A-LINE

ALRS601
6" LED Flat Frame Square Recessed Luminaire, NON-IC
Recessed Lighting

CASAMBI **LUTRON**
araya5 TUNABLE COLOR
cETLus Intertek
LED 7 YEAR WARRANTY

Description

This 6" LED luminaire kit includes a flat frame and square trim, combined with high power LED and dimmable driver options. The luminaire reduces operating costs and provides maintenance-free operation.

Technical Drawings

6⅞" 175mm
7⅞" 200mm

6" 152mm
6⅜" 162mm
7⅜" 187mm

13¼" 337mm

6⅝"×6⅝" 168×168mm
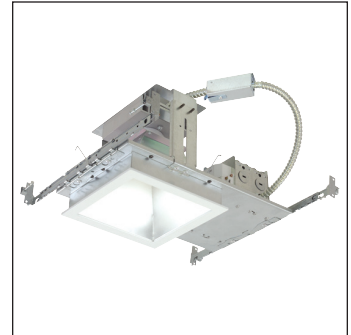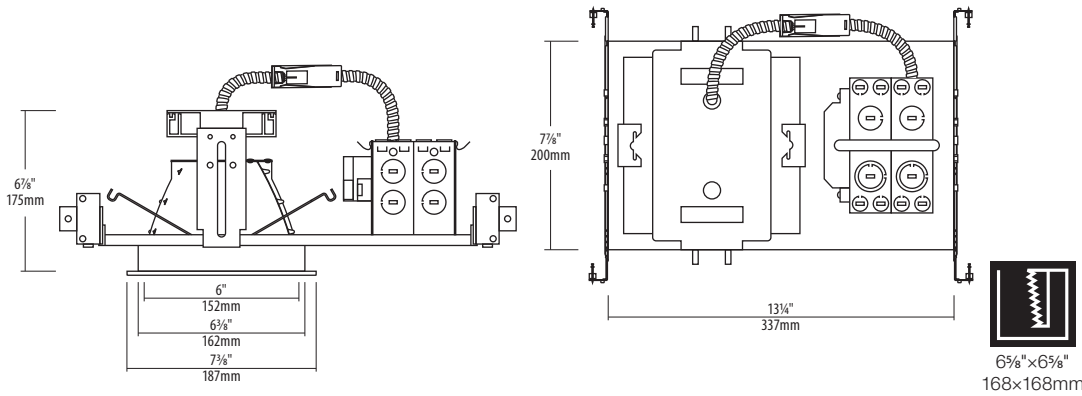
SPECIFICATION	
Aperture	6"
Approved Location	Damp
Application	Recessed
Certification	cETLus
CRI	85
Dimming	YES
Hole Cut Size	6⅝" × 6⅝" (168mm × 168mm)
Lumen per watt	Typical 85
Lumen Maintenance	70% @ 50,000 hrs
Power Factor	>0.9
Power Supply Type	Constant Current
THD	<20%

Ordering Guide

ALRS601 - [Delivered Lumens Per Head[1]] [Color Temp.] [Beam Angle] - [Reflector Finish] [Trim Ring Color] [Driver Options]

QUICKSHIP MADE-TO-ORDER 7-DAY

Highlighted option denotes quick ship.

Delivered Lumens Per Head[1]
- **15 :** 1250 lm (16W)
- **26 :** 1800 lm (22W)
- **34 :** 2600 lm (34W)

Color Temp.
- **27 :** 2700 K
- **30 :** 3000 K
- **35 :** 3500 K
- **40 :** 4000 K
- **65 :** 6500 K

Beam Angle
- **W :** Wide (74°)
- **N :** Narrow (33°)

