

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: P1456887

Luminaire Tested: GLAN-SB5A-940-U-T3LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1456887
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB5A-940-U-T3LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 5xLight Square
PACKAGE 90CRI 4000K FIXTURE w/ TYPE III LOW GLARE
Light Source: (130) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16017.6 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

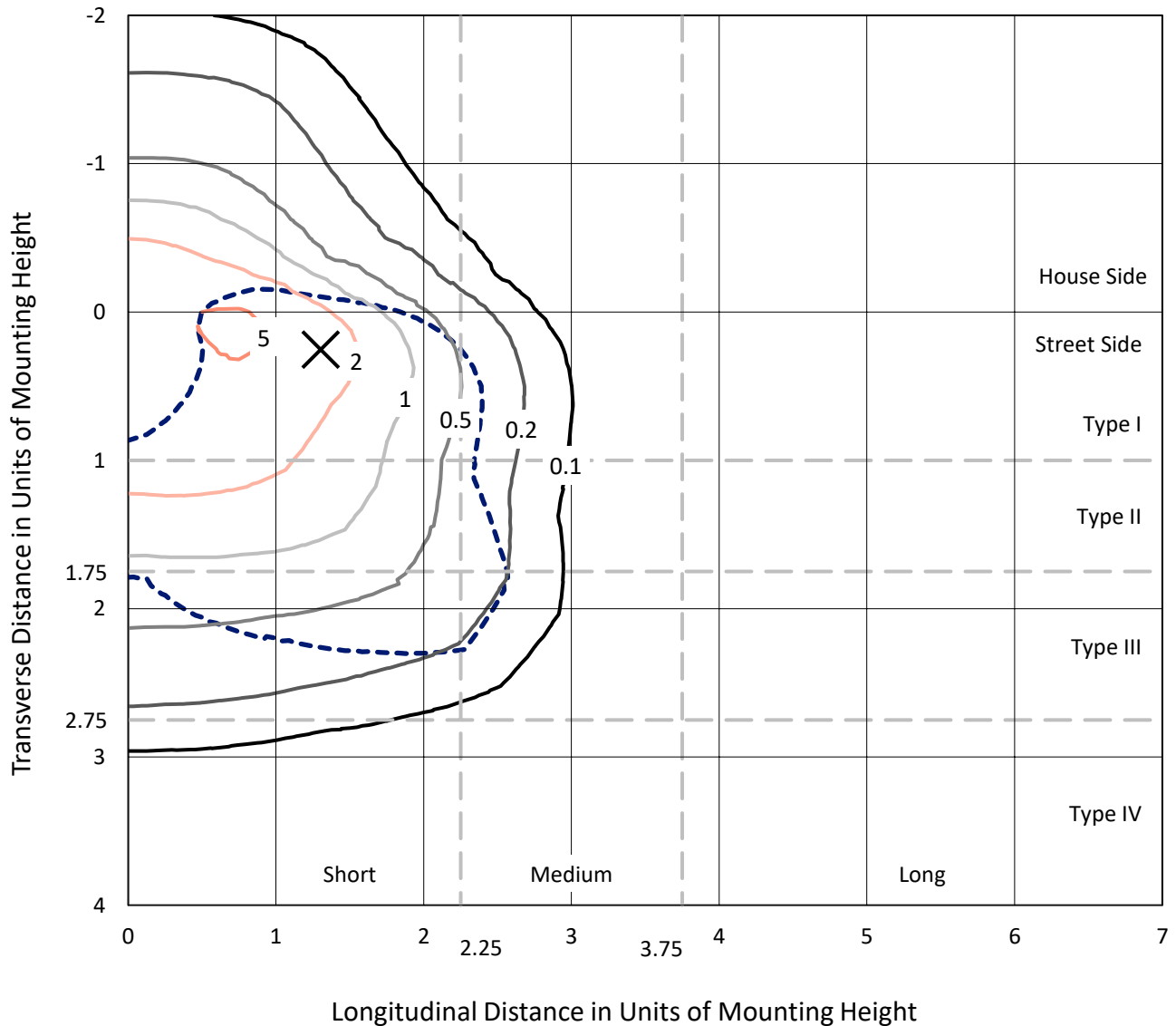
Input Watts (W): 141.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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CATALOG NUMBER: GLAN-SB5A-940-U-T3LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

