



COOLEEDGE LUMINOUS CEILINGS FABRILUM RECTANGLES - UL LISTED (N. AMERICA): SPECIFICATIONS

| | | | |
|--------------|--|----------------|-------------------|
| PROJECT | | REFERENCE TYPE | |
| SPECIFIED BY | | QUANTITY | |
| DATE | | NOTE | Luminous Ceilings |

DESCRIPTION

FABRILum luminaires deliver best-in-class immersive illumination at a scale that brings the feeling of the outdoors to interior spaces. More than that, FABRILum goes **beyond lighting** to deliver so much more; unparalleled acoustic performance and new architectural forms.

Perfect for almost any design including:

- Lobbies, atriums, and indoor plazas
- Open plan offices and co-working spaces
- Shop-in-shop retail
- Showrooms



SIZES

| Nominal Size (W x L) | Suspended | Surface Mount | Recessed | Grid (T-Bar) |
|---|-----------|---------------|----------|--------------|
| RSB* (4' x 4' / 1200mm x 1200mm) | ✓ | ✓ | ✓ | ✓ |
| RS (4' x 4' / 1200mm x 1200mm) | ✓ | ✓ | ✓ | ✓ |
| RM (4' x 6' / 1200mm x 1800mm) | ✓ | ✓ | ✓ | |
| RL (4' x 8' / 1200mm x 2400mm) | ✓ | ✓ | | |
| RXL (6' x 6' / 1800mm x 1800mm) | ✓ | ✓ | | |
| RXXL (6' x 8' / 1800 x 2400mm) | ✓ | ✓ | | |

*RSB offers a reduced feature set at lower prices for simple applications

GENERAL

| | |
|-----------------------|------------------------------------|
| Location | Indoor, dry location only |
| Operating Temperature | 0 – 40°C (32 – 104°F) |
| Storage Temperature | -40 – +85°C (-40 – +185°F) |
| Relative Humidity | 90% max (non-condensing) |
| Input Voltage | 120-277 VAC |
| Diffuser Material | Woven Polyester Fabric (coated) |
| Frame Material | Aluminum |
| Fire Rating | ASTM E84 Class A/EN:3501-1 Class B |

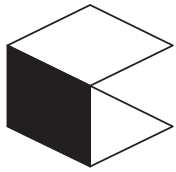


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Cooledge Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.



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PHOTOMETRICS

| Size | CCT | Flux (lm) | |
|------|-------|-----------|---------------|
| | | High (HF) | Standard (SF) |
| RSB | 3000K | 9,700 | N/A |
| | 3500K | 10,000 | |
| | 4000K | 10,300 | |
| RS | 3000K | 9,700 | 5000 |
| | 3500K | 10,000 | 5000 |
| | 4000K | 10,300 | 5000 |
| | TNW | 8,950 | 5000 |
| RM | 3000K | 14,600 | 7500 |
| | 3500K | 15,050 | 7500 |
| | 4000K | 15,500 | 7500 |
| | TNW | 13,450 | 7500 |
| RL | 3000K | 19,400 | 10000 |
| | 3500K | 20,000 | 10000 |
| | 4000K | 20,600 | 10000 |
| | TNW | 17,900 | 10000 |
| RXL | 3000K | 21,850 | 11000 |
| | 3500K | 22,500 | 11000 |
| | 4000K | 23,200 | 11000 |
| | TNW | 20,150 | 11000 |
| RXXL | 3000K | 28,700 | 14500 |
| | 3500K | 29,600 | 14500 |
| | 4000K | 30,500 | 14500 |
| | TNW | 26,500 | 14500 |

| | |
|----------------------------|-----------|
| CRI (Ra) | >90 |
| Color Uniformity (Typical) | 2 SDCM |
| Lumen Maintenance (L80) | 75,000 hr |

TM-30-15 DATA

| Index | TNW* | 3000K | 3500K | 4000K |
|-------|------|-------|-------|-------|
| Rf | 90 | 90 | 89 | 90 |
| Rg | 102 | 98 | 99 | 100 |

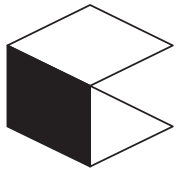
*TNW = Tunable White 2700K-5700K (both channels @50%)

For more details about **FABRILum** color rendering properties, please see "Light Quality Metrics" at www.cooledgelighting.com

