

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: P293865

Luminaire Tested: **24GR-LD5-42-A125-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33307)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-A125-UNV-L92765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A125 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3593.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

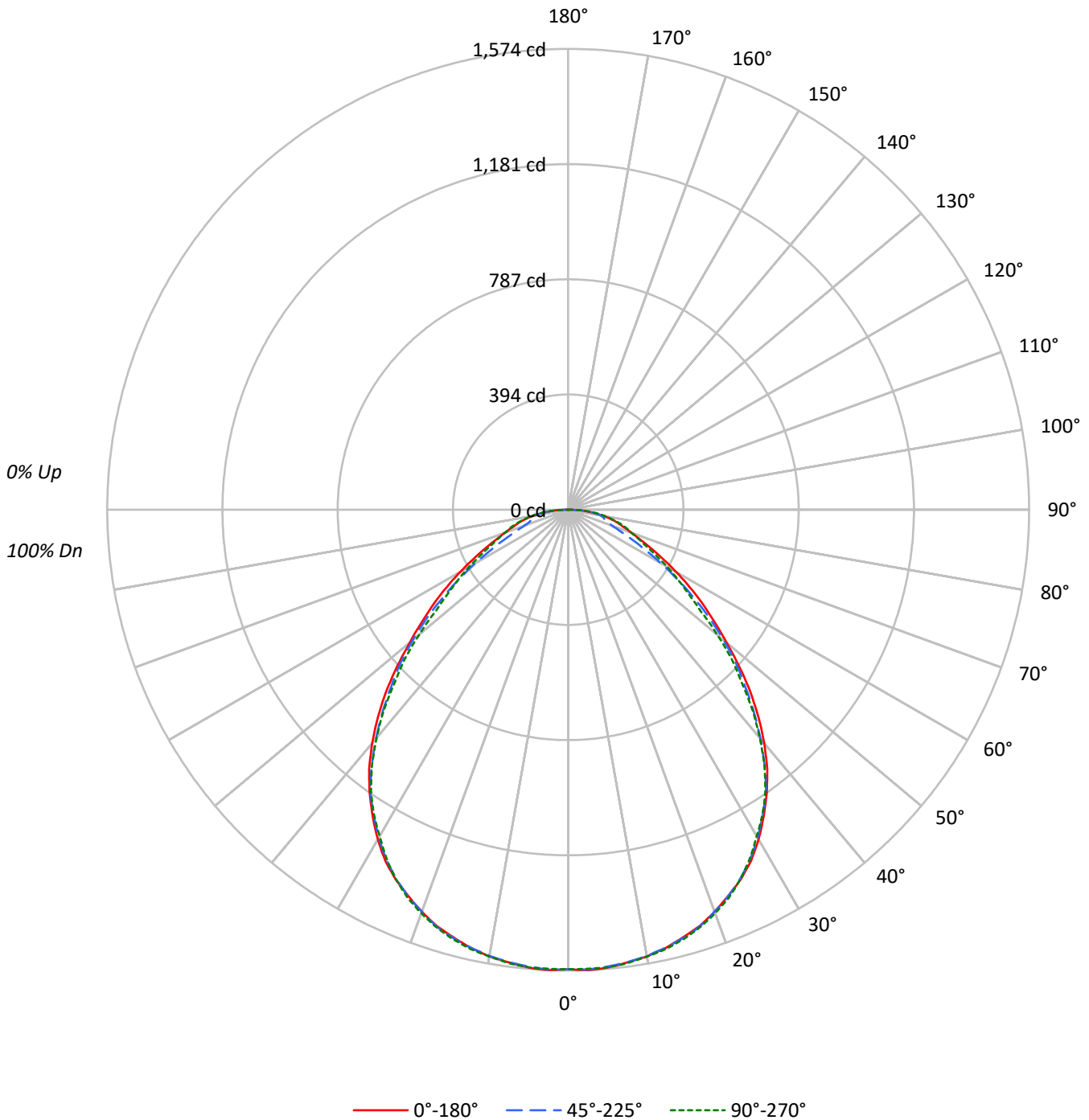
Input Watts (W): 28.086
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293865

CATALOG NUMBER: 24GR-LD5-42-A125-UNV-L92765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P293865

