

PROJECT

DATE

COMMENTS



IN STOCK



Pendant

Surface

ENERGY CHART*

(3000K, 80 CRI)

SIZE	DELIVERED LUMENS	WATTAGE	EFFICACY lm/w
4"	1140	11	95
	1710	18	95
	2375	25	95
6"	2100	20	105
	3150	30	105
	4200	40	105
8"	2700	29	90
	4050	44	90
	5220	58	90

* Expanded Energy Chart on Page 2

CRISP ARCHITECTURAL CYLINDER LED

CRISP is an LED Architectural Cylinder available in 4", 6", and 8" diameters in black or white powder coat finish. Standard features include universal voltage, field selectable wattage, several options for reflectors, beam spreads, CCT, CRI, and drivers. CRISP can be surface or pendant mounted to recessed junction boxes with a flat plate or surface mounted junction boxes with a deep canopy that includes four conduit knock outs. CRISP can be suspended with field adjustable cable or rigid stem available in 2', 4', or 8' lengths. The rigid stem is suitable for sloped ceiling applications with the integral swivel canopy that installs over recessed or surface junction boxes.

- Commercial Office
- Classrooms
- Civic & Transportation

PHYSICAL

Material	Die Cast Aluminum
Mounting	Surface or Suspended
Lens	Acrylic
Reflector	Black, White, Copper, Chrome
Finish	Black, White
Sloped Ceiling	Yes with Rigid Stem

PERFORMANCE

Warranty	5 years
Certifications	Damp Location, UL
Rated Life	50,000 hours
Operating Temperature	-20°C to 40°C (-4°F to 104°F)
CCT	2700K, 3000K, 3500K, 4000K
CRI	80+, 90+
Beam Angle	15°, 24°, 36°, 60°

ELECTRICAL

Wattage	Field Selectable: (11W/18W/25W), (20W/30W/40W), (29W/44W/58W)
Voltage	120-277V
Power Factor	>0.9
Dimming	1-10V, 0-10V, Triac

SEE ORDERING LOGIC ON PAGE 2





ORDERING LOGIC

EX: CRISP-4-110-80-27-15-BK-WH-PR-2

FAMILY		SIZE		DIMMING		CRI		CCT		BEAM ANGLE	
CRISP											
		4	4", Field Selectable Wattage (11W/18W/25W)	110	1-10V to 10%	80	80+	27	2700K	15	15°
		6	6", Field Selectable Wattage (20W/30W/40W)	010/TR	0-10V to 1% or Triac	90	90+	30	3000K	24	24°
		8	8", Field Selectable Wattage (29W/44W/58W)					35	3500K	36	36°
								40	4000K	60	60°
HOUSING FINISH		REFLECTOR FINISH		MOUNTING TYPE		CABLE OR STEM LENGTH (PR + PS ONLY)					
BK	Black	WH	White	PR	Pendant With Flat Canopy FOR USE WITH RECESSED J-BOX	2CWH	2' Cable Mount, White	2SWH	2' Rigid Stem, White		
WH	White	BK	Black	PS	Pendant With Deep Canopy FOR USE WITH SURFACE MOUNTED J-BOX	2CBK	2' Cable Mount, Black	2SBK	2' Rigid Stem, Black		
		CP	Copper	SR	Surface FOR USE WITH RECESSED J-BOX	4CWH	4' Cable Mount, White	4SWH	4' Rigid Stem, White		
		CH	Chrome	SS	Surface FOR USE WITH SURFACE MOUNTED J-BOX	4CBK	4' Cable Mount, Black	4SBK	4' Rigid Stem, Black		
						8CWH	8' Cable Mount, White	8SWH	8' Rigid Stem, White		
						8CBK	8' Cable Mount, Black	8SBK	8' Rigid Stem, Black		

ACCESSORIES ORDERING LOGIC (ORDER SEPARATELY)

EX: CRISP-12RBK

FAMILY		ACCESSORIES		ORDERING NOTES	
CRISP				* 4" Cylinder Only	
		12RBK*	12" Reflector Black Finish		
		12RWH*	12" Reflector White Finish		
		12RCC(XX)*	12" Reflector Custom Color CONSULT FACTORY		
		EM8	8W Emergency Battery		
		EM25	25W Emergency Battery		

