

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: P385782

Luminaire Tested: **GPC-SA1B-760-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P385782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-15)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GPC-SA1B-760-U-T3-HSS
Description: GALLEON PEDESTRIAN LUMINAIRE
(1) 70 CRI, 5700K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4448 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

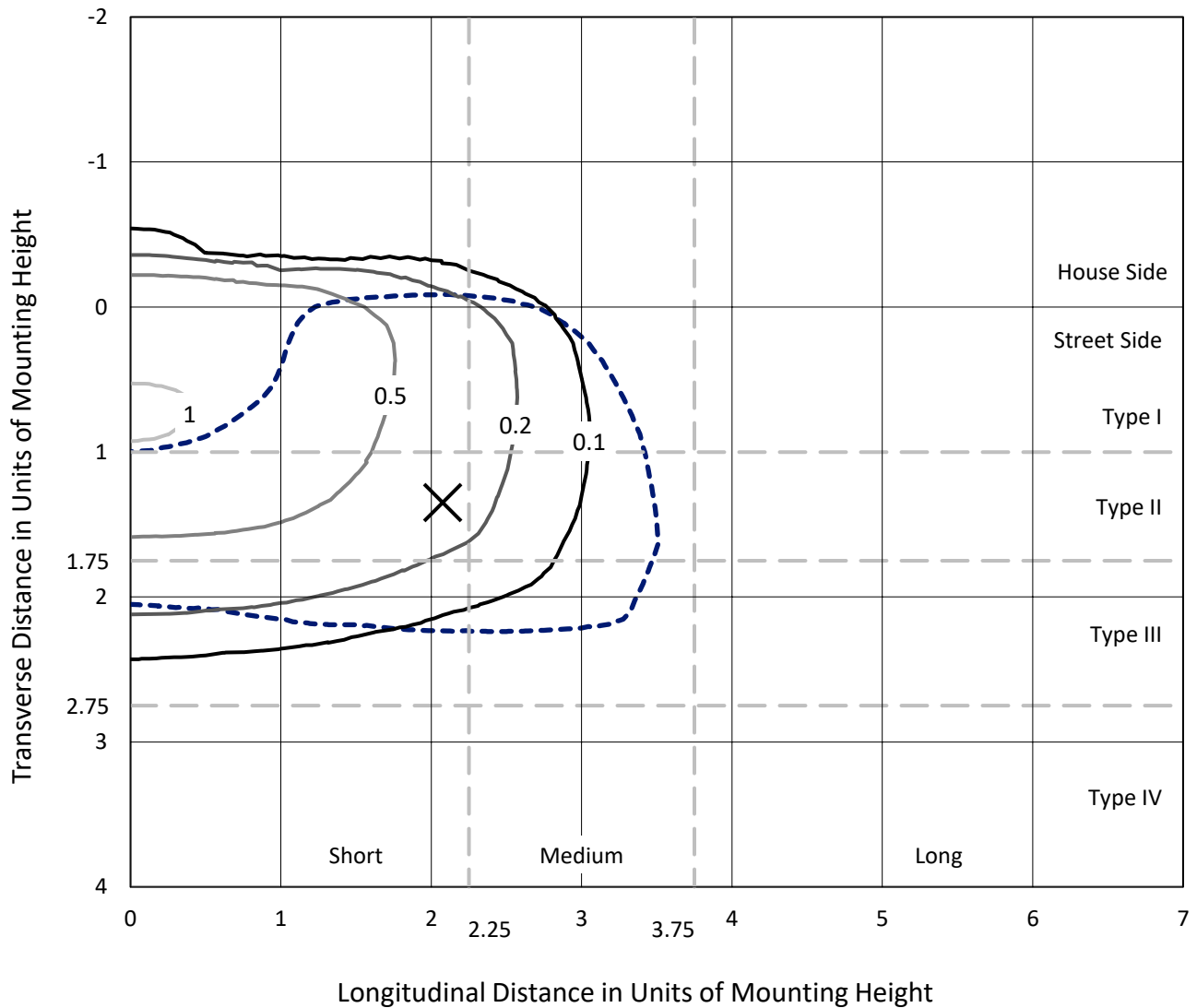
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P385782
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Iso-Footcandle Lines of Horizontal Illumination

