### PLUS Series | P3RA 3-Inch Adjustable Downlight

A family of Adjustables, Downlights, and Wall Wash luminaires; the PLUS Series provides an exceptional balance of performance, quality and value.









**TYPE** 

#### **FEATURES**

• Performance: Providing outstanding performance, the PLUS Series Adjustable Downlights deliver up to 2500 Lumens, and efficacies

up to 100 Lumens per Watt

• Visual Comfort: Precise optical control with three (3) beam distributions from 19° to 46°; Trims available in Angle-Cut or Beveled

• Light Quality: Premium quality light source with color consistency within 2 SDCM and excellent color rendering over 90 CRI

• Flexibility: Designed as a direct install product for effortless installation; additional housing options are available to accommodate

a variety of applications

P3RA DOWNLIGHT MODULE	10L	15L	20L	25L		
NOMINAL LUMEN OUTPUT <sup>1</sup>	1000Lm	1500Lm	2000Lm	2500Lm		
NOMINAL WATTAGE	10W	14W	20W	28W		
INPUT VOLTAGE	120V-277V / 347V					
COLOR TEMPERATURE   CRI	2700K / 3000K / 3	3500K / 4000K   80	0 / 90+ CRI			
BEAM DISTRIBUTIONS	Narrow (19°) / Med	ium (34°) / Flood (46	°)			
DRIVER DIMMING OPTIONS	Phase (Forward / R	everse), 0-10V, Lutro	on EcoSystem, DALI			
MOUNTING OPTIONS	Direct Mount Remodel Non-IC New Construction Frame Insulated Ceiling (IC) / StopAire™ / Chicago Plenum Housing					
CCSAus Damp Damp Listed Certified IC Rated  WSEC Compliant STAR®  LISTINGS  LISTINGS  LISTINGS  LISTINGS  LISTINGS  T24 JA8	ICSA Housing / Chi ICSA Housing confo Infiltration; tested in ENERGY STAR® Cer	cago Plenum Housing orms to Washington S n accordance with AS 'tified <sup>2</sup> nply with CEC Title 24	rds; Suitable for Dam g is CCEA Listed State Energy Code (W STM E283 (2.0 CFM o 4 Part 6 JA8 High Effi	VSEC) for Low Air or less)		
WARRANTY	Five (5) year replacement after date of purchase Emergency battery backup option covered by a one (1) year replacement guarantee after date of purchase					
SYSTEM RATING	50,000 Hours @ 70	0% Lumen Maintenan	ce			
				·		

<sup>1.</sup> Approximate lumen output based on 3000K performance; see photometric test results for additional information 2. Some restrictions apply, see Certification section of Product Specifications (page 4) for details



PRO IFCT

### PLUS Series | P3RA 3-Inch Adjustable Downlight

#### **ORDERING INFORMATION**

#### **MODULE**

Example Order: P3RA-25L30KMMVD2 / P3RTA-CLR / P3RA-Ne

Series
P3RA PLUS 3-Inch Adjustable Downlight

Lumens	CCT/CRI	Beam Distribution	Electrical/Driver		
10L 1000Lm 15L 1500Lm 20L 2000Lm 25L¹ 2500Lm	80+ CRI 27K 2700K 30K 3000K 35K 3500K 40K 4000K 90+ CRI 27KC 2700K 30KC 3000K 35KC 3500K 40KC 4000K	N 19° Narrow M 34° Medium F 46° Flood	ALL MVD DRIVER OPTIONS ARE MULTI-VOLT 120 - 277V  MVD Phase (Forward/Reverse)/0-10V Dimming  MVD2 0-10V, 1% Dimming  MVD4 Lutron Hi-lume EcoSystem  1% Dimming with Soft-on, Fade-to-Black  MVD62 eldoLED ECOdrive 0-10V, 1% Dimming  MVD72 eldoLED ECOdrive DALI, 1% Dimming  MVD82 eldoLED SOLOdrive 0-10V, 0.1% Dimming  MVD92 eldoLED SOLOdrive DALI, 0.1% Dimming  MVD93 347V 0-10V Dimming		

23R	TA-C	CLR / P3RA-NC
_		
	Opti	ons
	ER <sup>3</sup>	No Battery Back-Up Leave Blank Emergency Battery Backup with Remote Test Switch

