



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-ACW.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] BIO2-LIN-LED35-HO-ACW

[TESTLAB] Intertek

[ISSUE DATE]

[MANUFAC] Prudential Ltg

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3232
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	40
Ballast Factor	1.00
CIE Type	Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

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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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.540	0.000	0.540
10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	15.479	14.950	11.810	0.000	0.000	0.000	0.000	0.000	0.000
92.5	117.265	172.201	207.816	81.500	2.369	4.105	8.625	7.475	11.431	7.475
95.0	293.158	566.156	473.328	149.833	17.698	13.236	27.830	28.842	30.187	28.842
97.5	644.885	1309.965	580.416	208.897	37.869	28.888	36.420	41.503	43.527	41.503
100.0	1457.740	2079.234	557.715	255.035	57.764	59.478	38.962	49.231	47.828	49.231
102.5	2233.967	1988.557	579.197	289.397	82.386	66.665	51.577	48.840	50.462	48.840
105.0	2238.187	1750.265	624.105	327.520	105.811	69.103	97.198	54.441	52.957	54.441
107.5	2082.167	1633.943	656.857	368.943	130.835	72.507	125.821	88.481	70.403	88.481
110.0	1979.851	1579.134	689.160	415.863	156.446	77.590	130.076	135.378	123.544	135.378
112.5	1897.097	1550.246	721.602	463.151	182.551	81.937	127.466	156.906	156.158	156.906
115.0	1847.693	1526.280	757.861	508.403	206.896	90.493	125.775	162.138	164.956	162.138
117.5	1812.181	1507.466	796.444	546.894	233.852	96.266	127.052	157.998	166.163	157.998
120.0	1779.659	1488.146	838.695	575.931	263.833	105.064	129.421	155.066	163.564	155.066
122.5	1746.309	1470.424	881.486	595.148	292.146	116.713	130.605	157.435	161.333	157.435
125.0	1707.945	1454.922	918.447	609.293	320.562	136.942	133.572	159.045	164.105	159.045
127.5	1677.976	1438.397	947.646	619.631	350.566	159.390	135.723	162.943	168.406	162.943
130.0	1641.096	1418.835	966.655	630.775	380.454	179.664	136.401	168.256	173.684	168.256
132.5	1603.341	1391.419	971.658	641.861	409.848	195.028	139.920	169.142	177.410	169.142

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135.0	1551.787	1350.836	967.368	653.200	440.622	208.886	145.141	170.441	180.320	170.441
137.5	1486.743	1298.603	956.455	663.975	470.810	229.954	152.973	171.200	178.986	171.200
140.0	1408.163	1242.379	943.345	675.786	497.030	269.410	167.543	172.040	177.594	172.040
142.5	1325.904	1185.075	926.612	685.860	521.502	326.623	192.084	170.326	177.514	170.326
145.0	1249.452	1131.680	910.880	695.957	546.008	387.837	225.446	173.868	179.940	173.868
147.5	1183.097	1085.450	894.734	702.052	571.975	443.060	258.232	179.331	183.471	179.331
150.0	1123.734	1040.244	878.945	709.653	595.148	487.646	280.519	192.510	201.721	192.510
152.5	1072.559	1002.961	863.926	715.978	616.227	514.648	295.722	222.260	257.036	222.260
155.0	1029.652	969.277	847.446	725.144	638.353	525.251	312.351	271.423	342.228	271.423
157.5	987.194	937.882	833.807	730.997	658.122	535.463	339.100	339.606	433.170	339.606
160.0	950.601	909.029	821.157	735.333	674.325	560.314	387.998	407.663	512.026	407.663
162.5	915.009	880.348	809.473	741.980	690.678	598.943	453.974	469.798	570.193	469.798
165.0	881.486	854.933	798.479	746.741	705.651	632.925	513.314	532.726	613.088	532.726
167.5	849.896	830.633	789.912	751.571	719.497	662.814	576.725	593.756	647.243	593.756
170.0	822.549	809.508	781.873	754.273	732.308	690.149	640.113	645.759	674.325	645.759
172.5	802.113	791.326	773.053	757.643	743.693	714.380	686.136	681.168	692.668	681.168
175.0	780.930	775.180	763.864	757.022	750.973	729.905	713.207	707.422	711.240	707.422
177.5	761.610	758.390	754.676	753.825	755.975	741.589	730.376	726.489	729.410	726.489
180.0	746.614	746.614	746.614	746.614	746.614	746.614	746.614	746.614	746.614	746.614

