

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L25-835-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-L25-835-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                                | 2833                         |
| Downward Total Efficiency                       | N.A. (absolute)              |
| Total Luminaire Efficiency                      | N.A. (absolute)              |
| Luminaire Efficacy Rating (LER)                 | 123                          |
| Total Luminaire Watts                           | 23.1                         |
| Ballast Factor                                  | 1.00                         |
| Upward Waste Light Ratio                        | 0.00                         |
| Maximum Candela                                 | 12698.834                    |
| Maximum Candela Angle                           | 90H 0V                       |
| Maximum Candela (<90 Degrees Vertical)          | 12698.834                    |
| Maximum Candela Angle (<90 Degrees Vertical)    | 90H 0V                       |
| Maximum Candela At 90 Degrees Vertical          | .13 (0.0% Luminaire Lumens)  |
| Maximum Candela from 80 to <90 Degrees Vertical | .577 (0.0% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)              |

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L25-835-XXX-DIM-UNV-S-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 1286.0   | N.A.   | 45.4        |
| FM - Front-Medium (30-60)     | 126.4    | 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)          | 1286.0   | N.A.   | 45.4        |
| BM - Back-Medium (30-60)      | 126.4    | 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                         | 2832.9   | 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               | 12698.834         | 12698.834   | 12698.834   | 12698.834   | 12698.834   |
| 1               | 12675.608         | 12670.188   | 12671.277   | 12666.518   | 12671.389   |
| 2               | 12516.328         | 12514.140   | 12505.721   | 12501.754   | 12515.350   |
| 3               | 12239.966         | 12230.272   | 12222.812   | 12215.157   | 12245.647   |
