

# CYLINDRIX® III MINI

MULTIPLE RECESSED 1 LIGHT LED

C3MR-1  
1LT LED

**APPLICATION:**

Accent and display lighting for retail, commercial and hospitality environments


**CONSTRUCTION:**

Stamped steel mounting frame with integral mounting bars  
Thermally protected  
Steel driver housing  
Steel upper housing and laser cut trim ring  
Complete die-cast optical head construction  
Powder coat paint

**MOUNTING:**

For use in T-grid or sheetrock ceilings, max thickness 1" standard, consult factory for thicker ceilings

**LABELING:**

 For indoor use only

**OPTICS:**

0-35° tilt, 360°+ rotation  
Available in a variety of beam spreads  
LED:  
Color Temp Options: 2200K, 2700K, 3000K, 3500K, 4000K  
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)  
90+ typ. (2200K, 2700K, 3000K, 3500K)  
CrispWhite & Class A LEDs available  
R9 Values: 11 (83CRI), 55 (90+CRI)  
Binning: 3 MacAdam  
Lumen Maintenance: >70% of initial lumens @ 50,000 hrs  
Lumen Output (21W, 3000K): 1850 lm (89.6 lpw)  
CBCP (21W, 3000K): SP 13,578

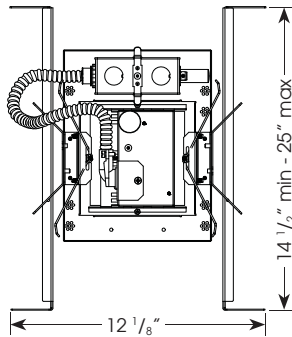
**ELECTRICAL:**

Electronic constant current LED driver, 120v - 277v input  
ELV and Triac dimming standard, 120v & 277v.  
0-10v and Lutron systems also available. See following pages for more information.  
**This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Amerlux® recommends using additional surge protection with this unit (supplied by others), surge damage is not covered by warranty.**

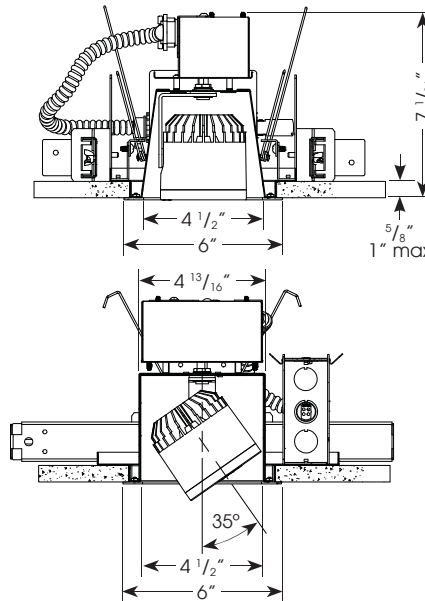


PROJECT:

TYPE:



Ceiling Cut Out Dimension: 5 9/16" x 5 9/16"



  
Electrostatic sensitive device,  
observe precautions for  
handling

**ELECTRICAL**

Electronic driver

|      | 15w          |      | 18w          |      | 21w          |      |
|------|--------------|------|--------------|------|--------------|------|
|      | System Watts | Amps | System Watts | Amps | System Watts | Amps |
| 120v | 15           | 0.13 | 18           | 0.15 | 21           | 0.18 |
| 277v | 15           | 0.05 | 18           | 0.06 | 21           | 0.08 |

**5** year limited  
warranty  
AMERLUX LED

(see website for details)

**ORDERING INFORMATION:**

| FRAME Model   | # Heads | Lamp Type | Voltage    | Options/Accessories  |
|---------------|---------|-----------|------------|--|
| C3MR/SR-FRAME | 1       | LED       | 120<br>277 | 0-10V - 0-10v dimming<br>HILUME - Lutron Hi-lume® dimming<br>DALI - DALI dimming |

Complete Unit Specification:

C3MR/SR-FRAME-1-LED-120/C3MR-TRIM-1-21-LED-WT-120-277-SP-WT-30

Frame Only: C3MR/SR-FRAME-1-LED-120

Trim Only: C3MR-TRIM-1-21-LED-WT-120-277-SP-WT-30

| TRIM Model | # Heads | Wattage      | Lamp Type | Housing/Head Finish   | Voltage | Beam Spread   | Trim Finish   | Color Temp (CCT-CRI)                                   | Options/Accessories   |
|------------|---------|--------------|-----------|---|---------|---|---|--|---|
| C3MR-TRIM  | 1       | 15           | LED       | WT - white texture<br>BT - black texture<br>ST - silver texture | 120-277 | SP - spot, 14°<br>VNF - very narrow flood, 18°<br>NF - narrow flood, 23°<br>FL - flood, 34°<br>WF - wide flood, 44° | WT - white texture<br>BT - black texture<br>ST - silver texture | 27 - 2700-83   | SN- snoot, 1" w/black matte interior standard<br>HEX - hexcell louver<br>LS - linear spread<br>CB - cross blade, matte black, requires snoot<br>SOL - solite beam softening lens<br>0-10V - 0-10v dimming<br>HILUME - Lutron Hi-lume® dimming<br>DALI - DALI driver |
|            |         | 30 - 3000-83 |           |   |         |   |   |  |   |
|            |         | 21           |           |   |         |   |   | 35 - 3500-83   |   |
|            |         |              |           |   |         |   |   | 40 - 4000-83   |   |
|            |         |              |           |   |         |   |   | 229 - 2200-90+   |   |
|            |         |              |           |   |         |   |   | 279 - 2700-90+   |   |
|            |         |              |           |   |         |   |   | 309 - 3000-90+   |   |
|            |         |              |           |   |         |   |   | 359 - 3500-90+   |   |
|            |         |              |           |   |         |   |   | 409 - 4000-90+   |   |
|            |         |              |           |   |         |   |   | 3CLA - 3K Class A<br>CRISP - CrispWhite (not for VNSP) |   |
|            |         | 18 (8° only) |           | (other RAL)   |         | VNSP - very narrow spot, 8° (18w only)  |   |  |   |

Cat #:

Amerlux reserves the right to change details that do not affect overall function and performance.



# CYLINDRIX® III MINI

MULTIPLE RECESSED 1 LIGHT LED

C3MR-1  
1LT LED



TYPE:

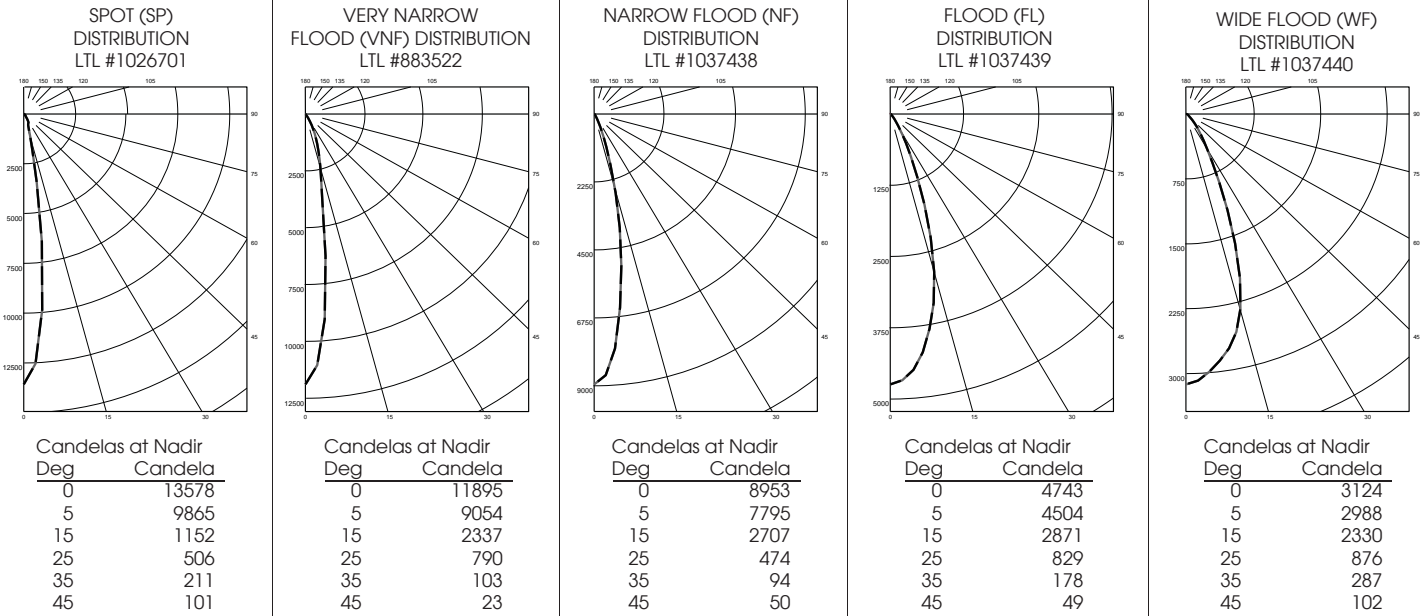


**FIXTURE DATA:** For 15W data, multiply by 0.71; For 18W data see next page

Complete photometric data (ies format) available upon request.

