

Cylindrix® III Mini

3.5" Round Surface Canopy



Features

This powerful, compact member of our Cylindrix family enhances your design aesthetics. The new Cylindrix III Mini (C3 Mini) Round Surface Canopy is tiny, passively cooled, with an invisible heat sink and full dimming capacity. It delivers brilliant colors, crispest whites, and a patent pending, field changeable optical system.

Product Overview

Type:	Surface Accent & Display
Wattage:	15, 18 (VNSP only), 21
Color Temp:	2200K, 2700K, 3000K, 3500K, 4000K, CRISP
ORl:	83 typ. (2700K, 3000K, 3500K, 4000K) 90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K) CrispWhite & 3K Class A available
Dimming:	TRIAC & ELV (120/277VAC) - 5% Dim Lutron LDE1 Hi-lume® 1% Soft-On/Fade-to-Black (120/277VAC) 0-10V (120/277VAC) - 1% dim DALI (120/277VAC) - 1% dim

PROJECT:

TYPE:

Fixture Summary *(see following pages for more information)*

Performance Chart

Watts	Delivered Lumens	LPW	CBCP	Color Temp
15	1,508	100.5	9,415	3000K-83
18*	1,096	60.2	24,308	3000K-83
21	2,125	105	13,260	3000K-83

*Note: 18W is VNSP only

Data is based on 3000K-83 120V IES files available on website.

15W & 21W data is based on Very Narrow Flood optics, 18W data is Very Narrow Spot optic only. See pgs 6-7 for other beam spreads.

Electrical Data

	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

Electronic constant current LED driver



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PROJECT:

TYPE:

Housing/Frame Ordering Information

1	2	3	4	5
1 <u>Model</u> For New Construction C3M-RSC-NC-A17[†] (New Construction) C3M-RSC-CP-A17[†] (Chicago Plenum (CCEA) housing) C3M-RSC-IC-A17[†] (Insulated Ceiling/air tight housing 15W only) For Existing Ceilings C3M-RSC-REM-A17[†] (Remodeler)	2 <u>Wattage</u> 15 (120/277 only) 18 (VNSP only) 21	3 <u>Voltage</u> 120 277 120/277 (for use with 15W only)	4 <u>Driver</u> (for non-dimming, select LE/TE option) LE/TE - TRIAC/ELV dimming, 5% dim HILUME-H-ECO - Lutron LDE1 Hi-lume® 1% Soft-On/ Fade-to-Black 0-10V - 0-10V dimming, 1% dim DALI - DALI dimming, 1% dim	5 <u>Options/Accessories</u> EM - emergency battery pack with remote test switch (not available for use with REM, CP or IC options)

Trim Ordering Information

C3M-RSC-A17				
1	2	3	4	5
1 <u>Model</u> C3M-RSC-A17[†]	2 <u>Finish</u> WT - white texture BT - black texture ST - silver texture <i>Other finishes, consult factory</i>	3 <u>Beam Spreads</u> VNSP - very narrow spot, 8° (for 18W only) SP - spot, 14° VNF - very narrow flood, 18° NF - narrow flood, 23° FL - flood, 34° WF - wide flood, 44° LS - linear spread, 60°x10°	4 <u>Color Temp</u> 83 CRI 90+ CRI 27 - 2700K-83 229[†] - 2200K-90+ CRISP[†] - CrispWhite 30 - 3000K-83 279 - 2700K-90+ 3CLA - 3K Class A 35 - 3500K-83 309 - 3000K-90+ 40 - 4000K-83 359 - 3500K-90+ 409 - 4000K-90+ † Not available for use with 18W VNSP	5 <u>Options/Accessories</u> SN - snoot, 1" length, matte black interior, exterior finish matches fixture finish HEX - hexcell louver CB - cross blade, matte black finish, requires snoot SOL - solite beam softening lens

† The "A" refers to the sequential revision in a year and "XX" refers to the year of update. Updates coincide with improved performance while not changing the overall fixture aesthetic and are reflected in the published performance data. Please contact your Amerlux representative for explanations of changes.

