



Photometric Toolbox™

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HBIA48-LED355DMVFR35- LLIA000974-014.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LLIA000974-014A

[TESTLAB] LightLab International Allentown, LLC

[MANUFAC] Mobern Lighting Co., 8200 Stayton Drive, Jessup, MD 20794, USA

[LUMCAT] HBIA48-LED355DMVFR35

[LUMINAIRE] Catalog Number: HBIA48-LED355DMVFR35

[MORE] Pendant/surface mounted, formed steel housing, formed

[MORE] aluminum LED mounting plates, frosted plastic enclosures.

[MORE] 1248 white LEDs, eight ULT Everline M18CC835D156N2S50C LED boards with 156 LEDs each.

[MORE] Four ULT Everline D23CC90UNVTW-F LED drivers each set at 2040mA

[MORE] 120.0Vac, 60.00Hz, 2.945A, 352.7W, 0.998PF, 5.8%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 10:55:12 AM

[ISSUE DATE] Wednesday, May 2, 2018 10:55:12 AM

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	38840
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	352.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.14 m
Luminous Width (90-270)	0.48 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	20285	20971	22382
55	18825	19909	21983
65	16932	19283	22549
75	13505	20226	24907
85	6525	22200	28483

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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	12928.78	12928.78	12928.78	12928.78	12928.78
0.5	12979.77	12926.55	12913.99	12903.53	12957.63
1.0	12977.08	12924.43	12912.03	12901.89	12955.59
1.5	12973.23	12920.63	12908.88	12899.36	12953.54
2.0	12967.32	12915.48	12904.33	12895.41	12950.00
2.5	12960.81	12909.06	12898.71	12890.51	12945.26
3.0	12951.89	12900.71	12891.60	12884.56	12939.46
3.5	12941.94	12891.36	12883.60	12877.40	12933.15
4.0	12930.31	12880.75	12874.02	12869.00	12925.74
4.5	12917.24	12868.52	12863.33	12859.71	12917.73
5.0	12902.94	12855.17	12851.50	12849.74	12907.84
5.5	12887.18	12840.14	12838.38	12838.04	12897.45
6.0	12869.58	12824.12	12824.13	12825.89	12886.32
6.5	12850.35	12806.13	12808.09	12811.88	12873.67
7.0	12830.29	12787.40	12791.82	12797.46	12860.67
7.5	12808.46	12766.87	12773.28	12781.53	12845.90
8.0	12785.42	12745.59	12754.46	12765.04	12831.01
8.5	12760.51	12722.24	12733.65	12747.08	12814.88
9.0	12734.91	12698.39	12712.53	12728.57	12798.14
9.5	12708.06	12672.71	12689.97	12708.74	12780.08
10.0	12678.62	12645.22	12665.98	12688.02	12760.95
10.5	12648.92	12617.07	12641.10	12666.18	12741.23
11.0	12616.99	12587.07	12614.44	12643.21	12720.16
11.5	12584.33	12556.11	12587.29	12619.31	12698.17
12.0	12549.57	12523.11	12558.07	12594.19	12675.43
12.5	12514.36	12489.89	12528.57	12568.51	12651.89
13.0	12476.69	12454.58	12497.38	12541.28	12626.87
13.5	12438.90	12418.51	12465.58	12513.62	12601.29
14.0	12400.02	12381.80	12432.81	12485.55	12575.49
14.5	12358.82	12342.39	12398.22	12455.44	12547.65
15.0	12317.46	12302.64	12362.96	12425.10	12519.56
15.5	12273.59	12260.41	12325.60	12392.72	12489.86
16.0	12229.28	12217.93	12288.36	12360.04	12459.64
16.5	12182.70	12173.51	12248.79	12325.78	12428.04
17.0	12136.26	12128.82	12209.16	12291.21	12395.83
17.5	12087.06	12081.86	12167.41	12255.13	12362.13
18.0	12038.23	12034.90	12125.31	12218.71	12328.21
18.5	11987.85	11986.33	12082.33	12181.10	12293.59
19.0	11934.97	11936.13	12037.52	12142.52	12256.82
19.5	11882.38	11885.03	11991.93	12102.87	12219.63
20.0	11826.94	11831.95	11944.42	12061.53	12181.15
20.5	11771.62	11778.86	11896.84	12020.06	12141.79
21.0	11714.40	11723.46	11847.12	11976.81	12100.98
21.5	11656.93	11668.65	11797.90	11933.55	12059.66
22.0	11596.88	11610.91	11746.20	11888.25	12016.73
22.5	11537.70	11553.85	11695.02	11843.22	11973.92
23.0	11477.26	11496.00	11642.59	11797.41	11929.97
23.5	11413.81	11435.30	11587.43	11748.98	11883.26
24.0	11351.09	11374.74	11532.86	11701.14	11836.93
24.5	11285.31	11311.66	11475.74	11650.40	11788.57
25.0	11220.48	11248.90	11418.67	11600.24	11740.12
25.5	11152.87	11183.84	11359.71	11548.14	11688.89
26.0	11086.06	11119.35	11300.81	11495.86	11638.28
26.5	11016.53	11052.01	11239.73	11441.42	11585.18

