

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-2-L180-840-HP-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 14617179.01  
[TESTLAB] UL Verification Services Inc.  
[ISSUE DATE] 1/20/2025  
[TEST DATE] 1/6/2023  
[MANUFAC] H E Williams Inc  
[LUMCAT] GS-2-L180-840-HP-DIM-UNV  
[LUMINAIRE] White aluminum housing, prismatic lense enclosure  
[LAMP] 448 White LEDs  
[BALLAST] ULT D21CC80UNVPW-C  
[OTHER] 24.9 C, 120.004 V, 1.44538 A, 173.17 W, 0.998374 PF, 59.9997 H  
[OTHER] This test was performed using the calibrated photodetector met  
[MORE] hod of absolute photometry.

### CHARACTERISTICS

|                                 |                 |
|---------------------------------|-----------------|
| Lumens Per Lamp                 | N.A. (absolute) |
| Total Lamp Lumens               | N.A. (absolute) |
| Luminaire Lumens                | 18722           |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 161             |
| Total Luminaire Watts           | 116             |
| Ballast Factor                  | 1.00            |
| CIE Type                        | Direct          |
| Spacing Criterion (0-180)       | 1.28            |
| Spacing Criterion (90-270)      | 1.30            |
| Spacing Criterion (Diagonal)    | 1.42            |
| Basic Luminous Shape            | Rectangular     |
| Luminous Length (0-180)         | 1.67 ft         |
| Luminous Width (90-270)         | 1.17 ft         |
| Luminous Height                 | 0.00 ft         |

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

| Angle In<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45                  | 37354            | 38510             | 39207             |
| 55                  | 35753            | 37193             | 26752             |
| 65                  | 32430            | 22683             | 7353              |
| 75                  | 26549            | 7298              | 7392              |
| 85                  | 11640            | 10005             | 9317              |

