

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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
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: P1457639

Luminaire Tested: GLAN-SB4A-735-U-T2LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1457639
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB4A-735-U-T2LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 4xLight Square PACKAGE 70CRI 3500K FIXTURE w/ TYPE II LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (104) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

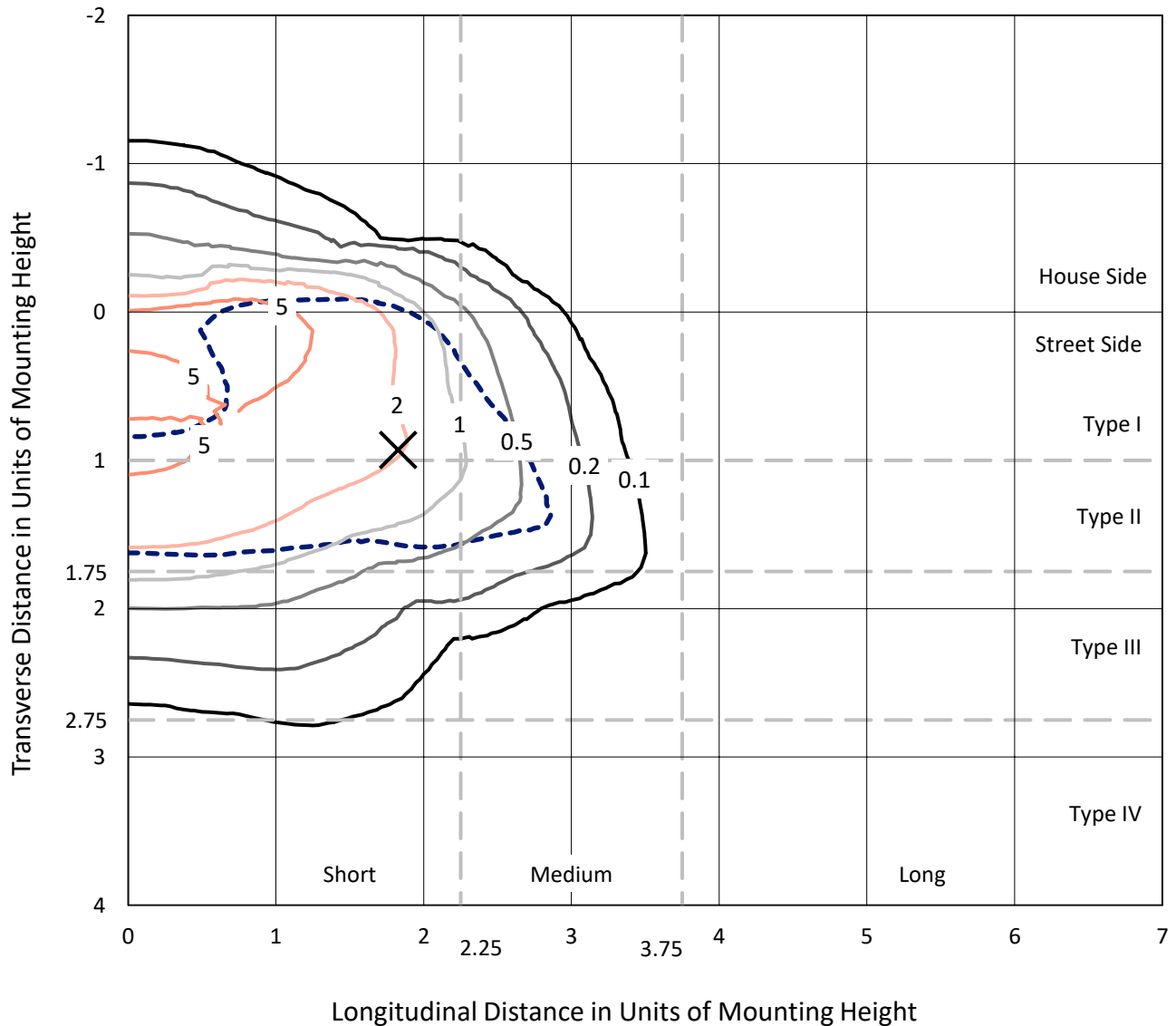
Lumens per Lamp: N/A
Luminaire Lumens: 13019.5 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 114
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1457639
 CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

