

# 210 Watt RIO Roadway Type II Lamp Module

RIO: RETROFIT INTEGRATED OPTICS METAL HALIDE SYSTEM FOR STREET AND AREA LIGHTING

## DATA SHEET



**SUPER PULSE START**  
**Ceramic (SPC)**  
 Ceramic Metal Halide

## RIO 210W/T9/942/TYP2-RD/E39

### GENERAL Characteristics

Lamp Type	Ceramic Metal Halide
ANSI Code	C183/E
Base Type	Mogul (E39)
Bulb Finish	Clear
Rated Life	30000 hours
Operating Position	Horizontal
Dimming	N/A

### PHOTOMETRIC

Initial Lumens	23000
Scotopic Lumens (S/P 1.7)	39000
Lumens Per Watt	110
Lamp Lumen Depreciation (LLD)	0.89 (89%) @12000 hrs
Correlated Color Temperature	4200K
Chromaticity Coordinates (CIE-x,y)	.373 .366
Color Rendering Index (CRI)	90
Light Distribution	IES Type II

### PHYSICAL

Dimensions	See Diagrams Below
Luminaire Type	Enclosed Rated

### KIT ORDERING

Kit Order Code: <b>RI05926</b>	electronic ballast (208-240)
Kit Order Code: <b>RI03815</b>	electronic ballast (277)
Kit Order Code: <b>RI01568</b>	magnetic ballast (120/208/240/277)
Kit Order Code: <b>RI03723</b>	magnetic ballast (120/277/347)
Kit Order Code: <b>RI05714</b>	magnetic ballast (480)

### ELECTRICAL

Lamp Watts	210
Lamp Oper. Voltage (Nom.)	100

### SUSTAINABILITY

Recycling Program	Smartpac® 800-451-2606
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### OPTICS

Free formed SUPRAX™ optics with ultra smooth glass surfaces and dichroic anti-frost coating

### NOTES

Lamp performance ratings published in this data sheet are based on operation with approved magnetic ballasts. To calculate nighttime Scotopic lumens, multiply the lumen rating by the S/P ratio.

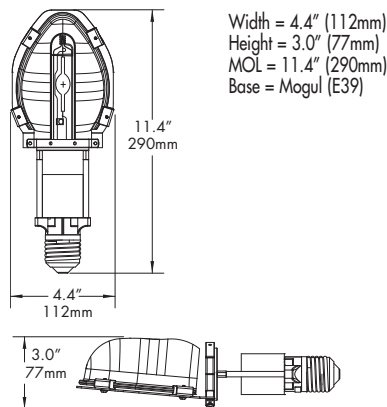
Kit includes lamp module, MH lamp, ballast and ballast mounting strap

Electronic ballast kits include external surge protection

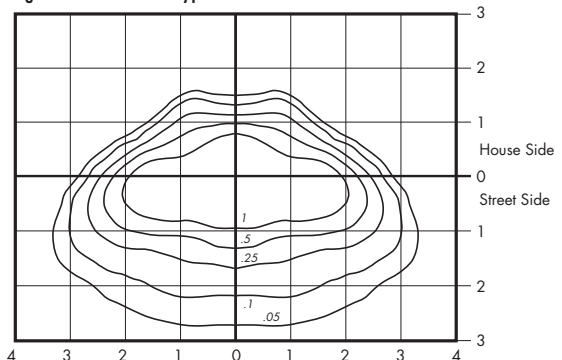
Patented Design

Revision Date: 1/22/15

Production Status: Production



Light Distribution: IES Type II



'Cobrahead' Streetlight | Clear Flat Lens | Uptilted Davit Arm | 30 Foot Mounting Height  
 Distribution shown is for 140W ROADWAY RIO

**(800) 451-2606**  
**or (440) 248-3510**  
 Fax: (800) 451-2605  
 7905 Cochran Road  
 Glenwillow, Ohio 44139 USA  
 E-mail: [venture@adlt.com](mailto:venture@adlt.com)  
[VentureLighting.com](http://VentureLighting.com)



