



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] BIO2-LIN-LED35-HO-MWW-D1W  
 [TESTLAB] Intertek  
 [ISSUE DATE]  
 [MANUFAC] Prudential Lighting

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3738
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	93
Total Luminaire Watts	40
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.14
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.20 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18222	21027	16128
55	15850	17105	12794
65	9685	14183	9314
75	5455	11840	5727
85	2396	7370	1503

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES**

**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>
<b>0.0</b>	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222
<b>2.5</b>	2052.864	2034.296	1960.838	1893.650	1836.538	1748.142	1667.402	1623.688	1603.492	1616.582
<b>5.0</b>	2329.844	2288.660	2145.396	1979.582	1820.830	1658.470	1521.102	1439.570	1416.030	1441.484
<b>7.5</b>	2548.370	2502.962	2329.536	2060.740	1805.496	1571.548	1392.094	1302.004	1274.834	1294.986
<b>10.0</b>	2721.158	2662.858	2475.770	2142.096	1778.348	1483.548	1282.226	1185.624	1151.568	1181.774
<b>12.5</b>	2792.064	2794.726	2581.084	2212.254	1744.094	1394.052	1188.506	1076.724	1036.068	1071.576
<b>15.0</b>	2605.878	2707.122	2682.636	2273.898	1703.680	1316.524	1091.156	980.650	934.802	973.038
<b>17.5</b>	2375.142	2484.944	2709.652	2317.700	1656.402	1237.874	1004.916	884.708	841.478	877.800
<b>20.0</b>	2161.302	2278.474	2593.668	2350.986	1604.702	1170.224	923.736	795.938	754.600	788.568
<b>22.5</b>	1981.628	2082.894	2415.776	2358.026	1546.908	1092.938	843.546	720.918	683.100	715.572
<b>25.0</b>	1829.960	1912.702	2256.936	2375.098	1481.744	1024.166	768.064	652.982	624.822	650.188
<b>27.5</b>	1696.992	1769.130	2083.334	2380.620	1411.542	954.184	700.788	603.174	584.056	599.368
<b>30.0</b>	1535.182	1640.122	1919.412	2360.292	1345.014	885.082	636.724	563.178	560.802	559.108
<b>32.5</b>	1406.328	1482.910	1764.818	2322.782	1261.656	820.138	584.122	534.336	549.010	532.796
<b>35.0</b>	1314.214	1356.850	1624.370	2253.130	1178.254	756.426	539.616	516.912	535.260	513.106
<b>37.5</b>	1219.680	1263.900	1513.292	2152.942	1096.524	696.168	497.222	502.678	516.758	498.036
<b>40.0</b>	1108.206	1166.088	1378.454	2017.466	1008.524	636.174	461.362	482.570	491.788	479.402
<b>42.5</b>	1030.700	1051.622	1228.106	1881.330	930.226	579.238	429.418	453.970	478.412	452.738
<b>45.0</b>	958.540	973.720	1106.094	1752.850	848.386	526.152	399.344	433.510	478.808	429.770
<b>47.5</b>	891.132	901.912	1004.784	1607.122	766.722	478.214	372.064	425.348	482.988	419.606
<b>50.0</b>	811.162	826.056	905.740	1464.364	690.250	431.816	347.578	426.008	478.236	423.104
<b>52.5</b>	748.902	756.712	811.844	1319.626	613.822	386.232	321.398	418.902	448.228	417.648
<b>55.0</b>	676.324	685.344	729.850	1183.974	545.930	348.964	298.034	398.992	394.878	396.990
<b>57.5</b>	592.702	628.848	646.558	1049.554	474.210	311.454	279.796	372.988	330.770	374.000
<b>60.0</b>	496.848	562.298	580.448	909.920	412.038	276.034	256.982	334.246	270.622	334.048
<b>62.5</b>	390.060	484.088	513.436	780.340	352.418	241.164	229.988	289.938	223.718	288.068
<b>65.0</b>	304.480	402.116	445.918	662.662	292.820	209.638	205.524	245.586	182.908	238.216
<b>67.5</b>	234.718	318.032	385.418	553.058	242.704	176.858	181.456	199.254	150.458	195.998
<b>70.0</b>	181.236	246.356	331.034	454.058	190.454	145.992	157.740	163.570	123.442	159.192
<b>72.5</b>	141.042	184.294	279.642	363.396	148.632	120.098	133.342	130.240	98.934	129.998
<b>75.0</b>	105.028	139.216	227.964	279.664	110.264	94.644	106.898	102.102	77.726	98.692
<b>77.5</b>	79.376	98.340	178.750	206.954	77.264	67.342	83.072	75.834	60.082	72.820
<b>80.0</b>	54.956	68.090	129.734	140.712	53.284	47.146	60.874	54.164	39.072	50.820
<b>82.5</b>	33.220	40.744	88.088	87.406	26.730	27.808	36.366	31.702	25.630	32.032
<b>85.0</b>	15.532	20.790	47.784	40.480	9.746	11.110	18.766	14.432	13.442	15.730
<b>87.5</b>	3.652	7.480	18.810	10.582	0.000	0.000	5.126	3.234	3.168	4.972
<b>90.0</b>	0.000	0.000	0.594	0.000	0.000	0.000	0.132	0.000	0.000	0.000
<b>92.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>97.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>100.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>102.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>105.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>107.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>110.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>112.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>115.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>117.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>120.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>122.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>125.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>127.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>130.0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>132.5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES**

