

## ILLUMINATION



# **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

#### **PRIMARY APPLICATIONS**

High Bay
Low Bay
Floodlights
Wall Pack
Outdoor
Spotlights





VOLTAGE	NOMINAL CCT <sup>[1]</sup>	MINIMUM R9 <sup>[4]</sup>	MINIMUM CRI <sup>[2, 3]</sup>	LUMINOUS FLUX <sup>[2, 3]</sup> (Im)		TYPICAL LUMINOUS	TEST CURRENT	PART NUMBER
				MINIMUM	TYPICAL	EFFICACY (lm/W)	(mA)	PART NOWDER
12V	2200K	≥ -40	70	1172	1260	153	700	L170-2270701200000
	2700K	≥ -40	70	1295	1392	169	700	L170-2280701200000
	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

### LUXEON 7070 product performance at test current, T=25°C and T=85°C for R9 and CRI.

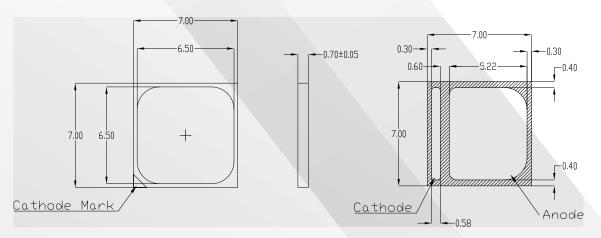
#### Notes:

Correlated color temperature is hot targeted at T<sub>i</sub>=85°C.

Luminous flux is based upon mounted package on highly reflective surface at  $T_j=25^{\circ}$ C. There is a tolerance of ±7% on luminous flux measurements. 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. 3.

4. Lumileds maintains a tolerance of ±6.5 on R9 (tested to 85°C).

#### Mechanical Dimensions.



Notes:

1. Drawings are not to scale.

2. All dimensions are in millimeters.

©2021 Lumileds Holding B.V. All rights reserved. LUXEON is a registered trademark of the Lumileds Holding B.V. in the United States and other countries.

lumileds.com

Neither Lumileds Holding B.V. nor its affiliates shall be liable for any kind of loss of data or any other damages, direct, indirect or consequential, resulting from the use of the provided information and data. Although Lumileds Holding B.V. and/or its affiliates have attempted to provide the most accurate information and data, the materials and services information and data are provided "as is," and neither Lumileds Holding B.V. nor its affiliates warrants or guarantees the contents and cate are provided as is, and referrer unlieds Holding B.V. In its annuels wall and or guarantees the contents and correctness of the provided information and data. Lumileds Holding B.V. and its affiliates reserve the right to make changes without notice. You as user agree to this disclaimer and user agree-ment with the download or use of the provided materials, information and data. A listing of Lumileds product/ patent coverage may be accessed at lumileds.com/patents.