



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HBIA48-LED104DMV35- LLIA000974-011.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] LLIA000974-011A
 [TESTLAB] LightLab International Allentown, LLC
 [MANUFAC] Mobern Lighting Co., 8200 Stayton Drive, Jessup, MD 20794, USA
 [LUMCAT] HBIA48-LED104DMV35
 [LUMINAIRE] Catalog Number: HBIA48-LED104DMV35
 [MORE] Pendant/surface mounted, formed steel housing, formed aluminum LED mounting plates, no enclosure.
 [MORE] 624 white LEDs, four ULT Everline M18CC835D156N2S50C LED boards with 156 LEDs each.
 [MORE] Two ULT Everline D23CC90UNVTW-F LED drivers each set at 1190mA
 [MORE] 120.0Vac, 60.00Hz, 0.8501A, 101.3W, 0.993PF, 7.7%THD(i)
 [OTHER] Absolute test - lamp lumens value set to -1
 [MORE] NA conventions used for C0 plane alignment and C-plane rotation direction.
 [MORE] The sample was tested at a distance of 9.5m.
 [MORE] This IES file created by LightLab/LSA Report program version 3.820a.
 [DATE] This file created: Wednesday, May 2, 2018 9:27:29 AM
 [ISSUE DATE] Wednesday, May 2, 2018 9:27:29 AM

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14518
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	143
Total Luminaire Watts	101.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.14 m
Luminous Width (90-270)	0.29 m
Luminous Height	0.02 m

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15251	14371	14111
55	14649	13644	13325
65	13472	12221	9847
75	10722	4914	1058
85	4763	226	203

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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>
0.0	5205.07	5205.07	5205.07	5205.07	5205.07
0.5	5249.10	5204.23	5195.10	5192.26	5205.29
1.0	5248.41	5203.60	5194.47	5191.16	5204.14
1.5	5247.69	5202.45	5193.33	5190.10	5202.09
2.0	5246.23	5200.92	5191.89	5188.16	5199.82
2.5	5244.44	5199.07	5189.56	5185.75	5196.50
3.0	5242.36	5196.88	5187.13	5182.85	5192.93
3.5	5240.23	5194.18	5184.01	5179.18	5188.67
4.0	5237.23	5190.97	5180.49	5175.08	5184.11
4.5	5234.08	5187.38	5176.64	5170.39	5178.67
5.0	5230.50	5183.73	5172.27	5165.37	5172.81
5.5	5226.36	5179.40	5167.47	5159.48	5166.18
6.0	5222.07	5174.86	5162.26	5153.40	5159.01
6.5	5217.23	5169.59	5156.18	5146.36	5150.82
7.0	5212.07	5164.10	5149.89	5139.20	5142.36
7.5	5206.50	5157.96	5142.85	5131.15	5133.48
8.0	5200.58	5151.67	5135.59	5122.91	5123.88
8.5	5194.06	5144.95	5127.45	5113.92	5113.81
9.0	5187.48	5137.80	5119.49	5104.59	5103.86
9.5	5180.42	5130.62	5110.85	5094.88	5092.88
10.0	5172.98	5122.58	5101.61	5084.46	5081.61
10.5	5164.93	5114.10	5092.13	5073.89	5070.45
11.0	5156.80	5105.29	5081.98	5062.66	5058.24
11.5	5148.01	5096.47	5071.44	5051.59	5046.00
12.0	5138.90	5086.77	5060.28	5039.78	5033.13
12.5	5129.71	5077.23	5049.08	5028.22	5020.39
13.0	5119.91	5067.00	5037.02	5015.76	5007.00
13.5	5109.68	5056.43	5024.92	5003.57	4993.98
14.0	5099.68	5045.39	5012.82	4990.63	4980.24
14.5	5088.72	5033.95	4999.91	4977.35	4966.18
15.0	5077.73	5022.14	4986.67	4964.17	4952.30
15.5	5066.14	5009.59	4972.63	4950.36	4937.85
16.0	5054.13	4996.83	4958.74	4936.83	4923.58
16.5	5041.52	4983.52	4943.96	4922.54	4908.60
17.0	5028.77	4969.67	4929.21	4908.63	4893.47
17.5	5015.55	4955.41	4913.72	4893.98	4878.16
18.0	5001.98	4941.29	4898.31	4879.07	4863.07
18.5	4988.47	4926.79	4882.91	4864.55	4847.56
19.0	4974.79	4911.11	4866.59	4849.53	4831.82
19.5	4960.10	4895.52	4850.39	4834.19	4815.79
20.0	4944.83	4879.67	4833.54	4818.42	4799.66
20.5	4929.18	4863.60	4816.94	4802.52	4782.86
21.0	4913.23	4846.52	4799.15	4785.93	4765.58
21.5	4897.80	4829.66	4781.81	4769.91	4748.80
22.0	4880.60	4812.21	4763.67	4752.87	4731.33
22.5	4864.15	4794.74	4745.61	4736.05	4713.86
23.0	4847.17	4776.79	4727.27	4719.11	4696.24
23.5	4829.27	4758.04	4708.11	4701.33	4677.78
24.0	4811.95	4739.22	4689.45	4683.62	4659.62
24.5	4793.31	4719.46	4670.07	4665.31	4640.33
25.0	4774.48	4699.78	4650.29	4647.16	4621.53
25.5	4755.47	4679.42	4630.16	4628.09	4601.81
26.0	4735.97	4658.80	4610.39	4609.24	4582.12
26.5	4715.70	4637.74	4589.52	4589.44	4561.75

