



Trim



Tamper-resistant Trim

Voila 4" round 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 with Chromawerx SOLA (dim-to-warm) and DUO (tunable white), as well as emergency option. 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 1	WATTS	EFFICACY LM/W
1501 lm	14 W	107 lm/W
2037 lm	20 W	102 lm/W
2744 lm	28 W	98 lm/W

 $<sup>^{\</sup>rm 1} {\rm Lumens}$  packages are assuming 3500K, 80CRI, 30° beam, round white baffle

# Delivered Lumens for Round White Standard Baffles at 35K

CRI 90 CRI								
BEAM	10	20	30	40	50	60	75	90
Low - 13.8 W	1257	1203	1410	1424	1379	1363	1333	1302
Medium - 19.7 W	1576	1508	1912	1933	1871	1849	1808	1766
High - 28 W	1932	1848	2576	2604	2520	2492	2436	2380

## LUMENWERX





IP54

Aperture Size

4.00"

### Configurations





Fixed, adjustable

### Baffle Depth



Standard 1.00"

### Trim





### Baffle & Finishes

Textured matte white Textured matte black Custom RAL



#### Color Temperature

•	
2700K	
3000K	
3500K	
4000K	
SOLA	G
DUO	<b>Q</b>

Delivered 1294-2800 lm 14-28 Watts, up to 111 lm/W

#### Integral & Remote Drivers

0-10V, TRIAC, ELV, eldoLED & Lutron

Emergency battery pack







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Project:	
Type:	

### 1 - Housing (Example: VOSEAL4RR-GKT-SW-OF-ASB-120-14W-D1)

**Product Specification** 

LUMINAIRE ID	TRIM STYLE	LIGHT SOURCE		MOUNTING OPTIONS	VOLTAGE	WATTAGE (80 CRI) <sup>3</sup>	DIMMING		
VOSEAL4RR									
VOSEAL4RR - Voila Seal	<b>GKT</b> - Gasketed	<b>SW</b> - Static	<b>OF</b> - Open frame type	ACB - Adjustable	120 - 120V 277 - 277V	<b>14W</b> - Low output 1294-1532 lm	INTEGRAL	REMOTE	
4" Round Recessed	trim TRT - Tamper- resistant trim GTT - Gasketed and tamper- resistant trim	white	non-IC IC¹-IC rated CP¹-Chicago Plenum type-IC (CCEA)  ¹IC/CP with low output only.	commercial bar hangers (grid and drywall) ASB - Adjustable standard bar hangers (grid and drywall) FMB - Flush	UNV - 120V-277V 347 <sup>2</sup> - 347V <sup>2</sup> Available with 0-10V dimming options D1, RD1, and RSD1 only.	20W 4 - Medium output 1623-2078 Im 28W 4 - High output 1988-2800 Im For other lumen packages, consult factory.	D1 - 1% 0-10V ELV 5 - ELV 120V TR1 5 - TRIAC 120V LDE1 6 - Lutron Hi- lume 1% Eco DA 6 - DALI ELDO 6 - eldoLED 0.1% ELDI 6 - eldoLED 1% DB 7 - 0-10V with onboard emergency battery backup	RDI - 1% 0-10V RELV 8 - ELV 120V RTRI 8 - TRIAC 120V RLDEI - Lutron Hi-lume 1% Eco RDA - DALI RELDO - eldoLED 0.1% RELDI - eldoLED 1%	+EB 9 - Emergency battery  9 Specify with remote dimming only. The code will be like the following
		SOLA - Dim-to-warm  DUO - Tunable white		mount bars (drywall only) AHC - Adjustable hat channel bars	Consult factory for details.	SOLA 13W - Low output 920 Im (20° only) 25W 4 - High output 1800-1981 Im (40° and up)  DUO 10W - Low output 700 Im (20° only) 20W 4 - High output 1100-1200 Im (40° and up)	SOLA SDI - Single 0-10V input DUO PSQ0 7 - Lutron T-Series 1% tunable white	SOLA RSD1 - Single 0-10V input  DUO RDMX - To specify, see pages 7 to 9 RDDA - DALI RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 - Lutron T-Series 1% tunable white	example: RDI + EB.
						<sup>3</sup> For delivered lumens and other CRI, see multiplier tables on page 3. <sup>4</sup> Available with OF housing only.	<sup>5</sup> Available with 120V only. <sup>6</sup> Not available with CP installation type. <sup>7</sup> Available with OF housing only.	<sup>8</sup> Available with 120V only.	

