



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 13326828.01  
[TESTLAB] GEN FROM UL Verification Services Inc.  
[ISSUEDATE] 4/24/2020  
[MANUFAC] WILLIAMS INDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] GH-2-L80-840-HA-FA-DIM-UNV  
[LUMINAIRE] White steel housing, frosted lens enclosure  
[LAMP] 168 white LEDs  
[BALLAST] ULT D15CC55UNVPW-C  
[OTHER] 25 C, 120.146 V, 0.466429 A, 55.9026 W, 0.997551 PF, 60 Hz  
[OTHER] This test was performed using the calibrated photodetector met  
[MORE] hod of absolute photometry.  
[ \_SEARCH\_SOURCECTYPE] LED  
[ \_SEARCH\_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay  
[ \_SEARCH\_MOUNTING] Pendant, Suspended

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8074
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	55.9026
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.85 ft
Luminous Width (90-270)	0.88 ft
Luminous Height	0.27 ft

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**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12015	12187	13643
55	9896	10810	12749
65	7662	9231	11037
75	5270	7096	7739
85	2338	4168	5190

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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	2641.0	2641.0	2641.0	2641.0	2641.0
0.5	2674.0	2636.0	2639.0	2636.0	2633.0
1.0	2674.0	2636.0	2639.0	2635.0	2632.0
1.5	2673.0	2635.0	2638.0	2635.0	2631.0
2.0	2672.0	2634.0	2637.0	2634.0	2631.0
2.5	2670.0	2633.0	2636.0	2633.0	2630.0
3.0	2669.0	2631.0	2635.0	2632.0	2629.0
3.5	2667.0	2629.0	2633.0	2631.0	2628.0
4.0	2664.0	2627.0	2632.0	2630.0	2627.0
4.5	2661.0	2625.0	2630.0	2628.0	2626.0
5.0	2658.0	2622.0	2628.0	2626.0	2624.0
5.5	2655.0	2619.0	2625.0	2624.0	2622.0
6.0	2652.0	2616.0	2623.0	2622.0	2620.0
6.5	2647.0	2612.0	2619.0	2620.0	2618.0
7.0	2643.0	2608.0	2616.0	2617.0	2616.0
7.5	2638.0	2604.0	2613.0	2615.0	2613.0
8.0	2634.0	2600.0	2609.0	2611.0	2611.0
8.5	2628.0	2595.0	2606.0	2609.0	2608.0
9.0	2622.0	2590.0	2601.0	2605.0	2605.0
9.5	2617.0	2585.0	2597.0	2602.0	2602.0
10.0	2610.0	2579.0	2593.0	2598.0	2599.0
10.5	2604.0	2574.0	2588.0	2594.0	2596.0
11.0	2598.0	2568.0	2583.0	2591.0	2592.0
11.5	2591.0	2562.0	2578.0	2587.0	2588.0
12.0	2583.0	2555.0	2573.0	2582.0	2584.0
12.5	2576.0	2548.0	2567.0	2578.0	2580.0
13.0	2568.0	2541.0	2561.0	2573.0	2576.0
13.5	2560.0	2534.0	2555.0	2568.0	2571.0
14.0	2551.0	2526.0	2548.0	2563.0	2567.0
14.5	2543.0	2518.0	2542.0	2557.0	2562.0
15.0	2534.0	2510.0	2535.0	2552.0	2557.0
15.5	2524.0	2501.0	2527.0	2546.0	2552.0
16.0	2515.0	2492.0	2520.0	2540.0	2546.0
16.5	2504.0	2483.0	2512.0	2534.0	2541.0
17.0	2494.0	2474.0	2505.0	2527.0	2535.0
17.5	2482.0	2464.0	2497.0	2521.0	2529.0
18.0	2471.0	2454.0	2488.0	2514.0	2523.0
18.5	2459.0	2443.0	2480.0	2507.0	2516.0
19.0	2447.0	2432.0	2471.0	2500.0	2510.0
19.5	2435.0	2420.0	2462.0	2493.0	2503.0
20.0	2423.0	2409.0	2453.0	2485.0	2496.0
20.5	2409.0	2398.0	2444.0	2477.0	2489.0
21.0	2397.0	2386.0	2435.0	2470.0	2482.0
21.5	2383.0	2374.0	2425.0	2462.0	2475.0
22.0	2370.0	2362.0	2415.0	2454.0	2467.0
22.5	2356.0	2349.0	2405.0	2445.0	2460.0
23.0	2342.0	2337.0	2395.0	2437.0	2452.0
23.5	2328.0	2324.0	2384.0	2429.0	2445.0
24.0	2314.0	2311.0	2373.0	2420.0	2437.0
24.5	2299.0	2298.0	2362.0	2411.0	2429.0
25.0	2284.0	2284.0	2351.0	2402.0	2421.0
25.5	2269.0	2271.0	2340.0	2393.0	2412.0
26.0	2253.0	2257.0	2328.0	2384.0	2404.0
26.5	2238.0	2243.0	2316.0	2374.0	2395.0

