

Signify Classified - Internal
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: McGRAW-EDISON

Report Number: P386627

Luminaire Tested: **GPC-SA2B-735-U-T4FT**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P386627
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GPC-SA2B-735-U-T4FT
Description: GALLEON PEDESTRIAN LUMINAIRE
(2) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11270.8 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

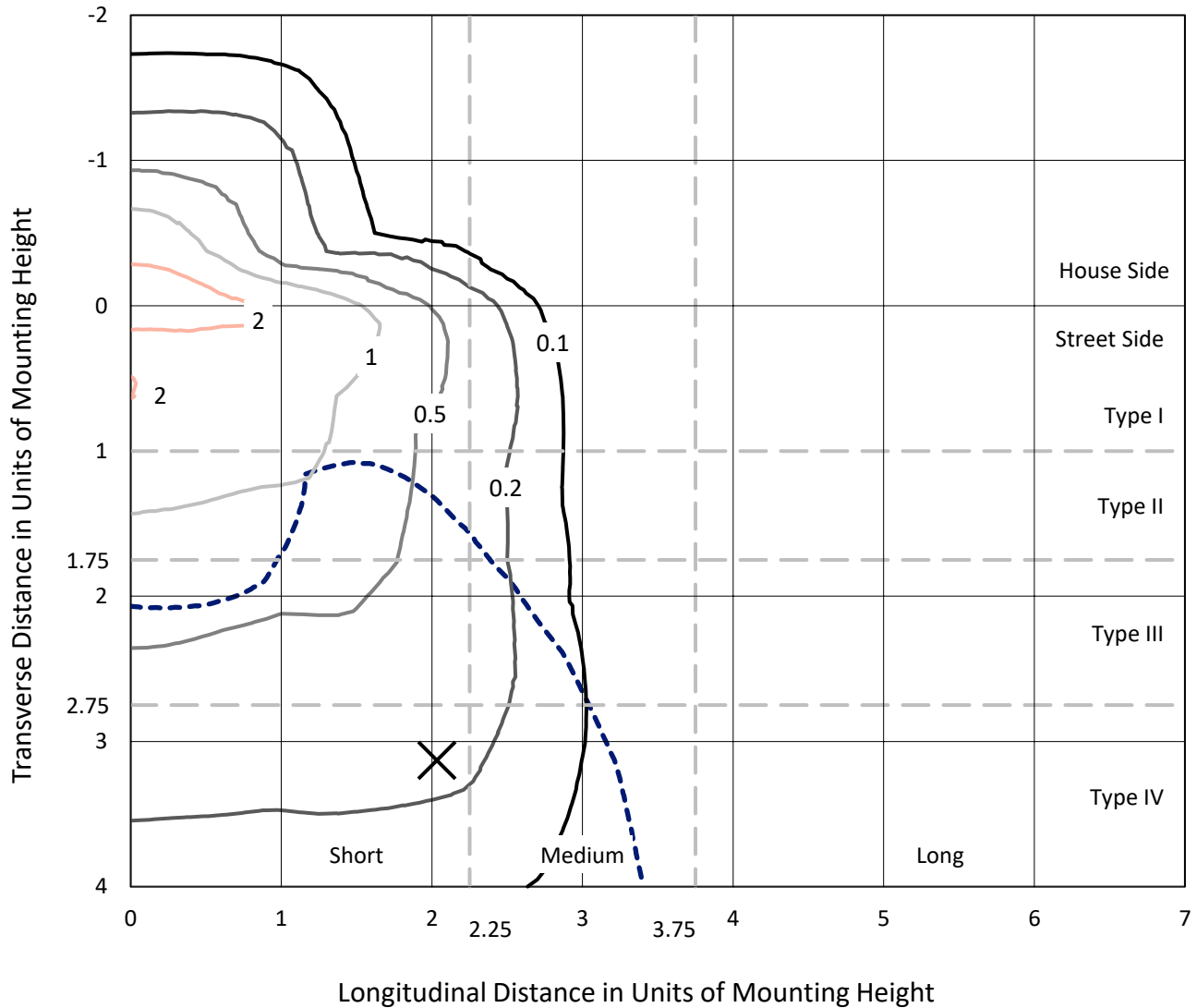
Input Watts (W): 86
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P386627
 CATALOG NUMBER: GPC-SA2B-735-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

