

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-UPL15

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: REPORT IS A COMBINATION OF REPORTS P1431901 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-UPL15
Description: Elevate Round Highbay at, 60000 lumens, 4000K 80CRI LEDs with TASM lens
Light Source: -
Ballast/Driver: -

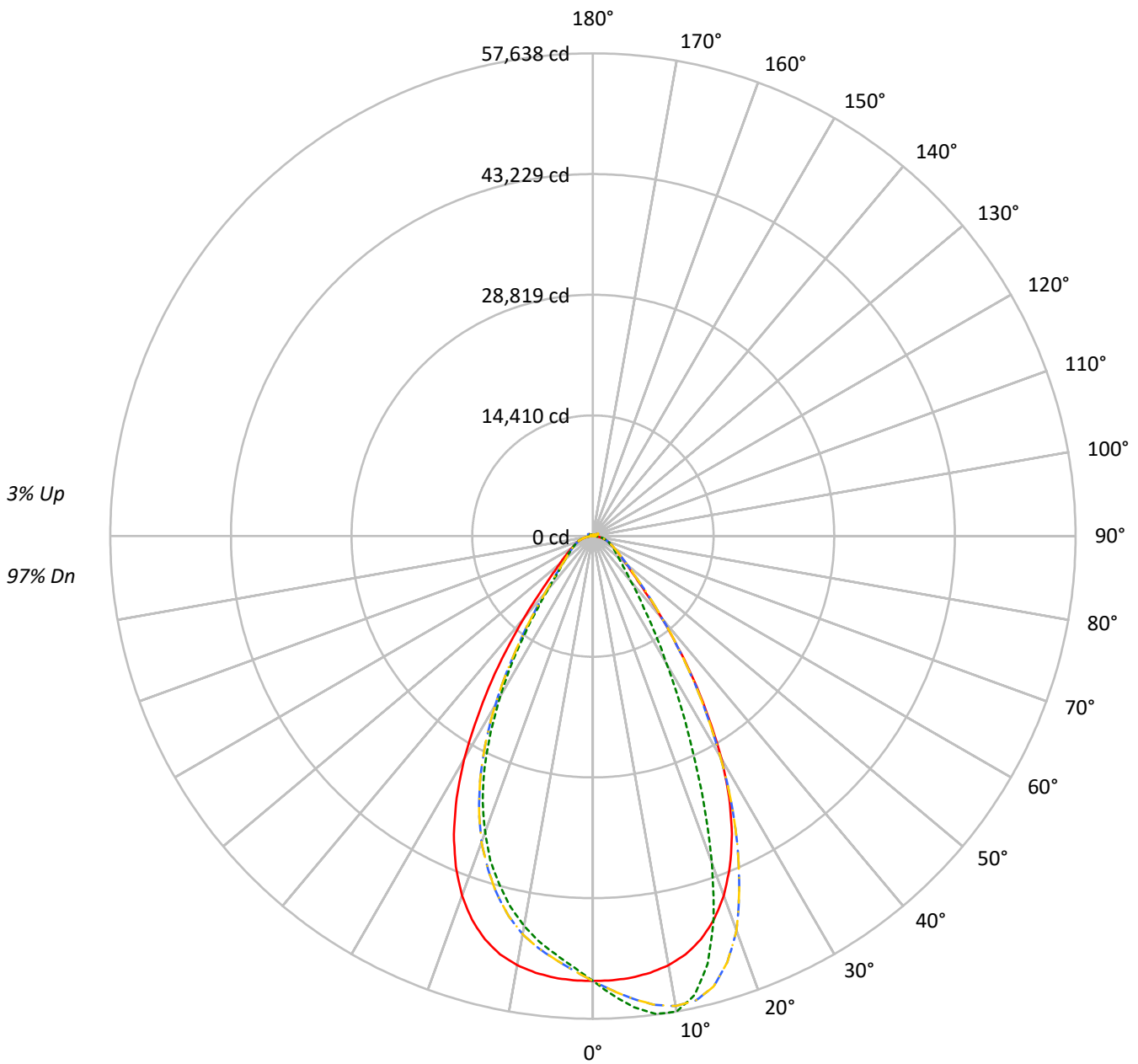
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60882.1 lumens
Efficiency: N/A
Efficacy: 179.2 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): 339.7
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-UPL15

