

M735L3-C2 - June 1, 2015

Item # M735L3-C2 was discontinued on June 1, 2015. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

COLLIMATED LED LIGHT SOURCES FOR MICROSCOPY

- ▶ UV, Visible, and IR LEDs
- ▶ Mounted LED with Adjustable Collimation Optic
- ▶ Epi-Illumination Port Compatible with Olympus, Leica, Nikon, and Zeiss Microscopes



M625L3-C1
For Olympus BX/IX Microscopes



M625L3-C2
For Leica DMI Microscopes



M625L3-C5
For Nikon Eclipse Microscopes



M625L3-C4
For Zeiss Axioskop Microscopes

M505L3-C1 Used as a Light Source for an Olympus IX71



[Hide Overview](#)

OVERVIEW

Features

- Illumination Source for Microscope Epi-Illumination Ports, Projectors, and Custom Imaging Systems
- Optimized Thermal Management Provides Output Intensity Stability
- Adjustable Aspheric Collimation Optic with Low f/# (Approximately 0.8)
- Integrated Identification Chip (EEPROM) Stores LED Operating Parameters
- 4-Pin Female Mating Connector for Custom Power Supplies can be Purchased Separately
- Custom Adapters Available - Contact Tech Support for Details

Thorlabs' collimated LED assemblies can be easily connected to standard and epi-illumination ports on most readily available commercial microscopes, including Olympus,* Leica, Nikon, and Zeiss. Each collimated LED consists of a high-power mounted LED and a lamphouse-port-compatible housing that contains an AR-coated aspheric collimation optic (see the *Specs* tab for details). The collimation of the beam can be adjusted by changing the position of the aspheric

Item # Prefix	Color ^a	Spectrum ^a (Click for Details)		Nominal Wavelength ^{a,b}
M365L2	UV		Raw Data	365 nm
M385L2	UV		Raw Data	385 nm
M405L2	UV		Raw Data	405 nm
M455L3	Royal Blue		Raw Data	455 nm
M470L3	Blue		Raw Data	470 nm
M505L3	Cyan		Raw Data	505 nm
M530L3	Green		Raw Data	530 nm
M590L3	Amber		Raw Data	590 nm
M617L3	Orange		Raw Data	617 nm
M625L3	Red		Raw Data	625 nm
M660L3	Deep Red		Raw Data	660 nm
M735L3	Far Red		Raw Data	735 nm
M780L3	IR		Raw Data	780 nm
M850L3	IR		Raw Data	850 nm
M940L3	IR		Raw Data	940 nm
MCWHL5	Cold White		Raw Data	6500 K ^c

• Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual spectral output of any given LED will vary. Output plots and center wavelength

lens with respect to the LED. Interchanging LEDs is easy; simply unscrew one LED from the housing and replace it with a different mounted LED (purchased separately). If the wavelength you require is not sold on this page, our mounted high-power LEDs are available in additional wavelengths. We also offer collimation packages, which can be purchased separately from these LEDs.

specs are only intended to be used as a guideline. See the tables below for the output power through the collimation package for each LED.

- For LEDs in the visible spectrum, the nominal wavelength indicates the wavelength at which the LED appears brightest to the human eye. For UV and IR LEDs, the nominal wavelength corresponds to the peak wavelength. The nominal wavelength for visible LEDs may not correspond to the peak wavelength as measured by a spectrograph.
- Correlated color temperature.

The approximate total beam power through the collimation adapter is given in the tables below and on the *Specs* tab. The actual power at the sample plane will be lower due to losses specific to the optical set up of the microscope. If you wish to measure the power at the sample plane for your particular microscope setup, Thorlabs also offers a microscope slide power meter.

Like our high-power mounted LEDs, the package of these collimated LEDs is in direct contact with the heat sink to provide excellent thermal management. This minimizes the degradation of optical output power caused by increased LED temperatures. Please see the *Stability* tab for information on the stable output intensity of these collimated LEDs.

If compatibility with SM1 (1.035"-40) threading is preferable to compatibility with a microscope for your application, our mounted LEDs can be collimated using a Ø1" lens and lens tubes. This collimation method also allows for a smaller beam size than the collimators on this page. Please see the *Collimation* tab on our Mounted LEDs presentation for a detailed item list and instructions.

