



CLEAN ROOM

Lighting for Clean Room Applications



LUTRON®

Clean Room and Containment

Our CleanRoom series provides high efficacy and high performance lighting for cleanroom and containment applications. Enclosed and sealed to prevent moisture, dirt, and bacteria from entering the facility through the plenum or around the fixture and into the facility. Each fixture is welded and fully enclosed, ground smooth, and painted after fabrication. Inset and overlap doorframes are available to meet the needs of various clean room and biosafety laboratories. Customized fixtures allow us to provide lighting solutions that meet the exact needs of the facility. Custom lumen output, housing and doorframe gauge and material, CRI, colored LEDs, and more.

Our CleanRoom line of fixtures are built to order to the exact specifications required for each application.

- IP rated
- ISO 3-9 applications
- NSF Listed
- Anti-Microbial White Paint
- High delivered lumen output in 80 or 90 CRI
- Recessed Grid, Recessed Flanged, Surface Mount
- Amber and Red LEDs available
- Emergency Driver Capable



CleanRoom Series

Sealed for Protection

Our CleanRoom series fixtures are designed to maintain their seals throughout the entire lifetime of the fixture. Welded and ground smooth with chemically resistant gaskets to resist penetration to the fixture and facility from outgassing, moisture, dust, pathogens, air pressure leakage, arcing, and electromagnetic interference (if MIL STD 461G Compliance is needed).

Applications

Engineered and designed for stringent environmental challenges, our CleanRoom series of products consists of lighting fixtures suitable for a wide range of applications. Our fixtures were designed for use in pharmaceutical labs, research labs, biosafety labs, clean rooms, general laboratories, anterooms, vivariums, kitchen areas, and more.

Clean Room Rating Comparison

ISO ratings are currently used for products that are suitable for clean room conditions. Ranging from ISO 1 (the most stringent clean room) to ISO 9. Clean Room classifications are rated according to particulate size per cubic meter existant in the facility. Before the International Standards Organization (ISO) developed global cleanroom classifications, the US adopted standards known as FS209E. In 2001, the Federal Standard 209E was superseded by the ISO 14644 international standards, though references to both standards are still used.

Airborne Particulate Cleanliness Class Comparison						
Class	0.1 micron	0.2 micron	0.3 micron	0.5 micron	1 micron	5 microns
ISO 1	10	2				
ISO 2	100	24	10	4		
ISO 3	1,000	237	102	35	8	
ISO 4	10,000	2,370	1,020	352	83	
ISO 5	100,000	23,700	10,200	3,520	832	29
ISO 6	1,000,000	237,000	102,000	35,200	8,320	293
ISO 7				352,000	83,200	2,930
ISO 8				3,520,000	832,000	29,300
ISO 9				35,200,000	8,320,000	293,000

CLD

LED Recessed ISO 3 Cleanrooms

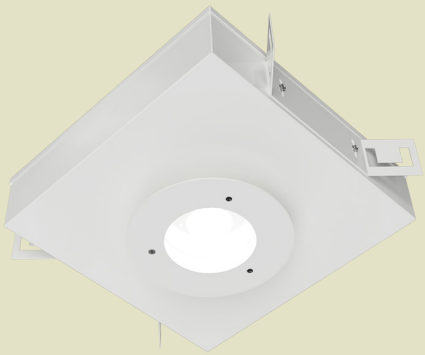
Available in recessed grid and recessed flanged configurations. Grid clips included for grid applications, while swing arm mounting brackets included for flanged applications. CLDF (flanged) fixture is field convertible to grid mounting by tucking the swing arm brackets in the fixture utilizing grid sized flanged housing. IP65 and BSL 1-2 rated with inset doorframe. IP66 and BSL 3-4 with overlapping doorframe. Suitable for ISO 3/Class 1 cleanrooms. Available with options such as anti-microbial white paint and MIL STD 461G compliance to meet the needs of specific cleanroom applications.