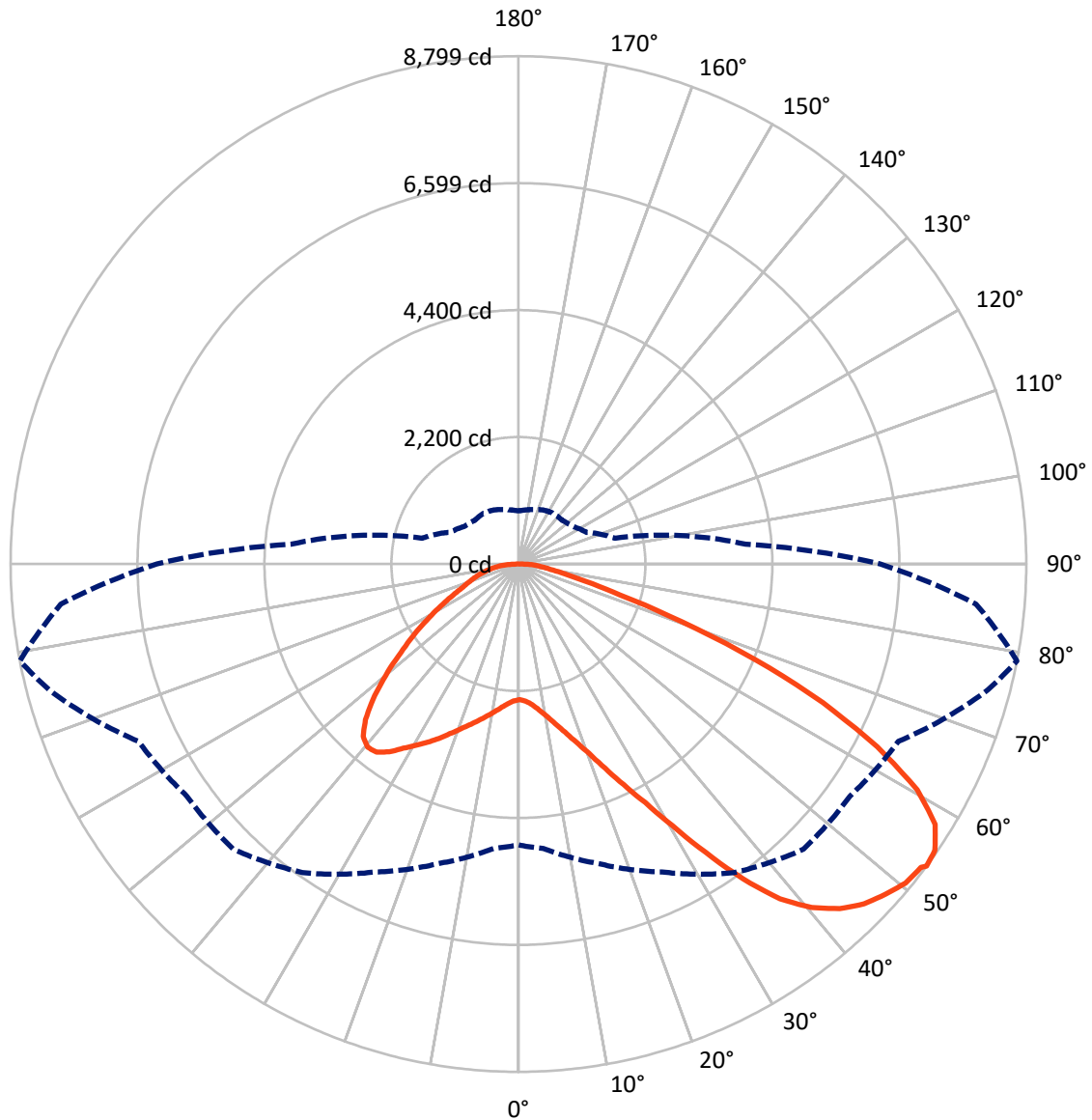


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - N/A

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CATALOG NUMBER: GLAN-SB5A-940-U-T3LG

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 53-Deg Vertical

REPORT NUMBER: P1456887

CATALOG NUMBER: GLAN-SB5A-940-U-T3LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4037.9 | 0.0 | 4037.9 |
| | % Fixture | 25.2 | 0.0 | 25.2 |
| Street Side | Lumens | 11979.7 | 0.0 | 11979.7 |
| | % Fixture | 74.8 | 0.0 | 74.8 |
| Total | Lumens | 16017.6 | 0.0 | 16017.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 224.1 | 1.4 |
| 10°-20° | 693.8 | 4.3 |
| 20°-30° | 1326.5 | 8.3 |
| 30°-40° | 2277.5 | 14.2 |
| 40°-50° | 3190.1 | 19.9 |
| 50°-60° | 3620.4 | 22.6 |
| 60°-70° | 3174.8 | 19.8 |
| 70°-80° | 1241.4 | 7.8 |
| 80°-90° | 269.0 | 1.7 |
| 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° | 16017.6 | 100.0 |
| 0°-180° | 16017.6 | 100.0 |