## 2 - Light (Example: VO4-SW-10-2-CRI90-27-LS)

LUMINAIRE ID	LIGHT SOURCE	BEAM		COLOR QUALITY	CRI	COLOR TEMP	OPTION
VO4							
<b>VO4</b> - Voila 4"	<b>SW</b> - Static white	<b>10</b> - 10° Narrow spot <b>20</b> - 20° Spot	SOLA/DUO 20 10 - 20° Spot	<b>2</b> - 2 Step MacAdam Ellipse	<b>90</b> - 90 CRI <b>80</b> - 80 CRI	<b>27</b> - 2700K <b>30</b> - 3000K	LS <sup>12</sup> - Linear spread HEX <sup>12</sup> - Hex louver
		<b>30</b> - 30° Narrow flood <b>40</b> - 40° Flood	<b>40</b> <sup>π</sup> - 40° Flood <b>50</b> <sup>π</sup> - 50° Wide flood <b>60</b> <sup>π</sup> - 60° Very wide flood		97 - 97 CRI (not available for 3500K)	<b>35</b> - 3500K <b>40</b> - 4000K	NA - None
	SOLA - Dim-to-warm DUO - Tunable white	50 - 50° Wide flood 60 - 60° Very wide flood 75 - 75° Very wide flood 90 - 90° Open flood	75 " - 75° Very wide flood 90 " - 90° Open flood 1º Available with low output only. "Available with high output only.	<b>3</b> - 3 Step MacAdam Ellipse	90 - 90 CRI (SOLA and DUO)	SOLA - Dim-to- warm 35K-22K DUO - Tunable white 65K-27K	spread cannot be combined together.

## 3 - Baffle (Example: VOSEAL4RRB-GKT-SDL-SR-TMW)

LUMINAIRE ID	TRIM STYLE <sup>13</sup>	LENS	BAFFLE POSITION	TRIM FLANGE FINISH
VOSEAL4RRB			SR	
VOSEAL4RRB - Voila Seal 4" Round Recessed Baffle	GKT - Gasketed trim TRT - Tamper-resistant trim GTT - Gasketed and tamper-resistant trim  18 IP54 rated for bathrooms, showers, outdoor canopies, and marquees when specified with gasketed trim (GKT) and gasketed and tamper-resistant trim (GTT) options.	SDL - Soft diffused lens FDL - Frosted diffused lens	SR - Standard regress	TMW - Textured matte white TMB - Textured matte black WA - White antimicrobial Silverwerx CF# - Custom finish specify RAL# (e.g. CF1028)







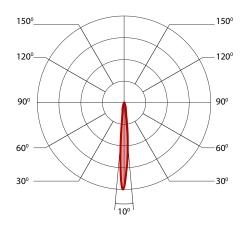


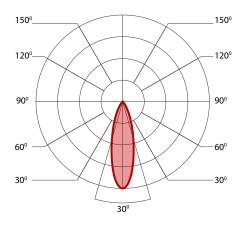
4" Round Downlight for Healthcare

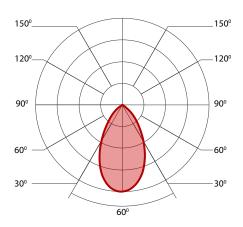
Fixed/Adjustable

## Photometrics

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







Delivered Lumens for Round White Standard Baffles - At 35K

80 CRI 90 CRI BEAM Low - 13.8 W 1348 1294 Medium - 19.7 W High - 28 W 1988 | 2744 | 2800 | 2688 | 2660 | 2604 | 2548 1848 | 2576 | 2604 | 2520 | 2492 | 2436 | 2380

Delivered Lumens - At 30K

97 CRI							
10	20	30	40	50	60	75	90
1080	1053	1213	1225	1186	1172	1146	1120
1355	1297	1644	1663	1609	1590	1555	1519
1820	1736	2212	2122	2156	2128	2100	2044

Efficacy Based on Delivered Lumens - High 28 W

				LP	W			
BEAM	10	20	30	40	50	60	75	90
80 CRI	74	71	98	100	96	95	93	91
90 CRI	69	66	92	93	90	89	87	85
97 CRI	65	62	79	79	77	76	75	73

SOLA and DUO Max Wattage

				90	CRI			
BEAM	10	20	30	40	50	60	75	90
DUO	NA	10	NA		19	19	19	19
SOLA	NA	19	NA	26	26	26	26	26

Multiplier - CCT

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

Multiplier - Baffle Color and Shape

BAFFLE VARIABLES		
White	Round standard	1
White	Square standard	0.89
Black	Round standard	0.95
Black	Square standard	0.87

Multiplier - Optical Options

LENS AND LOUVERS			
No lens	1		
Soft diffused lens	0.94		
Frosted lens	0.78		
110000010110			
Hex louvers	0.82		

Lumenwerx reserves the right to modify

For SOLA and DUO, please consult factory.



