Lumenwerx

Round Downlight for Healthcare

Fixed



Voila Seal is a class of downlights featuring precision optics, outstanding quality of light, and robust, user-friendly construction for Healthcare spaces. The gasketed and sealed trim is IP64 rated.

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

¹ Lumens packages are assuming 3500K, 80+ CRI, 30° beam, round white haffle

Delivered Lumens for Round White Standard Baffles at 3500K

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









Aperture Size

4.00"

Configuration



Fixed

Baffle Depth



Standard 1.00"

Trim



Baffle & Finishes

Matte white	
Matte black	
Custom RAL	

Color Temperature

•		
2400K		
2700K		
3000K		
3500K		
4000K		
5000K		
SOLA	C	
DUO	<u> </u>	
Delivered 1294-2800 lm		

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:	
Туре:	

1 - Housing (Example: VO4SEALRR-GKT-SW-OF-ACB-120V-14W-RD1)

Product Specification

LUMINAIRE ID	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTIONS	VOLTAGE	WATTAGE (80+ CRI) ³	DIMMING											
VO4SEALRR																		
VO4SEALRR - Voila 4"	GKT -	sw -	OF - Open	ASB -	120V - 120V	14W - Low output	INTEGRAL	REMOTE										
Seal Round Recessed	Gasketed trim GTT - Gasketed and tamper- resistant trim	Static white	frame type non-IC IC¹- IC rated CP¹- Chicago Plenum type-IC (CCEA) ¹ IC/CP with low output only.	Adjustable standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial bar hangers (grid and drywall) AHC - Adjustable hat channel bars	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial bar hangers	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial bar hangers	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial bar hangers	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial bar hangers	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial	standard bar hangers (grid and drywall) FMB - Flush mount bars (drywall only) ACB - Adjustable commercial	ndard bar gers (grid 120V-277V 1 1 20V-277V 1 347V 2 - 347V 2 - 347V 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	d bar s (grid 120V-277V 347V 2 - 347V 1 - 347V 2 - 347V bars l only) ble with 0-10V dimming options	ndard bar ngers (grid d drywall) 18 - Flush bunt bars ywall only) 18 - B - with 0-10V dimming options	dard bar lers (grid drywall) 347V 2-77V drywall) - Flush nt bars wall only) - stable mercial options	1294-1532 lm 20W ⁴ - Medium output 1623-2078 lm 28W ⁴ - High output 1988-2800 lm For other lumen packages, consult factory.	D1 - 1% 0-10V ELV ⁵ - ELV 120V TRI ⁵ - TRIAC 120V LDE1 ^{6,8} - Lutron Hi-lume 1% Eco DA ^{6,8} - DALI ELDO ⁶ - eldoLED 0.1% ELD1 ⁶ - eldoLED 1% DEB ⁷ - 0-10V with onboard emergency battery backup	RD1 - 1% 0-10V RELV ⁵ - ELV 120V RTRI ⁵ - TRIAC 120V RLDE1 ⁸ - Lutron Hi-lume 1% Eco RDA ⁸ - DALI RELDO - eldoLED 0.1% RELD1 - eldoLED 1% +EB ⁹ - Emergency battery
			(grid and drywall) AHC - Adjustable hat channel		and and RSDI only. table Consult factory for details.	 For delivered lumens and other CRI, see multiplier tables on page 3. Available with OF housing only. 	 Available with 120V only. Not available with CP insta Available with OF housing On-site commissioning is r For emergency battery, cool example: RD1+EB 	n CP installation type. housing only. oning is required. attery, code will be like the following										
		SOLA - Dim-to- warm DUO - Tunable white		NA - No bar hangers		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 DMX 8 - To specify, see pages 7 to 9 DDA 8 - DALI DT6 DDA8 8 - DALI DT8 DDI - Dual 0-10V input for CCT/intensity LD2 7.8 - Lutron T-Series 1% tunable white	SOLA RSD1 - Single 0-10V input RSELV ⁵ - ELV 120V RSTRI ⁵ - TRIAC 120V DUO RDMX ⁸ - To specify, see pages 7 to 9 RDDA ⁸ - DALI DT6 RDDA8 ⁸ - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RLD2 ⁸ - Lutron DALI-2 digiti										

