

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: P894306

Luminaire Tested: 4MB-SC3-RND-UNV-CC93-HI-3500K

Issue Date: 11/11/2024

Test Information

Test Method: LM-79-2019
Report Number: P894306
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-SC3-RND-UNV-CC93-HI-3500K
Description: Selectable 4FT MICROBAY LINEAR BAY with ROUND FROSTED LENS, 90CRI, 3500K CCT, HI lum setting
Light Source: -
Ballast/Driver: -

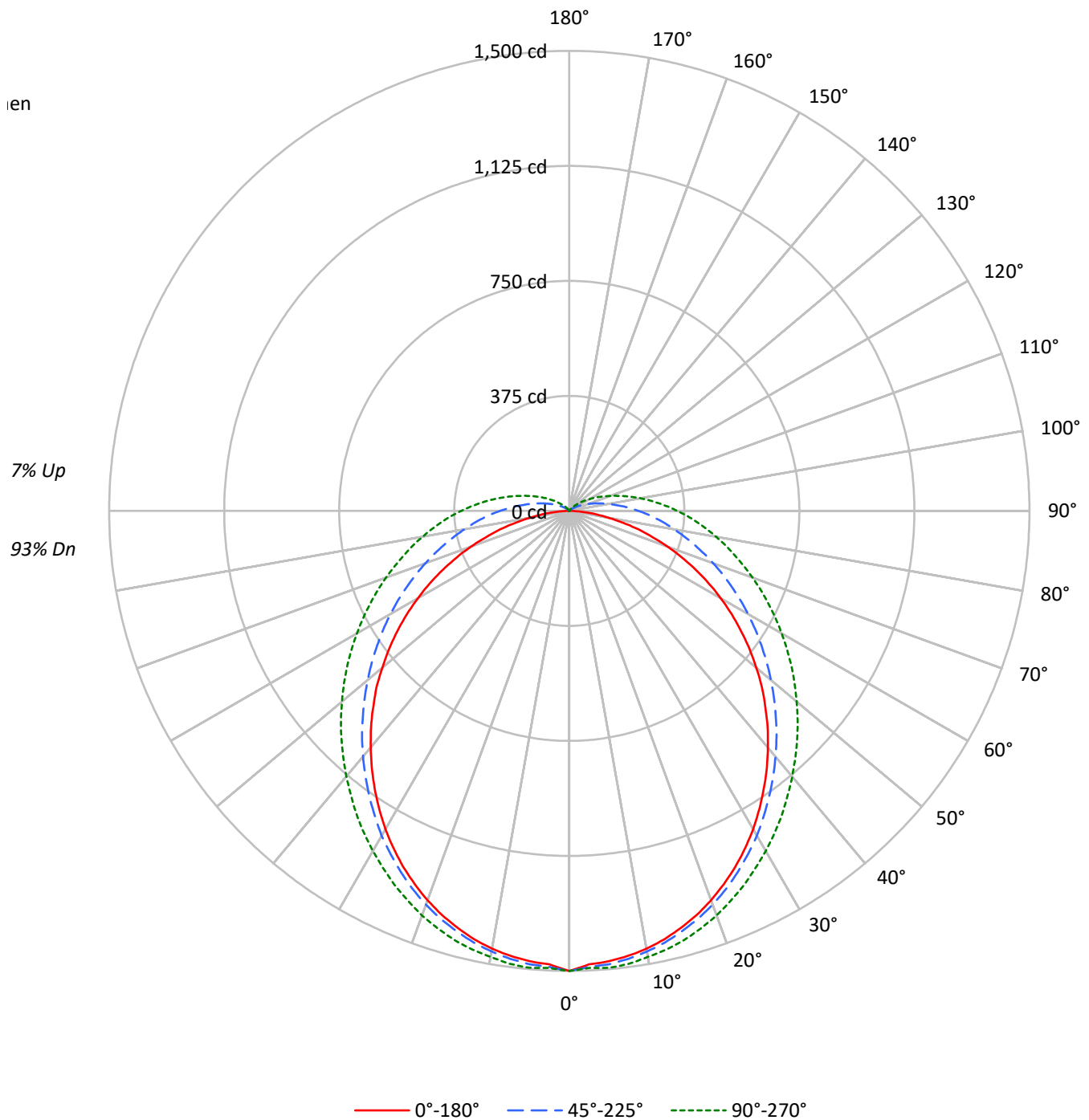
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4966.0 lumens
Efficiency: N/A
Efficacy: 97.9 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): 50.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.39961257980444
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P894306
CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

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 | 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° | 10673 | 10673 | 10673 |
| 5° | 10530 | 10597 | 10680 |
| 10° | 10473 | 10541 | 10668 |
| 15° | 10367 | 10453 | 10670 |
| 20° | 10229 | 10345 | 10629 |
| 25° | 10053 | 10201 | 10569 |
| 30° | 9846 | 10049 | 10521 |
| 35° | 9604 | 9869 | 10501 |
| 40° | 9354 | 9713 | 10499 |
| 45° | 9094 | 9578 | 10570 |
| 50° | 8809 | 9497 | 10706 |
| 55° | 8488 | 9478 | 10964 |
| 60° | 8118 | 9571 | 11374 |
| 65° | 7667 | 9822 | 12054 |
| 70° | 7106 | 10379 | 13210 |
| 75° | 6422 | 11551 | 15326 |
| 80° | 5433 | 14234 | 19909 |
| 85° | 4408 | 23193 | 34115 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 87.5°
 Luminance: 62799 cd/sqm



TEST NUMBER: P894306
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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 141.9 | 2.9 |
| 10°-20° | 404.2 | 8.1 |
| 20°-30° | 605.2 | 12.2 |
| 30°-40° | 721.7 | 14.5 |
| 40°-50° | 748.5 | 15.1 |
| 50°-60° | 694.4 | 14.0 |
| 60°-70° | 579.3 | 11.7 |
| 70°-80° | 431.9 | 8.7 |
| 80°-90° | 287.6 | 5.8 |
| 90°-100° | 175.1 | 3.5 |
| 100°-110° | 97.8 | 2.0 |
| 110°-120° | 48.8 | 1.0 |
| 120°-130° | 20.4 | 0.4 |
| 130°-140° | 6.4 | 0.1 |
| 140°-150° | 1.6 | 0.0 |
| 150°-160° | 0.7 | 0.0 |
| 160°-170° | 0.5 | 0.0 |
| 170°-180° | 0.2 | 0.0 |
| 0°-30° | 1151.3 | 23.2 |
| 0°-40° | 1873.0 | 37.7 |