Luminous Intensity Polar Plot



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



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 100 | 100 | 100 | 97 |
| 1 | 111 | 108 | 105 | 102 | 109 | 105 | 103 | 100 | 101 | 99 | 97 | 97 | 95 | 93 | 93 | 91 | 90 | 93 | 91 | 90 | 88 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 89 | 86 | 84 | 86 | 84 | 81 | 86 | 84 | 81 | 79 |
| 3 | 98 | 90 | 84 | 79 | 96 | 89 | 83 | 79 | 85 | 81 | 77 | 83 | 79 | 75 | 80 | 77 | 74 | 80 | 77 | 74 | 72 |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 79 | 74 | 70 | 77 | 72 | 69 | 75 | 71 | 68 | 75 | 71 | 68 | 66 |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 69 | 65 | 74 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 62 | 70 | 66 | 62 | 60 |
| 6 | 82 | 71 | 65 | 60 | 80 | 70 | 64 | 59 | 69 | 63 | 59 | 67 | 62 | 58 | 65 | 61 | 57 | 65 | 61 | 57 | 56 |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 58 | 54 | 63 | 58 | 54 | 61 | 57 | 53 | 61 | 57 | 53 | 52 |
| 8 | 73 | 62 | 56 | 51 | 72 | 62 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 58 | 53 | 50 | 48 |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 50 | 47 | 55 | 50 | 46 | 55 | 50 | 46 | 45 |
| 10 | 66 | 55 | 49 | 44 | 65 | 55 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 52 | 47 | 43 | 52 | 47 | 43 | 42 |

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 | 8.3 |
| 10°-20° | 13740.8 | 22.6 |
| 20°-30° | 16115.1 | 26.5 |
| 30°-40° | 11207.0 | 18.4 |
| 40°-50° | 5569.4 | 9.1 |
| 50°-60° | 3331.1 | 5.5 |
| 60°-70° | 2344.5 | 3.9 |
| 70°-80° | 1510.3 | 2.5 |
| 80°-90° | 482.3 | 0.8 |
| 90°-100° | 42.0 | 0.1 |
| 100°-110° | 262.7 | 0.4 |
| 110°-120° | 483.3 | 0.8 |
| 120°-130° | 288.9 | 0.5 |
| 130°-140° | 177.2 | 0.3 |
| 140°-150° | 124.8 | 0.2 |
| 150°-160° | 83.9 | 0.1 |
| 160°-170° | 50.6 | 0.1 |
| 170°-180° | 17.4 | 0.0 |
| 0°-30° | 34906.6 | 57.3 |
| 0°-40° | 46113.6 | 75.7 |
| 0°-60° | 55014.1 | 90.4 |
| 0°-90° | 59351.3 | 97.5 |
| 90°-120° | 788.0 | 1.3 |
| 90°-150° | 1378.9 | 2.3 |
| 90°-180° | 1531.0 | 2.5 |
| 0°-180° | 60882.1 | 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° | 12 | 19 | 12 | 12 | 12 | 24 |
| 95° | 23 | 26 | 23 | 19 | 23 | 24 |
| 105° | 121 | 68 | 121 | 92 | 121 | 163 |
| 115° | 514 | 444 | 514 | 417 | 514 | 468 |
| 125° | 330 | 351 | 330 | 302 | 330 | 304 |
| 135° | 213 | 247 | 213 | 222 | 213 | 169 |
| 145° | 196 | 206 | 196 | 190 | 196 | 123 |
| 155° | 179 | 187 | 179 | 176 | 179 | 83 |
| 165° | 177 | 187 | 177 | 175 | 177 | 50 |
| 175° | 183 | 192 | 183 | 179 | 183 | 17 |
| 180° | 184 | 184 | 184 | 184 | 184 | |



