



**Case No.:** 12-2474 -EL-EEC

**Mercantile Customer:** **Rookwood Commons and Pavilion**

**Electric Utility:** **Duke Energy**

**Program Title or  
Description:** **Lighting**

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. [10-834-EL-POR](#)

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at [ee-pdr@puc.state.oh.us](mailto:ee-pdr@puc.state.oh.us).

## Section 1: Mercantile Customer Information

Name: **Rookwood Commons and Pavilion**

Principal address: **3805 Edwards Road Suite 700 Cincinnati, Ohio 45209**

Address of facility for which this energy efficiency program applies:

**2601 Edmondson Rd Cincinnati Oh 45209 (Commons)**  
**2692 Madison Rd Cincinnati Ohio 45208 (Pavilion)**

Name and telephone number for responses to questions:

**Grady Reid Jr 513-287-1038**

Electricity use by the customer (check the box(es) that apply):

- The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (**Refer to Appendix A for documentation.**)
- The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

## Section 2: Application Information

A) The customer is filing this application (choose which applies):

- Individually, without electric utility participation.
- Jointly with the electric utility.**

B) The electric utility is: **Duke Energy**

C) The customer is offering to commit (check any that apply):

- Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)**
- Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)

### Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (check those that apply):

- Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)).  
**Customer completed retrofit in April and May of 2012 using energy efficient lighting**
- Installation of new equipment to replace equipment that needed to be replaced The customer installed new equipment on the following date(s):  
\_\_\_\_\_.
- Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s):  
\_\_\_\_\_.
- Behavioral or operational improvement.

B) Energy savings achieved/to be achieved by the energy efficiency program:

- 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: **127,377 kWh**

**Refer to Appendix B for calculations and supporting documents**

- 2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: \_\_\_\_\_kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 3) If you checked the box indicating that the project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: \_\_\_\_\_kWh

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment.

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.
-

## Section 4: Demand Reduction/Demand Response Programs

- A) The customer's program involves (check the one that applies):
- Coincident peak-demand savings from the customer's energy efficiency program.
  - Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
  - Potential peak-demand reduction (check the one that applies):
    - The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
    - The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.
- B) On what date did the customer initiate its demand reduction program?
- C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

\_\_\_\_ kW

## **Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)**

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

**Option 1: A cash rebate reasonable arrangement.**

OR

Option 2: An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.

OR

Commitment payment

B) The value of the option that the customer is seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

A cash rebate of **\$5,143.00. Refer to Appendix C for documentation.**

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for \_\_\_\_\_ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

A commitment payment valued at no more than \$\_\_\_\_\_. (Attach documentation and

calculations showing how this payment amount was determined.)

OR

- Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

### Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- Total Resource Cost (TRC) Test. The calculated TRC value is: \_\_\_\_\_  
(Continue to Subsection 1, then skip Subsection 2)
- ✓ Utility Cost Test (UCT) . The calculated UCT value is **4.62**  
**Refer to Appendix D for calculations**

#### Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were \_\_\_\_\_.

Our program costs were \_\_\_\_\_.

The incremental measure costs were \_\_\_\_\_.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were **\$37,975**.

The utility's program costs were **\$3,071**.

The utility's incentive costs/rebate costs were **\$5143**.

**Refer to Appendix D for calculations and supporting documents.**

### **Section 7: Additional Information**

Please attach the following supporting documentation to this application:

Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.

A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;
- 2) a description of any consequences of noncompliance with the terms of the commitment;
- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
- 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

#### **Refer to Offer Letter following this application**

A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.





DUKE ENERGY  
Mercantile Self Direct Program  
139 East Fourth Street  
Cincinnati, OH 45202  
513 629 5572 fax

August 23, 2012

Ms. Michelle Pennington  
Rookwood Commons and Rookwood Pavilion  
3805 Edwards Road Suite 700  
Cincinnati, Ohio 45209

Subject: Your Application for a Duke Energy Mercantile Self-Direct Rebate

Dear Ms. Pennington:

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page three, a total rebate of \$5143.00 has been proposed for your lighting projects completed in the 2012 calendar year. **All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).**

At your earliest convenience, please indicate if you accept this rebate by

- providing your signature on page two
- completing the PUCO-required affidavit on page four.

Please return the documents to my attention via fax at 513-629-5572 or e-mail to SelfDirect@Duke-Energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

At Duke Energy, we value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart \$aver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Grady Reid, Jr.'.

Grady Reid, Jr  
Product Manager  
Mercantile Self Direct Rebates

cc: Rob Jung, WECC  
Jeff Rubin, Power Patriots, LLC

Please indicate your response to this rebate offer within 30 days of receipt.

Rebate is accepted.

Rebate is declined.

By accepting this rebate, Rookwood Commons and Rookwood Pavilion affirms its intention to commit and integrate the energy efficiency projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.

Additionally, Rookwood Commons and Rookwood Pavilion also agrees to serve as joint applicant in any future filings necessary to secure approval of this arrangement as required by PUCO and to comply with any information and reporting requirements imposed by rule or as part of that approval.

Finally, Rookwood Commons and Rookwood Pavilion affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Information in question would include, but not be limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

If rebate is accepted, will you use the monies to fund future energy efficiency and/or demand reduction projects?

YES

NO

If rebate is declined, please indicate reason (optional):

  
Customer Signature

Mandy Herz  
Printed Name

8-23-12  
Date

### Proposed Rebate Amounts

Measure ID	Energy Conservation Measure (ECM)	Proposed Rebate Amount
ECM-1	Acct 0920 - 2187 03 Rookwood Commons – Change Metal Halide Lighting from 175W to 100W (Qty – 27)	\$459.00
ECM-2	Acct 36902189 02 Rookwood Commons - Change Metal Halide Lighting from 175W to 100W (Qty – 19)	\$323.00
ECM-3	Acct 71302182 02 Rookwood Commons - Change Metal Halide Lighting from 1000W to 775W (Qty – 14)	\$630.00
ECM-4	Acct 84102185 03 Rookwood Commons - Change Metal Halide Lighting from 1000W to 775W (Qty – 47)	\$2115.00
ECM-5	Acct 91402187 02 Rookwood Commons - Change Metal Halide Lighting from 175W to 100W (Qty – 12)	\$204.00
ECM-6	Acct 97502187 04 Rookwood Commons - Change Metal Halide Lighting from 1000W to 775W (Qty – 3)	\$135.00
ECM-7	Acct 47502049 02 Rookwood Pavilion - Change Metal Halide Lighting from 175W to 100W (Qty – 16)	\$272.00
ECM-8	Acct 47502049 02 Rookwood Pavilion – Change Halogen Lighting to Induction Lighting (Qty – 2)	\$150.00
ECM-9	Acct 97802009 02 Rookwood Pavilion - Change Metal Halide Lighting from 1000W to 775W (Qty – 19)	\$855.00
Total		\$5143.00



**Public Utilities  
Commission**

**Application to Commit  
Energy Efficiency/Peak  
Demand Reduction  
Programs  
(Mercantile Customers  
Only)**

Case No.: \_\_\_\_ - \_\_\_\_ -EL-EEC

State of Ohio :

Mindy Heizer, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

CLP SPF Rockwood Commons, LLC and CLP SPF Rockwood Park, LLC  
[insert customer or EDU company name and any applicable name(s) doing business as]

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

3. I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.

Mindy Heizer Agent in Charge  
Signature of Affiant & Title

Sworn and subscribed before me this 23 day of August,  
2012 Month/Year

Kimberlea Ramsey  
Signature of official administering official



Notary Public State of Ohio  
Print Name and Title  
Kimberlea Ramsey  
Notary Public, State of Ohio  
My Commission Expires 11-11-2012

My commission expires on \_\_\_\_\_

Appendix A Billing History

92002188 04		
CLP-SPF ROOKWOOD TOWERS LL		
3805 EDWARDS RD		
CINCINNATI, OH 45209		
Date	Days	Actual KWH
7/20/2012	30	357,726
6/20/2012	30	331,364
5/21/2012	31	319,591
4/20/2012	30	315,192
3/21/2012	29	294,001
2/21/2012	29	279,413
1/23/2012	34	315,258
12/20/2011	32	301,918
11/18/2011	29	288,591
10/20/2011	29	302,762
9/21/2011	30	353,012
8/22/2011	31	399,120
<b>Total</b>		<b>3,857,948</b>

Appendix B –Rookwood (Commons and Pavilion) Lighting Energy Savings Achieved

**Self Direct Custom**

As-Found Equipment	Equipment Wattage	Annual Operating Hours	Annual kWh	New Equipment	Equipment Wattage	Annual Operating Hours	Annual kWh	Energy Savings (kWh each)
Metal Halide	1000W	4368	4717	Metal Halide	775W	4368	3691	1026
Metal Halide	175W	4368	939	Metal Halide	100W	4368	546	393
Quartz Halogen	500W	4368	2184	Induction	108W	4368	472	1712

Quantity	Total Energy Savings (kWh) AT THE METER <sup>1</sup>
83	85,158
74	29,082
2	3,424
<b>Total - 159</b>	<b>Total - 117,664</b>

Inclusion of 7.43% line losses yields **126,903 kWh** saved at the plant. This value also includes insignificant rounding error due to the mode of analysis used to model the project in DSMore software.

Note, these fixtures operate overnight and do not affect summer coincident peak demand.

**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
 MSD

Rev.  
 State

0  
 OH

Note: all data from "Rookwood Commons Part2-Custom-Lighting-App.xls", except as otherwise noted

4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
1	MH 1000 w	47	1,080	1.080	50.8	221,720	MH 775W V90D9610/24	47	845	0.845	39.7	173,475	11.0	48,245		\$ 272.72
	<b>Totals</b>	<b>47</b>			<b>50.8</b>	<b>221,720</b>		<b>47</b>			<b>39.7</b>	<b>173,475</b>	<b>11.0</b>	<b>48,245</b>	\$ -	\$ 272.72

**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
 MSD

Rev.  
 State

0  
 OH

Note: all data from "Rookwood Commons Part2-Custom-Lighting-App.xls", except as otherwise noted

4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
2	MH 1000 w	14	1,080	1.080	15.1	66,044	MH 775W V90D9610/24	14	845	0.845	11.8	51,673	3.3	14,371		\$ 272.72
	<b>Totals</b>	<b>14</b>			<b>15.1</b>	<b>66,044</b>		<b>14</b>			<b>11.8</b>	<b>51,673</b>	<b>3.3</b>	<b>14,371</b>	\$ -	\$ 272.72



**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
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Rev.  
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0  
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4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
3	MH 1000 w	3	1,080	1.080	3.2	14,152	MH 775W V90D9610/24	3	845	0.845	2.5	11,073	0.7	3,079		\$ 272.72
	<b>Totals</b>	<b>3</b>			<b>3.2</b>	<b>14,152</b>		<b>3</b>			<b>2.5</b>	<b>11,073</b>	<b>0.7</b>	<b>3,079</b>	\$ -	\$ 272.72

**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
 MSD

Rev.  
 State

0  
 OH

Note: all data from "Rookwood Commons Part2-Custom-Lighting-App.xls", except as otherwise noted

4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
4	MH 175 w	27	215	0.215	5.8	25,356	MH V90D9610/24	27	125	0.125	3.4	14,742	2.4	10,614		\$ 272.72
<b>Totals</b>		<b>27</b>			<b>5.8</b>	<b>25,356</b>		<b>27</b>			<b>3.4</b>	<b>14,742</b>	<b>2.4</b>	<b>10,614</b>	\$ -	\$ 272.72

**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
 MSD

Rev.  
 State

0  
 OH

Note: all data from "Rookwood Commons Part2-Custom-Lighting-App.xls", except as otherwise noted

4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
5	MH 175 w	19	215	0.215	4.1	17,843	MH V90D9610/24	19	125	0.125	2.4	10,374	1.7	7,469		\$ 272.72
<b>Totals</b>		<b>19</b>			<b>4.1</b>	<b>17,843</b>		<b>19</b>			<b>2.4</b>	<b>10,374</b>	<b>1.7</b>	<b>7,469</b>	\$ -	\$ 272.72

**LIGHTING CALCULATIONS for ECM #**  
**JAN 2012 V1**

1

Salesforce Opportunity Name  
 Project Name

Rookwood Commons - Lighting  
 Rookwood Commons - Lighting

Application #

12-450  
 MSD

Rev.  
 State

0  
 OH

Note: all data from "Rookwood Commons Part2-Custom-Lighting-App.xls", except as otherwise noted

4,368 hr/yr operation - before implementation  
 4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
6	MH 175 w	12	215	0.215	2.6	11,269	MH V90D9610/24	12	125	0.125	1.5	6,552	1.1	4,717		\$ 272.72
<b>Totals</b>		<b>12</b>			<b>2.6</b>	<b>11,269</b>		<b>12</b>			<b>1.5</b>	<b>6,552</b>	<b>1.1</b>	<b>4,717</b>	\$ -	\$ 272.72

**LIGHTING CALCULATIONS for ECM #**

**1**

**JAN 2012 V1**

Salesforce Opportunity Name

Rookwood Pavilion- Lighting

Application # 12-451 MSD

Rev. 0

Project Name

Rookwood Pavilion- Lighting

State OH

Note: all data from the "Rookwood Pavilion Part2-Custom-Lighting-App b.xls" file, except as otherwise noted. Revisions are highlighted in yellow.

4,368	hr/yr operation - before implementation
4,368	hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
1	MH 1000 w	19	1,080	1.080	20.5	89,631	MH 775W V90D9610/249	19	845	0.845	16.1	70,128	4.5	19,503		\$ 330.41
	<b>Totals</b>	<b>19</b>			<b>20.5</b>	<b>89,631</b>		<b>19</b>			<b>16.1</b>	<b>70,128</b>	<b>4.5</b>	<b>19,503</b>	\$ -	\$ <b>330.41</b>

**LIGHTING CALCULATIONS for ECM #**

**1**

**JAN 2012 V1**

Salesforce Opportunity Name Rookwood Pavilion- Lighting  
 Project Name Rookwood Pavilion- Lighting

Application # 12-451 MSD

Rev. 0  
 State OH

Note: all data from the "Rookwood Pavilion Part2-Custom-Lighting-App b.xls" file, except as otherwise noted. Revisions are highlighted in yellow.