EXPANDED ENERGY CHART

SIZE	WATTAGE	DELIVERED LUMENS BY CCT & CRI							
		2700K		3000K		3500K		4000K	
		Ra>80	Ra>90	Ra>80	Ra>90	Ra>80	Ra>90	Ra>80	Ra>90
4"	12W	1080 lm	912 lm	1140 lm	960 lm	1176 lm	984 lm	1200 lm	1008 lm
	18W	1620 lm	1368 lm	1710 lm	1440 lm	1764 lm	1476 lm	1800 lm	1512 lm
	25W	2250 lm	1900 lm	2375 lm	2000 lm	2450 lm	2050 lm	2500 lm	2100 lm
	EFFICACY	90 lm/w	76 lm/w	95 lm/w	80 lm/w	98 lm/w	82 lm/w	100 lm/w	84 lm/w
6"	20W	2000 lm	1700 lm	2100 lm	1780 lm	2160 lm	1820 lm	2200 lm	1860 lm
	30W	3000 lm	2550 lm	3150 lm	2670 lm	3240 lm	2730 lm	3300 lm	2790 lm
	40W	4000 lm	3400 lm	4200 lm	3560 lm	4320 lm	3640 lm	4400 lm	3720 lm
	EFFICACY	100 lm/w	85 lm/w	105 lm/w	89 lm/w	108 lm/w	91 lm/w	110 lm/w	93 lm/w
8"	30W	2550 lm	2160 lm	2700 lm	2280 lm	2790 lm	2340 lm	2850 lm	2400 lm
	45W	3825 lm	3240 lm	4050 lm	3420 lm	4185 lm	3510 lm	4275 lm	3600 lm
	58W	4930 lm	4176 lm	5220 lm	4408 lm	5394 lm	4524 lm	5510 lm	4640 lm
	EFFICACY	85 lm/w	72 lm/w	90 lm/w	76 lm/w	93 lm/w	78 lm/w	95 lm/w	80 lm/w





ASCENT

ARCHITECTURAL LIGHTING

CRISP ARCHITECTURAL CYLINDER LED

SPECIFICATIONS

OPTICS

Powered by high efficiency COB LED chip. 15° / 24° / 36° / 60° fixed beam spread options. Cylinder beam spreads are interchangeable which can be easily swapped out in the field without tools.

FINISH

Constructed of rigid die cast aluminum. Powder coated polyester paint that comes standard in white and black.

ELECTRICAL

LED Driver: Powered by Class 2 high efficiency LED driver, with a standard 1-10V dimming which continuously dims to 10% and works with many types of controls. Tested Dimmers: Lutron® Diva-Dvtv, Leviton® IP-710-DL. Another driver with 0-10V dimming to 1% and TRIAC dimming is available.

THD: <20%

Power Factor: >0.9

Input Voltage: Standard electronic drivers are cULus recognized and available for 120-277V AC.

LED SYSTEM

CRI: COB LED with 80+ is standard. 90 CRI is also available upon request by consulting the factory. They have been tested in accordance with IESNA LM-80 and the results have shown L80 lumen maintenance greater than 50,000 hours.

CCT: 2700K, 3000K, 3500K and 4000K with great color consistency.

Thermal Management: Aluminum housing acts as the heat sink to maximize life.

WARRANTY

5-year limited warranty

LISTINGS

- cULus listed for damp locations
- 5 years limited warranty

NOTES:

- Ambient temperatures at fixture location should not exceed 40°C during normal operation.

OPTIONAL FUNCTION

Optional high voltage 8W emergency LED driver can be provided. When AC power fails, it immediately switches to the emergency mode, operating lighting up to 120 minutes. When AC power is restored, it automatically returns to the charging mode which meets critical life-safety lighting requirements.

For more info or spec sheet, please contact sales.



Indicator



Canopy with Indicator

EMERGENCY LUMEN OUTPUT

MOUNTING	FIXTURE EFFICACY	OUTPUT POWER 8W
Surface	90 lm/w	720 Lumens
Suspended	80 lm/w	640 Lumens

MOUNTING

Cable Mount:

White/black cable is provided in length specified (2' nominal, 4' nominal or 8' nominal). Installers can cut the cable and power cord in the field to desired length.

Notes:

- For 4", the power cord and aircraft cable is combined in one pipe.
- For 6" and 8", the power cord and aircraft cable are separated.

Pendant Stem Mount:

Ø12/25" steel stem is provided in length specified. (2' nominal, 4' nominal, or 8' nominal) and is provided in white or black finish.

