

Case studies:

## changing from **400W Metal Halide** to **120W UCD**

**Project:** Holiday Business Center

**Location:** Fresno, California, United States

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** 1 Lamp Shoebox Fixture

**Height of posts:** 20ft

**Total lamp watts:** 400W (1 fixture per post x 400W)

**New total lamp watts:** 120W (1 fixture per post x 120W)

**Savings per post:** 70% - 280W (400-120) without taking into account ballast loss

71% - 331W (465-134) taking into account ballast loss

**Quote:** “We are looking for every way possible to reduce operating costs in today’s economy. This change-out provides excellent lighting in my parking lots while providing huge energy savings. I am happy with my decision to go with this technology.”

William Dyck, Owner

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Case studies:

## changing from **400W Metal Halide** to **120W UCD**

**Project:** The Mehmet Noyan Company

**Location:** Fresno, California, United States

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** 1 Lamp Round Parking Lot Fixture

**Height of posts:** 20ft

**Total lamp watts:** 400W (1 fixture per post x 400W)

**New total lamp watts:** 120W (1 fixture per post x 120W)

**Savings per post:** 70% - 280W (400-120) without taking into account ballast loss

71% - 331W (465-134) taking into account ballast loss

**Quote:** "We have been searching for a viable alternative for our parking lot lights. We reviewed the UCD technology and were impressed with its performance. It's difficult to find technology that performs this good and provides 70% in savings."

Mehmet Noyan, President/CEO

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Case studies:

## changing from 250W High Pressure Sodium to 120W UCD

**Project:** Pardini's Catering Parking Lot

**Location:** Fresno, California, United States

**Previous technology:** 250W High Pressure Sodium

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** 1 Lamp Shoebox

**Height of posts:** 20ft

**Total lamp watts:** 250W (1 fixture per post x 250W)

**New total lamp watts:** 120W (1 fixture per post x 120W)

**Savings per post:** 52% - 130W (250-120) without taking into account ballast loss

57% - 176W (310-134) taking into account ballast loss

**Quote:** "We were looking to upgrade our parking lot lighting to improve safety for our customers. The sodium lamps created a drab, dark environment. We were extremely pleased to find a technology that not only allowed us to improve our light quality but also save substantially on energy use. The parking lot looks great."

Jim Pardini, Owner

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Case studies:

## changing from 180W Low Pressure Sodium to 120W UCD

**Project:** Valley Christian High School

**Location:** San Jose, California, United States

**Previous technology:** 180W Low Pressure Sodium

**New technology:** 60W & 120W Ultra Constant Discharge

**Fixture type:** 4 shoebox fixtures per post & 2 shoebox fixtures per post

**Height of posts:** 21ft

**Total lamp watts:** (4 fixtures per post x 180W) + (2 fixtures per post x 180W)

**New total lamp watts:** (2 fixtures per post x 120W) + (2 fixtures per post x 60W)

**Savings per post:** 67% - (720-240) & (360-120) without taking into account ballast loss  
71% - (880-268) & (440-134) taking into account ballast loss

**Quote:** “Nighttime lighting is of the utmost importance at our school for security and safety. UCD provided an exceptional quality of light that far surpassed both that of our existing sodium lighting and several LED alternatives we tested. Our security personnel immediately commented on how much brighter the light appeared and the ability to discern features on cars and people was markedly improved. We have had several comments from parents about how much safer they feel walking through the parking lots. We switched to UCD primarily for the significant energy savings, however the increase in quality of light was surprising and is worth the switch by itself.”

Jason Redding Director of Operations

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Case studies:

## changing from 100W High Pressure Sodium to 60W UCD

**Project:** City of Merced Municipal Parking Lot

**Location:** Merced, California, United States

**Previous technology:** 100W High Pressure Sodium

**New technology:** 60W Ultra Constant Discharge

**Fixture type:** 1 Lamp Cobra Head

**Height of posts:** 25ft

**Total lamp watts:** 100W (1 fixture per post x 100W)

**New total lamp watts:** 60W (1 fixture per post x 60W)

**Savings per post:** 40% - 40W (100-60) without taking into account ballast loss

51% - 63W (130-67) taking into account ballast loss

**Quote:** "The City of Merced is focused on reducing our environmental impact including reducing energy usage wherever possible. This technology produced a far superior quality of light, ensuring the safety of our citizens while providing significant energy savings."