**CANDELA TABULATION - (Cont.)**

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	0.022	0.000	0.000	0.000	0.528	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	0.352	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. 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	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222	1817.222
2.5	1641.552	1721.126	1828.882	1920.116	1988.448	2035.990	2052.864
5.0	1495.868	1633.038	1819.884	2000.636	2168.496	2290.596	2329.844
7.5	1373.482	1541.408	1802.042	2080.716	2346.938	2497.814	2548.370
10.0	1264.670	1457.720	1777.138	2154.702	2483.074	2654.410	2721.158
12.5	1171.302	1368.312	1736.372	2216.940	2579.962	2778.336	2792.064
15.0	1080.860	1292.082	1699.940	2260.412	2681.602	2676.916	2605.878
17.5	989.802	1214.972	1651.364	2296.712	2672.582	2460.238	2375.142
20.0	908.050	1144.088	1602.744	2312.706	2547.402	2261.182	2161.302
22.5	828.762	1079.034	1536.414	2335.674	2378.156	2069.892	1981.628
25.0	755.062	996.402	1471.778	2332.594	2208.404	1902.406	1829.960
27.5	693.066	929.412	1400.938	2323.178	2052.600	1759.758	1696.992
30.0	629.574	861.960	1318.790	2287.076	1879.372	1620.894	1535.182
32.5	574.310	800.866	1236.730	2228.226	1725.086	1469.160	1406.328
35.0	532.730	735.064	1157.156	2152.766	1589.324	1338.282	1314.214
37.5	488.312	673.596	1078.264	2047.804	1471.360	1246.498	1219.680
40.0	453.024	613.866	995.852	1932.194	1340.416	1148.246	1108.206
42.5	421.256	556.798	920.634	1802.240	1196.558	1041.216	1030.700
45.0	390.918	507.562	837.342	1682.252	1079.210	957.858	958.540
47.5	365.288	459.932	750.420	1539.230	973.984	885.786	891.132
50.0	342.298	412.918	672.298	1410.354	872.630	815.562	811.162
52.5	316.866	370.744	604.846	1260.490	783.046	742.896	748.902
55.0	291.170	334.994	528.660	1132.230	701.646	674.432	676.324
57.5	270.996	295.636	466.312	991.892	626.450	613.074	592.702
60.0	250.382	262.614	402.754	860.310	556.512	547.096	496.848
62.5	227.370	227.788	342.276	740.762	492.030	474.166	390.060
65.0	200.552	200.508	288.398	626.516	428.076	390.676	304.480
67.5	174.746	169.686	236.082	518.606	369.930	310.970	234.718
70.0	152.856	141.548	190.762	422.356	314.952	245.652	181.236
72.5	127.204	114.752	146.322	336.952	264.352	184.822	141.042
75.0	107.624	86.086	110.154	259.006	214.192	135.960	105.028
77.5	82.896	66.968	79.376	188.562	164.010	98.912	79.376
80.0	60.610	45.936	52.074	127.006	118.888	67.760	54.956

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES**

**CANDELA TABULATION - (Cont.)**

82.5	37.268	26.532	29.898	76.516	75.416	41.074	33.220
85.0	18.744	10.868	9.900	33.902	40.304	20.174	15.532
87.5	3.542	0.000	0.198	5.390	14.036	4.488	3.652
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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	679.83	N.A.	18.20
0-30	1349.58	N.A.	36.10
0-40	2057.62	N.A.	55.00
0-60	3224.74	N.A.	86.30
0-80	3708.91	N.A.	99.20
0-90	3738.28	N.A.	100.00
10-90	3561.72	N.A.	95.30
20-40	1377.79	N.A.	36.90
20-50	2024.3	N.A.	54.20
40-70	1499.21	N.A.	40.10
60-80	484.18	N.A.	13.00
70-80	152.08	N.A.	4.10
80-90	29.37	N.A.	0.80
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3738.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	176.57
10-20	503.26
20-30	669.76
30-40	708.04
40-50	646.50
50-60	520.61
60-70	332.10
70-80	152.08
80-90	29.37
90-100	0.01
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

