



## 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  
MLSDLB1850LED

LTL Test Number  
26665

Test Date

2011-11-30

Prepared By

Kyle Spaziani, Technician III

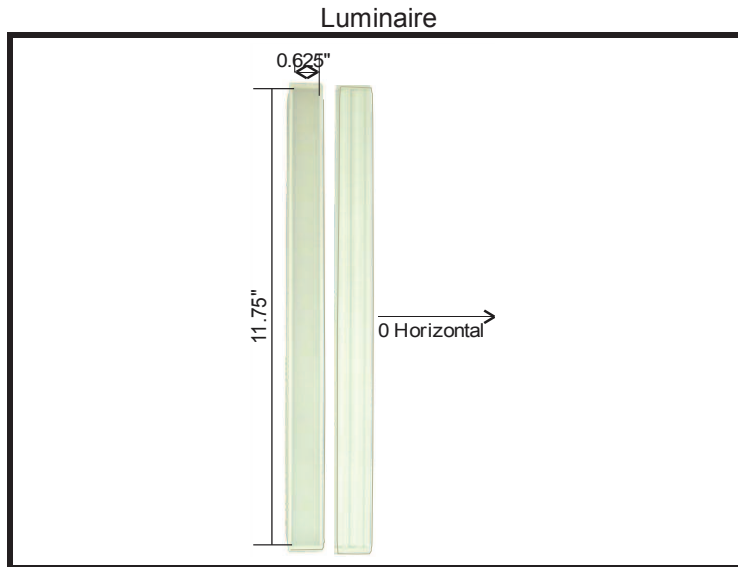
Approved By

Zachary Mooney, Project Coordinator III

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



Luminaire Description: Extruded aluminum housing, translucent white plastic enclosure
Catalog Number: MLSDLB1850LED
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: 0.08982 A
Power: 5.888 W
Power Factor: 0.546
Frequency: 60 Hz
Current THD: 129 %

Summary of Results

Total Lumen Output: 323.7 Lumens
Luminaire Efficacy: 55.0 Lumens/Watt
CIE Type: Direct
Spacing Criterion: 0 Degree: 1.20 90 Degree: 1.21 180 Degree: 1.20 270 Degree: 1.21

