

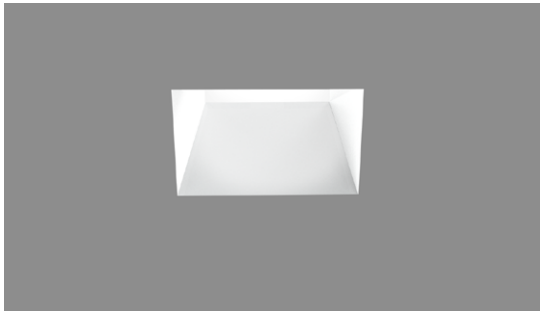
# Voilà

True 2" Square Downlight  
Fixed/Adjustable

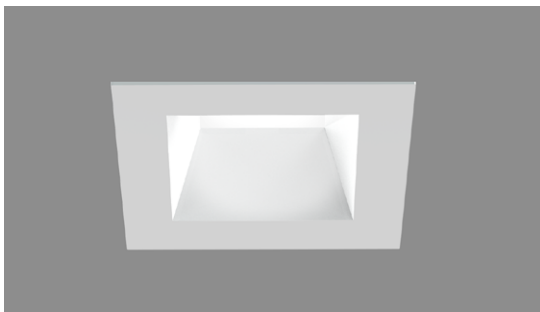
# LUMENWERX

Project: \_\_\_\_\_

Type: \_\_\_\_\_



Trimless



Trim

Voila 2" square downlights feature innovative Hyflex™ optics for precise beam control. Shallow construction requires only 4" recess depth. Driver can be replaced through 2" aperture. The Voila COB source with 90 CRI and 2-step color consistency matches other Lumenwerx luminaires, and is available in Chromawerx SOLA (dim-to-warm) and DUO (tunable white). Complete Voila offering includes 2" and 4" apertures; downlights, adjustables, and wall washers; round and square trim; and cylinders; see separate specifications.

## Performance

LUMEN OUTPUT <sup>1</sup>	WATTS	EFFICACY LM/W
797 lm	7 W	114 lm/W
982 lm	10 W	98 lm/W
1191 lm	14 W	85 lm/W

<sup>1</sup> Lumens packages are assuming 3500K, 80 CRI, 30° beam, square white baffle

Delivered Lumens for Round White Standard Baffles at 35K

CRI	90 CRI								
BEAM	10	20	30	40	50	60	75	90	
Low - 7 W	496	487	822	795	785	730	684	656	
Medium - 9.8 W	641	630	1012	978	966	898	841	807	
High - 13.8 W	828	814	1228	1187	1173	1090	1021	980	



Some restrictions may apply.



## Aperture Size

2.00"

## Configurations



Fixed, adjustable & wall wash (see other spec sheets for all the configurations)

## Baffle Depth



Standard 0.52" Deep 1.06"

