

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: P324245

Luminaire Tested: **GLEON-SA1C-760-U-SLL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P324245  
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-SA1C-760-U-SLL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5491 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

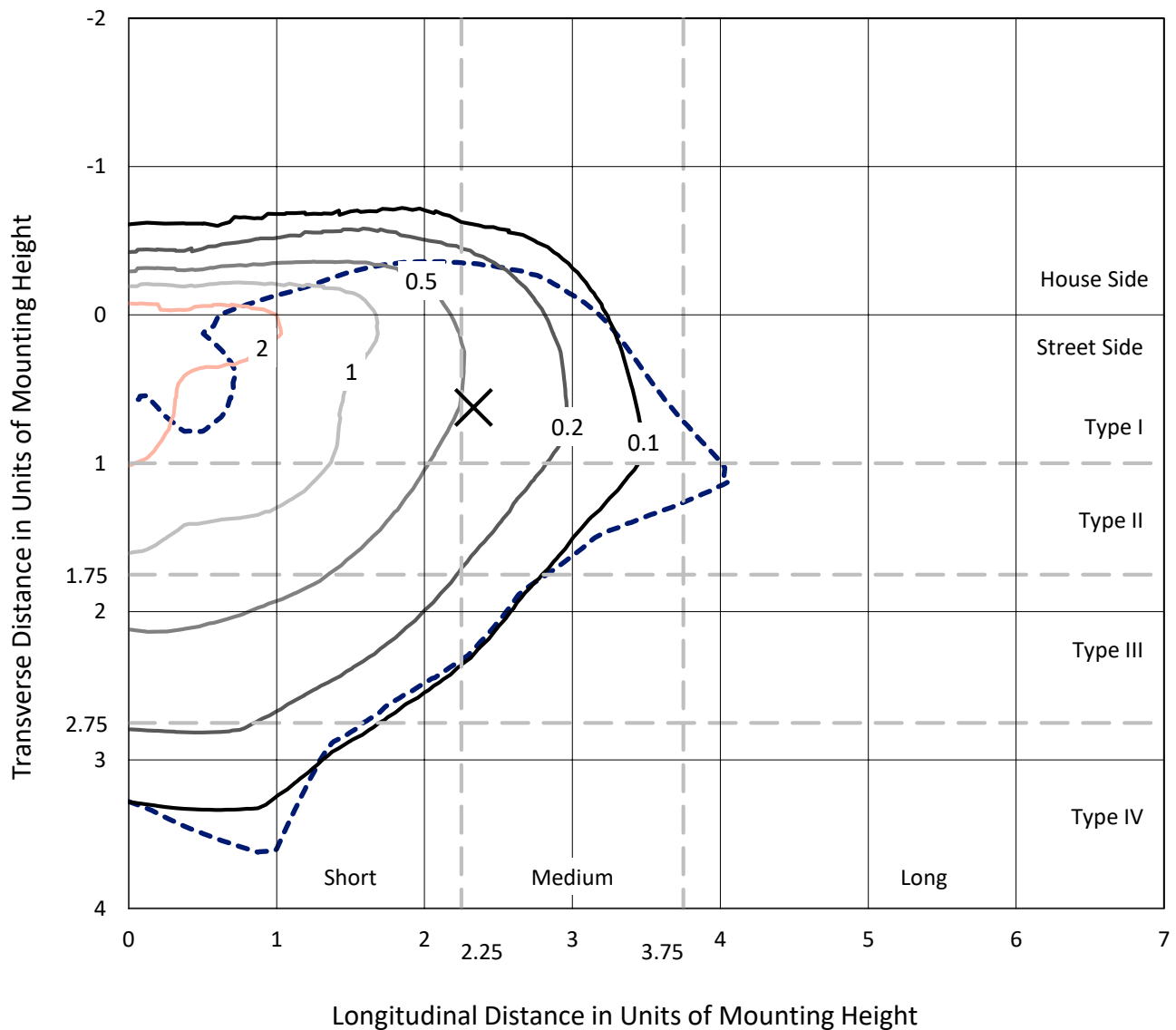
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P324245  
 CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

