



8165 E. Kaiser Blvd. Anaheim, CA 92808
 p. 714.282.2270
 f. 714.676.5558

Photometric Test Report

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L111406801R01
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUEDATE] 11/21/2014
 [MANUFAC] BARTCO LIGHTING
 [LUMCAT] BSS110
 [LUMINAIRE] 3-1/4"L. X 23"W. X 2"H. LED LUMINAIRE
 [MORE] DIFFUSED LENS
 [BALLASTCAT] COOL LED CL33-700SA-UNI-B
 [BALLAST] INPUT: 120-277VAC, 0.4A, 50/60Hz. OUTPUT: 700/350mA, 33Wmax, 48VDC
 [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, 13.93W
 [_TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1063
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	13.93
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 w/Sides
Luminous Length (0-180)	0.08 ft
Luminous Width (90-270)	1.88 ft
Luminous Height	0.06 ft

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1254	802	0
55	2231	1458	0
65	3678	2606	0
75	6177	4858	0
85	10709	9466	0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	5.24	5.22	5.15	5.06	4.95	4.81	4.64	4.47	4.21	0.00
25	7.05	7.04	6.92	6.76	6.53	6.27	5.97	5.65	5.32	5.00
30	9.48	9.43	9.25	8.98	8.64	8.20	7.74	7.20	6.70	6.13
35	12.63	12.53	12.28	11.90	11.39	10.71	10.05	9.30	8.49	7.66
40	16.70	16.55	16.18	15.65	14.90	14.06	13.06	11.99	10.90	9.72
45	21.70	21.55	21.06	20.25	19.30	18.11	16.85	15.41	13.91	12.31
50	29.54	29.34	28.82	27.96	26.72	25.08	22.27	20.09	18.00	15.91
55	37.07	36.80	36.23	35.11	33.61	31.70	29.48	26.80	24.00	20.93
60	46.24	45.98	45.24	44.00	42.29	39.96	37.31	34.06	30.61	26.84
65	56.71	56.42	55.53	54.18	52.17	49.45	46.19	42.69	38.41	33.66
70	69.92	69.97	68.34	66.68	64.47	61.39	57.77	53.45	48.45	42.72
75	84.95	84.54	83.51	81.58	79.10	75.56	70.08	66.02	60.34	53.87
80	102.98	102.55	101.37	99.25	96.50	92.68	87.76	81.73	75.65	67.46
85	124.96	124.56	123.15	120.81	117.50	113.33	107.76	100.80	93.21	84.46
90	150.63	150.17	148.58	145.96	142.47	137.28	131.20	123.20	114.49	104.49
95	181.46	180.91	179.16	176.32	172.12	166.16	159.11	150.44	140.01	127.99
100	215.21	214.58	212.50	209.17	204.27	197.40	188.82	179.34	167.45	153.72
105	252.99	252.19	249.76	245.65	240.20	232.19	222.84	211.49	197.93	182.43
110	291.02	290.05	287.33	282.41	276.22	267.12	256.51	243.02	228.53	212.16
115	329.35	328.17	324.90	319.57	312.18	302.88	290.53	275.55	259.80	242.05
120	364.33	363.14	359.49	353.65	345.65	335.47	322.09	306.20	289.58	270.75
125	394.72	393.47	389.63	383.55	375.53	363.70	350.60	334.97	317.03	296.68
130	419.40	418.05	414.06	407.88	399.79	387.80	374.61	358.97	341.02	320.75
135	436.58	435.15	431.70	425.86	417.42	405.89	392.99	376.77	359.87	340.96
140	446.81	445.47	441.87	436.17	427.85	417.82	405.09	389.76	373.98	356.27
145	448.35	447.30	444.03	438.74	431.55	421.48	410.43	396.94	382.05	364.81
150	442.60	441.62	438.77	433.92	427.73	418.73	408.86	396.96	383.88	368.43
155	429.32	428.49	426.00	421.89	416.17	409.26	400.29	389.71	379.06	366.22
160	408.14	407.52	405.45	402.12	397.54	391.86	384.72	376.08	367.32	357.00
165	380.28	379.88	378.33	375.82	372.42	367.77	362.77	356.25	349.69	342.05
170	346.84	346.53	345.55	343.88	341.72	338.69	335.39	331.36	326.90	321.65
175	308.99	308.88	308.36	307.58	306.60	305.22	303.58	301.78	299.70	297.30
180	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85

