

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-L935-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-L935-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

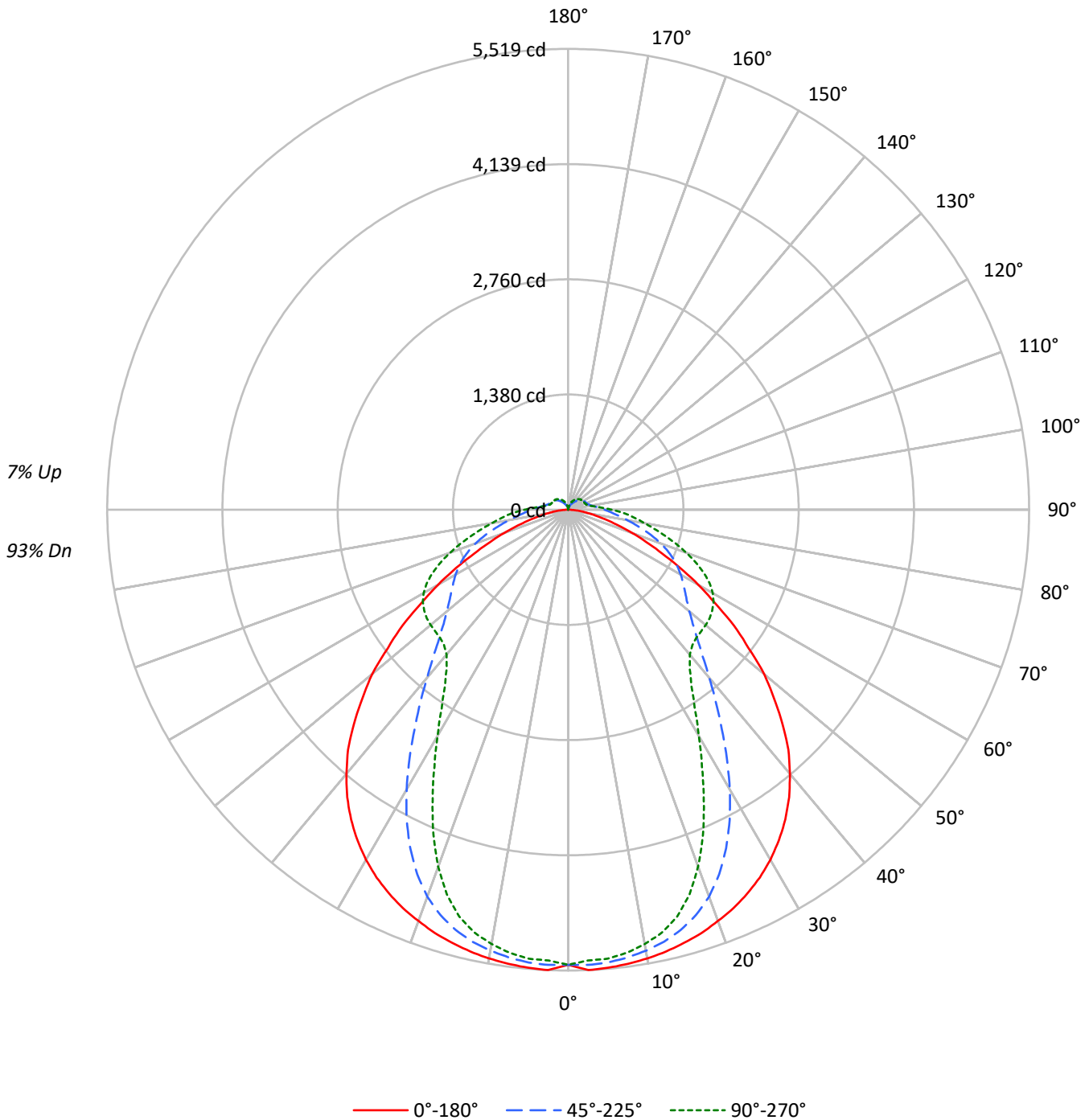
Lumens per Lamp: N/A
Luminaire Lumens: 13706.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Direct

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#
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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° | 22021 | 22021 | 22021 |
| 5° | 22305 | 21555 | 21197 |
| 10° | 22329 | 20978 | 20325 |
| 15° | 22367 | 20294 | 19166 |
| 20° | 22410 | 19265 | 17213 |
| 25° | 22455 | 17669 | 14576 |
| 30° | 22386 | 15562 | 11989 |
| 35° | 22108 | 13253 | 10047 |
| 40° | 21506 | 11236 | 9082 |
| 45° | 20415 | 9776 | 9014 |
| 50° | 18914 | 8948 | 9330 |
| 55° | 16713 | 8613 | 9656 |
| 60° | 14163 | 8503 | 9790 |
| 65° | 11460 | 8331 | 9484 |
| 70° | 9283 | 7919 | 8747 |
| 75° | 7092 | 7189 | 7762 |
| 80° | 5367 | 6481 | 6905 |
| 85° | 3819 | 6150 | 6351 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L935-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 515.6 | 3.8 |
| 10°-20° | 1457.4 | 10.6 |
| 20°-30° | 2037.3 | 14.9 |
| 30°-40° | 2113.2 | 15.4 |
| 40°-50° | 1952.2 | 14.2 |
| 50°-60° | 1743.0 | 12.7 |
| 60°-70° | 1412.6 | 10.3 |
| 70°-80° | 939.5 | 6.9 |
| 80°-90° | 538.0 | 3.9 |
| 90°-100° | 297.6 | 2.2 |
| 100°-110° | 201.6 | 1.5 |
| 110°-120° | 167.8 | 1.2 |
| 120°-130° | 136.4 | 1.0 |
| 130°-140° | 98.4 | 0.7 |
| 140°-150° | 59.3 | 0.4 |
| 150°-160° | 28.5 | 0.2 |
| 160°-170° | 7.4 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 4010.3 | 29.3 |
| 0°-40° | 6123.5 | 44.7 |
| 0°-60° | 9818.7 | 71.6 |
| 0°-90° | 12708.9 | 92.7 |
| 90°-120° | 667.0 | 4.9 |
| 90°-150° | 961.2 | 7.0 |
| 90°-180° | 997.0 | 7.3 |
| 0°-180° | 13706.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 5450 | 5450 | 5450 | 5450 | 5450 | |
| 5° | 5507 | 5414 | 5443 | 5405 | 5398 | 524 |
| 15° | 5370 | 5256 | 5211 | 5092 | 5043 | 1517 |
| 25° | 5074 | 4848 | 4474 | 4005 | 3842 | 2338 |
| 35° | 4531 | 4034 | 3207 | 2693 | 2572 | 2827 |
