



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

Photometric Indoor 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
CENLED 24 SSQ 6035U1
Project Number
10546163
Test Number
801108

Test Date

2014-10-29

Prepared By

Derek Smarr

Derek Smarr, Technician

Approved By

Eric M. Gaudreau

Eric Gaudreau, Engineering Project Handler

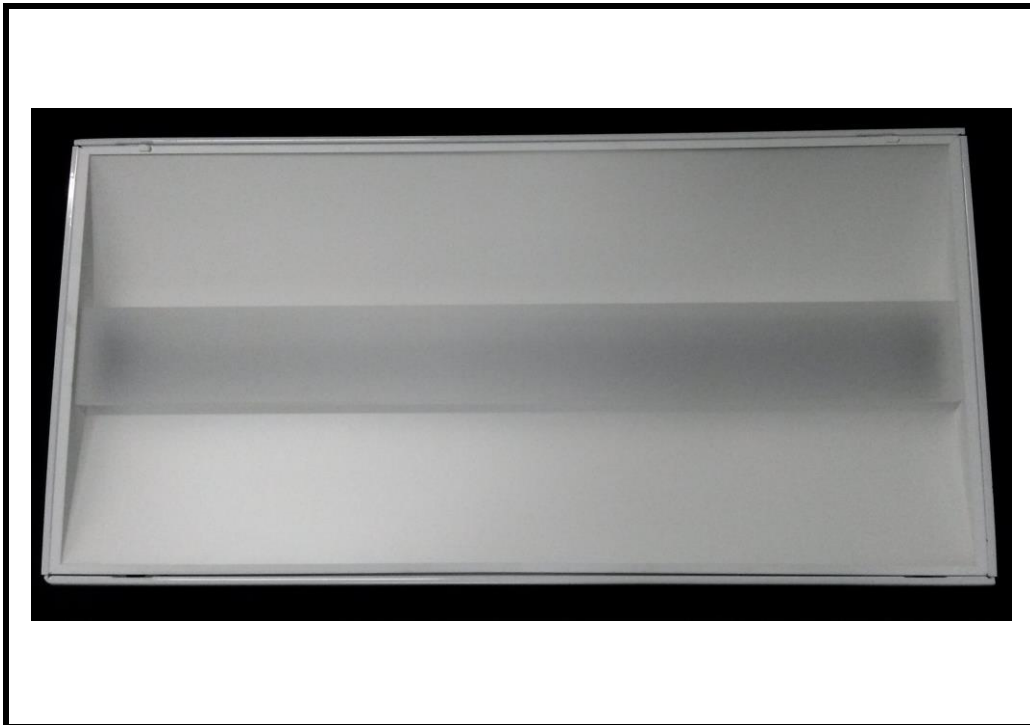
The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



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

Luminaire Description: White housing, white reflectors, frosted plastic enclosed lens
Catalog Number: CENLED 24 SSQ 6035U1
Lamp: 256 white LEDs, four boards with 64 LEDs each
Mounting: Recessed
Ballast/Driver: One EagleRise EWP060C2100LED4P

Luminaire

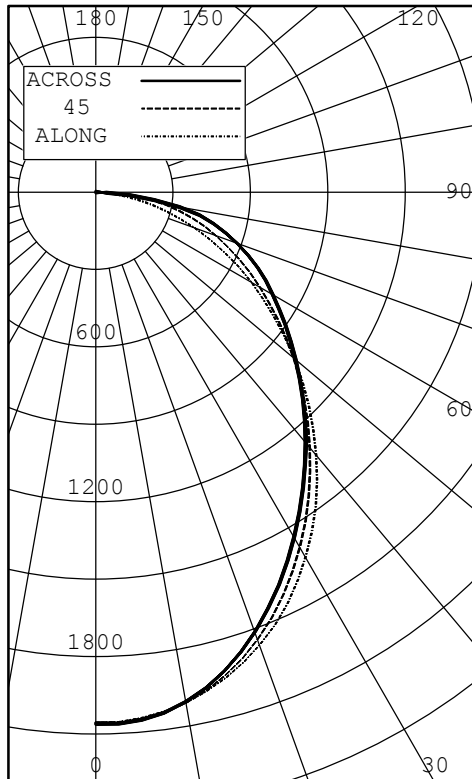


Test Conditions

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.5017 A
Power:	59.81 W
Power Factor:	0.993
Frequency:	60 Hz
Current THD:	7.16 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	2059	2059	2059	2059	2059	
5	2047	2047	2049	2047	2053	197
10	2010	2011	2011	2003	2007	
15	1949	1950	1940	1923	1923	544
20	1864	1863	1842	1815	1811	
25	1758	1753	1721	1687	1679	790
30	1629	1623	1585	1548	1540	
35	1487	1477	1439	1407	1400	900
40	1329	1322	1289	1269	1266	
45	1167	1163	1143	1136	1136	885
50	1004	1006	1002	1007	1011	
55	845	854	863	884	896	777
60	698	714	734	772	791	
65	550	576	613	672	694	614
70	410	445	499	563	586	
75	281	322	389	452	473	405
80	167	211	276	321	332	
85	70	105	126	133	136	131
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1531	29.20
0-40	2431	46.36
0-60	4093	78.07
0-90	5242	100.00
40-90	2812	53.64
60-90	1150	21.93
90-180	0	0.00
0-180	5242	100.00

