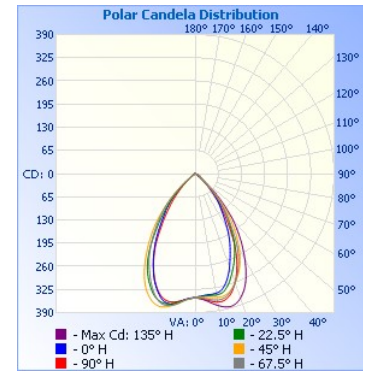


# KICHLER®

KICHLER PHOTOMETRIC LAB

**Filename:** CTR180743-01A High  
**Manufacturer:** Eaglerise  
**Luminaire:** CP301752 Landscape Underwater  
**Luminaire Cat:** CTR180743-01A High  
**Lamp:** Integrated LED AC  
**Lamp Output:** Total luminaire Lumens: 454.2  
**Max Candela:** 385.6 at Horizontal: 135°, Vertical: 15°  
**Input Wattage:** 5.3  
**Luminous Opening:** Circular (Dia: 1.8")  
**Test:** LM-79 Distribution  
**Test Lab:** Kichler Lighting LLC  
**Photometry:** Type C  
**Nema Type:** 5 X 5



**Roadway Summary**

Cutoff Classification:	FULL CUTOFF
Distribution:	Type VS
Max Cd, 90 Deg Vert:	0
Max Cd, 80 to <90 Deg:	2.3
Lumens % Lamp	
Downward Street Side:	220.6 48.6%
Downward House Side:	233.7 51.5%
Downward Total:	454.3 100%
Upward Street Side:	0 0%
Upward House Side:	0 0%
Upward Total:	0 0%
Total Lumens:	454.3 100%

**Flood Summary**

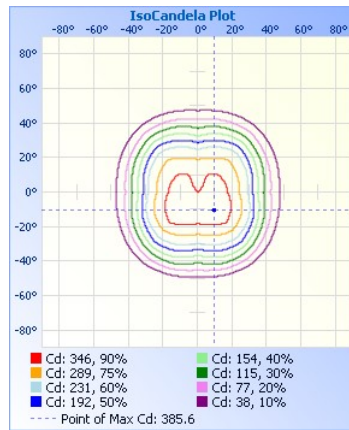
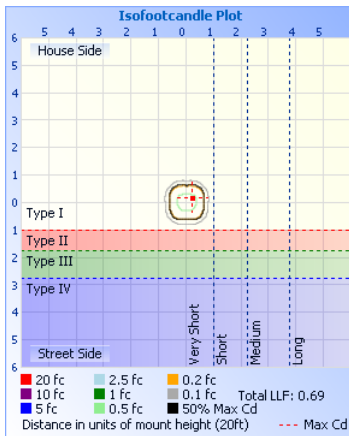
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	94.9%	431.0	94	96.3
Beam (50%):	69.5%	315.8	64.9	64.1
Total:	100%	454.1		

**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	266.5	58.7%
0-40	378.5	83.3%
0-60	447.1	98.4%
60-90	7.0	1.6%
70-100	2.0	0.4%
90-120	0	0%
0-90	454.2	100%
90-180	0	0%
0-180	454.2	100%

**Lumens Per Zone**

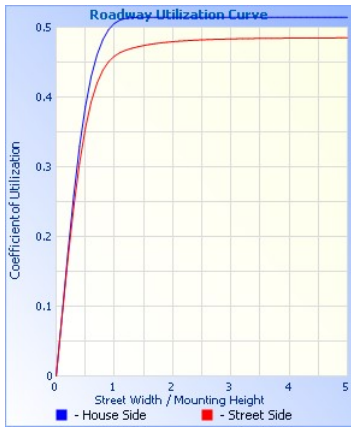
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	34.0	7.5%	90-100	0	0%
10-20	100.0	22.0%	100-110	0	0%
20-30	132.4	29.2%	110-120	0	0%
30-40	112.0	24.7%	120-130	0	0%
40-50	56.4	12.4%	130-140	0	0%
50-60	12.3	2.7%	140-150	0	0%
60-70	5.1	1.1%	150-160	0	0%
70-80	1.8	0.4%	160-170	0	0%
80-90	0.2	0.0%	170-180	0	0%