CLD/CLDF

- Up to 25,000 lumens
- Available in 1x1, 1x2, 1x4, 2x2, and 2x4 sizes
- Up to 170 Lm/W efficacy
- LED life hours of >100,000 hours L70
- White powdercoat standard
- Cold roll, stainless steel, or aluminum
- 80 CRI standard, 90 CRI optional.
- Various diffusing and clear lens options
- Outer polycarbonate lenses available
- MIL STD 461G Compliance Available
- Anti-microbial white finish optional
- ISO 3/Class 1 Rated
- Recessed Flanged and Recessed Grid
- 0-10V 1% dimming standard

CLEAN ROOM AND CONTAINMENT



CLH

A sealed, IP65 rated downlight suitable for ISO 4 cleanrooms. High transmission diffuser with a 110° FWHM beam angle evenly disperses the light across the facility. Applications include food processing facilities, laboratories, hi-tech manufacturing facilities, general cleanroom applications, and more.

CLI

A completely sealed and enclosed exit sign designed for cleanroom applications. IP65 and ISO 4 rated. Choice of green or red LED light source. Constructed of 18 gauge cold roll or stainless steel. Wall, top, and side mounting options. Clear polycarbonate lens.



CLQ

A sealed backlit flat panel suitable for ISO 5 to ISO 9 rated positive pressure clean rooms. Zero distance between the back cover and the frame eliminates particle transfer. Back lit design fully illuminates the flat panel. Lens is optimized to protect against light degradation and yellowing.

CLIR

Recessed Exit Sign



CLIR

A completely sealed recessed exit sign enclosure, featuring a one-piece seam welded housing and one-piece seam welded overlapping doorframe. Available in CRS and Stainless Steel construction. IP65 and ISO5 rated.

CLPIMP

Recessed Top Access for IMP Ceilings



CLPIMP

A top access clean room recessed luminaire designed to mount into integrated metal panel ceilings. Load tested for 600lb to reduce the hazard of foot traffic. One-piece seam welded 14 gauge housing with choice of CRS or Stainless Steel one-piece screwless design doorframe.

CLN

Cleanroom Vapor Tight



CLN

A sealed and gasketed enclosure that is completely dust and moisture resistant. IP67 rating, NSF listed. Fiberglass housing with poured-in-place polyurethane sealing gasket. Various lens and latch options. High lumen output capable. NEMA 4X rated.

