

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: P1458714

Luminaire Tested: GLAN-SB2D-727-U-T4LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1458714
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB2D-727-U-T4LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 2xLight Square PACKAGE 70CRI 2700K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (52) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

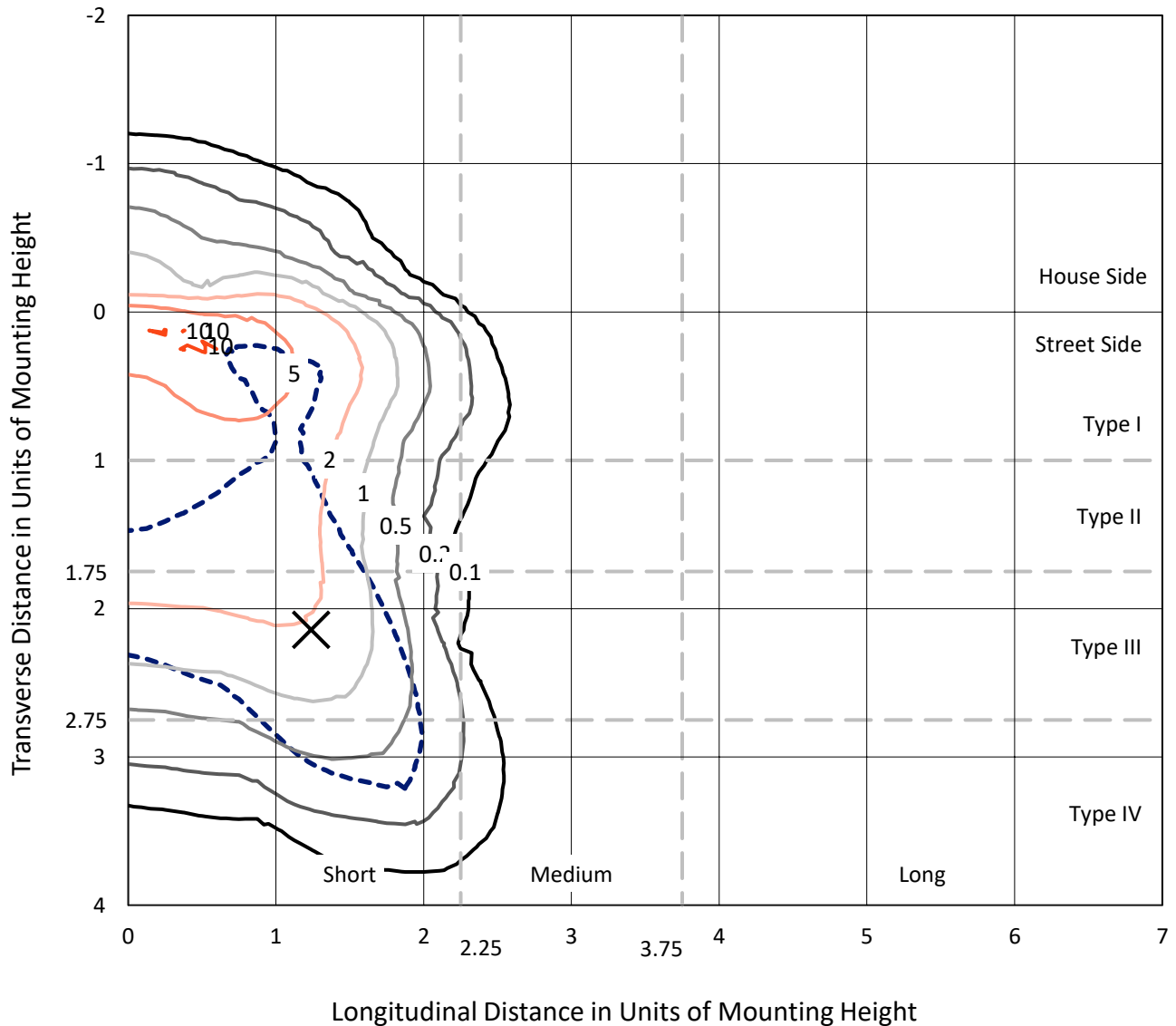
Lumens per Lamp: N/A
Luminaire Lumens: 13691.9 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 147.6
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

