

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: **8SNLED-LD5-83SL-SLN-UNV-L835-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 (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8SNLED-LD5-83SL-SLN-UNV-L835-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

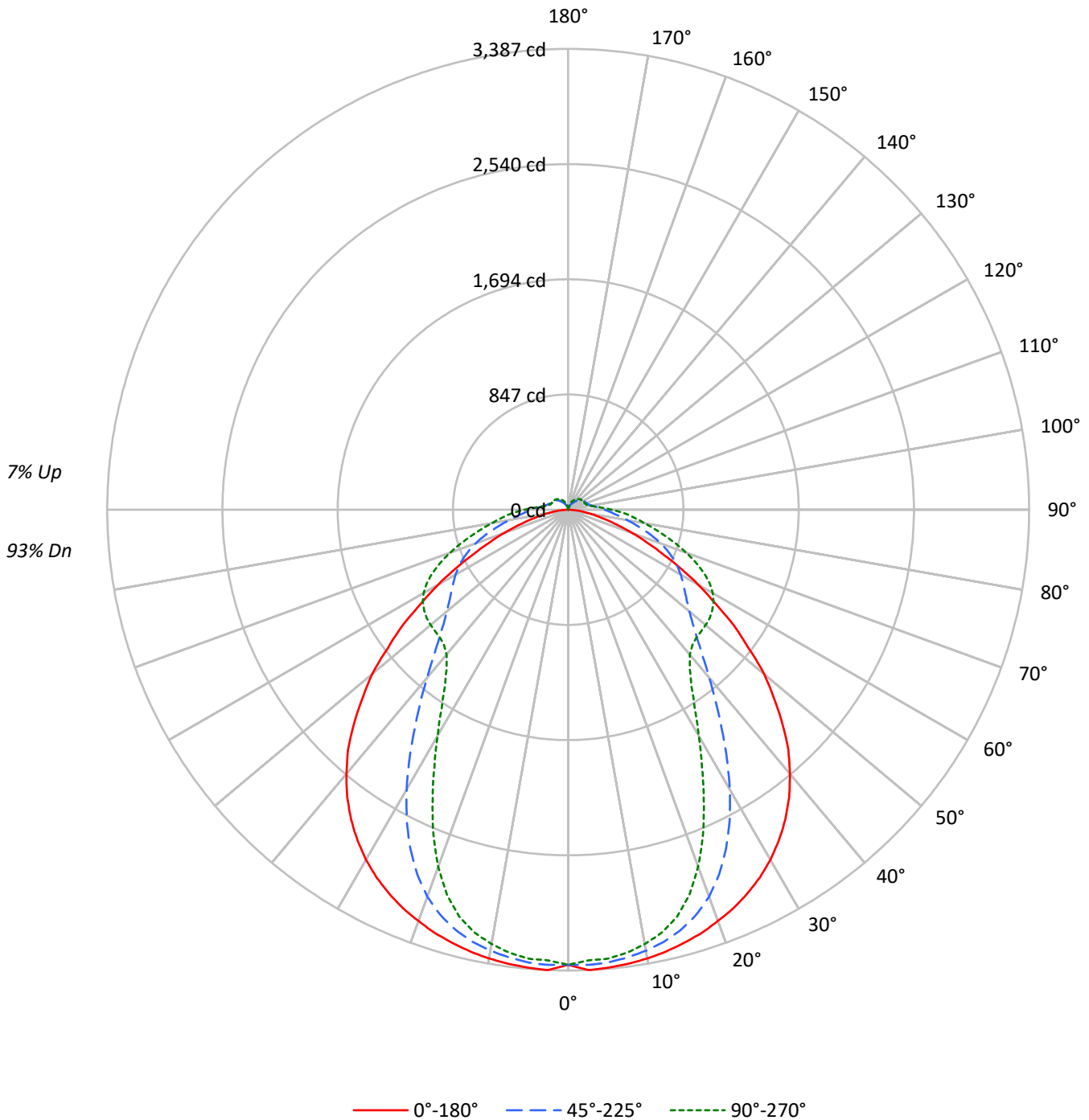
Lumens per Lamp: N/A
Luminaire Lumens: 8411.0 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Direct

Input Watts (W): 61
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#
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Luminous Intensity Polar Plot





TEST NUMBER: P#

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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 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 107 | 102 | 97 | 93 | 103 | 99 | 94 | 91 | 93 | 90 | 87 | 88 | 85 | 83 | 83 | 81 | 79 | 76 |
| 2 | 97 | 89 | 82 | 76 | 94 | 86 | 80 | 75 | 81 | 76 | 72 | 77 | 73 | 69 | 73 | 70 | 66 | 64 |
| 3 | 89 | 78 | 70 | 64 | 86 | 76 | 69 | 63 | 72 | 66 | 61 | 68 | 63 | 59 | 65 | 61 | 57 | 54 |
| 4 | 82 | 70 | 61 | 55 | 79 | 68 | 60 | 54 | 65 | 58 | 52 | 61 | 55 | 51 | 58 | 53 | 49 | 47 |
| 5 | 75 | 63 | 54 | 47 | 73 | 61 | 53 | 47 | 58 | 51 | 46 | 55 | 49 | 44 | 53 | 48 | 43 | 41 |
| 6 | 70 | 57 | 48 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 40 | 51 | 44 | 39 | 48 | 43 | 39 | 36 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 42 | 37 | 48 | 41 | 36 | 46 | 40 | 35 | 44 | 39 | 35 | 32 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 39 | 33 | 44 | 37 | 32 | 43 | 36 | 32 | 41 | 35 | 31 | 29 |
| 9 | 57 | 44 | 36 | 30 | 55 | 43 | 35 | 30 | 41 | 34 | 29 | 40 | 33 | 29 | 38 | 33 | 28 | 27 |
| 10 | 53 | 40 | 33 | 28 | 52 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 35 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13514 | 13514 | 13514 |
| 5° | 13688 | 13228 | 13009 |
| 10° | 13702 | 12874 | 12473 |
