

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:

Luminaire Tested: EHBR1-60-UNV-TASM-L840-UPL36

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431905 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-TASM-L840-UPL36
Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

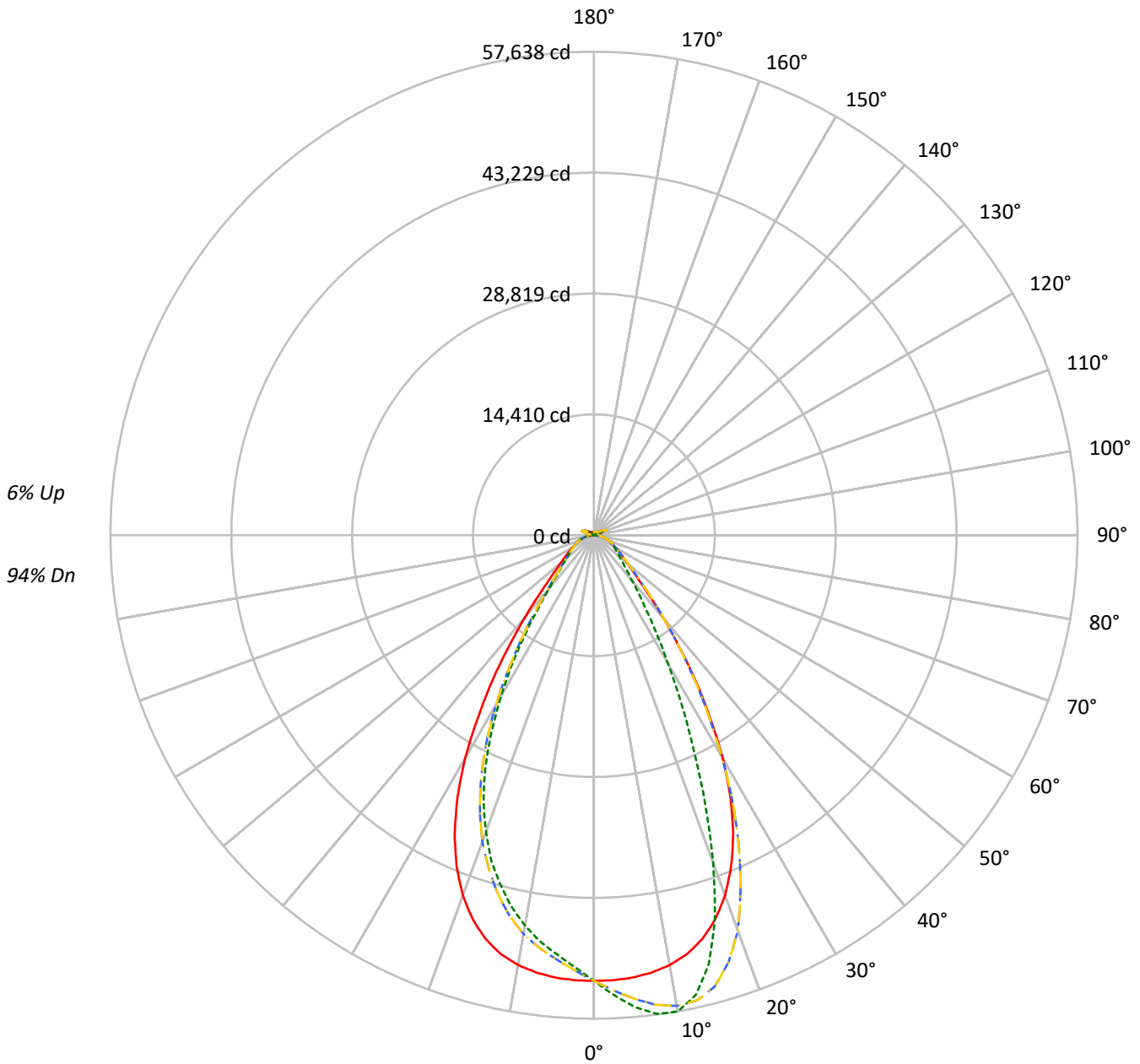
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 63076.1 lumens
Efficiency: N/A
Efficacy: 175.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 0.84 / 0.9
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 358.8
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: 24 FT

TEST NUMBER:
CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - · 90°-270° - · - · 135°-315°



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

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 | 118 | 118 | 118 | 118 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 97 | 97 | 97 | 94 |
| 1 | 110 | 107 | 104 | 101 | 107 | 104 | 101 | 99 | 99 | 97 | 95 | 94 | 93 | 91 | 90 | 89 | 87 | 87 | 87 | 87 | 85 |
| 2 | 103 | 97 | 93 | 88 | 101 | 95 | 91 | 87 | 91 | 87 | 84 | 87 | 84 | 81 | 83 | 81 | 79 | 79 | 79 | 79 | 77 |
| 3 | 97 | 89 | 83 | 78 | 94 | 87 | 82 | 77 | 84 | 79 | 75 | 80 | 77 | 73 | 77 | 74 | 72 | 72 | 72 | 72 | 70 |
| 4 | 91 | 82 | 76 | 71 | 89 | 81 | 74 | 70 | 78 | 72 | 68 | 75 | 70 | 67 | 72 | 68 | 65 | 65 | 65 | 65 | 64 |
| 5 | 86 | 76 | 69 | 64 | 84 | 75 | 68 | 64 | 72 | 67 | 62 | 70 | 65 | 61 | 67 | 63 | 60 | 60 | 60 | 60 | 58 |
| 6 | 81 | 70 | 64 | 59 | 79 | 69 | 63 | 58 | 67 | 62 | 57 | 65 | 60 | 56 | 63 | 59 | 56 | 56 | 56 | 56 | 54 |
| 7 | 76 | 66 | 59 | 54 | 74 | 65 | 58 | 54 | 63 | 57 | 53 | 61 | 56 | 52 | 59 | 55 | 52 | 52 | 52 | 52 | 50 |
| 8 | 72 | 61 | 55 | 50 | 70 | 61 | 54 | 50 | 59 | 53 | 49 | 57 | 52 | 49 | 56 | 51 | 48 | 48 | 48 | 48 | 46 |
| 9 | 68 | 58 | 51 | 47 | 67 | 57 | 51 | 46 | 55 | 50 | 46 | 54 | 49 | 45 | 53 | 48 | 45 | 45 | 45 | 45 | 43 |
| 10 | 65 | 54 | 48 | 43 | 64 | 53 | 47 | 43 | 52 | 47 | 43 | 51 | 46 | 42 | 50 | 45 | 42 | 42 | 42 | 42 | 41 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|--------|--------|--------|--------|
| 0° | 249447 | 249447 | 249447 | 249447 |
| 5° | 247929 | 264494 | 247929 | 235063 |
| 10° | 244881 | 271284 | 244881 | 222467 |
| 15° | 237651 | 252108 | 237651 | 205499 |
| 20° | 222263 | 202156 | 222263 | 183042 |
| 25° | 196720 | 140065 | 196720 | 153397 |
| 30° | 159730 | 91123 | 159730 | 114772 |
| 35° | 114563 | 59013 | 114563 | 76406 |
| 40° | 74069 | 40675 | 74069 | 48186 |
| 45° | 46996 | 31507 | 46996 | 34333 |
| 50° | 34900 | 26773 | 34900 | 28598 |
| 55° | 28494 | 24389 | 28494 | 25244 |
| 60° | 24674 | 23232 | 24674 | 23373 |
| 65° | 22492 | 22406 | 22492 | 22310 |
| 70° | 21319 | 21954 | 21319 | 21670 |
| 75° | 19936 | 21238 | 19936 | 20601 |
| 80° | 17513 | 20051 | 17513 | 18745 |
| 85° | 11333 | 14315 | 11333 | 13649 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 66074 cd/sqm