4,368 hr/yr operation - before implementation  
4,368 hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
2	MH 175 w	16	215	0.215	3.4	15,026	MH V905932/951	16	125	0.125	2.0	8,736	1.4	6,290		\$ 330.41
	<b>Totals</b>	<b>16</b>			<b>3.4</b>	<b>15,026</b>		<b>16</b>			<b>2.0</b>	<b>8,736</b>	<b>1.4</b>	<b>6,290</b>	\$ -	\$ <b>330.41</b>

**LIGHTING CALCULATIONS for ECM #**

**1**

**JAN 2012 V1**

Salesforce Opportunity Name

Rookwood Pavilion- Lighting

Application # 12-451 MSD

Rev. 0

Project Name

Rookwood Pavilion- Lighting

State OH

Note: all data from the "Rookwood Pavilion Part2-Custom-Lighting-App b.xls" file, except as otherwise noted. Revisions are highlighted in yellow.

4,368	hr/yr operation - before implementation
4,368	hr/yr operation - after implementation

Site ID	Existing						Proposed						Savings		Other Annual Savings	Incremental Implementation Costs per fixture
	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	Fixture	Qty	Watts per fixture	kw per fixture	total kw	kw-hr/yr	kw	kw-hr/yr		
3	Qtz Halogen	2	500	0.500	1.0	4,368	Induction MHTWP100E	2	108	0.108	0.2	943	0.8	3,425		\$ 330.41
<b>Totals</b>		<b>2</b>			<b>1.0</b>	<b>4,368</b>		<b>2</b>			<b>0.2</b>	<b>943</b>	<b>0.8</b>	<b>3,425</b>	<b>\$ -</b>	<b>\$ 330.41</b>

**Appendix C -Rookwood Commons and Pavilion Cash Rebate Calculation**

**Lighting**

<b>Measure</b>	<b>Quantity</b>	<b>Cash Rebate Rate</b>	<b>Rebate</b>	<b>Cash Rebate</b>
Metal Hilade 1000W to Metal Hilade 775W	83	50% of incentive that would be offered by the Smart \$aver Custom program	\$45	<b>\$3,735</b>
Metal Hilade 175W to Metal Hilade 100W	74	50% of incentive that would be offered by the Smart \$aver Custom program	\$17	<b>\$1,258</b>
Metal Hilade 500W to Induction 108W	2	50% of incentive that would be offered by the Smart \$aver Custom program	\$75	<b>\$150</b>
<b>Totals</b>	<b>159</b>		<b>Total</b>	<b>\$5,143</b>



**Appendix D Rookwood Commons and Pavilion Lighting -UCT Value**

***Lighting***

<b>Measure</b>	<b>Total Avoided Cost</b>	<b>Program Cost</b>	<b>Incentive</b>	<b>Quantity</b>	<b>Measure UCT</b>
Metal Hilade 1000W to Metal Hilade 775W	\$331	\$27	\$45	83	<b>4.60</b>
Metal Hilade 175W to Metal Hilade 100W	\$127	\$10	\$17	74	<b>4.70</b>
Metal Hilade to Induction	\$552	\$45	\$75	2	<b>4.60</b>
<b>Totals</b>	<b>\$37,975</b>	<b>\$3,071</b>	<b>\$5,143</b>	<b>159</b>	

Total Avoided Supply Costs	\$37,975			<i>UCT</i>	<b>4.62</b>
Total Program Costs	\$3,071				
Total Incentive	\$5,143				

**Appendix D Rookwood Commons and Pavilion Lighting -UCT Value**

***Lighting***

<b>Measure</b>	<b>Total Avoided Cost</b>	<b>Program Cost</b>	<b>Incentive</b>	<b>Quantity</b>	<b>Measure UCT</b>
Metal Hilade 1000W to Metal Hilade 775W	\$331	\$27	\$45	83	<b>4.60</b>
Metal Hilade 175W to Metal Hilade 100W	\$127	\$10	\$17	74	<b>4.70</b>
Metal Hilade to Induction	\$552	\$45	\$75	2	<b>4.60</b>
<b>Totals</b>	<b>\$37,975</b>	<b>\$3,071</b>	<b>\$5,143</b>	<b>159</b>	

Total Avoided Supply Costs	\$37,975			<i>UCT</i>	<b>4.62</b>
Total Program Costs	\$3,071				
Total Incentive	\$5,143				

# Ohio Mercantile Self Direct Program

Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account
- multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
84102185 03	221269	36902189 02	17093
71302182 02	68961	91402187 02	11490
97502187 04	14613		
0902187 03	25466		

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input checked="" type="checkbox"/> Proof of payment.*	<input checked="" type="checkbox"/> Manufacturer's Spec sheets	<input checked="" type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
--	--	--	---

\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input checked="" type="checkbox"/> Custom Lighting Worksheet <input checked="" type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Air Compressors	MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Chiller Tune-ups	MSD Prescriptive Chiller Tune-ups <input type="checkbox"/>		
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



Proposed energy efficiency measures may be eligible for Self-Direct Custom rebates if they clearly reduce electrical consumption and/or demand as compared to the appropriate baseline.

Before you complete this application, please note the following important criteria:

- Submitting this application does not guarantee a rebate will be approved.
- Rebates are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Incomplete applications cannot be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, beginning on page 6.

## Notes on the Application Process

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact your Duke Energy Ohio, Inc account manager or the Duke Energy Smart \$aver® team at 1-866-380-9580.

Every application must include calculations of the baseline electrical usage and the electrical usage of the proposed high-efficiency equipment/system. Monthly calculations are best. You, the Duke Energy Ohio customer, or your equipment vendor / engineer should perform these calculations and submit them to Duke Energy for review. *We strongly encourage the use of modeling software (such as eQuest or comparable) for complex projects.*

Upon receipt of your application, an acknowledgement email will be sent to you with an estimated response time based on an initial assessment of your application. The application review may include some communication to resolve any questions about the project or to request additional information. Applications that are received complete without missing information have a faster review time.

There are two ways to submit your completed application.

Email your scanned form to: [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com)

Or, fax your form to 513-419-5572

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**1. Contact Information (Required)**

Duke Energy Customer Contact Information					
Company Name	CPL-SPF Rookwood Commons				
Address	2601 Edmonson Rd				
Project Contact	Michele Pennington				
City	Cincinnati	State	OH	Zip Code	45209
Title	Property Manager				
Office Phone	513-366-3522	Mobile Phone		Fax	
E-mail Address	mpennington@anderson-realestate.com				

Equipment Vendor / Contractor / Architect / Engineer Contact Information					
Company Name	Power Patriots, LLC				
Address	779 Commerce Drive Suite 3				
City	Venice	State	FL	Zip Code	34292
Project Contact	Jeff Rubin				
Title	Controller				
Office Phone	941-375-8267	Mobile Phone	941-928-6636	Fax	941-375-8328
E-mail Address	jeff.rubin@powerpatriots.com				
Describe Role	Financial Controller				

Payment Information					
Payee Legal Company Name (as shown on Federal income tax return):	CPL-SPF Rookwood Commons				
Mailing Address	3805 Edwards Rd., Suite 700				
City	Cincinnati	State	OH	Zip Code	45209
Type of organization (check one) <input type="checkbox"/> Individual/Sole Proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Unit of Government <input type="checkbox"/> Non-Profit (non-corporation)					
Payee Federal Tax ID # of Legal Company Name Above:	20-8327078				
Who should receive incentive payment? (select one) <input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor (Customer must sign below)					
If the vendor is to receive payment, please sign below: I hereby authorize payment of incentive directly to vendor:					
Customer Signature _____ Date ____/____/____ (mm/dd/yyyy)					

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**2. Project Information (Required)**

- A. Please indicate project type:
- New Construction
  - Expansion at an existing facility
  - Replacing equipment due to equipment failure
  - Replacing equipment that is estimated to have remaining useful life of 2 years or less
  - Replacing equipment that is estimated to have remaining useful life of more than 2 years
  - Behavioral, operational and/or procedural programs/projects
- B. Please describe your project, or attach a detailed project description that describes the project.  
Retrofit outdoor lighting fixtures. See detailed project description attached.
- C. When did you start and complete implementation?  
Start date 02/2012 (mm/yyyy) End date 04/2012 (mm/yyyy)
- D. Are you also applying for Self-Direct Prescriptive incentives and, if so, which one(s)<sup>1</sup>?  
no
- E. Please indicate which worksheet(s) you are submitting for this application (check all that apply):
- Lighting
  - Variable Frequency Drive (VFD)
  - Compressed Air
  - Energy Management System (EMS)
  - General (for projects not easily submitted using one of the above worksheets)
- F. Please tell us if there is anything about your electrical energy projections (either for the baseline or the proposed project) that you are either unsure about or for which you have made significant assumptions. Attach additional sheets as needed.

Required: Attach a supplier or contractor invoice or other equivalent information documenting the Implementation Cost for each project listed in your application. (Note: self-install costs cannot be included in the Implementation Cost)

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<sup>1</sup> If your project involves some equipment that is eligible for prescriptive incentives and some equipment that is likely eligible for custom incentives, and if it is feasible to separate the equipment for the energy analysis, then the equipment will be evaluated separately. If it is not feasible to separate the equipment for analysis, then the equipment will be evaluated together in the custom application.

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**3. Signature (Required – must be signed by Duke Energy customer)**

**Customer Consent to Release of Personal Information**

I, (insert name) CLP-SPF Rookwood Commons LLC, do hereby consent to Duke Energy disclosing my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number to its subcontractors solely for the purpose of administering Duke Energy Ohio's Mercantile Self-Direct Program. I understand that such subcontractors are contractually bound to otherwise maintain my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number in the strictest of confidence.

I realize that under the rules and regulations of the public utilities commission, I may refuse to allow Duke Energy Ohio, Inc to release the information set forth above. By my signature, I freely give Duke Energy Ohio, Inc permission to release the information designated above.

**Application Signature**

I certify that I meet the eligibility requirements of the Duke Energy Ohio, Inc Mercantile Self Direct Custom Incentives Program and that all information provided within this application is correct to the best of my knowledge. I agree to the terms and conditions set forth for this program. I certify that the numbers, energy savings, and responses shown on this form are correct. Further, I certify that the taxpayer identification number is current and correct. I am not subject to backup withholding because: (a) I am exempt from backup withholding; or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends; or (c) the IRS has notified me that I am no longer subject to backup withholding. I am a U.S. citizen (includes a U.S. resident alien).

Mindy Heizer  
Duke Energy Ohio, Inc Customer Signature

Print Name Mindy Heizer, Agent for Owner

Date 7/23/2012



**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**Checklist for completing the Application**

INCOMPLETE APPLICATIONS WILL RESULT IN DELAYS IN DUKE ENERGY PROCESSING YOUR APPLICATION AND NOTIFYING YOU CONCERNING ANY REBATES. Before submitting the application and the required supplementary information, use the following checklist to ensure that your application is complete and the information in the application is accurate. (Note: this checklist is for your use only – do not submit this checklist with your application)

Section No. & Title	Have You:
1. Contact Information	<input checked="" type="checkbox"/> Completed the contact information for the Duke Energy customer? <input checked="" type="checkbox"/> Completed the contact information for the equipment vendor / project engineer that can answer questions about the technical aspects of the project, if that is a different person than above?
2. Project Information	<input checked="" type="checkbox"/> Answered the questions A-E, including providing a description of your project. <input checked="" type="checkbox"/> Completed and attached the lighting, compressed air, VFD, EMS and/or General worksheet(s)?
3. Signature	<input checked="" type="checkbox"/> Signed your name? <input checked="" type="checkbox"/> Printed your name? <input checked="" type="checkbox"/> Entered the date?
Supplementary information (Required)	<input checked="" type="checkbox"/> Attached a supplier or contractor's invoice or other equivalent information documenting the Implementation Cost for projects listed in your application? (Note: self-install costs cannot be included in the Implementation Cost) <input checked="" type="checkbox"/> (If submitting the General Worksheet) attached calculations documenting the energy usage and energy savings for <b>each</b> project listed in your application?

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact:

- your Duke Energy account manager
- or,
- the Duke Energy Smart \$aver® team at 1-866-380-9580.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



## Instructions/Terms/Conditions

Note: Please keep for your records- do not submit with the application

1. Energy service companies or contractors may assist in preparing the application, but an authorized representative of the customer must sign this application to be eligible to participate in the Mercantile Self Direct Program. Completion of this application does not guarantee the approval of a Self Direct Custom Rebate.
2. Once all documentation requested in this application is received by *Duke Energy Ohio, Inc*, and any follow-up information requested by *Duke Energy* is received, the rebate amount for each Energy Conservation Measure (ECM) will be communicated to the customer. The rebate amount will be based on ECM energy savings and ECM incremental installation cost.
3. All rebates require approval by the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* will submit an application for rebate on the customer's behalf upon customer attestation to program terms, conditions and requirements as outlined in the rebate offer letter and upon customer completion of attestation documents required by the Public Utilities Commission of Ohio.
4. *Duke Energy Ohio, Inc* will issue a Self Direct Custom Rebate check, based on the approved rebate amount for each ECM, upon receiving approval from the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* does not guarantee PUCO approval.
5. With the application, the customer must provide a list of all sites where the ECMs were installed. *Duke Energy Ohio, Inc* requests that sites of similar size, hours of operation and energy consuming characteristics be grouped together in one application for the determination of the rebate amount. The application should identify the site where each unique ECM was installed.
6. Based on the information submitted with the application and the information gathered both before and after the initial installation of the ECM, *Duke Energy Ohio, Inc* will calculate the rebate amount for each ECM.
7. *Duke Energy Ohio, Inc* may conduct random site inspections of a sample of the locations where the ECMs are installed to verify installation and operability of the ECMs and to obtain information needed to calculate the Approved Incentive Amount.
8. Customers are encouraged to retain copies of all forms, invoices and supporting documentation for their records.
9. Approved rebates are valid for 6 months from the date communicated to the customer by *Duke Energy Ohio, Inc*, subject to the expiration of measure eligibility based on project completion dates and application submission deadlines as defined by PUCO. Customers are encouraged to execute their rebate offer contracts and PUCO-required affidavits promptly to ensure eligibility is not forfeited.