Cylindrix® III Mini

3.5" Round Surface Canopy



PROJECT:

TYPE:

Specifications

Application

Retail and commercial accent and display lighting

Construction

20 ga. galvanized steel frame
18 ga. galvanized steel splice housing and hanger brackets
(not for Remodeler version)
Die-cast optical housing and heat sink

Optical

0-180° tilt, 360° rotation
Beam spreads: Very Narrow Spot, 8° (18W only); Spot, 14°;
Very Narrow Flood, 18°; Narrow Flood, 23°; Flood, 34°;
Wide Flood, 44°

LED

Color Temp Options:
2200K, 2700K, 3000K, 3500K, 4000K, CRISP
CRI: 83 typ. (2700K, 3000K, 3500K, 4000K)
90+ typ. (2200K, 2700K, 3000K, 3500K, 4000K)
CrispWhite* and Class A** 3000K (high CRI, high gamut)
available (see description below)
R9 Values: 11 (83 CRI), 55 (92 CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

**CrispWhite: CrispWhite Technology delivers the warmth of colors expected from a high 90 CRI solution but also creates the natural crisp white color that is pleasing to the eye. It creates the most impactful lighting ever available, by revealing the richest whites and vibrant colors that pop.*

***Class A LED: Class A LED's have a CRI > 80 and a GAI > 80. CRI defines color "Naturalness" and GAI defines color "Saturation." Both being high delivers rich colors and pure whites.*

Electrical

Wattage: 15, 18 (VNSP only), 21
Electronic constant current LED driver, 120/277VAC input
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 and over voltage damage is not covered under warranty.

Driver

LE/TE - Leading Edge, TRIAC, forward phase/Trailing Edge, ELV, reverse phase
0-10V, Lutron & DALI systems also available
See pages 8-10 for more dimming information

Finish

Powder coat paint
Consult factory for custom finishes

Mounting

For use in T-Grid or GB ceilings; max ceiling thickness 1"
Consult factory for thicker ceilings
Adjustable hanger bars included (14 1/2" - 25" std.)
(32"-48" Adjustable hanger bars available, consult factory)

Certifications

CSA listed to UL standards
IC/AT rated (*optional, not for Remodeler version*)
For indoor use only

Warranty

5 year limited warranty

Emergency Battery Pack (EM)

Powers fixture at 5.1 watts (approx. 400 Lm) for 90 minutes
(not for Remodeler version)

