

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: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27404)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR SQUARE LENS
Light Source: -
Ballast/Driver: -

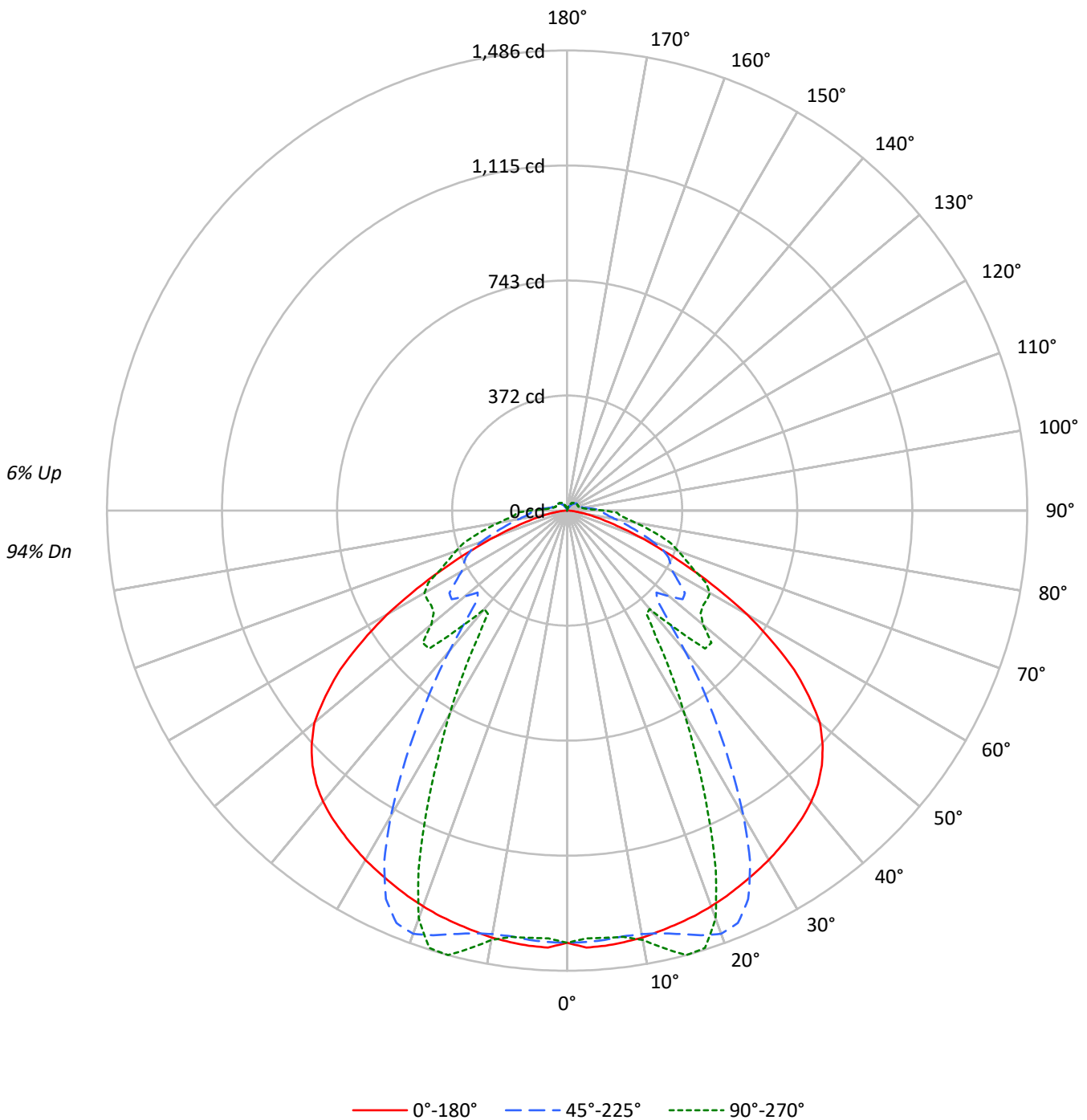
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3584.0 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1 / 1.08
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 25
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

TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U

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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 94 |
| 1 | 107 | 102 | 98 | 94 | 104 | 99 | 95 | 92 | 94 | 91 | 88 | 89 | 87 | 84 | 85 | 83 | 81 | 78 |
| 2 | 98 | 90 | 83 | 77 | 95 | 87 | 81 | 76 | 83 | 78 | 73 | 79 | 74 | 71 | 75 | 71 | 68 | 66 |
| 3 | 89 | 79 | 71 | 65 | 87 | 77 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 60 | 67 | 62 | 59 | 56 |
| 4 | 82 | 71 | 62 | 56 | 80 | 69 | 61 | 55 | 66 | 59 | 53 | 63 | 57 | 52 | 60 | 55 | 51 | 49 |
| 5 | 76 | 64 | 55 | 48 | 74 | 62 | 54 | 48 | 59 | 52 | 47 | 57 | 51 | 46 | 54 | 49 | 45 | 43 |
| 6 | 70 | 58 | 49 | 43 | 68 | 56 | 48 | 42 | 54 | 47 | 41 | 52 | 45 | 41 | 50 | 44 | 40 | 38 |
| 7 | 66 | 52 | 44 | 38 | 64 | 51 | 43 | 38 | 49 | 42 | 37 | 47 | 41 | 36 | 46 | 40 | 36 | 34 |
| 8 | 61 | 48 | 40 | 34 | 59 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 37 | 33 | 42 | 37 | 32 | 30 |
| 9 | 57 | 44 | 36 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 30 | 41 | 34 | 30 | 39 | 34 | 29 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 28 | 39 | 32 | 28 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11275 | 11275 | 11275 |
| 5° | 11412 | 11011 | 10875 |
| 10° | 11427 | 10843 | 10838 |
