

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: 15170

Luminaire Tested: **AI-WN-4T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 15170  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: AI-WN-4T5  
Description: WITH WHITE INTERIOR

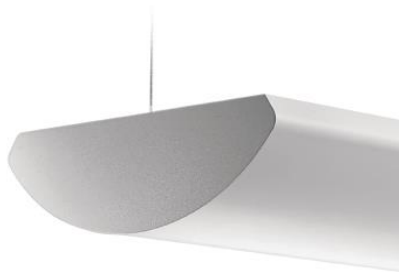
Light Source: FOUR SYLVANIA 54 WATT T5 LAMPS  
FP54/841/HO. LUMEN RATING = 4500 LMS.

Ballast/Driver: -

**Summary**

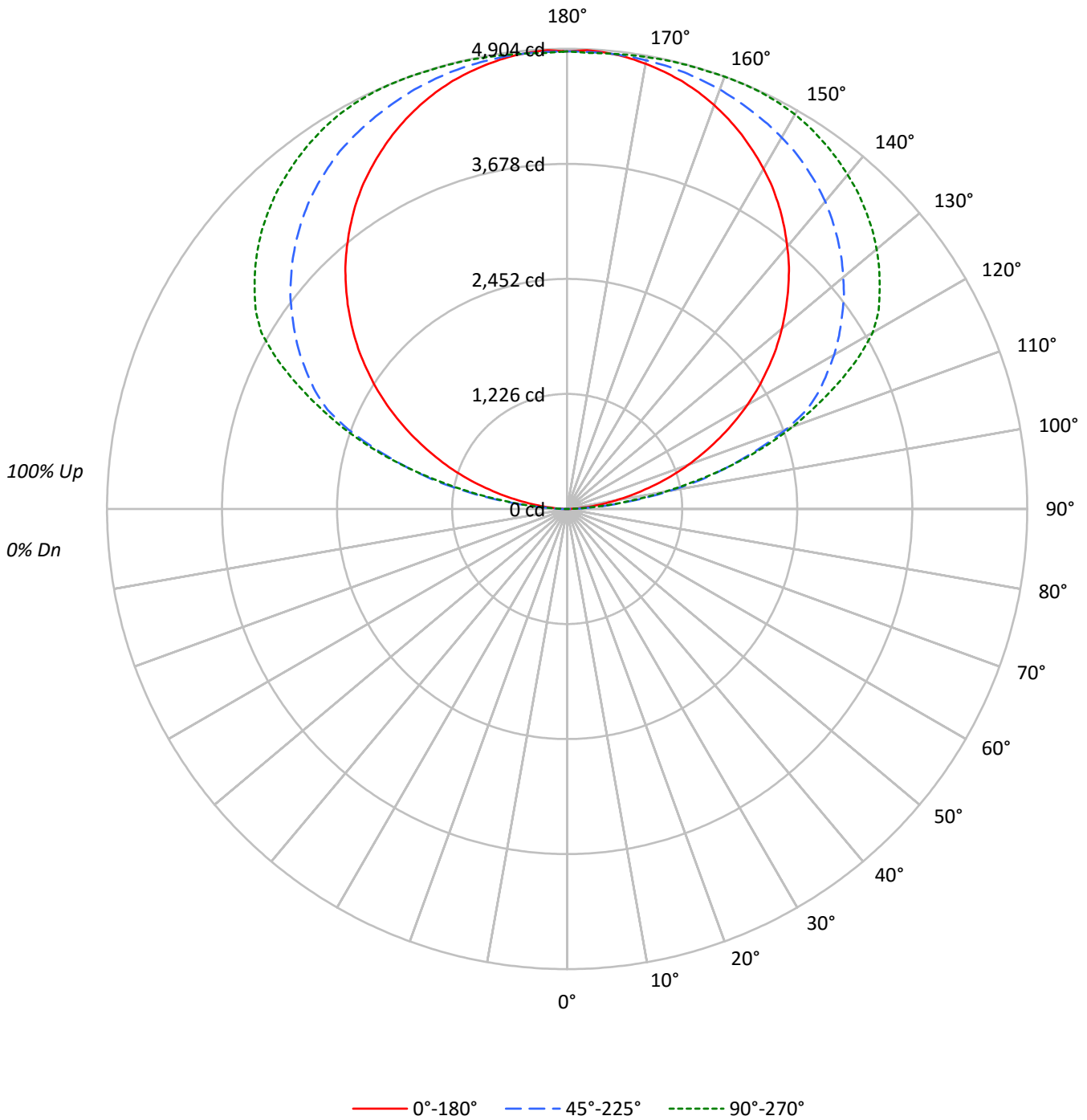
Lumens per Lamp: 4500 (4 lamps)  
Luminaire Lumens: 17874.5 lumens  
Efficiency: 99.3%  
Efficacy: 74.5 lumens/watt  
N/A  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Indirect

