

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: 15171

Luminaire Tested: **AI-WN-2T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 15171  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AI-WN-2T5  
Description: WITH WHITE INTERIOR

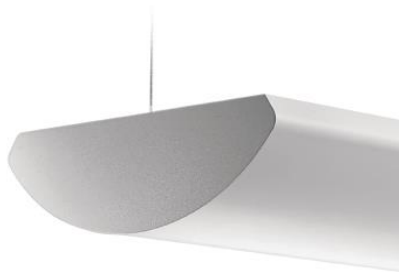
Light Source: TWO SYLVANIA 54 WATT T5 LAMPS  
FP54T5/835HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: -

**Summary**

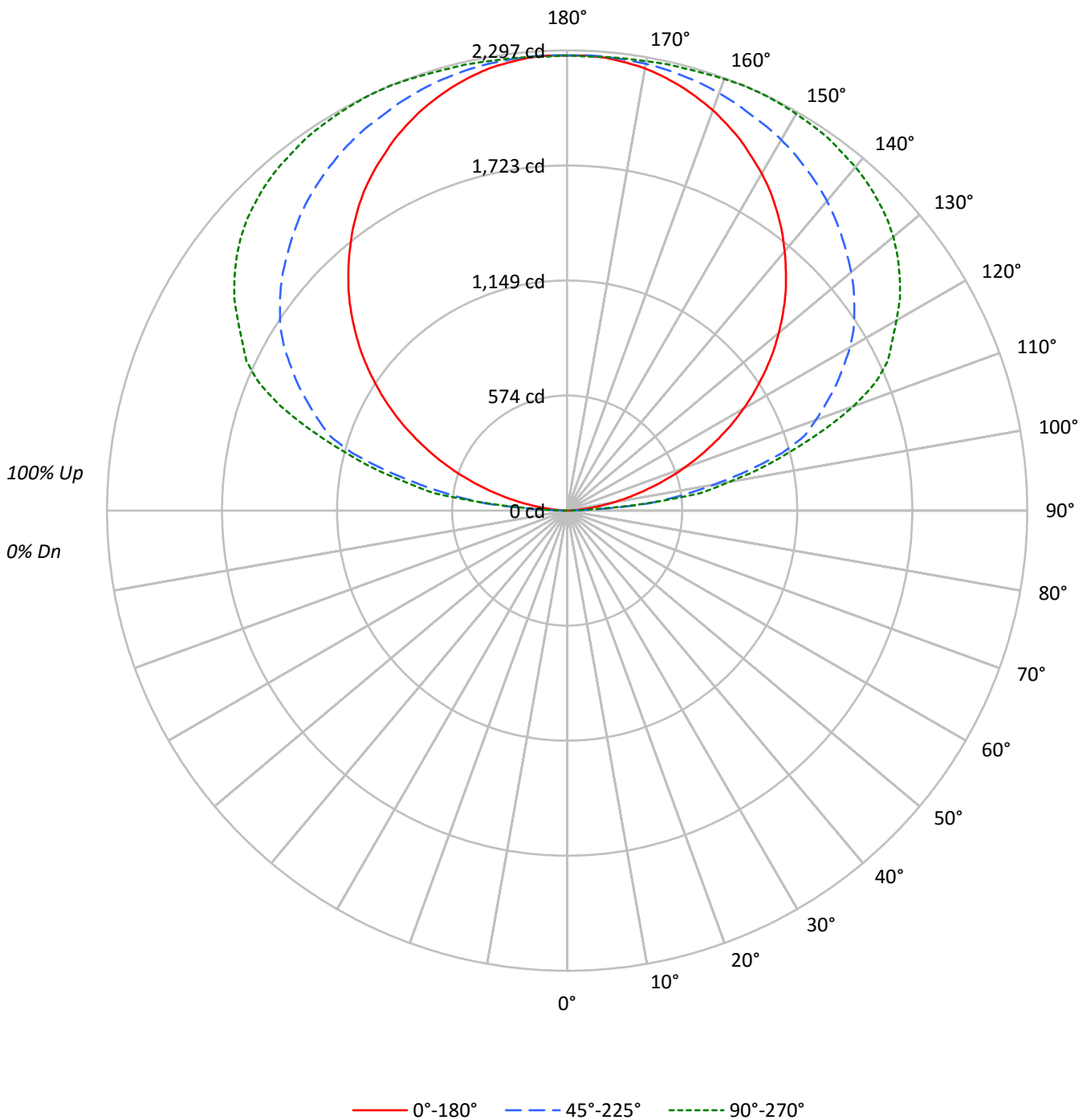
Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 8883.4 lumens  
Efficiency: 98.7%  
Efficacy: 72.8 lumens/watt  
N/A  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Indirect