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**CANDELA TABULATION - (Cont.)**

27.0	2222.0	2228.0	2304.0	2365.0	2386.0
27.5	2204.0	2213.0	2292.0	2355.0	2377.0
28.0	2187.0	2198.0	2279.0	2345.0	2368.0
28.5	2170.0	2182.0	2266.0	2334.0	2358.0
29.0	2152.0	2166.0	2254.0	2324.0	2348.0
29.5	2134.0	2150.0	2240.0	2313.0	2338.0
30.0	2115.0	2133.0	2226.0	2301.0	2327.0
30.5	2097.0	2116.0	2212.0	2289.0	2316.0
31.0	2078.0	2099.0	2197.0	2277.0	2304.0
31.5	2058.0	2081.0	2183.0	2265.0	2293.0
32.0	2039.0	2063.0	2168.0	2253.0	2281.0
32.5	2019.0	2045.0	2153.0	2240.0	2269.0
33.0	1999.0	2027.0	2137.0	2226.0	2256.0
33.5	1979.0	2008.0	2121.0	2213.0	2243.0
34.0	1958.0	1989.0	2106.0	2199.0	2230.0
34.5	1937.0	1970.0	2089.0	2185.0	2216.0
35.0	1916.0	1951.0	2073.0	2171.0	2203.0
35.5	1895.0	1931.0	2056.0	2157.0	2190.0
36.0	1874.0	1912.0	2039.0	2142.0	2176.0
36.5	1851.0	1891.0	2023.0	2127.0	2162.0
37.0	1829.0	1871.0	2005.0	2112.0	2147.0
37.5	1807.0	1852.0	1988.0	2097.0	2133.0
38.0	1785.0	1831.0	1970.0	2081.0	2118.0
38.5	1763.0	1811.0	1952.0	2065.0	2103.0
39.0	1740.0	1790.0	1935.0	2050.0	2088.0
39.5	1717.0	1769.0	1916.0	2034.0	2073.0
40.0	1695.0	1748.0	1898.0	2018.0	2057.0
40.5	1672.0	1727.0	1880.0	2002.0	2041.0
41.0	1649.0	1706.0	1862.0	1985.0	2026.0
41.5	1626.0	1685.0	1843.0	1970.0	2011.0
42.0	1603.0	1664.0	1825.0	1954.0	1996.0
42.5	1581.0	1644.0	1808.0	1938.0	1980.0
43.0	1558.0	1623.0	1790.0	1922.0	1964.0
43.5	1536.0	1602.0	1771.0	1906.0	1949.0
44.0	1513.0	1581.0	1754.0	1891.0	1934.0
44.5	1491.0	1561.0	1736.0	1875.0	1920.0
45.0	1469.0	1541.0	1719.0	1859.0	1906.0
45.5	1447.0	1520.0	1701.0	1844.0	1890.0
46.0	1425.0	1500.0	1684.0	1828.0	1875.0
46.5	1403.0	1480.0	1666.0	1813.0	1860.0
47.0	1381.0	1460.0	1648.0	1797.0	1846.0
47.5	1359.0	1439.0	1631.0	1781.0	1831.0
48.0	1338.0	1419.0	1614.0	1765.0	1815.0
48.5	1316.0	1399.0	1596.0	1749.0	1800.0
49.0	1294.0	1379.0	1579.0	1734.0	1785.0
49.5	1272.0	1358.0	1561.0	1718.0	1770.0
50.0	1250.0	1338.0	1544.0	1702.0	1754.0
50.5	1228.0	1318.0	1526.0	1685.0	1739.0
51.0	1207.0	1298.0	1509.0	1669.0	1723.0
51.5	1184.0	1278.0	1491.0	1653.0	1707.0
52.0	1163.0	1258.0	1473.0	1636.0	1691.0
52.5	1141.0	1238.0	1455.0	1620.0	1676.0
53.0	1120.0	1218.0	1437.0	1603.0	1659.0
53.5	1098.0	1198.0	1420.0	1586.0	1643.0
54.0	1077.0	1178.0	1402.0	1569.0	1625.0
54.5	1055.0	1158.0	1384.0	1552.0	1608.0