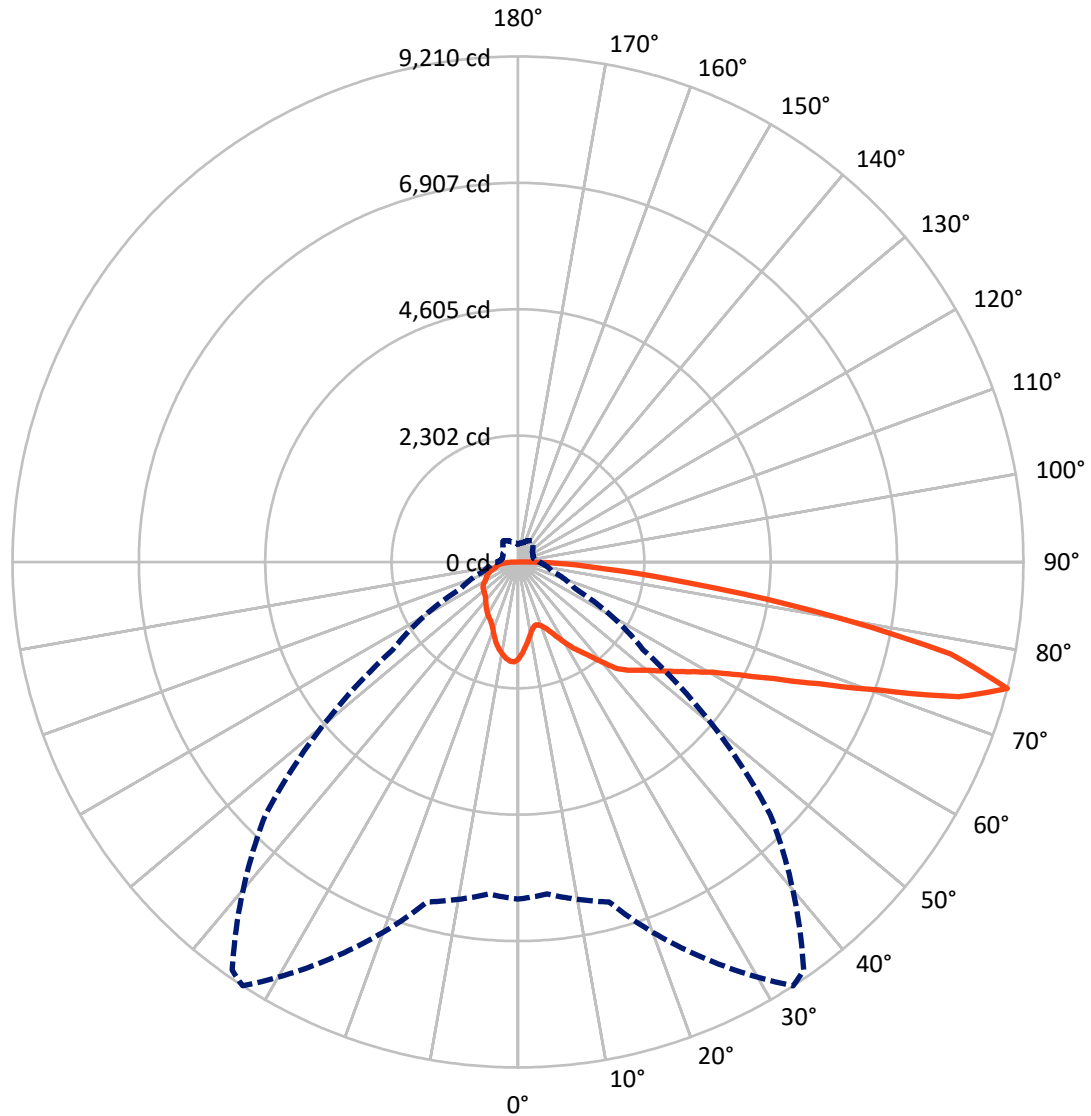
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P386627
CATALOG NUMBER: GPC-SA2B-735-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P386627
 CATALOG NUMBER: GPC-SA2B-735-U-T4FT

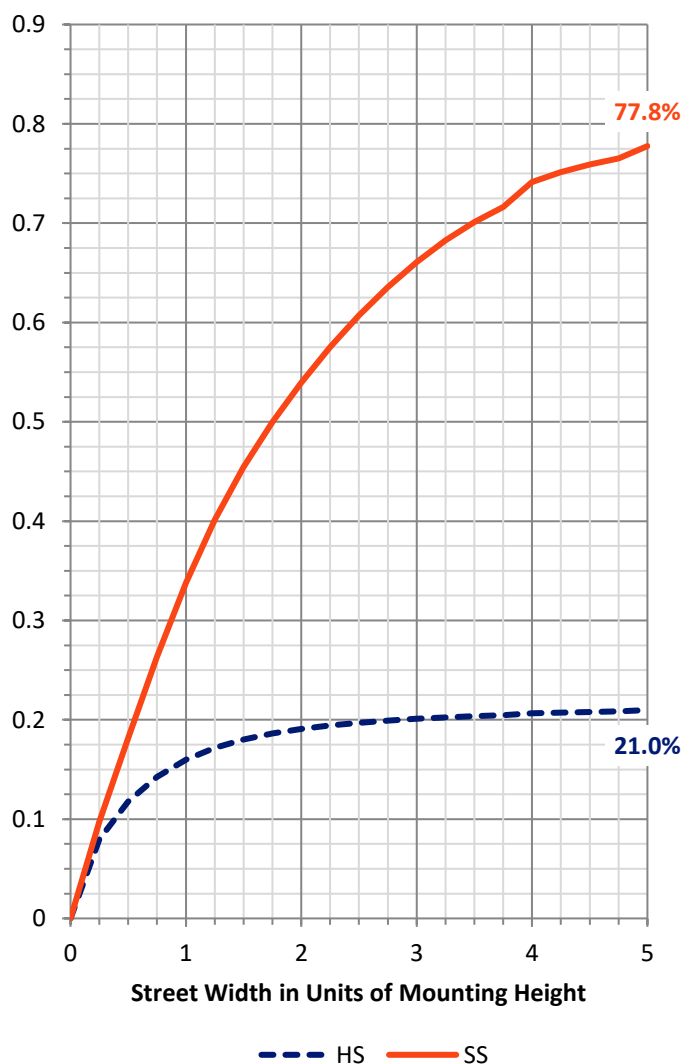
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2420.2 | 0.0 | 2420.2 |
| | % Fixture | 21.5 | 0.0 | 21.5 |
| Street Side | Lumens | 8850.7 | 0.0 | 8850.7 |
| | % Fixture | 78.5 | 0.0 | 78.5 |
| Total | Lumens | 11270.8 | 0.0 | 11270.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 159.3 | 1.4 |
| 10°-20° | 431.5 | 3.8 |
| 20°-30° | 704.7 | 6.3 |
| 30°-40° | 1049.5 | 9.3 |
| 40°-50° | 1505.3 | 13.4 |
| 50°-60° | 2066.5 | 18.3 |
| 60°-70° | 2587.2 | 23.0 |
| 70°-80° | 2340.5 | 20.8 |
| 80°-90° | 426.3 | 3.8 |
| 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° | 11270.8 | 100.0 |
| 0°-180° | 11270.8 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P386627

