

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

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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: STREETWORKS

Report Number: P1456120

Luminaire Tested: GLAN-SB2B-840-U-T2LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1456120
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB2B-840-U-T2LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 450mA 2xLight Square
PACKAGE 80CRI 4000K FIXTURE w/ TYPE II LOW GLARE
Light Source: (52) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10419.3 lumens
Efficiency: N/A
Efficacy: 141.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

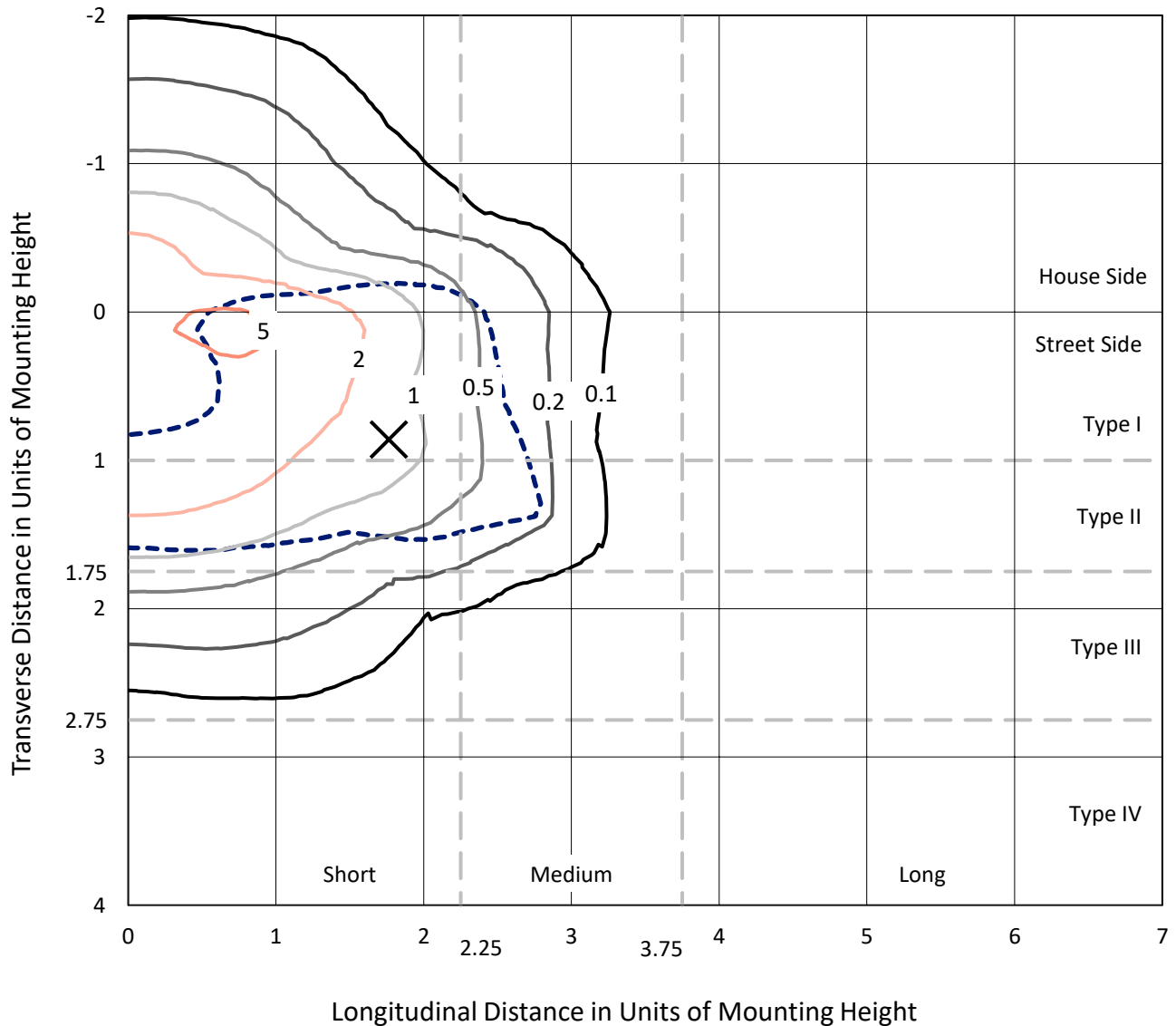
Input Watts (W): 73.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

