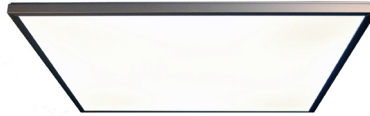




# COMPARATIVE ANALYSIS

## LUNERA VS. METAL HALIDE



**LIGHTING SCENARIO**  
**Lighting Goal:** 15 foot candles  
**Work Plane:** 2.5 FT  
**Building Size:** 640,000 sq. ft. office  
**Facility Type:** Parking Garage  
  
**Ceiling Height:** 12 ft  
**Electricity Cost:** \$0.13/kWhr  
**Duty Cycle:** 24/7= 8,760 hours/yr  
**RCR:** 80 / 50 / 20

### SCENARIO A

150W Metal Halide

40' x 40' spacing (10fc @ 0.38W per sq. ft.)  
 4,000 Lumens - maintained

### SCENARIO B

Lunera 2200 100W

40' x 40' spacing (15fc @ 0.06W per sq. ft.)  
 4,000 Lumens - maintained

## RESULTS

### SCENARIO A

FIXTURES REQUIRED

400

TOTAL WATTS TO LIGHT SPACE

60,000 W

LIGHTING POWER DENSITY (LPD)

0.09 W / SQ FT

GREEN HOUSE GAS (5 YEARS)

4,074,101 LBS

### SCENARIO B

FIXTURES REQUIRED

400

TOTAL WATTS TO LIGHT SPACE

40,000 W

LIGHTING POWER DENSITY (LPD)

0.06 W / SQ FT

GREEN HOUSE GAS (5 YEARS)

2,698,080 LBS

**Overall wattage reduction**  
 ↓ 20,000

**kWhr saved per year**  
 ↓ 178,704

**Reduced wattage per sq. ft.**  
 ↓ 0.03

**Reduced GHG emissions (LBS)**  
 ↓ 1,376,021

**Lighting energy cost savings**  
 ↓ 34%

**Total operating cost savings**  
 ↓ 36%

**Payback:**  
**0.26 YEARS**