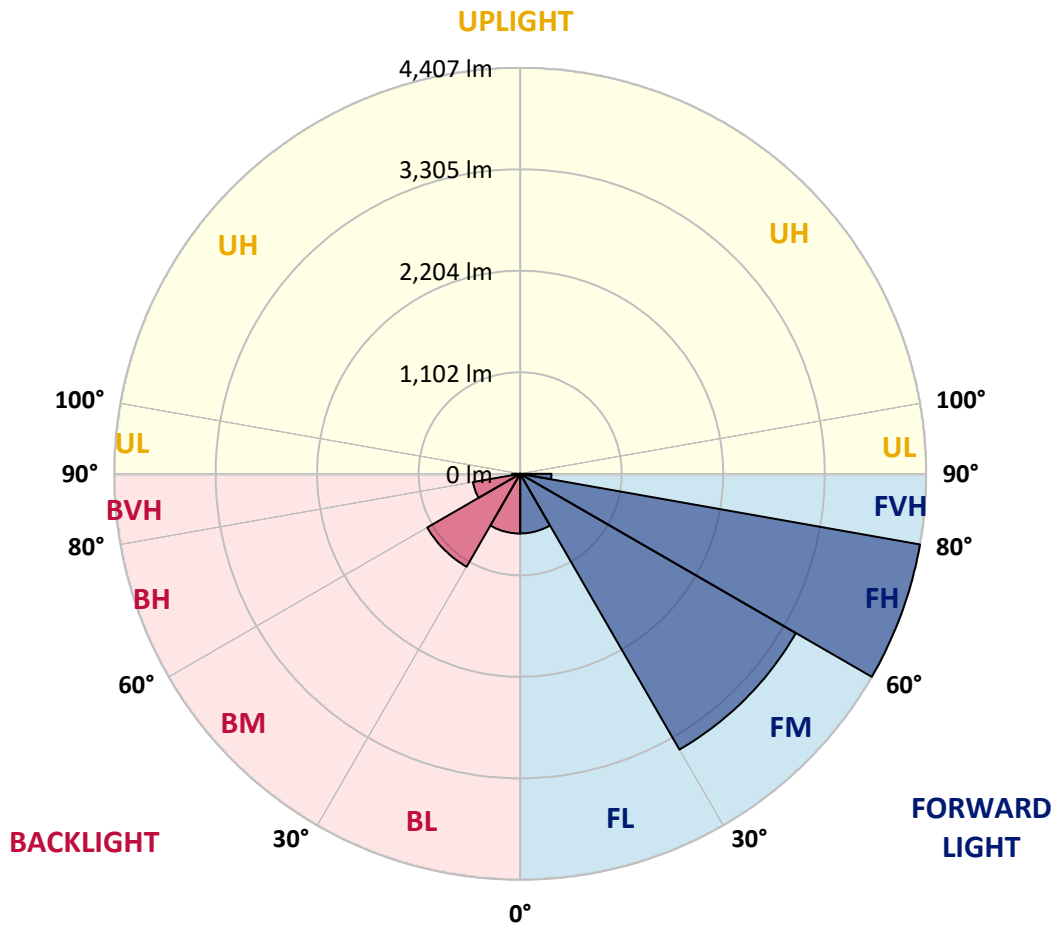
CATALOG NUMBER: GPC-SA2B-735-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 647.3 | 5.7 | | | |
| FM (30°-60°) | 3456.5 | 30.7 | | | |
| FH (60°-80°) | 4407.3 | 39.1 | | | G2/5000 |
| FVH (80°-90°) | 339.5 | 3.0 | | | G3/500 |
| BL (0°-30°) | 648.2 | 5.8 | B2/1000 | | |
| BM (30°-60°) | 1164.8 | 10.3 | B2/2500 | | |
| BH (60°-80°) | 520.4 | 4.6 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 86.8 | 0.8 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Short





