

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: P1433842

Luminaire Tested: EHBR1-36-UNV-ASM-L940

Issue Date: 3/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2601-654-4)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-36-UNV-ASM-L940
Description: Elevate Round Highbay at, 36000 lumens, 4000K 90CRI LEDs with ASM lens
Light Source: -
Ballast/Driver: -

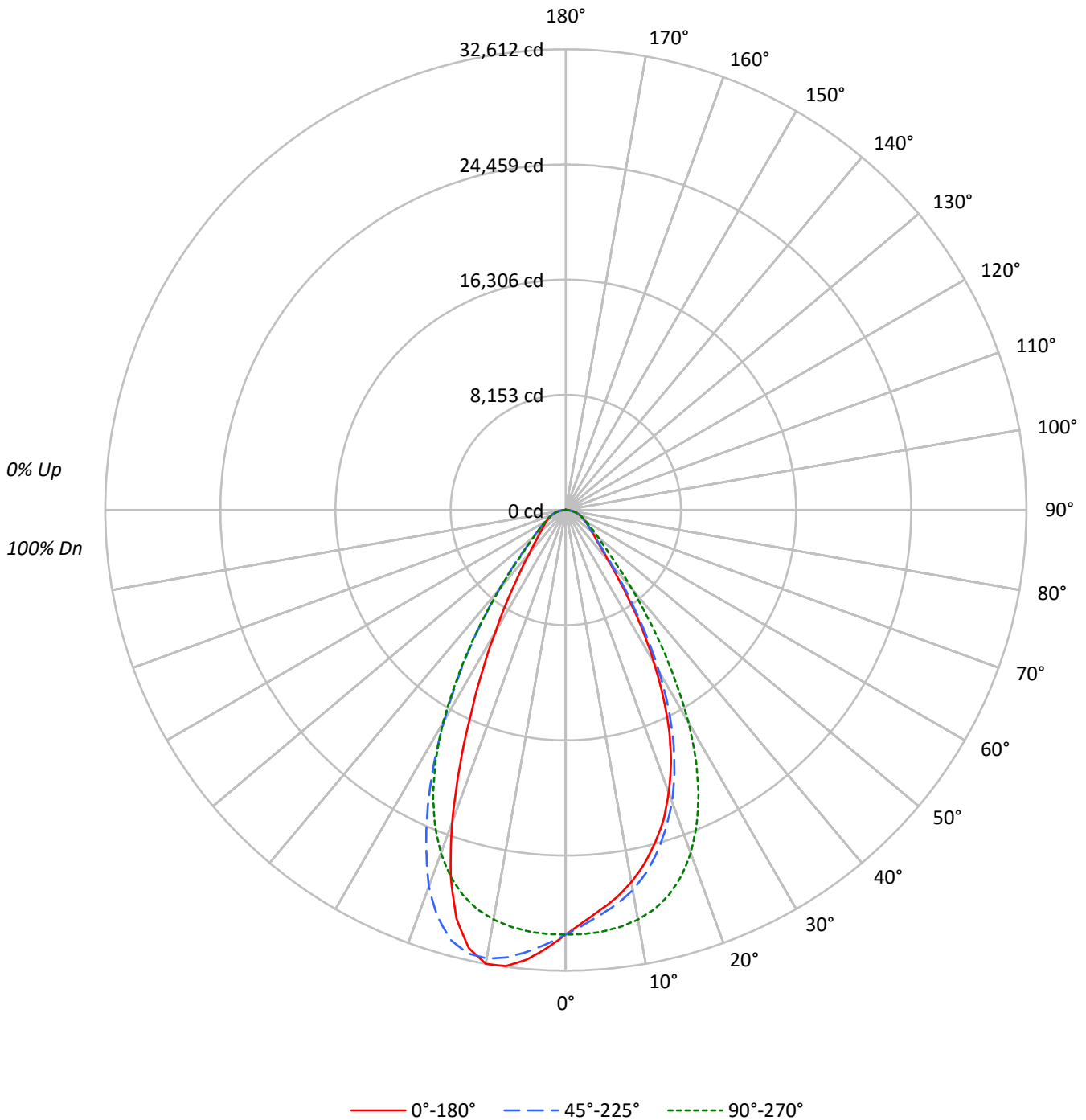
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33605.3 lumens
Efficiency: N/A
Efficacy: 175.6 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.99 / 0.92
Luminous Opening: Circular (Dia: 1.71' x H: 0')
CIE Type: Direct

Input Watts (W): 191.4
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: P1433842
CATALOG NUMBER: EHBR1-36-UNV-ASM-L940