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



10. *Duke Energy Ohio, Inc* reserves the right to recover all unrecoverable costs associated with the project approval if the customer decides not to execute the rebate contract, after the project is approved by *Duke Energy Ohio, Inc*.
11. Projects financially supported by other funding sources will be evaluated on a case-by-case basis for potential partial funding from *Duke Energy Ohio, Inc*.
12. Participants must be *Duke Energy Ohio, Inc* nonresidential, mercantile customers with the project sites in the *Duke Energy Ohio, Inc* service territory.
13. Customers or trade allies may not use any *Duke Energy* logo without prior written permission.
14. Only trade allies registered with *Duke Energy* are eligible to participate.
15. All equipment must be new. Used or rebuilt equipment is not eligible for incentives. All old existing equipment must be removed on retrofit projects.
16. Disclaimers: *Duke Energy Ohio, Inc*
  - a. does not endorse any particular manufacturer, product or system design within the program;
  - b. will not be responsible for any tax liability imposed on the customer as a result of the payment of incentives;
  - c. does not expressly or implicitly warrant the performance of installed equipment. (Contact your contractor for details regarding equipment warranties.);
  - d. is not responsible for the proper disposal/recycling of any waste generated or obsolete or old equipment as a result of this project;
  - e. is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment; and
  - f. reserves the right to change or discontinue this program at any time. The acceptance of program applications is determined solely by *Duke Energy Ohio, Inc*.



The Lighting Worksheet is part 2 of the application. Do not submit this file without submitting a completed Part1 Custom Application document file, which can be found at [www.duke-energy.com](http://www.duke-energy.com).

Before you complete this application, please note the following important criteria:

- Incentive approval is required PRIOR to equipment purchase, or any other activity which would indicate that the Duke Energy customer has already decided to proceed.
- Submitting this application does not guarantee an incentive will be approved.
- Incentives are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Simple payback without incentive must be greater than 1 year.
  
- Incomplete applications will not be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, found in the Custom Application Part 1 document.

**Please enter your information and data into the cells that are shaded.  
Cells in white are locked and cannot be written over.**

**Duke Energy Customer Contact Information (Match the information in Application Part 1):**

Name	Michele Pennington
Company	CPL-SPF Rookwood Commons

**Equipment Vendor / Project Engineer Contact Information**

Name	Jeff Rubin
Company	Power Patriots, LLC

Before proceeding with the custom application, please verify that your project is not on the prescriptive incentive application.

The prescriptive incentive applications can be found at:

KY <http://www.duke-energy.com/kentucky-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 OH <http://www.duke-energy.com/ohio-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 NC <http://www.duke-energy.com/north-carolina-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 SC <http://www.duke-energy.com/south-carolina-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 IN <http://www.duke-energy.com/indiana-business/smart-saver/smart-saver-incentive-program-customer.asp>

Prescriptive incentives are already pre-approved and the application is submitted after project implementation.

Take note of the equipment eligibility on the prescriptive application before planning to utilize the prescriptive application.



Please enter your information and data into the cells that are shaded.  
 Cells in white are locked and cannot be written over.

**List of Sites (Required)**

Project/ Site (see note 1)	Site Name	Electric Account Number(s) (see note 2)	Site Address	Area (sq ft)	Location within Facility	Location Type	Indoor or Outdoor?
<i>Example</i>	<i>Distribution Center</i>	<i>12345678 01</i>	<i>Example: 123 Main Street, Anywhere USA 12345</i>	<i>1000</i>	<i>Warehouse</i>	<i>Industrial</i>	<i>Indoor</i>
1	Rookwood Commons	84102185 03	2601 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
2	Rookwood Commons	71302182 02	2602 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
3	Rookwood Commons	97502187 04	2603 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
4	Rookwood Commons	09202187 03	2604 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
5	Rookwood Commons	36902189 02	2605 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
6	Rookwood Commons	91402187 02	2606 Edmondson Rd., Cincinnati, OH 45209	400000	EXTERIOR	Large Commercial	OUTDOOR
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

If your application involves more than 20 lighting projects, please check here and use multiple worksheets.

**1 Project/Site**

You can write over the default project/site number with a store #, building identifier, or other reference that distinguishes one project/location from another.

**2 Electric Account Number(s)**

If there are multiple meters at a site, only include the Duke Energy account numbers that pertain to the project.

Currently active account number(s) are required for an existing facility. For new construction, write in "new construction."



Project/ Site	Hours of Use (see note 3)									Controls (see note 5)			
	24 x 7	Weekday		Saturday		Sunday		Weeks of Use in Year (see note 4)	Total Annual Hours of Use	Existing		Proposed	Description
		Start Hour	End Hour	Start Hour	End Hour	Start Hour	End Hour			Type of Control	Hours Reduction	Type of Control	
<i>Example</i>	No	8:00 AM	7:00 PM	10:00 AM	6:00 PM	1:00 PM	6:00 PM	52	3,536	None	0%	Occupancy	Applying for Prescriptive Incentive
1	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
2	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
3	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
4	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			
5	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
6	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

**3 Hours of Use**

For unoccupied times, leave applicable cells blank.

**4 Weeks of Use in Year**

If the lighting fixtures are not in use 52 weeks during the year (for example, during holiday or summer break), provide an explanation of when they are not expected to be in use and why:

**5 Controls**

Please attach more description of existing and/or proposed controls if more space is needed. If sufficient description is not provided, then controls portion of project will not be evaluated. Attach assumptions and calculations to support estimated reduction in hours that result from the controls.

New occupancy sensors should be applied for through the prescriptive application unless ineligible for prescriptive.

New or upgraded EMS/building controls require a separate application part 2. Without the separate application, EMS portion of the project will not be evaluated for an incentive.



Existing Fixture(s)									
Project/ Site	Existing Fixture Installation Year <small>(see note 6)</small>	Fixture Type	Fixture Manufacturer <small>(see note 6)</small>	Fixture Model Number <small>(see note 6)</small>	Lamps per Fixture	Fixture Size	Fixture Input Power (watts) <small>(see note 7)</small>	Quantity of Fixtures	Total Demand (kW)
<i>Example</i>	1995	High Pressure Sodium	Manufacturer	Model #	1		190	175	33
1	2004	Metal Halide	n/a Retrofit		1	1000w	1,080	47	51
2	2004	Metal Halide	n/a Retrofit		1	1000w	1,080	14	15
3	2004	Metal Halide	n/a Retrofit		1	1000w	1,080	3	3
4	2004	Metal Halide	n/a Retrofit		1	175W	215	27	6
5	2004	Metal Halide	n/a Retrofit		1	175W	215	19	4
6	2004	Metal Halide	n/a Retrofit		1	175W	215	12	3
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
<b>Application Total</b>								<b>122</b>	<b>82</b>

**6 Information on Existing Fixture(s)**

Optional - please provide as much information as you can.

For new construction projects, provide information on the light fixture(s) that would meet the building code in your location.

**7 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.



Project/ Site	Proposed Fixture(s)										Projected Savings			Incremental Project Cost \$ (see note 11)
	Fixture Type	Fixture Manufacturer (see note 8)	Fixture Model Number (see note 8)	Warranty of Proposed Fixtures (years)	Lamps per Fixture	Fixture Input Power (watts) (see note 9)	Quantity of Fixtures	Total Demand (kW)	Lumen Output per Fixture	Lumen/ Sq Ft	Demand (kW)	Annual Energy (kWh)	Other Annual Savings \$ (see note 10)	
<i>Example</i>	<i>T8 Fluorescent</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>5.0</i>	<i>1.0</i>	<i>78</i>	<i>225</i>	<i>18</i>		<i>0</i>		<i>55,515</i>	<i>\$1,265</i>	<i>\$29,215</i>
1	Metal Halide	Venture	V90D9610/24	5.0	1.0	845	47	40		0	11	48,377		\$13,792
2	Metal Halide	Venture	V90D9610/24	5.0	1.0	845	14	12		0	3	14,410		\$4,108
3	Metal Halide	Venture	V90D9610/24	5.0	1.0	845	3	3		0	1	3,088		\$880
4	Metal Halide	Venture	V90D5932/95	5.0	1.0	125	27	3		0	2	10,643		\$5,863
5	Metal Halide	Venture	V90D5932/95 100	5.0	1.0	125	19	2		0	2	7,490		\$4,125
6	Metal Halide	Venture	V90D5932/95 100	5.0	1.0	125	12	2		0	1	4,730		\$2,606
7														
8														
9														
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**Application Total** 122      61  
**Average Electric Rate \$/kWh** \$0.10 **Project Simple Electric Payback** (see note 12) 3.4 years 20      88,739      \$0      \$31,374

**8 Fixture Manufacturer and Model Number**

Attach a scanned copy of a spec sheet for each fixture that includes the input power (watts), lumen output and other relevant information. For eligible LED fixtures, refer to the FAQs for Custom Incentives found at [www.duke-energy.com](http://www.duke-energy.com) and attach required documents if necessary.

**9 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.

**10 Other Annual Savings \$**

Optional. Estimate other annual savings in addition to electric (for example operations/maintenance savings).

**11 Incremental Project Cost \$**

Attach a copy of a formal proposal with the projected project costs. For new construction projects, a formal proposal is also required with the projected costs for the light fixture(s) that would meet the building code in your location.

**12 Project Simple Electric Payback**

If the simple payback on the project is less than 1 year, then the project is not eligible for a custom incentive. Please check that the electric rate is accurate based on history.



# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account
- multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
43902010 04	146664		
47502049 02	21696		
97802009 02	164295		
47802022 03	2290		

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input checked="" type="checkbox"/> Proof of payment.*	<input checked="" type="checkbox"/> Manufacturer's Spec sheets	<input checked="" type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
--	--	--	---

\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input checked="" type="checkbox"/> Custom Lighting Worksheet <input checked="" type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Air Compressors	MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom Compressed Air Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Chiller Tune-ups	MSD Prescriptive Chiller Tune-ups <input type="checkbox"/>		
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



Proposed energy efficiency measures may be eligible for Self-Direct Custom rebates if they clearly reduce electrical consumption and/or demand as compared to the appropriate baseline.

Before you complete this application, please note the following important criteria:

- Submitting this application does not guarantee a rebate will be approved.
- Rebates are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Incomplete applications cannot be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, beginning on page 6.

## Notes on the Application Process

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact your Duke Energy Ohio, Inc account manager or the Duke Energy Smart \$aver® team at 1-866-380-9580.

Every application must include calculations of the baseline electrical usage and the electrical usage of the proposed high-efficiency equipment/system. Monthly calculations are best. You, the Duke Energy Ohio customer, or your equipment vendor / engineer should perform these calculations and submit them to Duke Energy for review. *We strongly encourage the use of modeling software (such as eQuest or comparable) for complex projects.*

Upon receipt of your application, an acknowledgement email will be sent to you with an estimated response time based on an initial assessment of your application. The application review may include some communication to resolve any questions about the project or to request additional information. Applications that are received complete without missing information have a faster review time.

There are two ways to submit your completed application.

Email your scanned form to: [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com)

Or, fax your form to 513-419-5572

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**1. Contact Information (Required)**

Duke Energy Customer Contact Information					
Company Name	CPL-SPF Rookwood Pavilion				
Address	2692 Madison Rd.				
Project Contact	Michele Pennington				
City	Cincinnati	State	OH	Zip Code	45208
Title	Property Manager				
Office Phone	513-366-3522	Mobile Phone		Fax	
E-mail Address	mpennington@anderson-realestate.com				

Equipment Vendor / Contractor / Architect / Engineer Contact Information					
Company Name	Power Patriots, LLC				
Address	779 Commerce Drive Suite 3				
City	Venice	State	FL	Zip Code	34292
Project Contact	Jeff Rubin				
Title	Controller				
Office Phone	941-375-8267	Mobile Phone	941-928-6636	Fax	941-375-8328
E-mail Address	jeff.rubin@powerpatriots.com				
Describe Role	Financial Controller				

Payment Information					
Payee Legal Company Name (as shown on Federal income tax return):	CPL-SPF Rookwood Pavilion				
Mailing Address	3805 Edwards Rd., Suite 700				
City	Cincinnati	State	OH	Zip Code	45209
Type of organization (check one) <input type="checkbox"/> Individual/Sole Proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Unit of Government <input type="checkbox"/> Non-Profit (non-corporation)					
Payee Federal Tax ID # of Legal Company Name Above:	20-8327150				
Who should receive incentive payment? (select one) <input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor (Customer must sign below)					
If the vendor is to receive payment, please sign below: I hereby authorize payment of incentive directly to vendor:					
Customer Signature _____ Date ____/____/____ (mm/dd/yyyy)					

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**2. Project Information (Required)**

- A. Please indicate project type:
- New Construction
  - Expansion at an existing facility
  - Replacing equipment due to equipment failure
  - Replacing equipment that is estimated to have remaining useful life of 2 years or less
  - Replacing equipment that is estimated to have remaining useful life of more than 2 years
  - Behavioral, operational and/or procedural programs/projects
- B. Please describe your project, or attach a detailed project description that describes the project.  
Retrofit outdoor lighting fixtures. See detailed project description attached.
- C. When did you start and complete implementation?  
Start date 02/2012 (mm/yyyy) End date 05/2012 (mm/yyyy)
- D. Are you also applying for Self-Direct Prescriptive incentives and, if so, which one(s)<sup>1</sup>?  
no
- E. Please indicate which worksheet(s) you are submitting for this application (check all that apply):
- Lighting
  - Variable Frequency Drive (VFD)
  - Compressed Air
  - Energy Management System (EMS)
  - General (for projects not easily submitted using one of the above worksheets)
- F. Please tell us if there is anything about your electrical energy projections (either for the baseline or the proposed project) that you are either unsure about or for which you have made significant assumptions. Attach additional sheets as needed.

Required: Attach a supplier or contractor invoice or other equivalent information documenting the Implementation Cost for each project listed in your application. (Note: self-install costs cannot be included in the Implementation Cost)

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<sup>1</sup> If your project involves some equipment that is eligible for prescriptive incentives and some equipment that is likely eligible for custom incentives, and if it is feasible to separate the equipment for the energy analysis, then the equipment will be evaluated separately. If it is not feasible to separate the equipment for analysis, then the equipment will be evaluated together in the custom application.

