

LIU365A - March 31, 2022

Item # LIU365A was discontinued on March 31, 2022. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

LED ARRAY LIGHT SOURCES

- ▶ Compact, Easy to Use LED Source
- ▶ Central Wavelengths from 365 to 850 nm
- ▶ Broadband White Option Available



LIU470A
470 nm LED Array



AD38
Ø2" Mounting Adapter



Application Idea
LIU525B with an AD38
Ø2" Mounting Adapter
Secured in a KS2
Kinematic Mount

OVERVIEW

Features

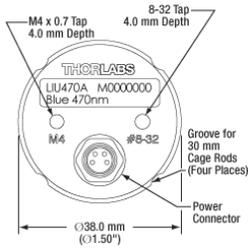
- LED Array Comprised of 20 High Brightness LEDs
- Longer Lifetime than Traditional Light Sources (up to 100,000 hours)
- Fits Many Commercially Available Camera Illumination Units
- Compatible with Thorlabs' 30 mm Cage System
- LED Array Power Supply Sold Separately (See Below)

Thorlabs' LED Array Light Sources consist of 20 individual bright LEDs and are available with one of seven central wavelengths between 365 nm and 850 nm or with a broadband, cold-white output (see the graph below for the available emission spectra). Each array features a diffuser mounted over the LEDs and secured by the housing. The intensities of these LED arrays range from 0.26 mW/cm² to 4.0 mW/cm², as measured from 100 mm away along the emission axis.

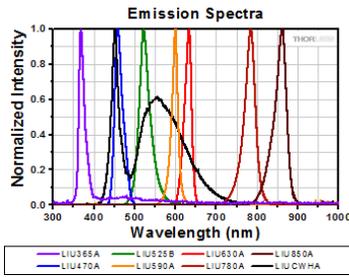
Conveniently mounted in a Ø1.5" housing, these light sources can be used for a variety of lighting applications. The housing can be readily secured into most optical mounts used in camera illumination units. Additional mounting options include two threaded holes on the rear of the housing, one M4 and one 8-32 (see drawing below), as well as grooves running the length of the housing that allow the LED unit to be placed in a 30 mm cage system. The LED unit will be suspended by the cage rods but not restrained from moving along the optical axis of the cage system as shown in the photo below and to the right. To fix the position of the LED unit, clamp it between two fixed cage elements (see the *Application Idea* tab for more details). Thorlabs also offers a mounting adapter (Item # AD38) for these LEDs to be mounted in our Ø2" mirror mounts, such as the KS2 shown above.

These LED arrays are only compatible with the 24 V LIU-PS power supply, which must be purchased separately. The LED arrays sold on this page are not compatible with Thorlabs' LED current controllers.

Please Note: During normal operation, the temperature of the LED housing can increase by as much as 25 °C above the ambient temperature. Avoid handling the LED housing while the LED is on or shortly after it has been turned off.



Click to Enlarge
The drawing above shows a back view of the LIU470A LED array.



Click to Enlarge
Click Here to Download Raw Data
The plot above shows the spectra for all of the LEDs on this page, measured using our CCS200 compact spectrometer.



Click to Enlarge
[APPLIST]
[APPLIST]
The photo above shows an LED array in a 30 mm cage system. When pushed together, the two cage plates clamp the LED array in place.

PIN DIAGRAM

Pin Diagram for LED Arrays



Pin	Specification	Wire Color on PAA630 Cable
1	24 VDC	Brown
2	Ground	White
3	Not Connected	Blue
4	Not Connected	Black

Please Note: The pin diagram above is viewed looking into the male plug. The above color scheme is standard for M8 connectors and can be used for external wiring applications. When the PAA630 cable is plugged into an LIU series unit, the table above relates cable wire color to unit pin number.

APPLICATION IDEA

Dichroic Filters and Filter Wheel for Multi-Color Light Source

The image below and to the left shows the LIUCWHA white LED array being inserted between the 30 mm cage rods. The LED is sandwiched between a CFW6 30 mm Cage Filter Wheel and a CP37 30 mm Cage Plate so that it cannot slide along the cage rods. The Ø35 mm aperture of the CP37 cage plate allows for easy access to the power terminal located on the rear of the unit. The photo below and to the right shows the completed assembly.

