

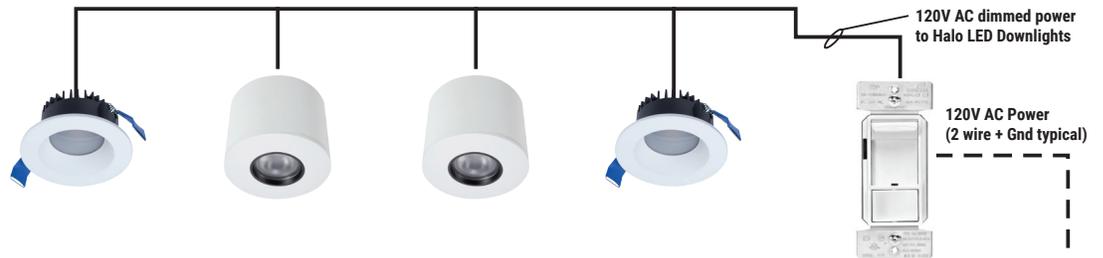
The ML4 LED Series provides continuous dimming with select leading or trailing edge 120V phase cut dimmers and 0-10V dimmers.

ML4 canless & retrofit - 90+CRI

ML4D10FL9FS1E	ML4DM10LSFL9FS1E
ML4D10FL9FS1E010	ML4DM10LSFL9FSE010
ML4D08FL95FS1E	ML4DM08LSFL95FS1E
ML4D06FLD2W1E	ML4DM06FLD2W1E

Phase Control Dimming

ML4 luminaires installed with Canless direct mounts and surface housing



0-10V Dimming

ML4 luminaires installed with Canless direct mounts and surface housing



LED Rated Phase Cut Dimmers (Used with ML4DM Canless CCT Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Leviton	SureSlide	6674	1	11	5%	100%	<1s
Leviton	SureSlide	DSL06-ILZ	1	44	5%	99%	<1s
Leviton	Illumatech	IPL06-ILZ	1	11	4%	99%	<1s
Cooper Lighting Solutions	Halo Home	HIWMA1BLE40AWH	1	22	3%	100%	<1s
Leviton	Vizia	VPI06	1	44	7%	100%	<1s
Leviton	Decora	TSL06-1LW	1	37	4%	100%	<1s
Leviton	SureSlide	RDL06-10Z	1	44	0%	100%	>1s
Lutron	Toggler	TG-600P	1	44	3%	100%	<1s
Lutron	Nova T	NTFTU-6A	1	44	29%	100%	<1s
Lutron	Maestro	MAW600	1	44	1%	100%	<1s
Lutron	Toggler	TGCL-153P	1	11	5%	100%	<1s
Lutron	Lumea	LG600P	1	44	0%	100%	NA
EWD	Universal	TUL06P-C2	1	22	5%	100%	<1s
EWD	Universal	SUL06P	1	22	4%	100%	<1s
Lutron	Skylark	SCL-153P-WH	1	11	4%	100%	<1s
Lutron	Diva	DV603P	1	44	0%	100%	NA
Lutron	Diva	DVCL-153P	1	11	5%	100%	<1s
Lutron	Maestro	MACL-153-M	1	11	2%	94%	<1s
Leviton	Legrand	H703PTU	1	22	7%	100%	<1s
Leviton	Vizia	VZE04	1	29	0%	100%	NA
Leviton	Acenti	ATX10	1	74	11%	100%	<1s
Lutron	Maestro	MAELV600	1	44	8%	100%	<1s
Lutron	Faetra	FAELV500	1	37	7%	100%	<1s
Lutron	Diva	DVELV303P	1	22	3%	100%	<1s
Lutron	Skylark	SELV300P	1	22	2%	100%	<1s
EWD	Smart	AAL06	1	22	4%	100%	<1s
Lightolier	Sunrise	ZP260QEW	1	19	4%	100%	<1s
Eaton	Skye	SF8AP	1	71	37%	100%	<1s
Eaton	React	RI061	1	44	0%	100%	NA
Eaton	Devine	TAL06P	1	22	5%	100%	<1s
Eaton	Toggle	DAL06P	1	22	5%	100%	<1s
Eaton	Skye	SLC03P	1	22	5%	100%	<1s
Eaton	Devine	DLC03P	1	22	5%	100%	<1s
Eaton	Toggle	TI061	1	44	0%	90%	NA
Lutron (PANEL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	143	0%	100%	NA
Lutron (PANEL)	LCP128 (ELV)	LP-RPM-4A-120	1	89	0%	99%	NA
Cooper Lighting Solutions	LDCM	LDCM-PL-120-277-010V-GR	1	33	0%	100%	NA
Cooper Lighting Solutions	PD216	PD216-AN10-120	1	143	0%	100%	NA
Lutron	Contour	CT-103P	1	74	0%	100%	NA
Lutron	Contour	CT-600P	1	44	0%	100%	NA
Lutron	Rotary	D-600P	1	44	0%	100%	NA
Lutron	Diva	DV-600P	1	44	0%	100%	NA