| 15° | 11458 | 10996 | 11296 |
| 20° | 11564 | 11323 | 10603 |
| 25° | 11708 | 10882 | 8164 |
| 30° | 11939 | 9114 | 5807 |
| 35° | 12235 | 6903 | 3932 |
| 40° | 12609 | 5018 | 3329 |
| 45° | 12895 | 3640 | 5235 |
| 50° | 12913 | 4031 | 4968 |
| 55° | 12069 | 4639 | 4906 |
| 60° | 10283 | 4244 | 5214 |
| 65° | 7736 | 4281 | 4769 |
| 70° | 5429 | 3897 | 4440 |
| 75° | 3557 | 3265 | 3983 |
| 80° | 2269 | 2797 | 3317 |
| 85° | 1223 | 2658 | 2976 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.7 | 3.7 |
| 10°-20° | 400.9 | 11.2 |
| 20°-30° | 582.3 | 16.2 |
| 30°-40° | 556.4 | 15.5 |
| 40°-50° | 508.9 | 14.2 |
| 50°-60° | 469.9 | 13.1 |
| 60°-70° | 373.3 | 10.4 |
| 70°-80° | 230.4 | 6.4 |
| 80°-90° | 125.5 | 3.5 |
| 90°-100° | 63.4 | 1.8 |
| 100°-110° | 39.8 | 1.1 |
| 110°-120° | 33.7 | 0.9 |
| 120°-130° | 27.6 | 0.8 |
| 130°-140° | 19.8 | 0.6 |
| 140°-150° | 12.2 | 0.3 |
| 150°-160° | 5.8 | 0.2 |
| 160°-170° | 1.5 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1115.9 | 31.1 |
| 0°-40° | 1672.3 | 46.7 |
| 0°-60° | 2651.1 | 74.0 |
| 0°-90° | 3380.2 | 94.3 |
| 90°-120° | 137.0 | 3.8 |
| 90°-150° | 196.5 | 5.5 |
| 90°-180° | 204.0 | 5.7 |
| 0°-180° | 3584.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1395 | 1395 | 1395 | 1395 | 1395 | |
| 5° | 1411 | 1389 | 1392 | 1384 | 1385 | 134 |
| 15° | 1381 | 1362 | 1416 | 1468 | 1486 | 391 |
| 25° | 1332 | 1358 | 1384 | 1172 | 1076 | 616 |
| 35° | 1267 | 1247 | 841 | 579 | 503 | 795 |
| 45° | 1164 | 812 | 410 | 523 | 630 | 894 |
| 55° | 895 | 416 | 464 | 500 | 535 | 788 |
| 65° | 432 | 270 | 362 | 440 | 450 | 437 |
| 75° | 127 | 144 | 217 | 287 | 306 | 144 |
| 85° | 18 | 61 | 123 | 167 | 170 | 23 |
| 90° | 1 | 46 | 110 | 130 | 120 | 1 |
| 95° | 0 | 43 | 76 | 67 | 64 | 0 |
| 105° | 0 | 38 | 47 | 43 | 42 | 0 |