Iso-Footcandle Lines of Horizontal Illumination

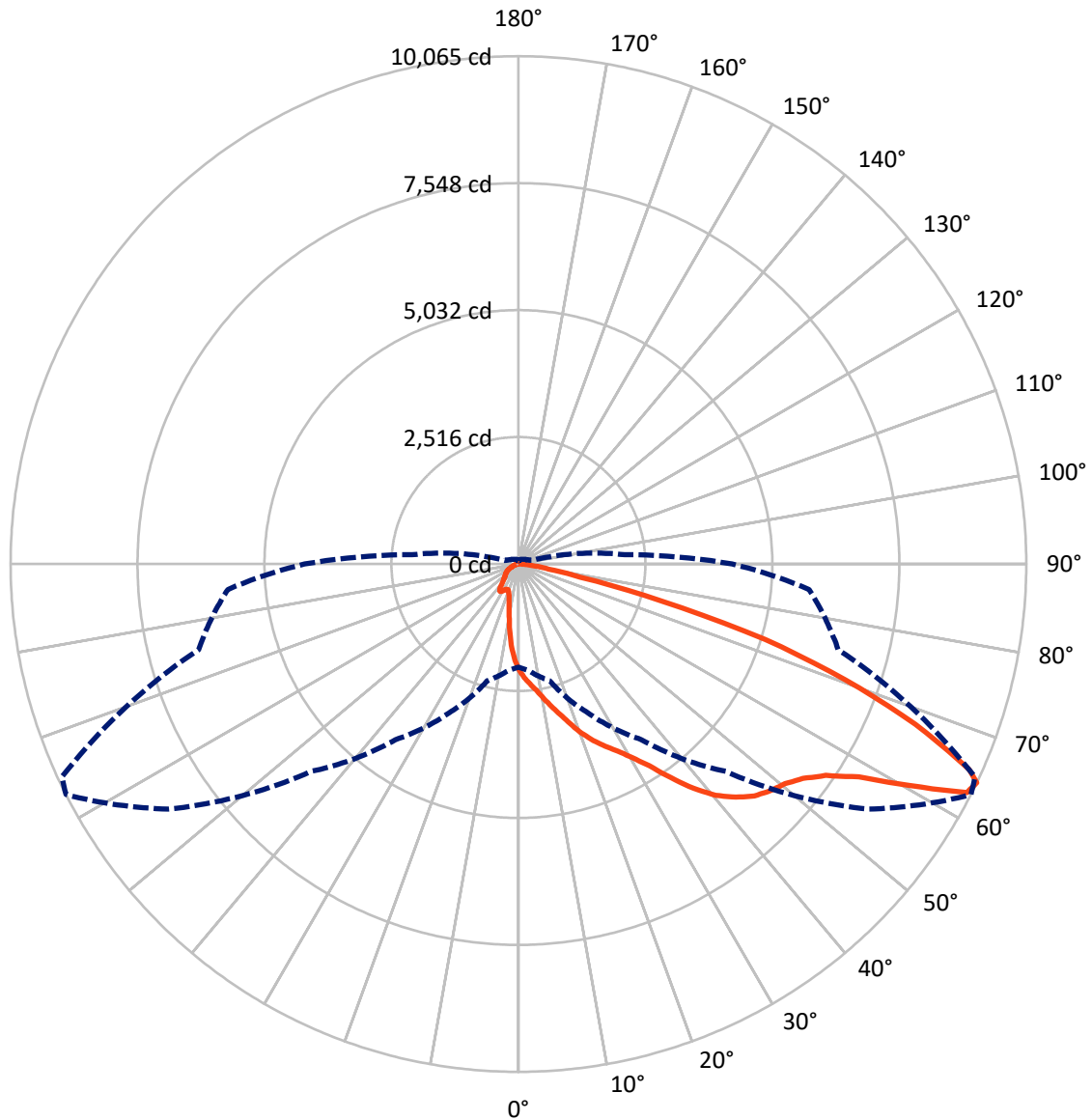
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - N/A