In this application, the CFW6 was loaded with Ø1" dichroic filters (FD1R Red Filter, FD1G Green Filter, FD1B Blue Filter, FD1M Magenta Filter, FD1Y Yellow Filter, and FD1C Cyan Filter). When combined with the white LED array, the user can illuminate the sample, object, or subject with any of the primary or secondary colors by simply rotating the filter wheel.

For automated applications, the CFW6 can be replaced with either a FW102C or FW103H motorized filter wheel. In addition, these LED arrays can be mounted to any SM1-threaded (1.035"-40) motorized filter wheel that is not cage compatible by using 30 mm cage rods, an SM1T2 coupler, and a CP33 cage plate.



Click to Enlarge
To secure the LIUCWHA LED array within a 30 mm cage system, it can be sandwiched between two 30 mm cage components. Here, the LED array is being secured by the CFW6 filter wheel and the CP37 cage plate.



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[APPLIST]
[APPLIST]

The white LED array combined with our dichroic filters can be used to selectively illuminate a sample with a particular color.

LED SELECTION GUIDE

Light Emitting Diode (LED) Selection Guide										
(Click Representative Photo to Enlarge; Not to Scale)										
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy ^a	Fiber-Coupled LEDs ^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options ^c	LED Arrays
Single Color LEDs										
250 nm	LED250J (1 mW Min)	-	-	-	-	-	-	-	-	-
255 nm	LED255W (0.4 mW)	-	-	-	-	-	-	-	-	-
	LED255J (1 mW Min)	-	-	-	-	-	-	-	-	-
260 nm	LED260W (1 mW)	-	-	-	-	-	-	-	-	-
	LED260J (1 mW Min)	-	-	-	-	-	-	-	-	-
265 nm	-	-	-	M265D4 (38.4 mW Min) ^d	M265L5 (38.4 mW Min) ^d	-	-	-	-	-
275 nm	LED275W (1.6 mW)	-	-	M275D2 (45 mW Min)	M275L4 (45 mW Min)	-	-	-	-	-
	LED275J (1 mW Min)	-	-	M275D3 (47.3 mW Min) ^d		-	-	-	-	-
280 nm	LED280W (2.3 mW)	-	-	-	M280L6 (78 mW Min) ^d	-	M280F5 (0.5 mW Min) ^d	-	-	-
285 nm	LED285W (1.6 mW)	-	-	M285D3 (50 mW Min)	-	-	-	-	-	-
	LED285J (1.3 mW)	-	-		-	-	-	-	-	-
290 nm	LED290W (1.6 mW)	-	-	-	-	-	-	-	-	-
295 nm	LED295W (1.2 mW)	-	-	-	-	-	-	-	-	-
300 nm	LED300W (1.2 mW)	-	-	M300D3 (26 mW Min)	M300L4 (26 mW Min)	-	M300F2 (320 μW)	-	-	-

