



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA2-L280-730-T3-F-S-XXX-DIM-UNV\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] GEN FROM ATAL011772  
[TESTLAB] ATAL-LABS  
[ISSUEDATE] 2023-01-18  
[MANUFAC] WILLIAMS OUTDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] VA2-L280-730-T3-F-S-xxx-DIM-UNV\_  
[LUMINAIRE] VA2 ARCHITECTURAL LED AREA LIGHT  
[MORE] WITH TYPE III OPTICS, CLEAR LENS,  
[MORE] (2) LED MODULES AND (2) ELECTRONIC DRIVERS  
[LAMP] LED  
[ \_SEARCH\_SOURCETYPE] LED  
[ \_SEARCH\_APPLICATION] Outdoor, Area, Parking  
[ \_SEARCH\_MOUNTING] Pole

### CHARACTERISTICS

|   |                                   |
|---|-----------------------------------|
| IES Classification                              | Type III                          |
| Longitudinal Classification                     | Short                             |
| Lumens Per Lamp                                 | N.A. (absolute)                   |
| Total Lamp Lumens                               | N.A. (absolute)                   |
| Luminaire Lumens                                | 26608                             |
| Downward Total Efficiency                       | N.A. (absolute)                   |
| Total Luminaire Efficiency                      | N.A. (absolute)                   |
| Luminaire Efficacy Rating (LER)                 | 116                               |
| Total Luminaire Watts                           | 229                               |
| Ballast Factor                                  | 1.00                              |
| Upward Waste Light Ratio                        | 0.00                              |
| Maximum Candela                                 | 19655.579                         |
| Maximum Candela Angle                           | 62.5H 67.5V                       |
| Maximum Candela (<90 Degrees Vertical)          | 19655.579                         |
| Maximum Candela Angle (<90 Degrees Vertical)    | 62.5H 67.5V                       |
| Maximum Candela At 90 Degrees Vertical          | 0 (0.0% Luminaire Lumens)         |
| Maximum Candela from 80 to <90 Degrees Vertical | 4563.321 (17.2% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)                   |

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA2-L280-730-T3-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 2644.7   | N.A.   | 9.9         |
| FM - Front-Medium (30-60)     | 9250.0   | N.A.   | 34.8        |
| FH - Front-High (60-80)       | 6554.5   | N.A.   | 24.6        |
| FVH - Front-Very High (80-90) | 219.3    | N.A.   | 0.8         |
| BL - Back-Low (0-30)          | 1423.9   | N.A.   | 5.4         |
| BM - Back-Medium (30-60)      | 3278.7   | N.A.   | 12.3        |
| BH - Back-High (60-80)        | 2935.6   | N.A.   | 11.0        |
| BVH - Back-Very High (80-90)  | 300.7    | N.A.   | 1.1         |
| UL - Uplight-Low (90-100)     | 0.0      | N.A.   | 0.0         |
| UH - Uplight-High (100-180)   | 0.0      | N.A.   | 0.0         |
| Total                         | 26607.4  | N.A.   | 100.0       |
| BUG Rating                    | B4-U0-G4 |        |             |

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA2-L280-730-T3-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION**