LED Rated Phase Cut Dimmers (Used with ML4DM Canless CCT Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Lutron	Glyder	GL-600P	1	44	0%	100%	NA
Lutron	Lumia	LG-600PH	1	44	0%	100%	NA
Lutron	Maestro	MA-600	1	44	1%	100%	<1s
Lutron	Nova	N-600	1	44	0%	100%	NA
Lutron	Skylark	S-600P	1	44	0%	100%	NA
Lutron	Ariadni	AYLV-600P	1	33	3%	100%	<1s
Lutron	Glyder	GLV-600	1	33	0%	99%	NA
Lutron	Diva	DVLV-600P	1	33	0%	99%	>1s
Lutron	Lumina	LG-103P	1	74	1%	100%	<1s
Lutron	Skylark	SLV-600P	1	33	0%	100%	NA
EWD	Universal	DUL06P-C7	1	22	5%	100%	<1s
Lutron	Nova	NTLV-600	1	22	5%	99%	<1s
Lutron	Nova	NT-600	1	33	1%	99%	<1s

LED Rated Phase Cut Dimmers (Used with ML4DM Canless D2W Field Selectable Luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Leviton	SureSlide	6674	1	14	1%	99%	<1s
Leviton	SureSlide	DSL06-ILZ	1	57	2%	99%	<1s
Leviton	Illumatech	IPL06-ILZ	1	14	2%	99%	<1s
Cooper Lighting Solutions	Halo Home	HIWMA1BLE40AWH	1	28	1%	100%	<1s
Leviton	Decora	TSL06-1LW	1	47	2%	99%	<1s
Leviton	SureSlide	RDL06-10Z	1	57	4%	100%	<1s
Lutron	Toggler	TG-600P	1	57	0%	95%	>1s
Lutron	Nova T	NTFTU-6A	1	57	18%	99%	>1s
Lutron	Toggler	TGCL-153P	1	14	1%	95%	<1s
Lutron	Lumea	LG600P	1	57	1%	99%	<1s
EWD	Universal	TUL06P-C2	1	28	2%	98%	<1s
EWD	Universal	SUL06P	1	28	1%	97%	<1s
Lutron	Skylark	SCL-153P-WH	1	14	1%	96%	<1s
Lutron	Diva	DV603P	1	57	0%	99%	>1s
Lutron	Diva	DVCL-153P	1	14	1%	96%	<1s
Leviton	Legrand	H703PTU	1	28	5%	100%	<1s
Leviton	Vizia	VZE04	1	38	8%	100%	<1s
Leviton	Acenti	ATX10	1	95	2%	99%	<1s
Lutron	Maestro	MAELV600	1	57	5%	100%	<1s
Lutron	Faetra	FAELV500	1	47	5%	100%	<1s
Lutron	Diva	DVELV303P	1	28	1%	99%	<1s
Lutron	Skylark	SELV300P	1	28	1%	99%	<1s
EWD	Smart	AAL06	1	28	1%	99%	<1s
Lightolier	Sunrise	ZP260QEW	1	24	2%	99%	<1s
Eaton	React	RI061	1	57	0%	100%	>1s
Eaton	Devine	TAL06P	1	28	3%	100%	<1s
Eaton	Toggle	DAL06P	1	28	3%	100%	<1s
Eaton	Skye	SAL06P	1	28	3%	100%	<1s
Eaton	Skye	SLC03P	1	28	3%	99%	<1s
Eaton	Devine	DLC03P	1	28	3%	99%	<1s
Lutron (PANEL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	182	0%	100%	>1s
