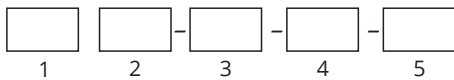




Product Ordering Guide

Sample

CE8-27W-40 E-347



1. Base Model

CE or C

2. Size

- 4 4"
- 6 6"
- 8 8"
- 10 10"

3. Wattage

- 18W 18W
- 27W 27W
- 40W 40W
- 54W 54W
- 80W 80W

4. CCT

- 30E 3000K
- 35E 3500K
- 40E 4000K
- 50E 5000K
- 35T CCT Adjustable
- TWS Wattage & CCT Adjustable

5. 110-347V Option

- 347 110-347V AC input option

Optional Ordering Guide

Optional Mounting Accessory

- 4" Housing
- 6" Housing
- 8" Housing
- 10" Housing

Interactive Menu

Order Information	Page 1
Product Specification	Page 2
Dimension	Page 3
Photometric Data - 8' 18W	Page 4
Photometric Data - 8' 27W	Page 5
Photometric Data - 8' 40W	Page 6
Photometric Data - 8' 54W	Page 7
Photometric Data - 8' 80W	Page 8

Specification



Model No.	CES-18W-XXX	CES-27W-XXX	CES-40W-XXX	CES-54W-XXX	CES-80W-XXX
Input Power	18W	27W	40W	54W	80W
Trim Options	6",8",10"	4",6",8",10"	6",8",10"	6",8",10"	6",8",10"
Efficacy @ 3000K	80 LM/W	80 LM/W	80 LM/W	80 LM/W	80 LM/W
Luminous Flux	1440 LM	2160 LM	3200 LM	4320 LM	6400LM
100-277VAC Input	✓	✓	✓	✓	✓
110-347VAC Input Option	✓	✓	✓	50W	✓
1-10V Dimming	✓	✓	✓	✓	✓
CCT Adjustable Option	3000K, 3500K,4000K	3000K, 3500K,4000K	3000K, 3500K,4000K	N/A	N/A
Wattage Adjustable Option	N/A	N/A	18W,27W,40W	N/A	50W,65W,80W
UL/CUL	✓	✓	✓	✓	✓
Energy Star	6", 8"	6", 8"	6", 8", 10"	6", 8", 10"	6", 8", 10"

*All efficacy is ±5% base on different CCT and trim size. Check the IES file to gain the accurate data.

Product Performance

► Structure

Spun aluminum reflector integrated with haze finish and white trim ring with shadow free, deeply regressed diffusing lens conceals the LEDs from direct view.

► Electrical

LED Driver Powered by Class 2 high efficiency LED driver, with a standard 1- 10V driver which continuous dims to 10% that works with many types of controls. Tested Dimmers: Lutron® Diva- Dvtv, Leviton® IP- 710- DL.

THD <20%

Power Factor >0.9

Input Voltage Standard electronic drivers are cULus recognized and available for 100- 277V or 110- 347VAC.

► Optional Function

Emergency Option Optional low voltage 100- 277V emergency LED driver for lighting up to 120 minutes in event of power failure, that meets critical life- safety lighting requirements.

► LED System

CRI Minimum 80 color rendering index

CCT 3000K, 3500K, 4000K and 5000K with a great color consistency

LED life Minimum 50,000h with 87.8% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM- 80 testing measurements.

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

► Mounting

It is provided with spring steel friction clips allowing for installation in a variety of commercial recessed open frame rough-in sections.