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HBIA48-LED104DMV35- LLIA000974-011.IES****CANDELA TABULATION - (Cont.)**

27.0	4695.65	4616.58	4568.65	4570.03	4541.58
27.5	4674.93	4595.23	4547.82	4549.84	4521.30
28.0	4653.34	4572.83	4526.77	4529.23	4500.13
28.5	4631.42	4550.55	4505.23	4508.44	4478.76
29.0	4607.66	4527.59	4482.76	4487.08	4457.15
29.5	4583.79	4504.52	4460.62	4465.51	4435.36
30.0	4558.15	4480.65	4437.61	4443.33	4412.42
30.5	4532.73	4456.37	4414.72	4420.98	4389.56
31.0	4506.33	4431.07	4390.84	4398.03	4366.14
31.5	4480.38	4405.51	4367.56	4375.04	4342.82
32.0	4454.15	4379.37	4343.91	4351.84	4319.27
32.5	4426.77	4351.88	4319.31	4327.65	4294.52
33.0	4400.29	4324.33	4294.99	4303.58	4270.27
33.5	4372.64	4295.71	4269.61	4278.61	4245.03
34.0	4346.74	4267.25	4244.37	4253.46	4219.42
34.5	4320.11	4238.64	4218.55	4227.57	4193.23
35.0	4293.41	4209.39	4192.64	4201.32	4166.38
35.5	4266.89	4181.12	4166.73	4174.81	4139.96
36.0	4240.08	4152.48	4140.23	4147.78	4112.64
36.5	4212.87	4124.09	4113.67	4121.09	4085.21
37.0	4184.87	4094.53	4086.16	4093.01	4056.43
37.5	4157.01	4065.75	4058.36	4065.00	4028.16
38.0	4127.19	4036.63	4029.98	4036.09	3998.89
38.5	4097.35	4007.61	4001.72	4007.04	3969.69
39.0	4065.05	3977.38	3972.69	3977.00	3939.79
39.5	4032.44	3947.83	3943.38	3947.58	3909.91
40.0	3998.10	3917.04	3912.84	3916.89	3879.05
40.5	3964.45	3886.23	3882.53	3886.71	3847.75
41.0	3930.96	3855.15	3851.74	3855.73	3816.72
41.5	3896.38	3822.20	3819.99	3823.83	3783.75
42.0	3862.36	3789.44	3788.43	3792.28	3751.46
42.5	3827.87	3755.94	3755.70	3758.99	3718.00
43.0	3794.81	3722.57	3723.64	3726.40	3685.55
43.5	3761.06	3688.04	3690.10	3692.78	3651.69
44.0	3728.00	3654.17	3656.44	3659.33	3617.58
44.5	3694.00	3618.35	3622.52	3624.59	3583.16
45.0	3660.56	3583.65	3588.93	3590.18	3548.38
45.5	3626.65	3549.24	3555.05	3556.00	3513.64
46.0	3590.71	3512.93	3519.67	3520.13	3477.02
46.5	3554.01	3478.07	3485.47	3484.97	3441.21
47.0	3514.99	3441.42	3449.93	3448.32	3404.52
47.5	3476.34	3405.85	3414.56	3412.41	3368.10
48.0	3436.73	3369.29	3378.46	3375.03	3330.72
48.5	3397.89	3332.89	3342.24	3338.26	3294.51
49.0	3357.43	3294.98	3305.09	3299.78	3257.58
49.5	3319.43	3257.34	3268.13	3262.11	3219.40
50.0	3281.63	3220.12	3230.36	3224.37	3181.32
50.5	3243.10	3181.23	3191.67	3184.91	3143.24
51.0	3205.66	3143.24	3153.56	3145.95	3105.09
51.5	3166.43	3104.01	3113.72	3106.04	3066.32
52.0	3127.86	3065.94	3074.86	3066.73	3027.92
52.5	3086.13	3026.66	3034.33	3025.76	2988.68
53.0	3043.89	2988.23	2994.39	2985.69	2950.16
53.5	3000.05	2948.31	2952.79	2944.29	2909.49
54.0	2957.53	2908.87	2911.78	2903.60	2870.14
54.5	2914.69	2869.05	2870.67	2862.86	2830.59