| <b>Vert.<br/>Angles</b> | <b>Horizontal Angles</b> |            |             |             |             |             |             |             |             |             |
|-------------------------|--------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                         | <u>0.0</u>               | <u>5.0</u> | <u>15.0</u> | <u>25.0</u> | <u>35.0</u> | <u>45.0</u> | <u>55.0</u> | <u>62.5</u> | <u>65.0</u> | <u>75.0</u> |
| 0.0                     | 5510.554                 | 5510.554   | 5510.554    | 5510.554    | 5510.554    | 5510.554    | 5510.554    | 5510.554    | 5510.554    | 5510.554    |
| 2.5                     | 5730.273                 | 5720.508   | 5720.508    | 5730.273    | 5702.930    | 5679.494    | 5676.564    | 5658.010    | 5642.386    | 5610.160    |
| 5.0                     | 5963.664                 | 5968.546   | 5963.664    | 5955.851    | 5920.696    | 5882.612    | 5862.105    | 5801.560    | 5782.029    | 5700.977    |
| 7.5                     | 6002.725                 | 6012.490   | 6011.514    | 6018.349    | 6019.326    | 6014.443    | 6004.678    | 5935.344    | 5916.790    | 5796.677    |
| 10.0                    | 5965.617                 | 5967.570   | 5965.617    | 5979.288    | 6002.725    | 6039.833    | 6074.988    | 6043.739    | 6031.044    | 5902.142    |
| 12.5                    | 5953.898                 | 5953.898   | 5941.204    | 5951.945    | 5980.265    | 6029.091    | 6093.542    | 6111.120    | 6116.002    | 6010.537    |
| 15.0                    | 6004.678                 | 5994.913   | 5973.429    | 5962.687    | 5985.147    | 6035.927    | 6107.213    | 6161.899    | 6173.617    | 6125.768    |
| 17.5                    | 6102.331                 | 6104.284   | 6075.965    | 6042.763    | 6037.880    | 6075.965    | 6147.251    | 6224.397    | 6236.115    | 6245.881    |
| 20.0                    | 6234.162                 | 6240.021   | 6214.632    | 6176.547    | 6159.946    | 6163.852    | 6229.280    | 6316.191    | 6333.768    | 6383.571    |
| 22.5                    | 6339.627                 | 6358.181   | 6339.627    | 6329.862    | 6319.120    | 6317.167    | 6366.970    | 6440.210    | 6467.553    | 6525.168    |
| 25.0                    | 6428.492                 | 6430.445   | 6423.609    | 6447.046    | 6491.966    | 6504.661    | 6538.839    | 6584.736    | 6617.938    | 6661.882    |
| 27.5                    | 6514.426                 | 6498.802   | 6476.342    | 6519.309    | 6634.539    | 6719.497    | 6740.004    | 6753.676    | 6768.324    | 6793.714    |
| 30.0                    | 6589.619                 | 6577.901   | 6549.581    | 6552.511    | 6706.802    | 6941.169    | 6982.184    | 6957.770    | 6944.099    | 6933.357    |
| 32.5                    | 6600.361                 | 6591.572   | 6602.314    | 6632.586    | 6760.512    | 7149.170    | 7254.635    | 7167.724    | 7145.264    | 7053.470    |
| 35.0                    | 6582.783                 | 6580.830   | 6619.891    | 6716.568    | 6929.451    | 7343.499    | 7562.242    | 7440.176    | 7370.842    | 7170.654    |
| 37.5                    | 6541.769                 | 6536.886   | 6604.267    | 6832.775    | 7218.504    | 7598.374    | 7910.863    | 7735.088    | 7616.928    | 7249.753    |
| 40.0                    | 6465.600                 | 6483.177   | 6588.642    | 7040.775    | 7863.013    | 8408.893    | 8385.456    | 8052.460    | 7902.074    | 7335.687    |
| 42.5                    | 6431.421                 | 6451.928   | 6549.581    | 6998.785    | 8033.906    | 9241.872    | 9377.610    | 8701.852    | 8405.963    | 7472.401    |
| 45.0                    | 6738.051                 | 6742.934   | 6696.061    | 6989.996    | 7887.426    | 9206.717    | 10159.810   | 9781.893    | 9456.709    | 7900.121    |
| 47.5                    | 7393.302                 | 7383.537   | 7345.452    | 7409.903    | 7919.652    | 8953.796    | 10240.862   | 10472.299   | 10358.045   | 8950.866    |
| 50.0                    | 7364.007                 | 7343.499   | 7564.195    | 7989.962    | 8387.409    | 8891.298    | 9902.982    | 10443.980   | 10410.778   | 9440.108    |
| 52.5                    | 6828.869                 | 6841.563   | 7271.236    | 8009.492    | 8953.796    | 9359.056    | 9726.231    | 10082.664   | 10110.983   | 9234.060    |
| 55.0                    | 5384.582                 | 5453.915   | 6348.416    | 7831.764    | 9398.117    | 10600.224   | 10252.580   | 10203.753   | 10257.463   | 9430.342    |
| 57.5                    | 3969.591                 | 4048.690   | 4958.815    | 6972.418    | 9528.972    | 12273.019   | 11715.421   | 110945.916  | 10884.394   | 9877.593    |
| 60.0                    | 3133.682                 | 3185.438   | 3727.412    | 5063.304    | 8626.659    | 13673.362   | 14657.703   | 12327.704   | 12102.126   | 10682.253   |
| 62.5                    | 2427.652                 | 2412.027   | 2694.244    | 3307.504    | 6533.957    | 13164.590   | 18072.626   | 14739.731   | 14053.231   | 11913.656   |
| 65.0                    | 1706.973                 | 1722.597   | 1887.631    | 2173.754    | 3888.539    | 11751.552   | 18693.698   | 17915.404   | 16811.926   | 13487.821   |
| 67.5                    | 1473.583                 | 1482.371   | 1680.607    | 1759.706    | 2054.617    | 8076.873    | 16993.561   | 19655.579   | 18984.704   | 14613.759   |
| 70.0                    | 1175.741                 | 1148.398   | 1414.014    | 1536.080    | 1518.503    | 3611.205    | 14008.311   | 18266.955   | 18751.313   | 15063.939   |
| 72.5                    | 835.909                  | 806.613    | 908.172     | 1293.901    | 1167.929    | 1873.959    | 8979.186    | 14618.642   | 15592.241   | 14088.386   |
| 75.0                    | 637.674                  | 629.861    | 647.439     | 989.224     | 938.445     | 1137.656    | 3891.469    | 9793.611    | 10789.671   | 110059.227  |
| 77.5                    | 426.743                  | 422.837    | 439.438     | 652.321     | 786.106     | 759.740     | 1581.977    | 4595.546    | 5623.832    | 6553.487    |
| 80.0                    | 267.569                  | 259.757    | 284.170     | 406.236     | 677.711     | 488.265     | 767.552     | 1695.255    | 2667.878    | 4563.321    |
| 82.5                    | 139.644                  | 140.620    | 157.221     | 236.320     | 462.875     | 274.405     | 389.635     | 618.143     | 909.149     | 2319.257    |
| 85.0                    | 54.686                   | 54.686     | 63.474      | 102.536     | 166.010     | 109.371     | 148.432     | 197.259     | 256.827     | 532.208     |
| 87.5                    | 6.836                    | 7.812      | 9.765       | 15.624      | 21.484      | 15.624      | 24.413      | 24.413      | 32.225      | 35.155      |
| 90.0                    | 0.000                    | 0.000      | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       |

