

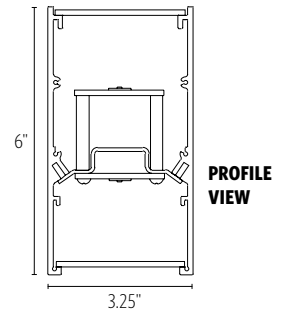


Twin™

PENDANT

FEATURES

- DUAL DIRECTION ILLUMINATION WITH ACRYLIC TOP AND BOTTOM LENSES
- FIXTURES CAN BE CLUSTERED TOGETHER TO CREATE LARGE SCALE INSTALLATIONS
- CUSTOMIZABLE SIZES AND SHAPES
- THICK WALL ALUMINUM EXTRUSION WITH MINIMAL FIXTURE CROSS SECTION SIZE
- AVAILABLE IN 80+ CRI AND 90+ CRI (R9>50)
- INTEGRAL DRIVERS




Declare.



CATALOG CODES

TW1	-	B	-	C	-	MW	-	E	-	F	-	UNV	-	H	-	J	-	I
SERIES		HANGING SYSTEM		SIZE		DIFFUSER		FINISH		LIGHT SOURCE		VOLTAGE		OAH		CONTROL		OPTIONS

SPECIFY CATALOG CODE		A	B	C	D	E	
		SERIES	HANGING SYSTEM	SIZE	DIFFUSER	FINISH*	
	TW1 TWIN	P1EM	PENDANT WITH VERTICAL AIRCRAFT CABLES TO SEPARATE MOUNTING POINTS AND POWER CORD TO CANOPY	24	MW MATTE WHITE	POWDER COAT FINISHES	
				36		BKP BLACK	MWP MATTE WHITE
				48		BMP BRASS METALLIC	SGP STEEL GRAY
				60		BNP BRONZE	SMP SILVER METALLIC
				72		BTP BLACK TEXTURED	SWP SKY WHITE
96	GRP GRAPHITE	WTP WHITE TEXTURED					
120	GLP GOLDTASTIC						
						PREMIUM METAL FINISHES	
						BAL BRUSHED ALUMINUM	

F		G		H	I	J
LIGHT SOURCE		VOLTAGE		OAH*	CONTROL	OPTIONS
LED OUTPUT	COLOR TEMP	COLOR TEMP	UNV	48	DM1 0-10V DIMMING 1%	DUC DUAL CIRCUITING BIOS BIOS SKYBLUE™ OR BIOS SKYBLUE™ DYNAMIC LIGHT ENGINE** MOD MODIFIED LUMINAIRE (CONTACT LOCAL REP)
LED1	(80+ CRI)	(90+ CRI)	120-277	100		
LED2	27K	927K		144		
	30K	930K				
	35K	935K				
	40K	940K				
				FOR P1EE: SPECIFY IN INCHES		

SAMPLE CODE: TW1-P1EM-60-MW-WTP-LED1/35K-UNV-48-DM1

*For Minimum OAH, see hanging systems details. P1EM will ship with one of three standard OAH's (48", 100" or 144") field adjustable to the desired height.

**Contact factory for BIOS SkyBlue® or BIOS SkyBlue® Dynamic light engine and control options.

Fixtures with P1EM hanging system, canopy will be MWP unless specified.

Fixtures with P1EE hanging system, canopy will match finish choice.

Power cord white unless specified.