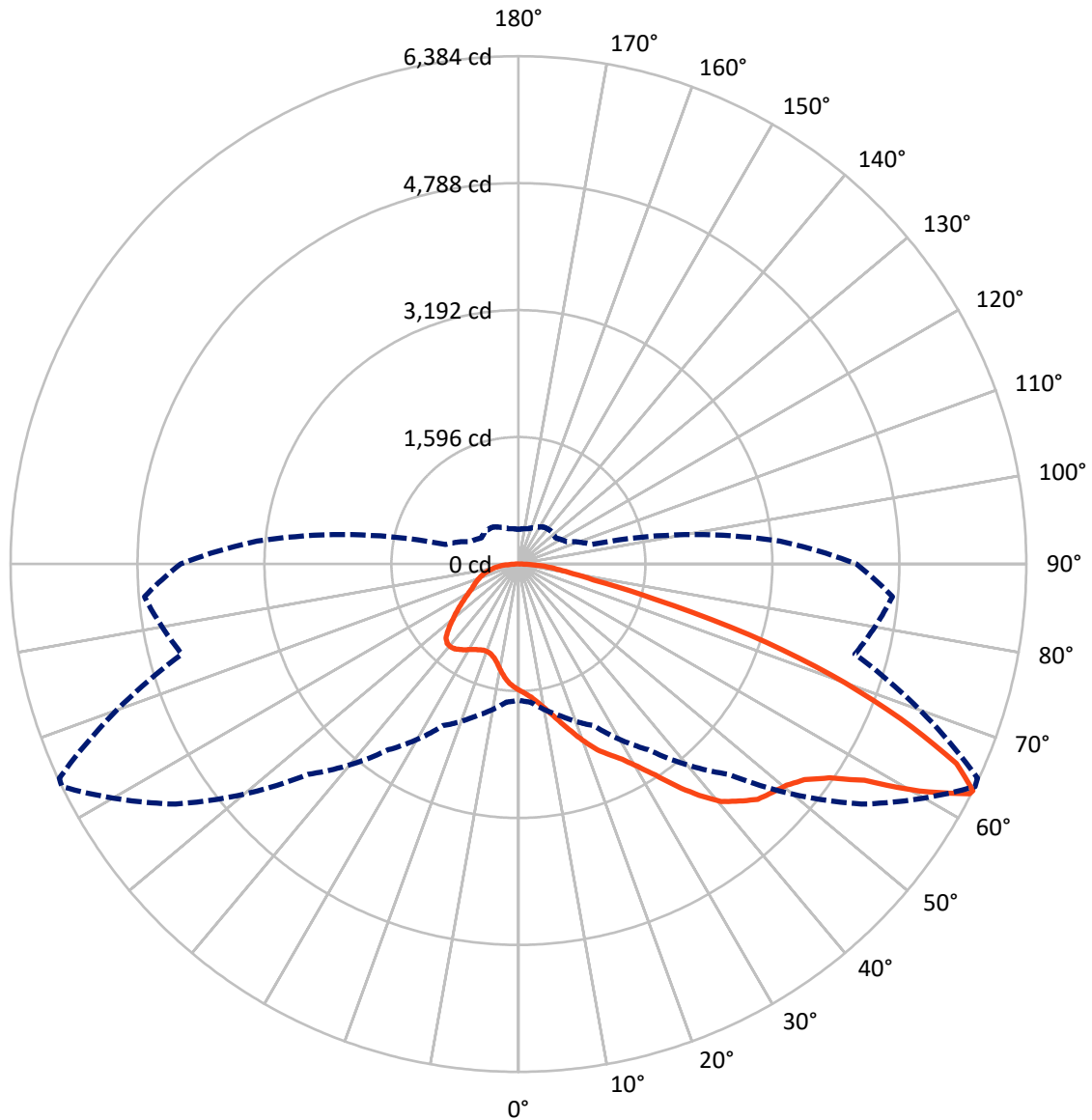


Based on 20 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - N/A

REPORT NUMBER: P1456120

CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P1456120

CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2799.4 | 0.0 | 2799.4 |
| | % Fixture | 26.9 | 0.0 | 26.9 |
| Street Side | Lumens | 7619.9 | 0.0 | 7619.9 |
| | % Fixture | 73.1 | 0.0 | 73.1 |
| Total | Lumens | 10419.3 | 0.0 | 10419.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 145.7 | 1.4 |
| 10°-20° | 448.5 | 4.3 |
| 20°-30° | 820.1 | 7.9 |
| 30°-40° | 1410.8 | 13.5 |
| 40°-50° | 2080.5 | 20.0 |
| 50°-60° | 2493.6 | 23.9 |
| 60°-70° | 2001.4 | 19.2 |
| 70°-80° | 804.2 | 7.7 |
| 80°-90° | 214.4 | 2.1 |
| 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° | 10419.3 | 100.0 |
| 0°-180° | 10419.3 | 100.0 |