Luminous Intensity Polar Plot





TEST NUMBER: P1433842
 CATALOG NUMBER: EHBR1-36-UNV-ASM-L940

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 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 |
| 1 | 112 | 108 | 105 | 103 | 109 | 106 | 104 | 101 | 102 | 100 | 98 | 98 | 97 | 95 | 95 | 93 | 92 | 90 | 90 | 90 |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 85 | 83 | 81 | 81 | 81 |
| 3 | 99 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 87 | 82 | 78 | 84 | 80 | 77 | 82 | 78 | 76 | 74 | 74 | 74 |
| 4 | 93 | 84 | 77 | 72 | 91 | 83 | 77 | 72 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 67 | 67 | 67 |
| 5 | 87 | 78 | 71 | 66 | 86 | 77 | 70 | 65 | 75 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 64 | 62 | 62 | 62 |
| 6 | 82 | 72 | 65 | 60 | 81 | 71 | 65 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | 67 | 62 | 59 | 57 | 57 | 57 |
| 7 | 78 | 67 | 60 | 56 | 76 | 67 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | 53 | 53 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 | 49 | 49 |
| 9 | 70 | 59 | 53 | 48 | 69 | 59 | 52 | 48 | 58 | 52 | 48 | 57 | 51 | 48 | 56 | 51 | 47 | 46 | 46 | 46 |
| 10 | 66 | 56 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 49 | 45 | 54 | 48 | 45 | 53 | 48 | 45 | 43 | 43 | 43 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|--------|--------|--------|--------|
| 0° | 141138 | 141138 | 141138 | 141138 | 141138 |
| 5° | 133867 | 135431 | 141194 | 147966 | 150627 |
| 10° | 127527 | 130228 | 140376 | 153721 | 155511 |
| 15° | 118595 | 121762 | 137150 | 153170 | 145492 |
| 20° | 106376 | 109959 | 129169 | 141781 | 117484 |
| 25° | 89809 | 93209 | 115174 | 119805 | 82004 |
| 30° | 67733 | 71659 | 94265 | 93324 | 53776 |
| 35° | 45487 | 48234 | 68203 | 67102 | 35132 |
| 40° | 28969 | 30959 | 44529 | 44816 | 24453 |
| 45° | 20874 | 21742 | 28572 | 29800 | 19156 |
| 50° | 17618 | 17758 | 21501 | 22061 | 16494 |
| 55° | 15803 | 15840 | 17838 | 18309 | 15269 |
| 60° | 14933 | 14805 | 15763 | 16096 | 14842 |
| 65° | 14641 | 14510 | 14760 | 15048 | 14703 |
| 70° | 14773 | 14516 | 14531 | 14811 | 14965 |
| 75° | 14900 | 14448 | 14417 | 14929 | 15359 |
| 80° | 15090 | 14036 | 14098 | 15090 | 16140 |
| 85° | 14300 | 11870 | 11870 | 13573 | 15001 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 112.5°
 Vertical Angle: 45°
 Luminance: 40171 cd/sqm



TEST NUMBER: P1433842
 CATALOG NUMBER: EHBR1-36-UNV-ASM-L940

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 2857.7 | 8.5 |
| 10°-20° | 7774.6 | 23.1 |
| 20°-30° | 9118.0 | 27.1 |
| 30°-40° | 6341.0 | 18.9 |
| 40°-50° | 3151.2 | 9.4 |
| 50°-60° | 1884.7 | 5.6 |
| 60°-70° | 1326.6 | 3.9 |
| 70°-80° | 854.5 | 2.5 |
| 80°-90° | 271.4 | 0.8 |
| 90°-100° | 1.6 | 0.0 |
| 100°-110° | 1.9 | 0.0 |
| 110°-120° | 1.9 | 0.0 |
| 120°-130° | 2.4 | 0.0 |
| 130°-140° | 3.3 | 0.0 |
| 140°-150° | 4.0 | 0.0 |
| 150°-160° | 4.4 | 0.0 |
| 160°-170° | 4.3 | 0.0 |
| 170°-180° | 1.9 | 0.0 |
| 0°-30° | 19750.3 | 58.8 |
| 0°-40° | 26091.3 | 77.6 |
| 0°-60° | 31127.2 | 92.6 |
| 0°-90° | 33579.7 | 99.9 |
| 90°-120° | 5.4 | 0.0 |
| 90°-150° | 15.0 | 0.0 |
| 90°-180° | 26.0 | 0.1 |
| 0°-180° | 33605.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 30054 | 30054 | 30054 | 30054 | 30054 | |
| 5° | 28398 | 28729 | 29952 | 31388 | 31953 | 2664 |
| 15° | 24393 | 25045 | 28210 | 31505 | 29926 | 6803 |
| 25° | 17332 | 17988 | 22228 | 23121 | 15826 | 7820 |
| 35° | 7934 | 8414 | 11897 | 11705 | 6128 | 5054 |
| 45° | 3143 | 3274 | 4302 | 4487 | 2884 | 2541 |
| 55° | 1930 | 1935 | 2179 | 2236 | 1865 | 1751 |
| 65° | 1318 | 1306 | 1328 | 1354 | 1323 | 1308 |
| 75° | 821 | 796 | 795 | 823 | 846 | 867 |
| 85° | 265 | 220 | 220 | 252 | 278 | 273 |
| 90° | 1 | 1 | 1 | 2 | 4 | 13 |
| 95° | 1 | 1 | 1 | 2 | 4 | 1 |
| 105° | 1 | 1 | 1 | 2 | 5 | 1 |
| 115° | 1 | 1 | 2 | 2 | 5 | 1 |
| 125° | 2 | 2 | 2 | 3 | 6 | 1 |
| 135° | 2 | 4 | 4 | 4 | 6 | 2 |
| 145° | 6 | 7 | 7 | 6 | 7 | 4 |
| 155° | 11 | 10 | 9 | 9 | 10 | 5 |
| 165° | 16 | 15 | 15 | 16 | 19 | 4 |
| 175° | 19 | 19 | 20 | 21 | 24 | 2 |
| 180° | 21 | 21 | 21 | 21 | 21 | |