## Iso-Footcandle Lines of Horizontal Illumination

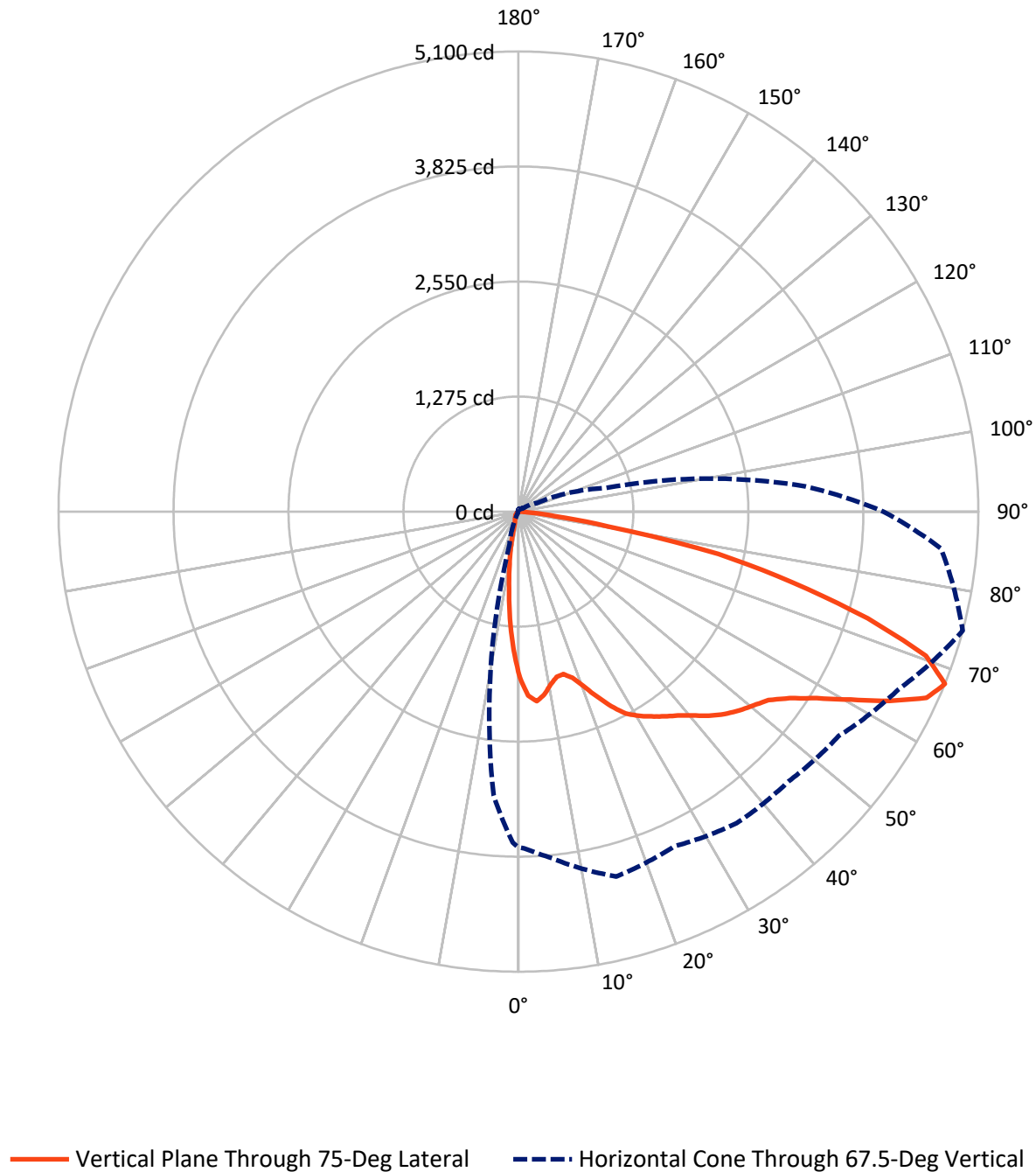
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P324245  
CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P324245

CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

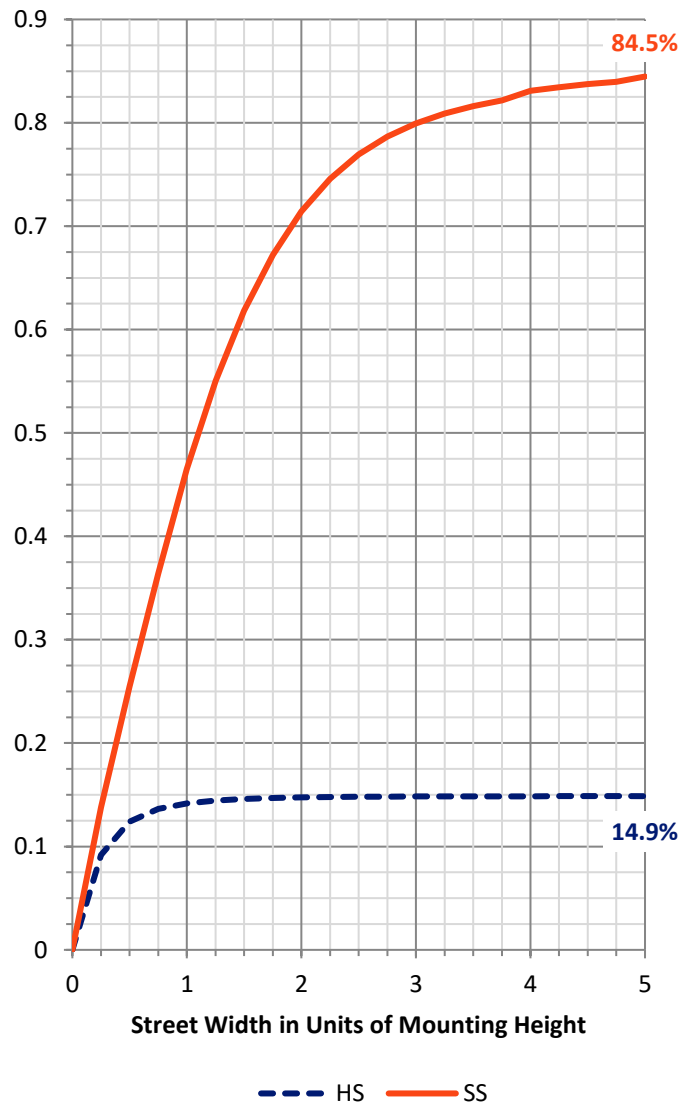
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 824.0    | 0.0    | 824.0  |
|                    | % Fixture | 15.0     | 0.0    | 15.0   |
| <b>Street Side</b> | Lumens    | 4667.0   | 0.0    | 4667.0 |
|                    | % Fixture | 85.0     | 0.0    | 85.0   |
| <b>Total</b>       | Lumens    | 5491.0   | 0.0    | 5491.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 139.7  | 2.5       |
| 10°-20°   | 275.1  | 5.0       |
| 20°-30°   | 389.2  | 7.1       |
| 30°-40°   | 572.3  | 10.4      |
| 40°-50°   | 822.6  | 15.0      |
| 50°-60°   | 1158.0 | 21.1      |
| 60°-70°   | 1352.4 | 24.6      |
| 70°-80°   | 690.0  | 12.6      |
| 80°-90°   | 91.7   | 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°    | 5491.0 | 100.0     |
| 0°-180°   | 5491.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P324245