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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  | 7097.124   | 7097.124    | 7097.124    | 7097.124    | 7097.124    |
| 0.5  | 7009.450   | 7101.582    | 7117.185    | 7106.040    | 7120.157    |
| 1.0  | 7011.679   | 7102.325    | 7117.928    | 7106.040    | 7119.414    |
| 1.5  | 7014.651   | 7101.582    | 7118.671    | 7103.811    | 7117.185    |
| 2.0  | 7013.908   | 7103.068    | 7117.185    | 7104.554    | 7117.928    |
| 2.5  | 7012.422   | 7101.582    | 7117.928    | 7103.068    | 7115.699    |
| 3.0  | 7011.679   | 7098.610    | 7116.442    | 7103.811    | 7117.185    |
| 3.5  | 7009.450   | 7094.152    | 7115.699    | 7103.811    | 7117.185    |
| 4.0  | 7004.249   | 7091.923    | 7113.470    | 7106.783    | 7118.671    |
| 4.5  | 6997.562   | 7087.465    | 7110.498    | 7108.269    | 7120.157    |
| 5.0  | 6988.646   | 7082.264    | 7108.269    | 7106.783    | 7117.928    |
| 5.5  | 6981.959   | 7077.806    | 7105.297    | 7104.554    | 7114.956    |
| 6.0  | 6976.758   | 7073.348    | 7101.582    | 7099.353    | 7109.012    |
| 6.5  | 6969.328   | 7066.661    | 7097.867    | 7094.152    | 7100.839    |
| 7.0  | 6959.669   | 7059.231    | 7090.437    | 7086.722    | 7091.180    |
| 7.5  | 6951.496   | 7052.544    | 7083.750    | 7077.063    | 7080.778    |
| 8.0  | 6944.066   | 7044.371    | 7074.091    | 7066.661    | 7071.119    |
| 8.5  | 6940.351   | 7035.455    | 7065.175    | 7056.259    | 7063.689    |
| 9.0  | 6934.407   | 7025.796    | 7055.516    | 7045.857    | 7054.773    |
| 9.5  | 6926.234   | 7018.366    | 7047.343    | 7038.427    | 7048.086    |
| 10.0 | 6917.318   | 7011.679    | 7038.427    | 7029.511    | 7039.170    |
| 10.5 | 6909.145   | 7004.249    | 7028.025    | 7018.366    | 7028.768    |
| 11.0 | 6900.229   | 6996.819    | 7016.137    | 7005.735    | 7017.623    |
| 11.5 | 6892.799   | 6988.646    | 7004.249    | 6993.847    | 7000.534    |
| 12.0 | 6878.682   | 6978.244    | 6994.590    | 6978.244    | 6978.244    |
| 12.5 | 6863.079   | 6967.842    | 6981.216    | 6957.440    | 6960.412    |
| 13.0 | 6847.476   | 6955.954    | 6967.099    | 6936.636    | 6941.094    |
| 13.5 | 6831.130   | 6939.608    | 6952.982    | 6918.804    | 6919.547    |
| 14.0 | 6813.298   | 6924.005    | 6938.122    | 6898.743    | 6899.486    |
| 14.5 | 6789.522   | 6908.402    | 6920.290    | 6878.682    | 6882.397    |
| 15.0 | 6772.433   | 6892.799    | 6903.201    | 6858.621    | 6869.023    |
| 15.5 | 6762.774   | 6875.710    | 6883.140    | 6839.303    | 6855.649    |
| 16.0 | 6748.657   | 6856.392    | 6863.079    | 6822.214    | 6839.303    |
| 16.5 | 6733.797   | 6838.560    | 6839.303    | 6805.125    | 6824.443    |
| 17.0 | 6724.138   | 6819.985    | 6818.499    | 6788.036    | 6807.354    |
| 17.5 | 6708.535   | 6802.153    | 6796.209    | 6768.718    | 6791.008    |
| 18.0 | 6690.703   | 6781.349    | 6772.433    | 6750.886    | 6771.690    |
| 18.5 | 6671.385   | 6761.288    | 6751.629    | 6729.339    | 6746.428    |
| 19.0 | 6648.353   | 6741.970    | 6725.624    | 6707.049    | 6722.652    |
| 19.5 | 6623.091   | 6721.909    | 6701.105    | 6685.502    | 6703.334    |
| 20.0 | 6599.315   | 6701.848    | 6677.329    | 6662.470    | 6682.530    |
| 20.5 | 6576.282   | 6680.301    | 6655.783    | 6640.180    | 6661.727    |
| 21.0 | 6553.992   | 6657.269    | 6633.493    | 6619.376    | 6639.437    |
| 21.5 | 6527.987   | 6634.236    | 6610.460    | 6598.572    | 6614.918    |
| 22.0 | 6502.725   | 6611.203    | 6587.427    | 6576.282    | 6590.399    |
| 22.5 | 6481.178   | 6586.684    | 6562.908    | 6553.249    | 6568.109    |
| 23.0 | 6459.631   | 6561.422    | 6535.417    | 6526.501    | 6541.361    |
| 23.5 | 6438.084   | 6533.188    | 6508.669    | 6502.725    | 6517.585    |
| 24.0 | 6411.336   | 6507.926    | 6479.692    | 6478.949    | 6491.580    |
| 24.5 | 6388.303   | 6482.664    | 6449.972    | 6452.201    | 6467.061    |
| 25.0 | 6363.041   | 6451.458    | 6418.023    | 6427.682    | 6438.827    |
| 25.5 | 6334.064   | 6425.453    | 6389.789    | 6400.191    | 6412.079    |
| 26.0 | 6300.629   | 6399.448    | 6362.298    | 6372.700    | 6382.359    |
| 26.5 | 6264.222   | 6365.270    | 6335.550    | 6343.723    | 6353.382    |