CCT Correction Factors: 2700-83 = 0.96; 3500-83 = 1.02; 4000-83 = 1.04; 2200-90+ = 0.71; 2700-90+ = 0.80; 3000-90+ = 0.83; 3500-90+ = 0.87; Crisp = 0.65

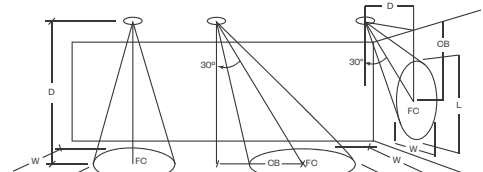
**21W LED (3000K)**



**APPLICATION DATA:**

**Notes and Definitions:**

Beam spread is to 50% center beam candlepower (CBCP).  
 D=Distance to floor or wall.  
 FC=Footcandles on floor or wall at center beam aiming location.  
 L=Effective Visual Beam length in feet (50% of maximum footcandle level).  
 W=Effective Visual Beam width in feet (50% of maximum footcandle level).  
 CB=Distance across or down to center beam location.



|                   | 0° Aiming Angle<br>Horizontal<br>Footcandles |     |     |     | 30° Aiming Angle<br>Horizontal<br>Footcandles |     |     |     |     | 30° Aiming Angle<br>Vertical<br>Footcandles |     |     |     |     | 60° Aiming Angle<br>Vertical<br>Footcandles |     |     |     |     |
|-------------------|--|-----|-----|-----|---|-----|-----|-----|-----|---|-----|-----|-----|-----|---|-----|-----|-----|-----|
|                   | D  | FC  | L   | W   | D   | FC  | L   | W   | CB  | D   | FC  | L   | W   | CB  | D   | FC  | L   | W   | CB  |
| SPOT              | 5.0'   | 540 | 1.2 | 1.2 | 5.0'  | 348 | 1.6 | 1.4 | 3.0 | 3.0'  | 200 | 2.8 | 1.4 | 5.0 | 3.0'  | 726 | 1.3 | 1.1 | 2.0 |
|                   | 7.5'   | 241 | 1.8 | 1.8 | 7.5'  | 155 | 2.5 | 2.2 | 4.0 | 4.0'  | 121 | 3.5 | 1.8 | 6.0 | 4.0'  | 518 | 1.5 | 1.2 | 2.0 |
|                   | 10.0'  | 136 | 2.6 | 2.6 | 10.0'   | 85  | 3.4 | 3.0 | 6.0 | 5.0'  | 77  | 4.3 | 2.5 | 8.0 | 5.0'  | 334 | 1.8 | 1.3 | 3.0 |
|                   | 12.5'  | 87  | 3.2 | 3.2 | 12.5'   | 57  | 4.2 | 3.6 | 7.0 | 6.0'  | 54  | 5.2 | 2.9 | 9.0 | 6.0'  | 230 | 2.2 | 1.6 | 3.0 |
| VERY NARROW FLOOD | 5.0'   | 473 | 1.4 | 1.4 | 5.0'  | 305 | 1.9 | 1.5 | 3.0 | 3.0'  | 176 | 3.4 | 1.5 | 5.0 | 3.0'  | 651 | 1.6 | 1.2 | 2.0 |
|                   | 7.5'   | 211 | 2.1 | 2.1 | 7.5'  | 136 | 2.9 | 2.5 | 4.0 | 4.0'  | 108 | 4.1 | 2.0 | 6.0 | 4.0'  | 462 | 1.6 | 1.3 | 2.0 |
|                   | 10.0'  | 119 | 2.9 | 2.9 | 10.0'   | 75  | 3.8 | 3.3 | 6.0 | 5.0'  | 67  | 5.3 | 2.8 | 8.0 | 5.0'  | 293 | 2.0 | 1.5 | 3.0 |
