

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



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P382862

Luminaire Tested: **GLEON-SA2B-735-U-SLL-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P382862  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA2B-735-U-SLL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 8074.7 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

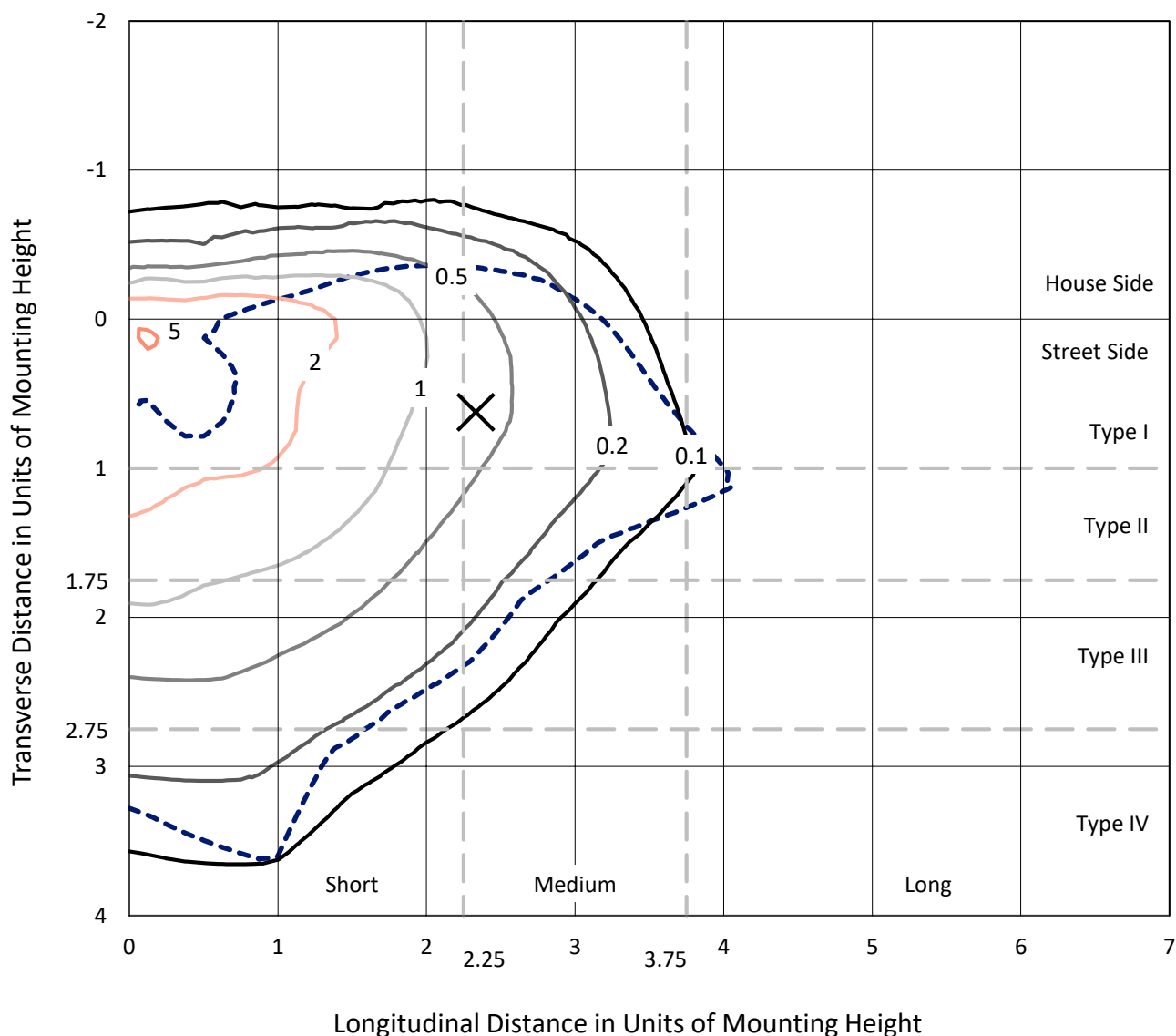
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

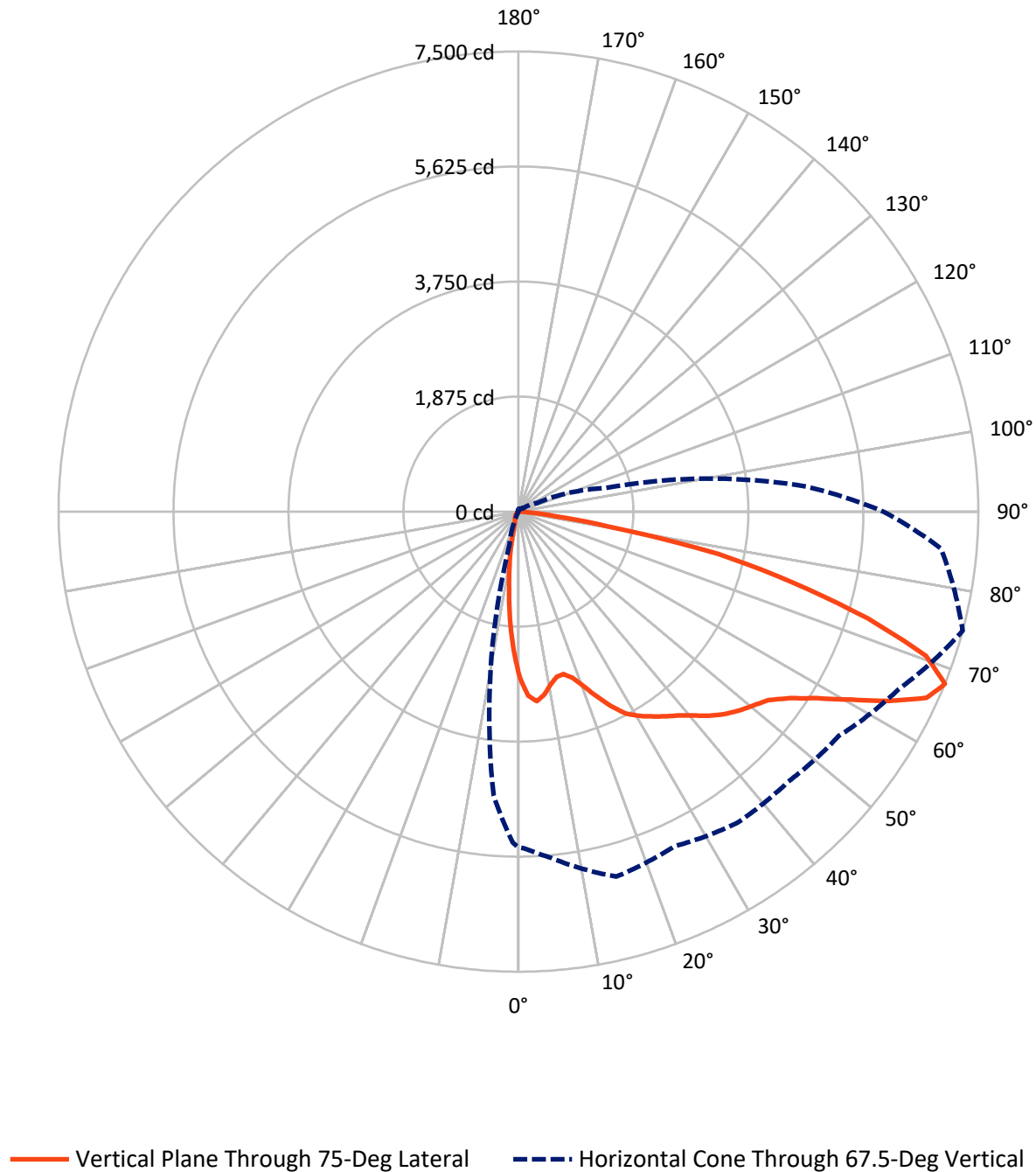
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1211.7   | 0.0    | 1211.7 |
|                    | % Fixture | 15.0     | 0.0    | 15.0   |
| <b>Street Side</b> | Lumens    | 6863.0   | 0.0    | 6863.0 |
|                    | % Fixture | 85.0     | 0.0    | 85.0   |
| <b>Total</b>       | Lumens    | 8074.7   | 0.0    | 8074.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 205.5  | 2.5       |
| 10°-20°   | 404.6  | 5.0       |
| 20°-30°   | 572.4  | 7.1       |
| 30°-40°   | 841.6  | 10.4      |
| 40°-50°   | 1209.6 | 15.0      |
| 50°-60°   | 1702.8 | 21.1      |
| 60°-70°   | 1988.8 | 24.6      |
| 70°-80°   | 1014.6 | 12.6      |
| 80°-90°   | 134.8  | 1.7       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 8074.7 | 100.0     |
| 0°-180°   | 8074.7 | 100.0     |