Compatible Controllers


Information concerning compatible controllers is provided on the *LED Drivers* tab. If the LED is driven with a DC2100, DC4100, or DC4104 controller, the integrated EEPROM chip will identify the LED and allow the controller to automatically set the proper current limit to protect the LED from being overdriven. The DC4100 and DC4104 require the DC4100-HUB when used with these LEDs.

*Due to the optical design of the transmitted lamphouse port of the BX and IX microscopes, it may be necessary to purchase a separate adapter available from Olympus.

[Hide Specs](#)

S P E C S

Common LED Specifications^a

Item # Prefix	Nominal Wavelength ^{b,c}	Color ^b	Spectrum ^b (Click for Details)	Min LED Power ^{d,d}	Typ. LED Power ^{b,d}	Max Drive Current (CW)	Typical Lifetime	Included Collimation Lens
M365L2	365 nm	UV	 Raw Data	190 mW	360 mW	700 mA	>10 000 h	ACL5040-A
M385L2	385 nm	UV	 Raw Data	270 mW	430 mW	700 mA	>10 000 h	ACL5040-A
M405L2	405 nm	UV	 Raw Data	410 mW	760 mW	1000 mA	100 000 h	ACL5040-A
M455L3	455 nm	Royal Blue	 Raw Data	900 mW	1020 mW	1000 mA	100 000 h	ACL5040-A
M470L3	470 nm	Blue	 Raw Data	650 mW	710 mW	1000 mA	100 000 h	ACL5040-A
M505L3	505 nm	Cyan	 Raw Data	400 mW	440 mW	1000 mA	100 000 h	ACL5040-A
M530L3	530 nm	Green	 Raw Data	350 mW	370 mW	1000 mA	100 000 h	ACL5040-A
M590L3	590 nm	Amber	 Raw Data	160 mW	170 mW	1000 mA	100 000 h	ACL5040-A
M617L3	617 nm	Orange	 Raw Data	600 mW	650 mW	1000 mA	100 000 h	ACL5040-A
M625L3	625 nm	Red	 Raw Data	700 mW	770 mW	1000 mA	100 000 h	ACL5040-A
M660L3	660 nm	Deep Red	 Raw Data	640 mW	700 mW	1200 mA	>65 000 h	ACL5040-A
M735L3	735 nm	Far Red	 Raw Data	260 mW	310 mW	1200 mA	>65 000 h	ACL5040-B
M780L3	780 nm	IR	 Raw Data	200 mW	300 mW	800 mA	>10 000 h	ACL5040-B
M850L3	850 nm	IR	 Raw Data	900 mW	1100 mW	1000 mA	100 000 h	ACL5040-B
M940L3	940 nm	IR	 Raw Data	800 mW	1000 mW	1000 mA	100 000 h	ACL5040-B
MCWHL5 ^e	6500 K ^f	Cold White	 Raw Data	800 mW	840 mW	1000 mA	100 000 h	ACL5040-A

- Specifications for the LEDs without collimating adapters are given in this table. Please see the second table on this tab for specifications pertaining to the LED with the collimating adapter attached.
- Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual spectral output of any given

LED will vary. Output plots and center wavelength specs are only intended to be used as a guideline.

- For LEDs in the visible spectrum, the nominal wavelength indicates the wavelength at which the LED appears brightest to the human eye. For UV and IR LEDs, the nominal wavelength corresponds to the peak wavelength. The nominal wavelength for visible LEDs may not correspond to the peak wavelength as measured by a spectrograph.
- For the bare LED. See the table below for total beam power with the collimation package.
- The MCWHL5-C LEDs may not turn off completely when modulated at frequencies above 5 kHz, as the white light is produced by optically stimulating emission from phosphor.
- Correlated color temperature. The wavelength range corresponding to >10% power is approximately 435 - 675 nm.