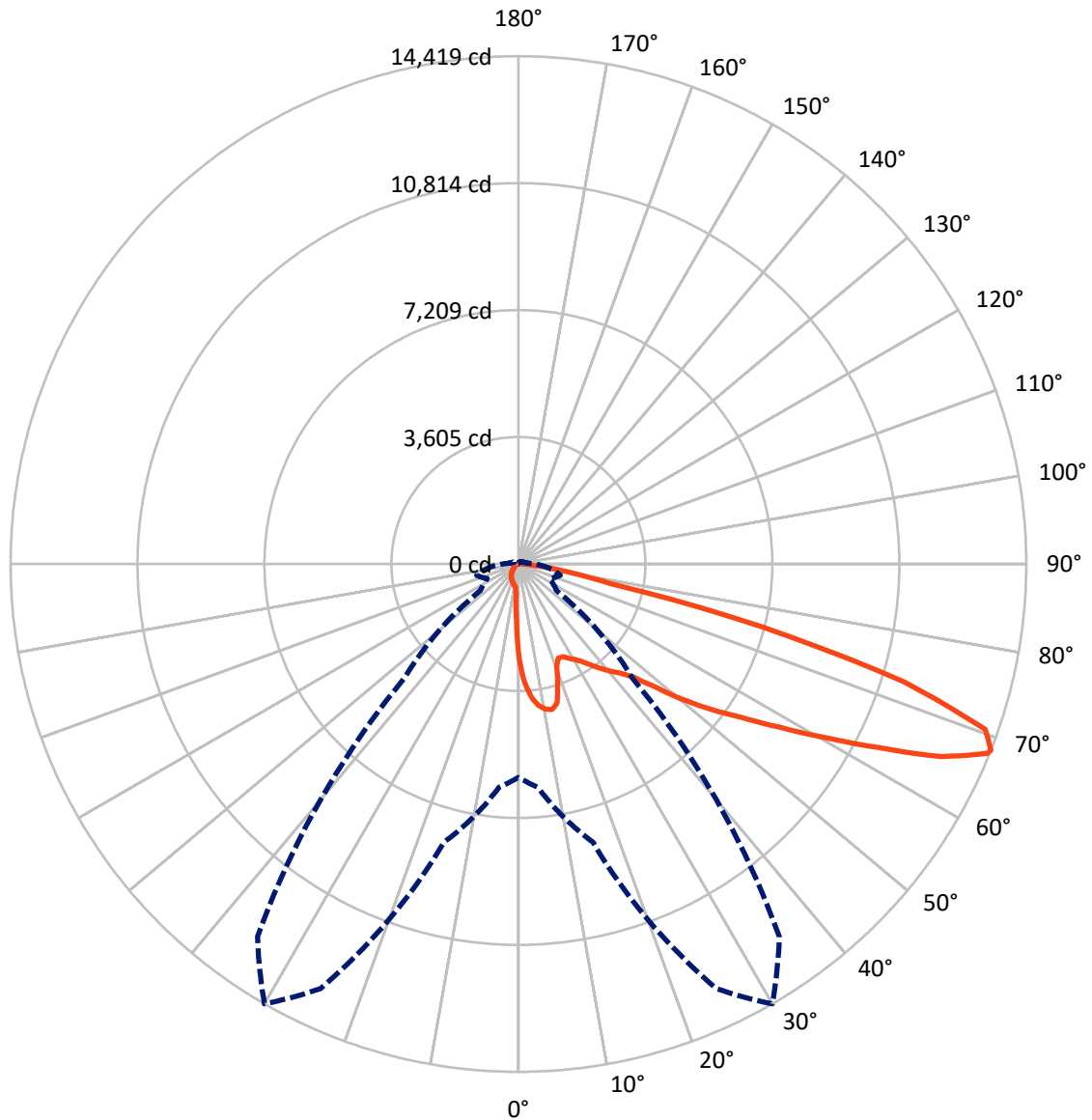
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.3 fc
 Type IV - Short - N/A

