

CLUSTER

PENDANT PARABOLIC



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 parabolic is available in 3, 5, and 2x2 cell configurations, all with precision optics that eliminate multiple shadows, as well as subtle louver treatments.

Light Source

Static White

SOLA

DUO



Mounting Options



Flat



Deep



Conduit

Sizes



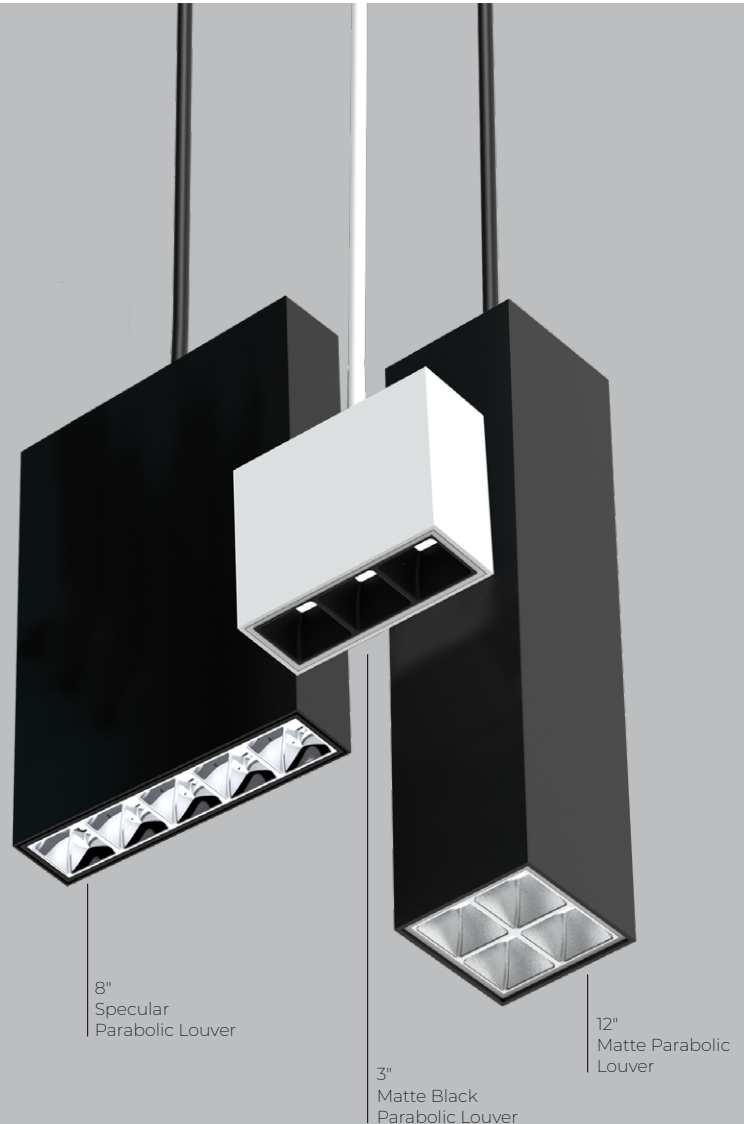
3x1



5x1



2x2



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



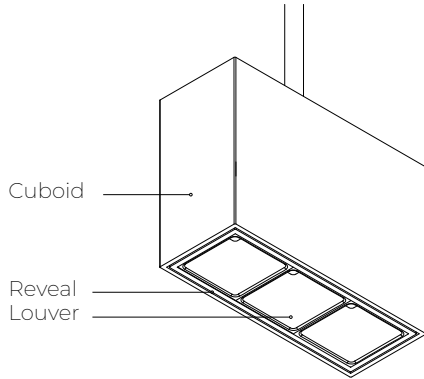
Blank Downlight Parabolic

CLUSTER

PENDANT PARABOLIC



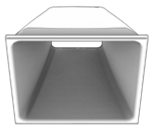
Overview



OPTIC

LOUVER FINISHES

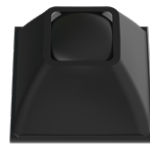
Louvers are injection molded with integral texture and color.



