

ULTRA RT6 and RT6 Gimbal LED



Recessed Downlight Kit



The SYLVANIA ULTRA RT6 is a six-inch LED recessed downlight kit creating high performing white light and is optimized for new construction and retrofit applications. Installation is done quickly and easily in most standard six-inch Insulated Ceiling (IC) housings, Airtight (AT) housings and non-IC housings. The adjustable gimbal features a smooth travel from nadir to a 30° tilt, making it suitable for slanted ceilings and wall wash. The gimbal's friction blade design allows the downlight to be installed in any position within the housing aperture and the 360° horizontal rotation capability of the gimbal head offers easy aiming and adjustment.

Dimming

The SYLVANIA ULTRA RT Series recessed downlight kits are dimmable to 10% with standard 120V electronic low voltage dimmers (recommended), incandescent or magnetic low voltage dimmers. In some cases, standard incandescent dimmers require a minimum load of typically >40 watts on the circuit for full range dimming performance (four LED modules). For dimming with digital (smart) multi-location dimmers or when dimming fewer than four LED modules, electronic low-voltage (ELV) dimmers are required (some ELV dimmers need a neutral connection in the wallbox).

Application Information

Applications

- Healthcare
- Hospitality
- Office
- Property Management
- Residential
- Retail

Key Features & Benefits

- Lumen package:
 - 700 lumens @ 10 watts
 - 900 lumens @ 13 watts
- Replacement for up to 100W incandescent lamps
- Fits into most 6" recessed downlight fixtures
- CCT: 2700K/3000K/4000K/5000K
- CRI: up to 84
- Beam angle: 80°
- Dimmable down to 10%
- 50,000 hour life (L₇₀)
- Suitable for indoor and outdoor dry, damp and wet locations (Both Gimbal and non-Gimbal)
- Reduces energy consumption up to 87%
- 120V input voltage
- Lasts up to 25 times longer than incandescent lamps
- No warm-up time, instant-on with full light output and stable lamp to lamp color
- Meets California Title 24 fixture requirements for high efficacy luminaire
- Integrated white trim, white baffle reflector and medium base socket adaptor (included) for direct replacement
- Adjustable Gimbal feature (30° tilt and 360° rotation)

Quality of Light

The SYLVANIA ULTRA RT Series provides excellent color rendering (82+ CRI), and a selection of color temperatures (2700K, 3000K). LEDs have virtually no UV or infrared radiation to damage or fade furnishings, art or other objects.

Optical Design

Optical design efficiently directs light output in an 80° beam angle with low glare.

Accessories

Assorted color retrofit trims, GU24 socket adaptor, push wire adaptor, retrofit band.

Product Offering

Lumen Output	Wattage	Color Temperature	CRI
700	10	2700K, 3000K, 4000K, 5000K	Up to 84
900	13	2700K, 3000K	Up to 84

Specifications and Certifications



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Specifications

Energy Data

Minimum Starting Temp: -40°F (-40°C)
EMI/RFI: FCC Title 47 CFR, Part 15, Class B
Sound Rating: <24dBA
Input Voltage: 120V
Power Factor: >0.90
Input Frequency: 60Hz

THD: <20%
Input Power: 10W & 13W
Input Current: 0.08A & 0.1A
Maximum Ambient Operating Temperature
(Insulated Ceiling or Non-Insulated Ceiling): 104°F (40°C)

Lighting Data

Lumen Output: 700 & 900
Lumens per Watt: 70 for 700lm & 69 for 900lm
Color
Correlated Color Temperature (CCT): 2700K, 3000K, 4000K, 5000K
Color Rendering Index (CRI): Up to 84
R9: 15

