



COOLEEDGE LUMINOUS CEILINGS FABRICATED LUMINAIRES - RECESSED: SPECIFICATIONS

PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY	
DATE		NOTE	Luminous Ceilings

DESCRIPTION

Cooledge **FABRICated Luminaires** are a simple, out-of-the-box way to incorporate the unique look and feel of a stretch fabric ceiling into your space. Use recessed luminaires to create open spaces that deliver the visual, biological, and emotional benefits of large luminous surfaces, for example in plaster or drywall ceilings.

Recessed luminaires deliver immersive illumination for:

- Elevator lobbies
- Showrooms
- Shops
- Healthcare facilities



Features Cooledge's unique "Infinity Edge" design for uniform illumination from edge to edge.

SIZES

Nominal Size (Imperial - ft)
4 x 6
4 x 8
4 x 10
5 x 5
6 x 6
6 x 8
6 x 9

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)
Operating Voltage	58 VDC
Diffuser Material	Woven Fabric (coated)
Frame Material	Aluminum
Fire Rating	ASTM E 84 Class A /EN:3501-1 Class B
Noise Reduction Coefficient (NRC)	Standard: 0.2 (ISO Class E)



RoHS



Contact Cooledge for ordering information for JA8 compliant models.

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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

Nominal Size (Imperial - ft)	Flux (lm)		
	Extra High Flux (XHF)	High Flux (HF)	Medium Flux (MF)
4 x 6	13290	8860	4430
4 x 8	18150	12100	6050
4 x 10	22720	15150	7570
5 x 5	14010	9340	4670
6 x 6	23560	15700	7850
6 x 8	31650	21100	10550
6 x 9	35440	23630	11810

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

TM-30-15 DATA

CCT	TNW*	3000	3500	4000
Rf	90	89	88	85
Rg	99	97	97	95

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

*TNW = Tunable White

POWER

Nominal Size (ft)	CCT	Extra High Flux (HF)	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)	Power (W)
4 x 6	TNW	223.8	149.2	72.0
	3000K	214.8	144.1	69.5
	3500K	210.9	140.2	68.2
	4000K	207.1	136.3	66.9
4 x 8	TNW	299.1	199.5	96.3
	3000K	287.1	192.5	92.8
	3500K	281.9	187.4	91.1
	4000K	276.8	182.2	89.4
4 x 10	TNW	374.5	249.7	120.5
	3000K	359.4	241.0	116.2
	3500K	353.0	234.6	114.1
	4000K	346.5	228.1	111.9
5 x 5	TNW	233.4	155.6	75.1
	3000K	224.0	150.2	72.4
	3500K	219.9	146.2	71.1
	4000K	215.9	142.2	69.7

Nominal Size (ft)	CCT	Extra High Flux (HF)	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)	Power (W)
6 x 6	TNW	384.1	256.1	123.6
	3000K	368.7	247.3	119.2
	3500K	362.1	240.6	117.0
	4000K	355.4	234.0	114.8
6 x 8	TNW	505.3	336.9	162.6
	3000K	485.0	325.3	156.8
	3500K	476.3	316.6	153.9
	4000K	467.6	307.8	151.0
6 x 9	TNW	565.9	377.3	182.1
	3000K	543.2	364.3	175.6
	3500K	533.4	354.5	172.4
	4000K	523.6	344.8	169.1