REPORT NUMBER: P1457639
CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P1457639

CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1545.0 | 0.0 | 1545.0 |
| | % Fixture | 11.9 | 0.0 | 11.9 |
| Street Side | Lumens | 11474.5 | 0.0 | 11474.5 |
| | % Fixture | 88.1 | 0.0 | 88.1 |
| Total | Lumens | 13019.5 | 0.0 | 13019.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 177.3 | 1.4 |
| 10°-20° | 498.1 | 3.8 |
| 20°-30° | 887.2 | 6.8 |
| 30°-40° | 1694.6 | 13.0 |
| 40°-50° | 2808.9 | 21.6 |
| 50°-60° | 3501.3 | 26.9 |
| 60°-70° | 2610.8 | 20.1 |
| 70°-80° | 748.8 | 5.8 |
| 80°-90° | 92.6 | 0.7 |
| 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° | 13019.5 | 100.0 |
| 0°-180° | 13019.5 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P1457639

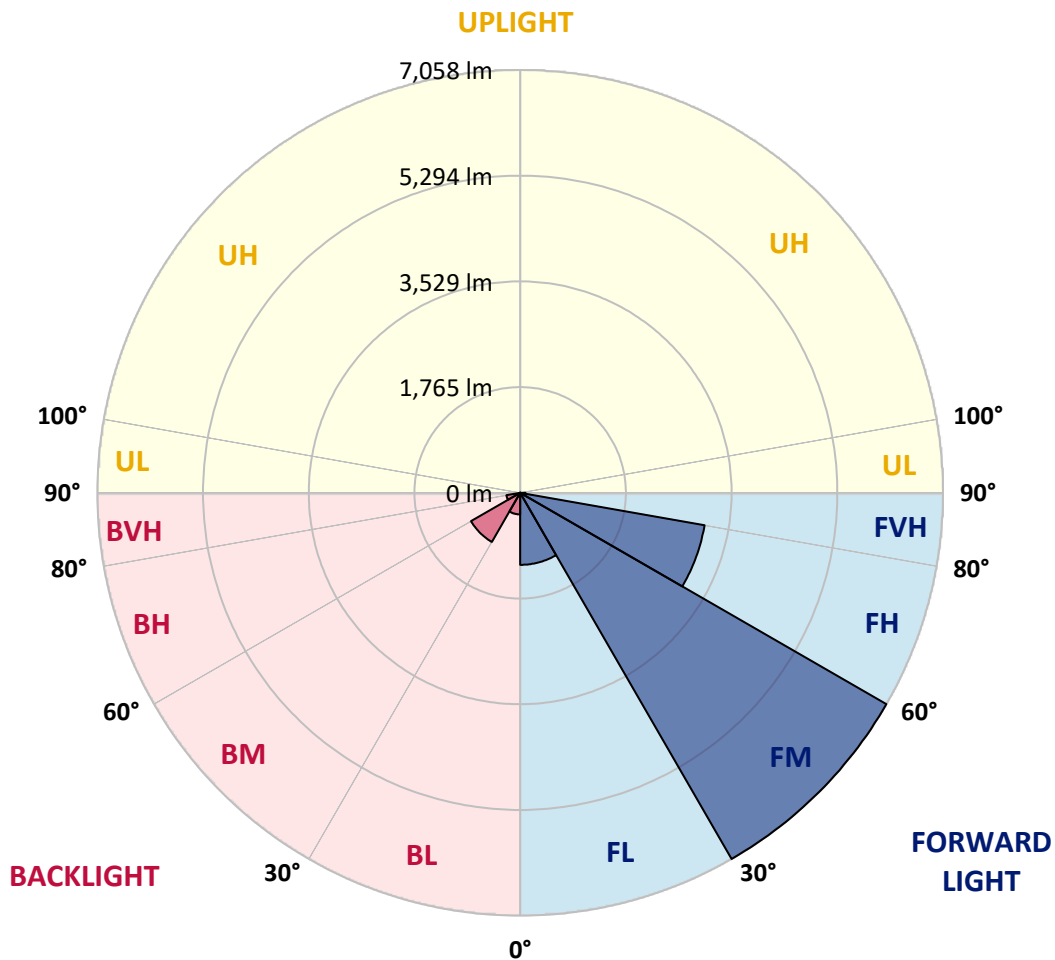
CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1202.2 | 9.2 | | | |
| FM | (30°-60°) | 7058.4 | 54.2 | | | |
| FH | (60°-80°) | 3125.9 | 24.0 | | | G2/5000 |
| FVH | (80°-90°) | 88.0 | 0.7 | | | G1/100 |
| BL | (0°-30°) | 360.5 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 946.3 | 7.3 | B1/1000 | | |
| BH | (60°-80°) | 233.7 | 1.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 4.6 | 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 Short





