

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638871

Luminaire Tested: GWS-SA4F-760-U-SLR-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-760-U-SLR-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: (64) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32502.6 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: B3 - U0 - G4

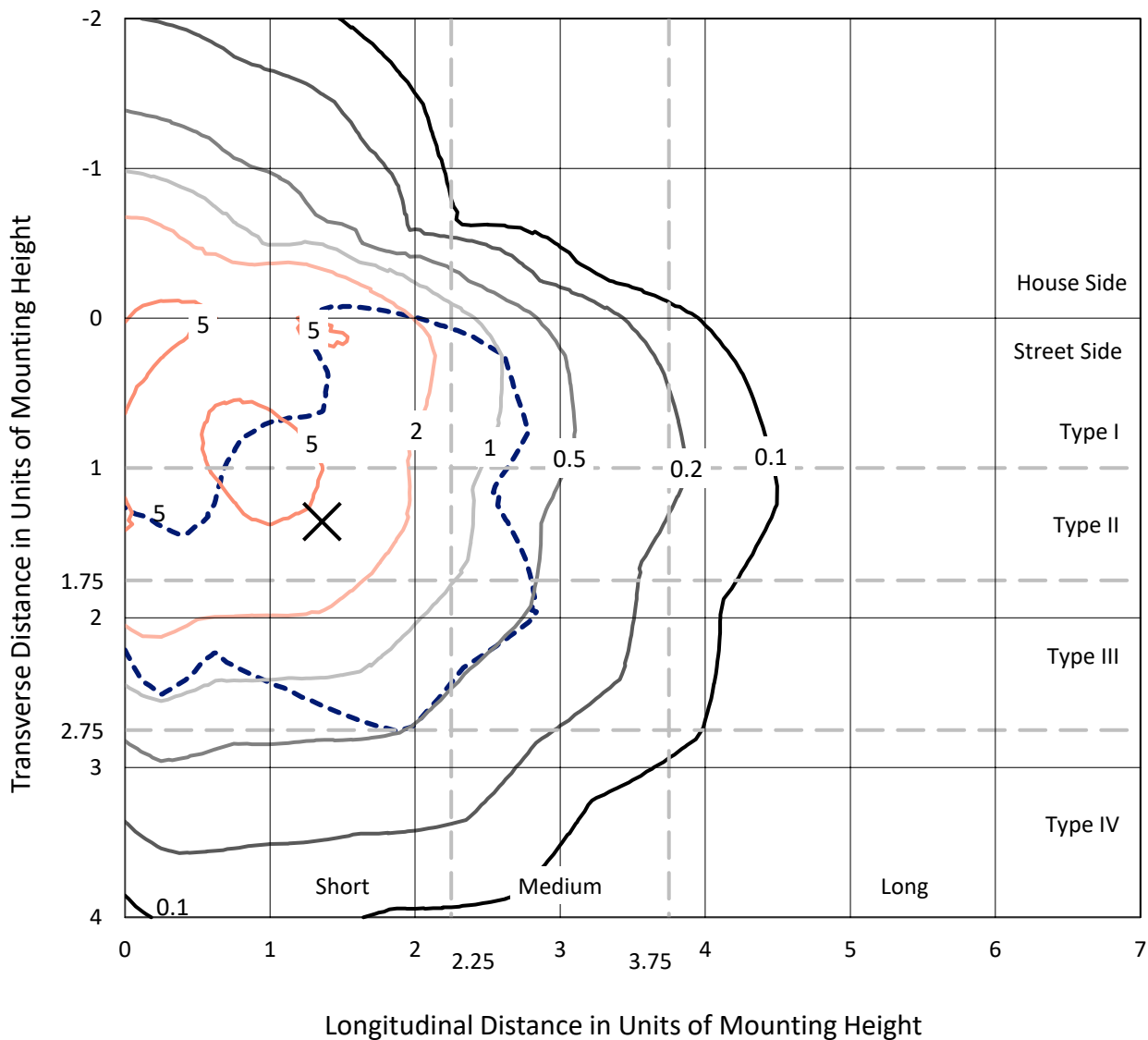
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P638871
 CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

Iso-Footcandle Lines of Horizontal Illumination

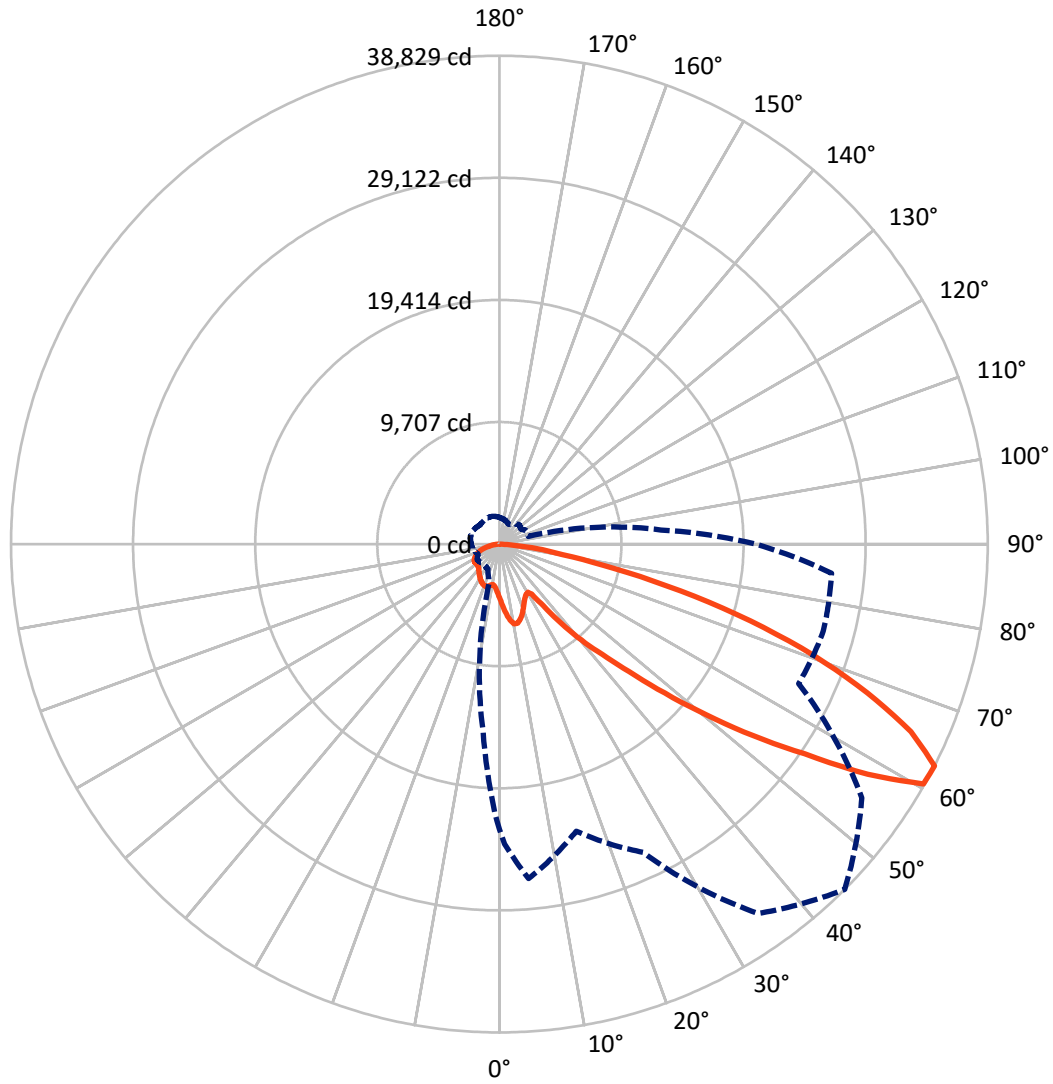
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - N/A

