

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-LD5-200HL-SLN-UNV-L940-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-LD5-200HL-SLN-UNV-L940-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

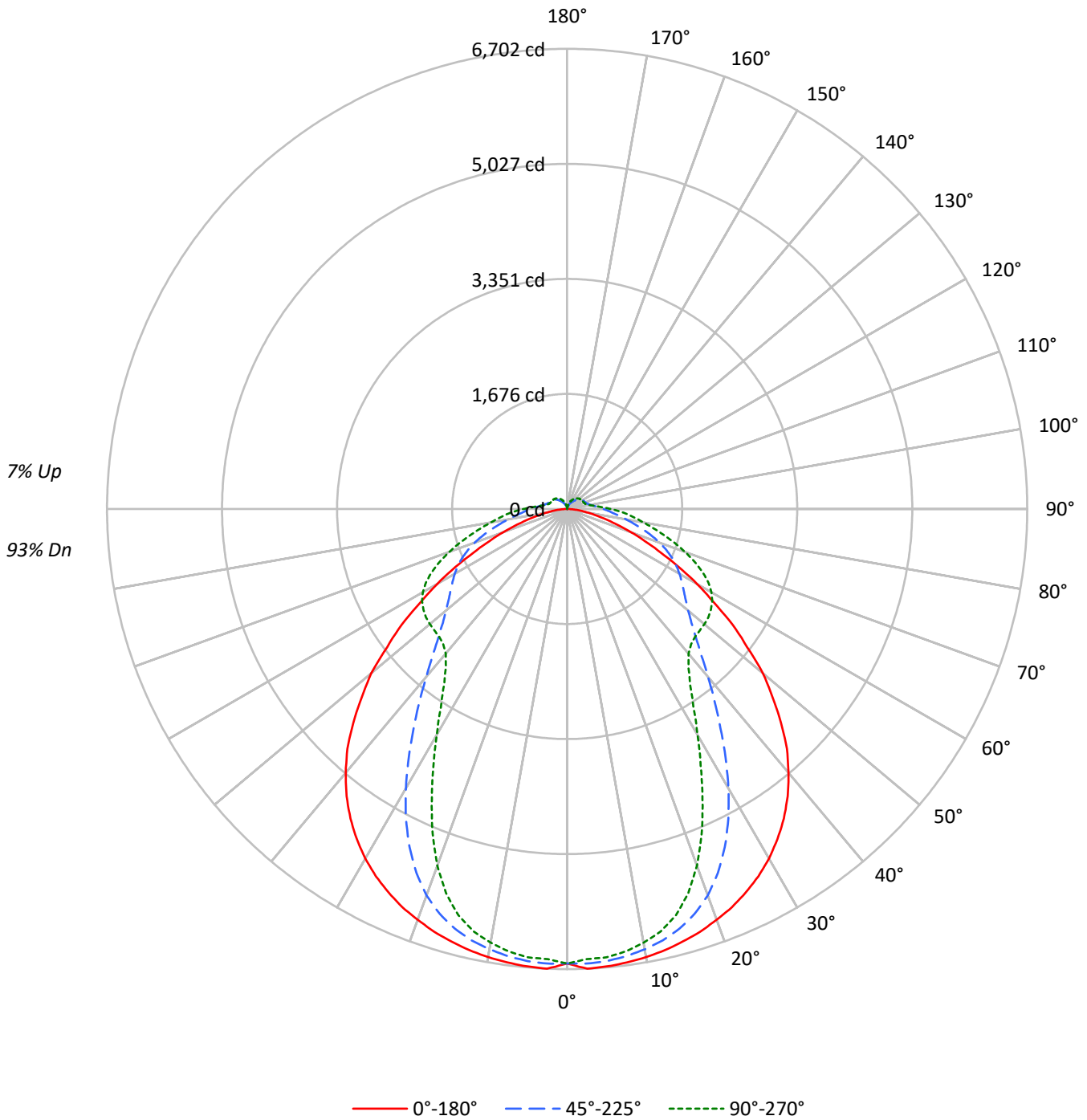
Lumens per Lamp: N/A
Luminaire Lumens: 16645.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Direct

Input Watts (W): 158
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





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-SLN-UNV-L940-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 | 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° | 26743 | 26743 | 26743 |
| 5° | 27088 | 26177 | 25743 |
| 10° | 27116 | 25477 | 24684 |
| 15° | 27163 | 24645 | 23276 |
| 20° | 27216 | 23396 | 20904 |
| 25° | 27270 | 21458 | 17702 |
| 30° | 27186 | 18898 | 14559 |
| 35° | 26849 | 16095 | 12201 |
| 40° | 26117 | 13645 | 11030 |
| 45° | 24793 | 11872 | 10947 |
| 50° | 22969 | 10866 | 11331 |
| 55° | 20296 | 10459 | 11727 |
| 60° | 17200 | 10326 | 11889 |
| 65° | 13917 | 10117 | 11518 |
| 70° | 11274 | 9617 | 10622 |
| 75° | 8613 | 8730 | 9426 |
| 80° | 6517 | 7871 | 8386 |
| 85° | 4638 | 7469 | 7713 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-SLN-UNV-L940-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 626.2 | 3.8 |
| 10°-20° | 1769.9 | 10.6 |
| 20°-30° | 2474.2 | 14.9 |
| 30°-40° | 2566.3 | 15.4 |
| 40°-50° | 2370.9 | 14.2 |
| 50°-60° | 2116.7 | 12.7 |
| 60°-70° | 1715.5 | 10.3 |
| 70°-80° | 1141.0 | 6.9 |
| 80°-90° | 653.4 | 3.9 |
| 90°-100° | 361.5 | 2.2 |
| 100°-110° | 244.8 | 1.5 |
| 110°-120° | 203.8 | 1.2 |
| 120°-130° | 165.7 | 1.0 |
| 130°-140° | 119.5 | 0.7 |
| 140°-150° | 72.1 | 0.4 |
| 150°-160° | 34.6 | 0.2 |
| 160°-170° | 9.0 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 4870.2 | 29.3 |
| 0°-40° | 7436.6 | 44.7 |
| 0°-60° | 11924.2 | 71.6 |
| 0°-90° | 15434.0 | 92.7 |
| 90°-120° | 810.1 | 4.9 |
| 90°-150° | 1167.4 | 7.0 |
| 90°-180° | 1211.0 | 7.3 |
| 0°-180° | 16645.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 6619 | 6619 | 6619 | 6619 | 6619 | |
| 5° | 6688 | 6576 | 6610 | 6564 | 6555 | 636 |