TEST NUMBER:
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

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° | 11.7 | 20.2 | 34.4 | 22.5 | 18.7 | 22.5 | 34.4 | 20.2 | 11.7 | 20.0 | 30.8 |
| 92.5° | 15.1 | 26.8 | 47.6 | 28.3 | 22.9 | 28.3 | 47.6 | 26.8 | 15.1 | 25.8 | 48.9 |
| 95° | 22.7 | 32.6 | 60.0 | 30.8 | 26.2 | 30.8 | 60.0 | 32.6 | 22.7 | 34.1 | 68.0 |
| 97.5° | 34.2 | 40.0 | 67.5 | 32.5 | 30.3 | 32.5 | 67.5 | 40.0 | 34.2 | 41.5 | 77.9 |
| 100° | 45.0 | 45.0 | 121.2 | 36.6 | 33.6 | 36.6 | 121.2 | 45.0 | 45.0 | 51.6 | 120.9 |
| 102.5° | 67.3 | 87.3 | 278.4 | 69.0 | 39.4 | 69.0 | 278.4 | 87.3 | 67.3 | 95.4 | 255.6 |
| 105° | 121.0 | 196.4 | 487.6 | 169.0 | 67.7 | 169.0 | 487.6 | 196.4 | 121.0 | 197.9 | 454.8 |
| 107.5° | 227.7 | 364.2 | 627.3 | 327.7 | 147.9 | 327.7 | 627.3 | 364.2 | 227.7 | 349.2 | 600.5 |
| 110° | 363.2 | 508.1 | 684.3 | 446.8 | 291.7 | 446.8 | 684.3 | 508.1 | 363.2 | 478.9 | 629.4 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 472.3 | 565.9 | 668.6 | 494.7 | 400.8 | 494.7 | 668.6 | 565.9 | 472.3 | 528.5 | 602.9 |
| 115° | 513.8 | 557.7 | 597.5 | 493.0 | 443.8 | 493.0 | 597.5 | 557.7 | 513.8 | 516.1 | 538.5 |
| 117.5° | 496.5 | 510.5 | 516.5 | 463.3 | 446.3 | 463.3 | 516.5 | 510.5 | 496.5 | 465.1 | 457.5 |
| 120° | 448.5 | 442.8 | 436.5 | 419.5 | 421.5 | 419.5 | 436.5 | 442.8 | 448.5 | 406.4 | 382.2 |
| 122.5° | 389.2 | 376.8 | 369.5 | 375.8 | 387.6 | 375.8 | 369.5 | 376.8 | 389.2 | 347.0 | 328.7 |
| 125° | 330.5 | 318.1 | 323.4 | 337.8 | 350.6 | 337.8 | 323.4 | 318.1 | 330.5 | 296.0 | 290.8 |
| 127.5° | 281.9 | 276.1 | 289.5 | 305.6 | 316.7 | 305.6 | 289.5 | 276.1 | 281.9 | 259.6 | 263.6 |
| 130° | 247.4 | 248.0 | 265.6 | 280.1 | 286.9 | 280.1 | 265.6 | 248.0 | 247.4 | 236.6 | 247.2 |
| 132.5° | 226.0 | 231.7 | 248.4 | 261.3 | 265.6 | 261.3 | 248.4 | 231.7 | 226.0 | 223.7 | 236.8 |
| 135° | 213.0 | 220.9 | 237.0 | 244.6 | 247.4 | 244.6 | 237.0 | 220.9 | 213.0 | 214.8 | 226.0 |
| 137.5° | 205.7 | 213.7 | 225.4 | 232.4 | 231.7 | 232.4 | 225.4 | 213.7 | 205.7 | 209.2 | 218.1 |
| 140° | 201.8 | 209.7 | 214.7 | 222.4 | 222.8 | 222.4 | 214.7 | 209.7 | 201.8 | 203.4 | 210.9 |
| 142.5° | 197.8 | 204.9 | 207.4 | 213.5 | 212.9 | 213.5 | 207.4 | 204.9 | 197.8 | 199.5 | 204.4 |
| 145° | 196.3 | 201.9 | 199.3 | 206.1 | 205.5 | 206.1 | 199.3 | 201.9 | 196.3 | 196.2 | 199.6 |
| 147.5° | 192.2 | 196.2 | 193.7 | 199.6 | 199.1 | 199.6 | 193.7 | 196.2 | 192.2 | 192.2 | 193.9 |
| 150° | 188.1 | 191.4 | 187.2 | 193.9 | 195.1 | 193.9 | 187.2 | 191.4 | 188.1 | 187.3 | 189.1 |
| 152.5° | 182.5 | 185.8 | 182.5 | 190.1 | 190.3 | 190.1 | 182.5 | 185.8 | 182.5 | 181.7 | 183.5 |
| 155° | 178.7 | 180.4 | 178.7 | 186.4 | 187.4 | 186.4 | 178.7 | 180.4 | 178.7 | 177.7 | 179.7 |
| 157.5° | 176.6 | 178.4 | 177.6 | 184.4 | 185.4 | 184.4 | 177.6 | 178.4 | 176.6 | 176.6 | 177.6 |
| 160° | 176.5 | 178.1 | 178.3 | 184.3 | 185.3 | 184.3 | 178.3 | 178.1 | 176.5 | 176.3 | 177.3 |
| 162.5° | 176.8 | 176.8 | 178.0 | 184.0 | 186.0 | 184.0 | 178.0 | 176.8 | 176.8 | 176.8 | 177.6 |
| 165° | 177.3 | 178.2 | 178.5 | 183.8 | 186.6 | 183.8 | 178.5 | 178.2 | 177.3 | 177.2 | 177.2 |
| 167.5° | 178.5 | 177.7 | 179.7 | 185.2 | 188.0 | 185.2 | 179.7 | 177.7 | 178.5 | 178.3 | 178.3 |
| 170° | 177.9 | 178.9 | 180.0 | 185.5 | 188.2 | 185.5 | 180.0 | 178.9 | 177.9 | 178.7 | 178.5 |
| 172.5° | 180.9 | 180.9 | 182.2 | 186.8 | 190.4 | 186.8 | 182.2 | 180.9 | 180.9 | 180.7 | 181.5 |
| 175° | 182.9 | 183.0 | 184.1 | 187.9 | 191.6 | 187.9 | 184.1 | 183.0 | 182.9 | 181.9 | 181.9 |
| 177.5° | 182.0 | 184.0 | 185.9 | 189.8 | 194.2 | 189.8 | 185.9 | 184.0 | 182.0 | 181.9 | 181.9 |
| 180° | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

