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

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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: P1460448

Luminaire Tested: PRV-PC1D-722-U-5WQ

Issue Date: 06/10/2026

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1460448 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 6/10/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | LUMARK |
| Catalog Number: | PRV-PC1D-722-U-5WQ |
| Description: | PREVAIL DISCRETE LED 1 SQUARE AT 1170MA 70CRI 2200K FIXTURE w/ TYPE V SQUARE WIDE DISTRIBUTION OPTIC |
| Light Source: | (40) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 18354.5 lumens |
| Efficiency: | N/A |
| Efficacy: | 120.8 lumens/watt |
| Luminous Opening: | Rectangular (W 0.67' x L: 0.67' x H: 0') |
| IES Classification: | Type V - Short |
| BUG Rating: | B4 - U0 - G3 |
| Input Watts (W): | 152 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 2.75% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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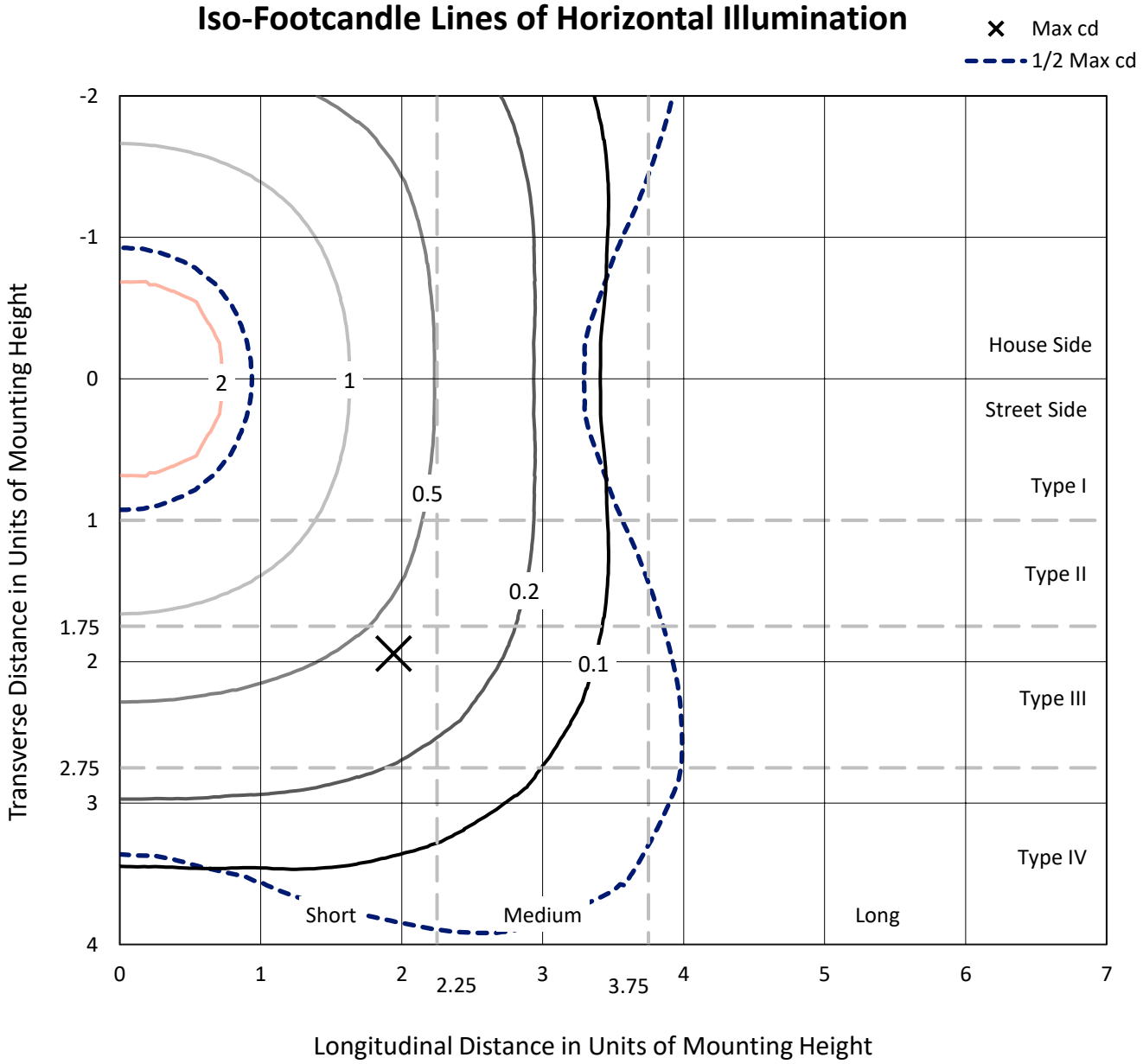
Scaled Data Report

REPORT NUMBER: P1460448
CATALOG NUMBER: PRV-PC1D-722-U-5WQ

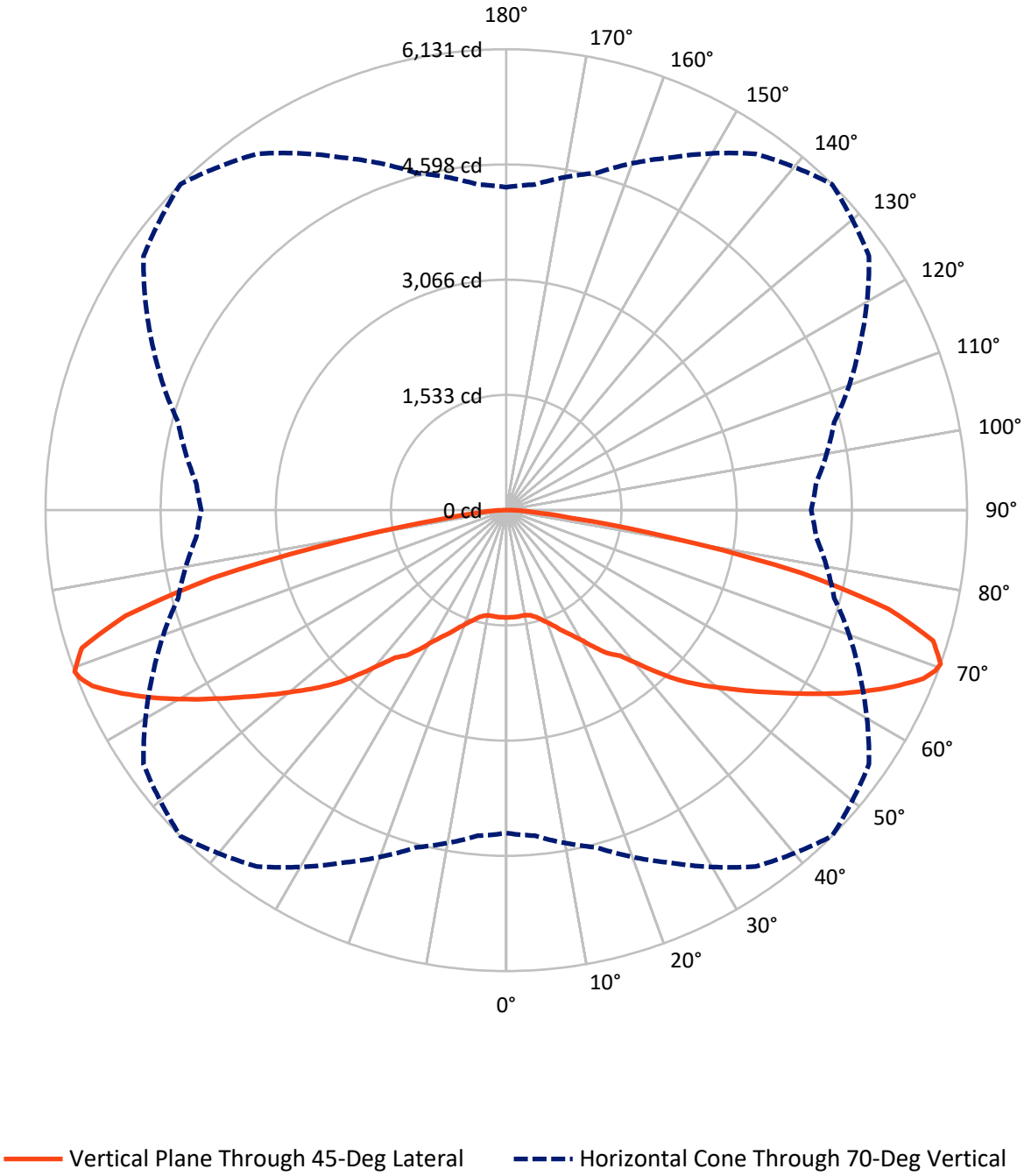
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type V - Short - N/A

