

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: P638865

Luminaire Tested: GWS-SA4F-760-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-760-U-SLL-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (64) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26719.6 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G3

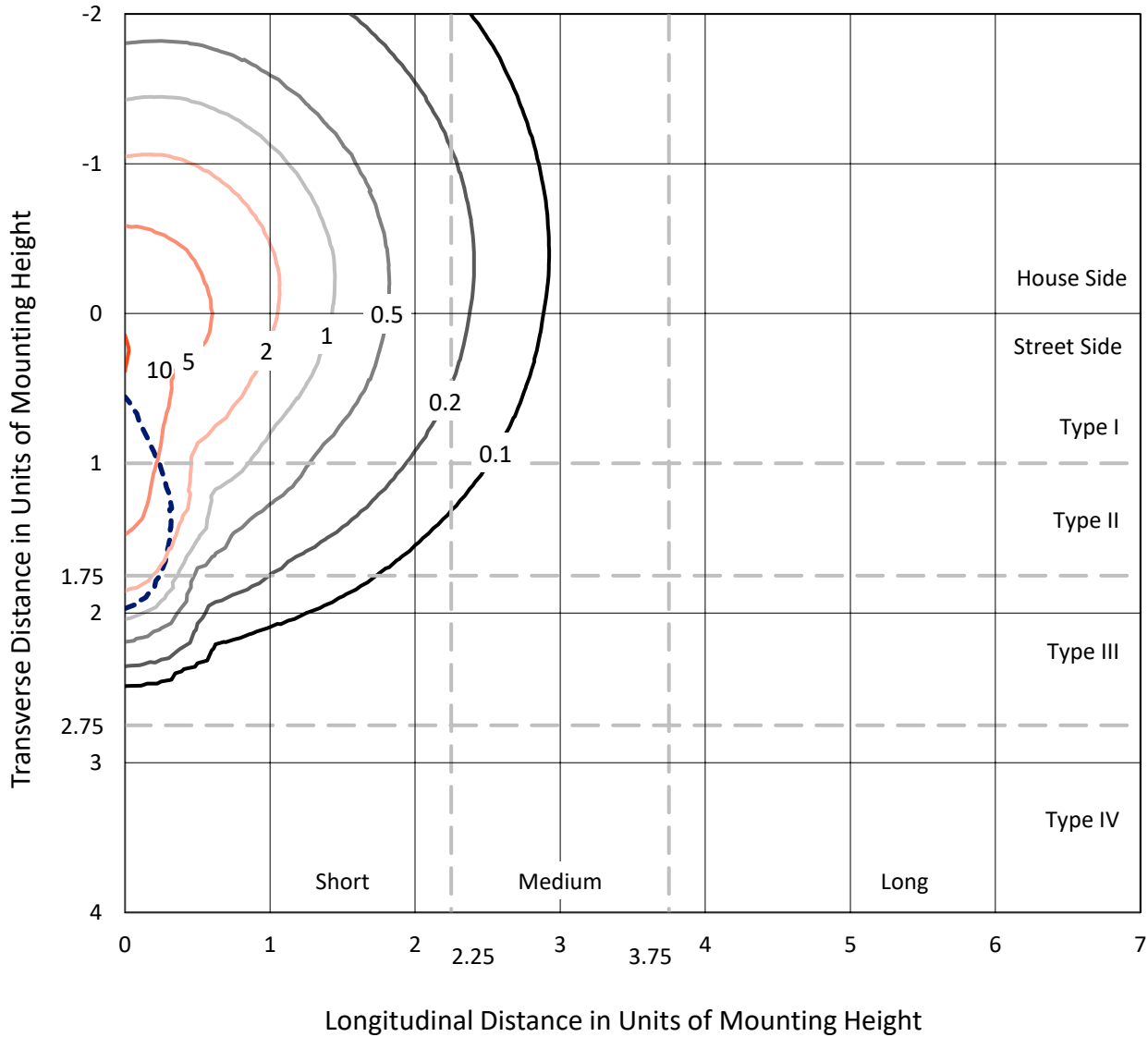
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

