

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: P1432785

Luminaire Tested: EHBR1-54-UNV-TASM-L835-UPL40

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1432785
REPORT IS A COMBINATION OF REPORTS P1431874 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-54-UNV-TASM-L835-UPL40
Description: Elevate Round Highbay at, 54000 lumens, 3500K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

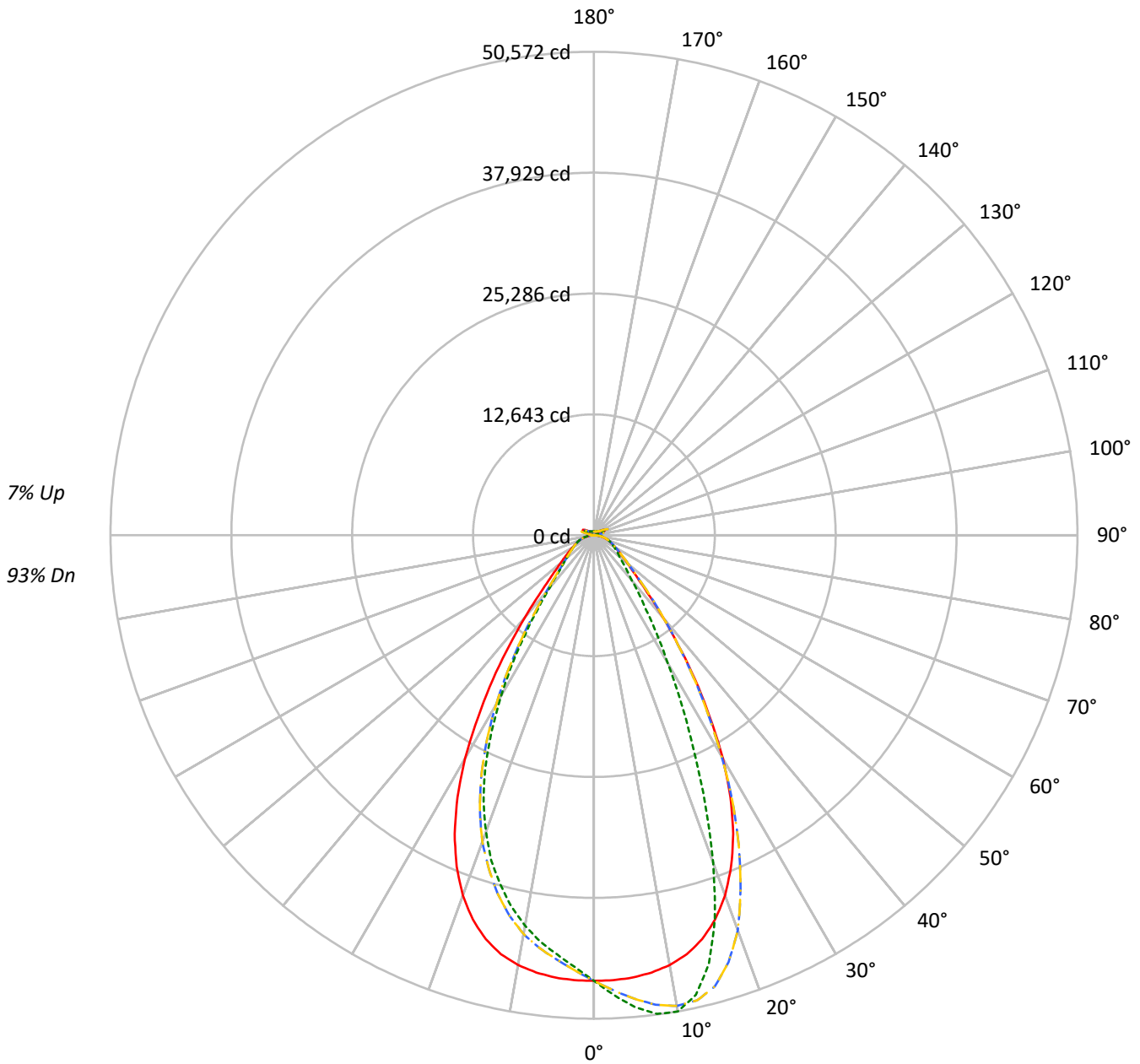
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55874.6 lumens
Efficiency: N/A
Efficacy: 171.1 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): 326.6
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: P1432785
CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

Luminous Intensity Polar Plot



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



TEST NUMBER: P1432785
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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 | 110 | 107 | 104 | 101 | 107 | 104 | 101 | 99 | 99 | 96 | 94 | 94 | 92 | 90 | 89 | 88 | 86 | 86 | 86 | 86 | 84 |
| 2 | 103 | 97 | 92 | 88 | 100 | 95 | 90 | 87 | 90 | 87 | 84 | 86 | 83 | 81 | 83 | 80 | 78 | 78 | 78 | 78 | 76 |
| 3 | 97 | 89 | 83 | 78 | 94 | 87 | 82 | 77 | 83 | 79 | 75 | 80 | 76 | 73 | 77 | 74 | 71 | 71 | 71 | 71 | 69 |
| 4 | 91 | 82 | 75 | 70 | 88 | 80 | 74 | 70 | 77 | 72 | 68 | 74 | 70 | 66 | 72 | 68 | 65 | 65 | 65 | 65 | 63 |
| 5 | 85 | 76 | 69 | 64 | 83 | 74 | 68 | 63 | 72 | 66 | 62 | 69 | 64 | 61 | 67 | 63 | 60 | 60 | 60 | 60 | 58 |
| 6 | 81 | 70 | 63 | 58 | 78 | 69 | 63 | 58 | 67 | 61 | 57 | 65 | 60 | 56 | 63 | 58 | 55 | 55 | 55 | 55 | 53 |
| 7 | 76 | 65 | 59 | 54 | 74 | 64 | 58 | 53 | 62 | 57 | 53 | 61 | 56 | 52 | 59 | 54 | 51 | 51 | 51 | 51 | 49 |
| 8 | 72 | 61 | 54 | 50 | 70 | 60 | 54 | 49 | 59 | 53 | 49 | 57 | 52 | 48 | 55 | 51 | 48 | 48 | 48 | 48 | 46 |
| 9 | 68 | 57 | 51 | 46 | 67 | 57 | 50 | 46 | 55 | 49 | 45 | 54 | 49 | 45 | 52 | 48 | 44 | 44 | 44 | 44 | 43 |
| 10 | 65 | 54 | 47 | 43 | 63 | 53 | 47 | 43 | 52 | 46 | 43 | 51 | 46 | 42 | 49 | 45 | 42 | 42 | 42 | 42 | 40 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|--------|--------|--------|--------|
| 0° | 218869 | 218869 | 218869 | 218869 |
| 5° | 217537 | 232071 | 217537 | 206247 |
| 10° | 214863 | 238029 | 214863 | 195196 |
| 15° | 208519 | 221203 | 208519 | 180308 |
| 20° | 195017 | 177375 | 195017 | 160604 |
| 25° | 172606 | 122895 | 172606 | 134593 |
| 30° | 140149 | 79952 | 140149 | 100703 |
| 35° | 100519 | 51779 | 100519 | 67040 |
| 40° | 64989 | 35689 | 64989 | 42279 |
| 45° | 41235 | 27645 | 41235 | 30124 |
| 50° | 30622 | 23491 | 30622 | 25092 |
| 55° | 25002 | 21399 | 25002 | 22150 |
| 60° | 21649 | 20385 | 21649 | 20508 |
| 65° | 19735 | 19659 | 19735 | 19576 |
| 70° | 18704 | 19263 | 18704 | 19014 |
| 75° | 17493 | 18635 | 17493 | 18075 |
| 80° | 15367 | 17593 | 15367 | 16447 |
| 85° | 9942 | 12560 | 9942 | 11976 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 57974 cd/sqm