REPORT NUMBER: P386627

CATALOG NUMBER: GPC-SA2B-735-U-T4FT

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 33° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 |
| 2.5° | 1636.0 | 1629.8 | 1641.4 | 1642.9 | 1653.1 | 1657.0 | 1671.0 | 1692.8 | 1710.7 | 1731.3 | 1750.0 |
| 5° | 1487.6 | 1483.3 | 1499.6 | 1511.4 | 1533.6 | 1542.9 | 1576.0 | 1622.3 | 1663.6 | 1710.3 | 1752.7 |
| 7.5° | 1346.7 | 1344.4 | 1362.7 | 1389.1 | 1414.8 | 1427.7 | 1484.9 | 1552.3 | 1621.1 | 1696.6 | 1761.7 |
| 10° | 1228.0 | 1227.1 | 1244.7 | 1270.7 | 1308.5 | 1322.9 | 1396.9 | 1485.7 | 1582.2 | 1686.2 | 1776.9 |
| 12.5° | 1161.4 | 1164.1 | 1172.3 | 1194.1 | 1229.1 | 1243.5 | 1325.7 | 1429.9 | 1549.5 | 1682.6 | 1799.0 |
| 15° | 1177.7 | 1181.9 | 1167.9 | 1167.2 | 1192.1 | 1203.4 | 1280.5 | 1390.3 | 1526.1 | 1688.5 | 1831.3 |
| 17.5° | 1247.4 | 1248.2 | 1211.2 | 1187.9 | 1203.0 | 1208.8 | 1266.5 | 1367.7 | 1512.5 | 1701.7 | 1871.8 |
| 20° | 1345.5 | 1343.5 | 1278.1 | 1239.2 | 1247.4 | 1248.9 | 1286.3 | 1368.1 | 1511.4 | 1724.7 | 1924.4 |
| 22.5° | 1475.5 | 1461.1 | 1373.1 | 1320.2 | 1318.3 | 1315.9 | 1337.3 | 1396.9 | 1528.5 | 1762.1 | 1987.1 |
| 25° | 1645.3 | 1631.6 | 1510.5 | 1438.2 | 1422.6 | 1416.8 | 1419.9 | 1458.4 | 1562.4 | 1802.2 | 2057.2 |
| 27.5° | 1834.1 | 1810.4 | 1693.5 | 1591.1 | 1558.8 | 1550.7 | 1532.0 | 1545.2 | 1599.3 | 1840.7 | 2140.5 |
| 30° | 1992.2 | 1979.3 | 1877.3 | 1755.8 | 1717.7 | 1706.0 | 1657.0 | 1642.5 | 1652.7 | 1893.3 | 2245.6 |
| 32.5° | 2080.6 | 2072.0 | 2010.1 | 1911.9 | 1876.5 | 1860.2 | 1790.9 | 1762.1 | 1738.3 | 1976.2 | 2388.1 |
| 35° | 2187.7 | 2182.2 | 2144.8 | 2073.5 | 2021.0 | 2003.8 | 1950.1 | 1920.1 | 1859.1 | 2090.2 | 2572.2 |
| 37.5° | 2323.9 | 2318.0 | 2318.8 | 2261.2 | 2198.6 | 2182.6 | 2147.2 | 2115.6 | 2015.6 | 2240.2 | 2772.3 |
| 40° | 2478.0 | 2466.8 | 2462.5 | 2459.8 | 2420.1 | 2411.0 | 2392.4 | 2349.6 | 2211.8 | 2419.2 | 2969.8 |
| 42.5° | 2710.1 | 2670.0 | 2584.4 | 2616.7 | 2655.9 | 2651.3 | 2666.5 | 2604.9 | 2429.7 | 2631.1 | 3162.5 |
| 45° | 2933.9 | 2868.2 | 2720.2 | 2727.2 | 2813.3 | 2839.3 | 2953.1 | 2909.4 | 2666.1 | 2863.1 | 3361.8 |
| 47.5° | 3035.9 | 2986.1 | 2860.4 | 2860.7 | 2946.0 | 3000.1 | 3249.3 | 3218.2 | 2914.5 | 3126.7 | 3605.1 |
| 50° | 3150.1 | 3100.2 | 2987.3 | 3029.7 | 3104.1 | 3161.7 | 3535.5 | 3519.5 | 3150.8 | 3415.2 | 3896.8 |
| 52.5° | 3274.6 | 3190.1 | 3118.5 | 3194.4 | 3298.8 | 3365.8 | 3822.0 | 3778.4 | 3367.6 | 3705.6 | 4232.0 |
| 55° | 3276.1 | 3253.2 | 3307.7 | 3363.4 | 3519.5 | 3601.6 | 4122.2 | 4006.9 | 3544.4 | 3991.0 | 4504.9 |
| 57.5° | 3462.7 | 3425.3 | 3541.0 | 3566.6 | 3770.6 | 3863.3 | 4420.8 | 4205.9 | 3724.3 | 4209.8 | 4652.1 |
| 60° | 3709.5 | 3677.5 | 3772.1 | 3840.0 | 4081.3 | 4205.1 | 4739.6 | 4410.3 | 3865.6 | 4374.9 | 4645.0 |
| 62.5° | 4135.8 | 4099.6 | 4098.4 | 4193.5 | 4518.5 | 4662.6 | 5097.4 | 4610.7 | 3921.7 | 4407.5 | 4446.9 |
| 65° | 4759.9 | 4702.2 | 4593.6 | 4638.8 | 5122.3 | 5266.1 | 5497.2 | 4756.0 | 3847.7 | 4232.3 | 3936.4 |
| 67.5° | 5367.2 | 5365.3 | 5231.8 | 5324.4 | 5919.7 | 6034.9 | 5952.8 | 4770.4 | 3616.9 | 3622.3 | 3030.9 |
| 70° | 5972.7 | 5980.5 | 5957.8 | 6280.2 | 6997.0 | 7116.8 | 6437.9 | 4576.9 | 3097.8 | 2615.8 | 1815.8 |
| 72.5° | 6452.3 | 6450.3 | 6564.0 | 7395.2 | 8395.0 | 8368.1 | 6846.7 | 3990.5 | 2224.2 | 1412.1 | 867.8 |
| 75° | 6141.6 | 6073.8 | 6412.6 | 7947.3 | 9209.9 | 9078.7 | 6499.0 | 2783.7 | 1154.3 | 642.7 | 467.2 |
| 77.5° | 4005.8 | 4070.0 | 4567.1 | 6565.2 | 8056.0 | 7896.3 | 4768.1 | 1298.8 | 543.9 | 421.6 | 338.7 |
| 80° | 1450.6 | 1518.3 | 2138.5 | 3718.9 | 5550.2 | 5524.1 | 2348.0 | 533.8 | 367.9 | 318.5 | 246.9 |
| 82.5° | 499.1 | 524.0 | 843.7 | 1651.5 | 3133.7 | 3250.5 | 883.4 | 303.3 | 267.4 | 225.8 | 169.0 |
| 85° | 195.9 | 224.2 | 385.8 | 794.6 | 1580.6 | 1592.4 | 357.8 | 181.4 | 186.1 | 148.0 | 92.6 |
| 87.5° | 74.4 | 90.4 | 184.5 | 369.1 | 721.8 | 663.0 | 128.1 | 86.4 | 105.9 | 88.0 | 44.0 |
| 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: P386627

