



Photometric Indoor Test Report

Relevant Standards

IES LM-79-2008

ANSI C82.77

Prepared For
Eureka Lighting, Inc.

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Montreal, Canada
H2P 1H4

Catalog Number
LAP3151

LTL Test Number
28155

Test Date

2012-01-26

Prepared By

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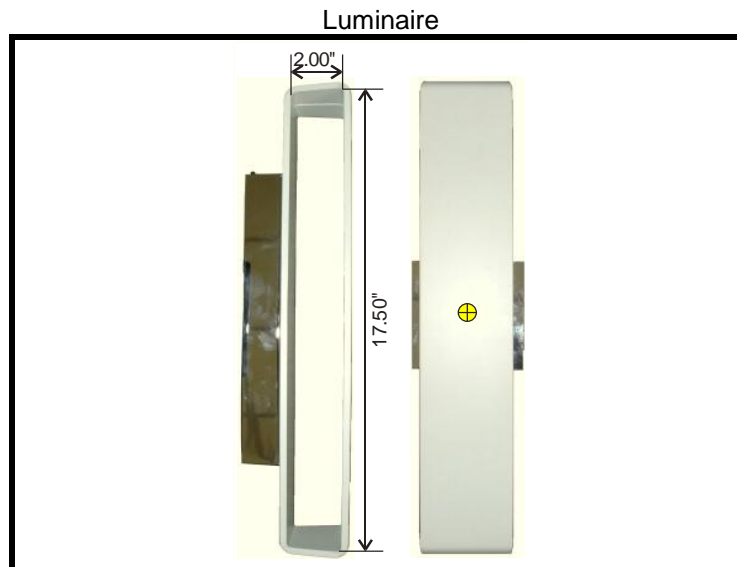
Approved By

Brian Moyer, Engineer

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Formed white enamel aluminum housing / reflector, open sides
Catalog Number: LAP3151
Lamp: Nine white LEDs
Mounting: Surface Wall
Ballast/Driver: One Lightech LED 10CV 12 PU



Zonal Lumen Summary

Zone (Degrees)	Lumens	% of Lamp	% of Luminaire
0-30	3.6	N/A	2.1%
0-40	9.5	N/A	5.6%
0-60	31.4	N/A	18.5%
0-90	84.8	N/A	49.9%
90-180	85.0	N/A	50.1%
0-180	169.9	N/A	100.0%

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.1 VAC
Current:	0.07191 A
Power:	4.477 W
Power Factor:	0.519
Frequency:	60 Hz
Current THD:	145 %

Summary of Results

Total Lumen Output: 169.9 Lumens
Luminaire Efficacy: 37.9 Lumens/Watt
CIE Type: Direct/Indirect

Spacing Criterion:	0 Degree:	0.01	90 Degree:	5.26
	180 Degree:	11.98	270 Degree:	5.26

Data was acquired using the calibrated photodetector method of absolute photometry. A spectral mismatch correction factor was employed based on the spectral responsivity of the photodetector and the spectral power distribution of the test subject.



