



IES INDOOR REPORT

PHOTOMETRIC FILENAME : O-20-LED4-SO-D9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L041502002
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUE DATE] 4/15/2015
 [MANUFAC] PRUDENTIAL LTG.
 [LUMCAT] O-20-LED4-SO-D9
 [LUMINAIRE] 24"DIA. X 5"H. LED FIXTURE
 [MORE] DIFFUSED LENS
 [BALLASTCAT] OSRAM OPTOTRONIC
 [BALLAST] INPUT: 120-277VAC,
 [LAMPPOSITION] 0,0
 [LAMPCAT] N/A
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4213
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	60
Total Luminaire Watts	70
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	3.00 ft (Diameter)
Luminous Width (90-270)	3.00 ft (Diameter)
Luminous Height	0.42 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1260	1262	1263
55	1121	1120	1122
65	965	963	964
75	711	710	709
85	297	294	289

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CANDELA TABULATION

	0	5	10	15	20	25	30	35	40	45
0	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015
5	1089.059	1088.989	1088.931	1088.837	1088.767	1088.650	1088.626	1088.615	1088.673	1088.720
10	1071.357	1071.334	1071.275	1071.287	1071.369	1071.357	1071.334	1071.310	1071.427	1071.498
15	1042.294	1042.353	1042.400	1042.482	1042.505	1042.482	1042.482	1042.599	1042.751	1042.844
20	1003.450	1003.462	1003.462	1003.579	1003.684	1003.696	1003.743	1003.965	1004.188	1004.328
25	954.381	954.474	954.486	954.591	954.825	954.919	955.083	955.246	955.410	955.562
30	897.413	897.425	897.484	897.636	897.858	897.998	898.127	898.338	898.513	898.630
35	833.812	833.859	833.871	833.976	834.105	834.350	834.538	834.725	834.865	835.052
40	764.057	764.174	764.115	764.221	764.361	764.653	764.958	765.274	765.566	765.706
45	689.773	689.738	689.598	689.633	689.738	689.797	689.809	690.019	690.604	690.920
50	611.161	611.138	610.986	610.869	610.880	610.880	610.939	611.056	611.173	611.337
55	530.057	530.010	529.823	529.741	529.636	529.542	529.565	529.682	529.764	529.870
60	455.961	456.019	455.879	455.797	455.680	455.305	455.107	455.153	455.200	455.270
65	370.387	370.422	370.562	370.223	370.293	370.106	370.106	370.118	370.001	369.907
70	284.602	284.439	284.450	284.322	284.310	284.240	284.216	284.228	284.146	284.123
75	201.404	201.217	201.310	201.252	201.240	201.170	201.111	201.135	201.100	201.064
80	122.616	122.604	122.522	122.487	122.487	122.464	122.382	122.277	122.171	122.054
85	51.737	51.737	51.691	51.667	51.632	51.527	51.421	51.340	51.246	51.106
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	25.915	25.857	25.681	25.366	25.003	24.570	24.160	23.786	23.458	23.201
100	45.724	45.618	45.513	45.571	45.466	45.326	45.162	44.951	44.834	44.612
105	71.499	71.581	71.990	72.201	72.318	72.423	72.329	72.306	71.978	71.756
110	101.018	100.924	101.275	101.474	101.439	101.392	101.228	101.193	101.310	101.310
115	132.959	132.830	133.017	132.900	133.357	133.567	133.251	133.158	132.889	132.573
120	165.017	165.216	165.391	165.894	166.081	165.672	165.134	165.052	165.157	164.935
125	195.238	195.577	194.992	194.910	195.718	196.057	196.455	196.981	196.993	197.098
130	229.659	229.882	229.694	230.022	231.227	232.350	232.818	233.216	233.696	233.906
135	267.169	267.099	266.971	267.415	268.866	269.697	270.375	271.253	272.622	273.335
140	302.971	303.053	303.264	303.346	305.183	307.628	309.722	311.150	311.957	312.016
145	342.342	342.178	342.237	342.751	344.038	345.419	346.706	348.098	348.730	349.292
150	379.665	378.776	378.998	379.513	379.981	380.847	382.227	382.567	383.304	383.561
155	411.945	411.863	412.589	411.723	412.015	413.022	414.227	414.601	415.327	415.362
160	441.476	441.429	439.978	440.329	440.599	441.230	442.482	442.845	442.892	443.056
165	464.654	465.379	464.490	463.566	464.186	464.572	464.981	465.871	466.023	465.742
170	481.818	482.005	481.747	480.999	481.209	481.958	482.332	483.304	483.257	482.742
175	490.944	490.698	490.651	491.166	491.634	492.827	493.249	493.927	493.986	493.085
180	496.057	496.057	496.057	496.057	496.057	496.057	496.057	496.057	496.057	496.057

