



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BIO-STD-FLSH-LED4-HO-AWL-D1W.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L021507501R01
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUE DATE] 3/4/2015
 [MANUFAC] PRUDENTIAL LTG.
 [LUMCAT] BIO-FLSH-LED4-HO-AWL-D1W
 [LUMINAIRE] 4-1/2"L. X 48"W. X 5"H. LED LUMINAIRE
 [MORE] PRISMATIC 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.
 [INPUT] 120VAC
 [TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4288
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	47
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.58
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	3.94 ft
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15590	17853	9428
55	12153	13319	8762
65	9877	10261	7528
75	7516	7438	6185
85	4185	4418	3720

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CANDELA TABULATION

	0	5	10	15	20	25	30	35	40	45
0	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90
5	2305.45	2300.55	2295.65	2283.40	2271.15	2254.00	2234.40	2207.45	2178.05	2141.30
10	2646.00	2646.00	2638.65	2621.50	2604.35	2584.75	2557.80	2523.50	2481.85	2435.30
15	3055.15	3045.35	3028.20	2993.90	2949.80	2898.35	2846.90	2788.10	2724.40	2660.70
20	3165.40	3167.85	3175.20	3197.25	3216.85	3219.30	3197.25	3145.80	3057.60	2940.00
25	2597.00	2606.80	2626.40	2670.50	2729.30	2807.70	2895.90	2998.80	3087.00	3113.95
30	2182.95	2185.40	2195.20	2214.80	2251.55	2303.00	2371.60	2481.85	2621.50	2773.40
35	1901.20	1898.75	1906.10	1918.35	1937.95	1962.45	1994.30	2053.10	2143.75	2285.85
40	1617.00	1617.00	1624.35	1631.70	1653.75	1673.35	1697.85	1734.60	1786.05	1866.90
45	1332.80	1335.25	1340.15	1347.50	1357.30	1379.35	1403.85	1433.25	1470.00	1526.35
50	1051.05	1053.50	1055.95	1065.75	1073.10	1090.25	1109.85	1136.80	1171.10	1215.20
55	842.80	840.35	840.35	842.80	845.25	850.15	859.95	872.20	891.80	923.65
60	671.30	668.85	671.30	671.30	673.75	678.65	681.10	686.00	693.35	705.60
65	504.70	504.70	504.70	504.70	507.15	509.60	512.05	514.50	519.40	524.30
70	362.60	362.60	362.60	362.60	362.60	362.60	362.60	362.60	362.60	362.60
75	235.20	235.20	235.20	237.65	237.65	237.65	237.65	235.20	235.20	232.75
80	122.50	124.95	124.95	124.95	127.40	129.85	129.85	127.40	127.40	124.95
85	44.10	44.10	44.10	46.55	46.55	46.55	46.55	46.55	46.55	46.55
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles **Horizontal Angles**

	50	55	60	65	70	75	80	85	90	95
0	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90
5	2102.10	2055.55	2009.00	1955.10	1893.85	1832.60	1768.90	1710.10	1653.75	1597.40
10	2381.40	2322.60	2256.45	2168.25	2067.80	1960.00	1842.40	1719.90	1604.75	1499.40
15	2589.65	2511.25	2423.05	2320.15	2200.10	2053.10	1881.60	1700.30	1528.80	1384.25
20	2805.25	2685.20	2565.15	2435.30	2283.40	2109.45	1888.95	1651.30	1428.35	1249.50
25	3042.90	2908.15	2734.20	2557.80	2366.70	2143.75	1871.80	1575.35	1310.75	1114.75
30	2930.20	2986.55	2888.55	2697.45	2450.00	2168.25	1825.25	1470.00	1178.45	982.45
35	2484.30	2685.20	2827.30	2761.15	2540.65	2192.75	1761.55	1352.40	1046.15	859.95
40	2001.65	2224.60	2484.30	2638.65	2545.55	2207.45	1680.70	1222.55	921.20	752.15
45	1612.10	1756.65	2009.00	2310.35	2393.65	2156.00	1587.60	1095.15	806.05	656.60
50	1274.00	1369.55	1541.05	1832.60	2099.65	1969.80	1457.75	975.10	703.15	570.85
55	970.20	1036.35	1149.05	1359.75	1663.55	1680.70	1259.30	855.05	607.60	485.10
60	732.55	776.65	852.60	994.70	1242.15	1335.25	1026.55	727.65	516.95	389.55
65	534.10	556.15	600.25	688.45	852.60	953.05	759.50	565.95	384.65	325.85
70	367.50	377.30	399.35	448.35	543.90	610.05	502.25	367.50	303.80	240.10
75	230.30	235.20	245.00	269.50	318.50	350.35	296.45	237.65	193.55	159.25
80	122.50	124.95	127.40	139.65	159.25	169.05	147.00	122.50	102.90	88.20
85	46.55	46.55	46.55	49.00	53.90	56.35	51.45	44.10	39.20	36.75
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles **Horizontal Angles**