2 - Light & Baffle (Example: VO4SEALRRB-SW-14W-10DEG-3STP-90CRI-27K-LS-GKT-PCL-SR-FTMW)

LUMINAIRE ID	LIGHT SOURCE	WATTAGE (80+ CRI) 10		BEAM	ВЕАМ		QUALITY	CRI	COLOR TEMPERATURE
VO4SEALRRB									
VO4SEALRRB - Voila 4" Seal Round Recessed	SW - Static white	20W " - Medium output 1623-2078 Im 28W " - High output 1988-2800 Im For other lumen packages, consult factory. To For delivered lumens and other CRI, see multiplier tables on page 3. Available with OF housing only.		Soult		2STP - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse		80CRI - 80+ CRI 90CRI - 90+ CRI 95CRI * - 95+ CRI ** Not available with 2400K and 5000K.	24K - 2400K 27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K
	SOLA - Dim-to- warm DUO - Tunable white	SOLA 13W - Low output 920 Im (20° only) 25W " - High output 1800-1981 Im (40° and up) DUO 10W - Low output 700 Im (20° only) 20W " - High output 1100-1200 Im (40° and up)		50DEG ¹³ - 50° Wide flood 60DEG ¹³ - 60° Wide flood 75DEG ¹³ - 75° Very wide flood 90DEG ¹³ - 90° Open flood		3STP - 3 : MacAdar		90CRI - 90+ CRI	SOLA - Dim-to- warm 35K-22K DUO - Tunable white 65K-27K
ACCESSORY		TRIM STYLE	LENS	5	BAFFLE PC	SITION	TRIM FL	ANGE FINISH	
			PCL		SR				
LS ¹⁵ - Linear spread HEX ^{15, 16} - Hex louver NA - None ¹⁵ Hex louver & linear spr combined together. ¹⁶ Not available with 60%		GKT - Gasketed trim GTT - Gasketed and tamper-resistant trim	PCL - Clear polycarbonate impact-resistant lens		SR - Standard regress		FTMB - M WA - Wh	Matte white fatte black ite antimicrobial Si stom finish specify	lverwerx RAL# (e.g. CF1028)



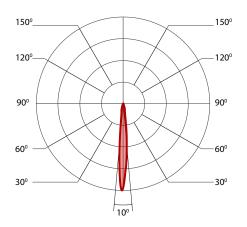


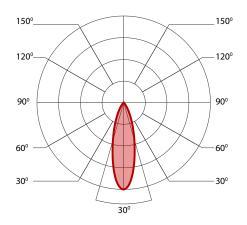
Round Downlight for Healthcare

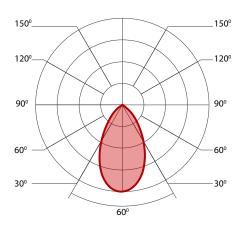
Fixed

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 3500K

80+ CRI 90+ CRI BEAM Low - 13.8 W 1348 1294 1203 1410 Medium - 19.7 W 1848 | 2576 | 2604 | 2520 | 2492 | 2436 | 2380 High - 28 W 1988 | 2744 | 2800 | 2688 | 2660 | 2604 | 2548

Delivered Lumens - At 3000K

95+ 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

	LPW							
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
95+ 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

Manapher CC1								
сст								
2400K	0.87							
2700K	0.94							
3000K	0.98							
3500K	1							
4000K	1.05							
5000K	1.05							

For SOLA and DUO, please consult factory.

Multiplier - Baffle Color and Shape

BAFFLE VARIABLES		
White	Round standard	1
Black	Round standard	0.95

Multiplier - Optical Options

LENS AND LOUVERS			
No lens	1		
Clear polycarbonate impact-resistant lens	1		
Linear spread	0.80		
Hex louver	0.82		





OILÁ 4" SEAL

Round Downlight for Healthcare

Fixed



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 standard, flush mount, adjustable commercial, and adjustable hat channel bar hangers are available as mounting options.

