

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: CORELITE

Report Number: P385212

Luminaire Tested: **24ID-70-L840-CNC**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P385212  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-72)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 2/25/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: 24ID-70-L840-CNC  
Description: 2X4 IN DEPTH TROFFER WITH CONCAVE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

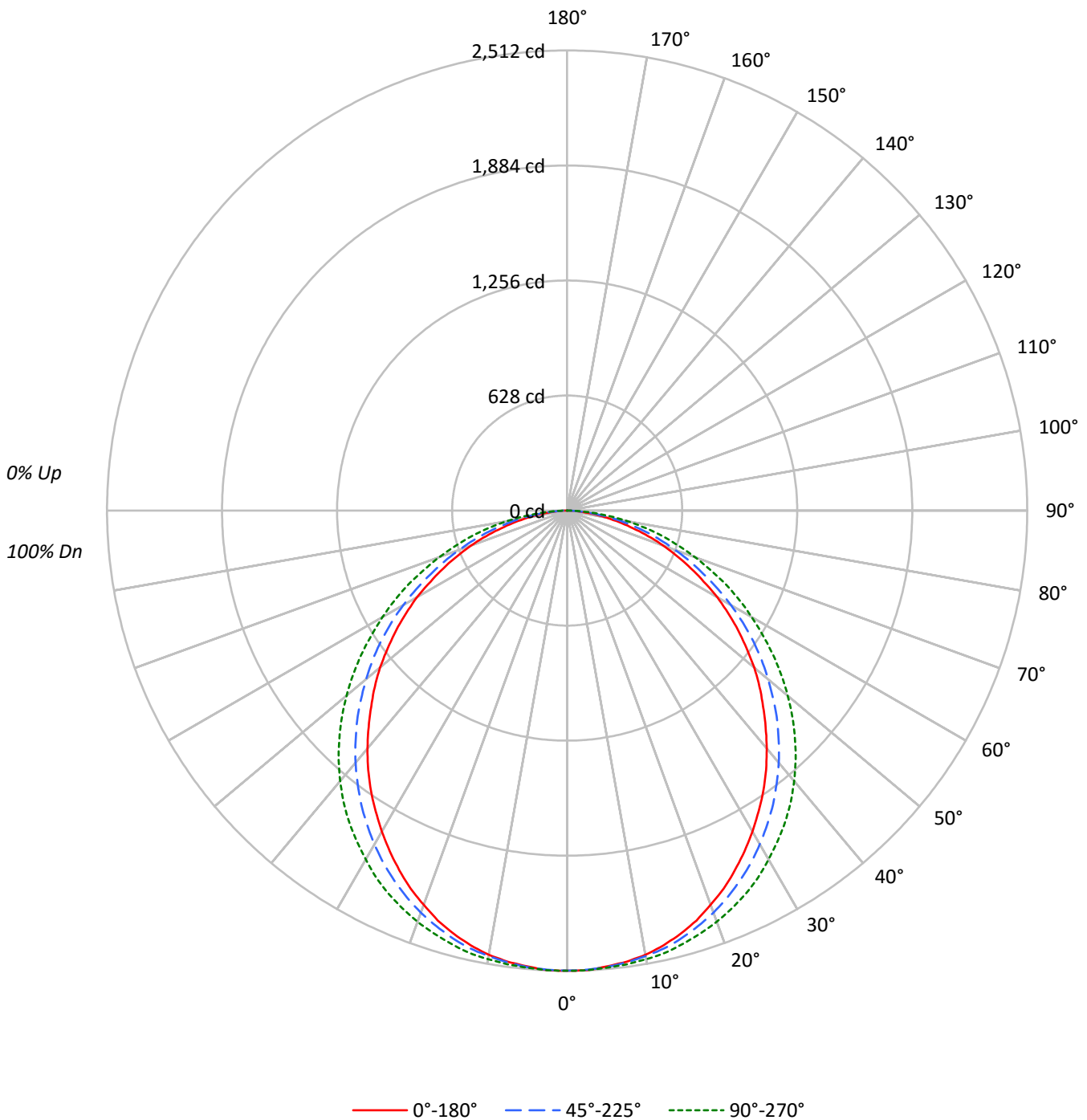
Lumens per Lamp: N/A  
Luminaire Lumens: 6973.9 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.3 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 65.7  
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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 98  | 94  | 91  |  | 94  | 91  | 89  |  | 90  | 88  | 86  | 84  |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 83  | 77  | 85  | 80  | 75  |  | 82  | 78  | 74  |  | 79  | 75  | 72  | 70  |
| 3   | 90  | 80  | 72  | 65  | 88  | 78  | 71  | 65  | 75  | 69  | 63  |  | 72  | 67  | 62  |  | 70  | 65  | 61  | 59  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  |  | 65  | 58  | 53  |  | 62  | 57  | 53  | 50  |
| 5   | 76  | 63  | 54  | 48  | 74  | 62  | 54  | 47  | 60  | 52  | 47  |  | 58  | 51  | 46  |  | 56  | 50  | 46  | 44  |
| 6   | 70  | 57  | 48  | 42  | 68  | 56  | 48  | 41  | 54  | 47  | 41  |  | 52  | 46  | 41  |  | 51  | 45  | 40  | 38  |
| 7   | 65  | 52  | 43  | 37  | 63  | 51  | 42  | 37  | 49  | 42  | 36  |  | 48  | 41  | 36  |  | 46  | 40  | 36  | 34  |
| 8   | 61  | 47  | 39  | 33  | 59  | 46  | 38  | 33  | 45  | 38  | 32  |  | 44  | 37  | 32  |  | 43  | 37  | 32  | 30  |
| 9   | 57  | 43  | 35  | 29  | 55  | 43  | 35  | 29  | 42  | 34  | 29  |  | 40  | 34  | 29  |  | 39  | 33  | 29  | 27  |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  |  | 37  | 31  | 26  |  | 37  | 31  | 26  | 25  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 3380 | 3380 | 3380 |
