

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: P384164

Luminaire Tested: **22ID-85-L840-CFD1**

Issue Date: 2/25/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P384164  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-67)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 2/25/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: 22ID-85-L840-CFD1  
Description: 2X2 IN DEPTH TROFFER WITH 1INCH DROP CUBE LENS

Light Source: -  
Ballast/Driver: -

**Summary**

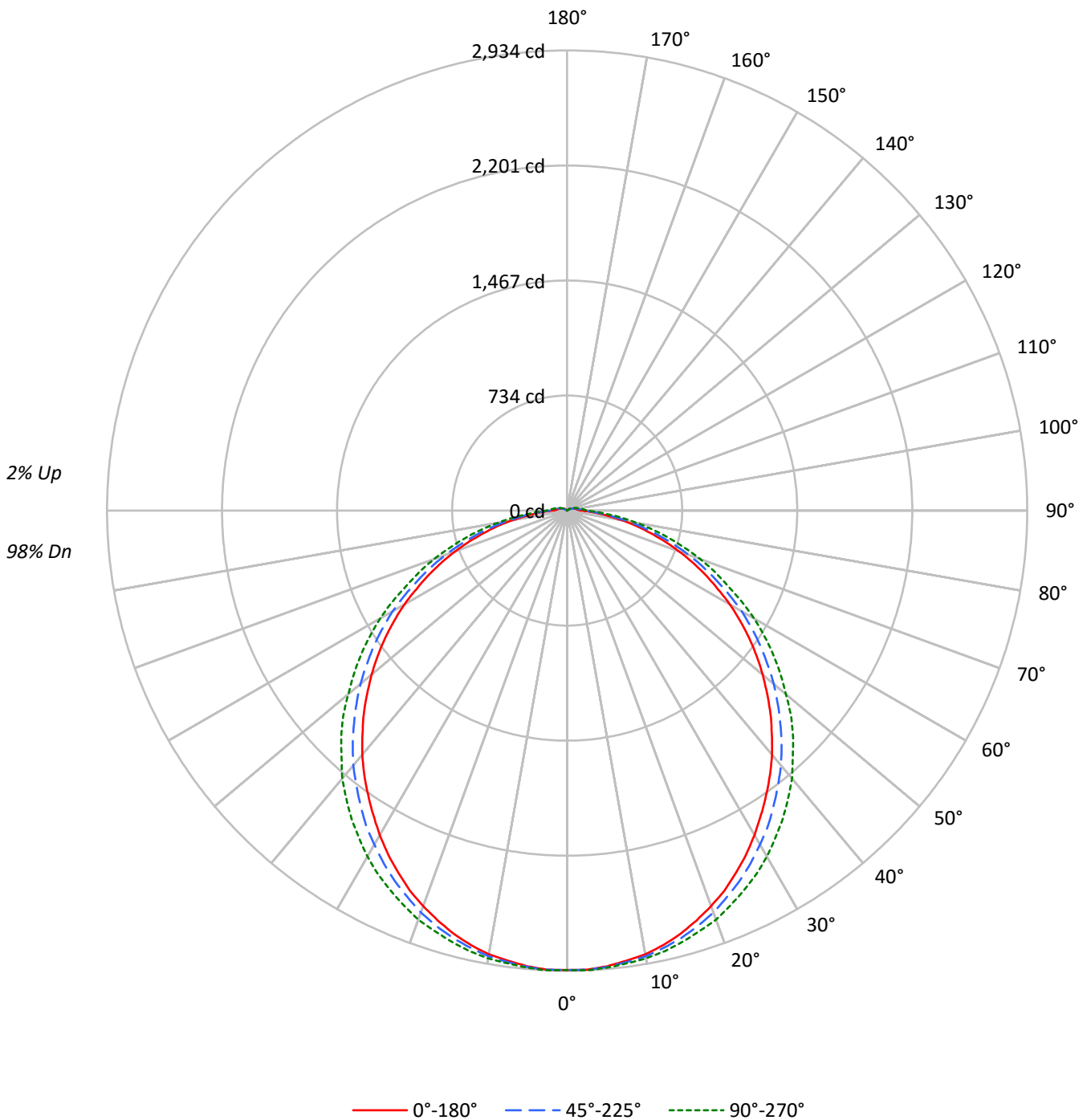
Lumens per Lamp: N/A  
Luminaire Lumens: 8676.9 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.08')  
CIE Type: Direct