| <b>Vert.<br/>Angles</b> | <b>Horizontal Angles</b> |             |             |              |              |              |              |              |              |              |
|-------------------------|--------------------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                         | <u>85.0</u>              | <u>90.0</u> | <u>95.0</u> | <u>105.0</u> | <u>115.0</u> | <u>125.0</u> | <u>135.0</u> | <u>145.0</u> | <u>155.0</u> | <u>165.0</u> |
| 0.0                     | 5510.554                 | 5510.554    | 5510.554    | 5510.554     | 5510.554     | 5510.554     | 5510.554     | 5510.554     | 5510.554     | 5510.554     |
| 2.5                     | 5560.357                 | 5555.475    | 5521.296    | 5470.516     | 5408.995     | 5341.615     | 5304.507     | 5262.516     | 5196.112     | 5179.511     |
| 5.0                     | 5592.583                 | 5549.615    | 5483.211    | 5362.122     | 5229.314     | 5078.928     | 4966.627     | 4857.256     | 4758.627     | 4697.105     |
| 7.5                     | 5641.409                 | 5563.287    | 5462.704    | 5264.469     | 5041.820     | 4783.040     | 4535.002     | 4281.104     | 4024.277     | 3835.807     |
| 10.0                    | 5706.837                 | 5586.723    | 5457.822    | 5174.628     | 4835.773     | 4400.240     | 3876.821     | 3380.744     | 2993.062     | 2808.498     |
| 12.5                    | 5783.006                 | 5623.832    | 5465.634    | 5084.787     | 4591.640     | 3851.431     | 3095.598     | 2712.798     | 2582.920     | 2546.788     |
| 15.0                    | 5875.776                 | 5681.447    | 5489.071    | 4998.853     | 4270.362     | 3225.476     | 2682.526     | 2565.342     | 2529.211     | 2512.610     |
| 17.5                    | 5990.030                 | 5759.569    | 5530.085    | 4907.059     | 3855.337     | 2800.686     | 2593.662     | 2539.952     | 2511.633     | 2499.915     |
| 20.0                    | 6118.932                 | 5862.105    | 5589.653    | 4810.383     | 3399.298     | 2638.582     | 2565.342     | 2526.281     | 2494.056     | 2470.619     |
| 22.5                    | 6261.505                 | 5977.335    | 5655.080    | 4695.152     | 3031.147     | 2598.544     | 2544.835     | 2498.938     | 2454.018     | 2412.027     |
| 25.0                    | 6401.149                 | 6088.659    | 5713.672    | 4544.767     | 2805.568     | 2578.037     | 2511.633     | 2444.253     | 2387.614     | 2340.740     |
| 27.5                    | 6543.722                 | 6206.819    | 5768.358    | 4357.273     | 2697.174     | 2553.624     | 2455.971     | 2381.755     | 2322.186     | 2266.524     |

