

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: P1459201

Luminaire Tested: GLAN-SB7C-940-U-T4LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1459201
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB7C-940-U-T4LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 615mA 7xLight Square PACKAGE 90CRI 4000K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (182) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

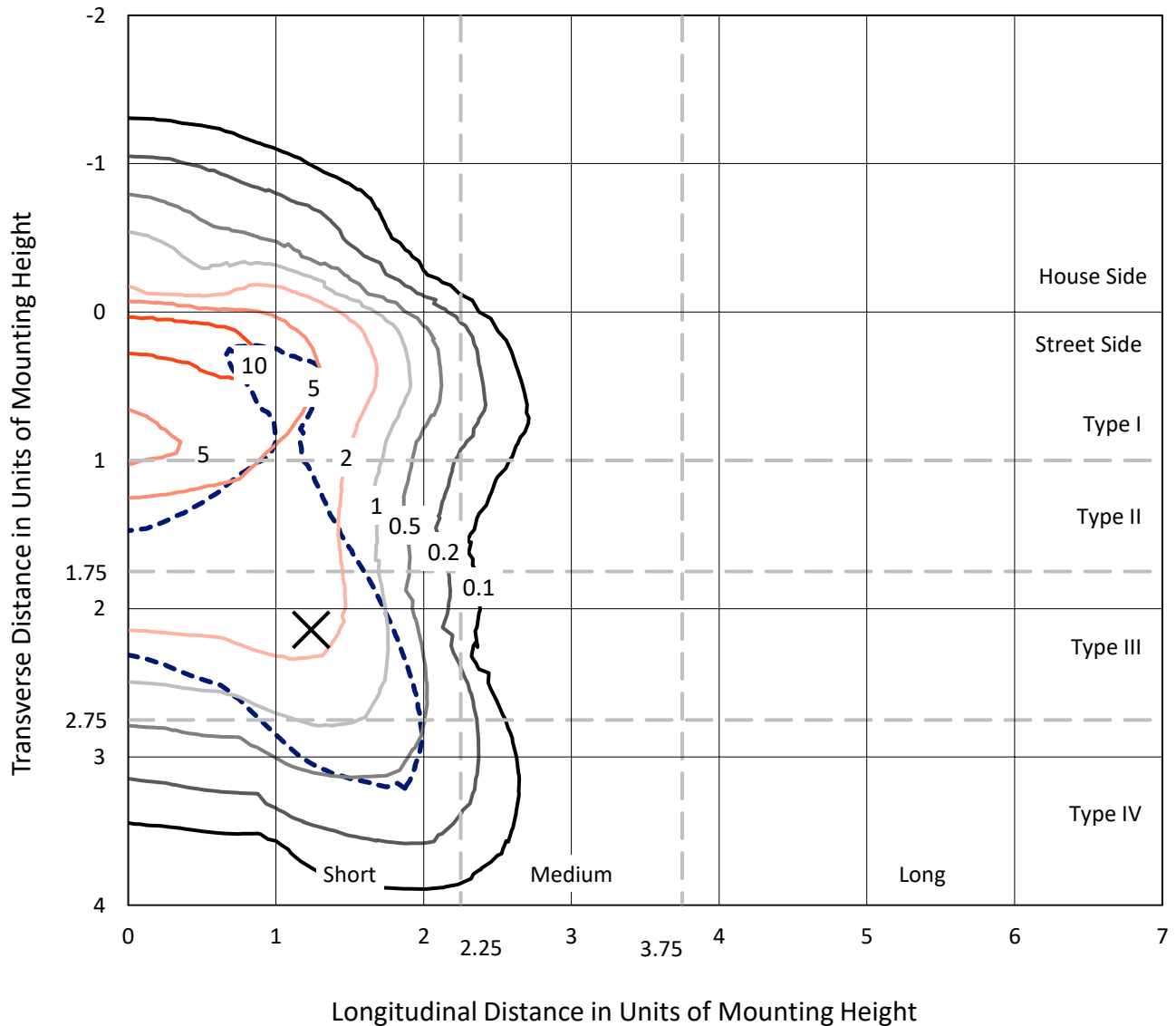
Lumens per Lamp: N/A
Luminaire Lumens: 27988.7 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 350.5
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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Iso-Footcandle Lines of Horizontal Illumination

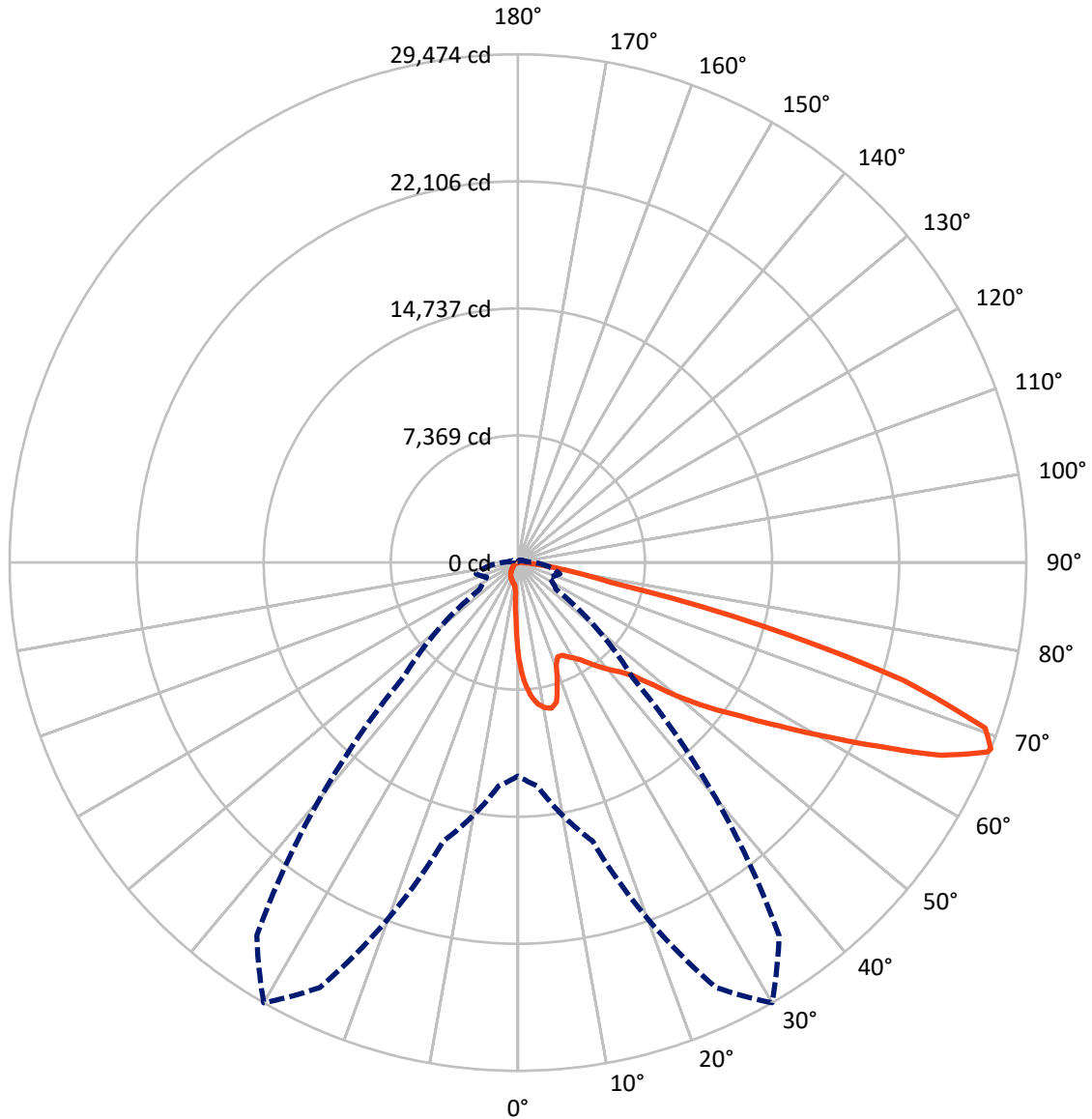
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.5 fc
 Type IV - Short - N/A

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CATALOG NUMBER: GLAN-SB7C-940-U-T4LG-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 30-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2136.3 | 0.0 | 2136.3 |
| | % Fixture | 7.6 | 0.0 | 7.6 |
| Street Side | Lumens | 25852.4 | 0.0 | 25852.4 |
| | % Fixture | 92.4 | 0.0 | 92.4 |
| Total | Lumens | 27988.7 | 0.0 | 27988.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 476.2 | 1.7 |
