

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: P1456700

Luminaire Tested: GLAN-SB3B-840-U-T3LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1456700
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB3B-840-U-T3LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 450mA 3xLight Square
PACKAGE 80CRI 4000K FIXTURE w/ TYPE III LOW GLARE
Light Source: (78) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15760.9 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

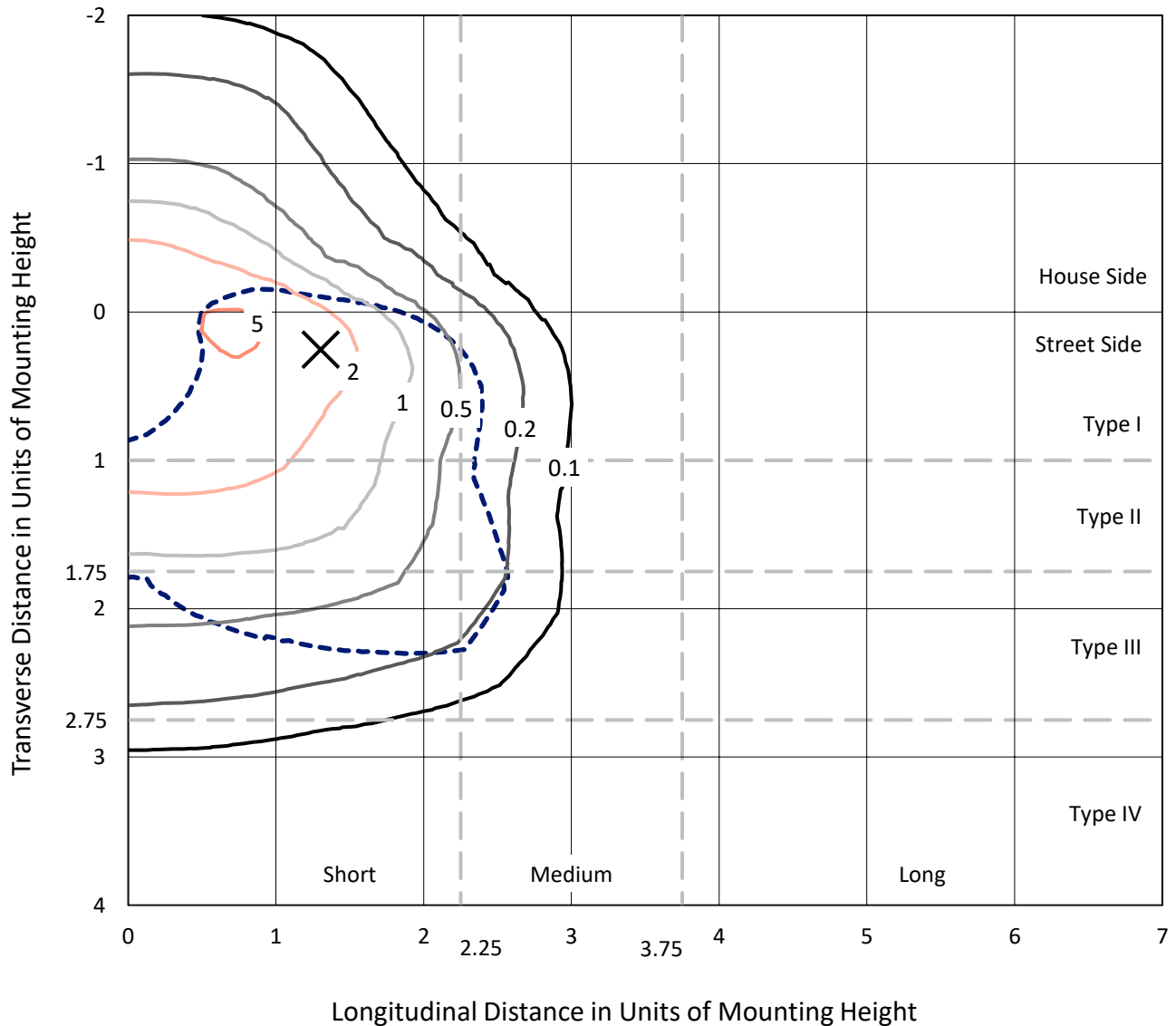
Input Watts (W): 109.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

