

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P893779

Luminaire Tested: 4MB-6SL-RND-UNV-L840

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P893779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-327-1)
Test Lab: INNOVATION CENTER
Issue Date: 11/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4MB-6SL-RND-UNV-L840
Description: 6000 Lumen 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 80CRI, 4000K CCT
Light Source: -
Ballast/Driver: -

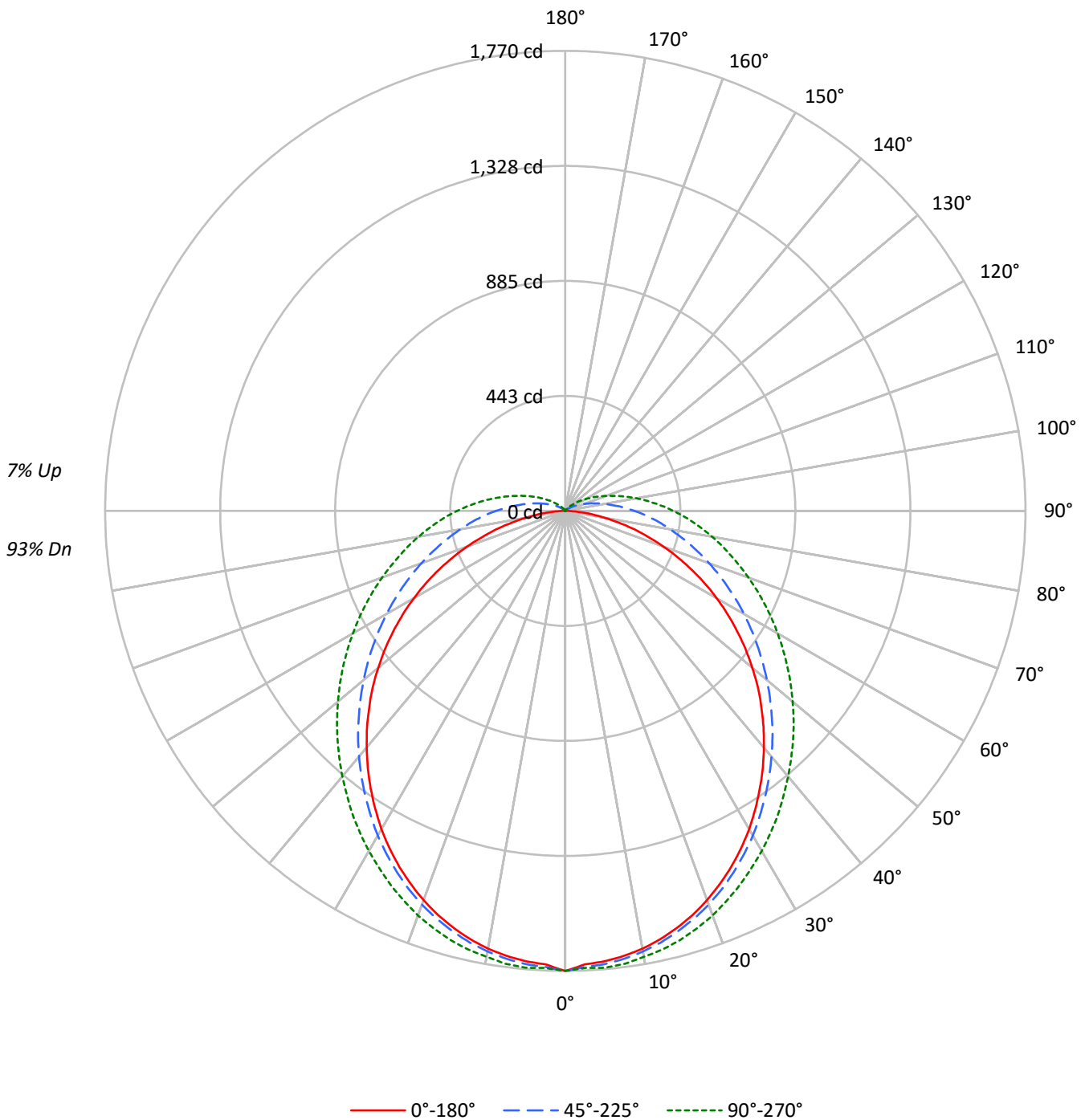
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5859.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.35
Luminous Opening: Rectangular (W 0.38' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 4
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P893779
CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

Luminous Intensity Polar Plot





TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| RF | 20 | | | | 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 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 96 | 96 | 96 | 96 | 96 | 96 | 93 |
| 1 | 105 | 100 | 95 | 90 | 102 | 97 | 92 | 88 | 91 | 87 | 84 | 86 | 83 | 80 | 81 | 79 | 76 | 76 | 76 | 76 | 74 |
| 2 | 95 | 86 | 78 | 72 | 92 | 83 | 77 | 71 | 79 | 73 | 68 | 74 | 70 | 65 | 70 | 66 | 63 | 63 | 63 | 63 | 60 |
| 3 | 86 | 75 | 66 | 59 | 83 | 73 | 65 | 58 | 69 | 62 | 56 | 65 | 59 | 55 | 62 | 57 | 53 | 53 | 53 | 53 | 50 |
| 4 | 79 | 66 | 57 | 50 | 76 | 64 | 56 | 49 | 61 | 54 | 48 | 58 | 51 | 46 | 55 | 49 | 45 | 45 | 45 | 45 | 43 |
| 5 | 72 | 59 | 50 | 43 | 70 | 58 | 49 | 42 | 55 | 47 | 41 | 52 | 45 | 40 | 49 | 44 | 39 | 39 | 39 | 39 | 37 |
| 6 | 67 | 53 | 44 | 37 | 64 | 52 | 43 | 37 | 49 | 42 | 36 | 47 | 40 | 35 | 45 | 39 | 34 | 34 | 34 | 34 | 32 |
| 7 | 62 | 48 | 39 | 33 | 60 | 47 | 38 | 32 | 45 | 37 | 32 | 43 | 36 | 31 | 41 | 35 | 30 | 30 | 30 | 30 | 28 |
| 8 | 58 | 44 | 35 | 29 | 56 | 43 | 35 | 29 | 41 | 34 | 28 | 39 | 33 | 28 | 37 | 32 | 27 | 27 | 27 | 27 | 25 |
| 9 | 54 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 25 | 36 | 30 | 25 | 35 | 29 | 24 | 24 | 24 | 24 | 23 |
| 10 | 50 | 37 | 29 | 24 | 49 | 36 | 29 | 24 | 35 | 28 | 23 | 33 | 27 | 23 | 32 | 26 | 22 | 22 | 22 | 22 | 20 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 12593 | 12593 | 12593 |
| 5° | 12423 | 12502 | 12601 |
| 10° | 12357 | 12437 | 12587 |
| 15° | 12230 | 12333 | 12588 |
