

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: P1433358

Luminaire Tested: EHBR1-60-UNV-A1-L930-UPL24

Issue Date: 3/20/2026

Test Information

Test Method: LM-79-2019
Report Number: P1433358
REPORT IS A COMBINATION OF REPORTS P1431895 AND P1431635
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: EHBR1-60-UNV-A1-L930-UPL24
Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with A lens
Light Source: -
Ballast/Driver: -

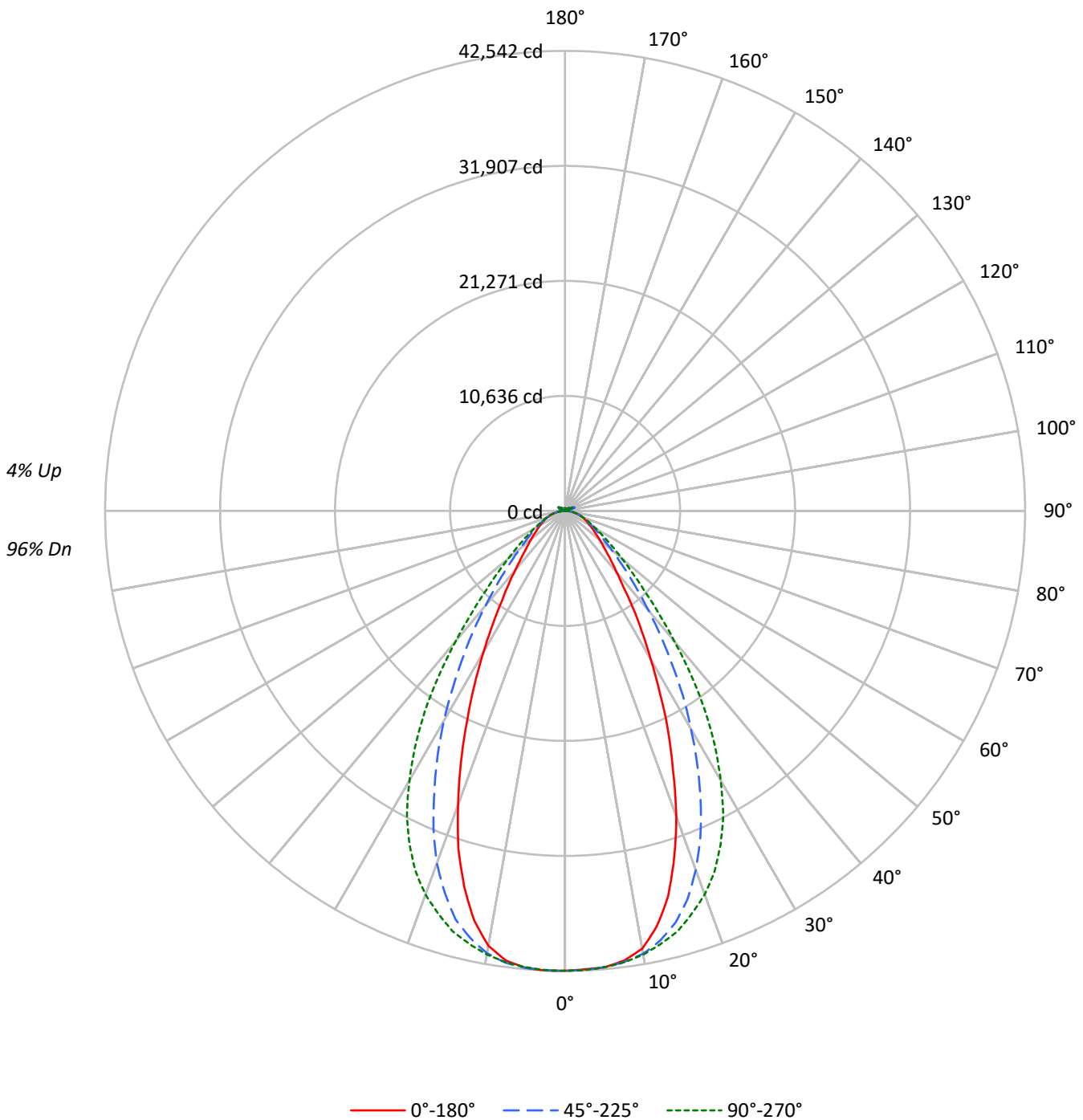
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54996.7 lumens
Efficiency: N/A
Efficacy: 158.5 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): 346.9
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: P1433358
CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P1433358
 CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL24

