

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: P643214

Luminaire Tested: GWS-SA6E-740-U-SLR-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SAGE-740-U-SLR-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (96) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

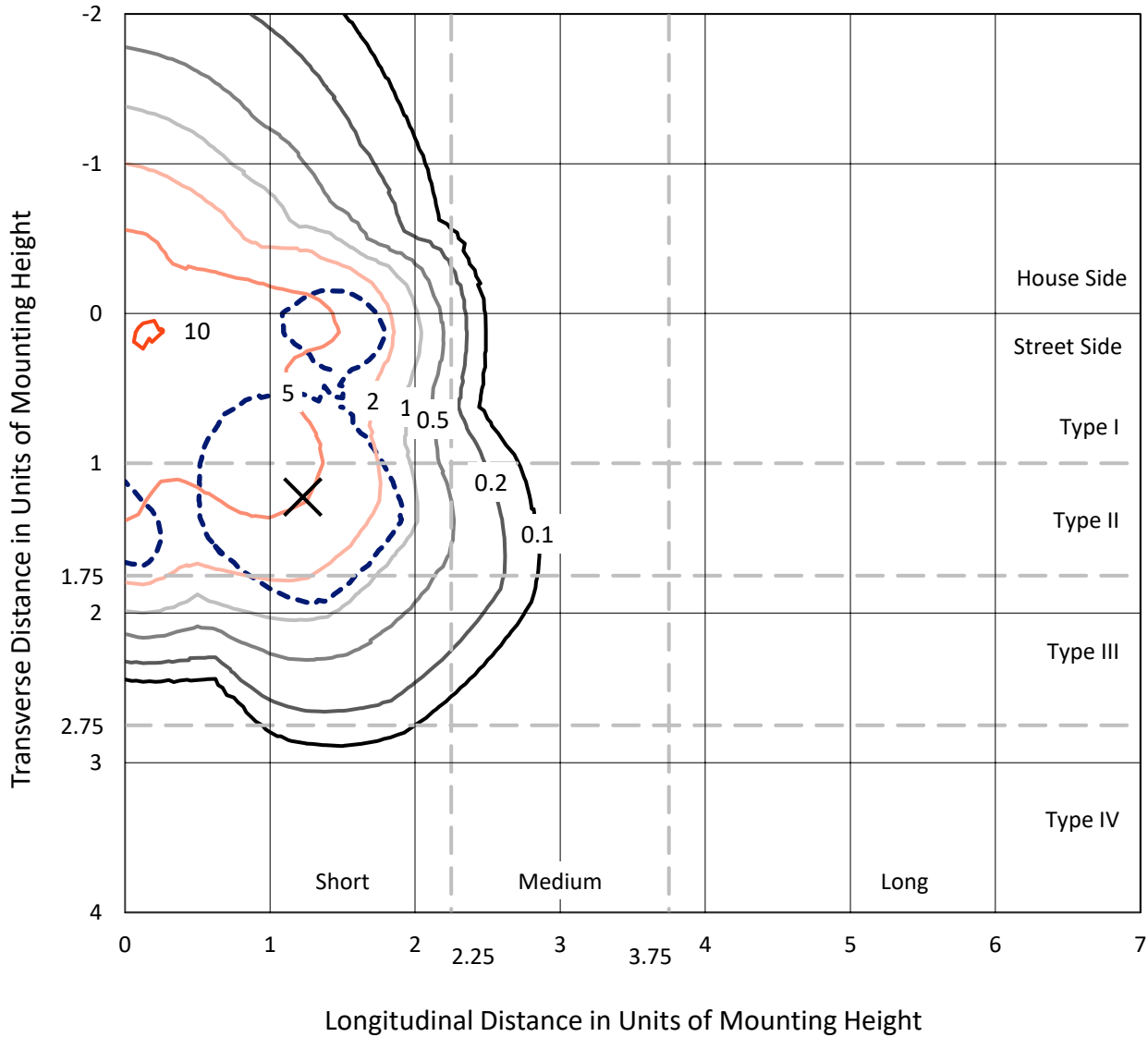
Lumens per Lamp: N/A  
Luminaire Lumens: 35023.5 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G3  
  
Input Watts (W): 323.8  
Input Voltage (V): 120  
Input Current (Ain): 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

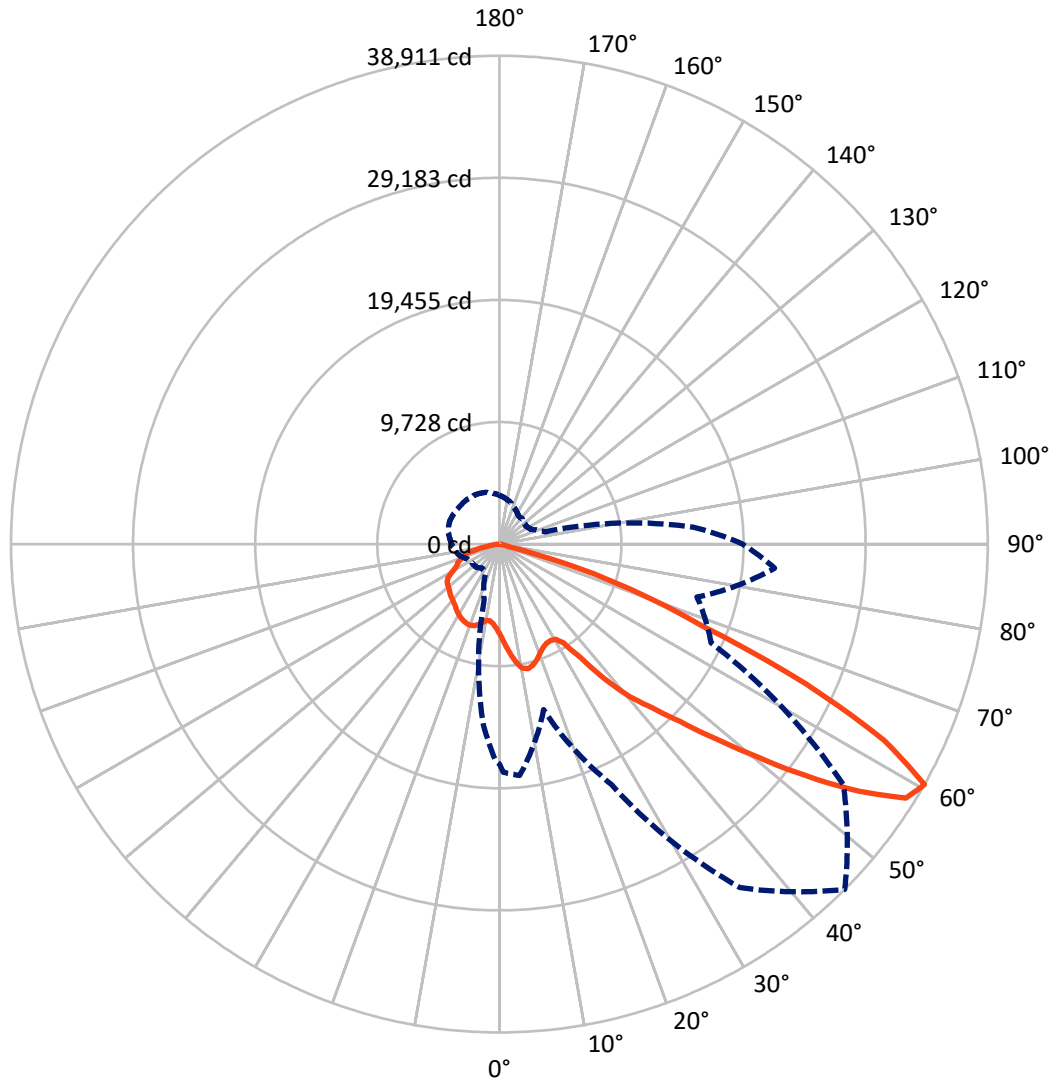
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 60-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12277.0  | 0.0    | 12277.0 |
|                    | % Fixture | 35.1     | 0.0    | 35.1    |
| <b>Street Side</b> | Lumens    | 22746.5  | 0.0    | 22746.5 |
|                    | % Fixture | 64.9     | 0.0    | 64.9    |
| <b>Total</b>       | Lumens    | 35023.5  | 0.0    | 35023.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 702.0   | 2.0       |
| 10°-20°   | 2218.2  | 6.3       |
| 20°-30°   | 3603.3  | 10.3      |
| 30°-40°   | 5081.7  | 14.5      |
| 40°-50°   | 7022.8  | 20.1      |
| 50°-60°   | 9040.4  | 25.8      |
| 60°-70°   | 5728.1  | 16.4      |
| 70°-80°   | 1469.8  | 4.2       |
| 80°-90°   | 157.2   | 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°    | 35023.5 | 100.0     |
| 0°-180°   | 35023.5 | 100.0     |