| 20° | 12069 | 12205 | 12541 |
| 25° | 11861 | 12035 | 12470 |
| 30° | 11616 | 11855 | 12413 |
| 35° | 11331 | 11643 | 12389 |
| 40° | 11036 | 11460 | 12386 |
| 45° | 10729 | 11301 | 12471 |
| 50° | 10393 | 11205 | 12631 |
| 55° | 10015 | 11183 | 12936 |
| 60° | 9577 | 11291 | 13420 |
| 65° | 9046 | 11588 | 14223 |
| 70° | 8384 | 12245 | 15586 |
| 75° | 7576 | 13630 | 18083 |
| 80° | 6412 | 16795 | 23490 |
| 85° | 5200 | 27356 | 40246 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 74087 cd/sqm



TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 167.4 | 2.9 |
| 10°-20° | 476.9 | 8.1 |
| 20°-30° | 714.1 | 12.2 |
| 30°-40° | 851.4 | 14.5 |
| 40°-50° | 883.0 | 15.1 |
| 50°-60° | 819.2 | 14.0 |
| 60°-70° | 683.4 | 11.7 |
| 70°-80° | 509.6 | 8.7 |
| 80°-90° | 339.3 | 5.8 |
| 90°-100° | 206.6 | 3.5 |
| 100°-110° | 115.3 | 2.0 |
| 110°-120° | 57.6 | 1.0 |
| 120°-130° | 24.1 | 0.4 |
| 130°-140° | 7.6 | 0.1 |
| 140°-150° | 1.9 | 0.0 |
| 150°-160° | 0.8 | 0.0 |
| 160°-170° | 0.6 | 0.0 |
| 170°-180° | 0.2 | 0.0 |
| 0°-30° | 1358.4 | 23.2 |
| 0°-40° | 2209.8 | 37.7 |
| 0°-60° | 3912.1 | 66.8 |
| 0°-90° | 5444.4 | 92.9 |
| 90°-120° | 379.5 | 6.5 |
| 90°-150° | 413.1 | 7.1 |
| 90°-180° | 415.0 | 7.1 |
| 0°-180° | 5859.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1770 | 1770 | 1770 | 1770 | 1770 | |
| 5° | 1739 | 1780 | 1750 | 1760 | 1764 | 165 |
| 15° | 1660 | 1703 | 1674 | 1705 | 1709 | 468 |
| 25° | 1511 | 1551 | 1533 | 1576 | 1588 | 696 |
| 35° | 1304 | 1339 | 1340 | 1407 | 1426 | 816 |
| 45° | 1066 | 1094 | 1123 | 1212 | 1239 | 823 |
| 55° | 807 | 835 | 902 | 1007 | 1043 | 722 |
| 65° | 537 | 580 | 688 | 805 | 845 | 532 |
| 75° | 276 | 352 | 496 | 616 | 658 | 291 |
| 85° | 64 | 174 | 335 | 450 | 493 | 72 |
| 90° | 3 | 115 | 266 | 375 | 416 | 5 |
| 95° | 0 | 71 | 205 | 307 | 343 | 0 |
| 105° | 0 | 22 | 112 | 190 | 219 | 0 |
| 115° | 1 | 6 | 53 | 107 | 127 | 1 |
| 125° | 1 | 1 | 21 | 51 | 64 | 1 |
| 135° | 1 | 1 | 6 | 18 | 24 | 1 |
| 145° | 1 | 1 | 1 | 4 | 6 | 1 |
| 155° | 3 | 3 | 1 | 1 | 1 | 1 |
| 165° | 3 | 3 | 1 | 1 | 1 | 1 |
| 175° | 3 | 3 | 3 | 1 | 0 | 0 |
| 180° | 3 | 3 | 3 | 3 | 3 | |



TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 |
| 2.5° | 1746.3 | 1749.1 | 1774.0 | 1772.6 | 1768.5 | 1785.1 | 1789.2 | 1775.4 | 1753.2 | 1775.4 | 1756.0 |
| 5° | 1739.4 | 1742.2 | 1767.1 | 1765.7 | 1761.5 | 1779.5 | 1780.9 | 1768.5 | 1746.3 | 1768.5 | 1750.5 |
