

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: P189022

Luminaire Tested: **RZL-NL-80L840-1D-UNV-STD-W-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34812)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: RZL-NL-80L840-1D-UNV-STD-W-4
Description: RZL LINEAR LED FIXTURE
WITH SOLID ALUMINUM SIDES, FROSTED LINEAR PRISMATIC LENS AND INLAY
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8562.7 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.34
Luminous Opening: Rectangular (W 0.53' x L: 3.83' x H: 0')
CIE Type: Direct

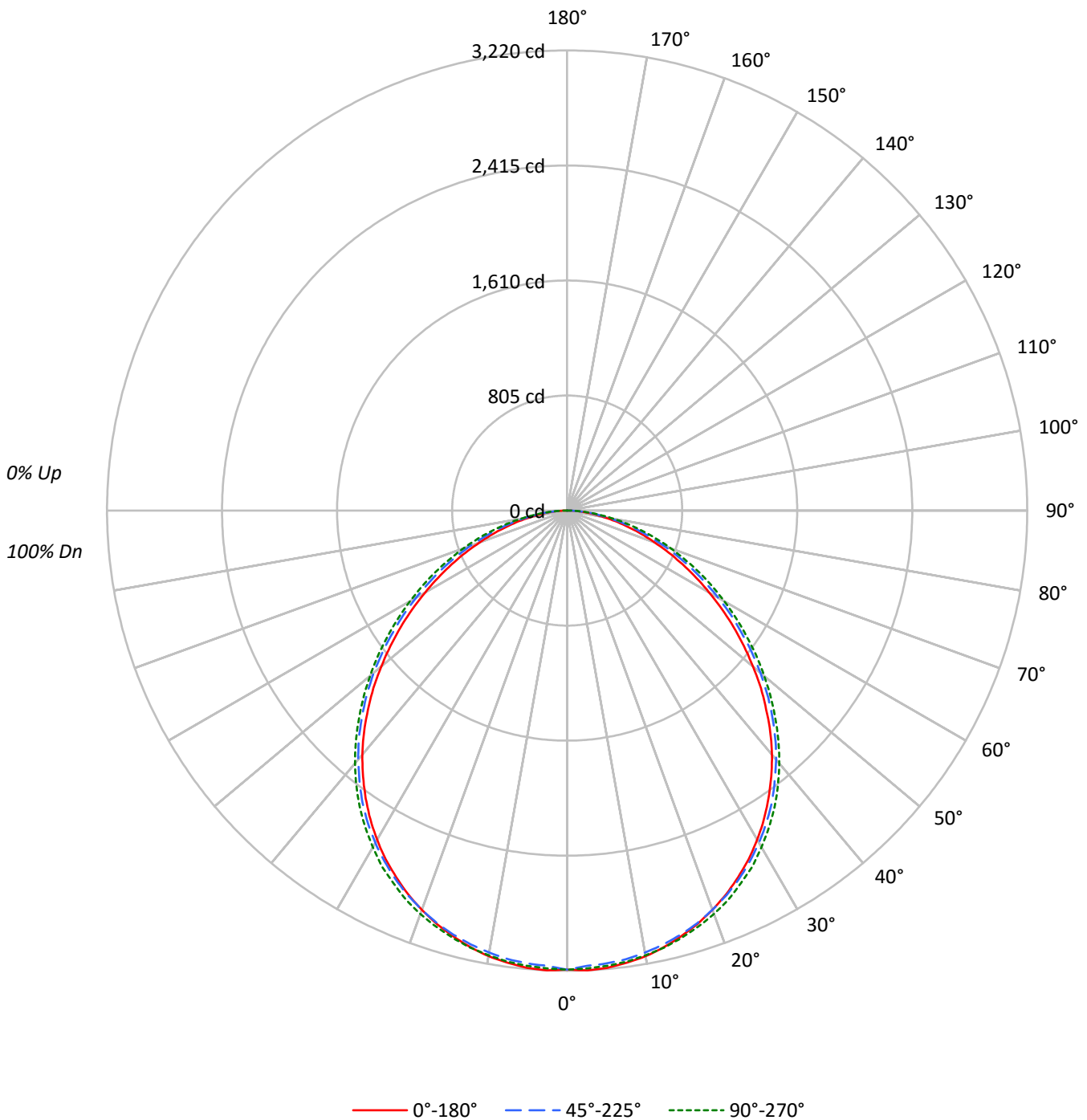
Input Watts (W): 74.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P189022

