

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: P1456737

Luminaire Tested: GLAN-SB3C-850-U-T3LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1456737
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB3C-850-U-T3LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 615mA 3xLight Square
PACKAGE 80CRI 5000K FIXTURE w/ TYPE III LOW GLARE
Light Source: (78) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20961.7 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

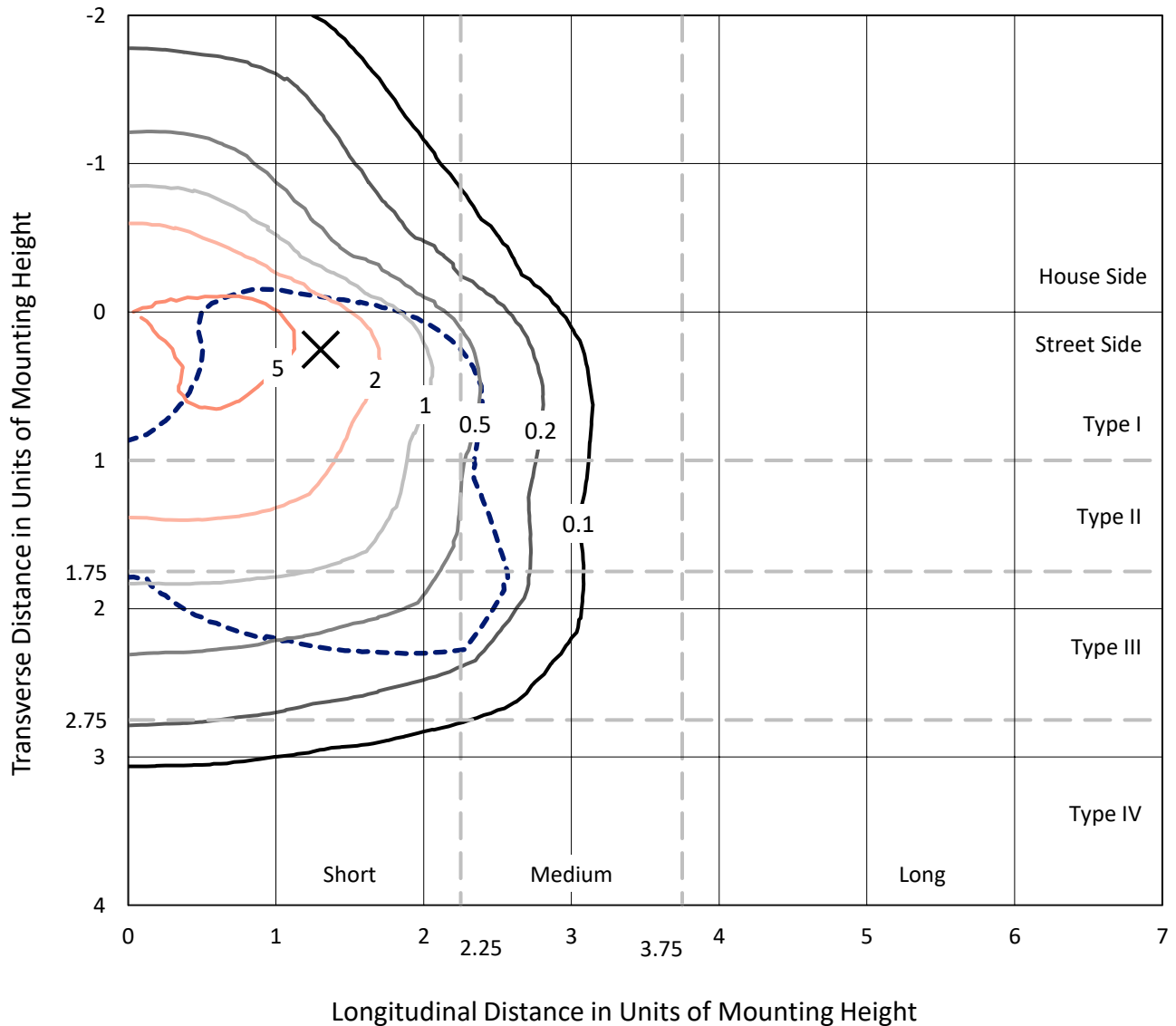
Input Watts (W): 149.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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CATALOG NUMBER: GLAN-SB3C-850-U-T3LG