| 7.5° | 1726.9 | 1729.7 | 1754.6 | 1753.2 | 1750.5 | 1768.5 | 1767.1 | 1757.4 | 1733.8 | 1757.4 | 1738.0 |
| 10° | 1710.3 | 1711.7 | 1738.0 | 1735.2 | 1733.8 | 1751.8 | 1747.7 | 1739.4 | 1715.8 | 1739.4 | 1721.4 |
| 12.5° | 1688.1 | 1689.5 | 1715.8 | 1713.1 | 1713.1 | 1729.7 | 1724.2 | 1717.2 | 1693.7 | 1715.8 | 1700.6 |
| 15° | 1660.4 | 1661.8 | 1686.8 | 1685.4 | 1685.4 | 1703.4 | 1695.1 | 1689.5 | 1667.4 | 1690.9 | 1674.3 |
| 17.5° | 1630.0 | 1628.6 | 1654.9 | 1652.1 | 1654.9 | 1671.5 | 1660.4 | 1657.7 | 1636.9 | 1659.1 | 1645.2 |
| 20° | 1594.0 | 1594.0 | 1617.5 | 1616.1 | 1620.3 | 1635.5 | 1621.7 | 1623.1 | 1602.3 | 1625.8 | 1612.0 |
| 22.5° | 1553.8 | 1552.4 | 1576.0 | 1576.0 | 1580.1 | 1595.4 | 1580.1 | 1584.3 | 1563.5 | 1585.7 | 1574.6 |
| 25° | 1510.9 | 1508.1 | 1531.7 | 1531.7 | 1538.6 | 1551.0 | 1534.4 | 1540.0 | 1520.6 | 1542.7 | 1533.0 |
| 27.5° | 1463.8 | 1459.6 | 1483.2 | 1484.6 | 1490.1 | 1502.6 | 1484.6 | 1492.9 | 1474.9 | 1495.6 | 1488.7 |
| 30° | 1413.9 | 1409.8 | 1433.3 | 1434.7 | 1441.6 | 1451.3 | 1433.3 | 1444.4 | 1427.8 | 1448.6 | 1443.0 |
| 32.5° | 1359.9 | 1357.2 | 1379.3 | 1382.1 | 1389.0 | 1395.9 | 1379.3 | 1390.4 | 1376.6 | 1397.3 | 1391.8 |
| 35° | 1304.5 | 1301.8 | 1322.5 | 1326.7 | 1333.6 | 1339.2 | 1321.2 | 1336.4 | 1323.9 | 1343.3 | 1340.5 |
| 37.5° | 1247.8 | 1243.6 | 1265.8 | 1268.5 | 1276.8 | 1279.6 | 1263.0 | 1281.0 | 1269.9 | 1289.3 | 1287.9 |
| 40° | 1188.2 | 1184.1 | 1206.2 | 1209.0 | 1217.3 | 1217.3 | 1203.4 | 1222.8 | 1214.5 | 1232.5 | 1233.9 |
| 42.5° | 1128.7 | 1124.5 | 1143.9 | 1149.4 | 1156.4 | 1156.4 | 1142.5 | 1163.3 | 1157.7 | 1175.7 | 1179.9 |
| 45° | 1066.3 | 1062.2 | 1080.2 | 1085.7 | 1094.0 | 1094.0 | 1080.2 | 1103.7 | 1099.6 | 1117.6 | 1123.1 |
| 47.5° | 1005.4 | 999.9 | 1016.5 | 1022.0 | 1030.3 | 1029.0 | 1017.9 | 1041.4 | 1040.0 | 1058.0 | 1067.7 |
| 50° | 938.9 | 934.8 | 951.4 | 956.9 | 966.6 | 963.9 | 955.6 | 980.5 | 980.5 | 998.5 | 1012.3 |
| 52.5° | 873.8 | 869.7 | 886.3 | 891.8 | 900.2 | 900.2 | 891.8 | 918.2 | 922.3 | 940.3 | 956.9 |
| 55° | 807.4 | 801.8 | 818.5 | 824.0 | 833.7 | 835.1 | 828.1 | 854.5 | 862.8 | 883.5 | 901.5 |
| 57.5° | 740.9 | 738.1 | 752.0 | 757.5 | 770.0 | 770.0 | 765.8 | 793.5 | 804.6 | 826.8 | 847.5 |
| 60° | 673.0 | 670.3 | 682.7 | 689.7 | 703.5 | 706.3 | 703.5 | 732.6 | 747.8 | 770.0 | 793.5 |