REPORT NUMBER: P638871
CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P638871

CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

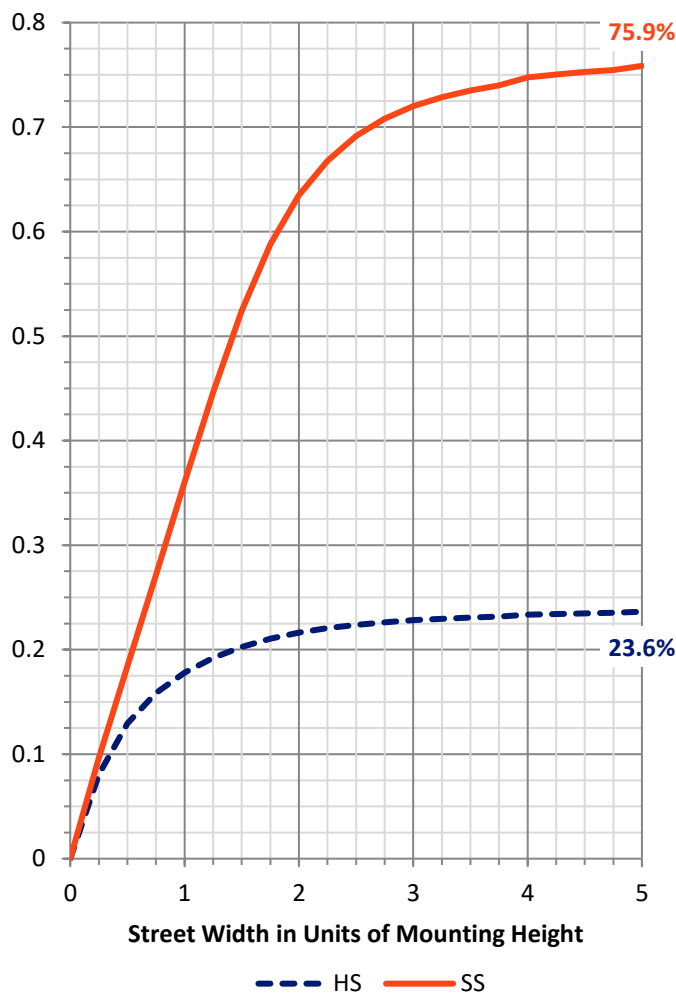
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7755.7 | 0.0 | 7755.7 |
| | % Fixture | 23.9 | 0.0 | 23.9 |
| Street Side | Lumens | 24746.9 | 0.0 | 24746.9 |
| | % Fixture | 76.1 | 0.0 | 76.1 |
| Total | Lumens | 32502.6 | 0.0 | 32502.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 421.3 | 1.3 |
| 10°-20° | 1320.7 | 4.1 |
| 20°-30° | 2051.3 | 6.3 |
| 30°-40° | 2785.2 | 8.6 |
| 40°-50° | 4414.2 | 13.6 |
| 50°-60° | 7786.7 | 24.0 |
| 60°-70° | 8663.9 | 26.7 |
| 70°-80° | 4394.0 | 13.5 |
| 80°-90° | 665.3 | 2.0 |
| 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° | 32502.6 | 100.0 |
| 0°-180° | 32502.6 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P638871

