COOLEDGE™

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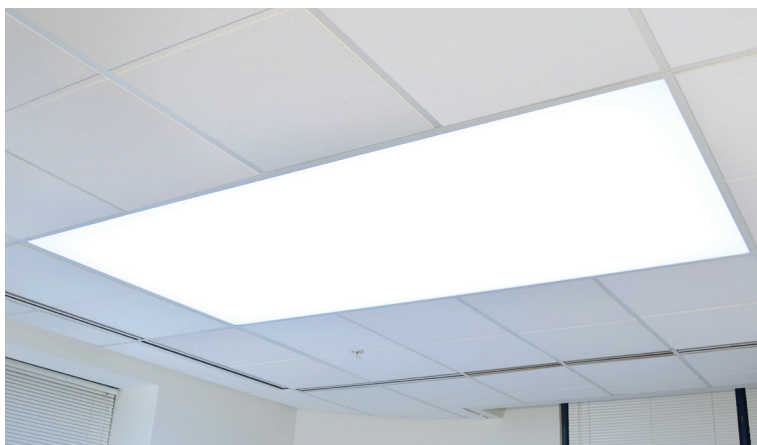
Features Cooledge's unique "Infinity Edge" design for uniform illumination from edge to edge.

SIZES

Nominal Size (Metric - mm)
1200 x 1200
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	Knitted Polyester 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)

c**UL**us LISTED   CE   **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.

PHOTOMETRICS

Nominal Size (Metric - mm)	Flux (lm)	
For Metric Ceilings with 600mm Spacing	High (HF)	Medium (MF)
1200 x 1200	5530	2760
1200 x 1800	8740	4370

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	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)
1200 x 1200	TNW	87	44
	3000K	81	40
	3500K	79	40
	4000K	77	37
1200 x1800	TNW	135	68
	3000K	126	61
	3500K	122	61
	4000K	119	58
1200 x 2400	TNW	183	92
	3000K	170	83
	3500K	165	83
	4000K	161	78

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DIMENSIONS

Nominal Size (Metric - mm)	Order Code	External Dimensions (mm)		Weight (kg)	# Mounting Points
		W	L		
1200 x 1200	44	1168	1168	19.5	4
1200 x 1800	46	1168	1768	23.6	6
1200 x 2400	48	1168	2368	25.9	6

MOUNTING DETAILS
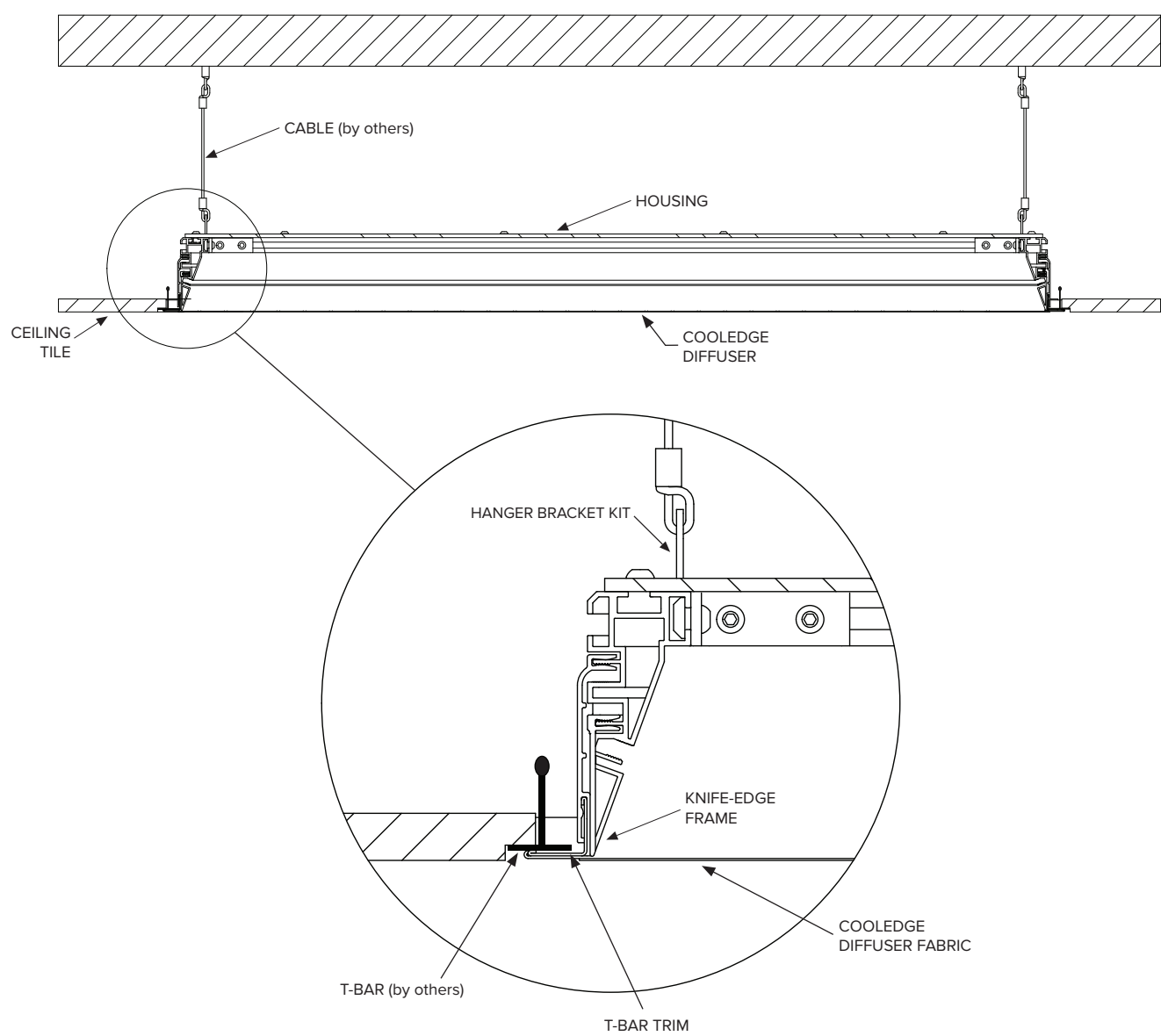
CABLE (by others)