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**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|
| 27.0 | 6230.787 | 6331.835 | 6306.573 | 6315.489 | 6324.405 |
| 27.5 | 6198.095 | 6296.914 | 6279.825 | 6287.255 | 6296.171 |
| 28.0 | 6166.889 | 6261.993 | 6250.848 | 6260.507 | 6267.937 |
| 28.5 | 6140.141 | 6227.072 | 6220.385 | 6231.530 | 6237.474 |
| 29.0 | 6110.421 | 6192.894 | 6189.179 | 6197.352 | 6207.754 |
| 29.5 | 6080.702 | 6158.716 | 6157.973 | 6166.146 | 6181.006 |
| 30.0 | 6050.982 | 6120.823 | 6124.538 | 6133.454 | 6149.800 |
| 30.5 | 6021.262 | 6085.903 | 6094.075 | 6100.019 | 6121.566 |
| 31.0 | 5989.313 | 6047.267 | 6063.613 | 6068.814 | 6090.361 |
| 31.5 | 5953.649 | 6009.374 | 6031.664 | 6036.865 | 6059.155 |
| 32.0 | 5916.499 | 5975.196 | 5998.229 | 6004.173 | 6026.463 |
| 32.5 | 5877.863 | 5938.789 | 5966.280 | 5975.196 | 5992.285 |
| 33.0 | 5837.741 | 5903.125 | 5937.303 | 5943.247 | 5961.079 |
| 33.5 | 5799.105 | 5865.232 | 5903.868 | 5910.555 | 5932.845 |
| 34.0 | 5759.726 | 5825.110 | 5867.461 | 5876.377 | 5900.153 |
| 34.5 | 5722.576 | 5785.731 | 5830.311 | 5842.199 | 5865.975 |
| 35.0 | 5688.398 | 5744.866 | 5789.446 | 5808.764 | 5829.568 |
| 35.5 | 5656.449 | 5704.001 | 5742.637 | 5773.843 | 5796.876 |
| 36.0 | 5617.813 | 5660.164 | 5704.744 | 5738.922 | 5762.698 |
| 36.5 | 5577.691 | 5616.327 | 5668.337 | 5702.515 | 5726.291 |
| 37.0 | 5531.625 | 5572.490 | 5628.215 | 5666.851 | 5690.627 |
| 37.5 | 5481.845 | 5529.396 | 5587.350 | 5631.187 | 5652.734 |
| 38.0 | 5434.293 | 5487.046 | 5550.943 | 5594.037 | 5613.355 |
| 38.5 | 5385.998 | 5443.952 | 5516.022 | 5555.401 | 5570.261 |
| 39.0 | 5343.647 | 5400.858 | 5475.158 | 5513.793 | 5530.139 |
| 39.5 | 5303.525 | 5354.792 | 5429.835 | 5469.957 | 5490.761 |
| 40.0 | 5261.917 | 5306.497 | 5384.512 | 5428.349 | 5449.896 |
| 40.5 | 5218.823 | 5258.202 | 5341.418 | 5385.998 | 5411.260 |
| 41.0 | 5178.701 | 5209.907 | 5297.581 | 5339.932 | 5371.881 |
| 41.5 | 5129.663 | 5160.869 | 5250.772 | 5297.581 | 5326.558 |
| 42.0 | 5075.424 | 5112.574 | 5203.220 | 5252.258 | 5280.492 |
| 42.5 | 5016.727 | 5063.536 | 5154.925 | 5206.935 | 5235.169 |
| 43.0 | 4959.516 | 5013.755 | 5108.859 | 5161.612 | 5191.332 |
| 43.5 | 4906.021 | 4961.002 | 5061.307 | 5115.546 | 5148.238 |
| 44.0 | 4858.469 | 4911.222 | 5018.213 | 5070.966 | 5108.116 |
| 44.5 | 4819.090 | 4862.184 | 4972.147 | 5030.844 | 5065.022 |
| 45.0 | 4778.225 | 4810.174 | 4926.082 | 4989.236 | 5015.241 |
| 45.5 | 4733.645 | 4759.650 | 4876.301 | 4939.455 | 4969.918 |
| 46.0 | 4680.892 | 4707.640 | 4820.576 | 4884.474 | 4920.881 |
| 46.5 | 4626.653 | 4653.401 | 4761.879 | 4839.151 | 4874.072 |
| 47.0 | 4569.442 | 4601.391 | 4712.098 | 4792.342 | 4828.749 |
| 47.5 | 4518.175 | 4551.610 | 4662.317 | 4743.304 | 4780.454 |
| 48.0 | 4471.366 | 4503.315 | 4609.564 | 4696.495 | 4730.673 |
| 48.5 | 4425.300 | 4459.478 | 4557.554 | 4650.429 | 4671.233 |
| 49.0 | 4376.262 | 4399.295 | 4508.516 | 4602.877 | 4595.447 |
| 49.5 | 4323.510 | 4335.398 | 4460.221 | 4555.325 | 4507.773 |
| 50.0 | 4257.383 | 4281.902 | 4409.697 | 4504.058 | 4402.267 |
| 50.5 | 4197.200 | 4235.093 | 4355.458 | 4449.076 | 4273.729 |
| 51.0 | 4140.732 | 4179.368 | 4301.220 | 4382.206 | 4125.872 |
| 51.5 | 4091.694 | 4125.129 | 4244.752 | 4300.477 | 3983.959 |
| 52.0 | 4044.885 | 4066.432 | 4191.256 | 4205.373 | 3869.537 |
| 52.5 | 3991.389 | 4009.964 | 4137.017 | 4082.035 | 3761.060 |
| 53.0 | 3929.720 | 3949.038 | 4081.292 | 3940.865 | 3598.343 |
| 53.5 | 3866.565 | 3892.570 | 4027.796 | 3793.751 | 3379.158 |
| 54.0 | 3807.868 | 3841.303 | 3971.328 | 3669.671 | 3128.768 |
| 54.5 | 3758.831 | 3784.835 | 3914.117 | 3562.679 | 2921.471 |

