

MedMaster™ Healthcare Luminaires
Lighting that Promotes Health & Wellness



MedMaster & More – Kenall Lighting in Every Part of Your Healthcare Facility

Kenall MedMaster lighting combines thoughtful design and development with rigorous testing to create luminaires you can count on to perform as promised, year after year. But today's highly specialized healthcare environments demand more than just good lighting performance and energy savings, which is why Kenall offers features optimized for healthcare applications, including:

- Safe, continuous, whole room disinfection
- Tunability: The ability to choose specific colors and wavelengths for special tasks
- IP ratings to protect from egress/ingress of dust and bacteria
- Protection from EMI/RFI
- Embedded controls
- Long LED life
- Ligature- and tamper-resistance for behavioral health applications
- Ease of cleaning
- Industry-leading warranties

From surgical suites and stairwells, to patient rooms and parking garages, Kenall luminaires support patient health, safety, visual comfort and staff performance throughout your entire healthcare facility.



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MedMaster™ - Helping You Achieve Best Practices for Healthcare Lighting



Rugged Construction, Classic Design, High-tech Healing

Kenall luminaires are designed to perform flawlessly, even in the most challenging healthcare environments. Housings are designed to withstand harsh cleaning, intentional tampering, pressurized environments, electromagnetic interference and more, while maintaining their aesthetic appeal.

But durable housings are only half of the story. Harnessing the latest LED technology is critical to creating luminaires that help set the stage for healing. On the following pages, you'll find out more about our lighting and controls technologies, and the benefits they offer.




 bios

ILLUMINATED

[Learn More](#)

What is BIOS SkyBlue®?

A NASA spinoff, BIOS lighting promotes health and wellness using brilliant, high-quality architectural white light.

How does BIOS SkyBlue work?

- Research has established that effective circadian lighting should include a “sky blue” (490nm) wavelength, which is found in daylight, but is missing from most traditional LED lighting systems
- The SkyBlue 490nm wavelength communicates directly with human biology via non-visual photoreceptors in the eye, known as ipRGCs (photosensitive retinal ganglion cells)
- ipRGCs contain melanopsin, a protein, which, when stimulated by light, sends a signal to the body to reset its cycle for the next 24 hours.
- This triggers a variety of biological processes, including the production of cortisol for morning alertness and melatonin for a good night’s sleep
- BIOS SkyBlue optimizes this natural process, without complicated controls, energy-sapping increases in illumination, or uncomfortable color temperature changes
- Choose from three modes based on your environment:
 1. biological static
 2. biological dynamic
 3. biological tunable

Kenall's Tunable White Technology

Tailor Lighting to Patient & Staff Needs



Learn More

Kenall's tunable white lighting technology enables users to independently change the color of light from warm to neutral to cool in appearance, over time, based on the needs of the occupant or the space.

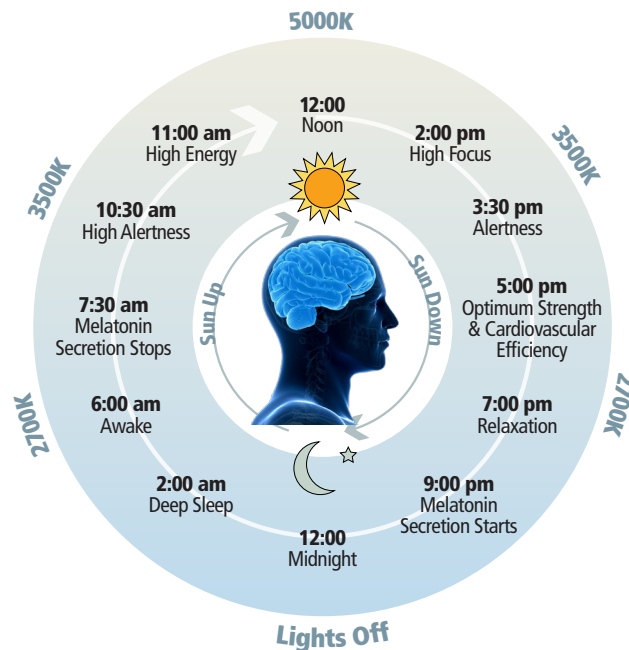
In addition, Kenall's combination of white color tuning and warm dimming creates flexibility in adjusting the ambiance of the space, while providing excellent value and controls compatibility. Kenall offers a choice of 0-10V dimming or Digital Addressable Lighting Interface (DALI) for more sophisticated capabilities. Both options provide the ability to interface with building automation systems, including Pico®, EcoSystems® and Fresco™. Consult factory regarding specific controls compatibility.

Benefits to patients & staff:

- *Improves patient rest & recovery¹*
- *Assists shift workers to stay alert while on duty*
- *Integrates simply with existing controls*

¹<https://www.hfmmagazine.com/articles/2244-lighting-it-up-with-tunable-white-light>

Natural Light Simulation



Narrow Spectrum LED

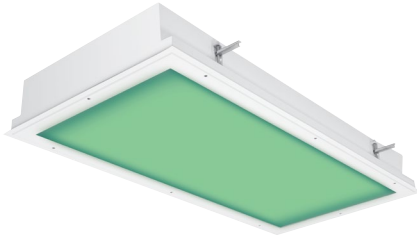
Bringing the Applied Science of Color to Specialized Healthcare Applications

[Learn More](#)



Improve Procedure & Research Outcomes with Specific LED Wavelengths

Kenall has utilized the applied science of color to develop high-quality, sealed, narrow-spectrum luminaires for specialized applications. Rather than employing color filters or color mixing, specific wavelengths of the color spectrum are pinpointed to provide the best delivery of light, tailored for your unique healthcare and scientific applications.



M4SEDI Green Series

530nm green LED light enhances the visibility of monitors during surgical procedures, and reduces staff eye strain

- Diffused high-efficiency lens for reduced glare
- Symmetric and asymmetric optical distributions
- Dual-function white and green LED sources provide individually-dimmable illumination
- Also available in green only

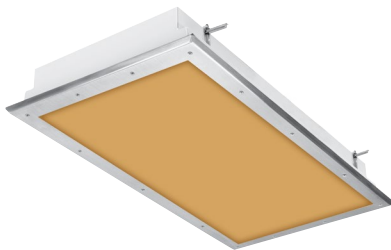


Green LED Light



White LED Light

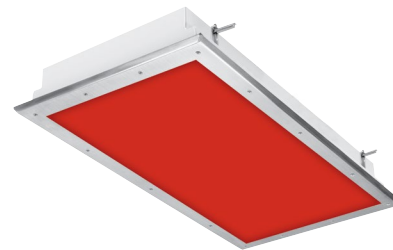
530nm "green" LED light significantly reduces monitor glare allowing the medical staff to see clearly without adjusting the lights.



CSED_ Amber Series

Features 570nm Phosphor-Converted (PC) amber LED light, which performs better than native amber, especially in warm temperatures

- Provides visual acuity for detailed tasks without the damaging effects of white light to light-sensitive products and processes
- Used to increase cell viability at in-vitro fertilization clinics
- Reduces possible damage to delicate DNA during stem-cell transplant procedures
- Protects light-sensitive ingredients used in pharmaceutical compounding



CSED_ Red Series

630nm red LED light provides consistent, controllable red light, supporting the natural circadian rhythm of laboratory animals in research environments

- Offers pure, consistent and controllable red light intensity over time.
- Does not degrade in purity, even when light output has degraded

For detailed information on Kenall's Narrow Spectrum product offering, visit kenall.com and download the brochure.



Lighting Controls Add Ease & Convenience

Low Voltage Controllers

Low voltage controllers (LVCs) interface with nurse call systems or pillow speakers to allow safe operation of high voltage lighting systems. The low voltage controller isolates the patient from the high voltage, and provides the logical control of multi-function luminaires to reduce the number of switches needed on the pillow speaker, bed or wall. These LVCs are designed to eliminate interference with sensitive medical equipment common to the hospital patient room.

Kenall MedMaster Patient Wall Switch

Kenall's low voltage controller wall switch allows the clinical staff to easily regulate patient room lighting. It can be placed at the entrance of the room, next to the patient bed, or any other location that is deemed convenient. Different control configurations can be used together to create customized access without complicating the installation. The switch is wired in parallel with the pillow speaker, bedside rail, and/or entertainment station to the low voltage side of the low voltage controller.

- Easy access for staff
- Controls up to four separate lights/loads
- Seamless integration with any nurse call system
- Permits convenient dimming and easy on/off for lights



Diagnostic & Treatment Area Lighting



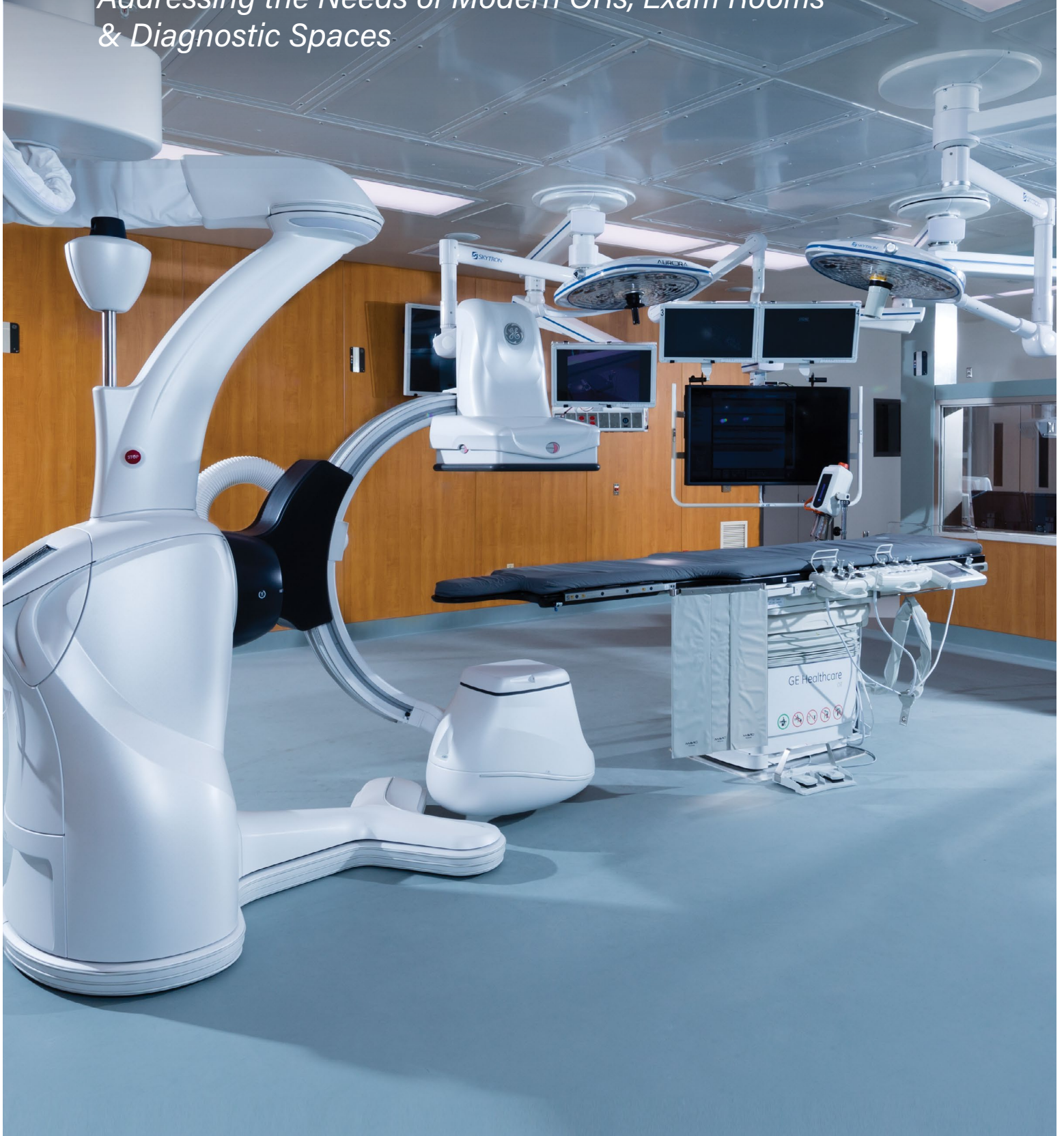


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Diagnostic & Treatment Area Luminaires

*Addressing the Needs of Modern ORs, Exam Rooms
& Diagnostic Spaces*



Best Practices:

Performance Requirements for Lighting Diagnostic & Treatment Areas – and How We Meet Them

1. Excellent light quality

Nowhere is it more important to have high-quality light than in ORs, exam rooms and emergency rooms. Kenall combines the latest in optics and LED technology to provide caregivers adjustable, comfortable lighting.

Kenall Solutions:

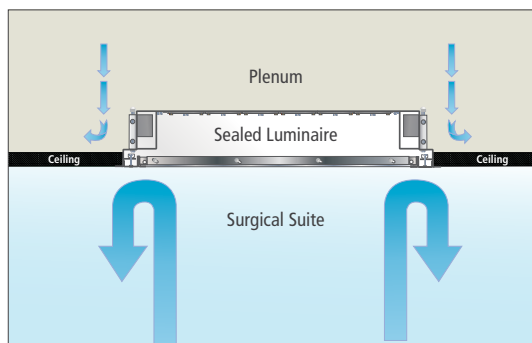
- Offer a range of color temperatures, including natural-appearing white light
- Feature advanced optics that provide a high level of uniformity, while minimizing eye fatigue
- Offer color rendering of 80 or 90 CRI
- Provide maximum lumens to minimize the number of luminaires required, preserving critical ceiling space

2. Sealed for infection control & ease of cleaning

Luminaires must be sealed against contaminants from either the room or plenum side, and the seal must be able to withstand rigorous cleaning protocols.

Kenall Solutions:

- NSF International listed for use in “Splash Non-Food Zones”
- Toxin-free, corrosion resistant, and easy to clean
- Provide a leak-proof barrier between the flange and ceiling, preventing contaminants from entering around the luminaire from the plenum
- Internal components are isolated from the surrounding environment, protecting against heat, sparks, arcing, dirt, dust, moisture, air pressure differences and other conditions



MedMaster IP-rated luminaires feature a leak-proof barrier to prevent contaminants from entering or escaping.

