

CLUSTER

SURFACE LINEAR WALL WASH

DESCRIPTION

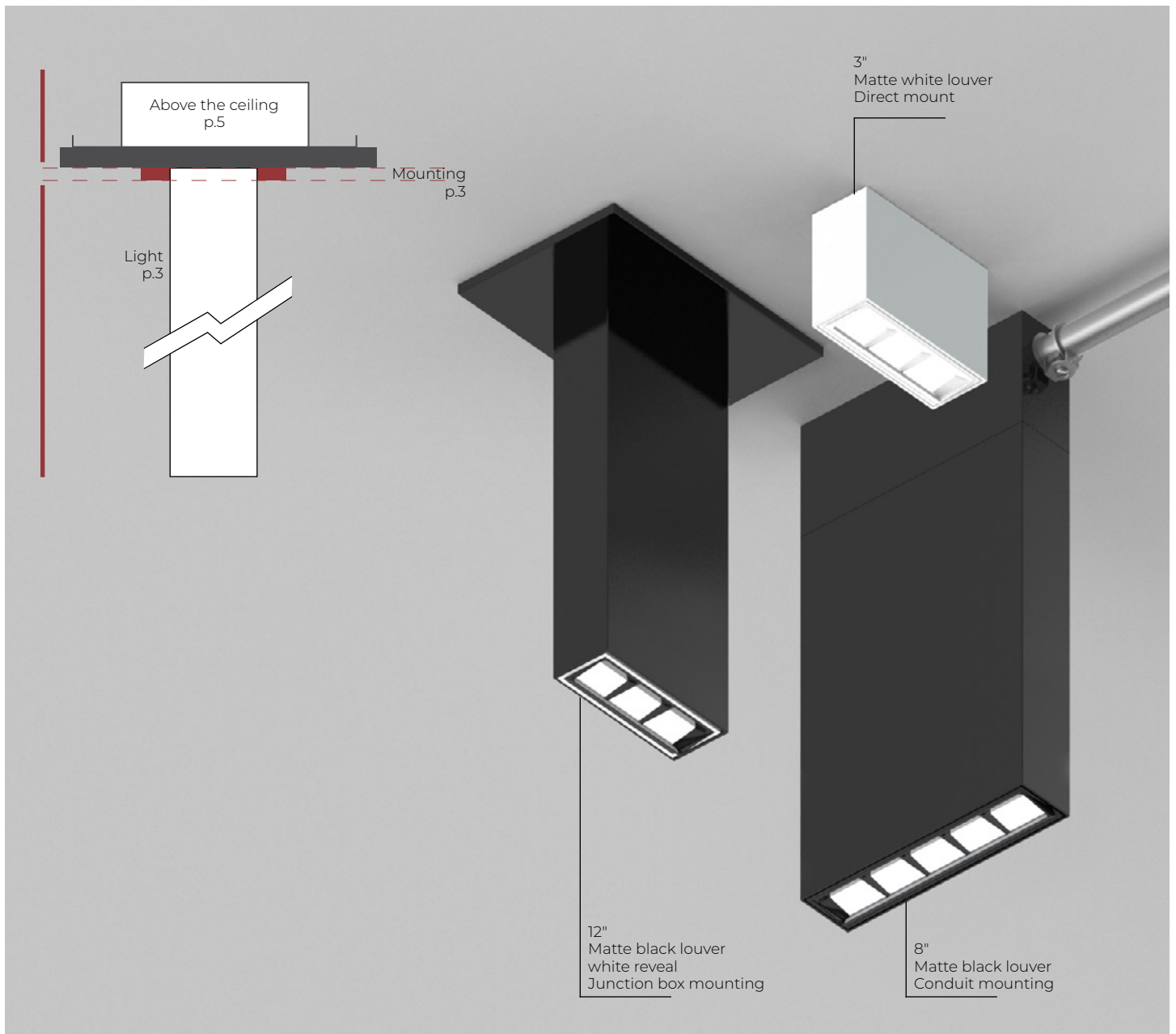
Cluster is the precise, and scalable family of downlights, wall washers, and adjustables, available in both linear and planar configurations and for recessed, pendant, and surface mounting. Based on a fundamental 1.2" square cell, Cluster deliver lighting that is optically sophisticated and aesthetically refined. Cluster surface linear wall wash is available in 3-, and 5-cell configurations. The diffusion film optics deliver remarkably smooth and uniform vertical illumination. Nominal light output of 400 or 800 lumens. Surface linear wall wash fit a choice of 3", 8" or 12" deep cuboid enclosures. Surface Cluster mount using a choice of direct mount, junction box with canopy, and conduit feed with splice enclosure. Driver is either integral or remote, which is capable of powering multiple luminaires.

