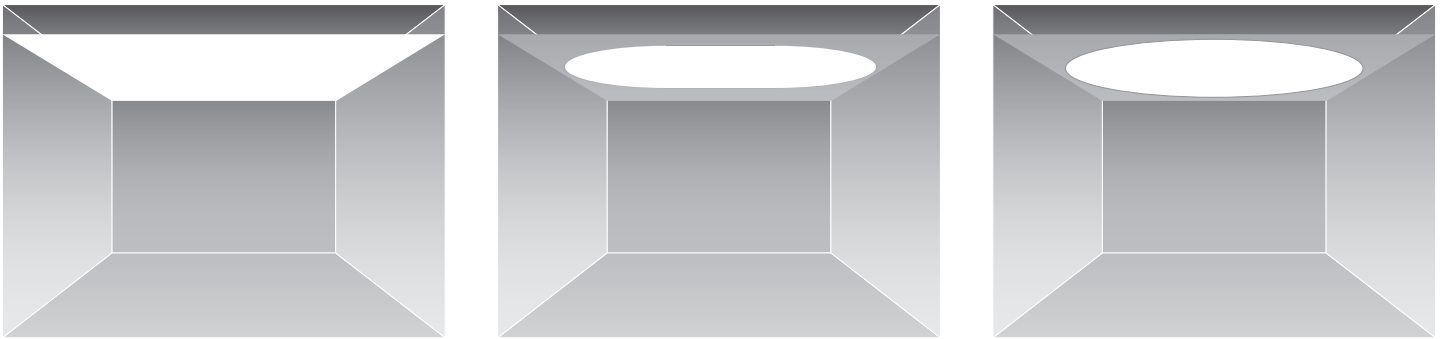




COOLEGE LUMINOUS CEILINGS SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT: SPECIFICATIONS

PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY/SIZE	
DATE		NOTE	Luminous Ceiling

SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT STANDARD CONFIGURATION



Create luminous ceilings that deliver immersive illumination experiences from wall to wall.

GENERAL

Mounting Type	Flush Mount
Surface Material	Polyester Woven Fabric (coated)
Fabric Tensioning Profile	Flexible PVC
Light Source	Cooledge TILE Interior or TILE Tunable White (W+RGB available)
Dust Ply Included	Yes
Maximum Seamless Dimensions	15.5ft (4.7m) x 161ft (49m) (WxL)
Minimum Cavity Depth	Recommended: 6 in (150mm) Minimum: 4 in (100mm)

SPECIFICATION

- A luminous surface of dimensions aa x bb consisting of a woven polyester light emitting diffuser mounted to vertical wall or ceiling cavity surfaces.
- Cooledge Solutions form a single, uniformly diffuse and seamless light emitting surface; provide a minimum of xx fc (lux) on the horizontal workplane; and are installable in occupied premises, without need for heating devices or water.
- The surface material(s) is composed of a coated polyester fabric with a fire rating ASTM E 84 Class A/EN:3501-1 Class B or better.
- Light output from the luminous surface is CRI>90; provides flux within 10% of average, and has a color consistency of 2 SDCM over the entire surface. (Single CCT & Tunable White)
- Cooledge Solutions are UL Listed, CE Compliant.

FEATURES

- **Continuous:** Mounts directly to each wall to form a continuous luminous ceiling or fill a cavity with limitless scalability
- **No Special Site Requirements:** Woven fabric is easily stretched and held in place without need to remove equipment, or furniture, or isolate the space
- **First Time Right Install:** Field adjustability accommodates obstacles and altered site dimensions – no need for 2nd attempts
- **Immersive Illumination:** A large luminous surface delivers a surprising amount of illumination without visual discomfort
- **Adaptable:** Choice of tunable white, dim-to-warm, W+RGB or static color temperature
- **Code Friendly:** Fire-rated polyester fabric and a fully certified lighting system eliminate inspection challenges
- **Quick & Clean:** Avoid the mess caused by drywall construction and delays waiting for surface prep.

COOLEGE LUMINOUS CEILING SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT: SPECIFICATIONS

PHOTOMETRICS¹ (SINGLE CCT & TUNABLE WHITE)

Distribution	Lambertian
Light Output ² (lm/sqft)	Extra High Flux (XHF): 520 High Flux (HF): 345 Medium Flux (MF): 175 Low Flux (LF): 85
Light Output ² (lm/m ²)	Extra High Flux (XHF): 5580 High Flux (HF): 3710 Medium Flux (MF): 1860 Low Flux (LF): 930
Correlated Color Temperature (CCT)	2200K, 2700K, 3000K, 3500K, 4000K, 5700K, Tunable White 2700K-5700K Dim-to-Warm 3500K-2200K
Color Rendering Index (CRI)	≥ 90
Color Uniformity	2 SDCM (typical)
Lumen Maintenance ³	L80 = 75,000 hr

¹ Photometric files available from cooledgelighting.com

² Based on a 10'x10' (3mx3m) area - refer to Specialty Illumination Solutions Size Factors for other sizes

³ Based on LM80 data & TM-21 calculations

Cooledge has conducted extensive testing on the interaction between the light source and the surface materials to deliver the optical and photometric properties of the Solution.

