

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L25-840-XXX-DIM-UNV-S-XXX\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] W4CR\_BARBARA-SPOT DISTRIBUTION  
[TESTLAB] LEDIL INC.  
[TESTDATE] 07/03/2025  
[ISSUEDATE] 2025-07-15  
[MANUFAC] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] W4CR-xx-L25-840-xxx-DIM-UNV-S-xxx  
[LUMINAIRE] 4 INCH ROUND OUTDOOR LED CYLINDER  
[MORE] WITH SPOT DISTRIBUTION & MICROPRISM LENS  
[MORE] 0-10 LED DRIVER

### CHARACTERISTICS

|   |                              |
|---|------------------------------|
| IES Classification                              | Type VS                      |
| Longitudinal Classification                     | Very Short                   |
| Lumens Per Lamp                                 | N.A. (absolute)              |
| Total Lamp Lumens                               | N.A. (absolute)              |
| Luminaire Lumens                                | 2861                         |
| Downward Total Efficiency                       | N.A. (absolute)              |
| Total Luminaire Efficiency                      | N.A. (absolute)              |
| Luminaire Efficacy Rating (LER)                 | 124                          |
| Total Luminaire Watts                           | 23.1                         |
| Ballast Factor                                  | 1.00                         |
| Upward Waste Light Ratio                        | 0.00                         |
| Maximum Candela                                 | 12825.821                    |
| Maximum Candela Angle                           | 90H 0V                       |
| Maximum Candela (<90 Degrees Vertical)          | 12825.821                    |
| Maximum Candela Angle (<90 Degrees Vertical)    | 90H 0V                       |
| Maximum Candela At 90 Degrees Vertical          | .132 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | .583 (0.0% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)              |

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L25-840-XXX-DIM-UNV-S-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 1298.9   | N.A.   | 45.4        |
| FM - Front-Medium (30-60)     | 127.6    | N.A.   | 4.5         |
| FH - Front-High (60-80)       | 3.8      | N.A.   | 0.1         |
| FVH - Front-Very High (80-90) | 0.2      | N.A.   | 0.0         |
| BL - Back-Low (0-30)          | 1298.9   | N.A.   | 45.4        |
| BM - Back-Medium (30-60)      | 127.6    | N.A.   | 4.5         |
| BH - Back-High (60-80)        | 3.8      | N.A.   | 0.1         |
| BVH - Back-Very High (80-90)  | 0.2      | N.A.   | 0.0         |
| UL - Uplight-Low (90-100)     | 0.1      | N.A.   | 0.0         |
| UH - Uplight-High (100-180)   | < 0.05   | N.A.   | 0.0         |
| Total                         | 2861.1   | N.A.   | 100.0       |
| BUG Rating                    | B3-U1-G0 |        |             |

