



IES INDOOR REPORT

PHOTOMETRIC FILENAME : WAVE2-LED4-LO-04-WA-D9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L101404401
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUE DATE] 10/21/2014
 [MANUFAC] PRUDENTIAL LTG.
 [LUMCAT] Wave2-LED4LO-04-WA-D9-SC-UN
 [LUMINAIRE] 48"L. X 10"W. X 2-1/2"H. LED LUMINAIRE
 [MORE] DIFFUSED LENS
 [BALLASTCAT] OSRAM OPTOTRONIC OT30W/PRG1050C/UNV/DIM/L
 [BALLAST] INPUT: 120-277VAC, 0.31-0.15A, 50/60Hz. OUTPUT: 30W, 10-55VDC, 350-1050mA
 [LAMPPOSITION] 0,0
 [LAMPCAT] N/A
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [INPUT] 120VAC
 [TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1464
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	14
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.54 ft
Luminous Height	0.21 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1931	1510	1395
55	1784	1285	1160
65	1605	1029	906
75	1259	667	566
85	715	230	173

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CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0	465.903	465.903	465.903	465.903	465.903	465.903	465.903	465.903	465.903	465.903
5	462.159	462.186	462.177	462.105	462.276	462.708	463.104	463.320	463.446	463.437
10	454.131	454.140	454.104	453.978	454.050	454.392	454.707	454.860	454.905	454.815
15	441.198	441.171	441.045	440.910	440.919	441.099	441.288	441.315	441.216	441.018
20	423.819	423.765	423.603	423.405	423.333	423.396	423.396	423.351	423.207	422.919
25	402.588	402.498	402.273	402.030	401.886	401.868	401.868	401.760	401.283	400.545
30	377.811	377.775	377.514	377.235	377.082	377.136	376.857	376.299	375.516	374.544
35	350.442	350.370	350.019	349.668	349.569	349.299	348.723	347.985	346.968	345.762
40	320.553	320.445	320.049	319.698	319.527	318.978	318.330	317.367	316.017	314.469
45	288.693	288.540	288.081	287.910	287.397	286.830	285.993	284.670	282.906	281.313
50	255.231	255.042	254.718	254.385	253.827	253.080	251.802	250.128	248.751	247.545
55	220.968	220.833	220.725	220.221	219.573	218.484	217.071	215.982	215.010	213.957
60	188.478	188.442	188.316	187.776	186.912	185.400	184.824	184.077	183.060	181.935
65	151.596	151.533	151.326	150.768	149.742	149.328	148.689	147.717	146.736	145.836
70	114.345	114.399	114.102	113.346	113.103	112.599	111.870	111.159	110.430	109.728
75	78.291	78.282	77.832	77.688	77.292	76.896	76.473	76.032	75.528	75.033
80	45.567	45.477	45.414	45.306	45.180	44.991	44.784	44.568	44.352	44.100
85	20.016	20.061	20.034	20.007	19.926	19.782	19.530	19.170	18.819	18.387
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	7.686	7.740	8.784	9.324	9.252	8.946	8.604	8.415	8.208	8.019
100	12.852	12.312	12.555	14.175	15.966	17.010	17.280	17.082	16.596	16.029
105	19.017	18.504	17.469	18.369	19.755	22.176	23.472	24.804	25.443	25.695
110	24.489	24.102	23.004	22.878	23.913	25.326	26.964	28.755	30.429	31.869
115	30.753	30.438	29.295	28.566	28.854	29.772	31.032	32.355	33.813	35.370
120	36.684	36.459	35.505	34.596	34.245	34.677	35.433	36.486	37.647	38.718
125	41.751	41.517	40.869	39.816	39.267	39.231	39.690	40.365	41.202	42.138
130	47.169	46.989	46.314	45.504	44.838	44.478	44.541	44.973	45.468	45.990
135	52.074	52.029	51.390	50.832	50.103	49.797	49.473	49.455	49.761	50.085
140	56.511	56.619	56.061	55.548	55.098	54.648	54.405	54.054	54.027	54.153
145	60.687	60.813	60.480	59.940	59.535	59.148	58.905	58.599	58.347	58.122
150	64.368	64.503	64.377	63.864	63.513	63.270	63.045	62.757	62.478	62.262
155	67.554	67.689	67.734	67.365	66.996	66.771	66.582	66.492	66.096	66.006
160	70.317	70.416	70.551	70.380	70.020	69.732	69.579	69.336	69.246	69.228
165	72.459	72.540	72.702	72.693	72.576	72.333	72.117	71.910	71.775	71.676
170	74.016	74.079	74.160	74.241	74.304	74.340	74.277	74.142	73.944	73.809
175	74.970	75.033	75.078	75.096	75.186	75.312	75.429	75.492	75.492	75.537
180	75.600	75.600	75.600	75.600	75.600	75.600	75.600	75.600	75.600	75.600

