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

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: LUMARK

Report Number: P1460871

Luminaire Tested: PRV-PC1C-730-U-T3R

Issue Date: 06/10/2026

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1460871 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 6/10/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | LUMARK |
| Catalog Number: | PRV-PC1C-730-U-T3R |
| Description: | PREVAIL DISCRETE LED 1 SQUARE AT 880MA 70CRI 3000K FIXTURE w/ TYPE III DISTRIBUTION OPTIC |
| Light Source: | (40) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

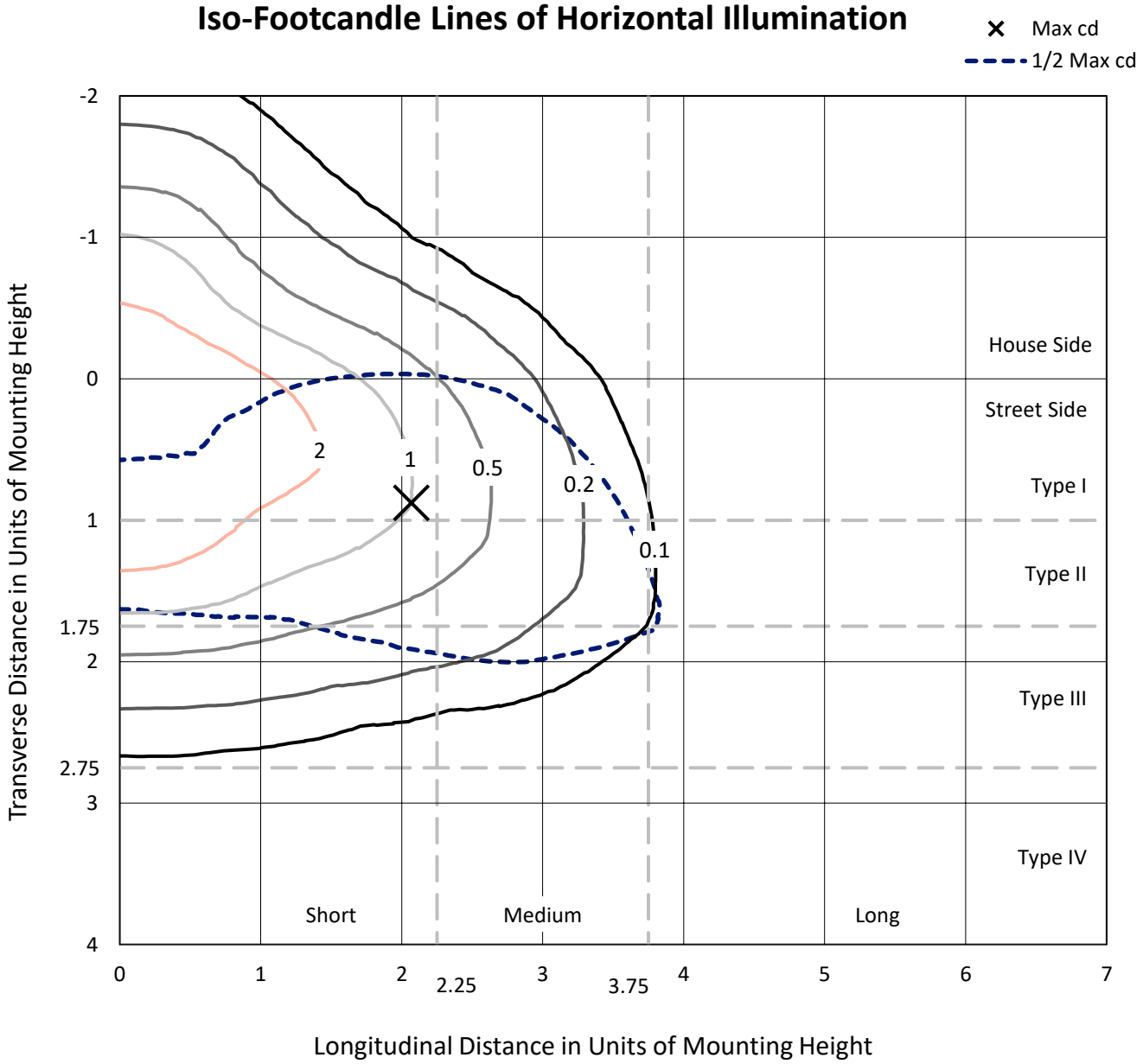
| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 16236.1 lumens |
| Efficiency: | N/A |
| Efficacy: | 146.3 lumens/watt |
| Luminous Opening: | Rectangular (W 0.67' x L: 0.67' x H: 0') |
| IES Classification: | Type III - Short |
| BUG Rating: | B3 - U0 - G3 |
| Input Watts (W): | 111 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 2.87% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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

Scaled Data Report

REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

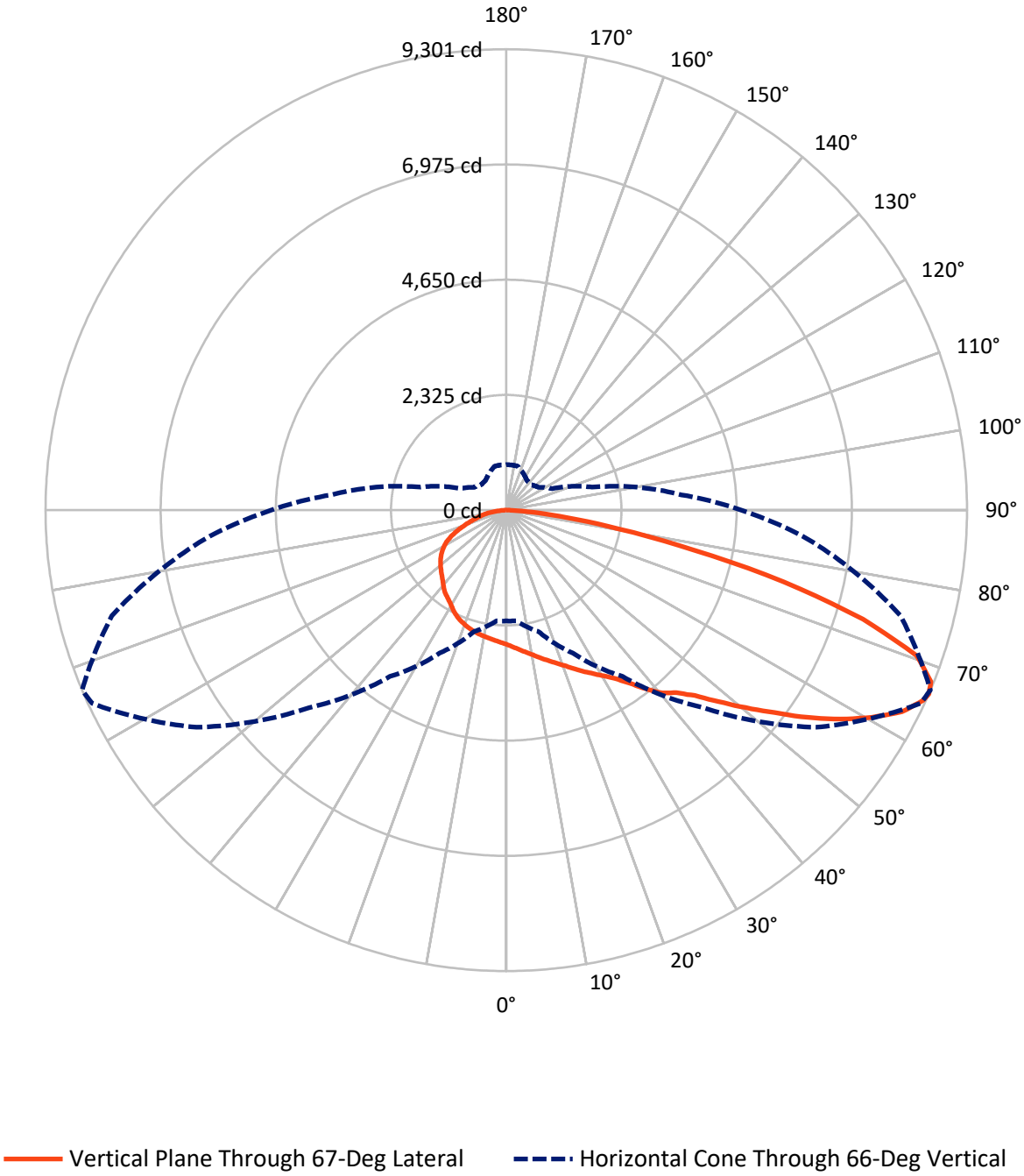
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type III - Short - N/A

REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

## Luminous Intensity Polar Plot



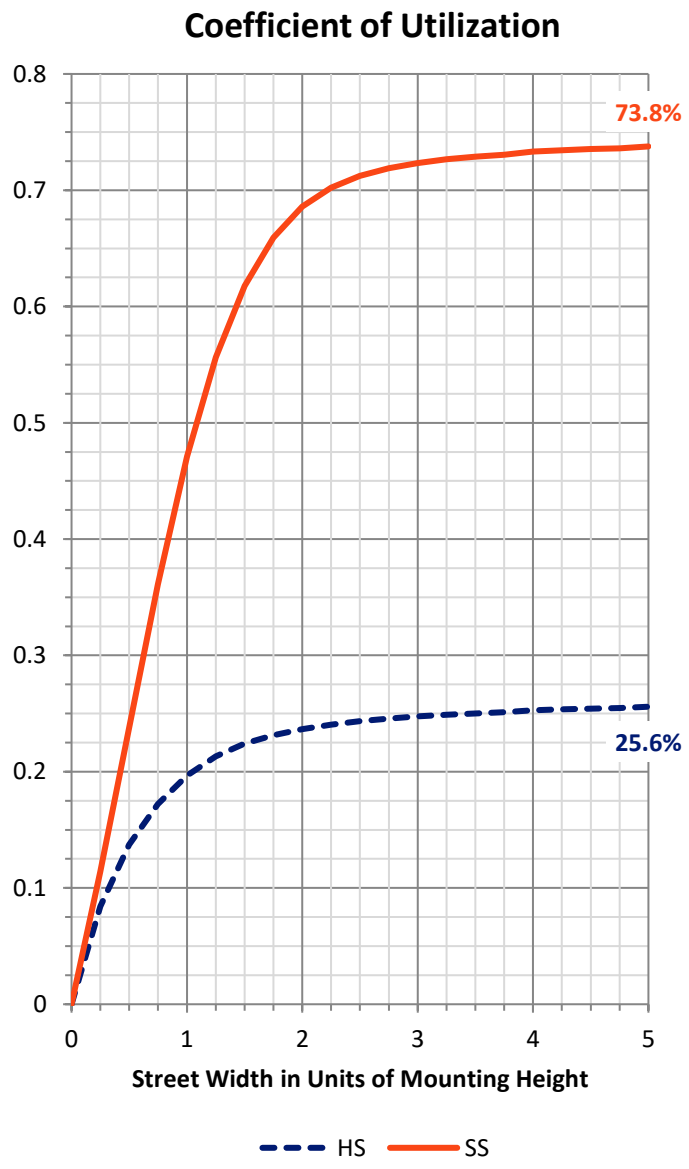
REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 4207.8 | 0.0 | 4207.8 |
| | % Fixture | 25.9 | 0.0 | 25.9 |
| **Street Side** | Lumens | 12028.3 | 0.0 | 12028.3 |
| | % Fixture | 74.1 | 0.0 | 74.1 |
| **Total** | Lumens | 16236.1 | 0.0 | 16236.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 261.4 | 1.6 |
| 10°-20° | 786.9 | 4.8 |
| 20°-30° | 1339.3 | 8.2 |
| 30°-40° | 2093.7 | 12.9 |
| 40°-50° | 2895.3 | 17.8 |
| 50°-60° | 3472.0 | 21.4 |
| 60°-70° | 3350.4 | 20.6 |
| 70°-80° | 1729.1 | 10.6 |
| 80°-90° | 307.9 | 1.9 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 16236.1 | 100.0 |
| 0°-180° | 16236.1 | 100.0 |

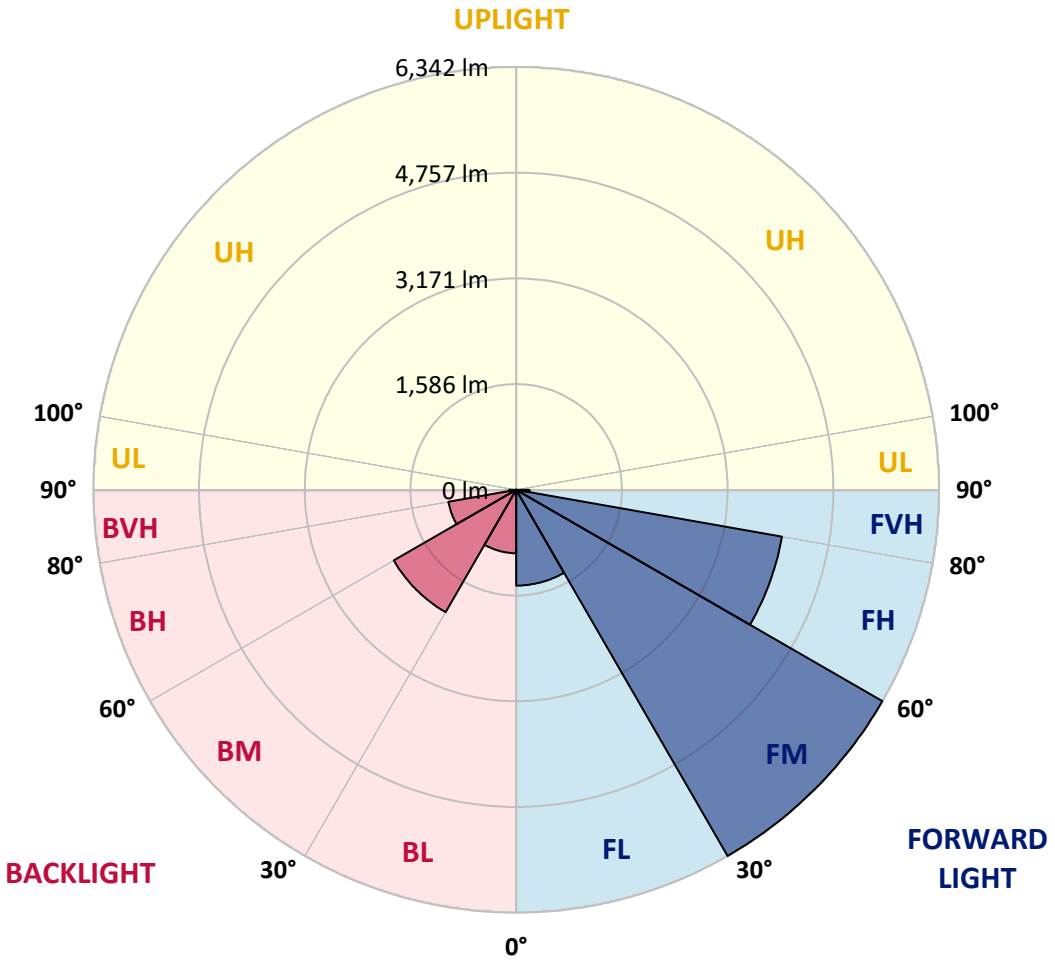


REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1436.8 | 8.8 | | | |
| FM | (30°-60°) | 6342.5 | 39.1 | | | |
| FH | (60°-80°) | 4047.9 | 24.9 | | | G2/5000 |
| FVH | (80°-90°) | 201.1 | 1.2 | | | G2/225 |
| BL | (0°-30°) | 950.8 | 5.9 | B2/1000 | | |
| BM | (30°-60°) | 2118.6 | 13.0 | B2/2500 | | |
| BH | (60°-80°) | 1031.6 | 6.4 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 106.8 | 0.7 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B3-U0-G3**
Type III Short



REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | *2713.4* | 2713.4 | 2713.4 |
| 2.5° | 2823.5 | 2825.8 | 2827.3 | 2822.8 | 2808.4 | 2798.6 | 2791.1 | 2766.9 | *2767.7* | 2752.6 | 2724.7 |
| 5° | 2931.4 | 2942.7 | 2939.7 | 2931.4 | 2914.1 | 2889.9 | 2863.5 | 2825.0 | *2828.0* | 2795.6 | 2747.3 |
| 7.5° | 3034.0 | 3048.4 | 3043.1 | 3036.3 | 3016.7 | 2985.7 | 2954.8 | 2899.0 | *2896.7* | 2847.7 | 2774.5 |
| 10° | 3115.5 | 3130.6 | 3130.6 | 3126.1 | 3117.8 | 3082.3 | 3042.3 | 2982.0 | *2969.9* | 2901.2 | 2813.7 |
| 12.5° | 3182.7 | 3196.3 | 3205.3 | 3201.5 | 3204.6 | 3180.4 | 3136.7 | 3071.0 | *3058.9* | 2967.6 | 2857.5 |
| 15° | 3222.7 | 3248.3 | 3255.1 | 3267.2 | 3283.0 | 3273.2 | 3243.0 | 3154.8 | *3147.2* | 3044.6 | 2903.5 |
| 17.5° | 3263.4 | 3277.8 | 3294.4 | 3324.5 | 3350.2 | 3365.3 | 3335.1 | 3261.2 | *3241.5* | 3117.8 | 2951.8 |
| 20° | 3311.0 | 3337.4 | 3355.5 | 3387.2 | 3423.4 | 3460.4 | 3453.6 | 3366.0 | *3346.4* | 3209.1 | 3010.6 |
| 22.5° | 3437.0 | 3455.8 | 3464.1 | 3486.0 | 3529.0 | 3566.0 | 3570.5 | 3493.6 | *3469.4* | 3320.0 | 3080.8 |
| 25° | 3690.5 | 3711.6 | 3679.9 | 3655.8 | 3643.7 | 3676.2 | 3698.8 | 3627.9 | *3601.5* | 3430.2 | 3149.5 |
| 27.5° | 4141.7 | 4141.0 | 4048.9 | 3950.8 | 3845.9 | 3807.4 | 3823.3 | 3762.9 | *3734.3* | 3537.3 | 3229.5 |
| 30° | 4654.1 | 4679.0 | 4601.2 | 4363.6 | 4116.8 | 3961.4 | 3971.2 | 3903.3 | *3881.4* | 3667.1 | 3322.3 |
| 32.5° | 5189.8 | 5204.1 | 5111.3 | 4882.7 | 4485.0 | 4199.1 | 4141.0 | 4084.4 | *4052.7* | 3839.9 | 3442.2 |
| 35° | 5450.1 | 5478.8 | 5429.0 | 5210.2 | 4809.5 | 4490.3 | 4390.7 | 4330.3 | *4287.3* | 4044.4 | 3596.9 |
| 37.5° | 5786.6 | 5828.1 | 5818.3 | 5507.4 | 5011.7 | 4723.5 | 4653.3 | 4594.4 | *4575.6* | 4300.2 | 3793.1 |
| 40° | 6282.4 | 6280.9 | 6302.7 | 5806.2 | 5226.8 | 4884.9 | 4887.2 | 4889.5 | *4852.5* | 4510.7 | 3938.7 |
| 42.5° | 6522.3 | 6515.5 | 6442.3 | 5971.5 | 5477.3 | 5044.2 | 5072.8 | 5069.8 | *5031.3* | 4670.7 | 4054.2 |
| 45° | 6595.5 | 6587.2 | 6412.9 | 6098.3 | 5869.6 | 5223.7 | 5306.0 | 5367.9 | *5336.2* | 4961.9 | 4284.3 |
| 47.5° | 6544.2 | 6527.6 | 6431.8 | 6173.7 | 6084.7 | 5539.9 | 5573.1 | 5775.3 | *5769.3* | 5324.8 | 4551.4 |
| 50° | 6416.7 | 6370.6 | 6342.0 | 6200.9 | 6022.0 | 5681.0 | 5903.6 | 6278.6 | *6264.3* | 5770.0 | 4836.7 |
| 52.5° | 6135.2 | 6129.2 | 6165.4 | 6072.6 | 5892.3 | 5744.4 | 6265.0 | 6783.4 | *6786.4* | 6222.8 | 5124.1 |
| 55° | 5785.1 | 5763.2 | 5877.2 | 5869.6 | 5756.4 | 5870.4 | 6620.4 | 7362.9 | *7384.0* | 6690.6 | 5432.7 |
| 57.5° | 4944.6 | 4969.5 | 5456.1 | 5592.7 | 5614.6 | 5999.4 | 6999.9 | 7909.9 | *7953.7* | 7164.4 | 5696.8 |
| 60° | 4122.8 | 4171.1 | 4521.3 | 5137.7 | 5392.8 | 6066.6 | 7355.3 | 8466.8 | *8484.9* | 7639.0 | 5936.8 |
| 62.5° | 3418.1 | 3403.8 | 3723.7 | 4419.4 | 5035.9 | 6040.2 | 7606.6 | 8897.6 | *8963.3* | 8017.1 | 6074.1 |
| 65° | 2535.3 | 2569.2 | 2916.3 | 3532.8 | 4431.5 | 5790.4 | 7685.8 | 9195.7 | *9250.0* | 8226.8 | 6068.8 |
| 66° | *2235.7* | *2241.8* | *2539.8* | *3182.7* | *4094.9* | *5635.7* | *7635.3* | *9223.6* | *9300.6* | *8241.9* | *6004.7* |
| 67.5° | 1847.9 | 1856.2 | 2093.1 | 2619.0 | 3564.5 | 5299.2 | 7442.1 | 9172.3 | *9246.2* | 8158.2 | 5803.2 |
| 70° | 1312.2 | 1356.7 | 1483.4 | 1837.3 | 2512.6 | 4310.7 | 6821.1 | 8616.9 | *8786.0* | 7627.0 | 5215.4 |
| 72.5° | 950.0 | 962.0 | 1064.7 | 1248.0 | 1579.3 | 2874.1 | 5644.8 | 7421.0 | *7529.6* | 6378.2 | 4157.6 |
| 75° | 677.6 | 692.7 | 779.4 | 852.6 | 1045.0 | 1773.2 | 3980.2 | 5813.0 | *5787.4* | 4563.5 | 2832.6 |
| 77.5° | 526.7 | 538.0 | 569.7 | 608.9 | 701.7 | 1014.1 | 2395.7 | 3928.2 | *3872.3* | 2860.5 | 1765.6 |
| 80° | 427.8 | 430.8 | 421.0 | 436.9 | 483.7 | 639.1 | 1371.0 | 2345.9 | *2296.1* | 1614.0 | 1069.2 |
| 82.5° | 333.5 | 337.3 | 329.7 | 319.2 | 342.6 | 431.6 | 800.6 | 1240.5 | *1233.7* | 935.6 | 579.5 |
| 85° | 213.5 | 221.8 | 212.8 | 197.7 | 213.5 | 262.6 | 421.8 | 528.9 | *508.6* | 423.3 | 220.3 |
| 87.5° | 119.2 | 117.7 | 107.9 | 86.8 | 75.5 | 95.1 | 117.7 | 118.5 | *113.9* | 99.6 | 60.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* | 0.0 | 0.0 |

