

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: P220202

Luminaire Tested: **R3-WL-1L40-LD5-UNV-24**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P220202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35861)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: R3-WL-1L40-LD5-UNV-24
Description: CLASS R3 2X4 RECESSED LED LUMIANIRE
WITH A FROSTED PRISMATIC ROUND LENS
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3228.5 lumens
Efficiency: N/A
Efficacy: 141.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

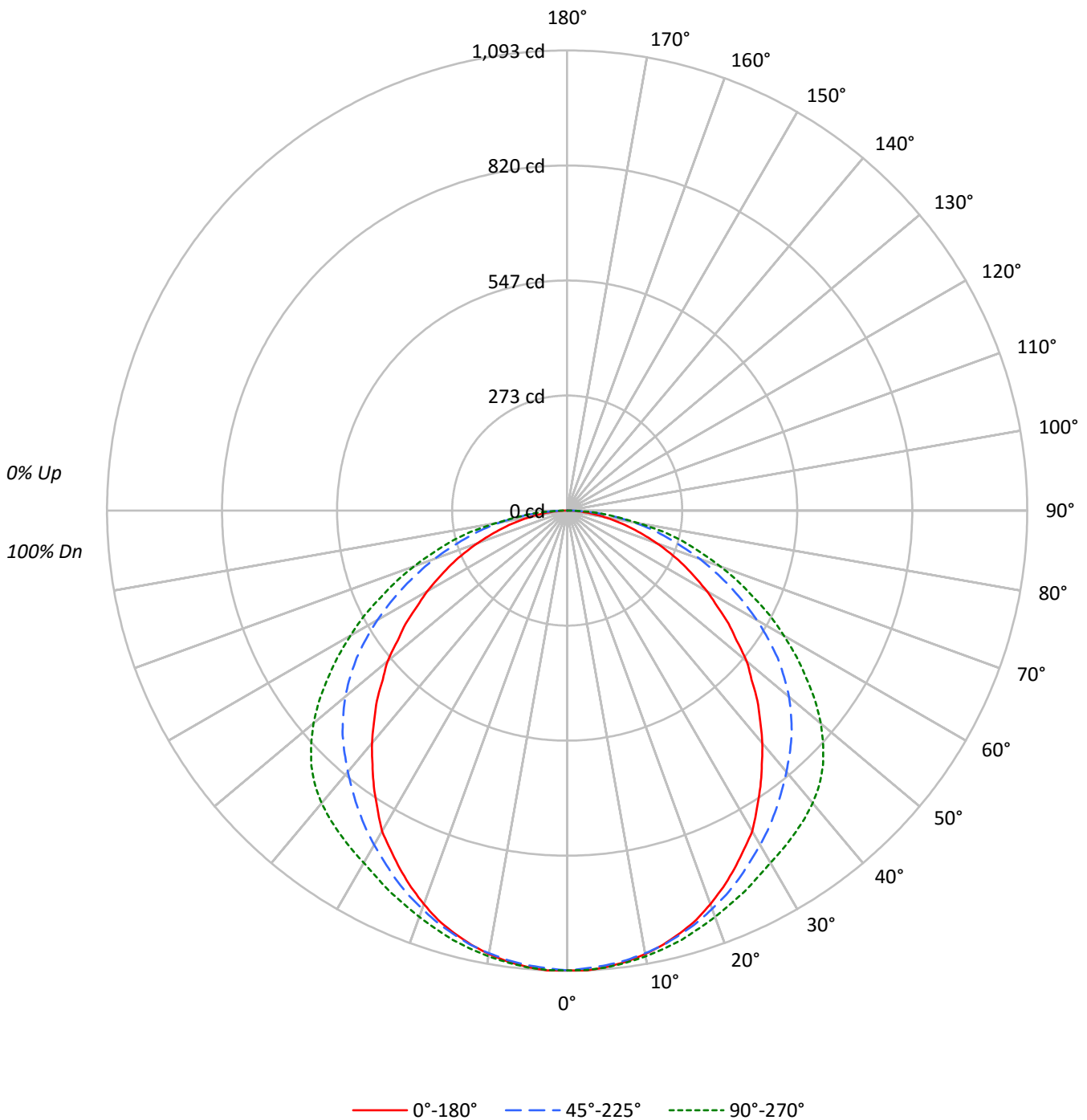
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 |
| 3 | 89 | 79 | 70 | 63 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 65 | 61 | 69 | 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 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1470 | 1470 | 1470 |
| 5° | 1469 | 1464 | 1471 |
| 10° | 1461 | 1459 | 1469 |
| 15° | 1447 | 1451 | 1469 |
| 20° | 1425 | 1441 | 1470 |
| 25° | 1395 | 1433 | 1482 |
| 30° | 1366 | 1425 | 1501 |
| 35° | 1315 | 1422 | 1543 |
| 40° | 1267 | 1423 | 1594 |
| 45° | 1216 | 1436 | 1635 |
| 50° | 1165 | 1441 | 1646 |
| 55° | 1098 | 1431 | 1627 |
| 60° | 1033 | 1400 | 1599 |
| 65° | 970 | 1358 | 1558 |
| 70° | 891 | 1316 | 1522 |
| 75° | 806 | 1272 | 1489 |
| 80° | 704 | 1251 | 1333 |
| 85° | 610 | 1122 | 1238 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.3 | 3.2 |
| 10°-20° | 294.9 | 9.1 |
| 20°-30° | 446.0 | 13.8 |
| 30°-40° | 544.0 | 16.8 |
| 40°-50° | 578.9 | 17.9 |
| 50°-60° | 530.7 | 16.4 |
| 60°-70° | 407.9 | 12.6 |
| 70°-80° | 247.2 | 7.7 |
| 80°-90° | 75.6 | 2.3 |
| 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° | 844.2 | 26.1 |
| 0°-40° | 1388.2 | 43.0 |
| 0°-60° | 2497.8 | 77.4 |
| 0°-90° | 3228.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3228.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1092 | 1092 | 1092 | 1092 | 1092 | |
| 5° | 1088 | 1087 | 1084 | 1089 | 1089 | 103 |
| 15° | 1039 | 1040 | 1042 | 1052 | 1055 | 293 |
| 25° | 939 | 947 | 965 | 988 | 998 | 433 |
| 35° | 800 | 820 | 866 | 919 | 939 | 501 |
