

MaxLite® Multi-Mode Downlight – RADM Series



General Safety Information

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Commercial installation, service and maintenance of luminaires should be performed by a qualified licensed electrician.
- For Residential installation: If you are unsure about the installation or maintenance of the luminaires, consult a qualified licensed electrician and check your local electrical code.
- **DO NOT INSTALL DAMAGED PRODUCT!**
- This fixture is intended to be connected to a properly installed and grounded UL listed junction box.
- The product should be installed, inspected and maintained by a qualified electrician in accordance with local national electrical safety regulations;
- Please turn off the power before checking, installing or removing;
- Ensure that the voltage used is the voltage within the product identification range;
- Use wires that comply with UL (or other local standards) for wiring.
- Do not install in a hazardous environment. The ambient temperature must not exceed the rated operating temperature of the product;
- Do not install the product when it rains. Avoid the danger of lightning strikes and avoid accidents;
- Please use with listed waterproof strain relief bushing when connecting the power supply cord to outlet box.
- Do not use the electric generator to test the LED lamp.
- External 0-10V only passive dimmers are supported.



*Pictures are for illustration purposes only.
Your model may vary.*

WARNINGS:

- Risk of Fire - Supply conductors (power wires) connecting the fixture must be rated minimum 90°C. If uncertain consult an electrician.
- Risk of fire or electric shock. Installation requires knowledge of luminaires electrical systems.
- Risk of Fire/Electric Shock - If not qualified, do not attempt installation. Contact a qualified electrician.
- Keep away from flammable and explosive environment.
- Don't cover the fixture with insulation liner or similar material.
- Don't install where fixture is loose or only partially supported.
- Don't impact or exert pressure on the fixture surface face or rear, as damage may occur..

CAUTION:

- For your safety read and understand instructions completely before starting installation.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- Before attempting installation, check your local electrical code, as it sets the wiring standards for your locality.

NOTES:

- If luminaire (fixture) is to be switched from a wall switch, make sure black power supply wire is connected to the switch.
DO NOT connect the white supply wire to the switch.
- Make certain no bare wires are exposed outside the wire nut connectors.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

MIN 90°C SUPPLY CONDUCTORS

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED. ALL COMPONENTS IN THE LUMINAIRE SHALL NOT BE REPLACED OR SERVICED.

MODEL:

RADM Series Light engines: RADM-12WCS, RADM-12WCSTA, RADM-18WCS, RADM-18WCSTA, RADM-30WCS, RADM-30WCSTA

RADM Series Round Reflectors: RADR-4MW, RADR-4WW, RADR-4MWTA, RADR-4WWTA, RADR-6MW, RADR-6WW, RADR-6MWTA, RADR-6WWTA, RADR-8MW, RADR-8WW, RADR-8MWTA, RADR-8WWTA, RADR-10MW, RADR-10WW, RADR-10MWTA, RADR-10WWTA

RADM Series Wall Wash Reflectors: RADW-6MW, RADW-6WW, RADW-6MWTA, RADW-6WWTA, RADW-8MW, RADW-8WW, RADW-8MWTA, RADW-8WWTA, RADW-10MW, RADW-10WW, RADW-10MWTA, RADW-10WWTA

RADM Series Square Reflectors: RADRS-4MW; RADRS-4MWTA; RADRS-4WW; RADRS-4WWTA; RADRS-6MW; RADRS-6MWTA; RADRS-6WW; RADRS-6WWTA; RADRS-8MW; RADRS-8MWTA; RADRS-8WW; RADRS-8WWTA

LED ENGINE – What's in the box:

- (1) – LED engine
- (1) – Instruction Manual
- (6) – Wire Nuts



REFLECTOR KIT – What's in the box:

- (1) Reflector Kit
- (1) Instruction Manual



MaxLite® Multi-Mode Downlight – RADM Series

General Wiring Diagram

Models: RADM Series - Wattage & CCT Selectable

Input Rating: 120-277V, 50/60hz, 0-10V & TRIAC dimming

Operating Temperature: -4°F to 104°F (-20°C to 40°C)

