

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: P183929

Luminaire Tested: **14SR-LD2-35-C-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183929
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34451)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14SR-LD2-35-C-UNV-L840-CD1-U
Description: METALUX SKYRIDGE EDGELIT LED 1X4 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3542.4 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.42 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

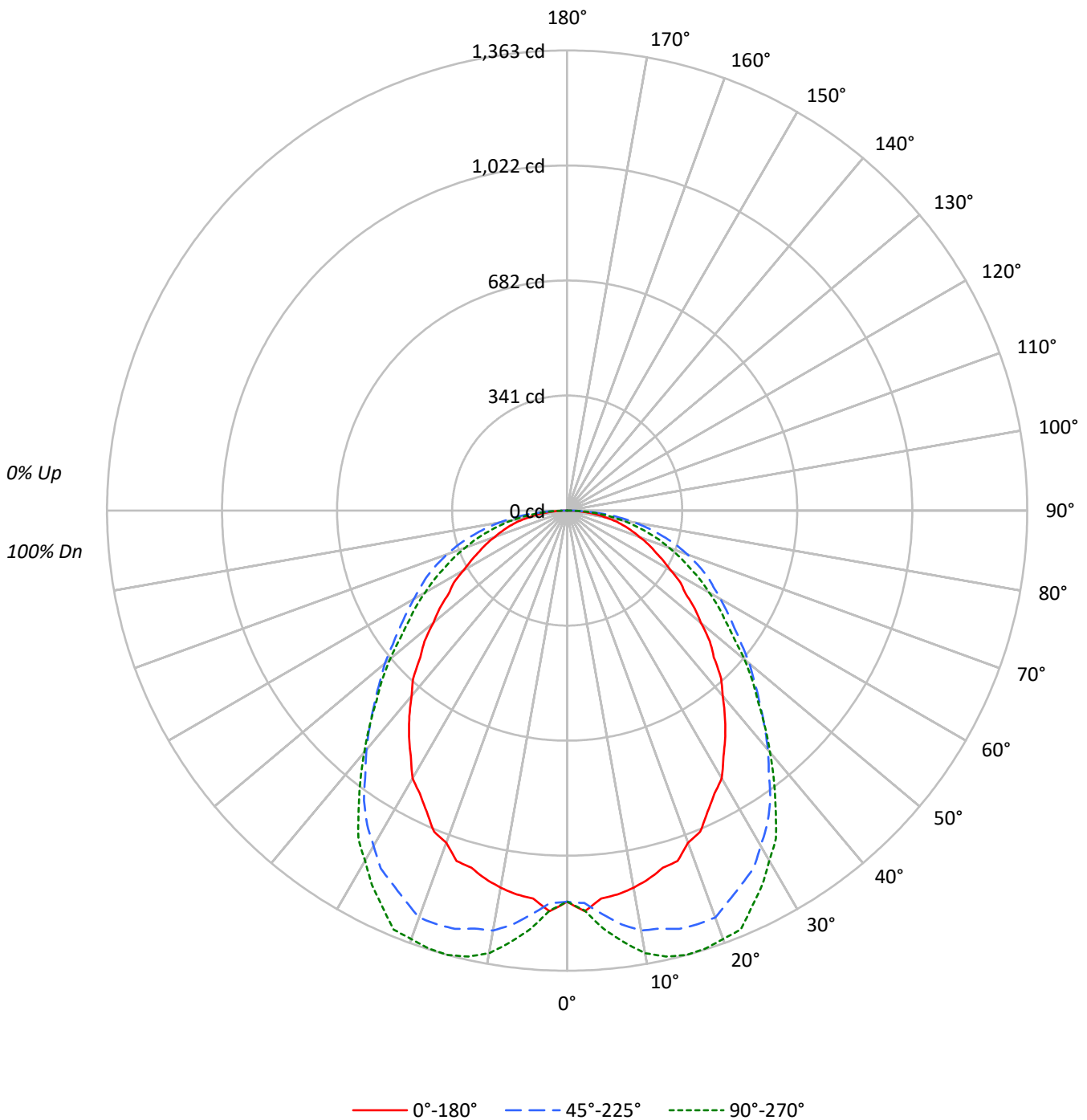
Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 93 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 99 | 90 | 83 | 77 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 81 | 77 | 73 | 78 | 75 | 71 | 69 |
| 3 | 90 | 79 | 71 | 65 | 87 | 78 | 70 | 64 | 75 | 68 | 63 | 72 | 66 | 62 | 69 | 65 | 61 | 58 |
| 4 | 83 | 70 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 50 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 52 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 32 | 30 |
| 9 | 57 | 44 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3118 | 3118 | 3118 |
| 5° | 3117 | 3241 | 3360 |
| 10° | 3100 | 3451 | 3637 |
| 15° | 3052 | 3573 | 3796 |
| 20° | 2998 | 3673 | 3867 |
| 25° | 2921 | 3628 | 3844 |
| 30° | 2845 | 3562 | 3721 |
| 35° | 2681 | 3447 | 3535 |
| 40° | 2517 | 3251 | 3285 |
| 45° | 2339 | 3069 | 3041 |
| 50° | 2166 | 2949 | 2868 |
| 55° | 2006 | 2837 | 2690 |
| 60° | 1908 | 2824 | 2615 |
| 65° | 1825 | 2908 | 2552 |
| 70° | 1796 | 2981 | 2522 |
| 75° | 1818 | 3056 | 2525 |
| 80° | 1770 | 3161 | 2560 |
| 85° | 1726 | 3223 | 2550 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 116.7 | 3.3 |
| 10°-20° | 358.5 | 10.1 |
| 20°-30° | 552.1 | 15.6 |
| 30°-40° | 632.0 | 17.8 |
| 40°-50° | 597.4 | 16.9 |
| 50°-60° | 507.3 | 14.3 |
| 60°-70° | 403.4 | 11.4 |
| 70°-80° | 273.5 | 7.7 |
| 80°-90° | 101.4 | 2.9 |
| 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° | 1027.4 | 29.0 |
| 0°-40° | 1659.3 | 46.8 |
| 0°-60° | 2764.0 | 78.0 |
| 0°-90° | 3542.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3542.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1159 | 1159 | 1159 | 1159 | 1159 | |
| 5° | 1154 | 1178 | 1200 | 1241 | 1244 | 110 |