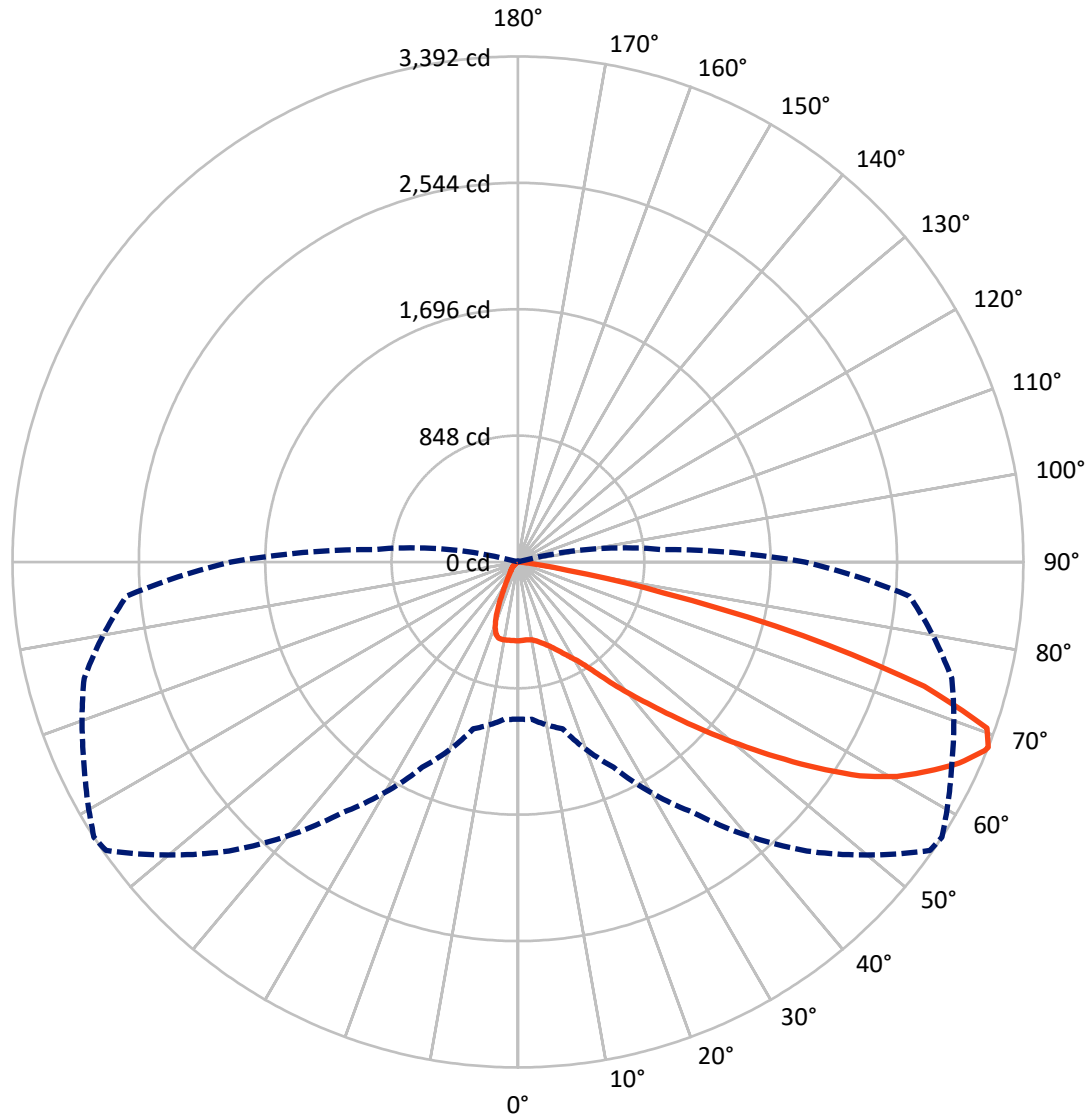
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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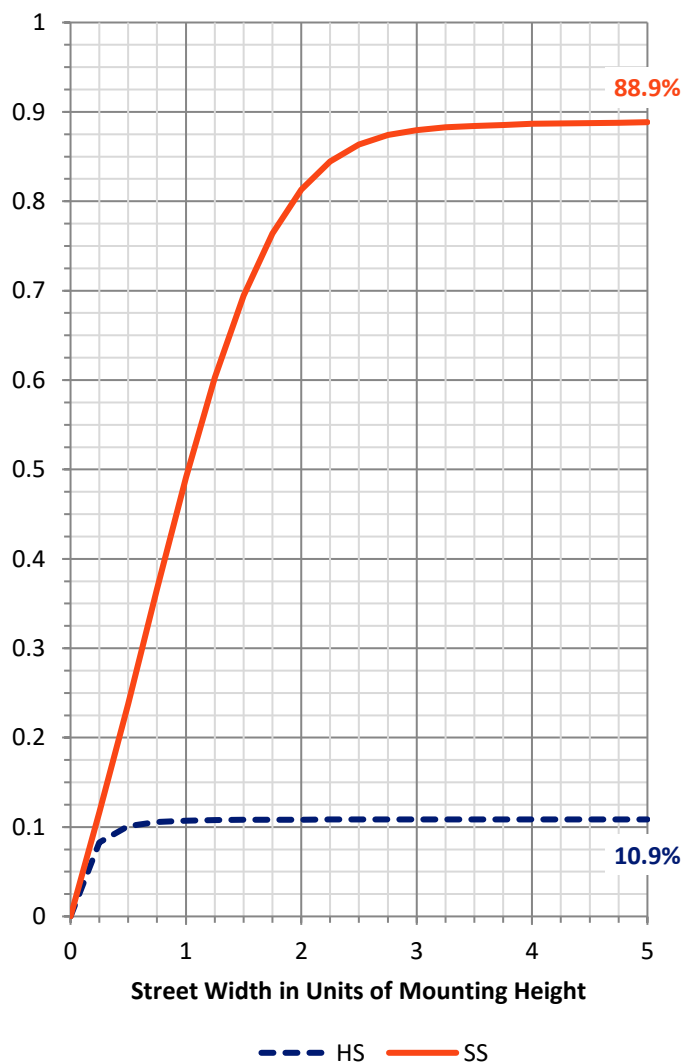
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 487.7 | 0.0 | 487.7 |
| | % Fixture | 11.0 | 0.0 | 11.0 |
| Street Side | Lumens | 3960.3 | 0.0 | 3960.3 |
| | % Fixture | 89.0 | 0.0 | 89.0 |
| Total | Lumens | 4448.0 | 0.0 | 4448.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.5 | 1.1 |
| 10°-20° | 137.1 | 3.1 |
| 20°-30° | 236.5 | 5.3 |
| 30°-40° | 408.1 | 9.2 |
| 40°-50° | 698.1 | 15.7 |
| 50°-60° | 1116.9 | 25.1 |
| 60°-70° | 1290.4 | 29.0 |
| 70°-80° | 493.1 | 11.1 |
| 80°-90° | 18.5 | 0.4 |
| 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° | 4448.0 | 100.0 |
| 0°-180° | 4448.0 | 100.0 |