TEST NUMBER: P1432785

CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 4431.6 | 7.9 |
| 10°-20° | 12056.4 | 21.6 |
| 20°-30° | 14139.6 | 25.3 |
| 30°-40° | 9833.2 | 17.6 |
| 40°-50° | 4886.7 | 8.7 |
| 50°-60° | 2922.7 | 5.2 |
| 60°-70° | 2057.1 | 3.7 |
| 70°-80° | 1325.1 | 2.4 |
| 80°-90° | 427.6 | 0.8 |
| 90°-100° | 101.4 | 0.2 |
| 100°-110° | 658.6 | 1.2 |
| 110°-120° | 1216.0 | 2.2 |
| 120°-130° | 723.3 | 1.3 |
| 130°-140° | 438.2 | 0.8 |
| 140°-150° | 304.0 | 0.5 |
| 150°-160° | 199.3 | 0.4 |
| 160°-170° | 115.3 | 0.2 |
| 170°-180° | 38.5 | 0.1 |
| 0°-30° | 30627.6 | 54.8 |
| 0°-40° | 40460.8 | 72.4 |
| 0°-60° | 48270.2 | 86.4 |
| 0°-90° | 52080.0 | 93.2 |
| 90°-120° | 1976.0 | 3.5 |
| 90°-150° | 3441.5 | 6.2 |
| 90°-180° | 3795.0 | 6.8 |
| 0°-180° | 55874.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 46606 | 46606 | 46606 | 46606 | 46606 | |
| 5° | 46448 | 49551 | 46448 | 44037 | 46448 | 4408 |
| 15° | 43746 | 46407 | 43746 | 37828 | 43746 | 12225 |
| 25° | 34469 | 24542 | 34469 | 26878 | 34469 | 15605 |
| 35° | 18449 | 9503 | 18449 | 12304 | 18449 | 11517 |
| 45° | 6672 | 4473 | 6672 | 4874 | 6672 | 5459 |
| 55° | 3379 | 2892 | 3379 | 2993 | 3379 | 3090 |
| 65° | 2060 | 2052 | 2060 | 2043 | 2060 | 2069 |
| 75° | 1232 | 1313 | 1232 | 1273 | 1232 | 1294 |
| 85° | 342 | 432 | 342 | 412 | 342 | 380 |
| 90° | 28 | 34 | 28 | 28 | 28 | 29 |
| 95° | 54 | 53 | 54 | 47 | 54 | 57 |
| 105° | 303 | 156 | 303 | 230 | 303 | 408 |
| 115° | 1294 | 1107 | 1294 | 1051 | 1294 | 1179 |
| 125° | 829 | 870 | 829 | 759 | 829 | 763 |
| 135° | 525 | 607 | 525 | 555 | 525 | 416 |
| 145° | 476 | 498 | 476 | 463 | 476 | 299 |
| 155° | 426 | 444 | 426 | 414 | 426 | 199 |
| 165° | 404 | 418 | 404 | 396 | 404 | 115 |
| 175° | 405 | 414 | 405 | 398 | 405 | 38 |
| 180° | 404 | 404 | 404 | 404 | 404 | |



