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: P981432

Luminaire Tested: **FFX-CLB-20-730-U-FR-T3**

Issue Date: 04/15/2025

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: | P981432 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 04/15/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | STREETWORKS |
| Catalog Number: | FFX-CLB-20-730-U-FR-T3 |
| Description: | FAIRFAX POST TOP FIXTURE w/ FAIRFAX REFRACTOR T3 DISTRIBUTION LENS |
| Light Source: | (4) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 3185.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 160.9 lumens/watt |
| Luminous Opening: | Vertical Cylinder (Dia: 1.17' x H: 1.67') |
| IES Classification: | Type III - Short |
| BUG Rating: | B1 - U3 - G2 |

| | |
|---|---|
| Input Watts (W): | 19.8 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.99 |
| Total Harmonic Distortion (THDi): | 9.1% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

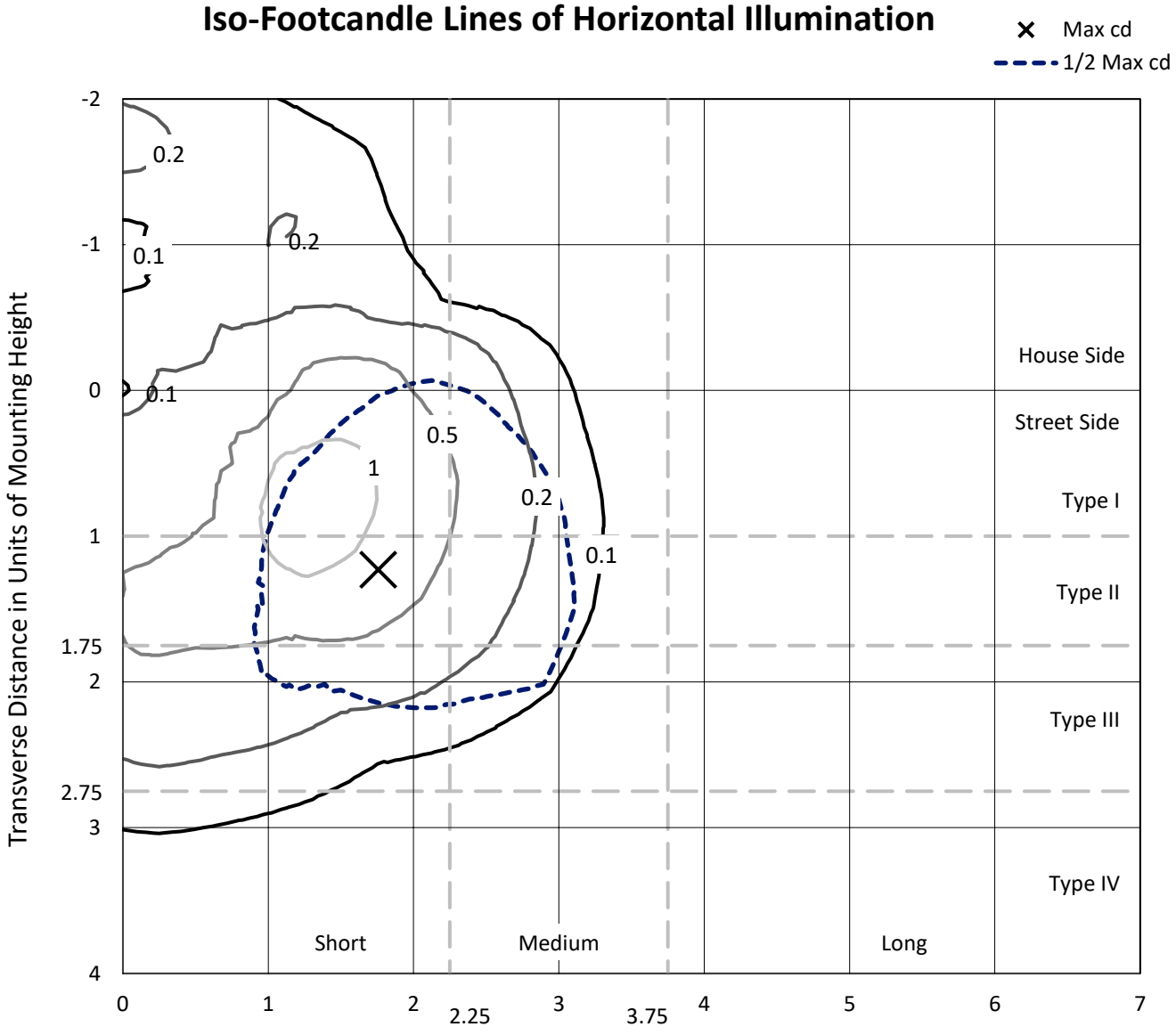


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REPORT NUMBER: P981432
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## Iso-Footcandle Lines of Horizontal Illumination