| 62.5° | 605.2 | 602.4 | 614.9 | 624.6 | 639.8 | 642.6 | 644.0 | 674.4 | 691.0 | 714.6 | 740.9 |
| 65° | 537.3 | 534.6 | 547.0 | 558.1 | 576.1 | 580.3 | 584.4 | 616.3 | 635.7 | 660.6 | 688.3 |
| 67.5° | 469.5 | 468.1 | 480.5 | 494.4 | 513.8 | 519.3 | 526.2 | 559.5 | 581.6 | 608.0 | 638.4 |
| 70° | 403.0 | 401.6 | 414.1 | 430.7 | 454.2 | 461.2 | 469.5 | 502.7 | 530.4 | 558.1 | 588.6 |
| 72.5° | 336.5 | 337.9 | 351.8 | 371.1 | 397.5 | 404.4 | 415.5 | 450.1 | 480.5 | 509.6 | 541.5 |
| 75° | 275.6 | 275.6 | 290.8 | 313.0 | 342.1 | 351.8 | 364.2 | 400.2 | 432.1 | 462.5 | 495.8 |
| 77.5° | 213.3 | 213.3 | 231.3 | 259.0 | 290.8 | 300.5 | 315.7 | 353.1 | 387.8 | 418.2 | 451.5 |
| 80° | 156.5 | 159.3 | 180.0 | 207.7 | 241.0 | 253.4 | 271.4 | 308.8 | 346.2 | 376.7 | 409.9 |
| 82.5° | 106.6 | 110.8 | 132.9 | 164.8 | 198.0 | 210.5 | 228.5 | 268.7 | 306.1 | 337.9 | 372.5 |
| 85° | 63.7 | 70.6 | 94.2 | 126.0 | 160.6 | 174.5 | 193.9 | 231.3 | 268.7 | 300.5 | 335.1 |
| 87.5° | 29.1 | 38.8 | 63.7 | 95.6 | 128.8 | 144.0 | 160.6 | 196.7 | 234.0 | 265.9 | 301.9 |
| 90° | 2.8 | 16.6 | 41.5 | 69.2 | 101.1 | 114.9 | 131.6 | 166.2 | 202.2 | 231.3 | 265.9 |
| 92.5° | 0.0 | 6.9 | 24.9 | 49.9 | 77.6 | 91.4 | 106.6 | 139.9 | 171.7 | 200.8 | 234.0 |
| 95° | 0.0 | 2.8 | 13.8 | 34.6 | 58.2 | 70.6 | 84.5 | 114.9 | 146.8 | 174.5 | 205.0 |
| 97.5° | 0.0 | 1.4 | 8.3 | 23.5 | 42.9 | 54.0 | 66.5 | 94.2 | 123.3 | 149.6 | 177.3 |
| 100° | 0.0 | 1.4 | 4.2 | 15.2 | 31.9 | 40.2 | 52.6 | 76.2 | 102.5 | 126.0 | 153.7 |
| 102.5° | 0.0 | 0.0 | 2.8 | 9.7 | 23.5 | 30.5 | 40.2 | 60.9 | 84.5 | 106.6 | 131.6 |
| 105° | 0.0 | 0.0 | 1.4 | 6.9 | 16.6 | 22.2 | 30.5 | 48.5 | 69.2 | 88.6 | 112.2 |
| 107.5° | 0.0 | 0.0 | 1.4 | 4.2 | 11.1 | 16.6 | 23.5 | 37.4 | 55.4 | 73.4 | 94.2 |
| 110° | 1.4 | 1.4 | 1.4 | 2.8 | 8.3 | 12.5 | 16.6 | 29.1 | 45.7 | 60.9 | 78.9 |



TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|
| 112.5° | 1.4 | 1.4 | 1.4 | 1.4 | 5.5 | 8.3 | 12.5 | 22.2 | 36.0 | 48.5 | 65.1 |
| 115° | 1.4 | 1.4 | 1.4 | 1.4 | 4.2 | 5.5 | 8.3 | 16.6 | 27.7 | 38.8 | 52.6 |
| 117.5° | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 5.5 | 12.5 | 20.8 | 30.5 | 42.9 |
| 120° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 8.3 | 16.6 | 23.5 | 34.6 |
| 122.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 2.8 | 6.9 | 12.5 | 18.0 | 26.3 |
| 125° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 8.3 | 13.8 | 20.8 |