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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 | 1045.0 | 0.0 | 1045.0 |
| | % Fixture | 7.6 | 0.0 | 7.6 |
| Street Side | Lumens | 12646.9 | 0.0 | 12646.9 |
| | % Fixture | 92.4 | 0.0 | 92.4 |
| Total | Lumens | 13691.9 | 0.0 | 13691.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 233.0 | 1.7 |
| 10°-20° | 665.1 | 4.9 |
| 20°-30° | 1045.2 | 7.6 |
| 30°-40° | 1639.3 | 12.0 |
| 40°-50° | 2450.3 | 17.9 |
| 50°-60° | 3259.7 | 23.8 |
| 60°-70° | 3151.1 | 23.0 |
| 70°-80° | 1132.7 | 8.3 |
| 80°-90° | 115.6 | 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° | 13691.9 | 100.0 |
| 0°-180° | 13691.9 | 100.0 |



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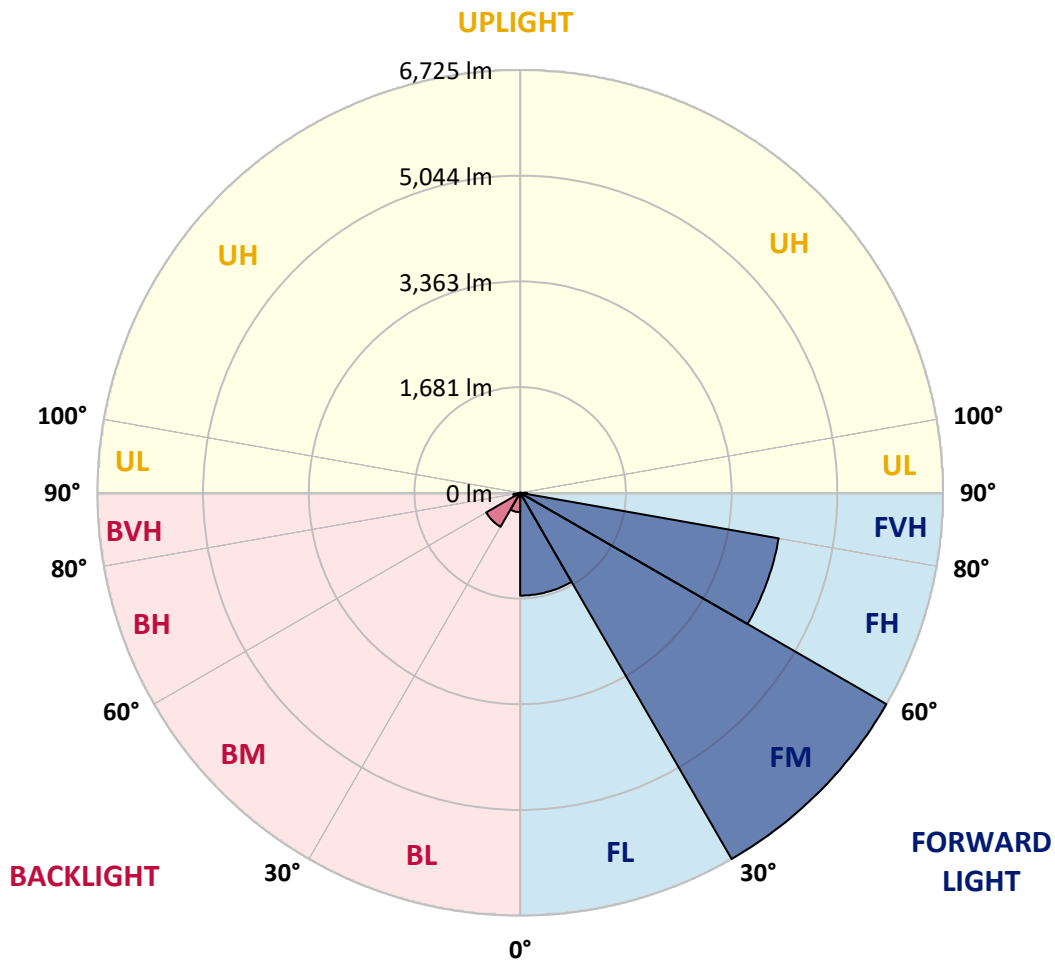
CATALOG NUMBER: GLAN-SB2D-727-U-T4LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1634.8 | 11.9 | | | |
| FM | (30°-60°) | 6725.5 | 49.1 | | | |
| FH | (60°-80°) | 4175.1 | 30.5 | | | G2/5000 |
| FVH | (80°-90°) | 111.5 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 308.5 | 2.3 | B1/500 | | |
| BM | (30°-60°) | 623.8 | 4.6 | B1/1000 | | |
| BH | (60°-80°) | 108.7 | 0.8 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 4.1 | 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 IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 30° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|--------|
| 0° | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 |
| 2.5° | 3450.8 | 3450.8 | 3426.2 | 3393.3 | 3356.4 | 3344.1 | 3274.3 | 3175.9 | 3073.3 | 2954.3 | 2782.0 |
| 5° | 3893.9 | 3889.8 | 3840.6 | 3840.6 | 3791.3 | 3746.2 | 3676.4 | 3532.8 | 3368.7 | 3155.3 | 2855.8 |
| 7.5° | 4090.9 | 4099.1 | 4078.6 | 4078.6 | 4049.8 | 4017.0 | 3976.0 | 3836.5 | 3643.6 | 3356.4 | 2929.7 |
