

CLUSTER

PENDANT 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.

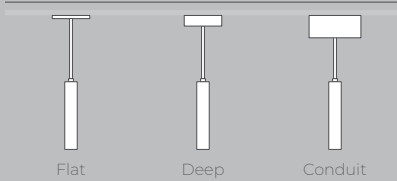
Cluster pendant wall wash is available in 3 and 5 cell configurations. The diffusion film optics deliver remarkably smooth and uniform vertical illumination.

Optic

WRO - Wall wash



Mounting Options



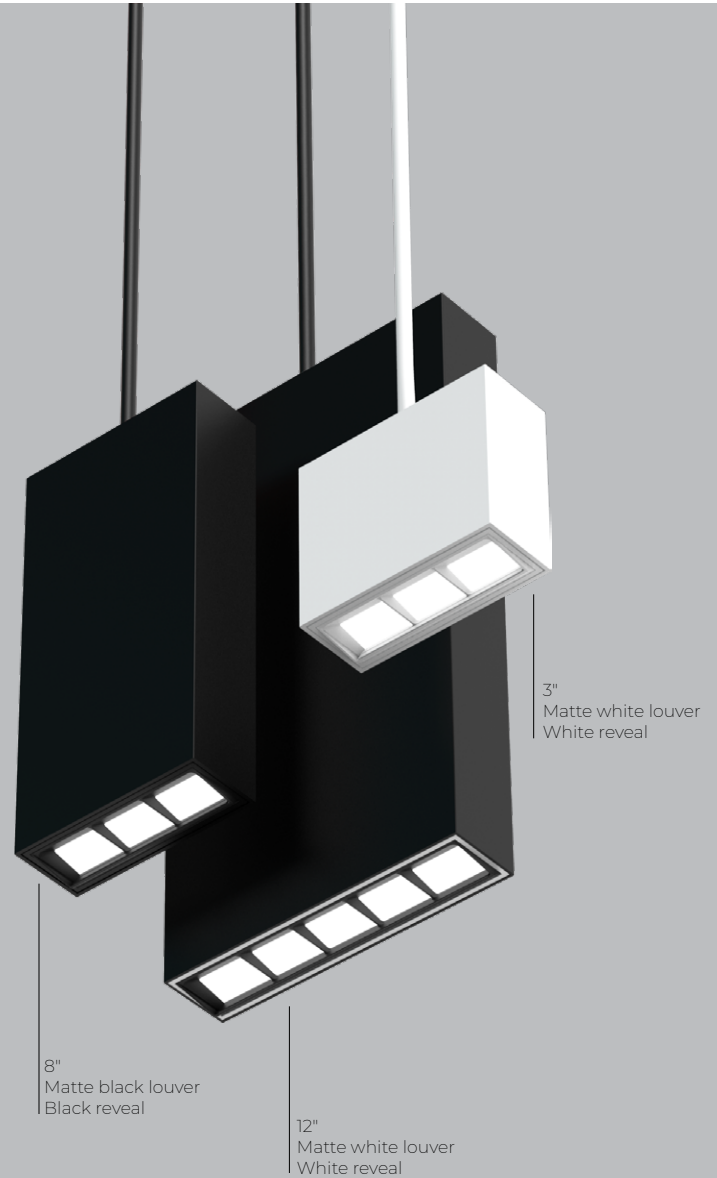
Sizes



3x1



5x1



Cluster Family (Refer to other spec sheets)

Recessed, Wood Slat



Downlight Parabolic Wall Wash

Recessed Adjustable



Downlight Parabolic Wall Wash

Pendant



Downlight Parabolic Wall Wash

Surface



Downlight Parabolic Wall Wash

Combo



Recessed
Pendant
Surface

Acoustix



Blank
Downlight
Parabolic

CLUSTER

PENDANT WALL WASH



Project: _____

Type: _____

Order Guide

LUMINAIRE ID	CUBOID HEIGHT	CUBOID FINISH	LOUVER FINISH	REVEAL FINISH	LIGHT SOURCE	OPTIC	CRI	COLOR TEMP.
					SW	WRO	90CRI	
CLU03PWW - Cluster 3x1 Pendant Wall Wash CLU05PWW - Cluster 5x1 Pendant Wall Wash	3IN - 3" 8IN - 8" 12IN - 12"	FTMW - Matte white FTMB - Matte black CF# - Custom finish, specify RAL#	MF01 - Matte white MF04 - Matte black	FTMW - Matte white FTMB - Matte black CF# - Custom finish, specify RAL#	SW - Static white	WRO - Wall wash	90CRI - 90+ CRI	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K