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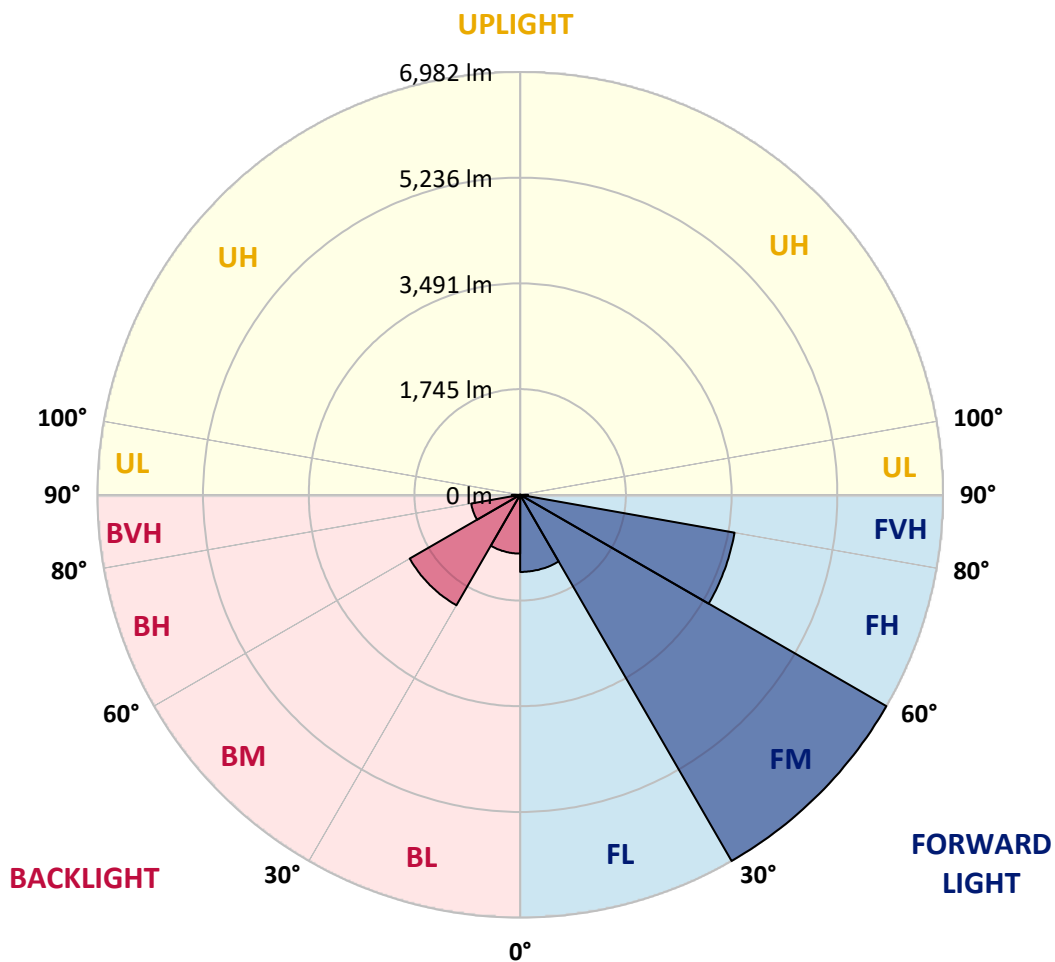
CATALOG NUMBER: GLAN-SB5A-940-U-T3LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1273.3 | 7.9 | | | |
| FM (30°-60°) | 6981.5 | 43.6 | | | |
| FH (60°-80°) | 3594.5 | 22.4 | | | G2/5000 |
| FVH (80°-90°) | 130.5 | 0.8 | | | G2/225 |
| BL (0°-30°) | 971.1 | 6.1 | B2/1000 | | |
| BM (30°-60°) | 2106.5 | 13.2 | B2/2500 | | |
| BH (60°-80°) | 821.8 | 5.1 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 138.5 | 0.9 | | | 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 III Short





