

PROJECT: \_\_\_\_\_

TYPE: \_\_\_\_\_

NOTES: \_\_\_\_\_



## A2231

Provides maximum delivered lumens and optical performance through optical and LED science in the smallest possible aperture.

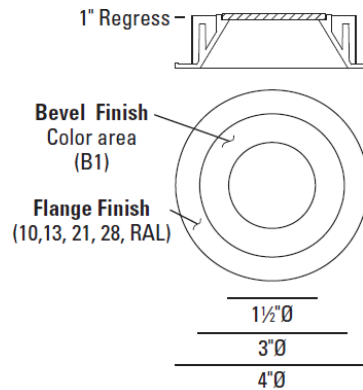
### Features

- Special optional optics for optimal light spread to accommodate every application
- Comes standard with 1" Bevel finish
- Damp Location Rated
- 80+ and 90+ CRI offered
- Several color temperatures available

### Applications

- Offices
- Reception Areas
- Corridors

### Extrusion Dimensions



### LED System Information

Color Rendering Index	14 Watts		20 Watts	
	80+ CRI	90+ CRI	80+ CRI	90+ CRI
Lumens per Watt	45	36	37	30
Source Lumens	1100	825	1500	1050
<b>Delivered Lumens</b>	<b>625</b>	<b>500</b>	<b>800</b>	<b>650</b>
Center Beam Candle Power	7825	6250	10050	8025

Color Rendering Index	2700K		3000K		3500K	4000K
	80+ CRI	90+ CRI	80+ CRI	90+ CRI	80+ CRI	80+ CRI
Multiplier for Lumens	1.00	.73	1.00	.80	1.15	1.07

### Ordering Information:

A2231	-	B1	-	LRTA3	-	M2	-	Color
Trim	Option	Bevel Style	Lens	Flange Finish	Housing Code	Wattage	Engine Code	
A2231	W- Wet Location	B1-1" Regressed Bevel-Die Cast	F- Frosted S- Solite C- Clear N- No Glass	10- White 13- Statuary Bronze 21- Black 28- Insulation Contact RAL- Custom Color (specify color)	LSTA3	8414- 14W, 625 Lumens 8420- 20W, 800 Lumens	M2	27KS- 2700K (80+CRI) 30KS 3000K (80+CRI) 35KS 3500K (80+CRI) 40KS 4000K (80+CRI) 27KH 2700K (90+CRI) 30KH 3000K (90+CRI)

Reflector	Housing Type	Voltage	Driver	Accessories
10- 10° Beam 25- 25° Beam	NC-New Construction CP- Chicago Plenum* IC- Insulation Contact*	120 277	DIML2- Standard 10% Dimming (0-10V) DIML3- Lutron A 2-Wire, 1% DIML4- Standard 10% Dimming (0-10V) DIML6A- EldoLED 0-10V Lutron, 0.1% DIML6B- EldoLED 0-10V Linear, 0.1% DIML9- TRIAC 15% 2-wire, 120V only DIML10- ELV 15% 2-wire, 120V only	CB27- 27" C-Channel Bars CB52- 52" C-Channel Bars EML- Emergency battery* EMLW- Emergency battery, wet location*

\*Not available with EM

\*EM requires above ceiling access. For use with NC housings only.

### Optical Accessories:

(Order Separately)  
 AL10D  
 AL15D  
 AL20D  
 AL30D  
 AL40D  
 AL55D  
 AL80D  
 AS61D

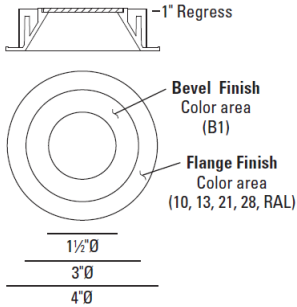
Refer to optical accessories matrix on the next page for resulting beam spreads when a accessory lens is combined with 10° and 20° optics.

Ordering Example: A2231-W-B1-C-21-LRTA3-8420-M2-10-120-DIML3-EM

www.speckaylighting.com | 646.837.9000 | quotes@kaylighting.com

December 2018

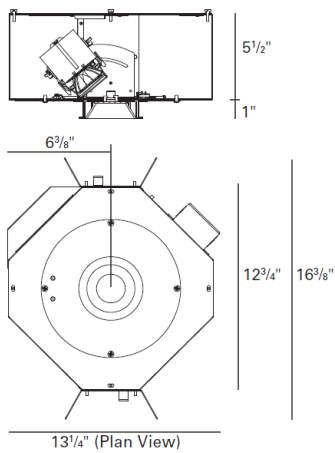
**Trim Information:**



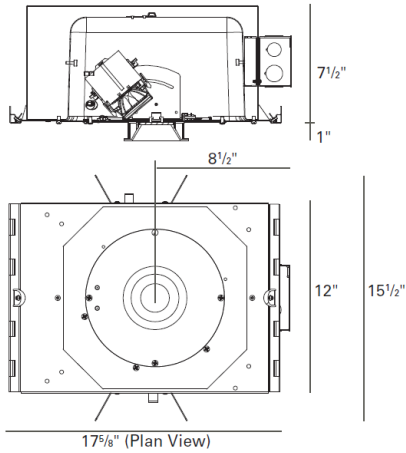
BeveLED Mini Optical Accessories Matrix if you want ...	and you have....	
	10°	25°
15° beam	AL10D	N/A
20° beam	AL15D	N/A
25° beam	AL30D	N/A
30° beam	N/A	AL20D
35° beam	N/A	AL30D
40° beam	N/A	AL40D
45° beam	N/A	AL55D
55° beam	N/A	AL80D
20x60° beam	AS61D	N/A
40x60° beam	N/A	AS61D
	size D	size D

