

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: P385378

Luminaire Tested: **24ID-70-L830-CNV**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P385378
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-572-73)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 2/25/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 24ID-70-L830-CNV
Description: 2X4 IN DEPTH TROFFER WITH CONVEX LENS

Light Source: -
Ballast/Driver: -

Summary

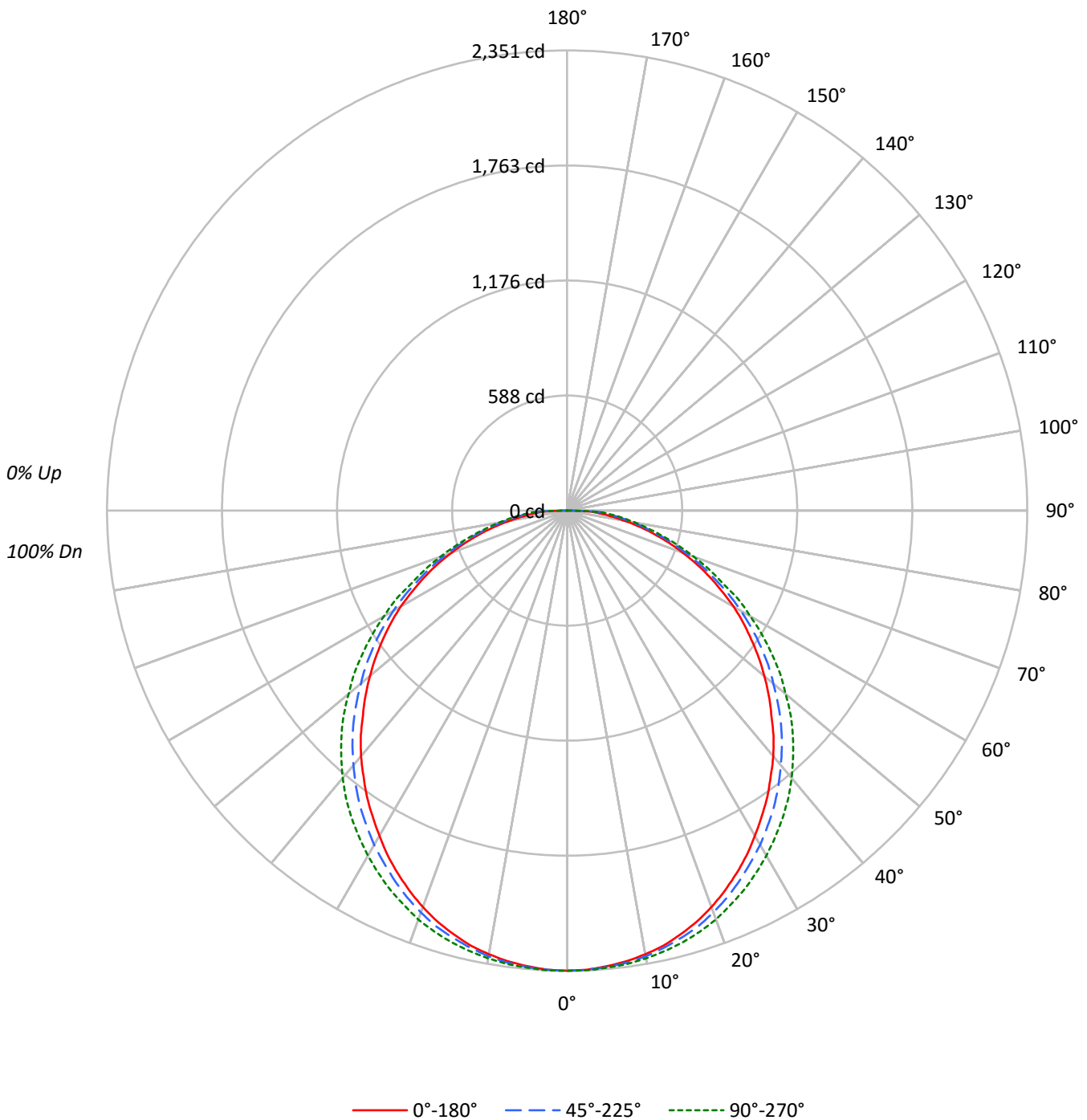
Lumens per Lamp: N/A
Luminaire Lumens: 6819.1 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.28 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (A_{in}): 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 | 108 | 103 | 99 | 94 | 105 | 101 | 97 | 93 | 96 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 82 |
| 2 | 98 | 90 | 82 | 77 | 95 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 70 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 65 | 61 | 68 | 64 | 60 | 57 |
| 4 | 82 | 69 | 60 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 35 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 40 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3163 | 3163 | 3163 |
| 5° | 3145 | 3137 | 3143 |
| 10° | 3121 | 3110 | 3127 |
| 15° | 3087 | 3074 | 3112 |
| 20° | 3041 | 3030 | 3090 |
| 25° | 2980 | 2973 | 3056 |
| 30° | 2911 | 2915 | 3017 |
| 35° | 2847 | 2852 | 2977 |
| 40° | 2780 | 2777 | 2928 |
| 45° | 2695 | 2703 | 2865 |
| 50° | 2624 | 2606 | 2775 |
| 55° | 2544 | 2511 | 2676 |
| 60° | 2465 | 2392 | 2543 |
| 65° | 2353 | 2240 | 2366 |
| 70° | 2216 | 2076 | 2202 |
| 75° | 2058 | 1899 | 2011 |
| 80° | 1844 | 1720 | 1847 |
| 85° | 1743 | 1634 | 1766 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 222.5 | 3.3 |
| 10°-20° | 637.5 | 9.3 |
| 20°-30° | 962.1 | 14.1 |
| 30°-40° | 1154.8 | 16.9 |
| 40°-50° | 1195.1 | 17.5 |
| 50°-60° | 1082.6 | 15.9 |
| 60°-70° | 834.1 | 12.2 |
| 70°-80° | 516.1 | 7.6 |
| 80°-90° | 214.4 | 3.1 |
| 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° | 1822.0 | 26.7 |
| 0°-40° | 2976.8 | 43.7 |
| 0°-60° | 5254.5 | 77.1 |
| 0°-90° | 6819.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6819.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2351 | 2351 | 2351 | 2351 | 2351 | |
| 5° | 2337 | 2337 | 2340 | 2340 | 2344 | 222 |
| 15° | 2241 | 2245 | 2259 | 2273 | 2284 | 632 |
| 25° | 2046 | 2053 | 2085 | 2121 | 2138 | 942 |
| 35° | 1784 | 1798 | 1844 | 1894 | 1918 | 1115 |
| 45° | 1475 | 1496 | 1546 | 1603 | 1631 | 1141 |
| 55° | 1149 | 1167 | 1206 | 1259 | 1277 | 1029 |
| 65° | 805 | 812 | 837 | 872 | 876 | 796 |
| 75° | 458 | 468 | 486 | 507 | 507 | 485 |
| 85° | 167 | 184 | 213 | 227 | 223 | 180 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P385378