	100	105	110	115	120	125	130	135	140	145
0	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90
5	1543.50	1492.05	1440.60	1396.50	1357.30	1323.00	1291.15	1259.30	1232.35	1205.40
10	1401.40	1315.65	1242.15	1171.10	1107.40	1053.50	1009.40	970.20	938.35	911.40
15	1254.40	1153.95	1058.40	984.90	921.20	867.30	825.65	791.35	761.95	742.35
20	1109.85	992.25	901.60	830.55	776.65	735.00	705.60	683.55	661.50	644.35
25	970.20	857.50	779.10	722.75	681.10	644.35	619.85	597.80	578.20	570.85
30	842.80	749.70	688.45	639.45	602.70	573.30	546.35	531.65	521.85	514.50
35	739.90	663.95	610.05	563.50	534.10	507.15	492.45	482.65	470.40	465.50

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CANDELA TABULATION - (Cont.)

40	651.70	588.00	539.00	502.25	475.30	448.35	438.55	428.75	423.85	423.85
45	573.30	516.95	475.30	436.10	418.95	399.35	387.10	382.20	384.65	387.10
50	497.35	441.00	416.50	387.10	365.05	347.90	338.10	338.10	340.55	347.90
55	411.60	384.65	355.25	330.75	311.15	296.45	291.55	291.55	298.90	306.25
60	355.25	323.40	298.90	279.30	262.15	249.90	247.45	252.35	257.25	257.25
65	281.75	259.70	240.10	222.95	208.25	200.90	200.90	203.35	205.80	208.25
70	208.25	191.10	178.85	166.60	156.80	151.90	151.90	151.90	156.80	161.70
75	139.65	129.85	120.05	112.70	105.35	102.90	102.90	105.35	107.80	112.70
80	78.40	73.50	68.60	63.70	61.25	58.80	58.80	61.25	63.70	66.15
85	31.85	31.85	29.40	29.40	26.95	26.95	26.95	26.95	26.95	26.95
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles	Horizontal Angles						
	150	155	160	165	170	175	180
0	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90	1670.90
5	1183.35	1163.75	1149.05	1136.80	1129.45	1124.55	1122.10
10	891.80	872.20	857.50	845.25	837.90	833.00	833.00
15	725.20	712.95	700.70	693.35	686.00	683.55	683.55
20	629.65	617.40	607.60	600.25	595.35	595.35	595.35
25	563.50	553.70	548.80	546.35	546.35	546.35	546.35
30	512.05	512.05	504.70	502.25	502.25	502.25	502.25
35	465.50	465.50	465.50	465.50	465.50	467.95	467.95
40	426.30	431.20	433.65	433.65	436.10	438.55	441.00
45	392.00	396.90	401.80	406.70	409.15	411.60	414.05
50	355.25	360.15	360.15	360.15	357.70	357.70	360.15
55	306.25	306.25	306.25	308.70	311.15	308.70	313.60
60	259.70	262.15	264.60	267.05	267.05	267.05	267.05
65	213.15	215.60	218.05	215.60	213.15	213.15	213.15
70	164.15	166.60	161.70	159.25	154.35	151.90	149.45
75	115.15	112.70	110.25	102.90	98.00	93.10	93.10
80	66.15	63.70	61.25	56.35	51.45	49.00	49.00
85	26.95	26.95	24.50	22.05	22.05	22.05	19.60
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	649.73	N.A.	15.20
0-30	1401.21	N.A.	32.70
0-40	2237.2	N.A.	52.20
0-60	3635.92	N.A.	84.80
0-80	4241.3	N.A.	98.90
0-90	4288.35	N.A.	100.00
10-90	4127.12	N.A.	96.20
20-40	1587.47	N.A.	37.00
20-50	2370.97	N.A.	55.30
40-70	1806.05	N.A.	42.10
60-80	605.38	N.A.	14.10
70-80	198.05	N.A.	4.60
80-90	47.05	N.A.	1.10
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4288.35	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	161.23
10-20	488.51
20-30	751.48
30-40	835.99
40-50	783.50
50-60	615.22
60-70	407.33
70-80	198.05
80-90	47.05
90-100	0.00
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