308 nm	-	-	-	M310D1 (38.5 mW Min) ^d	M310L1 (38.5 mW Min) ^d	-	M310F1 (0.51 mW) ^d	-	-	-
310 nm	LED310W (1.5 mW)	-	-	-	-	-	-	-	-	-
325 nm	LED325W2 (1.7 mW)	-	-	M325D3 (25 mW Min)	M325L5 (25 mW Min)	-	M325F4 (350 μW)	-	-	-
340 nm	LED340W (1.7 mW)	-	-	M340D3 (53 mW Min)	M340L4 (53 mW Min)	-	M340F4 (0.75 mW) ^d	-	-	-
	LED341W (0.33 mW)									
365 nm	-	-	-	M365D2 (1150 mW Min)	M365L3 (880 mW Min)	M365L2-Cx (120 mW) ^g	M365FP1 (15.5 mW)	SOLIS-365C (3.0 W) ^f	Chrolis (1130 mW)	LIU365A (31 mW)
					M365LP1 (1350 mW Min)	M365LP1-Cx (350 mW) ^e			4- Wavelength Source (85 mW)	
375 nm	LED375L (1 mW)	-	-	M375D4 (1270 mW Min)	M375L4 (1270 mW Min)	-	M375F2 (4.23 mW)	-	-	-
	LED370E (2.5 mW)									
385 nm	LED385L (5 mW)	-	-	M385D1 (270 mW Min)	M385L2 (270 mW Min)	M385L2-Cx (90 mW) ^e	M385F1 (10.7 mW)	SOLIS-385C (5.8 W) ^f	Chrolis (1250 mW)	-
					M385L3 (1240 mW Min)	M385L3-Cx (450 mW) ^e			4- Wavelength Source (95 mW)	
				M385D2 (1650 mW Min)	M385LP1 (1650 mW Min)	M385LP1-Cx (520 mW) ^e	M385FP1 (23.2 mW)			
395 nm	LED395L (6 mW)	-	-	M395D3 (400 mW Min)	M395L4 (400 mW Min)	-	M395F3 (6.8 mW)	-	-	-
				M395D4 (1420 mW Min)	M395L5 (1130 mW Min)		M395FP1 (29.8 mW)			
					M395LP1 (1420 mW Min)					
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy^a	Fiber-Coupled LEDs^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options^c	LED Arrays
Single Color LEDs										
405 nm	LED405L (6 mW)	-	-	M405D2 (1500 mW Min)	M405L4 (1000 mW Min)	M405L4-Cx (510 mW) ^g	M405F1 (3.7 mW)	SOLIS-405C (3.9 W) ^f	Chrolis (900 mW)	-
	LED405E (10 mW)				M405LP1 (1200 mW Min)	M405LP1-Cx (450 mW) ^e	M405FP1 (24.3 mW)		4- Wavelength Source (290 mW)	
415 nm	-	-	-	M415D2 (1640 mW Min)	M415L4 (1310 mW Min)	-	M415F3 (21.3 mW)	SOLIS-415C (5.8 W) ^f	-	-
					M415LP1 (1640 mW Min)					
420 nm	-	-	-	-	-	-	-	-	Chrolis (710 mW)	-
									4- Wavelength Source (95 mW)	
430 nm	LED430L (8 mW)	-	-	M430D3 (529.2 mW Min) ^d	M430L5 (529.2 mW Min) ^d	-	M430F1 (7.5 mW) ^d	-	-	-
445 nm	-	-	-	-	-	-	-	SOLIS-445C	-	-

								(5.4 W) ^f		
450 nm	LED450L (7 mW)	-	LEDS450 (250 mW)	M450D4 (2118.1 mW) ^d	M450LP2 (2118.1 mW) ^d	-	-	-	-	-
455 nm	-	-	-	M455D3 (1150 mW Min)	M455L4 (1150 mW Min)	M455L3-Cx (400 mW) ^h M455L4-Cx (490 mW) ^e	M455F3 (24.5 mW)	-	4- Wavelength Source (310 mW)	-
465 nm	LED465E (20 mW)	-	-	-	-	-	-	-	-	-
470 nm	LED470L (170 mW)	EP470S04 (18 mW Min) EP470S10 (100 mW Min)	-	M470D4 (809 mW Min) ^d	M470L5 (809 mW Min) ^d	M470L5-Cx (402 mW) ^e	M470F3 (21.8 mW)	SOLIS-470C (3.0 W) ^f	4- Wavelength Source (250 mW)	LIU470A (253 mW)
475 nm	-	-	-	-	-	-	-	-	Chrolis (630 mW)	-
490 nm	LED490L (3 mW)	-	-	M490D3 (205 mW Min)	M490L4 (205 mW Min)	-	M490F3 (3.1 mW)	-	Chrolis (120 mW) 4- Wavelength Source (50 mW)	-
505 nm	LED505L (4 mW)	-	-	M505D3 (400 mW Min)	M505L4 (400 mW Min)	M505L3-Cx (150 mW) ^e M505L4-Cx (170 mW) ^e	M505F3 (11.7 mW)	SOLIS-505C (1.0 W) ^f	4- Wavelength Source (170 mW)	-
525 nm	LED525E (2.6 mW Max) LED525L (4 mW) LED528EHP (7 mW)	-	-	-	-	-	-	SOLIS-525C (2.4 W) ^f	Chrolis (180 mW)	LIU525A (111 mW)
530 nm	-	-	-	M530D3 (370 mW Min)	M530L4 (370 mW Min)	M530L4-Cx (160 mW) ^e	M530F2 (9.6 mW)	-	4- Wavelength Source (100 mW)	-
545 nm	LED545L (2.4 mW CW, 8.7 mW Pulsed)	-	-	-	-	-	-	-	-	-
554 nm	-	-	-	MINTD3 (650 mW Min)	MINTL5 (650 mW Min)	-	MINTF4 (28 mW)	-	-	-
562 nm	LED560L (0.15 mW) ^d	-	-	-	-	-	-	-	-	-
565 nm	-	-	-	M565D2 (880 mW Min)	M565L3 (880 mW Min)	-	M565F3 (13.5 mW)	SOLIS-565C (3.2 W) ^f	Chrolis (350 mW) 4- Wavelength Source (106 mW)	-
570 nm	LED570L (0.3 mW)	-	-	-	-	-	-	-	-	-
590 nm	LED590L (2 mW) LED591E (2 mW)	EP590S04 (3.5 mW Min) EP590S10 (18 mW Min)	-	M590D3 (230 mW Min)	M590L4 (230 mW Min)	M590L3-Cx (60 mW) ^e M590L4-Cx (100 mW) ^e	M590F3 (4.6 mW)	SOLIS-590C (350 mW) ^f	Chrolis (140 mW) 4- Wavelength Source (65 mW)	LIU590A (109 mW)
595 nm	-	-	-	M595D3 (820 mW Min)	M595L4 (820 mW Min)	-	M595F2 (11.5 mW)	SOLIS-595C (700 mW) ^f	-	-
			LEDs in			Collimated	Fiber-	High-Power	Multi- Wavelength	

