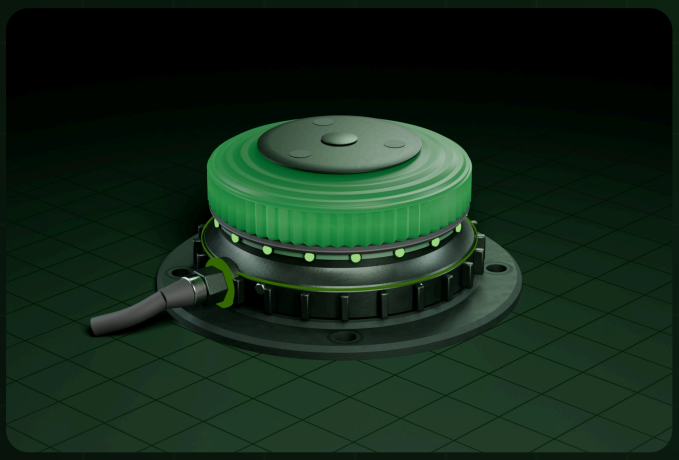
TECHNICAL ANATOMY

TLOF PERIMETER LIGHTS

TLOF perimeter lights mark the touchdown and lift-off area boundary so a pilot can identify the usable landing surface at night or in poor visibility. The assembly pairs a sealed optical unit with an LED source and a weatherproof mounting base, built to sit flush or elevated at the pad edge without becoming an obstruction itself.

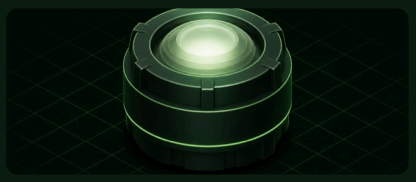


Body material class	Corrosion resistant metal or engineering-grade polymer suited to continuous outdoor exposure
Ingress protection approach	Sealed housing and gasket design rated for washdown and standing water at pad level
Power options	Series circuit constant current or low voltage DC configurations depending on the airfield lighting system in use
Control compatibility	Compatible with constant current regulators and standard airfield lighting control panels
Mounting	Flush or semi-flush mounting at the pad perimeter to avoid obstructing the operating surface
Operating environment	Engineered for outdoor helipad and heliport exposure across the Kingdom's temperature and dust conditions

01

LIGHT HOUSING

The outer enclosure carries the optical and electrical components and protects them from moisture, dust and impact at the pad edge. Its shape and mounting profile keep the fixture low enough to avoid becoming a rotor or ground hazard.



02

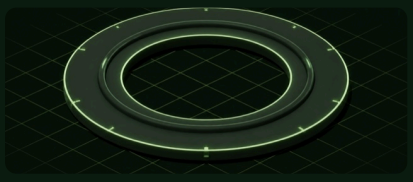
OPTICAL LENS ASSEMBLY

Shapes and directs the light output into the beam pattern required for perimeter marking, keeping the signal visible to an approaching pilot at the correct angle. The lens material and seal also block moisture ingress into the optical chamber.

03

LED MODULE

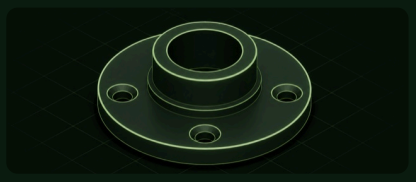
Generates the light output at the colour and intensity specified for perimeter marking. Solid state LED sources give a long service interval compared to older lamp technology, reducing the frequency of relamping at height or at pad edge.



04

SEALING GASKET

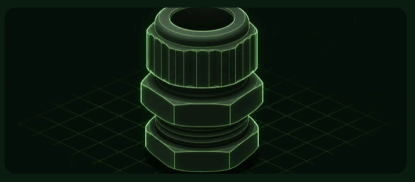
Forms the weatherproof barrier between the housing and lens assembly, keeping the ingress protection rating intact through repeated thermal cycling and washdown. A degraded gasket is a common cause of moisture ingress in perimeter fixtures.



05

MOUNTING FLANGE

Anchors the fixture to the pad surface or edge structure at the height and orientation the layout requires. The flange design allows flush or semi-flush mounting so the fixture does not project into the operating area.



06

CABLE GLAND CONNECTOR

Seals the point where the supply cable enters the fixture, preventing water tracking along the cable into the electrical chamber. It also provides strain relief so vibration or handling does not stress the internal wiring connections.

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