

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

Cooper Lighting Solutions Photometric Lab
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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: P1458319

Luminaire Tested: GLAN-SB3A-827-U-T3LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1458319
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB3A-827-U-T3LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 3xLight Square PACKAGE 80CRI 2700K FIXTURE w/ TYPE III LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (78) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

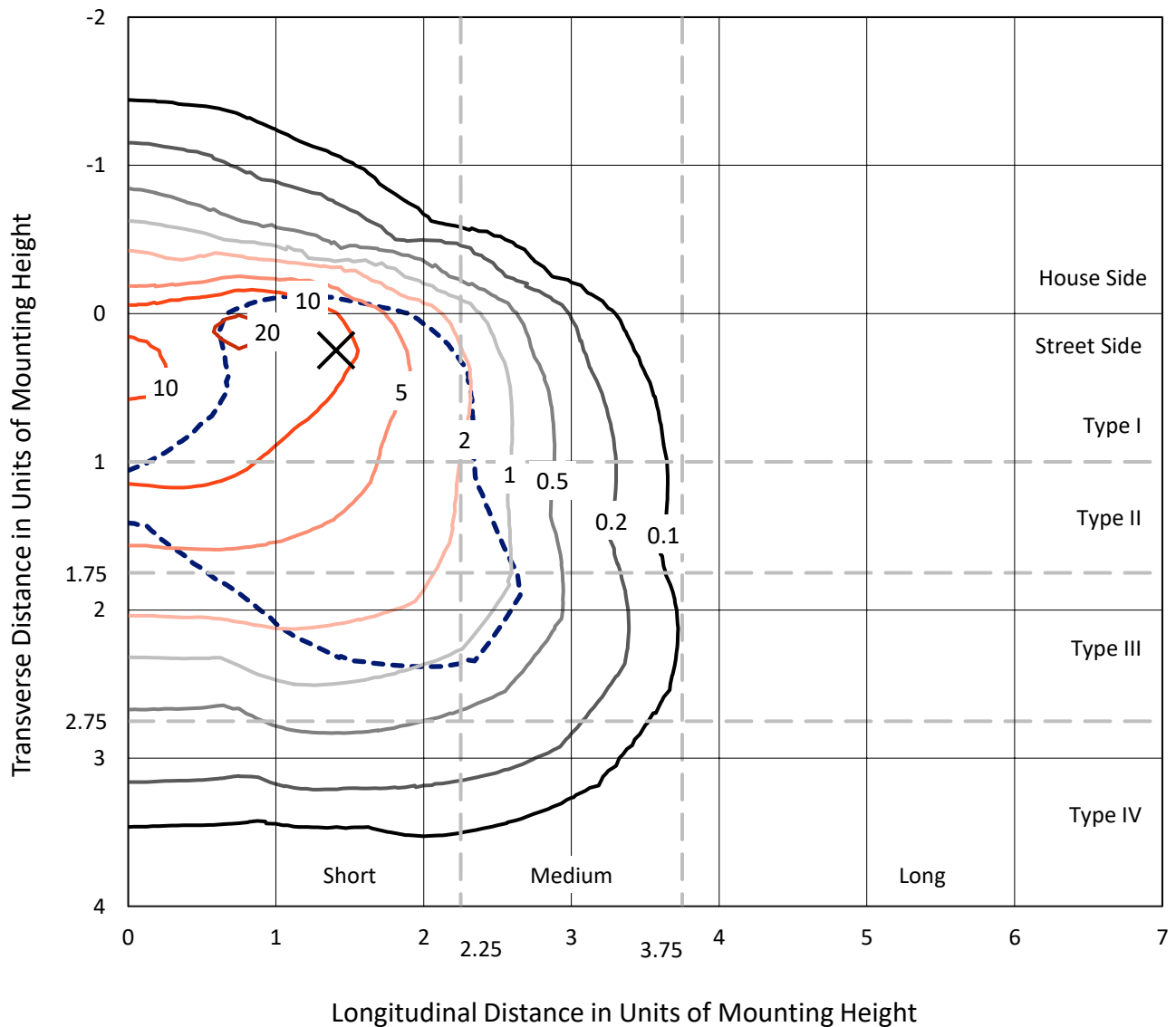
Lumens per Lamp: N/A
Luminaire Lumens: 8946 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 84.7
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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Iso-Footcandle Lines of Horizontal Illumination

