## LUMENWERX

### RECESSED DIRECT









# RECESSED DIRECT

## LUMENWERX



Project:	
Туре:	

### Order Guide

LUMINAIRE ID	DISTRIBUTION	OPTIC	LIGHT SOURCE 1	CRI	LUMEN PACKAGE
VIA2PRR	D				
VIA2PRR - Via 2" Prism Recessed	<b>D</b> - Direct	SDPO - Matte Silver Diamond Prism Optic PDPO - Precision Specular Diamond Prism Optic BDPO - Matte Black Diamond Prism Optic WDPO - Matte White Diamond Prism Optic	SW - Static white FS - Full spectrum 'Chromawerx Sola and Duo also available. Consult factory.	80 <sup>2</sup> - 80 CRI 90 <sup>2</sup> - 90 CRI 95 <sup>3</sup> - 95 CRI <sup>2</sup> Not available with full spectrum. <sup>3</sup> Not available with static white.	350 - Low output 350 lm/ft 500 - Medium output 500 lm/ft 750 - High output 750 lm/ft 1000 <sup>4,5</sup> - Ultra high output 1000 lm/ft 1200 <sup>4,5</sup> - Hyper output 1200 lm/ft *Not available with full spectrum. 5 Not available with BDPO.

COLOR TEMP.	LUMINAIRE LENGTH	VOLTAGE	DRIVER 7	ELECTRICAL	ELECTRICAL SECTIONS (optional) 13, 14
27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	#FT#IN - Specify nominal length (#) in 1' and/or 6" increments Standard nominal lengths: Single units: 2' - 12' Continuous runs: lengths over 12'	120 - 120V 277 - 277V UNV - 120V-277V 347 6 - 347V <sup>6</sup> Available with DI only.	D1 - 1% 0-10V DA ® - DALI LTEA2W 9 - Lutron 1% - 2 wire FP 120V LDE1 ® - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECOdrive 0-10V ELD0 - eldoLED 0.1% SOLOdrive 0-10V  PoE (Power-over-Ethernet) compatible. Consult factory for details.  On-site commissioning is required.  Available with 120V only.	1C - 1 circuit #MC 10 - Multi circuit EC - Emergency-powered fixture NL - Night light fixture DL - Daylight fixture GTD 11,12 - Generator transfer device fixture  10 Specify total number of circuits (#), including any required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit. 11 Minimum 4' fixture. 12 Not available with 347V.	#EC## <sup>15</sup> - Emergency-powered section #NL## <sup>15</sup> - Night light section #DL## <sup>15</sup> - Daylight section #GTD## <sup>15</sup> , <sup>16</sup> , <sup>17</sup> - Generator transfer device section #EMB <sup>17</sup> , <sup>18</sup> - Emergency battery NA - None <sup>13</sup> Specify with multi circuit (#MC) electrical option only. <sup>14</sup> Provide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. <sup>15</sup> Specify quantity (#), and section length in inches (##). <sup>16</sup> Minimum 4' section. <sup>17</sup> Not available with 347V. <sup>18</sup> Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section.

MOUNTING	FINISH	CONTROL 19			OPTIONS
<b>TG9</b> - Tegular 9/16"	<b>W</b> - Matte white	STANDALONE CONTROLS 20, 21	CONNECTED CONTROL	<u>S</u> <sup>24</sup>	<b>FU120</b> - Fuse 120V
TG15 - Tegular 15/16" TB9 - T-bar 9/16" TB15 - T-bar 15/16" ST - Screw slot T-bar DTR - Drywall trim DTL - Drywall trimless DMF - Drywall mud flange	AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	Specify the quantity (#) of sensors per fixture. #OMS <sup>22</sup> - Onboard Occupancy #OMS## <sup>23</sup> - Onboard Occupancy with bi-level dimming #ODS - Onboard Daylight #OCS - Onboard Occupancy & Daylight	LU- Lutron EN - Enlighted ENC - Encelium WL - Cooper Wavelinx	AN - Acuity nLight CA - Casambi LG - Legrand	FU277 - Fuse 277V FWC - Flexible whip cable (6' std) CP - Chicago Plenum NA - None
		NA - Non	e		
		<ul> <li>Standalone and connected control options cannot be combined.</li> <li>Available with D1 driver and 1 circuit options only.</li> <li>Minimum 4' per zone. Provide control zone length.</li> </ul>	<sup>22</sup> Fixture turns off when no or <sup>23</sup> Fixture dims to specified lig <sup>24</sup> Consult factory for connect	ht level % (##).	