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

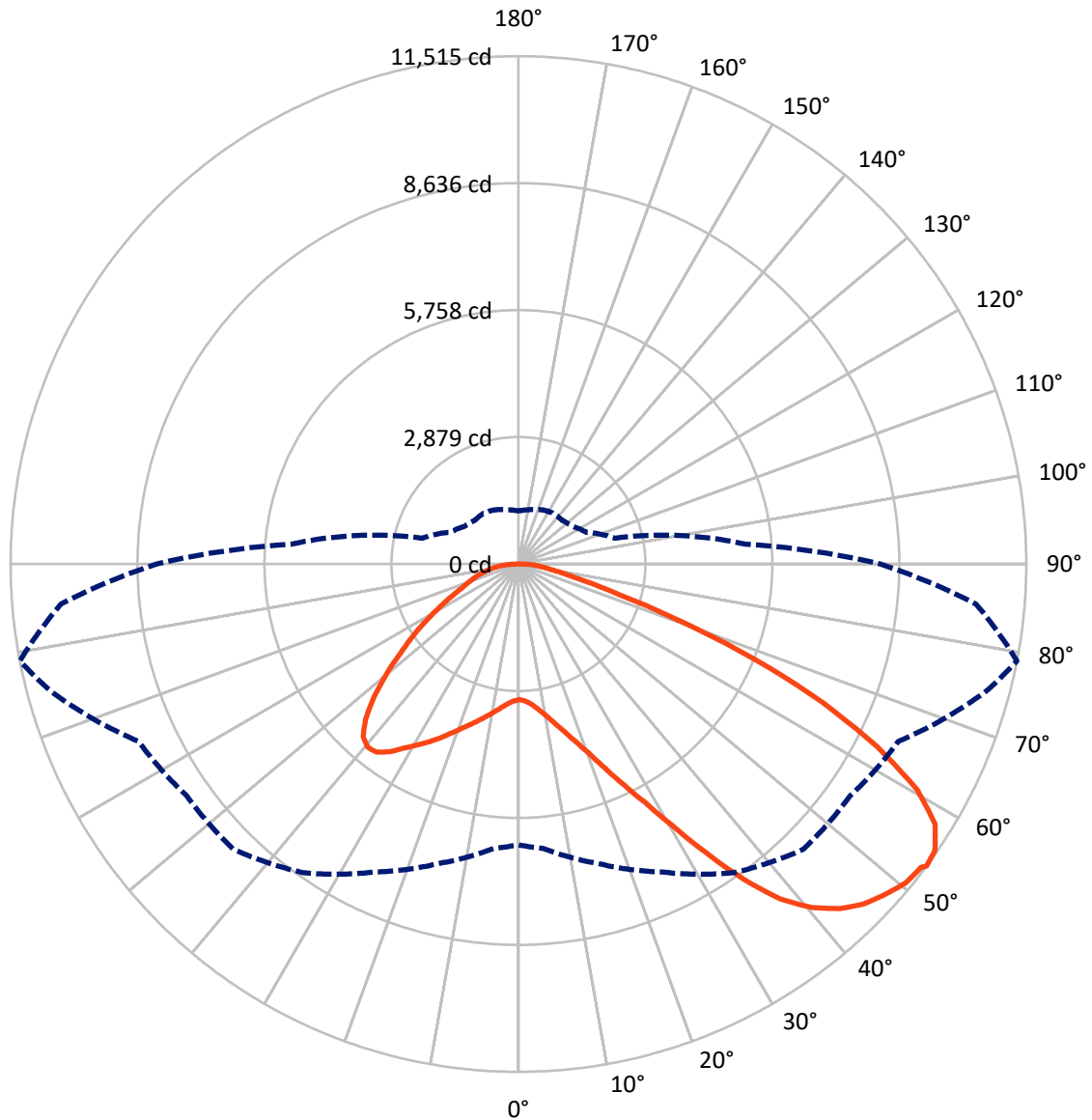


Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type III - Short - N/A

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CATALOG NUMBER: GLAN-SB3C-850-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-SB3C-850-U-T3LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5284.3 | 0.0 | 5284.3 |
| | % Fixture | 25.2 | 0.0 | 25.2 |
| Street Side | Lumens | 15677.4 | 0.0 | 15677.4 |
| | % Fixture | 74.8 | 0.0 | 74.8 |
| Total | Lumens | 20961.7 | 0.0 | 20961.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 293.2 | 1.4 |
| 10°-20° | 908.0 | 4.3 |
| 20°-30° | 1736.0 | 8.3 |
| 30°-40° | 2980.5 | 14.2 |
| 40°-50° | 4174.8 | 19.9 |
| 50°-60° | 4737.8 | 22.6 |
| 60°-70° | 4154.8 | 19.8 |
| 70°-80° | 1624.6 | 7.8 |
| 80°-90° | 352.0 | 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° | 20961.7 | 100.0 |
| 0°-180° | 20961.7 | 100.0 |



