ESSENCE™ LED STRIPS

DIMMER COMPATIBILITY CHART FOR STATIC WHITE AND WARM DIM

Test Methodology/Nomenclature:

- % = Light output at a given point vs. max light output when measured without a dimmer
- Top = % Light output at top of dimmer setting
- Bottom = % Light output at bottom of dimmer setting (stable, without experiencing flicker/shimmer)
- Turn-on/Pop-on = % Light output (initial) required for all lights to turn-on within 1 second
- Drop-out = Fixture turns off before reaching the bottom dimmer setting
- * = Most recommended
- Standard Phase = Forward and Reverse Phase
- F = Forward Phase (Leading Edge / TRIAC / Incandescent / Lutron C.L / Lutron LED+)
- R = Reverse Phase (Trailing Edge / ELV)
- M = Magnetic Low-Voltage (Leading Edge / MLV)
- U = Universal
- W = Wireless Compatible

FORWARD-PHASE, REVERSE-PHASE, TRIAC 120V POWER SUPPLY (ESPR***24ELV120)

Compatible / Recommended

Manufacturer	Name	Tested Part Number	Type	Top	Bottom	Pop-On	Drop-Out	Notes
Lutron	RadioRa 2	RRD-6NA	F, R, W	99%	0.1%	—	—	also MRF2-6ELV
Lutron	RadioRa 2	RRD-10ND	F, W	98%	0.1%	—	—	also MRF2-6ND
Lutron	RadioRa 2	RRD-H6BRL	F, W	88%	0.1%	—	—	
Lutron	Vive	MRF2S-6CL	F, W	97%	0.1%	—	—	also RRD-6CL, HQRD/A-6CL
Lutron	Caseta	PD-6WCL	F, W	92%	0.1%	—	—	
Lutron	Diva Reverse Phase	DVRP-253P	R	95%	0.1%	—	—	
Lutron	Diva*	DVCL-153P*	F	98%	0.3%	—	—	also TGCL-153P, SCL-153P, LECL-153P
Lutron	Sunnata	ST-PRO-N	U	99%	0.1%	—	—	
Lutron	Maestro	MACL-153M	F	91%	0.1%	—	—	
Leviton	Decora	TSL06-1LZ	F	99%	13.0%	—	—	
Leviton	Decora Smart	D26HD	F	97%	0.1%	—	—	
Leviton	Decora Rocker Slider	DSE06-10Z	R	97%	0.1%	—	—	
Leviton	Decora SureSlide	6672	F	97%	0.1%	—	—	
Legrand	Radiant	RHL743P	F	97%	0.3%	—	—	
Legrand	Adorne	ADTP600RMHW1	F, R, W	80%	0.1%	—	Yes	trim adjustment available
Legrand	Adorne	ADTH700RMTUW1	F, R, W	81%	0.1%	—	Yes	trim adjustment available
Forbes & Lomax	F&L Collection	Z0KP100.24US	F	84%	0.2%	—	—	
Insteon	Insteon Dimmer	2477D	R, W	97%	0.1%	—	—	
Control4	Decora Forward	C4-FPD120	F	98%	0.1%	—	Yes	trim adjustment available
Control4	Decora Adaptive	C4-APD120	F, R, M	98%	0.1%	—	Yes	trim adjustment available

Not Recommended or Incompatible

Lutron	Nova T	NTELV-600	R	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Skylark	SELV-300P	R	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Diva	DVELV-300P	R	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Maestro	MAELV-600P	R	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Glyder	GL-600P-WH	F	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Skylark	S-600P	F	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Rotary Dimmer	DV-600P-WH	F	—	—	—	—	per Lutron: not UL rated for LEDs
Lutron	Diva	DV-600P	F	—	—	—	—	per Lutron: not UL rated for LEDs
Eaton	Toggle Dimmer	TUL06-C2	F	—	—	—	—	
Leviton	Decora	DSL06-1LZ	F	—	—	—	—	

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Updated 7/22/2026

ESSENCE™ LED STRIPS

DIMMER COMPATIBILITY CHART FOR STATIC WHITE AND WARM DIM

0–10V POWER SUPPLY 5% (ESPR***24010120-277)

Compatible / Recommended

Manufacturer	Name	Tested Part Number	Type	Top	Bottom	Pop-On	Drop-Out	Notes
Lutron	Diva 0–10	DVTV	0–10V	100%	1.0%	—	—	logarithmic dimming curve

UNIVERSAL DIMMING: REVERSE-PHASE, FORWARD-PHASE, TRIAC, AND 0–10V IP66 (ESPR***24U120-277)

