



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN from 12316380.09  
 [TESTLAB] UL Verification Services Inc.  
 [ISSUE DATE] 28-JAN-2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
 [LUMCAT] 6CR-TL-L24-9DW-xxx-DIM-UNV-LM-WH-xx  
 [LUMINAIRE] 6" DIA. SURFACE CYLINDER  
 [LAMP] One white LED  
 [BALLAST] Philips XI025C070V054DSM5  
 [OTHER] 25 C, 120.065 V, 0.165764 A, 19.7946 W, 0.994578 PF, 59.9706 H  
 [OTHER] This test was performed using the calibrated photodetector met  
 [MORE] hod of absolute photometry.

### CHARACTERISTICS

|                                 |                    |
|---------------------------------|--------------------|
| Lumens Per Lamp                 | N.A. (absolute)    |
| Total Lamp Lumens               | N.A. (absolute)    |
| Luminaire Lumens                | 1995               |
| Total Luminaire Efficiency      | N.A.               |
| Luminaire Efficacy Rating (LER) | 53                 |
| Total Luminaire Watts           | 37.7               |
| Ballast Factor                  | 1.00               |
| CIE Type                        | Direct             |
| Spacing Criterion (0-180)       | 0.56               |
| Spacing Criterion (90-270)      | 0.56               |
| Spacing Criterion (Diagonal)    | 0.54               |
| Basic Luminous Shape            | Circular           |
| Luminous Length (0-180)         | 0.35 ft (Diameter) |
| Luminous Width (90-270)         | 0.35 ft (Diameter) |
| Luminous Height                 | 0.00 ft            |

### LUMINANCE DATA (cd/sq.m)

| Angle In<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45                  | 15138            | 15138             | 15138             |
| 55                  | 11799            | 11799             | 11799             |
| 65                  | 9861             | 9861              | 9861              |
| 75                  | 7934             | 7934              | 7934              |
| 85                  | 4740             | 4740              | 4740              |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION

|      | <u>0</u> |
|------|----------|
| 0.0  | 5161.904 |
| 0.5  | 5159.680 |
| 1.0  | 5151.896 |
| 1.5  | 5139.664 |
| 2.0  | 5124.096 |
| 2.5  | 5102.968 |
| 3.0  | 5078.504 |
| 3.5  | 5049.592 |
| 4.0  | 5016.232 |
| 4.5  | 4980.648 |
| 5.0  | 4940.616 |
| 5.5  | 4896.136 |
| 6.0  | 4847.208 |
| 6.5  | 4792.720 |
| 7.0  | 4733.784 |
| 7.5  | 4669.288 |
| 8.0  | 4599.232 |
| 8.5  | 4523.616 |
| 9.0  | 4443.552 |
| 9.5  | 4356.816 |
| 10.0 | 4263.408 |
| 10.5 | 4163.328 |
| 11.0 | 4058.800 |
| 11.5 | 3948.712 |
| 12.0 | 3831.952 |
| 12.5 | 3710.744 |
| 13.0 | 3583.976 |
| 13.5 | 3452.760 |
| 14.0 | 3315.984 |
| 14.5 | 3174.760 |
| 15.0 | 3032.424 |
| 15.5 | 2887.864 |
| 16.0 | 2743.304 |
| 16.5 | 2597.632 |
| 17.0 | 2453.072 |
| 17.5 | 2312.960 |
| 18.0 | 2173.960 |
| 18.5 | 2040.520 |
| 19.0 | 1912.640 |
| 19.5 | 1789.208 |
| 20.0 | 1672.448 |
| 20.5 | 1560.136 |
| 21.0 | 1455.608 |
| 21.5 | 1356.640 |
| 22.0 | 1263.232 |
| 22.5 | 1176.496 |
| 23.0 | 1094.653 |
| 23.5 | 1018.370 |
| 24.0 | 947.535  |
| 24.5 | 881.371  |
| 25.0 | 819.989  |
| 25.5 | 762.943  |
| 26.0 | 709.456  |
| 26.5 | 660.083  |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION - (Cont.)