Specifications for LED with Collimating Microscope Adapter Attached

Item # Suffix	-C1	-C2	-C4	-C5
Compatible Microscope^a	Olympus BX and IX	Leica DMI	Zeiss Axioskop	Nikon Eclipse (Bayonet Mount)
Beam Diameter^{b,c}	50 mm	37 mm	44 mm	43 mm
Beam Area^b	1960 mm ²	1080 mm ²	1520 mm ²	1450 mm ²
Item # Prefix	Total Beam Power^b			
M365L2	120 mW	60 mW	80 mW	80 mW
M385L2	170 mW	90 mW	110 mW	120 mW
M405L2	440 mW	260 mW	360 mW	360 mW
M455L3	500 mW	360 mW	430 mW	400 mW
M470L3	350 mW	250 mW	310 mW	300 mW
M505L3	210 mW	150 mW	180 mW	170 mW
M530L3	170 mW	130 mW	150 mW	150 mW
M590L3	80 mW	60 mW	70 mW	70 mW
M617L3	320 mW	230 mW	280 mW	260 mW
M625L3	380 mW	270 mW	330 mW	300 mW
M660L3	600 mW	370 mW	420 mW	410 mW
M735L3	160 mW	100 mW	140 mW	130 mW
M780L3	210 mW	130 mW	180 mW	170 mW
M850L3	480 mW	330 mW	400 mW	370 mW
M940L3	430 mW	320 mW	380 mW	340 mW
MCWHL5	440 mW	320 mW	380 mW	340 mW

- Standard or Epi-Illumination Port Required.
- Due to variations in the manufacturing process and operating parameters such as temperature and current, the total beam power, beam diameter, and beam area of any given LED will vary.
- At the output aperture of the collimation package.

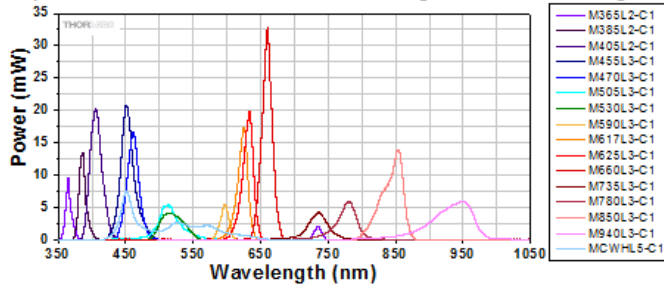
[Hide Relative Power](#)

RELATIVE POWER

The actual spectral output and total output power of any given LED will vary due to variations in the manufacturing process and operating parameters, such as temperature and current. The typical total beam power of each collimated LED is specified to help you select an LED that suits your needs. In order to provide a point of comparison for the relative powers of LEDs with different nominal wavelengths, the spectra in the plots below have been scaled to the typical total beam power of each collimated LED. An Excel file containing the normalized and scaled spectra for each collimation package can be downloaded using the link below each plot.

Collimated LEDs for Olympus BX and IX Microscopes

Spectra Scaled to Total Beam Power Through Collimation Package

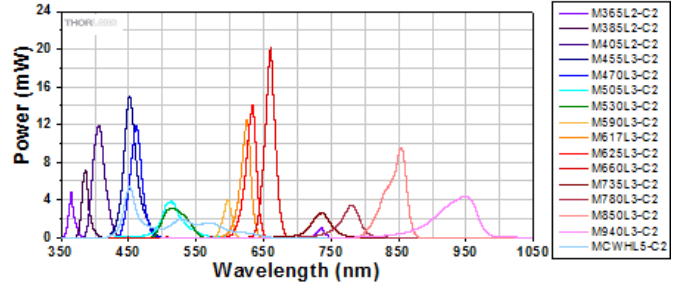


Click to Enlarge

An Excel file containing the data shown in the plot above may be found here.

Collimated LEDs for Leica DMI Microscopes

Spectra Scaled to Total Beam Power Through Collimation Package

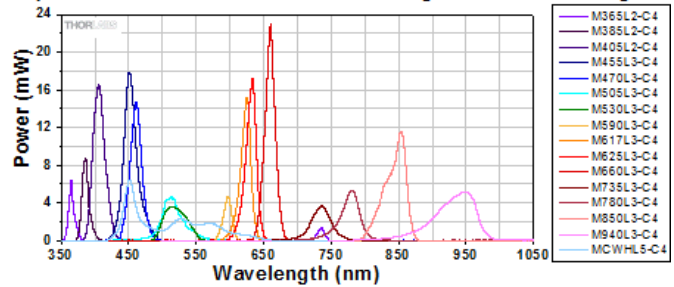


Click to Enlarge

An Excel file containing the data shown in the plot above may be found here.