| 10°-20° | 1359.6 | 4.9 |
| 20°-30° | 2136.6 | 7.6 |
| 30°-40° | 3351.0 | 12.0 |
| 40°-50° | 5008.8 | 17.9 |
| 50°-60° | 6663.3 | 23.8 |
| 60°-70° | 6441.4 | 23.0 |
| 70°-80° | 2315.4 | 8.3 |
| 80°-90° | 236.3 | 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° | 27988.7 | 100.0 |
| 0°-180° | 27988.7 | 100.0 |

Coefficient of Utilization



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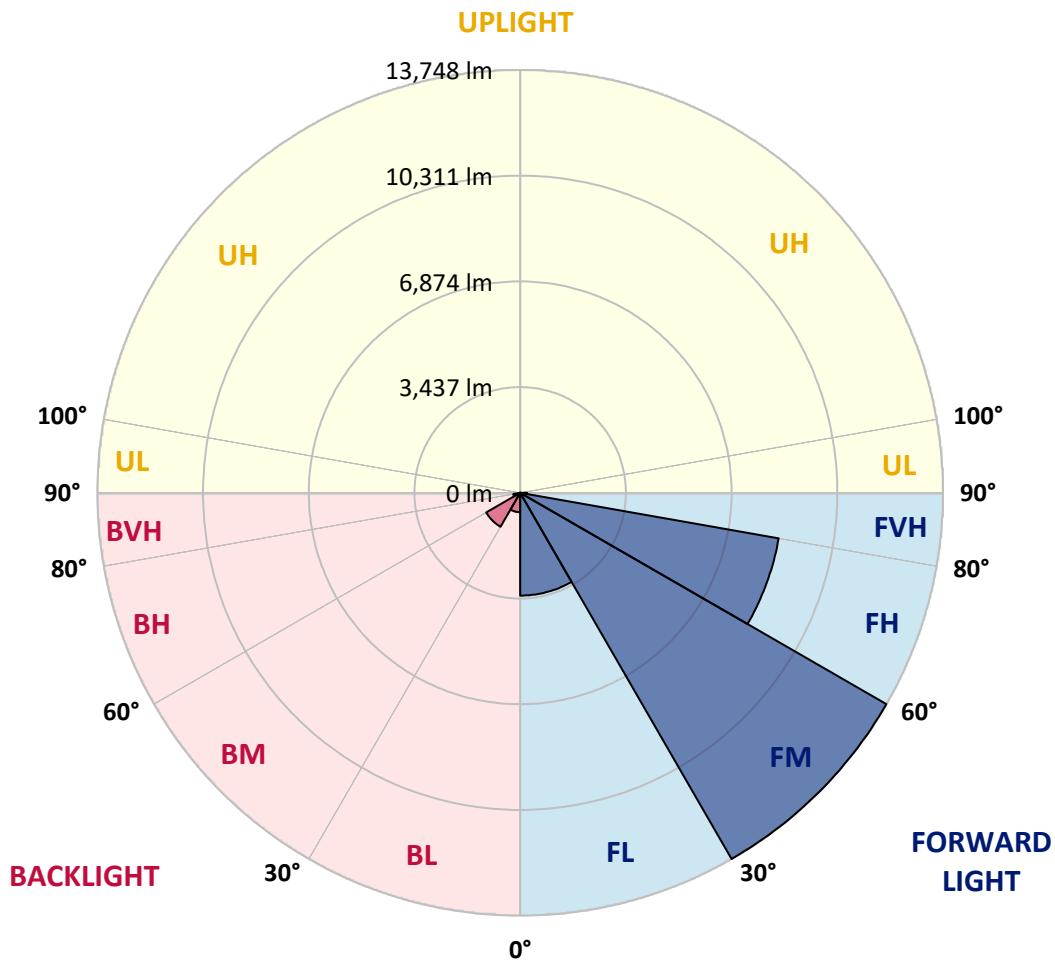
CATALOG NUMBER: GLAN-SB7C-940-U-T4LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 3341.8 | 11.9 | | | |
| FM | (30°-60°) | 13748.0 | 49.1 | | | |
| FH | (60°-80°) | 8534.6 | 30.5 | | | G4/12000 |
| FVH | (80°-90°) | 227.9 | 0.8 | | | G3/500 |
| BL | (0°-30°) | 630.5 | 2.3 | B2/1000 | | |
| BM | (30°-60°) | 1275.1 | 4.6 | B2/2500 | | |
| BH | (60°-80°) | 222.2 | 0.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 8.4 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 30° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 |
| 2.5° | 7054.0 | 7054.0 | 7003.6 | 6936.5 | 6861.1 | 6835.9 | 6693.3 | 6492.0 | 6282.3 | 6039.1 | 5686.8 |
| 5° | 7959.8 | 7951.4 | 7850.8 | 7850.8 | 7750.1 | 7657.9 | 7515.3 | 7221.7 | 6886.2 | 6450.1 | 5837.8 |
| 7.5° | 8362.4 | 8379.2 | 8337.3 | 8337.3 | 8278.6 | 8211.5 | 8127.6 | 7842.4 | 7448.2 | 6861.1 | 5988.7 |
