

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: P183889

Luminaire Tested: **22SR-LD2-29-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P32591)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SR-LD2-29-S-UNV-L840-CD1-U
Description: METALUX SKYRIDGE EDGELIT LED 2X2 TROFFER

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3061.3 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.61 / 1.54
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

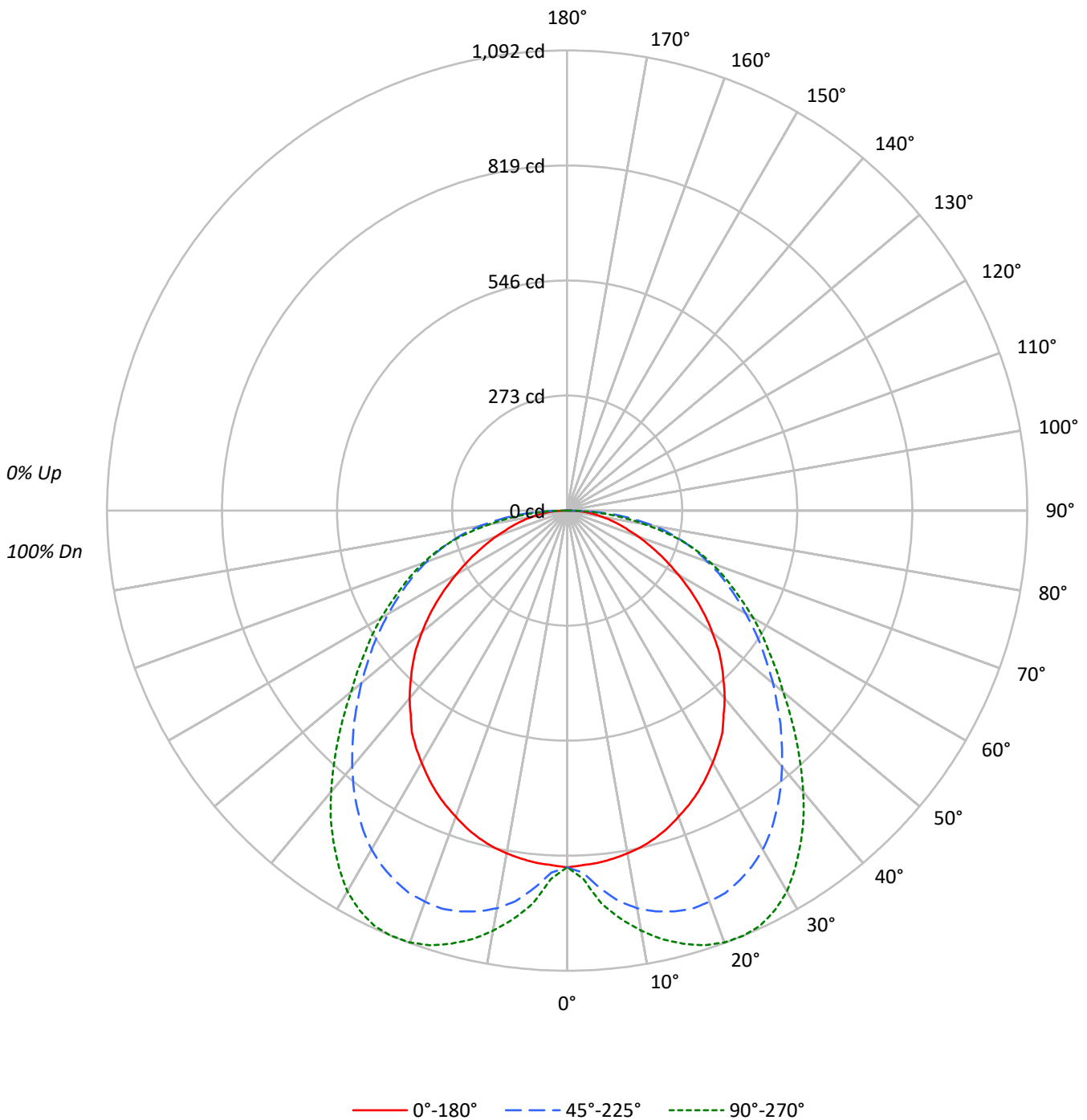
Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 89 | 92 | 89 | 87 | 88 | 86 | 84 | 82 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 70 | 67 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 56 |
| 4 | 81 | 69 | 60 | 53 | 79 | 67 | 59 | 52 | 65 | 57 | 52 | 63 | 56 | 51 | 60 | 55 | 50 | 48 |
| 5 | 75 | 61 | 52 | 45 | 72 | 60 | 52 | 45 | 58 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 43 | 41 |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | 51 | 44 | 38 | 49 | 43 | 38 | 36 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 41 | 35 | 48 | 40 | 34 | 46 | 39 | 34 | 45 | 39 | 34 | 32 |
| 8 | 59 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 30 | 41 | 35 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 28 | 40 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 25 |
| 10 | 52 | 39 | 30 | 25 | 51 | 38 | 30 | 25 | 37 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2278 | 2278 | 2278 |
| 5° | 2267 | 2430 | 2529 |
| 10° | 2257 | 2618 | 2767 |
| 15° | 2243 | 2743 | 2964 |
| 20° | 2214 | 2828 | 3123 |
| 25° | 2186 | 2875 | 3225 |
| 30° | 2146 | 2886 | 3242 |
| 35° | 2110 | 2848 | 3172 |
| 40° | 2044 | 2788 | 3061 |
| 45° | 1974 | 2724 | 2925 |
| 50° | 1883 | 2670 | 2799 |
| 55° | 1772 | 2640 | 2744 |
| 60° | 1637 | 2634 | 2744 |
| 65° | 1516 | 2686 | 2760 |
| 70° | 1411 | 2787 | 2856 |
| 75° | 1330 | 2980 | 2964 |
| 80° | 1275 | 3234 | 2892 |
| 85° | 1408 | 3538 | 2859 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.7 | 2.8 |
| 10°-20° | 272.9 | 8.9 |
| 20°-30° | 435.4 | 14.2 |
| 30°-40° | 524.1 | 17.1 |
| 40°-50° | 525.7 | 17.2 |
| 50°-60° | 469.9 | 15.4 |
| 60°-70° | 380.7 | 12.4 |
| 70°-80° | 265.1 | 8.7 |
| 80°-90° | 100.8 | 3.3 |
| 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° | 795.0 | 26.0 |
| 0°-40° | 1319.1 | 43.1 |
| 0°-60° | 2314.7 | 75.6 |
| 0°-90° | 3061.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3061.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|------|------|
| 0° | 846 | 846 | 846 | 846 | 846 | |
| 5° | 839 | 858 | 899 | 929 | 936 | 80 |
| 15° | 805 | 899 | 985 | 1043 | 1064 | 227 |
| 25° | 736 | 852 | 968 | 1055 | 1086 | 339 |
| 35° | 642 | 744 | 867 | 944 | 966 | 400 |
| 45° | 519 | 607 | 716 | 758 | 769 | 400 |
| 55° | 378 | 473 | 563 | 580 | 585 | 337 |
| 65° | 238 | 348 | 422 | 428 | 434 | 237 |
| 75° | 128 | 235 | 287 | 285 | 285 | 136 |
| 85° | 46 | 101 | 115 | 98 | 93 | 48 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P183889