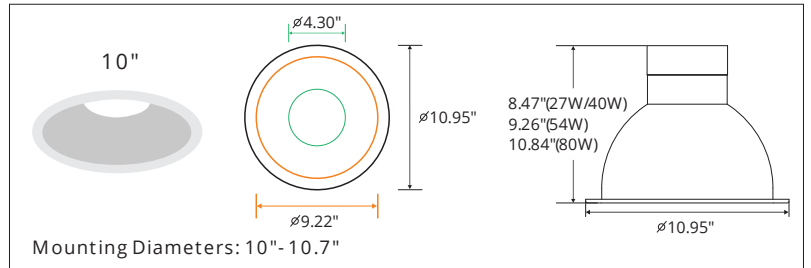
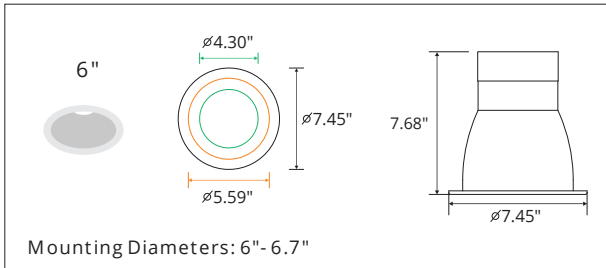
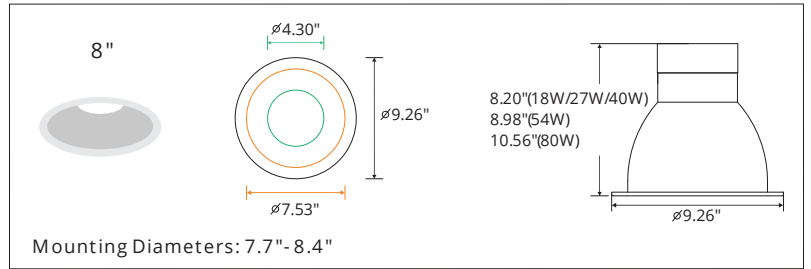
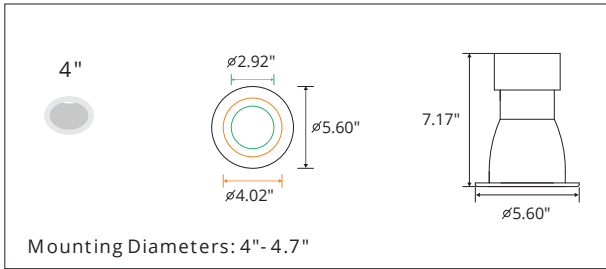
► Approvals

- cULus listed for damp locations
- Energy Star Listed
- Tested to IESNA LM- 79 and LM- 80

