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

PLH-A50W-14-55-SXZ Iout 1400mA Vout 13.9V		Total Score:	100.0%	Driver Current (mA) With No Dimmer:		1394	Driver Light Output (FC) With No Dimmer:		1700	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%	1700	17	1394.0	14.3	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	1700	17	1394.0	14.3	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	1700	17	1394.0	14.3	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

PLH-A50W-14-55-SXZ Iout 1400mA Vout 13.9V		Total Score:	100.0%		Driver Current (mA) With No Dimmer:	1394	Driver Light Output (FC) With No Dimmer:	1700	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%	1700	17	1394.0	14.3	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	1700	17	1394.0	14.3	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	1700	17	1394.0	14.3	100%	1%	2	0.0%	2	2	2	2	2	2

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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

PLH-A50W-14-55-SXZ Iout 1400mA Vout 26.1V		Total Score:	100.0%	Driver Current (mA) With No Dimmer:	1396	Driver Light Output (FC) With No Dimmer:		2300	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%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2

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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.
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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.
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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

PLH-A50W-14-55-SXZ Iout 1400mA Vout 26.1V		Total Score:	100.0%	Driver Current (mA) With No Dimmer:	1396	Driver Light Output (FC) With No Dimmer:		2300	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%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	2300	23	1396.0	14.0	100%	1%	2	0.0%	2	2	2	2	2	2

NOTES:

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8. No light output when dimmer switch or button is turned off.
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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

PLH-A50W-14-55-SXZ Iout 1050mA Vout 36.2V		Total Score:	100.0%	Driver Current (mA) With No Dimmer:	1050	Driver Light Output (FC) With No Dimmer:	4100	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%	4100	42	1050.0	10.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	4100	42	1050.0	10.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	4100	42	1050.0	10.8	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.
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8. No light output when dimmer switch or button is turned off.
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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

PLH-A50W-14-55-SXZ Iout 1050mA Vout 36.2V	Total Score:	100.0%	Driver Current (mA) With No Dimmer:	1051	Driver Light Output (FC) With No Dimmer:	4100	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%	4100	42	1051.0	10.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	4100	42	1051.0	10.8	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	4100	42	1051.0	10.8	100%	1%	2	0.0%	2	2	2	2	2	2

NOTES:

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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

PLH-A50W-14-55-SXZ Iout 400mA Vout 44.2V		Total Score:	100.0%	Driver Current (mA) With No Dimmer:	400	Driver Light Output (FC) With No Dimmer:	1200	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%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2

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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%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	Diva DVTV	100.0%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2
Leviton	IP710-DL	100.0%	1200	15	400.0	5.1	100%	1%	2	0.0%	2	2	2	2	2	2

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