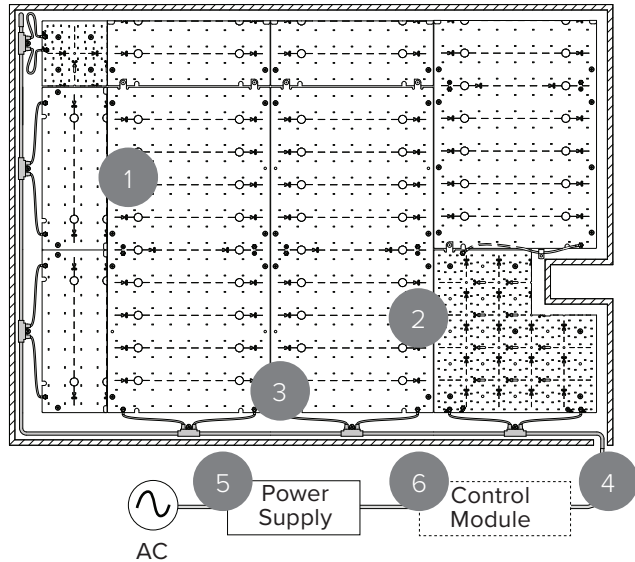


COOLEEDGE™

# COOLEEDGE TILE INTERIOR - SPECIFICATIONS

PROJECT		REFERENCE TYPE	
SPECIFIED BY		QUANTITY	
DATE		NOTE	For Luminous Surfaces

## SYSTEM OVERVIEW



Create luminous ceilings, feature walls, and large graphics displays with Cooledge TILE Interior products

1	TILE Interior
2	TILE Interior Cut-out Kit <i>(optional)</i>
3	TILE Interior T-Cable
4	TILE Interior Starter Cable*
5	Power Supply
6	Control Module <i>(optional)</i>

\*Included in TILE Interior Starter Kit

## GENERAL

Location	Indoor, dry location only
Operating Temp.	0-40°C
Storage Temp.	-40-85°C
Relative Humidity	90% max (non-condensing)
Input Voltage (to power supply)	120-277 VAC
Electrical Connections	Tool-less snap connectors
Mounting Surface	Non-conductive* (drywall, plywood, etc)

\*Mounting to a conductive surface may void warranty. Please contact Cooledge if this is required

## FEATURES

- Seven standard choices of constant lumen output ensure consistent highly calibrated illumination and precise power density control
- Color consistency of typically 2 SDCM between TILES meets stringent requirements for large area installations
- Cut-to-fit means systems are adaptable to any size installation and can accommodate obstacles and shapes
- Constant voltage electrical architecture is fully scalable without loss of performance or need to reconfigure drivers
- Low setback distances, flexibility, and no requirement for a heat sink enable optimal integration with luminous surfaces
- Multiple options for dimming, lumen level, and CCT offer the most adaptable illumination for large surface areas available
- Mounts directly to most common non-conductive construction materials (eg. drywall, plywood)

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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.

# COOLEGE TILE INTERIOR - SPECIFICATIONS

## PHOTOMETRICS<sup>1</sup>

Light Output (lm/m <sup>2</sup> )	9680, 6460, 3230, 1610 , 5000 <sup>3</sup> , 2420 <sup>3</sup> , 1080 <sup>3</sup>
Correlated Color Temperature (CCT)	2200K, 2700K, 3000K, 3500K, 4000K, 5700K
Color Rendering Index (CRI)	≥ 90
Color Uniformity	2 SDCM (typical)
Lumen Maintenance <sup>2</sup>	L80 = 75,000hr

<sup>1</sup> Photometric files available from [cooledgelighting.com](http://cooledgelighting.com)

<sup>2</sup> Based on LM80 data & TM-21 calculations

<sup>3</sup> Available for 3000K, 3500K, & 4000K

## IESNA TM-30-18 DATA

CCT	Rf	Rg
2200K	91	99
2700K	91	100
3000K	87	97
3500K	88	97
4000K	90	100
5700K	87	97

## POWER

Light Output (lm/m <sup>2</sup> )	CCT	Power (W/m <sup>2</sup> )	EcoDesign Class
9680	2200K	79.9	E
	2700K	74.4	E
	3000K	68.3	D
	3500K	66.7	D
	4000K	66.7	D
	5700K	66.7	D
6460	2200K	53.3	E
	2700K	50.0	E
	3000K	46.7	E
	3500K	43.9	D
	4000K	44.4	D
	5700K	45.6	D
3230	2200K	26.7	E
	2700K	24.4	E
	3000K	23.3	E
	3500K	21.7	D
	4000K	22.2	D
	5700K	21.7	D
1610	2200K	13.3	E
	2700K	12.2	E
	3000K	11.7	E
	3500K	11.1	D
	4000K	11.1	D
	5700K	11.1	D