| 15° | 1096 | 1212 | 1282 | 1358 | 1363 | 310 |
| 25° | 984 | 1149 | 1222 | 1287 | 1295 | 454 |
| 35° | 816 | 981 | 1049 | 1078 | 1076 | 510 |
| 45° | 614 | 760 | 806 | 816 | 799 | 478 |
| 55° | 428 | 556 | 605 | 590 | 573 | 388 |
| 65° | 287 | 410 | 457 | 418 | 401 | 287 |
| 75° | 175 | 282 | 294 | 253 | 243 | 184 |
| 85° | 56 | 119 | 104 | 85 | 83 | 62 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1158.6 | 1158.6 | 1158.6 | 1158.6 | 1158.6 |
| 2.5° | 1187.8 | 1170.8 | 1163.5 | 1187.8 | 1185.4 |
| 5° | 1153.8 | 1178.1 | 1199.9 | 1241.2 | 1243.7 |
| 7.5° | 1146.5 | 1202.4 | 1236.4 | 1287.4 | 1289.8 |
| 10° | 1134.4 | 1207.2 | 1263.1 | 1323.8 | 1331.1 |
| 12.5° | 1117.4 | 1212.1 | 1268.0 | 1343.3 | 1353.0 |
| 15° | 1095.5 | 1212.1 | 1282.5 | 1357.8 | 1362.7 |
| 17.5° | 1088.2 | 1212.1 | 1285.0 | 1350.5 | 1360.3 |
| 20° | 1046.9 | 1199.9 | 1282.5 | 1340.8 | 1350.5 |
| 22.5° | 1029.9 | 1178.1 | 1250.9 | 1321.4 | 1343.3 |
| 25° | 983.8 | 1148.9 | 1221.8 | 1287.4 | 1294.7 |
| 27.5° | 944.9 | 1117.4 | 1195.1 | 1250.9 | 1250.9 |
| 30° | 915.7 | 1078.5 | 1146.5 | 1199.9 | 1197.5 |
| 32.5° | 862.3 | 1025.0 | 1102.8 | 1144.1 | 1151.4 |
| 35° | 816.2 | 981.3 | 1049.3 | 1078.5 | 1076.1 |
| 37.5° | 767.6 | 925.5 | 981.3 | 1015.3 | 1005.6 |
| 40° | 716.6 | 869.6 | 925.5 | 947.3 | 935.2 |
| 42.5° | 675.3 | 811.3 | 864.7 | 879.3 | 867.2 |
| 45° | 614.5 | 760.3 | 806.4 | 816.2 | 799.1 |
| 47.5° | 573.3 | 704.4 | 753.0 | 753.0 | 743.3 |
| 50° | 517.4 | 651.0 | 704.4 | 689.8 | 685.0 |
| 52.5° | 476.1 | 604.8 | 651.0 | 638.8 | 624.3 |
| 55° | 427.5 | 556.2 | 604.8 | 590.3 | 573.3 |
| 57.5° | 398.4 | 517.4 | 563.5 | 546.5 | 532.0 |
| 60° | 354.6 | 478.5 | 524.7 | 502.8 | 485.8 |
| 62.5° | 320.6 | 444.5 | 488.2 | 461.5 | 444.5 |
| 65° | 286.6 | 410.5 | 456.7 | 417.8 | 400.8 |
| 67.5° | 259.9 | 378.9 | 417.8 | 376.5 | 361.9 |
| 70° | 228.3 | 342.5 | 378.9 | 335.2 | 320.6 |
| 72.5° | 201.6 | 313.3 | 337.6 | 293.9 | 284.2 |
| 75° | 174.9 | 281.8 | 293.9 | 252.6 | 242.9 |
| 77.5° | 148.2 | 250.2 | 250.2 | 213.8 | 204.0 |
| 80° | 114.2 | 213.8 | 204.0 | 172.5 | 165.2 |
| 82.5° | 87.4 | 170.0 | 155.5 | 128.7 | 123.9 |
| 85° | 55.9 | 119.0 | 104.4 | 85.0 | 82.6 |
| 87.5° | 26.7 | 63.2 | 51.0 | 41.3 | 38.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)