CATALOG NUMBER: RZL-NL-80L840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P189022

CATALOG NUMBER: RZL-NL-80L840-1D-UNV-STD-W-4

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 | 97 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 85 | 79 | 97 | 90 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 81 | 73 | 66 | 88 | 79 | 72 | 66 | 76 | 70 | 64 | 73 | 68 | 63 | 71 | 66 | 62 | 60 |
| 4 | 83 | 72 | 63 | 56 | 81 | 70 | 62 | 56 | 68 | 61 | 55 | 65 | 59 | 54 | 63 | 58 | 54 | 52 |
| 5 | 77 | 64 | 55 | 49 | 75 | 63 | 55 | 48 | 61 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 48 | 42 | 55 | 48 | 42 | 53 | 47 | 42 | 52 | 46 | 41 | 39 |
| 7 | 66 | 52 | 44 | 38 | 64 | 52 | 43 | 38 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 40 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16911 | 16911 | 16911 |
| 5° | 16976 | 16810 | 16900 |
| 10° | 16928 | 16791 | 16898 |
| 15° | 16809 | 16747 | 16871 |
| 20° | 16656 | 16656 | 16832 |
| 25° | 16442 | 16525 | 16707 |
| 30° | 16169 | 16325 | 16532 |
| 35° | 15795 | 16051 | 16270 |
| 40° | 15324 | 15637 | 15872 |
| 45° | 14672 | 15096 | 15350 |
| 50° | 13901 | 14460 | 14740 |
| 55° | 13043 | 13670 | 14063 |
| 60° | 12083 | 12863 | 13373 |
| 65° | 11104 | 11991 | 12665 |
| 70° | 10038 | 11047 | 11879 |
| 75° | 8979 | 10080 | 11005 |
| 80° | 7771 | 9066 | 10015 |
| 85° | 6536 | 7914 | 8602 |



TEST NUMBER: P189022

CATALOG NUMBER: RZL-NL-80L840-1D-UNV-STD-W-4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 303.9 | 3.5 |
| 10°-20° | 870.7 | 10.2 |
| 20°-30° | 1314.4 | 15.4 |
| 30°-40° | 1560.1 | 18.2 |
| 40°-50° | 1560.7 | 18.2 |
| 50°-60° | 1330.0 | 15.5 |
| 60°-70° | 950.6 | 11.1 |
| 70°-80° | 524.8 | 6.1 |
| 80°-90° | 147.5 | 1.7 |
| 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° | 2488.9 | 29.1 |
| 0°-40° | 4049.0 | 47.3 |
| 0°-60° | 6939.8 | 81.0 |
| 0°-90° | 8562.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8562.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 3212 | 3212 | 3212 | 3212 | 3212 | |
| 5° | 3212 | 3201 | 3181 | 3203 | 3198 | 305 |
| 15° | 3084 | 3081 | 3072 | 3101 | 3095 | 870 |
| 25° | 2830 | 2836 | 2845 | 2882 | 2876 | 1304 |
| 35° | 2457 | 2472 | 2497 | 2526 | 2531 | 1536 |
| 45° | 1970 | 1996 | 2027 | 2062 | 2062 | 1520 |
| 55° | 1421 | 1446 | 1489 | 1529 | 1532 | 1272 |
| 65° | 891 | 911 | 962 | 1008 | 1017 | 885 |
| 75° | 441 | 453 | 496 | 532 | 541 | 470 |
| 85° | 108 | 114 | 131 | 142 | 142 | 127 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P189022