REPORT NUMBER: P1456737

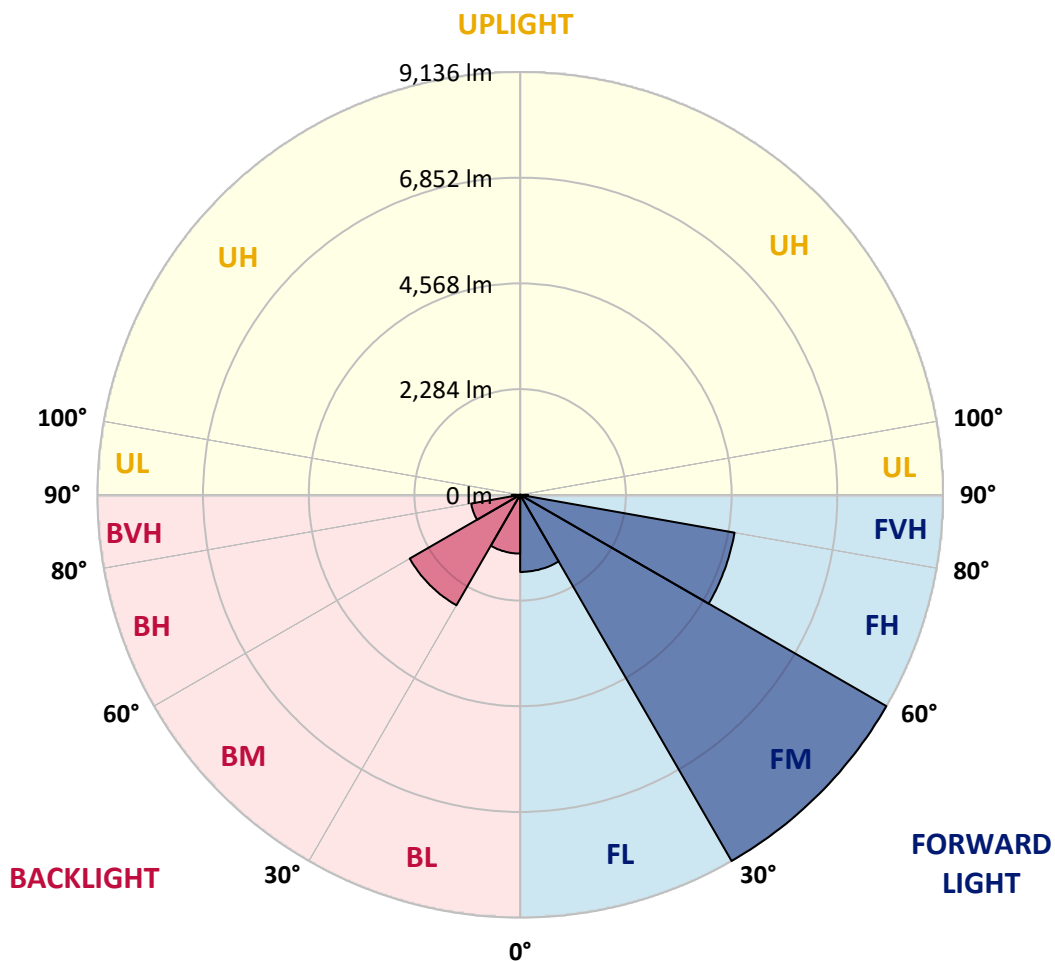
CATALOG NUMBER: GLAN-SB3C-850-U-T3LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1666.3 | 7.9 | | | |
| FM | (30°-60°) | 9136.4 | 43.6 | | | |
| FH | (60°-80°) | 4703.9 | 22.4 | | | G2/5000 |
| FVH | (80°-90°) | 170.7 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 1270.9 | 6.1 | B3/2500 | | |
| BM | (30°-60°) | 2756.7 | 13.2 | B3/5000 | | |
| BH | (60°-80°) | 1075.4 | 5.1 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 181.3 | 0.9 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Short