REPORT NUMBER: P1460871
CATALOG NUMBER: PRV-PC1C-730-U-T3R

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 | 2713.4 |
| 2.5° | 2718.6 | 2713.4 | 2691.5 | 2671.9 | 2651.5 | 2639.4 | 2621.3 | 2613.0 | 2603.2 | 2594.9 | 2587.3 |
| 5° | 2733.7 | 2715.6 | 2674.1 | 2635.6 | 2598.7 | 2574.5 | 2542.1 | 2526.2 | 2508.1 | 2501.3 | 2492.3 |
| 7.5° | 2751.8 | 2717.1 | 2661.3 | 2601.7 | 2551.9 | 2507.4 | 2465.9 | 2441.0 | 2420.6 | 2414.6 | 2413.8 |
| 10° | 2775.2 | 2733.0 | 2650.0 | 2572.3 | 2502.8 | 2442.5 | 2389.7 | 2351.9 | 2329.3 | 2321.0 | 2317.2 |
| 12.5° | 2803.1 | 2747.3 | 2642.4 | 2543.6 | 2453.0 | 2379.1 | 2313.4 | 2265.9 | 2244.0 | 2230.4 | 2232.0 |
| 15° | 2836.3 | 2765.4 | 2634.1 | 2510.4 | 2395.7 | 2307.4 | 2227.4 | 2173.1 | 2147.4 | 2137.6 | 2136.1 |
| 17.5° | 2871.1 | 2782.0 | 2625.1 | 2471.1 | 2332.3 | 2223.7 | 2139.9 | 2078.8 | 2046.3 | 2044.1 | 2050.1 |
| 20° | 2911.0 | 2806.9 | 2614.5 | 2426.6 | 2265.9 | 2141.4 | 2048.6 | 1995.0 | 1962.6 | 1959.6 | 1971.6 |
| 22.5° | 2957.8 | 2831.1 | 2598.7 | 2375.3 | 2192.0 | 2056.1 | 1964.8 | 1913.5 | 1887.9 | 1890.9 | 1900.7 |
| 25° | 3010.6 | 2857.5 | 2578.3 | 2318.0 | 2109.7 | 1967.1 | 1882.6 | 1846.4 | 1830.5 | 1836.6 | 1850.2 |
| 27.5° | 3062.7 | 2886.9 | 2547.4 | 2247.0 | 2021.4 | 1885.6 | 1825.3 | 1798.8 | 1794.3 | 1805.6 | 1821.5 |
| 30° | 3126.8 | 2915.6 | 2510.4 | 2163.3 | 1926.4 | 1814.7 | 1771.7 | 1765.6 | 1770.2 | 1780.0 | 1798.1 |
| 32.5° | 3215.9 | 2973.7 | 2484.7 | 2086.3 | 1842.6 | 1744.5 | 1737.0 | 1746.8 | 1758.9 | 1771.7 | 1792.1 |
| 35° | 3335.9 | 3047.6 | 2477.9 | 2022.9 | 1766.4 | 1688.7 | 1707.5 | 1746.8 | 1767.2 | 1782.2 | 1801.9 |
| 37.5° | 3486.8 | 3138.2 | 2468.1 | 1964.1 | 1694.7 | 1632.8 | 1687.2 | 1757.3 | 1784.5 | 1792.1 | 1807.1 |
| 40° | 3571.3 | 3164.6 | 2398.0 | 1887.1 | 1626.1 | 1583.8 | 1666.0 | 1759.6 | 1783.0 | 1794.3 | 1807.1 |
| 42.5° | 3649.0 | 3177.4 | 2332.3 | 1809.4 | 1572.5 | 1533.2 | 1629.8 | 1732.4 | 1770.9 | 1820.0 | 1836.6 |
| 45° | 3799.1 | 3261.2 | 2305.9 | 1740.0 | 1516.6 | 1476.7 | 1559.7 | 1668.3 | 1765.6 | 1820.0 | 1833.6 |
| 47.5° | 3993.8 | 3354.7 | 2280.2 | 1675.9 | 1454.0 | 1400.4 | 1452.5 | 1620.0 | 1728.7 | 1770.2 | 1775.5 |
| 50° | 4196.0 | 3438.5 | 2246.3 | 1614.7 | 1376.3 | 1297.1 | 1362.0 | 1549.8 | 1665.3 | 1684.9 | 1689.4 |
| 52.5° | 4378.6 | 3515.4 | 2213.1 | 1550.6 | 1294.8 | 1195.2 | 1268.4 | 1451.8 | 1555.9 | 1561.2 | 1572.5 |
| 55° | 4561.2 | 3589.4 | 2172.3 | 1483.4 | 1197.5 | 1090.3 | 1162.0 | 1323.5 | 1405.7 | 1397.4 | 1397.4 |
| 57.5° | 4704.6 | 3655.8 | 2135.4 | 1400.4 | 1106.2 | 999.8 | 1051.8 | 1178.6 | 1256.3 | 1248.8 | 1242.0 |
| 60° | 4825.3 | 3698.8 | 2091.6 | 1303.9 | 1014.1 | 912.2 | 944.7 | 1057.1 | 1132.6 | 1116.0 | 1116.0 |
| 62.5° | 4873.6 | 3699.5 | 2019.9 | 1201.2 | 919.8 | 827.7 | 848.9 | 949.2 | 1034.5 | 1024.7 | 1030.7 |
| 65° | 4818.5 | 3629.4 | 1870.5 | 1075.2 | 830.8 | 747.0 | 764.4 | 850.4 | 950.7 | 947.7 | 953.7 |
| 66° | *4742.3* | *3547.9* | *1790.5* | *1023.9* | *799.1* | *722.1* | *728.1* | *816.4* | *916.0* | *917.5* | *916.8* |
| 67.5° | 4576.3 | 3401.5 | 1647.2 | 950.7 | 747.8 | 674.6 | 682.1 | 770.4 | 869.2 | 861.7 | 864.7 |
| 70° | 4150.8 | 2926.9 | 1352.9 | 820.9 | 670.8 | 597.6 | 609.7 | 701.0 | 774.2 | 766.6 | 765.1 |
| 72.5° | 3317.7 | 2208.6 | 1092.6 | 701.0 | 593.1 | 529.7 | 547.8 | 611.2 | 701.7 | 698.0 | 700.2 |
| 75° | 2200.3 | 1443.4 | 859.4 | 590.1 | 511.6 | 476.1 | 477.6 | 532.0 | 619.5 | 630.8 | 637.6 |
| 77.5° | 1370.3 | 987.7 | 691.2 | 495.7 | 429.3 | 398.4 | 401.4 | 458.8 | 530.4 | 535.7 | 541.8 |
| 80° | 879.0 | 728.1 | 544.8 | 402.2 | 328.2 | 321.4 | 331.2 | 384.1 | 443.7 | 448.2 | 445.2 |
| 82.5° | 530.4 | 471.6 | 407.5 | 287.5 | 253.5 | 253.5 | 267.1 | 308.6 | 330.5 | 256.5 | 239.9 |
| 85° | 211.3 | 245.2 | 221.8 | 158.5 | 163.0 | 166.8 | 175.1 | 209.0 | 220.3 | 116.2 | 91.3 |
| 87.5° | 49.0 | 67.2 | 65.6 | 46.0 | 50.6 | 55.1 | 54.3 | 88.3 | 110.2 | 49.8 | 28.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

McGraw-Edison

Report Number: SP2-2501-321-4

Test Date: 04/10/2025

Luminaire Tested: GKO-PB1E-730-U-T4W

Data in this report applies to families of products including GKO-PB1E-730-U-T4W

Report Generated By FNC07603 / LDUCLS01DT447
Version: v7.04

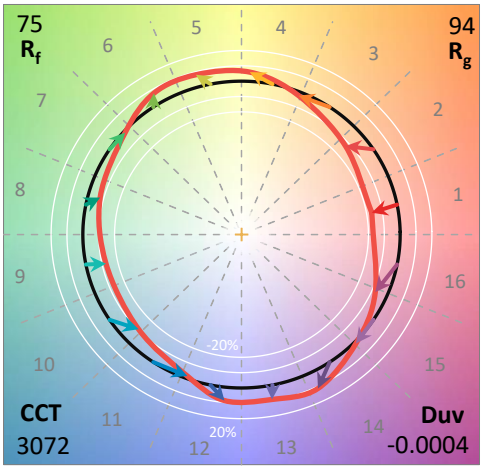
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP2-2501-321-4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP2 - 165CM SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 04/10/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GKO-PB1E-730-U-T4W** |
| Description: | Gekko Wedge Wall Pack Fixture 1 SQ w/ T4W distribution |