|      |         |
|------|---------|
| 27.0 | 614.046 |
| 27.5 | 571.902 |
| 28.0 | 532.648 |
| 28.5 | 496.397 |
| 29.0 | 463.148 |
| 29.5 | 432.123 |
| 30.0 | 403.322 |
| 30.5 | 376.746 |
| 31.0 | 352.170 |
| 31.5 | 329.597 |
| 32.0 | 308.691 |
| 32.5 | 289.454 |
| 33.0 | 271.773 |
| 33.5 | 255.426 |
| 34.0 | 240.526 |
| 34.5 | 226.737 |
| 35.0 | 214.282 |
| 35.5 | 202.718 |
| 36.0 | 192.154 |
| 36.5 | 182.479 |
| 37.0 | 173.583 |
| 37.5 | 165.466 |
| 38.0 | 158.126 |
| 38.5 | 151.343 |
| 39.0 | 145.116 |
| 39.5 | 139.445 |
| 40.0 | 134.218 |
| 40.5 | 129.326 |
| 41.0 | 124.766 |
| 41.5 | 120.652 |
| 42.0 | 116.760 |
| 42.5 | 113.090 |
| 43.0 | 109.754 |
| 43.5 | 106.530 |
| 44.0 | 103.527 |
| 44.5 | 100.747 |
| 45.0 | 97.967  |
| 45.5 | 95.410  |
| 46.0 | 93.074  |
| 46.5 | 90.739  |
| 47.0 | 88.515  |
| 47.5 | 86.514  |
| 48.0 | 84.401  |
| 48.5 | 82.510  |
| 49.0 | 80.620  |
| 49.5 | 78.730  |
| 50.0 | 77.062  |
| 50.5 | 75.394  |
| 51.0 | 73.837  |
| 51.5 | 72.169  |
| 52.0 | 70.612  |
| 52.5 | 69.166  |
| 53.0 | 67.610  |
| 53.5 | 66.164  |
| 54.0 | 64.718  |
| 54.5 | 63.273  |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION - (Cont.)

|      |        |
|------|--------|
| 55.0 | 61.938 |
| 55.5 | 60.604 |
| 56.0 | 59.270 |
| 56.5 | 57.935 |
| 57.0 | 56.490 |
| 57.5 | 55.266 |
| 58.0 | 54.043 |
| 58.5 | 52.931 |
| 59.0 | 51.708 |
| 59.5 | 50.485 |
| 60.0 | 49.262 |
| 60.5 | 48.038 |
| 61.0 | 47.038 |
| 61.5 | 45.814 |
| 62.0 | 44.702 |
| 62.5 | 43.590 |
| 63.0 | 42.478 |
| 63.5 | 41.478 |
| 64.0 | 40.366 |
| 64.5 | 39.254 |
| 65.0 | 38.142 |
| 65.5 | 37.141 |
| 66.0 | 36.140 |
| 66.5 | 35.139 |
| 67.0 | 34.027 |
| 67.5 | 33.026 |
| 68.0 | 32.026 |
| 68.5 | 31.025 |
| 69.0 | 30.024 |
| 69.5 | 29.023 |
| 70.0 | 28.022 |
| 70.5 | 27.133 |
| 71.0 | 26.243 |
| 71.5 | 25.131 |
| 72.0 | 24.242 |
| 72.5 | 23.352 |
| 73.0 | 22.462 |
| 73.5 | 21.462 |
| 74.0 | 20.572 |
| 74.5 | 19.682 |
| 75.0 | 18.793 |
| 75.5 | 17.903 |
| 76.0 | 17.014 |
| 76.5 | 16.124 |
| 77.0 | 15.234 |
| 77.5 | 14.567 |
| 78.0 | 13.678 |
| 78.5 | 12.899 |
| 79.0 | 12.121 |
| 79.5 | 11.342 |
| 80.0 | 10.564 |
| 80.5 | 9.786  |
| 81.0 | 9.007  |
| 81.5 | 8.451  |
| 82.0 | 7.562  |
| 82.5 | 7.006  |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION - (Cont.)

