Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: P1223920

Luminaire Tested: **FFX-CLB-40-750-U-VM9-T4**

Issue Date: 01/27/2026

Report Generated By 670245763

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P1223920 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 01/27/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | STREETWORKS |
| Catalog Number: | FFX-CLB-40-750-U-VM9-T4 |
| Description: | FAIRFAX POST TOP FIXTURE w/ ULA ACORN 9 INCH NECK TYPE 4 DISTRIBUTION |
| Light Source: | (6) 5000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 6349.9 lumens |
| Efficiency: | N/A |
| Efficacy: | 161.2 lumens/watt |
| Luminous Opening: | Vertical Cylinder (Dia: 1.17' x H: 1.67') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B1 - U5 - G4 |

| | |
|---|---|
| Input Watts (W): | 39.4 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.99 |
| Total Harmonic Distortion (THDi): | 8.2% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

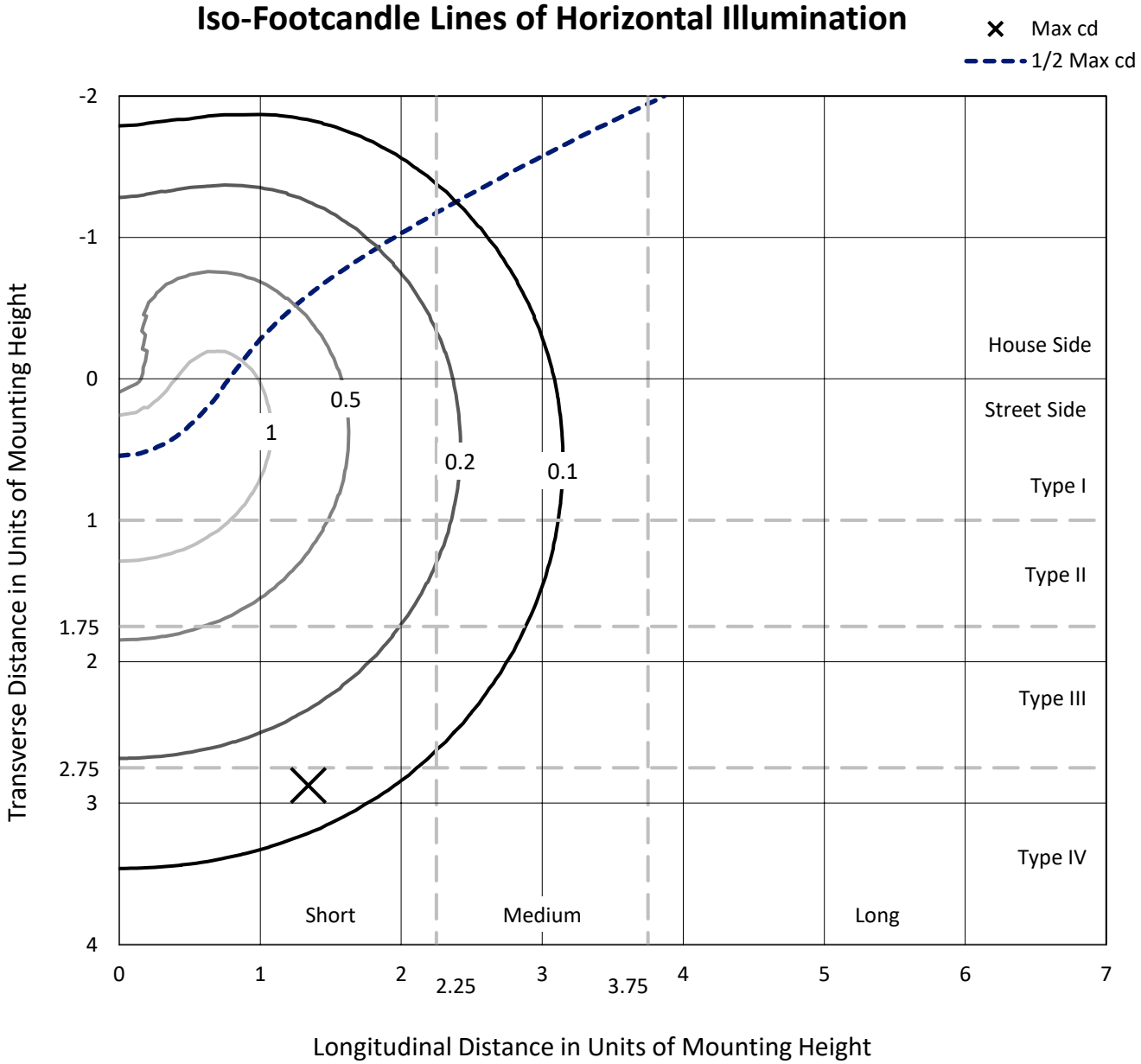


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REPORT NUMBER: P1223920
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## Iso-Footcandle Lines of Horizontal Illumination



