

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: P183823

Luminaire Tested: **24SR-LD2-45-S-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P32665)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24SR-LD2-45-S-UNV-L835-CD1-U
Description: METALUX SKYRIDGE EDGELIT LED 2X4 TROFFER

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

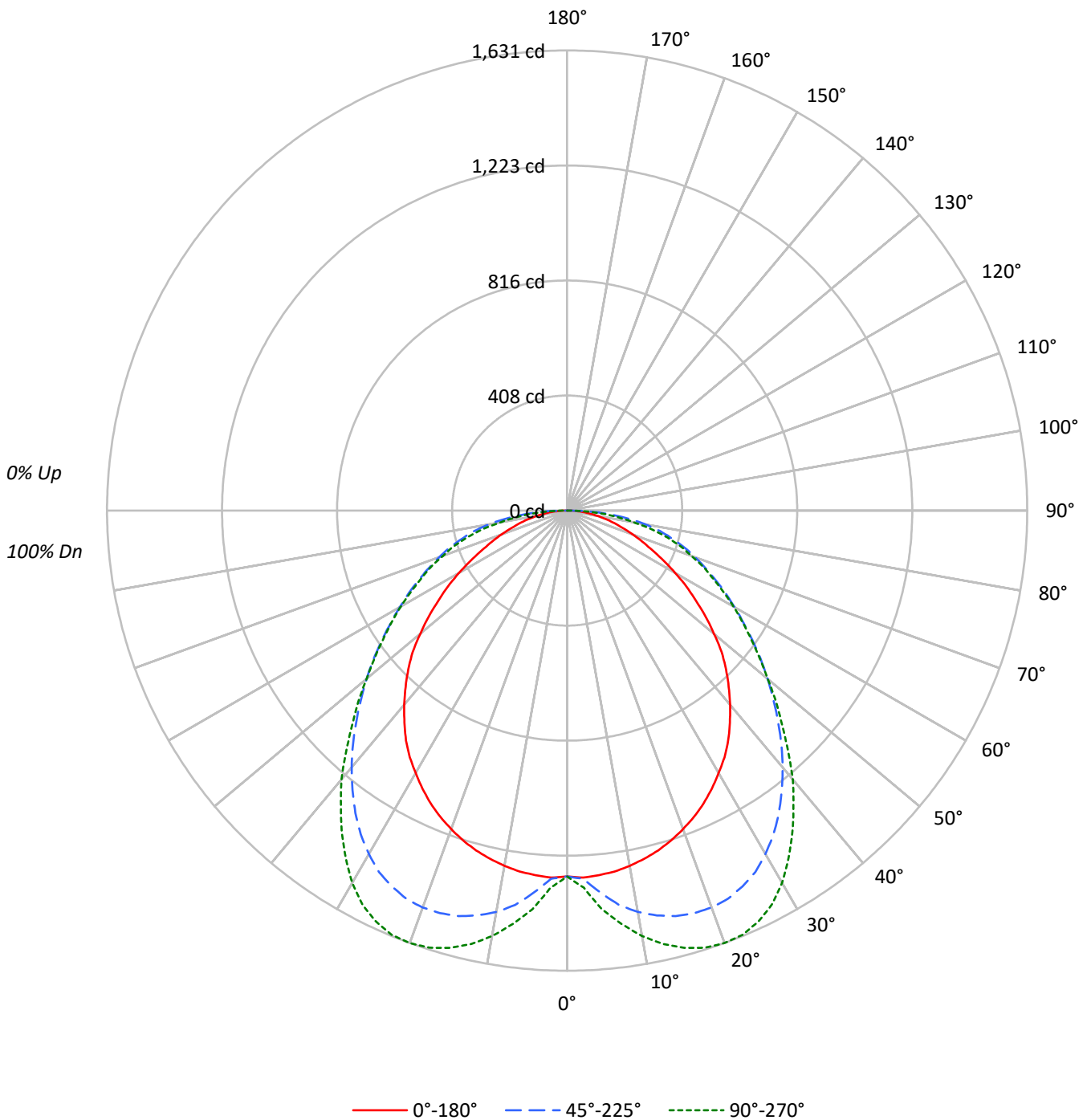
Lumens per Lamp: N/A
Luminaire Lumens: 4465.3 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.55 / 1.51
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.7
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



TEST NUMBER: P183823
CATALOG NUMBER: 24SR-LD2-45-S-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P183823

CATALOG NUMBER: 24SR-LD2-45-S-UNV-L835-CD1-U

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 | 94 | 105 | 101 | 97 | 93 | 96 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 82 |
| 2 | 98 | 90 | 82 | 77 | 95 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 68 |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 57 |
| 4 | 82 | 70 | 61 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 |
| 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 46 | 40 | 52 | 45 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 42 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 33 | 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 | 25 | 24 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1745 | 1745 | 1745 |
| 5° | 1751 | 1836 | 1916 |
| 10° | 1747 | 1974 | 2092 |
| 15° | 1737 | 2073 | 2235 |
| 20° | 1720 | 2144 | 2335 |
| 25° | 1700 | 2182 | 2384 |
| 30° | 1669 | 2184 | 2367 |
| 35° | 1635 | 2149 | 2287 |
| 40° | 1578 | 2087 | 2186 |
| 45° | 1515 | 2011 | 2051 |
| 50° | 1423 | 1941 | 1941 |
| 55° | 1309 | 1881 | 1868 |
| 60° | 1191 | 1844 | 1833 |
| 65° | 1059 | 1843 | 1818 |
| 70° | 974 | 1896 | 1840 |
| 75° | 906 | 2009 | 1907 |
| 80° | 852 | 2192 | 1857 |
| 85° | 829 | 2367 | 1942 |