REPORT NUMBER: P1456700

CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

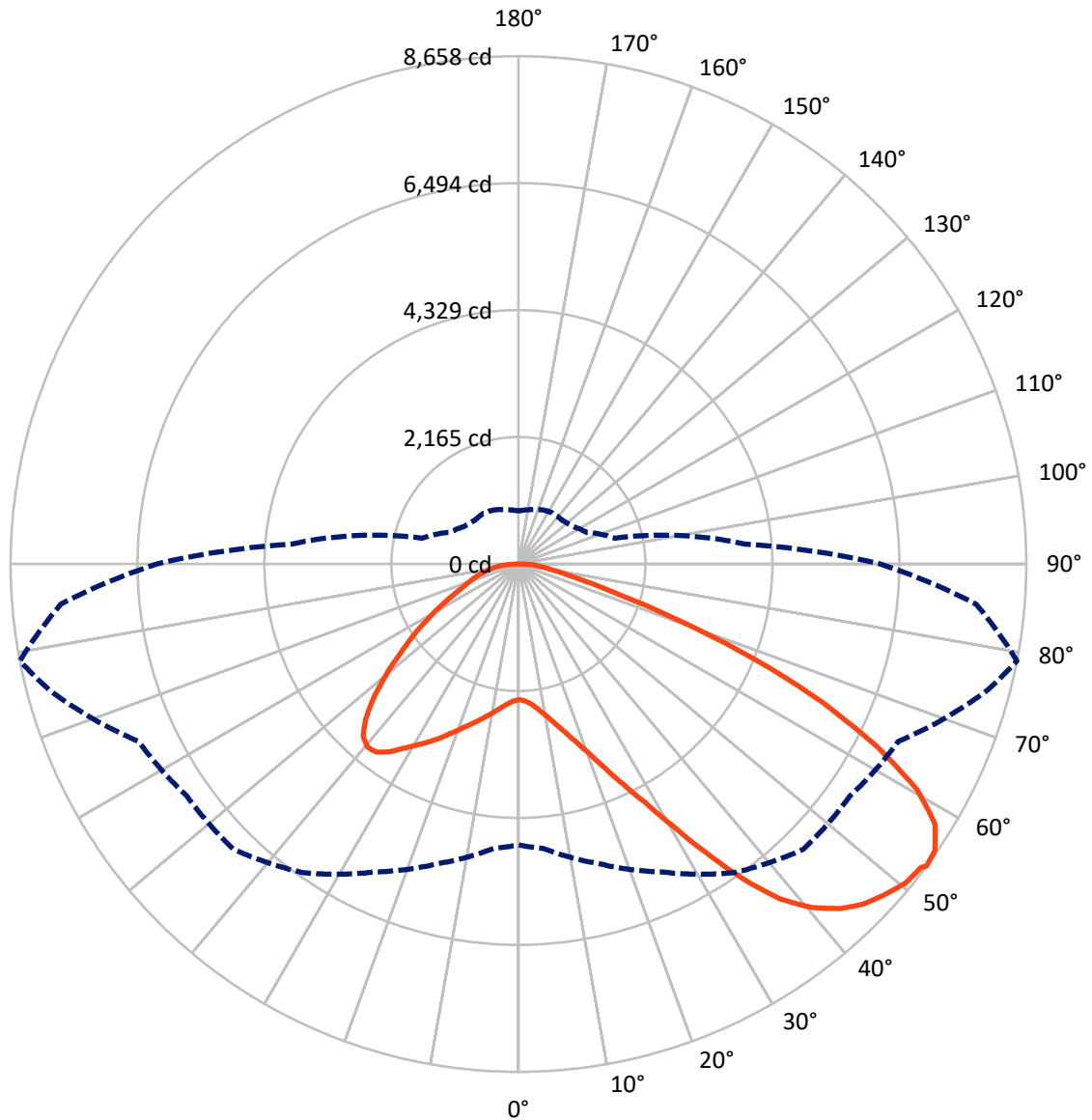


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - N/A

REPORT NUMBER: P1456700

CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3973.2 | 0.0 | 3973.2 |
| | % Fixture | 25.2 | 0.0 | 25.2 |
| Street Side | Lumens | 11787.7 | 0.0 | 11787.7 |
| | % Fixture | 74.8 | 0.0 | 74.8 |
| Total | Lumens | 15760.9 | 0.0 | 15760.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 220.5 | 1.4 |
| 10°-20° | 682.7 | 4.3 |
| 20°-30° | 1305.3 | 8.3 |
| 30°-40° | 2241.0 | 14.2 |
| 40°-50° | 3139.0 | 19.9 |
| 50°-60° | 3562.3 | 22.6 |
| 60°-70° | 3124.0 | 19.8 |
| 70°-80° | 1221.5 | 7.8 |