Coefficient of Utilization



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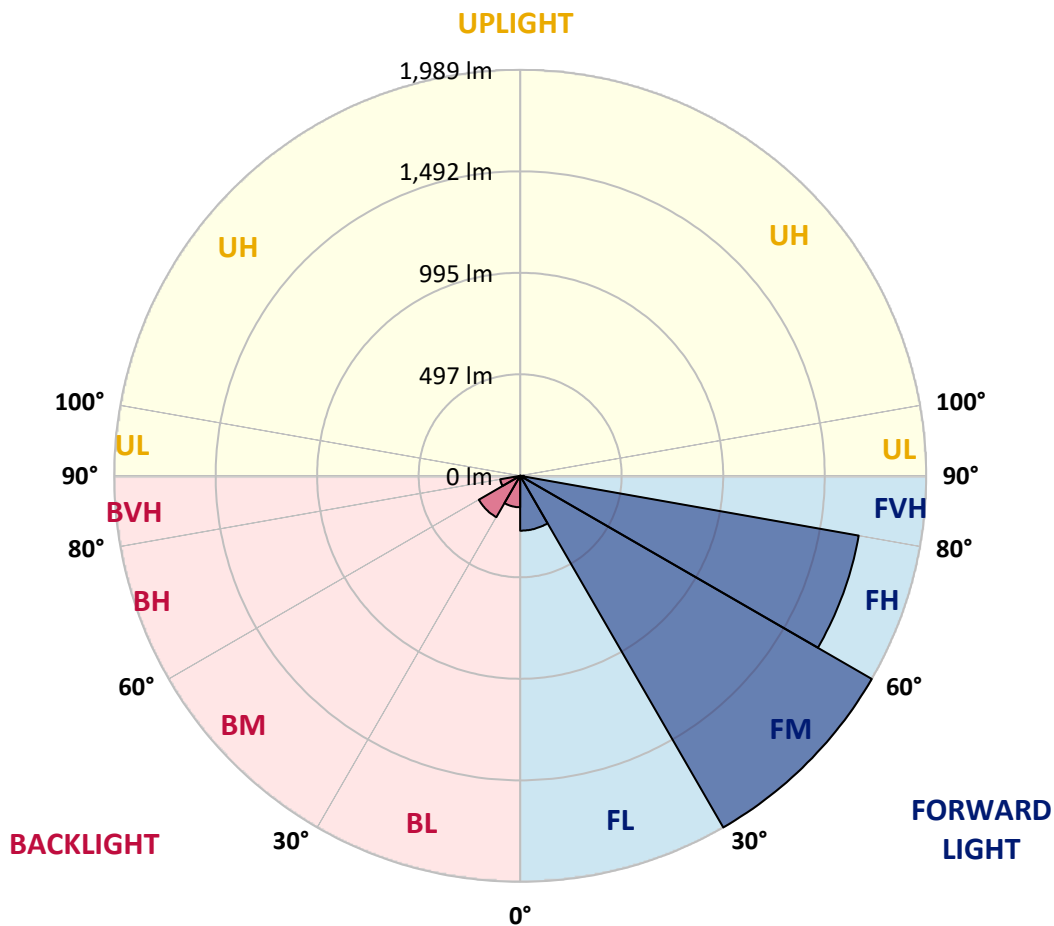
CATALOG NUMBER: GPC-SA1B-760-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 268.8 | 6.0 | | | |
| FM (30°-60°) | 1989.1 | 44.7 | | | |
| FH (60°-80°) | 1684.2 | 37.9 | | | G1/1800 |
| FVH (80°-90°) | 18.1 | 0.4 | | | G1/100 |
| BL (0°-30°) | 154.1 | 3.5 | B1/500 | | |
| BM (30°-60°) | 233.9 | 5.3 | B1/1000 | | |
| BH (60°-80°) | 99.3 | 2.2 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.3 | 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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 |
| 2.5° | 516.1 | 518.4 | 520.1 | 521.2 | 522.4 | 525.2 | 526.0 | 527.3 | 527.9 | 527.9 | 529.4 |
| 5° | 495.7 | 498.3 | 501.8 | 504.8 | 510.7 | 518.2 | 523.7 | 525.8 | 529.6 | 533.0 | 534.8 |
| 7.5° | 476.8 | 479.7 | 484.0 | 490.9 | 501.0 | 513.2 | 524.5 | 527.5 | 534.8 | 542.0 | 545.6 |
| 10° | 464.6 | 466.9 | 472.4 | 482.3 | 495.5 | 512.6 | 528.5 | 532.1 | 544.7 | 556.7 | 563.5 |
| 12.5° | 460.4 | 462.5 | 468.2 | 479.3 | 495.7 | 515.7 | 537.8 | 543.1 | 561.6 | 579.0 | 588.5 |
| 15° | 466.5 | 466.9 | 473.0 | 483.5 | 499.7 | 523.5 | 553.1 | 559.5 | 582.8 | 605.5 | 617.3 |
| 17.5° | 490.1 | 488.2 | 491.3 | 495.9 | 508.8 | 533.8 | 569.3 | 578.8 | 609.9 | 636.6 | 647.8 |
| 20° | 548.9 | 548.9 | 541.8 | 529.2 | 529.4 | 549.8 | 591.2 | 601.9 | 640.0 | 670.9 | 681.0 |
| 22.5° | 649.7 | 647.8 | 633.5 | 602.6 | 574.2 | 577.3 | 617.9 | 631.8 | 676.2 | 709.2 | 712.6 |
| 25° | 770.8 | 768.5 | 746.4 | 702.9 | 653.7 | 621.9 | 654.1 | 670.1 | 719.3 | 748.5 | 741.6 |
| 27.5° | 899.1 | 897.2 | 875.4 | 821.3 | 751.3 | 693.0 | 697.2 | 712.4 | 763.3 | 792.1 | 770.0 |
| 30° | 1023.4 | 1024.1 | 1002.4 | 946.9 | 867.6 | 783.7 | 751.9 | 760.7 | 806.0 | 835.2 | 803.6 |
| 32.5° | 1141.6 | 1142.5 | 1123.8 | 1061.7 | 987.7 | 889.0 | 827.6 | 825.3 | 855.6 | 884.4 | 848.2 |