**TYPE** 

#### **TRIM**

Series	Trim Type	Lens		Tri
P3RT P3 PLUS Trim	<b>A</b> Angle-Cut <b>B</b> <sup>4</sup> Bevel	No Lens Leave Blank  LSOL Wet Listed Trim with Solite Lens Wet Listed Trim with Clear Lens	5	CL PL PL' WH BL

Trim Finish						
CLR CLRW	Clear Specular Clear Specular with White Painted Flange					
PL PLW	Platinum Semi-Specular Platinum Semi-Specular with White Painted Flange					
WHT <sup>5</sup> BLK <sup>5</sup>	Matte White Matte Black					

#### HOUSING

Housing Type	e
P3RA-NC	New Construction Frame: 10-1/2" x 15"
P3RA-ICSA	Insulated Ceiling / StopAire™ / Chicago Plenum Housing: 10-1/2" x 15"

- 1. 25L Lumen Option (28W) is not available for use with ICSA Housings and is restricted up to the 20L option max.
- 2. eldoLED Drivers are programmed for Linear Curve Dimming as standard; for Logarithmic Curve Dimming, consult factory
- 3. The ER Emergency Battery Backup for Damp Location only
- 4. Bevel Style Trim available in Black and White Finishes only

### **REPLACEMENT OPTICS**

P3OPT-N P3OPT-M P3OPT-FA	Narrow Beam Medium Beam Flood Beam

#### **ACCESSORIES**

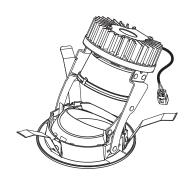
NC Frame	NC Frame / ICSA Housing Accessories						
RL-KIT HB-24 HBC-24	Commercial Mounting Brackets 27-In. Flat Hanger Bars for RL-KIT 25-In. C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction						
HB-30	T-Bar Hanger Set						

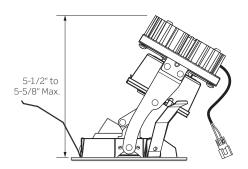
Trim Accessories			
FA-64 Trim Media F	Retention Spring		
3 - Inch Dia. Temp	pered Glass Lenses		
LF16-CL-75MM	Clear Lens	LF16-A-75MM	Amber Lens
LF16-SL-75MM	Soft Light Lens	LF16-B-75MM	Blue Lens
LF16-SOL-75MM	Solite Lens	LF16-LB-75MM	Light Blue Lens
LF16-LS-75MM	Linear Spread Lens	LF16-G-75MM	Green Lens
LF16-73-75MM	Spread Lens	LF16-R-75MM	Red Lens
		LF16-RO-75MM	Rose Lens
		LF16-Y-75MM	Yellow Lens



## PLUS Series | P3RA 3-Inch Adjustable Downlight

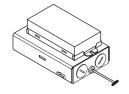
#### **P3 ADJUSTABLE MODULE**

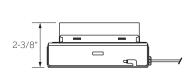


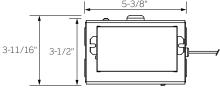


APERTURE DIAMETER	3-1/2"
REFLECTOR FLANGE DIAMETER	4-1/2"
REFLECTOR FLANGE WIDTH	1/2"
CEILING CUTOUT	4"
CEILING THICKNESS	1/2" to 1-1/2"
MODULE CABLE LENGTH	6"
JUNCTION BOX CABLE LENGTH	16"
ADJUSTABILITY RANGE	0° to 40°

#### **P3 ADJUSTABLE DRIVER**

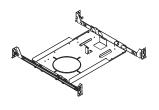


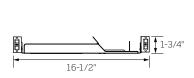


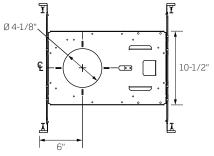


#### P3 ADJUSTABLE DOWNLIGHT OPTIONAL HOUSINGS

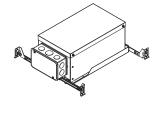
#### **NEW CONSTRUCTION FRAME**

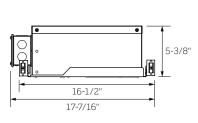


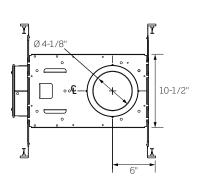




#### INSULATED CEILING/STOPAIRE™ (ICSA)









PRO IFCT

### PLUS Series | P3RA 3-Inch Adjustable Downlight

#### **PRODUCT SPECIFICATIONS**

#### LIGHT ENGINE

- 2700K, 3000K, 3500K and 4000K; 80 or 90 CRI
- · Color consistency within 2 SDCM

#### **ELECTRICAL / DRIVER**

- Driver Options include Universal Voltage 120–277V; 347V optional
- Flicker free Dimming Options include 0–10V, Phase (Forward/Reverse), EldoLED (0-10V and DALI), and Lutron EcoSystem
- All Driver Options are accessible and field replaceable from below the ceiling
- Class 2 output with over-voltage, over-current and short circuit protection;
   9 power factor.

