

TYPICAL APPLICATIONS

- Flashlights
- Mining Lamps
- Head Lamps
- Bicycle Lights
- Diving Lights
- Lanterns
- Medical Lamps
- Weapon Lights
- Spotlights



RUGGED, SOLID STATE, VIBRATION PROOF

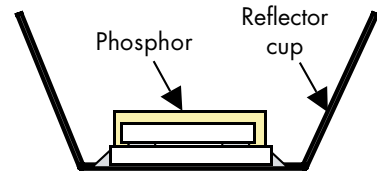
Unlike bulbs, there are no fragile components to break, even when misused. LUXEON® LEDs are solid state devices that contain no moving parts, no toxic gases, and no filament. Your product can be sealed for life when you use LUXEON® LEDs – the need to replace a bulb is eliminated.

ABCs OF LIGHT

Appearance

Philips Lumileds' patented Conformal Coating Process ensures highly uniform white color, unlike other high power LEDs.

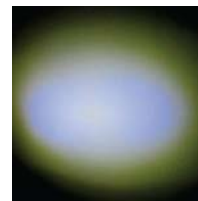
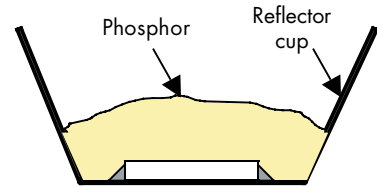
Lumileds conformal phosphor deposition process



Highly uniform white color



Conventional phosphor coating method



Large color shift

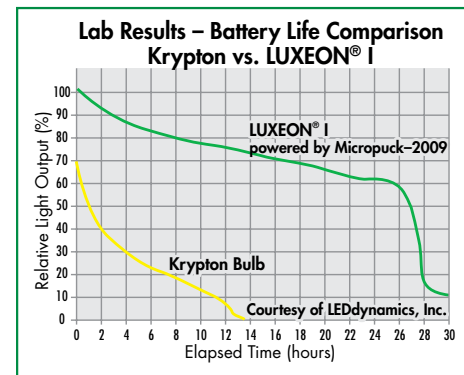
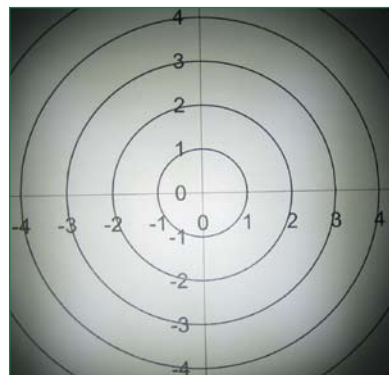


Brightness / Beam Size

Nearly 100% of the light emitted from high power LUXEON® LEDs is directed, resulting in more efficient use of light when coupled to an optic than a krypton bulb, incandescent bulb or 5mm LED array.

Consumption

LUXEON® LEDs are five times more efficient than incandescent light sources, significantly prolonging battery life.



