



Lamp Replacement Source Guide

The following tables provide a partial list of Bridgelux LED Arrays which may be used to replace traditional light sources in luminaires while delivering comparable lighting system performance. Light losses are assumed to range from 0-60% for luminaires with traditional light sources. A 30% system loss is assumed to account for thermal, optical, and electronic driver losses in LED Array based lighting systems. Options are provided which deliver various luminaire operating efficacy (hot efficacy) performance levels. All options listed assume the use of a single Bridgelux LED Array unless otherwise noted. Additional options exist dependant on system design requirements. Please consult the relevant product data sheets and application notes for design assistance to enable an optimized luminaire design.

Conventional Light Source	Luminaire Operating System Efficacy (hot efficacy including thermal, optical and driver losses)		
	> 40 lm/W	> 50 lm/W	> 60 lm/W
40W - 60W A19 35W PAR 20/30 35W MR16 40W B10/G25 5W - 9W CFL (Warm White)	BXRA-W0260	BXRA-W0401 BXRA-W0402	BXRA-W0802 BXRA-W1202
60W - 75W A19 60W PAR 38 50W MR16 50W PAR 20/30 60W G25/B10 11W - 18W CFL (Warm White)	BXRA-W0402	BXRA-W0802	BXRA-W1202
75W - 100W A19 75W PAR 30/38 75W BR40 18W - 26W CFL (Warm White)	BXRA-W0802	BXRA-W1202 BXRA-W3000	BXRA-W1202 (multiple arrays)
150W - 200W A21 50W - 70W Metal Halide 70W PAR 38-MH	BXRA-W3000	BXRA-W0802 (multiple arrays)	BXRA-W1202 (multiple arrays)

Note: Increased system efficacy levels may be achieved by using multiple LED Arrays driven under lower power operating conditions.

Conventional Light Source	Luminaire Operating System Efficacy (hot efficacy including thermal, optical and driver losses)			
	> 50 lm/W	> 60 lm/W	> 70 lm/W	> 80 lm/W
5W - 9W CFL (Cool White)		BXRA-C0360	BXRA-C0402	BXRA-C0802 BXRA-C1202
11W - 18W CFL (Cool White)	BXRA-C0402	BXRA-C0802	BXRA-C0802	BXRA-C1202 BXRA-C2002
18W - 26W CFL (Cool White)		BXRA-C0802	BXRA-C1202	BXRA-C2002 BXRA-C4500
70W Metal Halide 50W High Pressure Sodium 35W Low Pressure Sodium		BXRA-C4500	BXRA-C2002 (multiple arrays)	BXRA-C2002 BXRA-C4500 (multiple arrays)
100W Metal Halide 70W High Pressure Sodium	BXRA-C4500	BXRA-C2002 (multiple arrays)	BXRA-C2002 (multiple arrays)	BXRA-C4500 (multiple arrays)

Note: Increased system efficacy levels may be achieved by using multiple LED Arrays driven under lower power operating conditions.