Cylindrix® III Mini

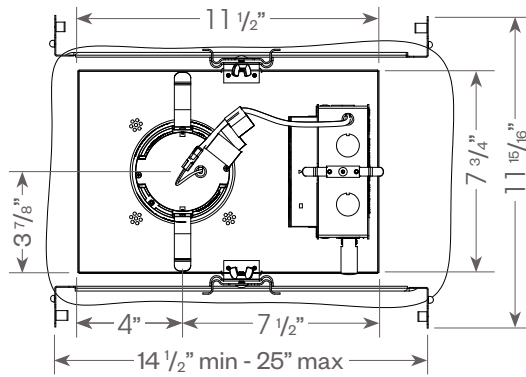
3.5" Round Surface Canopy



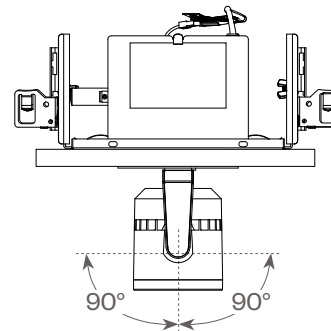
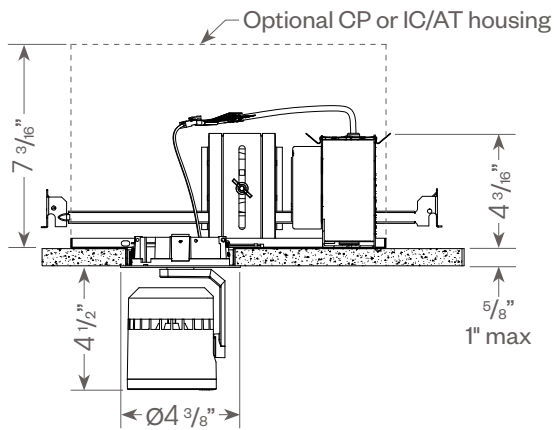
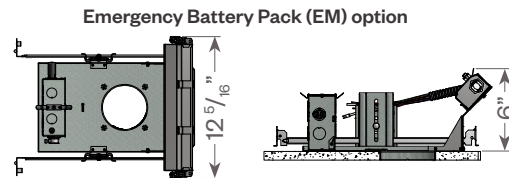
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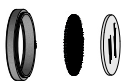
C3M Round Surface Canopy (new construction):



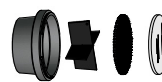
Ceiling cut out: 4" dia.



Accessories (diagrams show installation order)



Front door/Accessory holder, hexcell, solite lens



Snout accessory holder, cross blade, hexcell, solite lens

Cylindrix® III Mini

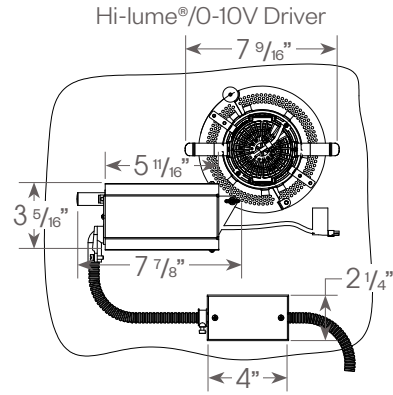
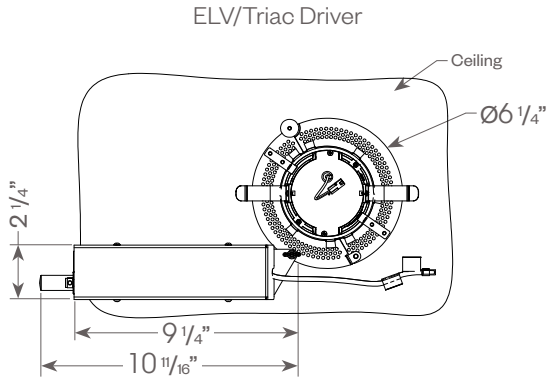
3.5" Round Surface Canopy



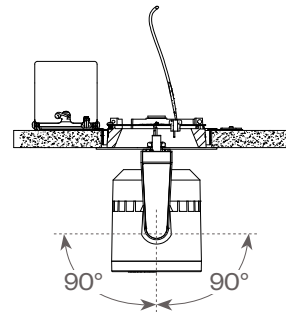
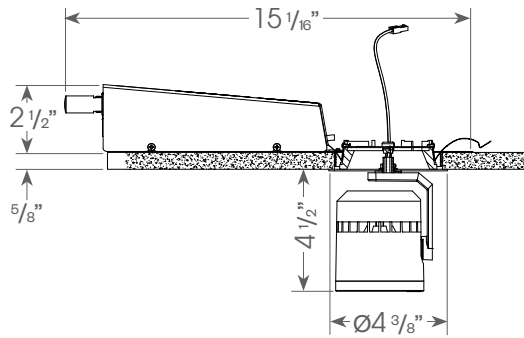
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TYPE:

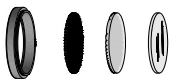
C3M Round Surface Canopy Remodeler:



Ceiling cut out: 4" dia.



