

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: P641510

Luminaire Tested: GWS-SA6B-722-U-SLR-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641510  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA6B-722-U-SLR-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (96) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

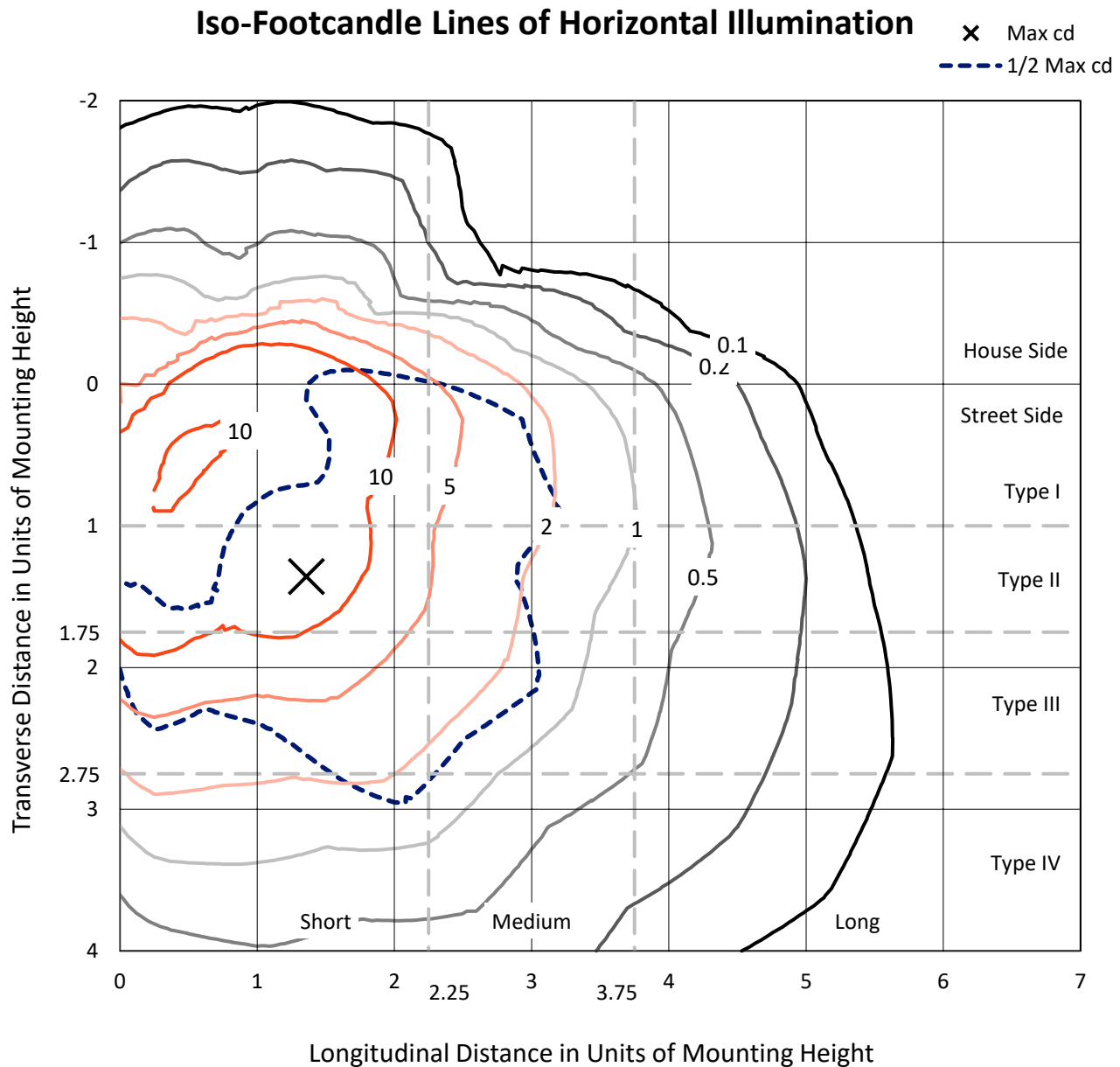
Lumens per Lamp: N/A  
Luminaire Lumens: 9678.6 lumens  
Efficiency: N/A  
Efficacy: 69.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 138.9  
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: P641510

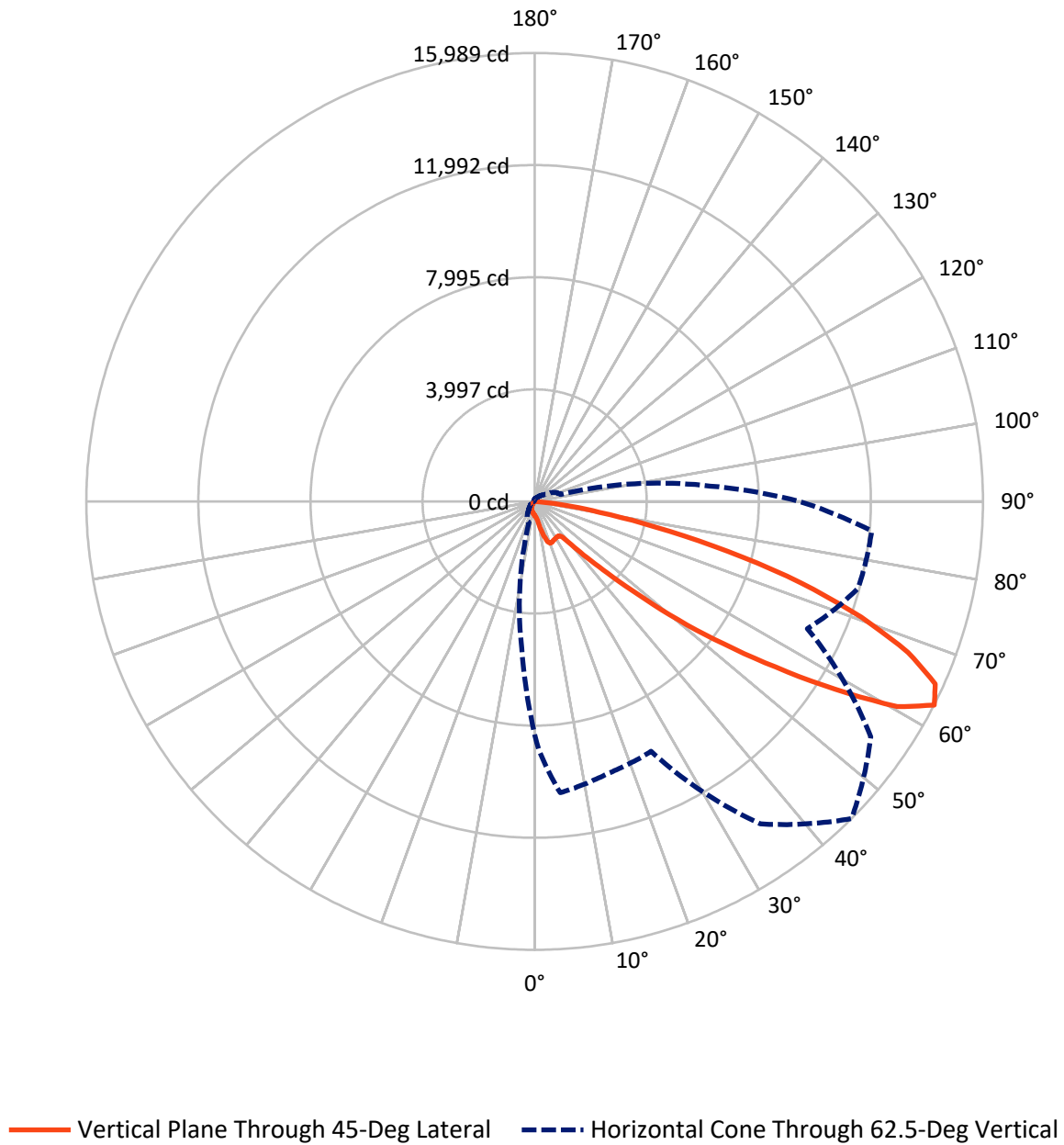
CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS