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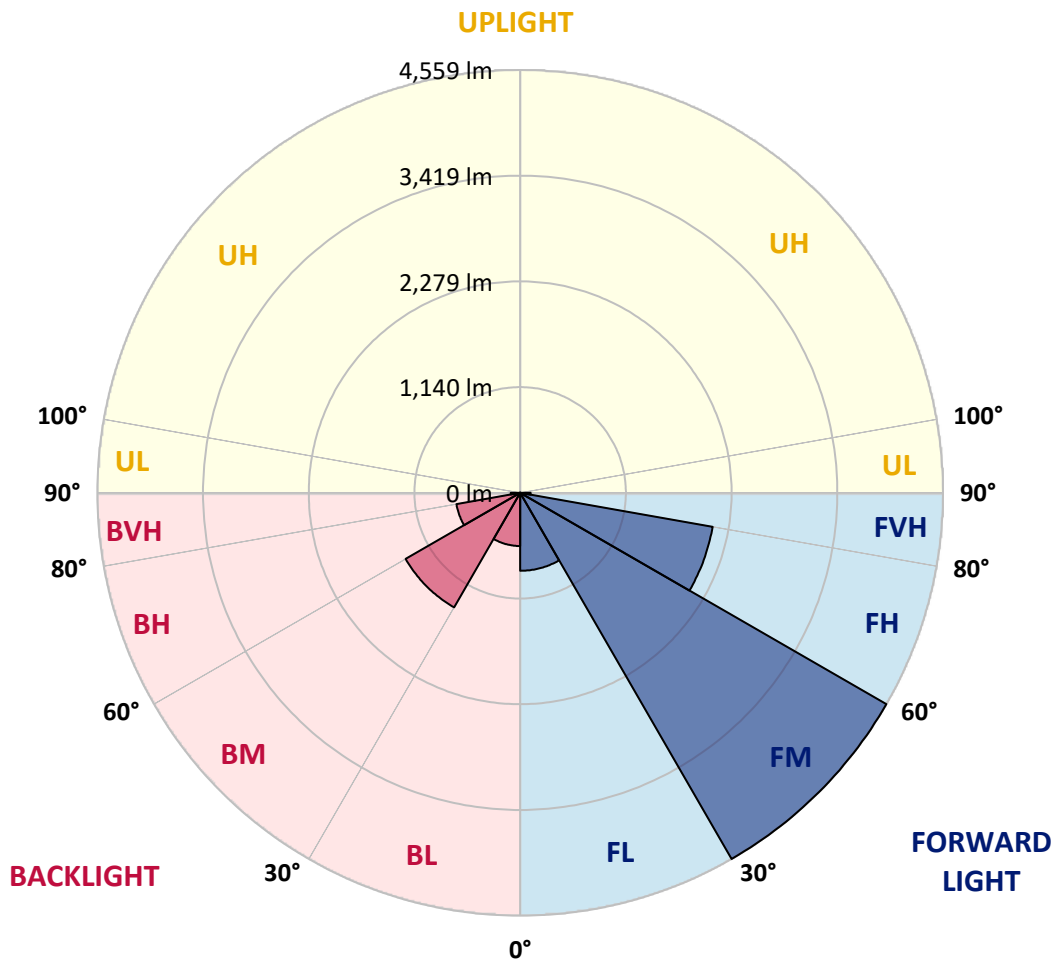
CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 840.6 | 8.1 | | | |
| FM (30°-60°) | 4559.0 | 43.8 | | | |
| FH (60°-80°) | 2107.6 | 20.2 | | | G2/5000 |
| FVH (80°-90°) | 112.7 | 1.1 | | | G2/225 |
| BL (0°-30°) | 573.7 | 5.5 | B2/1000 | | |
| BM (30°-60°) | 1425.9 | 13.7 | B2/2500 | | |
| BH (60°-80°) | 698.0 | 6.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 101.8 | 1.0 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short