## Trim



Trim & Trimless

## Baffle & Trim Flange Finishes

- Textured matte white
- Textured matte black
- Mixed black & white
- Custom RAL

## Color Temperature

- 2700K
- 3000K
- 3500K
- 4000K
- SOLA
- DUO

Delivered 471-1191 lm  
7-14 Watts, up to 114 lm/W

## Integral Drivers

0-10V, TRIAC & ELV

## Remote Drivers

Lutron, eldoLED and other drivers  
Remote emergency battery pack

## 1 - Housing (Example: VO2SR-TRM-SW-OF-ASB-120-7W-D1)

Product Specification

LUMINAIRE ID	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION	VOLTAGE	WATTAGE (80 CRI) <sup>2</sup>	DIMMING		
<b>VO2SR</b>									
<b>VO2SR</b> - Voila 2" Square Recessed	<b>TRM</b> - Flanged trim <b>TLMP</b> - Trimless drywall mudplate <b>TLMW</b> - Trimless millwork	<b>SW</b> - Static white  <b>SOLA</b> - Dim-to-warm  <b>DUO</b> - Tunable white	<b>OF</b> - Open frame type non-IC <b>IC</b> - IC rated <b>CP</b> - Chicago Plenum type-IC (CCEA)	<b>ACB</b> - Adjustable commercial bar hangers (grid and drywall) <b>ASB</b> - Adjustable standard bar hangers (grid and drywall) <b>FMB</b> - Flush mount bars (drywall only) <b>AHC</b> - Adjustable hat channel bars	<b>120</b> - 120V <b>UNV</b> - 120V-277V <b>347</b> <sup>1</sup> - 347V  <sup>1</sup> Available with remote 0-10V dimming options RD1 and RSD1 only. Consult factory for details.	<b>7W</b> - Low output 471-797 lm <b>10W</b> - Medium output 608-982 lm <b>14W</b> - High output 786-1191 lm  <sup>2</sup> For delivered lumens and other CRI, see multiplier tables on page 3.  <b>SOLA</b> <b>8W</b> - Low output 560 lm (20° only) <b>13W</b> - High output 740-900 lm (40° and up)  <b>DUO</b> <b>5W</b> - Low output 300 lm (20° only) <b>10W</b> - High output 530-640 lm (40° and up)	<b>INTEGRAL</b> <b>DI</b> - 1% 0-10V <b>ELV</b> <sup>3</sup> - ELV 120V <b>TRI</b> <sup>3</sup> - TRIAC 120V  <sup>3</sup> Available with 120V only.  <b>SOLA</b> <b>SDI</b> - Single 0-10V input	<b>REMOTE</b> <b>RD1</b> - 1% 0-10V <b>RELV</b> <sup>4</sup> - ELV 120V <b>RTRI</b> <sup>4</sup> - TRIAC 120V <b>RLDEI</b> <sup>5</sup> - Lutron Hi-lume 1% Eco <b>RDA</b> <sup>5</sup> - DALI <b>RELD0</b> - eldoLED 0.1% <b>RELD1</b> - eldoLED 1%  <sup>4</sup> Available with 120V only. <sup>5</sup> On-site commissioning is required.  <b>SOLA</b> <b>RSDI</b> - Single 0-10V input  <b>DUO</b> <b>RDMX</b> <sup>5</sup> - To specify, see pages 7 to 9 <b>RDDA</b> <sup>5</sup> - DALI <b>RDD1</b> - Dual 0-10V input for CCT/Intensity <b>RLD2</b> <sup>5</sup> - Lutron DALI-2 digital	<b>+EB</b> <sup>6</sup> - Emergency battery  <sup>6</sup> Specify with remote dimming only. The code will be like the following example: <b>RD1 + EB.</b>

## 2 - Light (Example: VO2-SW-10-2-90-27-LS)

LUMINAIRE ID	LIGHT SOURCE	BEAM	COLOR QUALITY	CRI	COLOR TEMP	OPTION
<b>VO2</b>						
<b>VO2</b> - Voila 2"	<b>SW</b> - Static white	<b>10</b> - 10° Narrow spot <b>20</b> - 20° Spot  <b>30</b> - 30° Narrow flood <b>40</b> - 40° Flood <b>50</b> - 50° Wide flood <b>60</b> - 60° Very wide flood <b>75</b> - 75° Very wide flood <b>90</b> - 90° Open flood	<b>3</b> - 3 Step MacAdam Ellipse (for beam 10°&20°)  <b>2</b> - 2 Step MacAdam Ellipse (for beam 30°-90°)	<b>90</b> - 90 CRI <b>80</b> - 80 CRI <b>97</b> - 97 CRI (not available for 3500K, 10° and 20° beam angles)	<b>27</b> - 2700K <b>30</b> - 3000K <b>35</b> - 3500K <b>40</b> - 4000K	<b>LS</b> <sup>9</sup> - Linear spread <b>HEX</b> <sup>9,10</sup> - Hex louver <b>NA</b> - None  <sup>9</sup> Hex louver & linear spread cannot be combined together. <sup>10</sup> Not available with 60°/75°/90° beam options.
	<b>SOLA</b> - Dim-to-warm <b>DUO</b> - Tunable white	<b>20</b> <sup>7</sup> - 20° Spot <b>40</b> <sup>8</sup> - 40° Flood <b>50</b> <sup>8</sup> - 50° Wide flood <b>60</b> <sup>8</sup> - 60° Very wide flood <b>75</b> <sup>8</sup> - 75° Very wide flood <b>90</b> <sup>8</sup> - 90° Open flood  <sup>7</sup> Available with low output only. <sup>8</sup> Available with high output only.	<b>3</b> - 3 Step MacAdam Ellipse	<b>90</b> - 90 CRI <b>(SOLA and DUO)</b>	<b>SOLA</b> - Dim-to-warm 35K-22K <b>DUO</b> - Tunable white 27K-65K	