TEST NUMBER: P1432785
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 |
| 2.5° | 46579.4 | 47181.5 | 47669.2 | 47990.9 | 48149.9 | 47990.9 | 47669.2 | 47181.5 | 46579.4 | 45980.7 | 45569.1 |
| 5° | 46447.5 | 47653.5 | 48675.2 | 49343.7 | 49550.8 | 49343.7 | 48675.2 | 47653.5 | 46447.5 | 45307.9 | 44551.9 |
| 7.5° | 46131.9 | 48010.9 | 49529.0 | 50309.4 | 50500.0 | 50309.4 | 49529.0 | 48010.9 | 46131.9 | 44518.7 | 43563.4 |
| 10° | 45650.5 | 48236.4 | 49990.4 | 50549.7 | 50572.5 | 50549.7 | 49990.4 | 48236.4 | 45650.5 | 43476.9 | 42350.4 |
| 12.5° | 44882.3 | 48156.0 | 49835.7 | 49652.3 | 49235.4 | 49652.3 | 49835.7 | 48156.0 | 44882.3 | 42204.5 | 40783.4 |
| 15° | 43746.1 | 47679.7 | 48856.0 | 47362.5 | 46407.2 | 47362.5 | 48856.0 | 47679.7 | 43746.1 | 40486.3 | 38838.0 |
| 17.5° | 42145.1 | 46788.3 | 46811.0 | 43856.2 | 42054.2 | 43856.2 | 46811.0 | 46788.3 | 42145.1 | 38385.3 | 36570.2 |
| 20° | 40081.7 | 45358.5 | 43995.2 | 38590.7 | 36455.7 | 38590.7 | 43995.2 | 45358.5 | 40081.7 | 35901.6 | 34120.5 |
| 22.5° | 37494.8 | 43430.6 | 40073.8 | 33293.7 | 30380.9 | 33293.7 | 40073.8 | 43430.6 | 37494.8 | 33013.2 | 31159.6 |
| 25° | 34469.2 | 41068.4 | 35855.2 | 27522.2 | 24542.1 | 27522.2 | 35855.2 | 41068.4 | 34469.2 | 29571.6 | 27895.4 |
| 27.5° | 30910.5 | 38074.2 | 31363.2 | 22490.1 | 19740.6 | 22490.1 | 31363.2 | 38074.2 | 30910.5 | 26018.2 | 24306.1 |
| 30° | 26957.6 | 34235.8 | 26688.5 | 17910.5 | 15378.8 | 17910.5 | 26688.5 | 34235.8 | 26957.6 | 22026.0 | 20493.1 |
| 32.5° | 22532.0 | 30473.5 | 22199.0 | 14351.0 | 12206.3 | 14351.0 | 22199.0 | 30473.5 | 22532.0 | 18216.5 | 16614.5 |
| 35° | 18448.9 | 25766.5 | 18150.9 | 11276.5 | 9503.3 | 11276.5 | 18150.9 | 25766.5 | 18448.9 | 14620.2 | 13047.1 |
| 37.5° | 14478.6 | 21319.0 | 14469.0 | 9080.3 | 7708.2 | 9080.3 | 14469.0 | 21319.0 | 14478.6 | 11366.6 | 10089.6 |
| 40° | 11264.2 | 16669.6 | 11336.8 | 7248.5 | 6185.8 | 7248.5 | 11336.8 | 16669.6 | 11264.2 | 8648.6 | 7831.4 |
| 42.5° | 8534.9 | 12746.5 | 8910.8 | 5949.0 | 5254.2 | 5949.0 | 8910.8 | 12746.5 | 8534.9 | 6814.2 | 6202.4 |
| 45° | 6671.7 | 9380.0 | 6958.3 | 5019.0 | 4472.9 | 5019.0 | 6958.3 | 9380.0 | 6671.7 | 5487.5 | 5076.7 |
| 47.5° | 5433.3 | 7249.4 | 5639.5 | 4305.0 | 3922.3 | 4305.0 | 5639.5 | 7249.4 | 5433.3 | 4641.5 | 4333.9 |
| 50° | 4563.7 | 5562.6 | 4682.6 | 3757.9 | 3501.0 | 3757.9 | 4682.6 | 5562.6 | 4563.7 | 3974.6 | 3769.4 |
| 52.5° | 3920.5 | 4536.6 | 3987.8 | 3349.0 | 3175.9 | 3349.0 | 3987.8 | 4536.6 | 3920.5 | 3477.4 | 3349.9 |
| 55° | 3378.7 | 3813.9 | 3467.8 | 3011.6 | 2891.9 | 3011.6 | 3467.8 | 3813.9 | 3378.7 | 3094.6 | 3000.3 |
| 57.5° | 2967.0 | 3235.3 | 3011.6 | 2724.1 | 2644.6 | 2724.1 | 3011.6 | 3235.3 | 2967.0 | 2753.8 | 2703.1 |
| 60° | 2602.6 | 2801.9 | 2657.7 | 2473.2 | 2450.6 | 2473.2 | 2657.7 | 2801.9 | 2602.6 | 2477.6 | 2444.4 |
| 62.5° | 2322.1 | 2447.9 | 2350.0 | 2247.8 | 2227.7 | 2247.8 | 2350.0 | 2447.9 | 2322.1 | 2226.0 | 2232.1 |
| 65° | 2059.9 | 2177.0 | 2100.1 | 2045.0 | 2052.0 | 2045.0 | 2100.1 | 2177.0 | 2059.9 | 2015.3 | 2024.9 |
| 67.5° | 1857.1 | 1918.3 | 1885.1 | 1853.6 | 1861.5 | 1853.6 | 1885.1 | 1918.3 | 1857.1 | 1813.5 | 1828.3 |
| 70° | 1641.2 | 1706.8 | 1672.7 | 1677.1 | 1690.2 | 1677.1 | 1672.7 | 1706.8 | 1641.2 | 1628.1 | 1639.5 |
| 72.5° | 1435.0 | 1485.7 | 1474.3 | 1484.8 | 1498.8 | 1484.8 | 1474.3 | 1485.7 | 1435.0 | 1433.2 | 1434.1 |
| 75° | 1232.3 | 1270.7 | 1275.9 | 1290.8 | 1312.7 | 1290.8 | 1275.9 | 1270.7 | 1232.3 | 1219.1 | 1234.9 |
| 77.5° | 1011.1 | 1054.9 | 1071.4 | 1091.6 | 1123.9 | 1091.6 | 1071.4 | 1054.9 | 1011.1 | 1019.8 | 1027.8 |
| 80° | 808.4 | 828.5 | 865.2 | 880.1 | 925.5 | 880.1 | 865.2 | 828.5 | 808.4 | 793.5 | 804.9 |
| 82.5° | 591.6 | 610.0 | 641.5 | 669.5 | 695.7 | 669.5 | 641.5 | 610.0 | 591.6 | 584.6 | 585.5 |
| 85° | 341.7 | 369.7 | 390.7 | 423.9 | 431.7 | 423.9 | 390.7 | 369.7 | 341.7 | 349.6 | 341.7 |
| 87.5° | 119.8 | 128.5 | 146.8 | 159.9 | 160.8 | 159.9 | 146.8 | 128.5 | 119.8 | 122.4 | 111.0 |
| 90° | 28.0 | 47.7 | 82.0 | 47.0 | 34.1 | 47.0 | 82.0 | 47.7 | 28.0 | 49.0 | 76.1 |
| 92.5° | 36.4 | 64.4 | 115.5 | 61.7 | 44.6 | 61.7 | 115.5 | 64.4 | 36.4 | 63.5 | 122.1 |
| 95° | 54.0 | 79.0 | 146.8 | 67.9 | 52.9 | 67.9 | 146.8 | 79.0 | 54.0 | 84.5 | 170.1 |
| 97.5° | 83.2 | 97.8 | 165.6 | 72.1 | 63.4 | 72.1 | 165.6 | 97.8 | 83.2 | 103.3 | 195.2 |
| 100° | 110.4 | 110.4 | 301.4 | 82.5 | 71.8 | 82.5 | 301.4 | 110.4 | 110.4 | 127.1 | 303.9 |
| 102.5° | 166.8 | 215.8 | 697.2 | 162.8 | 86.4 | 162.8 | 697.2 | 215.8 | 166.8 | 237.9 | 644.5 |
| 105° | 302.6 | 491.5 | 1225.9 | 415.6 | 156.2 | 415.6 | 1225.9 | 491.5 | 302.6 | 497.0 | 1148.0 |
| 107.5° | 572.2 | 915.8 | 1579.0 | 816.9 | 358.9 | 816.9 | 1579.0 | 915.8 | 572.2 | 879.3 | 1514.6 |
| 110° | 914.9 | 1279.3 | 1723.2 | 1117.8 | 722.5 | 1117.8 | 1723.2 | 1279.3 | 914.9 | 1207.4 | 1587.7 |