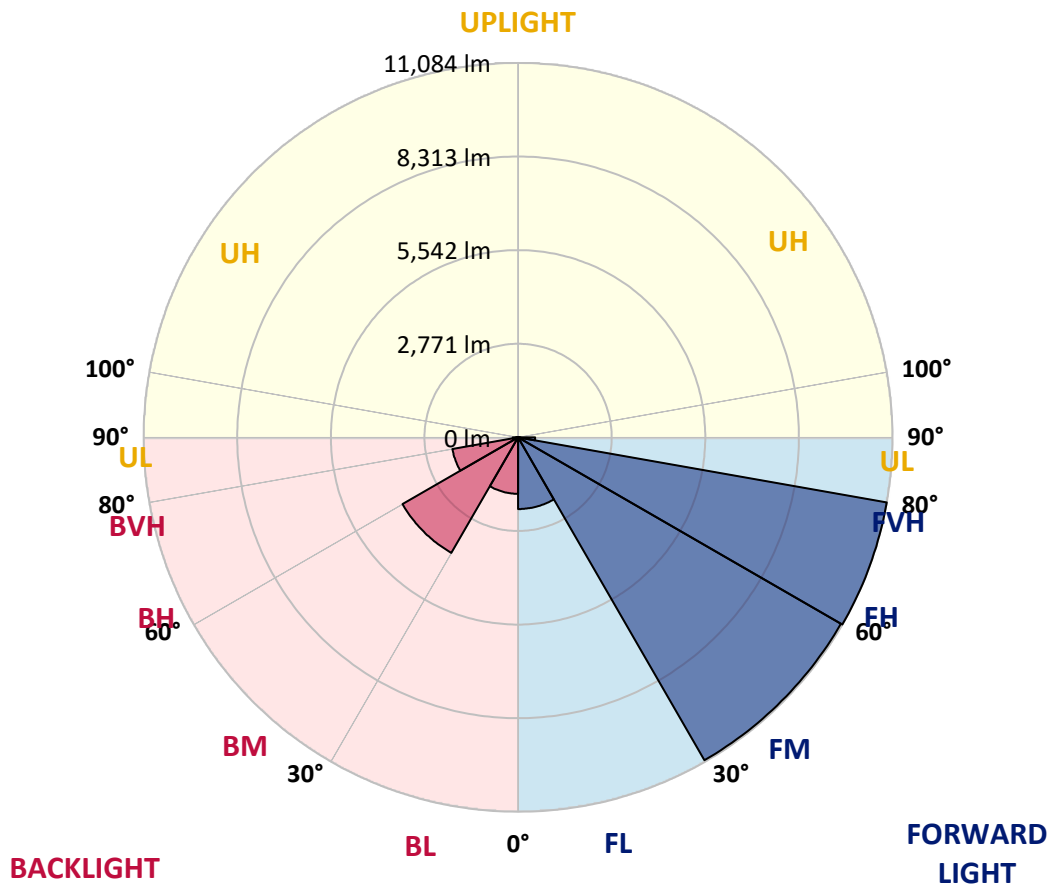
CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2122.1 | 6.5 | | | |
| FM (30°-60°) | 11036.0 | 34.0 | | | |
| FH (60°-80°) | 11083.7 | 34.1 | | | G4/12000 |
| FVH (80°-90°) | 505.0 | 1.6 | | | G4/750 |
| BL (0°-30°) | 1671.2 | 5.1 | B3/2500 | | |
| BM (30°-60°) | 3950.0 | 12.2 | B3/5000 | | |
| BH (60°-80°) | 1974.2 | 6.1 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 160.3 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P638871
 CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 |
| 2.5° | 4636.1 | 4633.7 | 4680.4 | 4751.8 | 4818.2 | 4847.7 | 4897.0 | 4892.0 | 4852.7 | 4801.0 | 4783.8 |
| 5° | 5000.3 | 5010.2 | 5091.4 | 5248.9 | 5423.6 | 5497.4 | 5529.4 | 5517.1 | 5445.7 | 5354.7 | 5194.7 |
| 7.5° | 5330.1 | 5347.3 | 5472.8 | 5709.0 | 5925.6 | 6024.0 | 6102.8 | 6088.0 | 5984.6 | 5814.8 | 5578.6 |
| 10° | 5571.2 | 5590.9 | 5741.0 | 6019.1 | 6260.2 | 6346.4 | 6447.3 | 6452.2 | 6361.1 | 6132.3 | 5891.1 |
| 12.5° | 5812.4 | 5832.1 | 5972.3 | 6225.8 | 6383.3 | 6385.7 | 6444.8 | 6476.8 | 6481.7 | 6375.9 | 6134.7 |
| 15° | 6063.4 | 6080.6 | 6208.6 | 6351.3 | 6343.9 | 6206.1 | 6206.1 | 6267.6 | 6403.0 | 6479.3 | 6311.9 |
| 17.5° | 6277.5 | 6299.6 | 6398.0 | 6351.3 | 6132.3 | 5883.7 | 5854.2 | 5933.0 | 6169.2 | 6462.0 | 6444.8 |
| 20° | 6454.6 | 6471.9 | 6526.0 | 6215.9 | 5817.3 | 5492.5 | 5435.9 | 5526.9 | 5846.8 | 6356.2 | 6545.7 |
| 22.5° | 6624.4 | 6634.3 | 6604.8 | 6038.8 | 5477.7 | 5106.1 | 5037.2 | 5133.2 | 5477.7 | 6169.2 | 6631.8 |
| 25° | 6826.2 | 6816.4 | 6676.1 | 5854.2 | 5167.7 | 4801.0 | 4729.6 | 4837.9 | 5197.2 | 5920.7 | 6725.3 |
| 27.5° | 7060.0 | 7023.1 | 6737.6 | 5654.9 | 4929.0 | 4574.6 | 4525.4 | 4641.0 | 4975.7 | 5691.8 | 6799.2 |
| 30° | 7259.3 | 7188.0 | 6747.5 | 5477.7 | 4805.9 | 4478.6 | 4449.1 | 4557.4 | 4867.4 | 5536.8 | 6892.7 |
| 32.5° | 7480.8 | 7382.4 | 6804.1 | 5431.0 | 4874.8 | 4709.9 | 4749.3 | 4756.7 | 4897.0 | 5492.5 | 7032.9 |
| 35° | 7798.2 | 7670.3 | 6959.1 | 5566.3 | 5583.5 | 5861.6 | 6004.3 | 5812.4 | 5342.4 | 5590.9 | 7298.7 |
| 37.5° | 8278.1 | 8115.7 | 7274.1 | 6152.0 | 7047.7 | 7670.3 | 8014.8 | 7576.8 | 6695.8 | 5962.5 | 7699.8 |
| 40° | 8861.3 | 8654.6 | 7677.7 | 7234.7 | 8415.9 | 9412.5 | 10025.2 | 9383.0 | 8088.6 | 6890.2 | 8263.3 |
| 42.5° | 9675.8 | 9459.3 | 8460.2 | 8297.8 | 9683.2 | 11167.0 | 11966.8 | 11009.6 | 9316.5 | 8088.6 | 9166.4 |
| 45° | 11095.7 | 10886.5 | 9894.8 | 9363.3 | 11167.0 | 13327.6 | 14449.7 | 13118.5 | 10564.2 | 9291.9 | 10854.5 |
| 47.5° | 13718.9 | 13472.8 | 12025.9 | 10544.5 | 12860.1 | 16132.9 | 17702.9 | 15763.8 | 11861.0 | 10670.0 | 13689.4 |
| 50° | 16868.7 | 16632.5 | 14700.7 | 11942.2 | 14730.3 | 19132.6 | 21315.3 | 18871.8 | 13354.7 | 12345.8 | 17077.9 |
| 52.5° | 20658.3 | 20614.0 | 18517.4 | 13709.0 | 16676.8 | 22331.6 | 25324.0 | 22314.4 | 14991.1 | 14602.3 | 20916.7 |
| 55° | 24073.9 | 24507.0 | 23365.2 | 16403.6 | 19191.7 | 26350.1 | 29445.8 | 26069.6 | 17210.7 | 18332.9 | 25412.5 |
| 57.5° | 25914.5 | 27078.5 | 28833.0 | 21901.0 | 22848.4 | 31153.6 | 34532.2 | 30654.0 | 21025.0 | 24543.9 | 29581.1 |
| 60° | 24698.9 | 26017.9 | 29197.2 | 26040.0 | 26475.6 | 35002.2 | 38730.3 | 34507.6 | 24770.3 | 28855.2 | 29344.9 |
| 62.5° | 22676.1 | 23859.8 | 26687.2 | 23623.6 | 27036.7 | 35848.7 | 38828.8 | 35179.4 | 26259.1 | 26667.5 | 26507.6 |
| 65° | 20276.9 | 21470.4 | 24465.1 | 20621.4 | 25252.6 | 33838.3 | 35964.4 | 33203.4 | 23584.2 | 24093.6 | 24152.6 |
| 67.5° | 17090.2 | 18192.6 | 21241.5 | 18335.3 | 23018.2 | 30887.8 | 31567.0 | 30388.3 | 21718.9 | 22531.0 | 21682.0 |
| 70° | 12769.0 | 13763.2 | 16455.3 | 14900.1 | 19403.3 | 27044.0 | 26495.3 | 26670.0 | 19624.8 | 20431.9 | 18111.4 |
| 72.5° | 8725.9 | 9474.0 | 11782.2 | 11708.4 | 14858.2 | 21650.0 | 20884.7 | 22540.8 | 16391.3 | 17461.7 | 13807.5 |
| 75° | 6102.8 | 6686.0 | 8516.8 | 9250.1 | 11231.0 | 16046.8 | 14873.0 | 16871.2 | 12801.0 | 14329.2 | 10074.5 |
| 77.5° | 3745.3 | 4131.7 | 5379.3 | 6853.3 | 7224.9 | 10982.5 | 9237.8 | 12695.2 | 8989.3 | 10451.0 | 6720.4 |
