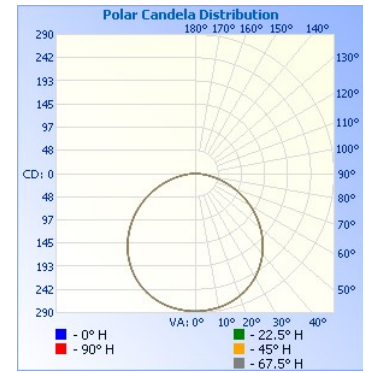


# KICHLER®

KICHLER PHOTOMETRIC LAB

**Filename: 44244XXLEDYY-Photometric Report**

Manufacturer: Kichler Lighting LLC  
 Luminaire: 44244XXLEDYY Zeo 7" Round  
 Luminaire Cat: CTR180730-01  
 Lamp: Integrated LED AC  
 Lamp Output: Total luminaire Lumens: 857.4  
 Max Candela: 287.1 at Horizontal: 90°, Vertical: 1°  
 Input Wattage: 14.1  
 Luminous Opening: Ellipsoidal Spheroid (L: 5.04", W: 5.04", H: 0.12")  
 Test: LM-79 Distribution  
 Test Lab: Kichler Lighting LLC  
 Photometry : Type C  
 Nema Type: 7 X 7



**Roadway Summary**

Cutoff Classification:	CUTOFF
Distribution:	Type VS
Max Cd, 90 Deg Vert:	6.3
Max Cd, 80 to <90 Deg:	36.6
Lumens % Lamp	
Downward Street Side:	427.7 49.9%
Downward House Side:	427.7 49.9%
Downward Total:	855.4 99.8%
Upward Street Side:	1.1 0.1%
Upward House Side:	1.1 0.1%
Upward Total:	2.1 0.2%
Total Lumens:	857.5 100%

**Flood Summary**

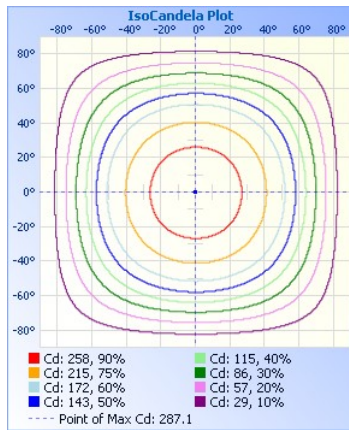
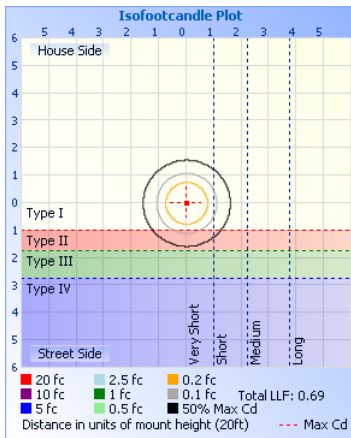
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	98.1%	841.2	163.8	163.8
Beam (50%):	74.1%	635.4	115.5	115.2
Total:	100%	857.2		

**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	226.4	26.4%
0-40	373.4	43.5%
0-60	665.7	77.6%
60-90	189.6	22.1%
70-100	85.1	9.9%
90-120	2.1	0.2%
0-90	855.3	99.8%
90-180	2.1	0.2%
0-180	857.4	100%

**Lumens Per Zone**

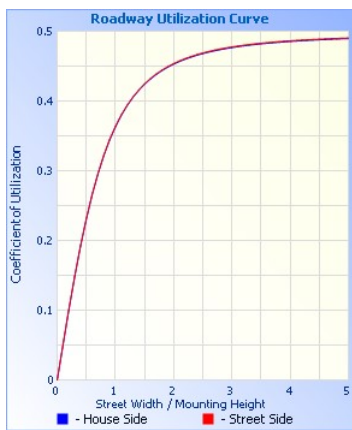
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	27.2	3.2%	90-100	2.1	0.2%
10-20	78.6	9.2%	100-110	0	0%
20-30	120.6	14.1%	110-120	0	0%
30-40	147.0	17.1%	120-130	0	0%
40-50	153.3	17.9%	130-140	0	0%
50-60	139.0	16.2%	140-150	0	0%
60-70	106.6	12.4%	150-160	0	0%
70-80	62.4	7.3%	160-170	0	0%
80-90	20.6	2.4%	170-180	0	0%



