

Cubebits

Recessed Downlight



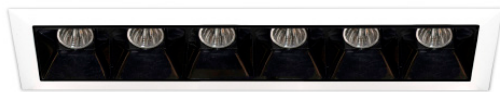
Features

Cubebits, a recessed linear downlight form gives specifiers and designers an opportunity to make a statement with design and performance. The 1.5" wide profile is available in 3 cell, 6 cell, 9 cell or 12 cell units, compatible with grid and hard ceiling for up to 1-1/2" ceiling thickness. The downlight comes standard with dimming capability with spot, flood and wide flood beam distribution options. The black and white specular finished louver allows for quiet, comfortable yet required light output. Easy installation and comfortable light output comes together in the product without compromising on the performance.

Product Overview

Type: Recessed Downlight, Accent & Display
 Wattage: L (low), M (medium), H (high)
 Lumen Output: up to 2208 lm (see chart below)
 Color Temp: 2700K, 3000K, 3500K, 4000K
 CRI: 90 CRI
 Dimming: 0-10V (120-277VAC) - 1% Dim
 ELV (120VAC) - 5% Dim
 Lutron Hi-lume® H Series/EcoSystem - 1% dim with soft on, fade to black, 120-277VAC

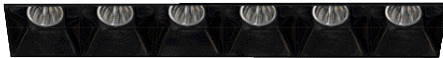
Weight (lb):	Fixture	Frame/Housing	Trim	Combined
	3 Cell	4	1	5
	6 Cell	4.5	1.2	5.7
	9 Cell	5	1.5	6.5
	12 Cell	5.5	2.25	7.75



CUBE-06 Trimmed (shown)

PROJECT:

TYPE:



CUBE-06 Trimless (shown)

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

Fixture Type

# of Cells	New Construction	Trim	Trimless	Millwork
3	Yes	Yes	Yes	Yes
6	Yes	Yes	Yes	Yes
9	Yes	Yes	Yes	Yes
12	Yes	Yes	Yes	Yes

Performance Chart: Lumen Output

Level	3 Cell		6 Cell		9 Cell		12 Cell	
	Black	White	Black	White	Black	White	Black	White
Low	NA	NA	496	530	745	795	993	1060
Med	NA	NA	796	850	1194	1275	1592	1700
High	517	552	1034	1104	1551	1656	2068	2208

Data is based on Spot Optics, 3000K-90, 120V IES files available on website

Electrical Data

Level	Volts	3 Cell		6 Cell		9 Cell		12 Cell	
		System Watts	Amps	System Watts	Amps	System Watts	Amps	System Watts	Amps
Low	120	NA	NA	7.6	0.06	10.8	0.09	14	0.12
	277	NA	NA	7.8	0.04	11	0.05	14.4	0.06
Med	120	NA	NA	10.7	0.09	15.3	0.13	20	0.16
	277	NA	NA	11	0.05	15.8	0.06	20.3	0.09
High	120	7.7	0.06	14.8	0.12	21.3	0.18	28	0.23
	277	8.2	0.03	15.1	0.06	21.8	0.08	28	0.12

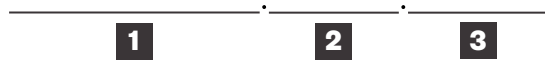
Electronic constant current LED driver, 120V



PROJECT:

TYPE:

Housing Ordering Information



- | | |
|--|---|
| <p>1 <u>Model</u>
 CUBE-NC (new construction)
 CUBE-CP (Chicago Plenum (CCEA))
 CUBE-IC (insulated ceiling/air tight)</p> <p>2 <u>Style</u>
 T - trimmed (5/8" - 1-1/2" ceiling thickness)
 TL - trimless (5/8" ceiling thickness)
 MWK - millwork (5/8" - 1-1/2" ceiling thickness)</p> | <p>3 <u>Housing Size</u> (must match Trim model of same # of cells)
 03C - 3 cell downlight
 06C - 6 cell downlight
 09C - 9 cell downlight
 12C - 12 cell downlight</p> |
|--|---|