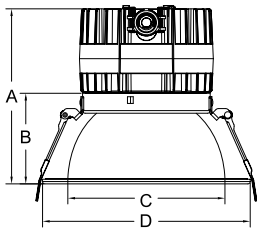
Damp Location Rated

0-10V

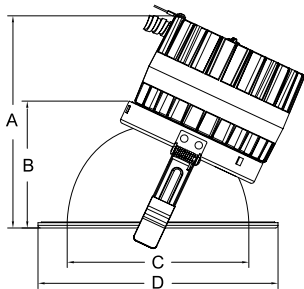
TO SOURCE
120V-277V

YELLOW (12+)	Light Fixture
PINK (-)	
PURPLE (+)	
BLACK (LINE)	
WHITE (NEUTRAL)	
GREEN (GROUND)	

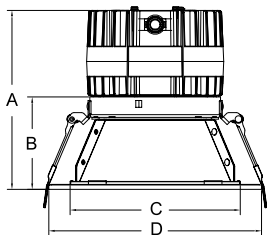
Dimensions



Standard Reflector



Wall Washer Reflector



Square Reflector

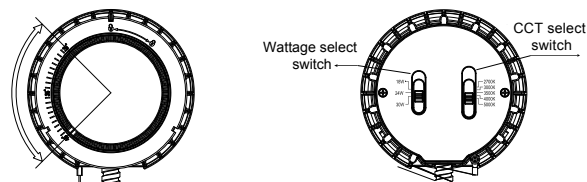
Light engine	Reflector Type	Reflector Size	Fixture Height (A)	Reflector Height (B)	Inner Diameter (C)	Outer Diameter (D)	Cut-Outs (inches)
RADM-12WCS** RADM-18WCS**	Round Downlight	4"	5.39	2.56	4.07	5.51	Φ4.84 - 5.04
		6"	5.98	3.07	5.24	7.09	Φ6.22 - 6.50
		8"	6.50	3.62	7.09	9.06	Φ7.28 - 7.72
		10"	7.05	4.17	8.9	11.02	Φ9.13 - 9.76
RADM-30WCS**	Round Downlight	6"	5.94	3.07	5.24	7.09	Φ6.22 - 6.50
		8"	6.46	3.62	7.09	9.06	Φ7.28 - 7.72
		10"	7.01	4.17	8.9	11.02	Φ9.13 - 9.76
RADM-12WCS** RADM-18WCS**	Round Wallwash	6"	6.26	3.74	5.24	7.09	Φ6.22 - 6.50
		8"	6.81	4.19	7.09	9.06	Φ7.28 - 7.72
		10"	7.24	4.65	8.9	11.02	Φ9.13 - 9.76
RADM-30WCS**	Round Wallwash	6"	6.50	3.74	5.24	7.09	Φ6.22 - 6.50
		8"	7.01	4.19	7.09	9.06	Φ7.28 - 7.72
		10"	7.44	4.65	8.9	11.02	Φ9.13 - 9.76
RADM-12WCS** RADM-18WCS**	Square Downlight	4"	5.61	2.72	4.49	5.91	Square 4.84-5.04
		6"	5.96	3.08	5.67	7.09	Square 6.22-6.50
		8"	6.49	3.61	7.64	9.06	Square 7.71-8.11
RADM-30WCS**	Square Downlight	6"	5.91	3.08	5.67	7.09	Square 6.22-6.50
		8"	6.44	3.61	7.64	9.06	Square 7.71-8.11

** Can be Blank or TA

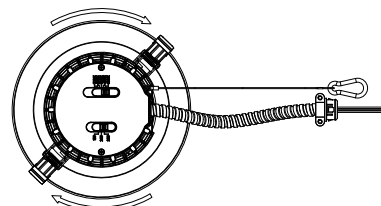
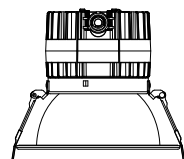
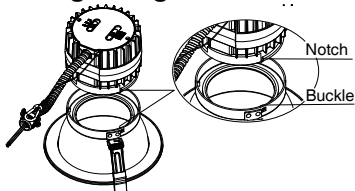
Installation Instructions

LED Light Engine – Beam Angle, CCT & Wattage Settings

1. Select light engine appropriate for the application.
2. Rotate white engine frame for to select desired beam angle.
3. Select the desired CCT and wattage output switches.



