

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: P1456169

Luminaire Tested: GLAN-SB5C-850-U-T2LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1456169
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB5C-850-U-T2LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 615mA 5xLight Square
PACKAGE 80CRI 5000K FIXTURE w/ TYPE II LOW GLARE
Light Source: (130) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

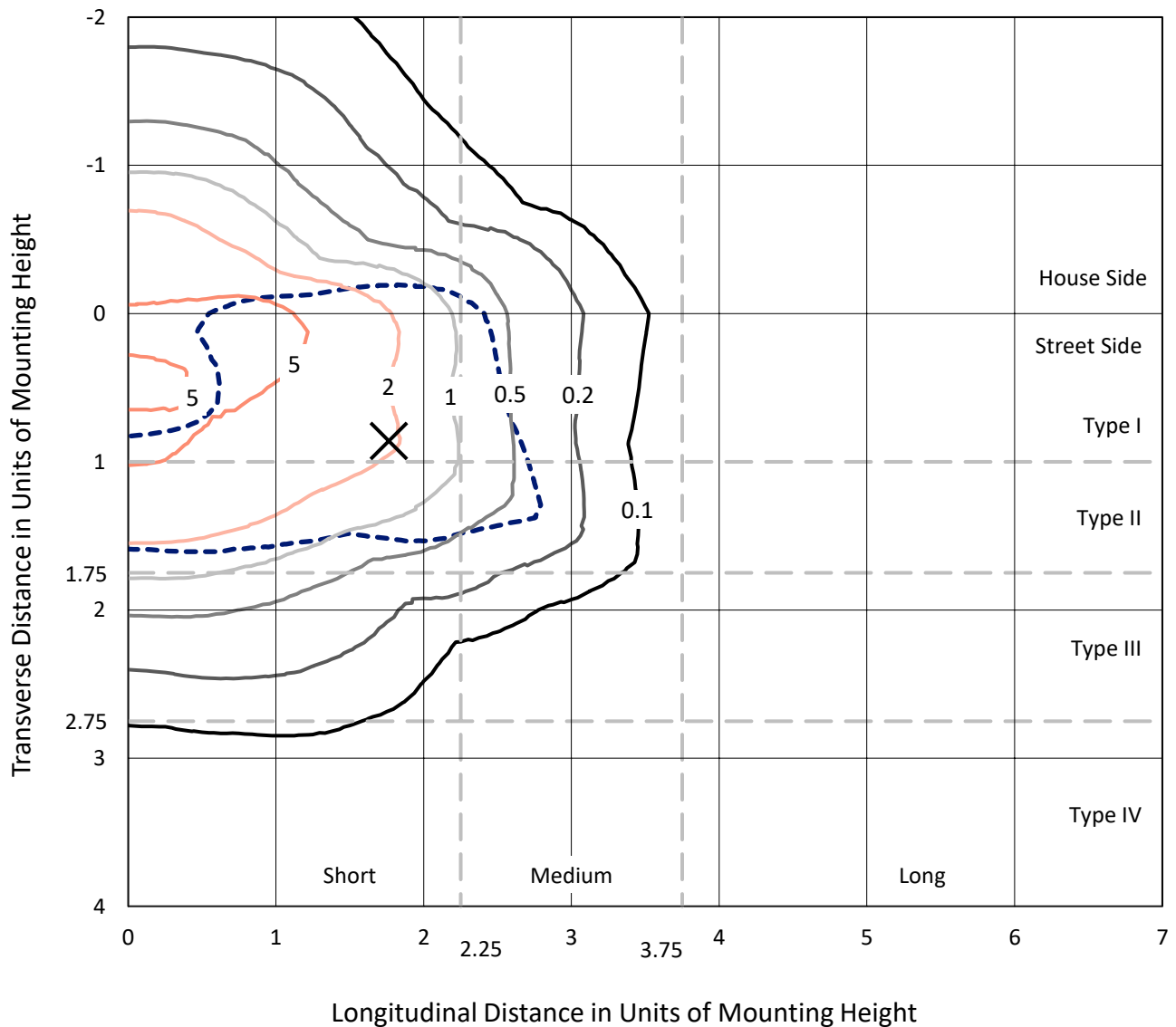
Lumens per Lamp: N/A
Luminaire Lumens: 35002.5 lumens
Efficiency: N/A
Efficacy: 140.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 249.5
Input Voltage (V): 120
Input Current (A_{in}): 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: P1456169
 CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

