



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] L021507504R01  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUE DATE] 3/4/2015  
 [MANUFACTURER] PRUDENTIAL LTG.  
 [LUMEN CATEGORY] BIO-SUS-LED4-MO-CW  
 [LUMINAIRE] 4-1/2"L. X 48"W. X 5"H. LED LUMINAIRE  
 [MORE] LEDS WITH OPTICS  
 [BALLAST CATEGORY] OSRAM OPTOTRONIC  
 [BALLAST] INPUT: 120-277VAC  
 [LAMP POSITION] 0,0  
 [LAMP CATEGORY] 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	4735
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	47
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)	0.33 ft
Luminous Width (90-270)	3.94 ft
Luminous Height	0.00 ft

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES**

**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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES**

**CANDELA TABULATION**

	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>	<b>45</b>
<b>0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>10</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>15</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>20</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>25</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>30</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>35</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>40</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>45</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>50</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>55</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>60</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>65</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>70</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>75</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>80</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>85</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95</b>	228.004	236.572	257.376	300.468	364.868	456.456	549.752	575.960	492.352	336.224
<b>100</b>	1348.732	1377.824	1415.176	1465.492	1483.580	1405.936	1189.132	892.220	596.344	344.428
<b>105</b>	1634.164	1626.632	1582.756	1510.292	1383.256	1205.792	999.880	796.292	600.376	411.628
<b>110</b>	1612.184	1598.660	1553.580	1471.512	1345.484	1186.920	1007.216	825.020	658.280	508.284
<b>115</b>	1539.104	1523.704	1485.792	1405.600	1300.432	1171.996	1022.560	871.192	728.896	609.252
<b>120</b>	1493.464	1481.648	1443.568	1379.952	1289.288	1178.828	1055.040	926.436	803.236	698.348
<b>125</b>	1468.068	1458.240	1421.420	1366.540	1291.976	1198.400	1092.364	979.244	873.712	778.372
<b>130</b>	1437.604	1428.840	1398.852	1346.016	1281.308	1204.168	1110.676	1015.952	924.812	844.424
<b>135</b>	1384.936	1375.500	1350.132	1304.772	1250.340	1183.420	1105.804	1027.208	953.092	889.168
<b>140</b>	1304.156	1293.068	1268.428	1234.492	1192.744	1139.852	1079.260	1022.112	965.804	916.860
<b>145</b>	1207.108	1199.604	1181.236	1156.512	1126.216	1088.500	1048.572	1008.000	967.372	929.404
<b>150</b>	1122.604	1116.752	1105.356	1090.544	1072.680	1048.320	1021.720	992.852	964.040	932.596
<b>155</b>	1063.916	1061.956	1054.172	1043.476	1031.856	1016.736	998.200	976.948	955.416	931.140
<b>160</b>	1017.184	1019.284	1012.396	1006.208	998.508	988.120	974.652	960.232	945.000	928.144
<b>165</b>	978.880	978.656	974.792	970.788	965.496	959.448	951.356	942.676	933.772	924.588
<b>170</b>	948.668	947.520	943.376	942.900	940.576	938.392	935.396	931.252	927.976	924.196
<b>175</b>	931.644	928.564	929.656	927.976	927.388	927.528	928.284	927.416	926.856	925.876
<b>180</b>	924.000	924.000	924.000	924.000	924.000	924.000	924.000	924.000	924.000	924.000

**Vert. Angles**      **Horizontal Angles**

	<b>50</b>	<b>55</b>	<b>60</b>	<b>65</b>	<b>70</b>	<b>75</b>	<b>80</b>	<b>85</b>	<b>90</b>
<b>0</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>5</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>10</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>15</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>20</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>25</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>30</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>35</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>40</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>45</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>50</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>55</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>60</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES**

**CANDELA TABULATION - (Cont.)**

<b>65</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>70</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>75</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>80</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>85</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>95</b>	199.360	125.412	91.084	76.020	70.196	69.496	64.148	48.104	39.928
<b>100</b>	255.640	190.904	166.544	157.220	149.604	136.192	118.664	99.092	89.236
<b>105</b>	335.104	274.176	245.112	230.216	218.260	201.852	178.640	157.108	147.952
<b>110</b>	414.652	365.624	334.124	316.288	298.480	272.832	244.048	222.040	213.304
<b>115</b>	515.984	463.792	435.792	410.060	380.240	345.268	313.768	292.068	284.172
<b>120</b>	618.492	565.348	523.656	487.676	453.684	415.492	383.180	362.348	354.984
<b>125</b>	705.488	652.372	609.196	567.924	520.072	481.376	453.908	434.224	427.868
<b>130</b>	780.304	728.588	683.480	638.568	594.076	550.984	521.808	506.464	500.892
<b>135</b>	835.016	787.500	742.924	696.948	653.324	616.476	588.280	571.928	567.224
<b>140</b>	871.108	827.568	785.344	741.440	702.044	668.696	644.672	630.644	626.668
<b>145</b>	890.176	852.684	814.044	776.468	743.204	716.352	696.920	686.308	683.340
<b>150</b>	900.816	868.896	837.004	806.764	781.536	761.068	747.712	739.956	737.772
<b>155</b>	905.884	882.560	857.976	837.144	819.616	804.328	795.144	791.000	789.544
<b>160</b>	910.868	895.524	879.676	865.704	854.000	843.052	838.712	835.856	835.744
<b>165</b>	915.628	905.828	898.240	890.316	882.980	877.184	874.888	872.704	871.696
<b>170</b>	918.792	916.188	912.856	908.572	904.988	900.732	901.012	900.144	900.536
<b>175</b>	924.028	923.440	921.340	919.912	918.792	915.404	916.020	916.496	915.824
<b>180</b>	924.000	924.000	924.000	924.000	924.000	924.000	924.000	924.000	924.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES**