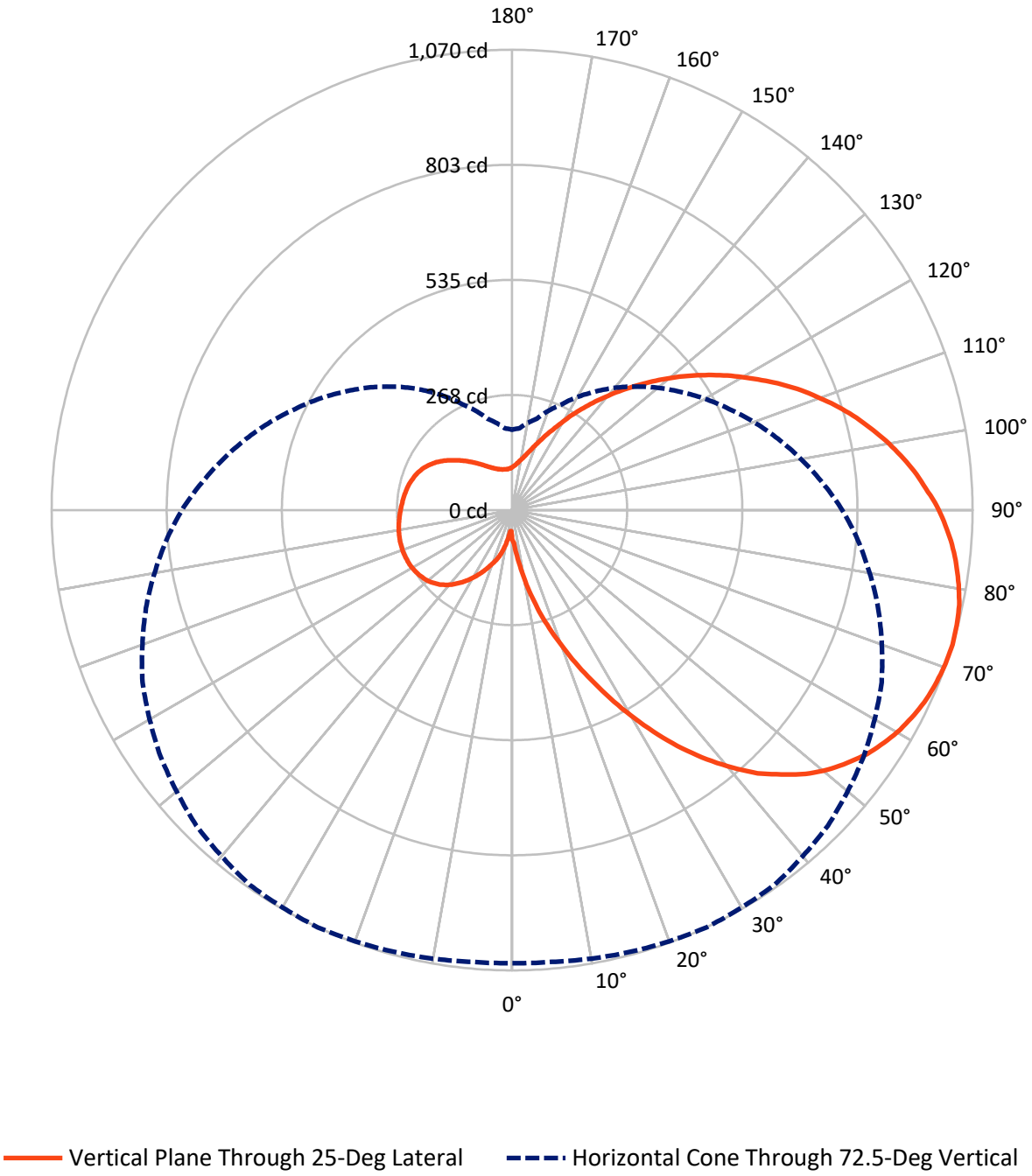

Based on 15 foot mounting height. Maximum calculated value = 1.7 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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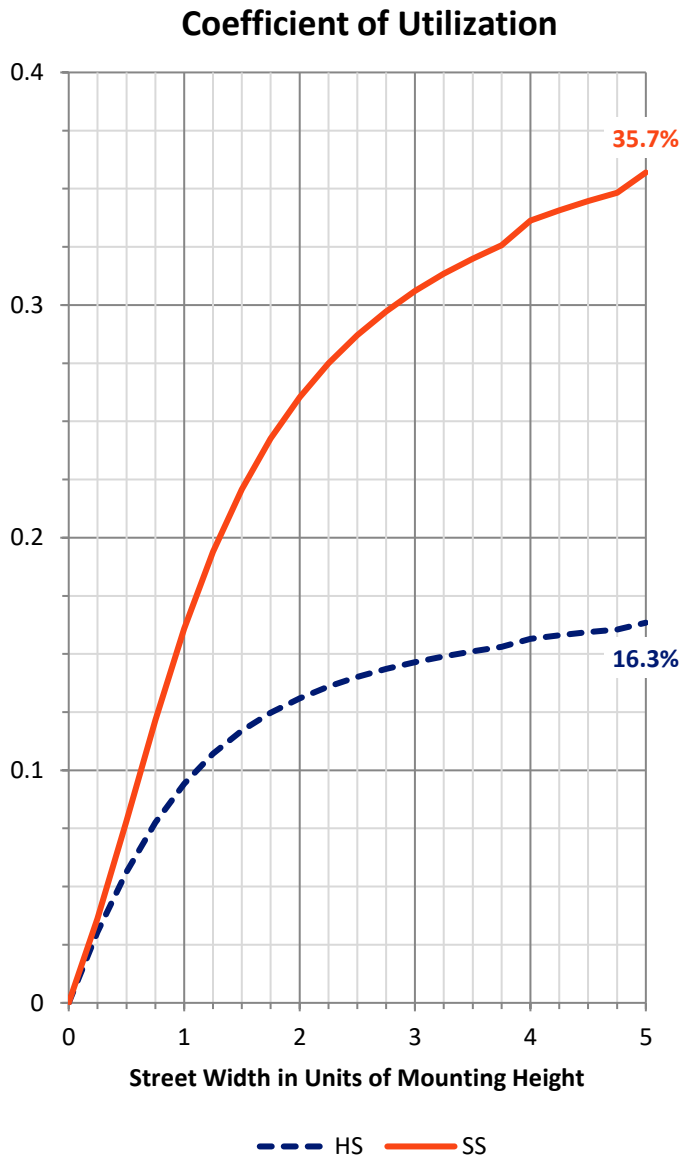
REPORT NUMBER: P1223920
CATALOG NUMBER: FFX-CLB-40-750-U-VM9-T4

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1144.1 | 875.5 | 2019.6 |
| | % Fixture | 18.0 | 13.8 | 31.8 |
| **Street Side** | Lumens | 2587.6 | 1742.8 | 4330.4 |
| | % Fixture | 40.7 | 27.4 | 68.2 |
| **Total** | Lumens | 3731.6 | 2618.3 | 6349.9 |
| | % Fixture | 58.8 | 41.2 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 9.0 | 0.1 |
| 10°-20° | 53.9 | 0.8 |
| 20°-30° | 146.9 | 2.3 |
| 30°-40° | 291.0 | 4.6 |
| 40°-50° | 454.3 | 7.2 |
| 50°-60° | 595.5 | 9.4 |
| 60°-70° | 694.9 | 10.9 |
| 70°-80° | 745.6 | 11.7 |
| 80°-90° | 740.7 | 11.7 |
| 90°-100° | 687.2 | 10.8 |
| 100°-110° | 598.4 | 9.4 |
| 110°-120° | 484.1 | 7.6 |
| 120°-130° | 356.4 | 5.6 |
| 130°-140° | 235.7 | 3.7 |
| 140°-150° | 139.4 | 2.2 |
| 150°-160° | 73.3 | 1.2 |
| 160°-170° | 34.0 | 0.5 |
| 170°-180° | 9.8 | 0.2 |
| 0°-90° | 3731.6 | 58.8 |
| 0°-180° | 6349.9 | 100.0 |



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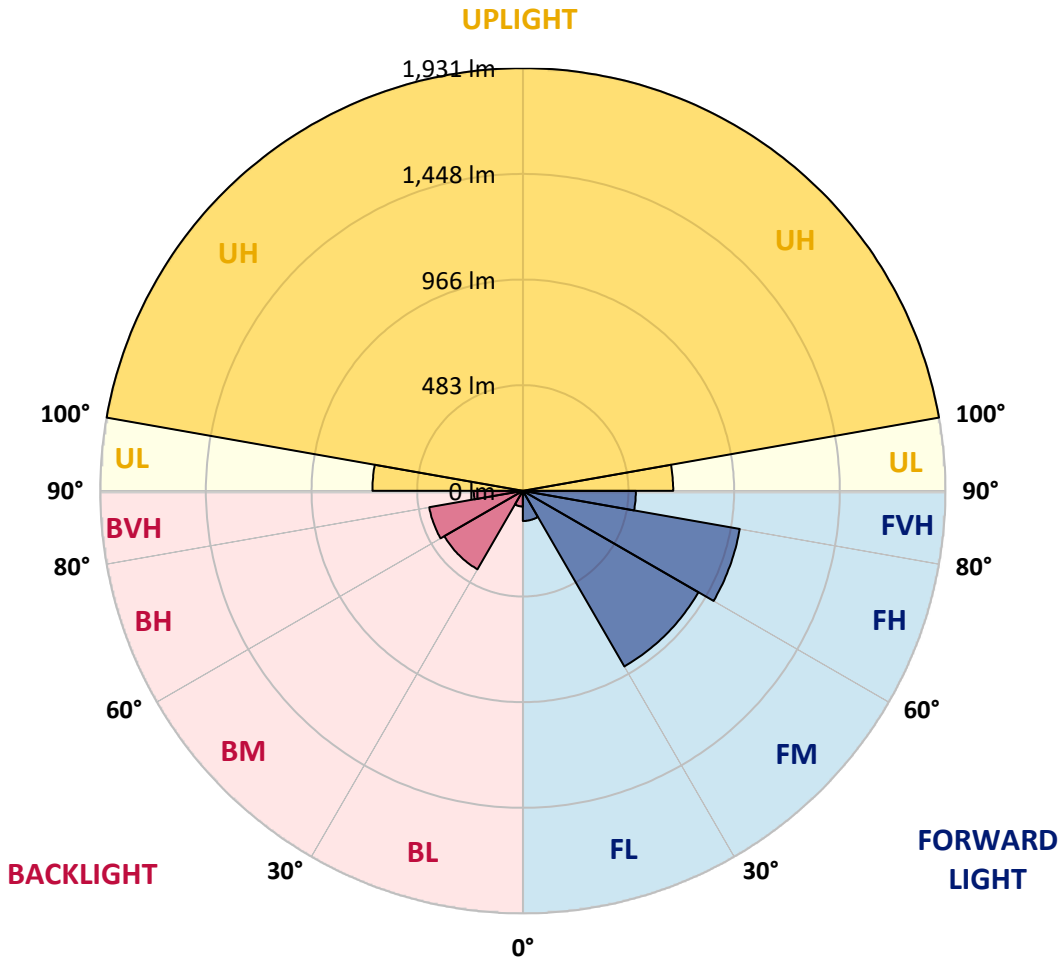
Scaled Data Report

REPORT NUMBER: P1223920
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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 137.9 | 2.2 | | | |
| FM | (30°-60°) | 926.8 | 14.6 | | | |
| FH | (60°-80°) | 1006.5 | 15.9 | | | G1/1800 |
| FVH | (80°-90°) | 516.4 | 8.1 | | | G4/750 |
| BL | (0°-30°) | 71.8 | 1.1 | B0/110 | | |
| BM | (30°-60°) | 414.0 | 6.5 | B1/1000 | | |
| BH | (60°-80°) | 433.9 | 6.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 224.3 | 3.5 | | | G2/225 |
| UL | (90°-100°) | 687.2 | 10.8 | | U4/1000 | |
| UH | (100°-180°) | 1931.1 | 30.4 | | U5 | |

