# FCO Series 9AAR-HO **Energy Efficient LED Lighting** Up to 175W Watt replacement

# **FEATURED HIGHLIGHTS**

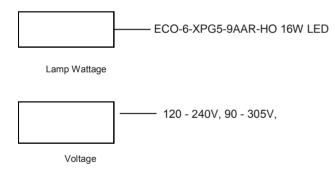
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.
- \*Maintenance free
- \*Green Product

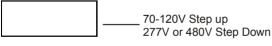
#### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights





Power Supply

#### **Dimensions**

Weight: 1 lb. (with power supply)

3" round x 1.375"

Issue Date: 4/22/11 Supersede Date: 4/22/11























# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO-9AAR-HO was specifically designed for spot and decorative lighting retrofits. Its superior heat management and compact design make it ideal, 10+ year retrofit no maintenance.

## **OUTPUT SPECIFICATIONS**

- \*Cree Inc XP-G Lamp \*Number of Lights 6
- \*Source power 17.5 Watts \*CRI 74
- \*Lumens 2400 at 100% \*Efficacv 135 LM/W \*Chromaticity: White Light 5823k
- <60°C \*Junction Temperature \*IESNA Tested LM79 & LM80 \*Operating Range -30°C to 70°C
- \*Nominal Lumens per watt 150
- \*EMC: Complaint to 47 CFR, part 2, 15
- 125° \*Viewing angle

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

- \*Decorative
- \*Garages
- \*Bollards
- \*Spot Lighting







# ECO Series 9AR-HO Energy Efficient LED Lighting 175 to 250 Watt replacement

## **FEATURED HIGHLIGHTS**

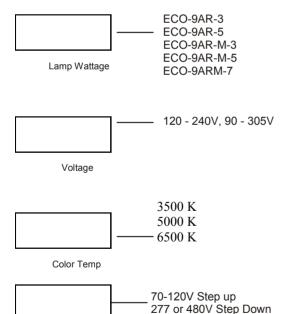
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

#### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC



#### **Dimensions**

Weight: 2 lbs. (with power supply)

**7.25"** x **3.38"**Issue Date: 5/20/11
Supersede Date: 4/22/11

Power Supply



















# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO-9AR-HO was specifically designed for wall packs and decorative lighting retrofits. Its superior heat management and compact design make it ideal for retrofitting in existing fixtures, for 10+ years of maintenance free service.

#### **OUTPUT SPECIFICATIONS**

- \*Cree High Output LEDs
- \*Number of Lights 12
  \*Source power 32 Watts
  \*CRI 74
- \*Lumens 4350 at 100%
  \*Efficacy 135 LM/W
  \*Junction Temperature <60°C
  \*IESNA Tested LM79 & LM80
- \*Operating Range -30°C to 70°C \*Nominal Lumens per watt 150
- \*EMC: Complaint to 47 CFR, part 2, 15
- \*Viewing Angle 125°

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

- \*Wall Packs
- \*High Bay Fixtures
- \*Parking Garages
- \*Parking lots
- \*Gas Station Canopies

FCO Series 9R-HO **Energy Efficient LED Lighting** 250 to 400 Watt replacement

### **FEATURED HIGHLIGHTS**

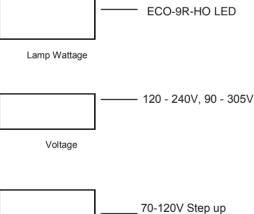
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

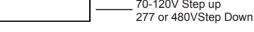
### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights





Power Supply

#### **Dimensions**

7.25" x 7.25"

Issue Date: 4/22/11 Supersede Date: 4/22/11























# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO **9**R-HO was specifically designed as a retrofit kit for existing wall packs, parking areas and roadway fixtures. Its superior heat management and compact design make it ideal, 10+ of maintenance free service in existing fixtures.