Collimated LEDs for Zeiss Axioskop Microscopes

Spectra Scaled to Total Beam Power Through Collimation Package

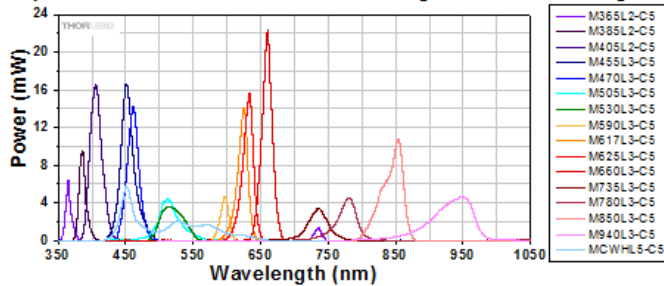


Click to Enlarge

An Excel file containing the data shown in the plot above may be found here.

Collimated LEDs for Nikon Eclipse Microscopes

Spectra Scaled to Total Beam Power Through Collimation Package



Click to Enlarge

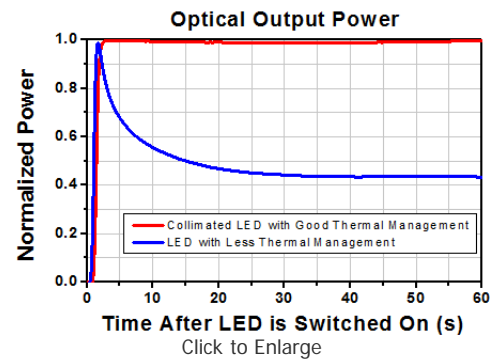
An Excel file containing the data shown in the plot above may be found here.

[Hide Stability](#)

STABILITY

Optimized Thermal Management

The thermal dissipation performance of these collimated LEDs has been optimized for stable power output. The heat sink is directly mounted to the LED mount so as to provide optimal thermal contact. By doing so, the degradation of optical output power that can be attributed to increased LED junction temperature is minimized (see the graph to the right).



[Hide Pin Diagram](#)

PIN DIAGRAM

Pin Connection - Male

The diagram to the right shows the male connector of the collimated LED assembly. It is a standard M8 x 1 sensor circular connector. Pins 1 and 2 are the connection to the LED. Pin 3 and 4 are used for the internal EEPROM in these LEDs. If using an LED driver that was not purchased from Thorlabs, be careful that the appropriate connections are made to Pin 1 and Pin 2 and that you do not attempt to drive the LED through the EEPROM pins.



Pin	Specification	Color
1	LED Anode	Brown
2	LED Cathode	White
3	EEPROM GND	Black
4	EEPROM IO	Blue

[Hide LED Drivers](#)

LED DRIVERS

Compatible Drivers	LEDD1B	DC2100 ^a	DC4100 ^{a,b}	DC4104 ^{a,b}
Click Photos to Enlarge				
Max LED Driver Current Output	1.2 A	2.0 A	1.0 A per Channel	1.0 A per Channel
Max LED Driver Forward Voltage	12 V	24 V	5 V	5 V
Max Modulation Frequency Using External Input	5 kHz	100 kHz ^c	100 kHz ^c (Simultaneous Across all Channels)	100 kHz ^c (Independently Controlled Channels)
External Control Interface(s)	Analog (BNC)	USB 2.0 and Analog (BNC)	USB 2.0 and Analog (BNC)	USB 2.0 and Analog (8-Pin)
Main Driver Features	Very Compact Footprint 60 mm x 73 mm x 104 mm (W x H x D)	Individual Pulse Width Control	4 Channels ^b	4 Channels ^b
EEPROM Compatible: Reads Out LED Data for LED Settings	-			
LCD Display	-			

- Automatically limits to LED's max current via EEPROM readout.
- The DC4100 or DC4104 can power and control up to four LEDs simultaneously when used with the DC4100-HUB. The LEDs on this page all require the DC4100-HUB when used with the DC4100 or DC4104.
- The MCWHL5-C LEDs may not turn off completely when modulated at frequencies above 5 kHz, as the white light is produced by optically stimulating emission from phosphor.