| 10° | 4160.6 | 4164.7 | 4164.7 | 4193.4 | 4185.2 | 4181.1 | 4177.0 | 4099.1 | 3898.0 | 3561.6 | 3007.6 |
| 12.5° | 3992.4 | 4012.9 | 4070.3 | 4197.5 | 4238.6 | 4283.7 | 4345.3 | 4320.6 | 4181.1 | 3820.1 | 3126.6 |
| 15° | 3450.8 | 3454.9 | 3614.9 | 3930.8 | 4099.1 | 4271.4 | 4509.4 | 4558.6 | 4468.4 | 4099.1 | 3249.7 |
| 17.5° | 2847.6 | 2859.9 | 2987.1 | 3340.0 | 3610.8 | 4008.8 | 4603.8 | 4804.8 | 4772.0 | 4374.0 | 3364.6 |
| 20° | 2597.3 | 2613.7 | 2675.3 | 2896.8 | 3102.0 | 3471.3 | 4509.4 | 5038.7 | 5051.0 | 4648.9 | 3471.3 |
| 22.5° | 2539.9 | 2552.2 | 2601.4 | 2773.7 | 2900.9 | 3147.1 | 4189.3 | 5223.3 | 5367.0 | 4964.8 | 3598.5 |
| 25° | 2523.5 | 2535.8 | 2609.6 | 2798.4 | 2917.4 | 3122.5 | 3898.0 | 5321.8 | 5740.3 | 5293.1 | 3721.6 |
| 27.5° | 2511.1 | 2527.6 | 2646.5 | 2888.6 | 3028.1 | 3225.1 | 3844.7 | 5342.3 | 6097.3 | 5641.9 | 3922.6 |
| 30° | 2527.6 | 2552.2 | 2708.1 | 2983.0 | 3143.0 | 3364.6 | 3971.9 | 5362.8 | 6491.2 | 6039.9 | 4177.0 |
| 32.5° | 2593.2 | 2613.7 | 2802.5 | 3110.2 | 3294.8 | 3545.1 | 4189.3 | 5485.9 | 6864.6 | 6446.1 | 4419.1 |
| 35° | 2667.1 | 2695.8 | 2921.5 | 3290.7 | 3512.3 | 3795.4 | 4484.8 | 5728.0 | 7221.6 | 6831.8 | 4669.4 |
| 37.5° | 2757.3 | 2790.2 | 3061.0 | 3495.9 | 3750.3 | 4070.3 | 4804.8 | 6064.5 | 7537.5 | 7147.7 | 4919.7 |
| 40° | 2880.4 | 2917.4 | 3221.0 | 3713.4 | 3988.3 | 4308.3 | 5120.8 | 6396.8 | 7779.6 | 7336.5 | 5083.8 |
| 42.5° | 3364.6 | 3413.8 | 3541.0 | 3926.7 | 4234.5 | 4562.7 | 5432.6 | 6712.8 | 7869.9 | 7398.0 | 5116.7 |
| 45° | 4267.3 | 4316.5 | 4283.7 | 4357.6 | 4562.7 | 4870.5 | 5773.2 | 7016.4 | 7882.2 | 7381.6 | 5100.2 |
| 47.5° | 5174.1 | 5231.5 | 5202.8 | 5161.8 | 5206.9 | 5354.6 | 6154.8 | 7209.3 | 7816.5 | 7373.4 | 5100.2 |
| 50° | 6039.9 | 6007.0 | 6011.2 | 5998.8 | 6039.9 | 6117.8 | 6524.0 | 7246.2 | 7800.1 | 7451.4 | 5145.4 |
