

The Lumaris downlight family makes it easy to bring the familiar feelings of daylight and incandescent light to new or existing spaces. A unique combination of warm-dim and tunable white in one, Lumaris downlights deliver a more natural-feeling electric light and intuitive end-user control.

Lumaris downlights are available in multiple installation options to suit unique project requirements, combining superior lighting quality with flexible design choices.

Features

Lighting System

- Works seamlessly with HomeWorks QSX and RadioRA 3 systems
- Independent control of intensity and color temperature
- Warm dimming to mimic the dimming curve of an incandescent lamp
- Programming presets can automatically change color temperature based on the time of day
- Manual adjustments via the Lutron app or integration

Downlight

- 1800 K 4000 K CCT range, matching all Lumaris family products
- 2-channel, continuous, flicker-free dimming from 100% down to 0.1% of measured light output
- Output: 800 lumens
- CRI: 90+ throughout the tunable white range
- 50,000 hours rated lifetime (L70)
- Uses Clear Connect Type X wireless communication
- 0.5 in (12.7 mm) regress to reduce unwanted glare
- Permanently affixed white or black trim options available
- Retrofit or canless options available



4 in (101.6 mm) Canless Downlight



3691335b

4 in (101.6 mm) Retrofit Downlight



6 in (152.4 mm) Canless Downlight

5 in (127 mm)/ 6 in (152.4 mm) Retrofit Downlight

Mode	I Number	Description
HomeWorks QSX	RadioRA 3	Description
HWL-RD4WH-TW	RRL-RD4WH-TW	4 in (101.6 mm) retrofit recessed downlight with white trim
HWL-RD4BL-TW	RRL-RD4BL-TW	4 in (101.6 mm) retrofit recessed downlight with black trim
HWL-RD6WH-TW	RRL-RD6WH-TW	5 in (127 mm)/6 in (152.4 mm) retrofit recessed downlight with white trim
HWL-RD6BL-TW	RRL-RD6BL-TW	5 in (127 mm)/6 in (152.4 mm) retrofit recessed downlight with black trim
HWL-CD4WH-TW	RRL-CD4WH-TW	4 in (101.6 mm) canless recessed downlight with white trim
HWL-CD4BL-TW	RRL-CD4BL-TW	4 in (101.6 mm) canless recessed downlight with black trim
HWL-CD6WH-TW	RRL-CD6WH-TW	6 in (152.4 mm) canless recessed downlight with white trim
HWL-CD6BL-TW	RRL-CD6BL-TW	6 in (152.4 mm) canless recessed downlight with black trim



Specifications

Electrical

- 120 V∼ 60 Hz
- 0.07 A
- 8.5 W
- 40 downlights maximum per 15 A breaker

Regulatory Approvals

- cULus listed
- FCC approved. Complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules
- Industry Canada certified
- California Title 24 as detailed in Reference Joint Appendix JA8 for High Luminous Efficacy Light Sources

Environmental

- Ambient operating temperature: 32 °F to 104°F (0 °C to 40 °C)
- Relative humidity: 0%-90% non-condensing
- Suitable for dry or damp locations
- Suitable for wet locations. Covered ceiling only
- Type IC rated and inherently protected (canless versions)
- Suitable for Type IC and Non-IC luminaires (retrofit versions)

Warranty

• Limited Warranty: www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy



Dimensions: Canless Downlight

All dimensions shown as: in (mm)

4 in (101.6 mm) Canless Downlight



Required hole dimension: 4 ¹/₄ in to 4 ¹/₂ in (107.9 mm to 114.3 mm) Acceptable ceiling thickness: 1/2 in to 1 ³/₈ in (12.7 mm to 34.9 mm)

Junction box wire capacity:

Wire	AWG (mm ²)	Quantity
12/2 with ground	12 (4)	2
14/2 with ground	14 (2.5)	2
14/3 with ground	14 (2.5)	2

6 in (152.4 mm) Canless Downlight



Required hole dimension: 5 ¼ in to 5 ½ in (133.3 mm to 139.7 mm) Acceptable ceiling thickness: 1/2 in to 1 ¾ in (12.7 mm to 34.9 mm)

Junction box wire capacity:

Wire	AWG (mm ²)	Quantity
12/2 with ground	12 (4)	2
14/2 with ground	14 (2.5)	2
14/3 with ground	14 (2.5)	2



Dimensions: Retrofit Downlight

All dimensions shown as: in (mm)

4 in (101.6 mm) Retrofit Downlight



5 in (127 mm)/6 in (152.4 mm) Retrofit Downlight



Note: Minimum recessed housing depth for 4 in (101.6 mm) and 6 in (152.4 mm) retrofit downlights: 3.0 in (76 mm)



Note: Minimum recessed housing depth for 4 in (101.6 mm) and 5 in (127 mm)/6 in (152.4 mm) retrofit downlights: 3.0 in (76 mm)



Dimensions: Retrofit Downlight (continued)

All dimensions shown as: in (mm)

E26 Adapter (Included with retrofit downlight)



GU24 Adapter (LU-RD-GU24)





Dimensions: Retrofit Downlight (continued)

All dimensions shown as: in (mm)

Canless Downlight Template





Wiring Diagram

Lumaris downlights are rated to be powered directly by a breaker. Any dimmer or switch in between the breaker and the downlight should be bypassed.



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Lumaris Tunable White Recessed Downlight Family

Photometric Data, 4 in (101.6 mm)¹

Model Number	Wattage (W)	Delivered Lumens	CBCP
XXX-XD4XX-TW	8.5	800	836
Foot-candles		Bean	n Diameter
	3.3 ft		6.8 ft
36.2	(1 m)		(2.1 m)
	6.6 ft		106#
0.0			13.6 ft
9.0	(2 m)		(4.2 m)
	9.8 ft		20.5 ft
4.0	(3 m)		(6.2 m)
	13.1 ft		27.3 ft
2.3	(4 m)		(8.3 m)
	16.4 ft		34.1 ft
1.4	(5 m)		(10.4 m)
	Distance from	Light	



All data is simulated to represent the typical performance expected with the following parameters, unless otherwise stated: white trim, 3000 K, 77 °F (25 °C) ambient, 100% power input.

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Lumaris Tunable White Recessed Downlight Family

Photometric Data, 6 in (152.4 mm)¹

Model Number	Wattage (W)	Delivered Lumens	CBCP
XXX-XD6XX-TW	8.5	800	823
Foot-candles		Beam	Diameter
	3.3 ft		7.3 ft
33.6	(1 m)		(2.2 m)
	6.6 ft		14.6 ft
8.4	(2 m)		(4.4 m)
	9.8 ft		21.8 ft
3.7	(3 m)		(6.7 m)
	13.1 ft		29.1 ft
2.1	(4 m)		(8.9 m)
	16.4 ft		36.4 ft
1.3	(5 m)		(11.1 m)
	Distance from L	_ight	



All data is simulated to represent the typical performance expected with the following parameters, unless otherwise stated: white trim, 3000 K, 77 °F (25 °C) ambient, 100% power input.

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