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CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 |
| 2.5° | 1652.3 | 1654.6 | 1647.6 | 1645.2 | 1649.9 | 1640.6 | 1638.2 | 1628.9 | 1624.2 | 1614.8 | 1603.1 |
| 5° | 1699.1 | 1701.4 | 1696.7 | 1696.7 | 1701.4 | 1694.4 | 1692.1 | 1682.7 | 1678.0 | 1668.7 | 1645.2 |
| 7.5° | 1696.7 | 1699.1 | 1703.8 | 1722.5 | 1745.9 | 1755.2 | 1762.3 | 1755.2 | 1752.9 | 1738.9 | 1715.5 |
| 10° | 1659.3 | 1661.6 | 1673.3 | 1701.4 | 1759.9 | 1802.0 | 1846.5 | 1846.5 | 1851.2 | 1839.5 | 1797.4 |
| 12.5° | 1607.8 | 1610.1 | 1638.2 | 1682.7 | 1759.9 | 1832.5 | 1923.7 | 1961.2 | 1958.9 | 1951.8 | 1902.7 |
| 15° | 1483.8 | 1483.8 | 1525.9 | 1610.1 | 1734.2 | 1853.5 | 1989.3 | 2089.9 | 2092.2 | 2099.3 | 2040.8 |
| 17.5° | 1378.5 | 1380.8 | 1415.9 | 1490.8 | 1652.3 | 1841.8 | 2059.5 | 2232.7 | 2239.7 | 2279.5 | 2195.2 |
| 20° | 1387.8 | 1387.8 | 1399.5 | 1432.3 | 1563.3 | 1795.0 | 2099.3 | 2384.8 | 2408.2 | 2501.8 | 2396.5 |
| 22.5° | 1460.4 | 1460.4 | 1469.7 | 1467.4 | 1547.0 | 1764.6 | 2125.0 | 2536.9 | 2579.0 | 2773.3 | 2637.5 |
| 25° | 1593.8 | 1591.4 | 1582.1 | 1568.0 | 1614.8 | 1797.4 | 2183.5 | 2653.9 | 2735.8 | 3072.8 | 2916.0 |
| 27.5° | 1757.6 | 1752.9 | 1738.9 | 1715.5 | 1748.2 | 1895.7 | 2284.2 | 2778.0 | 2866.9 | 3400.5 | 3210.9 |
| 30° | 1961.2 | 1947.1 | 1933.1 | 1902.7 | 1937.8 | 2057.1 | 2433.9 | 2953.5 | 3037.7 | 3772.6 | 3566.7 |
| 32.5° | 2202.2 | 2218.6 | 2171.8 | 2129.7 | 2167.1 | 2277.1 | 2656.3 | 3161.8 | 3253.0 | 4161.1 | 3936.4 |
| 35° | 2562.7 | 2611.8 | 2597.8 | 2384.8 | 2419.9 | 2541.6 | 2916.0 | 3430.9 | 3512.8 | 4514.5 | 4315.6 |
| 37.5° | 2918.4 | 2906.7 | 2918.4 | 2740.5 | 2684.4 | 2831.8 | 3194.5 | 3688.4 | 3767.9 | 4802.3 | 4650.2 |
| 40° | 3203.9 | 3239.0 | 3239.0 | 3093.9 | 3021.4 | 3119.7 | 3447.3 | 3924.7 | 4002.0 | 4961.5 | 4891.3 |
| 42.5° | 3515.2 | 3519.8 | 3510.5 | 3384.1 | 3356.0 | 3381.8 | 3669.6 | 4074.5 | 4137.7 | 5043.4 | 5055.1 |
| 45° | 3866.2 | 3863.9 | 3824.1 | 3718.8 | 3676.6 | 3653.2 | 3807.7 | 4219.6 | 4282.8 | 5080.8 | 5144.0 |
| 47.5° | 4156.4 | 4168.1 | 4170.5 | 4058.1 | 3987.9 | 3887.3 | 3927.1 | 4292.2 | 4364.7 | 5038.7 | 5162.8 |
| 50° | 4172.8 | 4191.5 | 4280.5 | 4313.2 | 4299.2 | 4137.7 | 4037.1 | 4369.4 | 4441.9 | 5048.1 | 5230.6 |
| 52.5° | 4069.8 | 4088.5 | 4203.2 | 4339.0 | 4502.8 | 4425.6 | 4210.2 | 4502.8 | 4577.7 | 5139.4 | 5385.1 |
| 55° | 3793.7 | 3824.1 | 3994.9 | 4184.5 | 4477.0 | 4587.0 | 4516.8 | 4743.8 | 4814.0 | 5211.9 | 5565.3 |
| 57.5° | 3302.2 | 3339.6 | 3576.0 | 3877.9 | 4278.1 | 4549.6 | 4961.5 | 5130.0 | 5188.5 | 5263.4 | 5567.6 |