TEST NUMBER: P1432785
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1190.7 | 1425.6 | 1683.5 | 1239.0 | 998.3 | 1239.0 | 1683.5 | 1425.6 | 1190.7 | 1332.8 | 1520.9 |
| 115° | 1294.0 | 1404.7 | 1503.8 | 1234.7 | 1106.9 | 1234.7 | 1503.8 | 1404.7 | 1294.0 | 1301.4 | 1357.9 |
| 117.5° | 1250.1 | 1285.6 | 1299.0 | 1159.6 | 1113.2 | 1159.6 | 1299.0 | 1285.6 | 1250.1 | 1170.7 | 1153.1 |
| 120° | 1128.9 | 1114.3 | 1095.1 | 1048.8 | 1050.6 | 1048.8 | 1095.1 | 1114.3 | 1128.9 | 1022.4 | 962.9 |
| 122.5° | 977.3 | 945.9 | 925.9 | 936.8 | 964.9 | 936.8 | 925.9 | 945.9 | 977.3 | 870.7 | 825.9 |
| 125° | 828.9 | 797.5 | 807.7 | 840.7 | 869.6 | 840.7 | 807.7 | 797.5 | 828.9 | 739.9 | 728.5 |
| 127.5° | 704.4 | 689.8 | 721.9 | 759.2 | 783.9 | 759.2 | 721.9 | 689.8 | 704.4 | 648.0 | 659.6 |
| 130° | 615.4 | 618.7 | 661.3 | 693.2 | 708.8 | 693.2 | 661.3 | 618.7 | 615.4 | 588.2 | 616.6 |
| 132.5° | 559.8 | 575.7 | 616.3 | 644.0 | 653.2 | 644.0 | 616.3 | 575.7 | 559.8 | 552.3 | 587.0 |
| 135° | 525.2 | 548.6 | 585.8 | 603.4 | 607.2 | 603.4 | 585.8 | 548.6 | 525.2 | 528.2 | 559.8 |
| 137.5° | 505.2 | 528.5 | 556.5 | 570.9 | 567.5 | 570.9 | 556.5 | 528.5 | 505.2 | 512.3 | 536.5 |
| 140° | 493.5 | 516.9 | 529.4 | 545.8 | 543.3 | 545.8 | 529.4 | 516.9 | 493.5 | 497.7 | 516.5 |
| 142.5° | 481.8 | 503.1 | 509.4 | 521.5 | 518.2 | 521.5 | 509.4 | 503.1 | 481.8 | 486.0 | 498.5 |
| 145° | 476.4 | 492.3 | 487.3 | 502.7 | 498.2 | 502.7 | 487.3 | 492.3 | 476.4 | 477.7 | 484.8 |
| 147.5° | 466.0 | 477.7 | 471.4 | 484.8 | 480.3 | 484.8 | 471.4 | 477.7 | 466.0 | 466.0 | 469.0 |
| 150° | 454.3 | 462.6 | 453.4 | 469.0 | 468.7 | 469.0 | 453.4 | 462.6 | 454.3 | 452.3 | 455.2 |
| 152.5° | 438.5 | 446.8 | 438.5 | 456.1 | 454.9 | 456.1 | 438.5 | 446.8 | 438.5 | 436.4 | 439.4 |
| 155° | 425.6 | 429.8 | 425.6 | 443.2 | 444.0 | 443.2 | 425.6 | 429.8 | 425.6 | 424.7 | 426.5 |
| 157.5° | 416.9 | 419.9 | 417.8 | 433.3 | 434.1 | 433.3 | 417.8 | 419.9 | 416.9 | 416.9 | 417.8 |
| 160° | 410.0 | 414.2 | 412.9 | 426.3 | 427.2 | 426.3 | 412.9 | 414.2 | 410.0 | 411.2 | 412.0 |
| 162.5° | 407.5 | 407.5 | 407.2 | 420.6 | 422.3 | 420.6 | 407.2 | 407.5 | 407.5 | 407.5 | 409.6 |
| 165° | 403.9 | 405.9 | 403.5 | 413.6 | 417.5 | 413.6 | 403.5 | 405.9 | 403.9 | 405.0 | 405.0 |
| 167.5° | 403.5 | 401.5 | 403.2 | 412.0 | 415.9 | 412.0 | 403.2 | 401.5 | 403.5 | 404.8 | 404.8 |
| 170° | 400.2 | 401.1 | 400.8 | 409.6 | 413.5 | 409.6 | 400.8 | 401.1 | 400.2 | 402.3 | 403.5 |
| 172.5° | 402.8 | 402.8 | 401.3 | 408.1 | 414.1 | 408.1 | 401.3 | 402.8 | 402.8 | 404.1 | 406.1 |
| 175° | 404.6 | 403.4 | 403.0 | 407.9 | 413.8 | 407.9 | 403.0 | 403.4 | 404.6 | 403.7 | 403.7 |
| 177.5° | 402.5 | 404.3 | 406.0 | 410.8 | 418.8 | 410.8 | 406.0 | 404.3 | 402.5 | 403.7 | 403.7 |
| 180° | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 |