HOUSING

CEILING TILE

COOLEDGE DIFFUSER

HANGER BRACKET KIT

KNIFE-EDGE FRAME

COOLEDGE DIFFUSER FABRIC

T-BAR (by others)

T-BAR TRIM

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POWER AND CONTROL MOUNTING
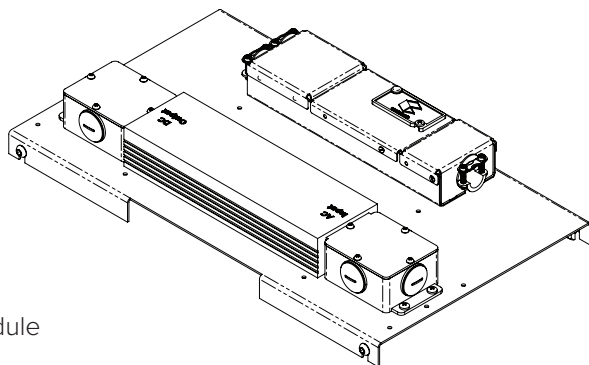
Power Supply with
Cooledge Control Module

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

```
_____   FLG   - _____ - _____ - _____ - _____ -   E   - _____
          1        2        3        4        5          6       7
```

Static CCT

1 PRODUCT	2 NOM. SIZE	3 FLUX	4 CCT	5 DIMMING	6 NRC	7 CERTIFICATION*
FLG = **F**ABRICated **L**uminaire - **G**rid (T-Bar)	**44** = **4x4** (1200x1200) **46** = **4x6** (1200x1800) **48** = **4x8** (1200x2400)	**HF** = **H**igh **F**lux **MF** = **M**ed **F**lux	**30** = **30**00K **35** = **35**00K **40** = **40**00K	**010** = **0-10**V (1%) **DAL** = **DAL**I/0-10V (0.05%) **DMX** = **DMX** (0.05%) **CAS** = **Cas**ambi (Wireless – 0.05%)	**E** = 0.2	**U** = c**UL** **C** = **C**E

Tunable White

1 PRODUCT	2 NOM. SIZE	3 FLUX	4 CCT	5 CONTROL	6 NRC
FLG = **F**ABRICated **L**uminaire - **G**rid (T-Bar)	**44** = **4x4** (1200x1200) **46** = **4x6** (1200x1800) **48** = **4x8** (1200x2400)	**HF** = **H**igh **F**lux **MF** = **M**ed **F**lux	**TNW** = Tunable White (2700K -5700K)	**DAL** = **DAL**I/0-10V (0.05%) **DMX** = **DMX** (0.05%) **CAS** = **Cas**ambi (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 = Photopic Lux x 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)	3000K
Maximum Luminance* (cd/m2)	1465	740

*Maximum occurs at 45°

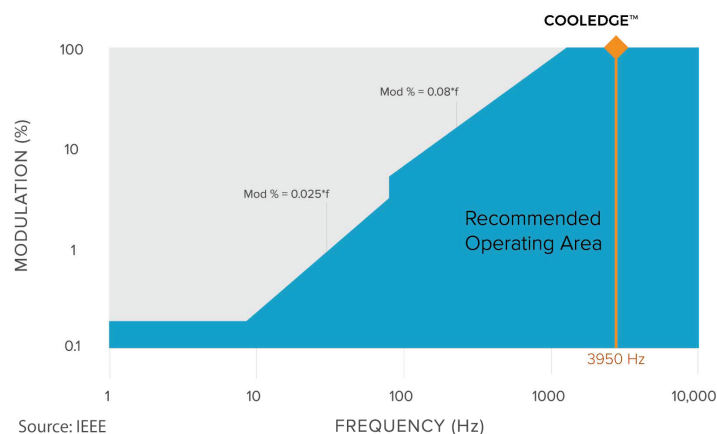### Feature L07: Electric Light Quality – Part 1 Ensure Color Rendering Quality
This feature requires minimum values for color rendering.
Compliance requirement (a): CRI > 90

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

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