| 127.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 5.5 | 9.7 | 15.2 |
| 130° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 6.9 | 11.1 |
| 132.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 5.5 | 8.3 |
| 135° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 4.2 | 5.5 |
| 137.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 2.8 | 4.2 |
| 140° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 2.8 |
| 142.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 |
| 145° | 1.4 | 2.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 147.5° | 1.4 | 2.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 150° | 1.4 | 2.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 152.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 155° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 157.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 | 1.4 |
| 160° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 | 1.4 |
| 162.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 | 1.4 |
| 165° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 | 1.4 |
| 167.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 |
| 170° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 172.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.4 |
| 175° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 177.5° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 180° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |



TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 | 1769.9 |
| 2.5° | 1761.5 | 1765.7 | 1769.9 | 1758.8 | 1765.7 | 1778.2 | 1782.3 | 1765.7 | 1771.2 | 1760.2 |
| 5° | 1756.0 | 1758.8 | 1764.3 | 1750.5 | 1760.2 | 1771.2 | 1778.2 | 1764.3 | 1772.6 | 1764.3 |
| 7.5° | 1744.9 | 1747.7 | 1754.6 | 1740.8 | 1753.2 | 1762.9 | 1771.2 | 1757.4 | 1765.7 | 1757.4 |
| 10° | 1728.3 | 1732.5 | 1742.2 | 1725.5 | 1740.8 | 1749.1 | 1757.4 | 1742.2 | 1750.5 | 1742.2 |
| 12.5° | 1707.5 | 1714.5 | 1722.8 | 1707.5 | 1722.8 | 1729.7 | 1740.8 | 1725.5 | 1735.2 | 1728.3 |
| 15° | 1682.6 | 1689.5 | 1700.6 | 1685.4 | 1704.8 | 1710.3 | 1721.4 | 1706.1 | 1715.8 | 1708.9 |
| 17.5° | 1653.5 | 1661.8 | 1675.7 | 1657.7 | 1679.8 | 1684.0 | 1695.1 | 1681.2 | 1690.9 | 1684.0 |
| 20° | 1620.3 | 1628.6 | 1642.4 | 1625.8 | 1648.0 | 1650.8 | 1663.2 | 1650.8 | 1660.4 | 1656.3 |
| 22.5° | 1581.5 | 1591.2 | 1605.1 | 1589.8 | 1613.4 | 1613.4 | 1628.6 | 1616.1 | 1627.2 | 1623.1 |