TEST NUMBER: P1432785

CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|---------|---------|---------|---------|---------|---------|
| 0° | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 | 46606.5 |
| 2.5° | 45252.8 | 45223.1 | 45252.8 | 45569.1 | 45980.7 | 46579.4 |
| 5° | 44201.4 | 44037.1 | 44201.4 | 44551.9 | 45307.9 | 46447.5 |
| 7.5° | 42977.1 | 42881.7 | 42977.1 | 43563.4 | 44518.7 | 46131.9 |
| 10° | 41687.9 | 41472.1 | 41687.9 | 42350.4 | 43476.9 | 45650.5 |
| 12.5° | 40099.2 | 39813.4 | 40099.2 | 40783.4 | 42204.5 | 44882.3 |
| 15° | 38078.6 | 37827.7 | 38078.6 | 38838.0 | 40486.3 | 43746.1 |
| 17.5° | 35910.3 | 35683.1 | 35910.3 | 36570.2 | 38385.3 | 42145.1 |
| 20° | 33187.2 | 33008.8 | 33187.2 | 34120.5 | 35901.6 | 40081.7 |
| 22.5° | 30330.2 | 30163.3 | 30330.2 | 31159.6 | 33013.2 | 37494.8 |
| 25° | 26969.0 | 26878.1 | 26969.0 | 27895.4 | 29571.6 | 34469.2 |
| 27.5° | 23336.9 | 23182.2 | 23336.9 | 24306.1 | 26018.2 | 30910.5 |
| 30° | 19626.2 | 19370.1 | 19626.2 | 20493.1 | 22026.0 | 26957.6 |
| 32.5° | 15996.6 | 15812.3 | 15996.6 | 16614.5 | 18216.5 | 22532.0 |
| 35° | 12488.6 | 12304.3 | 12488.6 | 13047.1 | 14620.2 | 18448.9 |
| 37.5° | 9731.3 | 9405.4 | 9731.3 | 10089.6 | 11366.6 | 14478.6 |
| 40° | 7380.5 | 7328.0 | 7380.5 | 7831.4 | 8648.6 | 11264.2 |
| 42.5° | 6008.3 | 5865.9 | 6008.3 | 6202.4 | 6814.2 | 8534.9 |
| 45° | 4929.9 | 4874.0 | 4929.9 | 5076.7 | 5487.5 | 6671.7 |
| 47.5° | 4239.5 | 4264.0 | 4239.5 | 4333.9 | 4641.5 | 5433.3 |
| 50° | 3724.8 | 3739.6 | 3724.8 | 3769.4 | 3974.6 | 4563.7 |
| 52.5° | 3345.5 | 3332.3 | 3345.5 | 3349.9 | 3477.4 | 3920.5 |
| 55° | 3009.9 | 2993.3 | 3009.9 | 3000.3 | 3094.6 | 3378.7 |
| 57.5° | 2716.3 | 2728.5 | 2716.3 | 2703.1 | 2753.8 | 2967.0 |
| 60° | 2454.0 | 2465.4 | 2454.0 | 2444.4 | 2477.6 | 2602.6 |
| 62.5° | 2233.0 | 2239.9 | 2233.0 | 2232.1 | 2226.0 | 2322.1 |
| 65° | 2035.4 | 2043.3 | 2035.4 | 2024.9 | 2015.3 | 2059.9 |
| 67.5° | 1846.6 | 1846.6 | 1846.6 | 1828.3 | 1813.5 | 1857.1 |
| 70° | 1669.3 | 1668.4 | 1669.3 | 1639.5 | 1628.1 | 1641.2 |
| 72.5° | 1456.0 | 1477.0 | 1456.0 | 1434.1 | 1433.2 | 1435.0 |
| 75° | 1248.9 | 1273.3 | 1248.9 | 1234.9 | 1219.1 | 1232.3 |
| 77.5° | 1039.1 | 1076.7 | 1039.1 | 1027.8 | 1019.8 | 1011.1 |
| 80° | 824.2 | 865.2 | 824.2 | 804.9 | 793.5 | 808.4 |
| 82.5° | 609.2 | 639.7 | 609.2 | 585.5 | 584.6 | 591.6 |
| 85° | 362.7 | 411.6 | 362.7 | 341.7 | 349.6 | 341.7 |
| 87.5° | 116.3 | 148.6 | 116.3 | 111.0 | 122.4 | 119.8 |
| 90° | 44.8 | 28.0 | 44.8 | 76.1 | 49.0 | 28.0 |
| 92.5° | 67.8 | 40.5 | 67.8 | 122.1 | 63.5 | 36.4 |
| 95° | 78.2 | 46.8 | 78.2 | 170.1 | 84.5 | 54.0 |
| 97.5° | 86.5 | 60.2 | 86.5 | 195.2 | 103.3 | 83.2 |
| 100° | 101.1 | 79.0 | 101.1 | 303.9 | 127.1 | 110.4 |
| 102.5° | 214.0 | 133.4 | 214.0 | 644.5 | 237.9 | 166.8 |
| 105° | 450.1 | 229.5 | 450.1 | 1148.0 | 497.0 | 302.6 |
| 107.5° | 805.3 | 396.7 | 805.3 | 1514.6 | 879.3 | 572.2 |
| 110° | 1068.6 | 739.4 | 1068.6 | 1587.7 | 1207.4 | 914.9 |



TEST NUMBER: P1432785

CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1148.0 | 998.5 | 1148.0 | 1520.9 | 1332.8 | 1190.7 |
| 115° | 1104.2 | 1050.7 | 1104.2 | 1357.9 | 1301.4 | 1294.0 |
| 117.5° | 1008.0 | 1015.2 | 1008.0 | 1153.1 | 1170.7 | 1250.1 |
| 120° | 897.3 | 939.9 | 897.3 | 962.9 | 1022.4 | 1128.9 |
| 122.5° | 795.7 | 846.0 | 795.7 | 825.9 | 870.7 | 977.3 |
| 125° | 708.0 | 759.0 | 708.0 | 728.5 | 739.9 | 828.9 |
| 127.5° | 647.4 | 681.7 | 647.4 | 659.6 | 648.0 | 704.4 |
| 130° | 600.3 | 629.5 | 600.3 | 616.6 | 588.2 | 615.4 |
| 132.5° | 567.7 | 586.5 | 567.7 | 587.0 | 552.3 | 559.8 |
| 135° | 539.3 | 555.2 | 539.3 | 559.8 | 528.2 | 525.2 |
| 137.5° | 515.1 | 528.9 | 515.1 | 536.5 | 512.3 | 505.2 |
| 140° | 493.9 | 505.5 | 493.9 | 516.5 | 497.7 | 493.5 |
| 142.5° | 471.8 | 480.1 | 471.8 | 498.5 | 486.0 | 481.8 |
| 145° | 456.7 | 463.0 | 456.7 | 484.8 | 477.7 | 476.4 |
| 147.5° | 443.9 | 448.1 | 443.9 | 469.0 | 466.0 | 466.0 |
| 150° | 431.0 | 435.2 | 431.0 | 455.2 | 452.3 | 454.3 |
| 152.5° | 417.3 | 422.3 | 417.3 | 439.4 | 436.4 | 438.5 |
| 155° | 408.5 | 413.6 | 408.5 | 426.5 | 424.7 | 425.6 |
| 157.5° | 404.0 | 407.9 | 404.0 | 417.8 | 416.9 | 416.9 |
| 160° | 400.4 | 403.3 | 400.4 | 412.0 | 411.2 | 410.0 |
| 162.5° | 395.8 | 398.8 | 395.8 | 409.6 | 407.5 | 407.5 |
| 165° | 395.5 | 396.4 | 395.5 | 405.0 | 405.0 | 403.9 |
| 167.5° | 394.3 | 396.4 | 394.3 | 404.8 | 404.8 | 403.5 |
| 170° | 395.2 | 396.0 | 395.2 | 403.5 | 402.3 | 400.2 |
| 172.5° | 396.9 | 397.8 | 396.9 | 406.1 | 404.1 | 402.8 |
| 175° | 396.6 | 397.5 | 396.6 | 403.7 | 403.7 | 404.6 |
| 177.5° | 399.5 | 400.4 | 399.5 | 403.7 | 403.7 | 402.5 |
| 180° | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 | 404.3 |