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**CANDELA TABULATION**

| Vert.<br>Angles | Horizontal Angles |             |             |             |             |
|-----------------|-------------------|-------------|-------------|-------------|-------------|
|                 | <u>0.0</u>        | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
| 0               | 12825.821         | 12825.821   | 12825.821   | 12825.821   | 12825.821   |
| 1               | 12802.363         | 12796.888   | 12797.989   | 12793.182   | 12798.102   |
| 2               | 12641.490         | 12639.280   | 12630.777   | 12626.770   | 12640.503   |
| 3               | 12362.365         | 12352.573   | 12345.039   | 12337.307   | 12368.103   |
| 4               | 11944.838         | 11941.631   | 11928.773   | 11924.945   | 11962.842   |
| 5               | 11386.352         | 11376.279   | 11372.657   | 11367.841   | 11415.643   |
| 6               | 10685.280         | 10681.564   | 10684.932   | 10692.184   | 10731.812   |
| 7               | 9861.307          | 9865.135    | 9888.763    | 9910.153    | 9926.077    |
| 8               | 8944.421          | 8961.079    | 9006.755    | 9045.461    | 9034.550    |
| 9               | 7996.928          | 8021.844    | 8093.227    | 8144.434    | 8102.944    |
| 10              | 7074.323          | 7104.545    | 7193.423    | 7256.077    | 7185.719    |
| 11              | 6196.152          | 6231.538    | 6334.751    | 6398.289    | 6310.991    |
| 12              | 5385.405          | 5432.952    | 5533.569    | 5608.677    | 5509.301    |
| 13              | 4680.259          | 4720.319    | 4826.251    | 4906.033    | 4806.705    |
| 14              | 4069.795          | 4103.168    | 4202.628    | 4279.682    | 4187.794    |
| 15              | 3543.910          | 3576.531    | 3675.276    | 3745.793    | 3654.244    |
| 16              | 3104.167          | 3138.828    | 3210.643    | 3273.523    | 3193.891    |
| 17              | 2753.705          | 2756.508    | 2827.703    | 2878.684    | 2817.356    |
| 18              | 2427.568          | 2449.428    | 2504.416    | 2545.652    | 2498.942    |
| 19              | 2169.513          | 2181.656    | 2241.083    | 2277.664    | 2243.397    |
| 20              | 1953.888          | 1970.113    | 2010.841    | 2041.552    | 2007.436    |
| 21              | 1779.010          | 1788.783    | 1823.435    | 1848.765    | 1816.258    |
| 22              | 1630.544          | 1639.875    | 1666.946    | 1683.867    | 1656.317    |
| 23              | 1506.431          | 1511.313    | 1532.157    | 1546.275    | 1521.471    |
| 24              | 1398.317          | 1400.923    | 1417.449    | 1425.275    | 1403.886    |
| 25              | 1300.137          | 1303.363    | 1313.841    | 1316.193    | 1298.199    |
| 26              | 1211.607          | 1211.372    | 1215.557    | 1213.968    | 1198.278    |
| 27              | 1120.227          | 1115.618    | 1117.254    | 1114.291    | 1099.966    |
| 28              | 1022.648          | 1017.268    | 1015.622    | 1013.891    | 1003.478    |
| 29              | 919.934           | 914.901     | 913.058     | 916.058     | 908.072     |
| 30              | 810.701           | 808.914     | 807.456     | 813.654     | 809.130     |
| 31              | 700.377           | 700.809     | 701.205     | 711.222     | 708.522     |
| 32              | 593.825           | 595.856     | 596.806     | 609.947     | 611.132     |
| 33              | 489.793           | 493.706     | 497.149     | 510.440     | 516.384     |
| 34              | 393.362           | 400.069     | 404.537     | 418.712     | 427.986     |
| 35              | 311.012           | 316.722     | 318.603     | 331.997     | 345.156     |
| 36              | 233.788           | 241.962     | 247.822     | 256.673     | 271.206     |
| 37              | 173.486           | 183.945     | 186.381     | 194.207     | 210.160     |
| 38              | 127.659           | 134.930     | 136.934     | 146.170     | 158.314     |
| 39              | 96.873            | 98.021      | 101.454     | 107.512     | 114.735     |
| 40              | 70.019            | 73.066      | 77.798      | 82.190      | 86.150      |
| 41              | 52.834            | 55.364      | 58.581      | 62.231      | 66.275      |
| 42              | 41.123            | 43.240      | 46.466      | 49.288      | 52.495      |
| 43              | 33.288            | 34.784      | 37.784      | 40.267      | 42.600      |
| 44              | 27.851            | 28.933      | 31.529      | 33.740      | 34.746      |
| 45              | 23.901            | 24.719      | 26.977      | 28.679      | 29.131      |
| 46              | 21.032            | 21.634      | 23.600      | 24.832      | 25.114      |
| 47              | 18.822            | 19.320      | 20.994      | 21.850      | 22.001      |
| 48              | 17.072            | 17.552      | 18.925      | 19.536      | 19.621      |
| 49              | 15.699            | 16.094      | 17.326      | 17.712      | 17.721      |
| 50              | 14.579            | 14.927      | 15.990      | 16.244      | 16.197      |
| 51              | 13.592            | 13.921      | 14.871      | 15.050      | 14.956      |
| 52              | 12.689            | 12.971      | 13.808      | 13.865      | 13.667      |