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 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 98 | 98 | 98 | 96 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 100 | 97 | 95 | 95 | 93 | 92 | 91 | 90 | 88 | 88 | 88 | 88 | 86 |
| 2 | 103 | 97 | 92 | 88 | 101 | 95 | 90 | 86 | 91 | 87 | 84 | 87 | 84 | 81 | 84 | 81 | 79 | 79 | 79 | 79 | 77 |
| 3 | 97 | 89 | 82 | 77 | 94 | 87 | 81 | 76 | 83 | 79 | 75 | 80 | 76 | 73 | 78 | 74 | 71 | 71 | 71 | 71 | 69 |
| 4 | 90 | 81 | 74 | 69 | 88 | 80 | 73 | 68 | 77 | 71 | 67 | 74 | 70 | 66 | 72 | 68 | 65 | 65 | 65 | 65 | 63 |
| 5 | 85 | 75 | 68 | 62 | 83 | 73 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 67 | 62 | 59 | 59 | 59 | 59 | 57 |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 62 | 58 | 54 | 54 | 54 | 54 | 52 |
| 7 | 75 | 64 | 57 | 52 | 73 | 63 | 56 | 52 | 61 | 55 | 51 | 60 | 54 | 50 | 58 | 53 | 50 | 50 | 50 | 50 | 48 |
| 8 | 71 | 60 | 53 | 48 | 69 | 59 | 52 | 48 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 46 | 46 | 46 | 46 | 45 |
| 9 | 67 | 56 | 49 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 44 | 52 | 47 | 43 | 51 | 46 | 43 | 43 | 43 | 43 | 41 |
| 10 | 63 | 52 | 46 | 41 | 62 | 52 | 45 | 41 | 50 | 45 | 41 | 49 | 44 | 40 | 48 | 44 | 40 | 40 | 40 | 40 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|--------|--------|--------|--------|
| 0° | 199698 | 199698 | 199698 | 199698 | 199698 |
| 5° | 198378 | 198348 | 198357 | 198707 | 198586 |
| 10° | 193474 | 195730 | 196040 | 195487 | 192208 |
| 15° | 175643 | 187899 | 191767 | 186392 | 171610 |
| 20° | 146367 | 171904 | 183648 | 168667 | 140668 |
| 25° | 113194 | 148638 | 170366 | 143209 | 107329 |
| 30° | 82509 | 121047 | 149654 | 116454 | 78314 |
| 35° | 59475 | 93299 | 122993 | 89281 | 55593 |
| 40° | 42789 | 68909 | 90640 | 66001 | 41469 |
| 45° | 33717 | 50413 | 63305 | 48227 | 32550 |
| 50° | 27974 | 37876 | 45819 | 36628 | 27550 |
| 55° | 24432 | 29908 | 34700 | 29407 | 24102 |
| 60° | 22034 | 24968 | 27650 | 24812 | 22189 |
| 65° | 20607 | 22024 | 23235 | 22092 | 20803 |
| 70° | 19569 | 20037 | 20657 | 20148 | 19763 |
| 75° | 18257 | 18144 | 18257 | 18193 | 18435 |
| 80° | 16490 | 15304 | 14966 | 15542 | 16490 |
| 85° | 11429 | 9692 | 9587 | 9849 | 11766 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 66327 cd/sqm



