

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: **8SRL-LD5-83SL-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: 8SRL-LD5-83SL-LC-UNV-L840-CD1-U
Description: SRL LINEAR LED

Light Source: -
Ballast/Driver: -

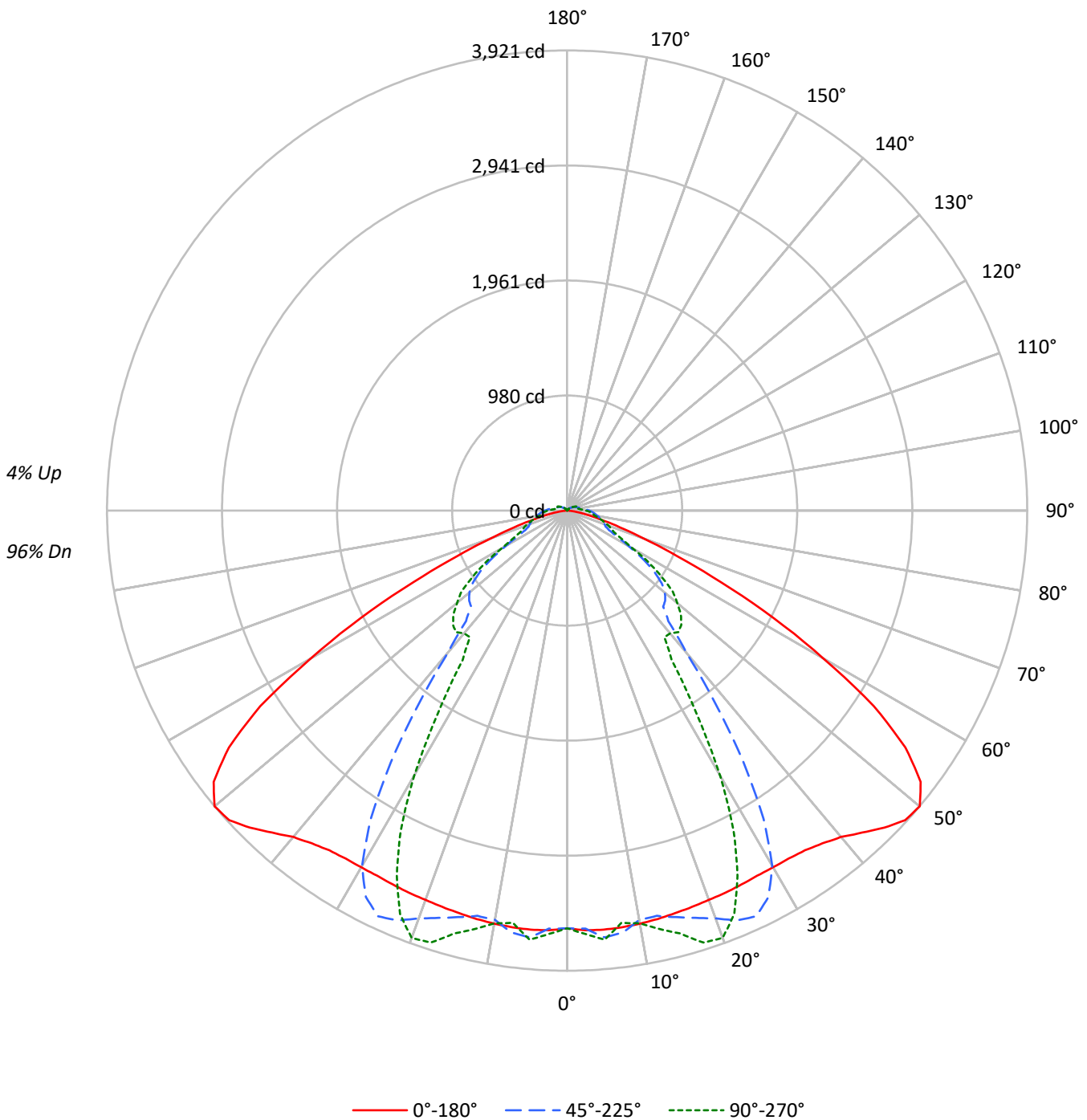
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8583.0 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 1.13 / 1.12
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 7.33' x H: 0.17')
CIE Type: Direct

