

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: P#

Luminaire Tested: **24CZ-LD5-75-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-75-RDP-UNV-L830-CD1-U  
Description:

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4411.3 lumens  
Efficiency: N/A  
Efficacy: 63.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

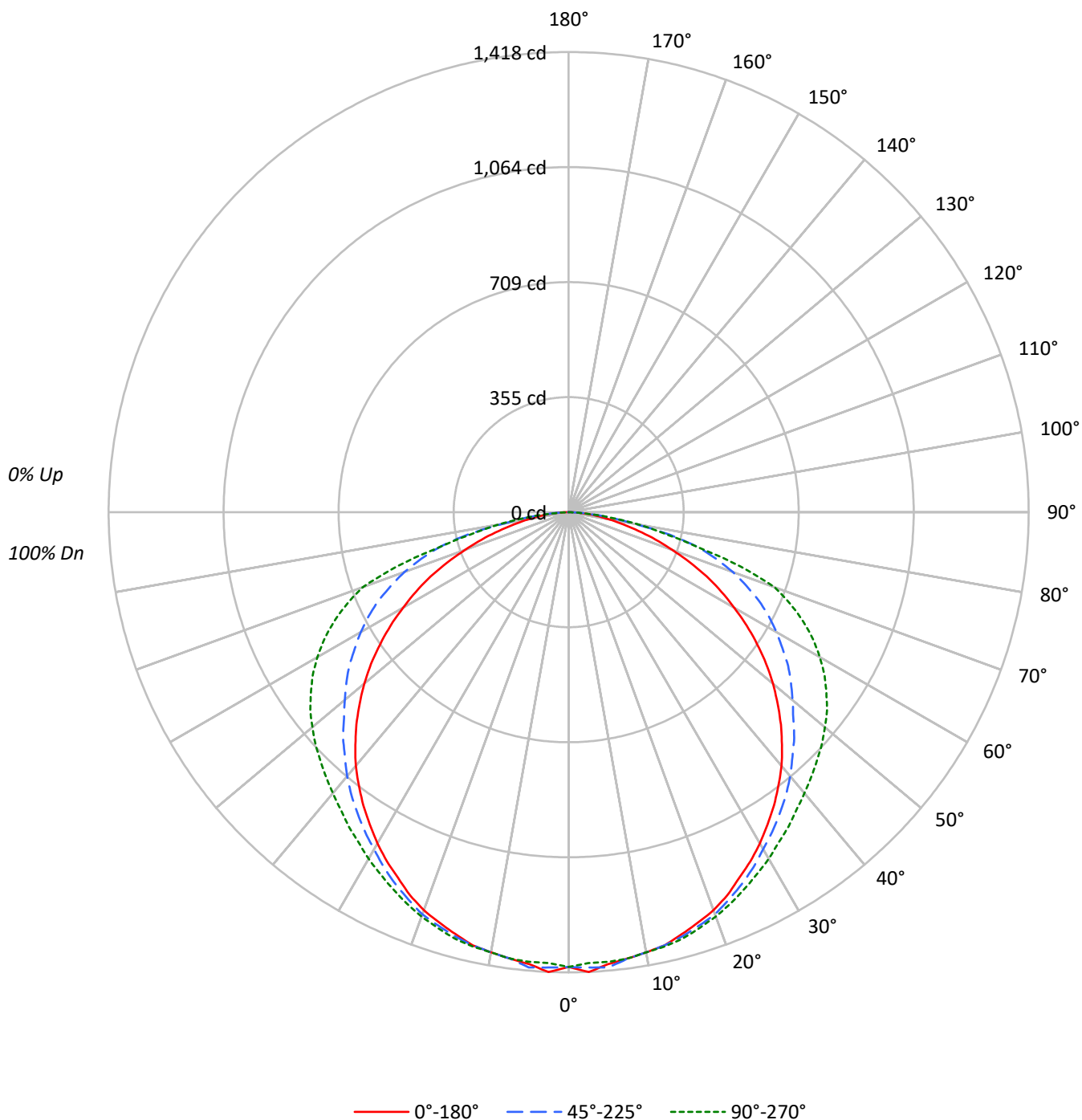
Input Watts (W): 69.06  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  |  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  | 87  | 85  |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 81  | 75  |  | 84  | 78  | 73  |  | 80  | 76  | 71  |  | 77  | 73  | 70  |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  |  | 73  | 66  | 61  |  | 70  | 64  | 59  |  | 68  | 63  | 58  |
| 4   | 81  | 68  | 59  | 52  | 79  | 67  | 58  | 52  |  | 64  | 57  | 51  |  | 62  | 56  | 50  |  | 60  | 54  | 50  |
| 5   | 74  | 61  | 52  | 45  | 72  | 60  | 51  | 44  |  | 58  | 50  | 44  |  | 56  | 49  | 43  |  | 54  | 48  | 43  |
| 6   | 68  | 55  | 45  | 39  | 66  | 54  | 45  | 39  |  | 52  | 44  | 38  |  | 50  | 43  | 38  |  | 48  | 42  | 37  |