| 45° | 3629 | 2875 | 2184 | 2106 | 2170 | 2790 |
| 55° | 2425 | 1833 | 1705 | 1982 | 2106 | 2157 |
| 65° | 1239 | 1108 | 1388 | 1701 | 1791 | 1252 |
| 75° | 481 | 602 | 936 | 1146 | 1194 | 527 |
| 85° | 97 | 280 | 552 | 706 | 725 | 112 |
| 90° | 5 | 197 | 436 | 526 | 521 | 7 |
| 95° | 5 | 166 | 346 | 370 | 358 | 4 |
| 105° | 2 | 144 | 249 | 242 | 230 | 3 |
| 115° | 2 | 130 | 220 | 218 | 211 | 2 |
| 125° | 2 | 111 | 194 | 204 | 199 | 3 |
| 135° | 5 | 83 | 154 | 180 | 180 | 3 |
| 145° | 5 | 52 | 107 | 140 | 149 | 3 |
| 155° | 5 | 33 | 66 | 88 | 107 | 2 |
| 165° | 5 | 19 | 33 | 43 | 57 | 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-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 5450.1 | 5450.1 | 5450.1 | 5450.1 | 5450.1 |
| 2.5° | 5518.7 | 5428.7 | 5457.2 | 5433.5 | 5402.7 |
| 5° | 5506.9 | 5414.5 | 5442.9 | 5405.1 | 5397.9 |
| 7.5° | 5485.6 | 5393.2 | 5409.8 | 5364.8 | 5352.9 |
| 10° | 5457.2 | 5360.0 | 5362.4 | 5298.5 | 5281.9 |
| 12.5° | 5419.3 | 5312.7 | 5298.5 | 5210.8 | 5187.1 |
| 15° | 5369.5 | 5255.8 | 5210.8 | 5092.4 | 5042.7 |
| 17.5° | 5315.0 | 5182.4 | 5090.0 | 4907.7 | 4829.5 |
| 20° | 5241.6 | 5092.4 | 4931.3 | 4654.2 | 4550.0 |
| 22.5° | 5168.2 | 4983.4 | 4725.3 | 4355.8 | 4216.0 |
| 25° | 5073.5 | 4848.4 | 4474.2 | 4005.2 | 3841.8 |
| 27.5° | 4966.9 | 4689.7 | 4185.2 | 3645.2 | 3469.9 |
| 30° | 4841.3 | 4497.9 | 3867.9 | 3292.3 | 3126.5 |
| 32.5° | 4694.5 | 4282.4 | 3533.9 | 2974.9 | 2821.0 |
| 35° | 4531.1 | 4033.7 | 3207.0 | 2693.1 | 2572.3 |
| 37.5° | 4343.9 | 3761.3 | 2903.9 | 2465.7 | 2387.5 |
| 40° | 4130.8 | 3465.2 | 2624.4 | 2290.4 | 2264.3 |
| 42.5° | 3901.0 | 3176.2 | 2385.1 | 2176.7 | 2200.4 |
| 45° | 3628.6 | 2875.4 | 2183.8 | 2105.6 | 2169.6 |
| 47.5° | 3342.0 | 2581.7 | 2020.4 | 2065.4 | 2157.8 |
| 50° | 3064.9 | 2309.3 | 1892.5 | 2039.3 | 2148.3 |
| 52.5° | 2721.5 | 2065.4 | 1790.6 | 2015.6 | 2134.1 |
| 55° | 2425.4 | 1833.3 | 1705.4 | 1982.5 | 2105.6 |
| 57.5° | 2084.3 | 1624.8 | 1629.6 | 1939.8 | 2063.0 |
| 60° | 1800.1 | 1435.3 | 1556.1 | 1880.6 | 1999.1 |
| 62.5° | 1511.1 | 1264.8 | 1475.6 | 1802.5 | 1909.1 |
| 65° | 1238.8 | 1108.5 | 1388.0 | 1700.6 | 1790.6 |
