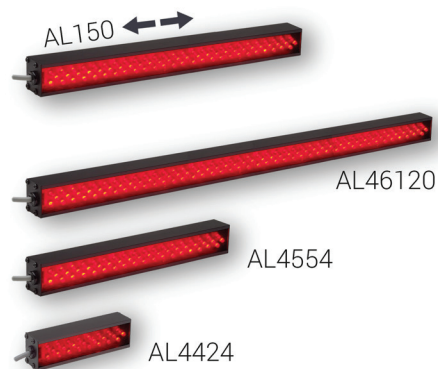





Expandable

Product Highlights

- Provides very even illumination along the length of the light, with controlled fall off in the transverse direction
- Designed to provide low angle of incidence illumination over a long, wide area
- Applications requiring very even illumination over a wide area can utilize two BALAs aligned parallel to and facing each other
- AL150 - Expandable in 1" increments up to 80"
- AL150 Derivatives: AL46120 (20"), AL4554 (9"), AL4424 (4")



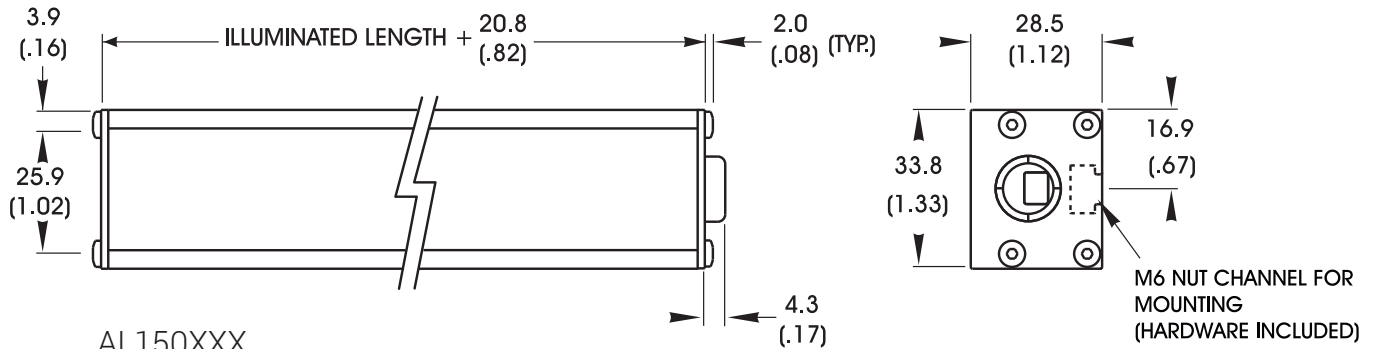
General Specifications

	Part	Color	24v Current (A)	All Other Controls (A Max)
Electrical Specifications	AL4424	625	0.12	0.04
		395, WHI, 470, 520	0.08	0.06
		880	0.12	0.03
	AL4554	625	0.30	0.14
		395, WHI, 470, 520	0.20	0.16
		880	0.30	0.12
	AL46120	625	0.61	0.28
		395, WHI, 470, 520	0.41	0.32
		880	0.61	0.24
Normal Operating Temperature	0 - 60°C			
Weight (g)	Unavailable			
Standard Cable Information	Up to 2 meters (80") long - 105°C rated PVC jacket, foil shield with drain.			
Photobiological Risk Factor IEC 62471	Exempt Applicable Wavelengths: 880 Group 1 (Low-Risk) Applicable Wavelengths: 455, 520, 625, WHI Group 2 (Moderate Risk) Applicable Wavelengths: 395			
Compliance				
IP Rating	IP50			
Lumen Maintenance	L70 = 50,000 hours			

AL150 Expandable Series BALA (Broad Area Linear Array) Bar Lights

Mechanical Specifications

AL150XXX (Expandable BALA)



AL150XXX

Available in 25mm Increments
up to 2.03m (80")

6 LEDs = 25mm (1")

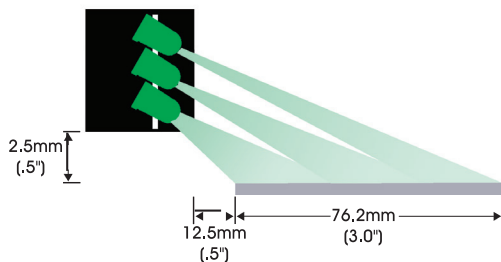
DIMENSIONS ARE IN MILLIMETERS (INCHES)

Unique Part Numbers

Part #	Length in mm	(inches)
AL4424	119.9	(4.72)
AL4554	249.5	(9.82)
AL46120	534.5	(21.04)

Part #	# of LEDs	Aprox. length (inches)
AL150006	6	1"
AL150012	12	2"
AL150018	18	3"
AL4424	24	4"
AL150030	30	5"
AL150036	36	6"
AL15042	42	7"
AL150048	48	8"
AL4554	54	9"
AL150060	60	10"
AL150066	66	11"
AL150072	72	12"
AL150078	78	13"
AL150084	84	14"
AL150090	90	15"
AL150096	96	16"
AL150102	102	17"
AL150108	108	18"
AL150114	114	19"
AL46120	120	20"

BALA Light Function Diagram



The Broad Area Linear Array (BALA) design is exclusive to Ai.