TEST NUMBER:
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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 5050.7 | 8.0 |
| 10°-20° | 13740.8 | 21.8 |
| 20°-30° | 16115.1 | 25.5 |
| 30°-40° | 11207.0 | 17.8 |
| 40°-50° | 5569.4 | 8.8 |
| 50°-60° | 3331.1 | 5.3 |
| 60°-70° | 2344.5 | 3.7 |
| 70°-80° | 1510.3 | 2.4 |
| 80°-90° | 486.2 | 0.8 |
| 90°-100° | 99.7 | 0.2 |
| 100°-110° | 645.2 | 1.0 |
| 110°-120° | 1190.8 | 1.9 |
| 120°-130° | 708.6 | 1.1 |
| 130°-140° | 429.8 | 0.7 |
| 140°-150° | 298.5 | 0.5 |
| 150°-160° | 196.1 | 0.3 |
| 160°-170° | 113.9 | 0.2 |
| 170°-180° | 38.2 | 0.1 |
| 0°-30° | 34906.6 | 55.3 |
| 0°-40° | 46113.6 | 73.1 |
| 0°-60° | 55014.1 | 87.2 |
| 0°-90° | 59355.1 | 94.1 |
| 90°-120° | 1935.7 | 3.1 |
| 90°-150° | 3372.7 | 5.3 |
| 90°-180° | 3721.0 | 5.9 |
| 0°-180° | 63076.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 53118 | 53118 | 53118 | 53118 | 53118 | |
| 5° | 52937 | 56474 | 52937 | 50190 | 52937 | 5024 |
| 15° | 49858 | 52891 | 49858 | 43113 | 49858 | 13934 |
| 25° | 39285 | 27971 | 39285 | 30633 | 39285 | 17785 |
| 35° | 21026 | 10831 | 21026 | 14023 | 21026 | 13126 |
| 45° | 7604 | 5098 | 7604 | 5555 | 7604 | 6222 |
| 55° | 3851 | 3296 | 3851 | 3411 | 3851 | 3521 |
| 65° | 2348 | 2339 | 2348 | 2329 | 2348 | 2358 |
| 75° | 1404 | 1496 | 1404 | 1451 | 1404 | 1474 |
| 85° | 390 | 492 | 390 | 469 | 390 | 433 |
| 90° | 28 | 35 | 28 | 28 | 28 | 31 |
| 95° | 53 | 53 | 53 | 46 | 53 | 56 |
| 105° | 296 | 154 | 296 | 225 | 296 | 400 |
| 115° | 1267 | 1085 | 1267 | 1029 | 1267 | 1155 |
| 125° | 812 | 853 | 812 | 743 | 812 | 748 |
| 135° | 515 | 596 | 515 | 544 | 515 | 409 |
| 145° | 468 | 490 | 468 | 455 | 468 | 293 |
| 155° | 419 | 437 | 419 | 408 | 419 | 196 |
| 165° | 399 | 413 | 399 | 392 | 399 | 114 |
| 175° | 401 | 411 | 401 | 394 | 401 | 38 |
| 180° | 401 | 401 | 401 | 401 | 401 | |