LED Light Engine & Reflector Kit Assembly



1. Align the Buckle of the reflector kit with the notch on the heatsink.

2. Rotate the module clockwise until it is properly tightened.

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Installation Instructions

Retrofit Installation – Round Downlight or Wallwash Reflector

CAUTION:

Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.

1. Remove existing lamp and reflector. If existing trim or can are present, remove from the ceiling or move it out of the way. Make sure to retain existing rough-in kit components. (See Fig. 1)
2. Measure the ceiling opening and ensure the edge of the downlight retrofit will cover the entire hole and sit firmly in the ceiling. (refer to Dimensions chart for proper opening sizes)
3. Attach the carabiner safety lanyard to the existing fixture housing. (See Fig. 2)
4. Remove the junction box faceplate. Disconnect wiring to existing ballast. Remove appropriate knock out on junction box.
5. Connect incoming AC mains power to fixture input leads. Insert the downlight conduit into the J-box and wire to the power source (black to hot, white to neutral, violet to 0-10V dimming positive, pink to 0-10V dimming negative). Reattach the J-box cover when done. (The grounding of the overall system shall be done in accordance with NEC and local codes). (See Fig. 3)
6. Bend the spring clips upward so they are in an upright and insert downlight into hole in the ceiling/housing. (See Fig. 4)
7. Once downlight is inside the ceiling and housing, release the spring clips and push the fixture up into the ceiling until securely fixed and flush with the ceiling (rotating the downlight may be necessary to properly engage the spring clips and ensure a secure fit). (See Fig. 5)
8. For additional safety, connect safety cable onto the ceiling/housing where applicable.
9. Restore power at the source. The installation is complete. (See Fig. 6)

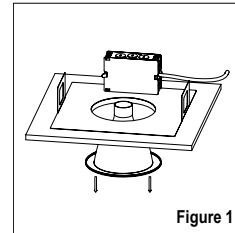


Figure 1

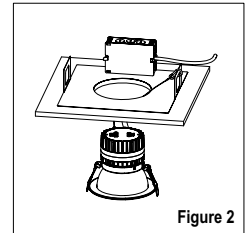


Figure 2

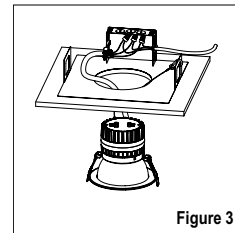


Figure 3

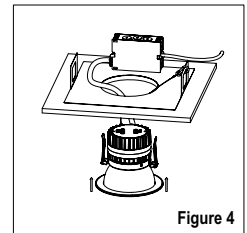


Figure 4

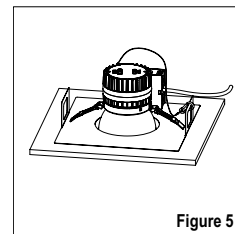


Figure 5

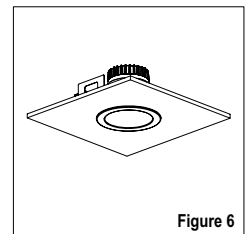


Figure 6

New Construction Installation – Round Downlight or Wallwash Reflector

CAUTION:

Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.

1. If using a new construction plate, install it in the ceiling first.
2. If a new hole is needed, cut the hole according to the downlight cut-out dimension for your model type in the Installation Manual's Dimension chart. (See Fig. 7) (See pg. 2 of manual for cut-out dimensions chart)
3. Attach the carabiner safety lanyard to secure place inside the ceiling. (See Fig. 8)
4. Remove the junction box faceplate. Disconnect wiring to existing ballast. Remove appropriate knock out on junction box.
5. Connect incoming AC mains power to fixture input leads. Insert the downlight conduit into the J-box and wire to the power source (black to hot, white to neutral, violet to 0-10V dimming positive, pink to 0-10V dimming negative). Reattach the J-box cover when done. (The grounding of the overall system shall be done in accordance with NEC and local codes). (See Fig. 9)
6. Bend the spring clips upward so they are in an upright and insert downlight into hole in the ceiling / housing. (See Fig. 10)
7. Once downlight is inside the ceiling and housing, release the spring clips and push the fixture up into the ceiling until securely fixed and flush with the ceiling (rotating the downlight may be necessary to properly engage the spring clips and ensure a secure fit). (See Fig. 11)
8. For additional safety, connect safety cable onto the ceiling/housing where applicable.
9. Restore power at the source. The installation is complete. (See Fig. 12)