Based on 10 foot mounting height. Maximum calculated value = 19.7 fc  
Type IV - Short - N/A

REPORT NUMBER: P641510  
CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P641510

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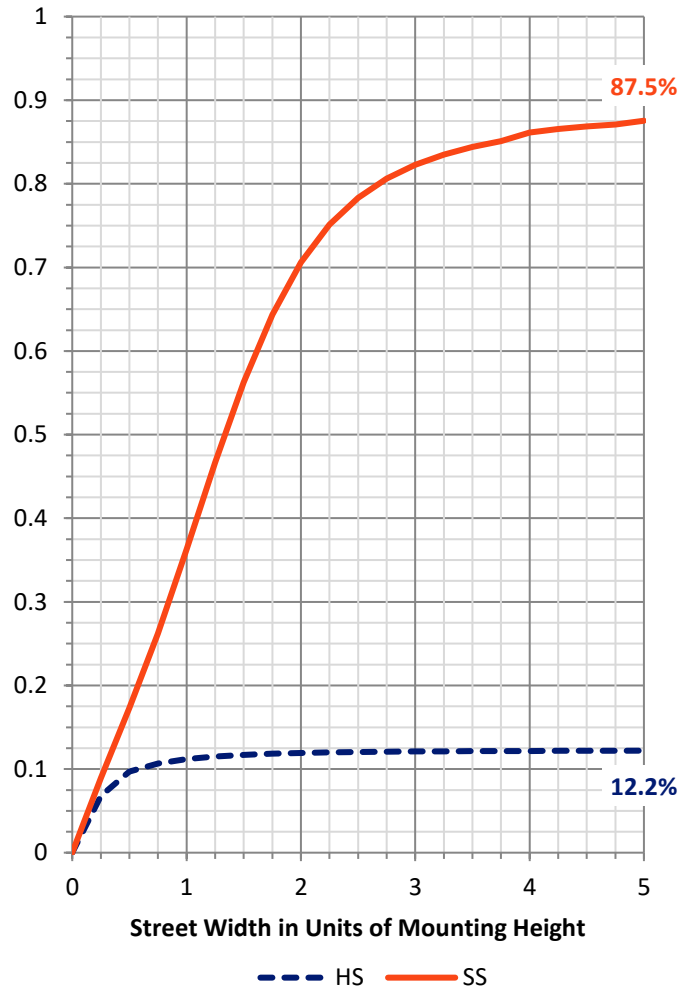
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1194.3   | 0.0    | 1194.3 |
|                    | % Fixture | 12.3     | 0.0    | 12.3   |
| <b>Street Side</b> | Lumens    | 8484.3   | 0.0    | 8484.3 |
|                    | % Fixture | 87.7     | 0.0    | 87.7   |
| <b>Total</b>       | Lumens    | 9678.6   | 0.0    | 9678.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 44.6   | 0.5       |
| 10°-20°   | 168.7  | 1.7       |
| 20°-30°   | 366.8  | 3.8       |
| 30°-40°   | 602.1  | 6.2       |
| 40°-50°   | 1106.8 | 11.4      |
| 50°-60°   | 2376.9 | 24.6      |
| 60°-70°   | 3192.6 | 33.0      |
| 70°-80°   | 1662.4 | 17.2      |
| 80°-90°   | 157.6  | 1.6       |
| 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°    | 9678.6 | 100.0     |
| 0°-180°   | 9678.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P641510

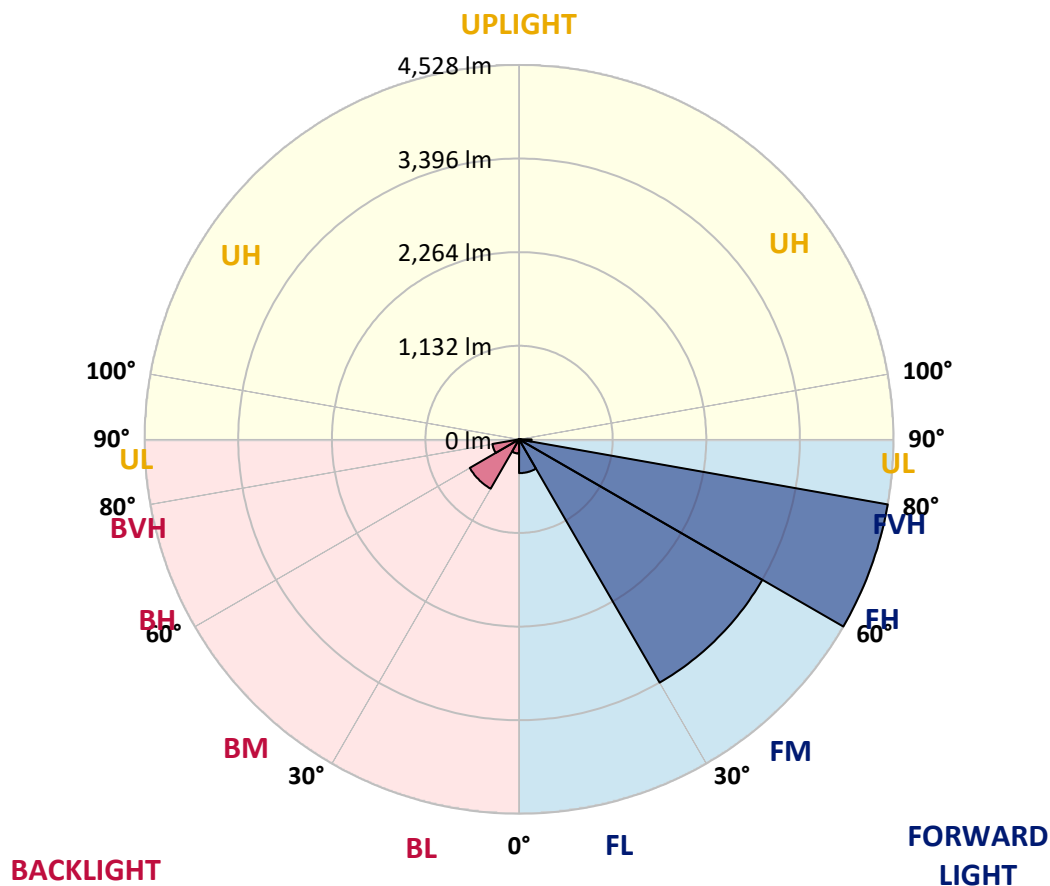
CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 408.9  | 4.2       |                         |      |         |
| FM   | (30°-60°)   | 3397.1 | 35.1      |                         |      |         |
| FH   | (60°-80°)   | 4527.7 | 46.8      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 150.6  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 171.3  | 1.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 688.7  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 327.3  | 3.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 7.0    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P641510

CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°      | 15°     | 25°    | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|--------|--------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 503.1  | 503.1  | 503.1   | 503.1   | 503.1  | 503.1   | 503.1   | 503.1   | 503.1   | 503.1   | 503.1   |
| 2.5°  | 513.1  | 515.4  | 517.6   | 525.4   | 531.0  | 535.5   | 536.6   | 533.3   | 525.4   | 517.6   | 506.4   |
| 5°    | 497.5  | 499.7  | 507.6   | 528.8   | 550.0  | 566.8   | 572.4   | 569.0   | 550.0   | 525.4   | 499.7   |
| 7.5°  | 496.4  | 500.8  | 519.9   | 564.6   | 610.4  | 645.1   | 654.0   | 646.2   | 610.4   | 561.2   | 508.7   |
| 10°   | 536.6  | 544.4  | 572.4   | 652.9   | 736.7  | 798.2   | 822.8   | 789.3   | 732.3   | 642.8   | 556.7   |
| 12.5° | 641.7  | 655.1  | 708.8   | 826.2   | 955.9  | 1037.5  | 1071.0  | 1029.6  | 940.2   | 810.5   | 674.1   |
| 15°   | 807.2  | 827.3  | 907.8   | 1083.3  | 1236.5 | 1309.1  | 1320.3  | 1296.8  | 1192.9  | 1049.8  | 866.4   |
| 17.5° | 1040.8 | 1069.9 | 1195.1  | 1374.0  | 1484.7 | 1510.4  | 1507.0  | 1482.4  | 1406.4  | 1308.0  | 1134.7  |
| 20°   | 1320.3 | 1355.0 | 1478.0  | 1625.5  | 1636.7 | 1606.5  | 1589.7  | 1575.2  | 1549.5  | 1532.7  | 1397.5  |
| 22.5° | 1602.0 | 1644.5 | 1773.1  | 1810.0  | 1709.4 | 1622.2  | 1580.8  | 1592.0  | 1630.0  | 1712.7  | 1657.9  |
| 25°   | 1882.7 | 1922.9 | 2043.6  | 1944.1  | 1742.9 | 1597.6  | 1545.0  | 1571.9  | 1662.4  | 1841.3  | 1911.7  |
| 27.5° | 2210.2 | 2240.4 | 2312.0  | 2035.8  | 1748.5 | 1577.4  | 1526.0  | 1567.4  | 1678.1  | 1921.8  | 2190.1  |
| 30°   | 2551.2 | 2569.1 | 2534.4  | 2060.4  | 1729.5 | 1547.3  | 1507.0  | 1567.4  | 1704.9  | 1975.4  | 2399.2  |
| 32.5° | 2801.6 | 2805.0 | 2692.1  | 2062.6  | 1719.4 | 1522.7  | 1489.1  | 1560.7  | 1730.6  | 2020.2  | 2601.5  |
| 35°   | 3059.9 | 3043.1 | 2843.0  | 2096.2  | 1746.3 | 1531.6  | 1502.5  | 1579.7  | 1770.9  | 2072.7  | 2779.3  |
| 37.5° | 3321.5 | 3291.3 | 3011.8  | 2151.0  | 1815.6 | 1628.9  | 1611.0  | 1676.9  | 1835.7  | 2145.4  | 2974.9  |
| 40°   | 3589.8 | 3548.4 | 3187.3  | 2233.7  | 1969.9 | 1959.8  | 2021.3  | 2013.5  | 2013.5  | 2238.2  | 3176.1  |
| 42.5° | 3917.4 | 3869.3 | 3446.7  | 2467.4  | 2329.8 | 2554.6  | 2722.2  | 2618.3  | 2426.0  | 2451.7  | 3437.7  |
| 45°   | 4350.0 | 4308.6 | 3896.1  | 2914.5  | 2894.4 | 3410.9  | 3636.7  | 3431.0  | 2952.5  | 2944.7  | 3874.9  |
| 47.5° | 5042.0 | 5034.2 | 4612.7  | 3433.3  | 3585.3 | 4500.9  | 4936.9  | 4541.2  | 3552.9  | 3466.8  | 4702.2  |
| 50°   | 6014.7 | 5991.2 | 5506.0  | 4041.4  | 4407.0 | 5851.4  | 6629.5  | 5969.9  | 4278.5  | 4076.1  | 5810.1  |
| 52.5° | 7110.3 | 7134.9 | 6757.0  | 4705.5  | 5280.2 | 7354.0  | 8437.3  | 7606.6  | 5066.6  | 4850.9  | 7204.2  |
| 55°   | 8142.1 | 8283.0 | 8183.5  | 5482.5  | 6133.2 | 9013.0  | 10422.8 | 9402.1  | 6042.6  | 5864.8  | 8767.1  |
| 57.5° | 8949.3 | 9346.2 | 10043.8 | 6611.6  | 7136.0 | 10953.8 | 12639.7 | 11348.5 | 7181.8  | 7511.6  | 10894.6 |
| 60°   | 8994.0 | 9519.5 | 11139.4 | 8973.9  | 8426.1 | 12618.5 | 14853.3 | 13250.1 | 8972.8  | 10307.6 | 12561.5 |
| 62.5° | 8319.9 | 8883.4 | 10426.1 | 10047.2 | 9831.4 | 14034.9 | 15989.1 | 14636.4 | 10734.7 | 11945.5 | 12067.3 |
| 65°   | 7548.5 | 8117.5 | 9630.2  | 8829.7  | 9668.2 | 13974.6 | 15700.7 | 14668.8 | 10894.6 | 10832.0 | 11183.0 |
| 67.5° | 6382.5 | 6893.4 | 8262.9  | 7815.7  | 8911.3 | 13300.4 | 14368.1 | 13744.3 | 10037.1 | 10131.0 | 10287.5 |
| 70°   | 4658.6 | 5150.5 | 6421.6  | 6444.0  | 7782.2 | 12085.2 | 12345.7 | 12259.6 | 9243.3  | 9342.8  | 8895.7  |
| 72.5° | 3365.1 | 3779.8 | 4876.6  | 5284.6  | 6212.5 | 10134.4 | 9954.4  | 10286.4 | 7930.8  | 8321.0  | 7144.9  |
| 75°   | 2419.3 | 2730.1 | 3577.5  | 4597.1  | 4924.6 | 7526.1  | 7125.9  | 7966.6  | 6363.5  | 7165.0  | 5371.8  |
| 77.5° | 981.6  | 1091.1 | 1407.5  | 3096.8  | 3236.5 | 5063.3  | 4362.3  | 5786.6  | 4536.7  | 4707.8  | 2603.7  |
| 80°   | 40.2   | 44.7   | 58.1    | 1598.7  | 2219.2 | 2848.6  | 2334.3  | 3093.4  | 2996.1  | 1896.1  | 614.9   |
| 82.5° | 4.5    | 4.5    | 10.1    | 460.6   | 971.5  | 1571.9  | 1100.1  | 1782.0  | 1517.1  | 803.8   | 279.5   |
| 85°   | 1.1    | 1.1    | 2.2     | 52.5    | 228.1  | 251.5   | 148.7   | 546.7   | 705.4   | 328.7   | 0.0     |
| 87.5° | 0.0    | 0.0    | 0.0     | 0.0     | 0.0    | 0.0     | 0.0     | 5.6     | 10.1    | 11.2    | 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     |

