

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12316380.04

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 07/21/2025

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] 4DR-TL-L60-950-DIM-UNV-OM-OF-WH

[LUMINAIRE] ROUND 4.5 INCH RECESSED LED DOWNLIGHT

[MORE] WITH OPEN SPECULAR REFLECTOR MEDIUM DIST.

[LAMP] One white LED

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

|                                 |                    |
|---------------------------------|--------------------|
| Lumens Per Lamp                 | N.A. (absolute)    |
| Total Lamp Lumens               | N.A. (absolute)    |
| Luminaire Lumens                | 4720               |
| Total Luminaire Efficiency      | N.A.               |
| Luminaire Efficacy Rating (LER) | 82                 |
| Total Luminaire Watts           | 57.6               |
| Ballast Factor                  | 1.00               |
| CIE Type                        | Direct             |
| Spacing Criterion (0-180)       | 0.56               |
| Spacing Criterion (90-270)      | 0.56               |
| Spacing Criterion (Diagonal)    | 0.76               |
| Basic Luminous Shape            | Circular           |
| Luminous Length (0-180)         | 0.38 ft (Diameter) |
| Luminous Width (90-270)         | 0.38 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                  | 11718            | 11718             | 11718             |
| 55                  | 3402             | 3402              | 3402              |
| 65                  | 1195             | 1195              | 1195              |
| 75                  | 532              | 532               | 532               |
| 85                  | 264              | 264               | 264               |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES

CANDELA TABULATION

|      | <u>0</u> |
|------|----------|
| 0.0  | 9549.827 |
| 0.5  | 9556.899 |
| 1.0  | 9585.188 |
| 1.5  | 9611.120 |
| 2.0  | 9670.055 |
| 2.5  | 9707.773 |
| 3.0  | 9714.845 |
| 3.5  | 9717.203 |
| 4.0  | 9662.982 |
| 4.5  | 9589.903 |
| 5.0  | 9450.816 |
| 5.5  | 9274.011 |
| 6.0  | 9075.990 |
| 6.5  | 8854.394 |
| 7.0  | 8613.939 |
| 7.5  | 8364.055 |
| 8.0  | 8107.098 |
| 8.5  | 7852.499 |
| 9.0  | 7602.615 |
| 9.5  | 7359.803 |
| 10.0 | 7128.777 |
| 10.5 | 6911.897 |
| 11.0 | 6709.160 |
| 11.5 | 6518.211 |
| 12.0 | 6336.691 |
| 12.5 | 6166.958 |
| 13.0 | 6006.655 |
| 13.5 | 5853.424 |
| 14.0 | 5707.265 |
| 14.5 | 5572.893 |
| 15.0 | 5450.309 |
| 15.5 | 5341.868 |
| 16.0 | 5252.287 |
| 16.5 | 5172.135 |
| 17.0 | 5096.699 |
| 17.5 | 5030.691 |
| 18.0 | 4971.756 |
| 18.5 | 4922.251 |
| 19.0 | 4886.890 |
| 19.5 | 4856.244 |
| 20.0 | 4830.312 |
| 20.5 | 4799.666 |
| 21.0 | 4769.020 |
| 21.5 | 4736.016 |
| 22.0 | 4700.655 |
| 22.5 | 4655.865 |
| 23.0 | 4601.645 |
| 23.5 | 4535.637 |
| 24.0 | 4453.128 |
| 24.5 | 4344.688 |
| 25.0 | 4219.746 |
| 25.5 | 4087.731 |
| 26.0 | 3958.075 |
| 26.5 | 3814.273 |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES**

