

CLUSTER PI

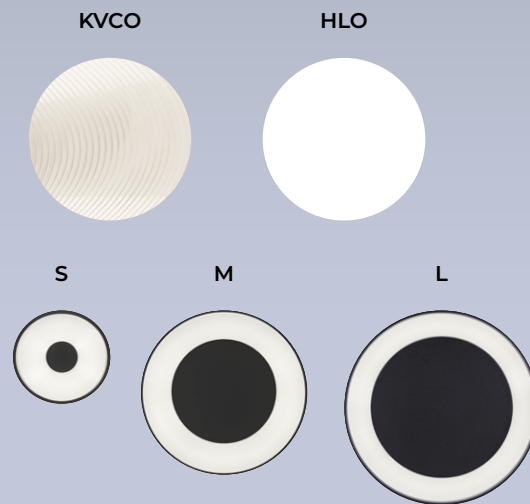
PENDANT

KVCO, HLO OPTICS

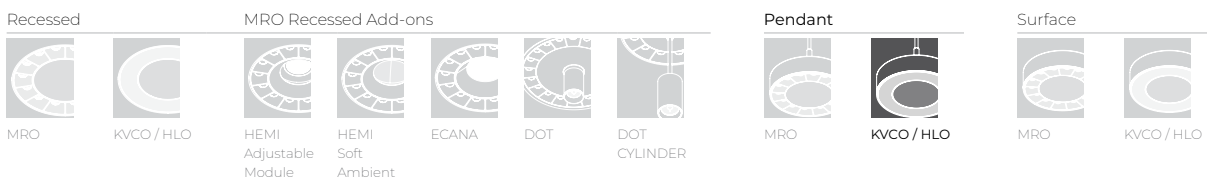


Cluster Pi M KVCO

Both Cluster Pi with HLO and Cluster Pi with KVCO™ integrate the beauty and quality of our Cluster family into circular fixtures featuring sophisticated optics and a timeless modernist esthetic. The luminaires occupy low profiles of under 2", are available in three sizes—Small (3.5"), Medium (6.5"), and Large (9")—and can be recessed, surface, or pendant mounted.



Cluster Pi Family (Refer to other spec sheets)



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PENDANT

KVCO, HLO OPTICS



Project: _____

Type: _____

SENSORS
For latest information on sensors, click [here](#).



Order Guide

LUMINAIRE ID	FIXTURE FINISH	REVEAL FINISH	CENTER BLANK FINISH
CLUPISP - Cluster Pi S Pendant CLUPIMP - Cluster Pi M Pendant CLUPIPL - Cluster Pi L Pendant	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#

LIGHT SOURCE	OPTIC	CRI	COLOR TEMPERATURE	VOLTAGE	LUMEN PACKAGE ¹												
SW		90CRI															
SW - Static white	KVCO - Kinetic Visual Comfort Optic HLO - High-Efficiency Lambertian Optic	90CRI - 90 CRI	27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K - 5000K	120V - 120V 277V - 277V UNV - 120V-277V	<table border="1"> <thead> <tr> <th></th> <th>KVCO</th> <th>HLO</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>360LM - 360 lm</td> <td>400LM - 400 lm</td> </tr> <tr> <td>M</td> <td>700LM - 700 lm</td> <td>780LM - 780 lm</td> </tr> <tr> <td>L</td> <td>1200LM - 1200 lm</td> <td>1350LM - 1350 lm</td> </tr> </tbody> </table>		KVCO	HLO	S	360LM - 360 lm	400LM - 400 lm	M	700LM - 700 lm	780LM - 780 lm	L	1200LM - 1200 lm	1350LM - 1350 lm
	KVCO	HLO															
S	360LM - 360 lm	400LM - 400 lm															
M	700LM - 700 lm	780LM - 780 lm															
L	1200LM - 1200 lm	1350LM - 1350 lm															

¹Delivered lumens at 90 CRI, 3500K.