TEST NUMBER: P183823

CATALOG NUMBER: 24SR-LD2-45-S-UNV-L835-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.1 | 3.0 |
| 10°-20° | 415.0 | 9.3 |
| 20°-30° | 660.9 | 14.8 |
| 30°-40° | 788.1 | 17.6 |
| 40°-50° | 776.3 | 17.4 |
| 50°-60° | 670.5 | 15.0 |
| 60°-70° | 523.3 | 11.7 |
| 70°-80° | 358.6 | 8.0 |
| 80°-90° | 140.7 | 3.2 |
| 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° | 1207.9 | 27.1 |
| 0°-40° | 1996.0 | 44.7 |
| 0°-60° | 3442.8 | 77.1 |
| 0°-90° | 4465.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4465.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1297 | 1297 | 1297 | 1297 | 1297 | |
| 5° | 1297 | 1320 | 1360 | 1411 | 1419 | 123 |
| 15° | 1247 | 1379 | 1488 | 1581 | 1605 | 352 |
| 25° | 1145 | 1326 | 1470 | 1581 | 1606 | 527 |
| 35° | 996 | 1164 | 1309 | 1383 | 1392 | 621 |
| 45° | 796 | 942 | 1057 | 1087 | 1078 | 613 |
| 55° | 558 | 707 | 802 | 804 | 796 | 501 |
| 65° | 333 | 498 | 579 | 576 | 571 | 334 |
| 75° | 174 | 338 | 386 | 371 | 367 | 185 |
| 85° | 54 | 162 | 153 | 131 | 126 | 60 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P183823

CATALOG NUMBER: 24SR-LD2-45-S-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1296.8 | 1296.8 | 1296.8 | 1296.8 | 1296.8 |
| 2.5° | 1302.0 | 1303.4 | 1306.0 | 1332.2 | 1337.4 |
| 5° | 1296.8 | 1320.4 | 1359.7 | 1410.8 | 1418.6 |
| 7.5° | 1290.3 | 1342.7 | 1409.5 | 1464.5 | 1477.6 |
| 10° | 1278.5 | 1364.9 | 1444.8 | 1514.2 | 1531.3 |
| 12.5° | 1264.1 | 1376.7 | 1469.7 | 1550.9 | 1573.2 |
| 15° | 1247.0 | 1379.3 | 1488.1 | 1581.1 | 1604.6 |
| 17.5° | 1226.1 | 1375.4 | 1495.9 | 1598.1 | 1624.3 |
| 20° | 1201.2 | 1364.9 | 1497.2 | 1604.6 | 1630.8 |
| 22.5° | 1175.0 | 1349.2 | 1489.4 | 1599.4 | 1626.9 |
| 25° | 1144.9 | 1325.6 | 1469.7 | 1581.1 | 1605.9 |
| 27.5° | 1110.8 | 1292.9 | 1444.8 | 1549.6 | 1573.2 |
| 30° | 1074.1 | 1254.9 | 1405.5 | 1503.8 | 1523.4 |
| 32.5° | 1037.4 | 1213.0 | 1361.0 | 1448.8 | 1460.5 |
| 35° | 995.5 | 1164.5 | 1308.6 | 1383.3 | 1392.4 |
| 37.5° | 947.1 | 1116.0 | 1249.6 | 1315.1 | 1317.8 |
| 40° | 898.6 | 1057.1 | 1188.1 | 1236.5 | 1244.4 |
| 42.5° | 847.5 | 999.5 | 1123.9 | 1164.5 | 1159.3 |
| 45° | 796.4 | 941.8 | 1057.1 | 1087.2 | 1078.1 |
| 47.5° | 742.7 | 882.9 | 991.6 | 1011.2 | 1004.7 |
| 50° | 679.8 | 823.9 | 927.4 | 937.9 | 927.4 |
| 52.5° | 619.6 | 767.6 | 864.5 | 869.8 | 860.6 |
| 55° | 558.0 | 707.3 | 801.7 | 804.3 | 796.4 |
| 57.5° | 501.7 | 651.0 | 741.4 | 741.4 | 737.5 |
| 60° | 442.7 | 594.7 | 685.1 | 682.5 | 681.1 |
| 62.5° | 386.4 | 544.9 | 632.7 | 628.8 | 624.8 |
| 65° | 332.7 | 497.8 | 579.0 | 576.4 | 571.1 |
| 67.5° | 288.2 | 453.2 | 529.2 | 525.3 | 522.7 |
| 70° | 247.6 | 413.9 | 482.0 | 471.6 | 467.6 |
| 72.5° | 208.3 | 374.6 | 436.2 | 420.5 | 421.8 |
| 75° | 174.2 | 338.0 | 386.4 | 370.7 | 366.8 |
| 77.5° | 140.2 | 300.0 | 338.0 | 313.1 | 307.8 |
| 80° | 110.0 | 259.4 | 282.9 | 251.5 | 239.7 |
| 82.5° | 81.2 | 214.8 | 220.1 | 189.9 | 182.1 |
| 85° | 53.7 | 162.4 | 153.3 | 131.0 | 125.8 |
| 87.5° | 28.8 | 95.6 | 82.5 | 66.8 | 62.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)