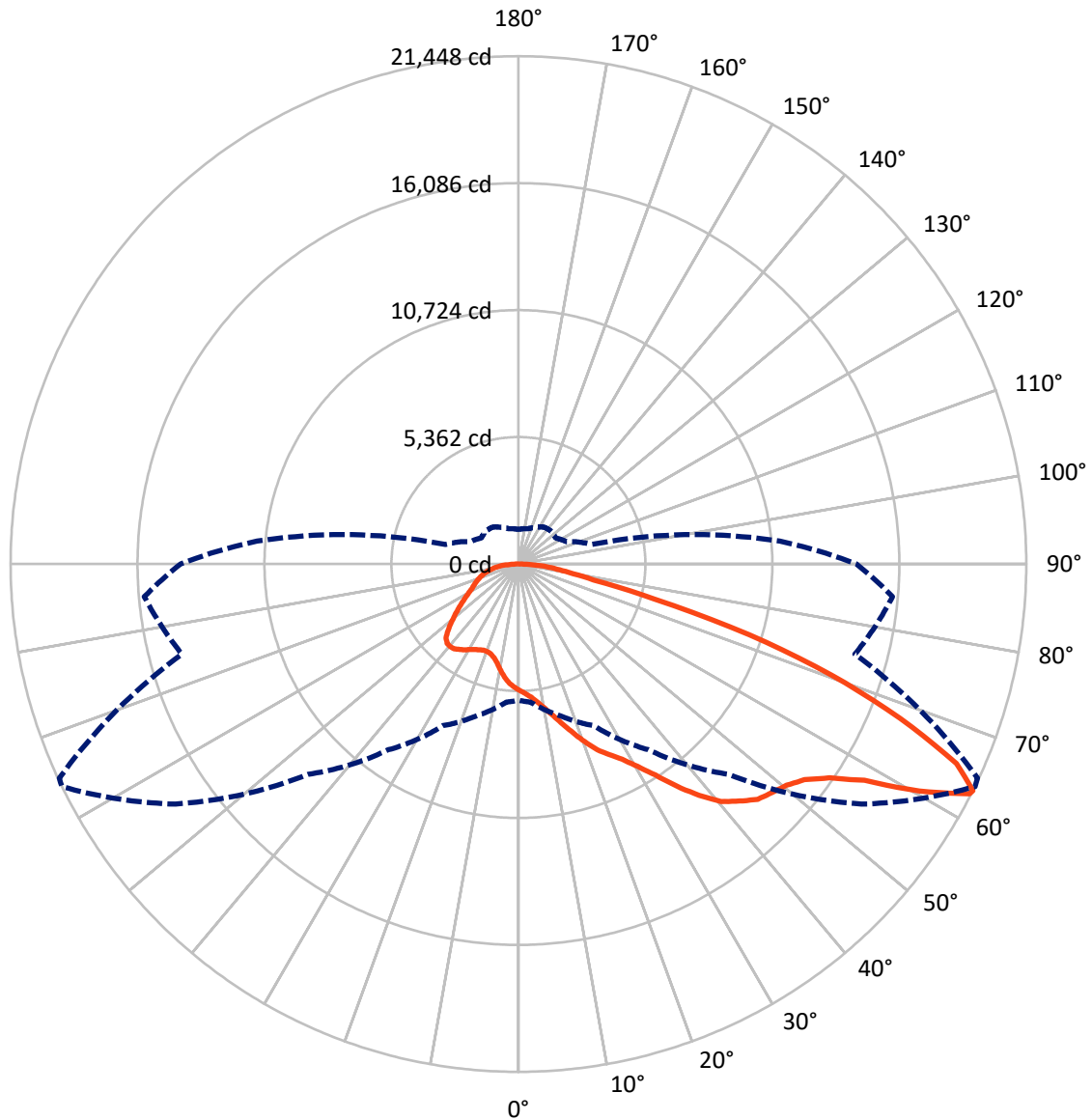


Based on 30 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - N/A

REPORT NUMBER: P1456169

CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9404.2 | 0.0 | 9404.2 |
| | % Fixture | 26.9 | 0.0 | 26.9 |
| Street Side | Lumens | 25598.3 | 0.0 | 25598.3 |
| | % Fixture | 73.1 | 0.0 | 73.1 |
| Total | Lumens | 35002.5 | 0.0 | 35002.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 489.4 | 1.4 |
| 10°-20° | 1506.7 | 4.3 |
| 20°-30° | 2755.2 | 7.9 |
| 30°-40° | 4739.4 | 13.5 |
| 40°-50° | 6989.3 | 20.0 |
| 50°-60° | 8377.1 | 23.9 |
| 60°-70° | 6723.4 | 19.2 |
| 70°-80° | 2701.7 | 7.7 |