| 15° | 13726 | 12454 | 11761 |
| 20° | 13753 | 11822 | 10563 |
| 25° | 13780 | 10843 | 8945 |
| 30° | 13738 | 9550 | 7357 |
| 35° | 13567 | 8133 | 6165 |
| 40° | 13197 | 6895 | 5574 |
| 45° | 12528 | 5999 | 5531 |
| 50° | 11607 | 5491 | 5725 |
| 55° | 10256 | 5285 | 5926 |
| 60° | 8692 | 5218 | 6008 |
| 65° | 7032 | 5113 | 5821 |
| 70° | 5697 | 4860 | 5368 |
| 75° | 4353 | 4411 | 4764 |
| 80° | 3294 | 3978 | 4237 |
| 85° | 2344 | 3774 | 3898 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-83SL-SLN-UNV-L835-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 316.4 | 3.8 |
| 10°-20° | 894.4 | 10.6 |
| 20°-30° | 1250.2 | 14.9 |
| 30°-40° | 1296.8 | 15.4 |
| 40°-50° | 1198.1 | 14.2 |
| 50°-60° | 1069.6 | 12.7 |
| 60°-70° | 866.8 | 10.3 |
| 70°-80° | 576.6 | 6.9 |
| 80°-90° | 330.2 | 3.9 |
| 90°-100° | 182.7 | 2.2 |
| 100°-110° | 123.7 | 1.5 |
| 110°-120° | 103.0 | 1.2 |
| 120°-130° | 83.7 | 1.0 |
| 130°-140° | 60.4 | 0.7 |
| 140°-150° | 36.4 | 0.4 |
| 150°-160° | 17.5 | 0.2 |
| 160°-170° | 4.5 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 2461.0 | 29.3 |
| 0°-40° | 3757.8 | 44.7 |
| 0°-60° | 6025.5 | 71.6 |
| 0°-90° | 7799.1 | 92.7 |
| 90°-120° | 409.4 | 4.9 |
| 90°-150° | 589.9 | 7.0 |
| 90°-180° | 612.0 | 7.3 |
| 0°-180° | 8411.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3345 | 3345 | 3345 | 3345 | 3345 | |
| 5° | 3379 | 3323 | 3340 | 3317 | 3313 | 321 |
| 15° | 3295 | 3225 | 3198 | 3125 | 3094 | 931 |
| 25° | 3113 | 2975 | 2746 | 2458 | 2358 | 1435 |
| 35° | 2781 | 2475 | 1968 | 1653 | 1578 | 1735 |
| 45° | 2227 | 1765 | 1340 | 1292 | 1331 | 1712 |
| 55° | 1488 | 1125 | 1046 | 1217 | 1292 | 1323 |
| 65° | 760 | 680 | 852 | 1044 | 1099 | 768 |
| 75° | 295 | 369 | 574 | 704 | 733 | 323 |
| 85° | 60 | 172 | 339 | 433 | 445 | 69 |
| 90° | 3 | 121 | 267 | 323 | 320 | 5 |
| 95° | 3 | 102 | 212 | 227 | 220 | 2 |
| 105° | 2 | 89 | 153 | 148 | 141 | 2 |
