ERP POWER

Dimming Compatibility Matrix with 120 Vac TRIAC and ELV Dimmers

EBR020U-0700-24		Total Score:	94.2%	Driver Current (mA) with no Dimmer:		690	Driver Light (FC) with no Dimmer:			Scoring				
		Average Min. Dimming:	6.1%							0 - Needs improvement				
										1 - Unlikely to be noticed				
										2 - No issues				
Dimmer List		Indiv. Score	Light Output (Foot Candle)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	Flicker[5]	Shimmer[6]	Able to turn off[7]	Audible Noise
Mfg.	Model	%	Max2	Min2	Max3	Min4	Max4	Min42	Score	%a	Column19	Column21	Column213	Column212	Column214
Lutron	S-603PG	91.7%			574	55	83%	8%	2	17.0%	2	2	2	2	2
Leviton	IPI06-1LZ	83.3%			687	16	100%	2%	2	0.0%	2	0	2	2	2
Leviton	6631-LW	100.0%			687	4	100%	1%	2	0.0%	2	2	2	2	2
Lutron	DVCL-153P	83.3%			668	2	97%	0%	0	3.0%	2	2	2	2	2
Lutron	DV600P	66.7%			635	48	92%	7%	0	8.0%	2	0	2	2	2
Lutron	TGCL-153P	83.3%			662	33	96%	5%	0	4.0%	2	2	2	2	2
Lutron	S600P	100.0%			680	32	99%	5%	2	1.0%	2	2	2	2	2
Leviton	VPE06	100.0%			687	59	100%	9%	2	0.0%	2	2	2	2	2
Lutron	DVELV303P	91.7%			642	42	93%	6%	2	7.0%	2	2	2	2	2
Lutron	SELV300P	91.7%			635	45	92%	7%	2	8.0%	2	2	2	2	2
Leviton	6683-IW	91.7%			688	32	100%	5%	2	0.0%	2	1	2	2	2
Leviton	6161	100.0%			684	88	99%	13%	2	1.0%	2	2	2	2	2
Leviton	6633-P	100.0%			688	17	100%	2%	2	0.0%	2	2	2	2	2
Lutron	TG-600P	91.7%			687	113	100%	16%	2	0.0%	2	2	2	2	2
Cooper	DLC03P	100.0%			688	16	100%	2%	2	0.0%	2	2	2	2	2
Lutron	LG600P	100.0%			682	59	99%	9%	2	1.0%	2	2	2	2	2
Lutron	CT103P	100.0%			680	66	99%	10%	2	1.0%	2	2	2	2	2
Cooper	SLC03P	100.0%			688	7	100%	1%	2	0.0%	2	2	2	2	2
Leviton	IPE04	100.0%			687	40	100%	6%	2	0.0%	2	2	2	2	2
Lutron	MAELV600	100.0%			674	75	98%	11%	2	2.0%	2	2	2	2	2
Lutron	FAELV500	100.0%			677	79	98%	11%	2	2.0%	2	2	2	2	2
Lightolier	ZP260QEW	91.7%			661	34	96%	5%	2	4.0%	2	2	2	2	2
Cooper	DAL06P	100.0%			688	1	100%	0%	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.