

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: P294340

Luminaire Tested: **24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH FGW080 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2083.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

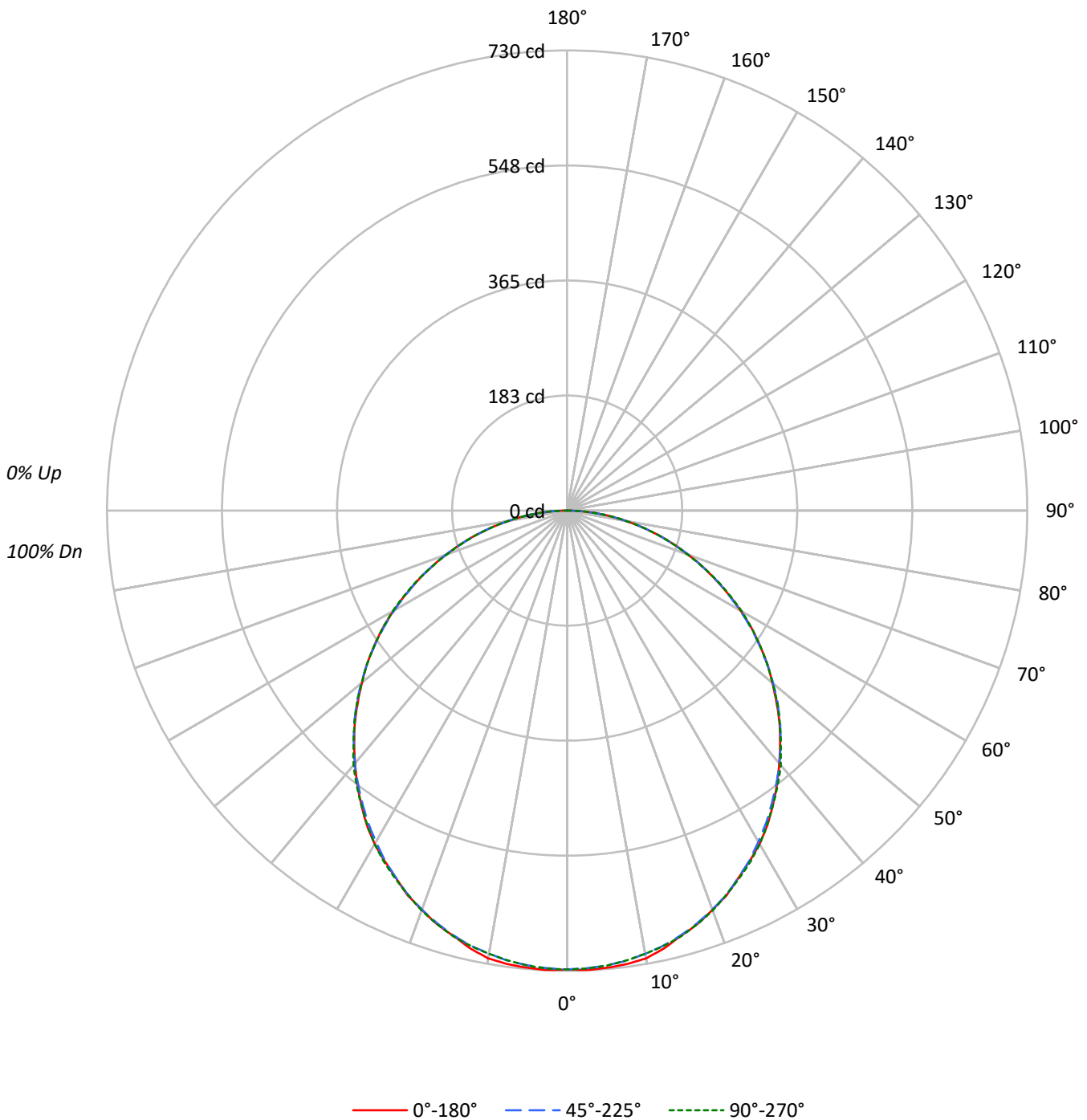
Input Watts (W): 19.902
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 84 | 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 | 64 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-----|-----|-----|
| 0° | 980 | 980 | 980 |
| 5° | 983 | 978 | 979 |
| 10° | 985 | 975 | 975 |
| 15° | 972 | 972 | 974 |
| 20° | 965 | 964 | 966 |
| 25° | 955 | 954 | 957 |
| 30° | 949 | 943 | 949 |
| 35° | 935 | 930 | 935 |
| 40° | 920 | 921 | 926 |
| 45° | 907 | 910 | 908 |
| 50° | 889 | 893 | 890 |
| 55° | 876 | 874 | 876 |
| 60° | 855 | 853 | 861 |
| 65° | 829 | 832 | 835 |
| 70° | 802 | 806 | 800 |
| 75° | 774 | 774 | 774 |
| 80° | 731 | 731 | 738 |
| 85° | 675 | 682 | 659 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.8 | 3.3 |
| 10°-20° | 196.8 | 9.4 |
| 20°-30° | 296.6 | 14.2 |
| 30°-40° | 355.2 | 17.1 |
| 40°-50° | 367.7 | 17.7 |
| 50°-60° | 333.4 | 16.0 |
| 60°-70° | 258.5 | 12.4 |
| 70°-80° | 157.2 | 7.5 |
| 80°-90° | 48.9 | 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° | 562.2 | 27.0 |
| 0°-40° | 917.4 | 44.0 |
| 0°-60° | 1618.5 | 77.7 |
| 0°-90° | 2083.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2083.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 728 | 728 | 728 | 728 | 728 | |
| 5° | 728 | 724 | 724 | 723 | 725 | 69 |
| 15° | 698 | 699 | 698 | 695 | 699 | 197 |
| 25° | 643 | 643 | 643 | 644 | 644 | 297 |
| 35° | 569 | 565 | 566 | 569 | 569 | 356 |
| 45° | 476 | 478 | 478 | 476 | 477 | 367 |
| 55° | 373 | 371 | 372 | 374 | 373 | 334 |
| 65° | 260 | 262 | 261 | 260 | 262 | 258 |
| 75° | 149 | 148 | 149 | 148 | 149 | 157 |
| 85° | 44 | 43 | 44 | 44 | 43 | 49 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P294340