Compatible / Recommended

Manufacturer	Name	Tested Part Number	Type	Top	Bottom	Pop-On	Drop-Out	Notes
Lutron	Diva	DVCL-153P	F	100%	0.9%	—	—	
Lutron	Skylark	SCL-152P	F	100%	0.9%	—	—	
Lutron	Lumea	LECL-153P	F	100%	0.9%	—	—	
Lutron	Skylark Contour	CTCL-153P	F	100%	0.9%	—	—	
Lutron	Maestro	MACL-153M	F	100%	0.3%	—	—	
Lutron	Sunnata	ST-PRO-N	U	100%	0.1%	—	—	
Lutron	Diva	DVRP-253P	R	100%	0.1%	—	—	
Lutron	Caseta	PD-6WCL	F	100%	0.1%	—	—	
Lutron	Caseta	PD-5NE	U	100%	0.1%	—	—	
Lutron	Maestro	MA-PRO	U	100%	0.1%	—	—	
Lutron	RadioRa 2	RRD-6NA	U	100%	0.2%	—	—	
Lutron	Maestro	MRF2-6ELV	U	100%	0.2%	—	—	
Lutron	RadioRa 2	RRD-10ND	F	100%	0.1%	—	—	
Lutron	HomeWorks QS	HQRD-10ND	F	100%	0.1%	—	—	
Lutron	Maestro	MRF2S-6CL	F	100%	0.1%	—	—	
Lutron	RadioRa2	RRD-6CL	F	100%	0.1%	—	—	
Lutron	HomeWorks QS	HQRD-6CL	F	100%	0.1%	—	—	
Lutron	HomeWorks QS	HQRA-6CL	F	100%	0.1%	—	—	
Lutron	Lutron RadioRa 2 Hybrid Keypad	RRD-H6BRL	F	100%	0.1%	—	—	
Leviton	Toggle	TSL06	F	100%	9.5%	—	—	
Leviton	Decora Smart	D26HD	F	100%	0.6%	—	—	
Leviton	Decora	DSL06 SSL7A	F	100%	2.4%	—	—	
Leviton	SureSlide	6672	F	100%	1.9%	—	—	
Leviton	Decora	DSE06-1	R	100%	0.2%	—	—	
Eaton	Toggle	TUL06-C2	F	89%	1.9%	—	—	
Legrand	Adorne	ADTP600RMHW1	U	91%	0.1%	—	—	
Legrand	Adorne	ADTH700RMTUW1	U	89%	0.3%	—	—	
Legrand	Radiant	RHL743P	F	100%	0.6%	—	—	
Forbes & Lomax	—	Z0KP100.24US	F	100%	0.7%	—	—	
Insteon	—	2477D	R	100%	0.1%	—	—	
Control4	Decora Forward Phase	C4-FPD120	F	100%	0.2%	—	—	
Control4	Adaptive Phase	C4-APD120	U	100%	0.1%	—	—	

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DIMMER COMPATIBILITY CHART FOR STATIC WHITE AND WARM DIM

LUTRON HI-LUME ECOSYSTEM/3-WIRE POWER SUPPLY* (ESPR***24HLECO120-277)	
Compatible / Recommended	
For Lutron Hi-Lume EcoSystem/3-wire L3D0 0.1% Power Supply, refer to Lutron's Technical Document Library for the latest dimmer compatibility listings and performance specifications. https://www.lutron.com/TechnicalDocumentLibrary/369883.pdf *Lutron Hi-Lume EcoSystem/3-wire Power Supplies are *not compatible* with Warm Dim. **Notes:**	
Performance Variation	1) Results may vary for a number of reasons including the following: - job site line voltage fluctuation - fixture to dimmer distance - number of fixtures per dimmer, i.e. dimmer load - dimmer tolerances - driver/COB manufacturing tolerances
Tested	2) Test results reflect: 150W load, dimmers trimmed to their lowest level. Performance may vary depending on install load.
Unlisted	3) For additional compatibility, please submit specific request to factory.
Trim Settings	4) Most modern dimmers and control systems allow bottom and top end levels to be trimmed, limiting the usable dim range in order to suit the lighting designer or end user's preferences. See Image 1. 5) Adjustment of the trim settings may be preferred for a number or reasons, including: - limiting the brightness of the fixture at full-on - reducing "popcorn" affect if multiple fixtures come on at different times - reducing "pop-on time" if there is an undesirable delay at turn-on from the off-state - eliminating "pop-on" if the fixture does not turn on at the lowest dimmer setting - eliminating "drop-out" if the fixture turns off prior to reaching the lowest dimmer setting - eliminating low-end flicker or shimmer or buzzing, if present
Programming	6) Modern control systems (Homeworks, RadioRa, Control 4, etc.) can be programmed in a number of ways including to turn on at a higher level then immediately dim lower after a short/settable time interval. For example, to reduce pop-on time, popcorning effect, or low-end flicker/shimmer, the control system can be programmed to turn-on at 5% then dim down to 0.8% after 0.5 seconds, thus allowing the full dimming range to be available once the fixture is in the on-state. See Image 2.
Digital System Input vs. Actual Light Output	7) Modern control systems (Homeworks, RadioRa, Control 4, etc.) can be programmed to adjust light levels. However, there is non-linear correlation between the light level selection values and the actual light output of the fixture. For example, a program setting of "50%" on the control system may correlate to 17% actual light output, a program setting of "20%" may correlate to 2% actual light output. See Image 3.
Slider Position vs. Actual Light Output	8) Like modern control systems, slider dimmers have a non-linear correlation between the slider position and the actual light output of the fixture. For example, a slider position of ~75% on the dimmer may correlate to 40% actual light output and a slider position of ~25% on the dimmer may correlate to 4% actual light output. See Image 3.
Eye Perception vs. Actual Light Output	9) The human eye responds to low light levels by enlarging the pupil, allowing more light to enter the eye. This response results in a difference between measured (actual) and perceived light levels. The dilation of the pupil allows more light to enter the eye so that a fixture dimmed to 10% of its maximum measured light output is perceived as being dimmed to only 32%. Likewise, a fixture dimmed to 1% is perceived to be at 10%. See Image 3.