3. Electromagnetic Interference (EMI) mitigation

Lighting must not produce electromagnetic emissions that interfere with the performance of other equipment in these areas, and it must also provide multi-level switching and dimming without EMI.

Kenall Solutions Mitigate:

- Voltage dips, interruptions and variations
- Radiated 60Hz magnetic fields from power lines, transformers and motors
- Electrical fast transient arcing of contacts on nearby power and signal lines
- Surge voltage from lightning
- Radiated electromagnetic fields from walkie-talkies and commercial radio station broadcasts
- Electrostatic discharge
- Conducted radio frequency

4. Improved monitor visibility

The increased use of minimally invasive surgical techniques requires clear, comfortable monitor viewing. Kenall addresses those needs as well.

Kenall Solutions:

- High-quality green LED options
- Patented optics that maximize lumens while dramatically reducing veiling reflections in electronic displays



Advanced optics provide uniformity and minimize glare, while reducing eye fatigue.

Lighting that Supports the Latest Surgical Technologies

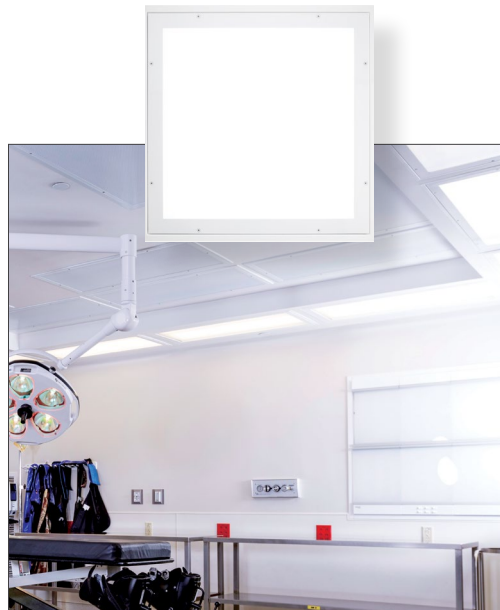
Advanced medical equipment, air handling, and power sources now claim ceiling space that lighting used to occupy. The previous commercial standard for asymmetric distribution (2.5 to 5 degrees) may not always be enough, so Kenall incorporated 7 degree and 10-12 degree distribution options in the M4SEDI product family, which provide the opportunity to significantly increase illuminance on the surgical field while also reducing power consumption.

Legacy Optics



Designed for fluorescent sources commonly in use, symmetric/asymmetric prismatic lenses increase glare and create lens surface pixelation.

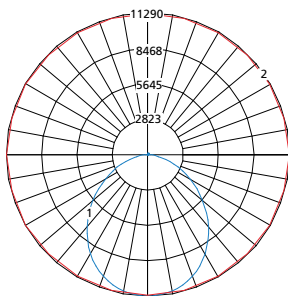
MedMaster M4 Asymmetric Distribution Options



Kenall's M4 symmetric/asymmetric and full asymmetric options both add total internal reflection optics working in conjunction with a high-efficiency, diffused lens. By doing so they provide asymmetry while also maintaining uniform lens appearance.

Symmetric Light Distribution

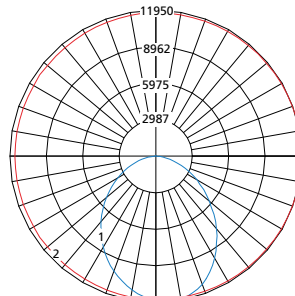
Model: M4SEDI24-200L-40K8-DCC-120-2F-2H-SYM



Max Candela = 11290 Located At Horizontal Angle = 90, Vertical Angle = 2.5
 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Asymmetric Light Distribution

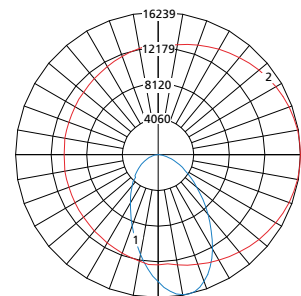
Model: M4SEDI24-200L-40K8-DCC-120-2F-2H-ASYM



Max Candela = 11950 Located At Horizontal Angle = 0, Vertical Angle = 5
 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

Full Asymmetric Light Distribution

Model: M4SEDI24-200L-40K8-DCC-120-2F-2H-FASYM



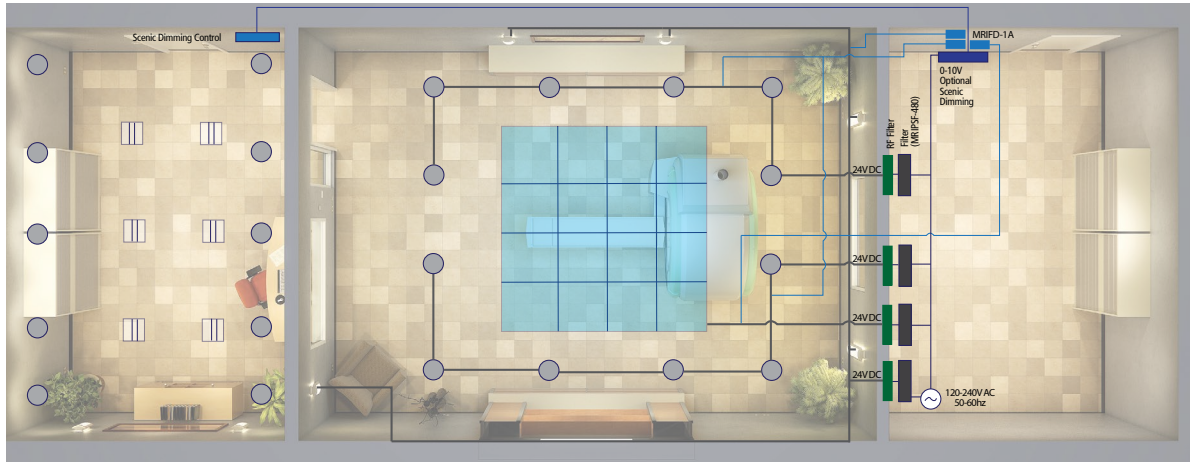
Max Candela = 16239 Located At Horizontal Angle = 0, Vertical Angle = 12.5
 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
 2 - Horizontal Cone Through Vertical Angle (12.5) (Through Max. Cd.)

MRI Suite Configuration - Plan View

Proper installation and configuration of lighting and supporting equipment in MRI/imaging suites is critical in ensuring successful operation, patient safety and comfort, and optimum scan/image resolution. In addition to non-ferrous fixture construction and proper room shielding, special low-voltage DC power supplies, RF filtering, and shielded, grounded conduit are essential elements to successful installation.

To assure a trouble-free installation, Kenall provides detailed configuration, installation sheets and technical support. If Kenall's installation instructions are followed and confirmed, Kenall offers a "Scan Safe" guarantee against fixture interference and susceptibility.

The wiring diagrams (below) illustrate two different room configurations, depending on the need for single or multiple power supplies.



Control Room (Non-Shielded MRI Installation)

Lighting for the control room of MRI/imaging suites requires the combination of even ambient and non-glare task illumination with the added flexibility of dimmable controls.

Shielded Imaging Room Closed MRI

Providing for patient comfort during imaging procedures is achieved with gentle ambient illumination and decorative sconces, along with the calming effect of beautiful graphic image lightboxes.

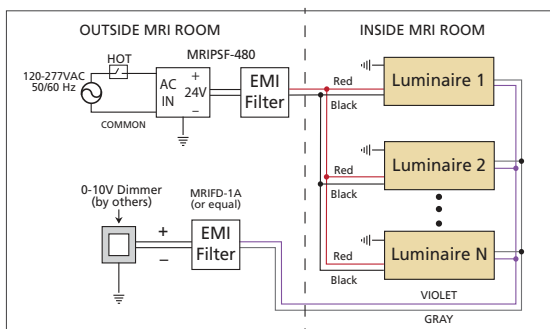
Shielded Imaging Room Open MRI

Ambient illumination can also be achieved from a variety of light sources, where light levels can be adjusted through conventional dimming or through sophisticated control systems.

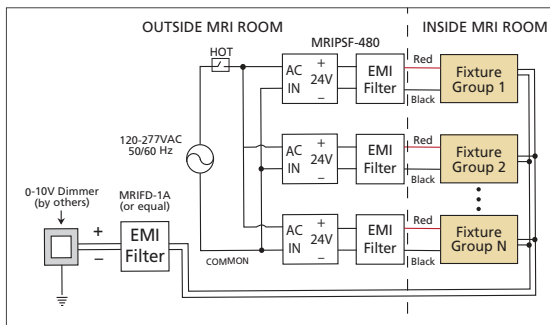
Equipment Room (Non-Shielded Installation)

All line voltage and 24-volt DC power supplies, RF filtering and dimming control systems are located in an adjacent equipment room with general illumination.

Wiring Diagram



Wiring procedure for installations with single MRI Power Supply System



Wiring procedure for installations with multiple MRI Power Supply Systems

Remote Power Supply System: MRI External Power Supply with EMI Filter

- Low-voltage DC remote power supply to reduce MRI room radio frequency interference (RFI)
- DC line EMI filter
- Optional dimming circuit EMI filter (MRIFD-1A)
- Certified to UL1012 and CSA C22.2 No. 1071 by Intertek Testing Services; Dry Location only



MRIPSF

MedMaster™ Surgical Suites - Ceiling Mount



M4SEDI Series

- Delivered lumen range: 2,404 - 28,435 lm
- Input power: 43 - 227W
- Efficacy: 86 - 134 lm/W
- Available in 530nm green LED to enhance monitor visibility and reduce eye strain

Nominal sizes:	1'×4'; 2'×2'; 2'×4'
Installation Types:	Grid, flange
Lamp Types:	White LED, 530nm green LED



MedMaster™ Surgical Suites - Undercabinet



MAUCLED Series

- Delivered lumen range: 1,233 – 2,035 lm
- Input Power: 15 – 22W
- Efficacy: 84 – 93 lm/W
- Antimicrobial finish

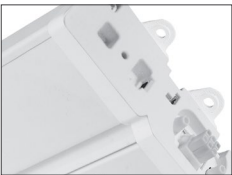
Nominal sizes: 4.5" x 18"/24"/36"/48"
 Installation Type: Surface
 Lamp Type: LED



Solid Front
 Sharp cutoff distribution



Options
 Available occupancy sensor, dimming ballast, convenience outlet and rocker switch



External Mounting Feet



Continuous Row Connectivity



Power Connections

MedMaster CleanScene™ MRI Suites - Backlit Graphic Panels



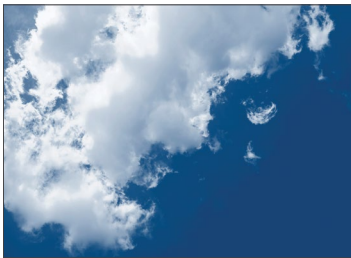
CSMRI Series

- Non-ferrous construction
- Expansive offering of high quality graphic images
- Antimicrobial finish option available

Nominal sizes: 2' x 2'; 2' x 4'; 4' x 4'
 Installation Type: Recessed mount, Grid
 Lamp Type: LED



Image library sample graphics



[View the Library](#)

MedMaster™ MRI Suites - Ceiling Mount



ME11MRI Series

- Delivered lumen range: 1,274 – 1,778 lm
- Input Power: 34W
- Efficacy: 37 – 52 lm/W
- Unique, patented optical chamber eliminates glare & reflections
- Standard dimming provides flexible light levels

Nominal Size:	1' x 1'
Installation types:	recessed mount, 1" and slot T grid
Lamp Type:	LED



MedMaster™ MRI Suites - Downlight



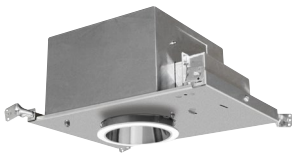
MRIDL6 Series

- Delivered lumen range: 591-2,953 lm
- Input Power: 16 – 37W
- Efficacy: 20 – 80 lm/W
- Wall-wash option
- 24V DC

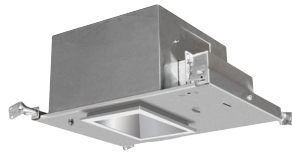
Nominal sizes:	6" aperture
Installation Type:	Recessed
Lamp Type:	LED



MedMaster™ MRI Suites - Downlight



Round



Square

MRIDL4 Series

- Delivered lumen range: 930-1,364 lm
- Input Power: 15W
- Efficacy: 60 – 89 lm/W
- Round or square aperture
- Wall-wash option
- 24V DC
- Standard dimming provides flexible light levels

Nominal sizes:	4" aperture
Installation Type:	Recessed
Lamp Type:	LED



MedMaster™ MRI Suites - Ceiling Mount



MRIGT Series

- Delivered lumen range: 2,141 – 7,508 lm
- Input power range: 28 – 77W
- Efficacy: 72 – 98 lm/W

Nominal sizes: 2' x 2' & 2' x 4'
 Installation types: Recessed Grid Mount
 Lamp types: LED



MedMaster™ MRI Suites - Ceiling Mount



MedMaster® MedSlot™ MRIRS4 Series

- Delivered lumen range: 364 – 1,006 lm
- Input power: 4 – 9W
- Efficacy: 91 – 118 lm/W
- Non-ferrous construction and remote power supplies provide safe operation with medical imaging devices
- Symmetric optical distribution with uniform lens appearance
- Radiated and conducted emissions controlled as per MIL-STD-461G

Nominal size: 2', 4' and 8' lengths
 Installation type: Grid or flange recessed mount
 Lamp type: LED



MedMaster™ MRI Suites - Ceiling Mount



MedMaster® MRI4SEDI & MRI4SESI Series

- Delivered lumen range: 2,187 – 15,617 lm
- Input power: 30 – 121W
- Efficacy: 83 – 129 lm/W
- Non-ferrous construction and remote power supplies provide safe operation with medical imaging devices
- Includes 530nm green option for improved monitor visibility in surgical suites
- Symmetric, asymmetric/symmetric and full asymmetric optical distribution options with uniform lens appearance
- Radiated and conducted emissions controlled as per MIL-STD-461G

Nominal size:	1' × 4'; 2' × 2'; 2' × 4'
Installation type:	surface mount; recessed
Lamp type:	LED



MedMaster™ MRI Suites - Wall Sconce



MRIMAS Series

- Input Power: 6 – 32W
- Non-ferrous, marine-grade, extruded aluminum construction
- Sealed backlighting creates a pleasing visual accent and supports an NSF2 listing
- Standard antimicrobial finish for cleanability
- Multiple frame finishes and decorator lenses available