| 5°  | 3373 | 3378 | 3383 |
| 10° | 3364 | 3374 | 3398 |
| 15° | 3332 | 3366 | 3411 |
| 20° | 3279 | 3345 | 3420 |
| 25° | 3217 | 3311 | 3426 |
| 30° | 3143 | 3268 | 3416 |
| 35° | 3068 | 3219 | 3409 |
| 40° | 2978 | 3157 | 3386 |
| 45° | 2878 | 3086 | 3347 |
| 50° | 2791 | 2997 | 3292 |
| 55° | 2674 | 2905 | 3218 |
| 60° | 2546 | 2783 | 3133 |
| 65° | 2374 | 2621 | 3046 |
| 70° | 2186 | 2463 | 2920 |
| 75° | 1939 | 2286 | 2798 |
| 80° | 1636 | 2044 | 2590 |
| 85° | 1195 | 1575 | 2064 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 237.8  | 3.4       |
| 10°-20°   | 682.1  | 9.8       |
| 20°-30°   | 1028.8 | 14.8      |
| 30°-40°   | 1228.2 | 17.6      |
| 40°-50°   | 1255.2 | 18.0      |
| 50°-60°   | 1113.1 | 16.0      |
| 60°-70°   | 829.8  | 11.9      |
| 70°-80°   | 474.0  | 6.8       |
| 80°-90°   | 125.0  | 1.8       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 1948.6 | 27.9      |
| 0°-40°    | 3176.8 | 45.6      |
| 0°-60°    | 5545.1 | 79.5      |
| 0°-90°    | 6973.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6973.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2512 | 2512  | 2512 | 2512  | 2512 |      |
| 5°  | 2498 | 2498  | 2501 | 2501  | 2505 | 237  |
| 15° | 2392 | 2399  | 2417 | 2438  | 2448 | 674  |
| 25° | 2167 | 2185  | 2230 | 2280  | 2308 | 998  |
| 35° | 1868 | 1893  | 1960 | 2037  | 2076 | 1167 |
| 45° | 1513 | 1544  | 1622 | 1710  | 1759 | 1169 |
| 55° | 1140 | 1161  | 1238 | 1326  | 1372 | 1018 |
| 65° | 746  | 763   | 823  | 908   | 957  | 739  |
| 75° | 373  | 390   | 440  | 507   | 538  | 398  |
| 85° | 77   | 81    | 102  | 127   | 134  | 97   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2511.8 | 2511.8 | 2511.8 | 2511.8 | 2511.8 |
| 2.5°  | 2511.8 | 2508.2 | 2508.2 | 2508.2 | 2511.8 |
