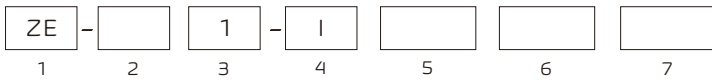


Product Ordering Guide

Sample

ZE-41 - I 35 A D



1. Base Model

- ZE ZETA

2. Length

- 2 2 feet 4 4 feet 8 8 feet

3. Width

- 1 1.3 inch

4. Driver

- I Internal E External (See External Driver Version Spec Sheet)

5. CCT

- 30 3000K 35 3500K 40 4000K 50 5000K

6. Light Distribution

- D 100% Downlight U 100% Uplight A Uplight and Downlight
 - 50% down, 50% up 75% down, 25% up 25% down, 75% up Customize _____% down, _____% up

7. Optics Options

- D Diffuser R Micro Reflector L Louver C Convex

Installation Ordering Guide

Mounting Options

- Pendant Surface Mounted Wall Mounted

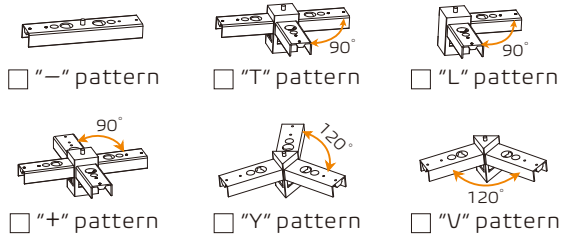
Installation Accessory (If Pendant)

- For Dry Ceiling For Drop Ceiling
 - T-Grid Clips T-Grid Hangers

Canopy (If Pendant)

- Round (2" & 4") Square (2" & 4")

Joiner



Optional Accessory

- Rolling Diffuser (42')

Optional Functions

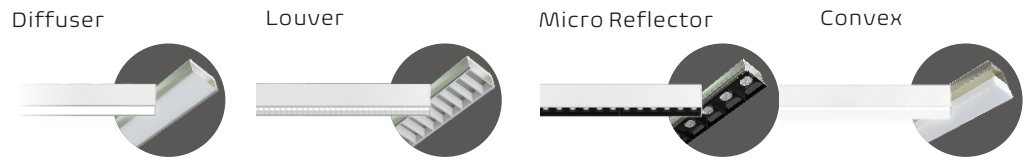
- Emergency Sensor Wattage Adjustable

Interactive Menu

- Order Information.....Page 1
- Product Specification & DimensionsPage 2
- Product Performance & MountingPage 3
- Photometric Data - Diffuser/50% Up,50% Down/ 3500K.....Page 4
- Photometric Data - Louver/25% Up,75% Down/ 3500K.....Page 5
- Photometric Data -Micro Reflector / 50% Up,50% Down/ 3500K.....Page 6
- Photometric Data -Convex /50% Up,50% Down/ 4000K.....Page 7



Specification

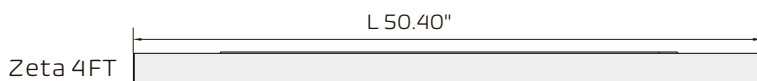
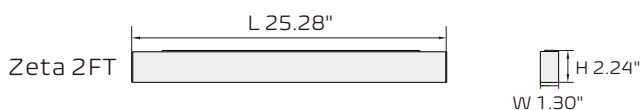


Model	ZE-X1-IXXXD	ZE-X1-IXXXL	ZE-X1-IXXXR	ZE-X1-IXXXC
Aperture	1.3"	1.3"	1.3"	1.3"
Lengths	2FT,4FT,8FT	2FT,4FT,8FT	2FT,4FT,8FT	2FT,4FT,8FT
Wattage	20W,40W,80W	20W,40W,80W	20W,40W,80W	20W,40W,80W
Efficacy -100% down	75 lm/w	65 lm/w	90 lm/w	90 lm/w
Efficacy -75% down, 25% up	80 lm/w	70 lm/w	103 lm/w	95 lm/w
Efficacy -50% down, 50% up	100 lm/w	95 lm/w	105 lm/w	110 lm/w
Efficacy -25% down, 75% up	105 lm/w	105 lm/w	115 lm/w	110 lm/w
Efficacy - 100% up	75 lm/w			
Beam Angle	Up150°,Down 100°	Up 150°,Down 60°	Up150°,Down 48°	Up 150°,Down 110°
100-277V Input	✓	✓	✓	✓
1-10V Dimming	✓	✓	✓	✓
Custom Pattern	✓	✓	✓	✓
Pendant	✓	✓	✓	✓
Surface Mounted	✓	✓	✓	✓
Wall Mounted	✓ (2FT/4FT)	✓ (2FT/4FT)	✓ (2FT/4FT)	✓ (2FT/4FT)
Wattage Adjustable Option (100%,75%,50%)	✓	✓	✓	✓
Emergency Option	✓	✓	✓	✓
Sensor Option	✓	✓	✓	✓
UL/CUL	✓	✓	✓	✓