Wavelength	Unmounted LEDs	Pigttailed LEDs	SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	LEDs for Microscopy ^a	Coupled LEDs ^b	LEDs for Microscopy	LED Source Options ^c	LED Arrays
Single Color LEDs										
600 nm	LED600L (3 mW)	-	-	-	-	-	-	-	-	-
610 nm	LED610L (8 mW)	-	-	-	-	-	-	-	-	-
617 nm	-	-	-	M617D2 (600 mW Min)	M617L3 (600 mW Min)	M617L3-Cx (230 mW) ^e	M617F2 (13.2 mW)	SOLIS-617C (1.5 mW) ^f	4-Wavelength Source (210 mW)	-
				M617D3 (660 mW Min)		M617L4-Cx (280 mW) ^e				
620 nm	-	-	-	-	-	-	-	SOLIS-620D (3.47 W) ^f	-	-
625 nm	LED625L (12 mW)	-	-	M625D3 (700 mW Min)	M625L4 (700 mW Min)	M625L3-Cx (270 mW) ^e	M625F1 (17.5 mW)	-	Chrolis (490 mW)	-
						M625L4-Cx (490 mW) ^e			4-Wavelength Source (240 mW)	
630 nm	LED630L (16 mW)	-	-	-	-	-	-	-	-	LIU630A (208 mW)
635 nm	LED631E (4 mW)	-	-	-	-	-	-	-	-	-
	LED635L (170 mW)									
639 nm	LED630E (7.2 mW)	-	-	-	-	-	-	-	-	-
645 nm	LED645L (16 mW)	-	-	-	-	-	-	-	-	-
660 nm	LED660L (13 mW)	-	-	M660D2 (940 mW Min)	M660L4 (940 mW Min)	M660L4-Cx (400 mW) ^e	M660FP1 (15.5 mW)	SOLIS-660C (2.0 W) ^f	4-Wavelength Source (210 mW)	-
670 nm	LED670L (12 mW)	-	-	-	-	-	-	-	-	-
680 nm	LED680L (8 mW)	-	-	M680D2 (180 mW Min)	M680L4 (180 mW Min)	-	M680F3 (2.7 mW)	-	-	-
700 nm	-	EP700S04 (5 mW Min)	-	M700D2 (80 mW Min)	M700L4 (80 mW Min)	-	M700F3 (1.7 mW)	-	-	-
		EP700S10 (30 mW Min)								
730 nm	-	-	-	M730D3 (540 mW Min)	M730L5 (540 mW Min)	-	-	-	-	-
740 nm	-	-	-	-	-	-	M740F2 (6.0 mW)	SOLIS-740C (2.0 W) ^f	-	-
750 nm	LED750L (18 mW)	-	-	-	-	-	-	-	-	-
760 nm	LED760L (24 mW)	-	-	-	-	-	-	-	-	-
770 nm	LED770L (22 mW)	-	-	-	-	-	-	-	-	-
780 nm	LED780E (18 mW)	-	-	M780D2 (200 mW Min)	M780L3 (200 mW Min)	M780L3-Cx (130 mW) ^e	M780F2 (7.5 mW)	-	Chrolis (40 mW)	LIU780A (315 mW)
	LED780L (22 mW)			M780D3 (800 mW Min)	M780LP1 (800 mW Min)					
800 nm	LED800L (20 mW)	-	-	-	-	-	-	-	-	-
		EP810S04		M810D2	M810L3					