# IES ROAD REPORT

PHOTOMETRIC FILENAME : VA2-L280-730-T3-F-S-XXX-DIM-UNV\_.IES

## CANDELA TABULATION - (Cont.)

|      |           |          |          |          |          |          |          |          |          |          |
|------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 30.0 | 6684.342  | 6327.909 | 5829.879 | 4146.343 | 2648.347 | 2513.586 | 2391.520 | 2306.562 | 2247.970 | 2198.167 |
| 32.5 | 6808.361  | 6432.398 | 5884.565 | 3919.788 | 2610.263 | 2458.900 | 2323.163 | 2228.440 | 2176.684 | 2136.646 |
| 35.0 | 6897.226  | 6498.802 | 5918.743 | 3695.186 | 2561.436 | 2392.496 | 2252.853 | 2148.364 | 2105.397 | 2064.383 |
| 37.5 | 6922.615  | 6510.520 | 5918.743 | 3498.904 | 2504.797 | 2319.257 | 2182.543 | 2071.218 | 2030.204 | 1986.260 |
| 40.0 | 6949.958  | 6524.191 | 5910.931 | 3347.542 | 2451.088 | 2248.947 | 2117.115 | 2001.885 | 1957.941 | 1904.232 |
| 42.5 | 6985.113  | 6526.145 | 5904.095 | 3226.452 | 2411.051 | 2186.449 | 2050.711 | 1940.363 | 1872.006 | 1817.321 |
| 45.0 | 7190.184  | 6699.967 | 6035.927 | 3174.696 | 2370.036 | 2133.716 | 2001.885 | 1885.678 | 1781.189 | 1728.457 |
| 47.5 | 7893.285  | 7276.119 | 6573.018 | 3438.359 | 2438.393 | 2103.444 | 1970.636 | 1857.359 | 1722.597 | 1678.654 |
| 50.0 | 8281.944  | 7675.519 | 6936.287 | 3835.807 | 2814.357 | 2200.120 | 1970.636 | 1879.819 | 1758.729 | 1798.767 |
| 52.5 | 8073.943  | 7489.002 | 6748.793 | 3625.853 | 2955.954 | 2537.023 | 2029.228 | 1910.091 | 1921.809 | 2183.519 |
| 55.0 | 8291.709  | 7732.158 | 7060.306 | 3685.421 | 2609.286 | 2422.769 | 2248.947 | 1920.833 | 2110.280 | 2616.122 |
| 57.5 | 8699.898  | 8197.962 | 7660.871 | 4316.259 | 2554.600 | 2101.491 | 2049.735 | 1944.270 | 2202.073 | 2838.770 |
| 60.0 | 9297.534  | 8739.936 | 8448.930 | 5294.741 | 2605.380 | 1976.495 | 1786.072 | 1774.354 | 2163.012 | 2722.563 |
| 62.5 | 10027.978 | 9378.586 | 9194.999 | 6311.308 | 2758.695 | 1884.701 | 1642.522 | 1637.639 | 2052.664 | 2429.605 |
| 65.0 | 10761.352 | 9758.456 | 9489.911 | 6819.103 | 3080.950 | 1807.556 | 1517.526 | 1526.315 | 1919.856 | 2137.622 |
| 67.5 | 11035.756 | 9875.640 | 9626.625 | 7006.597 | 3457.890 | 1714.785 | 1389.601 | 1402.296 | 1745.058 | 1831.969 |
| 70.0 | 10939.080 | 9926.419 | 9833.649 | 6920.662 | 3812.370 | 1605.414 | 1238.239 | 1246.051 | 1532.174 | 1595.649 |
| 72.5 | 9902.982  | 9186.210 | 9186.210 | 6590.595 | 4053.573 | 1510.691 | 1070.276 | 1079.065 | 1316.361 | 1343.704 |
| 75.0 | 6725.356  | 6179.477 | 6262.482 | 5419.737 | 4031.112 | 1439.404 | 901.336  | 914.031  | 1099.572 | 1059.534 |
| 77.5 | 4153.179  | 3730.341 | 3777.215 | 4357.273 | 3794.792 | 1369.094 | 724.585  | 737.280  | 868.134  | 612.284  |
| 80.0 | 3186.415  | 2760.648 | 2858.301 | 3411.993 | 3404.181 | 1279.253 | 534.161  | 550.762  | 626.932  | 293.935  |
| 82.5 | 1492.137  | 1354.446 | 1512.644 | 2057.547 | 2689.361 | 1124.962 | 289.053  | 353.504  | 352.527  | 185.541  |
| 85.0 | 202.142   | 192.376  | 265.616  | 704.078  | 1541.940 | 728.491  | 126.949  | 141.597  | 112.301  | 87.888   |
| 87.5 | 23.437    | 20.507   | 23.437   | 48.826   | 399.400  | 251.945  | 27.343   | 29.296   | 22.460   | 17.578   |
| 90.0 | 0.000     | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    |