**Illuminance at a Distance**

Center Beam fc	Beam Width
0.99 fc	53.6 ft 53.9 ft
0.25 fc	107.1 ft 107.9 ft
0.11 fc	160.7 ft 161.8 ft
0.06 fc	214.2 ft 215.7 ft
0.04 fc	267.8 ft 269.7 ft
0.03 fc	321.3 ft 323.6 ft

Vert. Spread: 115.2°  
 Horiz. Spread: 115.5°



**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	1.00	1.00
1	1.08	1.03	.99	.95	1.06	1.01	.97	.84	.97	.93	.90	.88	.93	.90	.88	.89	.87	.85	.85	.83	.83
2	.98	.90	.83	.77	.96	.88	.82	.70	.84	.79	.74	.74	.81	.76	.73	.78	.74	.71	.71	.69	.69
3	.90	.79	.70	.64	.87	.77	.69	.59	.74	.67	.62	.62	.71	.66	.61	.69	.64	.60	.60	.58	.58
4	.82	.70	.61	.54	.80	.68	.60	.51	.66	.58	.53	.53	.63	.57	.52	.61	.56	.51	.51	.49	.49
5	.75	.62	.53	.46	.73	.61	.52	.44	.59	.51	.45	.45	.57	.50	.45	.55	.49	.44	.44	.42	.42
6	.69	.56	.47	.40	.67	.55	.46	.39	.53	.45	.40	.40	.51	.45	.39	.50	.44	.39	.39	.37	.37
7	.64	.51	.42	.36	.63	.50	.41	.34	.48	.41	.35	.35	.47	.40	.35	.45	.39	.35	.35	.32	.32
8	.60	.46	.38	.32	.58	.45	.37	.31	.44	.37	.31	.31	.43	.36	.31	.42	.35	.31	.31	.29	.29
9	.56	.42	.34	.28	.54	.42	.34	.28	.41	.33	.28	.28	.39	.33	.28	.38	.32	.28	.28	.26	.26
10	.52	.39	.31	.26	.51	.38	.31	.25	.37	.30	.26	.26	.36	.30	.25	.36	.30	.25	.25	.23	.23

Zonal Lumen Tabulation - Flood Type

Table with 26 columns and 40 rows. Columns represent height zones from -89.75 to -43.7. Rows represent various luminaire heights from 177.5 down to 1.25. Most cells contain the value 0, with some values (e.g., 0.1, 0.2, 0.3) appearing in the lower height zones.



Maximum lm: 0.5  
Field lm: 841.2  
Total lm: 857.2

## Candela Table - Type C

	0	22.5	45	67.5	90
0	287	287	287	287	287
1	287	287	287	287	287
2	287	287	287	287	287
3	286	286	286	286	287
4	286	286	286	286	286
5	286	286	286	286	286
6	285	285	285	286	286
7	285	285	285	285	285
8	284	284	284	284	285
9	284	284	284	284	284
10	283	283	283	283	283
11	282	282	282	282	282
12	281	281	282	282	282
13	280	281	281	281	281
14	279	279	280	280	280
15	278	278	278	278	279
16	277	277	277	277	277
17	276	276	276	276	276
18	274	274	274	274	274
19	273	273	273	273	273
20	271	271	271	271	271
21	269	269	269	270	270
22	268	267	268	268	268
23	266	266	266	266	266
24	264	264	264	264	264
25	262	262	262	262	262
26	259	260	260	260	260
27	257	257	257	257	257
28	255	255	255	255	255
29	252	252	252	252	252
30	250	249	250	250	250
31	247	247	247	247	247
32	244	244	244	244	244
33	241	241	241	241	241
34	238	238	238	238	238
35	235	235	235	235	235
36	232	232	232	232	232
37	228	228	229	229	229
38	225	225	225	225	225
39	222	221	222	222	222
40	218	218	218	218	218
41	214	214	214	215	215
42	210	210	211	211	211
43	207	206	207	207	207
44	203	203	203	203	203
45	199	199	199	199	200
46	195	195	195	195	196
47	191	190	191	191	191
48	186	186	186	187	187
49	182	182	182	183	183
50	178	177	178	178	179
51	173	173	174	174	174
52	169	169	169	170	170
53	164	164	165	165	165
54	160	160	160	161	161
55	155	155	155	156	156
56	151	150	151	151	152
57	146	146	146	147	147
58	142	141	142	142	142
59	137	136	137	137	138
60	132	132	132	132	133
61	127	127	127	128	128
62	122	122	122	123	123
63	117	117	117	118	118
64	112	112	113	113	113
65	108	107	108	108	108
66	103	102	103	103	104
67	98	98	98	98	99
68	93	93	93	93	94
69	88	88	88	89	89
70	83	83	83	83	84
71	78	78	78	78	79
72	73	73	73	74	74
73	68	68	68	69	69
74	63	63	64	64	64
75	59	58	59	59	59
76	54	54	54	54	54
77	49	49	49	50	50
78	45	45	45	45	45
79	41	41	41	41	41

