



LUTRON® Product Report Card

ID 2802

Manufacturer: Ecosmart
Model Number Tested: DL-N28A9ER1-27
Other Model Numbers: None

Manufacturer's Description

Type of device: LED 10 W Downlight
 Operating voltage: 120V
 Input Power: 10.0 W
 Input Current: 0.07 A
 Input Frequency: 60 Hz

Control Type: Forward and Reverse Phase Control
 Dimming Range: Not Specified
 Output Power: Not Specified
 Lumen Output: 600 lm
 Type/Shape: Downlight
 Base Type: E26

Lutron Test Results

Date Tested: 10-Mar-17
 Test Voltage: 120 V
 Test Notes: Performance verified with up to 15 fixtures per control. Test results valid only at 120 V and 60 Hz.

Lutron Recommended Products

Lutron products not in this list can be considered to be not recommended, based on our testing.

Product	Model Number	Control Type ⁽¹⁾	Fixtures per Dimmer ⁽²⁾	Measured Dimming Range ⁽³⁾ (Software Trim Settings)		Perceived Low End ⁽⁴⁾	Comments
			Min-Max	Low End	High End		
<i>Wallbox Dimmers</i>							
Diva/ Skylark/ Skylark Contour/ Ariadni/ Toggler/ Lumea	C:L wall-mount dimmers (T8, T9)*	FP	1 - 15	13%	98%	36%	May experience buzzing.
Maestro	MACL-153M ()*	FP	1 - 15	7%	91%	26%	May experience buzzing
Maestro Wireless	MRF2-6ELV	RP	1 - 15	8%	100%	29%	Load type not selectable.
Maestro Sensor	MSCL-OP153M (T2)*/ MSCL-VP153M (T2)*	FP	1 - 15	16%	94%	39%	
Caseta Wireless	PD-6WCL (SD11)*	FP	1 - 15	8%	92%	29%	
Maestro Wireless	MRF2-6CL (M6)*	FP	1 - 15	15%	93%	39%	May experience buzzing
Grafik T	Phase Selectable GT-5NEM/ GTJ-5NEM	RP	1 - 25	16%	98%	40%	
<i>Commercial Systems</i>							
Stanza	SZ-6ND	FP	1 - 6	10% (3)	98% (99)	31%	May experience buzzing
Panel Module	HW/LP-RPM-4A-120	RP	1 - 90	20% (26)	97% (99)	44%	Rating is per channel; total per module is 144.
Panel Module	HW/LP-RPM-4U-120	FP	1 - 30	12% (16)	96% (99)	34%	Rating is per channel; total per module is 30.
Grafik QS/ Wallbox Power Module	Grafik Eye QS Main Unit Family/ LQRJ-WPM-6P	FP	1 - 30	20% (24)	97% (83)	44%	May experience buzzing Rating is per output; total quantity per Main Unit is 75.

