

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L25-927-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-L25-927-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                                | 2663                         |
| Downward Total Efficiency                       | N.A. (absolute)              |
| Total Luminaire Efficiency                      | N.A. (absolute)              |
| Luminaire Efficacy Rating (LER)                 | 115                          |
| Total Luminaire Watts                           | 23.1                         |
| Ballast Factor                                  | 1.00                         |
| Upward Waste Light Ratio                        | 0.00                         |
| Maximum Candela                                 | 11936.904                    |
| Maximum Candela Angle                           | 90H 0V                       |
| Maximum Candela (<90 Degrees Vertical)          | 11936.904                    |
| Maximum Candela Angle (<90 Degrees Vertical)    | 90H 0V                       |
| Maximum Candela At 90 Degrees Vertical          | .123 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | .543 (0.0% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)              |

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L25-927-XXX-DIM-UNV-S-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 1208.9   | N.A.   | 45.4        |
| FM - Front-Medium (30-60)     | 118.8    | N.A.   | 4.5         |
| FH - Front-High (60-80)       | 3.6      | N.A.   | 0.1         |
| FVH - Front-Very High (80-90) | 0.2      | N.A.   | 0.0         |
| BL - Back-Low (0-30)          | 1208.9   | N.A.   | 45.4        |
| BM - Back-Medium (30-60)      | 118.8    | N.A.   | 4.5         |
| BH - Back-High (60-80)        | 3.6      | 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                         | 2663.1   | 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               | 11936.904         | 11936.904   | 11936.904   | 11936.904   | 11936.904   |
| 1               | 11915.071         | 11909.976   | 11911.000   | 11906.527   | 11911.105   |
| 2               | 11765.348         | 11763.291   | 11755.377   | 11751.648   | 11764.429   |
| 3               | 11505.568         | 11496.455   | 11489.443   | 11482.247   | 11510.908   |
| 4               | 11116.979         | 11113.994   | 11102.027   | 11098.464   | 11133.734   |
| 5               | 10597.200         | 10587.824   | 10584.454   | 10579.972   | 10624.460   |
| 6               | 9944.716          | 9941.258    | 9944.392    | 9951.142    | 9988.023    |
| 7               | 9177.851          | 9181.413    | 9203.404    | 9223.311    | 9238.132    |
| 8               | 8324.511          | 8340.015    | 8382.525    | 8418.548    | 8408.394    |
| 9               | 7442.686          | 7465.875    | 7532.311    | 7579.969    | 7541.354    |
| 10              | 6584.024          | 6612.151    | 6694.869    | 6753.180    | 6687.699    |
| 11              | 5766.716          | 5799.649    | 5895.709    | 5954.844    | 5873.596    |
| 12              | 5012.159          | 5056.411    | 5150.055    | 5219.957    | 5127.469    |
| 13              | 4355.885          | 4393.169    | 4491.758    | 4566.011    | 4473.567    |
| 14              | 3787.730          | 3818.790    | 3911.357    | 3983.071    | 3897.551    |
| 15              | 3298.293          | 3328.652    | 3420.554    | 3486.184    | 3400.979    |
| 16              | 2889.026          | 2921.286    | 2988.124    | 3046.645    | 2972.533    |
| 17              | 2562.855          | 2565.463    | 2631.724    | 2679.171    | 2622.094    |
| 18              | 2259.321          | 2279.666    | 2330.843    | 2369.221    | 2325.748    |
| 19              | 2019.150          | 2030.452    | 2085.761    | 2119.806    | 2087.914    |
| 20              | 1818.470          | 1833.571    | 1871.476    | 1900.059    | 1868.307    |
| 21              | 1655.712          | 1664.808    | 1697.058    | 1720.633    | 1690.379    |
| 22              | 1517.536          | 1526.220    | 1551.415    | 1567.164    | 1541.523    |
| 23              | 1402.025          | 1406.568    | 1425.968    | 1439.108    | 1416.023    |
| 24              | 1301.404          | 1303.829    | 1319.210    | 1326.494    | 1306.587    |
| 25              | 1210.028          | 1213.031    | 1222.783    | 1224.972    | 1208.225    |
| 26              | 1127.634          | 1127.415    | 1131.311    | 1129.831    | 1115.229    |
| 27              | 1042.587          | 1038.298    | 1039.821    | 1037.063    | 1023.731    |
| 28              | 951.771           | 946.764     | 945.232     | 943.621     | 933.930     |
| 29              | 856.176           | 851.492     | 849.776     | 852.569     | 845.137     |
| 30              | 754.514           | 752.850     | 751.493     | 757.262     | 753.052     |
| 31              | 651.836           | 652.239     | 652.606     | 661.929     | 659.417     |
| 32              | 552.669           | 554.559     | 555.444     | 567.673     | 568.776     |
| 33              | 455.847           | 459.489     | 462.693     | 475.063     | 480.595     |
| 34              | 366.100           | 372.341     | 376.500     | 389.692     | 398.324     |
| 35              | 289.457           | 294.771     | 296.521     | 308.987     | 321.234     |
| 36              | 217.585           | 225.192     | 230.646     | 238.884     | 252.409     |
| 37              | 161.462           | 171.197     | 173.464     | 180.747     | 195.595     |
| 38              | 118.812           | 125.579     | 127.443     | 136.040     | 147.342     |
| 39              | 90.159            | 91.227      | 94.423      | 100.060     | 106.783     |
| 40              | 65.166            | 68.002      | 72.406      | 76.494      | 80.179      |
| 41              | 49.172            | 51.527      | 54.521      | 57.918      | 61.682      |
| 42              | 38.273            | 40.243      | 43.246      | 45.872      | 48.857      |
| 43              | 30.981            | 32.373      | 35.166      | 37.477      | 39.648      |
| 44              | 25.921            | 26.928      | 29.344      | 31.401      | 32.338      |
| 45              | 22.244            | 23.006      | 25.107      | 26.691      | 27.112      |
| 46              | 19.574            | 20.135      | 21.964      | 23.111      | 23.374      |
| 47              | 17.517            | 17.981      | 19.539      | 20.336      | 20.476      |
| 48              | 15.889            | 16.335      | 17.613      | 18.182      | 18.261      |
| 49              | 14.611            | 14.978      | 16.125      | 16.484      | 16.493      |
| 50              | 13.569            | 13.893      | 14.882      | 15.118      | 15.075      |
| 51              | 12.650            | 12.956      | 13.840      | 14.007      | 13.919      |
| 52              | 11.809            | 12.072      | 12.851      | 12.904      | 12.720      |