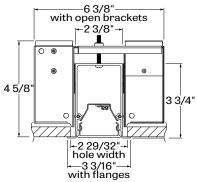
MICRO SPOT 25	MS CRI	MS LUMEN PACK.	MS COLOR TEMP.	MS FINISH
<b>#MS25</b> - Micro Spot 25°	<b>80</b> - 80 CRI	<b>400</b> <sup>26</sup> - 400 lm	<b>27</b> - 2700K	<b>W</b> - Matte white
#MS35 - Micro Spot 35°	<b>90</b> - 90 CRI		<b>30</b> - 3000K	<b>B</b> - Matte black
#MS50 - Micro Spot 50°		<sup>26</sup> 5 W. Wattage is for reference only. May	<b>35</b> - 3500K	
		change based on driver.	<b>40</b> - 4000K	
<sup>25</sup> Specify quantity (#).				

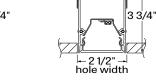


## LUMENWERX

### RECESSED DIRECT

#### **Dimensions**





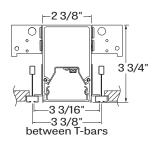
<del>-</del>23/8"→ 3 3/4" ---3 1/4"---hole width —4 7/8"— with flanges

**DTR** - Drywall Trim

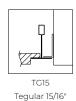
**DTL** - Drywall Trimless

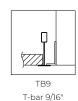
-2 3/8"

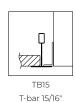
**DMF** - Drywall Mud Flange













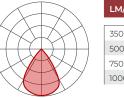
Photometrics

Values calculated based on a 4 ft fixture at 35K and 80 CRI for all optics.



LM/FT	W/FT	LPW
350	2.6	132
500	3.8	132
750	5.9	127
1000	8.2	122
1200	10	120

## BDPO



LM/FT	W/FT	LPW
750		60
350	5.1	69
500	7.5	66
750	11.9	63
1000	16.7	60

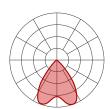
#### **MULTIPLIER TABLES**

Use these tables to get results for different color temperatures and CRI.

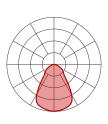
Multiplier - CCT/CRI SDPO, PDPO, BDPO, WDPO

CCT (K)	WA	TTS	LPW		
CCI (K)	CRI 80	CRI 90	CRI 80	CRI 90	
2700	1.04	1.19	0.96	0.84	
3000	1.00	1.15	1.00	0.87	
3500	1.00	1.12	1.00	0.89	
4000	0.99	1.10	1.01	0.91	

PDPO



LM/FT	W/FT	LPW
350	2.4	147
500	3.4	147
750	5.3	142
1000	7.3	137
1200	8.9	134



WDPO

LM/FT	W/FT	LPW
350	2.4	145
500	3.5	144
750	5.4	139
1000	7.4	135
1200	9.1	132

MICRO SPOT









Micro Spot 50°

Wattage		5.0							
CRI	80				80 90				
CCT	2700K	3000K	3500K	4000K	2700K	3000K	3500K	4000K	
Lumen	373	373	400	400	322	322	322	345	



# RECESSED DIRECT

## LUMENWERX

### Technical Specifications

#### DIRECT OPTICS

#### Diamond Prism Optic (DPO)

The Diamond Prism Optic<sup>™</sup> (DPO<sup>™</sup>) is our patent-pending 3-tiered optic meticulously crafted to refract and reflect beams with great precision, effectively keeping glare to a minimum while delivering light of exceptional quality and visual comfort.











MATTE WHITE

#### LIGHT SOURCE

Custom linear array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K and 4000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs operate at reduced drive current to optimize efficacy and lumen maintenance. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

#### LUMINAIRE LENGTH

Via 2 Prism is available in standard lengths of 2' to 12'. Continuous runs are available for run lengths over 12'. Exact run length must be noted in the product code. The minimum length is 2', and can be ordered in 1' increments. All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.

#### ELECTRICAL

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>84%, PF>0.9, THD<20%. Other specifiable options include Lutron Hi-Lume 1% (specify 2-wire, or Ecosystem Dim-to-Off), eldoLED 1% ECOdrive 0-10V, eldoLED 0.1% SOLOdrive 0-10V, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

#### PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, Duo (tunable white), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

#### **ELECTRICAL SECTION OPTIONS**

Electrical section options are available for fixtures specified as multi circuit (#MC). With MC, specify the total number of circuits (#), including any circuits required for optional electrical sections. A drawing is required to specify the layout. Please consult factory for custom configurations.

#### **Electrical sections**

Options include emergency-powered (#EC##), night light (#NL##), daylight (#DL##), and generator transfer device (#GTD##) sections. Specify the quantity (#), as well as the section length in inches (##).

Example 1: A 32' Direct fixture with two 8' emergency-powered sections on a second circuit.

Code: 2MC-2EC96

Example 2: A 24' Direct fixture with one 4' generator transfer device section.