| 35° | 1247.0 | 1249.1 | 1236.3 | 1188.1 | 1109.7 | 1006.4 | 925.8 | 920.4 | 926.0 | 958.6 | 916.6 |
| 37.5° | 1348.6 | 1349.8 | 1340.2 | 1299.6 | 1234.0 | 1135.3 | 1049.9 | 1042.1 | 1029.9 | 1055.0 | 1006.8 |
| 40° | 1459.8 | 1456.7 | 1445.5 | 1408.7 | 1352.4 | 1277.7 | 1183.3 | 1169.8 | 1148.6 | 1170.9 | 1125.4 |
| 42.5° | 1563.3 | 1559.7 | 1561.6 | 1520.0 | 1472.5 | 1424.1 | 1338.7 | 1315.6 | 1303.2 | 1328.8 | 1271.0 |
| 45° | 1692.7 | 1690.8 | 1697.1 | 1660.9 | 1622.4 | 1587.3 | 1516.8 | 1491.6 | 1486.1 | 1516.2 | 1447.0 |
| 47.5° | 1820.3 | 1825.0 | 1844.5 | 1829.2 | 1813.6 | 1782.7 | 1705.5 | 1694.1 | 1697.5 | 1733.9 | 1632.7 |
| 50° | 1926.8 | 1932.2 | 1985.9 | 2003.5 | 2026.0 | 2007.9 | 1930.5 | 1923.6 | 1936.9 | 1969.7 | 1832.5 |
| 52.5° | 2003.7 | 2014.9 | 2081.6 | 2163.0 | 2245.0 | 2257.2 | 2180.0 | 2173.7 | 2191.6 | 2196.6 | 1986.9 |
| 55° | 2057.2 | 2067.0 | 2142.6 | 2291.5 | 2458.5 | 2511.0 | 2463.1 | 2438.7 | 2435.3 | 2385.5 | 2149.3 |
| 57.5° | 2066.6 | 2065.6 | 2174.1 | 2374.5 | 2625.9 | 2761.5 | 2731.2 | 2707.3 | 2638.3 | 2560.0 | 2335.4 |
| 60° | 2013.2 | 2019.3 | 2145.3 | 2403.4 | 2731.0 | 2951.0 | 2953.3 | 2922.2 | 2814.7 | 2729.8 | 2515.9 |
| 62.5° | 1848.7 | 1873.6 | 2000.8 | 2327.8 | 2729.8 | 3027.4 | 3116.1 | 3092.4 | 2963.9 | 2868.8 | 2698.9 |
| 65° | 1582.0 | 1590.9 | 1712.2 | 2069.1 | 2545.3 | 2995.4 | 3262.7 | 3253.9 | 3098.3 | 3003.8 | 2792.9 |
| 67.5° | 1155.3 | 1136.2 | 1263.6 | 1629.4 | 2155.0 | 2809.1 | 3367.9 | 3379.0 | 3201.9 | 3031.6 | 2692.8 |
| 68° | 1054.3 | 1060.0 | 1159.3 | 1520.6 | 2052.7 | 2743.2 | 3374.8 | 3391.9 | 3212.3 | 3013.5 | 2638.1 |
| 70° | 628.4 | 639.4 | 727.9 | 1047.0 | 1561.6 | 2370.8 | 3300.0 | 3338.9 | 3150.8 | 2826.9 | 2281.8 |
| 72.5° | 160.5 | 173.5 | 257.2 | 468.6 | 892.0 | 1670.4 | 2785.7 | 2851.5 | 2735.7 | 2293.4 | 1540.4 |
| 75° | 66.0 | 69.4 | 91.9 | 154.4 | 332.3 | 752.5 | 1836.1 | 1977.0 | 1896.5 | 1373.0 | 696.2 |