CLB

Cleanroom Vapor Tight



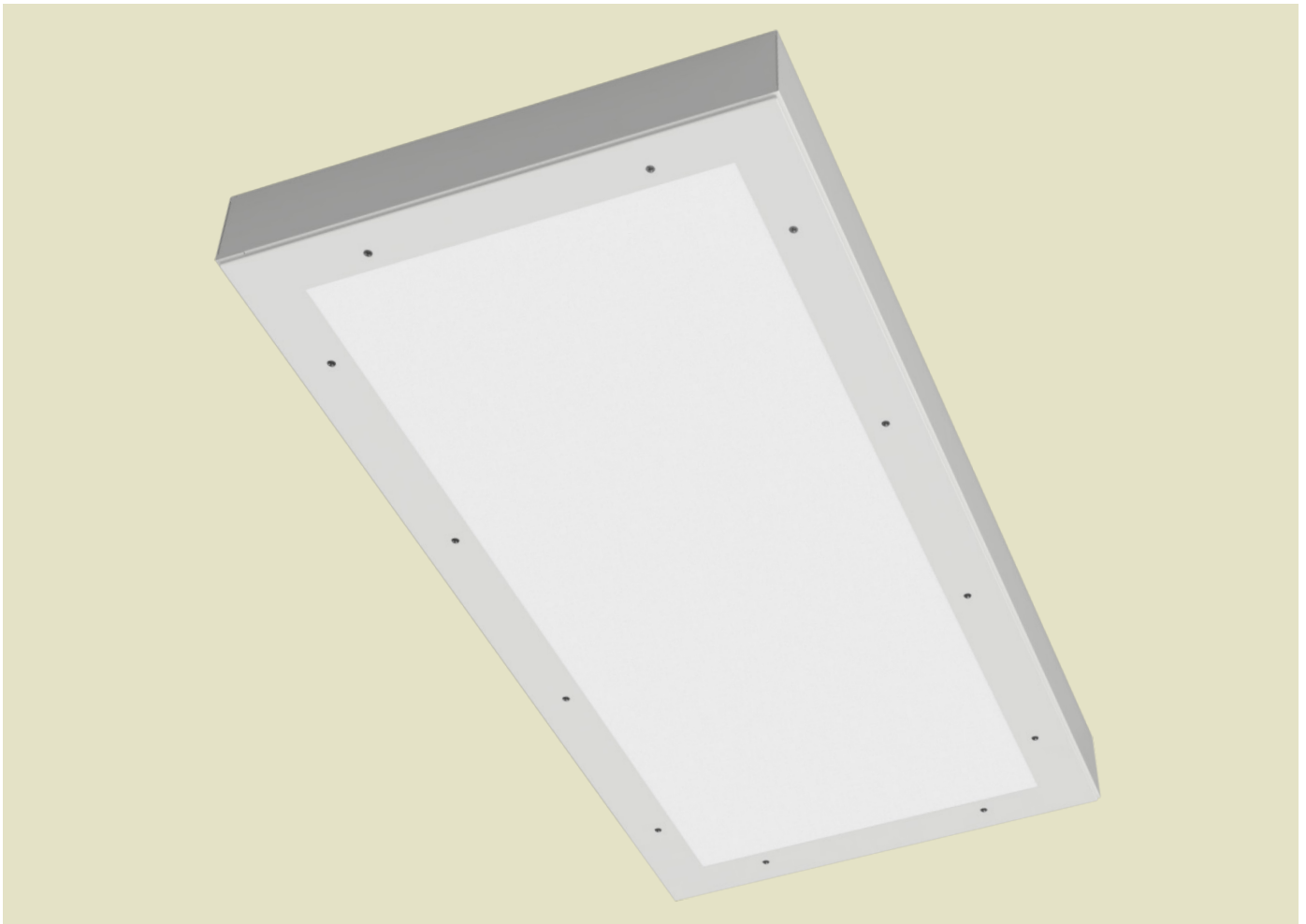
CLB

A sealed and gasketed mini wash down highbay that is completely dust and moisture resistant. IP67 rated, NEMA 4X rated, NSF listed. UL 5VA fiberglass housing resistant to melting and burning. Poured-in-place polyurethane gasket for a lifetime seal.

CLE

LED Surface Mount ISO 3 Cleanrooms

A surface mount enclosed and sealed fixture designed for cleanrooms and applications that require a high lumen, wet location rated surface mount fixture. IP65 and BSL 1-2 rated with inset doorframe. IP66 and BSL 3-4 with overlapping doorframe. Available with options such as anti-microbial white paint and MIL STD 461G compliance to meet the needs of specific cleanroom applications.