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CATALOG NUMBER: GLAN-SB5A-940-U-T3LG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 |
| 2.5° | 2355.0 | 2355.0 | 2340.7 | 2355.0 | 2347.9 | 2358.6 | 2365.7 | 2365.7 | 2380.0 | 2376.4 | 2376.4 |
| 5° | 2315.7 | 2308.6 | 2305.0 | 2330.0 | 2344.3 | 2372.8 | 2405.0 | 2419.2 | 2444.2 | 2444.2 | 2447.8 |
| 7.5° | 2212.3 | 2208.7 | 2226.5 | 2276.5 | 2322.9 | 2394.2 | 2462.0 | 2501.3 | 2540.5 | 2547.7 | 2547.7 |
| 10° | 2148.0 | 2144.5 | 2165.9 | 2226.5 | 2301.5 | 2405.0 | 2512.0 | 2594.1 | 2658.3 | 2676.1 | 2676.1 |
| 12.5° | 2148.0 | 2148.0 | 2165.9 | 2226.5 | 2305.0 | 2429.9 | 2576.2 | 2715.4 | 2815.3 | 2836.7 | 2829.6 |
| 15° | 2208.7 | 2205.1 | 2226.5 | 2290.8 | 2365.7 | 2483.5 | 2661.9 | 2847.4 | 2983.0 | 3022.2 | 3025.8 |
| 17.5° | 2272.9 | 2269.4 | 2301.5 | 2383.5 | 2472.7 | 2590.5 | 2772.5 | 3000.8 | 3193.5 | 3243.5 | 3254.2 |
| 20° | 2372.8 | 2369.3 | 2408.5 | 2487.0 | 2597.6 | 2733.2 | 2922.3 | 3182.8 | 3450.4 | 3504.0 | 3518.2 |
| 22.5° | 2487.0 | 2490.6 | 2533.4 | 2629.7 | 2740.4 | 2918.8 | 3150.7 | 3439.7 | 3760.9 | 3842.9 | 3857.2 |
| 25° | 2726.1 | 2715.4 | 2751.1 | 2818.9 | 2936.6 | 3150.7 | 3436.2 | 3750.2 | 4132.0 | 4231.9 | 4249.7 |
| 27.5° | 3043.7 | 3025.8 | 3065.1 | 3132.9 | 3218.5 | 3418.3 | 3746.6 | 4096.3 | 4556.6 | 4681.5 | 4685.0 |
| 30° | 3329.1 | 3318.4 | 3371.9 | 3511.1 | 3600.3 | 3753.7 | 4103.4 | 4503.0 | 5081.1 | 5263.1 | 5270.2 |
| 32.5° | 3575.3 | 3571.7 | 3671.7 | 3850.1 | 4053.5 | 4217.6 | 4556.6 | 5016.9 | 5744.8 | 5955.3 | 5908.9 |
| 35° | 3810.8 | 3821.5 | 3946.4 | 4132.0 | 4403.1 | 4731.4 | 5074.0 | 5598.5 | 6444.1 | 6697.5 | 6622.5 |
| 37.5° | 4049.9 | 4057.0 | 4221.2 | 4460.2 | 4745.7 | 5173.9 | 5634.2 | 6230.0 | 7050.7 | 7364.7 | 7200.6 |
| 40° | 4271.1 | 4292.5 | 4513.7 | 4770.7 | 5141.7 | 5577.1 | 6090.9 | 6668.9 | 7518.2 | 7828.6 | 7650.2 |
| 42.5° | 4492.3 | 4524.5 | 4763.5 | 5116.8 | 5512.8 | 5966.0 | 6408.5 | 6936.5 | 7817.9 | 8164.0 | 7889.2 |
| 45° | 4720.7 | 4742.1 | 5038.3 | 5405.8 | 5855.4 | 6272.9 | 6590.4 | 7107.8 | 8024.8 | 8399.5 | 8024.8 |
| 47.5° | 4874.1 | 4917.0 | 5241.7 | 5666.3 | 6115.9 | 6508.4 | 6736.7 | 7179.2 | 8156.9 | 8552.9 | 8074.8 |
| 50° | 4934.8 | 4995.5 | 5345.1 | 5816.1 | 6330.0 | 6729.6 | 6850.9 | 7218.4 | 8303.2 | 8688.5 | 8064.1 |
| 52.5° | 4924.1 | 4981.2 | 5363.0 | 5883.9 | 6501.2 | 6933.0 | 6961.5 | 7261.2 | 8406.6 | 8734.9 | 7971.3 |
| 53° | 4867.0 | 4945.5 | 5373.7 | 5887.5 | 6526.2 | 6986.5 | 7011.5 | 7264.8 | 8420.9 | 8799.1 | 7957.0 |
| 55° | 4670.7 | 4713.6 | 5263.1 | 5883.9 | 6644.0 | 7186.3 | 7150.6 | 7371.9 | 8460.2 | 8756.3 | 7800.0 |