| 10° | 8505.0 | 8513.4 | 8513.4 | 8572.1 | 8555.3 | 8547.0 | 8538.6 | 8379.2 | 7968.2 | 7280.4 | 6148.1 |
| 12.5° | 8161.1 | 8203.1 | 8320.5 | 8580.5 | 8664.4 | 8756.6 | 8882.5 | 8832.1 | 8547.0 | 7808.8 | 6391.3 |
| 15° | 7054.0 | 7062.4 | 7389.5 | 8035.3 | 8379.2 | 8731.5 | 9218.0 | 9318.6 | 9134.1 | 8379.2 | 6643.0 |
| 17.5° | 5821.0 | 5846.2 | 6106.2 | 6827.5 | 7381.1 | 8194.7 | 9410.9 | 9821.9 | 9754.8 | 8941.2 | 6877.8 |
| 20° | 5309.3 | 5342.9 | 5468.7 | 5921.6 | 6341.0 | 7095.9 | 9218.0 | 10300.0 | 10325.1 | 9503.1 | 7095.9 |
| 22.5° | 5191.9 | 5217.1 | 5317.7 | 5670.0 | 5930.0 | 6433.3 | 8563.7 | 10677.4 | 10971.0 | 10149.0 | 7355.9 |
| 25° | 5158.4 | 5183.5 | 5334.5 | 5720.3 | 5963.6 | 6383.0 | 7968.2 | 10878.7 | 11734.2 | 10820.0 | 7607.5 |
| 27.5° | 5133.2 | 5166.8 | 5410.0 | 5904.9 | 6190.0 | 6592.6 | 7859.2 | 10920.6 | 12464.0 | 11532.9 | 8018.5 |
| 30° | 5166.8 | 5217.1 | 5535.8 | 6097.8 | 6424.9 | 6877.8 | 8119.2 | 10962.6 | 13269.2 | 12346.5 | 8538.6 |
| 32.5° | 5301.0 | 5342.9 | 5728.7 | 6357.8 | 6735.2 | 7246.9 | 8563.7 | 11214.2 | 14032.4 | 13176.9 | 9033.4 |
| 35° | 5451.9 | 5510.6 | 5972.0 | 6726.8 | 7179.8 | 7758.5 | 9167.6 | 11709.1 | 14762.2 | 13965.3 | 9545.1 |
| 37.5° | 5636.5 | 5703.6 | 6257.1 | 7146.2 | 7666.3 | 8320.5 | 9821.9 | 12396.9 | 15408.0 | 14611.2 | 10056.7 |