TEST NUMBER:
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 |
| 2.5° | 53087.1 | 53773.4 | 54329.2 | 54695.7 | 54877.0 | 54695.7 | 54329.2 | 53773.4 | 53087.1 | 52404.8 | 51935.7 |
| 5° | 52936.7 | 54311.2 | 55475.6 | 56237.6 | 56473.7 | 56237.6 | 55475.6 | 54311.2 | 52936.7 | 51637.9 | 50776.3 |
| 7.5° | 52577.1 | 54718.6 | 56448.8 | 57338.2 | 57555.4 | 57338.2 | 56448.8 | 54718.6 | 52577.1 | 50738.4 | 49649.8 |
| 10° | 52028.3 | 54975.6 | 56974.7 | 57612.1 | 57638.0 | 57612.1 | 56974.7 | 54975.6 | 52028.3 | 49551.2 | 48267.3 |
| 12.5° | 51152.8 | 54884.0 | 56798.4 | 56589.2 | 56114.1 | 56589.2 | 56798.4 | 54884.0 | 51152.8 | 48100.9 | 46481.3 |
| 15° | 49857.9 | 54341.1 | 55681.8 | 53979.6 | 52890.9 | 53979.6 | 55681.8 | 54341.1 | 49857.9 | 46142.7 | 44264.2 |
| 17.5° | 48033.2 | 53325.2 | 53351.1 | 49983.4 | 47929.6 | 49983.4 | 53351.1 | 53325.2 | 48033.2 | 43748.2 | 41679.4 |
| 20° | 45681.5 | 51695.6 | 50141.8 | 43982.3 | 41548.9 | 43982.3 | 50141.8 | 51695.6 | 45681.5 | 40917.5 | 38887.5 |
| 22.5° | 42733.2 | 49498.4 | 45672.6 | 37945.3 | 34625.4 | 37945.3 | 45672.6 | 49498.4 | 42733.2 | 37625.5 | 35512.9 |
| 25° | 39284.9 | 46806.1 | 40864.7 | 31367.4 | 27970.9 | 31367.4 | 40864.7 | 46806.1 | 39284.9 | 33703.1 | 31792.7 |
| 27.5° | 35229.0 | 43393.6 | 35745.0 | 25632.2 | 22498.6 | 25632.2 | 35745.0 | 43393.6 | 35229.0 | 29653.2 | 27702.0 |
| 30° | 30723.9 | 39019.0 | 30417.2 | 20412.9 | 17527.4 | 20412.9 | 30417.2 | 39019.0 | 30723.9 | 25103.3 | 23356.2 |
| 32.5° | 25680.0 | 34731.0 | 25300.5 | 16356.0 | 13911.7 | 16356.0 | 25300.5 | 34731.0 | 25680.0 | 20761.5 | 18935.8 |
| 35° | 21026.5 | 29366.3 | 20686.8 | 12851.9 | 10831.0 | 12851.9 | 20686.8 | 29366.3 | 21026.5 | 16662.8 | 14869.9 |
| 37.5° | 16501.4 | 24297.5 | 16490.5 | 10348.9 | 8785.1 | 10348.9 | 16490.5 | 24297.5 | 16501.4 | 12954.5 | 11499.3 |
| 40° | 12838.0 | 18998.5 | 12920.7 | 8261.2 | 7050.0 | 8261.2 | 12920.7 | 18998.5 | 12838.0 | 9856.8 | 8925.5 |
| 42.5° | 9727.4 | 14527.3 | 10155.7 | 6780.1 | 5988.2 | 6780.1 | 10155.7 | 14527.3 | 9727.4 | 7766.1 | 7068.9 |
| 45° | 7603.8 | 10690.5 | 7930.5 | 5720.3 | 5097.7 | 5720.3 | 7930.5 | 10690.5 | 7603.8 | 6254.2 | 5786.0 |
| 47.5° | 6192.4 | 8262.2 | 6427.5 | 4906.5 | 4470.2 | 4906.5 | 6427.5 | 8262.2 | 6192.4 | 5290.0 | 4939.4 |
| 50° | 5201.3 | 6339.8 | 5336.8 | 4283.0 | 3990.1 | 4283.0 | 5336.8 | 6339.8 | 5201.3 | 4530.0 | 4295.9 |
| 52.5° | 4468.2 | 5170.5 | 4544.9 | 3816.8 | 3619.6 | 3816.8 | 4544.9 | 5170.5 | 4468.2 | 3963.3 | 3817.8 |
| 55° | 3850.7 | 4346.7 | 3952.3 | 3432.4 | 3295.9 | 3432.4 | 3952.3 | 4346.7 | 3850.7 | 3527.0 | 3419.4 |
| 57.5° | 3381.6 | 3687.4 | 3432.4 | 3104.7 | 3014.0 | 3104.7 | 3432.4 | 3687.4 | 3381.6 | 3138.5 | 3080.8 |
| 60° | 2966.2 | 3193.3 | 3029.0 | 2818.8 | 2792.9 | 2818.8 | 3029.0 | 3193.3 | 2966.2 | 2823.8 | 2785.9 |
| 62.5° | 2646.5 | 2789.9 | 2678.4 | 2561.8 | 2538.9 | 2561.8 | 2678.4 | 2789.9 | 2646.5 | 2536.9 | 2543.9 |
| 65° | 2347.7 | 2481.1 | 2393.5 | 2330.7 | 2338.7 | 2330.7 | 2393.5 | 2481.1 | 2347.7 | 2296.9 | 2307.8 |
| 67.5° | 2116.6 | 2186.3 | 2148.5 | 2112.6 | 2121.6 | 2112.6 | 2148.5 | 2186.3 | 2116.6 | 2066.8 | 2083.7 |
| 70° | 1870.6 | 1945.3 | 1906.4 | 1911.4 | 1926.3 | 1911.4 | 1906.4 | 1945.3 | 1870.6 | 1855.6 | 1868.6 |
| 72.5° | 1635.5 | 1693.3 | 1680.3 | 1692.3 | 1708.2 | 1692.3 | 1680.3 | 1693.3 | 1635.5 | 1633.5 | 1634.5 |
| 75° | 1404.4 | 1448.2 | 1454.2 | 1471.2 | 1496.1 | 1471.2 | 1454.2 | 1448.2 | 1404.4 | 1389.5 | 1407.4 |
| 77.5° | 1152.4 | 1202.2 | 1221.1 | 1244.1 | 1280.9 | 1244.1 | 1221.1 | 1202.2 | 1152.4 | 1162.4 | 1171.3 |
| 80° | 921.3 | 944.2 | 986.1 | 1003.0 | 1054.8 | 1003.0 | 986.1 | 944.2 | 921.3 | 904.4 | 917.4 |
| 82.5° | 674.3 | 695.2 | 731.1 | 763.0 | 792.9 | 763.0 | 731.1 | 695.2 | 674.3 | 666.4 | 667.3 |
| 85° | 389.5 | 421.3 | 445.2 | 483.1 | 492.0 | 483.1 | 445.2 | 421.3 | 389.5 | 398.4 | 389.5 |
| 87.5° | 136.5 | 146.4 | 167.3 | 182.3 | 183.3 | 182.3 | 167.3 | 146.4 | 136.5 | 139.4 | 126.5 |
| 90° | 27.6 | 47.0 | 80.7 | 46.9 | 34.6 | 46.9 | 80.7 | 47.0 | 27.6 | 48.0 | 74.6 |