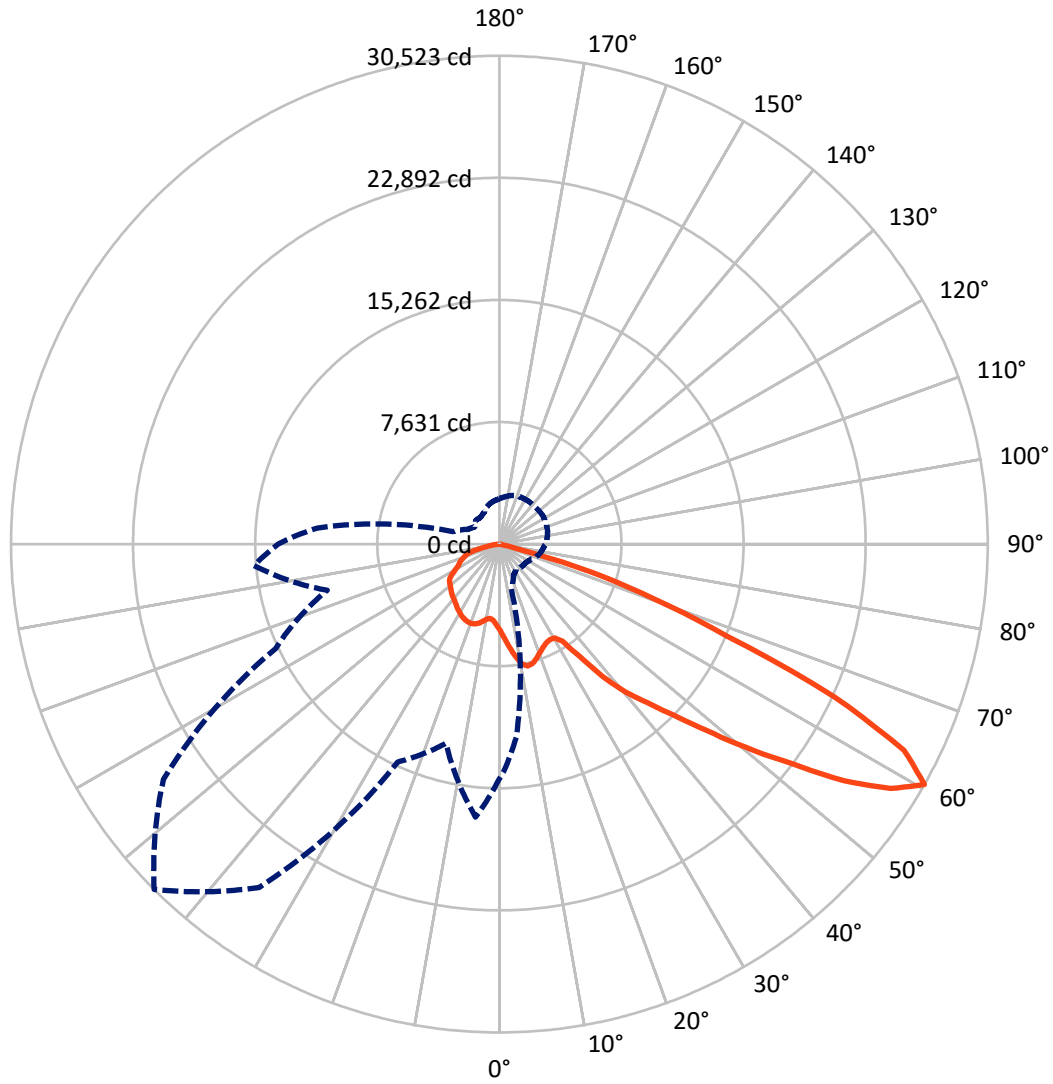
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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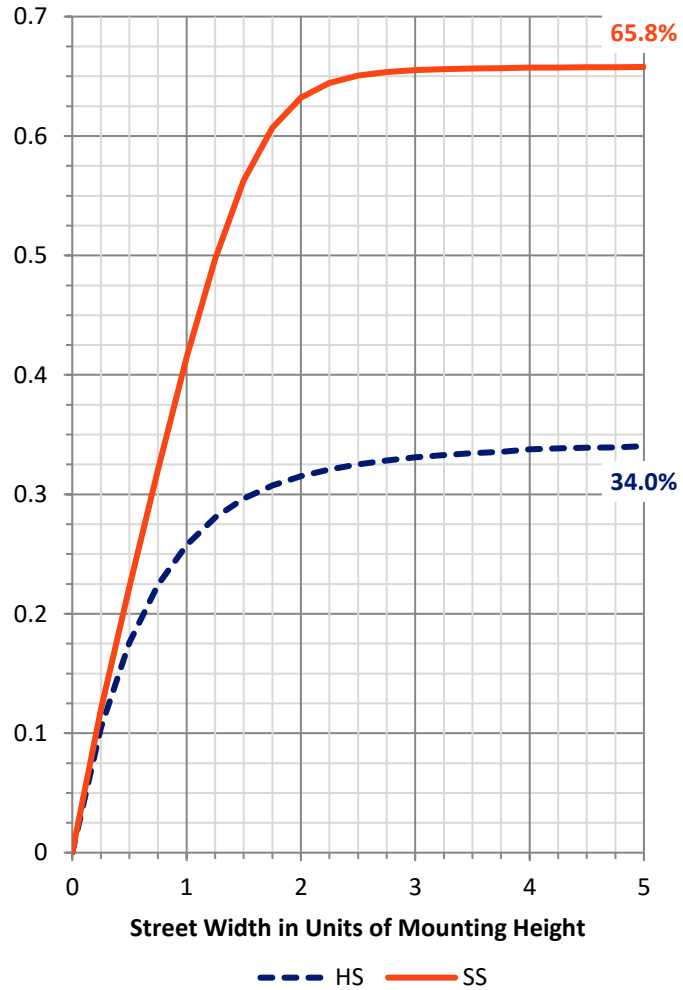
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9140.5 | 0.0 | 9140.5 |
| | % Fixture | 34.2 | 0.0 | 34.2 |
| Street Side | Lumens | 17579.1 | 0.0 | 17579.1 |
| | % Fixture | 65.8 | 0.0 | 65.8 |
| Total | Lumens | 26719.6 | 0.0 | 26719.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 526.5 | 2.0 |
| 10°-20° | 1688.8 | 6.3 |
| 20°-30° | 2750.3 | 10.3 |
| 30°-40° | 3863.6 | 14.5 |
| 40°-50° | 5287.0 | 19.8 |
| 50°-60° | 6782.9 | 25.4 |
| 60°-70° | 4567.3 | 17.1 |
| 70°-80° | 1141.8 | 4.3 |
| 80°-90° | 111.3 | 0.4 |
| 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° | 26719.6 | 100.0 |
| 0°-180° | 26719.6 | 100.0 |