| 40° | 5888.1 | 5963.6 | 6584.3 | 7590.8 | 8152.7 | 8807.0 | 10467.7 | 13076.3 | 15902.9 | 14997.0 | 10392.2 |
| 42.5° | 6877.8 | 6978.5 | 7238.5 | 8026.9 | 8656.0 | 9327.0 | 11105.2 | 13722.1 | 16087.4 | 15122.8 | 10459.3 |
| 45° | 8723.1 | 8823.7 | 8756.6 | 8907.6 | 9327.0 | 9956.1 | 11801.3 | 14342.8 | 16112.6 | 15089.3 | 10425.8 |
| 47.5° | 10576.8 | 10694.2 | 10635.5 | 10551.6 | 10643.9 | 10945.8 | 12581.4 | 14737.0 | 15978.4 | 15072.5 | 10425.8 |
| 50° | 12346.5 | 12279.4 | 12287.8 | 12262.7 | 12346.5 | 12505.9 | 13336.3 | 14812.5 | 15944.8 | 15231.9 | 10518.0 |
| 52.5° | 13294.3 | 13327.9 | 13537.6 | 13847.9 | 14032.4 | 14191.8 | 14200.2 | 14929.9 | 15701.6 | 14963.5 | 10409.0 |
| 55° | 14225.4 | 14292.5 | 14778.9 | 15307.4 | 15718.3 | 16020.3 | 15064.1 | 14854.4 | 14250.5 | 14066.0 | 9838.6 |
| 57.5° | 15273.8 | 15366.1 | 16053.9 | 17144.2 | 17865.6 | 18024.9 | 15919.7 | 13445.3 | 12061.4 | 12782.7 | 8731.5 |
| 60° | 16716.5 | 16825.5 | 17739.8 | 19375.3 | 20449.0 | 20121.8 | 15986.8 | 11205.8 | 9578.6 | 10610.3 | 7204.9 |
| 62.5° | 17848.8 | 18066.9 | 19719.2 | 22269.1 | 23451.7 | 22411.6 | 14737.0 | 8588.9 | 6693.3 | 7456.6 | 5259.0 |
| 65° | 16641.0 | 17060.4 | 19752.8 | 25582.2 | 26949.3 | 25104.1 | 12774.3 | 5862.9 | 3774.4 | 4822.9 | 3363.4 |