| 57.5° | 4492.3 | 4535.2 | 5013.3 | 5816.1 | 6740.3 | 7468.2 | 7375.4 | 7354.0 | 8246.1 | 8513.7 | 7404.0 |
| 60° | 4378.2 | 4392.4 | 4795.6 | 5602.0 | 6701.0 | 7664.5 | 7521.7 | 7143.5 | 7718.0 | 7939.2 | 6708.2 |
| 62.5° | 4281.8 | 4278.2 | 4635.1 | 5295.2 | 6551.2 | 7693.0 | 7550.3 | 6622.5 | 6943.7 | 6979.4 | 5780.5 |
| 65° | 4064.2 | 4039.2 | 4385.3 | 4949.1 | 6240.7 | 7564.5 | 7200.6 | 5834.0 | 5916.0 | 5798.3 | 4642.2 |
| 67.5° | 3632.4 | 3578.9 | 3885.7 | 4421.0 | 5609.2 | 7200.6 | 6533.3 | 4917.0 | 4663.6 | 4428.1 | 3496.8 |
| 70° | 2601.2 | 2601.2 | 2847.4 | 3382.6 | 4503.0 | 6222.9 | 5609.2 | 3721.6 | 3211.4 | 3000.8 | 2337.2 |
| 72.5° | 1273.8 | 1306.0 | 1562.9 | 1998.2 | 3018.7 | 4517.3 | 4296.1 | 2412.1 | 1948.2 | 1844.7 | 1498.6 |
| 75° | 542.4 | 545.9 | 667.2 | 884.9 | 1530.7 | 2672.6 | 2690.4 | 1391.6 | 1248.9 | 1198.9 | 992.0 |
| 77.5° | 378.2 | 385.4 | 438.9 | 521.0 | 727.9 | 1227.5 | 1398.7 | 842.1 | 838.5 | 802.8 | 706.5 |
| 80° | 289.0 | 296.2 | 331.8 | 388.9 | 488.8 | 628.0 | 724.3 | 570.9 | 599.5 | 563.8 | 510.2 |
| 82.5° | 217.7 | 224.8 | 249.8 | 292.6 | 349.7 | 421.0 | 406.8 | 421.0 | 442.5 | 421.0 | 367.5 |
| 85° | 146.3 | 149.9 | 167.7 | 203.4 | 224.8 | 253.3 | 253.3 | 306.9 | 321.1 | 314.0 | 289.0 |
| 87.5° | 74.9 | 74.9 | 89.2 | 107.0 | 114.2 | 117.7 | 103.5 | 135.6 | 153.4 | 167.7 | 135.6 |
| 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-SB5A-940-U-T3LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 | 2351.4 |
| 2.5° | 2376.4 | 2380.0 | 2369.3 | 2365.7 | 2362.1 | 2344.3 | 2344.3 | 2326.5 | 2322.9 | 2326.5 | 2315.7 |
| 5° | 2454.9 | 2447.8 | 2419.2 | 2397.8 | 2372.8 | 2322.9 | 2294.3 | 2255.1 | 2244.4 | 2233.7 | 2223.0 |
| 7.5° | 2551.2 | 2540.5 | 2490.6 | 2433.5 | 2365.7 | 2269.4 | 2215.8 | 2151.6 | 2130.2 | 2112.4 | 2105.2 |
| 10° | 2672.6 | 2651.2 | 2572.7 | 2451.3 | 2326.5 | 2208.7 | 2133.8 | 2055.3 | 2019.6 | 2012.5 | 1994.6 |
| 12.5° | 2829.6 | 2790.3 | 2644.0 | 2454.9 | 2290.8 | 2137.3 | 2055.3 | 1994.6 | 1980.3 | 1976.8 | 1958.9 |
| 15° | 3004.4 | 2947.3 | 2711.8 | 2458.5 | 2244.4 | 2076.7 | 2026.7 | 1994.6 | 1994.6 | 1991.0 | 1980.3 |
| 17.5° | 3218.5 | 3125.7 | 2776.0 | 2444.2 | 2187.3 | 2058.8 | 2033.9 | 2005.3 | 1998.2 | 2001.7 | 1987.5 |
| 20° | 3475.4 | 3322.0 | 2843.8 | 2426.4 | 2162.3 | 2062.4 | 2033.9 | 1994.6 | 1976.8 | 1973.2 | 1962.5 |
| 22.5° | 3771.6 | 3546.8 | 2918.8 | 2397.8 | 2162.3 | 2058.8 | 2012.5 | 1958.9 | 1923.2 | 1909.0 | 1894.7 |
| 25° | 4110.5 | 3807.2 | 2997.3 | 2387.1 | 2169.5 | 2044.6 | 1969.6 | 1884.0 | 1826.9 | 1805.5 | 1794.8 |
| 27.5° | 4520.9 | 4082.0 | 3054.4 | 2397.8 | 2165.9 | 2012.5 | 1894.7 | 1784.1 | 1719.9 | 1684.2 | 1677.0 |