Vert. Angles **Horizontal Angles**

	50	55	60	65	70	75	80	85	90
0	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015	1095.015
5	1088.790	1088.814	1088.860	1088.954	1089.001	1088.989	1089.059	1089.130	1089.270
10	1071.544	1071.638	1071.720	1071.790	1071.860	1071.860	1071.919	1072.048	1072.165
15	1043.008	1043.172	1043.277	1043.418	1043.511	1043.453	1043.453	1043.535	1043.605
20	1004.515	1004.644	1004.726	1004.831	1004.936	1004.971	1005.065	1005.053	1004.983
25	955.761	955.925	956.089	956.147	956.241	956.299	956.381	956.335	956.288
30	898.852	898.993	899.180	899.309	899.414	899.484	899.484	899.531	899.508
35	835.181	835.368	835.626	835.731	835.895	835.942	835.918	835.942	835.848
40	765.905	766.081	766.221	766.420	766.549	766.607	766.572	766.537	766.432
45	691.142	691.294	691.447	691.564	691.727	691.809	691.809	691.716	691.704
50	611.676	611.980	612.191	612.355	612.448	612.624	612.624	612.507	612.589
55	529.975	530.115	530.338	530.466	530.618	530.770	530.864	530.829	530.806
60	455.376	455.458	455.586	455.656	455.762	455.914	456.054	455.937	455.902

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65	369.942	370.012	370.094	370.165	370.153	370.176	370.258	370.165	370.129
70	284.088	284.181	284.240	284.216	284.275	284.181	284.263	284.158	283.971
75	201.041	201.088	201.076	201.064	201.100	201.100	201.158	201.064	200.936
80	121.984	121.972	121.949	121.926	121.937	121.961	122.008	121.879	121.692
85	50.989	50.930	50.836	50.743	50.626	50.521	50.497	50.310	50.263
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	23.072	23.096	23.213	23.224	23.388	23.599	23.657	23.178	22.979
100	44.495	44.413	44.437	44.378	44.460	44.472	44.191	43.477	43.419
105	71.967	71.990	72.002	71.768	71.382	71.183	70.598	69.755	69.650
110	101.263	101.193	101.123	100.807	100.620	100.363	99.625	99.286	99.157
115	132.853	132.818	132.655	132.877	132.619	131.882	131.485	130.935	130.724
120	165.298	165.496	165.754	165.836	165.485	164.642	164.151	163.858	163.285
125	197.344	197.788	197.894	197.824	197.484	196.443	196.162	195.987	195.308
130	234.632	234.901	234.772	234.433	233.579	233.064	232.690	232.561	232.222
135	273.721	273.628	273.312	272.750	272.037	271.300	271.030	271.007	270.820
140	312.062	311.899	311.173	310.436	309.465	308.061	307.944	307.640	307.172
145	348.894	348.321	347.443	346.963	346.624	345.946	345.653	345.478	345.384
150	383.655	383.245	382.777	382.180	381.572	381.642	381.081	381.502	382.028
155	415.490	415.338	415.116	414.437	413.361	413.139	413.642	412.706	412.940
160	443.208	443.184	442.892	441.932	441.301	441.219	440.505	442.389	441.850
165	465.988	465.859	464.876	464.502	464.186	463.156	464.162	465.344	464.747
170	483.187	482.824	482.227	481.736	481.127	481.069	481.034	480.952	480.870
175	494.021	493.693	493.202	492.535	491.470	491.119	490.710	490.008	490.405
180	496.057	496.057	496.057	496.057	496.057	496.057	496.057	496.057	496.057

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	397.54	N.A.	9.40
0-30	837.73	N.A.	19.90
0-40	1360.04	N.A.	32.30
0-60	2368.94	N.A.	56.20
0-80	2948.77	N.A.	70.00
0-90	3009.85	N.A.	71.40
10-90	2906.45	N.A.	69.00
20-40	962.50	N.A.	22.80
20-50	1495.29	N.A.	35.50
40-70	1375.35	N.A.	32.60
60-80	579.83	N.A.	13.80
70-80	213.38	N.A.	5.10
80-90	61.08	N.A.	1.40
90-110	101.52	N.A.	2.40
90-120	233.05	N.A.	5.50
90-130	409.97	N.A.	9.70
90-150	835.30	N.A.	19.80
90-180	1203.22	N.A.	28.60
110-180	1101.7	N.A.	26.10
0-180	4213.07	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	103.39
10-20	294.15
20-30	440.18
30-40	522.31
40-50	532.80
50-60	476.10
60-70	366.45
70-80	213.38
80-90	61.08
90-100	25.26
100-110	76.26
110-120	131.53
120-130	176.92
130-140	209.00
140-150	216.33
150-160	190.37
160-170	130.89
170-180	46.66

