

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: P386842

Luminaire Tested: **GPC-SA2C-735-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P386842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GPC-SA2C-735-U-T2-HSS
Description: GALLEON PEDESTRIAN LUMINAIRE
(2) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9864.6 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

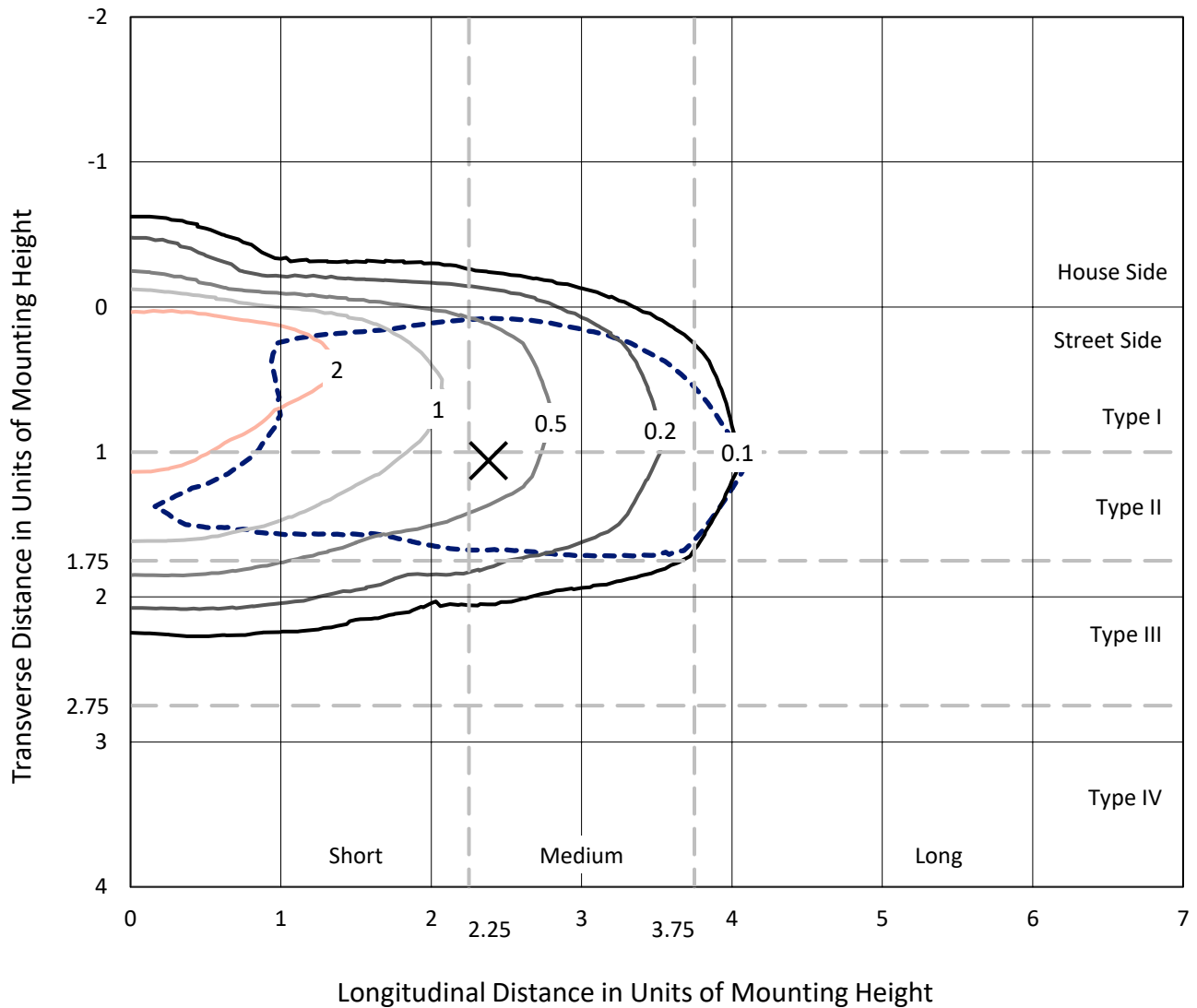
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

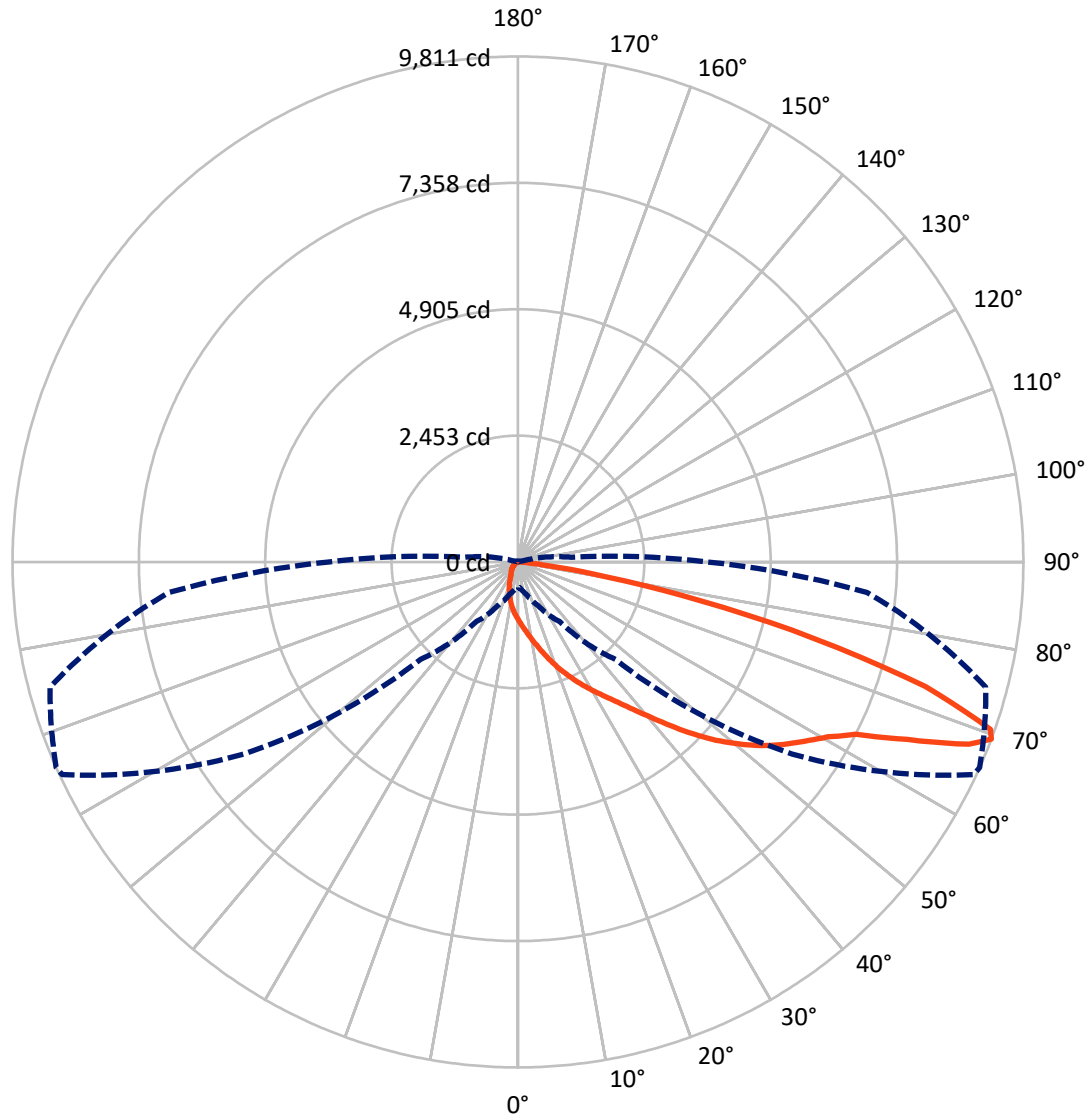
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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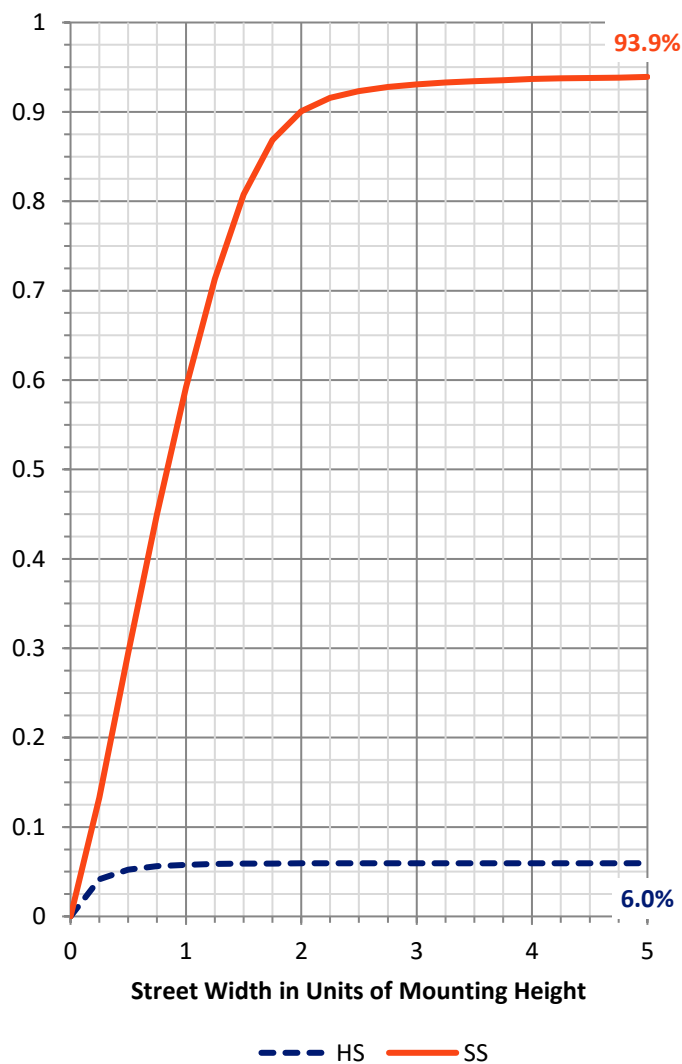
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 591.7 | 0.0 | 591.7 |
| | % Fixture | 6.0 | 0.0 | 6.0 |
| Street Side | Lumens | 9272.8 | 0.0 | 9272.8 |
| | % Fixture | 94.0 | 0.0 | 94.0 |
| Total | Lumens | 9864.6 | 0.0 | 9864.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 108.5 | 1.1 |
| 10°-20° | 323.0 | 3.3 |
| 20°-30° | 562.4 | 5.7 |
| 30°-40° | 986.7 | 10.0 |
| 40°-50° | 1651.6 | 16.7 |
| 50°-60° | 2427.7 | 24.6 |
| 60°-70° | 2492.7 | 25.3 |
| 70°-80° | 1230.6 | 12.5 |
| 80°-90° | 81.4 | 0.8 |
| 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° | 9864.6 | 100.0 |
| 0°-180° | 9864.6 | 100.0 |

Coefficient of Utilization