| 25° | 1541.3 | 1552.4 | 1567.7 | 1551.0 | 1576.0 | 1576.0 | 1592.6 | 1580.1 | 1591.2 | 1588.4 |
| 27.5° | 1498.4 | 1510.9 | 1528.9 | 1512.3 | 1537.2 | 1535.8 | 1552.4 | 1541.3 | 1553.8 | 1549.7 |
| 30° | 1452.7 | 1466.6 | 1484.6 | 1470.7 | 1497.0 | 1494.3 | 1510.9 | 1501.2 | 1512.3 | 1510.9 |
| 32.5° | 1402.9 | 1418.1 | 1440.3 | 1425.0 | 1451.3 | 1448.6 | 1469.3 | 1458.3 | 1472.1 | 1469.3 |
| 35° | 1353.0 | 1369.6 | 1391.8 | 1377.9 | 1407.0 | 1402.9 | 1423.6 | 1413.9 | 1427.8 | 1426.4 |
| 37.5° | 1301.8 | 1319.8 | 1341.9 | 1330.9 | 1358.5 | 1354.4 | 1376.6 | 1368.2 | 1383.5 | 1379.3 |
| 40° | 1249.1 | 1267.1 | 1290.7 | 1281.0 | 1310.1 | 1304.5 | 1328.1 | 1321.2 | 1336.4 | 1333.6 |
| 42.5° | 1196.5 | 1215.9 | 1239.4 | 1233.9 | 1261.6 | 1256.1 | 1279.6 | 1274.1 | 1289.3 | 1286.5 |
| 45° | 1142.5 | 1163.3 | 1188.2 | 1182.7 | 1211.8 | 1206.2 | 1229.8 | 1225.6 | 1240.8 | 1239.4 |
| 47.5° | 1088.5 | 1110.7 | 1135.6 | 1132.8 | 1160.5 | 1155.0 | 1179.9 | 1175.7 | 1191.0 | 1191.0 |
| 50° | 1033.1 | 1058.0 | 1083.0 | 1081.6 | 1109.3 | 1103.7 | 1125.9 | 1125.9 | 1142.5 | 1141.1 |
| 52.5° | 977.7 | 1004.0 | 1030.3 | 1030.3 | 1058.0 | 1052.5 | 1077.4 | 1076.0 | 1092.7 | 1092.7 |
| 55° | 925.1 | 948.6 | 974.9 | 980.5 | 1006.8 | 998.5 | 1024.8 | 1027.6 | 1041.4 | 1042.8 |
| 57.5° | 872.5 | 897.4 | 923.7 | 930.6 | 955.6 | 950.0 | 974.9 | 977.7 | 991.6 | 992.9 |
| 60° | 819.8 | 843.4 | 869.7 | 879.4 | 904.3 | 898.8 | 923.7 | 926.5 | 941.7 | 943.1 |
| 62.5° | 767.2 | 790.8 | 819.8 | 829.5 | 853.1 | 848.9 | 875.2 | 878.0 | 891.8 | 894.6 |
| 65° | 716.0 | 740.9 | 768.6 | 782.4 | 804.6 | 799.1 | 825.4 | 828.1 | 843.4 | 844.8 |
| 67.5° | 666.1 | 691.0 | 718.7 | 734.0 | 754.7 | 752.0 | 776.9 | 782.4 | 794.9 | 797.7 |
| 70° | 617.6 | 642.6 | 671.7 | 686.9 | 707.7 | 706.3 | 729.8 | 734.0 | 747.8 | 749.2 |
| 72.5° | 570.6 | 595.5 | 624.6 | 642.6 | 660.6 | 659.2 | 682.7 | 688.3 | 702.1 | 703.5 |
| 75° | 524.9 | 551.2 | 578.9 | 598.3 | 616.3 | 614.9 | 638.4 | 644.0 | 656.4 | 657.8 |
| 77.5° | 481.9 | 508.2 | 537.3 | 556.7 | 571.9 | 573.3 | 594.1 | 599.6 | 612.1 | 616.3 |
| 80° | 441.8 | 466.7 | 494.4 | 515.2 | 529.0 | 531.8 | 551.2 | 558.1 | 567.8 | 573.3 |
| 82.5° | 403.0 | 427.9 | 455.6 | 475.0 | 488.9 | 491.6 | 509.6 | 517.9 | 527.6 | 531.8 |
| 85° | 365.6 | 390.5 | 416.8 | 437.6 | 450.1 | 451.5 | 469.5 | 477.8 | 486.1 | 493.0 |