| 0°-60° | 3315.8 | 66.8 |
| 0°-90° | 4614.6 | 92.9 |
| 90°-120° | 321.7 | 6.5 |
| 90°-150° | 350.1 | 7.0 |
| 90°-180° | 351.0 | 7.1 |
| 0°-180° | 4966.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1500 | 1500 | 1500 | 1500 | 1500 | |
| 5° | 1474 | 1508 | 1484 | 1492 | 1495 | 140 |
| 15° | 1407 | 1444 | 1419 | 1445 | 1448 | 397 |
| 25° | 1281 | 1315 | 1299 | 1336 | 1346 | 590 |
| 35° | 1106 | 1135 | 1136 | 1193 | 1209 | 692 |
| 45° | 904 | 927 | 952 | 1027 | 1050 | 697 |
| 55° | 684 | 708 | 764 | 853 | 884 | 612 |
| 65° | 455 | 492 | 583 | 682 | 716 | 451 |
| 75° | 234 | 298 | 420 | 522 | 558 | 247 |
| 85° | 54 | 148 | 284 | 382 | 418 | 61 |
| 90° | 2 | 97 | 225 | 318 | 352 | 4 |
| 95° | 0 | 60 | 174 | 261 | 291 | 0 |
| 105° | 0 | 19 | 95 | 161 | 186 | 0 |
| 115° | 1 | 5 | 45 | 90 | 108 | 1 |
| 125° | 1 | 1 | 18 | 43 | 54 | 1 |
| 135° | 1 | 1 | 5 | 15 | 20 | 1 |
| 145° | 1 | 1 | 1 | 4 | 5 | 1 |
| 155° | 2 | 2 | 1 | 1 | 1 | 1 |
| 165° | 2 | 2 | 1 | 1 | 1 | 1 |
| 175° | 2 | 2 | 2 | 1 | 0 | 0 |
| 180° | 2 | 2 | 2 | 2 | 2 | |



TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 |
| 2.5° | 1480.1 | 1482.5 | 1503.6 | 1502.4 | 1498.9 | 1513.0 | 1516.5 | 1504.8 | 1486.0 | 1504.8 | 1488.4 |
| 5° | 1474.3 | 1476.6 | 1497.8 | 1496.6 | 1493.1 | 1508.3 | 1509.5 | 1498.9 | 1480.1 | 1498.9 | 1483.7 |
| 7.5° | 1463.7 | 1466.1 | 1487.2 | 1486.0 | 1483.7 | 1498.9 | 1497.8 | 1489.5 | 1469.6 | 1489.5 | 1473.1 |
| 10° | 1449.6 | 1450.8 | 1473.1 | 1470.8 | 1469.6 | 1484.8 | 1481.3 | 1474.3 | 1454.3 | 1474.3 | 1459.0 |
| 12.5° | 1430.8 | 1432.0 | 1454.3 | 1452.0 | 1452.0 | 1466.1 | 1461.4 | 1455.5 | 1435.5 | 1454.3 | 1441.4 |
| 15° | 1407.4 | 1408.5 | 1429.7 | 1428.5 | 1428.5 | 1443.8 | 1436.7 | 1432.0 | 1413.2 | 1433.2 | 1419.1 |
| 17.5° | 1381.5 | 1380.4 | 1402.7 | 1400.3 | 1402.7 | 1416.8 | 1407.4 | 1405.0 | 1387.4 | 1406.2 | 1394.5 |
| 20° | 1351.0 | 1351.0 | 1371.0 | 1369.8 | 1373.3 | 1386.2 | 1374.5 | 1375.7 | 1358.1 | 1378.0 | 1366.3 |
| 22.5° | 1317.0 | 1315.8 | 1335.8 | 1335.8 | 1339.3 | 1352.2 | 1339.3 | 1342.8 | 1325.2 | 1344.0 | 1334.6 |
| 25° | 1280.6 | 1278.3 | 1298.2 | 1298.2 | 1304.1 | 1314.6 | 1300.6 | 1305.3 | 1288.8 | 1307.6 | 1299.4 |
