



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 6041U1
Project Number
10567095
Test Number
816918

Test Date

2014-11-12

Prepared By

Derek Smarr

Derek Smarr, Technician

Approved By

Eric M. Gaudreau

Eric Gaudreau, Engineering Project Handler

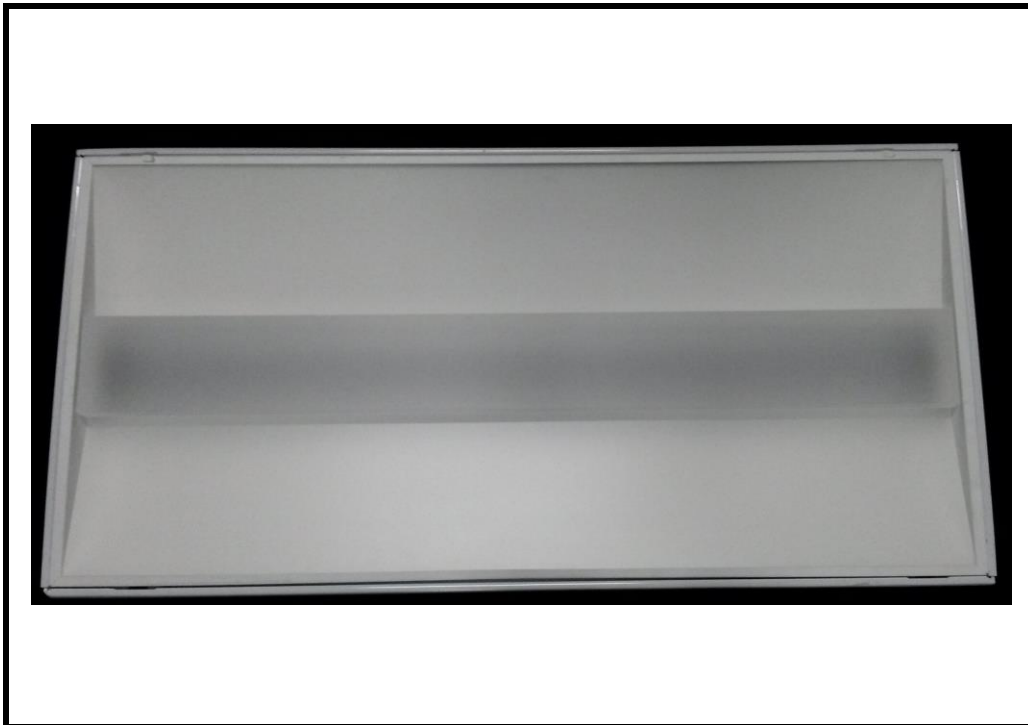
The results contained in this report pertain only to the tested sample.
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Luminaire Description: White housing, white reflectors, frosted plastic enclosed lens
Catalog Number: CENLED 24 SSQ 6041U1
Lamp: 256 white LEDs, four boards with 64 LEDs each
Mounting: Recessed
Ballast/Driver: One EWP060C2100LED4P

