

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L10-950-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-L10-950-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                                | 1103                         |
| Downward Total Efficiency                       | N.A. (absolute)              |
| Total Luminaire Efficiency                      | N.A. (absolute)              |
| Luminaire Efficacy Rating (LER)                 | 113                          |
| Total Luminaire Watts                           | 9.8                          |
| Ballast Factor                                  | 1.00                         |
| Upward Waste Light Ratio                        | 0.00                         |
| Maximum Candela                                 | 4943.94                      |
| Maximum Candela Angle                           | 90H 0V                       |
| Maximum Candela (<90 Degrees Vertical)          | 4943.94                      |
| Maximum Candela Angle (<90 Degrees Vertical)    | 90H 0V                       |
| Maximum Candela At 90 Degrees Vertical          | .051 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | .225 (0.0% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)              |

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L10-950-XXX-DIM-UNV-S-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 500.7    | N.A.   | 45.4        |
| FM - Front-Medium (30-60)     | 49.2     | N.A.   | 4.5         |
| FH - Front-High (60-80)       | 1.5      | N.A.   | 0.1         |
| FVH - Front-Very High (80-90) | 0.1      | N.A.   | 0.0         |
| BL - Back-Low (0-30)          | 500.7    | N.A.   | 45.4        |
| BM - Back-Medium (30-60)      | 49.2     | N.A.   | 4.5         |
| BH - Back-High (60-80)        | 1.5      | N.A.   | 0.1         |
| BVH - Back-Very High (80-90)  | 0.1      | N.A.   | 0.0         |
| UL - Uplight-Low (90-100)     | < 0.05   | N.A.   | 0.0         |
| UH - Uplight-High (100-180)   | < 0.05   | N.A.   | 0.0         |
| Total                         | 1103.0   | N.A.   | 100.0       |