CATALOG NUMBER: GPC-SA2B-735-U-T4FT

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 | 1761.7 |
| 2.5° | 1764.5 | 1772.6 | 1789.7 | 1801.4 | 1813.9 | 1817.4 | 1818.9 | 1822.0 | 1825.1 | 1824.0 | 1824.4 |
| 5° | 1775.4 | 1791.3 | 1818.9 | 1830.6 | 1836.0 | 1829.8 | 1817.7 | 1808.1 | 1801.0 | 1797.2 | 1795.9 |
| 7.5° | 1793.2 | 1815.8 | 1845.4 | 1843.5 | 1831.0 | 1803.4 | 1772.2 | 1748.9 | 1729.4 | 1722.4 | 1718.5 |
| 10° | 1817.0 | 1843.5 | 1864.1 | 1841.9 | 1805.7 | 1757.8 | 1711.1 | 1674.8 | 1645.7 | 1634.4 | 1632.5 |
| 12.5° | 1847.3 | 1874.2 | 1878.1 | 1831.0 | 1771.0 | 1705.7 | 1642.2 | 1594.2 | 1550.7 | 1536.7 | 1533.6 |
| 15° | 1886.7 | 1911.9 | 1887.8 | 1811.9 | 1728.2 | 1640.2 | 1558.1 | 1493.1 | 1447.1 | 1429.9 | 1423.7 |
| 17.5° | 1927.9 | 1952.1 | 1889.8 | 1780.3 | 1672.1 | 1562.8 | 1459.5 | 1393.0 | 1340.4 | 1320.6 | 1318.3 |
| 20° | 1977.4 | 1988.3 | 1881.6 | 1735.2 | 1595.1 | 1462.3 | 1353.7 | 1291.0 | 1263.0 | 1248.9 | 1247.4 |
| 22.5° | 2038.5 | 2026.8 | 1862.9 | 1674.1 | 1497.3 | 1346.2 | 1257.9 | 1228.7 | 1221.7 | 1218.6 | 1219.7 |
| 25° | 2103.1 | 2067.3 | 1835.3 | 1594.2 | 1374.0 | 1230.2 | 1187.9 | 1196.0 | 1205.3 | 1204.2 | 1204.2 |
| 27.5° | 2174.4 | 2108.6 | 1792.8 | 1488.4 | 1237.3 | 1135.3 | 1140.3 | 1170.3 | 1184.3 | 1183.9 | 1183.5 |
| 30° | 2265.9 | 2155.3 | 1738.7 | 1361.1 | 1109.6 | 1068.3 | 1099.1 | 1135.6 | 1154.7 | 1154.0 | 1154.3 |
| 32.5° | 2378.4 | 2206.7 | 1665.2 | 1219.0 | 1017.3 | 1018.9 | 1054.3 | 1090.5 | 1112.7 | 1110.7 | 1111.1 |
| 35° | 2510.0 | 2264.3 | 1565.5 | 1078.8 | 956.2 | 979.5 | 1007.6 | 1032.9 | 1053.9 | 1051.2 | 1048.5 |
| 37.5° | 2653.2 | 2320.8 | 1433.1 | 953.5 | 906.3 | 943.0 | 966.3 | 970.6 | 980.4 | 973.3 | 968.2 |
| 40° | 2789.5 | 2364.0 | 1262.5 | 850.7 | 856.2 | 911.8 | 927.0 | 909.9 | 892.3 | 890.0 | 883.0 |
| 42.5° | 2908.3 | 2378.4 | 1090.1 | 768.5 | 803.2 | 879.1 | 888.5 | 852.6 | 821.1 | 806.3 | 800.1 |
| 45° | 3033.6 | 2383.4 | 929.3 | 699.7 | 752.2 | 849.9 | 860.0 | 812.1 | 767.8 | 735.8 | 725.3 |
| 47.5° | 3197.5 | 2420.1 | 804.3 | 648.7 | 713.3 | 830.4 | 844.8 | 779.8 | 722.2 | 676.6 | 666.9 |
| 50° | 3412.1 | 2492.5 | 702.8 | 609.7 | 687.9 | 817.6 | 833.9 | 748.3 | 684.8 | 630.0 | 620.2 |
| 52.5° | 3650.3 | 2559.0 | 620.6 | 578.1 | 663.4 | 795.0 | 819.9 | 725.7 | 649.8 | 586.7 | 576.2 |
| 55° | 3816.9 | 2508.0 | 554.4 | 545.4 | 631.5 | 762.7 | 800.5 | 706.6 | 599.5 | 544.7 | 535.4 |
| 57.5° | 3848.9 | 2333.6 | 504.2 | 511.6 | 592.9 | 722.2 | 770.5 | 664.2 | 572.3 | 526.3 | 516.7 |
| 60° | 3761.6 | 2090.7 | 466.8 | 480.4 | 551.7 | 671.2 | 714.4 | 634.2 | 546.3 | 506.9 | 498.7 |
| 62.5° | 3542.5 | 1841.9 | 439.2 | 452.4 | 513.1 | 619.4 | 679.4 | 602.7 | 519.8 | 484.7 | 476.6 |
| 65° | 3099.8 | 1546.4 | 412.7 | 427.5 | 477.3 | 574.6 | 647.8 | 573.5 | 493.7 | 466.8 | 459.0 |
| 67.5° | 2339.8 | 1158.3 | 387.8 | 401.0 | 445.4 | 535.7 | 613.6 | 544.7 | 468.4 | 451.2 | 441.9 |
| 70° | 1377.8 | 725.3 | 359.3 | 373.4 | 411.9 | 495.2 | 577.0 | 513.1 | 436.8 | 429.0 | 417.0 |
| 72.5° | 641.2 | 436.4 | 327.0 | 340.6 | 369.8 | 441.1 | 529.9 | 471.9 | 399.4 | 382.3 | 366.0 |
| 75° | 382.7 | 319.2 | 288.9 | 301.0 | 321.6 | 383.5 | 470.7 | 429.8 | 364.0 | 341.5 | 324.3 |
| 77.5° | 286.1 | 244.1 | 246.9 | 259.6 | 276.5 | 335.6 | 417.0 | 396.7 | 336.8 | 319.2 | 307.6 |
| 80° | 205.9 | 185.3 | 201.3 | 215.3 | 232.8 | 305.2 | 399.4 | 366.7 | 304.5 | 281.1 | 270.2 |
| 82.5° | 137.4 | 133.1 | 151.4 | 165.9 | 183.0 | 267.1 | 375.3 | 321.2 | 260.0 | 230.5 | 206.4 |
| 85° | 75.9 | 80.2 | 102.0 | 108.2 | 123.1 | 188.1 | 307.6 | 258.1 | 195.9 | 157.6 | 150.7 |
| 87.5° | 31.6 | 37.0 | 54.9 | 53.0 | 65.4 | 112.2 | 202.4 | 155.8 | 124.6 | 93.1 | 72.4 |
| 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



Test Information

Test Method: LM-79-08
 Report Number: SP1-2101-121-7
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1
 Measurement Geometry: 4π
 Issue Date: 03/04/2021
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: STREETWORKS
 Catalog Number: **IFLD-S-SA2A-735-U-T2**
 Description: STREETWORKS INF FLOOD

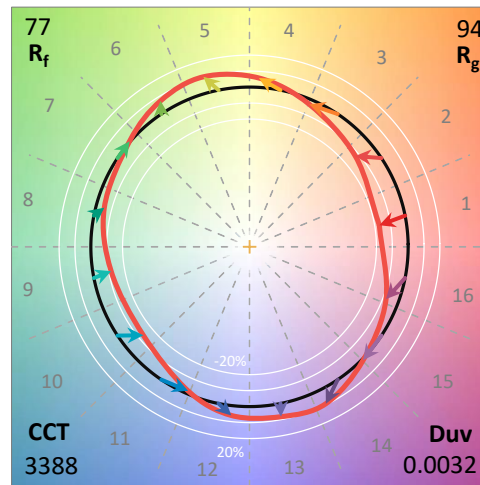
PROGRAMMED @ 615mA.