**Coefficient of Utilization**



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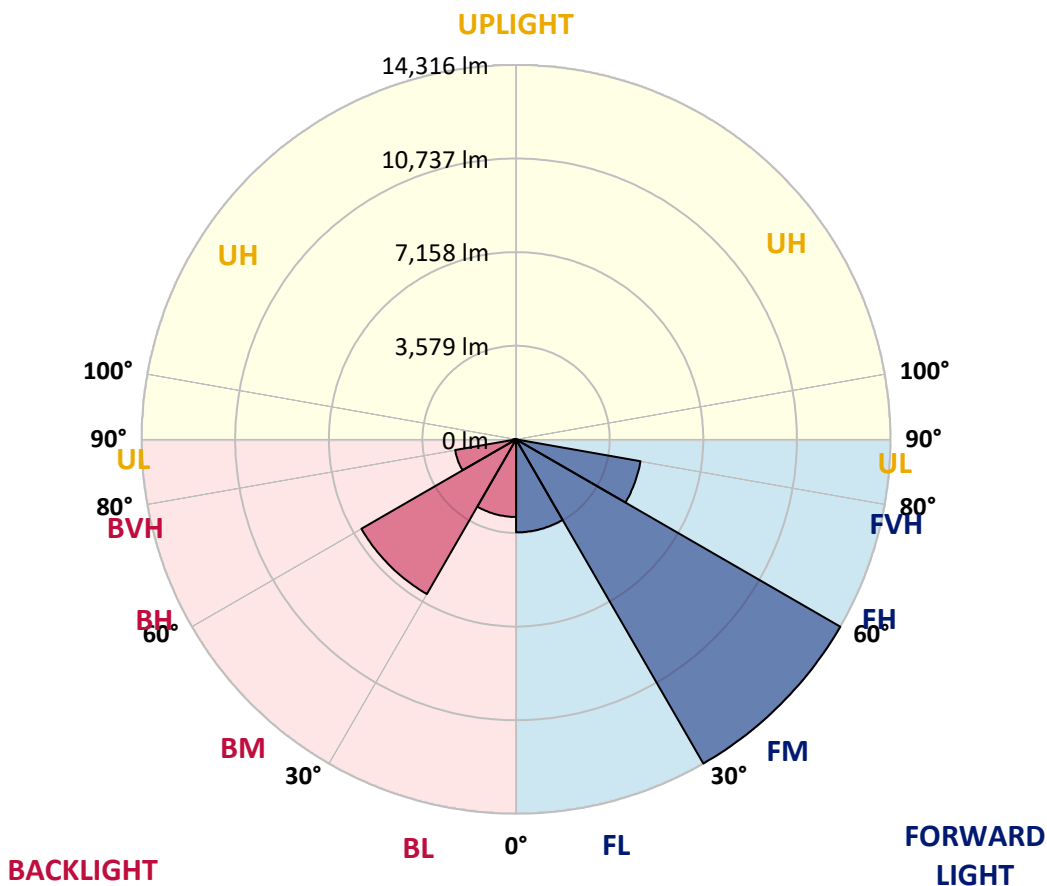
CATALOG NUMBER: GWS-SA6E-740-U-SLR-W-GRSWH