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**3. Signature (Required – must be signed by Duke Energy customer)**

**Customer Consent to Release of Personal Information**

I, (insert name) CPL-SPF Rookwood Pavilion, LLC, do hereby consent to Duke Energy disclosing my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number to its subcontractors solely for the purpose of administering Duke Energy Ohio's Mercantile Self-Direct Program. I understand that such subcontractors are contractually bound to otherwise maintain my Duke Energy Ohio, Inc Account Number and Federal Tax ID Number in the strictest of confidence.

I realize that under the rules and regulations of the public utilities commission, I may refuse to allow Duke Energy Ohio, Inc to release the information set forth above. By my signature, I freely give Duke Energy Ohio, Inc permission to release the information designated above.

**Application Signature**

I certify that I meet the eligibility requirements of the Duke Energy Ohio, Inc Mercantile Self Direct Custom Incentives Program and that all information provided within this application is correct to the best of my knowledge. I agree to the terms and conditions set forth for this program. I certify that the numbers, energy savings, and responses shown on this form are correct. Further, I certify that the taxpayer identification number is current and correct. I am not subject to backup withholding because: (a) I am exempt from backup withholding; or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends; or (c) the IRS has notified me that I am no longer subject to backup withholding. I am a U.S. citizen (includes a U.S. resident alien).

Mindy Heizer  
Duke Energy Ohio, Inc Customer Signature

Print Name Mindy Heizer, Agent for Owner

Date 7/23/2012

**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



**Checklist for completing the Application**

INCOMPLETE APPLICATIONS WILL RESULT IN DELAYS IN DUKE ENERGY PROCESSING YOUR APPLICATION AND NOTIFYING YOU CONCERNING AY REBATES. Before submitting the application and the required supplementary information, use the following checklist to ensure that your application is complete and the information in the application is accurate. (Note: this checklist is for your use only – do not submit this checklist with your application)

<b>Section No. &amp; Title</b>	<b>Have You:</b>
1. Contact Information	<input checked="" type="checkbox"/> Completed the contact information for the Duke Energy customer? <input checked="" type="checkbox"/> Completed the contact information for the equipment vendor / project engineer that can answer questions about the technical aspects of the project, if that is a different person than above?
2. Project Information	<input checked="" type="checkbox"/> Answered the questions A-E, including providing a description of your project. <input checked="" type="checkbox"/> Completed and attached the lighting, compressed air, VFD, EMS and/or General worksheet(s)?
3. Signature	<input checked="" type="checkbox"/> Signed your name? <input checked="" type="checkbox"/> Printed your name? <input checked="" type="checkbox"/> Entered the date?
Supplementary information (Required)	<input checked="" type="checkbox"/> Attached a supplier or contractor’s invoice or other equivalent information documenting the Implementation Cost for projects listed in your application? (Note: self-install costs cannot be included in the Implementation Cost) <input checked="" type="checkbox"/> (If submitting the General Worksheet) attached calculations documenting the energy usage and energy savings for <b>each</b> project listed in your application?

If you have any questions concerning how to complete any portion of the application or what supplementary information is required, please contact:

- your Duke Energy account manager  
or,
- the Duke Energy Smart \$aver® team at 1-866-380-9580.

# Mercantile Self Direct Nonresidential Custom Rebate Application PART 1



## Instructions/Terms/Conditions

Note: Please keep for your records- do not submit with the application

1. Energy service companies or contractors may assist in preparing the application, but an authorized representative of the customer must sign this application to be eligible to participate in the Mercantile Self Direct Program. Completion of this application does not guarantee the approval of a Self Direct Custom Rebate.
2. Once all documentation requested in this application is received by *Duke Energy Ohio, Inc*, and any follow-up information requested by *Duke Energy* is received, the rebate amount for each Energy Conservation Measure (ECM) will be communicated to the customer. The rebate amount will be based on ECM energy savings and ECM incremental installation cost.
3. All rebates require approval by the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* will submit an application for rebate on the customer's behalf upon customer attestation to program terms, conditions and requirements as outlined in the rebate offer letter and upon customer completion of attestation documents required by the Public Utilities Commission of Ohio.
4. *Duke Energy Ohio, Inc* will issue a Self Direct Custom Rebate check, based on the approved rebate amount for each ECM, upon receiving approval from the Public Utilities Commission of Ohio. *Duke Energy Ohio, Inc* does not guarantee PUCO approval.
5. With the application, the customer must provide a list of all sites where the ECMs were installed. *Duke Energy Ohio, Inc* requests that sites of similar size, hours of operation and energy consuming characteristics be grouped together in one application for the determination of the rebate amount. The application should identify the site where each unique ECM was installed.
6. Based on the information submitted with the application and the information gathered both before and after the initial installation of the ECM, *Duke Energy Ohio, Inc* will calculate the rebate amount for each ECM.
7. *Duke Energy Ohio, Inc* may conduct random site inspections of a sample of the locations where the ECMs are installed to verify installation and operability of the ECMs and to obtain information needed to calculate the Approved Incentive Amount.
8. Customers are encouraged to retain copies of all forms, invoices and supporting documentation for their records.
9. Approved rebates are valid for 6 months from the date communicated to the customer by *Duke Energy Ohio, Inc*, subject to the expiration of measure eligibility based on project completion dates and application submission deadlines as defined by PUCO. Customers are encouraged to execute their rebate offer contracts and PUCO-required affidavits promptly to ensure eligibility is not forfeited.



**Mercantile Self Direct  
Nonresidential Custom Rebate Application  
PART 1**



10. *Duke Energy Ohio, Inc* reserves the right to recover all unrecoverable costs associated with the project approval if the customer decides not to execute the rebate contract, after the project is approved by *Duke Energy Ohio, Inc*.
11. Projects financially supported by other funding sources will be evaluated on a case-by-case basis for potential partial funding from *Duke Energy Ohio, Inc*.
12. Participants must be *Duke Energy Ohio, Inc* nonresidential, mercantile customers with the project sites in the *Duke Energy Ohio, Inc* service territory.
13. Customers or trade allies may not use any *Duke Energy* logo without prior written permission.
14. Only trade allies registered with *Duke Energy* are eligible to participate.
15. All equipment must be new. Used or rebuilt equipment is not eligible for incentives. All old existing equipment must be removed on retrofit projects.
16. Disclaimers: *Duke Energy Ohio, Inc*
  - a. does not endorse any particular manufacturer, product or system design within the program;
  - b. will not be responsible for any tax liability imposed on the customer as a result of the payment of incentives;
  - c. does not expressly or implicitly warrant the performance of installed equipment. (Contact your contractor for details regarding equipment warranties.);
  - d. is not responsible for the proper disposal/recycling of any waste generated or obsolete or old equipment as a result of this project;
  - e. is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment; and
  - f. reserves the right to change or discontinue this program at any time. The acceptance of program applications is determined solely by *Duke Energy Ohio, Inc*.



The Lighting Worksheet is part 2 of the application. Do not submit this file without submitting a completed Part1 Custom Application document file, which can be found at [www.duke-energy.com](http://www.duke-energy.com).

Before you complete this application, please note the following important criteria:

- Incentive approval is required PRIOR to equipment purchase, or any other activity which would indicate that the Duke Energy customer has already decided to proceed.
- Submitting this application does not guarantee an incentive will be approved.
- Incentives are based on electricity conservation only.
- Electric demand and/or energy reductions must be well documented with auditable calculations.
- Simple payback without incentive must be greater than 1 year.
- Incomplete applications will not be reviewed; all fields are required.

Refer to the complete list of Instructions and Disclaimers, found in the Custom Application Part 1 document.

**Please enter your information and data into the cells that are shaded.  
Cells in white are locked and cannot be written over.**

**Duke Energy Customer Contact Information (Match the information in Application Part 1):**

Name	Michele Pennington
Company	CPL-SPF Rookwood Pavilion

**Equipment Vendor / Project Engineer Contact Information**

Name	Jeff Rubin
Company	Power Patriots, LLC

Before proceeding with the custom application, please verify that your project is not on the prescriptive incentive application.

The prescriptive incentive applications can be found at:

KY <http://www.duke-energy.com/kentucky-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 OH <http://www.duke-energy.com/ohio-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 NC <http://www.duke-energy.com/north-carolina-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 SC <http://www.duke-energy.com/south-carolina-business/smart-saver/smart-saver-incentive-program-customer.asp>  
 IN <http://www.duke-energy.com/indiana-business/smart-saver/smart-saver-incentive-program-customer.asp>

Prescriptive incentives are already pre-approved and the application is submitted after project implementation.

Take note of the equipment eligibility on the prescriptive application before planning to utilize the prescriptive application.



Please enter your information and data into the cells that are shaded.  
 Cells in white are locked and cannot be written over.

**List of Sites (Required)**

Project/ Site (see note 1)	Site Name	Electric Account Number(s) (see note 2)	Site Address	Area (sq ft)	Location within Facility	Location Type	Indoor or Outdoor?
<i>Example</i>	<i>Distribution Center</i>	<i>12345678 01</i>	<i>Example: 123 Main Street, Anywhere USA 12345</i>	<i>1000</i>	<i>Warehouse</i>	<i>Industrial</i>	<i>Indoor</i>
1	Rookwood Pavilion	97802009 02	2692 Madison Rd., Cincinnati, OH 45208	400000	EXTERIOR	Large Commercial	OUTDOOR
2	Rookwood Pavilion	47502049 02	2693 Madison Rd., Cincinnati, OH 45208	400000	EXTERIOR	Large Commercial	OUTDOOR
3	Rookwood Pavilion	47502049 02	2694 Madison Rd., Cincinnati, OH 45208	400000	EXTERIOR	Large Commercial	OUTDOOR
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If your application involves more than 20 lighting projects, please check here and use multiple worksheets.

**1 Project/Site**

You can write over the default project/site number with a store #, building identifier, or other reference that distinguishes one project/location from another.

**2 Electric Account Number(s)**

If there are multiple meters at a site, only include the Duke Energy account numbers that pertain to the project.

Currently active account number(s) are required for an existing facility. For new construction, write in "new construction."



Project/ Site	Hours of Use (see note 3)								Controls (see note 5)				
	24 x 7	Weekday		Saturday		Sunday		Weeks of Use in Year (see note 4)	Total Annual Hours of Use	Existing		Proposed	Description
		Start Hour	End Hour	Start Hour	End Hour	Start Hour	End Hour			Type of Control	Hours Reduction	Type of Control	
<i>Example</i>	No	8:00 AM	7:00 PM	10:00 AM	6:00 PM	1:00 PM	6:00 PM	52	3,536	None	0%	Occupancy	Applying for Prescriptive Incentive
1	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
2	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
3	No	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	7:30:00 PM	7:30:00 AM	52	4,380	None			Retrofit
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**3 Hours of Use**

For unoccupied times, leave applicable cells blank.

**4 Weeks of Use in Year**

If the lighting fixtures are not in use 52 weeks during the year (for example, during holiday or summer break), provide an explanation of when they are not expected to be in use and why:

**5 Controls**

Please attach more description of existing and/or proposed controls if more space is needed. If sufficient description is not provided, then controls portion of project will not be evaluated. Attach assumptions and calculations to support estimated reduction in hours that result from the controls.

New occupancy sensors should be applied for through the prescriptive application unless ineligible for prescriptive.

New or upgraded EMS/building controls require a separate application part 2. Without the separate application, EMS portion of the project will not be evaluated for an incentive.



Project/ Site	Existing Fixture(s)								
	Existing Fixture Installation Year (see note 6)	Fixture Type	Fixture Manufacturer (see note 6)	Fixture Model Number (see note 6)	Lamps per Fixture	Fixture Size	Fixture Input Power (watts) (see note 7)	Quantity of Fixtures	Total Demand (kW)
<i>Example</i>	1995	High Pressure Sodium	Manufacturer	Model #	1		190	175	33
1	2004	Metal Halide	n/a Retrofit		1	1000w	1,080	19	21
2	2004	Metal Halide	n/a Retrofit		1	175w	215	16	3
3	2004	Other (enter by typing	n/a Retrofit	Qtz Halogen	1	500w	500	2	1
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

**Application Total** **37** **25**

**6 Information on Existing Fixture(s)**

Optional - please provide as much information as you can.

For new construction projects, provide information on the light fixture(s) that would meet the building code in your location.

**7 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.



Project/ Site	Proposed Fixture(s)										Projected Savings			Incremental Project Cost \$ (see note 11)
	Fixture Type	Fixture Manufacturer (see note 8)	Fixture Model Number (see note 8)	Warranty of Proposed Fixtures (years)	Lamps per Fixture	Fixture Input Power (watts) (see note 9)	Quantity of Fixtures	Total Demand (kW)	Lumen Output per Fixture	Lumen/ Sq Ft	Demand (kW)	Annual Energy (kWh)	Other Annual Savings \$ (see note 10)	
<i>Example</i>	<i>T8 Fluorescent</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>5.0</i>	<i>1.0</i>	<i>78</i>	<i>225</i>	<i>18</i>		<i>0</i>		<i>55,515</i>	<i>\$1,265</i>	<i>\$29,215</i>
1	Metal Halide	Venture	V90D9610/249	5.0	1.0	845	19	16		0	4	19,557		\$5,531
2	Metal Halide	Venture	V90D5932/951	5.0	1.0	125	16	2		0	1	6,307		\$4,647
3	Induction	MHT	MHTWP100E	10.0	1.0	100	2	0		0	1	3,504		\$771
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

Application Total 37 18 7 29,368 \$0 \$10,948  
 Average Electric Rate \$/kWh \$0.09 Project Simple Electric Payback (see note 12) 4.4 years

**8 Fixture Manufacturer and Model Number**

Attach a scanned copy of a spec sheet for each fixture that includes the input power (watts), lumen output and other relevant information. For eligible LED fixtures, refer to the FAQs for Custom Incentives found at [www.duke-energy.com](http://www.duke-energy.com) and attach required documents if necessary.

**9 Fixture Input Power (watts)**

Provide actual input power (in watts), not nominal power rating. For example, a 400 watt (nominal) metal halide fixture has a typical input power of approximately 459 watts.

**10 Other Annual Savings \$**

Optional. Estimate other annual savings in addition to electric (for example operations/maintenance savings).