| 115° | 0 | 32 | 45 | 40 | 38 | 0 |
| 125° | 1 | 25 | 40 | 39 | 37 | 0 |
| 135° | 1 | 18 | 32 | 35 | 34 | 0 |
| 145° | 1 | 11 | 22 | 28 | 30 | 0 |
| 155° | 1 | 7 | 14 | 18 | 22 | 0 |
| 165° | 1 | 4 | 7 | 9 | 12 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 1395.2 | 1395.2 | 1395.2 | 1395.2 | 1395.2 |
| 2.5° | 1412.5 | 1392.1 | 1394.6 | 1390.3 | 1382.9 |
| 5° | 1410.7 | 1389.0 | 1391.5 | 1384.1 | 1384.7 |
| 7.5° | 1405.7 | 1383.5 | 1386.6 | 1385.3 | 1388.4 |
| 10° | 1400.2 | 1376.7 | 1388.4 | 1398.9 | 1408.2 |
| 12.5° | 1390.3 | 1369.3 | 1397.7 | 1428.6 | 1447.7 |
| 15° | 1381.0 | 1362.5 | 1415.6 | 1468.1 | 1486.0 |
| 17.5° | 1371.7 | 1360.0 | 1437.8 | 1483.5 | 1481.1 |
| 20° | 1360.0 | 1358.8 | 1454.5 | 1439.1 | 1401.4 |
| 22.5° | 1347.0 | 1359.4 | 1441.5 | 1328.5 | 1254.4 |
| 25° | 1332.2 | 1358.2 | 1384.1 | 1171.6 | 1075.9 |
| 27.5° | 1317.4 | 1352.6 | 1279.7 | 999.9 | 905.4 |
| 30° | 1302.6 | 1337.8 | 1138.9 | 843.1 | 757.2 |
| 32.5° | 1285.3 | 1305.7 | 985.7 | 704.1 | 625.0 |
| 35° | 1267.4 | 1247.0 | 840.6 | 578.7 | 503.4 |
| 37.5° | 1248.8 | 1162.4 | 710.3 | 468.8 | 420.6 |
| 40° | 1226.6 | 1056.1 | 590.5 | 402.1 | 415.0 |
| 42.5° | 1198.8 | 936.3 | 484.8 | 421.8 | 512.0 |
| 45° | 1163.6 | 811.6 | 410.1 | 523.1 | 630.0 |
| 47.5° | 1119.1 | 691.7 | 391.6 | 599.1 | 632.4 |
| 50° | 1065.4 | 581.8 | 430.5 | 574.4 | 571.9 |
| 52.5° | 983.9 | 490.4 | 470.0 | 523.7 | 543.5 |
| 55° | 894.9 | 416.3 | 464.5 | 499.7 | 534.9 |
| 57.5° | 782.5 | 366.3 | 426.2 | 494.7 | 535.5 |
| 60° | 670.7 | 332.9 | 393.4 | 494.1 | 532.4 |
| 62.5° | 547.2 | 302.6 | 376.8 | 482.4 | 505.2 |
| 65° | 431.7 | 269.9 | 361.9 | 439.7 | 450.2 |
| 67.5° | 331.0 | 236.6 | 336.0 | 392.2 | 413.2 |
| 70° | 249.5 | 203.8 | 295.2 | 355.8 | 381.7 |
| 72.5° | 179.7 | 172.9 | 253.2 | 323.6 | 350.8 |