**BUG Rating: B1-U5-G4**
Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 69.0 | 69.0 | 69.0 | *69.0* | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 |
| 2.5° | 74.1 | 74.1 | 75.4 | *75.8* | 76.3 | 76.3 | 76.7 | 76.3 | 74.5 | 72.4 | 71.1 |
| 5° | 101.1 | 100.3 | 99.8 | *100.3* | 100.3 | 98.5 | 96.0 | 91.3 | 87.8 | 82.3 | 80.1 |
| 7.5° | 135.4 | 134.5 | 133.2 | *132.0* | 132.0 | 127.7 | 123.4 | 119.5 | 113.5 | 105.8 | 103.3 |
| 10° | 175.2 | 173.5 | 171.8 | *169.2* | 166.2 | 162.4 | 156.8 | 150.4 | 142.2 | 134.1 | 129.0 |
| 12.5° | 214.2 | 213.8 | 212.9 | *209.1* | 203.5 | 200.1 | 194.1 | 185.1 | 174.8 | 163.7 | 159.4 |
| 15° | 259.2 | 257.1 | 255.8 | *252.8* | 249.3 | 242.5 | 232.6 | 224.1 | 212.1 | 196.7 | 191.5 |
| 17.5° | 300.8 | 299.9 | 297.3 | *296.5* | 290.9 | 283.6 | 272.5 | 259.6 | 245.1 | 230.9 | 223.2 |
| 20° | 346.2 | 348.3 | 345.3 | *342.7* | 332.9 | 325.6 | 315.3 | 302.9 | 285.3 | 265.2 | 257.1 |
| 22.5° | 396.7 | 398.9 | 394.2 | *394.2* | 386.0 | 374.0 | 359.5 | 344.9 | 323.0 | 302.0 | 291.8 |
| 25° | 455.4 | 456.3 | 449.0 | *446.0* | 440.0 | 428.0 | 410.4 | 393.3 | 368.0 | 341.5 | 329.5 |
| 27.5° | 511.1 | 512.8 | 508.6 | *504.7* | 494.8 | 483.3 | 464.0 | 443.9 | 415.2 | 383.5 | 370.2 |
| 30° | 574.1 | 570.7 | 569.0 | *562.1* | 551.8 | 539.8 | 518.4 | 496.1 | 463.1 | 425.9 | 409.6 |
| 32.5° | 629.8 | 627.2 | 628.5 | *622.9* | 608.0 | 594.7 | 574.5 | 547.5 | 509.0 | 470.0 | 451.6 |
| 35° | 687.2 | 688.5 | 686.8 | *680.8* | 671.8 | 654.2 | 626.8 | 596.4 | 557.8 | 512.0 | 492.3 |
| 37.5° | 745.9 | 742.9 | 740.8 | *735.6* | 726.6 | 706.9 | 679.9 | 645.7 | 601.1 | 552.7 | 530.8 |
| 40° | 796.5 | 798.6 | 796.0 | *787.5* | 779.3 | 757.5 | 727.9 | 688.9 | 643.1 | 591.2 | 566.0 |
| 42.5° | 844.4 | 843.6 | 841.4 | *836.7* | 825.6 | 802.5 | 773.3 | 733.5 | 681.6 | 624.2 | 597.7 |
| 45° | 883.0 | 883.9 | 883.9 | *877.0* | 866.7 | 845.7 | 812.3 | 771.6 | 716.3 | 655.9 | 628.1 |
| 47.5° | 919.9 | 921.1 | 920.3 | *917.3* | 906.1 | 881.3 | 847.4 | 805.5 | 746.8 | 684.6 | 653.4 |
| 50° | 952.4 | 952.4 | 952.0 | *949.4* | 938.7 | 914.7 | 880.0 | 835.0 | 774.2 | 708.6 | 677.8 |
| 52.5° | 979.4 | 979.0 | 979.4 | *976.4* | 965.3 | 943.4 | 907.4 | 859.4 | 798.6 | 728.8 | 698.8 |
| 55° | 1000.8 | 999.5 | 1002.5 | *1001.3* | 991.4 | 967.0 | 928.9 | 882.2 | 819.2 | 748.0 | 716.3 |
| 57.5° | 1018.0 | 1017.5 | 1021.4 | *1020.1* | 1010.3 | 985.8 | 948.1 | 900.6 | 836.3 | 763.9 | 729.2 |
| 60° | 1032.1 | 1031.2 | 1036.4 | *1036.4* | 1026.5 | 1002.1 | 964.8 | 914.7 | 850.0 | 776.3 | 741.2 |
| 62.5° | 1042.0 | 1042.4 | 1047.1 | *1048.8* | 1040.2 | 1015.4 | 976.4 | 927.1 | 861.2 | 786.2 | 750.6 |
| 65° | 1048.8 | 1049.7 | 1055.2 | *1058.7* | 1050.1 | 1025.7 | 985.4 | 936.1 | 870.2 | 794.3 | 757.9 |
| 67.5° | 1053.1 | 1053.5 | 1061.2 | *1064.7* | 1057.8 | 1032.1 | 993.1 | 942.6 | 876.2 | 799.5 | 763.5 |
| 70° | 1054.8 | 1055.2 | 1063.8 | *1068.9* | 1062.1 | 1036.0 | 996.5 | 946.0 | 880.0 | 802.9 | 766.5 |
| 72.5° | *1053.5* | *1054.4* | *1063.4* | *1070.2* | *1063.4* | *1037.7* | *997.8* | *947.7* | *880.9* | *806.7* | *767.3* |
| 75° | 1049.2 | 1050.1 | 1060.4 | *1067.2* | 1062.1 | 1035.5 | 995.7 | 946.0 | 879.6 | 803.3 | 766.0 |
| 77.5° | 1042.0 | 1043.2 | 1054.0 | *1062.5* | 1056.5 | 1031.2 | 991.4 | 941.3 | 874.9 | 799.0 | 761.3 |
| 80° | 1031.2 | 1031.7 | 1043.7 | *1052.2* | 1048.0 | 1022.7 | 982.8 | 933.1 | 867.2 | 791.8 | 754.9 |
| 82.5° | 1017.5 | 1019.3 | 1030.8 | *1040.2* | 1036.4 | 1010.3 | 971.7 | 922.9 | 857.3 | 782.8 | 745.5 |
| 85° | 1003.0 | 1004.7 | 1015.4 | *1025.7* | 1021.0 | 996.5 | 958.0 | 909.6 | 844.0 | 770.3 | 734.8 |
| 87.5° | 985.4 | 986.7 | 997.0 | *1007.7* | 1003.4 | 979.0 | 941.7 | 894.1 | 830.3 | 758.8 | 722.3 |
| 90° | 966.1 | 967.4 | 977.3 | *987.5* | 982.0 | 958.8 | 922.4 | 875.7 | 813.6 | 743.3 | 708.2 |
| 92.5° | 945.6 | 946.0 | 957.1 | *962.7* | 959.7 | 939.1 | 903.1 | 858.2 | 796.0 | 727.5 | 694.5 |
| 95° | 922.4 | 922.4 | 933.1 | *939.1* | 934.0 | 914.7 | 880.9 | 835.9 | 775.5 | 711.2 | 677.4 |
| 97.5° | 897.1 | 898.0 | 906.1 | *912.1* | 910.4 | 890.3 | 858.2 | 815.3 | 757.5 | 693.6 | 661.5 |
| 100° | 871.0 | 871.0 | 878.3 | *883.4* | 879.6 | 863.3 | 832.9 | 793.5 | 734.8 | 674.8 | 643.5 |
| 102.5° | 843.6 | 843.2 | 849.2 | *853.0* | 850.4 | 835.5 | 807.2 | 768.2 | 713.3 | 655.1 | 625.5 |
| 105° | 813.2 | 811.9 | 817.9 | *822.2* | 819.6 | 806.3 | 782.3 | 744.6 | 691.5 | 635.8 | 607.5 |
| 107.5° | 780.6 | 782.8 | 786.2 | *788.8* | 786.6 | 775.0 | 752.3 | 718.9 | 668.8 | 615.7 | 588.2 |
| 110° | 749.8 | 751.0 | 751.5 | *754.5* | 754.0 | 744.6 | 725.3 | 691.9 | 644.4 | 594.2 | 567.7 |

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**CANDELA DISTRIBUTION (continued):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 112.5° | 718.5 | 718.1 | 718.5 | *720.6* | 720.6 | 711.2 | 692.8 | 663.6 | 620.4 | 571.5 | 547.1 |
| 115° | 684.6 | 682.9 | 683.4 | *683.8* | 685.5 | 678.2 | 662.4 | 634.9 | 592.5 | 549.3 | 525.3 |
| 117.5° | 649.5 | 649.1 | 648.2 | *646.9* | 646.9 | 643.9 | 630.2 | 605.8 | 565.5 | 522.7 | 502.6 |
| 120° | 616.1 | 614.4 | 612.2 | *611.0* | 611.8 | 608.4 | 597.2 | 572.8 | 537.3 | 498.7 | 478.6 |
| 122.5° | 577.5 | 578.8 | 577.5 | *575.8* | 576.2 | 572.8 | 563.4 | 542.8 | 507.3 | 470.4 | 452.4 |
| 125° | 544.5 | 544.1 | 542.4 | *539.8* | 539.8 | 538.5 | 528.3 | 510.3 | 478.6 | 443.4 | 426.7 |
| 127.5° | 507.7 | 508.1 | 506.4 | *505.1* | 506.0 | 503.4 | 496.6 | 476.0 | 448.1 | 416.9 | 400.6 |
| 130° | 473.0 | 472.6 | 472.1 | *469.6* | 471.7 | 467.0 | 461.0 | 443.9 | 417.3 | 390.7 | 375.7 |
| 132.5° | 440.4 | 437.9 | 436.1 | *435.7* | 435.3 | 434.9 | 427.6 | 412.6 | 390.3 | 363.7 | 349.2 |
| 135° | 407.9 | 405.7 | 403.6 | *402.7* | 403.6 | 401.4 | 395.0 | 382.6 | 362.0 | 336.3 | 325.2 |
| 137.5° | 374.5 | 373.6 | 373.6 | *371.5* | 371.5 | 369.7 | 364.2 | 353.9 | 334.6 | 312.3 | 301.2 |
| 140° | 344.5 | 342.7 | 341.9 | *340.6* | 341.9 | 340.2 | 334.2 | 324.3 | 308.0 | 288.8 | 278.1 |
| 142.5° | 313.6 | 311.9 | 313.2 | *311.9* | 310.6 | 309.8 | 304.6 | 296.9 | 282.8 | 265.2 | 256.2 |
| 145° | 284.9 | 284.9 | 284.1 | *284.5* | 283.6 | 282.8 | 277.6 | 270.3 | 258.3 | 242.1 | 235.6 |
| 147.5° | 257.9 | 258.8 | 257.9 | *258.8* | 258.8 | 255.3 | 251.9 | 245.9 | 234.8 | 221.9 | 215.1 |
| 150° | 232.6 | 233.9 | 233.1 | *232.6* | 233.1 | 231.4 | 226.6 | 223.2 | 213.4 | 202.2 | 195.4 |
| 152.5° | 211.2 | 212.1 | 212.1 | *211.2* | 210.8 | 209.9 | 205.2 | 200.5 | 192.8 | 184.2 | 179.5 |
| 155° | 191.1 | 191.1 | 191.5 | *191.9* | 190.7 | 188.1 | 186.4 | 182.5 | 175.7 | 167.9 | 163.2 |
| 157.5° | 174.4 | 173.9 | 174.4 | *173.9* | 173.5 | 170.9 | 168.4 | 165.4 | 159.8 | 153.0 | 150.4 |
| 160° | 158.5 | 158.5 | 158.9 | *158.5* | 156.8 | 155.5 | 153.4 | 150.8 | 146.1 | 141.4 | 138.0 |
| 162.5° | 145.7 | 145.7 | 145.7 | *145.2* | 143.5 | 143.1 | 140.5 | 138.0 | 134.1 | 130.2 | 127.7 |
| 165° | 134.5 | 134.5 | 134.1 | *134.1* | 133.2 | 132.0 | 129.8 | 127.7 | 124.2 | 121.2 | 119.5 |
| 167.5° | 125.5 | 125.1 | 124.7 | *124.2* | 123.8 | 122.5 | 120.4 | 119.1 | 116.5 | 114.0 | 112.7 |
| 170° | 117.8 | 117.8 | 117.4 | *117.4* | 116.5 | 115.2 | 114.0 | 112.3 | 110.5 | 108.0 | 107.1 |
| 172.5° | 111.0 | 111.0 | 111.0 | *111.0* | 109.7 | 109.3 | 108.0 | 106.7 | 105.4 | 103.7 | 102.8 |
| 175° | 105.8 | 105.8 | 105.8 | *105.8* | 105.0 | 104.1 | 103.7 | 102.4 | 101.5 | 100.3 | 99.8 |
| 177.5° | 102.0 | 102.0 | 102.0 | *102.0* | 101.5 | 100.7 | 100.3 | 99.4 | 98.5 | 98.1 | 97.7 |
| 180° | 98.5 | 98.5 | 98.5 | *98.5* | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 |

