

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: P189048

Luminaire Tested: **RZL-WL-30L840-1D-UNV-STD-W-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P189048
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34814)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: RZL-WL-30L840-1D-UNV-STD-W-4
Description: RZL LINEAR LED FIXTURE
WITH LUMINOUS SIDES AND SNAP-ON FROSTED LINEAR PRISMATIC LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3366.0 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.53' x L: 3.83' x H: 0.12')
CIE Type: Semi-Direct

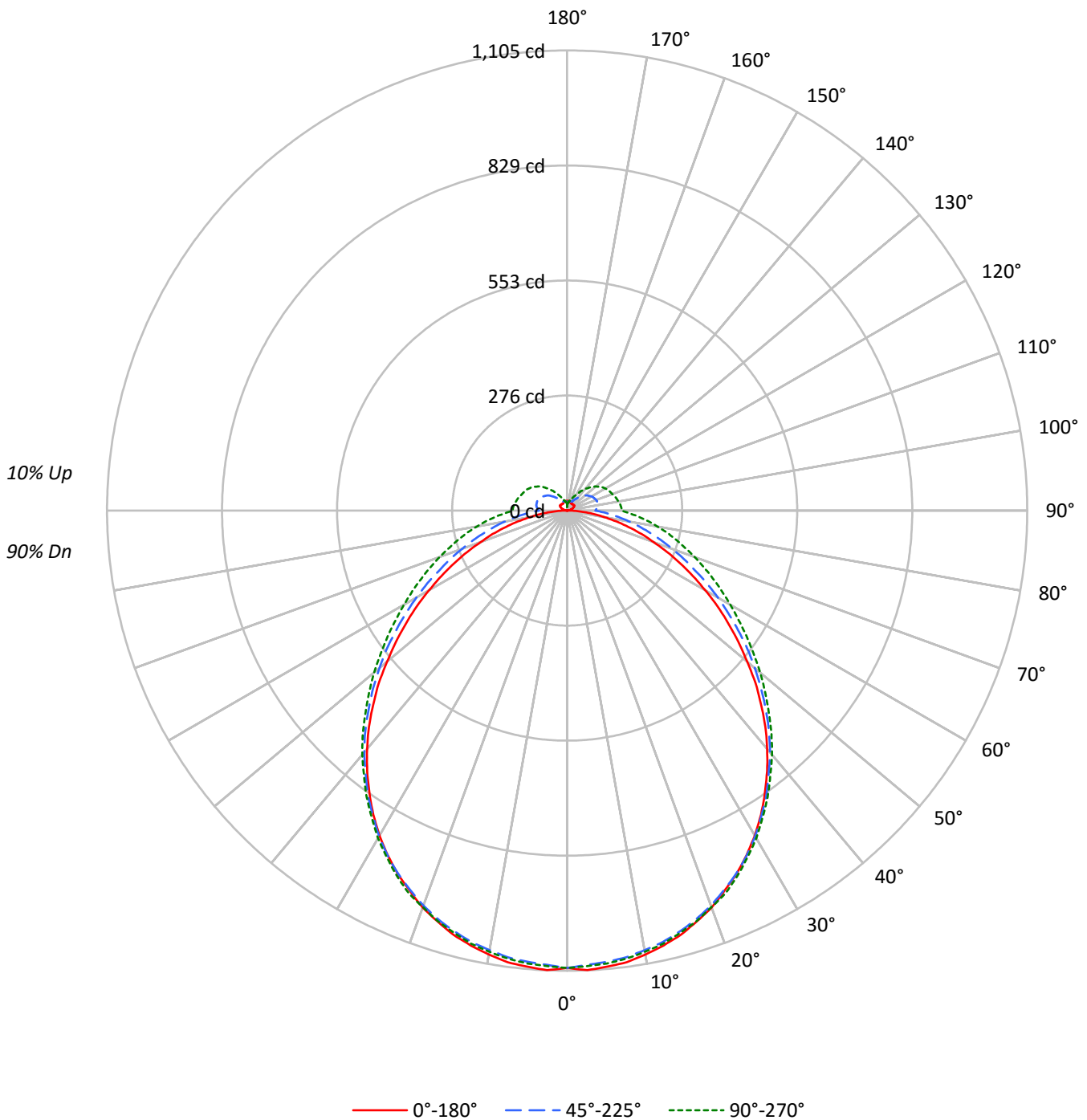
Input Watts (W): 24.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 105 | 105 | 105 | | 99 | 99 | 99 | | 92 | 92 | 92 | 90 |
| 1 | 106 | 101 | 96 | 92 | 102 | 97 | 93 | 90 | 91 | 88 | 85 | | 86 | 83 | 81 | | 80 | 78 | 76 | 74 |
| 2 | 96 | 88 | 81 | 75 | 93 | 85 | 79 | 73 | 80 | 75 | 70 | | 75 | 71 | 67 | | 70 | 67 | 64 | 61 |
| 3 | 88 | 77 | 69 | 63 | 84 | 75 | 67 | 61 | 70 | 64 | 59 | | 66 | 61 | 57 | | 62 | 58 | 54 | 52 |
| 4 | 80 | 68 | 60 | 53 | 77 | 66 | 58 | 52 | 63 | 56 | 50 | | 59 | 53 | 49 | | 56 | 51 | 47 | 44 |
| 5 | 74 | 61 | 52 | 46 | 71 | 59 | 51 | 45 | 56 | 49 | 44 | | 53 | 47 | 42 | | 50 | 45 | 41 | 38 |
| 6 | 68 | 55 | 46 | 40 | 66 | 54 | 45 | 39 | 51 | 44 | 38 | | 48 | 42 | 37 | | 46 | 40 | 36 | 34 |
| 7 | 63 | 50 | 41 | 35 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | | 44 | 38 | 33 | | 42 | 36 | 32 | 30 |
| 8 | 59 | 46 | 37 | 32 | 57 | 45 | 37 | 31 | 42 | 35 | 30 | | 40 | 34 | 30 | | 38 | 33 | 29 | 27 |
| 9 | 55 | 42 | 34 | 28 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | | 37 | 31 | 27 | | 35 | 30 | 26 | 24 |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 30 | 25 | 36 | 29 | 25 | | 34 | 28 | 24 | | 33 | 28 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5782 | 5782 | 5782 |
| 5° | 5793 | 5655 | 5654 |
| 10° | 5753 | 5545 | 5524 |
| 15° | 5699 | 5428 | 5382 |
| 20° | 5617 | 5291 | 5232 |
| 25° | 5508 | 5133 | 5068 |