| BUG Rating                    | B2-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               | 4943.940          | 4943.940    | 4943.940    | 4943.940    | 4943.940    |
| 1               | 4934.897          | 4932.787    | 4933.211    | 4931.358    | 4933.255    |
| 2               | 4872.886          | 4872.034    | 4868.756    | 4867.212    | 4872.505    |
| 3               | 4765.292          | 4761.518    | 4758.613    | 4755.633    | 4767.504    |
| 4               | 4604.349          | 4603.113    | 4598.156    | 4596.681    | 4611.289    |
| 5               | 4389.071          | 4385.188    | 4383.792    | 4381.935    | 4400.361    |
| 6               | 4118.830          | 4117.398    | 4118.696    | 4121.491    | 4136.766    |
| 7               | 3801.215          | 3802.691    | 3811.799    | 3820.044    | 3826.182    |
| 8               | 3447.785          | 3454.206    | 3471.813    | 3486.733    | 3482.527    |
| 9               | 3082.557          | 3092.162    | 3119.677    | 3139.416    | 3123.423    |
| 10              | 2726.923          | 2738.572    | 2772.832    | 2796.983    | 2769.862    |
| 11              | 2388.416          | 2402.056    | 2441.842    | 2466.334    | 2432.683    |
| 12              | 2075.899          | 2094.227    | 2133.012    | 2161.964    | 2123.658    |
| 13              | 1804.089          | 1819.531    | 1860.364    | 1891.117    | 1852.829    |
| 14              | 1568.774          | 1581.638    | 1619.977    | 1649.679    | 1614.259    |
| 15              | 1366.063          | 1378.637    | 1416.700    | 1443.882    | 1408.593    |
| 16              | 1196.556          | 1209.917    | 1237.599    | 1261.837    | 1231.142    |
| 17              | 1061.464          | 1062.545    | 1089.988    | 1109.640    | 1086.000    |
| 18              | 935.749           | 944.175     | 965.371     | 981.267     | 963.261     |
| 19              | 836.277           | 840.958     | 863.865     | 877.966     | 864.757     |
| 20              | 753.160           | 759.415     | 775.114     | 786.952     | 773.802     |
| 21              | 685.751           | 689.518     | 702.875     | 712.639     | 700.109     |
| 22              | 628.522           | 632.119     | 642.554     | 649.076     | 638.457     |