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Scaled Data Report

REPORT NUMBER: P1223920
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**CANDELA DISTRIBUTION (continued):**

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 |
| 2.5° | 69.8 | 67.3 | 63.8 | 60.0 | 57.0 | 53.1 | 49.3 | 47.1 | 45.8 | 45.0 |
| 5° | 78.0 | 72.4 | 67.3 | 61.7 | 57.4 | 53.6 | 49.3 | 45.8 | 44.1 | 43.7 |
| 7.5° | 99.4 | 91.7 | 84.0 | 77.1 | 71.1 | 65.1 | 60.8 | 57.4 | 55.3 | 55.3 |
| 10° | 125.1 | 114.4 | 105.4 | 96.4 | 88.3 | 81.0 | 75.0 | 71.5 | 69.0 | 68.1 |
| 12.5° | 154.2 | 141.4 | 129.0 | 118.7 | 106.7 | 98.5 | 91.3 | 86.5 | 83.5 | 83.1 |
| 15° | 184.7 | 171.4 | 155.5 | 141.4 | 128.1 | 115.2 | 106.7 | 99.8 | 97.3 | 97.3 |
| 17.5° | 213.8 | 196.7 | 179.1 | 161.9 | 145.7 | 130.7 | 118.7 | 111.0 | 107.1 | 106.3 |
| 20° | 245.1 | 224.5 | 201.8 | 181.7 | 161.5 | 144.0 | 129.8 | 120.0 | 114.8 | 114.4 |
| 22.5° | 277.2 | 253.2 | 228.8 | 202.2 | 179.1 | 158.1 | 141.4 | 129.8 | 123.4 | 122.5 |
| 25° | 314.0 | 284.9 | 255.8 | 226.6 | 198.8 | 173.9 | 154.2 | 140.1 | 132.8 | 132.0 |
| 27.5° | 354.7 | 318.3 | 283.6 | 250.2 | 217.6 | 190.2 | 166.7 | 150.4 | 141.4 | 141.0 |
| 30° | 392.0 | 351.7 | 312.3 | 273.8 | 238.2 | 205.2 | 179.1 | 160.2 | 150.4 | 149.1 |
| 32.5° | 429.3 | 384.7 | 340.2 | 297.8 | 256.6 | 221.1 | 191.5 | 169.7 | 158.1 | 157.2 |
| 35° | 467.9 | 417.3 | 368.9 | 320.0 | 277.2 | 236.9 | 203.1 | 179.1 | 166.7 | 164.9 |
| 37.5° | 503.8 | 449.4 | 396.3 | 344.5 | 295.2 | 251.5 | 214.2 | 188.1 | 173.9 | 171.8 |
| 40° | 536.8 | 478.1 | 421.2 | 365.5 | 312.3 | 265.2 | 224.9 | 195.8 | 179.9 | 178.2 |
| 42.5° | 567.2 | 505.1 | 443.9 | 383.9 | 328.2 | 277.2 | 233.9 | 202.2 | 184.7 | 182.9 |
| 45° | 596.0 | 530.4 | 464.9 | 401.0 | 341.9 | 288.3 | 242.5 | 208.2 | 189.4 | 186.8 |
| 47.5° | 620.4 | 551.8 | 481.6 | 415.6 | 354.3 | 297.8 | 248.9 | 212.5 | 192.8 | 190.2 |
| 50° | 642.2 | 569.8 | 497.4 | 429.7 | 365.0 | 306.3 | 254.9 | 215.9 | 194.5 | 191.9 |
| 52.5° | 659.8 | 586.5 | 511.1 | 440.9 | 374.9 | 313.2 | 259.2 | 218.9 | 196.2 | 193.7 |
| 55° | 676.9 | 600.2 | 523.1 | 450.7 | 382.2 | 319.6 | 262.6 | 220.6 | 197.1 | 194.1 |
| 57.5° | 691.1 | 611.8 | 533.0 | 458.4 | 389.4 | 323.9 | 265.6 | 221.5 | 197.1 | 193.7 |
| 60° | 701.4 | 620.8 | 540.7 | 464.9 | 394.2 | 327.8 | 267.8 | 221.9 | 196.7 | 193.2 |
| 62.5° | 710.3 | 628.1 | 546.3 | 470.4 | 398.9 | 330.8 | 269.9 | 222.4 | 195.8 | 192.4 |
| 65° | 717.2 | 634.1 | 551.0 | 473.9 | 401.9 | 333.3 | 270.3 | 221.9 | 194.5 | 191.1 |
| 67.5° | 722.8 | 637.9 | 554.0 | 476.8 | 404.0 | 334.6 | 271.2 | 221.5 | 193.7 | 189.8 |
| 70° | 724.9 | 639.7 | 555.7 | 478.1 | 405.3 | 335.5 | 271.2 | 220.6 | 191.9 | 188.1 |
| 72.5° | *724.5* | *639.7* | *556.1* | *478.6* | *405.7* | *335.9* | *270.8* | *219.4* | *190.7* | *186.8* |
| 75° | 723.2 | 638.4 | 555.3 | 478.1 | 405.3 | 335.5 | 270.3 | 218.5 | 189.4 | 185.9 |
| 77.5° | 719.8 | 634.9 | 552.3 | 476.4 | 404.4 | 334.2 | 269.1 | 217.6 | 188.5 | 184.2 |
| 80° | 713.8 | 629.8 | 548.0 | 472.6 | 401.4 | 332.9 | 267.8 | 215.9 | 186.8 | 183.4 |
| 82.5° | 705.2 | 623.4 | 542.8 | 469.1 | 398.9 | 330.3 | 266.1 | 215.1 | 185.9 | 182.5 |
| 85° | 695.4 | 615.2 | 536.0 | 464.0 | 395.0 | 327.8 | 263.9 | 213.4 | 185.1 | 181.7 |
| 87.5° | 683.4 | 604.5 | 529.1 | 458.0 | 390.3 | 324.3 | 261.8 | 212.1 | 184.7 | 181.2 |
| 90° | 670.9 | 594.7 | 520.6 | 452.4 | 386.4 | 320.9 | 259.6 | 211.2 | 184.2 | 181.2 |
| 92.5° | 657.2 | 584.0 | 512.4 | 445.1 | 381.3 | 317.5 | 257.5 | 210.4 | 184.2 | 181.2 |
| 95° | 643.5 | 572.8 | 504.3 | 438.7 | 376.2 | 314.0 | 255.3 | 209.9 | 185.1 | 182.1 |
| 97.5° | 627.2 | 560.0 | 494.4 | 431.9 | 370.2 | 310.2 | 253.6 | 209.5 | 185.5 | 182.9 |
| 100° | 611.8 | 547.1 | 484.1 | 424.2 | 364.6 | 305.9 | 251.1 | 209.1 | 186.4 | 183.4 |
| 102.5° | 595.1 | 534.7 | 473.9 | 416.0 | 358.6 | 301.2 | 248.9 | 208.6 | 187.2 | 184.7 |
| 105° | 578.4 | 519.7 | 462.7 | 406.6 | 351.3 | 296.5 | 246.4 | 208.2 | 187.7 | 185.1 |
| 107.5° | 560.0 | 505.6 | 450.3 | 397.6 | 344.0 | 291.3 | 242.9 | 207.4 | 188.1 | 185.5 |
| 110° | 541.1 | 488.8 | 437.4 | 387.3 | 335.5 | 284.9 | 239.5 | 205.2 | 187.7 | 185.5 |

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1223920
CATALOG NUMBER: FFX-CLB-40-750-U-VM9-T4