CATALOG NUMBER: 22SR-LD2-29-S-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|--------|--------|
| 0° | 846.5 | 846.5 | 846.5 | 846.5 | 846.5 |
| 2.5° | 842.1 | 846.5 | 859.7 | 871.4 | 874.4 |
| 5° | 839.1 | 858.2 | 899.4 | 928.8 | 936.1 |
| 7.5° | 833.2 | 872.9 | 934.6 | 965.5 | 977.3 |
| 10° | 825.9 | 889.1 | 958.2 | 997.8 | 1012.5 |
| 12.5° | 817.1 | 899.4 | 974.3 | 1024.3 | 1041.9 |
| 15° | 805.3 | 899.4 | 984.6 | 1043.4 | 1064.0 |
| 17.5° | 790.6 | 895.0 | 990.5 | 1056.6 | 1081.6 |
| 20° | 773.0 | 886.1 | 987.5 | 1064.0 | 1090.4 |
| 22.5° | 755.4 | 871.4 | 981.7 | 1064.0 | 1091.9 |
| 25° | 736.2 | 852.3 | 968.4 | 1055.1 | 1086.0 |
| 27.5° | 714.2 | 830.3 | 950.8 | 1039.0 | 1068.4 |
| 30° | 690.7 | 803.8 | 928.8 | 1015.5 | 1043.4 |
| 32.5° | 667.2 | 774.5 | 900.8 | 983.1 | 1006.6 |
| 35° | 642.2 | 743.6 | 867.0 | 943.5 | 965.5 |
| 37.5° | 609.9 | 708.3 | 831.8 | 900.8 | 921.4 |
| 40° | 581.9 | 676.0 | 793.6 | 855.3 | 871.4 |
| 42.5° | 549.6 | 640.7 | 753.9 | 806.8 | 820.0 |
| 45° | 518.8 | 606.9 | 715.7 | 758.3 | 768.6 |
| 47.5° | 486.4 | 571.7 | 674.5 | 709.8 | 718.6 |
| 50° | 449.7 | 537.9 | 637.8 | 667.2 | 668.6 |
| 52.5° | 414.4 | 505.5 | 598.1 | 621.6 | 627.5 |
| 55° | 377.7 | 473.2 | 562.8 | 580.5 | 584.9 |
| 57.5° | 340.9 | 442.3 | 526.1 | 540.8 | 548.1 |
| 60° | 304.2 | 410.0 | 489.4 | 502.6 | 509.9 |
| 62.5° | 270.4 | 379.1 | 455.6 | 464.4 | 470.3 |
| 65° | 238.1 | 348.3 | 421.8 | 427.6 | 433.5 |
| 67.5° | 207.2 | 320.4 | 389.4 | 392.4 | 399.7 |
| 70° | 179.3 | 292.4 | 354.2 | 357.1 | 363.0 |
| 72.5° | 151.4 | 263.1 | 321.8 | 320.4 | 326.2 |
| 75° | 127.9 | 235.1 | 286.6 | 285.1 | 285.1 |
| 77.5° | 105.8 | 205.7 | 249.8 | 241.0 | 236.6 |
| 80° | 82.3 | 174.9 | 208.7 | 191.0 | 186.6 |
| 82.5° | 64.7 | 139.6 | 161.7 | 144.0 | 139.6 |
| 85° | 45.6 | 101.4 | 114.6 | 98.5 | 92.6 |
| 87.5° | 23.5 | 54.4 | 58.8 | 50.0 | 42.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)