Vert. Angles **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
0	465.903	465.903	465.903	465.903	465.903	465.903	465.903	465.903	465.903
5	463.374	463.275	463.149	462.852	462.609	462.447	462.429	462.402	462.312
10	454.635	454.446	454.194	453.825	453.537	453.339	453.249	453.231	453.132
15	440.730	440.433	440.091	439.686	439.389	439.137	438.975	439.002	438.858
20	422.478	421.866	421.263	420.615	420.102	419.715	419.418	419.364	419.229
25	399.789	398.979	398.196	397.404	396.837	396.315	395.937	395.838	395.676
30	373.608	372.609	371.601	370.656	369.990	369.306	368.739	368.595	368.442
35	344.592	343.332	341.964	340.821	339.876	339.084	338.562	338.310	338.238
40	312.885	311.436	310.176	309.303	308.511	307.827	307.431	307.089	307.170
45	280.026	278.847	277.857	277.092	276.372	275.670	275.310	275.022	275.121
50	246.483	245.448	244.503	243.621	242.748	242.082	241.641	241.425	241.452
55	212.877	211.806	210.798	209.853	208.971	208.368	208.044	207.801	207.855
60	180.846	179.883	178.947	178.092	177.372	176.805	176.607	176.310	176.355

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CANDELA TABULATION - (Cont.)

65	144.954	144.090	143.307	142.596	141.984	141.561	141.318	141.048	141.012
70	109.044	108.342	107.712	107.163	106.740	106.416	106.101	105.867	105.786
75	74.520	74.016	73.611	73.287	72.954	72.612	72.414	72.198	72.090
80	43.839	43.569	43.272	43.029	42.804	42.579	42.363	42.192	42.129
85	17.955	17.523	17.163	16.920	16.722	16.596	16.515	16.470	16.452
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	7.848	7.677	7.488	7.218	6.903	6.831	6.786	6.786	6.750
100	15.426	14.769	14.103	13.500	12.861	12.393	12.132	11.907	11.790
105	25.758	25.650	25.380	25.092	24.804	24.507	24.291	24.111	24.075
110	33.057	33.831	34.164	34.317	34.398	34.488	34.569	34.533	34.515
115	36.801	38.097	39.069	39.852	40.419	40.941	41.274	41.472	41.481
120	39.807	40.986	42.021	42.777	43.470	44.055	44.361	44.658	44.703
125	43.011	43.776	44.451	45.063	45.621	46.116	46.386	46.674	46.674
130	46.584	47.187	47.736	48.285	48.681	48.969	49.140	49.248	49.221
135	50.454	50.850	51.219	51.597	51.894	52.083	52.236	52.272	52.254
140	54.342	54.639	54.918	55.188	55.413	55.458	55.458	55.422	55.413
145	58.185	58.329	58.491	58.644	58.752	58.752	58.707	58.590	58.599
150	62.100	62.064	62.037	62.019	62.019	61.947	61.803	61.605	61.587
155	65.925	65.772	65.610	65.475	65.394	65.196	64.962	64.746	64.773
160	69.138	68.832	68.733	68.652	68.535	68.400	68.301	68.085	68.175
165	71.541	71.442	71.361	71.334	71.307	71.217	71.127	71.028	71.082
170	73.692	73.566	73.422	73.368	73.332	73.269	73.179	73.170	73.179
175	75.519	75.465	75.393	75.357	75.321	75.294	75.249	75.267	75.222
180	75.600	75.600	75.600	75.600	75.600	75.600	75.600	75.600	75.600

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	168.04	N.A.	11.50
0-30	352.11	N.A.	24.10
0-40	567.91	N.A.	38.80
0-60	977.40	N.A.	66.80
0-80	1202.2	N.A.	82.10
0-90	1224.15	N.A.	83.60
10-90	1180.25	N.A.	80.60
20-40	399.86	N.A.	27.30
20-50	617.25	N.A.	42.20
40-70	554.07	N.A.	37.90
60-80	224.80	N.A.	15.40
70-80	80.22	N.A.	5.50
80-90	21.95	N.A.	1.50
90-110	32.14	N.A.	2.20
90-120	66.75	N.A.	4.60
90-130	105.18	N.A.	7.20
90-150	181.54	N.A.	12.40
90-180	239.45	N.A.	16.40
110-180	207.31	N.A.	14.20
0-180	1463.6	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	43.90
10-20	124.14
20-30	184.07
30-40	215.80
40-50	217.39
50-60	192.10
60-70	144.58
70-80	80.22
80-90	21.95
90-100	8.21
100-110	23.93
110-120	34.61
120-130	38.43
130-140	39.40
140-150	36.95
150-160	30.51
160-170	20.26
170-180	7.14