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CATALOG NUMBER: GLAN-SB3C-850-U-T3LG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|--------|--------|--------|--------|--------|---------|--------|--------|---------|---------|---------|
| 0° | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 |
| 2.5° | 3081.9 | 3081.9 | 3063.2 | 3081.9 | 3072.6 | 3086.6 | 3095.9 | 3095.9 | 3114.6 | 3109.9 | 3109.9 |
| 5° | 3030.5 | 3021.2 | 3016.5 | 3049.2 | 3067.9 | 3105.2 | 3147.3 | 3165.9 | 3198.6 | 3198.6 | 3203.3 |
| 7.5° | 2895.1 | 2890.4 | 2913.8 | 2979.2 | 3039.9 | 3133.3 | 3222.0 | 3273.3 | 3324.7 | 3334.0 | 3334.0 |
| 10° | 2811.1 | 2806.4 | 2834.4 | 2913.8 | 3011.9 | 3147.3 | 3287.4 | 3394.8 | 3478.8 | 3502.2 | 3502.2 |
| 12.5° | 2811.1 | 2811.1 | 2834.4 | 2913.8 | 3016.5 | 3180.0 | 3371.4 | 3553.5 | 3684.3 | 3712.3 | 3702.9 |
| 15° | 2890.4 | 2885.8 | 2913.8 | 2997.8 | 3095.9 | 3250.0 | 3483.5 | 3726.3 | 3903.7 | 3955.1 | 3959.8 |
| 17.5° | 2974.5 | 2969.8 | 3011.9 | 3119.3 | 3236.0 | 3390.1 | 3628.2 | 3927.1 | 4179.2 | 4244.6 | 4258.6 |
| 20° | 3105.2 | 3100.6 | 3151.9 | 3254.7 | 3399.4 | 3576.9 | 3824.4 | 4165.2 | 4515.4 | 4585.5 | 4604.2 |
| 22.5° | 3254.7 | 3259.3 | 3315.4 | 3441.4 | 3586.2 | 3819.7 | 4123.2 | 4501.4 | 4921.7 | 5029.1 | 5047.8 |
| 25° | 3567.5 | 3553.5 | 3600.2 | 3688.9 | 3843.0 | 4123.2 | 4496.8 | 4907.7 | 5407.3 | 5538.1 | 5561.4 |
| 27.5° | 3983.1 | 3959.8 | 4011.1 | 4099.9 | 4211.9 | 4473.4 | 4903.0 | 5360.6 | 5963.0 | 6126.4 | 6131.1 |
| 30° | 4356.7 | 4342.7 | 4412.7 | 4594.8 | 4711.6 | 4912.4 | 5370.0 | 5893.0 | 6649.4 | 6887.6 | 6896.9 |
| 32.5° | 4678.9 | 4674.2 | 4805.0 | 5038.4 | 5304.6 | 5519.4 | 5963.0 | 6565.4 | 7518.0 | 7793.5 | 7732.8 |
| 35° | 4987.1 | 5001.1 | 5164.5 | 5407.3 | 5762.2 | 6191.8 | 6640.1 | 7326.5 | 8433.2 | 8764.7 | 8666.7 |
| 37.5° | 5299.9 | 5309.3 | 5524.1 | 5836.9 | 6210.5 | 6770.8 | 7373.2 | 8153.0 | 9227.0 | 9637.9 | 9423.1 |
| 40° | 5589.4 | 5617.5 | 5907.0 | 6243.2 | 6728.8 | 7298.5 | 7970.9 | 8727.4 | 9838.7 | 10245.0 | 10011.5 |
| 42.5° | 5878.9 | 5921.0 | 6233.8 | 6696.1 | 7214.4 | 7807.5 | 8386.5 | 9077.6 | 10231.0 | 10683.9 | 10324.3 |