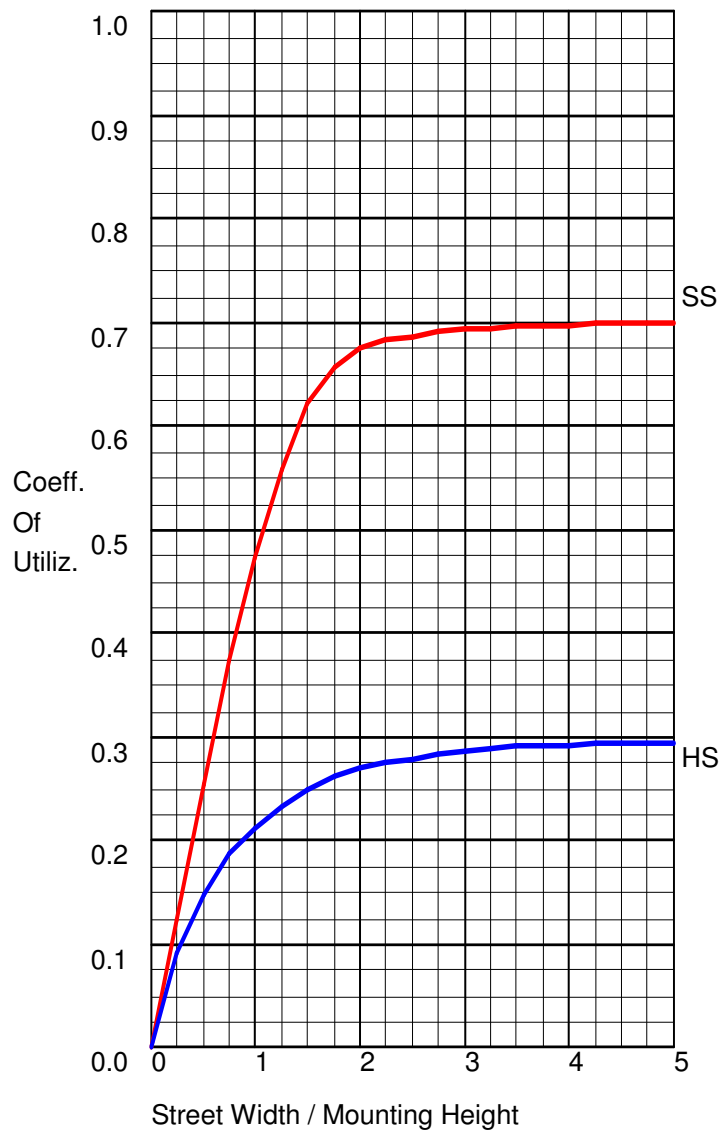
## Vert. Horizontal Angles

|      | <u>175.0</u> | <u>180.0</u> |
|------|--------------|--------------|
| 0.0  | 5510.554     | 5510.554     |
| 2.5  | 5202.947     | 5206.854     |
| 5.0  | 4672.692     | 4678.551     |
| 7.5  | 3752.802     | 3753.778     |
| 10.0 | 2746.977     | 2742.094     |
| 12.5 | 2536.046     | 2531.164     |
| 15.0 | 2507.727     | 2506.750     |
| 17.5 | 2495.032     | 2493.079     |
| 20.0 | 2462.807     | 2458.900     |
| 22.5 | 2398.356     | 2392.496     |
| 25.0 | 2317.304     | 2319.257     |
| 27.5 | 2232.346     | 2234.299     |
| 30.0 | 2159.106     | 2160.083     |
| 32.5 | 2089.772     | 2089.772     |
| 35.0 | 2021.415     | 2020.439     |
| 37.5 | 1953.058     | 1945.246     |
| 40.0 | 1870.053     | 1862.241     |
| 42.5 | 1776.307     | 1769.471     |
| 45.0 | 1695.255     | 1691.349     |
| 47.5 | 1651.311     | 1651.311     |
| 50.0 | 1812.438     | 1835.875     |
| 52.5 | 2296.797     | 2334.881     |
| 55.0 | 2845.606     | 2889.550     |
| 57.5 | 3201.063     | 3281.138     |
| 60.0 | 2995.015     | 3006.733     |
| 62.5 | 2529.211     | 2498.938     |
| 65.0 | 2097.585     | 2100.514     |