| 80°-90° | 720.4 | 2.1 |
| 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° | 35002.5 | 100.0 |
| 0°-180° | 35002.5 | 100.0 |



REPORT NUMBER: P1456169

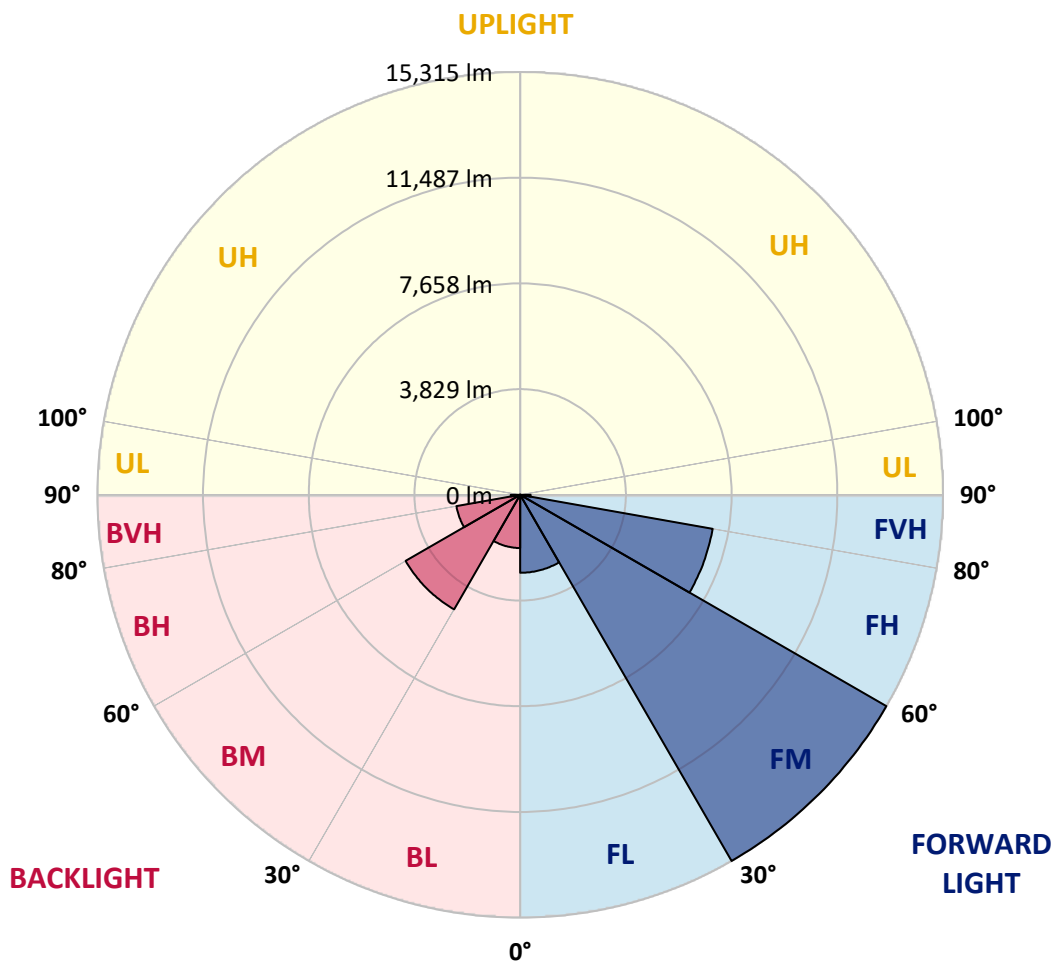
CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2824.0 | 8.1 | | | |
| FM (30°-60°) | 15315.4 | 43.8 | | | |
| FH (60°-80°) | 7080.3 | 20.2 | | | G3/7500 |
| FVH (80°-90°) | 378.5 | 1.1 | | | G3/500 |
| BL (0°-30°) | 1927.2 | 5.5 | B3/2500 | | |
| BM (30°-60°) | 4790.3 | 13.7 | B3/5000 | | |
| BH (60°-80°) | 2344.8 | 6.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 341.9 | 1.0 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short