| 87.5° | 329.6 | 354.5 | 379.5 | 401.6 | 412.7 | 415.5 | 432.1 | 440.4 | 447.3 | 454.2 |
| 90° | 293.6 | 318.5 | 343.4 | 364.2 | 375.3 | 376.7 | 394.7 | 403.0 | 409.9 | 415.5 |
| 92.5° | 260.4 | 285.3 | 310.2 | 331.0 | 340.7 | 343.4 | 358.7 | 368.4 | 373.9 | 379.5 |
| 95° | 228.5 | 253.4 | 275.6 | 297.7 | 307.4 | 311.6 | 325.4 | 333.8 | 340.7 | 343.4 |
| 97.5° | 200.8 | 223.0 | 243.7 | 265.9 | 274.2 | 278.4 | 292.2 | 301.9 | 307.4 | 310.2 |
| 100° | 174.5 | 195.3 | 214.7 | 235.4 | 243.7 | 247.9 | 260.4 | 268.7 | 274.2 | 278.4 |
| 102.5° | 150.9 | 170.3 | 188.3 | 207.7 | 216.0 | 218.8 | 229.9 | 238.2 | 243.7 | 247.9 |
| 105° | 130.2 | 148.2 | 164.8 | 182.8 | 189.7 | 193.9 | 203.6 | 210.5 | 216.0 | 218.8 |
| 107.5° | 110.8 | 128.8 | 142.6 | 159.3 | 166.2 | 169.0 | 178.6 | 187.0 | 191.1 | 192.5 |
| 110° | 94.2 | 109.4 | 123.3 | 137.1 | 145.4 | 148.2 | 156.5 | 163.4 | 167.6 | 169.0 |



TEST NUMBER: P893779

CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 78.9 | 92.8 | 105.2 | 117.7 | 124.6 | 127.4 | 135.7 | 142.6 | 145.4 | 146.8 |
| 115° | 65.1 | 78.9 | 88.6 | 101.1 | 106.6 | 109.4 | 116.3 | 123.3 | 124.6 | 127.4 |
| 117.5° | 52.6 | 65.1 | 74.8 | 84.5 | 90.0 | 92.8 | 98.3 | 103.9 | 106.6 | 108.0 |
| 120° | 42.9 | 52.6 | 60.9 | 70.6 | 74.8 | 77.6 | 83.1 | 88.6 | 90.0 | 91.4 |
| 122.5° | 34.6 | 42.9 | 49.9 | 58.2 | 62.3 | 65.1 | 69.2 | 73.4 | 74.8 | 76.2 |
| 125° | 26.3 | 34.6 | 40.2 | 47.1 | 51.2 | 52.6 | 56.8 | 60.9 | 62.3 | 63.7 |
| 127.5° | 20.8 | 26.3 | 31.9 | 37.4 | 40.2 | 41.5 | 45.7 | 48.5 | 49.9 | 51.2 |
| 130° | 15.2 | 19.4 | 23.5 | 29.1 | 31.9 | 33.2 | 36.0 | 38.8 | 40.2 | 40.2 |
| 132.5° | 11.1 | 15.2 | 18.0 | 22.2 | 23.5 | 24.9 | 27.7 | 30.5 | 30.5 | 31.9 |
| 135° | 6.9 | 9.7 | 12.5 | 15.2 | 18.0 | 18.0 | 20.8 | 22.2 | 23.5 | 23.5 |
| 137.5° | 5.5 | 6.9 | 8.3 | 11.1 | 12.5 | 13.8 | 13.8 | 16.6 | 16.6 | 16.6 |
| 140° | 4.2 | 5.5 | 5.5 | 6.9 | 8.3 | 9.7 | 9.7 | 11.1 | 11.1 | 11.1 |
| 142.5° | 2.8 | 4.2 | 4.2 | 5.5 | 5.5 | 6.9 | 6.9 | 6.9 | 8.3 | 8.3 |
| 145° | 2.8 | 2.8 | 2.8 | 4.2 | 4.2 | 4.2 | 4.2 | 5.5 | 5.5 | 5.5 |
| 147.5° | 1.4 | 1.4 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 4.2 | 4.2 | 4.2 |