| 92.5° | 35.8 | 63.4 | 113.5 | 61.2 | 44.8 | 61.2 | 113.5 | 63.4 | 35.8 | 62.4 | 119.6 |
| 95° | 53.1 | 77.7 | 144.1 | 67.4 | 53.0 | 67.4 | 144.1 | 77.7 | 53.1 | 82.8 | 166.7 |
| 97.5° | 81.8 | 96.1 | 162.5 | 71.5 | 63.2 | 71.5 | 162.5 | 96.1 | 81.8 | 101.2 | 191.2 |
| 100° | 108.4 | 108.4 | 295.5 | 81.7 | 71.4 | 81.7 | 295.5 | 108.4 | 108.4 | 124.7 | 297.6 |
| 102.5° | 163.6 | 211.6 | 683.1 | 160.4 | 85.7 | 160.4 | 683.1 | 211.6 | 163.6 | 233.1 | 631.0 |
| 105° | 296.5 | 481.6 | 1200.6 | 407.9 | 154.2 | 407.9 | 1200.6 | 481.6 | 296.5 | 486.8 | 1123.9 |
| 107.5° | 560.4 | 896.8 | 1546.2 | 800.6 | 352.6 | 800.6 | 1546.2 | 896.8 | 560.4 | 861.1 | 1482.9 |
| 110° | 895.8 | 1252.7 | 1687.4 | 1095.2 | 708.5 | 1095.2 | 1687.4 | 1252.7 | 895.8 | 1182.2 | 1554.5 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1165.8 | 1395.9 | 1648.5 | 1213.8 | 978.5 | 1213.8 | 1648.5 | 1395.9 | 1165.8 | 1304.9 | 1489.0 |
| 115° | 1267.1 | 1375.5 | 1472.6 | 1209.7 | 1084.9 | 1209.7 | 1472.6 | 1375.5 | 1267.1 | 1274.2 | 1329.5 |
| 117.5° | 1224.1 | 1258.9 | 1272.1 | 1136.1 | 1091.0 | 1136.1 | 1272.1 | 1258.9 | 1224.1 | 1146.4 | 1129.0 |
| 120° | 1105.5 | 1091.2 | 1072.7 | 1027.7 | 1029.7 | 1027.7 | 1072.7 | 1091.2 | 1105.5 | 1001.2 | 942.9 |
| 122.5° | 957.2 | 926.5 | 907.0 | 918.2 | 945.8 | 918.2 | 907.0 | 926.5 | 957.2 | 852.8 | 808.9 |
| 125° | 811.9 | 781.3 | 791.4 | 824.1 | 852.7 | 824.1 | 791.4 | 781.3 | 811.9 | 725.0 | 713.8 |
| 127.5° | 690.2 | 675.9 | 707.6 | 744.3 | 768.8 | 744.3 | 707.6 | 675.9 | 690.2 | 635.0 | 646.3 |
| 130° | 603.3 | 606.3 | 648.3 | 679.9 | 695.2 | 679.9 | 648.3 | 606.3 | 603.3 | 576.7 | 604.3 |
| 132.5° | 549.0 | 564.4 | 604.3 | 631.8 | 641.0 | 631.8 | 604.3 | 564.4 | 549.0 | 541.8 | 575.6 |
| 135° | 515.3 | 537.8 | 574.6 | 591.9 | 596.0 | 591.9 | 574.6 | 537.8 | 515.3 | 518.3 | 549.0 |
| 137.5° | 495.8 | 518.3 | 545.9 | 560.2 | 557.1 | 560.2 | 545.9 | 518.3 | 495.8 | 502.9 | 526.5 |
| 140° | 484.5 | 507.1 | 519.3 | 535.7 | 533.6 | 535.7 | 519.3 | 507.1 | 484.5 | 488.6 | 507.0 |
| 142.5° | 473.3 | 493.8 | 499.9 | 512.1 | 509.0 | 512.1 | 499.9 | 493.8 | 473.3 | 477.4 | 489.6 |
| 145° | 468.1 | 483.5 | 478.4 | 493.7 | 489.5 | 493.7 | 478.4 | 483.5 | 468.1 | 469.2 | 476.3 |
| 147.5° | 457.9 | 469.2 | 463.0 | 476.3 | 472.1 | 476.3 | 463.0 | 469.2 | 457.9 | 457.9 | 460.8 |
| 150° | 446.5 | 454.7 | 445.6 | 460.8 | 460.8 | 460.8 | 445.6 | 454.7 | 446.5 | 444.5 | 447.5 |
| 152.5° | 431.2 | 439.3 | 431.2 | 448.5 | 447.5 | 448.5 | 431.2 | 439.3 | 431.2 | 429.1 | 432.2 |
| 155° | 418.8 | 422.9 | 418.8 | 436.2 | 437.2 | 436.2 | 418.8 | 422.9 | 418.8 | 417.8 | 419.8 |
| 157.5° | 410.6 | 413.7 | 411.6 | 426.9 | 427.9 | 426.9 | 411.6 | 413.7 | 410.6 | 410.6 | 411.6 |
| 160° | 404.4 | 408.5 | 407.4 | 420.7 | 421.7 | 420.7 | 407.4 | 408.5 | 404.4 | 405.4 | 406.4 |
| 162.5° | 402.3 | 402.3 | 402.3 | 415.5 | 417.5 | 415.5 | 402.3 | 402.3 | 402.3 | 402.3 | 404.3 |
| 165° | 399.2 | 401.2 | 399.1 | 409.3 | 413.3 | 409.3 | 399.1 | 401.2 | 399.2 | 400.2 | 400.2 |
| 167.5° | 399.1 | 397.1 | 399.1 | 408.2 | 412.3 | 408.2 | 399.1 | 397.1 | 399.1 | 400.2 | 400.2 |
| 170° | 396.0 | 397.0 | 397.0 | 406.1 | 410.1 | 406.1 | 397.0 | 397.0 | 396.0 | 398.1 | 399.1 |
| 172.5° | 399.0 | 399.0 | 397.9 | 404.9 | 411.0 | 404.9 | 397.9 | 399.0 | 399.0 | 400.1 | 402.1 |
| 175° | 401.0 | 400.0 | 399.8 | 404.9 | 411.0 | 404.9 | 399.8 | 400.0 | 401.0 | 400.0 | 400.0 |
| 177.5° | 399.0 | 401.0 | 402.9 | 407.9 | 416.1 | 407.9 | 402.9 | 401.0 | 399.0 | 400.0 | 400.0 |
| 180° | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|---------|---------|---------|---------|---------|---------|
| 0° | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 | 53118.0 |
| 2.5° | 51575.1 | 51541.2 | 51575.1 | 51935.7 | 52404.8 | 53087.1 |
| 5° | 50376.9 | 50189.6 | 50376.9 | 50776.3 | 51637.9 | 52936.7 |
| 7.5° | 48981.4 | 48872.8 | 48981.4 | 49649.8 | 50738.4 | 52577.1 |
| 10° | 47512.3 | 47266.2 | 47512.3 | 48267.3 | 49551.2 | 52028.3 |
| 12.5° | 45701.4 | 45375.7 | 45701.4 | 46481.3 | 48100.9 | 51152.8 |
| 15° | 43398.6 | 43112.7 | 43398.6 | 44264.2 | 46142.7 | 49857.9 |
