

CLUSTER

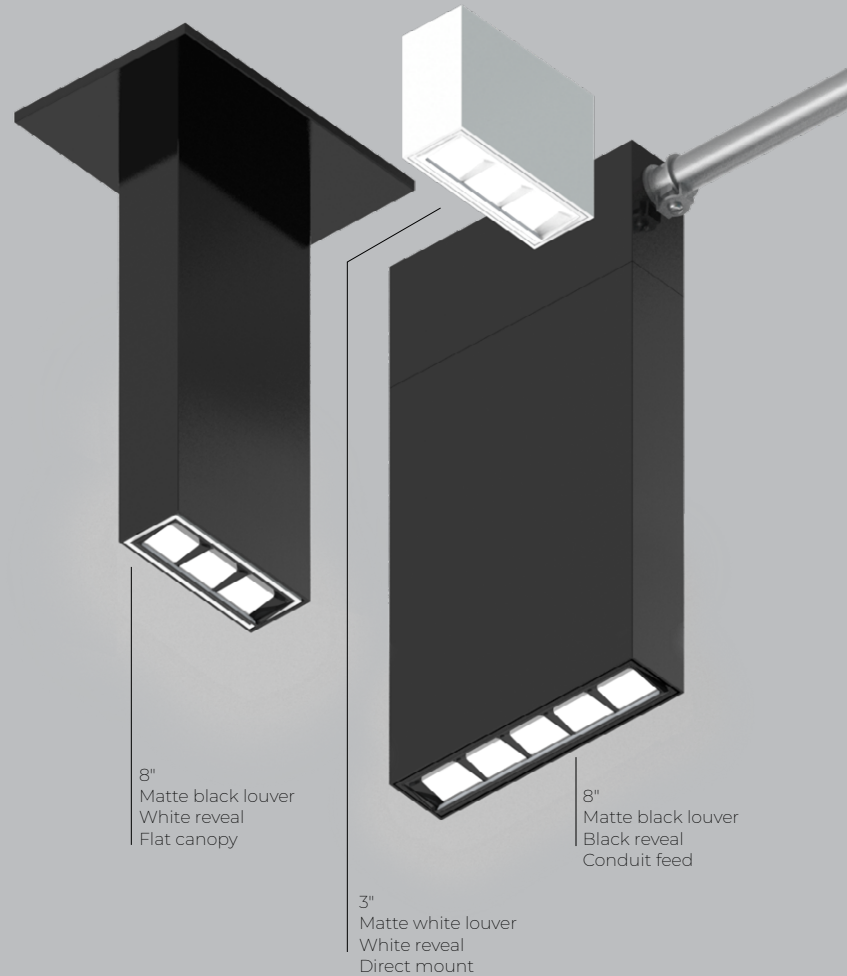
SURFACE WALL WASH



Cluster is the precise, and scalable family of downlights, wall washers, and adjustables, available for recessed, pendant, and surface mounting.

Based on a fundamental 1.2" square cell, Cluster delivers lighting that is optically sophisticated and aesthetically refined.

Cluster surface wall wash is available in 3 and 5 cell configurations. The diffusion film optics deliver remarkably smooth and uniform vertical illumination.

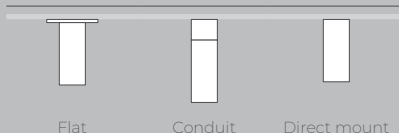


Optic

WRO - Wall wash



Mounting Options



Sizes



Declare.

Cluster Family (Refer to other spec sheets)