Input Watts (W): 78.1  
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 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |
| 1   | 108 | 103 | 98  | 94  | 105 | 100 | 96  | 92  | 96  | 92  | 89  | 91  | 88  | 86  | 87  | 85  | 83  | 81 |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 81  | 75  | 83  | 78  | 73  | 80  | 75  | 71  | 76  | 73  | 69  | 67 |
| 3   | 89  | 78  | 70  | 63  | 86  | 76  | 69  | 63  | 73  | 67  | 61  | 70  | 64  | 60  | 67  | 62  | 58  | 56 |
| 4   | 81  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 58  | 52  | 62  | 56  | 51  | 60  | 55  | 50  | 48 |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 58  | 51  | 45  | 56  | 49  | 44  | 54  | 48  | 44  | 41 |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36 |
| 7   | 64  | 50  | 42  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  | 46  | 39  | 34  | 45  | 39  | 34  | 32 |
| 8   | 60  | 46  | 37  | 32  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 30  | 28 |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 34  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 27  | 26 |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  | 36  | 30  | 25  | 35  | 29  | 25  | 23 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7884 | 7884 | 7884 |
| 5°  | 7850 | 7850 | 7873 |
| 10° | 7792 | 7804 | 7863 |
| 15° | 7696 | 7733 | 7841 |
| 20° | 7570 | 7646 | 7830 |
| 25° | 7418 | 7526 | 7777 |
| 30° | 7248 | 7389 | 7728 |
| 35° | 7063 | 7245 | 7652 |
| 40° | 6898 | 7097 | 7570 |
| 45° | 6702 | 6909 | 7441 |
| 50° | 6492 | 6728 | 7264 |
| 55° | 6273 | 6511 | 7110 |
| 60° | 6028 | 6273 | 6912 |
| 65° | 5709 | 5919 | 6582 |
| 70° | 5342 | 5571 | 6367 |
| 75° | 4909 | 5100 | 6016 |
| 80° | 4411 | 4548 | 5625 |
| 85° | 3958 | 4058 | 5336 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 277.5  | 3.2       |
| 10°-20°   | 795.4  | 9.2       |
| 20°-30°   | 1200.8 | 13.8      |
| 30°-40°   | 1438.8 | 16.6      |
| 40°-50°   | 1487.6 | 17.1      |
| 50°-60°   | 1347.1 | 15.5      |
| 60°-70°   | 1042.4 | 12.0      |
| 70°-80°   | 640.3  | 7.4       |
| 80°-90°   | 254.4  | 2.9       |
| 90°-100°  | 92.8   | 1.1       |
| 100°-110° | 57.1   | 0.7       |
| 110°-120° | 29.3   | 0.3       |
| 120°-130° | 12.5   | 0.1       |
| 130°-140° | 0.9    | 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°    | 2273.7 | 26.2      |
| 0°-40°    | 3712.5 | 42.8      |
| 0°-60°    | 6547.2 | 75.5      |
| 0°-90°    | 8484.4 | 97.8      |
| 90°-120°  | 179.2  | 2.1       |
| 90°-150°  | 192.6  | 2.2       |
| 90°-180°  | 193.0  | 2.2       |
| 0°-180°   | 8676.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2930 | 2930  | 2930 | 2930  | 2930 |      |
| 5°   | 2916 | 2916  | 2921 | 2921  | 2925 | 277  |
| 15°  | 2793 | 2798  | 2820 | 2837  | 2846 | 787  |
| 25°  | 2547 | 2565  | 2604 | 2648  | 2670 | 1174 |
| 35°  | 2213 | 2239  | 2296 | 2358  | 2397 | 1385 |
| 45°  | 1834 | 1856  | 1922 | 2002  | 2037 | 1414 |
| 55°  | 1416 | 1447  | 1504 | 1570  | 1606 | 1266 |
| 65°  | 977  | 999   | 1047 | 1100  | 1126 | 966  |
| 75°  | 546  | 572   | 598  | 638   | 669  | 581  |
| 85°  | 189  | 202   | 220  | 242   | 255  | 188  |
| 90°  | 88   | 101   | 110  | 123   | 132  | 52   |
| 95°  | 66   | 75    | 84   | 92    | 101  | 53   |
| 105° | 48   | 48    | 53   | 57    | 62   | 51   |
| 115° | 31   | 26    | 26   | 31    | 35   | 31   |
| 125° | 18   | 13    | 9    | 13    | 18   | 16   |
| 135° | 0    | 0     | 0    | 0     | 0    | 1    |
| 145° | 0    | 0     | 0    | 0     | 0    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2929.7 | 2929.7 | 2929.7 | 2929.7 | 2929.7 |
| 2.5°   | 2929.7 | 2925.3 | 2929.7 | 2929.7 | 2934.1 |
| 5°     | 2916.5 | 2916.5 | 2920.9 | 2920.9 | 2925.3 |
| 7.5°   | 2894.5 | 2894.5 | 2903.3 | 2907.7 | 2912.1 |
| 10°    | 2872.5 | 2872.5 | 2885.7 | 2890.1 | 2898.9 |
| 12.5°  | 2837.3 | 2841.7 | 2854.9 | 2868.1 | 2876.9 |