| 67.5° | 13453.7 | 14040.8 | 17538.5 | 27192.6 | 29348.2 | 26521.6 | 10056.7 | 3111.8 | 2164.0 | 2801.5 | 1769.8 |
| 68° | 12380.1 | 13017.5 | 16724.9 | 27192.6 | 29474.0 | 26395.8 | 9335.4 | 2692.4 | 1996.2 | 2516.3 | 1534.9 |
| 70° | 8555.3 | 9008.3 | 12858.2 | 25666.0 | 28735.9 | 24064.0 | 6148.1 | 1543.3 | 1501.4 | 1727.8 | 1014.9 |
| 72.5° | 4193.8 | 4680.3 | 6877.8 | 20339.9 | 23409.8 | 18494.6 | 2801.5 | 1023.3 | 1140.7 | 1266.5 | 796.8 |
| 75° | 1669.1 | 1769.8 | 2709.2 | 10031.6 | 14628.0 | 11801.3 | 1467.8 | 771.7 | 981.3 | 989.7 | 629.1 |
| 77.5° | 956.2 | 1014.9 | 1501.4 | 3690.5 | 5485.5 | 5275.8 | 947.8 | 553.6 | 780.0 | 712.9 | 411.0 |
| 80° | 536.8 | 545.2 | 847.1 | 1945.9 | 3137.0 | 2809.8 | 645.8 | 402.6 | 595.5 | 503.3 | 276.8 |
| 82.5° | 268.4 | 302.0 | 536.8 | 1073.6 | 1744.6 | 1786.6 | 343.9 | 285.2 | 478.1 | 360.7 | 226.5 |
| 85° | 192.9 | 209.7 | 385.8 | 595.5 | 805.2 | 1207.8 | 209.7 | 142.6 | 360.7 | 243.2 | 159.4 |
| 87.5° | 100.7 | 125.8 | 243.2 | 293.6 | 327.1 | 411.0 | 100.7 | 67.1 | 201.3 | 142.6 | 83.9 |
| 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: P1459201

CATALOG NUMBER: GLAN-SB7C-940-U-T4LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 | 5519.0 |
| 2.5° | 5519.0 | 5326.1 | 4931.9 | 4470.6 | 4109.9 | 3740.9 | 3438.9 | 3153.7 | 3019.5 | 3002.8 | 3036.3 |