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**CANDELA TABULATION - (Cont.)**

55.0	1035.0	1138.0	1366.0	1535.0	1591.0
55.5	1013.0	1119.0	1348.0	1517.0	1573.0
56.0	992.3	1099.0	1330.0	1499.0	1555.0
56.5	971.4	1080.0	1312.0	1481.0	1536.0
57.0	950.8	1060.0	1293.0	1463.0	1516.0
57.5	930.3	1041.0	1275.0	1444.0	1497.0
58.0	909.8	1022.0	1256.0	1426.0	1477.0
58.5	888.9	1003.0	1238.0	1406.0	1456.0
59.0	868.5	983.8	1220.0	1387.0	1436.0
59.5	848.4	965.5	1201.0	1366.0	1415.0
60.0	828.2	946.5	1182.0	1346.0	1393.0
60.5	808.5	928.0	1163.0	1326.0	1372.0
61.0	789.0	909.5	1145.0	1306.0	1350.0
61.5	769.5	891.3	1127.0	1285.0	1328.0
62.0	751.9	872.8	1108.0	1263.0	1306.0
62.5	734.1	855.1	1089.0	1242.0	1284.0
63.0	715.5	837.4	1071.0	1221.0	1262.0
63.5	696.7	820.0	1052.0	1199.0	1239.0
64.0	678.2	803.0	1033.0	1178.0	1217.0
64.5	659.6	785.8	1015.0	1156.0	1195.0
65.0	641.6	769.3	995.3	1133.0	1171.0
65.5	623.7	753.4	975.9	1112.0	1147.0
66.0	606.1	739.3	956.6	1090.0	1123.0
66.5	588.6	723.5	937.3	1068.0	1101.0
67.0	571.2	706.9	918.0	1046.0	1076.0
67.5	554.2	690.6	898.3	1023.0	1050.0
68.0	537.4	674.6	878.3	999.6	1024.0
68.5	520.7	658.6	858.3	976.8	999.5
69.0	504.1	642.7	839.0	953.9	973.6
69.5	487.7	626.6	819.7	930.3	946.7
70.0	471.2	610.6	800.3	905.8	918.9
70.5	455.1	594.5	780.7	880.7	890.9
71.0	439.3	578.5	763.2	856.5	863.8
71.5	423.3	562.3	744.1	831.9	836.4
72.0	407.6	545.8	726.5	806.5	808.3
72.5	392.2	529.7	707.8	781.2	781.8
73.0	376.9	513.4	688.1	756.4	754.4
73.5	361.8	497.3	668.2	731.1	727.4
74.0	347.1	481.3	648.9	708.0	703.1
74.5	332.4	465.1	629.6	682.9	677.4
75.0	318.0	448.8	610.4	657.5	651.4
75.5	303.9	432.8	590.6	632.9	626.5
76.0	290.1	416.8	570.5	609.2	603.0
76.5	276.6	401.1	550.5	586.5	580.2
77.0	263.2	385.3	530.8	564.4	558.5
77.5	250.1	369.6	511.6	542.5	537.0
78.0	237.3	354.3	492.1	520.9	516.4
78.5	224.7	339.4	472.4	500.6	497.0
79.0	212.5	325.1	453.1	481.5	478.8
79.5	200.4	310.9	434.4	463.0	461.0
80.0	188.6	296.9	416.3	444.8	443.9
80.5	177.0	283.3	398.5	427.5	427.6
81.0	165.6	269.7	380.6	410.9	412.2
81.5	154.5	256.5	362.9	395.0	397.6
82.0	143.6	243.0	346.2	380.0	383.5
82.5	132.8	229.6	330.2	365.5	369.9