REPORT NUMBER: P1460448
CATALOG NUMBER: PRV-PC1D-722-U-5WQ

## Luminous Intensity Polar Plot



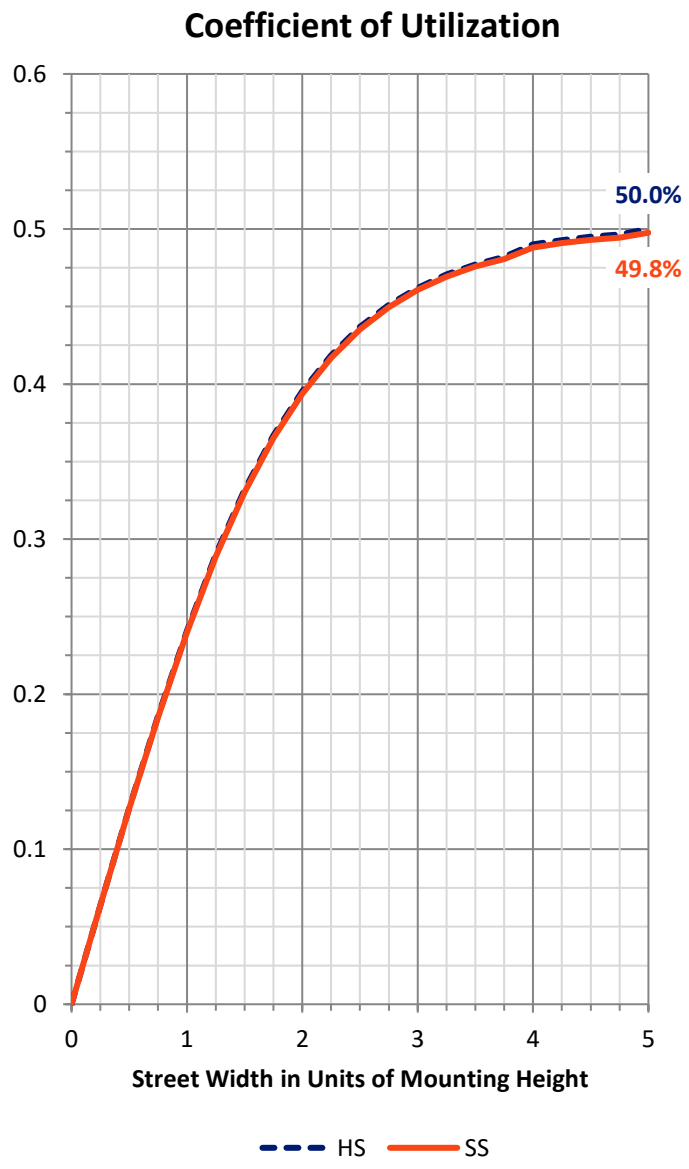
REPORT NUMBER: P1460448
CATALOG NUMBER: PRV-PC1D-722-U-5WQ

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 9177.2 | 0.0 | 9177.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 9177.2 | 0.0 | 9177.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 18354.5 | 0.0 | 18354.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 135.3 | 0.7 |
| 10°-20° | 422.5 | 2.3 |
| 20°-30° | 823.0 | 4.5 |
| 30°-40° | 1459.6 | 8.0 |
| 40°-50° | 2518.3 | 13.7 |
| 50°-60° | 3802.7 | 20.7 |
| 60°-70° | 5063.2 | 27.6 |
| 70°-80° | 3672.5 | 20.0 |
| 80°-90° | 457.5 | 2.5 |
| 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° | 18354.5 | 100.0 |
| 0°-180° | 18354.5 | 100.0 |

