

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: P393262

Luminaire Tested: **22EN-LD2-25-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393262
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-563-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-25-UNV-L83050-W2A-1-U (4500K)
Description: 2X2 ENCOUNTER, 2500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2546.6 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.25 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

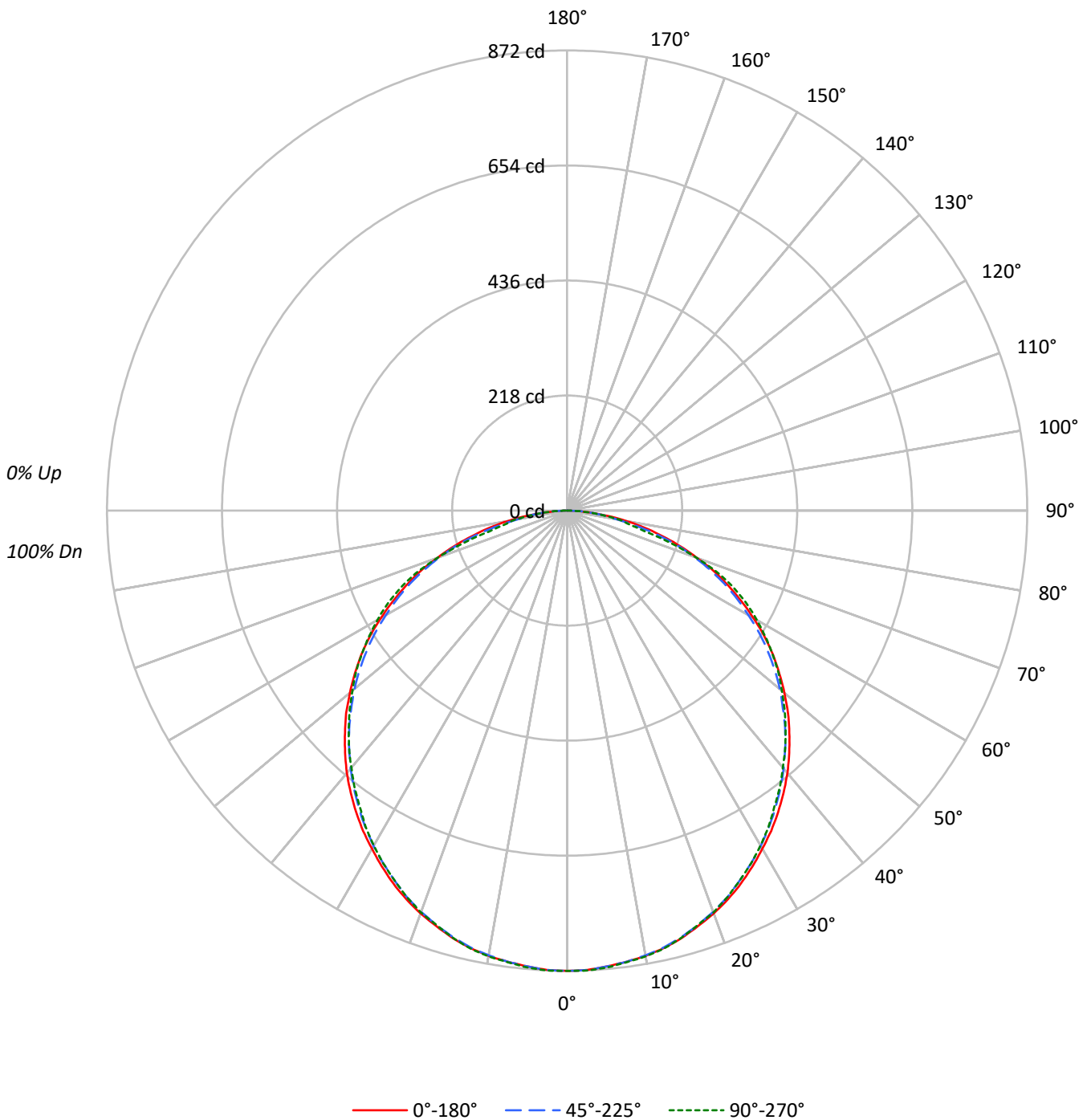
Input Watts (W): 18
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P393262

CATALOG NUMBER: 22EN-LD2-25-UNV-L83050-W2A-1-U (4500K)