Accessories (diagrams show installation order)



Front door/Accessory holder, hexcell, linear spread lens, solite lens



Snoot accessory holder, cross blade, hexcell, linear spread lens, solite lens

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3.5" Round Surface Canopy



PROJECT:

TYPE:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

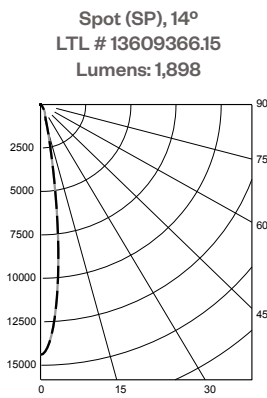
MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

Wattage:	15W	21W
Factor:	0.71	1.0

CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

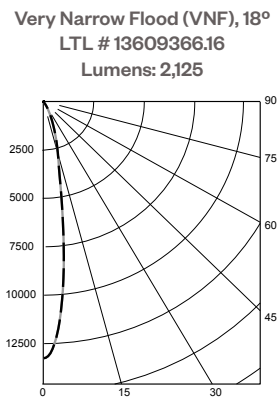
CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP	3CLA
Factor:	0.66	0.83	0.86	0.90	0.93	0.65	0.70

21W LED, 3000K-83 (For FL & WF data see pg 7; For VNSP (18W only) data see pg 7)



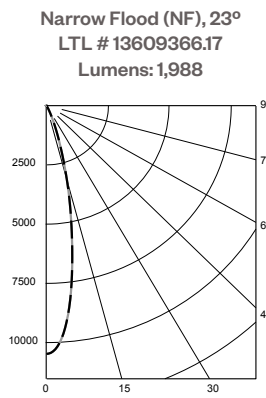
Candelas at Nadir

Deg	Candela
0	14400
5	10490
15	1426
25	560
35	233
45	110



Candelas at Nadir

Deg	Candela
0	13260
5	10300
15	2656
25	810
35	136
45	33



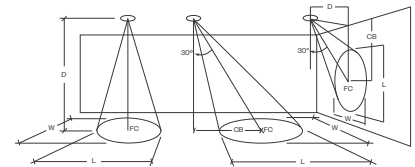
Candelas at Nadir

Deg	Candela
0	10480
5	9150
15	2963
25	453
35	86
45	47

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						
	D	FC	L	W	D	FC	L	W	CB	D	FC	L	W	CB	D	FC	L	W	CB
SPOT	5.0'	575	1.2	1.2	5.0'	371	1.6	1.4	3.0	3.0'	216	2.8	1.4	5.0	3.0'	779	1.3	1.1	2.0
	7.5'	256	1.9	1.9	7.5'	166	2.5	2.2	4.0	4.0'	130	3.5	1.8	6.0	4.0'	555	1.5	1.2	2.0
	10.0'	144	2.7	2.7	10.0'	92	3.4	3.0	6.0	5.0'	82	4.3	2.5	8.0	5.0'	361	1.8	1.4	3.0
	12.5'	93	3.2	3.2	12.5'	61	4.1	3.6	7.0	6.0'	58	5.2	2.9	9.0	6.0'	247	2.2	1.6	3.0
VERY NARROW FLOOD	5.0'	531	1.4	1.4	5.0'	342	1.9	1.5	3.0	3.0'	200	3.4	1.6	5.0	3.0'	745	1.5	1.2	2.0
	7.5'	236	2.2	2.2	7.5'	155	2.9	2.6	4.0	4.0'	124	4.1	2.1	6.0	4.0'	529	1.7	1.3	2.0
	10.0'	133	3.0	3.0	10.0'	85	3.9	3.4	6.0	5.0'	77	5.2	2.9	7.0	5.0'	333	2.1	1.6	3.0
	12.5'	85	3.6	3.6	12.5'	57	4.7	4.1	7.0	6.0'	56	6.2	3.2	9.0	6.0'	235	2.4	1.9	3.0
NARROW FLOOD	5.0'	420	1.8	1.8	5.0'	271	2.5	2.2	3.0	3.0'	193	3.2	1.8	4.0	3.0'	628	1.9	1.3	2.0
	7.5'	187	2.9	2.9	7.5'	126	3.5	3.2	4.0	4.0'	105	4.5	2.8	6.0	4.0'	443	1.9	1.6	2.0
	10.0'	105	3.7	3.7	10.0'	71	4.8	4.2	5.0	5.0'	70	5.4	3.3	7.0	5.0'	265	2.6	2.2	3.0
	12.5'	67	4.7	4.7	12.5'	45	6.0	5.4	7.0	6.0'	49	6.6	3.9	8.0	6.0'	197	2.9	2.6	3.0