| 60° | 2469.0 | 2499.5 | 2869.2 | 3276.5 | 3877.9 | 4315.6 | 5225.9 | 5792.3 | 5825.1 | 4984.9 | 5251.7 |
| 62.5° | 1818.4 | 1848.9 | 2096.9 | 2389.5 | 3047.1 | 3884.9 | 5277.4 | 6365.7 | 6370.4 | 4481.7 | 4816.4 |
| 63° | 1713.1 | 1743.5 | 1968.2 | 2242.0 | 2850.5 | 3739.8 | 5261.0 | 6384.4 | 6368.0 | 4378.7 | 4720.4 |
| 65° | 1334.0 | 1387.8 | 1621.8 | 1830.1 | 2136.7 | 2976.9 | 5050.4 | 6052.1 | 6075.5 | 4074.5 | 4238.3 |
| 67.5° | 908.0 | 947.8 | 1245.1 | 1486.1 | 1614.8 | 1895.7 | 4142.4 | 5179.1 | 5216.6 | 3758.6 | 3381.8 |
| 70° | 702.1 | 720.8 | 894.0 | 1177.2 | 1305.9 | 1205.3 | 2700.7 | 4170.5 | 4170.5 | 2934.8 | 2396.5 |
| 72.5° | 550.0 | 557.0 | 674.0 | 919.7 | 1050.8 | 926.8 | 1504.8 | 3033.1 | 2920.7 | 1741.2 | 1598.4 |
| 75° | 393.2 | 402.5 | 507.9 | 685.7 | 837.8 | 730.2 | 961.9 | 1766.9 | 1699.1 | 1001.7 | 1067.2 |
| 77.5° | 311.3 | 315.9 | 379.1 | 505.5 | 678.7 | 557.0 | 732.5 | 964.2 | 954.9 | 704.4 | 685.7 |
| 80° | 245.7 | 255.1 | 297.2 | 362.8 | 524.2 | 435.3 | 545.3 | 636.6 | 617.8 | 484.4 | 440.0 |
| 82.5° | 175.5 | 191.9 | 229.4 | 276.2 | 388.5 | 311.3 | 358.1 | 449.3 | 449.3 | 365.1 | 290.2 |
| 85° | 107.7 | 121.7 | 135.7 | 170.8 | 276.2 | 201.3 | 189.6 | 290.2 | 297.2 | 273.8 | 187.2 |
| 87.5° | 51.5 | 56.2 | 65.5 | 72.6 | 100.6 | 91.3 | 74.9 | 110.0 | 112.3 | 121.7 | 77.2 |
| 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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CATALOG NUMBER: GLAN-SB2B-840-U-T2LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 | 1586.7 |
| 2.5° | 1600.8 | 1596.1 | 1572.7 | 1549.3 | 1523.6 | 1500.1 | 1476.7 | 1458.0 | 1437.0 | 1441.6 | 1444.0 |
| 5° | 1631.2 | 1619.5 | 1568.0 | 1507.2 | 1427.6 | 1352.7 | 1280.2 | 1228.7 | 1195.9 | 1186.5 | 1167.8 |
| 7.5° | 1696.7 | 1668.7 | 1575.0 | 1446.3 | 1298.9 | 1181.9 | 1114.0 | 1083.6 | 1074.2 | 1076.5 | 1071.9 |
| 10° | 1771.6 | 1729.5 | 1584.4 | 1373.8 | 1186.5 | 1107.0 | 1097.6 | 1116.3 | 1125.7 | 1135.1 | 1137.4 |
| 12.5° | 1869.9 | 1802.0 | 1579.7 | 1294.2 | 1132.7 | 1118.7 | 1153.8 | 1188.9 | 1209.9 | 1224.0 | 1221.6 |
| 15° | 1984.6 | 1893.3 | 1565.7 | 1228.7 | 1125.7 | 1163.1 | 1207.6 | 1247.4 | 1273.1 | 1287.2 | 1280.2 |
| 17.5° | 2122.7 | 2001.0 | 1549.3 | 1186.5 | 1146.8 | 1191.2 | 1238.0 | 1277.8 | 1305.9 | 1315.3 | 1308.2 |
| 20° | 2293.5 | 2122.7 | 1521.2 | 1167.8 | 1163.1 | 1202.9 | 1245.1 | 1282.5 | 1305.9 | 1315.3 | 1305.9 |
| 22.5° | 2494.8 | 2267.8 | 1497.8 | 1167.8 | 1170.2 | 1202.9 | 1233.4 | 1261.4 | 1282.5 | 1289.5 | 1277.8 |
| 25° | 2752.2 | 2436.3 | 1488.4 | 1186.5 | 1172.5 | 1191.2 | 1207.6 | 1224.0 | 1235.7 | 1240.4 | 1235.7 |
| 27.5° | 3014.3 | 2630.5 | 1493.1 | 1209.9 | 1170.2 | 1174.8 | 1174.8 | 1177.2 | 1179.5 | 1181.9 | 1179.5 |
