

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: P218301

Luminaire Tested: **4SNLED-LD5-20SL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218301
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-20SL-LW-UNV-L840-CD1-U
Description: LED STRIP LIGHT - SNLED SERIES 4FOOT

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2170.0 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.3 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

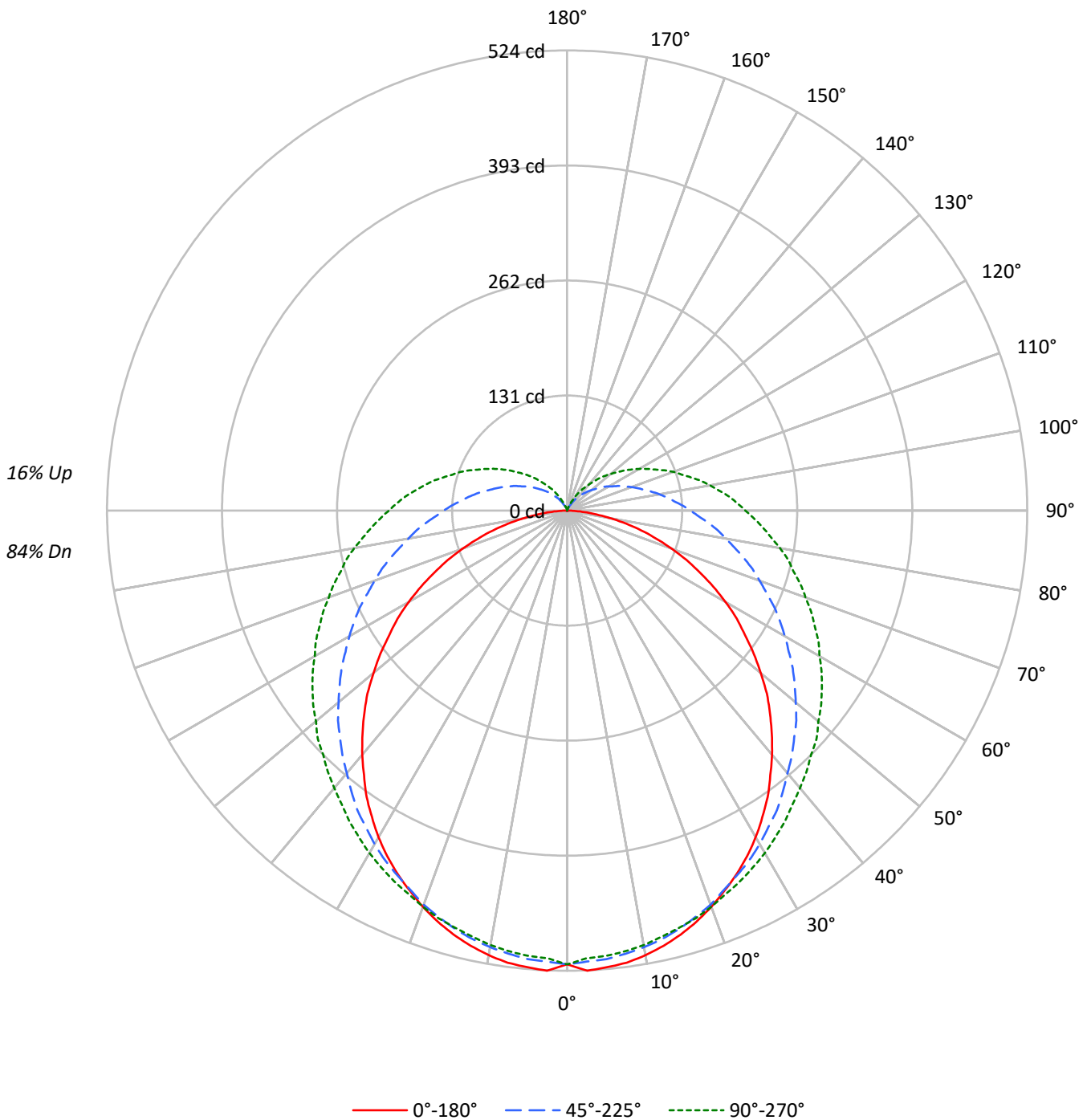
Input Watts (W): 16
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P218301