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**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|
| 55.0 | 3709.793 | 3718.709 | 3859.135 | 3428.939 | 2775.843 |
| 55.5 | 3647.381 | 3657.783 | 3802.667 | 3238.731 | 2665.136 |
| 56.0 | 3579.768 | 3608.745 | 3747.686 | 3001.715 | 2557.402 |
| 56.5 | 3523.300 | 3556.735 | 3691.961 | 2781.044 | 2422.919 |
| 57.0 | 3475.748 | 3498.781 | 3633.264 | 2625.014 | 2286.950 |
| 57.5 | 3422.252 | 3434.140 | 3568.623 | 2513.565 | 2174.014 |
| 58.0 | 3360.583 | 3370.985 | 3499.524 | 2422.919 | 2104.172 |
| 58.5 | 3291.484 | 3310.802 | 3414.822 | 2312.212 | 2060.335 |
| 59.0 | 3235.759 | 3252.105 | 3317.489 | 2160.640 | 2023.929 |
| 59.5 | 3181.521 | 3188.951 | 3206.782 | 2035.073 | 1972.662 |
| 60.0 | 3111.679 | 3122.824 | 3076.015 | 1960.774 | 1904.306 |
| 60.5 | 3044.809 | 3066.356 | 2958.621 | 1916.937 | 1817.375 |
| 61.0 | 2984.626 | 3004.687 | 2847.914 | 1879.787 | 1709.640 |
| 61.5 | 2931.873 | 2940.789 | 2719.375 | 1825.548 | 1595.961 |
| 62.0 | 2868.718 | 2873.176 | 2579.692 | 1755.706 | 1482.282 |
| 62.5 | 2790.703 | 2804.820 | 2399.143 | 1664.317 | 1331.454 |
| 63.0 | 2722.347 | 2746.123 | 2195.561 | 1550.638 | 1104.839 |
| 63.5 | 2668.108 | 2688.169 | 2030.615 | 1440.675 | 922.061  |
| 64.0 | 2601.982 | 2620.556 | 1918.423 | 1330.711 | 813.584  |
| 64.5 | 2538.827 | 2561.117 | 1832.978 | 1167.251 | 714.096  |
| 65.0 | 2479.387 | 2500.191 | 1734.159 | 953.267  | 562.153  |
| 65.5 | 2400.629 | 2431.092 | 1610.078 | 805.411  | 487.110  |
| 66.0 | 2333.759 | 2367.194 | 1506.058 | 715.136  | 470.318  |
| 66.5 | 2275.805 | 2309.240 | 1443.647 | 582.139  | 462.591  |
| 67.0 | 2212.650 | 2244.599 | 1394.609 | 487.853  | 455.830  |
| 67.5 | 2146.523 | 2180.701 | 1343.342 | 453.749  | 449.143  |
| 68.0 | 2078.167 | 2122.747 | 1277.215 | 444.388  | 442.902  |
| 68.5 | 2018.728 | 2054.391 | 1183.597 | 436.958  | 436.809  |
| 69.0 | 1960.774 | 1992.723 | 1076.605 | 430.048  | 430.716  |
| 69.5 | 1896.133 | 1929.568 | 985.216  | 423.584  | 424.475  |
| 70.0 | 1832.978 | 1870.871 | 859.650  | 417.417  | 418.308  |
| 70.5 | 1772.052 | 1804.001 | 698.567  | 411.101  | 412.364  |
| 71.0 | 1718.556 | 1734.159 | 594.770  | 405.232  | 406.420  |
| 71.5 | 1656.887 | 1661.345 | 516.458  | 399.362  | 399.733  |
| 72.0 | 1595.218 | 1584.073 | 426.853  | 392.749  | 393.269  |
| 72.5 | 1534.292 | 1485.254 | 382.570  | 386.434  | 386.359  |
| 73.0 | 1477.081 | 1381.978 | 371.054  | 380.044  | 378.855  |
| 73.5 | 1419.871 | 1293.561 | 363.401  | 373.208  | 371.276  |
| 74.0 | 1362.660 | 1199.943 | 355.896  | 365.853  | 362.955  |
| 74.5 | 1306.192 | 1097.409 | 348.838  | 357.902  | 354.708  |
| 75.0 | 1243.037 | 966.641  | 341.705  | 349.804  | 346.089  |
| 75.5 | 1185.083 | 875.252  | 334.870  | 341.482  | 337.099  |
| 76.0 | 1127.129 | 808.383  | 328.257  | 332.863  | 327.960  |
| 76.5 | 1065.460 | 735.272  | 321.124  | 324.022  | 318.524  |
| 77.0 | 1003.791 | 657.702  | 313.991  | 314.957  | 309.162  |
| 77.5 | 941.379  | 607.179  | 306.338  | 305.818  | 299.503  |
| 78.0 | 871.537  | 545.584  | 298.388  | 296.382  | 289.844  |
| 78.5 | 813.584  | 468.461  | 289.844  | 286.500  | 279.888  |
| 79.0 | 762.317  | 408.946  | 281.225  | 276.841  | 270.154  |
| 79.5 | 709.118  | 322.833  | 272.383  | 267.182  | 260.198  |
| 80.0 | 655.399  | 277.510  | 263.244  | 257.226  | 250.019  |
| 80.5 | 601.606  | 235.085  | 254.106  | 246.973  | 239.989  |
| 81.0 | 546.996  | 220.671  | 244.595  | 236.794  | 230.924  |
| 81.5 | 493.128  | 211.680  | 234.639  | 226.763  | 222.231  |
| 82.0 | 444.610  | 202.319  | 224.237  | 216.584  | 210.640  |
| 82.5 | 401.294  | 192.882  | 213.835  | 206.479  | 200.387  |

