

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: P393125

Luminaire Tested: **14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393125
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-54)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)
Description: 1X4 ENCOUNTER, 4300 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3972.7 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

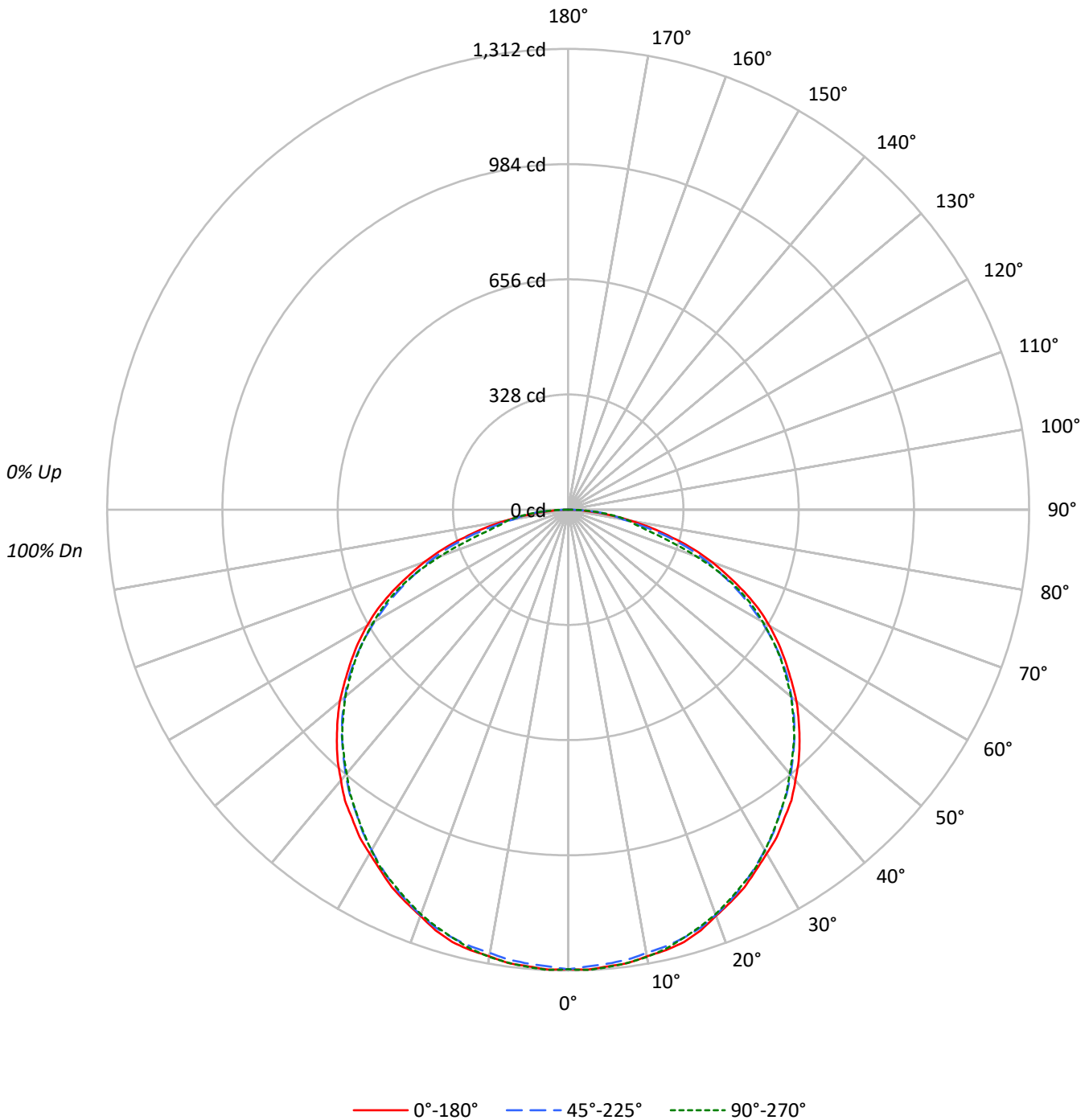
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393125

CATALOG NUMBER: 14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)

Luminous Intensity Polar Plot





TEST NUMBER: P393125

CATALOG NUMBER: 14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)

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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 68 |
| 3 | 89 | 78 | 70 | 63 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 65 | 60 | 68 | 64 | 59 | 57 |
| 4 | 82 | 69 | 60 | 53 | 79 | 68 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 51 | 61 | 55 | 51 | 48 |
| 5 | 75 | 62 | 52 | 46 | 73 | 61 | 52 | 45 | 58 | 51 | 45 | 56 | 50 | 44 | 54 | 49 | 44 | 42 |
| 6 | 69 | 55 | 46 | 40 | 67 | 54 | 46 | 39 | 53 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 35 | 46 | 39 | 34 | 45 | 39 | 34 | 32 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 30 | 28 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 25 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3522 | 3522 | 3522 |
| 5° | 3525 | 3505 | 3530 |
| 10° | 3528 | 3502 | 3533 |
| 15° | 3550 | 3519 | 3519 |
| 20° | 3523 | 3515 | 3510 |
| 25° | 3523 | 3498 | 3492 |
| 30° | 3512 | 3477 | 3480 |
| 35° | 3523 | 3459 | 3455 |
| 40° | 3534 | 3459 | 3446 |
| 45° | 3544 | 3466 | 3463 |
| 50° | 3551 | 3473 | 3465 |
| 55° | 3541 | 3476 | 3458 |
| 60° | 3560 | 3419 | 3444 |
| 65° | 3515 | 3331 | 3396 |
| 70° | 3425 | 3234 | 3050 |
| 75° | 3176 | 2982 | 2486 |
| 80° | 2808 | 2431 | 2678 |
| 85° | 2047 | 2652 | 2711 |