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**CANDELA TABULATION - (Cont.)**

83.0	122.3	216.3	314.7	351.4	356.7
83.5	112.1	203.2	299.3	337.9	344.2
84.0	102.0	190.3	284.3	325.1	332.3
84.5	92.0	177.4	270.0	313.0	320.9
85.0	82.1	164.7	256.7	301.2	309.8
85.5	72.3	152.3	244.0	289.8	299.0
86.0	62.4	140.2	231.6	278.8	288.6
86.5	52.6	128.5	219.5	268.3	278.7
87.0	42.6	117.1	208.3	258.4	269.2
87.5	32.6	106.1	197.8	248.8	259.6
88.0	22.7	95.8	187.9	239.4	250.1
88.5	12.8	86.0	178.8	230.4	241.5
89.0	4.0	77.9	171.0	223.2	234.5
89.5	0.0	71.6	164.3	216.5	227.7
90.0	0.0	67.5	159.2	210.8	221.8
90.5	2.6	86.4	197.2	268.4	287.7
91.0	2.7	83.3	192.3	262.2	281.0
91.5	2.8	80.3	188.0	256.8	275.3
92.0	2.8	77.4	183.9	251.7	269.7
92.5	2.9	74.5	179.6	246.9	264.7
93.0	3.0	71.7	175.4	242.0	259.6
93.5	3.2	69.2	171.2	236.9	254.5
94.0	3.5	66.8	167.0	232.0	249.0
94.5	3.9	64.3	162.7	227.3	244.0
95.0	4.3	62.0	158.7	222.6	239.2
95.5	4.8	59.9	154.7	217.7	234.4
96.0	5.2	57.9	151.0	212.8	229.5
96.5	5.6	55.9	147.6	208.2	224.2
97.0	6.0	54.0	144.3	203.7	219.5
97.5	6.5	52.1	141.1	199.3	214.9
98.0	6.8	50.5	137.8	195.1	210.4
98.5	7.1	49.0	134.3	191.4	206.0
99.0	7.3	47.6	130.8	187.8	202.1
99.5	7.5	46.3	127.7	184.2	198.5
100.0	7.7	45.0	124.6	180.5	194.9
100.5	7.8	43.8	121.7	176.9	191.2
101.0	7.9	42.7	119.0	172.8	187.5
101.5	8.0	41.8	116.1	168.5	184.0
102.0	8.1	40.9	113.3	164.6	179.5
102.5	8.2	40.1	110.5	161.2	175.1
103.0	8.4	39.4	107.6	157.8	171.2
103.5	8.5	38.7	104.8	154.4	167.9
104.0	8.6	38.0	102.1	151.4	164.5
104.5	8.7	37.4	99.6	148.5	160.9
105.0	8.8	36.8	97.2	145.5	158.0
105.5	8.9	36.3	95.2	142.3	155.2
106.0	9.0	35.9	93.2	139.3	152.3
106.5	9.1	35.4	91.0	136.0	149.0
107.0	9.2	35.0	89.0	132.6	146.0
107.5	9.3	34.7	87.2	129.6	142.9
108.0	9.4	34.4	85.4	126.5	139.3
108.5	9.5	34.1	83.7	123.5	136.0
109.0	9.5	33.8	81.9	120.5	133.0
109.5	9.6	33.5	80.1	118.0	129.8
110.0	9.7	33.3	78.7	115.8	126.9
110.5	9.8	33.1	77.4	113.7	123.8

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**CANDELA TABULATION - (Cont.)**