#### **EMERGENCY BATTERY**

- 6W Emergency Battery Backup option provides illumination for a minumum duration of 90 minutes
- Certified to UL924 and CSA 222.2 No. 141 Standards for Emergency Lighting
- Lithium-Ion Battery with self-testing and self-diagnostics
- Available with Remote Test Switch Option
- Emergency Battery Backup is accessible from below the ceiling
- Meets Title 20 CEC (California Energy Commission) efficiency standards

#### OPTICS

- Three (3) beam distributions are available: Narrow (19°), Medium (34°), and Flood (46°)
- Optics are field interchangeable and provide smooth, striation-free beams

#### TRIMS

- Self-flanged, Spun Aluminum Angle-Cut Reflectors are available in various finishes: Specular and Semi-specular with and without White Painted Flanges and White and Black Painted finishes
- A Die-cast Bevel Trim is available in White and Black painted finishes, providing a clean, architectural finish
- For Wet Location applications, Trim must inlcude a lens; all Trim Options will accept up to one (1) Lens. See ordering information for available Tempered Glass Lens options.

#### **INSTALLATION**

- **CEILING OPENING:** For direct install applications, a ceiling cut-out diameter of 4-inches is required; for applications utilizing the Non-IC Mounting Frame or ICSA Housing, a ceiling cut-out diameter of 4-1/8-inches is required.
- **CEILING THICKNESS:** Accommodates ceiling thicknesses of 1/2-to 1-1/2-inches
- A Module Support Ring is provided to facilitate smooth insertion and removal of the Fixture Module
- A Safety Tether is included for additional support between the Fixture Module and Junction Box / Driver assembly

#### **CONSTRUCTION**

General Fixture construction is designed for quick, direct install into Non-IC applications

**TYPE** 

- Optional Non-IC Mounting Frame and Insulated Ceiling / StopAire™ (ICSA)
   Housing available
- Non-IC Mounting Frame is available for new construction applications; includes pre-installed hanger bars and requires a minimum 3-inch clearance around fixture from insulation material
- ICSA Housing is available for new construction applications; includes pre-installed hanger bars and may be used various applications including IC (direct insulation contact), restrictive air flow, and Chicago Plenum
- Adjustable Downlight Module features adjustability up to 40° when installed in a 1/2-inch to 1-inch thick ceiling, to 30° in 1-1/2-inch thick ceilings
- Module includes aiming indicator marks in 15° increments for consistent aiming
- Downlight Module Quick-connect design enables easy installation and removal of Universal LED Module; three (3) Spring Steel Supports secure Module into Housing/ceiling
- LED Module Consists of a Die-Cast Aluminum Heat Sink and Die-Cast Aluminum Mounting Ring, three (3) Steel Mounting Springs ensure secure mounting
- Junction Box / Driver assembly can be easily accessed from below the ceiling; when used with optional Frame or Housing, it is secured with a positive spring latch design
- Fixture Module Junction Box includes four (4) 1/2-inch screwdriver pry-out knockouts
- ICSA Housing includes Junction Box with six (6) 1/2-inch knockouts and one (1) 3/4-inch knockout
- Approved for through circuit wiring: Max. eight (8) 12 AWG (4 in / 4 out), wiring rated to 90°C

#### **CERTIFICATION**

- cCSAus Certified to UL and CSA Standards, suitable for Damp Locations.
   Suitable for Wet Locations (covered ceiling) when Trim is used with a Lens Accessory
- Emergency Battery Backup option is cCSAus certified to UL924 and CSA 222.2 No. 141 Standards for Emergency Lighting
- ICSA Housings meet the air leakage requirements per ASTM E283; conforms to Washington State Energy Code (WSEC) for low air Infiltration
- ICSA Housings are City of Chicago Environmental Air (CCEA) approved
- ENERGY STAR® Certified Includes all lumen packages, all CCT/CRI options, all beam distributions, Emergency Battery Backup option and MVD and MVD2 Driver options 347V, Lutron and eldoLED Driver options are not ENERGY STAR® Certified
- Can be used to comply with CEC Title 24 Part 6 JA8 High Efficacy LED Light Source Requirements