| 5°    | 2497.7 | 2497.7 | 2501.2 | 2501.2 | 2504.7 |
| 7.5°  | 2483.6 | 2483.6 | 2487.1 | 2490.6 | 2497.7 |
| 10°   | 2462.5 | 2462.5 | 2469.5 | 2480.1 | 2487.1 |
| 12.5° | 2430.8 | 2434.4 | 2448.4 | 2462.5 | 2473.1 |
| 15°   | 2392.1 | 2399.2 | 2416.8 | 2437.9 | 2448.4 |
| 17.5° | 2346.4 | 2353.5 | 2378.1 | 2406.2 | 2420.3 |
| 20°   | 2290.1 | 2304.2 | 2335.9 | 2371.0 | 2388.6 |
| 22.5° | 2233.8 | 2247.9 | 2286.6 | 2328.8 | 2349.9 |
| 25°   | 2167.0 | 2184.6 | 2230.3 | 2279.6 | 2307.7 |
| 27.5° | 2096.6 | 2117.8 | 2170.5 | 2226.8 | 2258.5 |
| 30°   | 2022.8 | 2047.4 | 2103.7 | 2167.0 | 2198.7 |
| 32.5° | 1945.4 | 1970.0 | 2033.3 | 2103.7 | 2138.9 |
| 35°   | 1868.0 | 1892.6 | 1959.5 | 2036.8 | 2075.5 |
| 37.5° | 1783.6 | 1808.2 | 1878.5 | 1963.0 | 2005.2 |
| 40°   | 1695.6 | 1723.8 | 1797.6 | 1882.1 | 1927.8 |
| 42.5° | 1604.1 | 1635.8 | 1709.7 | 1801.1 | 1846.9 |
| 45°   | 1512.7 | 1544.3 | 1621.7 | 1709.7 | 1758.9 |
| 47.5° | 1424.7 | 1449.4 | 1526.8 | 1618.2 | 1667.5 |
| 50°   | 1333.3 | 1354.4 | 1431.8 | 1523.2 | 1572.5 |
| 52.5° | 1234.8 | 1262.9 | 1336.8 | 1428.3 | 1474.0 |
| 55°   | 1139.8 | 1160.9 | 1238.3 | 1326.2 | 1372.0 |
| 57.5° | 1041.3 | 1062.4 | 1136.3 | 1224.2 | 1266.4 |
| 60°   | 946.3  | 967.4  | 1034.3 | 1122.2 | 1164.4 |
| 62.5° | 840.8  | 861.9  | 928.7  | 1020.2 | 1062.4 |
| 65°   | 745.8  | 763.4  | 823.2  | 907.6  | 956.9  |
| 67.5° | 650.8  | 668.4  | 724.7  | 805.6  | 844.3  |
| 70°   | 555.8  | 569.9  | 626.2  | 700.1  | 742.3  |
| 72.5° | 464.4  | 478.4  | 534.7  | 601.6  | 636.7  |
| 75°   | 372.9  | 390.5  | 439.7  | 506.6  | 538.2  |
| 77.5° | 288.5  | 306.1  | 348.3  | 408.1  | 436.2  |
| 80°   | 211.1  | 225.1  | 263.8  | 309.6  | 334.2  |
| 82.5° | 140.7  | 151.3  | 179.4  | 218.1  | 235.7  |
| 85°   | 77.4   | 80.9   | 102.0  | 126.6  | 133.7  |
| 87.5° | 31.7   | 31.7   | 38.7   | 42.2   | 45.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)