111.0	9.9	32.8	76.2	111.2	121.4
111.5	9.9	32.6	74.9	108.8	119.3
112.0	10.0	32.4	73.7	106.7	117.3
112.5	10.1	32.3	72.6	104.7	115.1
113.0	10.2	32.1	71.5	102.8	112.5
113.5	10.2	31.9	70.4	101.0	110.3
114.0	10.2	31.8	69.4	99.1	108.4
114.5	10.2	31.7	68.4	96.8	106.4
115.0	10.2	31.6	67.4	95.0	104.6
115.5	10.1	31.4	66.4	93.6	102.9
116.0	10.1	31.4	65.5	92.2	100.9
116.5	10.1	31.3	64.6	90.9	98.6
117.0	10.1	31.2	63.8	89.6	97.0
117.5	10.1	31.2	63.0	88.4	95.6
118.0	10.2	31.1	62.2	87.1	94.3
118.5	10.3	31.0	61.5	85.9	92.9
119.0	10.4	30.9	60.7	84.7	91.7
119.5	10.4	30.8	60.1	83.6	90.4
120.0	10.5	30.6	59.3	82.5	89.2
120.5	10.5	30.5	58.6	81.4	88.1
121.0	10.5	30.4	58.0	80.3	86.9
121.5	10.5	30.4	57.3	79.3	85.8
122.0	10.5	30.3	56.7	78.2	84.7
122.5	10.5	30.2	56.1	77.2	83.7
123.0	10.5	30.1	55.5	76.2	82.7
123.5	10.6	30.1	55.0	75.3	81.7
124.0	10.8	30.0	54.4	74.4	80.7
124.5	10.9	29.9	53.9	73.4	79.8
125.0	11.0	29.8	53.3	72.6	78.8
125.5	11.0	29.8	52.8	71.7	77.9
126.0	11.1	29.8	52.4	70.9	77.1
126.5	11.2	29.8	52.0	70.1	76.2
127.0	11.3	29.8	51.5	69.3	75.3
127.5	11.4	29.8	51.1	68.5	74.5
128.0	11.5	29.8	50.7	67.8	73.7
128.5	11.6	29.9	50.3	67.0	72.8
129.0	11.8	29.9	49.9	66.3	72.0
129.5	11.9	30.0	49.6	65.6	71.2
130.0	12.0	30.0	49.2	64.9	70.4
130.5	12.2	30.1	48.8	64.2	69.6
131.0	12.3	30.1	48.5	63.5	68.8
131.5	12.5	30.1	48.1	62.9	68.1
132.0	12.6	30.1	47.8	62.2	67.4
132.5	12.8	30.1	47.6	61.6	66.7
133.0	12.9	30.1	47.3	60.9	66.0
133.5	13.0	30.1	47.0	60.3	65.4
134.0	13.0	30.1	46.8	59.7	64.7
134.5	13.1	30.1	46.5	59.2	64.0
135.0	13.1	30.1	46.2	58.6	63.4
135.5	13.1	30.1	45.9	58.1	62.7
136.0	13.1	30.1	45.6	57.5	62.1
136.5	13.0	30.1	45.3	57.0	61.5
137.0	12.9	30.0	44.9	56.6	60.9
137.5	12.8	29.9	44.6	56.1	60.4
138.0	12.6	29.9	44.2	55.7	59.9
138.5	12.4	29.8	43.8	55.3	59.4

