

This document was created to provide **simple conversion charts that estimate the amount of light needed to replace an existing light source** and the preferred mounting height ranges of each lumen package. Simply put, if a customer has "a certain type of bulb", the corresponding LED solution should provide a certain amount of lumens, at a preferred mounting height.

The first chart focuses on mounting heights. It provides guidelines for applications where there may not be adequate lighting and the customer is looking for a recommendation. If that situation applies, the chart can point you in the right direction. **If not, use the bulb to lumen chart to determine the needed lumen output instead.**

Please note that none of these charts indicate the footcandle levels achieved by selecting a certain lumen package. That can only be determined by factoring in lumen package with mounting height , fixture spacing, and the reflective factors of the walls and floors in the installation space.

Example: a customer with a 400-Watt Metal Halide bulb in any type of Luminaire will need approximately 24,000 lumens to replace it. The 24,000 lumen package is just a good "rule of thumb" guideline, as an 18,000 lumen or 30,000 package may work and be more ideal for the application. (The 30,000 lumen solution would provide more light for applications requiring it, and the 18,000 lumen could be used in instances where fixture costs are driving the customer behavior. But, beware in using a lower lumen package as the output may not meet the customer's expectations.) The ideal placement of these 24,000 lumen fixtures is 20'-40' mounting heights where more light is delivered to the work area at the lower heights.

Click the Chart tab below for access to the conversion charts.

Lowbay / Highbay Fixture - Lumens by Mounting Height Recommendations						
Lumens	Distributions	Mounting Heights				
		10'-20'	20'-30'	30'-40'	40'-50'	50'-60'
8000	GND, WD	X				
12,000/15,000	GND, WD	X	X			
18,000/24,000/30,000	GND, ND		X	X		
36,000/48,000/60,000	GND, ND, FD			X	X	X
72,000	GND, ND, FD				X	X

Lowbay / Highbay Fixture - Conversion from Old Technology Recommendations	
Lumens	Comparable Light Source
4,000	2-lamp T8 NBF
8,000	4-lamp T8 NBF
12,000	100W MH, 4-lamp T8 NBF
15,000	175W MH, 4-lamp T8 HBF, 2-lamp T5HO
18,000	250W MH, 6-lamp T8 NBF
24,000	400W MH, 6-lamp T8 HBF, 4-lamp T5HO, 6-lamp T5
30,000	400W MH, 6-lamp T5HO
36,000	575W MH, 10-lamp T8 HBF
48,000	750W MH, 8-lamp T5HO
60,000	875W MH, 10-lamp T5HO
72,000	1000W MH

Downlighting - Compatible Lumens Table												
Lumens	500	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000
Approx. LED Wattage	7W	12W	19W	23W	29W	37W	44W	55W	70W	91W	116W	143W
Comparable Fluorescent	18W	26W	32W	1/42W 2/26W	2/32W 1/57W	>2/32W	2/42W	2/57W				
Comparable HID			50W		70W	70W	100W			150W	175W	250W
Comparable Incandescent	65W BR30	120W BR40	150W A21	200W A21		300W BR40						
Comparable Halogen PAR	50W	75W	90W	100W								

**Identify the existing bulb type and match it with the associated lumens to determine the appropriate lumen package for your LED Solution*