Dimming Compatibility Matrix with 0-10V Dimmers at 120 VAC

PTB30W-0700-42 @ 500 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	506	Driver Light Output (FC) With No Dimmer:	3720	Scoring 0 - Needs Improvement 1 - Unlikely to Be Noticed 2 - No Issues
	Avg. Min. Dimming:	1.0%					

Dimmer List		Indiv. Score	Light Output (Foot Candles)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s [5]	Flicker[6]	Shimmer[7]	Able to turn off[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%						
Lutron	Nova NFTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DLZ	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	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. Low End Start
6. 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.
7 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.
8. No light output when dimmer switch or button is turned off.
9. 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.
10. 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.

Dimming Compatibility Matrix with 0-10V Dimmers at 277 VAC

PTB30W-0700-42 @ 500 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	506	Driver Light Output (FC) With No Dimmer:	3720	Scoring 0 - Needs Improvement 1 - Unlikely to Be Noticed 2 - No Issues
	Avg. Min. Dimming:	1.0%					

Dimmer List		Indiv. Score	Light Output (Foot Candles)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s [5]	Flicker[6]	Shimmer[7]	Able to turn off[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%						
Lutron	Nova NFTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DLZ	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	3720	33	506.0	5.1	100%	1%	2	0.0%	2	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. Low End Start
6. 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.
7 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.
8. No light output when dimmer switch or button is turned off.
9. 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.
10. 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.

Dimming Compatibility Matrix with 0-10V Dimmers at 120 VAC

PTB30W-0700-42 @ 700 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	707	Driver Light Output (FC) With No Dimmer:	5300	Scoring
	Avg. Min. Dimming:	1.0%					0 - Needs Improvement
							1 - Unlikely to Be Noticed
							2 - No Issues

Dimmer List		Indiv. Score	Light Output (Foot Candles)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s [5]	Flicker[6]	Shimmer[7]	Able to turn off[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%						
Lutron	Nova NFTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	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. Low End Start
6. 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.
7. 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.
8. No light output when dimmer switch or button is turned off.
9. 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.
10. 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.

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Dimming Compatibility Matrix with 0-10V Dimmers at 277 VAC

PTB30W-0700-42 @ 700 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	707	Driver Light Output (FC) With No Dimmer:	5300	Scoring 0 - Needs Improvement 1 - Unlikely to Be Noticed 2 - No Issues
	Avg. Min. Dimming:	1.0%					

Dimmer List		Indiv. Score	Light Output (Foot Candles)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s [5]	Flicker[6]	Shimmer[7]	Able to turn off[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min		%						
Lutron	Nova NFTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	5300	51	707.0	7.4	100%	1%	2	0.0%	2	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. Low End Start
6. 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.
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   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.
8. No light output when dimmer switch or button is turned off.
9. 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.
10. 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.

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Dimming Compatibility Matrix with TRIAC & ELV Dimmers at 120 VAC

PTB30W-0700-42 @ 500 mA		Total Score:	97%	Driver Current (mA) with no Dimmer:	506	Driver Light (FC) with no Dimmer:	3720	Scoring: 0 - Needs improvement; 1 - Unlikely to be noticed; 2 - No issues							
		Avg. Min. Dimming:	1.0%												
Dimmer List		Indiv. Score	Light Output (Foot Candle)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s[5]	Flicker[6]	Shimmer[7]	Able to turn on at 1%[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min								
Lutron	VPE06	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Leviton	DVELV303P	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Lutron	SELV300P	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Lutron	6673-10W	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Cooper	MAELV600	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Leviton	LGCL-153PL	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Leviton	RRD-6CL	100.0%	3620	33	490	5	97%	1%	2	0	2	2	2	2	2	2
Lutron	TAL06P1-C1	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Lutron	SAL06P-W-K	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Cooper	SCL-153P	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Cooper	IPL06	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Lutron	IPE04	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Cooper	DAL06P	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Leviton	MACL-153M	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Cooper	6674	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Lutron	DVCL-153P	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Cooper	NTELV-600P	95.8%	3720	0	506	0	100%	0%	2	2	1	2	2	2	2	2
Lutron	RRD-6NA	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Lutron	DVRP-253P	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Lutron	PD-6WCL	95.8%	2990	33	478	5	80%	1%	2	0	1	2	2	2	2	2
Leviton	RRD-10ND	100.0%	3720	33	506	5	100%	1%	2	2	2	2	2	2	2	2
Leviton	DSL06-1LZ	95.8%	3720	33	506	5	100%	1%	2	2	1	2	2	2	2	2
Lutron	DW1KD-1BZ	95.8%	3720	0	506	0	100%	0%	2	2	1	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. Low End Start
6. 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.
7 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.
8. Ability to turn on at low light levels
9. 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.
10. 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.

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Dimming Compatibility Matrix with TRIAC & ELV Dimmers at 120 VAC

PTB30W-0700-42 @ 700 mA		Total Score:	97%	Driver Current (mA) with no Dimmer:	707	Driver Light (FC) with no Dimmer:	5300	Scoring: 0 - Needs improvement; 1 - Unlikely to be noticed; 2 - No issues							
		Avg. Min. Dimming:	1.1%												
Dimmer List		Indiv. Score	Light Output (Foot Candle)		Current (mA)		Dimming Range[1]		Smooth Dimming[2]	Sag[3]	No Start Flash[4]	LE Start <1 s[5]	Flicker[6]	Shimmer[7]	Able to turn on at 1%[8]	Audible Noise[9]
Mfg.	Model	%	Max	Min	Max	Min	Max	Min								
Lutron	VPE06	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Leviton	DVELV303P	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Lutron	SELV300P	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Lutron	6673-10W	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Cooper	MAELV600	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Leviton	LGCL-153PL	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Leviton	RRD-6CL	100.0%	4720	270	686	12	89%	5%	2	0	2	2	2	2	2	2
Lutron	TAL06P1-C1	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Lutron	SAL06P-W-K	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Cooper	SCL-153P	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Cooper	IPL06	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Lutron	IPE04	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Cooper	DAL06P	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Leviton	MACL-153M	100.0%	4880	51	700	7	92%	1%	2	2	2	2	2	2	2	2
Cooper	6674	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Lutron	DVCL-153P	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Cooper	NTELV-600P	95.8%	5300	0	707	0	100%	0%	2	2	1	2	2	2	2	2
Lutron	RRD-6NA	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Lutron	DVRP-253P	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Lutron	PD-6WCL	95.8%	4680	51	668	7	88%	1%	2	0	1	2	2	2	2	2
Leviton	RRD-10ND	100.0%	5300	51	707	7	100%	1%	2	2	2	2	2	2	2	2
Leviton	DSL06-1LZ	95.8%	5300	51	707	7	100%	1%	2	2	1	2	2	2	2	2
Lutron	DW1KD-1BZ	95.8%	5300	0	707	0	100%	0%	2	2	1	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. Low End Start
6. 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.
7 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.
8. Ability to turn on at low light levels
9. 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.
10. 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.