**CANDELA TABULATION - (Cont.)**

|             |          |
|-------------|----------|
| <b>27.0</b> | 3663.400 |
| <b>27.5</b> | 3491.309 |
| <b>28.0</b> | 3295.645 |
| <b>28.5</b> | 3081.122 |
| <b>29.0</b> | 2857.169 |
| <b>29.5</b> | 2628.501 |
| <b>30.0</b> | 2385.689 |
| <b>30.5</b> | 2134.154 |
| <b>31.0</b> | 1870.833 |
| <b>31.5</b> | 1608.454 |
| <b>32.0</b> | 1356.212 |
| <b>32.5</b> | 1120.236 |
| <b>33.0</b> | 914.907  |
| <b>33.5</b> | 739.752  |
| <b>34.0</b> | 592.179  |
| <b>34.5</b> | 469.594  |
| <b>35.0</b> | 370.112  |
| <b>35.5</b> | 295.146  |
| <b>36.0</b> | 247.056  |
| <b>36.5</b> | 221.831  |
| <b>37.0</b> | 206.744  |
| <b>37.5</b> | 193.543  |
| <b>38.0</b> | 181.991  |
| <b>38.5</b> | 171.383  |
| <b>39.0</b> | 161.718  |
| <b>39.5</b> | 152.995  |
| <b>40.0</b> | 144.744  |
| <b>40.5</b> | 136.965  |
| <b>41.0</b> | 129.657  |
| <b>41.5</b> | 123.056  |
| <b>42.0</b> | 116.691  |
| <b>42.5</b> | 110.798  |
| <b>43.0</b> | 104.904  |
| <b>43.5</b> | 99.718   |
| <b>44.0</b> | 94.532   |
| <b>44.5</b> | 89.581   |
| <b>45.0</b> | 85.102   |
| <b>45.5</b> | 80.623   |
| <b>46.0</b> | 76.144   |
| <b>46.5</b> | 71.901   |
| <b>47.0</b> | 67.422   |
| <b>47.5</b> | 63.178   |
| <b>48.0</b> | 59.171   |
| <b>48.5</b> | 55.399   |
| <b>49.0</b> | 51.627   |
| <b>49.5</b> | 47.855   |
| <b>50.0</b> | 44.083   |
| <b>50.5</b> | 40.547   |
| <b>51.0</b> | 37.483   |
| <b>51.5</b> | 34.654   |
| <b>52.0</b> | 31.825   |
| <b>52.5</b> | 29.467   |
| <b>53.0</b> | 27.110   |
| <b>53.5</b> | 25.224   |
| <b>54.0</b> | 23.338   |
| <b>54.5</b> | 21.452   |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES

CANDELA TABULATION - (Cont.)

|      |        |
|------|--------|
| 55.0 | 20.038 |
| 55.5 | 18.623 |
| 56.0 | 17.209 |
| 56.5 | 16.030 |
| 57.0 | 14.852 |
| 57.5 | 13.909 |
| 58.0 | 12.966 |
| 58.5 | 12.023 |
| 59.0 | 11.316 |
| 59.5 | 10.608 |
| 60.0 | 9.901  |
| 60.5 | 9.194  |
| 61.0 | 8.722  |
| 61.5 | 8.015  |
| 62.0 | 7.544  |
| 62.5 | 7.072  |
| 63.0 | 6.601  |
| 63.5 | 6.365  |
| 64.0 | 5.893  |
| 64.5 | 5.422  |
| 65.0 | 5.186  |
| 65.5 | 4.951  |
| 66.0 | 4.479  |
| 66.5 | 4.243  |
| 67.0 | 4.008  |
| 67.5 | 3.772  |
| 68.0 | 3.536  |
| 68.5 | 3.300  |
| 69.0 | 3.065  |
| 69.5 | 2.829  |
| 70.0 | 2.593  |
| 70.5 | 2.593  |
| 71.0 | 2.357  |
| 71.5 | 2.122  |
| 72.0 | 1.886  |
| 72.5 | 1.886  |
| 73.0 | 1.650  |
| 73.5 | 1.650  |
| 74.0 | 1.414  |
| 74.5 | 1.414  |
| 75.0 | 1.414  |
| 75.5 | 1.179  |
| 76.0 | 1.179  |
| 76.5 | 0.943  |
| 77.0 | 0.943  |
| 77.5 | 0.943  |
| 78.0 | 0.707  |
| 78.5 | 0.707  |
| 79.0 | 0.707  |
| 79.5 | 0.707  |
| 80.0 | 0.471  |
| 80.5 | 0.471  |
| 81.0 | 0.471  |
| 81.5 | 0.471  |
| 82.0 | 0.471  |
| 82.5 | 0.471  |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES

CANDELA TABULATION - (Cont.)

|       |       |
|-------|-------|
| 83.0  | 0.471 |
| 83.5  | 0.236 |
| 84.0  | 0.236 |
| 84.5  | 0.236 |
| 85.0  | 0.236 |
| 85.5  | 0.236 |
| 86.0  | 0.236 |
| 86.5  | 0.236 |
| 87.0  | 0.236 |
| 87.5  | 0.236 |
| 88.0  | 0.000 |
| 88.5  | 0.000 |
| 89.0  | 0.000 |
| 89.5  | 0.000 |
| 90.0  | 0.000 |
| 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 : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.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 : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.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 |

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES

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 : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 2380.61 | N.A.  | 50.40  |
| 0-30    | 4204.71 | N.A.  | 89.10  |
| 0-40    | 4625.78 | N.A.  | 98.00  |
| 0-60    | 4712.48 | N.A.  | 99.80  |
| 0-80    | 4719.38 | N.A.  | 100.00 |
| 0-90    | 4719.66 | N.A.  | 100.00 |
| 10-90   | 3901.93 | N.A.  | 82.70  |
| 20-40   | 2245.18 | N.A.  | 47.60  |
| 20-50   | 2312.18 | N.A.  | 49.00  |
| 40-70   | 92.13   | N.A.  | 2.00   |
| 60-80   | 6.90    | N.A.  | 0.10   |
| 70-80   | 1.47    | N.A.  | 0.00   |
| 80-90   | 0.28    | N.A.  | 0.00   |
| 90-110  | 0.00    | N.A.  | 0.00   |
| 90-120  | 0.00    | N.A.  | 0.00   |
| 90-130  | 0.00    | N.A.  | 0.00   |
| 90-150  | 0.00    | N.A.  | 0.00   |
| 90-180  | 0.00    | N.A.  | 0.00   |
| 110-180 | 0.00    | N.A.  | 0.00   |
| 0-180   | 4719.66 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  |
|---------|---------|
| 0-10    | 817.74  |
| 10-20   | 1562.87 |
| 20-30   | 1824.1  |
| 30-40   | 421.07  |
| 40-50   | 67.00   |
| 50-60   | 19.69   |
| 60-70   | 5.43    |
| 70-80   | 1.47    |
| 80-90   | 0.28    |
| 90-100  | 0.00    |
| 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 : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.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  | 93 | 93 | 93 | 93 | 91 | 91 | 91 | 91 | 87 | 87 | 87 | 83 | 83 | 83 | 80 | 80 | 80 | 78 |
| 1  | 89 | 87 | 86 | 84 | 88 | 86 | 84 | 83 | 83 | 81 | 80 | 80 | 79 | 78 | 77 | 76 | 76 | 74 |
| 2  | 86 | 82 | 80 | 77 | 84 | 81 | 78 | 76 | 79 | 76 | 75 | 76 | 75 | 73 | 74 | 73 | 72 | 70 |
| 3  | 82 | 78 | 74 | 72 | 81 | 77 | 74 | 71 | 75 | 72 | 70 | 73 | 71 | 69 | 71 | 69 | 68 | 67 |
| 4  | 79 | 74 | 70 | 67 | 77 | 73 | 69 | 66 | 71 | 68 | 66 | 70 | 67 | 65 | 68 | 66 | 64 | 63 |
| 5  | 75 | 70 | 66 | 63 | 74 | 69 | 65 | 63 | 68 | 64 | 62 | 66 | 64 | 61 | 65 | 63 | 61 | 60 |
| 6  | 72 | 66 | 62 | 59 | 71 | 66 | 62 | 59 | 65 | 61 | 59 | 63 | 61 | 58 | 63 | 60 | 58 | 57 |
| 7  | 69 | 63 | 59 | 56 | 68 | 63 | 59 | 56 | 62 | 58 | 56 | 61 | 58 | 55 | 60 | 57 | 55 | 54 |
| 8  | 67 | 60 | 56 | 53 | 66 | 60 | 56 | 53 | 59 | 55 | 53 | 58 | 55 | 53 | 57 | 55 | 52 | 52 |
| 9  | 64 | 57 | 53 | 51 | 63 | 57 | 53 | 51 | 56 | 53 | 50 | 56 | 53 | 50 | 55 | 52 | 50 | 49 |
| 10 | 61 | 55 | 51 | 48 | 61 | 55 | 51 | 48 | 54 | 50 | 48 | 53 | 50 | 48 | 53 | 50 | 48 | 47 |