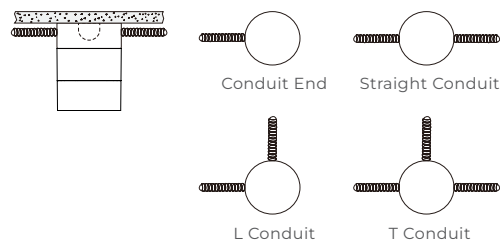
Recessed J-box:

If recessed J-box is 3" octagon, 4" octagon or 4" round, the cylinder can be mounted directly to recessed mounted junction box.

Surface Mount J-box:

If standard 4" octagonal J-box is surface mounted, a Ø5.97" round x 2.38" deep canopy with conduit cutout is provided for mounting. Conduit cutout canopy has 4 key slots, one in each side, and can be configured to accommodate any ceiling layout using 1/2" or 3/8" conduit. Conduit cutout canopy is provided in white or black powder coat finish.

Conduit Mounting Example:



PENDANT CANOPY MOUNTING OPTIONS

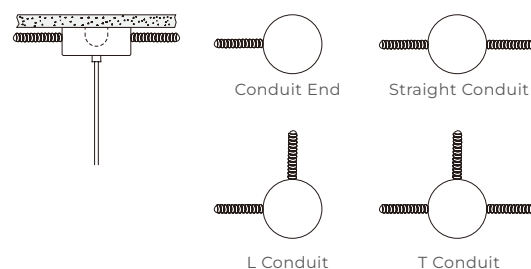
Flat Canopy For Recessed J-box:

If recessed J-box is 3" octagon, 4" octagon or 4" round, a 4.5" flat canopy is provided for mounting to recessed junction box in white or black powder coat finish.

Conduit Cutout Deep Canopy For Surface Mount J-box:

If standard 4" octagonal J-box is surface mounted, a Ø5.97" round x 2.38" deep canopy with conduit cutout is provided for mounting. Conduit cutout canopy has 4 key slots, one in each side, and can be configured to accommodate any ceiling layout using 1/2" or 3/8" conduit. Conduit cutout canopy is provided in white or black powder coat finish.

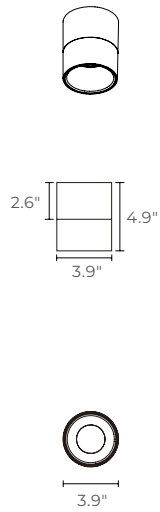
Conduit Mounting Example:



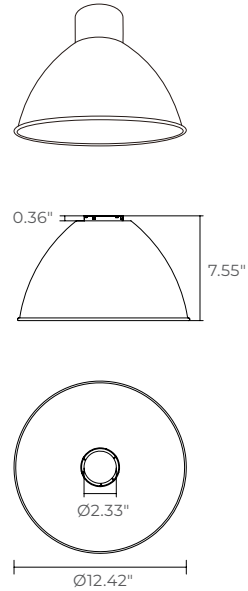


DIMENSIONS

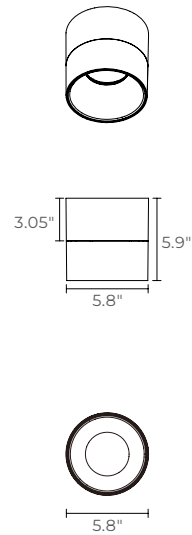
4" PRODUCT



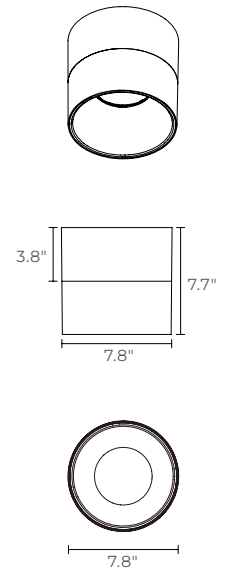
4" PRODUCT WITH 12" REFLECTOR



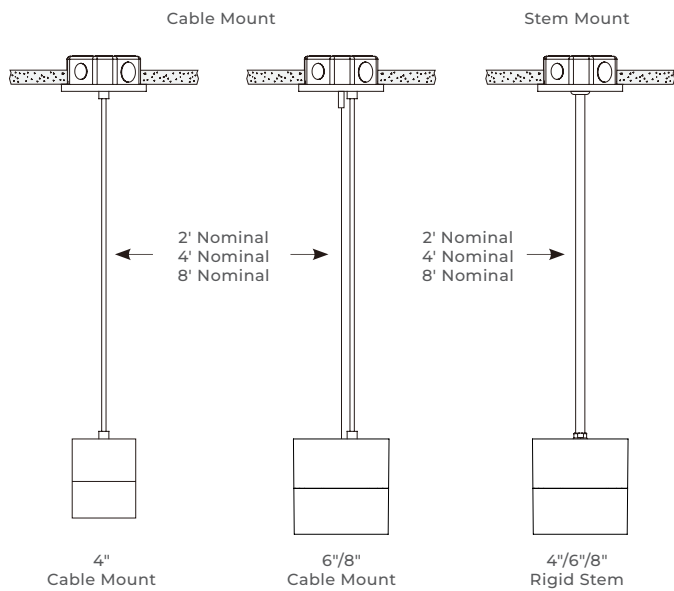
6" PRODUCT



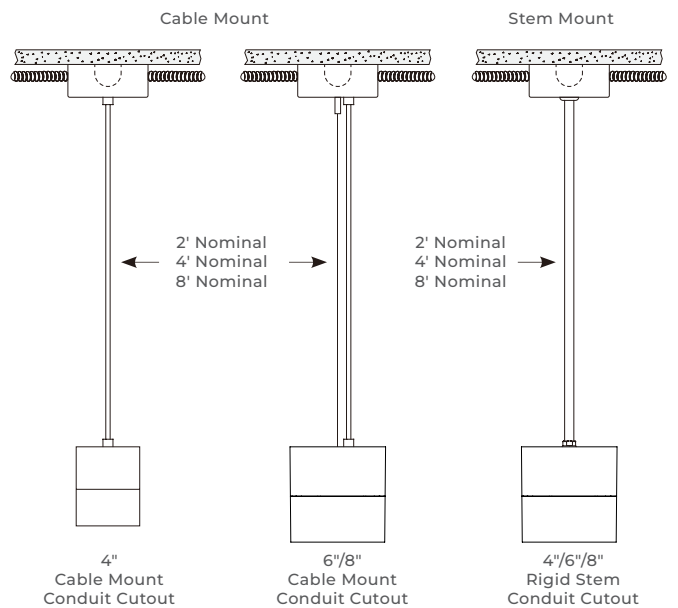
8" PRODUCT



FOR USE WITH RECESSED J-BOXES



FOR USE WITH SURFACE MOUNTED J-BOXES





MOUNTING OPTIONS

SURFACE MOUNTING

Recessed J-Box



4" / 6" / 8"

Surface Mounted J-Box



4"



6"



8"

SUSPENDED MOUNTING

Recessed J-Box



4"

Cable Mount



6"/8"

Cable Mount



4"/6"/8"

Rigid Stem

Surface Mounted J-Box



4"

Cable Mount
Conduit Cutout



6"/8"

Cable Mount
Conduit Cutout



4"/6"/8"