**11 Incremental Project Cost \$**

Attach a copy of a formal proposal with the projected project costs. For new construction projects, a formal proposal is also required with the projected costs for the light fixture(s) that would meet the building code in your location.

**12 Project Simple Electric Payback**

If the simple payback on the project is less than 1 year, then the project is not eligible for a custom incentive. Please check that the electric rate is accurate based on history.

# Rookwood Commons

DETAILS BY FIXTURE

EXISTING LIGHTING									
#	Existing Fixture Type	Lamp Type	Lamps /Fixt	Watts /Fixt	Qty	Annual Hours	Annual kWh	Rated Lamp Life	Location
1	Shoe Box	1000w MH	1	1080	64	4,380	302,746	13,000	Parking Lot
2	Acorn Lights	175w MH	1	215	58	4,380	54,619	6,000	Sidewalk Areas
<b>TOTAL/AVERAGE</b>					<b>122</b>		<b>357,364</b>		

PROPOSED LIGHTING									POTENTIAL SAVINGS		
#	Proposed Description	Lamp Type	Lamps /Fixt	Watts /Fixt	Qty	Annual Hours	Annual kWh	Rated Lamp Life	Annual \$ Savings	%	kWh Savings
1	L & B Retrofit	775w NW BU	1	845	64	4,380	236,870	26,000	\$ 6,766	-22%	65,875
2	L & B Retrofit	100w NW	1	125	58	4,380	31,755	20,000	\$ 2,348	-42%	22,864
<b>TOTAL/AVERAGE</b>					<b>122</b>		<b>268,625</b>		<b>\$ 9,114</b>	<b>-25%</b>	<b>88,739</b>

Annual Savings Estimated @ \$ 0.103 /kWh

## FINANCIAL SUMMARY

COSTS	
Material	\$23,408
Labor & Disposal	<b>\$7,832</b>
<b>TOTAL COSTS</b>	<b>\$31,241</b>
Est. Rebate Savings	\$5,520
<b>NET</b>	<b>\$25,721</b>

SAVINGS	
Energy Savings/Year	\$9,114
Maintenance Savings	\$4,061
<b>TOTAL SAVINGS/YEAR</b>	<b>\$13,175</b>

FINANCIAL PERFORMANCE - NO REBATE	
10-Year Net Cash Flow	\$ 123,920
10-year Net Present Value	\$74,606
Return on Investment	168%
Payback Years	<b>2.37</b>

FINANCIAL PERFORMANCE - WITH REBATE	
10-Year Net Cash Flow	\$106,031
10-year Net Present Value	\$58,043
Return on Investment	51%
Payback Years	<b>1.95</b>

Prices do not include taxes.



779 Commerce Drive, Suite 3  
Venice, FL 34292

Phone (941) 375-8267 Fax (941) 375-8328

# 775 Watt Pulse Start Lamp

HIGH CRI AND HIGH CCT UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

# 24983

## DATA SHEET



**VENTURE**  
**LIGHTING**

**Natural White**

## MP 775W/BU/BT37/PS/950

### GENERAL Characteristics

Lamp Type	MH Pulse Start Single Ended
ANSI Code	M181/O
Bulb Shape	BT37
Base Type	Mogul (EX39)
Bulb Finish	Clear
Rated Life	26000 hours
Operating Position	Base Up $\pm 15^\circ$
Dimming	70% Rated Power

### ELECTRICAL

Lamp Watts	775
Lamp Oper. Voltage (Nom.)	220

### SUSTAINABILITY

Recycling Program	Smartpac® 800-451-2606
Picograms Hg per Mean Lumen Hour	46
MR-Credit 4 Reduced Mercury in Lamps	1 LEED point

### PHOTOMETRIC

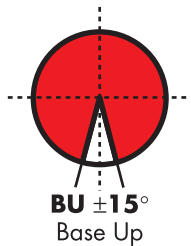
Initial Lumens	66000
Scotopic Lumens (S/P 2.1)	138500
Lumens Per Watt	85
Lamp Lumen Depreciation (LLD)	.90 (90%) @ 8000 hours
Correlated Color Temperature	5000K
Chromaticity Coordinates (CIE-x,y)	.346 .359
Color Rendering Index (CRI)	90+

### NOTES

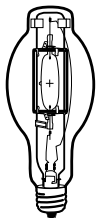
Lamp performance ratings published in this data sheet are based on operation with magnetic ballasts. Performance of position-rated lamps outside of their tolerances will result in poor performance. Minimum Starting Temperature:  $-40^\circ\text{C}/^\circ\text{F}$ . To calculate nighttime Scotopic lumens, multiply the lumen rating by the S/P ratio. \*\*LEED V3, MR CREDIT 4: Sustainable Purchasing - Reduced Mercury in Lamps is awarded 1 point for projects which at least 90% of all mercury-containing lamps purchased during the performance period comply and meet the target for mercury content of 90 picograms per lumen-hour or less.

### PHYSICAL

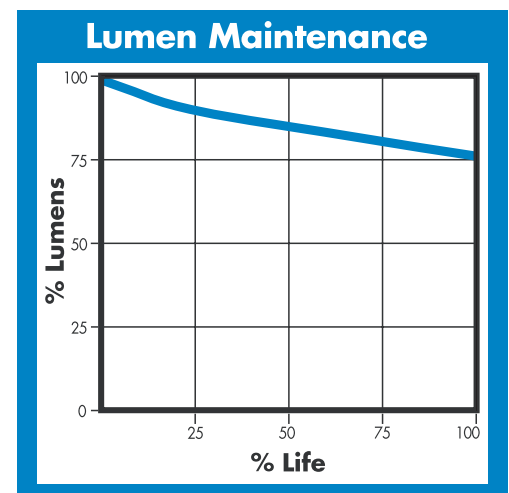
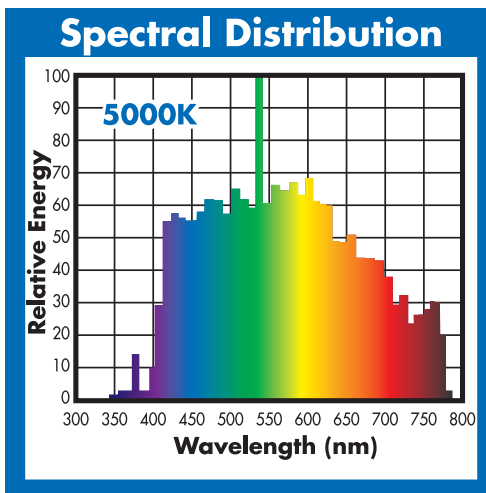
Bulb Diameter	4.6" (120mm)
Max. Overall Length (MOL)	11.5" (292mm)
Light Center Length (LCL)	7.0" (178mm)
Effective Arc Length	64.5 mm
Max. Base Temperature ( $^\circ\text{C}$ )	250
Max. Bulb Temperature ( $^\circ\text{C}$ )	450
Socket Pulse Rating (KV)	4
Luminaire Type	Open / Enclosed Rated



**BT37**



Dia. = 4.6" (120mm)  
MOL = 11.5" (292mm)  
LCL = 7.0" (178mm)  
Base = Mogul (EX39)



**(800) 451-2606**  
**or (440) 248-3510**

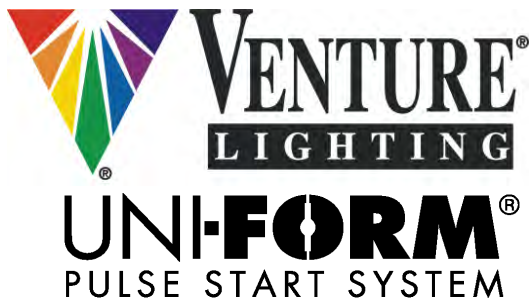
Fax: (800) 451-2605  
10295 Philipp Parkway  
Streetsboro, Ohio 44241 USA  
E-mail: [venture@adlt.com](mailto:venture@adlt.com)  
**VentureLighting.com**

THIS LAMP CONFORMS TO FEDERAL STANDARD 21 CFR 1040.30

**Warning:** This lamp can cause skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when outer envelope is broken or punctured are commercially available.

This Product is Recyclable Through  Smartpac  
FOR RECYCLING PURPOSES

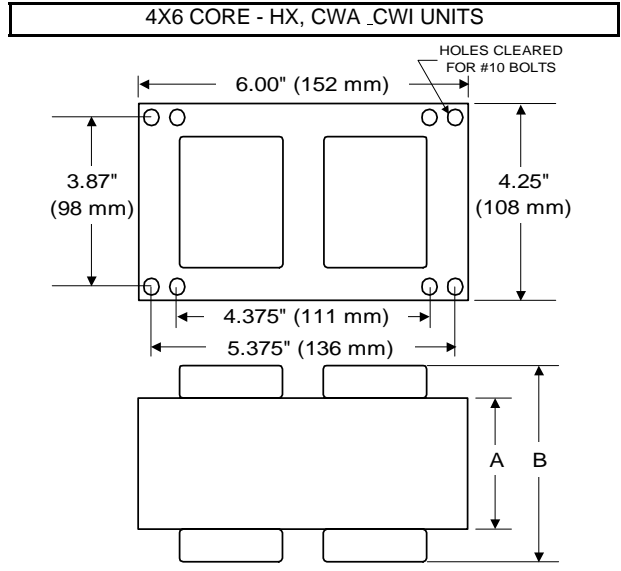




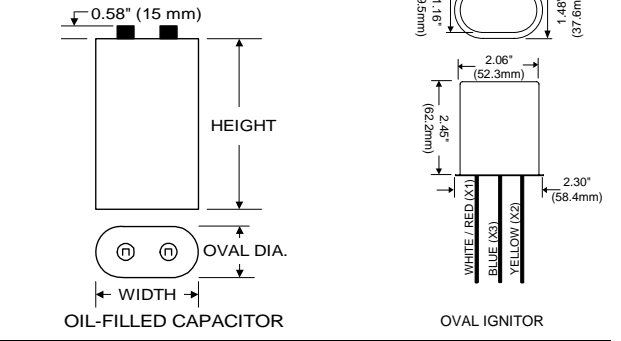
**BALLAST SPECIFICATION**

**775W M181**  
**Pulse Start Metal Halide**  
**V90D9610**  
**60 Hz CWA**

<b>Input Volts</b>	120	208	240	277
<b>Line Current ( Amps )</b>				
Operating	7.45	4.50	3.75	3.25
Open Circuit	5.60	4.10	3.05	2.60
Starting	5.20	2.85	2.65	2.30
<b>Recommended Fuse (Amps)</b>	20	12	10	9
<b>Regulation</b>				
Line Volts	±10%	±10%	±10%	±10%
Lamp Watts	±10%	±10%	±10%	±10%
<b>Temperature Ratings</b>				
Insulation Class	180 (H)	180 (H)	180 (H)	180 (H)
Coil Temperature Code	B	D	B	C
Benchtop Coil Rise	80.0	85.0	79.1	80.9
<b>Power Factor (Min)</b>	90%	90%	90%	90%
<b>Input Watts</b>	845 W	845 W	845 W	845 W
<b>Efficiency</b>				
<b>NOM. Open Circuit Voltage</b>	420	420	420	420
<b>Input Voltage At Lamp Dropout</b>	70	100	115	130
<b>Min Ambient Starting Temp</b>	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*
<b>60 HZ TEST PROCEDURES</b>				
<b>High Potential Test (Volts)</b>				
1 Minute	1,850 V	1,850 V	1,850 V	1,850 V
1 Second	2,200 V	2,200 V	2,200 V	2,200 V
<b>Open Circuit Voltage Test (V)</b>	375 - 465	375 - 465	375 - 465	375 - 465
<b>Short Circuit Current Test (A)</b>				
Secondary Current	Min 4.30	4.30	4.30	4.30
Max 5.30	5.30	5.30	5.30	5.30
Input Current	Min 3.90	2.15	2.00	1.85
Max 5.90	3.25	3.10	2.80	2.80
<b>CORE and COIL Specifications</b>				
Dimension (A)	2.80 in	2.80 in	2.80 in	2.80 in
Dimension (B)	4.95 in	4.95 in	4.95 in	4.95 in
Weight	18.5 lb's	18.5 lb's	18.5 lb's	18.5 lb's
Lead Lengths	12"	12"	12"	12"
<b>Capacitor Requirement</b>				
Microfarads	22.0 uf	22.0 uf	22.0 uf	22.0 uf
Volts (Min)	500 V	500 V	500 V	500 V



<b>Capacitor:</b>	ACB3270V	<b>Ignitor:</b>	BVS-020
Microfarads:	22.0 uf	Case Temp (Max):	105 °C
Volts (Max):	525 V	BTL Distance (Max):	10 ft
Case Temp (Max):	100 °C		
Height (Max):	3.94 in		
Dia / Oval Dia (Max):	1.97 in		
Oval Width (Max):	2.97 in		



**Ordering Information Add Suffix for options**

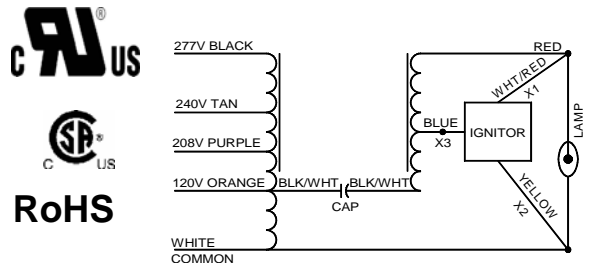
- C - With Capacitor
- K - Prewired, with Capacitor and Bracket Kit
- B - With Welded Bracket, no cap
- CB - With Capacitor and Welded Bracket

\* -40°F/-40°C Min Ambient Starting Temp with Venture Lamp  
 Coil material: primary Cu and secondary Al

RoHS compliant on all manufactured products after August 1, 2007

Data is based upon tests performed by Venture Lighting in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice.