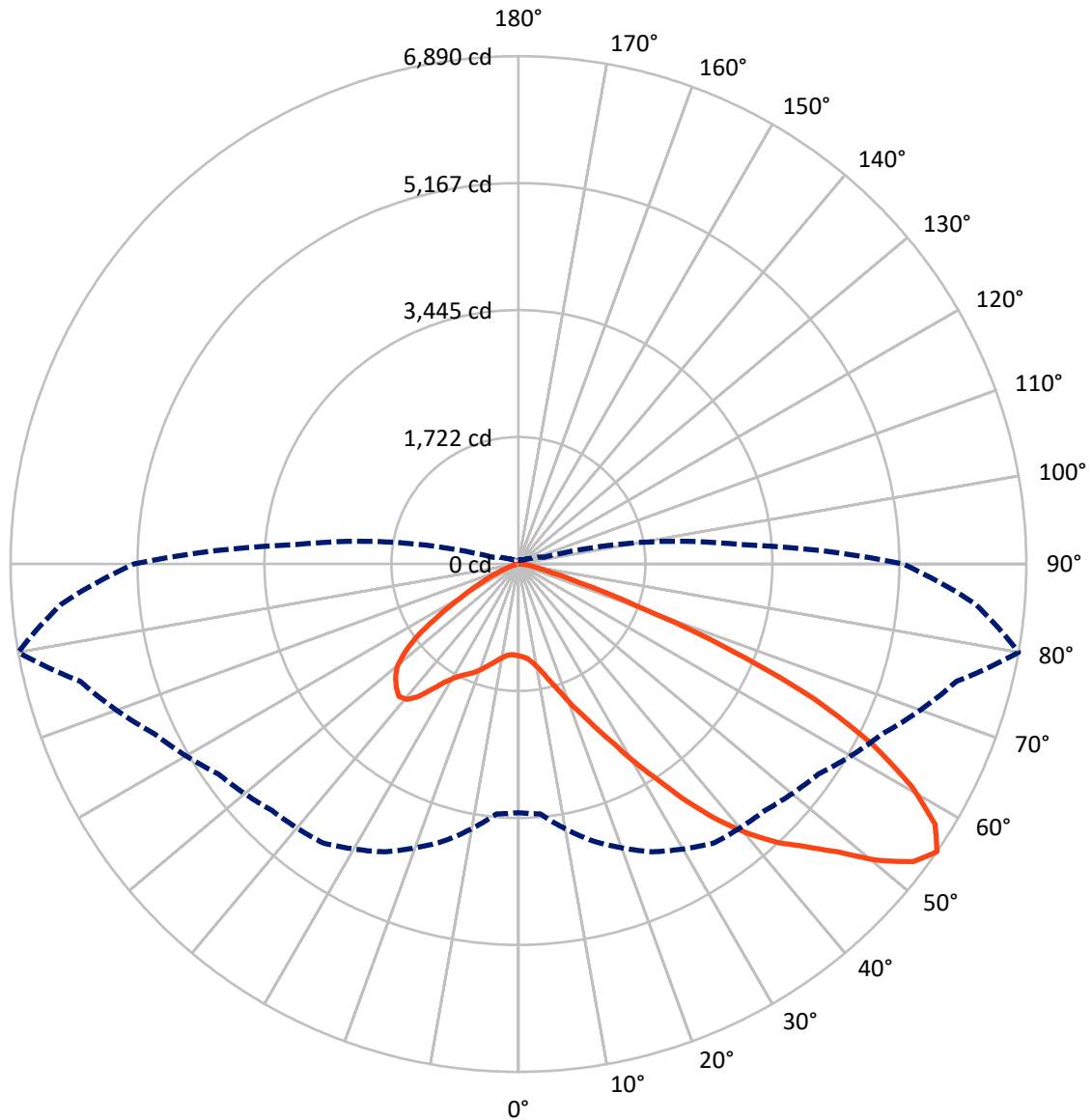
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1087.5 | 0.0 | 1087.5 |
| | % Fixture | 12.2 | 0.0 | 12.2 |
| Street Side | Lumens | 7858.5 | 0.0 | 7858.5 |
| | % Fixture | 87.8 | 0.0 | 87.8 |
| Total | Lumens | 8946.0 | 0.0 | 8946.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 104.6 | 1.2 |
| 10°-20° | 275.7 | 3.1 |
| 20°-30° | 539.8 | 6.0 |
| 30°-40° | 1098.1 | 12.3 |
| 40°-50° | 1851.2 | 20.7 |
| 50°-60° | 2365.3 | 26.4 |
| 60°-70° | 2019.4 | 22.6 |
| 70°-80° | 645.3 | 7.2 |
| 80°-90° | 46.6 | 0.5 |
| 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° | 8946.0 | 100.0 |
| 0°-180° | 8946.0 | 100.0 |