| 27.5° | 1240.7 | 1237.2 | 1257.1 | 1258.3 | 1263.0 | 1273.6 | 1258.3 | 1265.3 | 1250.1 | 1267.7 | 1261.8 |
| 30° | 1198.4 | 1194.9 | 1214.9 | 1216.0 | 1221.9 | 1230.1 | 1214.9 | 1224.3 | 1210.2 | 1227.8 | 1223.1 |
| 32.5° | 1152.7 | 1150.3 | 1169.1 | 1171.4 | 1177.3 | 1183.2 | 1169.1 | 1178.5 | 1166.7 | 1184.4 | 1179.7 |
| 35° | 1105.7 | 1103.4 | 1121.0 | 1124.5 | 1130.4 | 1135.1 | 1119.8 | 1132.7 | 1122.1 | 1138.6 | 1136.2 |
| 37.5° | 1057.6 | 1054.1 | 1072.8 | 1075.2 | 1082.2 | 1084.6 | 1070.5 | 1085.8 | 1076.4 | 1092.8 | 1091.6 |
| 40° | 1007.1 | 1003.6 | 1022.4 | 1024.7 | 1031.8 | 1031.8 | 1020.0 | 1036.5 | 1029.4 | 1044.7 | 1045.8 |
| 42.5° | 956.6 | 953.1 | 969.5 | 974.2 | 980.1 | 980.1 | 968.4 | 986.0 | 981.3 | 996.5 | 1000.1 |
| 45° | 903.8 | 900.3 | 915.6 | 920.2 | 927.3 | 927.3 | 915.6 | 935.5 | 932.0 | 947.2 | 951.9 |
| 47.5° | 852.2 | 847.5 | 861.6 | 866.3 | 873.3 | 872.1 | 862.7 | 882.7 | 881.5 | 896.8 | 905.0 |
| 50° | 795.8 | 792.3 | 806.4 | 811.1 | 819.3 | 817.0 | 809.9 | 831.0 | 831.0 | 846.3 | 858.0 |
| 52.5° | 740.7 | 737.1 | 751.2 | 755.9 | 763.0 | 763.0 | 755.9 | 778.2 | 781.7 | 797.0 | 811.1 |
| 55° | 684.3 | 679.6 | 693.7 | 698.4 | 706.6 | 707.8 | 701.9 | 724.2 | 731.3 | 748.9 | 764.1 |
| 57.5° | 628.0 | 625.6 | 637.4 | 642.1 | 652.6 | 652.6 | 649.1 | 672.6 | 682.0 | 700.8 | 718.4 |
| 60° | 570.5 | 568.1 | 578.7 | 584.5 | 596.3 | 598.6 | 596.3 | 620.9 | 633.8 | 652.6 | 672.6 |
| 62.5° | 512.9 | 510.6 | 521.2 | 529.4 | 542.3 | 544.6 | 545.8 | 571.6 | 585.7 | 605.7 | 628.0 |
| 65° | 455.4 | 453.1 | 463.6 | 473.0 | 488.3 | 491.8 | 495.3 | 522.3 | 538.8 | 559.9 | 583.4 |
| 67.5° | 397.9 | 396.7 | 407.3 | 419.0 | 435.5 | 440.2 | 446.0 | 474.2 | 493.0 | 515.3 | 541.1 |
| 70° | 341.6 | 340.4 | 351.0 | 365.0 | 385.0 | 390.9 | 397.9 | 426.1 | 449.6 | 473.0 | 498.9 |
| 72.5° | 285.2 | 286.4 | 298.1 | 314.6 | 336.9 | 342.7 | 352.1 | 381.5 | 407.3 | 432.0 | 459.0 |
| 75° | 233.6 | 233.6 | 246.5 | 265.3 | 289.9 | 298.1 | 308.7 | 339.2 | 366.2 | 392.0 | 420.2 |
| 77.5° | 180.8 | 180.8 | 196.0 | 219.5 | 246.5 | 254.7 | 267.6 | 299.3 | 328.7 | 354.5 | 382.7 |
| 80° | 132.6 | 135.0 | 152.6 | 176.1 | 204.2 | 214.8 | 230.1 | 261.8 | 293.4 | 319.3 | 347.4 |