Note: Pick the appropriate trim section for voltage and dimming

Trim Ordering Information



- | | |
|--|--|
| <p>1 <u>Model</u> (must match Frame Size of same # of cells)
 CUBE-03 - trim module 3 Cell
 CUBE-06 - trim module 6 Cell
 CUBE-09 - trim module 9 Cell
 CUBE-12 - trim module 12 Cell</p> <p>2 <u>Style</u>
 T - trimmed
 TL - trimless
 MWK - millwork</p> <p>3 <u>Wattage</u>
 L - low, 1.25W per cell (not available for use with 3 Cell)
 M - medium, 2W per cell (not available for use with 3 Cell)
 H - high, 2.6W per cell (8W for 3 Cell)</p> <p>4 <u>Louver Finish</u>
 W - white
 B - black</p> <p>5 <u>Trim Finish</u> (not required for TL or MWK style)
 MW - matte white
 MB - matte black</p> | <p>6 <u>Voltage</u>
 120
 120-277 (not available for use with ELV dimming)</p> <p>7 <u>Beam Spreads</u>
 SP - spot, 12°
 FL - flood, 28°
 WF - wide flood, 47°</p> <p>8 <u>Color Temp</u>
 90+ CRI:
 279 - 2700K-90+
 309 - 3000K-90+
 359 - 3500K-90+
 409 - 4000K-90+</p> <p>9 <u>Driver</u>
 0-10V - 0-10V dimming; 1% dim
 ELV - ELV dimming, 120V only, 5% dim
 HILUME-H-ECO* - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black
 * Not available for use with CUBE-03</p> |
|--|--|

PROJECT:

TYPE:

Specifications

Application

Retail, commercial and hospitality accent and display lighting

Finish

Powder coat paint

Construction

Stamped steel mounting frame with integral mounting bars
Steel driver housing
Steel upper housing and die-cast trim
Extruded aluminum plaster frame (trimless only)
Extruded aluminum optical head construction

Mounting

For use in T-Grid or GB ceilings; max ceiling thickness 1 1/2"
Adjustable hanger bars included (14 1/4" - 26" std.)
See page 5 for postioning
(32"-48" Adjustable hanger bars available, consult factory)

Optical

Precision molded louver
Beam Spreads: Spot, 12°; Flood, 28°; Wide Flood, 47°;

Certifications

CSA listed to UL standards. Suitable for damp locations
Indoor use only

LED

Color Temp Options: 2700K, 3000K, 3500K, 4000K
CRI: 90+ typ.
R9 Values: 55 (90+ CRI)
Binning: 3 MacAdam (SDCM)
Life: 50,000+ hrs, > 70% of initial lumens at 50,000 hrs

Warranty

5 year limited warranty

Electrical

Wattage: **L** - low, 1.25W per cell (not available for use with 3 Cell), **M** - medium, 2W per cell (not available for use with 3 Cell), **H** - high, 2.6W per cell (8w for 3 celll)

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.

For emergency: Remote EM inverter or emergency circuit by others

Drivers

0-10V - 0-10V dimming, 1% dim

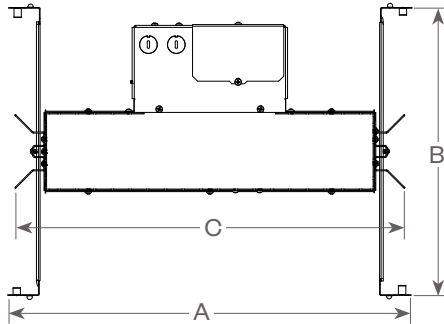
ELV - ELV dimming, 120V only, 5% dim

HILUME-H-ECO - Lutron Hi-lume® H Series, EcoSystem, 1% dim with soft on, fade to black, (not available for use with CUBE-03)

PROJECT:

TYPE:

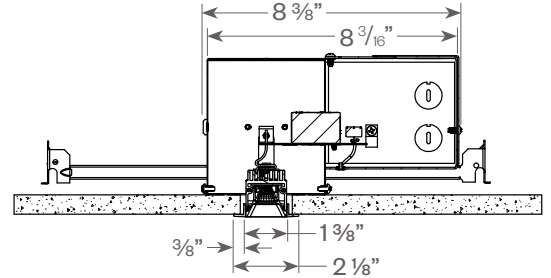
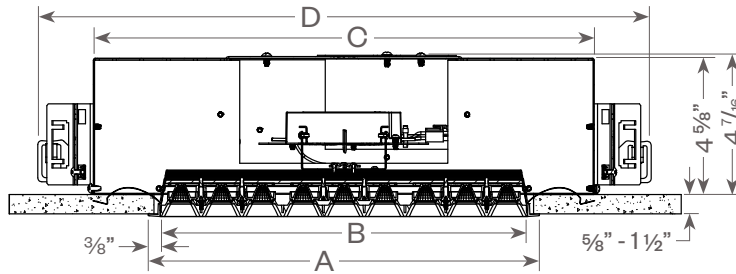
Trimmed/Trimless Housing



	3 Cell	6 Cell	9 Cell	12 Cell
A	12 1/8"	16 3/8"	19 7/8"	23 7/8"
B	14 1/4" max 26"	14 1/4" max 26"	14 1/4" max 26"	14 1/4" max 26"
C	11 1/2"	15 3/4"	19 1/4"	23 1/4"

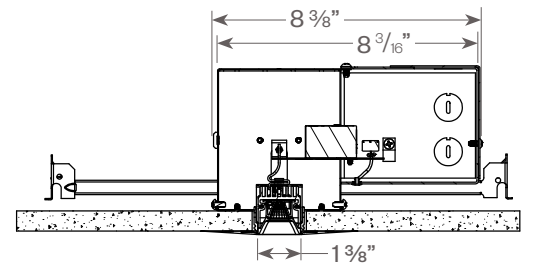
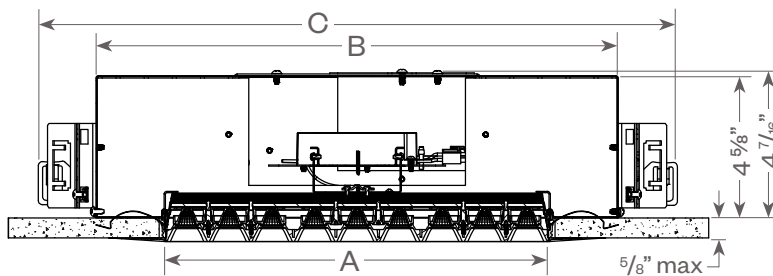
Ceiling Cut Out: 3 Cell - 1 11/16" x 4 3/8"
 6 Cell - 1 11/16" x 8 3/8"
 9 Cell - 1 11/16" x 12 5/16"
 12 Cell - 1 11/16" x 16 5/16"

Trimmed



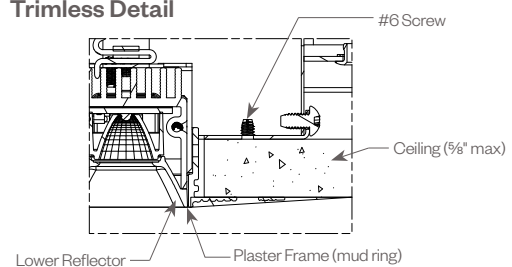
	3 Cell	6 Cell	9 Cell	12 Cell
A	4 3/4"	8 3/4"	12 11/16"	16 11/16"
B	4"	7 15/16"	11 15/16"	15 7/8"
C	8 1/2"	12 3/4"	16 1/4"	20 1/4"
D	12 1/8"	16 3/8"	19 7/8"	23 7/8"

Trimless



	3 Cell	6 Cell	9 Cell	12 Cell
A	4"	7 31/32"	11 15/16"	15 29/32"
B	8 1/2"	12 3/4"	16 1/4"	20 1/4"
C	12 1/8"	16 3/8"	19 7/8"	23 7/8"