Originally designed for inspecting circuit boards, BALAs are aimed to create illumination that is very even in intensity along the length of the light, with controlled "fall off" in the transverse direction.

To create a wider area of illumination, two BALAs can be placed parallel to and facing each other.

AL150 Expandable Series BALA (Broad Area Linear Array) Bar Lights

Part Number Key

Model	Model Extension	# of LEDs ³	—	Spectral Wavelength	Connector/Control	Optional Light Conditioning	Alternative Connector
XX	XXXX	XXX	—	XXX	XX	X	XXX
AL	150			395 (UV) ²	C1	D	M12 ¹
	4424	NA		470 (blue)	C2	(diffuser)	
	4554	NA		520 (green)	C5	P	
	46120	NA		625 (red)	IC	(polarizer)	
				660 (red)	I3		
				850 (IR)	I3S		
				WHI (white)	24		
Ex: AL15012-660C1 AL15084-66024					¹ Available with IC, I3 and I3S options only ² Not available in 24v or IC ³ See chart on page 3 for size guide		

Stock Product: *shipped next day*

AL4424-625C2 AL4554-625C2
 AL4424-62524 AL4554-62524
 AL4424-625IC AL4554-625IC

Build to Order: *shipped in two weeks*

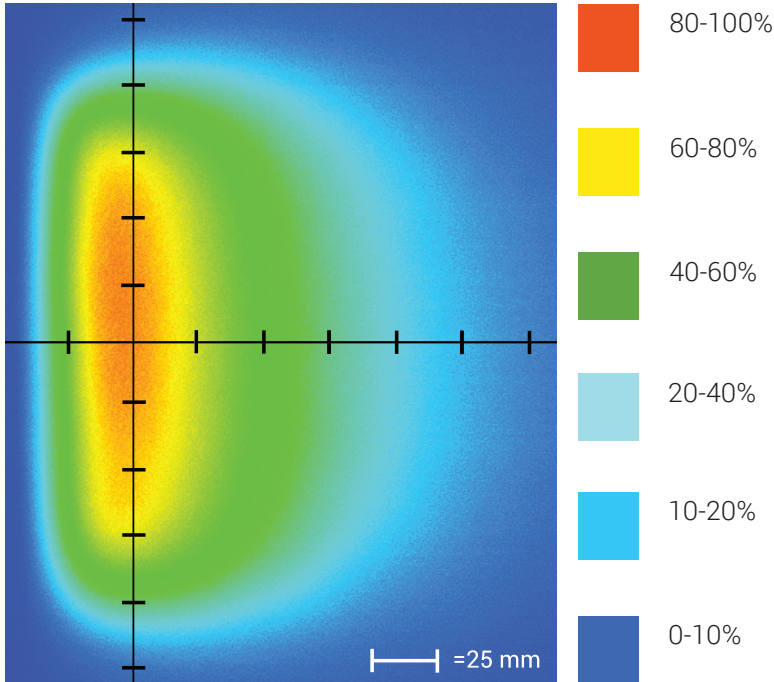
Connector | Control Options

C1 Connector	C2 Connector	C5 Connector	IC	I3	I3S	24
For use with: DCS Series Controllers	For use with: Legacy Controllers (Not recommended for new applications)	For use with: Pulsar 320 Strobe Controller.	Continuous in-line controller Powered with: 24V power supply	Combination strobe/continuous in-line controller Powered with: 24V power supply	Default-OFF strobe/continuous in-line controller Powered with: 24V power supply	Flying/tinned leads Powered with: 24V power supply

AL150 Expandable Series BALA (Broad Area Linear Array) Bar Lights

Optical Performance

Intensity Distribution



Optical measurement taken using AL4554-WHI13 @ 25mm



Operation and Wiring

ICS 2 (IC)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	GHI	White
3	GND	Blue
4	GLO	Black
5	N/A	N/A

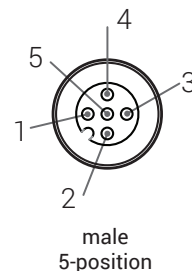
ICS 3 (I3 and I3S)

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	Reserved	White
3	GND	Blue
4	PNP/Active High Trigger	Black
5	0-10 VDC Analog Control	Gray

24 Volt

Pin (M12)	Function	Wire Color
1	+24 VDC	Brown
2	N/A	White
3	GND	Blue
4	N/A	Black

Optional M12 Pinout



AL150 Expandable Series BALA (Broad Area Linear Array) Bar Lights

Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of two years from the original date of purchase. Should a defect develop during this period, please contact Ai Customer Service or your Ai distributor for a Return Merchandise Authorization (RMA), and return the complete product, freight prepaid, to Ai. If a defect is found, Ai will - at our discretion - repair or replace the product without charge. Ai claims no liability for any implied warranties, including "merchantability" and "fitness for a specific purpose."

Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm ET or send an email to orders@advill.com.

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