| 30° | 3316.2 | 2827.1 | 1511.8 | 1240.4 | 1174.8 | 1151.4 | 1144.4 | 1130.4 | 1118.7 | 1109.3 | 1100.0 |
| 32.5° | 3608.8 | 3014.3 | 1544.6 | 1284.8 | 1170.2 | 1125.7 | 1111.7 | 1076.5 | 1043.8 | 1015.7 | 1015.7 |
| 35° | 3924.7 | 3208.6 | 1603.1 | 1317.6 | 1165.5 | 1102.3 | 1062.5 | 1022.7 | 987.6 | 947.8 | 947.8 |
| 37.5° | 4196.2 | 3374.7 | 1649.9 | 1355.0 | 1160.8 | 1074.2 | 1011.0 | 966.6 | 929.1 | 889.3 | 884.6 |
| 40° | 4385.8 | 3470.7 | 1678.0 | 1369.1 | 1144.4 | 1036.8 | 961.9 | 905.7 | 851.9 | 798.1 | 795.7 |
| 42.5° | 4477.0 | 3466.0 | 1661.6 | 1364.4 | 1114.0 | 990.0 | 919.7 | 844.9 | 772.3 | 723.2 | 718.5 |
| 45° | 4526.2 | 3435.6 | 1598.4 | 1324.6 | 1064.8 | 940.8 | 865.9 | 786.3 | 713.8 | 669.3 | 660.0 |
| 47.5° | 4516.8 | 3360.7 | 1511.8 | 1226.3 | 999.3 | 887.0 | 812.1 | 730.2 | 671.7 | 645.9 | 645.9 |
| 50° | 4542.6 | 3302.2 | 1413.6 | 1114.0 | 910.4 | 823.8 | 762.9 | 688.1 | 653.0 | 620.2 | 608.5 |
| 52.5° | 4657.2 | 3351.3 | 1329.3 | 1008.7 | 826.1 | 762.9 | 720.8 | 657.6 | 613.2 | 592.1 | 585.1 |
| 55° | 4809.4 | 3456.7 | 1249.7 | 915.1 | 744.2 | 709.1 | 688.1 | 629.5 | 578.1 | 557.0 | 545.3 |
| 57.5° | 4837.4 | 3529.2 | 1172.5 | 823.8 | 676.4 | 667.0 | 660.0 | 580.4 | 538.3 | 521.9 | 512.5 |
| 60° | 4643.2 | 3475.4 | 1071.9 | 741.9 | 622.5 | 627.2 | 608.5 | 550.0 | 500.8 | 484.4 | 475.1 |
| 62.5° | 4313.2 | 3335.0 | 971.2 | 671.7 | 580.4 | 589.8 | 571.0 | 512.5 | 463.4 | 447.0 | 442.3 |
| 63° | 4247.7 | 3297.5 | 947.8 | 664.7 | 571.0 | 582.7 | 566.4 | 507.9 | 458.7 | 442.3 | 435.3 |
| 65° | 3856.9 | 3072.8 | 865.9 | 627.2 | 540.6 | 540.6 | 543.0 | 484.4 | 442.3 | 435.3 | 430.6 |
| 67.5° | 3145.4 | 2565.0 | 777.0 | 582.7 | 507.9 | 514.9 | 526.6 | 493.8 | 477.4 | 472.7 | 468.1 |
| 70° | 2377.8 | 1930.8 | 699.8 | 540.6 | 472.7 | 496.1 | 575.7 | 561.7 | 500.8 | 458.7 | 449.3 |
| 72.5° | 1685.0 | 1315.3 | 631.9 | 498.5 | 430.6 | 489.1 | 596.8 | 535.9 | 451.7 | 402.5 | 393.2 |
| 75° | 1128.0 | 847.2 | 564.0 | 454.0 | 383.8 | 451.7 | 564.0 | 489.1 | 393.2 | 381.5 | 367.4 |
| 77.5° | 709.1 | 603.8 | 496.1 | 402.5 | 332.3 | 402.5 | 512.5 | 435.3 | 339.3 | 344.0 | 323.0 |
| 80° | 433.0 | 430.6 | 416.6 | 341.7 | 266.8 | 320.6 | 430.6 | 367.4 | 271.5 | 271.5 | 241.1 |
| 82.5° | 257.4 | 311.3 | 353.4 | 283.2 | 194.2 | 229.4 | 311.3 | 276.2 | 227.0 | 220.0 | 205.9 |
| 85° | 173.2 | 210.6 | 280.8 | 217.7 | 124.0 | 140.4 | 215.3 | 231.7 | 208.3 | 182.5 | 170.8 |
| 87.5° | 63.2 | 84.3 | 128.7 | 88.9 | 53.8 | 84.3 | 161.5 | 168.5 | 126.4 | 98.3 | 88.9 |
| 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: SP1-2407-184-11