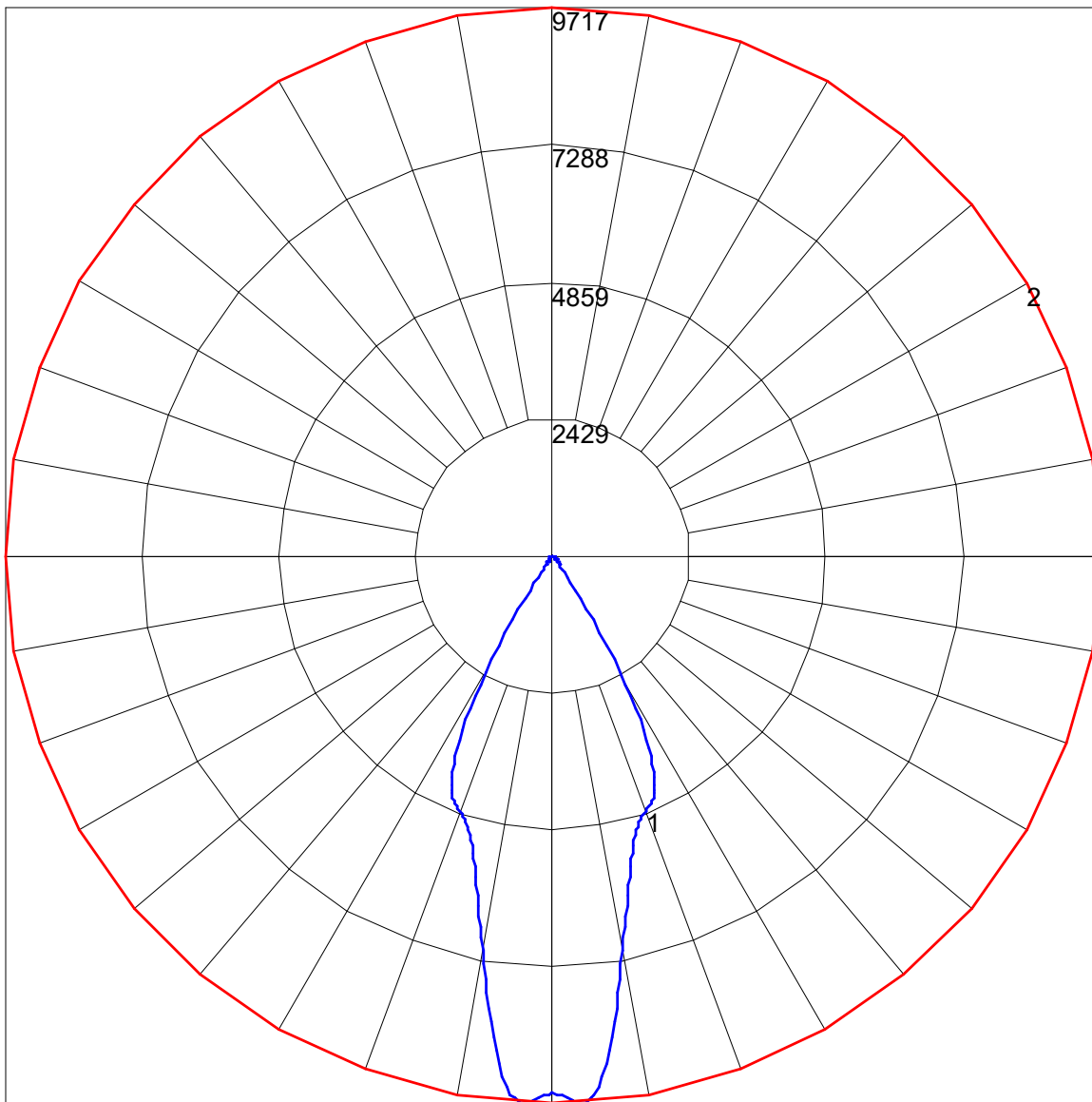
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 4DR-TL-L60-950-DIM-UNV-OM-OF-WH\_.IES**