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3556.2  | 10.2      |                         |      |         |
| FM (30°-60°)   | 14315.6 | 40.9      |                         |      |         |
| FH (60°-80°)   | 4832.0  | 13.8      |                         |      | G2/5000 |
| FVH (80°-90°)  | 42.7    | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 2967.3  | 8.5       | B4/5000                 |      |         |
| BM (30°-60°)   | 6829.3  | 19.5      | B4/8500                 |      |         |
| BH (60°-80°)   | 2365.9  | 6.8       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 114.5   | 0.3       |                         |      | G2/225  |
| 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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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 1°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  | 7194.9  |
| 2.5°  | 7525.4  | 7576.7  | 7608.8  | 7669.8  | 7778.9  | 7839.9  | 7907.3  | 7833.5  | 7852.7  | 7843.1  | 7724.4  |
| 5°    | 7971.5  | 8032.4  | 8115.9  | 8295.6  | 8497.8  | 8610.1  | 8716.0  | 8699.9  | 8600.4  | 8433.6  | 8314.8  |
| 7.5°  | 8388.6  | 8459.2  | 8603.7  | 8895.7  | 9194.1  | 9367.4  | 9495.8  | 9412.4  | 9328.9  | 9065.8  | 8767.3  |
| 10°   | 8716.0  | 8757.7  | 8953.5  | 9345.0  | 9691.6  | 9887.3  | 10044.6 | 10025.3 | 9909.8  | 9614.5  | 9213.4  |
| 12.5° | 9024.1  | 9052.9  | 9264.7  | 9656.3  | 9967.5  | 10054.2 | 10182.5 | 10224.3 | 10185.8 | 9964.3  | 9569.6  |
| 15°   | 9354.6  | 9409.1  | 9604.9  | 9903.4  | 10044.6 | 9954.7  | 9999.6  | 10115.2 | 10224.3 | 10224.3 | 9861.6  |
| 17.5° | 9662.7  | 9710.8  | 9909.8  | 10038.1 | 9903.4  | 9665.9  | 9678.7  | 9826.3  | 10086.3 | 10359.0 | 10128.0 |
| 20°   | 9935.4  | 9980.4  | 10176.1 | 10054.2 | 9627.4  | 9280.8  | 9271.2  | 9450.9  | 9871.3  | 10445.7 | 10413.6 |
| 22.5° | 10233.9 | 10298.1 | 10461.7 | 10067.0 | 9370.6  | 8931.0  | 8927.8  | 9113.9  | 9681.9  | 10532.3 | 10740.9 |
| 25°   | 10657.5 | 10757.0 | 10840.4 | 10179.3 | 9232.6  | 8703.1  | 8744.9  | 8921.4  | 9621.0  | 10673.5 | 11225.5 |
| 27.5° | 11286.5 | 11366.7 | 11360.3 | 10413.6 | 9226.2  | 8610.1  | 8696.7  | 8902.1  | 9730.1  | 10923.9 | 11735.8 |
| 30°   | 11966.8 | 12008.5 | 11941.1 | 10740.9 | 9373.8  | 8667.8  | 8796.2  | 9040.1  | 10006.0 | 11337.8 | 12486.7 |
| 32.5° | 12721.0 | 12772.3 | 12643.9 | 11231.9 | 9717.2  | 9094.7  | 9377.1  | 9495.8  | 10394.3 | 11934.7 | 13282.6 |
| 35°   | 13587.4 | 13686.9 | 13420.6 | 11880.2 | 10728.1 | 10651.1 | 11061.8 | 10907.8 | 11219.1 | 12640.7 | 14133.0 |
| 37.5° | 14498.8 | 14502.0 | 14120.1 | 12839.7 | 12711.3 | 12842.9 | 13664.4 | 13183.1 | 12968.1 | 13427.0 | 14999.4 |
| 40°   | 15272.2 | 15253.0 | 14665.7 | 14133.0 | 14437.8 | 14960.9 | 15952.5 | 15214.5 | 14649.6 | 14482.8 | 15718.3 |
| 42.5° | 16045.6 | 15975.0 | 15381.3 | 14954.5 | 15628.4 | 16703.5 | 17823.5 | 16918.5 | 15727.9 | 15442.3 | 16427.5 |
| 45°   | 17034.0 | 17011.6 | 16295.9 | 15281.8 | 16703.5 | 18654.6 | 20140.5 | 18673.9 | 16366.5 | 16000.7 | 17608.5 |
| 47.5° | 18629.0 | 18519.8 | 17188.1 | 15256.2 | 17711.1 | 21254.0 | 23131.4 | 20885.0 | 16812.6 | 16013.5 | 19514.7 |
| 50°   | 20188.6 | 20053.8 | 18253.5 | 15253.0 | 18750.9 | 23949.7 | 26661.4 | 23571.0 | 17268.3 | 16090.5 | 21453.0 |
| 52.5° | 21764.3 | 21764.3 | 20002.5 | 15615.6 | 19842.0 | 26959.8 | 30740.2 | 26918.1 | 18044.9 | 17098.2 | 23837.4 |
| 55°   | 22701.3 | 22951.6 | 21969.7 | 16228.5 | 21119.2 | 30502.7 | 34774.1 | 30531.6 | 19245.1 | 18917.8 | 26038.8 |
| 57.5° | 21510.8 | 21979.3 | 21838.1 | 15801.7 | 21873.4 | 33105.3 | 38195.0 | 33272.2 | 19838.8 | 19132.8 | 25708.3 |
| 60°   | 17528.2 | 18179.7 | 18503.8 | 13645.2 | 21128.9 | 33407.0 | 38910.6 | 33451.9 | 18612.9 | 16292.7 | 22021.0 |
| 62.5° | 11652.3 | 12188.2 | 12682.5 | 9749.3  | 18292.0 | 30053.4 | 34414.6 | 30063.1 | 15545.0 | 12159.4 | 15256.2 |
| 65°   | 5715.4  | 6113.4  | 6646.1  | 5763.6  | 14290.2 | 25111.4 | 26831.5 | 24293.1 | 11244.8 | 6806.5  | 7782.1  |
| 67.5° | 1495.5  | 1607.8  | 1681.6  | 2236.8  | 10237.1 | 18041.7 | 17499.3 | 17768.9 | 7223.7  | 2223.9  | 2034.6  |
| 70°   | 776.6   | 783.0   | 779.8   | 924.2   | 6918.9  | 11466.2 | 12059.9 | 11158.1 | 5041.5  | 930.6   | 802.3   |
| 72.5° | 555.2   | 558.4   | 548.8   | 622.6   | 3340.7  | 6569.1  | 6806.5  | 6732.7  | 2641.1  | 552.0   | 548.8   |
| 75°   | 362.6   | 365.8   | 359.4   | 365.8   | 503.8   | 747.7   | 690.0   | 725.3   | 439.6   | 349.8   | 349.8   |
| 77.5° | 215.0   | 218.2   | 215.0   | 221.4   | 215.0   | 215.0   | 199.0   | 199.0   | 189.3   | 189.3   | 192.5   |
| 80°   | 144.4   | 144.4   | 141.2   | 147.6   | 134.8   | 134.8   | 128.4   | 125.2   | 115.5   | 112.3   | 112.3   |
| 82.5° | 86.6    | 89.9    | 86.6    | 86.6    | 80.2    | 80.2    | 73.8    | 70.6    | 61.0    | 61.0    | 57.8    |
| 85°   | 44.9    | 44.9    | 41.7    | 41.7    | 35.3    | 32.1    | 25.7    | 25.7    | 19.3    | 16.0    | 16.0    |
| 87.5° | 6.4     | 6.4     | 3.2     | 3.2     | 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: GWS-SA6E-740-U-SLR-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°    | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7194.9  | 7194.9  | 7194.9  | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 |
| 2.5°  | 7692.3  | 7628.1  | 7531.8  | 7438.7 | 7352.1 | 7262.2 | 7159.6 | 7053.7 | 6963.8 | 6870.7 | 6822.6 |
| 5°    | 8157.6  | 8026.0  | 7775.7  | 7554.3 | 7355.3 | 7191.6 | 7015.1 | 6864.3 | 6723.1 | 6607.6 | 6549.8 |
| 7.5°  | 8578.0  | 8372.6  | 7993.9  | 7644.1 | 7374.6 | 7149.9 | 6906.0 | 6681.4 | 6492.1 | 6350.9 | 6296.3 |
| 10°   | 8966.3  | 8722.4  | 8225.0  | 7782.1 | 7467.6 | 7217.3 | 6918.9 | 6614.0 | 6363.7 | 6177.6 | 6132.6 |
| 12.5° | 9280.8  | 9001.6  | 8407.9  | 7894.4 | 7522.2 | 7252.6 | 6989.5 | 6726.3 | 6479.2 | 6238.5 | 6200.0 |
| 15°   | 9560.0  | 9229.4  | 8545.9  | 7965.0 | 7502.9 | 7159.6 | 6938.1 | 6906.0 | 6906.0 | 6633.3 | 6556.2 |
| 17.5° | 9800.7  | 9438.0  | 8658.2  | 7997.1 | 7381.0 | 6883.6 | 6748.8 | 7028.0 | 7342.5 | 7146.7 | 6973.4 |
| 20°   | 10076.6 | 9637.0  | 8751.3  | 7997.1 | 7156.3 | 6533.8 | 6520.9 | 6995.9 | 7461.2 | 7464.4 | 7281.5 |
| 22.5° | 10355.8 | 9868.1  | 8860.4  | 7968.3 | 6848.3 | 6129.4 | 6366.9 | 6867.5 | 7281.5 | 7458.0 | 7332.8 |
| 25°   | 10808.3 | 10189.0 | 9033.7  | 7945.8 | 6488.8 | 5853.4 | 6228.9 | 6697.4 | 7047.2 | 7233.4 | 7153.1 |
| 27.5° | 11382.8 | 10612.6 | 9296.8  | 7981.1 | 6132.6 | 5689.8 | 6081.3 | 6476.0 | 6793.7 | 6957.4 | 6899.6 |
