

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: **4SRL-LD5-61SL-LC-UNV-L840-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 (P35657)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SRL-LD5-61SL-LC-UNV-L840-CD1-U
Description: SRL LINEAR LED

Light Source: -
Ballast/Driver: -

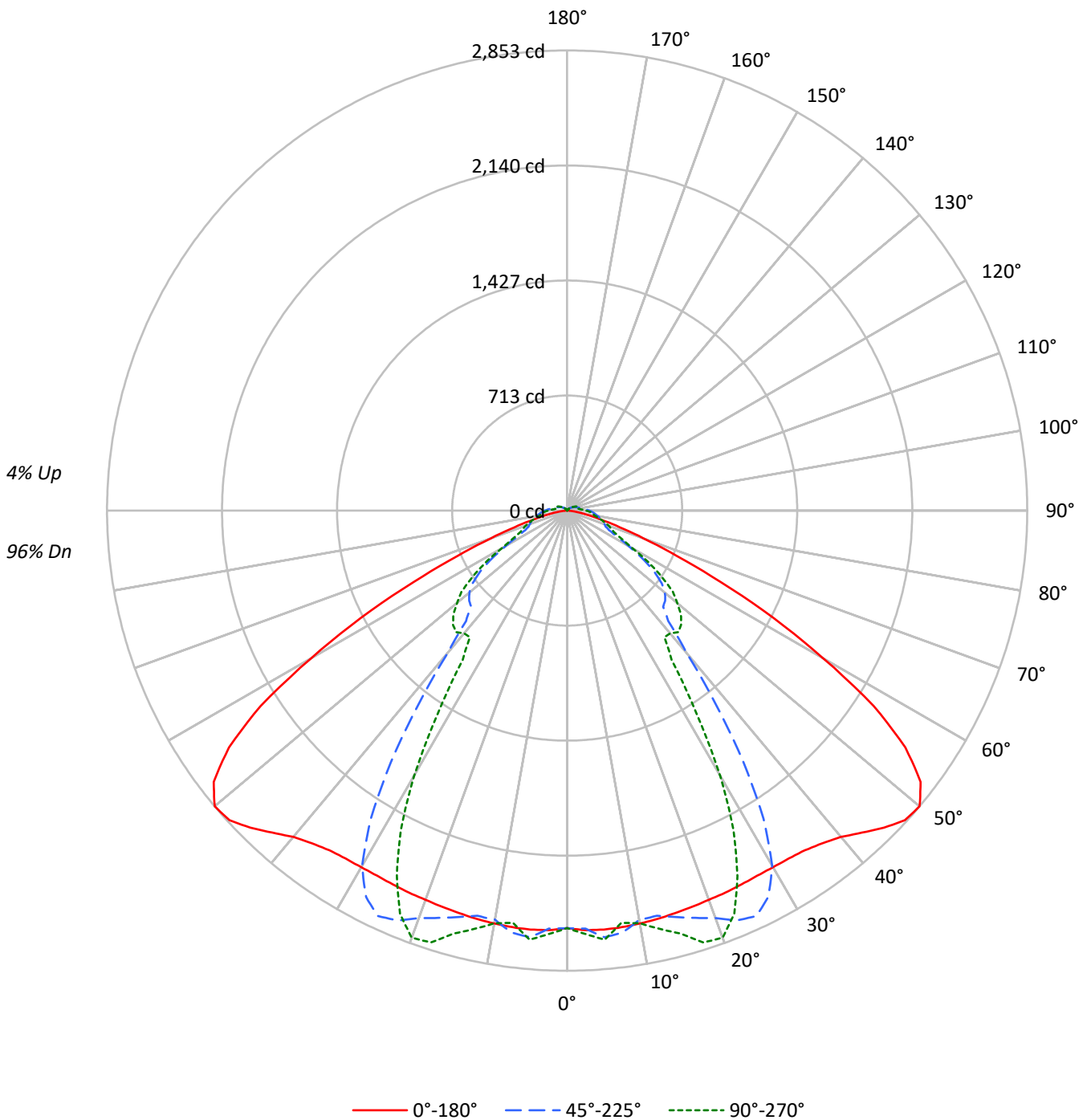
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6244.0 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 1.13 / 1.12
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 3.67' x H: 0.17')
CIE Type: Direct

