

REPORT NUMBER: ITL86570

PAGE: 1 OF 8

ISSUE DATE: 01/26/16

PREPARED FOR: H.E. WILLIAMS, INC.

CATALOG NUMBER: S10-G-L3/840-FTG-DBZ-120

LUMINAIRE: CAST UNFINISHED METAL HOUSING, ONE LED MODULE, FABRICATED WHITE PAINTED METAL REFLECTOR/LED MODULE MOUNTING PLATE, FROSTED FLAT GLASS DIFFUSER IN CAST BROWN PAINTED LOUVERED METAL FACEPLATE. DIFFUSER FROSTED SIDE IN.

LAMP: ONE LED MODULE, OSRAM PL-CUBE-1100-840-0.35A-G2, AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 13.8 WATTS, 0.116 AMPS

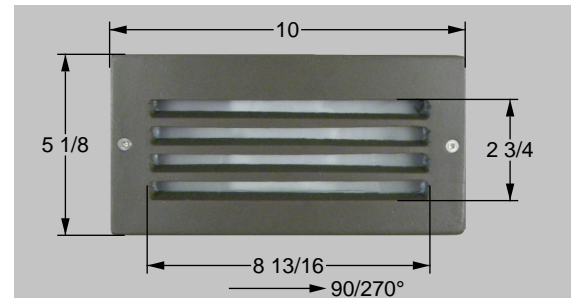
MOUNTING: RECESSED

LED DRIVER: OSRAM OT25W/PRG1250C/UNV/DIM, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST. CLIENT STATES DRIVER PROGRAMMED FOR 350mA OUTPUT.

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

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



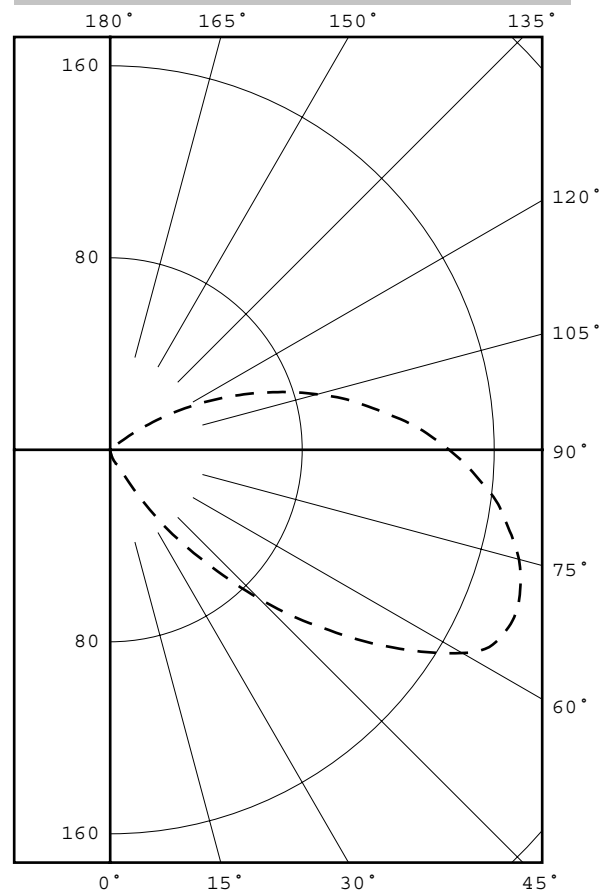
CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	FLUX
0	0	0	0	0	0	0
5	1	0	0	0	0	0
15	3	2	0	0	0	1
25	7	5	0	0	0	5
35	37	8	0	0	0	15
45	88	33	0	0	0	31
55	144	68	0	0	0	47
65	181	102	0	0	0	52
75	176	110	0	0	0	48
85	155	94	0	0	0	36
90	141	82	0	0	0	23
95	125	70	0	0	0	10
105	89	43	0	0	0	2
115	51	15	0	0	0	0
125	14	1	0	0	0	0
135	1	1	0	0	0	0
145	1	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

ZONAL LUMEN SUMMARY

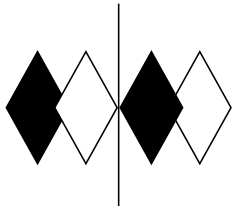
ZONE	LUMENS	%FIXT
0- 30	1	0.5
0- 40	6	2.3
0- 60	52	19.3
0- 90	199	73.5
90-120	69	25.5
90-130	71	26.3
90-150	72	26.4
90-180	72	26.5
0-180	271	100.0