| 80°-90° | 264.7 | 1.7 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 15760.9 | 100.0 |
| 0°-180° | 15760.9 | 100.0 |



REPORT NUMBER: P1456700

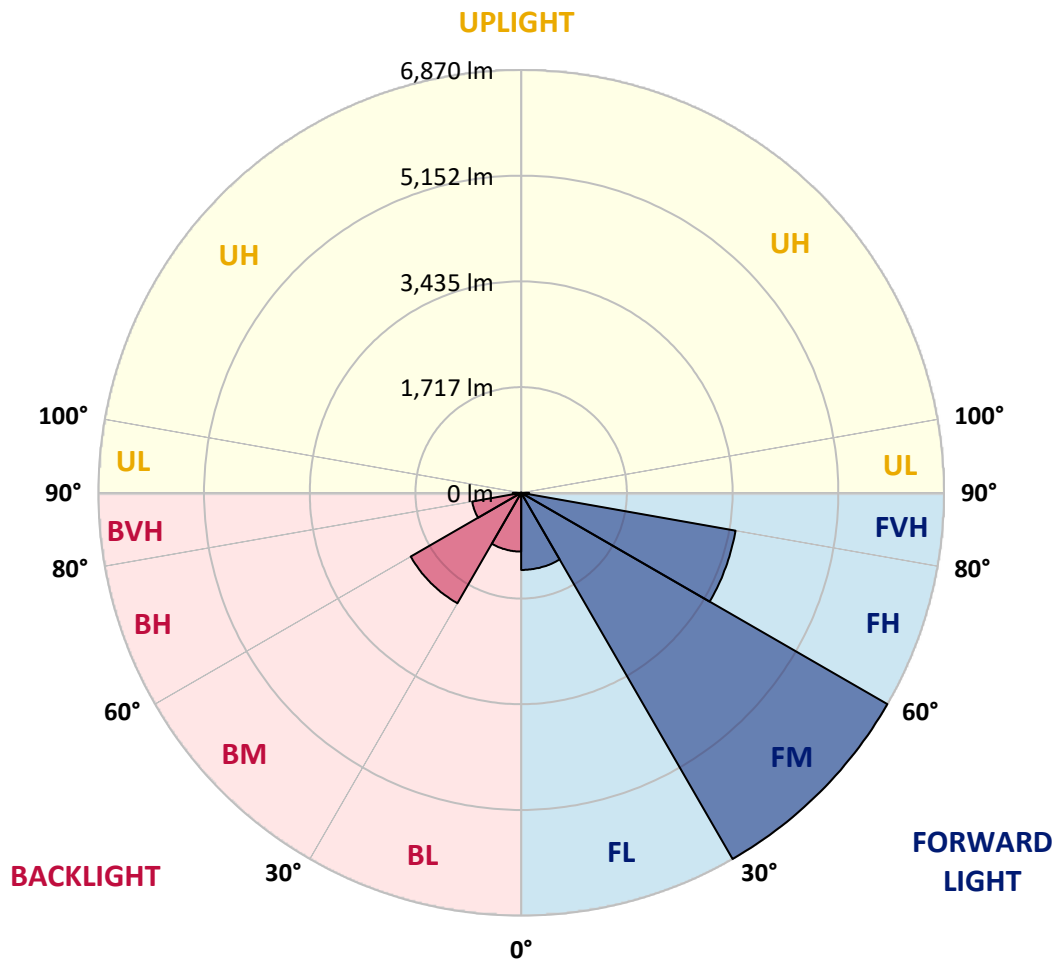
CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1252.8 | 7.9 | | | |
| FM | (30°-60°) | 6869.6 | 43.6 | | | |
| FH | (60°-80°) | 3536.9 | 22.4 | | | G2/5000 |
| FVH | (80°-90°) | 128.4 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 955.6 | 6.1 | B2/1000 | | |
| BM | (30°-60°) | 2072.7 | 13.2 | B2/2500 | | |
| BH | (60°-80°) | 808.6 | 5.1 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 136.3 | 0.9 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type III Short