  Includes all lumps posteres all CCT estima with 20 c CPL all beam.
- Includes all lumen packages, all CCT options with 90+ CRI, all beam distributions, Emergency Battery Backup and Driver options MVD and MVD2 347V, Lutron and eldoLED Driver options are not included



### PLUS Series | P3RA 3-Inch Adjustable Downlight

#### TRIMS AND TRIM ACCESSORIES

#### P3RTA: Angle-Cut Reflector Trims

- Reflector Trims will accept one (1) 75mm Lens; the FA-64 Media Retention Spring is required
- For Wet Listing, Lens is required







P3RTA-CLR Clear Specular

P3RTA-PL Platinum Semi-Specular

P3RTA-WHT Matte White

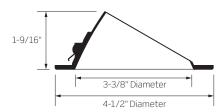
P3RTA-BLK Matte Black



P3RTA-CLRW Clear Specular/ White Painted Flange



P3RTA-PLW Plat. Semi-Specular/ White Painted Flange



#### **P3RTB:** Bevel Trims

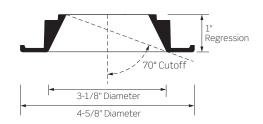
- Bevel Trims will accept one (1) 67mm Lens
- · Bevel Style Trim available in Black and White Finishes only
- For Wet Listing, Lens is required



P3RTB-WHT Matte White



P3RTB-BLK Matte Black



#### **TRIM ACCESSORIES**



FA-64 Media Retention Spring

All Trim Options will accept up to one (1) 3-inch Lens. For Wet Location applications, Trim must inlcude Lens. Reflector Trims utilize the FA-64 Media Retention Spring to hold the lens securely in place.

#### TEMPERED GLASS LENSES (Available in 67mm or 75mm)



LF16-A

Amher Lens



LF16-SL

LF16-SOL

LF16-LB Light Blue Lens



LF16-LS



LF16-G



LF16-73





FA-16



LF16-RO Rose Lens



**TYPE** 

**MEDIA MULTIPLIERS** 

Adding Lenses and Louvers effects lumen output values; to estimate lumen output of these combinations, multiply the published results by the following factors:

FA-16	LF16-73	LF16-CL	LF16-LS	LF16-SL	LF16-SOL	LF16-A	LF16-B	LF16-G	LF16-LB	LF16-R	LF16-RO	LF16-Y
0.60	0.85	0.93	0.75	0.73	0.93	0.48	0.21	0.07	0.53	0.07	0.45	0.80



### PLUS Series | P3RA 3-Inch Adjustable Downlight Photometrics

#### **PHOTOMETRICS**

#### P3RA-25L30KNMVD / P3RTA-CLR: 3-Inch Adjustable Downlight, Narrow Beam, Clear Reflector

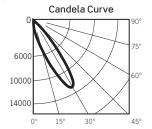
#### Luminaire aimed 30° from Nadir

Fixture Delivered Lumens: 2044.5 Total Watts@120V: 26.9 Lumens Per Watt: 76.0

Center Beam Candle Power: 12852

Beam Distribution: 18.6° Color Rendering Index (CRI)1: 82.6

Color Temperature (CCT)2: 3099K Designed for 50,000 Hour Lamp Life<sup>3</sup>





#### P3RA-25L30KMMVD / P3RTA-CLR: 3-Inch Adjustable Downlight, Medium Beam, Clear Reflector

LM-63 Test No. G23120601: LM-79 Test No. S23120401

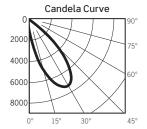
#### Luminaire aimed 30° from Nadir

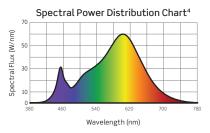
Fixture Delivered Lumens: 2410.9 Total Watts@120V: 26.8 Lumens Per Watt: 90.0

Center Beam Candle Power: 7323

Beam Distribution: 34°

Color Rendering Index (CRI)1: 82.6 Color Temperature (CCT)2: 3099K Designed for 50,000 Hour Lamp Life<sup>3</sup>