TEST NUMBER: P1433842
 CATALOG NUMBER: EHBR1-36-UNV-ASM-L940

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 30054.4 | 30054.4 | 30054.4 | 30054.4 | 30054.4 | 30054.4 | 30054.4 | 30054.4 | 30054.4 |
| 2.5° | 29162.3 | 29181.5 | 29385.4 | 29650.8 | 30036.9 | 30425.2 | 30739.7 | 30947.1 | 31049.6 |
| 5° | 28397.5 | 28503.4 | 28729.4 | 29217.0 | 29951.9 | 30729.6 | 31388.4 | 31819.5 | 31953.0 |
| 7.5° | 27652.5 | 27714.0 | 28092.1 | 28708.0 | 29748.4 | 30960.1 | 31939.0 | 32442.2 | 32565.1 |
| 10° | 26743.5 | 26882.6 | 27309.8 | 28036.3 | 29437.9 | 31105.4 | 32236.5 | 32597.2 | 32611.9 |
| 12.5° | 25673.8 | 25858.1 | 26299.3 | 27215.7 | 28942.5 | 31053.6 | 32136.8 | 32018.4 | 31749.6 |
| 15° | 24393.4 | 24555.1 | 25044.9 | 26107.8 | 28209.9 | 30746.5 | 31505.0 | 30541.9 | 29925.9 |
| 17.5° | 23010.4 | 23156.9 | 23582.4 | 24752.9 | 27177.4 | 30171.6 | 30186.3 | 28280.9 | 27118.8 |
| 20° | 21285.9 | 21400.8 | 22002.8 | 23151.3 | 25846.8 | 29249.7 | 28370.5 | 24885.4 | 23508.6 |
| 22.5° | 19450.9 | 19558.5 | 20093.4 | 21288.7 | 24178.6 | 28006.4 | 25841.7 | 21469.6 | 19591.2 |
| 25° | 17332.4 | 17391.0 | 17988.5 | 19069.4 | 22227.6 | 26483.1 | 23121.4 | 17747.9 | 15826.1 |
| 27.5° | 14949.2 | 15048.9 | 15673.9 | 16777.9 | 19932.8 | 24552.3 | 20224.7 | 14502.8 | 12729.8 |
| 30° | 12490.9 | 12656.0 | 13215.0 | 14203.6 | 17383.8 | 22077.1 | 17210.2 | 11549.7 | 9917.1 |
| 32.5° | 10196.6 | 10315.5 | 10713.9 | 11746.9 | 14529.9 | 19651.0 | 14315.1 | 9254.3 | 7871.3 |
| 35° | 7934.5 | 8053.3 | 8413.5 | 9427.9 | 11896.8 | 16615.6 | 11704.7 | 7271.7 | 6128.2 |
| 37.5° | 6065.1 | 6275.3 | 6506.3 | 7329.7 | 9336.6 | 13747.6 | 9330.4 | 5855.5 | 4970.6 |
| 40° | 4725.5 | 4759.3 | 5050.1 | 5577.0 | 7263.8 | 10749.4 | 7310.5 | 4674.3 | 3988.9 |
| 42.5° | 3782.7 | 3874.5 | 3999.6 | 4394.1 | 5503.8 | 8219.6 | 5746.1 | 3836.2 | 3388.1 |
| 45° | 3143.0 | 3179.1 | 3273.7 | 3538.7 | 4302.2 | 6048.7 | 4487.1 | 3236.5 | 2884.4 |
| 47.5° | 2749.7 | 2733.8 | 2794.8 | 2993.1 | 3503.7 | 4674.8 | 3636.7 | 2776.1 | 2529.3 |
| 50° | 2411.5 | 2401.9 | 2430.7 | 2563.1 | 2943.0 | 3587.1 | 3019.6 | 2423.3 | 2257.7 |
| 52.5° | 2148.8 | 2157.3 | 2160.1 | 2242.5 | 2528.1 | 2925.5 | 2571.5 | 2159.6 | 2048.0 |
| 55° | 1930.2 | 1940.9 | 1934.7 | 1995.6 | 2178.7 | 2459.4 | 2236.2 | 1942.0 | 1864.9 |
| 57.5° | 1759.4 | 1751.6 | 1743.1 | 1775.8 | 1913.3 | 2086.3 | 1942.0 | 1756.6 | 1705.4 |
| 60° | 1589.9 | 1582.5 | 1576.3 | 1597.7 | 1678.3 | 1806.8 | 1713.8 | 1594.9 | 1580.3 |
| 62.5° | 1444.4 | 1440.0 | 1439.4 | 1435.4 | 1497.4 | 1578.6 | 1515.4 | 1449.5 | 1436.5 |
| 65° | 1317.6 | 1312.5 | 1305.8 | 1299.6 | 1328.3 | 1403.8 | 1354.2 | 1318.7 | 1323.2 |
| 67.5° | 1190.8 | 1190.8 | 1179.0 | 1169.4 | 1197.5 | 1237.0 | 1215.6 | 1195.3 | 1200.4 |
| 70° | 1075.9 | 1076.4 | 1057.2 | 1050.0 | 1058.3 | 1100.6 | 1078.7 | 1081.5 | 1089.9 |
| 72.5° | 952.4 | 938.9 | 924.8 | 924.3 | 925.4 | 958.1 | 950.7 | 957.5 | 966.5 |
| 75° | 821.2 | 805.3 | 796.3 | 786.2 | 794.6 | 819.4 | 822.8 | 832.4 | 846.5 |
| 77.5° | 694.4 | 670.0 | 662.8 | 657.6 | 652.1 | 680.2 | 690.9 | 703.9 | 724.7 |
| 80° | 558.0 | 531.4 | 519.0 | 511.8 | 521.3 | 534.3 | 558.0 | 567.5 | 596.8 |
| 82.5° | 412.5 | 392.8 | 377.6 | 377.0 | 381.5 | 393.3 | 413.7 | 431.7 | 448.6 |
| 85° | 265.4 | 233.8 | 220.3 | 225.5 | 220.3 | 238.4 | 251.9 | 273.3 | 278.4 |
| 87.5° | 95.8 | 75.0 | 71.6 | 78.9 | 77.2 | 82.8 | 94.7 | 103.1 | 103.7 |
| 90° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.1 | 1.7 | 3.4 | 4.5 |
| 92.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.1 | 1.7 | 3.4 | 4.5 |
| 95° | 0.6 | 0.6 | 0.6 | 0.6 | 1.1 | 1.1 | 1.7 | 3.4 | 4.5 |
| 97.5° | 1.1 | 0.6 | 0.6 | 0.6 | 1.1 | 1.1 | 1.7 | 3.4 | 4.5 |
| 100° | 1.1 | 0.6 | 0.6 | 1.1 | 1.1 | 1.1 | 1.7 | 3.4 | 4.5 |
| 102.5° | 1.1 | 0.6 | 0.6 | 1.1 | 1.1 | 1.7 | 2.2 | 3.9 | 4.5 |
| 105° | 1.1 | 0.6 | 0.6 | 1.1 | 1.1 | 1.7 | 2.2 | 3.9 | 5.0 |
| 107.5° | 1.1 | 0.6 | 1.1 | 1.1 | 1.1 | 1.7 | 2.2 | 3.9 | 5.0 |
| 110° | 1.1 | 0.6 | 1.1 | 1.1 | 1.1 | 1.7 | 2.2 | 3.9 | 5.0 |