| 52.5° | 6503.5 | 6519.9 | 6622.5 | 6774.3 | 6864.6 | 6942.6 | 6946.7 | 7303.7 | 7681.1 | 7320.1 | 5092.0 |
| 55° | 6959.0 | 6991.8 | 7229.8 | 7488.3 | 7689.3 | 7837.1 | 7369.3 | 7266.7 | 6971.3 | 6881.0 | 4813.0 |
| 57.5° | 7471.9 | 7517.0 | 7853.5 | 8386.9 | 8739.8 | 8817.7 | 7787.8 | 6577.4 | 5900.4 | 6253.2 | 4271.4 |
| 60° | 8177.6 | 8231.0 | 8678.2 | 9478.3 | 10003.5 | 9843.5 | 7820.7 | 5481.8 | 4685.8 | 5190.5 | 3524.6 |
| 62.5° | 8731.6 | 8838.2 | 9646.6 | 10893.9 | 11472.5 | 10963.7 | 7209.3 | 4201.7 | 3274.3 | 3647.7 | 2572.7 |
| 65° | 8140.7 | 8345.9 | 9663.0 | 12514.7 | 13183.5 | 12280.8 | 6249.1 | 2868.1 | 1846.4 | 2359.3 | 1645.4 |
| 67.5° | 6581.5 | 6868.7 | 8579.7 | 13302.5 | 14357.0 | 12974.2 | 4919.7 | 1522.3 | 1058.6 | 1370.5 | 865.8 |
| 68° | 6056.3 | 6368.1 | 8181.7 | 13302.5 | 14418.6 | 12912.7 | 4566.8 | 1317.1 | 976.6 | 1231.0 | 750.9 |
| 70° | 4185.2 | 4406.8 | 6290.2 | 12555.7 | 14057.5 | 11772.0 | 3007.6 | 755.0 | 734.5 | 845.3 | 496.5 |
| 72.5° | 2051.6 | 2289.6 | 3364.6 | 9950.2 | 11452.0 | 9047.5 | 1370.5 | 500.6 | 558.0 | 619.6 | 389.8 |
| 75° | 816.5 | 865.8 | 1325.3 | 4907.4 | 7155.9 | 5773.2 | 718.1 | 377.5 | 480.1 | 484.2 | 307.7 |
| 77.5° | 467.8 | 496.5 | 734.5 | 1805.4 | 2683.5 | 2580.9 | 463.7 | 270.8 | 381.6 | 348.8 | 201.1 |
| 80° | 262.6 | 266.7 | 414.4 | 951.9 | 1534.6 | 1374.6 | 315.9 | 197.0 | 291.3 | 246.2 | 135.4 |
| 82.5° | 131.3 | 147.7 | 262.6 | 525.2 | 853.5 | 874.0 | 168.2 | 139.5 | 233.9 | 176.4 | 110.8 |
| 85° | 94.4 | 102.6 | 188.7 | 291.3 | 393.9 | 590.9 | 102.6 | 69.8 | 176.4 | 119.0 | 78.0 |
| 87.5° | 49.2 | 61.5 | 119.0 | 143.6 | 160.0 | 201.1 | 49.2 | 32.8 | 98.5 | 69.8 | 41.0 |
| 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: P1458714

