

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: P296664

Luminaire Tested: **22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296664
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36060-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K
Description: RLN LED 2x2 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (252) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1567.0 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.38 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

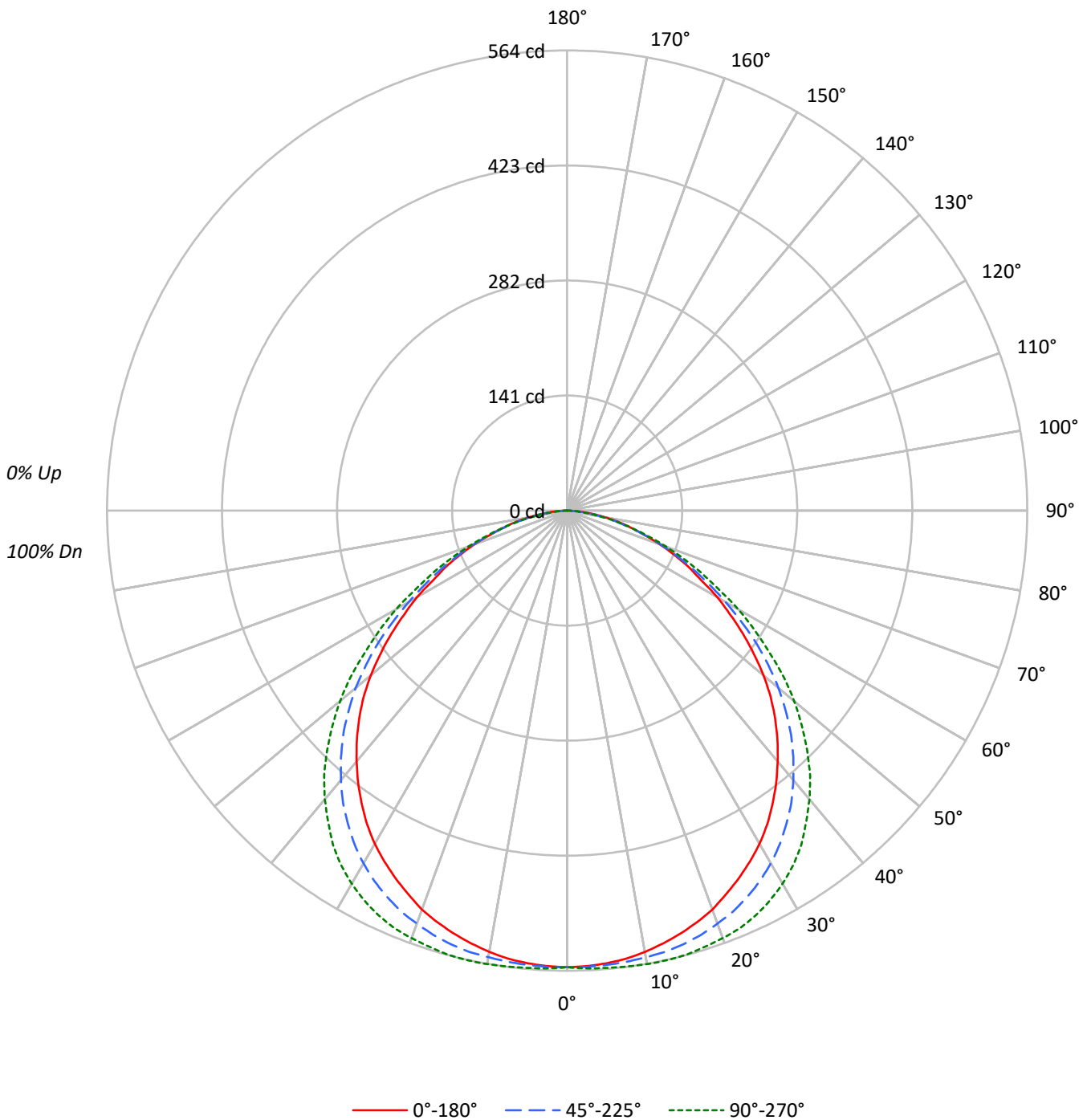
Input Watts (W): 18.879
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P296664

CATALOG NUMBER: 22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P296664

CATALOG NUMBER: 22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 105 | 101 | 97 | 107 | 103 | 99 | 96 | 98 | 95 | 93 | 94 | 92 | 90 | 91 | 89 | 87 | 85 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 74 | 72 |
| 3 | 91 | 81 | 73 | 67 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 63 | 57 | 81 | 71 | 63 | 56 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 58 | 54 | 52 |
| 5 | 77 | 64 | 56 | 49 | 75 | 63 | 55 | 49 | 61 | 54 | 48 | 59 | 53 | 48 | 57 | 52 | 47 | 45 |
| 6 | 71 | 58 | 49 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 42 | 40 |
| 7 | 66 | 53 | 44 | 38 | 64 | 52 | 44 | 38 | 50 | 43 | 37 | 49 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 40 | 34 | 60 | 47 | 39 | 34 | 46 | 39 | 33 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 36 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 52 | 40 | 33 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1506 | 1506 | 1506 |
| 5° | 1504 | 1509 | 1520 |
| 10° | 1501 | 1519 | 1542 |
| 15° | 1495 | 1533 | 1570 |
| 20° | 1490 | 1543 | 1597 |
| 25° | 1477 | 1551 | 1625 |
| 30° | 1465 | 1552 | 1641 |
| 35° | 1442 | 1540 | 1644 |
| 40° | 1411 | 1515 | 1623 |
| 45° | 1372 | 1477 | 1583 |
| 50° | 1316 | 1416 | 1521 |
| 55° | 1232 | 1326 | 1416 |
| 60° | 1145 | 1207 | 1305 |
| 65° | 1050 | 1086 | 1160 |
| 70° | 950 | 965 | 1010 |
| 75° | 837 | 817 | 847 |
| 80° | 728 | 668 | 638 |
| 85° | 593 | 445 | 386 |