| 80° | 1872.7 | 2059.7 | 2613.4 | 4308.8 | 4791.2 | 6471.9 | 5101.2 | 7370.1 | 6083.1 | 6471.9 | 3718.2 |
| 82.5° | 566.0 | 625.0 | 765.3 | 1636.4 | 2482.9 | 3725.6 | 3014.5 | 4281.8 | 3322.1 | 3034.1 | 1464.2 |
| 85° | 150.1 | 169.8 | 211.6 | 484.8 | 871.1 | 1336.2 | 1018.8 | 2074.4 | 1592.1 | 1119.7 | 551.2 |
| 87.5° | 12.3 | 12.3 | 9.8 | 9.8 | 4.9 | 0.0 | 0.0 | 147.6 | 297.8 | 169.8 | 96.0 |
| 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: P638871
 CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 |
| 2.5° | 4697.6 | 4687.8 | 4586.9 | 4513.1 | 4427.0 | 4343.3 | 4257.2 | 4180.9 | 4094.7 | 4008.6 | 3984.0 |
| 5° | 5076.6 | 5007.7 | 4793.6 | 4614.0 | 4436.8 | 4281.8 | 4146.4 | 4006.2 | 3893.0 | 3782.2 | 3740.4 |
| 7.5° | 5411.3 | 5290.7 | 4980.6 | 4707.5 | 4461.4 | 4269.5 | 4070.1 | 3865.9 | 3705.9 | 3548.5 | 3509.1 |
| 10° | 5713.9 | 5554.0 | 5162.7 | 4818.2 | 4545.1 | 4326.1 | 4092.3 | 3819.1 | 3587.8 | 3395.9 | 3344.2 |
| 12.5° | 5937.9 | 5763.2 | 5320.2 | 4924.0 | 4614.0 | 4367.9 | 4136.6 | 3895.4 | 3651.8 | 3403.3 | 3346.7 |
| 15° | 6115.1 | 5933.0 | 5450.6 | 5005.2 | 4616.4 | 4299.0 | 4075.1 | 3991.4 | 3915.1 | 3671.5 | 3568.1 |
| 17.5° | 6257.8 | 6065.8 | 5563.8 | 5054.5 | 4550.0 | 4089.8 | 3895.4 | 4018.5 | 4212.9 | 4060.3 | 3865.9 |
| 20° | 6388.2 | 6193.8 | 5650.0 | 5088.9 | 4402.3 | 3801.9 | 3693.6 | 3954.5 | 4247.3 | 4242.4 | 4067.7 |
| 22.5° | 6530.9 | 6341.4 | 5775.5 | 5108.6 | 4195.6 | 3509.1 | 3573.1 | 3861.0 | 4099.7 | 4171.0 | 4062.8 |
| 25° | 6713.0 | 6545.7 | 5950.2 | 5152.9 | 3961.9 | 3307.3 | 3484.5 | 3740.4 | 3939.7 | 3956.9 | 3893.0 |
| 27.5° | 6924.7 | 6799.2 | 6211.0 | 5256.2 | 3735.5 | 3203.9 | 3381.1 | 3570.6 | 3752.7 | 3760.1 | 3683.8 |
| 30° | 7156.0 | 7072.3 | 6452.2 | 5342.4 | 3565.7 | 3172.0 | 3248.2 | 3400.8 | 3516.5 | 3536.2 | 3469.7 |
| 32.5° | 7451.3 | 7377.4 | 6666.3 | 5285.8 | 3464.8 | 3164.6 | 3125.2 | 3203.9 | 3299.9 | 3299.9 | 3248.2 |
| 35° | 7857.3 | 7753.9 | 6892.7 | 5069.2 | 3341.7 | 3135.0 | 2994.8 | 3016.9 | 3058.8 | 3066.1 | 3036.6 |
| 37.5° | 8433.1 | 8263.3 | 7121.5 | 4641.0 | 3140.0 | 3029.2 | 2844.7 | 2817.6 | 2832.4 | 2852.1 | 2844.7 |
| 40° | 9146.7 | 8868.7 | 7456.2 | 4126.7 | 2898.8 | 2825.0 | 2689.6 | 2638.0 | 2625.7 | 2665.0 | 2679.8 |
| 42.5° | 10044.9 | 9619.2 | 7815.5 | 3646.9 | 2679.8 | 2591.2 | 2507.5 | 2463.2 | 2443.6 | 2510.0 | 2549.4 |
| 45° | 11479.6 | 10778.2 | 8160.0 | 3172.0 | 2556.8 | 2391.9 | 2335.3 | 2303.3 | 2313.1 | 2391.9 | 2441.1 |
| 47.5° | 13957.6 | 12547.6 | 8487.3 | 2871.7 | 2546.9 | 2249.2 | 2180.3 | 2187.6 | 2214.7 | 2298.4 | 2357.4 |
| 50° | 17092.6 | 14917.3 | 8706.3 | 2746.2 | 2576.4 | 2163.0 | 2072.0 | 2111.4 | 2153.2 | 2234.4 | 2303.3 |
| 52.5° | 20284.3 | 17124.6 | 8445.4 | 2677.3 | 2574.0 | 2165.5 | 1971.1 | 2089.2 | 2108.9 | 2190.1 | 2263.9 |
| 55° | 22479.3 | 17370.7 | 7296.2 | 2571.5 | 2534.6 | 2263.9 | 1892.3 | 2079.4 | 2091.7 | 2165.5 | 2231.9 |
| 57.5° | 23316.0 | 16529.1 | 5563.8 | 2601.1 | 2416.5 | 2340.2 | 1857.9 | 2010.5 | 2099.1 | 2163.0 | 2231.9 |
| 60° | 22304.6 | 14941.9 | 3381.1 | 2677.3 | 2227.0 | 2335.3 | 1880.0 | 1885.0 | 2037.5 | 2145.8 | 2214.7 |
| 62.5° | 20397.5 | 12904.4 | 2374.7 | 2460.8 | 2089.2 | 2204.9 | 1931.7 | 1737.3 | 1929.3 | 2059.7 | 2121.2 |
| 65° | 18212.3 | 10507.6 | 1811.1 | 2118.7 | 2022.8 | 2003.1 | 1948.9 | 1606.9 | 1781.6 | 1909.6 | 1963.7 |
| 67.5° | 15936.1 | 8167.4 | 1471.6 | 1579.8 | 1828.4 | 1811.1 | 1781.6 | 1491.2 | 1606.9 | 1697.9 | 1759.5 |
| 70° | 13069.2 | 5713.9 | 1242.7 | 1186.1 | 1567.5 | 1624.1 | 1557.7 | 1346.1 | 1383.0 | 1476.5 | 1525.7 |
| 72.5° | 9560.2 | 3560.8 | 1021.2 | 979.4 | 1259.9 | 1419.9 | 1385.4 | 1186.1 | 1203.3 | 1291.9 | 1331.3 |
| 75° | 6875.4 | 2037.5 | 819.4 | 807.1 | 962.2 | 1215.6 | 1146.7 | 1021.2 | 1040.9 | 1107.4 | 1134.4 |
| 77.5° | 4370.4 | 1134.4 | 632.4 | 649.6 | 689.0 | 908.0 | 979.4 | 873.6 | 873.6 | 913.0 | 935.1 |
| 80° | 2340.2 | 649.6 | 462.6 | 470.0 | 482.3 | 693.9 | 772.7 | 676.7 | 676.7 | 649.6 | 676.7 |
| 82.5° | 954.8 | 374.0 | 317.4 | 295.3 | 322.4 | 474.9 | 541.4 | 430.6 | 450.3 | 406.0 | 415.9 |
| 85° | 315.0 | 187.0 | 157.5 | 155.0 | 152.6 | 209.2 | 260.8 | 214.1 | 255.9 | 162.4 | 169.8 |