EFFICACY = 19.6 lm/W
CIE TYPE - SEMI-DIRECT



LEGEND:
0-deg -----
90-deg =====
180-deg -----

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



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NVLAP
NVLAP LAB CODE: 200925-0

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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	112.5	135.0	157.5
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
5.0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
7.5	1	1	1	1	1	1	0	0	0	0	0	0	0	0
10.0	2	2	2	2	1	1	1	0	0	0	0	0	0	0
12.5	3	3	2	2	2	1	1	1	0	0	0	0	0	0
15.0	3	3	3	3	3	2	2	1	0	0	0	0	0	0
17.5	4	4	4	4	3	3	2	1	1	0	0	0	0	0
20.0	5	5	5	5	4	3	2	2	1	0	0	0	0	0
22.5	6	6	6	5	5	4	3	2	1	0	0	0	0	0
25.0	7	7	7	6	6	5	3	2	1	0	0	0	0	0
27.5	9	9	9	8	7	5	4	2	1	0	0	0	0	0
30.0	16	16	13	9	8	6	4	3	1	0	0	0	0	0
32.5	25	26	22	16	10	7	5	3	2	0	0	0	0	0
35.0	37	36	32	25	15	8	6	4	2	0	0	0	0	0
37.5	48	48	43	35	23	11	7	4	2	0	0	0	0	0
40.0	60	60	55	45	32	17	8	5	2	0	0	0	0	0
42.5	73	73	67	57	42	25	9	5	3	0	0	0	0	0
45.0	88	87	80	68	52	33	14	6	3	1	0	0	0	0
47.5	102	101	94	81	62	41	20	7	3	1	0	0	0	0
50.0	115	115	107	93	73	50	27	8	4	1	0	0	0	0
52.5	130	130	121	105	84	59	34	11	4	1	0	0	0	0
55.0	144	143	134	118	94	68	41	15	5	1	0	0	0	0
57.5	157	157	147	130	105	77	48	20	5	1	0	0	0	0
60.0	169	169	159	141	115	86	55	26	6	1	0	0	0	0
62.5	178	177	168	151	124	94	62	31	7	1	0	0	0	0
65.0	181	180	172	157	133	102	69	36	9	1	0	0	0	0
67.5	182	181	173	158	137	108	74	41	12	2	0	0	0	0
70.0	181	180	173	158	137	112	80	46	15	2	0	0	0	0
72.5	179	178	171	156	136	112	83	50	19	2	0	0	0	0
75.0	176	175	168	153	134	110	84	53	21	2	0	0	0	0
77.5	172	171	164	149	130	107	82	55	24	2	0	0	0	0
80.0	167	166	159	145	126	103	79	54	26	2	0	0	0	0
82.5	162	161	153	140	121	99	75	52	27	1	0	0	0	0
85.0	155	154	147	134	115	94	71	48	25	1	0	0	0	0
87.5	149	148	141	128	109	88	66	44	23	1	0	0	0	0
90.0	141	140	133	121	103	82	61	40	19	0	0	0	0	0
92.5	134	133	125	113	96	76	55	35	16	0	0	0	0	0
95.0	125	124	117	106	89	70	49	30	12	0	0	0	0	0
97.5	116	116	109	98	81	63	44	25	9	0	0	0	0	0
100.0	107	107	101	90	74	57	38	20	5	0	0	0	0	0
102.5	99	98	92	81	66	50	32	16	2	0	0	0	0	0
105.0	89	88	83	73	59	43	26	11	1	0	0	0	0	0
107.5	80	79	74	64	51	36	20	6	1	0	0	0	0	0
110.0	70	70	65	55	43	29	14	3	0	0	0	0	0	0
112.5	60	60	55	47	35	22	9	1	0	0	0	0	0	0
115.0	51	50	46	37	27	15	4	1	0	0	0	0	0	0
117.5	41	40	37	29	20	8	2	1	0	0	0	0	0	0
120.0	32	31	28	21	12	4	1	1	0	0	0	0	0	0
122.5	23	23	19	13	6	2	1	0	0	0	0	0	0	0
125.0	14	14	11	6	3	1	1	0	0	0	0	0	0	0
127.5	7	7	5	3	2	1	1	0	0	0	0	0	0	0
130.0	3	3	2	2	1	1	1	0	0	0	0	0	0	0
132.5	2	2	2	1	1	1	1	0	0	0	0	0	0	0
135.0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
137.5	1	1	1	1	1	1	1	0	0	0	0	0	0	0
140.0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
142.5	1	1	1	1	1	1	0	0	0	0	0	0	0	0
145.0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
147.5	1	1	1	1	0	0	0	0	0	0	0	0	0	0
150.0	1	1	1	1	0	0	0	0	0	0	0	0	0	0
152.5	0	1	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
157.5	0	0	0	0	0	0	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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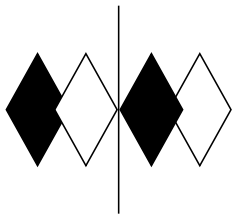
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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
160.0	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
165.0	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
170.0	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
175.0	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
180.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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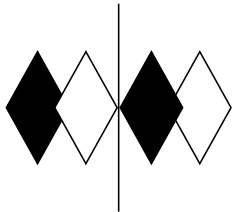
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CANDELA DISTRIBUTION
LATERAL ANGLE