UP TO **85** LM/W

LUMENS AND WATTAGE CHART

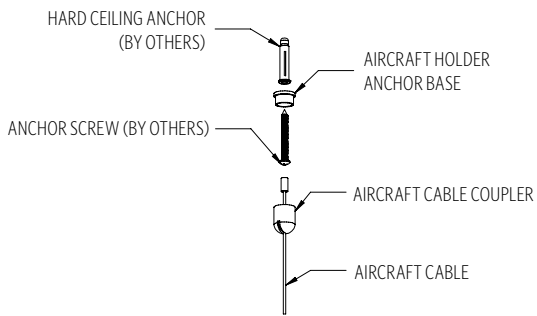
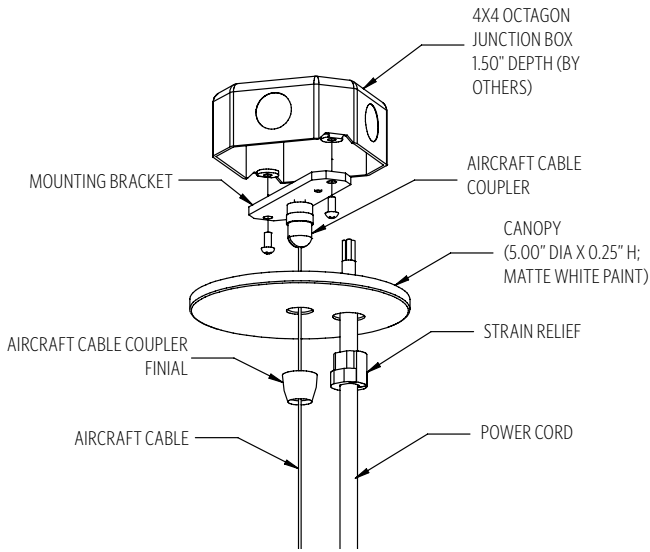
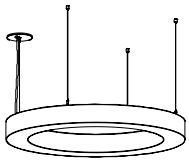
		24"	36"	48"	60"	72"	96"	120"
LED1	LUMENS DELIVERED	5525	10200	12750	15300	19975	25925	33150
	SYSTEM WATTAGE	65	120	150	180	235	305	390
LED2	LUMENS DELIVERED	8075	13360	18700	22950	28900	38675	50150
	SYSTEM WATTAGE	95	160	220	270	340	455	590

This chart was created for a 35K color temp. Multiply by 0.95 for 27k color temp, 0.97 for 30k color temp, and 1.03 for 40k color temp. Wattage and lumen data approx. pending LM-79 testing.

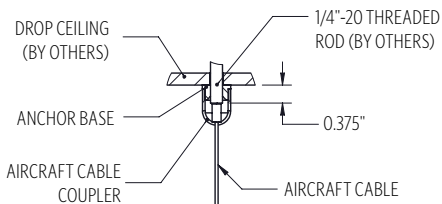
Values shown for 80+ CRI. For 90+ CRI lumens use 0.85 multiplier.

MODS, NOTES, & COMMENTS

P1EM PENDANT WITH VERTICAL AIRCRAFT CABLES TO SEPARATE MOUNTING POINTS AND POWER CORD TO CANOPY (CANOPY MATTE WHITE PAINT)



