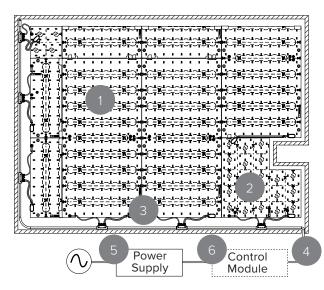


# COOLEDGE TILE TUNABLE WHITE - SPECIFICATIONS

PROJECT	REFERENCE TYPE	
SPECIFIED BY	QUANTITY	
DATE	NOTE	For Luminous Surfaces

# SYSTEM OVERVIEW



# GENERAL

Location	Indoor, dry location only
Operating Temp.	0-40°C (32-104°F)
Storage Temp.	-40-85°C (-40-185°F)
Relative Humidity	90% max (non-condensing)
Operating Voltage	58 VDC
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**

Replicate natural light both in scale and through dynamic changes in color temperature

1	TILE Tunable White
2	TILE Tunable White Cut-out Kit (optional)
3	TILE Tunable White T-Cable
4	TILE Tunable White Starter Cable*
5	Power Supply
6	Control Module

\*Included in TILE Tunable White Starter Kit

# SPECIFICATION

UL Listed lighting system inclusive of flexible light emitting sheets, connectors, low voltage cables, and power & controls. Light output from the system must be +/- 10% of 900/600/300/150 lumens/sq ft across the total illuminated area post-installation. The lighting system must have a Color Rendering index (CRI) >90 and provide constant lumen output for all CCTs between 2700K-5700K and for all dimming levels. Electrical connections between cables and light emitting sheets must be tool-less and allow more than one connect/disconnect iteration. System must be configurable on-site and include the capability to accommodate obstacles, angles, and curves. System warranty is a minimum of 5 years.

- Unique tunable white system design provides constant lumen output at all CCTs in the range 2700K-5700K and at all dimming levels
- Dim-to-warm option provides smooth dimming along the CCT curve to 0.05% from 3500K to 2200K
- Cooledge Control Module is 0-10V as standard; DMX, DALI and wireless (Casambi) versions include protocol converters
- Uniquely suited for installations requiring high CRI such as retail and hospitality
- Cut-to-fit means systems are adaptable to any size installation and can accommodate obstacles and shapes

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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.

# COOLEDGE TILE TUNABLE WHITE - SPECIFICATIONS

# **PHOTOMETRICS**<sup>1</sup>

900³, 600, 300, 150
Tunable White = 2700K-5700K Dim-to-Warm = 3500K-2200K
≥ 90 (except 2200K, CRI88)
2 SDCM (typical)
L80 = 75,000hr

1 Photometric files available from cooledgelighting.com

2 Based on LM80 data & TM-21 calculations

3 Not available in Dim-to-Warm

# POWER

Light Output (Im/sqft)	ССТ	Power (W/sqft)	EcoDesign Class
	2700K	7.69	
900	3500K	N/A	F
	5700K	6.82	
	2700K	5.10	
600	3500K	4.61	F
	5700K	4.50	
	2700K	2.49	
300	3500K	2.29	E
	5700K	2.26	
	2700K	1.28	
150	3500K	1.19	F
	5700K	1.19	



### IESNA TM-30-15 DATA

ССТ	Rf	Rg
2200K	92	99
2700K	91	97
3500K	88	97
5700K	87	97
DTW*	91	100
TNW*	89	100

\* Denotes both channels @50%

# CERTIFICATIONS



### WARRANTY

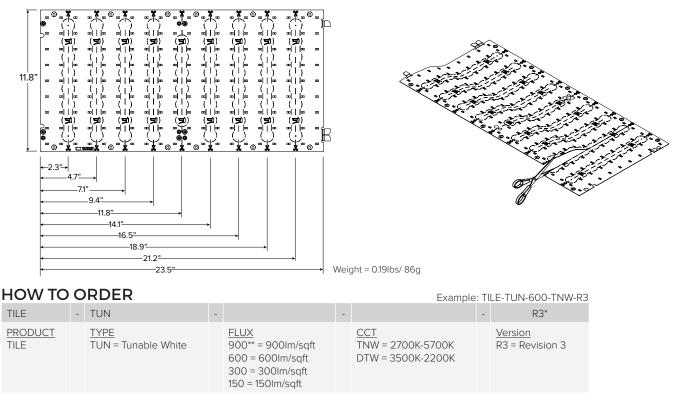


5 Year Limited Warranty: Parts and workmanship when used with a Cooledge approved power supply.



# COOLEDGE TILE TUNABLE WHITE - SPECIFICATIONS

# 1 TILE TUNABLE WHITE



\*May be identified as "C3" in some regions \*\*Not available in DTW

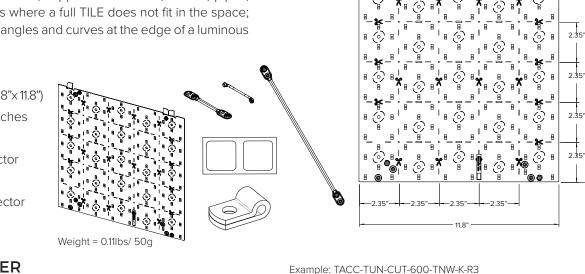
# 2 TILE TUNABLE WHITE CUT-OUT KIT

**Purpose:** Cut-to-fit around obstacles located in 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 at the edge of a luminous surface. (Optional)

