

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: P189006

Luminaire Tested: **RZL-NB-680L8840-1D-UNV-STD-W-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34816)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: RZL-NB-680L8840-1D-UNV-STD-W-4
Description: RZL LINEAR LED FIXTURE
WITH OPAQUE SIDES, CLEAR PRISMATIC LENS, INLAY AND INTERNAL BAFFLE
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6435.2 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.3 / 1.33
Luminous Opening: Rectangular (W 0.53' x L: 3.83' x H: 0')
CIE Type: Direct

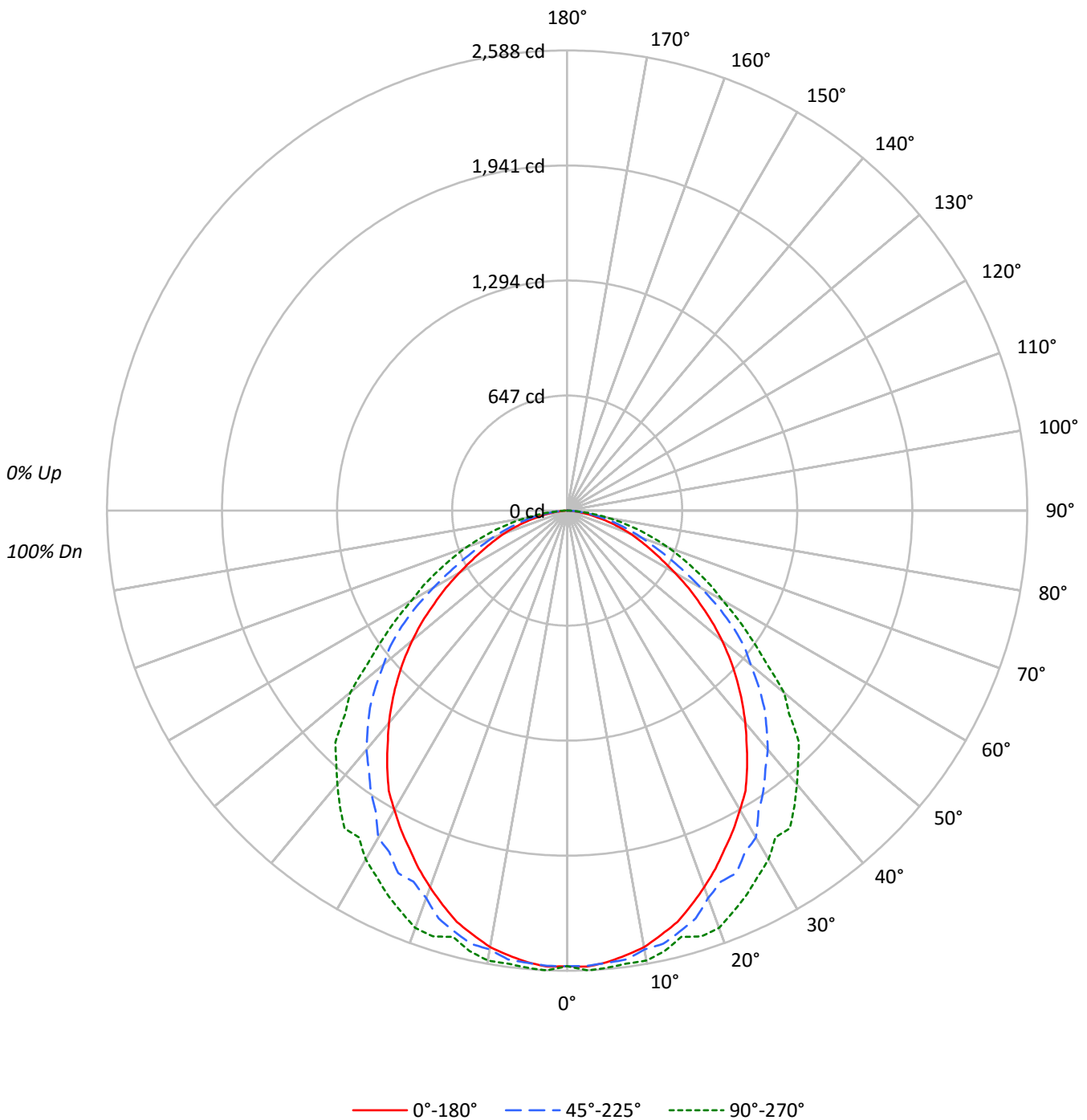
Input Watts (W): 56.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 105 | 101 | 98 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 88 | 85 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 77 | 74 | 72 |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 75 | 69 | 65 | 72 | 68 | 64 | 62 |
| 4 | 84 | 73 | 64 | 58 | 82 | 72 | 64 | 58 | 69 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 55 | 53 |
| 5 | 78 | 65 | 57 | 50 | 76 | 64 | 56 | 50 | 62 | 55 | 50 | 60 | 54 | 49 | 58 | 53 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 44 | 55 | 48 | 43 | 53 | 47 | 43 | 41 |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 51 | 44 | 39 | 50 | 43 | 38 | 49 | 43 | 38 | 36 |
| 8 | 62 | 49 | 41 | 35 | 61 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 32 |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 28 | 38 | 33 | 28 | 27 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13490 | 13490 | 13490 |
| 5° | 13481 | 13493 | 13640 |
| 10° | 13327 | 13401 | 13736 |
| 15° | 13057 | 13360 | 13524 |
| 20° | 12628 | 12992 | 13993 |
| 25° | 12191 | 13067 | 13861 |
| 30° | 11814 | 12913 | 13773 |
| 35° | 11342 | 12371 | 14025 |
| 40° | 10710 | 12065 | 13818 |
| 45° | 10066 | 11672 | 13726 |
| 50° | 9306 | 11036 | 13049 |
| 55° | 8365 | 10429 | 11664 |
| 60° | 7350 | 9157 | 10597 |
| 65° | 6442 | 7886 | 9938 |
| 70° | 5783 | 6853 | 9281 |
| 75° | 4764 | 6038 | 8348 |
| 80° | 3587 | 4991 | 6961 |
| 85° | 2102 | 3365 | 4621 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 243.5 | 3.8 |
| 10°-20° | 690.8 | 10.7 |
| 20°-30° | 1032.9 | 16.1 |
| 30°-40° | 1214.4 | 18.9 |
| 40°-50° | 1215.5 | 18.9 |
| 50°-60° | 988.1 | 15.4 |
| 60°-70° | 645.7 | 10.0 |
| 70°-80° | 331.4 | 5.1 |
| 80°-90° | 72.9 | 1.1 |
| 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° | 1967.2 | 30.6 |
| 0°-40° | 3181.6 | 49.4 |
| 0°-60° | 5385.2 | 83.7 |
| 0°-90° | 6435.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6435.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2562 | 2562 | 2562 | 2562 | 2562 | |
| 5° | 2551 | 2567 | 2553 | 2565 | 2581 | 242 |
| 15° | 2395 | 2402 | 2451 | 2484 | 2481 | 673 |
| 25° | 2099 | 2136 | 2249 | 2340 | 2386 | 968 |
| 35° | 1765 | 1811 | 1925 | 2052 | 2182 | 1101 |
| 45° | 1352 | 1422 | 1568 | 1748 | 1844 | 1041 |
| 55° | 911 | 979 | 1136 | 1227 | 1271 | 818 |
| 65° | 517 | 554 | 633 | 740 | 798 | 519 |
| 75° | 234 | 236 | 297 | 390 | 410 | 252 |
| 85° | 35 | 39 | 56 | 72 | 76 | 48 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P189006