REPORT NUMBER: P1457639

CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| 0° | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 |
| 2.5° | 2359.0 | 2351.1 | 2343.3 | 2331.6 | 2316.0 | 2300.4 | 2280.8 | 2253.5 | 2241.8 | 2202.7 | 2155.9 |
| 5° | 2480.0 | 2480.0 | 2476.1 | 2468.3 | 2460.5 | 2444.9 | 2421.4 | 2386.3 | 2370.7 | 2316.0 | 2234.0 |
| 7.5° | 2511.3 | 2515.2 | 2526.9 | 2542.5 | 2566.0 | 2562.0 | 2562.0 | 2523.0 | 2515.2 | 2456.6 | 2347.2 |
| 10° | 2456.6 | 2460.5 | 2491.7 | 2534.7 | 2605.0 | 2671.4 | 2718.3 | 2694.8 | 2683.1 | 2624.5 | 2487.8 |
| 12.5° | 2378.5 | 2378.5 | 2429.3 | 2495.7 | 2605.0 | 2730.0 | 2866.7 | 2890.1 | 2894.0 | 2827.6 | 2663.6 |
| 15° | 2175.4 | 2183.2 | 2265.2 | 2398.0 | 2577.7 | 2772.9 | 3003.4 | 3093.2 | 3116.6 | 3073.7 | 2878.4 |
| 17.5° | 1905.9 | 1913.7 | 1995.7 | 2175.4 | 2444.9 | 2772.9 | 3120.5 | 3327.5 | 3358.8 | 3366.6 | 3151.8 |
| 20° | 1792.7 | 1792.7 | 1839.5 | 1976.2 | 2257.4 | 2698.7 | 3190.8 | 3577.5 | 3647.8 | 3733.7 | 3452.5 |
| 22.5° | 1808.3 | 1808.3 | 1835.6 | 1913.7 | 2140.2 | 2597.2 | 3233.8 | 3800.1 | 3944.6 | 4163.3 | 3839.2 |
| 25° | 1894.2 | 1894.2 | 1917.6 | 1968.4 | 2152.0 | 2581.6 | 3315.8 | 3999.3 | 4229.7 | 4643.7 | 4280.5 |
| 27.5° | 2030.9 | 2027.0 | 2046.5 | 2097.3 | 2265.2 | 2655.8 | 3452.5 | 4198.5 | 4456.2 | 5182.7 | 4788.2 |
| 30° | 2230.1 | 2218.4 | 2226.2 | 2284.8 | 2448.8 | 2827.6 | 3651.7 | 4452.3 | 4714.0 | 5772.4 | 5350.6 |
| 32.5° | 2690.9 | 2687.0 | 2573.8 | 2542.5 | 2718.3 | 3104.9 | 3925.1 | 4768.7 | 5061.6 | 6397.3 | 5928.6 |
| 35° | 3522.8 | 3577.5 | 3417.4 | 3007.3 | 3042.4 | 3475.9 | 4315.6 | 5198.3 | 5467.8 | 7061.2 | 6557.4 |
| 37.5° | 4366.4 | 4366.4 | 4300.0 | 3815.7 | 3569.7 | 3886.0 | 4737.4 | 5639.6 | 5920.8 | 7596.3 | 7162.8 |
| 40° | 5034.3 | 5069.4 | 4991.3 | 4628.1 | 4307.8 | 4354.7 | 5159.2 | 6026.3 | 6284.0 | 7924.4 | 7592.4 |
| 42.5° | 5530.3 | 5522.5 | 5491.2 | 5253.0 | 5073.3 | 4967.9 | 5542.0 | 6315.3 | 6561.3 | 8092.3 | 7861.9 |