TEST NUMBER: P1433358
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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 4015.8 | 7.3 |
| 10°-20° | 10792.9 | 19.6 |
| 20°-30° | 13124.1 | 23.9 |
| 30°-40° | 10690.6 | 19.4 |
| 40°-50° | 6418.6 | 11.7 |
| 50°-60° | 3694.0 | 6.7 |
| 60°-70° | 2311.8 | 4.2 |
| 70°-80° | 1361.5 | 2.5 |
| 80°-90° | 402.0 | 0.7 |
| 90°-100° | 57.3 | 0.1 |
| 100°-110° | 378.2 | 0.7 |
| 110°-120° | 699.4 | 1.3 |
| 120°-130° | 415.4 | 0.8 |
| 130°-140° | 252.4 | 0.5 |
| 140°-150° | 176.6 | 0.3 |
| 150°-160° | 116.3 | 0.2 |
| 160°-170° | 67.4 | 0.1 |
| 170°-180° | 22.6 | 0.0 |
| 0°-30° | 27932.8 | 50.8 |
| 0°-40° | 38623.3 | 70.2 |
| 0°-60° | 48735.9 | 88.6 |
| 0°-90° | 52811.3 | 96.0 |
| 90°-120° | 1134.9 | 2.1 |
| 90°-150° | 1979.2 | 3.6 |
| 90°-180° | 2185.0 | 4.0 |
| 0°-180° | 54996.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|-------|-------|-------|-------|-------|-------|
| 0° | 42524 | 42524 | 42524 | 42524 | 42524 | |
| 5° | 42357 | 42350 | 42352 | 42427 | 42401 | 4003 |
| 15° | 36849 | 39420 | 40232 | 39104 | 36003 | 10138 |
| 25° | 22605 | 29683 | 34022 | 28599 | 21434 | 10299 |
| 35° | 10916 | 17124 | 22574 | 16386 | 10203 | 6906 |
| 45° | 5455 | 8157 | 10242 | 7803 | 5266 | 4303 |
| 55° | 3302 | 4042 | 4689 | 3974 | 3257 | 2985 |
| 65° | 2151 | 2299 | 2425 | 2306 | 2171 | 2138 |
| 75° | 1286 | 1278 | 1286 | 1282 | 1299 | 1362 |
| 85° | 393 | 333 | 330 | 338 | 404 | 419 |
| 90° | 18 | 43 | 16 | 46 | 17 | 27 |
| 95° | 28 | 98 | 30 | 83 | 27 | 27 |
| 105° | 133 | 661 | 173 | 705 | 87 | 178 |
| 115° | 606 | 782 | 744 | 865 | 635 | 559 |
| 125° | 439 | 418 | 476 | 463 | 499 | 400 |
| 135° | 322 | 323 | 302 | 337 | 349 | 252 |
| 145° | 269 | 280 | 276 | 284 | 290 | 171 |
| 155° | 242 | 248 | 246 | 249 | 261 | 113 |
| 165° | 235 | 237 | 234 | 236 | 244 | 67 |
| 175° | 239 | 239 | 235 | 236 | 244 | 23 |
| 180° | 238 | 238 | 238 | 238 | 238 | |