#### P3RA-25L30KFMVD / P3RTA-CLR: 3-Inch Adjustable Downlight, Flood Beam, Clear Reflector

LM-63 Test No. G24011901; LM-79 Test No. S23120401

#### Luminaire aimed 30° from Nadir Fixture Delivered Lumens: 2309.9

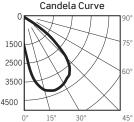
Total Watts@120V: 26.8 Lumens Per Watt: 86.2

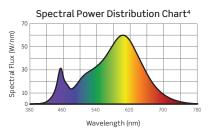
Center Beam Candle Power: 4173

Beam Distribution: 46°

Color Rendering Index (CRI)1: 82.6 Color Temperature (CCT)2: 3099K

Designed for 50,000 Hour Lamp Life<sup>3</sup>





#### P3RA-25L30KMMVD / P3RTB-WHT: 3-Inch Adjustable Downlight, Medium Beam, White Bevel Trim

LM-63 Test No. G23120606; LM-79 Test No. S23120401

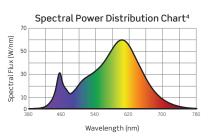
#### Luminaire aimed 30° from Nadir

Fixture Delivered Lumens: 2097.4 Total Watts@120V: 26.9 Lumens Per Watt: 78.0

Center Beam Candle Power: 6507 Beam Distribution: 34°

Color Rendering Index (CRI)1: 82.6 Color Temperature (CCT)2: 3099K Designed for 50,000 Hour Lamp Life<sup>3</sup>

Candela Curve 3000 5000 7000



1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

#### PHOTOMETRIC MULTIPLIERS

Lumen output values fluctuate based on Color Temperature (CCT), Color Rendering Index (CRI) and Wattage. To estimate lumen output of other combinations, multiply the published results by the following factors:

CCT MULTIPLIERS				
CCT	80+ CRI	90+ CRI		
2700K	0.95	0.84		
3000K	1.00	0.87		
3500K	1.02	0.90		
4000K	1.04	0.92		

OUTPUT MULTIPLIERS				
10L SERIES	15L SERIES	20L SERIES	25L SERIES	
0.41	0.56	0.76	1.00	

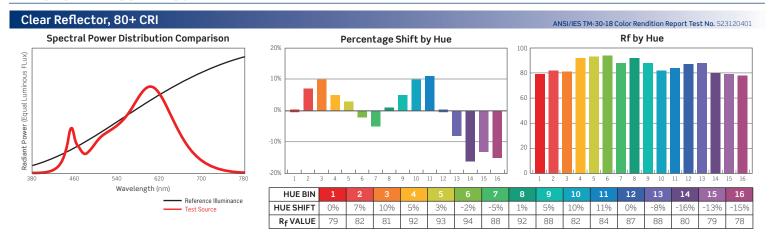
TRIM FINISH MULTIPLIERS				
FINISH	P3RTR REFLECTOR	P3RTB BEVEL		
CLEAR (SPECULAR)	1.00	N/A		
PLATINUM (SEMI-SPECULAR)	1.01	N/A		
MATTE WHITE	1.00	1.00		
MATTE BLACK	0.96	0.96		



### PLUS Series | P3RD 3-Inch Downlight Photometrics

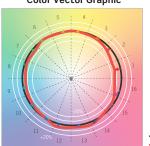
#### **PHOTOMETRICS: TM-30 DATA**

Colors are for visual orientation purposes only



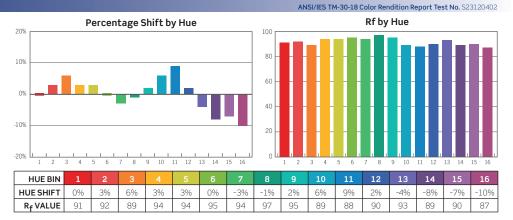
#### **Color Vector Graphic**

85
94
3099K
0.0007
0.2470
0.5203



Reference Illuminance

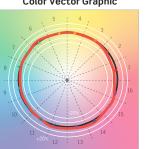
# Clear Reflector, 90+ CRI Spectral Power Distribution Comparison Radiant Power (Equal Luminous FLux) Wavelength (nm)



#### **Color Vector Graphic**

Test Source

$R_f$	92	
R <sub>g</sub>	100	
CCT(K)	3024K	
D <sub>uv</sub>	-0.0004	
u¹	0.2499	
VI	0.5203	