Input Watts (W): 59.2
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: 8SRL-LD5-83SL-LC-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 8SRL-LD5-83SL-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 | 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° | 20896 | 20896 | 20896 |
| 5° | 21084 | 20635 | 20441 |
| 10° | 21220 | 19438 | 19054 |
| 15° | 21457 | 19281 | 19241 |
| 20° | 21873 | 19614 | 19477 |
| 25° | 22532 | 20128 | 16973 |
| 30° | 23485 | 18490 | 12771 |
| 35° | 24928 | 13999 | 7586 |
| 40° | 27304 | 8584 | 6712 |
| 45° | 31020 | 6458 | 6850 |
| 50° | 34873 | 6283 | 6234 |
| 55° | 34886 | 5458 | 5155 |
| 60° | 28502 | 3858 | 3492 |
| 65° | 19110 | 2673 | 2533 |
| 70° | 11152 | 2485 | 2286 |
| 75° | 6240 | 2445 | 1941 |
| 80° | 3564 | 2351 | 1657 |
| 85° | 1765 | 2327 | 1631 |



TEST NUMBER: P#

CATALOG NUMBER: 8SRL-LD5-83SL-LC-UNV-L840-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 344.1 | 4.0 |
| 10°-20° | 1031.9 | 12.0 |
| 20°-30° | 1642.2 | 19.1 |
| 30°-40° | 1673.7 | 19.5 |
| 40°-50° | 1413.6 | 16.5 |
| 50°-60° | 1089.6 | 12.7 |
| 60°-70° | 562.8 | 6.6 |
| 70°-80° | 311.0 | 3.6 |
| 80°-90° | 197.9 | 2.3 |
| 90°-100° | 121.8 | 1.4 |
| 100°-110° | 78.5 | 0.9 |
| 110°-120° | 57.0 | 0.7 |
| 120°-130° | 32.9 | 0.4 |
| 130°-140° | 15.9 | 0.2 |
| 140°-150° | 6.7 | 0.1 |
| 150°-160° | 2.3 | 0.0 |
| 160°-170° | 0.8 | 0.0 |
| 170°-180° | 0.3 | 0.0 |
| 0°-30° | 3018.2 | 35.2 |
| 0°-40° | 4691.8 | 54.7 |
| 0°-60° | 7195.0 | 83.8 |
| 0°-90° | 8266.8 | 96.3 |
| 90°-120° | 257.3 | 3.0 |
| 90°-150° | 312.7 | 3.6 |
| 90°-180° | 316.0 | 3.7 |
| 0°-180° | 8583.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 3559 | 3559 | 3559 | 3559 | 3559 | |
| 5° | 3585 | 3597 | 3650 | 3685 | 3671 | 342 |
| 15° | 3552 | 3554 | 3586 | 3715 | 3731 | 1006 |
| 25° | 3515 | 3539 | 3813 | 3627 | 3434 | 1627 |
| 35° | 3533 | 3700 | 2620 | 1781 | 1552 | 2230 |
| 45° | 3821 | 2230 | 1157 | 1335 | 1375 | 2951 |
| 55° | 3519 | 820 | 904 | 983 | 983 | 3047 |
| 65° | 1443 | 375 | 394 | 443 | 443 | 1488 |
| 75° | 298 | 247 | 304 | 306 | 298 | 359 |
| 85° | 33 | 161 | 227 | 220 | 209 | 45 |
| 90° | 0 | 124 | 189 | 174 | 161 | 2 |
| 95° | 0 | 97 | 150 | 132 | 121 | 0 |
| 105° | 0 | 59 | 99 | 92 | 86 | 0 |
| 115° | 2 | 35 | 71 | 86 | 84 | 1 |
| 125° | 2 | 18 | 46 | 55 | 49 | 2 |
| 135° | 2 | 9 | 26 | 31 | 26 | 1 |
| 145° | 2 | 4 | 13 | 16 | 13 | 1 |
| 155° | 2 | 2 | 6 | 7 | 4 | 1 |
| 165° | 2 | 4 | 4 | 4 | 0 | 1 |
| 175° | 4 | 4 | 4 | 4 | 0 | 0 |
| 180° | 2 | 2 | 2 | 2 | 2 | |