**Coefficient of Utilization**



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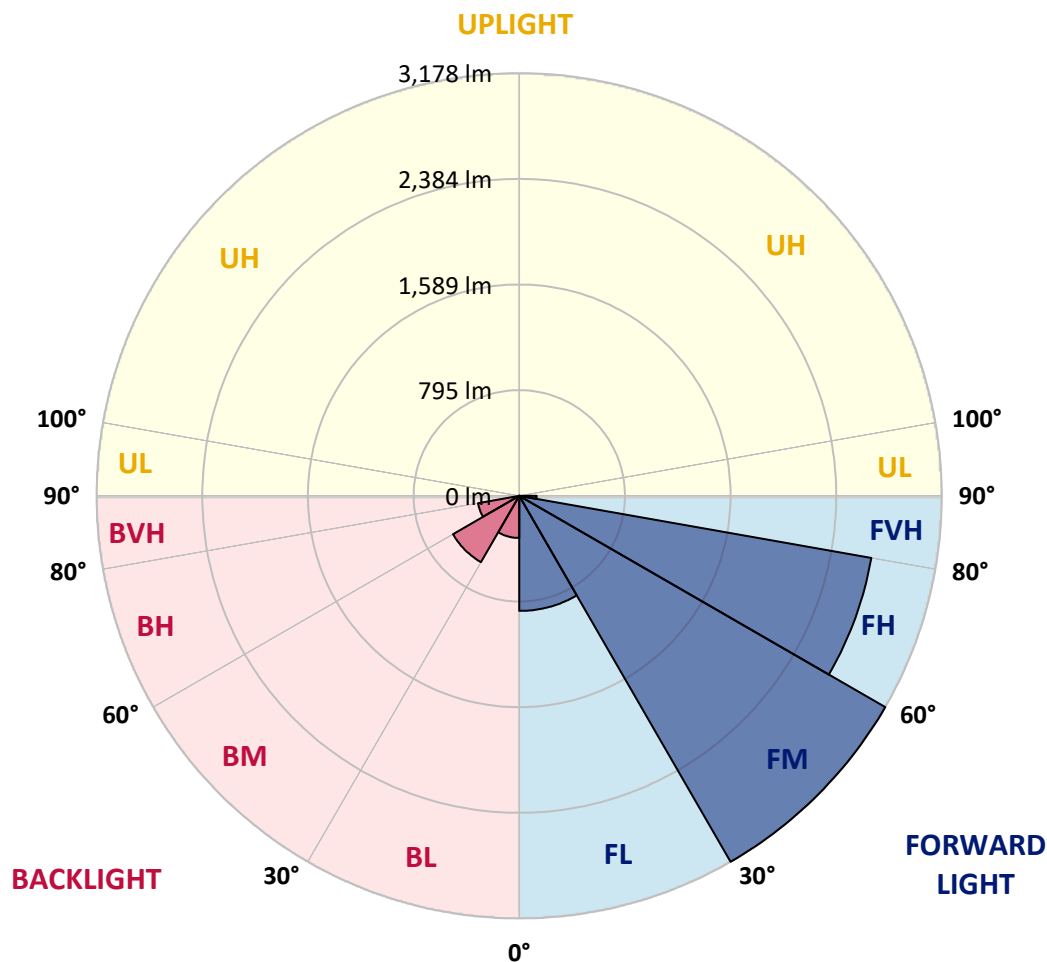
CATALOG NUMBER: GLEON-SA2B-735-U-SLL-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 865.6  | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 3178.0 | 39.4      |                         |      |         |
| FH   | (60°-80°)   | 2688.6 | 33.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 130.7  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 316.9  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 576.0  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 314.7  | 3.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 4.1    | 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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 |
| 2.5°  | 2936.5 | 2941.1 | 2964.8 | 3019.9 | 3080.0 | 3084.5 | 3125.1 | 3083.4 | 3069.3 | 3001.9 | 2932.3 |
| 5°    | 2958.7 | 2976.3 | 3057.7 | 3219.5 | 3359.9 | 3405.1 | 3437.2 | 3355.3 | 3269.3 | 3104.8 | 2929.3 |
| 7.5°  | 2780.0 | 2809.5 | 2937.6 | 3241.3 | 3492.3 | 3603.2 | 3624.3 | 3496.1 | 3285.4 | 3014.5 | 2750.6 |
| 10°   | 2551.3 | 2585.0 | 2739.5 | 3112.9 | 3457.4 | 3647.6 | 3676.6 | 3508.8 | 3205.8 | 2868.4 | 2557.5 |
| 12.5° | 2366.2 | 2405.5 | 2563.5 | 2968.3 | 3337.7 | 3548.2 | 3605.5 | 3466.3 | 3136.9 | 2764.7 | 2425.5 |
| 15°   | 2280.9 | 2326.0 | 2492.0 | 2874.9 | 3205.0 | 3370.6 | 3418.0 | 3358.0 | 3098.7 | 2748.3 | 2394.9 |
| 17.5° | 2329.8 | 2378.8 | 2550.2 | 2883.0 | 3080.3 | 3151.1 | 3189.3 | 3213.8 | 3098.7 | 2847.4 | 2484.3 |
| 20°   | 2530.6 | 2583.5 | 2764.7 | 2964.5 | 2977.0 | 2950.7 | 2991.6 | 3077.6 | 3134.7 | 3035.5 | 2699.3 |
| 22.5° | 2808.3 | 2870.3 | 3074.9 | 3104.0 | 2926.5 | 2826.7 | 2832.1 | 2967.1 | 3200.1 | 3274.3 | 2997.7 |
| 25°   | 3146.9 | 3222.6 | 3430.7 | 3312.1 | 2947.6 | 2752.9 | 2751.0 | 2876.1 | 3264.0 | 3513.3 | 3330.1 |
| 27.5° | 3483.1 | 3566.5 | 3749.3 | 3566.2 | 3034.4 | 2739.5 | 2735.7 | 2848.5 | 3326.3 | 3726.0 | 3693.1 |
| 30°   | 3765.0 | 3846.1 | 4003.7 | 3750.1 | 3128.1 | 2770.9 | 2752.5 | 2878.0 | 3363.4 | 3864.1 | 3957.8 |
| 32.5° | 3994.5 | 4059.5 | 4186.9 | 3876.7 | 3228.4 | 2831.7 | 2791.9 | 2956.7 | 3426.5 | 3980.8 | 4201.1 |
| 35°   | 4246.9 | 4315.4 | 4366.3 | 3997.2 | 3340.8 | 2919.3 | 2862.3 | 3081.8 | 3523.7 | 4099.3 | 4467.7 |
| 37.5° | 4535.0 | 4603.1 | 4597.0 | 4107.4 | 3483.5 | 3064.2 | 3027.9 | 3280.0 | 3674.8 | 4216.7 | 4765.2 |
| 40°   | 4816.9 | 4886.5 | 4836.8 | 4227.8 | 3651.0 | 3303.4 | 3276.5 | 3577.6 | 3877.1 | 4367.1 | 5114.1 |
| 42.5° | 5080.8 | 5156.2 | 5049.8 | 4341.9 | 3850.6 | 3604.7 | 3650.6 | 3960.8 | 4130.3 | 4552.2 | 5414.7 |
| 45°   | 5293.5 | 5370.4 | 5228.5 | 4452.8 | 4061.1 | 3970.4 | 4108.5 | 4385.4 | 4434.8 | 4708.7 | 5617.9 |
| 47.5° | 5448.1 | 5520.7 | 5352.4 | 4563.7 | 4330.4 | 4417.6 | 4658.2 | 4830.6 | 4709.8 | 4844.4 | 5762.1 |
| 50°   | 5546.7 | 5603.4 | 5388.7 | 4702.5 | 4683.8 | 4939.3 | 5230.7 | 5314.9 | 4968.8 | 4966.8 | 5937.2 |
| 52.5° | 5609.4 | 5635.1 | 5415.6 | 4847.5 | 5052.5 | 5507.3 | 5791.5 | 5817.9 | 5235.4 | 5101.5 | 6173.3 |
| 55°   | 5825.5 | 5846.2 | 5605.2 | 5023.1 | 5357.4 | 6004.9 | 6298.8 | 6274.3 | 5537.1 | 5365.1 | 6451.7 |
| 57.5° | 6194.3 | 6216.1 | 5997.3 | 5275.5 | 5604.1 | 6312.5 | 6666.3 | 6710.3 | 5891.0 | 5735.3 | 6750.1 |
| 60°   | 6379.4 | 6419.9 | 6342.0 | 5595.3 | 5843.1 | 6509.1 | 6916.8 | 7057.2 | 6333.1 | 6223.4 | 7039.2 |
| 62.5° | 6211.6 | 6270.4 | 6383.6 | 5949.9 | 6080.7 | 6617.3 | 6994.9 | 7181.6 | 6786.0 | 6792.2 | 7217.5 |
| 65°   | 5876.5 | 5923.5 | 6115.5 | 6144.2 | 6218.4 | 6603.9 | 6802.1 | 7007.9 | 7063.4 | 7314.7 | 7207.9 |
| 67.5° | 5471.7 | 5489.3 | 5652.3 | 6159.5 | 6018.7 | 6201.6 | 6223.0 | 6375.2 | 6844.2 | 7499.8 | 6918.4 |
| 70°   | 4889.2 | 4898.7 | 5041.1 | 5647.3 | 5172.2 | 5212.4 | 5180.7 | 5211.6 | 5884.1 | 7048.8 | 6187.4 |
| 72.5° | 3934.9 | 3959.0 | 4161.3 | 4689.9 | 3768.1 | 3652.1 | 3901.6 | 3887.8 | 4531.5 | 5955.2 | 4595.4 |