|       |       |
|-------|-------|
| 83.0  | 6.227 |
| 83.5  | 5.671 |
| 84.0  | 5.004 |
| 84.5  | 4.337 |
| 85.0  | 3.781 |
| 85.5  | 3.114 |
| 86.0  | 2.669 |
| 86.5  | 2.113 |
| 87.0  | 1.779 |
| 87.5  | 1.446 |
| 88.0  | 1.112 |
| 88.5  | 0.890 |
| 89.0  | 0.667 |
| 89.5  | 0.445 |
| 90.0  | 0.334 |
| 90.5  | 0.000 |
| 91.0  | 0.000 |
| 91.5  | 0.000 |
| 92.0  | 0.000 |
| 92.5  | 0.000 |
| 93.0  | 0.000 |
| 93.5  | 0.000 |
| 94.0  | 0.000 |
| 94.5  | 0.000 |
| 95.0  | 0.000 |
| 95.5  | 0.000 |
| 96.0  | 0.000 |
| 96.5  | 0.000 |
| 97.0  | 0.000 |
| 97.5  | 0.000 |
| 98.0  | 0.000 |
| 98.5  | 0.000 |
| 99.0  | 0.000 |
| 99.5  | 0.000 |
| 100.0 | 0.000 |
| 100.5 | 0.000 |
| 101.0 | 0.000 |
| 101.5 | 0.000 |
| 102.0 | 0.000 |
| 102.5 | 0.000 |
| 103.0 | 0.000 |
| 103.5 | 0.000 |
| 104.0 | 0.000 |
| 104.5 | 0.000 |
| 105.0 | 0.000 |
| 105.5 | 0.000 |
| 106.0 | 0.000 |
| 106.5 | 0.000 |
| 107.0 | 0.000 |
| 107.5 | 0.000 |
| 108.0 | 0.000 |
| 108.5 | 0.000 |
| 109.0 | 0.000 |
| 109.5 | 0.000 |
| 110.0 | 0.000 |
| 110.5 | 0.000 |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION - (Cont.)

|       |       |
|-------|-------|
| 111.0 | 0.000 |
| 111.5 | 0.000 |
| 112.0 | 0.000 |
| 112.5 | 0.000 |
| 113.0 | 0.000 |
| 113.5 | 0.000 |
| 114.0 | 0.000 |
| 114.5 | 0.000 |
| 115.0 | 0.000 |
| 115.5 | 0.000 |
| 116.0 | 0.000 |
| 116.5 | 0.000 |
| 117.0 | 0.000 |
| 117.5 | 0.000 |
| 118.0 | 0.000 |
| 118.5 | 0.000 |
| 119.0 | 0.000 |
| 119.5 | 0.000 |
| 120.0 | 0.000 |
| 120.5 | 0.000 |
| 121.0 | 0.000 |
| 121.5 | 0.000 |
| 122.0 | 0.000 |
| 122.5 | 0.000 |
| 123.0 | 0.000 |
| 123.5 | 0.000 |
| 124.0 | 0.000 |
| 124.5 | 0.000 |
| 125.0 | 0.000 |
| 125.5 | 0.000 |
| 126.0 | 0.000 |
| 126.5 | 0.000 |
| 127.0 | 0.000 |
| 127.5 | 0.000 |
| 128.0 | 0.000 |
| 128.5 | 0.000 |
| 129.0 | 0.000 |
| 129.5 | 0.000 |
| 130.0 | 0.000 |
| 130.5 | 0.000 |
| 131.0 | 0.000 |
| 131.5 | 0.000 |
| 132.0 | 0.000 |
| 132.5 | 0.000 |
| 133.0 | 0.000 |
| 133.5 | 0.000 |
| 134.0 | 0.000 |
| 134.5 | 0.000 |
| 135.0 | 0.000 |
| 135.5 | 0.000 |
| 136.0 | 0.000 |
| 136.5 | 0.000 |
| 137.0 | 0.000 |
| 137.5 | 0.000 |
| 138.0 | 0.000 |
| 138.5 | 0.000 |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

CANDELA TABULATION - (Cont.)

|       |       |
|-------|-------|
| 139.0 | 0.000 |
| 139.5 | 0.000 |
| 140.0 | 0.000 |
| 140.5 | 0.000 |
| 141.0 | 0.000 |
| 141.5 | 0.000 |
| 142.0 | 0.000 |
| 142.5 | 0.000 |
| 143.0 | 0.000 |
| 143.5 | 0.000 |
| 144.0 | 0.000 |
| 144.5 | 0.000 |
| 145.0 | 0.000 |
| 145.5 | 0.000 |
| 146.0 | 0.000 |
| 146.5 | 0.000 |
| 147.0 | 0.000 |
| 147.5 | 0.000 |
| 148.0 | 0.000 |
| 148.5 | 0.000 |
| 149.0 | 0.000 |
| 149.5 | 0.000 |
| 150.0 | 0.000 |
| 150.5 | 0.000 |
| 151.0 | 0.000 |
| 151.5 | 0.000 |
| 152.0 | 0.000 |
| 152.5 | 0.000 |
| 153.0 | 0.000 |
| 153.5 | 0.000 |
| 154.0 | 0.000 |
| 154.5 | 0.000 |
| 155.0 | 0.000 |
| 155.5 | 0.000 |
| 156.0 | 0.000 |
| 156.5 | 0.000 |
| 157.0 | 0.000 |
| 157.5 | 0.000 |
| 158.0 | 0.000 |
| 158.5 | 0.000 |
| 159.0 | 0.000 |
| 159.5 | 0.000 |
| 160.0 | 0.000 |
| 160.5 | 0.000 |
| 161.0 | 0.000 |
| 161.5 | 0.000 |
| 162.0 | 0.000 |
| 162.5 | 0.000 |
| 163.0 | 0.000 |
| 163.5 | 0.000 |
| 164.0 | 0.000 |
| 164.5 | 0.000 |
| 165.0 | 0.000 |
| 165.5 | 0.000 |
| 166.0 | 0.000 |
| 166.5 | 0.000 |

