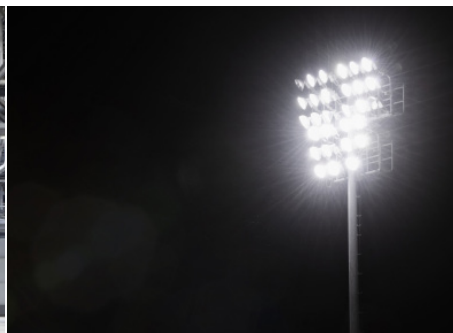




LUXEON 7070

LUXEON 7070 HE

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



LUXEON 7070 and 7070 HE are 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 and 7070 HE use an industry standard 7070 surface mount package with a small Light Emitting Surface (LES). LUXEON 7070 and 7070 HE are 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°C and T_j=85°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
36V	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
	4000K	≥ 50	90	1102	1185	143	233	L170-4090703600000
	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°C.
2. Luminous flux is based upon mounted package on highly reflective surface at T_j=25°C. There is a tolerance of ±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).

LUXEON 7070 HE product performance at test current, T_j=25°C Flux and T_j=85°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	1220	1311	160	700	L170-22707012000A1
	2700K	-40	70	1350	1448	177	700	L170-27707012000A1
	3000K	-40	70	1390	1492	182	700	L170-30707012000A1
	3500K	-40	70	1420	1529	187	700	L170-35707012000A1
	4000K	-40	70	1450	1565	191	700	L170-40707012000A1
	5000K	-40	70	1450	1565	191	700	L170-50707012000A1
	5700K	-40	70	1440	1550	189	700	L170-57707012000A1
	6500K	-40	70	1430	1539	188	700	L170-65707012000A1
36V	2200K	-40	70	1220	1311	159	233	L170-22707036000A1
	2700K	-40	70	1350	1448	176	233	L170-27707036000A1
	3000K	-40	70	1390	1492	181	233	L170-30707036000A1
	3500K	-40	70	1420	1529	186	233	L170-35707036000A1
	4000K	-40	70	1450	1565	190	233	L170-40707036000A1
	5000K	-40	70	1450	1565	190	233	L170-50707036000A1
	5700K	-40	70	1440	1550	188	233	L170-57707036000A1
	6500K	-40	70	1430	1539	187	233	L170-65707036000A1

Notes:

1. Correlated color temperature is not targeted at T_j=85°C.
2. Luminous flux is based upon mounted package on highly reflective surface at T_j=25°C. There is a tolerance of ±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).