#### **OUTPUT SPECIFICATIONS**

- \*Cree Inc XP-G Lamp
- \*Number of Lights 24 \*Source power 64 Watts
- \*CRI
- 8880 at 100% \*Lumens \*Efficacy 135 LM/W \*Chromaticity: White Light 5823k \*Junction Temperature <60°C
- \*IESNA Tested LM79 & LM80 -30°C to 70°C \*Operating Range
- 150 \*Nominal Lumens per watt
- \*EMC: Complaint to 47 CFR, part 2, 15
- \*Viewing Angle 125°

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

- \*Roadway Lighting
- \*High Bay Fixtures
- \*Parking lots/Parking Garages
- \*Gas Station Canopies

FCO Series 8R-HO **Energy Efficient LED Lighting** 400 to 750 Watt replacement

#### **FEATURED HIGHLIGHTS**

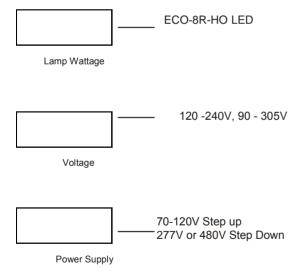
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

#### **ENVIRNOMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights



#### **Dimensions**

Weight: 6 lbs. (with power supply)

7.25" x 10"

# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO 8R-HO was specifically designed for the service station and parking lot industry. Its superior heat management and compact design make it ideal for retrofitting existing fixtures commonly found in these environments.

# **OUTPUT SPECIFICATIONS**

- \*Cree Inc XM-L Lamp
- \*Number of Lights 36 96 Watts \*Source power \*CRI 74
- \*Lumens 13,250 at 100% \*Efficacy 135 LM/W \*Chromaticity: White Light 5823k <60°C \*Junction Temperature
- \*IESNA Tested LM79 & LM80 \*Operating Range -30°C to 70°C
- 150 \*Nominal Lumens per watt

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

- \*Roadway Lighting
- \*High Bay Fixtures
- \*Parking Garages
- \*Parking lots
- \*Gas Station Canopies

























ECO Series 2x8R-HO
Energy Efficient LED Lighting
750-1000 Watt replacement

#### FEATURED HIGHLIGHTS

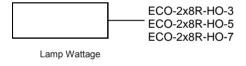
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

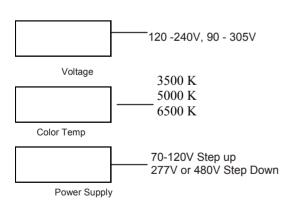
#### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights





#### **Dimensions**

Weight: 10 lbs. (with power supply)

10" X 7.25" X 1.50" Issue Date: 5/20/11 Supersede Date: 4/22/11

# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO 10R-HO was specifically designed for car dealerships, parking lots and street lighting. Its superior heat management and compact design make it ideal for retrofitting existing fixtures commonly found in these environments.

#### **OUTPUT SPECIFICATIONS**

- \*Cree High Output LEDs
- \*Number of Lights 72
- \*Source power 192 Watts
- \*CRI 71
- \*Lumens 26,500 at 100%

  \*Efficacy 135 LM/W

  \*Chromaticity: White Light 5823k

  \*Junction Temperature <60°C
- \*IESNA Tested LM79 & LM80 \*Operating Range -30°C to 70°C
- \*Nominal Lumens per watt 150
- \*EMC: Complaint to 47 CFR, part 2, 15
- \*Viewing Angle 125°

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

#### **APPLICATIONS**

- \*Roadway Lighting
- \*High Bay Fixtures
- \*Parking Garages
- \*Parking lots
- \*Gas Station Canopies



Preliminary specification sheet























# ECO Series 4x9R Energy Efficient LED Lighting

1000 Watt Replacement

#### FEATURED HIGHLIGHTS

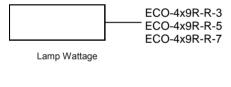
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

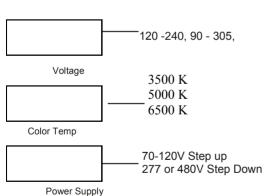
### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

#### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights





## **Dimensions**

Weight: 10 lbs. (with power supply)

22" Dia. X 1.50" Issue Date: 5/20/11 Supersede Date: 4/22/11

# **SPECIFICATIONS**

- \*\*UL and CUL rated
- \*\*MADE IN THE U.S.A

The ECO 4x9R-HO was specifically designed for car dealerships, parking lots and street lighting. Its superior heat management and compact design make it ideal for retrofitting existing fixtures commonly found in these environments.