Light Output (lm/m <sup>2</sup> )	CCT	Power (W/m <sup>2</sup> )
5000	3000K	35.9
	3500K	34.2
	4000K	34.2
2420	3000K	17.4
	3500K	16.5
	4000K	16.5
1080	3000K	7.7
	3500K	7.4
	4000K	7.4



**BUILD-TO-ORDER FLUX VS POWER**

For applications that require a more precise selection of flux/power combinations than is offered by standard TILE Interior, Cooledge offers a “Build-To-Order” (BTO) program that allows you to choose a non-standard flux/power combination to optimize for power density while still meeting the required illumination levels for your design.

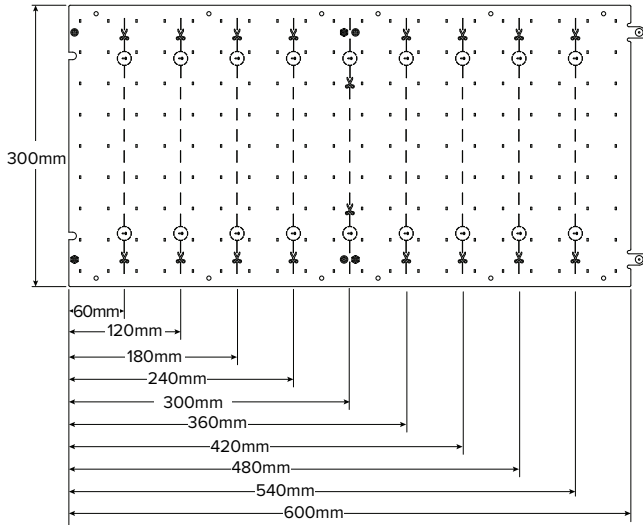
Refer to the table below and select either a desired power level with corresponding light output level, or conversely, choose the minimum flux level that delivers the required illumination to determine the power level.

Flux (lm/m <sup>2</sup> )	2200K	2700K	3000K	3500K	4000K	5700K	Flux (lm/m <sup>2</sup> )	2200K	2700K	3000K	3500K	4000K	5700K
1080	8.3	7.9	Standard			7.3	6990	59.4	53.8	50.0	48.0	48.3	48.6
1350	10.6	10.0	9.9	9.1	9.4	9.2	7260	61.7	55.9	51.9	49.9	50.2	50.5
1610	Standard						7530	64.0	58.0	53.8	51.7	52.0	52.4
1880	15.3	14.2	13.7	12.8	13.1	13.0	7800	66.3	60.1	55.7	53.6	53.9	54.3
2150	17.6	16.3	15.6	14.6	15.0	14.9	8070	68.6	62.2	57.6	55.4	55.7	56.1
2420	19.9	18.4	Standard			16.7	8340	71.0	64.3	59.5	57.3	57.6	58.0
2690	22.2	20.4	19.4	18.3	18.7	18.6	8610	73.3	66.4	61.4	59.1	59.5	59.9
2960	24.6	22.5	21.4	20.2	20.5	20.5	8880	75.6	68.4	63.3	61.0	61.3	61.8
3230	Standard						9150	77.9	70.5	65.2	62.8	63.2	63.6
3500	29.2	26.7	25.2	23.9	24.2	24.2	9420	80.2	72.6	67.1	64.7	65.0	65.5
3770	31.5	28.8	27.1	25.8	26.1	26.1	9680	Standard					
4040	33.8	30.9	29.0	27.6	27.9	28.0	9950	84.9	76.8	70.9	68.4	68.7	69.3
4300	36.2	33.0	30.9	29.5	29.8	29.9	10220	87.2	78.9	72.8	70.3	70.6	71.2
4570	38.5	35.1	32.8	31.3	31.6	31.7	10490	89.5	81.0	74.7	72.1	72.4	73.0
4840	40.8	37.1	34.7	33.2	33.5	33.6	10760	91.8	83.1	76.6	74.0	74.3	74.9
5000	42.2	38.4	Standard			34.7	11030	94.2	85.1	78.6	75.8	76.1	76.8
5380	45.4	41.3	38.5	36.9	37.2	37.4	11300	96.5	87.2	80.5	77.7	78.0	78.7
5650	47.8	43.4	40.4	38.7	39.1	39.2	11570	98.8	89.3	82.4	79.5	79.9	80.5
5920	50.1	45.5	42.3	40.6	40.9	41.1	11840	101.1	91.4	84.3	81.4	81.7	82.4
6190	52.4	47.6	44.2	42.4	42.8	43.0	12110	103.4	93.5	86.2	83.2	83.6	84.3
6460	Standard						12370	105.7	95.6	88.1	85.1	85.4	86.2
6730	57.0	51.7	48.0	46.1	46.5	46.8	12640	108.1	97.7	90.0	86.9	87.3	88.0