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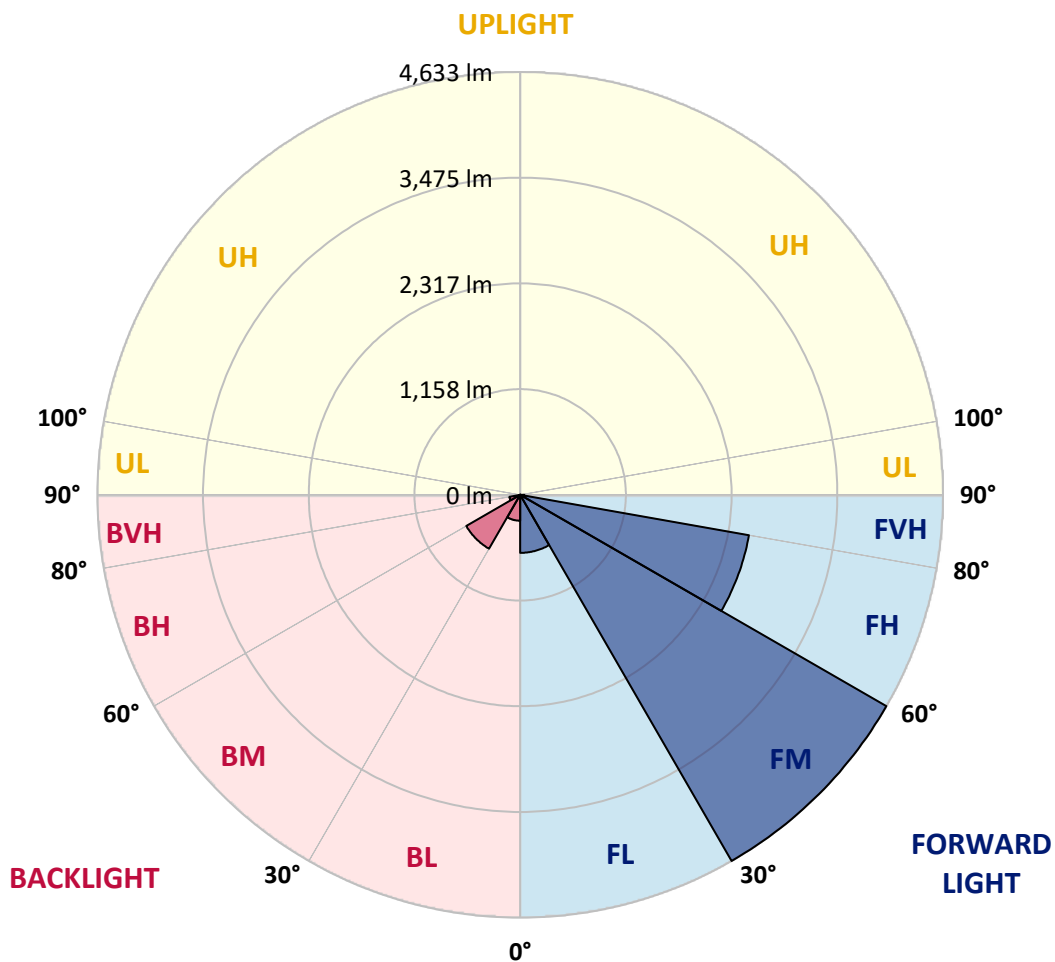
CATALOG NUMBER: GLAN-SB3A-827-U-T3LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 636.1 | 7.1 | | | |
| FM | (30°-60°) | 4633.1 | 51.8 | | | |
| FH | (60°-80°) | 2545.2 | 28.5 | | | G2/5000 |
| FVH | (80°-90°) | 44.2 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 284.0 | 3.2 | B1/500 | | |
| BM | (30°-60°) | 681.6 | 7.6 | B1/1000 | | |
| BH | (60°-80°) | 119.5 | 1.3 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 2.4 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 80° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 |
| 2.5° | 1253.8 | 1256.3 | 1253.8 | 1256.3 | 1261.4 | 1258.9 | 1269.1 | 1266.5 | 1266.5 | 1264.0 | 1253.8 |
| 5° | 1182.6 | 1185.1 | 1190.2 | 1202.9 | 1220.7 | 1238.5 | 1261.4 | 1276.7 | 1291.9 | 1289.4 | 1279.2 |
| 7.5° | 1042.7 | 1047.8 | 1068.1 | 1093.6 | 1152.1 | 1205.5 | 1264.0 | 1302.1 | 1335.2 | 1345.3 | 1337.7 |
| 10° | 963.9 | 969.0 | 981.7 | 1007.1 | 1060.5 | 1149.5 | 1264.0 | 1342.8 | 1401.3 | 1421.6 | 1424.2 |
| 12.5° | 956.2 | 958.8 | 969.0 | 996.9 | 1042.7 | 1119.0 | 1261.4 | 1396.2 | 1495.4 | 1525.9 | 1536.1 |
| 15° | 961.3 | 966.4 | 976.6 | 999.5 | 1052.9 | 1139.3 | 1281.8 | 1480.1 | 1620.0 | 1663.2 | 1665.8 |
| 17.5° | 981.7 | 986.8 | 999.5 | 1024.9 | 1083.4 | 1192.8 | 1345.3 | 1566.6 | 1770.1 | 1818.4 | 1846.4 |
| 20° | 1022.4 | 1024.9 | 1040.2 | 1073.2 | 1139.3 | 1258.9 | 1439.4 | 1683.6 | 1950.6 | 2021.8 | 2042.2 |
| 22.5° | 1075.8 | 1083.4 | 1103.7 | 1144.4 | 1228.4 | 1350.4 | 1569.1 | 1826.0 | 2149.0 | 2222.7 | 2258.4 |
| 25° | 1134.3 | 1144.4 | 1175.0 | 1241.1 | 1347.9 | 1490.3 | 1729.4 | 2014.2 | 2383.0 | 2472.0 | 2520.3 |
| 27.5° | 1253.8 | 1256.3 | 1276.7 | 1360.6 | 1497.9 | 1673.4 | 1932.8 | 2255.8 | 2657.6 | 2761.9 | 2815.3 |
| 30° | 1515.7 | 1518.3 | 1500.5 | 1523.4 | 1663.2 | 1889.6 | 2171.9 | 2538.1 | 2978.1 | 3123.0 | 3166.3 |
| 32.5° | 1836.2 | 1848.9 | 1846.4 | 1831.1 | 1894.7 | 2105.8 | 2456.7 | 2876.3 | 3354.5 | 3507.1 | 3547.7 |
| 35° | 2199.9 | 2230.4 | 2222.7 | 2217.7 | 2225.3 | 2383.0 | 2782.2 | 3250.2 | 3781.7 | 3967.4 | 4000.4 |
