







LARGE Reflector Selection Guide

- Medium to high vertical surfaces, 9 feet (3m) and up
- Where higher wattage allows fewer luminaires
- Where high light levels are desired

This guide is designed to assist the lighting professional in comparing and selecting the lamp(s) and luminaire(s) best suited for a project. First determine lamp and luminaire characteristics most important to your application. Then select lamp wattage(s) based on the height of the surface and desired light level.

Example: To light a 35' high facade to 40 footcandles average initial, scan down the **Surface Height** column under **Typical Applications** for a height closest to 35'. Select those lamp type(s) and wattage(s) that provide approximately 40 fcai. Match the lamp color characteristics to the color of the surface material(s). Then choose the appropriate luminaire style from those available for the selected lamp type.

Source	Lamp Type ③	Lamp Characteristics			Control Characteristics		Performance ⑤			Typical Applications ⑦					
		Correlated Color Temp ③	Color Rendering Index (CRI)	Lamp Life ① (Hours)	Starting	Ambient Temperature	Lamp Wattage	Lamp Output	Efficacy	Surf. Ht.	Set-back	Spacing	E _v (fcai)	Energy (w/ft)	
Point Sources Best where setback can be 1/3 to 1/5 the height of the surface (36" minimum recommended) and where individually mounted luminaires can be spaced 1.5 to 2 times the setback distance. Example: 25' high facade, 6' setback, 10' on center.	 Tungsten Halogen	3000K Warm	>95 CRI <i>Excellent</i> Ideal for large murals, colorful facades and featured architectural elements, etc.	2000 Approx. 11 months at 6 hours operation per day. Note: dimming extends lamp life. ②	Instant-on	Ambient temperature variations typically do not affect lamp light output.	300W	5770	19	9'	30"	4'	58	75.0	
							350W	10,000	29	12'	36"	6'	30	50.0	
							500W	10,700	21	12'	36"	6'	52	83.3	
							900W	32,000	36	18'	48"	8'	26	62.5	
							1000W	21,500	22	24'	72"	10'	62	90.0	
	 Metal Halide	175W - 4000K Cool 250W - 3200K Warm 400W - 3200K Warm 1000W - ④ (for alternative colors, see lamp chart in Accessories Section.)	65 CRI <i>Good</i> Suitable for concourses, entries and large facades where good color rendering is desired.	400W - 15,000 250W - 10,000 175W - 7500 Approx. 3-1/2 to 7 years at 6 hours operation per day.	3 to 5 minutes from cold start; 10 to 20 minutes from warm start (restrike period).	Ballast rated for -20°F/-29°C starting. Ambient temperature variations typically do not affect lamp light output.	175W	12,800	63	12'	36"	6'	73	34.2	
							250W	21,000	72	18'	48"	8'	32	36.9	
							400W	38,000	82	24'	72"	10'	36	29.5	
							1000W④	100,000	91	36'	108"	12'	20	24.6	
										18'	48"	8'	113	57.5	
										24'	72"	10'	66	46.0	
							 High Pressure Sodium	2100K Warm	21 CRI <i>Poor</i> Suitable for warm-tone or monotone surfaces and areas where color rendering is not critical.	24,000+ Approx. 11+ years at 6 hours operation per day.	3 to 5 minutes from cold start or warm start (restrike period).	Ballast rated for -20°F/-29°C starting. Ambient temperature variations typically do not affect output.	150W	16,000	85
250W	28,000	95	24'	72"	10'	47							29.5		
400W	51,000	110	36'	108"	12'	26							24.6		
			18'	48"	8'	141							58.0		
			24'	72"	10'	83							46.4		
 Hex Tube Compact Fluorescent	3000K <i>Warm</i> ③ 3500K <i>Neutral</i> 4100K <i>Cool</i>	82 CRI <i>Very Good</i> Suitable for murals and general signage.	12,000 Approx. 5-1/2 years at 6 hours operation per day.	Rapid start	Ballast rated for 0°F starting. Light output may be diminished in extreme low temperatures.	32W	2400	73	9'	30"	4'	23	8.3		
						42W	3200	73	12'	36"	6'	11	5.5		
						2x42W	6400	73	9'	30"	4'	30	11.0		
									12'	36"	6'	15	7.3		
Linear Sources Best where setback is limited to 1/6 to 1/10 the height of the wall (18" minimum recommended) and where luminaires can be mounted end-to-end in a row.	 T12 HO Fluorescent ③	3000K <i>Warm</i> 3500K <i>Neutral</i> 4100K <i>Cool</i>	52 to 82 CRI <i>Good to Very Good</i> Suitable for signage and general facades, etc.	12,000 2-1/2 to 3 years at 12 hours operation per day.	Rapid start	Ballast rated for -20°F/-29°C starting. Lamp light output may be diminished in low ambient temperatures.	45W (36")	2850	54 to 62 ⑥	9'	18"	End-to-End	40	17 to 20 ⑥	
							60W (48")	4300		9'	24"		37		
							75W (60")	5150		12'	18"		33		
							85W (72")	6750		12'	24"		32		
							110W (96")	9500		12'	36"		28		
	 T12 VHO Fluorescent ③	3000K <i>Warm</i> 4100K <i>Cool</i>	52 to 62 CRI <i>Good</i>	10,000 2-1/2 years.	10,000 2-1/2 years.	Rapid start	Ballast rated for -20°F/-29°C starting. Lamp light output may be diminished in low ambient temperatures.	115W (48")	6600	49 to 55 ⑥	15'	24"	End-to-End	61	30 to 33
								160W (72")	10,600	15'	36"	49			
								215W (96")	14,500	15'	36"	31			
								215W (96")	14,500	⑥	15'	36"		31	⑥
											15'	36"		31	⑥