| 75°   | 2897.1 | 2938.8 | 3244.4 | 3777.6 | 2644.7 | 2392.2 | 2574.2 | 2622.9 | 3221.5 | 4606.5 | 2873.7 |
| 77.5° | 2028.4 | 2059.4 | 2355.5 | 2777.0 | 1914.1 | 1710.6 | 1644.7 | 1702.5 | 2126.4 | 3332.4 | 1447.8 |
| 80°   | 1168.5 | 1180.0 | 1369.0 | 1603.5 | 1289.8 | 1475.7 | 1336.9 | 1376.6 | 1274.2 | 1482.6 | 622.7  |
| 82.5° | 764.6  | 766.6  | 840.3  | 954.4  | 803.3  | 933.3  | 690.8  | 883.2  | 783.7  | 595.5  | 202.7  |
| 85°   | 413.1  | 415.4  | 487.3  | 677.4  | 454.8  | 257.0  | 151.1  | 310.2  | 484.6  | 136.6  | 55.4   |
| 87.5° | 45.6   | 41.7   | 146.9  | 246.3  | 126.2  | 23.3   | 8.0    | 34.8   | 77.7   | 8.8    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 |
| 2.5°  | 2896.7 | 2865.0 | 2785.8 | 2702.0 | 2634.7 | 2571.6 | 2508.1 | 2430.4 | 2370.4 | 2358.1 | 2338.3 |
| 5°    | 2834.8 | 2734.2 | 2568.2 | 2401.3 | 2267.1 | 2097.7 | 1990.2 | 1906.4 | 1824.5 | 1819.6 | 1803.1 |
| 7.5°  | 2618.3 | 2485.9 | 2252.2 | 2021.6 | 1832.5 | 1671.2 | 1508.2 | 1399.2 | 1313.5 | 1283.3 | 1265.3 |
| 10°   | 2410.2 | 2261.3 | 1969.5 | 1706.3 | 1537.7 | 1395.0 | 1280.2 | 1166.3 | 1063.0 | 991.8  | 959.7  |
| 12.5° | 2264.8 | 2100.4 | 1778.7 | 1551.9 | 1431.0 | 1295.5 | 1155.6 | 1013.2 | 894.3  | 808.6  | 756.2  |
| 15°   | 2208.6 | 2033.0 | 1714.8 | 1490.7 | 1341.4 | 1170.1 | 991.1  | 828.5  | 696.5  | 618.9  | 571.9  |
| 17.5° | 2275.5 | 2071.3 | 1709.8 | 1416.0 | 1207.6 | 994.5  | 796.8  | 604.8  | 480.4  | 421.5  | 391.3  |
| 20°   | 2445.4 | 2192.9 | 1707.9 | 1324.7 | 1048.5 | 786.4  | 539.7  | 397.8  | 322.4  | 289.5  | 275.4  |
| 22.5° | 2685.6 | 2348.2 | 1723.2 | 1234.4 | 882.8  | 561.9  | 372.5  | 292.2  | 253.6  | 236.0  | 227.9  |
| 25°   | 2994.6 | 2566.2 | 1766.4 | 1152.5 | 727.2  | 419.2  | 290.4  | 244.8  | 217.6  | 203.9  | 198.1  |
| 27.5° | 3323.9 | 2817.2 | 1833.8 | 1081.3 | 600.6  | 334.3  | 248.6  | 209.6  | 190.1  | 180.5  | 175.2  |
| 30°   | 3595.6 | 3107.8 | 1901.8 | 1002.2 | 508.7  | 291.5  | 227.6  | 191.2  | 168.7  | 162.6  | 157.6  |
| 32.5° | 3833.1 | 3327.8 | 1950.0 | 930.6  | 448.6  | 259.0  | 205.8  | 170.9  | 155.7  | 143.8  | 138.4  |
| 35°   | 4079.1 | 3511.0 | 1948.5 | 880.5  | 407.4  | 234.5  | 187.4  | 153.0  | 134.6  | 120.9  | 116.6  |
| 37.5° | 4345.3 | 3718.0 | 1915.2 | 837.6  | 389.4  | 215.0  | 177.1  | 143.5  | 125.1  | 111.3  | 105.9  |
| 40°   | 4657.0 | 3935.2 | 1881.2 | 797.5  | 384.4  | 199.3  | 169.8  | 135.8  | 116.3  | 102.9  | 97.5   |
| 42.5° | 4960.7 | 4131.0 | 1851.4 | 767.7  | 363.0  | 198.9  | 163.3  | 130.0  | 109.4  | 96.4   | 90.3   |
| 45°   | 5203.6 | 4313.5 | 1845.6 | 749.7  | 340.4  | 205.8  | 159.9  | 126.2  | 104.1  | 91.0   | 85.3   |
| 47.5° | 5405.6 | 4511.7 | 1882.3 | 737.1  | 319.1  | 187.8  | 168.3  | 123.5  | 99.0   | 86.4   | 79.9   |
| 50°   | 5645.8 | 4754.9 | 1968.7 | 716.5  | 296.4  | 169.1  | 192.7  | 124.3  | 94.8   | 81.9   | 75.0   |
| 52.5° | 5980.9 | 5091.6 | 2095.8 | 681.6  | 265.5  | 151.8  | 189.8  | 125.1  | 90.3   | 76.9   | 70.0   |
| 55°   | 6356.5 | 5511.9 | 2232.3 | 623.9  | 222.3  | 129.3  | 162.6  | 119.7  | 81.5   | 71.5   | 65.0   |
| 57.5° | 6751.2 | 5893.2 | 2313.4 | 555.0  | 176.7  | 111.7  | 130.0  | 109.0  | 71.9   | 64.3   | 60.1   |
| 60°   | 6813.2 | 6038.2 | 2276.3 | 470.5  | 140.4  | 97.2   | 96.4   | 110.9  | 64.3   | 56.6   | 53.6   |
| 62.5° | 6659.1 | 5856.2 | 2096.9 | 395.2  | 117.5  | 85.3   | 79.2   | 96.8   | 58.1   | 50.5   | 47.4   |
| 65°   | 6362.6 | 5363.9 | 1806.2 | 356.1  | 109.0  | 73.0   | 65.8   | 68.1   | 50.9   | 44.0   | 41.3   |
| 67.5° | 5950.3 | 4706.7 | 1482.9 | 334.0  | 107.9  | 62.7   | 56.3   | 51.6   | 44.0   | 38.3   | 36.0   |
| 70°   | 5107.2 | 3921.1 | 1183.1 | 321.7  | 104.8  | 52.8   | 47.4   | 42.1   | 36.7   | 32.5   | 30.6   |
| 72.5° | 3758.9 | 2778.5 | 920.3  | 308.3  | 105.5  | 42.1   | 41.3   | 34.8   | 29.4   | 25.2   | 24.5   |