810 nm	LED810L (22 mW)	(16 mW Min)	-	(325 mW Min)	(325 mW Min)	M810L3-Cx (210 mW) ^e	M810F2 (6.5 mW)	-	-	-
	EP810S10 (90 mW Min)	-	-	M810D3 (363 mW Min)	M810L4 (363 mW Min)	-	-	-	-	-
830 nm	LED830L (22 mW)	-	-	-	-	-	-	-	-	-
840 nm	LED840L (22 mW)	-	-	-	-	-	-	-	-	-
850 nm	LED851L (13 mW)	-	-	M850D2 (900 mW Min)	M850L3 (900 mW Min)	M850L3-Cx (330 mW) ^e	M850F3 (8.6 mW Min) ^d	SOLIS-850C (2.7 W) ^f	-	LIU850A (322 mW)
				M850D3 (1400 mW)	M850LP1 (1400 mW Min)					
870 nm	LED870E (22 mW)	-	-	-	-	-	-	-	-	-
	LED870L (24 mW)									
880 nm	-	-	-	M880D2 (300 mW Min)	M880L3 (300 mW Min)	-	M880F2 (3.4 mW)	-	-	-
890 nm	LED890L (12 mW)	-	-	-	-	-	-	-	-	-
910 nm	LED910L (10 mW)	-	-	-	-	-	-	-	-	-
	LED910E (12 mW)									
930 nm	LED930L (15 mW)	-	-	-	-	-	-	-	-	-
940 nm	LED940E (18 mW)	-	-	M940D2 (800 mW Min)	M940L3 (800 mW Min)	M940L3-Cx (320 mW) ^e	M940F3 (14.2 mW)	SOLIS-940C (2.5 W) ^f	-	-
970 nm	LED970L (5 mW)	-	-	M970D3 (600 mW Min)	M970L4 (600 mW Min)	-	M970F3 (8.1 mW)	-	-	-
Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy^a	Fiber-Coupled LEDs^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options^c	LED Arrays
Single Color LEDs										
1050 nm	LED1050E (2.5 mW)	-	-	M1050D1 (50 mW Min)	M1050L2 (50 mW Min)	-	-	-	-	-
	LED1050L (4 mW)			M1050D3 (160 mW Min)	M1050L4 (160 mW Min)		M1050F3 (3 mW)			
	LED1050L2 (8 mW) ^d			-	-		-			
1070 nm	LED1070L (4 mW)	-	-	-	-	-	-	-	-	-
	LED1070E (7.5 mW)									
1085 nm	LED1085L (5 mW)	-	-	-	-	-	-	-	-	-
1100 nm	-	-	-	M1100D1 (168 mW Min) ^d	M1100L1 (168 mW Min) ^d	-	M1100F1 (5.4 mW) ^d	-	-	-
1200 nm	LED1200E (2.5 mW)	-	-	M1200D2 (30 mW Min)	M1200L3 (30 mW Min)	-	-	-	-	-
	LED1200L (5 mW)									
1300 nm	LED1300E (2 mW)	-	-	M1300D2 (25 mW Min)	M1300L3 (25 mW Min)	-	-	-	-	-
	LED1300L (3.5 mW)									
1450 nm	LED1450E (2 mW)	-	-	-	-	-	-	-	-	-
	-									

