

Date: _____ Customer: _____
 Project: _____
 Type: _____ Qty: _____



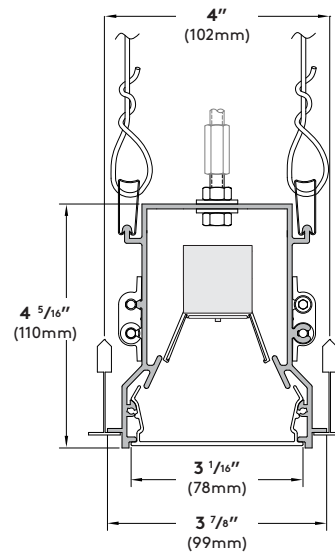
M-LED for 4" Technical Ceilings

Recessed Linear LED for 4" Technical Ceiling Systems



Order Code:	LR4TZ - - - - - TBZ - - - - -							
LR4TZ	Series LR4TZ M-LED for 4" Technical Ceiling Systems							
Light Engine	1B45^{1,2} 713lm/10.8W per foot	1B40^{1,2} 645lm/9.6W per foot	1B35¹ 567 lm/8.4W per foot	1B30¹ 485lm/7.0W per foot	1B25¹ 434lm/6.2W per foot	1B20¹ 328lm/4.6W per foot	¹ Values calculated from a 4' fixture @4000K using LW shielding and DIM driver. For additional information please see page 2. ² Not available with Lutron	
CCT	27 2700K 90+ CRI	30 3000K 90+ CRI	35 3500K 90+ CRI	40 4000K 90+ CRI				
Shielding	LW LED Optimized White Lens	MI Clear Lens with Microprism						
TBZ	Mounting TBZ Technical Ceilings with suspension clips and 1" 1/4-20 stud							
Nominal Fixture Length	02 2 ft.	04 4 ft.	05 5 ft.	06 6 ft.	08 8 ft.	XX Runs (over 8') in nominal 1' steps to fit into 4" Technical Ceiling Systems	See pages 2 and 3 for additional details.	
Finish	WH* White	BL* Semi-Matte Black	SV* Silver	SP* Specify Premium Color			* Custom colors are available, please consult factory	
Voltage	120 120 Volt	277 277 Volt	UNV 120 through 277V 50/60Hz capable	347 347 Volt (consult factory)				
Driver	DIM³ 0-10V (Linear)	DM^{3,5} eldoLED SOLOdrive 0-10V (Linear)	DML^{3,5} eldoLED SOLO- drive 0-10V (Logarithmic)	DMD^{3,5} eldoLED DALI (Logarithmic)	DC2^{3,4} Lutron 2-Wire	DE1³ Lutron EcoSystem	DC5 Lutron 5-Series (consult factory)	³ See page 4 for full details ⁴ 120V only ⁵ EM option only available in 4' length
Fixture Options	DL Damp Location Rated	FS In-line Fuse	SS Separate Switching	CCEA CCEA Approved	#P1⁶ 1 Cell Piix 332lm/3.5W per cell	#P3⁶ 3 Cell Piix 332lm/3.5W per cell	► Provide quantity (#) of Piix™ modules required. ► Piix™ modules provided with same CCT, finish and driver as LR4TZ. Standard module provided with Black Baffle and 35° reflectors. For other configurations, consult factory.	⁶ Piix™ modules are switched separate standard. Minimum 6' LR4TZ required for Piix™ module.
Example: 2P1 will yield an M100 with two (2) 1 cell Piix™ modules located at either end of the fixture.								
Sensor Options	xE^{7,8} Enlighted	xS1^{7,8} Sensor Switch Daylight	xS2^{7,8} Sensor Switch Occ/Vac	xS3^{7,8} Sensor Switch Occ/Vac/ Daylight	xSN nLight enabled (consult factory)	xV Lutron Vive (consult factory)	⁷ Minimum fixture length 2'. See page 6 for full details and restrictions. ⁸ Requires DIM driver (0-10V)	
Emergency Options	EC^{9,19} Emergency Circuit Wiring	EMR Remote Micro Inverter (consult factory)	EM^{9,10,11} Integral EM battery pack (non-IC rated)					⁹ See page 5 for full details and restrictions ¹⁰ For emergency options with sensors, please consult factory ¹¹ EM avail in 4' and 26'. Please consult factory for 5'.