Rigid Stem
Conduit Cutout

SLOPED CEILING MOUNTING



4"/6"/8"
Rigid Stem

FINISH OPTIONS

White Housing Finish



White
Reflector



Copper
Reflector



Chrome
Reflector



Black
Reflector



12" White
Reflector

Black Housing Finish



White
Reflector



Copper
Reflector



Chrome
Reflector



Black
Reflector



12" Black
Reflector





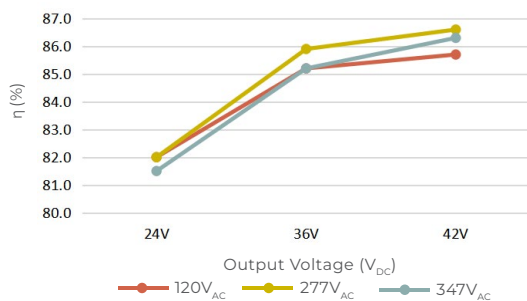
1-10V DIMMING DRIVER SPECIFICATIONS

INPUT		OUTPUT	
Efficiency	86%@220V _{AC} full load	Voltage (VDC)	30-42V _{DC}
Voltage	120-277V _{AC} (standard)	Current (mA)	600mA
	120-347V _{AC} (optional)	Power (W)	25W
Frequency Range (Hz)	50/60Hz	Current Ripple	<5%
Power Factor	≥ 0.9@120V _{AC} /60Hz,≥10% full load	Channel	1 output channel
	≥ 0.9@277V _{AC} /60Hz,≥50% full load	Linear Regulation	±5%
	≥ 0.9@347V _{AC} /60Hz,≥70% full load	No-load Output Voltage	<50V
THD (Full Load)	<10%@120V _{AC} full load	Start Time	<0.5S@347V <1S@120V
AC Current (max)	0.25A@120V _{AC} full load	Auxiliary Voltage	12V/100mA
Standby Power	<1W		
Inrush Current (Cold Start, Max)	120V 20A peak,500us duration(10% Ipeak)		
	277V 25A peak,600us duration(10% Ipeak)		
	347V 35A peak,800us duration(10% Ipeak)		
Leakage Current (Max)	<0.15mA@347V		
FUNCTION		PROTECTION	
Dimming Method	0-10V 0.5V OFF/0.7V ON	Over Temperature	When temperature is too high, shut down the output, recovers automatically
Dimming Current	<1mA@10V <2mA@0.7V	Over Load	Hiccup, when the output power exceeds, then, recovers automatically after fault removed
Dimming Range	10%-100% (standard)	Short Circuit	Close output recovers automatically after fault removed
Adjust Power	Can be dialed externally		

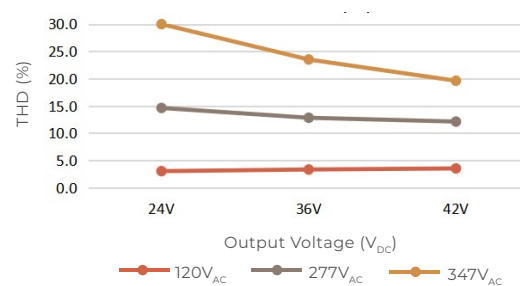
ELECTRICAL CHARACTERISTICS

Measured at Ta 25°C, output current 600mA

Efficiency VS Output Voltage Curve



Total Harmonic Distortion VS Output Voltage Curve



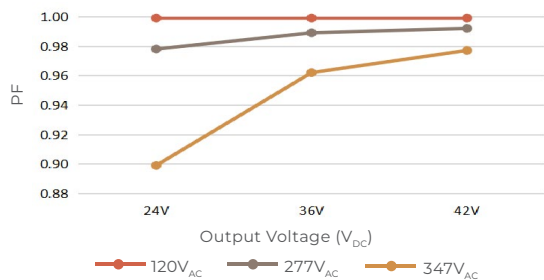


1-10V DIMMING DRIVER SPECIFICATIONS (CONTINUED)

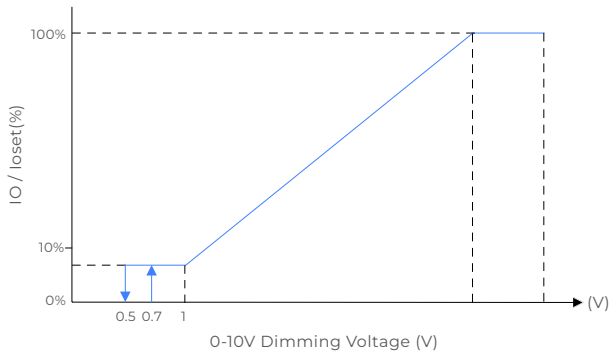
ELECTRICAL CHARACTERISTICS (CONTINUED)

Measured at Ta 25°C, output current 600mA

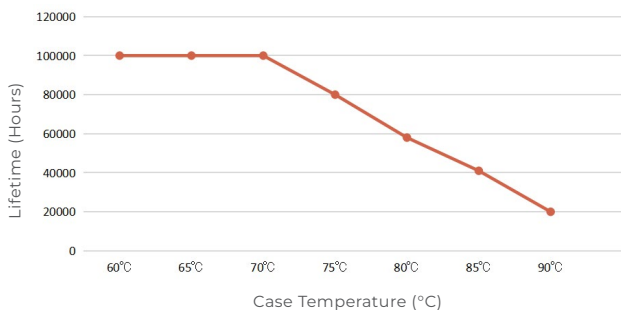
Power Factor VS Output Voltage Curve



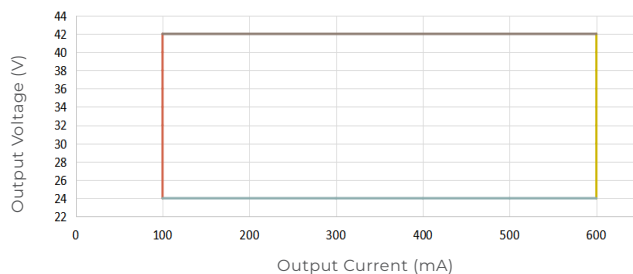
Output Current VS Dimming Voltage (Typical)