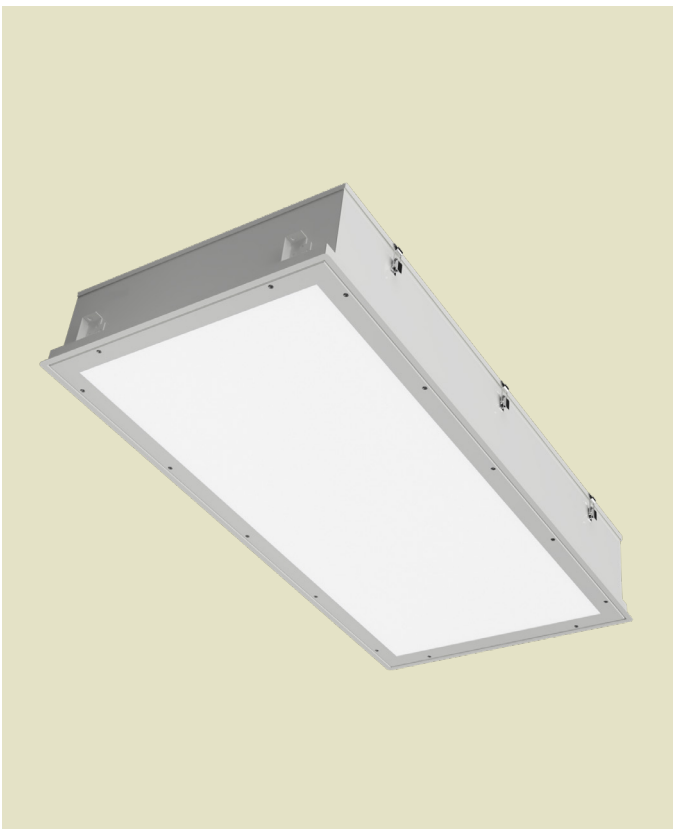


CLE Series

- Up to 25,000 lumens
- Available in 1x1, 1x2, 1x4, 2x2, and 2x4 sizes
- Up to 170 Lm/W efficacy
- LED life hours of >100,000 hours L70
- White powdercoat standard
- Cold roll, stainless steel, or aluminum
- Various diffusing and clear lens options
- 0-10V 1% dimming standard
- MIL STD 461G Compliance Available
- Anti-microbial white finish optional
- ISO 3/Class 1 Rated
- Surface Mount

TOP ACCESS

Designed to be maintenance free, if service is ever needed, our top-access clean room fixtures give service personnel the freedom to access the inside of the fixture while maintaining the integrity of the sealed space. Prevents dust and particulates from entering the clean room when the luminaire is being serviced. This can simplify ceiling layout and maintenance plans, and prevent cleanroom disruption caused by removing a fixture or opening a doorframe. Available in 570nm amber and 630nm red LEDS, consult factory for customized luminaires.



CLT

Available in recessed grid and flanged mounting. 2X2, and 2X4 sizes. Top access housing allows access to the inside of the fixture without removal of the fixture. High lumen output of up to 25,000 lumens, custom lumen output available. IP65 and ISO 4 rated. Available in cold roll steel, stainless steel, and aluminum housing/door construction. Applications include cleanrooms, hospitals, laboratories, hi-tech manufacturing, food processing facilities, and more.



CLP

A top access clean room troffer designed for mounting into walkable ceiling systems. 600lb load tested to reduce the hazard of foot traffic. 1X4, 2X2, and 2X4 sizes. IP65 and ISO 3 rated. Available in cold roll steel, stainless steel, and aluminum housing/doorframe construction. High lumen output of up to 25,000 lumens, with custom lumen outputs available. Applications include biomedical labs, food processing and testing centers, pharmaceutical labs, general cleanrooms, and more.