Wavelength	Unmounted LEDs	Pigtailed LEDs	LEDs in SMT Packages	PCB-Mounted LEDs	Heatsink-Mounted LEDs	Collimated LEDs for Microscopy ^a	Fiber-Coupled LEDs ^b	High-Power LEDs for Microscopy	Multi-Wavelength LED Source Options ^c	LED Arrays
Multi-Color, Broadband, and White LEDs										
455 nm (12.5% ⁱ) and 640 nm	-	-	-	MPRP1D2 (275 mW Min)	MPRP1L4 (275 mW Min)	-	-	-	-	-
572 nm and 625 nm	LEDGR (0.09 mW and 0.19 mW)	-	-	-	-	-	-	-	-	-
588 nm and 617 nm	LEDRY (0.09 mW and 0.19 mW)	-	-	-	-	-	-	-	-	-
467.5 nm, 525 nm, and 627.5 nm	LEDRGBE (5.8 mW, 6.2 mW, and 3.1 mW)	-	-	-	-	-	-	-	-	-
430 - 660 nm (White)	LEDWE-15 (13 mW)	-	-	-	-	-	-	-	-	-
	LEDW7E (15.0 mW)	-	-	-	-	-	-	-	-	-
	LEDW25E (15.0 mW)	-	-	-	-	-	-	-	-	-
6500 K (Cold White)	-	-	-	MCWHD5 (930 mW Min)	MCWHL7 (930 mW Min)	-	-	SOLIS-1D (5.8 W) ^f	-	-
				MCWHD6 (942 mW Min) ^d	MCWHLP2 (942 mW Min) ^d					
6200 K (Cold White)	-	-	-	-	-	-	MCWHF2 (27.0 mW)	-	-	-
5000 K (Cold White)	-	-	LEDSW50 (110 mW)	-	-	-	-	-	-	-
4600 - 9000 K (Cold White)	-	-	-	-	-	-	-	-	-	LIUCWHA (250 mW)
4000 K (Warm White)	-	-	LEDSW40 (115 mW)	-	-	-	MWWHF2 (23.1 mW)	-	-	-
3000 K (Warm White)	-	-	LEDSW30 (100 mW)	MWWHD4 (1713 mW Min) ^d	MWWHL4 (570 mW Min)	-	-	SOLIS-2C (3.2 W) ^f	-	-
					MWWHLP2 (1713 mW Min) ^d					
5700 K (Day Light White)	-	-	-	-	-	-	-	SOLIS-3C (3.5 W)	-	-
470 - 850 nm (Broadband)	-	-	-	MBB1D1 (70 mW Min)	MBB1L3 (70 mW Min)	-	MBB1F1 (1.2 mW)	-	-	-
770 nm, 860 nm, & 940 nm (Broadband)	-	-	-	MBB2D1 (740 mW Min) ^d	MBB2L1 (650 mW Min) ^d	-	-	-	-	-
					MBB2LP1 (740 mW Min) ^d					

- These Collimated LEDs are compatible with the standard and epi-illumination ports on the following microscopes: Olympus BX/IX (Item # Suffix: -C1), Leica DMI (Item # Suffix: -C2), Zeiss Axioskop (Item # Suffix: -C4), and Nikon Eclipse (Bayonet Mount, Item # Suffix: -C5).
- Typical power when used with MM Fiber with Ø400 µm core, 0.39 NA.
- Our Multi-Wavelength LED Sources are available with select combinations of the LEDs at these wavelengths.
- Measured at 25 °C
- Typical power for LEDs with the Leica DMI collimation package (Item # Suffix: -C2).
- Minimum power for the collimated output of these LEDs. The collimation lens is installed with each LED.
- Typical power for LEDs with the Olympus BX and IX collimation package (Item # Suffix: -C1).
- Typical power for LEDs with the Nikon Eclipse collimation package (Item # Suffix: -C5).
- Percentage of LED intensity that emits in the blue portion of the spectrum, from 400 nm to 525 nm.
- Typical power for LEDs with the Zeiss Axioskop collimation package (Item # Suffix: -C4).