**4/23/2008 Production**



# 100 Watt Pulse Start Lamp

# 95100 DATA SHEET



## MP 100W/U/UVS/PS/EM/950

### GENERAL Characteristics

Lamp Type	MH Pulse Start Single Ended
ANSI Code	M90/O
Bulb Shape	EDX17
Base Type	Medium (E26)
Bulb Finish	Clear
Rated Life	20000 hours
Operating Position	Universal
Dimming	70% Rated Power

### ELECTRICAL

Lamp Watts	100
Lamp Oper. Voltage (Nom.)	90

### SUSTAINABILITY

Recycling Program	Smartpac® 800-451-2606
Picograms Hg per Mean Lumen Hour	36
MR-Credit 4 Reduced Mercury in Lamps	1 LEED point

### PHOTOMETRIC

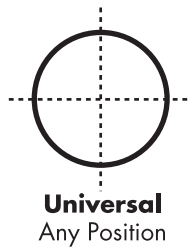
Initial Lumens	7000
Scotopic Lumens (S/P 2.1)	14700
Lumens Per Watt	70
Lamp Lumen Depreciation (LLD)	.90 (90%) @ 8000 hours
Correlated Color Temperature	5000K
Chromaticity Coordinates (CIE-x,y)	.346 .359
Color Rendering Index (CRI)	90+

### NOTES

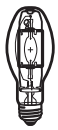
Lamp performance ratings published in this data sheet are based on operation with approved electronic ballasts. Performance ratings of Universal lamps are based upon vertical ( $\pm 15^\circ$ ) operation. Minimum Starting Temperature:  $-40^\circ\text{C}/^\circ\text{F}$ . UV Shield eliminates nearly all UV emissions, reducing color fading and lens yellowing. To calculate nighttime Scotopic lumens, multiply the lumen rating by the S/P ratio. \*\*LEED V3, MR CREDIT 4: Sustainable Purchasing - Reduced Mercury in Lamps is awarded 1 point for projects which at least 90% of all mercury-containing lamps purchased during the performance period comply and meet the target for mercury content of 90 picograms per lumen-hour or less.

### PHYSICAL

Bulb Diameter	2.1" (54mm)
Max. Overall Length (MOL)	5.4" (138mm)
Light Center Length (LCL)	3.4" (86mm)
Effective Arc Length	12.0mm
Max. Base Temperature ( $^\circ\text{C}$ )	210
Max. Bulb Temperature ( $^\circ\text{C}$ )	450
Socket Pulse Rating (KV)	4.5
Luminaire Type	Open / Enclosed Rated



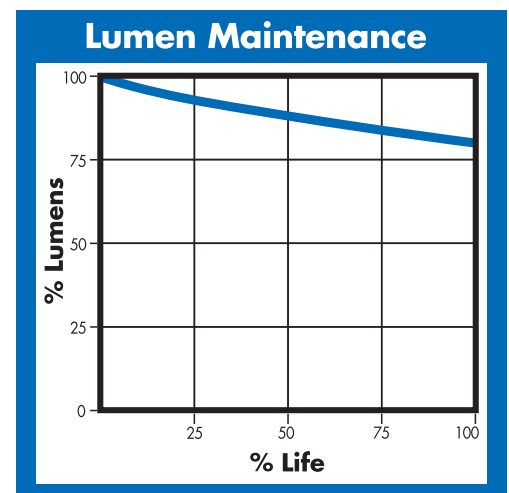
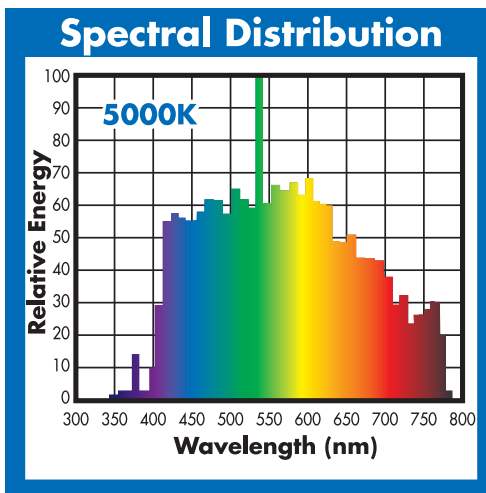
EDX17



Dia. = 2.1" (54mm)  
MOL = 5.4" (138mm)  
LCL = 3.4" (86mm)  
Base = Medium (E26)

(800) 451-2606  
or (440) 248-3510

Fax: (800) 451-2605  
10295 Philipp Parkway  
Streetsboro, Ohio 44241 USA  
E-mail: [venture@adlt.com](mailto:venture@adlt.com)  
**VentureLighting.com**



THIS LAMP CONFORMS TO FEDERAL STANDARD 21 CFR 1040.30

**Warning:** This lamp can cause skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when outer envelope is broken or punctured are commercially available.

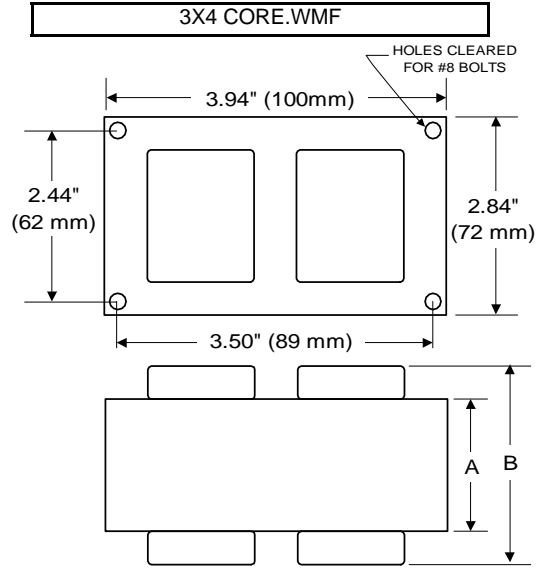
This Product is Recyclable Through Smartpac  
THE RECYCLING EXPERT



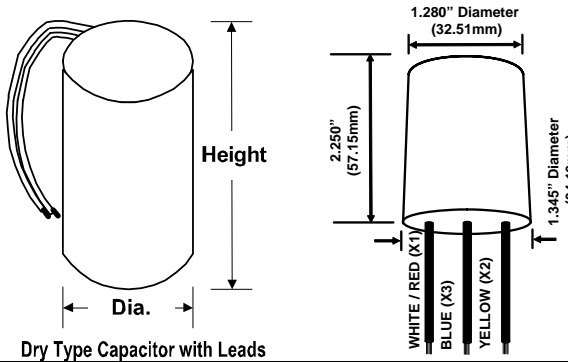
**BALLAST SPECIFICATION**

**100W M90**  
**Pulse Start Metal Halide**  
**V90D5932**  
**60 Hz HX-HPF**

<b>Input Volts</b>	120	208	240	277
<b>Line Current ( Amps )</b>				
Operating	1.10	0.65	0.55	0.50
Open Circuit	2.60	1.50	1.30	1.15
Starting	1.00	0.60	0.50	0.45
<b>Recommended Fuse (Amps)</b>	7	4	4	3
<b>Regulation</b>				
Line Volts	±5%	±5%	±5%	±5%
Lamp Watts	±10%	±10%	±10%	±10%
<b>Temperature Ratings</b>				
Insulation Class	180 (H)	180 (H)	180 (H)	180 (H)
Coil Temperature Code	A	A	A	A
Benchtop Coil Rise	70.1	69.8	65.9	71.8
<b>Power Factor (Min)</b>	90%	90%	90%	90%
<b>Input Watts</b>	125 W	125 W	125 W	125 W
<b>Efficiency</b>				
<b>NOM. Open Circuit Voltage</b>	270	270	270	270
<b>Input Voltage At Lamp Dropout</b>	80	140	160	185
<b>Min Ambient Starting Temp</b>	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*
<b>60 HZ TEST PROCEDURES</b>				
<b>High Potential Test (Volts)</b>				
1 Minute	1,600 V	1,600 V	1,600 V	1,600 V
1 Second	1,900 V	1,900 V	1,900 V	1,900 V
<b>Open Circuit Voltage Test (V)</b>	240 - 300	240 - 300	240 - 300	240 - 300
<b>Short Circuit Current Test (A)</b>				
Secondary Current	Min 1.20 Max 1.50	Min 1.20 Max 1.50	Min 1.20 Max 1.50	Min 1.20 Max 1.50
Input Current	Min 0.40 Max 0.75	Min 0.25 Max 0.45	Min 0.20 Max 0.40	Min 0.15 Max 0.35
<b>CORE and COIL Specifications</b>				
Dimension (A)	1.70 in	1.70 in	1.70 in	1.70 in
Dimension (B)	3.10 in	3.10 in	3.10 in	3.10 in
Weight	5.2 lb's	5.2 lb's	5.2 lb's	5.2 lb's
Lead Lengths	12 "	12 "	12 "	12 "
<b>Capacitor Requirement</b>				
Microfarads	12.0 uf	12.0 uf	12.0 uf	12.0 uf
Volts (Min)	280 V	280 V	280 V	280 V



<b>Capacitor:</b>	ACG321	<b>Ignitor:</b>	BVS-032
Microfarads:	12.0 uf	Case Temp (Max):	105 °C
Volts (Max):	330 V	BTL Distance (Max)	2 ft
Case Temp (Max)	100 °C		
Height (Max):	2.76 in		
Dia (Max):	1.62 in		



**Ordering Information Add Suffix for options**

- C - With Capacitor
- K - Prewired, with Capacitor and Bracket Kit
- B - With Welded Bracket, no cap
- CB - With Capacitor and Welded Bracket

\* -40°F/-40°C Min Ambient Starting Temp with Venture Lamp  
 Coil material: primary Cu and secondary Al

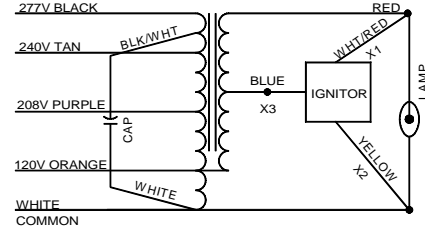
RoHS compliant on all manufactured products after August 1, 2007

Data is based upon tests performed by Venture Lighting in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice.

**8/25/2009 Production**



**RoHS**





# Invoice

779 Commerce Dr.  
 Suite 3  
 Venice, FL 34292

Phone # 941-375-8267  
 Fax # 941-375-8328

Date	Invoice #
4/25/2012	0172

Bill To
CLP-SPF Rookwood Commons LLC dba Rookwood Commons 3805 Edwards Rd., Suite 700 Cincinnati, OH 45209

Ship To
Rookwood Commons 2601 Edmondson Rd. Cincinnati, OH 45209

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
contract	Net 30	GO	4/25/2012			

Quantity	Item Code	Description	Price Each	Amount
64	RK775W480V	Lamp/Ballast replacement kit (775 watt, 480 volt)	227.16	14,538.24T
58	RK100W277V	Lamp/Ballast replacement kit (100 watt, 277 volt)	152.93	8,869.94T
1	Installation-Rook...	Installation - Rookwood Commons lighting retrofit	7,833.00	7,833.00T
		Sales Tax - Hamilton County, OH	6.50%	2,030.68

			<b>Total</b>	\$33,271.86
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# Rookwood Pavilion

DETAILS BY FIXTURE

EXISTING LIGHTING									
#	Existing Fixture Type	Lamp Type	Lamps /Fixt	Watts /Fixt	Qty	Annual Hours	Annual kWh	Rated Lamp Life	Location
1	Shoe Box	1000w MH	1	1080	19	4,380	89,878	13,000	Parking Lot
2	Acorn Lights	175w MH	1	215	16	4,380	15,067	6,000	Sidewalk Areas
3	Flood Lights	500w Qtz Halogen	1	500	2	4,380	4,380	2,000	Flood Lights
4	Stadium Spots	1000w MH	1	1080	4	4,380	18,922	13,000	Shine on Tower
<b>TOTAL/AVERAGE</b>					<b>41</b>		<b>128,246</b>		

PROPOSED LIGHTING									POTENTIAL SAVINGS		
#	Proposed Description	Lamp Type	Lamps /Fixt	Watts /Fixt	Qty	Annual Hours	Annual kWh	Rated Lamp Life	Annual \$ Savings	%	kWh Savings
1	L & B Retrofit	775w NW	1	845	19	4,380	70,321	26,000	\$ 1,669	-22%	19,557
2	L & B Retrofit	100w NW	1	125	16	4,380	8,760	20,000	\$ 538	-42%	6,307
3	Flood Lights	100w Induction	1	100	2	4,380	876	100,000	\$ 299	-80%	3,504
4	Replace Stadiums	1000w NW	1	1080	4	4,380	18,922	26,000	\$ -	0%	-
<b>TOTAL/AVERAGE</b>					<b>41</b>		<b>98,879</b>		<b>\$ 2,506</b>	<b>-23%</b>	<b>29,368</b>

Annual Savings Estimated @ \$ 0.085 /kWh

## FINANCIAL SUMMARY

COSTS	
Material	\$8,858
Labor & Disposal	<b>\$2,621</b>
<b>TOTAL COSTS</b>	<b>\$11,479</b>
Est. Rebate Savings	\$1,830
<b>NET</b>	<b>\$9,649</b>

SAVINGS	
Energy Savings/Year	\$2,506
Maintenance Savings	\$1,182
<b>TOTAL SAVINGS/YEAR</b>	<b>\$3,687</b>

FINANCIAL PERFORMANCE - NO REBATE	
10-Year Net Cash Flow	\$ 34,252
10-year Net Present Value	\$20,482
Return on Investment	141%
Payback Years	<b>3.11</b>

FINANCIAL PERFORMANCE - WITH REBATE	
10-Year Net Cash Flow	\$27,224
10-year Net Present Value	\$13,975
Return on Investment	38%
Payback Years	<b>2.62</b>

Prices do not include taxes.