CANDELA TABULATION - (Cont.)

|       |       |
|-------|-------|
| 167.0 | 0.000 |
| 167.5 | 0.000 |
| 168.0 | 0.000 |
| 168.5 | 0.000 |
| 169.0 | 0.000 |
| 169.5 | 0.000 |
| 170.0 | 0.000 |
| 170.5 | 0.000 |
| 171.0 | 0.000 |
| 171.5 | 0.000 |
| 172.0 | 0.000 |
| 172.5 | 0.000 |
| 173.0 | 0.000 |
| 173.5 | 0.000 |
| 174.0 | 0.000 |
| 174.5 | 0.000 |
| 175.0 | 0.000 |
| 175.5 | 0.000 |
| 176.0 | 0.000 |
| 176.5 | 0.000 |
| 177.0 | 0.000 |
| 177.5 | 0.000 |
| 178.0 | 0.000 |
| 178.5 | 0.000 |
| 179.0 | 0.000 |
| 179.5 | 0.000 |
| 180.0 | 0.000 |



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 1261.66 | N.A.  | 63.20  |
| 0-30    | 1657.02 | N.A.  | 83.10  |
| 0-40    | 1799.54 | N.A.  | 90.20  |
| 0-60    | 1932.39 | N.A.  | 96.90  |
| 0-80    | 1990.31 | N.A.  | 99.80  |
| 0-90    | 1995.02 | N.A.  | 100.00 |
| 10-90   | 1544.51 | N.A.  | 77.40  |
| 20-40   | 537.87  | N.A.  | 27.00  |
| 20-50   | 615.05  | N.A.  | 30.80  |
| 40-70   | 170.79  | N.A.  | 8.60   |
| 60-80   | 57.92   | N.A.  | 2.90   |
| 70-80   | 19.99   | N.A.  | 1.00   |
| 80-90   | 4.70    | N.A.  | 0.20   |
| 90-110  | 0.01    | N.A.  | 0.00   |
| 90-120  | 0.01    | N.A.  | 0.00   |
| 90-130  | 0.01    | N.A.  | 0.00   |
| 90-150  | 0.01    | N.A.  | 0.00   |
| 90-180  | 0.01    | N.A.  | 0.00   |
| 110-180 | 0.00    | N.A.  | 0.00   |
| 0-180   | 1995.02 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 450.50 |
| 10-20   | 811.16 |
| 20-30   | 395.35 |
| 30-40   | 142.52 |
| 40-50   | 77.18  |
| 50-60   | 55.68  |
| 60-70   | 37.93  |
| 70-80   | 19.99  |
| 80-90   | 4.70   |
| 90-100  | 0.01   |
| 100-110 | 0.00   |
| 110-120 | 0.00   |
| 120-130 | 0.00   |
| 130-140 | 0.00   |
| 140-150 | 0.00   |
| 150-160 | 0.00   |
| 160-170 | 0.00   |
| 170-180 | 0.00   |