TEST NUMBER: P#

CATALOG NUMBER: 8SRL-LD5-83SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 3559.0 | 3559.0 | 3559.0 | 3559.0 | 3559.0 |
| 2.5° | 3579.1 | 3566.3 | 3566.3 | 3612.0 | 3612.0 |
| 5° | 3584.6 | 3597.4 | 3650.5 | 3685.3 | 3670.6 |
| 7.5° | 3580.9 | 3639.5 | 3626.7 | 3575.4 | 3542.5 |
| 10° | 3573.6 | 3661.5 | 3540.6 | 3575.4 | 3571.8 |
| 12.5° | 3564.4 | 3628.5 | 3537.0 | 3659.6 | 3652.3 |
| 15° | 3551.6 | 3553.5 | 3586.4 | 3714.6 | 3731.0 |
| 17.5° | 3540.6 | 3505.9 | 3639.5 | 3811.6 | 3859.2 |
| 20° | 3529.7 | 3491.2 | 3696.3 | 3894.0 | 3873.8 |
| 22.5° | 3524.2 | 3504.0 | 3780.5 | 3831.7 | 3720.1 |
| 25° | 3515.0 | 3538.8 | 3813.4 | 3626.7 | 3434.5 |
| 27.5° | 3507.7 | 3579.1 | 3712.7 | 3277.0 | 3072.0 |
| 30° | 3509.5 | 3635.8 | 3494.9 | 2866.9 | 2608.8 |
| 32.5° | 3515.0 | 3690.8 | 3115.9 | 2317.7 | 2050.4 |
| 35° | 3533.3 | 3699.9 | 2619.8 | 1781.3 | 1552.5 |
| 37.5° | 3573.6 | 3599.2 | 2079.7 | 1409.7 | 1360.2 |
| 40° | 3630.4 | 3295.3 | 1578.1 | 1316.3 | 1365.7 |
| 42.5° | 3721.9 | 2784.6 | 1276.0 | 1330.9 | 1404.2 |
| 45° | 3820.8 | 2229.8 | 1157.0 | 1334.6 | 1374.9 |
| 47.5° | 3905.0 | 1645.8 | 1133.2 | 1285.2 | 1314.5 |
| 50° | 3921.4 | 1239.4 | 1087.5 | 1206.5 | 1224.8 |
| 52.5° | 3797.0 | 979.4 | 1014.2 | 1102.1 | 1135.1 |
| 55° | 3518.7 | 820.2 | 904.4 | 983.1 | 983.1 |
| 57.5° | 3099.4 | 695.7 | 759.8 | 834.8 | 827.5 |
| 60° | 2522.8 | 573.0 | 606.0 | 651.7 | 640.8 |
| 62.5° | 1984.5 | 459.5 | 470.5 | 519.9 | 527.3 |
| 65° | 1442.6 | 375.3 | 393.6 | 443.0 | 443.0 |
| 67.5° | 1012.4 | 320.4 | 355.2 | 400.9 | 404.6 |
| 70° | 690.2 | 289.3 | 338.7 | 375.3 | 377.1 |
| 72.5° | 470.5 | 267.3 | 322.2 | 342.3 | 336.9 |
| 75° | 298.4 | 247.1 | 303.9 | 305.7 | 298.4 |
| 77.5° | 194.1 | 225.2 | 285.6 | 270.9 | 265.5 |
| 80° | 119.0 | 203.2 | 261.8 | 243.5 | 234.3 |
| 82.5° | 67.7 | 181.2 | 243.5 | 230.7 | 221.5 |
| 85° | 33.0 | 161.1 | 227.0 | 219.7 | 208.7 |
| 87.5° | 12.8 | 142.8 | 208.7 | 197.7 | 186.7 |
| 90° | 0.0 | 124.5 | 188.6 | 173.9 | 161.1 |
| 92.5° | 0.0 | 109.8 | 168.4 | 150.1 | 139.1 |
| 95° | 0.0 | 97.0 | 150.1 | 131.8 | 120.8 |
| 97.5° | 0.0 | 86.0 | 133.6 | 117.2 | 104.4 |
| 100° | 0.0 | 76.9 | 120.8 | 104.4 | 95.2 |
| 102.5° | 0.0 | 67.7 | 108.0 | 97.0 | 91.5 |
| 105° | 0.0 | 58.6 | 98.9 | 91.5 | 86.0 |
| 107.5° | 0.0 | 51.3 | 89.7 | 87.9 | 84.2 |
| 110° | 0.0 | 45.8 | 84.2 | 86.0 | 87.9 |