ACOUSTIC PERFORMANCE

| Mounting Type | Noise Reduction Coefficient | Sound Absorption Average | Weighted Sound Absorption Coefficient (ISO EN11654) |
|-----------------|-----------------------------|--------------------------|---|
| | NRC | SAA | α_w |
| Suspended | 0.90 | 0.91 | 0.90 |
| Surface Mount | 0.60 | 0.62 | 0.45 (M) |
| Recessed (Grid) | 0.65 | 0.66 | 0.40 (LM) |

A full acoustic report is available at <https://www.cooledgelighting.com/acoustic-lighting#testreports>



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INPUT POWER

| Nominal Size | CCT | High Flux (HF) | Standard Flux (SF) |
|---|-------|----------------|--------------------|
| | | Power (W) | Power (W) |
| RSB 4' x 4' 1200mm x 1200mm | 3000K | 131 | N/A |
| | 3500K | 131 | |
| | 4000K | 131 | |
| RS 4' x 4' 1200mm x 1200mm | 3000K | 131 | 69 |
| | 3500K | 131 | 68 |
| | 4000K | 131 | 66 |
| | TNW | 131 | 72 |
| RM 4' x 6' 1200mm x 1800mm | 3000K | 196 | 103 |
| | 3500K | 196 | 101 |
| | 4000K | 196 | 99 |
| | TNW | 197 | 108 |
| RL 4' x 8' 1200mm x 2400mm | 3000K | 261 | 137 |
| | 3500K | 261 | 135 |
| | 4000K | 261 | 132 |
| | TNW | 262 | 143 |
| RXL 6' x 6' 1800mm x 1800mm | 3000K | 294 | 154 |
| | 3500K | 294 | 151 |
| | 4000K | 294 | 148 |
| | TNW | 295 | 161 |
| RXXL 6' x 8' 1800mm x 2400mm | 3000K | 392 | 205 |
| | 3500K | 392 | 201 |
| | 4000K | 392 | 197 |
| | TNW | 392 | 216 |

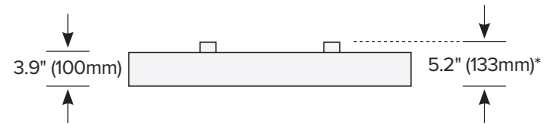


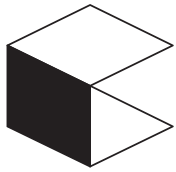
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DIMENSIONS

| Size | External Dimensions mm (in) | | Weight | # Mounting Points |
|------|-----------------------------|-------------|-----------|-------------------|
| | W | L | kg (lbs) | |
| RSB | 1193 (47.0) | 1193 (47.0) | 14 (31) | 4 |
| RS | 1193 (47.0) | 1193 (47.0) | 14 (31) | 4 |
| RM | 1193 (47.0) | 1768 (69.6) | 25.8 (57) | 4 |
| RL | 1193 (47.0) | 2343 (92.2) | 32.0 (71) | 4 |
| RXL | 1768 (69.6) | 1768 (69.6) | 32.0 (71) | 4 |
| RXXL | 1768 (69.6) | 2343 (92.2) | 41 (90) | 4 |

- Profile Height = 100mm (3.9")
- Overall Height (including Mounting Rails) = 133mm (5.2")
- Surface Mount will have an opening of 33mm (1.3") between the frame and the ceiling

