ERP POWER

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

ESM040W-0700-56	Total Score:	95.8%	Driver Current (mA) with no Dimmer:	696	Driver Light (FC) with no Dimmer:	2830	Scoring
	Avg. Min. Dimming:	6.0%					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[8]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%					
Lutron	S-603PG	85.7%	2640	130	630	15	93%	5%	2	9.0%	2	2	2	2	2
Leviton	IPI06-1LZ	92.9%	2830	20	696	5	100%	1%	2	0.0%	2	2	2	2	2
Leviton	6631-2	92.9%	2830	20	696	5	100%	1%	2	0.0%	2	2	2	2	2
Lutron	DVCL-153P	96.4%	2830	20	696	5	100%	1%	2	0.0%	2	2	2	2	2
Lutron	DV600P	92.9%	2830	80	696	15	100%	3%	2	0.0%	2	2	2	2	2
Lutron	MAW600	0.0%													
Lutron	TGCL-153P	100.0%	2830	170	696	32	100%	6%	2	0.0%	2	2	2	2	2
Lutron	S600P	92.9%	2830	10	696	4	100%	0%	2	0.0%	2	2	2	2	2
Leviton	VPE06	96.4%	2830	320	696	59	100%	11%	2	0.0%	2	2	2	2	2
Lutron	DVELV303P	100.0%	2830	240	696	43	100%	8%	2	0.0%	2	2	2	2	2
Lutron	SELV300P	100.0%	2830	250	696	45	100%	9%	2	0.0%	2	2	2	2	2
Leviton	6673-10W	0.0%													
Leviton	6683-IW	89.3%	2830	180	696	34	100%	6%	2	0.0%	1	2	2	2	2
Leviton	VP106	0.0%													
Leviton	6161	92.9%	2830	490	696	90	100%	17%	2	0.0%	2	2	2	2	2
Leviton	6633-P	89.3%	2830	10	696	4	100%	0%	2	0.0%	1	2	2	2	2
Lutron	TG-600P	100.0%	2830	270	696	49	100%	10%	2	0.0%	2	2	2	2	2
Cooper	DLC03P	100.0%	2830	90	696	18	100%	3%	2	0.0%	2	2	2	2	2
Lutron	LG600P	92.9%	2830	90	696	18	100%	3%	2	0.0%	2	2	2	2	2
Lutron	CT103P	100.0%	2830	180	696	33	100%	6%	2	0.0%	2	2	2	2	2
Lutron	DV603P	0.0%													
Cooper	SLC03P	100.0%	2830	30	696	8	100%	1%	2	0.0%	2	2	2	2	2
Leviton	IPE04	100.0%	2830	220	696	40	100%	8%	2	0.0%	2	2	2	2	2
Lutron	MAELV600	96.4%	2830	390	696	72	100%	14%	2	0.0%	2	2	2	2	2
Lutron	FAELV500	96.4%	2830	390	696	71	100%	14%	2	0.0%	2	2	2	2	2
Lightolier	ZP260QEW	0.0%													
Cooper	DAL06P	100.0%	2830	90	696	18	100%	3%	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.