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° | 18.4 | 11.7 | 18.4 | 30.8 | 20.0 | 11.7 |
| 92.5° | 27.5 | 16.7 | 27.5 | 48.9 | 25.8 | 15.1 |
| 95° | 31.6 | 19.2 | 31.6 | 68.0 | 34.1 | 22.7 |
| 97.5° | 34.9 | 25.1 | 34.9 | 77.9 | 41.5 | 34.2 |
| 100° | 40.7 | 32.6 | 40.7 | 120.9 | 51.6 | 45.0 |
| 102.5° | 85.3 | 54.1 | 85.3 | 255.6 | 95.4 | 67.3 |
| 105° | 178.7 | 92.1 | 178.7 | 454.8 | 197.9 | 121.0 |
| 107.5° | 319.2 | 158.2 | 319.2 | 600.5 | 349.2 | 227.7 |
| 110° | 423.4 | 293.8 | 423.4 | 629.4 | 478.9 | 363.2 |



TEST NUMBER:

CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 454.8 | 396.3 | 454.8 | 602.9 | 528.5 | 472.3 |
| 115° | 437.4 | 417.0 | 437.4 | 538.5 | 516.1 | 513.8 |
| 117.5° | 399.4 | 402.9 | 399.4 | 457.5 | 465.1 | 496.5 |
| 120° | 355.6 | 373.1 | 355.6 | 382.2 | 406.4 | 448.5 |
| 122.5° | 316.1 | 335.9 | 316.1 | 328.7 | 347.0 | 389.2 |
| 125° | 281.4 | 302.2 | 281.4 | 290.8 | 296.0 | 330.5 |
| 127.5° | 257.4 | 271.6 | 257.4 | 263.6 | 259.6 | 281.9 |
| 130° | 239.4 | 251.0 | 239.4 | 247.2 | 236.6 | 247.4 |
| 132.5° | 227.2 | 234.6 | 227.2 | 236.8 | 223.7 | 226.0 |
| 135° | 216.6 | 222.2 | 216.6 | 226.0 | 214.8 | 213.0 |
| 137.5° | 207.7 | 212.5 | 207.7 | 218.1 | 209.2 | 205.7 |
| 140° | 200.6 | 204.6 | 200.6 | 210.9 | 203.4 | 201.8 |
| 142.5° | 192.5 | 195.8 | 192.5 | 204.4 | 199.5 | 197.8 |
| 145° | 187.9 | 190.4 | 187.9 | 199.6 | 196.2 | 196.3 |
| 147.5° | 184.0 | 185.7 | 184.0 | 193.9 | 192.2 | 192.2 |
| 150° | 180.2 | 181.9 | 180.2 | 189.1 | 187.3 | 188.1 |
| 152.5° | 175.4 | 178.1 | 175.4 | 183.5 | 181.7 | 182.5 |
| 155° | 173.3 | 176.0 | 173.3 | 179.7 | 177.7 | 178.7 |
| 157.5° | 172.8 | 175.6 | 172.8 | 177.6 | 176.6 | 176.6 |
| 160° | 173.3 | 175.2 | 173.3 | 177.3 | 176.3 | 176.5 |
| 162.5° | 172.9 | 174.7 | 172.9 | 177.6 | 176.8 | 176.8 |
| 165° | 174.0 | 175.0 | 174.0 | 177.2 | 177.2 | 177.3 |
| 167.5° | 174.2 | 175.0 | 174.2 | 178.3 | 178.3 | 178.5 |
| 170° | 175.2 | 176.2 | 175.2 | 178.5 | 178.7 | 177.9 |
| 172.5° | 177.2 | 178.2 | 177.2 | 181.5 | 180.7 | 180.9 |
| 175° | 178.4 | 179.4 | 178.4 | 181.9 | 181.9 | 182.9 |
| 177.5° | 180.2 | 181.2 | 180.2 | 181.9 | 181.9 | 182.0 |
| 180° | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 | 184.0 |