| 45° | 6065.3 | 6065.3 | 6022.4 | 5827.1 | 5678.7 | 5588.9 | 5827.1 | 6557.4 | 6815.2 | 8193.9 | 8029.8 |
| 47.5° | 6623.8 | 6616.0 | 6573.1 | 6358.2 | 6198.1 | 6065.3 | 6116.1 | 6713.7 | 6971.4 | 8127.5 | 8057.2 |
| 50° | 6760.5 | 6752.7 | 6850.3 | 6858.2 | 6713.7 | 6459.8 | 6346.5 | 6846.4 | 7073.0 | 8131.4 | 8143.1 |
| 52.5° | 6600.4 | 6647.3 | 6791.8 | 6967.5 | 7131.5 | 6866.0 | 6592.6 | 7057.3 | 7291.7 | 8240.7 | 8357.9 |
| 55° | 6202.0 | 6221.6 | 6498.8 | 6780.0 | 7162.8 | 7256.5 | 6987.0 | 7393.2 | 7600.2 | 8346.2 | 8549.3 |
| 57.5° | 5460.0 | 5534.2 | 5831.0 | 6319.2 | 6901.1 | 7291.7 | 7674.4 | 7955.6 | 8111.8 | 8389.1 | 8443.8 |
| 60° | 4120.4 | 4159.4 | 4803.8 | 5436.5 | 6358.2 | 7010.5 | 8314.9 | 8908.6 | 8889.0 | 7904.8 | 7705.7 |
| 62.5° | 2507.4 | 2542.5 | 3003.4 | 4007.1 | 5167.1 | 6424.6 | 8529.7 | 9974.8 | 9869.3 | 7088.6 | 6487.1 |
| 64° | 2042.6 | 2109.0 | 2394.1 | 3253.3 | 4249.2 | 5811.5 | 8467.2 | 10064.6 | 9982.6 | 6561.3 | 5780.2 |
| 65° | 1745.8 | 1835.6 | 2128.5 | 2823.7 | 3612.6 | 5151.4 | 8295.4 | 9814.7 | 9760.0 | 6241.1 | 5194.4 |
| 67.5° | 1097.5 | 1140.4 | 1573.9 | 2194.9 | 2487.8 | 3296.3 | 7131.5 | 8486.8 | 8584.4 | 5561.5 | 3831.4 |
| 70° | 816.3 | 835.8 | 1081.8 | 1698.9 | 1941.1 | 1917.6 | 4897.6 | 6873.8 | 6897.2 | 4448.4 | 2312.1 |
| 72.5° | 593.6 | 597.6 | 757.7 | 1257.6 | 1519.3 | 1308.4 | 2581.6 | 5108.5 | 4940.5 | 2605.0 | 1261.5 |
| 75° | 394.5 | 410.1 | 531.2 | 886.6 | 1183.4 | 960.8 | 1175.6 | 2909.6 | 2858.9 | 1273.2 | 722.5 |
| 77.5° | 289.0 | 292.9 | 359.3 | 593.6 | 929.5 | 706.9 | 710.8 | 1253.7 | 1292.7 | 757.7 | 457.0 |
| 80° | 164.0 | 171.8 | 234.3 | 363.2 | 605.4 | 484.3 | 398.4 | 605.4 | 695.2 | 515.5 | 304.6 |
| 82.5° | 97.6 | 105.5 | 167.9 | 238.2 | 414.0 | 199.2 | 203.1 | 332.0 | 414.0 | 371.0 | 164.0 |
| 85° | 58.6 | 62.5 | 105.5 | 128.9 | 246.1 | 132.8 | 74.2 | 164.0 | 214.8 | 218.7 | 89.8 |
| 87.5° | 39.1 | 39.1 | 58.6 | 54.7 | 70.3 | 62.5 | 31.2 | 43.0 | 54.7 | 74.2 | 35.2 |
| 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: P1457639