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55.0	2872.21	2827.45	2828.51	2820.70	2789.07
55.5	2831.52	2785.53	2786.79	2779.40	2748.19
56.0	2790.51	2742.45	2744.12	2736.52	2706.02
56.5	2749.36	2700.12	2701.90	2694.55	2665.03
57.0	2706.94	2656.98	2658.62	2651.52	2621.69
57.5	2661.79	2614.77	2615.98	2608.61	2579.05
58.0	2615.34	2572.26	2572.58	2564.45	2536.05
58.5	2570.02	2530.00	2530.29	2520.51	2492.88
59.0	2525.06	2487.98	2486.96	2476.80	2448.64
59.5	2480.48	2445.16	2442.90	2432.05	2404.39
60.0	2437.88	2402.15	2399.30	2387.06	2359.47
60.5	2393.59	2356.80	2354.51	2340.80	2314.04
61.0	2347.79	2311.83	2310.13	2295.17	2269.19
61.5	2300.18	2264.45	2264.16	2248.40	2222.48
62.0	2252.65	2217.27	2219.51	2201.55	2177.31
62.5	2204.79	2169.72	2172.73	2153.28	2128.59
63.0	2159.87	2123.31	2126.23	2106.45	2074.05
63.5	2114.81	2077.21	2079.68	2059.04	1994.61
64.0	2068.01	2031.80	2032.83	2010.96	1875.56
64.5	2018.86	1986.03	1985.74	1959.30	1736.18
65.0	1968.87	1938.29	1938.15	1892.78	1583.39
65.5	1921.33	1890.54	1889.88	1793.21	1445.11
66.0	1874.91	1839.03	1840.73	1660.42	1320.96
66.5	1826.29	1790.57	1791.72	1519.56	1211.07
67.0	1775.91	1742.22	1741.71	1380.14	1108.09
67.5	1725.34	1695.09	1693.84	1253.19	1020.69
68.0	1679.04	1646.50	1646.46	1142.72	945.00
68.5	1629.55	1597.45	1597.05	1037.19	875.78
69.0	1579.59	1549.70	1546.66	950.99	820.61
69.5	1528.38	1499.66	1494.77	874.48	781.83
70.0	1480.75	1449.99	1441.23	807.54	752.41
70.5	1429.56	1400.92	1363.55	753.10	725.75
71.0	1379.50	1352.83	1248.60	715.14	693.18
71.5	1330.02	1300.49	1122.86	685.56	649.97
72.0	1280.40	1252.58	1007.89	657.39	548.57
72.5	1230.51	1204.27	896.48	623.76	446.86
73.0	1181.41	1154.45	786.60	558.40	378.13
73.5	1131.38	1107.58	697.57	451.30	320.95
74.0	1082.01	1057.32	625.81	372.67	225.87
74.5	1033.08	1010.87	564.09	317.94	162.81
75.0	984.08	961.34	516.24	237.44	113.67
75.5	935.76	915.24	481.56	159.99	73.76
76.0	887.46	866.90	452.30	110.92	46.44
76.5	839.65	820.74	417.76	73.58	27.37
77.0	794.02	775.29	340.08	44.15	22.26
77.5	747.16	728.50	268.89	26.79	21.40
78.0	702.14	682.98	220.00	21.54	20.60
78.5	656.36	636.88	154.91	20.40	19.84
79.0	611.98	581.60	94.73	19.51	19.12
79.5	567.50	496.95	60.96	18.64	18.30
80.0	524.83	423.72	34.83	17.92	17.68
80.5	482.45	351.13	22.66	17.13	16.86
81.0	442.22	279.08	18.60	16.44	16.36
81.5	403.05	230.63	17.31	15.77	15.68
82.0	364.63	196.52	16.31	15.09	14.98
82.5	327.36	166.25	15.35	14.43	14.32