| 7   | 63  | 49  | 40  | 34  | 62  | 49  | 40  | 34  |  | 47  | 39  | 34  |  | 45  | 39  | 33  |  | 44  | 38  | 33  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  |  | 43  | 35  | 30  |  | 42  | 35  | 30  |  | 40  | 34  | 29  |
| 9   | 55  | 41  | 33  | 27  | 54  | 41  | 33  | 27  |  | 39  | 32  | 27  |  | 38  | 32  | 27  |  | 37  | 31  | 27  |
| 10  | 51  | 38  | 30  | 24  | 50  | 37  | 30  | 24  |  | 36  | 29  | 24  |  | 35  | 29  | 24  |  | 35  | 28  | 24  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 1885 | 1885 | 1885 |
| 5°  | 1884 | 1893 | 1870 |
| 10° | 1873 | 1864 | 1865 |
| 15° | 1863 | 1859 | 1869 |
| 20° | 1852 | 1853 | 1864 |
| 25° | 1825 | 1831 | 1859 |
| 30° | 1805 | 1807 | 1862 |
| 35° | 1781 | 1796 | 1876 |
| 40° | 1756 | 1786 | 1906 |
| 45° | 1717 | 1777 | 1962 |
| 50° | 1671 | 1774 | 2037 |
| 55° | 1606 | 1800 | 2123 |
| 60° | 1520 | 1824 | 2214 |
| 65° | 1418 | 1851 | 2295 |
| 70° | 1249 | 1847 | 2334 |
| 75° | 1059 | 1769 | 1771 |
| 80° | 860  | 1204 | 1324 |
| 85° | 658  | 658  | 606  |