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HBIA48-LED355DMVFR35- LLIA000974-014.IES****CANDELA TABULATION - (Cont.)**

27.0	10947.81	10985.45	11178.95	11387.05	11532.39
27.5	10878.60	10918.37	11117.36	11332.11	11479.00
28.0	10806.38	10848.64	11053.84	11275.25	11422.27
28.5	10735.64	10779.43	10989.77	11217.53	11365.83
29.0	10661.71	10707.16	10923.04	11158.11	11306.82
29.5	10589.56	10636.42	10857.65	11099.08	11248.46
30.0	10515.16	10562.98	10789.63	11037.26	11187.27
30.5	10441.99	10490.89	10722.38	10976.41	11126.68
31.0	10364.62	10416.11	10652.34	10912.62	11062.88
31.5	10288.13	10342.66	10583.15	10849.77	10999.82
32.0	10211.03	10269.02	10513.36	10786.20	10936.14
32.5	10130.16	10192.05	10440.27	10719.50	10869.25
33.0	10050.44	10115.57	10368.25	10653.66	10803.34
33.5	9966.95	10036.37	10293.57	10584.76	10734.27
34.0	9884.89	9958.17	10219.47	10517.00	10665.98
34.5	9801.10	9877.21	10143.64	10447.19	10595.36
35.0	9717.41	9795.35	10066.92	10376.65	10525.03
35.5	9634.91	9713.60	9990.40	10305.71	10453.69
36.0	9550.39	9630.16	9912.40	10233.73	10380.81
36.5	9466.70	9548.25	9835.52	10162.08	10307.60
37.0	9379.79	9463.59	9755.09	10087.30	10233.19
37.5	9294.47	9379.70	9675.41	10013.82	10158.81
38.0	9206.41	9293.90	9593.42	9937.23	10081.74
38.5	9120.38	9208.89	9513.02	9862.04	10005.96
39.0	9031.28	9121.81	9429.73	9784.19	9927.74
39.5	8943.88	9036.21	9347.74	9707.78	9850.79
40.0	8853.22	8947.84	9263.09	9628.69	9772.18
40.5	8764.90	8860.83	9180.24	9550.56	9693.15
41.0	8675.39	8773.50	9096.44	9472.19	9613.66
41.5	8584.11	8683.72	9009.94	9391.36	9533.25
42.0	8493.79	8594.61	8924.31	9311.36	9453.20
42.5	8400.56	8503.75	8836.18	9229.69	9370.77
43.0	8309.60	8414.04	8749.48	9148.96	9289.30
43.5	8216.02	8321.47	8660.66	9065.76	9207.04
44.0	8124.31	8230.91	8572.73	8984.07	9124.83
44.5	8029.75	8137.35	8482.39	8900.06	9040.73
45.0	7937.13	8046.03	8394.04	8817.89	8958.11
45.5	7844.58	7954.47	8305.49	8735.41	8874.99
46.0	7748.72	7859.99	8213.81	8649.63	8789.01
46.5	7655.61	7767.29	8124.71	8566.09	8705.10
47.0	7559.43	7672.16	8033.21	8480.00	8618.90
47.5	7465.76	7578.94	7943.45	8396.12	8534.85
48.0	7369.73	7483.22	7851.74	8309.04	8448.42
48.5	7274.59	7389.62	7761.42	8224.29	8363.62
49.0	7177.72	7293.44	7669.34	8137.16	8277.32
49.5	7082.85	7198.91	7578.58	8051.76	8191.91
50.0	6987.10	7104.33	7487.74	7966.75	8106.90
50.5	6890.17	7007.58	7395.70	7878.83	8020.06
51.0	6794.36	6912.54	7304.39	7793.14	7934.47
51.5	6696.04	6815.08	7211.48	7705.72	7847.63
52.0	6600.80	6720.01	7120.49	7620.03	7763.14
52.5	6502.28	6622.06	7027.97	7531.70	7676.78
53.0	6406.41	6526.49	6937.15	7445.76	7592.64
53.5	6307.64	6428.21	6843.90	7357.33	7506.36
54.0	6211.48	6332.33	6753.34	7271.45	7422.87
54.5	6115.41	6236.69	6663.16	7186.09	7340.07