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CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 |
| 2.5° | 5550.6 | 5558.5 | 5534.9 | 5527.0 | 5542.8 | 5511.3 | 5503.4 | 5472.0 | 5456.3 | 5424.8 | 5385.5 |
| 5° | 5707.9 | 5715.7 | 5700.0 | 5700.0 | 5715.7 | 5692.1 | 5684.3 | 5652.8 | 5637.1 | 5605.6 | 5527.0 |
| 7.5° | 5700.0 | 5707.9 | 5723.6 | 5786.5 | 5865.1 | 5896.5 | 5920.1 | 5896.5 | 5888.7 | 5841.5 | 5762.9 |
| 10° | 5574.2 | 5582.1 | 5621.4 | 5715.7 | 5912.3 | 6053.8 | 6203.2 | 6203.2 | 6218.9 | 6179.6 | 6038.1 |
| 12.5° | 5401.2 | 5409.1 | 5503.4 | 5652.8 | 5912.3 | 6156.0 | 6462.6 | 6588.4 | 6580.5 | 6557.0 | 6391.9 |
| 15° | 4984.5 | 4984.5 | 5126.1 | 5409.1 | 5825.8 | 6226.8 | 6682.7 | 7020.8 | 7028.7 | 7052.3 | 6855.7 |
| 17.5° | 4630.8 | 4638.6 | 4756.5 | 5008.1 | 5550.6 | 6187.4 | 6918.6 | 7500.4 | 7524.0 | 7657.6 | 7374.6 |
| 20° | 4662.2 | 4662.2 | 4701.5 | 4811.6 | 5251.9 | 6030.2 | 7052.3 | 8011.4 | 8090.1 | 8404.5 | 8050.7 |
| 22.5° | 4905.9 | 4905.9 | 4937.4 | 4929.5 | 5196.8 | 5928.0 | 7138.7 | 8522.5 | 8664.0 | 9316.5 | 8860.5 |
| 25° | 5354.1 | 5346.2 | 5314.8 | 5267.6 | 5424.8 | 6038.1 | 7335.3 | 8915.6 | 9190.7 | 10322.9 | 9796.1 |
| 27.5° | 5904.4 | 5888.7 | 5841.5 | 5762.9 | 5873.0 | 6368.3 | 7673.4 | 9332.3 | 9631.0 | 11423.6 | 10786.7 |
| 30° | 6588.4 | 6541.2 | 6494.1 | 6391.9 | 6509.8 | 6910.7 | 8176.5 | 9921.9 | 10205.0 | 12673.6 | 11981.8 |
| 32.5° | 7398.2 | 7453.2 | 7296.0 | 7154.5 | 7280.3 | 7649.8 | 8923.4 | 10621.6 | 10928.3 | 13978.7 | 13224.0 |
| 35° | 8609.0 | 8774.1 | 8726.9 | 8011.4 | 8129.4 | 8538.2 | 9796.1 | 11525.8 | 11800.9 | 15165.9 | 14497.6 |
| 37.5° | 9804.0 | 9764.7 | 9804.0 | 9206.5 | 9017.8 | 9513.1 | 10731.7 | 12390.6 | 12657.9 | 16132.9 | 15621.9 |
| 40° | 10763.2 | 10881.1 | 10881.1 | 10393.6 | 10149.9 | 10480.1 | 11580.8 | 13184.7 | 13444.1 | 16667.6 | 16431.7 |
| 42.5° | 11808.8 | 11824.5 | 11793.1 | 11368.5 | 11274.2 | 11360.7 | 12327.7 | 13687.8 | 13900.1 | 16942.7 | 16982.0 |
| 45° | 12988.1 | 12980.3 | 12846.6 | 12492.8 | 12351.3 | 12272.7 | 12791.6 | 14175.3 | 14387.6 | 17068.5 | 17280.8 |
| 47.5° | 13963.0 | 14002.3 | 14010.2 | 13632.8 | 13396.9 | 13058.9 | 13192.5 | 14419.0 | 14662.7 | 16927.0 | 17343.7 |