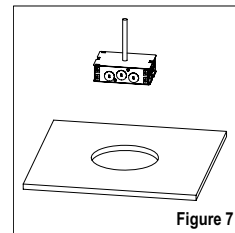


Figure 7

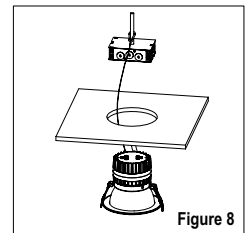


Figure 8

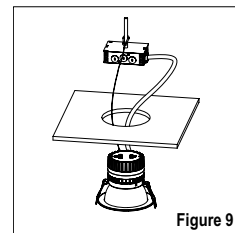


Figure 9

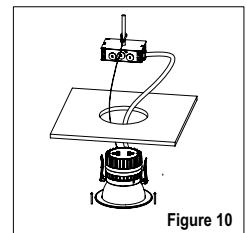


Figure 10

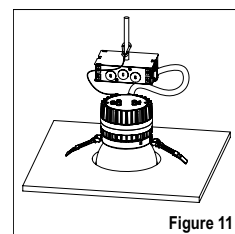


Figure 11

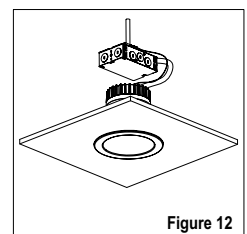


Figure 12

MaxLite® Multi-Mode Downlight – RADM Series

Installation Instructions

Retrofit Installation – Square Downlight Reflector

CAUTION:

Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.

1. Remove existing lamp and reflector. If existing trim or can are present, remove from the ceiling or move it out of the way. Make sure to retain existing rough-in kit components. (See Fig. 1)
2. Measure the ceiling opening and ensure the edge of the downlight retrofit will cover the entire hole and sit firmly in the ceiling. (refer to Dimensions chart for proper opening sizes)
3. Attach the carabiner safety lanyard to the existing fixture housing. (See Fig. 2)
4. Remove the junction box faceplate. Disconnect wiring to existing ballast. Remove appropriate knock out on junction box.
5. Connect incoming AC mains power to fixture input leads. Insert the downlight conduit into the J-box and wire to the power source (black to hot, white to neutral, violet to 0-10V dimming positive, pink to 0-10V dimming negative). Reattach the J-box cover when done. (The grounding of the overall system shall be done in accordance with NEC and local codes). (See Fig. 3)
6. Bend the spring clips upward so they are in an upright and insert downlight into hole in the ceiling/housing. (See Fig. 4)
7. Once downlight is inside the ceiling and housing, release the spring clips and push the fixture up into the ceiling until securely fixed and flush with the ceiling (rotating the downlight may be necessary to properly engage the spring clips and ensure a secure fit). (See Fig. 5)
8. For additional safety, connect safety cable onto the ceiling/housing where applicable.
9. Restore power at the source. The installation is complete. (See Fig. 6)