HARD CEILING

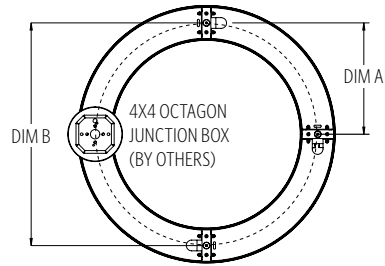


DROP CEILING

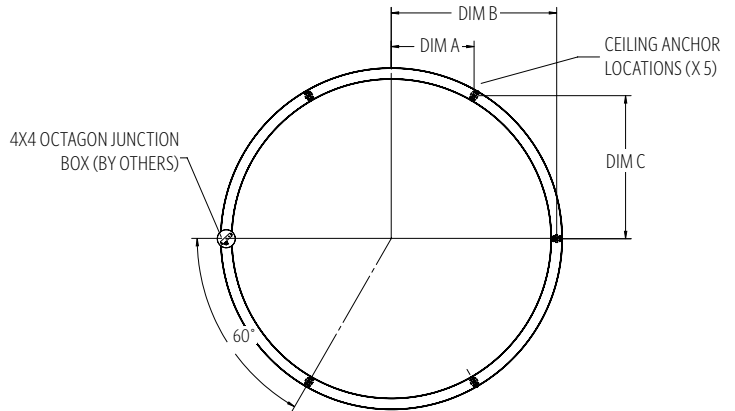
MOUNTING INFORMATION CHART

LUMINAIRE DIAMETER	LUMINAIRE WEIGHT	MOUNTING DISTANCE DIM A	MOUNTING DISTANCE DIM B	MOUNTING DISTANCE DIM C	MOUNTING POINTS	MIN/MAX OAH
24"	35 LBS	10.375"	Ø 20.75"	-	4	12/144"
36"	50 LBS	16.375"	Ø 32.75"	-	4	12/144"
48"	65 LBS	22.375"	Ø 44.75"	-	4	12/144"
60"	80 LBS	28.375"	Ø 56.75"	-	4	12/144"
72"	95 LBS	34.375"	Ø 68.75"	-	4	12/144"
96"	110 LBS	23.188"	46.375"	40.125"	6	12/144"
120"	125 LBS	41.25"	58.375"	116.75"	8	12/144"

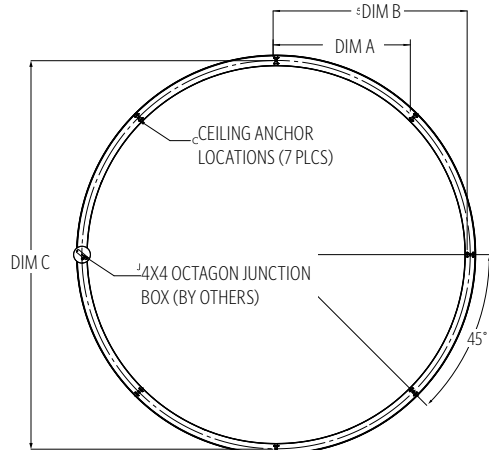
* P1EM ships with one of three OAH's (48", 100" or 144") and is field adjustable to the desired height



24 - 72" MOUNT LOCATIONS

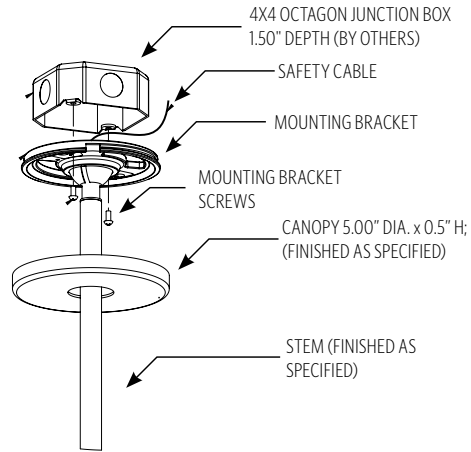
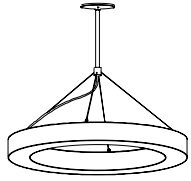


96" MOUNT LOCATIONS



120" MOUNT LOCATIONS

P1EE PENDANT WITH ANGLED AIRCRAFT CABLES AND POWER CORD TO COLLECTOR THEN SINGLE CENTER STEM TO CANOPY (CANOPY MATCHES FIXTURE FINISH)