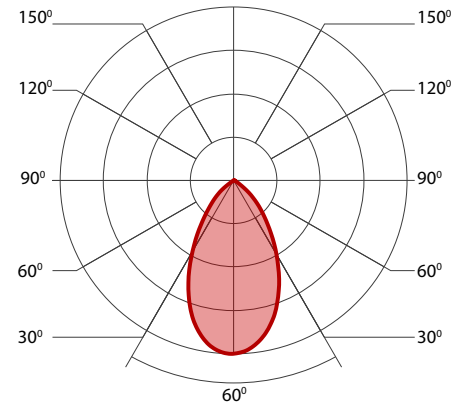
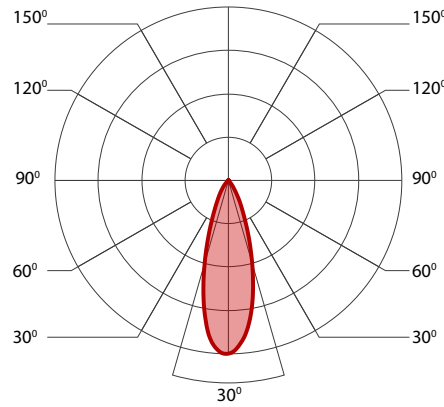
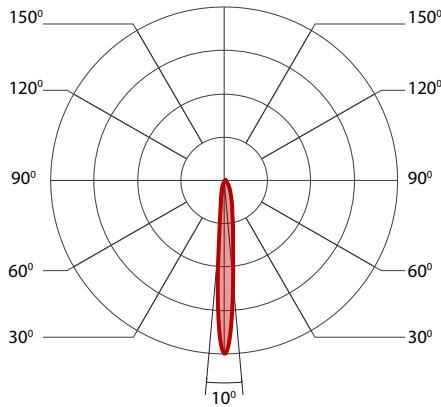
## 3 - Baffle (Example: VO2SRB-TRM-SDL-SR-TMW-TMW)

LUMINAIRE ID	TRIM STYLE <sup>11</sup>	LENS <sup>11</sup>	BAFFLE POSITION	BAFFLE FINISH <sup>11</sup>	TRIM FLANGE FINISH <sup>11</sup>
<b>VO2SRB</b>					
<b>VO2SRB</b> - Voila 2" Square Recessed Baffle	<b>TRM</b> - Flanged trim <b>TLMP</b> - Trimless drywall mudplate <b>TLMW</b> - Trimless millwork	<b>SDL</b> - Soft diffused lens <b>FDL</b> - Frosted diffused lens <b>NOL</b> - No lens	<b>SR</b> - Standard regress <b>DR</b> - Deep regress (fixed only)	<b>TMW</b> - Textured matte white <b>TMB</b> - Textured matte black <b>CF#</b> - Custom finish, specify RAL# (e.g. <b>CF1028</b> )	<b>TMW</b> <sup>12</sup> - Textured matte white <b>TMB</b> <sup>12</sup> - Textured matte black <b>CF#</b> <sup>12</sup> - Custom finish, specify RAL# (e.g. <b>CF1028</b> ) <b>NA</b> - None  <sup>12</sup> Applicable for <b>TRM</b> only.

<sup>11</sup>IP44 rated for bathrooms, showers, outdoor canopies and marquees when specified with lens options (**SDL**, **FDL**), trim option (**TRM**), and the same finish for both the baffle and trim.

## Photometrics

Please follow the multiplier tables to ensure correct lumen value. Beams, baffle color, lensing, CCT, CRI, baffle shape, baffle depth and accessories will change the lumen value.



### Delivered Lumens for Round White Standard Baffles - At 35K

CRI	80 CRI								90 CRI								
	BEAM	10	20	30	40	50	60	75	90	10	20	30	40	50	60	75	90
Low - 7 W	537	529	896	869	859	795	748	711	496	487	822	795	785	730	684	656	
Medium - 9.8 W	694	683	1103	1068	1057	978	921	876	641	630	1012	978	966	898	841	807	
High - 13.8 W	897	883	1338	1297	1283	1187	1118	1062	828	814	1228	1187	1173	1090	1021	980	

### Delivered Lumens - At 30K

97 CRI								
BEAM	10	20	30	40	50	60	75	90
Low - 7 W	NA	NA	607	588	675	628	589	564
Medium - 9.8 W	NA	NA	870	841	830	771	724	695
High - 13.8 W	NA	NA	1056	1021	1009	937	878	855

### Efficacy Based on Delivered Lumens - High 13.8 W

LPW	80 CRI								90 CRI								97 CRI								
	BEAM	10	20	30	40	50	60	75	90	10	20	30	40	50	60	75	90	10	20	30	40	50	60	75	90
80 CRI	65	64	97	94	93	86	81	77	65	64	97	94	93	86	81	77	65	64	97	94	93	86	81	77	
90 CRI	60	59	89	86	85	79	74	71	60	59	89	86	85	79	74	71	60	59	89	86	85	79	74	71	
97 CRI	NA	NA	77	74	73	68	64	61	NA	NA	77	74	73	68	64	61	NA	NA	77	74	73	68	64	61	

### SOLA and DUO Max Wattage

90 CRI	90 CRI								
	BEAM	10	20	30	40	50	60	75	90
DUO	NA	5	NA	10	10	10	10	10	
SOLA	NA	8	NA	13	13	13	13	13	

### Multiplier - CCT

CCT	
2700K	0.9
3000K	0.95
3500K	1
4000K	1.05

For SOLA and DUO, please consult factory.

