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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P324320

Luminaire Tested: **GLEON-SA6B-830-U-SLL-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

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Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P324320 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/3/2020 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GLEON-SA6B-830-U-SLL-HSS |
| Description: | GALLEON AREA AND ROADWAY LUMINAIRE |
| | (6) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT |
| | ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 20135 lumens |
| Efficiency: | N/A |
| Efficacy: | 80.9 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B2 - U0 - G3 |

| | |
|---|---|
| Input Watts (W): | 249 |
| Input Voltage (V): | NR |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | NR |
| Total Harmonic Distortion (THDi): | NR |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 24 FT |

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REPORT NUMBER: P324320
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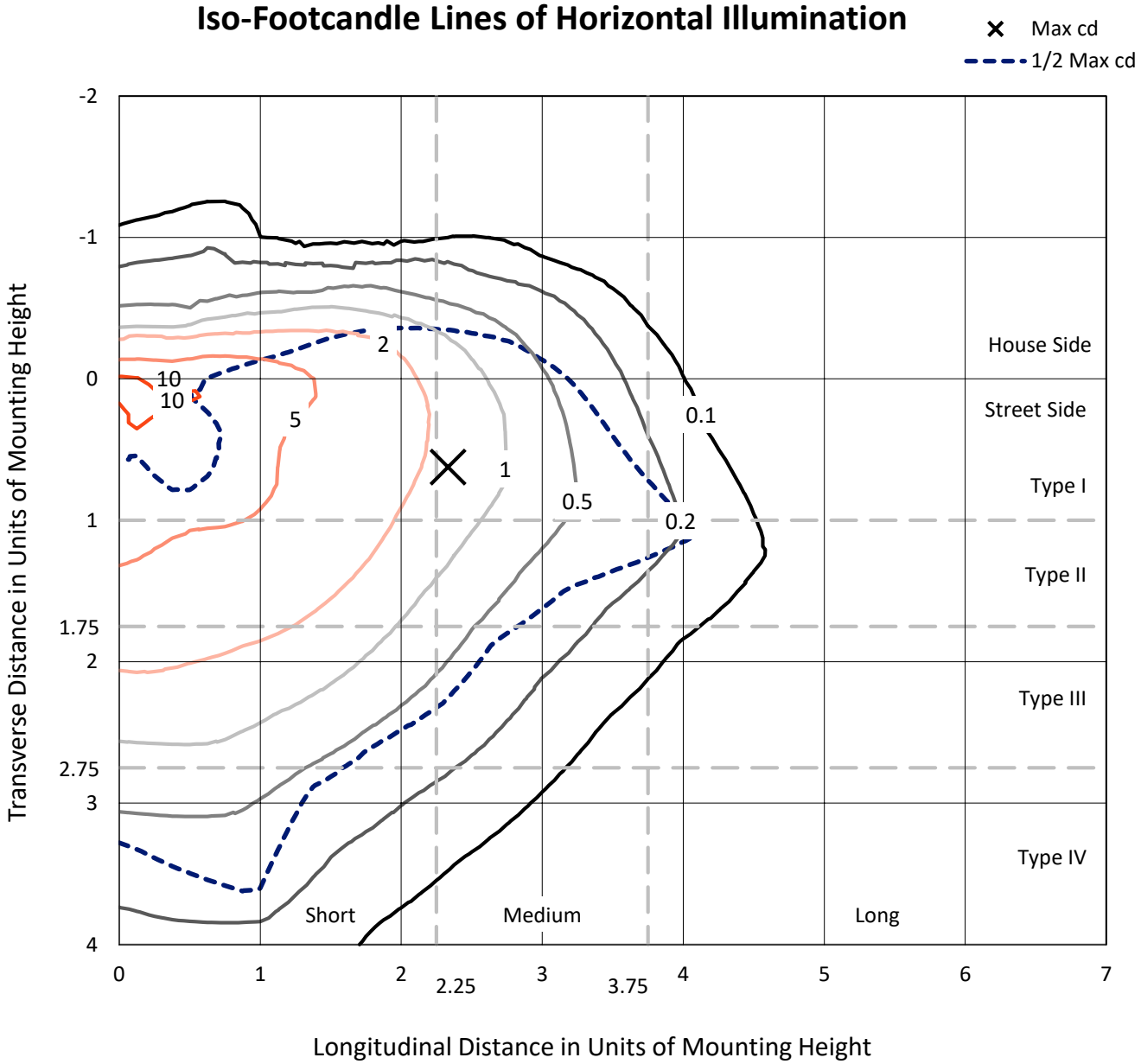
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 14 fc
Type III - Medium - N/A

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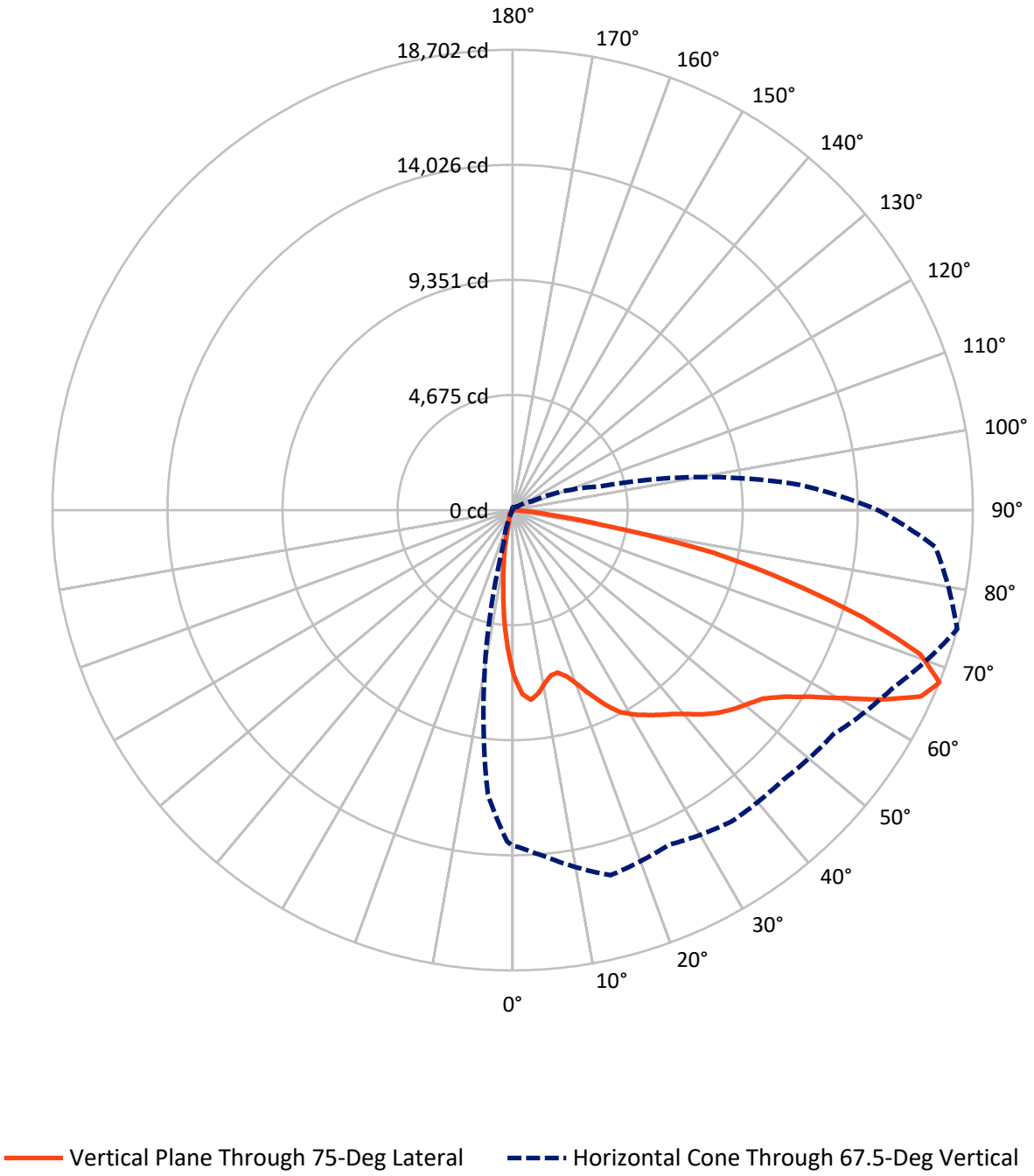
## Luminous Intensity Polar Plot