Luminaire

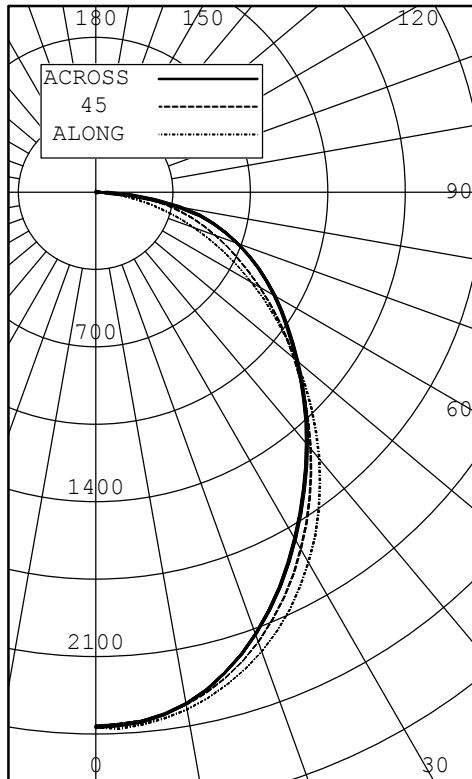


Test Conditions

Test Temperature:	25.2 °C
Voltage:	120.0 VAC
Current:	0.4887 A
Power:	58.38 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	5.14 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	2418	2418	2418	2418	2418	
5	2417	2402	2400	2406	2404	231
10	2375	2361	2354	2354	2350	
15	2304	2290	2273	2262	2253	639
20	2205	2190	2159	2134	2123	
25	2079	2058	2018	1984	1969	928
30	1928	1905	1857	1818	1805	
35	1756	1733	1686	1652	1641	1057
40	1571	1550	1511	1490	1485	
45	1379	1363	1339	1332	1335	1039
50	1184	1177	1173	1181	1189	
55	994	997	1010	1037	1056	910
60	813	827	856	907	934	
65	639	666	711	783	813	714
70	477	516	580	657	685	
75	327	374	453	527	553	472
80	194	247	323	378	386	
85	82	125	150	159	162	155
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1798	29.26
0-40	2855	46.45
0-60	4804	78.16
0-90	6146	100.00
40-90	3291	53.55
60-90	1342	21.84
90-180	0	0.00
0-180	6146	100.00

EFFICACY (LUMENS PER WATT): 105.2

*** 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	2986	2911	2901
55	2655	2706	2830
65	2317	2585	2956
75	1933	2681	3284
85	1443	2634	2856

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	2418	2418	2418	2418	2418	2418	
2.5	2429	2412	2408	2415	2414	2414	
5.0	2417	2402	2400	2406	2404	2405	231
7.5	2400	2385	2381	2386	2383	2386	
10.0	2375	2361	2354	2354	2350	2358	
12.5	2343	2329	2318	2313	2307	2321	
15.0	2304	2290	2273	2262	2253	2276	639
17.5	2258	2243	2220	2202	2192	2223	
20.0	2205	2190	2159	2134	2123	2162	
22.5	2146	2127	2091	2062	2048	2094	
25.0	2079	2058	2018	1984	1969	2021	928
27.5	2005	1984	1940	1901	1887	1943	
30.0	1928	1905	1857	1818	1805	1862	
32.5	1845	1821	1772	1734	1723	1778	
35.0	1756	1733	1686	1652	1641	1692	1057
37.5	1664	1642	1599	1571	1562	1606	
40.0	1571	1550	1511	1490	1485	1520	
42.5	1475	1457	1424	1410	1410	1433	
45.0	1379	1363	1339	1332	1335	1348	1039
47.5	1281	1270	1255	1256	1262	1263	
50.0	1184	1177	1173	1181	1189	1179	
52.5	1088	1086	1090	1107	1121	1097	
55.0	994	997	1010	1037	1056	1017	910
57.5	902	910	931	970	994	940	
60.0	813	827	856	907	934	866	
62.5	725	745	782	845	873	793	
65.0	639	666	711	783	813	722	714
67.5	557	590	644	721	750	652	
70.0	477	516	580	657	685	584	
72.5	400	444	517	593	620	516	
75.0	327	374	453	527	553	449	472
77.5	258	309	388	460	482	382	
80.0	194	247	323	378	386	309	
82.5	135	186	248	269	271	227	
85.0	82	125	150	159	162	139	155
87.5	36	53	54	53	51	51	
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	.22	1.191	.191	.191	.19	1.161	.161	.161	.16	1.111	.111	.111	.11	1.061	.061	.061	.06	1.021	.021	.021	.02	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	.720	.67	0.750	.700	.65	0.720	.680	.64	0.62			
4	0.870	.750	.660	.60	0.850	.740	.660	.59	0.830	.720	.650	.59	0.700	.630	.58	0.680	.620	.57	0.660	.610	.57	0.54			
5	0.810	.670	.580	.52	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	.510	.45	0.570	.500	.44	0.550	.490	.44	0.540	.480	.43	0.42			
7	0.680	.540	.460	.40	0.670	.540	.450	.40	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	.390	.34	0.32			
9	0.590	.450	.370	.31	0.580	.450	.370	.31	0.560	.440	.360	.31	0.430	.360	.31	0.420	.350	.30	0.410	.350	.30	0.29			
10	0.550	.410	.330	.28	0.540	.410	.330	.28	0.530	.400	.330	.28	0.390	.320	.28	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.