TEST NUMBER: P1433842
 CATALOG NUMBER: EHBR1-36-UNV-ASM-L940

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|------|-------|------|-------|------|--------|------|--------|------|
| 112.5° | 1.1 | 0.6 | 1.1 | 1.1 | 1.1 | 1.7 | 2.2 | 3.9 | 5.0 |
| 115° | 1.1 | 0.6 | 1.1 | 1.1 | 1.7 | 1.7 | 2.2 | 3.9 | 5.0 |
| 117.5° | 1.1 | 0.6 | 1.1 | 1.7 | 1.7 | 1.7 | 2.2 | 3.9 | 5.0 |
| 120° | 1.1 | 0.6 | 1.1 | 1.7 | 1.7 | 1.7 | 2.8 | 3.9 | 5.0 |
| 122.5° | 1.1 | 1.1 | 1.7 | 2.2 | 2.2 | 2.2 | 2.8 | 4.5 | 5.0 |
| 125° | 1.7 | 1.1 | 2.2 | 2.8 | 2.2 | 2.2 | 3.4 | 4.5 | 5.6 |
| 127.5° | 1.7 | 1.1 | 2.2 | 2.8 | 2.8 | 2.8 | 3.4 | 4.5 | 5.6 |
| 130° | 1.7 | 1.7 | 2.8 | 3.4 | 3.4 | 2.8 | 3.4 | 5.0 | 5.6 |
| 132.5° | 2.2 | 2.2 | 3.9 | 4.5 | 3.9 | 3.4 | 3.9 | 5.6 | 6.2 |
| 135° | 2.2 | 2.8 | 3.9 | 5.0 | 4.5 | 3.4 | 4.5 | 5.0 | 6.2 |
| 137.5° | 2.8 | 3.4 | 5.0 | 5.6 | 5.0 | 3.9 | 4.5 | 5.6 | 6.2 |
| 140° | 3.9 | 4.5 | 5.6 | 5.6 | 5.6 | 4.5 | 4.5 | 5.6 | 6.8 |
| 142.5° | 5.0 | 5.0 | 6.2 | 6.2 | 6.2 | 5.0 | 5.0 | 6.2 | 6.8 |
| 145° | 6.2 | 6.2 | 6.8 | 6.2 | 6.8 | 6.2 | 5.6 | 6.2 | 7.4 |
| 147.5° | 7.4 | 7.4 | 7.4 | 6.8 | 6.8 | 6.2 | 6.2 | 6.8 | 7.9 |
| 150° | 8.5 | 8.5 | 7.9 | 7.4 | 7.4 | 7.4 | 6.8 | 7.4 | 8.5 |
| 152.5° | 9.6 | 9.0 | 8.5 | 7.9 | 7.9 | 7.9 | 7.9 | 8.5 | 9.0 |
| 155° | 10.7 | 10.2 | 9.6 | 8.5 | 9.0 | 9.0 | 9.0 | 9.6 | 10.2 |
| 157.5° | 12.4 | 11.3 | 10.7 | 10.2 | 10.2 | 10.7 | 10.7 | 11.3 | 11.8 |
| 160° | 13.5 | 12.9 | 12.4 | 11.8 | 12.4 | 12.4 | 12.9 | 13.5 | 14.1 |
| 162.5° | 14.6 | 14.1 | 13.5 | 13.5 | 13.5 | 13.5 | 14.6 | 15.2 | 16.3 |
| 165° | 15.7 | 15.2 | 14.6 | 14.6 | 15.2 | 15.2 | 16.3 | 17.5 | 18.6 |
| 167.5° | 15.7 | 15.7 | 15.7 | 15.7 | 16.3 | 16.3 | 17.5 | 19.2 | 20.3 |
| 170° | 16.9 | 16.3 | 16.3 | 16.9 | 16.9 | 17.5 | 18.6 | 20.3 | 21.4 |
| 172.5° | 18.1 | 17.5 | 18.1 | 18.1 | 18.6 | 18.6 | 20.3 | 22.0 | 23.1 |
| 175° | 19.2 | 18.6 | 19.2 | 19.2 | 19.8 | 20.3 | 21.4 | 23.1 | 24.2 |
| 177.5° | 19.8 | 19.2 | 19.2 | 19.2 | 19.8 | 20.9 | 22.0 | 23.7 | 24.8 |
| 180° | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 |