| 50° | 14018.0 | 14080.9 | 14379.7 | 14489.8 | 14442.6 | 13900.1 | 13562.1 | 14678.5 | 14922.2 | 16958.5 | 17571.7 |
| 52.5° | 13672.1 | 13735.0 | 14120.3 | 14576.3 | 15126.6 | 14867.2 | 14143.8 | 15126.6 | 15378.2 | 17265.1 | 18090.6 |
| 55° | 12744.4 | 12846.6 | 13420.5 | 14057.4 | 15040.1 | 15409.6 | 15173.8 | 15936.4 | 16172.3 | 17508.8 | 18696.0 |
| 57.5° | 11093.4 | 11219.2 | 12013.2 | 13027.4 | 14371.8 | 15283.8 | 16667.6 | 17233.6 | 17430.2 | 17681.8 | 18703.8 |
| 60° | 8294.5 | 8396.7 | 9638.9 | 11006.9 | 13027.4 | 14497.6 | 17556.0 | 19458.6 | 19568.7 | 16746.2 | 17642.5 |
| 62.5° | 6108.8 | 6211.0 | 7044.4 | 8027.2 | 10236.4 | 13051.0 | 17728.9 | 21384.8 | 21400.5 | 15055.8 | 16180.1 |
| 63° | 5755.0 | 5857.2 | 6612.0 | 7531.9 | 9576.0 | 12563.6 | 17673.9 | 21447.7 | 21392.7 | 14709.9 | 15857.8 |
| 65° | 4481.4 | 4662.2 | 5448.4 | 6148.1 | 7178.1 | 10000.5 | 16966.3 | 20331.3 | 20409.9 | 13687.8 | 14238.2 |
| 67.5° | 3050.5 | 3184.1 | 4182.6 | 4992.4 | 5424.8 | 6368.3 | 13915.8 | 17398.7 | 17524.5 | 12626.5 | 11360.7 |
| 70° | 2358.6 | 2421.5 | 3003.3 | 3954.6 | 4387.0 | 4049.0 | 9072.8 | 14010.2 | 14010.2 | 9859.0 | 8050.7 |
| 72.5° | 1847.6 | 1871.2 | 2264.3 | 3089.8 | 3530.1 | 3113.4 | 5055.3 | 10189.2 | 9811.8 | 5849.4 | 5369.8 |
| 75° | 1320.8 | 1352.3 | 1706.1 | 2303.6 | 2814.6 | 2453.0 | 3231.3 | 5935.9 | 5707.9 | 3365.0 | 3585.1 |
| 77.5° | 1045.7 | 1061.4 | 1273.7 | 1698.2 | 2280.0 | 1871.2 | 2460.8 | 3239.2 | 3207.7 | 2366.5 | 2303.6 |
| 80° | 825.5 | 857.0 | 998.5 | 1218.6 | 1761.1 | 1462.3 | 1831.9 | 2138.5 | 2075.6 | 1627.4 | 1478.1 |
| 82.5° | 589.7 | 644.7 | 770.5 | 927.7 | 1305.1 | 1045.7 | 1202.9 | 1509.5 | 1509.5 | 1226.5 | 974.9 |
| 85° | 361.7 | 408.8 | 456.0 | 573.9 | 927.7 | 676.1 | 636.8 | 974.9 | 998.5 | 919.9 | 629.0 |
| 87.5° | 173.0 | 188.7 | 220.1 | 243.7 | 338.1 | 306.6 | 251.6 | 369.5 | 377.4 | 408.8 | 259.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: GLAN-SB5C-850-U-T2LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 | 5330.5 |
| 2.5° | 5377.6 | 5361.9 | 5283.3 | 5204.7 | 5118.2 | 5039.6 | 4961.0 | 4898.1 | 4827.3 | 4843.0 | 4850.9 |