**Housing Information:**

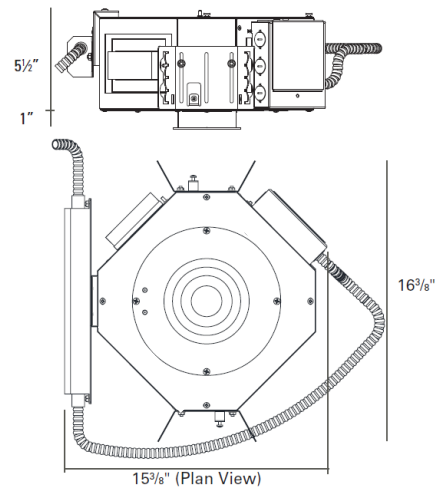
**New Construction  
Universal Style Housing - NC**



**IC / Airtight - IC  
Chicago Plenum - CP**



**EM Housing**



**Specifications:**

**TRIM:** 3" round aperture with a 1" regressed bevel and 1/2" fl ange, retained by two mounting clips. Die cast aluminum bevel is self-fl angled and is available in white, statuary bronze, black, and metalized grey finishes. Custom color fl angles available (provide RAL#).

**TRIM LENS:** Mini adjustable trims are available with several trim options. The 25° optic is designed for use with a solite lens (specify "S"). The 10o optic is designed for use with no lens in place (specify "N"), but clear glass ("C") is provided if the wet location option is selected. A frosted glass lens ("F") option is available for both beamsreads.

**REFLECTOR:** Proprietary 10° or 25° high efficiency molded optic.

**ADJUSTMENT:** True hot aiming with center beam optics is adjustable, with a completely tool-less mechanism. 0°-40° lockable vertical tilt with 362° lockable rotation.

**FIELD REPLACEABLE LIGHT ENGINE:** Available in 2 lumen packages: 14W (625 delivered lumens), 20W (800 lm). Engine is field replaceable through the aperture without tools.

**COLOR:** Available in 4 color temperatures (2700K, 3000K, 3500K, 4000K). All color options are tightly binned for fixture-to-fixture color consistency within a 2-Step MacAdam Ellipse. 80+ color rendering index provided standard. 90+ CRI for 2700K and 3000K CCTs.

**RATED LIFE:** Based on IESNA LM80-2008 50,000 hours at 70% lumen maintenance (L70).

**THERMAL MANAGEMENT:** Proprietary high performance aluminum die cast heatsink for maximum LED life. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

**FIELD REPLACEABLE DRIVER:** 0-10V, 100%-10% solid state electronic constant current DIML2 dimming driver with a high power factor provided standard and sources 2mA. Specify 120V or 277V. Driver complies with IEEE62.41 surge protection.

**DIMMING OPTIONS:** Multiple dimming drivers available. See Some on-time delay may be experienced depending on control system used. Note: DIML6A logarithmic control is intended for use with Lutron control systems; DIML6B linear control is intended for use with non-Lutron controls. DIML6 dimming drivers source 2mA.

**EMERGENCY:** Emergency lighting battery pack with remote test switch requires above ceiling access for service. Bodine 17C provides 200mA for 90 minutes; delivers 325 lumens. EMLW wet location option is available with B1 trim only and requires remote test switch. EM options is available with NC housings only.

**MOUNTING:** Butterfly brackets and adjustable nailer bars with integral nails provided. Nailer bars are extendible from 14" to 24" centers.

**HOUSING:** Fabricated of 20 ga. galvanized steel with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring. IC-rated housings for use with 14W light engines only are rated for direct contact with spray foam insulation of R-42 per inch or less. IC-rated housings for use with 20W light engines are rated for direct contact with spray foam insulation of R-3.7 per inch or less.

**MAXIMUM CEILING THICKNESS:** As per drawings above.

**ACCESSORY HOLDER:** Snap-in accessory holder shipped with fixture. Accepts 'D' size lens, maximum 2.

**CEILING CUT OUT:** 3-1/2"Ø

**LISTINGS:** Dry/damp. Wet location option is available. Tested to UL standards. IBEW union made.

**WARRANTY:** 5 years.

**NOTES:** Not for use in corrosive environment. Use of pressure washer voids warranty.

**PHOTOMETRICS:** Consult factory or website for IES files. Tested in accordance with IESNA LM79-2008.

Delivered Performance

2231/2331 14W 30KS 10°:

**Coefficients Of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.00
1	1.16	1.14	1.12	1.11	1.13	1.12	1.10	.98	1.08	1.07	1.06	1.04	1.03	1.03	1.01	1.00	1.00	1.01	1.00	1.00	1.01	1.00	1.00	.98
2	1.13	1.10	1.07	1.05	1.11	1.08	1.06	.96	1.05	1.03	1.02	1.02	1.01	.99	.99	.98	.97	.99	.98	.97	.99	.98	.97	.96
3	1.10	1.06	1.03	1.01	1.08	1.05	1.02	.95	1.02	1.00	.98	1.00	.98	.97	.98	.97	.95	.98	.97	.95	.98	.97	.95	.94
4	1.07	1.03	1.00	.97	1.06	1.02	.99	.93	1.00	.98	.96	.98	.96	.95	.97	.95	.93	.97	.95	.93	.97	.95	.93	.92
5	1.05	1.00	.97	.94	1.04	.99	.96	.91	.98	.95	.93	.96	.94	.93	.95	.93	.92	.95	.93	.92	.95	.93	.92	.91
6	1.03	.98	.95	.92	1.02	.97	.94	.90	.96	.93	.91	.95	.93	.91	.94	.92	.90	.94	.92	.90	.94	.92	.90	.89
7	1.01	.96	.92	.90	1.00	.95	.92	.89	.94	.92	.90	.93	.91	.89	.92	.90	.89	.92	.90	.89	.92	.90	.89	.88
8	.99	.94	.91	.88	.98	.94	.90	.87	.93	.90	.88	.92	.89	.88	.91	.89	.88	.91	.89	.87	.91	.89	.87	.87
9	.97	.92	.89	.87	.97	.92	.89	.86	.91	.88	.87	.91	.88	.86	.90	.88	.86	.90	.88	.86	.90	.88	.86	.85
10	.96	.91	.88	.86	.95	.90	.87	.85	.90	.87	.85	.89	.87	.85	.89	.86	.85	.89	.86	.85	.89	.86	.85	.84

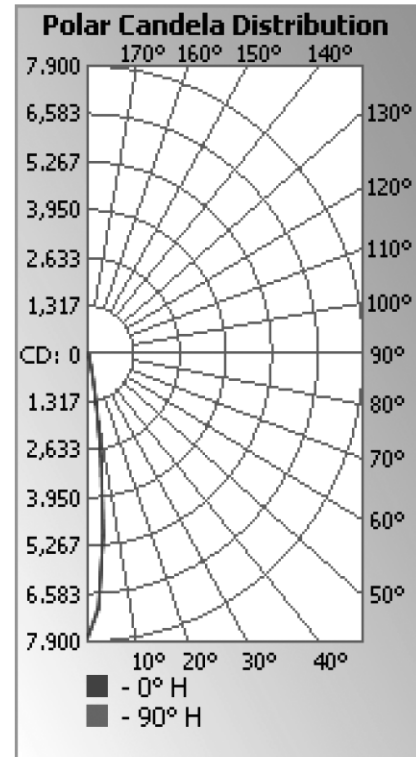
**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	521.2	94.8%
0-40	546.8	99.4%
0-60	549.9	100%
60-90	0	0%
70-100	0	0%
90-120	0	0%

**Illuminance at a Distance**

	Center Beam fc	Beam Width	
2.0R	1,953.6 fc	0.4 ft	0.4 ft
4.0R	488.4 fc	0.9 ft	0.9 ft
6.0R	217.1 fc	1.3 ft	1.3 ft
8.0R	122.1 fc	1.8 ft	1.8 ft
10.0R	78.1 fc	2.2 ft	2.2 ft
12.0R	54.3 fc	2.6 ft	2.7 ft
14.0R	39.9 fc	3.1 ft	3.1 ft
16.0R	30.5 fc	3.5 ft	3.6 ft

■ Vert. Spread: 12.5°  
■ Horiz. Spread: 12.7°



2231/2331 20W 30KS 10°:

**Coefficients Of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.00
1	1.16	1.14	1.12	1.11	1.13	1.12	1.10	.98	1.08	1.07	1.06	1.04	1.03	1.03	1.01	1.00	1.00	1.01	1.00	1.00	1.01	1.00	1.00	.98
2	1.13	1.10	1.07	1.05	1.11	1.08	1.06	.96	1.05	1.03	1.02	1.02	1.01	.99	.99	.98	.97	.99	.98	.97	.99	.98	.97	.96
3	1.10	1.06	1.03	1.01	1.08	1.05	1.02	.95	1.02	1.00	.98	1.00	.98	.97	.98	.97	.95	.98	.97	.95	.98	.97	.95	.94
4	1.07	1.03	1.00	.97	1.06	1.02	.99	.93	1.00	.98	.96	.98	.96	.95	.97	.95	.93	.97	.95	.93	.97	.95	.93	.92
5	1.05	1.00	.97	.94	1.04	.99	.96	.91	.98	.95	.93	.96	.94	.93	.95	.93	.92	.95	.93	.92	.95	.93	.92	.91
6	1.03	.98	.95	.92	1.02	.97	.94	.90	.96	.93	.91	.95	.93	.91	.94	.92	.90	.94	.92	.90	.94	.92	.90	.89
7	1.01	.96	.92	.90	1.00	.95	.92	.89	.94	.92	.90	.93	.91	.89	.92	.90	.89	.92	.90	.89	.92	.90	.89	.88
8	.99	.94	.91	.88	.98	.94	.90	.87	.93	.90	.88	.92	.89	.88	.91	.89	.88	.91	.89	.87	.91	.89	.87	.87
9	.97	.92	.89	.87	.97	.92	.89	.86	.91	.88	.87	.91	.88	.86	.90	.88	.86	.90	.88	.86	.90	.88	.86	.85
10	.96	.91	.88	.86	.95	.90	.87	.85	.90	.87	.85	.89	.87	.85	.89	.86	.85	.89	.86	.85	.89	.86	.85	.84

