

# **COOLEDGE LUMINOUS CEILINGS FABRILUM BULLNOSE: SPECIFICATIONS**

PROJECT	REFERENCE TYPE	
SPECIFIED BY	QUANTITY	
DATE	NOTE	Luminous Ceilings

#### **DESCRIPTION**

FABRILum Bullnose luminaires are shaped with straight sides and full radius ends to create a unique architectural form combining the exceptional acoustic performance and immersive illumination that deliver the Cooledge Advantage. Incorporate the high efficacy, accessible fabric diffuser and incredible value featured in this distinctive shape to create more interesting spaces for:

- Lobbies, atriums, indoor plazas
- Retail base lighting or illumination for merchandise display islands
- Open plan offices and co-working spaces where acoustics and aesthetics are critical elements of the design



#### **SIZES**

# **Nominal Size BNM** (4' x 8'/1.2m x 2.4m) **BNL** $(4' \times 10'/1.2m \times 3.0m)$

#### **GENERAL**

Mounting Options	Suspended & Surface Mount
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)
Diffuser Material	Woven Polyester Fabric (coated)
Frame Material	Aluminum
Fire Rating	ASTM E84 Class A/EN:3501-1 Class B
Input Voltage	Nom. 120 – 277 VAC







# **PHOTOMETRICS**

Size	ССТ	Flux (lm)		
		High Flux (HF)	Standard Flux (SF)	
	3000K	15,700	8400	
BNM	3500K	16,500	8400	
DINIVI	4000K	16,800	8400	
	TNW	15,000	8400	
	3000K	20,000	10,750	
BNL	3500K	21,000	10,750	
DINL	4000K	21,500	10,750	
	TNW	19,300	10,750	

CRI (Ra)	>92
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	Mounting Type Noise Reduction Coefficient		Weighted Sound Absorption Coefficient (ISO EN11654)	
	NRC	SAA	αw	
Suspended (single)	0.90	0.91	0.90	
Surface Mount	0.60	0.62	0.45 (M)	

A full acoustic report is available at <a href="https://www.cooledgelighting.com/acoustic-lighting#testreports">https://www.cooledgelighting.com/acoustic-lighting#testreports</a>

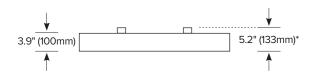
# **POWER**

Size	ССТ	Power (W)		
		High Flux (HF)	Standard Flux (SF)	
	3000K	244	128	
DNIM	3500K	244	121	
BNM	4000K	244	121	
	TNW	244	133	
	3000K	311	163	
DNII	3500K	311	156	
BNL	4000K	311	156	
	TNW	311	170	

# **DIMENSIONS**

Size	External Dimension mm (in)		Weight	# Mounting Points
	W	L	kg (lbs)	
BNM	1193 (47.0)	2343 (92.2)	32 (70)	4
BNL	1193 (47.0)	2961 (116.6)	38 (85)	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



# **MOUNTING DETAILS**

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

## POWER AND CONTROL MOUNTING



Control Module Actual power & control

configuration is determined by the luminaire model.

**Power & Control Mounting Plate** 

#### **Mounting Plate Dimensions:**

 $RSB = 480 \text{mm} \times 214 \text{mm} (18.9" \times 8.4")$ RS, RM, RL, RXL =  $400 \text{mm} \times 190 \text{mm} (15.75" \times 7.5")$  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)

Power Supply Performance	
Input Voltage	Nom. 120-277VAC
Input Frequency	Nom. 50-60 Hz
Start-up Time	1.25 sec
Max. Inrush Current	60A
Rated Lifetime	200,000 hr

Control Module Performance			
Minimum Dim Level	0.1%		
Operating Frequency	3000Hz (compliant with IEEE 1789- 2015 for flicker free)		
Control Protocols	<ul> <li>O/1-10V*</li> <li>DMX*</li> <li>DALI**</li> <li>Wireless (Casambi)***</li> </ul>		

<sup>\*</sup> N. America only

# **HOW TO ORDER**

	FBx _	BNx				
	1	2 3	4 5	6 7		
1 MOUNTING FBS = Suspended FBM = Surface Mount	2 NOM. SIZE BNM = Bullnose Medium BNL = Bullnose Large	3 FLUX HF = High Flux SF = Std Flux	4 CCT 30 = 3000K 35 = 3500K 40 = 4000K TNW = Tunable White	5 FINISH WH = White BL = Black	6 <u>DIMMING</u> 010 = 0-10V DAL = DALI <sup>2</sup> DMX = DMX <sup>3</sup> CAS = Casambi (Wireless)	7 CERTIFICATION CE = CE Compliant UL = UL Listed

<sup>\*\*</sup> EMEA only

<sup>\*\*\*</sup> All regions

# 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 LO3: 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

<sup>\*</sup>Tunable White: 2700K @ 50% + 5700K @ 50%

#### 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 FABRILum

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

<sup>\*</sup>Maximum occurs at 45°

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

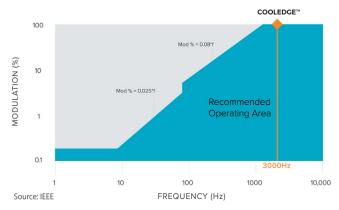
This feature requires minimum values for color rendering.

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

<sup>\*\*</sup>Calculated using the IWBI Melanopic Ratio calculator