



IES INDOOR REPORT
PHOTOMETRIC FILENAME : CPG-LED-3L-CA-W-50.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 3368
[TESTLAB] TUV SUD America
[TESTDATE] 3/19/2018 5:13:29 PM
[ISSUE DATE] 04/24/2018
[MANUFACTURER] LSI INDUSTRIES, INC
[LUMCAT] CPG-LED-3L-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	3524
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	24.55
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.54
Spacing Criterion (90-270)	1.78
Spacing Criterion (Diagonal)	2.98
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.58 ft
Luminous Width (90-270)	0.58 ft
Luminous Height	0.08 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	33488	26960	24778
55	49635	50314	47679
65	36269	78315	31845
75	13002	7984	7389
85	1445	1129	600

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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	490.464	490.464	490.464	490.464	490.464	490.464	490.464	490.464	490.464	490.464
2.5	490.906	489.475	488.444	487.739	488.381	487.739	488.444	489.475	490.906	489.475
5.0	491.117	488.781	484.772	482.267	482.120	482.267	484.772	488.781	491.117	488.781
7.5	495.768	491.043	481.731	478.774	479.626	478.774	481.731	491.043	495.768	491.043
10.0	503.859	495.147	482.646	478.826	480.457	478.826	482.646	495.147	503.859	495.147
12.5	513.519	500.597	487.339	480.784	481.878	480.784	487.339	500.597	513.519	500.597
15.0	524.241	508.132	494.063	484.224	483.351	484.224	494.063	508.132	524.241	508.132
17.5	539.236	519.422	502.733	489.380	486.613	489.380	502.733	519.422	539.236	519.422
20.0	550.158	532.449	513.435	496.473	491.096	496.473	513.435	532.449	550.158	532.449
22.5	561.018	543.561	526.462	505.112	495.915	505.112	526.462	543.561	561.018	543.561
25.0	575.865	557.650	542.635	515.276	501.187	515.276	542.635	557.650	575.865	557.650
27.5	594.237	574.823	557.945	525.841	507.521	525.841	557.945	574.823	594.237	574.823
30.0	618.228	597.373	575.960	539.731	517.318	539.731	575.960	597.373	618.228	597.373
32.5	647.050	624.647	598.888	557.524	529.797	557.524	598.888	624.647	647.050	624.647
35.0	680.606	656.078	627.236	576.665	541.698	576.665	627.236	656.078	680.606	656.078
37.5	716.782	688.077	652.690	590.891	551.979	590.891	652.690	688.077	716.782	688.077
40.0	757.494	724.611	671.009	603.876	566.994	603.876	671.009	724.611	757.494	724.611
42.5	804.087	769.553	691.581	621.743	592.501	621.743	691.581	769.553	804.087	769.553
45.0	856.184	822.260	724.958	652.595	633.507	652.595	724.958	822.260	856.184	822.260
47.5	916.057	890.845	779.117	707.838	698.431	707.838	779.117	890.845	916.057	890.845
50.0	983.612	981.181	863.561	798.563	796.522	798.563	863.561	981.181	983.612	981.181
52.5	1043.706	1093.593	993.924	933.125	915.984	933.125	993.924	1093.593	1043.706	1093.593
55.0	1084.449	1214.086	1176.416	1099.265	1041.717	1099.265	1176.416	1214.086	1084.449	1214.086
57.5	1081.703	1311.609	1406.343	1271.381	1133.494	1271.381	1406.343	1311.609	1081.703	1311.609
60.0	1010.655	1333.727	1617.887	1380.268	1133.589	1380.268	1617.887	1333.727	1010.655	1333.727