TEST NUMBER: P1432785
 CATALOG NUMBER: EHBR1-54-UNV-TASM-L835-UPL40

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 | 19.35 | 20.45 | 19.84 | 20.91 | 21.40 | 18.67 | 19.77 | 19.16 | 20.23 | 20.72 |
| | 3H | 20.90 | 21.88 | 21.40 | 22.35 | 22.88 | 20.52 | 21.50 | 21.02 | 21.97 | 22.50 |
| | 4H | 21.53 | 22.45 | 22.06 | 22.94 | 23.49 | 21.30 | 22.22 | 21.82 | 22.70 | 23.25 |
| | 6H | 22.02 | 22.86 | 22.55 | 23.36 | 23.92 | 21.94 | 22.78 | 22.48 | 23.29 | 23.85 |
| | 8H | 22.17 | 22.96 | 22.71 | 23.49 | 24.05 | 22.16 | 22.96 | 22.71 | 23.48 | 24.05 |
| | 12H | 22.24 | 23.00 | 22.79 | 23.51 | 24.11 | 22.29 | 23.05 | 22.84 | 23.57 | 24.16 |
| 4H | 2H | 19.77 | 20.68 | 20.29 | 21.17 | 21.72 | 19.24 | 20.16 | 19.77 | 20.65 | 21.20 |
| | 3H | 21.56 | 22.32 | 22.10 | 22.85 | 23.42 | 21.30 | 22.06 | 21.83 | 22.59 | 23.16 |
| | 4H | 22.34 | 23.02 | 22.89 | 23.56 | 24.17 | 22.21 | 22.89 | 22.76 | 23.43 | 24.04 |
| | 6H | 22.95 | 23.54 | 23.53 | 24.11 | 24.73 | 22.98 | 23.57 | 23.56 | 24.14 | 24.76 |
| | 8H | 23.15 | 23.70 | 23.73 | 24.26 | 24.89 | 23.25 | 23.80 | 23.83 | 24.37 | 24.99 |
| | 12H | 23.25 | 23.74 | 23.85 | 24.34 | 24.97 | 23.42 | 23.90 | 24.02 | 24.50 | 25.13 |
| 8H | 4H | 22.59 | 23.13 | 23.17 | 23.70 | 24.33 | 22.49 | 23.04 | 23.07 | 23.60 | 24.23 |
| | 6H | 23.33 | 23.77 | 23.94 | 24.39 | 25.02 | 23.39 | 23.84 | 24.01 | 24.45 | 25.09 |
| | 8H | 23.60 | 23.99 | 24.23 | 24.62 | 25.27 | 23.75 | 24.14 | 24.38 | 24.77 | 25.42 |
| | 12H | 23.77 | 24.12 | 24.40 | 24.73 | 25.45 | 23.99 | 24.34 | 24.62 | 24.95 | 25.67 |
| 12H | 4H | 22.60 | 23.08 | 23.20 | 23.68 | 24.31 | 22.50 | 22.98 | 23.10 | 23.58 | 24.21 |
| | 6H | 23.37 | 23.77 | 24.00 | 24.40 | 25.04 | 23.44 | 23.84 | 24.07 | 24.46 | 25.11 |
| | 8H | 23.69 | 24.04 | 24.31 | 24.65 | 25.37 | 23.84 | 24.19 | 24.47 | 24.80 | 25.52 |

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-3

Test Date: 07/31/2025

Luminaire Tested: EHBR-60-L835-N

Data in this report applies to families of products including EHBR-60-L835-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-3
 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-L835-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3500K 80CRI LEDs with N lens

Spectral Parameters

CCT (K): 3468
 CIE u': 0.2375
 CIE v': 0.5091
 Duv: -0.0021
 CIE x: 0.4049
 CIE y: 0.3856
 CIE z: 0.2095
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 581
 Purity: 37.24544
 R_f: 80.1
 R_g: 101

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 82.1 | | |
| R1: | 82.9 | R9: | 27.6 |
| R2: | 85.6 | R10: | 63.8 |
| R3: | 85.9 | R11: | 81.2 |
| R4: | 82.8 | R12: | 57.2 |
| R5: | 81.0 | R13: | 82.6 |
| R6: | 79.7 | R14: | 91.0 |
| R7: | 86.5 | R15: | 79.4 |
| R8: | 72.1 | | |



Test Conditions

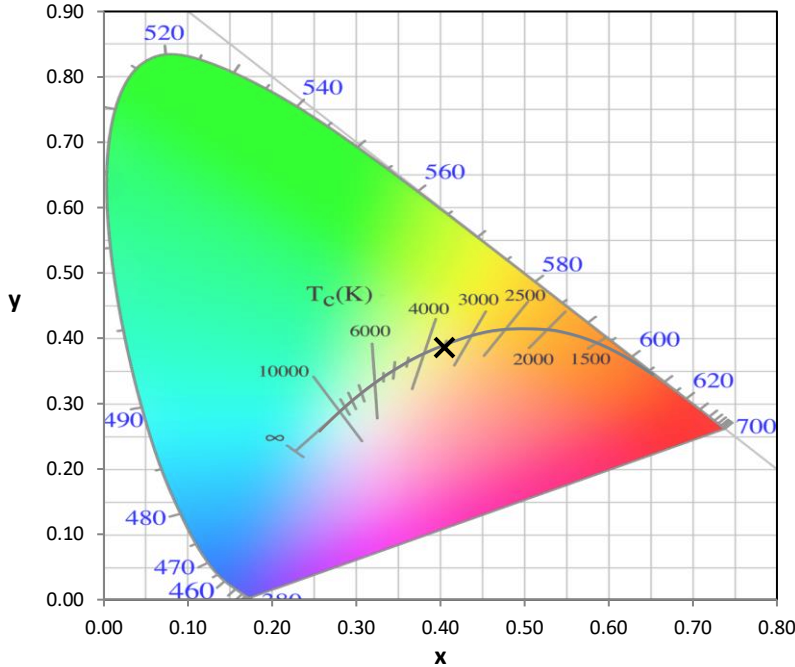
Stabilization Time: 39M
 Operation Time: 1H 39M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-3

