

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: P1433859

Luminaire Tested: EHBR1-42-UNV-A1-L940-UPL12

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433859
REPORT IS A COMBINATION OF REPORTS P1431796 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-42-UNV-A1-L940-UPL12
Description: Elevate Round Highbay at, 42000 lumens, 4000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

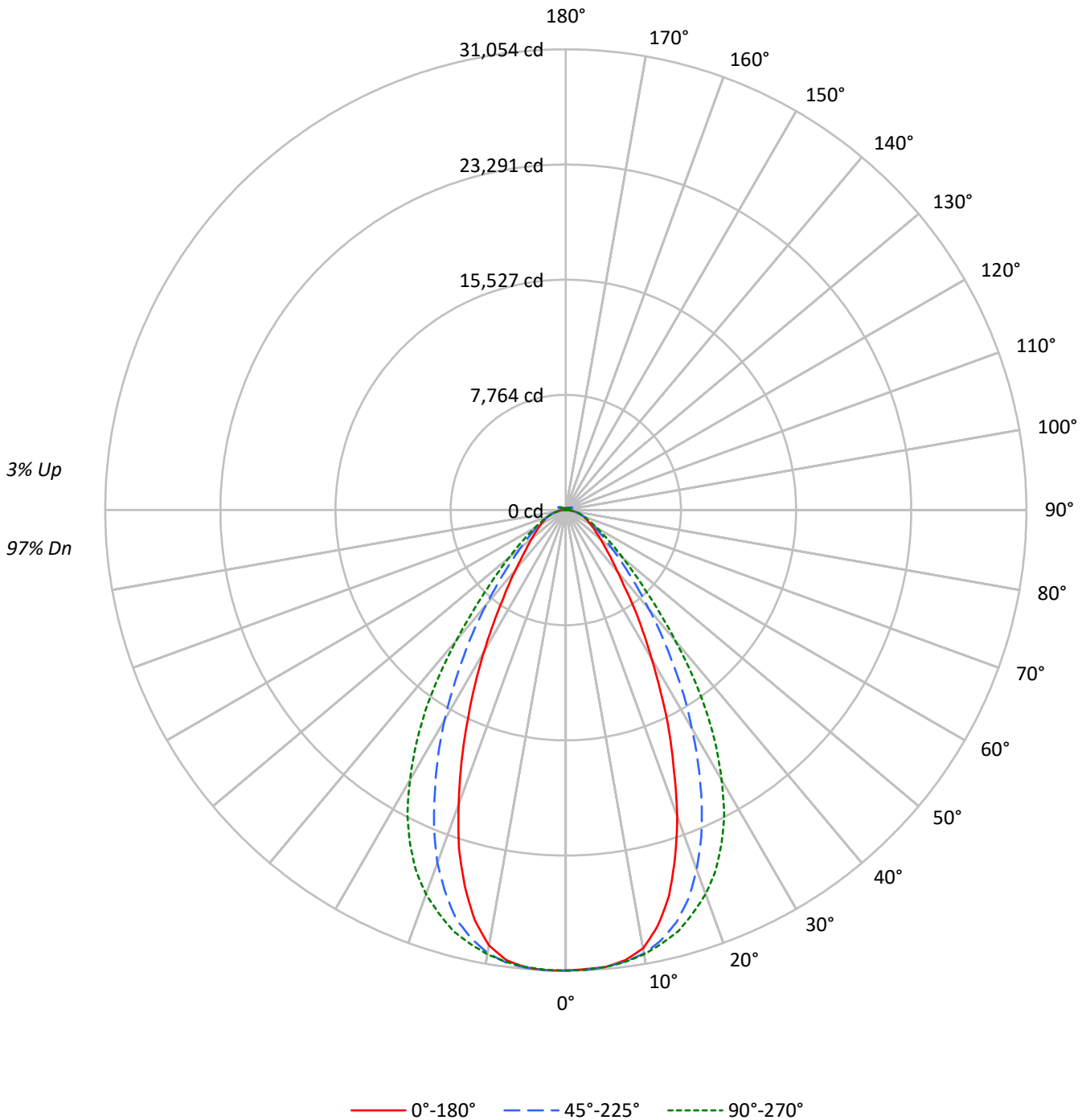
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39689.1 lumens
Efficiency: N/A
Efficacy: 171.2 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 1.07 / 0.95
Luminous Opening: Vertical Cylinder (Dia: 1.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 231.8
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: P1433859
CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL12