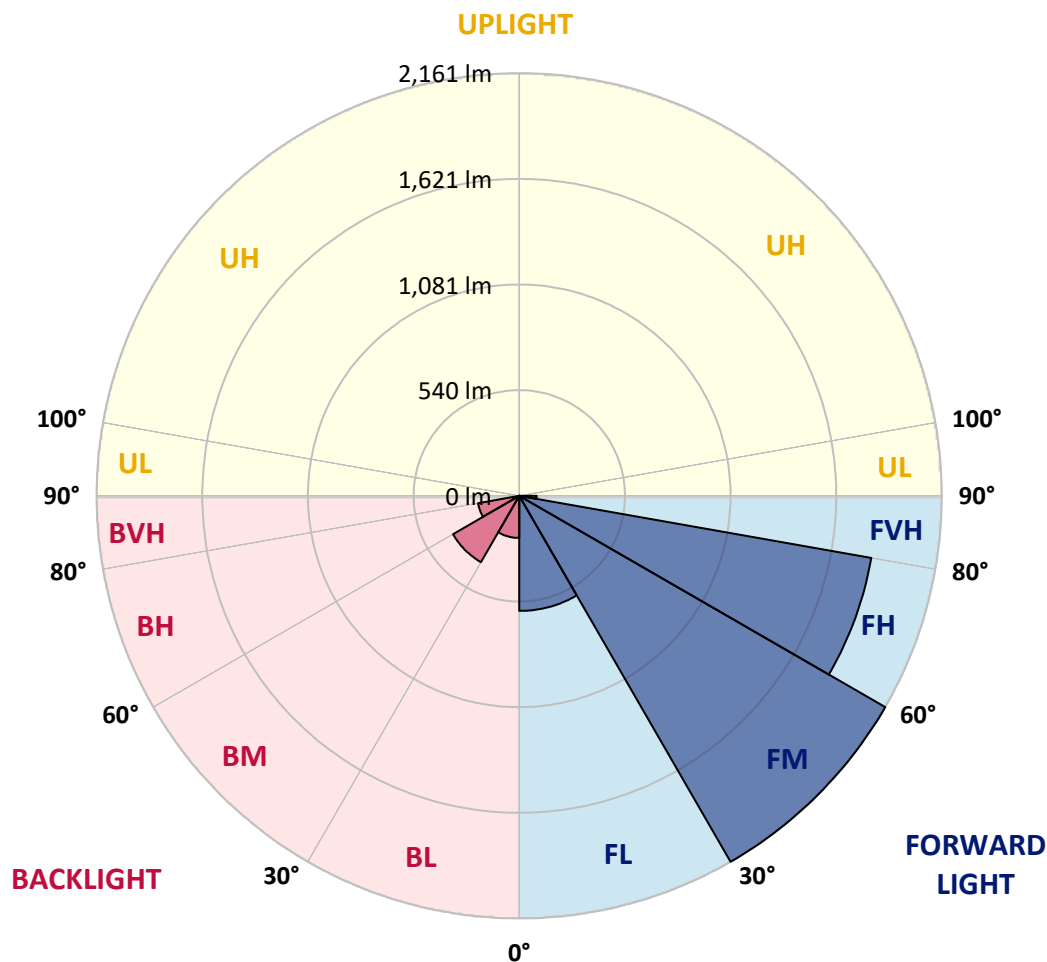
CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 588.6  | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 2161.2 | 39.4      |                         |      |         |
| FH   | (60°-80°)   | 1828.3 | 33.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.9   | 1.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 215.5  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 391.7  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 214.0  | 3.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 2.8    | 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