| 37.5° | 2555.9 | 2563.5 | 2599.1 | 2642.4 | 2647.5 | 2756.8 | 3158.6 | 3646.9 | 4178.5 | 4415.0 | 4465.8 |
| 40° | 2830.6 | 2856.0 | 2945.0 | 3031.5 | 3120.5 | 3207.0 | 3468.9 | 3967.4 | 4493.8 | 4811.7 | 4834.6 |
| 42.5° | 3044.2 | 3105.2 | 3234.9 | 3369.7 | 3550.3 | 3646.9 | 3763.9 | 4193.7 | 4750.7 | 5165.2 | 5155.0 |
| 45° | 3303.6 | 3329.0 | 3512.1 | 3690.2 | 3873.3 | 4020.8 | 4018.2 | 4384.5 | 4951.6 | 5467.9 | 5404.3 |
| 47.5° | 3479.1 | 3509.6 | 3758.8 | 3967.4 | 4155.6 | 4229.3 | 4244.6 | 4590.5 | 5228.8 | 5834.1 | 5684.0 |
| 50° | 3573.2 | 3626.6 | 3898.7 | 4163.2 | 4366.7 | 4389.5 | 4458.2 | 4860.0 | 5592.5 | 6319.8 | 6037.5 |
| 52.5° | 3583.4 | 3634.2 | 3947.0 | 4287.8 | 4509.1 | 4554.8 | 4671.8 | 5165.2 | 5946.0 | 6708.9 | 6241.0 |
| 55° | 3372.3 | 3402.8 | 3888.5 | 4308.2 | 4621.0 | 4727.8 | 4966.8 | 5447.5 | 6152.0 | 6889.5 | 6223.2 |
| 57.5° | 3173.9 | 3204.4 | 3626.6 | 4272.6 | 4735.4 | 4954.1 | 5282.2 | 5640.8 | 5991.7 | 6665.7 | 5826.4 |
| 60° | 3003.5 | 3018.8 | 3402.8 | 4107.2 | 4778.6 | 5175.4 | 5554.3 | 5450.1 | 5577.2 | 6129.1 | 5147.4 |
| 62.5° | 2683.1 | 2693.2 | 3148.5 | 3809.7 | 4692.2 | 5345.8 | 5648.4 | 5045.7 | 5122.0 | 5389.0 | 4348.9 |
| 65° | 2026.9 | 2065.1 | 2482.2 | 3585.9 | 4549.8 | 5424.6 | 5429.7 | 4552.3 | 4473.5 | 4409.9 | 3420.6 |
| 67.5° | 1375.9 | 1419.1 | 1670.9 | 3224.8 | 4318.3 | 5457.7 | 5005.0 | 3914.0 | 3407.9 | 3079.8 | 2240.5 |
| 70° | 1098.7 | 1098.7 | 1185.1 | 2591.5 | 3769.0 | 5035.5 | 4478.6 | 2955.2 | 2164.3 | 1701.4 | 1200.4 |
| 72.5° | 722.3 | 724.8 | 806.2 | 1645.4 | 2672.9 | 3840.2 | 3652.0 | 1709.0 | 1124.1 | 867.2 | 592.6 |
| 75° | 261.9 | 261.9 | 353.5 | 658.7 | 1414.0 | 2286.3 | 2225.3 | 816.4 | 610.4 | 473.0 | 358.6 |
| 77.5° | 139.9 | 145.0 | 170.4 | 272.1 | 541.7 | 930.8 | 869.8 | 417.1 | 345.9 | 295.0 | 223.8 |
| 80° | 94.1 | 96.6 | 114.4 | 167.9 | 261.9 | 358.6 | 279.8 | 234.0 | 234.0 | 198.4 | 150.0 |
| 82.5° | 50.9 | 53.4 | 76.3 | 109.4 | 139.9 | 167.9 | 134.8 | 137.3 | 165.3 | 134.8 | 86.5 |
| 85° | 35.6 | 35.6 | 58.5 | 78.8 | 78.8 | 81.4 | 58.5 | 86.5 | 96.6 | 83.9 | 58.5 |
| 87.5° | 20.3 | 20.3 | 33.1 | 38.1 | 38.1 | 35.6 | 17.8 | 30.5 | 38.1 | 43.2 | 25.4 |
| 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: P1458319