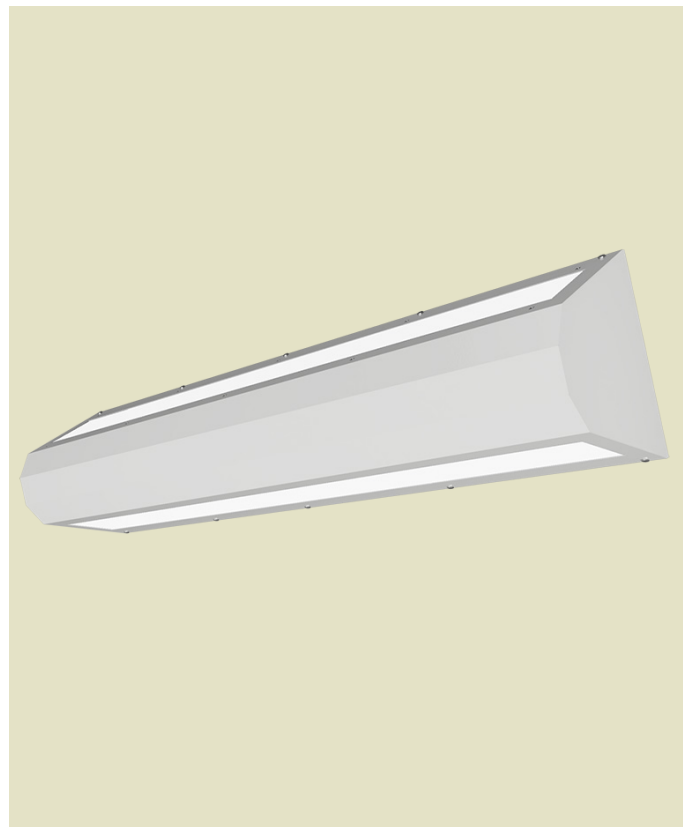
WALL/SURFACE MOUNT

With most of the available space in cleanrooms being allocated to air filters, certain applications require additional light in the form of wall or surface mount luminaires. Our completely sealed and gasketed fixtures are suitable for cleanroom applications without taking up valuable space in the ceiling. With an IP65 rating, these fixtures can be gasketed to a surface to provide a practical clean room surface mount solution without impairing the integrity of the cleanroom.



CLS

The CLS is a corner surface mount cleanroom rated luminaire. Sealed and gasketed to provide an IP65 rating and is suitable for use in ISO 5 clean rooms. Available in 4' and 8' lengths, with continuous runs available. Choice of stainless or cold roll steel, and various lens options. High lumen output capable, with custom lumen outputs available. High efficiency symmetrical reflector provides exceptional downward light throw.