LUMENWERX

PROJECT: _____

TYPE: _____

NOTES: _____



LIGHT

Consult pages 3-4 for details before specifying

LUMINAIRE ID	CUBOID HEIGHT ¹	CUBOID FINISH	LOUVER FINISH	REVEAL FINISH	SW	WRO
CLUS03 - Cluster Surface 3x1 CLUS05 - Cluster Surface 5x1	3 - 3" 8 - 8" 12 - 12" ¹ Conduit mounting option will add 3" to total height.	TMW - Textured matte white TMB - Textured matte black CF# - Custom finish, specify RAL#	MF01 - Matte white MF04 - Matte black	TMW - Textured matte white TMB - Textured matte black CF# - Custom finish, specify RAL#	SW - Static white	WRO - Wall wash

90	CRI	COLOR TEMP.	DRIVER	VOLTAGE	LUMEN PACKAGE ³	DIMMING ^{4,5}	MOUNTING TYPE	J-BOX PLATE & CONDUIT FINISH
90 - 90 CRI	27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K		INTEGRAL ² ² Not available with 3" cuboid height.	120 - 120V 277 - 277V	400 - 400 lm (CLUS03) 800 - 800 lm (CLUS05) ³ Lumen packages shown at 3500K, with WRO. For other, see lumen output multipliers on page 4.	D1 - 1% 0-10V ELV ⁶ - ELV 120V TRI ⁶ - TRIAC 120V ⁴ Integral drivers (in body) available for 8" and 12" cuboid height only. ⁵ Integral drivers (in body) not available for 3". ⁶ Available with 120V only.	DM - Direct mount JB - Junction box CD - Conduit box	TMW - Textured matte white TMB - Textured matte black CF# - Custom finish, specify RAL#
			REMOTE	FOR FULL REMOTE DRIVER SPECIFICATION, SEE "REMOTE DRIVER" SECTION BELOW.				

REMOTE DRIVER OPTIONAL

Consult page 5 for details before specifying

Continue here for full remote driver specifications. Remote driver can be ordered separately.

REMOTE DRIVER ⁷	LUMINAIRE QTY. ⁸	LUMINAIRE ID	VOLTAGE	LUMEN PACKAGE ^{9,10}	DIMMING ¹¹
RDB# - Remote driver ⁷ If multiple driver boxes needed, specify a line number for each driver type used. (e.g. RDB1-4X-CLUS05-...-RD1 RDB2-2X-CLUS05-...-RD1 ...)	#X - Number of luminaires ⁸ Specify number of luminaires per remote driver. (e.g. 3X)	CLUS03 - Cluster Surface 3x1 CLUS05 - Cluster Surface 5x1	120 - 120V 277 - 277V UNV - 120V-277V	### - Low 100 lm - Med 250 lm - High 400 lm (CLUS03) ### - Low 200 lm - Med 500 lm - High 800 lm (CLUS05) 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. ¹⁰ Low and medium lumen packages are not available with RELV and RTRI dimming options.	RD1 - 1% 0-10V RELV ¹² - ELV 120V RTRI ¹² - TRIAC 120V RDA ¹³ - DALI RLTEA2W ¹² - Lutron 1% - 2 wire FP 120V RLDE1 ¹³ - Lutron Hi-lume 1% Eco ¹¹ For configurations involving different clusters sizes on a remote driver, please consult factory. ¹² Available with 120V only. ¹³ On-site commissioning is required.

EXAMPLE ORDER CODES

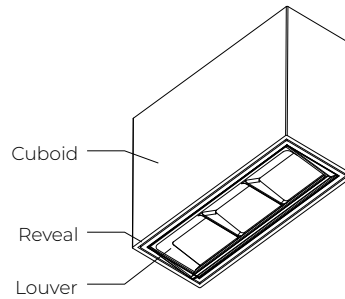
WHEN SPECIFYING WITH INTEGRAL DRIVER		WHEN SPECIFYING WITH REMOTE DRIVER ¹⁴	
LIGHT	CLUS03-3-TMW-MF01-TMW-SW-WRO-CRI90-35-INTEGRAL-120-400-D1-DM-TMW	LIGHT	CLUS03-3-TMW-MF01-TMW-SW-WRO-CRI90-35-REMOTE-DM-TMW
REMOTE DRIVER	N/A	REMOTE DRIVER	Remote driver 1: RDB1-6X-CLUS03-120-250-RD1 Remote driver 2: RDB2-2X-CLUS03-120-250-RD1

¹⁴ When specifying with multiple remote driver boxes, each driver used needs to be on a separate line and be numbered for the ordering codes.

