



LUXEON 7070

High light output and efficacy in a robust multi-die package, enabling cost-effective system designs for demanding applications



LUXEON 7070 is a multi-die, high power package that provides high luminance from a super robust package to enable cost effective, single optic and directional fixture designs. LUXEON 7070 uses an industry standard 7070 surface mount package with a small Light Emitting Surface (LES). LUXEON 7070 is offered in 70, 80, 90 CRI with a wide range of CCTs, and offers hot-color targeting to ensure that the LEDs are within color target at application conditions of 85°C.

FEATURES AND BENEFITS

- Superior lm/W enables outstanding efficacy in end application
- Extremely reliable package design affirms long lifetime in harsh environments
- Low Rth enables effective thermal dissipation design for higher efficiency
- Hot-color targeting ensures color is within ANSI bin at 85°C
- 3-step and 5-step MacAdam ellipse binning structure ensures excellent color uniformity
- Offered in different voltage options for customer design flexibility

PRIMARY APPLICATIONS

- High Bay
- Low Bay
- Floodlights
- Wall Pack
- Outdoor
- Spotlights

LUXEON 7070 product performance at test current, $T_j=25^{\circ}\text{C}$ and $T_j=85^{\circ}\text{C}$ for R9 and CRI.

VOLTAGE	NOMINAL CCT ^[1]	MINIMUM R9 ^[4]	MINIMUM CRI ^[2, 3]	LUMINOUS FLUX ^[2, 3] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	PART NUMBER
				MINIMUM	TYPICAL			
12V	2200K	≥ -40	70	1172	1260	153	700	L170-2270701200000
	2700K	≥ -40	70	1295	1392	169	700	L170-2770701200000
	3000K	≥ -40	70	1344	1445	175	700	L170-3070701200000
	3500K	≥ -40	70	1376	1480	179	700	L170-3570701200000
	4000K	≥ -40	70	1414	1520	184	700	L170-4070701200000
	5000K	≥ -40	70	1404	1510	183	700	L170-5070701200000
	5700K	≥ -40	70	1395	1500	182	700	L170-5770701200000
	6500K	≥ -40	70	1386	1490	180	700	L170-6570701200000
	2200K	≥ 0	80	1059	1139	138	700	L170-2280701200000
	2700K	≥ 0	80	1176	1265	153	700	L170-2780701200000
	3000K	≥ 0	80	1232	1325	160	700	L170-3080701200000
	3500K	≥ 0	80	1257	1352	164	700	L170-3580701200000
	4000K	≥ 0	80	1293	1390	168	700	L170-4080701200000
	5000K	≥ 0	80	1288	1385	168	700	L170-5080701200000
	5700K	≥ 0	80	1288	1385	168	700	L170-5780701200000
	6500K	≥ 0	80	1283	1380	167	700	L170-6580701200000
	2200K	≥ 50	90	911	980	119	700	L170-2290701200000
	2700K	≥ 50	90	1018	1095	133	700	L170-2790701200000
	3000K	≥ 50	90	1049	1128	137	700	L170-3090701200000
	3500K	≥ 50	90	1075	1156	140	700	L170-3590701200000
	4000K	≥ 50	90	1102	1185	143	700	L170-4090701200000
	5000K	≥ 50	90	1097	1180	143	700	L170-5090701200000
	5700K	≥ 50	90	1086	1168	141	700	L170-5790701200000
	6500K	≥ 50	90	1075	1156	140	700	L170-6590701200000
	2200K	≥ -40	70	1172	1260	154	233	L170-2270703600000
	2700K	≥ -40	70	1295	1392	170	233	L170-2770703600000
	3000K	≥ -40	70	1344	1445	176	233	L170-3070703600000
	3500K	≥ -40	70	1376	1480	180	233	L170-3570703600000
	4000K	≥ -40	70	1414	1520	185	233	L170-4070703600000
	5000K	≥ -40	70	1404	1510	184	233	L170-5070703600000
5700K	≥ -40	70	1395	1500	183	233	L170-5770703600000	
6500K	≥ -40	70	1386	1490	182	233	L170-6570703600000	
2200K	≥ 0	80	1059	1139	138	233	L170-2280703600000	
2700K	≥ 0	80	1176	1265	153	233	L170-2780703600000	
3000K	≥ 0	80	1232	1325	160	233	L170-3080703600000	
3500K	≥ 0	80	1257	1352	164	233	L170-3580703600000	
4000K	≥ 0	80	1293	1390	168	233	L170-4080703600000	
5000K	≥ 0	80	1288	1385	168	233	L170-5080703600000	
5700K	≥ 0	80	1288	1385	168	233	L170-5780703600000	
6500K	≥ 0	80	1283	1380	167	233	L170-6580703600000	
2200K	≥ 50	90	911	980	119	233	L170-2290703600000	
2700K	≥ 50	90	1018	1095	133	233	L170-2790703600000	
3000K	≥ 50	90	1049	1128	137	233	L170-3090703600000	
3500K	≥ 50	90	1075	1156	140	233	L170-3590703600000	
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5000K	≥ 50	90	1097	1180	143	233	L170-5090703600000	
5700K	≥ 50	90	1086	1168	141	233	L170-5790703600000	
6500K	≥ 50	90	1075	1156	140	233	L170-6590703600000	

Notes:

1. Correlated color temperature is hot targeted at $T_j=85^{\circ}\text{C}$.
2. Luminous flux is based upon mounted package on highly reflective surface at $T_j=25^{\circ}\text{C}$. There is a tolerance of $\pm 7\%$ on luminous flux measurements.
3. Lumileds maintains a tolerance of ± 2 on CRI (tested to 85°C). Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed.
4. Lumileds maintains a tolerance of ± 6.5 on R9 (tested to 85°C).