## LUMENWERX

4" Round Downlight for Healthcare Fixed/Adjustable

# Technical Specification

**DESCRIPTION** Compact fixed or adjustable 4" downlight with multiple outputs, 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/Type-IC/Chicago Plenum: 4";

Open frame with DEB or PSQ0 (Duo) options: 8" Ceiling Thickness: Can accommodate  $\frac{1}{2}$ " to 1"

Housing weight: Type-IC/Chicago Plenum - 8 lbs -3.6 kg

Open Frame - 6 lbs -2.7 kg

**Ceiling cut out:** Ø5 5/32" for round, 4 21/32"x4 21/32" for square

#### FIELD REPLACEABLE LIGHT ELEMENT

**Adjustability:** Hot aiming, lockable, 360° rotation and 30° vertical tilt with shift to ensure beam stays centered.

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

Light Output: From 1294-2800 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** Round die-cast aluminum retained with spring clips. **Trim options:** Round gasketed, tamper-resistant, or gasketed and tamper-resistant trim

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

### ELECTRICAL

Integral: 0-10V, ELV, TRIAC, Lutron EcoSystem, Lutron Hi-lume, DALI, eldoLED 0.1%, eldoLED 1%, Lutron T-Series (tunable white).

**Remote:** 0-10V, ELV, TRIAC, Lutron EcoSystem, Lutron Hi-lume, DALI, eldoLED 0.1%, eldoLED 1%, DMX, Lutron T-Series (tunable white).

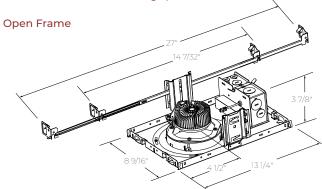
**Emergency Options:** Emergency battery back-up options are available as integral (Fulham), or remote (Fulham, Bodine, or IOTA). The battery provides 10W of power.

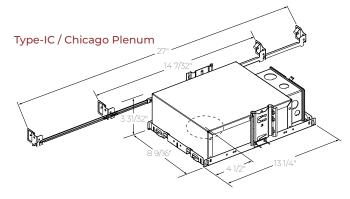
**ENVIRONMENT** Ambient temperature at fixture location shall be within 0°C/32°F - 25°C/77°F, indoor dry or damp as well as outdoor damp use (canopies or marquees).

**LISTING** cETLus listed to UL 1598 and CAN/CSA Standard C22.2 No. 250.0. IP54 rated for bathrooms, showers, outdoor canopies, and marquees when specified with gasketed trim (GKT) and gasketed and tamper-resistant trim (GTT) options.

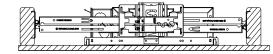
**WARRANTY** 5 year limited warranty on LED module and power supply. Guaranteed to maintain 70% lumen maintenance.



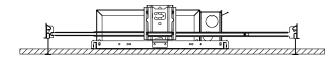




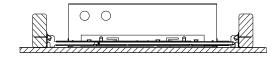
#### **Mounting Options**



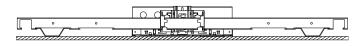
ACB - Adjustable Commercial Bar Hangers



ASB - Adjustable Standard Bar Hangers



FMB - Flush Mount Bars



AHC - Adjustable Hat Channel Bars

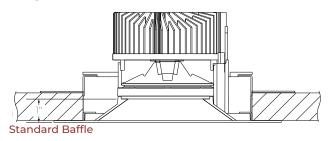


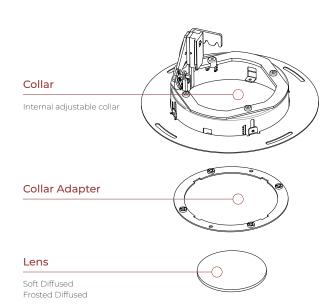




## LUMENWERX

# Light







### **Optics**

Hyflex $^{\text{TM}}$  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 interchanged in the field.



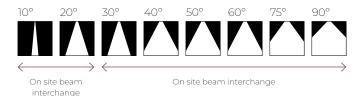
### Adjustability

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  $\frac{1}{2}$ " 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 Louvers







Standard Regress Baffle Trim and Tamper-resistant Trim



4" Round Downlight for Healthcare

Fixed/Adjustable

### Integral Driver

Unless otherwise specified, Voila 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.