| 5° | 5493.9 | 5074.5 | 4177.0 | 3296.3 | 2575.0 | 2071.7 | 1794.9 | 1652.4 | 1576.9 | 1543.3 | 1551.7 |
| 7.5° | 5443.5 | 4806.1 | 3371.8 | 2231.1 | 1669.1 | 1451.1 | 1384.0 | 1358.8 | 1350.4 | 1350.4 | 1350.4 |
| 10° | 5393.2 | 4445.4 | 2583.4 | 1635.6 | 1367.2 | 1308.5 | 1291.7 | 1291.7 | 1283.3 | 1283.3 | 1291.7 |
| 12.5° | 5368.1 | 4109.9 | 2004.6 | 1367.2 | 1274.9 | 1249.8 | 1233.0 | 1224.6 | 1224.6 | 1224.6 | 1233.0 |
| 15° | 5309.3 | 3740.9 | 1618.8 | 1266.5 | 1216.2 | 1182.7 | 1174.3 | 1165.9 | 1165.9 | 1165.9 | 1165.9 |
| 17.5° | 5259.0 | 3380.2 | 1409.1 | 1199.4 | 1157.5 | 1123.9 | 1115.5 | 1107.2 | 1107.2 | 1115.5 | 1115.5 |
| 20° | 5183.5 | 3036.3 | 1266.5 | 1132.3 | 1098.8 | 1065.2 | 1056.8 | 1048.4 | 1056.8 | 1056.8 | 1056.8 |
| 22.5° | 5091.3 | 2751.1 | 1182.7 | 1082.0 | 1040.1 | 1006.5 | 1006.5 | 1006.5 | 1006.5 | 1006.5 | 1014.9 |
| 25° | 5032.6 | 2549.8 | 1123.9 | 1023.3 | 981.3 | 956.2 | 947.8 | 947.8 | 964.6 | 964.6 | 973.0 |
| 27.5° | 5124.8 | 2499.5 | 1132.3 | 1006.5 | 931.0 | 905.9 | 897.5 | 897.5 | 914.2 | 922.6 | 931.0 |
| 30° | 5401.6 | 2591.8 | 1233.0 | 1056.8 | 897.5 | 855.5 | 847.1 | 847.1 | 872.3 | 880.7 | 889.1 |
| 32.5° | 5720.3 | 2784.7 | 1384.0 | 1123.9 | 872.3 | 805.2 | 788.4 | 788.4 | 813.6 | 822.0 | 830.4 |
| 35° | 6156.5 | 3086.6 | 1585.3 | 1182.7 | 889.1 | 754.9 | 721.3 | 721.3 | 738.1 | 754.9 | 763.3 |