Note: The LEDs on this page are not compatible with the DC3100 drivers sold with our Modulated LEDs for FLIM Microscopy kits.

Collimated LED Light Sources for Olympus BX and IX Microscopes



- ▶ Approximate Beam Diameter: 50 mm
- ▶ Approximate Beam Area: 1960 mm²
- ▶ AR-Coated Aspheric Collimation Lens (EFL: 40 mm)
- ▶ See the *Specs* Tab for a Complete List of Specifications
- ▶ Cable Length: 2 m

Item #	Total Beam Power ^a
M365L2-C1	120 mW
M385L2-C1	170 mW
M405L2-C1	440 mW
M455L3-C1	500 mW
M470L3-C1	350 mW
M505L3-C1	210 mW
M530L3-C1	170 mW
M590L3-C1	80 mW

Item #	Total Beam Power ^a
M617L3-C1	320 mW
M625L3-C1	380 mW
M660L3-C1	600 mW
M735L3-C1	160 mW
M780L3-C1	210 mW
M850L3-C1	480 mW
M940L3-C1	430 mW
MCWHL5-C1	440 mW

Please note: Due to the optical design of the transmitted lamphouse port of the BX and IX microscopes, it may be necessary to purchase a separate adapter that is available from Olympus.

- After collimation package. Due to variations in the manufacturing process and operating parameters such as temperature and current, the total beam power of any given LED will vary.

Part Number	Description	Price	Availability
M365L2-C1	UV (365 nm) Collimated LED for Olympus BX & IX, 700 mA	\$724.00	Today
M385L2-C1	UV (385 nm) Collimated LED for Olympus BX & IX, 700 mA	\$724.00	Today
M405L2-C1	UV (405 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$724.00	Today
M455L3-C1	Royal Blue (455 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$523.00	Today
M470L3-C1	Blue (470 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$523.00	Today
M505L3-C1	Cyan (505 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$523.00	Today
M530L3-C1	Green (530 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$523.00	Today
M590L3-C1	Amber (590 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$449.00	Today
M617L3-C1	Orange (617 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$449.00	Today
M625L3-C1	Red (625 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$449.00	Today
M660L3-C1	Deep Red (660 nm) Collimated LED for Olympus BX & IX, 1200 mA	\$467.00	Today
M735L3-C1	IR (735 nm) Collimated LED for Olympus BX & IX, 1200 mA	\$497.00	Today
M780L3-C1	IR (780 nm) Collimated LED for Olympus BX & IX, 800 mA	\$497.00	Today
M850L3-C1	IR (850 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$497.00	Today
M940L3-C1	IR (940 nm) Collimated LED for Olympus BX & IX, 1000 mA	\$497.00	Today
MCWHL5-C1	Cold White Collimated LED for Olympus BX & IX, 1000 mA	\$479.00	Today

Collimated LED Light Sources for Leica DMI Microscopes



- ▶ Approximate Beam Diameter: 37 mm
- ▶ Approximate Beam Area: 1080 mm²
- ▶ AR-Coated Aspheric Collimation Lens (EFL = 40 mm)
- ▶ See the *Specs* Tab for a Complete List of Specifications
- ▶ Cable Length: 2 m

Item #	Total Beam Power ^a
M365L2-C2	60 mW
M385L2-C2	90 mW
M405L2-C2	260 mW
M455L3-C2	360 mW
M470L3-C2	250 mW
M505L3-C2	150 mW
M530L3-C2	130 mW
M590L3-C2	60 mW

Item #	Total Beam Power ^a
M617L3-C2	230 mW
M625L3-C2	270 mW
M660L3-C2	370 mW
M735L3-C2	100 mW
M780L3-C2	130 mW
M850L3-C2	330 mW
M940L3-C2	320 mW
MCWHL5-C2	320 mW

- After collimation package. Due to variations in the manufacturing process and operating parameters such as temperature and current, the total beam power of any given LED will vary.