| 30°   | 12024.6 | 11100.4 | 9579.2  | 8042.1 | 5875.9 | 5606.3 | 5904.8 | 6222.5 | 6504.9 | 6668.6 | 6642.9 |
| 32.5° | 12842.9 | 11629.9 | 9823.1  | 7958.6 | 5731.5 | 5564.6 | 5718.7 | 5946.5 | 6219.3 | 6322.0 | 6344.4 |
| 35°   | 13821.7 | 12213.9 | 10009.3 | 7631.3 | 5599.9 | 5519.7 | 5516.5 | 5657.7 | 5850.2 | 6013.9 | 6029.9 |
| 37.5° | 14723.5 | 12897.5 | 10214.6 | 7069.7 | 5362.4 | 5407.4 | 5279.0 | 5362.4 | 5551.8 | 5715.4 | 5779.6 |
| 40°   | 15615.6 | 13590.6 | 10500.2 | 6354.1 | 5051.2 | 5157.1 | 5006.2 | 5064.0 | 5214.8 | 5429.8 | 5532.5 |
| 42.5° | 16482.1 | 14216.4 | 10801.9 | 5622.4 | 4739.9 | 4807.3 | 4694.9 | 4752.7 | 4910.0 | 5179.5 | 5295.1 |
| 45°   | 17425.5 | 15063.6 | 11036.2 | 4932.4 | 4470.3 | 4441.4 | 4351.6 | 4435.0 | 4672.5 | 4967.7 | 5105.7 |
| 47.5° | 19209.8 | 16398.6 | 11190.2 | 4473.5 | 4325.9 | 4117.3 | 4014.6 | 4194.3 | 4463.9 | 4762.3 | 4929.2 |
| 50°   | 21388.8 | 18330.5 | 11145.3 | 4181.5 | 4200.7 | 3783.6 | 3748.3 | 3985.7 | 4274.6 | 4585.8 | 4768.8 |
| 52.5° | 23115.3 | 20227.1 | 10635.0 | 3902.3 | 3956.8 | 3571.8 | 3469.1 | 3815.6 | 4091.6 | 4409.3 | 4598.7 |
| 55°   | 24434.3 | 20865.7 | 9069.0  | 3571.8 | 3558.9 | 3417.7 | 3202.7 | 3639.1 | 3908.7 | 4204.0 | 4409.3 |
| 57.5° | 23359.2 | 19444.1 | 6723.1  | 3116.1 | 3039.0 | 3112.8 | 2904.3 | 3340.7 | 3684.1 | 3976.1 | 4159.0 |
| 60°   | 19386.3 | 15503.3 | 3745.0  | 2759.8 | 2541.6 | 2721.3 | 2689.2 | 3026.2 | 3440.2 | 3748.3 | 3905.5 |
| 62.5° | 13160.6 | 10323.7 | 2220.7  | 2182.2 | 2060.3 | 2317.0 | 2487.1 | 2708.5 | 3116.1 | 3366.4 | 3514.0 |
| 65°   | 6559.4  | 5015.9  | 1476.2  | 1633.4 | 1649.5 | 1906.2 | 2227.1 | 2471.0 | 2811.2 | 3067.9 | 3215.5 |
| 67.5° | 1903.0  | 1559.6  | 1123.2  | 1248.3 | 1421.6 | 1627.0 | 1883.8 | 2172.6 | 2503.1 | 2808.0 | 2981.3 |
| 70°   | 821.5   | 831.2   | 892.1   | 1039.8 | 1209.8 | 1421.6 | 1678.4 | 1960.8 | 2240.0 | 2474.2 | 2605.8 |
| 72.5° | 580.9   | 603.3   | 670.7   | 821.5  | 982.0  | 1184.2 | 1440.9 | 1713.7 | 1915.8 | 2153.3 | 2291.3 |
| 75°   | 372.3   | 388.3   | 442.9   | 558.4  | 677.1  | 872.9  | 1116.8 | 1367.1 | 1575.7 | 1745.8 | 1877.3 |
| 77.5° | 205.4   | 208.6   | 253.5   | 320.9  | 401.1  | 526.3  | 706.0  | 901.8  | 1055.8 | 1152.1 | 1270.8 |
| 80°   | 118.7   | 118.7   | 141.2   | 182.9  | 231.1  | 308.1  | 407.6  | 503.8  | 596.9  | 657.9  | 715.6  |
| 82.5° | 64.2    | 64.2    | 73.8    | 99.5   | 125.2  | 170.1  | 227.8  | 276.0  | 333.7  | 365.8  | 404.3  |
| 85°   | 19.3    | 19.3    | 25.7    | 35.3   | 44.9   | 64.2   | 89.9   | 115.5  | 141.2  | 163.7  | 186.1  |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 3.2    |
| 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-SA6E-740-U-SLR-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 |
| 2.5°  | 6813.0 | 6768.0 | 6742.4 | 6710.3 | 6719.9 | 6691.0 | 6675.0 | 6684.6 | 6626.8 | 6684.6 | 6742.4 |
| 5°    | 6527.4 | 6463.2 | 6411.8 | 6370.1 | 6350.9 | 6312.3 | 6289.9 | 6289.9 | 6254.6 | 6312.3 | 6382.9 |
| 7.5°  | 6277.0 | 6225.7 | 6200.0 | 6174.4 | 6145.5 | 6110.2 | 6071.7 | 6058.8 | 6036.4 | 6097.3 | 6158.3 |
| 10°   | 6110.2 | 6116.6 | 6132.6 | 6167.9 | 6161.5 | 6139.1 | 6081.3 | 6049.2 | 6049.2 | 6119.8 | 6212.9 |
| 12.5° | 6187.2 | 6254.6 | 6293.1 | 6357.3 | 6370.1 | 6350.9 | 6293.1 | 6267.4 | 6331.6 | 6437.5 | 6591.5 |
| 15°   | 6485.6 | 6530.6 | 6562.7 | 6614.0 | 6610.8 | 6594.7 | 6549.8 | 6569.1 | 6780.9 | 6986.3 | 7124.3 |
| 17.5° | 6809.8 | 6758.4 | 6752.0 | 6784.1 | 6793.7 | 6774.5 | 6748.8 | 6835.4 | 7185.2 | 7377.8 | 7448.4 |
| 20°   | 7044.0 | 6867.5 | 6829.0 | 6841.8 | 6867.5 | 6857.9 | 6857.9 | 6999.1 | 7361.7 | 7451.6 | 7361.7 |
| 22.5° | 7114.6 | 6864.3 | 6806.5 | 6809.8 | 6845.1 | 6848.3 | 6864.3 | 7011.9 | 7223.7 | 7226.9 | 7089.0 |
| 25°   | 7002.3 | 6761.6 | 6719.9 | 6726.3 | 6768.0 | 6764.8 | 6771.2 | 6854.7 | 6947.8 | 6909.2 | 6806.5 |
| 27.5° | 6790.5 | 6581.9 | 6569.1 | 6604.4 | 6658.9 | 6630.0 | 6610.8 | 6633.3 | 6678.2 | 6630.0 | 6540.2 |
| 30°   | 6549.8 | 6373.3 | 6379.7 | 6447.1 | 6504.9 | 6456.8 | 6408.6 | 6421.5 | 6424.7 | 6373.3 | 6270.6 |
| 32.5° | 6296.3 | 6164.7 | 6187.2 | 6257.8 | 6325.2 | 6273.8 | 6222.5 | 6216.1 | 6155.1 | 6094.1 | 5994.6 |
| 35°   | 6042.8 | 5991.4 | 6020.3 | 6078.1 | 6135.8 | 6094.1 | 6062.0 | 6042.8 | 5911.2 | 5821.3 | 5737.9 |
| 37.5° | 5811.7 | 5850.2 | 5901.6 | 5936.9 | 5956.1 | 5952.9 | 5933.7 | 5888.7 | 5715.4 | 5609.5 | 5500.4 |
| 40°   | 5606.3 | 5725.1 | 5779.6 | 5795.7 | 5824.6 | 5818.1 | 5814.9 | 5750.7 | 5522.9 | 5410.6 | 5285.4 |
| 42.5° | 5420.2 | 5587.1 | 5680.1 | 5696.2 | 5712.2 | 5715.4 | 5705.8 | 5612.8 | 5352.8 | 5221.2 | 5102.5 |
| 45°   | 5240.5 | 5458.7 | 5577.5 | 5561.4 | 5583.9 | 5583.9 | 5593.5 | 5471.6 | 5185.9 | 5051.2 | 4926.0 |
| 47.5° | 5083.3 | 5340.0 | 5449.1 | 5429.8 | 5442.7 | 5452.3 | 5461.9 | 5320.7 | 5003.0 | 4874.7 | 4746.3 |
| 50°   | 4938.8 | 5211.6 | 5304.7 | 5311.1 | 5311.1 | 5333.6 | 5330.4 | 5192.4 | 4849.0 | 4711.0 | 4582.6 |
| 52.5° | 4784.8 | 5080.0 | 5179.5 | 5221.2 | 5234.1 | 5243.7 | 5198.8 | 5038.3 | 4691.7 | 4524.9 | 4406.1 |
| 55°   | 4605.1 | 4945.3 | 5035.1 | 5089.7 | 5115.3 | 5108.9 | 5048.0 | 4884.3 | 4531.3 | 4364.4 | 4229.6 |
| 57.5° | 4332.3 | 4656.4 | 4784.8 | 4810.5 | 4852.2 | 4826.5 | 4755.9 | 4617.9 | 4274.6 | 4107.7 | 3969.7 |
| 60°   | 4033.9 | 4268.1 | 4370.8 | 4393.3 | 4361.2 | 4370.8 | 4361.2 | 4229.6 | 3931.2 | 3799.6 | 3658.4 |
| 62.5° | 3642.4 | 3850.9 | 3960.1 | 3988.9 | 3934.4 | 3969.7 | 3956.8 | 3793.2 | 3494.7 | 3356.7 | 3231.6 |
| 65°   | 3347.1 | 3575.0 | 3703.3 | 3719.4 | 3703.3 | 3719.4 | 3674.4 | 3475.5 | 3193.1 | 3051.9 | 2923.5 |
| 67.5° | 3116.1 | 3350.3 | 3485.1 | 3530.0 | 3514.0 | 3510.8 | 3440.2 | 3209.1 | 2917.1 | 2763.1 | 2599.4 |
| 70°   | 2718.1 | 2923.5 | 3096.8 | 3205.9 | 3205.9 | 3144.9 | 3010.2 | 2795.1 | 2560.9 | 2429.3 | 2300.9 |
| 72.5° | 2406.8 | 2666.8 | 2836.9 | 2949.2 | 2971.6 | 2936.3 | 2747.0 | 2519.2 | 2249.6 | 2118.0 | 1983.2 |
| 75°   | 1983.2 | 2236.8 | 2419.7 | 2567.3 | 2596.2 | 2557.7 | 2339.5 | 2114.8 | 1864.5 | 1736.1 | 1601.4 |
| 77.5° | 1325.4 | 1476.2 | 1623.8 | 1758.6 | 1729.7 | 1755.4 | 1607.8 | 1437.7 | 1283.6 | 1187.4 | 1126.4 |
| 80°   | 747.7  | 847.2  | 892.1  | 965.9  | 965.9  | 965.9  | 869.7  | 789.4  | 702.8  | 648.2  | 587.3  |
| 82.5° | 423.6  | 487.8  | 507.0  | 568.0  | 584.1  | 587.3  | 523.1  | 471.7  | 417.2  | 388.3  | 346.6  |
| 85°   | 195.8  | 231.1  | 234.3  | 269.6  | 282.4  | 308.1  | 279.2  | 243.9  | 211.8  | 199.0  | 173.3  |
| 87.5° | 6.4    | 19.3   | 25.7   | 48.1   | 64.2   | 73.8   | 80.2   | 80.2   | 67.4   | 61.0   | 51.3   |
| 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: P643214