CATALOG NUMBER: 24ID-70-L830-CNV

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2351.1 | 2351.1 | 2351.1 | 2351.1 | 2351.1 |
| 2.5° | 2347.5 | 2347.5 | 2347.5 | 2347.5 | 2351.1 |
| 5° | 2336.9 | 2336.9 | 2340.4 | 2340.4 | 2344.0 |
| 7.5° | 2322.7 | 2322.7 | 2329.8 | 2329.8 | 2336.9 |
| 10° | 2301.4 | 2305.0 | 2312.1 | 2315.6 | 2322.7 |
| 12.5° | 2276.6 | 2276.6 | 2287.3 | 2297.9 | 2305.0 |
| 15° | 2241.2 | 2244.7 | 2258.9 | 2273.1 | 2283.7 |
| 17.5° | 2202.1 | 2205.7 | 2227.0 | 2241.2 | 2255.3 |
| 20° | 2156.1 | 2159.6 | 2184.4 | 2205.7 | 2223.4 |
| 22.5° | 2102.9 | 2110.0 | 2138.3 | 2166.7 | 2180.9 |
| 25° | 2046.1 | 2053.2 | 2085.1 | 2120.6 | 2138.3 |
| 27.5° | 1985.8 | 1996.5 | 2028.4 | 2067.4 | 2088.7 |
| 30° | 1918.5 | 1932.6 | 1971.7 | 2014.2 | 2035.5 |
| 32.5° | 1851.1 | 1865.3 | 1907.8 | 1957.5 | 1978.7 |
| 35° | 1783.7 | 1797.9 | 1844.0 | 1893.6 | 1918.5 |
| 37.5° | 1709.2 | 1723.4 | 1773.1 | 1826.3 | 1854.6 |
| 40° | 1638.3 | 1652.5 | 1698.6 | 1758.9 | 1783.7 |
| 42.5° | 1560.3 | 1574.5 | 1624.1 | 1680.9 | 1709.2 |
| 45° | 1475.2 | 1496.5 | 1546.1 | 1602.9 | 1631.2 |
| 47.5° | 1397.2 | 1414.9 | 1461.0 | 1521.3 | 1549.7 |
| 50° | 1315.6 | 1333.3 | 1375.9 | 1436.2 | 1457.5 |
| 52.5° | 1234.1 | 1251.8 | 1294.3 | 1351.1 | 1372.4 |
| 55° | 1148.9 | 1166.7 | 1205.7 | 1258.9 | 1276.6 |
| 57.5° | 1067.4 | 1081.6 | 1117.0 | 1166.7 | 1180.9 |
| 60° | 982.3 | 996.5 | 1024.8 | 1070.9 | 1081.6 |
| 62.5° | 890.1 | 900.7 | 932.6 | 975.2 | 989.4 |
| 65° | 805.0 | 812.1 | 836.9 | 872.3 | 875.9 |
| 67.5° | 716.3 | 723.4 | 748.2 | 773.1 | 783.7 |
| 70° | 627.7 | 638.3 | 656.0 | 680.9 | 688.0 |
| 72.5° | 542.6 | 553.2 | 570.9 | 592.2 | 595.8 |
| 75° | 457.5 | 468.1 | 485.8 | 507.1 | 507.1 |
| 77.5° | 375.9 | 386.5 | 407.8 | 425.5 | 425.5 |
| 80° | 294.3 | 312.1 | 333.3 | 351.1 | 351.1 |
| 82.5° | 227.0 | 241.1 | 269.5 | 283.7 | 283.7 |
| 85° | 166.7 | 184.4 | 212.8 | 227.0 | 223.4 |
| 87.5° | 120.6 | 138.3 | 163.1 | 173.8 | 170.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)