Trimless Detail



Cubebits

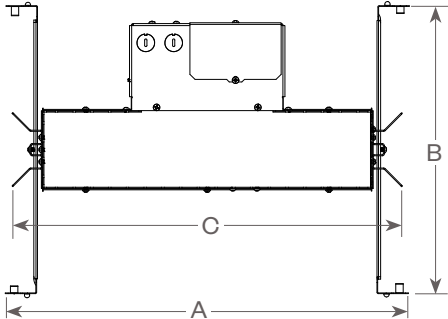
Recessed Downlight, LED



PROJECT:

TYPE:

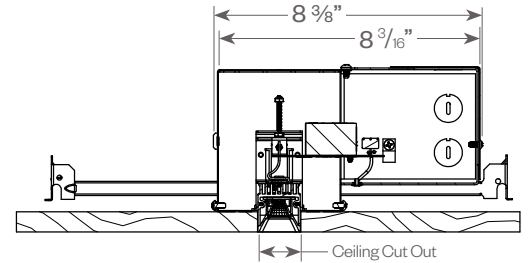
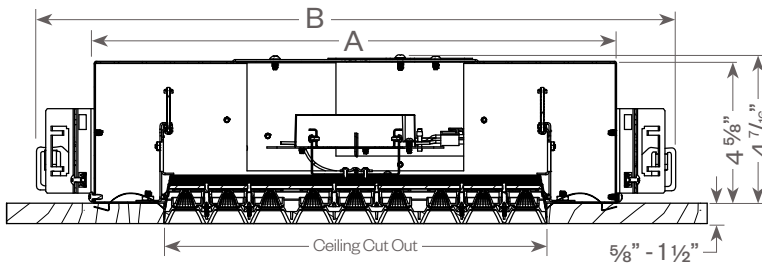
Millwork Housing



	3 Cell	6 Cell	9 Cell	12 Cell
A	12 1/8"	16 3/8"	19 7/8"	23 7/8"
B	14 1/4" max 26"	14 1/4" max 26"	14 1/4" max 26"	14 1/4" max 26"
C	11 1/2"	15 3/4"	19 1/4"	23 1/4"

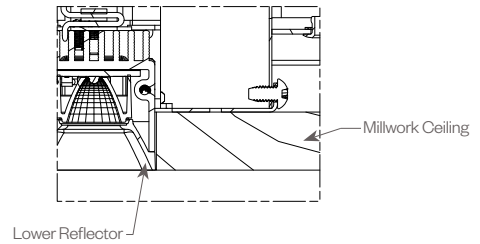
Ceiling Cut Out: 3 Cell - 1 13/32" x 4 1/16"
 6 Cell - 1 13/32" x 8 1/32"
 9 Cell - 1 13/32" x 12"
 12 Cell - 1 13/32" x 15 31/32"

Millwork Trim

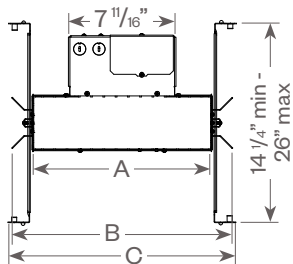


	3 Cell	6 Cell	9 Cell	12 Cell
A	8 1/2"	12 3/4"	16 1/4"	20 1/4"
B	12 1/8"	16 3/8"	19 7/8"	23 7/8"

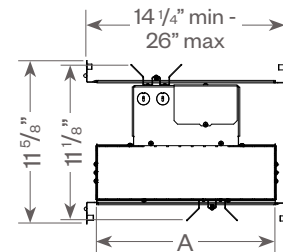
Millwork Detail



Hanger Bar Mounting Positions

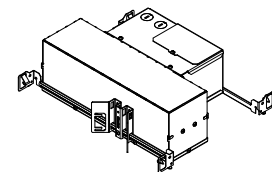
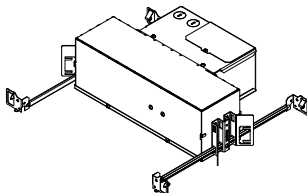


	A	B	C
3 Cell	8 1/2"	11 1/2"	12 1/8"
6 Cell	12 3/4"	15 3/4"	16 3/8"
9 Cell	16 1/4"	19 1/4"	19 7/8"
12 Cell	20 1/4"	23 1/4"	23 7/8"



Hanger Bar Mounted on **End** of Housing

Hanger Bar Mounted on **Side** of Housing



PROJECT:

TYPE:

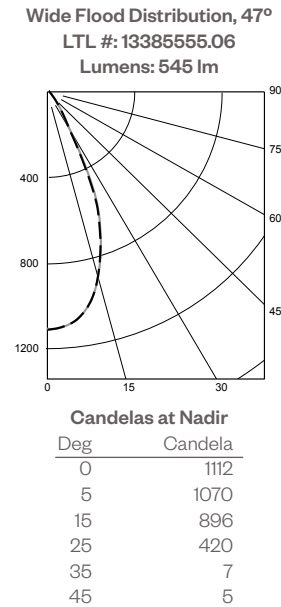
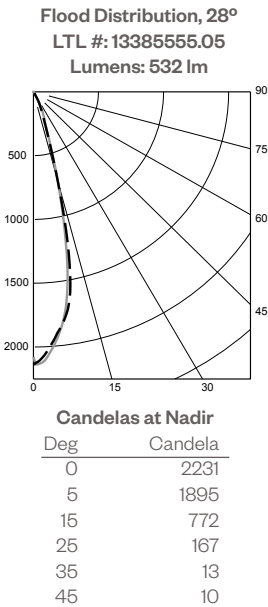
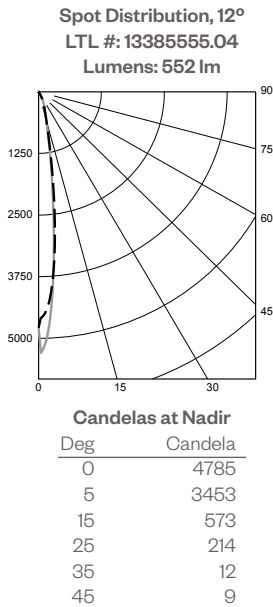
FIXTURE DATA: (Complete photometric data (.ies format) available upon request)

MULTIPLYING FACTORS:

CCT:	2700K-90+	3000K-90+	3500K-90+	4000K-90+
Factor:	0.96	1.0	1.05	1.08

Color:	Black	White
Factor:	0.94	1.0

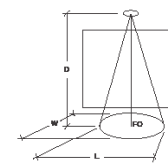
CUBE-03-T-H-W-MW (3 CELL, TRIMMED, HIGH WATTAGE, WHITE BEZEL, MATTE WHITE, 8W):




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.




3 CELL
0° Aiming Angle
Horizontal
Footcandles




	D	FC	L	W
Spot	5.0'	112	1.8	1.7
	7.5'	64	2.4	2.3
	10.0'	40	3.0	2.9
	12.5'	27	3.5	3.4
Flood	D	FC	L	W
	5.0'	74	2.6	2.6
	7.5'	36	3.6	3.5
	10.0'	21	4.9	4.8
Wide Flood	D	FC	L	W
	5.0'	42	3.7	3.7
	7.5'	19	5.7	5.5
	10.0'	11	7.5	7.4
12.5'	7	9.5	9.3	

6 CELL
0° Aiming Angle
Horizontal
Footcandles




	D	FC	L	W
Spot	5.0'	221	1.8	1.8
	7.5'	127	2.4	2.4
	10.0'	80	3.0	2.9
	12.5'	54	3.5	3.4
Flood	D	FC	L	W
	5.0'	147	2.6	2.6
	7.5'	71	3.6	3.6
	10.0'	41	4.9	4.7
Wide Flood	D	FC	L	W
	5.0'	83	3.7	3.7
	7.5'	38	5.7	5.6
	10.0'	22	7.6	7.5
12.5'	14	9.4	9.3	

9 CELL
0° Aiming Angle
Horizontal
Footcandles



	D	FC	L	W
Spot	5.0'	319	1.8	1.9
	7.5'	186	2.4	2.5
	10.0'	118	3.0	2.9
	12.5'	80	3.5	3.4
Flood	D	FC	L	W
	5.0'	216	2.6	2.6
	7.5'	106	3.6	3.6
	10.0'	61	4.9	4.8
Wide Flood	D	FC	L	W
	5.0'	124	3.7	3.7
	7.5'	57	5.6	5.6
	10.0'	33	7.6	7.5
12.5'	21	9.5	9.3	