Portable Lighting

DESIGNER'S GUIDE

Making LED Lighting Solutions Simple™

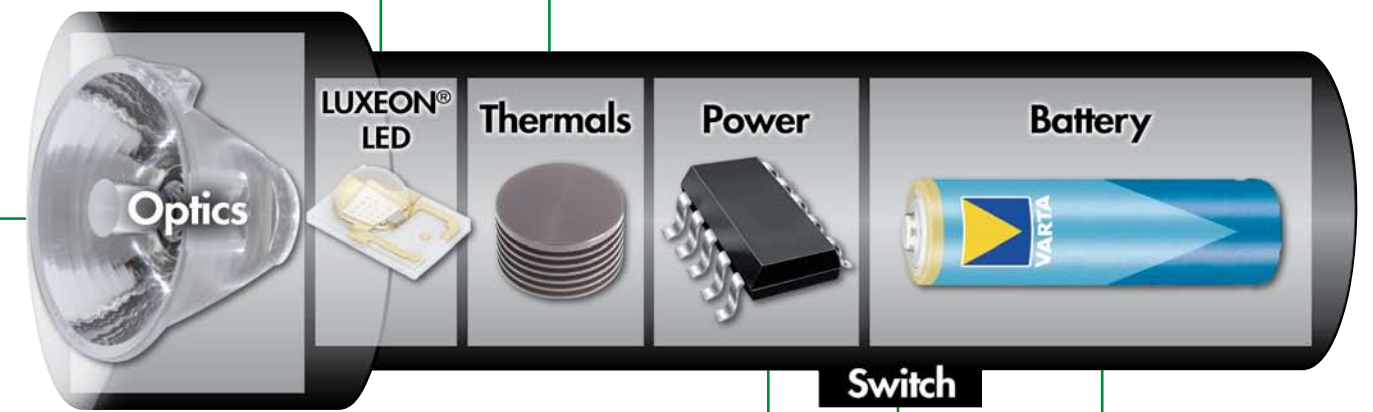
PORTABLE LIGHTING DESIGNER'S GUIDE

LUXEON® LEDs

	SMT	Emitter		Star		SMT Emitter	
	LUXEON® PWT	LUXEON® I	LUXEON® III	LUXEON® I	LUXEON® III	LUXEON® Rebel	LUXEON® K2
Typical Flux (lm)	26	45	80	45	80	145	120
Drive Current (mA)	350	350	1000	350	1000	700	1000
Max Junction Temp (°C)	135	135	135	135	135	150	150
Thermal Resistance (°C/W)	10	15	13	20	17	10	9
Efficacy (lm/W)	22	38	21	38	21	58	32
Size (mm)	2.04 x 1.6 x 0.7	14.5 x 8.0 x 5.9	14.5 x 8.0 x 5.9	19.9 x 19.0 x 7.4	19.9 x 19.0 x 7.4	4.61 x 3.17 x 2.10	11.7 x 7.3 x 5.8
Part #	LXCL-PWT1	LXHL-PW01	LXHL-PW09	LXHL-MW1D	LXHL-LW3C	LXML-PWVC1-0080	LXK2-PV14-U00

THERMAL MANAGEMENT

Ask us about our off-the-shelf thermal solutions, as well as our enabling relationships with Certified Solutions Partners.



OPTICS*

	Low Profile			Supa-Hex	Rebel	Reflectors
	Polymer Optics	Carclo	L2 Optics	Polymer	Carclo	IMS
Full Angle (°)	12	12, 30	10, 30	12	9, 12, 16, 18	10
Diameter (mm)	14.9	19	20	21.6	20	17.6, 20.5
Part Number	120	10003 10003/15	OP-005 OP-015	152	10193 10194 10195 10208	SO17XA SO17XB SO20XA
Remarks	Optical Holders are available. Please reference data sheet for product information	Optical Holders are available. Please reference data sheet for product information	Optical Holders are available. Please reference data sheet for product information	No Holder Required	Optical Holders are available. Please reference data sheet for product information	No Holder Required

* All products are designed to fit LUXEON® I, LUXEON® III, and LUXEON® K2 Models. Carclo Rebel optics are designed to fit on LUXEON® Rebel LEDs.

SWITCHES, BATTERIES & OFF-THE-SHELF LED DRIVERS

	Switch		Battery Holder		Batteries		LED Drivers
	ITT Cannon	ITT Cannon	Keystone	Keystone	Varta	Rayovac	LEDdynamics
Description	2-position slide	3-position slide	2-cell AA	4-cell AA	AA	AA	V _{in} < 3
Part #	OS102011MS2QN1	OS103011MS8QP1	2463	2478	4106210501	815-BULK	Micropuck-2009
Remarks	rocker switches also available	rocker switches also available	other form factors available	other form factors available	other low cost batteries available	other low cost batteries available	ideal for prototyping



POWER MANAGEMENT

	Buck (4-cell)			Boost (2-cell)			Buck-Boost (3-cell)	
	Sipex	STMicroelectronics	Zetex	STMicroelectronics	National Semiconductor	Zetex	ON Semiconductor	STMicroelectronics
I _{out} (mA)	500	800	1000	500	1000	1100	500	600
V _{in} (min) (V)	2.7	2.2	9	0.6	0.8	0.8	2.7	2.7
V _{in} (max) (V)	5.5	5.5	30	5.5	14	8	5.5	5.5
V _{out} (max) (V)	5.5	5.5	30	5.2	14	8	5.5	6
Part #	SP6655	L6926	ZXLD1360	L6920	LM2623A	ZXSC400	NCP5030	STCF02
Remarks	high efficiency	high efficiency	high efficiency	high efficiency	high output current	high efficiency	input voltage flexibility	input voltage flexibility
Reference Design	available	available	available	available	available	available	available	available

ABOUT FUTURE LIGHTING SOLUTIONS

A division of Future Electronics, the third largest electronic components distributor in the world, Future Lighting Solutions is dedicated to the LED lighting industry. With more than 7 years of power LED experience, Future Lighting Solutions is the pioneer in delivering the most comprehensive worldwide LED lighting solutions support structure in the industry. Future Lighting Solutions offers customers LED Lighting knowledge, resources, programs, partners, solutions and logistics support, focused on enabling the adoption of LUXEON®-based solid state lighting technology.

Future Lighting Solutions' innovative approach is built around its team of world class LED lighting experts, its highly specialized and experienced partners, and its exclusive worldwide relationship with Philips Lumileds Lighting Company.

Future Lighting Solutions; **Making LED lighting solutions simple™.**