



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Indoor Distribution Test Report

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

Prepared For
Simkar Corporation

Andre Duljas
700 Ramona Ave
Philadelphia, PA 19120
United States

Catalog Number
RG2LEDM433041U1

Order Number
10767861
Test Number
1056630

Test Date

2015-05-06

Prepared By

Dane Hernandez-Adams, Technician

Approved By

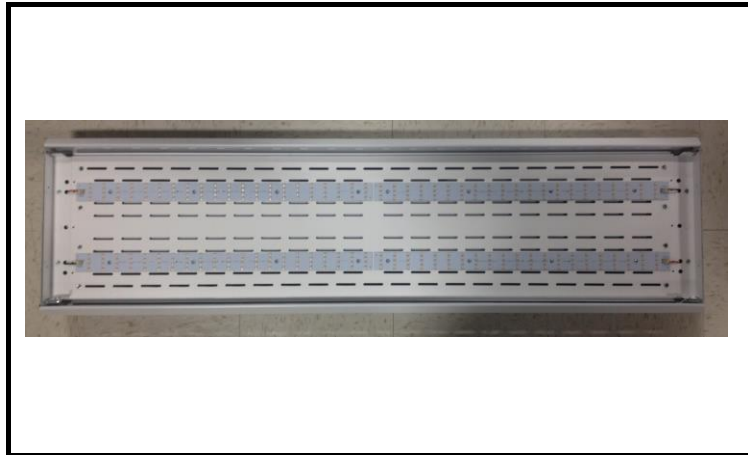
Eric Gaudreau, Engineering Project Handler

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.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: White steel housing, white steel reflector plate, no enclosure
Lamp: 336 white LEDs, four boards with 84 LEDs each
Mounting: Pendant
Ballast/Driver: Two Eagle Rise ELS150-3150P

Luminaire



Luminaire Characteristics

Luminous Length: 48.00 in.
Luminous Width: 12.00 in.

Summary of Results

Total Luminaire Output: 33740 Lumens
Luminaire Efficacy: 102.4 lm/w
Maximum Candela: 11355 Candela

Electrical Data

Test Temperature: 25.1 °C
Voltage: 120.0 VAC
Current: 2.759 A
Power: 329.4 W
Power Factor: 0.994
Frequency: 60 Hz
Current THD: 6.02 %

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
25.1 °C	120.0 VAC	2.759 A	329.4 W	0.994	60 Hz	6.02 %

Summary of Results

Spacing Criteria

0-180: 1.30
90-270: 1.30

Total Lumen Output:

33740 Lumens

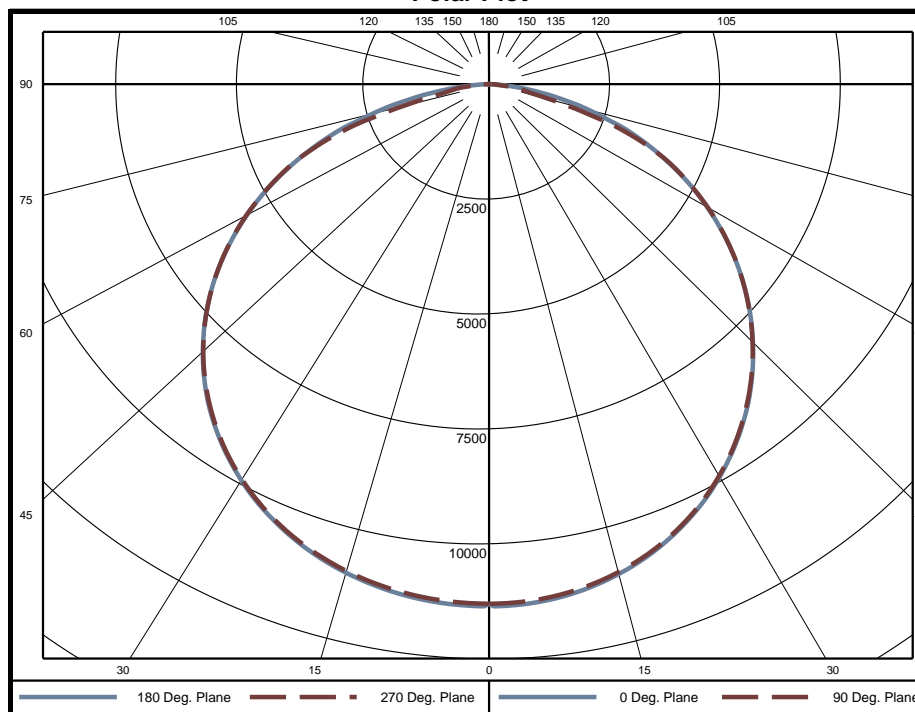
Luminaire Efficacy:

102.4 lm/w

Maximum Candela:

11355 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	270	0.8%	60-65	2427	7.2%	120-125	0	0.0%
5-10	802	2.4%	65-70	2004	5.9%	125-130	0	0.0%
10-15	1311	3.9%	70-75	1446	4.3%	130-135	0	0.0%
15-20	1783	5.3%	75-80	792	2.3%	135-140	0	0.0%
20-25	2202	6.5%	80-85	331	1.0%	140-145	0	0.0%
25-30	2554	7.6%	85-90	61	0.2%	145-150	0	0.0%
30-35	2828	8.4%	90-95	3	0.0%	150-155	0	0.0%
35-40	3013	8.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	3102	9.2%	100-105	0	0.0%	160-165	0	0.0%
45-50	3088	9.2%	105-110	0	0.0%	165-170	0	0.0%
50-55	2972	8.8%	110-115	0	0.0%	170-175	0	0.0%
55-60	2750	8.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	14763	43.8%
0-60	24121	79.1%
0-90	33736	100.0%
90-180	3	0.0%



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	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300	11300
5	11320	11300	11240	11230	11260	11230	11240	11300	11320	11300	11240	11230	11260	11230	11240	11300
10	11200	11190	11120	11120	11150	11120	11120	11190	11200	11190	11120	11120	11150	11120	11120	11190
15	10990	10990	10930	10930	10950	10930	10930	10990	10990	10990	10930	10930	10950	10930	10930	10990
20	10710	10710	10660	10650	10680	10650	10660	10710	10710	10710	10660	10650	10680	10650	10660	10710
25	10340	10350	10290	10290	10320	10290	10290	10350	10340	10350	10290	10290	10320	10290	10290	10350
30	9885	9904	9845	9843	9860	9843	9845	9904	9885	9904	9845	9843	9860	9843	9845	9904
35	9348	9374	9314	9311	9324	9311	9314	9374	9348	9374	9314	9311	9324	9311	9314	9374
40	8728	8761	8708	8702	8706	8702	8708	8761	8728	8761	8708	8702	8706	8702	8708	8761
45	8020	8068	8013	8006	8010	8006	8013	8068	8020	8068	8013	8006	8010	8006	8013	8068
50	7242	7296	7249	7239	7236	7239	7249	7296	7242	7296	7249	7239	7236	7239	7249	7296
55	6383	6450	6401	6392	6389	6392	6401	6450	6383	6450	6401	6392	6389	6392	6401	6450
60	5457	5519	5483	5475	5468	5475	5483	5519	5457	5519	5483	5475	5468	5475	5483	5519
65	4460	4524	4495	4485	4481	4485	4495	4524	4460	4524	4495	4485	4481	4485	4495	4524
70	3415	3469	3453	3356	3251	3356	3453	3469	3415	3469	3453	3356	3251	3356	3453	3469
75	2284	2332	2315	1798	1576	1798	2315	2332	2284	2332	2315	1798	1576	1798	2315	2332
80	1247	1309	843	723	735	723	843	1309	1247	1309	843	723	735	723	843	1309
85	416	280	274	170	168	170	274	280	416	280	274	170	168	170	274	280
90	5	14	11	8	5	8	11	14	5	14	11	8	5	8	11	14
95	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	1
100	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
110	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
120	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
130	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
140	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
150	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
160	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
170	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
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

	0	45	90
0	30410	30410	30410
45	30520	30500	30480
55	29950	30030	29970
65	28400	28620	28530
75	23740	24070	16390
85	12850	8460	5182



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	40165	40165	40165	40165	39230	39230	39230	39230	37486	37486	37486	35891	35891	35891	34425	34425	34425	33736
1	36744	35152	33726	32441	35826	34386	33088	31911	32951	31881	30901	31633	30761	29954	30417	29717	29063	28358
2	33371	30583	28277	26338	32480	29944	27823	26022	28743	26956	25413	27635	26142	24831	26611	25377	24276	23543
3	30367	26785	24013	21805	29525	26249	23678	21605	25239	23034	21218	24304	22424	20844	23436	21846	20484	19740
4	27754	23669	20678	18393	26972	23217	20423	18262	22365	19932	18005	21573	19464	17756	20837	19018	17513	16773
5	25483	21098	18033	15771	24766	20716	17835	15681	19994	17453	15505	19322	17087	15332	18695	16737	15164	14438
6	23500	18954	15904	13714	22847	18631	15747	13651	18017	15444	13525	17443	15152	13402	16907	14872	13281	12577
7	21764	17153	14165	12071	21172	16877	14039	12024	16352	13794	11932	15860	13558	11841	15398	13330	11752	11073
8	20240	15628	12728	10735	19705	15391	12625	10700	14940	12425	10631	14516	12231	10562	14117	12044	10495	9844
9	18894	14324	11525	9635	18410	14120	11440	9608	13730	11275	9554	13362	11114	9501	13016	10959	9449	8826
10	17703	13201	10508	8715	17265	13024	10437	8694	12686	10299	8652	12366	10165	8611	12064	10035	8570	7974

Cone of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	706	5.18
6.00	314	7.78
8.00	177	10.4
10.0	113	13.0
12.0	78.5	15.6
14.0	57.7	18.1
16.0	44.1	20.7

Cone of Light Plot