CATALOG NUMBER: GWS-SA6E-740-U-SLR-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°    | 355°    | 359°    | 360°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9 | 7194.9  | 7194.9  | 7194.9  | 7194.9  |
| 2.5°  | 6813.0 | 6890.0 | 6979.8 | 7044.0 | 7159.6 | 7255.8 | 7355.3  | 7464.4  | 7544.6  | 7525.4  |
| 5°    | 6469.6 | 6598.0 | 6761.6 | 6912.5 | 7127.5 | 7345.7 | 7586.4  | 7833.5  | 7977.9  | 7971.5  |
| 7.5°  | 6277.0 | 6460.0 | 6658.9 | 6861.1 | 7114.6 | 7429.1 | 7798.2  | 8183.3  | 8379.0  | 8388.6  |
| 10°   | 6379.7 | 6575.5 | 6710.3 | 6880.4 | 7146.7 | 7541.4 | 7984.3  | 8446.4  | 8671.0  | 8716.0  |
| 12.5° | 6703.9 | 6687.8 | 6678.2 | 6800.1 | 7121.0 | 7621.7 | 8164.0  | 8716.0  | 8969.5  | 9024.1  |
| 15°   | 7011.9 | 6681.4 | 6482.4 | 6565.9 | 7005.5 | 7673.0 | 8340.5  | 9011.2  | 9296.8  | 9354.6  |
| 17.5° | 7069.7 | 6569.1 | 6200.0 | 6257.8 | 6822.6 | 7689.1 | 8510.6  | 9300.0  | 9608.1  | 9662.7  |
| 20°   | 6909.2 | 6424.7 | 5994.6 | 5914.4 | 6591.5 | 7647.3 | 8616.5  | 9540.7  | 9877.7  | 9935.4  |
| 22.5° | 6707.1 | 6296.3 | 5840.6 | 5632.0 | 6309.1 | 7605.6 | 8735.2  | 9794.2  | 10182.5 | 10233.9 |
| 25°   | 6495.3 | 6132.6 | 5696.2 | 5378.5 | 5988.2 | 7579.9 | 8934.2  | 10128.0 | 10596.5 | 10657.5 |
| 27.5° | 6270.6 | 5933.7 | 5571.0 | 5256.5 | 5693.0 | 7612.0 | 9216.6  | 10667.1 | 11199.8 | 11286.5 |
| 30°   | 6029.9 | 5734.7 | 5490.8 | 5214.8 | 5490.8 | 7640.9 | 9527.9  | 11219.1 | 11844.9 | 11966.8 |
| 32.5° | 5779.6 | 5551.8 | 5407.4 | 5234.1 | 5365.7 | 7573.5 | 9800.7  | 11838.5 | 12615.1 | 12721.0 |
| 35°   | 5529.3 | 5365.7 | 5301.5 | 5269.4 | 5198.8 | 7326.4 | 10022.1 | 12464.2 | 13494.4 | 13587.4 |
| 37.5° | 5295.1 | 5173.1 | 5153.9 | 5189.2 | 4942.0 | 6922.1 | 10278.8 | 13260.1 | 14357.6 | 14498.8 |
| 40°   | 5076.8 | 4964.5 | 4961.3 | 4954.9 | 4659.6 | 6370.1 | 10625.4 | 14068.8 | 15208.0 | 15272.2 |
| 42.5° | 4874.7 | 4733.5 | 4759.1 | 4682.1 | 4428.6 | 5773.2 | 10952.7 | 14758.8 | 16000.7 | 16045.6 |
| 45°   | 4694.9 | 4508.8 | 4537.7 | 4441.4 | 4319.5 | 5147.4 | 11241.6 | 15573.9 | 17005.1 | 17034.0 |
| 47.5° | 4521.7 | 4322.7 | 4242.5 | 4236.0 | 4300.2 | 4569.8 | 11524.0 | 17143.1 | 18577.6 | 18629.0 |
| 50°   | 4361.2 | 4146.2 | 3918.3 | 4059.5 | 4181.5 | 4136.6 | 11877.0 | 18824.7 | 20201.4 | 20188.6 |
| 52.5° | 4207.2 | 3924.8 | 3600.6 | 3873.4 | 3873.4 | 3815.6 | 11777.5 | 19845.2 | 21542.8 | 21764.3 |
| 55°   | 4030.7 | 3568.5 | 3270.1 | 3562.1 | 3420.9 | 3526.8 | 10015.7 | 20179.0 | 22386.8 | 22701.3 |
| 57.5° | 3680.9 | 3128.9 | 2869.0 | 3026.2 | 2814.4 | 3270.1 | 7194.9  | 18523.1 | 20952.4 | 21510.8 |
| 60°   | 3343.9 | 2804.8 | 2634.7 | 2605.8 | 2329.8 | 2666.8 | 4662.9  | 14502.0 | 17245.8 | 17528.2 |
| 62.5° | 2949.2 | 2525.6 | 2381.2 | 2159.7 | 1874.1 | 1941.5 | 2824.0  | 9543.9  | 11588.1 | 11652.3 |
| 65°   | 2650.7 | 2288.1 | 2012.1 | 1749.0 | 1534.0 | 1408.8 | 1668.7  | 4601.9  | 5792.5  | 5715.4  |
| 67.5° | 2275.3 | 1960.8 | 1697.6 | 1508.3 | 1331.8 | 1174.5 | 1110.4  | 1367.1  | 1546.8  | 1495.5  |
| 70°   | 2025.0 | 1723.3 | 1469.8 | 1290.1 | 1126.4 | 969.2  | 856.8   | 805.5   | 789.4   | 776.6   |
| 72.5° | 1745.8 | 1482.6 | 1219.5 | 1046.2 | 892.1  | 747.7  | 645.0   | 584.1   | 568.0   | 555.2   |
| 75°   | 1392.8 | 1145.7 | 905.0  | 741.3  | 606.5  | 503.8  | 436.4   | 385.1   | 375.5   | 362.6   |
| 77.5° | 921.0  | 734.9  | 539.1  | 439.6  | 359.4  | 304.9  | 259.9   | 227.8   | 221.4   | 215.0   |
| 80°   | 507.0  | 423.6  | 330.5  | 266.4  | 215.0  | 186.1  | 170.1   | 150.8   | 147.6   | 144.4   |
| 82.5° | 301.7  | 253.5  | 189.3  | 150.8  | 125.2  | 112.3  | 102.7   | 93.1    | 89.9    | 86.6    |
| 85°   | 150.8  | 118.7  | 83.4   | 70.6   | 64.2   | 57.8   | 57.8    | 48.1    | 44.9    | 44.9    |
| 87.5° | 38.5   | 32.1   | 19.3   | 16.0   | 16.0   | 16.0   | 12.8    | 9.6     | 9.6     | 6.4     |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |

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

Report Prepared for

Cooper Lighting Solutions

MCGRAW, INVUE, LUMARK AND STREETWORKS

DATA VALID FOR LUMINAIRES UTILIZING SA LIGHT ENGINES

Report Number: SP1-2101-121-2

Luminaire Tested: IFLD-S-SA2A-740-U-T3R-HSS

Test Date: 03/05/2021

**Test Information**

Test Method: LM-79-08  
 Report Number: SP1-2101-121-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry: 4π  
 Issue Date: 03/05/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **IFLD-S-SA2A-740-U-T3R-HSS**  
 Description: STREETWORKS INF FLOOD

SHIELD, DRIVER PROGRAMMED @ 615mA.

**Spectral Parameters**

|                           |         |           |      |      |       |
|---------------------------|---------|-----------|------|------|-------|
| CCT (K):                  | 3905    | CRI (Ra): | 71.2 | R9:  | -29.7 |
| CIE u':                   | 0.2273  | R1:       | 68.9 | R10: | 46.2  |
| CIE v':                   | 0.5024  | R2:       | 77.0 | R11: | 68.8  |
| Duv:                      | -0.0008 | R3:       | 84.0 | R12: | 45.6  |
| CIE x:                    | 0.3841  | R4:       | 71.6 | R13: | 69.5  |
| CIE y:                    | 0.3774  | R5:       | 68.9 | R14: | 90.7  |
| CIE z:                    | 0.2385  | R6:       | 68.3 |      |       |
| Peak Wavelength (nm):     | 443     | R7:       | 78.7 |      |       |
| Dominant Wavelength (nm): | 579     | R8:       | 52.2 |      |       |
| Purity:                   | 28.7    |           |      |      |       |
| Rf:                       | 71.7    |           |      |      |       |
| Rg:                       | 96.9    |           |      |      |       |



**Test Conditions**

Stabilization Time: 211M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.8/312%  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2101-121-2

| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | IN0058                | 1/31/2021        | 7/31/2021            |
| Power Meter                    | IN0071                | 12/1/2020        | 12/1/2021            |
| AC Power Source                | IN0063                | 12/1/2020        | 12/1/2021            |
| DC Power Source                | IN0208                | 12/1/2020        | 12/1/2021            |
| Sphere Thermometer             | IN0085                | 12/1/2020        | 12/1/2021            |
| Room Thermometer               | IN0046                | 12/1/2020        | 12/1/2021            |

REPORT NUMBER: SP1-2101-121-2

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-2

**Photopic Flux vs. Wavelength**



#####

| 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    | 2304          | 0.0           | 490    | 19043         | 2.7           | 620    | 97577         | 25.4          | 750    | 4830          | 0.0           | 880    | 3505          | 0.0           |
| 365    | 2150          | 0.0           | 495    | 26606         | 4.8           | 625    | 90158         | 19.9          | 755    | 4664          | 0.0           | 885    | 2991          | 0.0           |
| 370    | 2146          | 0.0           | 500    | 36376         | 8.0           | 630    | 82240         | 14.9          | 760    | 4006          | 0.0           | 890    | 2327          | 0.0           |
| 375    | 2332          | 0.0           | 505    | 47714         | 13.3          | 635    | 74361         | 11.2          | 765    | 3715          | 0.0           | 895    | 2775          | 0.0           |
| 380    | 2527          | 0.0           | 510    | 58741         | 20.2          | 640    | 66994         | 8.0           | 770    | 3696          | 0.0           | 900    | 2141          | 0.0           |
| 385    | 2304          | 0.0           | 515    | 68716         | 28.5          | 645    | 60405         | 5.8           | 775    | 3117          | 0.0           | 905    | 2421          | 0.0           |
| 390    | 2064          | 0.0           | 520    | 77136         | 37.4          | 650    | 53806         | 3.9           | 780    | 3062          | 0.0           | 910    | 2200          | 0.0           |
| 395    | 1856          | 0.0           | 525    | 83567         | 44.9          | 655    | 47610         | 2.7           | 785    | 2907          | 0.0           | 915    | 2716          | 0.0           |
| 400    | 1856          | 0.0           | 530    | 89283         | 52.6          | 660    | 42018         | 1.8           | 790    | 2655          | 0.0           | 920    | 2656          | 0.0           |
| 405    | 2374          | 0.0           | 535    | 94097         | 58.4          | 665    | 36742         | 1.2           | 795    | 2467          | 0.0           | 925    | 2671          | 0.0           |
| 410    | 4084          | 0.0           | 540    | 96845         | 63.1          | 670    | 32105         | 0.7           | 800    | 2609          | 0.0           | 930    | 3292          | 0.0           |
| 415    | 8543          | 0.0           | 545    | 100829        | 67.1          | 675    | 27946         | 0.5           | 805    | 2293          | 0.0           | 935    | 3188          | 0.0           |
| 420    | 18394         | 0.1           | 550    | 105648        | 71.8          | 680    | 24146         | 0.3           | 810    | 2188          | 0.0           | 940    | 1997          | 0.0           |
| 425    | 37987         | 0.2           | 555    | 110017        | 75.1          | 685    | 21191         | 0.2           | 815    | 2386          | 0.0           | 945    | 2623          | 0.0           |
| 430    | 67605         | 0.5           | 560    | 114586        | 77.9          | 690    | 18544         | 0.1           | 820    | 2712          | 0.0           | 950    | 2969          | 0.0           |
| 435    | 102160        | 1.2           | 565    | 118987        | 79.1          | 695    | 16058         | 0.1           | 825    | 2473          | 0.0           | 955    | 2277          | 0.0           |
| 440    | 135103        | 2.1           | 570    | 122326        | 79.5          | 700    | 14133         | 0.0           | 830    | 1969          | 0.0           | 960    | 4267          | 0.0           |
| 445    | 140126        | 2.9           | 575    | 125968        | 78.4          | 705    | 12309         | 0.0           | 835    | 1917          | 0.0           | 965    | 2034          | 0.0           |
| 450    | 102339        | 2.7           | 580    | 127613        | 75.8          | 710    | 11142         | 0.0           | 840    | 2248          | 0.0           | 970    | 3586          | 0.0           |
| 455    | 58751         | 2.0           | 585    | 129466        | 71.9          | 715    | 10143         | 0.0           | 845    | 2266          | 0.0           | 975    | 2505          | 0.0           |
| 460    | 36892         | 1.5           | 590    | 128813        | 66.6          | 720    | 9072          | 0.0           | 850    | 2558          | 0.0           | 980    | 2666          | 0.0           |
| 465    | 24637         | 1.3           | 595    | 126387        | 59.9          | 725    | 8130          | 0.0           | 855    | 2767          | 0.0           | 985    | 2934          | 0.0           |
| 470    | 16738         | 1.0           | 600    | 123477        | 53.2          | 730    | 7149          | 0.0           | 860    | 2826          | 0.0           | 990    | 4120          | 0.0           |
| 475    | 13456         | 1.1           | 605    | 118718        | 46.0          | 735    | 6311          | 0.0           | 865    | 2385          | 0.0           | 995    | 3858          | 0.0           |
| 480    | 13081         | 1.2           | 610    | 112091        | 38.5          | 740    | 5711          | 0.0           | 870    | 3194          | 0.0           | 1000   | 3405          | 0.0           |
| 485    | 14734         | 1.7           | 615    | 105039        | 31.7          | 745    | 5111          | 0.0           | 875    | 3189          | 0.0           |        |               |               |