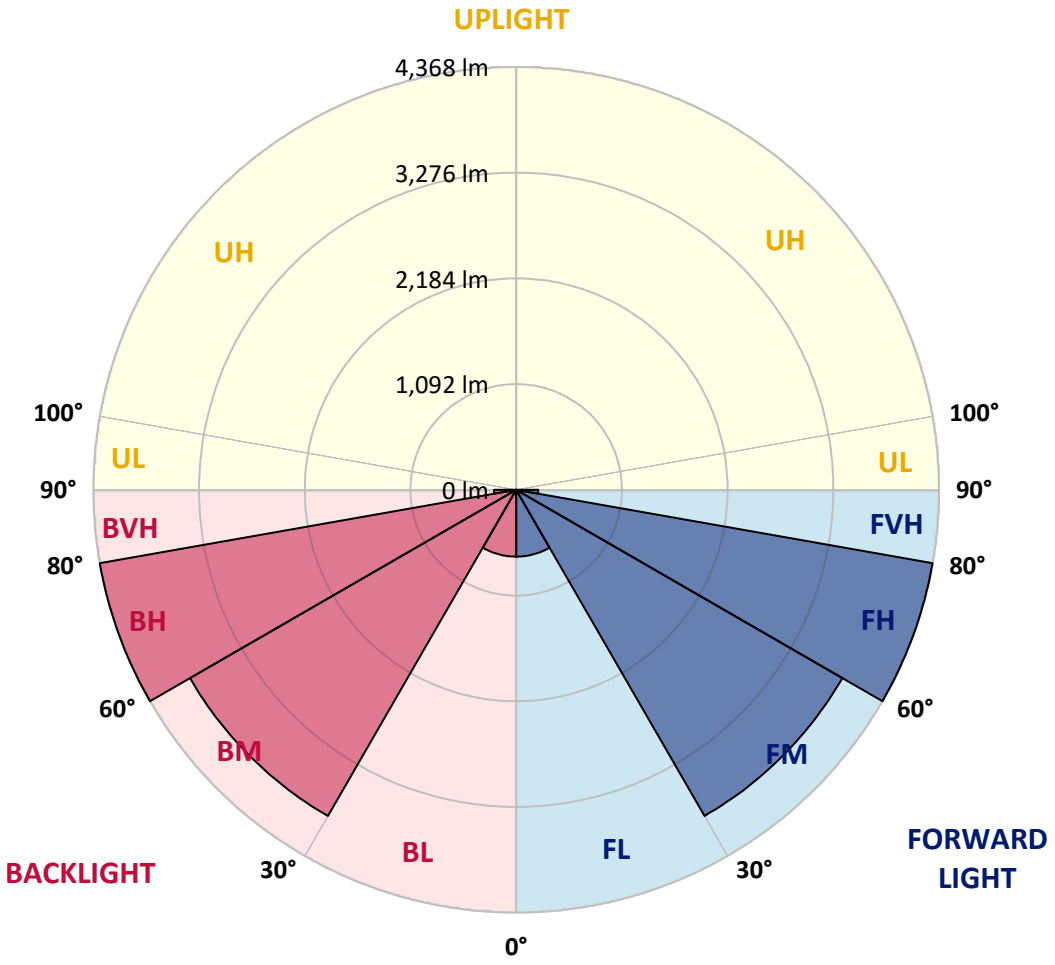


REPORT NUMBER: P1460448
CATALOG NUMBER: PRV-PC1D-722-U-5WQ

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

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 690.4 | 3.8 | | | |
| FM | (30°-60°) | 3890.3 | 21.2 | | | |
| FH | (60°-80°) | 4367.8 | 23.8 | | | G2/5000 |
| FVH | (80°-90°) | 228.8 | 1.2 | | | G3/500 |
| BL | (0°-30°) | 690.4 | 3.8 | B2/1000 | | |
| BM | (30°-60°) | 3890.3 | 21.2 | B3/5000 | | |
| BH | (60°-80°) | 4367.8 | 23.8 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 228.8 | 1.2 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B4-U0-G3**
Type V Short



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Scaled Data Report

REPORT NUMBER: P1460448
CATALOG NUMBER: PRV-PC1D-722-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1427.0 | 1427.0 | 1427.0 | 1427.0 | 1427.0 | *1427.0* | 1427.0 | 1427.0 | 1427.0 | 1427.0 | 1427.0 |
| 2.5° | 1427.8 | 1427.8 | 1427.8 | 1427.8 | 1427.0 | *1426.1* | 1425.3 | 1425.3 | 1425.3 | 1424.5 | 1424.5 |
| 5° | 1431.1 | 1430.3 | 1430.3 | 1429.5 | 1429.5 | *1426.1* | 1422.8 | 1420.3 | 1417.8 | 1415.3 | 1416.1 |
| 7.5° | 1417.8 | 1419.5 | 1418.6 | 1420.3 | 1422.0 | *1420.3* | 1413.6 | 1406.1 | 1399.5 | 1393.6 | 1393.6 |
| 10° | 1419.5 | 1418.6 | 1417.8 | 1418.6 | 1420.3 | *1419.5* | 1412.8 | 1402.8 | 1393.6 | 1387.0 | 1386.1 |
| 12.5° | 1442.8 | 1442.8 | 1438.6 | 1435.3 | 1437.0 | *1435.3* | 1430.3 | 1418.6 | 1411.1 | 1404.5 | 1405.3 |
| 15° | 1488.6 | 1486.9 | 1481.1 | 1476.1 | 1473.6 | *1472.8* | 1469.4 | 1461.1 | 1451.9 | 1444.5 | 1446.9 |
| 17.5° | 1544.4 | 1544.4 | 1532.8 | 1530.3 | 1527.8 | *1534.4* | 1526.9 | 1515.3 | 1507.8 | 1503.6 | 1503.6 |
| 20° | 1611.9 | 1613.6 | 1603.6 | 1598.6 | 1599.4 | *1600.2* | 1596.9 | 1584.4 | 1575.2 | 1571.1 | 1572.7 |
| 22.5° | 1687.7 | 1684.4 | 1681.9 | 1679.4 | 1684.4 | *1685.2* | 1678.5 | 1663.5 | 1657.7 | 1649.4 | 1651.9 |
| 25° | 1754.3 | 1754.3 | 1755.2 | 1768.5 | 1776.8 | *1789.3* | 1779.3 | 1756.0 | 1734.3 | 1726.0 | 1725.2 |
| 27.5° | 1826.8 | 1825.1 | 1835.1 | 1854.3 | 1881.0 | *1892.6* | 1880.1 | 1851.0 | 1826.0 | 1813.5 | 1807.6 |
| 30° | 1945.9 | 1945.1 | 1946.8 | 1970.9 | 2000.1 | *2017.6* | 2003.4 | 1979.2 | 1956.8 | 1945.1 | 1950.1 |
| 32.5° | 2122.5 | 2112.5 | 2127.5 | 2152.5 | 2175.8 | *2183.3* | 2185.0 | 2157.5 | 2129.2 | 2119.2 | 2123.4 |
| 35° | 2221.7 | 2219.2 | 2235.8 | 2265.8 | 2307.5 | *2341.6* | 2315.0 | 2290.8 | 2277.5 | 2263.3 | 2260.0 |
| 37.5° | 2447.4 | 2446.6 | 2459.9 | 2457.4 | 2464.1 | *2456.6* | 2469.1 | 2479.1 | 2491.6 | 2480.7 | 2483.2 |
| 40° | 2721.5 | 2714.8 | 2712.3 | 2707.3 | 2689.0 | *2677.3* | 2700.6 | 2718.1 | 2733.1 | 2754.0 | 2744.0 |
| 42.5° | 3008.9 | 2998.0 | 2989.7 | 2974.7 | 2955.5 | *2947.2* | 2950.5 | 2982.2 | 2995.5 | 2998.0 | 2998.9 |
| 45° | 3336.2 | 3316.2 | 3281.3 | 3254.6 | 3227.9 | *3225.4* | 3223.8 | 3230.4 | 3231.3 | 3231.3 | 3244.6 |
| 47.5° | 3623.6 | 3621.1 | 3571.1 | 3525.3 | 3472.0 | *3472.0* | 3453.7 | 3451.2 | 3462.0 | 3476.2 | 3468.7 |
| 50° | 3867.7 | 3859.4 | 3815.2 | 3776.1 | 3747.7 | *3713.6* | 3686.9 | 3666.1 | 3681.1 | 3693.6 | 3700.3 |
| 52.5° | 4065.1 | 4064.3 | 4034.3 | 4019.3 | 4008.5 | *3987.6* | 3926.0 | 3888.5 | 3891.9 | 3906.8 | 3902.7 |
| 55° | 4239.2 | 4250.9 | 4252.5 | 4271.7 | 4291.7 | *4276.7* | 4217.6 | 4160.9 | 4131.8 | 4110.1 | 4109.3 |
| 57.5° | 4438.3 | 4445.8 | 4469.1 | 4530.8 | 4588.3 | *4601.6* | 4541.6 | 4457.5 | 4376.7 | 4323.4 | 4303.4 |
| 60° | 4645.7 | 4647.4 | 4708.2 | 4805.7 | 4910.6 | *4954.8* | 4901.5 | 4763.2 | 4616.6 | 4500.8 | 4480.0 |
| 62.5° | 4832.3 | 4828.2 | 4919.8 | 5067.2 | 5243.8 | *5315.5* | 5244.7 | 5042.2 | 4789.0 | 4627.4 | 4599.9 |
| 65° | 4913.1 | 4924.0 | 5044.7 | 5271.3 | 5521.2 | *5661.2* | 5569.5 | 5233.0 | 4864.8 | 4646.6 | 4613.2 |
| 67.5° | 4766.5 | 4797.3 | 4990.6 | 5346.3 | 5737.8 | *5983.6* | 5822.8 | 5311.3 | 4801.5 | 4518.3 | 4474.1 |
| 69° | 4556.6 | 4564.1 | 4814.8 | 5280.5 | 5796.1 | *6096.0* | 5892.8 | 5270.5 | 4674.1 | 4314.2 | 4267.5 |
| 70° | *4295.0* | *4347.5* | *4644.1* | *5174.7* | *5786.1* | *6131.0* | *5891.9* | *5193.0* | *4519.1* | *4140.1* | *4057.6* |
| 72.5° | 3487.0 | 3506.2 | 3927.7 | 4739.9 | 5541.2 | *5940.2* | 5610.4 | 4764.9 | 3925.2 | 3361.2 | 3339.6 |
| 75° | 2335.8 | 2428.2 | 2935.5 | 3916.8 | 4839.8 | *5256.3* | 4844.0 | 3911.8 | 2943.0 | 2239.1 | 2140.9 |
| 77.5° | 1211.2 | 1263.7 | 1714.3 | 2552.4 | 3518.7 | *4010.1* | 3612.0 | 2737.3 | 1812.6 | 1094.6 | 1038.8 |
| 80° | 595.6 | 623.9 | 792.2 | 1177.1 | 1822.6 | *2210.0* | 2024.2 | 1438.6 | 848.8 | 542.3 | 509.8 |
| 82.5° | 334.9 | 345.7 | 439.8 | 548.1 | 759.7 | *884.7* | 828.0 | 701.4 | 426.5 | 321.5 | 312.4 |
| 85° | 174.1 | 183.3 | 274.1 | 338.2 | 378.2 | *382.4* | 381.5 | 376.5 | 269.1 | 196.6 | 187.4 |
| 87.5° | 82.5 | 90.8 | 140.8 | 185.8 | 195.8 | *189.1* | 200.8 | 174.1 | 127.5 | 89.1 | 78.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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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: SP2-2501-321-2