*All efficacy is base on 3000K. Check the IES file to gain the accurate data.

*Reflector Optics: When 100% downlight, 35W for 4' and 70W for 8'.

Dimensions



Product Performance

Optics

It offers a selection of professional lenses such as diffuser, louver, micro reflector and convex to meet your different requires.

Finish

- Extruded aluminum housing.
- Powder coat white finish or custom.

Electrical

LED Driver	It is 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

Mounting

- Pendant, surface and wall mount
- Individual or continuous run, up to 40ft in 120V AC, 100ft in 277V AC
- Custom Pattern

LED System

CRI	Minimum 80 color rendering index
CCT	The choice of 3000K, 3500K, 4000K and 5000K color temperature 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.

Approvals

- cULus listed for damp locations
- 5 years limited warranty

Optional Function

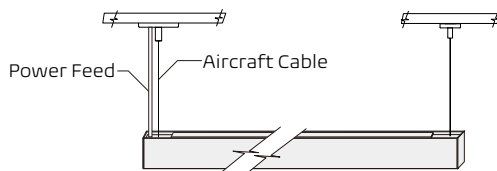
Sensor Option	In addition, it can include a factory-installed integrated sensor system for occupancy and daylight dimming control.
Emergency Option	Optional high voltage 100-277V emergency LED driver for lighting up to 120 minutes in event of power failure, that meets critical life-safety lighting requirements.
Wattage Adjustable Option	Available to adjust wattage to 100%, 75% and 50 % by dip switch.

Weight

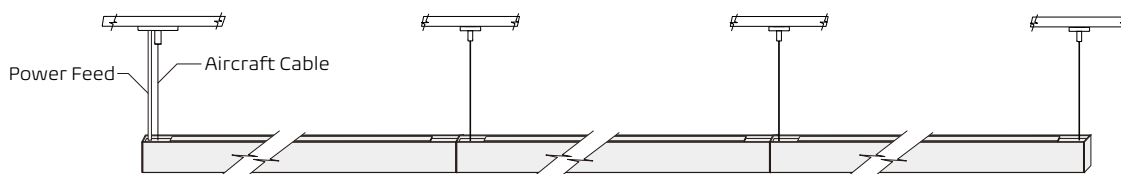
2': 3.75lbs / 1.7 kg 4': 6.61lbs / 3 kg 8': 12.56lbs / 5.7 kg

Mounting

Individual



Continuous Run



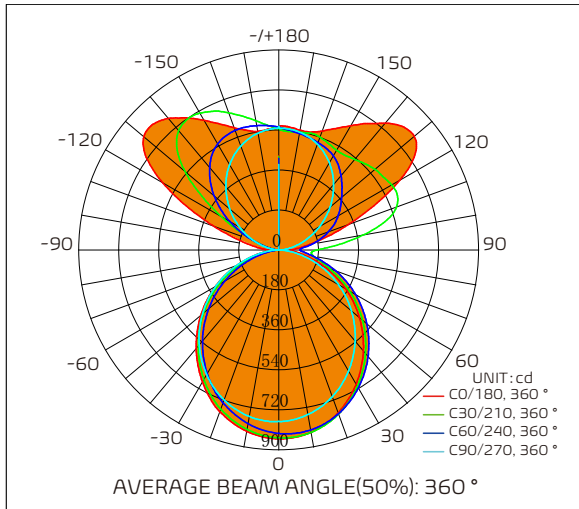
120VAC: connections up to 40ft.
277VAC: connections up to 100ft.

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.

