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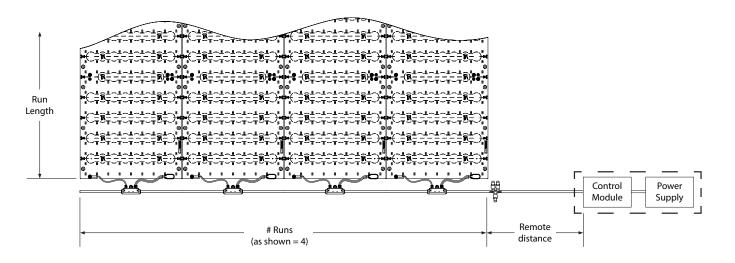
Use the following table to determine the maximum run length possible based on the number of runs, the light output of the TILEs, and the CCT for one (1) 90W channel. The values shown correspond to the nearest cut increment of the TILE, dimensions are in ft.

# of Runs	900 lm/sqft(TILE-TUN-900-xxx-R3)		600 lm/sqft (TILE-TUN-600-xxx-R3)	
	TNW	DTW	TNW	DTW
1	11.10	11.70	13.60	14.40
2	6.20	6.70	9.30	10.30
3	4.00	4.60	6.20	6.70
4	3.00	3.40	4.60	5.20
5	2.40	2.60	3.60	4.00
6	2.00	2.20	3.00	3.40
7	1.60	1.80	2.60	2.80
8	1.40	1.60	2.20	2.60

# of Runs	300 lm/sqft (TILE-TUN-300-xxx-R3)		150 lm/sqft (TILE-TUN-150-xxx-R3)	
	TNW	DTW	TNW	DTW
1	20.10	20.70	28.20	28.80
2	18.90	19.70	26.60	27.40
3	12.60	13.60	24.70	26.40
4	9.50	10.30	18.60	19.70
5	7.50	8.10	14.80	15.80
6	6.30	6.70	12.30	13.20
7	5.40	5.80	10.50	11.30
8	4.80	5.20	9.30	9.90

Example 1: DTW; 600lm/sqft; 5 Runs (as shown in the diagram above)

- Using the table, the corresponding value for this configuration is 4.0ft. This means that two full regular TILEs may be used without being cut for each of the 4 runs.

Example 2: TNW; 150 lm/sqft; 5 Runs

- Using the table, the corresponding value for this configuration is 14.8ft. This means that 7.5 regular TILEs may be used.

CALCULATING REMOTE POWER & CONTROL DISTANCE

Due to a voltage drop caused by the resistance of the cable carrying power 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 INTERIOR: 150LM (VALUES IN FT)

Conductor Size (AWG)	Configuration (# Runs x Maximum Length per Run)							
	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)	6 x max length (ft)	7 x max length (ft)	8 x max length (ft)
16	14	14	15	38	90	95	97	98
14	22	22.5	24	60.5	143.5	151	154	155.5
12	35.5	36	38.5	96.5	228.5	240	245	247.5
10*	56	57	61	154	363	382	390	394

TILE INTERIOR: 300LM (VALUES IN FT)

Conductor Size (AWG)	Configuration (# Runs x Maximum Length per Run)				
	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	11	12	42.5	54.5	64.5
14	17.5	19	67.5	87	102.5
12	28	30	107.5	138.5	163
10*	44.5	48	171.5	220.5	259.5

TILE INTERIOR: 600LM (VALUES IN FT)

Conductor Size (AWG)	Configuration (# Runs x Maximum Length per Run)			
	1 x max length (ft)	2 x max length (ft)	3 x max length (ft)	4 x max length (ft)
16	12	40.5	59	65
14	19.5	65	94	103.5
12	31	103.5	150	164.5
10*	49.5	164.5	238.5	262

TILE INTERIOR: 900LM (VALUES IN FT)

Conductor Size (AWG)	Configuration (# Runs x Maximum Length per Run)			
	1 x max length (ft)	2 x max length (ft)	3 x max length (ft)	4 x max length (ft)
16	12.5	53.5	65	68.5
14	19.5	85	103	109.5
12	31.5	135.5	164	174
10*	50	215.5	261	276.5

*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" = 75ft
- TILE Light Output = 600lm/sqft
- # Runs = 3 (assumes maximum run length)
Therefore, conductor size required = 14AWG (or larger)