Test Date: 04/09/2025

Luminaire Tested: GKO-PB1E-722-U-T4W

Data in this report applies to families of products including GKO-PB1E-722-U-T4W

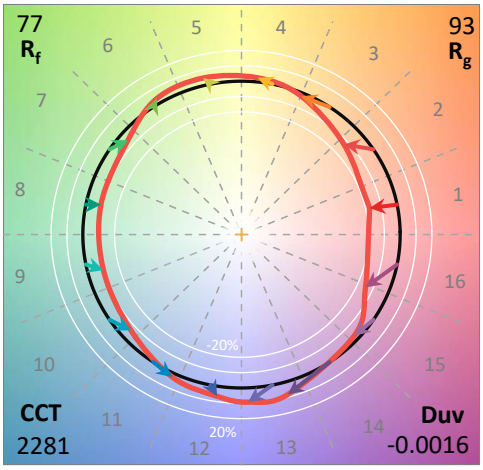
Report Generated By FNC07603 / LDUCLS01DT447
Version: v7.04

## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP2-2501-321-2 |
| 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-722-U-T4W** |
| Description: | Gekko Wedge Wall Pack Fixture 1 SQ w/ T4W distribution |

## Spectral Parameters

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CCT (K): | 2281 | CRI (Ra): | | 70.6 | | | |
| CIE u': | 0.2851 | R1: | | 68.4 | R9: | | -35.1 |
| CIE v': | 0.5324 | R2: | | 88.7 | R10: | | 78.0 |
| Duv: | -0.0016 | R3: | | 85.7 | R11: | | 60.2 |
| CIE x: | 0.4942 | R4: | | 63.2 | R12: | | 73.8 |
| CIE y: | 0.4102 | R5: | | 69.0 | R13: | | 72.8 |
| CIE z: | 0.0956 | R6: | | 88.6 | R14: | | 92.4 |
| Peak Wavelength (nm): | 602 | R7: | | 68.8 | R15: | | 58.4 |
| Dominant Wavelength (nm): | 587 | R8: | | 32.6 | | | |
| Purity: | 71.48321 | | | | | | |
| Rf: | 76.9 | | | | | | |
| Rg: | 92.6 | | | | | | |