### Multiplier - Baffle Color, Shape and Depth

BAFFLE VARIABLES		
White	Round standard	1
White	Square standard	0.89
Black	Round standard	0.95
Black	Square standard	0.87
White	Round deep	0.96
White	Square deep	0.85
Black	Round deep	0.85
Black	Square deep	0.76

### Multiplier - Optical Options

LENS AND LOUVERS	
No lens	1
Soft diffused lens	0.94
Frosted lens	0.78
Hex louvers	0.82

## Technical Specification

**DESCRIPTION** Compact fixed or adjustable 2" downlight with multiple output, color, beam, and dimming options.

**HOUSING CONSTRUCTION** For new construction, 20 gauge powder coated steel. Open frame, type-IC, or Chicago Plenum (CCEA) rated. 18 gauge galvanized steel junction box with ½" trade size knockouts. Adjustable hanger bars and butterfly brackets are included. Hat channel and flush mounted brackets are also available.

**Clearance Height:** Open frame 4", IC and Chicago Plenum 4"

**Ceiling Thickness:** Can accommodate ½" to 1"

**Housing weight:** Type-IC/Chicago Plenum -7.5 lbs -3.4 kg

**Open Frame** - 5.5 lbs -2.5 kg

**Ceiling cut out:** 3 ¼" for square and round

### FIELD REPLACEABLE LIGHT ELEMENT

**Adjustability:** Hot aiming, lockable, 360° rotation and 30° vertical tilt

**LED Module:** Integral COB module. 90C RI and 2 SDCM, standard with options of 80 CRI, or 97 CRI. L80 > 60,000 hours

**Light Output:** From 471-1191 lumens

**HyFlex™ Optics:** Proprietary TIR/reflector with field interchangeable beam smoothing lenses.

**Optical Accessories:** Linear spread lens and hex cell louver can accommodate up to two in the light element.

**Thermal Management:** Cold-forged aluminum heat sink to maximize thermal dissipation.

### BAFFLE

Die-cast aluminum retained ½" or 1" deep with rare earth magnets.

**Trim style options:** Round and square with flanged trim, trimless with mudplate for drywall, or trimless for millwork.

**CHROMAWERX** SOLA (dim-to-warm) and DUO (tunable white). See pages 6 for more information.

### ELECTRICAL

**Integral:** 0-10V, ELV, TRIAC.

**Remote:** 0-10V, ELV, TRIAC, Lutron Hi-Lume EcoSystem, DALI, eldoLED 0.1%, eldoLED 1%, DMX, Lutron DALI-2 digital.

**Emergency Options:** Bodine emergency battery back-up is installed remotely. For 7W or 10W fixtures, battery provides 6W of power. For 14W fixtures, battery provides 10W of power.

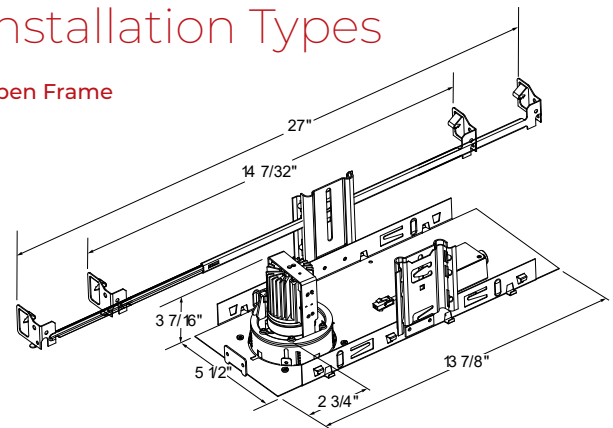
**ENVIRONMENT** Ambient temperature at fixture location shall be within 0°C/32°F - 25°C/77°F, indoor dry or damp as well as outdoor damp use (canopies or marquees).

**LISTING** cETLus listed to UL 1598 and CAN/CSA Standard C22.2 No. 250.0. IP44 rated for bathrooms, showers, outdoor canopies, and marquees when specified with lens options (SDL, FDL), trim option (TRM), and the same finish for both the baffle and trim.

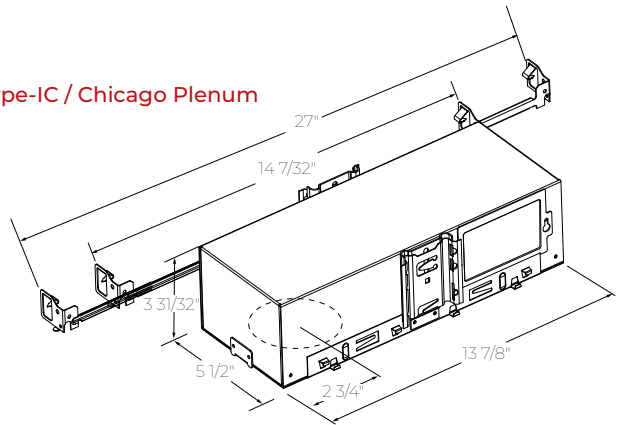
**WARRANTY** 5 year limited warranty on LED module and power supply. Guaranteed to maintain 70% lumen maintenance.

