

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: P384168

Luminaire Tested: **22ID-90-L840-CFD1**

Issue Date: 2/25/2020

Test Information

Test Method: LM-79-08
Report Number: P384168
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-90-L840-CFD1
Description: 2X2 IN DEPTH TROFFER WITH 1INCH DROP CUBE LENS

Light Source: -
Ballast/Driver: -

Summary

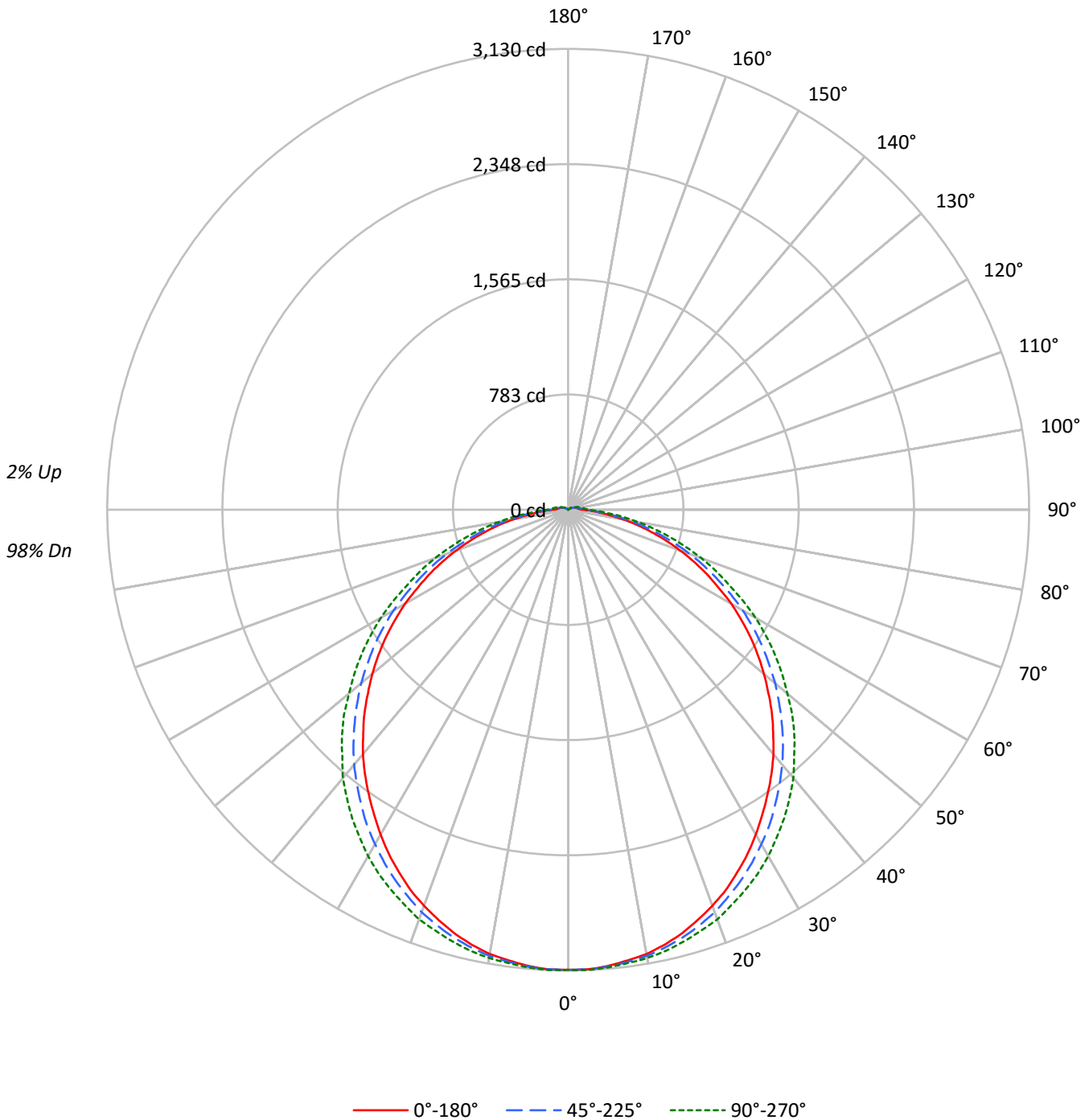
Lumens per Lamp: N/A
Luminaire Lumens: 9255.1 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.08')
CIE Type: Direct