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55.0	6016.58	6138.10	6570.52	7098.35	7254.41
55.5	5920.10	6041.82	6479.91	7013.08	7171.58
56.0	5820.86	5942.89	6387.71	6925.95	7086.95
56.5	5724.19	5846.52	6297.63	6841.38	7004.70
57.0	5625.53	5747.74	6205.91	6754.95	6920.82
57.5	5527.74	5650.67	6116.49	6670.64	6839.27
58.0	5428.54	5551.24	6025.09	6584.49	6755.29
58.5	5330.32	5454.18	5936.21	6500.85	6674.10
59.0	5232.31	5357.10	5847.22	6417.66	6593.27
59.5	5133.44	5258.22	5758.56	6333.10	6510.33
60.0	5034.29	5161.09	5670.15	6250.44	6429.84
60.5	4935.07	5061.54	5580.75	6165.81	6347.27
61.0	4836.40	4964.63	5494.53	6083.82	6267.44
61.5	4735.31	4865.37	5406.48	5999.66	6185.55
62.0	4636.32	4768.42	5321.10	5918.29	6106.60
62.5	4534.25	4669.20	5234.32	5834.61	6025.21
63.0	4435.54	4572.43	5149.84	5753.43	5946.21
63.5	4335.94	4475.37	5065.92	5673.30	5867.63
64.0	4235.09	4378.58	4981.94	5591.44	5788.54
64.5	4133.40	4281.72	4898.70	5510.88	5710.68
65.0	4033.64	4184.22	4815.86	5431.36	5630.89
65.5	3932.47	4088.93	4733.69	5352.00	5553.79
66.0	3829.66	3991.59	4651.87	5271.87	5475.37
66.5	3729.62	3897.13	4570.97	5193.97	5398.16
67.0	3626.55	3801.47	4489.60	5114.89	5319.55
67.5	3525.39	3707.72	4410.08	5037.06	5242.51
68.0	3426.04	3615.53	4331.65	4960.92	5166.58
68.5	3323.06	3521.30	4251.71	4882.67	5089.89
69.0	3222.80	3429.74	4174.02	4806.70	5013.99
69.5	3119.61	3336.51	4094.91	4728.92	4936.80
70.0	3019.33	3246.52	4018.50	4653.20	4861.27
70.5	2916.38	3155.12	3940.50	4575.80	4785.95
71.0	2816.24	3066.95	3865.19	4500.92	4710.44
71.5	2714.32	2977.08	3788.63	4424.55	4633.87
72.0	2613.88	2890.60	3714.22	4350.29	4558.01
72.5	2514.42	2805.39	3640.67	4276.46	4480.42
73.0	2414.26	2719.73	3566.05	4200.68	4398.76
73.5	2315.76	2637.17	3492.84	4124.78	4315.40
74.0	2215.52	2553.52	3419.26	4044.76	4224.84
74.5	2118.95	2473.05	3346.94	3964.00	4130.87
75.0	2020.57	2392.45	3274.53	3875.99	4031.46
75.5	1925.56	2314.52	3203.39	3785.76	3929.22
76.0	1828.61	2235.80	3130.93	3688.25	3820.51
76.5	1735.37	2160.71	3060.83	3589.61	3714.59
77.0	1643.46	2087.22	2989.97	3488.25	3609.58
77.5	1549.82	2012.75	2914.59	3382.89	3502.11
78.0	1460.02	1941.25	2838.51	3280.41	3398.35
78.5	1369.06	1869.02	2756.22	3176.29	3292.98
79.0	1281.70	1799.80	2670.63	3075.70	3190.72
79.5	1194.04	1729.86	2579.33	2972.97	3086.12
80.0	1108.74	1662.54	2485.98	2873.22	2984.50
80.5	1023.76	1594.70	2388.97	2771.44	2880.67
81.0	942.77	1528.75	2294.83	2672.74	2780.26
81.5	864.22	1463.91	2201.79	2574.86	2680.41
82.0	785.17	1399.15	2106.21	2473.94	2577.77
82.5	709.84	1335.21	2013.09	2375.92	2478.26