TM-30-15 DATA

CCT	2200K	2700K	3000K	3500K	4000K	5700K	TNW*
Rf	88	91	90	89	86	88	90
Rg	99	99	98	98	96	98	100

For more details about Cooledge Solutions color rendering, please see "Light Quality Metrics" at www.cooledgelighting.com

* = Tunable White @50% point in the tunable range 2700K - 5700K

PHOTOMETRICS (W+RGB)

	lm/sqft*	lm/m ² *
W (3500K)	280	3000
Full W+RGB	560	6030
Red only	85	920
Green only	225	2400
Blue only	50	540

*Approximate: actual flux values may vary depending on the size and shape of the Specialty Illumination Solution.

WHITE - 3500K

Correlated Color Temperature (CCT)	3500K
CRI (Ra) - White	94
R9	64
Color Uniformity - White (Typical)	3 SDCM
Lumen Maintenance (L70)	50,000 hr

WHITE - W+RGB: OTHER CCTS*

Nominal CCT	Calculated CCT	CRI	R9
2700K	2752K	80	51
3000K	3080K	90	79
3500K	3465K	95	95
4000K	3985K	95	97
5000K	5031K	93	96
5700K	5640K	91	88

**COOLEEDGE LUMINOUS CEILING
SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT: SPECIFICATIONS**

POWER (SINGLE CCT & TUNABLE WHITE)

Flux Category	Light Output (lm/sqft)	Light Output (lm/m ²)	CCT	Power (W/sqft)	Power (W/m ²)
Extra High Flux (XHF)	520	5580	2200K	n/a	n/a
			2700K	7.8	83.4
			3000K	7.1	76.2
			3500K	7.0	75.0
			4000K	7.0	75.0
			5700K	7.0	75.0
High Flux (HF)	345	3710	2200K	5.6	60.4
			2700K	5.2	55.6
			3000K	4.8	52.0
			3500K	4.6	49.6
			4000K	4.6	49.6
			5700K	4.7	50.8
Medium Flux (MF)	175	1860	2200K	2.8	30.2
			2700K	2.6	27.8
			3000K	2.5	26.6
			3500K	2.2	24.2
			4000K	2.4	25.4
			5700K	2.2	24.2
Low Flux (LF)	85	940	2200K	1.3	14.5
			2700K	1.2	13.3
			3000K	1.2	13.3
			3500K	1.1	12.1
			4000K	1.1	12.1
			5700K	1.1	12.1

Note: for Tunable White use 2700K power value; for Dim-to-Warm use 3500K value

POWER (W+RGB)

	W/sqft	W/m ²
W (3500K)	5.8	62
Full W+RGB	22.5	242
Red only	5.8	62
Green only	5.8	62
Blue only	5.8	62

CERTIFICATIONS



RoHS

INSTALLATION

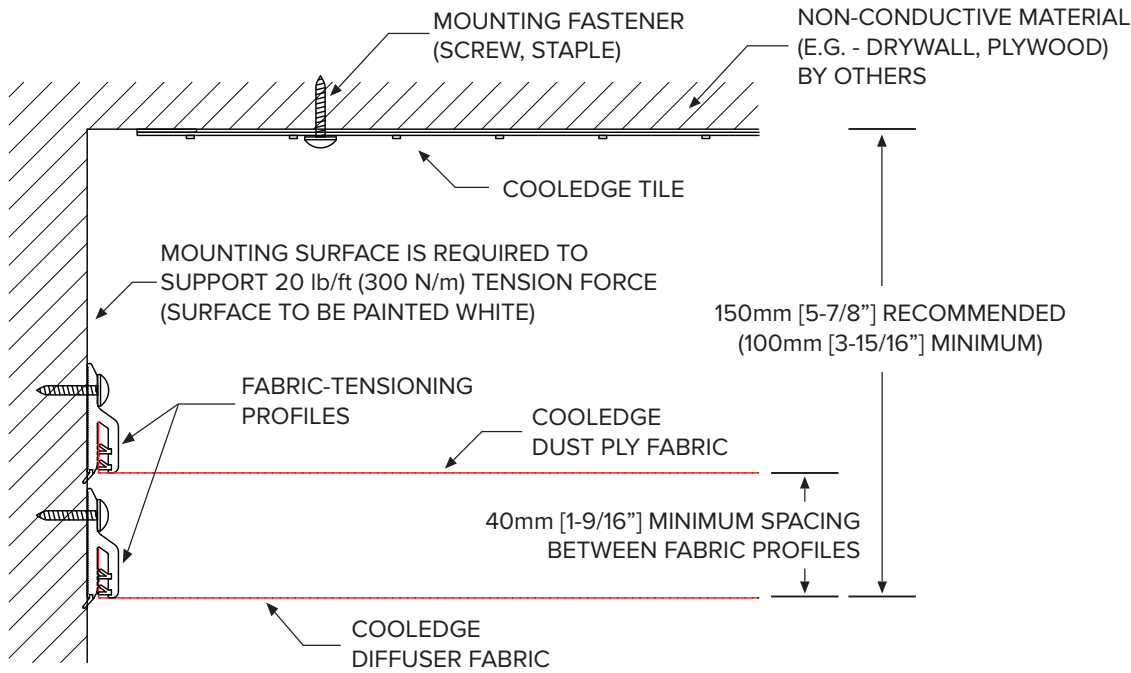
Installation of Cooleedge Specialty Illumination Solutions must be done by a Cooleedge recommended installer.