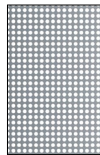
Nominal Size: 8" x 13" / 26" / 38" / 50"
 Installation types: Surface
 Lamp Type: LED



Architectural Decorative Outer Lens



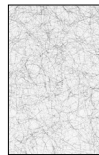
AS
Frosted Acrylic



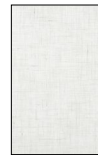
CAP
Clear Acrylic
w/Perforation



NL
Natural Leaf



SS
Silver Spun



OL
Oyster Linen



PL
Paper Leaf

MedMaster™ MRI Suites - Wall Sconce



LPS5MRI, LPSR5MRI Series

- Delivered lumen range: 452 – 587 lm
- Input Power: 16W
- Efficacy: 28 – 37 lm/W
- One-piece, die-cast aluminum frames with edge-lit LED lamp source
- Optional decorative lens
- Easy-to-clean construction—meets NSF2 requirements
- Product meets California OSHPD requirements (LPSR5MRI only)

Nominal Size: 1' length
 Installation types: Surface, semi-recessed
 Lamp Type: LED



Architectural Decorative Outer Lens



FP
Frosted
Polycarbonate



MDT
Monochrome
Dots



WVE
Weave



BRC
Branches



VNE
Vine



PIP
Pipes



CD
Custom Signage

MedMaster™ MRI Suites - Undercabinet



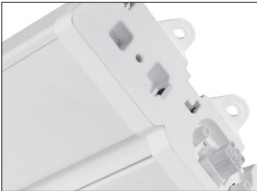
MRIAUC Series

- Delivered lumen range: 1,072 – 2,286 lm
- Input Power: 15 – 30W
- Efficacy: 70 – 75 lm/W
- Antimicrobial finish standard
- External mounting feet allow for easy installation

Nominal sizes:	1.5' or 3' lengths
Installation Type:	Surface
Lamp Type:	LED



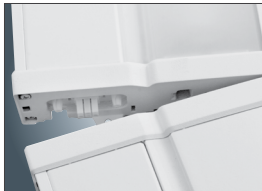
Solid Front
Sharp cutoff distribution



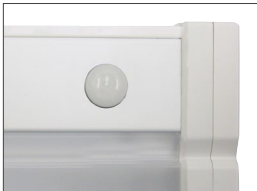
External Mounting Feet



Power Connections



Continuous Row Connectivity



Options
Available occupancy sensor,
dimming ballast, convenience
outlet and rocker switch

MedMaster CleanScene™ Exam Rooms - Backlit Graphic Panels



CS Series

- Expansive offering of soothing, high-quality graphic images
- Antimicrobial finish option available

Nominal sizes:	2'×2'; 2'×4'; 4'×4'
Installation types:	Recessed mount, grid or flange; surface
Lamp Type:	LED, fluorescent



MedMaster CleanScene™ Exam Rooms - Backlit Graphic Panels



CSMEC Series

- Symmetric fluorescent exam light with LED or fluorescent center graphic compartment
- Antibacterial finish standard

Nominal Size:	4'×4'
Installation Type:	Recessed mount, grid
Lamp Type:	LED, fluorescent



MedMaster™ Exam Rooms - Ceiling Mount



MAEC Series

- Delivered lumen range: 953 – 7,022 lm
- Input Power: 45–91W
- Efficacy: 65–88 lm/W
- Symmetric ambient, reading and asymmetric exam function
- Antimicrobial finish option
- Tunable White option available

Nominal Size:	8"×48"
Installation types:	Recessed mount, grid or flange
Lamp Type:	LED



MedMaster™ Exam Rooms - Ceiling Mount



MedSlot™ MRS4 Series

- Delivered lumen range: 409 – 1,215 lm/ft
- Input Power: 4 – 12 W/ft
- Efficacy: 79 – 128 lm/W
- Single-function linear slot luminaire provides ambient light
- Symmetric and asymmetric optical distribution options
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	4" × 24", 36", 48", 72" or 96"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED



MedMaster™ Exam Rooms - Ceiling Mount



MAERS4 Series

- Delivered lumen range: 957 – 5,468 lm
- Input Power: 10 – 57W
- Efficacy: 76 – 108 lm/W
- Multi-function linear slot luminaire provides ambient, exam and reading light options
- Symmetric and asymmetric optical distribution options

Nominal size:	4" × 48"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED

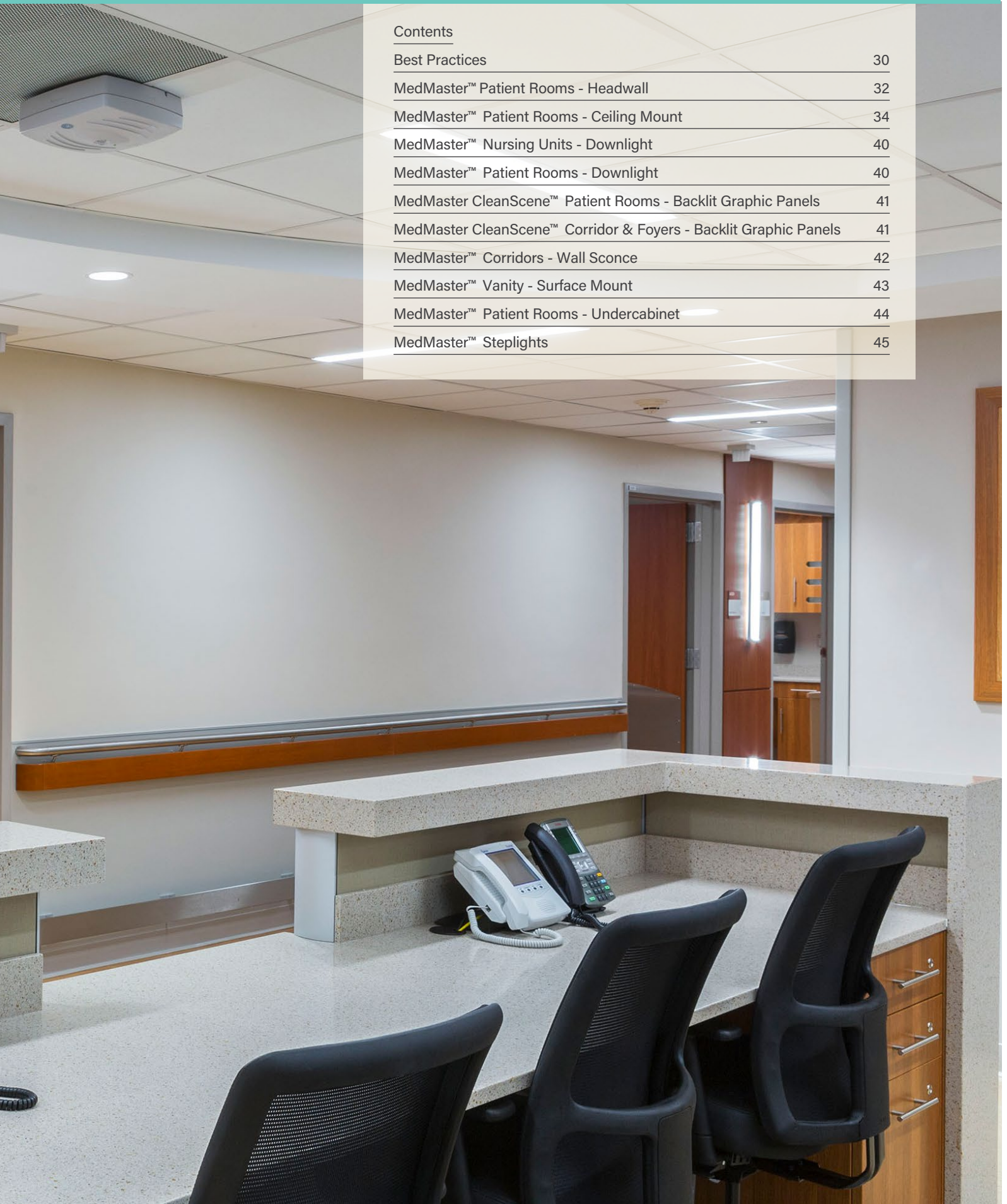




Englewood Hospital, Englewood, New Jersey

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Best Practices: Nursing Units & Patient Care Areas

Performance Requirements & How We Meet Them

1. Multi-Function Capability

The patient room requires different illumination levels for various tasks, including ambient illumination, patient exams, caregiving, charting, reading and wayfinding. Often, multiple patients share a space, (for example, double-occupancy rooms, and specialized nursing units, such as neonatal ICUs) resulting in the need for individual reading and task lighting. Kenall offers multi-function luminaires to meet a wide variety of patient care needs.

Kenall Solutions:

- Multiple functions include ambient, reading, exam, charting and night light
- Dimming
- Tunable White option to support circadian rhythms
- Patient- and staff-friendly controls

2. Ease of Maintenance & Cleanability

Patient care and nursing unit lighting should be easy to clean and maintain to minimize room downtime.

Kenall Solutions:

- Long life LEDs reduce maintenance
- Smooth, antimicrobial finishes and thoughtful design promote easy cleaning

3. Sealed for Safety & Infection Control

Patient room care area fixtures must support patient safety and infection prevention protocols.

Kenall Solutions:

- NSF Listed
- IP Rated to prevent the spread of airborne pathogens and maintain protective environments for immunosuppressed/immunocompromised patients
- One-piece, seam-welded construction
- Standard antimicrobial finish

4. Wayfinding Capability

At night, wayfinding or step lighting in patient rooms can be critical to the safety of both caregiver and patient.

Kenall Solutions:

- Exit signage and wayfinding available in a variety of configurations
- Step lighting available in a variety of wattages, shapes and colors
- ADA-compliant

5. Aesthetic Appeal

In a continuing effort to optimize patient comfort, contemporary patient rooms often mimic residential design aesthetics.

Kenall Solutions:

- Inviting residential look and feel
- Consistent design aesthetics
- Reduced glare

Patient Room Lighting Considerations

Effective patient room lighting must balance both the aesthetic and analytic aspects of patient care. While patient comfort is certainly of primary importance, caregiver performance remains the most critical component in determining patient outcome. As a result, variable lighting options—including color tuning, multi-level switching, and dimming capabilities—become essential to an effective patient room lighting design.

The diagram below describes each functional area of the patient room and the IES recommended footcandle levels required to effectively light each area. This section details the solutions Kenall offers to meet these recommended levels, including lighting fixtures that address the specific needs of each area.

Night Observation

Healthcare professionals require sufficient light in the patient room for reading of charts without disturbing the sleep of the patient. Recommended levels are 3 fc @ 3 ft.

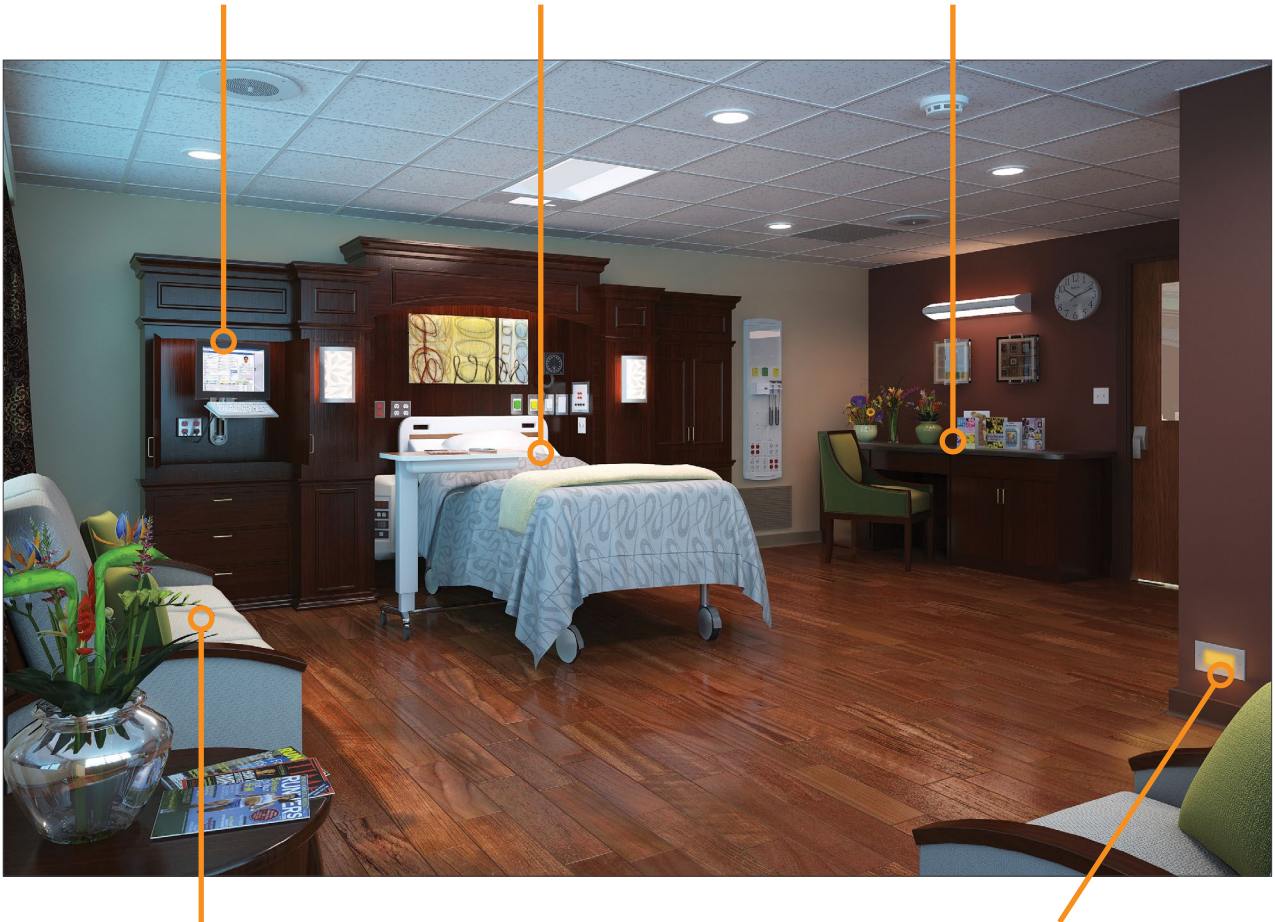
Patient Bed

Dimming or multiple switching levels required for various activities

Exam	75 fc @ 3 ft.
Reading	75 fc @ 3 ft.
General	20 fc @ 0 ft.