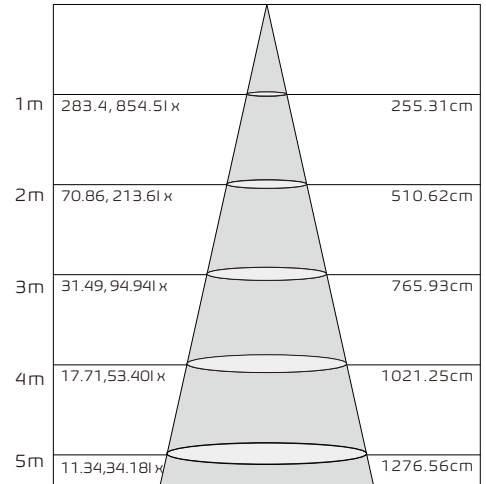
Distribution Diagram

ZE-41-I35AD



Average Illuminance Curve

Flux out: 1459 lm



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

Zonal Flux Diagram

T	C0	C45	C90	C135	C180	C225	C270	C315
5	846.7	842.0	766.9	713.5	844.2	831.3	771.3	771.9
10	833.7	833.4	753.0	674.0	829.3	812.7	761.5	788.2
15	811.5	815.6	731.7	629.2	805.5	785.6	743.8	797.1
20	780.7	789.8	703.5	580.3	775.7	751.9	718.9	797.5
25	742.3	756.2	699.1	528.1	734.9	711.5	687.2	789.5
30	697.2	715.4	629.1	472.5	687.6	662.3	649.2	773.0
35	647.2	669.0	584.3	414.7	635.3	608.8	605.7	748.4
40	593.0	617.9	535.5	355.1	579.0	551.3	557.3	716.6
45	535.2	562.3	483.0	293.8	519.8	490.4	504.9	678.5
50	474.6	503.8	427.6	230.8	458.3	427.2	448.7	634.2
55	411.7	442.7	369.7	170.0	394.7	362.0	389.5	585.1
60	347.1	379.4	309.6	112.3	329.3	295.2	328.0	531.6
65	281.4	314.5	248.5	60.01	261.8	227.7	262.9	474.3
70	216.0	248.5	187.2	16.79	196.1	161.6	198.9	414.3
75	152.1	193.4	126.7	1.266	133.3	99.57	136.4	351.9
80	100.4	150.4	72.53	0.8480	83.59	45.43	79.14	290.1
85	65.09	130.9	28.39	7.141	48.45	4.434	32.16	238.7
90	49.45	142.5	0.7812	22.35	45.07	2.682	6.658	199.5

DEG LUMINOUS INTENSITY:cd

Zonal Lumen Summary

T	φ zone	φ total	%lum,lamp
0-5	18.99	18.99	0.42,0.42
5-10	56.20	75.19	1.67,1.67
10-15	91.26	166.5	3.69,3.69
15-20	122.9	289.3	6.42,6.42
20-25	150.0	439.3	9.74,9.74
25-30	171.4	610.8	13.5,13.5
30-35	186.8	797.5	17.7,17.7
35-40	195.6	993.1	22,22
40-45	197.7	1191	26.4,26.4
45-50	193.2	1384	30.7,30.7
50-55	182.6	1567	34.7,34.7
55-60	166.3	1733	38.4,38.4
60-65	145.1	1878	41.6,41.6
65-70	120.4	1999	44.3,44.3
70-75	95.18	2094	46.4,46.4
75-80	71.31	2165	48,48
80-85	51.66	2217	49.2,49.2
85-90	40.25	2257	50.1,50.1