TEST NUMBER: P1433358
 CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL24

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 42524.2 | 42524.2 | 42524.2 | 42524.2 | 42524.2 | 42524.2 | 42524.2 | 42524.2 | 42524.2 |
| 2.5° | 42430.7 | 42469.0 | 42485.0 | 42493.9 | 42503.7 | 42530.5 | 42542.0 | 42523.3 | 42539.4 |
| 5° | 42356.8 | 42359.4 | 42350.5 | 42390.6 | 42352.3 | 42379.1 | 42427.1 | 42408.4 | 42401.3 |
| 7.5° | 41925.6 | 42014.8 | 42067.3 | 42080.6 | 42087.7 | 42120.7 | 42154.6 | 41963.1 | 41934.6 |
| 10° | 41106.2 | 41255.1 | 41585.5 | 41679.9 | 41651.3 | 41704.8 | 41533.8 | 41033.3 | 40837.3 |
| 12.5° | 39309.9 | 39832.6 | 40691.2 | 41073.4 | 41003.8 | 41051.1 | 40468.5 | 39412.3 | 38804.9 |
| 15° | 36849.0 | 37615.8 | 39420.3 | 40173.7 | 40231.7 | 40173.7 | 39104.1 | 37045.8 | 36002.9 |
| 17.5° | 33577.6 | 34993.7 | 37650.6 | 39113.0 | 39029.3 | 39056.9 | 37026.2 | 33983.7 | 32790.3 |
| 20° | 30082.7 | 31592.3 | 35331.3 | 37770.8 | 37744.9 | 37590.0 | 34666.0 | 30653.6 | 28911.4 |
| 22.5° | 26129.9 | 28077.0 | 32673.6 | 36120.4 | 36110.6 | 35852.3 | 31791.9 | 27017.0 | 25141.4 |
| 25° | 22604.7 | 24514.3 | 29682.8 | 34098.7 | 34022.0 | 33728.1 | 28598.8 | 23389.4 | 21433.5 |
| 27.5° | 18960.3 | 20945.4 | 26489.8 | 31729.5 | 31676.9 | 31356.3 | 25546.6 | 19998.7 | 18137.3 |
| 30° | 15870.6 | 17685.7 | 23283.4 | 29122.5 | 28785.9 | 28749.3 | 22399.9 | 16859.1 | 15063.6 |
| 32.5° | 13223.5 | 14779.5 | 20260.6 | 26396.3 | 25800.5 | 25970.5 | 19264.0 | 14233.6 | 12453.9 |
| 35° | 10915.8 | 12286.6 | 17123.7 | 23243.3 | 22573.6 | 22793.6 | 16386.2 | 11679.1 | 10203.3 |
| 37.5° | 8859.4 | 10177.4 | 14465.1 | 20176.8 | 19152.6 | 19567.7 | 13855.0 | 9753.5 | 8570.7 |
| 40° | 7416.4 | 8462.1 | 11943.7 | 16812.0 | 15710.2 | 16386.2 | 11439.6 | 8135.2 | 7187.6 |
| 42.5° | 6390.5 | 7072.7 | 9857.7 | 13599.3 | 12754.2 | 13233.3 | 9428.4 | 6801.0 | 6092.1 |
| 45° | 5455.2 | 5999.4 | 8156.6 | 10731.5 | 10242.5 | 10686.9 | 7803.0 | 5799.0 | 5266.5 |
| 47.5° | 4765.0 | 5184.5 | 6714.7 | 8666.1 | 8362.4 | 8503.1 | 6516.9 | 5060.7 | 4627.9 |
| 50° | 4169.1 | 4493.3 | 5644.9 | 6994.3 | 6828.6 | 6915.1 | 5458.8 | 4403.4 | 4105.9 |
| 52.5° | 3706.0 | 3943.8 | 4734.7 | 5748.3 | 5666.3 | 5679.7 | 4651.8 | 3873.4 | 3658.0 |
| 55° | 3301.7 | 3467.3 | 4041.8 | 4708.9 | 4689.3 | 4692.8 | 3974.1 | 3432.6 | 3257.1 |
| 57.5° | 2948.1 | 3085.2 | 3473.6 | 3955.4 | 3926.9 | 3933.1 | 3441.5 | 3048.7 | 2935.6 |
| 60° | 2648.8 | 2740.5 | 3001.5 | 3342.6 | 3324.0 | 3315.9 | 2982.8 | 2706.7 | 2667.5 |
| 62.5° | 2383.4 | 2442.2 | 2623.0 | 2865.2 | 2829.6 | 2837.7 | 2622.1 | 2444.8 | 2386.9 |
| 65° | 2150.9 | 2171.4 | 2298.8 | 2448.4 | 2425.2 | 2444.8 | 2305.9 | 2184.8 | 2171.4 |
| 67.5° | 1923.8 | 1944.3 | 2019.1 | 2119.8 | 2093.0 | 2109.1 | 2020.9 | 1949.6 | 1938.1 |
| 70° | 1717.1 | 1716.2 | 1758.1 | 1812.5 | 1812.5 | 1815.2 | 1767.9 | 1725.2 | 1734.1 |
| 72.5° | 1503.4 | 1498.1 | 1510.6 | 1547.0 | 1537.3 | 1571.1 | 1521.3 | 1507.9 | 1509.7 |
| 75° | 1286.1 | 1270.9 | 1278.1 | 1296.8 | 1286.1 | 1303.9 | 1281.6 | 1298.6 | 1298.6 |
| 77.5° | 1081.2 | 1052.8 | 1043.9 | 1046.6 | 1026.9 | 1053.7 | 1058.9 | 1070.5 | 1097.3 |
| 80° | 867.5 | 827.4 | 805.1 | 804.3 | 787.3 | 804.3 | 817.6 | 841.7 | 867.5 |
| 82.5° | 643.9 | 609.2 | 571.8 | 564.7 | 554.0 | 563.8 | 581.6 | 610.1 | 652.0 |
| 85° | 392.8 | 356.3 | 333.1 | 320.6 | 329.5 | 329.5 | 338.5 | 378.6 | 404.4 |
| 87.5° | 141.6 | 123.8 | 101.5 | 102.4 | 105.1 | 108.6 | 113.1 | 142.5 | 155.9 |
| 90° | 17.5 | 25.3 | 43.4 | 27.7 | 15.7 | 26.5 | 45.8 | 24.1 | 16.6 |
| 92.5° | 23.8 | 38.6 | 69.9 | 36.1 | 20.5 | 36.1 | 65.1 | 32.5 | 22.5 |
| 95° | 28.2 | 44.6 | 97.6 | 48.2 | 30.1 | 44.6 | 83.1 | 36.1 | 27.4 |
| 97.5° | 35.5 | 49.4 | 112.0 | 59.0 | 47.0 | 55.4 | 93.9 | 38.6 | 33.4 |
| 100° | 46.3 | 57.8 | 174.7 | 72.3 | 62.6 | 62.6 | 172.3 | 44.6 | 39.1 |
| 102.5° | 77.6 | 122.9 | 371.0 | 136.1 | 95.2 | 122.9 | 399.9 | 90.4 | 47.6 |
| 105° | 133.0 | 259.0 | 661.2 | 285.4 | 173.4 | 281.9 | 704.6 | 236.1 | 87.3 |
| 107.5° | 229.4 | 463.7 | 872.0 | 505.9 | 328.8 | 526.3 | 908.2 | 467.3 | 204.2 |
| 110° | 426.9 | 615.4 | 914.1 | 695.0 | 526.3 | 735.9 | 991.2 | 640.7 | 413.7 |