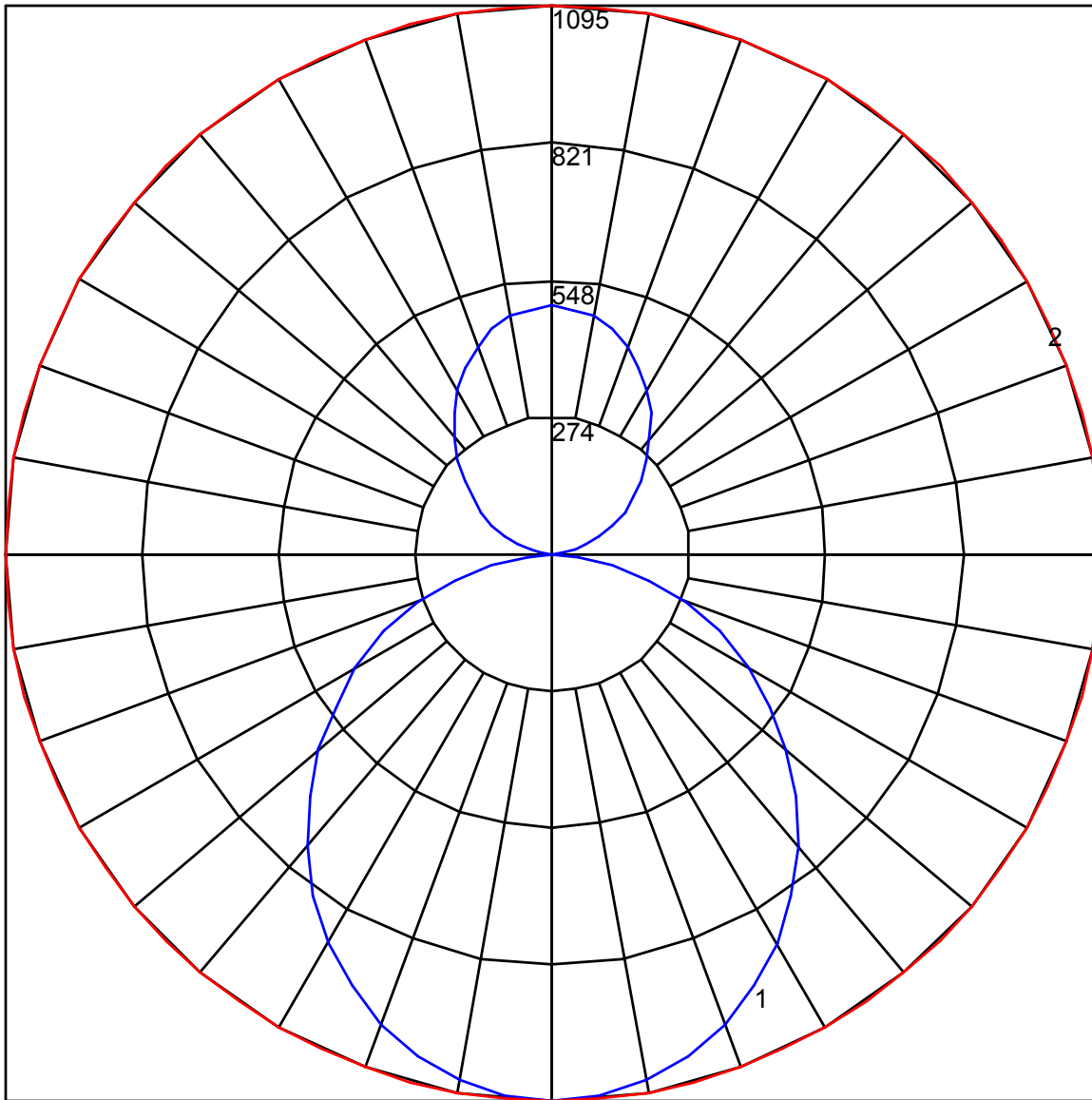
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	102	98	94	90	97	93	89	86	83	81	78	75	73	71	67	65	64	60
2	93	85	79	73	88	81	75	70	73	68	64	65	62	59	58	56	53	50
3	85	75	67	61	80	71	64	58	64	58	54	58	53	49	52	48	45	42
4	78	66	58	51	73	63	55	50	57	51	46	51	46	42	46	42	39	36
5	71	59	50	44	67	56	48	43	51	45	40	46	41	37	41	37	34	31
6	66	53	44	38	62	51	43	37	46	39	35	42	36	32	38	33	30	27
7	61	48	40	34	57	46	38	33	42	35	31	38	32	28	34	30	26	24
8	57	44	36	30	53	42	34	29	38	32	27	35	29	25	31	27	24	21
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	29	25	21	19
10	49	37	29	24	47	35	28	23	32	26	22	30	24	21	27	23	19	17

POLAR GRAPH



Maximum Candela = 1095.015 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)