UNIT: lm

Coefficients Of Utilization

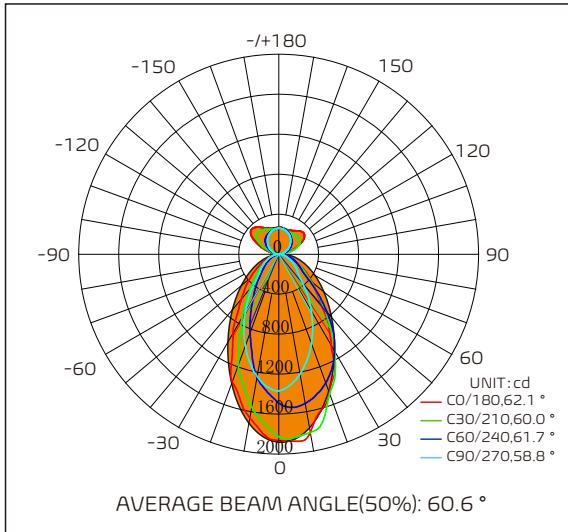
ppc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						(CU)									
0.0	107	107	107	99	99	99	83	83	83	69	69	69	56	56	56	50
1.0	93	89	85	86	82	79	72	70	67	60	58	56	49	47	46	41
2.0	81	74	69	75	69	64	63	59	55	52	49	47	43	41	39	34
3.0	71	63	57	65	59	54	55	50	46	46	43	39	38	35	33	29
4.0	63	54	48	58	51	45	49	44	39	41	37	34	34	31	28	24
5.0	56	47	41	52	44	39	44	38	34	37	32	29	30	27	24	21
6.0	50	42	36	46	39	34	40	34	29	33	29	25	27	24	21	18
7.0	45	37	31	42	35	29	36	30	26	30	26	22	25	22	19	16
8.0	41	33	28	38	31	26	33	27	23	28	23	20	23	20	17	15
9.0	37	30	25	35	28	23	30	24	21	25	21	18	21	18	15	13
10.0	34	27	22	32	25	21	28	22	18	23	19	16	20	16	14	12

Photometric

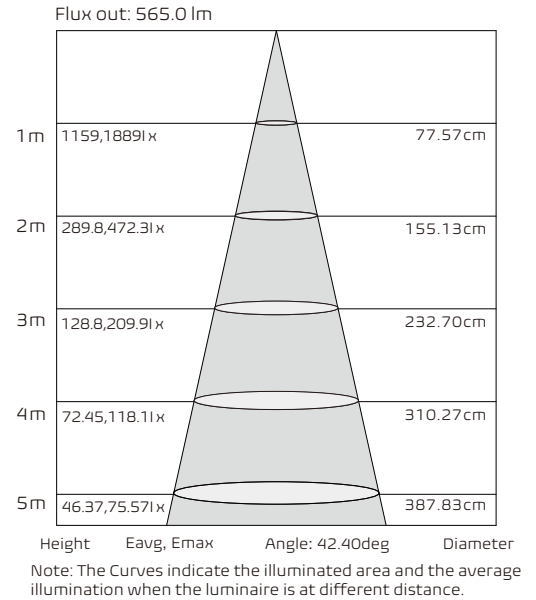
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

Distribution Diagram

ZE-41-135AL



Average Illuminance Curve



Zonal Flux Diagram

T	CO	C45	C90	C135	C180	C225	C270	C315
5	1877	1704	1316	1135	1803	1511	1331	1412
10	1812	1729	1219	940.3	1664	1341	1244	1490
15	1624	1659	1096	770.0	1502	1166	1124	1500
20	1480	1560	955.7	608.6	1362	920.8	979.9	1486
25	1324	1424	804.2	475.1	1104	731.8	827.9	1444
30	1053	1187	653.9	371.1	918.5	569.1	677.0	1338
35	872.9	1012	505.0	296.4	724.4	436.4	526.1	1214
40	670.6	818.9	367.4	229.5	583.2	337.2	383.4	1008
45	531.5	625.9	278.8	177.3	478.0	264.0	286.3	831.8
50	437.9	461.8	234.5	136.8	380.0	203.0	237.7	644.9
55	347.2	343.9	194.8	101.3	297.4	158.6	197.7	474.5
60	267.3	260.7	159.7	69.89	223.6	119.1	160.3	348.0
65	197.3	208.5	124.3	42.14	163.1	84.76	126.8	267.4
70	140.4	167.1	94.24	16.42	118.0	54.41	96.13	219.0
75	97.62	129.0	66.41	0.5593	77.95	26.98	67.57	178.4
80	62.39	96.13	40.90	0.4741	45.37	1.808	41.45	140.0
85	35.46	71.48	17.77	2.356	20.14	0.5964	17.87	110.0
90	18.59	56.42	0.4254	9.211	18.22	5.553	0.2548	87.65
DEG	LUMINOUS INTENSITY:cd							

Zonal Lumen Summary

T	φ zone	φ total	%lum,lamp
0-5	35.93	35.93	1.09,1.09
5-10	103.1	139.0	4.21,4.21
10-15	159.4	298.4	9.03,9.03
15-20	200.6	499.0	15.1,15.1
20-25	226.6	725.6	22,22
25-30	235.3	960.9	29.1,29.1
30-35	229.3	1190	36,36
35-40	211.3	1402	42.4,42.4
40-45	185.4	1587	48,48
45-50	157.4	1744	52.8,52.8
50-55	131.6	1876	56.8,56.8
55-60	108.5	1984	60.1,60.1
60-65	88.04	2073	62.7,62.7
65-70	69.41	2142	64.8,64.8
70-75	52.64	2195	66.4,66.4
75-80	37.94	2233	67.6,67.6
80-85	25.80	2258	68.3,68.3
85-90	18.22	2277	68.9,68.9