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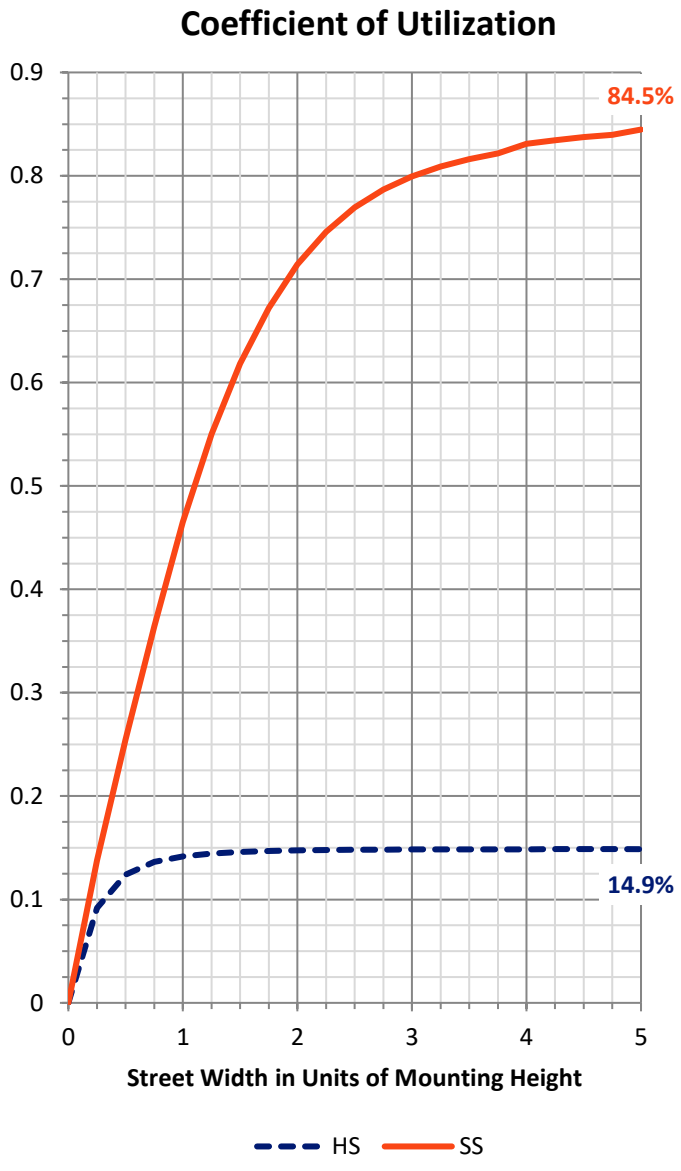
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 3021.5 | 0.0 | 3021.5 |
| | % Fixture | 15.0 | 0.0 | 15.0 |
| **Street Side** | Lumens | 17113.5 | 0.0 | 17113.5 |
| | % Fixture | 85.0 | 0.0 | 85.0 |
| **Total** | Lumens | 20135.0 | 0.0 | 20135.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 512.4 | 2.5 |
| 10°-20° | 1008.9 | 5.0 |
| 20°-30° | 1427.3 | 7.1 |
| 30°-40° | 2098.6 | 10.4 |
| 40°-50° | 3016.3 | 15.0 |
| 50°-60° | 4246.2 | 21.1 |
| 60°-70° | 4959.2 | 24.6 |
| 70°-80° | 2530.0 | 12.6 |
| 80°-90° | 336.1 | 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° | 20135.0 | 100.0 |
| 0°-180° | 20135.0 | 100.0 |



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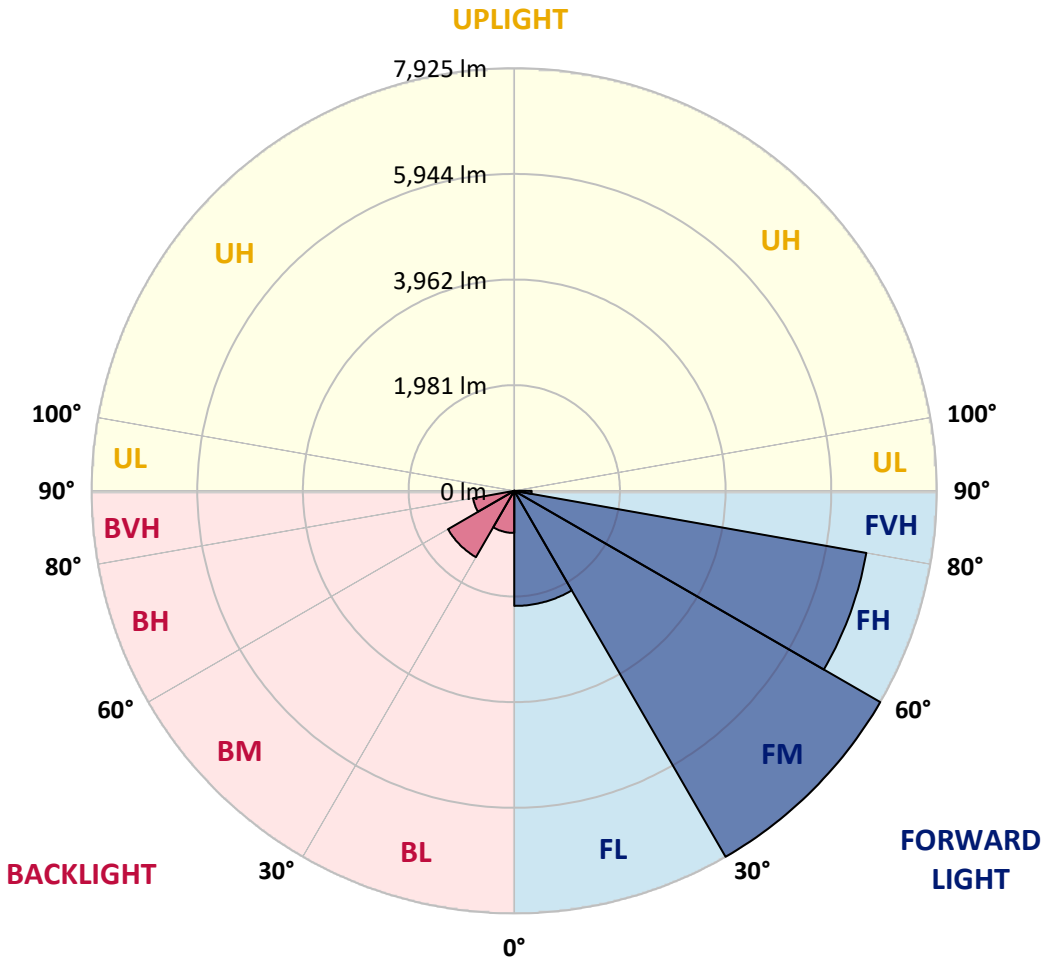
## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2158.5 | 10.7 | | | |
| FM | (30°-60°) | 7924.8 | 39.4 | | | |
| FH | (60°-80°) | 6704.4 | 33.3 | | | G3/7500 |
| FVH | (80°-90°) | 325.9 | 1.6 | | | G3/500 |
| BL | (0°-30°) | 790.2 | 3.9 | B2/1000 | | |
| BM | (30°-60°) | 1436.3 | 7.1 | B2/2500 | | |
| BH | (60°-80°) | 784.8 | 3.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 10.2 | 0.1 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G3**
Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | *6754.9* | 6754.9 |
| 2.5° | 7322.5 | 7333.9 | 7393.1 | 7530.4 | 7680.2 | 7691.6 | 7792.7 | 7688.7 | 7653.4 | *7485.6* | 7312.0 |
| 5° | 7377.8 | 7421.7 | 7624.8 | 8028.3 | 8378.3 | 8490.9 | 8571.0 | 8366.9 | 8152.3 | *7742.2* | 7304.3 |
| 7.5° | 6932.4 | 7005.8 | 7325.3 | 8082.7 | 8708.4 | 8985.0 | 9037.4 | 8717.9 | 8192.4 | *7517.0* | 6858.9 |
| 10° | 6362.0 | 6445.9 | 6831.3 | 7762.2 | 8621.6 | 9095.6 | 9168.1 | 8749.4 | 7994.0 | *7152.7* | 6377.2 |
| 12.5° | 5900.3 | 5998.6 | 6392.5 | 7401.6 | 8323.0 | 8847.6 | 8990.7 | 8643.5 | 7822.3 | *6894.2* | 6048.2 |
| 15° | 5687.6 | 5800.2 | 6214.1 | 7168.9 | 7992.1 | 8405.1 | 8523.3 | 8373.6 | 7726.9 | *6853.2* | 5971.9 |
| 17.5° | 5809.7 | 5931.8 | 6359.1 | 7188.9 | 7681.1 | 7857.6 | 7952.9 | 8014.0 | 7726.9 | *7100.2* | 6195.1 |
| 20° | 6310.5 | 6442.1 | 6894.2 | 7392.1 | 7423.6 | 7357.8 | 7459.8 | 7674.4 | 7816.5 | *7569.5* | 6731.1 |
| 22.5° | 7002.9 | 7157.5 | 7667.8 | 7740.2 | 7297.7 | 7048.7 | 7062.1 | 7398.8 | 7979.7 | *8164.7* | 7475.1 |
| 25° | 7847.1 | 8035.9 | 8554.8 | 8259.1 | 7350.1 | 6864.6 | 6859.9 | 7171.8 | 8138.9 | *8760.8* | 8304.0 |
| 27.5° | 8685.5 | 8893.4 | 9349.3 | 8892.5 | 7566.6 | 6831.3 | 6821.7 | 7103.1 | 8294.4 | *9291.2* | 9209.1 |
| 30° | 9388.4 | 9590.7 | 9983.6 | 9351.2 | 7800.3 | 6909.5 | 6863.7 | 7176.5 | 8386.9 | *9635.5* | 9869.2 |
| 32.5° | 9960.7 | 10122.9 | 10440.5 | 9667.0 | 8050.2 | 7061.1 | 6961.9 | 7373.0 | 8544.3 | *9926.4* | 10475.8 |
| 35° | 10590.3 | 10761.0 | 10887.8 | 9967.4 | 8330.7 | 7279.5 | 7137.4 | 7684.9 | 8786.6 | *10222.1* | 11140.6 |
| 37.5° | 11308.5 | 11478.3 | 11463.0 | 10242.1 | 8686.4 | 7641.0 | 7550.4 | 8179.0 | 9163.3 | *10514.9* | 11882.7 |
| 40° | 12011.4 | 12185.0 | 12061.0 | 10542.6 | 9104.2 | 8237.2 | 8170.4 | 8921.1 | 9667.9 | *10889.8* | 12752.6 |
| 42.5° | 12669.6 | 12857.5 | 12592.3 | 10826.8 | 9602.1 | 8988.8 | 9103.3 | 9876.8 | 10299.3 | *11351.4* | 13502.3 |
| 45° | 13199.9 | 13391.6 | 13037.8 | 11103.4 | 10126.7 | 9900.6 | 10245.0 | 10935.5 | 11058.6 | *11741.5* | 14008.7 |
| 47.5° | 13585.2 | 13766.5 | 13346.8 | 11380.0 | 10798.2 | 11015.7 | 11615.6 | 12045.8 | 11744.4 | *12080.1* | 14368.3 |
| 50° | 13831.3 | 13972.5 | 13437.4 | 11726.3 | 11679.5 | 12316.7 | 13043.5 | 13253.3 | 12390.1 | *12385.3* | 14805.2 |
| 52.5° | 13987.8 | 14051.7 | 13504.2 | 12087.8 | 12599.0 | 13733.1 | 14441.8 | 14507.6 | 13054.9 | *12721.1* | 15393.7 |
| 55° | 14526.7 | 14578.2 | 13977.3 | 12525.6 | 13359.2 | 14974.0 | 15706.5 | 15645.5 | 13807.5 | *13378.3* | 16088.1 |
| 57.5° | 15446.1 | 15500.5 | 14954.9 | 13155.1 | 13974.4 | 15740.9 | 16623.2 | 16732.9 | 14689.8 | *14301.6* | 16832.0 |
| 60° | 15907.8 | 16008.9 | 15814.3 | 13952.5 | 14570.5 | 16231.1 | 17247.9 | 17598.0 | 15792.4 | *15518.6* | 17553.1 |
| 62.5° | 15489.1 | 15636.0 | 15918.3 | 14836.7 | 15162.9 | 16501.1 | 17442.5 | 17908.0 | 16921.7 | *16937.0* | 17997.6 |
| 65° | 14653.5 | 14770.8 | 15249.7 | 15321.2 | 15506.2 | 16467.7 | 16961.8 | 17474.9 | 17613.2 | *18239.9* | 17973.8 |
| 67.5° | *13644.4* | *13688.3* | *14094.6* | *15359.4* | *15008.3* | *15464.3* | *15517.7* | *15897.3* | *17066.7* | *18701.5* | *17251.7* |
| 70° | 12191.7 | 12215.6 | 12570.4 | 14082.2 | 12897.5 | 12997.7 | 12918.5 | 12995.8 | 14672.6 | *17577.0* | 15429.0 |
| 72.5° | 9811.9 | 9872.0 | 10376.6 | 11694.8 | 9396.1 | 9107.1 | 9729.0 | 9694.6 | 11299.9 | *14850.0* | 11459.2 |
| 75° | 7224.2 | 7328.2 | 8090.3 | 9419.9 | 6594.7 | 5965.2 | 6419.2 | 6540.3 | 8033.1 | *11486.8* | 7166.0 |
| 77.5° | 5058.1 | 5135.4 | 5873.6 | 6924.7 | 4772.9 | 4265.5 | 4101.4 | 4245.4 | 5302.3 | *8309.7* | 3610.2 |
| 80° | 2913.9 | 2942.5 | 3413.7 | 3998.4 | 3216.3 | 3679.8 | 3333.6 | 3432.8 | 3177.2 | *3697.0* | 1552.8 |
| 82.5° | 1906.7 | 1911.5 | 2095.5 | 2379.8 | 2003.0 | 2327.3 | 1722.6 | 2202.4 | 1954.4 | *1485.1* | 505.5 |
| 85° | 1030.1 | 1035.8 | 1215.2 | 1689.2 | 1134.1 | 641.0 | 376.8 | 773.5 | 1208.5 | *340.5* | 138.3 |
| 87.5° | 113.5 | 104.0 | 366.3 | 614.3 | 314.8 | 58.2 | 20.0 | 86.8 | 193.6 | *21.9* | 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 |

