing homes.

Designed, tested and manufactured in Australia, Concava is engineered and purpose built to meet the requirements for healthcare applications, offering performance characteristics to match the demands of a modern healthcare facility at a competitive price point.

## Design:

Premium in style, shape and construction and available in 600mm and 900mm lengths, Concava is constructed from single piece extruded aluminium and coated with an antimicrobial powder coat finish. An internal reflector system and light-guiding optical layer, coupled with clear acrylic outer diffusers, offer premium lighting control while allowing for easy wipe down/bacteria control.

Concava provides 3 lighting modes: Upward ambient light, downward direct (reading) light and combined upward and downward lights set at 100% for examination lighting (\*).

An additional selection for Concava is an optional Amber LED night light provided to optimise patient sleep and recovery.

## Optics:

Concava provides upward asymmetric light distribution for ambient light effect, over bed downward direct light for reading and other tasks and combined upward and downward light for examination lighting (\*) (all at 100%). The upward forward throw asymmetric light distribution is combined with bi-symmetric downward light distribution to deliver outstanding optical performance. Recessed LED modules behind precision diffusion sleeves provide visual comfort. Lighting levels can be individually adjusted, combined and controlled via a DALI interface. The available lumen packages also vary between the 600mm and 900mm housing length.

## Controls:

DALI with CLO (Constant Light Output) enabled as standard. Other options may be possible via customisation. Direct, indirect and the optional Amber night light components each has its own DALI driver, allowing each component to be independently controlled via the DALI interface. (Single common 5-core flex per fitting. Each driver is then addressed individually via the master configurator.)

## Circadian Lighting:

The optional Amber component is no ordinary night light!

The spectrum of the PC (phosphor-converted) Amber LED is wide enough to provide basic object recognition at night but at the same time it lies far away from the melanopic action spectrum region (480-490nm), ensuring that the light does not cause melatonin suppression, thereby minimising the risk of various negative side effects caused by circadian phase misalignment.

## Installation:

Installation and maintenance of Concava is simple and easy to perform. Concava is provided with a separate steel wall mounted back plate to facilitate the quick-connect electrical connection and support the one-piece aluminium luminaire housing. The luminaire body is securely supported by longitudinal upper and lower hook rails and fastened from above by two locking screws.

\*For examination light levels supplementary ceiling lighting maybe required depending on ward or room layout.