UNIT: lm

Coefficients Of Utilization

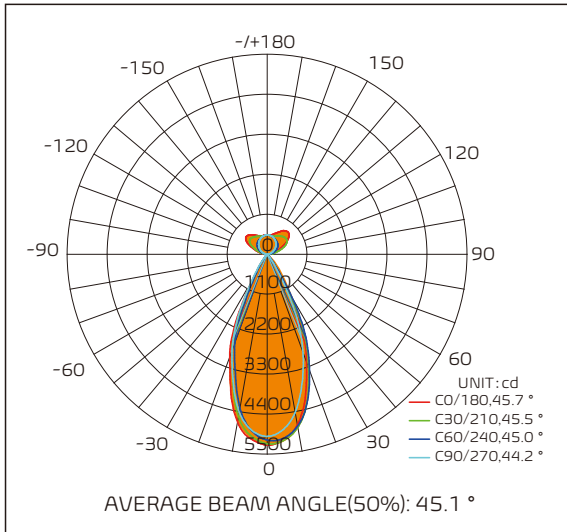
PPC	80%			70%			50%			30%			10%			0
PW	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio (CU)															
0.0	112	112	112	105	105	105	94	94	94	83	83	83	73	73	73	69
1.0	99	95	92	94	90	88	84	81	79	75	73	71	66	65	64	60
2.0	88	82	77	83	78	74	75	71	68	67	64	62	60	58	56	52
3.0	79	72	66	75	69	64	67	63	59	61	57	54	55	52	49	46
4.0	71	63	57	67	61	55	61	56	51	55	51	47	50	46	44	41
5.0	64	56	51	61	54	49	56	50	46	50	46	42	46	42	39	37
6.0	58	50	45	56	49	43	51	45	41	46	42	38	42	38	35	33
7.0	53	46	40	51	44	39	47	41	37	43	38	31	39	35	32	30
8.0	49	41	36	47	40	35	43	37	33	40	35	31	36	32	29	27
9.0	45	38	33	43	37	32	40	34	30	37	32	29	34	30	27	25
10.0	42	35	30	40	34	29	37	32	28	34	30	26	32	28	25	23

Photometric

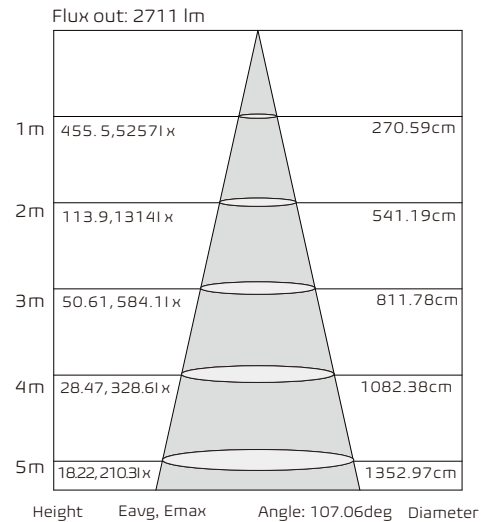
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Result may vary per actual order.