## Spectral Parameters

| | | | | | | |
|---|---|---|---|---|---|---|
| CCT (K): | 3072 | CRI (Ra): | 71.7 | | | |
| CIE u': | 0.2482 | R1: | 68.1 | R9: | -33.9 | |
| CIE v': | 0.5193 | R2: | 82.1 | R10: | 58.6 | |
| Duv: | -0.0004 | R3: | 93.4 | R11: | 62.0 | |
| CIE x: | 0.4313 | R4: | 67.3 | R12: | 48.5 | |
| CIE y: | 0.4010 | R5: | 67.2 | R13: | 70.7 | |
| CIE z: | 0.1677 | R6: | 74.9 | R14: | 96.4 | |
| Peak Wavelength (nm): | 593 | R7: | 77.5 | R15: | 60.2 | |
| Dominant Wavelength (nm): | 582 | R8: | 43.4 | | | |
| Purity: | 49.8225 | | | | | |

| | |
|---|---|
| Rf: | 74.7 |
| Rg: | 94.2 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 30M |
| Operation Time: | 1H 30M |
| Sphere Temperature (°C): | 25.7 |

| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN2187 | 1/6/2025 | 7/6/2025 |
| Power Meter | INXT2011002 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0458 | 10/22/2024 | 10/22/2025 |
| DC Power Source | IN0212 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | IN4036B | 10/22/2024 | 10/22/2025 |
| Room Thermometer | IN0046 | 10/22/2024 | 10/22/2025 |

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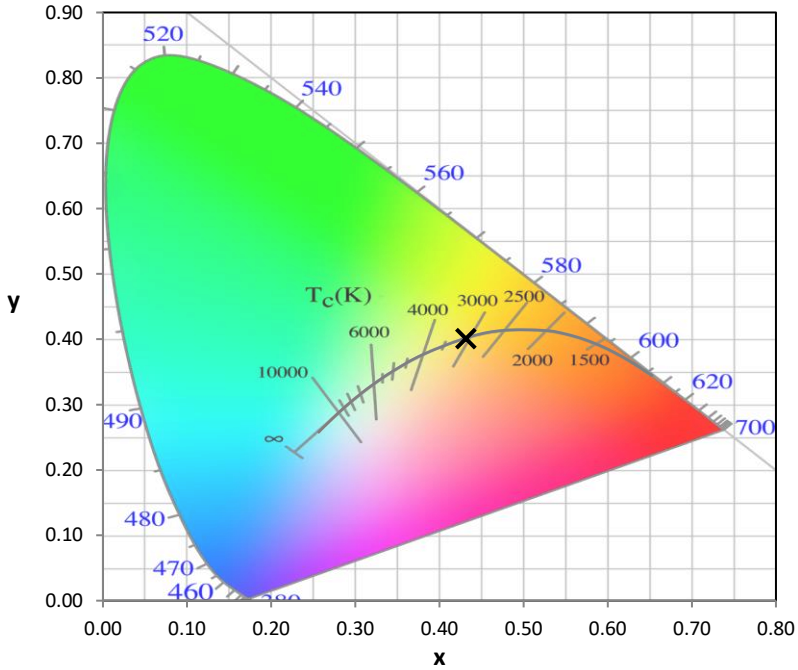
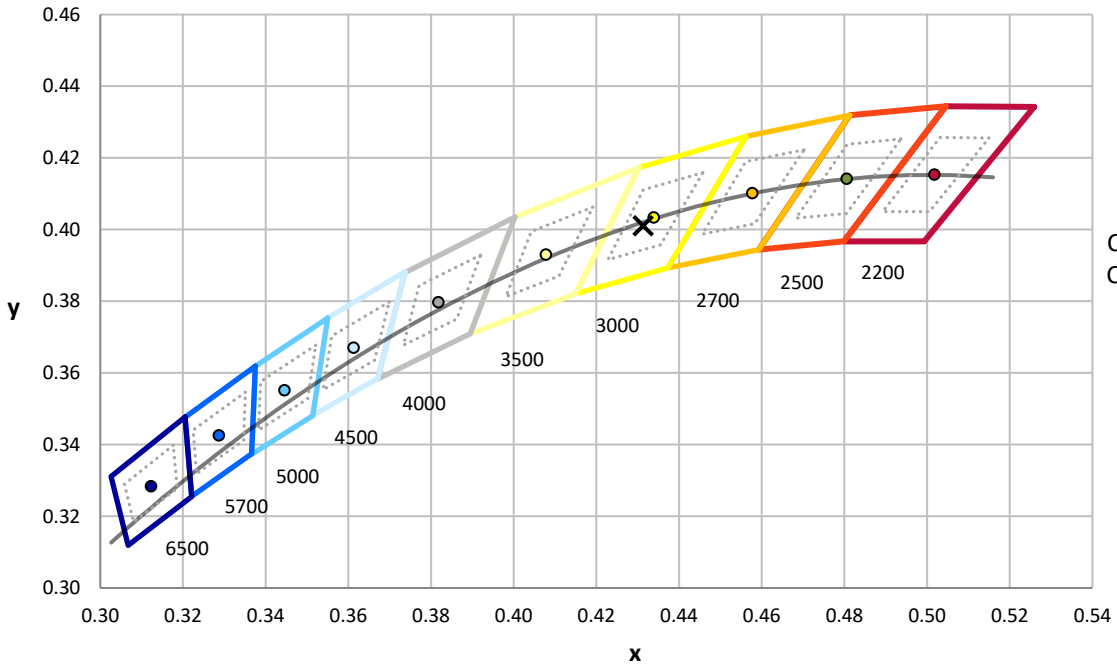
## CIE 1931 Chromaticity Diagram




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




CCT = 3072K
CIE x = 0.4313
CIE y = 0.4010
Duv = -0.0004

Point lies inside the ANSI 3000K 4-step quadrangle

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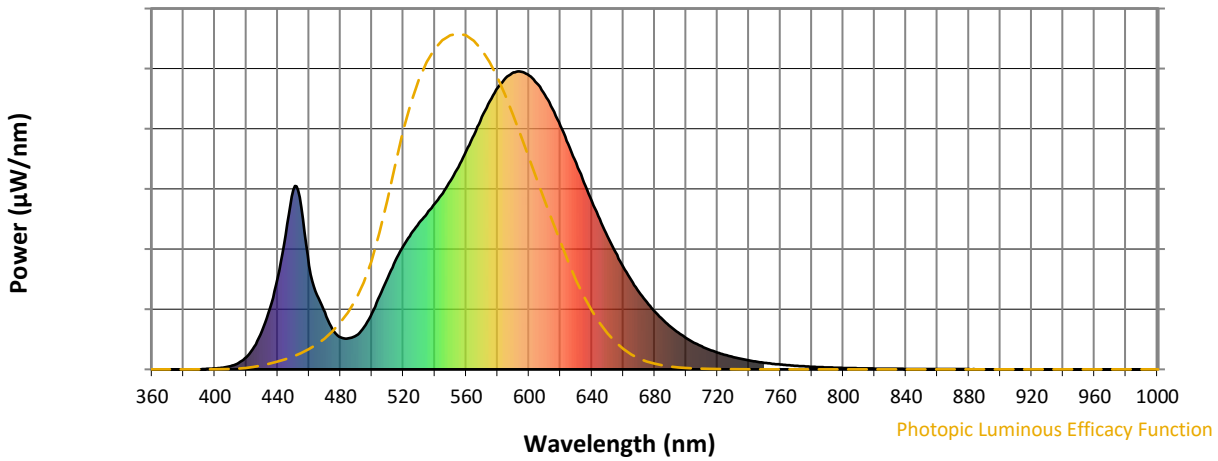
## Photopic Flux vs. Wavelength