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|     |        |        |        |        |        |
|-----|--------|--------|--------|--------|--------|
| 53  | 11.861 | 12.115 | 12.839 | 12.783 | 12.519 |
| 54  | 11.137 | 11.381 | 11.983 | 11.823 | 11.522 |
| 55  | 10.507 | 10.714 | 11.221 | 10.996 | 10.629 |
| 56  | 9.942  | 10.093 | 10.544 | 10.281 | 9.839  |
| 57  | 9.406  | 9.528  | 9.886  | 9.632  | 9.171  |
| 58  | 8.898  | 9.002  | 9.303  | 9.049  | 8.616  |
| 59  | 8.428  | 8.503  | 8.729  | 8.503  | 8.099  |
| 60  | 7.958  | 8.023  | 8.202  | 7.976  | 7.581  |
| 61  | 7.487  | 7.544  | 7.704  | 7.487  | 7.111  |
| 62  | 7.017  | 7.064  | 7.205  | 6.989  | 6.622  |
| 63  | 6.547  | 6.603  | 6.716  | 6.500  | 6.152  |
| 64  | 6.086  | 6.133  | 6.246  | 6.020  | 5.681  |
| 65  | 5.634  | 5.691  | 5.775  | 5.559  | 5.239  |
| 66  | 5.192  | 5.239  | 5.324  | 5.117  | 4.788  |
| 67  | 4.769  | 4.825  | 4.901  | 4.712  | 4.383  |
| 68  | 4.383  | 4.421  | 4.506  | 4.299  | 3.988  |
| 69  | 4.007  | 4.054  | 4.129  | 3.932  | 3.612  |
| 70  | 3.650  | 3.697  | 3.781  | 3.565  | 3.245  |
| 71  | 3.311  | 3.349  | 3.433  | 3.217  | 2.897  |
| 72  | 2.982  | 3.019  | 3.085  | 2.878  | 2.568  |
| 73  | 2.653  | 2.690  | 2.747  | 2.530  | 2.257  |
| 74  | 2.314  | 2.352  | 2.389  | 2.201  | 1.919  |
| 75  | 1.966  | 1.994  | 2.003  | 1.853  | 1.571  |
| 76  | 1.627  | 1.646  | 1.599  | 1.505  | 1.251  |
| 77  | 1.326  | 1.336  | 1.251  | 1.166  | 0.959  |
| 78  | 1.025  | 0.997  | 0.865  | 0.800  | 0.705  |
| 79  | 0.640  | 0.658  | 0.630  | 0.621  | 0.593  |
| 80  | 0.583  | 0.583  | 0.583  | 0.574  | 0.555  |
| 81  | 0.546  | 0.546  | 0.555  | 0.546  | 0.517  |
| 82  | 0.517  | 0.517  | 0.527  | 0.517  | 0.489  |
| 83  | 0.480  | 0.480  | 0.489  | 0.489  | 0.461  |
| 84  | 0.442  | 0.442  | 0.442  | 0.433  | 0.423  |
| 85  | 0.386  | 0.395  | 0.404  | 0.395  | 0.376  |
| 86  | 0.339  | 0.339  | 0.339  | 0.339  | 0.329  |
| 87  | 0.282  | 0.282  | 0.282  | 0.282  | 0.273  |
| 88  | 0.216  | 0.216  | 0.226  | 0.216  | 0.207  |
| 89  | 0.160  | 0.150  | 0.160  | 0.150  | 0.150  |
| 90  | 0.132  | 0.113  | 0.122  | 0.113  | 0.113  |
| 91  | 0.122  | 0.113  | 0.113  | 0.113  | 0.103  |
| 92  | 0.113  | 0.113  | 0.113  | 0.113  | 0.103  |
| 93  | 0.122  | 0.113  | 0.113  | 0.113  | 0.103  |
| 94  | 0.122  | 0.113  | 0.113  | 0.113  | 0.103  |
| 95  | 0.122  | 0.113  | 0.113  | 0.113  | 0.103  |
| 96  | 0.122  | 0.122  | 0.113  | 0.113  | 0.103  |
| 97  | 0.122  | 0.122  | 0.113  | 0.113  | 0.113  |
| 98  | 0.122  | 0.122  | 0.113  | 0.113  | 0.103  |
| 99  | 0.122  | 0.122  | 0.113  | 0.122  | 0.103  |
| 100 | 0.122  | 0.122  | 0.113  | 0.122  | 0.113  |
| 101 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 102 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 103 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 104 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 105 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 106 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 107 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |
| 108 | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  |