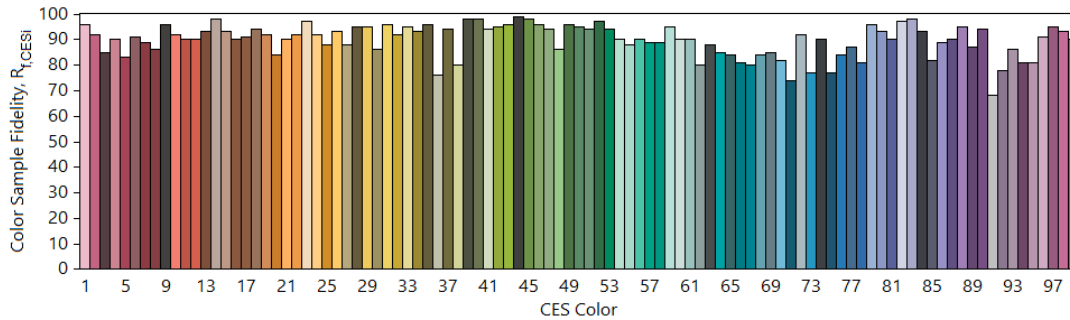
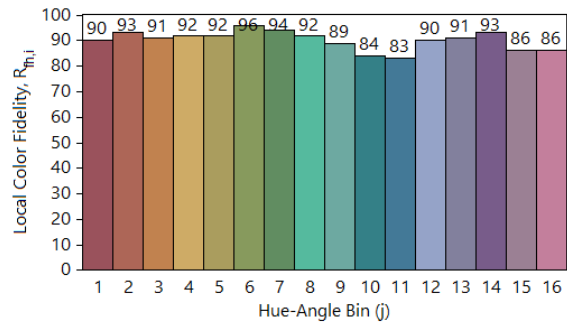
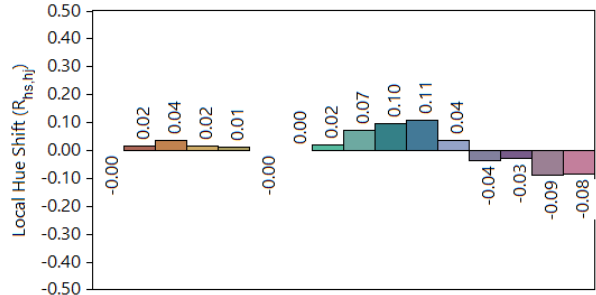
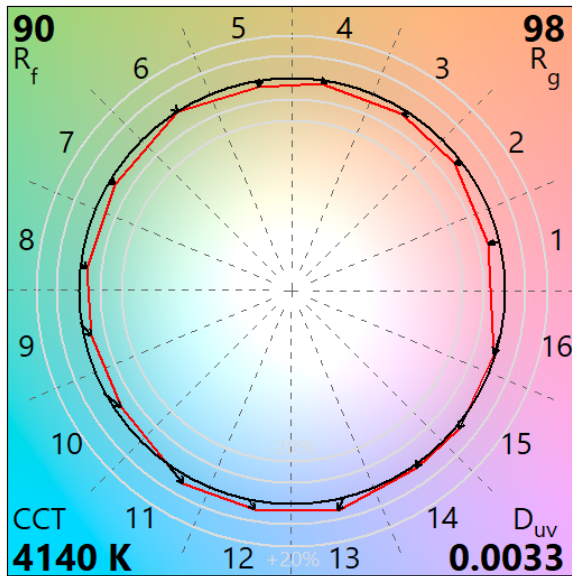
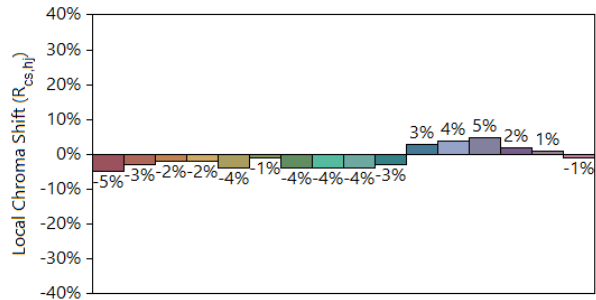
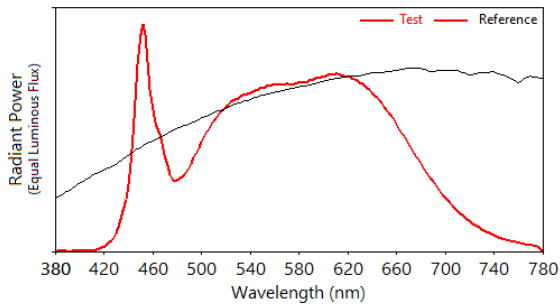
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## Optical Performance

Code	CCT (Direct)	CCT (Indirect)	Night Light	Power Initial CLO [W]	Final Power CLO [W]	Systems Lumens [lm]	Luminaire Lumens [lm]	Efficacy Initial [lm/W]	Nominal Size [mmxmm]	LLMF CLO L100B50 [hrs]
										LM80 duration: 12,000hrs
EL-CON-1100-244	4000K	4000K	-	41	50	5,600	3,234	78	600x150	72,000
EL-CON-1101-244	3500K	3500K	-	41	50	5,400	3,137	77	600x150	72,000
EL-CON-1102-244	3000K	4000K	-	41	50	5,500	3,166	77	600x150	72,000
EL-CON-1103-244	4000K	4000K	PC Amber	41	50	5,600	3,234	78	600x150	72,000
EL-CON-1500-244	4000K	4000K	-	48	59	6,700	4,075	85	900x150	72,000
EL-CON-1501-244	3500K	3500K	-	48	58	6,500	3,953	83	900x150	72,000
EL-CON-1502-244	3000K	4000K	-	48	59	6,600	3,958	82	900x150	72,000
EL-CON-1503-244	4000K	4000K	PC Amber	48	59	6,700	4,075	85	900x150	72,000

## TM-30-18 Colour Rendition Report



**Notes:** CONCAVA SMTD 48W 6700LM 940 DIR/INDIR, AMBER, 900MM DALI CLO

x 0.3766  
y 0.3814  
u' 0.2207  
v' 0.5030

**CIE 13.3-1995**  
**(CRI)**  
**R<sub>a</sub> 92**  
**R<sub>g</sub> 62**

Colors are for visual orientation purposes only.