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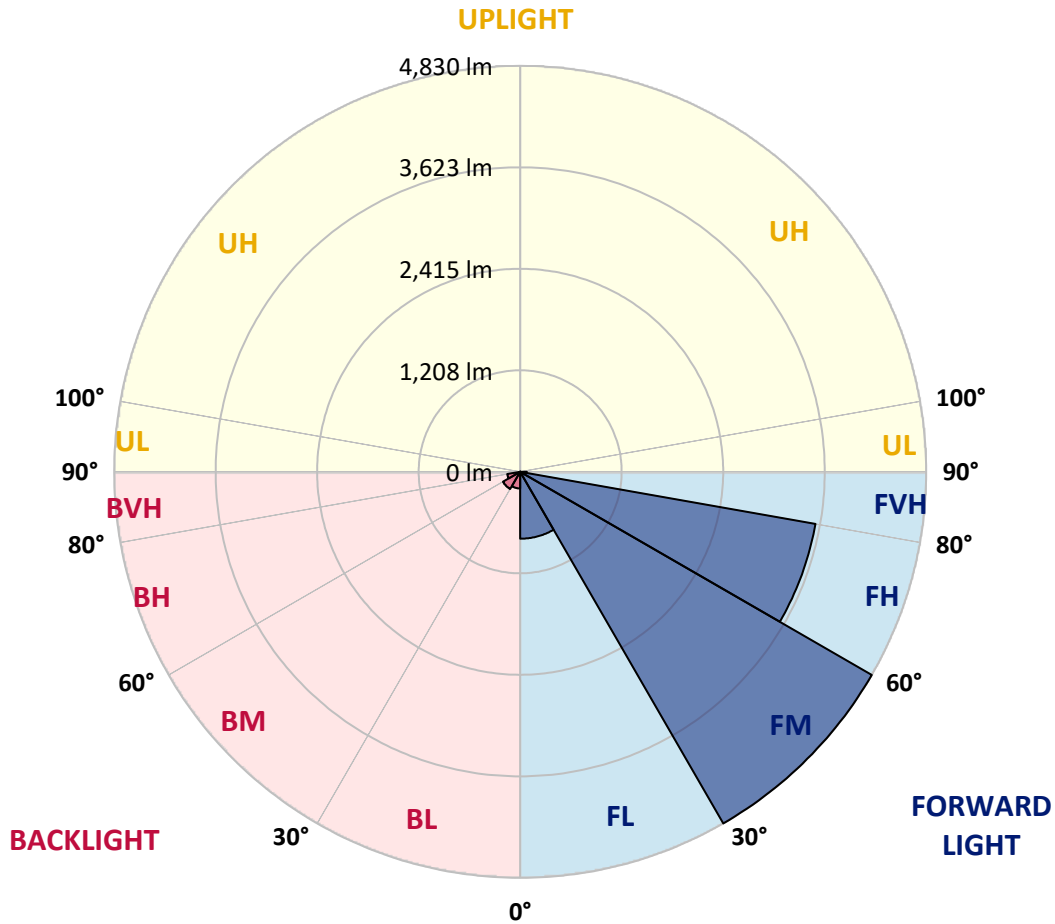
CATALOG NUMBER: GPC-SA2C-735-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 796.0 | 8.1 | | | |
| FM (30°-60°) | 4830.2 | 49.0 | | | |
| FH (60°-80°) | 3567.3 | 36.2 | | | G2/5000 |
| FVH (80°-90°) | 79.4 | 0.8 | | | G1/100 |
| BL (0°-30°) | 197.9 | 2.0 | B1/500 | | |
| BM (30°-60°) | 235.9 | 2.4 | B1/1000 | | |
| BH (60°-80°) | 155.9 | 1.6 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.0 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 |
| 2.5° | 1321.3 | 1315.6 | 1313.3 | 1303.0 | 1285.2 | 1271.7 | 1245.4 | 1214.9 | 1209.3 | 1179.8 | 1143.7 |
| 5° | 1492.8 | 1488.1 | 1484.8 | 1470.2 | 1452.0 | 1417.8 | 1370.0 | 1313.3 | 1302.6 | 1246.3 | 1174.1 |
| 7.5° | 1612.3 | 1620.6 | 1620.6 | 1611.3 | 1588.3 | 1562.6 | 1504.0 | 1426.7 | 1413.1 | 1326.9 | 1214.9 |
| 10° | 1682.1 | 1692.3 | 1700.3 | 1708.3 | 1705.0 | 1694.7 | 1639.4 | 1552.3 | 1535.9 | 1421.6 | 1262.3 |
| 12.5° | 1688.7 | 1698.9 | 1721.4 | 1754.7 | 1787.0 | 1810.4 | 1775.7 | 1691.5 | 1672.7 | 1531.2 | 1318.4 |
| 15° | 1652.1 | 1662.8 | 1697.5 | 1762.2 | 1840.5 | 1908.8 | 1920.1 | 1845.5 | 1826.4 | 1661.9 | 1388.7 |
| 17.5° | 1588.3 | 1595.4 | 1645.1 | 1734.5 | 1857.3 | 1982.9 | 2050.8 | 2011.0 | 1993.2 | 1811.3 | 1467.0 |
| 20° | 1541.0 | 1546.1 | 1589.7 | 1685.8 | 1846.9 | 2029.3 | 2174.5 | 2186.6 | 2167.9 | 1971.6 | 1551.8 |
