



COOLEGE LUMINOUS CEILING FABRICATED LUMINAIRE - GRID (T-BAR): 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. Create a canopy of light in T-bar grid ceilings by adding skylights to provide immersive illumination that delivers the visual, biological, and emotional benefits of large luminous surfaces.

Grid (T-Bar) luminaires deliver immersive illumination for:

- Offices
- Healthcare facilities
- Meeting rooms
- Educational buildings



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

SIZES

Nominal Size (Metric - mm)
1200 x 1800
1200 x 2400

Fits Grid (T-bar) ceilings with 600mm spacing

GENERAL

Location	Indoor, (IP20)
Operating Temperature	0 – 40°C
Storage Temperature	-40 – +85°C
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

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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 (Metric - mm)	Flux (lm)		
	Extra High Flux (XHF)	High Flux (HF)	Medium Flux (MF)
For Metric Ceilings with 600mm Spacing			
1200 x 1800	13550	9040	4520
1200 x 2400	18540	12360	6180

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

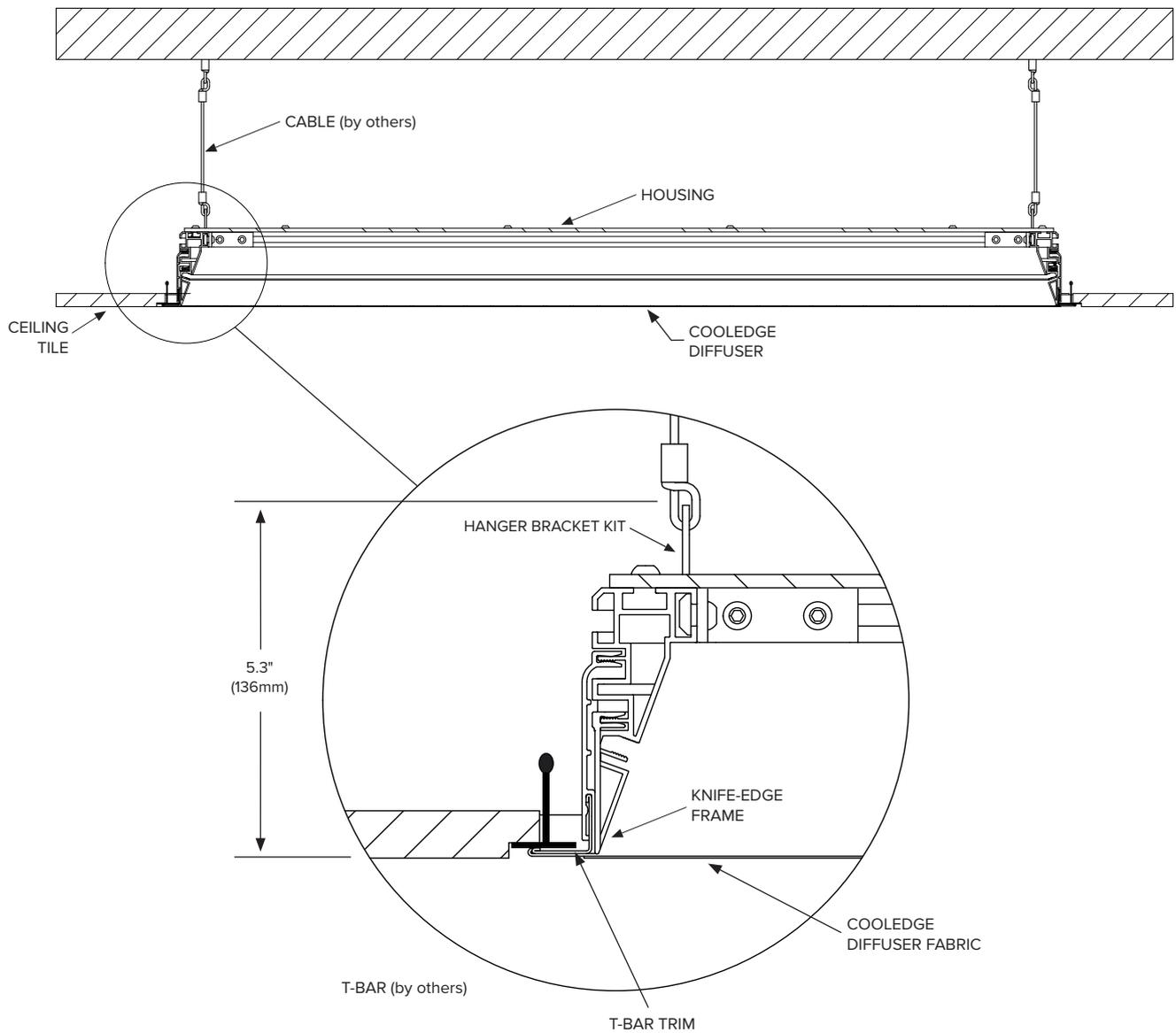
Nominal Size (mm)	CCT	Extra High Flux (XHF)	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)	Power (W)
1200 x1800	TNW	228.3	152.2	73.5
	3000K	219.1	146.9	70.8
	3500K	215.2	143.0	69.5
	4000K	211.2	139.1	68.2
1200 x 2400	TNW	305.6	203.7	98.3
	3000K	293.3	196.7	94.8
	3500K	288.0	191.4	93.1
	4000K	282.7	186.2	91.3