| 17.5° | 40927.4 | 40668.4 | 40927.4 | 41679.4 | 43748.2 | 48033.2 |
| 20° | 37823.7 | 37620.5 | 37823.7 | 38887.5 | 40917.5 | 45681.5 |
| 22.5° | 34567.7 | 34377.4 | 34567.7 | 35512.9 | 37625.5 | 42733.2 |
| 25° | 30736.9 | 30633.3 | 30736.9 | 31792.7 | 33703.1 | 39284.9 |
| 27.5° | 26597.3 | 26421.0 | 26597.3 | 27702.0 | 29653.2 | 35229.0 |
| 30° | 22368.1 | 22076.3 | 22368.1 | 23356.2 | 25103.3 | 30723.9 |
| 32.5° | 18231.6 | 18021.4 | 18231.6 | 18935.8 | 20761.5 | 25680.0 |
| 35° | 14233.5 | 14023.3 | 14233.5 | 14869.9 | 16662.8 | 21026.5 |
| 37.5° | 11090.9 | 10719.4 | 11090.9 | 11499.3 | 12954.5 | 16501.4 |
| 40° | 8411.6 | 8351.8 | 8411.6 | 8925.5 | 9856.8 | 12838.0 |
| 42.5° | 6847.8 | 6685.4 | 6847.8 | 7068.9 | 7766.1 | 9727.4 |
| 45° | 5618.7 | 5554.9 | 5618.7 | 5786.0 | 6254.2 | 7603.8 |
| 47.5° | 4831.8 | 4859.7 | 4831.8 | 4939.4 | 5290.0 | 6192.4 |
| 50° | 4245.1 | 4262.1 | 4245.1 | 4295.9 | 4530.0 | 5201.3 |
| 52.5° | 3812.9 | 3797.9 | 3812.9 | 3817.8 | 3963.3 | 4468.2 |
| 55° | 3430.4 | 3411.4 | 3430.4 | 3419.4 | 3527.0 | 3850.7 |
| 57.5° | 3095.7 | 3109.6 | 3095.7 | 3080.8 | 3138.5 | 3381.6 |
| 60° | 2796.9 | 2809.8 | 2796.9 | 2785.9 | 2823.8 | 2966.2 |
| 62.5° | 2544.9 | 2552.9 | 2544.9 | 2543.9 | 2536.9 | 2646.5 |
| 65° | 2319.8 | 2328.7 | 2319.8 | 2307.8 | 2296.9 | 2347.7 |
| 67.5° | 2104.6 | 2104.6 | 2104.6 | 2083.7 | 2066.8 | 2116.6 |
| 70° | 1902.4 | 1901.4 | 1902.4 | 1868.6 | 1855.6 | 1870.6 |
| 72.5° | 1659.4 | 1683.3 | 1659.4 | 1634.5 | 1633.5 | 1635.5 |
| 75° | 1423.3 | 1451.2 | 1423.3 | 1407.4 | 1389.5 | 1404.4 |
| 77.5° | 1184.3 | 1227.1 | 1184.3 | 1171.3 | 1162.4 | 1152.4 |
| 80° | 939.3 | 986.1 | 939.3 | 917.4 | 904.4 | 921.3 |
| 82.5° | 694.2 | 729.1 | 694.2 | 667.3 | 666.4 | 674.3 |
| 85° | 413.4 | 469.1 | 413.4 | 389.5 | 398.4 | 389.5 |
| 87.5° | 132.5 | 169.3 | 132.5 | 126.5 | 139.4 | 136.5 |
| 90° | 44.0 | 27.6 | 44.0 | 74.6 | 48.0 | 27.6 |
| 92.5° | 66.5 | 39.9 | 66.5 | 119.6 | 62.4 | 35.8 |
| 95° | 76.7 | 46.0 | 76.7 | 166.7 | 82.8 | 53.1 |
| 97.5° | 84.9 | 59.3 | 84.9 | 191.2 | 101.2 | 81.8 |
| 100° | 99.2 | 77.7 | 99.2 | 297.6 | 124.7 | 108.4 |
| 102.5° | 209.6 | 130.9 | 209.6 | 631.0 | 233.1 | 163.6 |
| 105° | 440.8 | 224.9 | 440.8 | 1123.9 | 486.8 | 296.5 |
| 107.5° | 788.5 | 388.6 | 788.5 | 1482.9 | 861.1 | 560.4 |
| 110° | 1046.2 | 724.0 | 1046.2 | 1554.5 | 1182.2 | 895.8 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1123.9 | 977.7 | 1123.9 | 1489.0 | 1304.9 | 1165.8 |
| 115° | 1081.0 | 1028.8 | 1081.0 | 1329.5 | 1274.2 | 1267.1 |
| 117.5° | 986.9 | 994.0 | 986.9 | 1129.0 | 1146.4 | 1224.1 |
| 120° | 878.5 | 920.4 | 878.5 | 942.9 | 1001.2 | 1105.5 |
| 122.5° | 779.3 | 828.3 | 779.3 | 808.9 | 852.8 | 957.2 |
| 125° | 693.3 | 743.4 | 693.3 | 713.8 | 725.0 | 811.9 |
| 127.5° | 634.0 | 667.8 | 634.0 | 646.3 | 635.0 | 690.2 |
| 130° | 588.0 | 616.6 | 588.0 | 604.3 | 576.7 | 603.3 |
| 132.5° | 556.3 | 574.7 | 556.3 | 575.6 | 541.8 | 549.0 |
| 135° | 528.6 | 544.0 | 528.6 | 549.0 | 518.3 | 515.3 |
| 137.5° | 505.1 | 518.4 | 505.1 | 526.5 | 502.9 | 495.8 |
| 140° | 484.6 | 495.9 | 484.6 | 507.0 | 488.6 | 484.5 |
| 142.5° | 463.1 | 471.3 | 463.1 | 489.6 | 477.4 | 473.3 |
| 145° | 448.7 | 454.9 | 448.7 | 476.3 | 469.2 | 468.1 |
| 147.5° | 436.3 | 440.4 | 436.3 | 460.8 | 457.9 | 457.9 |
| 150° | 424.0 | 428.1 | 424.0 | 447.5 | 444.5 | 446.5 |
| 152.5° | 410.7 | 415.8 | 410.7 | 432.2 | 429.1 | 431.2 |
| 155° | 402.4 | 407.5 | 402.4 | 419.8 | 417.8 | 418.8 |
| 157.5° | 398.3 | 402.3 | 398.3 | 411.6 | 410.6 | 410.6 |
| 160° | 395.2 | 398.2 | 395.2 | 406.4 | 405.4 | 404.4 |
| 162.5° | 391.0 | 394.1 | 391.0 | 404.3 | 402.3 | 402.3 |
| 165° | 391.0 | 392.0 | 391.0 | 400.2 | 400.2 | 399.2 |
| 167.5° | 389.9 | 392.0 | 389.9 | 400.2 | 400.2 | 399.1 |
| 170° | 390.9 | 391.9 | 390.9 | 399.1 | 398.1 | 396.0 |
| 172.5° | 392.9 | 393.9 | 392.9 | 402.1 | 400.1 | 399.0 |
| 175° | 392.9 | 393.9 | 392.9 | 400.0 | 400.0 | 401.0 |
| 177.5° | 395.9 | 396.9 | 395.9 | 400.0 | 400.0 | 399.0 |
| 180° | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 | 401.0 |