REPORT NUMBER: P641510

CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 503.1  | 503.1  | 503.1  | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 |
| 2.5°  | 506.4  | 500.8  | 494.1  | 487.4 | 484.1 | 475.1 | 471.8 | 469.5 | 467.3 | 468.4 | 468.4 |
| 5°    | 489.7  | 477.4  | 462.8  | 448.3 | 440.5 | 431.5 | 427.1 | 424.8 | 425.9 | 430.4 | 430.4 |
| 7.5°  | 487.4  | 464.0  | 432.7  | 413.6 | 404.7 | 398.0 | 393.5 | 391.3 | 392.4 | 398.0 | 400.2 |
| 10°   | 524.3  | 483.0  | 427.1  | 394.6 | 384.6 | 377.9 | 373.4 | 370.0 | 367.8 | 372.3 | 373.4 |
| 12.5° | 603.7  | 546.7  | 453.9  | 392.4 | 374.5 | 365.6 | 362.2 | 355.5 | 352.2 | 354.4 | 355.5 |
| 15°   | 768.0  | 669.7  | 507.6  | 401.3 | 365.6 | 355.5 | 349.9 | 344.3 | 338.7 | 337.6 | 338.7 |
| 17.5° | 982.7  | 841.8  | 589.2  | 422.6 | 358.9 | 346.6 | 338.7 | 330.9 | 323.1 | 322.0 | 320.9 |
| 20°   | 1248.8 | 1053.1 | 703.2  | 456.1 | 353.3 | 338.7 | 327.6 | 316.4 | 306.3 | 303.0 | 303.0 |
| 22.5° | 1491.4 | 1308.0 | 849.7  | 497.5 | 345.5 | 327.6 | 314.1 | 300.7 | 289.6 | 284.0 | 282.8 |
| 25°   | 1787.6 | 1578.6 | 1025.2 | 545.6 | 334.3 | 313.0 | 298.5 | 285.1 | 273.9 | 267.2 | 265.0 |
| 27.5° | 2086.1 | 1863.6 | 1224.2 | 608.2 | 320.9 | 298.5 | 285.1 | 272.8 | 260.5 | 252.7 | 250.4 |
| 30°   | 2375.7 | 2171.1 | 1447.8 | 686.4 | 310.8 | 284.0 | 272.8 | 260.5 | 249.3 | 237.0 | 233.7 |
| 32.5° | 2686.5 | 2485.2 | 1698.2 | 773.6 | 303.0 | 273.9 | 261.6 | 250.4 | 235.9 | 224.7 | 219.1 |
| 35°   | 2986.1 | 2809.4 | 1974.3 | 858.6 | 295.1 | 265.0 | 251.5 | 240.4 | 224.7 | 212.4 | 204.6 |
| 37.5° | 3287.9 | 3139.2 | 2262.8 | 910.0 | 284.0 | 252.7 | 240.4 | 231.4 | 213.5 | 199.0 | 190.1 |
| 40°   | 3607.7 | 3480.2 | 2574.7 | 888.8 | 273.9 | 239.2 | 232.5 | 222.5 | 202.4 | 185.6 | 174.4 |
| 42.5° | 3958.7 | 3805.6 | 2892.2 | 807.2 | 265.0 | 228.1 | 221.4 | 211.3 | 192.3 | 172.2 | 157.6 |
| 45°   | 4400.3 | 4162.2 | 3152.7 | 684.2 | 269.4 | 216.9 | 203.5 | 201.2 | 183.3 | 157.6 | 139.7 |
| 47.5° | 5159.4 | 4710.0 | 3355.0 | 604.8 | 299.6 | 204.6 | 188.9 | 194.5 | 175.5 | 143.1 | 123.0 |
| 50°   | 6321.0 | 5617.8 | 3544.0 | 599.2 | 345.5 | 199.0 | 175.5 | 190.1 | 167.7 | 128.6 | 108.4 |
| 52.5° | 7427.8 | 6540.1 | 3664.7 | 648.4 | 385.7 | 213.5 | 162.1 | 184.5 | 162.1 | 118.5 | 98.4  |
| 55°   | 8486.5 | 7072.3 | 3448.9 | 684.2 | 423.7 | 257.1 | 152.0 | 175.5 | 155.4 | 112.9 | 95.0  |
| 57.5° | 9627.9 | 7309.3 | 2715.5 | 756.9 | 450.5 | 294.0 | 154.3 | 162.1 | 146.5 | 109.6 | 93.9  |
| 60°   | 9968.9 | 7006.3 | 1638.9 | 851.9 | 436.0 | 305.2 | 171.0 | 144.2 | 134.2 | 102.9 | 90.6  |
| 62.5° | 9439.0 | 6287.4 | 967.0  | 775.9 | 423.7 | 288.4 | 195.6 | 133.0 | 121.9 | 93.9  | 83.8  |
| 65°   | 8646.3 | 5311.5 | 630.5  | 655.1 | 449.4 | 257.1 | 207.9 | 127.4 | 110.7 | 85.0  | 73.8  |
| 67.5° | 7740.8 | 4278.5 | 441.6  | 386.8 | 414.8 | 231.4 | 175.5 | 126.3 | 99.5  | 71.5  | 60.4  |
| 70°   | 6520.0 | 3204.1 | 310.8  | 256.0 | 345.5 | 205.7 | 136.4 | 123.0 | 87.2  | 58.1  | 47.0  |
| 72.5° | 5037.6 | 2005.6 | 231.4  | 165.5 | 246.0 | 167.7 | 108.4 | 104.0 | 70.4  | 48.1  | 35.8  |
| 75°   | 3715.0 | 1143.7 | 163.2  | 119.6 | 162.1 | 127.4 | 80.5  | 73.8  | 60.4  | 45.8  | 32.4  |
| 77.5° | 1939.7 | 572.4  | 101.7  | 91.7  | 92.8  | 79.4  | 58.1  | 53.7  | 55.9  | 45.8  | 30.2  |
| 80°   | 372.3  | 114.0  | 61.5   | 67.1  | 50.3  | 50.3  | 42.5  | 44.7  | 49.2  | 36.9  | 25.7  |
| 82.5° | 155.4  | 24.6   | 33.5   | 38.0  | 31.3  | 34.7  | 34.7  | 35.8  | 34.7  | 26.8  | 19.0  |
| 85°   | 0.0    | 0.0    | 14.5   | 15.7  | 21.2  | 21.2  | 17.9  | 17.9  | 17.9  | 15.7  | 11.2  |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0   | 1.1   | 3.4   | 6.7   | 7.8   | 8.9   | 6.7   | 4.5   |
| 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: P641510

CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 185°  | 195°  | 205°  | 215°  | 225°  | 235°  | 245°  | 255°  | 265°  | 270°  | 275°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 |
| 2.5°  | 467.3 | 465.1 | 468.4 | 470.7 | 472.9 | 472.9 | 470.7 | 468.4 | 465.1 | 468.4 | 465.1 |
| 5°    | 431.5 | 434.9 | 440.5 | 442.7 | 445.0 | 440.5 | 438.2 | 431.5 | 425.9 | 427.1 | 424.8 |
| 7.5°  | 403.6 | 406.9 | 413.6 | 418.1 | 418.1 | 415.9 | 409.2 | 402.5 | 393.5 | 393.5 | 392.4 |
| 10°   | 377.9 | 382.3 | 390.2 | 395.8 | 398.0 | 395.8 | 389.1 | 380.1 | 372.3 | 372.3 | 368.9 |
| 12.5° | 356.6 | 362.2 | 371.2 | 379.0 | 381.2 | 379.0 | 372.3 | 363.3 | 354.4 | 354.4 | 352.2 |
| 15°   | 338.7 | 345.5 | 355.5 | 364.5 | 367.8 | 364.5 | 356.6 | 345.5 | 336.5 | 337.6 | 334.3 |
| 17.5° | 322.0 | 327.6 | 341.0 | 351.0 | 354.4 | 351.0 | 341.0 | 326.4 | 317.5 | 319.7 | 317.5 |
| 20°   | 303.0 | 309.7 | 323.1 | 334.3 | 337.6 | 334.3 | 323.1 | 307.4 | 298.5 | 298.5 | 299.6 |
| 22.5° | 282.8 | 289.6 | 303.0 | 310.8 | 315.3 | 311.9 | 300.7 | 286.2 | 277.3 | 277.3 | 278.4 |
| 25°   | 265.0 | 268.3 | 278.4 | 286.2 | 287.3 | 284.0 | 275.0 | 263.8 | 257.1 | 260.5 | 261.6 |
| 27.5° | 248.2 | 248.2 | 252.7 | 257.1 | 256.0 | 252.7 | 249.3 | 240.4 | 239.2 | 242.6 | 246.0 |
| 30°   | 230.3 | 224.7 | 222.5 | 219.1 | 218.0 | 216.9 | 220.2 | 220.2 | 222.5 | 226.9 | 230.3 |
| 32.5° | 214.6 | 203.5 | 193.4 | 183.3 | 177.8 | 182.2 | 191.2 | 199.0 | 206.8 | 213.5 | 216.9 |
| 35°   | 196.8 | 178.9 | 162.1 | 148.7 | 139.7 | 146.5 | 161.0 | 175.5 | 188.9 | 197.9 | 203.5 |
| 37.5° | 178.9 | 153.2 | 133.0 | 116.3 | 109.6 | 115.2 | 130.8 | 150.9 | 171.0 | 182.2 | 190.1 |
| 40°   | 159.9 | 127.4 | 104.0 | 90.6  | 83.8  | 89.4  | 105.1 | 125.2 | 152.0 | 166.6 | 176.6 |
| 42.5° | 140.9 | 105.1 | 83.8  | 70.4  | 67.1  | 70.4  | 82.7  | 102.9 | 131.9 | 149.8 | 163.2 |
| 45°   | 121.9 | 87.2  | 67.1  | 57.0  | 53.7  | 57.0  | 67.1  | 83.8  | 112.9 | 133.0 | 148.7 |
| 47.5° | 105.1 | 73.8  | 55.9  | 47.0  | 44.7  | 48.1  | 55.9  | 70.4  | 95.0  | 115.2 | 133.0 |
| 50°   | 91.7  | 64.8  | 48.1  | 40.2  | 38.0  | 41.4  | 48.1  | 59.3  | 80.5  | 98.4  | 117.4 |
| 52.5° | 82.7  | 60.4  | 42.5  | 34.7  | 33.5  | 35.8  | 41.4  | 50.3  | 68.2  | 83.8  | 101.7 |
| 55°   | 80.5  | 60.4  | 39.1  | 31.3  | 30.2  | 32.4  | 36.9  | 43.6  | 59.3  | 72.7  | 88.3  |
| 57.5° | 82.7  | 64.8  | 36.9  | 26.8  | 25.7  | 27.9  | 32.4  | 38.0  | 51.4  | 62.6  | 77.1  |
| 60°   | 82.7  | 66.0  | 32.4  | 21.2  | 20.1  | 22.4  | 26.8  | 33.5  | 45.8  | 54.8  | 67.1  |
| 62.5° | 74.9  | 60.4  | 26.8  | 16.8  | 14.5  | 16.8  | 22.4  | 27.9  | 40.2  | 49.2  | 59.3  |
| 65°   | 64.8  | 51.4  | 22.4  | 12.3  | 10.1  | 12.3  | 17.9  | 23.5  | 34.7  | 42.5  | 53.7  |
| 67.5° | 52.5  | 39.1  | 16.8  | 8.9   | 6.7   | 8.9   | 13.4  | 19.0  | 29.1  | 36.9  | 48.1  |
| 70°   | 39.1  | 27.9  | 13.4  | 7.8   | 6.7   | 7.8   | 12.3  | 17.9  | 25.7  | 33.5  | 44.7  |
| 72.5° | 29.1  | 19.0  | 11.2  | 7.8   | 5.6   | 7.8   | 11.2  | 16.8  | 24.6  | 32.4  | 42.5  |
| 75°   | 24.6  | 15.7  | 10.1  | 6.7   | 5.6   | 6.7   | 10.1  | 15.7  | 22.4  | 30.2  | 40.2  |
| 77.5° | 23.5  | 14.5  | 8.9   | 5.6   | 4.5   | 5.6   | 8.9   | 13.4  | 20.1  | 27.9  | 39.1  |
| 80°   | 20.1  | 12.3  | 7.8   | 4.5   | 3.4   | 4.5   | 7.8   | 11.2  | 15.7  | 21.2  | 30.2  |
| 82.5° | 15.7  | 10.1  | 5.6   | 2.2   | 1.1   | 2.2   | 5.6   | 6.7   | 10.1  | 12.3  | 17.9  |
| 85°   | 10.1  | 5.6   | 2.2   | 0.0   | 0.0   | 0.0   | 2.2   | 4.5   | 4.5   | 5.6   | 8.9   |
| 87.5° | 4.5   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 1.1   | 2.2   | 3.4   |
| 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: P641510

CATALOG NUMBER: GWS-SA6B-722-U-SLR-W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°  | 295°  | 305°  | 315°  | 325°  | 335°  | 345°   | 355°   | 359°   | 360°   |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0°    | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1 | 503.1  | 503.1  | 503.1  | 503.1  |
| 2.5°  | 471.8 | 472.9 | 475.1 | 478.5 | 486.3 | 493.0 | 499.7  | 508.7  | 513.1  | 513.1  |
| 5°    | 427.1 | 428.2 | 429.3 | 433.8 | 445.0 | 453.9 | 468.4  | 486.3  | 495.3  | 497.5  |
| 7.5°  | 392.4 | 394.6 | 396.9 | 400.2 | 411.4 | 423.7 | 442.7  | 476.3  | 493.0  | 496.4  |
| 10°   | 372.3 | 375.6 | 380.1 | 386.8 | 396.9 | 410.3 | 442.7  | 503.1  | 531.0  | 536.6  |
| 12.5° | 356.6 | 362.2 | 366.7 | 374.5 | 386.8 | 408.1 | 472.9  | 579.1  | 628.3  | 641.7  |
| 15°   | 341.0 | 347.7 | 354.4 | 362.2 | 375.6 | 415.9 | 531.0  | 715.5  | 797.1  | 807.2  |
| 17.5° | 325.3 | 333.2 | 342.1 | 351.0 | 367.8 | 434.9 | 622.7  | 904.4  | 1018.5 | 1040.8 |
| 20°   | 307.4 | 317.5 | 329.8 | 341.0 | 360.0 | 465.1 | 750.2  | 1129.1 | 1272.2 | 1320.3 |
| 22.5° | 288.4 | 300.7 | 315.3 | 329.8 | 351.0 | 502.0 | 904.4  | 1370.6 | 1570.7 | 1602.0 |
| 25°   | 272.8 | 285.1 | 298.5 | 313.0 | 336.5 | 546.7 | 1091.1 | 1670.2 | 1852.5 | 1882.7 |
| 27.5° | 258.3 | 270.5 | 282.8 | 296.3 | 322.0 | 604.8 | 1315.8 | 1988.9 | 2178.9 | 2210.2 |
| 30°   | 242.6 | 257.1 | 269.4 | 282.8 | 308.6 | 676.4 | 1575.2 | 2342.1 | 2522.1 | 2551.2 |
| 32.5° | 229.2 | 243.7 | 256.0 | 269.4 | 298.5 | 754.6 | 1848.0 | 2655.2 | 2801.6 | 2801.6 |
| 35°   | 218.0 | 233.7 | 242.6 | 260.5 | 290.7 | 804.9 | 2106.2 | 2953.7 | 3064.3 | 3059.9 |
| 37.5° | 205.7 | 224.7 | 231.4 | 243.7 | 280.6 | 810.5 | 2348.8 | 3268.9 | 3350.5 | 3321.5 |
| 40°   | 193.4 | 213.5 | 223.6 | 230.3 | 269.4 | 764.7 | 2614.9 | 3558.5 | 3627.8 | 3589.8 |
| 42.5° | 182.2 | 197.9 | 212.4 | 220.2 | 262.7 | 684.2 | 2828.5 | 3868.2 | 3950.9 | 3917.4 |
| 45°   | 171.0 | 184.5 | 193.4 | 207.9 | 267.2 | 628.3 | 3011.8 | 4229.3 | 4374.6 | 4350.0 |
| 47.5° | 159.9 | 171.0 | 176.6 | 199.0 | 297.4 | 602.6 | 3123.6 | 4788.2 | 5062.1 | 5042.0 |
| 50°   | 147.6 | 161.0 | 161.0 | 196.8 | 342.1 | 611.5 | 3220.9 | 5597.7 | 6021.4 | 6014.7 |
| 52.5° | 135.3 | 149.8 | 147.6 | 213.5 | 376.8 | 652.9 | 3331.5 | 6312.0 | 7048.8 | 7110.3 |
| 55°   | 123.0 | 136.4 | 138.6 | 247.1 | 396.9 | 688.7 | 2903.4 | 6612.8 | 7926.4 | 8142.1 |
| 57.5° | 109.6 | 117.4 | 144.2 | 272.8 | 390.2 | 792.6 | 1988.9 | 6667.5 | 8486.5 | 8949.3 |
| 60°   | 95.0  | 101.7 | 163.2 | 267.2 | 368.9 | 732.3 | 1252.1 | 6175.6 | 8407.1 | 8994.0 |
| 62.5° | 82.7  | 93.9  | 172.2 | 235.9 | 375.6 | 635.0 | 798.2  | 5263.4 | 7650.2 | 8319.9 |
| 65°   | 72.7  | 90.6  | 156.5 | 213.5 | 380.1 | 430.4 | 538.9  | 4281.8 | 6911.3 | 7548.5 |
| 67.5° | 64.8  | 100.6 | 128.6 | 190.1 | 326.4 | 303.0 | 370.0  | 3327.1 | 5811.2 | 6382.5 |
| 70°   | 59.3  | 102.9 | 105.1 | 163.2 | 252.7 | 194.5 | 243.7  | 2239.3 | 4005.7 | 4658.6 |
| 72.5° | 53.7  | 76.0  | 79.4  | 130.8 | 163.2 | 118.5 | 157.6  | 1281.2 | 2920.1 | 3365.1 |
| 75°   | 51.4  | 51.4  | 54.8  | 85.0  | 90.6  | 86.1  | 101.7  | 764.7  | 2093.9 | 2419.3 |
| 77.5° | 48.1  | 39.1  | 34.7  | 54.8  | 49.2  | 61.5  | 60.4   | 339.9  | 907.8  | 981.6  |
| 80°   | 38.0  | 27.9  | 23.5  | 34.7  | 33.5  | 41.4  | 35.8   | 27.9   | 41.4   | 40.2   |
| 82.5° | 23.5  | 17.9  | 16.8  | 21.2  | 19.0  | 21.2  | 16.8   | 4.5    | 4.5    | 4.5    |
| 85°   | 11.2  | 10.1  | 8.9   | 8.9   | 10.1  | 8.9   | 6.7    | 2.2    | 1.1    | 1.1    |
| 87.5° | 5.6   | 5.6   | 4.5   | 3.4   | 4.5   | 4.5   | 3.4    | 1.1    | 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    |