Lutron (PANEL)	LCP128 (ELV)	LP-RPM-4A-120	1	114	0%	99%	>1s
Cooper Lighting Solutions	LDCM	LDCM-PL-120-277-010V-GR	1	42	0%	100%	>1s
Cooper Lighting Solutions	PD216	PD216-AN10-120	1	182	4%	100%	<1s
Lutron	Contour	CT-103P	1	95	1%	99%	<1s
Lutron	Contour	CT-600P	1	57	1%	99%	<1s
Lutron	Rotary	D-600P	1	57	0%	96%	>1s
Lutron	Diva	DV-600P	1	57	0%	99%	>1s
Lutron	Glyder	GL-600P	1	57	0%	99%	>1s
Lutron	Lumia	LG-600PH	1	57	1%	99%	<1s
Lutron	Maestro	MA-600	1	57	7%	100%	<1s
Lutron	Nova	N-600	1	57	0%	99%	>1s

LED Rated Phase Cut Dimmers (Used with ML4DM Canless D2W Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Lutron	Skylark	S-600P	1	57	0%	99%	>1s
Lutron	Ariadni	AYLV-600P	1	42	0%	99%	>1s
Lutron	Glyder	GLV-600	1	42	0%	99%	>1s
Lutron	Diva	DVLV-600P	1	42	0%	98%	>1s
Lutron	Lumina	LG-103P	1	95	1%	99%	<1s
Lutron	Skylark	SLV-600P	1	42	1%	99%	>1s
EWD	Universal	DUL06P-C7	1	28	2%	98%	<1s
Lutron	Nova	NTLV-600	1	28	1%	99%	<1s
Lutron	Nova	NT-600	1	42	0%	99%	>1s

LED Rated 0-10V Dimmers (Used with ML4DM Canless 1000 lumen setting)

Dimmer Make	Dimmer Series	Dimmer Model #	Types of Dimmer	Minimum Lamps or Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)	Low End Start Time
Eaton	Slide Dimmer	SF10P	0-10v	1	76	104	100	4	<1s
Eaton	Decorator Dimmer	DF10P	0-10v	1	76	104	100	4	<1s
Leviton	Illumatech	IP710-DL	0-10v	1	76	94	100	4	<1s
Lutron	NTFTV	NOVA T	0-10v	1	121	189	100	4	<1s
Lutron	DIVA	DVTV	0-10v	1	121	188	100	4	<1s
Cooper Lighting Solutions	Greengate	CK4A	0-10v	1	152	333	100	4	<1s

LED Rated 0-10V Dimmers (Used with ML4DM Canless 800 lumen setting)

Dimmer Make	Dimmer Series	Dimmer Model #	Types of Dimmer	Minimum Lamps or Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)	Low End Start Time
Eaton	Slide Dimmer	SF10P	0-10v	1	84	115	101	4	<1s
Eaton	Decorator Dimmer	DF10P	0-10v	1	84	115	100	4	<1s
Leviton	Illumatech	IP710-DL	0-10v	1	84	104	99	4	<1s
Lutron	NTFTV	NOVA T	0-10v	1	136	186	101	4	<1s
Lutron	DIVA	DVTV	0-10v	1	136	186	101	4	<1s
Cooper Lighting Solutions	Greengate	CK4A	0-10v	1	170	363	100	4	<1s