TEST NUMBER: P1433358
 CATALOG NUMBER: EHBR1-60-UNV-A1-L930-UPL24

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 112.5° | 576.3 | 661.2 | 875.6 | 767.2 | 685.3 | 820.2 | 968.4 | 710.6 | 572.6 |
| 115° | 606.4 | 635.9 | 781.7 | 749.2 | 744.4 | 808.2 | 864.8 | 708.2 | 635.3 |
| 117.5° | 586.8 | 580.6 | 663.6 | 673.3 | 719.1 | 739.6 | 746.8 | 664.9 | 638.9 |
| 120° | 542.6 | 516.7 | 554.0 | 587.8 | 649.2 | 640.7 | 628.7 | 601.9 | 602.8 |
| 122.5° | 489.2 | 458.6 | 474.5 | 499.8 | 561.2 | 543.2 | 531.1 | 536.8 | 554.3 |
| 125° | 438.7 | 408.0 | 417.9 | 424.0 | 475.8 | 457.7 | 463.4 | 481.5 | 498.9 |
| 127.5° | 394.2 | 373.0 | 378.2 | 371.0 | 403.5 | 395.0 | 414.0 | 435.4 | 449.5 |
| 130° | 364.0 | 346.2 | 353.8 | 336.0 | 352.6 | 355.0 | 380.0 | 396.8 | 406.2 |
| 132.5° | 339.6 | 327.9 | 337.5 | 316.2 | 321.0 | 331.5 | 354.4 | 369.7 | 374.5 |
| 135° | 322.4 | 311.9 | 322.8 | 302.5 | 302.3 | 316.7 | 337.2 | 346.8 | 348.9 |
| 137.5° | 306.7 | 298.4 | 309.1 | 294.7 | 291.1 | 305.6 | 321.3 | 328.5 | 327.0 |
| 140° | 294.1 | 286.0 | 298.0 | 287.2 | 284.8 | 299.2 | 306.5 | 315.8 | 313.3 |
| 142.5° | 279.4 | 274.5 | 288.1 | 280.9 | 278.5 | 292.6 | 296.2 | 302.2 | 300.7 |
| 145° | 269.4 | 265.7 | 280.5 | 277.0 | 275.7 | 286.2 | 283.8 | 293.2 | 289.5 |
| 147.5° | 262.4 | 259.1 | 271.8 | 270.6 | 270.6 | 277.9 | 275.1 | 283.2 | 280.5 |
| 150° | 254.9 | 251.6 | 264.2 | 263.1 | 264.2 | 269.0 | 265.1 | 275.4 | 275.0 |
| 152.5° | 247.4 | 244.1 | 255.5 | 253.4 | 254.6 | 259.4 | 256.4 | 266.9 | 267.5 |
| 155° | 242.2 | 238.9 | 248.0 | 246.2 | 246.2 | 249.5 | 248.9 | 260.3 | 261.2 |
| 157.5° | 240.1 | 237.0 | 243.7 | 241.9 | 241.9 | 244.1 | 244.6 | 254.9 | 255.8 |
| 160° | 238.2 | 235.3 | 240.7 | 238.9 | 237.7 | 241.0 | 241.6 | 250.6 | 251.5 |
| 162.5° | 236.4 | 233.4 | 239.2 | 237.0 | 236.2 | 237.0 | 237.7 | 247.6 | 248.4 |
| 165° | 234.9 | 233.1 | 237.3 | 235.5 | 234.4 | 235.5 | 235.8 | 242.4 | 244.5 |
| 167.5° | 235.8 | 233.7 | 237.0 | 235.3 | 234.0 | 232.9 | 235.5 | 240.9 | 243.0 |
| 170° | 235.4 | 234.5 | 236.7 | 233.7 | 231.6 | 232.5 | 234.0 | 239.4 | 241.5 |
| 172.5° | 237.2 | 236.3 | 238.5 | 235.5 | 233.4 | 234.3 | 234.5 | 238.7 | 242.0 |
| 175° | 238.7 | 237.0 | 238.7 | 236.1 | 235.2 | 234.9 | 236.3 | 239.4 | 243.5 |
| 177.5° | 240.8 | 239.0 | 239.6 | 237.0 | 234.9 | 235.8 | 238.5 | 241.4 | 246.8 |
| 180° | 238.5 | 238.5 | 238.5 | 238.5 | 238.5 | 238.5 | 238.5 | 238.5 | 238.5 |