| 87.5° | 41.8 | 34.5 | 19.7 | 14.8 | 17.2 | 7.4 | 14.8 | 17.2 | 17.2 | 12.3 | 12.3 |
| 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: P638871
 CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 |
| 2.5° | 3966.8 | 3947.1 | 3875.7 | 3893.0 | 3880.7 | 3861.0 | 3880.7 | 3843.7 | 3873.3 | 3883.1 | 3944.6 |
| 5° | 3708.4 | 3661.7 | 3592.7 | 3558.3 | 3550.9 | 3531.2 | 3533.7 | 3516.5 | 3521.4 | 3563.2 | 3632.1 |
| 7.5° | 3477.1 | 3432.8 | 3378.7 | 3354.1 | 3331.9 | 3309.8 | 3307.3 | 3304.8 | 3324.5 | 3361.4 | 3427.9 |
| 10° | 3309.8 | 3285.1 | 3263.0 | 3272.8 | 3263.0 | 3253.2 | 3235.9 | 3235.9 | 3267.9 | 3334.4 | 3415.6 |
| 12.5° | 3309.8 | 3304.8 | 3309.8 | 3339.3 | 3336.8 | 3339.3 | 3317.1 | 3329.4 | 3418.0 | 3531.2 | 3646.9 |
| 15° | 3486.9 | 3447.6 | 3447.6 | 3462.3 | 3457.4 | 3457.4 | 3457.4 | 3509.1 | 3710.9 | 3885.6 | 4008.6 |
| 17.5° | 3703.5 | 3587.8 | 3538.6 | 3531.2 | 3528.8 | 3528.8 | 3538.6 | 3649.3 | 3964.3 | 4148.9 | 4220.2 |
| 20° | 3853.6 | 3634.6 | 3553.4 | 3521.4 | 3523.8 | 3528.8 | 3558.3 | 3710.9 | 4057.8 | 4151.3 | 4134.1 |
| 22.5° | 3880.7 | 3597.7 | 3499.2 | 3452.5 | 3459.9 | 3464.8 | 3509.1 | 3671.5 | 3929.9 | 3944.6 | 3910.2 |
| 25° | 3755.2 | 3494.3 | 3388.5 | 3351.6 | 3361.4 | 3359.0 | 3398.3 | 3516.5 | 3701.0 | 3696.1 | 3676.4 |
| 27.5° | 3568.1 | 3329.4 | 3250.7 | 3226.1 | 3243.3 | 3223.6 | 3235.9 | 3327.0 | 3469.7 | 3464.8 | 3457.4 |
| 30° | 3376.2 | 3169.5 | 3098.1 | 3085.8 | 3108.0 | 3078.4 | 3080.9 | 3157.2 | 3255.6 | 3250.7 | 3248.2 |
| 32.5° | 3184.3 | 3009.5 | 2945.6 | 2945.6 | 2967.7 | 2935.7 | 2940.6 | 3007.1 | 3073.5 | 3053.8 | 3053.8 |
| 35° | 3002.2 | 2879.1 | 2827.4 | 2817.6 | 2834.8 | 2812.7 | 2822.5 | 2884.0 | 2908.6 | 2881.6 | 2864.4 |
| 37.5° | 2842.2 | 2788.1 | 2736.4 | 2701.9 | 2704.4 | 2706.9 | 2736.4 | 2783.1 | 2768.4 | 2729.0 | 2706.9 |
| 40° | 2694.6 | 2694.6 | 2645.3 | 2581.4 | 2574.0 | 2591.2 | 2640.4 | 2692.1 | 2650.3 | 2606.0 | 2578.9 |
| 42.5° | 2588.7 | 2610.9 | 2564.1 | 2500.2 | 2485.4 | 2514.9 | 2569.1 | 2606.0 | 2556.8 | 2507.5 | 2470.6 |
| 45° | 2490.3 | 2544.5 | 2512.5 | 2441.1 | 2421.4 | 2455.9 | 2524.8 | 2539.5 | 2473.1 | 2426.3 | 2399.3 |
| 47.5° | 2421.4 | 2495.2 | 2473.1 | 2404.2 | 2374.7 | 2423.9 | 2495.2 | 2492.8 | 2409.1 | 2359.9 | 2337.7 |
| 50° | 2372.2 | 2465.7 | 2463.2 | 2404.2 | 2372.2 | 2433.7 | 2497.7 | 2465.7 | 2374.7 | 2323.0 | 2300.8 |
| 52.5° | 2332.8 | 2463.2 | 2480.5 | 2446.0 | 2423.9 | 2478.0 | 2517.4 | 2455.9 | 2350.1 | 2295.9 | 2278.7 |
| 55° | 2315.6 | 2473.1 | 2485.4 | 2453.4 | 2433.7 | 2482.9 | 2517.4 | 2475.6 | 2350.1 | 2300.8 | 2286.1 |
| 57.5° | 2320.5 | 2460.8 | 2463.2 | 2419.0 | 2384.5 | 2446.0 | 2500.2 | 2487.9 | 2377.1 | 2320.5 | 2303.3 |
| 60° | 2291.0 | 2394.3 | 2399.3 | 2330.4 | 2291.0 | 2364.8 | 2460.8 | 2453.4 | 2364.8 | 2305.8 | 2273.8 |
| 62.5° | 2192.6 | 2283.6 | 2286.1 | 2222.1 | 2165.5 | 2271.3 | 2377.1 | 2374.7 | 2293.5 | 2234.4 | 2197.5 |
| 65° | 2027.7 | 2123.7 | 2148.3 | 2086.7 | 2042.5 | 2155.6 | 2266.4 | 2261.5 | 2180.3 | 2126.1 | 2089.2 |
| 67.5° | 1823.4 | 1926.8 | 1973.6 | 1931.7 | 1914.5 | 2017.8 | 2121.2 | 2118.7 | 2052.3 | 2000.6 | 1968.6 |
| 70° | 1574.9 | 1661.0 | 1739.8 | 1739.8 | 1727.5 | 1845.6 | 1956.3 | 1946.5 | 1885.0 | 1845.6 | 1821.0 |
| 72.5° | 1368.2 | 1434.6 | 1459.2 | 1483.9 | 1520.8 | 1643.8 | 1737.3 | 1744.7 | 1700.4 | 1680.7 | 1700.4 |
| 75° | 1164.0 | 1205.8 | 1227.9 | 1208.2 | 1272.2 | 1400.2 | 1523.2 | 1535.5 | 1488.8 | 1456.8 | 1464.2 |
| 77.5° | 957.2 | 1004.0 | 1026.1 | 981.9 | 976.9 | 1139.3 | 1289.5 | 1316.5 | 1277.1 | 1227.9 | 1242.7 |
| 80° | 691.5 | 753.0 | 789.9 | 760.4 | 750.5 | 821.9 | 1028.6 | 1058.1 | 1021.2 | 981.9 | 1004.0 |
| 82.5° | 423.3 | 457.7 | 467.5 | 497.1 | 558.6 | 588.1 | 662.0 | 760.4 | 733.3 | 698.9 | 760.4 |
| 85° | 167.3 | 199.3 | 221.5 | 251.0 | 292.8 | 347.0 | 408.5 | 487.2 | 442.9 | 428.2 | 504.5 |
| 87.5° | 9.8 | 2.5 | 0.0 | 4.9 | 41.8 | 81.2 | 174.7 | 241.2 | 201.8 | 216.5 | 260.8 |
| 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: P638871
 CATALOG NUMBER: GWS-SA4F-760-U-SLR-W