| 75°   | 2171.9 | 1587.4 | 603.5  | 249.7  | 100.6  | 32.5   | 34.5   | 24.5   | 20.7   | 17.6   | 17.6   |
| 77.5° | 1157.4 | 968.2  | 229.9  | 104.1  | 36.7   | 20.7   | 19.5   | 14.5   | 13.0   | 10.7   | 10.3   |
| 80°   | 504.5  | 426.1  | 69.2   | 29.1   | 20.3   | 11.1   | 7.3    | 6.5    | 5.8    | 4.6    | 4.2    |
| 82.5° | 178.7  | 154.2  | 22.5   | 14.2   | 8.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 40.5   | 29.1   | 0.0    | 3.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 |
| 2.5°  | 2297.8 | 2289.3 | 2239.5 | 2241.5 | 2250.2 | 2262.9 | 2233.1 | 2246.8 | 2284.0 | 2319.6 | 2332.9 |
| 5°    | 1776.7 | 1778.7 | 1748.4 | 1767.1 | 1784.0 | 1795.5 | 1747.3 | 1748.0 | 1777.5 | 1817.6 | 1838.7 |
| 7.5°  | 1251.9 | 1248.9 | 1250.4 | 1295.1 | 1326.9 | 1304.0 | 1322.0 | 1259.6 | 1263.5 | 1292.1 | 1270.7 |
| 10°   | 930.6  | 888.6  | 864.8  | 898.5  | 933.3  | 920.6  | 889.7  | 869.4  | 883.6  | 915.3  | 913.0  |
| 12.5° | 731.4  | 670.9  | 635.3  | 611.3  | 640.0  | 616.2  | 615.5  | 597.9  | 578.8  | 582.2  | 633.1  |
| 15°   | 550.1  | 506.0  | 464.0  | 425.3  | 424.6  | 416.6  | 375.6  | 329.7  | 325.9  | 328.2  | 354.5  |
| 17.5° | 378.3  | 363.4  | 346.2  | 312.9  | 304.1  | 270.4  | 230.7  | 212.3  | 203.1  | 207.4  | 216.1  |
| 20°   | 265.9  | 260.1  | 262.0  | 244.1  | 231.4  | 199.3  | 176.0  | 168.7  | 167.1  | 171.4  | 175.6  |
| 22.5° | 220.3  | 210.0  | 208.9  | 200.8  | 188.2  | 164.9  | 152.2  | 148.0  | 146.2  | 150.0  | 153.0  |
| 25°   | 192.7  | 182.5  | 178.2  | 173.3  | 159.9  | 143.8  | 136.2  | 132.4  | 130.4  | 132.7  | 134.6  |
| 27.5° | 169.8  | 160.2  | 156.4  | 153.0  | 140.0  | 128.6  | 122.4  | 119.0  | 117.5  | 118.2  | 120.1  |
| 30°   | 152.6  | 144.2  | 139.3  | 135.0  | 123.9  | 115.9  | 110.6  | 107.1  | 105.5  | 105.5  | 107.5  |
| 32.5° | 134.6  | 130.0  | 125.5  | 120.1  | 109.7  | 104.4  | 99.0   | 95.2   | 93.7   | 94.1   | 95.7   |
| 35°   | 112.1  | 110.6  | 111.7  | 106.8  | 97.9   | 93.3   | 87.9   | 83.7   | 82.6   | 83.0   | 84.5   |
| 37.5° | 99.5   | 92.6   | 96.8   | 94.1   | 89.1   | 83.0   | 76.1   | 72.3   | 70.4   | 71.5   | 72.3   |
| 40°   | 91.4   | 83.0   | 79.9   | 82.6   | 81.9   | 71.9   | 65.8   | 61.9   | 60.5   | 60.8   | 61.6   |
| 42.5° | 84.5   | 74.6   | 67.7   | 67.4   | 71.9   | 62.7   | 56.3   | 52.8   | 50.9   | 50.9   | 51.6   |
| 45°   | 78.1   | 67.4   | 58.9   | 52.4   | 60.5   | 53.2   | 47.0   | 44.0   | 41.7   | 41.7   | 42.1   |
| 47.5° | 73.0   | 61.2   | 51.2   | 42.9   | 45.6   | 43.6   | 38.7   | 35.6   | 33.3   | 33.3   | 33.6   |
| 50°   | 68.5   | 55.1   | 44.3   | 36.0   | 34.0   | 36.0   | 31.4   | 27.9   | 26.4   | 26.0   | 26.7   |
| 52.5° | 63.5   | 49.0   | 37.9   | 30.6   | 26.7   | 27.2   | 24.5   | 22.2   | 20.3   | 20.3   | 21.1   |
| 55°   | 58.5   | 44.0   | 32.9   | 26.0   | 22.2   | 20.3   | 19.5   | 18.0   | 16.5   | 16.5   | 17.2   |
| 57.5° | 53.6   | 38.7   | 27.9   | 21.4   | 17.6   | 16.0   | 16.0   | 14.9   | 13.8   | 13.8   | 14.5   |
| 60°   | 49.0   | 33.3   | 22.9   | 17.6   | 13.8   | 13.4   | 13.8   | 12.7   | 11.8   | 11.8   | 12.7   |
| 62.5° | 43.6   | 28.3   | 18.7   | 14.5   | 11.1   | 10.7   | 11.8   | 11.1   | 10.3   | 10.3   | 11.1   |
| 65°   | 37.1   | 24.1   | 14.9   | 11.1   | 8.4    | 8.4    | 10.0   | 9.2    | 8.4    | 8.4    | 9.2    |
| 67.5° | 31.4   | 20.3   | 11.5   | 8.0    | 6.1    | 6.5    | 8.4    | 7.6    | 7.3    | 7.3    | 8.0    |
| 70°   | 26.0   | 15.6   | 8.0    | 4.9    | 3.4    | 4.9    | 6.5    | 6.5    | 6.5    | 6.5    | 7.3    |
| 72.5° | 19.5   | 10.7   | 4.6    | 2.0    | 1.5    | 3.4    | 5.3    | 6.1    | 5.8    | 5.8    | 6.9    |
| 75°   | 12.7   | 6.1    | 1.5    | 0.0    | 0.0    | 2.0    | 4.2    | 4.9    | 4.9    | 4.6    | 5.8    |
| 77.5° | 7.3    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 2.7    | 2.3    | 2.0    | 1.5    | 2.7    |
| 80°   | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P382862