Coefficient of Utilization



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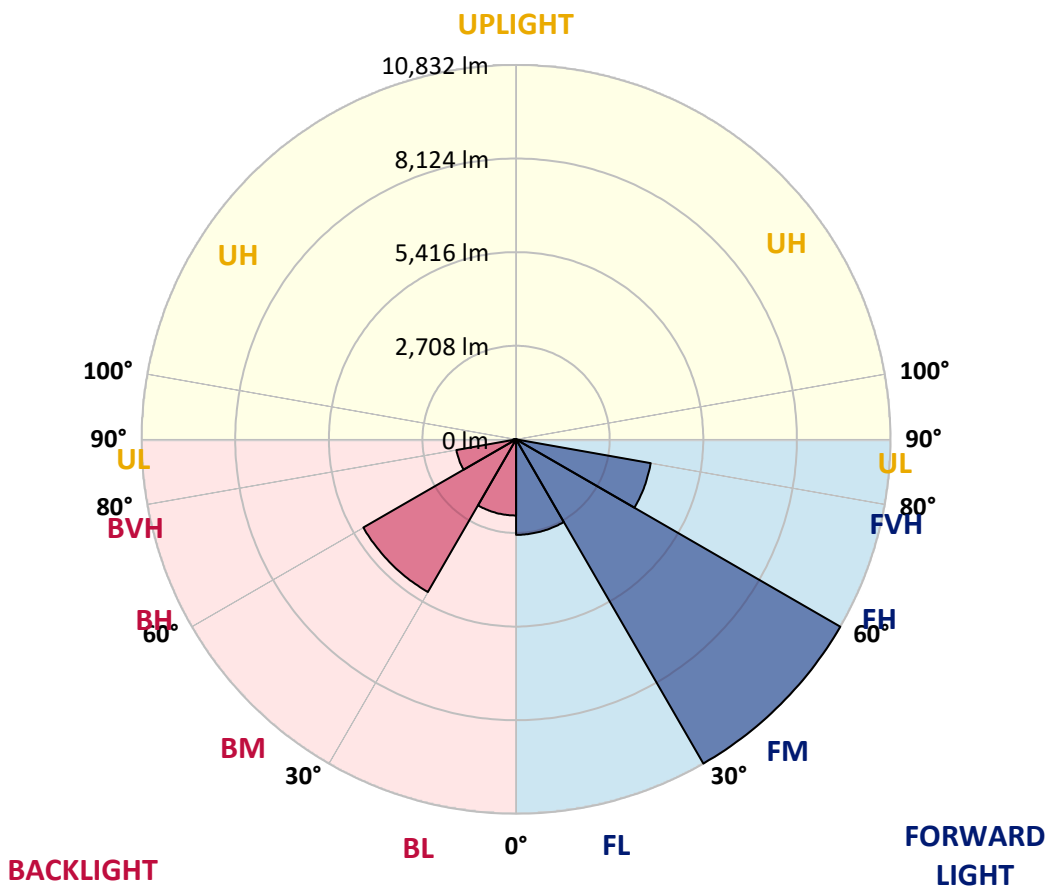
CATALOG NUMBER: GWS-SA4F-760-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2762.2 | 10.3 | | | |
| FM (30°-60°) | 10832.3 | 40.5 | | | |
| FH (60°-80°) | 3955.6 | 14.8 | | | G2/5000 |
| FVH (80°-90°) | 28.9 | 0.1 | | | G1/100 |
| BL (0°-30°) | 2203.4 | 8.2 | B3/2500 | | |
| BM (30°-60°) | 5101.2 | 19.1 | B4/8500 | | |
| BH (60°-80°) | 1753.6 | 6.6 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 82.4 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G3