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CANDELA TABULATION - (Cont.)

83.0	291.83	121.13	14.34	13.85	13.68
83.5	257.75	89.12	13.42	13.11	12.91
84.0	224.75	53.55	12.59	12.28	12.10
84.5	194.35	28.16	11.78	11.41	11.07
85.0	164.96	18.83	10.93	10.49	10.31
85.5	138.21	15.20	10.00	9.61	9.46
86.0	113.50	13.68	9.07	8.67	8.43
86.5	89.48	12.16	8.16	7.60	7.27
87.0	67.19	10.80	7.26	6.49	6.18
87.5	45.35	9.53	6.14	5.37	5.08
88.0	27.06	8.46	5.28	4.51	4.20
88.5	14.31	7.34	4.41	3.56	3.27
89.0	9.23	6.45	3.64	2.79	2.59
89.5	3.59	5.84	3.05	2.11	1.83
90.0	0.48	5.14	2.48	1.59	1.16
90.5	0.45	4.44	1.96	1.10	0.80
91.0	0.38	3.49	1.57	0.75	0.41
91.5	0.37	2.80	1.44	0.65	0.42
92.0	0.43	2.34	1.21	0.60	0.25
92.5	0.38	2.23	1.12	0.59	0.30
93.0	0.45	2.16	1.03	0.51	0.26
93.5	0.57	2.02	1.04	0.54	0.27
94.0	0.67	1.94	0.96	0.59	0.31
94.5	0.91	1.77	1.03	0.56	0.42
95.0	1.01	1.75	1.07	0.51	0.35
95.5	0.00	0.00	0.00	0.00	0.00
96.0	0.00	0.00	0.00	0.00	0.00
96.5	0.00	0.00	0.00	0.00	0.00
97.0	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00
98.0	0.00	0.00	0.00	0.00	0.00
98.5	0.00	0.00	0.00	0.00	0.00
99.0	0.00	0.00	0.00	0.00	0.00
99.5	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00
100.5	0.00	0.00	0.00	0.00	0.00
101.0	0.00	0.00	0.00	0.00	0.00
101.5	0.00	0.00	0.00	0.00	0.00
102.0	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00
103.0	0.00	0.00	0.00	0.00	0.00
103.5	0.00	0.00	0.00	0.00	0.00
104.0	0.00	0.00	0.00	0.00	0.00
104.5	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00
105.5	0.00	0.00	0.00	0.00	0.00
106.0	0.00	0.00	0.00	0.00	0.00
106.5	0.00	0.00	0.00	0.00	0.00
107.0	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00
108.0	0.00	0.00	0.00	0.00	0.00
108.5	0.00	0.00	0.00	0.00	0.00
109.0	0.00	0.00	0.00	0.00	0.00
109.5	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00
110.5	0.00	0.00	0.00	0.00	0.00