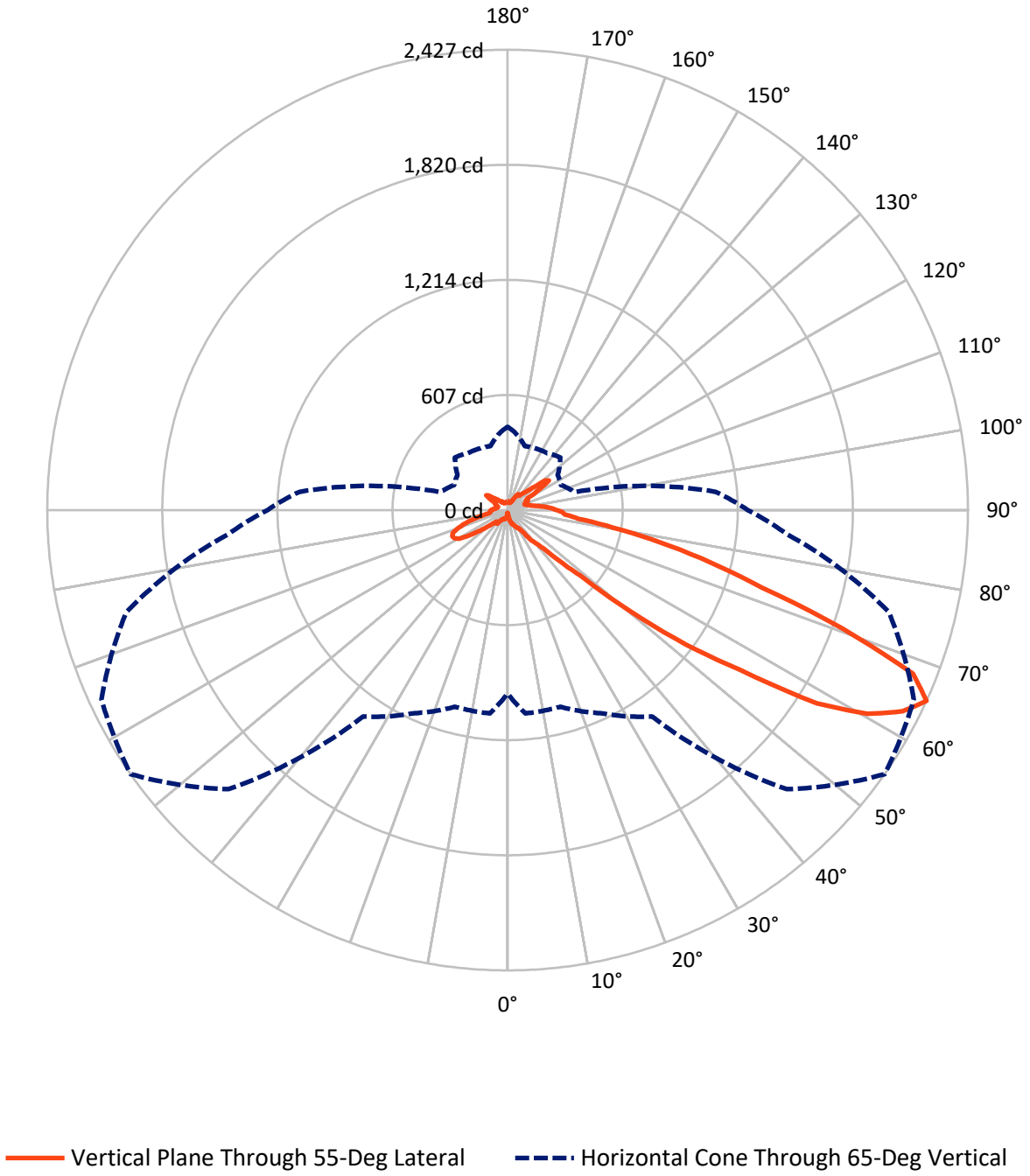

Based on 15 foot mounting height. Maximum calculated value = 1.3 fc
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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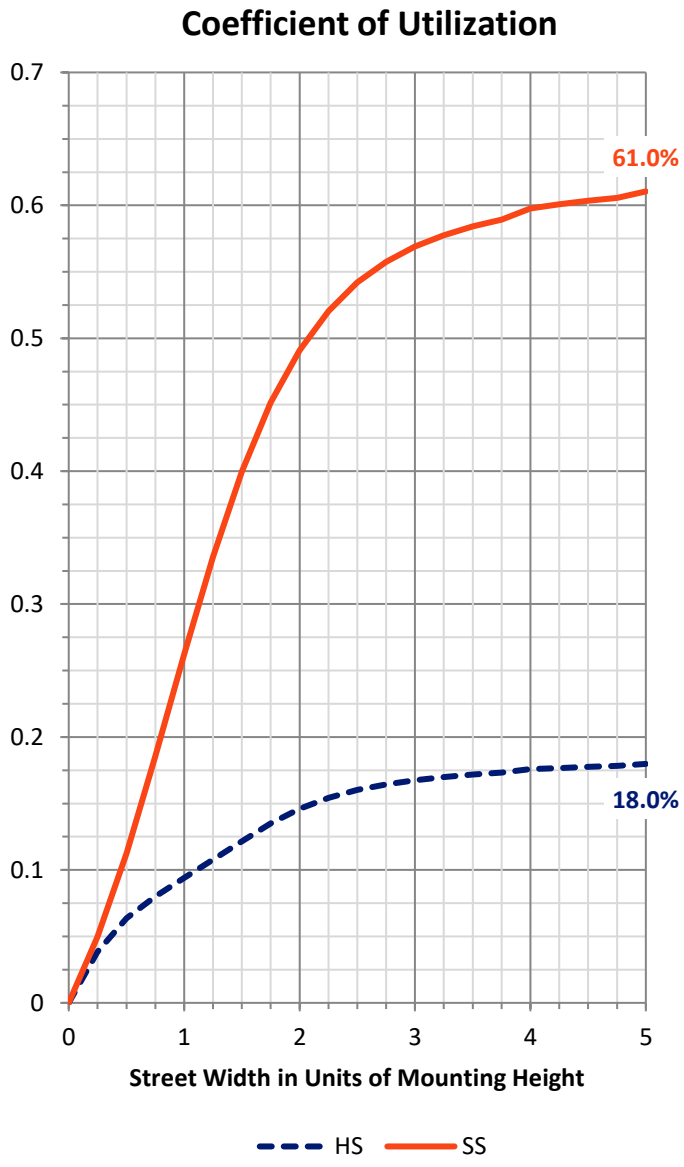
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**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 597.1 | 213.9 | 811.0 |
| | % Fixture | 18.7 | 6.7 | 25.5 |
| **Street Side** | Lumens | 2007.5 | 367.0 | 2374.4 |
| | % Fixture | 63.0 | 11.5 | 74.5 |
| **Total** | Lumens | 2604.5 | 580.9 | 3185.4 |
| | % Fixture | 81.8 | 18.2 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 3.0 | 0.1 |
| 10°-20° | 16.2 | 0.5 |
| 20°-30° | 33.3 | 1.0 |
| 30°-40° | 69.7 | 2.2 |
| 40°-50° | 183.9 | 5.8 |
| 50°-60° | 612.0 | 19.2 |
| 60°-70° | 987.1 | 31.0 |
| 70°-80° | 517.8 | 16.3 |
| 80°-90° | 181.7 | 5.7 |
| 90°-100° | 117.3 | 3.7 |
| 100°-110° | 76.1 | 2.4 |
| 110°-120° | 83.4 | 2.6 |
| 120°-130° | 140.3 | 4.4 |
| 130°-140° | 82.2 | 2.6 |
| 140°-150° | 44.0 | 1.4 |
| 150°-160° | 21.9 | 0.7 |
| 160°-170° | 11.5 | 0.4 |
| 170°-180° | 4.2 | 0.1 |
| 0°-90° | 2604.5 | 81.8 |
| 0°-180° | 3185.4 | 100.0 |



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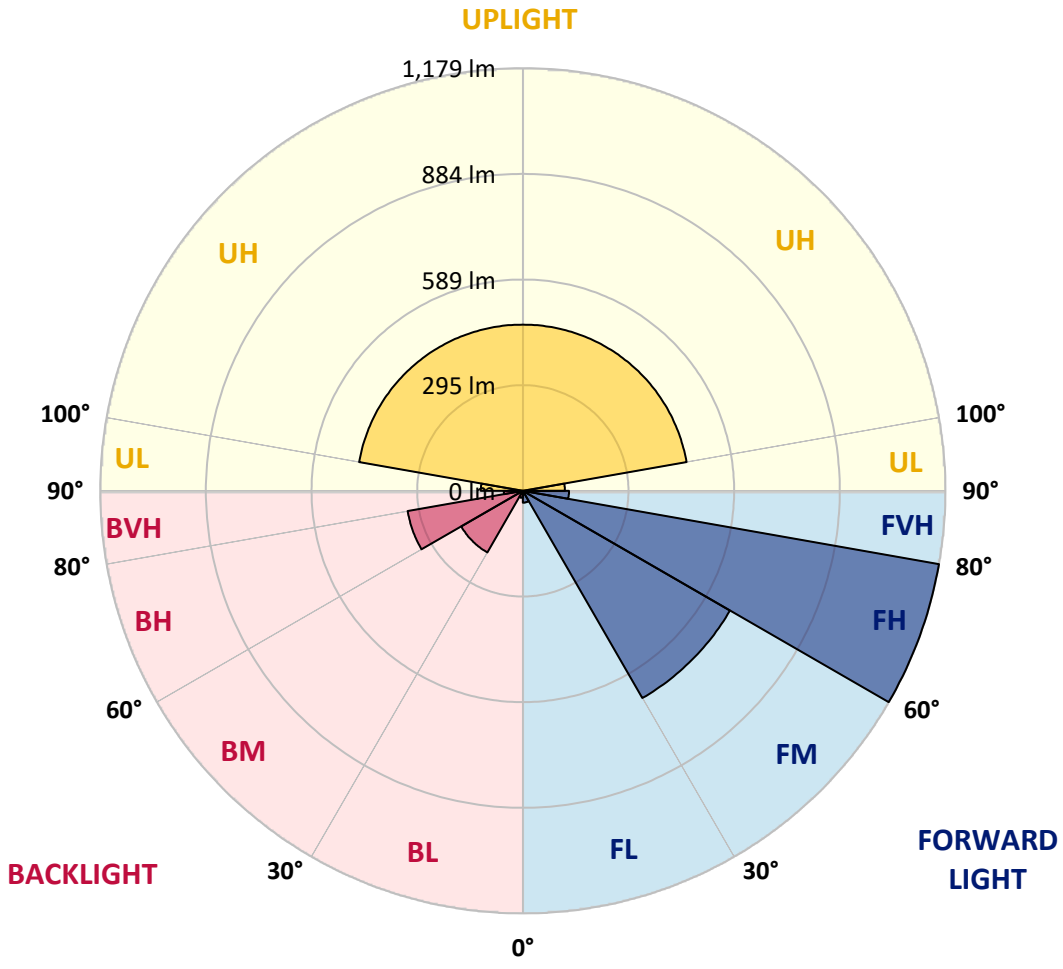
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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 33.0 | 1.0 | | | |
| FM | (30°-60°) | 667.1 | 20.9 | | | |
| FH | (60°-80°) | 1178.7 | 37.0 | | | G1/1800 |
| FVH | (80°-90°) | 128.6 | 4.0 | | | G2/225 |
| BL | (0°-30°) | 19.4 | 0.6 | B0/110 | | |
| BM | (30°-60°) | 198.4 | 6.2 | B0/220 | | |
| BH | (60°-80°) | 326.3 | 10.2 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 53.1 | 1.7 | | | G1/100 |
| UL | (90°-100°) | 117.3 | 3.7 | | U3/500 | |
| UH | (100°-180°) | 463.6 | 14.6 | | U3/500 | |