| 37.5° | 6718.5 | 3581.5 | 1820.1 | 1224.6 | 889.1 | 696.2 | 654.2 | 645.8 | 662.6 | 662.6 | 671.0 |
| 40° | 7305.6 | 4227.3 | 2063.3 | 1224.6 | 847.1 | 637.5 | 595.5 | 570.4 | 578.7 | 570.4 | 578.7 |
| 42.5° | 7632.7 | 4747.4 | 2273.0 | 1149.1 | 796.8 | 578.7 | 536.8 | 503.3 | 494.9 | 478.1 | 486.5 |
| 45° | 7817.2 | 4982.2 | 2214.3 | 1065.2 | 746.5 | 536.8 | 486.5 | 444.5 | 427.8 | 402.6 | 402.6 |
| 47.5° | 7817.2 | 5007.4 | 1895.6 | 998.1 | 696.2 | 503.3 | 436.2 | 394.2 | 369.1 | 343.9 | 352.3 |
| 50° | 7725.0 | 4780.9 | 1501.4 | 931.0 | 637.5 | 469.7 | 394.2 | 360.7 | 327.1 | 310.3 | 310.3 |
| 52.5° | 7339.1 | 4042.8 | 1149.1 | 847.1 | 570.4 | 427.8 | 352.3 | 318.7 | 285.2 | 276.8 | 276.8 |
| 55° | 6676.5 | 2969.2 | 931.0 | 763.3 | 511.6 | 394.2 | 318.7 | 293.6 | 260.0 | 243.2 | 243.2 |
| 57.5° | 5426.8 | 2029.8 | 771.7 | 687.8 | 452.9 | 352.3 | 285.2 | 260.0 | 218.1 | 201.3 | 201.3 |
| 60° | 4026.0 | 1325.2 | 654.2 | 603.9 | 385.8 | 318.7 | 251.6 | 218.1 | 184.5 | 167.8 | 159.4 |
| 62.5° | 2717.6 | 897.5 | 545.2 | 478.1 | 327.1 | 276.8 | 218.1 | 184.5 | 142.6 | 109.0 | 109.0 |
| 65° | 1694.3 | 696.2 | 452.9 | 377.4 | 285.2 | 243.2 | 184.5 | 142.6 | 100.7 | 75.5 | 67.1 |
| 67.5° | 973.0 | 562.0 | 369.1 | 293.6 | 243.2 | 192.9 | 142.6 | 117.4 | 83.9 | 58.7 | 50.3 |
