

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: P292765

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-26)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-FGW080-UNV-L82765-W2A1-U-6500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH FGW080 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2130.0 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

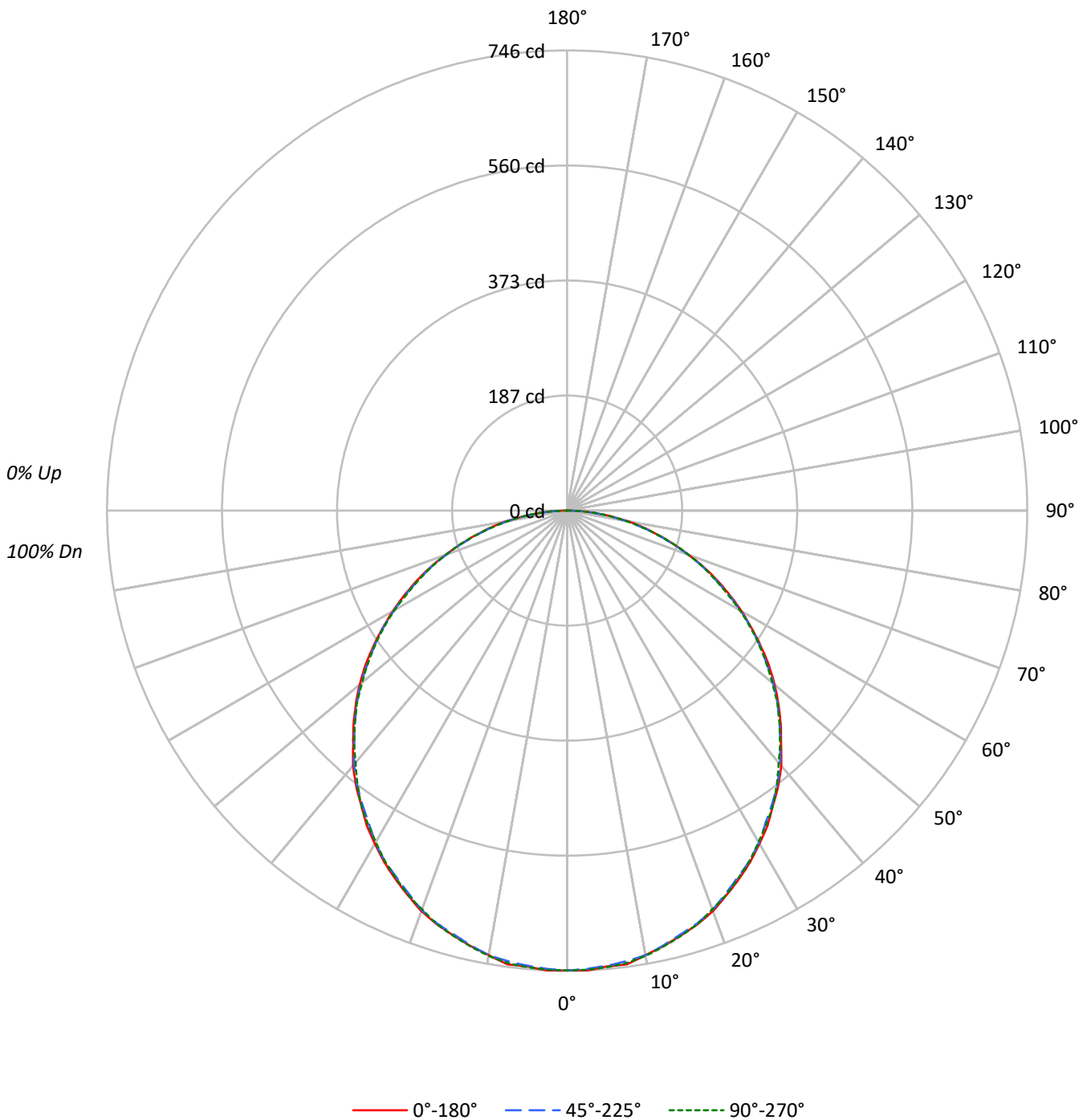
Input Watts (W): 18.972
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 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° | 2006 | 2006 | 2006 |
| 5° | 2004 | 2000 | 2007 |
| 10° | 2000 | 2000 | 2003 |
| 15° | 1986 | 1981 | 1988 |
| 20° | 1979 | 1974 | 1970 |
| 25° | 1957 | 1946 | 1952 |
| 30° | 1938 | 1932 | 1928 |
| 35° | 1913 | 1905 | 1913 |
| 40° | 1896 | 1887 | 1874 |
| 45° | 1864 | 1852 | 1852 |
| 50° | 1838 | 1828 | 1817 |
| 55° | 1799 | 1787 | 1784 |
| 60° | 1757 | 1747 | 1741 |
| 65° | 1712 | 1692 | 1685 |
| 70° | 1644 | 1639 | 1644 |
| 75° | 1587 | 1567 | 1580 |
| 80° | 1570 | 1492 | 1483 |
| 85° | 1389 | 1352 | 1371 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.5 | 3.3 |
| 10°-20° | 201.2 | 9.4 |
| 20°-30° | 303.0 | 14.2 |
| 30°-40° | 363.6 | 17.1 |
| 40°-50° | 376.3 | 17.7 |
| 50°-60° | 341.0 | 16.0 |
| 60°-70° | 264.3 | 12.4 |
| 70°-80° | 160.4 | 7.5 |
| 80°-90° | 49.6 | 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° | 574.8 | 27.0 |
| 0°-40° | 938.4 | 44.1 |
| 0°-60° | 1655.6 | 77.7 |
| 0°-90° | 2130.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2130.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 746 | 746 | 746 | 746 | 746 | |
| 5° | 742 | 742 | 740 | 742 | 743 | 71 |
| 15° | 713 | 713 | 711 | 714 | 714 | 201 |
| 25° | 659 | 658 | 656 | 658 | 657 | 304 |
| 35° | 582 | 582 | 580 | 580 | 582 | 365 |
| 45° | 490 | 489 | 487 | 487 | 487 | 378 |
| 55° | 383 | 383 | 381 | 380 | 380 | 343 |
| 65° | 269 | 269 | 266 | 267 | 265 | 266 |
| 75° | 153 | 152 | 151 | 151 | 152 | 162 |
| 85° | 45 | 44 | 44 | 44 | 44 | 51 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P292765