**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 | 114 | NR | 620 | 817 | NR | 750 | 22 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 756 | NR | 755 | 19 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 189 | NR | 630 | 693 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 247 | NR | 635 | 628 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 307 | NR | 640 | 564 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 504 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 415 | NR | 650 | 446 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 455 | NR | 655 | 393 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 491 | NR | 660 | 344 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 523 | NR | 665 | 300 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 556 | NR | 670 | 260 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 591 | NR | 675 | 226 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 41 | NR | 550 | 632 | NR | 680 | 195 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 679 | NR | 685 | 167 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 129 | NR | 560 | 732 | NR | 690 | 144 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 205 | NR | 565 | 787 | NR | 695 | 123 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 307 | NR | 570 | 847 | NR | 700 | 105 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 451 | NR | 575 | 900 | NR | 705 | 90 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 603 | NR | 580 | 944 | NR | 710 | 77 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 977 | NR | 715 | 66 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 348 | NR | 590 | 997 | NR | 720 | 56 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 249 | NR | 595 | 998 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 191 | NR | 600 | 986 | NR | 730 | 41 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 133 | NR | 605 | 960 | NR | 735 | 35 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 921 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 104 | NR | 615 | 874 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

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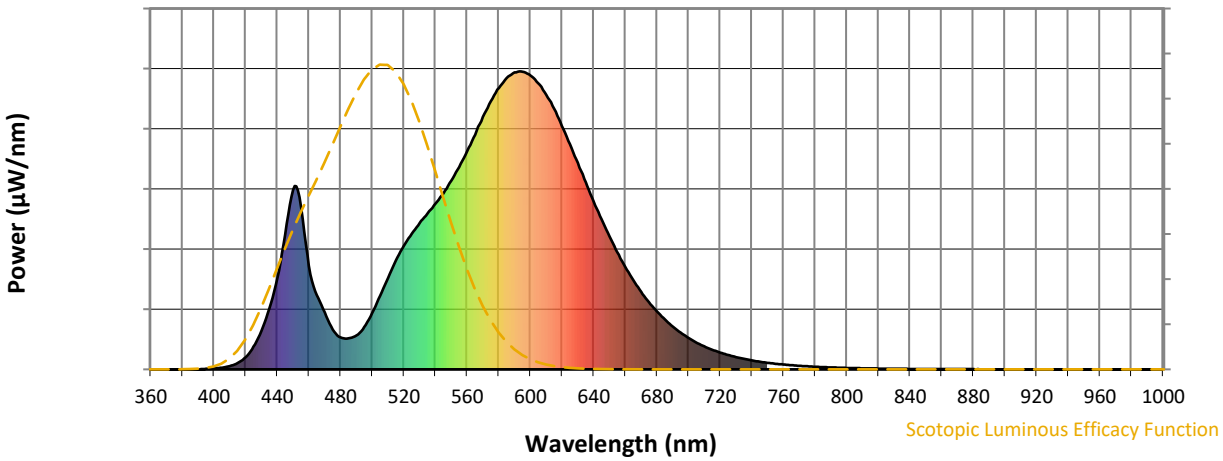
## Scotopic Flux vs. Wavelength




**Scotopic Lumens: NR** **S/P: 1.24**

| 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 | 114 | NR | 620 | 817 | NR | 750 | 22 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 756 | NR | 755 | 19 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 189 | NR | 630 | 693 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 247 | NR | 635 | 628 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 307 | NR | 640 | 564 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 504 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 415 | NR | 650 | 446 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 455 | NR | 655 | 393 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 491 | NR | 660 | 344 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 523 | NR | 665 | 300 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 556 | NR | 670 | 260 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 591 | NR | 675 | 226 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 41 | NR | 550 | 632 | NR | 680 | 195 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 679 | NR | 685 | 167 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 129 | NR | 560 | 732 | NR | 690 | 144 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 205 | NR | 565 | 787 | NR | 695 | 123 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 307 | NR | 570 | 847 | NR | 700 | 105 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 451 | NR | 575 | 900 | NR | 705 | 90 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 603 | NR | 580 | 944 | NR | 710 | 77 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 977 | NR | 715 | 66 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 348 | NR | 590 | 997 | NR | 720 | 56 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 249 | NR | 595 | 998 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 191 | NR | 600 | 986 | NR | 730 | 41 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 133 | NR | 605 | 960 | NR | 735 | 35 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 921 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 104 | NR | 615 | 874 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

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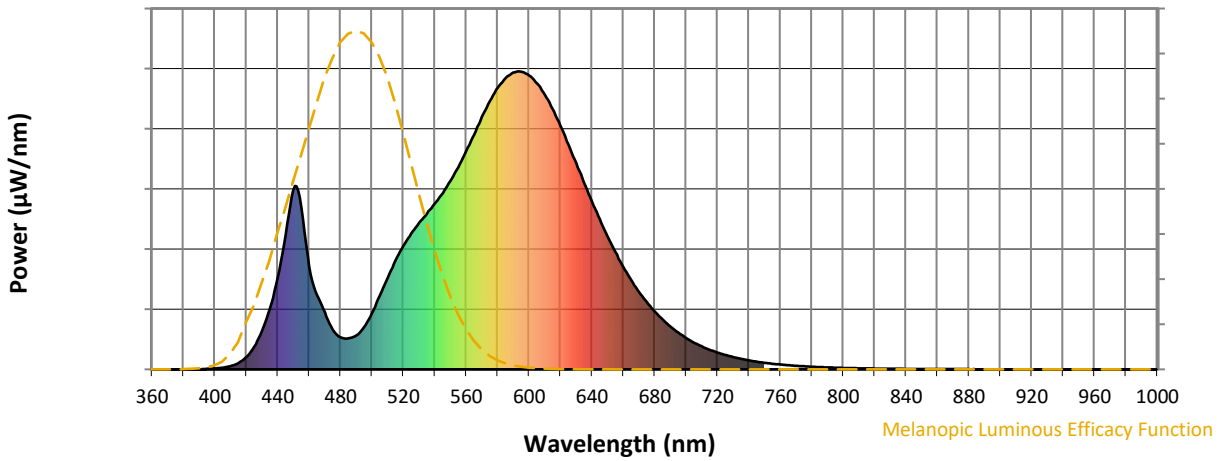
## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.3**

| 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 | 114 | NR | 620 | 817 | NR | 750 | 22 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 756 | NR | 755 | 19 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 189 | NR | 630 | 693 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 247 | NR | 635 | 628 | NR | 765 | 14 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 307 | NR | 640 | 564 | NR | 770 | 12 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 504 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 415 | NR | 650 | 446 | NR | 780 | 9 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 455 | NR | 655 | 393 | NR | 785 | 8 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 491 | NR | 660 | 344 | NR | 790 | 7 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 523 | NR | 665 | 300 | NR | 795 | 6 | NR | 925 | 0 | NR |
| 410 | 11 | NR | 540 | 556 | NR | 670 | 260 | NR | 800 | 5 | NR | 930 | 0 | NR |
| 415 | 21 | NR | 545 | 591 | NR | 675 | 226 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 41 | NR | 550 | 632 | NR | 680 | 195 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 679 | NR | 685 | 167 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 129 | NR | 560 | 732 | NR | 690 | 144 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 205 | NR | 565 | 787 | NR | 695 | 123 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 307 | NR | 570 | 847 | NR | 700 | 105 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 451 | NR | 575 | 900 | NR | 705 | 90 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 603 | NR | 580 | 944 | NR | 710 | 77 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 544 | NR | 585 | 977 | NR | 715 | 66 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 348 | NR | 590 | 997 | NR | 720 | 56 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 249 | NR | 595 | 998 | NR | 725 | 48 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 191 | NR | 600 | 986 | NR | 730 | 41 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 133 | NR | 605 | 960 | NR | 735 | 35 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 921 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 104 | NR | 615 | 874 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