Input Watts (W): 47
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: P#
CATALOG NUMBER: 4SRL-LD5-61SL-LC-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-61SL-LC-UNV-L840-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 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 96 |
| 1 | 109 | 105 | 101 | 97 | 106 | 102 | 99 | 95 | 97 | 94 | 92 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 100 | 93 | 87 | 82 | 98 | 91 | 85 | 81 | 87 | 82 | 78 | 83 | 79 | 76 | 80 | 77 | 74 | 72 |
| 3 | 93 | 83 | 76 | 70 | 90 | 81 | 75 | 69 | 78 | 72 | 67 | 75 | 70 | 66 | 72 | 68 | 64 | 62 |
| 4 | 86 | 75 | 67 | 61 | 83 | 73 | 66 | 60 | 70 | 64 | 59 | 68 | 62 | 58 | 65 | 60 | 57 | 54 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 59 | 54 | 50 | 48 |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 54 | 49 | 45 | 43 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 45 | 41 | 50 | 45 | 40 | 38 |
| 8 | 64 | 51 | 43 | 38 | 62 | 51 | 43 | 38 | 49 | 42 | 37 | 48 | 41 | 37 | 46 | 41 | 37 | 35 |
| 9 | 60 | 47 | 40 | 35 | 58 | 47 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 43 | 37 | 33 | 32 |
| 10 | 56 | 44 | 36 | 32 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 40 | 34 | 31 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 30402 | 30402 | 30402 |
| 5° | 30616 | 29983 | 29741 |
| 10° | 30751 | 28208 | 27723 |
| 15° | 31032 | 27947 | 27996 |
| 20° | 31565 | 28397 | 28340 |
| 25° | 32443 | 29108 | 24694 |
| 30° | 33732 | 26709 | 18581 |
| 35° | 35710 | 20199 | 11037 |
| 40° | 38996 | 12370 | 9766 |
| 45° | 44150 | 9296 | 9966 |
| 50° | 49437 | 9032 | 9070 |
| 55° | 49210 | 7835 | 7500 |
| 60° | 39956 | 5529 | 5080 |
| 65° | 26570 | 3825 | 3686 |
| 70° | 15325 | 3549 | 3327 |
| 75° | 8421 | 3484 | 2824 |
| 80° | 4656 | 3341 | 2412 |
| 85° | 2128 | 3293 | 2373 |



TEST NUMBER: P#

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 250.3 | 4.0 |
| 10°-20° | 750.7 | 12.0 |
| 20°-30° | 1194.7 | 19.1 |
| 30°-40° | 1217.6 | 19.5 |
| 40°-50° | 1028.3 | 16.5 |
| 50°-60° | 792.7 | 12.7 |
| 60°-70° | 409.5 | 6.6 |
| 70°-80° | 226.3 | 3.6 |
| 80°-90° | 144.0 | 2.3 |
| 90°-100° | 88.6 | 1.4 |
| 100°-110° | 57.1 | 0.9 |
| 110°-120° | 41.4 | 0.7 |
| 120°-130° | 23.9 | 0.4 |
| 130°-140° | 11.6 | 0.2 |
| 140°-150° | 4.8 | 0.1 |
| 150°-160° | 1.7 | 0.0 |
| 160°-170° | 0.6 | 0.0 |
| 170°-180° | 0.2 | 0.0 |
| 0°-30° | 2195.7 | 35.2 |
| 0°-40° | 3413.2 | 54.7 |
| 0°-60° | 5234.3 | 83.8 |
| 0°-90° | 6014.0 | 96.3 |
| 90°-120° | 187.2 | 3.0 |
| 90°-150° | 227.5 | 3.6 |
| 90°-180° | 230.0 | 3.7 |
| 0°-180° | 6244.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2589 | 2589 | 2589 | 2589 | 2589 | |
| 5° | 2608 | 2617 | 2656 | 2681 | 2670 | 249 |
| 15° | 2584 | 2585 | 2609 | 2702 | 2714 | 732 |
| 25° | 2557 | 2574 | 2774 | 2638 | 2498 | 1184 |
| 35° | 2570 | 2692 | 1906 | 1296 | 1129 | 1622 |
| 45° | 2780 | 1622 | 842 | 971 | 1000 | 2147 |
| 55° | 2560 | 597 | 658 | 715 | 715 | 2216 |
| 65° | 1050 | 273 | 286 | 322 | 322 | 1083 |
| 75° | 217 | 180 | 221 | 222 | 217 | 262 |
| 85° | 24 | 117 | 165 | 160 | 152 | 33 |
| 90° | 0 | 91 | 137 | 126 | 117 | 1 |
| 95° | 0 | 71 | 109 | 96 | 88 | 0 |
| 105° | 0 | 43 | 72 | 67 | 63 | 0 |
| 115° | 1 | 25 | 52 | 63 | 61 | 1 |
| 125° | 1 | 13 | 33 | 40 | 36 | 1 |
| 135° | 1 | 7 | 19 | 23 | 19 | 1 |
| 145° | 1 | 3 | 9 | 12 | 9 | 1 |
| 155° | 1 | 1 | 4 | 5 | 3 | 1 |
| 165° | 1 | 3 | 3 | 3 | 0 | 0 |
| 175° | 3 | 3 | 3 | 3 | 0 | 0 |
| 180° | 1 | 1 | 1 | 1 | 1 | |



TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-61SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 2589.1 | 2589.1 | 2589.1 | 2589.1 | 2589.1 |
| 2.5° | 2603.7 | 2594.4 | 2594.4 | 2627.7 | 2627.7 |
| 5° | 2607.7 | 2617.1 | 2655.7 | 2681.0 | 2670.3 |
| 7.5° | 2605.1 | 2647.7 | 2638.4 | 2601.1 | 2577.1 |
| 10° | 2599.7 | 2663.7 | 2575.8 | 2601.1 | 2598.4 |
| 12.5° | 2593.1 | 2639.7 | 2573.1 | 2662.3 | 2657.0 |
| 15° | 2583.8 | 2585.1 | 2609.1 | 2702.3 | 2714.3 |
| 17.5° | 2575.8 | 2550.5 | 2647.7 | 2772.9 | 2807.5 |
| 20° | 2567.8 | 2539.8 | 2689.0 | 2832.8 | 2818.2 |
| 22.5° | 2563.8 | 2549.1 | 2750.2 | 2787.5 | 2706.3 |
| 25° | 2557.1 | 2574.4 | 2774.2 | 2638.4 | 2498.5 |
| 27.5° | 2551.8 | 2603.7 | 2701.0 | 2384.0 | 2234.8 |
| 30° | 2553.1 | 2645.0 | 2542.5 | 2085.7 | 1897.9 |
| 32.5° | 2557.1 | 2685.0 | 2266.8 | 1686.1 | 1491.7 |
| 35° | 2570.4 | 2691.6 | 1905.9 | 1295.9 | 1129.4 |
| 37.5° | 2599.7 | 2618.4 | 1513.0 | 1025.5 | 989.6 |
| 40° | 2641.0 | 2397.3 | 1148.0 | 957.6 | 993.5 |
| 42.5° | 2707.6 | 2025.7 | 928.3 | 968.2 | 1021.5 |
| 45° | 2779.5 | 1622.2 | 841.7 | 970.9 | 1000.2 |
| 47.5° | 2840.8 | 1197.3 | 824.4 | 934.9 | 956.3 |
| 50° | 2852.8 | 901.7 | 791.1 | 877.7 | 891.0 |
| 52.5° | 2762.2 | 712.5 | 737.8 | 801.8 | 825.7 |
| 55° | 2559.8 | 596.7 | 657.9 | 715.2 | 715.2 |
| 57.5° | 2254.8 | 506.1 | 552.7 | 607.3 | 602.0 |
| 60° | 1835.3 | 416.9 | 440.8 | 474.1 | 466.1 |
| 62.5° | 1443.7 | 334.3 | 342.3 | 378.2 | 383.6 |
| 65° | 1049.5 | 273.0 | 286.3 | 322.3 | 322.3 |
| 67.5° | 736.5 | 233.1 | 258.4 | 291.7 | 294.3 |
| 70° | 502.1 | 210.4 | 246.4 | 273.0 | 274.4 |
| 72.5° | 342.3 | 194.4 | 234.4 | 249.1 | 245.1 |
| 75° | 217.1 | 179.8 | 221.1 | 222.4 | 217.1 |
| 77.5° | 141.2 | 163.8 | 207.8 | 197.1 | 193.1 |
| 80° | 86.6 | 147.8 | 190.5 | 177.1 | 170.5 |
| 82.5° | 49.3 | 131.9 | 177.1 | 167.8 | 161.2 |
| 85° | 24.0 | 117.2 | 165.1 | 159.8 | 151.8 |
| 87.5° | 9.3 | 103.9 | 151.8 | 143.8 | 135.8 |
| 90° | 0.0 | 90.6 | 137.2 | 126.5 | 117.2 |
| 92.5° | 0.0 | 79.9 | 122.5 | 109.2 | 101.2 |
| 95° | 0.0 | 70.6 | 109.2 | 95.9 | 87.9 |
| 97.5° | 0.0 | 62.6 | 97.2 | 85.2 | 75.9 |
| 100° | 0.0 | 55.9 | 87.9 | 75.9 | 69.3 |
| 102.5° | 0.0 | 49.3 | 78.6 | 70.6 | 66.6 |
| 105° | 0.0 | 42.6 | 71.9 | 66.6 | 62.6 |
| 107.5° | 0.0 | 37.3 | 65.3 | 63.9 | 61.3 |
| 110° | 0.0 | 33.3 | 61.3 | 62.6 | 63.9 |