**BUG Rating: B1-U3-G2**
Type III Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 |
| 2.5° | 18.0 | 18.5 | 19.5 | 19.9 | 20.1 | 19.7 | 18.9 | 19.7 | 19.7 | 19.7 | 19.5 |
| 5° | 26.2 | 26.2 | 26.2 | 26.8 | 27.1 | 27.5 | 27.1 | 26.0 | 25.2 | 24.3 | 24.1 |
| 7.5° | 36.7 | 37.1 | 37.3 | 37.3 | 37.3 | 38.2 | 39.0 | 37.1 | 35.4 | 33.8 | 33.4 |
| 10° | 52.6 | 51.6 | 50.6 | 51.0 | 50.1 | 48.5 | 49.3 | 47.8 | 44.0 | 42.8 | 42.8 |
| 12.5° | 67.3 | 67.1 | 67.5 | 65.2 | 64.0 | 60.4 | 60.8 | 60.0 | 57.3 | 52.9 | 51.4 |
| 15° | 75.5 | 76.1 | 75.9 | 76.8 | 74.9 | 69.8 | 68.6 | 69.0 | 66.5 | 62.3 | 60.2 |
| 17.5° | 79.7 | 79.7 | 79.9 | 81.0 | 81.0 | 76.1 | 74.0 | 73.0 | 70.9 | 67.3 | 64.6 |
| 20° | 81.8 | 81.8 | 81.6 | 83.1 | 86.0 | 83.3 | 80.3 | 78.7 | 76.8 | 71.1 | 66.9 |
| 22.5° | 87.7 | 87.3 | 86.6 | 87.0 | 91.5 | 90.6 | 88.3 | 85.8 | 83.1 | 74.5 | 69.2 |
| 25° | 93.8 | 94.0 | 92.1 | 92.7 | 97.1 | 98.4 | 96.5 | 94.0 | 90.8 | 77.8 | 72.6 |
| 27.5° | 100.7 | 100.5 | 98.0 | 98.8 | 101.1 | 105.7 | 103.4 | 102.2 | 96.9 | 80.5 | 75.5 |
| 30° | 107.0 | 105.9 | 103.4 | 105.5 | 105.5 | 112.8 | 110.8 | 111.4 | 104.9 | 85.6 | 80.1 |
| 32.5° | 111.6 | 111.4 | 109.9 | 112.6 | 111.2 | 120.6 | 120.0 | 125.2 | 115.6 | 95.4 | 90.4 |
| 35° | 122.1 | 122.3 | 128.4 | 133.6 | 131.1 | 144.9 | 147.9 | 154.6 | 142.8 | 120.0 | 114.5 |
| 37.5° | 197.6 | 195.1 | 186.7 | 177.0 | 178.3 | 204.1 | 200.5 | 204.1 | 186.1 | 153.1 | 144.5 |
| 40° | 208.1 | 208.7 | 199.1 | 191.7 | 190.7 | 223.6 | 229.1 | 258.0 | 220.2 | 183.5 | 166.5 |
| 42.5° | 202.6 | 204.7 | 231.2 | 240.6 | 232.2 | 274.2 | 275.8 | 331.6 | 257.0 | 226.3 | 203.9 |
| 45° | 257.0 | 257.4 | 262.8 | 268.9 | 270.0 | 374.4 | 380.3 | 442.0 | 326.8 | 285.1 | 247.1 |
| 47.5° | 292.4 | 295.8 | 303.3 | 344.8 | 366.9 | 478.7 | 517.9 | 615.8 | 435.2 | 388.7 | 313.8 |
| 50° | 413.4 | 422.7 | 460.0 | 495.7 | 530.1 | 709.8 | 841.7 | 958.6 | 653.8 | 569.7 | 456.0 |
| 52.5° | 503.8 | 537.0 | 578.7 | 664.7 | 701.0 | 970.1 | 1177.4 | 1249.7 | 915.8 | 772.1 | 621.3 |
| 55° | 582.3 | 643.1 | 688.2 | 829.0 | 898.0 | 1264.8 | 1485.9 | 1496.4 | 1229.0 | 942.4 | 796.7 |
| 57.5° | 743.8 | 832.5 | 861.9 | 982.3 | 1078.4 | 1615.7 | 1922.8 | 1871.2 | 1548.6 | 1136.5 | 983.8 |
| 60° | 895.9 | 998.0 | 987.1 | 1098.1 | 1225.2 | 1917.6 | 2181.5 | 2155.2 | 1848.2 | 1320.2 | 1147.4 |
| 62.5° | 945.4 | 1049.0 | 1039.8 | 1156.4 | 1327.3 | 2058.3 | 2336.7 | 2293.3 | 2025.0 | 1435.1 | 1229.6 |
| 65° | 967.0 | 1076.3 | 1073.7 | 1182.8 | 1328.6 | 2080.8 | 2427.1 | 2362.5 | 2080.6 | 1481.5 | 1265.7 |
| 67.5° | 948.5 | 1052.6 | 1051.5 | 1152.0 | 1231.7 | 1918.0 | 2304.8 | 2209.6 | 1943.6 | 1372.4 | 1187.8 |
| 70° | 818.5 | 890.8 | 886.4 | 948.1 | 989.8 | 1524.5 | 1870.4 | 1798.4 | 1568.6 | 1127.9 | 984.0 |
| 72.5° | 667.4 | 688.8 | 698.1 | 733.3 | 744.4 | 1115.7 | 1402.6 | 1345.4 | 1169.6 | 844.7 | 746.1 |
| 75° | 533.0 | 534.0 | 543.7 | 556.1 | 552.3 | 820.8 | 1104.8 | 1069.3 | 862.5 | 630.1 | 565.9 |
| 77.5° | 352.8 | 350.1 | 392.5 | 397.5 | 373.4 | 522.9 | 825.0 | 800.0 | 617.3 | 459.2 | 413.8 |
| 80° | 202.4 | 203.3 | 232.2 | 250.4 | 240.8 | 332.3 | 565.3 | 559.8 | 423.9 | 321.3 | 284.2 |
| 82.5° | 151.0 | 158.2 | 173.7 | 183.3 | 179.6 | 249.8 | 376.1 | 386.4 | 301.2 | 231.2 | 211.2 |
| 85° | 168.2 | 172.2 | 173.9 | 174.5 | 169.9 | 233.7 | 303.7 | 303.1 | 253.2 | 194.0 | 187.3 |
| 87.5° | 163.8 | 167.2 | 168.6 | 169.5 | 164.9 | 223.4 | 286.9 | 282.8 | 242.9 | 186.5 | 176.6 |
| 90° | 137.8 | 145.6 | 145.4 | 152.7 | 147.5 | 196.3 | 251.7 | 249.0 | 220.5 | 171.8 | 160.3 |
| 92.5° | 115.6 | 120.0 | 122.9 | 133.0 | 128.4 | 172.8 | 226.3 | 220.0 | 197.4 | 156.3 | 143.9 |
| 95° | 108.0 | 112.0 | 114.3 | 120.0 | 114.3 | 149.3 | 190.7 | 185.0 | 163.8 | 130.3 | 118.3 |
| 97.5° | 91.0 | 92.3 | 94.4 | 98.2 | 94.4 | 121.0 | 154.4 | 148.9 | 131.5 | 106.3 | 98.0 |
| 100° | 77.2 | 78.4 | 81.2 | 83.9 | 82.0 | 103.6 | 129.2 | 126.3 | 113.1 | 92.5 | 86.8 |
| 102.5° | 73.0 | 73.8 | 77.4 | 79.1 | 76.8 | 95.2 | 114.1 | 114.1 | 102.4 | 85.4 | 80.8 |
| 105° | 69.6 | 70.7 | 73.4 | 74.0 | 72.4 | 87.7 | 105.3 | 104.2 | 95.0 | 79.9 | 75.5 |
| 107.5° | 66.3 | 67.5 | 69.8 | 68.8 | 68.0 | 80.8 | 94.6 | 96.3 | 88.3 | 75.9 | 73.0 |
| 110° | 69.8 | 70.3 | 72.2 | 70.5 | 71.9 | 80.3 | 95.0 | 95.4 | 93.1 | 82.9 | 79.7 |

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REPORT NUMBER: P981432
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**CANDELA DISTRIBUTION (continued):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 112.5° | 95.0 | 92.7 | 96.7 | 90.4 | 95.2 | 101.1 | *110.3* | 113.7 | 111.0 | 99.2 | 96.5 |
| 115° | 104.0 | 105.7 | 109.9 | 103.6 | 106.8 | 113.9 | *118.3* | 118.9 | 115.8 | 108.2 | 107.2 |
| 117.5° | 81.2 | 89.6 | 85.2 | 88.9 | 90.2 | 100.1 | *110.1* | 113.1 | 110.1 | 99.6 | 106.1 |
| 120° | 103.8 | 110.5 | 95.4 | 90.8 | 97.1 | 114.3 | *123.5* | 126.1 | 118.1 | 118.3 | 122.3 |
| 122.5° | 172.2 | 176.0 | 185.4 | 190.2 | 182.9 | 193.4 | *196.5* | 198.8 | 186.7 | 172.4 | 165.3 |
| 125° | 261.4 | 258.6 | 257.4 | 256.1 | 254.2 | 265.3 | *267.4* | 261.6 | 249.4 | 229.5 | 218.4 |
| 127.5° | 236.4 | 238.7 | 242.3 | 241.8 | 240.2 | 248.8 | *254.0* | 250.4 | 247.1 | 228.0 | 221.5 |
| 130° | 170.1 | 171.2 | 177.5 | 188.8 | 187.5 | 194.4 | *195.1* | 198.6 | 204.3 | 195.9 | 189.2 |
| 132.5° | 141.0 | 142.0 | 151.4 | 156.5 | 156.9 | 157.1 | *154.2* | 162.4 | 168.2 | 159.8 | 154.2 |
| 135° | 122.9 | 122.9 | 125.0 | 123.1 | 123.8 | 129.2 | *131.7* | 139.1 | 140.5 | 136.6 | 130.9 |
| 137.5° | 108.7 | 109.1 | 104.7 | 101.1 | 101.7 | 111.6 | *117.3* | 122.9 | 120.0 | 111.8 | 107.8 |
| 140° | 94.6 | 92.3 | 86.2 | 85.2 | 89.8 | 99.2 | *102.6* | 106.6 | 107.4 | 96.9 | 91.7 |
| 142.5° | 69.6 | 68.8 | 71.5 | 77.2 | 79.7 | 95.4 | *92.9* | 100.5 | 100.9 | 83.3 | 74.7 |
| 145° | 77.8 | 77.6 | 77.4 | 78.4 | 84.3 | 107.2 | *101.1* | 110.8 | 115.4 | 88.5 | 72.4 |
| 147.5° | 87.9 | 87.7 | 85.8 | 83.5 | 92.3 | 98.0 | *92.5* | 100.9 | 105.9 | 87.9 | 70.1 |
| 150° | 68.0 | 68.4 | 67.3 | 66.7 | 76.4 | 75.3 | *74.0* | 76.4 | 78.4 | 72.8 | 63.8 |
| 152.5° | 52.9 | 52.0 | 51.4 | 51.6 | 59.6 | 58.3 | *58.3* | 60.0 | 60.2 | 58.1 | 53.5 |
| 155° | 47.6 | 47.4 | 47.0 | 47.8 | 52.6 | 51.4 | *50.3* | 49.9 | 48.9 | 48.2 | 47.6 |
| 157.5° | 44.7 | 44.3 | 44.3 | 45.5 | 48.9 | 46.8 | *46.4* | 45.9 | 45.3 | 45.3 | 45.5 |
| 160° | 41.7 | 41.5 | 41.5 | 43.4 | 44.5 | 42.6 | *42.2* | 42.0 | 41.7 | 42.2 | 42.6 |
| 162.5° | 40.1 | 40.1 | 40.1 | 41.3 | 41.3 | 40.1 | *39.6* | 39.4 | 39.6 | 41.1 | 41.3 |
| 165° | 39.4 | 39.2 | 39.4 | 40.1 | 39.9 | 39.0 | *38.8* | 38.8 | 39.4 | 40.7 | 40.9 |
| 167.5° | 40.5 | 40.5 | 40.5 | 40.7 | 40.5 | 39.6 | *39.4* | 39.4 | 40.1 | 41.1 | 41.1 |
| 170° | 42.2 | 42.0 | 42.0 | 42.0 | 41.7 | 40.9 | *40.5* | 40.7 | 40.9 | 41.5 | 41.5 |
| 172.5° | 43.6 | 43.6 | 43.4 | 43.2 | 42.8 | 42.4 | *42.0* | 42.0 | 42.0 | 42.2 | 42.2 |
| 175° | 45.3 | 45.3 | 45.3 | 45.1 | 45.1 | 44.5 | *44.3* | 44.0 | 43.8 | 43.6 | 43.4 |
| 177.5° | 47.2 | 47.0 | 47.0 | 47.0 | 47.0 | 46.4 | *45.9* | 45.7 | 45.3 | 45.1 | 45.1 |
| 180° | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | *46.4* | 46.4 | 46.4 | 46.4 | 46.4 |