REPORT NUMBER: P324245

CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 |
| 2.5°  | 1996.9 | 2000.0 | 2016.2 | 2053.6 | 2094.4 | 2097.6 | 2125.1 | 2096.8 | 2087.2 | 2041.4 | 1994.0 |
| 5°    | 2012.0 | 2024.0 | 2079.4 | 2189.4 | 2284.9 | 2315.5 | 2337.4 | 2281.7 | 2223.2 | 2111.4 | 1992.0 |
| 7.5°  | 1890.5 | 1910.5 | 1997.7 | 2204.2 | 2374.9 | 2450.3 | 2464.6 | 2377.5 | 2234.1 | 2050.0 | 1870.5 |
| 10°   | 1735.0 | 1757.9 | 1862.9 | 2116.8 | 2351.2 | 2480.5 | 2500.2 | 2386.0 | 2180.0 | 1950.6 | 1739.1 |
| 12.5° | 1609.1 | 1635.9 | 1743.3 | 2018.5 | 2269.8 | 2412.8 | 2451.8 | 2357.2 | 2133.2 | 1880.1 | 1649.4 |
| 15°   | 1551.1 | 1581.8 | 1694.7 | 1955.0 | 2179.5 | 2292.1 | 2324.4 | 2283.6 | 2107.2 | 1868.9 | 1628.6 |
| 17.5° | 1584.4 | 1617.7 | 1734.2 | 1960.5 | 2094.7 | 2142.8 | 2168.8 | 2185.5 | 2107.2 | 1936.3 | 1689.4 |
| 20°   | 1720.9 | 1756.8 | 1880.1 | 2015.9 | 2024.5 | 2006.5 | 2034.4 | 2092.9 | 2131.6 | 2064.3 | 1835.6 |
| 22.5° | 1909.8 | 1951.9 | 2091.1 | 2110.8 | 1990.1 | 1922.3 | 1925.9 | 2017.7 | 2176.1 | 2226.6 | 2038.5 |
| 25°   | 2140.0 | 2191.5 | 2333.0 | 2252.3 | 2004.4 | 1872.0 | 1870.7 | 1955.8 | 2219.6 | 2389.2 | 2264.6 |
| 27.5° | 2368.6 | 2425.3 | 2549.7 | 2425.1 | 2063.5 | 1862.9 | 1860.3 | 1937.1 | 2262.0 | 2533.8 | 2511.4 |
| 30°   | 2560.3 | 2615.5 | 2722.6 | 2550.2 | 2127.2 | 1884.3 | 1871.8 | 1957.1 | 2287.2 | 2627.7 | 2691.4 |
| 32.5° | 2716.4 | 2760.6 | 2847.2 | 2636.3 | 2195.4 | 1925.6 | 1898.6 | 2010.7 | 2330.1 | 2707.0 | 2856.8 |
| 35°   | 2888.1 | 2934.6 | 2969.2 | 2718.2 | 2271.8 | 1985.2 | 1946.4 | 2095.7 | 2396.2 | 2787.7 | 3038.1 |
| 37.5° | 3083.9 | 3130.2 | 3126.1 | 2793.1 | 2368.9 | 2083.8 | 2059.1 | 2230.5 | 2498.9 | 2867.5 | 3240.5 |
| 40°   | 3275.6 | 3323.0 | 3289.2 | 2875.1 | 2482.8 | 2246.4 | 2228.1 | 2432.9 | 2636.5 | 2969.7 | 3477.7 |
| 42.5° | 3455.1 | 3506.4 | 3434.0 | 2952.6 | 2618.6 | 2451.3 | 2482.5 | 2693.5 | 2808.7 | 3095.6 | 3682.2 |
| 45°   | 3599.7 | 3652.0 | 3555.5 | 3028.0 | 2761.6 | 2700.0 | 2793.9 | 2982.2 | 3015.8 | 3202.0 | 3820.3 |
| 47.5° | 3704.8 | 3754.2 | 3639.8 | 3103.4 | 2944.8 | 3004.1 | 3167.7 | 3285.0 | 3202.8 | 3294.4 | 3918.4 |
| 50°   | 3771.9 | 3810.4 | 3664.5 | 3197.9 | 3185.1 | 3358.9 | 3557.1 | 3614.3 | 3378.9 | 3377.6 | 4037.5 |
| 52.5° | 3814.6 | 3832.0 | 3682.7 | 3296.4 | 3435.9 | 3745.1 | 3938.4 | 3956.4 | 3560.2 | 3469.2 | 4198.0 |
| 55°   | 3961.6 | 3975.6 | 3811.7 | 3415.8 | 3643.2 | 4083.6 | 4283.3 | 4266.7 | 3765.4 | 3648.4 | 4387.4 |
| 57.5° | 4212.3 | 4227.1 | 4078.3 | 3587.5 | 3810.9 | 4292.7 | 4533.3 | 4563.2 | 4006.0 | 3900.2 | 4590.3 |
| 60°   | 4338.2 | 4365.8 | 4312.7 | 3805.0 | 3973.5 | 4426.4 | 4703.7 | 4799.1 | 4306.7 | 4232.1 | 4786.9 |
| 62.5° | 4224.0 | 4264.1 | 4341.1 | 4046.1 | 4135.1 | 4500.0 | 4756.7 | 4883.7 | 4614.7 | 4618.9 | 4908.1 |
| 65°   | 3996.2 | 4028.1 | 4158.7 | 4178.2 | 4228.7 | 4490.9 | 4625.6 | 4765.6 | 4803.3 | 4974.2 | 4901.6 |
| 67.5° | 3720.9 | 3732.9 | 3843.7 | 4188.6 | 4092.9 | 4217.2 | 4231.8 | 4335.3 | 4654.2 | 5100.1 | 4704.7 |
| 70°   | 3324.8 | 3331.3 | 3428.1 | 3840.3 | 3517.3 | 3544.6 | 3523.0 | 3544.1 | 4001.4 | 4793.4 | 4207.6 |
| 72.5° | 2675.8 | 2692.2 | 2829.8 | 3189.3 | 2562.4 | 2483.6 | 2653.2 | 2643.8 | 3081.6 | 4049.7 | 3125.0 |
| 75°   | 1970.1 | 1998.5 | 2206.3 | 2568.9 | 1798.4 | 1626.8 | 1750.6 | 1783.6 | 2190.7 | 3132.6 | 1954.2 |
| 77.5° | 1379.4 | 1400.5 | 1601.8 | 1888.4 | 1301.6 | 1163.2 | 1118.5 | 1157.8 | 1446.0 | 2266.1 | 984.5  |
| 80°   | 794.7  | 802.5  | 931.0  | 1090.4 | 877.1  | 1003.5 | 909.1  | 936.2  | 866.4  | 1008.2 | 423.5  |
| 82.5° | 520.0  | 521.3  | 571.5  | 649.0  | 546.2  | 634.7  | 469.8  | 600.6  | 533.0  | 405.0  | 137.9  |
| 85°   | 280.9  | 282.5  | 331.4  | 460.7  | 309.3  | 174.8  | 102.7  | 211.0  | 329.6  | 92.9   | 37.7   |
| 87.5° | 31.0   | 28.4   | 99.9   | 167.5  | 85.8   | 15.9   | 5.5    | 23.7   | 52.8   | 6.0    | 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: P324245

CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 |
| 2.5°  | 1969.9 | 1948.3 | 1894.4 | 1837.5 | 1791.7 | 1748.8 | 1705.6 | 1652.8 | 1611.9 | 1603.6 | 1590.1 |
| 5°    | 1927.7 | 1859.3 | 1746.4 | 1633.0 | 1541.7 | 1426.5 | 1353.4 | 1296.4 | 1240.8 | 1237.4 | 1226.2 |
| 7.5°  | 1780.5 | 1690.5 | 1531.6 | 1374.7 | 1246.2 | 1136.4 | 1025.6 | 951.5  | 893.2  | 872.7  | 860.5  |
| 10°   | 1639.0 | 1537.8 | 1339.3 | 1160.4 | 1045.7 | 948.6  | 870.6  | 793.1  | 722.9  | 674.5  | 652.6  |
| 12.5° | 1540.1 | 1428.3 | 1209.5 | 1055.3 | 973.1  | 881.0  | 785.8  | 689.0  | 608.1  | 549.9  | 514.2  |
| 15°   | 1501.9 | 1382.5 | 1166.1 | 1013.7 | 912.2  | 795.7  | 674.0  | 563.4  | 473.7  | 420.9  | 388.9  |
| 17.5° | 1547.4 | 1408.5 | 1162.7 | 962.9  | 821.2  | 676.3  | 541.8  | 411.2  | 326.7  | 286.6  | 266.1  |
| 20°   | 1662.9 | 1491.2 | 1161.4 | 900.8  | 713.0  | 534.8  | 367.0  | 270.5  | 219.3  | 196.9  | 187.3  |
| 22.5° | 1826.3 | 1596.8 | 1171.8 | 839.4  | 600.3  | 382.1  | 253.4  | 198.7  | 172.5  | 160.5  | 155.0  |
| 25°   | 2036.4 | 1745.1 | 1201.2 | 783.7  | 494.5  | 285.1  | 197.4  | 166.5  | 148.0  | 138.6  | 134.7  |
| 27.5° | 2260.4 | 1915.7 | 1247.0 | 735.3  | 408.4  | 227.3  | 169.1  | 142.5  | 129.3  | 122.8  | 119.1  |
| 30°   | 2445.1 | 2113.4 | 1293.3 | 681.5  | 346.0  | 198.2  | 154.8  | 130.1  | 114.7  | 110.5  | 107.2  |
| 32.5° | 2606.6 | 2263.0 | 1326.1 | 632.9  | 305.1  | 176.1  | 139.9  | 116.3  | 105.9  | 97.8   | 94.2   |
| 35°   | 2773.9 | 2387.6 | 1325.0 | 598.8  | 277.0  | 159.5  | 127.5  | 104.0  | 91.6   | 82.2   | 79.3   |
| 37.5° | 2954.9 | 2528.3 | 1302.4 | 569.7  | 264.8  | 146.2  | 120.4  | 97.5   | 85.1   | 75.7   | 72.1   |
| 40°   | 3166.9 | 2676.1 | 1279.2 | 542.3  | 261.4  | 135.5  | 115.5  | 92.3   | 79.1   | 70.0   | 66.3   |
| 42.5° | 3373.4 | 2809.2 | 1259.0 | 522.1  | 246.8  | 135.3  | 111.1  | 88.4   | 74.4   | 65.5   | 61.4   |
| 45°   | 3538.6 | 2933.3 | 1255.1 | 509.8  | 231.5  | 139.9  | 108.7  | 85.8   | 70.8   | 61.9   | 58.0   |
| 47.5° | 3675.9 | 3068.1 | 1280.0 | 501.2  | 216.9  | 127.7  | 114.5  | 84.0   | 67.4   | 58.8   | 54.4   |
| 50°   | 3839.3 | 3233.5 | 1338.8 | 487.2  | 201.6  | 115.0  | 131.1  | 84.5   | 64.5   | 55.7   | 51.0   |
| 52.5° | 4067.2 | 3462.4 | 1425.2 | 463.5  | 180.5  | 103.3  | 129.0  | 85.1   | 61.4   | 52.3   | 47.6   |
| 55°   | 4322.6 | 3748.3 | 1518.0 | 424.2  | 151.1  | 87.9   | 110.5  | 81.4   | 55.4   | 48.6   | 44.2   |
| 57.5° | 4591.0 | 4007.6 | 1573.2 | 377.4  | 120.2  | 76.0   | 88.4   | 74.1   | 48.9   | 43.7   | 40.8   |
| 60°   | 4633.2 | 4106.2 | 1547.9 | 319.9  | 95.5   | 66.1   | 65.5   | 75.4   | 43.7   | 38.5   | 36.4   |
| 62.5° | 4528.3 | 3982.4 | 1426.0 | 268.7  | 79.9   | 58.0   | 53.8   | 65.8   | 39.5   | 34.3   | 32.3   |
| 65°   | 4326.8 | 3647.6 | 1228.3 | 242.2  | 74.1   | 49.7   | 44.7   | 46.3   | 34.6   | 29.9   | 28.1   |
| 67.5° | 4046.4 | 3200.7 | 1008.5 | 227.1  | 73.4   | 42.7   | 38.2   | 35.1   | 29.9   | 26.0   | 24.5   |
| 70°   | 3473.1 | 2666.4 | 804.5  | 218.8  | 71.3   | 35.9   | 32.3   | 28.6   | 25.0   | 22.1   | 20.8   |
| 72.5° | 2556.2 | 1889.5 | 625.8  | 209.7  | 71.8   | 28.6   | 28.1   | 23.7   | 20.0   | 17.2   | 16.6   |
| 75°   | 1476.9 | 1079.5 | 410.5  | 169.9  | 68.4   | 22.1   | 23.4   | 16.6   | 14.0   | 12.0   | 12.0   |
| 77.5° | 787.1  | 658.4  | 156.3  | 70.8   | 25.0   | 14.0   | 13.3   | 9.9    | 8.8    | 7.3    | 7.0    |
| 80°   | 343.1  | 289.8  | 47.1   | 19.8   | 13.8   | 7.5    | 4.9    | 4.4    | 3.9    | 3.1    | 2.9    |
| 82.5° | 121.5  | 104.8  | 15.3   | 9.6    | 6.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 27.6   | 19.8   | 0.0    | 2.3    | 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: P324245

CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 |
| 2.5°  | 1562.5 | 1556.8 | 1523.0 | 1524.3 | 1530.3 | 1538.8 | 1518.6 | 1527.9 | 1553.1 | 1577.3 | 1586.4 |
| 5°    | 1208.2 | 1209.5 | 1189.0 | 1201.7 | 1213.2 | 1221.0 | 1188.2 | 1188.7 | 1208.8 | 1236.1 | 1250.4 |
| 7.5°  | 851.4  | 849.3  | 850.3  | 880.8  | 902.3  | 886.7  | 899.0  | 856.6  | 859.2  | 878.7  | 864.1  |
| 10°   | 632.9  | 604.2  | 588.1  | 611.0  | 634.7  | 626.1  | 605.0  | 591.2  | 600.9  | 622.5  | 620.9  |
| 12.5° | 497.3  | 456.2  | 432.1  | 415.7  | 435.2  | 419.0  | 418.5  | 406.6  | 393.6  | 395.9  | 430.5  |
| 15°   | 374.0  | 344.1  | 315.5  | 289.2  | 288.7  | 283.3  | 255.4  | 224.2  | 221.6  | 223.2  | 241.1  |
| 17.5° | 257.3  | 247.1  | 235.4  | 212.8  | 206.8  | 183.9  | 156.8  | 144.4  | 138.1  | 141.0  | 147.0  |
| 20°   | 180.8  | 176.9  | 178.2  | 166.0  | 157.4  | 135.5  | 119.7  | 114.7  | 113.7  | 116.5  | 119.4  |
| 22.5° | 149.8  | 142.8  | 142.0  | 136.6  | 128.0  | 112.1  | 103.5  | 100.7  | 99.4   | 102.0  | 104.0  |
| 25°   | 131.1  | 124.1  | 121.2  | 117.8  | 108.7  | 97.8   | 92.6   | 90.0   | 88.7   | 90.3   | 91.6   |
| 27.5° | 115.5  | 109.0  | 106.4  | 104.0  | 95.2   | 87.4   | 83.2   | 80.9   | 79.9   | 80.4   | 81.7   |
| 30°   | 103.8  | 98.1   | 94.7   | 91.8   | 84.3   | 78.8   | 75.2   | 72.8   | 71.8   | 71.8   | 73.1   |
| 32.5° | 91.6   | 88.4   | 85.3   | 81.7   | 74.7   | 71.0   | 67.4   | 64.8   | 63.7   | 64.0   | 65.0   |
| 35°   | 76.2   | 75.2   | 76.0   | 72.6   | 66.6   | 63.5   | 59.8   | 57.0   | 56.2   | 56.4   | 57.5   |
| 37.5° | 67.6   | 62.9   | 65.8   | 64.0   | 60.6   | 56.4   | 51.8   | 49.2   | 47.9   | 48.6   | 49.2   |
| 40°   | 62.2   | 56.4   | 54.4   | 56.2   | 55.7   | 48.9   | 44.7   | 42.1   | 41.1   | 41.4   | 41.9   |
| 42.5° | 57.5   | 50.7   | 46.0   | 45.8   | 48.9   | 42.7   | 38.2   | 35.9   | 34.6   | 34.6   | 35.1   |
| 45°   | 53.1   | 45.8   | 40.1   | 35.6   | 41.1   | 36.2   | 32.0   | 29.9   | 28.4   | 28.4   | 28.6   |
| 47.5° | 49.7   | 41.6   | 34.9   | 29.1   | 31.0   | 29.7   | 26.3   | 24.2   | 22.6   | 22.6   | 22.9   |
| 50°   | 46.6   | 37.5   | 30.2   | 24.5   | 23.2   | 24.5   | 21.3   | 19.0   | 17.9   | 17.7   | 18.2   |
| 52.5° | 43.2   | 33.3   | 25.8   | 20.8   | 18.2   | 18.5   | 16.6   | 15.1   | 13.8   | 13.8   | 14.3   |
| 55°   | 39.8   | 29.9   | 22.4   | 17.7   | 15.1   | 13.8   | 13.3   | 12.2   | 11.2   | 11.2   | 11.7   |
| 57.5° | 36.4   | 26.3   | 19.0   | 14.6   | 12.0   | 10.9   | 10.9   | 10.1   | 9.4    | 9.4    | 9.9    |
| 60°   | 33.3   | 22.6   | 15.6   | 12.0   | 9.4    | 9.1    | 9.4    | 8.6    | 8.1    | 8.1    | 8.6    |
| 62.5° | 29.7   | 19.2   | 12.7   | 9.9    | 7.5    | 7.3    | 8.1    | 7.5    | 7.0    | 7.0    | 7.5    |
| 65°   | 25.2   | 16.4   | 10.1   | 7.5    | 5.7    | 5.7    | 6.8    | 6.2    | 5.7    | 5.7    | 6.2    |
| 67.5° | 21.3   | 13.8   | 7.8    | 5.5    | 4.2    | 4.4    | 5.7    | 5.2    | 4.9    | 4.9    | 5.5    |
| 70°   | 17.7   | 10.7   | 5.5    | 3.4    | 2.3    | 3.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.9    |
| 72.5° | 13.3   | 7.3    | 3.1    | 1.3    | 1.0    | 2.3    | 3.6    | 4.2    | 3.9    | 3.9    | 4.7    |
| 75°   | 8.6    | 4.2    | 1.0    | 0.0    | 0.0    | 1.3    | 2.9    | 3.4    | 3.4    | 3.1    | 3.9    |
| 77.5° | 4.9    | 1.3    | 0.0    | 0.0    | 0.0    | 0.0    | 1.8    | 1.6    | 1.3    | 1.0    | 1.8    |
| 80°   | 1.3    | 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: P324245