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CATALOG NUMBER: 24CZ-LD5-75-RDP-UNV-L830-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 133.0  | 3.0       |
| 10°-20°   | 382.0  | 8.7       |
| 20°-30°   | 582.2  | 13.2      |
| 30°-40°   | 712.4  | 16.1      |
| 40°-50°   | 766.5  | 17.4      |
| 50°-60°   | 742.5  | 16.8      |
| 60°-70°   | 628.9  | 14.3      |
| 70°-80°   | 380.2  | 8.6       |
| 80°-90°   | 83.5   | 1.9       |
| 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°    | 1097.3 | 24.9      |
| 0°-40°    | 1809.7 | 41.0      |
| 0°-60°    | 3318.6 | 75.2      |
| 0°-90°    | 4411.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4411.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1401 | 1401  | 1401 | 1401  | 1401 |      |
| 5°  | 1398 | 1398  | 1408 | 1401  | 1391 | 133  |
| 15° | 1346 | 1350  | 1353 | 1357  | 1360 | 380  |
| 25° | 1244 | 1250  | 1264 | 1274  | 1281 | 574  |
| 35° | 1103 | 1110  | 1134 | 1165  | 1182 | 690  |
| 45° | 925  | 942   | 983  | 1045  | 1082 | 713  |
| 55° | 709  | 740   | 826  | 922   | 970  | 633  |
| 65° | 469  | 521   | 648  | 750   | 798  | 462  |
| 75° | 223  | 301   | 408  | 414   | 404  | 239  |
| 85° | 55   | 65    | 68   | 65    | 62   | 62   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1401.2 | 1401.2 | 1401.2 | 1401.2 | 1401.2 |
| 2.5°  | 1418.3 | 1414.8 | 1404.6 | 1397.7 | 1390.9 |
| 5°    | 1397.7 | 1397.7 | 1408.0 | 1401.2 | 1390.9 |
| 7.5°  | 1387.5 | 1387.5 | 1387.5 | 1404.6 | 1387.5 |
| 10°   | 1377.1 | 1380.6 | 1377.1 | 1390.9 | 1377.1 |
| 12.5° | 1366.9 | 1366.9 | 1366.9 | 1370.3 | 1370.3 |
| 15°   | 1346.3 | 1349.8 | 1353.2 | 1356.6 | 1360.0 |
| 17.5° | 1325.8 | 1329.2 | 1336.1 | 1339.5 | 1342.9 |
| 20°   | 1305.2 | 1308.6 | 1318.9 | 1318.9 | 1325.8 |
| 22.5° | 1277.8 | 1277.8 | 1291.5 | 1294.9 | 1305.2 |
| 25°   | 1243.6 | 1250.4 | 1264.1 | 1274.4 | 1281.3 |
| 27.5° | 1212.8 | 1219.6 | 1233.3 | 1247.0 | 1257.2 |
| 30°   | 1178.5 | 1185.3 | 1199.0 | 1219.6 | 1233.3 |
| 32.5° | 1140.8 | 1147.6 | 1168.2 | 1192.2 | 1205.8 |
| 35°   | 1103.1 | 1110.0 | 1133.9 | 1164.8 | 1181.9 |
| 37.5° | 1062.0 | 1072.3 | 1099.7 | 1133.9 | 1154.5 |
| 40°   | 1020.9 | 1031.1 | 1062.0 | 1099.7 | 1130.5 |
| 42.5° | 972.9  | 986.7  | 1020.9 | 1072.3 | 1106.6 |
| 45°   | 924.9  | 942.1  | 983.2  | 1044.9 | 1082.5 |
| 47.5° | 873.6  | 890.7  | 938.7  | 1017.4 | 1058.6 |
| 50°   | 822.2  | 842.7  | 901.0  | 986.7  | 1031.1 |
| 52.5° | 767.4  | 787.9  | 863.3  | 955.8  | 1003.8 |
| 55°   | 709.2  | 740.0  | 825.6  | 921.5  | 969.5  |
| 57.5° | 650.9  | 685.1  | 781.1  | 883.9  | 935.3  |
| 60°   | 589.2  | 630.3  | 740.0  | 842.7  | 894.1  |
| 62.5° | 531.0  | 575.5  | 695.4  | 798.2  | 849.6  |
| 65°   | 469.3  | 520.7  | 647.5  | 750.2  | 798.2  |
| 67.5° | 404.2  | 469.3  | 592.7  | 692.0  | 740.0  |
| 70°   | 339.2  | 414.5  | 537.9  | 630.3  | 674.9  |
| 72.5° | 280.9  | 359.7  | 476.1  | 555.0  | 555.0  |
| 75°   | 222.7  | 301.4  | 407.6  | 414.5  | 404.2  |
| 77.5° | 171.3  | 246.6  | 318.6  | 291.2  | 298.0  |
| 80°   | 126.7  | 188.4  | 202.2  | 212.4  | 219.3  |
| 82.5° | 85.7   | 126.7  | 130.2  | 137.0  | 137.0  |
| 85°   | 54.8   | 65.1   | 68.5   | 65.1   | 61.7   |
| 87.5° | 23.9   | 27.4   | 20.5   | 13.7   | 10.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)