**Illuminance at a Distance**

Center Beam fc	Beam Width
17.0ft: 1.20 fc	21.3 ft 21.6 ft
34.0ft: 0.30 fc	42.6 ft 43.3 ft
51.0ft: 0.13 fc	63.9 ft 64.9 ft
68.0ft: 0.08 fc	85.2 ft 86.5 ft
85.0ft: 0.05 fc	106.5 ft 108.2 ft
102.0ft: 0.03 fc	127.8 ft 129.8 ft

Vert. Spread: 64.1°  
 Horiz. Spread: 64.9°



Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0
RW %:	70	50	30	0	70	50	30	0	50	30	20	10	50	30	20	10	50	30	20	10	0
RCC: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.02	1.00
1	1.13	1.10	1.07	1.05	1.10	1.08	1.05	.93	1.04	1.02	1.00	1.00	1.00	.98	.97	.96	.95	.94	.94	.92	.92
2	1.07	1.01	.97	.93	1.04	.99	.95	.85	.96	.93	.90	.93	.93	.90	.88	.90	.88	.86	.86	.84	.84
3	1.00	.93	.88	.83	.98	.92	.87	.78	.89	.85	.81	.87	.83	.80	.84	.81	.79	.77	.77	.77	.77
4	.95	.86	.80	.75	.93	.85	.79	.72	.83	.78	.74	.81	.77	.73	.79	.75	.72	.71	.71	.71	.71
5	.89	.80	.73	.69	.87	.79	.73	.66	.77	.72	.68	.75	.71	.67	.74	.70	.66	.65	.65	.65	.65
6	.84	.74	.68	.63	.82	.73	.67	.61	.72	.66	.62	.70	.65	.62	.69	.65	.61	.60	.60	.60	.60
7	.79	.69	.62	.58	.78	.68	.62	.56	.67	.61	.57	.66	.61	.57	.65	.60	.57	.55	.55	.55	.55
8	.75	.64	.58	.53	.74	.64	.58	.52	.63	.57	.53	.62	.56	.53	.61	.56	.53	.51	.51	.51	.51
9	.71	.60	.54	.49	.70	.60	.54	.49	.59	.53	.49	.58	.53	.49	.57	.52	.49	.47	.47	.47	.47
10	.67	.57	.50	.46	.66	.56	.50	.45	.55	.50	.46	.54	.49	.46	.54	.49	.46	.44	.44	.44	.44