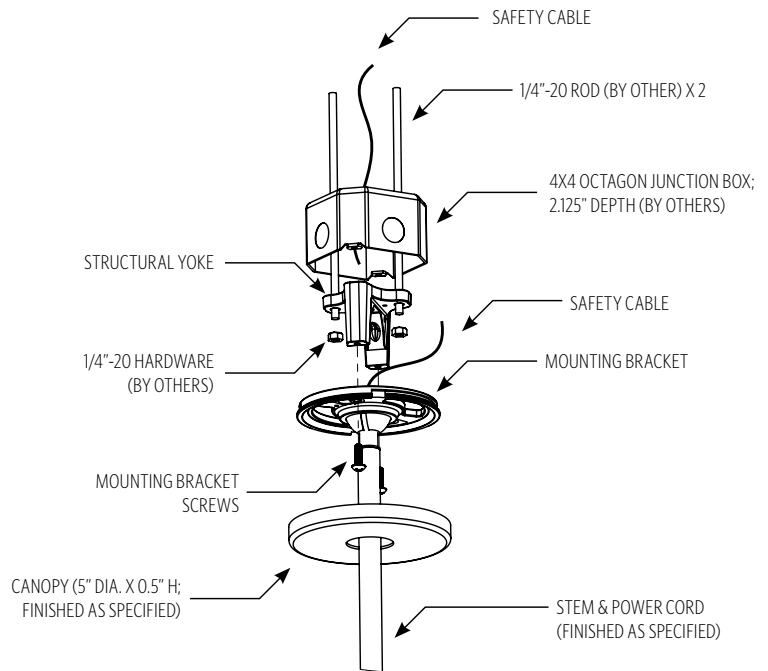


**STANDARD MOUNTING
UNDER 55 LBS
(24\" - 60\")**

MOUNTING INFORMATION CHART

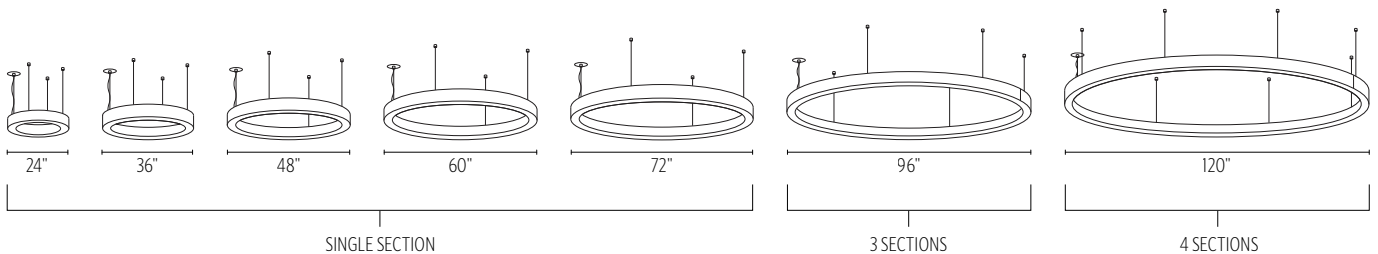
FIXTURE DIAMETER	FIXTURE WEIGHT	USE CANOPY INSTALL INSTRUCTIONS:	MIN/MAX OAH
24"	35 LBS	SWIVEL CANOPY ASSEMBLY UNDER 55LBS	19/156"
36"	50 LBS	SWIVEL CANOPY ASSEMBLY UNDER 55LBS	23/160"
48"	65 LBS	SWIVEL CANOPY ASSEMBLY OVER 55LBS	27/164"
60"	80 LBS	SWIVEL CANOPY ASSEMBLY OVER 55LBS	31/168"
72"	95 LBS	SWIVEL CANOPY ASSEMBLY OVER 55LBS	35/172"

Structural mounting required for fixtures over 55 lbs.

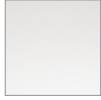


**STRUCTURAL MOUNTING
OVER 55 LBS
(48\" - 72\")**

SIZE AND SECTIONS



DIFFUSER



MW MATTE WHITE

FINISH

METALLIC POWDER COAT FINISHES:



SMP
SILVER



GRP
GRAPHITE



SGP
STEEL GRAY



GLP
GOLDTASTIC



BMP
BRASS



BNP
BRONZE

PREMIUM METAL FINISHES:



BAL
BRUSHED
ALUMINUM

SOLID POWDER COAT FINISHES:



SWP
SKY WHITE



MWP
MATTE
WHITE



BKP
BLACK

TEXTURED POWDER COAT FINISHES:



BTP
BLACK
TEXTURED



WTP
WHITE
TEXTURED

RAL®, Pantone® or custom finishes are also available.