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CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 |
| 2.5° | 2317.3 | 2317.3 | 2303.2 | 2317.3 | 2310.2 | 2320.8 | 2327.8 | 2327.8 | 2341.8 | 2338.3 | 2338.3 |
| 5° | 2278.6 | 2271.6 | 2268.1 | 2292.7 | 2306.7 | 2334.8 | 2366.4 | 2380.5 | 2405.0 | 2405.0 | 2408.5 |
| 7.5° | 2176.8 | 2173.3 | 2190.9 | 2240.0 | 2285.7 | 2355.9 | 2422.6 | 2461.2 | 2499.8 | 2506.8 | 2506.8 |
| 10° | 2113.6 | 2110.1 | 2131.2 | 2190.9 | 2264.6 | 2366.4 | 2471.7 | 2552.5 | 2615.7 | 2633.2 | 2633.2 |
| 12.5° | 2113.6 | 2113.6 | 2131.2 | 2190.9 | 2268.1 | 2391.0 | 2534.9 | 2671.9 | 2770.2 | 2791.2 | 2784.2 |
| 15° | 2173.3 | 2169.8 | 2190.9 | 2254.1 | 2327.8 | 2443.6 | 2619.2 | 2801.8 | 2935.2 | 2973.8 | 2977.3 |
| 17.5° | 2236.5 | 2233.0 | 2264.6 | 2345.3 | 2433.1 | 2549.0 | 2728.0 | 2952.7 | 3142.3 | 3191.5 | 3202.0 |
| 20° | 2334.8 | 2331.3 | 2369.9 | 2447.2 | 2556.0 | 2689.4 | 2875.5 | 3131.8 | 3395.1 | 3447.8 | 3461.8 |
| 22.5° | 2447.2 | 2450.7 | 2492.8 | 2587.6 | 2696.4 | 2872.0 | 3100.2 | 3384.6 | 3700.6 | 3781.3 | 3795.4 |
| 25° | 2682.4 | 2671.9 | 2707.0 | 2773.7 | 2889.5 | 3100.2 | 3381.1 | 3690.0 | 4065.7 | 4164.0 | 4181.6 |
| 27.5° | 2994.9 | 2977.3 | 3015.9 | 3082.6 | 3166.9 | 3363.5 | 3686.5 | 4030.6 | 4483.5 | 4606.4 | 4609.9 |
| 30° | 3275.8 | 3265.2 | 3317.9 | 3454.8 | 3542.6 | 3693.6 | 4037.6 | 4430.9 | 4999.6 | 5178.7 | 5185.7 |
| 32.5° | 3518.0 | 3514.5 | 3612.8 | 3788.4 | 3988.5 | 4150.0 | 4483.5 | 4936.4 | 5652.7 | 5859.8 | 5814.2 |
| 35° | 3749.7 | 3760.3 | 3883.2 | 4065.7 | 4332.6 | 4655.6 | 4992.6 | 5508.7 | 6340.8 | 6590.1 | 6516.4 |
| 37.5° | 3985.0 | 3992.0 | 4153.5 | 4388.7 | 4669.6 | 5090.9 | 5543.9 | 6130.2 | 6937.7 | 7246.7 | 7085.2 |
| 40° | 4202.7 | 4223.7 | 4441.4 | 4694.2 | 5059.3 | 5487.7 | 5993.3 | 6562.0 | 7397.7 | 7703.1 | 7527.6 |
| 42.5° | 4420.3 | 4451.9 | 4687.2 | 5034.8 | 5424.5 | 5870.4 | 6305.7 | 6825.4 | 7692.6 | 8033.1 | 7762.8 |
| 45° | 4645.0 | 4666.1 | 4957.5 | 5319.1 | 5761.5 | 6172.3 | 6484.8 | 6993.9 | 7896.2 | 8264.9 | 7896.2 |