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CANDELA TABULATION - (Cont.)

111.0	0.00	0.00	0.00	0.00	0.00
111.5	0.00	0.00	0.00	0.00	0.00
112.0	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00
113.0	0.00	0.00	0.00	0.00	0.00
113.5	0.00	0.00	0.00	0.00	0.00
114.0	0.00	0.00	0.00	0.00	0.00
114.5	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00
115.5	0.00	0.00	0.00	0.00	0.00
116.0	0.00	0.00	0.00	0.00	0.00
116.5	0.00	0.00	0.00	0.00	0.00
117.0	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00
118.0	0.00	0.00	0.00	0.00	0.00
118.5	0.00	0.00	0.00	0.00	0.00
119.0	0.00	0.00	0.00	0.00	0.00
119.5	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00
120.5	0.00	0.00	0.00	0.00	0.00
121.0	0.00	0.00	0.00	0.00	0.00
121.5	0.00	0.00	0.00	0.00	0.00
122.0	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00
123.0	0.00	0.00	0.00	0.00	0.00
123.5	0.00	0.00	0.00	0.00	0.00
124.0	0.00	0.00	0.00	0.00	0.00
124.5	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00
125.5	0.00	0.00	0.00	0.00	0.00
126.0	0.00	0.00	0.00	0.00	0.00
126.5	0.00	0.00	0.00	0.00	0.00
127.0	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00
128.0	0.00	0.00	0.00	0.00	0.00
128.5	0.00	0.00	0.00	0.00	0.00
129.0	0.00	0.00	0.00	0.00	0.00
129.5	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00
130.5	0.00	0.00	0.00	0.00	0.00
131.0	0.00	0.00	0.00	0.00	0.00
131.5	0.00	0.00	0.00	0.00	0.00
132.0	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00
133.0	0.00	0.00	0.00	0.00	0.00
133.5	0.00	0.00	0.00	0.00	0.00
134.0	0.00	0.00	0.00	0.00	0.00
134.5	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00
135.5	0.00	0.00	0.00	0.00	0.00
136.0	0.00	0.00	0.00	0.00	0.00
136.5	0.00	0.00	0.00	0.00	0.00
137.0	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00
138.0	0.00	0.00	0.00	0.00	0.00
138.5	0.00	0.00	0.00	0.00	0.00

CANDELA TABULATION - (Cont.)