Construction:

Housing - Continuous, low copper 6063-T6 extruded aluminum profile with aluminum endcaps, available as Individual fixtures (up to 8') or Runs.

Flange - Extruded aluminum flange fits both Armstrong TechZone™ 5/16" Slot Grid and 3/16" Tegular Grid ceiling systems.

Geartray - Low copper 6063-T6 extruded aluminum profile.

Shielding - Extruded, impact resistant acrylic snap in lens:

- LED Optimized White Lens (LW)
- Clear Lens with Microprism (MI)

Mounting(s) - M-LED for 4" Technical ceilings works with Technical Ceiling Systems 5/16" Slot Grid and 3/16" Tegular Grid (see page 3 for details).

Standard Luminaire lengths - All standard luminaires are supplied in nominal lengths to ensure full, even, illumination. Runs are available in nominal 1' increments starting at the nominal 8' fixture length, to fit Technical Ceiling Systems.

** Individual luminaires are not joinable in the field.

Exact length luminaires - Individual luminaires and Runs are available in exact lengths to meet your project needs. Please consult factory with your requirements.

** Lens luminance may soften at the very ends of the straight sections for exact length luminaires.

LED Joiner(s) - Runs are supplied in multiple housings that are joined together in the field using the supplied LR4TZ Joiner System. This allows ease of installation and ensures a uniform appearance (see page 5 for detail).

Weight: 2.4 lb. per foot.

Electrical/Performance:

LED Light Engine - Brand-name mid-power LEDs create a high efficiency LED light engine able to provide a lumen maintenance of 96% at 25,000 hours and 93% at 60,000 hours at 25°C per TM-21 reports. Reported L70 greater than 60,000 hours.

Delivered Lumens - Due to LED manufacturer's tolerances the listed output has a ±5% tolerance.

CCT - Available in 2700K, 3000K, 3500K and 4000K, tolerance within a 3-step MacAdam ellipse.

CRI - 90+.

All Drivers - High efficiency, constant current, soft start, Electronic Class 2 with a PFC>0.90. For more detailed information on the available drivers please see page 4.

Sensors - Selux offers a variety of integral sensor options. For details and specifications, please refer to page 6.

Emergency - There are multiple emergency options available - emergency circuit, remote micro inverter, and integral battery pack. All options compliant with UL 924 listed emergency luminaire. Please consult factory for use of sensors with emergency options. For more details on EC and EM options, see page 5.

Thermal Performance:

Ambient Operating Temperature - Luminaires suitable for maximum ambient temperature of 35°C (95°F) for all drivers.

Luminaires are suitable for minimum ambient temperatures of:
-40°C (-40°F) for DIM, DM, DML, and DMD drivers.
0°C (32°F) for DC2 and DE1 drivers.

Luminaire Finish:

Powder Coat - All Selux luminaires are finished in high quality polyester powder coating in our Tiger Drylac certified facility and are tested in accordance with test specifications for coatings from ASTM and PCI.

All products undergo a five stage intensive pretreatment process where product is thoroughly cleaned, phosphated, and sealed. Selux powder coated products provide excellent salt and humidity resistance as well as ultra violet resistance for color retention.

Standard interior colors are White (WH), Semi-Matte Black (BL), and Silver (SV). Selux premium colors (SP) are available, please specify from your Selux color selection guide. LM-79 testing is performed using white finish. Other finishes will impact light output.

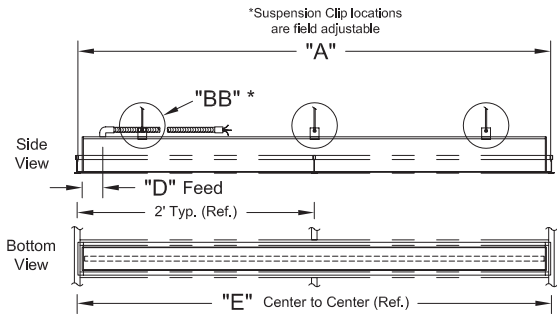
Warranty:

5 Year Limited LED Luminaire Warranty - Selux offers a 5 Year Limited Warranty to the original purchaser that the MLED series LED luminaire shall be free from defects in material and workmanship for up to five (5) years from date of shipment. This limited warranty covers the LED driver and LED light engine when installed according to Selux instructions and operated within the Ambient Temperature. For additional details and exclusions, see "Selux Terms and Condition of Sale."

