



# Reducing urban glow Bundaberg

Turtle friendly lighting guide  
for residential properties

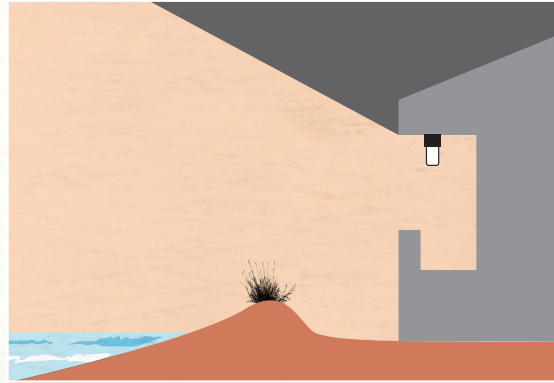


# How to play your part as a resident

## Tips

- Use LEDs and compact fluorescents with lower temperatures and warmer colors. Lights with lower color temperatures (2700–3000 K) are called “warm colors” (yellowish), while color temperatures over 5000 K are called “cool colors” (bluish).
- Use dimmers, motion sensors, or timers on outdoor lighting.
- Use outdoor lighting fixtures that shield the light source to minimize glare and light trespass.
- Turn off unnecessary indoor lighting, particularly in empty buildings at night.
- Maintain as much overnight dark as possible.
- If you live in a high-rise building, use drapes or blackout curtains to reduce light emissions, particularly during turtle nesting and hatching seasons.

## Balcony or deck lighting



**Poor**

Poorly directed balcony or deck lighting can cause problems on sea turtle nesting beaches.



**Better**

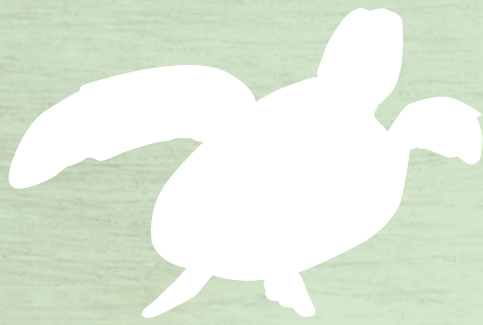
Completely shielding fixtures with a sheet of metal flashing can reduce stray light reaching the beach.



**Best**

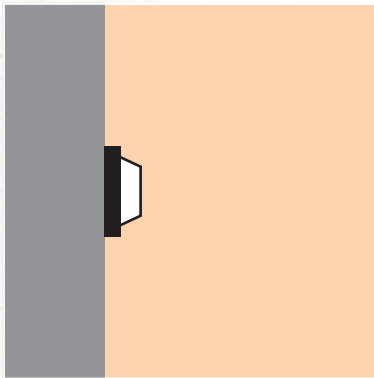
Louvered step lighting is one of the best ways to light a balcony or deck that is visible from nesting beaches.





## Diagrams of common lighting fixtures showing mounting position, light distribution and overall suitability for use near turtle nesting beaches.

For purposes of recommending suitable mounting distances from nesting beaches, the crest of the primary dune is considered to be the landward limit of the beach. Fixtures are assessed for their suitability in minimising direct and indirect lighting of the beach. For all fixtures, glowing portions or luminaries (including reflectors and globes) should not be visible from the turtle nesting beach.



### Wall mounted area lighting

**Mounting suitability**

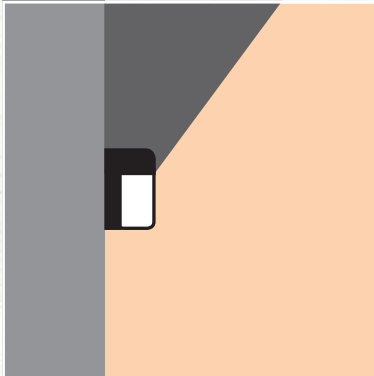
Poor. Very poor when mounted on upper stories.

**Directional suitability**

Poor.

**Overall suitability**

Poor, not suitable for the beach sides of buildings.



### Wall mounted area lighting

**Mounting suitability**

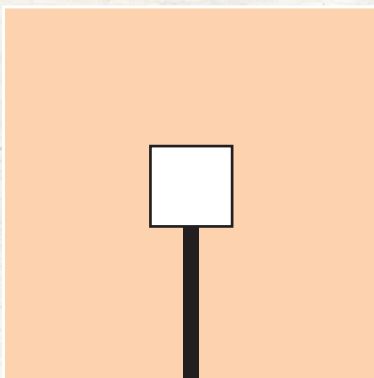
Poor. Very poor when mounted on upper stories.