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| RC | 80  |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0   |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1  | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |
| 2  | 109 | 104 | 101 | 97  | 107 | 103 | 99  | 96  | 99  | 97  | 94  | 96  | 94  | 92  | 94  | 92  | 90  | 89  |
| 3  | 104 | 98  | 94  | 90  | 102 | 97  | 93  | 89  | 94  | 91  | 88  | 92  | 89  | 87  | 90  | 87  | 85  | 84  |
| 4  | 100 | 93  | 88  | 84  | 98  | 92  | 87  | 84  | 90  | 86  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 80  |
| 5  | 96  | 88  | 83  | 80  | 94  | 88  | 83  | 79  | 86  | 82  | 79  | 84  | 81  | 78  | 83  | 80  | 77  | 76  |
| 6  | 92  | 84  | 79  | 75  | 91  | 84  | 79  | 75  | 82  | 78  | 75  | 81  | 77  | 74  | 80  | 76  | 74  | 72  |
| 7  | 89  | 81  | 76  | 72  | 87  | 80  | 75  | 72  | 79  | 74  | 71  | 78  | 74  | 71  | 77  | 73  | 71  | 69  |
| 8  | 86  | 77  | 72  | 69  | 84  | 77  | 72  | 69  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 70  | 68  | 67  |
| 9  | 83  | 74  | 69  | 66  | 82  | 74  | 69  | 66  | 73  | 69  | 66  | 72  | 68  | 65  | 71  | 68  | 65  | 64  |
| 10 | 80  | 72  | 67  | 63  | 79  | 71  | 66  | 63  | 70  | 66  | 63  | 70  | 66  | 63  | 69  | 65  | 63  | 62  |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6CR-TL-L24-9DW-XXX-DIM-UNV-LM-WH-XX.IES**

**UGR TABLE - CORRECTED**

Reflectances

|                |    |    |    |    |    |    |    |    |    |    |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Ceiling Cavity | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Walls          | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Floor Cavity   | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

Room Size      UGR Viewed Crosswise

|      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|
| X=2H | Y=2H | 14.3 | 15.4 | 14.7 | 15.7 | 16.0 | 14.3 | 15.4 | 14.7 | 15.7 | 16.0 |
|      | 3H   | 15.8 | 16.7 | 16.2 | 17.0 | 17.4 | 15.8 | 16.7 | 16.2 | 17.0 | 17.4 |
|      | 4H   | 16.3 | 17.1 | 16.7 | 17.5 | 17.9 | 16.3 | 17.1 | 16.7 | 17.5 | 17.9 |
|      | 6H   | 16.6 | 17.4 | 17.0 | 17.8 | 18.2 | 16.6 | 17.4 | 17.0 | 17.8 | 18.2 |
|      | 8H   | 16.7 | 17.4 | 17.1 | 17.8 | 18.2 | 16.7 | 17.4 | 17.1 | 17.8 | 18.2 |
|      | 12H  | 16.7 | 17.4 | 17.2 | 17.8 | 18.2 | 16.7 | 17.4 | 17.2 | 17.8 | 18.2 |