DRIVER	VOLTAGE	LUMEN PACKAGE ¹	DIMMING	CANOPY TYPE ³	CANOPY FINISH	SUSPENSION
INTEGRAL	120V - 120V 277V - 277V UNV - 120V-277V	3x1 400LM - 400 lm 5x1 800LM - 800 lm ¹ Lumen packages shown at 3500K, with WRO. For other, see lumen output multipliers on page 5.	D1 - 1% 0-10V ELV ² - ELV 120V TRI ² - TRIAC 120V ² Only available with 120V.	FLS ⁴ - Flat square canopy, 4" octagonal junction box DS - Deep square canopy CDS - Conduit feed, square canopy ³ See page 3 for details. ⁴ Not available with 3" cuboid height when specified with integral driver.	FTMW - Matte white FTMB - Matte black CF# - Custom finish, specify RAL#	STEM ⁵ BKS###IN - Matte black stem WHS###IN - Matte white stem BKFC###IN - Matte black field-cutttable stem WHFC###IN - Matte white field-cutttable stem CF#S###IN ⁶ - Custom finish stem CF#FCS###IN ⁶ - Custom finish field-cutttable stem ⁵ Min 10" - max 72", specify length (##) in inches. ⁶ Specify RAL#.
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 ⁷ Specify an RDB number (#) for each required remote driver box.	#X - Number of luminaires ⁸ Specify number (#) of luminaires per remote driver. See page 4 for minimum and maximum per driver.	CLU03PWW - Cluster 3x1 Pendant Wall Wash CLU05PWW - Cluster 5x1 Pendant Wall Wash	120V - 120V 277V - 277V UNV - 120V-277V	<table border="1"> <thead> <tr> <th></th> <th>Low</th> <th>Medium</th> <th>High</th> </tr> </thead> <tbody> <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> </tbody> </table> ⁹ Watts 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.		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 ELD1 - eldoLED 1% ECOdrive 0-10V ELD0 - eldoLED 0.1% SOLOdrive 0-10V ¹⁰ For configurations involving different Cluster sizes on a remote driver, please consult factory. ¹¹ Only available with 120V. ¹² Only available with high lumen packages. ¹³ On-site commissioning is required.
	Low	Medium	High														
3x1	100LM - 100 lm	250LM - 250 lm	400LM - 400 lm														
5x1	200LM - 200 lm	500LM - 500 lm	800LM - 800 lm														

EXAMPLE

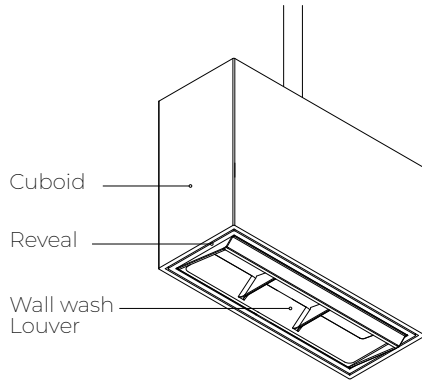
LIGHT	CLU03PWW-3IN-FTMW-MF01-FTMW-SW-WRO-90CRI-35K-INTEGRAL-120V-400LM-D1-DS-FTMW-WHS18IN	REMOTE DRIVER	N/A
LIGHT	CLU03PWW-3IN-FTMW-MF01-FTMW-SW-WRO-90CRI-35K-REMOTE-FLS-FTMW-WHS18IN	REMOTE DRIVER	RDB1-10X-CLU03PWW-120V-250LM-RD1 RDB2-8X-CLU03PWW-120V-250LM-RD1

CLUSTER

PENDANT WALL WASH



Overview



OPTIC



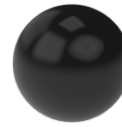
WRO - Wall wash

LOUVER FINISHES

Louvers are injection molded with integral texture and color.

