

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: P385220

Luminaire Tested: **24ID-80-L840-CNC**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P385220  
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-80-L840-CNC  
Description: 2X4 IN DEPTH TROFFER WITH CONCAVE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

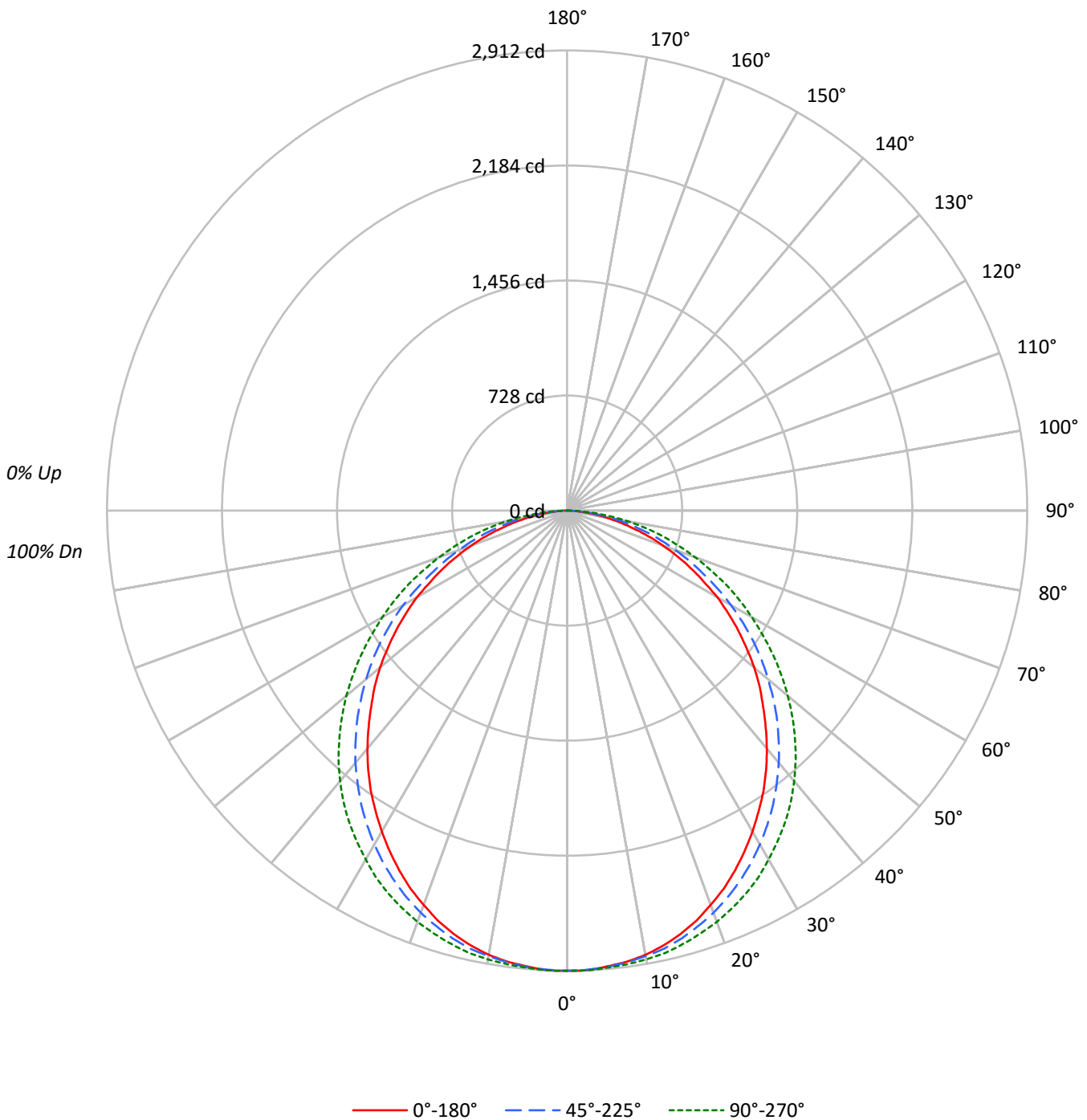
Lumens per Lamp: N/A  
Luminaire Lumens: 8085.7 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.3 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 77  
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  | 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°  | 3918 | 3918 | 3918 |
| 5°  | 3911 | 3917 | 3922 |
| 10° | 3901 | 3912 | 3940 |
| 15° | 3863 | 3903 | 3954 |
| 20° | 3802 | 3878 | 3965 |
| 25° | 3730 | 3839 | 3972 |
| 30° | 3644 | 3789 | 3961 |
| 35° | 3557 | 3732 | 3953 |
| 40° | 3453 | 3661 | 3926 |
| 45° | 3337 | 3578 | 3880 |
| 50° | 3236 | 3475 | 3816 |
| 55° | 3100 | 3368 | 3731 |
| 60° | 2953 | 3227 | 3633 |
| 65° | 2753 | 3039 | 3532 |
| 70° | 2535 | 2856 | 3386 |
| 75° | 2247 | 2650 | 3244 |
| 80° | 1896 | 2370 | 3002 |
| 85° | 1385 | 1826 | 2393 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 275.7  | 3.4       |
| 10°-20°   | 790.8  | 9.8       |
| 20°-30°   | 1192.8 | 14.8      |
| 30°-40°   | 1424.0 | 17.6      |
| 40°-50°   | 1455.4 | 18.0      |
| 50°-60°   | 1290.5 | 16.0      |
| 60°-70°   | 962.0  | 11.9      |
| 70°-80°   | 549.6  | 6.8       |
| 80°-90°   | 145.0  | 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°    | 2259.3 | 27.9      |
| 0°-40°    | 3683.3 | 45.6      |
| 0°-60°    | 6429.1 | 79.5      |
| 0°-90°    | 8085.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 8085.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 2912 | 2912  | 2912 | 2912  | 2912 |      |
| 5°  | 2896 | 2896  | 2900 | 2900  | 2904 | 275  |
| 15° | 2774 | 2782  | 2802 | 2826  | 2839 | 781  |
| 25° | 2512 | 2533  | 2586 | 2643  | 2676 | 1157 |
| 35° | 2166 | 2194  | 2272 | 2362  | 2406 | 1353 |
| 45° | 1754 | 1790  | 1880 | 1982  | 2039 | 1355 |
| 55° | 1322 | 1346  | 1436 | 1538  | 1591 | 1181 |
| 65° | 865  | 885   | 954  | 1052  | 1109 | 857  |