Type III Short





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CATALOG NUMBER: GWS-SA4F-760-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 |
| 2.5° | 5701.6 | 5689.3 | 5677.0 | 5581.0 | 5556.4 | 5487.5 | 5438.3 | 5376.8 | 5288.2 | 5239.0 | 5197.1 |
| 5° | 6058.4 | 6038.7 | 5972.3 | 5775.4 | 5647.4 | 5507.2 | 5391.5 | 5263.6 | 5128.2 | 5039.6 | 4970.7 |
| 7.5° | 6395.5 | 6390.6 | 6277.4 | 5952.6 | 5745.9 | 5544.1 | 5386.6 | 5199.6 | 5005.2 | 4872.3 | 4783.7 |
| 10° | 6708.0 | 6671.1 | 6535.8 | 6112.5 | 5841.8 | 5610.5 | 5440.7 | 5234.0 | 5007.6 | 4828.0 | 4709.9 |
| 12.5° | 6983.6 | 6936.9 | 6749.9 | 6260.2 | 5925.5 | 5640.1 | 5455.5 | 5285.7 | 5135.6 | 4985.5 | 4850.2 |
| 15° | 7210.0 | 7153.4 | 6963.9 | 6398.0 | 5999.3 | 5622.8 | 5364.5 | 5231.6 | 5283.2 | 5349.7 | 5199.6 |
| 17.5° | 7421.6 | 7362.6 | 7131.3 | 6498.9 | 6021.5 | 5517.0 | 5140.5 | 5083.9 | 5344.8 | 5647.4 | 5578.5 |
| 20° | 7598.8 | 7532.4 | 7264.2 | 6548.1 | 5982.1 | 5315.2 | 4850.2 | 4948.6 | 5293.1 | 5654.8 | 5765.6 |
| 22.5° | 7790.8 | 7736.6 | 7414.3 | 6619.4 | 5932.9 | 5037.2 | 4606.5 | 4847.7 | 5204.5 | 5521.9 | 5689.3 |
| 25° | 8098.4 | 8031.9 | 7648.0 | 6744.9 | 5908.3 | 4776.3 | 4431.8 | 4749.3 | 5081.5 | 5369.4 | 5499.8 |
| 27.5° | 8543.8 | 8420.7 | 7967.9 | 6963.9 | 5935.3 | 4530.3 | 4321.1 | 4628.7 | 4938.7 | 5184.8 | 5290.6 |
| 30° | 9028.5 | 8880.9 | 8322.3 | 7190.3 | 5974.7 | 4380.1 | 4262.0 | 4490.9 | 4719.7 | 4965.8 | 5081.5 |
| 32.5° | 9601.9 | 9471.5 | 8701.2 | 7360.1 | 5891.1 | 4311.2 | 4217.7 | 4340.8 | 4522.9 | 4719.7 | 4815.7 |
| 35° | 10286.0 | 10052.2 | 9114.6 | 7497.9 | 5620.4 | 4210.4 | 4178.4 | 4175.9 | 4271.9 | 4463.8 | 4572.1 |
| 37.5° | 11021.7 | 10770.7 | 9624.0 | 7645.6 | 5199.6 | 4050.4 | 4084.9 | 3981.5 | 4070.1 | 4222.7 | 4345.7 |
| 40° | 11624.6 | 11361.3 | 10138.3 | 7847.4 | 4673.0 | 3799.4 | 3878.2 | 3767.4 | 3821.6 | 3979.0 | 4116.8 |
| 42.5° | 12215.2 | 11934.7 | 10618.2 | 8076.2 | 4163.6 | 3553.3 | 3592.7 | 3550.9 | 3568.1 | 3733.0 | 3924.9 |
| 45° | 12990.3 | 12675.4 | 11208.8 | 8238.6 | 3705.9 | 3358.9 | 3322.0 | 3250.7 | 3341.7 | 3555.8 | 3760.0 |
| 47.5° | 14284.7 | 13908.2 | 12175.8 | 8344.4 | 3373.7 | 3248.2 | 3078.4 | 3036.6 | 3149.8 | 3388.5 | 3600.1 |
| 50° | 15798.1 | 15473.2 | 13721.2 | 8339.5 | 3125.2 | 3154.7 | 2842.2 | 2805.3 | 2992.3 | 3233.4 | 3457.4 |
| 52.5° | 17038.3 | 16708.5 | 15042.6 | 8093.4 | 2920.9 | 2955.4 | 2704.4 | 2601.0 | 2856.9 | 3080.9 | 3304.8 |
| 55° | 18039.8 | 17668.2 | 15650.4 | 7064.8 | 2662.5 | 2637.9 | 2554.3 | 2364.8 | 2687.1 | 2928.3 | 3137.5 |
| 57.5° | 17500.9 | 17058.0 | 14914.7 | 5371.8 | 2396.8 | 2241.8 | 2295.9 | 2155.6 | 2455.8 | 2758.5 | 2960.3 |
| 60° | 14673.5 | 14274.9 | 12116.8 | 2859.4 | 2108.9 | 1872.6 | 1985.8 | 2008.0 | 2202.4 | 2554.3 | 2761.0 |
| 62.5° | 10079.3 | 9788.9 | 8211.5 | 1734.8 | 1663.5 | 1503.5 | 1680.7 | 1840.6 | 1985.8 | 2283.6 | 2463.2 |
| 65° | 4931.4 | 4845.2 | 4107.0 | 1112.3 | 1163.9 | 1215.6 | 1392.8 | 1587.2 | 1801.3 | 2062.1 | 2251.6 |
| 67.5° | 1358.3 | 1368.2 | 1245.1 | 868.6 | 917.9 | 1060.6 | 1200.8 | 1355.9 | 1570.0 | 1811.1 | 2003.1 |
| 70° | 598.0 | 607.8 | 627.5 | 669.3 | 762.8 | 893.3 | 1038.4 | 1198.4 | 1395.2 | 1597.0 | 1781.6 |
| 72.5° | 415.9 | 425.7 | 455.2 | 509.4 | 593.0 | 716.1 | 853.9 | 1006.4 | 1210.7 | 1380.5 | 1533.1 |
| 75° | 255.9 | 263.3 | 290.4 | 337.1 | 393.7 | 487.2 | 622.6 | 762.8 | 942.5 | 1097.5 | 1232.8 |
| 77.5° | 135.3 | 130.4 | 147.6 | 179.6 | 228.9 | 278.1 | 369.1 | 457.7 | 585.7 | 711.2 | 824.4 |
| 80° | 73.8 | 71.4 | 81.2 | 98.4 | 113.2 | 152.6 | 214.1 | 273.1 | 347.0 | 418.3 | 479.8 |
| 82.5° | 32.0 | 29.5 | 32.0 | 41.8 | 51.7 | 73.8 | 108.3 | 150.1 | 191.9 | 241.2 | 280.5 |
| 85° | 0.0 | 0.0 | 0.0 | 2.5 | 12.3 | 19.7 | 36.9 | 54.1 | 78.7 | 108.3 | 132.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.8 | 22.1 |