| 23              | 580.680           | 582.562     | 590.597     | 596.039     | 586.478     |
| 24              | 539.006           | 540.010     | 546.381     | 549.398     | 541.153     |
| 25              | 501.161           | 502.404     | 506.443     | 507.350     | 500.414     |
| 26              | 467.035           | 466.945     | 468.558     | 467.945     | 461.898     |
| 27              | 431.811           | 430.035     | 430.665     | 429.523     | 424.001     |
| 28              | 394.198           | 392.124     | 391.489     | 390.822     | 386.808     |
| 29              | 354.605           | 352.665     | 351.954     | 353.111     | 350.033     |
| 30              | 312.499           | 311.810     | 311.248     | 313.637     | 311.893     |
| 31              | 269.973           | 270.139     | 270.292     | 274.153     | 273.112     |
| 32              | 228.900           | 229.683     | 230.050     | 235.115     | 235.572     |
| 33              | 188.800           | 190.308     | 191.635     | 196.758     | 199.050     |
| 34              | 151.628           | 154.214     | 155.936     | 161.400     | 164.975     |
| 35              | 119.885           | 122.086     | 122.811     | 127.974     | 133.047     |
| 36              | 90.118            | 93.269      | 95.527      | 98.939      | 104.541     |
| 37              | 66.873            | 70.905      | 71.844      | 74.861      | 81.010      |
| 38              | 49.209            | 52.011      | 52.784      | 56.344      | 61.025      |
| 39              | 37.341            | 37.784      | 39.107      | 41.442      | 44.227      |
| 40              | 26.990            | 28.165      | 29.988      | 31.682      | 33.208      |
| 41              | 20.366            | 21.341      | 22.581      | 23.988      | 25.547      |
| 42              | 15.852            | 16.668      | 17.911      | 18.999      | 20.235      |
| 43              | 12.831            | 13.408      | 14.565      | 15.522      | 16.421      |
| 44              | 10.736            | 11.153      | 12.153      | 13.006      | 13.393      |
