



UL LLC
1075 W Lambert Rd Suite B
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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Access Lighting

Jason Stone
14410 Myford Rd
Irvine, CA 92606
United States

Catalog Number

20071LEDD

Order Number

11936327

Test Number

11936327.03

Test Date

2017-09-06

Prepared By

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Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Circular white plastic housing with frosted lens
Lamp: 64 White LEDs
Mounting: Recessed

Luminaire



Luminaire Characteristics

Luminous Diameter: 5.75 in.

Summary of Results

Total Luminaire Output:	1056 Lumens
Luminaire Efficacy:	73.5 lm/w
Maximum Candela:	370 Candela

Test Conditions

Test Temperature:	24.5 °C
Voltage:	120.0 VAC
Current:	0.1265 A
Power:	14.38 W
Power Factor:	0.947
Frequency:	60 Hz
Current THD:	31.9 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

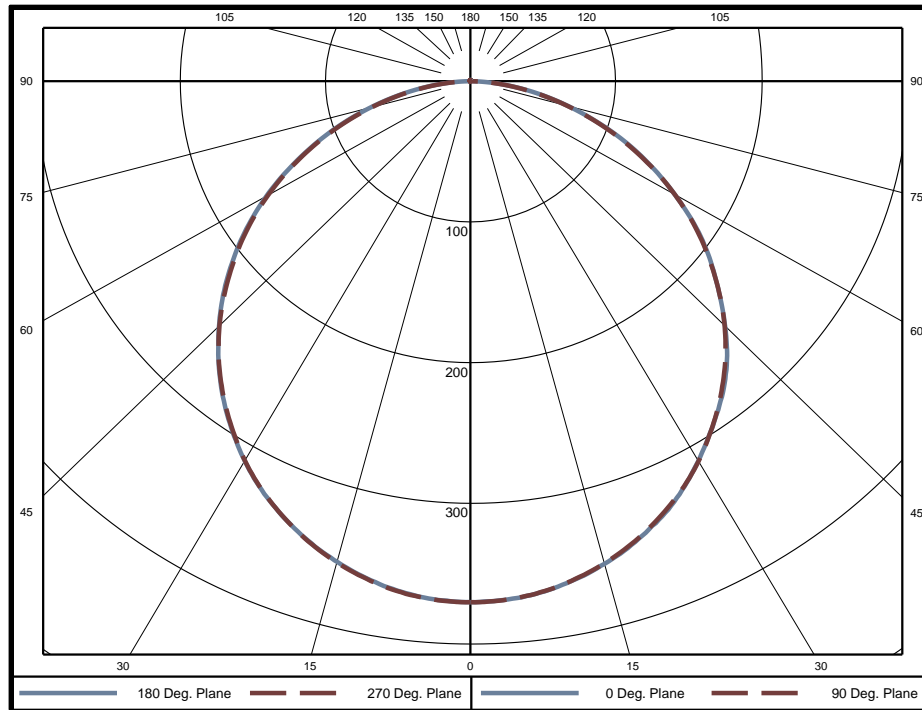
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.1265 A	14.38 W	0.947	60 Hz	31.9 %

Summary of Results

Spacing Criteria
 0-180: 1.25
 90-270: 1.25

Total Lumen Output: 1056 Lumens
Luminaire Efficacy: 73.5 lm/w
Maximum Candela: 370 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	8.83	0.8%	60-65	71.33	6.8%	120-125	0	0.0%
5-10	26.18	2.5%	65-70	58.64	5.6%	125-130	0	0.0%
10-15	42.58	4.0%	70-75	44.58	4.2%	130-135	0	0.0%
15-20	57.52	5.4%	75-80	30.11	2.9%	135-140	0	0.0%
20-25	70.52	6.7%	80-85	16.28	1.5%	140-145	0	0.0%
25-30	81.21	7.7%	85-90	4.38	0.4%	145-150	0	0.0%
30-35	89.05	8.4%	90-95	0	0.0%	150-155	0	0.0%
35-40	93.99	8.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	95.79	9.1%	100-105	0	0.0%	160-165	0	0.0%
45-50	94.18	8.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	89.46	8.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	81.85	7.8%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	470	44.5%
0-60	831	78.7%
0-90	1056	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical 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	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3	370.3
	5	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6	368.6
	10	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2	363.2
	15	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7
	20	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3	343.3
	25	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3	329.3
	30	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4	312.4
	35	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5
	40	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8
	45	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4
	50	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7	219.7
	55	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9
	60	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2	162.2
	65	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2
	70	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5
	75	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
80	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	
85	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	
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	0.0	0.0	0.0	0.0	
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	