| 75° | 432  | 453   | 510  | 587   | 624  | 461  |
| 85° | 90   | 94    | 118  | 147   | 155  | 112  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 2912.2 | 2912.2 | 2912.2 | 2912.2 | 2912.2 |
| 2.5°  | 2912.2 | 2908.1 | 2908.1 | 2908.1 | 2912.2 |
| 5°    | 2895.9 | 2895.9 | 2900.0 | 2900.0 | 2904.0 |
| 7.5°  | 2879.6 | 2879.6 | 2883.6 | 2887.7 | 2895.9 |
| 10°   | 2855.1 | 2855.1 | 2863.2 | 2875.5 | 2883.6 |
| 12.5° | 2818.4 | 2822.5 | 2838.8 | 2855.1 | 2867.3 |
| 15°   | 2773.5 | 2781.7 | 2802.1 | 2826.5 | 2838.8 |
| 17.5° | 2720.5 | 2728.6 | 2757.2 | 2789.8 | 2806.1 |
| 20°   | 2655.2 | 2671.5 | 2708.3 | 2749.0 | 2769.4 |
| 22.5° | 2590.0 | 2606.3 | 2651.2 | 2700.1 | 2724.6 |
| 25°   | 2512.5 | 2532.9 | 2585.9 | 2643.0 | 2675.6 |
| 27.5° | 2430.9 | 2455.4 | 2516.6 | 2581.8 | 2618.5 |
| 30°   | 2345.2 | 2373.8 | 2439.1 | 2512.5 | 2549.2 |
| 32.5° | 2255.5 | 2284.1 | 2357.5 | 2439.1 | 2479.8 |
| 35°   | 2165.8 | 2194.3 | 2271.8 | 2361.6 | 2406.4 |
| 37.5° | 2067.9 | 2096.4 | 2178.0 | 2275.9 | 2324.9 |
| 40°   | 1965.9 | 1998.6 | 2084.2 | 2182.1 | 2235.1 |
| 42.5° | 1859.9 | 1896.6 | 1982.2 | 2088.3 | 2141.3 |
| 45°   | 1753.8 | 1790.5 | 1880.3 | 1982.2 | 2039.3 |
| 47.5° | 1651.9 | 1680.4 | 1770.2 | 1876.2 | 1933.3 |
| 50°   | 1545.8 | 1570.3 | 1660.0 | 1766.1 | 1823.2 |
| 52.5° | 1431.6 | 1464.3 | 1549.9 | 1655.9 | 1709.0 |
| 55°   | 1321.5 | 1346.0 | 1435.7 | 1537.7 | 1590.7 |
| 57.5° | 1207.3 | 1231.8 | 1317.4 | 1419.4 | 1468.3 |
| 60°   | 1097.2 | 1121.6 | 1199.1 | 1301.1 | 1350.0 |
| 62.5° | 974.8  | 999.3  | 1076.8 | 1182.8 | 1231.8 |
| 65°   | 864.7  | 885.1  | 954.4  | 1052.3 | 1109.4 |
| 67.5° | 754.6  | 775.0  | 840.2  | 934.0  | 978.9  |
| 70°   | 644.4  | 660.7  | 726.0  | 811.7  | 860.6  |
| 72.5° | 538.4  | 554.7  | 620.0  | 697.5  | 738.2  |
| 75°   | 432.3  | 452.7  | 509.8  | 587.3  | 624.0  |
| 77.5° | 334.5  | 354.8  | 403.8  | 473.1  | 505.8  |
| 80°   | 244.7  | 261.0  | 305.9  | 358.9  | 387.5  |
| 82.5° | 163.1  | 175.4  | 208.0  | 252.9  | 273.3  |
| 85°   | 89.7   | 93.8   | 118.3  | 146.8  | 155.0  |
| 87.5° | 36.7   | 36.7   | 44.9   | 48.9   | 53.0   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)