



# COMPARATIVE ANALYSIS

## LIGHTING SCENARIO

**Lighting Goal:** 40 foot candles  
**Work Plane:** 2.5 FT  
**Building Size:** 10,000 sq. ft. office  
**Office Type:** Standard Open Office

**Ceiling Height:** 9 ft  
**Electricity Cost:** \$0.15/kWhr  
**Duty Cycle:** 12 hours/day, 5 days/week, 3,120 hours  
**RCR:** 80 / 50 / 20

## LUNERA VS. 3 LAMP T8

### SCENARIO A

3-32W T8 Lamp  
Fluorescent Troffers

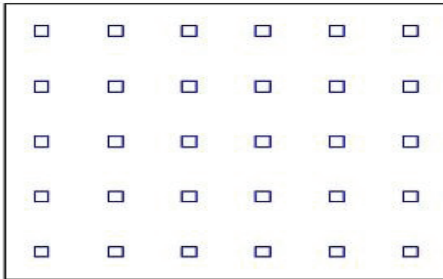
8' x 8' spacing (40fc @ 0.99W per sq. ft.)  
3,600 Lumens - maintained

### SCENARIO B

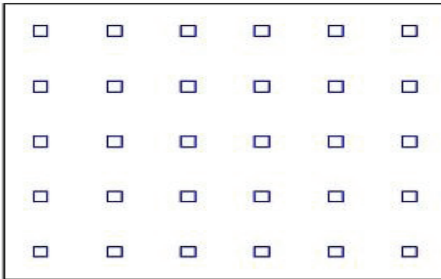
Lunera 2200 62W  
Lighting Panel

10' x 10' spacing (40fc @ 0.62W per sq. ft.)  
3,650 Lumens - maintained

### TYPICAL LAYOUT



### TYPICAL LAYOUT



### FIXTURES REQUIRED

100

### TOTAL WATTS TO LIGHT SPACE

10,000W

### LIGHTING POWER DENSITY (LPD)

1.00 W / SQ FT

### GREEN HOUSE GAS (10 YEARS)

320 TONS

### FIXTURES REQUIRED

100

### TOTAL WATTS TO LIGHT SPACE

6,200W

### LIGHTING POWER DENSITY (LPD)

0.62W / SQ FT

### GREEN HOUSE GAS (10 YEARS)

199 TONS

**Overall wattage reduction**  
↓ 3,800

**kWhr saved per year**  
↓ 11,856

**Reduced wattage per sq. ft.**  
↓ 0.38

**Reduced GHG emissions (tons)**  
↓ 121

**Lighting energy cost savings**  
↓ 38%

**Total operating cost savings**  
↓ 53%

## Typical Payback: 1~3 YEARS