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>	<u>95</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	4.63	4.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	5.59	5.09	4.56	4.14	0.00	0.00	0.00	0.00	0.00	0.00
35	6.82	6.07	5.31	4.65	4.12	0.00	0.00	0.00	0.00	0.00
40	8.45	7.26	6.30	5.33	4.51	0.00	0.00	0.00	0.00	0.00
45	10.59	9.01	7.55	6.26	5.13	4.19	0.00	0.00	0.00	0.00
50	13.91	11.63	9.43	7.44	5.85	4.57	0.00	0.00	0.00	0.00
55	17.62	14.45	11.72	9.03	6.74	5.07	0.00	0.00	0.00	0.00
60	22.72	18.71	14.71	11.26	8.11	5.65	4.07	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

CANDELA TABULATION - (Cont.)

65	29.06	23.95	18.85	14.23	10.17	6.65	4.41	0.00	0.00	0.00
70	37.16	30.98	24.71	18.85	13.88	8.39	5.03	0.00	0.00	0.00
75	46.63	39.47	31.87	24.63	17.46	11.07	6.15	0.00	0.00	0.00
80	58.85	49.93	41.64	32.31	23.46	16.41	8.44	0.00	0.00	0.00
85	71.87	63.88	54.05	42.97	32.12	21.98	14.86	5.65	0.00	0.00
90	93.03	81.89	69.17	57.07	44.45	32.49	21.79	14.09	0.00	0.00
95	115.45	102.54	88.78	73.07	61.58	47.66	35.93	25.12	15.19	8.42
100	139.55	125.09	109.76	94.14	75.01	64.46	51.51	39.54	28.22	19.73
105	166.46	150.35	133.47	117.03	100.65	84.96	69.37	55.56	43.08	33.65
110	193.87	176.19	157.77	139.87	121.39	104.82	88.46	73.13	60.58	48.74
115	222.25	202.45	184.44	164.45	144.89	126.85	109.20	92.94	76.13	66.38
120	249.81	229.04	210.16	189.26	168.55	148.36	130.80	114.32	97.94	84.73
125	276.27	255.69	234.21	213.88	193.23	171.14	153.07	135.63	118.17	103.46
130	301.06	279.42	258.16	237.84	215.23	195.02	175.51	157.41	139.26	123.72
135	319.93	299.01	279.34	258.98	236.38	216.62	197.05	177.66	160.86	144.51
140	336.40	316.71	298.82	277.70	256.18	236.32	217.83	199.34	180.90	165.16
145	347.30	330.04	311.39	292.21	273.11	253.58	235.60	217.70	199.92	183.71
150	352.83	337.53	320.40	303.13	285.96	268.98	251.54	234.03	218.21	202.71
155	352.47	338.47	324.87	309.09	293.50	279.21	263.65	247.99	233.78	220.28
160	345.98	334.46	323.33	310.31	297.46	284.74	272.46	259.89	247.22	235.68
165	333.76	325.46	316.12	306.67	296.87	287.04	277.47	267.72	257.93	248.22
170	316.48	310.91	304.75	298.41	292.22	285.28	278.80	272.29	265.59	258.87
175	294.81	292.21	289.26	286.29	283.22	280.11	276.75	273.40	270.41	266.90
180	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85

Vert. Angles **Horizontal Angles**

	100	105	110	115	120	125	130	135	140	145
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	6.45	5.61	5.21	4.99	4.91	4.84	4.79	4.78	4.78	4.78
100	15.81	12.18	10.45	9.34	8.60	8.00	7.56	7.26	7.01	6.81
105	26.83	22.05	18.78	16.89	14.59	13.19	12.10	11.38	10.75	10.29
110	40.36	33.48	28.63	25.16	22.53	20.31	18.48	17.25	15.77	14.90
115	55.54	47.28	40.76	35.80	32.04	28.86	26.31	24.30	22.69	21.34
120	72.45	62.64	54.94	48.30	43.13	39.13	35.60	32.77	30.70	28.98
125	90.37	79.37	70.07	62.15	56.00	50.46	45.96	42.42	39.82	37.55
130	110.18	97.39	86.42	78.09	70.45	63.84	58.07	53.94	50.48	47.53
135	129.58	115.78	104.42	94.16	86.02	78.47	72.01	66.79	62.54	59.19

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

CANDELA TABULATION - (Cont.)