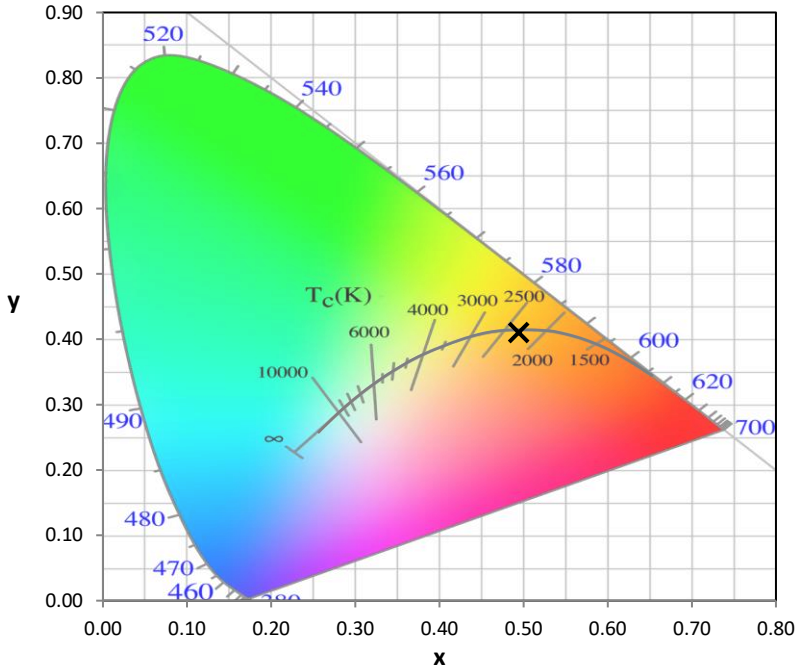

## Test Conditions

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

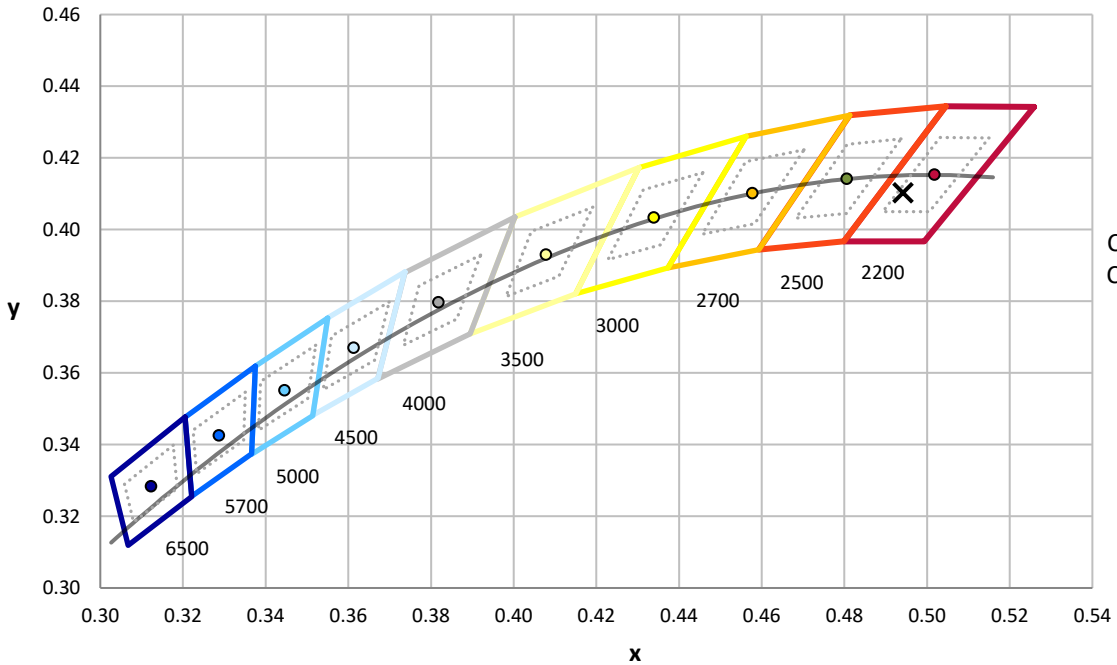
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN2187 | 1/6/2025 | 7/6/2025 |
| Power Meter | INXT2011002 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0458 | 10/22/2024 | 10/22/2025 |
| DC Power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

REPORT NUMBER: SP2-2501-321-2

**CIE 1931 Chromaticity Diagram**




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

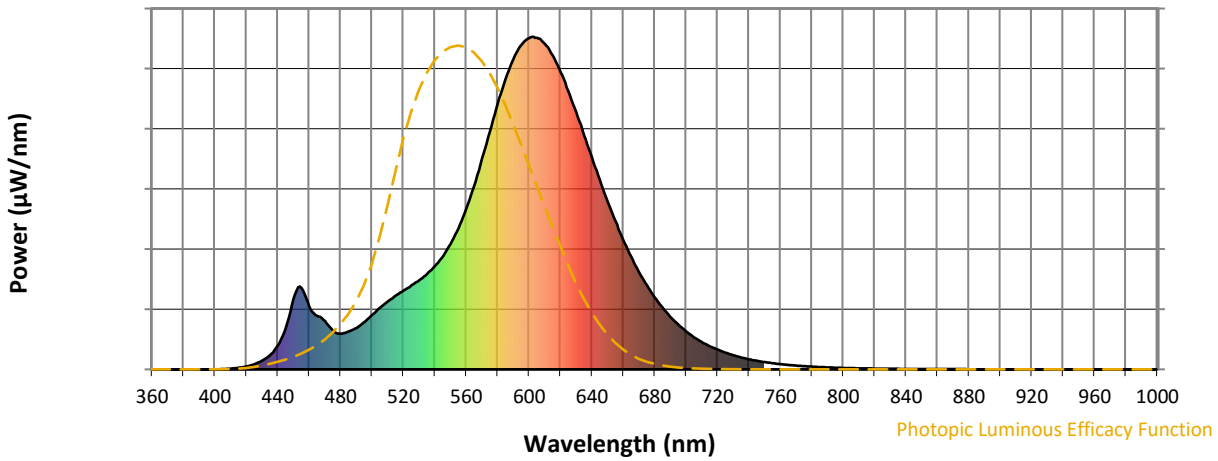



CCT = 2281K
CIE x = 0.4942
CIE y = 0.4102
Duv = -0.0016

Point lies inside the ANSI 2200K 4-step quadrangle

REPORT NUMBER: SP2-2501-321-2

## Photopic Flux vs. Wavelength

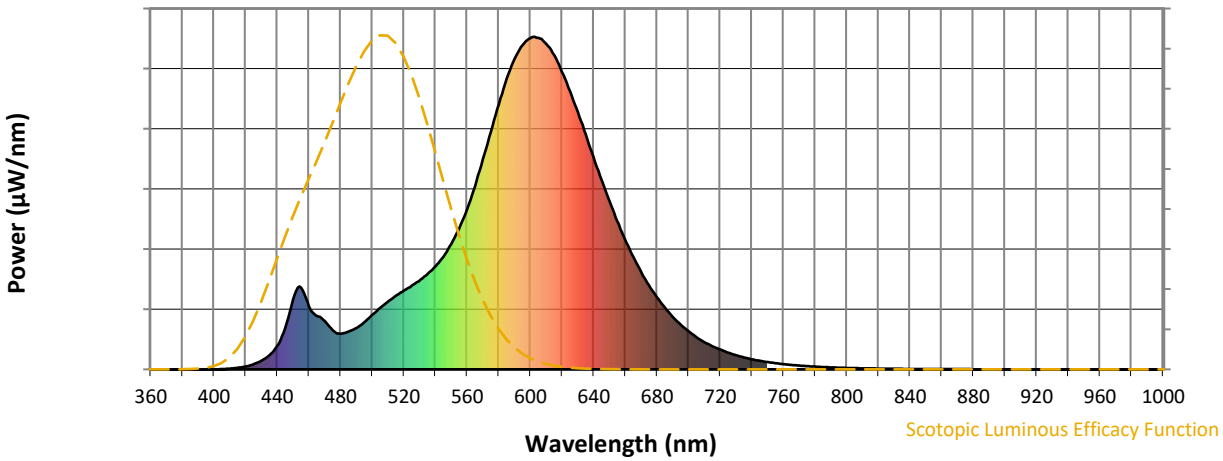



**Photopic Lumens: NR**

| 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 | 124 | NR | 620 | 894 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 837 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 163 | NR | 630 | 774 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 184 | NR | 635 | 706 | NR | 765 | 13 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 204 | NR | 640 | 638 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 221 | NR | 645 | 570 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 237 | NR | 650 | 505 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 252 | NR | 655 | 446 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 0 | NR | 530 | 268 | NR | 660 | 389 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 1 | NR | 535 | 287 | NR | 665 | 339 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 2 | NR | 540 | 310 | NR | 670 | 292 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 5 | NR | 545 | 339 | NR | 675 | 253 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 9 | NR | 550 | 377 | NR | 680 | 217 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 15 | NR | 555 | 424 | NR | 685 | 186 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 26 | NR | 560 | 482 | NR | 690 | 158 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 43 | NR | 565 | 551 | NR | 695 | 135 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 71 | NR | 570 | 632 | NR | 700 | 114 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 123 | NR | 575 | 714 | NR | 705 | 97 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 210 | NR | 580 | 797 | NR | 710 | 82 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 873 | NR | 715 | 70 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 190 | NR | 590 | 934 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 161 | NR | 595 | 975 | NR | 725 | 50 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 145 | NR | 600 | 996 | NR | 730 | 43 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 117 | NR | 605 | 997 | NR | 735 | 36 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 978 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 113 | NR | 615 | 945 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP2-2501-321-2