UGR Viewed Endwise

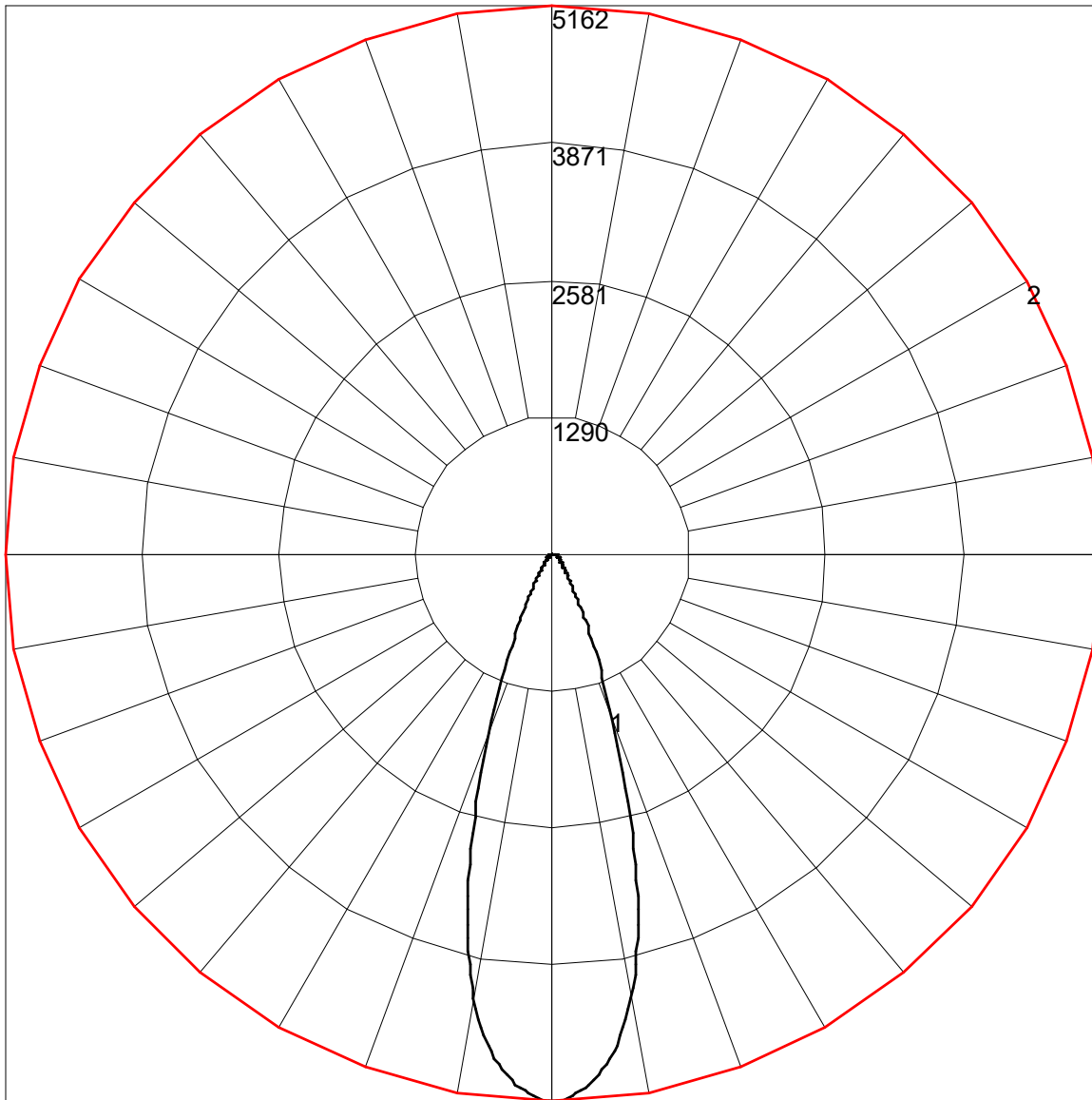
|    |     |      |      |      |      |      |      |      |      |      |      |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H | 2H  | 14.8 | 15.6 | 15.2 | 16.0 | 16.4 | 14.8 | 15.6 | 15.2 | 16.0 | 16.4 |
|    | 3H  | 16.4 | 17.1 | 16.8 | 17.5 | 17.9 | 16.4 | 17.1 | 16.8 | 17.5 | 17.9 |
|    | 4H  | 17.1 | 17.7 | 17.5 | 18.1 | 18.5 | 17.1 | 17.7 | 17.5 | 18.1 | 18.5 |
|    | 6H  | 17.5 | 18.0 | 18.0 | 18.5 | 18.9 | 17.5 | 18.0 | 18.0 | 18.5 | 18.9 |
|    | 8H  | 17.6 | 18.1 | 18.1 | 18.5 | 19.0 | 17.6 | 18.1 | 18.1 | 18.5 | 19.0 |
|    | 12H | 17.6 | 18.1 | 18.1 | 18.5 | 19.0 | 17.6 | 18.1 | 18.1 | 18.5 | 19.0 |

|    |     |      |      |      |      |      |      |      |      |      |      |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 8H | 4H  | 17.2 | 17.7 | 17.7 | 18.1 | 18.6 | 17.2 | 17.7 | 17.7 | 18.1 | 18.6 |
|    | 6H  | 17.7 | 18.1 | 18.3 | 18.6 | 19.1 | 17.7 | 18.1 | 18.3 | 18.6 | 19.1 |
|    | 8H  | 17.9 | 18.3 | 18.4 | 18.8 | 19.3 | 17.9 | 18.3 | 18.4 | 18.8 | 19.3 |
|    | 12H | 18.0 | 18.3 | 18.5 | 18.8 | 19.4 | 18.0 | 18.3 | 18.5 | 18.8 | 19.4 |

|     |    |      |      |      |      |      |      |      |      |      |      |
|-----|----|------|------|------|------|------|------|------|------|------|------|
| 12H | 4H | 17.2 | 17.6 | 17.7 | 18.1 | 18.6 | 17.2 | 17.6 | 17.7 | 18.1 | 18.6 |
|     | 6H | 17.8 | 18.1 | 18.3 | 18.6 | 19.1 | 17.8 | 18.1 | 18.3 | 18.6 | 19.1 |
|     | 8H | 17.9 | 18.3 | 18.5 | 18.7 | 19.3 | 17.9 | 18.3 | 18.5 | 18.7 | 19.3 |

Maximum UGR = 19.4

POLAR GRAPH



Maximum Candela = 5161.904 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)