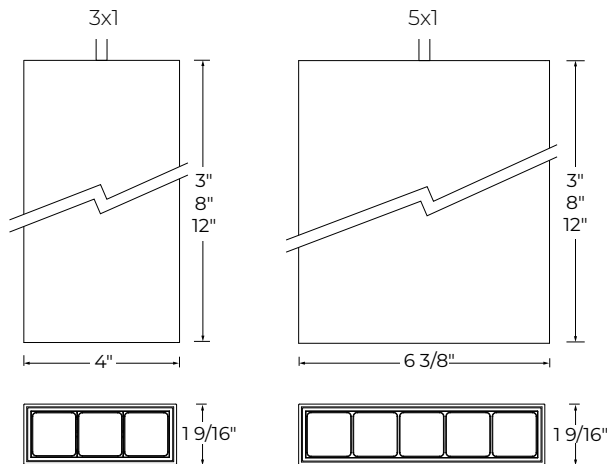


MF01 - Matte white

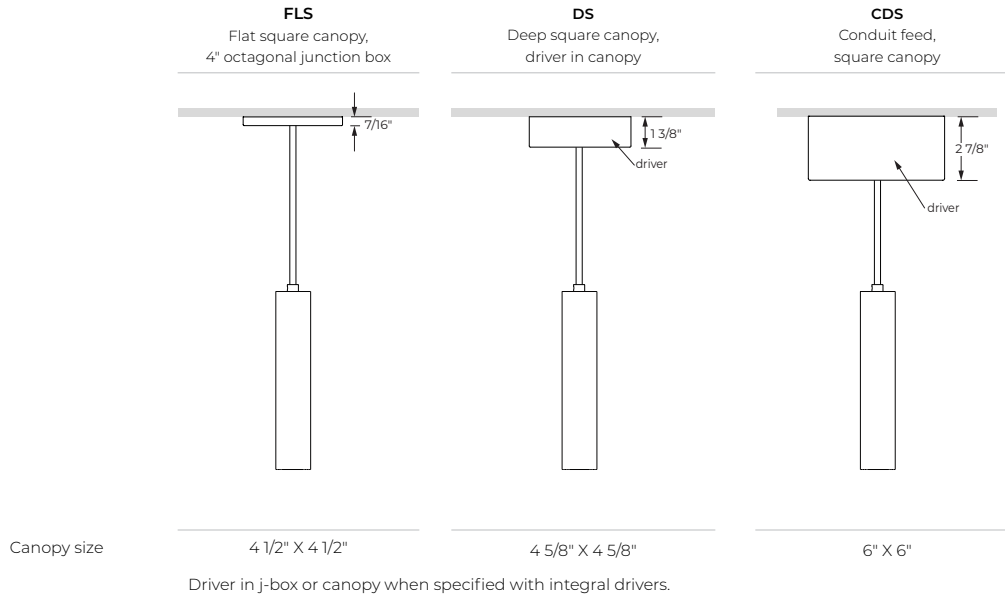


MF04 - Matte black

Dimensions



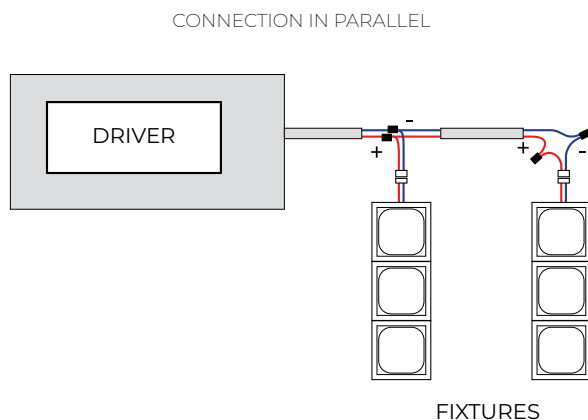
Mounting



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

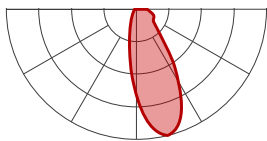
PENDANT WALL WASH



WALL WASH

Photometrics

Values calculated based on 3500K.



WRO - Wall wash

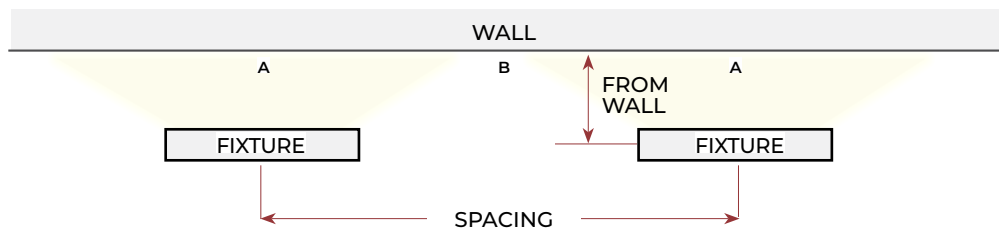
	LM	W	LM/W
3x1	400	6.35	63
5x1	800	12.7	63

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

Optics: Polycarbonate

Cuboid: Extruded aluminum

Cover pendant: Aluminum

Extension bar: Galvanized steel metal

Stem: Ø 1/2" rigid stem and field-cutable stem 10" to 72" standard length

CERTIFICATION

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

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.