## Installation Types

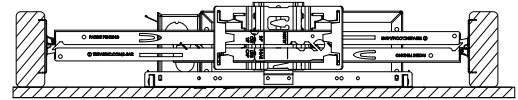
### Open Frame



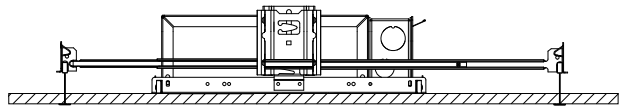
### Type-IC / Chicago Plenum



### Mounting Options



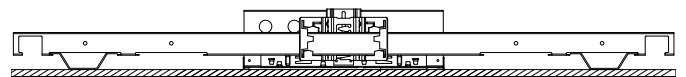
### ACB - Adjustable Commercial Bar Hangers



### ASB - Adjustable Standard Bar Hangers

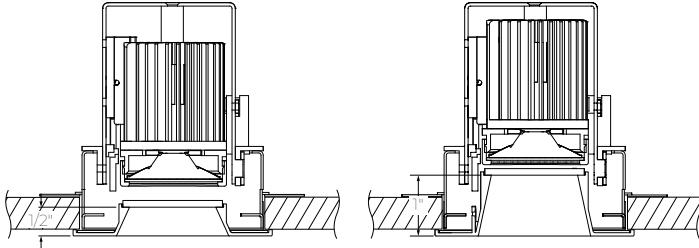


### FMB - Flush Mount Bars



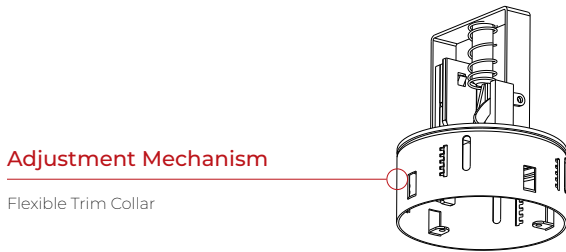
### AHC - Adjustable Hat Channel Bars

## Light



Standard Baffle

Deep Baffle

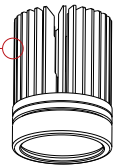


Adjustment Mechanism

Flexible Trim Collar

Light Element

Heat Sink  
LED Module  
Hyflex Optics



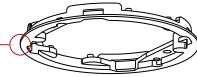
Optical Accessories (Optional)

Linear Spread  
Hex Louver



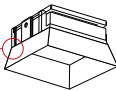
Retaining Ring

Magnetic Snap



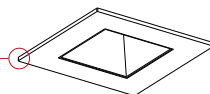
Baffle & Lens Options

Standard and Deep Regress  
Soft Diffused  
Frosted Diffused



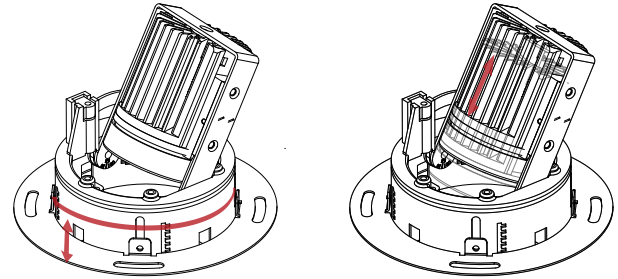
Trim

Trim and Trimless



## Optics

Hyflex™ optics provide precise optical control in a remarkably compact form. The core of this four-tier system is a compound reflector with a central TIR element, just 1.06" deep. Beam smoothing discs perfect beam angles up to 90°. Beam angles are easily interchangeable in the field.



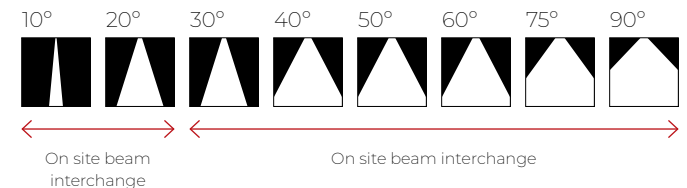
## Adjustability

Adjustable Light Element rotates 360° and tilts up to 30°. Screw thread mechanism provides easy tilt adjustment, fixes the aiming angle, and is accessed by removing aperture trim (see below). Supporting collar allows ceilings from 1/2" to 1" thick.

## Light Source - LED

Compact COB (Chip-On-Board) LED module, available in 2700K, 3000K, 3500K and 4000K with a choice of 80 CRI or 90 CRI with elevated R9 value (for 97 CRI, consult factory). Color consistency is maintained to within 2 SDCM. 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.