CANDELA DISTRIBUTION (continued):

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 359° | 360° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 | 4313.8 |
| 2.5° | 3993.9 | 4057.8 | 4144.0 | 4215.3 | 4306.4 | 4392.5 | 4481.1 | 4569.7 | 4616.4 | 4636.1 |
| 5° | 3710.9 | 3829.0 | 3966.8 | 4119.4 | 4296.5 | 4483.6 | 4673.0 | 4867.4 | 4990.5 | 5000.3 |
| 7.5° | 3541.1 | 3710.9 | 3900.3 | 4092.3 | 4311.3 | 4569.7 | 4869.9 | 5170.1 | 5295.6 | 5330.1 |
| 10° | 3595.2 | 3784.7 | 3934.8 | 4114.4 | 4355.6 | 4678.0 | 5032.3 | 5384.2 | 5529.4 | 5571.2 |
| 12.5° | 3811.8 | 3848.7 | 3895.4 | 4060.3 | 4355.6 | 4771.5 | 5199.6 | 5618.0 | 5773.0 | 5812.4 |
| 15° | 3991.4 | 3814.2 | 3730.6 | 3905.3 | 4296.5 | 4852.7 | 5376.8 | 5839.4 | 6026.5 | 6063.4 |
| 17.5° | 4006.2 | 3701.0 | 3518.9 | 3676.4 | 4193.2 | 4909.3 | 5546.6 | 6085.5 | 6243.0 | 6277.5 |
| 20° | 3856.1 | 3580.4 | 3344.2 | 3440.2 | 4052.9 | 4933.9 | 5669.7 | 6265.2 | 6420.2 | 6454.6 |
| 22.5° | 3686.3 | 3482.0 | 3226.1 | 3221.2 | 3883.1 | 4960.9 | 5817.3 | 6435.0 | 6602.3 | 6624.4 |
| 25° | 3526.3 | 3346.7 | 3130.1 | 3061.2 | 3686.3 | 5012.6 | 6016.6 | 6690.9 | 6818.8 | 6826.2 |
| 27.5° | 3339.3 | 3201.5 | 3053.8 | 2987.4 | 3514.0 | 5111.1 | 6311.9 | 6996.0 | 7072.3 | 7060.0 |
| 30° | 3169.5 | 3066.1 | 2999.7 | 2980.0 | 3405.7 | 5184.9 | 6592.4 | 7296.2 | 7301.2 | 7259.3 |
| 32.5° | 2989.9 | 2950.5 | 2950.5 | 3014.5 | 3317.1 | 5167.7 | 6821.3 | 7589.1 | 7542.3 | 7480.8 |
| 35° | 2829.9 | 2837.3 | 2889.0 | 3039.1 | 3169.5 | 4995.4 | 7040.3 | 7955.7 | 7886.8 | 7798.2 |
| 37.5° | 2677.3 | 2733.9 | 2807.8 | 2952.9 | 2975.1 | 4739.5 | 7296.2 | 8474.9 | 8388.8 | 8278.1 |
| 40° | 2546.9 | 2633.0 | 2719.2 | 2790.5 | 2768.4 | 4375.3 | 7653.0 | 9085.2 | 8989.3 | 8861.3 |
| 42.5° | 2443.6 | 2527.2 | 2623.2 | 2630.6 | 2638.0 | 3996.3 | 8032.0 | 9833.3 | 9816.1 | 9675.8 |
| 45° | 2377.1 | 2431.3 | 2522.3 | 2510.0 | 2630.6 | 3578.0 | 8381.4 | 10975.1 | 11201.5 | 11095.7 |
| 47.5° | 2332.8 | 2374.7 | 2384.5 | 2436.2 | 2694.6 | 3203.9 | 8831.8 | 13209.5 | 13839.5 | 13718.9 |
| 50° | 2308.2 | 2350.1 | 2239.3 | 2441.1 | 2704.4 | 2962.8 | 9454.3 | 16014.8 | 17028.6 | 16868.7 |
| 52.5° | 2305.8 | 2295.9 | 2128.6 | 2492.8 | 2650.3 | 2815.1 | 9779.2 | 18062.2 | 20311.3 | 20658.3 |
| 55° | 2310.7 | 2187.6 | 2072.0 | 2507.5 | 2542.0 | 2761.0 | 8691.5 | 19046.5 | 23340.6 | 24073.9 |
| 57.5° | 2266.4 | 2069.5 | 2104.0 | 2448.5 | 2337.7 | 2906.2 | 6425.1 | 18694.6 | 24551.3 | 25914.5 |
| 60° | 2182.7 | 1956.3 | 2163.0 | 2288.5 | 2128.6 | 2657.6 | 4424.5 | 17124.6 | 23296.3 | 24698.9 |
| 62.5° | 2062.1 | 1877.6 | 2155.6 | 2081.8 | 2052.3 | 2175.3 | 3041.5 | 14927.1 | 21305.5 | 22676.1 |
| 65° | 1926.8 | 1813.6 | 2040.0 | 1882.5 | 1899.7 | 1673.3 | 2150.7 | 12446.7 | 18928.4 | 20276.9 |
| 67.5° | 1781.6 | 1774.2 | 1870.2 | 1675.8 | 1604.4 | 1326.4 | 1567.5 | 9976.0 | 15874.5 | 17090.2 |
| 70° | 1616.7 | 1670.9 | 1700.4 | 1488.8 | 1301.8 | 1040.9 | 1164.0 | 6976.3 | 11710.9 | 12769.0 |
| 72.5° | 1451.9 | 1456.8 | 1498.6 | 1294.4 | 974.5 | 834.2 | 873.6 | 4225.2 | 7955.7 | 8725.9 |
| 75° | 1284.5 | 1237.8 | 1277.1 | 1053.2 | 725.9 | 684.1 | 674.3 | 2610.9 | 5494.9 | 6102.8 |
| 77.5° | 1104.9 | 1053.2 | 1001.5 | 792.4 | 583.2 | 529.1 | 516.8 | 1464.2 | 3371.3 | 3745.3 |
| 80° | 898.2 | 829.3 | 748.1 | 580.7 | 425.7 | 379.0 | 376.5 | 713.6 | 1680.7 | 1872.7 |
| 82.5° | 698.9 | 568.4 | 546.3 | 361.7 | 263.3 | 231.3 | 246.1 | 273.1 | 506.9 | 566.0 |
| 85° | 489.7 | 413.4 | 290.4 | 145.2 | 118.1 | 96.0 | 93.5 | 81.2 | 135.3 | 150.1 |
| 87.5° | 273.1 | 179.6 | 93.5 | 17.2 | 19.7 | 22.1 | 17.2 | 12.3 | 12.3 | 12.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-9-R4