These colors are for reference only. Please be aware that colors may vary per monitor. Contact your local rep for finish samples or with any questions.

LIGHT SOURCE

LUMENS AND WATTAGE CHART

		24"	36"	48"	60"	72"	96"	120"
LED1	LUMENS DELIVERED	5525	10200	12750	15300	19975	25925	33150
	SYSTEM WATTAGE	65	120	150	180	235	305	390
LED2	LUMENS DELIVERED	8075	13360	18700	22950	28900	38675	50150
	SYSTEM WATTAGE	95	160	220	270	340	455	590

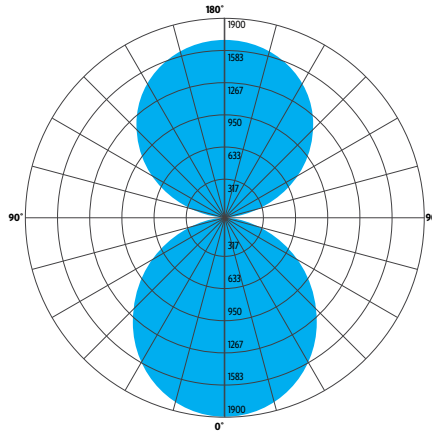
This chart was created for a 35K color temp. Multiply by 0.95 for 27k color temp, 0.97 for 30k color temp, and 1.03 for 40k color temp. Wattage and lumen data approx. pending LM-79 testing.

Values shown for 80+ CRI. For 90+ CRI lumens use 0.85 multiplier.

STANDARD COLOR TEMPERATURE OPTIONS	CRI (RA)	
2700K	80+	90+
3000K	80+	90+
3500K	80+	90+
4000K	80+	90+

PHOTOMETRY:

LUMINAIRE: TW1-PIEE-36-GW-MWP-LED2/35K-UNV
 COLOR TEMP #: 3500K
 OUTPUT: 13360
 EFFICACY: 86 LM/W
 TEST REPORT: TEST NO. 19984.0



LUMEN MAINTENANCE

REPORTED: L70 AT >60,000 HRS
 CALCULATED: L70 AT 181,000 HRS
 REPORTED: L90 AT 52,000 HRS
 CALCULATED: L90 AT 52,000 HRS

Derived from EPA TM-21 calculator. Based on typical conditions. Consult the factory for additional details

ZONE	LUMENS	% OF LUMINAIRE
0-30	1870	14%
0-60	5210	39%
0-90	6680	50%
90-180	6680	50%

CONTROL

DM1 0-10V DIMMING DOWN TO 1%

- 0-10V DIMMING
- 1% MINIMUM DIMMING LEVEL
- ELECTRONIC DRIVER
- POWER FACTOR >0.9
- THD <20%
- MIN AMBIENT OPERATING TEMPERATURE = -31°F
- FIELD REPLACEABLE

OPTIONS

MOD MODIFIED LUMINAIRE

- LUMINAIRE IS MODIFIED FROM STANDARD OPTIONS. CONTACT LOCAL REP FOR MORE INFORMATION

ULD DAMP LABEL LUMINAIRE

- MAY BE USED IN AN OUTDOOR AREA THAT IS PROTECTED FROM DIRECT CONTACT WITH WIND, RAIN, SNOW OR EXCESSIVE MOISTURE

BIOS

- BIOS SKYBLUE™ DYNAMIC** LIGHT ENGINE IS DIMMABLE AND FEATURES A SIMPLE APPROACH TO CIRCADIAN LIGHTING CONTROLS.
- WHEN PAIRED WITH THE BIOS BIO-DIMMING MODULE, IT OPERATES USING ANY SINGLE CHANNEL CONSTANT CURRENT (CC) LED DRIVER AND CAN BE USED WITH ANY STANDARD DIMMING INTERFACE/PROTOCOL (0-10V, ELV, DMX, WIRELESS) AND COULD WORK WITH EXISTING TWO-CHANNEL CONTROL SYSTEMS AS WELL.
- VISIT [OCL.COM/BIOS](https://www.ocl.com/bios) FOR MORE INFORMATION