Clearance Height: Open frame/Type-IC/Chicago Plenum: 4";

Open frame with DEB or LD2 (Duo) options: 8" Ceiling Thickness: Can accommodate 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: Ø 5 5/32"

LIGHT ELEMENT

LED Module: Integral COB module. 90+ CRI and 2 SDCM, Standard with options of 80+ CRI, or 95+ 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 or gasketed and tamper-resistant trim

CHROMAWERX SOLA (dim-to-warm) and DUO (tunable white). See page 7 for more information.

ELECTRICAL

Integral: 0-10V, ELV, TRIAC, Lutron Hi-lume 1% Eco, DALI, eldoLED 0.1%, eldoLED 1%, DMX, Lutron DALI-2 digital

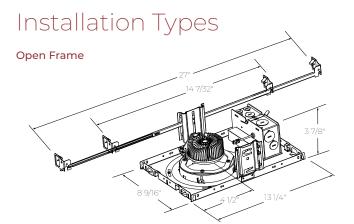
Remote: 0-10V, ELV, TRIAC, Lutron Hi-lume 1% Eco, DALI, eldoLED 0.1%, eldoLED 1%, DMX, Lutron DALI-2 digital

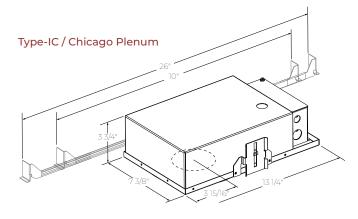
Emergency Options: Emergency battery back-up options are available as integral (Fulham), or remote (Fulham, Bodine, or IOTA). The battery provides 10 W of power.

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).

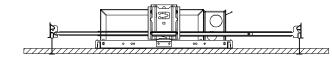
LISTING cETLus listed to UL 1598 and CAN/CSA Standard C22.2 No. 250.0. IP64 rated.

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

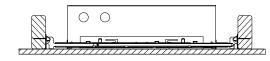




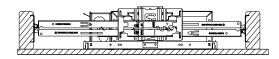
Mounting Options



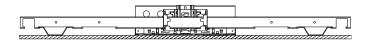
ASB - Adjustable Standard Bar Hangers



FMB - Flush Mount Bars



ACB - Adjustable Commercial Bar Hangers



AHC - Adjustable Hat Channel Bars

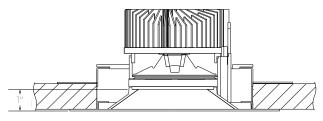


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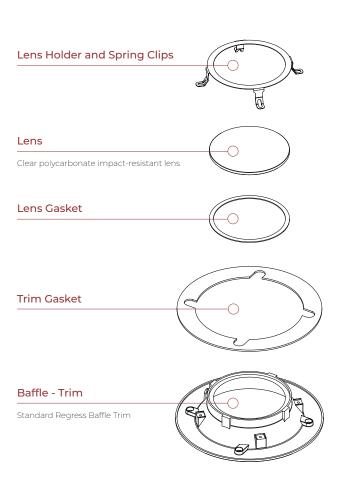
Fixed



Light



Standard Baffle



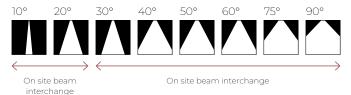
Optics

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 interchanged in the field.

Light Source - LED

Compact COB (Chip-On-Board) LED module, available in 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K with a choice of 80+ CRI or 90+ CRI with elevated R9 value (for 95+ 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



Option





Linear Spread Hex Louver

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Integral Driver

Unless otherwise specified, Voila comes standard with an integral, 120-277 VAC/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.

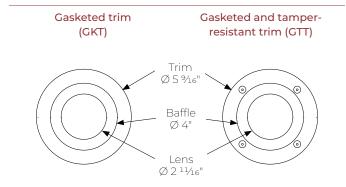
Emergency Integral

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 10 W 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 10 W 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 cool (6500K) to warm (2700K) 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. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve.