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**CANDELA TABULATION - (Cont.)**

|       |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|
| 83.0  | 354.708 | 183.669 | 202.764 | 196.077 | 190.431 |
| 83.5  | 309.236 | 174.085 | 191.768 | 185.824 | 180.251 |
| 84.0  | 265.325 | 164.277 | 180.400 | 175.125 | 169.775 |
| 84.5  | 224.311 | 153.875 | 169.255 | 163.980 | 158.853 |
| 85.0  | 183.521 | 143.399 | 157.739 | 151.943 | 146.891 |
| 85.5  | 162.345 | 132.254 | 145.405 | 139.015 | 134.631 |
| 86.0  | 139.089 | 120.737 | 132.402 | 125.418 | 121.332 |
| 86.5  | 105.283 | 108.701 | 117.840 | 110.707 | 107.883 |
| 87.0  | 87.600  | 96.144  | 102.385 | 95.327  | 93.246  |
| 87.5  | 76.455  | 83.067  | 85.891  | 79.724  | 77.495  |
| 88.0  | 65.384  | 68.727  | 69.396  | 62.560  | 59.811  |
| 88.5  | 53.273  | 53.273  | 52.604  | 43.986  | 40.568  |
| 89.0  | 38.933  | 38.413  | 35.813  | 28.531  | 26.228  |
| 89.5  | 24.370  | 25.782  | 23.033  | 19.541  | 18.946  |
| 90.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 90.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 91.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 91.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 92.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 92.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 93.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 93.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 94.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 94.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 95.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 95.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 96.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 96.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 97.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 97.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 98.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 98.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 99.0  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 99.5  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 100.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 100.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 101.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 101.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 102.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 102.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 103.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 103.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 104.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 104.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 105.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 105.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 106.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 106.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 107.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 107.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 108.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 108.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 109.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 109.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 110.0 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |
| 110.5 | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : GS-2-L180-840-HP-DIM-UNV\_.IES

