

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: 17880

Luminaire Tested: **NB-SC-2T5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 17880  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: NB-SC-2T5  
Description: NAVIGATOR II SUSPENDED LUMINAIRE  
WHITE INTERIOR WITH SPECULAR REFLECTORS AND WHITE LENS OVER CONCAVE PERF  
PANEL  
Light Source: TWO PHILIPS 54 WATT T5 LAMPS  
  
F54T5.841HO. LUMEN RATING = 4500 LMS.  
  
Ballast/Driver: -

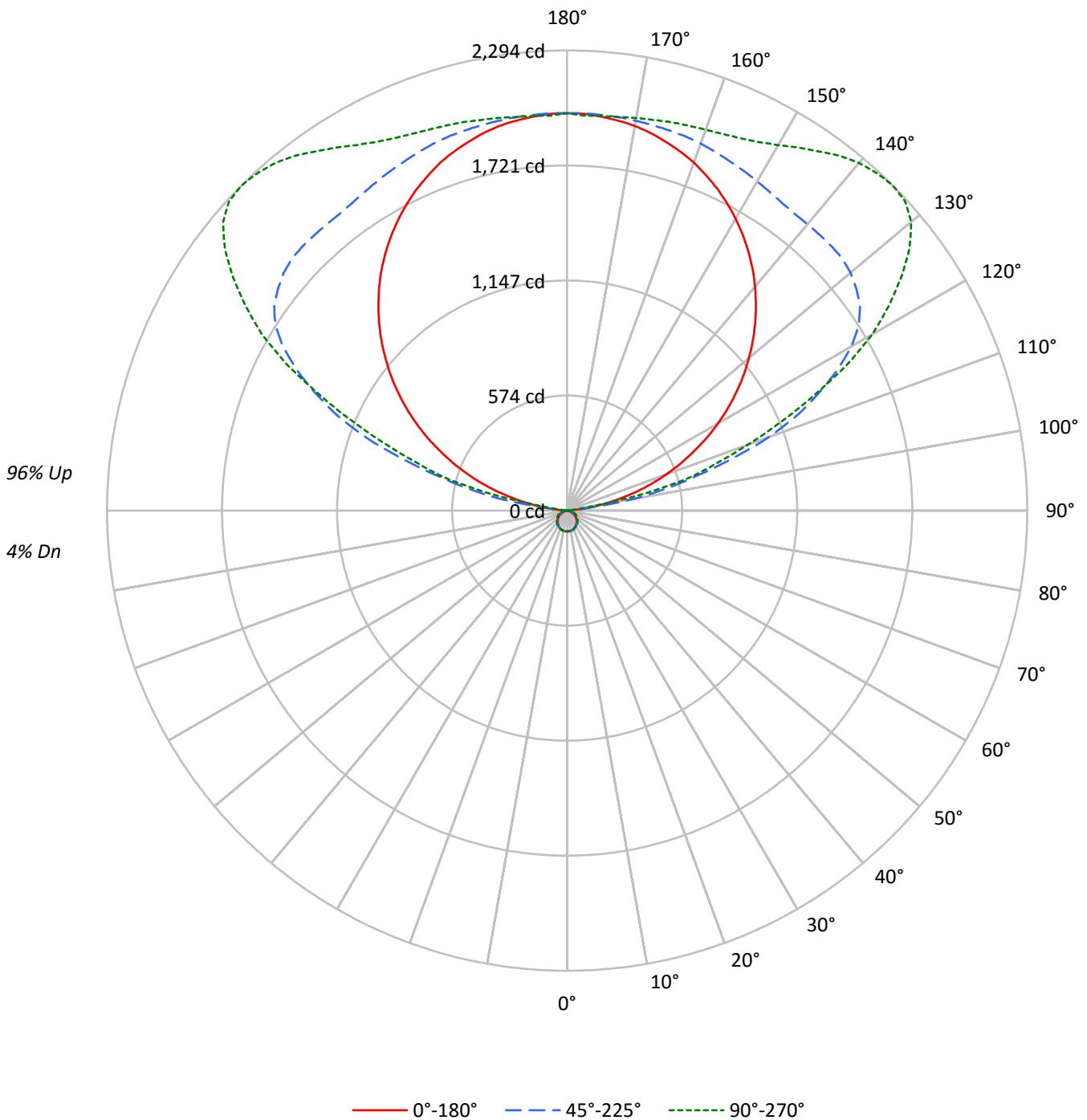
**Summary**

Lumens per Lamp: 4500 (2 lamps)  
Luminaire Lumens: 7941.1 lumens  
Efficiency: 88.2%  
Efficacy: 66.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 0.33' x L: 3.59' x H: 0')  
CIE Type: Indirect  
  