| 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: GWS-SA4F-760-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 |
| 2.5° | 5172.5 | 5111.0 | 5106.1 | 5056.9 | 5061.8 | 5064.2 | 5015.0 | 4995.3 | 5012.6 | 5032.2 | 5022.4 |
| 5° | 4946.1 | 4882.1 | 4855.1 | 4808.3 | 4803.4 | 4781.3 | 4761.6 | 4737.0 | 4754.2 | 4771.4 | 4781.3 |
| 7.5° | 4749.3 | 4707.4 | 4690.2 | 4677.9 | 4682.8 | 4673.0 | 4633.6 | 4611.5 | 4609.0 | 4616.4 | 4626.2 |
| 10° | 4685.3 | 4650.8 | 4673.0 | 4707.4 | 4732.0 | 4749.3 | 4707.4 | 4670.5 | 4636.1 | 4621.3 | 4621.3 |
| 12.5° | 4823.1 | 4778.8 | 4823.1 | 4860.0 | 4909.2 | 4921.5 | 4874.8 | 4835.4 | 4823.1 | 4837.8 | 4867.4 |
| 15° | 5128.2 | 5024.9 | 5022.4 | 5044.6 | 5083.9 | 5103.6 | 5059.3 | 5039.6 | 5039.6 | 5133.1 | 5207.0 |
| 17.5° | 5433.4 | 5263.6 | 5192.2 | 5179.9 | 5204.5 | 5211.9 | 5175.0 | 5157.7 | 5202.0 | 5384.1 | 5521.9 |
| 20° | 5647.4 | 5440.7 | 5285.7 | 5256.2 | 5263.6 | 5266.0 | 5236.5 | 5224.2 | 5288.2 | 5509.6 | 5625.3 |
| 22.5° | 5625.3 | 5472.7 | 5283.2 | 5246.3 | 5258.6 | 5253.7 | 5226.6 | 5221.7 | 5273.4 | 5465.3 | 5519.5 |
| 25° | 5472.7 | 5354.6 | 5194.7 | 5170.1 | 5189.7 | 5187.3 | 5160.2 | 5147.9 | 5170.1 | 5298.0 | 5302.9 |
| 27.5° | 5298.0 | 5194.7 | 5056.9 | 5049.5 | 5081.5 | 5098.7 | 5051.9 | 5015.0 | 5007.6 | 5093.8 | 5074.1 |
| 30° | 5088.8 | 5012.6 | 4901.8 | 4906.8 | 4965.8 | 4975.7 | 4919.1 | 4864.9 | 4850.2 | 4896.9 | 4869.8 |
| 32.5° | 4840.3 | 4815.7 | 4756.6 | 4768.9 | 4825.5 | 4845.2 | 4786.2 | 4729.6 | 4712.4 | 4727.1 | 4670.5 |
| 35° | 4628.7 | 4618.8 | 4623.8 | 4645.9 | 4695.1 | 4709.9 | 4660.7 | 4616.4 | 4591.8 | 4540.1 | 4466.3 |
| 37.5° | 4409.7 | 4436.7 | 4508.1 | 4549.9 | 4577.0 | 4572.1 | 4545.0 | 4513.0 | 4473.7 | 4377.7 | 4286.6 |
| 40° | 4205.4 | 4274.3 | 4402.3 | 4449.0 | 4458.9 | 4461.4 | 4441.7 | 4414.6 | 4365.4 | 4237.4 | 4134.1 |
| 42.5° | 4047.9 | 4124.2 | 4294.0 | 4365.4 | 4370.3 | 4375.2 | 4355.5 | 4333.4 | 4264.5 | 4094.7 | 3993.8 |
| 45° | 3883.1 | 3984.0 | 4183.3 | 4269.4 | 4264.5 | 4262.0 | 4244.8 | 4235.0 | 4153.8 | 3956.9 | 3846.2 |
| 47.5° | 3742.8 | 3860.9 | 4075.0 | 4148.8 | 4146.4 | 4143.9 | 4131.6 | 4131.6 | 4050.4 | 3836.3 | 3710.8 |
| 50° | 3605.0 | 3740.4 | 3964.3 | 4025.8 | 4030.7 | 4025.8 | 4020.9 | 4028.3 | 3932.3 | 3703.4 | 3580.4 |
| 52.5° | 3454.9 | 3607.5 | 3841.2 | 3897.8 | 3927.4 | 3939.7 | 3939.7 | 3922.4 | 3809.3 | 3570.6 | 3435.2 |
| 55° | 3290.0 | 3435.2 | 3705.9 | 3782.2 | 3806.8 | 3828.9 | 3828.9 | 3794.5 | 3688.7 | 3447.5 | 3302.3 |
| 57.5° | 3085.8 | 3213.7 | 3427.8 | 3504.1 | 3563.2 | 3577.9 | 3577.9 | 3521.3 | 3435.2 | 3203.9 | 3085.8 |
| 60° | 2864.3 | 2975.1 | 3120.2 | 3201.4 | 3245.7 | 3216.2 | 3238.4 | 3223.6 | 3154.7 | 2940.6 | 2842.2 |
| 62.5° | 2569.0 | 2682.2 | 2842.2 | 2925.8 | 2945.5 | 2916.0 | 2945.5 | 2943.1 | 2849.6 | 2657.6 | 2539.5 |
| 65° | 2357.4 | 2468.1 | 2625.6 | 2733.9 | 2765.9 | 2758.5 | 2778.2 | 2748.7 | 2633.0 | 2450.9 | 2337.7 |
| 67.5° | 2106.4 | 2224.5 | 2406.6 | 2527.2 | 2593.6 | 2601.0 | 2628.1 | 2566.6 | 2448.5 | 2249.1 | 2106.4 |
| 70° | 1867.7 | 1968.6 | 2108.9 | 2222.1 | 2315.6 | 2362.3 | 2367.2 | 2278.7 | 2131.0 | 1966.1 | 1862.8 |
| 72.5° | 1616.7 | 1720.1 | 1889.9 | 2012.9 | 2131.0 | 2185.2 | 2185.2 | 2076.9 | 1916.9 | 1734.8 | 1624.1 |
| 75° | 1311.6 | 1407.6 | 1562.6 | 1695.5 | 1830.8 | 1899.7 | 1897.2 | 1803.7 | 1626.6 | 1454.3 | 1338.7 |
| 77.5° | 888.3 | 959.7 | 1058.1 | 1159.0 | 1178.7 | 1232.8 | 1259.9 | 1141.8 | 1043.4 | 949.9 | 846.5 |
| 80° | 516.8 | 561.1 | 615.2 | 671.8 | 684.1 | 701.3 | 657.0 | 612.7 | 561.1 | 499.5 | 452.8 |
| 82.5° | 302.7 | 332.2 | 359.3 | 403.6 | 410.9 | 415.9 | 376.5 | 356.8 | 315.0 | 278.1 | 248.5 |
| 85° | 147.6 | 157.5 | 182.1 | 204.2 | 194.4 | 189.5 | 172.3 | 152.6 | 135.3 | 120.6 | 105.8 |
| 87.5° | 29.5 | 29.5 | 44.3 | 41.8 | 34.5 | 29.5 | 17.2 | 22.1 | 4.9 | 4.9 | 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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CATALOG NUMBER: GWS-SA4F-760-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 |