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|     |        |        |        |        |        |
|-----|--------|--------|--------|--------|--------|
| 53  | 11.039 | 11.275 | 11.949 | 11.897 | 11.652 |
| 54  | 10.365 | 10.593 | 11.153 | 11.004 | 10.724 |
| 55  | 9.778  | 9.971  | 10.444 | 10.234 | 9.892  |
| 56  | 9.253  | 9.393  | 9.813  | 9.568  | 9.157  |
| 57  | 8.754  | 8.868  | 9.201  | 8.964  | 8.535  |
| 58  | 8.281  | 8.378  | 8.658  | 8.422  | 8.019  |
| 59  | 7.844  | 7.914  | 8.124  | 7.914  | 7.537  |
| 60  | 7.406  | 7.467  | 7.634  | 7.424  | 7.056  |
| 61  | 6.968  | 7.021  | 7.170  | 6.968  | 6.618  |
| 62  | 6.531  | 6.574  | 6.706  | 6.504  | 6.163  |
| 63  | 6.093  | 6.145  | 6.250  | 6.049  | 5.725  |
| 64  | 5.664  | 5.708  | 5.813  | 5.603  | 5.288  |
| 65  | 5.244  | 5.296  | 5.375  | 5.174  | 4.876  |
| 66  | 4.832  | 4.876  | 4.955  | 4.762  | 4.456  |
| 67  | 4.438  | 4.491  | 4.561  | 4.386  | 4.079  |
| 68  | 4.079  | 4.114  | 4.193  | 4.001  | 3.712  |
| 69  | 3.729  | 3.773  | 3.843  | 3.659  | 3.362  |
| 70  | 3.397  | 3.440  | 3.519  | 3.318  | 3.020  |
| 71  | 3.081  | 3.116  | 3.195  | 2.994  | 2.696  |
| 72  | 2.775  | 2.810  | 2.871  | 2.679  | 2.390  |
| 73  | 2.469  | 2.504  | 2.556  | 2.355  | 2.101  |
| 74  | 2.154  | 2.189  | 2.224  | 2.048  | 1.786  |
| 75  | 1.830  | 1.856  | 1.865  | 1.725  | 1.462  |
| 76  | 1.514  | 1.532  | 1.488  | 1.401  | 1.164  |
| 77  | 1.234  | 1.243  | 1.164  | 1.086  | 0.893  |
| 78  | 0.954  | 0.928  | 0.805  | 0.744  | 0.657  |
| 79  | 0.595  | 0.613  | 0.587  | 0.578  | 0.552  |
| 80  | 0.543  | 0.543  | 0.543  | 0.534  | 0.516  |
| 81  | 0.508  | 0.508  | 0.516  | 0.508  | 0.481  |
| 82  | 0.481  | 0.481  | 0.490  | 0.481  | 0.455  |
| 83  | 0.446  | 0.446  | 0.455  | 0.455  | 0.429  |
| 84  | 0.411  | 0.411  | 0.411  | 0.403  | 0.394  |
| 85  | 0.359  | 0.368  | 0.376  | 0.368  | 0.350  |
| 86  | 0.315  | 0.315  | 0.315  | 0.315  | 0.306  |
| 87  | 0.263  | 0.263  | 0.263  | 0.263  | 0.254  |
| 88  | 0.201  | 0.201  | 0.210  | 0.201  | 0.193  |
| 89  | 0.149  | 0.140  | 0.149  | 0.140  | 0.140  |
| 90  | 0.123  | 0.105  | 0.114  | 0.105  | 0.105  |
| 91  | 0.114  | 0.105  | 0.105  | 0.105  | 0.096  |
| 92  | 0.105  | 0.105  | 0.105  | 0.105  | 0.096  |
| 93  | 0.114  | 0.105  | 0.105  | 0.105  | 0.096  |
| 94  | 0.114  | 0.105  | 0.105  | 0.105  | 0.096  |
| 95  | 0.114  | 0.105  | 0.105  | 0.105  | 0.096  |
| 96  | 0.114  | 0.114  | 0.105  | 0.105  | 0.096  |
| 97  | 0.114  | 0.114  | 0.105  | 0.105  | 0.105  |
| 98  | 0.114  | 0.114  | 0.105  | 0.105  | 0.096  |
| 99  | 0.114  | 0.114  | 0.105  | 0.114  | 0.096  |
| 100 | 0.114  | 0.114  | 0.105  | 0.114  | 0.105  |
| 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  |