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-840-U-5WQ

Data in this report applies to families of products including GSS-SB1A-840-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-11
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-840-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 4000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3897
 CIE u': 0.2249
 CIE v': 0.5084
 Duv: 0.0039
 CIE x: 0.3882
 CIE y: 0.3900
 CIE z: 0.2218
 Peak Wavelength (nm): 445
 Dominant Wavelength (nm): 577
 Purity: 33.54925
 Rf: 81.8
 Rg: 98.6

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 80.2 | | |
| R1: | 78.9 | R9: | 6.7 |
| R2: | 83.5 | R10: | 61.9 |
| R3: | 88.3 | R11: | 81.9 |
| R4: | 82.1 | R12: | 58.9 |
| R5: | 78.8 | R13: | 79.2 |
| R6: | 78.4 | R14: | 93.2 |
| R7: | 85.8 | R15: | 71.9 |
| R8: | 65.8 | | |



Test Conditions

Stabilization Time: 24M
 Operation Time: 1H 24M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-11

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

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CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 4000K 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

Scotopic Flux vs. Wavelength



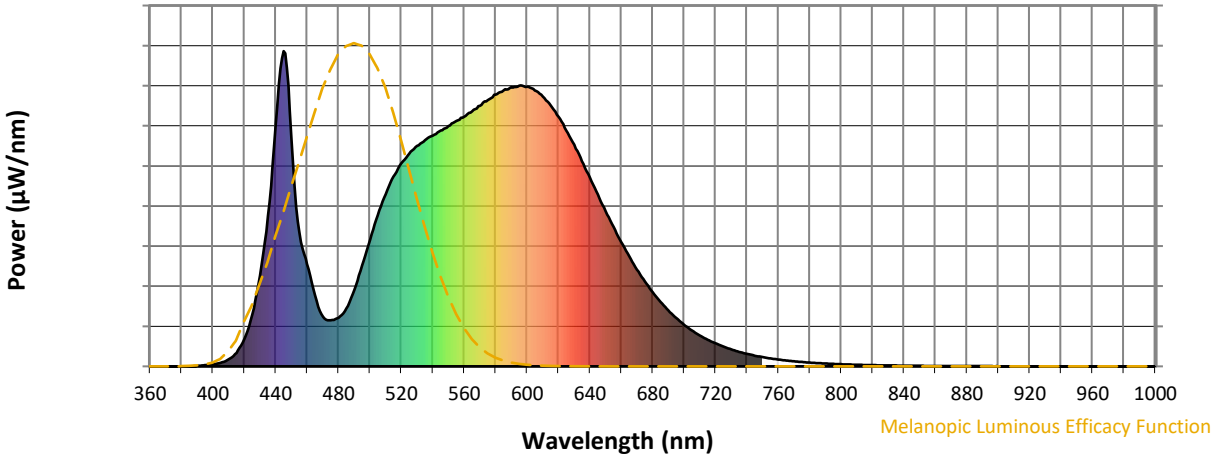
Scotopic Lumens: NR

S/P: 1.57

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

Melanopic Flux vs. Wavelength



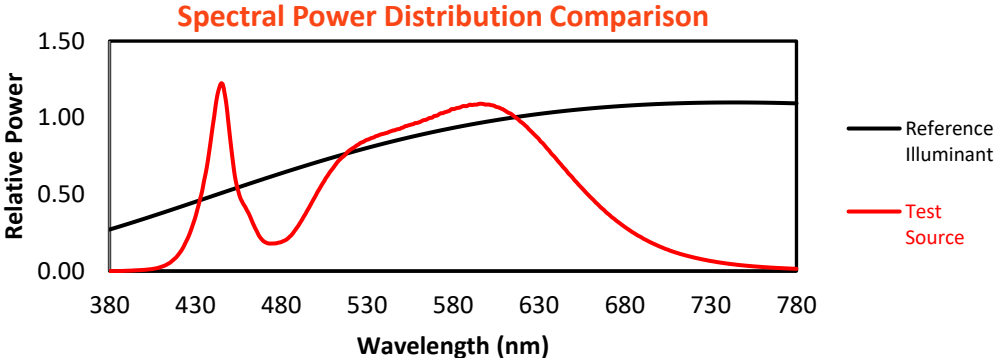
Melanopic Lumens: NR

M/P: 3.06

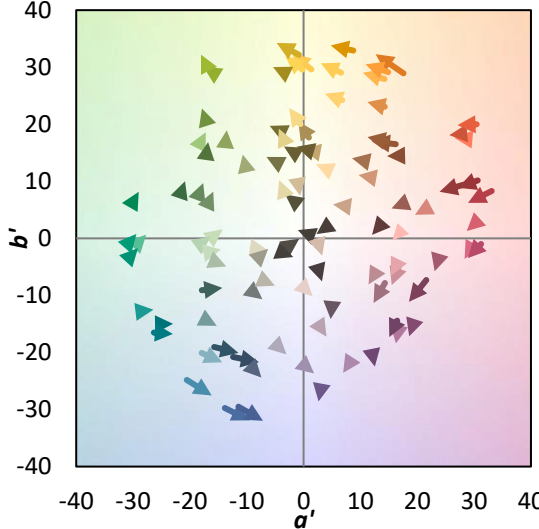
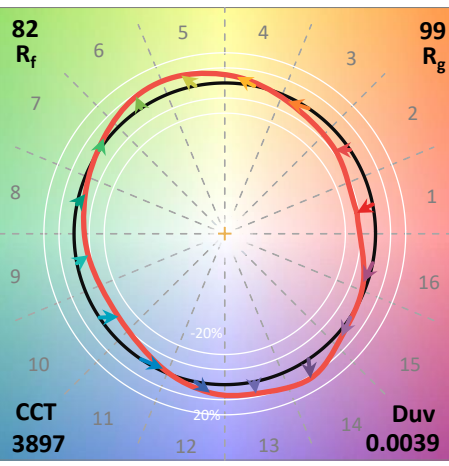
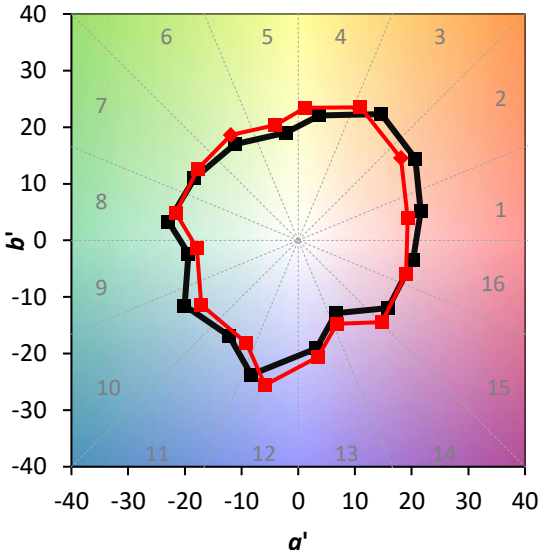