CATALOG NUMBER: 22GR-LD5-24-FGW080-UNV-L82765-W2A1-U-6500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 745.5 | 745.5 | 745.5 | 745.5 | 745.5 |
| 2.5° | 746.1 | 743.0 | 743.6 | 744.9 | 744.9 |
| 5° | 741.8 | 741.8 | 740.5 | 742.4 | 743.0 |
| 7.5° | 741.8 | 738.6 | 736.8 | 738.6 | 739.9 |
| 10° | 731.8 | 730.5 | 731.8 | 731.1 | 733.0 |
| 12.5° | 723.0 | 721.8 | 721.8 | 723.6 | 723.6 |
| 15° | 713.0 | 713.0 | 711.1 | 714.2 | 713.6 |
| 17.5° | 703.0 | 703.0 | 701.7 | 701.7 | 703.0 |
| 20° | 691.1 | 688.0 | 689.2 | 688.6 | 688.0 |
| 22.5° | 674.8 | 673.0 | 671.7 | 673.6 | 674.2 |
| 25° | 659.2 | 658.0 | 655.5 | 658.0 | 657.3 |
| 27.5° | 642.3 | 641.1 | 640.4 | 639.2 | 640.4 |
| 30° | 623.6 | 622.3 | 621.7 | 620.4 | 620.4 |
| 32.5° | 604.8 | 602.3 | 599.2 | 602.3 | 601.7 |
| 35° | 582.3 | 582.3 | 579.8 | 580.4 | 582.3 |
| 37.5° | 562.3 | 561.0 | 559.8 | 557.9 | 558.5 |
| 40° | 539.8 | 537.9 | 537.2 | 536.0 | 533.5 |
| 42.5° | 513.5 | 513.5 | 511.0 | 511.6 | 511.0 |
| 45° | 489.7 | 489.1 | 486.6 | 486.6 | 486.6 |
| 47.5° | 464.7 | 464.1 | 462.2 | 460.9 | 462.2 |
| 50° | 439.1 | 436.6 | 436.6 | 434.7 | 434.1 |
| 52.5° | 412.2 | 410.3 | 407.8 | 408.4 | 407.2 |
| 55° | 383.4 | 382.8 | 380.9 | 380.3 | 380.3 |
| 57.5° | 354.6 | 355.2 | 354.0 | 351.5 | 352.1 |
| 60° | 326.5 | 325.9 | 324.6 | 323.4 | 323.4 |
| 62.5° | 297.7 | 297.7 | 295.2 | 295.2 | 292.7 |
| 65° | 268.9 | 268.9 | 265.8 | 267.1 | 264.6 |
| 67.5° | 240.2 | 239.5 | 237.7 | 237.0 | 237.7 |
| 70° | 208.9 | 209.5 | 208.3 | 208.3 | 208.9 |
| 72.5° | 180.8 | 180.1 | 179.5 | 179.5 | 180.8 |
| 75° | 152.6 | 152.0 | 150.7 | 150.7 | 152.0 |
| 77.5° | 127.0 | 123.8 | 123.2 | 124.5 | 122.6 |
| 80° | 101.3 | 96.9 | 96.3 | 95.7 | 95.7 |
| 82.5° | 71.3 | 69.4 | 70.0 | 69.4 | 70.7 |
| 85° | 45.0 | 44.4 | 43.8 | 43.8 | 44.4 |
| 87.5° | 21.3 | 20.0 | 20.0 | 19.4 | 19.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)