ERP POWER

Dimming Compatibility Matrix with 120 Vac TRIAC, ELV and 0-10 V Dimmers

ESM030W-0900-26		Total Score:	96.7%		Driver Current (mA) with no Dimmer:	902	Driver Light (FC) with no Dimmer:	1219		Scoring: 0 - Needs improvement; 1 - Unlikely to be noticed; 2 - No issues				
		Avg. Min. Dimming:	7.8%											
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[8]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%					
Lutron	S-603PG	100.0%	1138	71	801	36	93%	6%	2	11.0%	2	2	2	2	2
Leviton	IPI06-1LZ	100.0%	1219	34	902	18	100%	3%	2	0.0%	2	2	2	2	2
Leviton	6631-2	100.0%	1219	3	902	2	100%	0%	2	0.0%	2	2	2	2	2
Lutron	DVCL-153P	100.0%	1218	34	902	18	100%	3%	2	0.0%	2	2	2	2	2
Lutron	DV600P	91.7%	1219	93	902	47	100%	8%	1	0.0%	2	2	2	2	2
Lutron	TGCL-153P	100.0%	1219	83	902	42	100%	7%	2	0.0%	2	2	2	2	2
Lutron	S600P	100.0%	1219	36	902	19	100%	3%	2	0.0%	2	2	2	2	2
Leviton	VPE06	95.8%	1218	151	902	76	100%	12%	2	0.0%	2	2	2	2	2
Lutron	DVELV303P	100.0%	1217	107	902	54	100%	9%	2	0.0%	2	2	2	2	2
Lutron	SELV300P	100.0%	1215	114	902	57	100%	9%	2	0.0%	2	2	2	2	2
Leviton	6683-IW	100.0%	1216	75	902	38	100%	6%	2	0.0%	2	2	2	2	2
Leviton	6161	91.7%	1219	236	902	122	100%	19%	2	0.0%	2	2	2	2	2
Leviton	6633-P	100.0%	1216	25	902	14	100%	2%	2	0.0%	2	2	2	2	2
Lutron	TG-600P	91.7%	1216	201	902	103	100%	16%	2	0.0%	2	2	2	2	2
Cooper	DLC03P	91.7%	1216	35	902	18	100%	3%	1	0.0%	2	2	2	2	2
Lutron	LG600P	100.0%	1213	92	902	47	100%	8%	2	0.0%	2	2	2	2	2
Lutron	CT103P	95.8%	1213	148	902	75	100%	12%	2	0.0%	2	2	2	2	2
Cooper	SLC03P	91.7%	1215	12	902	7	100%	1%	1	0.0%	2	2	2	2	2
Leviton	IPE04	91.7%	1215	102	902	51	100%	8%	1	0.0%	2	2	2	2	2
Lutron	MAELV600	95.8%	1213	182	902	93	100%	15%	2	0.0%	2	2	2	2	2
Lutron	FAELV500	95.8%	1213	184	902	94	100%	15%	2	0.0%	2	2	2	2	2
Lightolier	ZP260QEW	100.0%	1212	120	902	61	99%	10%	2	0.0%	2	2	2	2	2
Cooper	DAL06P	91.7%	1213	24	902	13	100%	2%	1	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.