Reflector Finish
- **HC :** Semi-Specular

Trim Ring Color
- **WH :** White
- **BK :** Black

Driver Options
- **Blank :** Standard 120V Input (TRIAC/ELV/0-10V)
- **2 :** 277V Input, 0-10V dimming
- **3E :** 347V Input, rated -40°C, 0-10V dimming
- **B1 :** Rated -40°C, 120V Input, 0-10V dimming
- **B2 :** Rated -40°C, 277V Input, 0-10V dimming
- **L1 :** Lutron EcoSystem, 120V Input
- **L2 :** Lutron EcoSystem, 277V Input
- **E1 :** Emergency Backup, 120V Input
- **E2 :** Emergency Backup, 277V Input
- **Q1 :** Casambi enabled driver, 120V Input
- **Q2 :** Casambi enabled driver, 277V Input
- **CUST :** Custom

araya5 TUNABLE COLOR
- **C2 :** 1000 lm (20W)
- **C3 :** 1700 lm (30W)
- **CT :** Araya5 Color Tunable
- **W :** Wide (74°)
- Select from above
- Select from above
- **T1 :** Color Tuning Control, 120V Input
- **T0 :** Dual 0-10V Control, 120V Input
- **T2 :** Color Tuning Control, 277V Input
- **TD :** Dual 0-10V Control, 277V Input

Notes:

[1] Delivered lumens provided are based on 3000 K with wide reflector.

Quick Ship option is available on orders of 75 pieces or less, and will ship within 5 business days. Options must be selected from Quick Ship section to qualify.

For additional options please consult your A-Line representative. All trademarks are the property of their respective owners. Lutron and EcoSystem are trademarks of Lutron Electronics Co., Inc. Casambi is a trademark of Casambi Technologies.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Features

Mounting Frame
Constructed of 22ga galvanized steel for optimum rigidity. The frame includes a mounting ring that accommodates up to 1¼" (32mm) ceiling thickness. Hanger bars installed on short side.

Junction Box
Listed for through branch circuit wiring. Maximum of eight 12 AWG 90°C branch-circuit connections (four in and four out). Ten ½" knockouts with true pry-out slots and eight knockouts with Romex® cable clamp. Ground wire is provided on J-Box. Push-in connectors provided for 0-10V wiring.

Hanger Bars
Rigid hanger bars extend up to 25" (635mm). Score lines on the hanger bars allow for tool-less shortening down to 12" (305mm). Built-in line-up foot allows for accurate housing height during installation. Integrated T-bar clips easily snap onto T-bars. Optional C-channel bracket kit accepts C-channel and EMT conduit. Vertically adjustable.

System Protection
Integral thermal protection provided to avoid overheating or improper installation. Mounted to the junction box and will disconnect if insulation is detected. Insulation must maintain 3" (76mm) clearance from top or sides.

Quick Disconnect
Included to allow for easy installation of the LED engine and reflector.

LED Optics
Integrated soft lens provides visual comfort.

Reflector
Constructed of spun aluminum, the reflector provides precision distribution of light with low glare. The square construction of the reflector produces a 90° cut-off for a more defined output. The reflector includes two butterfly clips that pull the trim flush to the ceiling.

LED Characteristics
Fixed CCT high power CREE® LED chips maintain uniform intensity with a typical 85 CRI.

Color Tuning LED Characteristics
Color tuning available with Araya5 color tuning module. Full spectrum tuning, 90+ CRI, 1650-8000 K tunable range and DTW function available from 3000-1800 K. Full spectrum control through "Araya" mobile app available from the App Store (iOS only). Without app, tunable white and dimming control is available over two separate 0-10V signals.

Dimming
Multiple dimming options are available. 100-10% dimming with TRIAC/ELV and down to 1% with 0-10V compatible devices. Consult factor for compatible dimmers.

Thermal Performance
Extruded aluminum heat sink ensures optimal heat dissipation and LED life.

LED Driver
Junction box mounted for ease of maintenance, the LED driver features a power factor larger than 0.9, and THD of less than 20%. See LED Driver Options for more specific details.

Environment
Suitable for use in damp locations.

Warranty
7-year warranty.

LED Driver Options

Standard : TRIAC/ELV dimming for 120V only. Dimming to 1% over 0-10V.
(3E) 347V : Dimming to 1% over 0-10V.
(B) Rated -40 : Low temperature driver operation. Dimming to 1% over 0-10V.
(L) Lutron EcoSystem : Suitable for integration into a planned or existing EcoSystem® lighting control solution. Dimming down to 1% with compatible controls. 40W max.
(E) Emergency Backup : Integrated emergency battery with switchable output of 5W for 180 minutes, or 10W for 90 minutes of operation during an outage. 40W max.
(Q) Casambi Enabled : Casambi wireless module included. Wireless dimming to 1% provided over 0-10V signal from module.
(CUST) Custom : Custom options may be available upon factory request.
(T1/T2) Colour Tuning Control : App controlled colour tuning. Dimming to 1% through app.
(T0/TD) Dual 0-10V Control : Required for separate 0-10V control of tunable white and dimming. Dimming to 1% over 0-10V.