| 68° | 897.5 | 536.8 | 343.9 | 276.8 | 226.5 | 184.5 | 134.2 | 109.0 | 75.5 | 50.3 | 50.3 |
| 70° | 729.7 | 478.1 | 293.6 | 226.5 | 192.9 | 151.0 | 117.4 | 92.3 | 58.7 | 33.6 | 33.6 |
| 72.5° | 645.8 | 402.6 | 251.6 | 176.1 | 134.2 | 125.8 | 92.3 | 67.1 | 41.9 | 25.2 | 16.8 |
| 75° | 528.4 | 318.7 | 201.3 | 134.2 | 92.3 | 92.3 | 67.1 | 41.9 | 16.8 | 0.0 | 0.0 |
| 77.5° | 343.9 | 234.9 | 159.4 | 83.9 | 50.3 | 58.7 | 41.9 | 16.8 | 0.0 | 0.0 | 0.0 |
| 80° | 226.5 | 176.1 | 109.0 | 41.9 | 25.2 | 25.2 | 8.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 159.4 | 117.4 | 67.1 | 16.8 | 8.4 | 8.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 100.7 | 50.3 | 25.2 | 8.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 41.9 | 16.8 | 8.4 | 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: SP1-2407-184-16

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

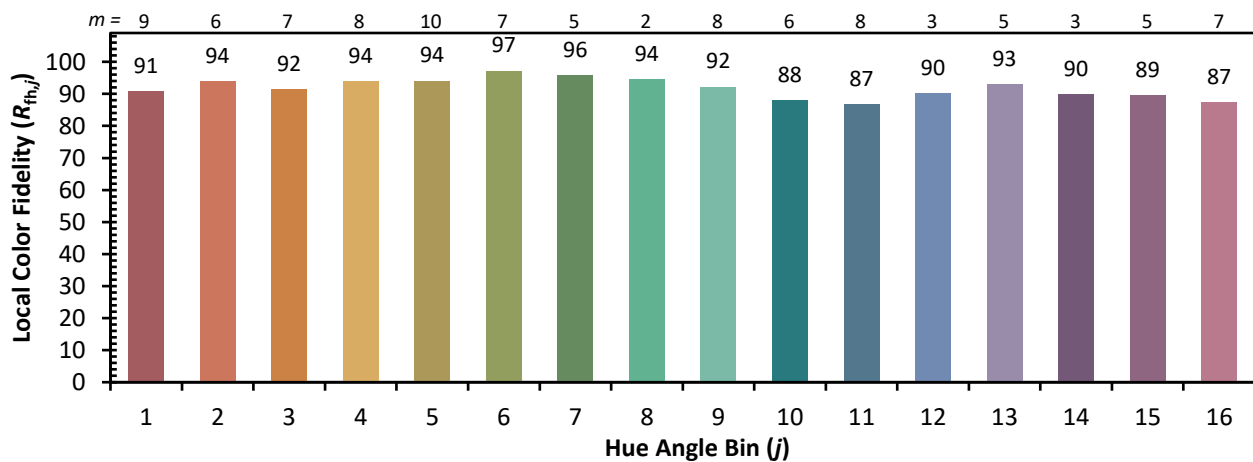


Individual Sample Fidelity Index ($R_{f,i}$)

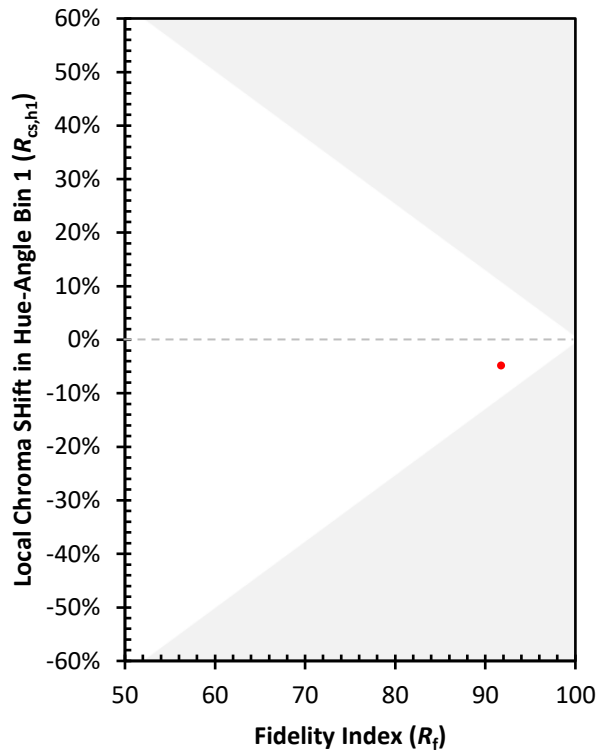
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 94 | CES51 = 96 | CES76 = 87 |
| CES02 = 62 | CES27 = 91 | CES52 = 98 | CES77 = 90 |
| CES03 = 31 | CES28 = 96 | CES53 = 95 | CES78 = 84 |
| CES04 = 69 | CES29 = 96 | CES54 = 94 | CES79 = 96 |
| CES05 = 49 | CES30 = 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)