## Beam Angles



## Options



Linear Spread



Hex Louver

# Voilà

True 2" Square Downlight  
Fixed/Adjustable

# LUMENWERX

Project: \_\_\_\_\_

Type: \_\_\_\_\_

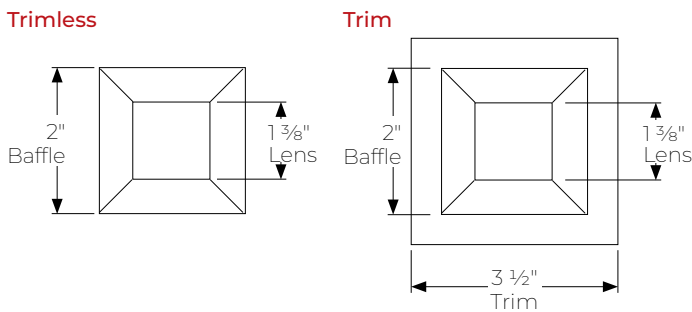
## Integral Driver

Unless otherwise specified, Voilà comes standard with an integral, 120-277VAC/60Hz, electronic, 1% 0-10V dimming, constant-current LED driver. The driver is field replaceable and features a high power factor, low THD and sources 1 mA on the 0-10V dim line. All integral drivers are located inside the housing and are easily accessible from below the ceiling through the aperture. All dimming drivers comply with IEEE C62.41 surge protection requirements.

## Emergency Remote

Long-life, high-temperature, emergency LED driver with Lithium Ion battery pack. Features a test switch with charge indicator, minimum of 90 minutes operation. For 7W or 10W fixtures, battery provides 6W of power. For 14W fixtures, battery provides 10W of power. Recharge time of 24 hours.

## Trim Dimensions



Chromawerx Sola is single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple or analog control adjusts a specially populated LED array to emulate the effect of dimming a filament source.



Chromawerx Duo offers a two-channel control system which uses analog or digital protocols for synchronous control of both warm (2700K) to cool (6500K) LED arrays - maintaining a CRI above 90. The range of color DUO offers is useful for entraining circadian rhythms, stimulating alertness, and compensating for jet lag among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures.

## Baffle

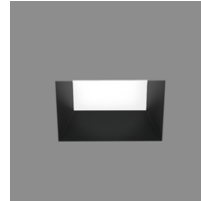


Standard Regress



Deep Regress

### Trimless

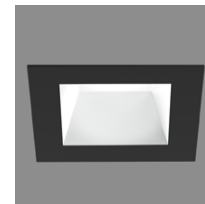
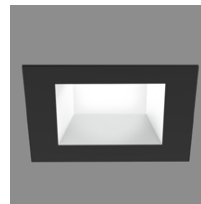


Black Baffle

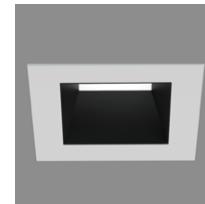
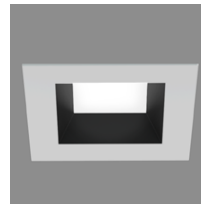


White Baffle

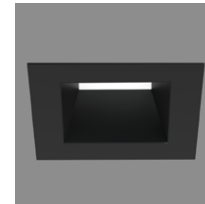
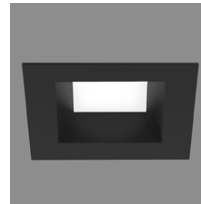
### Trim