DIMMING ²	CANOPY TYPE	CANOPY FINISH	SUSPENSION
CANOPY DRIVER ³ DI - 1% 0-10V ELV ^{4,5} - ELV 120V TRI ^{4,5} - TRIAC 120V	REMOTE DRIVER ⁶ RD1 - 1% 0-10V RELV ^{4,5} - ELV 120V RTRI ^{4,5} - TRIAC 120V RLDE1 ^{5,7} - Lutron Hi-Lume 1% Eco RDA ⁷ - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V RPEQO ⁷ - Lutron Hi-Lume Premier 0.1% EcoSystem	FLR ⁸ - Flat round canopy, 4" octagonal junction box CDR ⁸ - Conduit feed, round canopy DR ⁹ - Deep round canopy, driver in canopy	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#
² PoE (Power-over-Ethernet) compatible. Consult factory for details. ³ Only available with DR canopy. ⁴ Available with 120V only. ⁵ Not available with Cluster Pi S. ⁶ A remote driver box is provided, see page 4 for details. ⁷ On-site commissioning is required.	⁸ Available with remote driver only. ⁹ Available with canopy driver only.	POWER CORD ¹⁰ BPC###IN - Black PVC WPC###IN - White PVC CF#F###IN ^{11,12} - Custom color fabric, consult factory	STEM ¹³ BKS###IN - Textured black stem WHS###IN - Textured white stem BKSS###IN ¹⁴ - Textured black swivel stem WHSS###IN ¹⁴ - Textured white swivel stem CF#S###IN ¹⁵ - Custom finish stem CF#SS###IN ^{14,15} - Custom finish swivel stem
			¹⁰ Min 18" - max 72", specify length (##) in inches. ¹¹ Not available with D1 dimming option. ¹² Specify fabric color (#). ¹³ Min 10" - max 72", specify length (##) in inches. ¹⁴ Not available with DR canopy. ¹⁵ Specify RAL#.

