ERP POWER

Dimming Compatibility Matrix with 120 Vac TRIAC and ELV Dimmers

EBR015U-0440-36		Total Score:	94.7%	Driver Current (mA) with no Dimmer:			440	Driver Light (FC) with no Dimmer:			Scoring: 0 - Needs improvement; 1 - Unlikely to be noticed; 2 - No issues				
		Average Min. Dimming:	5.6%												
Dimmer List		Weighted Score	Light Output (Foot Candle)	Current (mA)		Dimming Range[1]		Min Score	Sag[3]	Sag score	LE Start <1 s [5]	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%			389	35	88%	8%	2	12.0%	2	2	2	2	2
Leviton	IPI06-1LZ	83.3%			436	6	99%	1%	2	1.0%	2	0	2	2	2
Leviton	6631-2	100.0%			436	1	99%	0%	2	1.0%	2	2	2	2	2
Lutron	DVCL-153P	91.7%			435	1	99%	0%	2	1.0%	2	2	1	2	2
Lutron	DV600P	75.0%			376	8	86%	2%	2	15.0%	2	0	2	2	2
Lutron	TGCL-153P	91.7%			436	19	99%	4%	0	1.0%	2	2	2	2	2
Lutron	S600P	100.0%			436	20	99%	5%	2	1.0%	2	2	2	2	2
Leviton	VPE06	95.8%			437	36	99%	8%	2	1.0%	1	2	2	2	2
Lutron	DVELV303P	100.0%			434	24	99%	5%	2	1.0%	2	2	2	2	2
Lutron	SELV300P	91.7%			429	26	98%	6%	2	3.0%	2	2	2	2	2
Leviton	6673-10W				436	20	99%	5%	0	1.0%	2	2	2	2	2
Leviton	6683-IW	91.7%			438	16	100%	4%	1	0.0%	1	2	2	2	2
Leviton	6161	100.0%			436	58	99%	13%	2	1.0%	2	2	2	2	2
Leviton	6633-P	95.8%			437	12	99%	3%	2	1.0%	1	2	2	2	2
Lutron	TG-600P	91.7%			436	74	99%	17%	2	1.0%	2	2	2	2	2
Cooper	DLC03P	95.8%			437	8	99%	2%	2	1.0%	1	2	2	2	2
Lutron	LG600P	100.0%			436	37	99%	8%	2	1.0%	2	2	2	2	2
Lutron	CT103P	100.0%			435	43	99%	10%	2	1.0%	2	2	2	2	2
Cooper	SLC03P	95.8%			437	1	99%	0%	2	1.0%	1	2	2	2	2
Leviton	IPE04	100.0%			437	25	99%	6%	2	1.0%	2	2	2	2	2
Lutron	MAELV600	100.0%			435	43	99%	10%	2	1.0%	2	2	2	2	2
Lutron	FAELV500	100.0%			435	44	99%	10%	2	1.0%	2	2	2	2	2
Lightolier	ZP260QEW	100.0%			435	25	99%	6%	2	1.0%	2	2	2	2	2
Cooper	DAL06P	87.5%			438	5	100%	1%	0	0.0%	1	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.