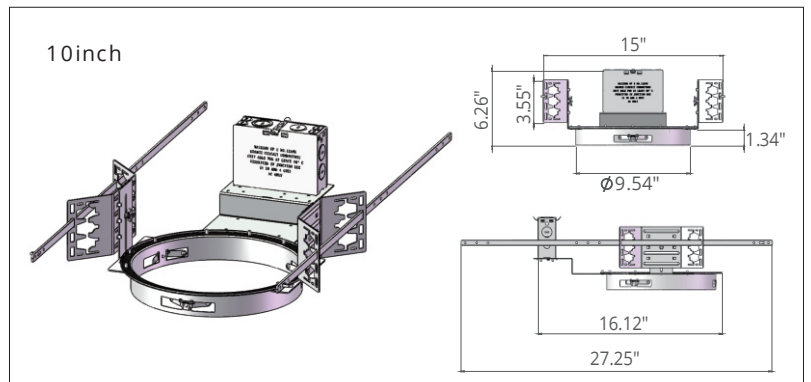
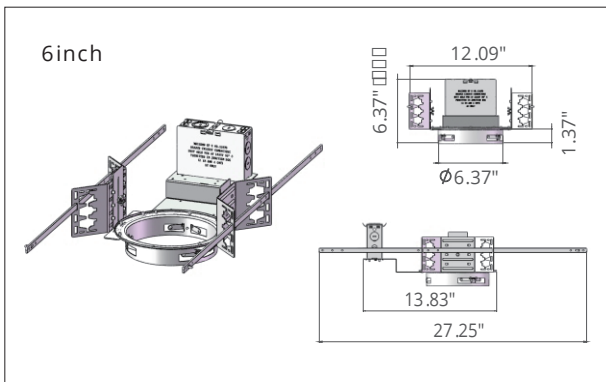
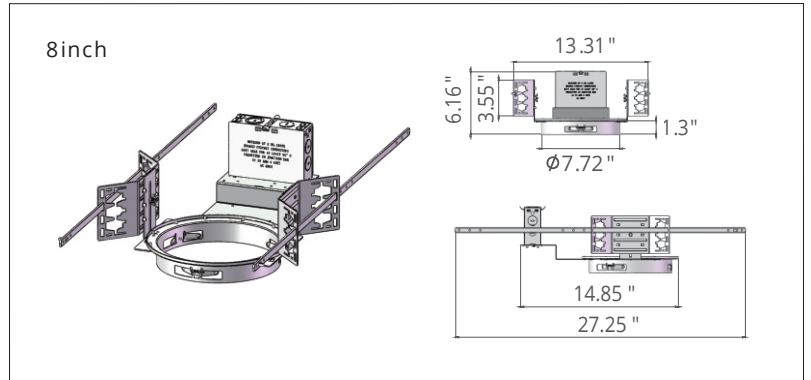
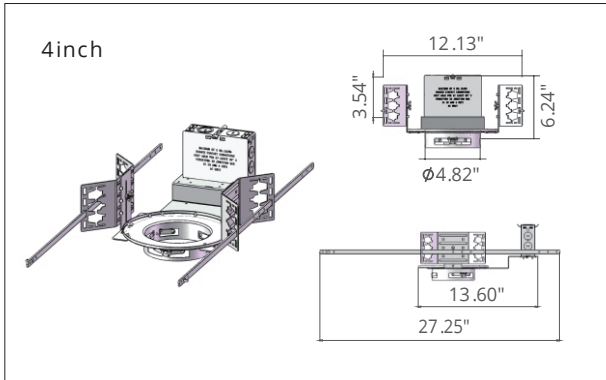
► Warranty

5- year limited warranty on LED and driver.

Dimension



Optional New Construction Frame



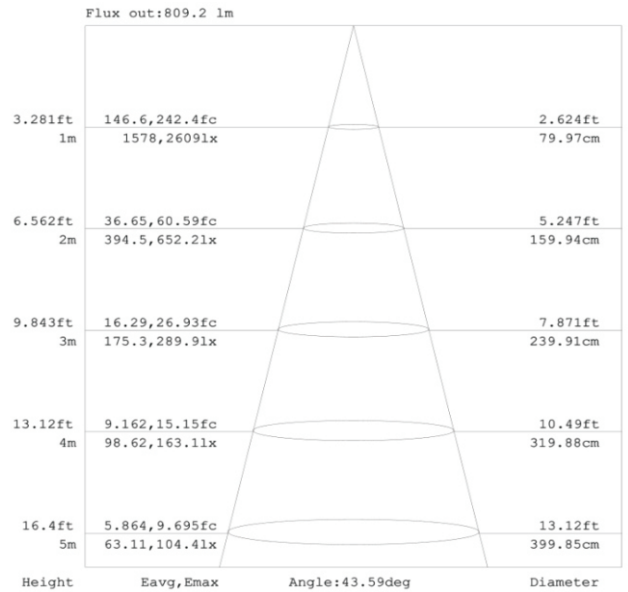
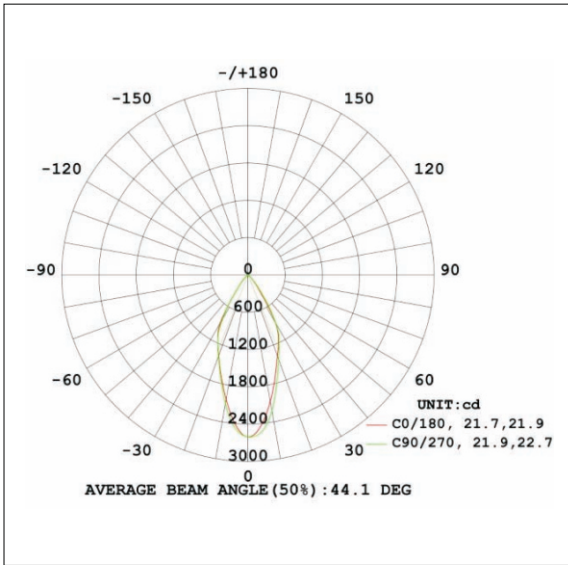
PHOTOMETRIC

Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

AVERAGE ILLUMINANCE CURVE

CE8-18W-30X



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

ZONAL FLUX DIAGRAM

ZONAL LUMEN SUMMARY

Y	C0	C45	C90	C135	C180	C225	C270	C315
10	2070	2133	2220	2134	2034	2036	2100	2125
20	1387	1414	1441	1413	1383	1372	1397	1399
30	877.5	895.9	890.6	886.3	891.3	846.0	821.9	831.0
40	193.5	209.9	238.0	226.1	219.1	209.8	215.7	206.7
50	39.22	43.94	52.91	49.93	48.69	46.36	46.76	39.83
60	13.01	14.78	17.95	15.89	15.62	15.75	16.34	13.34
70	5.343	6.119	7.261	6.352	6.104	6.266	6.507	5.457
80	1.969	2.286	2.690	2.434	2.309	2.310	2.313	1.985
90	0.0002	0.0009	0.0032	0.0074	0.0041	0	0	0

DEG LUMINOUS INTENSITY :cd

T	φ zone	φ total	lum lamp
0-10	223.3	223.3	13.6,13.6
10-20	479.6	702.9	42.7,42.7
20-30	528.6	1232	74.8,74.8
30-40	290.4	1522	92.5,92.5
40-50	85.04	1607	97.6,97.6
50-60	24.06	1631	99.1,99.1
60-70	9.751	1641	99.7,99.7
70-80	4.278	1645	99.9,99.9
80-90	0.9728	1646	100,100

UNIT: lm

COEFFICIENTS OF UTILIZATION

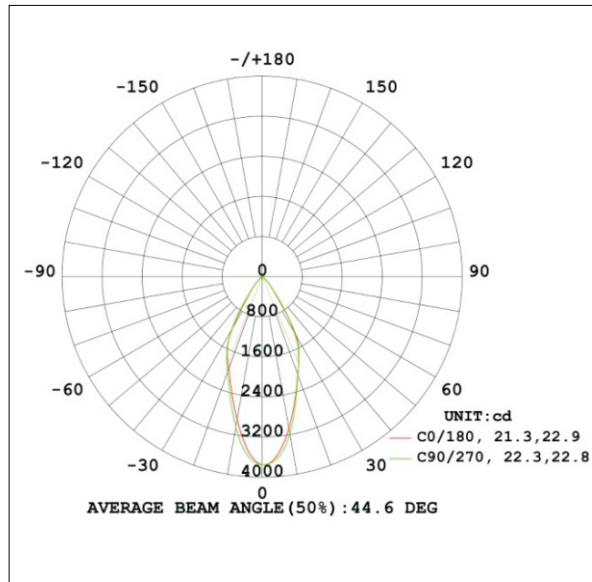
ppc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc																
RCR	RCR:Room Cavity Ratio			(CU)												
0.0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	00
1.0	111	108	106	109	107	105	105	103	101	101	00	98	98	96	96	94
2.0	103	99	96	102	98	95	98	96	93	96	93	91	93	91	89	87
3.0	96	92	88	95	91	87	93	89	86	90	87	85	88	85	83	82
4.0	90	85	81	89	85	81	87	83	80	85	82	79	84	80	78	76
5.0	85	80	75	84	79	75	82	78	74	81	77	74	79	76	73	72
6.0	80	74	70	79	74	70	78	73	70	77	72	69	75	72	69	67
7.0	75	70	66	75	70	66	74	69	65	73	68	65	72	68	65	63
8.0	71	66	62	71	66	62	70	65	61	69	65	61	68	64	61	60
9.0	67	62	58	67	62	58	66	62	58	66	61	58	65	61	58	56
10.0	64	59	55	64	59	55	63	58	55	63	58	55	62	58	55	53