|                   | 12.5'  | 76  | 3.5 | 3.5 | 12.5'   | 50  | 4.7 | 3.9 | 7.0 | 6.0'  | 49  | 6.3 | 3.2 | 9.0 | 6.0'  | 206 | 2.4 | 1.8 | 3.0 |
| NARROW FLOOD      | 5.0'   | 358 | 1.9 | 1.9 | 5.0'  | 257 | 2.4 | 2.1 | 3.0 | 3.0'  | 181 | 3.2 | 1.8 | 4.0 | 3.0'  | 620 | 1.9 | 1.2 | 2.0 |
|                   | 7.5'   | 159 | 2.9 | 2.9 | 7.5'  | 115 | 3.5 | 3.2 | 4.0 | 4.0'  | 96  | 4.4 | 2.8 | 6.0 | 4.0'  | 426 | 1.9 | 1.5 | 2.0 |
|                   | 10.0'  | 90  | 3.8 | 3.8 | 10.0'   | 63  | 4.8 | 4.2 | 5.0 | 5.0'  | 63  | 5.3 | 3.3 | 7.0 | 5.0'  | 249 | 2.5 | 2.2 | 3.0 |
|                   | 12.5'  | 58  | 4.8 | 4.8 | 12.5'   | 40  | 6.1 | 5.4 | 7.0 | 6.0'  | 43  | 6.7 | 4.0 | 8.0 | 6.0'  | 182 | 2.9 | 2.6 | 3.0 |
| FLOOD             | 5.0'   | 190 | 2.9 | 2.9 | 5.0'  | 130 | 3.5 | 3.1 | 2.0 | 3.0'  | 113 | 3.4 | 2.7 | 3.0 | 3.0'  | 340 | 2.3 | 1.8 | 1.0 |
|                   | 7.5'   | 85  | 4.3 | 4.3 | 7.5'  | 58  | 5.2 | 4.8 | 3.0 | 4.0'  | 64  | 4.6 | 3.5 | 4.0 | 4.0'  | 208 | 2.8 | 2.6 | 2.0 |
|                   | 10.0'  | 48  | 5.7 | 5.7 | 10.0'   | 34  | 6.8 | 6.4 | 5.0 | 5.0'  | 41  | 5.8 | 4.4 | 5.0 | 5.0'  | 133 | 3.5 | 3.1 | 2.0 |
|                   | 12.5'  | 31  | 7.2 | 7.2 | 12.5'   | 22  | 8.5 | 8.0 | 6.0 | 6.0'  | 29  | 7.0 | 5.2 | 7.0 | 6.0'  | 93  | 4.1 | 3.8 | 3.0 |
| WIDE FLOOD        | 5.0'   | 125 | 3.3 | 3.3 | 5.0'  | 92  | 3.9 | 3.5 | 2.0 | 3.0'  | 92  | 3.2 | 2.7 | 3.0 | 3.0'  | 254 | 2.3 | 2.0 | 1.0 |
|                   | 7.5'   | 56  | 5.0 | 5.0 | 7.5'  | 41  | 5.6 | 5.4 | 3.0 | 4.0'  | 52  | 4.3 | 3.6 | 4.0 | 4.0'  | 138 | 3.2 | 3.0 | 2.0 |
|                   | 10.0'  | 32  | 6.7 | 6.7 | 10.0'   | 23  | 7.6 | 7.3 | 4.0 | 5.0'  | 34  | 5.3 | 4.6 | 5.0 | 5.0'  | 93  | 3.9 | 3.5 | 2.0 |
|                   | 12.5'  | 20  | 8.5 | 8.5 | 12.5'   | 15  | 9.6 | 9.2 | 5.0 | 6.0'  | 23  | 6.5 | 5.5 | 6.0 | 6.0'  | 64  | 4.7 | 4.5 | 2.0 |

# CYLINDRIX® III MINI

MULTIPLE RECESSED 1 LIGHT LED

C3MR-1  
1LT LED



TYPE:



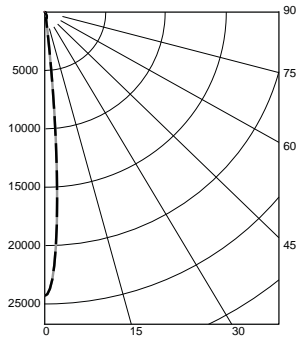
**FIXTURE DATA:**

Complete photometric data (ies format) available upon request.