| 5° | 5479.9 | 5440.5 | 5267.6 | 5063.2 | 4795.9 | 4544.3 | 4300.5 | 4127.6 | 4017.5 | 3986.1 | 3923.2 |
| 7.5° | 5700.0 | 5605.6 | 5291.2 | 4858.8 | 4363.4 | 3970.3 | 3742.3 | 3640.1 | 3608.7 | 3616.5 | 3600.8 |
| 10° | 5951.6 | 5810.1 | 5322.6 | 4615.0 | 3986.1 | 3718.8 | 3687.3 | 3750.2 | 3781.7 | 3813.1 | 3821.0 |
| 12.5° | 6281.8 | 6053.8 | 5306.9 | 4347.7 | 3805.2 | 3758.1 | 3876.0 | 3993.9 | 4064.7 | 4111.9 | 4104.0 |
| 15° | 6667.0 | 6360.4 | 5259.7 | 4127.6 | 3781.7 | 3907.4 | 4056.8 | 4190.5 | 4277.0 | 4324.1 | 4300.5 |
| 17.5° | 7130.9 | 6722.1 | 5204.7 | 3986.1 | 3852.4 | 4001.8 | 4159.0 | 4292.7 | 4387.0 | 4418.5 | 4394.9 |
| 20° | 7704.8 | 7130.9 | 5110.3 | 3923.2 | 3907.4 | 4041.1 | 4182.6 | 4308.4 | 4387.0 | 4418.5 | 4387.0 |
| 22.5° | 8381.0 | 7618.3 | 5031.7 | 3923.2 | 3931.0 | 4041.1 | 4143.3 | 4237.6 | 4308.4 | 4332.0 | 4292.7 |
| 25° | 9245.8 | 8184.4 | 5000.3 | 3986.1 | 3938.9 | 4001.8 | 4056.8 | 4111.9 | 4151.2 | 4166.9 | 4151.2 |
| 27.5° | 10126.3 | 8837.0 | 5016.0 | 4064.7 | 3931.0 | 3946.8 | 3946.8 | 3954.6 | 3962.5 | 3970.3 | 3962.5 |
| 30° | 11140.5 | 9497.4 | 5078.9 | 4166.9 | 3946.8 | 3868.1 | 3844.5 | 3797.4 | 3758.1 | 3726.6 | 3695.2 |
| 32.5° | 12123.3 | 10126.3 | 5189.0 | 4316.3 | 3931.0 | 3781.7 | 3734.5 | 3616.5 | 3506.5 | 3412.1 | 3412.1 |
| 35° | 13184.7 | 10778.9 | 5385.5 | 4426.3 | 3915.3 | 3703.0 | 3569.4 | 3435.7 | 3317.8 | 3184.1 | 3184.1 |
| 37.5° | 14096.7 | 11337.1 | 5542.8 | 4552.1 | 3899.6 | 3608.7 | 3396.4 | 3247.0 | 3121.2 | 2987.6 | 2971.9 |
| 40° | 14733.5 | 11659.4 | 5637.1 | 4599.3 | 3844.5 | 3482.9 | 3231.3 | 3042.6 | 2861.8 | 2681.0 | 2673.1 |
| 42.5° | 15040.1 | 11643.7 | 5582.1 | 4583.6 | 3742.3 | 3325.7 | 3089.8 | 2838.2 | 2594.5 | 2429.4 | 2413.7 |
| 45° | 15205.2 | 11541.5 | 5369.8 | 4449.9 | 3577.2 | 3160.5 | 2909.0 | 2641.7 | 2397.9 | 2248.5 | 2217.1 |
| 47.5° | 15173.8 | 11289.9 | 5078.9 | 4119.7 | 3357.1 | 2979.7 | 2728.1 | 2453.0 | 2256.4 | 2169.9 | 2169.9 |
| 50° | 15260.3 | 11093.4 | 4748.7 | 3742.3 | 3058.3 | 2767.4 | 2563.0 | 2311.4 | 2193.5 | 2083.4 | 2044.1 |
| 52.5° | 15645.5 | 11258.5 | 4465.6 | 3388.5 | 2775.3 | 2563.0 | 2421.5 | 2209.2 | 2059.9 | 1989.1 | 1965.5 |