62.5	853.059	1225.756	1696.922	1315.449	931.957	1315.449	1696.922	1225.756	853.059	1225.756
65.0	633.476	953.233	1500.698	997.733	556.209	997.733	1500.698	953.233	633.476	953.233
67.5	401.802	571.793	1007.635	535.322	248.594	535.322	1007.635	571.793	401.802	571.793
70.0	233.947	269.187	467.125	203.032	120.651	203.032	467.125	269.187	233.947	269.187
72.5	167.823	156.564	175.768	120.314	99.680	120.314	175.768	156.564	167.823	156.564
75.0	163.215	136.161	114.664	107.824	92.756	107.824	114.664	136.161	163.215	136.161
77.5	142.748	130.542	105.088	96.533	79.718	96.533	105.088	130.542	142.748	130.542
80.0	127.606	103.068	90.020	76.741	53.886	76.741	90.020	103.068	127.606	103.068
82.5	59.336	56.822	46.204	45.331	25.801	45.331	46.204	56.822	59.336	56.822
85.0	10.491	12.301	10.302	9.649	4.356	9.649	10.302	12.301	10.491	12.301
87.5	0.000	0.000	0.231	0.105	0.000	0.105	0.231	0.000	0.000	0.000
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	490.464	490.464	490.464	490.464	490.464	490.464	490.464
2.5	488.444	487.739	488.381	487.739	488.444	489.475	490.906
5.0	484.772	482.267	488.120	482.267	484.772	488.781	491.117
7.5	481.731	478.774	479.626	478.774	481.731	491.043	495.768
10.0	482.646	478.826	480.457	478.826	482.646	495.147	503.859
12.5	487.339	480.784	481.878	480.784	487.339	500.597	513.519
15.0	494.063	484.224	483.351	484.224	494.063	508.132	524.241
17.5	502.733	489.380	486.613	489.380	502.733	519.422	539.236
20.0	513.435	496.473	491.096	496.473	513.435	532.449	550.158
22.5	526.462	505.112	495.915	505.112	526.462	543.561	561.018
25.0	542.635	515.276	501.187	515.276	542.635	557.650	575.865
27.5	557.945	525.841	507.521	525.841	557.945	574.823	594.237
30.0	575.960	539.731	517.318	539.731	575.960	597.373	618.228
32.5	598.888	557.524	529.797	557.524	598.888	624.647	647.050
35.0	627.236	576.665	541.698	576.665	627.236	656.078	680.606
37.5	652.690	590.891	551.979	590.891	652.690	688.077	716.782
40.0	671.009	603.876	566.994	603.876	671.009	724.611	757.494
42.5	691.581	621.743	592.501	621.743	691.581	769.553	804.087
45.0	724.958	652.595	633.507	652.595	724.958	822.260	856.184
47.5	779.117	707.838	698.431	707.838	779.117	890.845	916.057
50.0	863.561	798.563	796.522	798.563	863.561	981.181	983.612
52.5	993.924	933.125	915.984	933.125	993.924	1093.593	1043.706
55.0	1176.416	1099.265	1041.717	1099.265	1176.416	1214.086	1084.449
57.5	1406.343	1271.381	1133.494	1271.381	1406.343	1311.609	1081.703
60.0	1617.887	1380.268	1133.589	1380.268	1617.887	1333.727	1010.655
62.5	1696.922	1315.449	931.957	1315.449	1696.922	1225.756	853.059
65.0	1500.698	997.733	556.209	997.733	1500.698	953.233	633.476
67.5	1007.635	535.322	248.594	535.322	1007.635	571.793	401.802
70.0	467.125	203.032	120.651	203.032	467.125	269.187	233.947
72.5	175.768	120.314	99.680	120.314	175.768	156.564	167.823
75.0	114.664	107.824	92.756	107.824	114.664	136.161	163.215
77.5	105.088	96.533	79.718	96.533	105.088	130.542	142.748
80.0	90.020	76.741	53.886	76.741	90.020	103.068	127.606

