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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Case studies:

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

LUMIVERSAL

Case studies:

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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Case studies:

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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