| 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: SP1-2506-472-3

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2506-472-3

Photopic Flux vs. Wavelength

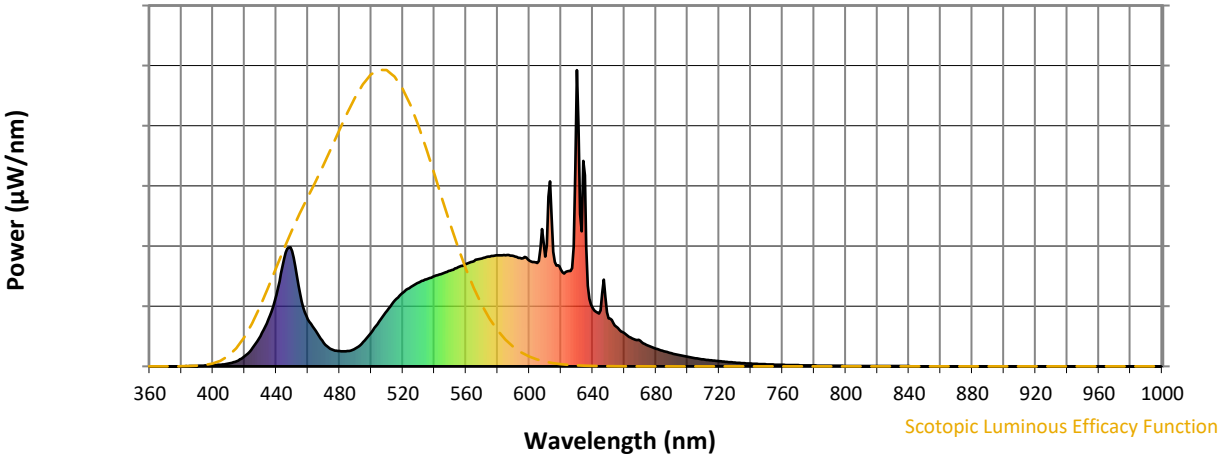


Photopic Lumens: NR

| 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 | 327 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 82 | NR | 625 | 322 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 114 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 152 | NR | 635 | 645 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 189 | NR | 640 | 197 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 222 | NR | 645 | 189 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 248 | NR | 650 | 163 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 268 | NR | 655 | 134 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 283 | NR | 660 | 113 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 294 | NR | 665 | 94 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 305 | NR | 670 | 87 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 314 | NR | 675 | 70 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 323 | NR | 680 | 60 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 62 | NR | 555 | 335 | NR | 685 | 51 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 102 | NR | 560 | 346 | NR | 690 | 44 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 159 | NR | 565 | 356 | NR | 695 | 38 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 241 | NR | 570 | 364 | NR | 700 | 32 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 363 | NR | 575 | 371 | NR | 705 | 28 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 389 | NR | 580 | 375 | NR | 710 | 24 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 375 | NR | 715 | 20 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 158 | NR | 590 | 373 | NR | 720 | 17 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 120 | NR | 595 | 364 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 357 | NR | 730 | 13 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 57 | NR | 605 | 349 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 51 | NR | 610 | 371 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 51 | NR | 615 | 387 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.43

| 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 | 327 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 82 | NR | 625 | 322 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 114 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 152 | NR | 635 | 645 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 189 | NR | 640 | 197 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 222 | NR | 645 | 189 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 248 | NR | 650 | 163 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 268 | NR | 655 | 134 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 283 | NR | 660 | 113 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 294 | NR | 665 | 94 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 305 | NR | 670 | 87 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 314 | NR | 675 | 70 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 323 | NR | 680 | 60 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 62 | NR | 555 | 335 | NR | 685 | 51 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 102 | NR | 560 | 346 | NR | 690 | 44 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 159 | NR | 565 | 356 | NR | 695 | 38 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 241 | NR | 570 | 364 | NR | 700 | 32 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 363 | NR | 575 | 371 | NR | 705 | 28 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 389 | NR | 580 | 375 | NR | 710 | 24 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 375 | NR | 715 | 20 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 158 | NR | 590 | 373 | NR | 720 | 17 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 120 | NR | 595 | 364 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 357 | NR | 730 | 13 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 57 | NR | 605 | 349 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 51 | NR | 610 | 371 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 51 | NR | 615 | 387 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.75

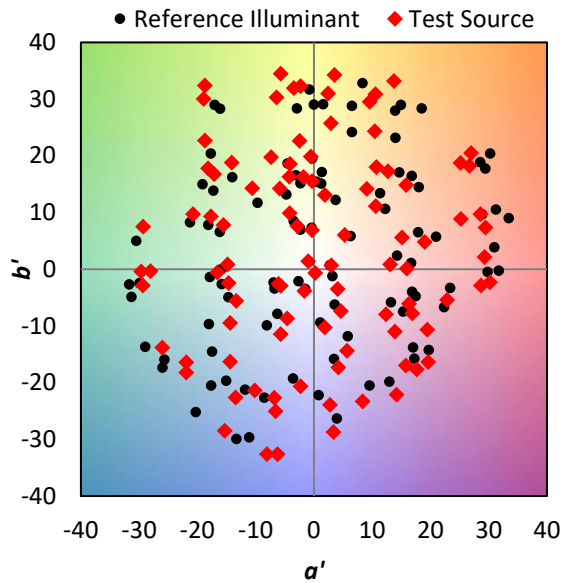
| λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) |
|----------------|-------------------------------------|-----------------------------|----------------|-------------------------------------|-----------------------------|----------------|-------------------------------------|-----------------------------|----------------|-------------------------------------|-----------------------------|----------------|-------------------------------------|-----------------------------|
| 360 | 0 | NR | 490 | 60 | NR | 620 | 327 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 82 | NR | 625 | 322 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 114 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 152 | NR | 635 | 645 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 189 | NR | 640 | 197 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 222 | NR | 645 | 189 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 248 | NR | 650 | 163 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 268 | NR | 655 | 134 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 283 | NR | 660 | 113 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 294 | NR | 665 | 94 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 9 | NR | 540 | 305 | NR | 670 | 87 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 18 | NR | 545 | 314 | NR | 675 | 70 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 34 | NR | 550 | 323 | NR | 680 | 60 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 62 | NR | 555 | 335 | NR | 685 | 51 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 102 | NR | 560 | 346 | NR | 690 | 44 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 159 | NR | 565 | 356 | NR | 695 | 38 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 241 | NR | 570 | 364 | NR | 700 | 32 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 363 | NR | 575 | 371 | NR | 705 | 28 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 389 | NR | 580 | 375 | NR | 710 | 24 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 375 | NR | 715 | 20 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 158 | NR | 590 | 373 | NR | 720 | 17 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 120 | NR | 595 | 364 | NR | 725 | 15 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 79 | NR | 600 | 357 | NR | 730 | 13 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 57 | NR | 605 | 349 | NR | 735 | 11 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 51 | NR | 610 | 371 | NR | 740 | 9 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 51 | NR | 615 | 387 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 80.1$
 $R_g = 101$
 $CIE R_a = 82.1$
 $R_9 = 27.6$