**CANDELA DISTRIBUTION (continued):**

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|
| 112.5° | 523.1 | 473.0 | 423.3 | 375.7 | 326.5 | 278.5 | 234.8 | 203.1 | 186.4 | 184.7 |
| 115° | 500.8 | 455.0 | 408.3 | 363.3 | 316.2 | 270.3 | 229.6 | 200.1 | 184.7 | 182.5 |
| 117.5° | 480.3 | 436.1 | 392.4 | 350.0 | 305.5 | 262.2 | 223.6 | 196.2 | 181.7 | 179.9 |
| 120° | 457.1 | 416.0 | 375.3 | 335.0 | 293.5 | 252.8 | 216.4 | 191.5 | 177.8 | 176.5 |
| 122.5° | 434.4 | 396.3 | 357.7 | 319.6 | 280.6 | 242.1 | 209.1 | 185.5 | 173.5 | 172.2 |
| 125° | 410.4 | 375.3 | 339.3 | 303.3 | 266.5 | 230.9 | 200.5 | 178.7 | 167.9 | 166.7 |
| 127.5° | 386.0 | 353.5 | 319.6 | 286.2 | 252.8 | 219.8 | 191.5 | 171.8 | 161.5 | 161.1 |
| 130° | 360.3 | 331.2 | 300.3 | 269.5 | 238.6 | 208.2 | 182.1 | 164.5 | 155.1 | 154.2 |
| 132.5° | 337.2 | 310.2 | 281.5 | 252.3 | 223.2 | 196.7 | 173.1 | 156.8 | 148.7 | 147.8 |
| 135° | 314.5 | 287.5 | 262.6 | 236.9 | 209.9 | 185.1 | 164.1 | 149.5 | 142.2 | 141.4 |
| 137.5° | 291.3 | 267.8 | 244.6 | 220.6 | 196.2 | 173.9 | 155.5 | 142.7 | 136.2 | 135.4 |
| 140° | 268.2 | 248.5 | 227.5 | 204.8 | 183.8 | 163.7 | 147.0 | 136.2 | 130.2 | 129.4 |
| 142.5° | 247.2 | 228.4 | 209.5 | 189.8 | 170.9 | 153.8 | 139.2 | 129.0 | 123.8 | 123.4 |
| 145° | 226.6 | 210.4 | 193.2 | 175.7 | 159.4 | 145.2 | 132.0 | 123.4 | 119.1 | 118.7 |
| 147.5° | 208.2 | 193.7 | 178.2 | 163.2 | 149.1 | 135.8 | 125.1 | 117.8 | 113.5 | 113.1 |
| 150° | 189.8 | 176.9 | 164.1 | 151.2 | 139.2 | 128.1 | 118.7 | 112.7 | 109.7 | 108.8 |
| 152.5° | 173.5 | 163.2 | 151.7 | 141.0 | 130.2 | 120.8 | 113.5 | 108.0 | 105.4 | 105.0 |
| 155° | 158.9 | 150.4 | 141.0 | 131.5 | 123.0 | 115.2 | 108.8 | 104.5 | 102.4 | 102.4 |
| 157.5° | 146.5 | 139.2 | 131.5 | 123.8 | 117.0 | 110.5 | 105.4 | 102.0 | 100.3 | 99.8 |
| 160° | 135.4 | 129.0 | 123.0 | 117.4 | 111.0 | 106.3 | 102.4 | 99.4 | 98.1 | 97.7 |
| 162.5° | 125.1 | 120.8 | 116.1 | 111.4 | 106.7 | 102.8 | 99.8 | 97.7 | 96.8 | 96.8 |
| 165° | 117.8 | 114.0 | 110.1 | 106.7 | 103.3 | 100.7 | 98.1 | 96.8 | 96.0 | 95.5 |
| 167.5° | 111.4 | 108.4 | 105.8 | 103.3 | 100.7 | 98.5 | 96.8 | 96.0 | 95.1 | 95.1 |
| 170° | 106.3 | 104.1 | 102.4 | 100.7 | 99.0 | 97.3 | 96.4 | 95.5 | 95.1 | 95.1 |
| 172.5° | 102.0 | 100.7 | 99.4 | 98.5 | 97.3 | 96.4 | 95.5 | 95.1 | 95.1 | 95.1 |
| 175° | 99.4 | 98.5 | 97.7 | 97.3 | 96.8 | 96.4 | 96.0 | 95.5 | 95.5 | 95.5 |
| 177.5° | 97.7 | 97.3 | 97.3 | 96.8 | 96.8 | 96.8 | 96.8 | 96.8 | 96.8 | 96.8 |
| 180° | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 |

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2501-332-5

Test Date: 03/25/2025

Luminaire Tested: FFX-CLB-100-750-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-750-U-FR-T5

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

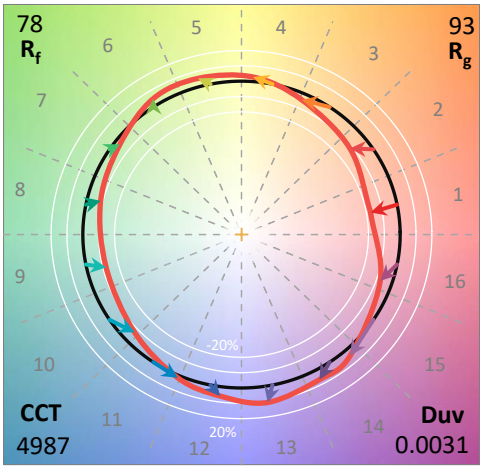
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2501-332-5 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 03/31/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | Streetworks |
| Catalog Number: | **FFX-CLB-100-750-U-FR-T5** |
| Description: | FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5 |

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 4987 | CRI (Ra): | 75.8 | | |
| CIE u': | 0.2094 | R1: | 71.6 | R9: | -30.4 |
| CIE v': | 0.4882 | R2: | 82.8 | R10: | 59.9 |
| Duv: | 0.0031 | R3: | 91.2 | R11: | 70.9 |
| CIE x: | 0.3461 | R4: | 73.8 | R12: | 51.2 |
| CIE y: | 0.3586 | R5: | 73.0 | R13: | 74.2 |
| CIE z: | 0.2954 | R6: | 76.1 | R14: | 95.3 |
| Peak Wavelength (nm): | 450 | R7: | 82.9 | R15: | 63.7 |
| Dominant Wavelength (nm): | 570 | R8: | 54.9 | | |
| Purity: | 11.4 | | | | |

| | |
|---|---|
| Rf: | 78.3 |
| Rg: | 93.4 |




## Test Conditions

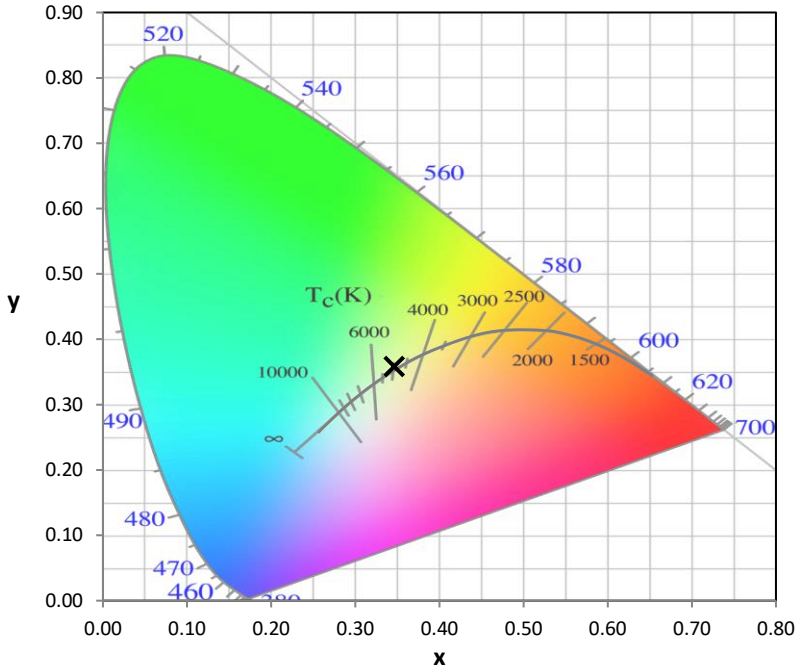
| | |
|---|---|
| Stabilization Time: | 67M |
| Operation Time: | 2H 7M |
| Sphere Temperature (°C): | 24.9 |

REPORT NUMBER: SP1-2501-332-5

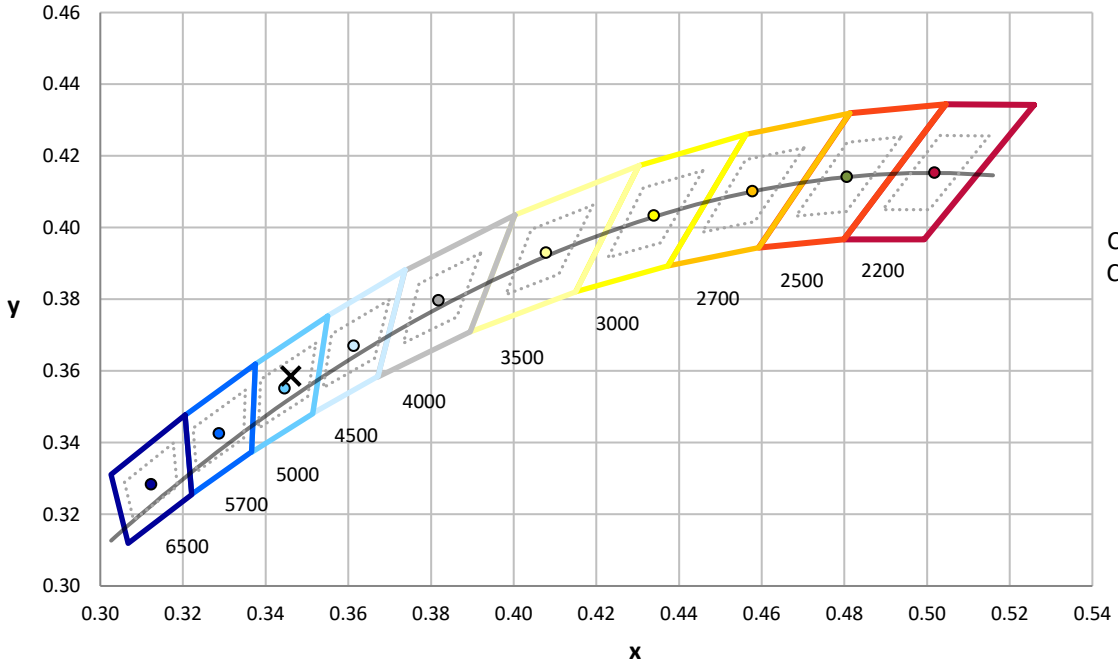
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 12/16/2024 | 6/16/2025 |
| Power Meter | INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | IN0046 | 10/22/2024 | 10/22/2025 |