Luminous Intensity Polar Plot





TEST NUMBER: P1433859
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL12

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 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 104 | 104 | 104 | 99 | 99 | 99 | 99 | 99 | 99 | 97 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 100 | 98 | 96 | 96 | 94 | 92 | 92 | 91 | 89 | 89 | 89 | 89 | 87 |
| 2 | 104 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 92 | 88 | 84 | 88 | 85 | 82 | 85 | 82 | 80 | 80 | 80 | 80 | 78 |
| 3 | 97 | 89 | 83 | 78 | 94 | 87 | 81 | 77 | 84 | 79 | 75 | 81 | 77 | 74 | 78 | 75 | 72 | 72 | 72 | 72 | 70 |
| 4 | 91 | 81 | 75 | 69 | 89 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 70 | 67 | 73 | 69 | 65 | 65 | 65 | 65 | 64 |
| 5 | 85 | 75 | 68 | 63 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 67 | 63 | 60 | 60 | 60 | 60 | 58 |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 62 | 57 | 66 | 60 | 56 | 65 | 59 | 55 | 63 | 58 | 55 | 55 | 55 | 55 | 53 |
| 7 | 75 | 64 | 57 | 52 | 74 | 63 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 59 | 54 | 50 | 50 | 50 | 50 | 49 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 52 | 48 | 58 | 52 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 47 | 47 | 47 | 45 |
| 9 | 67 | 56 | 49 | 45 | 66 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 43 | 43 | 43 | 43 | 42 |
| 10 | 64 | 52 | 46 | 41 | 62 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 44 | 41 | 49 | 44 | 40 | 40 | 40 | 40 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|--------|--------|--------|--------|
| 0° | 145771 | 145771 | 145771 | 145771 | 145771 |
| 5° | 144808 | 144786 | 144793 | 145048 | 144960 |
| 10° | 141228 | 142874 | 143101 | 142697 | 140304 |
| 15° | 128212 | 137159 | 139982 | 136059 | 125268 |
| 20° | 106842 | 125483 | 134056 | 123120 | 102682 |
| 25° | 82627 | 108499 | 124361 | 104537 | 78346 |
| 30° | 60228 | 88360 | 109241 | 85007 | 57166 |
| 35° | 43414 | 68104 | 89780 | 65171 | 40581 |
| 40° | 31234 | 50300 | 66163 | 48178 | 30271 |
| 45° | 24612 | 36799 | 46210 | 35204 | 23760 |
| 50° | 20420 | 27649 | 33446 | 26737 | 20110 |
| 55° | 17834 | 21831 | 25329 | 21467 | 17594 |
| 60° | 16084 | 18226 | 20183 | 18112 | 16197 |
| 65° | 15043 | 16076 | 16961 | 16126 | 15185 |
| 70° | 14285 | 14625 | 15078 | 14707 | 14426 |
| 75° | 13327 | 13245 | 13327 | 13282 | 13456 |
| 80° | 12036 | 11172 | 10924 | 11345 | 12036 |
| 85° | 8342 | 7076 | 7000 | 7189 | 8586 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 48417 cd/sqm