Lifetime VS Case Temperature



Output Voltage VS Output Current



Note: within the output voltage range, the maximum output power does not exceed 25W





0-10V/TRIAC DIMMING DRIVER SPECIFICATIONS

INPUT

Input Voltage	108-305 V _{AC}
Rated Input Voltage	120-277 V _{AC}
	47 Hz (min)
Input Frequency	50/60 Hz (typ)
	63 Hz (max)
Input Current (Max)	0.7A (Full Load, V _{IN} = 120V _{AC})
Inrush Current (Cold Start, Max)	25A (V _{IN} = 277V _{AC})
Leakage Current	0.75 (V _{IN} = 277V _{AC} 60Hz)
Number of Drivers per MCB(Circuit Breaker)	

MCB Type	13	15	17	17	20	22	21	24	28	26	30	35
120V _{AC}	30	46	53	39	60	69	48	74	85	60	93	106
277V _{AC}	13	22	44	120	28	57	21	35	71	26	44	88

Number of Drivers per MCB(Circuit Breaker)

MCB Type	13	15	17	17	20	22	21	24	28	26	30	35
120V _{AC}	15	18	20	20	23	26	24	28	33	31	36	41
277V _{AC}	10	17	35	45	23	46	17	28	57	21	35	71



INPUT VOLTAGE	INRUSH CURRENT	t(us)10%-10%
120V _{AC}	10.2A	200
277V _{AC}	22.2A	220
347V _{AC}	NA	NA

PROTECTION

Over Voltage Protection	It will recover automatically after fault conditions is removed.
Short Circuit Protection	It will recover automatically after fault conditions is removed.

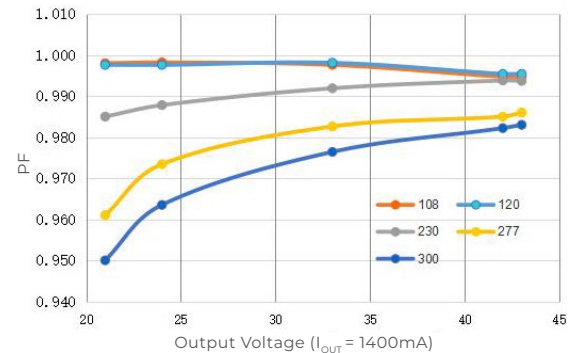
SAFETY COMPLIANCE

CUL/UL	UL8750, CAN/CSA-C22.2 No. 250.13
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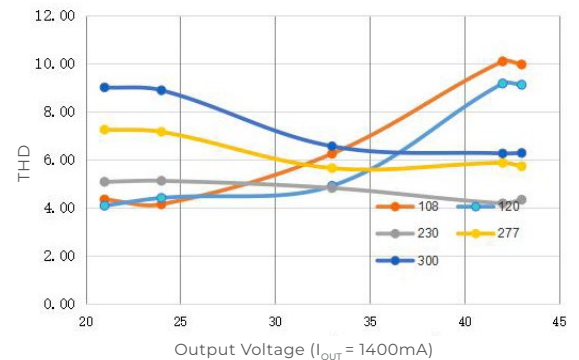
GENERAL CHARACTERISTICS

Power Factor	≥0.95 (50-100% Load, V _{IN} = 120V _{AC})
	≥0.9 (50-100% Load, V _{IN} = 120V _{AC})
Total Harmonic Distortion (max %)	20 (50-100% Load, V _{IN} = 120V _{AC})
Turn On Delay Time	0.5 s (Cold Start, No dimming)

Power Factor VS Output Voltage Curve



Total Harmonic Distortion VS Output Voltage Curve



OUTPUT

Output Current Tolerance	<5%
Output Voltage	20-42V _{DC}
Output Power	60W
Line Regulation	<3%
Load Regulation	<5% (V _{OUT} from MIN. to MAX.)
Ripple Current	<10% (Full Load, (I _{OMAX} -I _{OMIN})/(I _{OMAX} +I _{OMIN}))
Output Current Overshoot	<10% (Turning Power ON)