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HBIA48-LED355DMVFR35- LLIA000974-014.IES****CANDELA TABULATION - (Cont.)**

83.0	636.25	1268.63	1918.09	2275.50	2376.73
83.5	565.57	1200.94	1824.47	2178.00	2278.20
84.0	496.22	1127.38	1727.49	2077.31	2176.86
84.5	431.55	1051.27	1632.61	1978.76	2078.18
85.0	368.37	970.46	1534.36	1876.94	1967.66
85.5	310.41	891.59	1437.67	1763.25	1835.88
86.0	256.06	812.89	1339.54	1630.47	1694.40
86.5	203.89	730.38	1230.03	1483.93	1542.62
87.0	157.77	648.52	1102.80	1336.62	1393.38
87.5	115.81	561.89	963.88	1185.99	1243.05
88.0	80.84	474.05	826.01	1041.11	1097.77
88.5	50.82	373.91	689.68	899.61	957.25
89.0	27.37	276.32	570.88	771.79	828.70
89.5	9.35	198.82	467.98	657.54	714.98
90.0	0.89	154.20	396.01	574.73	629.68
90.5	0.82	131.55	358.67	526.67	578.82
91.0	0.90	119.90	333.99	495.14	546.05
91.5	1.00	111.47	317.48	472.88	523.46
92.0	1.24	103.31	305.42	455.54	504.77
92.5	1.39	97.19	294.48	442.46	490.95
93.0	1.62	92.06	283.73	429.59	477.55
93.5	2.21	86.13	274.63	417.47	464.99
94.0	2.72	76.21	272.47	405.38	452.18
94.5	3.46	68.10	275.77	395.46	439.79
95.0	3.91	62.00	276.92	395.57	432.90
95.5	4.21	56.12	275.89	405.04	436.57
96.0	4.72	50.94	271.64	414.96	450.64
96.5	5.08	46.06	256.57	421.65	465.27
97.0	5.41	41.73	225.54	424.98	476.17
97.5	5.86	37.62	200.87	424.46	483.72
98.0	6.28	35.00	186.47	416.85	487.29
98.5	6.67	33.81	175.64	391.36	483.30
99.0	7.18	34.43	166.62	348.77	466.23
99.5	7.64	35.67	158.32	311.76	423.78
100.0	8.12	36.79	150.07	285.26	376.02
100.5	8.60	36.16	142.48	266.70	339.54
101.0	9.12	33.52	135.04	252.58	312.08
101.5	9.67	29.04	128.05	241.57	291.02
102.0	10.53	24.80	121.30	231.47	274.51
102.5	11.12	21.17	114.92	222.27	261.98
103.0	11.98	18.07	108.54	213.33	251.32
103.5	12.71	16.13	102.66	204.90	241.99
104.0	13.37	14.80	97.38	196.86	233.10
104.5	14.04	14.05	93.70	188.83	224.26
105.0	14.75	12.69	92.13	181.26	215.91
105.5	15.56	11.44	91.69	173.84	207.82
106.0	16.28	10.62	93.41	166.65	200.10
106.5	16.89	10.25	96.16	159.46	192.54
107.0	17.81	10.29	99.02	152.62	185.15
107.5	18.61	10.32	101.88	146.03	177.89
108.0	19.28	10.45	104.16	139.91	170.89
108.5	19.99	10.60	104.87	135.33	164.07
109.0	20.74	10.83	102.31	132.70	157.16
109.5	21.56	10.91	97.71	131.69	150.90
110.0	22.26	11.15	91.17	131.91	146.31
110.5	22.93	11.31	83.31	134.52	144.22