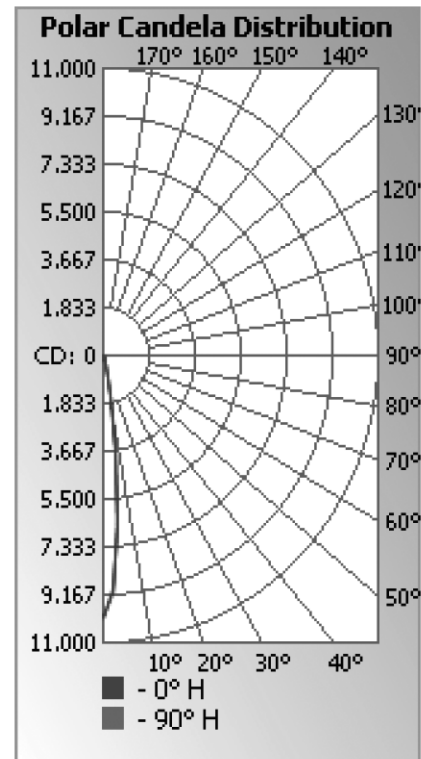
**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	670.0	94.8%
0-40	702.8	99.4%
0-60	706.8	100%
60-90	0	0%
70-100	0	0%
90-120	0	0%

**Illuminance at a Distance**

	Center Beam fc	Beam Width	
2.0R	2,511.1 fc	0.4 ft	0.4 ft
4.0R	627.8 fc	0.9 ft	0.9 ft
6.0R	279.0 fc	1.3 ft	1.3 ft
8.0R	156.9 fc	1.8 ft	1.8 ft
10.0R	100.4 fc	2.2 ft	2.2 ft
12.0R	69.8 fc	2.6 ft	2.7 ft
14.0R	51.2 fc	3.1 ft	3.1 ft
16.0R	39.2 fc	3.5 ft	3.6 ft

■ Vert. Spread: 12.5°  
■ Horiz. Spread: 12.7°



## SELECTION GUIDE: DIML2

### DIMMING DRIVER WIRING SCHEMES:

#### NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

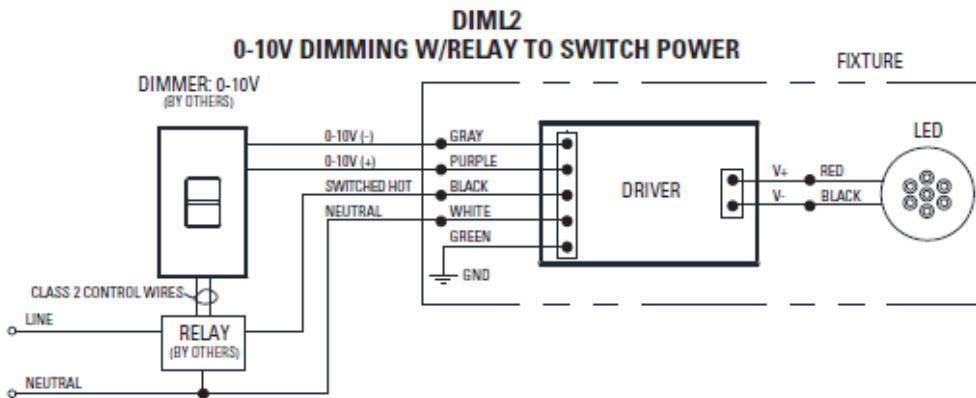
#### IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