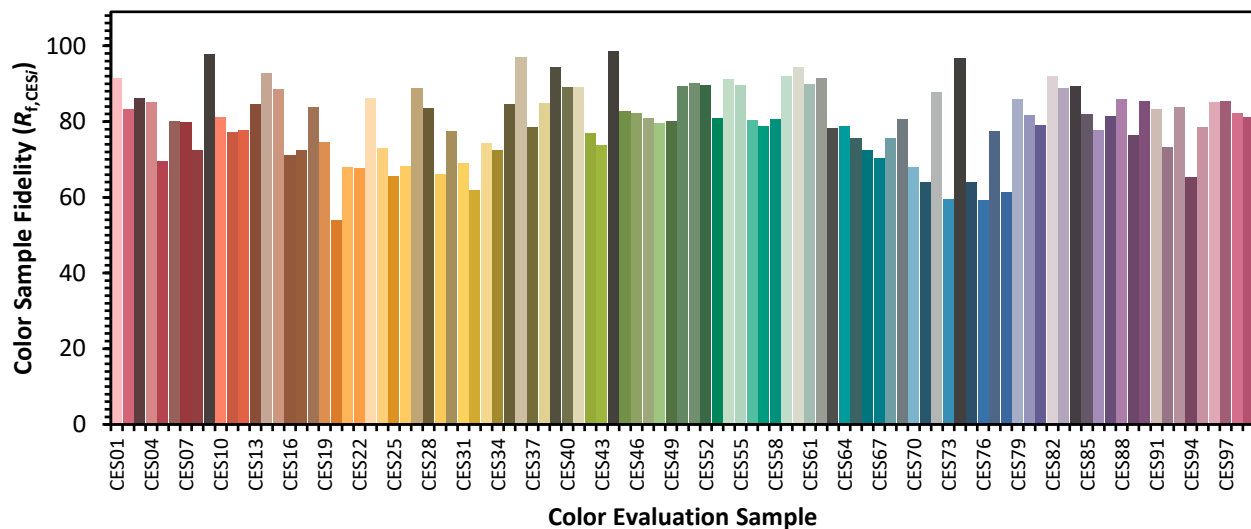


Color Vector Graphics

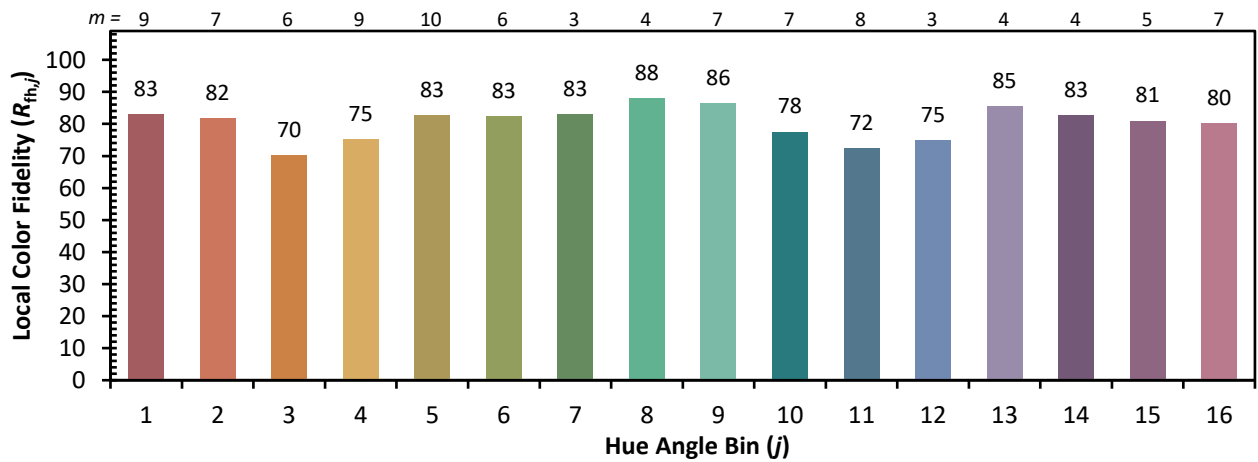


Individual Sample Fidelity Index ($R_{f,i}$)

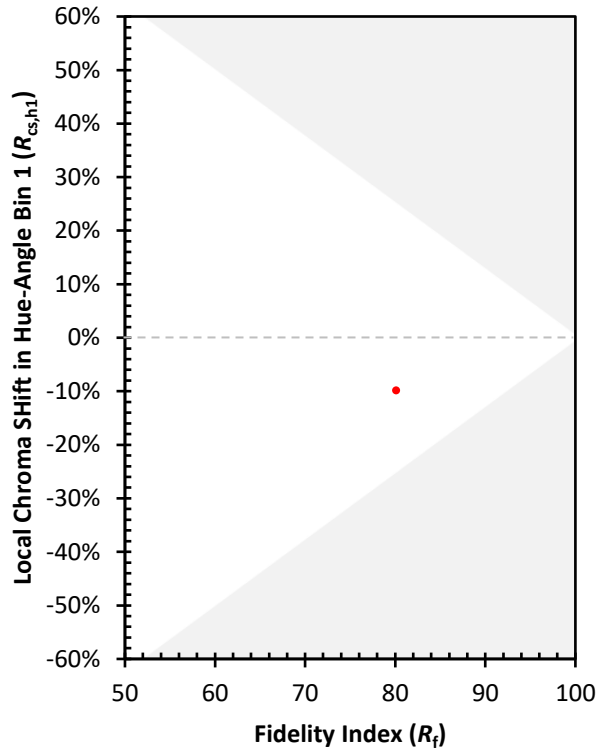
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|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 68 | CES51 = 90 | CES76 = 59 |
| CES02 = 62 | CES27 = 89 | CES52 = 90 | CES77 = 78 |
| CES03 = 31 | CES28 = 84 | CES53 = 81 | CES78 = 61 |
| CES04 = 70 | CES29 = 66 | CES54 = 91 | CES79 = 86 |
| CES05 = 49 | CES30 = 77 | CES55 = 90 | CES80 = 82 |
| CES06 = 51 | CES31 = 69 | CES56 = 80 | CES81 = 79 |
| CES07 = 42 | CES32 = 62 | CES57 = 79 | CES82 = 92 |
| CES08 = 41 | CES33 = 74 | CES58 = 81 | CES83 = 89 |
| CES09 = 29 | CES34 = 72 | CES59 = 92 | CES84 = 89 |
| CES10 = 75 | CES35 = 85 | CES60 = 94 | CES85 = 82 |
| CES11 = 58 | CES36 = 97 | CES61 = 90 | CES86 = 78 |
| CES12 = 64 | CES37 = 79 | CES62 = 92 | CES87 = 82 |
| CES13 = 43 | CES38 = 85 | CES63 = 78 | CES88 = 86 |
| CES14 = 74 | CES39 = 94 | CES64 = 79 | CES89 = 76 |
| CES15 = 71 | CES40 = 89 | CES65 = 76 | CES90 = 85 |
| CES16 = 47 | CES41 = 89 | CES66 = 73 | CES91 = 83 |
| CES17 = 49 | CES42 = 77 | CES67 = 70 | CES92 = 73 |
| CES18 = 56 | CES43 = 74 | CES68 = 76 | CES93 = 84 |
| CES19 = 72 | CES44 = 99 | CES69 = 81 | CES94 = 65 |
| CES20 = 66 | CES45 = 83 | CES70 = 68 | CES95 = 79 |
| CES21 = 86 | CES46 = 82 | CES71 = 64 | CES96 = 85 |
| CES22 = 78 | CES47 = 81 | CES72 = 88 | CES97 = 85 |
| CES23 = 92 | CES48 = 80 | CES73 = 60 | CES98 = 82 |
| CES24 = 91 | CES49 = 80 | CES74 = 97 | CES99 = 81 |
| CES25 = 72 | CES50 = 89 | CES75 = 64 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)