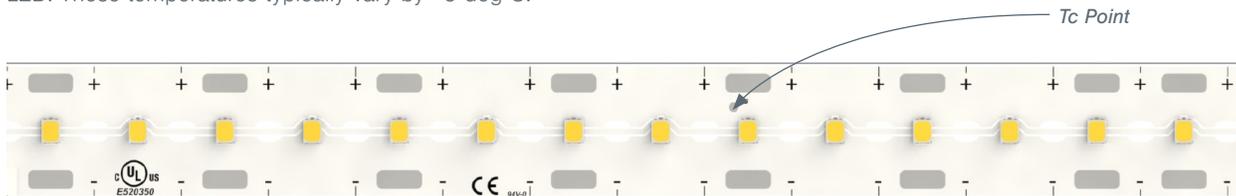


INTRODUCTION

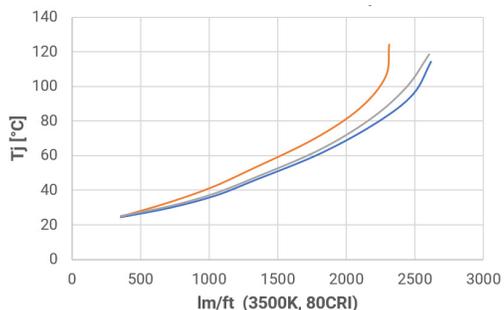
All data is for reference and performance will vary depending on fixture design. LUXTECH advises to measure the Tc of each LUXroll application at the desired outputs to ensure sufficient heat sinking performance.

MEASURING TEMPERATURE

Tc may be taken at the Tc point on the LUXroll PCB or at the solder point (Ts) of an LED. These temperatures typically vary by <5 deg C.



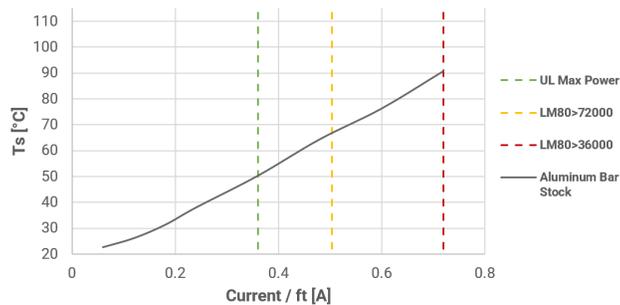
MATERIAL PERFORMANCE COMPARISON



Material Performance Comparison test was performed on 1 foot material samples 1" wide by 1/8" thick. Typical fixtures have greater heat sinking and thermal performance.

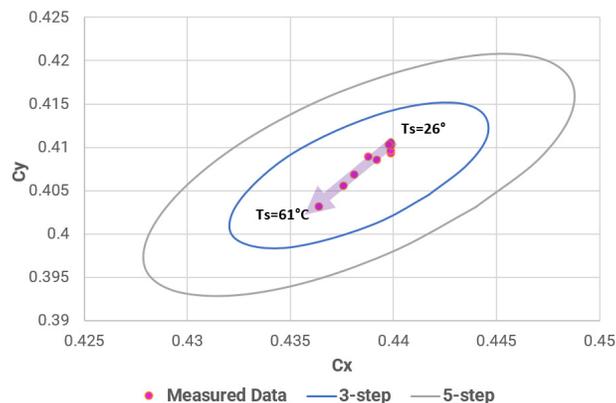
Test Material Cross Section

TYPICAL FIXTURE THERMAL PERFORMANCE



TYPICAL CCT SHIFT

30K, 90CRI



TABULATED DATA

3500K, 80CRI

Heatsink:		Aluminum (1/8" x 1")								
Ambient Temp (°C)		20.5								
Voltage	Current/ft (A)	Current/LED (mA)	Ts (°C)	Tj (Calc) (°C)	Power (W/ft)	lm/ft	Cx	Cy	lm/W	
32.17	0.060	5.0	22.6	24.4	1.9	355.6	0.4146	0.3979	184.2	
32.94	0.120	10.0	26.1	29.7	4.0	710.4	0.4133	0.3973	179.7	
33.56	0.180	15.0	31.2	36.7	6.0	1042.0	0.4128	0.3970	172.5	
33.89	0.240	20.0	37.9	45.4	8.1	1320.0	0.4116	0.3957	162.3	
34.59	0.360	30.0	50.2	61.6	12.5	1821.0	0.4105	0.3949	146.2	
35.15	0.480	40.0	64.3	79.8	16.9	2235.0	0.4078	0.3924	132.5	
35.58	0.600	50.0	76.2	95.8	21.3	2489.0	0.4052	0.3902	116.6	
35.83	0.720	60.0	90.7	114.3	25.8	2617.0	0.4016	0.3875	101.4	

Heatsink:		Bare Steel (1/8" x 1")								
Ambient Temp (°C)		21.1								
Voltage	Current/ft (A)	Current/LED (mA)	Ts (°C)	Tj (Calc) (°C)	Power (W/ft)	Lms	Cx	Cy	lm/W	
32.13	0.060	5.0	23.5	25.3	1.9	357.2	0.4152	0.3974	185.3	
32.85	0.120	10.0	27.1	30.7	3.9	702.3	0.4146	0.3977	178.2	
33.38	0.180	15.0	32.3	37.8	6.0	1024.4	0.4138	0.3971	170.5	
33.78	0.240	20.0	39.2	46.6	8.1	1310.8	0.4123	0.3962	161.7	
34.47	0.360	30.0	52.1	63.5	12.4	1807.2	0.4111	0.3946	145.6	
35.05	0.480	40.0	66.2	81.6	16.8	2184.4	0.4086	0.3925	129.8	
35.48	0.600	50.0	80.2	99.7	21.3	2441.1	0.4059	0.3903	114.7	
35.9	0.720	60.0	94.8	118.5	25.8	2605.0	0.4029	0.3881	100.8	

Heatsink:		Wood (1/8" x 1")								
Ambient Temp (°C)		20.4								
Voltage	Current/ft (A)	Current/LED (mA)	Ts (°C)	Tj (Calc) (°C)	Power (W/ft)	Lms	Cx	Cy	lm/W	
32.15	0.060	5.0	23	24.8	1.9	355.0	0.4158	0.3981	184.0	
32.81	0.120	10.0	29.2	32.8	3.9	702.0	0.4141	0.3970	178.3	
33.24	0.180	15.0	38.2	41.5	6.0	1015.0	0.4128	0.3959	169.6	
33.65	0.240	20.0	44.4	51.8	8.1	1301.0	0.4119	0.3951	161.1	
34.28	0.360	30.0	58.2	69.5	12.3	1764.3	0.4092	0.3928	143.0	
34.75	0.480	40.0	71.9	87.2	16.7	2099.1	0.4063	0.3904	125.8	
35.13	0.600	50.0	86.3	105.6	21.1	2288.2	0.4027	0.3878	108.6	
35.42	0.720	60.0	100.6	124.0	25.5	2313.6	0.3972	0.3834	90.7	

* Luxtech maintains a tolerance of 7% on flux measurements

CONTACT US

For assistance, please reach out at sales@luxtech.com