PHOTOMETRIC

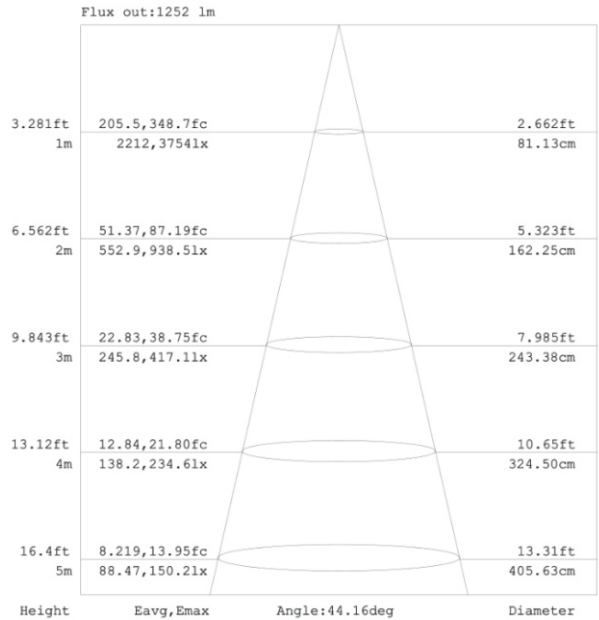
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

CE8-27W -30X



AVERAGE ILLUMINANCE CURVE



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

ZONAL FLUX DIAGRAM

Y	C0	C45	C90	C135	C180	C225	C270	C315
10	3075	3138	3180	3033	2896	2913	3044	3146
20	2080	2099	2088	2016	1958	1958	2027	2072
30	1348	1341	1274	1235	1205	1193	1218	1276
40	300.0	311.3	331.4	309.3	298.5	296.9	317.0	319.6
50	64.22	67.52	72.68	68.11	66.00	66.41	68.83	62.65
60	20.11	21.80	24.54	21.71	21.00	21.90	23.32	20.51
70	8.176	8.924	10.02	8.685	8.283	8.732	9.431	8.279
80	3.040	3.348	3.677	3.250	3.076	3.195	3.406	3.066
90	0.0020	0.0021	0.0021	0.0017	0	0	0	0
DEG	LUMINOUS INTENSITY :cd							

ZONAL LUMEN SUMMARY

T	φ zone	φ total	%lum lamp
0-10	322.7	322.7	13.5,13.5
10-20	696.5	1019	42.6,42.6
20-30	768.7	1788	74.8,74.8
30-40	423.0	2211	92.5,92.5
40-50	123.0	2334	97.6,97.6
50-60	34.63	2369	99.1,99.1
60-70	13.98	2382	99.7,99.7
70-80	6.112	2389	99.9,99.9
80-90	1.376	2390	100,100
	UNIT:lm		