Test Date: 10/23/2019

Luminaire Tested: SA1C-760-U-5WQ

Data in this report applies to families of products SA1C-760-U-5WQ .

Test Information

Test Method: LM-79-2008
 Report Number: SP1-1908-441-9-R4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/28/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGRAW-EDISON
 Catalog Number: **SA1C-760-U-5WQ**
 Description: McGRAW EDISON ROADWAY AND AREA LUMINAIRE

THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

Spectral Parameters

| | | | | | |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K): | 5474 | CRI (Ra): | 71.7 | R9: | -27.1 |
| CIE u': | 0.2052 | R1: | 70.6 | R10: | 40.8 |
| CIE v': | 0.4804 | R2: | 74.6 | R11: | 74.6 |
| Duv: | 0.0025 | R3: | 78.3 | R12: | 50.4 |
| CIE x: | 0.3330 | R4: | 73.8 | R13: | 70.0 |
| CIE y: | 0.3466 | R5: | 72.4 | R14: | 87.8 |
| CIE z: | 0.3204 | R6: | 67.5 | | |
| Peak Wavelength (nm): | 442 | R7: | 77.5 | | |
| Dominant Wavelength (nm): | 554 | R8: | 58.9 | | |
| Purity: | 4.1 | | | | |
| Rf: | 72.1 | | | | |
| Rg: | 97.2 | | | | |



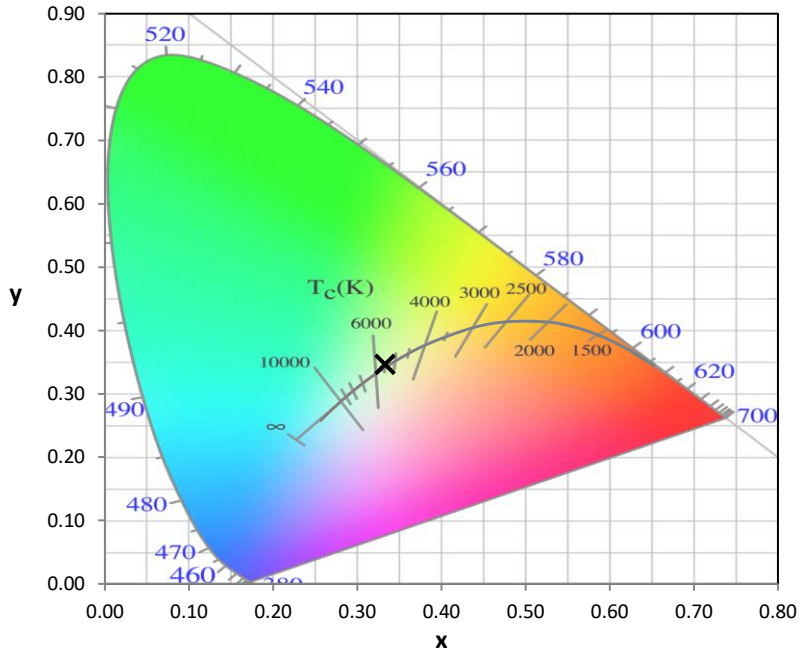
Test Conditions
 Stabilization Time: 240M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.6/31%
 Sphere Temperature (°C): 25.9

REPORT NUMBER: SP1-1908-441-9-R4

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

REPORT NUMBER: SP1-1908-441-9-R4

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 5700K 4-step quadrangle

REPORT NUMBER: SP1-1908-441-9-R4

Photopic Flux vs. Wavelength



#####

| λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Scotopic Flux vs. Wavelength