Candela Table - Type C

	0	22.5	45	67.5	90	112.5	135	157.5	180
0	348	348	348	348	348	348	348	348	348
1	345	347	348	348	349	349	349	349	347
2	344	346	347	349	350	350	350	350	349
3	344	345	347	349	351	352	352	352	350
4	343	345	348	351	353	354	355	354	353
5	342	344	348	352	355	357	358	357	355
6	341	344	349	354	358	360	361	361	359
7	341	344	350	356	360	362	365	365	362
8	342	344	351	357	362	365	369	369	366
9	341	345	352	359	364	367	372	372	369
10	340	345	352	360	365	370	375	375	371
11	339	345	353	360	366	372	379	377	372
12	337	344	353	360	366	373	381	378	372
13	333	342	353	358	364	374	384	378	370
14	329	338	351	356	362	374	385	378	368
15	322	333	349	353	359	372	386	376	363
16	316	328	345	348	354	370	385	372	358
17	308	322	341	344	349	367	383	367	351
18	299	315	337	339	342	363	380	361	344
19	291	307	332	333	334	358	376	354	336
20	281	300	326	326	326	352	371	346	328
21	270	292	320	319	318	345	366	339	319
22	260	284	314	312	308	338	359	330	310
23	251	277	307	304	298	330	352	321	300
24	242	269	300	295	287	323	344	312	289
25	232	261	293	287	277	314	335	303	279
26	223	253	285	278	266	305	325	294	268
27	213	245	277	269	254	296	314	285	257
28	203	236	268	259	241	285	303	276	246
29	193	227	258	248	229	274	291	266	234
30	182	217	248	236	215	261	280	255	223
31	171	207	238	224	200	248	267	244	211
32	160	196	227	211	185	234	255	233	199
33	151	186	217	197	173	219	243	222	187
34	142	176	205	184	160	204	231	211	175
35	134	166	194	172	148	190	219	200	164
36	126	157	182	160	136	177	207	189	154
37	118	147	170	148	125	164	195	178	145
38	111	137	158	138	115	151	182	168	137
39	103	126	146	128	106	139	170	157	128
40	96	116	134	117	96	127	157	146	119
41	88	106	121	106	87	114	143	136	111
42	81	96	109	95	78	102	130	126	102
43	73	86	99	84	69	91	116	115	93
44	64	77	87	74	61	79	104	104	85
45	56	68	77	64	53	68	92	91	75
46	49	60	66	56	46	59	80	78	65
47	42	51	56	48	39	50	68	66	56
48	36	44	47	41	34	41	57	56	47
49	31	38	39	35	29	34	47	46	39
50	27	32	32	30	25	27	36	36	29
51	25	27	26	26	22	19	23	23	19
52	23	24	23	23	19	13	12	11	10
53	22	22	21	21	16	10	9	7	5
54	21	21	20	19	14	8	7	5	4
55	20	20	19	18	13	6	5	3	3
56	19	19	18	17	11	5	3	2	2
57	19	19	17	16	10	4	2	2	2
58	18	18	16	15	9	3	1	1	1
59	17	17	15	14	8	2	1	1	1
60	16	17	14	13	7	2	1	0	0
61	16	16	13	12	6	1	0	0	0
62	15	15	13	10	5	1	0	0	0
63	14	14	12	9	5	1	0	0	0
64	14	14	11	7	4	1	0	0	0
65	13	13	10	7	4	1	0	0	0
66	12	12	9	6	3	0	0	0	0
67	12	12	8	5	3	0	0	0	0
68	11	11	7	5	3	0	0	0	0
69	10	10	6	4	2	0	0	0	0
70	9	9	5	4	2	0	0	0	0
71	9	8	5	3	2	0	0	0	0
72	8	7	4	3	2	0	0	0	0
73	7	6	4	2	1	0	0	0	0
74	6	5	3	2	1	0	0	0	0
75	5	5	3	2	1	0	0	0	0
76	5	4	2	2	1	0	0	0	0
77	4	4	2	1	1	0	0	0	0
78	3	3	1	1	1	0	0	0	0
79	3	3	1	1	1	0	0	0	0

80	2	2	1	1	0	0	0	0	0
81	2	2	1	1	0	0	0	0	0
82	1	1	0	0	0	0	0	0	0
83	1	1	0	0	0	0	0	0	0
84	1	1	0	0	0	0	0	0	0
85	1	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0
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94	0	0	0	0	0	0	0	0	0
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100	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0
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106	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0
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110	0	0	0	0	0	0	0	0	0
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118	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0
122	0	0	0	0	0	0	0	0	0
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125	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0
128	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0
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164	0	0	0	0	0	0	0	0	0	0
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166	0	0	0	0	0	0	0	0	0	0
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169	0	0	0	0	0	0	0	0	0	0
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176	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0





**Luminaire Report Summary**

IESNA:LM-63-2002  
[LUMCAT] CTR180743-01A High  
[LUMINAIRE] CP301752 Landscape Underwater  
[LAMP] Integrated LED AC  
[TEST] LM-79 Distribution  
[TESTLAB] Kichler Lighting LLC  
[ISSUEDATE] 7/22/2019  
[MANUFAC] Eaglerise

FILE: CREATED USING ABSOLUTE PHOTOMETRY  
FILE: CANDELA MULTIPLIER: 1  
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 9  
FILE: COORDINATE SYSTEM: TYPE C  
FILE: UNIT OF MEASURE: STANDARD  
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.