Ordering Information

Item Number	Ordering Abbreviation	Recessed Housing	Replaced Incandescent Wattage	Nominal Wattage (W)	Delivered Light Output (lm)	Color Temperature	CRI	Avg. Rated Life (hrs)*
70699	LED/RT6/700/827/FL80	6 in.	65W	10	700	2700K	83	50,000
71707	LED/RT6/700/830/FL80	6 in.	65W	10	700	3000K	84	50,000
73157	LED/RT6/700/840/FL80	6 in.	65W	10	700	4000K	83	50,000
73159	LED/RT6/700/850/FL80	6 in.	65W	10	700	5000K	83	50,000
72332	LED/RT6/900/827/FL80	6 in.	100W	13	900	2700K	82	50,000
72333	LED/RT6/900/830/FL80	6 in.	100W	13	900	3000K	84	50,000
72633	LED/RT6/G/900/827	6 in.	100W	13	900	2700K	84	50,000
72634	LED/RT6/G/900/830	6 in.	100W	13	900	3000K	84	50,000

* LED lamp life is defined as the number of hours when 50% of an average group of identical lamps reached 70% of its initial lumens.

Ordering Guide

LED	/	RT6	/	G	/	900	/	8	30
LED		Product Name RT6 6=fits 6" housing		Gimbal		Light Output 900 lm		CRI >80	Color Temperature 3000K

Energy Savings

Basic Product Description	LED Lumens	LED Life	Traditional Lamp Types	Lumens	Life	Watts Saved With RT6	RT6 Energy Savings*	RT6 Life Benefit
RT6 10W	700	50,000	Incandescent 65BR30	640	2000	55	\$302	25X
			Halogen 50WBR30/SS/HAL	585	2500	40	\$220	20X
			Halogen 50WPAR30LN/WFL	660	2500	40	\$220	20X
			Compact Fluorescent 15WBR30	600	8000	5	\$27	6X
RT6 13W	900	50,000	Incandescent 100BR40	935	2000	87	\$478	25X
			Halogen 80WBR40/SS/HAL	1080	2000	67	\$368	25X
			Halogen 75WPAR38/WFL	1060	2500	62	\$341	20X
			Compact Fluorescent 20WBR40	900	8000	7	\$38	6X

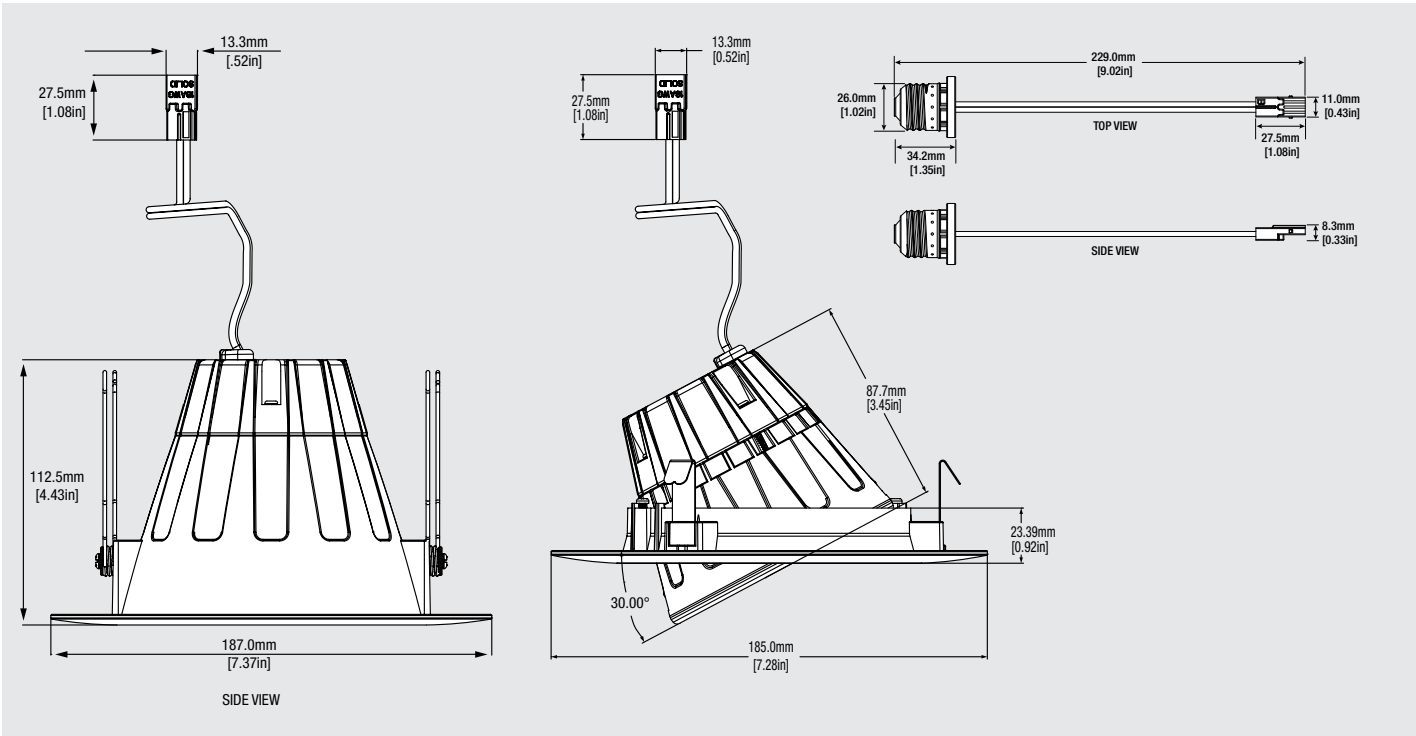
* Based on \$0.11/kWh over 50,000 hours life.