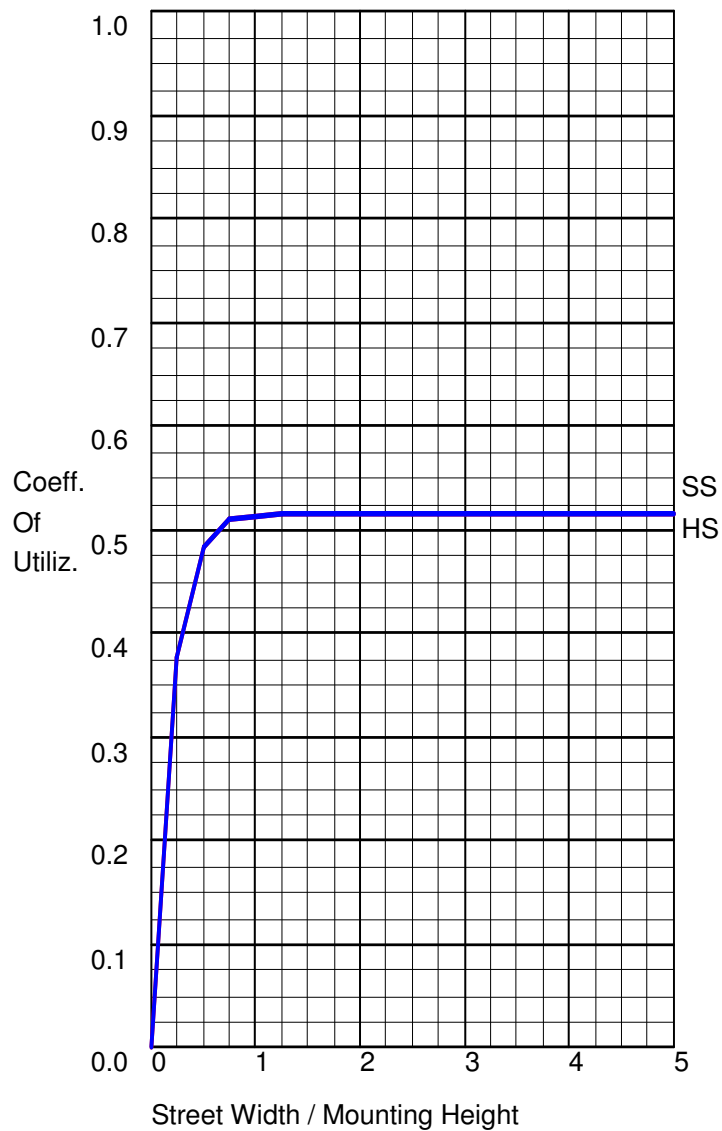
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|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 109 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 110 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 111 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 113 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 114 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 115 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 116 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 117 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 118 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 119 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 120 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 121 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 122 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 123 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 126 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 127 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 128 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 129 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 130 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 131 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 132 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 133 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 134 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 135 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 136 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 137 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 138 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 139 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 140 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 141 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 142 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 143 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 144 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 145 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 146 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 147 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 148 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 149 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 150 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 151 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 152 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 153 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 154 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 155 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 156 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 157 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 158 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 159 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 160 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 161 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 162 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 163 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 164 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

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|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 165 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 166 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 167 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 168 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 169 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 170 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 171 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 172 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 173 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 174 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 175 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 176 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 177 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 178 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 179 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 180 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