| 82.5° | 90.4 | 93.9 | 112.7 | 139.7 | 167.9 | 178.4 | 193.7 | 227.7 | 259.4 | 286.4 | 315.7 |
| 85° | 54.0 | 59.9 | 79.8 | 106.8 | 136.2 | 147.9 | 164.3 | 196.0 | 227.7 | 254.7 | 284.1 |
| 87.5° | 24.6 | 32.9 | 54.0 | 81.0 | 109.2 | 122.1 | 136.2 | 166.7 | 198.4 | 225.4 | 255.9 |
| 90° | 2.3 | 14.1 | 35.2 | 58.7 | 85.7 | 97.4 | 111.5 | 140.9 | 171.4 | 196.0 | 225.4 |
| 92.5° | 0.0 | 5.9 | 21.1 | 42.3 | 65.7 | 77.5 | 90.4 | 118.6 | 145.5 | 170.2 | 198.4 |
| 95° | 0.0 | 2.3 | 11.7 | 29.3 | 49.3 | 59.9 | 71.6 | 97.4 | 124.4 | 147.9 | 173.7 |
| 97.5° | 0.0 | 1.2 | 7.0 | 20.0 | 36.4 | 45.8 | 56.3 | 79.8 | 104.5 | 126.8 | 150.2 |
| 100° | 0.0 | 1.2 | 3.5 | 12.9 | 27.0 | 34.0 | 44.6 | 64.6 | 86.9 | 106.8 | 130.3 |
| 102.5° | 0.0 | 0.0 | 2.3 | 8.2 | 20.0 | 25.8 | 34.0 | 51.6 | 71.6 | 90.4 | 111.5 |
| 105° | 0.0 | 0.0 | 1.2 | 5.9 | 14.1 | 18.8 | 25.8 | 41.1 | 58.7 | 75.1 | 95.1 |
| 107.5° | 0.0 | 0.0 | 1.2 | 3.5 | 9.4 | 14.1 | 20.0 | 31.7 | 47.0 | 62.2 | 79.8 |
| 110° | 1.2 | 1.2 | 1.2 | 2.3 | 7.0 | 10.6 | 14.1 | 24.6 | 38.7 | 51.6 | 66.9 |



TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|
| 112.5° | 1.2 | 1.2 | 1.2 | 1.2 | 4.7 | 7.0 | 10.6 | 18.8 | 30.5 | 41.1 | 55.2 |
| 115° | 1.2 | 1.2 | 1.2 | 1.2 | 3.5 | 4.7 | 7.0 | 14.1 | 23.5 | 32.9 | 44.6 |
| 117.5° | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 4.7 | 10.6 | 17.6 | 25.8 | 36.4 |
| 120° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 7.0 | 14.1 | 20.0 | 29.3 |
| 122.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 2.3 | 5.9 | 10.6 | 15.3 | 22.3 |
| 125° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 7.0 | 11.7 | 17.6 |
| 127.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 4.7 | 8.2 | 12.9 |
| 130° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 5.9 | 9.4 |
| 132.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 4.7 | 7.0 |
| 135° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 3.5 | 4.7 |
| 137.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 2.3 | 3.5 |
| 140° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 2.3 |
| 142.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 |