**BALLAST SPECIFICATION**

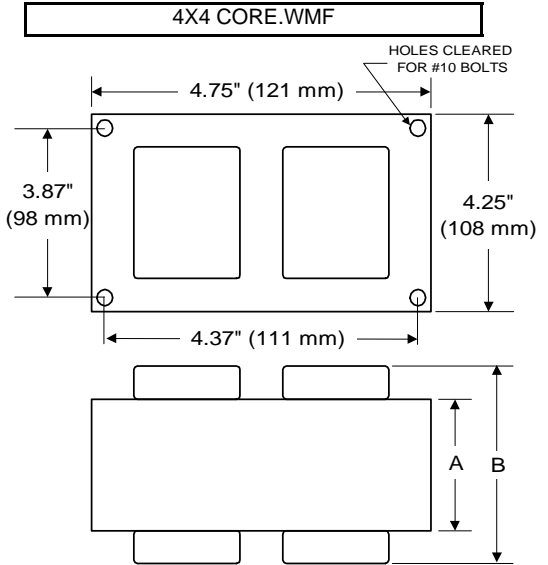
**210W MXXX-210PS**

**Pulse Start Metal Halide**

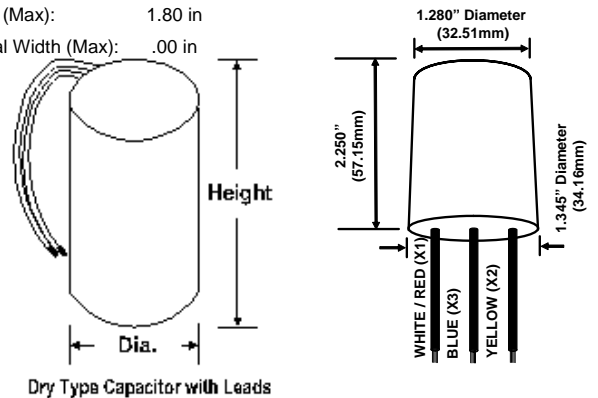
**V90D5310**

**60 Hz CWA C&C**

<b>Input Volts</b>	120	208	240	277
<b>Line Current ( Amps )</b>				
Operating	2.15	1.25	1.05	0.95
Open Circuit	1.05	0.65	0.55	0.50
Starting	1.50	0.85	0.75	0.65
<b>Recommended Fuse (Amps)</b>	6	3.5	3	3
<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	C	B	B	B
Benchtop Coil Rise	80.6	79.7	78.4	78.4
<b>Power Factor (%)</b> HPF	90	90	90	90
<b>Input Watts</b>	251 W	251 W	251 W	251 W
<b>Efficiency</b>	84.0%	84.0%	84.0%	84.0%
<b>NOM. Open Circuit Voltage</b>	195	195	195	195
<b>Input Voltage At Lamp Dropout</b>	85	150	175	190
<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>	175 - 215	175 - 215	175 - 215	175 - 215
<b>Short Circuit Current Test (A)</b>				
Secondary Current				
Min	3.00	3.00	3.00	3.00
Max	3.70	3.70	3.70	3.70
Input Current				
Min	1.20	0.70	0.60	0.50
Max	1.65	0.95	0.85	0.70
<b>CORE and COIL Specifications</b>				
Dimension (A)	1.20 in	1.20 in	1.20 in	1.20 in
Dimension (B)	3.00 in	3.00 in	3.00 in	3.00 in
Weight	8.2 lb's	8.2 lb's	8.2 lb's	8.2 lb's
Lead Lengths	12 "	12 "	12 "	12 "
<b>Capacitor Requirement</b>				
Microfarads	28.0 uf	28.0 uf	28.0 uf	28.0 uf
Volts (Min)	240 V	240 V	240 V	240 V



<b>Capacitor:</b>	ACG206	<b>Ignitor:</b>	BVS-041
Microfarads:	28.0 uf	Case Temp (Max):	105 °C
Volts (Max):	330 V	BTL Distance (Max)	2 ft
Case Temp (Max)	100 °C		
Height (Max):	3.68 in		
Dia (Max):	1.80 in		
Oval Width (Max):	.00 in		

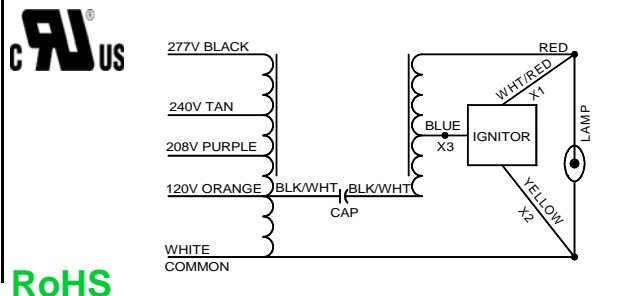


**Ordering Information**      Add Suffix for options  
 C - With Dry Capacitor  
 CB - With Dry Capacitor and Welded Bracket  
 B - With Welded Bracket, no Capacitor  
 K - Prewired, with Dry Capacitor and Bracket Kit

\* -40°F/-40°C Min Ambient Starting Temp with Venture Lamp

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.

**3/6/2013**      **Production**      Coil material: primary Cu and secondary Cu



**RoHS**