**Directional suitability**

Poor.

**Overall suitability**

Poor, not suitable for the beach sides of buildings.



### Decorative cube light

**Mounting suitability**

Fair if mounted at heights lower than 1.8 metres.

Poor if mounted higher.

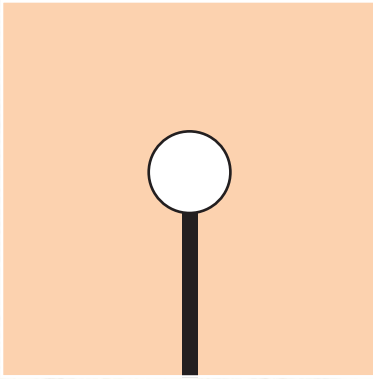
**Directional suitability**

Very poor.

**Overall suitability**

Very poor. This fixture is difficult to shield and should not be used near turtle nesting beaches.





### Decorative globe light

**Mounting suitability**

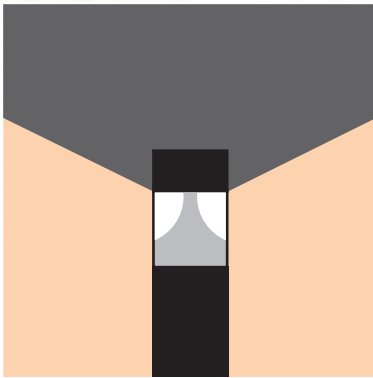
Fair if mounted at heights lower than 1.8 metres, poor if mounted higher.

**Directional suitability**

Very poor.

**Overall suitability**

Very poor. This fixture is difficult to shield and should not be used near turtle nesting beaches.



### Lighting bollards with hidden lamp

**Mounting suitability**

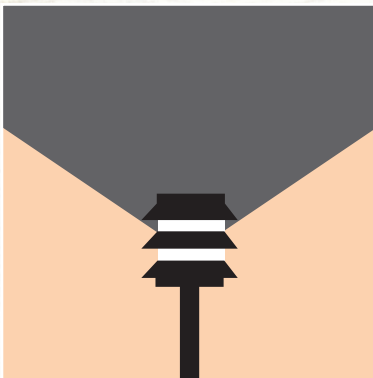
Good if mounting height is near 1 metre.

**Directional suitability**

Poor to fair.

**Overall suitability**

Fair, good if additional shields on the beach side of the fixture are used.



### Low height (short) tier lighting

**Mounting suitability**

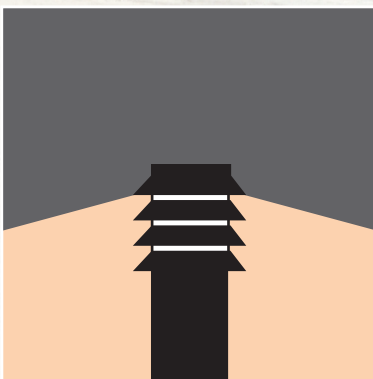
Good if mounted at foot level.

**Directional suitability**

Poor but can be good if the fixture has louvres that eliminate lateral light.

**Overall suitability**

Fair, good to excellent if used so that vegetation and topography block its light from the beach.



### Lighting bollard with louvres

**Mounting suitability**

Good if mounted at foot level.

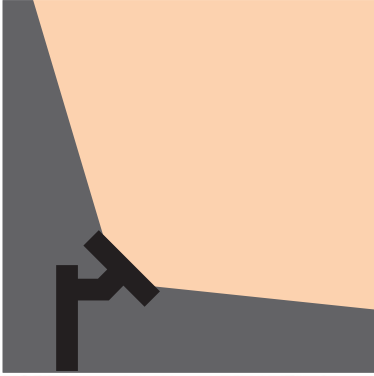
**Directional suitability**

Poor but can be good if the fixture has louvres that eliminate lateral light.

**Overall suitability**

Fair, good to excellent if used so that vegetation and topography block its light from the beach.