139.0	0.00	0.00	0.00	0.00	0.00
139.5	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00
140.5	0.00	0.00	0.00	0.00	0.00
141.0	0.00	0.00	0.00	0.00	0.00
141.5	0.00	0.00	0.00	0.00	0.00
142.0	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00
143.0	0.00	0.00	0.00	0.00	0.00
143.5	0.00	0.00	0.00	0.00	0.00
144.0	0.00	0.00	0.00	0.00	0.00
144.5	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00
145.5	0.00	0.00	0.00	0.00	0.00
146.0	0.00	0.00	0.00	0.00	0.00
146.5	0.00	0.00	0.00	0.00	0.00
147.0	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00
148.0	0.00	0.00	0.00	0.00	0.00
148.5	0.00	0.00	0.00	0.00	0.00
149.0	0.00	0.00	0.00	0.00	0.00
149.5	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00
150.5	0.00	0.00	0.00	0.00	0.00
151.0	0.00	0.00	0.00	0.00	0.00
151.5	0.00	0.00	0.00	0.00	0.00
152.0	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00
153.0	0.00	0.00	0.00	0.00	0.00
153.5	0.00	0.00	0.00	0.00	0.00
154.0	0.00	0.00	0.00	0.00	0.00
154.5	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00
155.5	0.00	0.00	0.00	0.00	0.00
156.0	0.00	0.00	0.00	0.00	0.00
156.5	0.00	0.00	0.00	0.00	0.00
157.0	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00
158.0	0.00	0.00	0.00	0.00	0.00
158.5	0.00	0.00	0.00	0.00	0.00
159.0	0.00	0.00	0.00	0.00	0.00
159.5	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00
160.5	0.00	0.00	0.00	0.00	0.00
161.0	0.00	0.00	0.00	0.00	0.00
161.5	0.00	0.00	0.00	0.00	0.00
162.0	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00
163.0	0.00	0.00	0.00	0.00	0.00
163.5	0.00	0.00	0.00	0.00	0.00
164.0	0.00	0.00	0.00	0.00	0.00
164.5	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00
165.5	0.00	0.00	0.00	0.00	0.00
166.0	0.00	0.00	0.00	0.00	0.00
166.5	0.00	0.00	0.00	0.00	0.00

CANDELA TABULATION - (Cont.)

167.0	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00
168.0	0.00	0.00	0.00	0.00	0.00
168.5	0.00	0.00	0.00	0.00	0.00
169.0	0.00	0.00	0.00	0.00	0.00
169.5	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00
170.5	0.00	0.00	0.00	0.00	0.00
171.0	0.00	0.00	0.00	0.00	0.00
171.5	0.00	0.00	0.00	0.00	0.00
172.0	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00
173.0	0.00	0.00	0.00	0.00	0.00
173.5	0.00	0.00	0.00	0.00	0.00
174.0	0.00	0.00	0.00	0.00	0.00
174.5	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00
175.5	0.00	0.00	0.00	0.00	0.00
176.0	0.00	0.00	0.00	0.00	0.00
176.5	0.00	0.00	0.00	0.00	0.00
177.0	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00
178.0	0.00	0.00	0.00	0.00	0.00
178.5	0.00	0.00	0.00	0.00	0.00
179.0	0.00	0.00	0.00	0.00	0.00
179.5	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HBIA48-LED104DMV35- LLIA000974-011.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1903.09	N.A.	13.10
0-30	4058.15	N.A.	28.00
0-40	6691.7	N.A.	46.10
0-60	11984.95	N.A.	82.60
0-80	14458.77	N.A.	99.60
0-90	14517.54	N.A.	100.00
10-90	14025.3	N.A.	96.60
20-40	4788.61	N.A.	33.00
20-50	7557.89	N.A.	52.10
40-70	7110.9	N.A.	49.00
60-80	2473.82	N.A.	17.00
70-80	656.16	N.A.	4.50
80-90	58.77	N.A.	0.40
90-110	0.73	N.A.	0.00
90-120	0.73	N.A.	0.00
90-130	0.73	N.A.	0.00
90-150	0.73	N.A.	0.00
90-180	0.73	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	14518.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