| 30° | 4974.0 | 4378.2 | 3093.6 | 2415.7 | 2144.5 | 1951.8 | 1805.5 | 1680.6 | 1591.4 | 1548.6 | 1537.9 |
| 32.5° | 5509.3 | 4710.0 | 3132.9 | 2415.7 | 2091.0 | 1866.2 | 1702.0 | 1566.4 | 1473.7 | 1423.7 | 1416.6 |
| 35° | 6101.6 | 5116.8 | 3168.5 | 2412.1 | 2026.7 | 1773.4 | 1598.5 | 1459.4 | 1363.0 | 1313.1 | 1309.5 |
| 37.5° | 6604.7 | 5423.6 | 3186.4 | 2376.4 | 1937.5 | 1666.3 | 1502.2 | 1363.0 | 1263.1 | 1209.6 | 1206.0 |
| 40° | 6915.1 | 5552.1 | 3150.7 | 2305.0 | 1830.5 | 1555.7 | 1395.2 | 1266.7 | 1166.8 | 1102.6 | 1088.3 |
| 42.5° | 7032.9 | 5491.4 | 3036.5 | 2187.3 | 1702.0 | 1445.1 | 1306.0 | 1170.4 | 1038.3 | 984.8 | 974.1 |
| 45° | 6993.6 | 5255.9 | 2793.9 | 2019.6 | 1559.3 | 1345.2 | 1227.5 | 1074.0 | 988.4 | 942.0 | 938.4 |
| 47.5° | 6861.6 | 4892.0 | 2490.6 | 1809.1 | 1409.4 | 1256.0 | 1124.0 | 1049.0 | 970.5 | 920.6 | 917.0 |
| 50° | 6629.7 | 4503.0 | 2126.6 | 1570.0 | 1273.8 | 1163.2 | 1099.0 | 1038.3 | 974.1 | 934.9 | 927.7 |
| 52.5° | 6333.5 | 4064.2 | 1791.2 | 1338.1 | 1156.1 | 1081.2 | 1074.0 | 1031.2 | 981.2 | 938.4 | 920.6 |
| 53° | 6265.7 | 3950.0 | 1727.0 | 1298.8 | 1138.2 | 1070.5 | 1066.9 | 1031.2 | 974.1 | 934.9 | 920.6 |
| 55° | 5941.0 | 3596.7 | 1523.6 | 1159.7 | 1049.0 | 1034.8 | 1066.9 | 1027.6 | 956.3 | 924.2 | 913.5 |
| 57.5° | 5420.1 | 3132.9 | 1327.4 | 1031.2 | 956.3 | 992.0 | 1056.2 | 1013.4 | 934.9 | 877.8 | 859.9 |
| 60° | 4792.1 | 2601.2 | 1177.5 | 945.6 | 888.5 | 938.4 | 1013.4 | 963.4 | 856.4 | 827.8 | 824.2 |
| 62.5° | 4042.7 | 2105.2 | 1063.3 | 874.2 | 831.4 | 881.3 | 949.1 | 863.5 | 785.0 | 763.6 | 756.5 |
| 65° | 3157.8 | 1673.5 | 974.1 | 820.7 | 774.3 | 813.5 | 859.9 | 806.4 | 756.5 | 738.6 | 735.0 |
| 67.5° | 2347.9 | 1313.1 | 902.7 | 774.3 | 717.2 | 742.2 | 795.7 | 781.4 | 738.6 | 727.9 | 724.3 |
| 70° | 1620.0 | 1066.9 | 838.5 | 731.5 | 645.8 | 674.4 | 756.5 | 767.2 | 724.3 | 717.2 | 713.6 |
| 72.5° | 1134.7 | 902.7 | 770.7 | 685.1 | 588.7 | 617.3 | 738.6 | 738.6 | 692.2 | 702.9 | 695.8 |
| 75° | 852.8 | 760.0 | 692.2 | 628.0 | 517.4 | 560.2 | 713.6 | 706.5 | 660.1 | 706.5 | 688.7 |
| 77.5° | 642.3 | 613.7 | 599.5 | 556.6 | 453.2 | 496.0 | 663.7 | 649.4 | 588.7 | 592.3 | 560.2 |
| 80° | 467.4 | 474.6 | 513.8 | 474.6 | 378.2 | 410.3 | 560.2 | 553.1 | 478.1 | 492.4 | 453.2 |
| 82.5° | 335.4 | 353.2 | 438.9 | 381.8 | 274.7 | 292.6 | 385.4 | 417.5 | 374.7 | 353.2 | 360.4 |
| 85° | 253.3 | 264.0 | 353.2 | 281.9 | 171.3 | 192.7 | 264.0 | 299.7 | 292.6 | 271.2 | 274.7 |
| 87.5° | 107.0 | 121.3 | 164.1 | 132.0 | 99.9 | 99.9 | 164.1 | 210.5 | 189.1 | 160.6 | 167.7 |
| 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: SP1-2407-184-16