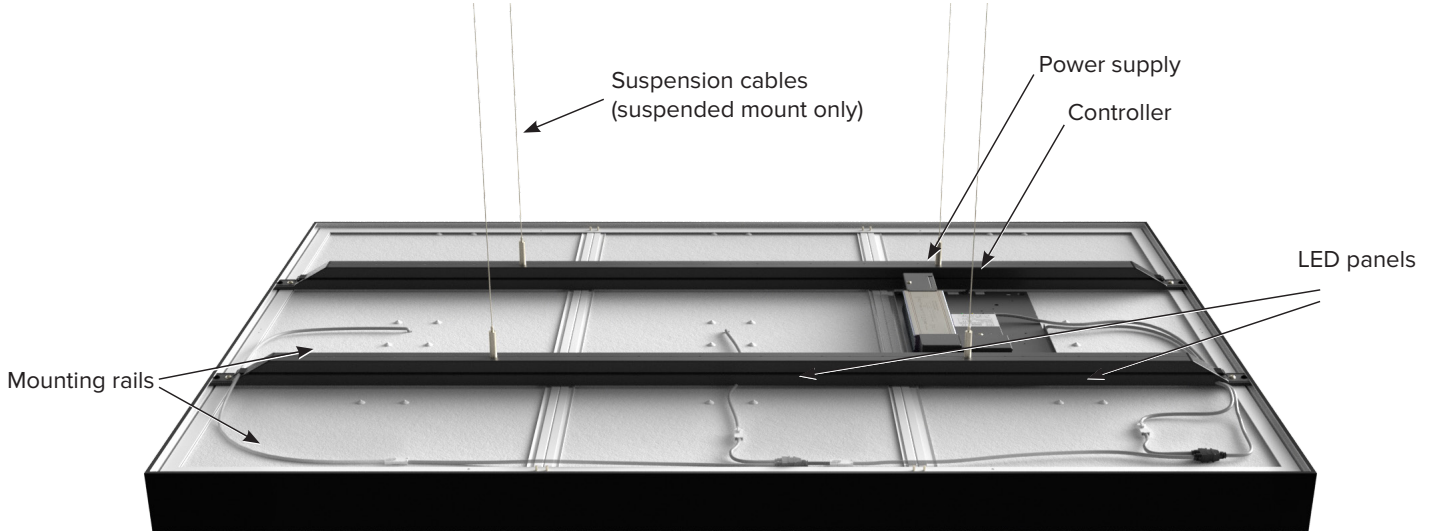




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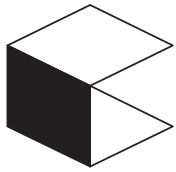
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MOUNTING DETAILS



| Mounting Type | Mounting Kit Required | Notes |
|-------------------------|---------------------------|--|
| Surface Mount | No mounting kit necessary | Mounts directly to the ceiling material through the mounting rails |
| Suspended | Mounting Kit included | Hardware for cable attachment to luminaire |
| Recessed | Mounting Kit included | Provides a trim for mounting within drywall or plaster ceiling (RS, RSB, RM sizes only) |
| Grid (T-Bar) - Metric | No mounting kit necessary | Lay-in for use with 24mm T-Bar (RS, RSB size only) Specify Surface Mount luminaire |
| Grid (T-Bar) - Imperial | LACC-GR-K | Adapter plate enables lay-in for use with 15/16" T-Bar (RS, RSB size only) Specify Surface Mount luminaire plus LACC-GR-K |

Note: Due to minor differences in aesthetic appearance, Coolege recommends that "RSB" not be mounted in the same location as other FABRILum models.



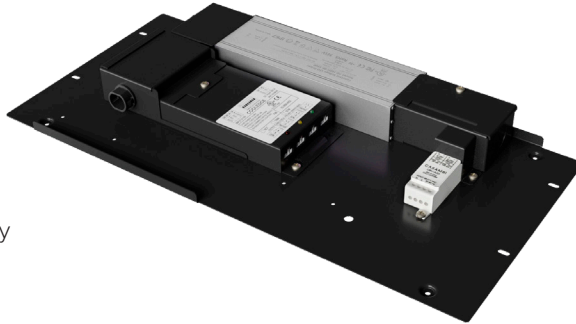
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POWER AND CONTROL

Power Supply with Coolege Control Module

Actual power & control configuration is determined by the luminaire model.



FABRILum offers two choices for locating the power and control components:

- **Integrated (Suspended & Recessed):** the mounting plate containing the power supply and control module may be secured to the top of the luminaire. AC electrical connections are made directly to the power supplies at the luminaire
- **Remote Mounted (All):** the mounting plate can be located remotely in a location that may be more suitable for AC electrical connection or for maintenance access (see www.coolegedlighting.com or contact Coolege for remote distance wiring requirements)

Mounting Plate Dimensions:

RSB = 480mm x 214mm (18.9" x 8.4")

RS, RM, RL, RXL, RXXL = 400mm x 190mm (15.75" x 7.5")

Power & Control Mounting Plate

Power Supply Performance

| | |
|---------------------|---------------|
| Input Voltage | 120-277 VAC |
| Input Frequency | Nom. 50-60 Hz |
| Start-up Time | 1.5 sec |
| Max. Inrush Current | 60 A |
| Rated Lifetime | 200,000 hr |

Control Module Performance

| | |
|---------------------|---|
| Minimum Dim Level | 0.1% (Deep Dimming) RSB = 5%* |
| Operating Frequency | 3000Hz (compliant with IEEE 1789-2015 for flicker free) |
| Control Protocols | 0/1-10V (DMX, Wireless (Casambi), DALI available via converter modules) RSB = 0/1-10V (DALI via converter) |

*RSB should not be used in the same location with other FABRILum models as dimming behavior may result in non-uniform illumination

HOW TO ORDER

FBx - Rx - - - - - UL
1 - 2 - 3 - 4 - 5 - 6 - 7

RS/RM/RL/RXL/RXXL

1 PRODUCT

FBS = FABRILum – Suspended
FBM = FABRILum – Surface Mount
FBR = FABRILum – Recessed¹