Baffle



Standard Regress

Trim



Black Trim



White Trim



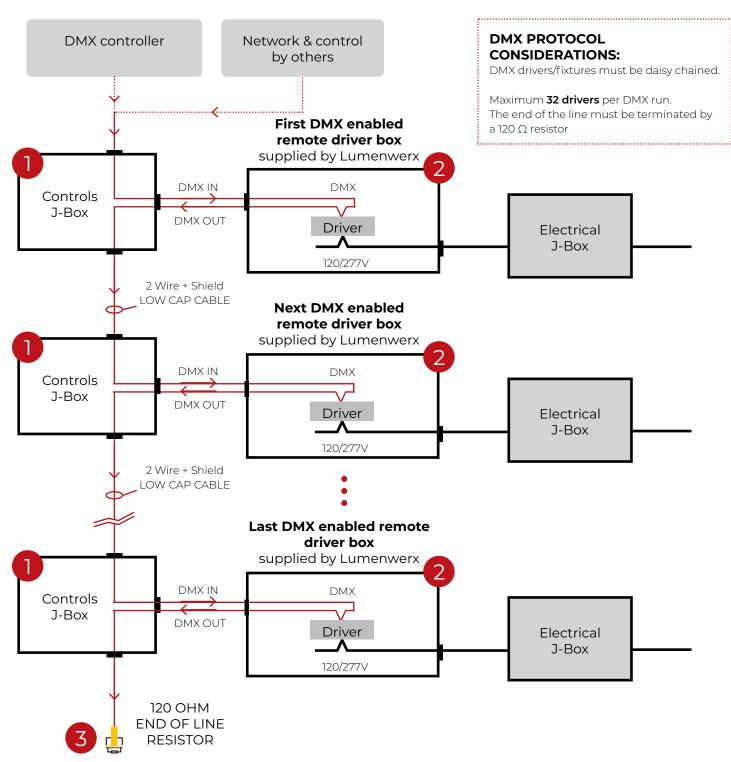


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DUO GENERIC DMX NETWORK ARCHITECTURE

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.



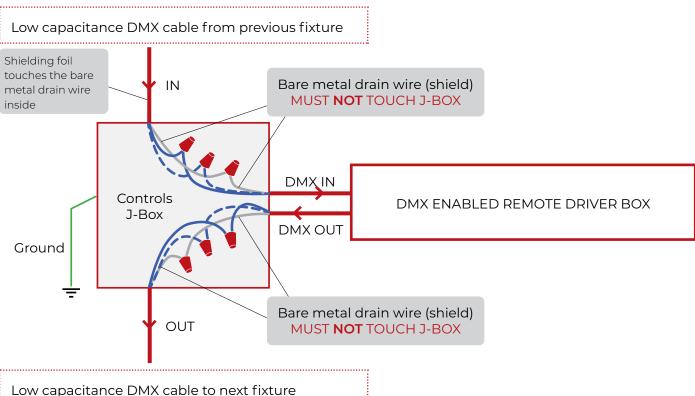




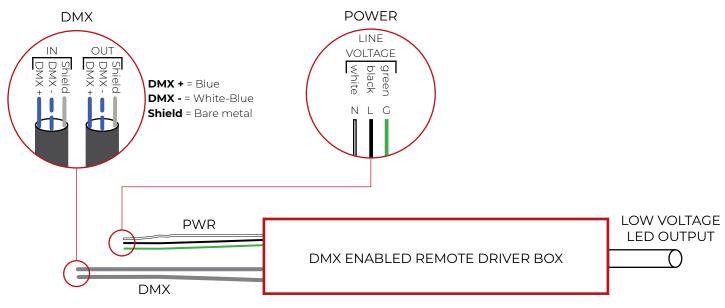
Round Downlight for Healthcare

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DMX CONNECTION REMOTE DRIVER





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3 LAST DMX CONNECTION DETAIL