TEST NUMBER: P1433842
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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 | 18.17 | 19.38 | 18.54 | 19.69 | 20.01 | 18.93 | 20.14 | 19.30 | 20.45 | 20.77 |
| | 3H | 20.08 | 21.16 | 20.47 | 21.49 | 21.86 | 20.59 | 21.66 | 20.97 | 21.99 | 22.36 |
| | 4H | 20.90 | 21.90 | 21.30 | 22.25 | 22.64 | 21.30 | 22.30 | 21.71 | 22.66 | 23.04 |
| | 6H | 21.56 | 22.48 | 21.98 | 22.86 | 23.25 | 21.89 | 22.81 | 22.31 | 23.18 | 23.58 |
| | 8H | 21.81 | 22.68 | 22.24 | 23.07 | 23.48 | 22.10 | 22.97 | 22.53 | 23.36 | 23.77 |
| | 12H | 21.97 | 22.80 | 22.40 | 23.18 | 23.61 | 22.23 | 23.06 | 22.67 | 23.45 | 23.88 |
| 4H | 2H | 18.74 | 19.74 | 19.14 | 20.09 | 20.48 | 19.36 | 20.36 | 19.76 | 20.71 | 21.10 |
| | 3H | 20.90 | 21.72 | 21.31 | 22.13 | 22.53 | 21.28 | 22.10 | 21.69 | 22.51 | 22.92 |
| | 4H | 21.85 | 22.59 | 22.28 | 23.01 | 23.45 | 22.15 | 22.89 | 22.59 | 23.31 | 23.76 |
| | 6H | 22.66 | 23.29 | 23.12 | 23.74 | 24.21 | 22.90 | 23.53 | 23.36 | 23.98 | 24.45 |
| | 8H | 22.95 | 23.54 | 23.42 | 23.99 | 24.47 | 23.16 | 23.76 | 23.64 | 24.21 | 24.68 |
| | 12H | 23.16 | 23.68 | 23.64 | 24.17 | 24.64 | 23.35 | 23.87 | 23.84 | 24.36 | 24.83 |
| 8H | 4H | 22.16 | 22.76 | 22.64 | 23.21 | 23.68 | 22.45 | 23.05 | 22.92 | 23.50 | 23.97 |
| | 6H | 23.12 | 23.60 | 23.63 | 24.10 | 24.59 | 23.35 | 23.84 | 23.86 | 24.34 | 24.82 |
| | 8H | 23.51 | 23.94 | 24.03 | 24.46 | 24.95 | 23.72 | 24.15 | 24.24 | 24.67 | 25.16 |
| | 12H | 23.80 | 24.18 | 24.32 | 24.68 | 25.25 | 23.99 | 24.37 | 24.51 | 24.87 | 25.44 |
| 12H | 4H | 22.19 | 22.71 | 22.68 | 23.20 | 23.68 | 22.48 | 23.00 | 22.97 | 23.49 | 23.97 |
| | 6H | 23.18 | 23.62 | 23.71 | 24.13 | 24.63 | 23.42 | 23.86 | 23.95 | 24.38 | 24.87 |
| | 8H | 23.63 | 24.01 | 24.15 | 24.51 | 25.08 | 23.86 | 24.23 | 24.37 | 24.73 | 25.31 |

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-7

Test Date: 08/04/2025

Luminaire Tested: EHBR-60-L940-N

Data in this report applies to families of products including EHBR-60-L940-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-7
 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-L940-N**
 Description: Elevate Round Highbay at, 60000 lumens, 4000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 3963
 CIE u': 0.2267
 CIE v': 0.5003
 Duv: -0.0016
 CIE x: 0.3810
 CIE y: 0.3738
 CIE z: 0.2453
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 580
 Purity: 26.49712
 Rf: 90.7
 Rg: 101

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 93.4 | | |
| R1: | 95.2 | R9: | 66.4 |
| R2: | 95.1 | R10: | 86.6 |
| R3: | 93.3 | R11: | 94.4 |
| R4: | 94.5 | R12: | 75.4 |
| R5: | 94.2 | R13: | 95.0 |
| R6: | 92.9 | R14: | 95.4 |
| R7: | 94.0 | R15: | 92.8 |
| R8: | 87.7 | | |



Test Conditions

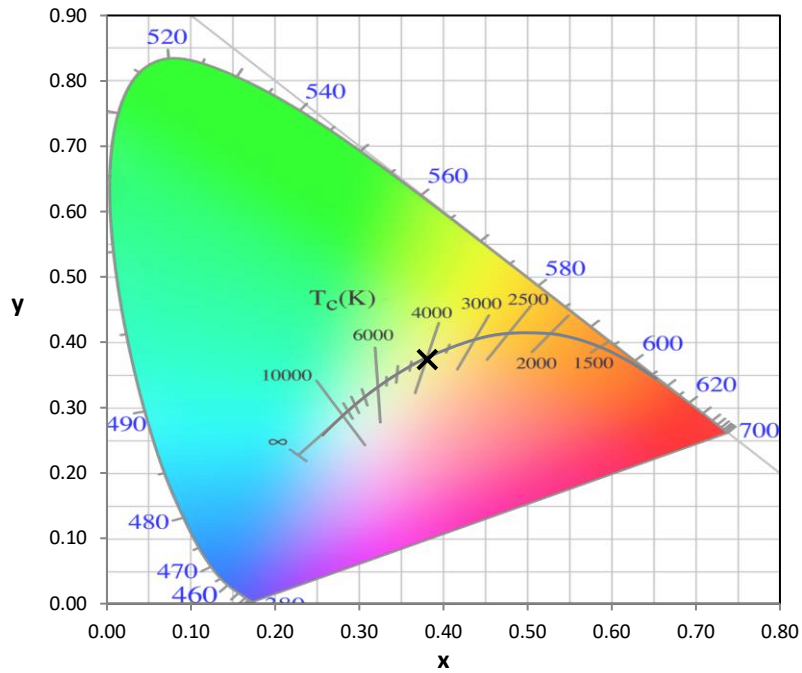
Stabilization Time: 44M
 Operation Time: 1H 44M
 Sphere Temperature (°C): 25.0