Input Watts (W): 122  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

| RF  | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    |   |   |   |   |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|
| RC  | 80 |    |    |    | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 |    |    |    |   |   |   |   |
| RW  | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |   |   |   |   |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |
| 0   | 94 | 94 | 94 | 94 | 80 | 80 | 80 | 80 | 55 | 55 | 55 | 55 | 32 | 32 | 32 | 32 | 10 | 10 | 10 | 10 | 0 | 0 | 0 | 0 |
| 1   | 85 | 82 | 78 | 75 | 73 | 70 | 67 | 64 | 48 | 46 | 45 | 45 | 27 | 27 | 26 | 26 | 9  | 9  | 8  | 8  | 0 | 0 | 0 | 0 |
| 2   | 78 | 71 | 66 | 61 | 66 | 61 | 56 | 53 | 42 | 39 | 37 | 37 | 24 | 23 | 22 | 22 | 8  | 7  | 7  | 7  | 0 | 0 | 0 | 0 |
| 3   | 71 | 62 | 56 | 51 | 60 | 53 | 48 | 44 | 37 | 33 | 31 | 31 | 21 | 20 | 18 | 18 | 7  | 6  | 6  | 6  | 0 | 0 | 0 | 0 |
| 4   | 65 | 55 | 48 | 42 | 55 | 47 | 41 | 37 | 32 | 29 | 26 | 26 | 19 | 17 | 15 | 15 | 6  | 5  | 5  | 5  | 0 | 0 | 0 | 0 |
| 5   | 59 | 49 | 41 | 36 | 50 | 42 | 36 | 31 | 29 | 25 | 22 | 22 | 17 | 15 | 13 | 13 | 5  | 5  | 4  | 4  | 0 | 0 | 0 | 0 |
| 6   | 54 | 43 | 36 | 31 | 46 | 37 | 31 | 27 | 26 | 22 | 19 | 19 | 15 | 13 | 11 | 11 | 5  | 4  | 4  | 4  | 0 | 0 | 0 | 0 |
| 7   | 50 | 39 | 32 | 27 | 42 | 33 | 27 | 23 | 23 | 19 | 16 | 16 | 13 | 11 | 10 | 10 | 4  | 4  | 3  | 3  | 0 | 0 | 0 | 0 |
| 8   | 46 | 35 | 28 | 23 | 39 | 30 | 24 | 20 | 21 | 17 | 14 | 14 | 12 | 10 | 8  | 8  | 4  | 3  | 3  | 3  | 0 | 0 | 0 | 0 |
| 9   | 43 | 31 | 25 | 20 | 36 | 27 | 21 | 18 | 19 | 15 | 12 | 12 | 11 | 9  | 7  | 7  | 4  | 3  | 2  | 2  | 0 | 0 | 0 | 0 |
| 10  | 39 | 29 | 22 | 18 | 34 | 25 | 19 | 15 | 17 | 13 | 11 | 11 | 10 | 8  | 7  | 7  | 3  | 3  | 2  | 2  | 0 | 0 | 0 | 0 |