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CANDELA TABULATION - (Cont.)

82.5	46.204	45.331	25.801	45.331	46.204	56.822	59.336
85.0	10.302	9.649	4.356	9.649	10.302	12.301	10.491
87.5	0.231	0.105	0.000	0.105	0.231	0.000	0.000
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	188.33	N.A.	5.30
0-30	438.98	N.A.	12.50
0-40	827.99	N.A.	23.50
0-60	2431.73	N.A.	69.00
0-80	3495.82	N.A.	99.20
0-90	3523.74	N.A.	100.00
10-90	3477.32	N.A.	98.70
20-40	639.66	N.A.	18.20
20-50	1223.13	N.A.	34.70
40-70	2519.3	N.A.	71.50
60-80	1064.1	N.A.	30.20
70-80	148.54	N.A.	4.20
80-90	27.91	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	3523.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.41
10-20	141.92
20-30	250.65
30-40	389.01
40-50	583.47
50-60	1020.27
60-70	915.56
70-80	148.54
80-90	27.91
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

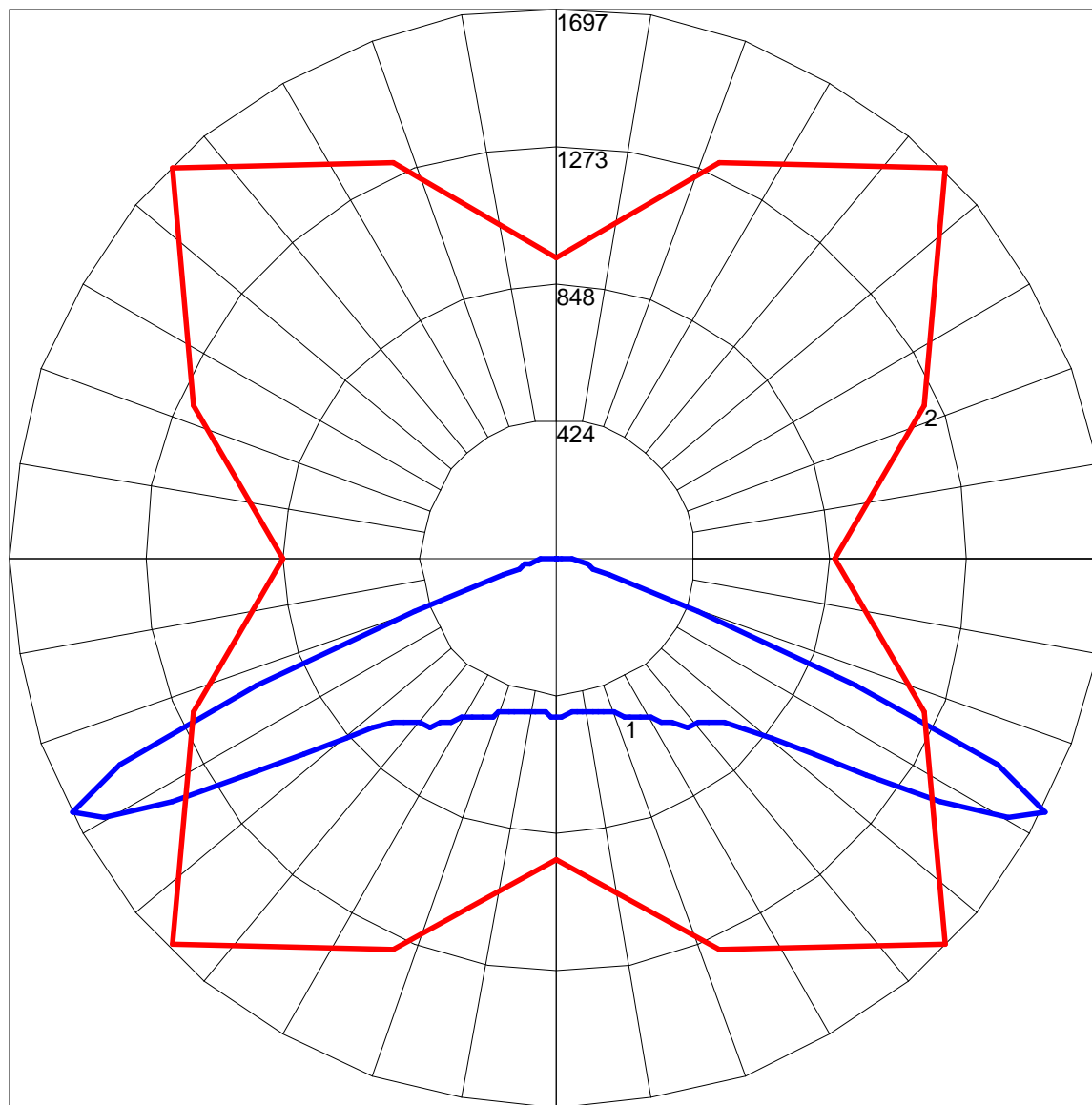
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	108	102	98	93	105	100	96	92	96	92	89	92	89	86	88	86	84	81
2	96	86	79	72	93	84	77	71	81	75	69	77	72	68	74	70	66	64
3	85	73	64	56	83	71	63	56	68	61	55	65	59	54	63	57	53	50
4	76	62	52	44	74	61	52	44	58	50	43	56	49	43	54	47	42	40
5	69	54	44	36	66	53	43	36	50	42	35	48	41	35	46	40	34	32
6	62	47	37	30	60	46	36	29	44	35	29	42	35	29	41	34	28	26
7	57	42	32	25	55	41	31	25	39	31	24	38	30	24	36	29	24	22
8	53	37	28	21	51	37	27	21	35	27	21	34	26	21	32	26	20	18
9	49	34	24	18	47	33	24	18	32	24	18	31	23	18	29	23	18	16
10	45	31	22	16	44	30	22	16	29	21	16	28	21	16	27	20	16	14

POLAR GRAPH



Maximum Candela = 1696.922 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.)