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. Bring the feeling of the outdoors inside, filling an open concept space with clouds of light that also absorbs sound to deliver an exceptional experience for your eyes and ears.

Suspended luminaires deliver immersive illumination and noise reduction for:
* Showrooms
* Lobbies
* Open plan Offices
* Shop-in-shop Retail

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
1200 x 3000
1500 x 1500
1800 x 1800
1800 x 2400
1800 x 2700

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)	Optional: 0.75 (ISO Class C)

c UL us LISTED   **CE**   **RoHS**

PHOTOMETRICS

Nominal Size (Metric - mm)	Flux (lm)		
	Extra High Flux (XHF)	High Flux (HF)	Medium Flux (MF)
1200 x 1800	13290	8860	4430
1200 x 2400	18150	12100	6050
1200 x 3000	22720	15150	7570
1500 x 1500	14010	9340	4670
1800 x 1800	23560	15700	7850
1800 x 2400	31650	21100	10550
1800 x 2700	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 (mm)	CCT	Extra High Flux (HF)	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)	Power (W)
1200 x 1800	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
1200 x 2400	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
1200 x 3000	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
1500 x 1500	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 (mm)	CCT	Extra High Flux (HF)	High Flux (HF)	Medium Flux (MF)
		Power (W)	Power (W)	Power (W)
1800 x 1800	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
1800 x 2400	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
1800 x 2700	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

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DIMENSIONS

Nominal Size (Metric - mm)	Order Code	External Dimensions (mm)		Weight (kg)	# Mounting Points
		W	L		
1200 x 1800	46	1180	1900	23.6	6
1200 x 2400	48	1180	2380	25.9	6
1200 x 3000	410	1180	2980	34.5	8
1500 x 1500	55	1480	1480	18.0	6
1800 x 1800	66	1900	1900	30.9	6
1800 x 2400	68	1900	2380	36.8	8
1800 x 2700	69	1900	2800	40.0	8

Height = 133mm

MOUNTING DETAILS

CABLE (by others)

HANGER BRACKET KIT

STIFFENER

BACK PANEL

OPTIONAL: TRIM KIT ORDERED SEPARATELY

COOLEDGE (LED) LIGHTING SYSTEM

KNIFE-EDGE FRAME

COOLEDGE DIFFUSER FABRIC
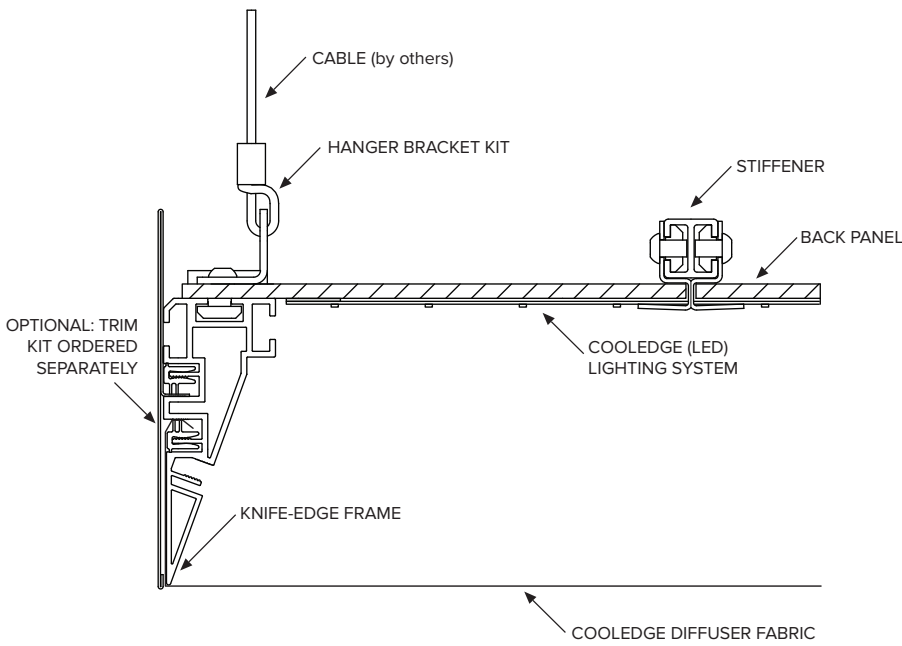
X-section showing Cable Mount