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|             |          |          |
|-------------|----------|----------|
| <b>67.5</b> | 1691.349 | 1675.724 |
| <b>70.0</b> | 1410.108 | 1400.343 |
| <b>72.5</b> | 1162.070 | 1149.375 |
| <b>75.0</b> | 798.801  | 792.942  |
| <b>77.5</b> | 444.321  | 441.391  |
| <b>80.0</b> | 296.865  | 289.053  |
| <b>82.5</b> | 189.447  | 189.447  |
| <b>85.0</b> | 70.310   | 58.592   |
| <b>87.5</b> | 7.812    | 2.930    |
| <b>90.0</b> | 0.000    | 0.000    |

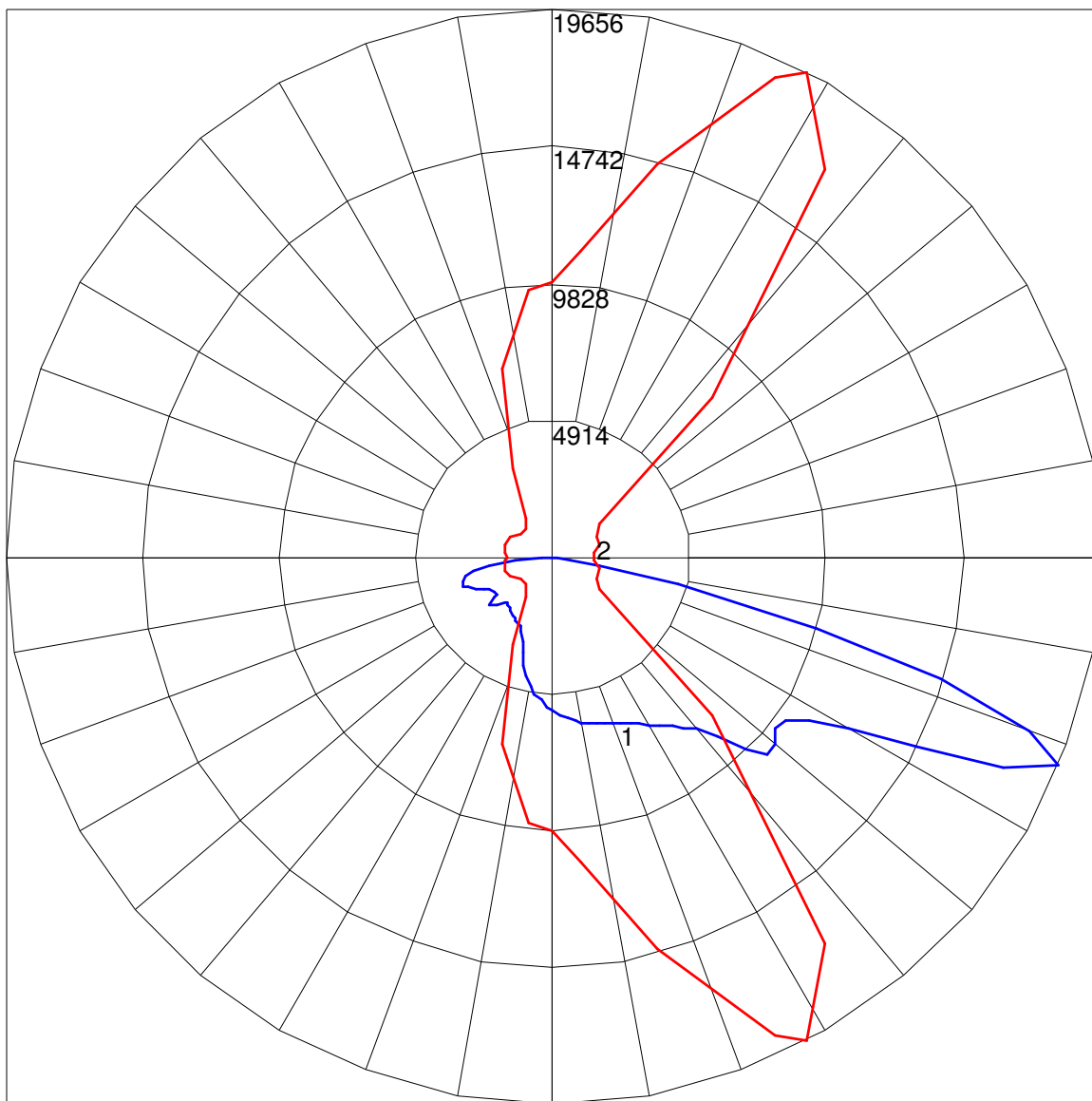
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