Cylindrix® III Mini

3.5" Round Surface Canopy



PROJECT:

TYPE:

FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS: (Multiplying Factor is based on 3000K-83 120V IES file on website)

Wattage:	15W	21W
Factor:	0.71	1.0

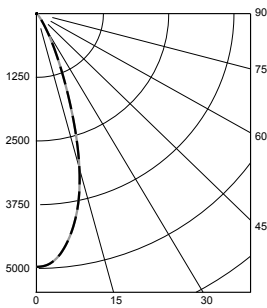
CCT:	2700K-83	3000K-83	3500K-83	4000K-83
Factor:	0.96	1.0	1.02	1.04

CCT:	2200K-90+	2700K-90+	3000K-90+	3500K-90+	4000K-90+	CRISP*	3CLA
Factor:	0.66	0.83	0.86	0.90	0.93	0.65	0.70

* Not available for use with 18W VNSP

21W LED, 3000K-83 (For SP, VNF, NF data see pg 6)

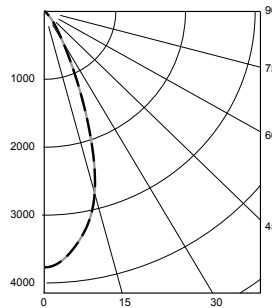
Flood (FL), 34°
LTL # 13609366.18
Lumens: 1,960



Candelas at Nadir

Deg	Candela
0	4970
5	4780
15	3130
25	913
35	193
45	55

Wide Flood (WF), 44°
LTL # 13609366.19
Lumens: 1,930

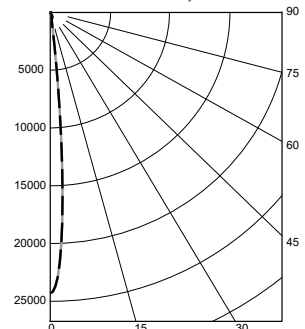


Candelas at Nadir

Deg	Candela
0	3771
5	3624
15	2758
25	1034
35	308
45	101

18W LED, 3000K (VNSP only)

Very Narrow Spot (VNSP), 8°
LTL #1170140
Lumens: 1,096



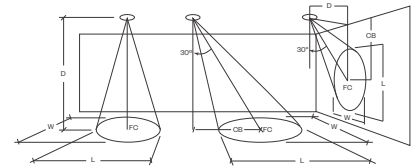
Candelas at Nadir

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				
	D	FC	L	W	D	FC	L	W	OB	D	FC	L	W	OB	D	FC	L	W	OB
FLOOD	5.0'	199	3.0	3.0	5.0'	141	3.5	3.1	2.0	3.0'	124	3.3	2.7	3.0	3.0'	372	2.2	1.8	1.0
	7.5'	89	4.4	4.4	7.5'	63	5.2	4.8	3.0	4.0'	70	4.5	3.4	4.0	4.0'	221	2.9	2.7	2.0
	10.0'	50	5.8	5.8	10.0'	36	6.9	6.4	4.0	5.0'	45	5.6	4.4	5.0	5.0'	143	3.5	3.1	2.0
	12.5'	32	7.3	7.3	12.5'	23	8.6	8.0	6.0	6.0'	32	6.8	5.2	7.0	6.0'	98	4.2	3.9	3.0
WIDE FLOOD	5.0'	151	3.2	3.2	5.0'	110	3.8	3.5	2.0	3.0'	109	3.2	2.7	3.0	3.0'	303	2.3	2.0	1.0
	7.5'	67	5.0	5.0	7.5'	49	5.6	5.4	3.0	4.0'	62	4.2	3.6	4.0	4.0'	167	3.1	3.0	2.0
	10.0'	38	6.6	6.6	10.0'	28	7.5	7.3	4.0	5.0'	40	5.3	4.6	5.0	5.0'	111	3.8	3.5	2.0
	12.5'	25	8.3	8.3	12.5'	18	9.5	9.1	5.0	6.0'	28	6.5	5.5	6.0	6.0'	76	4.6	4.5	2.0
18W only VERY NARROW SPOT	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