WARRANTY

Refer to Cooleedge Terms and Conditions for full warranty details.

COOLEdge LUMINOUS CEILINGS SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT: SPECIFICATIONS

MECHANICAL DETAILS



Cooledge Specialty Illumination Solutions include the illumination source, profile, diffuser fabric, and installation of all non-electrical components

GENERAL

Location	Indoor, dry location only
Operating Temp. Range	0-40°C (32-104°F)
Storage Temp. Range	-40-85°C (-40-185°F)
Relative Humidity	90% max (non-condensing)
Fire Spread	ASTM E84: Class A (FSI = 0-25); EN13501-1: Class B – s1,d0;

COOLEEDGE LUMINOUS CEILINGS SPECIALTY ILLUMINATION SOLUTIONS - FLUSH MOUNT: SPECIFICATIONS

POWER AND CONTROL

Specialty Illumination Solutions include all mechanical, electrical, and lighting components required including power supplies and Cooledge Control Modules selected from the options listed below.

Specifications for the power supplies and Cooledge Control Modules shown below are available in the following documents:

- Power and Control Specifications (cUL Listed)
- Power and Control Specifications (CE Compliant)

POWER SUPPLIES (54V) - cUL Listed

Order Code	# Controller Channels *	Enclosure
EPSS-092-54V-UL	1	Yes
EPSS-200-54V-UL	2	Yes
EPSS-400-54V-UL	4	Yes

*Class 2 (max 90W) output

POWER SUPPLIES (54V) - CE Compliant

Order Code	# Controller Channels *	Enclosure
EPSS-092-54V-CE	1	Yes
EPSS-200-54V-CE	2	Yes
EPSS-400-54V-CE	4	Yes

*Class 2 (max 90W) output

COOLEEDGE CONTROL MODULES (54V) - Static CCT

Order Code	Protocols
CTR-SCT-DAL/010-48/58V	0-10V, DALI
CTR-SCT-DMX-48/58V	DMX
CTR-SCT-CAS-48/58V	Casambi (wireless)

COOLEEDGE CONTROL MODULES (54V) - TUNABLE WHITE

Order Code	Function	Protocols
CTR-TNW-DAL/010-48/58V	Tunable White	0-10V, DALI
CTR-TNW-DMX-48/58V	Tunable White	DMX
CTR-TNW-CAS-48/58V	Tunable White	Casambi (Wireless)
CTR-DTW-DAL/010-48/58V	Dim-to-Warm	0-10V, DALI
CTR-DTW-DMX-48/58V	Dim-to-Warm	DMX
CTR-DTW-CAS-48/58V	Dim-to-Warm	Casambi (Wireless)

W+RGB solutions require alternate power & controls (DMX & Casambi only). Please contact Cooledge for details.

HOW TO SPECIFY

NOTE: By their nature, Cooledge Specialty Illumination Solutions are custom products. These **Specification Codes** are provided for use as simple references to Cooledge Specialty Illumination Solutions in specifications and/or construction documents. Specification Codes are **NOT** ordering codes. In order to receive quotations or purchase these products from Cooledge, the solution dimensions are required. Cooledge may also request additional information before issuing a quotation or accepting a purchase order.

SIS - **FM** - **STD** - **E**
 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

1 PRODUCT	2 TYPE	3 SHAPE	4 FLUX	5 CCT	6 MOUNTING	7 CONTROL	8 NRC	9 CERTIFICATION
SIS = Specialty Illumination Solution	SU = Suspended SM = Surface Mount FM = Flush Mount	R = Rectangle C = Curve/Circle	XHF = Extra High Flux HF = High Flux MF = Med Flux LF = Low Flux	22 = 2200K 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 57 = 5700K TNW = Tunable White DTW = Dim To Warm W+RGB = White + Red Green Blue	STD = Standard	DAL = DALI/0-10V DMX = DMX CAS = Casambi (Wireless)	E = 0.2 C = 0.75 (Suspended only)	U = cUL C = CE