TEST NUMBER: P1433859
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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 2931.3 | 7.4 |
| 10°-20° | 7878.4 | 19.9 |
| 20°-30° | 9580.1 | 24.1 |
| 30°-40° | 7803.7 | 19.7 |
| 40°-50° | 4685.3 | 11.8 |
| 50°-60° | 2696.4 | 6.8 |
| 60°-70° | 1687.5 | 4.3 |
| 70°-80° | 993.9 | 2.5 |
| 80°-90° | 292.6 | 0.7 |
| 90°-100° | 29.8 | 0.1 |
| 100°-110° | 196.5 | 0.5 |
| 110°-120° | 363.4 | 0.9 |
| 120°-130° | 215.9 | 0.5 |
| 130°-140° | 131.7 | 0.3 |
| 140°-150° | 92.8 | 0.2 |
| 150°-160° | 61.6 | 0.2 |
| 160°-170° | 36.0 | 0.1 |
| 170°-180° | 12.2 | 0.0 |
| 0°-30° | 20389.8 | 51.4 |
| 0°-40° | 28193.5 | 71.0 |
| 0°-60° | 35575.2 | 89.6 |
| 0°-90° | 38549.3 | 97.1 |
| 90°-120° | 589.7 | 1.5 |
| 90°-150° | 1030.0 | 2.6 |
| 90°-180° | 1140.0 | 2.9 |
| 0°-180° | 39689.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-------|-------|-------|-------|-------|------|
| 0° | 31041 | 31041 | 31041 | 31041 | 31041 | |
| 5° | 30919 | 30914 | 30916 | 30970 | 30951 | 2922 |
| 15° | 26898 | 28775 | 29367 | 28544 | 26281 | 7400 |
| 25° | 16501 | 21667 | 24835 | 20876 | 15646 | 7518 |
| 35° | 7968 | 12500 | 16478 | 11961 | 7448 | 5041 |
| 45° | 3982 | 5954 | 7477 | 5696 | 3844 | 3141 |
| 55° | 2410 | 2950 | 3423 | 2901 | 2378 | 2179 |
| 65° | 1570 | 1678 | 1770 | 1683 | 1585 | 1561 |
| 75° | 939 | 933 | 939 | 936 | 948 | 994 |
| 85° | 287 | 243 | 241 | 247 | 295 | 306 |
| 90° | 9 | 22 | 8 | 24 | 9 | 18 |
| 95° | 15 | 51 | 16 | 43 | 14 | 14 |
| 105° | 70 | 344 | 90 | 366 | 46 | 93 |
| 115° | 316 | 406 | 387 | 449 | 330 | 291 |
| 125° | 228 | 217 | 247 | 241 | 260 | 208 |
| 135° | 168 | 168 | 158 | 176 | 182 | 132 |
| 145° | 142 | 147 | 145 | 149 | 152 | 90 |
| 155° | 129 | 131 | 130 | 132 | 139 | 60 |
| 165° | 126 | 127 | 125 | 126 | 131 | 36 |
| 175° | 130 | 129 | 126 | 128 | 132 | 12 |
| 180° | 129 | 129 | 129 | 129 | 129 | |