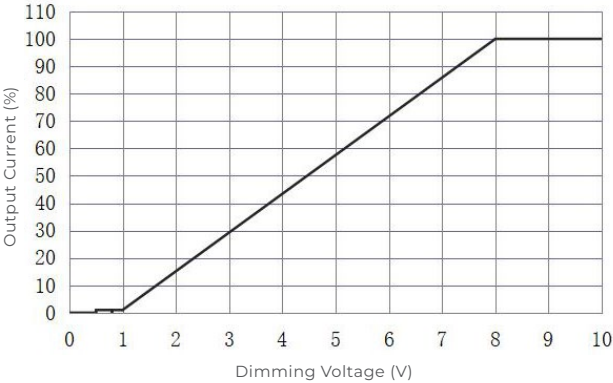
0-10V/TRIAC DIMMING DRIVER SPECIFICATIONS (CONTINUED)

0~10V OR RESISTOR DIMMING

The 0~10V or resistor dimming can be used to dim the output Current via a standard commercial wall dimmer (0~10VDC) or an external control voltage source (0~10VDC) or external resistor.

Dimming Curve	Linear. See Dimming Curve.
Absolute Maximum Voltage on 0~10V Pin	0-10V
Source Current on 0~10V Dimming Pin	200-500uA
Light On (V _{DIM-on})	0.8V
Light Off (V _{DIM-off})	0.5V
Dimming Voltage for Full Bright	8V
Output Current Range	1-100%
External Resistor Value at Full Bright	45 kΩ
Leakage Voltage	5V _{AC}
Standby Power	0.5W

Dimming Voltage VS Output Current Curve



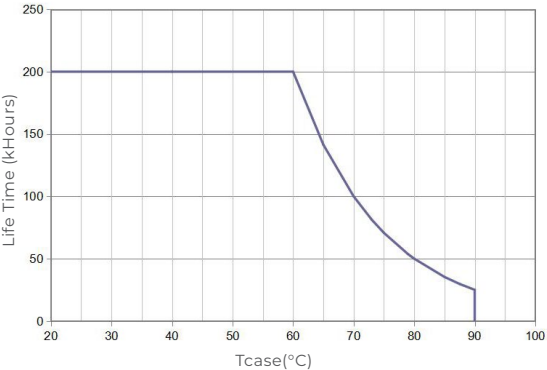
ENVIRONMENT

Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Ambient Operating Temperature	-25°C to 50°C (-13°F to 122°F)
Max. Case Temperature	90°C (194°F) (Hot spot on case)
Operating Relative Humidity	10-90% (Non-Condensing)
Acoustic Noise	24 dBA (Measured from 1 m w/o dimmer.)
Cooling	Convection Cooling
IP Rating	Dry and damp UL approved

OTHER SPECIFICATIONS

Lifetime	-40°F to 185°F (-40°C to 85°C)
MTBF	-13°F to 122°F (-25°C to 50°C)
Net Weight	194°F (90°C) (Hot spot on case)
Warranty	10-90% (Non-Condensing)
Flicker	24 dBA (Measured from 1 m w/o dimmer.)

Life Time Curve



SAFETY COMPLIANCE

EMC Requirements	Standard	Conditions
EMI Emissions	FCC Title 47 Part 15B	Class B at 120VAC, Class A at 277VAC
Voltage Fluctuations and Flicker	IEC61000-3-3	
Immunity Compliance	IEC 61000-4-2	±8kV air Discharge, ±6kV Contact Discharge
	IEC 61000-4-5 or ANSI/IEEE C62.41-2002	± 2kV Common and Differential Mode, test at 2 Ω, 5 strikes/minute interval (40 total strikes)
	ANSI/IEEE C62.41.1-2002	2.5kV Ring Wave, test at 30Ω 7 Strikes/1 minute interval, Common and Differential mode, 56 total strikes
	IEC 61000-4-11	>95% dip, .5 period; 30% dip, 25 periods; 95% reduction, 250 periods
	IEC 61000-4-4	± 2kV Direct couple to Line input, 5kHz repetition rate, 15mS duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)

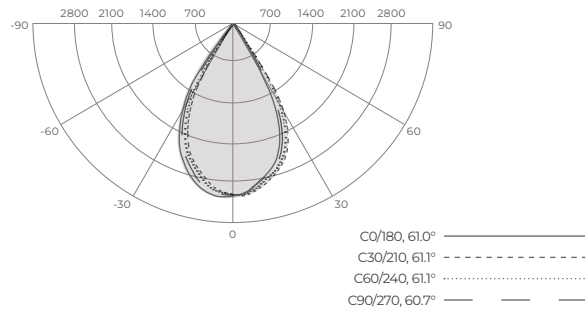
Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and rated voltage.





