## LUMENWERX

# COMBINATION RECESSED









# COMBINATION RECESSED





Project:		
T. (10.0)		

### Order Guide

A drawing of your combination is required - anything from a line drawing to an architectural drawing. You can also use the template on page 3 to sketch your configuration.

LUMINAIRE ID	DISTRIB.	OPTIC <sup>1</sup>	LIGHT SOURCE 2	CRI	LUMEN PACKAGE
VIA2PRCOMR	D				
VIA2PRCOMR - Via 2" Prism Combination Recessed	<b>D</b> - Direct	#FT#IN  SDPO - Matte Silver Diamond Prism Optic  PDPO - Precision Specular Diamond Prism Optic  BDPO - Matte Black Diamond Prism Optic  WDPO - Matte White Diamond Prism Optic  HLO - High-Efficiency Lambertian Optic  1Specify the total quantity of each required optic. DPO louvers are only available in 1' and/or 6" sections. HLO is available in 1' and/or 1" sections. The rest of the fixture will be filled with blanks.	FS - Full spectrum  2 Chromawerx Sola and Duo also available. Consult factory.	80 <sup>3</sup> - 80 CRI 90 <sup>3</sup> - 90 CRI 95 <sup>4</sup> - 95 CRI <sup>3</sup> Not available with full spectrum. <sup>4</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>5,6</sup> - Ultra high output 1000 lm/ft 1200 <sup>5,6,7</sup> - Hyper output 1200 lm/ft  SNot available with full spectrum. Not available with BDPO. For HLO, fixture will be very bright. Use in suitable applications.

COLOR TEMP.	TOTAL LUMINAIRE LENGTH	VOLTAGE	DRIVER 9	ELECTRICAL	ELECTRICAL SECTIONS (optional) 15, 16
27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	#FT#IN - Specify total pattern length (#) in 1' and/or 1" increments  Standard nominal lengths: Single units: 2' - 12' Continuous runs: lengths over 12'	120 - 120V 277 - 277V UNV - 120V-277V 347 <sup>8</sup> - 347V <sup>8</sup> Available with D1 only.	D1 - 1% 0-10V DA 10 - DALI LTEA2W 11 - Lutron 1% - 2 wire FP 120V LDE1 10 - Lutron Hi-lume 1% Eco ELD1 - eldoLED 1% ECOdrive 0-10V ELD0 - eldoLED 0.1% SOLOdrive 0-10V  1 PoE (Power-over-Ethernet) compatible. Consult factory for details. 10 On-site commissioning is required. 11 Available with 120V only.	1C - 1 circuit  #MC <sup>12</sup> - Multi circuit  EC - Emergency-powered fixture  NL - Night light fixture  DL - Daylight fixture  GTD <sup>13,14</sup> - Generator transfer device fixture <sup>12</sup> Specify total number of circuits (#), including any required for electrical section options. Provide drawing or layout specifications. Minimum 4' section per circuit. <sup>13</sup> Minimum 4' fixture. <sup>14</sup> Not available with 347V.	#EC## <sup>17</sup> - Emergency-powered section #NL## <sup>17</sup> - Night light section #DL## <sup>17</sup> - Daylight section #GTD## <sup>17, 18, 19</sup> - Generator transfer device section #EMB <sup>19, 20</sup> - Emergency battery NA - None  Specify with multi circuit (#MC) electrical option only. Frovide drawing or layout specifications. Consult factory for other configurations. Default section length is 4'. Specify quantity (#), and section length in inches (##). Minimum 4' section Not available with 347V. Specify quantity (#). All batteries will be on the same circuit. Each battery powers a 4' section.

MOUNTING	FINISH 21	CONTROL <sup>22</sup>		OPTIONS
TG9 - Tegular 9/16" 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	W - Matte white AL - Aluminum B - Matte black CF# - Custom finish, specify RAL#	STANDALONE CONTROLS <sup>23, 24</sup> Specify the quantity (#) of sensors per fixture. #OMS <sup>25</sup> - Onboard Occupancy #OMS## <sup>26</sup> - Onboard Occupancy with bi-level dimming #ODS - Onboard Daylight #OCS - Onboard Occupancy & Daylight	CONNECTED CONTROLS 27  LU- Lutron AN - Acuity nLight EN - Enlighted CA - Casambi ENC - Encelium LG - Legrand WL - Cooper Wavelinx	FU120 - Fuse 120V FU277 - Fuse 277V NA - None
<b>DMF</b> - Drywall mud flange	<sup>21</sup> Blanks will match	NA - None		
	the fixture color unless otherwise specified.	<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>	<ul> <li>Eixture turns off when no occupancy.</li> <li>Fixture dims to specified light level % (##).</li> <li>Consult factory for connected controls.</li> </ul>	

MICRO SPOT 28	MS CRI	MS LUMEN PACK.	MS COLOR TEMP.	MS FINISH
#MS25 - Micro Spot 25°	<b>80</b> - 80 CRI	<b>400</b> <sup>29</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>29</sup> 5 W. Wattage is for reference only. May	<b>35</b> - 3500K	
		change based on driver.	<b>40</b> - 4000K	
<sup>28</sup> Specify quantity (#).				