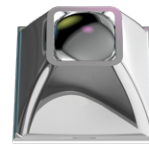
Parabolic



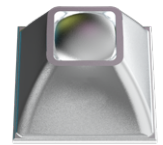
MWPL - Matte White Parabolic Louver



MBPL - Matte Black Parabolic Louver

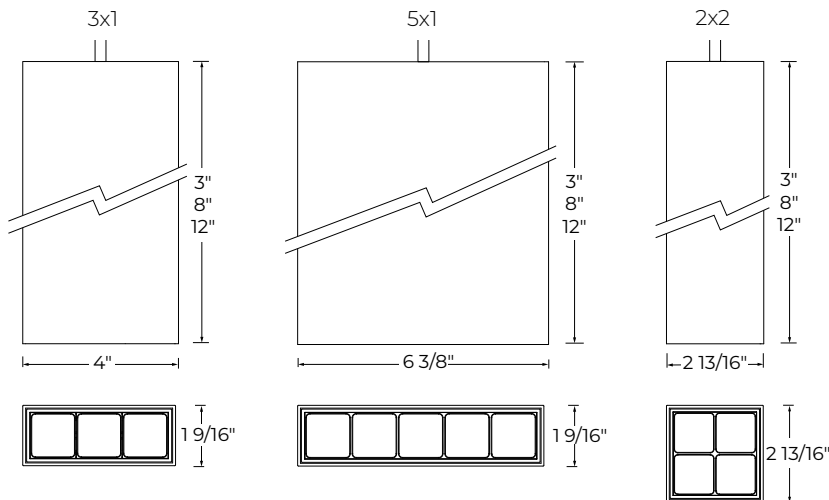


SPL - Specular Parabolic Louver

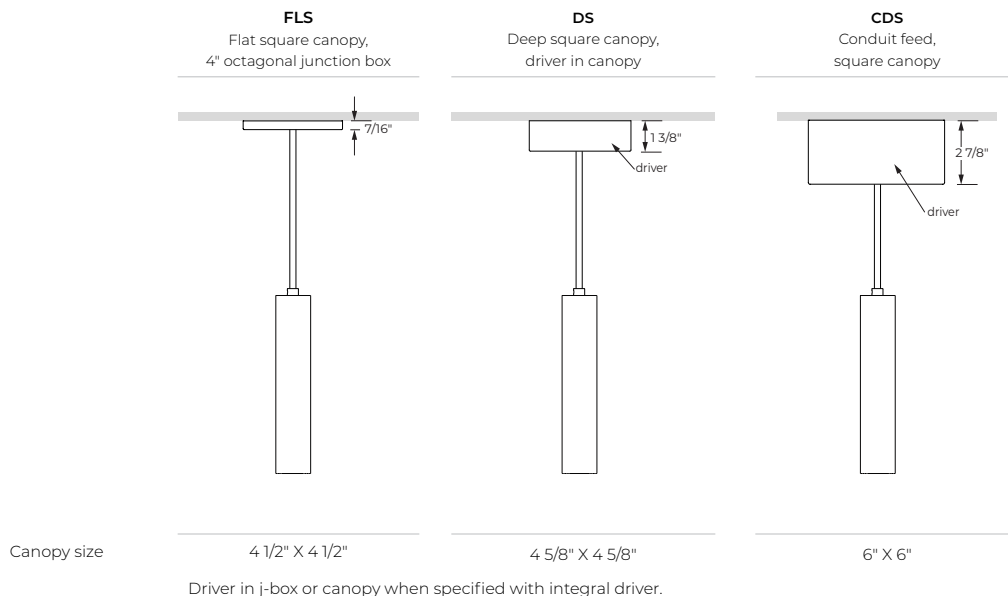


MPL - Matte Parabolic Louver

Dimensions



Mounting

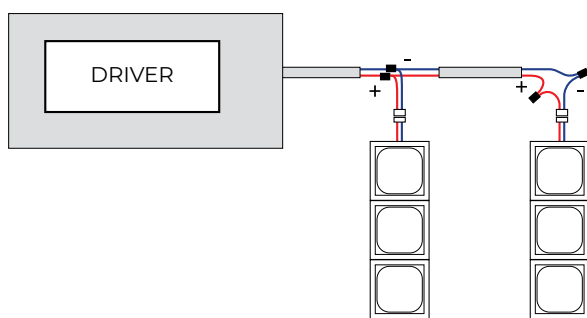


Driver

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).