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL36

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 | 19.88 | 20.99 | 20.35 | 21.43 | 21.90 | 19.20 | 20.31 | 19.67 | 20.75 | 21.21 |
| | 3H | 21.42 | 22.42 | 21.91 | 22.87 | 23.38 | 21.04 | 22.04 | 21.53 | 22.49 | 23.00 |
| | 4H | 22.06 | 22.99 | 22.57 | 23.46 | 23.99 | 21.83 | 22.75 | 22.33 | 23.22 | 23.75 |
| | 6H | 22.54 | 23.39 | 23.06 | 23.88 | 24.42 | 22.47 | 23.32 | 22.99 | 23.81 | 24.35 |
| | 8H | 22.69 | 23.50 | 23.23 | 24.01 | 24.55 | 22.69 | 23.50 | 23.22 | 24.00 | 24.55 |
| | 12H | 22.77 | 23.54 | 23.30 | 24.03 | 24.61 | 22.82 | 23.59 | 23.35 | 24.09 | 24.66 |
| 4H | 2H | 20.29 | 21.22 | 20.80 | 21.69 | 22.22 | 19.77 | 20.70 | 20.28 | 21.17 | 21.70 |
| | 3H | 22.09 | 22.86 | 22.61 | 23.37 | 23.92 | 21.83 | 22.59 | 22.35 | 23.11 | 23.66 |
| | 4H | 22.86 | 23.55 | 23.40 | 24.08 | 24.67 | 22.74 | 23.42 | 23.27 | 23.95 | 24.54 |
| | 6H | 23.48 | 24.07 | 24.04 | 24.63 | 25.23 | 23.51 | 24.10 | 24.07 | 24.66 | 25.26 |
| | 8H | 23.67 | 24.23 | 24.24 | 24.78 | 25.39 | 23.78 | 24.33 | 24.35 | 24.89 | 25.49 |
| | 12H | 23.78 | 24.27 | 24.37 | 24.86 | 25.47 | 23.95 | 24.43 | 24.53 | 25.02 | 25.63 |
| 8H | 4H | 23.11 | 23.67 | 23.68 | 24.22 | 24.83 | 23.02 | 23.57 | 23.59 | 24.12 | 24.73 |
| | 6H | 23.86 | 24.31 | 24.46 | 24.91 | 25.52 | 23.92 | 24.37 | 24.52 | 24.97 | 25.59 |
| | 8H | 24.13 | 24.53 | 24.74 | 25.14 | 25.77 | 24.27 | 24.67 | 24.89 | 25.29 | 25.92 |
| | 12H | 24.30 | 24.65 | 24.91 | 25.25 | 25.95 | 24.52 | 24.87 | 25.14 | 25.47 | 26.17 |
| 12H | 4H | 23.12 | 23.61 | 23.71 | 24.20 | 24.81 | 23.03 | 23.52 | 23.61 | 24.10 | 24.71 |
| | 6H | 23.90 | 24.30 | 24.52 | 24.91 | 25.54 | 23.97 | 24.37 | 24.58 | 24.98 | 25.61 |
| | 8H | 24.22 | 24.57 | 24.83 | 25.16 | 25.87 | 24.37 | 24.72 | 24.98 | 25.32 | 26.02 |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-1

Test Date: 07/30/2025

Luminaire Tested: EHBR-60-L840-N

Data in this report applies to families of products including EHBR-60-L840-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/05/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Metalux
 Catalog Number: **EHBR-60-L840-N**
 Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 3898
 CIE u': 0.2263
 CIE v': 0.5052
 Duv: 0.0013
 CIE x: 0.3861
 CIE y: 0.3831
 CIE z: 0.2308
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 578
 Purity: 30.85729
 Rf: 80.7
 Rg: 102.1

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 82.1 | | |
| R1: | 84.4 | R9: | 38.5 |
| R2: | 83.5 | R10: | 58.9 |
| R3: | 80.8 | R11: | 83.6 |
| R4: | 83.9 | R12: | 54.2 |
| R5: | 82.1 | R13: | 82.8 |
| R6: | 77.3 | R14: | 88.2 |
| R7: | 86.4 | R15: | 81.2 |
| R8: | 78.3 | | |



Test Conditions

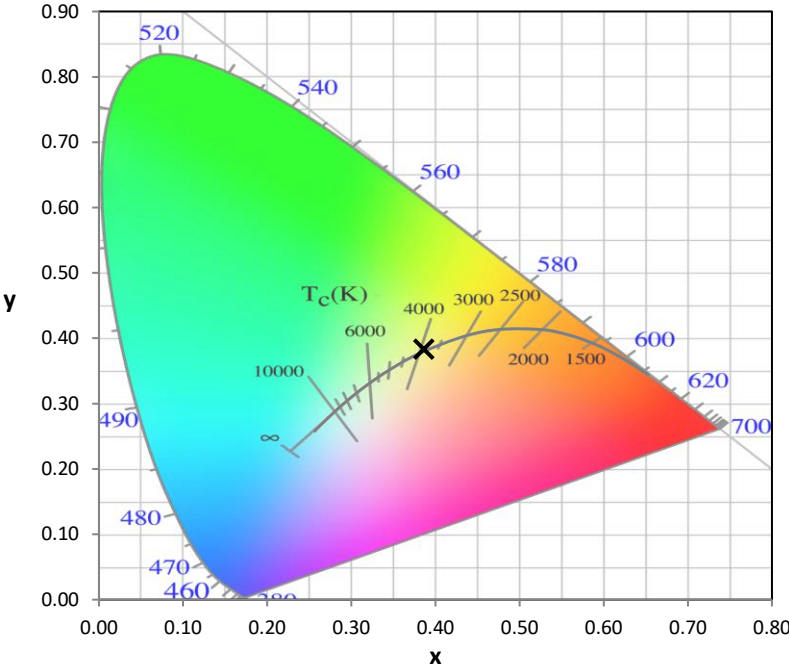
Stabilization Time: 42M
 Operation Time: 1H 42M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-1

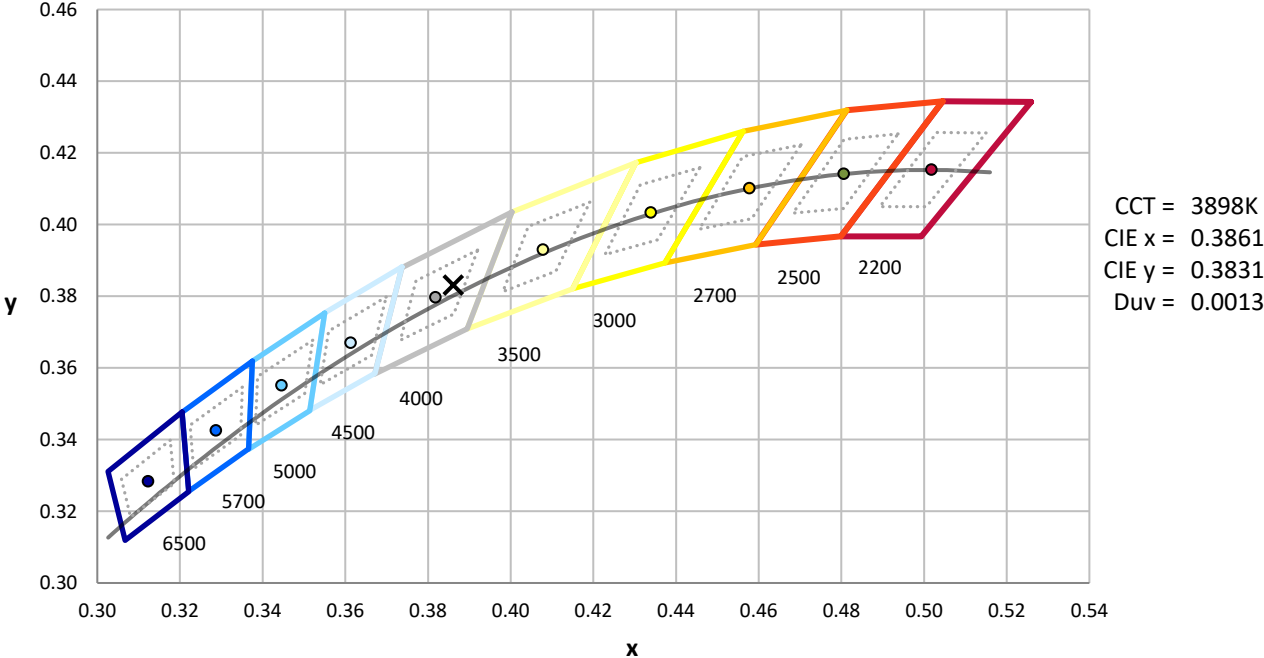
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 6/16/2025 | 12/16/2025 |
| Power Meter | XITRON INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | CHROMA 61603 IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | AGILENT E3634A IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | ONSET IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | ONSET IN0046 | 10/22/2024 | 10/22/2025 |