| 145° | 1.2 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 147.5° | 1.2 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 150° | 1.2 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 152.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 155° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 157.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 |
| 160° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 |
| 162.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 | 1.2 |
| 165° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 | 1.2 |
| 167.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 |
| 170° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 172.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.2 |
| 175° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 177.5° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 180° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |



TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 | 1500.1 |
| 2.5° | 1493.1 | 1496.6 | 1500.1 | 1490.7 | 1496.6 | 1507.1 | 1510.7 | 1496.6 | 1501.3 | 1491.9 |
| 5° | 1488.4 | 1490.7 | 1495.4 | 1483.7 | 1491.9 | 1501.3 | 1507.1 | 1495.4 | 1502.4 | 1495.4 |
| 7.5° | 1479.0 | 1481.3 | 1487.2 | 1475.4 | 1486.0 | 1494.2 | 1501.3 | 1489.5 | 1496.6 | 1489.5 |
| 10° | 1464.9 | 1468.4 | 1476.6 | 1462.5 | 1475.4 | 1482.5 | 1489.5 | 1476.6 | 1483.7 | 1476.6 |
| 12.5° | 1447.3 | 1453.1 | 1460.2 | 1447.3 | 1460.2 | 1466.1 | 1475.4 | 1462.5 | 1470.8 | 1464.9 |
| 15° | 1426.2 | 1432.0 | 1441.4 | 1428.5 | 1444.9 | 1449.6 | 1459.0 | 1446.1 | 1454.3 | 1448.5 |
| 17.5° | 1401.5 | 1408.5 | 1420.3 | 1405.0 | 1423.8 | 1427.3 | 1436.7 | 1425.0 | 1433.2 | 1427.3 |
| 20° | 1373.3 | 1380.4 | 1392.1 | 1378.0 | 1396.8 | 1399.2 | 1409.7 | 1399.2 | 1407.4 | 1403.8 |
| 22.5° | 1340.5 | 1348.7 | 1360.4 | 1347.5 | 1367.5 | 1367.5 | 1380.4 | 1369.8 | 1379.2 | 1375.7 |
| 25° | 1306.4 | 1315.8 | 1328.7 | 1314.6 | 1335.8 | 1335.8 | 1349.9 | 1339.3 | 1348.7 | 1346.3 |
| 27.5° | 1270.0 | 1280.6 | 1295.9 | 1281.8 | 1302.9 | 1301.7 | 1315.8 | 1306.4 | 1317.0 | 1313.5 |
| 30° | 1231.3 | 1243.0 | 1258.3 | 1246.6 | 1268.9 | 1266.5 | 1280.6 | 1272.4 | 1281.8 | 1280.6 |
| 32.5° | 1189.0 | 1202.0 | 1220.7 | 1207.8 | 1230.1 | 1227.8 | 1245.4 | 1236.0 | 1247.7 | 1245.4 |