| 4               | 11826.574         | 11823.398   | 11810.667   | 11806.877   | 11844.399   |
| 5               | 11273.617         | 11263.643   | 11260.058   | 11255.289   | 11302.618   |
| 6               | 10579.486         | 10575.807   | 10579.141   | 10586.321   | 10625.557   |
| 7               | 9763.671          | 9767.461    | 9790.856    | 9812.033    | 9827.800    |
| 8               | 8855.863          | 8872.356    | 8917.580    | 8955.903    | 8945.100    |
| 9               | 7917.751          | 7942.421    | 8013.097    | 8063.797    | 8022.717    |
| 10              | 7004.281          | 7034.203    | 7122.201    | 7184.235    | 7114.574    |
| 11              | 6134.805          | 6169.840    | 6272.031    | 6334.940    | 6248.507    |
| 12              | 5332.084          | 5379.161    | 5478.782    | 5553.146    | 5454.754    |
| 13              | 4633.920          | 4673.584    | 4778.466    | 4857.459    | 4759.114    |
| 14              | 4029.500          | 4062.543    | 4161.018    | 4237.309    | 4146.331    |
| 15              | 3508.822          | 3541.120    | 3638.887    | 3708.706    | 3618.063    |
| 16              | 3073.433          | 3107.751    | 3178.855    | 3241.112    | 3162.269    |
| 17              | 2726.441          | 2729.217    | 2799.706    | 2850.182    | 2789.462    |
| 18              | 2403.533          | 2425.177    | 2479.620    | 2520.448    | 2474.200    |
| 19              | 2148.032          | 2160.055    | 2218.895    | 2255.113    | 2221.186    |
| 20              | 1934.542          | 1950.607    | 1990.932    | 2021.339    | 1987.561    |
| 21              | 1761.396          | 1771.072    | 1805.381    | 1830.461    | 1798.275    |
| 22              | 1614.400          | 1623.639    | 1650.441    | 1667.195    | 1639.918    |
| 23              | 1491.516          | 1496.349    | 1516.987    | 1530.966    | 1506.407    |
| 24              | 1384.473          | 1387.052    | 1403.415    | 1411.164    | 1389.986    |
| 25              | 1287.264          | 1290.459    | 1300.833    | 1303.161    | 1285.346    |
