

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-LD5-170HL-SLN-UNV-L950-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-LD5-170HL-SLN-UNV-L950-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

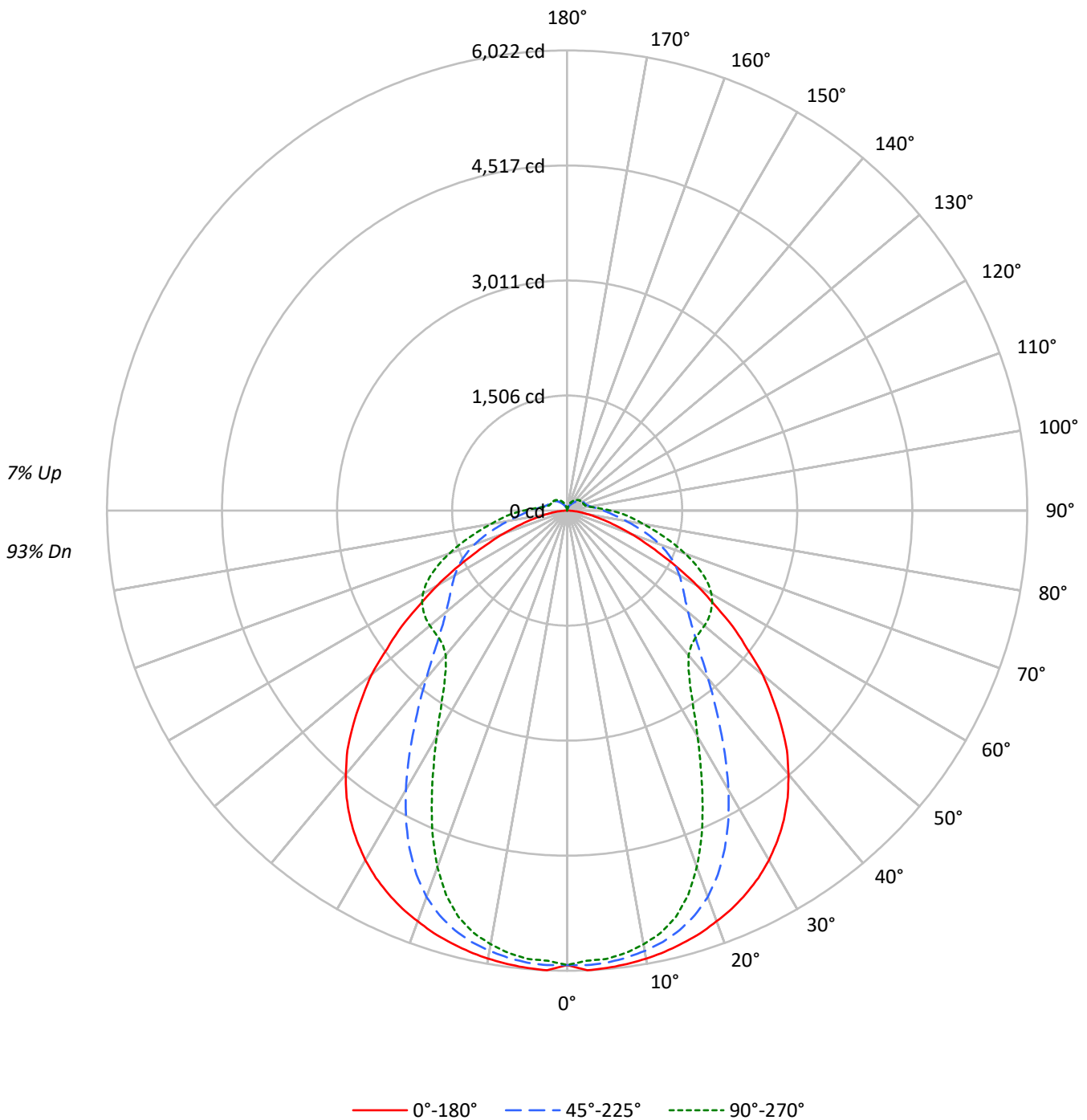
Lumens per Lamp: N/A
Luminaire Lumens: 14955.0 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Direct

Input Watts (W): 124
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: 8SNLED-LD5-170HL-SLN-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L950-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° | 24028 | 24028 | 24028 |
| 5° | 24338 | 23519 | 23129 |
| 10° | 24363 | 22890 | 22178 |
| 15° | 24405 | 22143 | 20913 |
| 20° | 24453 | 21021 | 18781 |
| 25° | 24501 | 19279 | 15904 |
| 30° | 24426 | 16980 | 13081 |
| 35° | 24123 | 14461 | 10963 |
| 40° | 23466 | 12259 | 9910 |
| 45° | 22276 | 10667 | 9835 |
| 50° | 20637 | 9763 | 10181 |
| 55° | 18235 | 9398 | 10536 |
| 60° | 15454 | 9278 | 10682 |
| 65° | 12503 | 9090 | 10349 |
| 70° | 10129 | 8641 | 9544 |
| 75° | 7738 | 7843 | 8469 |
| 80° | 5854 | 7072 | 7534 |
| 85° | 4169 | 6711 | 6930 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L950-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 562.6 | 3.8 |
| 10°-20° | 1590.2 | 10.6 |
| 20°-30° | 2222.9 | 14.9 |
| 30°-40° | 2305.8 | 15.4 |
| 40°-50° | 2130.2 | 14.2 |
| 50°-60° | 1901.8 | 12.7 |
| 60°-70° | 1541.3 | 10.3 |
| 70°-80° | 1025.2 | 6.9 |
| 80°-90° | 587.1 | 3.9 |
| 90°-100° | 324.8 | 2.2 |
| 100°-110° | 219.9 | 1.5 |
| 110°-120° | 183.1 | 1.2 |
| 120°-130° | 148.9 | 1.0 |
| 130°-140° | 107.4 | 0.7 |
| 140°-150° | 64.8 | 0.4 |
| 150°-160° | 31.1 | 0.2 |
| 160°-170° | 8.1 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 4375.8 | 29.3 |
| 0°-40° | 6681.5 | 44.7 |
| 0°-60° | 10713.5 | 71.6 |
| 0°-90° | 13867.0 | 92.7 |
| 90°-120° | 727.8 | 4.9 |
| 90°-150° | 1048.8 | 7.0 |
| 90°-180° | 1088.0 | 7.3 |
| 0°-180° | 14955.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5947 | 5947 | 5947 | 5947 | 5947 | |
| 5° | 6009 | 5908 | 5939 | 5898 | 5890 | 572 |
| 15° | 5859 | 5735 | 5686 | 5556 | 5502 | 1656 |
