COOLEDGE™

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
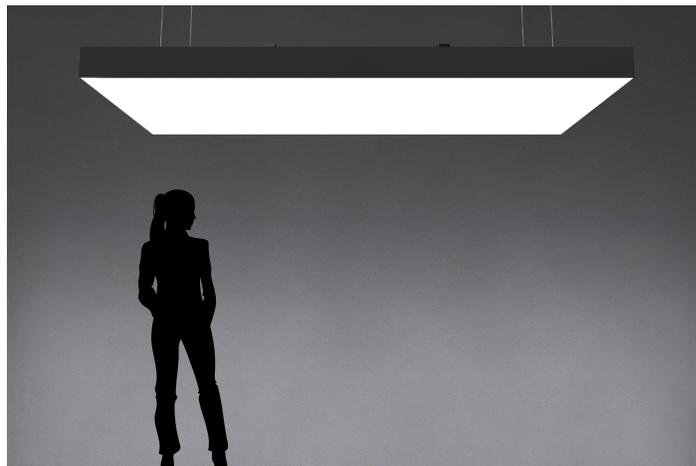
SIZES

| Nominal Size (W x L)	Suspended	Surface Mount	Recessed	Grid (T-Bar)
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)	√	√		

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	Nom. 100-277 VAC (For recessed applications: 100-240 VAC)
Diffuser Material	Woven Polyester Fabric (coated)
Frame Material	Aluminum
Fire Rating	ASTM E84 Class A/EN:13501-1 Class B

c(UL)us LISTED   CE   RoHS
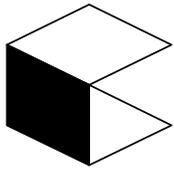
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PHOTOMETRICS

Size	CCT	Flux (lm)	
		High (HF)	Standard (SF)
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	αw
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
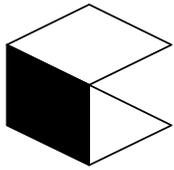
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INPUT POWER

Nominal Size	CCT	High Flux (HF)	Standard Flux (SF)
		Power (W)	Power (W)
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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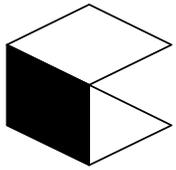
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DIMENSIONS

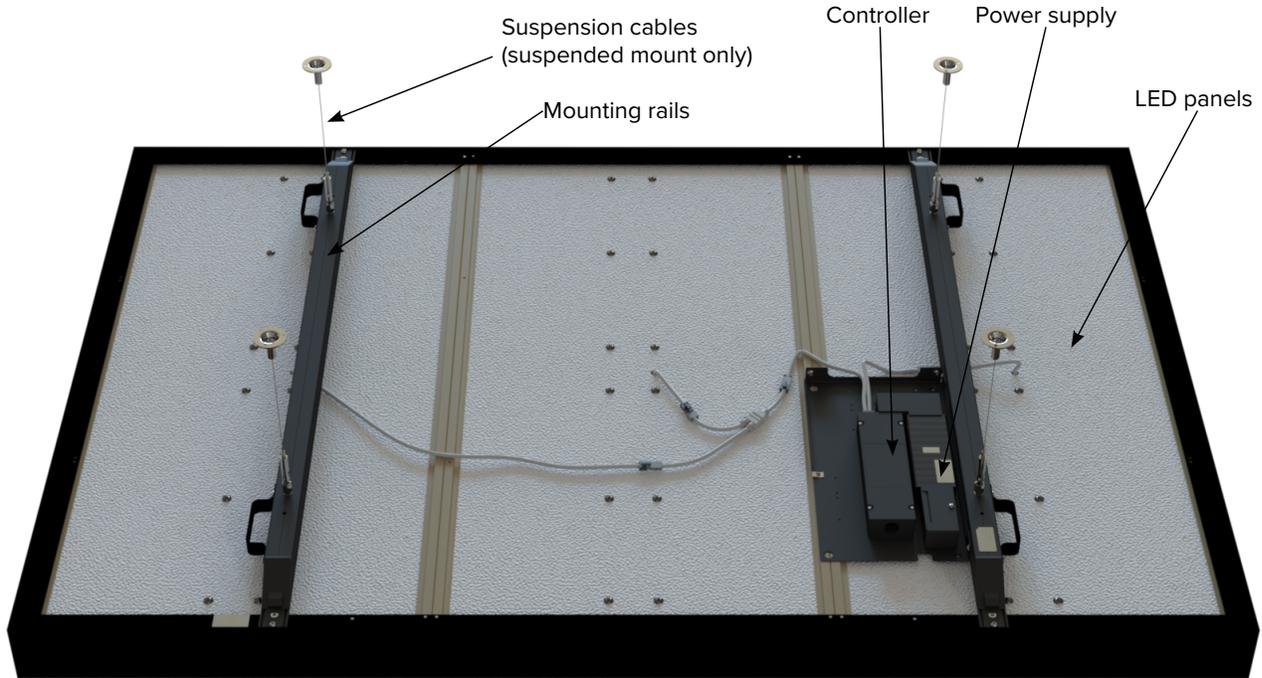| Size	External Dimensions mm (in)		Weight	# Mounting Points
	W	**L**	**kg (lbs)**	
RS	1193 (47.0)	1193 (47.0)	13.9 (31)	4
RM	1193 (47.0)	1768 (69.6)	22.0 (48)	4
RL	1193 (47.0)	2343 (92.2)	27.8 (61)	4
RXL	1768 (69.6)	1768 (69.6)	30.7 (68)	4
RXXL	1768 (69.6)	2343 (92.2)	39.5 (87)	4