REPORT NUMBER: SP1-2506-472-1

CIE 1931 Chromaticity Diagram



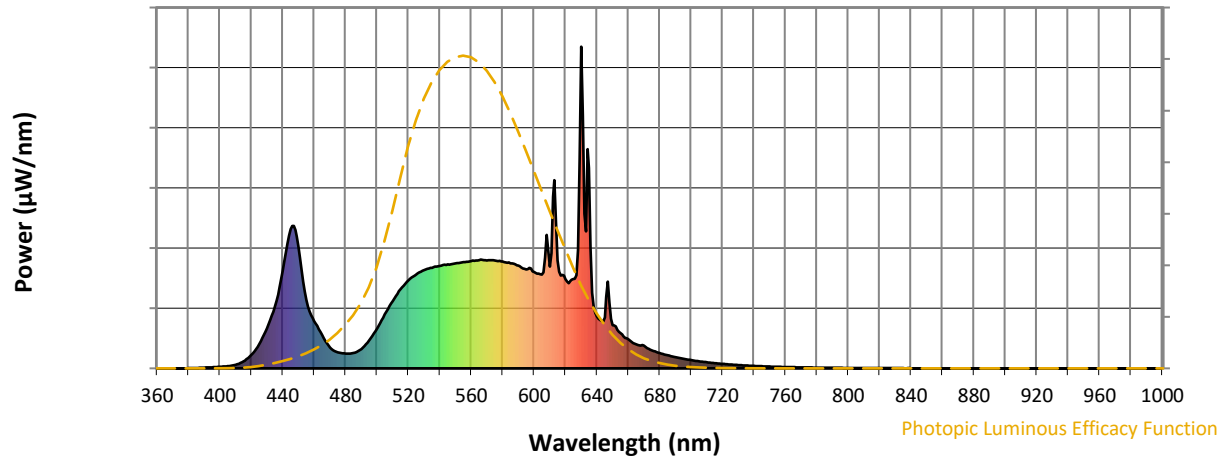
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-1

Photopic Flux vs. Wavelength



Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 60 | NR | 620 | 277 | NR | 750 | 6 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 278 | NR | 755 | 5 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 124 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 168 | NR | 635 | 623 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 209 | NR | 640 | 162 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 246 | NR | 645 | 158 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 273 | NR | 650 | 134 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 292 | NR | 655 | 109 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 305 | NR | 660 | 91 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 313 | NR | 665 | 75 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 319 | NR | 670 | 70 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 323 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 326 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 330 | NR | 685 | 41 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 125 | NR | 560 | 333 | NR | 690 | 35 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 193 | NR | 565 | 336 | NR | 695 | 30 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 302 | NR | 570 | 336 | NR | 700 | 26 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 432 | NR | 575 | 335 | NR | 705 | 22 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 380 | NR | 580 | 332 | NR | 710 | 19 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 213 | NR | 585 | 326 | NR | 715 | 16 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 147 | NR | 590 | 319 | NR | 720 | 14 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 307 | NR | 725 | 12 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 65 | NR | 600 | 299 | NR | 730 | 10 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 50 | NR | 605 | 291 | NR | 735 | 9 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 46 | NR | 610 | 317 | NR | 740 | 8 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 47 | NR | 615 | 336 | NR | 745 | 7 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-1

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.55

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 60 | NR | 620 | 277 | NR | 750 | 6 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 278 | NR | 755 | 5 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 124 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 168 | NR | 635 | 623 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 209 | NR | 640 | 162 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 246 | NR | 645 | 158 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 273 | NR | 650 | 134 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 292 | NR | 655 | 109 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 305 | NR | 660 | 91 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 313 | NR | 665 | 75 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 319 | NR | 670 | 70 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 323 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 326 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 330 | NR | 685 | 41 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 125 | NR | 560 | 333 | NR | 690 | 35 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 193 | NR | 565 | 336 | NR | 695 | 30 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 302 | NR | 570 | 336 | NR | 700 | 26 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 432 | NR | 575 | 335 | NR | 705 | 22 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 380 | NR | 580 | 332 | NR | 710 | 19 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 213 | NR | 585 | 326 | NR | 715 | 16 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 147 | NR | 590 | 319 | NR | 720 | 14 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 307 | NR | 725 | 12 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 65 | NR | 600 | 299 | NR | 730 | 10 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 50 | NR | 605 | 291 | NR | 735 | 9 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 46 | NR | 610 | 317 | NR | 740 | 8 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 47 | NR | 615 | 336 | NR | 745 | 7 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.99

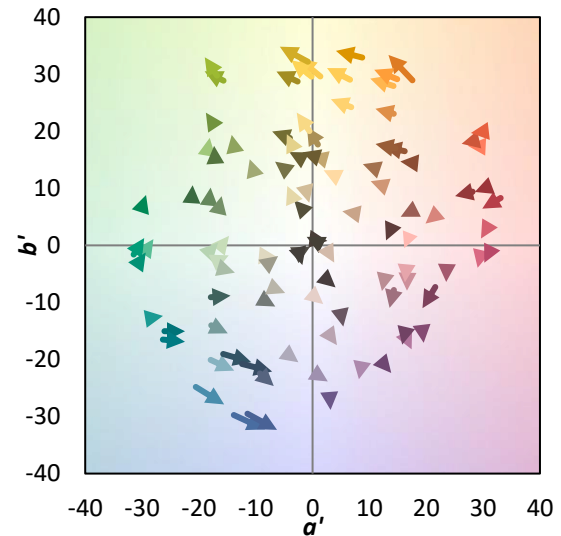
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 60 | NR | 620 | 277 | NR | 750 | 6 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 278 | NR | 755 | 5 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 124 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 168 | NR | 635 | 623 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 209 | NR | 640 | 162 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 246 | NR | 645 | 158 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 273 | NR | 650 | 134 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 292 | NR | 655 | 109 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 305 | NR | 660 | 91 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 313 | NR | 665 | 75 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 319 | NR | 670 | 70 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 323 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 326 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 330 | NR | 685 | 41 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 125 | NR | 560 | 333 | NR | 690 | 35 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 193 | NR | 565 | 336 | NR | 695 | 30 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 302 | NR | 570 | 336 | NR | 700 | 26 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 432 | NR | 575 | 335 | NR | 705 | 22 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 380 | NR | 580 | 332 | NR | 710 | 19 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 213 | NR | 585 | 326 | NR | 715 | 16 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 147 | NR | 590 | 319 | NR | 720 | 14 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 104 | NR | 595 | 307 | NR | 725 | 12 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 65 | NR | 600 | 299 | NR | 730 | 10 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 50 | NR | 605 | 291 | NR | 735 | 9 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 46 | NR | 610 | 317 | NR | 740 | 8 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 47 | NR | 615 | 336 | NR | 745 | 7 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 80.7$
 $R_g = 102.1$
 CIE $R_a = 82.1$
 $R_9 = 38.5$