CATALOG NUMBER: GLEON-SA2B-735-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 359°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 | 2708.9 |
| 2.5°  | 2386.8 | 2432.0 | 2495.4 | 2562.8 | 2666.5 | 2748.7 | 2829.4 | 2898.6 | 2925.4 | 2936.5 |
| 5°    | 1889.2 | 1955.4 | 2048.3 | 2167.6 | 2354.7 | 2523.0 | 2693.6 | 2865.3 | 2940.0 | 2958.7 |
| 7.5°  | 1355.6 | 1440.2 | 1558.3 | 1707.9 | 1927.1 | 2145.1 | 2383.4 | 2635.4 | 2751.0 | 2780.0 |
| 10°   | 1003.3 | 1106.6 | 1242.0 | 1399.6 | 1608.8 | 1833.0 | 2092.7 | 2380.8 | 2512.7 | 2551.3 |
| 12.5° | 711.9  | 851.4  | 1032.8 | 1224.4 | 1405.7 | 1605.8 | 1868.5 | 2186.1 | 2324.5 | 2366.2 |
| 15°   | 418.1  | 553.1  | 767.7  | 1024.3 | 1256.6 | 1459.3 | 1726.3 | 2086.2 | 2238.8 | 2280.9 |
| 17.5° | 239.9  | 307.1  | 469.3  | 755.5  | 1070.6 | 1351.4 | 1681.5 | 2111.1 | 2290.9 | 2329.8 |
| 20°   | 183.2  | 204.7  | 270.4  | 486.5  | 853.4  | 1245.5 | 1681.5 | 2251.8 | 2473.3 | 2530.6 |
| 22.5° | 160.2  | 176.0  | 202.7  | 290.4  | 628.0  | 1131.8 | 1701.0 | 2455.3 | 2744.9 | 2808.3 |
| 25°   | 142.2  | 156.4  | 179.4  | 218.4  | 428.4  | 996.8  | 1747.3 | 2705.1 | 3064.6 | 3146.9 |
| 27.5° | 127.3  | 140.8  | 161.4  | 191.2  | 293.0  | 833.8  | 1809.6 | 2998.1 | 3417.3 | 3483.1 |
| 30°   | 114.0  | 126.6  | 145.3  | 166.4  | 226.1  | 649.1  | 1862.8 | 3274.3 | 3694.2 | 3765.0 |
| 32.5° | 101.4  | 112.8  | 129.7  | 145.3  | 185.1  | 480.0  | 1868.5 | 3493.0 | 3924.1 | 3994.5 |
| 35°   | 89.5   | 99.9   | 115.1  | 127.3  | 153.4  | 379.0  | 1779.4 | 3682.8 | 4154.1 | 4246.9 |
| 37.5° | 78.1   | 87.9   | 101.4  | 110.6  | 135.0  | 309.1  | 1643.2 | 3894.3 | 4448.9 | 4535.0 |
| 40°   | 67.4   | 76.1   | 89.9   | 96.0   | 127.7  | 237.5  | 1495.2 | 4116.1 | 4738.1 | 4816.9 |
| 42.5° | 57.4   | 65.8   | 79.2   | 91.0   | 112.1  | 177.5  | 1335.4 | 4324.2 | 4998.2 | 5080.8 |
| 45°   | 47.8   | 56.6   | 70.0   | 96.4   | 93.0   | 132.7  | 1164.3 | 4462.3 | 5203.6 | 5293.5 |
| 47.5° | 38.7   | 48.5   | 67.0   | 91.8   | 74.2   | 97.5   | 1029.0 | 4593.1 | 5359.3 | 5448.1 |
| 50°   | 31.0   | 40.9   | 75.4   | 81.9   | 60.8   | 74.6   | 972.3  | 4710.2 | 5461.4 | 5546.7 |
| 52.5° | 25.2   | 34.5   | 71.2   | 62.7   | 50.9   | 61.6   | 1002.9 | 4899.9 | 5555.9 | 5609.4 |
| 55°   | 21.1   | 27.2   | 42.9   | 43.6   | 43.2   | 52.4   | 1040.8 | 5172.2 | 5800.3 | 5825.5 |
| 57.5° | 18.4   | 21.8   | 29.8   | 33.6   | 36.3   | 46.7   | 1041.6 | 5563.2 | 6178.6 | 6194.3 |
| 60°   | 15.6   | 19.1   | 24.9   | 27.2   | 31.4   | 41.7   | 1003.7 | 5699.8 | 6327.4 | 6379.4 |
| 62.5° | 13.8   | 16.9   | 20.7   | 22.5   | 26.4   | 37.4   | 915.0  | 5502.0 | 6123.2 | 6211.6 |
| 65°   | 12.2   | 15.3   | 17.2   | 19.1   | 23.3   | 33.6   | 768.8  | 5106.5 | 5784.3 | 5876.5 |
| 67.5° | 10.7   | 13.4   | 15.3   | 17.2   | 21.1   | 29.8   | 566.1  | 4647.0 | 5395.2 | 5471.7 |
| 70°   | 9.6    | 11.8   | 13.8   | 15.3   | 18.4   | 25.2   | 343.5  | 3943.2 | 4857.5 | 4889.2 |
| 72.5° | 9.2    | 10.7   | 12.7   | 13.8   | 16.0   | 22.2   | 174.0  | 2897.9 | 3883.2 | 3934.9 |
| 75°   | 8.0    | 9.6    | 11.5   | 12.2   | 14.2   | 19.1   | 70.8   | 1903.3 | 2814.1 | 2897.1 |
| 77.5° | 6.5    | 8.8    | 10.3   | 11.1   | 12.2   | 15.6   | 36.0   | 1216.4 | 1974.9 | 2028.4 |
| 80°   | 2.3    | 6.5    | 8.8    | 9.2    | 10.3   | 11.5   | 23.8   | 666.0  | 1145.6 | 1168.5 |
| 82.5° | 0.0    | 4.2    | 6.9    | 6.5    | 7.3    | 8.8    | 15.3   | 316.7  | 756.2  | 764.6  |
| 85°   | 0.0    | 2.0    | 5.3    | 4.2    | 3.1    | 6.1    | 5.3    | 69.2   | 396.7  | 413.1  |
| 87.5° | 0.0    | 0.0    | 0.4    | 2.0    | 1.5    | 2.3    | 0.7    | 0.4    | 36.0   | 45.6   |
| 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