| 15° | 6521 | 6383 | 6328 | 6184 | 6124 | 1843 |
| 25° | 6161 | 5888 | 5434 | 4864 | 4666 | 2839 |
| 35° | 5503 | 4899 | 3895 | 3270 | 3124 | 3433 |
| 45° | 4407 | 3492 | 2652 | 2557 | 2635 | 3388 |
| 55° | 2946 | 2226 | 2071 | 2408 | 2557 | 2619 |
| 65° | 1504 | 1346 | 1686 | 2065 | 2175 | 1521 |
| 75° | 584 | 731 | 1136 | 1392 | 1450 | 640 |
| 85° | 118 | 339 | 670 | 857 | 880 | 136 |
| 90° | 6 | 239 | 529 | 639 | 633 | 9 |
| 95° | 6 | 201 | 420 | 449 | 434 | 4 |
| 105° | 3 | 176 | 302 | 293 | 279 | 3 |
| 115° | 3 | 158 | 268 | 265 | 256 | 3 |
| 125° | 3 | 135 | 236 | 247 | 242 | 3 |
| 135° | 6 | 101 | 187 | 219 | 219 | 4 |
| 145° | 6 | 63 | 129 | 170 | 181 | 4 |
| 155° | 6 | 40 | 80 | 106 | 129 | 3 |
| 165° | 6 | 23 | 40 | 52 | 69 | 1 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 6618.7 | 6618.7 | 6618.7 | 6618.7 | 6618.7 |
| 2.5° | 6702.1 | 6592.8 | 6627.3 | 6598.6 | 6561.2 |
| 5° | 6687.8 | 6575.6 | 6610.1 | 6564.1 | 6555.4 |
| 7.5° | 6661.9 | 6549.7 | 6569.8 | 6515.2 | 6500.8 |
| 10° | 6627.3 | 6509.4 | 6512.3 | 6434.6 | 6414.5 |
| 12.5° | 6581.3 | 6451.9 | 6434.6 | 6328.2 | 6299.4 |
| 15° | 6520.9 | 6382.8 | 6328.2 | 6184.4 | 6124.0 |
| 17.5° | 6454.8 | 6293.7 | 6181.5 | 5960.0 | 5865.1 |
| 20° | 6365.6 | 6184.4 | 5988.8 | 5652.2 | 5525.7 |
| 22.5° | 6276.4 | 6052.1 | 5738.5 | 5289.8 | 5120.1 |
| 25° | 6161.4 | 5888.1 | 5433.6 | 4864.1 | 4665.6 |
| 27.5° | 6031.9 | 5695.4 | 5082.7 | 4426.9 | 4214.0 |
| 30° | 5879.5 | 5462.4 | 4697.2 | 3998.3 | 3796.9 |
| 32.5° | 5701.1 | 5200.6 | 4291.7 | 3612.8 | 3425.9 |
| 35° | 5502.7 | 4898.6 | 3894.7 | 3270.5 | 3123.8 |
| 37.5° | 5275.4 | 4567.8 | 3526.5 | 2994.4 | 2899.5 |
| 40° | 5016.5 | 4208.3 | 3187.1 | 2781.5 | 2749.9 |
| 42.5° | 4737.5 | 3857.3 | 2896.6 | 2643.5 | 2672.2 |
| 45° | 4406.7 | 3492.0 | 2652.1 | 2557.2 | 2634.8 |
| 47.5° | 4058.7 | 3135.3 | 2453.6 | 2508.3 | 2620.4 |
| 50° | 3722.1 | 2804.5 | 2298.3 | 2476.6 | 2608.9 |
| 52.5° | 3305.0 | 2508.3 | 2174.6 | 2447.9 | 2591.7 |
| 55° | 2945.5 | 2226.4 | 2071.0 | 2407.6 | 2557.2 |
| 57.5° | 2531.3 | 1973.2 | 1979.0 | 2355.8 | 2505.4 |
| 60° | 2186.1 | 1743.1 | 1889.8 | 2283.9 | 2427.7 |
