



IES INDOOR REPORT
PHOTOMETRIC FILENAME : CPG-LED-10L-CA-W-40.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 3355
[TESTLAB] TUV SUD America
[TESTDATE] 2/22/2018 9:36:15 AM
[ISSUE DATE] 04/24/2018
[MANUFACTURER] LSI INDUSTRIES, INC
[LUMCAT] CPG-LED-10L-CA-W-50
[OTHER] TEST PROCEDURE: IESNA
[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9830
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	79.57
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.46
Spacing Criterion (90-270)	1.74
Spacing Criterion (Diagonal)	2.98
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.58 ft
Luminous Width (90-270)	0.58 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	105692	88804	79357
55	162878	174124	154897
65	144901	316355	133125
75	52862	40336	31075
85	11084	13554	7157

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945
2.5	1375.650	1372.660	1370.072	1366.911	1368.085	1366.911	1370.072	1372.660	1375.650	1372.660
5.0	1380.005	1371.838	1360.379	1351.981	1349.794	1351.981	1360.379	1371.838	1380.005	1371.838
7.5	1392.758	1377.356	1349.332	1338.415	1339.549	1338.415	1349.332	1377.356	1392.758	1377.356
10.0	1411.982	1387.129	1348.208	1336.810	1339.971	1336.810	1348.208	1387.129	1411.982	1387.129
12.5	1434.679	1399.781	1358.322	1340.603	1342.479	1340.603	1358.322	1399.781	1434.679	1399.781
15.0	1463.255	1419.688	1374.587	1346.322	1344.004	1346.322	1374.587	1419.688	1463.255	1419.688
17.5	1502.667	1448.565	1395.246	1357.951	1350.757	1357.951	1395.246	1448.565	1502.667	1448.565
20.0	1531.042	1479.590	1420.832	1374.607	1360.178	1374.607	1420.832	1479.590	1531.042	1479.590
22.5	1561.535	1506.951	1453.392	1394.574	1369.951	1394.574	1453.392	1506.951	1561.535	1506.951
25.0	1594.987	1537.123	1488.670	1414.892	1378.209	1414.892	1488.670	1537.123	1594.987	1537.123
27.5	1638.192	1577.117	1521.761	1435.792	1390.631	1435.792	1521.761	1577.117	1638.192	1577.117
30.0	1695.756	1630.667	1558.585	1463.104	1410.387	1463.104	1558.585	1630.667	1695.756	1630.667
32.5	1771.069	1698.274	1606.084	1500.409	1439.655	1500.409	1606.084	1698.274	1771.069	1698.274
35.0	1867.763	1780.490	1668.233	1544.337	1475.496	1544.337	1668.233	1780.490	1867.763	1780.490
37.5	1975.786	1876.683	1737.957	1586.609	1510.824	1586.609	1737.957	1876.683	1975.786	1876.683
40.0	2093.100	1986.121	1800.748	1634.490	1563.612	1634.490	1800.748	1986.121	2093.100	1986.121
42.5	2221.833	2113.920	1877.907	1701.445	1644.182	1701.445	1877.907	2113.920	2221.833	2113.920
45.0	2364.552	2267.717	1986.733	1807.862	1775.383	1807.862	1986.733	2267.717	2364.552	2267.717
47.5	2518.459	2443.136	2147.834	1978.004	1960.926	1978.004	2147.834	2443.136	2518.459	2443.136
50.0	2678.336	2664.118	2386.756	2231.525	2211.006	2231.525	2386.756	2664.118	2678.336	2664.118
52.5	2836.888	2940.436	2716.614	2579.424	2510.753	2579.424	2716.614	2940.436	2836.888	2940.436
55.0	2955.788	3250.096	3159.883	2999.013	2810.961	2999.013	3159.883	3250.096	2955.788	3250.096
57.5	2972.725	3523.755	3712.951	3370.440	3012.297	3370.440	3712.951	3523.755	2972.725	3523.755
60.0	2841.022	3636.283	4242.660	3583.827	3036.208	3583.827	4242.660	3636.283	2841.022	3636.283