Spectral Parameters

CCT (K): 3388
 CIE u': 0.2371
 CIE v': 0.5177
 Duv: 0.0032
 CIE x: 0.4153
 CIE y: 0.4030
 CIE z: 0.1817
 Peak Wavelength (nm): 590
 Dominant Wavelength (nm): 580
 Purity: 45.7

 Rf: 76.9
 Rg: 94.4

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 73.1 | | |
| R1: | 68.9 | R9: | -34.6 |
| R2: | 81.1 | R10: | 57.8 |
| R3: | 93.1 | R11: | 68.6 |
| R4: | 71.6 | R12: | 53.9 |
| R5: | 69.4 | R13: | 70.9 |
| R6: | 75.0 | R14: | 96.2 |
| R7: | 79.5 | | |
| R8: | 46.4 | | |



Test Conditions

Stabilization Time: 81M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 25.0/30%
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2101-121-7

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 1/31/2021 | 7/31/2021 |
| Power Meter | IN0071 | 12/1/2020 | 12/1/2021 |
| AC Power Source | IN0063 | 12/1/2020 | 12/1/2021 |
| DC Power Source | IN0208 | 12/1/2020 | 12/1/2021 |
| Sphere Thermometer | IN0085 | 12/1/2020 | 12/1/2021 |
| Room Thermometer | IN0046 | 12/1/2020 | 12/1/2021 |

REPORT NUMBER: SP1-2101-121-7

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-7

Photopic Flux vs. Wavelength



#####

| λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 2672 | 0.0 | 490 | 34553 | 4.9 | 620 | 136720 | 35.6 | 750 | 5870 | 0.0 | 880 | 4216 | 0.0 |
| 365 | 2252 | 0.0 | 495 | 44336 | 8.0 | 625 | 126308 | 27.9 | 755 | 5421 | 0.0 | 885 | 4132 | 0.0 |
| 370 | 2217 | 0.0 | 500 | 54643 | 12.1 | 630 | 114625 | 20.7 | 760 | 5097 | 0.0 | 890 | 3992 | 0.0 |
| 375 | 2697 | 0.0 | 505 | 64676 | 18.1 | 635 | 103216 | 15.5 | 765 | 4626 | 0.0 | 895 | 3214 | 0.0 |
| 380 | 3039 | 0.0 | 510 | 73825 | 25.4 | 640 | 92605 | 11.1 | 770 | 3782 | 0.0 | 900 | 2580 | 0.0 |
| 385 | 2655 | 0.0 | 515 | 81872 | 33.9 | 645 | 83234 | 8.0 | 775 | 3506 | 0.0 | 905 | 1776 | 0.0 |
| 390 | 2357 | 0.0 | 520 | 88574 | 43.0 | 650 | 73263 | 5.4 | 780 | 3507 | 0.0 | 910 | 3995 | 0.0 |
| 395 | 2186 | 0.0 | 525 | 93289 | 50.1 | 655 | 64627 | 3.7 | 785 | 3267 | 0.0 | 915 | 4288 | 0.0 |
| 400 | 2015 | 0.0 | 530 | 98393 | 57.9 | 660 | 56614 | 2.4 | 790 | 2849 | 0.0 | 920 | 2446 | 0.0 |
| 405 | 2234 | 0.0 | 535 | 103269 | 64.0 | 665 | 49537 | 1.6 | 795 | 3037 | 0.0 | 925 | 3009 | 0.0 |
| 410 | 3412 | 0.0 | 540 | 107316 | 69.9 | 670 | 42866 | 0.9 | 800 | 2716 | 0.0 | 930 | 3026 | 0.0 |
| 415 | 6135 | 0.0 | 545 | 113101 | 75.3 | 675 | 36708 | 0.6 | 805 | 2648 | 0.0 | 935 | 4734 | 0.0 |
| 420 | 12146 | 0.0 | 550 | 120690 | 82.0 | 680 | 31814 | 0.4 | 810 | 3187 | 0.0 | 940 | 3719 | 0.0 |
| 425 | 23983 | 0.1 | 555 | 128583 | 87.8 | 685 | 27485 | 0.2 | 815 | 2931 | 0.0 | 945 | 1480 | 0.0 |
| 430 | 42142 | 0.3 | 560 | 137796 | 93.6 | 690 | 23698 | 0.1 | 820 | 2717 | 0.0 | 950 | 3450 | 0.0 |
| 435 | 68228 | 0.8 | 565 | 146577 | 97.5 | 695 | 20309 | 0.1 | 825 | 2236 | 0.0 | 955 | 5051 | 0.0 |
| 440 | 99323 | 1.6 | 570 | 154581 | 100.5 | 700 | 17890 | 0.1 | 830 | 2628 | 0.0 | 960 | 3176 | 0.0 |
| 445 | 115584 | 2.4 | 575 | 162633 | 101.2 | 705 | 15500 | 0.0 | 835 | 3140 | 0.0 | 965 | 5178 | 0.0 |
| 450 | 94997 | 2.5 | 580 | 168101 | 99.9 | 710 | 13699 | 0.0 | 840 | 3675 | 0.0 | 970 | 6385 | 0.0 |
| 455 | 61433 | 2.1 | 585 | 173145 | 96.2 | 715 | 12398 | 0.0 | 845 | 3283 | 0.0 | 975 | 3810 | 0.0 |
| 460 | 43373 | 1.8 | 590 | 174675 | 90.3 | 720 | 11147 | 0.0 | 850 | 3055 | 0.0 | 980 | 4322 | 0.0 |
| 465 | 32472 | 1.7 | 595 | 173724 | 82.3 | 725 | 9761 | 0.0 | 855 | 2932 | 0.0 | 985 | 4200 | 0.0 |
| 470 | 24257 | 1.5 | 600 | 171241 | 73.8 | 730 | 8651 | 0.0 | 860 | 3382 | 0.0 | 990 | 4661 | 0.0 |
| 475 | 21690 | 1.7 | 605 | 165134 | 64.0 | 735 | 7730 | 0.0 | 865 | 2605 | 0.0 | 995 | 6746 | 0.0 |
| 480 | 23173 | 2.2 | 610 | 156652 | 53.8 | 740 | 6847 | 0.0 | 870 | 3325 | 0.0 | 1000 | 4150 | 0.0 |
| 485 | 27564 | 3.3 | 615 | 147879 | 44.6 | 745 | 6124 | 0.0 | 875 | 3325 | 0.0 | | | |