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

139.0	12.1	29.8	43.6	54.9	58.9
139.5	11.9	29.8	43.3	54.6	58.5
140.0	11.6	29.7	43.0	54.3	58.1
140.5	11.4	29.7	42.7	54.0	57.7
141.0	11.2	29.7	42.4	53.7	57.3
141.5	11.0	29.7	42.1	53.4	57.0
142.0	10.9	29.7	41.7	53.1	56.6
142.5	10.8	29.7	41.4	52.8	56.2
143.0	10.7	29.7	41.1	52.5	55.9
143.5	10.7	29.8	40.9	52.1	55.7
144.0	10.6	29.8	40.7	51.7	55.4
144.5	10.7	29.9	40.5	51.4	55.1
145.0	10.8	29.9	40.4	51.0	54.8
145.5	10.9	30.0	40.2	50.6	54.6
146.0	11.0	30.1	40.1	50.2	54.3
146.5	11.1	30.2	40.0	49.9	54.0
147.0	11.3	30.2	39.9	49.6	53.8
147.5	11.4	30.3	39.9	49.3	53.7
148.0	11.5	30.3	39.8	48.9	53.5
148.5	11.6	30.3	39.8	48.6	53.2
149.0	11.7	30.3	39.8	48.2	53.1
149.5	11.8	30.3	39.8	47.8	53.0
150.0	11.9	30.3	39.8	47.4	52.8
150.5	12.0	30.3	39.8	47.1	52.6
151.0	12.1	30.3	39.8	46.9	52.3
151.5	12.2	30.2	39.7	46.6	52.1
152.0	12.3	30.1	39.6	46.3	51.9
152.5	12.3	30.1	39.5	46.1	51.6
153.0	12.4	29.9	39.3	45.8	51.4
153.5	12.5	29.8	38.9	45.5	51.2
154.0	12.5	29.6	38.6	45.3	51.0
154.5	12.6	29.4	38.2	45.0	50.7
155.0	12.6	29.1	37.9	44.8	50.4
155.5	12.7	28.9	37.6	44.5	50.1
156.0	12.7	28.6	37.3	44.3	49.7
156.5	12.8	28.3	37.1	43.9	49.3
157.0	12.8	28.0	36.9	43.6	48.9
157.5	12.9	27.7	36.7	43.1	48.4
158.0	12.9	27.4	36.6	42.5	47.8
158.5	13.0	27.1	36.4	41.8	47.2
159.0	13.0	26.8	36.3	41.0	46.4
159.5	13.1	26.5	36.2	40.1	45.5
160.0	13.2	26.2	36.1	39.2	44.4
160.5	13.2	25.9	36.0	38.4	43.2
161.0	13.2	25.6	35.8	37.7	41.8
161.5	13.3	25.3	35.7	37.1	40.4
162.0	13.3	25.0	35.4	36.5	39.1
162.5	13.4	24.7	35.1	36.1	38.0
163.0	13.4	24.4	34.8	35.6	37.0
163.5	13.4	24.1	34.5	35.2	36.0
164.0	13.4	23.7	34.2	34.8	35.2
164.5	13.5	23.4	33.8	34.5	34.4
165.0	13.5	23.1	33.3	34.2	33.7
165.5	13.5	22.7	32.6	33.9	32.9
166.0	13.5	22.4	31.9	33.4	32.3
166.5	13.6	22.0	31.2	32.8	31.6



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

<b>167.0</b>	13.6	21.6	30.5	32.2	30.7
<b>167.5</b>	13.6	21.3	29.8	31.7	29.7
<b>168.0</b>	13.6	20.9	29.0	31.1	28.7
<b>168.5</b>	13.7	20.5	28.3	30.3	27.9
<b>169.0</b>	13.7	20.2	27.6	29.4	27.0
<b>169.5</b>	13.7	19.8	26.9	28.4	25.9
<b>170.0</b>	13.8	19.5	26.2	27.3	24.7
<b>170.5</b>	13.8	19.1	25.6	26.3	23.4
<b>171.0</b>	13.9	18.8	24.9	25.3	22.2
<b>171.5</b>	13.9	18.4	24.2	24.4	21.0
<b>172.0</b>	13.9	18.1	23.5	23.4	19.7
<b>172.5</b>	14.0	17.7	22.8	22.5	18.5
<b>173.0</b>	14.0	17.4	22.0	21.6	17.3
<b>173.5</b>	14.1	17.1	21.3	20.6	16.3
<b>174.0</b>	14.2	16.8	20.6	19.7	15.4
<b>174.5</b>	14.3	16.5	19.8	18.8	14.5
<b>175.0</b>	14.4	16.3	19.1	17.9	13.6
<b>175.5</b>	14.5	16.0	18.4	17.0	13.0
<b>176.0</b>	14.5	15.8	17.7	16.2	12.8
<b>176.5</b>	14.7	15.6	17.1	15.4	12.6
<b>177.0</b>	14.8	15.5	16.6	14.6	12.2
<b>177.5</b>	15.0	15.5	16.1	13.9	11.8
<b>178.0</b>	15.2	15.4	15.7	13.4	11.6
<b>178.5</b>	15.2	15.3	15.3	13.0	11.5
<b>179.0</b>	15.2	15.2	15.0	12.6	11.8
<b>179.5</b>	15.1	15.1	14.8	12.4	12.1
<b>180.0</b>	13.9	13.9	13.9	13.9	13.9