Vert. Angles **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	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
62.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	11.810	14.950	15.479	0.000
92.5	8.625	4.105	2.369	81.500	207.816	172.201	117.265
95.0	27.830	13.236	17.698	149.833	473.328	566.156	293.158
97.5	36.420	28.888	37.869	208.897	580.416	1309.965	644.885
100.0	38.962	59.478	57.764	255.035	557.715	2079.234	1457.740
102.5	51.577	66.665	82.386	289.397	579.197	1988.557	2233.967
105.0	97.198	69.103	105.811	327.520	624.105	1750.265	2238.187
107.5	125.821	72.507	130.835	368.943	656.857	1633.943	2082.167
110.0	130.076	77.590	156.446	415.863	689.160	1579.134	1979.851
112.5	127.466	81.937	182.551	463.151	721.602	1550.246	1897.097
115.0	125.775	90.493	206.896	508.403	757.861	1526.280	1847.693
117.5	127.052	96.266	233.852	546.894	796.444	1507.466	1812.181
120.0	129.421	105.064	263.833	575.931	838.695	1488.146	1779.659
122.5	130.605	116.713	292.146	595.148	881.486	1470.424	1746.309
125.0	133.572	136.942	320.562	609.293	918.447	1454.922	1707.945
127.5	135.723	159.390	350.566	619.631	947.646	1438.397	1677.976
130.0	136.401	179.664	380.454	630.775	966.655	1418.835	1641.096
132.5	139.920	195.028	409.848	641.861	971.658	1391.419	1603.341
135.0	145.141	208.886	440.622	653.200	967.368	1350.836	1551.787
137.5	152.973	229.954	470.810	663.975	956.455	1298.603	1486.743
140.0	167.543	269.410	497.030	675.786	943.345	1242.379	1408.163
142.5	192.084	326.623	521.502	685.860	926.612	1185.075	1325.904
145.0	225.446	387.837	546.008	695.957	910.880	1131.680	1249.452
147.5	258.232	443.060	571.975	702.052	894.734	1085.450	1183.097
150.0	280.519	487.646	595.148	709.653	878.945	1040.244	1123.734
152.5	295.722	514.648	616.227	715.978	863.926	1002.961	1072.559
155.0	312.351	525.251	638.353	725.144	847.446	969.277	1029.652
157.5	339.100	535.463	658.122	730.997	833.807	937.882	987.194
160.0	387.998	560.314	674.325	735.333	821.157	909.029	950.601
162.5	453.974	598.943	690.678	741.980	809.473	880.348	915.009
165.0	513.314	632.925	705.651	746.741	798.479	854.933	881.486
167.5	576.725	662.814	719.497	751.571	789.912	830.633	849.896
170.0	640.113	690.149	732.308	754.273	781.873	809.508	822.549
172.5	686.136	714.380	743.693	757.643	773.053	791.326	802.113
175.0	713.207	729.905	750.973	757.022	763.864	775.180	780.930
177.5	730.376	741.589	755.975	753.825	754.676	758.390	761.610
180.0	746.614	746.614	746.614	746.614	746.614	746.614	746.614

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	0.00	N.A.	0.00
0-30	0.00	N.A.	0.00
0-40	0.00	N.A.	0.00
0-60	0.00	N.A.	0.00
0-80	0.00	N.A.	0.00
0-90	0.73	N.A.	0.00
10-90	0.72	N.A.	0.00
20-40	0.00	N.A.	0.00
20-50	0.00	N.A.	0.00
40-70	0.00	N.A.	0.00
60-80	0.00	N.A.	0.00
70-80	0.00	N.A.	0.00
80-90	0.72	N.A.	0.00
90-110	771.06	N.A.	23.90
90-120	1314.64	N.A.	40.70
90-130	1837.57	N.A.	56.90
90-150	2677.54	N.A.	82.80
90-180	3231.29	N.A.	100.00
110-180	2460.23	N.A.	76.10
0-180	3232.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.00
10-20	0.00
20-30	0.00
30-40	0.00
40-50	0.00
50-60	0.00
60-70	0.00
70-80	0.00
80-90	0.72
90-100	221.70
100-110	549.36
110-120	543.58
120-130	522.93
130-140	463.83
140-150	376.14
150-160	288.56
160-170	194.81
170-180	70.38

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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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	28	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

POLAR GRAPH



Maximum Candela = 2238.187 Located At Horizontal Angle = 0, Vertical Angle = 105
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (105) (Through Max. Cd.)