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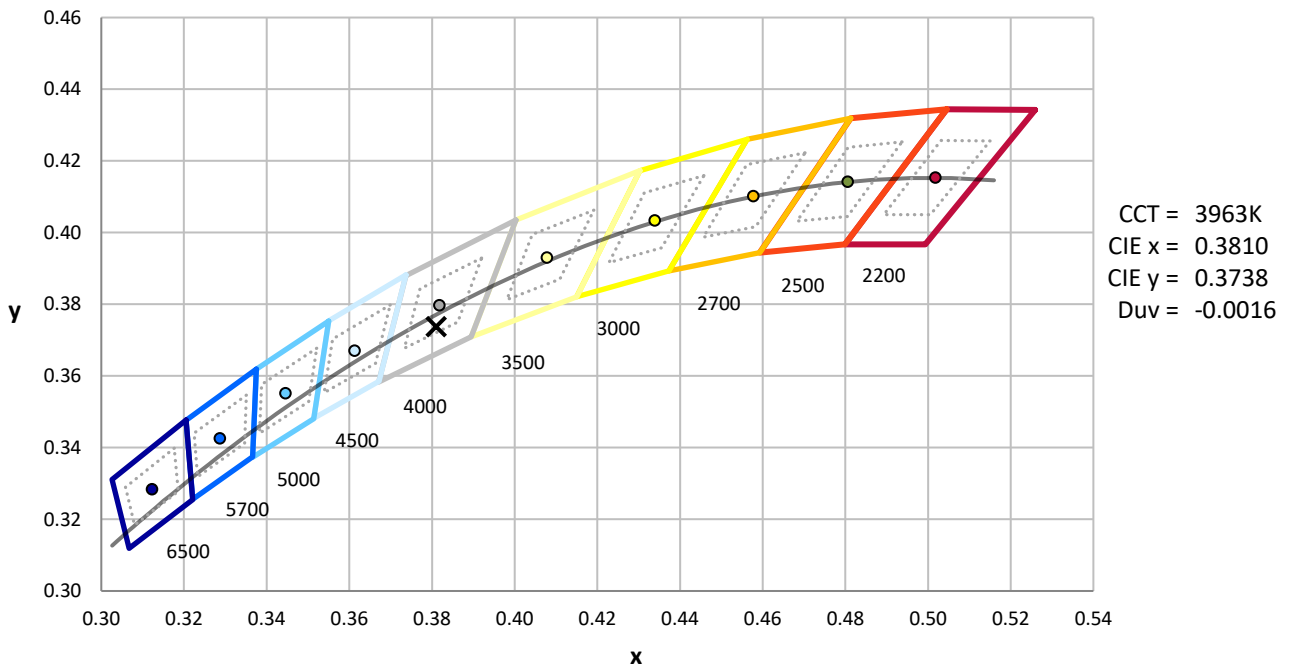
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 6/16/2025 | 12/16/2025 |
| Power Meter | 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 |

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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

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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 | 141 | NR | 620 | 276 | NR | 750 | 5 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 279 | NR | 755 | 4 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 193 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 215 | NR | 635 | 628 | NR | 765 | 3 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 230 | NR | 640 | 164 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 243 | NR | 645 | 161 | NR | 775 | 2 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 251 | NR | 650 | 137 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 256 | NR | 655 | 111 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 262 | NR | 660 | 92 | NR | 790 | 1 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 267 | NR | 665 | 76 | NR | 795 | 1 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 271 | NR | 670 | 71 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 276 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 20 | NR | 550 | 280 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 37 | NR | 555 | 285 | NR | 685 | 40 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 63 | NR | 560 | 290 | NR | 690 | 34 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 108 | NR | 565 | 294 | NR | 695 | 29 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 186 | NR | 570 | 296 | NR | 700 | 25 | NR | 830 | 0 | NR | 960 | 0 | NR |
| 445 | 323 | NR | 575 | 298 | NR | 705 | 21 | NR | 835 | 0 | NR | 965 | 0 | NR |
| 450 | 403 | NR | 580 | 299 | NR | 710 | 18 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 293 | NR | 585 | 298 | NR | 715 | 15 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 296 | NR | 720 | 13 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 180 | NR | 595 | 288 | NR | 725 | 11 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 132 | NR | 600 | 286 | NR | 730 | 9 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 109 | NR | 605 | 282 | NR | 735 | 8 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 110 | NR | 610 | 311 | NR | 740 | 7 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 121 | NR | 615 | 334 | NR | 745 | 6 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-7