3.5" Round Surface Canopy



PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Cylindrix 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.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

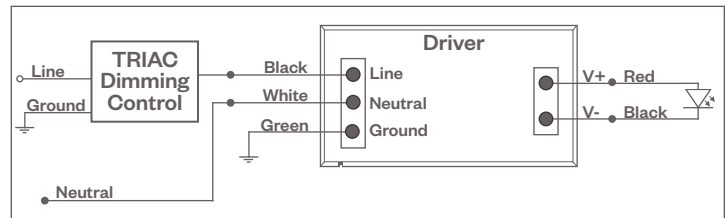
TRIAC (Forward Phase) DIMMING (Standard)

Utilizes standard TRIAC dimmers that are in wide use in installations across the US. Best for retrofit applications where TRIAC dimmers are installed.

Notes:

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

TRIAC Wiring Diagram



Compatible Dimmers†:

Wall Box (TRIAC 120VAC)	Central System
Lutron "Diva"	Lutron "GP" Panel
Lutron "Nova-T"	Lutron Grafik Eye QS
Lutron "Maestro"	
Lutron "Skylark"	

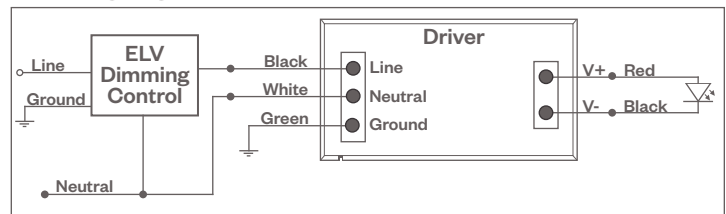
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

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

ELV Wiring Diagram



Compatible Dimmers†:

Wall Box (ELV 120VAC)	Wall Box (ELV 277VAC)	Central System
Lutron "Diva"	Leviton Revoir II AWSMT-E	Lutron "GP" Panel with PHPM-PA 120/277VAC
Lutron "Nova-T"		Lutron Grafik Eye QS with PHPM-PA 120/277VAC
Lutron "Maestro"		
Lutron "Skylark"		
Leviton "Surslide"		
Leviton "Vizio"		

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

Cylindrix® III Mini

3.5" Round Surface Canopy



PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Cylindrix 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.

--- NOTE: INFORMATION BELOW IS FOR WIRED DIMMERS ONLY. FOR WIRELESS DIMMERS, CONSULT FACTORY ---

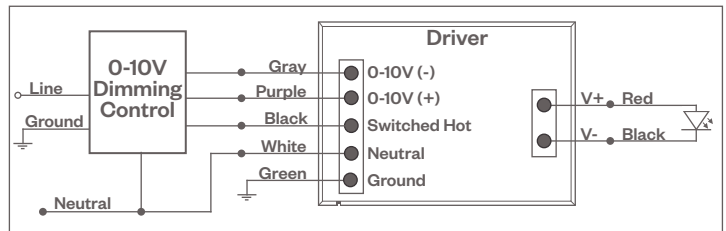
0-10V DIMMING

Integrates into a variety of building management and daylighting controls

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- Requires interface to turn off power to driver
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

0-10V Wiring Diagram



Compatible Dimmers*:

Wall Box

Lutron "Diva" - DVSTV | Leviton Renoir II 0-10V

Central System

Lutron Grafik Eye with GRX-TV1 Interface

LUTRON LDE1 DIMMING

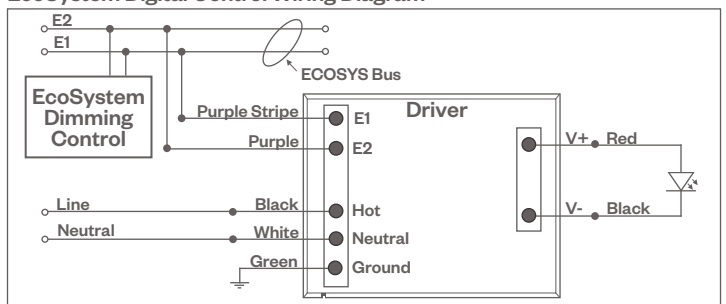
Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% Soft-On/Fade-to-Black
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Lutron LDE1 (HILUME-H-ECO)

EcoSystem Digital Control Wiring Diagram



Compatible Dimmers*:

Lutron ECO System

Pow Pak Dimming Modules
Energj Savr Node
Grafik Eye QS/Homeworks
QS Control Unit
Quantum Hub
Homeworks QS/My Room

Central System

Lutron EcoSystem compatible controls

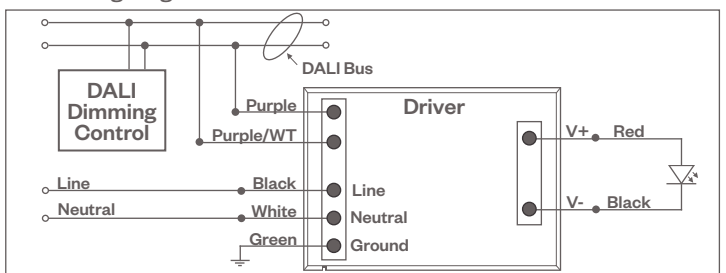
DALI DIMMING

Digital control protocol allows individual fixture control

Notes:

- 120VAC - 277VAC*
- Dims down to 1% light output in most cases

DALI Wiring Diagram



Compatible Dimmers*:

Wall Box (3-Wire Fluorescent)

Leviton CD250 Controller

Central System

Dynalite
Fifth Light

Notes:

- * Driver is 277VAC dimmable with appropriate dimmer (by others). All provided wiring diagrams show 120VAC wiring colors and method. Please refer to 277VAC dimmer manufacturer installation instructions for 277VAC wiring diagrams.
- † The absence of a dimmer from the lists above does not imply incompatibility. Please consult factory for compatibility inquiries.

Cylindrix[®] III Mini

3.5" Round Surface Canopy

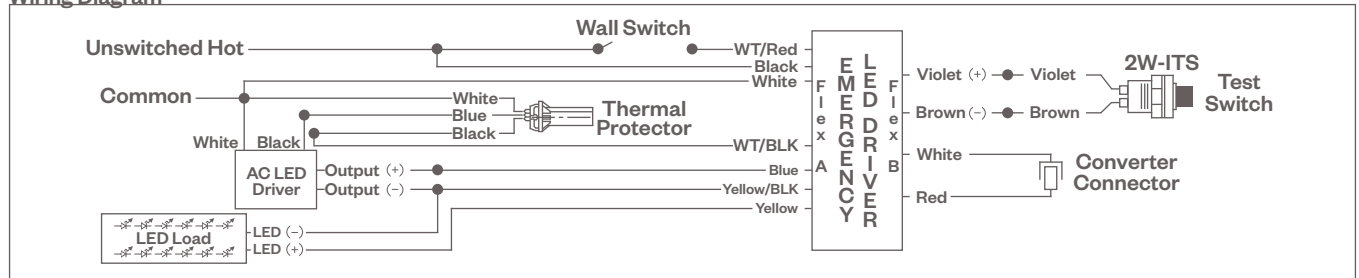


PROJECT:

TYPE:

EMERGENCY DIMMING

Wiring Diagram



C3M Round Surface Canopy