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	965.16	N.A.	12.00
0-30	2046.71	N.A.	25.30
0-40	3336.37	N.A.	41.30
0-60	5846.15	N.A.	72.40
0-80	7371.61	N.A.	91.30
0-90	7629.36	N.A.	94.50
10-90	7379.52	N.A.	91.40
20-40	2371.22	N.A.	29.40
20-50	3685.31	N.A.	45.60
40-70	3451.08	N.A.	42.70
60-80	1525.46	N.A.	18.90
70-80	584.16	N.A.	7.20
80-90	257.75	N.A.	3.20
90-110	251.66	N.A.	3.10
90-120	314.88	N.A.	3.90
90-130	360.21	N.A.	4.50
90-150	418.15	N.A.	5.20
90-180	444.66	N.A.	5.50
110-180	193.00	N.A.	2.40
0-180	8074.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	249.84
10-20	715.32
20-30	1081.55
30-40	1289.67
40-50	1314.09
50-60	1195.69
60-70	941.30
70-80	584.16
80-90	257.75
90-100	154.57
100-110	97.09
110-120	63.22
120-130	45.33
130-140	33.60
140-150	24.34
150-160	16.55
160-170	8.14
170-180	1.81

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	107	102	97	93	104	99	95	91	94	90	87	89	86	84	84	82	80	78
2	97	88	81	76	94	86	80	74	82	76	72	77	73	69	74	70	67	64
3	88	78	69	63	85	76	68	62	72	65	60	68	63	58	65	60	56	54
4	81	69	60	53	78	67	59	52	64	57	51	61	55	50	58	53	48	46
5	74	61	52	45	72	60	51	45	57	50	44	54	48	43	52	46	42	40
6	69	55	46	40	66	54	45	39	51	44	38	49	43	38	47	41	37	35
7	64	50	41	35	61	49	41	35	47	39	34	45	38	33	43	37	33	31
8	59	46	37	31	57	45	37	31	43	36	30	41	35	30	40	34	29	27
9	55	42	34	28	54	41	33	28	39	32	27	38	32	27	37	31	26	25
10	52	39	31	25	50	38	30	25	36	30	25	35	29	24	34	28	24	22

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GH-2-L80-840-HA-FA-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