COEFFICIENTS OF UTILIZATION

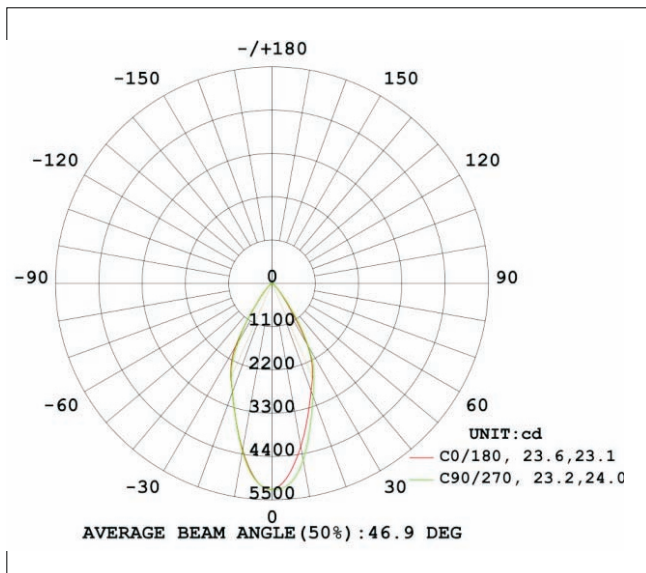
ppc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
	RCR:Room Cavity Ratio						(CU)									
0.0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	00
1.0	111	108	106	109	107	105	105	103	101	101	00	98	98	96	96	94
2.0	103	99	96	102	98	95	98	96	93	96	93	91	93	91	89	87
3.0	97	92	88	95	91	87	93	89	86	90	87	85	88	85	83	82
4.0	91	85	81	89	85	81	87	83	80	85	82	79	84	80	78	76
5.0	85	80	75	84	79	75	82	78	74	81	77	74	79	76	73	72
6.0	80	74	70	79	74	70	78	73	70	77	72	69	75	72	69	67
7.0	76	70	66	75	70	66	74	69	65	73	68	65	72	68	65	63
8.0	72	66	62	71	66	62	70	65	61	69	65	61	68	64	61	60
9.0	68	62	58	67	62	58	66	62	58	66	61	58	65	61	58	56
10.0	64	59	55	64	59	55	63	58	55	63	58	55	62	58	55	53

PHOTOMETRIC

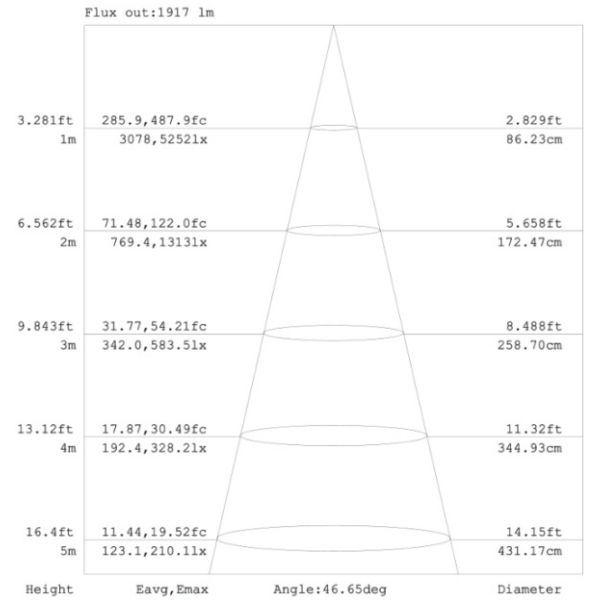
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

CE8-40W-30X



AVERAGE ILLUMINANCE CURVE



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

ZONAL FLUX DIAGRAM

Y	C0	C45	C90	C135	C180	C225	C270	C315
10	4207	4415	4558	4486	4303	4317	4343	4361
20	2908	2989	3048	3017	2951	2915	2939	2924
30	1783	1845	1841	1886	1860	1768	1722	1715
40	404.4	449.3	484.6	473.0	456.1	447.0	450.8	437.9
50	86.32	93.34	102.6	97.79	98.80	98.58	100.2	88.29
60	28.65	31.97	35.80	31.96	31.76	33.20	33.99	29.04
70	11.68	13.27	14.63	12.86	12.69	13.51	13.68	11.78
80	4.325	4.949	5.424	4.908	4.774	4.959	4.903	4.340
90	0.0042	0.0048	0.0057	0.0085	0.0064	0.0028	0.0019	0.0025
DEG	LUMINOUS INTENSITY :cd							

ZONAL LUMEN SUMMARY

T	φ zone	φ total	lum lamp
0-10	456.9	456.9	13.2,13.2
10-20	1007	1464	42.4,42.4
20-30	1112	2576	74.6,74.6
30-40	618.6	3195	92.5,92.5
40-50	177.5	3372	97.6,97.6
50-60	50.50	3423	99.1,99.1
60-70	20.55	3443	99.7,99.7
70-80	9.028	3452	99.9,99.9
80-90	2.048	3454	100,100
	UNIT: lm		