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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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 102 | 102 | 102 | 95 | 95 | 95 | 88 | 88 | 88 | 84 | | | | |
| 1 | 102 | 96 | 91 | 86 | 98 | 93 | 88 | 83 | 85 | 81 | 78 | 79 | 76 | 73 | 73 | 70 | 68 | 65 | | | | |
| 2 | 92 | 83 | 75 | 68 | 88 | 79 | 72 | 66 | 73 | 67 | 62 | 67 | 63 | 58 | 62 | 58 | 55 | 52 | | | | |
| 3 | 83 | 72 | 63 | 56 | 79 | 69 | 61 | 54 | 64 | 57 | 51 | 59 | 53 | 48 | 54 | 49 | 45 | 42 | | | | |
| 4 | 76 | 63 | 54 | 46 | 72 | 61 | 52 | 45 | 56 | 49 | 43 | 52 | 46 | 41 | 48 | 43 | 38 | 36 | | | | |
| 5 | 70 | 56 | 46 | 39 | 66 | 54 | 45 | 39 | 50 | 42 | 37 | 46 | 40 | 35 | 43 | 37 | 33 | 30 | | | | |
| 6 | 64 | 50 | 41 | 34 | 61 | 48 | 40 | 33 | 45 | 37 | 32 | 42 | 35 | 30 | 39 | 33 | 29 | 26 | | | | |
| 7 | 59 | 45 | 36 | 30 | 57 | 44 | 35 | 29 | 41 | 33 | 28 | 38 | 31 | 27 | 35 | 30 | 25 | 23 | | | | |
| 8 | 55 | 41 | 32 | 26 | 53 | 40 | 32 | 26 | 37 | 30 | 25 | 35 | 28 | 24 | 32 | 27 | 23 | 21 | | | | |
| 9 | 51 | 38 | 29 | 24 | 49 | 36 | 29 | 23 | 34 | 27 | 22 | 32 | 26 | 21 | 30 | 24 | 20 | 18 | | | | |
| 10 | 48 | 35 | 27 | 21 | 46 | 34 | 26 | 21 | 32 | 25 | 20 | 30 | 24 | 19 | 28 | 22 | 18 | 17 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8326 | 8326 | 8326 |
| 5° | 8411 | 7792 | 7569 |
| 10° | 8350 | 7312 | 6987 |
| 15° | 8244 | 6871 | 6472 |
| 20° | 8111 | 6458 | 6037 |
| 25° | 7967 | 6062 | 5649 |
| 30° | 7803 | 5726 | 5312 |
| 35° | 7611 | 5405 | 4999 |
| 40° | 7379 | 5075 | 4718 |
| 45° | 7147 | 4799 | 4478 |
| 50° | 6868 | 4535 | 4272 |
| 55° | 6557 | 4293 | 4096 |
| 60° | 6257 | 4054 | 3915 |
| 65° | 5830 | 3847 | 3771 |
| 70° | 5334 | 3630 | 3632 |
| 75° | 4697 | 3457 | 3510 |
| 80° | 3714 | 3289 | 3422 |
| 85° | 2441 | 3168 | 3329 |