Recessed, Wood Slat



Downlight Parabolic Wall Wash

Recessed Adjustable



Downlight Parabolic Wall Wash

Surface



Downlight Parabolic Wall Wash

Pendant



Downlight Parabolic Wall Wash

Combo



Recessed
Pendant
Surface

Acoustix



Blank
Downlight
Parabolic

CLUSTER

SURFACE WALL WASH



Project: _____

Type: _____

Order Guide

LIGHT

LUMINAIRE ID	CUBOID HEIGHT ¹	CUBOID FINISH	LOUVER FINISH	REVEAL FINISH	LIGHT SOURCE	OPTIC	
CLU03SWW - Cluster 3x1 Surface Wall Wash CLU05SWW - Cluster 5x1 Surface Wall Wash	3IN - 3" 8IN - 8" 12IN - 12" <small>¹Conduit feed canopy option will add 3" to total height.</small>	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#	MF01 - Matte white MF04 - Matte black	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#	SW - Static white	WRO - Wall wash	
CRI	COLOR TEMP.	DRIVER	VOLTAGE	LUMEN PACKAGE ³	DIMMING	CANOPY TYPE ⁵	CANOPY FINISH <small>Specify NA for DMRM</small>
90CRI							
90CRI - 90 CRI	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K	INTEGRAL ² <small>²Not available with 3" cuboid height.</small>	120V - 120V 277V - 277V UNV - 120V-277V	3x1 400LM - 400 lm 5x1 800LM - 800 lm <small>³Lumen packages shown at 3500K, with WRO. For other, see lumen output multipliers on page 5.</small>	D1 - 1% 0-10V ELV ⁴ - ELV 120V TRI ⁴ - TRIAC 120V <small>⁴Available with 120V only.</small>	FLS - Flat square canopy, 4" octagonal junction box CDRE - Conduit feed, rectangular canopy DMRM ⁶ - Direct mount, remodel <small>⁵See page 4 for details. ⁶Single wiring entry only. No daisy chain connections allowed. May be installed as new construction but without a j-box.</small>	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL# NA - Not applicable
		REMOTE	DO NOT SPECIFY FOR REMOTE. SEE "REMOTE DRIVER BOX" SECTION BELOW.				

REMOTE DRIVER BOX

Ordered separately. Specify each required remote driver box on a separate line.

REMOTE DRIVER ⁷	LUMINAIRE QTY. ⁸	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE ⁹	DIMMING ¹⁰												
RDB# - Remote driver box <small>⁷Specify an RDB number (#) for each required remote driver box.</small>	#X - Number of luminaires <small>⁸Specify number (#) of luminaires per remote driver. See page 4 for minimum and maximum per driver.</small>	CLU03SWW - Cluster 3x1 Surface Wall Wash CLU05SWW - Cluster 5x1 Surface Wall Wash	120V - 120V 277V - 277V UNV - 120V-277V	<table border="1"> <tr> <td></td> <td>Low</td> <td>Medium</td> <td>High</td> </tr> <tr> <td>3x1</td> <td>100LM - 100 lm</td> <td>250LM - 250 lm</td> <td>400LM - 400 lm</td> </tr> <tr> <td>5x1</td> <td>200LM - 200 lm</td> <td>500LM - 500 lm</td> <td>800LM - 800 lm</td> </tr> </table> <small>⁹Watts and lumen per watts will vary based on the number of lighting units per remote driver as well as on the type of driver selected.</small>		Low	Medium	High	3x1	100LM - 100 lm	250LM - 250 lm	400LM - 400 lm	5x1	200LM - 200 lm	500LM - 500 lm	800LM - 800 lm	RD1 - 1% 0-10V RELV ^{11,12} - ELV 120V RTRI ^{11,12} - TRIAC 120V RDA ¹³ - DALI RLDE1 ¹³ - Lutron Hi-Lume 1% Eco <small>¹⁰For configurations involving different cluster sizes on a remote driver, please consult factory. ¹¹Available with 120V only. ¹²Only available with high lumen packages. ¹³On-site commissioning is required.</small>
	Low	Medium	High														
3x1	100LM - 100 lm	250LM - 250 lm	400LM - 400 lm														
5x1	200LM - 200 lm	500LM - 500 lm	800LM - 800 lm														

EXAMPLE

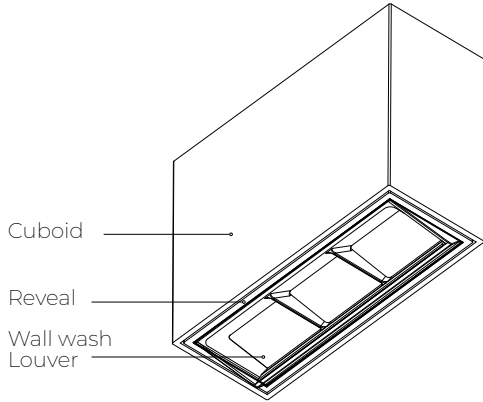
LIGHT	CLU03SWW-8IN-FTMW-MF01-FTMW-SW-WRO-90CRI-35K-INTEGRAL-120V-400LM-D1-DMRM-NA	REMOTE DRIVER	N/A
LIGHT	CLU03SWW-3IN-FTMW-MF01-FTMW-SW-WRO-90CRI-35K-REMOTE-DMRM-NA	REMOTE DRIVER	RDB1-6X-CLU03SWW-120V-400LM-RD1 RDB2-2X-CLU03SWW-120V-400LM-RD1

