

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: P229409

Luminaire Tested: **22ALNG-LD5-20-UNV-L835-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36087)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22ALNG-LD5-20-UNV-L835-CD1-SVPD1-U
Description: METALUX 2X2 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR
Light Source: (126)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1989.1 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.23 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

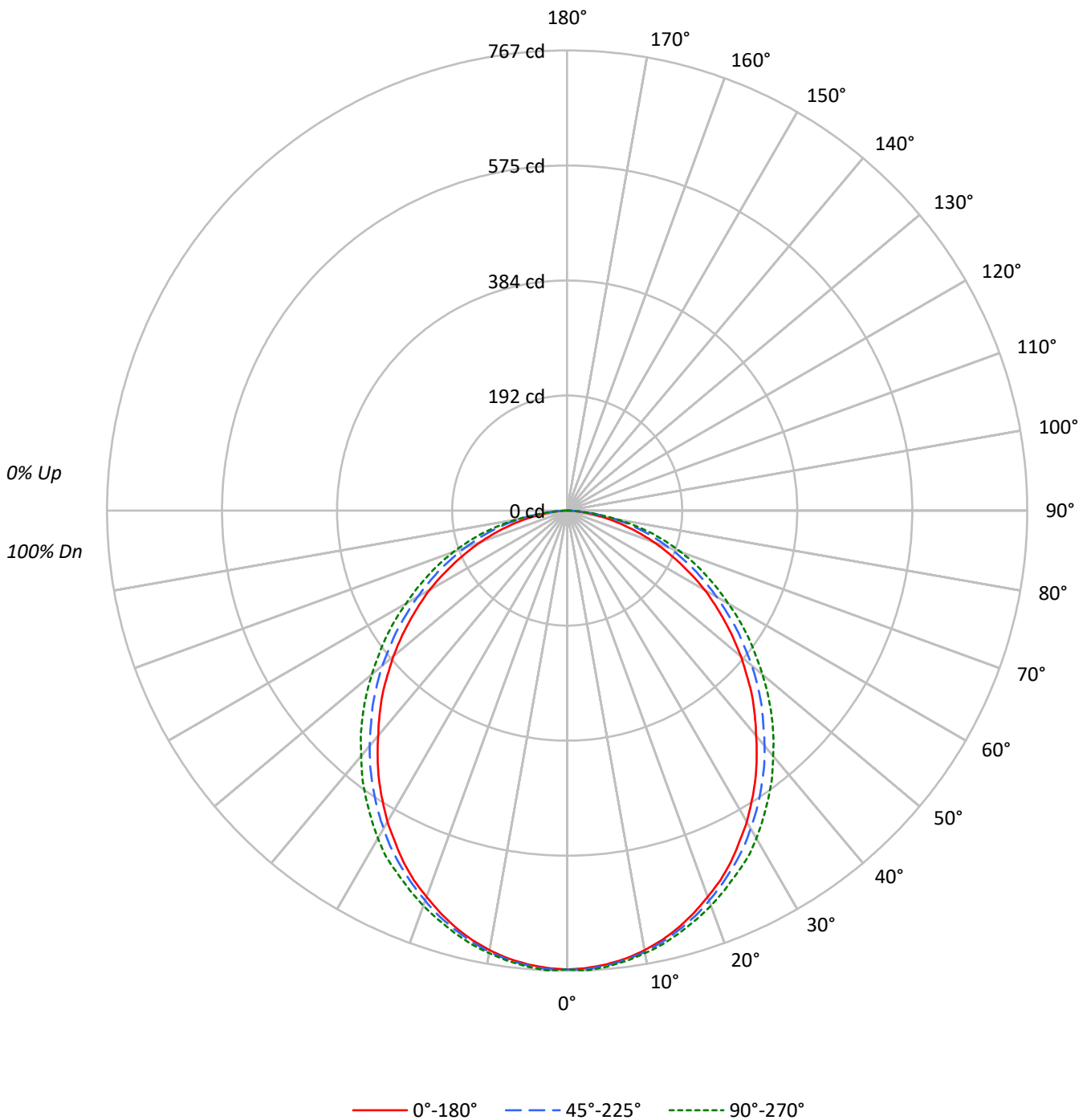
Input Watts (W): 16.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229409

CATALOG NUMBER: 22ALNG-LD5-20-UNV-L835-CD1-SVPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229409

