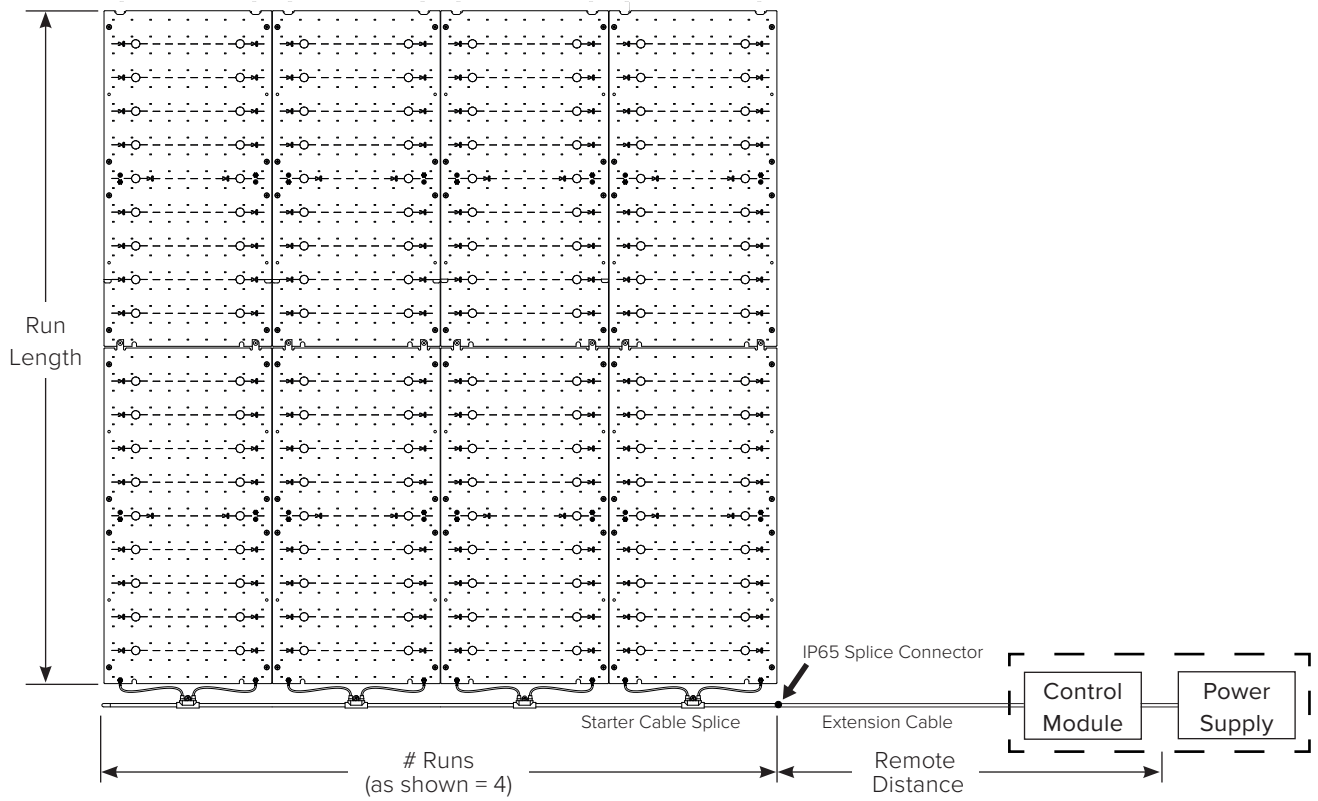
COOLEDGE™

COOLEDGE cUL TILE EXTERIOR R2 LAYOUT GUIDELINES

EXAMPLE LAYOUT WITH DEFINITIONS



CALCULATNG MAXIMUM RUN LENGTH

Use the following table to determine the maximum run length possible based on the number of runs, the light output of the TILEs, and the CCT for one (1) 90W channel. The values shown correspond to the run length in feet rounded to the nearest cut increment of the TILE.

# of Runs	600 lm/sqft (TILE-xxx-600)					300 lm/sqft (TILE-xxx-300)				
	2700K	3000K	3500K	4000K	5700K	2700K	3000K	3500K	4000K	5700K
1	14.4	14.8	15.4	15.7	16.5	23.2	23.6	23.6	24.2	24.8
2	7.1	7.3	7.7	7.9	8.3	15.2	15.4	15.7	16.1	16.9
3	4.7	4.9	5.1	5.1	5.5	10	10.2	10.4	10.6	11.2
4	3.5	3.5	3.7	3.9	4.1	7.5	7.7	7.9	8.1	8.5
5	2.8	3	3	3.1	3.1	5.9	6.1	6.3	6.3	6.7
6	2.4	2.4	2.6	2.6	2.8	4.9	5.1	5.1	5.3	5.5
7	2	2	2.2	2.2	2.4	4.3	4.3	4.5	4.5	4.7
8	1.8	1.8	1.8	2	2	3.7	3.7	3.9	3.9	4.1

Example 1: 3500K; 600lm/sqft; 4 Runs (as shown in the diagram above)

- Using the table, the corresponding value for this configuration is 3.7ft. This means that 1.9 regular TILEs may be used without being cut for each of the 4 runs.

Example 2: 5700K; 600 lm/sqft; 6 Runs

- Using the table, the corresponding value for this configuration is 2.8ft. This means that 1.4 regular TILEs may be used.

CALCULATING REMOTE POWER & CONTROL DISTANCE

The resistance of the cable causes a voltage and power drop between the Power Supply/Control Module and the TILEs. There is a maximum distance from the TILEs at which the power and control units may be mounted.
The maximum distance is dependent upon the size of the conductors used and the total load (# of TILEs x power per TILE as determined by lumen rating).

Use the tables below to determine the size of the conductors required to achieve the maximum "remote distance" – the distance between the Control Module and TILEs if the Control Module is located near the power supply OR the total distance between the Power Supply and TILEs if the Control Module is located near the TILEs.

TILE EXTERIOR R2: 300lm (VALUES IN ft)

	Configuration (# Runs x Maximum Length per Run)				
Conductor Size (AWG)	1 x max length (ft)	2 x max length (ft)	3 x max length (ft)	4 x max length (ft)	5 x max length (ft)
16	10.5	22	29	29.5	29.5
14	17	35	46	47.5	47.5
12	27	55.5	73	75.5	75.5
10*	43	89	116.5	120.5	120.5

TILE EXTERIOR R2: 600lm (VALUES IN ft)

	Configuration (# Runs x Maximum Length per Run)			
Conductor Size (AWG)	1 x max length (ft)	2 x max length (ft)	3 x max length (ft)	4 x max length (ft)
16	11	30	32.5	32
14	17.5	48	51.5	51
12	27.5	76	82.5	81
10*	44	121.5	131	129.5

*The control module accepts wire gauges in the range of 12-26AWG. The 10AWG numbers in the chart are based on connecting on short length of 12AWG wire to the control module and then splicing on a subsequent length of 10AWG wire to supply the TILEs.

Example

- Required "remote distance" = 50ft
- TILE Light Output = 600lm/sqft
- # Runs = 3 (assumes maximum run length)

Therefore, conductor size required = 14AWG (or larger)

Cooledge Lighting Inc.
110-13551 Commerce Parkway
Richmond, BC V6V 2L1 Canada

O +1 604 273 2665
F +1 604 273 2660
T +1 844 455 4448
W cooledgelighting.com