Application Information

Application Notes

1. Operating temperature range between -40°F and 104°F (-40°C and 40°C).
2. Suitable for indoor and outdoor dry, damp and wet locations (Both Gimbal and non-Gimbal).
3. Suitable for dimmers or in housings controlled by a dimmer. For a list of compatible dimmers, please refer to www.sylvania.com/RT6.
4. Not intended for use with emergency light fixtures or exit lights.
5. For use in housings that can structurally support a lamp weighing one pound.
6. Designed to install in standard 6" insulated and non-insulated housings. For a list of compatible housings, please refer to www.sylvania.com/RT6.
7. For detailed warranty information, please refer to www.sylvania.com/RT6.

Assembly Diagram

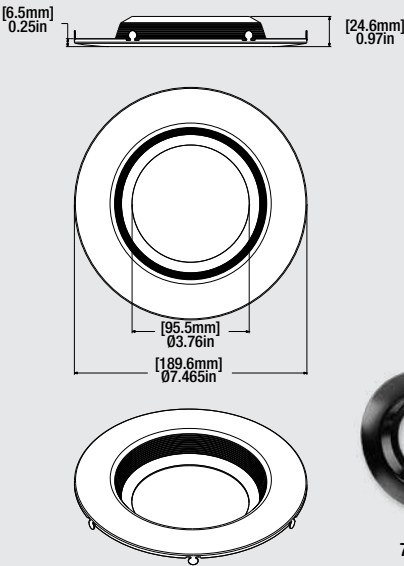
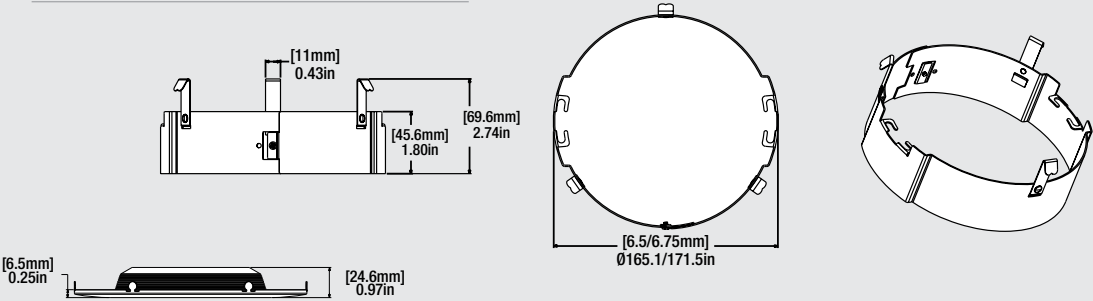


Accessories

GU24 Socket Adaptor
75105 LED/ADAPTOR/GU24 (sold separately)

Push Wire Adaptor
75107 LED/ADAPTOR/PUSHWIRE (sold separately)