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**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 |
| 2.5° | 7223.3 | 7144.1 | 6946.7 | 6737.8 | 6569.9 | 6412.5 | 6254.2 | 6060.6 | 5910.8 | 5880.3 | 5830.7 |
| 5° | 7068.8 | 6817.9 | 6403.9 | 5988.1 | 5653.3 | 5230.7 | 4962.7 | 4753.8 | 4549.7 | 4537.3 | 4496.3 |
| 7.5° | 6528.9 | 6198.9 | 5616.1 | 5040.9 | 4569.7 | 4167.2 | 3760.9 | 3489.1 | 3275.4 | 3200.1 | 3155.2 |
| 10° | 6010.0 | 5639.0 | 4911.2 | 4255.0 | 3834.4 | 3478.6 | 3192.4 | 2908.2 | 2650.7 | 2473.3 | 2393.1 |
| 12.5° | 5647.6 | 5237.4 | 4435.3 | 3869.6 | 3568.2 | 3230.6 | 2881.5 | 2526.7 | 2230.0 | 2016.4 | 1885.7 |
| 15° | 5507.4 | 5069.5 | 4276.0 | 3717.0 | 3345.0 | 2917.7 | 2471.3 | 2066.0 | 1736.9 | 1543.3 | 1426.0 |
| 17.5° | 5674.3 | 5164.9 | 4263.6 | 3531.0 | 3011.2 | 2479.9 | 1986.8 | 1508.0 | 1198.0 | 1051.1 | 975.8 |
| 20° | 6097.8 | 5468.2 | 4258.8 | 3303.1 | 2614.4 | 1961.1 | 1345.8 | 992.0 | 804.1 | 722.0 | 686.7 |
| 22.5° | 6696.8 | 5855.5 | 4297.0 | 3078.0 | 2201.4 | 1401.2 | 929.0 | 728.7 | 632.4 | 588.5 | 568.5 |
| 25° | 7467.5 | 6399.2 | 4404.7 | 2873.9 | 1813.2 | 1045.4 | 723.9 | 610.4 | 542.7 | 508.4 | 494.1 |
| 27.5° | 8288.7 | 7024.9 | 4572.6 | 2696.4 | 1497.5 | 833.6 | 620.0 | 522.7 | 474.0 | 450.2 | 436.8 |
| 30° | 8965.9 | 7749.8 | 4742.4 | 2499.0 | 1268.6 | 726.8 | 567.5 | 476.9 | 420.6 | 405.4 | 393.0 |
| 32.5° | 9558.2 | 8298.2 | 4862.6 | 2320.6 | 1118.8 | 645.7 | 513.2 | 426.4 | 388.2 | 358.6 | 345.3 |
| 35° | 10171.5 | 8755.1 | 4858.8 | 2195.7 | 1015.8 | 584.7 | 467.4 | 381.5 | 335.7 | 301.4 | 290.9 |
| 37.5° | 10835.4 | 9271.1 | 4775.8 | 2088.9 | 971.0 | 536.0 | 441.6 | 357.7 | 311.9 | 277.6 | 264.2 |
| 40° | 11612.7 | 9812.9 | 4690.9 | 1988.7 | 958.6 | 496.9 | 423.5 | 338.6 | 290.0 | 256.6 | 243.2 |
| 42.5° | 12370.1 | 10301.2 | 4616.5 | 1914.3 | 905.2 | 496.0 | 407.3 | 324.3 | 272.8 | 240.4 | 225.1 |
| 45° | 12975.8 | 10756.2 | 4602.2 | 1869.5 | 848.9 | 513.2 | 398.7 | 314.8 | 259.4 | 227.0 | 212.7 |
| 47.5° | 13479.4 | 11250.3 | 4693.7 | 1838.0 | 795.5 | 468.3 | 419.7 | 308.1 | 247.0 | 215.6 | 199.3 |
| 50° | 14078.4 | 11856.9 | 4909.3 | 1786.5 | 739.2 | 421.6 | 480.7 | 310.0 | 236.5 | 204.1 | 186.9 |
| 52.5° | 14913.9 | 12696.3 | 5226.0 | 1699.7 | 662.0 | 378.7 | 473.1 | 311.9 | 225.1 | 191.7 | 174.5 |
| 55° | 15850.6 | 13744.5 | 5566.5 | 1555.7 | 554.2 | 322.4 | 405.4 | 298.5 | 203.2 | 178.4 | 162.1 |
| 57.5° | 16834.9 | 14695.5 | 5768.7 | 1384.0 | 440.7 | 278.5 | 324.3 | 271.8 | 179.3 | 160.2 | 149.7 |
| 60° | 16989.4 | 15057.0 | 5676.2 | 1173.2 | 350.1 | 242.3 | 240.4 | 276.6 | 160.2 | 141.2 | 133.5 |
| 62.5° | 16605.0 | 14603.0 | 5228.8 | 985.3 | 292.8 | 212.7 | 197.4 | 241.3 | 145.0 | 125.9 | 118.3 |
| 65° | 15865.8 | 13375.4 | 4503.9 | 888.0 | 271.8 | 182.2 | 164.1 | 169.8 | 126.9 | 109.7 | 103.0 |
| 67.5° | *14837.6* | *11736.7* | *3698.0* | *832.7* | *269.0* | *156.4* | *140.2* | *128.8* | *109.7* | *95.4* | *89.7* |
| 70° | 12735.4 | 9777.6 | 2950.2 | 802.2 | 261.3 | 131.6 | 118.3 | 104.9 | 91.6 | 81.1 | 76.3 |
| 72.5° | 9373.2 | 6928.5 | 2294.9 | 768.8 | 263.3 | 104.9 | 103.0 | 86.8 | 73.4 | 63.0 | 61.0 |
| 75° | 5415.8 | 3958.4 | 1505.1 | 622.8 | 250.9 | 81.1 | 85.8 | 61.0 | 51.5 | 43.9 | 43.9 |
| 77.5° | 2886.3 | 2414.1 | 573.2 | 259.4 | 91.6 | 51.5 | 48.6 | 36.2 | 32.4 | 26.7 | 25.8 |
| 80° | 1258.1 | 1062.6 | 172.6 | 72.5 | 50.6 | 27.7 | 18.1 | 16.2 | 14.3 | 11.4 | 10.5 |
| 82.5° | 445.4 | 384.4 | 56.3 | 35.3 | 21.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 101.1 | 72.5 | 0.0 | 8.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 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 |