Input Watts (W): 240  
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   | 95 | 95 | 95 | 95 | 81 | 81 | 81 | 81 | 55 | 55 | 55 | 32 | 32 | 32 | 10 | 10 | 10 | 0  |    |    |  |  |
| 1   | 86 | 82 | 78 | 75 | 73 | 70 | 67 | 65 | 48 | 46 | 45 | 28 | 27 | 26 | 9  | 9  | 8  | 0  |    |    |  |  |
| 2   | 78 | 72 | 66 | 61 | 67 | 61 | 57 | 53 | 42 | 39 | 37 | 24 | 23 | 22 | 8  | 7  | 7  | 0  |    |    |  |  |
| 3   | 71 | 63 | 56 | 51 | 61 | 54 | 48 | 44 | 37 | 34 | 31 | 21 | 20 | 18 | 7  | 6  | 6  | 0  |    |    |  |  |
| 4   | 65 | 55 | 48 | 43 | 55 | 47 | 42 | 37 | 33 | 29 | 26 | 19 | 17 | 15 | 6  | 6  | 5  | 0  |    |    |  |  |
| 5   | 59 | 49 | 42 | 36 | 50 | 42 | 36 | 31 | 29 | 25 | 22 | 17 | 15 | 13 | 5  | 5  | 4  | 0  |    |    |  |  |
| 6   | 54 | 43 | 36 | 31 | 46 | 37 | 31 | 27 | 26 | 22 | 19 | 15 | 13 | 11 | 5  | 4  | 4  | 0  |    |    |  |  |
| 7   | 50 | 39 | 32 | 27 | 43 | 34 | 28 | 23 | 23 | 19 | 16 | 13 | 11 | 10 | 4  | 4  | 3  | 0  |    |    |  |  |
| 8   | 46 | 35 | 28 | 23 | 39 | 30 | 24 | 20 | 21 | 17 | 14 | 12 | 10 | 9  | 4  | 3  | 3  | 0  |    |    |  |  |
| 9   | 43 | 32 | 25 | 20 | 36 | 27 | 22 | 18 | 19 | 15 | 13 | 11 | 9  | 7  | 4  | 3  | 2  | 0  |    |    |  |  |
| 10  | 40 | 29 | 22 | 18 | 34 | 25 | 19 | 16 | 17 | 14 | 11 | 10 | 8  | 7  | 3  | 3  | 2  | 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°  | 468.6   | 2.6       | 2.6    |
| 100°-110° | 1745.7  | 9.8       | 9.7    |
| 110°-120° | 2717.3  | 15.2      | 15.1   |
| 120°-130° | 3116.1  | 17.4      | 17.3   |
| 130°-140° | 3092.4  | 17.3      | 17.2   |
| 140°-150° | 2755.6  | 15.4      | 15.3   |
| 150°-160° | 2152.8  | 12.0      | 12.0   |
| 160°-170° | 1361.5  | 7.6       | 7.6    |
| 170°-180° | 464.5   | 2.6       | 2.6    |
| 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°  | 4931.7  | 27.6      | 27.4   |
| 90°-150°  | 13895.7 | 77.7      | 77.2   |
| 90°-180°  | 17875.0 | 100.0     | 99.3   |
| 0°-180°   | 17874.5 | 100.0     | 99.3   |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 90°  | 0    | 0     | 0    | 0     | 0    |      |
| 95°  | 180  | 438   | 417  | 379   | 374  | 230  |
| 105° | 940  | 1647  | 1819 | 1832  | 1830 | 995  |
| 115° | 1796 | 2409  | 2960 | 3178  | 3198 | 1777 |
| 125° | 2612 | 3041  | 3576 | 3898  | 4066 | 2335 |
| 135° | 3332 | 3650  | 4076 | 4380  | 4498 | 2570 |
| 145° | 3938 | 4157  | 4442 | 4685  | 4769 | 2463 |
| 155° | 4401 | 4507  | 4672 | 4822  | 4897 | 2029 |
| 165° | 4721 | 4762  | 4818 | 4861  | 4900 | 1332 |
| 175° | 4880 | 4884  | 4875 | 4860  | 4873 | 464  |
| 180° | 4877 | 4877  | 4877 | 4877  | 4877 |      |