| 62.5° | 1835.2 | 1536.0 | 1792.0 | 2189.0 | 2318.4 |
| 65° | 1504.4 | 1346.2 | 1685.6 | 2065.3 | 2174.6 |
| 67.5° | 1228.2 | 1173.6 | 1564.8 | 1915.7 | 2007.8 |
| 70° | 995.3 | 1015.4 | 1432.5 | 1748.9 | 1826.5 |
| 72.5° | 765.1 | 868.7 | 1288.7 | 1570.5 | 1636.7 |
| 75° | 583.9 | 730.6 | 1136.2 | 1392.2 | 1449.7 |
| 77.5° | 431.5 | 609.8 | 998.1 | 1231.1 | 1280.0 |
| 80° | 304.9 | 503.4 | 868.7 | 1090.2 | 1127.6 |
| 82.5° | 204.2 | 414.2 | 762.3 | 963.6 | 998.1 |
| 85° | 117.9 | 339.4 | 670.2 | 857.2 | 880.2 |
| 87.5° | 48.9 | 281.9 | 595.4 | 747.9 | 759.4 |
| 90° | 5.8 | 238.7 | 529.3 | 638.6 | 632.8 |
| 92.5° | 5.8 | 215.7 | 471.7 | 535.0 | 520.6 |
| 95° | 5.8 | 201.4 | 420.0 | 448.7 | 434.3 |
| 97.5° | 5.8 | 192.7 | 373.9 | 385.4 | 371.1 |
| 100° | 2.9 | 187.0 | 342.3 | 342.3 | 327.9 |
| 102.5° | 2.9 | 181.2 | 319.3 | 310.7 | 299.2 |
| 105° | 2.9 | 175.5 | 302.0 | 293.4 | 279.0 |
| 107.5° | 2.9 | 172.6 | 290.5 | 281.9 | 267.5 |
| 110° | 2.9 | 166.8 | 281.9 | 273.3 | 261.8 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.9 | 164.0 | 276.1 | 270.4 | 256.0 |
| 115° | 2.9 | 158.2 | 267.5 | 264.6 | 256.0 |
| 117.5° | 2.9 | 152.5 | 261.8 | 261.8 | 253.1 |
| 120° | 2.9 | 146.7 | 253.1 | 258.9 | 250.3 |
| 122.5° | 2.9 | 140.9 | 244.5 | 253.1 | 244.5 |
| 125° | 2.9 | 135.2 | 235.9 | 247.4 | 241.6 |
| 127.5° | 5.8 | 126.6 | 224.4 | 241.6 | 235.9 |
| 130° | 2.9 | 117.9 | 212.9 | 235.9 | 233.0 |
| 132.5° | 5.8 | 109.3 | 201.4 | 227.2 | 227.2 |
| 135° | 5.8 | 100.7 | 187.0 | 218.6 | 218.6 |
| 137.5° | 5.8 | 89.2 | 172.6 | 207.1 | 210.0 |
| 140° | 5.8 | 80.5 | 158.2 | 195.6 | 201.4 |
| 142.5° | 5.8 | 71.9 | 143.8 | 184.1 | 192.7 |
| 145° | 5.8 | 63.3 | 129.4 | 169.7 | 181.2 |
| 147.5° | 5.8 | 57.5 | 115.1 | 152.5 | 169.7 |
| 150° | 5.8 | 48.9 | 103.6 | 138.1 | 155.3 |
| 152.5° | 5.8 | 43.1 | 92.0 | 123.7 | 143.8 |
| 155° | 5.8 | 40.3 | 80.5 | 106.4 | 129.4 |
| 157.5° | 5.8 | 34.5 | 69.0 | 92.0 | 115.1 |
| 160° | 5.8 | 28.8 | 57.5 | 80.5 | 97.8 |
| 162.5° | 5.8 | 25.9 | 48.9 | 66.2 | 86.3 |
| 165° | 5.8 | 23.0 | 40.3 | 51.8 | 69.0 |
| 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)