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 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 109 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 90 | 87 | 85 | 83 | | | | | 83 | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 85 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 | | | | | 69 | | | |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | 58 | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | 49 | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 | | | | | 42 | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 | | | | | 37 | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 | | | | | 33 | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | 29 | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | 26 | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 | | | | | 24 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2347 | 2347 | 2347 |
| 5° | 2343 | 2343 | 2348 |
| 10° | 2342 | 2339 | 2344 |
| 15° | 2337 | 2331 | 2334 |
| 20° | 2326 | 2317 | 2320 |
| 25° | 2315 | 2297 | 2297 |
| 30° | 2299 | 2280 | 2277 |
| 35° | 2290 | 2260 | 2250 |
| 40° | 2281 | 2242 | 2235 |
| 45° | 2266 | 2223 | 2227 |
| 50° | 2250 | 2203 | 2224 |
| 55° | 2235 | 2177 | 2230 |
| 60° | 2196 | 2137 | 2235 |
| 65° | 2145 | 2094 | 2229 |
| 70° | 2058 | 2010 | 2050 |
| 75° | 1947 | 1841 | 1598 |
| 80° | 1767 | 1483 | 1578 |
| 85° | 1288 | 1318 | 1288 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 82.4 | 3.2 |
| 10°-20° | 236.2 | 9.3 |
| 20°-30° | 357.2 | 14.0 |
| 30°-40° | 431.4 | 16.9 |
| 40°-50° | 452.8 | 17.8 |
| 50°-60° | 419.5 | 16.5 |
| 60°-70° | 331.2 | 13.0 |
| 70°-80° | 185.7 | 7.3 |
| 80°-90° | 50.1 | 2.0 |
| 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° | 675.8 | 26.5 |
| 0°-40° | 1107.2 | 43.5 |
| 0°-60° | 1979.5 | 77.7 |
| 0°-90° | 2546.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2546.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 872 | 872 | 872 | 872 | 872 | |
| 5° | 867 | 866 | 867 | 868 | 869 | 82 |
| 15° | 839 | 837 | 837 | 837 | 838 | 237 |
| 25° | 780 | 777 | 774 | 772 | 774 | 359 |
| 35° | 697 | 694 | 688 | 684 | 685 | 436 |
| 45° | 595 | 590 | 584 | 581 | 585 | 460 |
| 55° | 476 | 471 | 464 | 468 | 475 | 425 |
| 65° | 337 | 333 | 329 | 340 | 350 | 333 |
| 75° | 187 | 184 | 177 | 160 | 154 | 198 |
| 85° | 42 | 42 | 43 | 42 | 42 | 53 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P393262

CATALOG NUMBER: 22EN-LD2-25-UNV-L83050-W2A-1-U (4500K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 872.3 | 872.3 | 872.3 | 872.3 | 872.3 |
| 2.5° | 871.3 | 870.2 | 871.3 | 871.3 | 872.3 |
| 5° | 867.2 | 866.2 | 867.2 | 868.2 | 869.2 |
| 7.5° | 862.1 | 861.1 | 862.1 | 863.1 | 863.1 |
| 10° | 857.0 | 855.0 | 856.0 | 857.0 | 858.0 |
| 12.5° | 848.9 | 847.8 | 847.8 | 847.8 | 849.9 |
| 15° | 838.7 | 836.7 | 836.7 | 836.7 | 837.7 |
| 17.5° | 825.5 | 824.4 | 823.4 | 823.4 | 823.4 |
| 20° | 812.2 | 810.2 | 809.2 | 808.2 | 810.2 |
| 22.5° | 797.0 | 794.9 | 792.9 | 790.9 | 792.9 |
| 25° | 779.7 | 776.6 | 773.5 | 771.5 | 773.5 |
| 27.5° | 760.3 | 758.3 | 754.2 | 751.2 | 754.2 |
| 30° | 740.0 | 736.9 | 733.9 | 730.8 | 732.8 |
| 32.5° | 719.6 | 716.5 | 711.5 | 707.4 | 710.4 |
| 35° | 697.2 | 694.2 | 688.1 | 684.0 | 685.0 |
| 37.5° | 673.8 | 669.7 | 663.6 | 659.6 | 661.6 |
| 40° | 649.4 | 645.3 | 638.2 | 633.1 | 636.1 |
| 42.5° | 622.9 | 618.8 | 611.7 | 608.7 | 611.7 |
| 45° | 595.4 | 590.3 | 584.2 | 581.2 | 585.3 |
| 47.5° | 567.9 | 563.9 | 554.7 | 554.7 | 558.8 |
| 50° | 537.4 | 533.3 | 526.2 | 526.2 | 531.3 |
| 52.5° | 506.9 | 501.8 | 495.7 | 497.7 | 504.8 |
| 55° | 476.3 | 471.3 | 464.1 | 468.2 | 475.3 |
| 57.5° | 442.8 | 438.7 | 431.6 | 437.7 | 445.8 |
| 60° | 408.1 | 403.1 | 397.0 | 405.1 | 415.3 |
| 62.5° | 372.5 | 368.5 | 363.4 | 373.5 | 384.7 |
| 65° | 336.9 | 332.8 | 328.8 | 340.0 | 350.1 |
| 67.5° | 302.3 | 297.2 | 293.1 | 303.3 | 310.4 |
| 70° | 261.6 | 258.5 | 255.5 | 257.5 | 260.6 |
| 72.5° | 224.9 | 221.9 | 218.8 | 210.7 | 207.6 |
| 75° | 187.3 | 184.2 | 177.1 | 159.8 | 153.7 |
| 77.5° | 150.6 | 147.6 | 134.4 | 119.1 | 120.1 |
| 80° | 114.0 | 110.9 | 95.7 | 98.7 | 101.8 |
| 82.5° | 78.4 | 74.3 | 71.2 | 70.2 | 70.2 |
| 85° | 41.7 | 41.7 | 42.7 | 41.7 | 41.7 |
| 87.5° | 17.3 | 18.3 | 18.3 | 18.3 | 18.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)