Mr. Daryl Jordan, City Engineer

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Case studies:

## changing from **400W Metal Halide** to **120W UCD**

**Project:** Grupo Soriana Headquarters Parking Lot

**Location:** Monterrey, Nuevo Leon, Mexico

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** 4 shoebox fixtures per post

**Height of posts:** 21ft

**Total lamp watts:** 800W (2 fixtures per post x 400W)

**New total lamp watts:** 240W (2 fixtures per post x 120W)

**Savings per post:** 85% - 1,360W (1,600-240) without taking into account ballast loss

86% - 1,592W (1860-268) taking into account ballast loss

**Quote:** "In Grupo Soriana our top priority is the safety of our customers, and this type of illumination delivers a far superior quality of light with considerable energy cost savings."

Mr. Raul Ceballos, Vice President of Energy

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## changing from **400W Metal Halide** to **120W UCD**

**Project:** UANL Univeristy Orchestra & Philharmonic Parking Lot

**Location:** Campus Mederos, Monterrey, Nuevo Leon, Mexico

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constatnt Discharge

**Fixture type:** 2 shoebox fixtures per post

The upgrade entailed a change to only one shoebox per post

**Height of posts:** 21ft

**Total lamp watts:** 800W (2 fixtures per post x 400W)

**New total lamp watts:** 120W (1 fixture per post x 120W)

**Savings per post:** 85% - 680W (800-120) without taking into account ballast loss

86% - 796W (930-134) taking into account ballast loss

**Quote:** "We were able to drastically reduce our energy consumption related to lighting. Instead of having two shoeboxes per post, we now have only one."

Mr. Nicolas Gonzalez, Subdirector of Energy Efficiency for the Music Faculty

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## changing from **400W Metal Halide** to **120W UCD**

**Project:** San Pedro Garza Garcia County Tunnel Lights

**Location:** San Pedro Garza Garcia, Nuevo Leon, Mexico

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** tunnel lights

**Height of posts:** 12ft

**Total lamp watts:** 400W

**New total lamp watts:** 120W

**Savings per post:** 85% - 550W (800-120) without taking into account ballast loss

86% - 797W (930-133) taking into account ballast loss

**Quote:** “Due to the major change in lighting we were able to see the faces of the drivers & passengers in the cars, the true color of the cars, and the even details of the cars such as the license plates or whether they have expired tags. In addition, we believe we will be able to use just four 120W UCDs or eight 60W UCD tunnel lights to further increase our savings without compromising the light quality we gained by using UCD lights.”

Mr. Efrain Hernandez G., Technical Director of the Secretary of Public Services

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Case studies:

## changing from **400W Metal Halide** to **120W UCD**

**Project:** UANL Bilingual Highschool Parking Lot

**Location:** Campus Mederos, Monterrey, Nuevo Leon, Mexico

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** 2 shoebox fixtures per post

**Height of posts:** 21ft

**Total lamp watts:** 800W (2 fixtures per post x 400W)

**New total lamp watts:** 240W (2 fixtures per post x 120W)

**Savings per post:** 70% - 560W (800-240) without taking into account ballast loss

71% - 664W (930-266) taking into account ballast loss

**Quote:** "The light quality is much better than before, and there is no buzzing noise."

Mr. Felix Gonzalez, Director of Sustainability & Energy Savings for the UANL

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## changing from **400W Metal Halide** to **120W UCD**

**Project:** Pemex Gas Station

**Location:** Calzada Madero Cross with Guadalajara, Monterrey, Nuevo Leon, Mexico

**Previous technology:** 400W Metal Halide

**New technology:** 120W Ultra Constant Discharge

**Fixture type:** recessed canopy rectangular Metal Halide fixtures

**Height of posts:** 15ft

**Total lamp watts:** 400W (1 fixture per post x 400W)

**New total lamp watts:** 120W (1 fixture per post x 120W)

**Savings per post:** 70% - 280W (400-120) without taking into account ballast loss

71% - 331W (465-134) taking into account ballast loss

**Quote:** “As the price of electricity has increased, we have been looking for ways to reduce our consumption; one promising avenue was lighting. We are confident that we found the perfect solution with UCD because it delivers excellent light quality while complying with the stringent operating requirements imposed by the government for hazardous operating environments such as our gas stations.”

Mr. Filiberto Jimenez, Owner of Jimal Gas Stations Group

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