THREADED ROD (by others)

HANGER BRACKET KIT
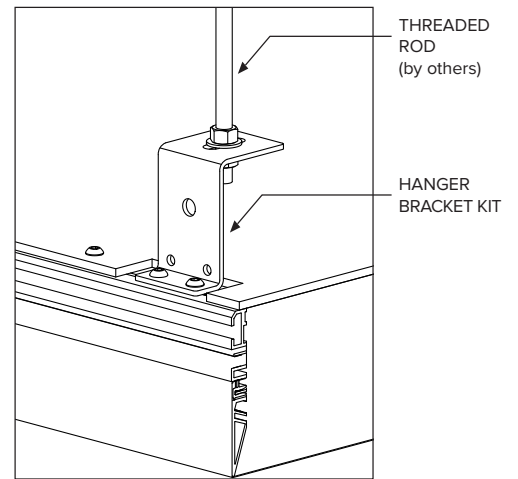
Threaded Rod Mounting Option

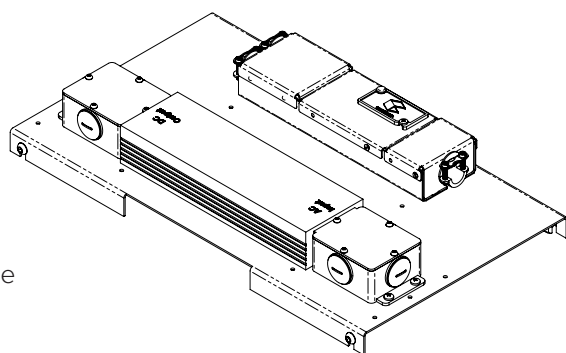COOLEDGE™
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NOISE REDUCTION

Suspended Cooledge FABRICated Luminaires are unique in combining high quality illumination with sound absorption characteristics. In open concept areas FABRICated Luminaires can reduce or eliminate the need for additional sound absorbing materials – especially useful where stone or tile floors are used.

NOISE REDUCTION COEFFICIENT (NRC)

NRC Value	Sound Absorption Class	Order Code Reference
0.75	Class C	"C"

NOTE: Contact Cooledge for NRC = 1.0 (class A) options

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

FLS - _____ - _____ - _____ - _____ - _____ - C - _____
   1   2   3   4   5   6   7   8
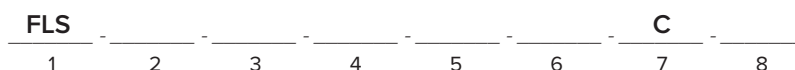
Static CCT

1 PRODUCT	**2 NOM. SIZE**	**3 FLUX**	**4 CCT**	**5 MOUNTING**	**6 DIMMING**	**7 NRC**	**8 CERTIFICATION**
FLS = **F**ABRICated **L**uminaire - **S**uspended	**46** = **4x6** (1200x1800) **48** = **4x8** (1200x2400) **410** = **4x10** (1200x3000) **55** = **5x5** (1500x1500) **66** = **6x6** (1800x1800) **68** = **6x8** (1800x2400) **69** = **6x9** (1800x2700)	**HF** = **H**igh **F**lux **MF** = **M**ed **F**lux **XHF** = **Ex**tra **H**igh **F**lux	**30** = **30**00K **35** = **35**00K **40** = **40**00K	**AC** = **A**ircraft **C**able **TR** = **T**hreaded **R**od	**010** = **0-10**V (1%) **DAL** = **DAL**I/0-10V (0.05%) **DMX** = **DMX** (0.05%) **CAS** = **Cas**ambi (Wireless – 0.05%)	**C** = 0.75	**U** = c**UL** **C** = **C**E

Tunable White

1 PRODUCT	**2 NOM. SIZE**	**3 FLUX**	**4 CCT**	**5 MOUNTING**	**6 DIMMING**	**7 NRC**	**8 CERTIFICATION**
FLS = **F**ABRICated **L**uminaire - **S**uspended	**46** = **4x6** (1200x1800) **48** = **4x8** (1200x2400) **410** = **4x10** (1200x3000) **55** = **5x5** (1500x1500) **66** = **6x6** (1800x1800) **68** = **6x8** (1800x2400) **69** = **6x9** (1800x2700)	**HF** = **H**igh **F**lux **MF** = **M**ed **F**lux **XHF** = **Ex**tra **H**igh **F**lux	**TNW** = **T**unable **W**hite (2700K -5700K)	**AC** = **A**ircraft **C**able **TR** = **T**hreaded **R**od	**DAL** = **DAL**I/0-10V (0.05%) **DMX** = **DMX** (0.05%) **CAS** = **Cas**ambi (Wireless – 0.05%)	**C** = 0.75	**U** = c**UL** **C** = **C**E