| 22.5° | 1622.1 | 1631.4 | 1632.9 | 1678.3 | 1818.9 | 2052.2 | 2283.2 | 2359.6 | 2345.5 | 2141.7 | 1635.2 |
| 25° | 1843.7 | 1854.5 | 1818.9 | 1790.8 | 1842.8 | 2062.5 | 2376.4 | 2536.6 | 2525.5 | 2324.9 | 1719.1 |
| 27.5° | 2136.6 | 2147.8 | 2101.9 | 2018.0 | 1967.8 | 2101.4 | 2459.3 | 2716.6 | 2716.2 | 2518.9 | 1809.5 |
| 30° | 2424.2 | 2435.5 | 2388.6 | 2304.7 | 2189.4 | 2211.5 | 2531.0 | 2905.0 | 2907.8 | 2718.9 | 1905.6 |
| 32.5° | 2725.9 | 2740.0 | 2691.7 | 2584.0 | 2463.6 | 2401.7 | 2631.8 | 3094.3 | 3110.1 | 2950.8 | 2013.8 |
| 35° | 3068.9 | 3070.8 | 3002.9 | 2890.0 | 2751.3 | 2656.1 | 2793.5 | 3306.5 | 3344.4 | 3238.1 | 2151.0 |
| 37.5° | 3405.3 | 3418.9 | 3363.2 | 3185.1 | 3057.7 | 2949.9 | 3033.8 | 3571.7 | 3625.6 | 3589.0 | 2330.5 |
| 40° | 3654.6 | 3683.2 | 3675.2 | 3483.1 | 3362.3 | 3285.4 | 3332.2 | 3887.0 | 3955.4 | 3997.6 | 2556.8 |
| 42.5° | 3811.1 | 3832.6 | 3869.2 | 3753.4 | 3643.8 | 3656.5 | 3684.6 | 4254.3 | 4338.7 | 4463.3 | 2816.9 |
| 45° | 3990.5 | 4000.9 | 4031.3 | 3980.2 | 3906.2 | 4033.7 | 4058.5 | 4668.0 | 4756.6 | 4964.1 | 3105.4 |
| 47.5° | 4209.8 | 4234.2 | 4242.6 | 4195.8 | 4162.1 | 4367.2 | 4418.8 | 5044.3 | 5168.5 | 5500.6 | 3410.9 |
| 50° | 4489.1 | 4495.7 | 4510.1 | 4479.7 | 4446.0 | 4654.0 | 4742.1 | 5439.3 | 5552.2 | 6039.0 | 3712.2 |