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CATALOG NUMBER: GLEON-SA6B-830-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 |
| 2.5° | 5729.6 | 5708.6 | 5584.6 | 5589.4 | 5611.3 | 5642.8 | 5568.4 | 5602.7 | 5695.3 | 5784.0 | 5817.3 |
| 5° | 4430.5 | 4435.3 | 4359.9 | 4406.6 | 4448.6 | 4477.2 | 4357.0 | 4359.0 | 4432.4 | 4532.5 | 4585.0 |
| 7.5° | 3121.9 | 3114.2 | 3118.0 | 3229.6 | 3308.8 | 3251.6 | 3296.4 | 3140.9 | 3150.5 | 3222.0 | 3168.6 |
| 10° | 2320.6 | 2215.7 | 2156.6 | 2240.5 | 2327.3 | 2295.8 | 2218.6 | 2168.0 | 2203.3 | 2282.5 | 2276.8 |
| 12.5° | 1823.7 | 1673.0 | 1584.3 | 1524.2 | 1595.7 | 1536.6 | 1534.7 | 1490.8 | 1443.1 | 1451.7 | 1578.6 |
| 15° | 1371.6 | 1261.9 | 1157.0 | 1060.6 | 1058.7 | 1038.7 | 936.7 | 822.2 | 812.7 | 818.4 | 884.2 |
| 17.5° | 943.3 | 906.1 | 863.2 | 780.2 | 758.3 | 674.4 | 575.2 | 529.4 | 506.5 | 517.0 | 538.9 |
| 20° | 662.9 | 648.6 | 653.4 | 608.5 | 577.1 | 496.9 | 438.8 | 420.6 | 416.8 | 427.3 | 437.8 |
| 22.5° | 549.4 | 523.6 | 520.8 | 500.8 | 469.3 | 411.1 | 379.6 | 369.1 | 364.4 | 373.9 | 381.5 |
| 25° | 480.7 | 455.0 | 444.5 | 432.1 | 398.7 | 358.6 | 339.6 | 330.0 | 325.3 | 331.0 | 335.7 |
| 27.5° | 423.5 | 399.7 | 390.1 | 381.5 | 349.1 | 320.5 | 305.2 | 296.6 | 292.8 | 294.7 | 299.5 |
| 30° | 380.6 | 359.6 | 347.2 | 336.7 | 309.0 | 289.0 | 275.7 | 267.1 | 263.3 | 263.3 | 268.0 |
| 32.5° | 335.7 | 324.3 | 312.9 | 299.5 | 273.7 | 260.4 | 247.0 | 237.5 | 233.7 | 234.6 | 238.5 |
| 35° | 279.5 | 275.7 | 278.5 | 266.1 | 244.2 | 232.7 | 219.4 | 208.9 | 206.0 | 207.0 | 210.8 |
| 37.5° | 248.0 | 230.8 | 241.3 | 234.6 | 222.2 | 207.0 | 189.8 | 180.3 | 175.5 | 178.4 | 180.3 |
| 40° | 228.0 | 207.0 | 199.3 | 206.0 | 204.1 | 179.3 | 164.1 | 154.5 | 150.7 | 151.7 | 153.6 |
| 42.5° | 210.8 | 186.0 | 168.8 | 167.9 | 179.3 | 156.4 | 140.2 | 131.6 | 126.9 | 126.9 | 128.8 |
| 45° | 194.6 | 167.9 | 146.9 | 130.7 | 150.7 | 132.6 | 117.3 | 109.7 | 104.0 | 104.0 | 104.9 |
| 47.5° | 182.2 | 152.6 | 127.8 | 106.8 | 113.5 | 108.7 | 96.3 | 88.7 | 83.0 | 83.0 | 83.9 |
| 50° | 170.7 | 137.3 | 110.6 | 89.7 | 84.9 | 89.7 | 78.2 | 69.6 | 65.8 | 64.9 | 66.8 |
| 52.5° | 158.3 | 122.1 | 94.4 | 76.3 | 66.8 | 67.7 | 61.0 | 55.3 | 50.6 | 50.6 | 52.5 |
| 55° | 145.9 | 109.7 | 82.0 | 64.9 | 55.3 | 50.6 | 48.6 | 44.8 | 41.0 | 41.0 | 42.9 |
| 57.5° | 133.5 | 96.3 | 69.6 | 53.4 | 43.9 | 40.1 | 40.1 | 37.2 | 34.3 | 34.3 | 36.2 |
| 60° | 122.1 | 83.0 | 57.2 | 43.9 | 34.3 | 33.4 | 34.3 | 31.5 | 29.6 | 29.6 | 31.5 |
| 62.5° | 108.7 | 70.6 | 46.7 | 36.2 | 27.7 | 26.7 | 29.6 | 27.7 | 25.8 | 25.8 | 27.7 |
| 65° | 92.5 | 60.1 | 37.2 | 27.7 | 21.0 | 21.0 | 24.8 | 22.9 | 21.0 | 21.0 | 22.9 |
| 67.5° | *78.2* | *50.6* | *28.6* | *20.0* | *15.3* | *16.2* | *21.0* | *19.1* | *18.1* | *18.1* | *20.0* |
| 70° | 64.9 | 39.1 | 20.0 | 12.4 | 8.6 | 12.4 | 16.2 | 16.2 | 16.2 | 16.2 | 18.1 |
| 72.5° | 48.6 | 26.7 | 11.4 | 4.8 | 3.8 | 8.6 | 13.4 | 15.3 | 14.3 | 14.3 | 17.2 |
| 75° | 31.5 | 15.3 | 3.8 | 0.0 | 0.0 | 4.8 | 10.5 | 12.4 | 12.4 | 11.4 | 14.3 |
| 77.5° | 18.1 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 5.7 | 4.8 | 3.8 | 6.7 |
| 80° | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 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

Scaled Data Report

REPORT NUMBER: P324320
CATALOG NUMBER: GLEON-SA6B-830-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 359° | 360° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 | 6754.9 |
| 2.5° | 5951.8 | 6064.4 | 6222.7 | 6390.6 | 6649.1 | 6854.1 | 7055.4 | 7228.0 | 7294.8 | 7322.5 |
| 5° | 4710.9 | 4875.9 | 5107.7 | 5405.3 | 5871.7 | 6291.4 | 6716.8 | 7145.1 | 7331.1 | 7377.8 |
| 7.5° | 3380.3 | 3591.1 | 3885.9 | 4258.8 | 4805.3 | 5349.0 | 5943.2 | 6571.8 | 6859.9 | 6932.4 |
| 10° | 2501.9 | 2759.4 | 3097.1 | 3490.0 | 4011.8 | 4570.7 | 5218.3 | 5936.6 | 6265.6 | 6362.0 |
| 12.5° | 1775.1 | 2123.2 | 2575.3 | 3053.2 | 3505.3 | 4004.1 | 4659.4 | 5451.1 | 5796.4 | 5900.3 |
| 15° | 1042.5 | 1379.2 | 1914.3 | 2554.3 | 3133.3 | 3638.8 | 4304.6 | 5202.1 | 5582.7 | 5687.6 |
| 17.5° | 598.0 | 765.9 | 1170.3 | 1883.8 | 2669.7 | 3369.8 | 4193.0 | 5264.1 | 5712.4 | 5809.7 |
| 20° | 456.9 | 510.3 | 674.4 | 1213.3 | 2128.0 | 3105.6 | 4193.0 | 5615.1 | 6167.4 | 6310.5 |
| 22.5° | 399.7 | 438.8 | 505.5 | 723.9 | 1566.2 | 2822.4 | 4241.6 | 6122.6 | 6844.6 | 7002.9 |
| 25° | 354.8 | 390.1 | 447.3 | 544.6 | 1068.3 | 2485.7 | 4357.0 | 6745.4 | 7642.0 | 7847.1 |
| 27.5° | 317.6 | 351.0 | 402.5 | 476.9 | 730.6 | 2079.3 | 4512.5 | 7476.0 | 8521.4 | 8685.5 |
| 30° | 284.2 | 315.7 | 362.5 | 414.9 | 563.7 | 1618.6 | 4645.1 | 8164.7 | 9212.0 | 9388.4 |
| 32.5° | 252.8 | 281.4 | 323.3 | 362.5 | 461.6 | 1197.0 | 4659.4 | 8710.3 | 9785.2 | 9960.7 |
| 35° | 223.2 | 248.9 | 287.1 | 317.6 | 382.5 | 945.2 | 4437.2 | 9183.4 | 10358.5 | 10590.3 |
| 37.5° | 194.6 | 219.4 | 252.8 | 275.7 | 336.7 | 770.7 | 4097.6 | 9710.8 | 11093.9 | 11308.5 |
| 40° | 167.9 | 189.8 | 224.1 | 239.4 | 318.6 | 592.3 | 3728.5 | 10264.0 | 11815.0 | 12011.4 |
| 42.5° | 143.1 | 164.1 | 197.4 | 227.0 | 279.5 | 442.6 | 3329.8 | 10782.9 | 12463.6 | 12669.6 |
| 45° | 119.2 | 141.2 | 174.5 | 240.4 | 231.8 | 331.0 | 2903.4 | 11127.3 | 12975.8 | 13199.9 |
| 47.5° | 96.3 | 121.1 | 166.9 | 228.9 | 185.0 | 243.2 | 2565.8 | 11453.5 | 13364.0 | 13585.2 |
| 50° | 77.3 | 102.1 | 187.9 | 204.1 | 151.7 | 186.0 | 2424.6 | 11745.3 | 13618.6 | 13831.3 |
| 52.5° | 63.0 | 85.8 | 177.4 | 156.4 | 126.9 | 153.6 | 2500.9 | 12218.4 | 13854.2 | 13987.8 |
| 55° | 52.5 | 67.7 | 106.8 | 108.7 | 107.8 | 130.7 | 2595.3 | 12897.5 | 14463.7 | 14526.7 |
| 57.5° | 45.8 | 54.4 | 74.4 | 83.9 | 90.6 | 116.4 | 2597.2 | 13872.3 | 15407.0 | 15446.1 |
| 60° | 39.1 | 47.7 | 62.0 | 67.7 | 78.2 | 104.0 | 2502.8 | 14212.9 | 15778.1 | 15907.8 |
| 62.5° | 34.3 | 42.0 | 51.5 | 56.3 | 65.8 | 93.5 | 2281.5 | 13719.7 | 15268.7 | 15489.1 |
| 65° | 30.5 | 38.2 | 42.9 | 47.7 | 58.2 | 83.9 | 1917.2 | 12733.5 | 14423.7 | 14653.5 |
| 67.5° | *26.7* | *33.4* | *38.2* | *42.9* | *52.5* | *74.4* | *1411.7* | *11588.0* | *13453.6* | *13644.4* |
| 70° | 23.8 | 29.6 | 34.3 | 38.2 | 45.8 | 63.0 | 856.5 | 9832.9 | 12112.6 | 12191.7 |
| 72.5° | 22.9 | 26.7 | 31.5 | 34.3 | 40.1 | 55.3 | 434.0 | 7226.1 | 9683.2 | 9811.9 |
| 75° | 20.0 | 23.8 | 28.6 | 30.5 | 35.3 | 47.7 | 176.5 | 4746.2 | 7017.2 | 7224.2 |
| 77.5° | 16.2 | 21.9 | 25.8 | 27.7 | 30.5 | 39.1 | 89.7 | 3033.1 | 4924.6 | 5058.1 |
| 80° | 5.7 | 16.2 | 21.9 | 22.9 | 25.8 | 28.6 | 59.1 | 1660.6 | 2856.7 | 2913.9 |
| 82.5° | 0.0 | 10.5 | 17.2 | 16.2 | 18.1 | 21.9 | 38.2 | 789.8 | 1885.7 | 1906.7 |
| 85° | 0.0 | 4.8 | 13.4 | 10.5 | 7.6 | 15.3 | 13.4 | 172.6 | 989.1 | 1030.1 |
| 87.5° | 0.0 | 0.0 | 1.0 | 4.8 | 3.8 | 5.7 | 1.9 | 1.0 | 89.7 | 113.5 |
| 90° | 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: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