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

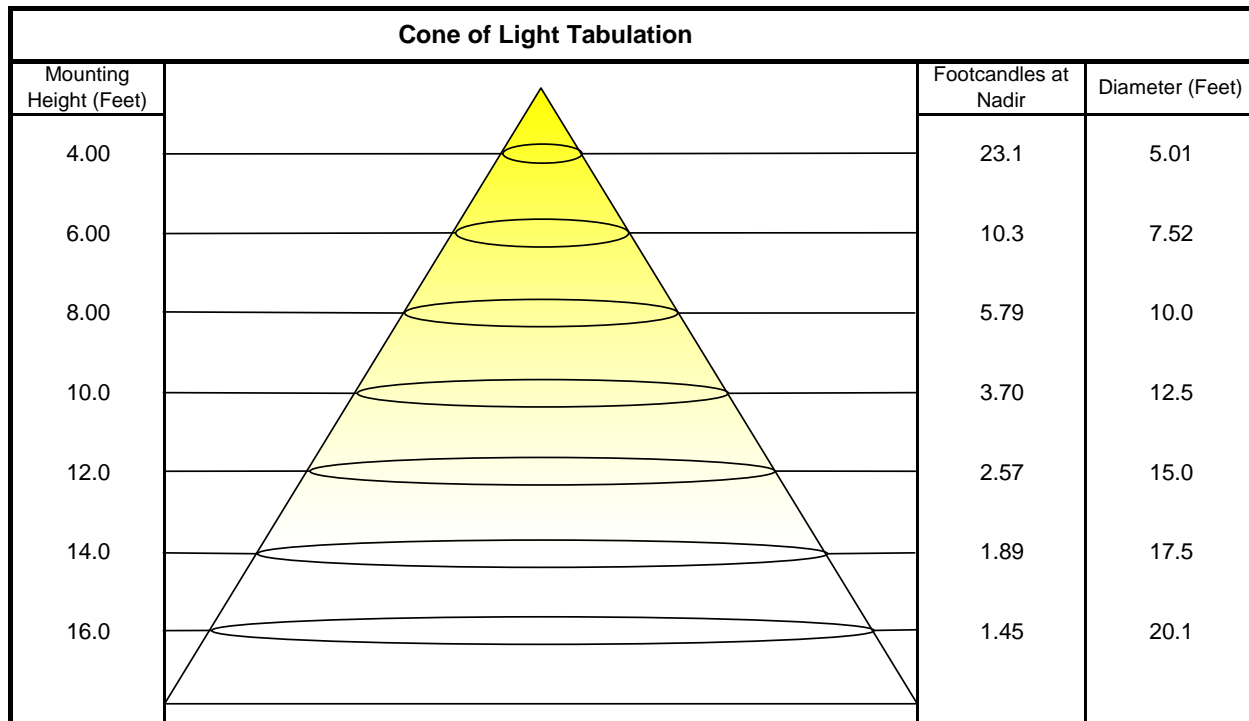
Vertical Angle (Degrees)	0	45	90	
	0	22100	22100	22100
	45	20800	20800	20800
	55	19970	19970	19970
	65	18530	18530	18530
	75	16250	16250	16250
	85	12360	12360	12360