| 77.5° | 45.6 | 48.0 | 59.1 | 85.6 | 143.9 | 255.1 | 900.2 | 1002.0 | 902.7 | 468.6 | 151.9 |
| 80° | 32.8 | 34.7 | 42.3 | 57.0 | 82.7 | 91.1 | 293.4 | 339.2 | 269.4 | 102.8 | 37.6 |
| 82.5° | 19.6 | 21.0 | 31.5 | 40.6 | 50.3 | 43.5 | 73.0 | 82.9 | 78.0 | 51.1 | 16.8 |
| 85° | 9.7 | 11.4 | 21.2 | 29.0 | 27.1 | 18.3 | 22.3 | 24.8 | 30.7 | 31.1 | 9.0 |
| 87.5° | 0.6 | 1.3 | 12.4 | 17.5 | 7.6 | 4.2 | 6.5 | 8.0 | 10.9 | 15.4 | 3.8 |
| 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: GPC-SA1B-760-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 | 528.5 |
| 2.5° | 530.0 | 530.2 | 528.7 | 528.1 | 528.5 | 526.0 | 525.0 | 525.4 | 525.4 | 526.0 | 525.0 |
| 5° | 535.3 | 535.3 | 532.7 | 529.4 | 527.5 | 522.7 | 519.5 | 518.7 | 518.0 | 517.6 | 516.8 |
| 7.5° | 546.6 | 545.4 | 540.9 | 533.6 | 527.3 | 516.8 | 508.8 | 504.6 | 502.5 | 501.6 | 501.0 |
| 10° | 564.9 | 562.6 | 555.3 | 541.6 | 527.1 | 508.3 | 490.9 | 478.5 | 468.2 | 464.0 | 461.4 |
| 12.5° | 589.5 | 586.2 | 573.8 | 551.0 | 525.6 | 491.1 | 453.2 | 416.9 | 383.0 | 369.1 | 362.2 |
| 15° | 617.9 | 613.1 | 593.5 | 559.0 | 517.0 | 452.2 | 370.0 | 306.2 | 259.3 | 241.7 | 234.1 |
| 17.5° | 646.7 | 640.4 | 610.8 | 564.1 | 491.1 | 371.6 | 259.5 | 196.0 | 164.7 | 156.3 | 153.3 |
| 20° | 675.8 | 666.5 | 625.7 | 560.3 | 432.6 | 268.0 | 171.2 | 143.2 | 134.2 | 131.7 | 130.8 |
| 22.5° | 703.3 | 689.0 | 639.2 | 545.6 | 342.6 | 179.8 | 135.4 | 126.6 | 123.7 | 122.2 | 121.8 |
| 25° | 727.3 | 707.3 | 650.9 | 500.1 | 242.5 | 135.9 | 122.0 | 119.0 | 115.3 | 112.5 | 112.7 |
| 27.5° | 749.8 | 725.6 | 658.1 | 425.3 | 161.7 | 116.1 | 112.9 | 108.9 | 102.0 | 98.0 | 98.0 |
| 30° | 776.9 | 750.0 | 663.4 | 327.3 | 119.0 | 102.6 | 100.1 | 94.0 | 84.5 | 79.3 | 79.3 |
| 32.5° | 817.7 | 787.0 | 660.0 | 229.7 | 98.6 | 90.2 | 84.3 | 75.9 | 65.6 | 60.6 | 60.4 |
| 35° | 880.2 | 844.2 | 636.0 | 150.6 | 87.1 | 78.5 | 69.0 | 58.7 | 49.6 | 45.4 | 45.2 |