Input Watts (W): 120  
Input Voltage (V): NR  
Input Current (Ain): 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 | 0 |
| RW  | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 85 | 85 | 85 | 85 | 73 | 73 | 73 | 73 | 51 | 51 | 51 | 31 | 31 | 31 | 12 | 12 | 12 | 3 |
| 1   | 77 | 74 | 70 | 68 | 66 | 63 | 61 | 59 | 44 | 43 | 41 | 27 | 26 | 25 | 11 | 10 | 10 | 3 |
| 2   | 70 | 64 | 59 | 55 | 60 | 55 | 51 | 48 | 39 | 36 | 34 | 23 | 22 | 21 | 9  | 9  | 8  | 2 |
| 3   | 64 | 56 | 50 | 46 | 55 | 49 | 44 | 40 | 34 | 31 | 29 | 21 | 19 | 18 | 8  | 8  | 7  | 2 |
| 4   | 58 | 50 | 43 | 38 | 50 | 43 | 38 | 33 | 30 | 27 | 24 | 18 | 16 | 15 | 7  | 7  | 6  | 2 |
| 5   | 53 | 44 | 37 | 32 | 46 | 38 | 32 | 28 | 27 | 23 | 20 | 16 | 14 | 13 | 6  | 6  | 5  | 1 |
| 6   | 49 | 39 | 32 | 28 | 42 | 34 | 28 | 24 | 24 | 20 | 18 | 15 | 13 | 11 | 6  | 5  | 5  | 1 |
| 7   | 45 | 35 | 29 | 24 | 38 | 30 | 25 | 21 | 21 | 18 | 15 | 13 | 11 | 10 | 5  | 5  | 4  | 1 |
| 8   | 42 | 31 | 25 | 21 | 36 | 27 | 22 | 18 | 19 | 16 | 13 | 12 | 10 | 8  | 5  | 4  | 3  | 1 |
| 9   | 38 | 28 | 22 | 18 | 33 | 25 | 20 | 16 | 18 | 14 | 12 | 11 | 9  | 7  | 4  | 4  | 3  | 1 |
| 10  | 36 | 26 | 20 | 16 | 31 | 22 | 18 | 14 | 16 | 13 | 10 | 10 | 8  | 6  | 4  | 3  | 3  | 1 |