SPECIFICATIONS

CONSTRUCTION

- EXTRUDED ALUMINUM PROFILE
- ACRYLIC DIFFUSER CUT WITH LAP JOINT TO ELIMINATE DIODE VIEW
- THICK GAUGE STEEL INTERNAL BRACKETS
- HANGING SYSTEMS USE STEEL OR ALUMINUM CANOPIES WITH AIRCRAFT CABLE SUPPORTS
- HARDWARE IS STEEL OR STAINLESS STEEL
- 96" & 120" PROVIDED WITH HARDWARE FOR BOLTING SECTIONS TOGETHER

ELECTRICAL

- DIMMING ELECTRONIC DRIVER(S), COMES STANDARD WITH 0-10V DOWN TO 1%
- LUTRON (LDEI) ECOSYSTEM 1% ALSO AVAILABLE
- OCL PROPRIETARY LED ARRAYS USE NICHIA 757 DIODES
- 80+ CRI = 80 RA, R9 > 0 (10-15 TYP.)
- 90+ CRI = 90 RA, R9 > 50
- FOR INTEGRAL DRIVERS:** LUMINAIRE CONNECTS TO BUILDING SUPPLY (120V-277V 50/60HZ)
- FOR REMOTE DRIVERS:** LUMINAIRE WIRE LEADS ARE LOW-VOLTAGE. THE WIRES SHOULD BE CONNECTED TO OCL PROVIDED REMOTE DRIVER ENCLOSURE ONLY! **LIGHT OUTPUT**
- LUMINAIRE PROVIDES APPROXIMATELY 50% DIRECT, 50% INDIRECT ILLUMINATION

LISTING

- ETL LISTED TO UL1598 FOR INDOOR, DRY LOCATION

WARRANTY

- 5 YEAR; ALL ELECTRICAL COMPONENTS RETAIN THE MANUFACTURER'S WARRANTY

SUSTAINABILITY

- DECLARE:** DECLARE IS AN INGREDIENT LABEL DISCLOSURE FOR BUILDING PRODUCTS THAT IS DESIGNED TO HELP SPECIFIERS QUICKLY IDENTIFY PRODUCTS THAT SUPPORT HUMAN AND ENVIRONMENTAL HEALTH. LEARN MORE AT [OCL.COM/DECLARE](https://www.ocl.com/declare)
- THIS PRODUCT MEETS THE MATERIAL RESTRICTIONS OF ARTICLE 4 OF THE **ROHS** DIRECTIVE (2011/65/EU), INCLUDING COMMISSION DELEGATED DIRECTIVE 2015/863
- BIOS** LIGHTING CONTRIBUTES TOWARD THE CIRCADIAN LIGHTING DESIGN FEATURE 54 UNDER THE **WELL BUILDING STANDARD™ V1** AND FEATURE L03 UNDER THE **WELL BUILDING STANDARD V2**

DECLARE

Final assembly location

Where was the product made?

Chemical ingredients

What is in this product?

Red List compliance

Are there Red List ingredients in this product?

Declare.