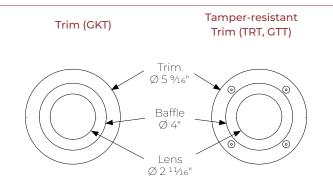
### Emergency Integral

Factory installed, long-life, high-temperature, LED driver with integrated emergency backup using a recyclable LiFePO4 battery pack. Features a remote test switch with charge indicator, minimum of 90 minutes operation and 10W per downlight emergency lighting output. Recharge time of 12 hours.

### **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 and 10W per downlight emergency lighting output. 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 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.

## \_UMENWERX

## Raffle



Standard Regress

### Trim



Black Trim



White Trim



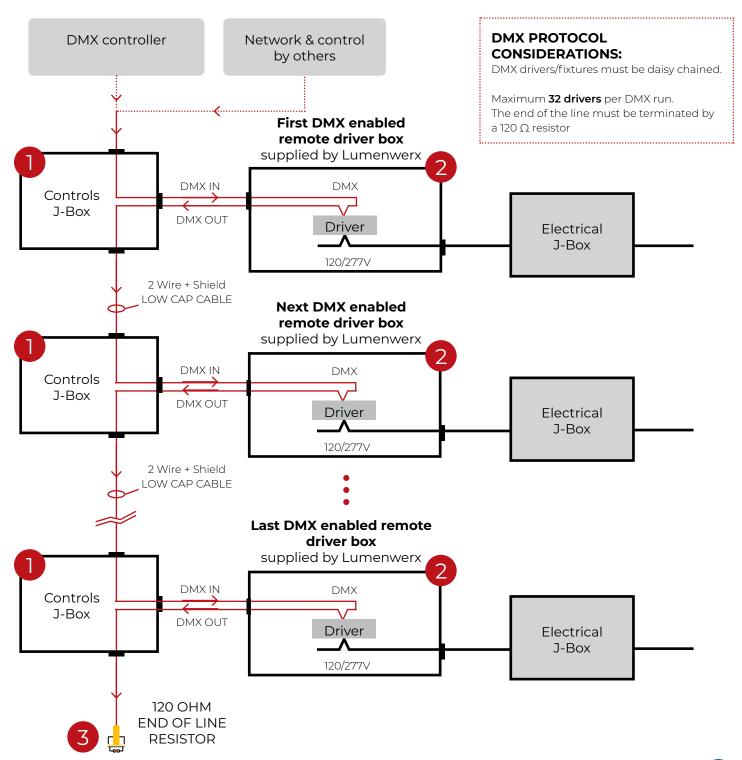






#### **DUO** GENERIC DMX NETWORK ARCHITECTURE

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.



3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9

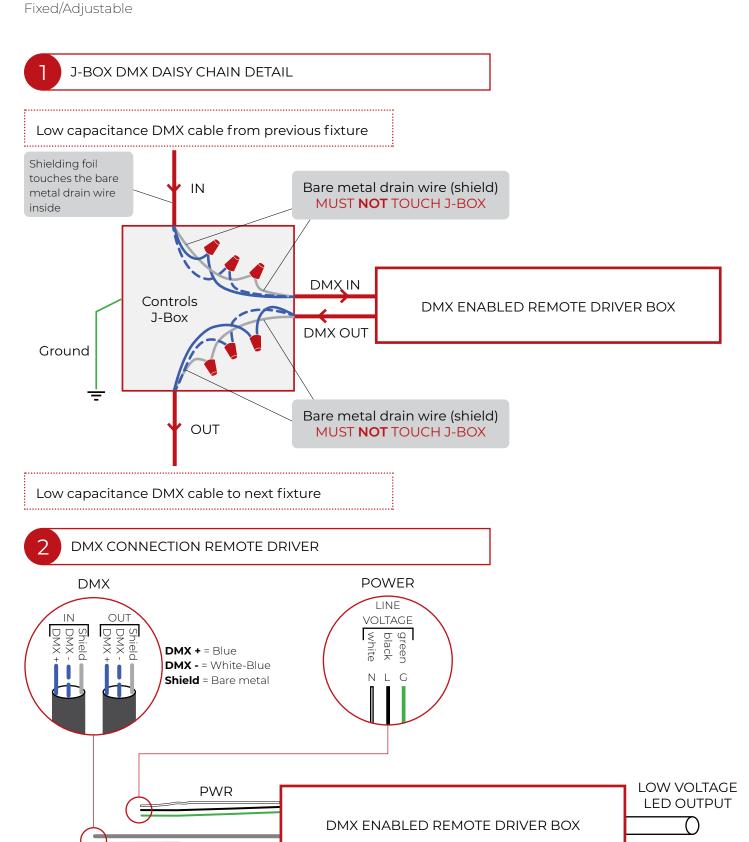
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4" Round Downlight for Healthcare





DMX





3 LAST DMX CONNECTION DETAIL

