

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: **2SNLED-LD5-18SL-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: 2SNLED-LD5-18SL-SLN-UNV-L940-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

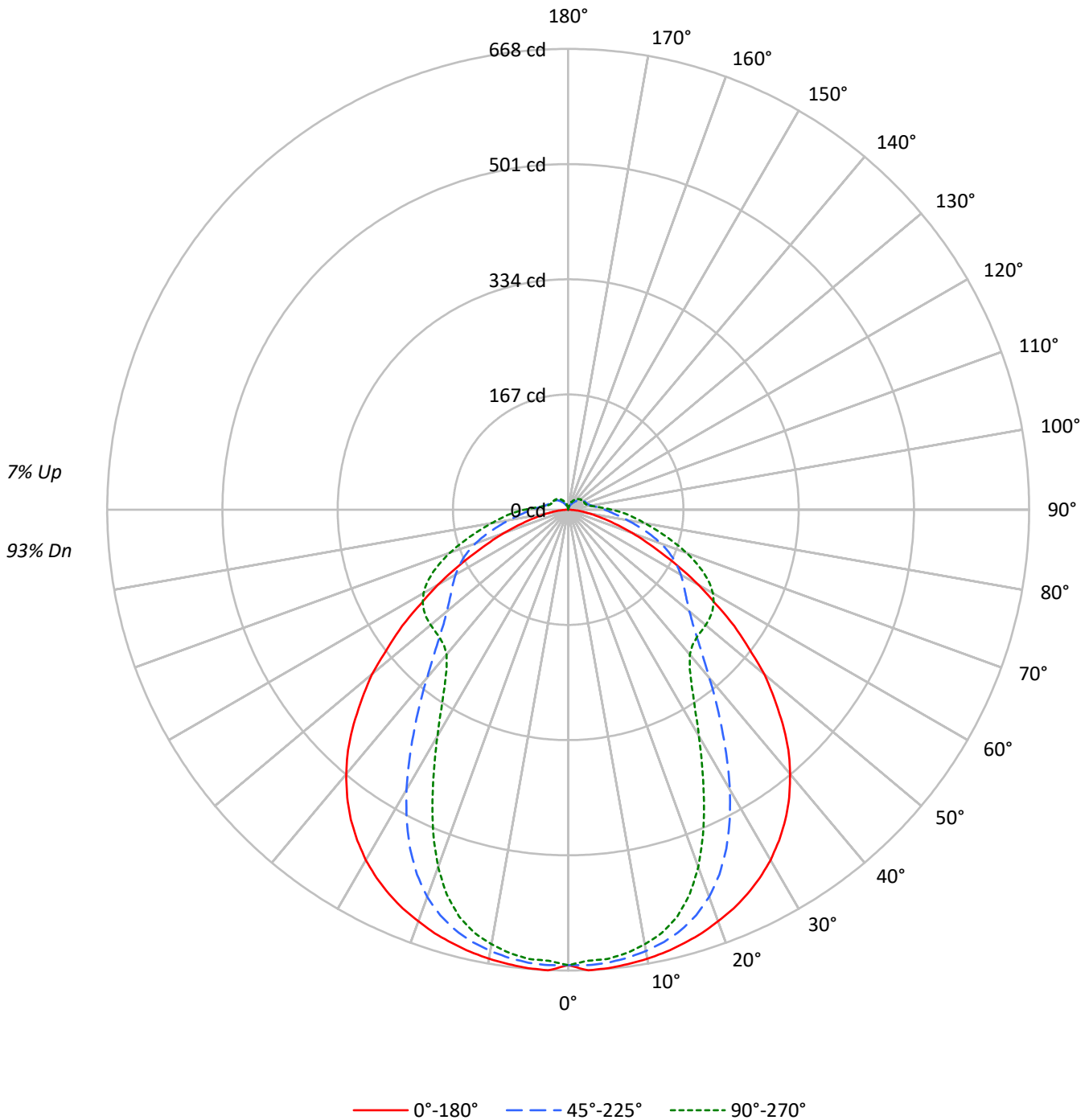
Lumens per Lamp: N/A
Luminaire Lumens: 1660.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 14
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: 2SNLED-LD5-18SL-SLN-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-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° | 10669 | 10669 | 10669 |
| 5° | 10762 | 10413 | 10270 |
| 10° | 10728 | 10107 | 9847 |
| 15° | 10702 | 9751 | 9284 |
| 20° | 10675 | 9233 | 8339 |
| 25° | 10648 | 8444 | 7062 |
| 30° | 10562 | 7417 | 5809 |
| 35° | 10374 | 6298 | 4867 |
| 40° | 10029 | 5322 | 4399 |
| 45° | 9455 | 4616 | 4367 |
| 50° | 8686 | 4210 | 4520 |
| 55° | 7600 | 4035 | 4678 |
| 60° | 6358 | 3966 | 4742 |
| 65° | 5058 | 3863 | 4595 |
| 70° | 4005 | 3649 | 4238 |
| 75° | 2947 | 3282 | 3761 |
| 80° | 2089 | 2925 | 3347 |
| 85° | 1276 | 2729 | 3077 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L940-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.5 | 3.8 |
| 10°-20° | 176.5 | 10.6 |
| 20°-30° | 246.7 | 14.9 |
| 30°-40° | 255.9 | 15.4 |
| 40°-50° | 236.4 | 14.2 |
| 50°-60° | 211.1 | 12.7 |
| 60°-70° | 171.1 | 10.3 |
| 70°-80° | 113.8 | 6.9 |
| 80°-90° | 65.2 | 3.9 |
| 90°-100° | 36.0 | 2.2 |
| 100°-110° | 24.4 | 1.5 |
| 110°-120° | 20.3 | 1.2 |
| 120°-130° | 16.5 | 1.0 |
| 130°-140° | 11.9 | 0.7 |
| 140°-150° | 7.2 | 0.4 |
| 150°-160° | 3.5 | 0.2 |
| 160°-170° | 0.9 | 0.1 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 485.7 | 29.3 |
| 0°-40° | 741.7 | 44.7 |
| 0°-60° | 1189.2 | 71.6 |
| 0°-90° | 1539.2 | 92.7 |
| 90°-120° | 80.8 | 4.9 |
| 90°-150° | 116.4 | 7.0 |
| 90°-180° | 121.0 | 7.3 |
| 0°-180° | 1660.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 660 | 660 | 660 | 660 | 660 | |
| 5° | 667 | 656 | 659 | 655 | 654 | 63 |
