



Product Brief

LUXEON A

Consistent, Reliable, Quality Light



LUXEON® A brings Illumination Grade LED light sources to the lighting market. It has never been simpler to design LED solutions and bring them to market. With hot testing and color binning, every LUXEON A is tested and specified at real world operating conditions, T_j 85°C. With *Freedom From Binning*, every LUXEON A LED falls within a single 3 step MacAdam ellipse centered on the black body curve and now, luminaire manufacturers can be confident in color consistency from LED to LED. There's never been a more supportable and consistent light emitting diode. The superior quality of light, light output, and real world efficacy enable leading performance and efficient solution development in a wide variety of segments including retrofit bulbs, office, hospitality, school, and home lighting.

Key Applications:

- Retrofit bulbs
- Downlights
- Retail lighting
- Home lighting
- Office lighting
- Linear lighting

Features:

- Freedom From Binning — 3 SDCM
- Hot tested at T_j 85°C
- 2700K and 3000K CCT and CRI of 80+
- Superior efficacy and light output
- Specified color over angle
- Proven LUXEON reliability

Benefits:

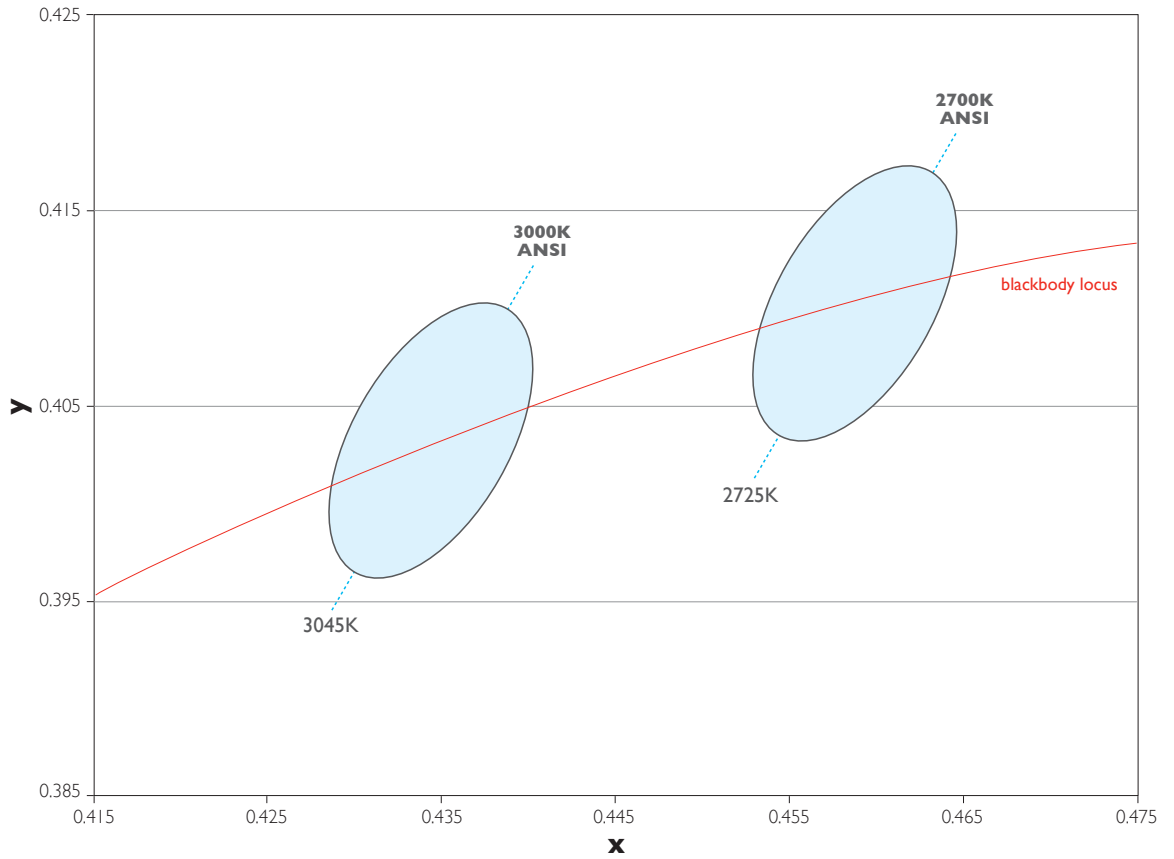
- Shorter and simpler design-in cycles
- Reduced inventory management and costs
- Confidence in consistent, high quality light
- Reduced operating and maintenance costs
- Solutions that deliver real energy savings

LUXEON A Product Characteristics

Part Number	Nominal ANSI CCT	CRI Min	Performance @ 700 mA Test Current		Typical Performance @ $T_j = 85^\circ\text{C}$								
			Minimum Luminous Flux (lm)	Test Condition	Luminous Flux (lm)			Forward Voltage (Vf)			Efficacy (lm/W)		
					350 mA	700 mA	1000 mA	350 mA	700 mA	1000 mA	350 mA	700 mA	1000 mA
LXH8-PW27	2700K	80	140	$T_j = 85^\circ\text{C}$	89	160	218	2.73	2.88	2.98	93	79	73
LXH8-PW30	3000K	80	150	$T_j = 85^\circ\text{C}$	92	165	224	2.73	2.88	2.98	96	82	75



LUXEON A 3-Step MacAdam Bin Structure



Absolute Maximum Ratings

Parameter	Value
DC Forward Current (mA)	1000
Peak Pulsed Forward Current (mA)	1200
Average Forward Current (mA)	1000
ESD Sensitivity	< 8000V Human Body Model (HBM) Class 3A JESD22-A114-E
LED Junction Temperature	150°C
Operating Case Temperature at 700 mA	-40°C - 135°C
Storage Temperature	-40°C - 135°C
Soldering Temperature	JEDEC 020c 260°C
Allowable Reflow Cycles	3
Autoclave Conditions	121°C at 2 ATM 100% Relative Humidity for 96 Hours Maximum
Reverse Voltage (Vr)	LUXEON Rebel A LEDs are not designed to be driven in reverse bias

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