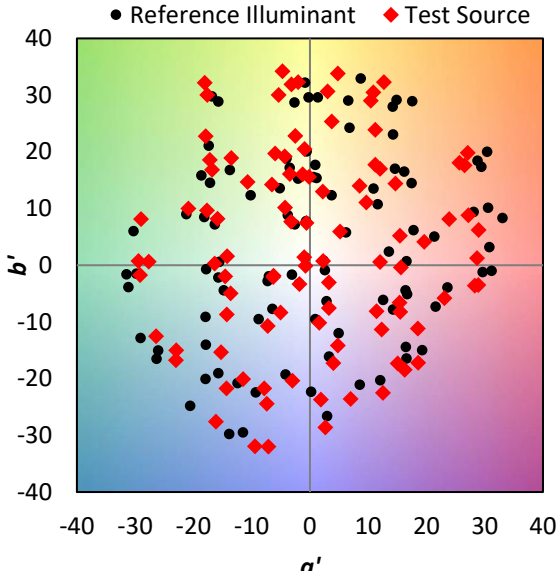
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 81.8$
 $R_g = 98.6$
 CIE $R_a = 80.2$
 $R_9 = 6.7$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 73 | CES51 = 93 | CES76 = 66 |
| CES02 = 61 | CES27 = 91 | CES52 = 93 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 83 | CES78 = 66 |
| CES04 = 69 | CES29 = 71 | CES54 = 89 | CES79 = 88 |
| CES05 = 48 | CES30 = 77 | CES55 = 88 | CES80 = 85 |
| CES06 = 50 | CES31 = 74 | CES56 = 80 | CES81 = 83 |
| CES07 = 41 | CES32 = 70 | CES57 = 79 | CES82 = 93 |
| CES08 = 40 | CES33 = 77 | CES58 = 80 | CES83 = 91 |
| CES09 = 29 | CES34 = 79 | CES59 = 92 | CES84 = 91 |
| CES10 = 74 | CES35 = 88 | CES60 = 95 | CES85 = 84 |
| CES11 = 57 | CES36 = 98 | CES61 = 91 | CES86 = 78 |
| CES12 = 63 | CES37 = 85 | CES62 = 90 | CES87 = 84 |
| CES13 = 42 | CES38 = 85 | CES63 = 81 | CES88 = 85 |
| CES14 = 74 | CES39 = 95 | CES64 = 81 | CES89 = 78 |
| CES15 = 71 | CES40 = 90 | CES65 = 76 | CES90 = 84 |
| CES16 = 47 | CES41 = 90 | CES66 = 78 | CES91 = 85 |
| CES17 = 49 | CES42 = 84 | CES67 = 76 | CES92 = 71 |
| CES18 = 56 | CES43 = 81 | CES68 = 80 | CES93 = 84 |
| CES19 = 71 | CES44 = 99 | CES69 = 86 | CES94 = 65 |
| CES20 = 65 | CES45 = 87 | CES70 = 73 | CES95 = 77 |
| CES21 = 86 | CES46 = 85 | CES71 = 70 | CES96 = 83 |
| CES22 = 78 | CES47 = 84 | CES72 = 90 | CES97 = 87 |
| CES23 = 91 | CES48 = 79 | CES73 = 65 | CES98 = 81 |
| CES24 = 90 | CES49 = 84 | CES74 = 98 | CES99 = 75 |
| CES25 = 71 | CES50 = 91 | CES75 = 68 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)