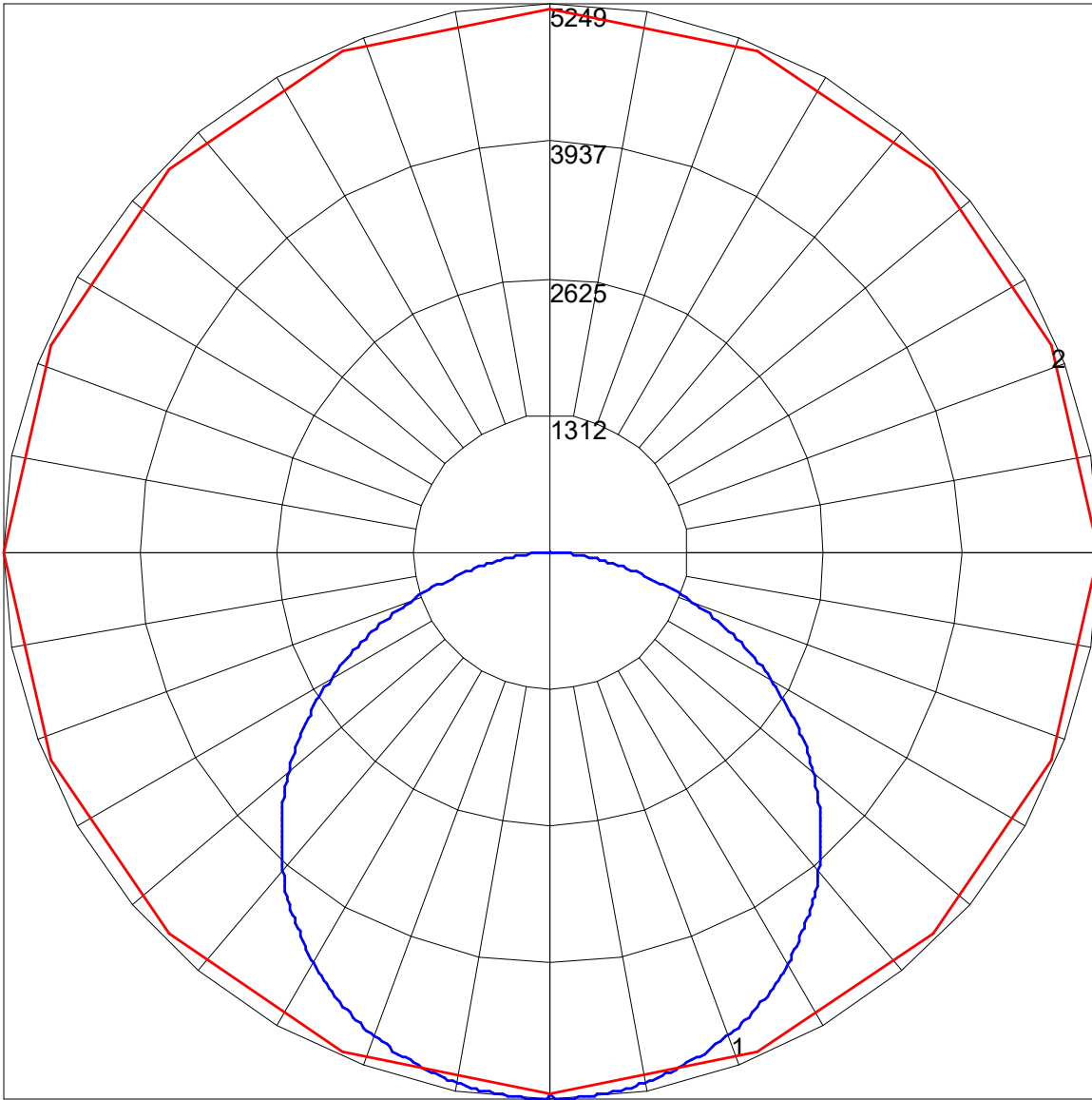
Zone	Lumens
0-10	492.24
10-20	1410.85
20-30	2155.06
30-40	2633.55
40-50	2769.28
50-60	2523.97
60-70	1817.66
70-80	656.16
80-90	58.77
90-100	0.73
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	86
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 5249.1 Located At Horizontal Angle = 0, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)