CCT Correction Factors: 2700-83 = 0.96; 3500-83 = 1.02; 4000-83 = 1.04; 2200-90+ = 0.71; 2700-90+ = 0.80; 3000-90+ = 0.83; 3500-90+ = 0.87; Crisp = 0.65

**18W LED (3000K-83)**

VERY NARROW SPOT (VNSP)  
DISTRIBUTION  
LTL #1170140

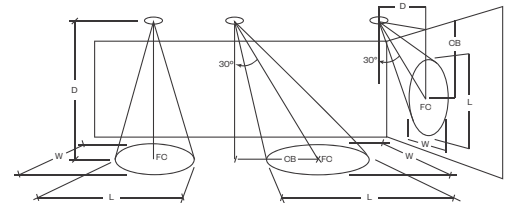


| Candelas at Nadir | Deg | Candela |
|-------------------|-----|---------|
|                   | 0   | 24308   |
|                   | 5   | 8980    |
|                   | 15  | 527     |
|                   | 25  | 394     |
|                   | 35  | 131     |
|                   | 45  | 57      |

**APPLICATION DATA:**

**Notes and Definitions:**

Beam spread is to 50% center beam candlepower (CBCP).  
 D=Distance to floor or wall.  
 FC=Footcandles on floor or wall at center beam aiming location.  
 L=Effective Visual Beam length in feet (50% of maximum footcandle level).  
 W=Effective Visual Beam width in feet (50% of maximum footcandle level).  
 CB=Distance across or down to center beam location.



0° Aiming Angle  
Horizontal  
Footcandles



30° Aiming Angle  
Horizontal  
Footcandles



30° Aiming Angle  
Vertical  
Footcandles



60° Aiming Angle  
Vertical  
Footcandles

| VERY NARROW SPOT | 0° Aiming Angle Horizontal Footcandles |     |     |     | 30° Aiming Angle Horizontal Footcandles |     |     |     |     | 30° Aiming Angle Vertical Footcandles |     |     |     |      | 60° Aiming Angle Vertical Footcandles |     |     |     |     |
|------------------|--|-----|-----|-----|---|-----|-----|-----|-----|---------------------------------------|-----|-----|-----|------|---------------------------------------|-----|-----|-----|-----|
|                  | D                                      | FC  | L   | W   | D                                       | FC  | L   | W   | CB  | D                                     | FC  | L   | W   | CB   | D                                     | FC  | L   | W   | CB  |
|                  | 5.0'                                   | 967 | 1.0 | 1.0 | 5.0'                                    | 624 | 1.0 | 1.0 | 3.0 | 3.0'                                  | 360 | 1.5 | 1.0 | 5.0  | 3.0'                                  | 983 | 1.0 | 1.0 | 2.0 |
|                  | 7.5'                                   | 431 | 1.1 | 1.1 | 7.5'                                    | 251 | 1.8 | 1.1 | 4.0 | 4.0'                                  | 185 | 2.4 | 1.1 | 7.0  | 4.0'                                  | 729 | 1.1 | 1.0 | 2.0 |
|                  | 10.0'                                  | 243 | 1.3 | 1.3 | 10.0'                                   | 153 | 2.1 | 1.6 | 6.0 | 5.0'                                  | 129 | 2.7 | 1.2 | 8.0  | 5.0'                                  | 600 | 1.1 | 1.0 | 3.0 |
|                  | 12.5'                                  | 156 | 1.8 | 1.8 | 12.5'                                   | 102 | 2.4 | 2.2 | 7.0 | 6.0'                                  | 90  | 3.3 | 1.6 | 10.0 | 6.0'                                  | 325 | 1.9 | 1.0 | 3.0 |

# CYLINDRIX® III MINI

MULTIPLE RECESSED 1 LIGHT LED

C3MR-1  
1LT LED



TYPE:



## DIMMING COMPATIBILITY:

Amerlux® fixtures are compatible with all major dimming protocols prevalent in the United States. Please see below for general compatibilities and wiring diagrams. Amerlux recommends testing your unique dimming configuration as the exact full configuration (Dimmer, Fixture Quantity, Voltage, etc) may affect dimming performance.

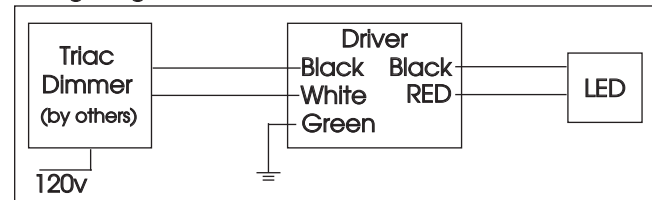
### TRIAC (Forward Phase) DIMMING (standard)

Utilizes "Standard" incandescent dimmers that are in wide use in installations across the US. Best for retrofit applications where Triac dimmers are installed.