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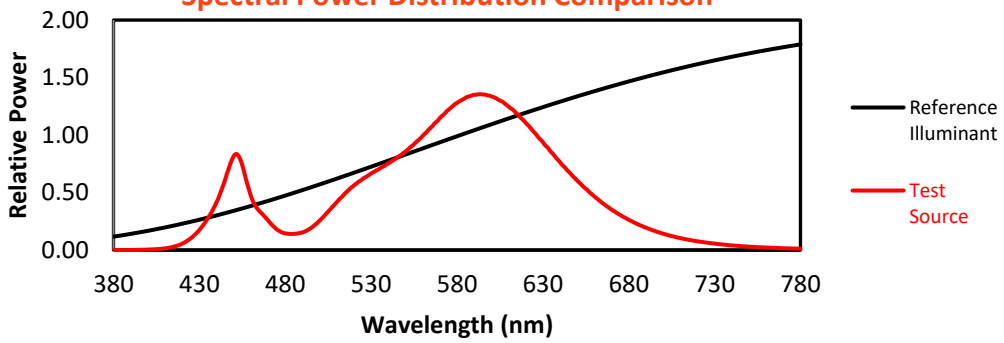
# TM-30-18

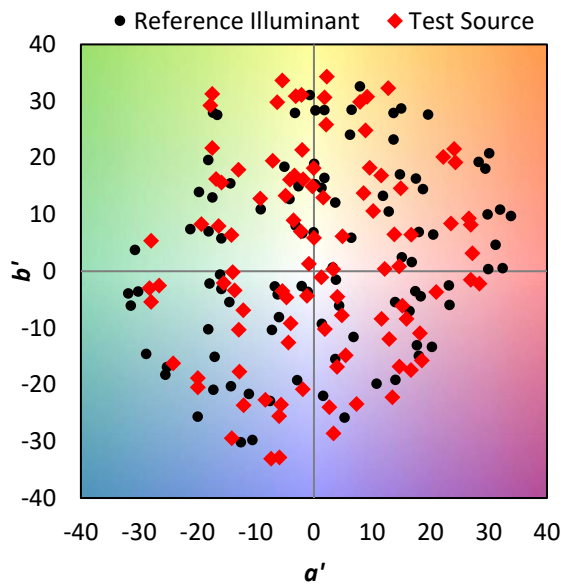
## Summary

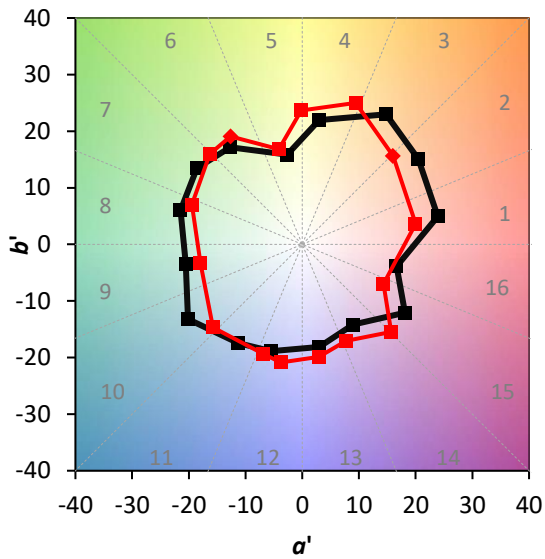
$R_f$ = 74.7
$R_g$ = 94.2
CIE $R_a$ = 71.7
$R_9$ = -33.9

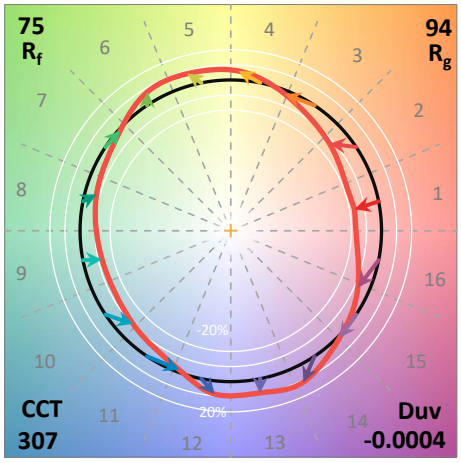
## Spectral Power Distribution Comparison