| 45° | 6177.8 | 6205.8 | 6593.4 | 7074.3 | 7662.7 | 8209.0 | 8624.6 | 9301.7 | 10501.8 | 10992.1 | 10501.8 |
| 47.5° | 6378.6 | 6434.6 | 6859.6 | 7415.2 | 8003.6 | 8517.2 | 8816.1 | 9395.1 | 10674.6 | 11192.9 | 10567.2 |
| 50° | 6458.0 | 6537.4 | 6995.0 | 7611.3 | 8283.8 | 8806.7 | 8965.5 | 9446.5 | 10866.0 | 11370.3 | 10553.2 |
| 52.5° | 6444.0 | 6518.7 | 7018.3 | 7700.1 | 8507.9 | 9072.9 | 9110.3 | 9502.5 | 11001.4 | 11431.0 | 10431.7 |
| 53° | 6369.2 | 6472.0 | 7032.3 | 7704.7 | 8540.6 | 9143.0 | 9175.6 | 9507.2 | 11020.1 | 11515.1 | 10413.1 |
| 55° | 6112.4 | 6168.5 | 6887.6 | 7700.1 | 8694.7 | 9404.4 | 9357.8 | 9647.3 | 11071.5 | 11459.0 | 10207.6 |
| 57.5° | 5878.9 | 5935.0 | 6560.7 | 7611.3 | 8820.8 | 9773.3 | 9651.9 | 9623.9 | 10791.3 | 11141.5 | 9689.3 |
| 60° | 5729.5 | 5748.2 | 6275.9 | 7331.2 | 8769.4 | 10030.2 | 9843.4 | 9348.4 | 10100.2 | 10389.7 | 8778.7 |
| 62.5° | 5603.4 | 5598.8 | 6065.7 | 6929.6 | 8573.3 | 10067.5 | 9880.7 | 8666.7 | 9086.9 | 9133.6 | 7564.7 |
| 65° | 5318.6 | 5285.9 | 5738.9 | 6476.6 | 8167.0 | 9899.4 | 9423.1 | 7634.7 | 7742.1 | 7588.0 | 6075.1 |
| 67.5° | 4753.6 | 4683.5 | 5085.1 | 5785.6 | 7340.5 | 9423.1 | 8549.9 | 6434.6 | 6103.1 | 5794.9 | 4576.1 |
| 70° | 3404.1 | 3404.1 | 3726.3 | 4426.7 | 5893.0 | 8143.7 | 7340.5 | 4870.3 | 4202.6 | 3927.1 | 3058.5 |
| 72.5° | 1667.0 | 1709.1 | 2045.3 | 2614.9 | 3950.4 | 5911.6 | 5622.1 | 3156.6 | 2549.6 | 2414.2 | 1961.2 |
| 75° | 709.8 | 714.4 | 873.2 | 1158.0 | 2003.2 | 3497.5 | 3520.8 | 1821.1 | 1634.3 | 1569.0 | 1298.1 |
| 77.5° | 495.0 | 504.3 | 574.4 | 681.8 | 952.6 | 1606.3 | 1830.5 | 1102.0 | 1097.3 | 1050.6 | 924.6 |
| 80° | 378.2 | 387.6 | 434.3 | 509.0 | 639.7 | 821.8 | 947.9 | 747.1 | 784.5 | 737.8 | 667.7 |
| 82.5° | 284.8 | 294.2 | 326.9 | 382.9 | 457.6 | 551.0 | 532.3 | 551.0 | 579.0 | 551.0 | 481.0 |
| 85° | 191.5 | 196.1 | 219.5 | 266.2 | 294.2 | 331.5 | 331.5 | 401.6 | 420.3 | 410.9 | 378.2 |
| 87.5° | 98.1 | 98.1 | 116.7 | 140.1 | 149.4 | 154.1 | 135.4 | 177.4 | 200.8 | 219.5 | 177.4 |
| 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: P1456737