TEST NUMBER: P296664

CATALOG NUMBER: 22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 53.3 | 3.4 |
| 10°-20° | 155.4 | 9.9 |
| 20°-30° | 240.8 | 15.4 |
| 30°-40° | 293.1 | 18.7 |
| 40°-50° | 298.5 | 19.0 |
| 50°-60° | 251.7 | 16.1 |
| 60°-70° | 170.3 | 10.9 |
| 70°-80° | 85.1 | 5.4 |
| 80°-90° | 18.9 | 1.2 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 449.5 | 28.7 |
| 0°-40° | 742.6 | 47.4 |
| 0°-60° | 1292.7 | 82.5 |
| 0°-90° | 1567.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1567.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 560 | 560 | 560 | 560 | 560 | |
| 5° | 557 | 558 | 559 | 562 | 563 | 53 |
| 15° | 537 | 541 | 550 | 560 | 564 | 152 |
| 25° | 497 | 505 | 522 | 540 | 547 | 229 |
| 35° | 439 | 449 | 469 | 491 | 500 | 274 |
| 45° | 360 | 367 | 388 | 408 | 416 | 278 |
| 55° | 263 | 266 | 283 | 296 | 302 | 235 |
| 65° | 165 | 162 | 171 | 178 | 182 | 163 |
| 75° | 80 | 78 | 79 | 80 | 82 | 86 |
| 85° | 19 | 16 | 14 | 12 | 12 | 22 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P296664

CATALOG NUMBER: 22RLN-LD5-25-RDP-UNV-L92765-W2A1-U-2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 559.7 | 559.7 | 559.7 | 559.7 | 559.7 |
| 2.5° | 558.8 | 558.8 | 559.7 | 560.7 | 561.7 |
| 5° | 556.9 | 557.8 | 558.8 | 561.7 | 562.6 |
| 7.5° | 554.0 | 554.9 | 557.8 | 561.7 | 563.6 |
| 10° | 549.2 | 551.1 | 555.9 | 561.7 | 564.5 |
| 12.5° | 543.4 | 546.3 | 554.0 | 560.7 | 564.5 |
| 15° | 536.7 | 540.6 | 550.2 | 559.7 | 563.6 |
| 17.5° | 529.1 | 533.9 | 545.4 | 555.9 | 560.7 |
| 20° | 520.4 | 526.2 | 538.7 | 552.1 | 557.8 |
| 22.5° | 508.9 | 516.6 | 531.9 | 547.3 | 554.0 |
| 25° | 497.4 | 505.1 | 522.4 | 539.6 | 547.3 |
| 27.5° | 485.0 | 493.6 | 511.8 | 531.0 | 538.7 |
| 30° | 471.6 | 479.2 | 499.4 | 519.5 | 528.1 |
| 32.5° | 456.2 | 463.9 | 485.0 | 506.1 | 515.6 |
| 35° | 439.0 | 448.6 | 468.7 | 490.7 | 500.3 |
| 37.5° | 420.8 | 429.4 | 451.4 | 472.5 | 481.1 |
| 40° | 401.6 | 410.2 | 431.3 | 453.3 | 462.0 |
| 42.5° | 381.5 | 390.1 | 410.2 | 431.3 | 440.9 |
| 45° | 360.4 | 367.1 | 388.2 | 408.3 | 416.0 |
| 47.5° | 338.3 | 343.1 | 363.3 | 382.4 | 390.1 |
| 50° | 314.4 | 319.2 | 338.3 | 355.6 | 363.3 |
| 52.5° | 288.5 | 292.3 | 310.5 | 325.9 | 334.5 |
| 55° | 262.6 | 266.5 | 282.7 | 296.2 | 301.9 |
| 57.5° | 236.7 | 238.7 | 253.0 | 266.5 | 272.2 |
| 60° | 212.8 | 212.8 | 224.3 | 234.8 | 242.5 |
| 62.5° | 185.0 | 187.9 | 196.5 | 207.0 | 209.9 |
| 65° | 164.9 | 162.0 | 170.6 | 178.3 | 182.1 |
| 67.5° | 141.9 | 139.9 | 145.7 | 152.4 | 154.3 |
| 70° | 120.8 | 117.9 | 122.7 | 126.5 | 128.4 |
| 72.5° | 98.7 | 97.8 | 99.7 | 102.6 | 103.5 |
| 75° | 80.5 | 77.6 | 78.6 | 79.6 | 81.5 |
| 77.5° | 64.2 | 59.4 | 60.4 | 59.4 | 60.4 |
| 80° | 47.0 | 43.1 | 43.1 | 42.2 | 41.2 |
| 82.5° | 31.6 | 29.7 | 27.8 | 25.9 | 24.9 |
| 85° | 19.2 | 16.3 | 14.4 | 12.5 | 12.5 |
| 87.5° | 7.7 | 5.8 | 4.8 | 4.8 | 4.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)