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HBIA48-LED355DMVFR35- LLIA000974-014.IES****CANDELA TABULATION - (Cont.)**

111.0	23.77	11.58	75.24	137.94	143.23
111.5	24.46	11.78	67.80	141.56	143.83
112.0	25.22	11.98	60.57	145.17	146.78
112.5	26.06	12.27	54.11	148.59	150.45
113.0	26.94	12.51	48.40	151.60	154.18
113.5	27.63	12.83	44.04	153.49	158.12
114.0	28.54	13.09	40.22	151.91	161.89
114.5	29.32	13.38	37.58	146.77	165.32
115.0	30.11	13.71	35.10	140.08	167.99
115.5	31.02	14.02	32.18	131.92	168.59
116.0	31.80	14.51	29.26	122.42	164.58
116.5	32.60	14.83	26.67	112.54	157.95
117.0	33.51	15.21	24.46	103.22	150.59
117.5	34.34	15.59	22.73	94.37	141.35
118.0	35.24	16.03	21.36	85.69	130.86
118.5	36.16	16.48	20.51	77.74	120.68
119.0	37.02	17.01	20.15	70.61	110.63
119.5	37.95	17.48	20.05	65.18	101.26
120.0	38.76	17.96	20.20	59.98	92.20
120.5	39.78	18.57	20.30	55.86	83.76
121.0	40.81	19.02	20.56	52.97	76.69
121.5	41.79	19.64	20.88	48.86	70.95
122.0	42.77	20.21	21.26	45.36	65.64
122.5	43.72	20.84	21.67	41.70	61.21
123.0	44.69	21.49	22.13	38.47	58.25
123.5	45.84	22.13	22.64	35.64	53.87
124.0	46.92	22.80	23.12	33.29	50.05
124.5	47.99	23.55	23.63	31.40	46.17
125.0	49.06	24.35	24.10	29.86	42.78
125.5	50.27	25.16	24.69	29.09	39.58
126.0	51.39	25.89	25.22	28.83	37.11
126.5	52.48	26.63	25.78	28.82	34.99
127.0	53.60	27.29	26.41	28.97	33.25
127.5	54.61	27.99	27.02	29.27	32.07
128.0	55.65	28.78	27.58	29.71	31.53
128.5	56.70	29.39	28.16	30.13	31.37
129.0	57.68	30.12	28.66	30.61	31.59
129.5	58.53	30.75	29.37	31.13	31.96
130.0	59.52	31.46	29.90	31.67	32.39
130.5	60.45	32.15	30.42	32.21	32.79
131.0	61.27	32.88	30.97	32.60	33.24
131.5	62.23	33.63	31.53	33.12	33.82
132.0	62.99	34.28	31.92	33.51	34.08
132.5	63.83	35.08	32.42	33.82	34.51
133.0	64.54	35.82	32.81	34.21	34.92
133.5	65.18	36.70	33.25	34.57	35.33
134.0	65.85	37.52	33.61	34.87	35.58
134.5	66.59	38.38	33.96	35.08	35.82
135.0	67.19	39.22	34.26	35.26	36.00
135.5	67.80	40.14	34.56	35.33	36.16
136.0	68.42	41.06	34.81	35.54	36.29
136.5	68.92	41.98	35.16	35.56	36.34
137.0	69.49	42.96	35.41	35.70	36.27
137.5	69.97	43.95	35.56	35.71	36.24
138.0	70.47	44.95	35.79	35.68	36.05
138.5	70.96	45.89	35.93	35.59	36.00