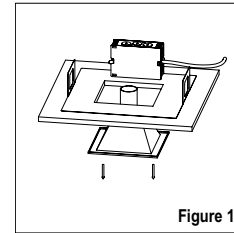


Figure 1

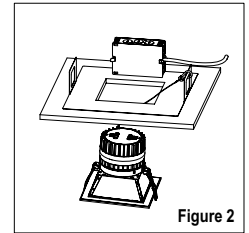


Figure 2

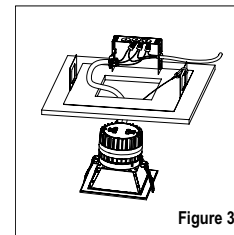


Figure 3

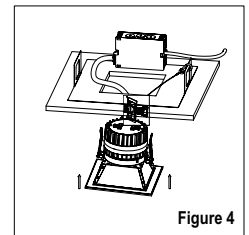


Figure 4

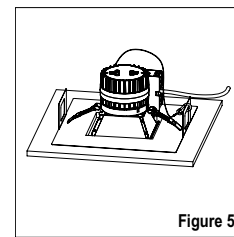


Figure 5

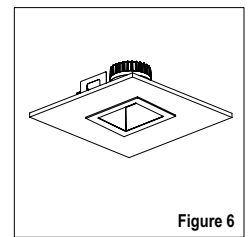


Figure 6

New Construction Installation – Square Downlight Reflector

CAUTION:

Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.

1. If using a new construction plate, install it in the ceiling first.
2. If a new hole is needed, cut the hole according to the downlight cut-out dimension for your model type in the Installation Manual's Dimension chart. (See Fig. 7) (See pg. 2 of manual for cut-out dimensions chart)
3. Attach the carabiner safety lanyard to secure place inside the ceiling. (See Fig. 8)
4. Remove the junction box faceplate. Disconnect wiring to existing ballast. Remove appropriate knock out on junction box.
5. Connect incoming AC mains power to fixture input leads. Insert the downlight conduit into the J-box and wire to the power source (black to hot, white to neutral, violet to 0-10V dimming positive, pink to 0-10V dimming negative). Reattach the J-box cover when done. (The grounding of the overall system shall be done in accordance with NEC and local codes). (See Fig. 9)
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8. For additional safety, connect safety cable onto the ceiling/housing where applicable.
9. Restore power at the source. The installation is complete. (See Fig. 12)

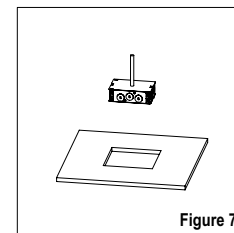


Figure 7

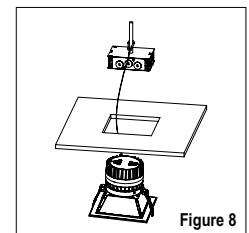


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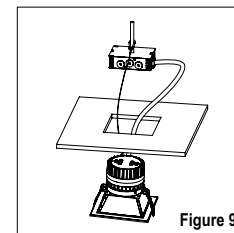


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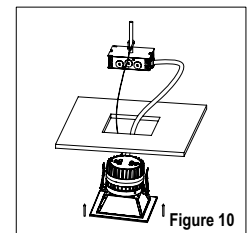


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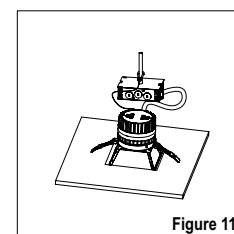


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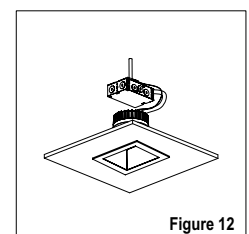