| 25° | 5536 | 5290 | 4882 | 4370 | 4192 | 2551 |
| 35° | 4944 | 4401 | 3499 | 2938 | 2807 | 3085 |
| 45° | 3959 | 3138 | 2383 | 2298 | 2367 | 3044 |
| 55° | 2646 | 2000 | 1861 | 2163 | 2298 | 2353 |
| 65° | 1352 | 1210 | 1514 | 1856 | 1954 | 1366 |
| 75° | 525 | 656 | 1021 | 1251 | 1302 | 575 |
| 85° | 106 | 305 | 602 | 770 | 791 | 122 |
| 90° | 5 | 214 | 476 | 574 | 569 | 8 |
| 95° | 5 | 181 | 377 | 403 | 390 | 4 |
| 105° | 3 | 158 | 271 | 264 | 251 | 3 |
| 115° | 3 | 142 | 240 | 238 | 230 | 3 |
| 125° | 3 | 122 | 212 | 222 | 217 | 3 |
| 135° | 5 | 90 | 168 | 196 | 196 | 4 |
| 145° | 5 | 57 | 116 | 152 | 163 | 3 |
| 155° | 5 | 36 | 72 | 96 | 116 | 2 |
| 165° | 5 | 21 | 36 | 46 | 62 | 1 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5946.7 | 5946.7 | 5946.7 | 5946.7 | 5946.7 |
| 2.5° | 6021.7 | 5923.4 | 5954.5 | 5928.6 | 5895.0 |
| 5° | 6008.7 | 5907.9 | 5939.0 | 5897.6 | 5889.8 |
| 7.5° | 5985.5 | 5884.7 | 5902.8 | 5853.7 | 5840.7 |
| 10° | 5954.5 | 5848.5 | 5851.1 | 5781.3 | 5763.2 |
| 12.5° | 5913.1 | 5796.8 | 5781.3 | 5685.7 | 5659.8 |
| 15° | 5858.8 | 5734.8 | 5685.7 | 5556.5 | 5502.2 |
| 17.5° | 5799.4 | 5654.7 | 5553.9 | 5354.9 | 5269.6 |
| 20° | 5719.3 | 5556.5 | 5380.7 | 5078.3 | 4964.6 |
| 22.5° | 5639.2 | 5437.6 | 5155.9 | 4752.7 | 4600.2 |
| 25° | 5535.8 | 5290.3 | 4881.9 | 4370.2 | 4191.9 |
| 27.5° | 5419.5 | 5117.1 | 4566.6 | 3977.4 | 3786.1 |
| 30° | 5282.5 | 4907.8 | 4220.3 | 3592.3 | 3411.4 |
| 32.5° | 5122.3 | 4672.6 | 3855.9 | 3246.0 | 3078.0 |
| 35° | 4944.0 | 4401.2 | 3499.3 | 2938.5 | 2806.7 |
| 37.5° | 4739.8 | 4104.0 | 3168.5 | 2690.4 | 2605.1 |
| 40° | 4507.2 | 3781.0 | 2863.5 | 2499.1 | 2470.7 |
| 42.5° | 4256.5 | 3465.7 | 2602.5 | 2375.1 | 2400.9 |
| 45° | 3959.3 | 3137.5 | 2382.8 | 2297.5 | 2367.3 |
| 47.5° | 3646.6 | 2817.0 | 2204.5 | 2253.6 | 2354.4 |
| 50° | 3344.2 | 2519.8 | 2064.9 | 2225.2 | 2344.1 |
| 52.5° | 2969.5 | 2253.6 | 1953.8 | 2199.3 | 2328.5 |
| 55° | 2646.4 | 2000.3 | 1860.8 | 2163.1 | 2297.5 |
| 57.5° | 2274.3 | 1772.9 | 1778.1 | 2116.6 | 2251.0 |
| 60° | 1964.1 | 1566.1 | 1698.0 | 2052.0 | 2181.2 |