| 47.5° | 4796.0 | 4838.1 | 5157.6 | 5575.4 | 6017.8 | 6404.0 | 6628.7 | 7064.1 | 8026.1 | 8415.8 | 7945.4 |
| 50° | 4855.7 | 4915.4 | 5259.5 | 5722.9 | 6228.5 | 6621.7 | 6741.1 | 7102.7 | 8170.1 | 8549.3 | 7934.8 |
| 52.5° | 4845.2 | 4901.3 | 5277.0 | 5789.6 | 6397.0 | 6821.9 | 6849.9 | 7144.9 | 8271.9 | 8594.9 | 7843.5 |
| 53° | 4789.0 | 4866.2 | 5287.5 | 5793.1 | 6421.6 | 6874.5 | 6899.1 | 7148.4 | 8285.9 | 8658.1 | 7829.5 |
| 55° | 4595.9 | 4638.0 | 5178.7 | 5789.6 | 6537.5 | 7071.1 | 7036.0 | 7253.7 | 8324.6 | 8616.0 | 7675.0 |
| 57.5° | 4420.3 | 4462.5 | 4932.9 | 5722.9 | 6632.3 | 7348.5 | 7257.2 | 7236.1 | 8113.9 | 8377.2 | 7285.3 |
| 60° | 4308.0 | 4322.0 | 4718.8 | 5512.3 | 6593.6 | 7541.6 | 7401.2 | 7029.0 | 7594.3 | 7811.9 | 6600.7 |
| 62.5° | 4213.2 | 4209.7 | 4560.8 | 5210.3 | 6446.2 | 7569.7 | 7429.3 | 6516.4 | 6832.4 | 6867.5 | 5687.8 |
| 65° | 3999.0 | 3974.4 | 4315.0 | 4869.7 | 6140.7 | 7443.3 | 7085.2 | 5740.5 | 5821.2 | 5705.4 | 4567.8 |
| 67.5° | 3574.2 | 3521.5 | 3823.5 | 4350.1 | 5519.3 | 7085.2 | 6428.6 | 4838.1 | 4588.9 | 4357.1 | 3440.8 |
| 70° | 2559.5 | 2559.5 | 2801.8 | 3328.4 | 4430.9 | 6123.2 | 5519.3 | 3662.0 | 3159.9 | 2952.7 | 2299.7 |
| 72.5° | 1253.4 | 1285.0 | 1537.8 | 1966.2 | 2970.3 | 4444.9 | 4227.2 | 2373.4 | 1917.0 | 1815.2 | 1474.6 |
| 75° | 533.7 | 537.2 | 656.6 | 870.7 | 1506.2 | 2629.7 | 2647.3 | 1369.3 | 1228.8 | 1179.7 | 976.1 |
| 77.5° | 372.2 | 379.2 | 431.9 | 512.6 | 716.2 | 1207.8 | 1376.3 | 828.6 | 825.1 | 790.0 | 695.2 |
| 80° | 284.4 | 291.4 | 326.5 | 382.7 | 481.0 | 617.9 | 712.7 | 561.8 | 589.8 | 554.7 | 502.1 |
| 82.5° | 214.2 | 221.2 | 245.8 | 287.9 | 344.1 | 414.3 | 400.3 | 414.3 | 435.4 | 414.3 | 361.6 |
| 85° | 144.0 | 147.5 | 165.0 | 200.1 | 221.2 | 249.3 | 249.3 | 301.9 | 316.0 | 309.0 | 284.4 |
| 87.5° | 73.7 | 73.7 | 87.8 | 105.3 | 112.4 | 115.9 | 101.8 | 133.4 | 151.0 | 165.0 | 133.4 |
| 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: P1456700