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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 | 110 | 105 | 101 | 98 | 107 | 103 | 100 | 96 | 99 | 96 | 93 | 95 | 93 | 90 | 91 | 90 | 88 | 86 |
| 2 | 101 | 93 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 |
| 3 | 93 | 83 | 76 | 70 | 90 | 82 | 75 | 69 | 79 | 73 | 68 | 76 | 71 | 67 | 73 | 69 | 66 | 64 |
| 4 | 86 | 75 | 66 | 60 | 83 | 73 | 66 | 60 | 71 | 64 | 59 | 68 | 63 | 58 | 66 | 61 | 57 | 55 |
| 5 | 79 | 67 | 59 | 53 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 49 |
| 6 | 73 | 61 | 53 | 47 | 72 | 60 | 52 | 46 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 45 | 43 |
| 7 | 68 | 56 | 47 | 42 | 67 | 55 | 47 | 41 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 51 | 43 | 37 | 62 | 50 | 43 | 37 | 49 | 42 | 37 | 48 | 41 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 58 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 33 | 43 | 38 | 33 | 32 |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 40 | 35 | 30 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2112 | 2112 | 2112 |
| 5° | 2120 | 2115 | 2119 |
| 10° | 2117 | 2114 | 2117 |
| 15° | 2107 | 2110 | 2116 |
| 20° | 2092 | 2092 | 2100 |
| 25° | 2069 | 2064 | 2066 |
| 30° | 2020 | 2010 | 2000 |
| 35° | 1941 | 1935 | 1928 |
| 40° | 1828 | 1795 | 1787 |
| 45° | 1672 | 1627 | 1597 |
| 50° | 1478 | 1449 | 1393 |
| 55° | 1315 | 1225 | 1178 |
| 60° | 1145 | 980 | 1051 |
| 65° | 989 | 760 | 930 |
| 70° | 902 | 622 | 900 |
| 75° | 909 | 670 | 956 |
| 80° | 947 | 873 | 1007 |
| 85° | 986 | 1039 | 1116 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 148.9 | 4.1 |
| 10°-20° | 427.1 | 11.9 |
| 20°-30° | 639.4 | 17.8 |
| 30°-40° | 730.6 | 20.3 |
| 40°-50° | 660.5 | 18.4 |
| 50°-60° | 475.2 | 13.2 |
| 60°-70° | 275.5 | 7.7 |
| 70°-80° | 163.4 | 4.5 |
| 80°-90° | 72.4 | 2.0 |
| 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° | 1215.4 | 33.8 |
| 0°-40° | 1946.0 | 54.2 |
| 0°-60° | 3081.7 | 85.8 |
| 0°-90° | 3593.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3593.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1570 | 1570 | 1570 | 1570 | 1570 | |
| 5° | 1570 | 1567 | 1566 | 1564 | 1569 | 149 |
| 15° | 1512 | 1515 | 1515 | 1513 | 1519 | 427 |
| 25° | 1394 | 1392 | 1391 | 1388 | 1392 | 641 |
| 35° | 1182 | 1176 | 1178 | 1164 | 1174 | 737 |
| 45° | 879 | 864 | 855 | 847 | 839 | 675 |
| 55° | 560 | 550 | 522 | 509 | 502 | 501 |
| 65° | 310 | 276 | 239 | 267 | 292 | 314 |
| 75° | 175 | 146 | 129 | 159 | 184 | 185 |
| 85° | 64 | 69 | 67 | 77 | 72 | 69 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CATALOG NUMBER: 24GR-LD5-42-A125-UNV-L92765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1570.0 | 1570.0 | 1570.0 | 1570.0 | 1570.0 |
| 2.5° | 1574.5 | 1568.9 | 1571.7 | 1570.0 | 1569.5 |
| 5° | 1569.5 | 1567.2 | 1566.1 | 1563.9 | 1568.9 |
| 7.5° | 1559.4 | 1557.7 | 1558.2 | 1558.8 | 1562.2 |
| 10° | 1549.3 | 1546.5 | 1547.0 | 1548.2 | 1549.8 |
| 12.5° | 1533.6 | 1531.9 | 1532.5 | 1533.6 | 1537.5 |
| 15° | 1512.3 | 1515.1 | 1515.1 | 1513.4 | 1519.0 |
| 17.5° | 1491.0 | 1490.4 | 1493.2 | 1488.2 | 1496.0 |
| 20° | 1461.3 | 1461.8 | 1461.3 | 1461.8 | 1466.9 |
| 22.5° | 1427.6 | 1430.4 | 1428.8 | 1428.8 | 1434.4 |
| 25° | 1393.5 | 1391.8 | 1390.6 | 1387.8 | 1391.8 |
| 27.5° | 1352.5 | 1349.2 | 1346.4 | 1340.8 | 1343.6 |
| 30° | 1300.4 | 1301.0 | 1293.7 | 1288.6 | 1287.5 |
| 32.5° | 1242.1 | 1242.1 | 1235.4 | 1231.5 | 1234.8 |
| 35° | 1181.6 | 1176.0 | 1178.2 | 1163.6 | 1173.7 |
| 37.5° | 1116.0 | 1107.0 | 1102.0 | 1096.9 | 1100.3 |
| 40° | 1040.9 | 1029.1 | 1021.8 | 1011.7 | 1017.3 |
| 42.5° | 961.9 | 947.3 | 938.3 | 931.0 | 933.3 |
| 45° | 878.9 | 863.8 | 854.8 | 846.9 | 839.1 |
| 47.5° | 791.5 | 781.9 | 777.4 | 767.4 | 758.4 |
| 50° | 706.3 | 702.9 | 692.2 | 683.8 | 665.3 |
| 52.5° | 628.3 | 625.5 | 608.7 | 594.7 | 571.2 |
| 55° | 560.5 | 549.9 | 522.4 | 509.0 | 502.2 |
| 57.5° | 491.6 | 474.2 | 441.1 | 439.4 | 443.9 |
| 60° | 425.4 | 404.1 | 364.3 | 373.3 | 390.7 |
| 62.5° | 365.5 | 333.5 | 295.4 | 316.7 | 337.4 |
| 65° | 310.5 | 275.8 | 238.8 | 266.8 | 292.0 |
| 67.5° | 265.1 | 230.4 | 192.3 | 229.8 | 259.0 |
| 70° | 229.3 | 193.9 | 158.1 | 201.2 | 228.7 |
| 72.5° | 199.5 | 167.6 | 137.9 | 178.8 | 207.4 |
| 75° | 174.9 | 146.3 | 128.9 | 159.2 | 183.9 |
| 77.5° | 150.2 | 127.2 | 123.3 | 141.8 | 156.9 |
| 80° | 122.2 | 111.5 | 112.7 | 124.4 | 130.0 |
| 82.5° | 91.4 | 91.9 | 94.7 | 104.3 | 102.0 |
| 85° | 63.9 | 68.9 | 67.3 | 77.4 | 72.3 |
| 87.5° | 35.3 | 38.7 | 36.4 | 44.3 | 39.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)