| 35° | 1146.8 | 1160.9 | 1179.7 | 1167.9 | 1192.6 | 1189.0 | 1206.7 | 1198.4 | 1210.2 | 1209.0 |
| 37.5° | 1103.4 | 1118.6 | 1137.4 | 1128.0 | 1151.5 | 1148.0 | 1166.7 | 1159.7 | 1172.6 | 1169.1 |
| 40° | 1058.8 | 1074.0 | 1094.0 | 1085.8 | 1110.4 | 1105.7 | 1125.7 | 1119.8 | 1132.7 | 1130.4 |
| 42.5° | 1014.2 | 1030.6 | 1050.5 | 1045.8 | 1069.3 | 1064.6 | 1084.6 | 1079.9 | 1092.8 | 1090.4 |
| 45° | 968.4 | 986.0 | 1007.1 | 1002.4 | 1027.1 | 1022.4 | 1042.3 | 1038.8 | 1051.7 | 1050.5 |
| 47.5° | 922.6 | 941.4 | 962.5 | 960.2 | 983.6 | 978.9 | 1000.1 | 996.5 | 1009.5 | 1009.5 |
| 50° | 875.6 | 896.8 | 917.9 | 916.7 | 940.2 | 935.5 | 954.3 | 954.3 | 968.4 | 967.2 |
| 52.5° | 828.7 | 851.0 | 873.3 | 873.3 | 896.8 | 892.1 | 913.2 | 912.0 | 926.1 | 926.1 |
| 55° | 784.1 | 804.0 | 826.3 | 831.0 | 853.3 | 846.3 | 868.6 | 870.9 | 882.7 | 883.9 |
| 57.5° | 739.5 | 760.6 | 782.9 | 788.8 | 809.9 | 805.2 | 826.3 | 828.7 | 840.4 | 841.6 |
| 60° | 694.9 | 714.8 | 737.1 | 745.4 | 766.5 | 761.8 | 782.9 | 785.3 | 798.2 | 799.3 |
| 62.5° | 650.3 | 670.2 | 694.9 | 703.1 | 723.1 | 719.5 | 741.8 | 744.2 | 755.9 | 758.3 |
| 65° | 606.8 | 628.0 | 651.5 | 663.2 | 682.0 | 677.3 | 699.6 | 701.9 | 714.8 | 716.0 |
| 67.5° | 564.6 | 585.7 | 609.2 | 622.1 | 639.7 | 637.4 | 658.5 | 663.2 | 673.8 | 676.1 |
| 70° | 523.5 | 544.6 | 569.3 | 582.2 | 599.8 | 598.6 | 618.6 | 622.1 | 633.8 | 635.0 |
| 72.5° | 483.6 | 504.7 | 529.4 | 544.6 | 559.9 | 558.7 | 578.7 | 583.4 | 595.1 | 596.3 |
| 75° | 444.9 | 467.2 | 490.6 | 507.1 | 522.3 | 521.2 | 541.1 | 545.8 | 556.4 | 557.5 |
| 77.5° | 408.5 | 430.8 | 455.4 | 471.9 | 484.8 | 485.9 | 503.6 | 508.2 | 518.8 | 522.3 |
| 80° | 374.4 | 395.6 | 419.0 | 436.6 | 448.4 | 450.7 | 467.2 | 473.0 | 481.3 | 485.9 |
| 82.5° | 341.6 | 362.7 | 386.2 | 402.6 | 414.3 | 416.7 | 432.0 | 439.0 | 447.2 | 450.7 |
| 85° | 309.9 | 331.0 | 353.3 | 370.9 | 381.5 | 382.7 | 397.9 | 405.0 | 412.0 | 417.9 |
| 87.5° | 279.4 | 300.5 | 321.6 | 340.4 | 349.8 | 352.1 | 366.2 | 373.3 | 379.1 | 385.0 |
| 90° | 248.8 | 270.0 | 291.1 | 308.7 | 318.1 | 319.3 | 334.5 | 341.6 | 347.4 | 352.1 |
| 92.5° | 220.7 | 241.8 | 262.9 | 280.5 | 288.8 | 291.1 | 304.0 | 312.2 | 316.9 | 321.6 |
| 95° | 193.7 | 214.8 | 233.6 | 252.4 | 260.6 | 264.1 | 275.8 | 282.9 | 288.8 | 291.1 |
