

GREEN PAPERS

- Case Studies
- Payback Analysis
- Testimonials
- Proven Success





Project Name: Prime Publishers

Application: Office Building (11,000sqft)

Products: New construction. 100% LED lighting was installed. First All LED building in CT.

- A. 378 pieces of 17W 4' T8 LED tube light at 17W vs 32W florescent tube alternative.
- B. 39 pieces of 15W PAR38 recessed lights vs 26W R40 Florescent alternative .
- C. 43 pieces of 8W A19 bulbs vs 150W incandescent alternative.

Savings:

- A. Reduced energy consumption by 35,732 kw-hrs/year.
- B. Annual savings of \$6,835 per year.
- C. T8 ballast maintenance is eliminated. No more ballast replacement required.
- D. Investment payback 3.3 years.
- E. Total Savings over 50,000 hrs is \$102,525

Light Level : The project resulted in a lighting power density of 0.49 watts per sqft with an average 30 - 40 fc of light on the desk surface.



"LED is definitely the wave of the future for lighting technology. Our new 11,000 square foot headquarters is completely outfitted with USA LED lighting that uses 80 percent less wattage than incandescent and 40 percent less than fluorescent. This lighting includes T8 LED tube lights, PAR38LED recessed lights, and G70 LED lights. All of which is providing us with an exceptional 60% total savings in energy from what we used in our previous building. It's truly a fabulous saver of energy."

Rudy Mazurosky, CEO, Prime Publishers



USALED completed the first 100% LED building in the state of Connecticut.



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Project Name: Air Cargo Facility, LaGuardia Airport

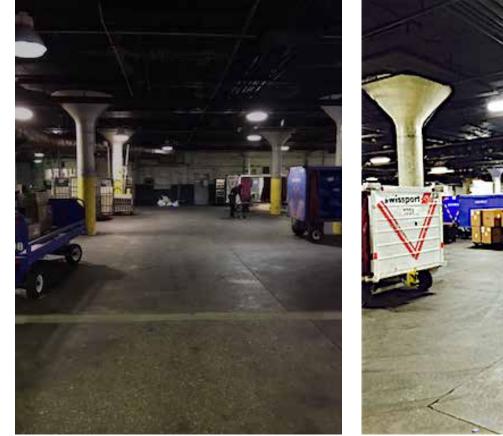
Products Installed:

- 66 pcs 79W Linear Led Highbay replacing 66 fixtures of 400W MH Highbay for cargo warehouse
- 123 pcs of 18W LED Light Bar repllacing 8 pcs of 32W 4 foot T8 linear fluorescent tubes for offices
- 5 pcs of 320W High Mast LED Flood Lights replacing 1000W MH for tarmac freight unloading
- 8 pcs of 120W LED Parking Lot lights replacing 400W MH for Employee Parking
- **Light Level:** Ft-Candles on the ground in the cargo warehouse 300% from 9 FC to 29 FC.

Total Savings:

• \$33,666 per year with 1.8 year payback. 72% power reduction.

Before: 400W MH



After: 79W LED 4 FT Linear

"Wow, what a difference. We were expecting an improvement but not to the extent we received. We now understand how inadequate our previous lighting was. It is a much more safe and efficient working environment. It is truly amazing that we can improve our work environment by implementing the LED upgrade and also benefit from a 70% energy savings which easily justifies the investment..." Brian Olcott, Regional Cargo Manager - Northeast



<u>Project Name:</u> Underground Fitness, Stamford, CT <u>Products Installed:</u>

 2 pcs 18W 4FT LED Tube light bar retrofit end to end replaced 2 pcs of 60W 8 FT T12 Fluorescent side by side.

Total Savings:

- \$11,914 per year with 1.1 year payback.
- Reduced lighting energy consumption by 65%
- LED Tube Light Bar qualified for a 40% Eversource incentive
- DLC Qualified



"The LED lights installed by USA LED are simply delightful. We had been searching for an energy savings upgrade for our 24 hour fitness facility for over 3 years. USA LED delivered! We are saving \$1,000 per month and have reduced lighting costs 65%. The new LED Tube light qualified for a 40% Eversource incentive and futher helps lower our investment payback to just over a year. Amazing! Most important however, the lighting is more uniform, non-flickering and bright without glare to offer our guests a more welcoming, comfortable experience during their workouts." Maurice Nizzardo, Owner



Project Name: Sandvik Manufacturing Products Installed:

- 235 pcs of DL-120-B 120W LED Highbay fixtures replacing 400W MH
- 1,035 pcs of 18W LED Tube lights replacing 32W T8 flourescent tubes in offices
- 36 pcs of LED parking lot and wall pack fixtures replacing various MH fixtures.