CATALOG NUMBER: GLAN-SB3B-840-U-T3LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 | 2313.7 |
| 2.5° | 2338.3 | 2341.8 | 2331.3 | 2327.8 | 2324.3 | 2306.7 | 2306.7 | 2289.2 | 2285.7 | 2289.2 | 2278.6 |
| 5° | 2415.6 | 2408.5 | 2380.5 | 2359.4 | 2334.8 | 2285.7 | 2257.6 | 2218.9 | 2208.4 | 2197.9 | 2187.3 |
| 7.5° | 2510.4 | 2499.8 | 2450.7 | 2394.5 | 2327.8 | 2233.0 | 2180.3 | 2117.1 | 2096.1 | 2078.5 | 2071.5 |
| 10° | 2629.7 | 2608.7 | 2531.4 | 2412.0 | 2289.2 | 2173.3 | 2099.6 | 2022.3 | 1987.2 | 1980.2 | 1962.6 |
| 12.5° | 2784.2 | 2745.6 | 2601.6 | 2415.6 | 2254.1 | 2103.1 | 2022.3 | 1962.6 | 1948.6 | 1945.1 | 1927.5 |
| 15° | 2956.3 | 2900.1 | 2668.4 | 2419.1 | 2208.4 | 2043.4 | 1994.2 | 1962.6 | 1962.6 | 1959.1 | 1948.6 |
| 17.5° | 3166.9 | 3075.6 | 2731.5 | 2405.0 | 2152.2 | 2025.8 | 2001.3 | 1973.2 | 1966.2 | 1969.7 | 1955.6 |
| 20° | 3419.7 | 3268.7 | 2798.3 | 2387.5 | 2127.7 | 2029.4 | 2001.3 | 1962.6 | 1945.1 | 1941.6 | 1931.0 |
| 22.5° | 3711.1 | 3489.9 | 2872.0 | 2359.4 | 2127.7 | 2025.8 | 1980.2 | 1927.5 | 1892.4 | 1878.4 | 1864.3 |
| 25° | 4044.7 | 3746.2 | 2949.2 | 2348.9 | 2134.7 | 2011.8 | 1938.1 | 1853.8 | 1797.6 | 1776.6 | 1766.0 |
| 27.5° | 4448.4 | 4016.6 | 3005.4 | 2359.4 | 2131.2 | 1980.2 | 1864.3 | 1755.5 | 1692.3 | 1657.2 | 1650.2 |
| 30° | 4894.3 | 4308.0 | 3044.0 | 2376.9 | 2110.1 | 1920.5 | 1776.6 | 1653.7 | 1565.9 | 1523.8 | 1513.2 |
| 32.5° | 5421.0 | 4634.5 | 3082.6 | 2376.9 | 2057.4 | 1836.2 | 1674.7 | 1541.3 | 1450.0 | 1400.9 | 1393.9 |
| 35° | 6003.8 | 5034.8 | 3117.8 | 2373.4 | 1994.2 | 1745.0 | 1572.9 | 1436.0 | 1341.2 | 1292.0 | 1288.5 |
| 37.5° | 6498.8 | 5336.7 | 3135.3 | 2338.3 | 1906.5 | 1639.6 | 1478.1 | 1341.2 | 1242.9 | 1190.2 | 1186.7 |
| 40° | 6804.3 | 5463.1 | 3100.2 | 2268.1 | 1801.1 | 1530.8 | 1372.8 | 1246.4 | 1148.1 | 1084.9 | 1070.9 |
| 42.5° | 6920.2 | 5403.4 | 2987.9 | 2152.2 | 1674.7 | 1422.0 | 1285.0 | 1151.6 | 1021.7 | 969.0 | 958.5 |
| 45° | 6881.5 | 5171.7 | 2749.1 | 1987.2 | 1534.3 | 1323.6 | 1207.8 | 1056.8 | 972.5 | 926.9 | 923.4 |
| 47.5° | 6751.6 | 4813.6 | 2450.7 | 1780.1 | 1386.8 | 1235.9 | 1106.0 | 1032.2 | 955.0 | 905.8 | 902.3 |
| 50° | 6523.4 | 4430.9 | 2092.5 | 1544.8 | 1253.4 | 1144.6 | 1081.4 | 1021.7 | 958.5 | 919.9 | 912.9 |
| 52.5° | 6232.0 | 3999.0 | 1762.5 | 1316.6 | 1137.6 | 1063.8 | 1056.8 | 1014.7 | 965.5 | 923.4 | 905.8 |
| 53° | 6165.3 | 3886.7 | 1699.3 | 1278.0 | 1120.0 | 1053.3 | 1049.8 | 1014.7 | 958.5 | 919.9 | 905.8 |
| 55° | 5845.8 | 3539.1 | 1499.2 | 1141.1 | 1032.2 | 1018.2 | 1049.8 | 1011.2 | 940.9 | 909.3 | 898.8 |
| 57.5° | 5333.2 | 3082.6 | 1306.1 | 1014.7 | 940.9 | 976.1 | 1039.3 | 997.1 | 919.9 | 863.7 | 846.1 |
| 60° | 4715.3 | 2559.5 | 1158.6 | 930.4 | 874.2 | 923.4 | 997.1 | 948.0 | 842.6 | 814.5 | 811.0 |
| 62.5° | 3978.0 | 2071.5 | 1046.3 | 860.2 | 818.1 | 867.2 | 933.9 | 849.7 | 772.4 | 751.4 | 744.3 |
| 65° | 3107.2 | 1646.7 | 958.5 | 807.5 | 761.9 | 800.5 | 846.1 | 793.5 | 744.3 | 726.8 | 723.3 |
| 67.5° | 2310.2 | 1292.0 | 888.3 | 761.9 | 705.7 | 730.3 | 783.0 | 768.9 | 726.8 | 716.2 | 712.7 |
| 70° | 1594.0 | 1049.8 | 825.1 | 719.8 | 635.5 | 663.6 | 744.3 | 754.9 | 712.7 | 705.7 | 702.2 |
| 72.5° | 1116.5 | 888.3 | 758.4 | 674.1 | 579.3 | 607.4 | 726.8 | 726.8 | 681.1 | 691.7 | 684.6 |
| 75° | 839.1 | 747.8 | 681.1 | 617.9 | 509.1 | 551.2 | 702.2 | 695.2 | 649.5 | 695.2 | 677.6 |
| 77.5° | 632.0 | 603.9 | 589.8 | 547.7 | 445.9 | 488.0 | 653.0 | 639.0 | 579.3 | 582.8 | 551.2 |
| 80° | 459.9 | 467.0 | 505.6 | 467.0 | 372.2 | 403.8 | 551.2 | 544.2 | 470.5 | 484.5 | 445.9 |
| 82.5° | 330.0 | 347.6 | 431.9 | 375.7 | 270.3 | 287.9 | 379.2 | 410.8 | 368.7 | 347.6 | 354.6 |
| 85° | 249.3 | 259.8 | 347.6 | 277.4 | 168.5 | 189.6 | 259.8 | 294.9 | 287.9 | 266.8 | 270.3 |
| 87.5° | 105.3 | 119.4 | 161.5 | 129.9 | 98.3 | 98.3 | 161.5 | 207.1 | 186.1 | 158.0 | 165.0 |
| 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: SP1-2407-184-11