CANDELA TABULATION - (Cont.)

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 111.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 111.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 113.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 113.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 114.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 114.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 115.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 115.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 116.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 116.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 117.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 117.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 118.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 118.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 119.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 119.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 120.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 120.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 121.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 121.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 122.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 122.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 123.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 123.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 124.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 124.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 125.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 125.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 126.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 126.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 127.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 127.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 128.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 128.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 129.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 129.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 130.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 130.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 131.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 131.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 132.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 132.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 133.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 133.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 134.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 134.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 135.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 135.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 136.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 136.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 137.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 137.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 138.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 138.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : GS-2-L180-840-HP-DIM-UNV\_.IES

CANDELA TABULATION - (Cont.)

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 139.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 139.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 140.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 140.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 141.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 141.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 142.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 142.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 143.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 143.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 144.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 144.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 145.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 145.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 146.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 146.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 147.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 147.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 148.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 148.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 149.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 149.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 150.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 150.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 151.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 151.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 152.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 152.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 153.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 153.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 154.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 154.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 155.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 155.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 156.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 156.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 157.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 157.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 158.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 158.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 159.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 159.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 160.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 160.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 161.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 161.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 162.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 162.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 163.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 163.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 164.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 164.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 165.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 165.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 166.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 166.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : GS-2-L180-840-HP-DIM-UNV\_.IES

CANDELA TABULATION - (Cont.)

|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| 167.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 167.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 168.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 168.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 169.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 169.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 170.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 170.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 171.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 171.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 172.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 172.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 173.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 173.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 174.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 174.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 175.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 175.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 176.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 176.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 177.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 177.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 178.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 178.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 179.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 179.5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 180.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-2-L180-840-HP-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens   | %Lamp | %Fixt  |
|---------|----------|-------|--------|
| 0-20    | 2614.05  | N.A.  | 14.00  |
| 0-30    | 5575.33  | N.A.  | 29.80  |
| 0-40    | 9186.99  | N.A.  | 49.10  |
| 0-60    | 16133.00 | N.A.  | 86.20  |
| 0-80    | 18553.58 | N.A.  | 99.10  |
| 0-90    | 18722.11 | N.A.  | 100.00 |
| 10-90   | 18048.03 | N.A.  | 96.40  |
| 20-40   | 6572.94  | N.A.  | 35.10  |
| 20-50   | 10352.32 | N.A.  | 55.30  |
| 40-70   | 8693.19  | N.A.  | 46.40  |
| 60-80   | 2420.57  | N.A.  | 12.90  |
| 70-80   | 673.39   | N.A.  | 3.60   |
| 80-90   | 168.54   | N.A.  | 0.90   |
| 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   | 18722.11 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  |
|---------|---------|
| 0-10    | 674.08  |
| 10-20   | 1939.97 |
| 20-30   | 2961.28 |
| 30-40   | 3611.67 |
| 40-50   | 3779.37 |
| 50-60   | 3166.64 |
| 60-70   | 1747.19 |
| 70-80   | 673.39  |
| 80-90   | 168.54  |
| 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    |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-2-L180-840-HP-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  | 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  | 82  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 65  | 63  |
| 4  | 85  | 73  | 65  | 59  | 82  | 72  | 64  | 58  | 70  | 63  | 57  | 67  | 61  | 57  | 65  | 60  | 56  | 54  |
| 5  | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 50  | 62  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  | 47  |
| 6  | 72  | 59  | 51  | 44  | 70  | 58  | 50  | 44  | 57  | 49  | 44  | 55  | 48  | 43  | 53  | 48  | 43  | 41  |
| 7  | 67  | 54  | 45  | 39  | 65  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 39  | 49  | 43  | 38  | 36  |
| 8  | 62  | 49  | 41  | 35  | 61  | 48  | 40  | 35  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 32  |
| 9  | 58  | 45  | 37  | 32  | 57  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 29  |
| 10 | 54  | 41  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 38  | 32  | 28  | 26  |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-2-L180-840-HP-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