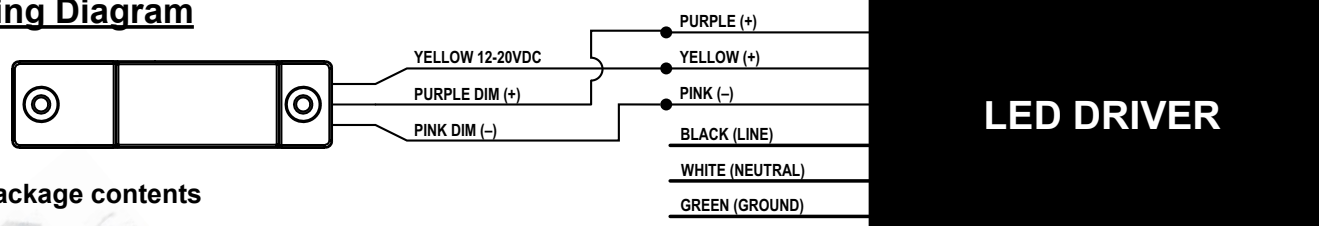
Figure 12

MaxLite® Multi-Mode Downlight – RADM Series



Installation Instructions – Network Node *(sold separately)*

Wiring Diagram

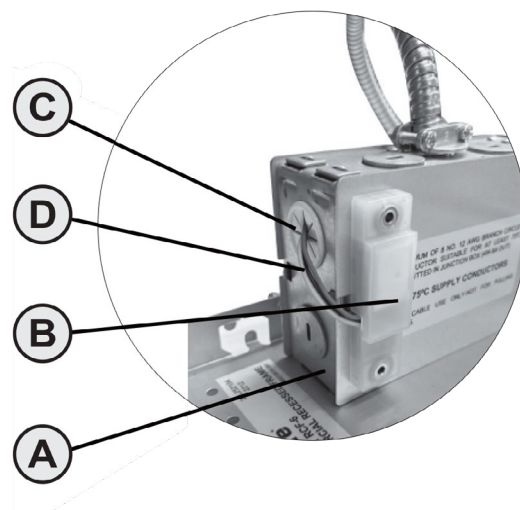


Package contents



Network Node Installation

1. Make sure the power is turn off at the source to the recessed housing where the sensor will be installed, ensure that at least one conduit knockout is available on the junction box **(A)**, and remove the junction box cover plate.
2. Take out the sensor **(B)** and stick it to the junction box aside the appropriate conduit knockout.
3. Install a flexible grommet **(C)** to the appropriate conduit knockout, and then have the sensor wires **(D)** pass through the flexible grommet into the junction box. Connect the sensor wire to the fixture's wire according to the wiring diagram above.
4. Carefully tuck all the wires into the junction box and replace the junction box cover plate.



Warranty Information

MaxLite Inc. warrants its products for a minimum period of **FIVE (5)** years from the date of original purchase from MaxLite or its authorized distributor/dealer (the "Warranty Period"), as follows: If a Product fails to operate during the Warranty Period as a result of defects in materials or workmanship, MaxLite will, at its option, repair it, replace it with the same or like Product.

Please refer to Maxlite's website (at <http://maxlite.com/resources/warranties>) for the complete terms and conditions of our warranty.

Limitation of Liability

THE FOREGOING WARRANTY IS EXCLUSIVE, AND IS THE SOLE REMEDY FOR ANY AND ALL CLAIMS, WHETHER IN CONTRACT, IN TORT OR OTHERWISE ARISING FROM THE FAILURE OF PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED TO THE EXTENT PERMITTED BY LAW AND, IN ANY EVENT, SHALL BE LIMITED TO THE WARRANTY PERIOD SPECIFIED ABOVE. THE LIABILITY OF MAXLITE SHALL BE LIMITED TO THE TERMS OF THE EXPRESS WARRANTY SET FORTH HEREIN. IN NO EVENT WILL MAXLITE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES RESULTING FROM LOSS OF USE, PROFITS, BUSINESS OR GOODWILL, LABOR COSTS, REMOVAL OR INSTALLATION COSTS, DECREASE IN THE LIGHT OUTPUT OF THE LAMP, AND/OR DETERIORATION IN THE LAMP'S PERFORMANCE, WHETHER OR NOT MAXLITE HAS BEEN ADVISED OF THE POSSIBILITY THEREOF. UNDER NO CIRCUMSTANCES SHALL MAXLITE'S ENTIRE LIABILITY FOR A DEFECTIVE PRODUCT EXCEED THE PURCHASE PRICE OF THAT PRODUCT. WARRANTY SERVICES PROVIDED UNDER THESE TERMS AND CONDITIONS DO NOT ENSURE THE UNINTERRUPTED OPERATION OF PRODUCTS; MAXLITE SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY ANY DELAYS INVOLVING WARRANTY SERVICE.

This Limited Warranty gives you specific legal rights and you may also have other rights that may vary from state to state. Because some states or jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, this limitation may not apply to you.