Scotopic Lumens: 13759.3 S/P: 1.85

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

Melanopic Flux vs. Wavelength



Melanopic Lumens: 5527.6 M/P: 0.74

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 3540 | NR | 490 | 33363 | NR | 620 | 80193 | NR | 750 | 4663 | NR | 880 | 4678 | NR |
| 365 | 2862 | NR | 495 | 44177 | NR | 625 | 73091 | NR | 755 | 4147 | NR | 885 | 4128 | NR |
| 370 | 2865 | NR | 500 | 57019 | NR | 630 | 66269 | NR | 760 | 4040 | NR | 890 | 4504 | NR |
| 375 | 3254 | NR | 505 | 70030 | NR | 635 | 60012 | NR | 765 | 3474 | NR | 895 | 4371 | NR |
| 380 | 3076 | NR | 510 | 81972 | NR | 640 | 53914 | NR | 770 | 3469 | NR | 900 | 4082 | NR |
| 385 | 2904 | NR | 515 | 92590 | NR | 645 | 48385 | NR | 775 | 3181 | NR | 905 | 2982 | NR |
| 390 | 2689 | NR | 520 | 100305 | NR | 650 | 43219 | NR | 780 | 2969 | NR | 910 | 4351 | NR |
| 395 | 2619 | NR | 525 | 107452 | NR | 655 | 38562 | NR | 785 | 3132 | NR | 915 | 3365 | NR |
| 400 | 2679 | NR | 530 | 111373 | NR | 660 | 34110 | NR | 790 | 2507 | NR | 920 | 3430 | NR |
| 405 | 3515 | NR | 535 | 114505 | NR | 665 | 30085 | NR | 795 | 2968 | NR | 925 | 4264 | NR |
| 410 | 6934 | NR | 540 | 116408 | NR | 670 | 26205 | NR | 800 | 2758 | NR | 930 | 4095 | NR |
| 415 | 14943 | NR | 545 | 118700 | NR | 675 | 22906 | NR | 805 | 2872 | NR | 935 | 5048 | NR |
| 420 | 31939 | NR | 550 | 119209 | NR | 680 | 20058 | NR | 810 | 3094 | NR | 940 | 4074 | NR |
| 425 | 64701 | NR | 555 | 120742 | NR | 685 | 17413 | NR | 815 | 3222 | NR | 945 | 4949 | NR |
| 430 | 110939 | NR | 560 | 121594 | NR | 690 | 15447 | NR | 820 | 3238 | NR | 950 | 4387 | NR |
| 435 | 164597 | NR | 565 | 121913 | NR | 695 | 13398 | NR | 825 | 3524 | NR | 955 | 4978 | NR |
| 440 | 207696 | NR | 570 | 122147 | NR | 700 | 11777 | NR | 830 | 2921 | NR | 960 | 4706 | NR |
| 445 | 201830 | NR | 575 | 121605 | NR | 705 | 10412 | NR | 835 | 3595 | NR | 965 | 5083 | NR |
| 450 | 145410 | NR | 580 | 120248 | NR | 710 | 9544 | NR | 840 | 3016 | NR | 970 | 4522 | NR |
| 455 | 89594 | NR | 585 | 117717 | NR | 715 | 8940 | NR | 845 | 4032 | NR | 975 | 4740 | NR |
| 460 | 58321 | NR | 590 | 114359 | NR | 720 | 7897 | NR | 850 | 3579 | NR | 980 | 6122 | NR |
| 465 | 39318 | NR | 595 | 109974 | NR | 725 | 7045 | NR | 855 | 4571 | NR | 985 | 6450 | NR |
| 470 | 27693 | NR | 600 | 105269 | NR | 730 | 6483 | NR | 860 | 4485 | NR | 990 | 4875 | NR |
| 475 | 23081 | NR | 605 | 99453 | NR | 735 | 5838 | NR | 865 | 3978 | NR | 995 | 4764 | NR |
| 480 | 23002 | NR | 610 | 92921 | NR | 740 | 5261 | NR | 870 | 4298 | NR | 1000 | 3640 | NR |
| 485 | 26201 | NR | 615 | 86989 | NR | 745 | 4760 | NR | 875 | 4356 | NR | | | |

REPORT NUMBER: SP1-1908-441-9-R4

TM-30-18

Summary

$R_f = 72.1$
 $R_g = 97.2$
 CIE $R_a = 71.7$
 $R_g = -27.1$



Color Vector Graphics



REPORT NUMBER: SP1-1908-441-9-R4

TM-30-18

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

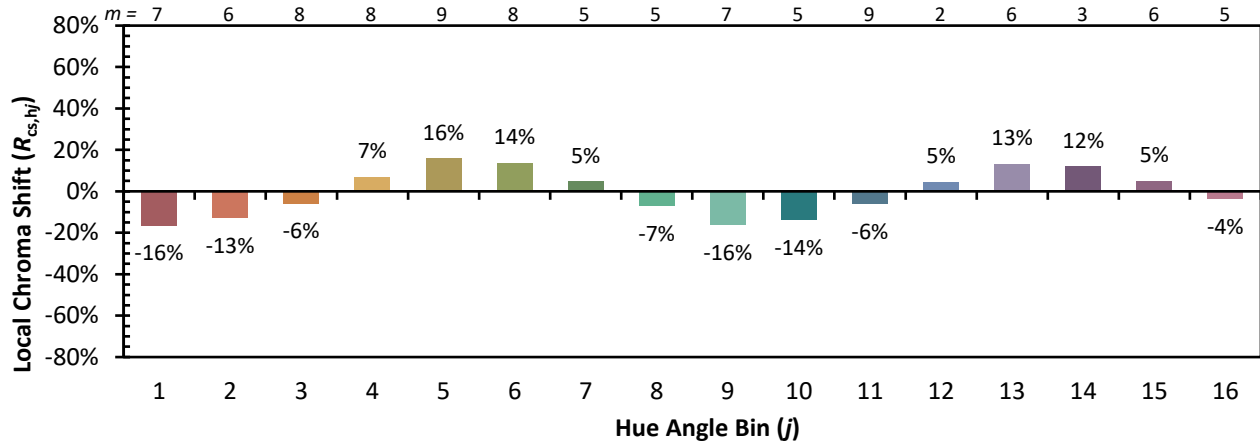
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54 = 81 | CES79 = 74 |
| CES05 = 46 | CES30 = 59 | CES55 = 80 | CES80 = 70 |
| CES06 = 50 | CES31 = 55 | CES56 = 70 | CES81 = 71 |
| CES07 = 38 | CES32 = 52 | CES57 = 68 | CES82 = 88 |
| CES08 = 38 | CES33 = 63 | CES58 = 70 | CES83 = 82 |
| CES09 = 29 | CES34 = 63 | CES59 = 88 | CES84 = 87 |
| CES10 = 72 | CES35 = 79 | CES60 = 92 | CES85 = 84 |
| CES11 = 55 | CES36 = 90 | CES61 = 88 | CES86 = 76 |
| CES12 = 61 | CES37 = 72 | CES62 = 81 | CES87 = 75 |
| CES13 = 41 | CES38 = 68 | CES63 = 75 | CES88 = 77 |
| CES14 = 74 | CES39 = 91 | CES64 = 72 | CES89 = 76 |
| CES15 = 70 | CES40 = 83 | CES65 = 65 | CES90 = 76 |
| CES16 = 46 | CES41 = 84 | CES66 = 66 | CES91 = 92 |
| CES17 = 48 | CES42 = 70 | CES67 = 64 | CES92 = 70 |
| CES18 = 55 | CES43 = 69 | CES68 = 71 | CES93 = 83 |
| CES19 = 70 | CES44 = 98 | CES69 = 80 | CES94 = 60 |
| CES20 = 64 | CES45 = 79 | CES70 = 58 | CES95 = 73 |
| CES21 = 85 | CES46 = 78 | CES71 = 55 | CES96 = 79 |
| CES22 = 77 | CES47 = 76 | CES72 = 84 | CES97 = 84 |
| CES23 = 91 | CES48 = 68 | CES73 = 47 | CES98 = 73 |
| CES24 = 90 | CES49 = 78 | CES74 = 94 | CES99 = 62 |
| CES25 = 71 | CES50 = 87 | CES75 = 51 | |



REPORT NUMBER: SP1-1908-441-9-R4

TM-30-18

Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-1908-441-9-R4

TM-30-18

Measure Comparisons



(END OF REPORT)