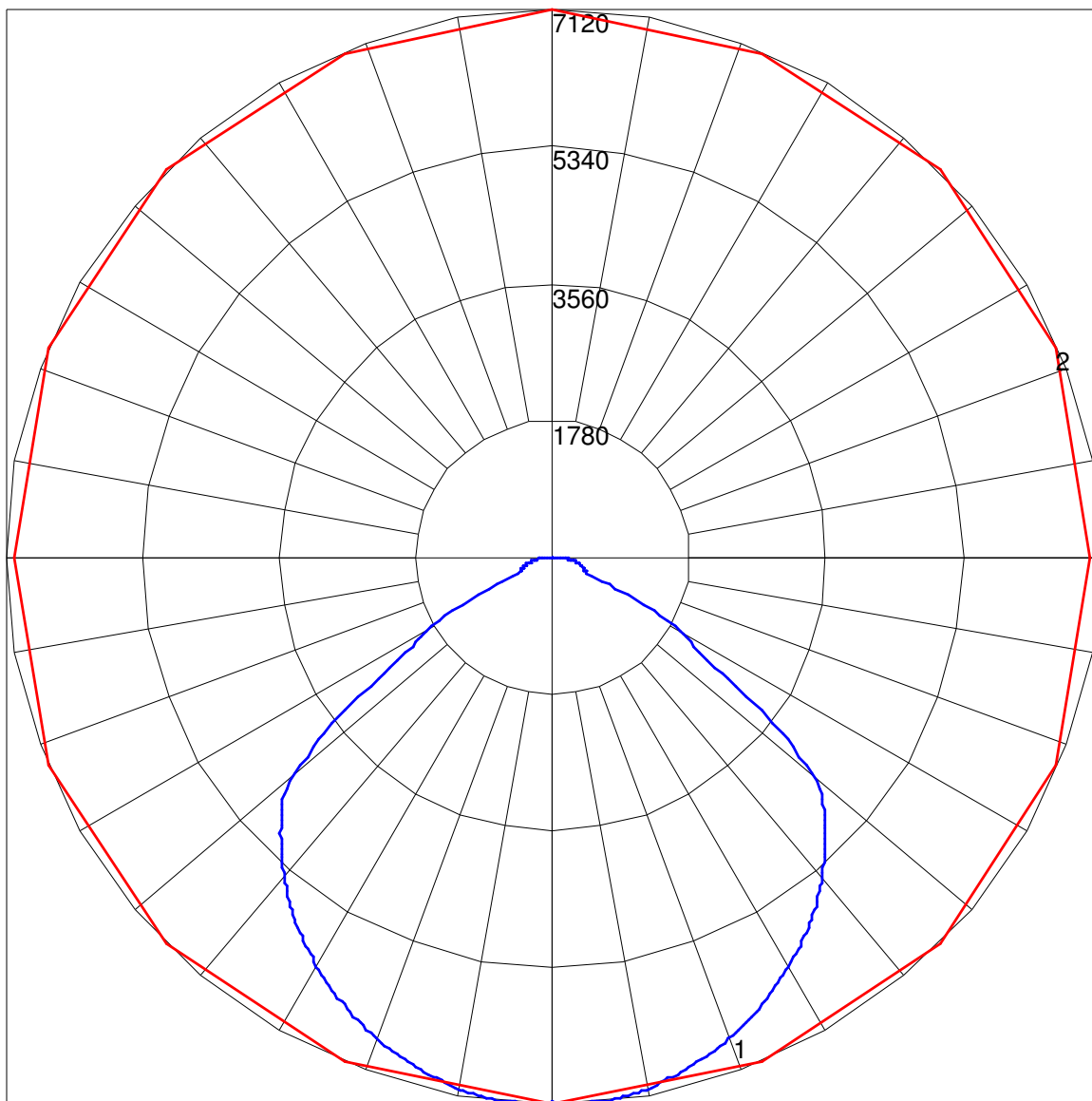
|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| X=2H | Y=2H | 25.0 | 26.6 | 25.4 | 26.9 | 27.2 | 22.6 | 24.2 | 23.0 | 24.5 | 24.8 |
|      | 3H   | 26.7 | 28.1 | 27.1 | 28.4 | 28.8 | 22.7 | 24.1 | 23.1 | 24.5 | 24.8 |
|      | 4H   | 27.2 | 28.6 | 27.6 | 28.9 | 29.3 | 22.8 | 24.1 | 23.2 | 24.5 | 24.9 |
|      | 6H   | 27.5 | 28.7 | 27.9 | 29.1 | 29.5 | 22.9 | 24.2 | 23.4 | 24.5 | 24.9 |
|      | 8H   | 27.6 | 28.7 | 28.0 | 29.1 | 29.5 | 23.0 | 24.2 | 23.4 | 24.6 | 25.0 |
|      | 12H  | 27.6 | 28.7 | 28.0 | 29.1 | 29.5 | 23.1 | 24.2 | 23.5 | 24.6 | 25.0 |