| 97.5° | 170.2 | 189.0 | 206.6 | 225.4 | 232.4 | 235.9 | 247.7 | 255.9 | 260.6 | 262.9 |
| 100° | 147.9 | 165.5 | 181.9 | 199.5 | 206.6 | 210.1 | 220.7 | 227.7 | 232.4 | 235.9 |
| 102.5° | 127.9 | 144.4 | 159.6 | 176.1 | 183.1 | 185.5 | 194.8 | 201.9 | 206.6 | 210.1 |
| 105° | 110.3 | 125.6 | 139.7 | 154.9 | 160.8 | 164.3 | 172.5 | 178.4 | 183.1 | 185.5 |
| 107.5° | 93.9 | 109.2 | 120.9 | 135.0 | 140.9 | 143.2 | 151.4 | 158.5 | 162.0 | 163.2 |
| 110° | 79.8 | 92.7 | 104.5 | 116.2 | 123.2 | 125.6 | 132.6 | 138.5 | 142.0 | 143.2 |



TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 112.5° | 66.9 | 78.6 | 89.2 | 99.8 | 105.6 | 108.0 | 115.0 | 120.9 | 123.2 | 124.4 |
| 115° | 55.2 | 66.9 | 75.1 | 85.7 | 90.4 | 92.7 | 98.6 | 104.5 | 105.6 | 108.0 |
| 117.5° | 44.6 | 55.2 | 63.4 | 71.6 | 76.3 | 78.6 | 83.3 | 88.0 | 90.4 | 91.6 |
| 120° | 36.4 | 44.6 | 51.6 | 59.9 | 63.4 | 65.7 | 70.4 | 75.1 | 76.3 | 77.5 |
| 122.5° | 29.3 | 36.4 | 42.3 | 49.3 | 52.8 | 55.2 | 58.7 | 62.2 | 63.4 | 64.6 |
| 125° | 22.3 | 29.3 | 34.0 | 39.9 | 43.4 | 44.6 | 48.1 | 51.6 | 52.8 | 54.0 |
| 127.5° | 17.6 | 22.3 | 27.0 | 31.7 | 34.0 | 35.2 | 38.7 | 41.1 | 42.3 | 43.4 |
| 130° | 12.9 | 16.4 | 20.0 | 24.6 | 27.0 | 28.2 | 30.5 | 32.9 | 34.0 | 34.0 |
| 132.5° | 9.4 | 12.9 | 15.3 | 18.8 | 20.0 | 21.1 | 23.5 | 25.8 | 25.8 | 27.0 |
| 135° | 5.9 | 8.2 | 10.6 | 12.9 | 15.3 | 15.3 | 17.6 | 18.8 | 20.0 | 20.0 |
| 137.5° | 4.7 | 5.9 | 7.0 | 9.4 | 10.6 | 11.7 | 11.7 | 14.1 | 14.1 | 14.1 |
| 140° | 3.5 | 4.7 | 4.7 | 5.9 | 7.0 | 8.2 | 8.2 | 9.4 | 9.4 | 9.4 |
| 142.5° | 2.3 | 3.5 | 3.5 | 4.7 | 4.7 | 5.9 | 5.9 | 5.9 | 7.0 | 7.0 |
| 145° | 2.3 | 2.3 | 2.3 | 3.5 | 3.5 | 3.5 | 3.5 | 4.7 | 4.7 | 4.7 |
| 147.5° | 1.2 | 1.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 3.5 | 3.5 | 3.5 |
| 150° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |
| 152.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 155° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 157.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 160° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 162.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 165° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 167.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 170° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 172.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 175° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 0.0 |