Scotopic Flux vs. Wavelength



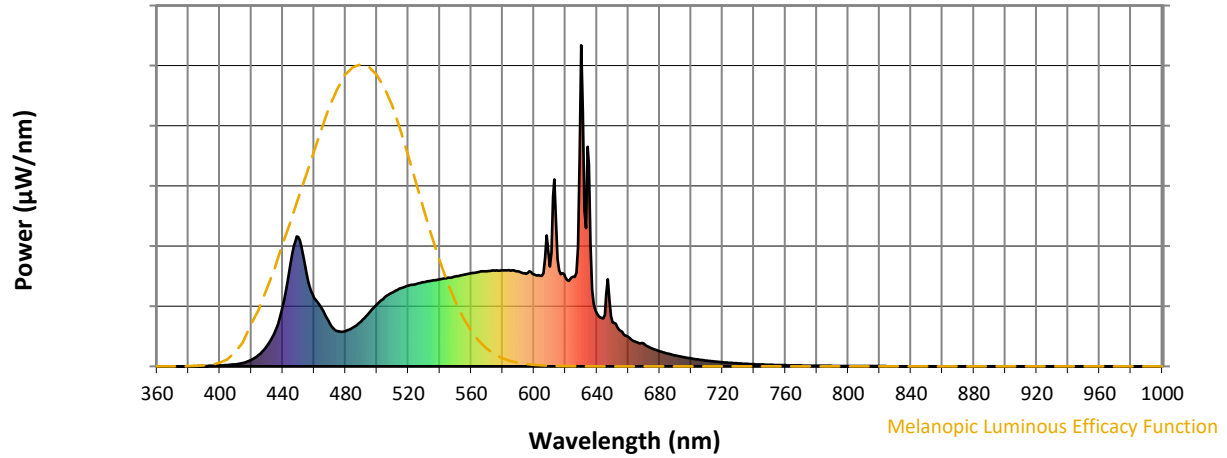
Scotopic Lumens: NR

S/P: 1.76

| 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 | 141 | NR | 620 | 276 | NR | 750 | 5 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 279 | NR | 755 | 4 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 193 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 215 | NR | 635 | 628 | NR | 765 | 3 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 230 | NR | 640 | 164 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 243 | NR | 645 | 161 | NR | 775 | 2 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 251 | NR | 650 | 137 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 256 | NR | 655 | 111 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 262 | NR | 660 | 92 | NR | 790 | 1 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 267 | NR | 665 | 76 | NR | 795 | 1 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 271 | NR | 670 | 71 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 276 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 20 | NR | 550 | 280 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 37 | NR | 555 | 285 | NR | 685 | 40 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 63 | NR | 560 | 290 | NR | 690 | 34 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 108 | NR | 565 | 294 | NR | 695 | 29 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 186 | NR | 570 | 296 | NR | 700 | 25 | NR | 830 | 0 | NR | 960 | 0 | NR |
| 445 | 323 | NR | 575 | 298 | NR | 705 | 21 | NR | 835 | 0 | NR | 965 | 0 | NR |
| 450 | 403 | NR | 580 | 299 | NR | 710 | 18 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 293 | NR | 585 | 298 | NR | 715 | 15 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 296 | NR | 720 | 13 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 180 | NR | 595 | 288 | NR | 725 | 11 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 132 | NR | 600 | 286 | NR | 730 | 9 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 109 | NR | 605 | 282 | NR | 735 | 8 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 110 | NR | 610 | 311 | NR | 740 | 7 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 121 | NR | 615 | 334 | NR | 745 | 6 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.64

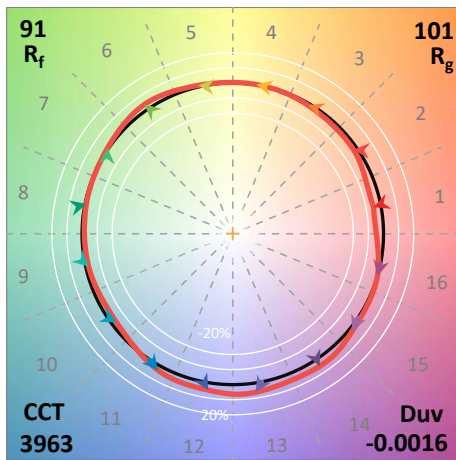
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 141 | NR | 620 | 276 | NR | 750 | 5 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 279 | NR | 755 | 4 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 193 | NR | 630 | 1000 | NR | 760 | 4 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 215 | NR | 635 | 628 | NR | 765 | 3 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 230 | NR | 640 | 164 | NR | 770 | 3 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 243 | NR | 645 | 161 | NR | 775 | 2 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 251 | NR | 650 | 137 | NR | 780 | 2 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 256 | NR | 655 | 111 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 262 | NR | 660 | 92 | NR | 790 | 1 | NR | 920 | 0 | NR |
| 405 | 4 | NR | 535 | 267 | NR | 665 | 76 | NR | 795 | 1 | NR | 925 | 0 | NR |
| 410 | 6 | NR | 540 | 271 | NR | 670 | 71 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 11 | NR | 545 | 276 | NR | 675 | 56 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 20 | NR | 550 | 280 | NR | 680 | 47 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 37 | NR | 555 | 285 | NR | 685 | 40 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 63 | NR | 560 | 290 | NR | 690 | 34 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 108 | NR | 565 | 294 | NR | 695 | 29 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 186 | NR | 570 | 296 | NR | 700 | 25 | NR | 830 | 0 | NR | 960 | 0 | NR |
| 445 | 323 | NR | 575 | 298 | NR | 705 | 21 | NR | 835 | 0 | NR | 965 | 0 | NR |
| 450 | 403 | NR | 580 | 299 | NR | 710 | 18 | NR | 840 | 0 | NR | 970 | 0 | NR |
| 455 | 293 | NR | 585 | 298 | NR | 715 | 15 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 214 | NR | 590 | 296 | NR | 720 | 13 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 180 | NR | 595 | 288 | NR | 725 | 11 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 132 | NR | 600 | 286 | NR | 730 | 9 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 109 | NR | 605 | 282 | NR | 735 | 8 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 110 | NR | 610 | 311 | NR | 740 | 7 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 121 | NR | 615 | 334 | NR | 745 | 6 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 90.7$
 $R_g = 101$
 $CIE R_a = 93.4$
 $R_9 = 66.4$