| 52.5° | 4762.3 | 4785.6 | 4836.3 | 4817.0 | 4803.5 | 4898.1 | 5030.3 | 5795.4 | 5921.4 | 6487.8 | 4013.0 |
| 55° | 4841.0 | 4861.1 | 5035.9 | 5155.3 | 5266.0 | 5198.9 | 5305.7 | 6114.4 | 6250.8 | 6889.0 | 4302.6 |
| 57.5° | 4526.6 | 4567.3 | 4870.0 | 5181.1 | 5639.8 | 5666.5 | 5684.4 | 6442.0 | 6564.2 | 7196.3 | 4603.9 |
| 60° | 3731.9 | 3739.9 | 4236.6 | 4770.2 | 5577.9 | 6074.6 | 6237.2 | 6793.8 | 6896.5 | 7482.6 | 4964.6 |
| 62.5° | 2373.7 | 2454.6 | 2999.6 | 3753.0 | 4923.9 | 6015.6 | 6905.8 | 7326.1 | 7363.5 | 7826.0 | 5481.9 |
| 65° | 1130.6 | 1183.1 | 1575.7 | 2318.8 | 3566.5 | 5259.9 | 7367.3 | 8288.9 | 8305.8 | 8506.8 | 6173.0 |
| 67.5° | 626.0 | 651.3 | 838.2 | 1248.2 | 2085.0 | 3719.7 | 7180.8 | 9429.4 | 9445.3 | 9202.1 | 6779.3 |
| 69° | 489.6 | 511.2 | 658.3 | 940.8 | 1413.6 | 2673.5 | 6498.2 | 9763.4 | 9810.7 | 9401.3 | 6800.8 |
| 70° | 415.6 | 436.7 | 566.9 | 794.6 | 1136.7 | 2065.8 | 5784.1 | 9680.5 | 9730.6 | 9382.5 | 6640.1 |
| 72.5° | 254.4 | 266.6 | 377.6 | 559.4 | 761.8 | 1039.3 | 3567.0 | 8186.8 | 8271.6 | 8606.6 | 5706.8 |
| 75° | 171.4 | 178.0 | 236.2 | 386.1 | 544.9 | 535.1 | 1853.0 | 5770.5 | 5954.2 | 6695.0 | 4215.0 |
| 77.5° | 122.8 | 128.9 | 158.4 | 249.7 | 381.9 | 353.3 | 839.2 | 3586.2 | 3625.6 | 4015.3 | 2298.7 |
| 80° | 69.8 | 75.4 | 112.0 | 148.5 | 259.1 | 235.7 | 333.6 | 1713.0 | 1732.6 | 1721.9 | 767.5 |