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

|     | 0°  | 45°  | 90°  |
|-----|-----|------|------|
| 0°  | 939 | 939  | 939  |
| 5°  | 945 | 932  | 932  |
| 10° | 943 | 956  | 943  |
| 15° | 938 | 947  | 934  |
| 20° | 940 | 936  | 950  |
| 25° | 931 | 917  | 931  |
| 30° | 908 | 922  | 938  |
| 35° | 901 | 916  | 959  |
| 40° | 871 | 920  | 933  |
| 45° | 843 | 911  | 961  |
| 50° | 816 | 892  | 947  |
| 55° | 790 | 892  | 976  |
| 60° | 740 | 881  | 952  |
| 65° | 630 | 905  | 989  |
| 70° | 571 | 948  | 1015 |
| 75° | 379 | 927  | 1015 |
| 80° | 303 | 900  | 1052 |
| 85° | 198 | 1011 | 1011 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 9.8    | 0.1       | 0.1    |
| 10°-20°   | 28.2   | 0.4       | 0.3    |
| 20°-30°   | 42.7   | 0.5       | 0.5    |
| 30°-40°   | 51.7   | 0.7       | 0.6    |
| 40°-50°   | 54.1   | 0.7       | 0.6    |
| 50°-60°   | 49.9   | 0.6       | 0.6    |
| 60°-70°   | 39.6   | 0.5       | 0.4    |
| 70°-80°   | 24.7   | 0.3       | 0.3    |
| 80°-90°   | 8.6    | 0.1       | 0.1    |
| 90°-100°  | 82.6   | 1.0       | 0.9    |
| 100°-110° | 642.4  | 8.1       | 7.1    |
| 110°-120° | 1204.5 | 15.2      | 13.4   |
| 120°-130° | 1472.2 | 18.5      | 16.4   |
| 130°-140° | 1417.0 | 17.8      | 15.7   |
| 140°-150° | 1182.4 | 14.9      | 13.1   |
| 150°-160° | 887.3  | 11.2      | 9.9    |
| 160°-170° | 554.9  | 7.0       | 6.2    |
| 170°-180° | 188.7  | 2.4       | 2.1    |
| 0°-30°    | 80.8   | 1.0       | 0.9    |
| 0°-40°    | 132.4  | 1.7       | 1.5    |
| 0°-60°    | 236.4  | 3.0       | 2.6    |
| 0°-90°    | 309.2  | 3.9       | 3.4    |
| 90°-120°  | 1929.5 | 24.3      | 21.4   |
| 90°-150°  | 6001.1 | 75.6      | 66.7   |
| 90°-180°  | 7632.0 | 96.1      | 84.8   |
| 0°-180°   | 7941.1 | 100.0     | 88.2   |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 103  | 103   | 103  | 103   | 103  |      |
| 5°   | 104  | 105   | 102  | 102   | 102  | 10   |
| 15°  | 100  | 101   | 101  | 102   | 99   | 28   |
| 25°  | 93   | 92    | 92   | 93    | 93   | 42   |
| 35°  | 81   | 82    | 83   | 85    | 86   | 50   |
| 45°  | 66   | 67    | 71   | 76    | 75   | 51   |
| 55°  | 50   | 51    | 56   | 58    | 62   | 45   |
| 65°  | 29   | 34    | 42   | 44    | 46   | 30   |
| 75°  | 11   | 19    | 26   | 28    | 29   | 13   |
| 85°  | 2    | 4     | 10   | 13    | 10   | 2    |
| 90°  | 0    | 0     | 0    | 0     | 0    | 2    |
| 95°  | 51   | 79    | 11   | 12    | 12   | 70   |
| 105° | 348  | 683   | 671  | 644   | 631  | 369  |
| 115° | 696  | 1077  | 1384 | 1416  | 1357 | 689  |
| 125° | 1030 | 1284  | 1783 | 1979  | 2034 | 920  |
| 135° | 1326 | 1490  | 1864 | 2186  | 2294 | 1022 |
| 145° | 1576 | 1687  | 1871 | 2096  | 2186 | 986  |
| 155° | 1770 | 1822  | 1921 | 2018  | 2047 | 816  |
| 165° | 1903 | 1925  | 1963 | 1999  | 2004 | 537  |
| 175° | 1971 | 1978  | 1980 | 1985  | 1974 | 187  |
| 180° | 1981 | 1981  | 1981 | 1981  | 1981 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°    | 67.5°  | 90°   |
|--------|-------|-------|--------|--------|-------|
| 0°     | 103.3 | 103.3 | 103.3  | 103.3  | 103.3 |
| 2.5°   | 105.0 | 102.2 | 105.0  | 105.0  | 103.6 |
| 5°     | 103.6 | 105.0 | 102.2  | 102.2  | 102.2 |
| 7.5°   | 103.6 | 102.2 | 103.6  | 102.2  | 102.2 |
| 10°    | 102.2 | 102.2 | 103.6  | 100.7  | 102.2 |
| 12.5°  | 102.2 | 102.2 | 100.7  | 102.2  | 102.2 |
| 15°    | 99.7  | 100.7 | 100.7  | 102.2  | 99.3  |
| 17.5°  | 98.3  | 97.2  | 98.3   | 97.2   | 98.3  |
| 20°    | 97.2  | 97.2  | 96.8   | 95.8   | 98.3  |