| 45              | 9.213             | 9.528       | 10.399      | 11.055      | 11.229      |
| 46              | 8.107             | 8.339       | 9.097       | 9.572       | 9.681       |
| 47              | 7.255             | 7.447       | 8.093       | 8.423       | 8.481       |
| 48              | 6.581             | 6.766       | 7.295       | 7.531       | 7.563       |
| 49              | 6.051             | 6.204       | 6.679       | 6.827       | 6.831       |
| 50              | 5.620             | 5.754       | 6.164       | 6.262       | 6.244       |
| 51              | 5.239             | 5.366       | 5.732       | 5.801       | 5.765       |
| 52              | 4.891             | 5.000       | 5.323       | 5.344       | 5.268       |

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|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 53  | 4.572 | 4.670 | 4.949 | 4.927 | 4.826 |
| 54  | 4.293 | 4.387 | 4.619 | 4.558 | 4.442 |
| 55  | 4.050 | 4.130 | 4.326 | 4.238 | 4.097 |
| 56  | 3.832 | 3.890 | 4.064 | 3.963 | 3.793 |
| 57  | 3.626 | 3.673 | 3.811 | 3.713 | 3.535 |
| 58  | 3.430 | 3.470 | 3.586 | 3.488 | 3.321 |
| 59  | 3.249 | 3.278 | 3.365 | 3.278 | 3.122 |
| 60  | 3.067 | 3.093 | 3.162 | 3.075 | 2.922 |
| 61  | 2.886 | 2.908 | 2.969 | 2.886 | 2.741 |
| 62  | 2.705 | 2.723 | 2.777 | 2.694 | 2.553 |
| 63  | 2.524 | 2.545 | 2.589 | 2.505 | 2.371 |
| 64  | 2.346 | 2.364 | 2.407 | 2.320 | 2.190 |
| 65  | 2.172 | 2.194 | 2.226 | 2.143 | 2.020 |
| 66  | 2.001 | 2.020 | 2.052 | 1.972 | 1.846 |
| 67  | 1.838 | 1.860 | 1.889 | 1.816 | 1.690 |
| 68  | 1.690 | 1.704 | 1.737 | 1.657 | 1.537 |
| 69  | 1.545 | 1.563 | 1.592 | 1.516 | 1.392 |
| 70  | 1.407 | 1.425 | 1.458 | 1.374 | 1.251 |
| 71  | 1.276 | 1.291 | 1.323 | 1.240 | 1.117 |
| 72  | 1.149 | 1.164 | 1.189 | 1.109 | 0.990 |
| 73  | 1.022 | 1.037 | 1.059 | 0.975 | 0.870 |
| 74  | 0.892 | 0.906 | 0.921 | 0.848 | 0.740 |
| 75  | 0.758 | 0.769 | 0.772 | 0.714 | 0.605 |
| 76  | 0.627 | 0.635 | 0.616 | 0.580 | 0.482 |
| 77  | 0.511 | 0.515 | 0.482 | 0.450 | 0.370 |
| 78  | 0.395 | 0.384 | 0.334 | 0.308 | 0.272 |
| 79  | 0.247 | 0.254 | 0.243 | 0.239 | 0.228 |
| 80  | 0.225 | 0.225 | 0.225 | 0.221 | 0.214 |