| 82.5° | 36.5 | 41.2 | 61.3 | 97.9 | 166.4 | 154.2 | 138.7 | 573.5 | 576.3 | 479.3 | 168.2 |
| 85° | 7.0 | 8.5 | 30.4 | 67.0 | 85.8 | 67.0 | 56.7 | 134.4 | 137.2 | 121.4 | 41.7 |
| 87.5° | 0.0 | 0.5 | 12.2 | 15.0 | 16.9 | 17.4 | 18.3 | 26.2 | 28.1 | 38.0 | 11.3 |
| 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: P386842
 CATALOG NUMBER: GPC-SA2C-735-U-T2-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 | 1122.6 |
| 2.5° | 1127.7 | 1110.9 | 1078.6 | 1041.1 | 1012.0 | 983.5 | 961.0 | 937.5 | 929.2 | 924.9 | 924.5 |
| 5° | 1139.0 | 1103.4 | 1035.0 | 964.8 | 907.1 | 852.8 | 813.9 | 776.9 | 759.5 | 751.5 | 748.2 |
| 7.5° | 1157.8 | 1100.6 | 990.5 | 883.2 | 800.3 | 732.4 | 678.4 | 638.1 | 618.0 | 609.6 | 606.3 |
| 10° | 1179.8 | 1096.8 | 938.5 | 797.0 | 691.1 | 620.8 | 567.4 | 527.6 | 505.6 | 496.2 | 491.5 |
| 12.5° | 1205.5 | 1090.3 | 878.5 | 709.8 | 597.8 | 527.6 | 462.9 | 413.7 | 388.4 | 377.6 | 372.5 |
| 15° | 1237.4 | 1083.7 | 815.8 | 627.8 | 515.8 | 430.1 | 359.4 | 326.1 | 321.0 | 319.1 | 319.6 |
| 17.5° | 1268.8 | 1073.4 | 747.3 | 546.8 | 429.7 | 335.9 | 299.9 | 298.0 | 298.9 | 298.9 | 298.9 |
| 20° | 1296.9 | 1050.0 | 672.8 | 477.4 | 347.7 | 283.5 | 276.0 | 272.7 | 270.4 | 268.5 | 266.1 |
| 22.5° | 1318.9 | 1018.6 | 601.1 | 408.5 | 284.0 | 259.6 | 247.8 | 237.6 | 229.1 | 223.5 | 220.7 |
| 25° | 1333.9 | 976.9 | 535.5 | 342.5 | 255.3 | 236.2 | 215.0 | 197.7 | 184.6 | 176.6 | 173.3 |