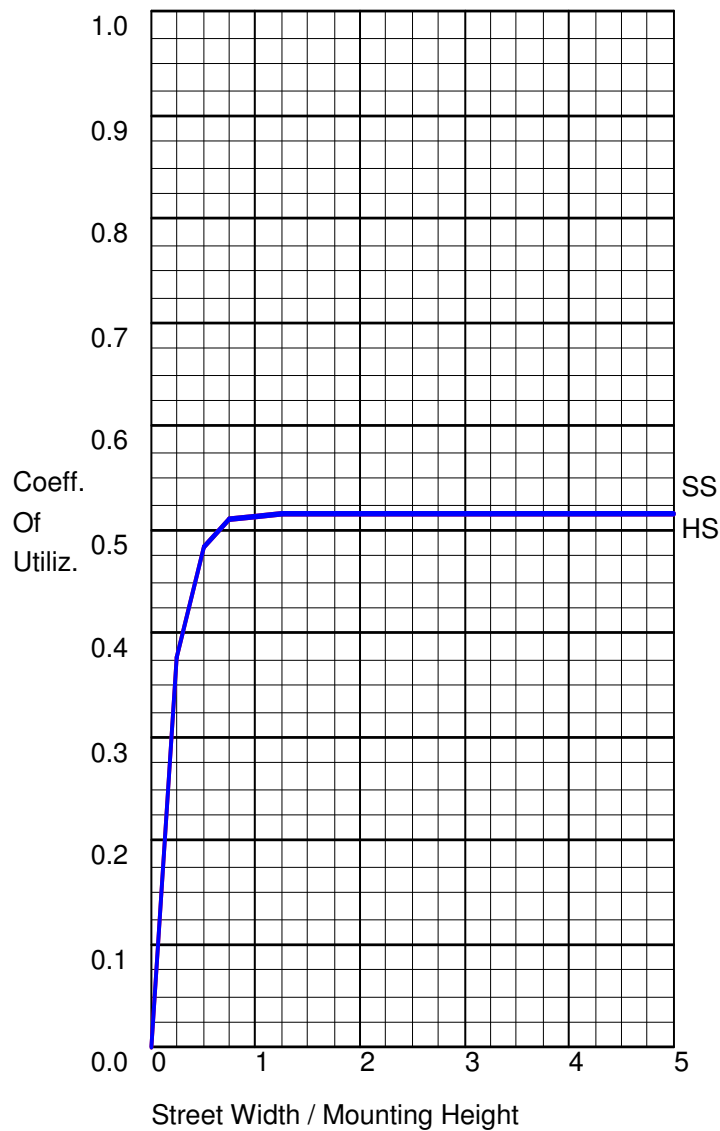
**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L25-927-XXX-DIM-UNV-S-XXX\_IES****CANDELA TABULATION - (Cont.)**

|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 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 |