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	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0
5	122.4	122.5	121.9	122.1	122.4	122.1	121.9	122.5	122.4	122.5	121.9	122.1	122.4	122.1	121.9	122.5
10	120.6	120.6	120.3	120.6	120.7	120.6	120.3	120.6	120.6	120.6	120.3	120.6	120.7	120.6	120.3	120.6
15	117.3	117.1	116.9	117.0	117.7	117.0	116.9	117.1	117.3	117.1	116.9	117.0	117.7	117.0	116.9	117.1
20	112.3	112.5	112.1	112.5	112.8	112.5	112.1	112.5	112.3	112.5	112.1	112.5	112.8	112.5	112.1	112.5
25	106.3	106.6	106.3	106.7	107.1	106.7	106.3	106.6	106.3	106.6	106.3	106.7	107.1	106.7	106.3	106.6
30	99.5	99.6	99.5	99.6	100.0	99.6	99.5	99.6	99.5	99.6	99.5	99.6	100.0	99.6	99.5	99.6
35	91.7	91.9	91.5	91.8	92.3	91.8	91.5	91.9	91.7	91.9	91.5	91.8	92.3	91.8	91.5	91.9
40	83.6	83.7	83.4	83.7	83.9	83.7	83.4	83.7	83.6	83.7	83.4	83.7	83.9	83.7	83.4	83.7
45	74.8	75.0	74.7	74.8	75.0	74.8	74.7	75.0	74.8	75.0	74.7	74.8	75.0	74.8	74.7	75.0
50	65.6	65.5	65.5	65.6	65.6	65.6	65.5	65.5	65.6	65.5	65.5	65.6	65.6	65.6	65.5	65.5
55	57.0	56.8	56.6	56.6	57.0	56.6	56.6	56.8	57.0	56.8	56.6	56.6	57.0	56.6	56.6	56.8
60	47.7	47.7	47.5	47.6	47.2	47.6	47.5	47.7	47.7	47.7	47.5	47.6	47.2	47.6	47.5	47.7
65	38.5	38.5	38.3	38.1	38.1	38.1	38.3	38.5	38.5	38.5	38.3	38.1	38.1	38.1	38.3	38.5
70	29.4	29.2	28.9	28.6	28.4	28.6	28.9	29.2	29.4	29.2	28.9	28.6	28.4	28.6	28.9	29.2
75	20.3	20.2	20.0	20.0	19.5	20.0	20.0	20.2	20.3	20.2	20.0	20.0	19.5	20.0	20.0	20.2
80	12.0	11.9	11.7	11.4	11.2	11.4	11.7	11.9	12.0	11.9	11.7	11.4	11.2	11.4	11.7	11.9
85	4.4	4.4	4.2	4.0	3.7	4.0	4.2	4.4	4.4	4.4	4.2	4.0	3.7	4.0	4.2	4.4
90	0.6	0.7	0.7	0.5	0.3	0.5	0.7	0.7	0.6	0.7	0.7	0.5	0.3	0.5	0.7	0.7
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	2.94	45-50	28.37	90-95	0	135-140	0
5-10	8.70	50-55	26.58	95-100	0	140-145	0
10-15	14.09	55-60	24.02	100-105	0	145-150	0
15-20	18.90	60-65	20.78	105-110	0	150-155	0
20-25	22.98	65-70	17.06	110-115	0	155-160	0
25-30	26.09	70-75	12.76	115-120	0	160-165	0
30-35	28.11	75-80	8.35	120-125	0	165-170	0
35-40	29.25	80-85	4.31	125-130	0	170-175	0
40-45	29.26	85-90	1.13	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	394.7	394.7	394.7	394.7	385.3	385.3	385.3	385.3	376.4	376.4	376.4	376.4
1	362.0	345.2	330.3	316.9	352.7	337.5	323.9	311.7	343.9	330.2	317.8	306.6
2	330.2	301.3	277.7	258.0	321.3	295.0	273.2	254.9	312.8	288.8	268.8	251.8
3	301.8	264.9	236.8	214.7	293.3	259.6	233.5	212.7	285.3	254.5	230.3	210.8
4	276.7	234.9	204.8	182.1	268.8	230.4	202.3	180.8	261.4	226.1	199.9	179.6
5	254.7	210.0	179.4	157.1	247.5	206.3	177.5	156.2	240.7	202.6	175.6	155.3
6	235.3	189.2	158.8	137.3	228.8	186.0	157.3	136.7	222.6	182.9	155.8	136.1
7	218.2	171.6	142.0	121.5	212.3	168.9	140.8	121.0	206.7	166.3	139.6	120.6
8	203.2	156.6	128.0	108.6	197.8	154.3	127.0	108.2	192.7	152.1	126.0	107.9
9	189.8	143.8	116.2	97.8	184.9	141.8	115.4	97.6	180.3	139.9	114.6	97.3
10	177.9	132.7	106.2	88.8	173.5	131.0	105.6	88.6	169.3	129.3	104.9	88.4

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	359.6	359.6	359.6	359.6	344.3	344.3	344.3	330.3	330.3	330.3	323.7
1	327.6	316.4	306.2	296.9	303.8	295.5	287.8	292.2	285.5	279.3	272.5
2	297.1	277.4	260.5	246.0	266.8	252.7	240.4	257.0	245.4	235.0	228.0
3	270.5	244.8	224.1	207.0	235.9	218.3	203.4	227.6	212.7	199.9	192.9
4	247.8	218.0	195.2	177.1	210.5	190.7	174.6	203.5	186.4	172.3	165.3
5	228.2	195.8	171.9	153.6	189.4	168.4	151.9	183.4	165.0	150.3	143.4
6	211.3	177.1	152.9	134.9	171.7	150.1	133.7	166.6	147.4	132.5	125.9
7	196.4	161.3	137.2	119.7	156.6	135.0	118.8	152.2	132.8	117.9	111.5
8	183.4	147.8	124.1	107.2	143.8	122.3	106.5	140.0	120.5	105.9	99.7
9	171.9	136.2	113.0	96.8	132.7	111.5	96.3	129.4	110.0	95.8	89.9
10	161.7	126.1	103.6	88.0	123.1	102.3	87.6	120.2	101.0	87.2	81.6

Average Luminance Table (cd/m<sup>2</sup>)

		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degree)	0	25960	25960	25960
	45	22330	22280	22380
	55	20960	20840	20960
	65	19210	19130	19050
	75	16540	16340	15880
	85	10610	10220	9039

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)