| 2.5° | 5054.4 | 5096.2 | 5147.9 | 5216.8 | 5295.6 | 5379.2 | 5460.4 | 5521.9 | 5583.5 | 5674.5 | 5659.7 |
| 5° | 4796.0 | 4867.4 | 4948.6 | 5054.4 | 5182.4 | 5327.5 | 5490.0 | 5652.4 | 5827.1 | 5974.7 | 6038.7 |
| 7.5° | 4645.9 | 4724.7 | 4820.6 | 4958.4 | 5123.3 | 5300.5 | 5529.3 | 5792.6 | 6075.6 | 6270.0 | 6390.6 |
| 10° | 4645.9 | 4746.8 | 4872.3 | 5005.2 | 5150.4 | 5332.5 | 5615.4 | 5945.2 | 6309.4 | 6565.3 | 6705.6 |
| 12.5° | 4914.1 | 5015.0 | 5042.1 | 5037.2 | 5118.4 | 5320.2 | 5684.4 | 6105.1 | 6540.7 | 6811.4 | 6983.6 |
| 15° | 5332.5 | 5366.9 | 5162.7 | 4975.7 | 4988.0 | 5231.6 | 5716.3 | 6233.1 | 6740.0 | 7064.8 | 7251.9 |
| 17.5° | 5613.0 | 5521.9 | 5157.7 | 4830.5 | 4761.6 | 5081.5 | 5716.3 | 6356.1 | 6951.6 | 7318.3 | 7493.0 |
| 20° | 5635.1 | 5408.7 | 5032.2 | 4690.2 | 4513.0 | 4882.1 | 5677.0 | 6449.6 | 7155.9 | 7561.9 | 7748.9 |
| 22.5° | 5440.7 | 5216.8 | 4899.4 | 4569.6 | 4308.8 | 4641.0 | 5613.0 | 6521.0 | 7330.6 | 7790.8 | 8022.1 |
| 25° | 5219.3 | 5032.2 | 4764.0 | 4446.6 | 4168.5 | 4397.4 | 5553.9 | 6641.6 | 7574.2 | 8100.8 | 8334.6 |
| 27.5° | 5002.7 | 4845.2 | 4601.6 | 4343.2 | 4089.8 | 4185.7 | 5517.0 | 6818.8 | 7864.6 | 8541.3 | 8743.1 |
| 30° | 4791.1 | 4648.4 | 4426.9 | 4244.8 | 4047.9 | 4047.9 | 5485.0 | 7023.0 | 8248.5 | 9035.9 | 9237.7 |
| 32.5° | 4577.0 | 4441.7 | 4262.0 | 4148.8 | 4023.3 | 3993.8 | 5396.4 | 7214.9 | 8644.6 | 9577.3 | 9784.0 |
| 35° | 4377.7 | 4242.3 | 4104.5 | 4057.8 | 4011.0 | 3952.0 | 5177.4 | 7365.0 | 9031.0 | 10209.7 | 10386.9 |
| 37.5° | 4190.7 | 4060.3 | 3956.9 | 3944.6 | 3949.5 | 3838.8 | 4832.9 | 7490.5 | 9513.3 | 10856.9 | 10950.4 |
| 40° | 4028.3 | 3883.1 | 3801.9 | 3799.4 | 3824.0 | 3656.7 | 4397.4 | 7670.2 | 10064.5 | 11405.6 | 11366.2 |
| 42.5° | 3883.1 | 3730.5 | 3632.1 | 3654.2 | 3639.5 | 3474.6 | 3971.7 | 7835.1 | 10544.3 | 11919.9 | 11841.2 |
| 45° | 3740.4 | 3592.7 | 3454.9 | 3486.9 | 3469.7 | 3361.4 | 3609.9 | 7955.6 | 11075.9 | 12537.6 | 12547.4 |
| 47.5° | 3602.5 | 3457.4 | 3319.6 | 3280.2 | 3277.7 | 3326.9 | 3331.9 | 7995.0 | 11942.1 | 13531.7 | 13307.8 |
| 50° | 3474.6 | 3329.4 | 3186.7 | 3053.8 | 3105.5 | 3258.0 | 3125.2 | 7965.5 | 13238.9 | 14629.2 | 14004.2 |
| 52.5° | 3341.7 | 3203.9 | 3046.4 | 2807.7 | 2943.1 | 3093.2 | 2940.6 | 7859.7 | 14031.2 | 15598.7 | 15224.7 |
| 55° | 3189.1 | 3058.7 | 2844.6 | 2554.3 | 2719.1 | 2751.1 | 2751.1 | 6836.0 | 14368.4 | 16558.4 | 16789.7 |
| 57.5° | 2984.9 | 2812.6 | 2473.1 | 2239.3 | 2386.9 | 2263.9 | 2549.3 | 4783.7 | 13812.2 | 16255.8 | 17153.9 |
| 60° | 2753.6 | 2569.0 | 2209.8 | 2042.4 | 2086.7 | 1870.2 | 2172.8 | 2999.7 | 11447.4 | 13831.9 | 15387.1 |
| 62.5° | 2448.5 | 2278.7 | 1980.9 | 1850.5 | 1759.4 | 1525.7 | 1749.6 | 1897.2 | 7847.4 | 10271.2 | 11331.8 |
| 65° | 2244.2 | 2057.2 | 1791.4 | 1619.2 | 1432.2 | 1227.9 | 1161.5 | 1245.1 | 4220.2 | 5748.3 | 6464.4 |
| 67.5° | 2003.1 | 1818.5 | 1567.5 | 1351.0 | 1200.8 | 1053.2 | 937.5 | 908.0 | 1446.9 | 1914.5 | 2072.0 |
| 70° | 1774.2 | 1597.0 | 1387.9 | 1186.1 | 1036.0 | 890.8 | 777.6 | 696.4 | 669.3 | 664.4 | 654.6 |
| 72.5° | 1540.4 | 1375.6 | 1200.8 | 1013.8 | 849.0 | 716.1 | 615.2 | 521.7 | 482.3 | 470.0 | 457.7 |
| 75° | 1262.4 | 1131.9 | 957.2 | 755.5 | 622.6 | 499.5 | 420.8 | 359.3 | 324.8 | 312.5 | 297.8 |
| 77.5° | 812.1 | 753.0 | 600.4 | 487.2 | 376.5 | 297.8 | 255.9 | 216.5 | 194.4 | 189.5 | 177.2 |
| 80° | 433.1 | 403.6 | 332.2 | 280.5 | 223.9 | 182.1 | 159.9 | 137.8 | 125.5 | 120.6 | 115.7 |
| 82.5° | 241.2 | 219.0 | 184.6 | 162.4 | 130.4 | 110.7 | 98.4 | 88.6 | 81.2 | 78.7 | 76.3 |
| 85° | 108.3 | 93.5 | 73.8 | 68.9 | 61.5 | 56.6 | 54.1 | 49.2 | 46.8 | 44.3 | 41.8 |
| 87.5° | 4.9 | 9.8 | 12.3 | 9.8 | 9.8 | 14.8 | 17.2 | 17.2 | 14.8 | 14.8 | 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: P638865