| 37.5° | 964.3 | 920.8 | 582.2 | 107.7 | 78.0 | 67.5 | 56.2 | 44.8 | 38.1 | 35.3 | 35.1 |
| 40° | 1073.5 | 1009.8 | 505.2 | 87.3 | 69.6 | 57.0 | 43.3 | 34.7 | 30.1 | 28.0 | 28.2 |
| 42.5° | 1204.5 | 1105.0 | 412.9 | 75.3 | 61.4 | 46.9 | 33.9 | 27.3 | 24.4 | 22.9 | 22.5 |
| 45° | 1350.1 | 1199.0 | 316.1 | 67.1 | 53.2 | 37.9 | 26.5 | 21.7 | 19.3 | 18.5 | 18.5 |
| 47.5° | 1510.1 | 1290.5 | 231.4 | 59.9 | 44.4 | 29.2 | 21.2 | 17.7 | 15.8 | 15.1 | 14.9 |
| 50° | 1655.4 | 1354.1 | 166.8 | 52.4 | 36.4 | 23.1 | 17.2 | 14.7 | 13.5 | 12.6 | 12.6 |
| 52.5° | 1776.6 | 1374.0 | 122.8 | 44.2 | 29.4 | 18.5 | 14.3 | 12.6 | 11.4 | 10.7 | 10.7 |
| 55° | 1883.2 | 1365.8 | 91.3 | 36.4 | 23.8 | 15.1 | 12.2 | 10.7 | 9.7 | 9.0 | 9.0 |
| 57.5° | 1985.4 | 1339.3 | 68.1 | 29.7 | 19.1 | 12.2 | 10.3 | 9.0 | 8.0 | 7.6 | 7.6 |
| 60° | 2068.9 | 1295.2 | 50.7 | 24.0 | 15.4 | 9.9 | 8.6 | 7.4 | 6.5 | 5.9 | 5.9 |
| 62.5° | 2136.7 | 1246.4 | 37.2 | 19.8 | 12.2 | 7.8 | 6.7 | 6.1 | 4.8 | 4.2 | 4.2 |
| 65° | 2137.1 | 1165.4 | 28.0 | 16.4 | 9.5 | 6.1 | 5.0 | 4.8 | 3.2 | 2.5 | 2.3 |
| 67.5° | 1982.5 | 1004.7 | 21.5 | 14.1 | 7.4 | 4.6 | 3.8 | 4.0 | 1.7 | 1.1 | 0.8 |
| 68° | 1926.3 | 963.9 | 20.2 | 13.9 | 6.9 | 4.4 | 3.6 | 4.0 | 1.5 | 0.8 | 0.6 |
| 70° | 1624.1 | 766.8 | 16.2 | 13.5 | 6.1 | 3.4 | 2.9 | 4.0 | 1.3 | 0.6 | 0.4 |
| 72.5° | 1038.8 | 445.0 | 12.0 | 10.7 | 4.6 | 2.5 | 1.9 | 3.6 | 1.3 | 0.4 | 0.2 |
| 75° | 442.1 | 138.0 | 8.2 | 7.6 | 2.7 | 1.9 | 1.3 | 2.3 | 0.8 | 0.2 | 0.0 |
| 77.5° | 93.2 | 31.1 | 4.8 | 4.6 | 1.9 | 1.3 | 0.8 | 0.6 | 0.2 | 0.0 | 0.0 |
| 80° | 24.0 | 9.0 | 2.5 | 2.3 | 1.1 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 7.6 | 3.6 | 1.5 | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 3.8 | 2.1 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.1 | 0.6 | 0.2 | 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 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Test Information