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-840-U-5WQ

Data in this report applies to families of products including GSS-SB1A-840-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-11
 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-840-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 4000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3897
 CIE u': 0.2249
 CIE v': 0.5084
 Duv: 0.0039
 CIE x: 0.3882
 CIE y: 0.3900
 CIE z: 0.2218
 Peak Wavelength (nm): 445
 Dominant Wavelength (nm): 577
 Purity: 33.54925
 Rf: 81.8
 Rg: 98.6

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 80.2 | | |
| R1: | 78.9 | R9: | 6.7 |
| R2: | 83.5 | R10: | 61.9 |
| R3: | 88.3 | R11: | 81.9 |
| R4: | 82.1 | R12: | 58.9 |
| R5: | 78.8 | R13: | 79.2 |
| R6: | 78.4 | R14: | 93.2 |
| R7: | 85.8 | R15: | 71.9 |
| R8: | 65.8 | | |



Test Conditions

Stabilization Time: 24M
 Operation Time: 1H 24M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-11

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.57

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.06

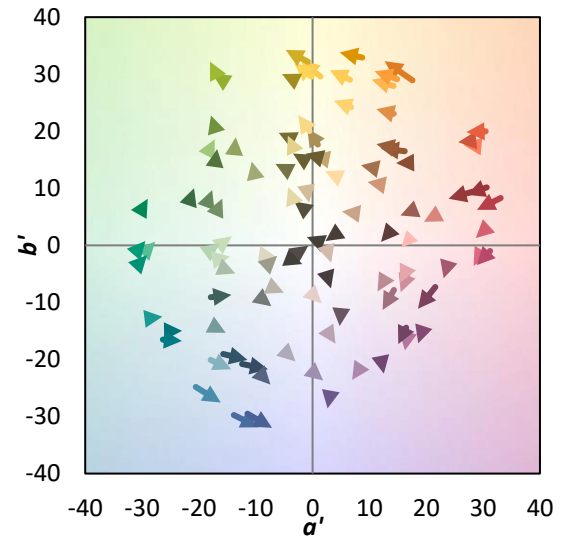
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 81.8$
 $R_g = 98.6$
 CIE $R_a = 80.2$
 $R_9 = 6.7$