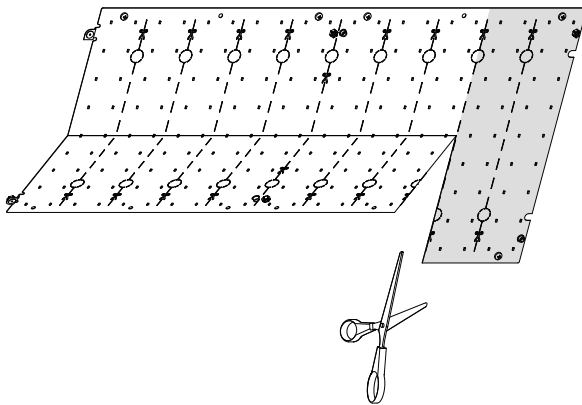
Notes:

- 1 Power levels shown are for TILES only. Power consumption calculations should include consideration of power supply efficiency and any electrical losses associated with a specific circuit design.
2. Luminous flux values are based on calculations with a tolerance of ±5% of the value shown.
3. BTO products are subject to longer lead times and increased prices compared to standard TILE Interior light output options.

1 TILE INTERIOR



Weight = 0.18lbs / 82g



HOW TO ORDER

Example: TILE-INT-600-40-R3\*\*

TILE	-	INT	-	-	-	-	R3
<u>PRODUCT</u>		<u>TYPE</u>		<u>FLUX (per 300x300mm)</u>		<u>CCT</u>	<u>Version</u>
TILE		INT = Interior		900 = 9680lm/m <sup>2</sup>		22 = 2200K	R3 = Revision 3
				600 = 6460lm/m <sup>2</sup>		27 = 2700K	
				300 = 3230lm/m <sup>2</sup>		30 = 3000K	
				150 = 1610lm/m <sup>2</sup>		35 = 3500K	
				465* = 5000lm/m <sup>2</sup>		40 = 4000K	
				225* = 2420 lm/m <sup>2</sup>		57 = 5700K	
				100* = 1080 lm/m <sup>2</sup>			
				BTO = Build To Order			

\*Available for 3000K, 3500K, & 4000K

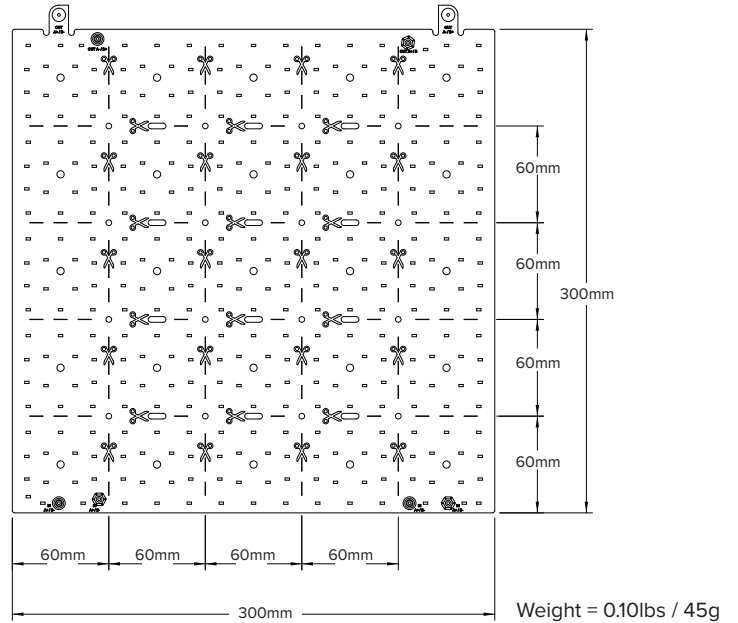
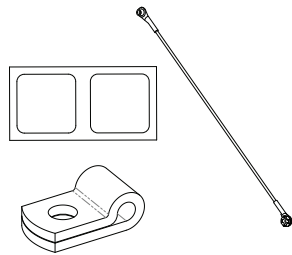
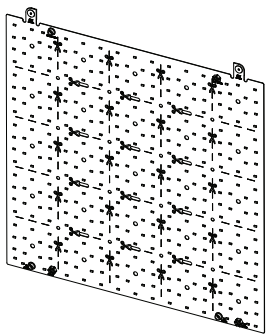
\*\*May be identified as "C3" in some regions