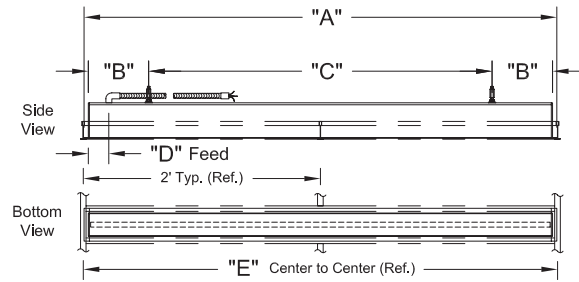
Certifications and Compliance:

NRTL - For Dry and Damp location
(I.E. cULus; cCSAus)
ARRA Compliant
RoHS Compliant
IC Rated*
*EM option is Non-IC rated

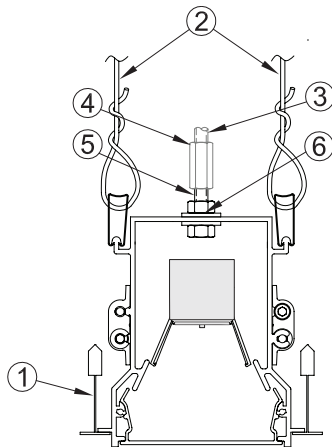
Technical Ceiling (TBZ) Mounting using Suspension Wire



Technical Ceiling (TBZ) Mounting using 1/4"-20 stud



Technical Ceiling 1/16" Tegular mounting (TBZ) (Wire Suspension or 1/4"-20 Stud)



1. 1/16" Technical Ceiling Tegular grid (shown as ref.)
2. Support wire to structure (supplied and installed by others).
3. 1/4"-20 Threaded rod to structure (supplied and installed by others).
4. 1/4"-20 Coupler hardware (supplied and installed by others).
5. 1" 1/4"-20 Stud (by Selux).
6. Ø1/16" [Ø7mm] mounting hole.

Please Note:
Luminaire supplied with both mountings shown above. They are shown above separately for clarification. Installer to select which mounting is required.

Technical Ceiling Systems Tegular (TBZ) and Flush (TBF) - Dimensions

Nominal Length	"A" Housing Length		"B" End Suspensions		"BB" Suspension Clips	** "C" (Ref.) Mid. Suspension		"D" Feed Location		"E" Grid Spacing
	Feet/Inch	MM	Feet/Inch	MM	Quantity	Feet/Inch	MM	Feet/Inch	MM	Feet
02 (2 ft.)*	1' - 11 7/16"	595	0' - 1 5/8"	41	4x	1' - 8 3/16"	513	0' - 1 1/8"	28	2' Center to Center
04 (4 ft.)*	3' - 11 7/16"	1205	0' - 6 1/8"	156	6x	2' - 11 3/16"	894	0' - 2 1/8"	54	4' Center to Center
05 (5 ft.)*	4' - 11 7/16"	1510	0' - 6 1/8"	156	6x	3' - 11 3/16"	1199	0' - 2 1/8"	54	5' Center to Center
06 (6 ft.)*	5' - 11 7/16"	1815	0' - 6 1/8"	156	6x	4' - 11 3/16"	1504	0' - 2 1/8"	54	6' Center to Center
08 (8 ft.)*	7' - 11 7/16"	2424	0' - 6 1/8"	156	8x	6' - 11 3/16"	2113	0' - 2 1/8"	54	8' Center to Center

*For other lengths, consult factory.