CLUSTER

SURFACE WALL WASH



Overview



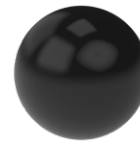
OPTIC



WRO - Wall wash

LOUVER FINISH

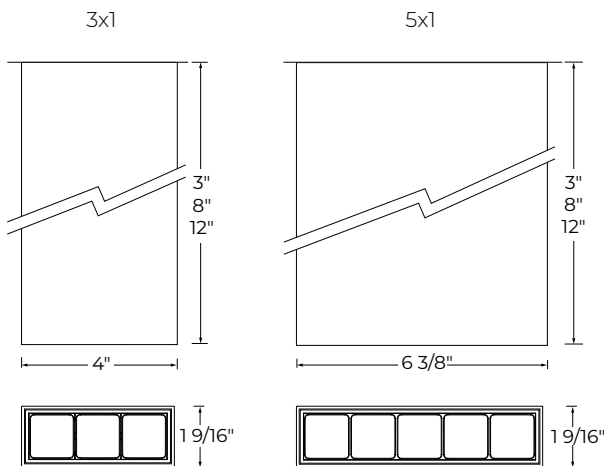
Louver is injection molded with integral texture and color.



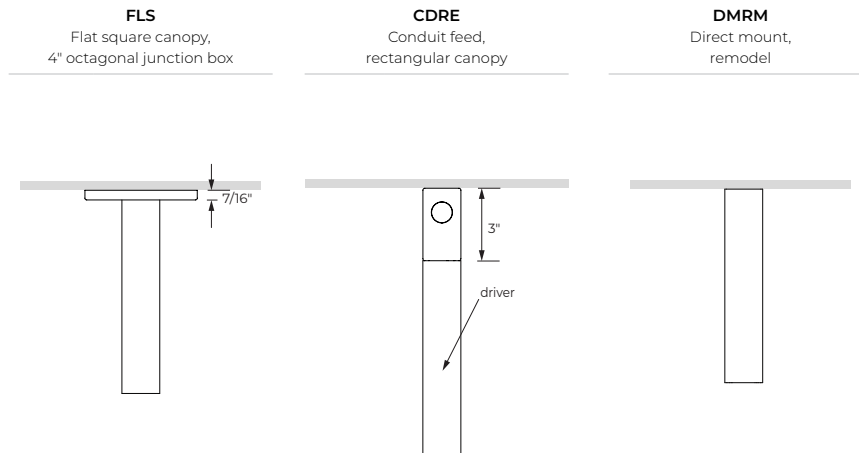
MF01 - Matte white

MF04 - Matte black

Dimensions



Mounting



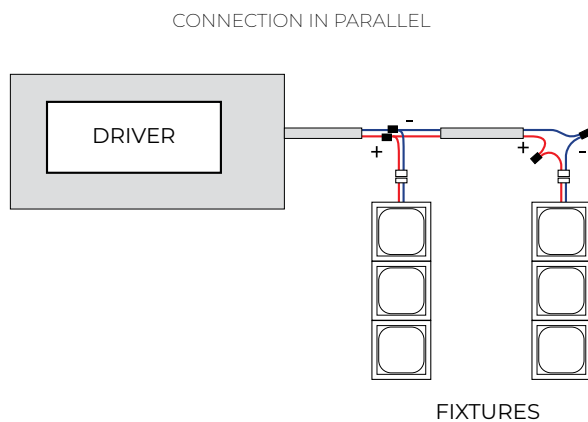
Canopy size	FLS		CDRE	
	3x1	4 5/8" X 7 1/16"	3x1	1 9/16" x 4"
	5x1	4 5/8" X 9 7/16"	5x1	1 9/16" x 6 3/8"

Driver in j-box or canopy when specified with integral drivers.

Driver

REMOTE DRIVER

The remote driver can power several lighting units, depending on their total power. The minimum and maximum number of lighting units and driver type are shown in the table below and must be observed. The remote driver and lighting units are wired together through connection boxes, which are furnished pre-wired to the driver enclosure. All wiring is Class 2 with quick-splice connectors. The remote driver requires access from above the ceiling (or an access panel).



Number of lighting units per driver (minimum and maximum).