| 26              | 1199.611          | 1199.378    | 1203.522    | 1201.948    | 1186.414    |
| 27              | 1109.135          | 1104.572    | 1106.192    | 1103.259    | 1089.075    |
| 28              | 1012.523          | 1007.196    | 1005.566    | 1003.852    | 993.543     |
| 29              | 910.825           | 905.843     | 904.018     | 906.988     | 899.082     |
| 30              | 802.674           | 800.905     | 799.461     | 805.598     | 801.119     |
| 31              | 693.442           | 693.871     | 694.262     | 704.180     | 701.507     |
| 32              | 587.945           | 589.957     | 590.898     | 603.908     | 605.081     |
| 33              | 484.944           | 488.818     | 492.227     | 505.386     | 511.272     |
| 34              | 389.468           | 396.108     | 400.531     | 414.566     | 423.749     |
| 35              | 307.933           | 313.586     | 315.448     | 328.710     | 341.739     |
| 36              | 231.473           | 239.566     | 245.368     | 254.132     | 268.520     |
| 37              | 171.768           | 182.124     | 184.536     | 192.285     | 208.079     |
| 38              | 126.395           | 133.594     | 135.578     | 144.723     | 156.746     |
| 39              | 95.914            | 97.050      | 100.450     | 106.447     | 113.599     |
| 40              | 69.326            | 72.343      | 77.027      | 81.377      | 85.297      |
| 41              | 52.311            | 54.816      | 58.001      | 61.614      | 65.619      |
| 42              | 40.716            | 42.812      | 46.006      | 48.800      | 51.976      |
| 43              | 32.959            | 34.439      | 37.410      | 39.869      | 42.178      |
| 44              | 27.576            | 28.647      | 31.217      | 33.406      | 34.402      |
| 45              | 23.664            | 24.474      | 26.710      | 28.395      | 28.842      |
| 46              | 20.824            | 21.420      | 23.366      | 24.586      | 24.866      |
| 47              | 18.635            | 19.129      | 20.787      | 21.634      | 21.783      |
| 48              | 16.903            | 17.378      | 18.738      | 19.343      | 19.427      |