LED Array Light Sources (Power Supply Not Included)

Item #	LIU365A	LIU470A	LIU525B	LIU590A	LIU630A	LIU780A	LIU850A	LIUCWHA
Image (Click to Enlarge)								
Color	UV ^a	Blue	Green	Orange	Red	Infrared (IR)	Infrared (IR)	Cold White
Central Wavelength	365 nm	470 nm	525 nm	590 nm	630 nm	780 nm	850 nm	Color Temperature: 4600 K - 9000 K
Intensity ^b	0.26 mW/cm ²	4.0 mW/cm ²	1.9 mW/cm ²	1.4 mW/cm ²	2.4 mW/cm ²	3.7 mW/cm ²	3.5 mW/cm ²	3.0 mW/cm ²
Total Output Power	31 mW	253 mW	111 mW	109 mW	208 mW	315 mW	322 mW	250 mW
Typical Max Current	80 mA							
Supply Voltage	24 V							
Operating (Ambient) Temperature	0 to 40 °C (Non-Condensing)							
Storage Temperature	-40 to 70 °C							
Emission Spectrum ^c								
Intensity Distribution ^{b,d}								

- The visible appearance of this UV LED can vary from violet to cold white. This does not represent a significant change in the spectrum.
- When measured at a distance of 100 mm from the LED along the emission axis.
- Click the graph icon to view the emission spectrum of each LED unit. Click here to download raw data.
- Click the graph icon to view the intensity distribution of each LED unit. Click here to download raw data.

Part Number	Description	Price	Availability
LIU365A	365 nm UV LED Array Light Source (Power Supply Not Included)	\$743.15	Lead Time
LIU470A	470 nm Blue LED Array Light Source (Power Supply Not Included)	\$257.33	Today
LIU525B	525 nm Green LED Array Light Source (Power Supply Not Included)	\$257.33	Today
LIU590A	590 nm Orange LED Array Light Source (Power Supply Not Included)	\$360.48	Today
LIU630A	630 nm Red LED Array Light Source (Power Supply Not Included)	\$257.33	Today
LIU780A	780 nm Infrared (IR) LED Array Light Source (Power Supply Not Included)	\$313.90	Today
LIU850A	850 nm Infrared (IR) LED Array Light Source (Power Supply Not Included)	\$313.90	Today
LIUCWHA	Cold White LED Array Light Source (Power Supply Not Included)	\$257.33	Today

LED Array Power Supply and M8-Connectorized Power Cord

To power the LED arrays sold above, two options are available. The LIU-PS is a 24 VDC power supply designed to power the LIU LED Arrays at full intensity. It is shipped with four plug adapters: plug type A (North America and Japan), plug type C (Europe), plug type G (UK and Ireland), and plug type I (Australia and New Zealand).

We also offer the PAA630, a 2 m long power cord with an M8 connector on one end and four bare wires on the other end. The M8 connector is compatible with the receptacle on the LIU LED Arrays, allowing them to be easily connected to an existing 24 V power supply.

Note: This power supply is only intended for use with the LED arrays sold above. It is not compatible with our High-Power Mounted LEDs, Collimated LEDs, or Fiber-Coupled LEDs.

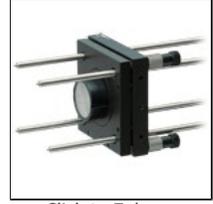


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Part Number	Description	Price	Availability
LIU-PS	DC Power Supply for LIU Series LED Array, 24 V	\$67.66	Today
PAA630	2 m LED Light Source Power Cord, M8 Straight Socket	\$27.18	Today

LED Mounting Adapter

The AD38 double-bored mounting adapter holds an LIU LED Array in place with a single 8-32 nylon-tipped setscrew. The adapter ring has a 2" outer diameter for compatibility with our Ø2" optic mounts, such as the KC2 kinematic mount shown to the right. To mount the LED array, simply secure it within the adapter with the top-located setscrew, slide the LED array and adapter into desired mount, and secure the adapter with either a setscrew or an SM2RR retaining ring, depending on the mount.