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TRIM KITS (OPTIONAL)

Cooledge FABRICated Luminaires are available with 3 finishing options:

1. Metal Trim/Fascia: for applications where the texture of the finish will be highly visible
2. Plastic Trim/Fascia: budget friendly alternative for typical mounting height applications
3. No Trim/Fascia: fabric diffuser is visible on the sides for a true Infinity Edge

HOW TO ORDER

Nominal Size (mm)	FABRICated Luminaire Models	Material	Color	Order Code
1200 x 1800	FLS-46	Metal	White	FL-TRM-46-MTL-WHT-K
			Black	FL-TRM-46-MTL-BLK-K
		Plastic	White	FL-TRM-46-PLS-WHT-K
			Black	FL-TRM-46-PLS-BLK-K
1200 x 2400	FLS-48	Metal	White	FL-TRM-48-MTL-WHT-K
			Black	FL-TRM-48-MTL-BLK-K
		Plastic	White	FL-TRM-48-PLS-WHT-K
			Black	FL-TRM-48-PLS-BLK-K
1200 x 3000	FLS-410	Metal	White	FL-TRM-410-MTL-WHT-K
			Black	FL-TRM-410-MTL-BLK-K
		Plastic	White	FL-TRM-410-PLS-WHT-K
			Black	FL-TRM-410-PLS-BLK-K
1500 x 1500	FLS-55	Metal	White	FL-TRM-55-MTL-WHT-K
			Black	FL-TRM-55-MTL-BLK-K
		Plastic	White	FL-TRM-55-PLS-WHT-K
			Black	FL-TRM-55-PLS-BLK-K
1800 x 1800	FLS-66	Metal	White	FL-TRM-66-MTL-WHT-K
			Black	FL-TRM-66-MTL-BLK-K
		Plastic	White	FL-TRM-66-PLS-WHT-K
			Black	FL-TRM-66-PLS-BLK-K
1800 x 2400	FLS-68	Metal	White	FL-TRM-68-MTL-WHT-K
			Black	FL-TRM-68-MTL-BLK-K
		Plastic	White	FL-TRM-68-PLS-WHT-K
			Black	FL-TRM-68-PLS-BLK-K
1800 x 2700	FLS-69	Metal	White	FL-TRM-69-MTL-WHT-K
			Black	FL-TRM-69-MTL-BLK-K
		Plastic	White	FL-TRM-69-PLS-WHT-K
			Black	FL-TRM-69-PLS-BLK-K

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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)	Extra High Flux (XHF)
Maximum Luminance* (cd/m2)	1465	2200

*Maximum occurs at 45°

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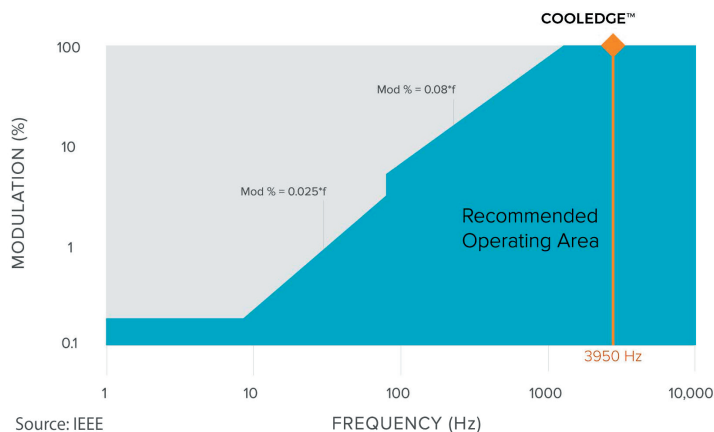This feature requires minimum values for color rendering.
Compliance requirement (a): CRI > 90

CRI (Ra) for 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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