COOLEGE LUMINOUS CEILINGS FABRICATED LUMINAIRES - GRID (T-BAR): SPECIFICATIONS

DIMENSIONS

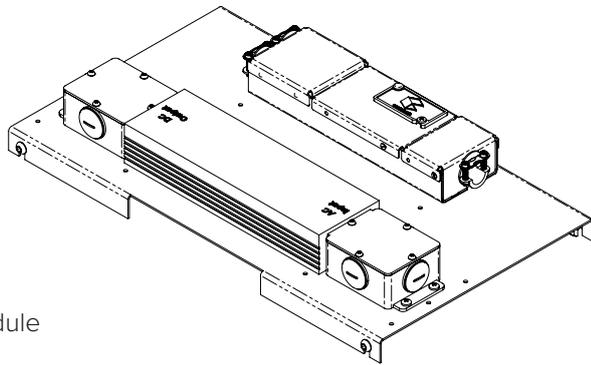
Nominal Size (Metric - mm)	Order Code	External Dimensions (mm)		Weight (kg)	# Mounting Points
		W	L		
1200 x 1800	46	1168	1768	23.6	6
1200 x 2400	48	1168	2368	25.9	6

MOUNTING DETAILS



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POWER AND CONTROL MOUNTING



Power Supply with
Cooledge Control Module

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

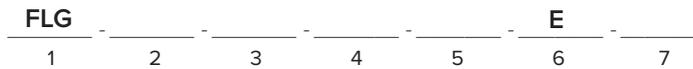
**Power & Control Mounting Plate
(shipped in a separate package)**

Mounting Plate Dimensions: 420mm x 239mm

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 DIMMING	6 NRC	7 CERTIFICATION*
FLG = FABRICated Luminaire - Grid (T-Bar)	46 = 4x6 (1200x1800) 48 = 4x8 (1200x2400)	HF = High Flux MF = Med Flux XHF = Extra High Flux	30 = 3000K 35 = 3500K 40 = 4000K	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 CONTROL	6 NRC
FLG = FABRICated Luminaire - Grid (T-Bar)	46 = 4x6 (1200x1800) 48 = 4x8 (1200x2400)	HF = High Flux MF = Med Flux XHF = Extra High Flux	TNW = Tunable White (2700K -5700K)	DAL = DALI/0-10V (0.05%) DMX = DMX (0.05%) CAS = Casambi (Wireless)	E = 0.2

*Certification is also used to indicate choice metric vs imperial ceiling grid dimensions

- cUL = Imperial grid spacing based on 2' on-center spacing
- CE = Metric grid spacing based on 600mm on-center spacing

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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):

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

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

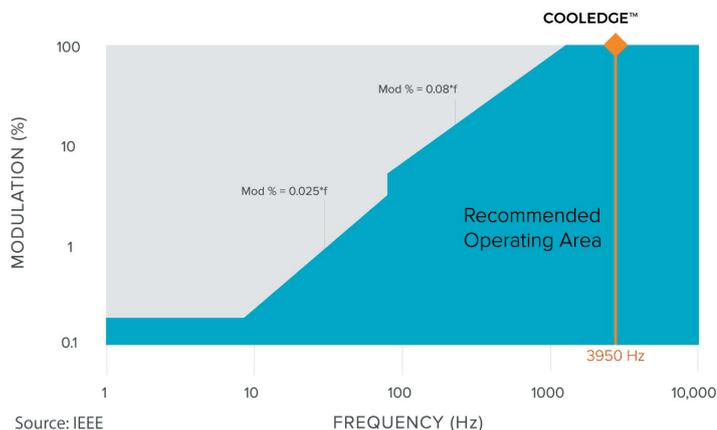
This feature requires minimum values for color rendering.

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

Source: IEEE