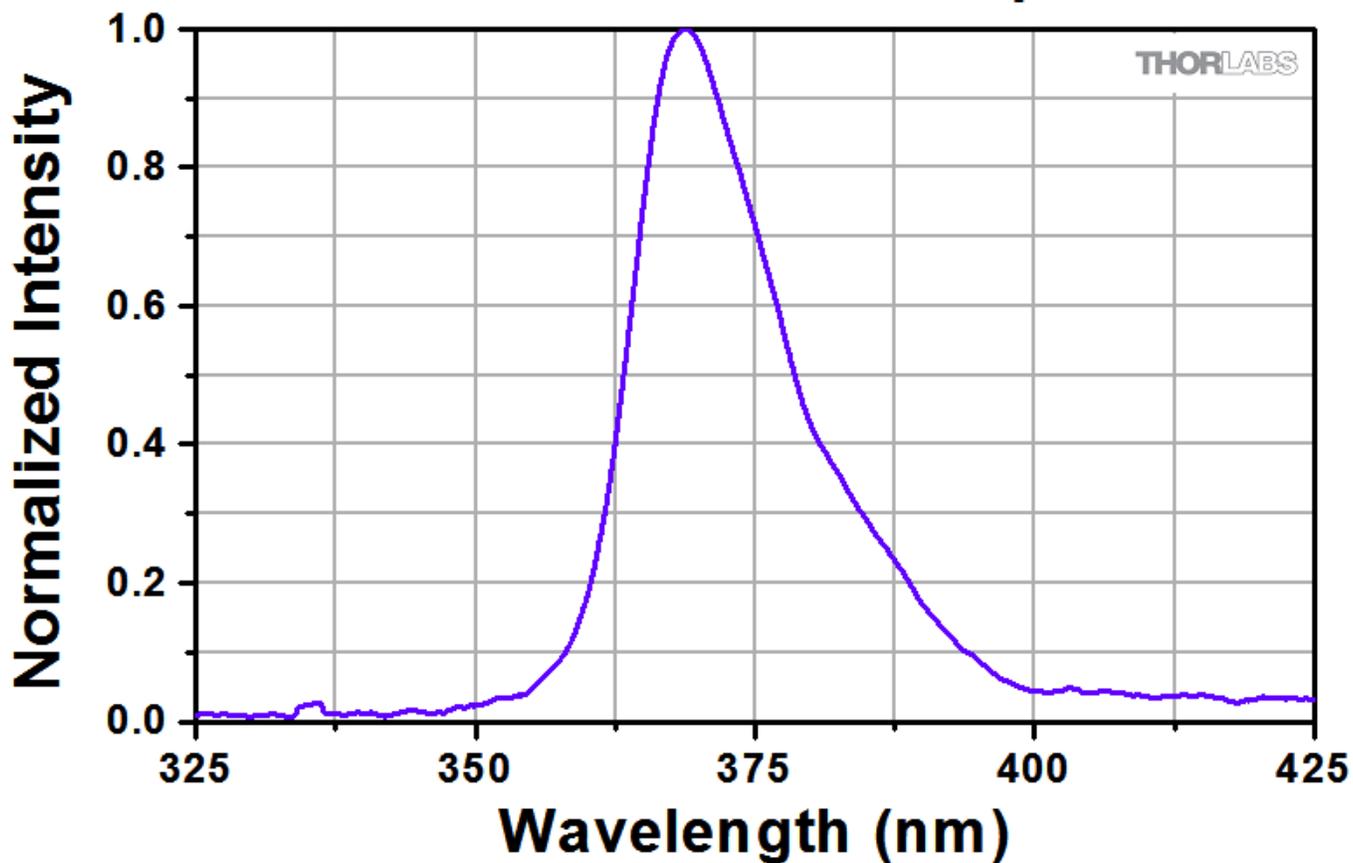
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The AD38 mounting adapter is used to secure an LED array inside a KC2 kinematic mount.

Part Number	Description	Price	Availability
AD38	Ø2" to Ø38 mm Mount Adapter for LIU Series LED Array	\$19.63	Today



LIU365A LED Emission Spectrum



LIU365A Typical Intensity Distribution