| 67.5° | 1011.4 | 966.4 | 1288.5 | 1577.5 | 1653.3 |
| 70° | 819.5 | 836.1 | 1179.5 | 1440.1 | 1504.0 |
| 72.5° | 630.0 | 715.3 | 1061.1 | 1293.2 | 1347.7 |
| 75° | 480.8 | 601.6 | 935.6 | 1146.4 | 1193.8 |
| 77.5° | 355.3 | 502.1 | 821.9 | 1013.7 | 1054.0 |
| 80° | 251.1 | 414.5 | 715.3 | 897.7 | 928.5 |
| 82.5° | 168.2 | 341.1 | 627.7 | 793.5 | 821.9 |
| 85° | 97.1 | 279.5 | 551.9 | 705.8 | 724.8 |
| 87.5° | 40.3 | 232.1 | 490.3 | 615.8 | 625.3 |
| 90° | 4.7 | 196.6 | 435.8 | 525.8 | 521.1 |
| 92.5° | 4.7 | 177.6 | 388.4 | 440.6 | 428.7 |
| 95° | 4.7 | 165.8 | 345.8 | 369.5 | 357.7 |
| 97.5° | 4.7 | 158.7 | 307.9 | 317.4 | 305.5 |
| 100° | 2.4 | 154.0 | 281.9 | 281.9 | 270.0 |
| 102.5° | 2.4 | 149.2 | 262.9 | 255.8 | 246.3 |
| 105° | 2.4 | 144.5 | 248.7 | 241.6 | 229.8 |
| 107.5° | 2.4 | 142.1 | 239.2 | 232.1 | 220.3 |
| 110° | 2.4 | 137.4 | 232.1 | 225.0 | 215.5 |



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-170HL-SLN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-------|-------|-------|
| 112.5° | 2.4 | 135.0 | 227.4 | 222.6 | 210.8 |
| 115° | 2.4 | 130.3 | 220.3 | 217.9 | 210.8 |
| 117.5° | 2.4 | 125.5 | 215.5 | 215.5 | 208.4 |
| 120° | 2.4 | 120.8 | 208.4 | 213.2 | 206.1 |
| 122.5° | 2.4 | 116.1 | 201.3 | 208.4 | 201.3 |
| 125° | 2.4 | 111.3 | 194.2 | 203.7 | 199.0 |
| 127.5° | 4.7 | 104.2 | 184.7 | 199.0 | 194.2 |
| 130° | 2.4 | 97.1 | 175.3 | 194.2 | 191.9 |
| 132.5° | 4.7 | 90.0 | 165.8 | 187.1 | 187.1 |
| 135° | 4.7 | 82.9 | 154.0 | 180.0 | 180.0 |
| 137.5° | 4.7 | 73.4 | 142.1 | 170.5 | 172.9 |
| 140° | 4.7 | 66.3 | 130.3 | 161.1 | 165.8 |
| 142.5° | 4.7 | 59.2 | 118.4 | 151.6 | 158.7 |
| 145° | 4.7 | 52.1 | 106.6 | 139.7 | 149.2 |
| 147.5° | 4.7 | 47.4 | 94.7 | 125.5 | 139.7 |
| 150° | 4.7 | 40.3 | 85.3 | 113.7 | 127.9 |
| 152.5° | 4.7 | 35.5 | 75.8 | 101.8 | 118.4 |
| 155° | 4.7 | 33.2 | 66.3 | 87.6 | 106.6 |
| 157.5° | 4.7 | 28.4 | 56.8 | 75.8 | 94.7 |
| 160° | 4.7 | 23.7 | 47.4 | 66.3 | 80.5 |
| 162.5° | 4.7 | 21.3 | 40.3 | 54.5 | 71.1 |
| 165° | 4.7 | 18.9 | 33.2 | 42.6 | 56.8 |
| 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)