| 150° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 152.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 155° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 157.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 160° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 162.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 165° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 167.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 170° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 172.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 175° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.0 |
| 177.5° | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 0.0 |
| 180° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |



TEST NUMBER: P893779
 CATALOG NUMBER: 4MB-6SL-RND-UNV-L840

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 19.09 | 20.63 | 19.56 | 21.08 | 21.57 | 20.66 | 22.20 | 21.13 | 22.65 | 23.14 |
| | 3H | 20.77 | 22.17 | 21.25 | 22.63 | 23.16 | 23.29 | 24.69 | 23.77 | 25.16 | 25.68 |
| | 4H | 21.36 | 22.69 | 21.87 | 23.18 | 23.72 | 24.60 | 25.93 | 25.10 | 26.41 | 26.95 |
| | 6H | 21.76 | 23.00 | 22.28 | 23.50 | 24.06 | 26.00 | 27.24 | 26.52 | 27.74 | 28.30 |
| | 8H | 21.88 | 23.07 | 22.41 | 23.59 | 24.15 | 26.75 | 27.94 | 27.28 | 28.46 | 29.02 |
| | 12H | 21.95 | 23.09 | 22.49 | 23.61 | 24.20 | 27.60 | 28.74 | 28.14 | 29.26 | 29.85 |
| 4H | 2H | 20.02 | 21.35 | 20.52 | 21.83 | 22.37 | 21.21 | 22.54 | 21.72 | 23.03 | 23.57 |
| | 3H | 22.00 | 23.13 | 22.51 | 23.66 | 24.22 | 24.13 | 25.26 | 24.64 | 25.79 | 26.35 |
| | 4H | 22.77 | 23.81 | 23.31 | 24.35 | 24.95 | 25.65 | 26.69 | 26.19 | 27.23 | 27.83 |
| | 6H | 23.35 | 24.27 | 23.91 | 24.84 | 25.45 | 27.29 | 28.21 | 27.85 | 28.78 | 29.39 |
| | 8H | 23.53 | 24.40 | 24.10 | 24.96 | 25.59 | 28.18 | 29.04 | 28.74 | 29.61 | 30.23 |
| | 12H | 23.66 | 24.45 | 24.24 | 25.04 | 25.66 | 29.18 | 29.97 | 29.76 | 30.56 | 31.19 |
| 8H | 4H | 23.65 | 24.52 | 24.21 | 25.08 | 25.70 | 26.01 | 26.88 | 26.57 | 27.44 | 28.07 |
| | 6H | 24.53 | 25.27 | 25.13 | 25.87 | 26.50 | 27.91 | 28.65 | 28.51 | 29.26 | 29.88 |
| | 8H | 24.88 | 25.55 | 25.49 | 26.16 | 26.80 | 29.00 | 29.66 | 29.60 | 30.28 | 30.92 |
| | 12H | 25.15 | 25.75 | 25.76 | 26.35 | 27.06 | 30.26 | 30.86 | 30.87 | 31.46 | 32.17 |
| 12H | 4H | 23.93 | 24.72 | 24.51 | 25.31 | 25.93 | 26.05 | 26.84 | 26.64 | 27.43 | 28.06 |
| | 6H | 24.98 | 25.65 | 25.59 | 26.26 | 26.90 | 28.02 | 28.69 | 28.63 | 29.31 | 29.95 |
| | 8H | 25.50 | 26.09 | 26.11 | 26.70 | 27.41 | 29.22 | 29.82 | 29.83 | 30.42 | 31.13 |