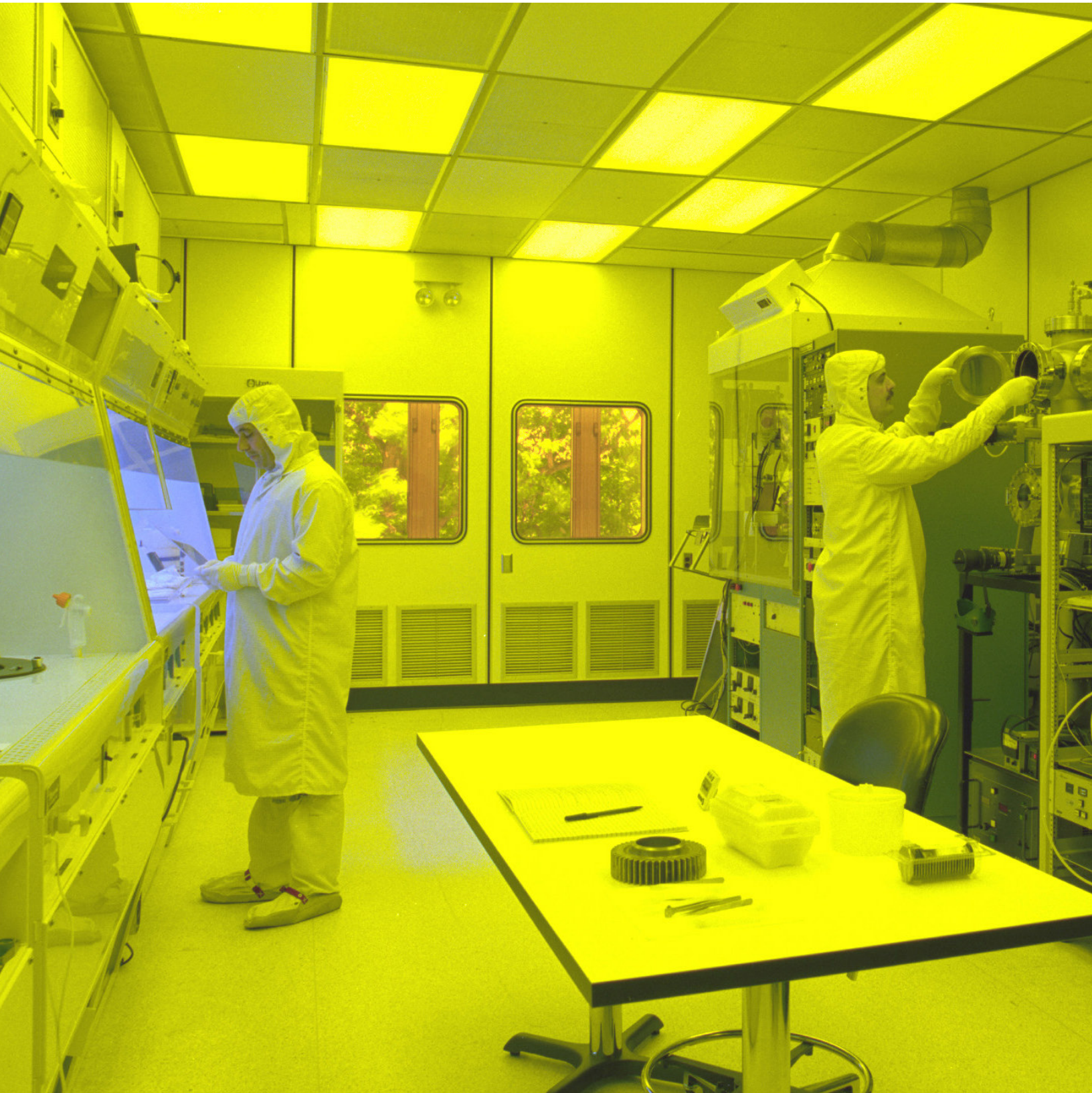


CLM

A wall mount direct/indirect fixture sealed and enclosed for clean room applications. Cold roll or stainless steel enclosed housing. Available with downlight and uplight, or downlight/uplight only. Applications include technical and biomedical labs, food processing facilities, food testing facilities, pharmaceutical labs, and general clean room environments. 14 gauge heavy duty steel backplate secures the fixture to the wall.

