

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: P393272

Luminaire Tested: **22EN-LD2-25-UNV-L92765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393272
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-L92765-W2A-1-U (5700K)
Description: 2X2 ENCOUNTER, 2500 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2141.4 lumens
Efficiency: N/A
Efficacy: 119.0 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

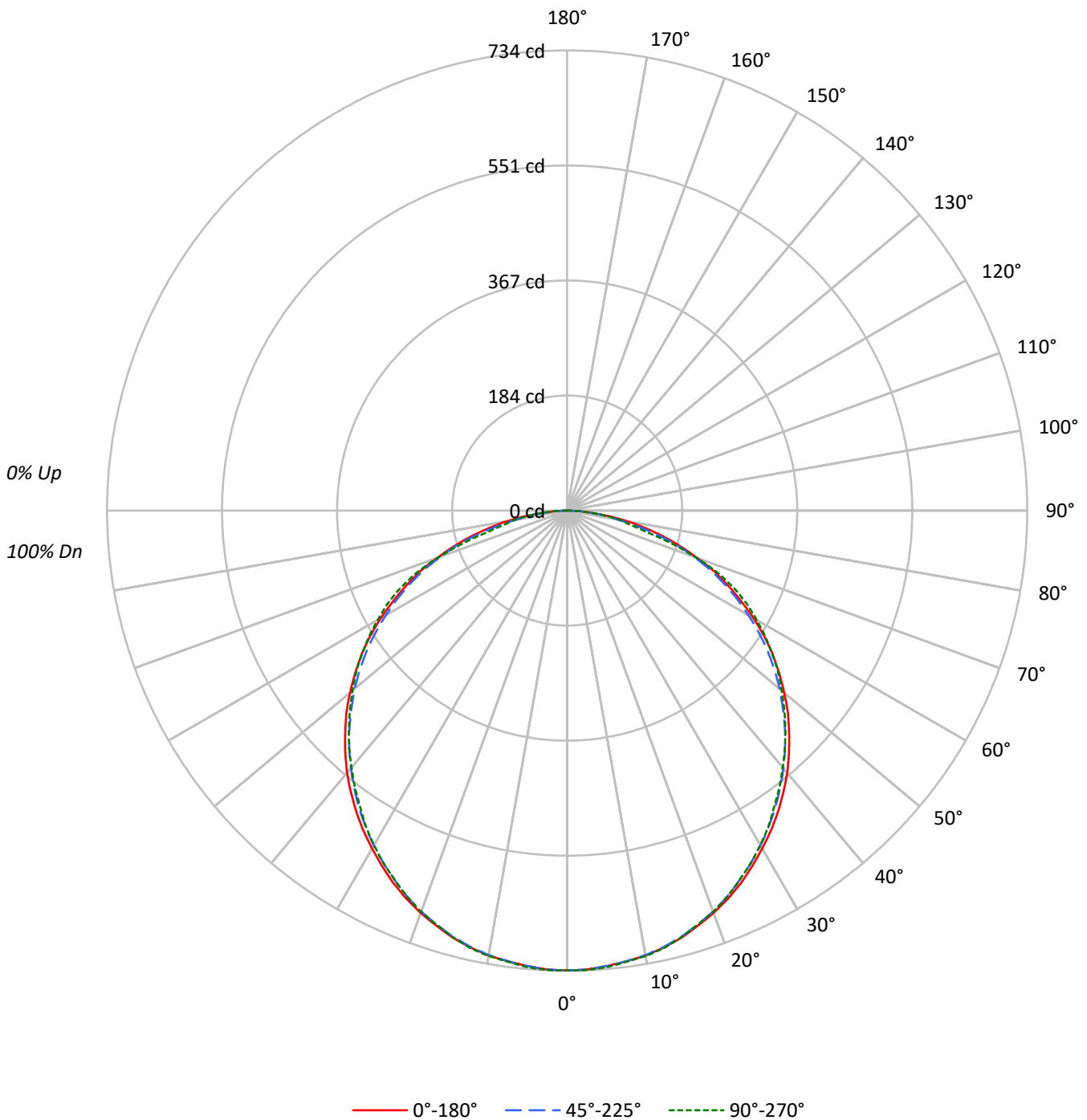
Input Watts (W): 18
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1974 | 1974 | 1974 |
| 5° | 1970 | 1970 | 1974 |
| 10° | 1969 | 1967 | 1971 |
| 15° | 1965 | 1960 | 1962 |
| 20° | 1956 | 1948 | 1951 |
| 25° | 1947 | 1931 | 1931 |
| 30° | 1933 | 1917 | 1915 |
| 35° | 1926 | 1901 | 1892 |
| 40° | 1918 | 1885 | 1879 |
| 45° | 1905 | 1870 | 1873 |
| 50° | 1892 | 1852 | 1870 |
| 55° | 1879 | 1831 | 1875 |
| 60° | 1847 | 1796 | 1879 |
| 65° | 1804 | 1760 | 1875 |
| 70° | 1731 | 1690 | 1724 |
| 75° | 1638 | 1548 | 1343 |
| 80° | 1486 | 1247 | 1327 |
| 85° | 1084 | 1108 | 1084 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 69.3 | 3.2 |
| 10°-20° | 198.6 | 9.3 |
| 20°-30° | 300.3 | 14.0 |
| 30°-40° | 362.7 | 16.9 |
| 40°-50° | 380.8 | 17.8 |
| 50°-60° | 352.8 | 16.5 |
| 60°-70° | 278.5 | 13.0 |
| 70°-80° | 156.2 | 7.3 |
| 80°-90° | 42.2 | 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° | 568.2 | 26.5 |
| 0°-40° | 931.0 | 43.5 |
| 0°-60° | 1664.5 | 77.7 |
| 0°-90° | 2141.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2141.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 734 | 734 | 734 | 734 | 734 | |
| 5° | 729 | 728 | 729 | 730 | 731 | 69 |
| 15° | 705 | 704 | 704 | 704 | 704 | 199 |
| 25° | 656 | 653 | 650 | 649 | 650 | 302 |
| 35° | 586 | 584 | 579 | 575 | 576 | 367 |
| 45° | 501 | 496 | 491 | 489 | 492 | 386 |
| 55° | 400 | 396 | 390 | 394 | 400 | 357 |
| 65° | 283 | 280 | 276 | 286 | 294 | 280 |
| 75° | 158 | 155 | 149 | 134 | 129 | 166 |