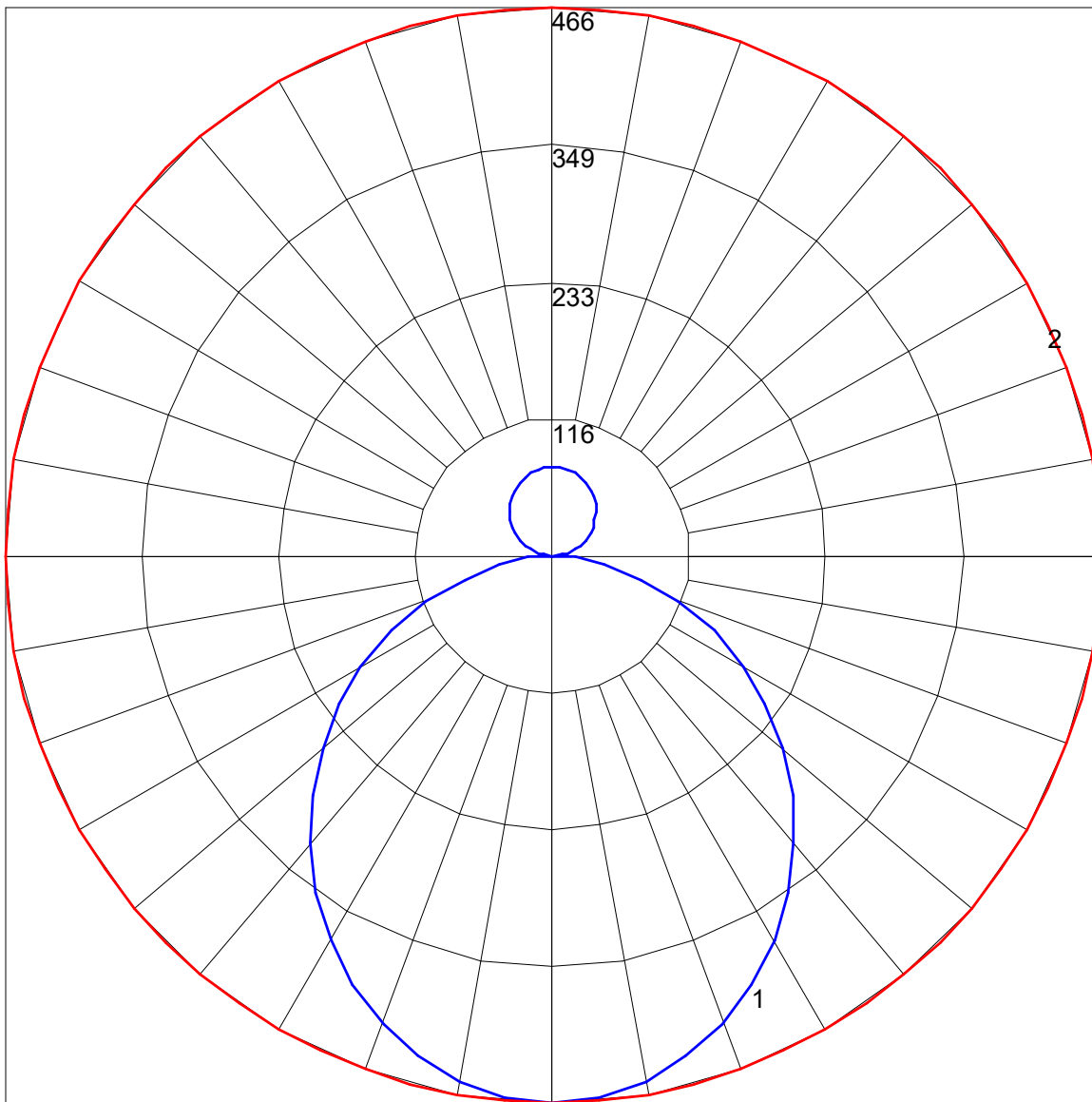
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84
1	105	101	97	93	101	97	93	90	90	87	84	83	81	79	77	75	73	70
2	96	88	81	76	92	85	79	74	78	74	69	73	69	66	68	64	62	59
3	87	77	69	63	84	74	67	62	69	63	58	64	59	55	60	56	52	50
4	80	69	60	54	77	66	58	52	62	55	50	57	52	48	53	49	45	43
5	74	61	53	46	70	59	51	45	55	48	43	52	46	41	48	43	39	37
6	68	55	46	40	65	53	45	39	50	43	38	47	41	36	44	39	35	32
7	63	50	41	36	60	48	40	35	45	39	34	43	37	32	40	35	31	29
8	59	46	37	32	56	44	36	31	42	35	30	39	33	29	37	32	28	26
9	55	42	34	28	53	41	33	28	38	32	27	36	30	26	34	29	25	23
10	51	38	31	26	49	37	30	25	35	29	24	33	28	24	31	26	23	21

POLAR GRAPH



Maximum Candela = 465.903 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.)