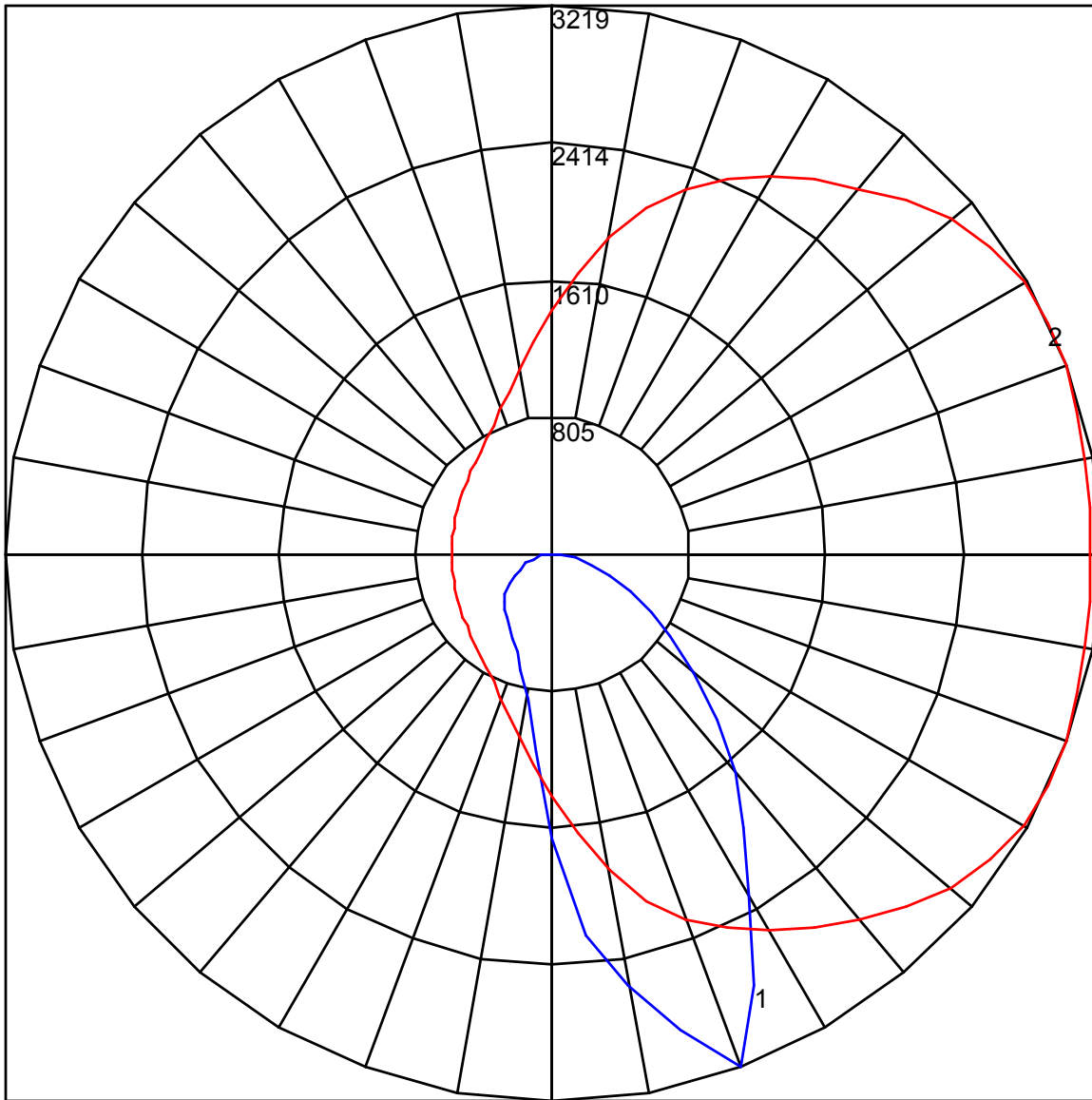
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	54
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

POLAR GRAPH



Maximum Candela = 3219.3 Located At Horizontal Angle = 25, Vertical Angle = 20
1 - Vertical Plane Through Horizontal Angles (25 - 205) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (20) (Through Max. Cd.)