| 85° | 35 | 35 | 36 | 35 | 35 | 44 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: 22EN-LD2-25-UNV-L92765-W2A-1-U (5700K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 733.5 | 733.5 | 733.5 | 733.5 | 733.5 |
| 2.5° | 732.6 | 731.8 | 732.6 | 732.6 | 733.5 |
| 5° | 729.2 | 728.3 | 729.2 | 730.1 | 730.9 |
| 7.5° | 724.9 | 724.1 | 724.9 | 725.8 | 725.8 |
| 10° | 720.6 | 718.9 | 719.8 | 720.6 | 721.5 |
| 12.5° | 713.8 | 712.9 | 712.9 | 712.9 | 714.7 |
| 15° | 705.2 | 703.5 | 703.5 | 703.5 | 704.4 |
| 17.5° | 694.1 | 693.3 | 692.4 | 692.4 | 692.4 |
| 20° | 683.0 | 681.3 | 680.4 | 679.6 | 681.3 |
| 22.5° | 670.1 | 668.4 | 666.7 | 665.0 | 666.7 |
| 25° | 655.6 | 653.0 | 650.5 | 648.7 | 650.5 |
| 27.5° | 639.3 | 637.6 | 634.2 | 631.6 | 634.2 |
| 30° | 622.2 | 619.6 | 617.1 | 614.5 | 616.2 |
| 32.5° | 605.1 | 602.5 | 598.3 | 594.8 | 597.4 |
| 35° | 586.3 | 583.7 | 578.6 | 575.1 | 576.0 |
| 37.5° | 566.6 | 563.2 | 558.0 | 554.6 | 556.3 |
| 40° | 546.0 | 542.6 | 536.6 | 532.4 | 534.9 |
| 42.5° | 523.8 | 520.4 | 514.4 | 511.8 | 514.4 |
| 45° | 500.7 | 496.4 | 491.3 | 488.7 | 492.1 |
| 47.5° | 477.6 | 474.2 | 466.4 | 466.4 | 469.9 |
| 50° | 451.9 | 448.5 | 442.5 | 442.5 | 446.8 |
| 52.5° | 426.2 | 421.9 | 416.8 | 418.5 | 424.5 |
| 55° | 400.5 | 396.3 | 390.3 | 393.7 | 399.7 |
| 57.5° | 372.3 | 368.9 | 362.9 | 368.0 | 374.9 |
| 60° | 343.2 | 338.9 | 333.8 | 340.6 | 349.2 |
| 62.5° | 313.2 | 309.8 | 305.5 | 314.1 | 323.5 |
| 65° | 283.3 | 279.9 | 276.4 | 285.9 | 294.4 |
| 67.5° | 254.2 | 249.9 | 246.5 | 255.0 | 261.0 |
| 70° | 220.0 | 217.4 | 214.8 | 216.5 | 219.1 |
| 72.5° | 189.1 | 186.6 | 184.0 | 177.2 | 174.6 |
| 75° | 157.5 | 154.9 | 148.9 | 134.4 | 129.2 |
| 77.5° | 126.7 | 124.1 | 113.0 | 100.1 | 101.0 |
| 80° | 95.9 | 93.3 | 80.5 | 83.0 | 85.6 |
| 82.5° | 65.9 | 62.5 | 59.9 | 59.1 | 59.1 |
| 85° | 35.1 | 35.1 | 35.9 | 35.1 | 35.1 |
| 87.5° | 14.5 | 15.4 | 15.4 | 15.4 | 15.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)