TEST NUMBER: P1433859
 CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL12

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 31041.0 | 31041.0 | 31041.0 | 31041.0 | 31041.0 | 31041.0 | 31041.0 | 31041.0 | 31041.0 |
| 2.5° | 30972.7 | 31000.6 | 31012.4 | 31018.8 | 31026.0 | 31045.5 | 31053.9 | 31040.3 | 31051.9 |
| 5° | 30918.7 | 30920.7 | 30914.2 | 30943.4 | 30915.5 | 30934.9 | 30970.1 | 30956.5 | 30951.2 |
| 7.5° | 30604.0 | 30669.0 | 30707.4 | 30717.1 | 30722.3 | 30746.5 | 30771.1 | 30631.3 | 30610.5 |
| 10° | 30005.9 | 30114.5 | 30355.6 | 30424.6 | 30403.8 | 30442.8 | 30318.0 | 29952.6 | 29809.6 |
| 12.5° | 28694.6 | 29076.2 | 29702.9 | 29981.9 | 29931.2 | 29965.6 | 29540.4 | 28769.3 | 28326.0 |
| 15° | 26898.2 | 27458.0 | 28775.2 | 29325.2 | 29367.4 | 29325.2 | 28544.4 | 27042.0 | 26280.6 |
| 17.5° | 24510.3 | 25544.0 | 27483.4 | 28550.9 | 28489.7 | 28510.0 | 27027.6 | 24806.8 | 23935.6 |
| 20° | 21959.1 | 23061.1 | 25790.4 | 27571.1 | 27552.3 | 27439.1 | 25304.7 | 22375.9 | 21104.2 |
| 22.5° | 19073.8 | 20495.0 | 23850.4 | 26366.4 | 26359.2 | 26170.8 | 23206.7 | 19721.4 | 18352.1 |
| 25° | 16500.6 | 17894.4 | 21667.2 | 24890.6 | 24834.7 | 24620.1 | 20876.0 | 17073.3 | 15645.6 |
| 27.5° | 13840.2 | 15289.3 | 19336.5 | 23161.3 | 23122.9 | 22888.9 | 18647.9 | 14598.2 | 13239.4 |
| 30° | 11584.8 | 12909.8 | 16995.9 | 21258.3 | 21012.5 | 20985.9 | 16351.0 | 12306.5 | 10995.8 |
| 32.5° | 9652.6 | 10788.5 | 14789.4 | 19268.2 | 18833.2 | 18957.4 | 14061.9 | 10389.9 | 9090.9 |
| 35° | 7968.1 | 8968.7 | 12499.6 | 16966.7 | 16477.8 | 16638.4 | 11961.3 | 8525.3 | 7448.0 |
| 37.5° | 6466.9 | 7429.1 | 10558.9 | 14728.3 | 13980.7 | 14283.5 | 10113.6 | 7119.6 | 6256.3 |
| 40° | 5413.7 | 6177.0 | 8718.3 | 12272.0 | 11467.8 | 11961.3 | 8350.4 | 5938.4 | 5246.7 |
| 42.5° | 4664.8 | 5162.7 | 7195.8 | 9927.0 | 9310.0 | 9659.8 | 6882.3 | 4964.5 | 4446.9 |
| 45° | 3982.1 | 4379.4 | 5954.0 | 7833.6 | 7476.6 | 7801.0 | 5695.9 | 4233.0 | 3844.3 |
| 47.5° | 3478.2 | 3784.4 | 4901.4 | 6325.9 | 6104.1 | 6206.9 | 4757.1 | 3694.1 | 3378.1 |
| 50° | 3043.3 | 3280.0 | 4120.6 | 5105.5 | 4984.6 | 5047.7 | 3984.7 | 3214.3 | 2997.1 |
| 52.5° | 2705.2 | 2878.8 | 3456.1 | 4196.0 | 4136.2 | 4145.9 | 3395.7 | 2827.5 | 2670.1 |
| 55° | 2410.1 | 2531.0 | 2950.3 | 3437.3 | 3423.0 | 3425.6 | 2901.0 | 2505.7 | 2377.6 |
| 57.5° | 2152.0 | 2252.1 | 2535.6 | 2887.3 | 2866.5 | 2871.1 | 2512.2 | 2225.4 | 2142.9 |
| 60° | 1933.5 | 2000.5 | 2191.0 | 2440.0 | 2426.3 | 2420.5 | 2177.3 | 1975.7 | 1947.1 |
| 62.5° | 1739.8 | 1782.7 | 1914.6 | 2091.5 | 2065.5 | 2071.3 | 1914.0 | 1784.7 | 1742.4 |
| 65° | 1570.1 | 1585.0 | 1678.0 | 1787.3 | 1770.3 | 1784.7 | 1683.2 | 1594.8 | 1585.0 |
| 67.5° | 1404.3 | 1419.3 | 1473.9 | 1547.4 | 1527.8 | 1539.5 | 1475.2 | 1423.2 | 1414.7 |
| 70° | 1253.4 | 1252.8 | 1283.3 | 1323.0 | 1323.0 | 1325.0 | 1290.5 | 1259.3 | 1265.8 |
| 72.5° | 1097.5 | 1093.6 | 1102.6 | 1129.2 | 1122.2 | 1146.9 | 1110.4 | 1100.6 | 1102.0 |
| 75° | 938.8 | 927.7 | 933.0 | 946.6 | 938.8 | 951.8 | 935.6 | 947.9 | 947.9 |
| 77.5° | 789.3 | 768.4 | 762.0 | 763.9 | 749.6 | 769.1 | 773.0 | 781.5 | 800.9 |
| 80° | 633.2 | 604.0 | 587.7 | 587.0 | 574.7 | 587.0 | 596.8 | 614.4 | 633.2 |
| 82.5° | 470.0 | 444.7 | 417.4 | 412.2 | 404.4 | 411.5 | 424.6 | 445.3 | 475.9 |
| 85° | 286.7 | 260.0 | 243.2 | 234.0 | 240.6 | 240.6 | 247.1 | 276.3 | 295.1 |
| 87.5° | 103.4 | 90.4 | 74.2 | 74.8 | 76.7 | 79.3 | 82.5 | 104.1 | 113.8 |
| 90° | 9.4 | 13.1 | 22.5 | 14.3 | 8.1 | 13.8 | 23.8 | 12.5 | 8.8 |
| 92.5° | 12.6 | 20.0 | 36.3 | 18.7 | 10.6 | 18.7 | 33.8 | 16.9 | 11.9 |
| 95° | 15.1 | 23.1 | 50.7 | 25.1 | 15.7 | 23.1 | 43.1 | 18.7 | 14.4 |
| 97.5° | 18.8 | 25.6 | 58.2 | 30.7 | 24.4 | 28.8 | 48.8 | 20.0 | 17.5 |
| 100° | 24.4 | 30.0 | 90.7 | 37.5 | 32.5 | 32.5 | 89.4 | 23.1 | 20.7 |
| 102.5° | 40.7 | 63.8 | 192.8 | 70.7 | 49.5 | 63.8 | 207.8 | 47.0 | 25.1 |
| 105° | 69.5 | 134.5 | 343.5 | 148.3 | 90.1 | 146.5 | 366.0 | 122.6 | 45.7 |
| 107.5° | 119.5 | 240.9 | 453.0 | 262.8 | 170.9 | 273.4 | 471.8 | 242.8 | 106.4 |
| 110° | 222.2 | 319.7 | 475.0 | 361.0 | 273.4 | 382.3 | 514.9 | 332.9 | 215.3 |