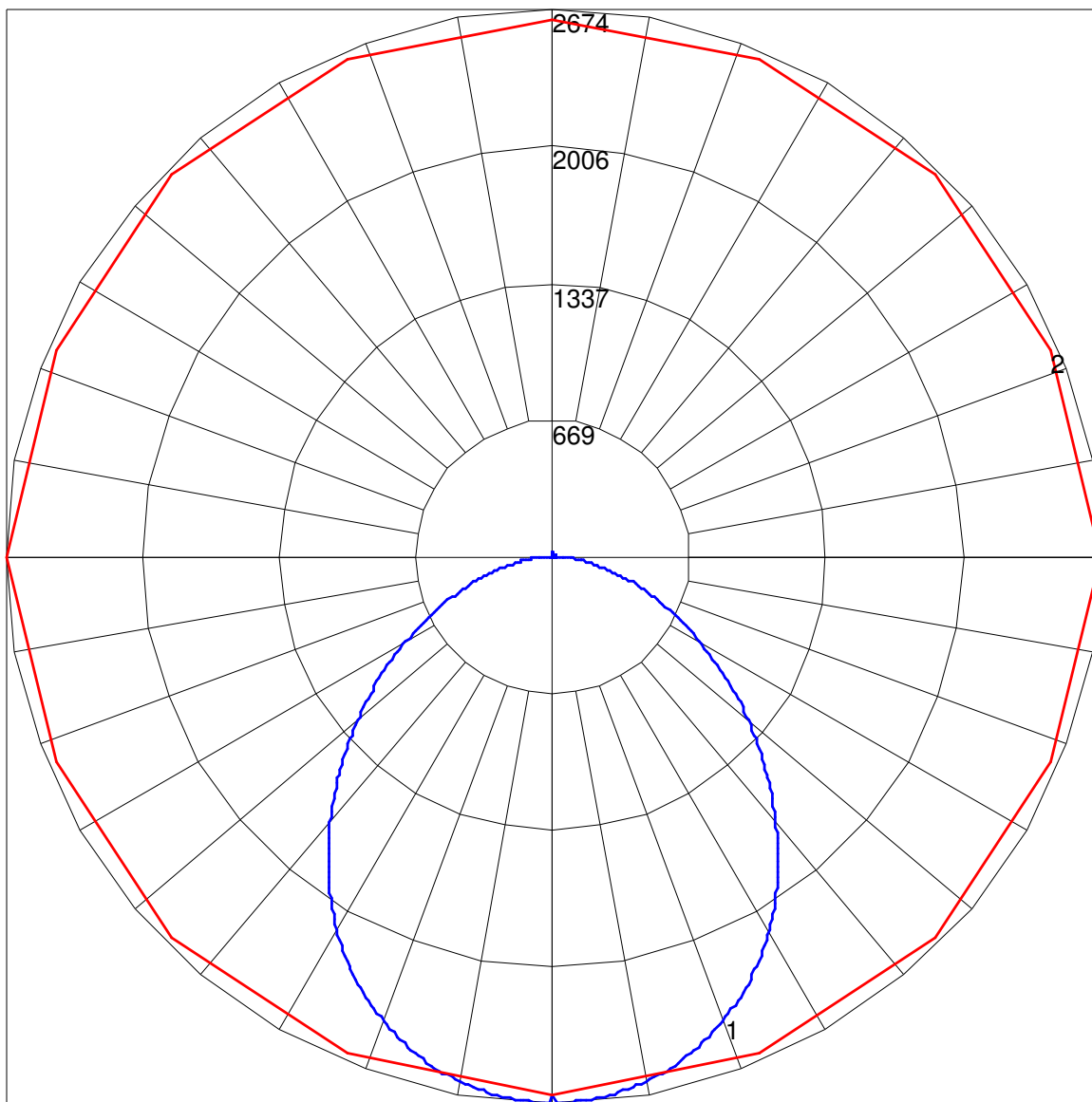
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.4	19.9	18.8	20.3	20.8	21.2	22.7	21.7	23.2	23.6
	3H	19.7	21.1	20.2	21.6	22.1	23.2	24.5	23.6	25.0	25.5
	4H	20.2	21.5	20.6	21.9	22.4	23.8	25.1	24.3	25.6	26.1
	6H	20.4	21.6	20.9	22.1	22.6	24.3	25.5	24.8	26.0	26.5
	8H	20.5	21.6	21.0	22.1	22.7	24.5	25.7	25.0	26.2	26.7
	12H	20.5	21.6	21.0	22.1	22.7	24.7	25.8	25.2	26.3	26.9
4H	2H	19.4	20.7	19.9	21.1	21.7	21.6	22.9	22.1	23.4	23.9
	3H	21.0	22.1	21.5	22.6	23.1	23.8	24.8	24.3	25.4	25.9
	4H	21.5	22.5	22.0	23.0	23.6	24.5	25.5	25.1	26.1	26.6
	6H	21.9	22.7	22.4	23.3	23.9	25.2	26.1	25.8	26.6	27.2
	8H	22.0	22.8	22.5	23.3	23.9	25.5	26.3	26.0	26.8	27.4
	12H	22.0	22.7	22.6	23.3	23.9	25.7	26.4	26.3	27.0	27.6
8H	4H	22.1	22.9	22.6	23.4	24.0	24.7	25.5	25.3	26.1	26.7
	6H	22.6	23.2	23.1	23.8	24.4	25.5	26.2	26.1	26.8	27.4
	8H	22.7	23.3	23.3	23.9	24.6	25.8	26.4	26.4	27.1	27.7
	12H	22.8	23.4	23.4	24.0	24.6	26.2	26.7	26.8	27.3	28.0
12H	4H	22.2	22.9	22.7	23.5	24.1	24.7	25.5	25.3	26.0	26.6
	6H	22.7	23.3	23.3	23.9	24.6	25.5	26.1	26.1	26.7	27.4
	8H	22.9	23.5	23.5	24.1	24.7	25.9	26.4	26.5	27.0	27.7

Maximum UGR = 28.0

POLAR GRAPH



Maximum Candela = 2674 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.)