LED Rated 0-10V Dimmers (Used with ML4DM Canless 600 lumen setting)

Dimmer Make	Dimmer Series	Dimmer Model #	Types of Dimmer	Minimum Lamps or Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)	Low End Start Time
Eaton	Slide Dimmer	SF10P	0-10v	1	105	140	100	5	<1s
Eaton	Decorator Dimmer	DF10P	0-10v	1	105	140	100	5	<1s
Leviton	Illumatech	IP710-DL	0-10v	1	105	126	94	5	<1s
Lutron	NTFTV	NOVA T	0-10v	1	168	187	100	5	<1s
Lutron	DIVA	DVTV	0-10v	1	168	188	100	5	<1s
Cooper Lighting Solutions	Greengate	CK4A	0-10v	1	210	432	100	5	<1s

LED Rated Phase Cut Dimmers (Used with ML4D Retrofit CCT Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Leviton	SureSlide	6674	1	9	5%	100%	<1s
Leviton	SureSlide	DSL06-ILZ	1	38	5%	100%	<1s
Leviton	Illumatech	IPL06-ILZ	1	9	5%	100%	<1s
Cooper Lighting Solutions	Halo Home	HIWMA1BLE40AWH	1	19	4%	100%	<1s
Leviton	Decora	TSL06-1LW	1	31	5%	100%	<1s
Leviton	SureSlide	RDL06-10Z	1	38	2%	100%	>1s
Lutron	Toggler	TG-600P	1	38	5%	100%	<1s
Lutron	Nova T	NTFTU-6A	1	38	28%	99%	<1s
Lutron	Maestro	MAW600	1	38	2%	100%	<1s
EWD	Universal	TUL06P-C2	1	19	5%	99%	<1s
EWD	Universal	SUL06P	1	19	5%	99%	<1s
Lutron	Skylark	SCL-153P-WH	1	9	5%	100%	<1s
Lutron	Diva	DVCL-153P	1	9	5%	100%	<1s
Lutron	Maestro	MACL-153-M	1	9	5%	95%	<1s
Leviton	Legrand	H703PTU	1	19	5%	100%	<1s
Leviton	Vizia	VZE04	1	25	8%	100%	<1s
Leviton	Acenti	ATX10	1	63	11%	100%	<1s
Lutron	Maestro	MAELV600	1	38	9%	100%	<1s
Lutron	Faetra	FAELV500	1	31	8%	100%	<1s
Lutron	Diva	DVELV303P	1	19	4%	100%	<1s
Lutron	Skylark	SELV300P	1	19	4%	100%	<1s
EWD	Smart	AAL06	1	19	5%	100%	<1s
Lightolier	Sunrise	ZP260QEW	1	16	5%	100%	<1s
Eaton	Skye	SF8AP	1	60	34%	100%	<1s
Eaton	React	RI061	1	38	0%	100%	NA
Eaton	Devine	TAL06P	1	19	5%	100%	<1s
Eaton	Toggle	DAL06P	1	19	5%	100%	<1s
Eaton	Skye	SAL06P	1	19	5%	100%	<1s
Eaton	Skye	SLC03P	1	19	5%	100%	<1s
Eaton	Devine	DLC03P	1	19	5%	100%	<1s
Eaton	Toggle	TI061	1	38	1%	91%	<1s
Lutron(PAN-EL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	121	0%	100%	NA
Lutron(PAN-EL)	LCP128 (ELV)	LP-RPM-4A-120	1	76	0%	100%	NA
Cooper Lighting Solutions	LDCM	LDCM-PL-120-277-010V-GR	1	28	0%	100%	NA
Cooper Lighting Solutions	PD216	PD216-AN10-120	1	121	0%	100%	NA
Lutron	Contour	CT-103P	1	63	0%	100%	NA
Lutron	Contour	CT-600P	1	38	0%	100%	NA