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**CANDELA DISTRIBUTION (continued):**

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 |
| 2.5° | 19.5 | 18.9 | 17.8 | 15.9 | 15.3 | 14.7 | 14.1 | 12.8 | 12.2 | 11.7 |
| 5° | 23.9 | 23.1 | 22.9 | 21.8 | 20.3 | 19.1 | 18.9 | 18.5 | 18.2 | 17.6 |
| 7.5° | 34.2 | 34.6 | 35.7 | 33.8 | 29.6 | 27.3 | 27.9 | 30.2 | 29.4 | 29.2 |
| 10° | 43.0 | 45.7 | 47.8 | 43.0 | 35.4 | 30.6 | 30.8 | 35.4 | 35.9 | 36.7 |
| 12.5° | 50.3 | 52.6 | 52.2 | 46.1 | 39.0 | 34.4 | 32.9 | 35.4 | 37.8 | 38.0 |
| 15° | 58.3 | 54.3 | 52.9 | 47.8 | 42.8 | 39.2 | 38.6 | 39.2 | 39.2 | 38.8 |
| 17.5° | 61.7 | 54.7 | 50.6 | 46.4 | 42.8 | 40.3 | 39.4 | 38.4 | 36.9 | 36.9 |
| 20° | 62.5 | 56.4 | 51.6 | 47.2 | 43.6 | 40.9 | 38.6 | 37.3 | 36.9 | 36.9 |
| 22.5° | 65.0 | 59.6 | 54.5 | 49.3 | 45.5 | 42.0 | 39.2 | 38.0 | 38.0 | 38.2 |
| 25° | 68.6 | 63.6 | 57.3 | 51.8 | 47.8 | 44.0 | 40.5 | 38.6 | 38.4 | 38.6 |
| 27.5° | 73.0 | 67.8 | 60.8 | 55.0 | 50.3 | 46.1 | 41.7 | 39.4 | 38.6 | 38.6 |
| 30° | 78.0 | 71.9 | 64.2 | 57.7 | 52.6 | 48.9 | 43.4 | 40.3 | 39.2 | 38.8 |
| 32.5° | 87.0 | 80.1 | 68.4 | 61.2 | 55.6 | 51.4 | 45.9 | 42.0 | 39.9 | 39.4 |
| 35° | 109.3 | 98.6 | 83.3 | 70.3 | 61.7 | 54.3 | 47.8 | 43.0 | 40.3 | 39.9 |
| 37.5° | 133.4 | 117.3 | 102.8 | 88.3 | 75.7 | 63.8 | 51.4 | 44.7 | 41.3 | 40.7 |
| 40° | 148.5 | 127.3 | 114.5 | 92.9 | 91.2 | 81.4 | 63.1 | 49.3 | 43.4 | 42.6 |
| 42.5° | 179.6 | 147.9 | 127.5 | 82.0 | 89.1 | 91.2 | 79.7 | 61.9 | 49.1 | 47.6 |
| 45° | 216.3 | 173.9 | 143.1 | 87.7 | 91.9 | 89.4 | 81.6 | 71.7 | 61.2 | 58.3 |
| 47.5° | 280.2 | 198.4 | 148.5 | 101.7 | 105.1 | 98.2 | 86.6 | 76.4 | 68.6 | 67.5 |
| 50° | 404.4 | 270.6 | 167.2 | 125.0 | 135.1 | 115.8 | 100.9 | 92.9 | 82.4 | 81.2 |
| 52.5° | 564.2 | 325.8 | 187.7 | 161.7 | 184.6 | 160.7 | 136.6 | 120.4 | 118.1 | 118.9 |
| 55° | 737.5 | 342.7 | 214.8 | 199.9 | 240.0 | 217.5 | 189.8 | 174.3 | 189.6 | 194.4 |
| 57.5° | 909.3 | 368.3 | 254.0 | 249.4 | 300.4 | 266.2 | 244.4 | 251.1 | 314.8 | 330.2 |
| 60° | 1044.6 | 390.1 | 287.2 | 297.0 | 360.2 | 323.0 | 313.8 | 323.7 | 433.1 | 473.8 |
| 62.5° | 1097.7 | 380.3 | 304.4 | 317.2 | 388.3 | 362.9 | 359.7 | 369.2 | 461.5 | 501.5 |
| 65° | *1101.6* | *365.2* | *311.1* | *322.6* | *392.7* | *365.6* | *357.0* | *349.0* | *413.2* | *438.6* |
| 67.5° | 1019.4 | 335.0 | 302.9 | 314.8 | 373.2 | 337.3 | 319.5 | 301.4 | 334.4 | 348.4 |
| 70° | 821.8 | 297.0 | 277.3 | 284.2 | 313.8 | 280.7 | 256.3 | 243.9 | 255.7 | 254.6 |
| 72.5° | 622.6 | 261.6 | 249.2 | 242.3 | 256.3 | 229.5 | 202.6 | 190.7 | 201.2 | 198.4 |
| 75° | 475.5 | 233.5 | 221.9 | 198.8 | 212.5 | 176.2 | 146.6 | 138.4 | 143.5 | 141.6 |
| 77.5° | 343.2 | 187.1 | 171.8 | 146.4 | 164.0 | 128.2 | 98.4 | 92.5 | 93.8 | 89.8 |
| 80° | 247.1 | 139.5 | 124.6 | 106.6 | 120.6 | 91.7 | 73.0 | 71.7 | 72.4 | 68.2 |
| 82.5° | 194.0 | 111.8 | 101.9 | 92.3 | 96.7 | 82.9 | 70.3 | 69.0 | 69.6 | 65.0 |
| 85° | 180.8 | 109.5 | 99.2 | 92.9 | 94.4 | 81.6 | 68.2 | 67.8 | 68.8 | 63.8 |
| 87.5° | 170.5 | 108.4 | 100.3 | 91.2 | 87.7 | 74.9 | 63.1 | 65.0 | 68.0 | 62.7 |
| 90° | 150.4 | 101.1 | 94.0 | 85.8 | 82.0 | 70.3 | 63.1 | 65.9 | 65.7 | 61.9 |
| 92.5° | 132.6 | 90.2 | 84.5 | 79.9 | 79.1 | 71.5 | 66.1 | 68.6 | 69.4 | 65.7 |
| 95° | 108.7 | 76.1 | 73.4 | 71.9 | 73.2 | 65.9 | 61.2 | 62.5 | 61.7 | 59.6 |
| 97.5° | 92.5 | 69.4 | 67.5 | 65.4 | 64.2 | 58.9 | 55.0 | 56.6 | 57.5 | 55.6 |
| 100° | 83.7 | 66.1 | 64.6 | 62.3 | 62.1 | 58.5 | 56.4 | 59.8 | 62.3 | 61.2 |
| 102.5° | 78.2 | 62.7 | 60.8 | 58.7 | 58.1 | 55.2 | 53.5 | 55.6 | 57.9 | 55.8 |
| 105° | 74.3 | 59.6 | 56.6 | 54.7 | 53.7 | 51.6 | 49.5 | 50.3 | 52.9 | 51.8 |
| 107.5° | 70.5 | 59.4 | 54.7 | 53.3 | 53.3 | 50.6 | 47.6 | 47.8 | 49.1 | 48.9 |
| 110° | 76.4 | 65.9 | 57.5 | 55.4 | 54.7 | 53.9 | 51.8 | 49.7 | 48.0 | 48.0 |