TEST NUMBER: P#

CATALOG NUMBER: 8SRL-LD5-83SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 40.3 | 76.9 | 87.9 | 89.7 |
| 115° | 1.8 | 34.8 | 71.4 | 86.0 | 84.2 |
| 117.5° | 1.8 | 29.3 | 64.1 | 76.9 | 73.2 |
| 120° | 1.8 | 25.6 | 58.6 | 69.6 | 64.1 |
| 122.5° | 1.8 | 22.0 | 51.3 | 60.4 | 56.8 |
| 125° | 1.8 | 18.3 | 45.8 | 54.9 | 49.4 |
| 127.5° | 1.8 | 16.5 | 40.3 | 47.6 | 43.9 |
| 130° | 1.8 | 14.6 | 34.8 | 42.1 | 38.4 |
| 132.5° | 1.8 | 11.0 | 31.1 | 36.6 | 31.1 |
| 135° | 1.8 | 9.2 | 25.6 | 31.1 | 25.6 |
| 137.5° | 1.8 | 7.3 | 22.0 | 25.6 | 22.0 |
| 140° | 1.8 | 5.5 | 18.3 | 22.0 | 18.3 |
| 142.5° | 1.8 | 5.5 | 14.6 | 20.1 | 14.6 |
| 145° | 1.8 | 3.7 | 12.8 | 16.5 | 12.8 |
| 147.5° | 1.8 | 3.7 | 11.0 | 14.6 | 11.0 |
| 150° | 1.8 | 3.7 | 9.2 | 12.8 | 7.3 |
| 152.5° | 1.8 | 1.8 | 7.3 | 11.0 | 5.5 |
| 155° | 1.8 | 1.8 | 5.5 | 7.3 | 3.7 |
| 157.5° | 1.8 | 1.8 | 5.5 | 5.5 | 3.7 |
| 160° | 1.8 | 1.8 | 5.5 | 5.5 | 1.8 |
| 162.5° | 1.8 | 1.8 | 3.7 | 3.7 | 0.0 |
| 165° | 1.8 | 3.7 | 3.7 | 3.7 | 0.0 |
| 167.5° | 1.8 | 3.7 | 3.7 | 3.7 | 0.0 |
| 170° | 1.8 | 3.7 | 3.7 | 3.7 | 0.0 |
| 172.5° | 1.8 | 3.7 | 3.7 | 3.7 | 0.0 |
| 175° | 3.7 | 3.7 | 3.7 | 3.7 | 0.0 |
| 177.5° | 3.7 | 3.7 | 3.7 | 3.7 | 0.0 |
| 180° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |

(END OF REPORT)