



Photometric Indoor Test Report

Relevant Standards

IES LM-79-2008

ANSI C82.77

Prepared For
Maxlite SK America, Inc.
Ken Charton
12 York Avenue
West Caldwell, NJ 07006

Catalog Number
MLSDLB1827LED

LTL Test Number
26657

Test Date

2011-11-04

Prepared By

Kyle Spaziani, Technician III

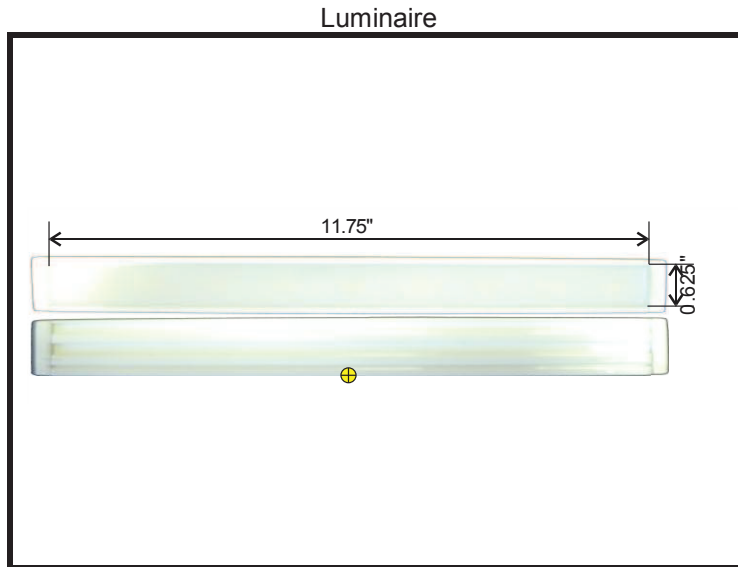
Approved By

Brian Moyer, Engineer

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Extruded aluminum housing, translucent white plastic enclosure
Catalog Number: MLSDLB1827LED
Lamp: 18 white LEDs
Mounting: Surface



Zonal Lumen Summary

Table with 4 columns: Zone (Degrees), Lumens, % of Lamp, % of Luminaire. Rows include zones 0-30, 0-40, 0-60, 0-90, 90-180, and 0-180.

Test Conditions

Test Temperature: 24.5 °C
Voltage: 120.0 VAC
Current: 0.09210 A
Power: 6.081 W
Power Factor: 0.550
Frequency: 60 Hz

Summary of Results

Total Lumen Output: 291.5 Lumens
Luminaire Efficacy: 47.9 Lumens/Watt
CIE Type: Direct
Spacing Criterion: 0 Degree: 1.20 90 Degree: 1.20 180 Degree: 1.20 270 Degree: 1.20

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)

	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	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7
5	111.3	111.4	110.9	111.1	111.4	111.1	110.9	111.4	111.3	111.4	110.9	111.1	111.4	111.1	110.9	111.4
10	109.3	109.4	109.0	109.3	109.5	109.3	109.0	109.4	109.3	109.4	109.0	109.3	109.5	109.3	109.0	109.4
15	106.1	106.2	105.8	106.1	106.4	106.1	105.8	106.2	106.1	106.2	105.8	106.1	106.4	106.1	105.8	106.2
20	101.7	101.8	101.5	101.9	102.1	101.9	101.5	101.8	101.7	101.8	101.5	101.9	102.1	101.9	101.5	101.8
25	96.3	96.4	96.2	96.5	96.8	96.5	96.2	96.4	96.3	96.4	96.2	96.5	96.8	96.5	96.2	96.4
30	89.9	89.9	89.7	90.0	90.2	90.0	89.7	89.9	89.9	89.9	89.7	90.0	90.2	90.0	89.7	89.9
35	82.7	82.7	82.5	82.8	82.9	82.8	82.5	82.7	82.7	82.7	82.5	82.8	82.9	82.8	82.5	82.7
40	75.3	75.2	75.0	75.3	75.5	75.3	75.0	75.2	75.3	75.2	75.0	75.3	75.5	75.3	75.0	75.2
45	67.3	67.2	67.2	67.3	67.4	67.3	67.2	67.2	67.3	67.2	67.2	67.3	67.4	67.3	67.2	67.2
50	59.3	59.2	59.1	59.2	59.3	59.2	59.1	59.2	59.3	59.2	59.1	59.2	59.3	59.2	59.1	59.2
55	51.1	51.0	50.9	51.0	51.0	51.0	50.9	51.0	51.1	51.0	50.9	51.0	51.0	51.0	50.9	51.0
60	42.8	42.7	42.5	42.5	42.5	42.5	42.5	42.7	42.8	42.7	42.5	42.5	42.5	42.5	42.5	42.7
65	34.4	34.4	34.2	34.1	34.1	34.1	34.2	34.4	34.4	34.4	34.2	34.1	34.1	34.1	34.2	34.4
70	26.3	26.3	26.1	25.9	25.8	25.9	26.1	26.3	26.3	26.3	26.1	25.9	25.8	25.9	26.1	26.3
75	18.1	18.0	17.8	17.6	17.4	17.6	17.8	18.0	18.1	18.0	17.8	17.6	17.4	17.6	17.8	18.0
80	10.5	10.5	10.3	10.1	9.9	10.1	10.3	10.5	10.5	10.5	10.3	10.1	9.9	10.1	10.3	10.5
85	4.0	4.0	3.8	3.6	3.3	3.6	3.8	4.0	4.0	4.0	3.8	3.6	3.3	3.6	3.8	4.0
90	0.4	0.5	0.4	0.1	0.1	0.1	0.4	0.5	0.4	0.5	0.4	0.1	0.1	0.1	0.4	0.5
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	0.0	0.0	0.0	0.0