CATALOG NUMBER: GLAN-SB3C-850-U-T3LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 | 3077.2 |
| 2.5° | 3109.9 | 3114.6 | 3100.6 | 3095.9 | 3091.2 | 3067.9 | 3067.9 | 3044.5 | 3039.9 | 3044.5 | 3030.5 |
| 5° | 3212.6 | 3203.3 | 3165.9 | 3137.9 | 3105.2 | 3039.9 | 3002.5 | 2951.1 | 2937.1 | 2923.1 | 2909.1 |
| 7.5° | 3338.7 | 3324.7 | 3259.3 | 3184.6 | 3095.9 | 2969.8 | 2899.8 | 2815.7 | 2787.7 | 2764.4 | 2755.0 |
| 10° | 3497.5 | 3469.5 | 3366.7 | 3208.0 | 3044.5 | 2890.4 | 2792.4 | 2689.7 | 2643.0 | 2633.6 | 2610.3 |
| 12.5° | 3702.9 | 3651.6 | 3460.1 | 3212.6 | 2997.8 | 2797.1 | 2689.7 | 2610.3 | 2591.6 | 2586.9 | 2563.6 |
| 15° | 3931.8 | 3857.0 | 3548.8 | 3217.3 | 2937.1 | 2717.7 | 2652.3 | 2610.3 | 2610.3 | 2605.6 | 2591.6 |
| 17.5° | 4211.9 | 4090.5 | 3632.9 | 3198.6 | 2862.4 | 2694.3 | 2661.6 | 2624.3 | 2614.9 | 2619.6 | 2600.9 |
| 20° | 4548.1 | 4347.3 | 3721.6 | 3175.3 | 2829.7 | 2699.0 | 2661.6 | 2610.3 | 2586.9 | 2582.3 | 2568.2 |
| 22.5° | 4935.7 | 4641.5 | 3819.7 | 3137.9 | 2829.7 | 2694.3 | 2633.6 | 2563.6 | 2516.9 | 2498.2 | 2479.5 |
| 25° | 5379.3 | 4982.4 | 3922.4 | 3123.9 | 2839.1 | 2675.6 | 2577.6 | 2465.5 | 2390.8 | 2362.8 | 2348.8 |
| 27.5° | 5916.3 | 5342.0 | 3997.1 | 3137.9 | 2834.4 | 2633.6 | 2479.5 | 2334.8 | 2250.7 | 2204.0 | 2194.7 |
| 30° | 6509.3 | 5729.5 | 4048.5 | 3161.3 | 2806.4 | 2554.2 | 2362.8 | 2199.4 | 2082.6 | 2026.6 | 2012.6 |
| 32.5° | 7209.8 | 6163.8 | 4099.9 | 3161.3 | 2736.3 | 2442.2 | 2227.4 | 2049.9 | 1928.5 | 1863.1 | 1853.8 |
| 35° | 7984.9 | 6696.1 | 4146.5 | 3156.6 | 2652.3 | 2320.8 | 2092.0 | 1909.8 | 1783.8 | 1718.4 | 1713.7 |
| 37.5° | 8643.3 | 7097.7 | 4169.9 | 3109.9 | 2535.6 | 2180.7 | 1965.9 | 1783.8 | 1653.0 | 1583.0 | 1578.3 |
| 40° | 9049.6 | 7265.8 | 4123.2 | 3016.5 | 2395.5 | 2035.9 | 1825.8 | 1657.7 | 1526.9 | 1442.9 | 1424.2 |
| 42.5° | 9203.7 | 7186.4 | 3973.8 | 2862.4 | 2227.4 | 1891.2 | 1709.1 | 1531.6 | 1358.8 | 1288.8 | 1274.8 |
| 45° | 9152.3 | 6878.2 | 3656.2 | 2643.0 | 2040.6 | 1760.4 | 1606.3 | 1405.5 | 1293.5 | 1232.8 | 1228.1 |
| 47.5° | 8979.5 | 6401.9 | 3259.3 | 2367.5 | 1844.5 | 1643.7 | 1470.9 | 1372.8 | 1270.1 | 1204.7 | 1200.1 |
| 50° | 8676.0 | 5893.0 | 2783.0 | 2054.6 | 1667.0 | 1522.3 | 1438.2 | 1358.8 | 1274.8 | 1223.4 | 1214.1 |
| 52.5° | 8288.4 | 5318.6 | 2344.1 | 1751.1 | 1512.9 | 1414.9 | 1405.5 | 1349.5 | 1284.1 | 1228.1 | 1204.7 |
| 53° | 8199.7 | 5169.2 | 2260.1 | 1699.7 | 1489.6 | 1400.9 | 1396.2 | 1349.5 | 1274.8 | 1223.4 | 1204.7 |
| 55° | 7774.8 | 4706.9 | 1993.9 | 1517.6 | 1372.8 | 1354.2 | 1396.2 | 1344.8 | 1251.4 | 1209.4 | 1195.4 |
| 57.5° | 7093.0 | 4099.9 | 1737.1 | 1349.5 | 1251.4 | 1298.1 | 1382.2 | 1326.1 | 1223.4 | 1148.7 | 1125.4 |
| 60° | 6271.2 | 3404.1 | 1540.9 | 1237.4 | 1162.7 | 1228.1 | 1326.1 | 1260.8 | 1120.7 | 1083.3 | 1078.7 |
| 62.5° | 5290.6 | 2755.0 | 1391.5 | 1144.0 | 1088.0 | 1153.4 | 1242.1 | 1130.0 | 1027.3 | 999.3 | 989.9 |
| 65° | 4132.5 | 2190.0 | 1274.8 | 1074.0 | 1013.3 | 1064.7 | 1125.4 | 1055.3 | 989.9 | 966.6 | 961.9 |
| 67.5° | 3072.6 | 1718.4 | 1181.4 | 1013.3 | 938.6 | 971.3 | 1041.3 | 1022.6 | 966.6 | 952.6 | 947.9 |
| 70° | 2120.0 | 1396.2 | 1097.3 | 957.3 | 845.2 | 882.5 | 989.9 | 1004.0 | 947.9 | 938.6 | 933.9 |
| 72.5° | 1484.9 | 1181.4 | 1008.6 | 896.6 | 770.5 | 807.8 | 966.6 | 966.6 | 905.9 | 919.9 | 910.6 |
| 75° | 1116.0 | 994.6 | 905.9 | 821.8 | 677.1 | 733.1 | 933.9 | 924.6 | 863.9 | 924.6 | 901.2 |
| 77.5° | 840.5 | 803.2 | 784.5 | 728.4 | 593.0 | 649.1 | 868.5 | 849.9 | 770.5 | 775.1 | 733.1 |
| 80° | 611.7 | 621.0 | 672.4 | 621.0 | 495.0 | 537.0 | 733.1 | 723.8 | 625.7 | 644.4 | 593.0 |
| 82.5° | 438.9 | 462.3 | 574.4 | 499.6 | 359.6 | 382.9 | 504.3 | 546.3 | 490.3 | 462.3 | 471.6 |
| 85° | 331.5 | 345.5 | 462.3 | 368.9 | 224.1 | 252.2 | 345.5 | 392.2 | 382.9 | 354.9 | 359.6 |
| 87.5° | 140.1 | 158.8 | 214.8 | 172.8 | 130.7 | 130.7 | 214.8 | 275.5 | 247.5 | 210.1 | 219.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-12