Code: 1MC-1GTD48

#### Battery

Each emergency battery (#EMB) powers a 4' section. All batteries will be on the same circuit. Specify the number of batteries (#) required.

Factory installed long life, high temperature, maintenance-free Lithium-lon battery pack with self-test functionality, test switch and charge indicator. Minimum of 90 minutes operation, up to 1000 lumens per 4' (25°C) emergency lighting output and recharge time of 24 hours.

#### MOUNTING OPTIONS

Recessed fixtures can be mounted into exposed or concealed T-bar or tegular ceiling, as well as in drywall ceilings with trim, trimless, or mud flange options.

#### EINIISH

**Interior** - 95%, reflective matte powder coated white paint **Exterior** - Matte white, matte black, or aluminum powder coating. Custom finishes are also available.







# RECESSED

### LUMENWERX

#### **CONTROLS**



Lumenwerx offers several options for integrating occupancy and daylight harvesting controls in our luminaires.

For latest information on sensors, click here.

#### STANDALONE CONTROLS

An integrated standalone sensor controls the luminaire in which it is installed. Depending on the length, more than one sensor may be necessary and may control the entire luminaire, or just a section of it. These controls operate independently. Unless otherwise agreed, sensor location, blank size, and functionality of the sensor within the luminaire are selected by Lumenwerx. See client drawings for details.

Three types are available:

**OMS**: An integral Passive InfraRed (PIR) sensor turns luminaires on and off automatically with field-adjustable time out period. No wall control is used. Coverage pattern for large motion has a 12' diameter with the sensor mounted 8' above the floor; for small motion, the pattern has an 8' diameter. Typically, one sensor is required for every 10' of a continuous luminaire run.

**ODS**: An integral, daylight harvesting sensor with closed-loop operation dims the luminaire in which it is installed in order to compensate for available daylight. The sensor measures the combination of daylight and luminaire light reflected from horizontal surfaces below the luminaire. Initial onsite calibration is required via the use of provided remote control.

**OCS**: Both an occupancy and a daylight sensor are installed in the luminaire.

#### **CONNECTED CONTROLS**

With connected controls, sensors or nodes installed in the luminaire form part of a larger control system infrastructure from manufacturers such as: Lutron, Enlighted, Encelium, Cooper Wavelinx, Acuity nLight, Casambi, Legrand, and others. These connected controls allow for a scalable system providing features like occupancy and daylight control, manual control, scheduling and configuration of various zones and scenes. Energy reporting and system monitoring are also possible. Specific capabilities depend on the control system being used.

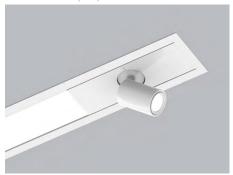
Lumenwerx installs the components (sensors, nodes, power packs, etc) which may be supplied to us by a third party, or procured directly by Lumenwerx, depending on the control system manufacturer.

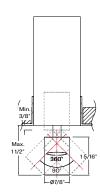
Lumenwerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

To indicate a Lumenwerx luminaire with connected controls, identify the specific onsite control system to be integrated into the luminaires using the ordering code. Due to the diversity of components, you must contact factory to assure complete compatibility with intended control system and to fully specify the luminaire.

Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for Lumenwerx to create shop drawings and submittals.

#### MICRO SPOT (MS)





The Micro Spot is a Ø 7/8" x 15/16" adjustable spotlight that extends, retracts, rotates 360°, and tilts 90°. Its LED light source is coupled with a TIR refractor to provide beam angles of 25°, 35°, and 50°, while producing up to 400 lumens. LED light source CCT options are 2700K, 3000K, 3500K, and 4000K, available in either 80 CRI or 90 CRI. The Micro Spot is offered in a white or black finish. The Micro Spot driver is mounted within the luminaire housing and accepts universal input voltage (120-277VAC) with 0-10 V dimming control.

#### CONSTRUCTION

**Housing** - Extruded aluminum, up to 90% recycled content **Interior brackets** - Die-formed cold rolled sheet steel

Joining system - Die-cast zinc

Reflectors - Aluminum

**Lens** - Acrylic or polycarbonate **End caps** - Die-cast aluminum

Recessed flanges - Extruded aluminum, up to 90% recycled

**Mud flange** - Extruded aluminum, up to 90% recylced content **Slip-through bracket** - Die-formed galvanized sheet

#### WEIGHT

**4ft** - 9.03 lbs - 4.1 kg **8ft** - 18.28 lbs - 8.3 kg **12ft** - 27.97 lbs - 12.7 kg







## LUMENWERX

# RECESSED

#### **CERTIFICATION**

**ETL** - Rated for Indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0. **Chicago Plenum** - City of Chicago approved (CCEA)

IC rated - Suitable for direct contact with insulation

#### WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.