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

Scaled Data Report

REPORT NUMBER: P981432
CATALOG NUMBER: FFX-CLB-20-730-U-FR-T3

**CANDELA DISTRIBUTION (continued):**

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|
| 112.5° | 91.5 | 80.8 | 72.2 | 65.4 | 62.7 | 59.6 | 55.2 | 52.0 | 49.7 | 49.1 |
| 115° | 98.2 | 86.6 | 78.4 | 71.1 | 64.8 | 58.7 | 55.0 | 52.6 | 51.4 | 52.6 |
| 117.5° | 92.5 | 76.6 | 75.5 | 68.0 | 62.1 | 57.3 | 56.2 | 52.4 | 54.5 | 54.5 |
| 120° | 104.0 | 88.9 | 86.6 | 75.7 | 67.5 | 61.5 | 60.8 | 60.2 | 57.9 | 56.8 |
| 122.5° | 152.1 | 132.4 | 122.9 | 106.8 | 92.7 | 80.1 | 73.0 | 63.1 | 56.2 | 54.7 |
| 125° | 206.6 | 180.6 | 157.9 | 136.6 | 115.4 | 92.9 | 74.0 | 59.4 | 52.2 | 51.2 |
| 127.5° | 207.2 | 180.8 | 155.8 | 129.8 | 106.8 | 83.3 | 66.5 | 56.2 | 51.2 | 51.0 |
| 130° | 182.3 | 159.2 | 131.7 | 105.9 | 87.3 | 71.7 | 59.6 | 51.2 | 47.6 | 46.6 |
| 132.5° | 145.2 | 124.6 | 107.0 | 91.0 | 76.8 | 63.6 | 52.6 | 46.8 | 44.7 | 44.5 |
| 135° | 122.1 | 104.2 | 91.9 | 80.1 | 69.0 | 57.3 | 47.2 | 44.3 | 43.2 | 42.8 |
| 137.5° | 99.6 | 88.9 | 81.4 | 71.9 | 61.2 | 51.6 | 44.9 | 43.6 | 43.2 | 42.4 |
| 140° | 86.4 | 79.3 | 71.1 | 60.6 | 52.4 | 44.5 | 40.9 | 42.0 | 43.0 | 42.8 |
| 142.5° | 70.5 | 65.2 | 59.2 | 52.2 | 46.6 | 43.0 | 41.5 | 42.2 | 42.2 | 42.4 |
| 145° | 66.9 | 60.0 | 56.6 | 52.4 | 48.7 | 45.9 | 42.4 | 41.1 | 40.9 | 40.9 |
| 147.5° | 62.1 | 59.4 | 57.3 | 54.3 | 48.7 | 43.6 | 39.6 | 39.0 | 39.9 | 39.6 |
| 150° | 58.1 | 56.2 | 53.7 | 49.1 | 43.4 | 40.1 | 38.0 | 38.2 | 39.6 | 39.9 |
| 152.5° | 49.3 | 48.2 | 46.6 | 43.6 | 39.6 | 38.0 | 36.9 | 37.8 | 38.8 | 39.0 |
| 155° | 43.8 | 43.2 | 42.8 | 40.9 | 38.4 | 37.3 | 36.9 | 37.5 | 38.6 | 38.8 |
| 157.5° | 43.4 | 42.0 | 41.3 | 40.1 | 38.2 | 37.1 | 37.1 | 37.8 | 38.4 | 38.6 |
| 160° | 42.2 | 40.3 | 40.1 | 38.8 | 38.4 | 37.8 | 38.2 | 38.4 | 39.0 | 38.8 |
| 162.5° | 41.1 | 39.9 | 39.6 | 38.8 | 39.2 | 39.9 | 39.9 | 40.1 | 40.5 | 40.3 |
| 165° | 40.7 | 39.6 | 39.4 | 39.4 | 40.7 | 41.7 | 42.0 | 41.7 | 41.7 | 41.7 |
| 167.5° | 41.1 | 40.5 | 40.3 | 40.7 | 41.7 | 43.0 | 43.2 | 42.8 | 42.4 | 42.2 |
| 170° | 41.7 | 41.5 | 41.7 | 42.0 | 42.6 | 43.4 | 43.4 | 43.0 | 43.0 | 43.0 |
| 172.5° | 42.4 | 42.8 | 43.0 | 43.0 | 43.6 | 44.0 | 44.3 | 44.0 | 44.0 | 44.0 |
| 175° | 43.6 | 43.8 | 43.8 | 44.0 | 44.7 | 45.1 | 45.5 | 45.5 | 45.5 | 45.5 |
| 177.5° | 45.1 | 45.1 | 45.1 | 45.3 | 45.5 | 46.1 | 46.4 | 46.8 | 47.0 | 47.0 |
| 180° | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 | 46.4 |

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: SP1-2501-332-4

Test Date: 03/21/2025

Luminaire Tested: FFX-CLB-100-730-U-FR-T5

Data in this report applies to families of products including FFX-CLB-100-730-U-FR-T5

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

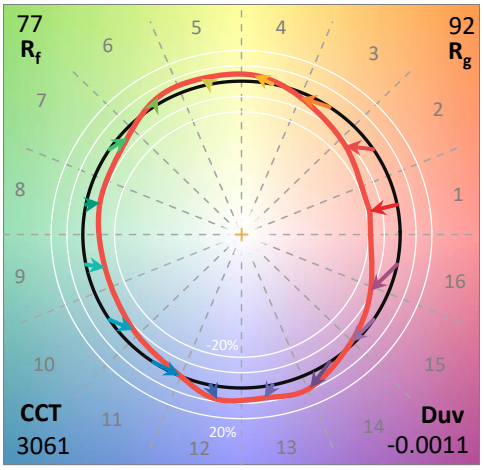
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2501-332-4 |
| 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-100-730-U-FR-T5** |
| Description: | FAIRFAX ACORN W/ FAIRFAX REFRACTOR 100W T5 |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3061 |
| CIE u': | 0.2489 |
| CIE v': | 0.5187 |
| Duv: | -0.0011 |
| CIE x: | 0.4312 |
| CIE y: | 0.3995 |
| CIE z: | 0.1693 |
| Peak Wavelength (nm): | 592 |
| Dominant Wavelength (nm): | 582 |
| Purity: | 49.32381 |
| Rf: | 76.8 |
| Rg: | 92.2 |

| | |
|---|---|
| CRI (Ra): | 71.7 |
| R1: | 67.8 |
| R2: | 85.0 |
| R3: | 92.9 |
| R4: | 66.0 |
| R5: | 68.5 |
| R6: | 80.2 |
| R7: | 74.5 |
| R8: | 39.0 |
| R9: | -40.3 |
| R10: | 67.2 |
| R11: | 61.6 |
| R12: | 59.9 |
| R13: | 71.4 |
| R14: | 96.3 |
| R15: | 58.8 |




## Test Conditions

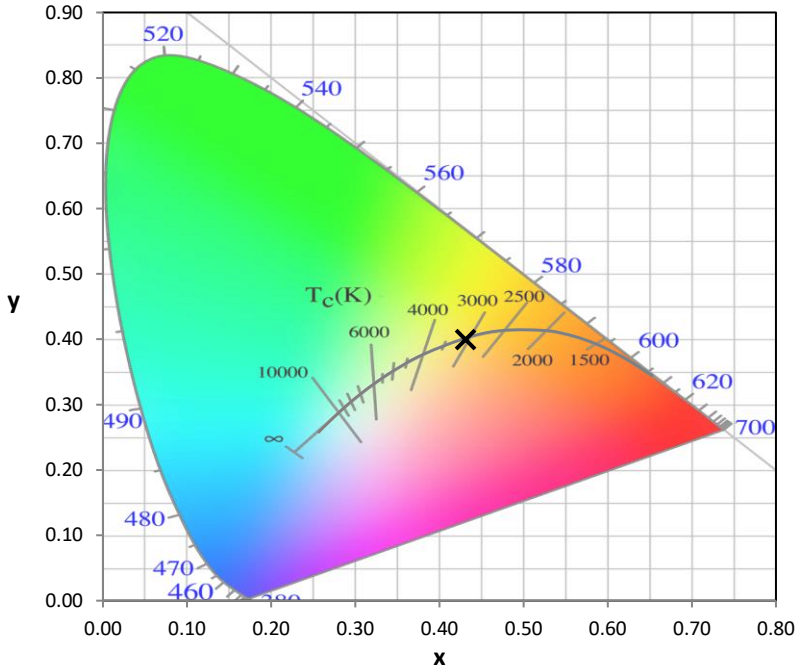
| | |
|---|---|
| Stabilization Time: | 56M |
| Operation Time: | 1H 56M |
| Sphere Temperature (°C): | 24.8 |

REPORT NUMBER: SP1-2501-332-4

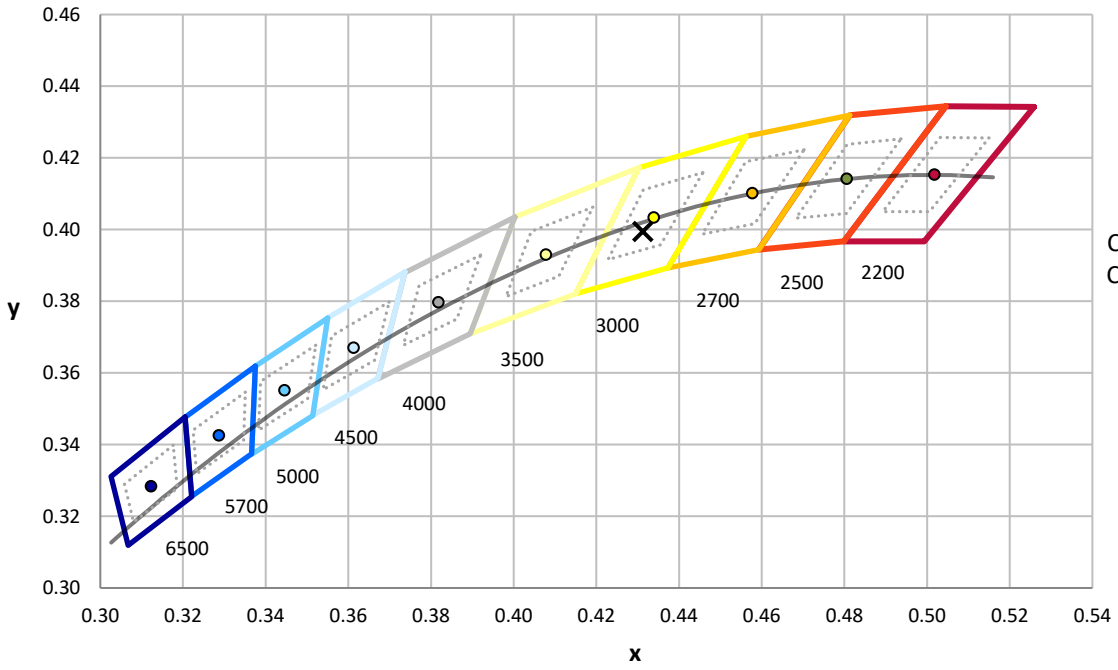
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 12/16/2024 | 6/16/2025 |
| Power Meter | INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0063 | 10/22/2024 | 10/22/2025 |
| DC 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: SP1-2501-332-4