Total Savings:

- \$177,363 per year with 2.2 year payback.
- Reduced lighting energy consumption by 908,825 kw-hrs/year

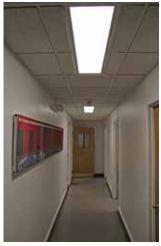
Light Level: Light Level measurements were taken in 10 locations before and after the lighting change. Actual measurements taken are shown in FC (foot-candles). Light levels increased an average of 58%. The lighting power density in the factory with the LED lighting is 0.45 LPD (watts per sqft).

<u>Area</u>	<u>Before</u>	<u>After</u>
1	32.4	52.3
2	31.8	49.8
3	42.6	54.1
4	29.8	48.2
5	38.0	56.7
6	14.3	45.2
7	30.2	49.6
8	36.4	53.8
9	34.4	52.3
10	36.4	54.4
Avg	32.6	51.7





"The LED lights installed by USA LED are a huge benefit to our operation at Sandvik. Our Operators appreciate the improvement in light quality due to the lower glare and higher light levels compared to our previous metal halide fixtures. Our electricians measured a 74% reduction in energy usage, saving more than \$14,700 per month with an investment payback under 2.2 years. A fantastic result for our company." Sandvik Engineer, Bethel, CT



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Project Name: Watertown Hyundai

<u>Application</u>: Parking Lot, Showroom, Offices, Repair area, Parts storage **<u>Total Savings</u>**:

- LED Energy Consumption vs Traditional : 76% Reduction
- LED Energy Savings: \$56,703 per year
- Simple Payback: 2.5 years
- Wireless Controls enabled 18% of the outdoor savings





"Watertown Hyundai's decision to install LED light at its new site made simple economic sense at 2.5 years payback. We are thrilled with the beauty and aesthetic appeal the LED light offer when illuminating our cars. It's amazing! Sales are Growing!" **Drew Miller, Watertown Hyundai, Business Development**





<u>Project Name</u>: Riker's Island Freezer Room (Operating at -13 Deg F) <u>**Products Installed**</u>:

• 25 pcs 79W Linear LED Highbay replacing 25 fixtures of 2 lamp, 8FT T12HO Fluorescent, 237W. Total Savings:

- \$7,776 per year with 1.4 year payback.
- Reduced lighting energy consumption by 88%

Light Level: Foot candles on the ground increased 7 times from 4 FC to 28 FC while benefitting from instant ON LED fixtures (in the -13 Deg F operating environment); enabling a reduction in operating hours.



BEFORE: 237W 8FT T12HO

AFTER: 79W LED 4FT Fixture



"The installed USA LED lights are fantastic. They are better than we hoped. After years of operating with insufficient illumination, we can finally see and read the labels on the racks. With the benefits of instant ON in our cold freezer, we can turn ON lights when actually needed rather than the long start-up time of our prior T12 lighting system. Our team is excited to know the design life of the new LED lighting system is 16 years in our cold freezers. USA LED has truely added operational value to our workspace." **Martin Edelman, Storage Room Managemennt, Riker's Island DOC**

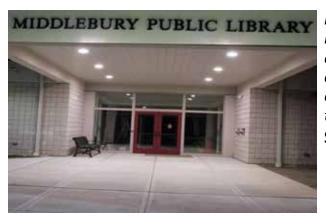


Project Name: Middlebury Library

Application: LED Tube Lights, LED recessed lights, LED Parking Lot Lights **Total Savings:**

- Energy Savings of \$5,121 per year
- Reduced lighting energy consumption by 51% vs conventional lighting
- Energy reduction of 32,005 kw/hr per year
- Relamping savings of \$495 per year
- Total savings of \$102,420





"The energy efficient LED lighting installed in the newly renovated Middlebury library is fantastic. The illumination quality is bright and inviting. Visitors experience a comfortable environment with non flickering lights for easy reading. The library will further enjoy further electrical savings at over 51% and maintenance free operation for well over 10 years" **Scott Schaake, USA LED**



<u>Project Name</u>: R.D. Scinto Parking Lot and Parking Garage, Shelton, CT <u>Products Installed</u>:

240W LED replacing 1000W MH, 120W LED replacing 400W MH, 93W LED replacing 250W MH, 67W LED replacing 175W MH, 23W Induction replacing 100W MH, Side arm mounting with 1,2,3 and 4 Heads/ poles and Spider Style Post Top Mounting. 18W 4FT T8 LED tube replacing 32W flourescent tube in Vapor Tight Fixtures. 191 Pole fixtures and 2000 LED tubes.