CATALOG NUMBER: GLAN-SB3A-827-U-T3LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 | 1246.2 |
| 2.5° | 1251.2 | 1243.6 | 1228.4 | 1197.8 | 1182.6 | 1162.2 | 1144.4 | 1121.5 | 1116.5 | 1113.9 | 1103.7 |
| 5° | 1271.6 | 1256.3 | 1210.6 | 1144.4 | 1088.5 | 1035.1 | 981.7 | 951.2 | 925.7 | 913.0 | 910.5 |
| 7.5° | 1322.5 | 1291.9 | 1208.0 | 1091.0 | 986.8 | 895.2 | 816.4 | 747.7 | 712.1 | 681.6 | 684.1 |
| 10° | 1398.8 | 1350.4 | 1213.1 | 1040.2 | 885.0 | 737.5 | 623.1 | 523.9 | 452.7 | 419.6 | 417.1 |
| 12.5° | 1500.5 | 1431.8 | 1230.9 | 989.3 | 760.4 | 554.4 | 409.5 | 351.0 | 335.7 | 333.2 | 330.6 |
| 15° | 1625.1 | 1528.5 | 1248.7 | 923.2 | 592.6 | 384.0 | 333.2 | 320.4 | 317.9 | 315.4 | 315.4 |
| 17.5° | 1775.1 | 1640.4 | 1258.9 | 811.3 | 432.3 | 330.6 | 312.8 | 305.2 | 302.6 | 300.1 | 300.1 |
| 20° | 1963.3 | 1765.0 | 1271.6 | 668.9 | 366.2 | 317.9 | 297.6 | 287.4 | 284.8 | 284.8 | 282.3 |
| 22.5° | 2149.0 | 1904.8 | 1261.4 | 544.2 | 353.5 | 302.6 | 279.8 | 269.6 | 264.5 | 264.5 | 261.9 |
| 25° | 2362.6 | 2047.3 | 1230.9 | 490.8 | 351.0 | 289.9 | 261.9 | 246.7 | 239.1 | 236.5 | 236.5 |
| 27.5° | 2606.8 | 2210.0 | 1182.6 | 493.4 | 351.0 | 279.8 | 239.1 | 218.7 | 213.6 | 208.5 | 208.5 |
| 30° | 2886.5 | 2408.4 | 1147.0 | 526.4 | 356.0 | 269.6 | 218.7 | 193.3 | 185.7 | 180.6 | 183.1 |
| 32.5° | 3207.0 | 2629.7 | 1144.4 | 579.8 | 363.7 | 254.3 | 195.8 | 167.9 | 160.2 | 157.7 | 160.2 |
| 35° | 3570.6 | 2904.3 | 1202.9 | 620.5 | 343.3 | 221.3 | 167.9 | 145.0 | 137.3 | 137.3 | 139.9 |
| 37.5° | 3975.0 | 3219.7 | 1281.8 | 610.4 | 277.2 | 175.5 | 145.0 | 127.2 | 119.5 | 122.1 | 124.6 |
| 40° | 4343.8 | 3466.4 | 1294.5 | 521.4 | 208.5 | 150.0 | 124.6 | 111.9 | 106.8 | 109.4 | 111.9 |
| 42.5° | 4623.5 | 3664.7 | 1172.4 | 404.4 | 175.5 | 127.2 | 106.8 | 96.6 | 94.1 | 99.2 | 99.2 |
| 45° | 4849.9 | 3743.6 | 979.1 | 300.1 | 155.1 | 109.4 | 94.1 | 89.0 | 83.9 | 86.5 | 86.5 |
| 47.5° | 5086.4 | 3756.3 | 798.6 | 241.6 | 137.3 | 99.2 | 86.5 | 81.4 | 76.3 | 76.3 | 76.3 |
| 50° | 5315.3 | 3725.8 | 610.4 | 213.6 | 127.2 | 89.0 | 78.8 | 73.8 | 68.7 | 66.1 | 66.1 |
| 52.5° | 5371.2 | 3481.6 | 447.6 | 198.4 | 117.0 | 83.9 | 73.8 | 68.7 | 63.6 | 61.0 | 61.0 |
| 55° | 5216.1 | 3018.8 | 351.0 | 178.0 | 106.8 | 76.3 | 68.7 | 63.6 | 56.0 | 53.4 | 53.4 |
| 57.5° | 4704.9 | 2301.6 | 279.8 | 152.6 | 96.6 | 73.8 | 63.6 | 58.5 | 50.9 | 48.3 | 48.3 |
| 60° | 4041.1 | 1632.7 | 226.3 | 124.6 | 89.0 | 66.1 | 58.5 | 50.9 | 45.8 | 40.7 | 40.7 |
| 62.5° | 3306.1 | 1172.4 | 183.1 | 104.3 | 83.9 | 58.5 | 53.4 | 45.8 | 35.6 | 28.0 | 28.0 |
| 65° | 2535.6 | 841.8 | 142.4 | 83.9 | 76.3 | 50.9 | 45.8 | 38.1 | 28.0 | 20.3 | 20.3 |
| 67.5° | 1640.4 | 544.2 | 106.8 | 73.8 | 58.5 | 43.2 | 35.6 | 30.5 | 25.4 | 17.8 | 15.3 |
| 70° | 864.7 | 317.9 | 78.8 | 63.6 | 43.2 | 33.1 | 30.5 | 25.4 | 20.3 | 12.7 | 12.7 |
| 72.5° | 447.6 | 208.5 | 58.5 | 56.0 | 33.1 | 22.9 | 25.4 | 20.3 | 15.3 | 7.6 | 7.6 |
| 75° | 287.4 | 139.9 | 43.2 | 45.8 | 20.3 | 17.8 | 17.8 | 12.7 | 7.6 | 5.1 | 2.5 |
| 77.5° | 185.7 | 94.1 | 30.5 | 38.1 | 12.7 | 10.2 | 10.2 | 5.1 | 2.5 | 0.0 | 0.0 |
| 80° | 109.4 | 58.5 | 20.3 | 25.4 | 5.1 | 5.1 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 56.0 | 30.5 | 10.2 | 10.2 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 35.6 | 15.3 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 17.8 | 5.1 | 2.5 | 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: SP1-2407-184-8