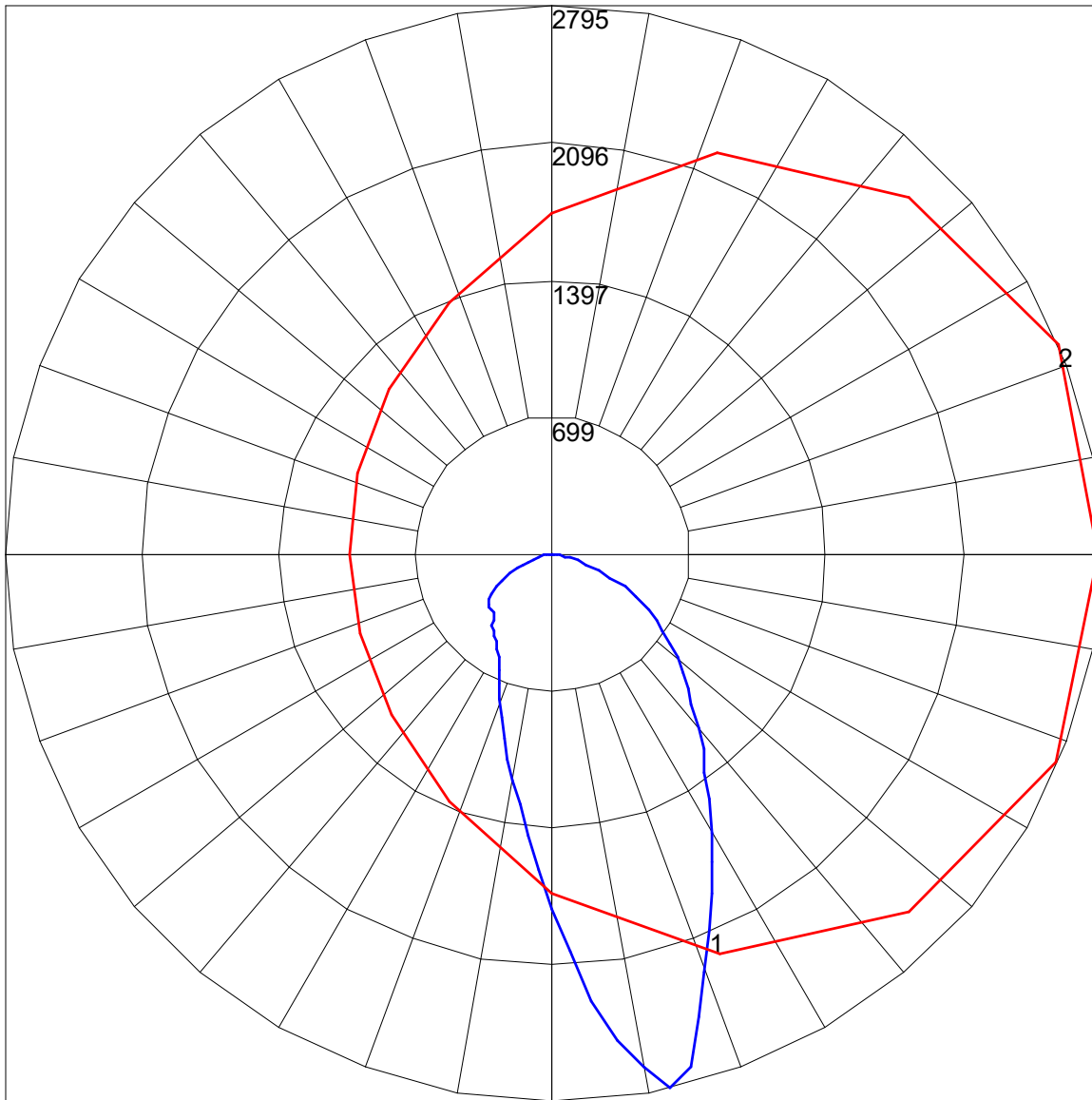
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO2-LIN-LED35-HO-MWW-D1W.IES**

**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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	67	56	48	42	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	38	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

POLAR GRAPH



Maximum Candela = 2794.726 Located At Horizontal Angle = 22.5, Vertical Angle = 12.5  
# 1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (12.5) (Through Max. Cd.)