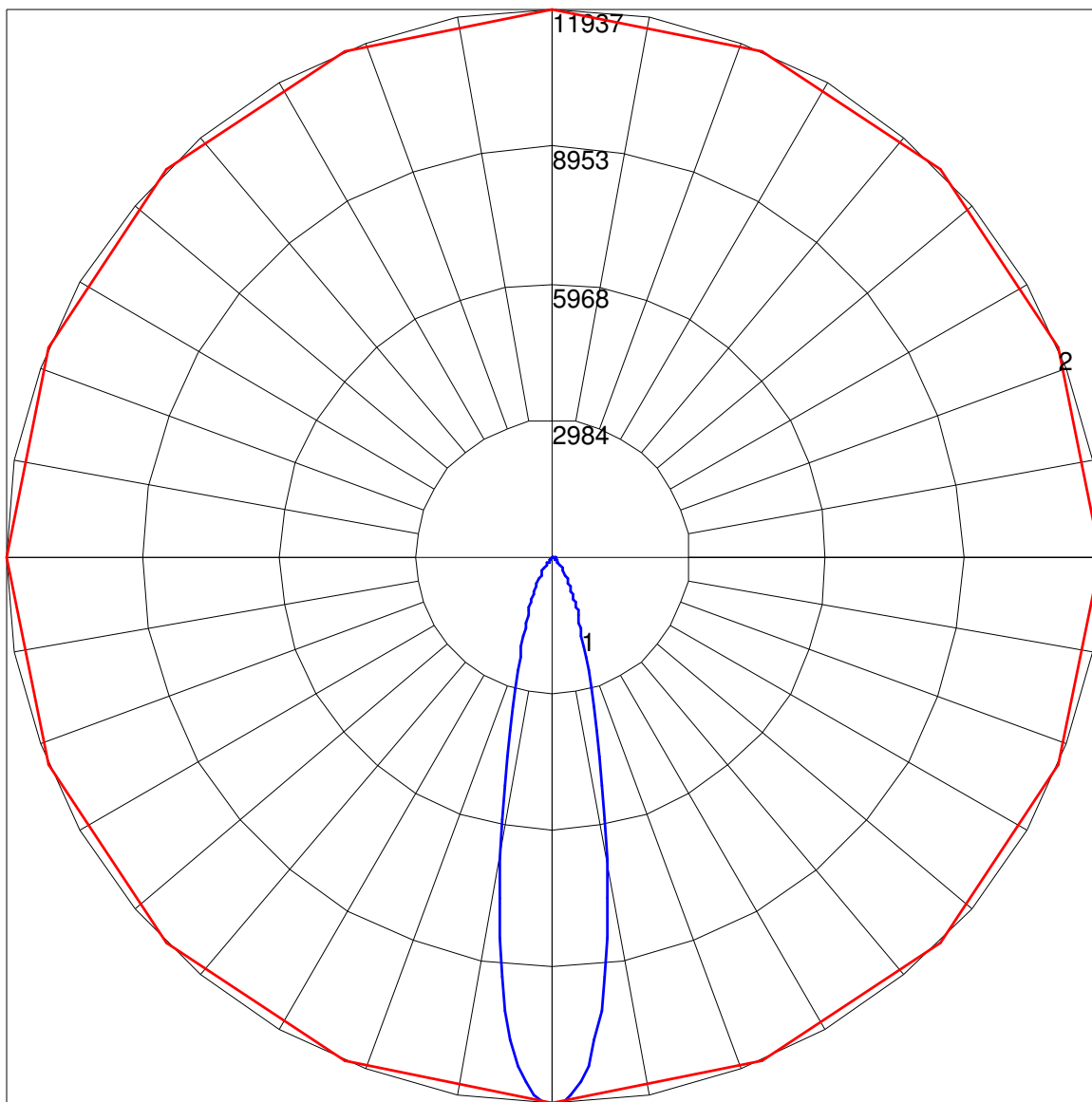
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

|                      | Lumens | Percent<br>Of Luminaire |
|----------------------|--------|-------------------------|
| Downward Street Side | 1331.4 | 50.0                    |
| Downward House Side  | 1331.4 | 50.0                    |
| Downward Total       | 2662.8 | 100.0                   |
| Upward Street Side   | 0.1    | 0.0                     |
| Upward House Side    | 0.1    | 0.0                     |
| Upward Total         | 0.2    | 0.0                     |
| Total Flux           | 2663.0 | 100.0                   |