Zonal Lumen Tabulation (5 degree zones)

Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens	Zone (Degrees)	Lumens
0-5	2.67	45-50	25.51	90-95	0.03	135-140	0
5-10	7.89	50-55	23.96	95-100	0	140-145	0
10-15	12.77	55-60	21.60	100-105	0	145-150	0
15-20	17.12	60-65	18.66	105-110	0	150-155	0
20-25	20.79	65-70	15.26	110-115	0	155-160	0
25-30	23.58	70-75	11.45	115-120	0	160-165	0
30-35	25.39	75-80	7.45	120-125	0	165-170	0
35-40	26.34	80-85	3.74	125-130	0	170-175	0
40-45	26.37	85-90	0.91	130-135	0	175-180	0



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	355.5	355.5	355.5	355.5	347.0	347.0	347.0	347.0	338.9	338.9	338.9	338.9
1	326.1	311.1	297.7	285.7	317.8	304.2	292.0	281.0	309.9	297.6	286.5	276.4
2	297.6	271.6	250.4	232.7	289.5	265.9	246.3	229.9	281.9	260.4	242.4	227.2
3	272.0	238.9	213.6	193.7	264.3	234.1	210.6	191.9	257.1	229.5	207.7	190.2
4	249.4	211.8	184.8	164.4	242.3	207.8	182.5	163.2	235.7	204.0	180.3	162.1
5	229.6	189.4	161.9	141.8	223.1	186.1	160.2	141.0	217.0	182.8	158.5	140.2
6	212.2	170.7	143.4	124.1	206.3	167.8	142.0	123.5	200.7	165.0	140.7	122.9
7	196.8	154.8	128.2	109.8	191.4	152.4	127.1	109.4	186.4	150.0	126.0	108.9
8	183.2	141.4	115.6	98.1	178.4	139.3	114.7	97.8	173.8	137.2	113.8	97.5
9	171.1	129.8	105.0	88.4	166.8	128.0	104.2	88.2	162.6	126.2	103.5	88.0
10	160.4	119.8	96.0	80.3	156.5	118.2	95.4	80.1	152.7	116.7	94.8	79.9

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	323.9	323.9	323.9	323.9	310.1	310.1	310.1	297.4	297.4	297.4	291.5
1	295.2	285.2	276.0	267.7	273.8	266.4	259.5	263.3	257.3	251.8	245.7
2	267.8	250.1	234.9	221.9	240.5	227.9	216.8	231.7	221.3	212.0	205.7
3	243.9	220.8	202.2	186.8	212.8	196.9	183.6	205.3	191.9	180.4	174.1
4	223.4	196.7	176.1	159.8	189.9	172.1	157.7	183.6	168.2	155.5	149.3
5	205.8	176.6	155.2	138.7	170.9	152.0	137.2	165.5	149.0	135.7	129.6
6	190.5	159.8	138.0	121.8	154.9	135.5	120.7	150.3	133.1	119.7	113.7
7	177.1	145.5	123.9	108.1	141.3	121.9	107.3	137.4	119.9	106.6	100.8
8	165.4	133.4	112.1	96.9	129.8	110.4	96.3	126.4	108.8	95.7	90.2
9	155.0	122.9	102.1	87.5	119.8	100.7	87.0	116.8	99.4	86.6	81.3
10	145.8	113.8	93.6	79.6	111.1	92.4	79.2	108.5	91.3	78.9	73.8

Average Luminance Table (cd/m²)

		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degree)	0	23580	23580	23580
	45	20090	20050	20120
	55	18810	18730	18770
	65	17200	17080	17000
	75	14730	14540	14160
	85	9602	9291	8086

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)