Input Watts (W): 85.5
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° | 8409 | 8409 | 8409 |
| 5° | 8373 | 8373 | 8398 |
| 10° | 8311 | 8324 | 8388 |
| 15° | 8209 | 8249 | 8364 |
| 20° | 8074 | 8156 | 8352 |
| 25° | 7913 | 8027 | 8295 |
| 30° | 7731 | 7882 | 8243 |
| 35° | 7533 | 7727 | 8163 |
| 40° | 7358 | 7570 | 8074 |
| 45° | 7148 | 7369 | 7937 |
| 50° | 6924 | 7177 | 7748 |
| 55° | 6691 | 6944 | 7584 |
| 60° | 6430 | 6691 | 7372 |
| 65° | 6088 | 6313 | 7021 |
| 70° | 5697 | 5942 | 6791 |
| 75° | 5235 | 5439 | 6418 |
| 80° | 4706 | 4851 | 6000 |
| 85° | 4221 | 4329 | 5692 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 296.0 | 3.2 |
| 10°-20° | 848.4 | 9.2 |
| 20°-30° | 1280.9 | 13.8 |
| 30°-40° | 1534.7 | 16.6 |
| 40°-50° | 1586.7 | 17.1 |
| 50°-60° | 1436.9 | 15.5 |
| 60°-70° | 1111.9 | 12.0 |
| 70°-80° | 683.0 | 7.4 |
| 80°-90° | 271.4 | 2.9 |
| 90°-100° | 99.0 | 1.1 |
| 100°-110° | 60.8 | 0.7 |
| 110°-120° | 31.3 | 0.3 |
| 120°-130° | 13.4 | 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° | 2425.2 | 26.2 |
| 0°-40° | 3959.9 | 42.8 |
| 0°-60° | 6983.5 | 75.5 |
| 0°-90° | 9049.7 | 97.8 |
| 90°-120° | 191.1 | 2.1 |
| 90°-150° | 205.4 | 2.2 |
| 90°-180° | 205.0 | 2.2 |
| 0°-180° | 9255.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3125 | 3125 | 3125 | 3125 | 3125 | |
| 5° | 3111 | 3111 | 3116 | 3116 | 3120 | 295 |
| 15° | 2980 | 2984 | 3008 | 3026 | 3036 | 840 |
| 25° | 2717 | 2736 | 2778 | 2825 | 2848 | 1252 |
| 35° | 2360 | 2388 | 2449 | 2515 | 2557 | 1478 |
| 45° | 1957 | 1980 | 2050 | 2135 | 2172 | 1508 |
| 55° | 1511 | 1544 | 1605 | 1675 | 1713 | 1350 |
| 65° | 1042 | 1065 | 1117 | 1173 | 1201 | 1030 |
| 75° | 582 | 610 | 638 | 680 | 713 | 620 |
| 85° | 202 | 216 | 235 | 258 | 272 | 201 |
| 90° | 94 | 108 | 117 | 131 | 141 | 55 |
| 95° | 70 | 80 | 89 | 98 | 108 | 56 |
| 105° | 52 | 52 | 56 | 61 | 66 | 55 |
| 115° | 33 | 28 | 28 | 33 | 38 | 33 |
| 125° | 19 | 14 | 9 | 14 | 19 | 18 |
| 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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CATALOG NUMBER: 22ID-90-L840-CFD1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3124.9 | 3124.9 | 3124.9 | 3124.9 | 3124.9 |
| 2.5° | 3124.9 | 3120.3 | 3124.9 | 3124.9 | 3129.6 |
| 5° | 3110.9 | 3110.9 | 3115.6 | 3115.6 | 3120.3 |
| 7.5° | 3087.4 | 3087.4 | 3096.8 | 3101.5 | 3106.2 |
| 10° | 3064.0 | 3064.0 | 3078.0 | 3082.7 | 3092.1 |
| 12.5° | 3026.4 | 3031.1 | 3045.2 | 3059.3 | 3068.6 |
