# Sixteen 5 hundred General Purpose Residential LED Guide

Fixtures Listed for California Residential Lighting T24-Part 6/ JA8











#### Table 150.0-A Classification of High Efficacy Light Sources

#### **High Efficacy Light Sources**

Light Sources shall comply with one of the columns below

Light sources in this column other than those installed in ceiling recessed downlight luminaires are classified as high efficacy and are NOT required to comply with Reference Joint Appendix JA8.

- 1. Pin-based linear fluorescent or compact fluorescent light sources using electronic ballasts.
- 2. Pulse-start metal halide light sources.
- 3. High Pressure sodium light sources.
- 4. Luminaires with hardwired high frequency generator and induction lamp.
- 5. LED light sources installed outdoors
- 6. Inseparable SSL luminaires containing colored light sources that are installed to provide decorative lighting.

Light sources in this column are only considered to be high efficacy if they are certified to the Commissions as High Efficacy Light Sources in accordance with Reference Joint Appendix JA8 and marked as required by JA8.

- 7. All Light sources installed in ceiling recessed downlight luminaires. Note that ceiling recessed downlight luminaires shall not have screw bases regardless of lamp type as described in section 150.-(k)1C.
- 8. Any light source not otherwise listed in this table.

Use this guide to discover the most popular, general-purpose residential LED products from Aculux, Lithonia and Juno lighting. For more options and to verify JA8 Compliant configurations for the products in this guide, check out the product spec sheets at:

www.acuitybrands.com.



Appendix JA8: Qualification Requirements for High Efficacy Light Source- Partial List

Specifications	Requirement
Initial Efficacy	≥ 45 Lumens/Watt
Power Factor at Full Rated Power	≥ 0.90
Correlated Color Temperature (CCT)	For inseparable SSL luminaires, LED light engines and GU24 LED lamps, <a href="4">4000</a> Kelvin. For all other sources, <a href="4">3000 Kelvin.</a>
Color Rendering Index (CRI)	≥ 90
R9	≥ 50
Rated Life	≥ 15,000 hours
Minimum Dimming Level	<u>≤</u> 10%
Flicker	< 30% for frequencies of 200HZ or below, at 100% and 20% light output.

This table contains a partial list of requirements. Additional qualification requirements may be found in JA8.

#### 6.10.3 Inspections

- A. Confirm Luminaires Are Properly Installed
- 1. All installed luminaires should be high efficacy or JA8-compliant.
- **B.** Confirm Lighting Controls Are Properly Installed
- 1. At least one luminaire in bathrooms, laundry rooms, garages, and utility rooms are controlled with vacancy/occupancy sensing controls.
- 2. Must control JA8 light sources with dimming capabilities.
- C. Outdoor
- 1. Photocontrol and either a motion sensor or an automatic time-switch control
- D. Inspections for Ceiling Recessed Downlight Luminaires
- 1. Recessed downlight luminaires must be insulated contact (IC) rated



**Downlight Reflector** 



**Angle Cut Reflector** 





Open Wall Wash





#### **Bevel & Pinhole**













Trim options vary per aperture size.

Brand	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	AX2/AX2SQ	9.9W-17.3W	800 lm- 1500 lm	90+	27K, 30K	Yes	Yes
<b>∆</b> CULUX°	AX3/AX3SQ	7.0W-33.3W	800 lm- 3000 lm	90+		Yes	Yes
	AX4/AX4SQ	12.0 W- 36.2 W	1200 lm- 3200 lm	90+	•	No	Yes







## initia™



Reflector Trim









#### **Reflector Trim**

Brand	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
A 0111 111/0	INIT3/INIT3SQ	5.0 W- 16.0 W	400 lm- 1500 lm	90+	27K, 30K	Yes	Yes
<b>∆</b> CULUX°	LN1SQ	5.0 W- 24.0 W	370 lm- 2230 lm	90+	•	Yes	Yes



Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	2LEDTRIM	7.0 W-11.0 W	600 lm - 1000 lm	90+	27K, 30K, 35K, 40K	Yes	Yes
	IC4AL/IC4RAL	10.0 W – 16.6 W	700 lm – 1000 lm	90+		Yes	Yes
	IC926LED/ IC928LED	14.5 W – 16.3 W	900 lm – 1400 lm	90+		No	Yes
	JPDZ4/ JPDZ6/ JPDZ5	8.1 W – 15.0 W	700 lm – 1200 lm	90+	27K, 30K, 35K, 40K, 50 K	No	Yes