TEST NUMBER: P1433859

CATALOG NUMBER: EHBR1-42-UNV-A1-L940-UPL12

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 299.8 | 343.5 | 454.9 | 398.6 | 356.0 | 426.1 | 503.1 | 369.2 | 297.8 |
| 115° | 315.5 | 330.4 | 406.1 | 389.1 | 386.7 | 419.9 | 449.2 | 367.9 | 330.5 |
| 117.5° | 305.4 | 301.6 | 344.8 | 349.7 | 373.6 | 384.2 | 387.9 | 345.4 | 332.3 |
| 120° | 282.3 | 268.4 | 287.8 | 305.3 | 337.3 | 332.9 | 326.6 | 312.8 | 313.5 |
| 122.5° | 254.7 | 238.4 | 246.5 | 259.6 | 291.6 | 282.2 | 276.0 | 279.1 | 288.5 |
| 125° | 228.4 | 212.1 | 217.2 | 220.2 | 247.2 | 237.8 | 240.9 | 250.3 | 259.7 |
| 127.5° | 205.3 | 194.0 | 196.5 | 192.8 | 209.6 | 205.2 | 215.3 | 226.6 | 234.1 |
| 130° | 189.7 | 180.3 | 184.0 | 174.6 | 183.3 | 184.7 | 197.8 | 206.5 | 211.6 |
| 132.5° | 177.2 | 170.9 | 175.9 | 164.6 | 167.1 | 172.8 | 184.7 | 192.9 | 195.4 |
| 135° | 168.4 | 162.8 | 168.4 | 157.7 | 157.8 | 165.3 | 175.9 | 180.9 | 182.2 |
| 137.5° | 160.3 | 156.0 | 161.5 | 154.1 | 152.1 | 159.7 | 167.8 | 171.6 | 171.0 |
| 140° | 154.1 | 149.7 | 156.0 | 150.4 | 149.1 | 156.6 | 160.3 | 165.4 | 164.2 |
| 142.5° | 146.6 | 144.1 | 151.0 | 147.2 | 146.0 | 153.5 | 155.4 | 158.5 | 157.9 |
| 145° | 141.6 | 139.7 | 147.3 | 145.3 | 144.8 | 150.4 | 149.2 | 154.2 | 152.3 |
| 147.5° | 138.6 | 136.7 | 142.9 | 142.3 | 142.3 | 146.0 | 144.8 | 149.2 | 147.9 |
| 150° | 134.9 | 132.9 | 139.2 | 138.5 | 139.2 | 141.7 | 139.8 | 145.5 | 145.5 |
| 152.5° | 131.2 | 129.2 | 134.8 | 133.5 | 134.2 | 136.7 | 135.5 | 141.1 | 141.8 |
| 155° | 128.7 | 126.8 | 131.1 | 129.8 | 129.8 | 131.7 | 131.7 | 138.1 | 138.7 |
| 157.5° | 128.1 | 126.1 | 129.3 | 128.0 | 128.0 | 129.2 | 130.0 | 135.6 | 136.3 |
| 160° | 127.5 | 125.6 | 128.1 | 126.8 | 126.1 | 128.0 | 128.8 | 133.8 | 134.4 |
| 162.5° | 127.0 | 125.0 | 127.4 | 126.1 | 125.5 | 126.1 | 126.9 | 132.6 | 133.2 |
| 165° | 126.3 | 125.0 | 126.9 | 125.6 | 124.9 | 125.6 | 126.3 | 130.1 | 131.4 |
| 167.5° | 126.9 | 125.8 | 126.9 | 125.6 | 125.0 | 124.4 | 126.3 | 129.5 | 130.7 |
| 170° | 127.0 | 126.3 | 127.0 | 125.0 | 123.7 | 124.4 | 125.7 | 128.8 | 130.1 |
| 172.5° | 128.3 | 127.6 | 128.3 | 126.3 | 125.0 | 125.7 | 126.3 | 128.8 | 130.8 |
| 175° | 129.6 | 128.3 | 128.8 | 127.0 | 126.3 | 126.3 | 127.6 | 129.5 | 132.1 |
| 177.5° | 130.9 | 129.6 | 129.5 | 127.5 | 126.3 | 126.9 | 128.8 | 130.8 | 134.0 |
| 180° | 128.8 | 128.8 | 128.8 | 128.8 | 128.8 | 128.8 | 128.8 | 128.8 | 128.8 |