CATALOG NUMBER: GWS-SA4F-760-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 359° | 360° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 | 5389.1 |
| 2.5° | 5750.8 | 5824.6 | 5832.0 | 5856.6 | 5824.6 | 5817.2 | 5765.6 | 5736.0 | 5709.0 | 5701.6 |
| 5° | 6198.6 | 6346.3 | 6405.4 | 6447.2 | 6407.8 | 6388.1 | 6274.9 | 6156.8 | 6090.4 | 6058.4 |
| 7.5° | 6658.8 | 6880.3 | 6995.9 | 7047.6 | 7052.5 | 6963.9 | 6769.5 | 6548.1 | 6437.3 | 6395.5 |
| 10° | 7069.8 | 7342.9 | 7495.5 | 7593.9 | 7559.4 | 7451.2 | 7185.4 | 6885.2 | 6744.9 | 6708.0 |
| 12.5° | 7374.9 | 7635.7 | 7753.8 | 7817.8 | 7815.4 | 7756.3 | 7505.3 | 7180.5 | 7020.5 | 6983.6 |
| 15° | 7571.8 | 7726.8 | 7734.2 | 7748.9 | 7790.8 | 7869.5 | 7739.1 | 7438.9 | 7261.7 | 7210.0 |
| 17.5° | 7726.8 | 7665.3 | 7549.6 | 7510.2 | 7603.7 | 7822.7 | 7901.5 | 7657.9 | 7465.9 | 7421.6 |
| 20° | 7825.2 | 7515.2 | 7310.9 | 7234.6 | 7342.9 | 7699.7 | 7999.9 | 7854.7 | 7655.4 | 7598.8 |
| 22.5° | 7901.5 | 7374.9 | 7045.1 | 6993.5 | 7106.7 | 7566.8 | 8100.8 | 8088.5 | 7869.5 | 7790.8 |
| 25° | 8022.1 | 7281.4 | 6858.1 | 6821.2 | 6927.0 | 7502.9 | 8236.2 | 8405.9 | 8211.5 | 8098.4 |
| 27.5° | 8211.5 | 7271.5 | 6762.2 | 6749.9 | 6895.0 | 7559.4 | 8430.6 | 8871.0 | 8627.4 | 8543.8 |
| 30° | 8474.8 | 7365.0 | 6784.3 | 6808.9 | 6986.1 | 7763.7 | 8733.2 | 9402.6 | 9158.9 | 9028.5 |
| 32.5° | 8853.8 | 7616.0 | 7121.4 | 7227.2 | 7357.7 | 8091.0 | 9176.2 | 9978.4 | 9793.8 | 9601.9 |
| 35° | 9353.3 | 8305.1 | 8118.0 | 8568.4 | 8445.3 | 8807.1 | 9710.1 | 10677.2 | 10453.3 | 10286.0 |
| 37.5° | 10020.2 | 9717.5 | 9889.8 | 10509.9 | 10212.1 | 10160.5 | 10362.3 | 11312.1 | 11189.1 | 11021.7 |
| 40° | 10955.3 | 11016.8 | 11334.2 | 12148.8 | 11718.1 | 11385.9 | 11162.0 | 11789.5 | 11831.3 | 11624.6 |
| 42.5° | 11575.4 | 11858.4 | 12623.7 | 13548.9 | 12955.9 | 12161.1 | 11831.3 | 12399.8 | 12402.2 | 12215.2 |
| 45° | 11806.7 | 12547.4 | 14146.9 | 15212.4 | 14220.7 | 12604.0 | 12200.4 | 13229.0 | 13204.4 | 12990.3 |
| 47.5° | 11723.0 | 13128.1 | 15729.2 | 17358.2 | 15844.8 | 12919.0 | 12148.8 | 14410.2 | 14609.5 | 14284.7 |
| 50° | 11548.3 | 13711.3 | 17577.2 | 19986.3 | 17838.0 | 13253.6 | 12070.0 | 15719.3 | 16049.1 | 15798.1 |
| 52.5° | 11725.5 | 14361.0 | 19762.3 | 22703.0 | 20338.2 | 13787.6 | 12601.5 | 17400.0 | 17341.0 | 17038.3 |
| 55° | 12286.6 | 15128.7 | 22417.5 | 26116.0 | 23084.4 | 14690.7 | 13967.3 | 19002.0 | 18401.5 | 18039.8 |
| 57.5° | 12259.5 | 15677.5 | 24745.4 | 28815.5 | 25473.8 | 15431.4 | 14442.2 | 19171.8 | 17958.6 | 17500.9 |
| 60° | 11127.5 | 15426.5 | 25631.3 | 30523.2 | 26194.8 | 15022.9 | 12879.6 | 17124.4 | 15153.3 | 14673.5 |
| 62.5° | 8305.1 | 13689.2 | 23913.6 | 28384.8 | 24154.8 | 12975.6 | 9685.5 | 12291.5 | 10888.9 | 10079.3 |
| 65° | 5312.8 | 10709.2 | 20104.4 | 22995.8 | 19910.0 | 9924.2 | 5768.0 | 6589.9 | 5162.7 | 4931.4 |
| 67.5° | 2261.4 | 7559.4 | 15628.3 | 15369.9 | 14895.0 | 6430.0 | 2227.0 | 1855.4 | 1382.9 | 1358.3 |
| 70° | 748.1 | 5143.0 | 9633.9 | 10251.5 | 8895.6 | 4429.4 | 735.8 | 622.6 | 620.1 | 598.0 |
| 72.5° | 489.7 | 2761.0 | 5423.5 | 6038.7 | 5723.7 | 2549.3 | 445.4 | 415.9 | 425.7 | 415.9 |
| 75° | 292.8 | 600.4 | 912.9 | 1186.1 | 912.9 | 428.2 | 268.2 | 263.3 | 268.2 | 255.9 |
| 77.5° | 172.3 | 167.3 | 162.4 | 162.4 | 159.9 | 147.6 | 135.3 | 130.4 | 132.9 | 135.3 |
| 80° | 110.7 | 105.8 | 100.9 | 98.4 | 86.1 | 81.2 | 76.3 | 71.4 | 71.4 | 73.8 |
| 82.5° | 71.4 | 66.4 | 61.5 | 54.1 | 44.3 | 36.9 | 34.5 | 29.5 | 29.5 | 32.0 |
| 85° | 36.9 | 29.5 | 22.1 | 17.2 | 9.8 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.4 | 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 |