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)															
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
5	0.00	0.08	0.32	0.44	0.41	0.38	0.35	0.24	0.03	0.24	0.35	0.38	0.41	0.44	0.32	0.08
10	0.00	0.40	1.57	1.64	0.92	1.56	2.11	0.81	0.25	0.81	2.11	1.56	0.92	1.64	1.57	0.40
15	0.00	0.92	3.37	2.73	0.92	3.71	7.27	1.54	0.60	1.54	7.27	3.71	0.92	2.73	3.37	0.92
20	0.00	1.68	5.10	3.90	0.89	6.37	12.84	2.38	0.95	2.38	12.84	6.37	0.89	3.90	5.10	1.68
25	0.00	2.38	6.83	5.06	0.89	9.40	19.25	3.11	1.30	3.11	19.25	9.40	0.89	5.06	6.83	2.38
30	0.00	2.98	8.49	6.21	0.83	11.97	26.97	3.76	1.59	3.76	26.97	11.97	0.83	6.21	8.49	2.98
35	0.03	3.57	10.09	7.38	0.83	14.57	32.28	4.35	1.94	4.35	32.28	14.57	0.83	7.38	10.09	3.57
40	0.00	4.06	11.55	8.40	0.71	17.05	37.22	4.86	2.22	4.86	37.22	17.05	0.71	8.40	11.55	4.06
45	0.00	4.49	12.86	9.40	0.67	19.41	41.84	5.29	2.44	5.29	41.84	19.41	0.67	9.40	12.86	4.49
50	0.00	4.89	14.11	10.30	0.62	21.70	46.08	5.73	2.70	5.73	46.08	21.70	0.62	10.30	14.11	4.89
55	0.03	5.30	15.22	11.14	0.57	23.81	49.96	6.16	2.89	6.16	49.96	23.81	0.57	11.14	15.22	5.30
60	0.00	5.57	16.13	11.81	0.48	25.62	53.23	6.43	3.08	6.43	53.23	25.62	0.48	11.81	16.13	5.57
65	0.00	5.84	16.98	12.43	0.41	27.32	56.17	6.71	3.24	6.71	56.17	27.32	0.41	12.43	16.98	5.84
70	0.00	6.14	17.76	12.97	0.32	28.81	58.90	7.00	3.37	7.00	58.90	28.81	0.32	12.97	17.76	6.14
75	0.00	6.30	18.27	13.32	0.25	29.90	60.77	7.17	3.46	7.17	60.77	29.90	0.25	13.32	18.27	6.30
80	0.00	6.44	18.60	13.55	0.19	30.65	62.03	7.27	3.52	7.27	62.03	30.65	0.19	13.55	18.60	6.44
85	0.00	6.57	18.87	13.68	0.16	31.19	62.87	7.38	3.62	7.38	62.87	31.19	0.16	13.68	18.87	6.57
90	0.00	6.59	18.89	13.63	0.10	31.31	63.09	7.36	3.59	7.36	63.09	31.31	0.10	13.63	18.89	6.59
95	0.00	6.56	18.82	13.59	0.13	31.27	62.90	7.33	3.59	7.33	62.90	31.27	0.13	13.59	18.82	6.56
100	0.00	6.49	18.52	13.35	0.19	30.84	62.03	7.25	3.49	7.25	62.03	30.84	0.19	13.35	18.52	6.49
105	0.00	6.37	18.11	13.01	0.25	30.14	60.63	7.10	3.43	7.10	60.63	30.14	0.25	13.01	18.11	6.37
110	0.00	6.19	17.57	12.59	0.32	29.17	58.60	6.89	3.33	6.89	58.60	29.17	0.32	12.59	17.57	6.19
115	0.00	5.97	16.89	12.06	0.40	27.85	56.11	6.62	3.21	6.62	56.11	27.85	0.40	12.06	16.89	5.97
120	0.00	5.73	16.09	11.44	0.49	26.38	53.30	6.35	3.02	6.35	53.30	26.38	0.49	11.44	16.09	5.73
125	0.00	5.43	15.13	10.68	0.54	24.59	49.85	6.00	2.83	6.00	49.85	24.59	0.54	10.68	15.13	5.43
130	0.00	5.10	14.01	9.83	0.60	22.51	45.96	5.60	2.64	5.60	45.96	22.51	0.60	9.83	14.01	5.10
135	0.00	4.68	12.76	8.89	0.68	20.19	41.73	5.16	2.41	5.16	41.73	20.19	0.68	8.89	12.76	4.68
140	0.03	4.29	11.48	7.92	0.76	17.89	37.24	4.73	2.19	4.73	37.24	17.89	0.76	7.92	11.48	4.29
145	0.00	3.78	10.02	6.87	0.78	15.40	32.31	4.19	1.87	4.19	32.31	15.40	0.78	6.87	10.02	3.78
150	0.00	3.25	8.44	5.81	0.86	12.84	27.19	3.64	1.62	3.64	27.19	12.84	0.86	5.81	8.44	3.25
155	0.00	2.62	6.79	4.65	0.84	10.30	19.78	3.00	1.27	3.00	19.78	10.30	0.84	4.65	6.79	2.62
160	0.00	1.95	5.17	3.60	0.86	7.25	13.68	2.33	0.95	2.33	13.68	7.25	0.86	3.60	5.17	1.95
165	0.00	1.21	3.49	2.57	0.90	4.51	7.94	1.52	0.57	1.52	7.94	4.51	0.90	2.57	3.49	1.21
170	0.00	0.52	1.73	1.60	0.95	1.73	2.41	0.81	0.29	0.81	2.41	1.73	0.95	1.60	1.73	0.52
175	0.00	0.13	0.37	0.48	0.44	0.41	0.33	0.21	0.06	0.21	0.33	0.41	0.44	0.48	0.37	0.13
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Zonal Lumen Tabulation (5 degree zones)

Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens
0-5	0.004	45-50	5.057	90-95	9.766	135-140	4.187
5-10	0.050	50-55	5.937	95-100	9.622	140-145	3.340
10-15	0.224	55-60	6.775	100-105	9.299	145-150	2.533
15-20	0.567	60-65	7.546	105-110	8.844	150-155	1.763
20-25	1.070	65-70	8.272	110-115	8.248	155-160	1.110
25-30	1.735	70-75	8.883	115-120	7.571	160-165	0.605
30-35	2.507	75-80	9.314	120-125	6.808	165-170	0.246
35-40	3.321	80-85	9.627	125-130	5.952	170-175	0.053
40-45	4.179	85-90	9.767	130-135	5.069	175-180	0.004



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
Wall Reflectance	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **											
0	196.8	196.8	196.8	196.8	182.0	182.0	182.0	182.0	167.8	167.8	167.8	167.8
1	170.5	157.3	145.5	134.9	156.0	144.4	133.9	124.5	142.3	132.1	122.8	114.5
2	151.6	131.6	115.3	101.6	138.1	120.5	106.0	93.7	125.3	109.9	97.0	86.0
3	136.1	112.3	94.1	79.8	123.6	102.6	86.4	73.5	111.8	93.4	79.0	67.4
4	123.0	97.1	78.5	64.4	111.6	88.8	72.1	59.3	100.8	80.7	65.8	54.2
5	111.8	84.9	66.5	53.0	101.4	77.7	61.1	48.8	91.6	70.6	55.7	44.6
6	102.2	75.0	57.1	44.4	92.7	68.6	52.5	40.9	83.7	62.5	47.9	37.3
7	93.9	66.8	49.6	37.8	85.2	61.2	45.6	34.7	77.0	55.7	41.7	31.7
8	86.6	60.0	43.5	32.4	78.7	54.9	40.0	29.8	71.2	50.1	36.6	27.2
9	80.2	54.2	38.5	28.1	72.9	49.7	35.4	25.8	66.1	45.3	32.4	23.6
10	74.5	49.2	34.3	24.6	67.9	45.2	31.6	22.6	61.6	41.3	28.9	20.6

Ceiling Cavity Reflectance	50				30			10			0
Wall Reflectance	70	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **										
0	141.5	141.5	141.5	141.5	117.4	117.4	117.4	95.2	95.2	95.2	84.8
1	116.9	109.0	101.9	95.3	87.9	82.4	77.4	68.4	64.3	60.4	50.8
2	101.6	89.9	79.8	71.1	71.4	63.7	57.0	54.4	48.6	43.4	34.8
3	90.1	76.0	64.7	55.4	60.0	51.2	43.8	45.0	38.4	32.6	25.0
4	81.0	65.6	53.7	44.4	51.5	42.3	34.8	38.4	31.3	25.5	18.6
5	73.5	57.4	45.5	36.4	45.0	35.7	28.3	33.5	26.2	20.4	14.4
6	67.3	50.8	39.1	30.3	39.8	30.6	23.5	29.6	22.4	16.8	11.3
7	62.0	45.4	34.0	25.7	35.7	26.6	19.8	26.5	19.4	14.0	9.1
8	57.4	40.9	29.9	22.0	32.2	23.4	16.9	24.0	17.1	11.9	7.5
9	53.4	37.1	26.5	19.0	29.3	20.7	14.6	21.9	15.2	10.2	6.2
10	49.9	33.8	23.6	16.6	26.8	18.5	12.7	20.1	13.6	8.8	5.2

Average Luminance Table (cd/m²)

		Horizontal Angle (Degrees)		
Vertical Angle (Degree)		0	45	90
	0	0	0	0
	45	0	1139	42
	55	0	1164	31
	65	0	1174	20
	75	0	1185	12
	85	0	1186	7

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 values should be used with caution.

This test was conducted using photometry techniques according to standard IES procedures. The user must therefore use caution in the following situations: 1) This test was performed using a specific ballast/lamp combination. Extrapolation of this data for other ballast/lamp combinations may produce erroneous results. 2) This test was conducted in a controlled laboratory environment where the ambient temperature was held at 25°C ±1°C. Field performance may differ particularly in regards to change in luminous output as a result of difference in ambient temperature and method of mounting the luminaire.



Polar Plot (Candela)