## CIE 1931 Chromaticity Diagram




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

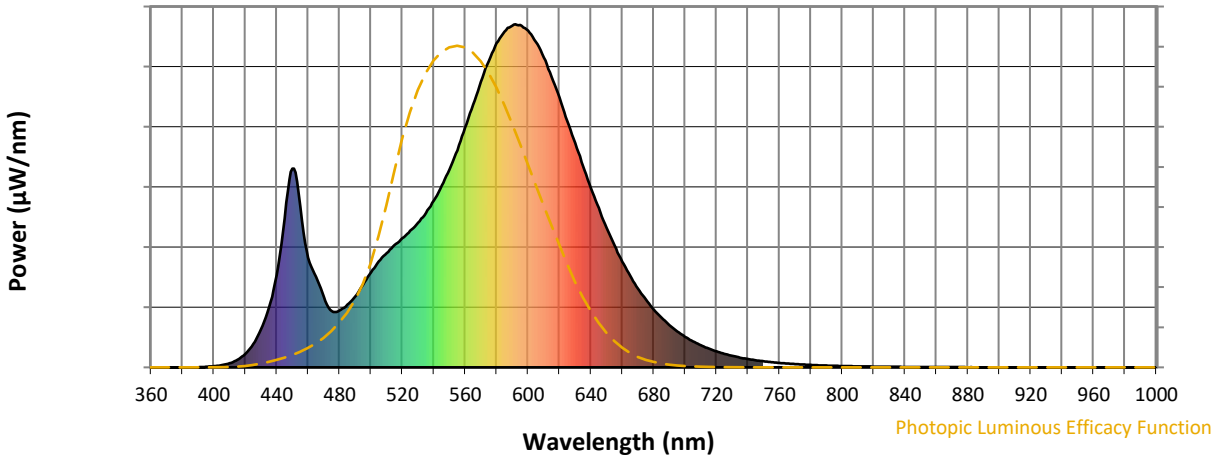



CCT = 3061K
CIE x = 0.4312
CIE y = 0.3995
Duv = -0.0011

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2501-332-4

## Photopic Flux vs. Wavelength

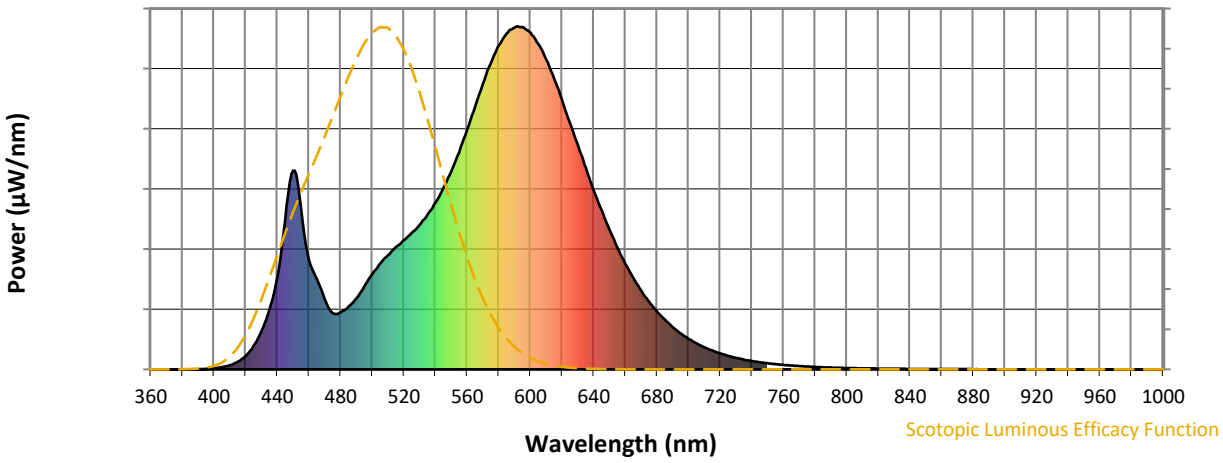



## Photopic Lumens: NR

| 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 | 207 | NR | 620 | 786 | NR | 750 | 18 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 241 | NR | 625 | 718 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 277 | NR | 630 | 654 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 309 | NR | 635 | 588 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 333 | NR | 640 | 523 | NR | 770 | 10 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 356 | NR | 645 | 465 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 376 | NR | 650 | 407 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 398 | NR | 655 | 356 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 422 | NR | 660 | 308 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 450 | NR | 665 | 267 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 486 | NR | 670 | 229 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 530 | NR | 675 | 197 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 577 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 68 | NR | 555 | 633 | NR | 685 | 145 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 111 | NR | 560 | 700 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 175 | NR | 565 | 766 | NR | 695 | 105 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 269 | NR | 570 | 832 | NR | 700 | 89 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 434 | NR | 575 | 893 | NR | 705 | 76 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 579 | NR | 580 | 945 | NR | 710 | 64 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 468 | NR | 585 | 979 | NR | 715 | 55 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 320 | NR | 590 | 996 | NR | 720 | 47 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 264 | NR | 595 | 998 | NR | 725 | 40 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 204 | NR | 600 | 981 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 164 | NR | 605 | 949 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 166 | NR | 610 | 903 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 183 | NR | 615 | 847 | NR | 745 | 21 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2501-332-4

## Scotopic Flux vs. Wavelength

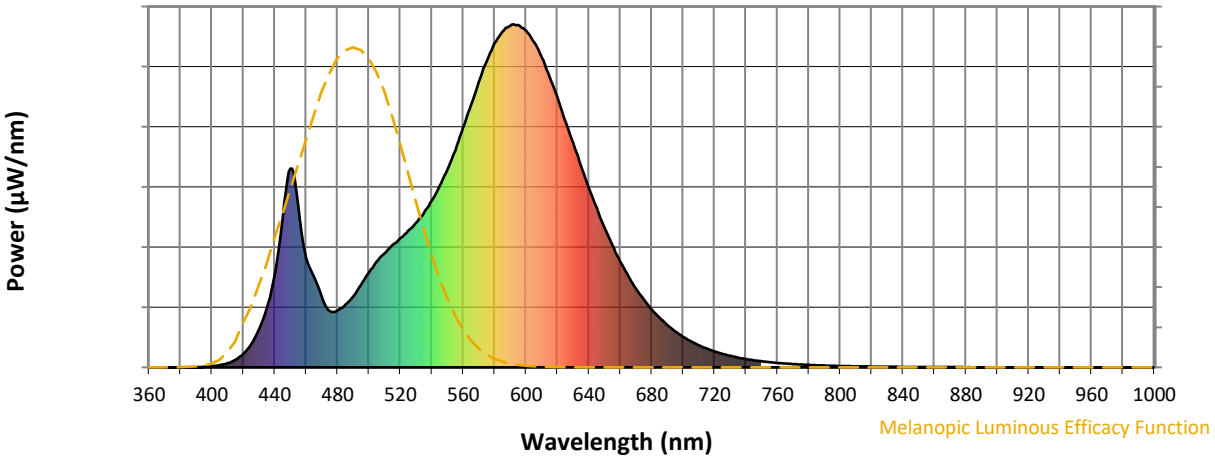



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | 207 | NR | 620 | 786 | NR | 750 | 18 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 241 | NR | 625 | 718 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 277 | NR | 630 | 654 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 309 | NR | 635 | 588 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 333 | NR | 640 | 523 | NR | 770 | 10 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 356 | NR | 645 | 465 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 376 | NR | 650 | 407 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 398 | NR | 655 | 356 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 422 | NR | 660 | 308 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 450 | NR | 665 | 267 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 486 | NR | 670 | 229 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 530 | NR | 675 | 197 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 577 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 68 | NR | 555 | 633 | NR | 685 | 145 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 111 | NR | 560 | 700 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 175 | NR | 565 | 766 | NR | 695 | 105 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 269 | NR | 570 | 832 | NR | 700 | 89 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 434 | NR | 575 | 893 | NR | 705 | 76 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 579 | NR | 580 | 945 | NR | 710 | 64 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 468 | NR | 585 | 979 | NR | 715 | 55 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 320 | NR | 590 | 996 | NR | 720 | 47 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 264 | NR | 595 | 998 | NR | 725 | 40 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 204 | NR | 600 | 981 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 164 | NR | 605 | 949 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 166 | NR | 610 | 903 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 183 | NR | 615 | 847 | NR | 745 | 21 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2501-332-4