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HBIA48-LED355DMVFR35- LLIA000974-014.IES****CANDELA TABULATION - (Cont.)**

139.0	71.43	46.87	36.01	35.57	35.79
139.5	71.74	47.84	36.15	35.48	35.72
140.0	72.10	48.75	36.21	35.50	35.49
140.5	72.59	49.77	36.27	35.50	35.47
141.0	73.03	50.64	36.40	35.47	35.43
141.5	73.33	51.49	36.35	35.40	35.32
142.0	73.71	52.24	36.44	35.40	35.25
142.5	74.04	52.98	36.47	35.35	35.11
143.0	74.17	53.61	36.45	35.40	35.13
143.5	74.37	54.18	36.42	35.30	35.09
144.0	74.61	54.75	36.45	35.39	35.09
144.5	74.78	55.32	36.42	35.40	35.20
145.0	75.04	55.95	36.44	35.56	35.16
145.5	75.25	56.78	36.47	35.62	35.28
146.0	75.51	57.44	36.64	35.76	35.31
146.5	75.77	58.29	36.77	35.95	35.56
147.0	75.98	59.06	36.97	36.05	35.60
147.5	76.16	59.78	37.28	36.24	35.65
148.0	76.28	60.66	37.61	36.35	35.93
148.5	76.35	61.46	37.93	36.44	36.01
149.0	76.43	62.35	38.34	36.40	36.05
149.5	76.39	63.17	38.80	36.45	36.15
150.0	76.33	63.90	39.40	36.45	36.15
150.5	76.24	64.57	40.03	36.37	36.20
151.0	76.12	65.28	40.83	36.36	36.25
151.5	75.90	65.92	41.67	36.23	36.23
152.0	75.80	66.38	42.55	36.15	36.13
152.5	75.64	66.72	43.59	36.14	36.14
153.0	75.54	67.11	44.57	36.18	36.01
153.5	75.27	67.51	45.61	36.23	35.97
154.0	75.06	68.09	46.71	36.36	35.79
154.5	74.96	68.54	48.01	36.64	35.81
155.0	74.77	69.00	49.28	37.13	35.80
155.5	74.42	69.41	50.55	37.76	36.09
156.0	74.34	69.54	51.72	38.51	36.38
156.5	74.08	69.66	52.79	39.35	36.99
157.0	73.87	69.81	53.80	40.59	37.69
157.5	73.79	69.96	54.75	41.88	38.57
158.0	73.70	70.05	55.60	43.26	39.61
158.5	73.54	70.16	56.38	44.83	40.76
159.0	73.35	70.31	57.28	46.32	42.03
159.5	73.07	70.48	58.24	47.97	43.60
160.0	72.93	70.76	59.21	49.74	45.13
160.5	72.65	70.99	60.00	51.59	46.92
161.0	72.63	71.29	60.90	53.07	48.72
161.5	72.41	71.44	61.97	54.56	50.73
162.0	72.32	71.65	63.13	55.76	52.83
162.5	72.16	71.86	64.08	56.92	54.71
163.0	72.10	72.04	65.09	57.76	56.55
163.5	72.05	72.21	66.11	58.81	58.15
164.0	72.10	72.46	67.12	59.85	59.43
164.5	72.24	72.59	67.97	61.14	60.67
165.0	72.32	72.76	68.62	62.53	62.19
165.5	72.46	72.98	69.13	64.01	63.80
166.0	72.55	73.09	69.81	65.49	65.23
166.5	72.76	73.32	70.48	66.72	66.75