All Brands

Data applicable to all product families using SA light engines

Report Number: SP1-2101-121-7

Luminaire Tested: IFLD-S-SA2A-735-U-T2

Test Date: 03/04/2021

### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2101-121-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry:  $4\pi$   
 Issue Date: 03/04/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **IFLD-S-SA2A-735-U-T2**  
 Description: STREETWORKS INF FLOOD

PROGRAMMED @ 615mA.

### Spectral Parameters

|                           |        |           |      |      |       |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K):                  | 3388   | CRI (Ra): | 73.1 |      |       |
| CIE u':                   | 0.2371 | R1:       | 68.9 | R9:  | -34.6 |
| CIE v':                   | 0.5177 | R2:       | 81.1 | R10: | 57.8  |
| Duv:                      | 0.0032 | R3:       | 93.1 | R11: | 68.6  |
| CIE x:                    | 0.4153 | R4:       | 71.6 | R12: | 53.9  |
| CIE y:                    | 0.4030 | R5:       | 69.4 | R13: | 70.9  |
| CIE z:                    | 0.1817 | R6:       | 75.0 | R14: | 96.2  |
| Peak Wavelength (nm):     | 590    | R7:       | 79.5 |      |       |
| Dominant Wavelength (nm): | 580    | R8:       | 46.4 |      |       |
| Purity:                   | 45.7   |           |      |      |       |
| Rf:                       | 76.9   |           |      |      |       |
| Rg:                       | 94.4   |           |      |      |       |



### Test Conditions

Stabilization Time: 81M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.0/30%  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2101-121-7

| 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: SP1-2101-121-7

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-7

### 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       | 2672             | 0.0              | 490       | 34553            | 4.9              | 620       | 136720           | 35.6             | 750       | 5870             | 0.0              | 880       | 4216             | 0.0              |
| 365       | 2252             | 0.0              | 495       | 44336            | 8.0              | 625       | 126308           | 27.9             | 755       | 5421             | 0.0              | 885       | 4132             | 0.0              |
| 370       | 2217             | 0.0              | 500       | 54643            | 12.1             | 630       | 114625           | 20.7             | 760       | 5097             | 0.0              | 890       | 3992             | 0.0              |
| 375       | 2697             | 0.0              | 505       | 64676            | 18.1             | 635       | 103216           | 15.5             | 765       | 4626             | 0.0              | 895       | 3214             | 0.0              |
| 380       | 3039             | 0.0              | 510       | 73825            | 25.4             | 640       | 92605            | 11.1             | 770       | 3782             | 0.0              | 900       | 2580             | 0.0              |
| 385       | 2655             | 0.0              | 515       | 81872            | 33.9             | 645       | 83234            | 8.0              | 775       | 3506             | 0.0              | 905       | 1776             | 0.0              |
| 390       | 2357             | 0.0              | 520       | 88574            | 43.0             | 650       | 73263            | 5.4              | 780       | 3507             | 0.0              | 910       | 3995             | 0.0              |
| 395       | 2186             | 0.0              | 525       | 93289            | 50.1             | 655       | 64627            | 3.7              | 785       | 3267             | 0.0              | 915       | 4288             | 0.0              |
| 400       | 2015             | 0.0              | 530       | 98393            | 57.9             | 660       | 56614            | 2.4              | 790       | 2849             | 0.0              | 920       | 2446             | 0.0              |
| 405       | 2234             | 0.0              | 535       | 103269           | 64.0             | 665       | 49537            | 1.6              | 795       | 3037             | 0.0              | 925       | 3009             | 0.0              |
| 410       | 3412             | 0.0              | 540       | 107316           | 69.9             | 670       | 42866            | 0.9              | 800       | 2716             | 0.0              | 930       | 3026             | 0.0              |
| 415       | 6135             | 0.0              | 545       | 113101           | 75.3             | 675       | 36708            | 0.6              | 805       | 2648             | 0.0              | 935       | 4734             | 0.0              |
| 420       | 12146            | 0.0              | 550       | 120690           | 82.0             | 680       | 31814            | 0.4              | 810       | 3187             | 0.0              | 940       | 3719             | 0.0              |
| 425       | 23983            | 0.1              | 555       | 128583           | 87.8             | 685       | 27485            | 0.2              | 815       | 2931             | 0.0              | 945       | 1480             | 0.0              |
| 430       | 42142            | 0.3              | 560       | 137796           | 93.6             | 690       | 23698            | 0.1              | 820       | 2717             | 0.0              | 950       | 3450             | 0.0              |
| 435       | 68228            | 0.8              | 565       | 146577           | 97.5             | 695       | 20309            | 0.1              | 825       | 2236             | 0.0              | 955       | 5051             | 0.0              |
| 440       | 99323            | 1.6              | 570       | 154581           | 100.5            | 700       | 17890            | 0.1              | 830       | 2628             | 0.0              | 960       | 3176             | 0.0              |
| 445       | 115584           | 2.4              | 575       | 162633           | 101.2            | 705       | 15500            | 0.0              | 835       | 3140             | 0.0              | 965       | 5178             | 0.0              |
| 450       | 94997            | 2.5              | 580       | 168101           | 99.9             | 710       | 13699            | 0.0              | 840       | 3675             | 0.0              | 970       | 6385             | 0.0              |
| 455       | 61433            | 2.1              | 585       | 173145           | 96.2             | 715       | 12398            | 0.0              | 845       | 3283             | 0.0              | 975       | 3810             | 0.0              |
| 460       | 43373            | 1.8              | 590       | 174675           | 90.3             | 720       | 11147            | 0.0              | 850       | 3055             | 0.0              | 980       | 4322             | 0.0              |
| 465       | 32472            | 1.7              | 595       | 173724           | 82.3             | 725       | 9761             | 0.0              | 855       | 2932             | 0.0              | 985       | 4200             | 0.0              |
| 470       | 24257            | 1.5              | 600       | 171241           | 73.8             | 730       | 8651             | 0.0              | 860       | 3382             | 0.0              | 990       | 4661             | 0.0              |
| 475       | 21690            | 1.7              | 605       | 165134           | 64.0             | 735       | 7730             | 0.0              | 865       | 2605             | 0.0              | 995       | 6746             | 0.0              |
| 480       | 23173            | 2.2              | 610       | 156652           | 53.8             | 740       | 6847             | 0.0              | 870       | 3325             | 0.0              | 1000      | 4150             | 0.0              |
| 485       | 27564            | 3.3              | 615       | 147879           | 44.6             | 745       | 6124             | 0.0              | 875       | 3325             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2101-121-7