PHOTOMETRICS - 4" - 3000K - 60°

AVERAGE BEAM ANGLE (50%): 61.0°



Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	2079	6732
80	2892	6628
75	8458	9206
70	11997	11556
65	13945	13764
60	15263	15703
55	16203	17152
50	16813	17592
45	17695	27503

ZONAL FLUX DIAGRAM

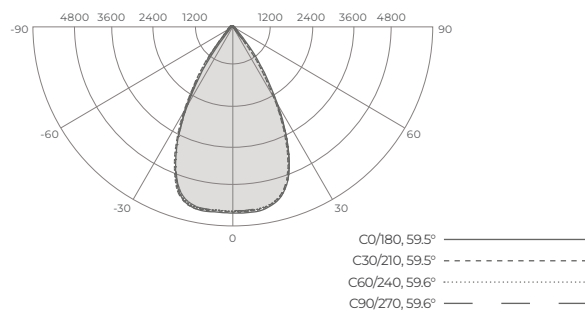
T	C0	C45	C90	C135	C180
10	2751	2786	2868	2917	2931
20	2335	2466	2558	2593	2538
30	1094	1535	1818	1905	1800
40	155.1	194.4	245.3	438.2	400.3
50	62.68	63.03	65.58	79.00	102.6
60	44.26	44.48	45.54	54.19	62.64
70	23.80	23.01	22.92	28.39	34.03
80	2.913	5.007	6.675	7.312	11.58
90	0.1544	0.1118	0.3414	0.4778	0.2661
100	0.0980	0.1167	0.1027	0.1260	0.1499
110	0.1725	0.2939	0.8678	0.2707	0.6863
120	0.3081	0.3082	0.3596	0.3502	0.7190
130	0.8022	0.6450	0.4290	0.4484	0.8034
140	2.066	1.785	1.408	1.243	1.589
150	3.714	3.274	2.851	2.718	3.120
160	5.316	4.917	4.461	4.184	4.698
170	6.381	6.205	6.044	5.930	6.233
180	6.788	6.806	6.652	6.657	6.797
DEG	LUMINOUS INTENSITY: cd				

ZONAL LUMEN SUMMARY

T	Φ TOTAL
0-10	2079
10-20	2892
20-30	8458
30-40	11997
40-50	13945
50-60	15263
60-70	16203
70-80	16813
80-90	17695
90-100	5033
100-110	5033
110-120	5033
120-130	5034
130-140	5036
140-150	5039
150-160	5042
160-170	5045
170-180	5046
UNIT: lm	

PHOTOMETRICS - 6" - 3000K - 60°

AVERAGE BEAM ANGLE (50%): 59.6°



Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	5141	5059
80	6800	6703
75	7678	7640
70	8441	8382
65	9032	8906
60	9393	9200
55	9336	9072
50	10163	10349
45	14737	15549

ZONAL FLUX DIAGRAM

T	C0	C45	C90	C135	C180
10	5529	5511	5486	5486	5576
20	4834	4887	4923	4940	4963
30	2643	2758	2803	2894	2818
40	433.5	487.4	508.0	551.8	472.2
50	100.6	104.4	102.4	105.5	99.85
60	72.33	72.16	70.84	70.56	71.23
70	44.46	45.15	44.15	44.05	43.76
80	18.19	18.90	17.92	18.39	18.56
90	0.1782	0.1447	0.1496	0.1447	0.1447
100	0.1727	0.1868	0.1494	0.1821	0.1729
110	0.2565	0.2615	0.2147	0.2568	0.2569
120	0.3688	0.3923	0.3823	0.3596	0.3737
130	1.082	1.047	0.9929	0.9770	1.080
140	3.232	3.112	3.031	2.920	3.318
150	6.392	6.202	6.089	5.889	6.530
160	9.529	9.302	9.245	9.017	9.601
170	12.21	12.07	11.91	11.77	12.11
180	13.29	13.37	13.15	13.16	13.31
DEG	LUMINOUS INTENSITY: cd				

ZONAL LUMEN SUMMARY

T	Φ TOTAL
0-10	526.3
10-20	2017
20-30	3780
30-40	4714
40-50	4863
50-60	4936
60-70	4993
70-80	5025
80-90	5033
90-100	5033
100-110	5033
110-120	5033
120-130	5034
130-140	5036
140-150	5039
150-160	5042
160-170	5045
170-180	5046
UNIT: lm	





ADDITIONAL IMAGERY (CONTINUED)