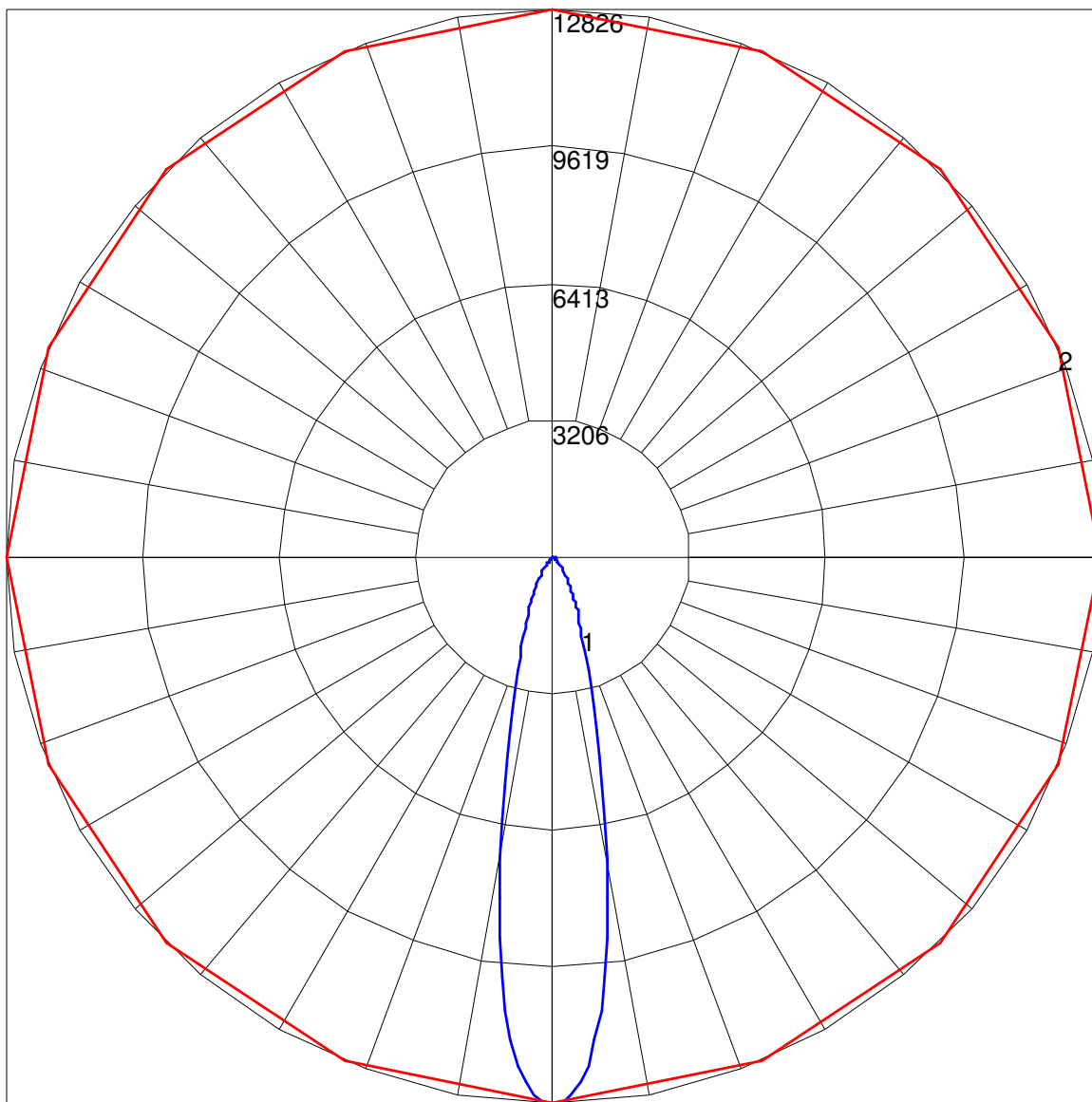
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