REPORT NUMBER: SP1-2501-332-5

## CIE 1931 Chromaticity Diagram




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

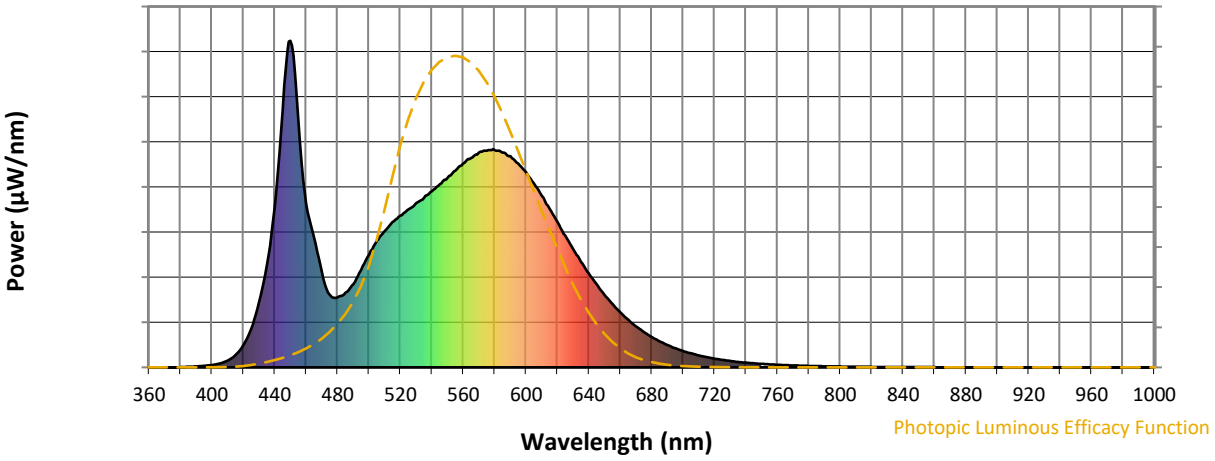



CCT = 4987K
CIE x = 0.3461
CIE y = 0.3586
Duv = 0.0031

Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2501-332-5

## Photopic Flux vs. Wavelength

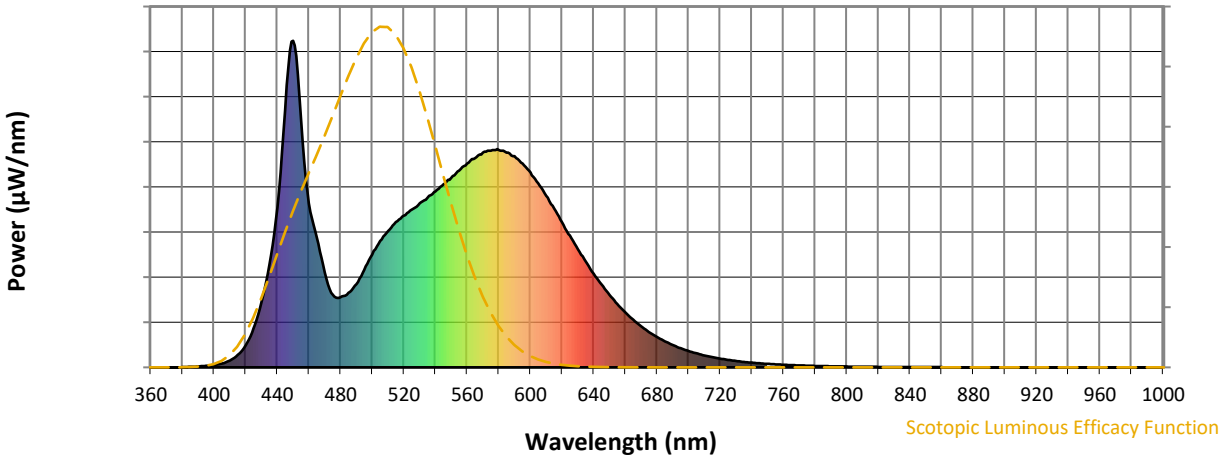



## Photopic Lumens: NR

| 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 | 255 | NR | 620 | 445 | NR | 750 | 11 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 403 | NR | 755 | 9 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 345 | NR | 630 | 362 | NR | 760 | 8 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 387 | NR | 635 | 323 | NR | 765 | 7 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 417 | NR | 640 | 287 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 445 | NR | 645 | 254 | NR | 775 | 5 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 464 | NR | 650 | 222 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 483 | NR | 655 | 194 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 503 | NR | 660 | 168 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 12 | NR | 535 | 519 | NR | 665 | 146 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 21 | NR | 540 | 539 | NR | 670 | 126 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 38 | NR | 545 | 561 | NR | 675 | 108 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 580 | NR | 680 | 93 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 119 | NR | 555 | 602 | NR | 685 | 80 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 199 | NR | 560 | 624 | NR | 690 | 69 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 641 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 489 | NR | 570 | 657 | NR | 700 | 50 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 787 | NR | 575 | 663 | NR | 705 | 43 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 666 | NR | 710 | 36 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 757 | NR | 585 | 657 | NR | 715 | 31 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 503 | NR | 590 | 646 | NR | 720 | 27 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 398 | NR | 595 | 624 | NR | 725 | 23 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 290 | NR | 600 | 597 | NR | 730 | 20 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 222 | NR | 605 | 564 | NR | 735 | 17 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 215 | NR | 610 | 525 | NR | 740 | 14 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 228 | NR | 615 | 486 | NR | 745 | 12 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2501-332-5

## Scotopic Flux vs. Wavelength

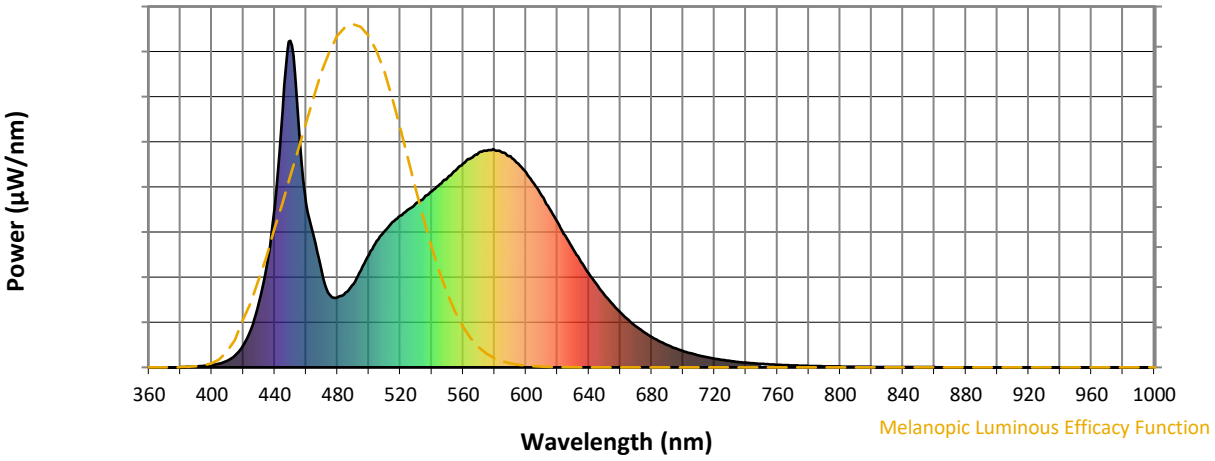



**Scotopic Lumens: NR** **S/P: 1.87**

| 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 | 255 | NR | 620 | 445 | NR | 750 | 11 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 403 | NR | 755 | 9 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 345 | NR | 630 | 362 | NR | 760 | 8 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 387 | NR | 635 | 323 | NR | 765 | 7 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 417 | NR | 640 | 287 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 445 | NR | 645 | 254 | NR | 775 | 5 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 464 | NR | 650 | 222 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 483 | NR | 655 | 194 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 503 | NR | 660 | 168 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 12 | NR | 535 | 519 | NR | 665 | 146 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 21 | NR | 540 | 539 | NR | 670 | 126 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 38 | NR | 545 | 561 | NR | 675 | 108 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 580 | NR | 680 | 93 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 119 | NR | 555 | 602 | NR | 685 | 80 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 199 | NR | 560 | 624 | NR | 690 | 69 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 641 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 489 | NR | 570 | 657 | NR | 700 | 50 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 787 | NR | 575 | 663 | NR | 705 | 43 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 666 | NR | 710 | 36 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 757 | NR | 585 | 657 | NR | 715 | 31 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 503 | NR | 590 | 646 | NR | 720 | 27 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 398 | NR | 595 | 624 | NR | 725 | 23 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 290 | NR | 600 | 597 | NR | 730 | 20 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 222 | NR | 605 | 564 | NR | 735 | 17 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 215 | NR | 610 | 525 | NR | 740 | 14 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 228 | NR | 615 | 486 | NR | 745 | 12 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2501-332-5