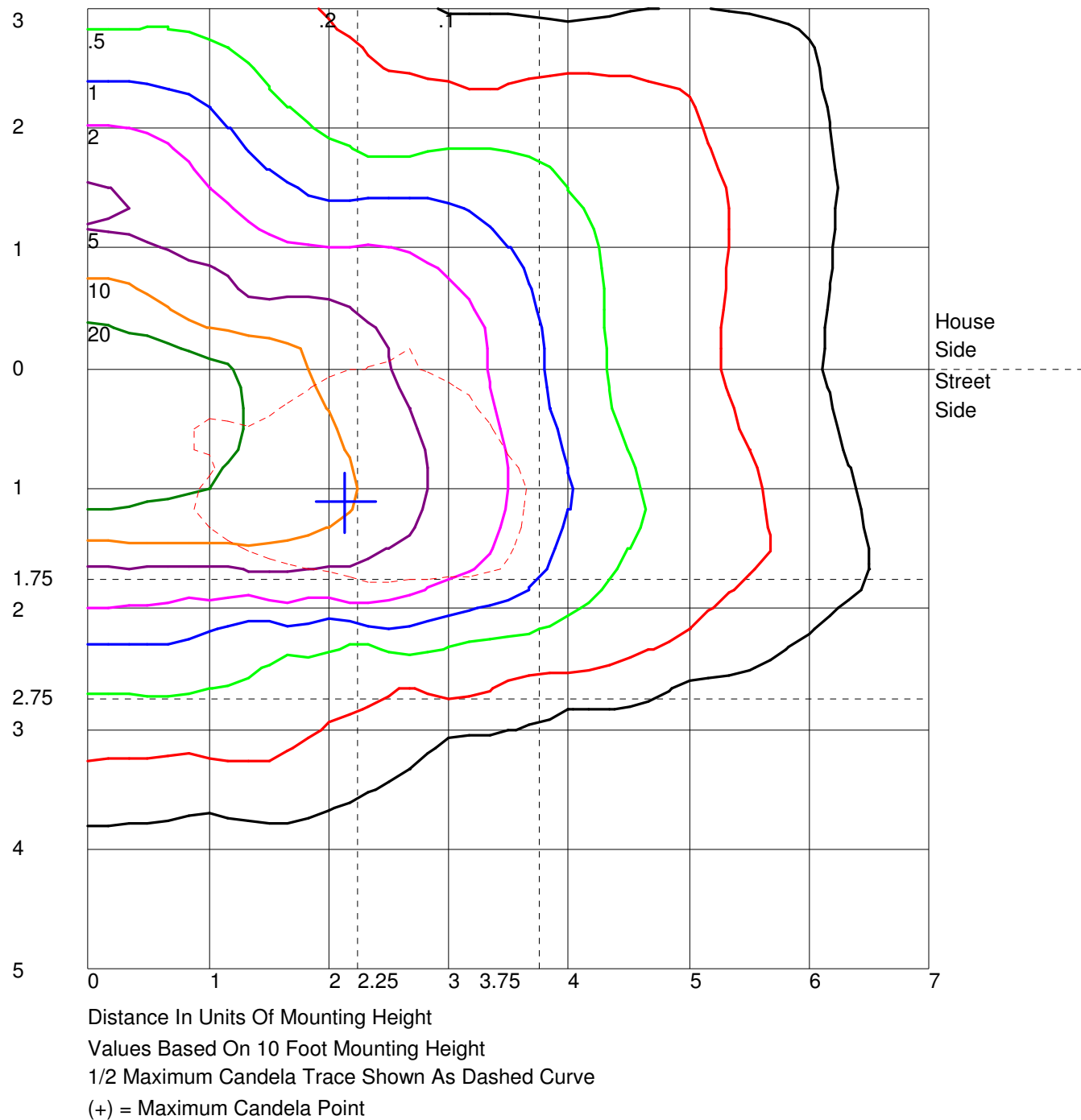
|                      | Lumens  | Percent Of Luminaire |
|----------------------|---------|----------------------|
| Downward Street Side | 18668.6 | 70.2                 |
| Downward House Side  | 7938.9  | 29.8                 |
| Downward Total       | 26607.6 | 100.0                |
| Upward Street Side   | 0.0     | 0.0                  |
| Upward House Side    | 0.0     | 0.0                  |
| Upward Total         | 0.0     | 0.0                  |
| Total Flux           | 26607.6 | 100.0                |