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-940-U-5WQ

Data in this report applies to families of products including GSS-SB1A-940-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-16
 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-940-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 90 CRI 4000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3856
 CIE u': 0.2261
 CIE v': 0.5084
 Duv: 0.0032
 CIE x: 0.3896
 CIE y: 0.3894
 CIE z: 0.2211
 Peak Wavelength (nm): 614
 Dominant Wavelength (nm): 578
 Purity: 33.77304
 Rf: 91.8
 Rg: 98.4

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 92.1 | | |
| R1: | 91.8 | R9: | 60.7 |
| R2: | 94.1 | R10: | 85.2 |
| R3: | 95.3 | R11: | 92.4 |
| R4: | 92.8 | R12: | 74.5 |
| R5: | 91.0 | R13: | 92.3 |
| R6: | 91.6 | R14: | 97.0 |
| R7: | 95.0 | R15: | 88.5 |
| R8: | 85.2 | | |



Test Conditions

Stabilization Time: 23M
 Operation Time: 1H 23M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-16

| 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 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-16

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.72

| 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 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-16

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.52

| 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 | 492 | NR | 620 | 993 | NR | 750 | 73 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 539 | NR | 625 | 978 | NR | 755 | 62 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 583 | NR | 630 | 962 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 623 | NR | 635 | 933 | NR | 765 | 46 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 661 | NR | 640 | 898 | NR | 770 | 39 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 698 | NR | 645 | 855 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 733 | NR | 650 | 810 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 1 | NR | 525 | 764 | NR | 655 | 759 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 3 | NR | 530 | 794 | NR | 660 | 704 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 6 | NR | 535 | 820 | NR | 665 | 651 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 12 | NR | 540 | 837 | NR | 670 | 592 | NR | 800 | 16 | NR | 930 | 1 | NR |
| 415 | 22 | NR | 545 | 853 | NR | 675 | 538 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 864 | NR | 680 | 486 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 79 | NR | 555 | 872 | NR | 685 | 435 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 147 | NR | 560 | 876 | NR | 690 | 389 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 278 | NR | 565 | 883 | NR | 695 | 344 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 515 | NR | 570 | 891 | NR | 700 | 303 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 832 | NR | 575 | 900 | NR | 705 | 266 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 874 | NR | 580 | 914 | NR | 710 | 233 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 659 | NR | 585 | 927 | NR | 715 | 203 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 567 | NR | 590 | 944 | NR | 720 | 178 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 485 | NR | 595 | 961 | NR | 725 | 154 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 401 | NR | 600 | 975 | NR | 730 | 133 | NR | 860 | 3 | NR | 990 | 0 | NR |
| 475 | 393 | NR | 605 | 988 | NR | 735 | 115 | NR | 865 | 2 | NR | 995 | 1 | NR |
| 480 | 417 | NR | 610 | 996 | NR | 740 | 98 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 448 | NR | 615 | 998 | NR | 745 | 85 | NR | 875 | 2 | NR | | | |