**Dimension(s) rounded to the nearest 1/16" with a ± 1/16" (1mm) tolerance.

Drivers:

0-10V linear dimming (DIM)

Luminaires supplied with drivers offering the capability of either normal switched operation of 0-10V dimming for linear dimming curve. Fixtures ship wired for dimming. For on/off functionality, simply cap the dimming leads. Minimum dimming level preset at factory to 1%. (Due to size constraints, 1' luminaires are supplied with a driver from a different manufacturer than 2' and above luminaires. For details, please consult factory).

eldoLED SOLOdrive 0-10V linear dimming (DM)

Luminaires supplied with SOLOdrive 0-10V dimming driver for linear dimming curve. Minimum dimming level preset at factory to 1%. For "dim to dark" (down to 0.1%), please consult factory.

eldoLED SOLOdrive 0-10V logarithmic dimming (DML)

Luminaires supplied with SOLOdrive 0-10V dimming driver for logarithmic dimming curve. Minimum dimming level preset at factory to 1%. For "dim to dark" (down to 0.1%), please consult factory.

eldoLED SOLOdrive DALI dimming (DMD)

Luminaires supplied with SOLOdrive DALI dimming driver for logarithmic dimming curve. Minimum dimming level preset at factory to 1%. For "dim to dark" (down to 0.1%), please consult factory.

LUTRON 2-wire dimming (DC2)

Luminaires supplied with Hi-Lume 2-wire dimming driver (120V only) programmed for Constant Current Reduction (CCR). For Pulse Width Modulation (PWM) dimming, please consult factory. Minimum dimming level down to 1%.

LUTRON EcoSystem dimming (DE1)

Luminaires supplied with Hi-Lume EcoSystem (4 wire, digital link) dimming driver programmed for Constant Current Reduction (CCR). For Pulse Width Modulation (PWM) dimming, please consult factory. Minimum dimming level down to 1% with SoftOn/FadeToBlack.

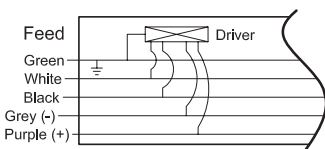
* For control recommendations, please contact driver manufacturer.

Driver Quantity									
	1 ft.	2 ft.	3 ft.	4 ft.	5 ft.	6 ft.	7 ft.	8 ft.	RUN
DIM	1	1	1	1	2	2	2	2	Approximately 1 driver per 4 ft.
DM, DML, and DMD drivers	N/A	1	1	1	1	1	2	2	Approximately 1 driver per 4 ft.
DC2 and DE1 drivers	N/A	1	1	1	2	2	2	2	Consult Factory

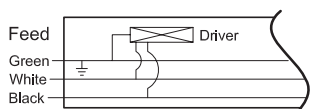
*For inrush and control current, please refer to the driver manufacturers' spec sheets.

Wiring Diagrams

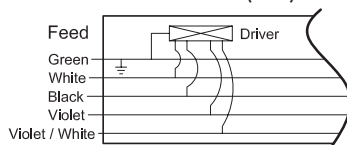
0-10V linear (DIM)
 0-10V linear eldoLED SOLOdrive (DM)
 0-10V logarithmic eldoLED SOLOdrive (DML)
 DALI eldoLED SOLOdrive (DMD)



Lutron 2-Wire (DC2)



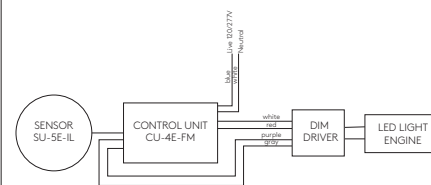
Lutron EcoSystem (DE1)
 Lutron 5-Series (DC5)



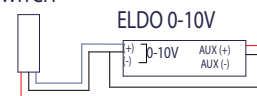
Standard Wiring supplied for all drivers.	Green = Ground White = Neutral Black = Hot
- The following wire(s) are in addition to the standard above -	
DIM, DM, DML & DMD	Gray = (-) DALI or 0-10V Dimming Control Purple = (+) DALI or 0-10V Dimming Control
DC2	No additional wires
DE1, DC5	Violet = "E1" Digital Link Dimming Control Violet/White = "E2" Digital Link Dimming Control

Sensor Wiring Diagrams

ENLIGHTED



SENSOR SWITCH



Fuse (FS) - Fusing, luminaires supplied with a in-line fuse located on the hot wire for each feed. (supplied with an 8A slow burn fuse).

Damp Location (DL) - Luminaires are suitable for use in damp location(s). Examples of such locations include protected areas under canopies, marquees, roofed porches, and similar locations where the fixture(s) are protected from direct contact with rain, snow, or excessive moisture (such as ocean spray). Interior locations include areas subject to moderate degrees of moisture, such as basements and certain barns and cold storage buildings.

*For Damp Location with sensors, please consult factory.