Accessories

P-CBKT
C-Channel bracket kit, for use with flat frame housings.

Photometry

CCT Correction Factors :
Baseline lumens = 3000 K
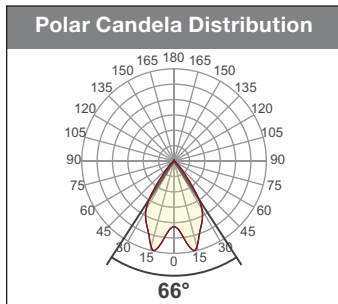Multiply 3000 K lumen values by:
    0.95 for 2700 K
   1.10 for 3500 K
    1.15 for 4000 K
    1.20 for 6500 K

ALRS601-1530W : 6" SQUARE FLAT FRAME LED LUMINAIRE, WIDE BEAM SPREAD, 3000 K, 16W

Polar Candela Distribution
66°

Beam Details

D	Lux	FC	L	W
4'	566	53	5.2'	5.2'
8'	142	13	10.4'	10.4'
12'	63	6	15.6'	15.6'
16'	35	3	20.8'	20.8'
20'	23	2	26'	26'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	784.5	63.6%
0-40	1,065.3	86.4%
0-60	1,162.1	94.2%
60-90	26.2	2.1%
70-100	20.3	1.6%
90-120	15.3	1.2%
0-90	1,188.3	96.4%
90-180	44.8	3.6%
0-180	1,233.1	100%

ALRS601-2630W : 6" SQUARE FLAT FRAME LED LUMINAIRE, WIDE BEAM SPREAD, 3000 K, 22W

Polar Candela Distribution
67.6°
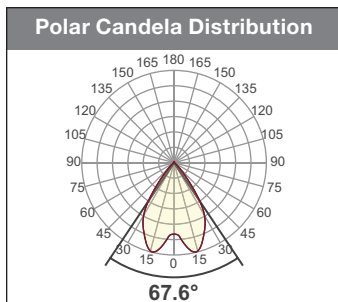
Beam Details

D	Lux	FC	L	W
4'	826	88	5.4'	5.4'
8'	207	19	10.7'	10.7'
12'	92	9	16.1'	16.1'
16'	52	5	21.4'	21.4'
20'	33	3	26.8'	26.8'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1,123.4	63%
0-40	1,539.5	86.4%
0-60	1,689.6	94.8%
60-90	34.4	1.9%
70-100	26.0	1.5%
90-120	19.1	1.1%
0-90	1,724.0	96.7%
90-180	58.6	3.3%
0-180	1,782.6	100%

ALRS601-3430W : 6" SQUARE FLAT FRAME LED LUMINAIRE, WIDE BEAM SPREAD, 3000 K, 34W

Polar Candela Distribution

65.4°
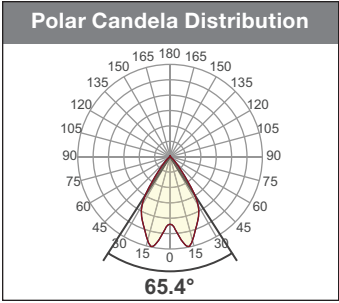
Beam Details

D	Lux	FC	L	W
4'	1226	114	5.1'	5.1'
8'	306	28	10.3'	10.3'
12'	136	13	15.4'	15.4'
16'	77	7	20.6'	20.6'
20'	49	5	25.7'	25.7'

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1,669.7	65.2%
0-40	2,242.5	87.6%
0-60	2,439.9	95.3%
60-90	44.4	1.7%
70-100	32.2	1.3%
90-120	23.1	0.9%
0-90	2,484.3	97%
90-180	76.6	3%
0-180	2,560.8	100%