#### **OUTPUT SPECIFICATIONS**

- \*Cree High Output LEDs
- \*Number of Lights 96
- \*Source power 236 Watts
- \*CRI 7/
- \*Lumens 20,500 at 100%

  \*Efficacy 87 LM/W

  \*Chromaticity: White Light 5823k

  \*Junction Temperature <60°C
- \*IESNA Tested LM79 & LM80 \*Operating Range -30°C to 70°C
- \*Nominal Lumens per watt 90
- \*EMC: Complaint to 47 CFR, part 2, 15
- \*Viewing Angle 125°

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

- \*Roadway Lighting
- \*High Mast Fixtures
- \*Building Uplighting
- \*Parking lots
- \*Sports Lighting

























# FCO Series 4x9R-HO **Energy Efficient LED Lighting** 1000 to 1500 Watt Replacement

## FEATURED HIGHLIGHTS

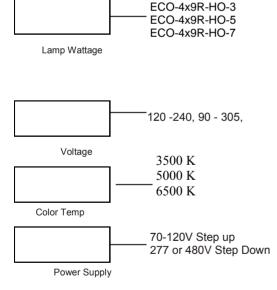
- \*Unlimited application possibilities due to retrofitting
- \*Saves up to 79% of energy consumption
- \*100,000 hour lifespan 5yr. Manufacturers registered warranty
- \*Return on Investment between 18 to 40 months.

### **ENVIRONMENTAL FEATURES**

- \*Contains no mercury or lead
- \*Does not produce UV rays
- \*Does not attract insects
- \*Directional light means no light pollution

### **ELECTRICAL SPECIFICATIONS**

- \*47 to 63 Hertz ac line power voltage from 90 VAC RMS to 277 VAC RMS
- \*Available to 480 VAC
- \*Nominal operating efficiency is 85% typical at 230 VAC and maximum load
- \*Driver provides surge protection at 305 VAC
- \*Power distributed to onboard drivers per six LED lights



#### **Dimensions**

Weight: 10 lbs. (with power supply)

22" Dia. x 1.50" Issue Date: 5/20/11 Supersede Date: 4/22/11

# **SPECIFICATIONS**

- \*\*UL and CUL
- \*\*MADE IN THE U.S.A

The ECO 4x9R-HO was specifically designed for car dealerships, parking lots and street lighting. Its superior heat management and compact design make it ideal for retrofitting existing fixtures commonly found in these environments.

#### **OUTPUT SPECIFICATIONS**

- \*Cree High Output LEDs
- 96 \*Number of Lights
- \*Source power **257 Watts**
- \*CRI
- 35,500 at 100% \*Lumens \*Efficacy 135 LM/W \*Chromaticity: White Light 5823k \*Junction Temperature <60°C
- \*IESNA Tested LM79 & LM80 -30°C to 70°C \*Operating Range
- 150 \*Nominal Lumens per watt
- \*EMC: Complaint to 47 CFR, part 2, 15
- \*Viewing Angle 125°

#### **ASSEMBLY**

- \*Metal Core Board
- \*One piece aluminum heat sink dissipates heat
- \*Vibration resistant
- \*ASTM and NEMA Tested

#### **APPLICATIONS**

- \*Roadway Lighting
- \*High Mast Fixtures
- \*Building Uplighting
- \*Parking lots
- \*Sports Lighting



Preliminary specification sheet





