TEST NUMBER: P1433859
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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 | 18.99 | 20.20 | 19.41 | 20.58 | 20.97 | 19.97 | 21.19 | 20.39 | 21.56 | 21.95 |
| | 3H | 20.47 | 21.55 | 20.90 | 21.94 | 22.38 | 21.23 | 22.32 | 21.67 | 22.71 | 23.15 |
| | 4H | 21.07 | 22.08 | 21.53 | 22.49 | 22.95 | 21.74 | 22.74 | 22.19 | 23.16 | 23.61 |
| | 6H | 21.54 | 22.47 | 22.01 | 22.90 | 23.36 | 22.09 | 23.02 | 22.56 | 23.45 | 23.92 |
| | 8H | 21.69 | 22.57 | 22.17 | 23.02 | 23.49 | 22.19 | 23.07 | 22.67 | 23.52 | 23.99 |
| | 12H | 21.77 | 22.60 | 22.25 | 23.05 | 23.55 | 22.23 | 23.07 | 22.71 | 23.51 | 24.01 |
| 4H | 2H | 19.51 | 20.52 | 19.97 | 20.93 | 21.39 | 20.29 | 21.30 | 20.75 | 21.71 | 22.17 |
| | 3H | 21.20 | 22.03 | 21.66 | 22.49 | 22.96 | 21.78 | 22.61 | 22.25 | 23.08 | 23.55 |
| | 4H | 21.92 | 22.66 | 22.40 | 23.14 | 23.65 | 22.41 | 23.15 | 22.89 | 23.63 | 24.14 |
| | 6H | 22.50 | 23.14 | 23.01 | 23.64 | 24.18 | 22.89 | 23.53 | 23.40 | 24.03 | 24.56 |
| | 8H | 22.68 | 23.28 | 23.20 | 23.79 | 24.32 | 23.02 | 23.62 | 23.54 | 24.12 | 24.66 |
| | 12H | 22.79 | 23.32 | 23.33 | 23.86 | 24.40 | 23.09 | 23.62 | 23.63 | 24.15 | 24.70 |
| 8H | 4H | 22.14 | 22.74 | 22.66 | 23.24 | 23.78 | 22.59 | 23.19 | 23.11 | 23.69 | 24.23 |
| | 6H | 22.83 | 23.32 | 23.38 | 23.87 | 24.42 | 23.17 | 23.66 | 23.72 | 24.21 | 24.76 |
| | 8H | 23.08 | 23.52 | 23.65 | 24.09 | 24.65 | 23.37 | 23.80 | 23.94 | 24.37 | 24.93 |
| | 12H | 23.25 | 23.64 | 23.82 | 24.18 | 24.82 | 23.49 | 23.87 | 24.05 | 24.42 | 25.06 |
| 12H | 4H | 22.14 | 22.67 | 22.68 | 23.21 | 23.75 | 22.59 | 23.12 | 23.12 | 23.65 | 24.20 |
| | 6H | 22.86 | 23.29 | 23.43 | 23.86 | 24.42 | 23.19 | 23.63 | 23.76 | 24.20 | 24.76 |
| | 8H | 23.15 | 23.54 | 23.72 | 24.08 | 24.72 | 23.43 | 23.81 | 23.99 | 24.36 | 25.00 |

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

REPORT NUMBER: SP1-2506-472-7

| 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

REPORT NUMBER: SP1-2506-472-7

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)