CATALOG NUMBER: GLAN-SB4A-735-U-T2LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 | 2105.1 |
| 2.5° | 2116.8 | 2093.4 | 2023.1 | 1929.3 | 1843.4 | 1777.0 | 1695.0 | 1640.3 | 1589.6 | 1589.6 | 1546.6 |
| 5° | 2167.6 | 2105.1 | 1933.3 | 1718.4 | 1488.0 | 1269.3 | 1128.7 | 972.5 | 921.7 | 878.8 | 886.6 |
| 7.5° | 2253.5 | 2140.2 | 1835.6 | 1449.0 | 1081.8 | 847.5 | 691.3 | 621.0 | 589.7 | 570.2 | 574.1 |
| 10° | 2359.0 | 2202.7 | 1718.4 | 1175.6 | 796.7 | 621.0 | 546.8 | 519.4 | 507.7 | 503.8 | 503.8 |
| 12.5° | 2503.5 | 2276.9 | 1601.3 | 945.1 | 628.8 | 535.1 | 496.0 | 480.4 | 468.7 | 460.9 | 460.9 |
| 15° | 2675.3 | 2370.7 | 1464.6 | 777.2 | 550.7 | 492.1 | 460.9 | 445.2 | 429.6 | 425.7 | 425.7 |
| 17.5° | 2894.0 | 2468.3 | 1343.5 | 667.9 | 511.6 | 460.9 | 429.6 | 410.1 | 398.4 | 394.5 | 394.5 |
| 20° | 3136.2 | 2589.4 | 1222.4 | 605.4 | 484.3 | 429.6 | 398.4 | 382.7 | 371.0 | 363.2 | 367.1 |
| 22.5° | 3444.7 | 2741.7 | 1144.3 | 574.1 | 460.9 | 402.3 | 371.0 | 355.4 | 343.7 | 335.9 | 339.8 |
| 25° | 3784.5 | 2933.1 | 1101.4 | 574.1 | 445.2 | 382.7 | 347.6 | 332.0 | 320.3 | 312.4 | 312.4 |
| 27.5° | 4198.5 | 3147.9 | 1105.3 | 597.6 | 441.3 | 367.1 | 328.1 | 312.4 | 300.7 | 289.0 | 289.0 |
| 30° | 4655.4 | 3401.7 | 1148.2 | 640.5 | 449.1 | 351.5 | 312.4 | 289.0 | 281.2 | 269.5 | 269.5 |
| 32.5° | 5139.7 | 3694.7 | 1257.6 | 695.2 | 441.3 | 332.0 | 289.0 | 269.5 | 257.8 | 250.0 | 250.0 |
| 35° | 5651.3 | 4026.6 | 1394.3 | 718.6 | 402.3 | 304.6 | 269.5 | 250.0 | 242.1 | 238.2 | 234.3 |
| 37.5° | 6139.5 | 4315.6 | 1468.5 | 671.8 | 351.5 | 281.2 | 246.1 | 226.5 | 222.6 | 214.8 | 214.8 |
| 40° | 6518.4 | 4553.9 | 1425.5 | 574.1 | 324.2 | 257.8 | 226.5 | 207.0 | 199.2 | 191.4 | 191.4 |
| 42.5° | 6741.0 | 4639.8 | 1269.3 | 488.2 | 304.6 | 234.3 | 207.0 | 187.5 | 179.7 | 175.8 | 175.8 |