62.5	2501.030	3458.737	4520.122	3510.280	2624.656	3510.280	4520.122	3458.737	2501.030	3458.737
65.0	1937.498	2852.702	4230.027	2948.473	1780.039	2948.473	4230.027	2852.702	1937.498	2852.702
67.5	1281.474	1897.674	3186.342	1891.443	872.500	1891.443	3186.342	1897.674	1281.474	1897.674
70.0	740.507	956.764	1737.104	808.847	375.110	808.847	1737.104	956.764	740.507	956.764
72.5	479.159	477.072	661.462	367.735	277.221	367.735	661.462	477.072	479.159	477.072
75.0	432.874	365.949	330.299	293.727	254.465	293.727	330.299	365.949	432.874	365.949
77.5	390.813	347.226	295.854	257.304	216.678	257.304	295.854	347.226	390.813	347.226
80.0	340.303	290.395	265.522	218.082	149.843	218.082	265.522	290.395	340.303	290.395
82.5	163.880	171.205	141.515	132.565	76.587	132.565	141.515	171.205	163.880	171.205
85.0	30.563	45.583	37.376	32.820	19.736	32.820	37.376	45.583	30.563	45.583
87.5	2.268	2.789	3.241	2.087	1.696	2.087	3.241	2.789	2.268	2.789
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945	1373.945
2.5	1370.072	1366.911	1368.085	1366.911	1370.072	1372.660	1375.650
5.0	1360.379	1351.981	1349.794	1351.981	1360.379	1371.838	1380.005
7.5	1349.332	1338.415	1339.549	1338.415	1349.332	1377.356	1392.758
10.0	1348.208	1336.810	1339.971	1336.810	1348.208	1387.129	1411.982
12.5	1358.322	1340.603	1342.479	1340.603	1358.322	1399.781	1434.679
15.0	1374.587	1346.322	1344.004	1346.322	1374.587	1419.688	1463.255
17.5	1395.246	1357.951	1350.757	1357.951	1395.246	1448.565	1502.667
20.0	1420.832	1374.607	1360.178	1374.607	1420.832	1479.590	1531.042
22.5	1453.392	1394.574	1369.951	1394.574	1453.392	1506.951	1561.535
25.0	1488.670	1414.892	1378.209	1414.892	1488.670	1537.123	1594.987
27.5	1521.761	1435.792	1390.631	1435.792	1521.761	1577.117	1638.192
30.0	1558.585	1463.104	1410.387	1463.104	1558.585	1630.667	1695.756
32.5	1606.084	1500.409	1439.655	1500.409	1606.084	1698.274	1771.069
35.0	1668.233	1544.337	1475.496	1544.337	1668.233	1780.490	1867.763
37.5	1737.957	1586.609	1510.824	1586.609	1737.957	1876.683	1975.786
40.0	1800.748	1634.490	1563.612	1634.490	1800.748	1986.121	2093.100
42.5	1877.907	1701.445	1644.182	1701.445	1877.907	2113.920	2221.833
45.0	1986.733	1807.862	1775.383	1807.862	1986.733	2267.717	2364.552
47.5	2147.834	1978.004	1960.926	1978.004	2147.834	2443.136	2518.459
50.0	2386.756	2231.525	2211.006	2231.525	2386.756	2664.118	2678.336
52.5	2716.614	2579.424	2510.753	2579.424	2716.614	2940.436	2836.888
55.0	3159.883	2999.013	2810.961	2999.013	3159.883	3250.096	2955.788
57.5	3712.951	3370.440	3012.297	3370.440	3712.951	3523.755	2972.725
60.0	4242.660	3583.827	3036.208	3583.827	4242.660	3636.283	2841.022
62.5	4520.122	3510.280	2624.656	3510.280	4520.122	3458.737	2501.030
65.0	4230.027	2948.473	1780.039	2948.473	4230.027	2852.702	1937.498
67.5	3186.342	1891.443	872.500	1891.443	3186.342	1897.674	1281.474
70.0	1737.104	808.847	375.110	808.847	1737.104	956.764	740.507
72.5	661.462	367.735	277.221	367.735	661.462	477.072	479.159
75.0	330.299	293.727	254.465	293.727	330.299	365.949	432.874
77.5	295.854	257.304	216.678	257.304	295.854	347.226	390.813
80.0	265.522	218.082	149.843	218.082	265.522	290.395	340.303