CANDELA TABULATION - (Cont.)

167.0	72.76	73.49	71.09	67.52	68.59
167.5	72.97	73.57	71.58	68.21	70.58
168.0	73.20	73.75	71.79	67.80	72.43
168.5	73.32	73.87	72.01	68.48	73.91
169.0	73.37	73.96	72.11	69.18	74.84
169.5	73.51	73.95	72.35	69.92	75.36
170.0	73.67	73.90	72.51	70.72	75.65
170.5	73.75	73.82	72.67	71.33	76.00
171.0	73.90	73.78	72.72	71.74	76.14
171.5	73.90	73.68	72.59	71.82	76.09
172.0	74.05	73.60	72.38	71.98	75.87
172.5	74.08	73.58	72.25	71.93	75.47
173.0	74.16	73.53	72.03	71.80	74.95
173.5	74.21	73.49	71.87	71.63	74.25
174.0	74.36	73.52	71.88	71.25	73.57
174.5	74.40	73.46	71.93	70.85	72.81
175.0	74.30	73.24	71.96	70.57	72.13
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-LED355DMVFR35- LLIA000974-014.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4714.17	N.A.	12.10
0-30	9983.34	N.A.	25.70
0-40	16293.85	N.A.	42.00
0-60	28710.27	N.A.	73.90
0-80	36790.29	N.A.	94.70
0-90	38250.58	N.A.	98.50
10-90	37028.41	N.A.	95.30
20-40	11579.69	N.A.	29.80
20-50	18080.7	N.A.	46.60
40-70	17190.96	N.A.	44.30
60-80	8080.01	N.A.	20.80
70-80	3305.48	N.A.	8.50
80-90	1460.29	N.A.	3.80
90-110	385.56	N.A.	1.00
90-120	451.15	N.A.	1.20
90-130	481.28	N.A.	1.20
90-150	540.85	N.A.	1.40
90-180	589.63	N.A.	1.50
110-180	204.07	N.A.	0.50
0-180	38840.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