Office Desk

Sufficient lighting is necessary for reading and writing activities. Recommended light levels are 40 fc @ 2.5 ft.



Casual Chair

Lighting for guest chairs should be between 30 fc @ 25 ft.

Steplight

Low levels suitable for nighttime circulation by patient and healthcare providers - 0.4 fc @ 0.0 ft.

MedMaster™ Patient Rooms - Headwall



MPH Series

- Delivered Lumen Range: 1,999-11,327
- Input Power: 25-97W
- Efficacy: 79-117 lm/W
- Bi-directional (up/down) illumination in a thin profile, wall-mounted luminaire
- Multi-function capability, providing ambient and examination lighting and a nightlight option

Nominal Size:	24", 36" or 48" length
Installation Type:	Surface Wall Mount
Lamp Type:	LED



MedMaster™ Patient Rooms - Headwall



MPWF Series

- Delivered lumen range: 4,304 – 9,810 lm
- Input Power: 44 – 93W
- Efficacy: 96 – 105 lm/W
- Uplight, downlight or combination for ambient, reading and exam functionality
- Amber night light option

Nominal Size:	36" or 48" length
Installation Type:	Standard six-point mounting
Lamp Type:	LED, Fluorescent



MedMaster™ Patient Rooms - Headwall



MPWUD Series

- Delivered lumen range: 2,981 – 11,534 lm
- Input Power: 28 – 93W
- Efficacy: 106 – 126 lm/W
- Uplight, downlight or combination for ambient and reading functionality
- Amber night light option
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes: | 24", 36" or 48" length
 Installation Type: | Standard four- or six-point mounting
 Lamp Type: | LED, Fluorescent



MedMaster™ Patient Rooms - Headwall



Traditional (T)



Contemporary (C)

MPWV Series

- Delivered lumen range: 2,960 – 11,449 lm
- Input Power: 28 – 95W
- Efficacy: 105 – 124 lm/W
- Ambient and reading functions
- Amber night light option

Nominal sizes: | 24" or 48" length
 Installation Type: | Standard four- or six-point mounting
 Lamp Type: | LED, fluorescent



MedMaster™ Patient Rooms - Ceiling Mount



MedSlot™ MRS4 Series

- Delivered lumen range: 409 – 1,215 lm/ft
- Input Power: 4 – 12 W/ft
- Efficacy: 79 – 128 lm/W
- Single-function linear slot luminaire provides ambient light
- Symmetric and asymmetric optical distribution options
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	4" × 24", 36", 48", 72" or 96"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MAERS4 Series

- Delivered lumen range: 957 – 5,468 lm
- Input Power: 10 – 57W
- Efficacy: 76 – 108 lm/W
- Multi-function linear slot luminaire provides ambient, exam and reading light options
- Symmetric and asymmetric optical distribution options

Nominal size:	4" × 48"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED





Carle Foundation Hospital Intensive Care Unit, Urbana, Illinois

MedMaster™ Patient Rooms - Ceiling Mount



MPCNGX Series

- Delivered lumen range: 1,302 – 17,746 lm
- Input Power: 26 – 188W
- Efficacy: 59 – 103 lm/W
- Ambient, exam and reading functions
- Antimicrobial finish standard
- Tunable White option available

Nominal sizes:	2' x 2'; 2' x 4'
Installation types:	Recessed mount, grid or flange
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MPC Series

- Delivered lumen range: 2,014 – 17,102 lm
- Input Power: 29 – 167W
- Efficacy: 69 – 116 lm/W
- Ambient, exam and reading functions
- Standard 0-10V dimming with 1-100% range
- Amber night light option

Nominal sizes:	2' x 2'; 2' x 4'
Installation types:	Recessed mount, grid or flange; surface
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MPCAE Series

- Delivered lumen range: 1,705 – 11,894 lm
- Input Power: 26 – 148W
- Efficacy: 66 – 87 lm/W
- Ambient and direct exam functions
- BIOS SkyBlue™ and Tunable White options available
- Amber night light option

Nominal sizes:	2' x 2'; 2' x 4'
Installation types:	Recessed mount, grid or flange; surface
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MPCAIE Series

- Delivered lumen range: 3,856 – 14,138 lm
- Input Power: 44 – 172W
- Efficacy: 70 – 115 lm/W
- Ambient, reading and indirect exam function
- Antimicrobial finish standard
- BIOS SkyBlue™ and Tunable White options available
- Amber night light option

Nominal sizes:	2' x 2'; 2' x 4'
Installation types:	Recessed mount, grid or flange; surface
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MAEC Series

- Delivered lumen range: 463 – 7,022 lm
- Input Power: 8 – 91W
- Efficacy: 56 – 88 lm/W
- Symmetric ambient, reading and asymmetric exam function
- Antimicrobial finish option
- Tunable White technology option available

Nominal Size:	8" x 48"
Installation types:	Recessed mount, grid or flange
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



ME Series

- Delivered lumen range: 1,687 – 12,365 lm
- Input Power: 29 – 98W
- Efficacy: 58 – 126 lm/W
- Fully sealed, NSF2 rated optical system; impact resistant acrylic lens
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	1'×1'; 1'×4'; 2'×2'; 2'×4'
Installation types:	Recessed mount, grid or flange
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MEP Series

- Delivered lumen range: 9,539 – 10,577 lm
- Input Power: 99W
- Efficacy: 96 – 107 lm/W
- Ambient and exam functions
- Fully sealed, NSF2 rated optical system; impact resistant acrylic lens
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	2'×2'; 2'×4'
Installation types:	Recessed mount, grid or flange
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



AMB Series

- Recessed mount – Flange or Grid; 2'×2', 2'×4'
- High R9 value and High CRI provide biologically optimized LED spectrum for early detection of cyanosis.
- Features BIOS SkyBlue™ Technology to benefit daytime alertness, cognition, mood and circadian rhythms
- Tool-less access for servicing
- Wipe-down cleanability with NSF2 rating

Nominal sizes:	2'×2'; 2'×4'
Installation types:	Recessed mount or grid
Lamp Type:	LED



MedMaster™ Patient Rooms - Ceiling Mount



MAC Series

- Delivered lumen range: 3,652 – 11,095 lm
- Input Power: 46 – 122W
- Efficacy: 76 – 122 lm/W
- Central diffuser combined with upper reflectors provide soft, ambient illumination
- BIOS SkyBlue™ and Tunable White options available
- Amber night light option

Nominal sizes: 1'×4'; 2'×2'; 2'×4'
 Installation types: Recessed mount, grid or flange; surface
 Lamp Type: LED, fluorescent



MedMaster™ Patient Rooms - Ceiling Mount



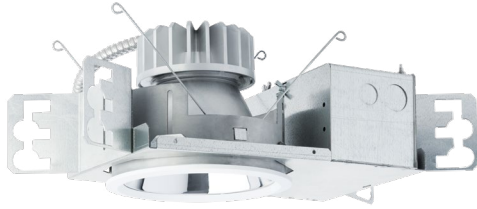
MADC Series

- Delivered lumen range: 3,816 – 9,228 lm
- Input Power: 50 – 98W
- Efficacy: 76 – 98 lm/W
- Perforated basket with center pearlescent acrylic diffuser
- Amber night light option

Nominal sizes: 2'×2'; 2'×4'
 Installation types: Recessed mount, grid or flange; surface
 Lamp Type: LED, fluorescent



MedMaster™ Nursing Units - Downlight



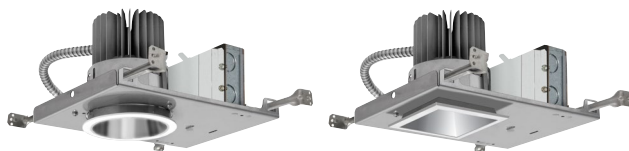
MDL6 Series

- Delivered lumen range: 768 – 5,543 lm
- Input Power: 15 – 62W
- Efficacy: 24 – 90 lm/W
- Aluminum, stainless or cold-rolled steel trim ring
- Tunable White technology options available

Nominal Size:	6" aperture
Installation types:	Recessed
Lamp Type:	LED



MedMaster™ Patient Rooms - Downlight



Round

Square

MDL4 Series

- Delivered lumen range: 983 – 2,640 lm
- Input Power: 16 – 31W
- Efficacy: 58 – 90 lm/W
- Round or square aperture
- Tunable White technology available

Nominal Size:	4" aperture
Installation types:	Recessed
Lamp Type:	LED



MedMaster CleanScene™ Patient Rooms - Backlit Graphic Panels



CSMEC Series

- Symmetric fluorescent exam light with LED or fluorescent center graphic compartment
- Antibacterial finish standard

Nominal Size: 4' x 4'
 Installation Type: Recessed mount, grid
 Lamp Type: LED, fluorescent



[View the Image Library](#)



MedMaster CleanScene™ Corridor & Foyers - Backlit Graphic Panels



CS Series

- Expansive offering of soothing, high-quality graphic images
- Antimicrobial finish option available

Nominal sizes: 2'x2'; 2'x4'; 4'x4'
 Installation types: Recessed mount, grid
 Lamp Type: LED



[View the Image Library](#)



MedMaster™ Corridors - Wall Sconce



LPS Series

- Delivered lumen range: 506 – 2,100 lm
- Input Power: 15 – 42W
- Efficacy: 34 – 50 lm/W
- One-piece, die-cast aluminum housing with LED edge-lit decorative lens
- Wall backlight on damp location configurations

Nominal sizes: 12", 24" or 36" lengths
 Installation Type: Wall mount or semi-recessed
 Lamp Type: LED



Architectural Decorative Outer Lens



FP
Frosted
Polycarbonate



MDT
Monochrome
Dots



WVE
Weave



BRC
Branches



VNE
Vine



PIP
Pipes



CD
Custom
Signage

MedMaster™ Vanity - Surface Mount



MLHA5V Series

- Delivered lumen range: 2,374 – 5,062lm
- Input Power: 25W, 49W
- Efficacy: 95 – 103 lm/W
- Four end cap styles available
- Natatorium environment option

Nominal sizes:	24" or 48" lengths
Installation Type:	Surface
Lamp Type:	LED



Multiple End Cap Options

End caps are marine grade, die-cast aluminum with a 1,000-hour salt spray tested finish.



Stepped



Reveal



Flat



Round

MedMaster™ Patient Rooms - Undercabinet



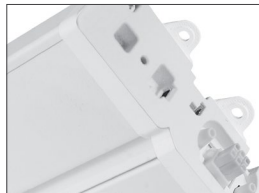
Stratalume Connects™ MAUCLED Series

- Delivered lumen range: 1,127 – 2,466 lm
- Input Power: 14 – 29W
- Efficacy: 80 – 93 lm/W
- Occupancy sensor option
- Extruded, die-cast aluminum construction

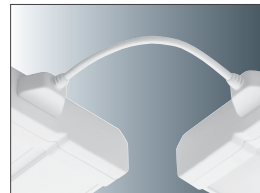
Nominal sizes:	18", 24", 36" or 48" lengths
Installation Type:	Surface – individual or series-mount
Lamp Type:	LED



Solid Front
Sharp cutoff distribution



External Mounting Feet



Power Connections



Continuous Row Connectivity



Options
Available occupancy sensor,
dimming ballast, convenience
outlet and rocker switch

MedMaster™ Steplights



VO



HO



VR



HR

MCSL Series

MedMaster™ SoftStep Contour™ steplight

- Delivered lumen range: 5 – 38lm
- Input Power: 0.5 – 3.3W
- Die-cast aluminum housings
- White, amber or blue LED options
- Lumen output field adjustable to 100%, 50% and 25%
- Multiple decorator finishes

Nominal sizes:	6.10" × 4.85"; 4.85" × 6.10"; 5.6" × 3.7"; 4" × 5.38"
Installation Type:	Semi-recessed wall mount
Lamp Type:	LED



MSLS



MSLR-H



MSLR-V



MSL



MSLT



MSLD

MSL Series

MedMaster™ SoftStep™ steplight

- White, amber, blue or red LED options
- Fabricated plates; square or rectangle face
- Painted or brushed stainless steel finish
- Duplex outlet option (MSLD)

Nominal sizes:	5" × 5"; 4.375" × 7"; 3.75" × 9.25"; 5.25" × 9.25"; 6.5" × 9.25"
Installation Type:	Semi-recessed wall mount
Lamp Type:	LED