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-827-U-5WQ

Data in this report applies to families of products including GSS-SB1A-827-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-8
 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-827-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2756
 CIE u': 0.2599
 CIE v': 0.5271
 Duv: 0.0006
 CIE x: 0.4563
 CIE y: 0.4112
 CIE z: 0.1325
 Peak Wavelength (nm): 609
 Dominant Wavelength (nm): 583
 Purity: 60.41121
 Rf: 82.2
 Rg: 99.9

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 82.9 | | |
| R1: | 81.6 | R9: | 10.8 |
| R2: | 88.8 | R10: | 74.8 |
| R3: | 96.0 | R11: | 84.3 |
| R4: | 83.4 | R12: | 72.1 |
| R5: | 81.4 | R13: | 82.9 |
| R6: | 87.0 | R14: | 97.3 |
| R7: | 84.0 | R15: | 73.7 |
| R8: | 60.8 | | |



Test Conditions

Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-8

| 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 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-8

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 | 158 | NR | 620 | 959 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 211 | NR | 625 | 918 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 264 | NR | 630 | 873 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 816 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 363 | NR | 640 | 755 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 403 | NR | 645 | 689 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 435 | NR | 650 | 626 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 459 | NR | 655 | 564 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 481 | NR | 660 | 503 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 501 | NR | 665 | 447 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 519 | NR | 670 | 392 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 542 | NR | 675 | 343 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 565 | NR | 680 | 299 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 93 | NR | 555 | 593 | NR | 685 | 260 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 156 | NR | 560 | 624 | NR | 690 | 225 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 250 | NR | 565 | 662 | NR | 695 | 194 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 391 | NR | 570 | 707 | NR | 700 | 166 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 460 | NR | 575 | 756 | NR | 705 | 143 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 293 | NR | 580 | 810 | NR | 710 | 122 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 188 | NR | 585 | 860 | NR | 715 | 105 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 149 | NR | 590 | 910 | NR | 720 | 90 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 103 | NR | 595 | 950 | NR | 725 | 77 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 80 | NR | 600 | 980 | NR | 730 | 66 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 82 | NR | 605 | 995 | NR | 735 | 56 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 92 | NR | 610 | 998 | NR | 740 | 48 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 116 | NR | 615 | 985 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.2

| 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 | 158 | NR | 620 | 959 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 211 | NR | 625 | 918 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 264 | NR | 630 | 873 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 816 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 363 | NR | 640 | 755 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 403 | NR | 645 | 689 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 435 | NR | 650 | 626 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 459 | NR | 655 | 564 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 481 | NR | 660 | 503 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 501 | NR | 665 | 447 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 519 | NR | 670 | 392 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 542 | NR | 675 | 343 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 565 | NR | 680 | 299 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 93 | NR | 555 | 593 | NR | 685 | 260 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 156 | NR | 560 | 624 | NR | 690 | 225 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 250 | NR | 565 | 662 | NR | 695 | 194 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 391 | NR | 570 | 707 | NR | 700 | 166 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 460 | NR | 575 | 756 | NR | 705 | 143 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 293 | NR | 580 | 810 | NR | 710 | 122 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 188 | NR | 585 | 860 | NR | 715 | 105 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 149 | NR | 590 | 910 | NR | 720 | 90 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 103 | NR | 595 | 950 | NR | 725 | 77 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 80 | NR | 600 | 980 | NR | 730 | 66 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 82 | NR | 605 | 995 | NR | 735 | 56 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 92 | NR | 610 | 998 | NR | 740 | 48 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 116 | NR | 615 | 985 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-8

Melanopic Flux vs. Wavelength



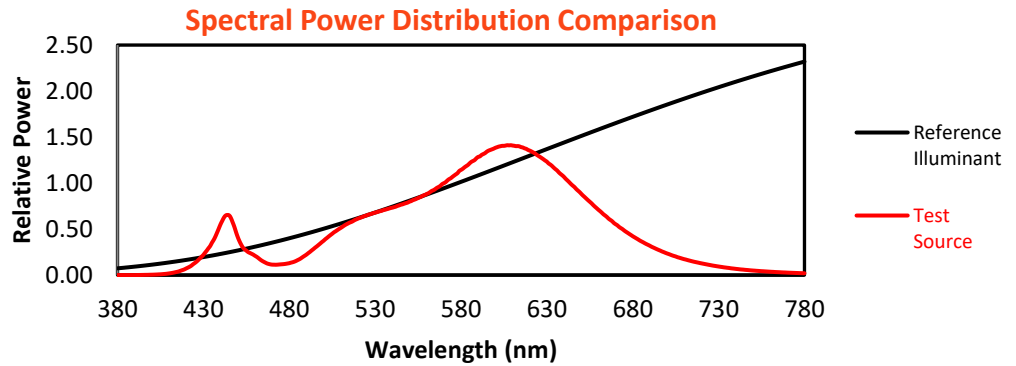
Melanopic Lumens: NR

M/P: 2.16

| 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 | 158 | NR | 620 | 959 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 211 | NR | 625 | 918 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 264 | NR | 630 | 873 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 318 | NR | 635 | 816 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 363 | NR | 640 | 755 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 403 | NR | 645 | 689 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 435 | NR | 650 | 626 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 1 | NR | 525 | 459 | NR | 655 | 564 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 481 | NR | 660 | 503 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 501 | NR | 665 | 447 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 519 | NR | 670 | 392 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 26 | NR | 545 | 542 | NR | 675 | 343 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 51 | NR | 550 | 565 | NR | 680 | 299 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 93 | NR | 555 | 593 | NR | 685 | 260 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 156 | NR | 560 | 624 | NR | 690 | 225 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 250 | NR | 565 | 662 | NR | 695 | 194 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 391 | NR | 570 | 707 | NR | 700 | 166 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 460 | NR | 575 | 756 | NR | 705 | 143 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 293 | NR | 580 | 810 | NR | 710 | 122 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 188 | NR | 585 | 860 | NR | 715 | 105 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 149 | NR | 590 | 910 | NR | 720 | 90 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 103 | NR | 595 | 950 | NR | 725 | 77 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 80 | NR | 600 | 980 | NR | 730 | 66 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 82 | NR | 605 | 995 | NR | 735 | 56 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 92 | NR | 610 | 998 | NR | 740 | 48 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 116 | NR | 615 | 985 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 82.2$
 $R_g = 99.9$
 $CIE R_a = 82.9$
 $R_9 = 10.8$