Distribution Diagram

ZE-41 -I35AR



Average Illuminance Curve



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

Zonal Flux Diagram

T	C0	C45	C90	C135	C180	C225	C270	C315
5	5135	5142	4858	4568	5105	4947	4864	5040
10	4771	4875	4424	3822	4699	4401	4421	4872
15	4073	4318	3706	3001	3885	3476	3633	4417
20	3172	3450	2892	2071	3028	2678	2834	3661
25	2233	2552	1937	951.5	2042	1515	1895	2846
30	982.2	1326	867.0	346.2	838.3	634.4	896.3	1897
35	379.1	462.7	595.9	113.2	331.0	254.1	385.3	900.3
40	75.80	148.4	82.03	31.71	61.07	67.68	112.6	373.5
45	16.73	39.27	19.68	12.14	16.12	17.50	21.36	124.1
50	9.085	14.31	8.995	7.277	8.885	9.591	9.307	31.22
55	6.277	8.058	5.823	4.940	6.052	6.362	6.272	11.38
60	4.512	5.466	4.075	3.525	4.265	4.503	4.344	7.246
65	3.707	3.808	3.140	2.804	3.454	3.293	3.227	4.946
70	2.964	2.876	2.504	2.177	2.678	2.616	2.551	3.433
75	4.411	3.202	1.904	1.591	3.691	1.976	1.879	2.661
80	10.56	8.789	1.340	1.671	10.87	1.367	1.266	6.664
85	22.76	21.85	0.9070	8.571	26.92	5.272	0.7706	17.45
90	40.91	46.40	0.4270	26.34	52.84	18.85	0.4746	36.64

DEG LUMINOUS INTENSITY:cd

Zonal Lumen Summary

T	φ zone	φ total	%lum, lamp
0-5	119.8	119.8	2.42, 2.42
5-10	338.6	458.4	9.24, 9.24
10-15	492.6	951.0	19.2, 19.2
15-20	556.0	1507	30.4, 30.4
20-25	520.0	2027	40.9, 40.9
25-30	370.2	2397	48.3, 48.3
30-35	194.0	2591	52.3, 52.3
35-40	81.70	2673	53.9, 53.9
40-45	26.88	2700	54.4, 54.4
45-50	8.137	2708	54.6, 54.6
50-55	3.822	2712	54.7, 54.7
55-60	2.638	2714	54.7, 54.7
60-65	1.985	2716	54.8, 54.8
65-70	1.574	2718	54.8, 54.8
70-75	1.391	2719	54.8, 54.8
75-80	2.055	2721	54.9, 54.9
80-85	4.744	2726	55, 55
85-90	10.72	2737	55.2, 55.2

UNIT: lm

Coefficients Of Utilization

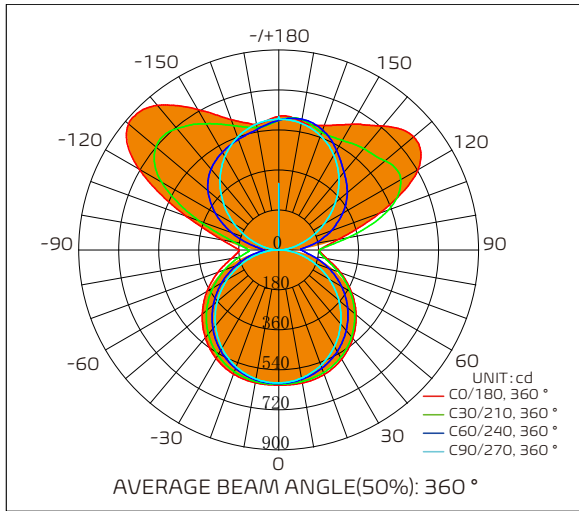
ppc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
pw																
pfc																
RCR	RCR:Room Cavity Ratio															
	(CU)															
0.0	108	108	108	101	101	101	86	86	86	73	73	73	61	61	61	55
1.0	99	96	93	92	90	87	80	78	77	69	67	66	58	58	57	52
2.0	90	86	82	85	81	78	74	71	69	65	63	61	56	54	53	49
3.0	83	78	73	78	74	70	69	66	63	61	59	57	53	52	50	47
4.0	77	71	66	73	67	64	65	61	58	57	55	53	51	49	48	44
5.0	71	65	61	68	62	58	61	57	54	54	52	49	48	46	45	42
6.0	66	60	56	63	58	54	57	53	50	52	49	46	46	44	43	40
7.0	62	56	52	59	54	50	54	50	47	49	46	44	44	42	40	38
8.0	58	52	48	56	50	47	51	47	44	47	43	41	42	40	38	36
9.0	55	49	45	53	47	44	48	44	41	44	41	39	41	38	37	35
10.0	52	46	42	50	45	41	46	42	39	42	39	37	39	37	35	33

