

REPORT NUMBER: ITL85562

ISSUE DATE: 09/14/15

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: DR2-LED-e59-2

LUMINAIRE: MOLDED PLASTIC HOUSING, ONE LED MODULE CONSISTING OF: MACHINED METAL HOUSING/CIRCUIT BOARD MOUNTING BASE, 1 GREEN CIRCUIT BOARD WITH 1 LED, CLEAR FLUTED PLASTIC OPTIC ABOVE LED WITH RECESSED FROSTED BOTTOM CENTER AND CLEAR CONCAVE TOP CENTER WITH FLUTED FROSTED PERIMETER, FABRICATED SEMI-DIFFUSE METAL OPTIC RETAINING BRACKET, FROSTED GLASS LENS IN CAST BLACK PAINTED METAL FACEPLATE WITH 2 APERTURES, LENS FROSTED SIDE IN.

LAMP: ONE WHITE LIGHT EMITTING DIODE (LED) WITH CLEAR HEMISPHERICAL INTEGRAL LENS, VERTICAL BASE-DOWN POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 8.36 WATTS, 0.116 AMPS

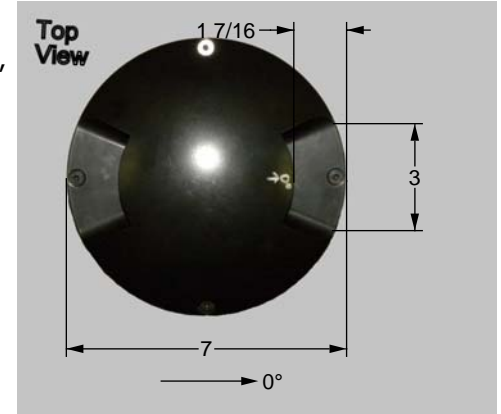
MOUNTING: IN-GRADE

LED DRIVER: B-K LIGHTING 524438/400188-L, POWER SELECT PS20U15K POWER SUPPLY.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE POWER SUPPLY.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION

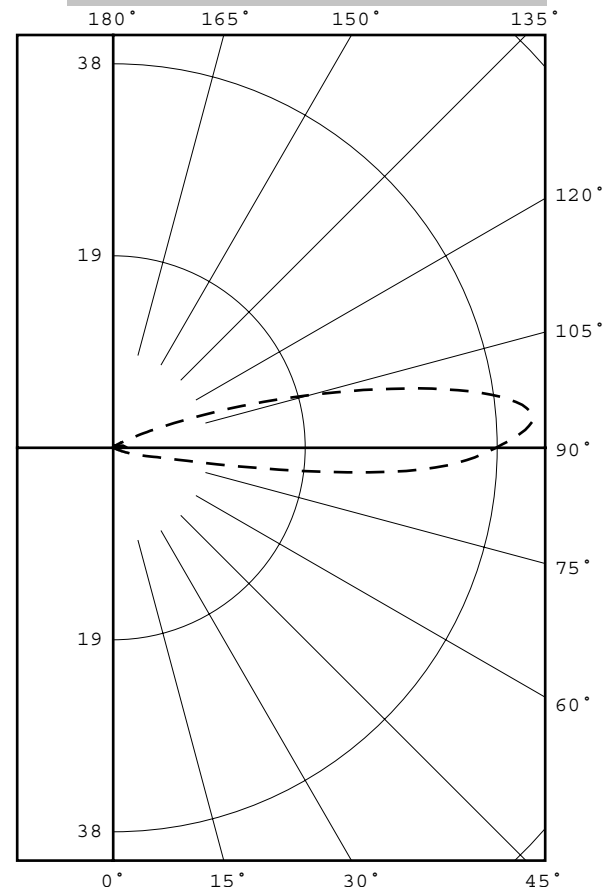
	0.0	25.0	45.0	65.0	90.0	FLUX
0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0
65	0.2	0.1	0.0	0.0	0.0	0.1
75	3.0	1.5	0.0	0.0	0.0	1.1
85	27.4	17.5	0.5	0.0	0.0	8.6
90	37.9	27.0	0.9	0.0	0.0	14.0
95	41.4	29.7	1.2	0.0	0.0	7.1
105	20.2	13.6	0.8	0.0	0.0	1.4
115	3.7	2.3	0.3	0.0	0.0	0.2
125	0.8	0.4	0.1	0.0	0.0	0.1
135	0.2	0.1	0.0	0.0	0.0	0.0
145	0.1	0.1	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	0.0	0.0
0- 40	0.0	0.0
0- 60	0.0	0.0
0- 90	9.8	30.0
90-120	22.5	69.0
90-130	22.7	69.7
90-150	22.8	69.9
90-180	22.8	70.0
0-180	32.6	100.0