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Image 1

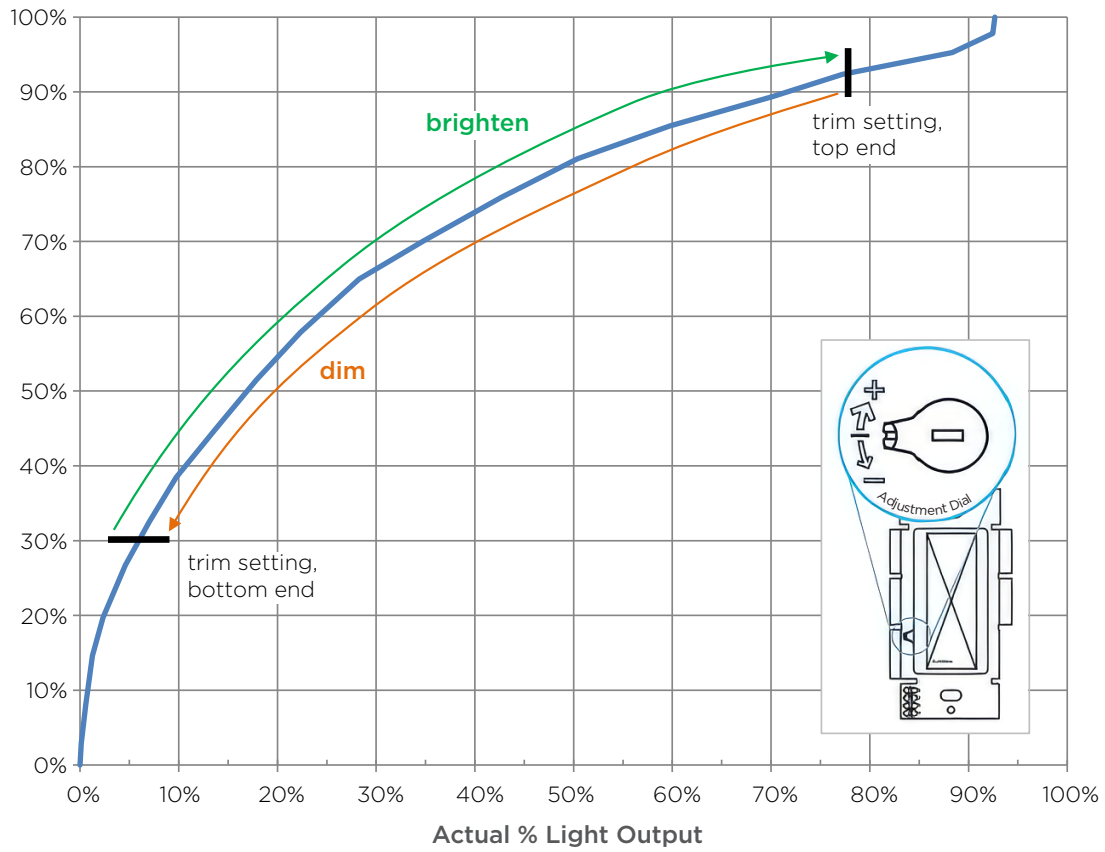
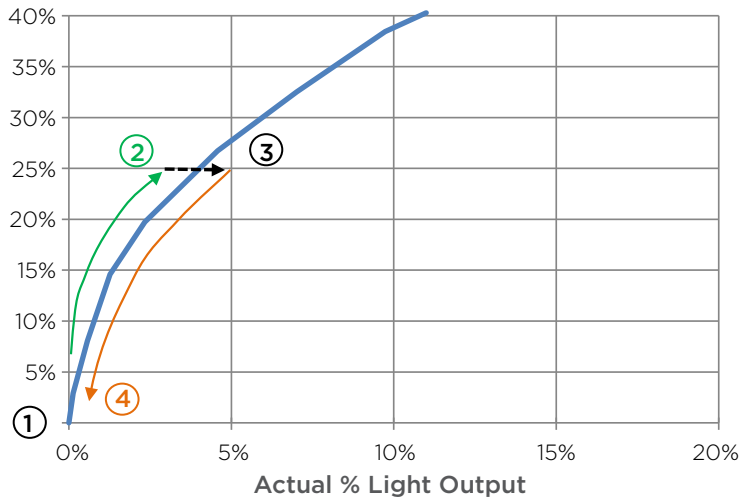