## 2 TILE INTERIOR CUT-OUT KIT

**Purpose:** Cut-to-fit around obstacles located in the middle of a luminous surface such as standoffs, support cables/rods, beams, pipes, etc.; used in corners where a full TILE does not fit in the space; or to step cut along angles and curves in a luminous surface. (Optional)

**INCLUDED**

- (1) Cut-out TILE (300mm x 300mm)
- (2) Insulating Patches
- (1) Cable Clamp
- (1) Jumper Cable



## HOW TO ORDER

Example: TACC-INT-CUT-600-35-K\*\*-R3

TACC	-	INT	-	CUT	-	FLUX (per 300x300mm)	-	CCT	-	K	-	R3
PRODUCT		TYPE		COMPONENT						KIT		VERSION
TACC = TILE Accessory		INT = Interior		CUT = Cut-out Kit		900 = 9680lm/m <sup>2</sup> 600 = 6460lm/m <sup>2</sup> 300 = 3230lm/m <sup>2</sup> 150 = 1610lm/m <sup>2</sup> 465* = 5000lm/m <sup>2</sup> 225* = 2420lm/m <sup>2</sup> 100* = 1080lm/m <sup>2</sup> BTO = Build To Order		22 = 2200K 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 57 = 5700K		K = Kit		R3 = Revision 3

\*Available for 3000K, 3500K, & 4000K

\*\*May be identified as "K-C3" in some regions

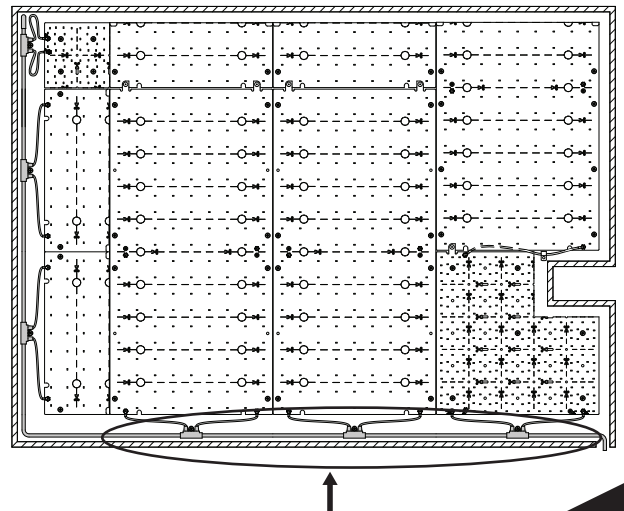
## 3 TILE INTERIOR T-CABLE

**Purpose:** Makes the electrical connection to the first TILE in each run from the Starter Cable that supplies power from the power/control components. Each "T" connects to a TILE via snap connectors. (Required)

## HOW TO ORDER

Example: TCBL-SCT-T4

TCBL	-	
PRODUCT		TYPE
TCBL = TILE Cable		SCT-T4 = Static CCT, T-Connectors (weight = 0.13lb/59g) SCT-T10 = Static CCT, T-Connectors (weight = 0.66lb/300g)

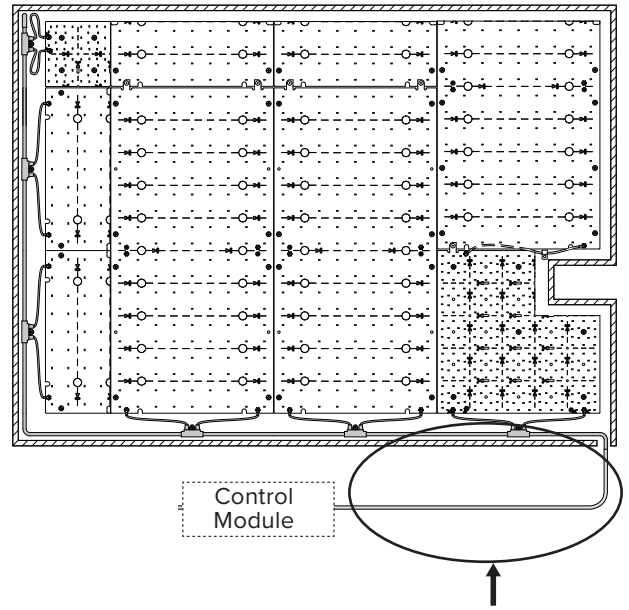
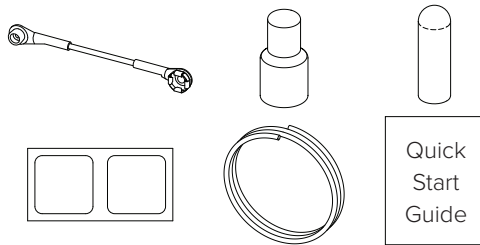