779 Commerce Drive, Suite 3

Venice, FL 34292

Phone (941) 375-8267 Fax (941) 375-8328

# 775 Watt Pulse Start Lamp

HIGH CRI AND HIGH CCT UNIFORM PULSE START METAL HALIDE LIGHTING SYSTEMS

# 24983

## DATA SHEET



**VENTURE**  
**LIGHTING**

**Natural White**

## MP 775W/BU/BT37/PS/950

### GENERAL Characteristics

Lamp Type	MH Pulse Start Single Ended
ANSI Code	M181/O
Bulb Shape	BT37
Base Type	Mogul (EX39)
Bulb Finish	Clear
Rated Life	26000 hours
Operating Position	Base Up $\pm 15^\circ$
Dimming	70% Rated Power

### ELECTRICAL

Lamp Watts	775
Lamp Oper. Voltage (Nom.)	220

### SUSTAINABILITY

Recycling Program	Smartpac® 800-451-2606
Picograms Hg per Mean Lumen Hour	46
MR-Credit 4 Reduced Mercury in Lamps	1 LEED point

### PHOTOMETRIC

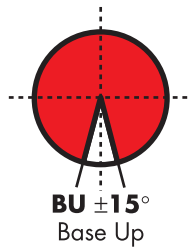
Initial Lumens	66000
Scotopic Lumens (S/P 2.1)	138500
Lumens Per Watt	85
Lamp Lumen Depreciation (LLD)	.90 (90%) @ 8000 hours
Correlated Color Temperature	5000K
Chromaticity Coordinates (CIE-x,y)	.346 .359
Color Rendering Index (CRI)	90+

### NOTES

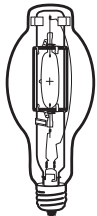
Lamp performance ratings published in this data sheet are based on operation with magnetic ballasts. Performance of position-rated lamps outside of their tolerances will result in poor performance. Minimum Starting Temperature:  $-40^\circ\text{C}/^\circ\text{F}$ . To calculate nighttime Scotopic lumens, multiply the lumen rating by the S/P ratio. \*\*LEED V3, MR CREDIT 4: Sustainable Purchasing - Reduced Mercury in Lamps is awarded 1 point for projects which at least 90% of all mercury-containing lamps purchased during the performance period comply and meet the target for mercury content of 90 picograms per lumen-hour or less.

### PHYSICAL

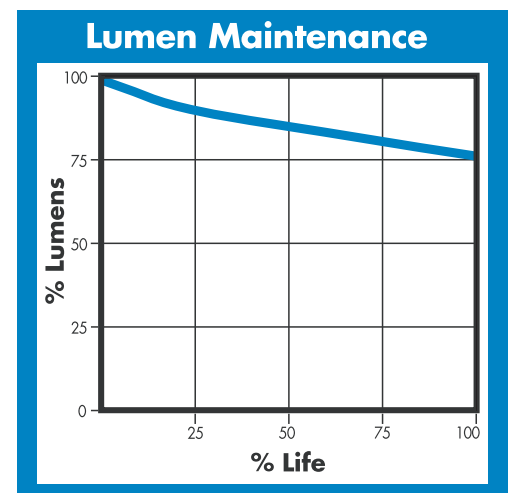
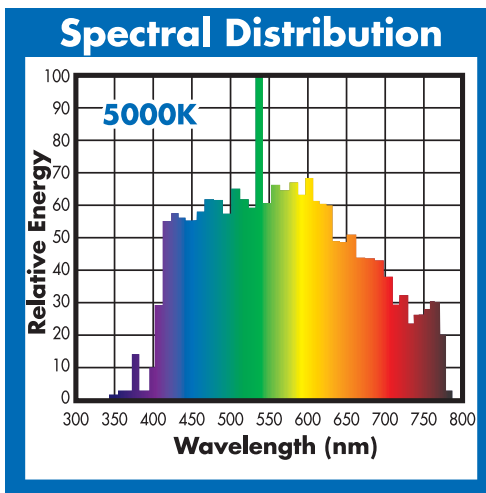
Bulb Diameter	4.6" (120mm)
Max. Overall Length (MOL)	11.5" (292mm)
Light Center Length (LCL)	7.0" (178mm)
Effective Arc Length	64.5 mm
Max. Base Temperature ( $^\circ\text{C}$ )	250
Max. Bulb Temperature ( $^\circ\text{C}$ )	450
Socket Pulse Rating (KV)	4
Luminaire Type	Open / Enclosed Rated



**BT37**



Dia. = 4.6" (120mm)  
MOL = 11.5" (292mm)  
LCL = 7.0" (178mm)  
Base = Mogul (EX39)



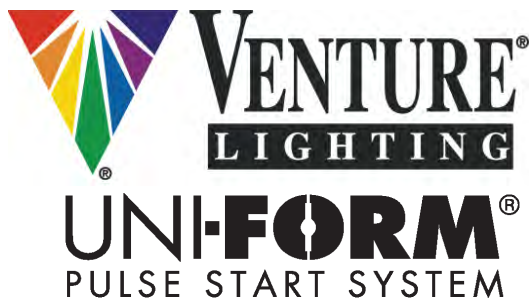
**(800) 451-2606**  
**or (440) 248-3510**

Fax: (800) 451-2605  
10295 Philipp Parkway  
Streetsboro, Ohio 44241 USA  
E-mail: [venture@adlt.com](mailto:venture@adlt.com)  
**VentureLighting.com**

THIS LAMP CONFORMS TO FEDERAL STANDARD 21 CFR 1040.30

**Warning:** This lamp can cause skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when outer envelope is broken or punctured are commercially available.

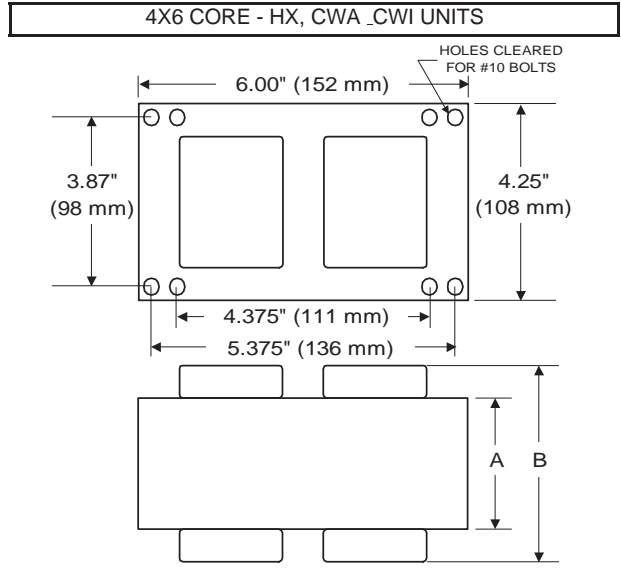
This Product is Recyclable Through  Smartpac  
FOR RECYCLING PURPOSES



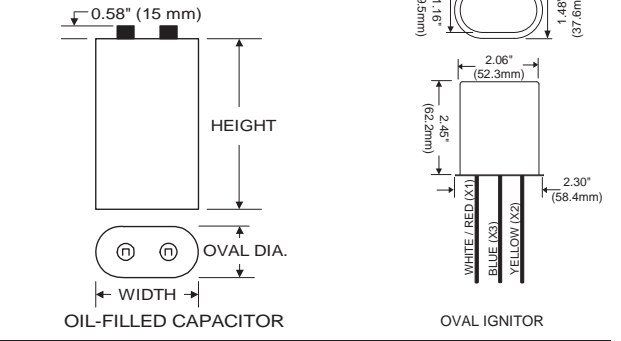
**BALLAST SPECIFICATION**

**775W M181**  
**Pulse Start Metal Halide**  
**V90D9610**  
**60 Hz CWA**

<b>Input Volts</b>	120	208	240	277
<b>Line Current ( Amps )</b>				
Operating	7.45	4.50	3.75	3.25
Open Circuit	5.60	4.10	3.05	2.60
Starting	5.20	2.85	2.65	2.30
<b>Recommended Fuse (Amps)</b>	20	12	10	9
<b>Regulation</b>				
Line Volts	±10%	±10%	±10%	±10%
Lamp Watts	±10%	±10%	±10%	±10%
<b>Temperature Ratings</b>				
Insulation Class	180 (H)	180 (H)	180 (H)	180 (H)
Coil Temperature Code	B	D	B	C
Benchtop Coil Rise	80.0	85.0	79.1	80.9
<b>Power Factor (Min)</b>	90%	90%	90%	90%
<b>Input Watts</b>	845 W	845 W	845 W	845 W
<b>Efficiency</b>				
<b>NOM. Open Circuit Voltage</b>	420	420	420	420
<b>Input Voltage At Lamp Dropout</b>	70	100	115	130
<b>Min Ambient Starting Temp</b>	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*
<b>60 HZ TEST PROCEDURES</b>				
<b>High Potential Test (Volts)</b>				
1 Minute	1,850 V	1,850 V	1,850 V	1,850 V
1 Second	2,200 V	2,200 V	2,200 V	2,200 V
<b>Open Circuit Voltage Test (V)</b>	375 - 465	375 - 465	375 - 465	375 - 465
<b>Short Circuit Current Test (A)</b>				
Secondary Current	Min 4.30	4.30	4.30	4.30
Max 5.30	5.30	5.30	5.30	5.30
Input Current	Min 3.90	2.15	2.00	1.85
Max 5.90	3.25	3.10	2.80	2.80
<b>CORE and COIL Specifications</b>				
Dimension (A)	2.80 in	2.80 in	2.80 in	2.80 in
Dimension (B)	4.95 in	4.95 in	4.95 in	4.95 in
Weight	18.5 lb's	18.5 lb's	18.5 lb's	18.5 lb's
Lead Lengths	12"	12"	12"	12"
<b>Capacitor Requirement</b>				
Microfarads	22.0 uf	22.0 uf	22.0 uf	22.0 uf
Volts (Min)	500 V	500 V	500 V	500 V



<b>Capacitor:</b>	ACB3270V	<b>Ignitor:</b>	BVS-020
Microfarads:	22.0 uf	Case Temp (Max):	105 °C
Volts (Max):	525 V	BTL Distance (Max):	10 ft
Case Temp (Max):	100 °C		
Height (Max):	3.94 in		
Dia / Oval Dia (Max):	1.97 in		
Oval Width (Max):	2.97 in		



**Ordering Information Add Suffix for options**

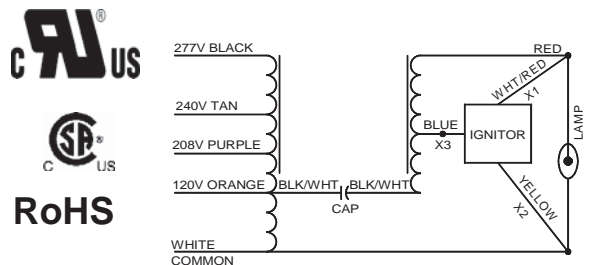
- C - With Capacitor
- K - Prewired, with Capacitor and Bracket Kit
- B - With Welded Bracket, no cap
- CB - With Capacitor and Welded Bracket

\* -40°F/-40°C Min Ambient Starting Temp with Venture Lamp  
 Coil material: primary Cu and secondary Al

RoHS compliant on all manufactured products after August 1, 2007

Data is based upon tests performed by Venture Lighting in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice.

**4/23/2008 Production**



# 100 Watt Pulse Start Lamp

# 95100 DATA SHEET



## MP 100W/U/UVS/PS/EM/950

### GENERAL Characteristics

Lamp Type	MH Pulse Start Single Ended
ANSI Code	M90/O
Bulb Shape	EDX17
Base Type	Medium (E26)
Bulb Finish	Clear
Rated Life	20000 hours
Operating Position	Universal
Dimming	70% Rated Power

### ELECTRICAL

Lamp Watts	100
Lamp Oper. Voltage (Nom.)	90

### SUSTAINABILITY

Recycling Program	Smartpac® 800-451-2606
Picograms Hg per Mean Lumen Hour	36
MR-Credit 4 Reduced Mercury in Lamps	1 LEED point

### PHOTOMETRIC

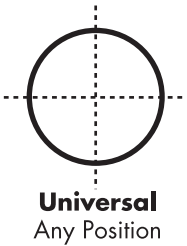
Initial Lumens	7000
Scotopic Lumens (S/P 2.1)	14700
Lumens Per Watt	70
Lamp Lumen Depreciation (LLD)	.90 (90%) @ 8000 hours
Correlated Color Temperature	5000K
Chromaticity Coordinates (CIE-x,y)	.346 .359
Color Rendering Index (CRI)	90+

### NOTES

Lamp performance ratings published in this data sheet are based on operation with approved electronic ballasts. Performance ratings of Universal lamps are based upon vertical ( $\pm 15^\circ$ ) operation. Minimum Starting Temperature:  $-40^\circ\text{C}/^\circ\text{F}$ . UV Shield eliminates nearly all UV emissions, reducing color fading and lens yellowing. To calculate nighttime Scotopic lumens, multiply the lumen rating by the S/P ratio. \*\*LEED V3, MR CREDIT 4: Sustainable Purchasing - Reduced Mercury in Lamps is awarded 1 point for projects which at least 90% of all mercury-containing lamps purchased during the performance period comply and meet the target for mercury content of 90 picograms per lumen-hour or less.

### PHYSICAL

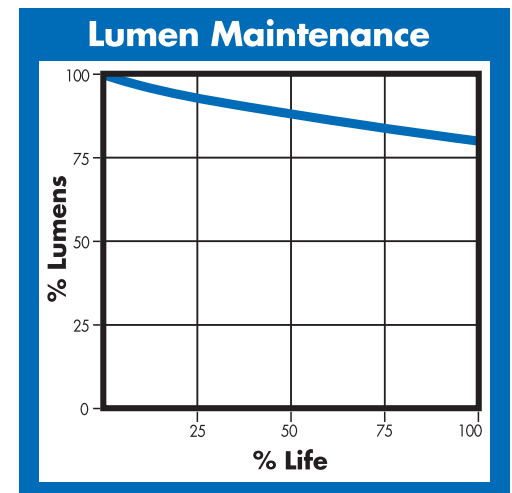
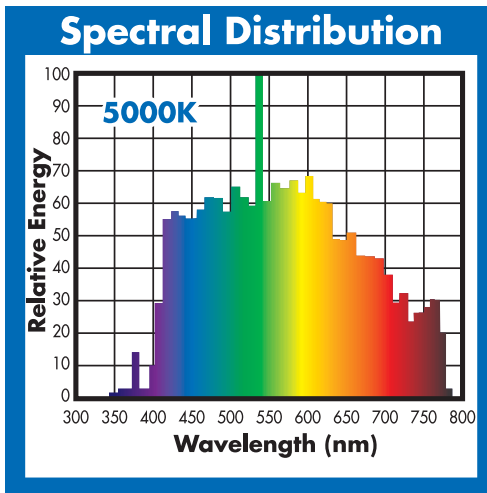
Bulb Diameter	2.1" (54mm)
Max. Overall Length (MOL)	5.4" (138mm)
Light Center Length (LCL)	3.4" (86mm)
Effective Arc Length	12.0mm
Max. Base Temperature ( $^\circ\text{C}$ )	210
Max. Bulb Temperature ( $^\circ\text{C}$ )	450
Socket Pulse Rating (KV)	4.5
Luminaire Type	Open / Enclosed Rated



EDX17



Dia. = 2.1" (54mm)  
MOL = 5.4" (138mm)  
LCL = 3.4" (86mm)  
Base = Medium (E26)



**(800) 451-2606**  
**or (440) 248-3510**

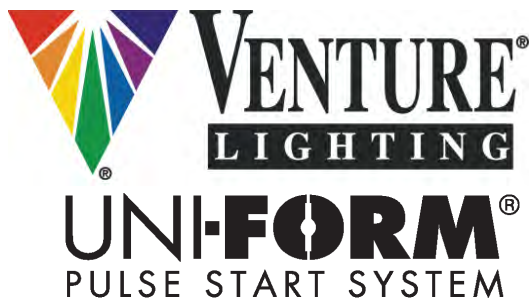
Fax: (800) 451-2605  
10295 Philipp Parkway  
Streetsboro, Ohio 44241 USA  
E-mail: [venture@adlt.com](mailto:venture@adlt.com)  
**VentureLighting.com**

THIS LAMP CONFORMS TO FEDERAL STANDARD 21 CFR 1040.30

**Warning:** This lamp can cause skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when outer envelope is broken or punctured are commercially available.