TEST NUMBER: P393125

CATALOG NUMBER: 14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 124.0 | 3.1 |
| 10°-20° | 357.1 | 9.0 |
| 20°-30° | 543.4 | 13.7 |
| 30°-40° | 663.3 | 16.7 |
| 40°-50° | 706.8 | 17.8 |
| 50°-60° | 662.6 | 16.7 |
| 60°-70° | 526.3 | 13.2 |
| 70°-80° | 299.3 | 7.5 |
| 80°-90° | 89.8 | 2.3 |
| 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° | 1024.6 | 25.8 |
| 0°-40° | 1687.9 | 42.5 |
| 0°-60° | 3057.3 | 77.0 |
| 0°-90° | 3972.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3972.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1309 | 1309 | 1309 | 1309 | 1309 | |
| 5° | 1305 | 1302 | 1298 | 1308 | 1307 | 124 |
| 15° | 1274 | 1270 | 1263 | 1261 | 1263 | 359 |
| 25° | 1186 | 1181 | 1178 | 1174 | 1176 | 546 |
| 35° | 1072 | 1063 | 1053 | 1056 | 1052 | 672 |
| 45° | 931 | 927 | 911 | 908 | 910 | 718 |
| 55° | 755 | 748 | 741 | 731 | 737 | 676 |
| 65° | 552 | 543 | 523 | 530 | 533 | 545 |
| 75° | 306 | 303 | 287 | 255 | 239 | 326 |
| 85° | 66 | 73 | 86 | 86 | 88 | 82 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P393125

CATALOG NUMBER: 14EN-LD2-43-UNV-L82765-W2A-1-U (4000K)

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1308.7 | 1308.7 | 1308.7 | 1308.7 | 1308.7 |
| 2.5° | 1310.6 | 1306.9 | 1301.3 | 1313.4 | 1311.5 |
| 5° | 1305.0 | 1302.2 | 1297.5 | 1307.8 | 1306.9 |
| 7.5° | 1302.2 | 1296.6 | 1291.9 | 1303.1 | 1301.3 |
| 10° | 1291.0 | 1291.9 | 1281.6 | 1292.9 | 1292.9 |
| 12.5° | 1284.5 | 1282.6 | 1274.2 | 1277.9 | 1280.7 |
| 15° | 1274.2 | 1270.4 | 1263.0 | 1261.1 | 1263.0 |
| 17.5° | 1255.5 | 1251.8 | 1249.0 | 1242.4 | 1245.2 |
| 20° | 1230.3 | 1232.1 | 1227.5 | 1221.9 | 1225.6 |
| 22.5° | 1208.8 | 1206.9 | 1205.0 | 1199.4 | 1201.3 |
| 25° | 1186.4 | 1180.8 | 1178.0 | 1174.2 | 1176.1 |
| 27.5° | 1157.4 | 1153.7 | 1149.9 | 1148.1 | 1151.8 |
| 30° | 1130.3 | 1124.7 | 1119.1 | 1117.2 | 1120.0 |
| 32.5° | 1105.1 | 1094.8 | 1088.3 | 1089.2 | 1086.4 |
| 35° | 1072.4 | 1063.1 | 1052.8 | 1055.6 | 1051.8 |
| 37.5° | 1043.4 | 1032.2 | 1021.0 | 1023.8 | 1019.2 |
| 40° | 1006.1 | 999.5 | 984.6 | 986.5 | 980.9 |
| 42.5° | 970.6 | 966.8 | 947.2 | 948.2 | 945.4 |
| 45° | 931.3 | 926.7 | 910.8 | 908.0 | 909.9 |
| 47.5° | 890.2 | 885.6 | 871.6 | 865.0 | 867.8 |
| 50° | 848.2 | 842.6 | 829.5 | 823.9 | 827.7 |
| 52.5° | 800.6 | 797.8 | 787.5 | 779.1 | 781.9 |
| 55° | 754.8 | 748.3 | 740.8 | 731.4 | 737.0 |
| 57.5° | 710.0 | 702.5 | 688.5 | 683.8 | 689.4 |
| 60° | 661.4 | 649.2 | 635.2 | 631.5 | 639.9 |
| 62.5° | 610.9 | 596.9 | 579.2 | 580.1 | 590.4 |
| 65° | 552.1 | 542.7 | 523.1 | 529.7 | 533.4 |
| 67.5° | 492.3 | 484.8 | 466.1 | 475.5 | 465.2 |
| 70° | 435.3 | 426.0 | 411.0 | 398.9 | 387.7 |
| 72.5° | 374.6 | 363.4 | 354.0 | 322.3 | 309.2 |
| 75° | 305.5 | 302.7 | 286.8 | 255.0 | 239.1 |
| 77.5° | 246.6 | 240.1 | 218.6 | 194.3 | 196.2 |
| 80° | 181.2 | 185.9 | 156.9 | 168.1 | 172.8 |
| 82.5° | 119.6 | 122.4 | 129.8 | 135.5 | 134.5 |
| 85° | 66.3 | 72.9 | 85.9 | 85.9 | 87.8 |
| 87.5° | 25.2 | 32.7 | 37.4 | 38.3 | 38.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)