## 4 TILE INTERIOR STARTER KIT

**Purpose:** Includes the Starter Cable that makes the connection from the Power/Control components to the T-Cable and other accessories required for wire termination and connections. Insulating patches are required to cover areas of TILES where cuts have been made. (Required)

### INCLUDED

- (4) Cut TILE Reuse Jumper Cable
- (2) Splice Connectors
- (4) End Caps
- (10) Insulating Patches
- (1) 16 AWG (1.3mm<sup>2</sup>) Cable, 10 ft (3m) Length
- (1) Quick Start Guide



### HOW TO ORDER

Example: TACC-SCT-STR-K

TACC	-	SCT	-	STR	-	K
<u>PRODUCT</u> TACC = TILE Accessory		<u>CCT</u> SCT = Static Color Temp.		<u>TYPE</u> STR = Starter		<u>KIT</u> K = Kit

## 5 POWER AND CONTROL

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

- Power and Control Specifications (CE Compliant)

The models shown below are those that are compatible with TILE Interior Systems for regions where CE Compliant products are required.

### POWER SUPPLIES (54V)

**Purpose:** Convert AC main (line) power to safe, low voltage DC power. (Required)

Order Code	Description	# Controller Channels*	Integrated Wiring Enclosure
EPSS-092-54V-CE	92W Power Supply, 54V (CE Compliant) with integrated junction box	1	Yes
EPSS-200-54V-CE	200W Power Supply, 54V (CE Compliant) with integrated junction box	2	Yes
EPSS-400-54V-CE	400W Power Supply, 54V (CE Compliant) with integrated junction box	4	Yes

\*Class 2 (max 90W) output

## COOLEEDGE CONTROL MODULES (54V)

**Purpose:** Receives 54VDC power from the power supply and converts it to max. 90W per channel of controlled output to drive TILE Interior sheets. Also receives input control from one of 4 protocol options to control dimming levels. (Optional)

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)
CTR-SCT-ATH-48/58V	Athena (wireless)

## ADDITIONAL ACCESSORIES

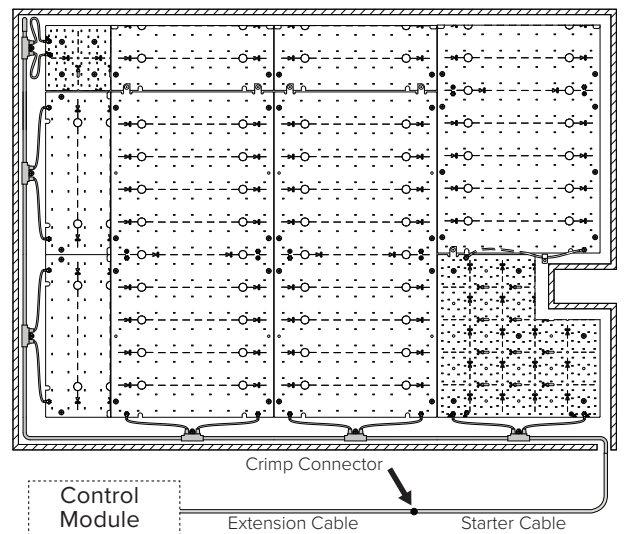
### EXTENSION CABLES

- 1.3mm<sup>2</sup> cable (non-plenum rated)
- Available in 3m and 6m lengths

**Purpose:** Cable between TILE Starter Cable and Control Module that extends the distance the Control Module and power supply may be remotely located away from the TILES. Please consult Cooleedge for additional information including requirements for plenum rated cables.

### HOW TO ORDER

TCBL	-	
<u>PRODUCT</u> TCBL = TILE Cable	<u>TYPE</u> SCT-LNG-10 = Static CCT, Length = 3m (10ft) SCT-LNG-20 = Static CCT, Length = 6m (20ft)	



## CERTIFICATIONS



5 Year Limited Warranty:  
Parts and workmanship when  
used with a Cooleedge approved  
power supply.



**RoHS**

**UK  
CA**