POLAR GRAPH



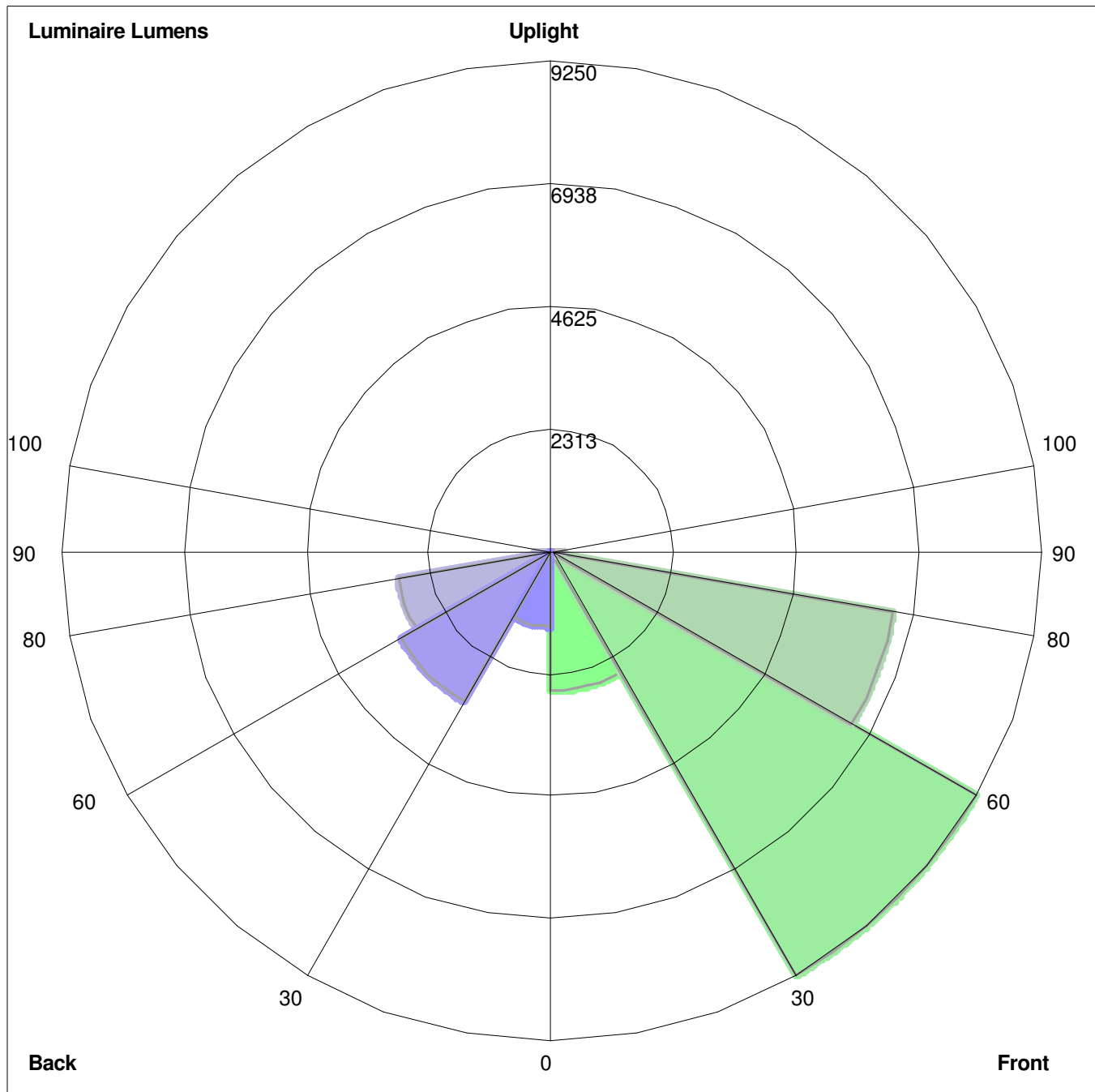
Maximum Candela = 19655.579 Located At Horizontal Angle = 62.5, Vertical Angle = 67.5  
# 1 - Vertical Plane Through Horizontal Angles (62.5 - 242.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (67.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=2644.7, Medium= 9250.0, High=6554.5, Very High=219.3  
Back: Low=1423.9, Medium=3278.7, High=2935.6, Very High=300.7  
Uplight: Low=0.0, High=0.0

BUG Rating : B4-U0-G4