

Reflect-A-Bay vs. Metal Halide

LAYOUT	Existing System	Proposed System
	250W Low Bay Metal Halide	4 Lamp F32T8
Fixture mounting height	20'	20'
Lamp & fixture data		
Initial lamp lumens	20,500	2,950
Number of lamps	1	4
Initial fixture lumens	20,500	11,800
Ballast factor	1	1.04
Initial fixture lumens (ballast corrected)	20,000	12,272
Lamp lumen depreciation	0.60	0.95
Luminaire dirt depreciation	0.85	0.85
Fixture efficiency	0.80	0.98
Maintained fixture lumens	8364	9711
Fixture watts	288	136
Fixture lumens/watt	29	71
CRI (color rendering index)	65	82
Avg. maintained footcandles	23	29
Operating Data		
Number of fixtures	100	100
Cost/kWh	\$0.10	\$0.10
Total wattage	28,880	13,600
Square footage	36,000	36,000
Total installed price	–	\$19,000
Watts/sq. foot	0.8	0.32
Annual oper. hrs. (365x24)	8760	8760
SAVINGS ANALYSIS		
Annual energy costs	\$25,298	\$11,914
Annual energy savings existing		\$13,384
Savings / Fixture PAYBACK		1.41 Years