REPORT NUMBER: SP1-2101-121-7

Scotopic Flux vs. Wavelength



Scotopic Lumens: 12126

S/P: 1.36

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 2672 | 0.0 | 490 | 34553 | 53.2 | 620 | 136720 | 1.7 | 750 | 5870 | 0.0 | 880 | 4216 | 0.0 |
| 365 | 2252 | 0.0 | 495 | 44336 | 71.7 | 625 | 126308 | 1.1 | 755 | 5421 | 0.0 | 885 | 4132 | 0.0 |
| 370 | 2217 | 0.0 | 500 | 54643 | 91.4 | 630 | 114625 | 0.6 | 760 | 5097 | 0.0 | 890 | 3992 | 0.0 |
| 375 | 2697 | 0.0 | 505 | 64676 | 110.0 | 635 | 103216 | 0.4 | 765 | 4626 | 0.0 | 895 | 3214 | 0.0 |
| 380 | 3039 | 0.0 | 510 | 73825 | 125.1 | 640 | 92605 | 0.2 | 770 | 3782 | 0.0 | 900 | 2580 | 0.0 |
| 385 | 2655 | 0.0 | 515 | 81872 | 135.7 | 645 | 83234 | 0.1 | 775 | 3506 | 0.0 | 905 | 1776 | 0.0 |
| 390 | 2357 | 0.0 | 520 | 88574 | 140.8 | 650 | 73263 | 0.1 | 780 | 3507 | 0.0 | 910 | 3995 | 0.0 |
| 395 | 2186 | 0.0 | 525 | 93289 | 139.6 | 655 | 64627 | 0.1 | 785 | 3267 | 0.0 | 915 | 4288 | 0.0 |
| 400 | 2015 | 0.0 | 530 | 98393 | 135.7 | 660 | 56614 | 0.0 | 790 | 2849 | 0.0 | 920 | 2446 | 0.0 |
| 405 | 2234 | 0.1 | 535 | 103269 | 128.7 | 665 | 49537 | 0.0 | 795 | 3037 | 0.0 | 925 | 3009 | 0.0 |
| 410 | 3412 | 0.2 | 540 | 107316 | 118.6 | 670 | 42866 | 0.0 | 800 | 2716 | 0.0 | 930 | 3026 | 0.0 |
| 415 | 6135 | 0.6 | 545 | 113101 | 108.4 | 675 | 36708 | 0.0 | 805 | 2648 | 0.0 | 935 | 4734 | 0.0 |
| 420 | 12146 | 2.0 | 550 | 120690 | 98.7 | 680 | 31814 | 0.0 | 810 | 3187 | 0.0 | 940 | 3719 | 0.0 |
| 425 | 23983 | 5.9 | 555 | 128583 | 87.9 | 685 | 27485 | 0.0 | 815 | 2931 | 0.0 | 945 | 1480 | 0.0 |
| 430 | 42142 | 14.3 | 560 | 137796 | 77.0 | 690 | 23698 | 0.0 | 820 | 2717 | 0.0 | 950 | 3450 | 0.0 |
| 435 | 68228 | 30.5 | 565 | 146577 | 65.8 | 695 | 20309 | 0.0 | 825 | 2236 | 0.0 | 955 | 5051 | 0.0 |
| 440 | 99323 | 55.5 | 570 | 154581 | 54.6 | 700 | 17890 | 0.0 | 830 | 2628 | 0.0 | 960 | 3176 | 0.0 |
| 445 | 115584 | 77.4 | 575 | 162633 | 44.3 | 705 | 15500 | 0.0 | 835 | 3140 | 0.0 | 965 | 5178 | 0.0 |
| 450 | 94997 | 73.6 | 580 | 168101 | 34.6 | 710 | 13699 | 0.0 | 840 | 3675 | 0.0 | 970 | 6385 | 0.0 |
| 455 | 61433 | 53.7 | 585 | 173145 | 26.5 | 715 | 12398 | 0.0 | 845 | 3283 | 0.0 | 975 | 3810 | 0.0 |
| 460 | 43373 | 41.9 | 590 | 174675 | 19.5 | 720 | 11147 | 0.0 | 850 | 3055 | 0.0 | 980 | 4322 | 0.0 |
| 465 | 32472 | 34.3 | 595 | 173724 | 13.9 | 725 | 9761 | 0.0 | 855 | 2932 | 0.0 | 985 | 4200 | 0.0 |
| 470 | 24257 | 27.9 | 600 | 171241 | 9.7 | 730 | 8651 | 0.0 | 860 | 3382 | 0.0 | 990 | 4661 | 0.0 |
| 475 | 21690 | 27.1 | 605 | 165134 | 6.5 | 735 | 7730 | 0.0 | 865 | 2605 | 0.0 | 995 | 6746 | 0.0 |
| 480 | 23173 | 31.3 | 610 | 156652 | 4.2 | 740 | 6847 | 0.0 | 870 | 3325 | 0.0 | 1000 | 4150 | 0.0 |
| 485 | 27564 | 40.0 | 615 | 147879 | 2.7 | 745 | 6124 | 0.0 | 875 | 3325 | 0.0 | | | |

REPORT NUMBER: SP1-2101-121-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: 4490.7 M/P: 0.5

| λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) | λ (nm) | Power (µW/nm) | Lumens (Φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 2672 | 0.0 | 490 | 34553 | 28.8 | 620 | 136720 | 0.1 | 750 | 5870 | 0.0 | 880 | 4216 | 0.0 |
| 365 | 2252 | 0.0 | 495 | 44336 | 36.6 | 625 | 126308 | 0.1 | 755 | 5421 | 0.0 | 885 | 4132 | 0.0 |
| 370 | 2217 | 0.0 | 500 | 54643 | 43.9 | 630 | 114625 | 0.0 | 760 | 5097 | 0.0 | 890 | 3992 | 0.0 |
| 375 | 2697 | 0.0 | 505 | 64676 | 49.6 | 635 | 103216 | 0.0 | 765 | 4626 | 0.0 | 895 | 3214 | 0.0 |
| 380 | 3039 | 0.0 | 510 | 73825 | 53.0 | 640 | 92605 | 0.0 | 770 | 3782 | 0.0 | 900 | 2580 | 0.0 |
| 385 | 2655 | 0.0 | 515 | 81872 | 53.5 | 645 | 83234 | 0.0 | 775 | 3506 | 0.0 | 905 | 1776 | 0.0 |
| 390 | 2357 | 0.0 | 520 | 88574 | 51.6 | 650 | 73263 | 0.0 | 780 | 3507 | 0.0 | 910 | 3995 | 0.0 |
| 395 | 2186 | 0.0 | 525 | 93289 | 47.3 | 655 | 64627 | 0.0 | 785 | 3267 | 0.0 | 915 | 4288 | 0.0 |
| 400 | 2015 | 0.0 | 530 | 98393 | 42.5 | 660 | 56614 | 0.0 | 790 | 2849 | 0.0 | 920 | 2446 | 0.0 |
| 405 | 2234 | 0.0 | 535 | 103269 | 37.2 | 665 | 49537 | 0.0 | 795 | 3037 | 0.0 | 925 | 3009 | 0.0 |
| 410 | 3412 | 0.1 | 540 | 107316 | 31.4 | 670 | 42866 | 0.0 | 800 | 2716 | 0.0 | 930 | 3026 | 0.0 |
| 415 | 6135 | 0.4 | 545 | 113101 | 26.3 | 675 | 36708 | 0.0 | 805 | 2648 | 0.0 | 935 | 4734 | 0.0 |
| 420 | 12146 | 1.4 | 550 | 120690 | 21.7 | 680 | 31814 | 0.0 | 810 | 3187 | 0.0 | 940 | 3719 | 0.0 |
| 425 | 23983 | 3.7 | 555 | 128583 | 17.3 | 685 | 27485 | 0.0 | 815 | 2931 | 0.0 | 945 | 1480 | 0.0 |
| 430 | 42142 | 8.9 | 560 | 137796 | 13.6 | 690 | 23698 | 0.0 | 820 | 2717 | 0.0 | 950 | 3450 | 0.0 |
| 435 | 68228 | 18.2 | 565 | 146577 | 10.3 | 695 | 20309 | 0.0 | 825 | 2236 | 0.0 | 955 | 5051 | 0.0 |
| 440 | 99323 | 33.2 | 570 | 154581 | 7.6 | 700 | 17890 | 0.0 | 830 | 2628 | 0.0 | 960 | 3176 | 0.0 |
| 445 | 115584 | 45.6 | 575 | 162633 | 5.4 | 705 | 15500 | 0.0 | 835 | 3140 | 0.0 | 965 | 5178 | 0.0 |
| 450 | 94997 | 43.8 | 580 | 168101 | 3.8 | 710 | 13699 | 0.0 | 840 | 3675 | 0.0 | 970 | 6385 | 0.0 |
| 455 | 61433 | 32.2 | 585 | 173145 | 2.6 | 715 | 12398 | 0.0 | 845 | 3283 | 0.0 | 975 | 3810 | 0.0 |
| 460 | 43373 | 25.6 | 590 | 174675 | 1.7 | 720 | 11147 | 0.0 | 850 | 3055 | 0.0 | 980 | 4322 | 0.0 |
| 465 | 32472 | 21.2 | 595 | 173724 | 1.1 | 725 | 9761 | 0.0 | 855 | 2932 | 0.0 | 985 | 4200 | 0.0 |
| 470 | 24257 | 17.4 | 600 | 171241 | 0.7 | 730 | 8651 | 0.0 | 860 | 3382 | 0.0 | 990 | 4661 | 0.0 |
| 475 | 21690 | 16.6 | 605 | 165134 | 0.5 | 735 | 7730 | 0.0 | 865 | 2605 | 0.0 | 995 | 6746 | 0.0 |
| 480 | 23173 | 18.6 | 610 | 156652 | 0.3 | 740 | 6847 | 0.0 | 870 | 3325 | 0.0 | 1000 | 4150 | 0.0 |
| 485 | 27564 | 22.7 | 615 | 147879 | 0.2 | 745 | 6124 | 0.0 | 875 | 3325 | 0.0 | | | |

Summary

$R_f = 76.9$
 $R_g = 94.4$
 CIE $R_a = 73.1$
 $R_g = -34.6$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 68 | CES51 = 90 | CES76 = 63 |
| CES02 = 62 | CES27 = 88 | CES52 = 89 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 80 | CES78 = 65 |
| CES04 = 70 | CES29 = 67 | CES54 = 84 | CES79 = 87 |
| CES05 = 48 | CES30 = 74 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 71 | CES56 = 75 | CES81 = 75 |
| CES07 = 40 | CES32 = 67 | CES57 = 74 | CES82 = 94 |
| CES08 = 39 | CES33 = 74 | CES58 = 76 | CES83 = 91 |
| CES09 = 29 | CES34 = 78 | CES59 = 87 | CES84 = 89 |
| CES10 = 75 | CES35 = 89 | CES60 = 93 | CES85 = 80 |
| CES11 = 58 | CES36 = 98 | CES61 = 86 | CES86 = 66 |
| CES12 = 64 | CES37 = 86 | CES62 = 89 | CES87 = 79 |
| CES13 = 43 | CES38 = 82 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 95 | CES64 = 74 | CES89 = 70 |
| CES15 = 71 | CES40 = 91 | CES65 = 68 | CES90 = 77 |
| CES16 = 47 | CES41 = 89 | CES66 = 71 | CES91 = 88 |
| CES17 = 50 | CES42 = 88 | CES67 = 69 | CES92 = 60 |
| CES18 = 56 | CES43 = 82 | CES68 = 74 | CES93 = 77 |
| CES19 = 72 | CES44 = 99 | CES69 = 82 | CES94 = 52 |
| CES20 = 65 | CES45 = 87 | CES70 = 67 | CES95 = 69 |
| CES21 = 86 | CES46 = 82 | CES71 = 66 | CES96 = 78 |
| CES22 = 79 | CES47 = 82 | CES72 = 88 | CES97 = 85 |
| CES23 = 92 | CES48 = 72 | CES73 = 59 | CES98 = 76 |
| CES24 = 91 | CES49 = 82 | CES74 = 97 | CES99 = 63 |
| CES25 = 72 | CES50 = 88 | CES75 = 66 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)