



Project Summary

Hank Graff Chevrolet in Davison, Michigan recently installed over 150 Relume parking lot and wall pack fixtures and improved the overall quality of light and security of their dealership. In addition to the improved performance and quality of light, Graff reduced energy use by over 80% and qualified for an energy efficient incentive from Consumer's Energy that resulted in a simple payback from the investment of only 3.3 years.

End User: Hank Graff Chevrolet Dealership, Davison, Michigan

Application: Auto Dealer Parking Lot Lighting

Products:

- Relume large and small parking lot fixtures
- Relume large floods
- Relume wall packs

Benefits:

- \$58,658 annual savings
- 15-20 year lifespan of new LED light engines vs. 3-4 year lifespan of traditional fixtures
- 82% reduction in energy use of prior MH lighting
- Estimated 3.3 year payback
- Less light trespass
- Better color rendition for enhanced product visibility
- Greater parking lot safety

Project Overview

By specifying high quality, energy efficient LED lighting fixtures by Relume, Graff qualified for an energy efficiency incentive from Consumer's Energy which helped to offset 15% of the upfront capital costs of the project. The incentive combined with an energy savings of 82% resulted in a simple payback of 3.3 years.

The Relume design staff worked hand in hand with Graff to ensure that the resulting quality of light would be improved. The project primarily entailed replacing the existing (2) 1000 watt metal halide fixtures on each pole with (3) newly developed highly efficient Relume 140 watt LED parking lot fixtures. In addition to the parking lot, all of the perimeter lighting around the buildings was replaced with Relume LED flood and wall pack fixtures.



Project Overview
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“In the end, a better visual experience for customers was achieved, the cars showed better, and the parking lot has a better appearance with more uniform lighting and improved security at night,” said Crawford Lipsey, Relume CEO.

“The light levels are similar to our old lights but the colors just pop so much more, the flakes stand out. The cars look so much better under the Relume lights than the old fashioned lights. We get lots of compliments,” said Chris Graff, Owner.

Cost Analysis



Annual LED Life-Cycle Cost Analysis

Existing Fixtures

Fixture	Number	Energy Use (kWh)	Cost/Unit	Total Cost
Pole Top	98	473,237	\$ 0.110	\$ 52,056
Mid Pole Floods	20	40,954	0.110	4,505
Wall Packs & Floods on Buildings	20	27,185	0.110	2,990
Total Costs for Period				\$ 59,551

Relume LED Fixtures

Fixture	Number	Energy Use (kWh)	Cost/Unit	Total Cost
Pole Top Fixtures	136	81,484	\$ 0.110	\$ 8,963
Mid Pole Fixtures	20	7,154	0.110	787
Wall Packs & Floods on Buildings	28	6,550	0.110	721
Total Costs for Period				\$ 10,471

Savings

	Savings
Maintenance Savings	\$ 10,000
Energy Savings	49,050
Total Savings LED Fixtures	\$ 59,050

Using Relume LED fixtures saves 81.71% in energy costs and additional maintenance savings for a payback of 3.3 years.