**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	0.00	N.A.	0.00
10-90	0.00	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	0.00	N.A.	0.00
90-110	1073.34	N.A.	22.70
90-120	1857.41	N.A.	39.20
90-130	2644.14	N.A.	55.80
90-150	3955.28	N.A.	83.50
90-180	4735.00	N.A.	100.00
110-180	3661.65	N.A.	77.30
0-180	4735.00	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	0.00
90-100	318.41
100-110	754.93
110-120	784.07
120-130	786.73
130-140	723.63
140-150	587.51
150-160	429.34
160-170	262.21
170-180	88.17

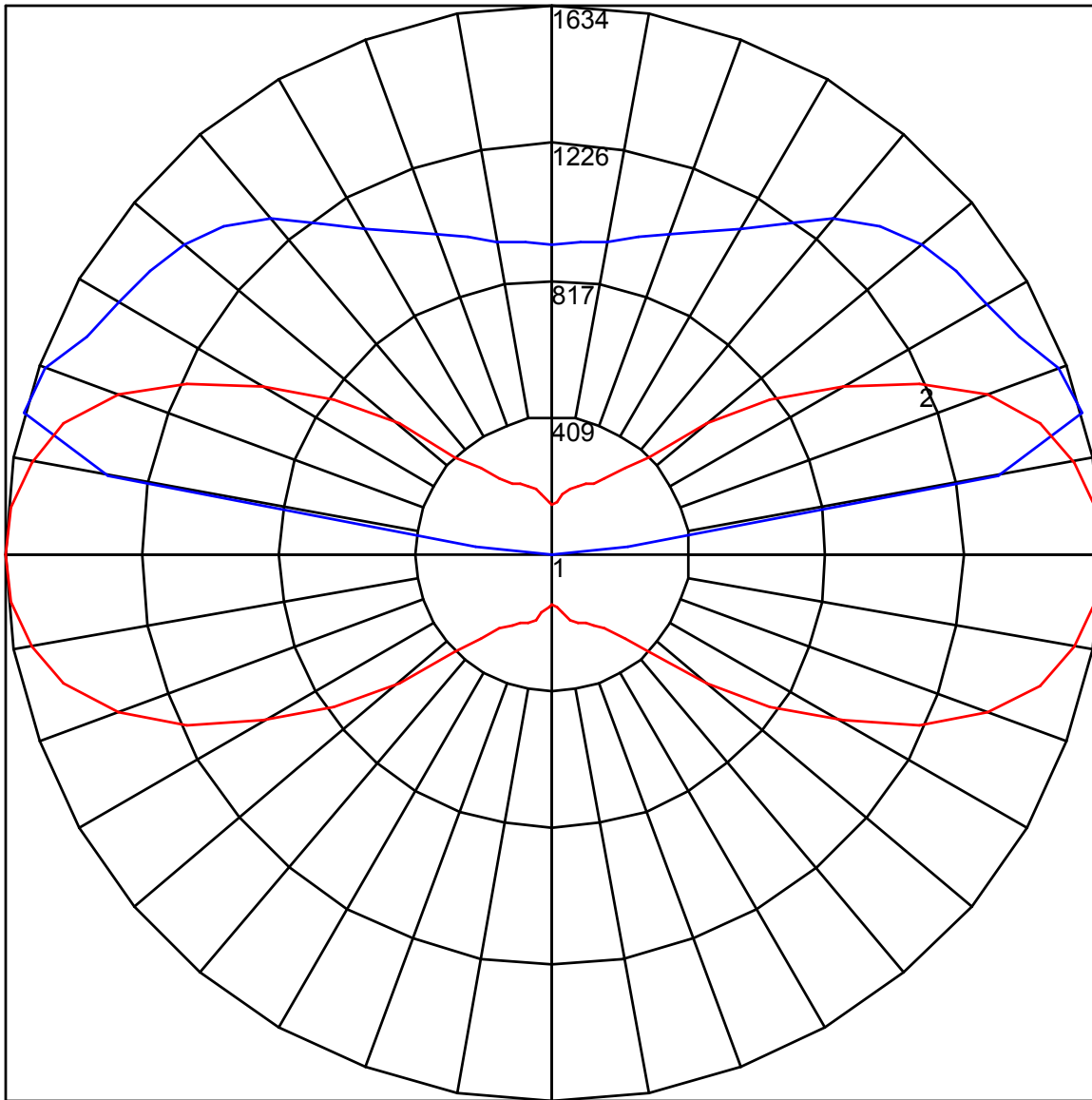
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : BIO-LIN-LED4-HO-CW.IES**

**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	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 = 1634.164 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.)