Total Savings:

- Reduced energy consumption by 487,260 kw/hrs per year
- Energy savings of \$77,962 per year
- Relamping savings of \$14,207 per year
- Investment payback of 3.2 years
- Total savings over investment life is \$1,029,309



"R.D. Scinto is excited about our new retrofit LED parking lot and parking garage lighting ate our Corporate Dr / Enterprise Dr Complex. The Lighting provided by USA LED is excepttional. The daytime fixture appearance has a high end architectural appeal and blends well with our campus. The light quality at night is fantastic. The fixtures provide a more uniform wide spread light with increased Foot Candle levels. Our parking lotd and garages are well lit and will not require maintenance for several years. USA LED provided dilligent service to see this comprehensive project through to completion. Of course we are very, very pleased with the project savings of over \$75,000 per year, and project savings of over \$1,000,000 over the project liftime." Joe Delco, VP Property Mgmt





67W Spider Mount





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Application: Multi-Family Common Areas operating 24/7 – Algin Properties, NYC

Products Installed: 6 Property Locations, Hallways, Stairwells, Parking Garages, Facilities areas

Savings:

- Energy reduction of 570,172 kw-hrs/year, a 59% reduction.
- Annual savings of \$128,814 per year.
- Utility Incentive \$135,266
- Investment payback in 2.0 Years
- Total Savings over investment life \$790,104



"The updated energy efficient LED fixtures are a welcome addition to the family of Algin Properties multifamily facilites. USALED provided excellent solutions to our strict lighting requirements and managed a complex installation across 6 different locations. Of course we are pleased with the annual savings of over \$120,000 and a payback of 2 years." Dan Hochstadt, Algin Property Manager



Application: Multi-Family Common Areas operating 24/7 – Woodstock Tower, NYC

Products Installed: 34 floors of Stairwells, Hallways, Lobby, Facilities areas

<u>Savings:</u>

- Energy reduction of 172,695 kw-hrs/year, a 70% reduction.
- Annual savings of \$43,277 per year.
- ConEd Incentive \$19,142
- Cost of Project less ConEd incentive \$33,140
- Investment payback in 0.76 Years
- Investment Life 5 Years
- Total Savings over investment life \$216,385





10W 2 FT and 18W 4 FT LED tube lights, DLC Certified



7W G24 LED PL Lamps, UL Certified in Hallway ceiling dome fixtures



4W LED Candelabra in Lobby Chandeliers and sconces

"USA LED Delivered. The Fixture retrofits look the same or better than with the previous fluorescent and incandescent lamps. Our coop board is every pleased with the \$43,277 energy savings, less maintenance and the phenomenal payback on our investment of under 1 year!" **Leo Pignataro, resident and board member**

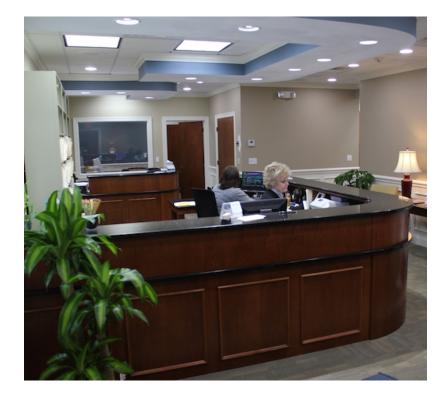


Application:Dentist Office – New ConstructionProducts Installed:T8 LED 2 ft tubes – 8WLED BR40 – 18WT8 LED 4 ft tubes – 18WLED PAR38 – 18W

Savings:

- Energy reduction of 16,200 kw-hrs/year, a 65% reduction vs conventional lighting.
- Energy savings of \$3,700 per year.
- Relamping savings of \$1,108.
- Investment payback in 3.6 years.
- Total Savings over 50,000 hrs is \$49,416

Illumination: 5000K CCT was used to offer daylight color for optimal tooth colormatching





"Our office is unique. We installed the latest dental technology to offer our customers the highest quality of service in a comfortable atmosphere. The LED lights were critical to establishing a relaxing feeling while enabling optimal color matching conditions for tooth color selections. We are excited to have such results, all while saving \$4,808 per year due to the low energy consumption of our LED lights.

Dr. Kest







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