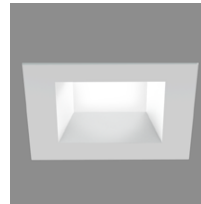
White Baffle, Black Trim



Black Baffle, White Trim



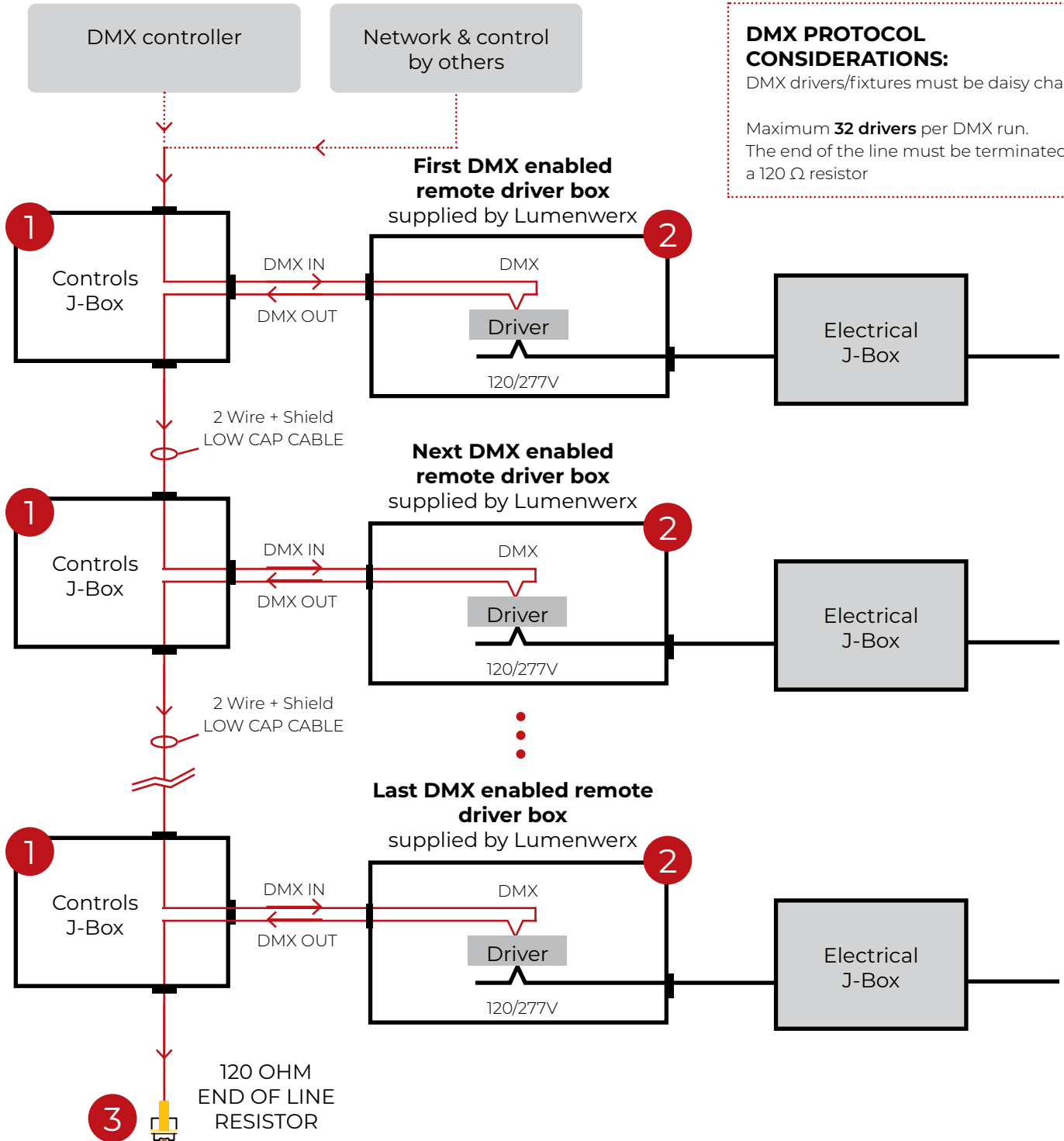
Black Baffle, Black Trim



White Baffle, White Trim

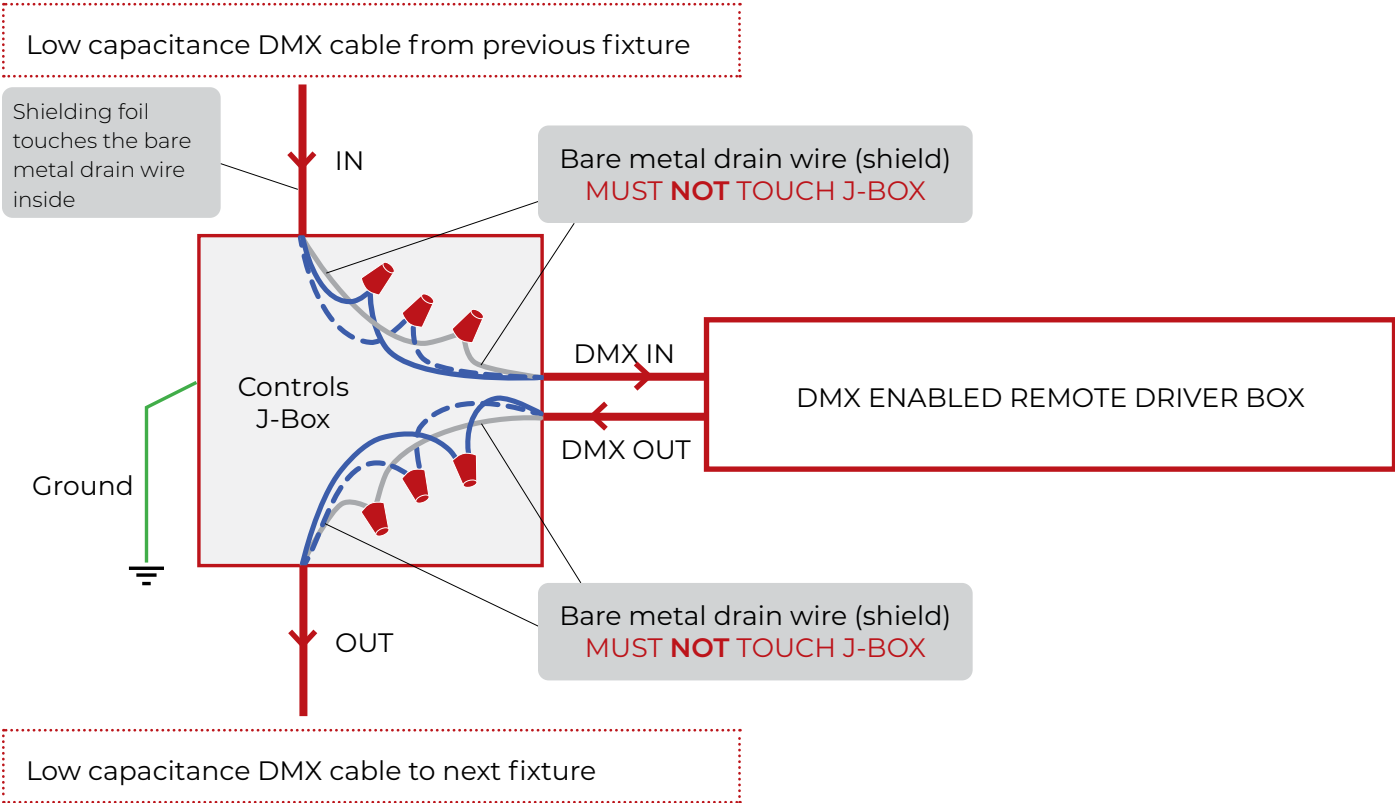
**DUO** GENERIC DMX NETWORK ARCHITECTURE