**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 |     |     |     |     | UGR Viewed Endwise |     |     |     |     |
| X=2H           | Y=2H | 2.2                  | 3.1 | 2.5 | 3.4 | 3.7 | 2.2                | 3.1 | 2.5 | 3.4 | 3.7 |
|                | 3H   | 2.3                  | 3.1 | 2.7 | 3.5 | 3.8 | 2.3                | 3.1 | 2.7 | 3.5 | 3.8 |
|                | 4H   | 2.3                  | 3.0 | 2.7 | 3.4 | 3.8 | 2.3                | 3.0 | 2.7 | 3.4 | 3.8 |
|                | 6H   | 2.2                  | 2.9 | 2.7 | 3.3 | 3.7 | 2.2                | 2.9 | 2.7 | 3.3 | 3.7 |
|                | 8H   | 2.2                  | 2.8 | 2.6 | 3.2 | 3.6 | 2.2                | 2.8 | 2.6 | 3.2 | 3.6 |
|                | 12H  | 2.1                  | 2.7 | 2.6 | 3.1 | 3.6 | 2.1                | 2.7 | 2.6 | 3.1 | 3.6 |
| 4H             | 2H   | 2.1                  | 2.8 | 2.5 | 3.2 | 3.6 | 2.1                | 2.8 | 2.5 | 3.2 | 3.6 |
|                | 3H   | 2.3                  | 2.9 | 2.8 | 3.3 | 3.7 | 2.3                | 2.9 | 2.8 | 3.3 | 3.7 |
|                | 4H   | 2.3                  | 2.8 | 2.7 | 3.3 | 3.7 | 2.3                | 2.8 | 2.7 | 3.3 | 3.7 |
|                | 6H   | 2.2                  | 2.7 | 2.7 | 3.2 | 3.6 | 2.2                | 2.7 | 2.7 | 3.2 | 3.6 |
|                | 8H   | 2.2                  | 2.6 | 2.7 | 3.1 | 3.6 | 2.2                | 2.6 | 2.7 | 3.1 | 3.6 |
|                | 12H  | 2.1                  | 2.5 | 2.6 | 3.0 | 3.5 | 2.1                | 2.5 | 2.6 | 3.0 | 3.5 |
| 8H             | 4H   | 2.2                  | 2.6 | 2.6 | 3.0 | 3.5 | 2.2                | 2.6 | 2.6 | 3.0 | 3.5 |
|                | 6H   | 2.1                  | 2.5 | 2.6 | 3.0 | 3.4 | 2.1                | 2.5 | 2.6 | 3.0 | 3.4 |
|                | 8H   | 2.1                  | 2.4 | 2.6 | 2.9 | 3.4 | 2.1                | 2.4 | 2.6 | 2.9 | 3.4 |
|                | 12H  | 2.0                  | 2.3 | 2.6 | 2.8 | 3.4 | 2.0                | 2.3 | 2.6 | 2.8 | 3.4 |
| 12H            | 4H   | 2.1                  | 2.5 | 2.6 | 3.0 | 3.4 | 2.1                | 2.5 | 2.6 | 3.0 | 3.4 |
|                | 6H   | 2.1                  | 2.4 | 2.6 | 2.8 | 3.4 | 2.1                | 2.4 | 2.6 | 2.8 | 3.4 |
|                | 8H   | 2.0                  | 2.3 | 2.6 | 2.8 | 3.4 | 2.0                | 2.3 | 2.6 | 2.8 | 3.4 |

Maximum UGR = 3.8

POLAR GRAPH



Maximum Candela = 9717.203 Located At Horizontal Angle = 0, Vertical Angle = 3.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (3.5) (Through Max. Cd.)