DRIVER	3x1	5x1
RD1	1-12	1-7
RELV	1-6	1-4
RTRI	1-6	1-4
RDA	1-11	1-7
RLDE1	1-11	1-7
RELD1	1-11	1-7
RELD0	1-11	1-7

For any quantities of lighting units per driver that fall outside the minimum and maximum listed above, please consult factory.

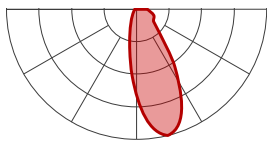
CLUSTER

SURFACE WALL WASH



Photometrics

Values calculated based on 3500K.



WRO - Wall wash

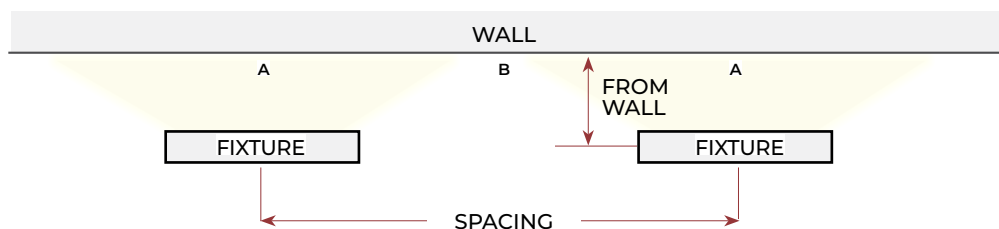
	LM	W	LM/W
3x1	400	6.35	63
5x1	800	12.7	63

MULTIPLIER TABLE

Please follow the multiplier table to ensure correct lumen value. CCT will change the lumen value.

CCT	LPW
2700K	0.94
3000K	0.97
3500K	1
4000K	1.02
5000K	1.06

VERTICAL ILLUMINANCE



FC ON WALL

24" FROM WALL - 18" SPACING

		3x1		5x1	
		A	B	A	B
Distance from Ceiling	1'	20	19	40	38
	2'	24	24	48	48
	3'	24	24	48	48
	4'	19	19	37	37
	5'	14	14	28	28
	6'	10	10	21	21
	7'	9	9	17	17
	8'	7	7	15	14

24" FROM WALL - 36" SPACING

		3x1		5x1	
		A	B	A	B
Distance from Ceiling	1'	10	9	21	17
	2'	11	11	23	21
	3'	13	12	25	25
	4'	12	12	24	24
	5'	10	10	20	20
	6'	8	8	15	16
	7'	6	6	12	12
	8'	5	5	11	11

30" FROM WALL - 36" SPACING

		3x1		5x1	
		A	B	A	B
Distance from Ceiling	1'	8	7	16	15
	2'	9	8	17	17
	3'	10	10	19	19
	4'	10	10	20	20
	5'	10	10	19	19
	6'	8	8	17	17
	7'	7	7	14	14
	8'	6	6	12	12



Technical Specifications

OPTICS

Wall Wash Refractive Optic (WRO)

Cluster wall wash optic use multiple mid-flux emitters in a continuous array, supported by an angled board. An aluminum reflector collects and redirects emitter flux, while a refractive film adjusts both vertical and horizontal intensity and eliminates source image. The result is excellent uniformity up and down the wall, as well as between luminaires.

LIGHT SOURCE

Custom array of mid-flux LEDs mounted onto aluminum-backed circuitry. Available in 2700K, 3000K, 3500K, 4000K and 5000K with a minimum 90 CRI with elevated R9 value. Color consistency is maintained to within 3 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.

ELECTRICAL

Unless otherwise specified, dimming down to 1%. At maximum driver load: efficiency>84%, PF>0.9, THD<20%.

Integral: 0-10V, ELV, TRIAC

Remote: 0-10V, ELV, TRIAC, Lutron Hi-Lume 1% EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V

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), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

WEIGHT

	3'		8'		12'	
	lb	kg	lb	kg	lb	kg
3x1	1.06	0.46	1.57	0.69	1.97	0.88
5x1	1.95	0.88	3.19	1.45	4.18	1.9

CONSTRUCTION

Housing: Die-cast aluminum (0.95" nominal)

Optics: Polycarbonate

Cuboid: Extruded aluminum

Cover surface: Galvanized steel metal

Extension bar: Galvanized steel metal

CERTIFICATION

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

Declare: [LBC Red List Approved](#)

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.