| 30° | 5376 | 4951 | 4864 |
| 35° | 5202 | 4736 | 4635 |
| 40° | 4999 | 4497 | 4395 |
| 45° | 4747 | 4223 | 4131 |
| 50° | 4446 | 3934 | 3875 |
| 55° | 4147 | 3625 | 3616 |
| 60° | 3814 | 3315 | 3390 |
| 65° | 3480 | 2999 | 3199 |
| 70° | 3115 | 2719 | 3047 |
| 75° | 2767 | 2454 | 2933 |
| 80° | 2305 | 2220 | 2856 |
| 85° | 1817 | 2007 | 2837 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.9 | 3.1 |
| 10°-20° | 296.4 | 8.8 |
| 20°-30° | 444.0 | 13.2 |
| 30°-40° | 521.7 | 15.5 |
| 40°-50° | 519.8 | 15.4 |
| 50°-60° | 448.2 | 13.3 |
| 60°-70° | 338.8 | 10.1 |
| 70°-80° | 221.9 | 6.6 |
| 80°-90° | 118.0 | 3.5 |
| 90°-100° | 76.1 | 2.3 |
| 100°-110° | 74.5 | 2.2 |
| 110°-120° | 67.0 | 2.0 |
| 120°-130° | 54.2 | 1.6 |
| 130°-140° | 37.8 | 1.1 |
| 140°-150° | 22.9 | 0.7 |
| 150°-160° | 12.3 | 0.4 |
| 160°-170° | 6.5 | 0.2 |
| 170°-180° | 2.0 | 0.1 |
| 0°-30° | 844.2 | 25.1 |
| 0°-40° | 1365.9 | 40.6 |
| 0°-60° | 2334.0 | 69.3 |
| 0°-90° | 3012.6 | 89.5 |
| 90°-120° | 217.6 | 6.5 |
| 90°-150° | 332.6 | 9.9 |
| 90°-180° | 353.0 | 10.5 |
| 0°-180° | 3366.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1098 | 1098 | 1098 | 1098 | 1098 | |
| 5° | 1099 | 1095 | 1088 | 1094 | 1092 | 104 |
| 15° | 1055 | 1050 | 1046 | 1054 | 1049 | 297 |
| 25° | 962 | 962 | 961 | 971 | 968 | 443 |
| 35° | 828 | 831 | 834 | 841 | 840 | 517 |
| 45° | 658 | 666 | 674 | 685 | 685 | 508 |
| 55° | 473 | 480 | 501 | 519 | 526 | 423 |
| 65° | 299 | 310 | 338 | 372 | 386 | 297 |
| 75° | 153 | 166 | 206 | 251 | 270 | 162 |
| 85° | 41 | 62 | 105 | 155 | 173 | 44 |
| 90° | 0 | 23 | 68 | 114 | 130 | 3 |
| 95° | 2 | 26 | 72 | 116 | 129 | 3 |
| 105° | 10 | 31 | 75 | 111 | 121 | 10 |
| 115° | 16 | 33 | 71 | 103 | 111 | 16 |
| 125° | 20 | 31 | 62 | 90 | 99 | 18 |
| 135° | 20 | 25 | 48 | 71 | 80 | 16 |
| 145° | 19 | 24 | 33 | 50 | 56 | 12 |
| 155° | 21 | 23 | 24 | 29 | 36 | 10 |
| 165° | 22 | 23 | 23 | 21 | 24 | 6 |
| 175° | 23 | 23 | 21 | 17 | 12 | 2 |
| 180° | 19 | 19 | 19 | 19 | 19 | |