Retrofit Band (For 6" housing models Progress Lighting P87-AT and Lightolier 1104IC)
70663 RT6/RETROFITBAND (sold separately)



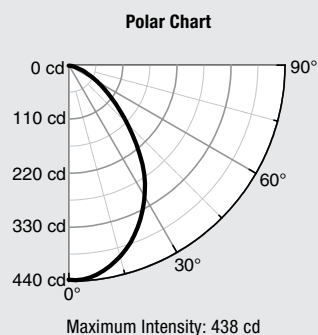
Retrofit Trim (For non-Gimbal only, can not be used with Gimbal)

70708	RT6/TRIM/BLK	One Tone: Black Trim & Black Reflector
70709	RT6/TRIM/ORBZ	One Tone: Bronze Trim & Bronze Reflector
70710	RT6/TRIM/SN	One Tone: Satin Nickel Trim & Satin Nickel Reflector
70711	RT6/TRIM/BLKBAFFLE	Two Tone: White Trim & Black Baffle Reflector
70712	RT6/TRIM/WHTBAFFLE	Two Tone: White Trim & White Baffle Reflector
70715	RT6/TRIM/ALZAK	Two Tone: White Trim & Alzak Reflector



Photometric Information

ULTRA RT6 700



Zonal Lumen Distribution

Zone	Lumens	% Fixture
0-30	305.6	41.3
0-40	462.6	62.5
0-60	668.3	90.3
60-90	71.5	9.7
0-90	739.8	100.0
90-180	0.0	0.0
0-180	739.8	100.0

Illuminance at Distance

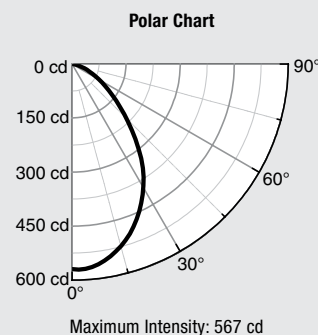
	Illuminance		Beam Diameter	
	Edge	Center	V	H
2 ft	26.0 fc	109.5 fc	3.2 ft	3.2 ft
4 ft	6.5 fc	27.4 fc	6.4 ft	6.4 ft
6 ft	2.9 fc	12.2 fc	9.6 ft	9.6 ft
8 ft	1.6 fc	6.8 fc	12.8 ft	12.3 ft
10 ft	1.0 fc	4.4 fc	16.1 ft	16.1 ft
12 ft	0.7 fc	3.0 fc	19.3 ft	19.3 ft

Vert. Spread: 77.6° Horiz. Spread: 77.5°

Spacing to Mounting Height Ratio

Spacing Criteria (0-180°)	1.04
Spacing Criteria (90-270°)	1.08
Spacing Criteria (Diagonal)	1.12

ULTRA RT6 900



Zonal Lumen Distribution

Zone	Lumens	% Fixture
0-30	393.6	43.2
0-40	589.4	64.7
0-60	828.9	91.0
60-90	81.7	9.0
0-90	910.6	100.0
90-180	0.0	0.0
0-180	910.6	100.0

Illuminance at Distance

	Illuminance		Beam Diameter	
	Edge	Center	V	H
2 ft	35.0 fc	141.8 fc	3.1 ft	3.1 ft
4 ft	8.8 fc	35.4 fc	6.2 ft	6.1 ft
6 ft	3.9 fc	15.8 fc	9.3 ft	9.2 ft
8 ft	2.2 fc	8.9 fc	12.4 ft	12.3 ft
10 ft	1.4 fc	5.7 fc	15.5 ft	15.4 ft
12 ft	1.0 fc	3.9 fc	18.6 ft	18.4 ft

Vert. Spread: 75.5° Horiz. Spread: 75.1°

Spacing to Mounting Height Ratio

Spacing Criteria (0-180°)	1.02
Spacing Criteria (90-270°)	1.04
Spacing Criteria (Diagonal)	1.10

OSRAM

Americas Headquarters

100 Endicott Street

Danvers, MA 01923 USA

Phone 1-800-LIGHTBULB

www.sylvania.com

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