

REPORT NUMBER: ITL86258

PAGE: 1 OF 6

ISSUE DATE: 01/05/16

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: MD-LED-e72-4

LUMINAIRE: CYLINDRICAL PLASTIC HOUSING WITH CAST BLACK PAINTED METAL TRIM.

ONE LED MODULE CONSISTING OF: MACHINED CYLINDRICAL METAL HOUSING,
MACHINED METAL CIRCUIT BOARD MOUNTING
BASE, 1 BLACK CIRCUIT BOARD WITH 1 LED,
CLEAR PLASTIC OPTIC ABOVE LED WITH
RECESSED TOP CENTER, CLEAR FROSTED
GLASS LENS IN CAST BLACK PAINTED METAL
FACEPLATE WITH 4 APERTURES, LENS
FROSTED SIDE IN.

LAMP: ONE WHITE LIGHT EMITTING DIODE (LED),
VERTICAL BASE-DOWN POSITION.

INPUT ELECTRICAL: 12.0 VOLTS, 2.56 WATTS,
0.331 AMPS

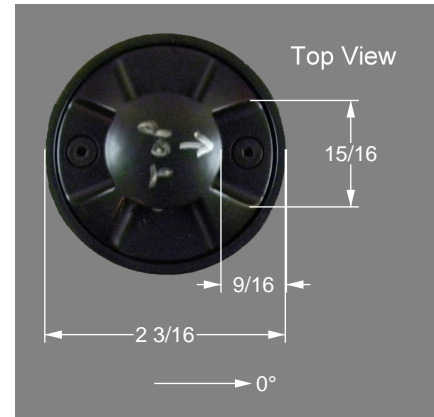
MOUNTING: IN-GRADE

LED DRIVER: B-K LIGHTING 518801/400187-F

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE
PROVIDED AT RATED INPUT VOLTAGE
(12VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

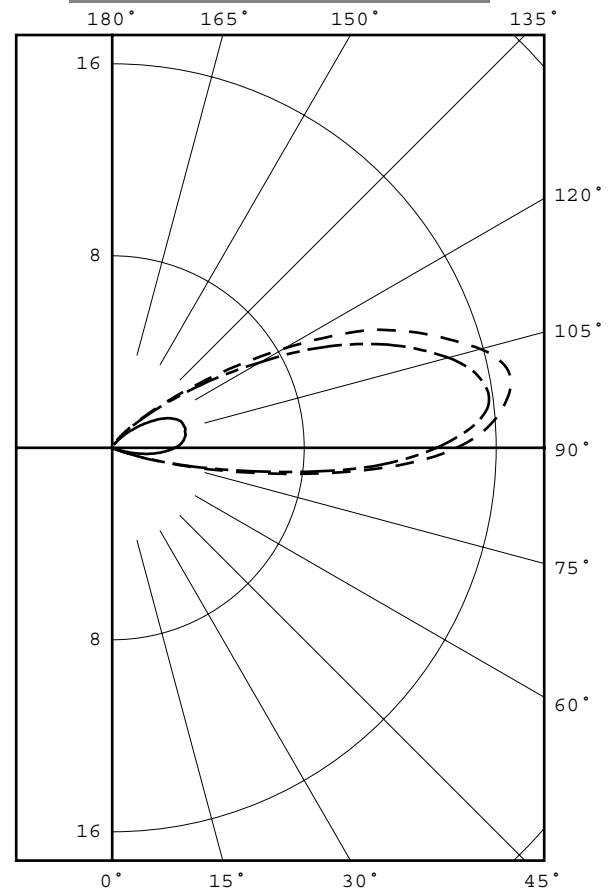
TEST DISTANCE = 20.0 FEET



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	0.1	0.0	0.0	0.0	0.0	0.1
75	2.5	1.8	0.7	1.8	2.4	2.1
85	10.6	8.3	2.1	7.9	10.1	7.8
90	14.3	11.6	2.6	10.9	13.5	12.5
95	16.2	13.8	3.0	13.1	15.5	11.8
105	15.9	12.9	3.2	12.2	14.5	8.2
115	11.5	9.4	2.9	9.5	10.0	3.7
125	5.3	4.2	1.9	4.2	4.7	1.1
135	1.7	1.3	0.9	1.2	1.6	0.3
145	0.5	0.4	0.3	0.4	0.4	0.1
155	0.2	0.2	0.2	0.2	0.2	0.0
165	0.1	0.1	0.1	0.1	0.1	0.0
175	0.1	0.1	0.1	0.1	0.1	0.0
180	0.1	0.1	0.1	0.1	0.1	0.0

FLUX



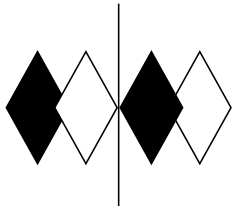
ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	0.0	0.0
0- 40	0.0	0.0
0- 60	0.0	0.0
0- 90	10.0	21.0
90-120	32.5	68.2
90-130	36.2	76.0
90-150	37.5	78.8
90-180	37.7	79.0
0-180	47.6	100.0

EFFICACY = 18.6 lm/W

CIE TYPE - SEMI-INDIRECT

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.
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PAGE: 2 OF 6