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

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-10-R4

Test Date: 10/25/2019

Luminaire Tested: SA1C-722-U-5WQ

Data in this report applies to families of products SA1C-722-U-5WQ.

### Test Information

Test Method: LM-79-2008 Report  
 Number: SP1-1908-441-10-R4  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 Issue Date: 10/28/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: MCGRAW-EDISON  
 Catalog Number: **SA1C-722-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):                  | 2237    | CRI (Ra): | 72.0 |      |       |
| CIE u':                   | 0.2876  | R1:       | 68.9 | R9:  | -17.4 |
| CIE v':                   | 0.5346  | R2:       | 83.0 | R10: | 61.3  |
| Duv:                      | -0.0006 | R3:       | 95.2 | R11: | 59.8  |
| CIE x:                    | 0.5005  | R4:       | 66.2 | R12: | 50.5  |
| CIE y:                    | 0.4134  | R5:       | 65.9 | R13: | 71.1  |
| CIE z:                    | 0.0860  | R6:       | 76.3 | R14: | 96.9  |
| Peak Wavelength (nm):     | 603     | R7:       | 76.7 |      |       |
| Dominant Wavelength (nm): | 587     | R8:       | 43.8 |      |       |
| Purity:                   | 74.5    |           |      |      |       |
| Rf:                       | 69.8    |           |      |      |       |
| Rg:                       | 99.2    |           |      |      |       |



### Test Conditions

Stabilization Time: 71M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.7/41%  
 Sphere Temperature (°C): 25.6

REPORT NUMBER: SP1-1908-441-10-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: SP1-1908-441-10-R4

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2200K 4-step quadrangle

REPORT NUMBER: SP1-1908-441-10-R4

**Photopic Flux vs. Wavelength**



#####

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1768             | NR               | 490       | 5206             | NR               | 620       | 130919           | NR               | 750       | 8553             | NR               | 880       | 2713             | NR               |
| 365       | 1569             | NR               | 495       | 7286             | NR               | 625       | 125335           | NR               | 755       | 7696             | NR               | 885       | 2316             | NR               |
| 370       | 1594             | NR               | 500       | 10654            | NR               | 630       | 118388           | NR               | 760       | 6978             | NR               | 890       | 2539             | NR               |
| 375       | 1744             | NR               | 505       | 15189            | NR               | 635       | 111855           | NR               | 765       | 6377             | NR               | 895       | 1933             | NR               |
| 380       | 1659             | NR               | 510       | 20541            | NR               | 640       | 104062           | NR               | 770       | 5600             | NR               | 900       | 2216             | NR               |
| 385       | 1504             | NR               | 515       | 26492            | NR               | 645       | 96365            | NR               | 775       | 5000             | NR               | 905       | 2067             | NR               |
| 390       | 1541             | NR               | 520       | 32294            | NR               | 650       | 88651            | NR               | 780       | 4709             | NR               | 910       | 1959             | NR               |
| 395       | 1355             | NR               | 525       | 38123            | NR               | 655       | 81152            | NR               | 785       | 4305             | NR               | 915       | 1874             | NR               |
| 400       | 1243             | NR               | 530       | 43232            | NR               | 660       | 73523            | NR               | 790       | 4040             | NR               | 920       | 1484             | NR               |
| 405       | 1417             | NR               | 535       | 48012            | NR               | 665       | 66123            | NR               | 795       | 3642             | NR               | 925       | 1914             | NR               |
| 410       | 2147             | NR               | 540       | 52623            | NR               | 670       | 58677            | NR               | 800       | 3594             | NR               | 930       | 1948             | NR               |
| 415       | 3837             | NR               | 545       | 57516            | NR               | 675       | 52349            | NR               | 805       | 3190             | NR               | 935       | 2079             | NR               |
| 420       | 7159             | NR               | 550       | 62613            | NR               | 680       | 46159            | NR               | 810       | 3241             | NR               | 940       | 2263             | NR               |
| 425       | 12599            | NR               | 555       | 68554            | NR               | 685       | 40525            | NR               | 815       | 2732             | NR               | 945       | 1688             | NR               |
| 430       | 19019            | NR               | 560       | 75325            | NR               | 690       | 35615            | NR               | 820       | 2612             | NR               | 950       | 1560             | NR               |
| 435       | 24875            | NR               | 565       | 82533            | NR               | 695       | 31158            | NR               | 825       | 2966             | NR               | 955       | 2826             | NR               |
| 440       | 29103            | NR               | 570       | 90909            | NR               | 700       | 27409            | NR               | 830       | 2574             | NR               | 960       | 1477             | NR               |
| 445       | 29901            | NR               | 575       | 99621            | NR               | 705       | 24204            | NR               | 835       | 2633             | NR               | 965       | 1568             | NR               |
| 450       | 24862            | NR               | 580       | 108484           | NR               | 710       | 21558            | NR               | 840       | 2526             | NR               | 970       | 2030             | NR               |
| 455       | 15942            | NR               | 585       | 116679           | NR               | 715       | 19222            | NR               | 845       | 2631             | NR               | 975       | 1986             | NR               |
| 460       | 9916             | NR               | 590       | 123752           | NR               | 720       | 17310            | NR               | 850       | 2079             | NR               | 980       | 2540             | NR               |
| 465       | 7051             | NR               | 595       | 129324           | NR               | 725       | 15280            | NR               | 855       | 2309             | NR               | 985       | 1139             | NR               |
| 470       | 5227             | NR               | 600       | 134082           | NR               | 730       | 13282            | NR               | 860       | 2528             | NR               | 990       | 2018             | NR               |
| 475       | 4257             | NR               | 605       | 135698           | NR               | 735       | 11753            | NR               | 865       | 2121             | NR               | 995       | 3445             | NR               |
| 480       | 4052             | NR               | 610       | 135144           | NR               | 740       | 10654            | NR               | 870       | 2751             | NR               | 1000      | 3704             | NR               |
| 485       | 4298             | NR               | 615       | 134180           | NR               | 745       | 9451             | NR               | 875       | 2317             | NR               |           |                  |                  |