| 81  | 0.210 | 0.210 | 0.214 | 0.210 | 0.199 |
| 82  | 0.199 | 0.199 | 0.203 | 0.199 | 0.189 |
| 83  | 0.185 | 0.185 | 0.189 | 0.189 | 0.178 |
| 84  | 0.170 | 0.170 | 0.170 | 0.167 | 0.163 |
| 85  | 0.149 | 0.152 | 0.156 | 0.152 | 0.145 |
| 86  | 0.131 | 0.131 | 0.131 | 0.131 | 0.127 |
| 87  | 0.109 | 0.109 | 0.109 | 0.109 | 0.105 |
| 88  | 0.083 | 0.083 | 0.087 | 0.083 | 0.080 |
| 89  | 0.062 | 0.058 | 0.062 | 0.058 | 0.058 |
| 90  | 0.051 | 0.044 | 0.047 | 0.044 | 0.044 |
| 91  | 0.047 | 0.044 | 0.044 | 0.044 | 0.040 |
| 92  | 0.044 | 0.044 | 0.044 | 0.044 | 0.040 |
| 93  | 0.047 | 0.044 | 0.044 | 0.044 | 0.040 |
| 94  | 0.047 | 0.044 | 0.044 | 0.044 | 0.040 |
| 95  | 0.047 | 0.044 | 0.044 | 0.044 | 0.040 |
| 96  | 0.047 | 0.047 | 0.044 | 0.044 | 0.040 |
| 97  | 0.047 | 0.047 | 0.044 | 0.044 | 0.044 |
| 98  | 0.047 | 0.047 | 0.044 | 0.044 | 0.040 |
| 99  | 0.047 | 0.047 | 0.044 | 0.047 | 0.040 |
| 100 | 0.047 | 0.047 | 0.044 | 0.047 | 0.044 |
| 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 |

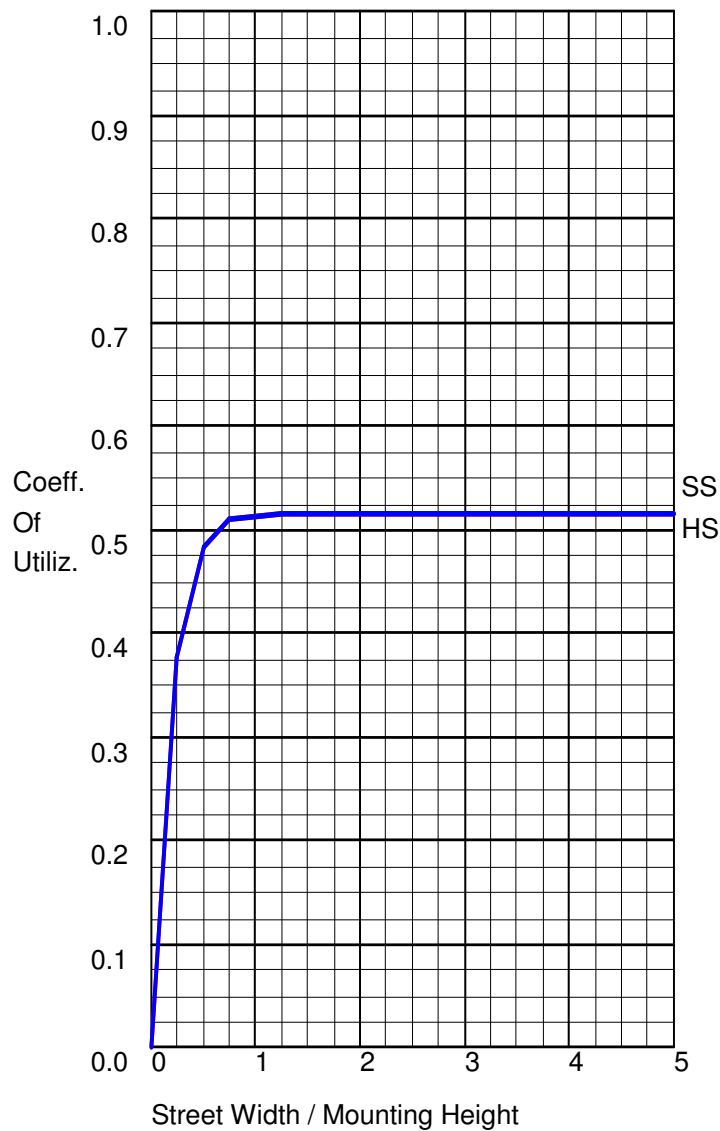
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|     |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|
| 109 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 110 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 111 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 112 |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

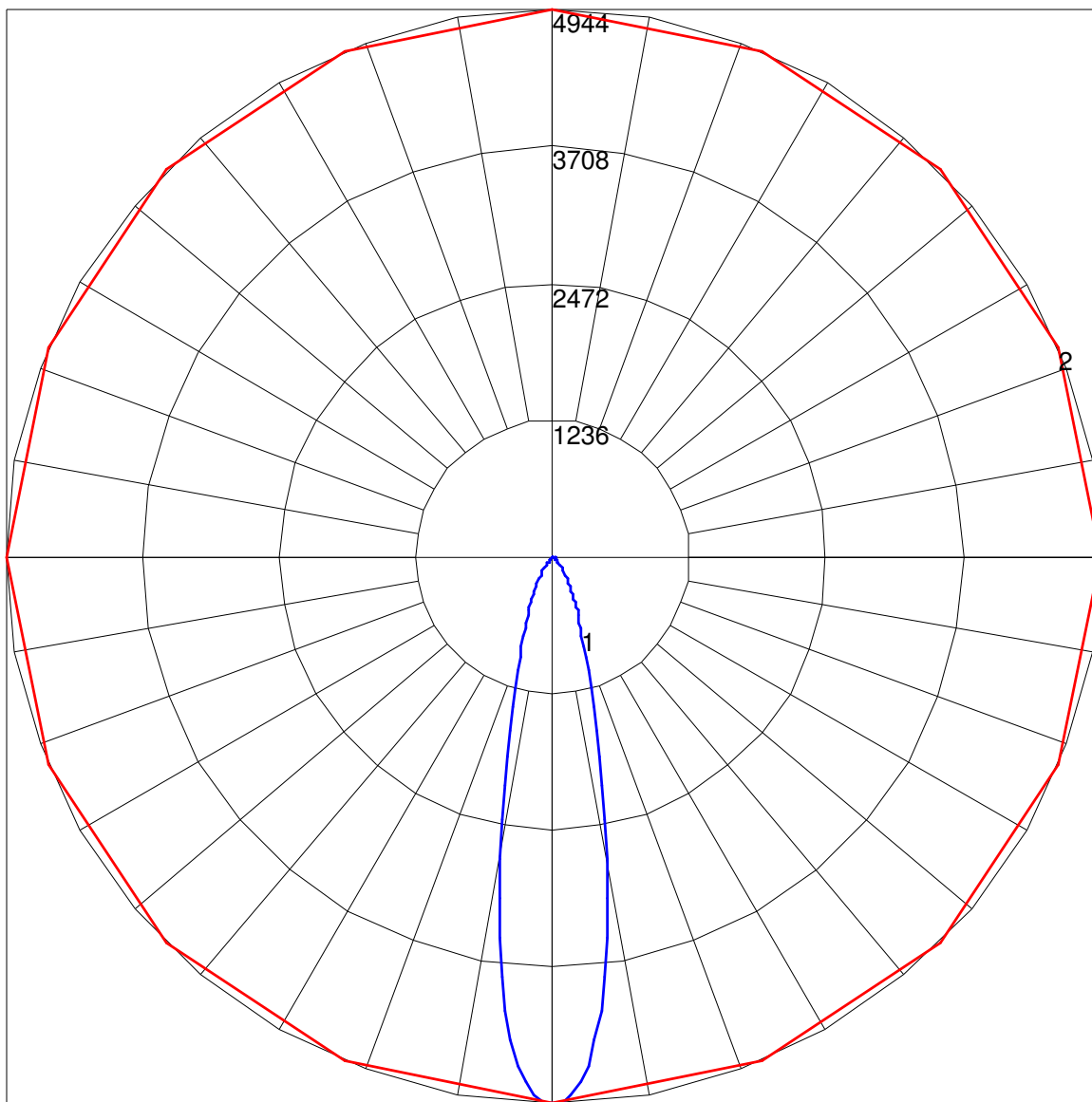
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FLUX DISTRIBUTION

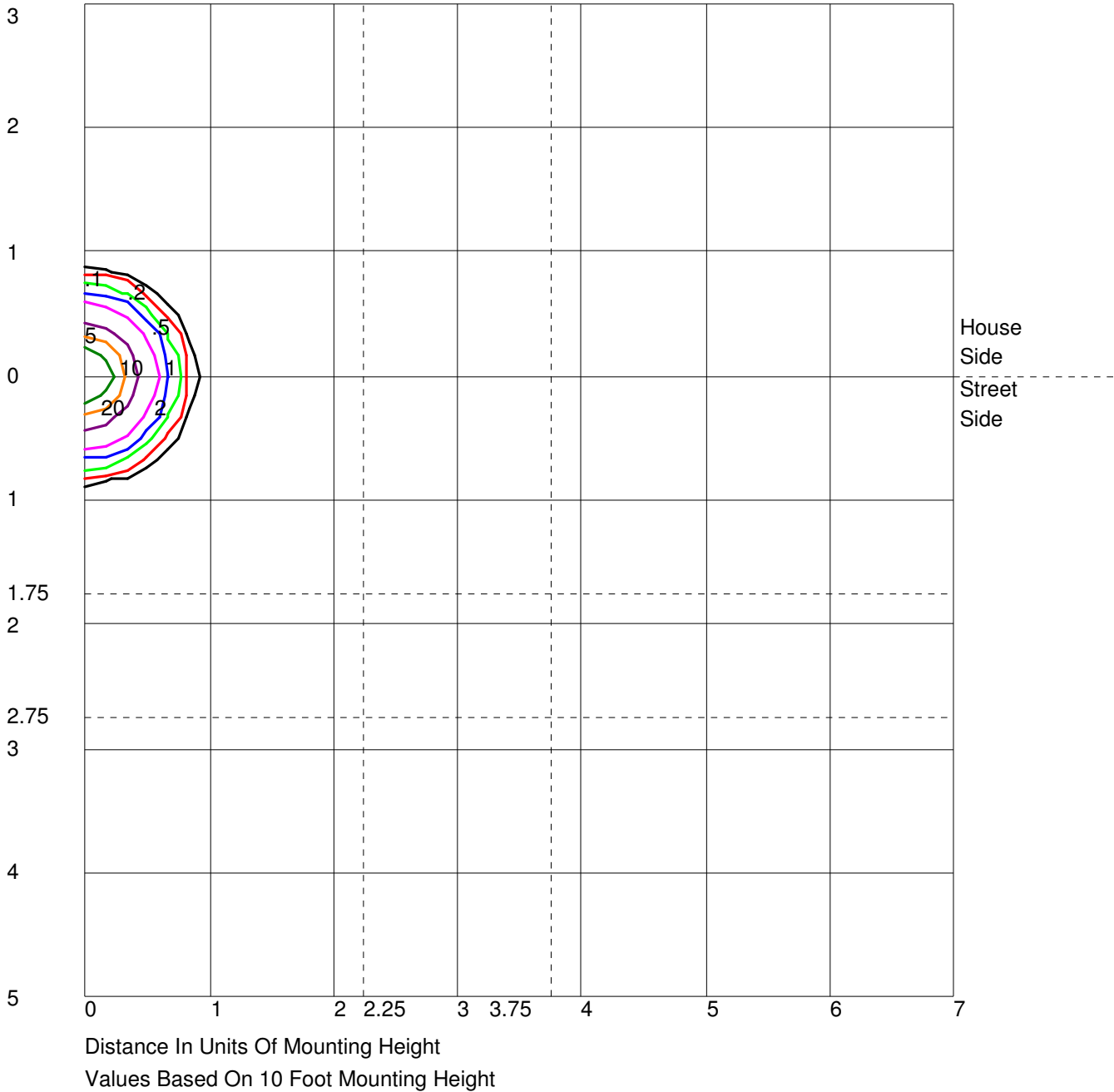
|                      | Lumens | Percent<br>Of Luminaire |
|----------------------|--------|-------------------------|
| Downward Street Side | 551.4  | 50.0                    |
| Downward House Side  | 551.4  | 50.0                    |
| Downward Total       | 1102.8 | 100.0                   |
| Upward Street Side   | 0.0    | 0.0                     |
| Upward House Side    | 0.0    | 0.0                     |
| Upward Total         | 0.0    | 0.0                     |
| Total Flux           | 1102.8 | 100.0                   |

POLAR GRAPH



Maximum Candela = 4943.94 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