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-850-U-5WQ

Data in this report applies to families of products including GSS-SB1A-850-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-12
 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-850-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 5000K CCT 26 LEDS

Spectral Parameters

CCT (K): 4760
 CIE u': 0.2107
 CIE v': 0.4939
 Duv: 0.0050
 CIE x: 0.3537
 CIE y: 0.3685
 CIE z: 0.2779
 Peak Wavelength (nm): 443
 Dominant Wavelength (nm): 571
 Purity: 16.69598
 R_f: 82
 R_g: 99.4

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 81.1 | | |
| R1: | 79.8 | R9: | 8.7 |
| R2: | 83.5 | R10: | 62.4 |
| R3: | 87.9 | R11: | 83.8 |
| R4: | 83.1 | R12: | 63.0 |
| R5: | 80.5 | R13: | 79.9 |
| R6: | 79.1 | R14: | 93.3 |
| R7: | 86.1 | R15: | 72.7 |
| R8: | 69.0 | | |



Test Conditions

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

REPORT NUMBER: SP1-2407-184-12

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

REPORT NUMBER: SP1-2407-184-12

CIE 1931 Chromaticity Diagram



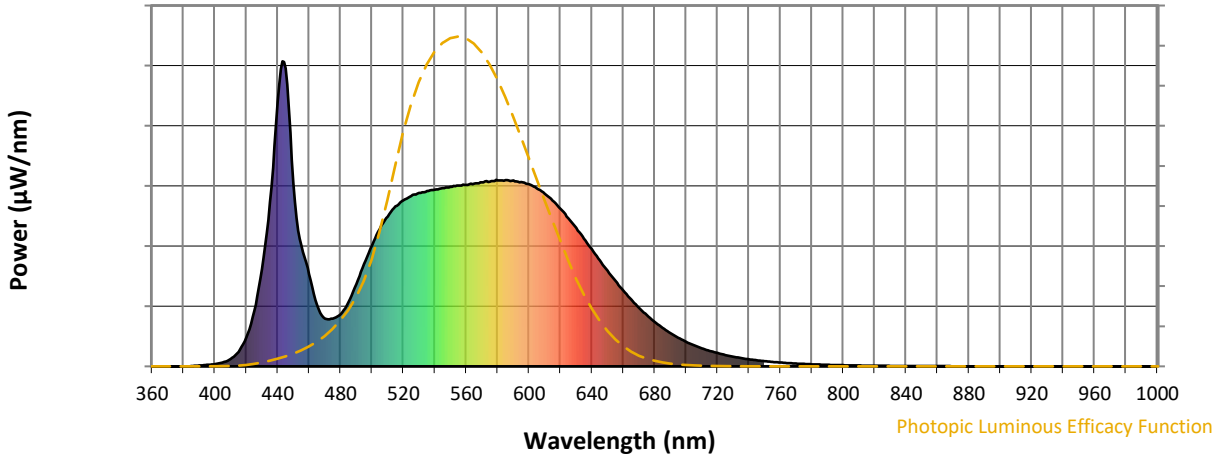
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 7-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 | 270 | NR | 620 | 517 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 335 | NR | 625 | 486 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 397 | NR | 630 | 454 | NR | 760 | 12 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 451 | NR | 635 | 419 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 492 | NR | 640 | 384 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 524 | NR | 645 | 347 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 545 | NR | 650 | 313 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 558 | NR | 655 | 280 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 568 | NR | 660 | 248 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 13 | NR | 535 | 575 | NR | 665 | 219 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 24 | NR | 540 | 579 | NR | 670 | 192 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 47 | NR | 545 | 585 | NR | 675 | 167 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 95 | NR | 550 | 588 | NR | 680 | 146 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 181 | NR | 555 | 593 | NR | 685 | 126 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 319 | NR | 560 | 595 | NR | 690 | 109 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 539 | NR | 565 | 600 | NR | 695 | 94 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 868 | NR | 570 | 603 | NR | 700 | 80 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 977 | NR | 575 | 606 | NR | 705 | 69 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 601 | NR | 580 | 609 | NR | 710 | 59 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 397 | NR | 585 | 611 | NR | 715 | 51 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 302 | NR | 590 | 610 | NR | 720 | 44 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 201 | NR | 595 | 604 | NR | 725 | 37 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 596 | NR | 730 | 32 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 157 | NR | 605 | 583 | NR | 735 | 27 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 566 | NR | 740 | 23 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 543 | NR | 745 | 20 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2407-184-12