TEST NUMBER: P1433358
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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 | 20.00 | 21.19 | 20.43 | 21.59 | 22.01 | 20.98 | 22.18 | 21.41 | 22.57 | 22.99 |
| | 3H | 21.48 | 22.54 | 21.93 | 22.96 | 23.42 | 22.24 | 23.31 | 22.69 | 23.72 | 24.19 |
| | 4H | 22.08 | 23.07 | 22.55 | 23.51 | 23.99 | 22.74 | 23.73 | 23.21 | 24.17 | 24.65 |
| | 6H | 22.54 | 23.46 | 23.03 | 23.91 | 24.40 | 23.10 | 24.01 | 23.58 | 24.46 | 24.96 |
| | 8H | 22.69 | 23.56 | 23.19 | 24.03 | 24.53 | 23.19 | 24.06 | 23.70 | 24.53 | 25.03 |
| | 12H | 22.77 | 23.60 | 23.27 | 24.06 | 24.59 | 23.23 | 24.06 | 23.74 | 24.52 | 25.05 |
| 4H | 2H | 20.52 | 21.51 | 20.99 | 21.94 | 22.43 | 21.30 | 22.29 | 21.77 | 22.72 | 23.21 |
| | 3H | 22.20 | 23.02 | 22.69 | 23.50 | 24.00 | 22.79 | 23.61 | 23.27 | 24.09 | 24.59 |
| | 4H | 22.92 | 23.65 | 23.42 | 24.15 | 24.69 | 23.41 | 24.15 | 23.92 | 24.64 | 25.18 |
| | 6H | 23.50 | 24.13 | 24.03 | 24.66 | 25.21 | 23.89 | 24.52 | 24.42 | 25.04 | 25.60 |
| | 8H | 23.69 | 24.28 | 24.22 | 24.80 | 25.36 | 24.02 | 24.62 | 24.56 | 25.14 | 25.70 |
| | 12H | 23.80 | 24.32 | 24.35 | 24.87 | 25.44 | 24.09 | 24.61 | 24.65 | 25.17 | 25.74 |
| 8H | 4H | 23.15 | 23.74 | 23.68 | 24.26 | 24.82 | 23.59 | 24.18 | 24.13 | 24.70 | 25.27 |
| | 6H | 23.84 | 24.32 | 24.40 | 24.89 | 25.46 | 24.17 | 24.66 | 24.74 | 25.23 | 25.80 |
| | 8H | 24.09 | 24.52 | 24.67 | 25.10 | 25.69 | 24.37 | 24.80 | 24.96 | 25.38 | 25.97 |
| | 12H | 24.25 | 24.63 | 24.84 | 25.20 | 25.86 | 24.49 | 24.87 | 25.07 | 25.43 | 26.09 |
| 12H | 4H | 23.15 | 23.67 | 23.70 | 24.22 | 24.79 | 23.59 | 24.11 | 24.14 | 24.67 | 25.23 |
| | 6H | 23.86 | 24.29 | 24.45 | 24.87 | 25.46 | 24.20 | 24.63 | 24.78 | 25.21 | 25.80 |
| | 8H | 24.15 | 24.53 | 24.74 | 25.10 | 25.76 | 24.43 | 24.81 | 25.01 | 25.38 | 26.04 |

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

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2506-472-5

Test Date: 08/01/2025

Luminaire Tested: EHBR-60-L930-N

Data in this report applies to families of products including EHBR-60-L930-N

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-472-5
 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-L930-N**
 Description: Elevate Round Highbay at, 60000 lumens, 3000K 90CRI LEDs with N lens

Spectral Parameters

CCT (K): 2996
 CIE u': 0.2519
 CIE v': 0.5169
 Duv: -0.0033
 CIE x: 0.4325
 CIE y: 0.3945
 CIE z: 0.1730
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 584
 Purity: 48.21818
 Rf: 91.3
 Rg: 102

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 94.4 | | |
| R1: | 96.8 | R9: | 61.4 |
| R2: | 98.1 | R10: | 94.4 |
| R3: | 97.8 | R11: | 95.7 |
| R4: | 95.6 | R12: | 88.5 |
| R5: | 96.9 | R13: | 97.3 |
| R6: | 95.7 | R14: | 97.8 |
| R7: | 90.9 | R15: | 92.3 |
| R8: | 83.0 | | |