LED Rated Phase Cut Dimmers (Used with ML4D Retrofit CCT Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Lutron	Maestro	MA-600	1	38	2%	100%	<1s
Lutron	Nova	N-600	1	38	0%	100%	>1s
Lutron	Ariadni	AYLV-600P	1	28	5%	100%	<1s
Lutron	Glyder	GLV-600	1	28	0%	100%	NA
Lutron	Diva	DVLV-600P	1	28	2%	100%	<1s
Lutron	Lumina	LG-103P	1	63	3%	100%	<1s
Lutron	Skylark	SLV-600P	1	28	0%	100%	>1s
EWD	Universal	DUL06P-C7	1	19	5%	99%	<1s
Lutron	Nova	NTLV-600	1	19	5%	100%	<1s
Lutron	Nova	NT-600	1	28	1%	100%	<1s

LED Rated Phase Cut Dimmers (Used with ML4D Retrofit D2W Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Leviton	SureSlide	6674	1	14	3%	99%	<1s
Leviton	SureSlide	DSL06-ILZ	1	57	3%	99%	<1s
Leviton	Illumatech	IPL06-ILZ	1	14	3%	98%	<1s
Cooper Lighting Solutions	Halo Home	HIWMA1BLE40AWH	1	28	2%	100%	<1s
Leviton	Decora	TSL06-1LW	1	48	5%	99%	<1s
Leviton	SureSlide	RDL06-10Z	1	57	1%	100%	<1s
Lutron	Toggler	TG-600P	1	57	0%	98%	NA
Lutron	Nova T	NTFTU-6A	1	57	18%	99%	<1s
Lutron	Toggler	TGCL-153P	1	14	5%	96%	<1s
Lutron	Lumea	LG600P	1	57	0%	98%	NA
EWD	Universal	TUL06P-C2	1	28	5%	98%	<1s
EWD	Universal	SUL06P	1	28	5%	97%	<1s
Lutron	Skylark	SCL-153P-WH	1	14	5%	96%	<1s
Lutron	Diva	DV603P	1	57	0%	98%	NA
Lutron	Diva	DVCL-153P	1	14	5%	96%	<1s
Leviton	Vizia	VZE04	1	38	4%	99%	<1s
Leviton	Acenti	ATX10	1	96	5%	99%	<1s
Lutron	Maestro	MAELV600	1	57	5%	100%	<1s
Lutron	Faetra	FAELV500	1	48	5%	100%	<1s
Lutron	Diva	DVELV303P	1	28	2%	99%	<1s
Lutron	Skylark	SELV300P	1	28	2%	99%	<1s
EWD	Smart	AAL06	1	28	5%	99%	<1s
Lightolier	Sunrise	ZP260QEW	1	25	5%	100%	<1s
Eaton	React	RI061	1	57	0%	100%	NA
Eaton	Devine	TAL06P	1	28	5%	100%	<1s
Eaton	Toggle	DAL06P	1	28	5%	100%	<1s
Eaton	Skye	SAL06P	1	28	5%	100%	<1s
Eaton	Skye	SLC03P	1	28	5%	100%	<1s
Eaton	Devine	DLC03P	1	28	5%	99%	<1s
Lutron (PANEL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	185	0%	100%	NA
Lutron (PANEL)	LCP128 (ELV)	LP-RPM-4A-120	1	115	0%	98%	NA
Cooper Lighting Solutions	LDCM	LDCM-PL-120-277-010V-GR	1	43	0%	99%	NA
Cooper Lighting Solutions	PD216	PD216-AN10-120	1	185	0%	100%	NA
Lutron	Contour	CT-103P	1	96	0%	98%	NA
Lutron	Contour	CT-600P	1	57	0%	98%	NA
Lutron	Rotary	D-600P	1	57	0%	98%	NA
Lutron	Diva	DV-600P	1	57	0%	99%	NA
Lutron	Glyder	GL-600P	1	57	0%	99%	NA
Lutron	Lumia	LG-600PH	1	57	0%	98%	NA