CATALOG NUMBER: GLAN-SB2D-727-U-T4LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 | 2699.9 |
| 2.5° | 2699.9 | 2605.5 | 2412.7 | 2187.0 | 2010.6 | 1830.0 | 1682.3 | 1542.8 | 1477.1 | 1468.9 | 1485.3 |
| 5° | 2687.6 | 2482.4 | 2043.4 | 1612.5 | 1259.7 | 1013.5 | 878.1 | 808.3 | 771.4 | 755.0 | 759.1 |
| 7.5° | 2663.0 | 2351.1 | 1649.5 | 1091.4 | 816.5 | 709.8 | 677.0 | 664.7 | 660.6 | 660.6 | 660.6 |
| 10° | 2638.3 | 2174.7 | 1263.8 | 800.1 | 668.8 | 640.1 | 631.9 | 631.9 | 627.8 | 627.8 | 631.9 |
| 12.5° | 2626.0 | 2010.6 | 980.7 | 668.8 | 623.7 | 611.4 | 603.2 | 599.1 | 599.1 | 599.1 | 603.2 |
| 15° | 2597.3 | 1830.0 | 791.9 | 619.6 | 595.0 | 578.5 | 574.4 | 570.3 | 570.3 | 570.3 | 570.3 |
| 17.5° | 2572.7 | 1653.6 | 689.3 | 586.8 | 566.2 | 549.8 | 545.7 | 541.6 | 541.6 | 545.7 | 545.7 |
| 20° | 2535.8 | 1485.3 | 619.6 | 553.9 | 537.5 | 521.1 | 517.0 | 512.9 | 517.0 | 517.0 | 517.0 |
| 22.5° | 2490.6 | 1345.8 | 578.5 | 529.3 | 508.8 | 492.4 | 492.4 | 492.4 | 492.4 | 492.4 | 496.5 |
| 25° | 2461.9 | 1247.4 | 549.8 | 500.6 | 480.1 | 467.8 | 463.7 | 463.7 | 471.9 | 471.9 | 476.0 |
| 27.5° | 2507.0 | 1222.7 | 553.9 | 492.4 | 455.5 | 443.1 | 439.0 | 439.0 | 447.2 | 451.3 | 455.5 |
| 30° | 2642.4 | 1267.9 | 603.2 | 517.0 | 439.0 | 418.5 | 414.4 | 414.4 | 426.7 | 430.8 | 434.9 |
| 32.5° | 2798.4 | 1362.3 | 677.0 | 549.8 | 426.7 | 393.9 | 385.7 | 385.7 | 398.0 | 402.1 | 406.2 |
| 35° | 3011.7 | 1510.0 | 775.5 | 578.5 | 434.9 | 369.3 | 352.9 | 352.9 | 361.1 | 369.3 | 373.4 |
| 37.5° | 3286.6 | 1752.1 | 890.4 | 599.1 | 434.9 | 340.6 | 320.0 | 315.9 | 324.2 | 324.2 | 328.3 |
| 40° | 3573.9 | 2068.0 | 1009.4 | 599.1 | 414.4 | 311.8 | 291.3 | 279.0 | 283.1 | 279.0 | 283.1 |
| 42.5° | 3733.9 | 2322.4 | 1112.0 | 562.1 | 389.8 | 283.1 | 262.6 | 246.2 | 242.1 | 233.9 | 238.0 |