CATALOG NUMBER: 24GR-LD5-30-FGW080-UNV-L92765-W2A1-U-2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 728.0 | 728.0 | 728.0 | 728.0 | 728.0 |
| 2.5° | 729.5 | 726.6 | 726.6 | 725.6 | 727.0 |
| 5° | 728.0 | 723.6 | 724.1 | 723.1 | 724.6 |
| 7.5° | 725.6 | 719.7 | 720.2 | 719.2 | 719.7 |
| 10° | 721.2 | 714.3 | 713.8 | 713.3 | 713.8 |
| 12.5° | 711.3 | 707.4 | 706.9 | 705.9 | 707.4 |
| 15° | 698.1 | 698.6 | 697.6 | 695.1 | 699.0 |
| 17.5° | 687.7 | 687.3 | 686.3 | 683.8 | 687.7 |
| 20° | 674.0 | 674.5 | 673.5 | 672.5 | 675.0 |
| 22.5° | 660.7 | 659.3 | 659.7 | 659.3 | 659.7 |
| 25° | 643.0 | 643.0 | 642.6 | 644.5 | 644.5 |
| 27.5° | 626.8 | 624.9 | 625.9 | 627.8 | 628.8 |
| 30° | 610.6 | 605.7 | 606.7 | 608.7 | 611.1 |
| 32.5° | 591.5 | 586.6 | 587.5 | 589.5 | 590.5 |
| 35° | 569.4 | 565.4 | 566.4 | 568.9 | 569.4 |
| 37.5° | 546.8 | 544.3 | 545.3 | 547.3 | 548.7 |
| 40° | 523.7 | 522.7 | 524.2 | 523.7 | 527.1 |
| 42.5° | 500.1 | 499.6 | 501.1 | 501.1 | 501.6 |
| 45° | 476.5 | 477.5 | 478.0 | 476.0 | 477.0 |
| 47.5° | 450.5 | 451.0 | 452.9 | 451.9 | 452.4 |
| 50° | 424.9 | 424.4 | 426.4 | 426.9 | 425.4 |
| 52.5° | 400.4 | 397.9 | 399.9 | 400.9 | 399.9 |
| 55° | 373.3 | 371.4 | 372.4 | 373.8 | 373.3 |
| 57.5° | 346.8 | 344.9 | 345.3 | 347.8 | 346.8 |
| 60° | 317.8 | 317.3 | 316.9 | 318.8 | 319.8 |
| 62.5° | 289.3 | 288.9 | 287.9 | 289.8 | 290.8 |
| 65° | 260.4 | 261.8 | 261.3 | 260.4 | 262.3 |
| 67.5° | 232.9 | 234.3 | 232.9 | 231.9 | 231.9 |
| 70° | 203.9 | 205.3 | 204.9 | 203.9 | 203.4 |
| 72.5° | 176.8 | 176.8 | 175.9 | 175.4 | 175.9 |
| 75° | 148.8 | 148.4 | 148.8 | 148.4 | 148.8 |
| 77.5° | 121.3 | 121.8 | 121.8 | 121.8 | 121.3 |
| 80° | 94.3 | 94.3 | 94.3 | 94.8 | 95.3 |
| 82.5° | 69.3 | 67.8 | 69.3 | 68.3 | 68.8 |
| 85° | 43.7 | 43.2 | 44.2 | 43.7 | 42.7 |
| 87.5° | 19.6 | 20.1 | 20.1 | 20.6 | 20.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)