## Scotopic Flux vs. Wavelength




**Scotopic Lumens: NR** **S/P: 0.98**

| 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 | 124 | NR | 620 | 894 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 837 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 163 | NR | 630 | 774 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 184 | NR | 635 | 706 | NR | 765 | 13 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 204 | NR | 640 | 638 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 221 | NR | 645 | 570 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 237 | NR | 650 | 505 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 252 | NR | 655 | 446 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 0 | NR | 530 | 268 | NR | 660 | 389 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 1 | NR | 535 | 287 | NR | 665 | 339 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 2 | NR | 540 | 310 | NR | 670 | 292 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 5 | NR | 545 | 339 | NR | 675 | 253 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 9 | NR | 550 | 377 | NR | 680 | 217 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 15 | NR | 555 | 424 | NR | 685 | 186 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 26 | NR | 560 | 482 | NR | 690 | 158 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 43 | NR | 565 | 551 | NR | 695 | 135 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 71 | NR | 570 | 632 | NR | 700 | 114 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 123 | NR | 575 | 714 | NR | 705 | 97 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 210 | NR | 580 | 797 | NR | 710 | 82 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 873 | NR | 715 | 70 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 190 | NR | 590 | 934 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 161 | NR | 595 | 975 | NR | 725 | 50 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 145 | NR | 600 | 996 | NR | 730 | 43 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 117 | NR | 605 | 997 | NR | 735 | 36 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 978 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 113 | NR | 615 | 945 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

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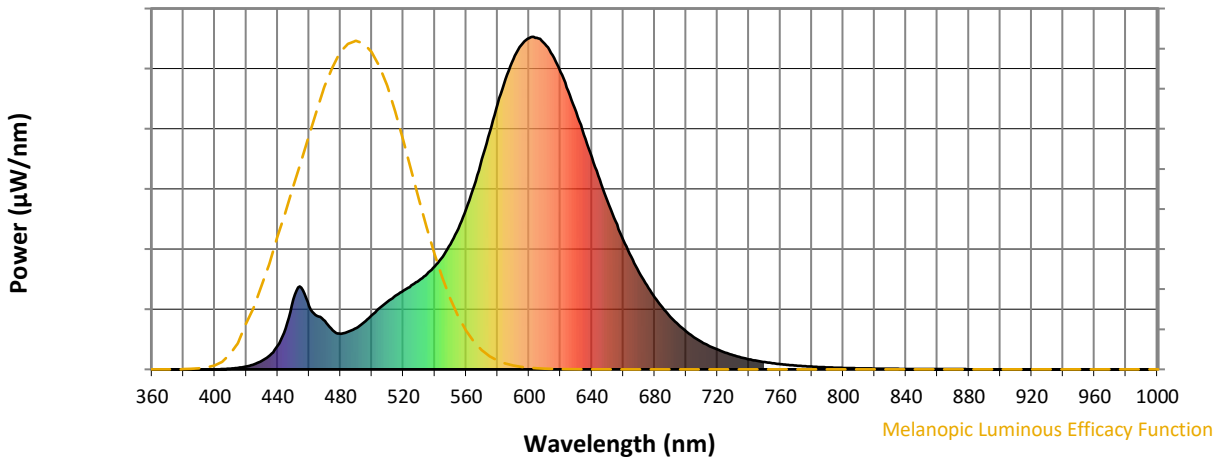
## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 1.75**

| 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 | 124 | NR | 620 | 894 | NR | 750 | 22 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 141 | NR | 625 | 837 | NR | 755 | 19 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 163 | NR | 630 | 774 | NR | 760 | 16 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 184 | NR | 635 | 706 | NR | 765 | 13 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 204 | NR | 640 | 638 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 221 | NR | 645 | 570 | NR | 775 | 10 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 237 | NR | 650 | 505 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 0 | NR | 525 | 252 | NR | 655 | 446 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 0 | NR | 530 | 268 | NR | 660 | 389 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 1 | NR | 535 | 287 | NR | 665 | 339 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 2 | NR | 540 | 310 | NR | 670 | 292 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 5 | NR | 545 | 339 | NR | 675 | 253 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 9 | NR | 550 | 377 | NR | 680 | 217 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 15 | NR | 555 | 424 | NR | 685 | 186 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 26 | NR | 560 | 482 | NR | 690 | 158 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 43 | NR | 565 | 551 | NR | 695 | 135 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 71 | NR | 570 | 632 | NR | 700 | 114 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 123 | NR | 575 | 714 | NR | 705 | 97 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 210 | NR | 580 | 797 | NR | 710 | 82 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 245 | NR | 585 | 873 | NR | 715 | 70 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 190 | NR | 590 | 934 | NR | 720 | 59 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 161 | NR | 595 | 975 | NR | 725 | 50 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 145 | NR | 600 | 996 | NR | 730 | 43 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 117 | NR | 605 | 997 | NR | 735 | 36 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 107 | NR | 610 | 978 | NR | 740 | 30 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 113 | NR | 615 | 945 | NR | 745 | 26 | NR | 875 | 1 | NR | | | |

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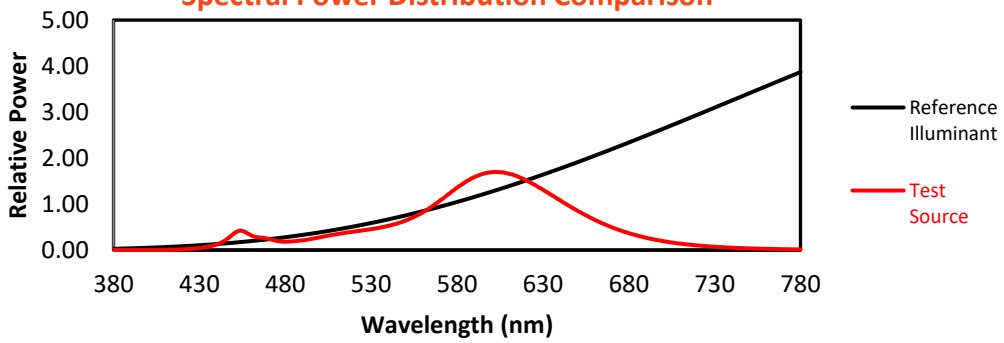
# TM-30-18