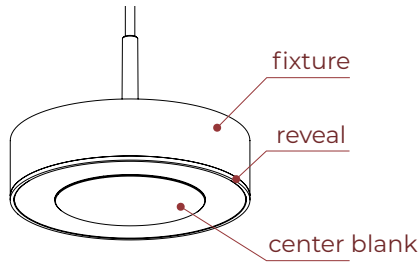
CLUSTER PI

PENDANT

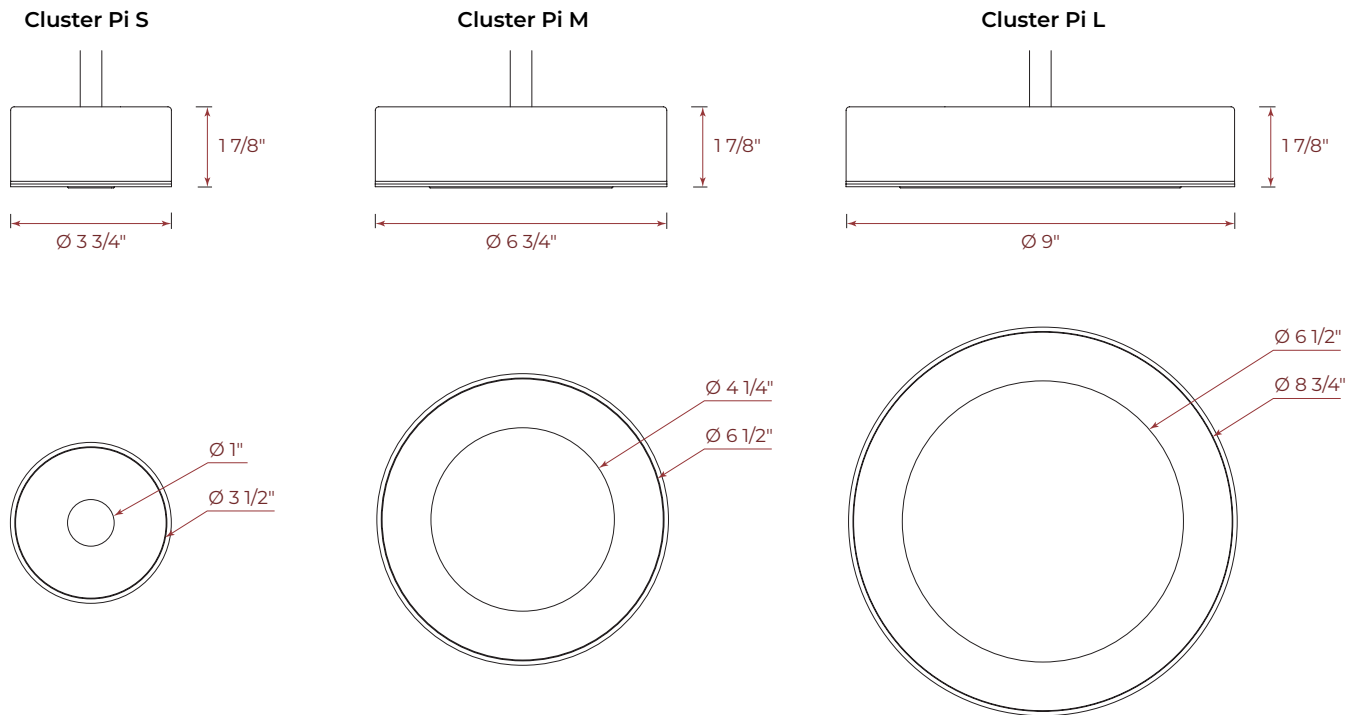
KVCO, HLO OPTICS



Overview



Dimensions



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KVCO, HLO OPTICS



Mounting

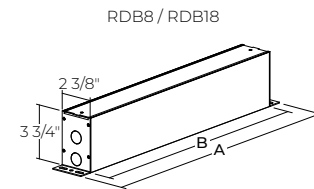
CANOPY TYPE

	CANOPY DRIVER	REMOTE DRIVER	
	DR	FLR	CDR
	Deep round canopy	Flat round canopy	Conduit feed round canopy
CANOPY SIZE	Ø 5 5/8" Height 1 3/8"	Ø 4 1/2" Height 3/8"	Ø 5 1/2" Height 1 15/16"

SUSPENSION

POWER CORD		STEM	
PVC	Fabric ¹	Stem	Swivel stem ^{2,3} Max 45° tilt
Power cord length (*): Min 18" - Max 72"		Stem Length (*): Min 10" - Max 72"	
¹ Not available with DI dimming option.		² Not available with DR canopy. ³ The total stem length (*) includes the 1" swivel base located inside the canopy.	

REMOTE DRIVER BOX



	RDB8	RDB18
A	10"	20"
B	8"	18"
DRIVER	RD1 - 1% 0-10V RELV - ELV 120V RTRI - TRIAC 120V RPEQO - Lutron Hi-lume Premier 0.1% EcoSystem	RLDE1 - Lutron Hi-lume 1% Eco RDA - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V

Photometrics

Values calculated based on 3500K and 90 CRI for all optics.

KVCO		LM	W	LM/W
S		360	4.9	73
M		700	8.2	85
L		1200	16.7	72

HLO		LM	W	LM/W
S		400	4.9	82
M		780	8.2	95
L		1350	16.7	81

MULTIPLIER TABLE

Use the table to get results for different color temperatures for all photometric tables.

Multiplier - CCT/CRI

CCT	WATTS 90 CRI	LPW 90 CRI
2700K	1.04	0.95
3000K	1.02	0.98
3500K	1	1
4000K	0.97	1.02
5000K	0.96	1.05

CLUSTER PI

PENDANT

KVCO, HLO OPTICS



Technical Specifications

OPTICS

Kinetic Visual Comfort Optic™ (KVCO™)

The Kinetic Visual Comfort Optic™ is finely crafted with a series of concentric grooves serving as light-bending prisms that redirect parallel rays to a common focal length. The resulting beams are precise and clean. The optic can change in appearance depending on the lighting conditions in its immediate surroundings.

High-Efficiency Lambertian Optic (HLO)

The High-Efficiency Lambertian Optic (HLO) is engineered with reflective sidewalls that distribute LED output across acrylic shielding, delivering soft, diffused beams. To negotiate the curves of Lumenwerx rounded fixtures, the HLO is equipped with proprietary SupremeGrip™ technology, which keeps the optic securely in place.

LIGHT SOURCE

Custom array of mid-flux LEDs are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 2700K, 3000K, 3500K, 4000K, and 5000K with 90 CRI and elevated R9 value. Color consistency 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%.

Canopy driver: 0-10V, ELV, TRIAC

Remote driver: 0-10V, ELV, TRIAC, Lutron Hi-Lume EcoSystem, DALI, eidoLED 0.1% SOLOdrive 0-10V, eidoLED 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.

CONSTRUCTION

Housing: Die-cast aluminum

Cover: Cold rolled steel

Lens: Acrylic

Power cord: Black and white PVC, custom color fabric. 18" to 72" standard length.

Stem: Ø 1/2" rigid stem and swivel stem 10" to 72" standard length

Canopy: Flat, conduit feed, and deep

Finish: Textured matte white and matte black. Custom colors also available (provide RAL #).

WEIGHT

Cluster Pi S: 1.3 lbs - 0.6 kg

Cluster Pi M: 2.8 lbs - 1.3 kg

Cluster Pi L: 4.4 lbs - 2 kg

CERTIFICATION

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

WARRANTY

Lumenwerx provides a five-year limited warranty of 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.