Part Number	Description	Price	Availability
M365L2-C2	UV (365 nm) Collimated LED for Leica DMI, 700 mA	\$724.00	Today

M385L2-C2	UV (385 nm) Collimated LED for Leica DMI, 700 mA	\$724.00	Today
M405L2-C2	UV (405 nm) Collimated LED for Leica DMI, 1000 mA	\$724.00	Today
M455L3-C2	Royal Blue (455 nm) Collimated LED for Leica DMI, 1000 mA	\$523.00	Today
M470L3-C2	Blue (470 nm) Collimated LED for Leica DMI, 1000 mA	\$523.00	Today
M505L3-C2	Cyan (505 nm) Collimated LED for Leica DMI, 1000 mA	\$523.00	Today
M530L3-C2	Green (530 nm) Collimated LED for Leica DMI, 1000 mA	\$523.00	Today
M590L3-C2	Amber (590 nm) Collimated LED for Leica DMI, 1000 mA	\$449.00	Today
M617L3-C2	Orange (617 nm) Collimated LED for Leica DMI, 1000 mA	\$449.00	Today
M625L3-C2	Red (625 nm) Collimated LED for Leica DMI, 1000 mA	\$449.00	Today
M660L3-C2	Deep Red (660 nm) Collimated LED for Leica DMI, 1200 mA	\$467.00	Today
M735L3-C2	IR (735 nm) Collimated LED for Leica DMI, 1200 mA	\$497.00	Today
M780L3-C2	IR (780 nm) Collimated LED for Leica DMI, 800 mA	\$497.00	Today
M850L3-C2	IR (850 nm) Collimated LED for Leica DMI, 1000 mA	\$497.00	Today
M940L3-C2	IR (940 nm) Collimated LED for Leica DMI, 1000 mA	\$497.00	Today
MCWHL5-C2	Cold White Collimated LED for Leica DMI, 1000 mA	\$479.00	Today

[Hide Collimated LED Light Sources for Nikon Eclipse \(Bayonet Mount\) Microscopes](#)

Collimated LED Light Sources for Nikon Eclipse (Bayonet Mount) Microscopes



- ▶ Approximate Beam Diameter: 43 mm
- ▶ Approximate Beam Area: 1450 mm²
- ▶ AR-Coated Aspheric Collimation Lens (EFL: 40 mm)
- ▶ See the *Specs* Tab for a Complete List of Specifications
- ▶ Cable Length: 2 m

Item #	Total Beam Power ^a
M365L2-C5	80 mW
M385L2-C5	120 mW
M405L2-C5	360 mW
M455L3-C5	400 mW
M470L3-C5	300 mW
M505L3-C5	170 mW
M530L3-C5	150 mW
M590L3-C5	70 mW

Item #	Total Beam Power ^a
M617L3-C5	260 mW
M625L3-C5	300 mW
M660L3-C5	410 mW
M735L3-C5	130 mW
M780L3-C5	170 mW
M850L3-C5	370 mW
M940L3-C5	340 mW
MCWHL5-C5	340 mW

- After collimation package. Due to variations in the manufacturing process and operating parameters such as temperature and current, the total beam power of any given LED will vary.

Part Number	Description	Price	Availability
M365L2-C5	UV (365 nm) Collimated LED for Nikon Eclipse, 700 mA	\$757.00	Today
M385L2-C5	UV (385 nm) Collimated LED for Nikon Eclipse, 700 mA	\$757.00	Today
M405L2-C5	UV (405 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$757.00	Today
M455L3-C5	Royal Blue (455 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$556.00	Today
M470L3-C5	Blue (470 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$556.00	3-5 Days
M505L3-C5	Cyan (505 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$556.00	Today
M530L3-C5	Green (530 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$556.00	Today
M590L3-C5	Amber (590 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$482.00	Today
M617L3-C5	Orange (617 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$482.00	Today
M625L3-C5	Red (625 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$482.00	Today
M660L3-C5	Deep Red (660 nm) Collimated LED for Nikon Eclipse, 1200 mA	\$500.00	Today
M735L3-C5	Far Red (735 nm) Collimated LED for Nikon Eclipse, 1200 mA	\$535.00	Today
M780L3-C5	IR (780 nm) Collimated LED for Nikon Eclipse, 800 mA	\$535.00	Today
M850L3-C5	IR (850 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$535.00	Today
M940L3-C5	IR (940 nm) Collimated LED for Nikon Eclipse, 1000 mA	\$535.00	Today
MCWHL5-C5	Cold White Collimated LED for Nikon Eclipse, 1000 mA	\$516.00	Today