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.47**

| 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 | 207 | NR | 620 | 786 | NR | 750 | 18 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 241 | NR | 625 | 718 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 277 | NR | 630 | 654 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 309 | NR | 635 | 588 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 333 | NR | 640 | 523 | NR | 770 | 10 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 356 | NR | 645 | 465 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 376 | NR | 650 | 407 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 398 | NR | 655 | 356 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 422 | NR | 660 | 308 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 450 | NR | 665 | 267 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 486 | NR | 670 | 229 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 530 | NR | 675 | 197 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 39 | NR | 550 | 577 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 68 | NR | 555 | 633 | NR | 685 | 145 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 111 | NR | 560 | 700 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 175 | NR | 565 | 766 | NR | 695 | 105 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 269 | NR | 570 | 832 | NR | 700 | 89 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 434 | NR | 575 | 893 | NR | 705 | 76 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 579 | NR | 580 | 945 | NR | 710 | 64 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 468 | NR | 585 | 979 | NR | 715 | 55 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 320 | NR | 590 | 996 | NR | 720 | 47 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 264 | NR | 595 | 998 | NR | 725 | 40 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 204 | NR | 600 | 981 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 164 | NR | 605 | 949 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 166 | NR | 610 | 903 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 183 | NR | 615 | 847 | NR | 745 | 21 | NR | 875 | 1 | NR | | | |

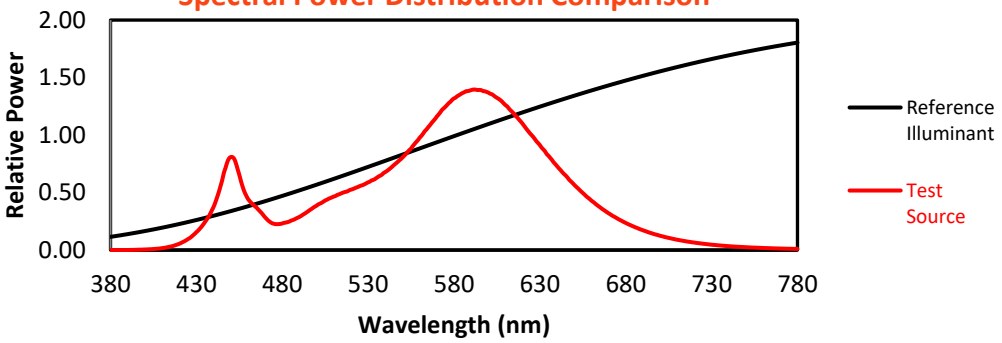
REPORT NUMBER: SP1-2501-332-4

# TM-30-18

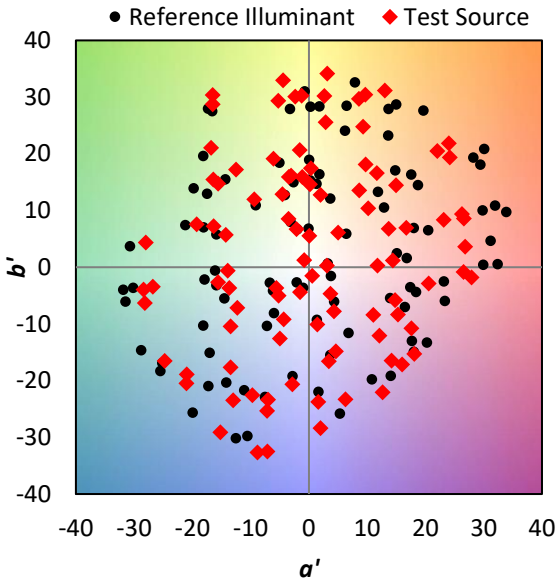
## Summary

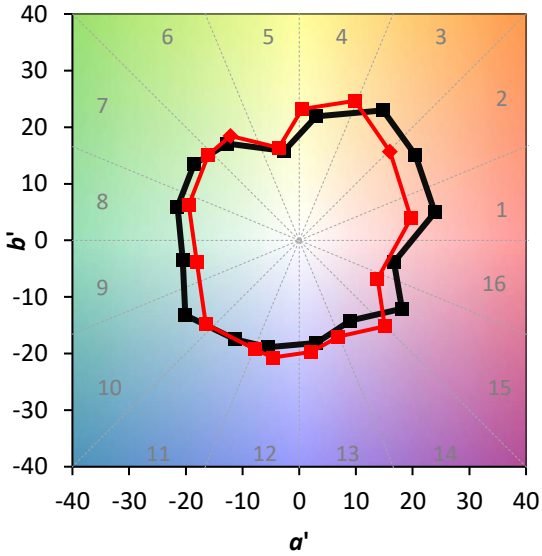
$R_f$ = 76.8
$R_g$ = 92.2
CIE $R_a$ = 71.7
$R_9$ = -40.3

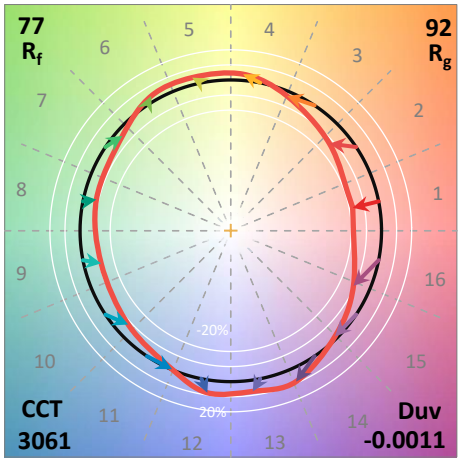
## Spectral Power Distribution Comparison