| 49              | 15.543            | 15.934      | 17.154      | 17.536      | 17.546      |
| 50              | 14.435            | 14.780      | 15.832      | 16.083      | 16.037      |
| 51              | 13.457            | 13.783      | 14.724      | 14.901      | 14.808      |
| 52              | 12.563            | 12.843      | 13.671      | 13.727      | 13.532      |

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|     |        |        |        |        |        |
|-----|--------|--------|--------|--------|--------|
| 53  | 11.744 | 11.995 | 12.712 | 12.656 | 12.396 |
| 54  | 11.027 | 11.269 | 11.865 | 11.706 | 11.408 |
| 55  | 10.403 | 10.607 | 11.110 | 10.887 | 10.524 |
| 56  | 9.844  | 9.993  | 10.440 | 10.179 | 9.741  |
| 57  | 9.313  | 9.434  | 9.788  | 9.536  | 9.080  |
| 58  | 8.810  | 8.912  | 9.211  | 8.959  | 8.531  |
| 59  | 8.344  | 8.419  | 8.642  | 8.419  | 8.018  |
| 60  | 7.879  | 7.944  | 8.121  | 7.897  | 7.506  |
| 61  | 7.413  | 7.469  | 7.627  | 7.413  | 7.041  |
| 62  | 6.947  | 6.994  | 7.134  | 6.920  | 6.556  |
| 63  | 6.482  | 6.538  | 6.649  | 6.435  | 6.091  |
| 64  | 6.025  | 6.072  | 6.184  | 5.960  | 5.625  |
| 65  | 5.578  | 5.634  | 5.718  | 5.504  | 5.187  |
| 66  | 5.141  | 5.187  | 5.271  | 5.066  | 4.740  |
| 67  | 4.722  | 4.778  | 4.852  | 4.666  | 4.340  |
| 68  | 4.340  | 4.377  | 4.461  | 4.256  | 3.949  |
| 69  | 3.967  | 4.014  | 4.088  | 3.893  | 3.576  |
| 70  | 3.613  | 3.660  | 3.744  | 3.530  | 3.213  |
| 71  | 3.278  | 3.315  | 3.399  | 3.185  | 2.868  |
| 72  | 2.952  | 2.989  | 3.055  | 2.850  | 2.542  |
| 73  | 2.626  | 2.664  | 2.719  | 2.505  | 2.235  |
| 74  | 2.291  | 2.328  | 2.365  | 2.179  | 1.900  |
| 75  | 1.946  | 1.974  | 1.984  | 1.835  | 1.555  |
| 76  | 1.611  | 1.630  | 1.583  | 1.490  | 1.239  |
| 77  | 1.313  | 1.322  | 1.239  | 1.155  | 0.950  |
| 78  | 1.015  | 0.987  | 0.857  | 0.792  | 0.698  |
| 79  | 0.633  | 0.652  | 0.624  | 0.615  | 0.587  |
| 80  | 0.577  | 0.577  | 0.577  | 0.568  | 0.549  |
| 81  | 0.540  | 0.540  | 0.549  | 0.540  | 0.512  |
| 82  | 0.512  | 0.512  | 0.522  | 0.512  | 0.484  |