| 62.5° | 1648.8 | 1380.1 | 1610.1 | 1966.7 | 2083.0 |
| 65° | 1351.6 | 1209.5 | 1514.5 | 1855.6 | 1953.8 |
| 67.5° | 1103.5 | 1054.4 | 1405.9 | 1721.2 | 1803.9 |
| 70° | 894.2 | 912.3 | 1287.0 | 1571.3 | 1641.1 |
| 72.5° | 687.5 | 780.5 | 1157.8 | 1411.1 | 1470.5 |
| 75° | 524.6 | 656.4 | 1020.8 | 1250.9 | 1302.5 |
| 77.5° | 387.7 | 547.9 | 896.8 | 1106.1 | 1150.1 |
| 80° | 273.9 | 452.3 | 780.5 | 979.5 | 1013.1 |
| 82.5° | 183.5 | 372.2 | 684.9 | 865.8 | 896.8 |
| 85° | 106.0 | 305.0 | 602.2 | 770.2 | 790.8 |
| 87.5° | 43.9 | 253.3 | 535.0 | 671.9 | 682.3 |
| 90° | 5.2 | 214.5 | 475.5 | 573.7 | 568.6 |
| 92.5° | 5.2 | 193.8 | 423.8 | 480.7 | 467.8 |
| 95° | 5.2 | 180.9 | 377.3 | 403.2 | 390.2 |
| 97.5° | 5.2 | 173.2 | 336.0 | 346.3 | 333.4 |
| 100° | 2.6 | 168.0 | 307.5 | 307.5 | 294.6 |
| 102.5° | 2.6 | 162.8 | 286.9 | 279.1 | 268.8 |
| 105° | 2.6 | 157.6 | 271.4 | 263.6 | 250.7 |
| 107.5° | 2.6 | 155.1 | 261.0 | 253.3 | 240.3 |
| 110° | 2.6 | 149.9 | 253.3 | 245.5 | 235.2 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.6 | 147.3 | 248.1 | 242.9 | 230.0 |
| 115° | 2.6 | 142.1 | 240.3 | 237.8 | 230.0 |
| 117.5° | 2.6 | 137.0 | 235.2 | 235.2 | 227.4 |
| 120° | 2.6 | 131.8 | 227.4 | 232.6 | 224.8 |
| 122.5° | 2.6 | 126.6 | 219.7 | 227.4 | 219.7 |
| 125° | 2.6 | 121.5 | 211.9 | 222.3 | 217.1 |
| 127.5° | 5.2 | 113.7 | 201.6 | 217.1 | 211.9 |
| 130° | 2.6 | 106.0 | 191.2 | 211.9 | 209.3 |
| 132.5° | 5.2 | 98.2 | 180.9 | 204.2 | 204.2 |
| 135° | 5.2 | 90.5 | 168.0 | 196.4 | 196.4 |
| 137.5° | 5.2 | 80.1 | 155.1 | 186.1 | 188.7 |
| 140° | 5.2 | 72.4 | 142.1 | 175.7 | 180.9 |
| 142.5° | 5.2 | 64.6 | 129.2 | 165.4 | 173.2 |
| 145° | 5.2 | 56.9 | 116.3 | 152.5 | 162.8 |
| 147.5° | 5.2 | 51.7 | 103.4 | 137.0 | 152.5 |
| 150° | 5.2 | 43.9 | 93.0 | 124.1 | 139.6 |
| 152.5° | 5.2 | 38.8 | 82.7 | 111.1 | 129.2 |
| 155° | 5.2 | 36.2 | 72.4 | 95.6 | 116.3 |
| 157.5° | 5.2 | 31.0 | 62.0 | 82.7 | 103.4 |
| 160° | 5.2 | 25.8 | 51.7 | 72.4 | 87.9 |
| 162.5° | 5.2 | 23.3 | 43.9 | 59.4 | 77.5 |
| 165° | 5.2 | 20.7 | 36.2 | 46.5 | 62.0 |
| 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)