TEST NUMBER: CATALOG
 CATALOG NUMBER: EHBR1-60-UNV-TASM-L840-UPL15

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 | 20.15 | 21.31 | 20.56 | 21.68 | 22.06 | 19.47 | 20.63 | 19.88 | 21.00 | 21.38 |
| | 3H | 21.70 | 22.73 | 22.12 | 23.12 | 23.55 | 21.32 | 22.35 | 21.74 | 22.74 | 23.17 |
| | 4H | 22.34 | 23.30 | 22.79 | 23.71 | 24.16 | 22.10 | 23.07 | 22.55 | 23.47 | 23.92 |
| | 6H | 22.82 | 23.71 | 23.28 | 24.13 | 24.59 | 22.74 | 23.63 | 23.21 | 24.06 | 24.52 |
| | 8H | 22.97 | 23.81 | 23.45 | 24.26 | 24.72 | 22.97 | 23.81 | 23.44 | 24.25 | 24.72 |
| | 12H | 23.04 | 23.85 | 23.52 | 24.28 | 24.78 | 23.10 | 23.90 | 23.57 | 24.33 | 24.83 |
| 4H | 2H | 20.57 | 21.53 | 21.02 | 21.94 | 22.39 | 20.04 | 21.01 | 20.50 | 21.42 | 21.87 |
| | 3H | 22.37 | 23.17 | 22.83 | 23.62 | 24.09 | 22.11 | 22.90 | 22.57 | 23.36 | 23.83 |
| | 4H | 23.14 | 23.86 | 23.62 | 24.33 | 24.83 | 23.01 | 23.73 | 23.49 | 24.20 | 24.71 |
| | 6H | 23.76 | 24.38 | 24.27 | 24.87 | 25.40 | 23.79 | 24.41 | 24.30 | 24.90 | 25.43 |
| | 8H | 23.95 | 24.53 | 24.47 | 25.03 | 25.56 | 24.06 | 24.63 | 24.57 | 25.13 | 25.66 |
| | 12H | 24.06 | 24.57 | 24.59 | 25.10 | 25.64 | 24.23 | 24.74 | 24.76 | 25.27 | 25.80 |
| 8H | 4H | 23.39 | 23.97 | 23.91 | 24.47 | 25.00 | 23.30 | 23.87 | 23.81 | 24.37 | 24.90 |
| | 6H | 24.14 | 24.60 | 24.68 | 25.15 | 25.69 | 24.20 | 24.67 | 24.75 | 25.21 | 25.75 |
| | 8H | 24.40 | 24.82 | 24.97 | 25.38 | 25.94 | 24.55 | 24.97 | 25.12 | 25.53 | 26.08 |
| | 12H | 24.58 | 24.95 | 25.14 | 25.49 | 26.12 | 24.80 | 25.17 | 25.36 | 25.71 | 26.34 |
| 12H | 4H | 23.40 | 23.91 | 23.94 | 24.44 | 24.98 | 23.31 | 23.82 | 23.84 | 24.35 | 24.88 |
| | 6H | 24.18 | 24.60 | 24.74 | 25.16 | 25.71 | 24.24 | 24.66 | 24.81 | 25.22 | 25.78 |
| | 8H | 24.50 | 24.86 | 25.06 | 25.40 | 26.03 | 24.65 | 25.02 | 25.21 | 25.56 | 26.19 |