| 45° | 6869.9 | 4628.1 | 1085.7 | 437.4 | 285.1 | 214.8 | 187.5 | 175.8 | 164.0 | 160.1 | 156.2 |
| 47.5° | 6866.0 | 4507.0 | 953.0 | 394.5 | 265.6 | 199.2 | 175.8 | 164.0 | 152.3 | 148.4 | 148.4 |
| 50° | 6838.6 | 4327.4 | 804.5 | 363.2 | 250.0 | 187.5 | 164.0 | 156.2 | 144.5 | 140.6 | 136.7 |
| 52.5° | 6905.0 | 4225.8 | 671.8 | 343.7 | 230.4 | 179.7 | 160.1 | 148.4 | 132.8 | 128.9 | 128.9 |
| 55° | 6987.0 | 4167.2 | 539.0 | 324.2 | 214.8 | 175.8 | 152.3 | 140.6 | 125.0 | 121.1 | 121.1 |
| 57.5° | 6748.8 | 3944.6 | 445.2 | 292.9 | 195.3 | 167.9 | 144.5 | 136.7 | 121.1 | 109.4 | 109.4 |
| 60° | 5998.9 | 3261.1 | 367.1 | 257.8 | 179.7 | 156.2 | 136.7 | 125.0 | 109.4 | 93.7 | 93.7 |
| 62.5° | 4878.0 | 2487.8 | 304.6 | 218.7 | 167.9 | 144.5 | 125.0 | 113.3 | 93.7 | 74.2 | 74.2 |
| 64° | 4237.5 | 2112.9 | 273.4 | 191.4 | 160.1 | 132.8 | 113.3 | 101.5 | 82.0 | 62.5 | 58.6 |
| 65° | 3800.1 | 1866.9 | 253.9 | 179.7 | 156.2 | 125.0 | 109.4 | 97.6 | 74.2 | 58.6 | 54.7 |
| 67.5° | 2675.3 | 1253.7 | 203.1 | 148.4 | 136.7 | 105.5 | 93.7 | 82.0 | 66.4 | 50.8 | 46.9 |
| 70° | 1558.3 | 710.8 | 160.1 | 125.0 | 105.5 | 82.0 | 78.1 | 74.2 | 58.6 | 39.1 | 39.1 |
| 72.5° | 847.5 | 355.4 | 121.1 | 101.5 | 82.0 | 58.6 | 66.4 | 58.6 | 46.9 | 31.2 | 27.3 |
| 75° | 519.4 | 218.7 | 89.8 | 74.2 | 54.7 | 43.0 | 50.8 | 43.0 | 27.3 | 19.5 | 15.6 |
| 77.5° | 347.6 | 140.6 | 66.4 | 50.8 | 35.2 | 27.3 | 35.2 | 23.4 | 11.7 | 3.9 | 3.9 |
| 80° | 214.8 | 97.6 | 43.0 | 31.2 | 19.5 | 11.7 | 7.8 | 3.9 | 3.9 | 0.0 | 0.0 |
| 82.5° | 93.7 | 62.5 | 23.4 | 15.6 | 7.8 | 3.9 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 50.8 | 19.5 | 7.8 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 15.6 | 7.8 | 3.9 | 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