4RLA/4RLD 10.0 W- 13.5 W 600 lm - 900 lm 90+ 27K, 30K, Yes	
35K	Yes
5RLA/5RLD 10.0 W -13.5 W 600 lm - 900 lm 90+	Yes
6RLA/6RLD 10.0 W -13.5 W 600 Im- 1000 Im 90+	Yes

#### RLA series must include L/SKTWHIP if shipping to California

Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	IC1LEDFW (Downlight) IC1ALEDFW(Adjustable) IC4ALFW (Adjustable)	8.6 W- 17.3 W 8.75W 10.5W- 16.4W	1400 lm 600 lm 700 lm – 1000lm	90+	27K, 30K, 35K, 40K	No	Yes
	ICF1 LED T24	8.0W- 13.5W	600 lm – 900 lm	90+	27K, 30K	No	No

Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	IC1LED(Downlight) IC1ALED(Adjustable)	8.1 W – 12.2 W 8.75W	600 lm – 900 lm 600 lm	90+	27K, 30K, 35K, 40K	Yes	Yes
	IC20LED/ IC20RLED	8.9 W – 11.8 W	600 lm – 900 lm	90+		Yes	Yes
	IC22LED/ IC22RLED	12.0 W- 36.2 W	600 lm- 1400 lm	90+		Yes	Yes
Ċ	IC23 LEDT24	12.0 W- 36.2 W	600 lm – 900 lm	90+	•	Yes	No



Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
33	*4BE/*4SE	9.8 W – 10.0 W	650 lm – 720 lm	90+	27K, 30K, 35K, 40K, 50K switchable	Yes	Yes
	*65BE/*65SE	11.7 W – 12.12 W	750 lm – 845 lm	90+		Yes	Yes

#### \*L/SKTWHIP is not required

Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
100	3JBK	6.9 W	490 lm – 525 lm	90+	27K, 30K, 40K	Yes	Yes
	4JBK	8.2 W – 9.0 W	595 lm – 720 lm	90+		Yes	Yes
	6JBK	10.7 W – 10.9 W	740 lm – 880 lm	90+	•	Yes	Yes



# Recessed

#### W/ Smart Technology

Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	J6AI	16.5 W- 22.0 W	1000 lm	90+	27K- 50K (Tunable)	Yes	Yes



Photo	Series	Wattage	Lumens	CRI	Kelvin	Remodel	Energy Star
	*WF4 / WF4 ADJ / WF4 SQ / WF4E	8.1 W – 10.5 W	540 lm – 810 lm	90+	Switchable White (27K, 30K, 35K) 30K, 40K, 50K	Yes	Yes
	*WF6 / WF6 ADJ / WF6 SQ / WF6E	10 W – 14 W	790 lm – 1190 lm	90+	Switchable White (27K, 30K, 35K) 30K, 40K, 50K	Yes	Yes
	WF8 / WF8 SQ	19.9 W – 21.2 W	1580 lm – 1850 lm	90+	Switchable White (27K, 30K, 35K) 30K, 40K	Yes	Yes

#### Trim options vary per aperture size.

4G1 All require L/SKTWHIP	7.7 W – 8.3 W	480 lm – 560 lm	90+	27K, 30K, 40K	Yes	Yes
<b>5G1</b> 27K require L/SKTWHIP	10.2 W – 10.9 W	680 lm – 800 lm	90+		Yes	Yes
6G1 27K require L/SKTWHIP	10.3 W – 11.0 W	680 lm – 820 lm	90+	•	Yes	Yes

	4iG	9.8 W	610 lm – 670 lm	90+	27K, 30K, 40K	Yes	Yes
	5iG All require L/SKTWHIP	11.0 W – 12.2 W	720 lm – 770 lm	90+		Yes	Yes
	6iG All require L/SKTWHIP	11.6 W – 12.2 W	720 lm – 770 lm	90+	•	Yes	Yes



# **Flushmounts**

Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
	FMLCRSLS 48IN	42 W	3167 lm - 3889 lm	90+	Switchable White (27K, 40K, 50K)	Yes
	FMLCCLS 48IN	42 W	3180 lm – 3905 lm	90+	•	Yes



Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
	JSF/JSFSQ	10.0 W – 20.0 W	700 lm – 1800 lm	90+	27K, 30K, 35K, 40K	Yes
	JSBC	11.0 W – 17.0 W	650 lm – 1100 lm	90+	30K, 40K	Yes
	4RLS/6RLS	10.0 W – 14.5 W	691 lm – 1050 lm	90+	27K, 30K	Yes





# **Under Cabinet**

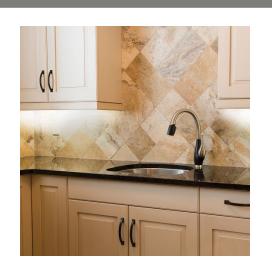
Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
The state of the s	UCLD 12"/18"/24"	7.3 W – 12.5 W	413 lm – 740 lm	90+	30 K	Yes
	UCEL 12"/ 24"/ 36"/ 48"	5.8 W – 19.5 W	300 lm – 1603 lm	90+	•	Yes



Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
3	UPLD 9"/14"/22"/30"	4.39 W – 15.3 W	291 lm – 1050 lm	90+	27K, 30K	Yes
	UCES 12"/ 18"/ 24"/ 36"	6.7 W – 16.7 W	415 lm – 1142 lm	90+	Switchable White (30K, 35K, 40K)	Yes
	UPS 9"/ 14"/ 22"/ 30"/ 40"	4.6 W – 16.4 W	304 lm – 1178 lm	90+	30K	Yes









# **Vanity**

Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
	FMVCCLS 12"/24"/36"/48"	9.61 W – 34.86 W	800 lm – 3550 lm	90+	Switchable White (30K, 35K, 40K)	Yes
	FMVCSLS 12"/24"/36"/48"	9.53 W – 35.18 W	750 lm – 3240 lm	90+		Yes
	FMVCALS 12"/24"/36"/48"	9.59 W - 36.47 W	750 lm – 3275 lm	90+	<u> </u>	Yes









# **Track**

Photo	Series	Wattage	Lumens	CRI	Kelvin	Energy Star
	R600L	9.5 W	563 lm – 820 lm	90+	27K, 30K, 35K, 40K	Yes
	R605L	10.5 W	704 lm – 868 lm	90+		Yes
	R606L	13.0 W	924 lm – 1188 lm	90+		Yes
	R610L	2.0 W-7.8 W	1789 lm- 2300lm	90+		No
	R620L	15.3 W	896 lm – 1034 lm	90+		Yes
	T263L	21.5 W	1464 lm – 1839 lm	90+		Yes
O	T275L	20.7 W	1946 lm – 2177 lm	90+	•	Yes









## **Controls**



Per Table 6.10.3 Inspections - Note B.1, at least one luminaire in bathrooms, laundry rooms, garages and utility rooms must be controlled with vacancy/occupancy sensing controls.



sensorswitch

#### **Exterior**

#### **WPX LED Wall Pack Luminaires**



Lumens- 1,500 and 3,000



Size 2

Lumens- 6,000





Size 3

Lumens- 9,200



Has an Integral Photocell

#### **WDGE LED Architectural Wall Luminaire**

#### WDGE1 LED P1 with PE



Size 1

Up to 2,000 Lumens

WDGE2



Size 2

Up to 6,000 Lumens

WDGE3



Size 3

Up to 12,000 Lumens

WDGE4



Size 4

Up to 25,000 Lumens

Has an Integral Photocell

#### **Exterior Controls**



**PTS 15** 



**PTS 60** 

**PTS 720** 

**Timer Switch for Auto OFF.** 

**Auto OFF is required for Outdoor Lighting.** 

Motion Sensor, OR, Astronomical time clock, or Timer Switch.

# Why Owners Should Renovate Multi-Family Housing

Prospective multi-family residents are looking for a place to live that is affordable, clean, conveniently located, and safe. With new multi-family developments emerging every day, it is critical that owners set themselves apart from the competition.



One of the easiest ways to spruce up a property is to update interior and exterior lighting. Upgrading to LED lighting can not only improve aesthetics and the feeling of security but can also reduce energy expenses and maintenance costs.

Find out more at www.acuitybrands.com