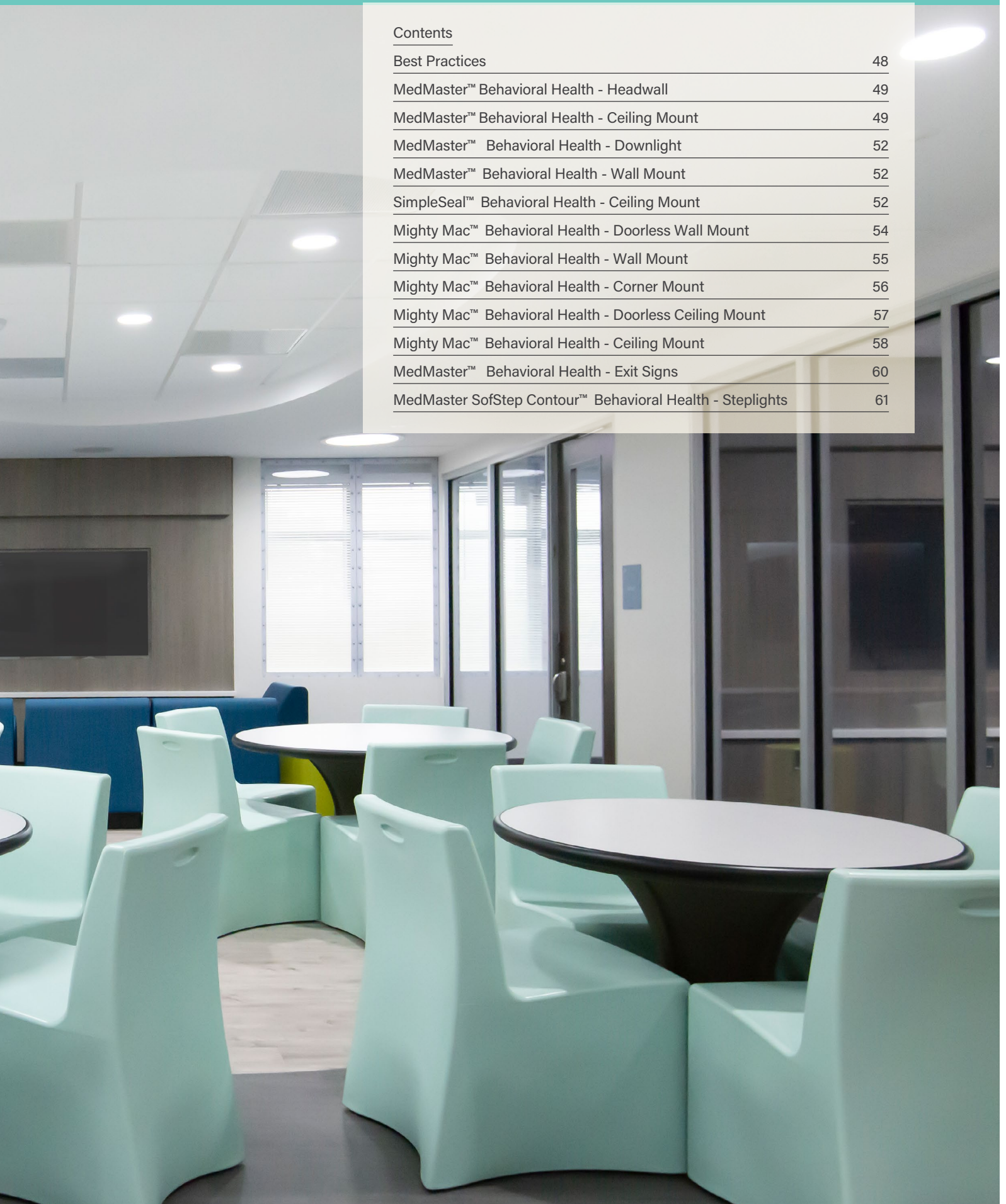




*Seattle Childrens' Psychiatry & Behavioral
Medicine Unit, Seattle, Washington*

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Best Practices: Behavioral Health Lighting

Performance Requirements for Behavioral Health Settings – and How We Meet Them

Many healthcare facilities contain units specifically designed for the care of patients in crisis due to mental health issues or addiction. Lighting for these spaces must be sufficiently robust to support patient and staff safety, while still providing suitable illumination and comfort.

1. Sealed for Safety & Security

To provide patient safety and security, lighting should be IP-certified and tamper-resistant to facilitate easy cleaning and help prevent the spread of pathogens.

Kenall Solutions:

- Ingress Protection ratings
- Antimicrobial finishes
- NSF listings to ensure cleanability

2. Multi-function Capabilities

Because behavioral health needs are varied, room luminaires must be multi-functional. Healthcare appropriate listings, such as IP and NSF, are desirable, but lighting should also be comfortable for patients and support their needs while in crisis.

Kenall Solutions:

- Fixtures with multiple functions, including ambient, exam, reading and night light
- Lighting with single and double apertures to direct light when and where it's needed
- Standard 0-10V dimming

3. Designed for Durability

Healthcare luminaires must be durable, and should be built with materials that support the protection of patients and staff.

Kenall Solutions:

- Security-grade housings with durable doorframes and tamper-resistant fasteners
- Impact-resistant polycarbonate lenses

4. Lighting Considerations for Behavioral Health Settings

To create an environment of healing, behavioral health lighting must be built to mitigate attempts at self-injury. Features such as color-tuning can also help preserve normal sleep/wake cycles, reducing patient irritability.

Kenall Solutions:

- Ligature resistant designs
- Optional Tunable White (TW) lighting
- BIOS® SkyBlue™ Circadian Solutions

Kenall Luminaires Recommended by Leading Behavioral Health Authorities

Kenall is the leading manufacturer of luminaires that are recommended for use in behavioral health settings by state and federal agencies, including the Department of Veteran's Affairs, and independent lighting consultants.

In addition to luminaires featured in this guide, the Kenall website contains other lighting appropriate for behavioral health settings.

For additional information about individual product recommendations, visit the behavioral health section of kenall.com and click "View the Guidelines".

MedMaster™ Behavioral Health - Headwall



BHH Series

- Delivered lumen range: 1,317 – 7,757 lm
- Input Power: 21 – 90 W
- Efficacy: 59 – 89 lm/W
- Bi-directional (up/down) luminaire proves multi-function ambient and exam lighting
- Durable, die-cast and extruded aluminum construction and tamper-resistant fasteners
- Diffused polycarbonate lenses with continuous lens retention
- BIOS SkyBlue™ option available

Nominal Size:	24", 36" or 48" length
Installation Type:	Surface Wall Mount
Lamp Type:	LED



MedMaster™ Behavioral Health - Ceiling Mount



SafeSlot™ BHRS4 Series

- Delivered lumen range: 412 – 1,035 lm/ft
- Input Power: 7 – 13 W/ft
- Efficacy: 52 – 84 lm/W
- Single function linear slot luminaire provides ambient light
- Symmetric and asymmetric optical distribution options
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	4"×24", 36", 48", 72" or 96"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED



MedMaster™ Behavioral Health - Ceiling Mount



SafeSlot™ BHAERS4 Series

- Delivered lumen range: 533 – 3,880 lm
- Input Power: 11 – 56W
- Efficacy: 47 – 75 lm/W
- Multi-function linear slot luminaire provides ambient, exam and reading light options
- Symmetric and asymmetric optical distribution options

Nominal size:	4"×48"
Installation Types:	Recessed ceiling mount, grid or flange
Lamp Type:	LED



MedMaster™ Behavioral Health - Ceiling Mount



MMAC Series

- Delivered lumen range: 3,749 – 11,214 lm
- Input Power: 46 – 122W
- Efficacy: 67 – 121 lm/W
- Center diffuser provides direct/indirect ambient lighting
- White and amber night light option
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	1' × 4'; 2' × 2'; 2' × 4'
Installation Type:	Surface; Recessed ceiling mount, grid or flange
Lamp Type:	LED, T5, T5HO, T8



MedMaster™ Behavioral Health - Ceiling Mount



MMPC Series

- Delivered lumen range: 1,869 – 15,870 lm
- Input Power: 28 – 167W
- Efficacy: 64 – 107 lm/W
- Multi-function luminaire offers ambient, reading, exam, chart and night light options

Nominal sizes:	2' × 2'; 2' × 4'
Installation Type:	Surface; Recessed ceiling mount, flange
Lamp Type:	LED



MedMaster™ Behavioral Health - Ceiling Mount



MMPCAIE Series

- Delivered lumen range: 1,502 – 10,976 lm
- Input Power: 26 – 148W
- Efficacy: 57 – 80 lm/W
- Doorframe with polycarbonate lens secured with Torx® fasteners for enhanced security
- Available in a variety of lens thicknesses, up to .375" for optimal security
- Multi-function luminaire offers ambient, reading, exam, chart and night light options
- BIOS SkyBlue™ and Tunable White options available
- Amber night light option

Nominal sizes:	2' x 2'; 2' x 4'
Installation Type:	Surface; Recessed ceiling mount, flange
Lamp Type:	LED, T5, T5HO, T8



MedMaster™ Behavioral Health - Ceiling Mount



MMPCAIE Series

- Delivered lumen range: 3,637 – 13,334 lm
- Input Power: 44 – 172W
- Efficacy: 66 – 108 lm/W
- Doorframe with polycarbonate lens secured with Torx fasteners for enhanced security
- Available in a variety of lens thicknesses, up to .375" for optimal security
- Multi-function luminaire offers ambient, reading, exam, chart and night light options
- Amber night light option

Nominal sizes:	2' x 2'; 2' x 4'
Installation Type:	Surface; Recessed ceiling mount, flange
Lamp Type:	LED, T5, T5HO, T8



MedMaster™ Behavioral Health - Downlight



BHD6 Series

- Delivered lumen range: 628 – 5,305 lm
- Input Power: 15 – 62W
- Efficacy: 48 – 86 lm/W
- Stainless or cold-rolled steel trim ring
- 1% dimming via 0-10V Driver
- Tunable White technology option available

Nominal size:	6" aperture
Installation Type:	Recessed
Lamp Type:	LED



MedMaster™ Behavioral Health - Wall Mount



BHWB Series

- Delivered lumen range: 5,286 – 8,816 lm
- Input power: 57– 81W
- Efficacy: 90 – 112 lm/W
- Bullnose profile with sloped sides for reduced patient injury risk
- Available integral, low-voltage controllers for wall- and bed-mounted patient control

Nominal Sizes:	7" x 37.7", 6.5" deep
Installation Type:	Wall Mount
Lamp types:	LED



SimpleSeal™ Behavioral Health - Ceiling Mount



HASEDI Series

- Delivered lumen range: 4,480 – 22,539 lm
- Input power: 46 – 196W
- Efficacy: 93 – 137 lm/W
- High-output lamp source for accurate color rendition and lighting performance
- One-piece inset doorframe, secured to housing with continuous piano hinge and Torx® fasteners

Nominal sizes:	1' x 4', 2' x 2' or 2' x 4'
Installation types:	Recessed mount, grid or flange
Lamp type:	LED





“Kenall is one of the few manufacturers that offers architecturally sensitive products that are also physically robust enough to be considered for these environments.”

– Mark de la Fuente, Senior Associate, Mazzetti

Fulton State Behavioral Health Hospital
Fulton, Missouri

[View the Case Study](#)

Mighty Mac™ Behavioral Health - Doorless Wall Mount



WCBS Series

- Delivered lumen range: 6,056 – 10,265 lm
- Input power: 57 – 81W
- Efficacy: 104 – 128 lm/W
- Two apertures provide both up and down light

Nominal size:	9" × 38.5", 6.5" deep
Installation type:	wall mount
Lamp type:	LED



Mighty Mac™ Behavioral Health - Doorless Wall Mount



WCBHS Series

- Delivered lumen range: 2,339 – 5,270 lm
- Input power: 22– 44W
- Efficacy: 98 – 127 lm/W
- Downlight only

Nominal size:	9" × 38.5", 6.5" deep
Installation type:	wall mount
Lamp type:	LED



Mighty Mac™ Behavioral Health - Doorless Wall Mount



WCHS Series

- Delivered lumen range: 2,339 – 5,270lm
- Input power: 22 – 44W
- Efficacy: 98 – 127 lm/W
- Downlight only

Nominal size:	8" × 38.5"
Installation type:	wall mount
Lamp type:	LED



Mighty Mac™ Behavioral Health - Doorless Wall Mount



WCUS Series

- Delivered lumen range: 6,056 – 10,265lm
- Input power: 57 – 81W
- Efficacy: 104 – 128 lm/W
- Two apertures provide both up and down light

Nominal size:	8" × 38.5"
Installation type:	wall mount
Lamp type:	LED



Mighty Mac™ Behavioral Health - Wall Mount



BHWHS Series

- Delivered lumen range: 1,919 – 4,325 lm
- Input power: 22– 44W
- Efficacy: 80 – 104 lm/W
- Bullnose profile with sloped sides for reduced patient injury risk
- Available integral low-voltage controllers for wall- and bed-mounted patient control

Nominal Sizes:	7" × 37.7", 6.5" deep
Installation Type:	Wall Mount
Lamp types:	LED



Mighty Mac™ Behavioral Health - Wall Mount



WCB Series

- Delivered lumen range: 2,001 – 4,200 lm
- Input Power: 28 – 47W
- Efficacy: 70 – 89 lm/W
- Completely concealed, internal drop-slot piano hinge
- Downlight only

Nominal Sizes: 9"× 11"× 29", 9"× 11"× 53"
Lamp Types: LED



Mighty Mac™ Behavioral Health - Wall Mount



WCBU Series

- Delivered lumen range: 3,751 – 6,152 lm
- Input Power: 57 - 94W
- Efficacy: 77 – 91 lm/W
- Two apertures provide up and down light
- Smooth, ligature-resistant bull-nose design

Nominal Sizes: 9"× 11"× 29"; 9"× 11"× 53"
Installation Type: Wall
Lamp Types: LED, T8



Mighty Mac™ Behavioral Health - Corner Mount



CC Series

- Delivered lumen range: 2,199 – 9,112 lm
- Input Power: 28 – 122W
- Efficacy: 62 – 99 lm/W
- Clamshell housing style prevents concealment of unauthorized items
- BIOS SkyBlue™ and Tunable White options available

Nominal Sizes: 9" × 24"; 9" × 48"
Installation Type: Corner
Lamp types: LED, T5, T5HO, T8



Mighty Mac™ Behavioral Health - Corner Mount



CD Series

- Delivered lumen range: 2,151 – 8,911 lm
- Input Power: 28 – 122W
- Efficacy: 59 – 99 lm/W
- Hinged door style
- BIOS SkyBlue™ and Tunable White options available

Nominal Sizes:	8"× 24"; 8"× 48"
Installation Type:	Corner
Lamp types:	LED, T5, T5H0, T8



Mighty Mac™ Behavioral Health - Doorless Ceiling Mount



SSAS Series

- Delivered lumen range: 2,235 lm – 5,035 lm
- Input Power: 22 – 43W
- Efficacy: 96 – 122 lm/W
- One-piece, TIG-welded housing with reinforced, continuous lens retention

Nominal size:	9" × 36"
Installation type:	surface ceiling mount
Lamp type:	LED



Mighty Mac™ Behavioral Health - Ceiling Mount



RMCA Series

- Delivered lumen range: 1,811 – 7,503 lm
- Input Power: 28 – 97W
- Lumens per watt: 64 – 83 lm/W
- Suitable for both grid and flange applications
- Full-length, concealed internal piano hinge

Nominal Sizes:	12" × 24", 12" × 48"
Installation Type:	Recessed ceiling mount, grid or flange
Lamp types:	LED, T8



Mighty Mac™ Behavioral Health - Ceiling Mount



RMCD Series

- Delivered lumen range: 3,364 – 9,529 lm
- Input Power: 29 – 97W
- Lumens per watt: 61 – 122 lm/W
- Suitable for both grid and flange applications
- Full-length, concealed internal piano hinge
- BIOS SkyBlue™ and Tunable White options available

Nominal Sizes:	24" × 24", 24" × 48"
Installation Type:	Recessed ceiling mount, grid or flange
Lamp types:	LED, T8