Photometric

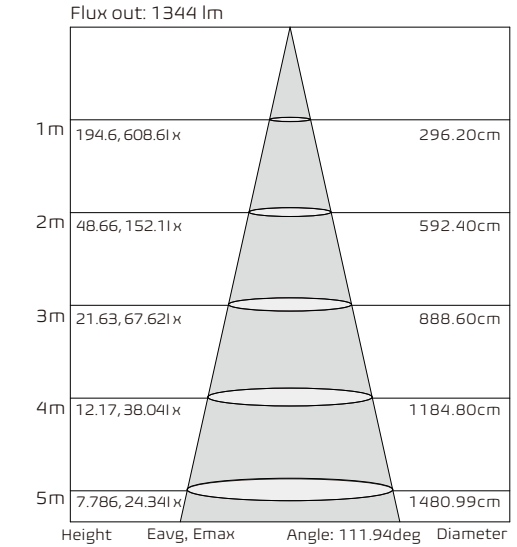
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

Distribution Diagram

ZE-41-135AC



Average Illuminance Curve



Zonal Flux Diagram

T	C0	C45	C90	C135	C180	C225	C270	C315
5	608.9	601.0	595.1	592.8	608.3	602.2	597.0	595.9
10	608.3	596.5	586.2	585.4	607.1	597.6	590.0	592.7
15	604.7	589.4	572.2	573.1	603.3	588.9	577.7	587.2
20	597.0	579.0	553.3	556.6	594.8	575.7	560.2	579.2
25	584.7	564.7	530.0	535.5	582.1	557.6	537.9	567.8
30	567.3	546.2	501.7	510.0	564.2	535.1	510.8	552.7
35	545.4	523.5	469.8	480.7	541.8	508.2	479.5	533.4
40	519.1	496.7	434.2	447.7	514.9	477.2	443.8	509.8
45	488.6	466.2	395.2	411.4	484.3	442.2	404.8	482.2
50	454.7	432.0	353.5	372.5	450.1	404.1	362.2	450.6
55	417.5	394.7	309.4	331.3	412.8	363.3	317.0	415.6
60	377.8	354.7	261.9	288.6	373.1	320.0	269.7	377.2
65	336.2	312.8	214.9	244.6	331.6	275.6	220.9	336.3
70	295.1	268.9	168.0	203.1	290.9	230.4	172.2	293.7
75	254.3	225.5	121.9	163.7	249.7	188.8	124.1	249.4
80	219.1	187.7	78.98	125.8	214.0	148.9	79.86	208.3
85	195.1	162.3	39.84	96.72	190.5	113.2	39.28	179.1
90	182.1	152.9	3.249	106.0	179.3	106.1	3.114	164.6
DEG	LUMINOUS INTENSITY:cd							

Zonal Lumen Summary

T	φ zone	φ total	%lum,lamp
0-5	14.33	14.33	0.31,0.31
5-10	42.67	57.00	1.22,1.22
10-15	69.98	127.0	2.71,2.71
15-20	95.49	222.5	4.74,4.74
20-25	118.4	340.9	7.27,7.27
25-30	138.0	478.9	10.2,10.2
30-35	153.7	632.5	13.5,13.5
35-40	164.9	797.4	17,17
40-45	171.3	968.7	20.7,20.7
45-50	172.8	1142	24.3,24.3
50-55	169.4	1311	28,28
55-60	161.3	1472	31.4,31.4
60-65	148.9	1621	34.6,34.6
65-70	133.0	1754	37.4,37.4
70-75	114.6	1869	39.8,39.8
75-80	95.32	1964	41.9,41.9
80-85	77.64	2042	43.5,43.5
85-90	65.72	2107	44.9,44.9
	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	20%			20%			20%			20%			20%			0
pf	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio (CU)															
0.0	106	106	106	97	97	97	81	81	81	65	65	65	51	51	51	45
1.0	91	86	82	83	79	76	69	66	63	56	54	52	43	42	41	35
2.0	78	72	66	72	66	61	59	55	51	48	45	42	37	35	33	28
3.0	68	61	54	63	56	50	52	47	43	42	38	35	33	30	28	23
4.0	60	52	46	55	48	42	46	40	36	37	33	30	29	26	24	20
5.0	53	45	39	49	42	36	41	35	31	33	29	25	26	23	20	17
6.0	48	39	33	44	36	31	37	31	27	30	25	22	23	20	18	15
7.0	43	35	29	40	32	27	33	27	23	27	23	19	21	18	16	13
8.0	39	31	25	36	29	24	30	24	20	25	20	17	20	16	14	11
9.0	35	28	23	33	26	21	27	22	18	23	18	15	18	15	12	10
10.0	32	25	20	30	23	19	25	20	16	21	17	14	17	13	11	9