Summary

$R_f = 91.8$
 $R_g = 98.4$
 $CIE R_a = 92.1$
 $R_9 = 60.7$



Color Vector Graphics

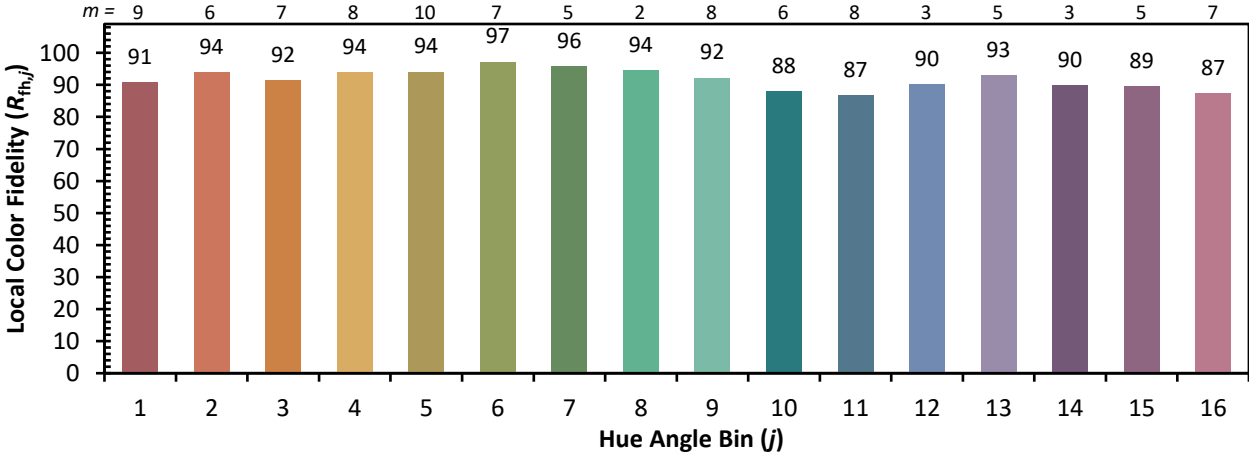


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 94 | CES51 = 96 | CES76 = 87 |
| CES02 = 62 | CES27 = 91 | CES52 = 98 | CES77 = 90 |
| CES03 = 31 | CES28 = 96 | CES53 = 95 | CES78 = 84 |
| CES04 = 69 | CES29 = 96 | CES54 = 94 | CES79 = 96 |
| CES05 = 49 | CES30 = 93 | CES55 = 92 | CES80 = 94 |
| CES06 = 50 | CES31 = 97 | CES56 = 93 | CES81 = 89 |
| CES07 = 42 | CES32 = 92 | CES57 = 92 | CES82 = 97 |
| CES08 = 41 | CES33 = 99 | CES58 = 92 | CES83 = 98 |
| CES09 = 29 | CES34 = 94 | CES59 = 96 | CES84 = 94 |
| CES10 = 74 | CES35 = 96 | CES60 = 93 | CES85 = 85 |
| CES11 = 57 | CES36 = 82 | CES61 = 92 | CES86 = 88 |
| CES12 = 63 | CES37 = 95 | CES62 = 87 | CES87 = 92 |
| CES13 = 43 | CES38 = 88 | CES63 = 92 | CES88 = 96 |
| CES14 = 74 | CES39 = 99 | CES64 = 89 | CES89 = 87 |
| CES15 = 71 | CES40 = 98 | CES65 = 88 | CES90 = 96 |
| CES16 = 47 | CES41 = 97 | CES66 = 87 | CES91 = 74 |
| CES17 = 49 | CES42 = 96 | CES67 = 86 | CES92 = 80 |
| CES18 = 56 | CES43 = 96 | CES68 = 88 | CES93 = 88 |
| CES19 = 71 | CES44 = 99 | CES69 = 89 | CES94 = 82 |
| CES20 = 66 | CES45 = 98 | CES70 = 86 | CES95 = 83 |
| CES21 = 85 | CES46 = 97 | CES71 = 81 | CES96 = 92 |
| CES22 = 78 | CES47 = 97 | CES72 = 94 | CES97 = 95 |
| CES23 = 91 | CES48 = 91 | CES73 = 81 | CES98 = 94 |
| CES24 = 90 | CES49 = 96 | CES74 = 93 | CES99 = 91 |
| CES25 = 71 | CES50 = 97 | CES75 = 83 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)