

## **CAVELL**

Healthcare bedhead for optimal patient rest and observation



WE MAKE LIGHT WORK

### COMFORTABLE BEDHEAD LIGHTING BY DAY AND BY NIGHT

Intended for installation above medical beds in hospitals, care homes and hospices, Cavell is Thorn's easy to use, custom-designed bedhead luminaire. Cavell provides low-glare, soft lighting of the patient, the bedded area and the bedroom or ward.

Delivered in a durable and hygienic powder-coated steel body with opal diffuser, offering a clean aesthetic.

#### DOWNLIGHT, UPLIGHT AND DUAL LIGHT MODES

The downlight function provides comfortable lighting for patients throughout the day and night, and makes examination and observational checks by healthcare professionals easier.

Cavell's optical design ensures that direct glare onto the patient is minimal, to promote rest and recovery. The bedhead will also not disturb any bedded patient directly opposite, due to its tailored beam angle.

The uplight ensures patients, doctors, nurses and other care staff can move around the ward or bedroom space in a safe manner.

Cavell has been designed with twin drivers to control the up and downlight separately. This dual control can be operated from both a nursing station and the patient's bedside switch.







### MEETING HEALTHCARE NEEDS

The general lighting area in a healthcare environment has to offer suitable light for nursing procedures while also providing a pleasant, relaxing environment for patients to recover in.

Higher levels of illumination required for administering medical or general patient care by nursing personnel are a typical practise within the bed space. The lighting should also provide sufficient illumination of the ward or bedroom to allow for safe circulation and cleaning activities to be carried out.

The Cavell wall-mounted bedhead luminaire is a tailor-made solution for lighting multi-bedded areas and single bedrooms in care giving areas. Controls typically at the nursing station or the bedside allow the nurse/patient to choose between pre-programmed scenes.

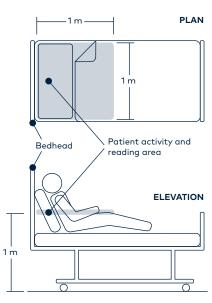
As highlighted in CIBSE: SLL Lighting Guide 2: Lighting for Healthcare Premises (2019) – there are particular lighting requirements for a ward, as the table illustrates.

LOCATION	MAINTAINED ILLUMINANCE (LUX)	NOTES
General lighting	100	Luminaires to use lamps with a colour rendering capability of Ra 80
Patient reading	300	To be controlled by the patient and to be provided over the patient activity/reading area
General nursing	300	To be provided over the general bed care area with a uniformity of ≥ 0.5
Night light	5	To be provided at the general ward area with a maximum of 0.5 lux over the pillow
Watch lighting	15 – 20	To be provided at the bed head pillow position
Examination or treatment at bed position	1000 (≥ Ra 90)	It is rare to require this level of lighting but, if required, portable examination light could be used

#### **READING LIGHT**

On and around the pillow area, the patient's reading light should provide a minimum of 300 lux. The 300 lux value should be an average value measurable over a horizontal area of 1 m x 1 m, as illustrated in the diagram. This will allow for various positions taken by the patient at rest.

To improve sleep in hospital wards, the indirect or room lighting source is typically turned off during hours of rest. During this time, any patient who wishes to read or use a personal electronic device can make use of the bedhead's downlight in its low-level, dimmed "reading mode".



Patient activity/reading area (indicated by blue shading)

### **OBSERVATION LIGHT**

This maintained illumination mode, at and around the bedhead position allows caregivers to continuously monitor a patient's progress during crucial periods including post-operative care and critical illness.

For observational tasks, an illuminance of 15 – 20 lux at the bedhead position is considered appropriate.





**DAYTIME LIGHTING** 



**EVENING LIGHTING** 





**NIGHTTIME LIGHTING** 

#### LOW GLARE OPTICAL DESIGN

Cavell provides good uniformity of light and low glare across various bed layouts, with consideration for the patient and those in the surrounding area. If there is a patient in an opposing bed, they will not be disturbed. The uplight is angled to throw light forward into the room, using reflection from the ceiling to enhance the uplight effect, creating a nice ambience in the room.

#### **DURABLE BUILD QUALITY**

During continuous use in a healthcare environment, the luminaire may receive wear and tear scratches. This is mitigated by the powder-coated steel body that provides a layer of protection from degradation to the surface.



#### **EASY-CLEAN CONSTRUCTION**

Cavell was designed to ensure the highest quality cleaning procedures required in healthcare environments can be carried out easily. The steel body and two opal diffuser panels are seamless, with no gaps, crevices or exposed screws for germs, dust and dirt to accumulate. The luminaire's flat surfaces promote a straightforward wipe-clean routine and the pure white paint finish highlights any dirt.



Cavell features a foam gasket on the reverse of the product. This enables a flush-fit with the wall to be achieved, ensuring no dust and dirt can get trapped behind the luminaire, improving cleanliness in the healthcare environment.

#### QUICK AND EASY INSTALLATION







Cavell has been designed with the installer in mind. A 5-pin plug-and-play terminal is provided for easy wiring of both the downlight and uplight, enabling fast connection to the in-built twin drivers.



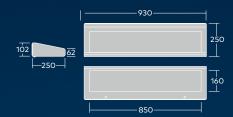
The luminaire has a lightweight back plate that has been designed to be secured to the wall first, keeping things simple for the installer. The main body can be safely attached to the back plate using the provided dog-clips to ensure the product cannot be dropped during assembly, or during removal for maintenance.



The fixing screws are on the bottom of the luminaire to aid the final part of installation. Plastic screw caps are provided to enhance the easy-clean design.

#### **DISCOVER**

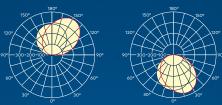
# CAVELL



	4000 K
Ø	Up: 4600 lm / Down: 1900 lm (Separately controllable)
CRI	80
UGR	< 19
80	IP40
	– 20 to 35 °C
	IK06
*	50 000 h L80

#### LG02:2019 compliant





×	Wall mounted
W	White
	DALI, switchDIM
	MacAdam 3