Color Vector Graphics



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

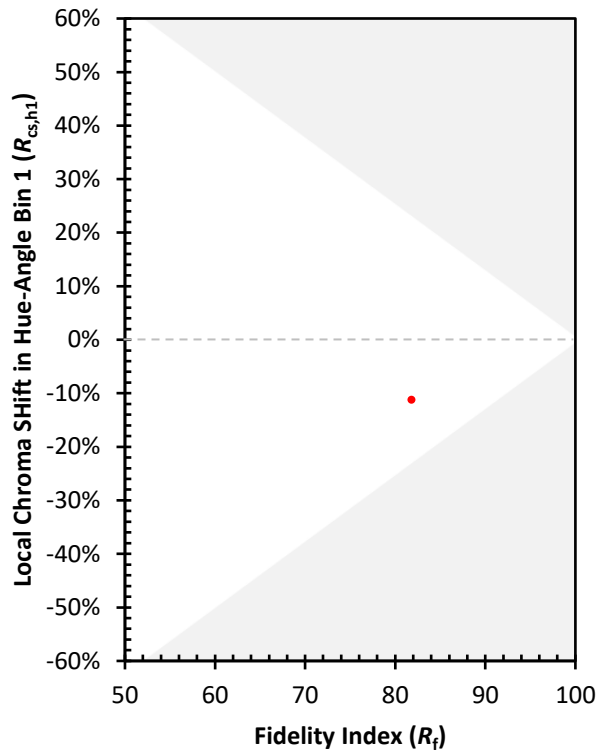
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 73 | CES51 = 93 | CES76 = 66 |
| CES02 = 61 | CES27 = 91 | CES52 = 93 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 83 | CES78 = 66 |
| CES04 = 69 | CES29 = 71 | CES54 = 89 | CES79 = 88 |
| CES05 = 48 | CES30 = 77 | CES55 = 88 | CES80 = 85 |
| CES06 = 50 | CES31 = 74 | CES56 = 80 | CES81 = 83 |
| CES07 = 41 | CES32 = 70 | CES57 = 79 | CES82 = 93 |
| CES08 = 40 | CES33 = 77 | CES58 = 80 | CES83 = 91 |
| CES09 = 29 | CES34 = 79 | CES59 = 92 | CES84 = 91 |
| CES10 = 74 | CES35 = 88 | CES60 = 95 | CES85 = 84 |
| CES11 = 57 | CES36 = 98 | CES61 = 91 | CES86 = 78 |
| CES12 = 63 | CES37 = 85 | CES62 = 90 | CES87 = 84 |
| CES13 = 42 | CES38 = 85 | CES63 = 81 | CES88 = 85 |
| CES14 = 74 | CES39 = 95 | CES64 = 81 | CES89 = 78 |
| CES15 = 71 | CES40 = 90 | CES65 = 76 | CES90 = 84 |
| CES16 = 47 | CES41 = 90 | CES66 = 78 | CES91 = 85 |
| CES17 = 49 | CES42 = 84 | CES67 = 76 | CES92 = 71 |
| CES18 = 56 | CES43 = 81 | CES68 = 80 | CES93 = 84 |
| CES19 = 71 | CES44 = 99 | CES69 = 86 | CES94 = 65 |
| CES20 = 65 | CES45 = 87 | CES70 = 73 | CES95 = 77 |
| CES21 = 86 | CES46 = 85 | CES71 = 70 | CES96 = 83 |
| CES22 = 78 | CES47 = 84 | CES72 = 90 | CES97 = 87 |
| CES23 = 91 | CES48 = 79 | CES73 = 65 | CES98 = 81 |
| CES24 = 90 | CES49 = 84 | CES74 = 98 | CES99 = 75 |
| CES25 = 71 | CES50 = 91 | CES75 = 68 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)