EFFICACY = 3.9 lm/W

CIE TYPE - SEMI-INDIRECT

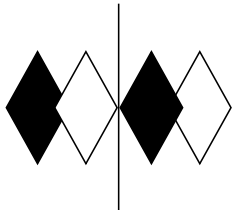


LEGEND:

0-deg -----
45-deg -----
90-deg -----

Checked B. HYRE

Approved R. BEATTIE
Lighting Engineer



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



INDEPENDENT TESTING LABORATORIES, INC.
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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5	0.7	0.6	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
70.0	1.3	1.4	1.3	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5	2.2	2.3	2.1	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
75.0	3.0	3.0	2.9	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5	4.1	4.2	4.0	2.2	0.7	0.1	0.0	0.0	0.0	0.0	0.0
80.0	7.5	7.7	7.2	4.1	1.1	0.2	0.0	0.0	0.0	0.0	0.0
81.0	10.4	10.7	10.0	5.9	1.4	0.3	0.0	0.0	0.0	0.0	0.0
82.0	14.3	14.7	13.9	8.3	1.8	0.3	0.0	0.0	0.0	0.0	0.0
83.0	18.8	19.3	18.3	11.2	2.2	0.4	0.0	0.0	0.0	0.0	0.0
84.0	23.3	23.7	22.8	14.3	2.7	0.4	0.0	0.0	0.0	0.0	0.0
85.0	27.4	27.8	26.8	17.5	3.3	0.5	0.0	0.0	0.0	0.0	0.0
85.5	29.1	29.5	28.6	18.7	3.5	0.5	0.0	0.0	0.0	0.0	0.0
86.0	30.6	31.0	30.2	20.3	3.8	0.6	0.0	0.0	0.0	0.0	0.0
86.5	31.9	32.3	31.7	21.3	4.0	0.6	0.0	0.0	0.0	0.0	0.0
87.0	33.1	33.4	33.0	22.4	4.3	0.6	0.0	0.0	0.0	0.0	0.0
87.5	34.1	34.4	34.2	23.4	4.6	0.7	0.1	0.0	0.0	0.0	0.0
88.0	35.0	35.3	35.3	24.3	4.8	0.7	0.1	0.0	0.0	0.0	0.0
88.5	35.8	36.1	36.4	25.0	5.0	0.8	0.1	0.0	0.0	0.0	0.0
89.0	36.5	36.9	37.3	25.7	5.2	0.8	0.1	0.0	0.0	0.0	0.0
89.5	37.2	37.6	38.3	26.4	5.4	0.8	0.1	0.0	0.0	0.0	0.0
90.0	37.9	38.4	39.3	27.0	5.6	0.9	0.1	0.0	0.0	0.0	0.0
90.5	38.5	39.0	40.2	27.6	5.8	0.9	0.1	0.0	0.0	0.0	0.0
91.0	39.2	39.7	41.1	28.1	6.0	0.9	0.1	0.0	0.0	0.0	0.0
91.5	39.8	40.2	41.8	28.6	6.1	1.0	0.1	0.0	0.0	0.0	0.0
92.0	40.3	40.8	42.5	29.1	6.3	1.0	0.1	0.0	0.0	0.0	0.0
92.5	40.8	41.3	43.0	29.4	6.4	1.1	0.1	0.0	0.0	0.0	0.0
93.0	41.2	41.7	43.4	29.6	6.6	1.1	0.1	0.0	0.0	0.0	0.0
93.5	41.5	41.9	43.6	29.8	6.7	1.1	0.1	0.0	0.0	0.0	0.0
94.0	41.6	42.0	43.5	29.9	6.7	1.1	0.1	0.0	0.0	0.0	0.0
94.5	41.6	41.9	43.3	29.8	6.8	1.1	0.1	0.0	0.0	0.0	0.0
95.0	41.4	41.8	43.0	29.7	6.8	1.2	0.1	0.0	0.0	0.0	0.0
95.5	41.1	41.4	42.5	29.4	6.8	1.2	0.1	0.0	0.0	0.0	0.0
96.0	40.7	40.9	41.8	29.1	6.9	1.2	0.2	0.0	0.0	0.0	0.0
96.5	40.1	40.3	41.0	28.6	6.8	1.2	0.1	0.0	0.0	0.0	0.0
97.0	39.4	39.6	40.1	28.0	6.7	1.2	0.1	0.0	0.0	0.0	0.0
97.5	38.7	38.8	39.1	27.4	6.6	1.2	0.1	0.0	0.0	0.0	0.0
98.0	37.8	37.9	38.1	26.7	6.5	1.2	0.1	0.0	0.0	0.0	0.0