TEST NUMBER: P189048

CATALOG NUMBER: RZL-WL-30L840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1098.2 | 1098.2 | 1098.2 | 1098.2 | 1098.2 |
| 2.5° | 1104.6 | 1099.3 | 1091.8 | 1097.1 | 1095.0 |
| 5° | 1099.3 | 1095.0 | 1087.6 | 1094.0 | 1091.8 |
| 7.5° | 1094.0 | 1088.7 | 1082.3 | 1088.7 | 1085.5 |
| 10° | 1082.3 | 1078.1 | 1071.7 | 1080.2 | 1075.9 |
| 12.5° | 1069.6 | 1066.4 | 1061.1 | 1068.5 | 1065.3 |
| 15° | 1054.7 | 1050.5 | 1046.3 | 1053.7 | 1049.4 |
| 17.5° | 1034.6 | 1032.5 | 1029.3 | 1037.8 | 1033.5 |
| 20° | 1014.5 | 1011.3 | 1009.2 | 1018.7 | 1013.4 |
| 22.5° | 988.0 | 988.0 | 985.8 | 995.4 | 994.3 |
| 25° | 962.5 | 962.5 | 961.4 | 971.0 | 967.8 |
| 27.5° | 932.8 | 932.8 | 933.9 | 940.2 | 938.1 |
| 30° | 901.0 | 901.0 | 903.1 | 910.6 | 908.4 |
| 32.5° | 866.0 | 868.2 | 868.2 | 875.6 | 873.5 |
| 35° | 827.9 | 831.1 | 834.2 | 840.6 | 839.5 |
| 37.5° | 788.7 | 791.8 | 795.0 | 803.5 | 801.4 |
| 40° | 747.3 | 751.6 | 757.9 | 766.4 | 765.3 |
| 42.5° | 704.9 | 708.1 | 717.6 | 725.1 | 726.1 |
| 45° | 658.3 | 665.7 | 674.2 | 684.8 | 684.8 |
| 47.5° | 613.8 | 620.1 | 631.8 | 643.4 | 644.5 |
| 50° | 563.9 | 574.5 | 588.3 | 601.0 | 605.3 |
| 52.5° | 518.4 | 527.9 | 545.9 | 559.7 | 563.9 |
| 55° | 472.8 | 480.2 | 501.4 | 519.4 | 525.8 |
| 57.5° | 428.3 | 435.7 | 459.0 | 481.3 | 487.6 |
| 60° | 382.7 | 393.3 | 417.7 | 444.2 | 452.6 |
| 62.5° | 340.3 | 349.8 | 378.4 | 407.1 | 418.7 |
| 65° | 298.9 | 309.5 | 338.2 | 372.1 | 385.9 |
| 67.5° | 259.7 | 271.4 | 303.2 | 339.2 | 355.1 |
| 70° | 220.5 | 233.2 | 268.2 | 308.5 | 325.4 |
| 72.5° | 187.6 | 199.3 | 236.4 | 278.8 | 296.8 |
| 75° | 152.6 | 166.4 | 205.6 | 251.2 | 270.3 |
| 77.5° | 120.8 | 135.7 | 178.1 | 224.7 | 245.9 |
| 80° | 90.1 | 109.2 | 151.6 | 200.3 | 219.4 |
| 82.5° | 65.7 | 82.7 | 127.2 | 177.0 | 196.1 |
| 85° | 41.3 | 61.5 | 104.9 | 154.8 | 172.8 |
| 87.5° | 20.1 | 41.3 | 84.8 | 131.4 | 149.5 |
| 90° | 0.0 | 23.3 | 67.8 | 114.5 | 130.4 |
| 92.5° | 1.1 | 24.4 | 70.0 | 115.5 | 130.4 |
| 95° | 2.1 | 26.5 | 72.1 | 115.5 | 129.3 |
| 97.5° | 4.2 | 27.6 | 74.2 | 115.5 | 127.2 |
| 100° | 6.4 | 28.6 | 75.3 | 114.5 | 125.1 |
| 102.5° | 7.4 | 29.7 | 75.3 | 113.4 | 123.0 |
| 105° | 9.5 | 30.7 | 75.3 | 111.3 | 120.8 |
| 107.5° | 10.6 | 31.8 | 75.3 | 109.2 | 117.7 |
| 110° | 12.7 | 31.8 | 74.2 | 107.1 | 115.5 |