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CANDELA TABULATION - (Cont.)

82.5	141.515	132.565	76.587	132.565	141.515	171.205	163.880
85.0	37.376	32.820	19.736	32.820	37.376	45.583	30.563
87.5	3.241	2.087	1.696	2.087	3.241	2.789	2.268
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	525.10	N.A.	5.30
0-30	1214.06	N.A.	12.40
0-40	2267.43	N.A.	23.10
0-60	6624.53	N.A.	67.40
0-80	9746.91	N.A.	99.20
0-90	9830.15	N.A.	100.00
10-90	9700.15	N.A.	98.70
20-40	1742.33	N.A.	17.70
20-50	3348.73	N.A.	34.10
40-70	7021.52	N.A.	71.40
60-80	3122.38	N.A.	31.80
70-80	457.96	N.A.	4.70
80-90	83.24	N.A.	0.80
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	9830.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	130.00
10-20	395.09
20-30	688.96
30-40	1053.37
40-50	1606.39
50-60	2750.7
60-70	2664.42
70-80	457.96
80-90	83.24
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

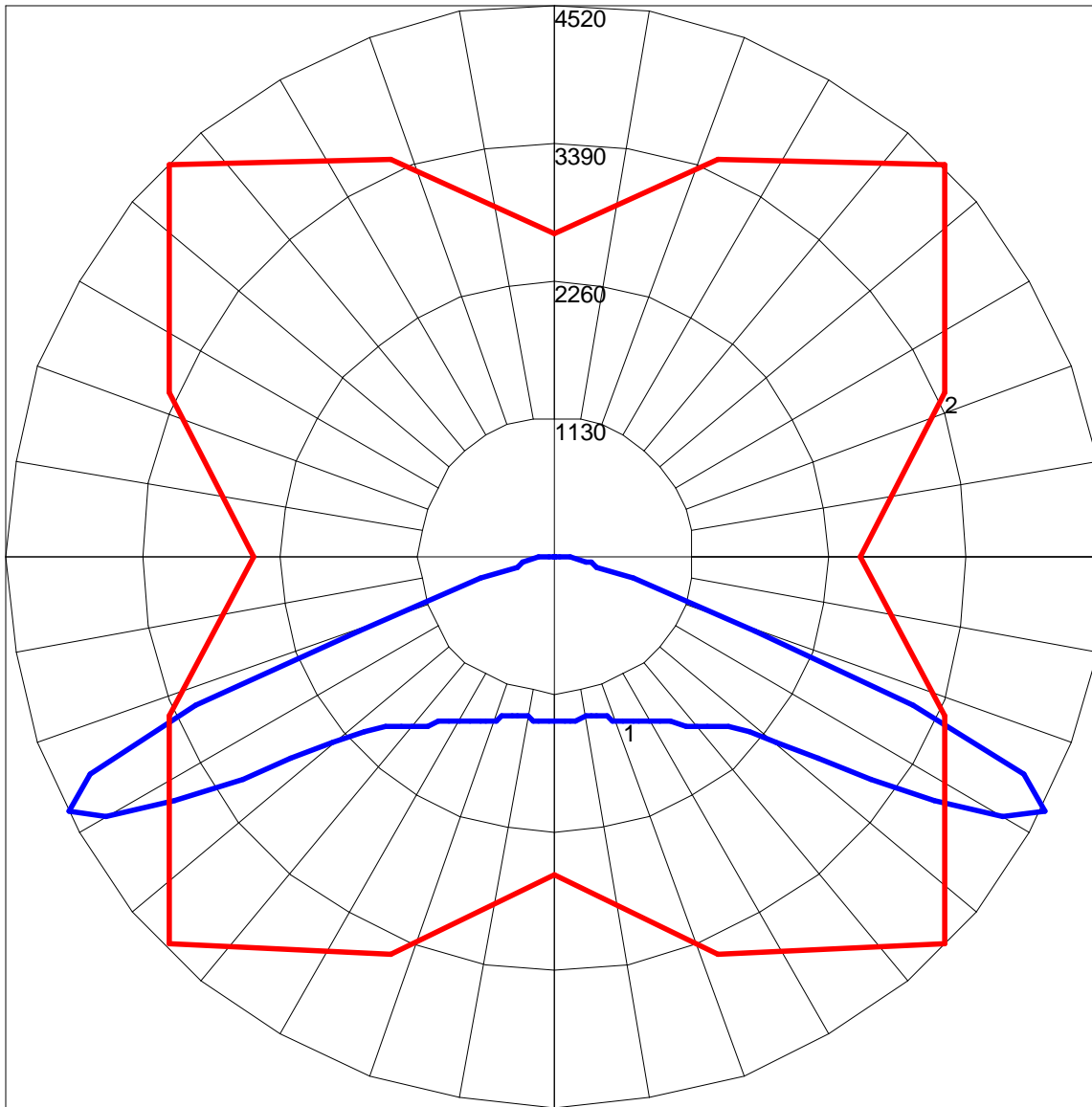
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	107	102	97	93	105	100	96	92	96	92	89	92	89	86	88	86	83	81
2	96	86	78	72	93	84	77	71	80	74	69	77	72	67	74	70	66	63
3	85	73	63	56	82	71	62	55	68	60	54	65	58	53	62	57	52	50
4	76	62	52	44	74	61	51	44	58	50	43	55	48	42	53	47	42	39
5	69	54	43	35	66	52	43	35	50	41	35	48	40	34	46	39	34	31
6	62	47	37	29	60	46	36	29	44	35	29	42	34	28	40	33	28	26
7	57	41	31	24	55	41	31	24	39	30	24	37	30	24	36	29	24	21
8	52	37	27	21	51	36	27	21	35	26	21	34	26	20	32	25	20	18
9	48	33	24	18	47	33	24	18	32	23	18	30	23	18	29	22	17	15
10	45	30	22	16	44	30	21	16	29	21	16	28	21	15	27	20	15	13

POLAR GRAPH



Maximum Candela = 4520.122 Located At Horizontal Angle = 45, Vertical Angle = 62.5
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)