[Hide Collimated LED Light Sources for Zeiss Axioskop Microscopes](#)

Collimated LED Light Sources for Zeiss Axioskop Microscopes



- ▶ Approximate Beam Diameter: 44 mm
- ▶ Approximate Beam Area: 1520 mm²
- ▶ AR-Coated Aspheric Collimation Lens (EFL: 40 mm)
- ▶ See the *Specs* Tab for a Complete List of Specifications
- ▶ Cable Length: 2 m

Item #	Total Beam Power ^a	Item #	Total Beam Power ^a
M365L2-C4	80 mW	M617L3-C4	280 mW
M385L2-C4	110 mW	M625L3-C4	330 mW
M405L2-C4	360 mW	M660L3-C4	420 mW
M455L3-C4	430 mW	M735L3-C4	140 mW
M470L3-C4	310 mW	M780L3-C4	180 mW
M505L3-C4	180 mW	M850L3-C4	400 mW
M530L3-C4	150 mW	M940L3-C4	380 mW
M590L3-C4	70 mW	MCWHL5-C4	380 mW

- After collimation package. Due to variations in the manufacturing process and operating parameters such as temperature and current, the total beam power of any given LED will vary.

Part Number	Description	Price	Availability
M365L2-C4	UV (365 nm) Collimated LED for Zeiss Axioskop, 700 mA	\$724.00	Today
M385L2-C4	UV (385 nm) Collimated LED for Zeiss Axioskop, 700 mA	\$724.00	Today
M405L2-C4	UV (405 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$724.00	Today
M455L3-C4	Royal Blue (455 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$523.00	Today
M470L3-C4	Blue (470 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$523.00	Today
M505L3-C4	Cyan (505 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$523.00	Today
M530L3-C4	Green (530 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$523.00	Today
M590L3-C4	Amber (590 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$449.00	Today
M617L3-C4	Orange (617 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$449.00	Today
M625L3-C4	Red (625 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$449.00	Today
M660L3-C4	Deep Red (660 nm) Collimated LED for Zeiss Axioskop, 1200 mA	\$467.00	Today
M735L3-C4	IR (735 nm) Collimated LED for Zeiss Axioskop, 1200 mA	\$497.00	Today
M780L3-C4	IR (780 nm) Collimated LED for Zeiss Axioskop, 800 mA	\$497.00	Today
M850L3-C4	IR (850 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$497.00	Today
M940L3-C4	IR (940 nm) Collimated LED for Zeiss Axioskop, 1000 mA	\$497.00	Today
MCWHL5-C4	Cold White Collimated LED for Zeiss Axioskop, 1000 mA	\$479.00	Today

[Hide Mounted LED Mating Connector](#)

Mounted LED Mating Connector



- ▶ Pico (M8) Receptacle
- ▶ Female 4-Pin for Front Mounting
- ▶ 0.5 m Long, 24 AWG Wires
- ▶ M8 x 0.5 Panel Mount Thread
- ▶ IP 67 and NEMA 6P Rated

The CON8ML-4 connector can be used to mate mounted LEDs featured on this page to user-supplied power supplies. We also offer a male 4-Pin M8 connector cable (Item # CAB-LEDD1).



CON8ML-4 Shown Connected to the 4-Pin M8 Plug of Mounted LED

Pin	Color	Specification
1	Brown	LED Anode
2	White	LED Cathode
3	Black	EEPROM GND
4	Blue	EEPROM IO

Part Number	Description	Price	Availability
CON8ML-4	4-Pin Female Mating Connector for Mounted LEDs	\$30.00	Today

Visit the *Collimated LED Light Sources for Microscopy* page for pricing and availability information:
http://www.thorlabs.com/newgrouppage9.cfm?objectgroup_id=2615