REPORT NUMBER: SP1-1908-441-10-R4

Scotopic Flux vs. Wavelength



Scotopic Lumens: 4696.9

S/P: 0.85

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1768             | NR               | 490       | 5206             | NR               | 620       | 130919           | NR               | 750       | 8553             | NR               | 880       | 2713             | NR               |
| 365       | 1569             | NR               | 495       | 7286             | NR               | 625       | 125335           | NR               | 755       | 7696             | NR               | 885       | 2316             | NR               |
| 370       | 1594             | NR               | 500       | 10654            | NR               | 630       | 118388           | NR               | 760       | 6978             | NR               | 890       | 2539             | NR               |
| 375       | 1744             | NR               | 505       | 15189            | NR               | 635       | 111855           | NR               | 765       | 6377             | NR               | 895       | 1933             | NR               |
| 380       | 1659             | NR               | 510       | 20541            | NR               | 640       | 104062           | NR               | 770       | 5600             | NR               | 900       | 2216             | NR               |
| 385       | 1504             | NR               | 515       | 26492            | NR               | 645       | 96365            | NR               | 775       | 5000             | NR               | 905       | 2067             | NR               |
| 390       | 1541             | NR               | 520       | 32294            | NR               | 650       | 88651            | NR               | 780       | 4709             | NR               | 910       | 1959             | NR               |
| 395       | 1355             | NR               | 525       | 38123            | NR               | 655       | 81152            | NR               | 785       | 4305             | NR               | 915       | 1874             | NR               |
| 400       | 1243             | NR               | 530       | 43232            | NR               | 660       | 73523            | NR               | 790       | 4040             | NR               | 920       | 1484             | NR               |
| 405       | 1417             | NR               | 535       | 48012            | NR               | 665       | 66123            | NR               | 795       | 3642             | NR               | 925       | 1914             | NR               |
| 410       | 2147             | NR               | 540       | 52623            | NR               | 670       | 58677            | NR               | 800       | 3594             | NR               | 930       | 1948             | NR               |
| 415       | 3837             | NR               | 545       | 57516            | NR               | 675       | 52349            | NR               | 805       | 3190             | NR               | 935       | 2079             | NR               |
| 420       | 7159             | NR               | 550       | 62613            | NR               | 680       | 46159            | NR               | 810       | 3241             | NR               | 940       | 2263             | NR               |
| 425       | 12599            | NR               | 555       | 68554            | NR               | 685       | 40525            | NR               | 815       | 2732             | NR               | 945       | 1688             | NR               |
| 430       | 19019            | NR               | 560       | 75325            | NR               | 690       | 35615            | NR               | 820       | 2612             | NR               | 950       | 1560             | NR               |
| 435       | 24875            | NR               | 565       | 82533            | NR               | 695       | 31158            | NR               | 825       | 2966             | NR               | 955       | 2826             | NR               |
| 440       | 29103            | NR               | 570       | 90909            | NR               | 700       | 27409            | NR               | 830       | 2574             | NR               | 960       | 1477             | NR               |
| 445       | 29901            | NR               | 575       | 99621            | NR               | 705       | 24204            | NR               | 835       | 2633             | NR               | 965       | 1568             | NR               |
| 450       | 24862            | NR               | 580       | 108484           | NR               | 710       | 21558            | NR               | 840       | 2526             | NR               | 970       | 2030             | NR               |
| 455       | 15942            | NR               | 585       | 116679           | NR               | 715       | 19222            | NR               | 845       | 2631             | NR               | 975       | 1986             | NR               |
| 460       | 9916             | NR               | 590       | 123752           | NR               | 720       | 17310            | NR               | 850       | 2079             | NR               | 980       | 2540             | NR               |
| 465       | 7051             | NR               | 595       | 129324           | NR               | 725       | 15280            | NR               | 855       | 2309             | NR               | 985       | 1139             | NR               |
| 470       | 5227             | NR               | 600       | 134082           | NR               | 730       | 13282            | NR               | 860       | 2528             | NR               | 990       | 2018             | NR               |
| 475       | 4257             | NR               | 605       | 135698           | NR               | 735       | 11753            | NR               | 865       | 2121             | NR               | 995       | 3445             | NR               |
| 480       | 4052             | NR               | 610       | 135144           | NR               | 740       | 10654            | NR               | 870       | 2751             | NR               | 1000      | 3704             | NR               |
| 485       | 4298             | NR               | 615       | 134180           | NR               | 745       | 9451             | NR               | 875       | 2317             | NR               |           |                  |                  |