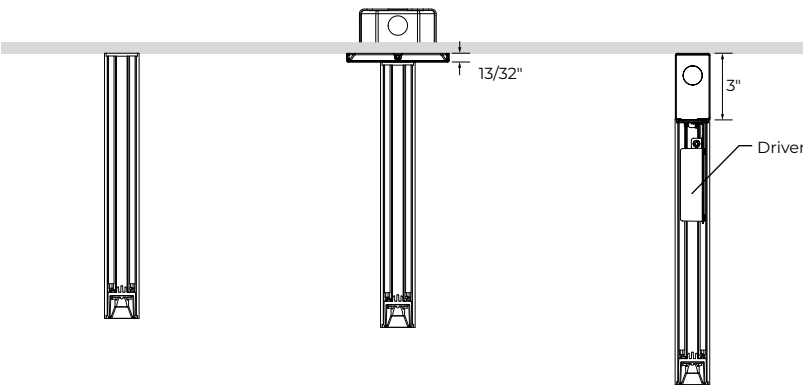
LIGHT

LOUVER FINISH

Louver is injection-molded with integral texture and color



MOUNTING



MOUNTING TYPE

Direct mount	DM
Junction box	JB
Conduit	CD

JUNCTION BOX PLATE & CONDUIT FINISH

Textured matte white	TMW
Textured matte black	TMB
Custom finish	CF#

DM - Direct Mount

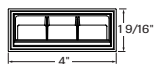
JB - Junction Box
To be attached on a hexagonal junction box

Junction box is covered by the junction box plate

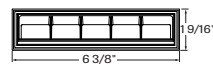
CD - Conduit
For concrete ceiling
Add 3" to the cuboid length

BOTTOM VIEW

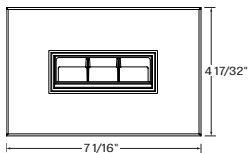
CLUS03 - Direct mount



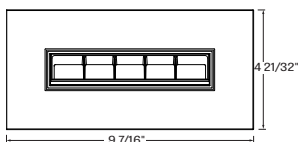
CLUS05 - Direct mount



CLUS03 - Junction box



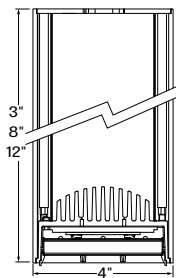
CLUS05 - Junction box



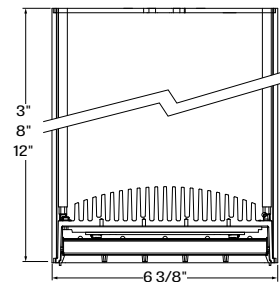
See planar spec sheet for more sizes

CROSS SECTION

CLUS03



CLUS05

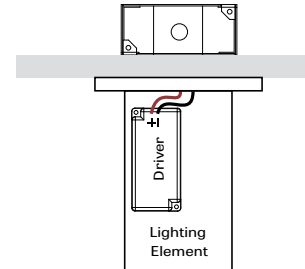


See planar spec sheet for more sizes

DRIVER

INTEGRAL DRIVER 8" & 12" CUBOID HEIGHT ONLY

The integral driver is sized to the lighting unit and is connected directly with Class 2 wiring and quick-splice connectors. The driver is accessible for service through the canopy.



MULTIPLIER

GENERAL LUMEN OUTPUT MULTIPLIER AT 90 CRI

	2700K	3000K	3500K	4000K
LUMEN OUTPUT MULTIPLIER	0.94	0.97	1	1.02

LUMEN PACKAGE (AT 3500K, WRO) - INTEGRAL DRIVER

LUMINAIRE ID	LUMEN OUTPUT	WATTS	EFFICACY LM/W
CLUS03	400 lm	6.35 W	63 lm/W
CLUS05	800 lm	12.7 W	63 lm/W

LUMEN PACKAGE	VOLTAGE	INTEGRAL DRIVER
Use the multiplier tables to calculate the lumen package	120 - 120V 277 - 277V	D1 - 1% 0-10V ELV ¹ - ELV 120V TRI ¹ - TRIAC 120V ¹ Available with 120V only.

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).