Separate Switching (SS) - Luminaires available with separately switched 4' (nominal) sections starting at 7' and up. Luminaire is intended to be wired to the same panel/breaker (not intended for Emergency use).

- To specify this option, the number of separately switched sections and locations of these sections must be provided at time of order.

*If the project requires different separate switching than outlined above please consult the factory.

*For Separate Switching with sensors, please consult factory.

Emergency Circuit (EC) - Luminaires with EC option compliant to UL 924 listed emergency luminaire. EC luminaires are intended to be wired to separate panels/breakers for emergency use.

- For 1' to 6' nominal luminaires, the entire fixture is wired for operation on emergency circuit.

- For 7' and up nominal luminaires, the first 4' nominal length is wired for operation by a separate EM circuit by default to meet the required "Life Safety Code" (NFPA 101).

*If a different configuration is needed please consult the factory.

*For EC with sensors, please consult factory.

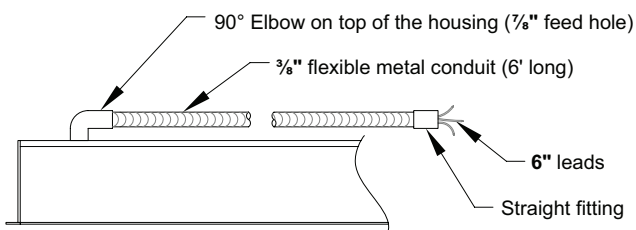
Emergency Battery (EM) - Luminaires with EM option are provided with factory installed emergency battery. In the event of an emergency, EM battery will illuminate a nominal 4' section at 10W (constant) for 90 minutes (25°C). Recharge time of 24 hours. If a different configuration is needed, please consult factory.

The emergency battery pack is located integral to fixture and available in nominal 4' and ≥ 6' lengths. Please consult factory for 5' lengths as fit of EM battery will depend on light engine and quantity of drivers. Emergency option will illuminate the first nominal 4' section of fixture. For fixtures 5' & >12' or if a different configuration is needed, please consult factory.

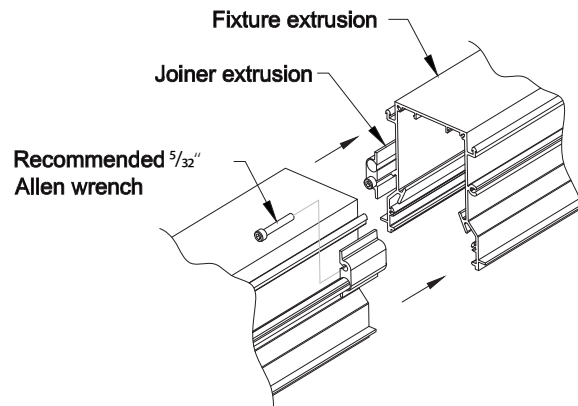
*Emergency battery option is UNV for use with 120-277V and is not available for 347V.

*For EM with sensors, please consult factory.

Flex Whip - standard



Joiner System - standard for Runs



Sensor Ordering Chart		
Quantity	Sensor	Settings*
x Number of Sensors	E Enlighted SU-5E-IL S Sensor Switch MSD EZ	1 Daylight 2 Occupancy/Vacancy 3 Daylight/Occupancy/Vacancy * Settings not available with Enlighted

Enlighted SU-5E-IL (E)

Enlighted Micro Sensor SU-5E-IL (Independent Lighting) provided as standard with an Enlighted CU-4E-FM Fixture Mount Control Unit integral to fixture. If SU-5E-CL (Connected Lighting) or SU-5E-IoT (Internet of Things) is desired, please contact factory. Occupancy/vacancy, thermal, daylight sensing plus Tunable White, Room & Zone control, Internet of Things (IoT) data collection and reporting control. For full details, please see SU-5E-(IoT/CL/IL) spec sheet on the Enlighted website. Must be paired with a 0-10V driver with auxiliary (DIM driver selection). Commissioning by Enlighted.

*Please contact Enlighted for complete details prior to specifying.

Sensor Switch MSD EZ (S)

Occupancy/vacancy and daylight harvesting. For full functionality and programming options, select settings option 3. If a different settings option is selected, other settings may be unavailable. For full details, please see MSD EZ spec sheets on the Sensor Switch website. Must be paired with DIM driver selection. Manual control of dimming not available with MSD EZ sensor. *Please contact Sensor Switch for complete details prior to specifying.