CATALOG NUMBER: RZL-NL-80L840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 3212.0 | 3212.0 | 3212.0 | 3212.0 | 3212.0 |
| 2.5° | 3220.5 | 3209.1 | 3189.2 | 3209.1 | 3206.3 |
| 5° | 3212.0 | 3200.6 | 3180.7 | 3203.4 | 3197.7 |
| 7.5° | 3192.0 | 3180.7 | 3166.4 | 3186.3 | 3183.5 |
| 10° | 3166.4 | 3155.0 | 3140.8 | 3166.4 | 3160.7 |
| 12.5° | 3129.4 | 3123.7 | 3109.5 | 3137.9 | 3132.2 |
| 15° | 3083.8 | 3081.0 | 3072.4 | 3100.9 | 3095.2 |
| 17.5° | 3032.6 | 3029.7 | 3026.9 | 3058.2 | 3052.5 |
| 20° | 2972.8 | 2972.8 | 2972.8 | 3004.1 | 3004.1 |
| 22.5° | 2907.3 | 2907.3 | 2913.0 | 2947.2 | 2947.2 |
| 25° | 2830.4 | 2836.1 | 2844.6 | 2881.7 | 2876.0 |
| 27.5° | 2750.7 | 2756.4 | 2767.8 | 2807.6 | 2807.6 |
| 30° | 2659.6 | 2668.1 | 2685.2 | 2719.4 | 2719.4 |
| 32.5° | 2562.7 | 2574.1 | 2594.1 | 2628.2 | 2628.2 |
| 35° | 2457.4 | 2471.6 | 2497.3 | 2525.7 | 2531.4 |
| 37.5° | 2346.3 | 2357.7 | 2386.2 | 2423.2 | 2423.2 |
| 40° | 2229.6 | 2246.7 | 2275.1 | 2309.3 | 2309.3 |
| 42.5° | 2104.3 | 2121.4 | 2155.6 | 2186.9 | 2189.7 |
| 45° | 1970.5 | 1996.1 | 2027.4 | 2061.6 | 2061.6 |
| 47.5° | 1839.5 | 1862.3 | 1899.3 | 1927.8 | 1933.4 |
| 50° | 1697.1 | 1728.4 | 1765.4 | 1796.8 | 1799.6 |
| 52.5° | 1560.4 | 1588.9 | 1628.8 | 1665.8 | 1668.6 |
| 55° | 1420.9 | 1446.5 | 1489.2 | 1529.1 | 1532.0 |
| 57.5° | 1287.1 | 1312.7 | 1358.3 | 1398.1 | 1401.0 |
| 60° | 1147.5 | 1170.3 | 1221.6 | 1261.4 | 1270.0 |
| 62.5° | 1019.4 | 1042.2 | 1087.7 | 1136.2 | 1141.8 |
| 65° | 891.3 | 911.2 | 962.5 | 1008.0 | 1016.6 |
| 67.5° | 768.8 | 785.9 | 837.2 | 879.9 | 888.4 |
| 70° | 652.1 | 669.2 | 717.6 | 760.3 | 771.7 |
| 72.5° | 543.9 | 558.1 | 603.7 | 643.5 | 654.9 |
| 75° | 441.4 | 452.8 | 495.5 | 532.5 | 541.0 |
| 77.5° | 344.5 | 355.9 | 393.0 | 427.1 | 432.8 |
| 80° | 256.3 | 264.8 | 299.0 | 324.6 | 330.3 |
| 82.5° | 179.4 | 187.9 | 210.7 | 230.6 | 233.5 |
| 85° | 108.2 | 113.9 | 131.0 | 142.4 | 142.4 |
| 87.5° | 51.3 | 51.3 | 59.8 | 62.6 | 59.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)