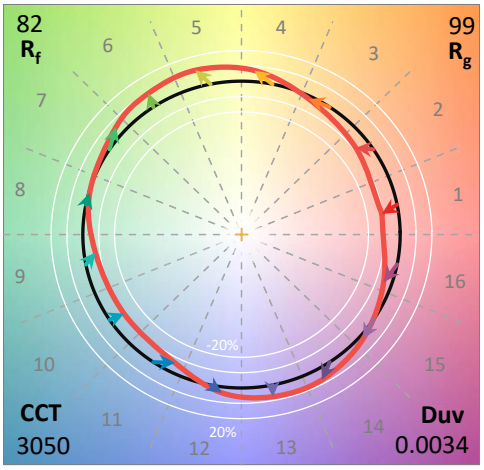
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2408-195-9 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 08/07/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | MCGRAW EDISON |
| Catalog Number: | **GALN-SB1A-830-U-5WQ** |
| Description: | GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS |

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 3050 | CRI (Ra): | 81.0 | | |
| CIE u': | 0.2476 | R1: | 79.6 | R9: | 7.1 |
| CIE v': | 0.5251 | R2: | 85.6 | R10: | 67.0 |
| Duv: | 0.0034 | R3: | 92.0 | R11: | 82.7 |
| CIE x: | 0.4383 | R4: | 82.6 | R12: | 63.2 |
| CIE y: | 0.4131 | R5: | 78.9 | R13: | 80.3 |
| CIE z: | 0.1487 | R6: | 81.7 | R14: | 95.0 |
| Peak Wavelength (nm): | 603 | R7: | 85.2 | R15: | 71.7 |
| Dominant Wavelength (nm): | 581 | R8: | 62.0 | | |
| Purity: | 55.55201 | | | | |
| Rf: | 81.5 | | | | |
| Rg: | 99.2 | | | | |




## Test Conditions

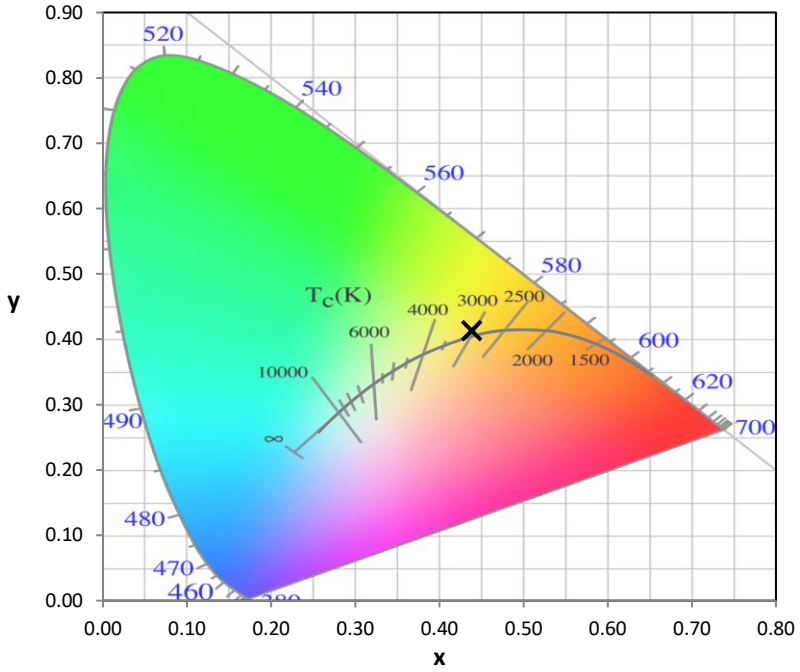
| | |
|---|---|
| Stabilization Time: | 20M |
| Operation Time: | 1H 20M |
| Sphere Temperature (°C): | 24.2 |

REPORT NUMBER: SP1-2408-195-9

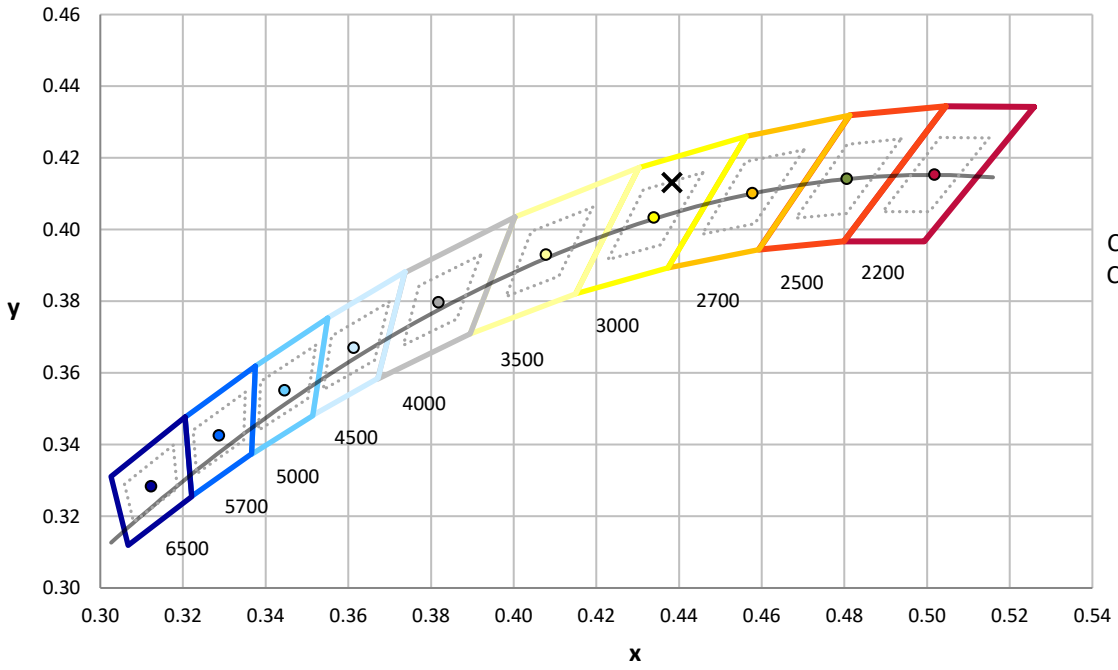
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC 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: SP1-2408-195-9