*Sensor can control up to 30 drivers. Please refer to driver quantity chart on page 4. Multiple sensors may be required for longer lengths.

	Occupancy	Vacancy	Daylight Harvesting	Driver Compatibility
Enlighted SU-5E-IL (E)	✓	✓	✓	DIM
Sensor Switch MSD EZ (S)	✓	✓	✓	DIM

Factory Presets - Sensors come from the sensor manufacturer with factory presets for each of the settings in above chart. Please see sensor manufacturers' spec sheets for details on presets and re-programming.

Commissioning - Commissioning of sensors and installation by others. Contact sensor manufacturer for details and costs associated with commissioning the system prior to specification of sensors.

Standard Sensor Placement - for other placement options, please consult factory. For functionality and limitations, please see sensor details above.

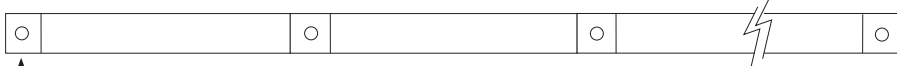
Qty 1 Sensor - Beginning



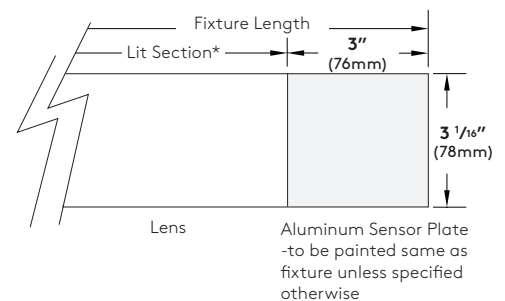
Qty 2 Sensor - Beginning and End (9' fixtures and longer)



Qty 3+ Sensor - For spacing between sensors, please consult the sensor manufacturer.



Beginning of Run

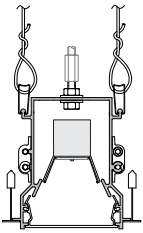


- Notes: 1. For spacing between sensors, please consult the sensor manufacturer.
- 2. Exact sensor placement and coverage will be defined by approved factory drawing.
- 3. Sections controlled by sensors may not be symmetrical - consult factory for layout.

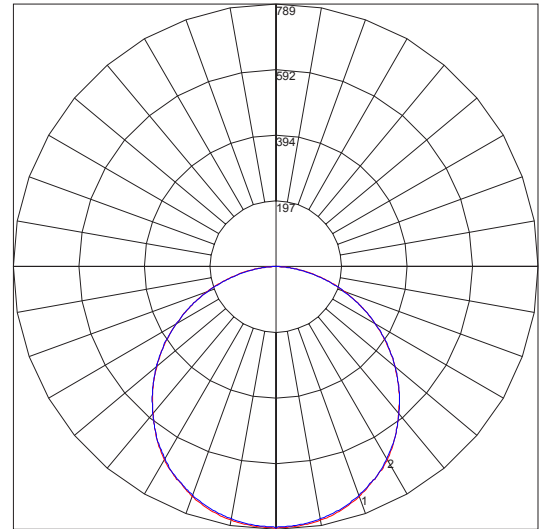
*Lit section will be the fixture length minus 3" for sensor plate.

Photometry

LW Optics / 34W LED / 4000K CCT



Catalog #: LR4TZ-1B35-40-LW-X-04-XX-UNV
 Report #: 11685024.01
 Delivered Lumens: 2267
 Input Watts: 33.5W
 Efficacy: 68
 CCT: 4000K
 CRI: 95.7



Maximum Candela = 788.8 Located At Horizontal Angle = 22.5, Vertical Angle = .5
 # 1 - Vertical Plane Through Horizontal Angles (90 - 270)
 # 2 - Vertical Plane Through Horizontal Angles (0 - 180)

LR4TZ Led Photometry Multiplier Table	
CCT Multiplier	
4000K	1.000
3500K	0.972
3000K	0.963
2700K	0.931

CCT multipliers apply to the photometry, IES files, and per foot values listed on page one (light engine).

Light engine multiplier supplied for per foot values listed on page one (light engine).