TEST NUMBER: P#

CATALOG NUMBER: 4SRL-LD5-61SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 29.3 | 55.9 | 63.9 | 65.3 |
| 115° | 1.3 | 25.3 | 51.9 | 62.6 | 61.3 |
| 117.5° | 1.3 | 21.3 | 46.6 | 55.9 | 53.3 |
| 120° | 1.3 | 18.6 | 42.6 | 50.6 | 46.6 |
| 122.5° | 1.3 | 16.0 | 37.3 | 44.0 | 41.3 |
| 125° | 1.3 | 13.3 | 33.3 | 40.0 | 36.0 |
| 127.5° | 1.3 | 12.0 | 29.3 | 34.6 | 32.0 |
| 130° | 1.3 | 10.7 | 25.3 | 30.6 | 28.0 |
| 132.5° | 1.3 | 8.0 | 22.6 | 26.6 | 22.6 |
| 135° | 1.3 | 6.7 | 18.6 | 22.6 | 18.6 |
| 137.5° | 1.3 | 5.3 | 16.0 | 18.6 | 16.0 |
| 140° | 1.3 | 4.0 | 13.3 | 16.0 | 13.3 |
| 142.5° | 1.3 | 4.0 | 10.7 | 14.7 | 10.7 |
| 145° | 1.3 | 2.7 | 9.3 | 12.0 | 9.3 |
| 147.5° | 1.3 | 2.7 | 8.0 | 10.7 | 8.0 |
| 150° | 1.3 | 2.7 | 6.7 | 9.3 | 5.3 |
| 152.5° | 1.3 | 1.3 | 5.3 | 8.0 | 4.0 |
| 155° | 1.3 | 1.3 | 4.0 | 5.3 | 2.7 |
| 157.5° | 1.3 | 1.3 | 4.0 | 4.0 | 2.7 |
| 160° | 1.3 | 1.3 | 4.0 | 4.0 | 1.3 |
| 162.5° | 1.3 | 1.3 | 2.7 | 2.7 | 0.0 |
| 165° | 1.3 | 2.7 | 2.7 | 2.7 | 0.0 |
| 167.5° | 1.3 | 2.7 | 2.7 | 2.7 | 0.0 |
| 170° | 1.3 | 2.7 | 2.7 | 2.7 | 0.0 |
| 172.5° | 1.3 | 2.7 | 2.7 | 2.7 | 0.0 |
| 175° | 2.7 | 2.7 | 2.7 | 2.7 | 0.0 |
| 177.5° | 2.7 | 2.7 | 2.7 | 2.7 | 0.0 |
| 180° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |

(END OF REPORT)