

COOLEDGE LUMINOUS CEILINGS FABRILUM CIRCLE: SPECIFICATIONS

PROJECT	REFERENCE TYPE	
SPECIFIED BY	QUANTITY	
DATE	NOTE	Luminous Ceilings

DESCRIPTION

FABRILum's exceptional acoustic performance and immersive illumination are now available in a circle (nominal 4'/1.2m) featuring the same higher efficacy, accessible fabric diffuser and incredible value. Perfect base lighting for design themes that incorporate curves and circles to create more interesting spaces great for:

- Lobbies, atriums, indoor plazas
- Retail environments where curves and circles are prominent
- Open plan offices and co-working spaces with a more modern feeling
- Showrooms



SIZE

Nominal Size
CS (4'/1.2m dia)

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)
Input Voltage	Nom. 120 – 277 VAC
Diffuser Material	Woven Polyester Fabric (coated)
Frame Material	Aluminum
Fire Rating	ASTM E84 Class A/EN:3501-1 Class B
Weight (single luminaire)	14 kg (31 lb)





(RoHS

PHOTOMETRICS

Size	сст	Flux (lm)	
		High Flux (HF)	Standard Flux (SF)
	3000K	6800	3650
CS	3500K	7100	3650
CS	4000K	7300	3650
	TNW	6500	3650

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	Noise Reduction Coefficient	Sound Absorption Average	Weighted Sound Absorption Coefficient (ISO EN11654)
	NRC	SAA	α w
Suspended	0.90	0.91	0.90
Surface Mount	0.60	0.62	0.45 (M)

A full acoustic report is available at https://www.cooledgelighting.com/acoustic-lighting#testreports

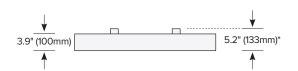
POWER

Size	сст	Power (W)	
		High Flux (HF)	Standard Flux (SF)
	3000K	108	57
CS	3500K	109	55
CS	4000K	109	55
	TNW	109	60

DIMENSIONS

Size	External Dimensions mm (in)	Weight kg (lbs)	# Mounting Points
CS	1193 (47.0)	14 (31)	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

Power Supply with Cooledge Control Module

Actual power & control configuration is determined by

Power & Control Mounting Plate

the luminaire model.

Mounting Plate Dimensions: RSB = 480mm × 214mm (18.9" × 8.4") RS, RM, RL, RXL = 400mm × 190mm (15.75" × 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	 O/1-10V* DMX* DALI** Wireless (Casambi)*** 	

^{*} N. America only

HOW TO ORDER

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

^{**} EMEA only

^{***} 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 L03: 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

^{*}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

^{*}Maximum occurs at 45°

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

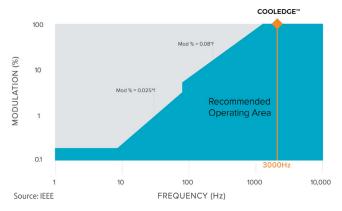
This feature requires minimum values for color rendering.

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

^{**}Calculated using the IWBI Melanopic Ratio calculator