This Product is Recyclable Through Smartpac  
FOR RECYCLING PURPOSES

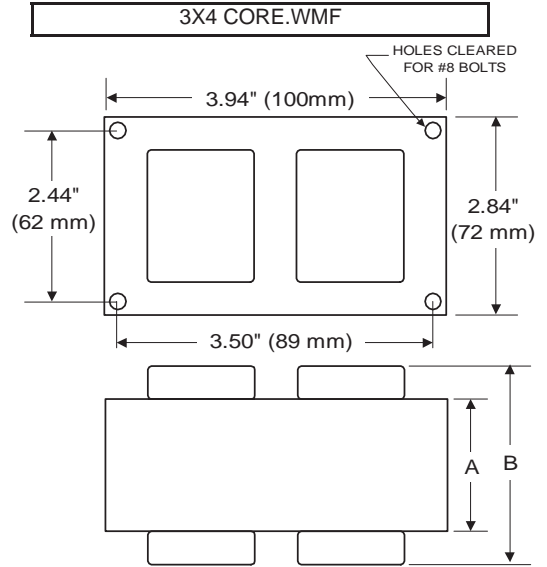




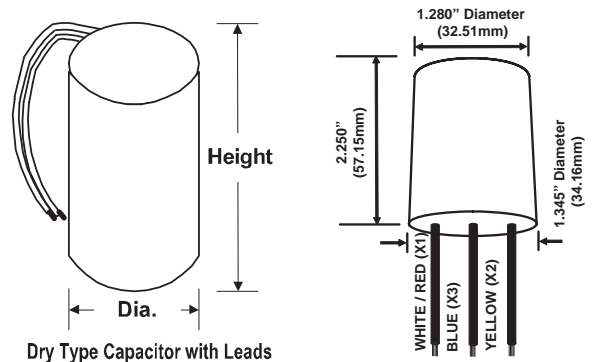
**BALLAST SPECIFICATION**

**100W M90**  
**Pulse Start Metal Halide**  
**V90D5932**  
**60 Hz HX-HPF**

<b>Input Volts</b>	120	208	240	277
<b>Line Current ( Amps )</b>				
Operating	1.10	0.65	0.55	0.50
Open Circuit	2.60	1.50	1.30	1.15
Starting	1.00	0.60	0.50	0.45
<b>Recommended Fuse (Amps)</b>	7	4	4	3
<b>Regulation</b>				
Line Volts	±5%	±5%	±5%	±5%
Lamp Watts	±10%	±10%	±10%	±10%
<b>Temperature Ratings</b>				
Insulation Class	180 (H)	180 (H)	180 (H)	180 (H)
Coil Temperature Code	A	A	A	A
Benchtop Coil Rise	70.1	69.8	65.9	71.8
<b>Power Factor (Min)</b>	90%	90%	90%	90%
<b>Input Watts</b>	125 W	125 W	125 W	125 W
<b>Efficiency</b>				
<b>NOM. Open Circuit Voltage</b>	270	270	270	270
<b>Input Voltage At Lamp Dropout</b>	80	140	160	185
<b>Min Ambient Starting Temp</b>	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*	-20°F/-30°C*
<b>60 HZ TEST PROCEDURES</b>				
<b>High Potential Test (Volts)</b>				
1 Minute	1,600 V	1,600 V	1,600 V	1,600 V
1 Second	1,900 V	1,900 V	1,900 V	1,900 V
<b>Open Circuit Voltage Test (V)</b>	240 - 300	240 - 300	240 - 300	240 - 300
<b>Short Circuit Current Test (A)</b>				
Secondary Current	Min 1.20 Max 1.50	Min 1.20 Max 1.50	Min 1.20 Max 1.50	Min 1.20 Max 1.50
Input Current	Min 0.40 Max 0.75	Min 0.25 Max 0.45	Min 0.20 Max 0.40	Min 0.15 Max 0.35
<b>CORE and COIL Specifications</b>				
Dimension (A)	1.70 in	1.70 in	1.70 in	1.70 in
Dimension (B)	3.10 in	3.10 in	3.10 in	3.10 in
Weight	5.2 lb's	5.2 lb's	5.2 lb's	5.2 lb's
Lead Lengths	12"	12"	12"	12"
<b>Capacitor Requirement</b>				
Microfarads	12.0 uf	12.0 uf	12.0 uf	12.0 uf
Volts (Min)	280 V	280 V	280 V	280 V



<b>Capacitor:</b>	ACG321	<b>Ignitor:</b>	BVS-032
Microfarads:	12.0 uf	Case Temp (Max):	105 °C
Volts (Max):	330 V	BTL Distance (Max)	2 ft
Case Temp (Max)	100 °C		
Height (Max):	2.76 in		
Dia (Max):	1.62 in		



Dry Type Capacitor with Leads

**Ordering Information** Add Suffix for options

- C - With Capacitor
- K - Prewired, with Capacitor and Bracket Kit
- B - With Welded Bracket, no cap
- CB - With Capacitor and Welded Bracket

\* -40°F/-40°C Min Ambient Starting Temp with Venture Lamp  
 Coil material: primary Cu and secondary Al

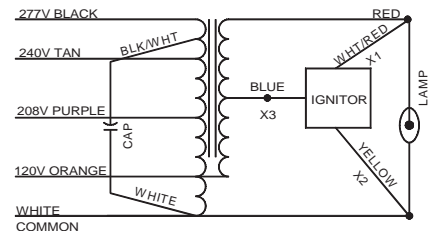
RoHS compliant on all manufactured products after August 1, 2007

Data is based upon tests performed by Venture Lighting in a controlled environment and is representative of relative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice.

**8/25/2009 Production**



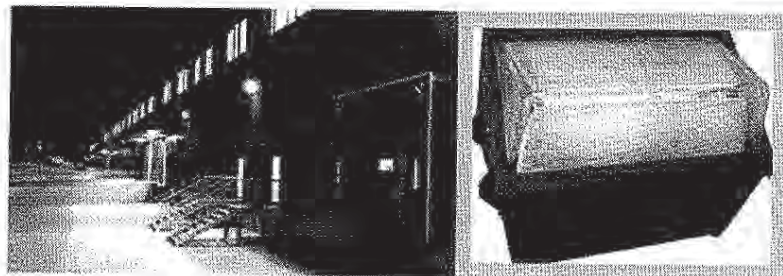
**RoHS**





# Wall Pack Fixtures WP SERIES

Project: \_\_\_\_\_  
Part Number: \_\_\_\_\_  
Quantity: \_\_\_\_\_



## APPLICATIONS

- Building Exterior
- Garages
- Parking Lots
- Safety Lighting
- Perimeter Lighting

## FEATURES

- 100,000 Hour Lifespan (IESNA)
- 10 Year or 60,000 Hour Warranty
- High Pressure Die-casted, Powder Coated Aluminum Housing
- Prismatic Tempered Glass Lens
- Surface Mounting with Bracket
- Ambient Temp Range: -30 to 130 deg F



## LAMP/GENERATOR

- 120-277V Universal Electronic Ballast
- Available 0-10V Dimmability, 2-way Communication
- Power Factor > 0.95, Operation Frequency 50-60Hz
- Instant-On, Flicker Free, Minimum Light Loss
- 40W—100W Square Tubular Lamp Design
- Color Temps Available: 3000K—5000K
- CRI > 85—Excellent Color Rendition

Product #	Wattage	Replaces	Lm/W	Lumens	IP Rating	Size	Lens
MHT-WP-40E	40	MH - 70W HPS - 100W	72.5	2,900	54	18"x9"	Prismatic Glass
MHT-WP-55E	55	MH - 100W HPS - 100W	72.5	3,988	54	18"x9"	Prismatic Glass
MHT-WP-70E	70	MH - 120W HPS - 150W	72.5	5,075	54	18"x9"	Prismatic Glass
MHT-WP-80E	80	MH - 150W HPS - 150W	77.5	6,200	54	18"x9"	Prismatic Glass
MHT-WP-100E	100	MH - 200W HPS - 200W	77.5	7,750	54	18"x9"	Prismatic Glass

### Available Options:

- Dimmable Ballast
- Occupancy Sensor
- Photocell
- Custom Colors Available



# Wall Pack Fixtures WP SERIES

Project: \_\_\_\_\_  
Part Number: \_\_\_\_\_  
Quantity: \_\_\_\_\_

## ORDERING CODES

**MHT-WP** -  **E** -  -  -  -

**Wattage:**  
40, 55, 70,  
80, 100

**Color Temp:**  
3K = 3000K  
4K = 4000K  
5K = 5000K

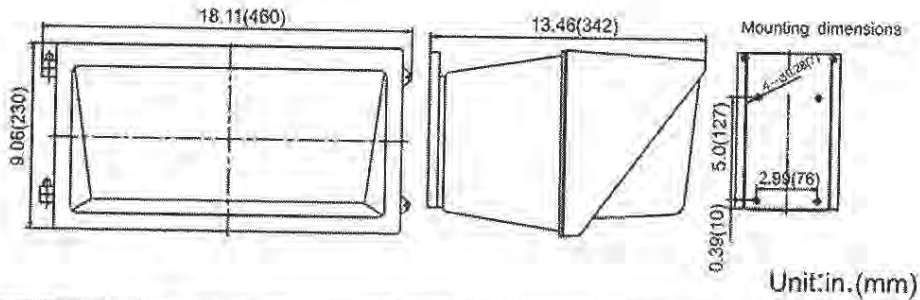
**Voltage:**  
U = Universal  
3 = 347V

**Dimmable**  
**Ballast:**  
DB

**Options:** (please specify voltage)  
OSD = Occ Sensor w/ Step Dim  
OSI = Occ Sensor w/ Instant On  
PC = Photocell, CC = Custom Color

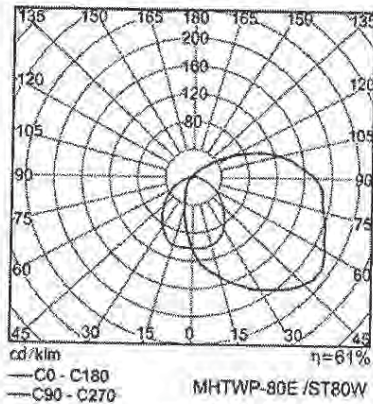
## DIMENSIONS

**MHT-WP-40/55/70/80/100E**

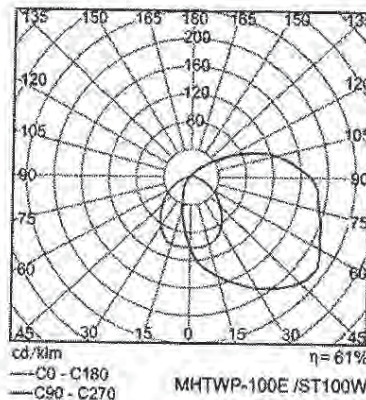


## SAMPLE PHOTOMETRICS

**MHT-WP-80E**



**MHT-WP-100E**



- ▶ MHT Products are UL Listed/Labeled and Assembled in ISO9000/1 Certified US Facility
- ▶ Every product is quality tested and inspected prior to shipment
- ▶ MHT Lighting offers a 10-year, 60,000 hour Warranty (please see Warranty Terms and Conditions)
- ▶ Made in the USA of US and Imported Parts, Meets Buy American requirements within the ARRA

MHT Plant Operations  
1961 Richmond Terrace  
Staten Island, NY 10302  
Ph: (718) 524-4370, Fx: (718) 524-4390

West Coast Operations  
2285 Michael Faraday Dr, Ste 15  
San Diego, CA 92154  
Ph: (619) 661-0600, Fx: (619) 661-0607



# Invoice

779 Commerce Dr.  
 Suite 3  
 Venice, FL 34292

Phone # 941-375-8267  
 Fax # 941-375-8328

Date	Invoice #
5/22/2012	0173

Bill To
CLP-SPF Rookwood Pavilion LLC 3805 Edwards Rd., Suite 700 Cincinnati, OH 45209

Ship To
Rookwood Pavilion 2692 Madison Rd. Cincinnati, OH 45208

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
contract	Net 30	GO	5/22/2012			

Quantity	Item Code	Description	Price Each	Amount
19	RK775W480V	Lamp/Ballast replacement kit (775 watt, 480 volt)	227.16	4,316.04T
16	RK100W277V	Lamp/Ballast replacement kit (100 watt, 277 volt)	226.50	3,624.00T
2	Induction Wall Pa...	Induction Wall-Pack, 100 watt	321.50	643.00T
4	Probe Start Natur...	Probe Start Natural White 5000K - 1,000 watt	68.75	275.00T
1	Installation-Rook...	Installation - Rookwood Pavilion lighting retrofit	2,621.00	2,621.00T
		Sales Tax - Hamilton County, OH	6.50%	746.14

			<b>Total</b>	\$12,225.18
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