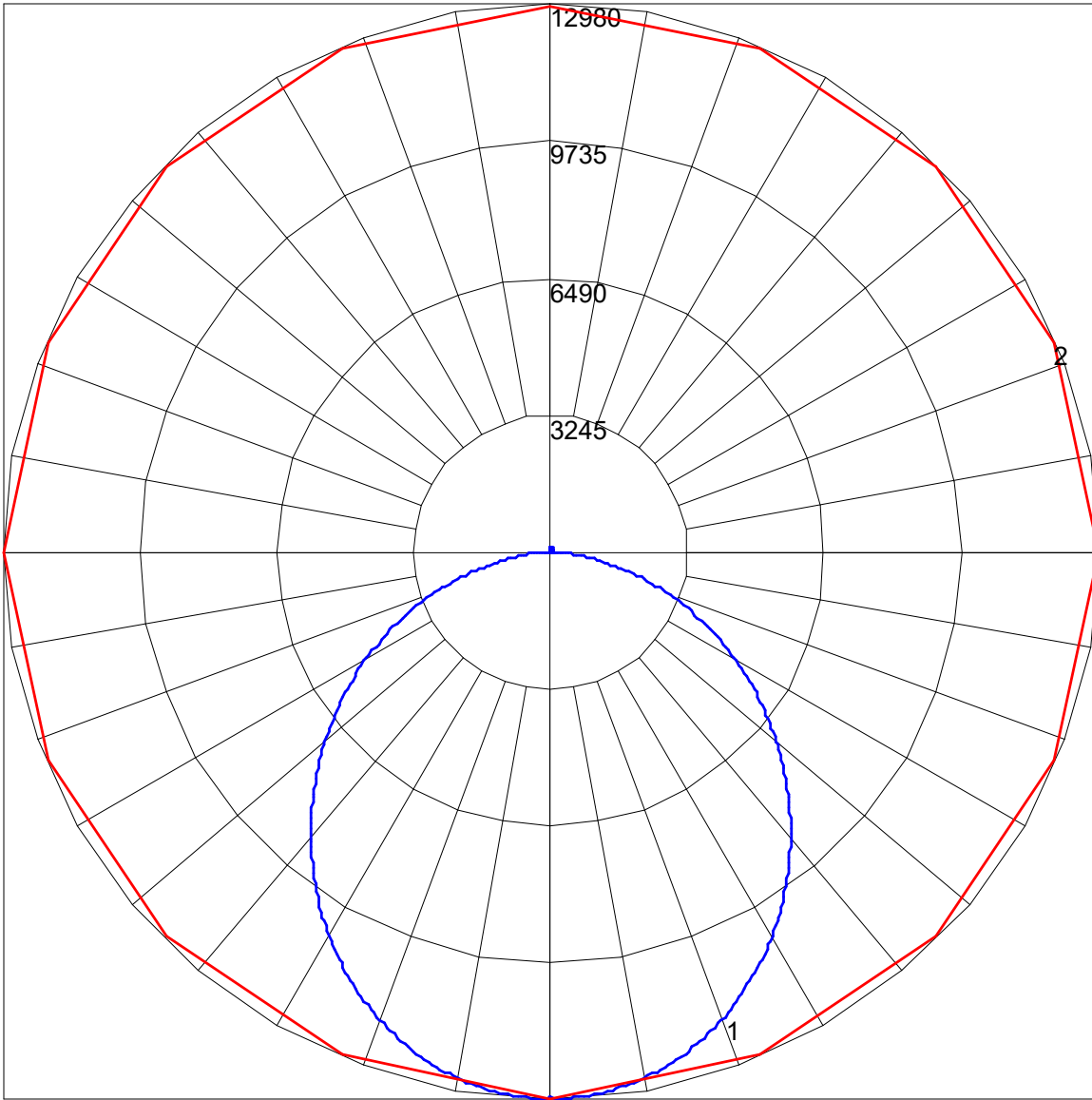
Zone	Lumens
0-10	1222.16
10-20	3492.00
20-30	5269.17
30-40	6310.52
40-50	6501.01
50-60	5915.41
60-70	4774.54
70-80	3305.47
80-90	1460.29
90-100	270.99
100-110	114.57
110-120	65.59
120-130	30.13
130-140	30.70
140-150	28.86
150-160	24.50
160-170	18.90
170-180	5.39

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
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	98
1	107	102	97	93	104	100	95	92	95	92	88	91	88	85	87	85	83	80
2	97	88	81	75	94	86	80	74	83	77	72	79	74	70	76	72	68	66
3	88	77	69	62	86	76	68	61	72	66	60	69	64	59	67	62	58	55
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	59	54	49	47
5	74	61	52	45	72	60	51	45	57	50	44	55	49	43	53	47	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	48	42	38	35
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	31	43	36	30	42	35	30	41	34	30	28
9	55	42	33	28	54	41	33	28	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

POLAR GRAPH



Maximum Candela = 12979.77 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.)