| 83  | 0.475  | 0.475  | 0.484  | 0.484  | 0.456  |
| 84  | 0.438  | 0.438  | 0.438  | 0.428  | 0.419  |
| 85  | 0.382  | 0.391  | 0.400  | 0.391  | 0.373  |
| 86  | 0.335  | 0.335  | 0.335  | 0.335  | 0.326  |
| 87  | 0.279  | 0.279  | 0.279  | 0.279  | 0.270  |
| 88  | 0.214  | 0.214  | 0.224  | 0.214  | 0.205  |
| 89  | 0.158  | 0.149  | 0.158  | 0.149  | 0.149  |
| 90  | 0.130  | 0.112  | 0.121  | 0.112  | 0.112  |
| 91  | 0.121  | 0.112  | 0.112  | 0.112  | 0.102  |
| 92  | 0.112  | 0.112  | 0.112  | 0.112  | 0.102  |
| 93  | 0.121  | 0.112  | 0.112  | 0.112  | 0.102  |
| 94  | 0.121  | 0.112  | 0.112  | 0.112  | 0.102  |
| 95  | 0.121  | 0.112  | 0.112  | 0.112  | 0.102  |
| 96  | 0.121  | 0.121  | 0.112  | 0.112  | 0.102  |
| 97  | 0.121  | 0.121  | 0.112  | 0.112  | 0.112  |
| 98  | 0.121  | 0.121  | 0.112  | 0.112  | 0.102  |
| 99  | 0.121  | 0.121  | 0.112  | 0.121  | 0.102  |
| 100 | 0.121  | 0.121  | 0.112  | 0.121  | 0.112  |
| 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  |

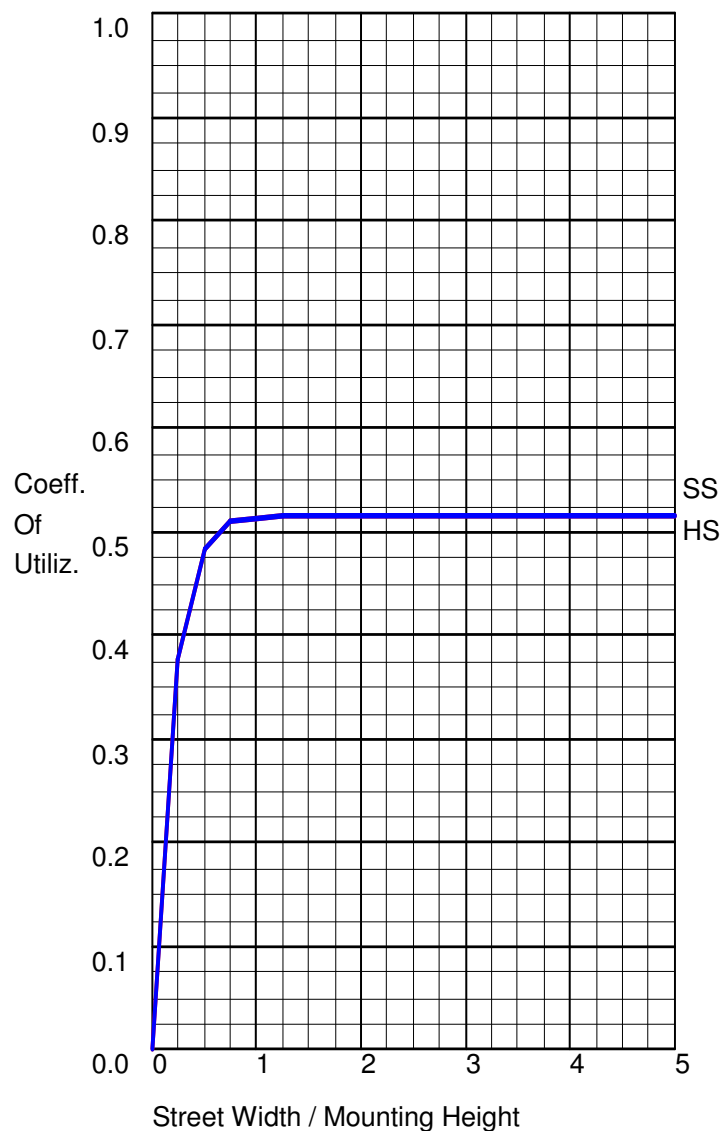
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|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 109 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 110 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 111 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112 | 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 |

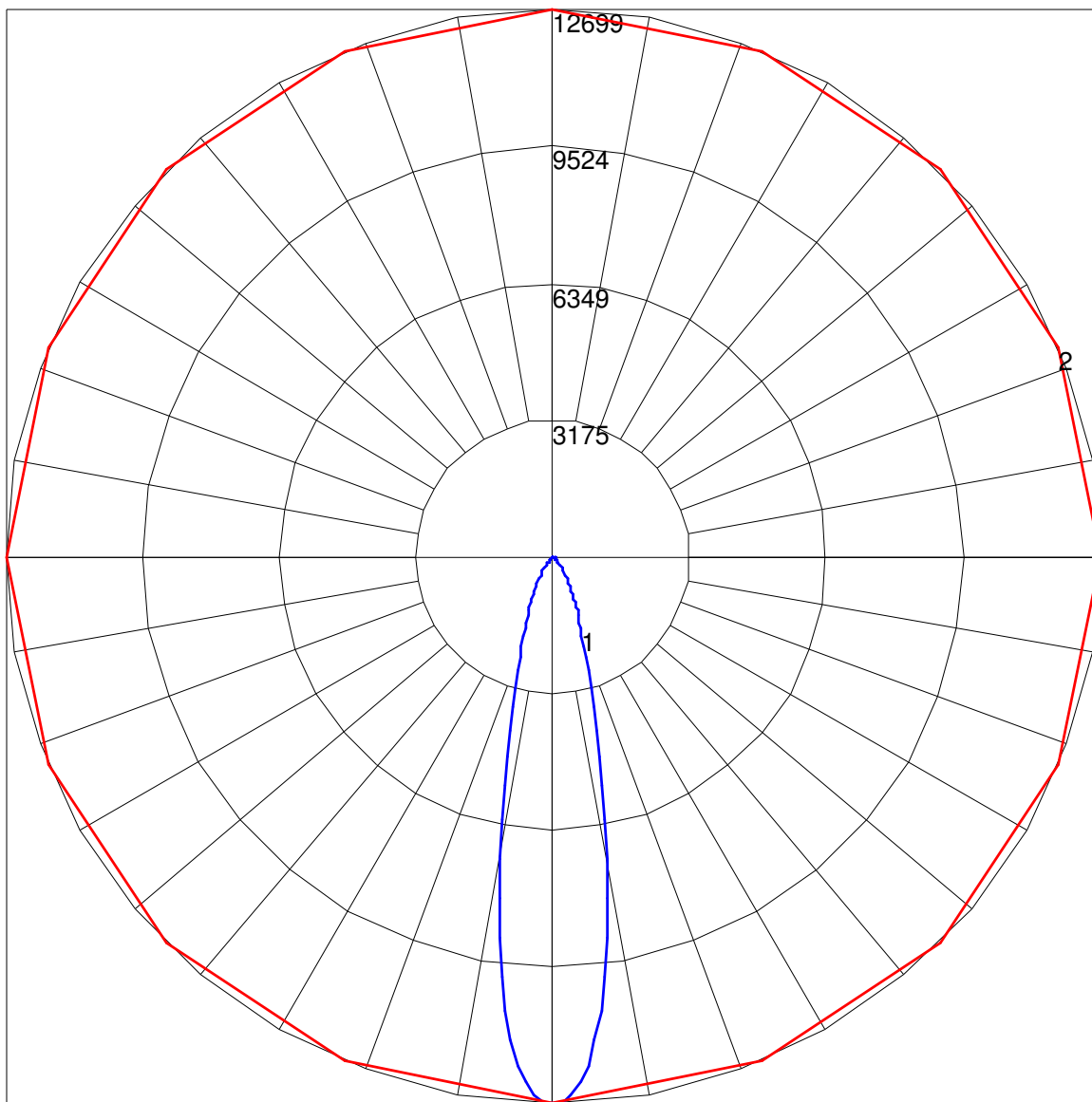
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

|                      | Lumens | Percent<br>Of Luminaire |
|----------------------|--------|-------------------------|
| Downward Street Side | 1416.4 | 50.0                    |
| Downward House Side  | 1416.4 | 50.0                    |
| Downward Total       | 2832.8 | 100.0                   |
| Upward Street Side   | 0.1    | 0.0                     |
| Upward House Side    | 0.1    | 0.0                     |
| Upward Total         | 0.2    | 0.0                     |
| Total Flux           | 2833.0 | 100.0                   |

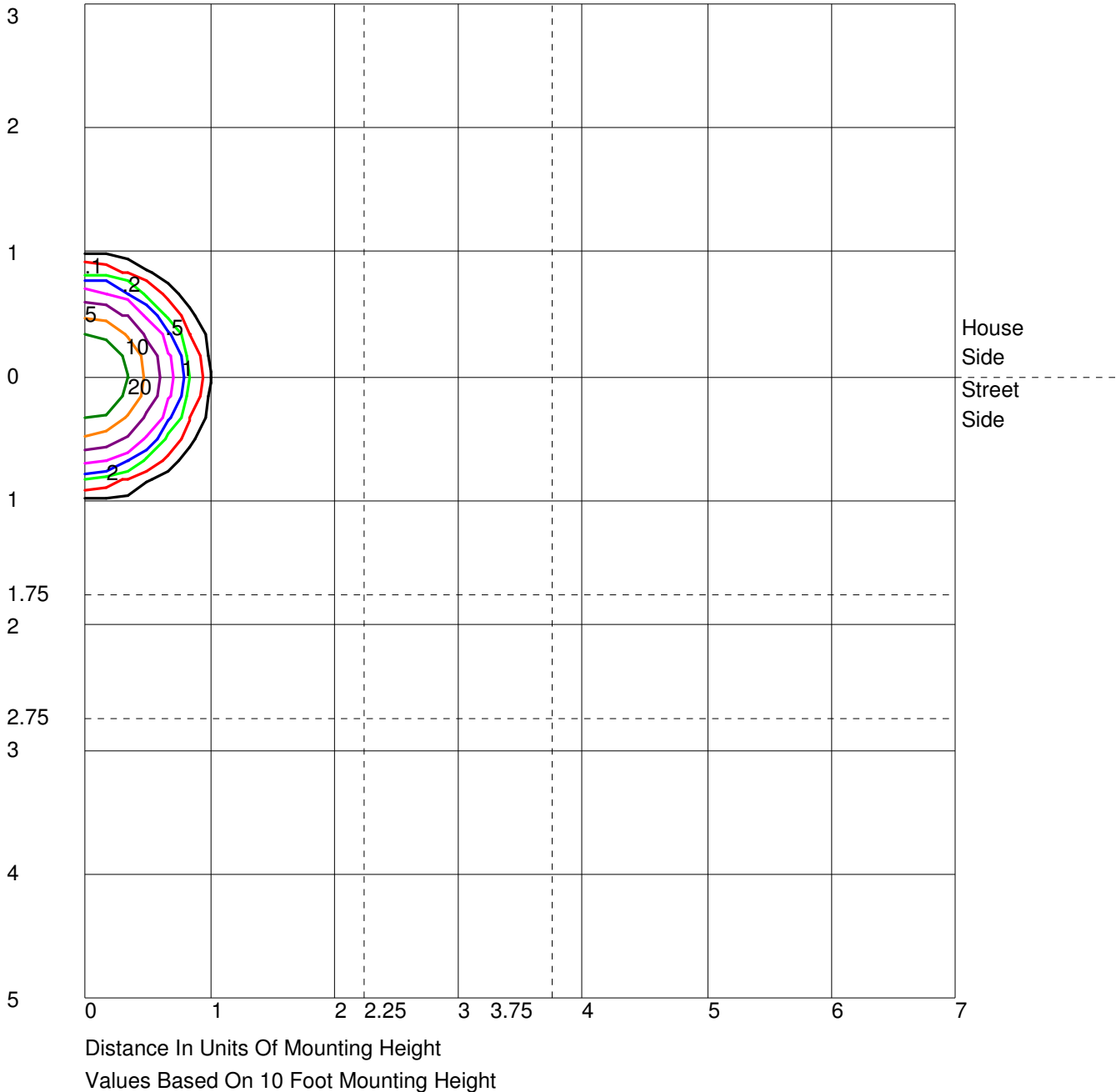
POLAR GRAPH



Maximum Candela = 12698.834 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