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 3.92**

| 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 | 255 | NR | 620 | 445 | NR | 750 | 11 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 403 | NR | 755 | 9 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 345 | NR | 630 | 362 | NR | 760 | 8 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 387 | NR | 635 | 323 | NR | 765 | 7 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 417 | NR | 640 | 287 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 445 | NR | 645 | 254 | NR | 775 | 5 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 464 | NR | 650 | 222 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 483 | NR | 655 | 194 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 503 | NR | 660 | 168 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 12 | NR | 535 | 519 | NR | 665 | 146 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 21 | NR | 540 | 539 | NR | 670 | 126 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 38 | NR | 545 | 561 | NR | 675 | 108 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 580 | NR | 680 | 93 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 119 | NR | 555 | 602 | NR | 685 | 80 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 199 | NR | 560 | 624 | NR | 690 | 69 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 315 | NR | 565 | 641 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 489 | NR | 570 | 657 | NR | 700 | 50 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 787 | NR | 575 | 663 | NR | 705 | 43 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 1000 | NR | 580 | 666 | NR | 710 | 36 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 757 | NR | 585 | 657 | NR | 715 | 31 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 503 | NR | 590 | 646 | NR | 720 | 27 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 398 | NR | 595 | 624 | NR | 725 | 23 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 290 | NR | 600 | 597 | NR | 730 | 20 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 222 | NR | 605 | 564 | NR | 735 | 17 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 215 | NR | 610 | 525 | NR | 740 | 14 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 228 | NR | 615 | 486 | NR | 745 | 12 | NR | 875 | 0 | NR | | | |

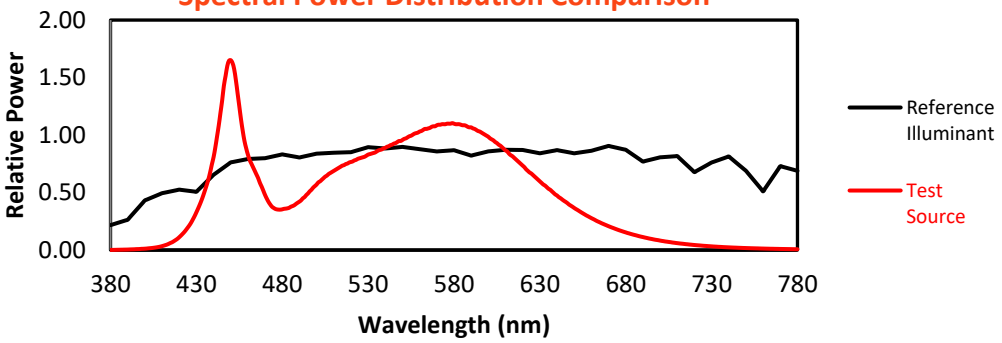
REPORT NUMBER: SP1-2501-332-5

# TM-30-18

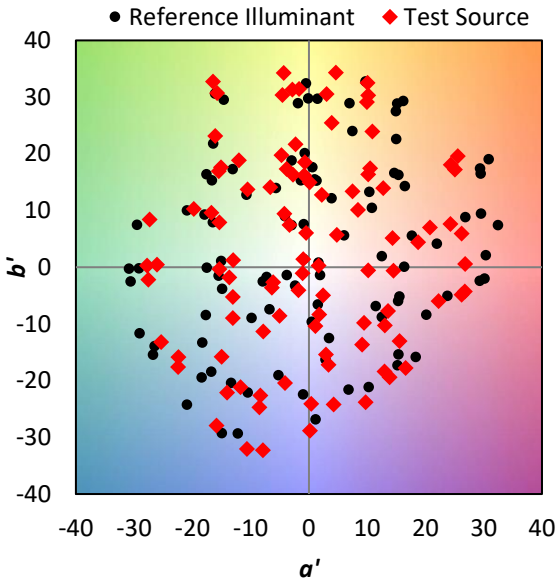
## Summary

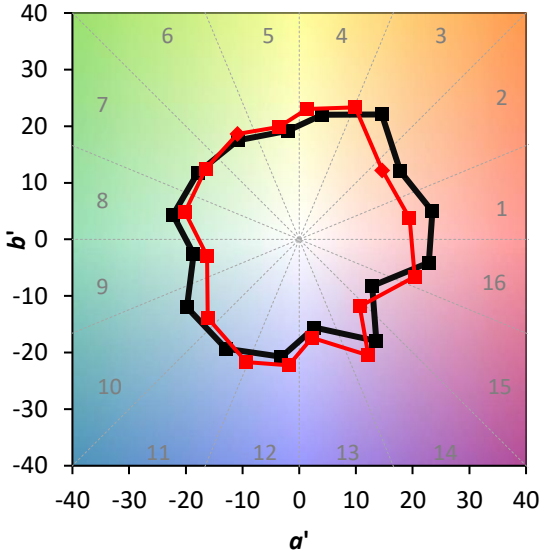
$R_f$ = 78.3
$R_g$ = 93.4
CIE $R_a$ = 75.8
$R_9$ = -30.4

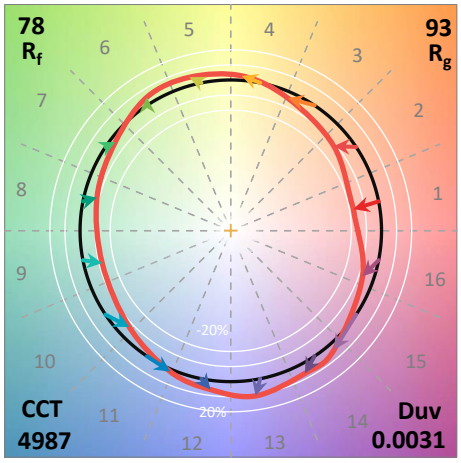
## Spectral Power Distribution Comparison

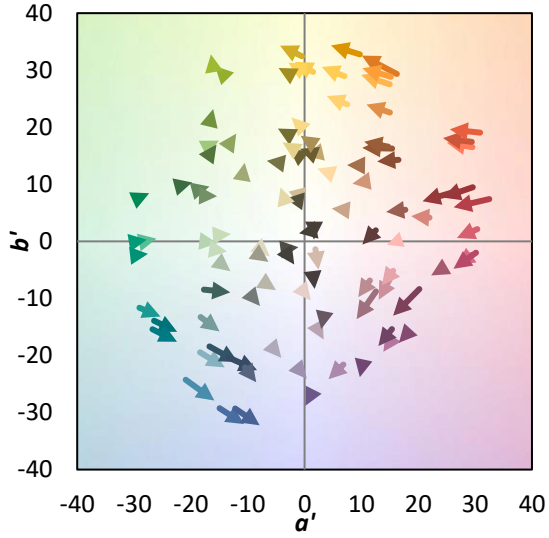



## Color Vector Graphics



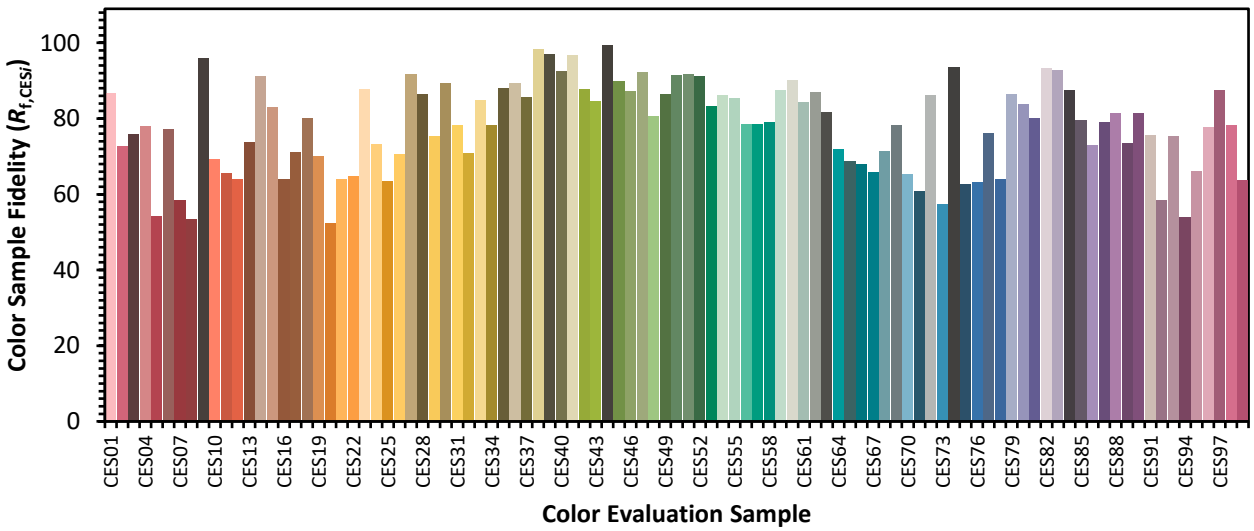



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**Individual Sample Fidelity Index ($R_{f,i}$)**