## CIE 1931 Chromaticity Diagram




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

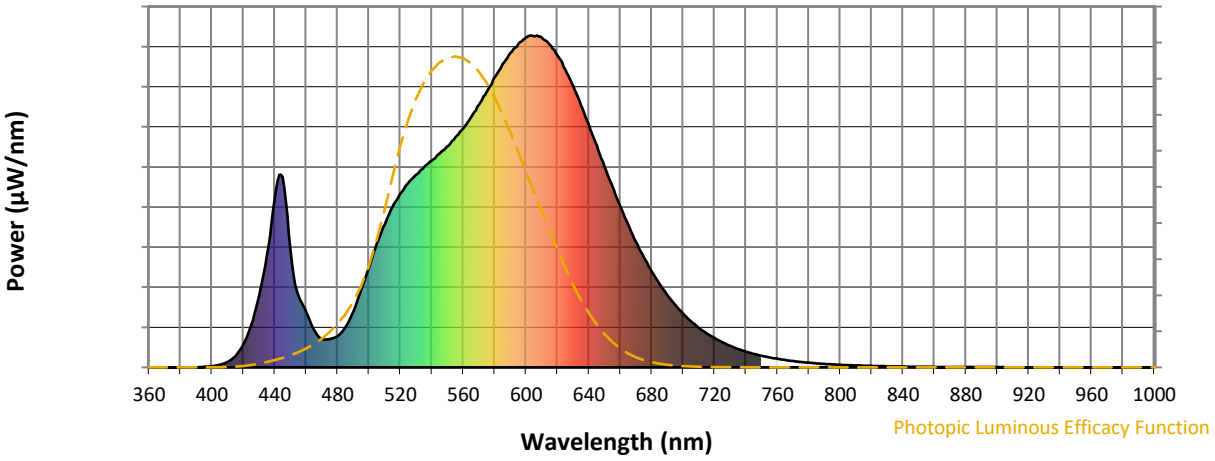



CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

## Photopic Flux vs. Wavelength

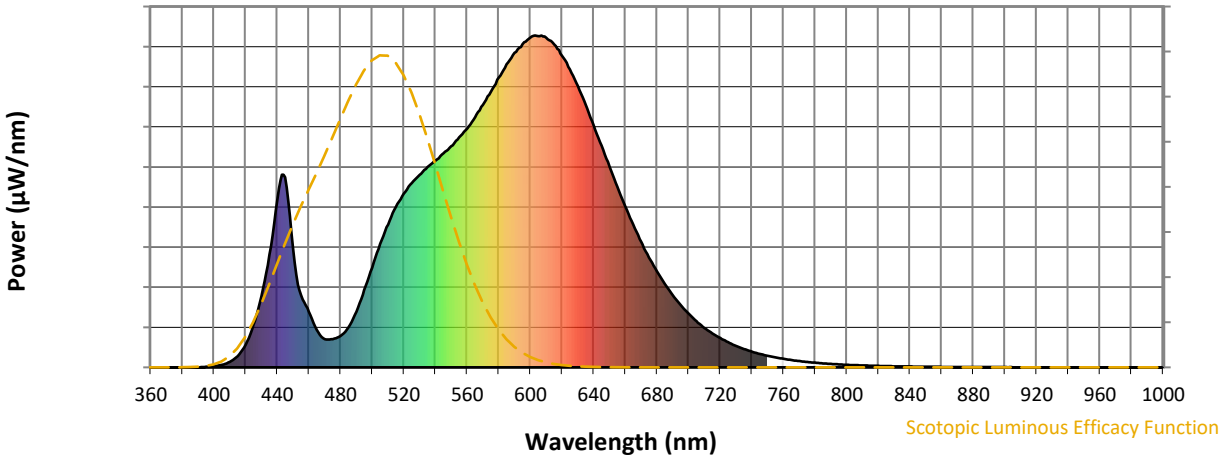



## Photopic Lumens: NR

| 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 | 168 | NR | 620 | 940 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 233 | NR | 625 | 897 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 300 | NR | 630 | 847 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 372 | NR | 635 | 790 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 430 | NR | 640 | 730 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 483 | NR | 645 | 668 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 524 | NR | 650 | 605 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 555 | NR | 655 | 545 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 581 | NR | 660 | 485 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 604 | NR | 665 | 430 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 17 | NR | 540 | 623 | NR | 670 | 378 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 34 | NR | 545 | 645 | NR | 675 | 331 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 667 | NR | 680 | 290 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 128 | NR | 555 | 693 | NR | 685 | 251 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 214 | NR | 560 | 719 | NR | 690 | 218 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 339 | NR | 565 | 754 | NR | 695 | 188 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 507 | NR | 570 | 791 | NR | 700 | 162 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 573 | NR | 575 | 830 | NR | 705 | 139 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 356 | NR | 580 | 873 | NR | 710 | 119 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 217 | NR | 585 | 913 | NR | 715 | 102 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 168 | NR | 590 | 948 | NR | 720 | 88 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 113 | NR | 595 | 974 | NR | 725 | 76 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 85 | NR | 600 | 994 | NR | 730 | 65 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 85 | NR | 605 | 998 | NR | 735 | 55 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 94 | NR | 610 | 994 | NR | 740 | 47 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 120 | NR | 615 | 973 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2408-195-9

## Scotopic Flux vs. Wavelength

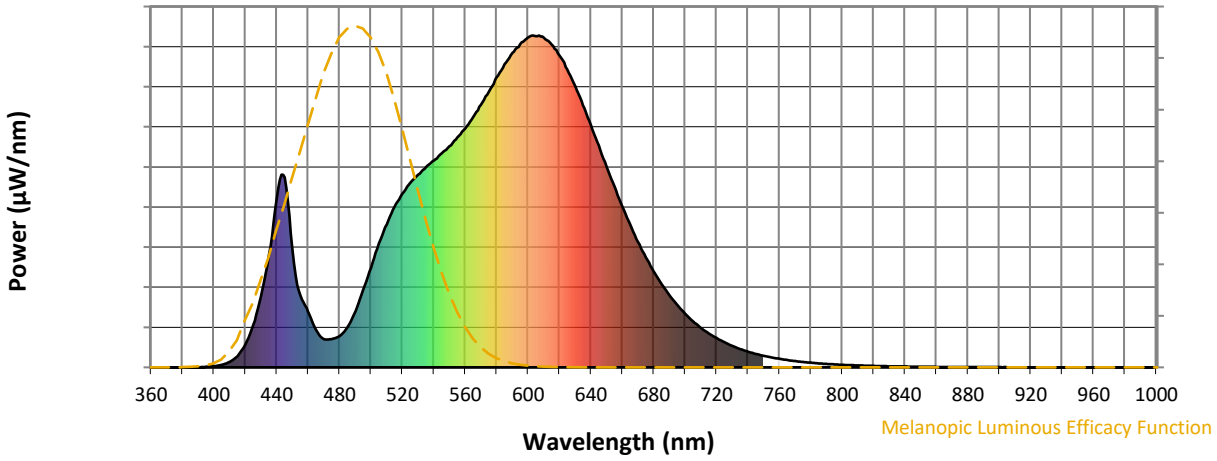



**Scotopic Lumens: NR** **S/P: 1.27**

| 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 | 168 | NR | 620 | 940 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 233 | NR | 625 | 897 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 300 | NR | 630 | 847 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 372 | NR | 635 | 790 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 430 | NR | 640 | 730 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 483 | NR | 645 | 668 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 524 | NR | 650 | 605 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 555 | NR | 655 | 545 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 581 | NR | 660 | 485 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 604 | NR | 665 | 430 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 17 | NR | 540 | 623 | NR | 670 | 378 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 34 | NR | 545 | 645 | NR | 675 | 331 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 667 | NR | 680 | 290 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 128 | NR | 555 | 693 | NR | 685 | 251 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 214 | NR | 560 | 719 | NR | 690 | 218 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 339 | NR | 565 | 754 | NR | 695 | 188 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 507 | NR | 570 | 791 | NR | 700 | 162 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 573 | NR | 575 | 830 | NR | 705 | 139 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 356 | NR | 580 | 873 | NR | 710 | 119 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 217 | NR | 585 | 913 | NR | 715 | 102 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 168 | NR | 590 | 948 | NR | 720 | 88 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 113 | NR | 595 | 974 | NR | 725 | 76 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 85 | NR | 600 | 994 | NR | 730 | 65 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 85 | NR | 605 | 998 | NR | 735 | 55 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 94 | NR | 610 | 994 | NR | 740 | 47 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 120 | NR | 615 | 973 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2408-195-9

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.32**

| 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 | 168 | NR | 620 | 940 | NR | 750 | 35 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 233 | NR | 625 | 897 | NR | 755 | 30 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 300 | NR | 630 | 847 | NR | 760 | 26 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 372 | NR | 635 | 790 | NR | 765 | 22 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 430 | NR | 640 | 730 | NR | 770 | 19 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 483 | NR | 645 | 668 | NR | 775 | 16 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 524 | NR | 650 | 605 | NR | 780 | 14 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 555 | NR | 655 | 545 | NR | 785 | 12 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 581 | NR | 660 | 485 | NR | 790 | 10 | NR | 920 | 0 | NR |
| 405 | 7 | NR | 535 | 604 | NR | 665 | 430 | NR | 795 | 9 | NR | 925 | 0 | NR |
| 410 | 17 | NR | 540 | 623 | NR | 670 | 378 | NR | 800 | 8 | NR | 930 | 0 | NR |
| 415 | 34 | NR | 545 | 645 | NR | 675 | 331 | NR | 805 | 7 | NR | 935 | 0 | NR |
| 420 | 68 | NR | 550 | 667 | NR | 680 | 290 | NR | 810 | 6 | NR | 940 | 0 | NR |
| 425 | 128 | NR | 555 | 693 | NR | 685 | 251 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 214 | NR | 560 | 719 | NR | 690 | 218 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 339 | NR | 565 | 754 | NR | 695 | 188 | NR | 825 | 4 | NR | 955 | 0 | NR |
| 440 | 507 | NR | 570 | 791 | NR | 700 | 162 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 573 | NR | 575 | 830 | NR | 705 | 139 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 356 | NR | 580 | 873 | NR | 710 | 119 | NR | 840 | 3 | NR | 970 | 0 | NR |
| 455 | 217 | NR | 585 | 913 | NR | 715 | 102 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 168 | NR | 590 | 948 | NR | 720 | 88 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 113 | NR | 595 | 974 | NR | 725 | 76 | NR | 855 | 2 | NR | 985 | 0 | NR |
| 470 | 85 | NR | 600 | 994 | NR | 730 | 65 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 85 | NR | 605 | 998 | NR | 735 | 55 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 94 | NR | 610 | 994 | NR | 740 | 47 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 120 | NR | 615 | 973 | NR | 745 | 41 | NR | 875 | 1 | NR | | | |