#### DIML2 LED: 0-10V Dimming Driver Wiring (Dims down to 10%)

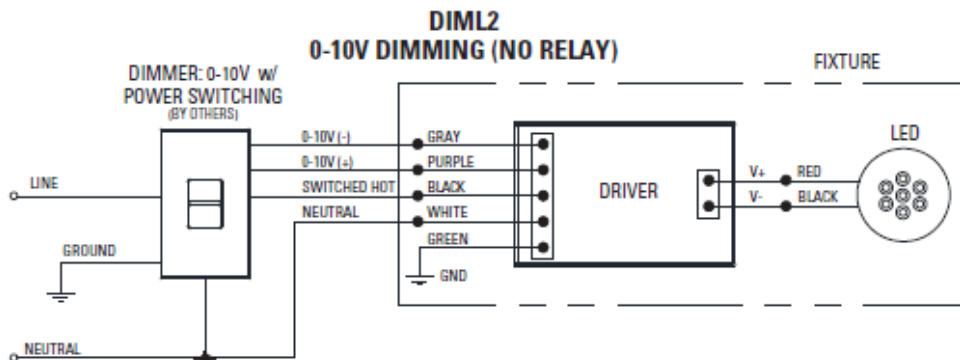
DIML2 Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V / 277V</b>				
Crestron	iLux dimmer expansion module	CLS-EXP-DIMFLV	100% - 10%	Use source current per fixture specification sheet to determine number of fixtures per dimmer. Max number of fixtures is limited by dimmer load rating.
Crestron	DIN Rail dimmer	DIN-4DIMFLV4	100% - 10%	
Crestron	DIN Rail analog output module	DIN-A08	100% - 10%	
Crestron	8 Channel dimmer module	GLX-DIMFLV8	100% - 10%	
Crestron	8 Channel dimmer module	GLXP-DIMFLV8	100% - 10%	
Leviton	IllumaTech dimmer	IP710-DLX	100% - 10%	
Lightolier (Philips)	Vega	V2000FAMU	100% - 10%	
Lutron	Diva	DVTV-XX	100% - 10%	

\* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.



#### NOTE:

If switched, non-dimming operation is desired, cap off purple and gray wires individually at installation. Do NOT cap purple and gray wires together.



#### NOTE:

If switched, non-dimming operation is desired, cap off purple and gray wires individually at installation. Do NOT cap purple and gray wires together.

## SELECTION GUIDE: DIML3

### DIMMING DRIVER WIRING SCHEMES:

**NOTES:**

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS**

**- SAVE THESE INSTRUCTIONS**

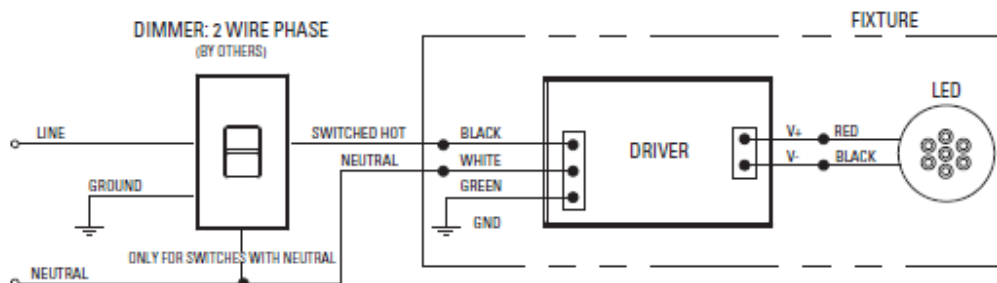
1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

**DIML3 LED: Lutron Hi-Lume A-Series 2 Wire Fwd Phase (with neutral) / LED Dimming Driver Wiring (Dims down to 1%) 120V only.**

DIML3 Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*	
				Fixture Wattage	
120V Only					
				39W and Less	40W - 80W
ETC	Sensor+ Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
ETC	Unison DRd Cabinet	ELV10	100% - 1%	1 - 26	1 - 13
Lutron	Maestro Wireless® 600W dimmer	MRF2-6ND-120-	100% - 1%	1 - 8	1 - 4
Lutron	Maestro Wireless® 1000W dimmer	MRF2-10ND-120-	100% - 1%	1 - 13	1 - 6
Lutron	HomeWorks® QS adaptive dimmer	HQRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 600W dimmer	HQRD-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	HomeWorks® QS 1000 W dimmer	HQRD-10ND-	100% - 1%	1 - 13	1 - 6
Lutron	Caseta Wireless® Pro 1000W dimmer	PD-10NXD-	100% - 1%	1 - 13	1 - 6
Lutron	Stanza® dimmer	SZ-6ND-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 adaptive dimmer	RRD-6NA-	100% - 1%	1 - 8	1 - 4
Lutron	RadioRA® 2 1000 W dimmer	RRD-10ND-	100% - 1%	1 - 6	1 - 3
Lutron	myRoom DIN power module	MQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® QS wallbox power module	HQBJ-WPM-6D-120-	100% - 1%	1 - 26	1 - 13
Lutron	Homeworks® DIN power module	LQSE-4A1-D	100% - 1%	1 - 6	1 - 3
Lutron	HomeWorks® wallbox power module	HWI-WPM-6D-120	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® QS control unit	QSGR-, QSGRJ-	100% - 1%	1 - 26	1 - 13
Lutron	GRAFIK Eye® 3000 control unit	GRX-3100-, GRX-3500-	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4U module	HW-RPM-4U-120, LP-RPM-4U-120	100% - 1%	1 - 26	1 - 13
Lutron	RPM-4A module	HW-RPM-4A-120, LP-RPM-4A-120	100% - 1%	1 - 26	1 - 13
Lutron	GP dimming panels	Various	100% - 1%	1 - 26	1 - 13
Lutron	Ariadni CL 250W dimmer	AYCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Divia CL 250W dimmer	DVCL-253P-, DVSCCL-253P-	100%-1%	1 - 8	1 - 4
Lutron	Grafik T CL or RF CL dimmer	GT-250M-, GTJ-250M-	100%-1%	1 - 8	1 - 4
Lutron	Nova T CL 250W dimmer	NTCL-250-	100%-1%	1 - 10	1 - 5

\* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

**DIML3  
2 WIRE PHASE DIMMING**



## SELECTION GUIDE: DIML4

### DIMMING DRIVER WIRING SCHEMES:

**NOTES:**

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS**

**- SAVE THESE INSTRUCTIONS**

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

**DIML4 LED: Lutron Hi-Lume A-Series LED Driver with 3-Wire FL Control / LED Dimming Driver Wiring (Dims down to 1%)**

DIML4 3-Wire Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Fixture Wattage	
<b>120V Only</b>				<b>39W and Less</b>	<b>40W - 80W</b>
ETC	Sensor+ Cabinet	D20 Dimming module	100% - 1%	1-53	1-26
ETC	Unison DRd Cabinet	D20F Dimming module	100% - 1%	1-53	1-26
Lutron	Nova T	NTF-10-	100%-1%	1-41	1-20
Lutron	Nova T	NTF-103P-	100%-1%	1-20	1-10
Lutron	Nova	NF-10-	100%-1%	1-41	1-20
Lutron	Nova	NF-103P-	100%-1%	1-20	1-10
Lutron	Vareo	VF-10-	100%-1%	1-20	1-10
Lutron	Skylark	SF-10P-, SF-103P-	100%-1%	1-20	1-10
Lutron	Diva	DVF-103P-, DVSCF-103P-	100%-1%	1-20	1-10
Lutron	Ariadni	AYF-103P-	100%-1%	1-20	1-10
Lutron	Vierti	VTF-6A-	100%-1%	1-15	1-7
Lutron	Maestro	MAF-6AM-, MSCF-6AM-	100%-1%	1-15	1-7
Lutron	Maestro Wireless	MRF2-F6AN-DV-	100%-1%	1-15	1-7
Lutron	RadioRA 2	RRD-F6AN-DV-	100%-1%	1-15	1-7
Lutron	HomeWorks QS	HQRD-F6AN-DV	100%-1%	1-15	1-7
Lutron	Interfaces	PHPM-3F-120, PHPM-3F-DV	100%-1%	1-41	1-20
Lutron	GP Dimming Panels	Various	100%-1%	1-41	1-20
<b>277V Only</b>				<b>40W and Less</b>	<b>41W - 80W</b>
ETC	Sensor+ Cabinet	D20 Dimming module	100% - 1%	1-53	1-26
ETC	Unison DRd Cabinet	D20F Dimming module	100% - 1%	1-53	1-26
Lutron	Nova T	NTF-10-277-	100%-1%	1-44	1-22
Lutron	Nova T	NTF-103P-277-	100%-1%	1-33	1-16
Lutron	Nova	NF-10-277-	100%-1%	1-44	1-22
Lutron	Nova	NF-103P-277-	100%-1%	1-33	1-16
Lutron	Skylark	SF-12P-277-, SF-12P-277-3	100%-1%	1-33	1-16
Lutron	Diva	DVF-103P-277-, DVSCF-103P-277-	100%-1%	1-33	1-16
Lutron	Ariadni	AYF-103P-277-	100%-1%	1-44	1-22
Lutron	Vierti	VTF-6A-	100%-1%	1-33	1-16
Lutron	Maestro	MAF-6AM-277-, MSCF-6AM-277-	100%-1%	1-20	1-10
Lutron	Maestro Wireless	MRF2-F6AN-DV-	100%-1%	1-33	1-16
Lutron	RadioRA 2	RRD-F6AN-DV-	100%-1%	1-33	1-16
Lutron	HomeWorks QS	HQRD-F6AN-DV	100%-1%	1-33	1-16
Lutron	Interfaces	PHPM-3F-DV	100%-1%	1-88	1-44
Lutron	GP Dimming Panels	Various	100%-1%	1-88	1-44

\* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

## SELECTION GUIDE: DIML4

### DIMMING DRIVER WIRING SCHEMES:

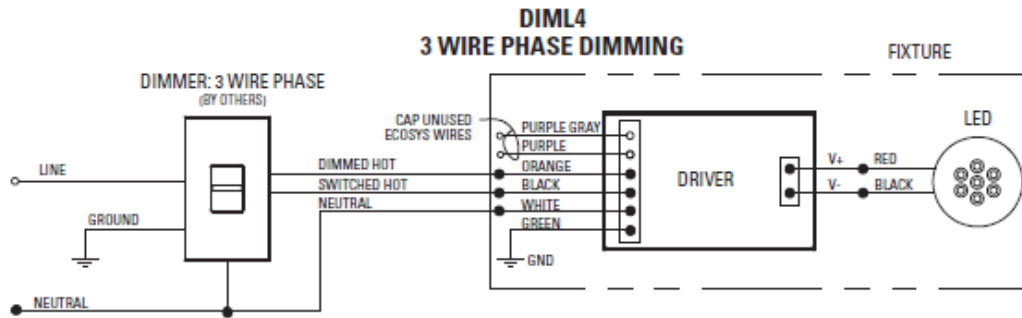
**NOTES:**

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

**IMPORTANT SAFETY INSTRUCTIONS  
- SAVE THESE INSTRUCTIONS**

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

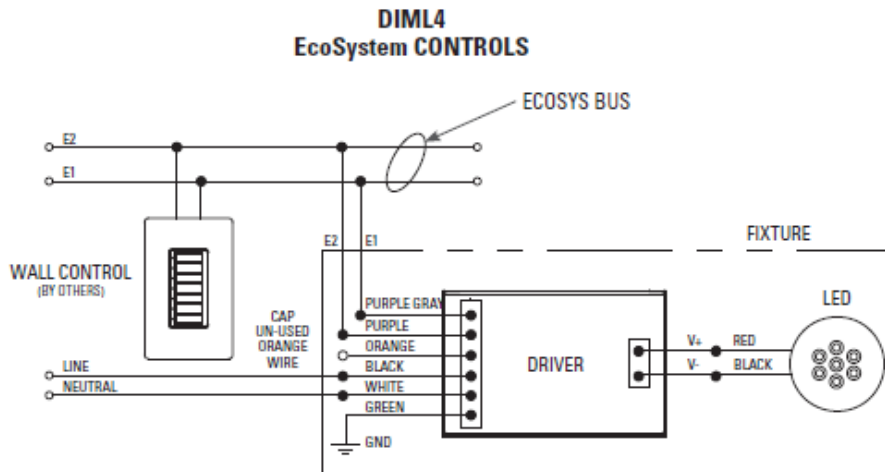
**DIML4 LED: Lutron Hi-Lume A-Series LED Driver with 3-Wire FL Control / LED Dimming Driver Wiring (Dims down to 1%)**



**DIML4 LED: Lutron Hi-Lume A-Series LED Driver with EcoSystem Control / LED Dimming Driver Wiring (Dims down to 1%)**

DIML4 EcoSystem Dimmer Compatibility Chart					
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Control*	
				Fixture Wattage	
<b>120V / 277V</b>					
Lutron	PowPak dimming module	RMJ-ECO32-DV-B	100%-1%	39W and Less	40W - 80W
Lutron	Energi Savr Node	QSN-1ECO-S, QSN-2ECO-S	100%-1%	1-64	1-32
Lutron	GRAFIK Eye QS (120V ONLY)	QSGRJ- E, QSGR- E	100%-1%	1-64	1-32
Lutron	Quantum	Various	100%-1%	1-64	1-32

\* NOTE: Number of fixtures may be higher if wattage is less than maximum values shown. Refer to dimmer manufacturer's documentation for installation instructions and circuit details.



## SELECTION GUIDE: DIML6A, 6B

### DIMMING DRIVER WIRING SCHEMES:

#### NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

#### IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

#### **DIML6A LED: EldoLED SOLOdrive 561/S 0-10V control 100%-0.1% linear-programmed dimming driver for use with logarithmic-style controls (e.g., Lutron and others listed in the table below)**

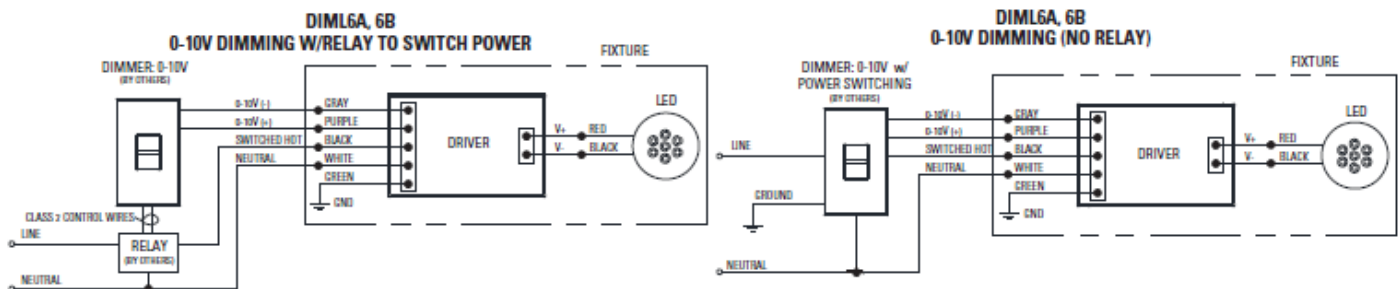
DIML6A Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V &amp; 277V</b>				
Lutron	Diva	DVTV/NFTV/NTFTV with PP-20	99% - 0.1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer.
Lutron	Energi Savr Node	QSN-4T16-S	100% - 0.1%	
Lutron	GP Dimming Panels	TVM2 Module	99% - 0.1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% - 0.1%	
Sensor Switch	nIO	nIO EZ	100% - 0.1%	

\* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.