COEFFICIENTS OF UTILIZATION

ppc	80%				70%				50%				30%				0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%		
pw	30%10%50%				20%				20%				20%				
pfc	20%				20%				20%				20%				
RCR	RCR:Room Cavity Ratio (CU)																
0.0	119	119	119	116	116	116	111	111	111	111	106	106	106	102	102	102	00
1.0	111	108	106	109	107	105	105	103	101	101	00	98	98	96	95	94	
2.0	103	99	96	102	98	95	98	96	93	96	93	91	93	91	89	87	
3.0	97	92	88	95	91	87	93	89	86	90	87	85	88	85	83	82	
4.0	91	85	81	89	84	81	87	83	80	85	82	79	83	80	78	76	
5.0	85	80	75	84	79	75	82	78	74	81	77	74	79	76	73	71	
6.0	80	74	70	79	74	70	78	73	70	77	72	69	75	71	68	67	
7.0	76	70	66	75	69	65	74	69	65	73	68	65	71	67	64	63	
8.0	72	66	62	71	65	62	70	65	61	69	65	61	68	64	61	59	
9.0	68	62	58	67	62	58	66	62	58	66	61	58	65	60	57	56	
10.0	64	59	55	64	59	55	63	58	55	63	58	55	62	57	54	53	

ZONAL LUMEN TABULATION

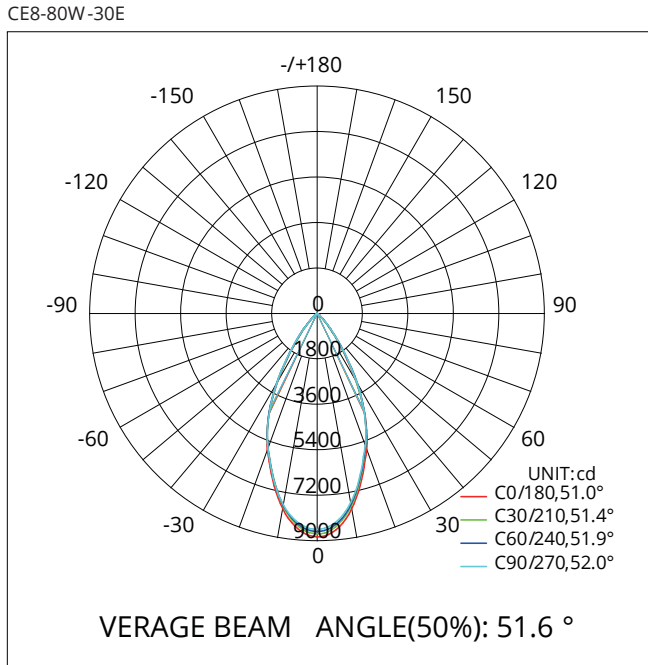
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	3,230.2	72.1%
0-40	4,056.7	90.5%
0-60	4,415.3	98.5%
60-90	65.1	1.5%
70-100	22.8	0.5%
90-120	0.0	0%
0-90	4,480.4	100%
90-180	0.0	0%
0-180	4,480.4	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	536.5	12%	90-100	0.0	0%
10-20	1254.1	28%	100-110	0	0%
20-30	1439.5	32.1%	110-120	0	0%
30-40	826.5	18.4%	120-130	0	0%
40-50	265.4	5.9%	130-140	0	0%
50-60	93.2	2.1%	140-150	0	0%
60-70	42.4	0.9%	150-160	0	0%
70-80	18.7	0.4%	160-170	0	0%
80-90	4.1	0.1%	170-180	0	0%