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
 CIE u': 0.2052
 CIE v': 0.4804
 Duv: 0.0025
 CIE x: 0.3330
 CIE y: 0.3466
 CIE z: 0.3204
 Peak Wavelength (nm): 442
 Dominant Wavelength (nm): 554
 Purity: 4.1

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.7 | | |
| R1: | 70.6 | R9: | -27.1 |
| R2: | 74.6 | R10: | 40.8 |
| R3: | 78.3 | R11: | 74.6 |
| R4: | 73.8 | R12: | 50.4 |
| R5: | 72.4 | R13: | 70.0 |
| R6: | 67.5 | R14: | 87.8 |
| R7: | 77.5 | | |
| R8: | 58.9 | | |

Rf: 72.1
 Rg: 97.2



Test Conditions

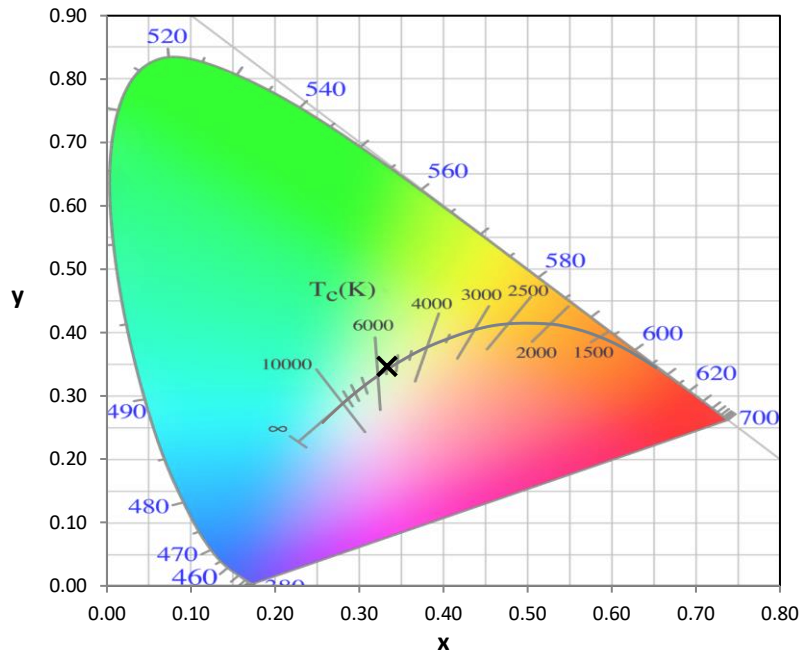
Stabilization Time: 240M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.6/31%
 Sphere Temperature (°C): 25.9

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 ($R_{f,i}$)

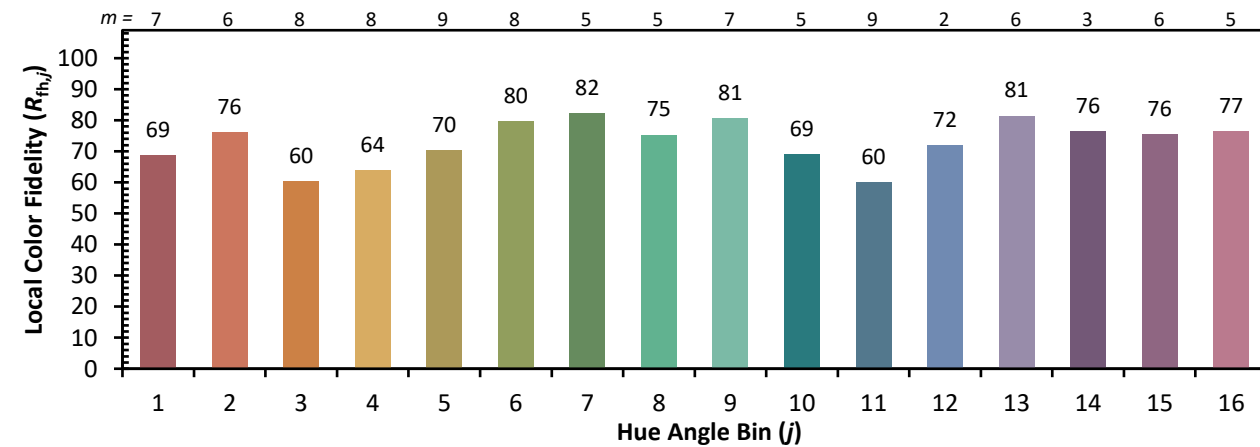
| | | | |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54 = 81 | CES79 = 74 |
| CES05 = 46 | CES30 = 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 | |



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Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)