	180.0
0.0	0
2.5	0
5.0	0
7.5	0
10.0	0
12.5	0
15.0	0
17.5	0
20.0	0
22.5	0
25.0	0
27.5	0
30.0	0
32.5	0
35.0	0
37.5	0
40.0	0
42.5	0
45.0	0
47.5	0
50.0	0
52.5	0
55.0	0
57.5	0
60.0	0
62.5	0
65.0	0
67.5	0
70.0	0
72.5	0
75.0	0
77.5	0
80.0	0
82.5	0
85.0	0
87.5	0
90.0	0
92.5	0
95.0	0
97.5	0
100.0	0
102.5	0
105.0	0
107.5	0
110.0	0
112.5	0
115.0	0
117.5	0
120.0	0
122.5	0
125.0	0
127.5	0
130.0	0
132.5	0
135.0	0
137.5	0
140.0	0
142.5	0
145.0	0
147.5	0
150.0	0
152.5	0
155.0	0
157.5	0



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CANDELA DISTRIBUTION
LATERAL ANGLE

	180.0
160.0	0
162.5	0
165.0	0
167.5	0
170.0	0
172.5	0
175.0	0
177.5	0
180.0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	0
5- 10	0
10- 15	0
15- 20	0
20- 25	0
25- 30	1
30- 35	2
35- 40	3
40- 45	6
45- 50	9
50- 55	13
55- 60	18
60- 65	22
65- 70	25
70- 75	26
75- 80	26
80- 85	25
85- 90	23
90- 95	20
95-100	16
100-105	13
105-110	10
110-115	6
115-120	4
120-125	2
125-130	1
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	0
0- 20	0
0- 30	1
0- 40	6
0- 50	21
0- 60	52
0- 70	99
0- 80	151
0- 90	199
0-100	235
0-110	258
0-120	268
0-130	270
0-140	270
0-150	270
0-160	271
0-170	271
0-180	271



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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	113	113	113	113	107	107	107	107	96	96	96	87	87	87	78	78	78	74
1	93	84	76	69	87	79	72	66	70	64	59	61	56	52	53	49	46	41
2	80	68	57	48	75	63	53	45	55	47	40	47	41	35	40	35	30	26
3	71	56	44	35	65	52	41	33	45	36	29	38	31	25	32	26	21	17
4	63	47	36	27	58	44	33	25	38	29	22	32	25	18	27	20	15	12
5	57	41	29	21	53	38	27	20	33	24	17	28	20	14	23	17	12	8
6	52	36	25	17	48	33	23	16	29	20	13	24	17	11	20	14	9	6
7	48	32	21	14	44	29	20	13	25	17	11	22	14	9	18	12	7	4
8	44	28	18	12	41	26	17	11	23	15	9	19	12	7	16	10	6	3
9	41	26	16	10	38	24	15	9	21	13	8	18	11	6	15	9	5	3
10	38	23	14	9	35	22	13	8	19	12	7	16	10	5	14	8	4	2

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.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.



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