Color Vector Graphics

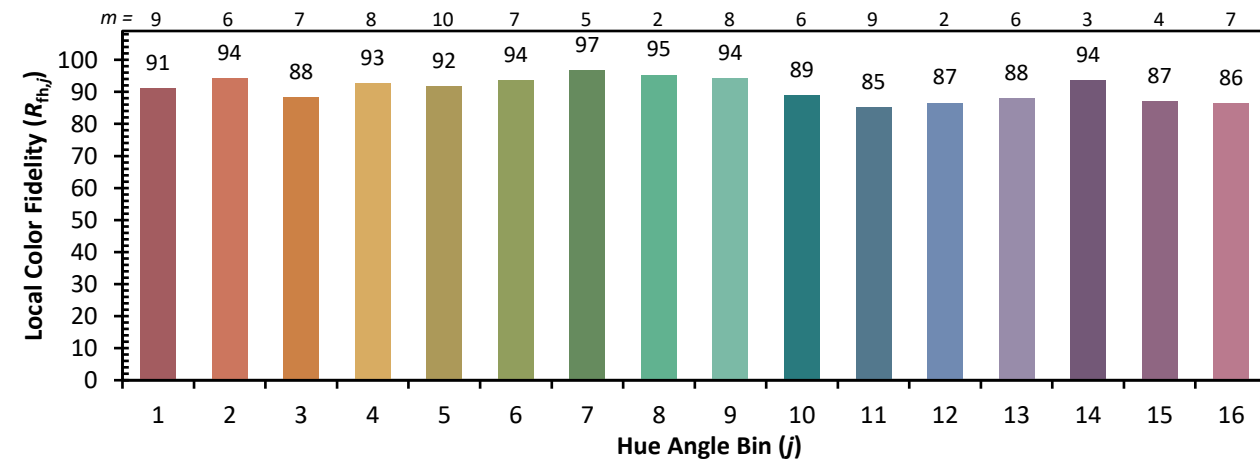
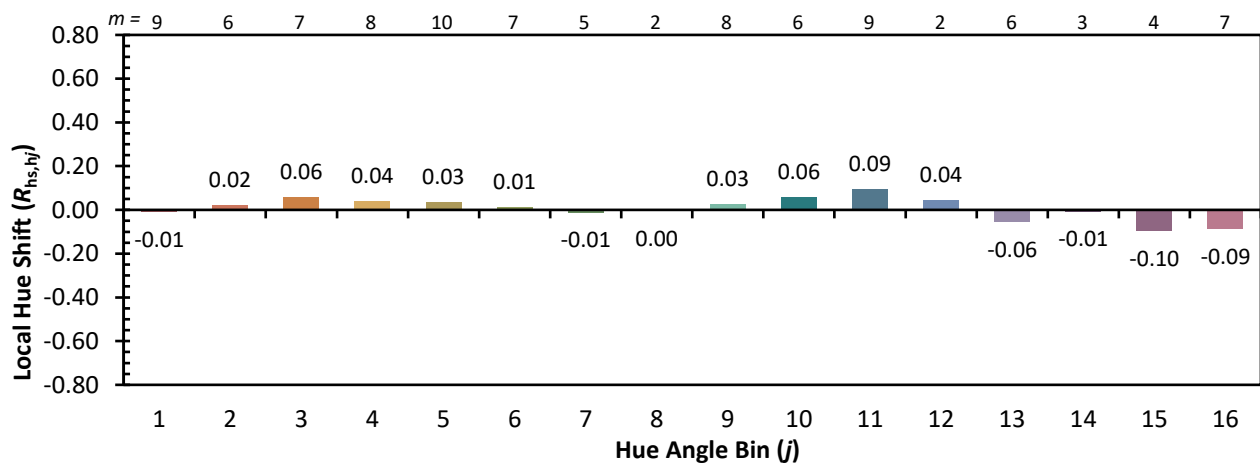


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 90 | CES51 = 99 | CES76 = 83 |
| CES02 = 62 | CES27 = 93 | CES52 = 97 | CES77 = 87 |
| CES03 = 31 | CES28 = 94 | CES53 = 95 | CES78 = 79 |
| CES04 = 69 | CES29 = 91 | CES54 = 96 | CES79 = 94 |
| CES05 = 49 | CES30 = 98 | CES55 = 95 | CES80 = 91 |
| CES06 = 50 | CES31 = 92 | CES56 = 95 | CES81 = 80 |
| CES07 = 42 | CES32 = 84 | CES57 = 94 | CES82 = 96 |
| CES08 = 41 | CES33 = 95 | CES58 = 95 | CES83 = 95 |
| CES09 = 29 | CES34 = 90 | CES59 = 98 | CES84 = 93 |
| CES10 = 74 | CES35 = 94 | CES60 = 93 | CES85 = 82 |
| CES11 = 57 | CES36 = 84 | CES61 = 93 | CES86 = 84 |
| CES12 = 63 | CES37 = 92 | CES62 = 90 | CES87 = 90 |
| CES13 = 43 | CES38 = 93 | CES63 = 92 | CES88 = 97 |
| CES14 = 74 | CES39 = 98 | CES64 = 91 | CES89 = 84 |
| CES15 = 71 | CES40 = 96 | CES65 = 88 | CES90 = 99 |
| CES16 = 47 | CES41 = 98 | CES66 = 88 | CES91 = 74 |
| CES17 = 49 | CES42 = 89 | CES67 = 87 | CES92 = 78 |
| CES18 = 56 | CES43 = 89 | CES68 = 87 | CES93 = 87 |
| CES19 = 71 | CES44 = 99 | CES69 = 88 | CES94 = 75 |
| CES20 = 66 | CES45 = 93 | CES70 = 84 | CES95 = 83 |
| CES21 = 85 | CES46 = 95 | CES71 = 80 | CES96 = 91 |
| CES22 = 78 | CES47 = 92 | CES72 = 93 | CES97 = 93 |
| CES23 = 91 | CES48 = 96 | CES73 = 78 | CES98 = 93 |
| CES24 = 90 | CES49 = 93 | CES74 = 92 | CES99 = 94 |
| CES25 = 71 | CES50 = 99 | CES75 = 81 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)