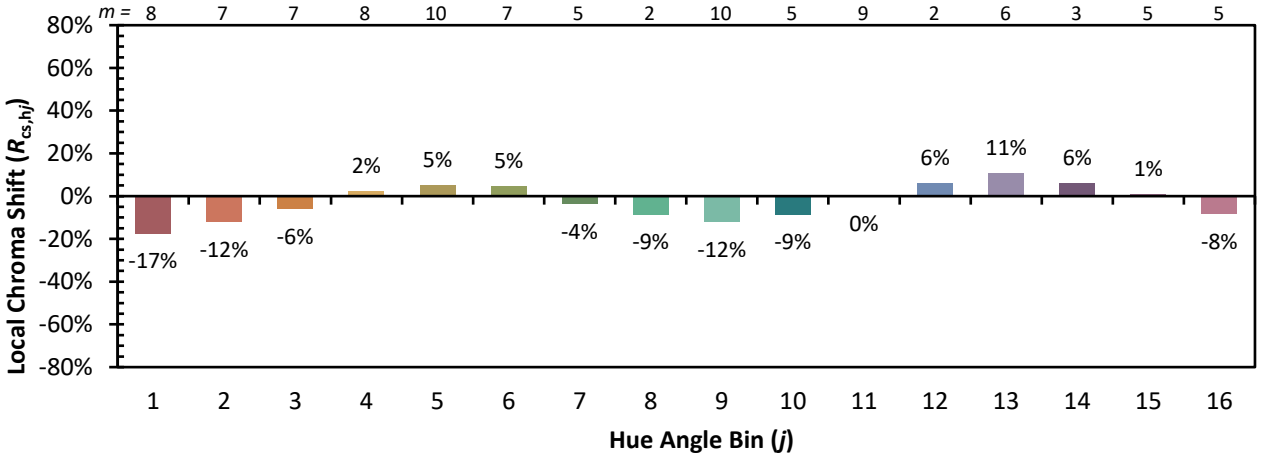
| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 71 | CES51 = 92 | CES76 = 63 |
| CES02 = 60 | CES27 = 92 | CES52 = 91 | CES77 = 76 |
| CES03 = 30 | CES28 = 86 | CES53 = 83 | CES78 = 64 |
| CES04 = 69 | CES29 = 75 | CES54 = 86 | CES79 = 86 |
| CES05 = 46 | CES30 = 89 | CES55 = 85 | CES80 = 84 |
| CES06 = 50 | CES31 = 78 | CES56 = 79 | CES81 = 80 |
| CES07 = 39 | CES32 = 71 | CES57 = 78 | CES82 = 93 |
| CES08 = 38 | CES33 = 85 | CES58 = 79 | CES83 = 93 |
| CES09 = 29 | CES34 = 78 | CES59 = 88 | CES84 = 87 |
| CES10 = 73 | CES35 = 88 | CES60 = 90 | CES85 = 80 |
| CES11 = 56 | CES36 = 89 | CES61 = 84 | CES86 = 73 |
| CES12 = 61 | CES37 = 86 | CES62 = 87 | CES87 = 79 |
| CES13 = 41 | CES38 = 98 | CES63 = 82 | CES88 = 81 |
| CES14 = 74 | CES39 = 97 | CES64 = 72 | CES89 = 74 |
| CES15 = 70 | CES40 = 93 | CES65 = 69 | CES90 = 81 |
| CES16 = 46 | CES41 = 97 | CES66 = 68 | CES91 = 76 |
| CES17 = 49 | CES42 = 88 | CES67 = 66 | CES92 = 58 |
| CES18 = 55 | CES43 = 85 | CES68 = 71 | CES93 = 75 |
| CES19 = 71 | CES44 = 99 | CES69 = 78 | CES94 = 54 |
| CES20 = 64 | CES45 = 90 | CES70 = 65 | CES95 = 66 |
| CES21 = 85 | CES46 = 87 | CES71 = 61 | CES96 = 78 |
| CES22 = 77 | CES47 = 92 | CES72 = 86 | CES97 = 88 |
| CES23 = 91 | CES48 = 81 | CES73 = 57 | CES98 = 78 |
| CES24 = 90 | CES49 = 86 | CES74 = 93 | CES99 = 64 |
| CES25 = 71 | CES50 = 91 | CES75 = 63 | |

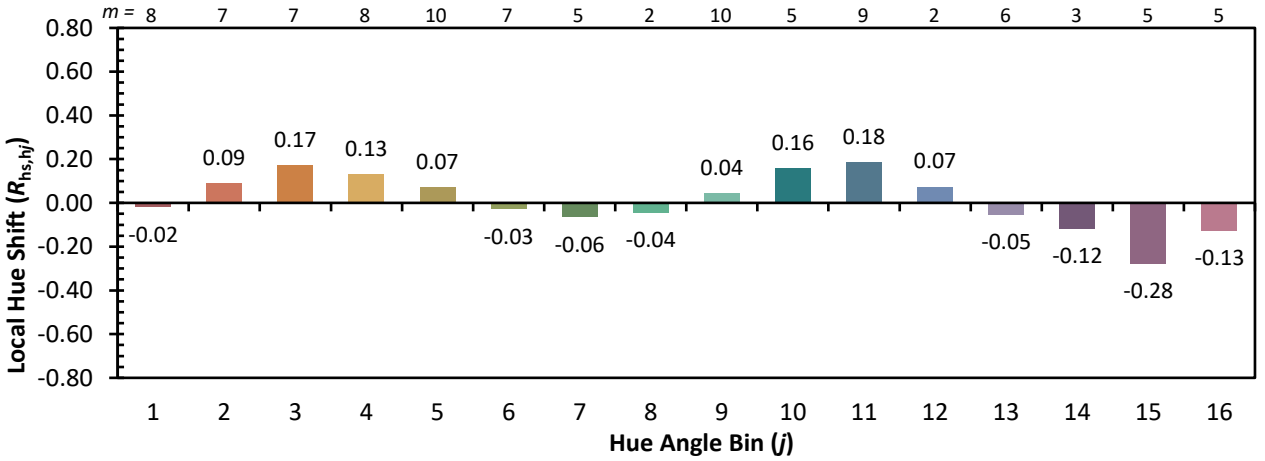


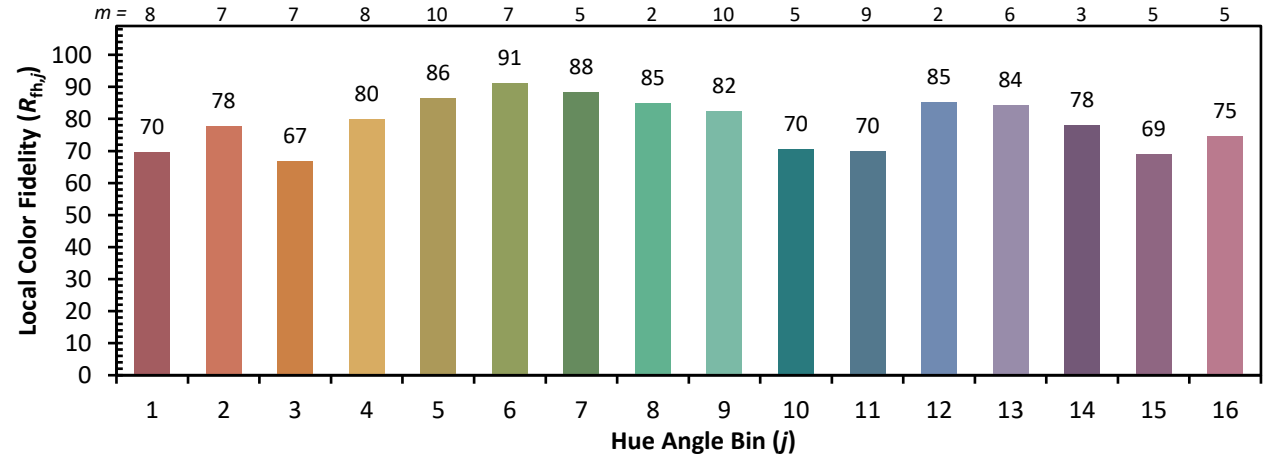
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## Color Rendition by Hue-Angle Bin



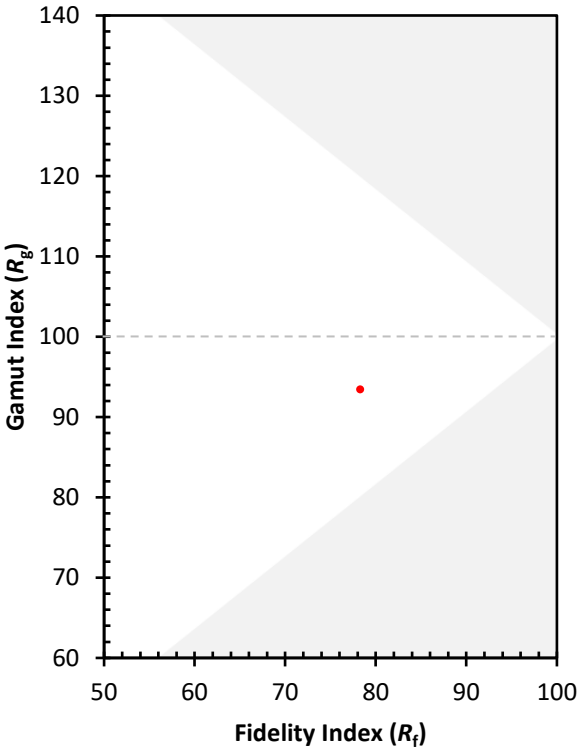



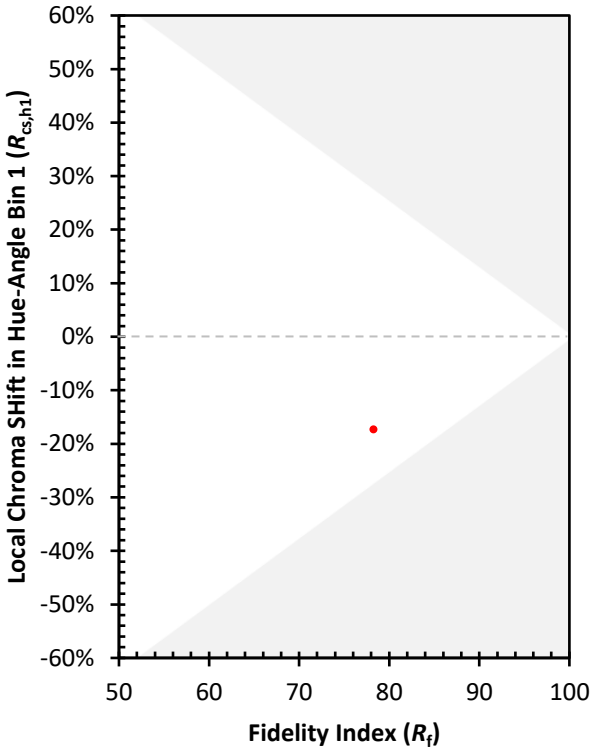



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## Measure Comparisons




(END OF REPORT)