TEST NUMBER: P218301

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 48.9 | 2.3 |
| 10°-20° | 139.9 | 6.4 |
| 20°-30° | 212.7 | 9.8 |
| 30°-40° | 260.3 | 12.0 |
| 40°-50° | 281.0 | 12.9 |
| 50°-60° | 275.9 | 12.7 |
| 60°-70° | 248.5 | 11.5 |
| 70°-80° | 205.8 | 9.5 |
| 80°-90° | 158.2 | 7.3 |
| 90°-100° | 119.3 | 5.5 |
| 100°-110° | 87.8 | 4.0 |
| 110°-120° | 60.6 | 2.8 |
| 120°-130° | 38.4 | 1.8 |
| 130°-140° | 21.2 | 1.0 |
| 140°-150° | 9.2 | 0.4 |
| 150°-160° | 2.3 | 0.1 |
| 160°-170° | 0.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 401.5 | 18.5 |
| 0°-40° | 661.8 | 30.5 |
| 0°-60° | 1218.7 | 56.2 |
| 0°-90° | 1831.2 | 84.4 |
| 90°-120° | 267.6 | 12.3 |
| 90°-150° | 336.5 | 15.5 |
| 90°-180° | 339.0 | 15.6 |
| 0°-180° | 2170.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 517 | 517 | 517 | 517 | 517 | |
| 5° | 522 | 519 | 513 | 513 | 509 | 50 |
| 15° | 500 | 498 | 493 | 496 | 492 | 141 |
| 25° | 457 | 457 | 458 | 467 | 466 | 210 |
| 35° | 398 | 402 | 416 | 430 | 432 | 249 |
| 45° | 327 | 341 | 366 | 388 | 393 | 252 |
| 55° | 247 | 275 | 314 | 345 | 354 | 222 |
| 65° | 167 | 204 | 260 | 299 | 311 | 165 |
| 75° | 87 | 139 | 208 | 252 | 267 | 92 |
| 85° | 20 | 86 | 161 | 210 | 224 | 22 |
| 90° | 0 | 66 | 141 | 189 | 203 | 1 |
| 95° | 1 | 52 | 122 | 169 | 185 | 0 |
| 105° | 0 | 32 | 91 | 133 | 146 | 0 |
| 115° | 0 | 21 | 66 | 100 | 111 | 0 |
| 125° | 0 | 13 | 46 | 72 | 79 | 0 |
| 135° | 0 | 8 | 29 | 47 | 52 | 0 |
| 145° | 0 | 3 | 14 | 26 | 29 | 0 |
| 155° | 0 | 1 | 4 | 8 | 9 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P218301

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 516.7 | 516.7 | 516.7 | 516.7 | 516.7 |
| 2.5° | 524.5 | 520.6 | 514.1 | 514.1 | 510.2 |
| 5° | 521.9 | 519.3 | 512.8 | 512.8 | 508.9 |
| 7.5° | 519.3 | 516.7 | 508.9 | 510.2 | 506.2 |
| 10° | 514.1 | 511.5 | 504.9 | 506.2 | 502.3 |
| 12.5° | 507.6 | 504.9 | 499.7 | 501.0 | 497.1 |
| 15° | 499.7 | 498.4 | 493.2 | 495.8 | 491.9 |
| 17.5° | 490.6 | 489.3 | 485.4 | 489.3 | 486.7 |
| 20° | 480.2 | 480.2 | 477.6 | 482.8 | 480.2 |
| 22.5° | 468.5 | 468.5 | 467.2 | 475.0 | 472.4 |
| 25° | 456.8 | 456.8 | 458.1 | 467.2 | 465.9 |
| 27.5° | 443.8 | 445.1 | 449.0 | 459.4 | 458.1 |
| 30° | 429.5 | 432.1 | 438.6 | 450.3 | 450.3 |
| 32.5° | 413.8 | 416.5 | 426.9 | 441.2 | 441.2 |
| 35° | 398.2 | 402.1 | 416.5 | 429.5 | 432.1 |
| 37.5° | 380.0 | 386.5 | 403.4 | 419.1 | 421.7 |
| 40° | 363.1 | 372.2 | 390.4 | 408.6 | 412.5 |
| 42.5° | 344.9 | 356.6 | 378.7 | 399.5 | 403.4 |
| 45° | 326.7 | 341.0 | 365.7 | 387.8 | 393.0 |
| 47.5° | 308.4 | 324.1 | 354.0 | 377.4 | 385.2 |
| 50° | 287.6 | 307.1 | 339.7 | 367.0 | 373.5 |
| 52.5° | 268.1 | 290.2 | 326.7 | 355.3 | 364.4 |
| 55° | 247.3 | 274.6 | 313.6 | 344.9 | 354.0 |
| 57.5° | 229.0 | 256.4 | 299.3 | 334.5 | 343.6 |
| 60° | 208.2 | 238.2 | 286.3 | 321.4 | 331.9 |
| 62.5° | 187.4 | 222.5 | 273.3 | 311.0 | 322.8 |
| 65° | 166.6 | 204.3 | 260.3 | 299.3 | 311.0 |
| 67.5° | 147.1 | 187.4 | 246.0 | 287.6 | 300.6 |
| 70° | 126.2 | 170.5 | 233.0 | 275.9 | 288.9 |
| 72.5° | 106.7 | 154.9 | 221.2 | 264.2 | 278.5 |
| 75° | 87.2 | 139.3 | 208.2 | 252.5 | 266.8 |
| 77.5° | 69.0 | 124.9 | 195.2 | 242.1 | 257.7 |
| 80° | 49.5 | 110.6 | 183.5 | 230.4 | 246.0 |
| 82.5° | 33.8 | 97.6 | 173.1 | 219.9 | 234.3 |
| 85° | 19.5 | 85.9 | 161.4 | 209.5 | 223.8 |
| 87.5° | 7.8 | 75.5 | 149.7 | 197.8 | 213.4 |
| 90° | 0.0 | 66.4 | 140.6 | 188.7 | 203.0 |
| 92.5° | 0.0 | 58.6 | 131.4 | 178.3 | 193.9 |
| 95° | 1.3 | 52.1 | 122.3 | 169.2 | 184.8 |
| 97.5° | 0.0 | 45.5 | 114.5 | 160.1 | 174.4 |
| 100° | 0.0 | 41.6 | 106.7 | 151.0 | 165.3 |
| 102.5° | 0.0 | 36.4 | 98.9 | 141.9 | 156.2 |
| 105° | 0.0 | 32.5 | 91.1 | 132.7 | 145.8 |
| 107.5° | 0.0 | 29.9 | 84.6 | 124.9 | 136.6 |
| 110° | 0.0 | 26.0 | 78.1 | 117.1 | 128.8 |