Color Vector Graphics

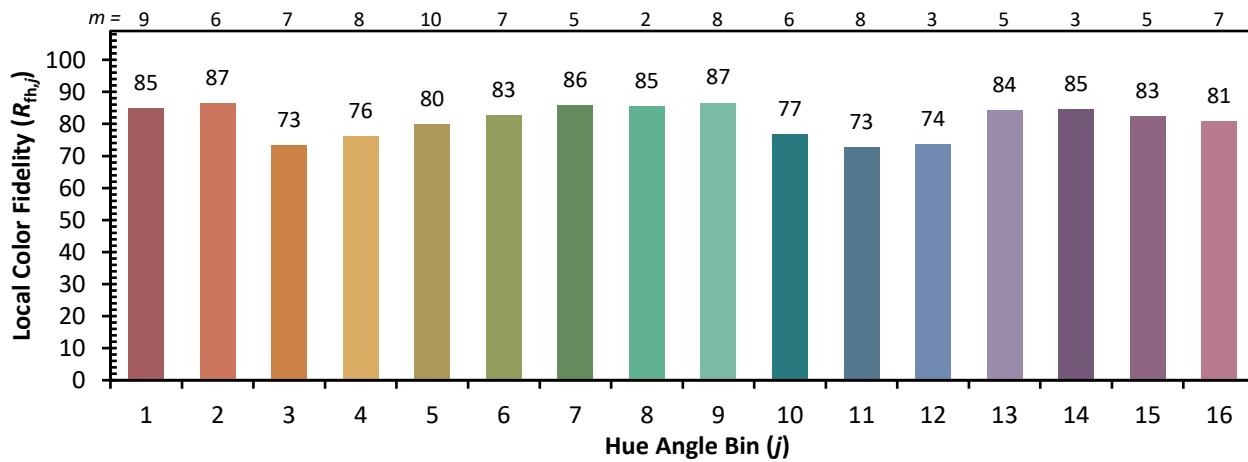
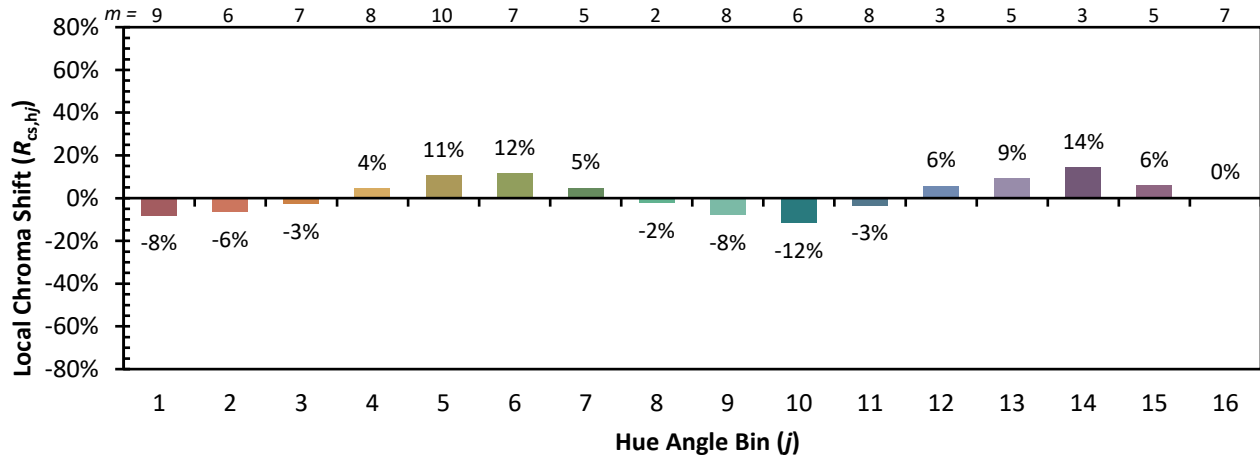


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 69 | CES51 = 90 | CES76 = 58 |
| CES02 = 61 | CES27 = 89 | CES52 = 90 | CES77 = 76 |
| CES03 = 31 | CES28 = 83 | CES53 = 80 | CES78 = 60 |
| CES04 = 69 | CES29 = 66 | CES54 = 91 | CES79 = 85 |
| CES05 = 48 | CES30 = 76 | CES55 = 89 | CES80 = 79 |
| CES06 = 50 | CES31 = 69 | CES56 = 79 | CES81 = 81 |
| CES07 = 41 | CES32 = 62 | CES57 = 77 | CES82 = 91 |
| CES08 = 40 | CES33 = 74 | CES58 = 79 | CES83 = 88 |
| CES09 = 29 | CES34 = 72 | CES59 = 93 | CES84 = 89 |
| CES10 = 74 | CES35 = 84 | CES60 = 95 | CES85 = 84 |
| CES11 = 57 | CES36 = 98 | CES61 = 92 | CES86 = 82 |
| CES12 = 63 | CES37 = 77 | CES62 = 89 | CES87 = 81 |
| CES13 = 43 | CES38 = 83 | CES63 = 80 | CES88 = 86 |
| CES14 = 74 | CES39 = 94 | CES64 = 80 | CES89 = 79 |
| CES15 = 71 | CES40 = 88 | CES65 = 77 | CES90 = 85 |
| CES16 = 47 | CES41 = 89 | CES66 = 74 | CES91 = 83 |
| CES17 = 49 | CES42 = 74 | CES67 = 72 | CES92 = 77 |
| CES18 = 56 | CES43 = 73 | CES68 = 78 | CES93 = 86 |
| CES19 = 71 | CES44 = 98 | CES69 = 83 | CES94 = 69 |
| CES20 = 65 | CES45 = 82 | CES70 = 69 | CES95 = 80 |
| CES21 = 86 | CES46 = 82 | CES71 = 64 | CES96 = 86 |
| CES22 = 78 | CES47 = 80 | CES72 = 88 | CES97 = 83 |
| CES23 = 91 | CES48 = 79 | CES73 = 60 | CES98 = 81 |
| CES24 = 90 | CES49 = 80 | CES74 = 98 | CES99 = 83 |
| CES25 = 71 | CES50 = 89 | CES75 = 62 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)