2 NOM. SIZE

RS
RM
RL
RXL
RXXL

3 FLUX

HF = High Flux
SF = Std Flux

4 CCT

30 = 3000K
35 = 3500K
40 = 4000K
TNW = Tunable White

5 FINISH

WH = White
BL = Black

6 DIMMING

010 = 0-10V
DAL = DALI²
DMX = DMX³
CAS = Casambi

7 CERTIFICATION

UL = cUL

1: White finish only, RM, RS, sizes only
2: DAL only in CE certification
3: DMX only in UL certification

FBx - RSB - - - - - 010 - UL
1 - 2 - 3 - 4 - 5 - 6 - 7

RSB

1 PRODUCT

FBS = FABRILum – Suspended
FBM = FABRILum – Surface Mount
FBR = FABRILum – Recessed

2 NOM. SIZE

RSB

3 CCT

30 = 3000K
35 = 3500K
40 = 4000K

4 FINISH

WH = White
BL = Black

5 DIMMING

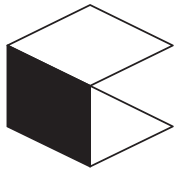
010 = 0-10V

6 CERTIFICATION

UL = cUL

ACCESSORIES

– **LACC-GR-K:** Imperial Grid (T-Bar) Adapter >> FABRILum luminaires (FBM-RS/RSB) may be used as lay-in fixtures in 15/16" T-bar ceilings. To enable this mounting option, an adapter kit is required.



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WELL STANDARD (V2)

Cooledge FABRILum luminaires enhance the user experience of spaces by delivering immersive illumination that impacts not only the visual, but also the emotional and physiological, response of people. New standards that define requirements for promoting design that enhances well-being are emerging. One of those standards, WELL v2, includes 9 “features” for lighting design that define requirements for the quality and composition.

The following data is provided to assist designers in determining compliance with the WELL v2 standard when incorporating Cooledge FABRILum luminaires in their design.

Feature L03: Circadian Lighting Design

This feature requires a calculation of Equivalent Melanopic Lux (EML):

$$EML = \text{Photopic Lux} \times \text{Melanopic Ratio}$$

Melanopic Ratio for FABRILum

| | TNW* | 3000K | 3500K | 4000K |
|-------------------|-------|-------|-------|-------|
| Melanopic Ratio** | 0.704 | 0.517 | 0.620 | 0.779 |

*Tunable White: 2700K @ 50% + 5700K @ 50%

**Calculated using the IWBI Melanopic Ratio calculator

Feature L04: Glare Control

This feature requires maximum values for different types of glare measurements.

Compliance requirement (d): Luminance < 10,000 cd/m2 between 45°-90° from nadir

Maximum Luminance for FABRILum

| | Standard Flux (SF) | High Flux (HF) |
|----------------------------|--------------------|----------------|
| Maximum Luminance* (cd/m2) | 1465 | 2200 |

*Maximum occurs at 45°

Feature L07: Electric Light Quality – Part 1 Ensure Color Rendering Quality

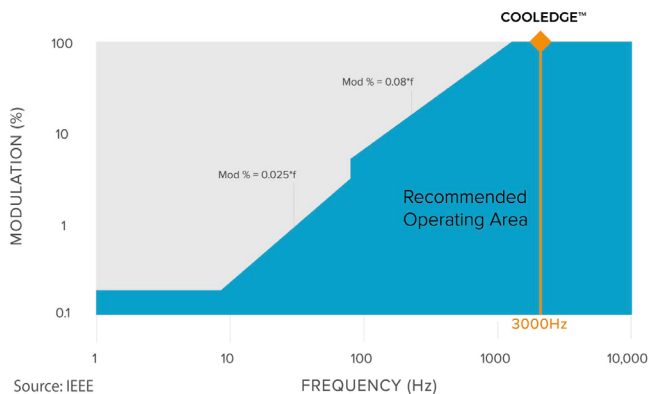
This feature requires minimum values for color rendering.

Compliance requirement (a): CRI > 90

CRI (Ra) for FABRILum

| | TNW* | 3000K | 3500K | 4000K |
|----------|------|-------|-------|-------|
| CRI (Ra) | 96 | 94 | 94 | 94 |

Feature L07: Electric Light Quality – Part 2 Manage Flicker



For LED-based luminaires, this feature requires specific values for the combination of frequency and modulation.

Compliance requirement: Meet IEEE 1789-2015 Standard Practice Recommendation

Source: IEEE