TEST NUMBER: P189048

CATALOG NUMBER: RZL-WL-30L840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|------|-------|------|-------|-------|
| 112.5° | 14.8 | 32.9 | 73.1 | 104.9 | 113.4 |
| 115° | 15.9 | 32.9 | 71.0 | 102.8 | 111.3 |
| 117.5° | 18.0 | 32.9 | 70.0 | 99.6 | 109.2 |
| 120° | 19.1 | 32.9 | 67.8 | 96.5 | 106.0 |
| 122.5° | 20.1 | 31.8 | 64.7 | 93.3 | 102.8 |
| 125° | 20.1 | 30.7 | 62.5 | 90.1 | 98.6 |
| 127.5° | 21.2 | 29.7 | 59.4 | 84.8 | 94.3 |
| 130° | 21.2 | 28.6 | 56.2 | 80.6 | 90.1 |
| 132.5° | 21.2 | 26.5 | 51.9 | 76.3 | 84.8 |
| 135° | 20.1 | 25.4 | 47.7 | 71.0 | 79.5 |
| 137.5° | 20.1 | 25.4 | 43.5 | 65.7 | 73.1 |
| 140° | 20.1 | 24.4 | 40.3 | 60.4 | 67.8 |
| 142.5° | 20.1 | 24.4 | 36.0 | 55.1 | 61.5 |
| 145° | 19.1 | 24.4 | 32.9 | 49.8 | 56.2 |
| 147.5° | 19.1 | 24.4 | 29.7 | 44.5 | 49.8 |
| 150° | 20.1 | 23.3 | 26.5 | 38.2 | 44.5 |
| 152.5° | 20.1 | 23.3 | 24.4 | 33.9 | 40.3 |
| 155° | 21.2 | 23.3 | 24.4 | 28.6 | 36.0 |
| 157.5° | 21.2 | 23.3 | 23.3 | 25.4 | 31.8 |
| 160° | 22.3 | 23.3 | 23.3 | 23.3 | 28.6 |
| 162.5° | 22.3 | 23.3 | 23.3 | 22.3 | 26.5 |
| 165° | 22.3 | 23.3 | 23.3 | 21.2 | 24.4 |
| 167.5° | 23.3 | 23.3 | 22.3 | 20.1 | 23.3 |
| 170° | 23.3 | 23.3 | 22.3 | 19.1 | 22.3 |
| 172.5° | 23.3 | 23.3 | 22.3 | 18.0 | 19.1 |
| 175° | 23.3 | 23.3 | 21.2 | 17.0 | 11.7 |
| 177.5° | 23.3 | 23.3 | 21.2 | 17.0 | 8.5 |
| 180° | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 |

(END OF REPORT)