| 75° | 127.2 | 143.9 | 216.8 | 287.2 | 306.3 |
| 77.5° | 87.7 | 117.3 | 185.9 | 247.1 | 262.5 |
| 80° | 57.4 | 93.9 | 158.1 | 212.5 | 223.0 |
| 82.5° | 34.6 | 75.4 | 137.1 | 185.9 | 191.5 |
| 85° | 17.9 | 61.1 | 122.9 | 167.4 | 169.8 |
| 87.5° | 5.6 | 51.3 | 114.9 | 158.7 | 161.8 |
| 90° | 0.6 | 45.7 | 109.9 | 130.3 | 120.4 |
| 92.5° | 0.0 | 43.2 | 95.1 | 88.9 | 79.7 |
| 95° | 0.0 | 42.6 | 76.0 | 67.3 | 63.6 |
| 97.5° | 0.0 | 41.4 | 62.4 | 56.2 | 54.4 |
| 100° | 0.0 | 40.1 | 53.7 | 49.4 | 48.8 |
| 102.5° | 0.0 | 39.5 | 48.8 | 45.1 | 44.5 |
| 105° | 0.0 | 38.3 | 46.9 | 42.6 | 42.0 |
| 107.5° | 0.0 | 36.4 | 45.7 | 41.4 | 40.1 |
| 110° | 0.0 | 34.6 | 45.7 | 40.8 | 38.9 |



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-35SL-SLC-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 32.7 | 45.7 | 40.1 | 38.3 |
| 115° | 0.0 | 31.5 | 45.1 | 40.1 | 38.3 |
| 117.5° | 0.6 | 30.3 | 44.5 | 40.1 | 38.3 |
| 120° | 0.0 | 29.0 | 43.2 | 40.1 | 37.7 |
| 122.5° | 0.6 | 27.2 | 42.0 | 39.5 | 37.7 |
| 125° | 0.6 | 25.3 | 40.1 | 38.9 | 37.1 |
| 127.5° | 0.6 | 23.5 | 38.3 | 37.7 | 35.8 |
| 130° | 0.6 | 21.6 | 36.4 | 37.1 | 35.2 |
| 132.5° | 0.6 | 19.8 | 34.0 | 35.8 | 34.6 |
| 135° | 0.6 | 17.9 | 32.1 | 35.2 | 34.0 |
| 137.5° | 0.6 | 16.1 | 29.6 | 33.4 | 33.4 |
| 140° | 0.6 | 14.2 | 27.2 | 32.1 | 32.7 |
| 142.5° | 0.6 | 13.0 | 24.7 | 30.9 | 31.5 |
| 145° | 0.6 | 11.1 | 22.2 | 28.4 | 30.3 |
| 147.5° | 0.6 | 9.9 | 19.8 | 25.9 | 28.4 |
| 150° | 0.6 | 8.6 | 17.3 | 23.5 | 25.9 |
| 152.5° | 0.6 | 7.4 | 15.4 | 20.4 | 24.1 |
| 155° | 1.2 | 6.8 | 13.6 | 17.9 | 21.6 |
| 157.5° | 1.2 | 5.6 | 11.1 | 15.4 | 18.5 |
| 160° | 1.2 | 4.9 | 9.9 | 13.0 | 16.7 |
| 162.5° | 1.2 | 4.3 | 8.0 | 11.1 | 14.2 |
| 165° | 1.2 | 3.7 | 6.8 | 8.6 | 11.7 |
| 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)