COOLEGE LUMINOUS CEILINGS FABRICATED LUMINAIRES - RECESSED: SPECIFICATIONS

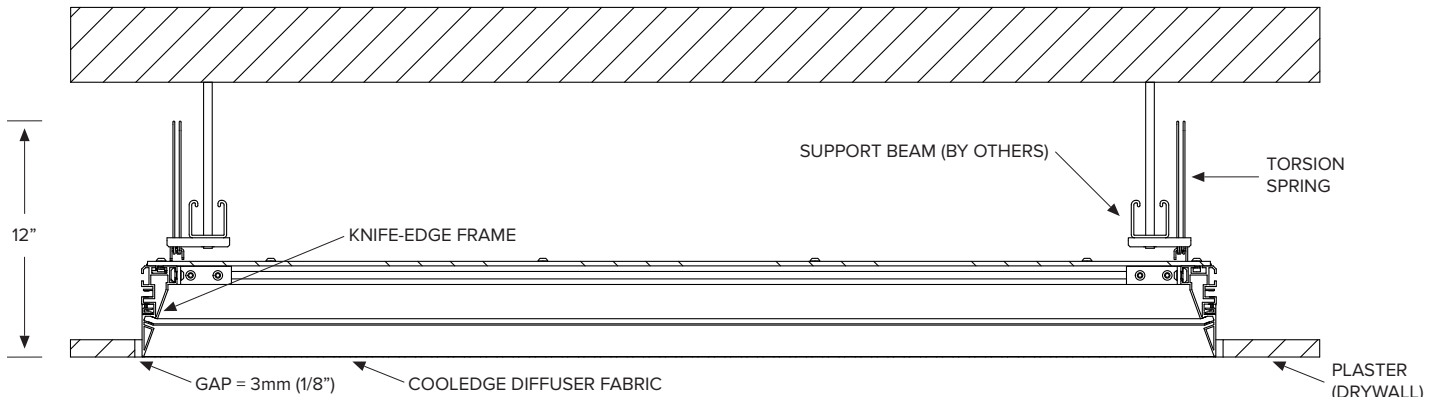
DIMENSIONS

Nominal Size (Imperial - ft)	Order Code	External Dimensions (in)		Weight (lb)	# Mounting Points
		W	L		
4 x 6	46	46.5	74.8	52	6
4 x 8	48	46.5	93.7	57	6
4 x 10	410	46.5	117.3	76	8
5 x 5	55	58.3	58.3	40	6
6 x 6	66	74.8	74.8	68	6
6 x 8	68	74.8	93.7	81	8
6 x 9	69	74.8	110.2	88	8

Height = 12"

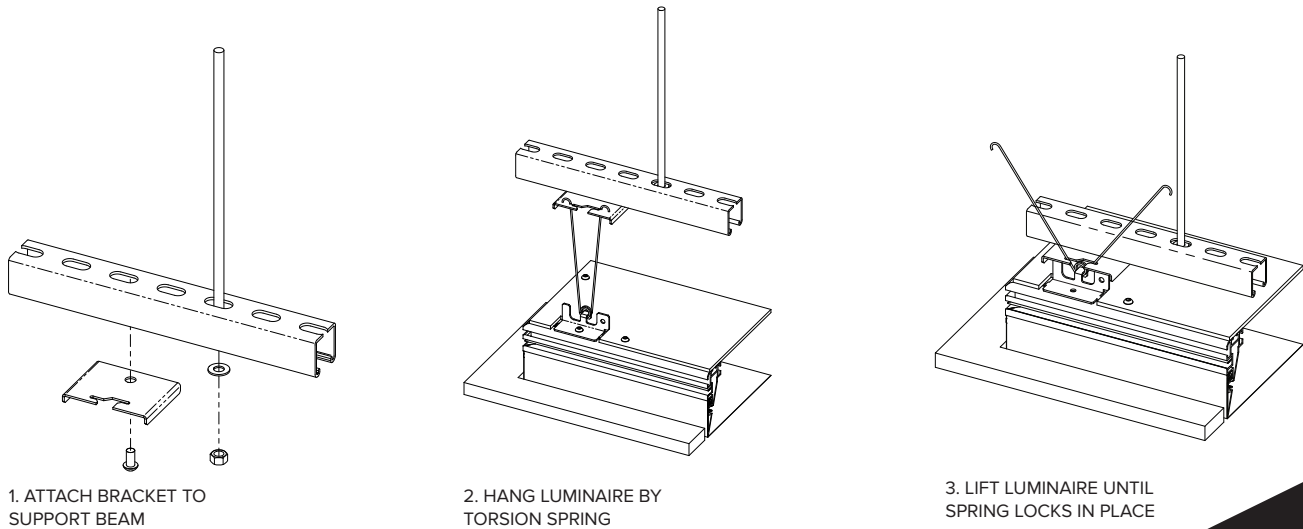
*Recessed opening to be a minimum 1/8" longer than External Dimensions