### INCLUDED

- (1) Cut-out TILE (11.8"× 11.8")
- (2) Insulating Patches
- (1) Cable Clamp
- (1) Single-connector
  Jumper Cable
- (1) Double-connector
  Jumper Cable

# HOW TO ORDER



							_			
TACC	-	TUN	-	CUT	-		-		-	K-R3*
PRODUCT TACC = TILE Accessory		<u>TYPE</u> TUN = Tunable White		COMPONENT CUT = Cut-out Kit		FLUX 900** = 900Im/sqft 600 = 600Im/sqft 300 = 300Im/sqft 150 = 150Im/sqft		<u>CCT</u> TNW = 2700K-5700K DTW = 3500K-2200K		<u>KIT</u> K = Kit Revision 3

\*May be identified as "K-C3" in some regions \*\*Not available in DTW

# COOLEDGE™

11.8

Light as a building material

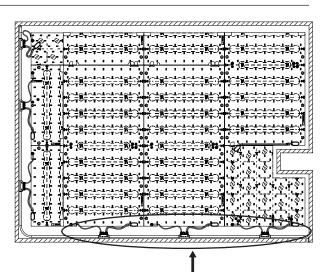
PSD-0003-R06-02082022 (LTR) 3/6

#### 3 **TILE TUNABLE WHITE 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

HOW TO OR	D	ER		Example: TCBL - TUN-T10
TCBL	-	TUN	-	
<u>PRODUCT</u> TCBL = TILE Cable				TYPE T4 = 4 T-Connectors (weight = .13lb) T10 = 10 T-Connectors (weight = .66lb)

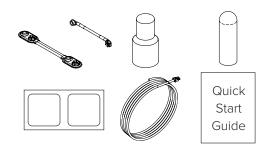


#### TILE TUNABLE WHITE STARTER KIT 4

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

### INCLUDED

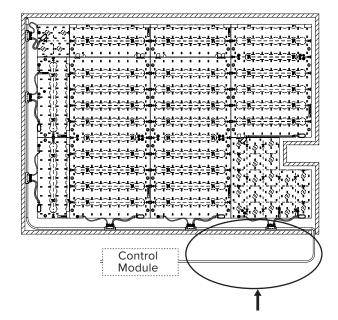
- (2) Single-connector Cut TILE Reuse Jumper Cables
- (2) Double-connector Cut TILE Reuse Jumper Cables
- (2) Splice Connectors
- (4) End Caps
- (10) Insulating Patches
- (1) 10ft (3m) Starter Cable with Connector
- (1) Quick Strart Guide



# HOW TO ORDER

Example: TACC-TUN-STR-	<

TACC	-	TUN	-	STR	-	К
PRODUCT TACC = TILE Accessory		<u>TYPE</u> TUN = Tunable White		<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 (UL Listed)

The models shown below are those that are compatible with TILE Tunable White Systems for regions where cUL Listed products are required.

### POWER SUPPLIES (58V)

**Purpose:** Convert AC main (line) power to safe, low voltage DC power. Cooledge LED drivers are offered with range of dimming options. (Required)

Order Code	# Controller Channels *	Enclosure
EPSS-200-58V	2	Yes

\*Class 2 (max 90W) output

### COOLEDGE CONTROL MODULES (58V)

**Purpose:** Receives 58VDC power from the power supply and converts it to max. 90W per channel of controlled output to drive TILE Interior sheets. Also receives input 0-10V to control dimming levels. Included converters translate dimming inputs to 1-10V.

Order Code	Function	Protocols
CTR-TUN-010-58V-CE	Tunable White	0-10V
CTR-TNW-010-58V-UL	Tunable White	0-10V
CTR-TNW-DMX-58V-UL	Tunable White	DMX
CTR-TNW-CAS-58V-UL	Tunable White	Casambi (Wireless)
CTR-DTW-010-58V-UL	Dim-to-Warm	0-10V
CTR-DTW-DMX-58V-UL	Dim-to-Warm	DMX
CTR-DTW-CAS-58V-UL	Dim-to-Warm	Casambi (Wireless)

# ADDITIONAL ACCESSORIES

### **EXTENSION CABLES**

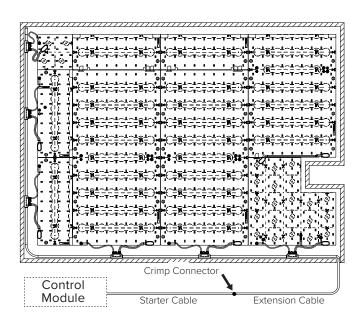
- 16 AWG cable (non-plenum rated)
- Available in 10' & 20' lengths

**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 Cooledge for additional information including requirements for plenum rated cables.

## HOW TO ORDER

Example: TCBL - TUN - LNG - 10

TCBL	-	TUN	-	LNG	-	
<u>PRODUCT</u> TCBL = Extention Cable		<u>TYPE</u> TUN = Tunable White				<u>LENGTH</u> 10 = 10ft (3m) 20 = 20ft (6m)



### JUMPER CABLES

- 5 sets of double and single-connector jumper cables

**Purpose:** Allows a Tile to be cut in half and both portions connected in separate runs. Kit sufficient for 5 cut Tiles

# HOW TO ORDER

TACC	-	TUN	-	JMP	-	5
<u>PRODUCT</u> TACC = Jumper Cables		<u>TYPE</u> TUN = Tunable White				



### COOLEDGE<sup>™</sup> Light as a building material