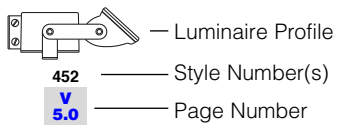
① Average rated life is the number of hours at which 50% of a large group of lamps are still operating. Fluorescent lamp ratings based on 3 or more operating hours per start. Metal halide based on 10 or more hours per start. Average life may increase or decrease as the period per start increases or decreases.
Where low maintenance is desired or for locations that are difficult to reach, long life metal halide or fluorescent lamps are suggested.

② Dimming halogen lamps to 95% of rated lamp voltage will double the average lamp life and reduce light output approximately 15%.
③ Lamp(s) furnished with luminaires, except T12HO and T12VHO. Standard fluorescent color temperature is 3000K. See lamp charts in Accessories Section.
④ For availability and specifications of 1000W metal halide lamp, consult factory.

⑤ **Lamp output** = initial rated lumens; may vary with lamp manufacturer.
Efficacy = expressed in lumens per watt (lpw); includes ballast losses and may vary, depending on actual lamp and ballast parameters.
⑥ Efficacy and energy for linear fluorescent luminaires will vary depending on the combination of lamp lengths and number of lamps per ballast.

Key

Styles available for cantilever mounting. Refer to data pages for complete specifications.



Surface - 100 Series		Enscore - 400 Series		Lamp Type
Remote Ballast (or no ballast)	Integral Ballast ④	Integral Ballast ④		
<p>152 (lighting upward) V 6.0</p> <p>152 (lighting downward) V 6.0</p> <p>153 V 9.0</p>	<p>154 V 9.0</p>	<p>454 (lighting downward) V 10.0</p> <p>454 (lighting upward) V 10.0</p>	<p>Tungsten Halogen</p> <p>Metal Halide</p> <p>High Pressure Sodium</p>	<p>OUTDOOR</p>
<p>152 V 7.0</p>	<p>162 V 9.2</p>		<p>Hex Tube Compact Fluorescent</p>	
<p>152 (lighting upward) V 8.0</p> <p>152 (lighting downward) V 8.0</p>			<p>T12 HO Fluorescent</p> <p>T12 VHO Fluorescent</p>	

④ Typical vertical surface applications:

E_v = vertical illuminance, footcandles average initial (fcai), perpendicular to the surface (estimated for a surface lighted by 5 or more luminaires).
Energy = input watts (including ballasts) per linear foot (perpendicular to height of surface) for the given spacing; use for comparison purposes only.
Surface height, Setback and **Spacing** are as illustrated:

