



Cost Analysis

Job name: **Facility Lighting Retro Fit**

	System 1		System 2	
	400w MH High Bay M400/U		4 Lamp T5HO High Bay F54T5HO	
General:				
Area of installation:	NA	Sq ft	NA	Sq ft
Mounting height:	SAME	Feet	SAME	Feet
Desired foot candles:	SAME	fc	SAME	fc
Catalogue number:	EXISTING		NHL5-4-54T5HO-UNV	
Number of units dimmable:				
Number of units non-dimmable:	70		70	
Assumption:				
System cost per unit (approx.):			\$200.00	
Installation costs per unit (approx.):				
Utility Rebate/Fixture:				
System wattage (Lamp&Ballast) Full Power:	464	Watts	234	Watts
Lamp wattage	400	Watts	216	Watts
Ballast wattage loss:	64	Watts	18	Watts
System wattage (Lamp&Ballast) Low Power:		Watts		Watts
Operating hours:	4732	Hrs	4732	Hrs
% of Operating hours dimmed:				
Re-lamping schedule: *	1.90	Years	5.07	Years
Re-lamping costs per unit: (approx.)	\$25.00		\$16.00	
Energy cost per kWh:	\$0.150		\$0.150	
INITIAL COSTS				
Fixture cost:			\$14,000.00	
Installation cost:				
Utility Rebates:				
Total initial costs:			\$14,000.00	
ANNUAL OPERATING COSTS				
Total annual kW consumption:	153695.36	kW	77510.16	kW
Total annual system kW (Full Power):	153695.36	kW	77510.16	kW
Total annual system kW (Low Power):		kW		kW
Annual energy cost:	\$23,054.30		\$11,626.52	
Annual relamping cost*:	\$920.11		\$220.83	
Total annual operating cost:	\$23,974.42		\$11,847.35	
COMPARISON				
Initial cost:			\$14,000.00	
Operating cost:	\$23,974.42		\$11,847.35	

RETURN ON INVESTMENT

R.O.I. In Years**:

1.15

Annual Savings **\$12,127.06**

Savings Occurred during R.O.I. Period **\$14,000.00**

* System 1 Re-Lamp @ of rated life. System 2 Re-Lamp @ of rated life plus \$ - labor cost.

** Difference in Total initial Costs (System1-System 2) + Difference in Total Annual Operating Costs (System1-System 2).

NOTE: Above analysis is based on data tested in DPS stabilized laboratory conditions. Various operating factors can cause differences between laboratory data and actual field measurement.