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2562.3 | 2562.3 | 2562.3 | 2562.3 | 2562.3 |
| 2.5° | 2567.0 | 2555.4 | 2562.3 | 2592.5 | 2587.9 |
| 5° | 2550.7 | 2567.0 | 2553.1 | 2564.7 | 2580.9 |
| 7.5° | 2522.9 | 2548.4 | 2546.1 | 2555.4 | 2569.3 |
| 10° | 2492.8 | 2504.4 | 2506.7 | 2557.7 | 2569.3 |
| 12.5° | 2444.1 | 2467.3 | 2495.1 | 2513.6 | 2536.8 |
| 15° | 2395.4 | 2402.3 | 2451.0 | 2483.5 | 2481.2 |
| 17.5° | 2325.8 | 2351.3 | 2404.7 | 2432.5 | 2511.3 |
| 20° | 2253.9 | 2295.7 | 2318.9 | 2469.6 | 2497.4 |
| 22.5° | 2179.7 | 2219.2 | 2258.6 | 2427.9 | 2441.8 |
| 25° | 2098.6 | 2135.7 | 2249.3 | 2339.7 | 2386.1 |
| 27.5° | 2024.4 | 2061.5 | 2165.8 | 2293.4 | 2321.2 |
| 30° | 1943.2 | 1987.3 | 2124.1 | 2223.8 | 2265.5 |
| 32.5° | 1866.7 | 1892.2 | 2003.5 | 2147.3 | 2179.7 |
| 35° | 1764.7 | 1811.0 | 1924.7 | 2052.2 | 2182.1 |
| 37.5° | 1658.0 | 1706.7 | 1831.9 | 2026.7 | 2098.6 |
| 40° | 1558.3 | 1618.6 | 1755.4 | 1927.0 | 2010.5 |
| 42.5° | 1456.2 | 1528.1 | 1660.3 | 1841.2 | 1922.3 |
| 45° | 1351.9 | 1421.5 | 1567.6 | 1748.4 | 1843.5 |
| 47.5° | 1245.2 | 1314.8 | 1458.6 | 1655.7 | 1692.8 |
| 50° | 1136.2 | 1203.5 | 1347.3 | 1500.3 | 1593.1 |
| 52.5° | 1027.3 | 1087.5 | 1254.5 | 1363.5 | 1414.5 |
| 55° | 911.3 | 978.6 | 1136.2 | 1226.7 | 1270.7 |
| 57.5° | 809.3 | 862.6 | 1004.1 | 1076.0 | 1140.9 |
| 60° | 698.0 | 755.9 | 869.6 | 948.4 | 1006.4 |
| 62.5° | 600.6 | 653.9 | 742.0 | 844.1 | 909.0 |
| 65° | 517.1 | 554.2 | 633.0 | 739.7 | 797.7 |
| 67.5° | 445.2 | 463.8 | 528.7 | 651.6 | 698.0 |
| 70° | 375.7 | 382.6 | 445.2 | 563.5 | 602.9 |
| 72.5° | 303.8 | 306.1 | 368.7 | 473.0 | 503.2 |
| 75° | 234.2 | 236.5 | 296.8 | 389.6 | 410.4 |
| 77.5° | 171.6 | 176.2 | 229.6 | 303.8 | 320.0 |
| 80° | 118.3 | 122.9 | 164.6 | 213.3 | 229.6 |
| 82.5° | 71.9 | 76.5 | 104.3 | 141.5 | 150.7 |
| 85° | 34.8 | 39.4 | 55.7 | 71.9 | 76.5 |
| 87.5° | 11.6 | 13.9 | 20.9 | 25.5 | 25.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)