ERP POWER

Dimming Compatibility Matrix with 120 Vac TRIAC and ELV Dimmers

EBR020U-0500-37	Total Score:	92.4%	Driver Current (mA) with no Dimmer:	496	Driver Light (FC) with no Dimmer:		Scoring: 0 - Needs improvement; 1 - Unlikely to be noticed; 2 - No issues					
	Average Min. Dimming:	4.7%										

Dimmer List		Indiv. Score	Light Output (Foot Candle)		Current (mA)		Dimming Range[1]		Smooth Dimming	Sag[3]	No Start Flash[4]	Flicker[5]	Shimmer[6]	Able to turn off[7]	Audible Noise[8]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%					
Lutron	S-603PG	91.7%			395	31	80%	6%	2	20.0%	2	2	2	2	2
Leviton	IPI06-1LZ	91.7%			481	3	97%	1%	2	3.0%	2	2	2	2	2
Leviton	6631-LW	100.0%			485	3	98%	1%	2	2.0%	2	2	2	2	2
Lutron	DVCL-153P	83.3%			460	2	93%	0%	0	7.0%	2	2	2	2	2
Lutron	DV600P	66.7%			467	7	94%	1%	0	6.0%	2	0	2	2	2
Lutron	TGCL-153P	83.3%			472	17	95%	3%	0	5.0%	2	2	2	2	2
Lutron	S600P	91.7%			468	16	94%	3%	2	6.0%	2	2	2	2	2
Leviton	VPE06	100.0%			495	36	100%	7%	2	0.0%	2	2	2	2	2
Lutron	DVELV303P	91.7%			451	25	91%	5%	2	9.0%	2	2	2	2	2
Lutron	SELV300P	91.7%			446	28	90%	6%	2	10.0%	2	2	2	2	2
Leviton	6683-IW	91.7%			497	17	100%	3%	2	0.0%	2	1	2	2	2
Leviton	6161	91.7%			472	56	95%	11%	2	5.0%	2	2	2	2	2
Leviton	6633-P	100.0%			496	6	100%	1%	2	0.0%	2	2	2	2	2
Lutron	TG-600P	91.7%			478	68	96%	14%	2	4.0%	2	2	2	2	2
Cooper	DLC03P	100.0%			495	6	100%	1%	2	0.0%	2	2	2	2	2
Lutron	LG600P	91.7%			470	33	95%	7%	2	5.0%	2	2	2	2	2
Lutron	CT103P	91.7%			469	39	95%	8%	2	5.0%	2	2	2	2	2
Cooper	SLC03P	100.0%			495	2	100%	0%	2	0.0%	2	2	2	2	2
Leviton	IPE04	100.0%			494	24	100%	5%	2	0.0%	2	2	2	2	2
Lutron	MAELV600	91.7%			465	45	94%	9%	2	6.0%	2	2	2	2	2
Lutron	FAELV500	91.7%			467	49	94%	10%	2	6.0%	2	2	2	2	2
Lightolier	ZP260QEW	91.7%			459	19	93%	4%	2	7.0%	2	2	2	2	2
Cooper	DAL06P	100.0%			495	3	100%	1%	2	0.0%	2	2	2	2	2

NOTES:

1. If light is measured, then the dimming range is based on light output. If light is not measured, then the dimming range is based on the percentage of output current.
2. While adjusting the dimming level, a smooth dimming, with no sudden jumps in light output, results in a score of 2. A small jump that is only noticeable if directly staring at the light results in a score of 1.
   A large obvious jump results in a score of 0.
3. Percentage away from 100% output current when dimmer is inserted in the circuit, at the dimmer's maximum conduction angle.
4. No flash at startup (at maximum conduction angle) results in a score of 2. A smooth, but still noticeable transition from overshoot results in a score of 1. A transition with overshoot and undershoot results in a score of 0.
5. Highly visible repeating light fluctuations. No flicker results in a score of 2. Flicker results in a score of 0. There is no "1" score.
   Flicker is measured using a stable AC source delivered by a power supply. AC line voltage instability will cause visible light fluctuations.
6. Low frequency or random variations in light output that are typically less noticeable than flicker (the light output does not turn off at any point).
   No shimmer, perfect light output, results in a score of 2. Only noticeable shimmer, if staring directly at the LEDs, results in a score of 1. Obvious shimmer, even if looking away from the LEDs, results in a score of 0.
   Like Flicker, Shimmer is measured using a stable AC source delivered by a power supply. AC line voltage instability will cause visible light fluctuations.
7. No light output when dimmer switch or button is turned off.
8. Audible noise with driver located at 3 feet and measured at 90 degree conduction angle (worst case). A strongly apparent noise resuts in a score of 0.
   A score of 1 is assigned if the noise is not very obvious, and most likely to not be noticed inside of a fixture.
9. All the dimmers are set to the widest dimming range, when the trim potentiometer is available. Testing is done with 1 dimmer per LED driver.