REPORT NUMBER: SP1-2101-121-2

**Scotopic Flux vs. Wavelength**



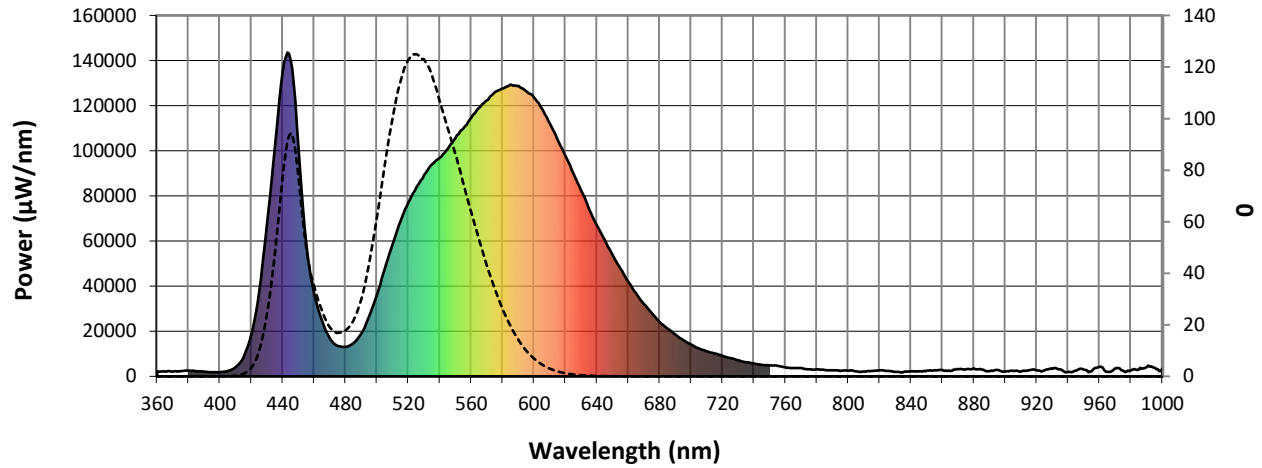
**Scotopic Lumens: 10425.8 S/P: 1.47**

| 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    | 2304          | 0.0           | 490    | 19043         | 29.3          | 620    | 97577         | 1.2           | 750    | 4830          | 0.0           | 880    | 3505          | 0.0           |
| 365    | 2150          | 0.0           | 495    | 26606         | 43.0          | 625    | 90158         | 0.8           | 755    | 4664          | 0.0           | 885    | 2991          | 0.0           |
| 370    | 2146          | 0.0           | 500    | 36376         | 60.8          | 630    | 82240         | 0.5           | 760    | 4006          | 0.0           | 890    | 2327          | 0.0           |
| 375    | 2332          | 0.0           | 505    | 47714         | 81.1          | 635    | 74361         | 0.3           | 765    | 3715          | 0.0           | 895    | 2775          | 0.0           |
| 380    | 2527          | 0.0           | 510    | 58741         | 99.6          | 640    | 66994         | 0.2           | 770    | 3696          | 0.0           | 900    | 2141          | 0.0           |
| 385    | 2304          | 0.0           | 515    | 68716         | 113.9         | 645    | 60405         | 0.1           | 775    | 3117          | 0.0           | 905    | 2421          | 0.0           |
| 390    | 2064          | 0.0           | 520    | 77136         | 122.6         | 650    | 53806         | 0.1           | 780    | 3062          | 0.0           | 910    | 2200          | 0.0           |
| 395    | 1856          | 0.0           | 525    | 83567         | 125.0         | 655    | 47610         | 0.0           | 785    | 2907          | 0.0           | 915    | 2716          | 0.0           |
| 400    | 1856          | 0.0           | 530    | 89283         | 123.1         | 660    | 42018         | 0.0           | 790    | 2655          | 0.0           | 920    | 2656          | 0.0           |
| 405    | 2374          | 0.1           | 535    | 94097         | 117.3         | 665    | 36742         | 0.0           | 795    | 2467          | 0.0           | 925    | 2671          | 0.0           |
| 410    | 4084          | 0.2           | 540    | 96845         | 107.0         | 670    | 32105         | 0.0           | 800    | 2609          | 0.0           | 930    | 3292          | 0.0           |
| 415    | 8543          | 0.9           | 545    | 100829        | 96.7          | 675    | 27946         | 0.0           | 805    | 2293          | 0.0           | 935    | 3188          | 0.0           |
| 420    | 18394         | 3.0           | 550    | 105648        | 86.4          | 680    | 24146         | 0.0           | 810    | 2188          | 0.0           | 940    | 1997          | 0.0           |
| 425    | 37987         | 9.3           | 555    | 110017        | 75.2          | 685    | 21191         | 0.0           | 815    | 2386          | 0.0           | 945    | 2623          | 0.0           |
| 430    | 67605         | 23.0          | 560    | 114586        | 64.0          | 690    | 18544         | 0.0           | 820    | 2712          | 0.0           | 950    | 2969          | 0.0           |
| 435    | 102160        | 45.7          | 565    | 118987        | 53.4          | 695    | 16058         | 0.0           | 825    | 2473          | 0.0           | 955    | 2277          | 0.0           |
| 440    | 135103        | 75.5          | 570    | 122326        | 43.2          | 700    | 14133         | 0.0           | 830    | 1969          | 0.0           | 960    | 4267          | 0.0           |
| 445    | 140126        | 93.8          | 575    | 125968        | 34.3          | 705    | 12309         | 0.0           | 835    | 1917          | 0.0           | 965    | 2034          | 0.0           |
| 450    | 102339        | 79.3          | 580    | 127613        | 26.3          | 710    | 11142         | 0.0           | 840    | 2248          | 0.0           | 970    | 3586          | 0.0           |
| 455    | 58751         | 51.3          | 585    | 129466        | 19.8          | 715    | 10143         | 0.0           | 845    | 2266          | 0.0           | 975    | 2505          | 0.0           |
| 460    | 36892         | 35.6          | 590    | 128813        | 14.3          | 720    | 9072          | 0.0           | 850    | 2558          | 0.0           | 980    | 2666          | 0.0           |
| 465    | 24637         | 26.0          | 595    | 126387        | 10.1          | 725    | 8130          | 0.0           | 855    | 2767          | 0.0           | 985    | 2934          | 0.0           |
| 470    | 16738         | 19.3          | 600    | 123477        | 7.0           | 730    | 7149          | 0.0           | 860    | 2826          | 0.0           | 990    | 4120          | 0.0           |
| 475    | 13456         | 16.8          | 605    | 118718        | 4.7           | 735    | 6311          | 0.0           | 865    | 2385          | 0.0           | 995    | 3858          | 0.0           |
| 480    | 13081         | 17.7          | 610    | 112091        | 3.0           | 740    | 5711          | 0.0           | 870    | 3194          | 0.0           | 1000   | 3405          | 0.0           |
| 485    | 14734         | 21.4          | 615    | 105039        | 1.9           | 745    | 5111          | 0.0           | 875    | 3189          | 0.0           |        |               |               |