Test Method: LM-79-2008
 Report Number: SP1-1908-441-9-R4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/28/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW-EDISON
 Catalog Number: **SA1C-760-U-5WQ**
 Description: MCGRAW EDISON ROADWAY AND AREA LUMINAIRE

THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

Spectral Parameters

| | | | | | |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K): | 5474 | CRI (Ra): | 71.7 | R9: | -27.1 |
| CIE u': | 0.2052 | R1: | 70.6 | R10: | 40.8 |
| CIE v': | 0.4804 | R2: | 74.6 | R11: | 74.6 |
| Duv: | 0.0025 | R3: | 78.3 | R12: | 50.4 |
| CIE x: | 0.3330 | R4: | 73.8 | R13: | 70.0 |
| CIE y: | 0.3466 | R5: | 72.4 | R14: | 87.8 |
| CIE z: | 0.3204 | R6: | 67.5 | | |
| Peak Wavelength (nm): | 442 | R7: | 77.5 | | |
| Dominant Wavelength (nm): | 554 | R8: | 58.9 | | |
| Purity: | 4.1 | | | | |
| Rf: | 72.1 | | | | |
| Rg: | 97.2 | | | | |



Test Conditions

Stabilization Time: 240M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.6/31%
 Sphere Temperature (°C): 25.9

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| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

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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 5700K 4-step quadrangle

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Photopic Flux vs. Wavelength



#####

| 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 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Scotopic Flux vs. Wavelength



Scotopic Lumens: 13759.3 S/P: 1.85

| 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 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Melanopic Flux vs. Wavelength



Melanopic Lumens: 5527.6 M/P: 0.74

| 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 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

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Summary

$R_f = 72.1$
 $R_g = 97.2$
 CIE $R_a = 71.7$
 $R_g = -27.1$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54 = 81 | CES79 = 74 |
| CES05 = 46 | CES30 = 59 | CES55 = 80 | CES80 = 70 |
| CES06 = 50 | CES31 = 55 | CES56 = 70 | CES81 = 71 |
| CES07 = 38 | CES32 = 52 | CES57 = 68 | CES82 = 88 |
| CES08 = 38 | CES33 = 63 | CES58 = 70 | CES83 = 82 |
| CES09 = 29 | CES34 = 63 | CES59 = 88 | CES84 = 87 |
| CES10 = 72 | CES35 = 79 | CES60 = 92 | CES85 = 84 |
| CES11 = 55 | CES36 = 90 | CES61 = 88 | CES86 = 76 |
| CES12 = 61 | CES37 = 72 | CES62 = 81 | CES87 = 75 |
| CES13 = 41 | CES38 = 68 | CES63 = 75 | CES88 = 77 |
| CES14 = 74 | CES39 = 91 | CES64 = 72 | CES89 = 76 |
| CES15 = 70 | CES40 = 83 | CES65 = 65 | CES90 = 76 |
| CES16 = 46 | CES41 = 84 | CES66 = 66 | CES91 = 92 |
| CES17 = 48 | CES42 = 70 | CES67 = 64 | CES92 = 70 |
| CES18 = 55 | CES43 = 69 | CES68 = 71 | CES93 = 83 |
| CES19 = 70 | CES44 = 98 | CES69 = 80 | CES94 = 60 |
| CES20 = 64 | CES45 = 79 | CES70 = 58 | CES95 = 73 |
| CES21 = 85 | CES46 = 78 | CES71 = 55 | CES96 = 79 |
| CES22 = 77 | CES47 = 76 | CES72 = 84 | CES97 = 84 |
| CES23 = 91 | CES48 = 68 | CES73 = 47 | CES98 = 73 |
| CES24 = 90 | CES49 = 78 | CES74 = 94 | CES99 = 62 |
| CES25 = 71 | CES50 = 87 | CES75 = 51 | |



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Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)