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.83

| 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 | 270 | NR | 620 | 517 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 335 | NR | 625 | 486 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 397 | NR | 630 | 454 | NR | 760 | 12 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 451 | NR | 635 | 419 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 492 | NR | 640 | 384 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 524 | NR | 645 | 347 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 545 | NR | 650 | 313 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 558 | NR | 655 | 280 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 568 | NR | 660 | 248 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 13 | NR | 535 | 575 | NR | 665 | 219 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 24 | NR | 540 | 579 | NR | 670 | 192 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 47 | NR | 545 | 585 | NR | 675 | 167 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 95 | NR | 550 | 588 | NR | 680 | 146 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 181 | NR | 555 | 593 | NR | 685 | 126 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 319 | NR | 560 | 595 | NR | 690 | 109 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 539 | NR | 565 | 600 | NR | 695 | 94 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 868 | NR | 570 | 603 | NR | 700 | 80 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 977 | NR | 575 | 606 | NR | 705 | 69 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 601 | NR | 580 | 609 | NR | 710 | 59 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 397 | NR | 585 | 611 | NR | 715 | 51 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 302 | NR | 590 | 610 | NR | 720 | 44 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 201 | NR | 595 | 604 | NR | 725 | 37 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 596 | NR | 730 | 32 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 157 | NR | 605 | 583 | NR | 735 | 27 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 566 | NR | 740 | 23 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 543 | NR | 745 | 20 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2407-184-12

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.74

| 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 | 270 | NR | 620 | 517 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 335 | NR | 625 | 486 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 397 | NR | 630 | 454 | NR | 760 | 12 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 451 | NR | 635 | 419 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 492 | NR | 640 | 384 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 524 | NR | 645 | 347 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 3 | NR | 520 | 545 | NR | 650 | 313 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 5 | NR | 525 | 558 | NR | 655 | 280 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 7 | NR | 530 | 568 | NR | 660 | 248 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 13 | NR | 535 | 575 | NR | 665 | 219 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 24 | NR | 540 | 579 | NR | 670 | 192 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 47 | NR | 545 | 585 | NR | 675 | 167 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 95 | NR | 550 | 588 | NR | 680 | 146 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 181 | NR | 555 | 593 | NR | 685 | 126 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 319 | NR | 560 | 595 | NR | 690 | 109 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 539 | NR | 565 | 600 | NR | 695 | 94 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 868 | NR | 570 | 603 | NR | 700 | 80 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 977 | NR | 575 | 606 | NR | 705 | 69 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 601 | NR | 580 | 609 | NR | 710 | 59 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 397 | NR | 585 | 611 | NR | 715 | 51 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 302 | NR | 590 | 610 | NR | 720 | 44 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 201 | NR | 595 | 604 | NR | 725 | 37 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 596 | NR | 730 | 32 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 157 | NR | 605 | 583 | NR | 735 | 27 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 171 | NR | 610 | 566 | NR | 740 | 23 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 210 | NR | 615 | 543 | NR | 745 | 20 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 82$
 $R_g = 99.4$
 $CIE R_a = 81.1$
 $R_9 = 8.7$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 73 | CES51 = 92 | CES76 = 66 |
| CES02 = 60 | CES27 = 90 | CES52 = 93 | CES77 = 80 |
| CES03 = 30 | CES28 = 87 | CES53 = 84 | CES78 = 65 |
| CES04 = 69 | CES29 = 69 | CES54 = 88 | CES79 = 87 |
| CES05 = 47 | CES30 = 73 | CES55 = 88 | CES80 = 83 |
| CES06 = 50 | CES31 = 72 | CES56 = 80 | CES81 = 84 |
| CES07 = 40 | CES32 = 69 | CES57 = 78 | CES82 = 93 |
| CES08 = 39 | CES33 = 75 | CES58 = 80 | CES83 = 90 |
| CES09 = 29 | CES34 = 78 | CES59 = 93 | CES84 = 92 |
| CES10 = 73 | CES35 = 88 | CES60 = 95 | CES85 = 87 |
| CES11 = 56 | CES36 = 98 | CES61 = 93 | CES86 = 80 |
| CES12 = 62 | CES37 = 85 | CES62 = 88 | CES87 = 84 |
| CES13 = 42 | CES38 = 81 | CES63 = 83 | CES88 = 85 |
| CES14 = 74 | CES39 = 93 | CES64 = 83 | CES89 = 80 |
| CES15 = 71 | CES40 = 88 | CES65 = 77 | CES90 = 83 |
| CES16 = 46 | CES41 = 89 | CES66 = 81 | CES91 = 89 |
| CES17 = 48 | CES42 = 82 | CES67 = 80 | CES92 = 73 |
| CES18 = 55 | CES43 = 80 | CES68 = 83 | CES93 = 85 |
| CES19 = 70 | CES44 = 99 | CES69 = 89 | CES94 = 67 |
| CES20 = 64 | CES45 = 87 | CES70 = 75 | CES95 = 78 |
| CES21 = 85 | CES46 = 85 | CES71 = 73 | CES96 = 84 |
| CES22 = 77 | CES47 = 82 | CES72 = 91 | CES97 = 87 |
| CES23 = 91 | CES48 = 78 | CES73 = 67 | CES98 = 81 |
| CES24 = 90 | CES49 = 84 | CES74 = 98 | CES99 = 74 |
| CES25 = 71 | CES50 = 91 | CES75 = 70 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)