Mighty Mac™ Behavioral Health - Ceiling Mount



WCU Series

- Delivered lumen range: 4,416 – 9,278 lm
- Input Power: 57 - 92W
- Efficacy: 78 – 101 lm/W
- Two apertures provide up and down light

Nominal Sizes:	7"×11"×29"; 7"×11"×53"
Installation Type:	Wall
Lamp types:	LED, T8



Mighty Mac™ Behavioral Health - Ceiling Mount



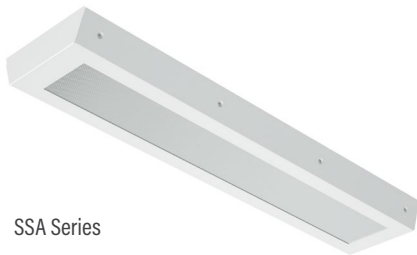
WCH Series

- Delivered lumen range: 2,775 – 3,076 lm
- Input Power: 50W
- Efficacy: 55 – 62 lm/W
- Single-aperture fixture

Nominal Sizes: 7" x 11" x 29"; 7" x 11" x 53"
 Installation Type: Wall
 Lamp types: LED, T8



Mighty Mac™ Behavioral Health - Ceiling Mount



SSA Series

SS_ Series

- Delivered lumen range: 2,530 – 11,867 lm
- Input power: 28 – 97W
- Efficacy: 72 – 130 lm/W
- Completely concealed internal drop slot piano hinge
- Die-formed blade trap (1/4" minimum) prevents contraband concealment and unauthorized access
- Tunable White technology available

Nominal Sizes
 SSA: 12" x 24"; 12" x 48"
 SSB: 16" x 24"; 16" x 48"
 SSC: 20" x 24"; 20" x 48"
 SSD: 24" x 24"; 24" x 48"
 Installation type: surface ceiling mount
 Lamp Types: LED, T5, T5H0, T8



SSA-TW and SSA-ICT

SSA Only



SSB Series



SSC Series



SSD Series

MedMaster™ Behavioral Health - Exit Signs



METSU



METDU



METSU

Millenium METSU, METDU, METSW

- Surface mount – wall or ceiling; single-face (METSU) or dual-face (METDU) option
- Wall mount – single face (METSU)
- Indirect red or green LED
- Internal battery backup system
- High impact polycarbonate construction



MedMaster™ Behavioral Health - Exit Signs



Millenium METSR

- Semi-recessed wall mount – single face
- Indirect red or green LED
- Internal battery backup system
- 20-gauge cold rolled steel housing
- Self diagnostic testing features



MightyMac MMEX

- Surface mount – wall or ceiling
- Single- and dual-face options
- Indirect red or green LED
- 14-gauge cold rolled steel or stainless steel housing



MedMaster SofStep Contour™ Behavioral Health - Steplights



VO



HO



VR



HR

MCSL Series

- Delivered lumen range: 5 – 38 lm
- Input Power: 0.5 – 3.3W
- Efficacy: 10 – 13 lm/W
- Die-cast aluminum housings
- White, amber or blue LED options
- Lumen output field adjustable to 100%, 50% and 25%
- Multiple decorator finishes available

Nominal sizes: 6.10"× 4.85"; 4.85"× 6.10";
5.6"× 3.7"; 4"× 5.38"
Installation Type: Semi-recessed wall mount
Lamp Type: LED





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Best Practices:

Performance Requirements for Circulation Area Lighting & Signage – and How We Meet Them
Kenall's lighting is engineered to support busy facilities by providing optimum light quality, simple wayfinding, and energy efficiency.

1. Life Safety Code® Compliant

The National Fire Protection Association's (NFPA) Life Safety Code requirements, specific to the Illumination of Means of Egress, address the illumination levels and duration required for various applications.

Kenall Solutions:

- Are designed and engineered to meet or exceed NFPA requirements
- Offer a variety of configurations designed to light variably-sized paths of egress
- Feature bright, evenly illuminated faces with red or green exit stencils, and remote operating capabilities
- Meet NFPA 101 and UL 924 standards to ensure safe operation

2. Durable, Rugged Construction

Kenall Solutions:

- Are built using the highest quality injection-molded polycarbonate housings, baseplates and mounting components
- Carry ingress protection (IP) ratings to protect against the penetration of moisture, dirt, and debris
- Are NSF listed, indicating the product is simple to clean, supporting infection prevention
- Meet NFPA 101 and UL 924 standards to ensure safe operation
- Offer a standard ambient temperature rating of 10°C to 45°C, or if optional cold weather package is specified, the fixture is rated to -45°C
- Are ADA compliant and carry an exclusive Peace of Mind Guarantee® against breakage for the life of the product installation

3. LED Technology for Long Life

Kenall Solutions:

- Are often underdriven to increase LED life (up to 50,000 hours)
- Feature LED lamps that do not contain filaments, making the fixtures ideal for high-vibration areas
- Require less battery power, so maintenance is reduced, and sustainability is enhanced

4. Integrated Controls & Motion Sensing Capability

Lighting should accommodate fluctuating activity levels while conserving energy.

Kenall Solutions:

- Feature integrated controls to detect occupancy* and daylight levels**—with adjustments for both time delay and sensitivity
- Frequently embed occupancy sensors behind a polycarbonate lens, adding extra durability
- Offer a daylight-hold/off feature that overrides the sensitivity control setting, keeping the fixture off if sufficient ambient daylight is detected

5. Emergency Lighting

Stairwells must meet the illumination levels required for both stairs and landings, and, as a result, pose particular emergency lighting challenges due to inherent changes in elevation.

Kenall Solutions:

- Whether your emergency lighting need calls for a 3' or 6' wide path of egress, Kenall's Millennium Series offers systems capable of exceeding Life Safety Code requirements for a wide variety of spatial configurations

* Motion Sensing

** with TekLink Controls

MedMaster™ Ceiling Mount



MGT Series

- Delivered lumen range: 2,734 – 8,787 lm
- Input power range: 29 – 70W
- Efficacy: 97 – 128 lm/W

Nominal sizes:	2' x 2' & 2' x 4'
Installation types:	Recessed Mount
Lamp types:	LED



Millenium Stretch™ Ceiling Mount



MLHA Series

- Delivered lumen range: 2,374 – 16,561 lm
- Input power range: 25 – 167W
- Efficacy: 93 – 113 lm/W
- Polycarbonate lens for added durability
- Embedded motion sensing option available (CA Title 24-compliant)
- TekLink controls compatible
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	5", 8", 12" widths; 24", 36", 48", 72", 96" lengths
Installation types:	Surface mount-ceiling, wall, corner or optional pendant mount
Lamp types:	LED, T5, T5HO, T8, T8HO



EnviroSeal™ Ceiling Mount



ES Series

- Delivered lumen range: 2,205 – 10,325 lm
- Input power range: 25 – 98W
- Efficacy: 88 – 110 lm/W
- One-piece, seam-welded, cold-rolled or stainless steel housing
- UV-stabilized, pearlescent or clear polycarbonate lens
- Embedded motion sensing options available (CA Title 24-compliant)

Nominal size:	3", 5", 8" and 12" widths; 2', 4' and 8' lengths
Installation types:	Surface ceiling or wall mount; optional pendant mount
Lamp types:	LED, T5, T5HO, T8, T8HO



Nova™ Ceiling Mount



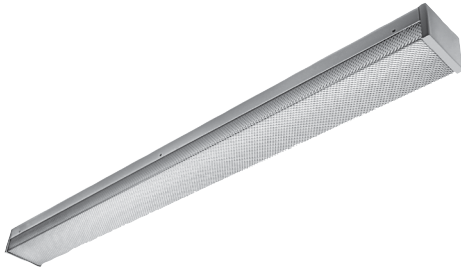
N Series

- Delivered lumen range: 3,216 – 11,068 lm
- Input power range: 28 – 93W
- Efficacy: 104 – 124 lm/W
- Cold-rolled steel baseplate
- One-piece, injected-molded, polycarbonate wraparound lens
- Embedded motion sensing options available (CA Title 24-compliant)

Nominal Size:	5" or 10" widths; 48" lengths
Installation types:	Surface ceiling or wall mount
Lamp types:	LED, T5, T5HO, T8



Sheriff™ Ceiling Mount



Sheriff™ SH Series

- Delivered lumen range: 4,534 – 10,434 lm
- Input power range: 48 – 95W
- Efficacy: 94 – 111 lm/W
- Cold-rolled steel baseplate
- Polycarbonate wraparound lens
- Embedded motion sensing options available (CA Title 24-compliant)

Nominal Size:	5", 8" or 12" widths; 24", 36" or 48" lengths
Installation types:	Surface ceiling, wall or pendant mount
Lamp types:	LED, T5, T8, T5HO



Millenium OS™ Stairwell - Surface Mount



MOS Series

- Delivered lumen range: 2,527 – 4,720 lm
- Input power range: 25 – 46W
- Efficacy: 98 – 108 lm/W
- Vandal-resistant for high-abuse areas
- Compatible with TekLink™ Controls (CA Title 24-compliant)
- Emergency battery backup option available

Nominal Size:	11" w x 18" l x 4" h
Installation types:	Surface mount-ceiling or wall
Lamp Type:	LED



MedMaster™ Circulation Area - Wall Sconce



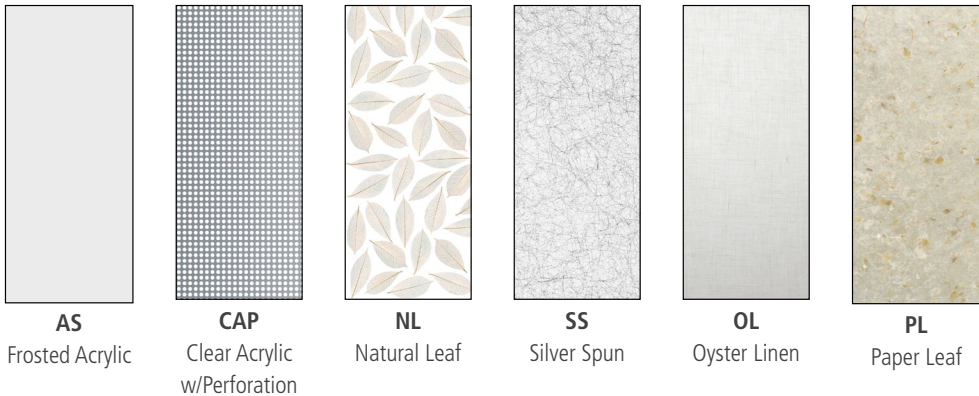
Auracyl™ MAS Series

- Delivered lumen range: 698 - 2,749 lm
- Input Power: 14 - 49W
- Efficacy: 47 - 57 lm/W
- MRI Option
- Variety of decorative frame and outer lens options
- Optional emergency pack

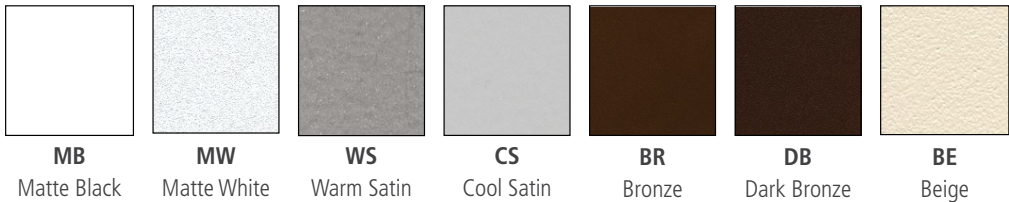
Nominal sizes: 8"×13", 26", 38" or 50"
 Installation types: surface mount
 Lamp Type: LED



Decorative Outer Lens



Frame finish



Millenium Metrex™ Exit & Emergency Lighting



METSU



METDU



METSU

METSU/METDU/METSW Series

- Surface mount — wall or ceiling; single-face (METSU) or dual-face (METDU) option
- Wall mount — single face (METSU)
- Indirect red or green LED
- Internal battery backup system
- High impact polycarbonate construction

Installation types: | Surface mount; wall or ceiling; single or double face
Lamp types: | LED



Millenium Metrex™ Exit & Emergency Lighting



METSU Series

- Semi-recessed wall mount —single face
- Indirect red or green LED exit
- Internal battery backup system
- 20-Gauge cold rolled steel housing
- Self diagnostic testing features

Installation types: | Semi-recessed wall; single face
Lamp types: | LED



Millenium Metrex™ Exit & Emergency Lighting



METEC Series

- Remote Exit Ready; can power Kenall METSS and METER emergency remote units
- Surface wall mount – single face
- Indirect red or green LED
- Exit/emergency combo unit
- High impact polycarbonate construction
- Meets all Life Safety Code® requirements

Installation types: | Surface wall mount single face
Lamp types: | LED



METEDU Series

- LED Emergency Signage
- Surface mount – wall or ceiling; double face
- Indirect red or green LED
- High impact polycarbonate construction
- Meets all Life Safety Code® requirements

Installation types: | Surface mount wall or ceiling double face
Lamp types: | LED



METMDU Series

- LED Signage
- Surface mount – wall or ceiling; double face
- Indirect, red, green or blue LED
- High impact polycarbonate construction

Installation types: | Surface mount wall or ceiling double face
Lamp types: | LED



Millenium Metrex™ Exit & Emergency Lighting



METER Series

- Remote powered emergency luminaire
- Low profile, ADA compliant
- Die-cut, closed cell neoprene gasket seals lens/housing to mounting surface
- Meets all Life Safety Code requirements
- 1 or 2 lamp LED

Installation types: | Surface ceiling or wall mount
Lamp types: | LED



METEL

METEL/METELHC Series

- Remote Exit Ready: can power Kenall METSS and METER emergency remote units
- Self-contained emergency luminaires
- Two or four lamp, high capacity units featuring the most advanced battery technology available
- Meets all Life Safety Code requirements

Installation types: | Surface wall mount
Lamp types: | LED



METELHC

MightyMac™ Exit & Emergency Lighting



MMEX Series

- Surface mount – wall or ceiling
- Single and dual-face options
- Indirect red or green LED exit
- 14-Gauge cold rolled steel or stainless steel housing

Installation types: | Surface mount; wall or ceiling; single or double face
 Lamp types: | LED