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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°  | 63.4   | 156.4  | 141.3  | 126.2  | 110.1  |
| 95°    | 180.1  | 438.1  | 416.8  | 379.0  | 374.2  |
| 97.5°  | 341.2  | 760.3  | 754.1  | 704.0  | 692.3  |
| 100°   | 525.0  | 1189.3 | 1114.1 | 1175.6 | 1057.4 |
| 102.5° | 726.3  | 1337.7 | 1485.1 | 1352.8 | 1439.7 |
| 105°   | 940.3  | 1647.2 | 1818.6 | 1832.3 | 1829.6 |
| 107.5° | 1158.1 | 1846.1 | 2155.6 | 2207.4 | 2207.4 |
| 110°   | 1374.1 | 2032.2 | 2485.3 | 2532.0 | 2553.3 |
| 112.5° | 1581.9 | 2222.5 | 2764.6 | 2860.4 | 2874.1 |
| 115°   | 1795.9 | 2408.7 | 2959.7 | 3178.5 | 3197.7 |
| 117.5° | 2008.5 | 2587.3 | 3120.8 | 3459.1 | 3503.4 |
| 120°   | 2218.4 | 2759.4 | 3285.6 | 3655.6 | 3762.4 |
| 122.5° | 2421.4 | 2970.0 | 3435.4 | 3835.2 | 3937.2 |
| 125°   | 2612.4 | 3041.4 | 3576.2 | 3898.4 | 4065.7 |
| 127.5° | 2806.1 | 3235.1 | 3718.1 | 4064.3 | 4192.8 |
| 130°   | 2986.1 | 3377.7 | 3841.4 | 4178.7 | 4306.2 |
| 132.5° | 3163.4 | 3517.2 | 3963.7 | 4283.1 | 4409.2 |
| 135°   | 3332.0 | 3650.4 | 4075.7 | 4380.0 | 4498.5 |
| 137.5° | 3499.3 | 3773.7 | 4180.1 | 4467.3 | 4582.7 |
| 140°   | 3650.4 | 3896.7 | 4278.3 | 4541.4 | 4650.7 |
| 142.5° | 3797.4 | 4011.8 | 4364.9 | 4610.1 | 4714.9 |
| 145°   | 3938.3 | 4157.4 | 4441.8 | 4684.7 | 4768.8 |
| 147.5° | 4069.5 | 4206.5 | 4515.0 | 4709.8 | 4818.0 |
| 150°   | 4186.3 | 4330.9 | 4572.7 | 4766.8 | 4855.7 |
| 152.5° | 4296.9 | 4421.6 | 4625.6 | 4796.3 | 4880.8 |
| 155°   | 4401.3 | 4507.4 | 4672.0 | 4821.7 | 4897.3 |
| 157.5° | 4495.8 | 4581.6 | 4715.9 | 4835.5 | 4902.5 |
| 160°   | 4581.3 | 4651.7 | 4757.5 | 4845.8 | 4903.8 |
| 162.5° | 4655.8 | 4711.1 | 4789.1 | 4853.3 | 4898.7 |
| 165°   | 4721.1 | 4761.6 | 4818.0 | 4860.9 | 4899.7 |
| 167.5° | 4773.0 | 4814.2 | 4839.3 | 4863.3 | 4897.3 |
| 170°   | 4818.0 | 4829.3 | 4855.7 | 4867.1 | 4889.7 |
| 172.5° | 4855.7 | 4866.0 | 4868.4 | 4861.9 | 4882.2 |
| 175°   | 4879.8 | 4883.6 | 4874.6 | 4859.5 | 4873.3 |
| 177.5° | 4893.5 | 4894.6 | 4874.6 | 4852.0 | 4865.7 |
| 180°   | 4876.7 | 4876.7 | 4876.7 | 4876.7 | 4876.7 |

(END OF REPORT)