| 22.5°  | 94.3  | 95.8  | 95.8   | 95.8   | 94.3  |
| 25°    | 92.9  | 91.9  | 91.5   | 92.9   | 92.9  |
| 27.5°  | 89.0  | 89.0  | 90.4   | 91.5   | 90.4  |
| 30°    | 86.5  | 85.1  | 87.9   | 89.0   | 89.4  |
| 32.5°  | 82.6  | 82.6  | 86.5   | 85.1   | 87.9  |
| 35°    | 81.2  | 81.5  | 82.6   | 85.1   | 86.5  |
| 37.5°  | 77.6  | 77.6  | 81.2   | 80.1   | 81.5  |
| 40°    | 73.4  | 74.8  | 77.6   | 78.7   | 78.7  |
| 42.5°  | 68.4  | 72.0  | 72.0   | 74.8   | 74.8  |
| 45°    | 65.6  | 67.0  | 70.9   | 75.9   | 74.8  |
| 47.5°  | 63.1  | 64.5  | 67.0   | 68.0   | 70.9  |
| 50°    | 57.7  | 60.6  | 63.1   | 65.9   | 67.0  |
| 52.5°  | 55.2  | 55.2  | 61.6   | 63.1   | 64.5  |
| 55°    | 49.9  | 51.3  | 56.3   | 58.1   | 61.6  |
| 57.5°  | 46.4  | 48.8  | 52.8   | 56.7   | 55.2  |
| 60°    | 40.7  | 42.1  | 48.5   | 53.8   | 52.4  |
| 62.5°  | 35.7  | 37.1  | 47.4   | 48.8   | 50.3  |
| 65°    | 29.3  | 34.3  | 42.1   | 43.5   | 46.0  |
| 67.5°  | 25.0  | 31.8  | 37.1   | 42.4   | 43.5  |
| 70°    | 21.5  | 25.0  | 35.7   | 38.2   | 38.2  |
| 72.5°  | 16.1  | 21.5  | 30.4   | 33.2   | 31.8  |
| 75°    | 10.8  | 19.0  | 26.4   | 27.9   | 28.9  |
| 77.5°  | 9.4   | 17.6  | 21.5   | 21.1   | 22.5  |
| 80°    | 5.8   | 12.2  | 17.2   | 20.1   | 20.1  |
| 82.5°  | 1.9   | 9.4   | 15.1   | 13.3   | 14.7  |
| 85°    | 1.9   | 4.4   | 9.7    | 13.3   | 9.7   |
| 87.5°  | 0.5   | 1.9   | 4.4    | 5.5    | 5.5   |
| 90°    | 0.5   | 0.5   | 0.5    | 0.5    | 0.5   |
| 92.5°  | 9.7   | 5.8   | 8.3    | 3.0    | 9.7   |
| 95°    | 51.3  | 78.7  | 11.2   | 12.2   | 12.2  |
| 97.5°  | 111.4 | 228.7 | 113.9  | 42.4   | 14.7  |
| 100°   | 183.2 | 423.9 | 347.1  | 279.2  | 142.7 |
| 102.5° | 261.1 | 490.0 | 503.1  | 384.8  | 399.0 |
| 105°   | 348.5 | 683.0 | 670.9  | 643.6  | 630.8 |
| 107.5° | 438.1 | 806.7 | 865.0  | 814.5  | 775.1 |
| 110°   | 523.8 | 905.9 | 1069.8 | 1004.7 | 954.9 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 610.1  | 996.9  | 1241.5 | 1206.3 | 1152.9 |
| 115°   | 695.8  | 1077.2 | 1383.6 | 1416.0 | 1357.3 |
| 117.5° | 782.9  | 1143.7 | 1520.1 | 1590.5 | 1571.0 |
| 120°   | 867.9  | 1200.9 | 1636.0 | 1753.3 | 1755.8 |
| 122.5° | 950.0  | 1262.1 | 1724.5 | 1925.0 | 1901.6 |
| 125°   | 1030.3 | 1284.5 | 1783.2 | 1978.7 | 2034.5 |
| 127.5° | 1108.5 | 1344.2 | 1817.0 | 2094.6 | 2151.8 |
| 130°   | 1182.8 | 1392.5 | 1844.3 | 2143.6 | 2238.9 |
| 132.5° | 1255.7 | 1440.5 | 1860.0 | 2173.9 | 2284.4 |
| 135°   | 1326.1 | 1489.9 | 1863.9 | 2185.6 | 2293.7 |
| 137.5° | 1392.5 | 1538.6 | 1863.9 | 2178.8 | 2283.3 |
| 140°   | 1457.6 | 1585.6 | 1863.9 | 2163.6 | 2262.4 |
| 142.5° | 1518.7 | 1631.1 | 1863.9 | 2132.3 | 2229.7 |
| 145°   | 1576.0 | 1686.9 | 1870.6 | 2095.7 | 2185.6 |
| 147.5° | 1629.3 | 1706.4 | 1882.0 | 2081.4 | 2145.4 |
| 150°   | 1680.1 | 1753.0 | 1895.2 | 2050.2 | 2103.5 |
| 152.5° | 1727.0 | 1789.6 | 1908.3 | 2029.5 | 2070.8 |
| 155°   | 1770.4 | 1822.3 | 1921.1 | 2017.5 | 2047.3 |
| 157.5° | 1809.1 | 1852.5 | 1933.9 | 2011.1 | 2031.7 |
| 160°   | 1846.8 | 1878.1 | 1947.1 | 2005.7 | 2019.9 |
| 162.5° | 1876.7 | 1904.4 | 1956.3 | 2001.8 | 2012.5 |
| 165°   | 1902.6 | 1925.0 | 1962.7 | 1999.3 | 2004.3 |
| 167.5° | 1927.5 | 1947.1 | 1968.0 | 1994.0 | 1994.3 |
| 170°   | 1947.1 | 1954.9 | 1973.4 | 1994.0 | 1987.6 |
| 172.5° | 1960.2 | 1969.5 | 1978.4 | 1986.2 | 1978.4 |
| 175°   | 1970.9 | 1978.4 | 1979.8 | 1985.1 | 1974.4 |
| 177.5° | 1979.8 | 1983.7 | 1982.6 | 1982.6 | 1970.5 |
| 180°   | 1980.8 | 1980.8 | 1980.8 | 1980.8 | 1980.8 |

(END OF REPORT)