| 45° | 3824.2 | 2437.3 | 1083.2 | 521.1 | 365.2 | 262.6 | 238.0 | 217.5 | 209.3 | 197.0 | 197.0 |
| 47.5° | 3824.2 | 2449.6 | 927.3 | 488.3 | 340.6 | 246.2 | 213.4 | 192.8 | 180.5 | 168.2 | 172.3 |
| 50° | 3779.0 | 2338.8 | 734.5 | 455.5 | 311.8 | 229.8 | 192.8 | 176.4 | 160.0 | 151.8 | 151.8 |
| 52.5° | 3590.3 | 1977.7 | 562.1 | 414.4 | 279.0 | 209.3 | 172.3 | 155.9 | 139.5 | 135.4 | 135.4 |
| 55° | 3266.1 | 1452.5 | 455.5 | 373.4 | 250.3 | 192.8 | 155.9 | 143.6 | 127.2 | 119.0 | 119.0 |
| 57.5° | 2654.8 | 993.0 | 377.5 | 336.5 | 221.6 | 172.3 | 139.5 | 127.2 | 106.7 | 98.5 | 98.5 |
| 60° | 1969.5 | 648.3 | 320.0 | 295.4 | 188.7 | 155.9 | 123.1 | 106.7 | 90.3 | 82.1 | 78.0 |
| 62.5° | 1329.4 | 439.0 | 266.7 | 233.9 | 160.0 | 135.4 | 106.7 | 90.3 | 69.8 | 53.3 | 53.3 |
| 65° | 828.8 | 340.6 | 221.6 | 184.6 | 139.5 | 119.0 | 90.3 | 69.8 | 49.2 | 36.9 | 32.8 |
| 67.5° | 476.0 | 274.9 | 180.5 | 143.6 | 119.0 | 94.4 | 69.8 | 57.4 | 41.0 | 28.7 | 24.6 |
| 68° | 439.0 | 262.6 | 168.2 | 135.4 | 110.8 | 90.3 | 65.7 | 53.3 | 36.9 | 24.6 | 24.6 |
| 70° | 357.0 | 233.9 | 143.6 | 110.8 | 94.4 | 73.9 | 57.4 | 45.1 | 28.7 | 16.4 | 16.4 |
| 72.5° | 315.9 | 197.0 | 123.1 | 86.2 | 65.7 | 61.5 | 45.1 | 32.8 | 20.5 | 12.3 | 8.2 |
| 75° | 258.5 | 155.9 | 98.5 | 65.7 | 45.1 | 45.1 | 32.8 | 20.5 | 8.2 | 0.0 | 0.0 |
| 77.5° | 168.2 | 114.9 | 78.0 | 41.0 | 24.6 | 28.7 | 20.5 | 8.2 | 0.0 | 0.0 | 0.0 |
| 80° | 110.8 | 86.2 | 53.3 | 20.5 | 12.3 | 12.3 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 78.0 | 57.4 | 32.8 | 8.2 | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 49.2 | 24.6 | 12.3 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 20.5 | 8.2 | 4.1 | 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: SP1-2407-184-3