12 CELL
0° Aiming Angle
Horizontal
Footcandles



	D	FC	L	W
Spot	5.0'	404	1.8	2.0
	7.5'	240	2.5	2.6
	10.0'	154	3.0	3.0
	12.5'	105	3.5	3.5
Flood	D	FC	L	W
	5.0'	282	2.6	2.6
	7.5'	139	3.6	3.6
	10.0'	81	4.9	4.8
Wide Flood	D	FC	L	W
	5.0'	164	3.7	3.8
	7.5'	76	5.6	5.6
	10.0'	43	7.6	7.5
12.5'	28	9.5	9.3	

PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Cubebits 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 ---

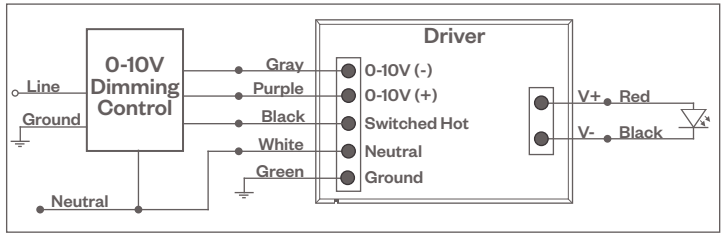
0-10V - DIMMING (-0-10V Option)

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" - DVTV with PP-120H Interface

Leviton Renoir II 0-10V

Central System

Lutron Grafik Eye with GRX-TVI Interface

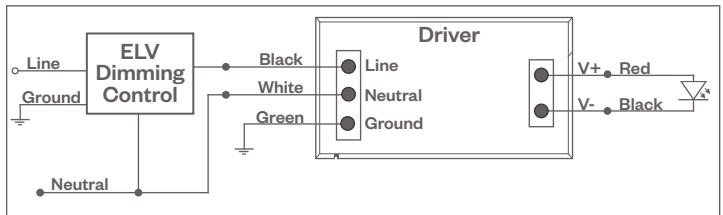
ELV - Electronic Low Voltage (Reverse Phase) DIMMING (Standard)

Utilizes specialized "ELV" dimmers.

Notes:

- 120VAC
- 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

ELV Wiring Diagram



Compatible Dimmers†:

Wall Box (ELV Style)

Lutron "Diva"
Lutron "Nova-T"
Lutron "Maestro"
Lutron "Vareo"
Lutron "Skylark"

Leviton "Surslide"
Leviton "Vizio"

Central System

Lutron "GP" Panel with PHPM-PA Interface
Lutron Grafik Eye QS with PHPM-PA Interface

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 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.

PROJECT:

TYPE:

DIMMING COMPATIBILITY:

Amerlux® Cubebits 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 ---

LUTRON H-SERIES / ECOSYSTEM (-HILUME-H-ECO Option)

Integrates into Lutron EcoSystem building management

Notes:

- 120VAC or 277VAC*
- Dims down to 1% light output
- EcoSystem Control
- Consult Dimming manufacturer for installation instructions - DO NOT SHARE NEUTRALS!

Compatible Dimmers†:

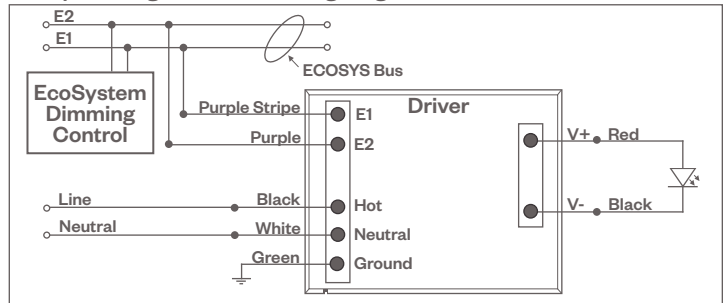
Lutron ECO System

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

Central System

Lutron EcoSystem compatible controls

**HILUME-H-ECO, HILUME-5-ECO
EcoSystem Digital Control Wiring Diagram**



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 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.