Solo, Twin OCL Architectural Lighting

Final Assembly: St. Louis, Missouri, USA
Life Expectancy: 10 Year(s)
End of Life Options: Recyclable (93), Landfill (7)

Ingredients:

Aluminum; Small Electrical Component¹; Steel; Zinc; 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate; Copper; Iron; Steel manufacture, chemicals; Tin; Organic; Cobalt metal powder; Brass; Magnette (Fe3O4); Unnamed Substance: Cadmium; Manganese; Poly[imino(1,6-dioxo-1,6-hexanedyl)imino-1,6-hexanedyl]; Nickel (Metallic)

¹LBC Temp Exception RL-002 - Small Electrical Components

Living Building Challenge Criteria:

I-13 Red List:

- LBC Red List Free
- LBC Red List Approved
- Declared

% Disclosed: 100% at 100ppm

VOC Content: Not Applicable

I-10 Interior Performance: Not Compliant

I-14 Responsible Sourcing: Not Applicable

OCL-0002
EXP: 01 OCT 2024
Original Issue Date: 2023



INTERNATIONAL LIVING FUTURE INSTITUTE™ [future.org/declare](https://www.future.org/declare)

Life expectancy + end of life options

How long will this product last + what do you do with it when you're done with it?

VOC info

Does this product off-gas?

DECLARE: PRODUCT TRANSPARENCY IN MANUFACTURING

Declare is the only label that combines material transparency and the Red List. It distills complex chemical ingredient information into an easy to read label. Declare helps specifiers find Red List Free products, which are healthy for people, the environment, and communities.

A product's compliance with the LBC Red List is represented on the Declare® label by the product's Declaration Status. There are three Declaration Statuses:

- DECLARED (RLD)** products disclose 100% of ingredients present in the final product, but contain one or more Red List chemicals that are not covered by an approved exception.
- LBC RED LIST APPROVED (RLA)** products disclose a minimum of 99% of ingredients present in the final product and meet the LBC Red List Imperative requirements through one or more approved exceptions.
- LBC RED LIST FREE (RLF)** products disclose 100% of ingredients present at or above 100 ppm (0.01%) in the final product and do not contain any Red List chemicals.

Need more information? Visit [ocl.com/declare](https://www.ocl.com/declare) to learn more.

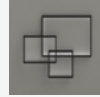
COMMON MODIFICATIONS

WE'RE BUILT FOR OUT-OF-THE-BOX THINKERS.

Nearly 50% of OCL fixtures we manufacture have some type of modification. Here is a list of common modifications we frequently produce. **Please contact the factory for modifications specific to your fixture or project.**

Need some help? Simply send your questions to us at OCL-Quotes@ocl.com

- BIOS, TUNABLE WHITE, WARM-DIM, & RGBW LIGHT SOURCES
- SPECIFIC LUMEN OUTPUT
- MODIFIED CLUSTERS OR CONFIGURATIONS / MULTI-DROP CANOPIES
- VARIOUS SHAPES, ARCS, AND CURVES FOR LINEAR PROFILES AND RINGS
- CEILING OR SURFACE MOUNTING
- LARGE SCALE MODIFICATIONS
- RAL, PANTONE, BRAND-SPECIFIC, RETIRED OCL COLOR, OR CUSTOM FINISHES



- EMERGENCY BATTERY BACKUP OR INVERTER OPTIONS
- REMOTE DRIVERS / EXTENDED DISTANCE REMOTE DRIVERS
- DIMMING TO 0.1% (DIM TO DARK)
- NON-STANDARD SIZES OR LENGTHS
- NON-STANDARD CANOPY, BODY AND/OR CORD COLORS
- SEISMIC AND/OR ANTI-SWAY SYSTEMS
- RIGID STEMS
- MODIFIED OVERALL HEIGHTS (LONGER OR SHORTER OAH)
- UPLIGHT ADDITIONS
- LASER ETCHING, ENGRAVING, AND CUTOUTS

The drawings and specifications and ideas, designs and arrangements represented on these drawings are and shall remain the property of The Original Cast Lighting (OCL Architectural Lighting) and no part thereof shall be copied, disclosed, to others or used in conjunction with any work or project other than the specified project for which they have been prepared and developed, without written consent of OCL. Visual contact with these plans or specifications shall constitute conclusive evidence of acceptance of these restrictions. All specifications and information subject to change without notice.