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-727-U-5WQ

Data in this report applies to families of products including GSS-SB1A-727-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-3
 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-727-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2672
 CIE u': 0.2638
 CIE v': 0.5276
 Duv: -0.0002
 CIE x: 0.4619
 CIE y: 0.4106
 CIE z: 0.1275
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 584
 Purity: 61.88407
 Rf: 67.9
 Rg: 98.6

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.1 | | |
| R1: | 68.3 | R9: | -27.8 |
| R2: | 79.8 | R10: | 54.4 |
| R3: | 91.2 | R11: | 65.8 |
| R4: | 69.4 | R12: | 45.6 |
| R5: | 66.5 | R13: | 69.8 |
| R6: | 72.6 | R14: | 94.5 |
| R7: | 77.0 | R15: | 60.1 |
| R8: | 44.1 | | |



Test Conditions

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

REPORT NUMBER: SP1-2407-184-3

| 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



CCT = 2672K
 CIE x = 0.4619
 CIE y = 0.4106
 Duv = -0.0002

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-3

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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.02

| 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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

| 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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 67.9$
 $R_g = 98.6$
 $CIE R_a = 71.1$
 $R_9 = -27.8$



Color Vector Graphics

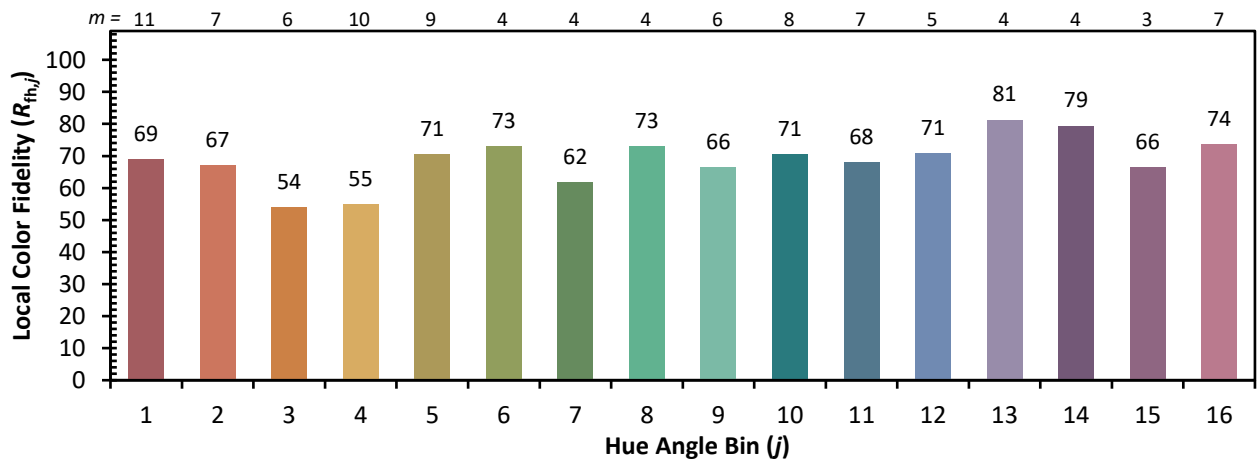


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 53 | CES51 = 75 | CES76 = 51 |
| CES02 = 63 | CES27 = 70 | CES52 = 80 | CES77 = 79 |
| CES03 = 31 | CES28 = 81 | CES53 = 64 | CES78 = 58 |
| CES04 = 71 | CES29 = 37 | CES54 = 73 | CES79 = 82 |
| CES05 = 50 | CES30 = 33 | CES55 = 69 | CES80 = 82 |
| CES06 = 52 | CES31 = 44 | CES56 = 60 | CES81 = 69 |
| CES07 = 42 | CES32 = 47 | CES57 = 54 | CES82 = 92 |
| CES08 = 41 | CES33 = 45 | CES58 = 59 | CES83 = 82 |
| CES09 = 29 | CES34 = 67 | CES59 = 85 | CES84 = 92 |
| CES10 = 77 | CES35 = 84 | CES60 = 86 | CES85 = 87 |
| CES11 = 60 | CES36 = 68 | CES61 = 86 | CES86 = 60 |
| CES12 = 66 | CES37 = 77 | CES62 = 59 | CES87 = 79 |
| CES13 = 44 | CES38 = 40 | CES63 = 66 | CES88 = 70 |
| CES14 = 74 | CES39 = 88 | CES64 = 69 | CES89 = 66 |
| CES15 = 72 | CES40 = 82 | CES65 = 64 | CES90 = 64 |
| CES16 = 48 | CES41 = 70 | CES66 = 65 | CES91 = 81 |
| CES17 = 51 | CES42 = 76 | CES67 = 64 | CES92 = 69 |
| CES18 = 57 | CES43 = 63 | CES68 = 73 | CES93 = 81 |
| CES19 = 73 | CES44 = 97 | CES69 = 83 | CES94 = 53 |
| CES20 = 67 | CES45 = 74 | CES70 = 64 | CES95 = 77 |
| CES21 = 88 | CES46 = 67 | CES71 = 60 | CES96 = 79 |
| CES22 = 80 | CES47 = 55 | CES72 = 87 | CES97 = 78 |
| CES23 = 92 | CES48 = 42 | CES73 = 57 | CES98 = 69 |
| CES24 = 92 | CES49 = 65 | CES74 = 84 | CES99 = 60 |
| CES25 = 73 | CES50 = 74 | CES75 = 60 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)