



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 22 SSQ 4341U1
Project Number
10567095
Test Number
816919

Test Date

2014-11-12

Prepared By

Handwritten signature of Derek Smarr in black ink.

Derek Smarr, Technician

Approved By

Handwritten signature of Eric M. Gaudreau in black ink.

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 22 SSQ 4341U1
Lamp: 128 white LEDs
Mounting: Recessed
Ballast/Driver: One EWP054C1500 LED4P

Luminaire

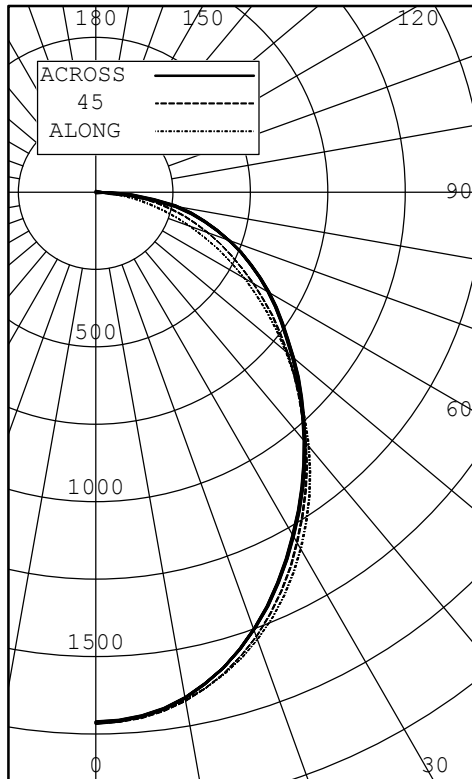


Test Conditions

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.3538 A
Power:	42.32 W
Power Factor:	0.997
Frequency:	60 Hz
Current THD:	2.85 %



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1713	1713	1713	1713	1713	
5	1701	1707	1705	1699	1700	164
10	1666	1674	1669	1660	1660	
15	1611	1618	1607	1593	1591	451
20	1535	1540	1523	1504	1500	
25	1439	1441	1420	1397	1392	651
30	1326	1327	1303	1281	1277	
35	1202	1203	1181	1164	1164	738
40	1069	1070	1053	1046	1049	
45	933	937	929	931	937	719
50	803	808	810	821	832	
55	676	687	697	718	734	627
60	554	568	586	621	644	
65	438	456	482	529	553	486
70	328	351	387	436	460	
75	226	251	295	342	364	312
80	135	161	204	246	262	
85	57	76	99	111	118	104
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1265	29.77
0-40	2003	47.12
0-60	3349	78.78
0-90	4251	100.00
40-90	2248	52.88
60-90	902	21.22
90-180	0	0.00
0-180	4251	100.00

EFFICACY (LUMENS PER WATT): 100.5

*** THIS IS AN ABSOLUTE TEST ***

LUMINOUS LENGTH: 21.750 INS
 WIDTH: 21.750 INS

LUMINANCE SUMMARY CD./SQ.M.

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

ANGLE	ALONG	45	ACROSS
45	4325	4319	4360
55	3864	3997	4209
65	3395	3753	4301
75	2863	3733	4630
85	2139	3727	4439

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	1713	1713	1713	1713	1713	1713	
2.5	1711	1717	1713	1707	1709	1712	
5.0	1701	1707	1705	1699	1700	1703	164
7.5	1687	1694	1690	1683	1684	1688	
10.0	1666	1674	1669	1660	1660	1666	
12.5	1641	1648	1641	1630	1628	1638	
15.0	1611	1618	1607	1593	1591	1605	451
17.5	1576	1582	1568	1551	1548	1565	
20.0	1535	1540	1523	1504	1500	1521	
22.5	1489	1493	1474	1452	1448	1472	
25.0	1439	1441	1420	1397	1392	1418	651
27.5	1384	1386	1363	1340	1335	1362	
30.0	1326	1327	1303	1281	1277	1303	
32.5	1264	1266	1242	1223	1220	1243	
35.0	1202	1203	1181	1164	1164	1182	738
37.5	1137	1137	1117	1105	1106	1120	
40.0	1069	1070	1053	1046	1049	1057	
42.5	1001	1003	989	988	992	994	
45.0	933	937	929	931	937	933	719
47.5	867	872	869	875	885	873	
50.0	803	808	810	821	832	814	
52.5	738	745	751	767	781	756	
55.0	676	687	697	718	734	702	627
57.5	614	627	641	668	689	647	
60.0	554	568	586	621	644	594	
62.5	495	511	533	574	598	541	
65.0	438	456	482	529	553	491	486
67.5	382	403	434	483	507	441	
70.0	328	351	387	436	460	392	
72.5	276	300	340	389	412	343	
75.0	226	251	295	342	364	296	312
77.5	179	204	249	296	318	249	
80.0	135	161	204	246	262	202	
82.5	94	118	157	182	191	150	
85.0	57	76	99	111	118	93	104
87.5	24	32	39	44	48	38	
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	.96	0.980	.950	.93	0.940	.920	.90	0.910	.890	.87	0.85			
	2	1.030	.950	.880	.82	1.000	.930	.870	.81	0.980	.910	.850	.80	0.870	.830	.78	0.840	.800	.77	0.810	.780	.75	0.73			
	3	0.940	.840	.760	.69	0.920	.820	.750	.69	0.900	.810	.740	.68	0.780	.720	.67	0.750	.700	.66	0.730	.690	.65	0.63			
	4	0.870	.750	.670	.60	0.850	.740	.660	.60	0.830	.730	.650	.59	0.700	.640	.59	0.680	.620	.58	0.660	.610	.57	0.55			
	5	0.810	.680	.590	.52	0.790	.670	.580	.52	0.770	.650	.570	.52	0.630	.560	.51	0.610	.550	.51	0.600	.540	.50	0.48			
	6	0.750	.610	.520	.46	0.730	.600	.520	.46	0.710	.590	.510	.45	0.570	.500	.45	0.560	.490	.44	0.540	.480	.44	0.42			
	7	0.690	.550	.460	.41	0.670	.540	.460	.40	0.660	.530	.450	.40	0.520	.440	.39	0.500	.440	.39	0.490	.430	.39	0.37			
	8	0.640	.500	.420	.36	0.620	.490	.410	.35	0.610	.480	.410	.35	0.470	.400	.35	0.460	.400	.35	0.450	.390	.35	0.33			
	9	0.590	.460	.370	.31	0.580	.450	.370	.31	0.570	.440	.370	.31	0.430	.360	.31	0.420	.360	.31	0.410	.350	.31	0.29			
	10	0.550	.420	.330	.28	0.540	.410	.330	.28	0.530	.410	.330	.28	0.400	.330	.28	0.390	.320	.28	0.380	.320	.27	0.26			

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.