REPORT NUMBER: SP1-1908-441-10-R4

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 1470.8**

**M/P: 0.27**

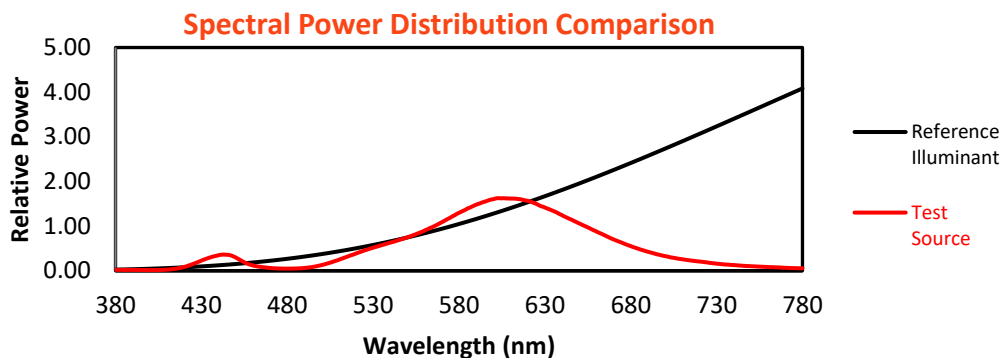
| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1768             | NR               | 490       | 5206             | NR               | 620       | 130919           | NR               | 750       | 8553             | NR               | 880       | 2713             | NR               |
| 365       | 1569             | NR               | 495       | 7286             | NR               | 625       | 125335           | NR               | 755       | 7696             | NR               | 885       | 2316             | NR               |
| 370       | 1594             | NR               | 500       | 10654            | NR               | 630       | 118388           | NR               | 760       | 6978             | NR               | 890       | 2539             | NR               |
| 375       | 1744             | NR               | 505       | 15189            | NR               | 635       | 111855           | NR               | 765       | 6377             | NR               | 895       | 1933             | NR               |
| 380       | 1659             | NR               | 510       | 20541            | NR               | 640       | 104062           | NR               | 770       | 5600             | NR               | 900       | 2216             | NR               |
| 385       | 1504             | NR               | 515       | 26492            | NR               | 645       | 96365            | NR               | 775       | 5000             | NR               | 905       | 2067             | NR               |
| 390       | 1541             | NR               | 520       | 32294            | NR               | 650       | 88651            | NR               | 780       | 4709             | NR               | 910       | 1959             | NR               |
| 395       | 1355             | NR               | 525       | 38123            | NR               | 655       | 81152            | NR               | 785       | 4305             | NR               | 915       | 1874             | NR               |
| 400       | 1243             | NR               | 530       | 43232            | NR               | 660       | 73523            | NR               | 790       | 4040             | NR               | 920       | 1484             | NR               |
| 405       | 1417             | NR               | 535       | 48012            | NR               | 665       | 66123            | NR               | 795       | 3642             | NR               | 925       | 1914             | NR               |
| 410       | 2147             | NR               | 540       | 52623            | NR               | 670       | 58677            | NR               | 800       | 3594             | NR               | 930       | 1948             | NR               |
| 415       | 3837             | NR               | 545       | 57516            | NR               | 675       | 52349            | NR               | 805       | 3190             | NR               | 935       | 2079             | NR               |
| 420       | 7159             | NR               | 550       | 62613            | NR               | 680       | 46159            | NR               | 810       | 3241             | NR               | 940       | 2263             | NR               |
| 425       | 12599            | NR               | 555       | 68554            | NR               | 685       | 40525            | NR               | 815       | 2732             | NR               | 945       | 1688             | NR               |
| 430       | 19019            | NR               | 560       | 75325            | NR               | 690       | 35615            | NR               | 820       | 2612             | NR               | 950       | 1560             | NR               |
| 435       | 24875            | NR               | 565       | 82533            | NR               | 695       | 31158            | NR               | 825       | 2966             | NR               | 955       | 2826             | NR               |
| 440       | 29103            | NR               | 570       | 90909            | NR               | 700       | 27409            | NR               | 830       | 2574             | NR               | 960       | 1477             | NR               |
| 445       | 29901            | NR               | 575       | 99621            | NR               | 705       | 24204            | NR               | 835       | 2633             | NR               | 965       | 1568             | NR               |
| 450       | 24862            | NR               | 580       | 108484           | NR               | 710       | 21558            | NR               | 840       | 2526             | NR               | 970       | 2030             | NR               |
| 455       | 15942            | NR               | 585       | 116679           | NR               | 715       | 19222            | NR               | 845       | 2631             | NR               | 975       | 1986             | NR               |
| 460       | 9916             | NR               | 590       | 123752           | NR               | 720       | 17310            | NR               | 850       | 2079             | NR               | 980       | 2540             | NR               |
| 465       | 7051             | NR               | 595       | 129324           | NR               | 725       | 15280            | NR               | 855       | 2309             | NR               | 985       | 1139             | NR               |
| 470       | 5227             | NR               | 600       | 134082           | NR               | 730       | 13282            | NR               | 860       | 2528             | NR               | 990       | 2018             | NR               |
| 475       | 4257             | NR               | 605       | 135698           | NR               | 735       | 11753            | NR               | 865       | 2121             | NR               | 995       | 3445             | NR               |
| 480       | 4052             | NR               | 610       | 135144           | NR               | 740       | 10654            | NR               | 870       | 2751             | NR               | 1000      | 3704             | NR               |
| 485       | 4298             | NR               | 615       | 134180           | NR               | 745       | 9451             | NR               | 875       | 2317             | NR               |           |                  |                  |

REPORT NUMBER: SP1-1908-441-10-R4

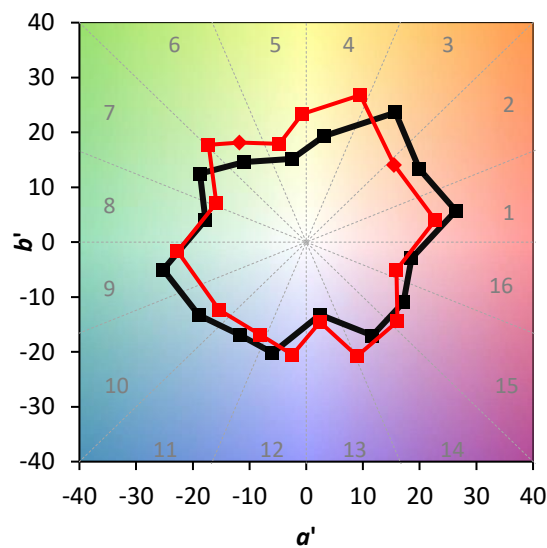
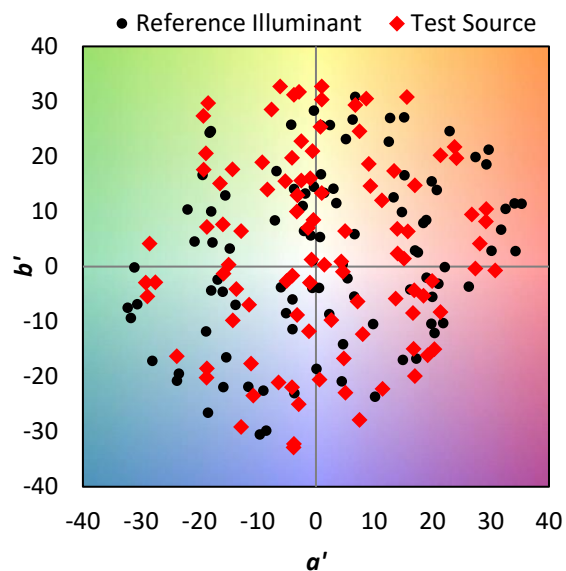
**TM-30-18**

### Summary

$R_f = 69.8$   
 $R_g = 99.2$   
 CIE  $R_a = 72.0$   
 $R_g = -17.4$



### Color Vector Graphics



REPORT NUMBER: SP1-1908-441-10-R4

**TM-30-18**

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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 87 | CES26 = 56 | CES51 = 74 | CES76 = 56 |
| CES02 = 65 | CES27 = 76 | CES52 = 76 | CES77 = 81 |
| CES03 = 32 | CES28 = 83 | CES53 = 65 | CES78 = 63 |
| CES04 = 72 | CES29 = 46 | CES54 = 78 | CES79 = 84 |
| CES05 = 52 | CES30 = 48 | CES55 = 75 | CES80 = 84 |
| CES06 = 52 | CES31 = 51 | CES56 = 65 | CES81 = 63 |
| CES07 = 44 | CES32 = 51 | CES57 = 62 | CES82 = 92 |
| CES08 = 42 | CES33 = 53 | CES58 = 66 | CES83 = 83 |
| CES09 = 29 | CES34 = 70 | CES59 = 84 | CES84 = 92 |
| CES10 = 78 | CES35 = 85 | CES60 = 90 | CES85 = 81 |
| CES11 = 61 | CES36 = 78 | CES61 = 84 | CES86 = 56 |
| CES12 = 68 | CES37 = 80 | CES62 = 70 | CES87 = 78 |
| CES13 = 45 | CES38 = 53 | CES63 = 68 | CES88 = 72 |
| CES14 = 75 | CES39 = 90 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 84 | CES65 = 67 | CES90 = 67 |
| CES16 = 49 | CES41 = 75 | CES66 = 64 | CES91 = 90 |
| CES17 = 51 | CES42 = 79 | CES67 = 63 | CES92 = 67 |
| CES18 = 57 | CES43 = 64 | CES68 = 69 | CES93 = 79 |
| CES19 = 74 | CES44 = 98 | CES69 = 80 | CES94 = 52 |
| CES20 = 68 | CES45 = 73 | CES70 = 63 | CES95 = 76 |
| CES21 = 89 | CES46 = 67 | CES71 = 63 | CES96 = 78 |
| CES22 = 81 | CES47 = 60 | CES72 = 87 | CES97 = 77 |
| CES23 = 92 | CES48 = 48 | CES73 = 56 | CES98 = 71 |
| CES24 = 92 | CES49 = 64 | CES74 = 87 | CES99 = 65 |
| CES25 = 74 | CES50 = 74 | CES75 = 66 |            |



REPORT NUMBER: SP1-1908-441-10-R4

**TM-30-18**

Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-1908-441-10-R4

**TM-30-18**

**Measure Comparisons**



(END OF REPORT)