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

PTB030W-0500-42 @ 300 mA		Total Score:	100.0%	Driver Current (mA) with no Dimmer:	300	Driver Light Output (FC) With No Dimmer:	3030	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)		Voltage (V)		Current (mA)		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%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DLZ	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	3030	33	300.0	3.8	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

PTB030W-0500-42 @ 300 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	300	Driver Light Output (FC) With No Dimmer:	3030	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)		Voltage (V)		Current (mA)		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%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DLZ	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	3030	33	300.0	3.8	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	3030	33	300.0	3.8	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 120 VAC

PTB030W-0500-42 @ 500 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	503	Driver Light Output (FC) With No Dimmer:	4880	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%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	4880	53	503.0	6.0	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

PTB030W-0500-42 @ 500 mA	Total Score:	100.0%	Driver Current (mA) with no Dimmer:	503	Driver Light Output (FC) With No Dimmer:	4880	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%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVTV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	Diva DVSTV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-LFZ	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Philips	Sunrise SR1200ZTUNV	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Cooper	SF10P	100.0%	4880	53	503.0	6.0	100%	1%	2	0.0%	2	2	2	2	2	2
Lutron	VIVE RMJS-8TN	100.0%	4880	53	503.0	6.0	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 TRIAC & ELV Dimmers at 120 VAC

PTB30W-0500-42 @ 300 mA		Total Score:	97%	Driver Current (mA) with no Dimmer:	300	Driver Light (FC) with no Dimmer:	3030	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%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Leviton	DVELV303P	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Lutron	SELV300P	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Lutron	6673-10W	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Cooper	MAELV600	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Leviton	LGCL-153PL	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Leviton	RRD-6CL	100.0%	2940	33	290	4	97%	1%	2	0	2	2	2	2	2	2
Lutron	TAL06P1-C1	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Lutron	SAL06P-W-K	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Cooper	SCL-153P	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Cooper	IPL06	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Lutron	IPE04	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Cooper	DAL06P	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Leviton	MACL-153M	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Cooper	6674	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Lutron	DVCL-153P	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Cooper	NTELV-600P	95.8%	3030	0	300	0	100%	0%	2	2	1	2	2	2	2	2
Lutron	RRD-6NA	91.7%	3030	33	300	4	100%	1%	2	2	2	2	2	1	2	2
Lutron	DVRP-253P	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Lutron	PD-6WCL	95.8%	2500	33	245	4	83%	1%	2	0	1	2	2	2	2	2
Leviton	RRD-10ND	100.0%	3030	33	300	4	100%	1%	2	2	2	2	2	2	2	2
Leviton	DSL06-1LZ	95.8%	3030	33	300	4	100%	1%	2	2	1	2	2	2	2	2
Lutron	DW1KD-1BZ	95.8%	3030	0	300	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-0500-42 @ 500 mA		Total Score:	96%	Driver Current (mA) with no Dimmer:	503	Driver Light (FC) with no Dimmer:	4880				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%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Leviton	DVELV303P	100.0%	4880	53	503	6	100%	1%	2	2	2	2	2	2	2	2
Lutron	SELV300P	100.0%	4880	53	503	6	100%	1%	2	2	2	2	2	2	2	2
Lutron	6673-10W	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Cooper	MAELV600	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Leviton	LGCL-153PL	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Leviton	RRD-6CL	100.0%	4750	120	485	11	97%	2%	2	0	2	2	2	2	2	2
Lutron	TAL06P1-C1	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Lutron	SAL06P-W-K	87.5%	4880	53	503	6	100%	1%	2	2	1	2	2	1	2	2
Cooper	SCL-153P	100.0%	4880	53	503	6	100%	1%	2	2	2	2	2	2	2	2
Cooper	IPL06	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Lutron	IPE04	100.0%	4880	53	503	6	100%	1%	2	2	2	2	2	2	2	2
Cooper	DAL06P	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Leviton	MACL-153M	100.0%	4800	53	498	6	98%	1%	2	2	2	2	2	2	2	2
Cooper	6674	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Lutron	DVCL-153P	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Cooper	NTELV-600P	95.8%	4880	0	503	0	100%	0%	2	2	1	2	2	2	2	2
Lutron	RRD-6NA	91.7%	4880	53	503	6	100%	1%	2	2	2	2	2	1	2	2
Lutron	DVRP-253P	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Lutron	PD-6WCL	95.8%	4200	53	423	6	86%	1%	2	0	1	2	2	2	2	2
Leviton	RRD-10ND	100.0%	4880	53	503	6	100%	1%	2	2	2	2	2	2	2	2
Leviton	DSL06-1LZ	95.8%	4880	53	503	6	100%	1%	2	2	1	2	2	2	2	2
Lutron	DW1KD-1BZ	95.8%	4880	0	503	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.