TEST NUMBER: P218301

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|------|-------|-------|
| 112.5° | 0.0 | 23.4 | 71.6 | 108.0 | 119.7 |
| 115° | 0.0 | 20.8 | 66.4 | 100.2 | 110.6 |
| 117.5° | 0.0 | 19.5 | 59.9 | 92.4 | 102.8 |
| 120° | 0.0 | 16.9 | 54.7 | 85.9 | 95.0 |
| 122.5° | 0.0 | 15.6 | 50.8 | 78.1 | 87.2 |
| 125° | 0.0 | 13.0 | 45.5 | 71.6 | 79.4 |
| 127.5° | 0.0 | 11.7 | 40.3 | 65.1 | 71.6 |
| 130° | 0.0 | 10.4 | 36.4 | 58.6 | 65.1 |
| 132.5° | 0.0 | 9.1 | 32.5 | 52.1 | 58.6 |
| 135° | 0.0 | 7.8 | 28.6 | 46.9 | 52.1 |
| 137.5° | 0.0 | 6.5 | 24.7 | 40.3 | 45.5 |
| 140° | 0.0 | 5.2 | 20.8 | 35.1 | 39.0 |
| 142.5° | 0.0 | 3.9 | 18.2 | 29.9 | 33.8 |
| 145° | 0.0 | 2.6 | 14.3 | 26.0 | 28.6 |
| 147.5° | 0.0 | 2.6 | 11.7 | 20.8 | 23.4 |
| 150° | 0.0 | 1.3 | 7.8 | 16.9 | 18.2 |
| 152.5° | 0.0 | 1.3 | 6.5 | 13.0 | 13.0 |
| 155° | 0.0 | 1.3 | 3.9 | 7.8 | 9.1 |
| 157.5° | 0.0 | 0.0 | 2.6 | 5.2 | 5.2 |
| 160° | 0.0 | 0.0 | 1.3 | 2.6 | 3.9 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)