| 177.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 0.0 |
| 180° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |



TEST NUMBER: P894306
 CATALOG NUMBER: 4MB-SC3-RND-UNV-CC93-HI-3500K

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 | 18.51 | 20.05 | 18.98 | 20.51 | 20.99 | 20.08 | 21.62 | 20.55 | 22.08 | 22.56 |
| | 3H | 20.19 | 21.59 | 20.67 | 22.06 | 22.59 | 22.71 | 24.11 | 23.19 | 24.58 | 25.11 |
| | 4H | 20.79 | 22.12 | 21.29 | 22.60 | 23.14 | 24.02 | 25.35 | 24.53 | 25.84 | 26.38 |
| | 6H | 21.19 | 22.43 | 21.70 | 22.92 | 23.48 | 25.43 | 26.67 | 25.94 | 27.16 | 27.72 |
| | 8H | 21.30 | 22.49 | 21.83 | 23.01 | 23.58 | 26.18 | 27.36 | 26.70 | 27.89 | 28.45 |
| | 12H | 21.38 | 22.52 | 21.92 | 23.04 | 23.63 | 27.03 | 28.17 | 27.56 | 28.68 | 29.27 |
| 4H | 2H | 19.44 | 20.77 | 19.95 | 21.26 | 21.80 | 20.64 | 21.97 | 21.14 | 22.45 | 22.99 |
| | 3H | 21.42 | 22.56 | 21.94 | 23.08 | 23.65 | 23.55 | 24.69 | 24.07 | 25.22 | 25.78 |
| | 4H | 22.20 | 23.24 | 22.73 | 23.78 | 24.37 | 25.08 | 26.12 | 25.61 | 26.66 | 27.25 |
| | 6H | 22.78 | 23.70 | 23.33 | 24.26 | 24.87 | 26.72 | 27.64 | 27.28 | 28.20 | 28.81 |
| | 8H | 22.96 | 23.83 | 23.52 | 24.39 | 25.01 | 27.60 | 28.47 | 28.16 | 29.03 | 29.65 |
| | 12H | 23.08 | 23.87 | 23.67 | 24.46 | 25.09 | 28.60 | 29.39 | 29.19 | 29.98 | 30.61 |
| 8H | 4H | 23.08 | 23.94 | 23.64 | 24.51 | 25.13 | 25.44 | 26.30 | 26.00 | 26.87 | 27.49 |
| | 6H | 23.96 | 24.69 | 24.55 | 25.30 | 25.93 | 27.34 | 28.08 | 27.93 | 28.68 | 29.31 |
| | 8H | 24.31 | 24.97 | 24.91 | 25.59 | 26.23 | 28.42 | 29.09 | 29.03 | 29.70 | 30.34 |
| | 12H | 24.58 | 25.17 | 25.18 | 25.78 | 26.48 | 29.69 | 30.28 | 30.29 | 30.89 | 31.59 |
| 12H | 4H | 23.35 | 24.14 | 23.94 | 24.73 | 25.36 | 25.48 | 26.27 | 26.06 | 26.86 | 27.49 |
| | 6H | 24.41 | 25.07 | 25.01 | 25.69 | 26.33 | 27.45 | 28.12 | 28.05 | 28.73 | 29.37 |
| | 8H | 24.92 | 25.52 | 25.53 | 26.12 | 26.83 | 28.65 | 29.24 | 29.25 | 29.85 | 30.55 |