Test Conditions

Stabilization Time: 40M
 Operation Time: 1H 40M
 Sphere Temperature (°C): 25.0

REPORT NUMBER: SP1-2506-472-5

| 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: SP1-2506-472-5

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 7-step quadrangle

REPORT NUMBER: SP1-2506-472-5

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 | 101 | NR | 620 | 317 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 121 | NR | 625 | 320 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 141 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 158 | NR | 635 | 651 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 171 | NR | 640 | 207 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 182 | NR | 645 | 201 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 189 | NR | 650 | 174 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 194 | NR | 655 | 146 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 199 | NR | 660 | 124 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 3 | NR | 535 | 205 | NR | 665 | 105 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 4 | NR | 540 | 210 | NR | 670 | 96 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 7 | NR | 545 | 216 | NR | 675 | 79 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 13 | NR | 550 | 222 | NR | 680 | 67 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 22 | NR | 555 | 230 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 37 | NR | 560 | 240 | NR | 690 | 49 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 60 | NR | 565 | 248 | NR | 695 | 42 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 101 | NR | 570 | 258 | NR | 700 | 36 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 172 | NR | 575 | 268 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 223 | NR | 580 | 278 | NR | 710 | 26 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 167 | NR | 585 | 287 | NR | 715 | 22 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 126 | NR | 590 | 295 | NR | 720 | 19 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 111 | NR | 595 | 298 | NR | 725 | 16 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 86 | NR | 600 | 303 | NR | 730 | 14 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 74 | NR | 605 | 307 | NR | 735 | 12 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 77 | NR | 610 | 341 | NR | 740 | 10 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 368 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-5

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.44

| 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 | 101 | NR | 620 | 317 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 121 | NR | 625 | 320 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 141 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 158 | NR | 635 | 651 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 171 | NR | 640 | 207 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 182 | NR | 645 | 201 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 189 | NR | 650 | 174 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 194 | NR | 655 | 146 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 199 | NR | 660 | 124 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 3 | NR | 535 | 205 | NR | 665 | 105 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 4 | NR | 540 | 210 | NR | 670 | 96 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 7 | NR | 545 | 216 | NR | 675 | 79 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 13 | NR | 550 | 222 | NR | 680 | 67 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 22 | NR | 555 | 230 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 37 | NR | 560 | 240 | NR | 690 | 49 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 60 | NR | 565 | 248 | NR | 695 | 42 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 101 | NR | 570 | 258 | NR | 700 | 36 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 172 | NR | 575 | 268 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 223 | NR | 580 | 278 | NR | 710 | 26 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 167 | NR | 585 | 287 | NR | 715 | 22 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 126 | NR | 590 | 295 | NR | 720 | 19 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 111 | NR | 595 | 298 | NR | 725 | 16 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 86 | NR | 600 | 303 | NR | 730 | 14 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 74 | NR | 605 | 307 | NR | 735 | 12 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 77 | NR | 610 | 341 | NR | 740 | 10 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 368 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2506-472-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.85

| 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 | 101 | NR | 620 | 317 | NR | 750 | 7 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 121 | NR | 625 | 320 | NR | 755 | 6 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 141 | NR | 630 | 1000 | NR | 760 | 5 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 158 | NR | 635 | 651 | NR | 765 | 4 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 171 | NR | 640 | 207 | NR | 770 | 4 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 182 | NR | 645 | 201 | NR | 775 | 3 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 189 | NR | 650 | 174 | NR | 780 | 3 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 194 | NR | 655 | 146 | NR | 785 | 2 | NR | 915 | 0 | NR |
| 400 | 1 | NR | 530 | 199 | NR | 660 | 124 | NR | 790 | 2 | NR | 920 | 0 | NR |
| 405 | 3 | NR | 535 | 205 | NR | 665 | 105 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 4 | NR | 540 | 210 | NR | 670 | 96 | NR | 800 | 1 | NR | 930 | 0 | NR |
| 415 | 7 | NR | 545 | 216 | NR | 675 | 79 | NR | 805 | 1 | NR | 935 | 0 | NR |
| 420 | 13 | NR | 550 | 222 | NR | 680 | 67 | NR | 810 | 1 | NR | 940 | 0 | NR |
| 425 | 22 | NR | 555 | 230 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 37 | NR | 560 | 240 | NR | 690 | 49 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 60 | NR | 565 | 248 | NR | 695 | 42 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 101 | NR | 570 | 258 | NR | 700 | 36 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 172 | NR | 575 | 268 | NR | 705 | 30 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 223 | NR | 580 | 278 | NR | 710 | 26 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 167 | NR | 585 | 287 | NR | 715 | 22 | NR | 845 | 0 | NR | 975 | 0 | NR |
| 460 | 126 | NR | 590 | 295 | NR | 720 | 19 | NR | 850 | 0 | NR | 980 | 0 | NR |
| 465 | 111 | NR | 595 | 298 | NR | 725 | 16 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 86 | NR | 600 | 303 | NR | 730 | 14 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 74 | NR | 605 | 307 | NR | 735 | 12 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 77 | NR | 610 | 341 | NR | 740 | 10 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 368 | NR | 745 | 8 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 91.3$
 $R_g = 102$
 $CIE R_a = 94.4$
 $R_9 = 61.4$