LUMEN PACKAGE¹ (AT 3500K, WRO) - REMOTE DRIVER

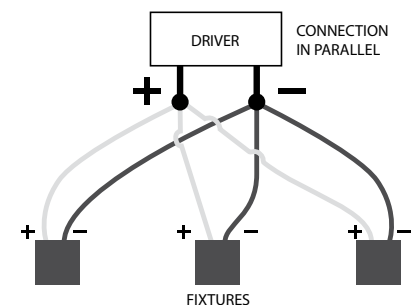
LUMINAIRE ID	LUMEN PACKAGE ²	VOLTAGE	REMOTE DRIVER	NUMBER OF LIGHTING UNITS PER DRIVER						
CLUS03 CLUS05	<table border="1"> <thead> <tr> <th>LOW</th> <th>MEDIUM</th> <th>HIGH</th> </tr> </thead> <tbody> <tr> <td>100 lm 200 lm</td> <td>250 lm 500 lm</td> <td>400 lm 800 lm</td> </tr> </tbody> </table> <p>² Low and medium options are not available with RELV and RTRI.</p>	LOW	MEDIUM	HIGH	100 lm 200 lm	250 lm 500 lm	400 lm 800 lm	120 - 120V 277 - 277V UNV - 120V-277V	RD1 - 1% 0-10V RELV ³ - ELV 120V RTRI ³ - TRIAC 120V RDA ⁴ - DALI RLTEA2W ³ - Lutron 1% - 2 wire FP 120V RLDE1 ⁴ - Lutron Hi-lume 1% Eco ³ Available with 120V only. ⁴ On-site commissioning is required.	See table below for maximum and minimum possible number of lighting units per each driver. For configurations involving different cluster sizes on a remote driver, please consult factory.
LOW	MEDIUM	HIGH								
100 lm 200 lm	250 lm 500 lm	400 lm 800 lm								

¹ 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.

NUMBER OF LIGHTING UNITS PER DRIVER - MINIMUM AND MAXIMUM

DRIVER TYPE	CLUS03	CLUS05
D1 - 1% 0-10V	2-12	1-6
ELV - ELV 120V	1-4	1
TRI - TRIAC 120V	1-4	1
DA - DALI	3-12	2-6
LTEA2W - Lutron 1% - 2 wire FP 120V	2-6	1-3
LDE1 - Lutron Hi-lume 1% Eco	2-11	1-6

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

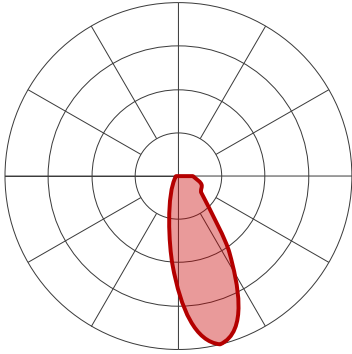


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LUMENWERX

WALL WASH



VERTICAL ILLUMINANCE

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	20	19	20
	2'	24	24	24
	3'	24	24	24
	4'	19	19	19
	5'	14	14	14
	6'	10	10	10
	7'	9	9	9
	8'	7	7	7

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	40	38	40
	2'	48	48	48
	3'	48	48	48
	4'	37	37	37
	5'	28	28	28
	6'	21	21	21
	7'	17	17	17
	8'	15	14	15

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	10	9	10
	2'	11	11	11
	3'	13	12	13
	4'	12	12	12
	5'	10	10	10
	6'	8	8	8
	7'	6	6	6
	8'	5	5	5

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	21	17	21
	2'	23	21	23
	3'	25	25	25
	4'	24	24	24
	5'	20	20	20
	6'	15	16	15
	7'	12	12	12
	8'	11	11	11

CLU03C-WW-SB-LED-90-400LMS-35				
FC on Wall				
Distance from Ceiling	1'	8	7	8
	2'	9	8	9
	3'	10	10	10
	4'	10	10	10
	5'	10	10	10
	6'	8	8	8
	7'	7	7	7
	8'	6	6	6

CLU05C-WW-SB-LED-90-800LMS-35				
FC on Wall				
Distance from Ceiling	1'	16	15	16
	2'	17	17	17
	3'	19	19	19
	4'	20	20	20
	5'	19	19	19
	6'	17	17	17
	7'	14	14	14
	8'	12	12	12

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Technical Specifications

OPTICS

WALL WASH REFLECTOR OPTICS (WRO)

Cluster Linear Wall Wash optics 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 and 4000K 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.

WEIGHT

	BODY		CUBOID 3"		CUBOID 8"		CUBOID 12"	
	Lb	Kg	Lb	Kg	Lb	Kg	Lb	Kg
CLUS03	0.70	0.30	0.36	0.16	0.87	0.39	1.27	0.58
CLUS05	1.10	0.50	0.85	0.38	2.09	0.95	3.08	1.40

CONSTRUCTION

Housing - Die-cast aluminum (0.95" nominal)

Optics - Polycarbonate

Cuboid - Aluminum extrusion

Cover Surface - Galvanized steel 16GA

Extension bar - Galvanized steel

CERTIFICATIONS

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.