EFFICACY (LUMENS PER WATT): 87.7

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 46.000 INS
 WIDTH: 22.000 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.1
 SC (ALONG): 1.2, SC (ACROSS): 1.1

ANGLE	ALONG	45	ACROSS
45	2528	2485	2470
55	2255	2312	2402
65	1992	2227	2523
75	1663	2302	2808
85	1228	2212	2399

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0.0	2059	2059	2059	2059	2059	2059	
2.5	2057	2056	2057	2054	2062	2057	
5.0	2047	2047	2049	2047	2053	2048	197
7.5	2032	2032	2034	2030	2036	2032	
10.0	2010	2011	2011	2003	2007	2008	
12.5	1982	1983	1979	1967	1969	1976	
15.0	1949	1950	1940	1923	1923	1937	544
17.5	1910	1910	1894	1872	1869	1891	
20.0	1864	1863	1842	1815	1811	1839	
22.5	1815	1811	1784	1753	1746	1782	
25.0	1758	1753	1721	1687	1679	1720	790
27.5	1695	1690	1655	1618	1609	1654	
30.0	1629	1623	1585	1548	1540	1585	
32.5	1560	1551	1513	1478	1470	1514	
35.0	1487	1477	1439	1407	1400	1442	900
37.5	1409	1400	1364	1337	1331	1368	
40.0	1329	1322	1289	1269	1266	1294	
42.5	1248	1243	1216	1202	1200	1221	
45.0	1167	1163	1143	1136	1136	1149	885
47.5	1086	1084	1073	1071	1073	1077	
50.0	1004	1006	1002	1007	1011	1005	
52.5	923	929	932	944	953	936	
55.0	845	854	863	884	896	868	777
57.5	769	780	796	826	843	802	
60.0	698	714	734	772	791	741	
62.5	623	644	674	724	743	681	
65.0	550	576	613	672	694	620	614
67.5	479	509	554	618	641	560	
70.0	410	445	499	563	586	501	
72.5	344	383	444	508	530	443	
75.0	281	322	389	452	473	385	405
77.5	222	265	332	394	412	327	
80.0	167	211	276	321	332	264	
82.5	116	159	209	228	231	192	
85.0	70	105	126	133	136	117	131
87.5	30	43	43	43	42	42	
90.0	0	0	0	0	0	0	



COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																									
0	1.221	.221	.221	.221	1.191	.191	.191	.191	1.161	.161	.161	.161	1.111	.111	.111	1.061	.061	.061	1.021	.021	.021	1.00			
1	1.121	.071	.030	.99	1.091	.051	.010	.97	1.071	.030	.990	.95	0.980	.950	.92	0.940	.920	.90	0.910	.890	.87	0.85			
2	1.030	.950	.880	.82	1.000	.930	.860	.81	0.980	.910	.850	.80	0.870	.820	.78	0.840	.800	.76	0.810	.780	.75	0.72			
3	0.940	.830	.750	.69	0.920	.820	.740	.68	0.900	.800	.730	.68	0.780	.710	.66	0.750	.700	.65	0.720	.680	.64	0.62			
4	0.870	.750	.660	.60	0.850	.740	.650	.59	0.830	.720	.650	.59	0.700	.630	.58	0.680	.620	.57	0.660	.610	.56	0.54			
5	0.810	.670	.580	.51	0.780	.660	.580	.51	0.760	.650	.570	.51	0.630	.560	.51	0.610	.550	.50	0.590	.540	.49	0.47			
6	0.740	.610	.520	.45	0.720	.600	.510	.45	0.700	.590	.500	.45	0.570	.500	.44	0.550	.490	.44	0.540	.480	.43	0.41			
7	0.680	.540	.460	.40	0.670	.540	.450	.39	0.650	.530	.450	.39	0.510	.440	.39	0.500	.430	.38	0.490	.430	.38	0.36			
8	0.640	.500	.410	.35	0.620	.490	.410	.35	0.610	.480	.400	.35	0.470	.400	.35	0.460	.390	.34	0.440	.380	.34	0.32			
9	0.590	.450	.370	.31	0.580	.450	.360	.31	0.560	.440	.360	.31	0.430	.360	.31	0.420	.350	.30	0.410	.350	.30	0.28			
10	0.550	.410	.330	.28	0.540	.410	.330	.28	0.530	.400	.330	.28	0.390	.320	.27	0.380	.320	.27	0.370	.310	.27	0.25			

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST
 LUMINOUS OPENING OF LUMINAIRE.