MOUNTING DETAILS



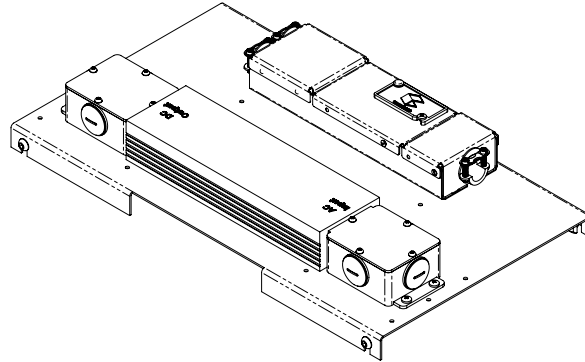
X-section showing Recessed

BRACKET DETAILS



COOLEdge LUMINOUS CEILING FABRICATED LUMINAIRE - RECESSED: SPECIFICATIONS

POWER AND CONTROL MOUNTING



Power Supply with
Cooledge Control Module

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

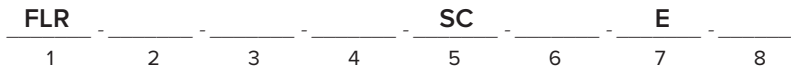
**Power & Control Mounting Plate
(shipped in a separate package)**

Mounting Plate Dimensions: 16.5" X 9.4"

FABRICated Luminaires offer two choices for
locating the power and control components:

- **Integrated:** 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:** 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)

HOW TO ORDER



Static CCT

1 PRODUCT	2 NOM. SIZE	3 FLUX	4 CCT	5 MOUNTING	6 DIMMING	7 NRC	8 CERTIFICATION
FLR = FABRICated Luminaire - Recessed (Plaster/Drywall)	46 = 4x6 48 = 4x8 410 = 4x10 55 = 5x5 66 = 6x6 68 = 6x8 69 = 6x9	HF = High Flux MF = Med Flux XHF = Extra High Flux	30 = 3000K 35 = 3500K 40 = 4000K	SC = Spring Clips	010 = 0-10V (1%) DAL = DALI/0-10V (0.05%) DMX = DMX (0.05%) CAS = Casambi (Wireless – 0.05%)	E = 0.2	U = cUL C = CE

Tunable White

1 PRODUCT	2 NOM. SIZE	3 FLUX	4 CCT	5 MOUNTING	6 DIMMING	7 NRC	8 CERTIFICATION
FLR = FABRICated Luminaire - Recessed (Plaster/Drywall)	46 = 4x6 48 = 4x8 410 = 4x10 55 = 5x5 66 = 6x6 68 = 6x8 69 = 6x9	HF = High Flux MF = Med Flux XHF = Extra High Flux	TNW = Tunable White (2700K -5700K)	SC = Spring Clips	DAL = DALI/0-10V (0.05%) DMX = DMX (0.05%) CAS = Casambi (Wireless – 0.05%)	E = 0.2	U = cUL C = CE

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WELL STANDARD (V2)

Cooledge FABRICated 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 8 “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 FABRICated Luminaires in their design.

Feature L03: Circadian Lighting Design

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

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

Melanopic Ratio for FABRICated Luminaires

	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 FABRICated Luminaires

	High Flux (HF)	Extra High Flux (XHF)
Maximum Luminance* (cd/m ²)	1465	2200

*Maximum occurs at 45°

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

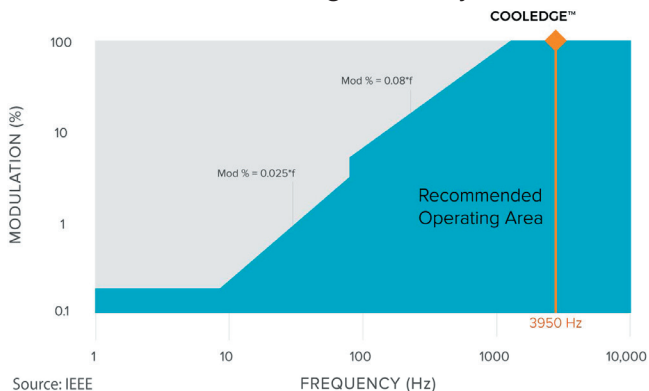
This feature requires minimum values for color rendering.

Compliance requirement (a): CRI > 90

CRI (Ra) for FABRICated Luminaires

	TNW*	3000K	3500K	4000K
CRI (Ra)	96	93	93	93

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