A qualified DMX integrator is required to assure proper installation and commissioning of the DMX network. **When placing the PO, please provide the contact information of your DMX integrator.**

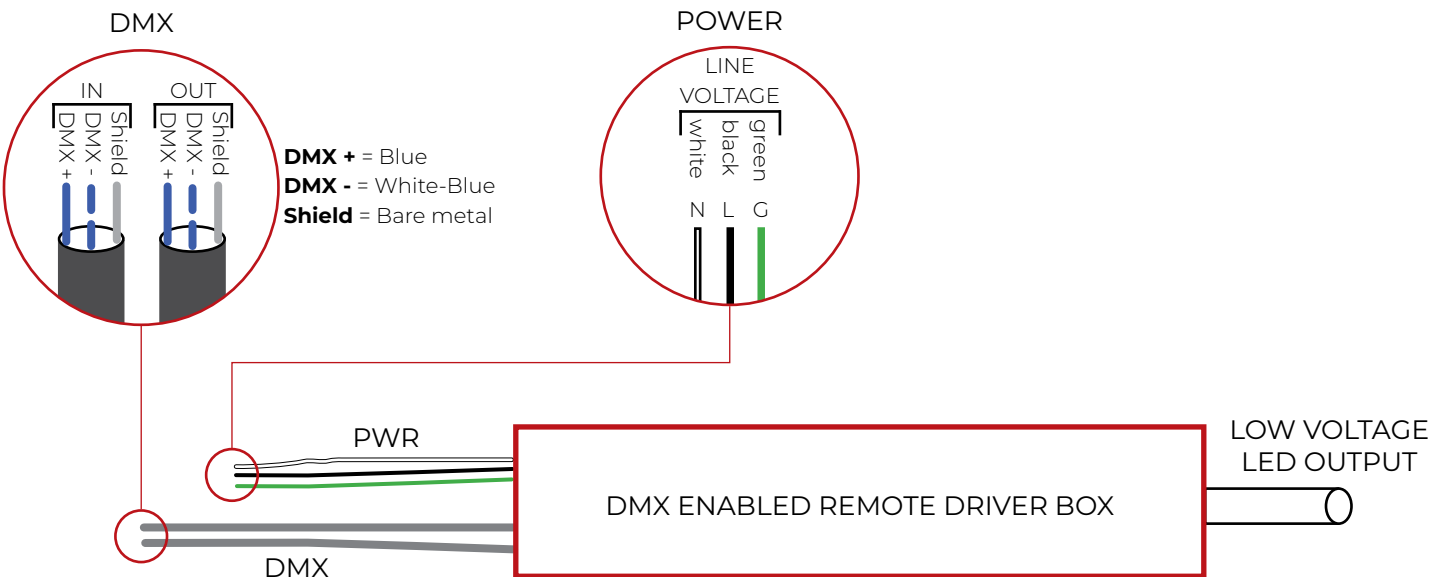


**DMX PROTOCOL CONSIDERATIONS:**  
DMX drivers/fixtures must be daisy chained.  
  
Maximum **32 drivers** per DMX run.  
The end of the line must be terminated by a 120 Ω resistor

## 1 J-BOX DMX DAISY CHAIN DETAIL



## 2 DMX CONNECTION REMOTE DRIVER





### 3 LAST DMX CONNECTION DETAIL