| 15° | 2979.5 | 2984.2 | 3007.6 | 3026.4 | 3035.8 |
| 17.5° | 2923.2 | 2932.6 | 2960.7 | 2988.9 | 2998.3 |
| 20° | 2862.2 | 2876.3 | 2909.1 | 2942.0 | 2960.7 |
| 22.5° | 2796.5 | 2805.9 | 2843.4 | 2885.6 | 2904.4 |
| 25° | 2716.7 | 2735.5 | 2777.7 | 2824.7 | 2848.1 |
| 27.5° | 2637.0 | 2655.7 | 2702.7 | 2759.0 | 2787.1 |
| 30° | 2547.8 | 2566.6 | 2622.9 | 2683.9 | 2716.7 |
| 32.5° | 2454.0 | 2477.4 | 2543.1 | 2604.1 | 2637.0 |
| 35° | 2360.1 | 2388.3 | 2449.3 | 2515.0 | 2557.2 |
| 37.5° | 2266.3 | 2289.8 | 2355.4 | 2425.8 | 2468.1 |
| 40° | 2167.8 | 2191.2 | 2261.6 | 2332.0 | 2378.9 |
| 42.5° | 2059.8 | 2088.0 | 2158.4 | 2233.4 | 2271.0 |
| 45° | 1956.6 | 1980.1 | 2050.5 | 2134.9 | 2172.4 |
| 47.5° | 1844.0 | 1876.8 | 1942.5 | 2022.3 | 2064.5 |
| 50° | 1736.1 | 1764.2 | 1834.6 | 1909.7 | 1942.5 |
| 52.5° | 1623.5 | 1651.6 | 1717.3 | 1792.4 | 1829.9 |
| 55° | 1510.9 | 1543.7 | 1604.7 | 1675.1 | 1712.6 |
| 57.5° | 1393.6 | 1426.4 | 1487.4 | 1548.4 | 1590.6 |
| 60° | 1280.9 | 1313.8 | 1370.1 | 1431.1 | 1468.6 |
| 62.5° | 1154.3 | 1182.4 | 1243.4 | 1309.1 | 1337.3 |
| 65° | 1041.6 | 1065.1 | 1116.7 | 1173.0 | 1201.2 |
| 67.5° | 924.3 | 952.5 | 999.4 | 1051.0 | 1083.9 |
| 70° | 807.0 | 839.9 | 877.4 | 924.3 | 961.9 |
| 72.5° | 694.4 | 722.6 | 755.4 | 802.4 | 835.2 |
| 75° | 581.8 | 610.0 | 638.1 | 680.4 | 713.2 |
| 77.5° | 483.3 | 497.4 | 525.5 | 563.1 | 595.9 |
| 80° | 375.4 | 394.1 | 417.6 | 455.1 | 478.6 |
| 82.5° | 281.5 | 300.3 | 319.1 | 347.2 | 370.7 |
| 85° | 201.8 | 215.8 | 234.6 | 258.1 | 272.1 |
| 87.5° | 136.1 | 150.1 | 164.2 | 183.0 | 197.1 |
| 90° | 93.8 | 107.9 | 117.3 | 131.4 | 140.8 |
| 92.5° | 79.8 | 89.2 | 98.5 | 107.9 | 117.3 |
| 95° | 70.4 | 79.8 | 89.2 | 98.5 | 107.9 |
| 97.5° | 65.7 | 70.4 | 79.8 | 89.2 | 93.8 |
| 100° | 61.0 | 65.7 | 70.4 | 79.8 | 84.5 |
| 102.5° | 56.3 | 56.3 | 65.7 | 70.4 | 75.1 |
| 105° | 51.6 | 51.6 | 56.3 | 61.0 | 65.7 |
| 107.5° | 46.9 | 46.9 | 51.6 | 51.6 | 61.0 |
| 110° | 42.2 | 37.5 | 42.2 | 42.2 | 51.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|------|
| 112.5° | 37.5 | 32.8 | 37.5 | 37.5 | 42.2 |
| 115° | 32.8 | 28.2 | 28.2 | 32.8 | 37.5 |
| 117.5° | 28.2 | 23.5 | 23.5 | 23.5 | 32.8 |
| 120° | 28.2 | 23.5 | 18.8 | 18.8 | 28.2 |
| 122.5° | 23.5 | 18.8 | 14.1 | 18.8 | 23.5 |
| 125° | 18.8 | 14.1 | 9.4 | 14.1 | 18.8 |
| 127.5° | 14.1 | 14.1 | 4.7 | 9.4 | 14.1 |
| 130° | 14.1 | 9.4 | 4.7 | 9.4 | 9.4 |
| 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)