### PLUS Series | P3R 3-Inch Downlight Dimming Specifications

- Incandescent 120V AC Dimmers adjust the light with Forward Phase Control, where the Dimmer "chops" the forward part of the AC Wave to deliver less or more power to the light source. No Neutral Wire Connection required.
- Electronic Low Voltage 120V AC Dimmers adjust the light with Reverse Phase Control, where the Dimmer "chops" the back part of the AC Wave to deliver less or more power to the light source. Neutral Wire Connection required.
- 0 –10V DC Low Voltage Dimmers operate using two (2) Low Voltage Dimming Wires that are separate from the 120V or 277V AC Power. The Dimmer sends a Variable Output Voltage to the luminaire based upon the dimming level. 10V Corresponds to undimmed operation, 5V to 50% and so on. Switching On/Off
- is controlled with the Line Voltage Power Input to the Dimmer (120V or 277V AC). Dimming operation is controlled with the 0 –10V DC Low Voltage Wiring Connection between the Dimmer and the LED Driver. The Control Signal runs on two (2) low voltage control wires color coded Violet and Pink/Gray.
- Lutron EcoSystem Drivers provide continuous dimming from 1% –100%. For a complete list of compatible Dimmers and Controls, visit www.lutron.com
- Use DALI approved Controls for dimming eldoLED ECOdrive, 1% Dimming (Dimming Option MVD7) and eldoLED SOLOdrive, 0.1% Dimming (Dimming Option MVD9).

			LIGHT OUTPUT			
MANUFACTURER	PRODUCT	MODEL	<b>MVD</b> Forward/Reverse Phase	<b>MVD2</b> 0-10V	MVD6 eldoLED ECOdrive 0-10V	MVD8 eldoLED SOLOdrive 0-10V
Leviton	IllumaTech	IPI06-1LZ	1%-100%	NA	NA	NA
Leviton	Vizia	VPE06	9%-100%	NA	NA	NA
Leviton	Trimatron	6683-IW	6%-100%	NA	NA	NA
Leviton	Decora	6161	15%-100%	NA	NA	NA
Leviton	SureSlide	6633-P	1%-100%	NA	NA	NA
Leviton	IllumaTech	IPE04	6%-100%	NA	NA	NA
Leviton	IllumaTech	IP710-DLX	NA	1%-100%	1%-100%	0.1%-100%
Cooper	Devine	DLC03P	1%-100%	NA	NA	NA
Cooper	Skye	SLC03P	0%-100%	NA	NA	NA
Cooper	Decorator	DAL06P	0%-100%	NA	NA	NA
Pass & Seymour	Titan	CD4FB-W	NA	1%-100%	1%-100%	0.1%-100%
Synergy	ISD Series	ISD BC	NA	1%-100%	1%-100%	0.1%-100%
Watt Stopper	Miro Decorator	DCLV1	NA	1%-100%	1%-100%	0.1%-100%
Lutron	Ariadni	TGCL-153P	1%-100%	NA	NA	NA
Lutron	Ariadni	TG-600P	13%-100%	NA	NA	NA
Lutron	Diva	DVCL-153P	1%-100%	NA	NA	NA
Lutron	Diva	DV600P	6%-100%	NA	NA	NA
Lutron	Diva	DVELV303P	6%-100%	NA	NA	NA
Lutron	Diva	DVTV	NA	1%-100%	1%-100%	0.1%-100%
Lutron	Faedra	FAELV500	12%-100%	NA	NA	NA
Lutron	Lumea	LG600P	8%-100%	NA	NA	NA
Lutron	Maestro	MAELV600	16%-100%	NA	NA	NA
Lutron	Nova	NFTV	NA	1%-100%	1%-100%	0.1%-100%
Lutron	Nova T	NTFTV	NA	1%-100%	1%-100%	0.1%-100%
Lutron	Skylark	S-603PG	5%-96%	NA	NA	NA
Lutron	Skylark	S600P	5%-100%	NA	NA	NA
Lutron	Skylark	SELV300P	10%-100%	NA	NA	NA
Lutron	Skylark	CT103P	9%-100%	NA	NA	NA

#### **NOTES**

- 1. Testing was performed with a single luminaire connected to Dimmer.
- 2. Testing has been performed on these Dimmers, but this does not imply any warranty of compatibility.
- 3. Dimming performance can be influenced by different Loads, as well as variations in Dimmer Switches within the same Model.
- 4. Dimmer Maximum Load Rating with LEDs may differ from published Traditional Source Dimmer Ratings. Consult manufacturer for maximum Dimmer information.
- 5. Consult factory for additional dimming information.