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	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	1258	1258	1258	1258	1228	1228	1228	1228	1174	1174	1174	1124	1124	1124	1078	1078	1078	1056
1	1148	1097	1051	1010	1119	1073	1031	993	1028	993	962	986	958	932	948	926	905	882
2	1043	955	882	821	1015	935	868	811	897	841	792	862	815	774	830	791	756	733
3	950	838	751	681	924	821	740	675	789	720	663	760	701	651	733	683	640	617
4	869	741	648	576	845	727	640	572	701	624	564	676	610	556	653	596	549	526
5	799	662	566	496	777	650	560	493	628	548	487	607	537	482	587	526	477	454
6	738	596	500	432	717	586	496	430	566	486	426	548	477	422	532	468	419	397
7	684	540	447	381	665	531	443	380	515	435	377	499	428	374	485	421	371	350
8	636	492	402	340	620	485	399	339	471	393	337	458	386	334	445	381	332	312
9	594	452	365	306	579	445	362	305	433	357	303	422	352	301	411	347	300	280
10	557	417	333	277	544	411	331	276	401	326	275	391	322	274	381	318	272	254

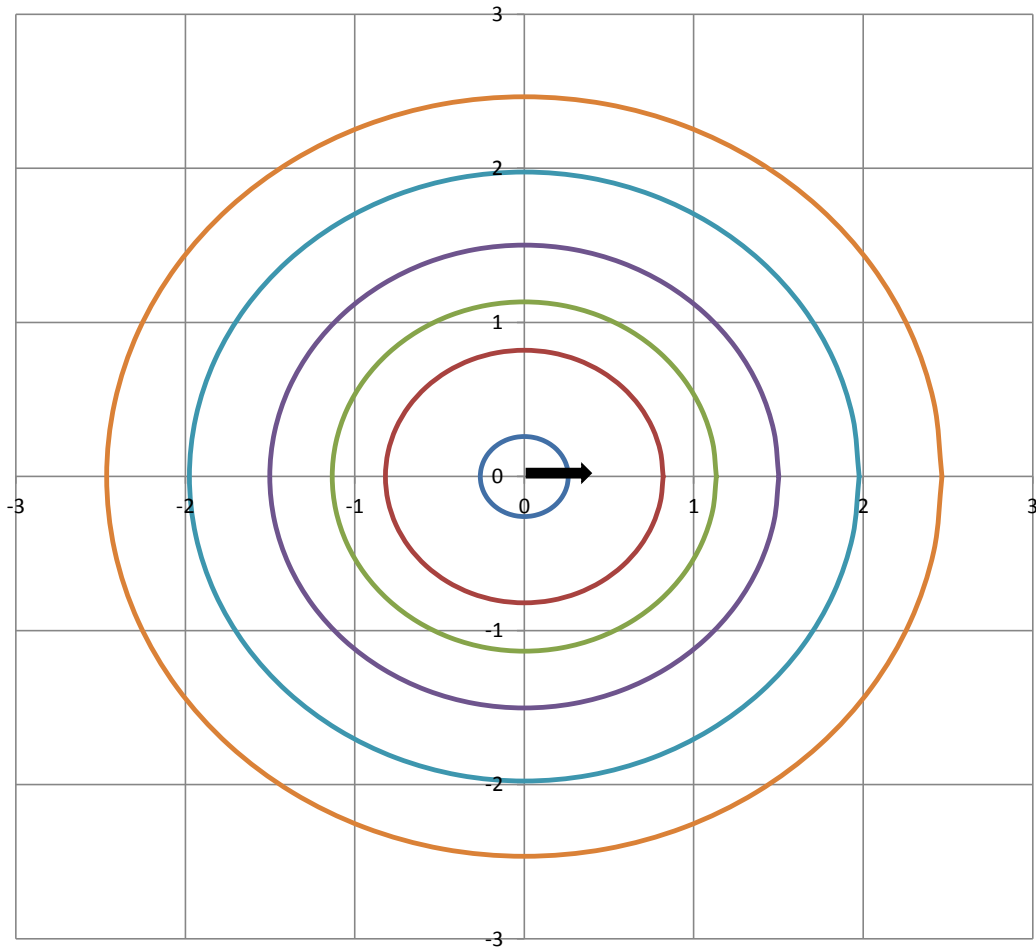
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	370.3 Candela
Central Cone Intensity:	370 Candela
Beam Flux:	768.9 Lumens
Beam Angle (0-180):	112.3 Degrees
Beam Angle (90-270):	112.3 Degrees
Field Angle (0-180):	162.1 Degrees
Field Angle (90-270):	162.1 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