#### Notes:

- 120v & 277v
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements per dimming manufacturer

#### Wiring Diagram



#### Compatible Dimmers

##### Wall Box (Incandescent Style, Wattage as required)

Lutron "Diva"  
Lutron "Nova-T"  
Lutron "Maestro"

Lutron "Vareo"  
Lutron "Skylark"

##### Central System

ETC "SR" Rack w/D20 Module  
Lutron "GP" Panel

ETC "DRD" Rack w/D20 Module  
Lutron Grafix Eye QS

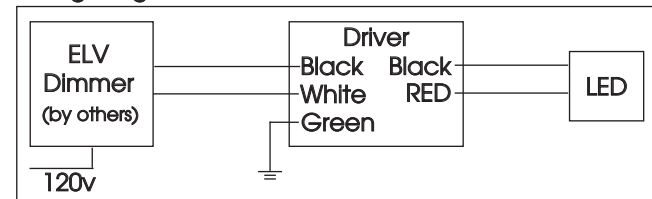
### ELV - Electronic Low Voltage (Reverse Phase) DIMMING (standard)

Utilizes specialized "ELV" dimmers. Best for New Construction applications

#### Notes:

- 120v & 277v
- Dims down to less than 5% light output (most cases)
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!
- Must meet dimmer Minimum Load Requirements

#### Wiring Diagram



#### Compatible Dimmers

##### Wall Box (ELV Style)

Lutron "Diva"  
Lutron "Nova-T"  
Lutron "Maestro"  
Leviton "Surslide"

Lutron "Vareo"  
Lutron "Skylark"  
Leviton "Vizio"

##### Central System

ETC "SR" Rack w/ELV10 Module  
Lutron "GP" Panel with PHPM-PA Interface

ETC "DRD" Rack w/ELV10 Module  
Lutron Grafix Eye QS with PHPM-PA Interface

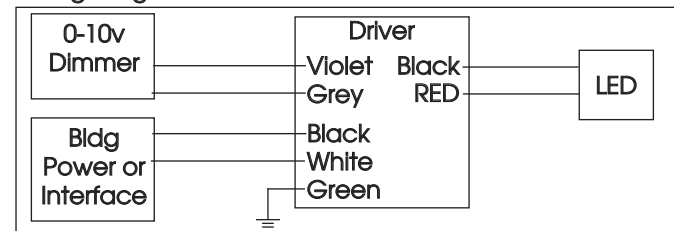
### 0-10V - DIMMING (-0-10V Option)

Integrates into a variety of building management and daylighting controls

#### Notes:

- 120v - 277v
- Dims down to less than 10% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

#### Wiring Diagram



#### Compatible Dimmers

##### Wall Box

Lutron "Diva" - DVTV with PP-120H Interface

Leviton Renoir II 0-10v

##### Central System

Lutron Grafix Eye with GRX-TVI Interface

# CYLINDRIX® III MINI

MULTIPLE RECESSED 1 LIGHT LED

C3MR-1  
1LT LED



TYPE:



## LUTRON HI-LUME / ECO-SYSTEM (-HILUME Option)

Integrates into a variety of building management and daylighting controls

### Notes:

- 120v or 277v
- Dims down to less than 5% light output
- May use 3-Wire or Ecosystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

### Compatible Dimmers

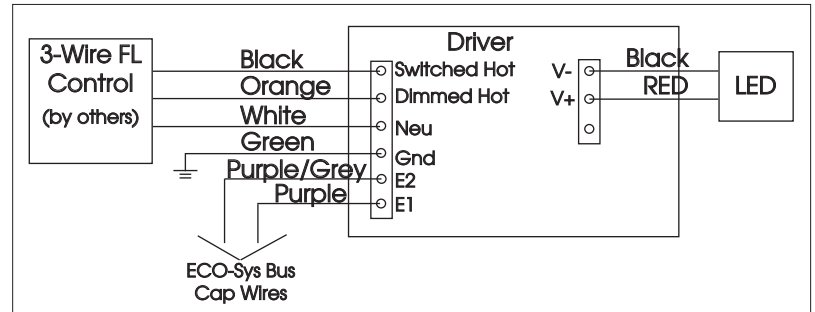
#### Wall Box (3-Wire Fluorescent)

DIVA  
Maestro  
Nova T  
Vareo

#### Central System

Lutron ECO-System compatible controls  
ETC "SR" Rack w/D20F Module  
ETC "DRD" Rack w/D20F Module

### 3-Wire Wiring Diagram



### ECO System Digital Control Wiring