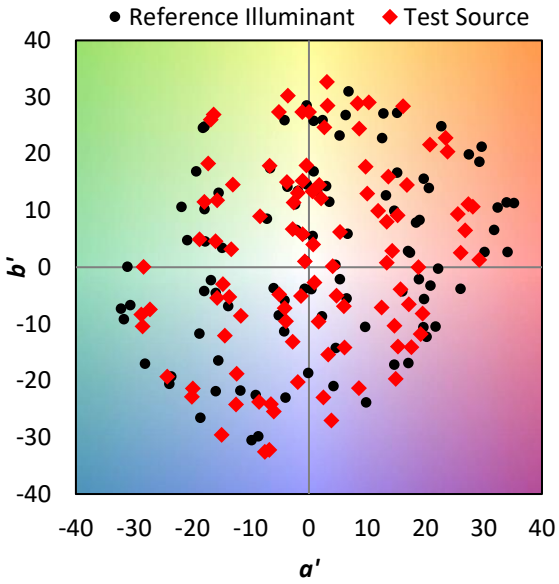
## Summary

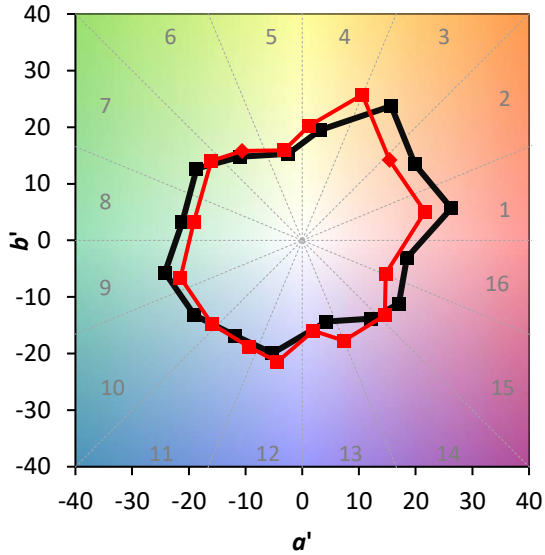
$R_f$ = 76.9
$R_g$ = 92.6
CIE $R_a$ = 70.6
$R_9$ = -35.1

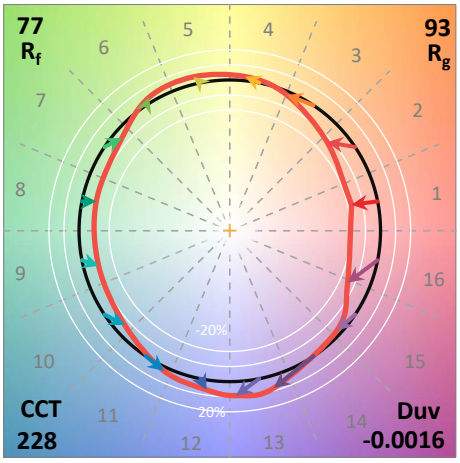
## Spectral Power Distribution Comparison