| 115° | 2 | 80 | 135 | 134 | 129 | 1 |
| 125° | 2 | 68 | 119 | 125 | 122 | 2 |
| 135° | 3 | 51 | 94 | 110 | 110 | 2 |
| 145° | 3 | 32 | 65 | 86 | 92 | 2 |
| 155° | 3 | 20 | 41 | 54 | 65 | 1 |
| 165° | 3 | 12 | 20 | 26 | 35 | 1 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-83SL-SLN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3344.6 | 3344.6 | 3344.6 | 3344.6 | 3344.6 |
| 2.5° | 3386.7 | 3331.5 | 3348.9 | 3334.4 | 3315.5 |
| 5° | 3379.4 | 3322.7 | 3340.2 | 3316.9 | 3312.6 |
| 7.5° | 3366.4 | 3309.7 | 3319.8 | 3292.2 | 3285.0 |
| 10° | 3348.9 | 3289.3 | 3290.8 | 3251.5 | 3241.4 |
| 12.5° | 3325.7 | 3260.2 | 3251.5 | 3197.7 | 3183.2 |
| 15° | 3295.1 | 3225.4 | 3197.7 | 3125.1 | 3094.5 |
| 17.5° | 3261.7 | 3180.3 | 3123.6 | 3011.7 | 2963.7 |
| 20° | 3216.6 | 3125.1 | 3026.2 | 2856.2 | 2792.2 |
| 22.5° | 3171.6 | 3058.2 | 2899.8 | 2673.0 | 2587.3 |
| 25° | 3113.4 | 2975.4 | 2745.7 | 2457.9 | 2357.6 |
| 27.5° | 3048.0 | 2878.0 | 2568.4 | 2237.0 | 2129.4 |
| 30° | 2971.0 | 2760.2 | 2373.6 | 2020.4 | 1918.6 |
| 32.5° | 2880.9 | 2628.0 | 2168.7 | 1825.6 | 1731.1 |
| 35° | 2780.6 | 2475.3 | 1968.1 | 1652.7 | 1578.5 |
| 37.5° | 2665.8 | 2308.2 | 1782.0 | 1513.1 | 1465.1 |
| 40° | 2534.9 | 2126.5 | 1610.5 | 1405.6 | 1389.6 |
| 42.5° | 2393.9 | 1949.2 | 1463.7 | 1335.8 | 1350.3 |
| 45° | 2226.8 | 1764.6 | 1340.1 | 1292.2 | 1331.4 |
| 47.5° | 2050.9 | 1584.3 | 1239.9 | 1267.5 | 1324.2 |
| 50° | 1880.9 | 1417.2 | 1161.4 | 1251.5 | 1318.3 |
| 52.5° | 1670.1 | 1267.5 | 1098.9 | 1236.9 | 1309.6 |
| 55° | 1488.4 | 1125.0 | 1046.5 | 1216.6 | 1292.2 |
| 57.5° | 1279.1 | 997.1 | 1000.0 | 1190.4 | 1266.0 |
| 60° | 1104.7 | 880.8 | 955.0 | 1154.1 | 1226.8 |
| 62.5° | 927.3 | 776.2 | 905.5 | 1106.1 | 1171.5 |
| 65° | 760.2 | 680.2 | 851.8 | 1043.6 | 1098.9 |
| 67.5° | 620.7 | 593.0 | 790.7 | 968.0 | 1014.6 |
| 70° | 502.9 | 513.1 | 723.9 | 883.7 | 923.0 |
