



Lighting Comparison

Technical Comparison	Induction	HP Sodium	Metal Halide	TS Flour. (6 Bulb)	T8 Flour. (8 Bulb)	LED
Wattage (Bulb)	200	400	400	240	300	200
Wattage (Luminaire)	202	475	470	272	370	208
Lumens/Watt (Bulb)	82	70	75	75	65	40
Lumens/Watt (Luminaire)	81	59	64	66	53	38
Pupil Lumens/Watt (Luminaire)	149	50	77	99	69	77
Mean Lumens	16,400	28,000	30,000	18,000	19,000	8,000
Pupil Lumens	30,000	23,520	36,000	27,000	25,350	16,000
Fixture Efficiency	99%	84%	85%	88%	82%	75%
Lumen Maintenance	70% / 70,000	75% / 2,000	50% /10,000	88% / 12,000	89% /14,000	90% /50,000
CRI	85+	25	70	80	82	80
CCT	5000K+	2100K+	3700K+	4100K+	4100K+	5000K+
Bulb Lifetime (Hours)	100,000+	17,000	12,000	15,000	20,000	50,000
Operational Temperature	(-)30 – 120°F	(-)7 - 100°F	0 - 100°F	0 - 100°F	0 - 100°F	(-)30 - 100°F
Ambient Temperature	>80°F	149°F	149°F	90°F	90°F	>70°F
Power Factor	0.98	0.44	0.87	0.91	0.91	0.98
Features Comparison	Induction	HP Sodium	Metal Halide	TS Flour. (6 Bulb)	T8 Flour. (8 Bulb)	LED
Bulb Maintenance Interval	23 Years	4 Years	3 Years	3 Years	5 Years	11 Years
Standard Warranty	10 Year / 60,000 Hr	1 – 2 Years	1 – 2 Years	1 – 2 Years	1 – 2 Years	2 - 3 Years
Instant On & Restrike	Yes	No	No	No	No	Yes
Non-Glare Bulbs	Yes	No	No	No	No	Yes
Vibration Resistance	Excellent	Poor	OK	Poor	Poor	Excellent
100% Recyclable	Yes	No	No	No	No	No
Noiseless Operation	Yes	No	No	No	No	Yes
Flicker-Free	Yes	No	No	No	No	Yes
LEED "Green" Compliance	Yes	No	No	Yes	Yes	Yes
"Dark Sky" Compliance	Excellent	Ok	Poor	n/a	n/a	Good
Cost Comparison	Induction	HP Sodium	Metal Halide	TS Flour. (6 Bulb)	T8 Flour. (8 Bulb)	LED
Up-Front	\$475.00	\$300.00	\$275.00	\$275.00	\$325.00	\$700.00
Annual Energy Usage @ 12 hr/day	885 kWh	2081 kWh	2059 kWh	1191 kWh	1621 kWh	911 kWh
Annual Energy Costs @ \$.11kWh	\$97.32	\$228.86	\$226.45	\$131.05	\$178.27	\$100.21
10 Year Energy Costs	\$973.24	\$2,288.55	\$2,264.46	\$1,310.50	\$1,782.66	\$1,002.14
10 Year Maintenance Costs	\$0	\$459.18	\$606.25	\$568.40	\$492.55	\$0
10 Year Total Costs	\$1,648.24	\$3,149.73	\$3,145.71	\$2,153.90	\$2,600.21	\$1,702.14