NARROW SPECTRUM LIGHTING

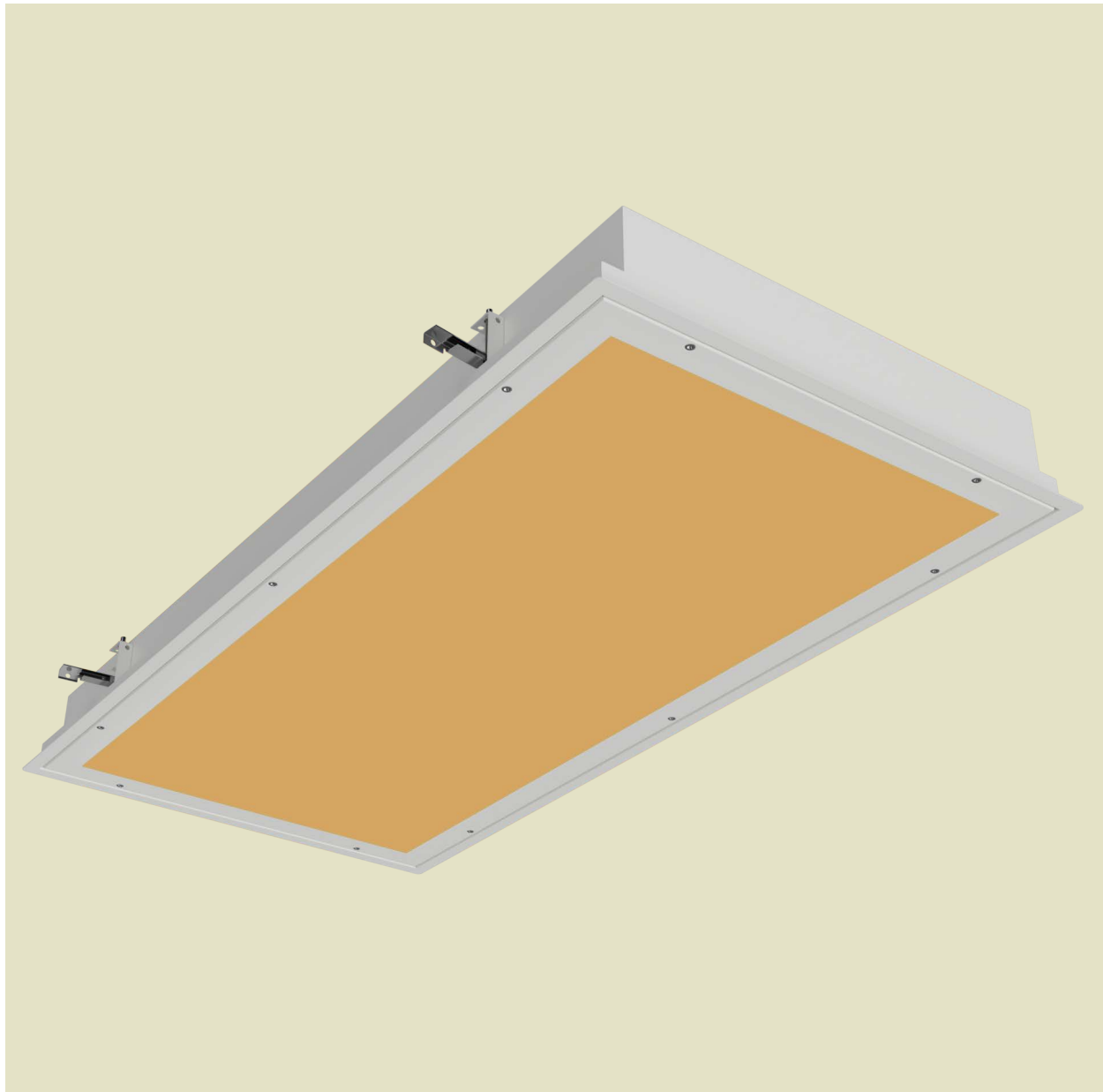
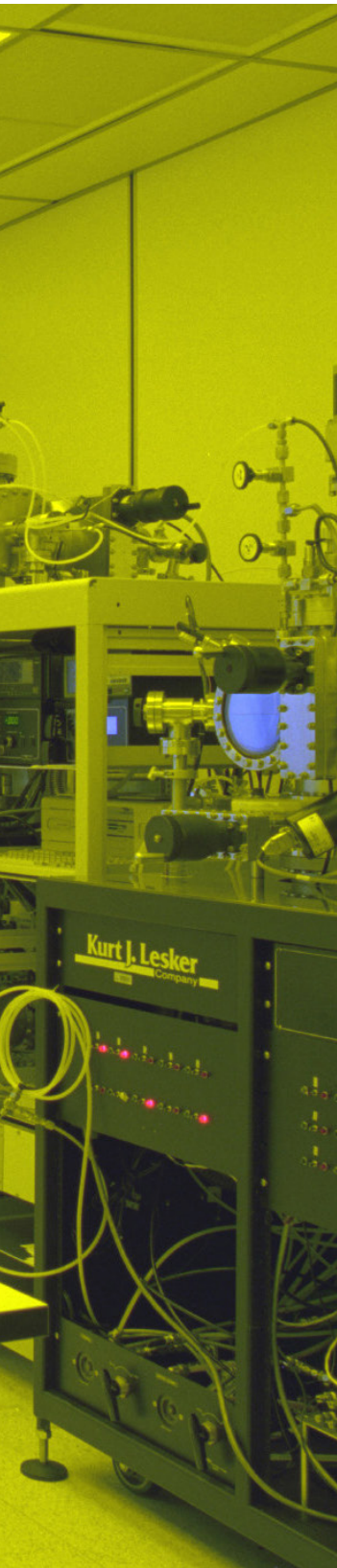
Utilizing specific LED wavelengths, our integrated LED boards are capable of providing green, red, and amber colored light to meet the needs of specific scientific applications. Available in a combination of dual function white and colored LEDs, or colored LEDs only.



CLU

Amber and White Clean Room

Available in white and 570nm amber LED, or 570nm amber LED only. Amber LED provides visual acuity and protects light sensitive products and processes from damage. Amber and white LEDs are available on the same circuit, or separate circuits for individual color dimming illumination.



- Up to 18,000lm amber LED output
- Up to 13,000lm white LED output
- 570nm amber LEDs
- 3000K, 3500K, 4000K, or 4000K White LEDs
- 80 or 90 CRI White LEDs available
- Individual color dimming available
- Anti-microbial white optional
- MIL STD 461G compliance optional
- Choice of diffusing/clear lens
- 0-10V 1% dimming standard



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