

HIGH BAY EFFICIENCY

APPLICATION COMPARISON

HID VS FLUORESCENT

HIGH BAY

Area Square Foot
Luminaire Mounting Height
Workplane Height



100,000 FT
16 FT
2.5FT



FIXTURE TYPE

Item Number
Lamp Description
Number of Lamps
Lamp Lumens
Light Loss Factor
Coefficient of Utilization
Fixture Wattage

METAL HALIDE HIGH BAY

MH400/U
1
36,000
0.88
0.7
465

VS.

HORIZON HIGH BAY™

54990
F32T8/Hi LUMEN
6
3,100
0.95
0.95
171

OUTPUT

Illuminance; Foot Candles
Number of Fixtures
Power Density, Watts per SQFT

30
16
0.74

24
12
0.27

ANNUAL POWER COST

\$4,333

\$1,195

POWER COST REDUCTION

\$3,138 72%

LOW BAY

Area Square Foot
Luminaire Mounting Height
Workplane Height



100,000 FT
16 FT
2.5FT



FIXTURE TYPE

Item Number
Lamp Description
Number of Lamps
Lamp Lumens
Light Loss Factor
Coefficient of Utilization
Fixture Wattage

METAL HALIDE LOW BAY

MH250/U
1
20,500
0.88
0.7
297

VS.

DIAMOND HIGH BAY™

54906
F32T8/Hi LUMEN
4
3,100
0.95
0.95
112

OUTPUT

Illuminance; Foot Candles
Number of Fixtures
Power Density, Watts per SQFT

25
20
0.74

23
20
0.22

ANNUAL POWER COST

\$3,459

\$1,304

POWER COST REDUCTION

\$2,155 62%

Quick Rule of Thumb to calculate for a larger or smaller area

Example: To compare at 140,000 SQFT divide the power cost of 100,000 SQFT by 10 and then multiply by 14

Power cost calculated at \$0.16 per KWH at 3,640 hours of operation per year (14 hour day - 5 days per week)

As Metal Halide lamps age the voltage in the arc tube rises. This raises the wattage draw. Near end of life wattage exceeds 500 watts



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LIGHTING UPGRADE

WORK SHEET

One to One Replacement

EXISTING



RECOMMENDED



FIXTURE TYPE

METAL HALIDE HIGH BAY

HORIZON HIGH BAY™

Item Number

54990

Lamp Description

MH400/U

F32T8/Hi LUMEN

Fixture Wattage

465

171

Number of Fixture

24

24

TOTAL WATTS

11,160

4,104

Annual Operating Hours

3,640

3,40

Cost Per KWH

0.16

0.16

ANNUAL POWER COST

\$6,499

\$2,390

POWER COST REDUCTION

\$4,109

63%

EXISTING

RECOMMENDED

FIXTURE TYPE

Item Number

Lamp Description

Fixture Wattage

Number of Fixture

TOTAL WATTS

Annual Operating Hours

Cost Per KWH

ANNUAL POWER COST

POWER COST REDUCTION

*Power cost calculated at \$0.16 per KWH at 3,640 hours of operation per year (14 hour day - 5 days per week)
As Metal Halide lamps age the voltage in the arc tube rises. This raises the wattage draw. Near end of life wattage exceeds 500 watts*



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GO GREEN