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-5
 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-735-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3369
 CIE u': 0.2386
 CIE v': 0.5156
 Duv: 0.0013
 CIE x: 0.4143
 CIE y: 0.3980
 CIE z: 0.1877
 Peak Wavelength (nm): 590
 Dominant Wavelength (nm): 580
 Purity: 43.80166
 Rf: 71.4
 Rg: 96

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 70.1 | | |
| R1: | 66.6 | R9: | -40.2 |
| R2: | 77.6 | R10: | 49.1 |
| R3: | 88.5 | R11: | 66.3 |
| R4: | 69.5 | R12: | 45.7 |
| R5: | 66.4 | R13: | 68.0 |
| R6: | 69.6 | R14: | 93.4 |
| R7: | 77.5 | R15: | 57.6 |
| R8: | 44.9 | | |



Test Conditions

Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-5

| 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 |

REPORT NUMBER: SP1-2407-184-5

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: SP1-2407-184-5

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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-5

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.29

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.36

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 71.4$
 $R_g = 96$
 $CIE R_a = 70.1$
 $R_9 = -40.2$



Color Vector Graphics

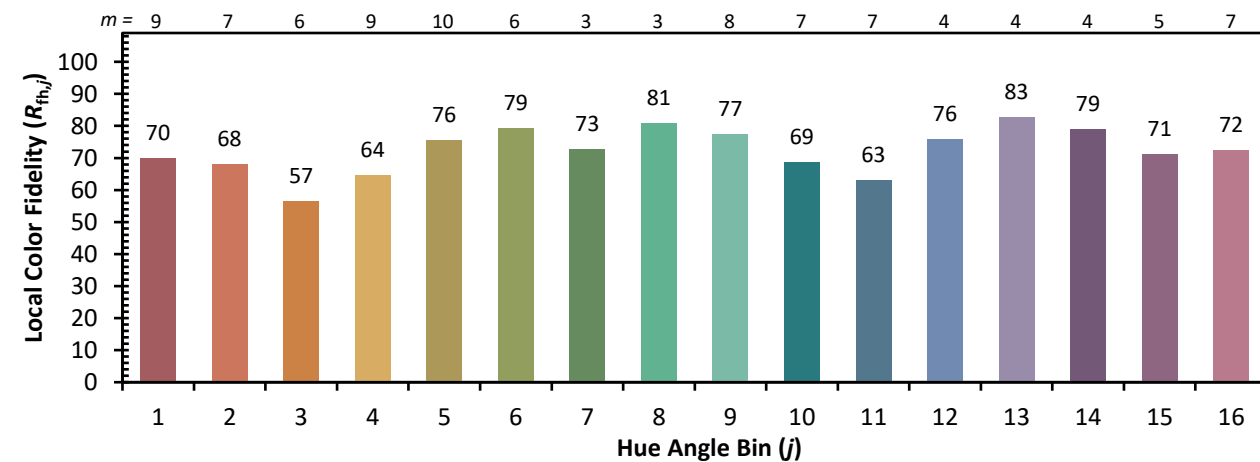


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 51 | CES31 = 56 | CES56 = 67 | CES81 = 74 |
| CES07 = 40 | CES32 = 54 | CES57 = 65 | CES82 = 91 |
| CES08 = 39 | CES33 = 60 | CES58 = 68 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 85 | CES84 = 89 |
| CES10 = 75 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 58 | CES36 = 88 | CES61 = 85 | CES86 = 66 |
| CES12 = 64 | CES37 = 78 | CES62 = 78 | CES87 = 77 |
| CES13 = 43 | CES38 = 64 | CES63 = 71 | CES88 = 75 |
| CES14 = 74 | CES39 = 92 | CES64 = 70 | CES89 = 68 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 72 |
| CES16 = 47 | CES41 = 81 | CES66 = 65 | CES91 = 95 |
| CES17 = 50 | CES42 = 79 | CES67 = 63 | CES92 = 62 |
| CES18 = 56 | CES43 = 71 | CES68 = 69 | CES93 = 78 |
| CES19 = 72 | CES44 = 98 | CES69 = 80 | CES94 = 51 |
| CES20 = 65 | CES45 = 80 | CES70 = 60 | CES95 = 70 |
| CES21 = 87 | CES46 = 75 | CES71 = 58 | CES96 = 76 |
| CES22 = 79 | CES47 = 71 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 61 | CES73 = 51 | CES98 = 72 |
| CES24 = 91 | CES49 = 74 | CES74 = 94 | CES99 = 60 |
| CES25 = 72 | CES50 = 83 | CES75 = 57 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)