

**Pharmaceutical • Biotech Biosafety • Research Facilities • Hazardous Locations**



Clear-Vu Lighting's cleanLED™ luminaires are designed to maximize the effectiveness/efficiency of LED technology and protect the integrity of clean room (ISO3-ISO8) and containment area (BSL3 and BSL4) environments.

cleanLED is the first lighting fixture series designed and tested to National Sanitation Foundation's new protocol (P442) "Lighting Fixtures for Controlled Environments" – clean room, containment area and surgical suites. P442 addresses three types of leakage (plenum to room, room to plenum, and plenum/room to lighting fixtures interior), ease of cleanability, corrosion, toxicity and interface with ceiling structure. Listings, ratings, certifications and protocols include: IP66 (ISO60598); Hazardous Locations – Optional Class I, Division 2; Class II, Division 2; NSF2 (Splash Zone); LM79; LM80; DLC Qualified. Optional MIL STD 461F.

First-time innovations include: deep-draw stainless steel lens frame with no surface welding; universal installation design (gypsum, 2.0" walkable ceiling panels and 2.0" T-Bar); edge-lit LED optics; one-piece mono-gasket system; wire and install without removing lens frame; LED heat sink/heat fin aluminum housing design; factory leakage testing and registration of every lighting fixture – 100%.

#### FEATURES AND BENEFITS:

##### BEST-IN-CLASS LED LIGHT ENGINE

- Edge-Lit optical system produces even facial luminance and glare free uniform lighting distribution
- DLC qualified
- 80,000 hour design life – 5 year warranty

##### HIGH-TECH ENCLOSURE

- Heavy duty, low-profile (2.0") extruded aluminum housing and die-cast end caps maximize conducted heat dissipation and produce a housing strong enough for walkable ceilings
- One-piece, deep-draw stainless steel lens frame is free of surface welding. 60° beveled edge produces a progressive surface with the ceiling
- One-piece Mono-Gasket System™ seals housing to ceiling structure and lens frame to housing

##### UNMATCHED CONTROLLED ENVIRONMENT PERFORMANCE

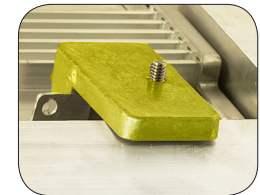
- Independent Lab (NRTL) tested for leakage – IP66 (IEC60598)
- Independent Lab tested for ease of cleanability, corrosion resistance and toxicity – National Sanitation Foundation (NSF2/Splash Zone)
- Class I, Division 2 and Class II, Division 2 listed to assure safe operation in hazardous locations
- Optional MIL STD 461F
- IP66 sealed wire-way junction and swing-lock mounting brackets protect the housing interior from plenum space contaminants

##### EASE OF INSTALLATION

- Lens frame does not need to be removed for wiring or installation
- Lighting fixture designed for universal installation (gypsum, 2.0" walkable ceiling panels and 2.0" T-Bar)



*Patent-pending Mono-Gasket System™ (shown in black) insulates controlled environments from the plenum space and provides and provides IP66 protection for the interior of the lighting fixture*



*The sealed swing-lock mounting brackets are adjustable without removing the lens frame, greatly reducing installation time. LED boards (shown in green) are mounted directly to integral heat sink/heat fins maximizing conducted heat dissipation*



*One-piece overlapping lens frame fasteners are positioned very close to the perimeter of the lens frame, facilitating consistent ceiling structure contact*