80	36	36	36	36	37
81	32	32	32	32	32
82	28	28	28	28	28
83	24	24	24	24	24
84	21	21	21	21	21
85	18	18	18	18	18
86	15	15	15	15	15
87	12	12	12	12	12
88	10	10	10	10	10
89	8	8	8	8	8
90	6	6	6	6	6
91	5	5	5	5	5
92	4	4	4	4	4
93	3	3	3	3	3
94	2	2	2	2	2
95	1	1	1	1	1
96	1	1	1	1	1
97	0	0	0	0	0
98	0	0	0	0	0
99	0	0	0	0	0
100	0	0	0	0	0
101	0	0	0	0	0
102	0	0	0	0	0
103	0	0	0	0	0
104	0	0	0	0	0
105	0	0	0	0	0
106	0	0	0	0	0
107	0	0	0	0	0
108	0	0	0	0	0
109	0	0	0	0	0
110	0	0	0	0	0
111	0	0	0	0	0
112	0	0	0	0	0
113	0	0	0	0	0
114	0	0	0	0	0
115	0	0	0	0	0
116	0	0	0	0	0
117	0	0	0	0	0
118	0	0	0	0	0
119	0	0	0	0	0
120	0	0	0	0	0
121	0	0	0	0	0
122	0	0	0	0	0
123	0	0	0	0	0
124	0	0	0	0	0
125	0	0	0	0	0
126	0	0	0	0	0
127	0	0	0	0	0
128	0	0	0	0	0
129	0	0	0	0	0
130	0	0	0	0	0
131	0	0	0	0	0
132	0	0	0	0	0
133	0	0	0	0	0
134	0	0	0	0	0
135	0	0	0	0	0
136	0	0	0	0	0
137	0	0	0	0	0
138	0	0	0	0	0
139	0	0	0	0	0
140	0	0	0	0	0
141	0	0	0	0	0
142	0	0	0	0	0
143	0	0	0	0	0
144	0	0	0	0	0
145	0	0	0	0	0
146	0	0	0	0	0
147	0	0	0	0	0
148	0	0	0	0	0
149	0	0	0	0	0
150	0	0	0	0	0
151	0	0	0	0	0
152	0	0	0	0	0
153	0	0	0	0	0
154	0	0	0	0	0
155	0	0	0	0	0
156	0	0	0	0	0
157	0	0	0	0	0
158	0	0	0	0	0
159	0	0	0	0	0
160	0	0	0	0	0
161	0	0	0	0	0
162	0	0	0	0	0

163	0	0	0	0	0
164	0	0	0	0	0
165	0	0	0	0	0
166	0	0	0	0	0
167	0	0	0	0	0
168	0	0	0	0	0
169	0	0	0	0	0
170	0	0	0	0	0
171	0	0	0	0	0
172	0	0	0	0	0
173	0	0	0	0	0
174	0	0	0	0	0
175	0	0	0	0	0
176	0	0	0	0	0
177	0	0	0	0	0
178	0	0	0	0	0
179	0	0	0	0	0
180	0	0	0	0	0





**Luminaire Report Summary**

IESNA:LM-63-2002  
[TEST] LM-79 Distribution  
[TESTLAB] Kichler Lighting LLC  
[ISSUEDATE] 7/11/2019  
[MANUFAC] Kichler Lighting LLC  
[LUMCAT] CTR180730-01  
[LUMINAIRE] 44244XXLEDYY Zeo 7" Round  
[LAMP] Integrated LED AC

FILE: CREATED USING ABSOLUTE PHOTOMETRY  
FILE: CANDELA MULTIPLIER: 1  
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 5  
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.