Image 2



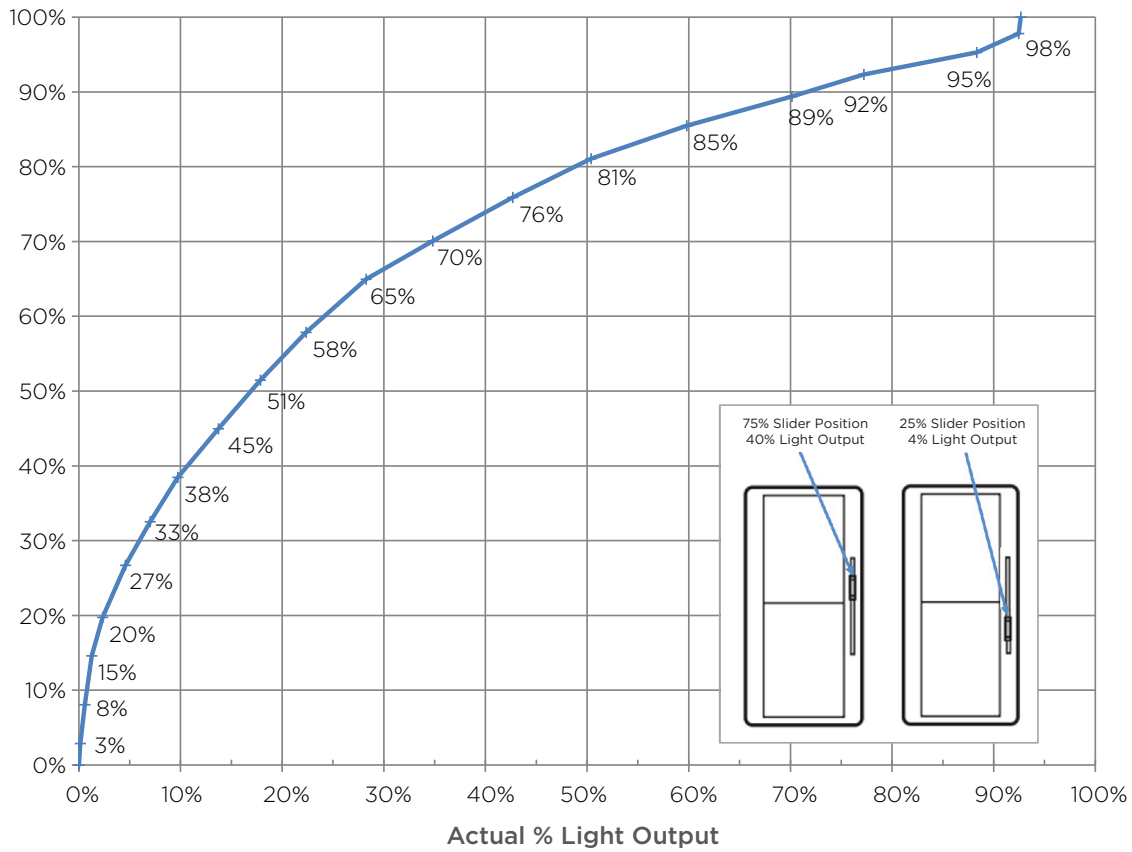
1. off-state
2. on, starting at 5%
3. split second time delay
4. dim to lower level (via program or slider)

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DIMMER COMPATIBILITY CHART FOR STATIC WHITE AND WARM DIM

Image 3



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