### Scotopic Flux vs. Wavelength



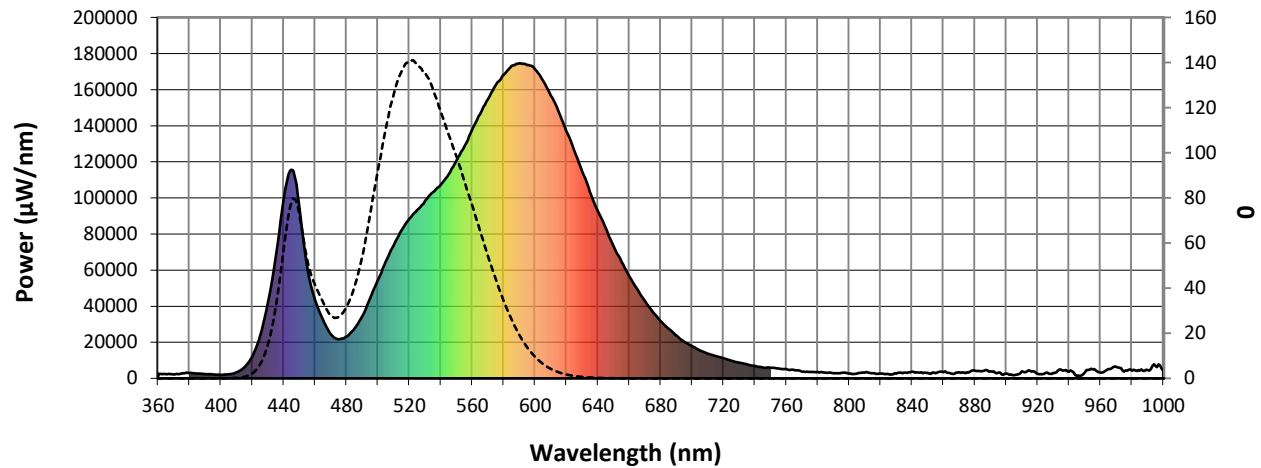
Scotopic Lumens: 12126

S/P: 1.36

| $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>( $\mu\text{W/nm}$ ) | Lumens<br>( $\Phi/\text{nm}$ ) |
|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|-------------------|-------------------------------|--------------------------------|
| 360               | 2672                          | 0.0                            | 490               | 34553                         | 53.2                           | 620               | 136720                        | 1.7                            | 750               | 5870                          | 0.0                            | 880               | 4216                          | 0.0                            |
| 365               | 2252                          | 0.0                            | 495               | 44336                         | 71.7                           | 625               | 126308                        | 1.1                            | 755               | 5421                          | 0.0                            | 885               | 4132                          | 0.0                            |
| 370               | 2217                          | 0.0                            | 500               | 54643                         | 91.4                           | 630               | 114625                        | 0.6                            | 760               | 5097                          | 0.0                            | 890               | 3992                          | 0.0                            |
| 375               | 2697                          | 0.0                            | 505               | 64676                         | 110.0                          | 635               | 103216                        | 0.4                            | 765               | 4626                          | 0.0                            | 895               | 3214                          | 0.0                            |
| 380               | 3039                          | 0.0                            | 510               | 73825                         | 125.1                          | 640               | 92605                         | 0.2                            | 770               | 3782                          | 0.0                            | 900               | 2580                          | 0.0                            |
| 385               | 2655                          | 0.0                            | 515               | 81872                         | 135.7                          | 645               | 83234                         | 0.1                            | 775               | 3506                          | 0.0                            | 905               | 1776                          | 0.0                            |
| 390               | 2357                          | 0.0                            | 520               | 88574                         | 140.8                          | 650               | 73263                         | 0.1                            | 780               | 3507                          | 0.0                            | 910               | 3995                          | 0.0                            |
| 395               | 2186                          | 0.0                            | 525               | 93289                         | 139.6                          | 655               | 64627                         | 0.1                            | 785               | 3267                          | 0.0                            | 915               | 4288                          | 0.0                            |
| 400               | 2015                          | 0.0                            | 530               | 98393                         | 135.7                          | 660               | 56614                         | 0.0                            | 790               | 2849                          | 0.0                            | 920               | 2446                          | 0.0                            |
| 405               | 2234                          | 0.1                            | 535               | 103269                        | 128.7                          | 665               | 49537                         | 0.0                            | 795               | 3037                          | 0.0                            | 925               | 3009                          | 0.0                            |
| 410               | 3412                          | 0.2                            | 540               | 107316                        | 118.6                          | 670               | 42866                         | 0.0                            | 800               | 2716                          | 0.0                            | 930               | 3026                          | 0.0                            |
| 415               | 6135                          | 0.6                            | 545               | 113101                        | 108.4                          | 675               | 36708                         | 0.0                            | 805               | 2648                          | 0.0                            | 935               | 4734                          | 0.0                            |
| 420               | 12146                         | 2.0                            | 550               | 120690                        | 98.7                           | 680               | 31814                         | 0.0                            | 810               | 3187                          | 0.0                            | 940               | 3719                          | 0.0                            |
| 425               | 23983                         | 5.9                            | 555               | 128583                        | 87.9                           | 685               | 27485                         | 0.0                            | 815               | 2931                          | 0.0                            | 945               | 1480                          | 0.0                            |
| 430               | 42142                         | 14.3                           | 560               | 137796                        | 77.0                           | 690               | 23698                         | 0.0                            | 820               | 2717                          | 0.0                            | 950               | 3450                          | 0.0                            |
| 435               | 68228                         | 30.5                           | 565               | 146577                        | 65.8                           | 695               | 20309                         | 0.0                            | 825               | 2236                          | 0.0                            | 955               | 5051                          | 0.0                            |
| 440               | 99323                         | 55.5                           | 570               | 154581                        | 54.6                           | 700               | 17890                         | 0.0                            | 830               | 2628                          | 0.0                            | 960               | 3176                          | 0.0                            |
| 445               | 115584                        | 77.4                           | 575               | 162633                        | 44.3                           | 705               | 15500                         | 0.0                            | 835               | 3140                          | 0.0                            | 965               | 5178                          | 0.0                            |
| 450               | 94997                         | 73.6                           | 580               | 168101                        | 34.6                           | 710               | 13699                         | 0.0                            | 840               | 3675                          | 0.0                            | 970               | 6385                          | 0.0                            |
| 455               | 61433                         | 53.7                           | 585               | 173145                        | 26.5                           | 715               | 12398                         | 0.0                            | 845               | 3283                          | 0.0                            | 975               | 3810                          | 0.0                            |
| 460               | 43373                         | 41.9                           | 590               | 174675                        | 19.5                           | 720               | 11147                         | 0.0                            | 850               | 3055                          | 0.0                            | 980               | 4322                          | 0.0                            |
| 465               | 32472                         | 34.3                           | 595               | 173724                        | 13.9                           | 725               | 9761                          | 0.0                            | 855               | 2932                          | 0.0                            | 985               | 4200                          | 0.0                            |
| 470               | 24257                         | 27.9                           | 600               | 171241                        | 9.7                            | 730               | 8651                          | 0.0                            | 860               | 3382                          | 0.0                            | 990               | 4661                          | 0.0                            |
| 475               | 21690                         | 27.1                           | 605               | 165134                        | 6.5                            | 735               | 7730                          | 0.0                            | 865               | 2605                          | 0.0                            | 995               | 6746                          | 0.0                            |
| 480               | 23173                         | 31.3                           | 610               | 156652                        | 4.2                            | 740               | 6847                          | 0.0                            | 870               | 3325                          | 0.0                            | 1000              | 4150                          | 0.0                            |
| 485               | 27564                         | 40.0                           | 615               | 147879                        | 2.7                            | 745               | 6124                          | 0.0                            | 875               | 3325                          | 0.0                            |                   |                               |                                |