| 15° | 650 | 637 | 631 | 617 | 611 | 184 |
| 25° | 614 | 587 | 542 | 485 | 465 | 283 |
| 35° | 549 | 488 | 388 | 326 | 312 | 342 |
| 45° | 440 | 348 | 264 | 255 | 263 | 338 |
| 55° | 294 | 222 | 206 | 240 | 255 | 261 |
| 65° | 150 | 134 | 168 | 206 | 217 | 152 |
| 75° | 58 | 73 | 113 | 139 | 145 | 64 |
| 85° | 12 | 34 | 67 | 86 | 88 | 14 |
| 90° | 1 | 24 | 53 | 64 | 63 | 1 |
| 95° | 1 | 20 | 42 | 45 | 43 | 0 |
| 105° | 0 | 18 | 30 | 29 | 28 | 0 |
| 115° | 0 | 16 | 27 | 26 | 26 | 0 |
| 125° | 0 | 14 | 24 | 25 | 24 | 0 |
| 135° | 1 | 10 | 19 | 22 | 22 | 0 |
| 145° | 1 | 6 | 13 | 17 | 18 | 0 |
| 155° | 1 | 4 | 8 | 11 | 13 | 0 |
| 165° | 1 | 2 | 4 | 5 | 7 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 660.1 | 660.1 | 660.1 | 660.1 | 660.1 |
| 2.5° | 668.4 | 657.5 | 660.9 | 658.1 | 654.3 |
| 5° | 667.0 | 655.8 | 659.2 | 654.6 | 653.8 |
| 7.5° | 664.4 | 653.2 | 655.2 | 649.8 | 648.3 |
| 10° | 660.9 | 649.2 | 649.5 | 641.7 | 639.7 |
| 12.5° | 656.4 | 643.4 | 641.7 | 631.1 | 628.2 |
| 15° | 650.3 | 636.6 | 631.1 | 616.8 | 610.7 |
| 17.5° | 643.7 | 627.7 | 616.5 | 594.4 | 584.9 |
| 20° | 634.8 | 616.8 | 597.3 | 563.7 | 551.1 |
| 22.5° | 625.9 | 603.6 | 572.3 | 527.5 | 510.6 |
| 25° | 614.5 | 587.2 | 541.9 | 485.1 | 465.3 |
| 27.5° | 601.6 | 568.0 | 506.9 | 441.5 | 420.3 |
| 30° | 586.4 | 544.8 | 468.5 | 398.7 | 378.7 |
| 32.5° | 568.6 | 518.7 | 428.0 | 360.3 | 341.7 |
| 35° | 548.8 | 488.5 | 388.4 | 326.2 | 311.5 |
| 37.5° | 526.1 | 455.5 | 351.7 | 298.6 | 289.2 |
| 40° | 500.3 | 419.7 | 317.8 | 277.4 | 274.2 |
| 42.5° | 472.5 | 384.7 | 288.9 | 263.6 | 266.5 |
| 45° | 439.5 | 348.3 | 264.5 | 255.0 | 262.8 |
| 47.5° | 404.8 | 312.7 | 244.7 | 250.1 | 261.3 |
| 50° | 371.2 | 279.7 | 229.2 | 247.0 | 260.2 |
| 52.5° | 329.6 | 250.1 | 216.9 | 244.1 | 258.5 |
| 55° | 293.8 | 222.0 | 206.5 | 240.1 | 255.0 |
| 57.5° | 252.4 | 196.8 | 197.4 | 234.9 | 249.9 |
| 60° | 218.0 | 173.8 | 188.5 | 227.8 | 242.1 |
| 62.5° | 183.0 | 153.2 | 178.7 | 218.3 | 231.2 |