LED Rated Phase Cut Dimmers (Used with ML4D Retrofit D2W Field Selectable luminaires)

Manufacturer	Series	Model	Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)	Minimum Measured Light Output	Maximum Measured Light Output	Low End Start Time
Lutron	Nova	N-600	1	57	0%	100%	NA
Lutron	Skylark	S-600P	1	57	0%	98%	NA
Lutron	Ariadni	AYLV-600P	1	43	0%	98%	NA
Lutron	Glyder	GLV-600	1	43	0%	99%	NA
Lutron	Diva	DVVL-600P	1	43	0%	98%	NA
Lutron	Lumina	LG-103P	1	96	0%	99%	NA
Lutron	Skylark	SLV-600P	1	43	0%	99%	NA
EWD	Universal	DUL06P-C7	1	28	5%	98%	<1s
Lutron	Nova	NTLV-600	1	28	2%	99%	<1s
Lutron	Nova	NT-600	1	43	0%	99%	NA

LED Rated 0-10V Dimmers (Used with ML4D Retrofit)

Dimmer Make	Dimmer Series	Dimmer Model #	Types of Dimmer	Minimum Lamps or Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)	Low End Start Time
Eaton	Slide Dimmer	SF10P	0-10v	1	74	103	100	4	<1s
Eaton	Decorator Dimmer	DF10P	0-10v	1	74	103	100	4	<1s
Leviton	Illumatech	IP710-DL	0-10v	1	74	93	100	4	<1s
Lutron	NTFTV	NOVA T	0-10v	1	118	184	100	4	<1s
Lutron	DIVA	DVTV	0-10v	1	118	184	100	4	<1s
Cooper Lighting Solutions	Greengate	CK4A	0-10v	1	148	333	100	4	<1s

Dimmer Notes:

- 1) Start time is measured at the lowest dimmer setting.
- 2) Some LED dimmers have a “rapid start” design used to provide a momentary power boost to LED and CFL lamps during start-up. When a LED luminaire is on a dimmer with “rapid start” the boost may cause a momentary flash of the LED lighting. This “flash” is generated by the dimmer, and may be more noticeable when the dimmer is at a low setting. A solution is available with EATON dimmers which provide adjustment capability of the “rapid start”: Devine (DAL06P), Accell (AAL06P), and Trace (TAL06P).

Dimming Guide Disclaimer:

- 1) Leviton® is a registered trademark of Leviton Manufacturing Co. Inc.; Lutron® is a registered trademark of Lutron Electronics Co. Inc.; Lightolier® is a registered trademark of Philips Lighting; Hubbell® is a registered trademark of Hubbell Incorporated; Legrand® and Pass & Seymour® are registered trademarks of Legrand®; Eaton® is a registered trademark of Eaton Corporation. These companies and their tradenames, trademarks or brands, where noted, are associated with their respective company and are not associated with Cooper Lighting Solutions.
- 2) Testing conducted by Cooper Lighting Solutions is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to the manufacturer specifications for more detailed information on product certifications and standards.
- 3) This is a representative list of typical dimmers as tested by Cooper Lighting Solutions for performance with the designated LED luminaires only. Test data contained in this literature is based upon dimmers obtained in the marketplace. Information about these other manufacturers products is obtained from packaging and published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Dimmer performance and perceived limitations of the dimmers are based on factors outside of Cooper Lighting Solutions’ control. The specifications of these dimming controls and their conditions of use may change without notice to Cooper Lighting Solutions or any other user. Cooper Lighting Solutions makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must ensure proper local and national electrical codes are followed; and that the dimmer application and condition of use is per dimmer manufacturer instructions and guidelines.