| 27.5° | 1345.2 | 931.9 | 476.9 | 286.7 | 235.7 | 209.0 | 181.3 | 160.7 | 147.1 | 140.1 | 137.2 |
| 30° | 1353.1 | 880.9 | 425.5 | 252.0 | 213.6 | 180.4 | 150.9 | 130.8 | 120.9 | 117.1 | 115.3 |
| 32.5° | 1360.6 | 824.1 | 376.7 | 235.7 | 193.0 | 154.2 | 126.5 | 111.0 | 104.9 | 100.2 | 98.8 |
| 35° | 1379.4 | 771.7 | 330.3 | 218.3 | 171.9 | 131.7 | 108.7 | 97.4 | 91.4 | 88.6 | 87.6 |
| 37.5° | 1423.9 | 732.8 | 285.8 | 200.6 | 150.9 | 113.9 | 95.1 | 87.2 | 81.5 | 78.7 | 77.8 |
| 40° | 1495.6 | 713.1 | 248.3 | 181.3 | 130.3 | 100.2 | 86.2 | 78.7 | 72.6 | 68.4 | 67.4 |
| 42.5° | 1601.0 | 715.9 | 222.1 | 162.1 | 113.9 | 89.5 | 77.8 | 68.9 | 62.3 | 58.5 | 57.6 |
| 45° | 1729.0 | 736.6 | 203.8 | 143.4 | 100.2 | 81.1 | 68.4 | 59.0 | 53.0 | 49.7 | 48.8 |
| 47.5° | 1867.6 | 769.8 | 188.8 | 126.5 | 89.5 | 73.1 | 59.0 | 49.2 | 44.1 | 41.2 | 40.8 |
| 50° | 2013.8 | 802.1 | 173.3 | 110.1 | 80.1 | 65.1 | 49.7 | 40.8 | 36.5 | 34.2 | 33.3 |
| 52.5° | 2161.8 | 839.6 | 159.3 | 95.1 | 72.1 | 55.8 | 41.2 | 33.3 | 30.0 | 28.1 | 27.1 |
| 55° | 2321.1 | 867.7 | 145.7 | 83.4 | 64.2 | 47.3 | 34.2 | 27.6 | 24.8 | 22.5 | 22.0 |
| 57.5° | 2508.6 | 911.3 | 131.7 | 72.1 | 54.9 | 39.4 | 28.1 | 22.0 | 19.6 | 17.4 | 16.9 |
| 60° | 2761.5 | 962.4 | 116.7 | 63.7 | 45.0 | 32.3 | 22.9 | 17.8 | 15.0 | 13.2 | 12.7 |