140	149.90	135.48	123.45	112.27	102.97	95.52	87.94	81.65	77.02	72.99
145	168.61	154.84	142.44	130.69	121.49	112.85	105.07	98.13	92.98	88.44
150	188.96	174.96	162.29	151.54	141.59	132.82	124.52	117.79	111.94	106.84
155	206.46	194.03	182.65	171.45	162.15	153.55	145.75	138.41	132.67	127.74
160	223.64	212.86	202.75	192.78	183.88	176.69	169.07	162.19	156.65	151.88
165	239.00	230.31	222.09	213.90	206.41	200.33	193.86	187.92	183.03	178.74
170	252.40	246.38	240.51	234.72	229.50	224.55	219.97	215.57	211.84	208.60
175	263.83	260.66	257.55	254.88	251.94	249.36	246.89	244.70	242.60	240.78
180	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85	271.85

Vert. Horizontal Angles

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	4.77	4.77	4.76	4.74	4.74	4.72	4.70
100	6.68	6.56	6.46	6.40	6.34	6.30	6.28
105	9.94	9.62	9.35	9.18	9.07	8.96	8.95
110	14.25	13.68	13.26	12.95	12.71	12.56	12.52
115	20.35	19.48	18.76	18.27	17.91	17.41	17.33
120	27.53	26.33	25.45	24.77	24.23	23.98	23.84
125	35.70	34.19	32.99	32.13	31.44	31.12	31.01
130	45.42	43.45	41.88	40.90	40.09	39.72	39.45
135	56.36	54.01	52.15	50.89	50.01	49.38	49.16
140	69.68	66.80	64.72	63.18	61.93	61.21	61.10
145	84.65	81.58	78.95	77.19	75.77	74.99	74.69
150	103.05	99.55	96.56	94.55	93.11	92.16	91.91
155	123.36	119.85	116.73	114.63	112.99	112.05	111.77
160	147.48	143.94	141.16	138.87	137.28	136.29	136.00
165	174.72	171.53	169.00	166.93	165.40	164.51	164.30
170	205.46	203.05	200.87	199.34	198.16	197.41	197.20
175	239.20	237.76	236.60	235.75	235.11	234.67	234.56
180	271.85	271.85	271.85	271.85	271.85	271.85	271.85

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	0.09	N.A.	0.00
0-30	0.99	N.A.	0.10
0-40	3.25	N.A.	0.30
0-60	17.04	N.A.	1.60
0-80	58.93	N.A.	5.50
0-90	100.51	N.A.	9.50
10-90	100.51	N.A.	9.50
20-40	3.16	N.A.	0.30
20-50	7.86	N.A.	0.70
40-70	29.61	N.A.	2.80
60-80	41.89	N.A.	3.90
70-80	26.06	N.A.	2.50
80-90	41.58	N.A.	3.90
90-110	164.69	N.A.	15.50
90-120	293.21	N.A.	27.60
90-130	443.45	N.A.	41.70
90-150	744.97	N.A.	70.10
90-180	962.11	N.A.	90.50
110-180	797.42	N.A.	75.00
0-180	1062.62	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.00
10-20	0.09
20-30	0.89
30-40	2.26
40-50	4.70
50-60	9.08
60-70	15.82
70-80	26.06
80-90	41.58
90-100	66.66
100-110	98.04
110-120	128.52
120-130	150.24
130-140	156.59
140-150	144.93
150-160	116.42
160-170	74.92
170-180	25.80