UGR Viewed Endwise

|     |     |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H  | 2H  | 25.3 | 26.6 | 25.7 | 26.9 | 27.3 | 23.2 | 24.6 | 23.6 | 24.9 | 25.3 |
|     | 3H  | 27.1 | 28.2 | 27.5 | 28.6 | 29.0 | 23.4 | 24.5 | 23.8 | 24.9 | 25.3 |
|     | 4H  | 27.7 | 28.7 | 28.1 | 29.1 | 29.5 | 23.6 | 24.5 | 24.0 | 24.9 | 25.4 |
|     | 6H  | 28.1 | 28.9 | 28.5 | 29.3 | 29.8 | 23.8 | 24.6 | 24.2 | 25.0 | 25.5 |
|     | 8H  | 28.1 | 28.9 | 28.6 | 29.4 | 29.8 | 23.8 | 24.6 | 24.3 | 25.1 | 25.5 |
|     | 12H | 28.2 | 28.9 | 28.7 | 29.4 | 29.8 | 23.9 | 24.6 | 24.4 | 25.1 | 25.6 |
| 8H  | 4H  | 27.7 | 28.5 | 28.1 | 28.9 | 29.4 | 23.7 | 24.5 | 24.2 | 25.0 | 25.4 |
|     | 6H  | 28.0 | 28.7 | 28.5 | 29.2 | 29.6 | 24.0 | 24.7 | 24.5 | 25.1 | 25.6 |
|     | 8H  | 28.1 | 28.7 | 28.6 | 29.2 | 29.7 | 24.1 | 24.7 | 24.6 | 25.2 | 25.7 |
|     | 12H | 28.2 | 28.7 | 28.7 | 29.2 | 29.8 | 24.3 | 24.8 | 24.8 | 25.3 | 25.9 |
| 12H | 4H  | 27.6 | 28.4 | 28.1 | 28.8 | 29.3 | 23.8 | 24.5 | 24.2 | 24.9 | 25.4 |
|     | 6H  | 28.0 | 28.6 | 28.5 | 29.1 | 29.6 | 24.0 | 24.6 | 24.5 | 25.1 | 25.6 |
|     | 8H  | 28.1 | 28.6 | 28.6 | 29.1 | 29.7 | 24.2 | 24.7 | 24.7 | 25.2 | 25.8 |

Maximum UGR = 29.8

POLAR GRAPH



Maximum Candela = 7120.157 Located At Horizontal Angle = 90, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)