REPORT NUMBER: SP1-2101-121-2

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 3927.2 M/P: 0.55**

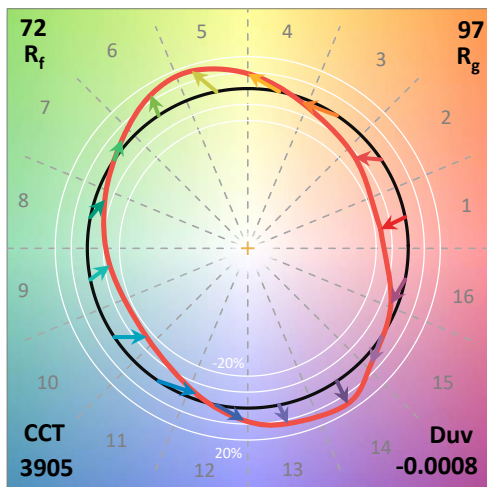
| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360    | 2304          | 0.0           | 490    | 19043         | 15.8          | 620    | 97577         | 0.1           | 750    | 4830          | 0.0           | 880    | 3505          | 0.0           |
| 365    | 2150          | 0.0           | 495    | 26606         | 22.0          | 625    | 90158         | 0.0           | 755    | 4664          | 0.0           | 885    | 2991          | 0.0           |
| 370    | 2146          | 0.0           | 500    | 36376         | 29.2          | 630    | 82240         | 0.0           | 760    | 4006          | 0.0           | 890    | 2327          | 0.0           |
| 375    | 2332          | 0.0           | 505    | 47714         | 36.6          | 635    | 74361         | 0.0           | 765    | 3715          | 0.0           | 895    | 2775          | 0.0           |
| 380    | 2527          | 0.0           | 510    | 58741         | 42.2          | 640    | 66994         | 0.0           | 770    | 3696          | 0.0           | 900    | 2141          | 0.0           |
| 385    | 2304          | 0.0           | 515    | 68716         | 44.9          | 645    | 60405         | 0.0           | 775    | 3117          | 0.0           | 905    | 2421          | 0.0           |
| 390    | 2064          | 0.0           | 520    | 77136         | 44.9          | 650    | 53806         | 0.0           | 780    | 3062          | 0.0           | 910    | 2200          | 0.0           |
| 395    | 1856          | 0.0           | 525    | 83567         | 42.4          | 655    | 47610         | 0.0           | 785    | 2907          | 0.0           | 915    | 2716          | 0.0           |
| 400    | 1856          | 0.0           | 530    | 89283         | 38.6          | 660    | 42018         | 0.0           | 790    | 2655          | 0.0           | 920    | 2656          | 0.0           |
| 405    | 2374          | 0.0           | 535    | 94097         | 33.9          | 665    | 36742         | 0.0           | 795    | 2467          | 0.0           | 925    | 2671          | 0.0           |
| 410    | 4084          | 0.2           | 540    | 96845         | 28.3          | 670    | 32105         | 0.0           | 800    | 2609          | 0.0           | 930    | 3292          | 0.0           |
| 415    | 8543          | 0.6           | 545    | 100829        | 23.4          | 675    | 27946         | 0.0           | 805    | 2293          | 0.0           | 935    | 3188          | 0.0           |
| 420    | 18394         | 2.1           | 550    | 105648        | 19.0          | 680    | 24146         | 0.0           | 810    | 2188          | 0.0           | 940    | 1997          | 0.0           |
| 425    | 37987         | 5.9           | 555    | 110017        | 14.8          | 685    | 21191         | 0.0           | 815    | 2386          | 0.0           | 945    | 2623          | 0.0           |
| 430    | 67605         | 14.3          | 560    | 114586        | 11.3          | 690    | 18544         | 0.0           | 820    | 2712          | 0.0           | 950    | 2969          | 0.0           |
| 435    | 102160        | 27.3          | 565    | 118987        | 8.4           | 695    | 16058         | 0.0           | 825    | 2473          | 0.0           | 955    | 2277          | 0.0           |
| 440    | 135103        | 45.1          | 570    | 122326        | 6.0           | 700    | 14133         | 0.0           | 830    | 1969          | 0.0           | 960    | 4267          | 0.0           |
| 445    | 140126        | 55.3          | 575    | 125968        | 4.2           | 705    | 12309         | 0.0           | 835    | 1917          | 0.0           | 965    | 2034          | 0.0           |
| 450    | 102339        | 47.2          | 580    | 127613        | 2.9           | 710    | 11142         | 0.0           | 840    | 2248          | 0.0           | 970    | 3586          | 0.0           |
| 455    | 58751         | 30.8          | 585    | 129466        | 1.9           | 715    | 10143         | 0.0           | 845    | 2266          | 0.0           | 975    | 2505          | 0.0           |
| 460    | 36892         | 21.7          | 590    | 128813        | 1.3           | 720    | 9072          | 0.0           | 850    | 2558          | 0.0           | 980    | 2666          | 0.0           |
| 465    | 24637         | 16.1          | 595    | 126387        | 0.8           | 725    | 8130          | 0.0           | 855    | 2767          | 0.0           | 985    | 2934          | 0.0           |
| 470    | 16738         | 12.0          | 600    | 123477        | 0.5           | 730    | 7149          | 0.0           | 860    | 2826          | 0.0           | 990    | 4120          | 0.0           |
| 475    | 13456         | 10.3          | 605    | 118718        | 0.3           | 735    | 6311          | 0.0           | 865    | 2385          | 0.0           | 995    | 3858          | 0.0           |
| 480    | 13081         | 10.5          | 610    | 112091        | 0.2           | 740    | 5711          | 0.0           | 870    | 3194          | 0.0           | 1000   | 3405          | 0.0           |
| 485    | 14734         | 12.1          | 615    | 105039        | 0.1           | 745    | 5111          | 0.0           | 875    | 3189          | 0.0           |        |               |               |

**Summary**

$R_f = 71.7$   
 $R_g = 96.9$   
 CIE  $R_a = 71.2$   
 $R_g = -29.7$



**Color Vector Graphics**



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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 55 | CES51 = 86 | CES76 = 45 |
| CES02 = 61 | CES27 = 80 | CES52 = 87 | CES77 = 68 |
| CES03 = 30 | CES28 = 79 | CES53 = 74 | CES78 = 49 |
| CES04 = 70 | CES29 = 51 | CES54 = 81 | CES79 = 77 |
| CES05 = 47 | CES30 = 60 | CES55 = 80 | CES80 = 75 |
| CES06 = 50 | CES31 = 56 | CES56 = 69 | CES81 = 75 |
| CES07 = 40 | CES32 = 52 | CES57 = 67 | CES82 = 90 |
| CES08 = 39 | CES33 = 62 | CES58 = 69 | CES83 = 85 |
| CES09 = 29 | CES34 = 65 | CES59 = 86 | CES84 = 87 |
| CES10 = 74 | CES35 = 81 | CES60 = 91 | CES85 = 83 |
| CES11 = 57 | CES36 = 92 | CES61 = 85 | CES86 = 72 |
| CES12 = 63 | CES37 = 74 | CES62 = 81 | CES87 = 77 |
| CES13 = 42 | CES38 = 69 | CES63 = 72 | CES88 = 77 |
| CES14 = 74 | CES39 = 92 | CES64 = 69 | CES89 = 72 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 75 |
| CES16 = 46 | CES41 = 84 | CES66 = 63 | CES91 = 91 |
| CES17 = 49 | CES42 = 75 | CES67 = 60 | CES92 = 66 |
| CES18 = 56 | CES43 = 70 | CES68 = 67 | CES93 = 80 |
| CES19 = 72 | CES44 = 98 | CES69 = 77 | CES94 = 56 |
| CES20 = 65 | CES45 = 80 | CES70 = 57 | CES95 = 72 |
| CES21 = 86 | CES46 = 77 | CES71 = 53 | CES96 = 78 |
| CES22 = 78 | CES47 = 74 | CES72 = 84 | CES97 = 83 |
| CES23 = 92 | CES48 = 66 | CES73 = 47 | CES98 = 73 |
| CES24 = 91 | CES49 = 76 | CES74 = 96 | CES99 = 63 |
| CES25 = 72 | CES50 = 85 | CES75 = 52 |            |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)