CONNECTION IN PARALLEL



FIXTURES

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

Static white	3x1	5x1	2x2
RD1	1-12	1-6	1-6
RELV	1-6	1-3	1-3
RTRI	1-6	1-3	1-3
RDA	1-11	1-6	1-6
RLDE1	1-11	1-6	1-6
RELD1	1-11	1-6	1-6
RELD0	1-11	1-6	1-6
SOLA	3x1	5x1	2x2
RSD1	1-7	1-4	1-4
DUO	3x1	5x1	2x2
RDMX	1-7	1-4	1-4
RDDA	1-7	1-4	1-4
RDDA8	1-7	1-4	1-4
RDD1	1-7	1-4	1-4
RLD2	2-7	1-4	1-4

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

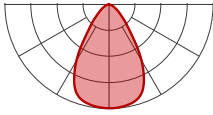
CLUSTER

PENDANT PARABOLIC

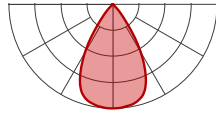


Photometrics

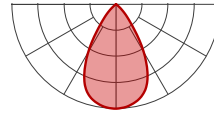
Values calculated based on 3500K, 90+ CRI, and SPL.



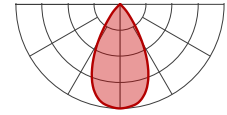
MWPL - Matte White Parabolic Louver



MBPL - Matte Black Parabolic Louver



MPL - Matte Parabolic Louver



SPL - Specular Parabolic Louver

	LM	W	LM/W
3x1	584	7.3	80
5x1	957	11.5	83
10x1	1896	23.2	82
15x1	2844	34.8	82
2x2	735	9.5	78

MULTIPLIER TABLE

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

CCT	LPW			
	MWPL	MBPL	MPL	SPL
2700K	0.94	0.58	0.81	0.94
3000K	0.97	0.6	0.83	0.97
3500K	1	0.62	0.86	1
4000K	1.02	0.63	0.88	1.02
5000K	1.06	0.66	0.9	1.06

Technical Specifications

OPTICS

Parabolic Louvers (MWPL, MBPL, MPL, SPL)

Parabolic louver optics provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and side reflectors with shielding of 50° lengthwise and 45° crosswise.

The parabolic contour of the blades and side reflectors direct light into a comfortable downlight distribution with a spacing criterion of 1:1, while minimizing shadows from the LED array above each cell.

Four finishes are available. Specular aluminum (SPL) provides higher efficacy, sharper cut-off, and an ultra-quiet appearance at shallow viewing angles. matte aluminum (MPL) offers a softer appearance, a wider beam spread, and gentle brightness transition at cut-off. Matte white (MWPL) creates the highest louver brightness, while matte black (MBPL) provides a dark appearance with slightly reduced beam spread.

LIGHT SOURCE

Static white

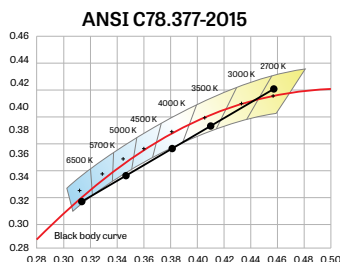
Custom array of mid-flux LEDs mounted onto aluminum-backed circuitry. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with a minimum 90+ CRI with elevated R9 value. Color consistency is maintained to within 3 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

Chromawerx SOLA

It is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable but the default option runs from 3500K at 100% of full power to 2200K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

Chromawerx DUO

It is a two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI, and LD2) protocol for synchronous control of both warm and cool LED arrays to enable the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of cool (6500K) to warm (2700K) color that can be useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. CRI is maintained above 80. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve.



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, DMX, Lutron DALI-2 digital

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
2x2	1.08	0.47	1.57	0.7	1.97	0.88

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-cutttable 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.