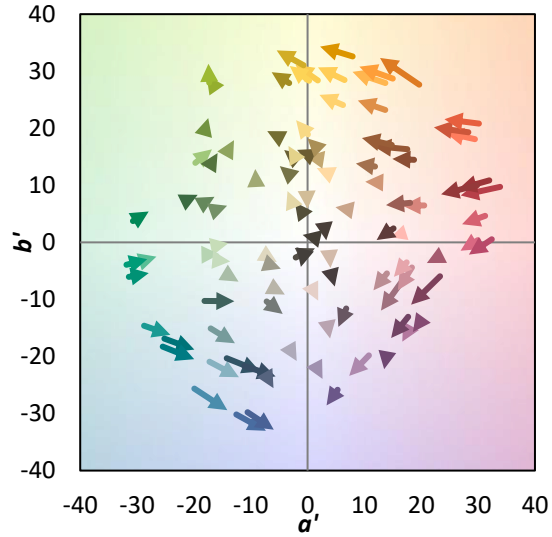



## Color Vector Graphics



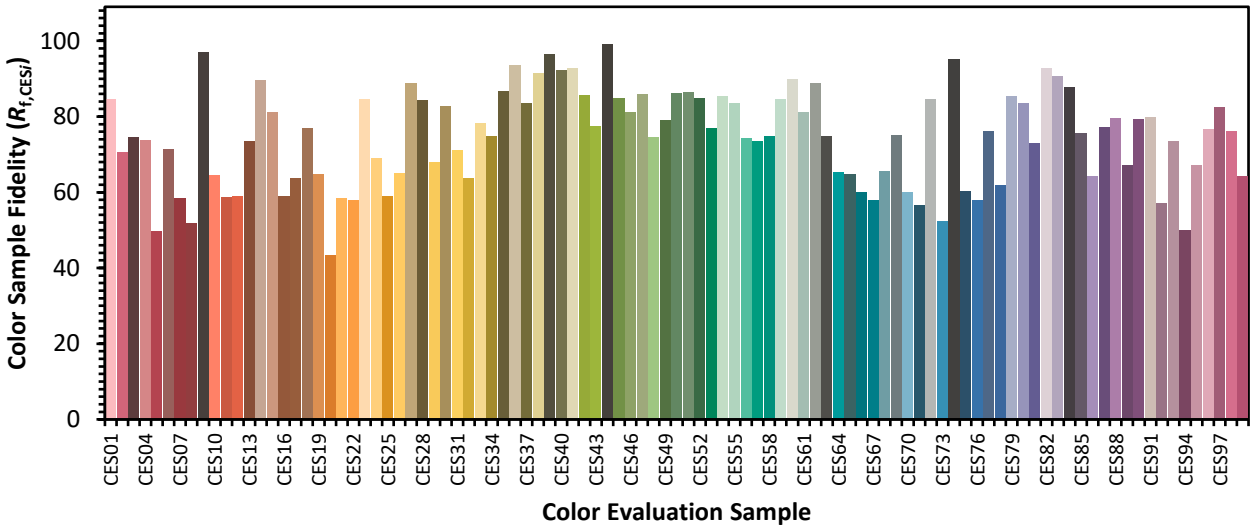



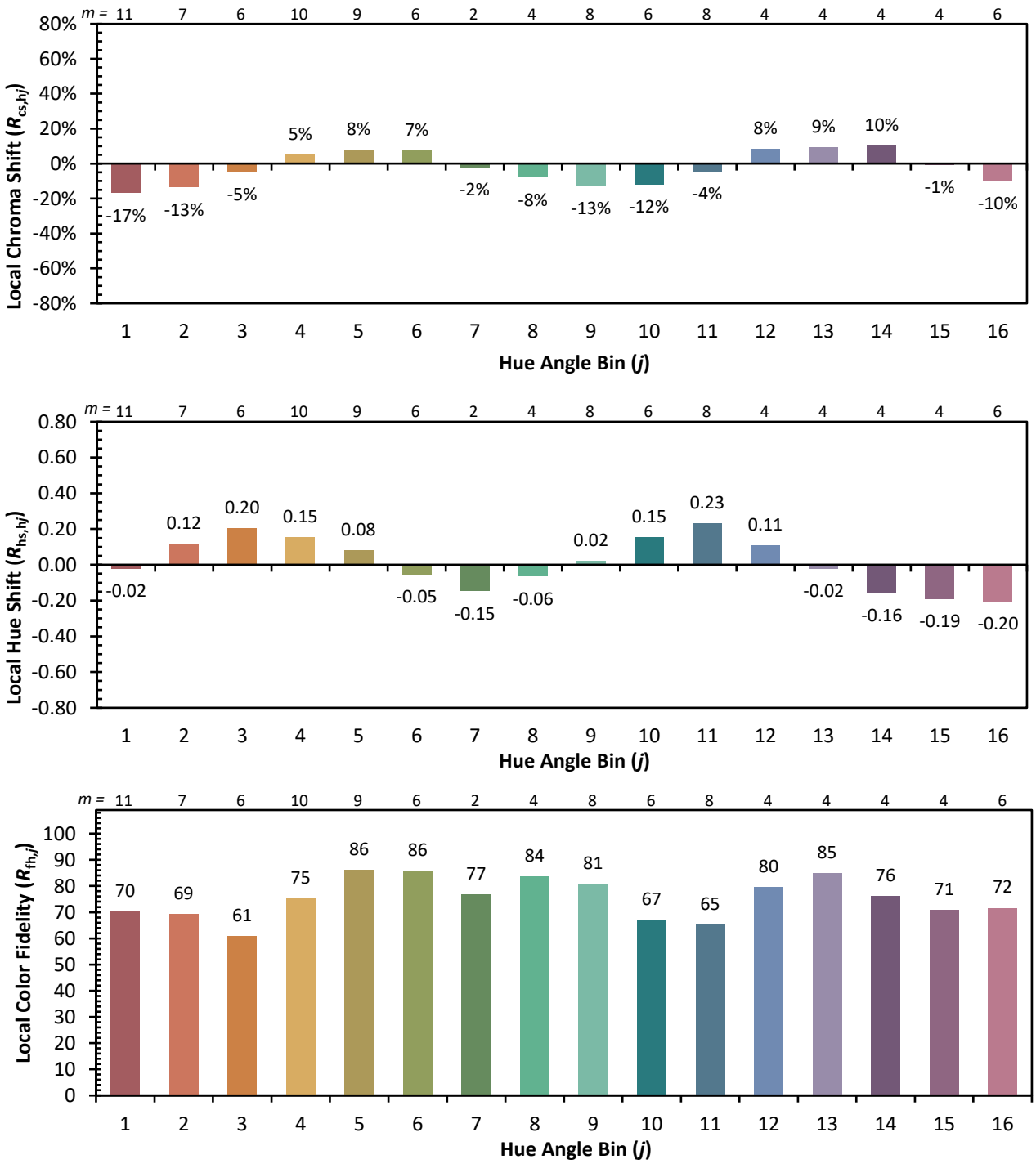



**Individual Sample Fidelity Index ($R_{f,i}$)**

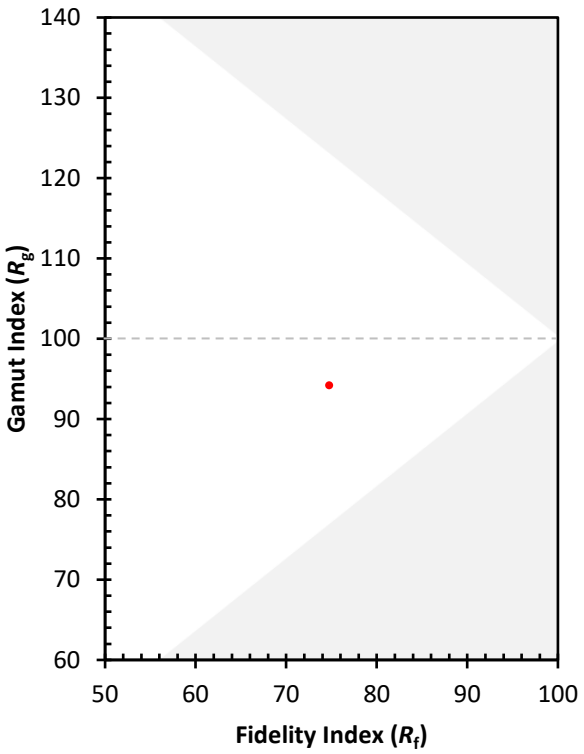
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 65 | CES51 = 86 | CES76 = 58 |
| CES02 = 62 | CES27 = 89 | CES52 = 85 | CES77 = 76 |
| CES03 = 31 | CES28 = 84 | CES53 = 77 | CES78 = 62 |
| CES04 = 71 | CES29 = 68 | CES54 = 85 | CES79 = 85 |
| CES05 = 49 | CES30 = 83 | CES55 = 84 | CES80 = 84 |
| CES06 = 51 | CES31 = 71 | CES56 = 74 | CES81 = 73 |
| CES07 = 41 | CES32 = 64 | CES57 = 74 | CES82 = 93 |
| CES08 = 40 | CES33 = 78 | CES58 = 75 | CES83 = 91 |
| CES09 = 29 | CES34 = 75 | CES59 = 85 | CES84 = 88 |
| CES10 = 76 | CES35 = 87 | CES60 = 90 | CES85 = 76 |
| CES11 = 59 | CES36 = 94 | CES61 = 81 | CES86 = 64 |
| CES12 = 65 | CES37 = 84 | CES62 = 89 | CES87 = 77 |
| CES13 = 43 | CES38 = 92 | CES63 = 75 | CES88 = 80 |
| CES14 = 74 | CES39 = 96 | CES64 = 65 | CES89 = 67 |
| CES15 = 71 | CES40 = 92 | CES65 = 65 | CES90 = 79 |
| CES16 = 47 | CES41 = 93 | CES66 = 60 | CES91 = 80 |
| CES17 = 50 | CES42 = 86 | CES67 = 58 | CES92 = 57 |
| CES18 = 56 | CES43 = 78 | CES68 = 66 | CES93 = 74 |
| CES19 = 73 | CES44 = 99 | CES69 = 75 | CES94 = 50 |
| CES20 = 66 | CES45 = 85 | CES70 = 60 | CES95 = 67 |
| CES21 = 87 | CES46 = 81 | CES71 = 57 | CES96 = 77 |
| CES22 = 79 | CES47 = 86 | CES72 = 85 | CES97 = 83 |
| CES23 = 92 | CES48 = 75 | CES73 = 52 | CES98 = 76 |
| CES24 = 91 | CES49 = 79 | CES74 = 95 | CES99 = 64 |
| CES25 = 73 | CES50 = 86 | CES75 = 60 | |

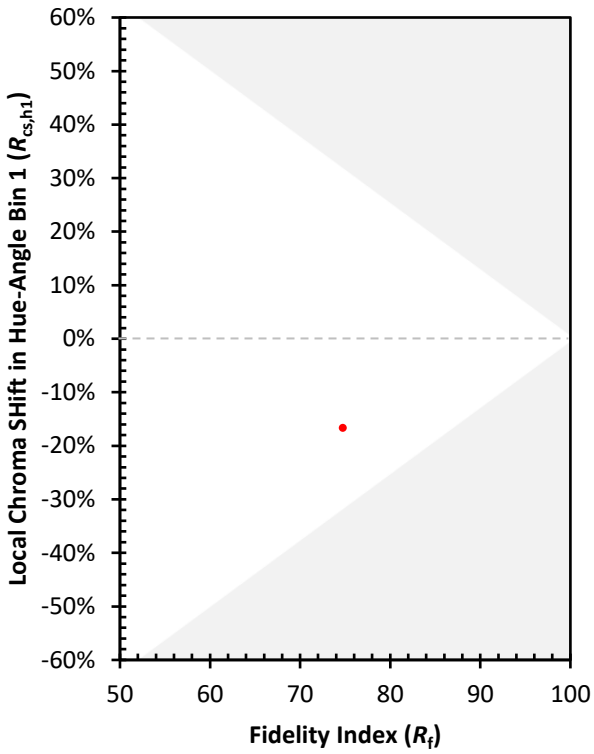


## Color Rendition by Hue-Angle Bin



## Measure Comparisons




(END OF REPORT)