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	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.2
70.0	0.6	0.6	0.6	0.4	0.2	0.1	0.2	0.4	0.6	0.7	0.7
72.5	1.5	1.4	1.3	1.0	0.5	0.3	0.5	0.9	1.3	1.4	1.4
75.0	2.5	2.5	2.3	1.8	1.0	0.7	1.0	1.8	2.3	2.5	2.4
77.5	4.2	4.1	3.8	3.0	1.5	1.1	1.5	2.8	3.6	3.8	3.8
80.0	6.0	6.0	5.5	4.5	2.2	1.5	2.0	4.3	5.3	5.5	5.5
82.5	8.3	8.2	7.6	6.3	3.0	1.8	2.6	6.0	7.4	7.7	7.7
85.0	10.6	10.6	9.9	8.3	3.8	2.1	3.2	7.9	9.7	10.1	10.1
87.5	12.8	12.6	12.0	10.0	4.7	2.4	3.9	9.5	11.4	12.0	12.0
90.0	14.3	14.2	13.6	11.6	5.6	2.6	4.5	10.9	13.0	13.5	13.5
92.5	15.5	15.4	15.0	12.9	6.3	2.8	5.0	12.0	14.3	14.7	14.7
95.0	16.2	16.1	15.8	13.8	7.0	3.0	5.5	13.1	15.4	15.6	15.5
97.5	16.7	16.6	16.3	14.3	7.2	3.0	5.7	13.6	15.9	16.0	15.8
100.0	16.9	16.8	16.4	14.2	7.2	3.1	5.9	13.5	16.0	16.0	15.7
102.5	16.6	16.5	15.9	13.6	7.0	3.1	6.1	12.9	15.4	15.5	15.3
105.0	15.9	15.8	15.0	12.9	6.9	3.2	6.2	12.2	14.4	14.6	14.5
107.5	14.9	14.8	13.9	12.1	6.8	3.1	6.1	11.6	13.4	13.7	13.5
110.0	13.9	13.8	13.0	11.3	6.6	3.1	6.0	11.0	12.5	12.7	12.5
112.5	12.8	12.6	11.9	10.4	6.2	3.0	5.7	10.3	11.6	11.6	11.3
115.0	11.5	11.3	10.7	9.4	5.7	2.9	5.3	9.5	10.5	10.3	10.0
117.5	9.9	9.8	9.3	8.2	5.0	2.7	4.7	8.2	9.2	8.9	8.6
120.0	8.3	8.2	7.7	6.8	4.2	2.4	3.9	6.9	7.9	7.4	7.1
122.5	6.7	6.6	6.3	5.4	3.5	2.2	3.2	5.6	6.5	6.1	5.8
125.0	5.3	5.2	4.9	4.2	2.8	1.9	2.5	4.2	5.0	4.8	4.7
127.5	4.1	4.0	3.8	3.2	2.2	1.6	2.0	3.1	3.7	3.7	3.6
130.0	3.1	3.0	2.8	2.4	1.7	1.3	1.6	2.3	2.7	2.8	2.8
132.5	2.3	2.3	2.1	1.8	1.3	1.1	1.2	1.7	2.0	2.1	2.1
135.0	1.7	1.7	1.6	1.3	1.0	0.9	1.0	1.2	1.5	1.6	1.6
137.5	1.3	1.3	1.2	1.0	0.8	0.7	0.7	0.9	1.1	1.1	1.2
140.0	1.0	0.9	0.9	0.7	0.6	0.5	0.5	0.7	0.8	0.8	0.8
142.5	0.7	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.6	0.6	0.6
145.0	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4
147.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3
150.0	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
152.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
157.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



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PAGE: 3 OF 6

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
160.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
162.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
167.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
170.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
172.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
177.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



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PAGE: 4 OF 6

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	0.5
75- 80	1.5
80- 85	3.1
85- 90	4.7
90- 95	6.0
95-100	6.5
100-105	6.3
105-110	5.5
110-115	4.7
115-120	3.5
120-125	2.3
125-130	1.3
130-135	0.7
135-140	0.4
140-145	0.2
145-150	0.1
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	2.2
0- 90	10.0
0-100	22.5
0-110	34.3
0-120	42.5
0-130	46.2
0-140	47.3
0-150	47.5
0-160	47.6
0-170	47.6
0-180	47.6



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PAGE: 5 OF 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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	29	29	29	21
1	85	78	72	66	74	68	63	58	49	45	42	32	29	26	16	14	12	4
2	76	66	58	52	66	58	51	45	41	36	32	26	23	20	12	10	8	1
3	69	58	49	42	60	50	43	37	36	31	26	23	19	16	11	8	6	1
4	63	51	42	35	54	44	37	31	32	26	22	20	16	13	9	7	5	0
5	58	45	36	30	50	39	32	26	28	23	19	18	14	11	9	6	4	0
6	53	40	32	25	46	35	28	22	25	20	16	16	13	10	8	5	4	0
7	49	36	28	22	42	32	24	19	23	18	14	15	11	8	7	5	3	0
8	45	33	25	19	39	28	22	17	21	16	12	13	10	7	7	4	3	0
9	42	29	22	17	37	26	19	15	19	14	11	12	9	6	6	4	2	0
10	39	27	20	15	34	24	17	13	17	13	9	11	8	6	6	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.



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