– 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

3.9" (100mm)   5.2" (133mm)*

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MOUNTING DETAILS

Suspension cables
(suspended mount only)

Controller   Power supply
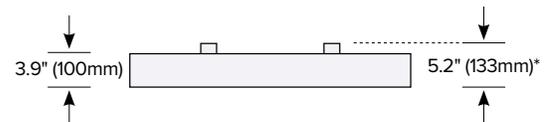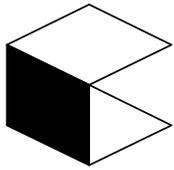
Mounting rails

LED panels

| 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, RM sizes only)
Grid (T-Bar) - Metric	No mounting kit necessary	Lay-in for use with 24mm T-Bar (RS size only) Specify Surface Mount luminaire
Grid (T-Bar) - Imperial	LACC-GR-RS-K LACC-GR-RM-K	Adapter plate enables lay-in for use with 15/16" T-Bar (RS & RM sizes only) Specify Surface Mount luminaire plus LACC-GR-Rx-K
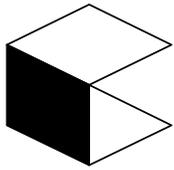
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POWER AND CONTROL

Power Supply with Cooledge
Control Module

Actual power & control
configuration is determined by
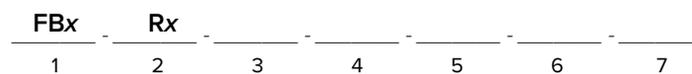the luminaire model.
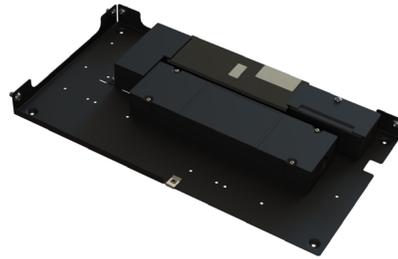
Power & Control Mounting Plate

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.
cooledgelighting.com or contact Cooledge
for remote distance wiring requirements)

Mounting Plate Dimensions:
RS, RM, RL, RXL, RXXL = 405mm x 215mm (16.0" x 8.5")

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)
Operating Frequency	3000Hz (compliant with IEEE 1789-2015 for flicker free)
Control Protocols	0/1-10V, DMX, Wireless (Casambi), DALI

HOW TO ORDER

FB*x* - R*x* _____ - _____ - _____ - _____ - _____
        1   2   3   4   5   6   7

RS/RM/RL/RXL/RXXL

| **1 PRODUCT**	**2 NOM. SIZE**	**3 FLUX**	**4 CCT**	**5 FINISH**	**6 DIMMING**	**7 CERTIFICATION**
FBS = FABRILum – Suspended	**RS**	**HF** = **H**igh **F**lux	**30** = **30**00K	**WH** = White	**010** = **0-10**V	**CE** = **CE** Compliant
FBM = FABRILum – Surface Mount	**RM**	**SF** = **S**td **F**lux	**35** = **35**00K	**BL** = Black	**DAL** = **DAL**I[2]	**UL** = **UL** Listed
FBR = FABRILum – Recessed[1]	**RL**		**40** = **40**00K		**DMX** = **DMX**[3]	
	RXL		**TNW** = **T**unable **W**hite		**CAS** = **Cas**ambi	
	RXXL					

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

ACCESSORIES

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

Cooledge offers the option of adding a faux perforated metal finish to our FABRILum products. Please contact us for details and
ordering process.