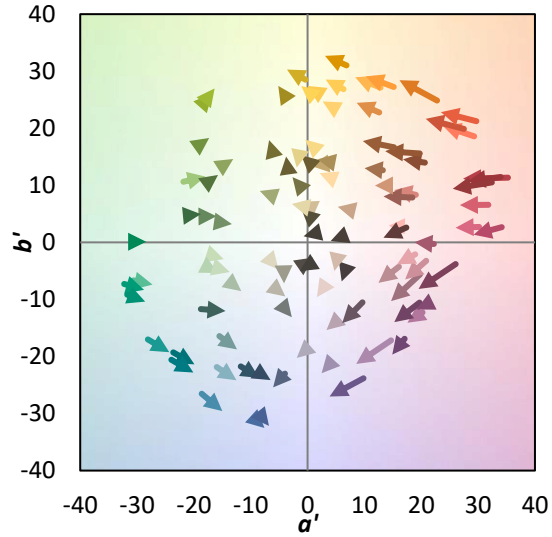



## Color Vector Graphics



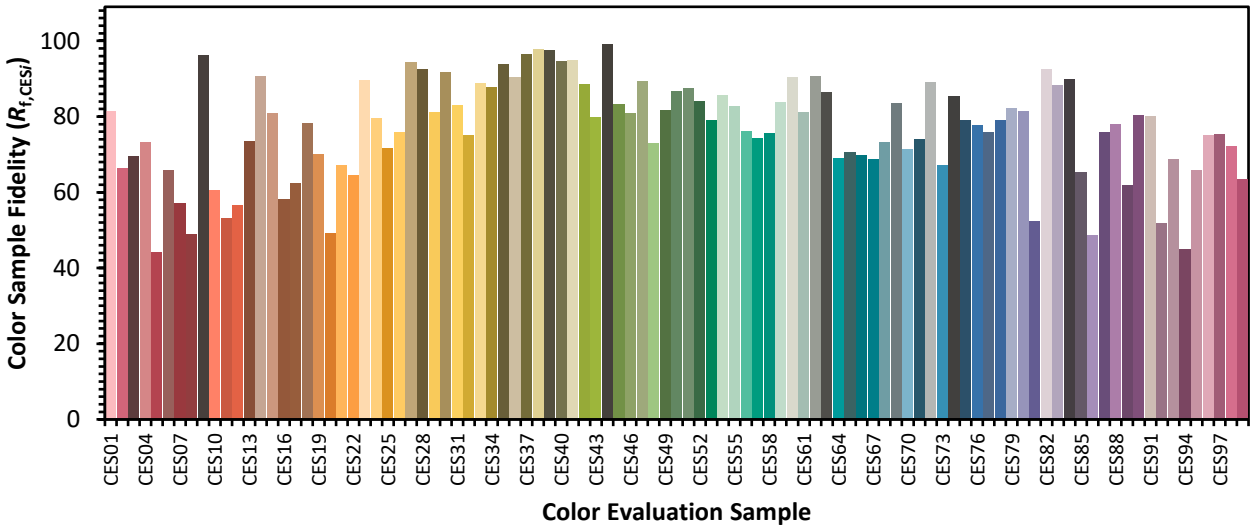



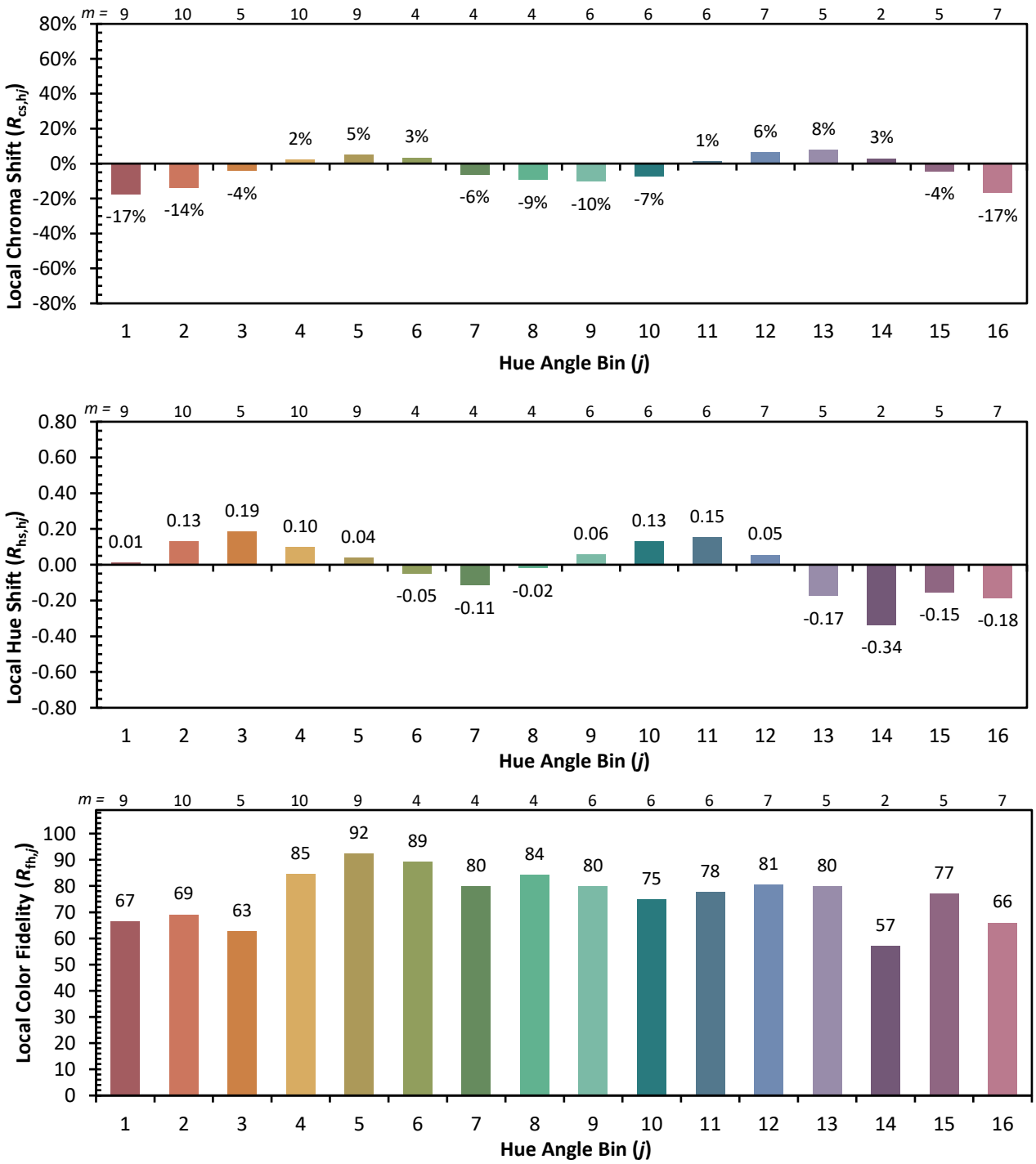



**Individual Sample Fidelity Index ($R_{f,i}$)**

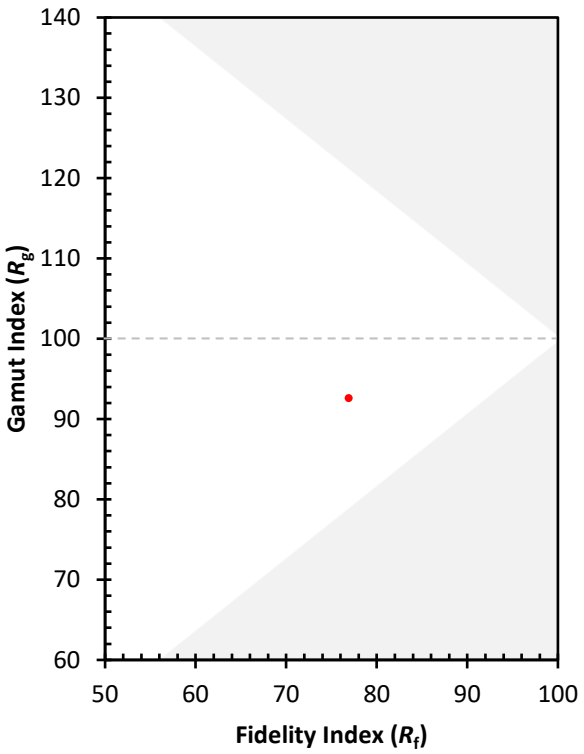
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 76 | CES51 = 88 | CES76 = 78 |
| CES02 = 65 | CES27 = 94 | CES52 = 84 | CES77 = 76 |
| CES03 = 32 | CES28 = 93 | CES53 = 79 | CES78 = 79 |
| CES04 = 72 | CES29 = 81 | CES54 = 86 | CES79 = 82 |
| CES05 = 51 | CES30 = 92 | CES55 = 83 | CES80 = 81 |
| CES06 = 52 | CES31 = 83 | CES56 = 76 | CES81 = 52 |
| CES07 = 44 | CES32 = 75 | CES57 = 74 | CES82 = 92 |
| CES08 = 42 | CES33 = 89 | CES58 = 76 | CES83 = 88 |
| CES09 = 29 | CES34 = 88 | CES59 = 84 | CES84 = 90 |
| CES10 = 79 | CES35 = 94 | CES60 = 91 | CES85 = 65 |
| CES11 = 62 | CES36 = 90 | CES61 = 81 | CES86 = 49 |
| CES12 = 68 | CES37 = 96 | CES62 = 91 | CES87 = 76 |
| CES13 = 44 | CES38 = 98 | CES63 = 86 | CES88 = 78 |
| CES14 = 75 | CES39 = 98 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 95 | CES65 = 71 | CES90 = 80 |
| CES16 = 48 | CES41 = 95 | CES66 = 70 | CES91 = 80 |
| CES17 = 51 | CES42 = 89 | CES67 = 69 | CES92 = 52 |
| CES18 = 57 | CES43 = 80 | CES68 = 73 | CES93 = 69 |
| CES19 = 74 | CES44 = 99 | CES69 = 84 | CES94 = 45 |
| CES20 = 68 | CES45 = 83 | CES70 = 71 | CES95 = 66 |
| CES21 = 88 | CES46 = 81 | CES71 = 74 | CES96 = 75 |
| CES22 = 81 | CES47 = 89 | CES72 = 89 | CES97 = 75 |
| CES23 = 92 | CES48 = 73 | CES73 = 67 | CES98 = 72 |
| CES24 = 92 | CES49 = 82 | CES74 = 85 | CES99 = 64 |
| CES25 = 73 | CES50 = 87 | CES75 = 79 | |

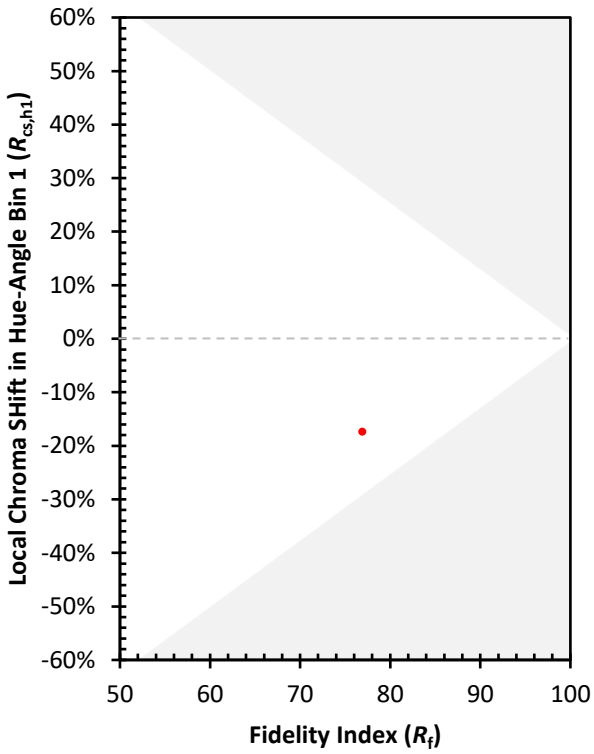


## Color Rendition by Hue-Angle Bin



## Measure Comparisons




(END OF REPORT)