| 72.5° | 386.6 | 439.0 | 651.2 | 793.6 | 827.1 |
| 75° | 295.1 | 369.2 | 574.1 | 703.5 | 732.6 |
| 77.5° | 218.0 | 308.1 | 504.4 | 622.1 | 646.8 |
| 80° | 154.1 | 254.4 | 439.0 | 550.9 | 569.8 |
| 82.5° | 103.2 | 209.3 | 385.2 | 486.9 | 504.4 |
| 85° | 59.6 | 171.5 | 338.7 | 433.1 | 444.8 |
| 87.5° | 24.7 | 142.4 | 300.9 | 377.9 | 383.7 |
| 90° | 2.9 | 120.6 | 267.4 | 322.7 | 319.8 |
| 92.5° | 2.9 | 109.0 | 238.4 | 270.4 | 263.1 |
| 95° | 2.9 | 101.7 | 212.2 | 226.7 | 219.5 |
| 97.5° | 2.9 | 97.4 | 189.0 | 194.8 | 187.5 |
| 100° | 1.5 | 94.5 | 173.0 | 173.0 | 165.7 |
| 102.5° | 1.5 | 91.6 | 161.3 | 157.0 | 151.2 |
| 105° | 1.5 | 88.7 | 152.6 | 148.3 | 141.0 |
| 107.5° | 1.5 | 87.2 | 146.8 | 142.4 | 135.2 |
| 110° | 1.5 | 84.3 | 142.4 | 138.1 | 132.3 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-83SL-SLN-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 1.5 | 82.9 | 139.5 | 136.6 | 129.4 |
| 115° | 1.5 | 79.9 | 135.2 | 133.7 | 129.4 |
| 117.5° | 1.5 | 77.0 | 132.3 | 132.3 | 127.9 |
| 120° | 1.5 | 74.1 | 127.9 | 130.8 | 126.5 |
| 122.5° | 1.5 | 71.2 | 123.5 | 127.9 | 123.5 |
| 125° | 1.5 | 68.3 | 119.2 | 125.0 | 122.1 |
| 127.5° | 2.9 | 64.0 | 113.4 | 122.1 | 119.2 |
| 130° | 1.5 | 59.6 | 107.6 | 119.2 | 117.7 |
| 132.5° | 2.9 | 55.2 | 101.7 | 114.8 | 114.8 |
| 135° | 2.9 | 50.9 | 94.5 | 110.5 | 110.5 |
| 137.5° | 2.9 | 45.1 | 87.2 | 104.7 | 106.1 |
| 140° | 2.9 | 40.7 | 79.9 | 98.8 | 101.7 |
| 142.5° | 2.9 | 36.3 | 72.7 | 93.0 | 97.4 |
| 145° | 2.9 | 32.0 | 65.4 | 85.8 | 91.6 |
| 147.5° | 2.9 | 29.1 | 58.1 | 77.0 | 85.8 |
| 150° | 2.9 | 24.7 | 52.3 | 69.8 | 78.5 |
| 152.5° | 2.9 | 21.8 | 46.5 | 62.5 | 72.7 |
| 155° | 2.9 | 20.3 | 40.7 | 53.8 | 65.4 |
| 157.5° | 2.9 | 17.4 | 34.9 | 46.5 | 58.1 |
| 160° | 2.9 | 14.5 | 29.1 | 40.7 | 49.4 |
| 162.5° | 2.9 | 13.1 | 24.7 | 33.4 | 43.6 |
| 165° | 2.9 | 11.6 | 20.3 | 26.2 | 34.9 |
| 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)