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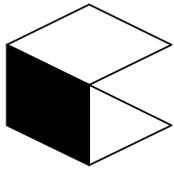
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FAUX PERFORATED METAL (PRINTED)

Make your design unique by adding the look of illuminated perforated metal panels to your FABRILum luminaires using images printed right on the diffuser fabric.

Combine exceptional quality illumination, true acoustic performance, and visual interest in one simple luminaire solution.
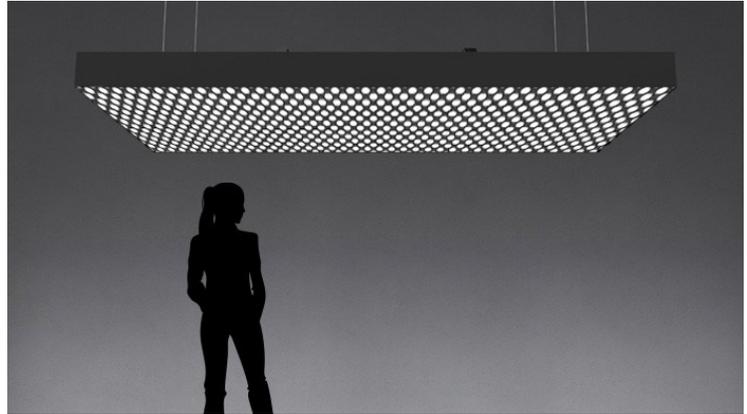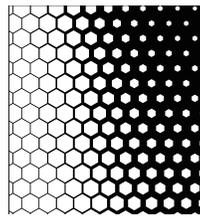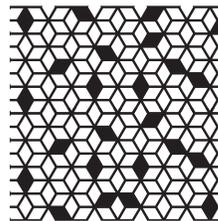

STANDARD PATTERNS

The following are standard patterns available from Cooledge. We are also able to work with other images that you have selected.
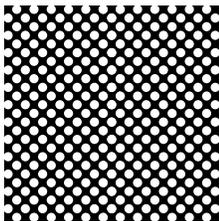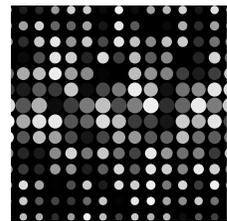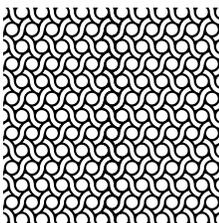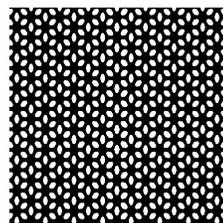

PATTERN A	PATTERN B	PATTERN C	PATTERN D
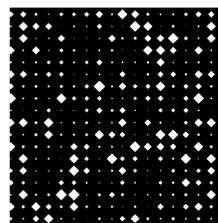
PATTERN E	PATTERN F	PATTERN G	PATTERN H

HOW TO ORDER

Choose your FABRILum luminaire as shown on the previous page and then select your faux perforated metal pattern as an accessory addition as shown below:

LACC	**PRF**	____	____
Lighting Accessory	Perforated Metal	Size/Type	Pattern Identifier
		RS	
		RM	A, B,
		RL	C, D,
		RXL	E, F,
		RXXL	G, H

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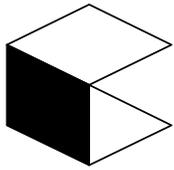
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WELL STANDARD (V2)

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 = Photopic Lux x 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 < 6000 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°

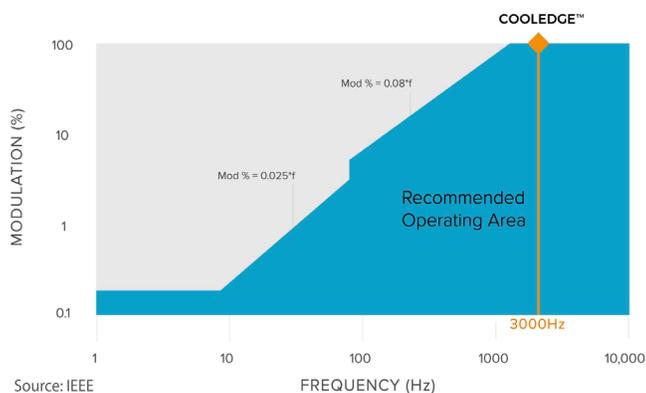### Feature L07: Electric Light Quality – Part 1 Ensure Color Rendering Quality
This feature requires minimum values for color rendering.
Compliance requirement (a): CRI > 90

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

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