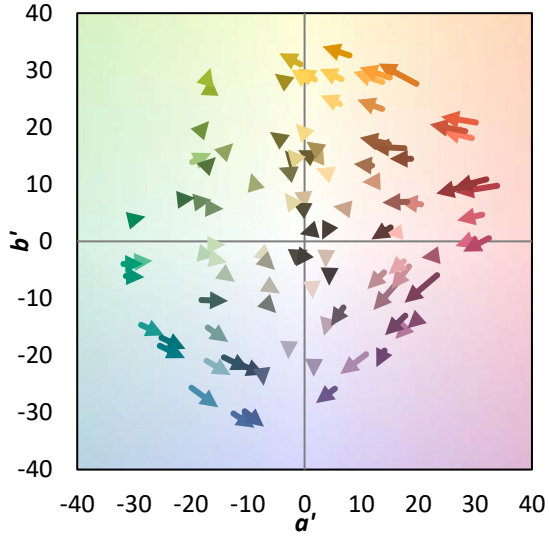



## Color Vector Graphics



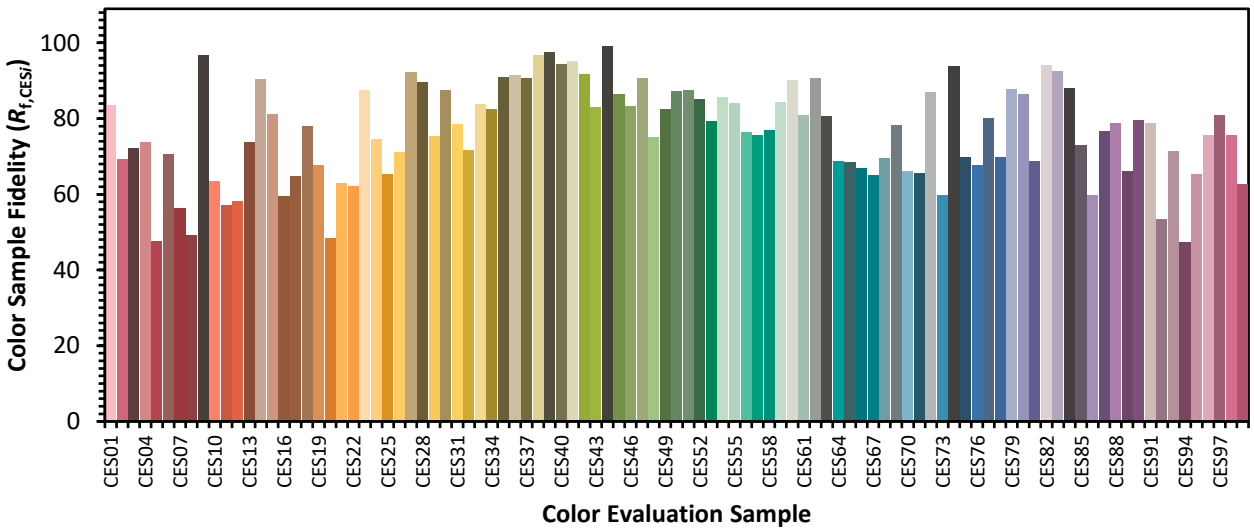



REPORT NUMBER: SP1-2501-332-4

## TM-30-18

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

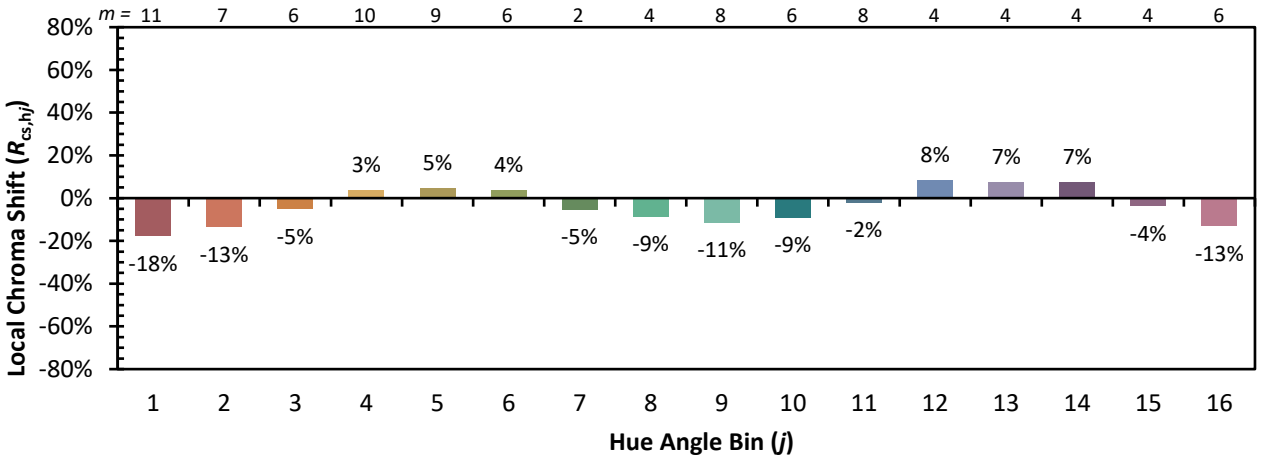
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| CES06 = 51 | CES31 = 79 | CES56 = 76 | CES81 = 69 |
| CES07 = 41 | CES32 = 72 | CES57 = 76 | CES82 = 94 |
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| CES13 = 43 | CES38 = 97 | CES63 = 81 | CES88 = 79 |
| CES14 = 74 | CES39 = 98 | CES64 = 69 | CES89 = 66 |
| CES15 = 71 | CES40 = 94 | CES65 = 69 | CES90 = 80 |
| CES16 = 47 | CES41 = 95 | CES66 = 67 | CES91 = 79 |
| CES17 = 50 | CES42 = 92 | CES67 = 65 | CES92 = 53 |
| CES18 = 56 | CES43 = 83 | CES68 = 70 | CES93 = 71 |
| CES19 = 73 | CES44 = 99 | CES69 = 78 | CES94 = 47 |
| CES20 = 66 | CES45 = 87 | CES70 = 66 | CES95 = 65 |
| CES21 = 87 | CES46 = 83 | CES71 = 66 | CES96 = 76 |
| CES22 = 79 | CES47 = 91 | CES72 = 87 | CES97 = 81 |
| CES23 = 92 | CES48 = 75 | CES73 = 60 | CES98 = 76 |
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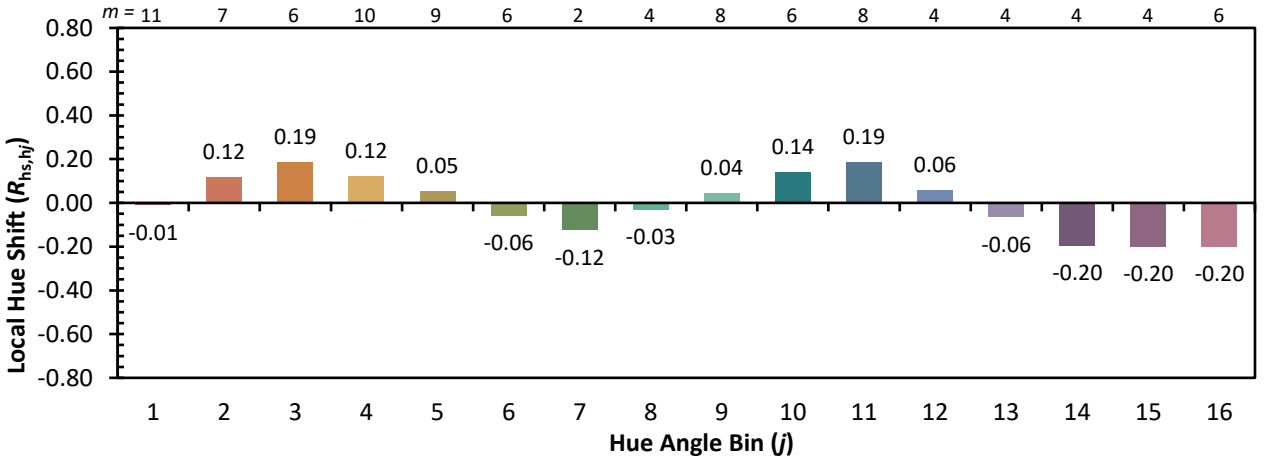


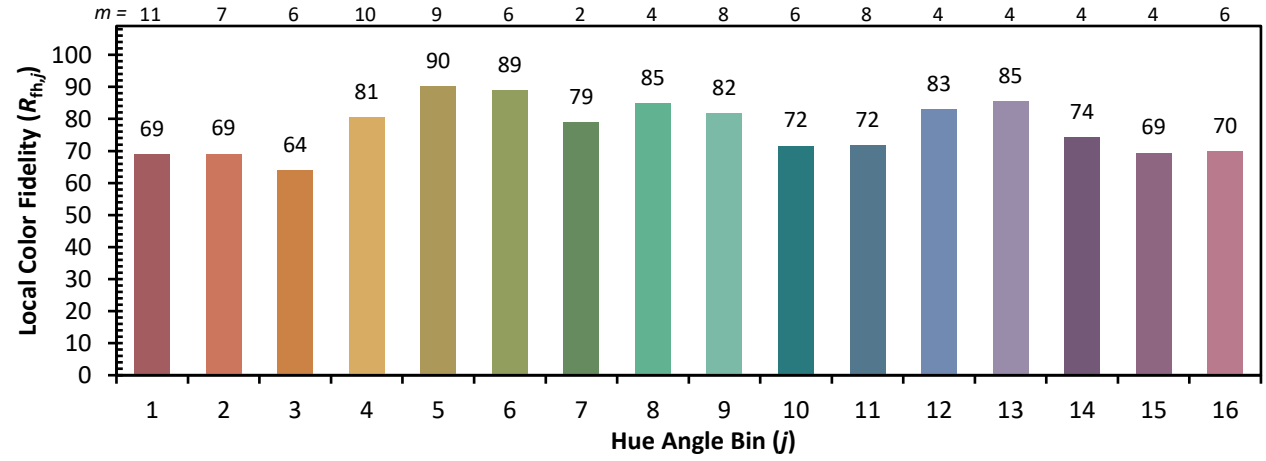
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## Color Rendition by Hue-Angle Bin



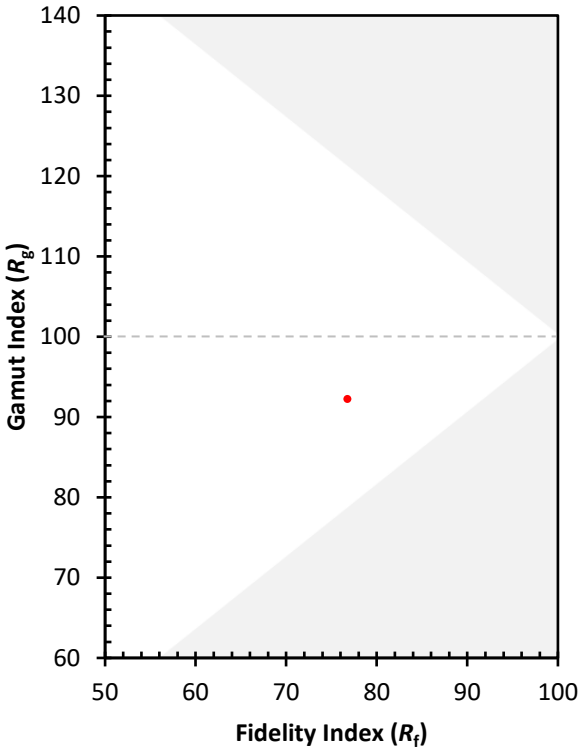



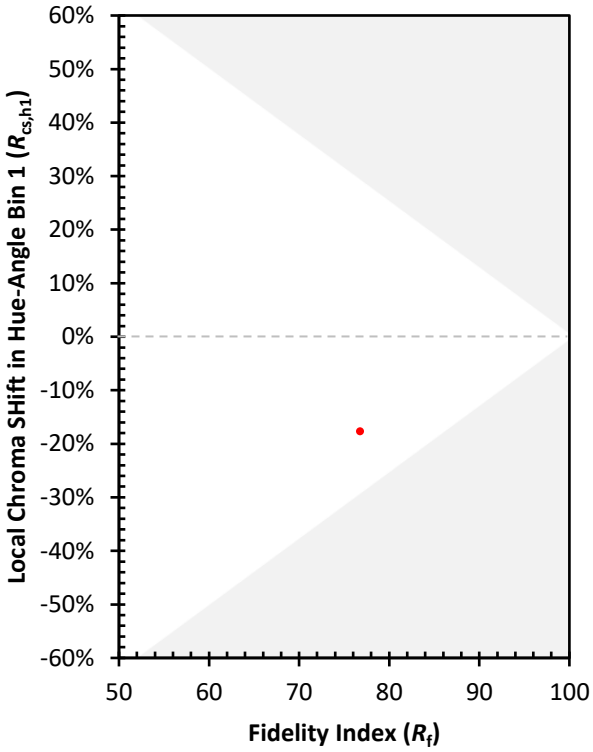



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## Measure Comparisons




(END OF REPORT)