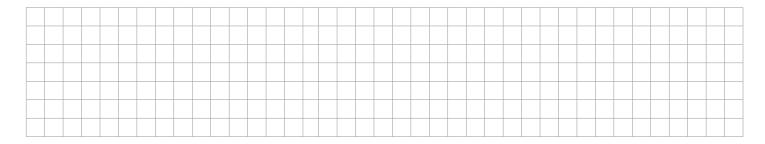


## LUMENWERX

# COMBINATION RECESSED

### Combination Layout

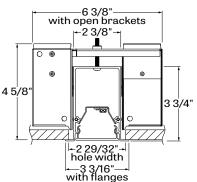
A drawing of your combination is required - anything from a line drawing to an architectural drawing. You can also use the template below to sketch your layout. Louvers are available in 1ft and/or 6in sections. HLO is available in 1ft and/or 1in sections. Specify the quantity of louvers and HLO. The rest will be filled with blanks.



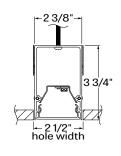
### **Dimensions**

#### DRYWALL

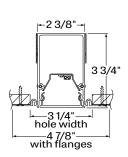
**DTR** - Drywall Trim



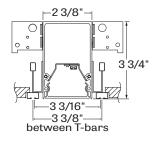
**DTL** - Drywall Trimless



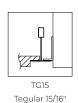
**DMF** - Drywall Mud Flange

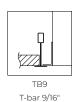


#### GRID



TC9
Tegular 9/16"





TB15 T-bar 15/16"



Screw slot T-bar

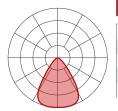
## LUMENWERX

# COMBINATION RECESSED

### Photometrics

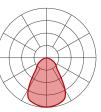
Values calculated based on a 4 ft fixture at 35K and 80 CRI for all optics.

#### SDPO



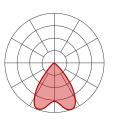
LM/FT	W/FT	LPW
350	2.6	132
500	3.8	132
750	5.9	127
1000	8.2	122
1200	10	120

## WDPO



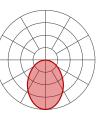
LM/FT	W/FT	LPW
350	2.4	145
500	3.5	144
750	5.4	139
1000	7.4	135
1200	9.1	132

#### PDPO



LM/FT	W/FT	LPW
		1
350	2.4	147
500	3.4	147
750	5.3	142
1000	7.3	137
1200	8.9	134

HLO



LM/FT	W/FT	LPW
350	3.2	109
500	4.7	107
750	7.2	104
1000	9.9	101
1200	12.1	98

#### **MULTIPLIER TABLES**

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

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

CCI	VVA	113	LP	·vv
(K)	CRI80	CRI90	CRI80	CRI90
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

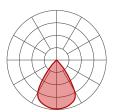
Multiplier - CCT/CRI

HLO

ССТ	WA	TTS	LPW	
(K)	CRI80	CRI90	CRI80	CRI90
2500	105	1.00	0.05	0.70

2700	1.05	1.26	0.95	0.79
3000	1.01	1.23	0.99	0.81
3500	1.00	1.20	1.00	0.84
4000	1.00	1.17	1.00	0.85

### BDPO



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

### MICRO SPOT







Micro Spot  $35^\circ$ 



Micro Spot 50°

### DELIVERED LUMENS

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

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## 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

### **High-Efficiency Lambertian Optic (HLO)**

The High-Efficiency Lambertian Optic (HLO) uses matte white reflectors to distribute LED output across 0.075" acrylic shielding, providing up to 88% transmission and good obscuration. Available as a flush lens or as a drop lens, the HLO has a spacing criterion of 1.06.

### 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'. DPO louvers are available in 1' and/or 6" sections. HLO is available in 1' and/or 1" sections. 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.

#### FLECTRICAL

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.





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## LUMENWERX

#### 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.

#### FINISH

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

#### **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.

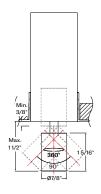
Lumenwerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

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 1 5/16" 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.





### LUMENWERX

### COMBINATION RECESSED DIRECT

#### CONSTRUCTION

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

Joining system - Die-cast zinc

**Reflectors** - Aluminum or cold rolled steel die-formed, 95%

reflective matte white painted 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

#### **CERTIFICATION**

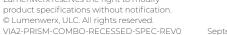
ETL - Rated for Indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

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.





Lumenwerx reserves the right to modify

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