Color Vector Graphics

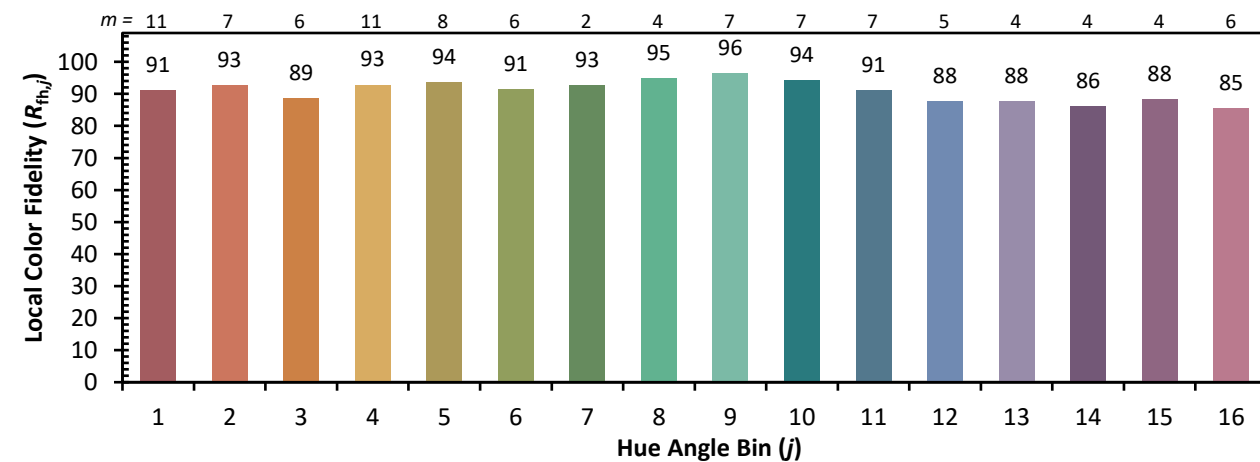


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 91 | CES51 = 96 | CES76 = 89 |
| CES02 = 63 | CES27 = 96 | CES52 = 95 | CES77 = 85 |
| CES03 = 32 | CES28 = 96 | CES53 = 93 | CES78 = 86 |
| CES04 = 70 | CES29 = 90 | CES54 = 98 | CES79 = 89 |
| CES05 = 51 | CES30 = 96 | CES55 = 98 | CES80 = 91 |
| CES06 = 51 | CES31 = 90 | CES56 = 95 | CES81 = 72 |
| CES07 = 44 | CES32 = 84 | CES57 = 95 | CES82 = 95 |
| CES08 = 42 | CES33 = 91 | CES58 = 95 | CES83 = 93 |
| CES09 = 29 | CES34 = 92 | CES59 = 99 | CES84 = 96 |
| CES10 = 76 | CES35 = 96 | CES60 = 96 | CES85 = 80 |
| CES11 = 59 | CES36 = 90 | CES61 = 96 | CES86 = 77 |
| CES12 = 65 | CES37 = 94 | CES62 = 95 | CES87 = 91 |
| CES13 = 44 | CES38 = 99 | CES63 = 94 | CES88 = 96 |
| CES14 = 74 | CES39 = 97 | CES64 = 96 | CES89 = 82 |
| CES15 = 72 | CES40 = 94 | CES65 = 92 | CES90 = 97 |
| CES16 = 48 | CES41 = 94 | CES66 = 95 | CES91 = 82 |
| CES17 = 50 | CES42 = 91 | CES67 = 94 | CES92 = 78 |
| CES18 = 57 | CES43 = 88 | CES68 = 93 | CES93 = 87 |
| CES19 = 72 | CES44 = 99 | CES69 = 94 | CES94 = 73 |
| CES20 = 67 | CES45 = 93 | CES70 = 90 | CES95 = 85 |
| CES21 = 86 | CES46 = 93 | CES71 = 90 | CES96 = 92 |
| CES22 = 79 | CES47 = 86 | CES72 = 96 | CES97 = 93 |
| CES23 = 92 | CES48 = 95 | CES73 = 85 | CES98 = 94 |
| CES24 = 91 | CES49 = 91 | CES74 = 90 | CES99 = 93 |
| CES25 = 72 | CES50 = 96 | CES75 = 90 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)