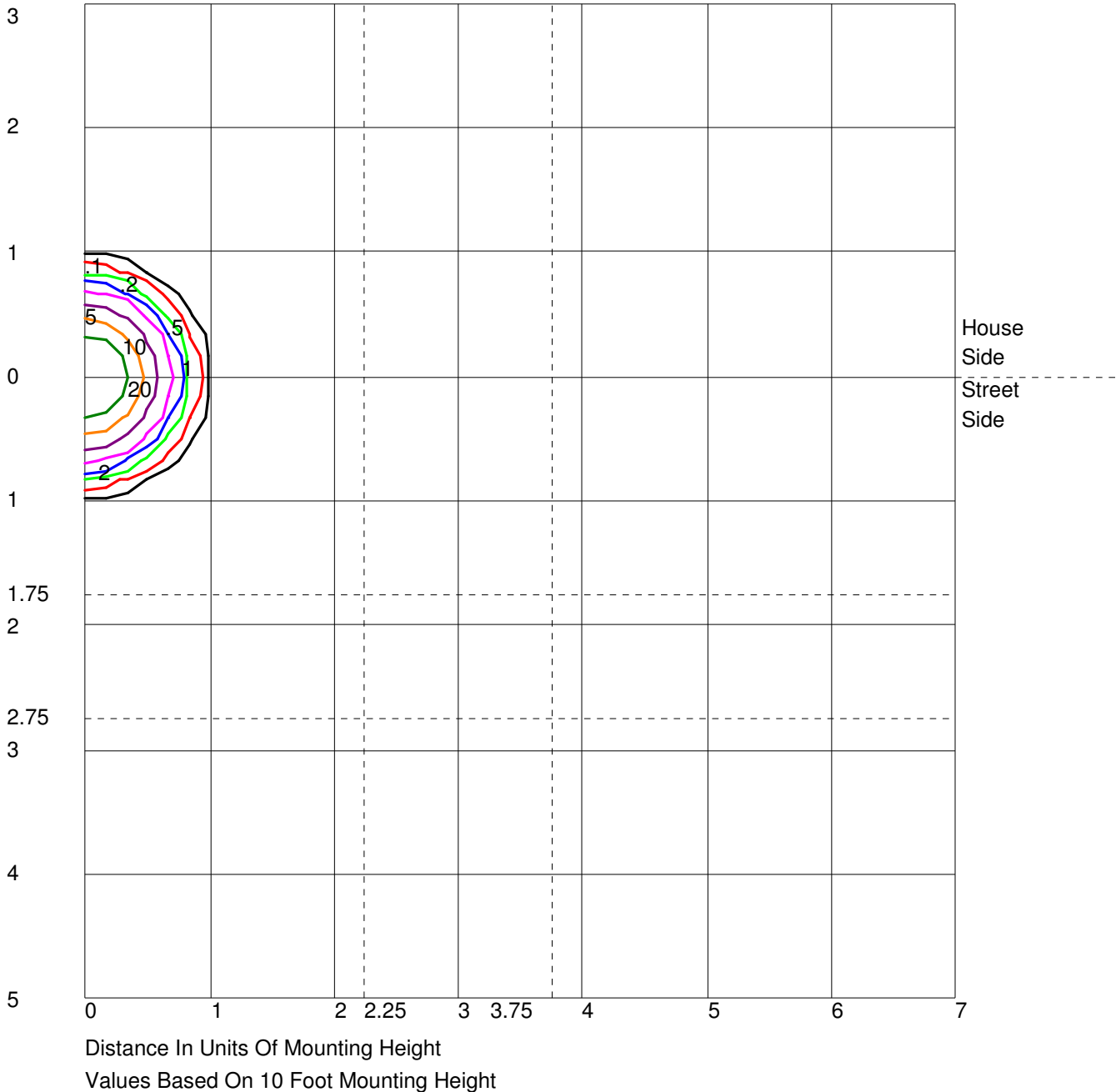
POLAR GRAPH



Maximum Candela = 11936.904 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