| 15°    | 2793.4 | 2797.8 | 2819.7 | 2837.3 | 2846.1 |
| 17.5°  | 2740.6 | 2749.4 | 2775.8 | 2802.2 | 2810.9 |
| 20°    | 2683.4 | 2696.6 | 2727.4 | 2758.2 | 2775.8 |
| 22.5°  | 2621.8 | 2630.6 | 2665.8 | 2705.4 | 2723.0 |
| 25°    | 2547.0 | 2564.6 | 2604.2 | 2648.2 | 2670.2 |
| 27.5°  | 2472.2 | 2489.8 | 2533.8 | 2586.6 | 2613.0 |
| 30°    | 2388.6 | 2406.2 | 2459.0 | 2516.2 | 2547.0 |
| 32.5°  | 2300.7 | 2322.7 | 2384.2 | 2441.4 | 2472.2 |
| 35°    | 2212.7 | 2239.1 | 2296.3 | 2357.9 | 2397.4 |
| 37.5°  | 2124.7 | 2146.7 | 2208.3 | 2274.3 | 2313.9 |
| 40°    | 2032.3 | 2054.3 | 2120.3 | 2186.3 | 2230.3 |
| 42.5°  | 1931.2 | 1957.5 | 2023.5 | 2093.9 | 2129.1 |
| 45°    | 1834.4 | 1856.4 | 1922.4 | 2001.5 | 2036.7 |
| 47.5°  | 1728.8 | 1759.6 | 1821.2 | 1896.0 | 1935.6 |
| 50°    | 1627.6 | 1654.0 | 1720.0 | 1790.4 | 1821.2 |
| 52.5°  | 1522.0 | 1548.4 | 1610.0 | 1680.4 | 1715.6 |
| 55°    | 1416.5 | 1447.3 | 1504.5 | 1570.4 | 1605.6 |
| 57.5°  | 1306.5 | 1337.3 | 1394.5 | 1451.7 | 1491.3 |
| 60°    | 1200.9 | 1231.7 | 1284.5 | 1341.7 | 1376.9 |
| 62.5°  | 1082.1 | 1108.5 | 1165.7 | 1227.3 | 1253.7 |
| 65°    | 976.6  | 998.6  | 1047.0 | 1099.7 | 1126.1 |
| 67.5°  | 866.6  | 893.0  | 937.0  | 985.4  | 1016.2 |
| 70°    | 756.6  | 787.4  | 822.6  | 866.6  | 901.8  |
| 72.5°  | 651.0  | 677.4  | 708.2  | 752.2  | 783.0  |
| 75°    | 545.5  | 571.9  | 598.3  | 637.9  | 668.6  |
| 77.5°  | 453.1  | 466.3  | 492.7  | 527.9  | 558.7  |
| 80°    | 351.9  | 369.5  | 391.5  | 426.7  | 448.7  |
| 82.5°  | 263.9  | 281.5  | 299.1  | 325.5  | 347.5  |
| 85°    | 189.2  | 202.4  | 219.9  | 241.9  | 255.1  |
| 87.5°  | 127.6  | 140.8  | 154.0  | 171.6  | 184.8  |
| 90°    | 88.0   | 101.2  | 110.0  | 123.2  | 132.0  |
| 92.5°  | 74.8   | 83.6   | 92.4   | 101.2  | 110.0  |
| 95°    | 66.0   | 74.8   | 83.6   | 92.4   | 101.2  |
| 97.5°  | 61.6   | 66.0   | 74.8   | 83.6   | 88.0   |
| 100°   | 57.2   | 61.6   | 66.0   | 74.8   | 79.2   |
| 102.5° | 52.8   | 52.8   | 61.6   | 66.0   | 70.4   |
| 105°   | 48.4   | 48.4   | 52.8   | 57.2   | 61.6   |
| 107.5° | 44.0   | 44.0   | 48.4   | 48.4   | 57.2   |
| 110°   | 39.6   | 35.2   | 39.6   | 39.6   | 48.4   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 22.5° | 45°  | 67.5° | 90°  |
|--------|------|-------|------|-------|------|
| 112.5° | 35.2 | 30.8  | 35.2 | 35.2  | 39.6 |
| 115°   | 30.8 | 26.4  | 26.4 | 30.8  | 35.2 |
| 117.5° | 26.4 | 22.0  | 22.0 | 22.0  | 30.8 |
| 120°   | 26.4 | 22.0  | 17.6 | 17.6  | 26.4 |
| 122.5° | 22.0 | 17.6  | 13.2 | 17.6  | 22.0 |
| 125°   | 17.6 | 13.2  | 8.8  | 13.2  | 17.6 |
| 127.5° | 13.2 | 13.2  | 4.4  | 8.8   | 13.2 |
| 130°   | 13.2 | 8.8   | 4.4  | 8.8   | 8.8  |
| 132.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 135°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 137.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 140°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 142.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 145°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 147.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 150°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 152.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 155°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 157.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 160°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 162.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 165°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 167.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 170°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 172.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 175°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 177.5° | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |
| 180°   | 0.0  | 0.0   | 0.0  | 0.0   | 0.0  |

(END OF REPORT)