SimpleSeal™ Exit & Emergency Lighting



CMEXR Series

- Single-faced, recessed wall mount
- Indirect red or green LED exit
- Internal battery backup options
- Cold temperature options
- High impact polycarbonate lens

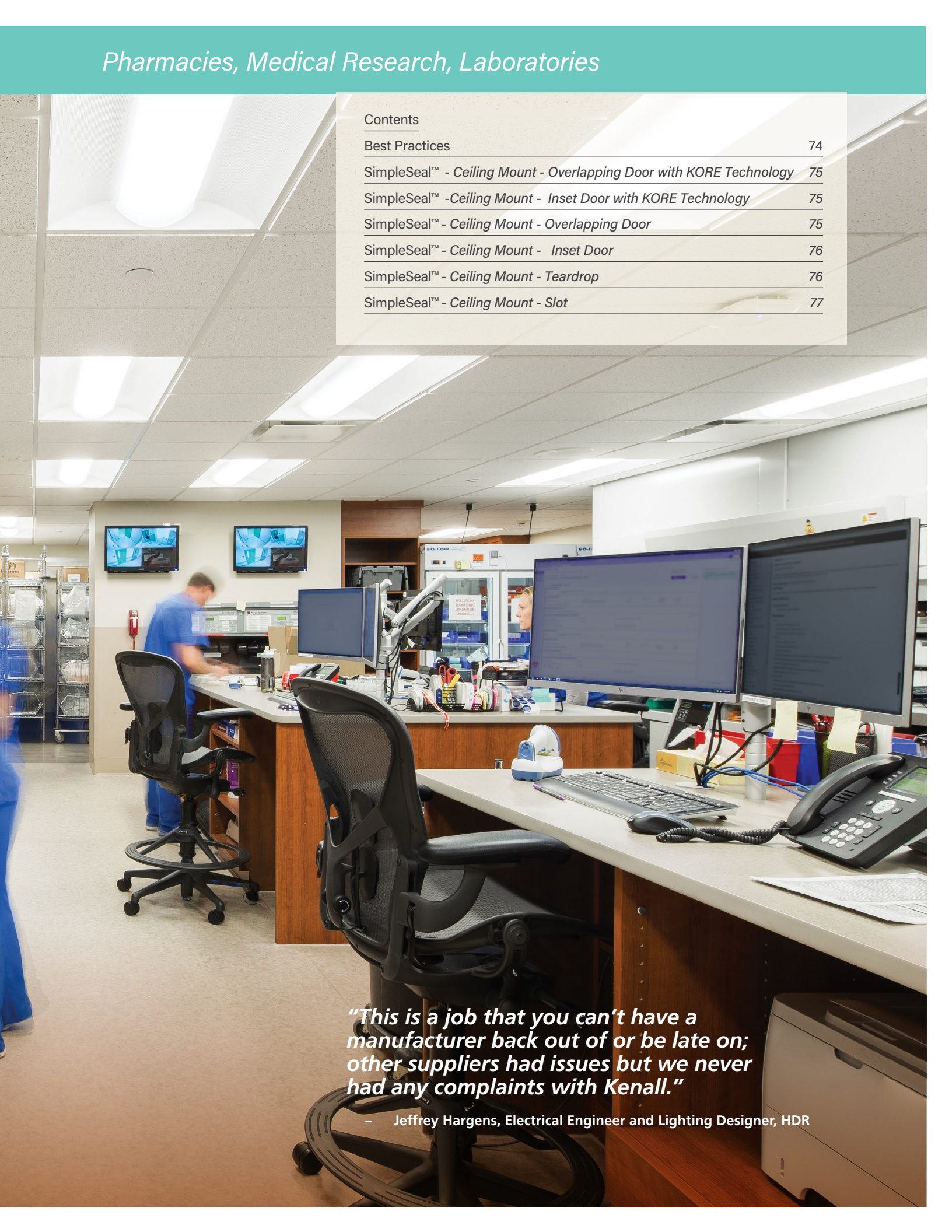
Installation types: | Recessed wall; single face
 Lamp types: | LED





Pharmacies, Medical Research, Laboratories

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"This is a job that you can't have a manufacturer back out of or be late on; other suppliers had issues but we never had any complaints with Kenall."

– Jeffrey Hargens, Electrical Engineer and Lighting Designer, HDR

Best Practices:**Performance Requirements for Patient Support Facilities Lighting – and How We Meet Them**

There are a number of specialized areas in a healthcare facility that have very specific lighting needs, such as pharmacies, medication preparation areas, laboratories, wash down areas and certain types of storage. Kenall provides luminaires that address those varied needs.

1. Illumination that protects the accuracy of work**Kenall Solutions:**

- Option for high color rendering index (CRI) luminaires, to better perceive colors
- Specialized optics that reduce veiling reflections
- Red lamps for use in vivariums
- Amber LEDs for areas where procedures may be photosensitive

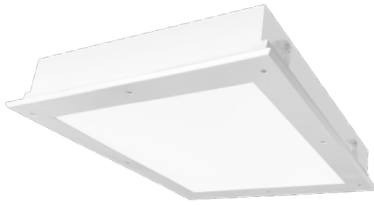
2. Protects against contaminants and moisture**Kenall Solutions:**

- Sealed with closed cell gasketing
- IP-rated fixtures that do not allow dust, debris or other contaminants to enter from the plenum
- Luminaires rated for use where water jets may be in use
- Luminaires that are purpose-built for positive and negative pressure rooms and specific types of air-handling systems
- Biosafety rated lab luminaires (BSL 1-4) for handling hazardous compounds or pathogens
- Antimicrobial finish option

3. Energy efficiency**Kenall Solutions:**

- Specialized optics provide unparalleled performance, reducing the number of luminaires required
- Feature high-efficacy, long-lasting LEDs

SimpleSeal™ - Ceiling Mount - Overlapping Door with KORE Technology



SimpleSeal™ CSERO Series

- Input watts: 18 – 136W
- Lumen range: 2,109 – 21,637 lm
- Designed specifically to improve the visual performance while providing industry leading efficacy of up to 175 lm/W
- Distribution provides uniform flat-field illumination, suppressing central hot spots and allowing greater ceiling spacing

Nominal sizes: 1' x 4'; 2' x 2'; 2' x 4'
 Installation Type: Universal installation into 1.0" and 1.5" grid or flange (drywall) ceilings
 Lamp Type: LED



SimpleSeal™ -Ceiling Mount - Inset Door with KORE Technology



SimpleSeal™ CSERI Series

- Input watts: 18 – 136W
- Lumen range: 2,109 – 21,637 lm
- Designed specifically to improve the visual performance while providing industry leading efficacy of up to 175 lm/W
- Distribution provides uniform flat-field illumination, suppressing central hot spots and allowing greater ceiling spacing

Nominal sizes: 1' x 4'; 2' x 2'; 2' x 4'
 Installation Type: Universal installation into 1.0" and 1.5" grid or flange (drywall) ceilings
 Lamp Type: LED



SimpleSeal™ - Ceiling Mount - Overlapping Door



CSEDO Series

- Delivered lumen range: 4,906 - 24,103 lm
- Input power: 46 – 196W
- Efficacy: 99 – 152 lm/W
- Available in 570nm amber LED or 630nm red LED
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes: 1'x4'; 2'x2'; 2'x4'
 Installation Types: Grid, flange
 Lamp Types: White LED, 570nm amber LED, 630nm red LED



SimpleSeal™ - Ceiling Mount - Inset Door



CSEDI Series

- Delivered lumen range: 4,906 – 24,103 lm
- Input power: 46 – 196W
- Efficacy: 99 – 152 lm/W
- Available in 570nm amber LED or 630nm red LED
- BIOS SkyBlue™ and Tunable White options available

Nominal sizes:	1'×4'; 2'×2'; 2'×4'
Installation Types:	Grid, flange
Lamp Types:	White LED, 570nm amber LED, 630nm red LED



SimpleSeal™ - Ceiling Mount - Teardrop



CTD Series

- Delivered lumen range: 4,241 – 12,320 lm
- Input Power: 52 – 106W
- Efficacy: 82 – 117 lm/W
- Optical system reduces glare and improves visibility
- Low profile construction for a modern design aesthetic

Nominal sizes:	4', 8'
Installation Types:	Surface grid mount – continuous row option
Lamp Types:	LED



SimpleSeal™ - Ceiling Mount - Slot



SimpleSeal CleanSlot CRS4 Series

- Delivered lumen range: 408 - 1,248 lms/ft
- Input Power: 4 - 12 W/ft
- Efficacy: 79 - 128 lm/W
- Symmetric and asymmetric distribution options
- Tunable white option available in 2', 4' & 8' lengths

Nominal size: 4' x 2', 3', 4', 6' & 8'
 Installation type: grid or flange
 Lamp Types: LED





*Project: City of Omaha Parking Garages
Location: Omaha, Nebraska*

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Best Practices:

Performance Requirements for Parking & Site Lighting – and How We Meet Them

While architects, engineers, and lighting designers increasingly seek the highest architectural standards in design and materials for hospital exterior lighting, durable fixtures with energy-saving daylight and occupancy sensors are a requirement in many states and municipalities. Kenall site lighting is designed to provide ample light where it's needed and TekLink™ controls ensure smooth, efficient operation.

1. Aesthetic Appeal

Exterior lighting should provide function, durability and energy efficiency, without compromising aesthetics.

Kenall Solutions:

- Provide versatility in frame styles, finishes and sizes
- Support design continuity throughout the facility

2. Safety & Security

Lighting fixtures must be able to withstand physical punishment while remaining attractive and performing as intended.

Kenall Solutions:

- TekLink controls provides numerous lighting performance reporting options
- Specialized Optics reduce glare to create a safer driving experience in parking structures

3. Durability

Lighting fixtures must be able to withstand physical punishment while remaining attractive and performing as intended.

Kenall Solutions:

- Constructed with marine-grade or heavy-duty, low-copper aluminum housings
- DR acrylic or polycarbonate lensing
- Tamper resistant Torx® fasteners
- Backed by Kenall's exclusive 'Peace of Mind Guarantee®' against breakage

4. Sealed against Dust & Water Penetration

Kenall Solutions:

- Sealed with closed cell gasketing
- Impervious to the penetration of dust, moisture, bugs, dirt and debris

5. Long Life LED Technology

Kenall Solutions:

- Featuring long life LEDs, expertly designed and engineered to provide up to 130,000 hours of service life
- Provide an energy efficient, sustainable lighting system ideal for use in hospital exteriors— even in the most challenging environments



*Project: City of Omaha Parking Garages
Location: Omaha, Nebraska*

SenScape™ Area Series

Lighting that Provides a Safer Path

The SenScape™ Area series consists of LED luminaires that integrate sophisticated next-generation controls and optics into a clean design that provides added safety & security throughout the parking area.



Post Top Mount

SenScape Area SA Series

- Delivered lumen range: 1,662–43,347 lm
- Input power: 35–306W
- Efficacy: 90–152 lm/W
- Architectural, modern design aesthetic scaled for mounting heights of 15–30 feet
- TekLink advanced wireless networked control options

Nominal Sizes: | 18" or 26" Diameter
Installation Type: | Pole Mount, Post Top or Wall Mount
Lamp type: | LED



Wall Mount



Pole Mount

SenScape™ Parking



SPG18 Series

- Delivered lumen range: 3,086 – 12,943 lm
- Input power range: 35 – 139W
- Efficacy: 74 – 129 lm/W
- Standard & enhanced uplight; 100% downlight versions also available
- Optical distribution patterns designed specifically for covered parking, canopy and low bay applications
- TekLink™ Controls compatible: embedded microwave sensor with an industry exclusive Peace of Mind Guarantee®

Nominal Sizes: | 18" diameter, 4.5" depth
 Installation Types: | Direct-to-surface, quick mount, pendant mount or trunion kit
 Lamp type: | LED



TekDek™



TD17 Series

- Delivered lumen range: 4,080 – 14,866 lm
- Input power range: 36 – 105W
- Efficacy: 96 – 152 lm/W
- Textured tertiary lens for glare reduction; uplight feature to eliminate "cave effect"
- Variety of distribution options
- TekLink™ Controls compatible: embedded microwave sensor with an industry exclusive Peace of Mind Guarantee®

Nominal Sizes: | 17" diameter; maximum depth 25.5"
 Installation Types: | Direct-to-surface, quick mount, pendant mount or trunion kit
 Lamp type: | LED



Millenium™ Rounds, Ovals & Squares



MR Series

M_ Series

- Delivered lumen range: 871 – 5,672 lm
- Input power: 11 – 57W
- Efficacy: 63 – 121 lm/W
- Die-cast aluminum backplate
- Polycarbonate lens for added durability
- Embedded motion sensing option available (CA Title 24-compliant)

Nominal Size: 13" and 17" diameters
 Installation Types: Surface or semi-recessed, wall or ceiling mount options
 Lamp Types: LED



Available Shapes & Housing Styles



MR Series



MO Series



MS Series



Low Profile



Deep



Semi-Recessed

Millenium™ Edge™



MR_FF_ Series

- Delivered lumen range: 1,111 – 3,206 lm
- Input power: 13 – 29W
- Efficacy: 86 – 111 lm/W
- Marine-grade, die-cast aluminum housing
- Emergency battery backup option available
- Dark-sky friendly (ceiling mount only)

Nominal Sizes: 13" or 17"
 Installation Type: Surface or semi-recessed, ceiling or wall mount
 Lamp type: LED



Herculux™



H612 Series



H1212 Series



H69 Series

H Series

- Delivered lumen range: 691 – 5,509 lm
- Input power: 11 – 54W
- Efficacy: 72 – 117 lm/W
- One-piece, powder-coated, marine-grade aluminum backplate
- Injection-molded, UV-resistant polycarbonate diffuser
- Stainless steel, tamper-resistant Torx® fasteners

Nominal sizes: 6" × 12", 6" × 9", 9" × 9", 12" × 12"
 Installation Types: Surface ceiling or wall
 Lamp type: LED



H99 Series

Millenium Freescale™



FS Series

- Delivered lumen range: 967 – 7,779 lm
- Input power range: 14 – 98W
- 48 – 79 lm/W
- CCT: 3500K, 4000K or 5000K; 82 CRI
- Round or triangular 100% DR acrylic lens options with multiple lens frame styles
- Marine-grade aluminum baseplate

Nominal Size: 5", 8" or 12" widths; 12", 18", 24" and 48" lengths
 Installation Types: Wall mount
 Lamp Types: LED