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### Melanopic Flux vs. Wavelength


**Melanopic Lumens: 4490.7**
**M/P: 0.5**

| 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       | 2672             | 0.0              | 490       | 34553            | 28.8             | 620       | 136720           | 0.1              | 750       | 5870             | 0.0              | 880       | 4216             | 0.0              |
| 365       | 2252             | 0.0              | 495       | 44336            | 36.6             | 625       | 126308           | 0.1              | 755       | 5421             | 0.0              | 885       | 4132             | 0.0              |
| 370       | 2217             | 0.0              | 500       | 54643            | 43.9             | 630       | 114625           | 0.0              | 760       | 5097             | 0.0              | 890       | 3992             | 0.0              |
| 375       | 2697             | 0.0              | 505       | 64676            | 49.6             | 635       | 103216           | 0.0              | 765       | 4626             | 0.0              | 895       | 3214             | 0.0              |
| 380       | 3039             | 0.0              | 510       | 73825            | 53.0             | 640       | 92605            | 0.0              | 770       | 3782             | 0.0              | 900       | 2580             | 0.0              |
| 385       | 2655             | 0.0              | 515       | 81872            | 53.5             | 645       | 83234            | 0.0              | 775       | 3506             | 0.0              | 905       | 1776             | 0.0              |
| 390       | 2357             | 0.0              | 520       | 88574            | 51.6             | 650       | 73263            | 0.0              | 780       | 3507             | 0.0              | 910       | 3995             | 0.0              |
| 395       | 2186             | 0.0              | 525       | 93289            | 47.3             | 655       | 64627            | 0.0              | 785       | 3267             | 0.0              | 915       | 4288             | 0.0              |
| 400       | 2015             | 0.0              | 530       | 98393            | 42.5             | 660       | 56614            | 0.0              | 790       | 2849             | 0.0              | 920       | 2446             | 0.0              |
| 405       | 2234             | 0.0              | 535       | 103269           | 37.2             | 665       | 49537            | 0.0              | 795       | 3037             | 0.0              | 925       | 3009             | 0.0              |
| 410       | 3412             | 0.1              | 540       | 107316           | 31.4             | 670       | 42866            | 0.0              | 800       | 2716             | 0.0              | 930       | 3026             | 0.0              |
| 415       | 6135             | 0.4              | 545       | 113101           | 26.3             | 675       | 36708            | 0.0              | 805       | 2648             | 0.0              | 935       | 4734             | 0.0              |
| 420       | 12146            | 1.4              | 550       | 120690           | 21.7             | 680       | 31814            | 0.0              | 810       | 3187             | 0.0              | 940       | 3719             | 0.0              |
| 425       | 23983            | 3.7              | 555       | 128583           | 17.3             | 685       | 27485            | 0.0              | 815       | 2931             | 0.0              | 945       | 1480             | 0.0              |
| 430       | 42142            | 8.9              | 560       | 137796           | 13.6             | 690       | 23698            | 0.0              | 820       | 2717             | 0.0              | 950       | 3450             | 0.0              |
| 435       | 68228            | 18.2             | 565       | 146577           | 10.3             | 695       | 20309            | 0.0              | 825       | 2236             | 0.0              | 955       | 5051             | 0.0              |
| 440       | 99323            | 33.2             | 570       | 154581           | 7.6              | 700       | 17890            | 0.0              | 830       | 2628             | 0.0              | 960       | 3176             | 0.0              |
| 445       | 115584           | 45.6             | 575       | 162633           | 5.4              | 705       | 15500            | 0.0              | 835       | 3140             | 0.0              | 965       | 5178             | 0.0              |
| 450       | 94997            | 43.8             | 580       | 168101           | 3.8              | 710       | 13699            | 0.0              | 840       | 3675             | 0.0              | 970       | 6385             | 0.0              |
| 455       | 61433            | 32.2             | 585       | 173145           | 2.6              | 715       | 12398            | 0.0              | 845       | 3283             | 0.0              | 975       | 3810             | 0.0              |
| 460       | 43373            | 25.6             | 590       | 174675           | 1.7              | 720       | 11147            | 0.0              | 850       | 3055             | 0.0              | 980       | 4322             | 0.0              |
| 465       | 32472            | 21.2             | 595       | 173724           | 1.1              | 725       | 9761             | 0.0              | 855       | 2932             | 0.0              | 985       | 4200             | 0.0              |
| 470       | 24257            | 17.4             | 600       | 171241           | 0.7              | 730       | 8651             | 0.0              | 860       | 3382             | 0.0              | 990       | 4661             | 0.0              |
| 475       | 21690            | 16.6             | 605       | 165134           | 0.5              | 735       | 7730             | 0.0              | 865       | 2605             | 0.0              | 995       | 6746             | 0.0              |
| 480       | 23173            | 18.6             | 610       | 156652           | 0.3              | 740       | 6847             | 0.0              | 870       | 3325             | 0.0              | 1000      | 4150             | 0.0              |
| 485       | 27564            | 22.7             | 615       | 147879           | 0.2              | 745       | 6124             | 0.0              | 875       | 3325             | 0.0              |           |                  |                  |

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### Summary

$R_f = 76.9$   
 $R_g = 94.4$   
 CIE  $R_a = 73.1$   
 $R_g = -34.6$

### Spectral Power Distribution Comparison



### Color Vector Graphics



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

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 68 | CES51 = 90 | CES76 = 63 |
| CES02 = 62 | CES27 = 88 | CES52 = 89 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 80 | CES78 = 65 |
| CES04 = 70 | CES29 = 67 | CES54 = 84 | CES79 = 87 |
| CES05 = 48 | CES30 = 74 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 71 | CES56 = 75 | CES81 = 75 |
| CES07 = 40 | CES32 = 67 | CES57 = 74 | CES82 = 94 |
| CES08 = 39 | CES33 = 74 | CES58 = 76 | CES83 = 91 |
| CES09 = 29 | CES34 = 78 | CES59 = 87 | CES84 = 89 |
| CES10 = 75 | CES35 = 89 | CES60 = 93 | CES85 = 80 |
| CES11 = 58 | CES36 = 98 | CES61 = 86 | CES86 = 66 |
| CES12 = 64 | CES37 = 86 | CES62 = 89 | CES87 = 79 |
| CES13 = 43 | CES38 = 82 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 95 | CES64 = 74 | CES89 = 70 |
| CES15 = 71 | CES40 = 91 | CES65 = 68 | CES90 = 77 |
| CES16 = 47 | CES41 = 89 | CES66 = 71 | CES91 = 88 |
| CES17 = 50 | CES42 = 88 | CES67 = 69 | CES92 = 60 |
| CES18 = 56 | CES43 = 82 | CES68 = 74 | CES93 = 77 |
| CES19 = 72 | CES44 = 99 | CES69 = 82 | CES94 = 52 |
| CES20 = 65 | CES45 = 87 | CES70 = 67 | CES95 = 69 |
| CES21 = 86 | CES46 = 82 | CES71 = 66 | CES96 = 78 |
| CES22 = 79 | CES47 = 82 | CES72 = 88 | CES97 = 85 |
| CES23 = 92 | CES48 = 72 | CES73 = 59 | CES98 = 76 |
| CES24 = 91 | CES49 = 82 | CES74 = 97 | CES99 = 63 |
| CES25 = 72 | CES50 = 88 | CES75 = 66 |            |



Color Rendition by Hue-Angle Bin



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**Measure Comparisons**



(END OF REPORT)