Color Vector Graphics

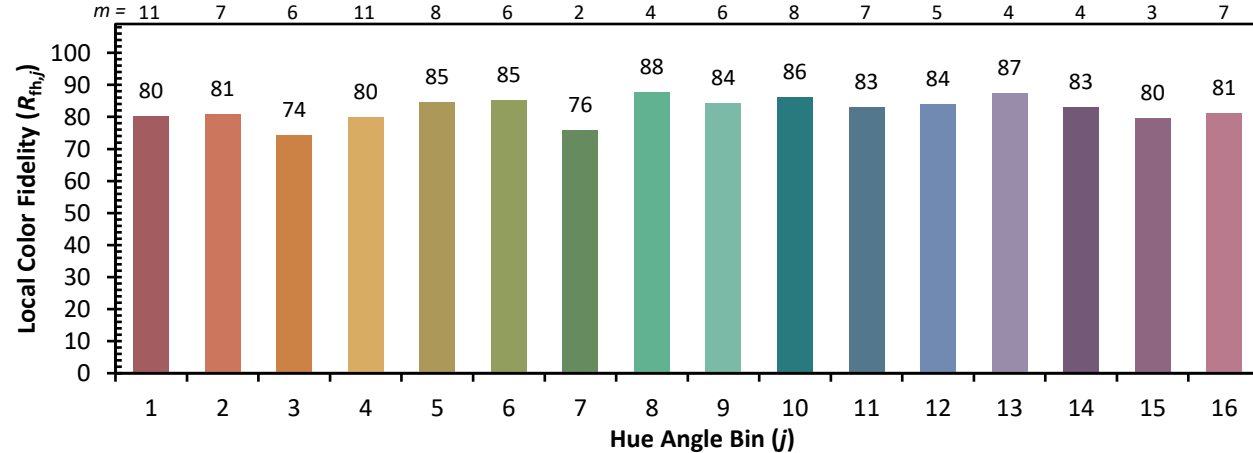


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 76 | CES51 = 89 | CES76 = 75 |
| CES02 = 63 | CES27 = 89 | CES52 = 91 | CES77 = 87 |
| CES03 = 31 | CES28 = 90 | CES53 = 82 | CES78 = 76 |
| CES04 = 71 | CES29 = 68 | CES54 = 88 | CES79 = 91 |
| CES05 = 50 | CES30 = 69 | CES55 = 87 | CES80 = 90 |
| CES06 = 52 | CES31 = 72 | CES56 = 80 | CES81 = 74 |
| CES07 = 43 | CES32 = 71 | CES57 = 78 | CES82 = 95 |
| CES08 = 42 | CES33 = 71 | CES58 = 80 | CES83 = 90 |
| CES09 = 29 | CES34 = 84 | CES59 = 93 | CES84 = 94 |
| CES10 = 77 | CES35 = 92 | CES60 = 96 | CES85 = 83 |
| CES11 = 59 | CES36 = 92 | CES61 = 94 | CES86 = 69 |
| CES12 = 66 | CES37 = 89 | CES62 = 84 | CES87 = 85 |
| CES13 = 44 | CES38 = 75 | CES63 = 79 | CES88 = 84 |
| CES14 = 74 | CES39 = 93 | CES64 = 85 | CES89 = 74 |
| CES15 = 72 | CES40 = 89 | CES65 = 79 | CES90 = 81 |
| CES16 = 48 | CES41 = 85 | CES66 = 83 | CES91 = 96 |
| CES17 = 50 | CES42 = 88 | CES67 = 82 | CES92 = 72 |
| CES18 = 57 | CES43 = 81 | CES68 = 86 | CES93 = 84 |
| CES19 = 73 | CES44 = 98 | CES69 = 92 | CES94 = 63 |
| CES20 = 67 | CES45 = 87 | CES70 = 81 | CES95 = 80 |
| CES21 = 87 | CES46 = 82 | CES71 = 81 | CES96 = 85 |
| CES22 = 79 | CES47 = 76 | CES72 = 93 | CES97 = 87 |
| CES23 = 92 | CES48 = 71 | CES73 = 75 | CES98 = 82 |
| CES24 = 91 | CES49 = 81 | CES74 = 91 | CES99 = 76 |
| CES25 = 72 | CES50 = 88 | CES75 = 79 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)