Finishes



Millenium Auracyl™



MLAS Series

- Delivered lumen range: 698 – 2,749 lm
- Input power range: 14 – 49W
- Efficacy: 50 – 57 lm/W
- CCT: 3500K, 4000K or 5000K; 82 CRI
- Marine grade aluminum housing with die-cast end caps
- Peace of Mind Guarantee against breakage

Nominal Size: 8"×13", 8"×26", 8"×38" and 8"×50"
 Installation Types: Surface wall mount
 Lamp Types: LED



Frame Type



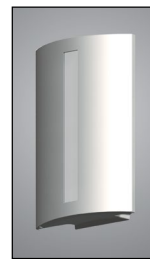
Pane



Pillar



Capital



Slot



Prairie



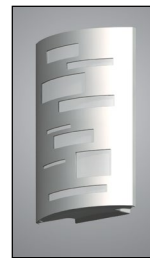
Rank



Lattice



Squares



Bricks



Orbs

Millenium™ Finite



FN6



FN15



FN9

FN Series

- Delivered lumen range: 1,788 – 12,221 lm
- Input power: 20 – 122W
- Efficacy: 79 –123 lm/W
- Full cut-off, LED wall-pack with classic design aesthetic
- Type II, III and IV optical distribution options
- Available two-circuit and cold-weather battery pack options

Nominal Sizes:

FN9:	9" × 9" × 9"
FN15:	9" × 12" × 15"
FN6:	4" × 6" × 12"; 4" × 6" × 24"
Installation Type:	Surface wall mount
Lamp type:	LED



Millenium™ Finite Linear



FNL Series

- Delivered lumen range: 1,154 – 6,874 lm
- Input power: 14 – 72W
- Efficacy: 82 – 96 lm/W
- Marine grade aluminum housing with die-cast end caps
- Embedded motion sensing options available (CA Title 24-compliant)
- Configurable as full-cutoff, full-cutoff/continuous row, upright, upright/continuous row

Nominal Sizes:	6"W × 1', 2', 3', 4' & 6' lengths
Installation Type:	Surface wall mount
Lamp Types:	LED



TekLink™ Lighting Controls

TekLink: A Full Range of Lighting Control Systems

Many of our products are controls compatible, and Kenall offers integrated solutions to suit a variety of budgets.

TL50M / TL50DM

Remote Controller



SenScape™



System Features

- Embedded motion sensor
- Daylight harvesting
- Settings configurable via remote controller

[Learn More](#)

TL100

Controller



Sensor



SenScape™



System Features

- Zonal occupancy detection
- Closed loop daylight harvesting
- One button commissioning

[Learn More](#)

TL1000/TL2000



System Features

- Web based user interface
- Wired and wireless options
- Email and text alerts
- Power monitoring
- Data reporting

[Learn More](#)

Kenall TekLink Control System Overview

Features	TekLink Cloud			
	TL50	TL100	TL1000	TL2000
Sensor Technology	Microwave/Infrared	Infrared/Ultrasonic	Infrared/Microwave	Infrared/Microwave
Wireless Communication				√
Adjustable Occupancy Time-Out	√	√	√	√
Daylight Feedback	√	√	√	√
Adjustable Dim-Level	√	√	√	√
Zonal Control		√	√	√
One Touch Light Level Commissioning*		√	√	√
L70 Detection*		√	√	√
Scheduling			√	√
Reporting			√	√

*Patent No: US 20120153840

[Learn More About Teklink Controls](#)





*Project: City of Omaha Parking Garages
Location: Omaha, Nebraska*

Warranties

On behalf of our valued customers, Kenall promises to stand behind our luminaires. Our commitment to excellence enables us to offer a variety of product warranties, including the Kenall exclusive Peace of Mind Guarantee, 5-year LED and 10-year limited product warranty. For more detailed, product specific warranty information, please visit our website at www.kenall.com.



Peace of Mind Guarantee

Kenall's High Abuse luminaires are designed and built to take exceptional physical punishment. When installed according to our instructions, Kenall will repair or replace any unit rendered inoperable due to physical abuse for the normal service life of the fixture.



LED 5-year Warranty

This warranty covers select Kenall LED products for a period of 5 years from the date of manufacture. For complete warranty information, please visit us on the web at www.kenall.com.



LED 10-year Warranty

This warranty covers select Kenall LED products for a period of 10 years from the date of manufacture. For complete warranty information, please visit us on the web at www.kenall.com.

Sample Ordering Information

Example: MGT24-G-FA-67L-40K8-DIM1-DV-FS

ORDERING INFORMATION

Model	Mounting	Lens Type	Lamp Type	Lamp Color	Driver Type	Voltage	Options
		FA			DIM1		
Model		Lamp Power		Lamp Color		Voltage	
MGT22 2'x2'		2x2		30K8 3000K / 82CRI		DV 120-277 VAC, 50/60Hz	
MGT24 2'x4'		25L 25 Watt LED		35K8 3500K / 82CRI		347 347 Volts	
		35L 35 Watt LED		35K9 3500K / 90CRI			
				40K8 4000K / 82CRI			
				40K9 4000K / 90CRI			
Mounting Options		2x4		Driver Type		Options	
G Grid (1")		45L 45 Watt LED		DIM1 0-10V Dimming to 1%		FS Fuse & Holder	
F Flange		67L 67 Watt LED					
Lens Type							
FA Frost DR Acrylic							



Listings & Certifications

Fixtures designed for use in healthcare settings must satisfy a large number of demanding lighting and environmental requirements. Listings applicable to the healthcare luminaires featured in this product selector guide are shown below. Please refer to the products within each section of this guide to determine specific listings, or visit us on the web at www.kenall.com

- ADA** **ADA Compliant**—Although ADA is not specific to lighting, it does impact fixture design by creating standards for wall sconce projection space and hanging light clearance. Section 4.4 of the ADA states that “objects projecting from walls with their leading edges between 27” and 80” above the finished floor shall protrude no more than 4” into walks, halls, corridors, passageways or aisles.”
- BSL 1-4** **BSL BioSafety Level (BSL-x)** classifies the relative danger from biohazardous material to the surrounding people and environment. There are four biosafety levels (BSL1 – BSL4), with the highest number representing the greatest risk. Luminaires in each class are designed to provide the protections necessary for containing the risks associated with that level. See the chart on page 39 for more information.
- CCEA Approved**—The City of Chicago Environmental Air (CCEA) rating ensures that the luminaire is inherently airtight. Wiring and/or branch circuit terminations are sealed off and gasketed from the plenum air space. This listing ensures that the luminaire is sealed to limit air flow from the room side to the plenum.
- ETL** **ETL**—A product bearing the ETL Listed mark is determined to have met the minimum requirements of prescribed product safety standards as certified by a Nationally Recognized Testing Laboratory (NRTL). The mark also indicates that the manufacturer’s production site conforms to a range of compliance measures and is subject to periodic follow-up inspections to verify continued conformance.
- FN** **FN Option** — FN refers to Food Zone/ Non-Food Contact. Fixtures are located in food preparation and handling areas but do not come in contact with food under normal conditions. All fixtures in this category have a higher level of construction: housing painted with paint that meets U.S. Code of Federal Regulations; fasteners constructed with stainless-steel and removable without tools; and FDA approved Food Grade polycarbonatematerial outer exposed lensing.
- HAZ** **HAZ** —The National Electric Code (NEC) identifies and classifies potentially hazardous materials and conditions. Kenall’s hazardous rated products are approved for use in Class 1, Division 2, Groups A, B, C, and D. Basic requirements for Class 1 Division 2 electrical equipment is no arcing or sparking parts be present, or if present, be in an explosion-proof enclosure.
- IP53** **IP53** — UL certified IP53 per IEC 60598 ensures that the enclosure is protected from: a) dust of sufficient quantity to interfere with satisfactory equipment operation and b) the harmful effects of water falling as a spray at an angle of up to 60 degrees from vertical.”
- IP64** **IP64**—UL Certified IP64 per IEC 60598 ensures that the enclosure is dust-tight and protected against splashing water without any harmful effects.
- IP65** **IP65**— UL Certified IP65 per IEC 60598 ensures that the enclosure is dust-tight and protected against jet streams of water from any direction without any harmful effects.
- IP66** **IP66** —UL Certified IP66 per IEC 60598 ensures that the enclosure is dust tight and protected against water projected in powerful jets without any harmful effects.
- ISO 3** **ISO 3** — Suitable for ISO 3, Class 1 Rated Rooms (FED-STD209E). Measures the number of particles equal to or greater than 0.5 mm in one cubic foot of air. The measurement must not exceed specified particle limits in order for the space to be considered a controlled ‘clean room’ environment.
- ISO 5** **ISO 5** — Suitable for ISO 5, Class 100 Rated Rooms (FED-STD209E). Measures the number of particles equal to or greater than 0.5 mm in one cubic foot of air. The measurement must not exceed specified particle limits in order for the space to be considered a controlled ‘clean room’ environment.
- MIL STD 461G** **MIL STD 461G**— Military Standards testing measurements cover both radiated and conducted electromagnetic emissions in addition to maximum allowable amounts of emitted energy based on both frequency range and field strength. Luminaires meeting MIL STD 461G pose the lowest possible likelihood of causing EMI-related issues.
- NFPA 101** **NFPA101**—This National Fire Protection Agency (NFPA) Life Safety Code pertains to egress facilities. The code establishes minimum criteria for the design of egress facilities so as to allow prompt escape of occupants from buildings or, where desirable, into safe areas within buildings.
- NSF** **NSF2**— An NSF2 Listing denotes that the luminaire has been evaluated for corrosion resistance, cleanability and the ability of exposed material to withstand normal wear. This supports infection control standards as it indicates that the luminaire is easy to sanitize.
- NSF P442** **NSF P442**— This protocol is a series of minimum requirements for the design, construction, performance and certifications of luminaires for cleanrooms. It requires ingress protection IEC 60529/60598 (IP-65) and NSF-2 Food Equipment certifications and a performance test for pressure decay resistance in which the sealed fixture is stressed with positive and negative pressure and checked to ensure that no leaks are present.
- OSHPD** **OSHPD** listing pertains to standards that protruding objects and horizontal projections must meet in order to comply with the requirements of California Office of State Health Planning and Development (OSHPD) California Building Code, Sections 1003.3.1 through 1003.3.4, for buildings and structures used for medical, surgical, psychiatric, nursing or custodial care for persons who are nonambulatory or bedridden.
- UL** **UL/CUL Listed**—The UL symbol signifies that Underwriter’s Laboratory (UL) has determined that a manufacturer has demonstrated the ability to produce a product complying with UL’s requirements with respect to specific risk, performance under specific conditions, compliance with regulatory codes and specified standards, or any other conditions as determined by UL.
- UL 48** **UL 48** — The ANSI/UL 48 signifies that a manufacturer’s products are in compliance with Underwriter’s Laboratories (UL) requirements for all electric signs, art forms and outline lighting for use in accordance with the National Electrical Code, NFPA 70.
- UL 924** **UL 924**—UL 924 is UL’s Standard for Safety of Emergency Lighting and Power Equipment. UL 924 listed electrical exit signs are tested and given a visibility rating of at least 100 feet, requiring them to be legible from a 100 foot viewing distance in total darkness. The battery backup is tested by UL and must provide at least 90 minutes of emergency operation. Letters must be red or green and at least 6” height with a 3/4” letter stroke.
- TW** **Tunable White** — Tunable white technology enables the user to independently control both color temperature and intensity of light within a given application. This provides the ability to change the color of light from warm to neutral to cool in appearance, over time, based on the needs of the occupant or the space.



Kenall Manufacturing headquarters in Kenosha, WI, showing Indigo-Clean Continuous Environmental Disinfection in office area.

Kenall's luminaires are expertly designed in our state-of-the-art, vertically integrated, static-controlled manufacturing facility in Wisconsin. This enables us to provide tight control over the entire development process from fixture design and engineering to full-fledged metal fabrication, paint, assembly and shipping. We also take great care in sourcing only the highest-quality components to assure optimal product performance.



Buy American Act Compliant

Our products comply with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin.

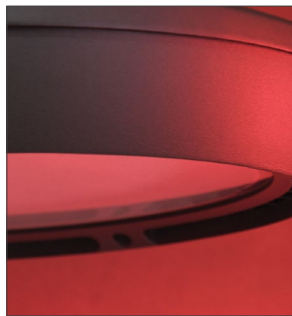
State-of-the-art, certified testing facility

Kenall is equipped with a state-of-the-art certified safety laboratory, providing comprehensive in-house testing capabilities:

Thermal Testing



Cold Weather Testing

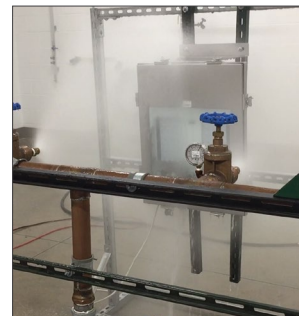


High Temperature Testing

Ingress Testing

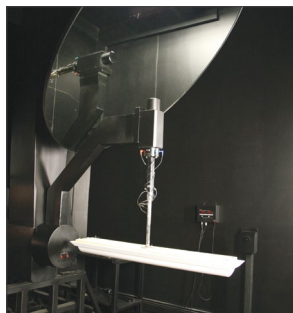


Solids and Particulates Testing



Water Ingress Testing

Photometrics Testing



Luminous Intensity Distribution Testing

Since 1963, Kenall has built its reputation on lighting challenging environments, and continues to develop innovative, energy efficient and sustainable solid state lighting solutions. Kenall pursues quality, durability, reliability and excellence by way of rigorous testing and certifications, dependable service and the innovation of state-of-the-art technologies.

[Learn More](#)



Kenall Market Segments

Kenall offers luminaires designed according to industry best practices and certified performance standards in each market segment we serve. From high abuse fixtures with an exclusive 'Peace of Mind' Guarantee® against breakage and healthcare fixtures sealed for infection control, to sealed enclosure fixtures that comply with stringent military standards for RFI/EMI and food processing fixtures that carry mission critical NSF, NEMA and IP ratings, our fixtures are designed with your specific needs in mind.



CORRECTIONAL



EDUCATION



HEALTHCARE



BEHAVIORAL HEALTH



CLEANROOM



INDUSTRIAL FOOD



TUNNEL & TRANSPORTATION



PARKING & SITE



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