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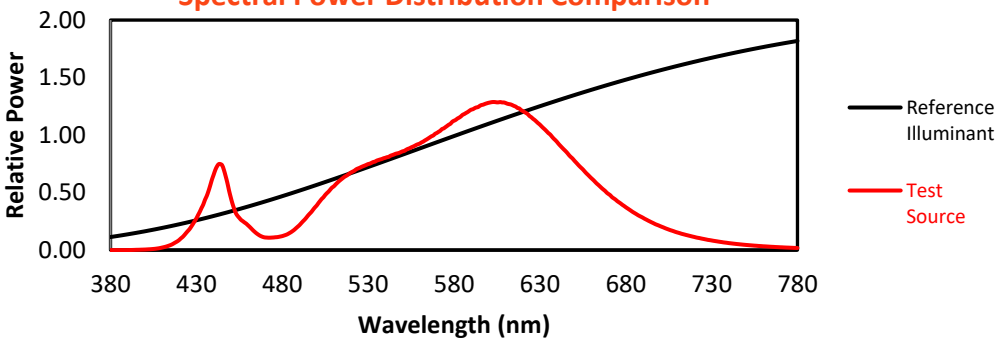
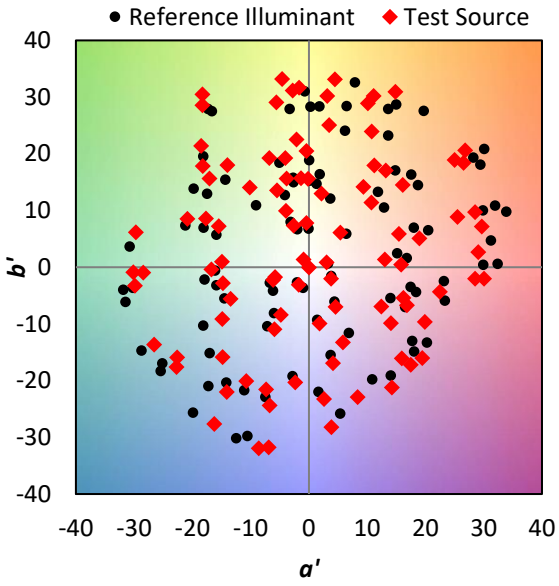
## Summary

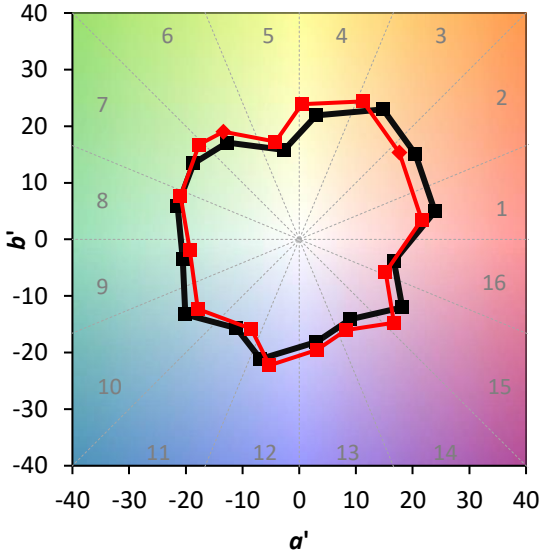
$R_f$ = 81.5
$R_g$ = 99.2
CIE $R_a$ = 81.0
$R_9$ = 7.1

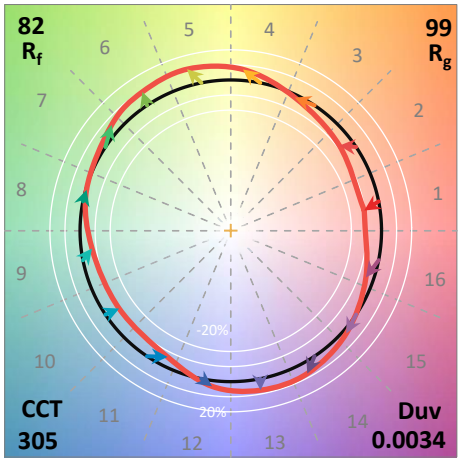
## Spectral Power Distribution Comparison

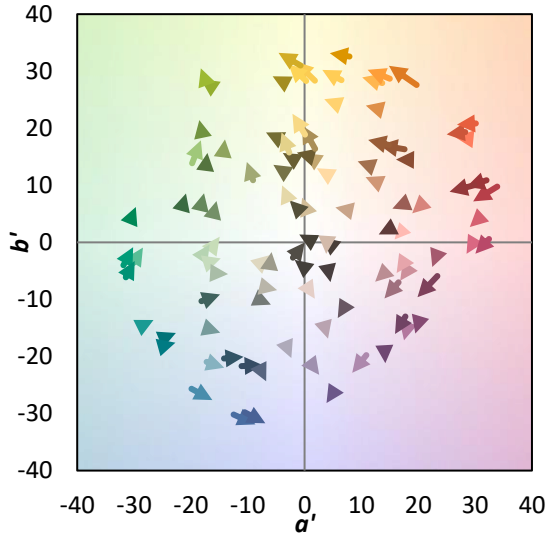



## Color Vector Graphics



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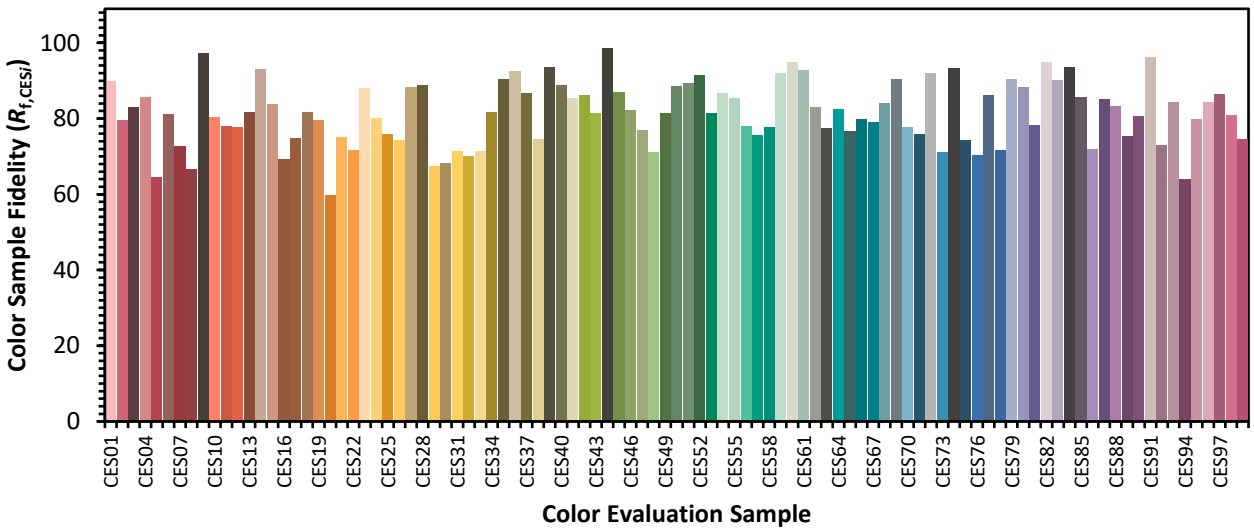
**Individual Sample Fidelity Index ($R_{f,i}$)**

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 74 | CES51 = 89 | CES76 = 70 |
| CES02 = 63 | CES27 = 88 | CES52 = 92 | CES77 = 86 |
| CES03 = 31 | CES28 = 89 | CES53 = 81 | CES78 = 72 |
| CES04 = 70 | CES29 = 67 | CES54 = 87 | CES79 = 90 |
| CES05 = 50 | CES30 = 68 | CES55 = 85 | CES80 = 88 |
| CES06 = 51 | CES31 = 71 | CES56 = 78 | CES81 = 78 |
| CES07 = 42 | CES32 = 70 | CES57 = 76 | CES82 = 95 |
| CES08 = 41 | CES33 = 71 | CES58 = 78 | CES83 = 90 |
| CES09 = 29 | CES34 = 82 | CES59 = 92 | CES84 = 94 |
| CES10 = 76 | CES35 = 90 | CES60 = 95 | CES85 = 86 |
| CES11 = 59 | CES36 = 93 | CES61 = 93 | CES86 = 72 |
| CES12 = 65 | CES37 = 87 | CES62 = 83 | CES87 = 85 |
| CES13 = 43 | CES38 = 75 | CES63 = 77 | CES88 = 83 |
| CES14 = 74 | CES39 = 94 | CES64 = 83 | CES89 = 75 |
| CES15 = 71 | CES40 = 89 | CES65 = 77 | CES90 = 81 |
| CES16 = 47 | CES41 = 85 | CES66 = 80 | CES91 = 96 |
| CES17 = 50 | CES42 = 86 | CES67 = 79 | CES92 = 73 |
| CES18 = 56 | CES43 = 81 | CES68 = 84 | CES93 = 84 |
| CES19 = 72 | CES44 = 99 | CES69 = 91 | CES94 = 64 |
| CES20 = 66 | CES45 = 87 | CES70 = 78 | CES95 = 80 |
| CES21 = 87 | CES46 = 82 | CES71 = 76 | CES96 = 84 |
| CES22 = 79 | CES47 = 77 | CES72 = 92 | CES97 = 87 |
| CES23 = 92 | CES48 = 71 | CES73 = 71 | CES98 = 81 |
| CES24 = 91 | CES49 = 81 | CES74 = 93 | CES99 = 74 |
| CES25 = 72 | CES50 = 89 | CES75 = 74 | |