CATALOG NUMBER: 22ALNG-LD5-20-UNV-L835-CD1-SVPD1-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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 84 | 79 | 97 | 89 | 83 | 78 | 86 | 80 | 76 | 82 | 78 | 74 | 79 | 76 | 73 | 70 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 56 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 61 | 53 | 48 | 59 | 52 | 47 | 57 | 51 | 46 | 44 |
| 6 | 71 | 58 | 49 | 42 | 69 | 57 | 48 | 42 | 55 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 39 |
| 7 | 66 | 52 | 44 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 61 | 48 | 39 | 34 | 60 | 47 | 39 | 33 | 46 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 36 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2450 | 2450 | 2450 |
| 5° | 2440 | 2446 | 2453 |
| 10° | 2419 | 2429 | 2436 |
| 15° | 2384 | 2397 | 2414 |
| 20° | 2334 | 2358 | 2389 |
| 25° | 2283 | 2314 | 2360 |
| 30° | 2215 | 2263 | 2333 |
| 35° | 2139 | 2205 | 2287 |
| 40° | 2048 | 2140 | 2232 |
| 45° | 1975 | 2074 | 2183 |
| 50° | 1883 | 2003 | 2117 |
| 55° | 1787 | 1926 | 2060 |
| 60° | 1697 | 1845 | 1986 |
| 65° | 1569 | 1773 | 1940 |
| 70° | 1442 | 1695 | 1882 |
| 75° | 1262 | 1609 | 1807 |
| 80° | 1051 | 1457 | 1549 |
| 85° | 808 | 1029 | 955 |



TEST NUMBER: P229409

CATALOG NUMBER: 22ALNG-LD5-20-UNV-L835-CD1-SVPD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 72.2 | 3.6 |
| 10°-20° | 203.9 | 10.3 |
| 20°-30° | 302.1 | 15.2 |
| 30°-40° | 353.3 | 17.8 |
| 40°-50° | 353.0 | 17.7 |
| 50°-60° | 307.7 | 15.5 |
| 60°-70° | 230.1 | 11.6 |
| 70°-80° | 133.9 | 6.7 |
| 80°-90° | 32.9 | 1.7 |
| 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° | 578.2 | 29.1 |
| 0°-40° | 931.4 | 46.8 |
| 0°-60° | 1592.2 | 80.0 |
| 0°-90° | 1989.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1989.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 765 | 765 | 765 | 765 | 765 | |
| 5° | 759 | 760 | 761 | 763 | 763 | 72 |
| 15° | 719 | 720 | 723 | 726 | 728 | 202 |
| 25° | 646 | 648 | 655 | 664 | 668 | 297 |
| 35° | 547 | 551 | 564 | 580 | 585 | 342 |
| 45° | 436 | 441 | 458 | 475 | 482 | 335 |
| 55° | 320 | 326 | 345 | 361 | 369 | 287 |
| 65° | 207 | 215 | 234 | 249 | 256 | 206 |
| 75° | 102 | 113 | 130 | 140 | 146 | 109 |
| 85° | 22 | 26 | 28 | 27 | 26 | 27 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P229409

CATALOG NUMBER: 22ALNG-LD5-20-UNV-L835-CD1-SVPD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-----|-------|-----|-------|-----|
| 0° | 765 | 765 | 765 | 765 | 765 |
| 2.5° | 763 | 763 | 765 | 766 | 767 |
| 5° | 759 | 760 | 761 | 763 | 763 |
| 7.5° | 753 | 754 | 755 | 757 | 757 |
| 10° | 744 | 745 | 747 | 749 | 749 |
| 12.5° | 733 | 734 | 736 | 738 | 740 |
| 15° | 719 | 720 | 723 | 726 | 728 |
| 17.5° | 703 | 705 | 709 | 713 | 715 |
| 20° | 685 | 687 | 692 | 699 | 701 |
| 22.5° | 667 | 668 | 674 | 682 | 685 |
| 25° | 646 | 648 | 655 | 664 | 668 |
| 27.5° | 622 | 625 | 635 | 646 | 652 |
| 30° | 599 | 601 | 612 | 626 | 631 |
| 32.5° | 573 | 577 | 589 | 603 | 608 |
| 35° | 547 | 551 | 564 | 580 | 585 |
| 37.5° | 519 | 523 | 539 | 555 | 561 |
| 40° | 490 | 496 | 512 | 529 | 534 |
| 42.5° | 463 | 468 | 484 | 501 | 509 |
| 45° | 436 | 441 | 458 | 475 | 482 |
| 47.5° | 406 | 411 | 430 | 447 | 454 |
| 50° | 378 | 383 | 402 | 419 | 425 |
| 52.5° | 349 | 355 | 372 | 390 | 396 |
| 55° | 320 | 326 | 345 | 361 | 369 |
| 57.5° | 292 | 299 | 315 | 332 | 340 |
| 60° | 265 | 270 | 288 | 304 | 310 |
| 62.5° | 236 | 242 | 260 | 277 | 283 |
| 65° | 207 | 215 | 234 | 249 | 256 |
| 67.5° | 180 | 188 | 207 | 221 | 229 |
| 70° | 154 | 162 | 181 | 194 | 201 |
| 72.5° | 128 | 138 | 155 | 167 | 173 |
| 75° | 102 | 113 | 130 | 140 | 146 |
| 77.5° | 79 | 90 | 105 | 114 | 116 |
| 80° | 57 | 68 | 79 | 83 | 84 |
| 82.5° | 39 | 47 | 53 | 53 | 55 |
| 85° | 22 | 26 | 28 | 27 | 26 |
| 87.5° | 8 | 9 | 8 | 5 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)