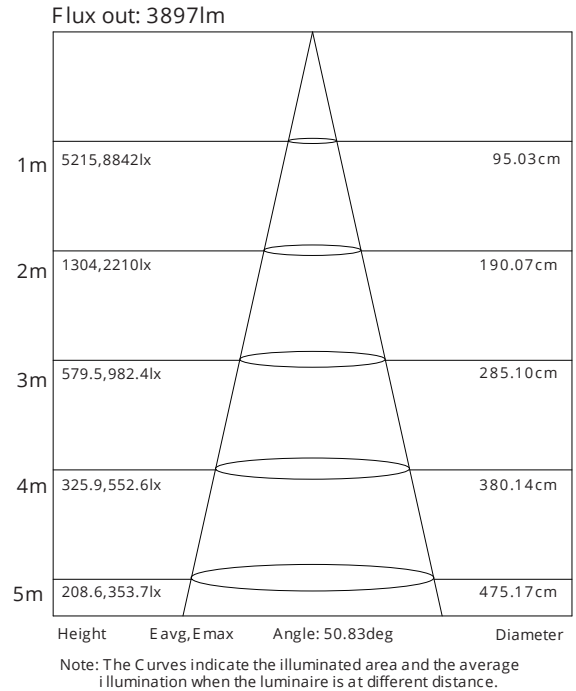
PHOTOMETRIC

Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE ILLUMINANCE CURVE



ZONAL FLUX DIAGRAM

Y	C0	C45	C90	C135	C180	C225	C270	C315
10	7872	7743	7625	7552	7858	7706	7709	7577
20	5741	5648	5579	5538	5777	5662	5706	5565
30	3072	3196	3154	3133	3168	3217	3245	3126
40	863.6	934.3	935.4	979.2	923.3	931.5	976.9	922.3
50	154.7	156.7	165.2	184.7	180.9	153.9	152.0	154.7
60	31.91	32.07	35.00	42.64	40.87	31.96	31.38	33.02
70	11.69	11.21	11.99	13.96	13.43	11.35	11.46	12.17
80	4.327	4.261	4.534	4.810	4.632	4.185	4.544	4.519
90	0.1629	0.1966	0.1448	0.1684	0.1504	0.1854	0.1127	0.1762
DEG	LUMINOUS INTENSITY :cd							

ZONAL LUMEN SUMMARY

T	φ zone	φ total	%lum lamp
0-10	775.2	775.2	12.3,12.3
10-20	1854	2630	41.8,41.8
20-30	2027	4656	74,74
30-40	1166	5823	92.6,92.6
40-50	346.1	6169	98.1,98.1
50-60	71.72	6241	99.2,99.2
60-70	20.38	6261	99.2,99.2
70-80	8.342	6269	99.7,99.7
80-90	1.889	6271	99.7,99.7

UNIT: lm

COEFFICIENTS OF UTILIZATION

ppc	80%				70%				50%				30%				0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%		
pw	30%10%50%				30%				50%				30%				0
pfc	20%				20%				20%				20%				0
RCR	RCR:Room Cavity Ratio (CU)																
0.0	119	119	119	116	116	116	111	111	111	106	106	106	102	102	102	00	
1.0	111	108	106	109	106	105	105	103	101	101	99	98	97	96	95	94	
2.0	103	99	96	102	98	95	98	95	93	95	93	91	93	91	89	87	
3.0	97	92	88	95	91	87	93	89	86	90	87	84	88	85	83	81	
4.0	90	85	81	89	84	80	87	83	80	85	82	79	83	80	78	76	
5.0	85	79	75	84	79	75	82	78	74	81	77	73	79	75	73	71	
6.0	80	74	70	79	74	70	78	73	69	76	72	69	75	71	68	67	
7.0	75	70	65	75	69	65	73	68	61	72	68	65	71	67	64	63	
8.0	71	65	61	71	65	61	70	65	61	68	64	61	68	63	60	59	
9.0	67	62	58	67	61	58	66	61	57	65	61	57	64	60	57	56	
10.0	64	58	55	64	58	54	63	58	54	62	57	54	61	57	54	53	