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0
98.5	36.8	36.9	37.0	25.9	6.4	1.1	0.1	0.0	0.0	0.0	0.0
99.0	35.7	35.8	35.8	25.0	6.2	1.1	0.1	0.0	0.0	0.0	0.0
99.5	34.6	34.7	34.5	24.3	6.1	1.1	0.2	0.0	0.0	0.0	0.0
100.0	33.3	33.5	33.2	23.4	5.9	1.1	0.1	0.0	0.0	0.0	0.0
100.5	32.1	32.3	31.9	22.4	5.8	1.1	0.2	0.0	0.0	0.0	0.0
101.0	30.8	31.0	30.5	21.4	5.6	1.1	0.2	0.0	0.0	0.0	0.0
101.5	29.4	29.6	29.1	20.4	5.3	1.0	0.2	0.0	0.0	0.0	0.0
102.0	28.1	28.2	27.6	19.4	5.1	1.0	0.2	0.0	0.0	0.0	0.0
102.5	26.7	26.8	26.2	18.4	4.9	1.0	0.2	0.0	0.0	0.0	0.0
103.0	25.4	25.5	24.8	17.4	4.7	1.0	0.2	0.0	0.0	0.0	0.0
103.5	24.0	24.1	23.4	16.4	4.5	0.9	0.1	0.0	0.0	0.0	0.0
104.0	22.7	22.8	22.1	15.4	4.3	0.9	0.1	0.0	0.0	0.0	0.0
104.5	21.4	21.5	20.9	14.5	4.1	0.9	0.1	0.0	0.0	0.0	0.0
105.0	20.2	20.2	19.6	13.6	3.9	0.8	0.2	0.0	0.0	0.0	0.0
106.0	17.8	17.8	17.2	11.8	3.5	0.8	0.1	0.0	0.0	0.0	0.0
107.0	15.5	15.5	14.9	10.2	3.1	0.7	0.1	0.0	0.0	0.0	0.0
108.0	13.4	13.5	12.8	8.7	2.7	0.7	0.1	0.0	0.0	0.0	0.0
109.0	11.4	11.5	10.9	7.3	2.4	0.6	0.1	0.0	0.0	0.0	0.0
110.0	9.6	9.7	9.1	6.1	2.0	0.5	0.1	0.0	0.0	0.0	0.0
112.5	5.9	6.0	5.5	3.7	1.4	0.4	0.1	0.0	0.0	0.0	0.0
115.0	3.7	3.7	3.3	2.3	0.9	0.3	0.1	0.0	0.0	0.0	0.0
117.5	2.3	2.3	2.1	1.4	0.6	0.2	0.0	0.0	0.0	0.0	0.0
120.0	1.5	1.5	1.3	0.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0
122.5	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0
125.0	0.8	0.7	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
127.5	0.5	0.5	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
130.0	0.4	0.4	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
132.5	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
135.0	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
137.5	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
140.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
142.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0.0
5- 10	0.0
10- 15	0.0
15- 20	0.0
20- 25	0.0
25- 30	0.0
30- 35	0.0
35- 40	0.0
40- 45	0.0
45- 50	0.0
50- 55	0.0
55- 60	0.0
60- 65	0.0
65- 70	0.1
70- 75	0.3
75- 80	0.8
80- 85	2.8
85- 90	5.8
90- 95	7.3
95-100	6.8
100-105	4.6
105-110	2.4
110-115	1.0
115-120	0.4
120-125	0.2
125-130	0.1
130-135	0.0
135-140	0.0
140-145	0.0
145-150	0.0
150-155	0.0
155-160	0.0
160-165	0.0
165-170	0.0
170-175	0.0
175-180	0.0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	0.0
0- 20	0.0
0- 30	0.0
0- 40	0.0
0- 50	0.0
0- 60	0.0
0- 70	0.1
0- 80	1.2
0- 90	9.8
0-100	23.9
0-110	30.9
0-120	32.3
0-130	32.5
0-140	32.6
0-150	32.6
0-160	32.6
0-170	32.6
0-180	32.6



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	84	75	68	61	73	66	59	53	49	44	39	33	29	25	18	15	12	5
2	75	64	54	47	65	56	48	41	41	35	29	27	22	18	14	11	8	2
3	68	55	46	38	59	48	40	33	35	29	24	23	19	15	12	9	6	1
4	62	49	39	32	54	43	34	28	31	25	20	21	16	12	11	8	5	0
5	57	43	34	27	50	38	30	23	28	22	17	19	14	10	10	7	4	0
6	52	39	29	23	46	34	26	20	25	19	14	17	12	9	9	6	4	0
7	48	35	26	20	42	31	23	17	23	17	13	15	11	8	8	5	3	0
8	45	31	23	17	39	28	20	15	21	15	11	14	10	7	8	5	3	0
9	41	28	21	15	36	25	18	13	19	13	10	13	9	6	7	5	2	0
10	39	26	18	13	34	23	16	12	17	12	9	12	8	5	7	4	2	0

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



itl boulder
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