| 55° | 16156.5 | 11612.3 | 4198.3 | 3074.1 | 2500.1 | 2382.2 | 2311.4 | 2114.9 | 1941.9 | 1871.2 | 1831.9 |
| 57.5° | 16250.9 | 11856.0 | 3938.9 | 2767.4 | 2272.1 | 2240.7 | 2217.1 | 1949.8 | 1808.3 | 1753.2 | 1721.8 |
| 60° | 15598.3 | 11675.2 | 3600.8 | 2492.3 | 2091.3 | 2107.0 | 2044.1 | 1847.6 | 1682.5 | 1627.4 | 1596.0 |
| 62.5° | 14489.8 | 11203.4 | 3262.8 | 2256.4 | 1949.8 | 1981.2 | 1918.3 | 1721.8 | 1556.7 | 1501.7 | 1485.9 |
| 63° | 14269.6 | 11077.6 | 3184.1 | 2232.8 | 1918.3 | 1957.7 | 1902.6 | 1706.1 | 1541.0 | 1485.9 | 1462.3 |
| 65° | 12956.7 | 10322.9 | 2909.0 | 2107.0 | 1816.1 | 1816.1 | 1824.0 | 1627.4 | 1485.9 | 1462.3 | 1446.6 |
| 67.5° | 10566.6 | 8616.8 | 2610.2 | 1957.7 | 1706.1 | 1729.7 | 1769.0 | 1658.9 | 1603.9 | 1588.1 | 1572.4 |
| 70° | 7987.9 | 6486.2 | 2350.8 | 1816.1 | 1588.1 | 1666.8 | 1934.1 | 1886.9 | 1682.5 | 1541.0 | 1509.5 |
| 72.5° | 5660.7 | 4418.5 | 2122.8 | 1674.6 | 1446.6 | 1643.2 | 2004.8 | 1800.4 | 1517.4 | 1352.3 | 1320.8 |
| 75° | 3789.5 | 2846.1 | 1894.8 | 1525.2 | 1289.4 | 1517.4 | 1894.8 | 1643.2 | 1320.8 | 1281.5 | 1234.3 |
| 77.5° | 2382.2 | 2028.4 | 1666.8 | 1352.3 | 1116.4 | 1352.3 | 1721.8 | 1462.3 | 1140.0 | 1155.7 | 1085.0 |
| 80° | 1454.5 | 1446.6 | 1399.4 | 1147.9 | 896.3 | 1077.1 | 1446.6 | 1234.3 | 912.0 | 912.0 | 809.8 |
| 82.5° | 864.8 | 1045.7 | 1187.2 | 951.3 | 652.6 | 770.5 | 1045.7 | 927.7 | 762.6 | 739.0 | 691.9 |
| 85° | 581.8 | 707.6 | 943.4 | 731.2 | 416.7 | 471.7 | 723.3 | 778.3 | 699.7 | 613.2 | 573.9 |
| 87.5° | 212.3 | 283.0 | 432.4 | 298.8 | 180.8 | 283.0 | 542.5 | 566.1 | 424.6 | 330.2 | 298.8 |
| 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: SP1-2407-184-12

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
 Rf: 82
 Rg: 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 |

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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 5000K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-12

Photopic Flux vs. Wavelength



Photopic Lumens: NR

| λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | Lumens (ϕ/nm) | λ (nm) | Power $\text{W}^{\wedge}/\text{nm}$ | 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)