**AVERAGE LUMINANCE (cd/sqm):**

|      | 0°   | 45° | 90° |
|------|--|-----|-----|
| 95°  | Luminaire represents a point source (luminous area is zero). |     |     |
| 100° | No luminance values can be calculated.                       |     |     |
| 105° |  |     |     |
| 110° |  |     |     |
| 115° |  |     |     |
| 120° |  |     |     |
| 125° |  |     |     |
| 130° |  |     |     |
| 135° |  |     |     |
| 140° |  |     |     |
| 145° |  |     |     |
| 150° |  |     |     |
| 155° |  |     |     |
| 160° |  |     |     |
| 165° |  |     |     |
| 170° |  |     |     |
| 175° |  |     |     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 0.0    | 0.0       | 0.0    |
| 10°-20°   | 0.0    | 0.0       | 0.0    |
| 20°-30°   | 0.0    | 0.0       | 0.0    |
| 30°-40°   | 0.0    | 0.0       | 0.0    |
| 40°-50°   | 0.0    | 0.0       | 0.0    |
| 50°-60°   | 0.0    | 0.0       | 0.0    |
| 60°-70°   | 0.0    | 0.0       | 0.0    |
| 70°-80°   | 0.0    | 0.0       | 0.0    |
| 80°-90°   | 0.0    | 0.0       | 0.0    |
| 90°-100°  | 353.6  | 4.0       | 3.9    |
| 100°-110° | 1012.2 | 11.4      | 11.2   |
| 110°-120° | 1386.4 | 15.6      | 15.4   |
| 120°-130° | 1512.2 | 17.0      | 16.8   |
| 130°-140° | 1471.4 | 16.6      | 16.3   |
| 140°-150° | 1293.5 | 14.6      | 14.4   |
| 150°-160° | 1003.8 | 11.3      | 11.2   |
| 160°-170° | 633.9  | 7.1       | 7.0    |
| 170°-180° | 216.3  | 2.4       | 2.4    |
| 0°-30°    | 0.0    | 0.0       | 0.0    |
| 0°-40°    | 0.0    | 0.0       | 0.0    |
| 0°-60°    | 0.0    | 0.0       | 0.0    |
| 0°-90°    | 0.0    | 0.0       | 0.0    |
| 90°-120°  | 2752.2 | 31.0      | 30.6   |
| 90°-150°  | 7029.4 | 79.1      | 78.1   |
| 90°-180°  | 8883.0 | 100.0     | 98.7   |
| 0°-180°   | 8883.4 | 100.0     | 98.7   |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 90°  | 0    | 0     | 0    | 0     | 0    |      |
| 95°  | 75   | 296   | 407  | 380   | 372  | 96   |
| 105° | 420  | 818   | 1111 | 1145  | 1165 | 445  |
| 115° | 818  | 1161  | 1481 | 1687  | 1766 | 810  |
| 125° | 1203 | 1425  | 1750 | 1938  | 2027 | 1075 |
| 135° | 1542 | 1693  | 1938 | 2122  | 2192 | 1188 |
| 145° | 1826 | 1928  | 2082 | 2216  | 2270 | 1142 |
| 155° | 2043 | 2090  | 2177 | 2253  | 2297 | 941  |
| 165° | 2192 | 2212  | 2245 | 2265  | 2284 | 619  |
| 175° | 2268 | 2271  | 2273 | 2263  | 2273 | 216  |
| 180° | 2272 | 2272  | 2272 | 2272  | 2272 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 90°    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    |
| 92.5°  | 20.8   | 135.4  | 121.3  | 82.5   | 88.7   |
| 95°    | 75.0   | 296.4  | 406.9  | 380.5  | 371.6  |
| 97.5°  | 141.6  | 481.0  | 571.7  | 653.4  | 671.2  |
| 100°   | 230.8  | 659.5  | 741.6  | 844.2  | 819.5  |
| 102.5° | 322.5  | 707.3  | 926.2  | 930.0  | 1000.4 |
| 105°   | 419.6  | 818.1  | 1110.9 | 1144.9 | 1164.8 |
| 107.5° | 518.8  | 917.3  | 1243.1 | 1330.9 | 1346.4 |
| 110°   | 620.8  | 1005.2 | 1321.0 | 1485.7 | 1519.7 |
| 112.5° | 720.0  | 1088.3 | 1398.9 | 1612.4 | 1664.2 |
| 115°   | 818.1  | 1161.0 | 1480.9 | 1686.9 | 1766.2 |
| 117.5° | 919.7  | 1230.7 | 1553.4 | 1758.6 | 1828.0 |
| 120°   | 1015.5 | 1303.5 | 1631.3 | 1830.4 | 1898.0 |
| 122.5° | 1111.3 | 1392.7 | 1696.8 | 1914.5 | 1969.7 |
| 125°   | 1202.9 | 1425.3 | 1750.0 | 1938.5 | 2027.4 |
| 127.5° | 1293.5 | 1506.0 | 1803.9 | 2011.3 | 2079.2 |
| 130°   | 1378.6 | 1570.2 | 1851.6 | 2055.2 | 2125.9 |
| 132.5° | 1462.1 | 1631.6 | 1894.2 | 2090.5 | 2163.3 |
| 135°   | 1542.4 | 1693.1 | 1938.1 | 2122.1 | 2192.1 |
| 137.5° | 1616.5 | 1749.7 | 1980.0 | 2148.2 | 2218.6 |
| 140°   | 1689.3 | 1805.0 | 2017.8 | 2172.2 | 2238.8 |
| 142.5° | 1760.0 | 1862.6 | 2051.4 | 2192.5 | 2252.9 |
| 145°   | 1826.2 | 1928.2 | 2081.6 | 2216.5 | 2270.4 |
| 147.5° | 1888.0 | 1952.2 | 2111.8 | 2221.3 | 2279.0 |
| 150°   | 1943.3 | 2010.2 | 2137.2 | 2238.8 | 2286.5 |
| 152.5° | 1992.4 | 2050.0 | 2159.9 | 2247.8 | 2292.7 |
| 155°   | 2042.8 | 2090.5 | 2177.4 | 2252.9 | 2296.8 |
| 157.5° | 2086.4 | 2124.5 | 2199.7 | 2257.7 | 2296.8 |
| 160°   | 2126.9 | 2158.5 | 2217.5 | 2259.1 | 2292.7 |
| 162.5° | 2160.9 | 2186.3 | 2234.0 | 2262.5 | 2287.9 |
| 165°   | 2192.5 | 2212.4 | 2245.4 | 2265.3 | 2284.1 |
| 167.5° | 2218.9 | 2237.8 | 2256.7 | 2265.3 | 2282.8 |
| 170°   | 2241.6 | 2246.4 | 2264.2 | 2266.3 | 2277.6 |
| 172.5° | 2255.3 | 2262.9 | 2269.0 | 2265.3 | 2275.2 |
| 175°   | 2267.7 | 2271.4 | 2272.8 | 2262.9 | 2272.8 |
| 177.5° | 2272.8 | 2277.6 | 2275.2 | 2261.8 | 2267.7 |
| 180°   | 2271.6 | 2271.6 | 2271.6 | 2271.6 | 2271.6 |

(END OF REPORT)