| 45° | 639 | 669 | 754 | 835 | 859 | 492 |
| 55° | 468 | 509 | 610 | 676 | 694 | 418 |
| 65° | 305 | 343 | 426 | 478 | 489 | 301 |
| 75° | 155 | 189 | 245 | 281 | 286 | 165 |
| 85° | 40 | 59 | 73 | 81 | 80 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1092.2 | 1092.2 | 1092.2 | 1092.2 | 1092.2 |
| 2.5° | 1093.2 | 1091.1 | 1087.9 | 1092.2 | 1092.2 |
| 5° | 1087.9 | 1086.8 | 1083.6 | 1089.0 | 1089.0 |
| 7.5° | 1080.4 | 1079.4 | 1077.2 | 1083.6 | 1082.6 |
| 10° | 1069.7 | 1068.7 | 1067.6 | 1075.1 | 1075.1 |
| 12.5° | 1055.8 | 1055.8 | 1056.9 | 1064.4 | 1065.5 |
| 15° | 1038.7 | 1039.8 | 1042.0 | 1051.6 | 1054.8 |
| 17.5° | 1019.5 | 1020.6 | 1025.9 | 1038.7 | 1040.9 |
| 20° | 994.9 | 998.1 | 1006.7 | 1023.8 | 1027.0 |
| 22.5° | 968.2 | 973.6 | 987.4 | 1006.7 | 1012.0 |
| 25° | 939.4 | 946.8 | 965.0 | 988.5 | 998.1 |
| 27.5° | 908.4 | 916.9 | 940.4 | 970.4 | 981.0 |
| 30° | 879.5 | 888.1 | 916.9 | 954.3 | 966.1 |
| 32.5° | 838.9 | 853.9 | 892.3 | 936.2 | 953.3 |
| 35° | 800.4 | 819.7 | 865.6 | 919.1 | 939.4 |
| 37.5° | 759.8 | 784.4 | 837.8 | 903.0 | 924.4 |
| 40° | 721.4 | 747.0 | 810.1 | 882.7 | 907.3 |
| 42.5° | 678.6 | 708.5 | 782.3 | 860.3 | 885.9 |
| 45° | 639.1 | 669.0 | 754.5 | 834.6 | 859.2 |
| 47.5° | 594.2 | 629.4 | 721.4 | 804.7 | 825.0 |
| 50° | 556.8 | 589.9 | 688.2 | 765.2 | 786.5 |
| 52.5° | 507.6 | 551.4 | 649.8 | 722.4 | 742.7 |
| 55° | 468.1 | 508.7 | 610.2 | 676.5 | 693.6 |
| 57.5° | 422.1 | 471.3 | 565.3 | 630.5 | 645.5 |
| 60° | 383.7 | 426.4 | 520.4 | 580.3 | 594.2 |
| 62.5° | 342.0 | 387.9 | 473.4 | 529.0 | 545.0 |
| 65° | 304.6 | 343.0 | 426.4 | 477.7 | 489.4 |
| 67.5° | 265.0 | 304.6 | 380.4 | 427.5 | 439.2 |
| 70° | 226.6 | 268.2 | 334.5 | 377.2 | 386.9 |
| 72.5° | 189.2 | 225.5 | 287.5 | 329.1 | 334.5 |
| 75° | 155.0 | 189.2 | 244.7 | 281.1 | 286.4 |
| 77.5° | 122.9 | 153.9 | 204.1 | 233.0 | 235.1 |
| 80° | 90.8 | 120.8 | 161.4 | 176.3 | 172.1 |
| 82.5° | 64.1 | 87.6 | 117.6 | 120.8 | 118.6 |
| 85° | 39.5 | 58.8 | 72.7 | 81.2 | 80.2 |
| 87.5° | 17.1 | 26.7 | 37.4 | 35.3 | 37.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)