#### **DIML6B LED: EldoLED SOLOdrive 561/S 0-10V control 100%-0.1% logarithmic-programmed dimming driver for use with linear-style controls (e.g., Crestron, non-Lutron, and others listed in the table below)**

DIML6B Dimmer Compatibility Chart				
Manufacturer	Product	Part Number	Dimmed Light Output Range	Qty Fixtures Per Dimmer*
<b>120V &amp; 277V</b>				
Bush-Jaeqer	Electronic potentiometer	2112U-101	100% - 0.1%	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer.
Jung	Electronic potentiometer	240-10	100% - 0.1%	
Leviton	IllumaTech dimmer	IP710-DLX	100% - 0.1%	
Lightolier (Philips)	Momentum (120V ONLY)	ZP600FAM120	100% - 0.1%	
Merten	Electronic potentiometer	5729	100% - 0.1%	
Pass & Seymour	Titan	CD4FB-W	100% - 0.1%	
Watt Stopper	Miro	DCLV1	100% - 0.1%	
Synergy	Wallbox Dimmers	ISD BC	100% - 0.1%	
ABB	i-bus	SD/S 2.16.1	100% - 0.1%	
Crestron	Modules	GLX-DIMFLV8, GLXP-DIMFLV8	100% - 0.1%	
Crestron	Green Light	GLPAC-DIMFLV4-, GLPAC-DIMFLV8-	100% - 0.1%	
Crestron	Green Light Power Pack	GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM	100% - 0.1%	
Crestron	DIN Rail Analog Output Module	DIN-A08	100% - 0.1%	
Crestron	DIN Rail 0-10V Fluorescent Dimmer	DIN-4DIMFLV4	100% - 0.1%	
Crestron	iLux 0-10V Dimmer Expansion Module	CLS-EXP-DIMFLV	100% - 0.1%	

\* NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details.





## SELECTION GUIDE: DIML7

### DIMMING DRIVER WIRING SCHEMES:

#### NOTES:

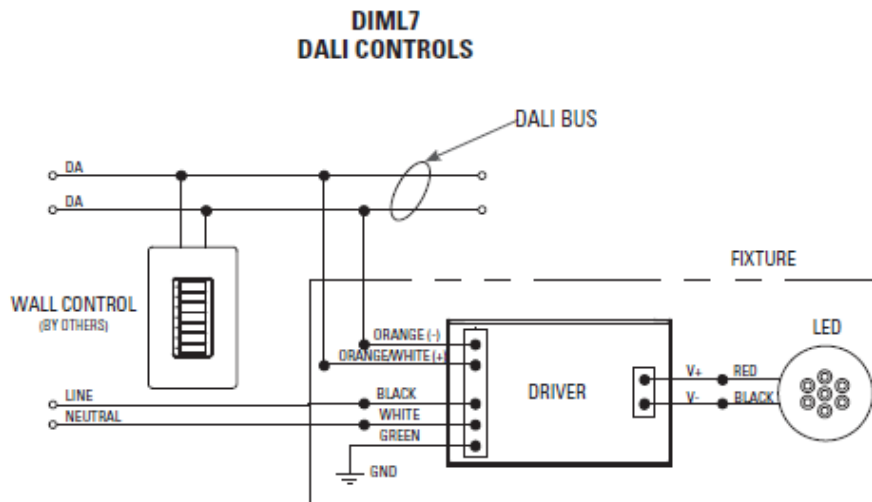
Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

### IMPORTANT SAFETY INSTRUCTIONS

#### - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance with local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

### DIML7 LED: EldoLED DALI Dimming Driver Wiring (Dims down to 0.1%)



## SELECTION GUIDE: DIML9

### DIMMING DRIVER WIRING SCHEMES:

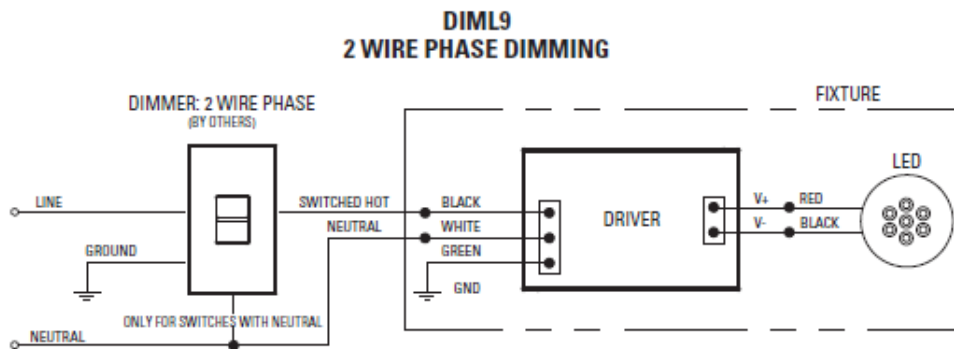
#### NOTES:

Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

#### IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance with local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

### DIML9 LED: TRIAC Forward Phase Dimming Driver Wiring (Dims down to 15%) 120V Only



## SELECTION GUIDE: DIML10

### DIMMING DRIVER WIRING SCHEMES:

#### NOTES:

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### IMPORTANT SAFETY INSTRUCTIONS

#### - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

### DIML10 LED: ELV Reverse Phase Dimming Driver Wiring (Dims down to 15%) 120V Only