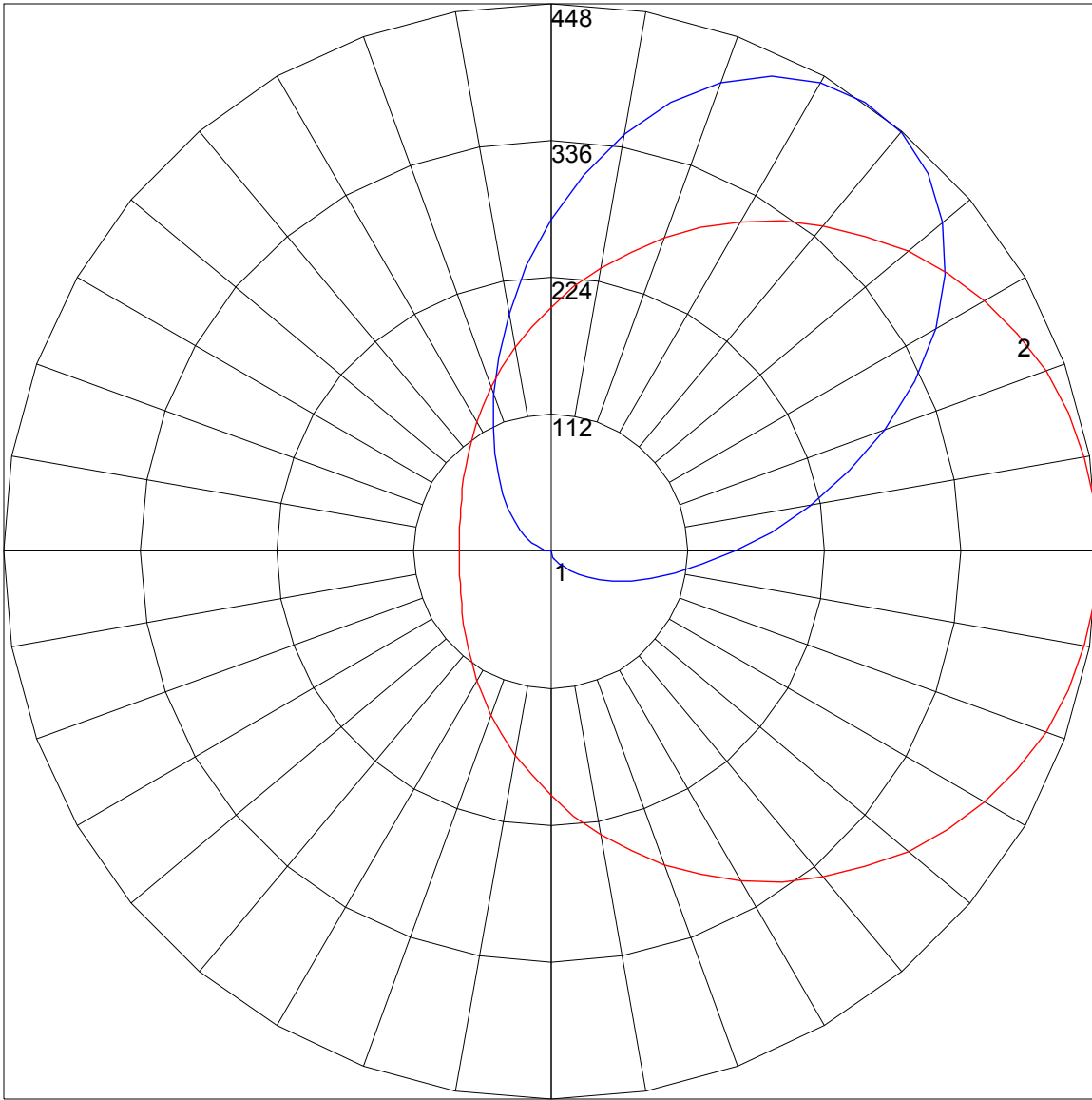
IES INDOOR REPORT
PHOTOMETRIC FILENAME : L111406801R01.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
0	97	97	97	97	85	85	85	85	61	61	61	39	39	39	19	19	19	9
1	87	82	78	74	75	71	67	64	50	48	46	31	30	28	14	13	12	4
2	78	71	64	59	68	61	56	51	43	40	37	27	25	23	11	10	9	2
3	71	62	54	48	61	53	47	42	38	34	30	23	21	19	10	8	7	2
4	65	54	46	40	56	47	40	35	33	29	25	20	18	15	8	7	6	1
5	59	48	40	34	51	41	35	30	29	25	21	18	15	13	7	6	5	1
6	54	43	35	29	47	37	30	25	26	22	18	16	13	11	7	5	4	1
7	50	38	30	25	43	33	27	22	23	19	16	14	12	10	6	5	4	0
8	46	34	27	22	40	30	23	19	21	17	14	13	10	8	5	4	3	0
9	43	31	24	19	37	27	21	17	19	15	12	12	9	7	5	4	3	0
10	40	28	21	17	34	25	19	15	18	13	11	11	8	6	5	3	2	0

POLAR GRAPH



Maximum Candela = 448.35 Located At Horizontal Angle = 0, Vertical Angle = 145
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (145) (Through Max. Cd.)