



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

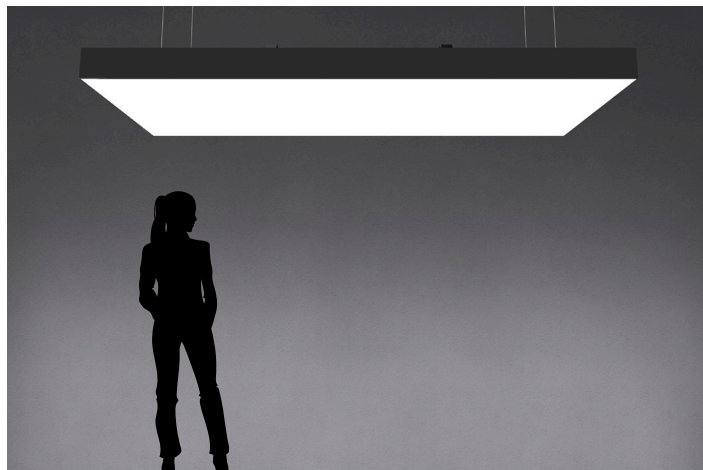
PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY	
DATE		NOTE	Luminous Ceilings

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

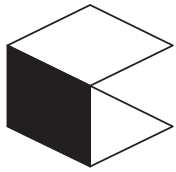


RoHS

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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	5,000
	3500K	10,000	5,000
	4000K	10,300	5,000
	TNW	8,950	5,000
RM	3000K	14,600	7,500
	3500K	15,050	7,500
	4000K	15,500	7,500
	TNW	13,450	7,500
RL	3000K	19,400	10,000
	3500K	20,000	10,000
	4000K	20,600	10,000
	TNW	17,900	10,000
RXL	3000K	21,850	11,000
	3500K	22,500	11,000
	4000K	23,200	11,000
	TNW	20,150	11,000
RXXL	3000K	28,700	14,500
	3500K	29,600	14,500
	4000K	30,500	14,500
	TNW	26,500	14,500

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

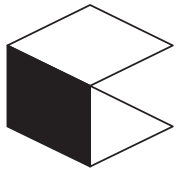
*TNW = Tunable White 2700K-5700K (both channels @50%)

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

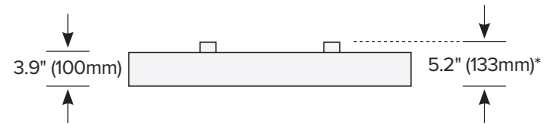


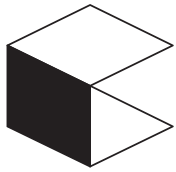
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DIMENSIONS

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

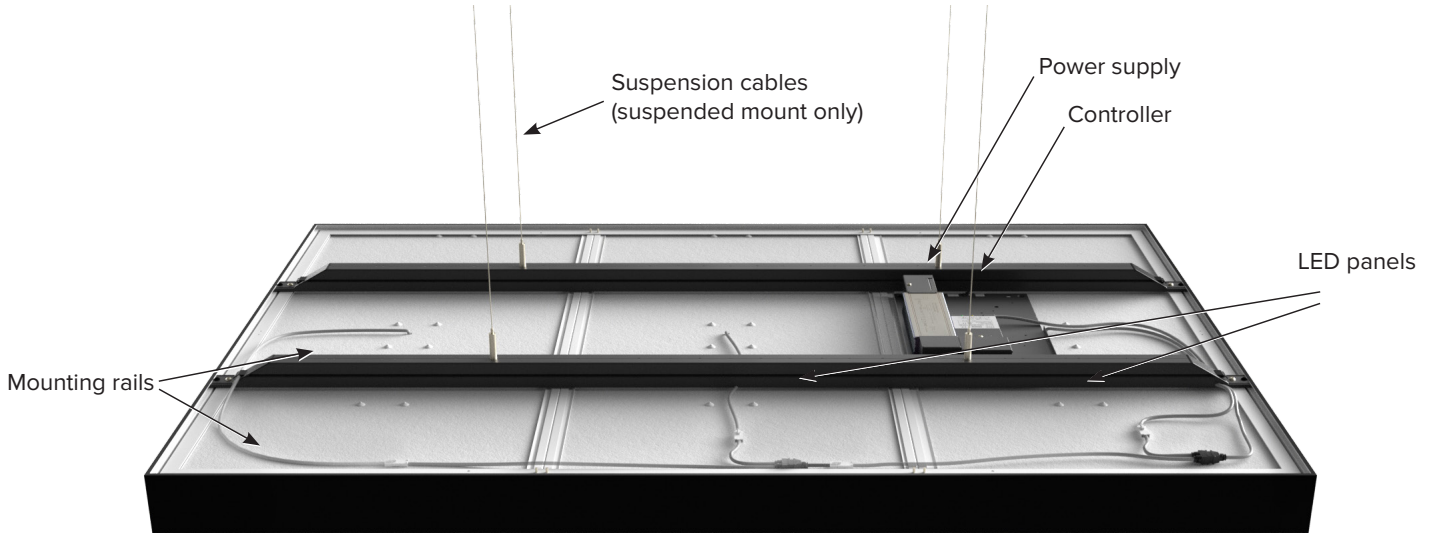




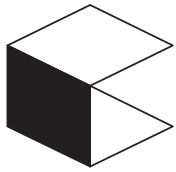
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MOUNTING DETAILS



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



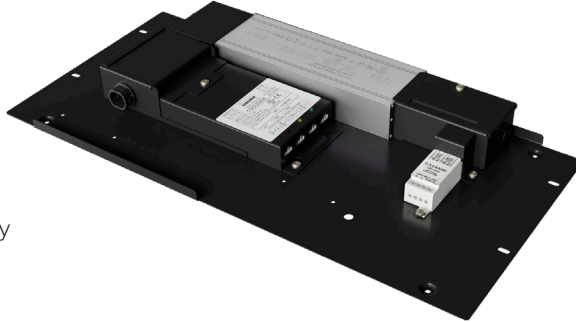
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POWER AND CONTROL

Power Supply with Coolege Control Module

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



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

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)

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
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FBR = FABRILum – Recessed

2 NOM. SIZE

RSB

3 CCT

30 = 3000K
35 = 3500K
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4 FINISH

WH = White
BL = Black

5 DIMMING

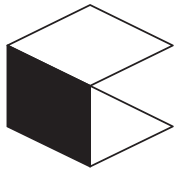
010 = 0-10V

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/m ²)	1465	2200

*Maximum occurs at 45°

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

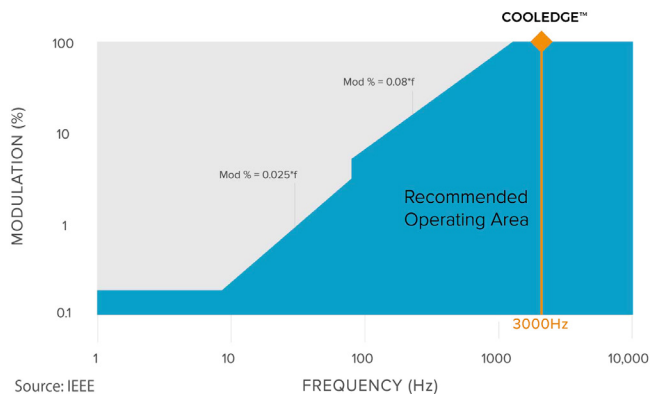
This feature requires minimum values for color rendering.

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

FREQUENCY (Hz)