Panel Module	GP (Harrier) Card	FP	1 - 30	20% (22)	97% (84)	45%	May experience buzzing Rating is per output. Use load type 2-1.
Grafik Eye 3000/ HomeWorks	Grafik Eye 3000 Family/ HWI-WPM-6D-120	FP	1 - 30	20% (24)	97% (83)	44%	May experience buzzing Rating is per output; total quantity per Main Unit is 45/56/75/75 for 2/3/4/6-Zone units, respectively.
HomeWorksQS/ myRoom	LQSE-4A1-D/ MQSE-4A1-D/ MQSE-3A1/ MQSE-2A1-D, 120V, RP	RP	1 - 6	15% (22)	100% (99)	39%	Rating is per output; total quantity per Main Unit is 24.
Grafik T	Phase Selectable GT-5NEM/ GTJ-5NEM	RP	1 - 25	16%	98%	40%	
Residential Systems							
RadioRA 2	RRD-6NA	RP	1 - 15	8%	100%	29%	
HomeWorks QS	HQRD-6NA	RP	1 - 15	8%	100%	29%	
HomeWorks	HxD-6ND	FP	1 - 6	10% (3)	98% (99)	31%	May experience buzzing
Panel Module	HW/LP-RPM-4A-120	RP	1 - 90	20% (26)	97% (99)	44%	Rating is per channel; total per module is 144.
Panel Module	HW/LP-RPM-4U-120	FP	1 - 30	12% (16)	96% (99)	34%	Rating is per channel; total per module is 30.
Grafik QS/ Wallbox Power Module	Grafik Eye QS Main Unit Family/ LQRJ-WPM-6P	FP	1 - 30	20% (24)	97% (83)	44%	May experience buzzing Rating is per output; total quantity per Main Unit is 75.
Panel Module	GP (Harrier) Card	FP	1 - 30	20% (22)	97% (84)	45%	May experience buzzing Rating is per output. Use load type 2-1.
Grafik Eye 3000/ HomeWorks	Grafik Eye 3000 Family/ HWI-WPM-6D-120	FP	1 - 30	20% (24)	97% (83)	44%	May experience buzzing Rating is per output; total quantity per Main Unit is 45/56/75/75 for 2/3/4/6-Zone units, respectively.
RadioRA 2	RRD-6CL (R3)*	FP	1 - 15	15%	93%	39%	May experience buzzing
HomeWorks QS	HQRD-6CL (H2)*/ HQRA-6CL (H2)*	FP	1 - 15	15%	93%	39%	May experience buzzing
RadioRA 2	Hybrid Keypad C.L RRD-HN6BRL	FP	1 - 10	13% (19)	100% (99)	35%	May experience buzzing Installation with a neutral wire is required.
HomeWorks QS	Hybrid Keypad C.L HQRD-HN6BRL	FP	1 - 10	13% (19)	100% (99)	35%	May experience buzzing Installation with a neutral wire is required.
HomeWorksQS/ myRoom	LQSE-4A1-D/ MQSE-4A1-D/ MQSE-3A1/ MQSE-2A1-D, 120V, RP	RP	1 - 6	15% (22)	100% (99)	39%	Rating is per output; total quantity per Main Unit is 24.
Grafik T	Phase Selectable GT-5NEM/ GTJ-5NEM	RP	1 - 25	16%	98%	40%	
Interfaces⁽⁵⁾							
	PHPM-PA with Grafik Eye QS Main Unit	RP	1 - 90	20% (30)	99% (78)	45%	
	PHPM-WBX with 3-wire fluorescent control	RP	1 - 90	20%	99%	45%	

Notes:	<p>* Identical model numbers with different compatibility codes may have different performance; () means there is no compatibility code assigned; contact technical support for additional information.</p> <p>(1) Control types of FP and RP represent Forward Phase and Reverse Phase, respectively. See product literature for details.</p> <p>(2) Maximum Fixtures per Dimmer value represents the maximum safe loading of the control.</p> <p>(3) Values are based on light output using the specified dimming control, and may not be an indication of the fixture's full rated capability. Values are set to optimize performance, such as reducing dead travel, ensuring that fixtures turn on at low end, reducing turn-on time at low end, and trimming out instability. Software trim values are indicated in parentheses when applicable.</p> <p>(4) Perceived light level percentage is the square root of the measured light level percentage, per IESNA Lighting Handbook.</p> <p>(5) Interfaces have been tested with the listed control; any compatible dimmer may be used instead, but high end/low end light levels may vary slightly.</p>
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Test Comments: Performance verified with up to 15 fixtures per control.

For any questions on this report, please contact the Lutron LED Center of Excellence at 877-DIM-LED8 or leds@lutron.com. This information was posted with the consent and cooperation of the device manufacturer. Please be aware that device manufacturers may modify their product at any time, without notice to Lutron, and therefore Lutron cannot ensure future compatibility. For more detailed and up to date fixture specifications, performance and/or any related recall information, visit the manufacturer's website. The latest Lutron test results can always be found at www.lutron.com/LEDtool.