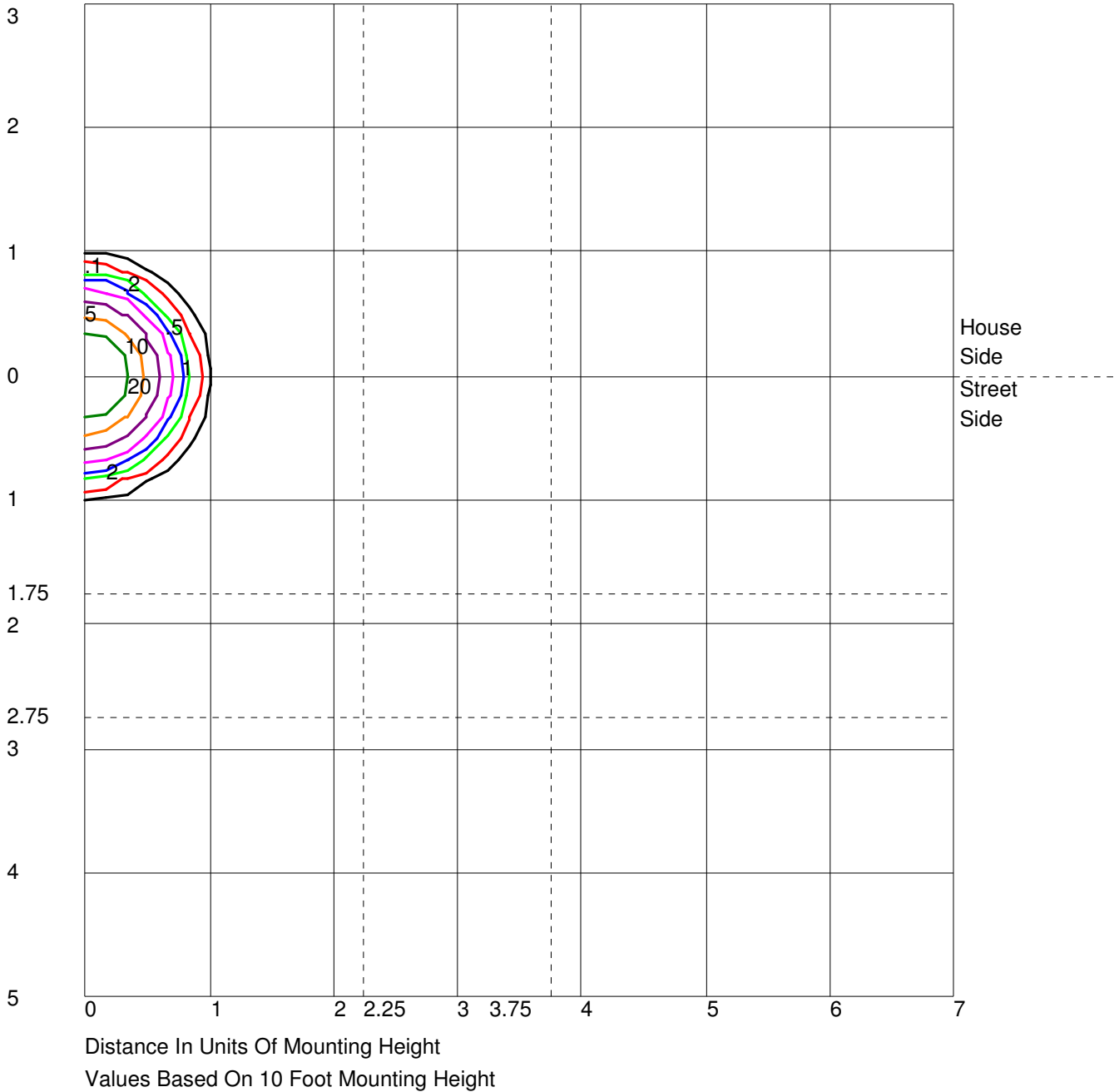
|                      | Lumens | Percent<br>Of Luminaire |
|----------------------|--------|-------------------------|
| Downward Street Side | 1430.5 | 50.0                    |
| Downward House Side  | 1430.5 | 50.0                    |
| Downward Total       | 2861.0 | 100.0                   |
| Upward Street Side   | 0.1    | 0.0                     |
| Upward House Side    | 0.1    | 0.0                     |
| Upward Total         | 0.2    | 0.0                     |
| Total Flux           | 2861.2 | 100.0                   |

POLAR GRAPH



Maximum Candela = 12825.821 Located At Horizontal Angle = 90, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



# PHOTO IES R