| 65° | 150.0 | 134.3 | 168.1 | 206.0 | 216.9 |
| 67.5° | 122.5 | 117.0 | 156.1 | 191.1 | 200.2 |
| 70° | 99.3 | 101.3 | 142.9 | 174.4 | 182.2 |
| 72.5° | 76.3 | 86.6 | 128.5 | 156.6 | 163.2 |
| 75° | 58.2 | 72.9 | 113.3 | 138.8 | 144.6 |
| 77.5° | 43.0 | 60.8 | 99.5 | 122.8 | 127.7 |
| 80° | 30.4 | 50.2 | 86.6 | 108.7 | 112.5 |
| 82.5° | 20.4 | 41.3 | 76.0 | 96.1 | 99.5 |
| 85° | 11.8 | 33.9 | 66.8 | 85.5 | 87.8 |
| 87.5° | 4.9 | 28.1 | 59.4 | 74.6 | 75.7 |
| 90° | 0.6 | 23.8 | 52.8 | 63.7 | 63.1 |
| 92.5° | 0.6 | 21.5 | 47.0 | 53.4 | 51.9 |
| 95° | 0.6 | 20.1 | 41.9 | 44.8 | 43.3 |
| 97.5° | 0.6 | 19.2 | 37.3 | 38.4 | 37.0 |
| 100° | 0.3 | 18.6 | 34.1 | 34.1 | 32.7 |
| 102.5° | 0.3 | 18.1 | 31.8 | 31.0 | 29.8 |
| 105° | 0.3 | 17.5 | 30.1 | 29.3 | 27.8 |
| 107.5° | 0.3 | 17.2 | 29.0 | 28.1 | 26.7 |
| 110° | 0.3 | 16.6 | 28.1 | 27.3 | 26.1 |



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-18SL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.3 | 16.4 | 27.5 | 27.0 | 25.5 |
| 115° | 0.3 | 15.8 | 26.7 | 26.4 | 25.5 |
| 117.5° | 0.3 | 15.2 | 26.1 | 26.1 | 25.2 |
| 120° | 0.3 | 14.6 | 25.2 | 25.8 | 25.0 |
| 122.5° | 0.3 | 14.1 | 24.4 | 25.2 | 24.4 |
| 125° | 0.3 | 13.5 | 23.5 | 24.7 | 24.1 |
| 127.5° | 0.6 | 12.6 | 22.4 | 24.1 | 23.5 |
| 130° | 0.3 | 11.8 | 21.2 | 23.5 | 23.2 |
| 132.5° | 0.6 | 10.9 | 20.1 | 22.7 | 22.7 |
| 135° | 0.6 | 10.0 | 18.6 | 21.8 | 21.8 |
| 137.5° | 0.6 | 8.9 | 17.2 | 20.7 | 20.9 |
| 140° | 0.6 | 8.0 | 15.8 | 19.5 | 20.1 |
| 142.5° | 0.6 | 7.2 | 14.3 | 18.4 | 19.2 |
| 145° | 0.6 | 6.3 | 12.9 | 16.9 | 18.1 |
| 147.5° | 0.6 | 5.7 | 11.5 | 15.2 | 16.9 |
| 150° | 0.6 | 4.9 | 10.3 | 13.8 | 15.5 |
| 152.5° | 0.6 | 4.3 | 9.2 | 12.3 | 14.3 |
| 155° | 0.6 | 4.0 | 8.0 | 10.6 | 12.9 |
| 157.5° | 0.6 | 3.4 | 6.9 | 9.2 | 11.5 |
| 160° | 0.6 | 2.9 | 5.7 | 8.0 | 9.8 |
| 162.5° | 0.6 | 2.6 | 4.9 | 6.6 | 8.6 |
| 165° | 0.6 | 2.3 | 4.0 | 5.2 | 6.9 |
| 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)