### Ground mounted floodlighting

**Mounting suitability**

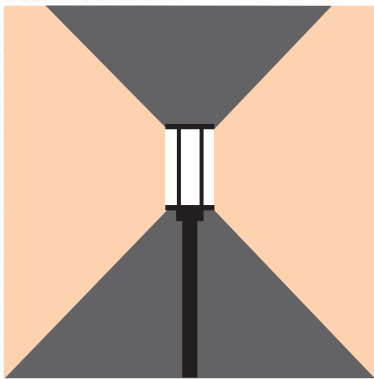
Poor because of its upward aim.

**Directional suitability**

Fair to good.

**Overall suitability**

Fair to poor if directed away from the beach, very poor if directed toward the beach.



### Decorative carriage lighting

**Mounting suitability**

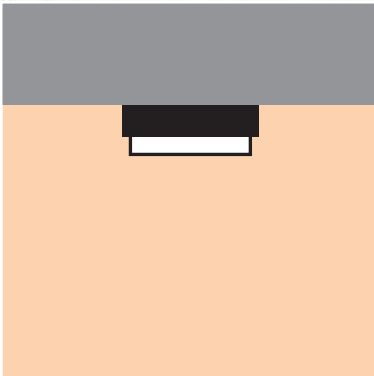
Fair if mounted at heights lower than 1.8 metres, poor if mounted higher.

**Directional suitability**

Very poor, Fair if shielded properly.

**Overall suitability**

Poor.



### Ceiling mounted area lighting:

#### fixtures with refracting gloves or convex lenses

**Mounting suitability**

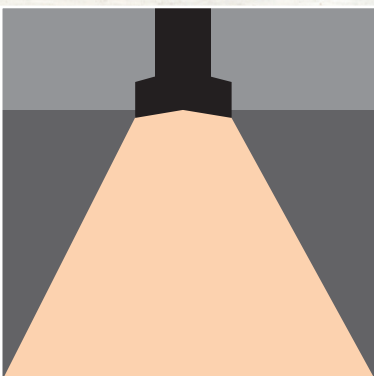
Poor if mounted on the beach side of buildings or on upper stories. Good if shielded from the beach by buildings.

**Directional suitability**

Poor.

**Overall suitability**

Poor to fair, depending on mounting location.



### Ceiling recessed down lighting:

#### fixtures with baffles to eliminate lateral light

**Mounting suitability**

Good to excellent when mounted in lower story ceilings and soffits.

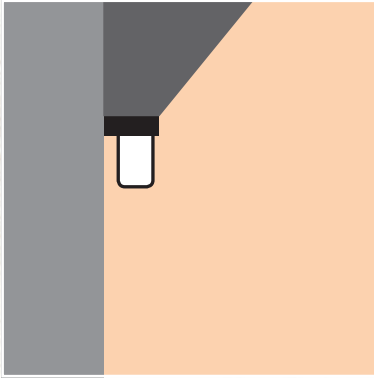
**Directional suitability**

Excellent.

**Overall suitability**

Good to excellent.





### Wall mounted area lighting: 'jelly jar' deck light fixture

**Mounting suitability**

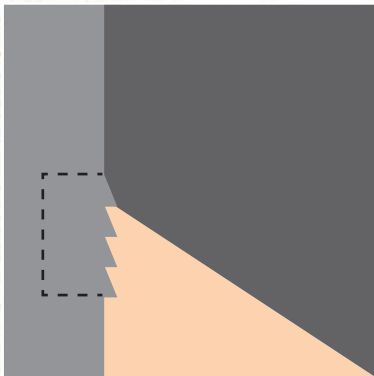
Poor. Very poor when mounted on upper stories.

**Directional suitability**

Poor.

**Overall suitability**

Poor.



### Louvred step lighting

**Mounting suitability**

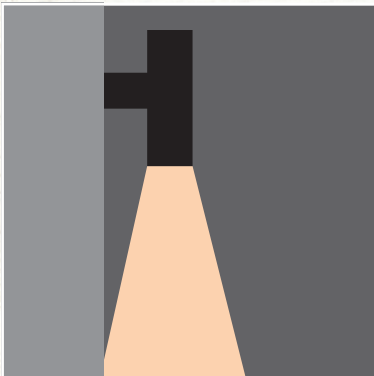
Excellent if mounted at foot level.

**Directional suitability**

Excellent.

**Overall suitability**

Excellent.



### Wall mounted down lighting

**Mounting suitability**

Good to excellent when mounted on lower story walls.

**Directional suitability**

Excellent.

**Overall suitability**

Good to excellent.



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