| 62.5° | 3095.2 | 1019.1 | 97.9 | 55.8 | 36.5 | 26.2 | 18.3 | 14.1 | 10.8 | 8.5 | 8.5 |
| 65° | 3518.2 | 1111.4 | 80.1 | 46.9 | 30.0 | 21.5 | 14.1 | 10.3 | 6.1 | 3.8 | 3.8 |
| 67.5° | 3765.2 | 1127.3 | 64.6 | 38.4 | 24.3 | 18.3 | 11.7 | 7.0 | 1.9 | 0.5 | 0.0 |
| 69° | 3686.0 | 1035.0 | 54.9 | 32.8 | 21.0 | 17.4 | 10.8 | 5.2 | 0.9 | 0.0 | 0.0 |
| 70° | 3537.0 | 946.4 | 48.3 | 29.0 | 19.2 | 16.4 | 10.3 | 3.8 | 0.9 | 0.0 | 0.0 |
| 72.5° | 2922.7 | 673.7 | 36.5 | 21.5 | 14.1 | 14.6 | 9.4 | 2.3 | 0.9 | 0.0 | 0.0 |
| 75° | 2129.0 | 409.5 | 26.2 | 15.0 | 8.9 | 10.8 | 6.6 | 0.9 | 0.5 | 0.0 | 0.0 |
| 77.5° | 1184.5 | 193.0 | 16.4 | 8.5 | 5.6 | 6.6 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 384.7 | 52.5 | 7.5 | 4.7 | 3.3 | 3.8 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 71.2 | 15.0 | 4.2 | 2.3 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 15.5 | 6.1 | 2.3 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.2 | 1.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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 |

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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 3500K 4-step quadrangle

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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 ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | 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)