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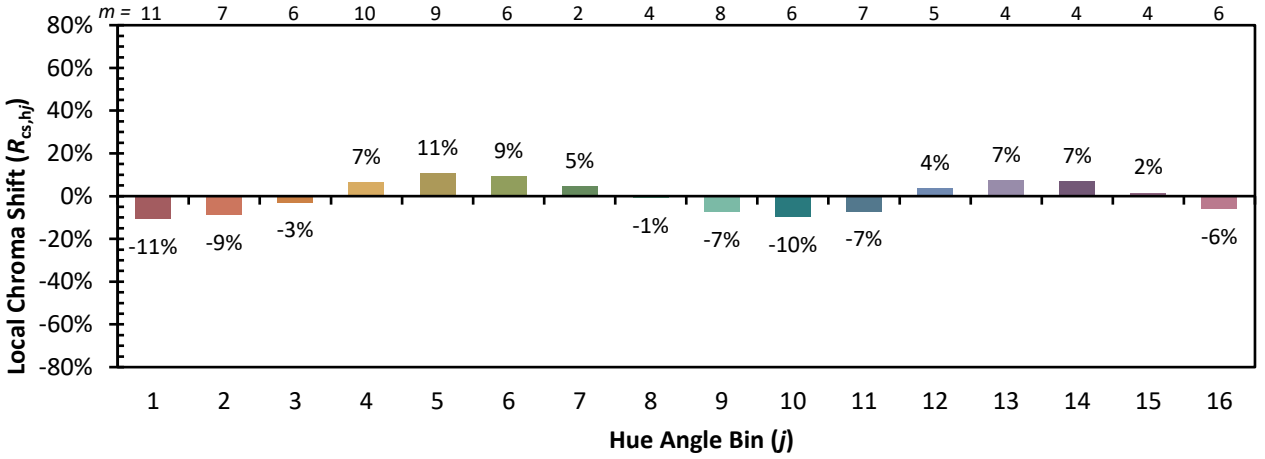
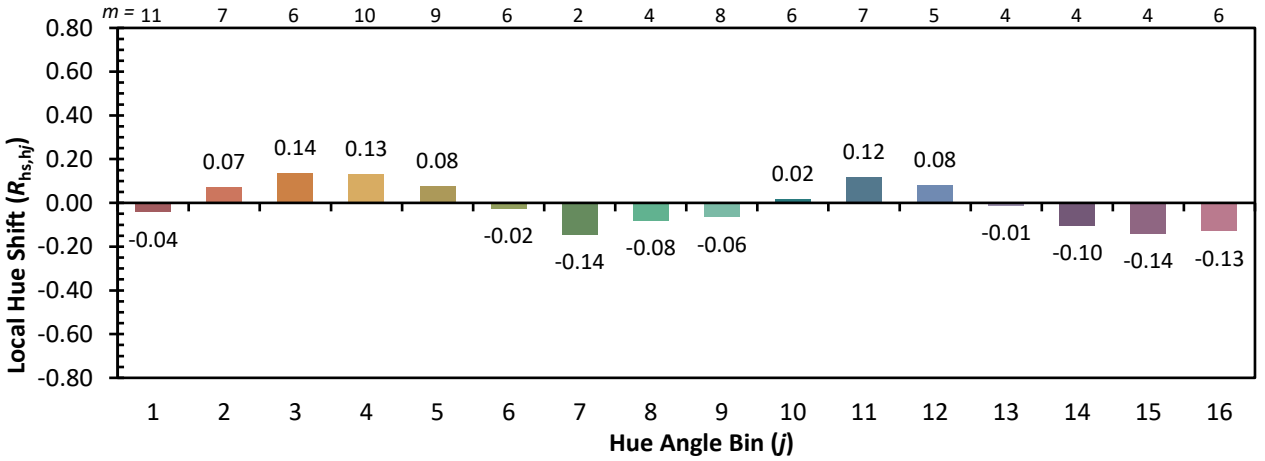
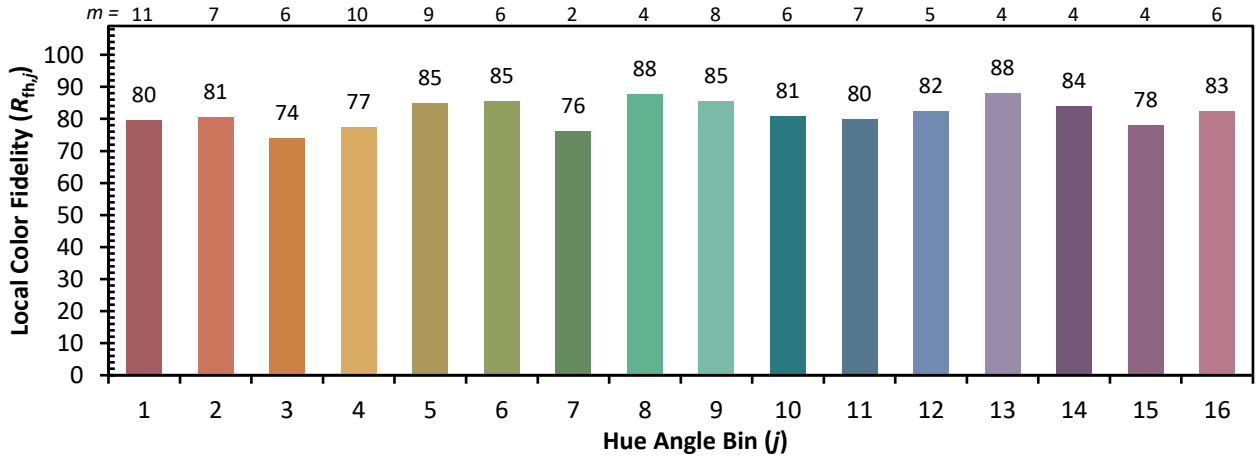
## Color Rendition by Hue-Angle Bin



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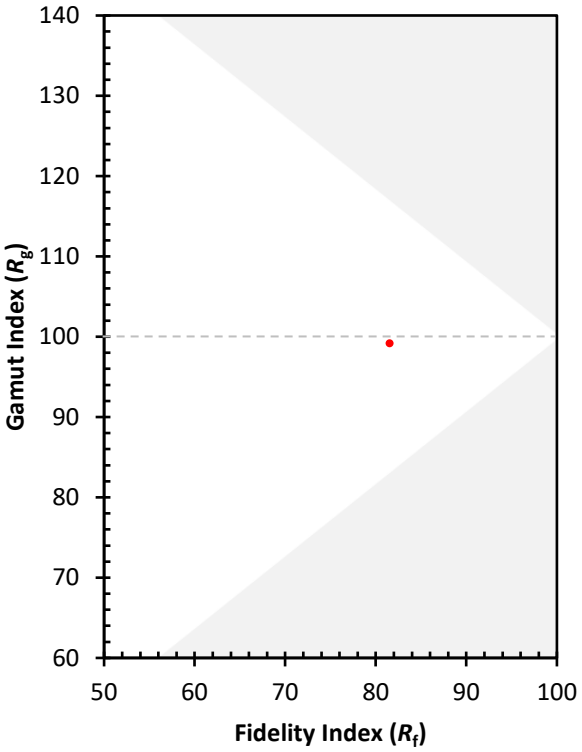
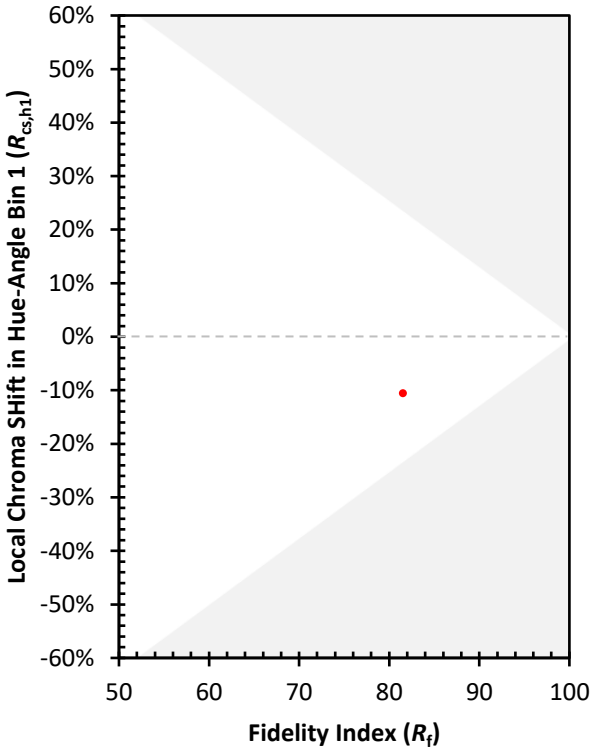
## Measure Comparisons




(END OF REPORT)