

## ENERGY EFFICIENCY INDEX

The Energy Efficiency Index (EEI) indicates the energy efficiency of a lamp (or light engine).

EEI is calculated from:  $\frac{P(\text{cor})}{P(\text{ref})}$

$P(\text{cor})$  = (for L.E.D's with external driver) 1.1 x rated power

$P(\text{ref}) = 0.88\sqrt{\Phi} + 0.049\Phi$  for  $<1300\text{Lm}$  or  $0.7341\Phi$  for  $\geq 1300\text{Lm}$

$\Phi$  = useful luminous flux

the limits are given in the table below:

	Class	Non-Directional Lamps	Directional Lamps
Most energy efficient ...	A++	$\text{EEI} \leq 0.11$	$\text{EEI} \leq 0.13$
	A+	$0.11 < \text{EEI} \leq 0.17$	$0.13 < \text{EEI} \leq 0.18$
	A	$0.17 < \text{EEI} \leq 0.24$	$0.18 < \text{EEI} \leq 0.40$
	B	$0.24 < \text{EEI} \leq 0.60$	$0.40 < \text{EEI} \leq 0.95$
	C	$0.60 < \text{EEI} \leq 0.80$	$0.95 < \text{EEI} \leq 1.2$
	D	$0.80 < \text{EEI} \leq 0.95$	$1.20 < \text{EEI} \leq 1.75$
Least energy efficient ...	E	$\text{EEI} > 0.95$	$\text{EEI} > 1.75$

EEI is shown by a product or box label as below, but is also indicated by just the letters, i.e. **A+**