CATALOG NUMBER: GLEON-SA1C-760-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 359°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 | 1842.1 |
| 2.5°  | 1623.1 | 1653.8 | 1697.0 | 1742.8 | 1813.3 | 1869.2 | 1924.1 | 1971.2 | 1989.4 | 1996.9 |
| 5°    | 1284.7 | 1329.7 | 1392.9 | 1474.1 | 1601.3 | 1715.7 | 1831.7 | 1948.5 | 1999.2 | 2012.0 |
| 7.5°  | 921.8  | 979.3  | 1059.7 | 1161.4 | 1310.5 | 1458.7 | 1620.8 | 1792.2 | 1870.7 | 1890.5 |
| 10°   | 682.3  | 752.5  | 844.6  | 951.8  | 1094.0 | 1246.5 | 1423.1 | 1619.0 | 1708.7 | 1735.0 |
| 12.5° | 484.1  | 579.0  | 702.3  | 832.6  | 955.9  | 1092.0 | 1270.7 | 1486.6 | 1580.7 | 1609.1 |
| 15°   | 284.3  | 376.1  | 522.1  | 696.6  | 854.5  | 992.3  | 1173.9 | 1418.7 | 1522.5 | 1551.1 |
| 17.5° | 163.1  | 208.9  | 319.2  | 513.7  | 728.1  | 919.0  | 1143.5 | 1435.6 | 1557.8 | 1584.4 |
| 20°   | 124.6  | 139.2  | 183.9  | 330.9  | 580.3  | 846.9  | 1143.5 | 1531.3 | 1681.9 | 1720.9 |
| 22.5° | 109.0  | 119.7  | 137.9  | 197.4  | 427.1  | 769.7  | 1156.7 | 1669.7 | 1866.6 | 1909.8 |
| 25°   | 96.8   | 106.4  | 122.0  | 148.5  | 291.3  | 677.9  | 1188.2 | 1839.5 | 2084.0 | 2140.0 |
| 27.5° | 86.6   | 95.7   | 109.8  | 130.1  | 199.2  | 567.1  | 1230.6 | 2038.8 | 2323.9 | 2368.6 |
| 30°   | 77.5   | 86.1   | 98.8   | 113.2  | 153.7  | 441.4  | 1266.8 | 2226.6 | 2512.2 | 2560.3 |
| 32.5° | 68.9   | 76.7   | 88.2   | 98.8   | 125.9  | 326.4  | 1270.7 | 2375.4 | 2668.5 | 2716.4 |
| 35°   | 60.9   | 67.9   | 78.3   | 86.6   | 104.3  | 257.8  | 1210.1 | 2504.4 | 2824.9 | 2888.1 |
| 37.5° | 53.1   | 59.8   | 68.9   | 75.2   | 91.8   | 210.2  | 1117.5 | 2648.2 | 3025.4 | 3083.9 |
| 40°   | 45.8   | 51.8   | 61.1   | 65.3   | 86.9   | 161.5  | 1016.8 | 2799.1 | 3222.0 | 3275.6 |
| 42.5° | 39.0   | 44.7   | 53.8   | 61.9   | 76.2   | 120.7  | 908.1  | 2940.6 | 3398.9 | 3455.1 |
| 45°   | 32.5   | 38.5   | 47.6   | 65.5   | 63.2   | 90.3   | 791.8  | 3034.5 | 3538.6 | 3599.7 |
| 47.5° | 26.3   | 33.0   | 45.5   | 62.4   | 50.5   | 66.3   | 699.7  | 3123.5 | 3644.5 | 3704.8 |
| 50°   | 21.1   | 27.8   | 51.2   | 55.7   | 41.4   | 50.7   | 661.2  | 3203.1 | 3713.9 | 3771.9 |
| 52.5° | 17.2   | 23.4   | 48.4   | 42.7   | 34.6   | 41.9   | 682.0  | 3332.1 | 3778.2 | 3814.6 |
| 55°   | 14.3   | 18.5   | 29.1   | 29.7   | 29.4   | 35.6   | 707.8  | 3517.3 | 3944.4 | 3961.6 |
| 57.5° | 12.5   | 14.8   | 20.3   | 22.9   | 24.7   | 31.7   | 708.3  | 3783.1 | 4201.6 | 4212.3 |
| 60°   | 10.7   | 13.0   | 16.9   | 18.5   | 21.3   | 28.4   | 682.5  | 3876.0 | 4302.8 | 4338.2 |
| 62.5° | 9.4    | 11.4   | 14.0   | 15.3   | 17.9   | 25.5   | 622.2  | 3741.5 | 4163.9 | 4224.0 |
| 65°   | 8.3    | 10.4   | 11.7   | 13.0   | 15.9   | 22.9   | 522.8  | 3472.5 | 3933.5 | 3996.2 |
| 67.5° | 7.3    | 9.1    | 10.4   | 11.7   | 14.3   | 20.3   | 385.0  | 3160.1 | 3668.9 | 3720.9 |
| 70°   | 6.5    | 8.1    | 9.4    | 10.4   | 12.5   | 17.2   | 233.6  | 2681.5 | 3303.2 | 3324.8 |
| 72.5° | 6.2    | 7.3    | 8.6    | 9.4    | 10.9   | 15.1   | 118.4  | 1970.6 | 2640.7 | 2675.8 |
| 75°   | 5.5    | 6.5    | 7.8    | 8.3    | 9.6    | 13.0   | 48.1   | 1294.3 | 1913.7 | 1970.1 |
| 77.5° | 4.4    | 6.0    | 7.0    | 7.5    | 8.3    | 10.7   | 24.5   | 827.2  | 1343.0 | 1379.4 |
| 80°   | 1.6    | 4.4    | 6.0    | 6.2    | 7.0    | 7.8    | 16.1   | 452.9  | 779.0  | 794.7  |
| 82.5° | 0.0    | 2.9    | 4.7    | 4.4    | 4.9    | 6.0    | 10.4   | 215.4  | 514.2  | 520.0  |
| 85°   | 0.0    | 1.3    | 3.6    | 2.9    | 2.1    | 4.2    | 3.6    | 47.1   | 269.7  | 280.9  |
| 87.5° | 0.0    | 0.0    | 0.3    | 1.3    | 1.0    | 1.6    | 0.5    | 0.3    | 24.5   | 31.0   |
| 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: SP1-1908-441-9-R4

Test Date: 10/23/2019

Luminaire Tested: SA1C-760-U-5WQ

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

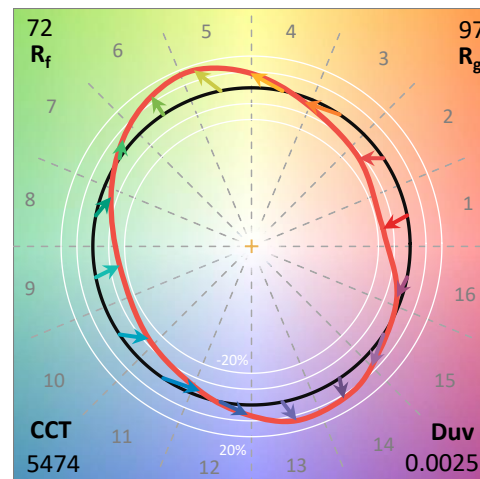
### Test Information

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

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

### Spectral Parameters

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



### Test Conditions

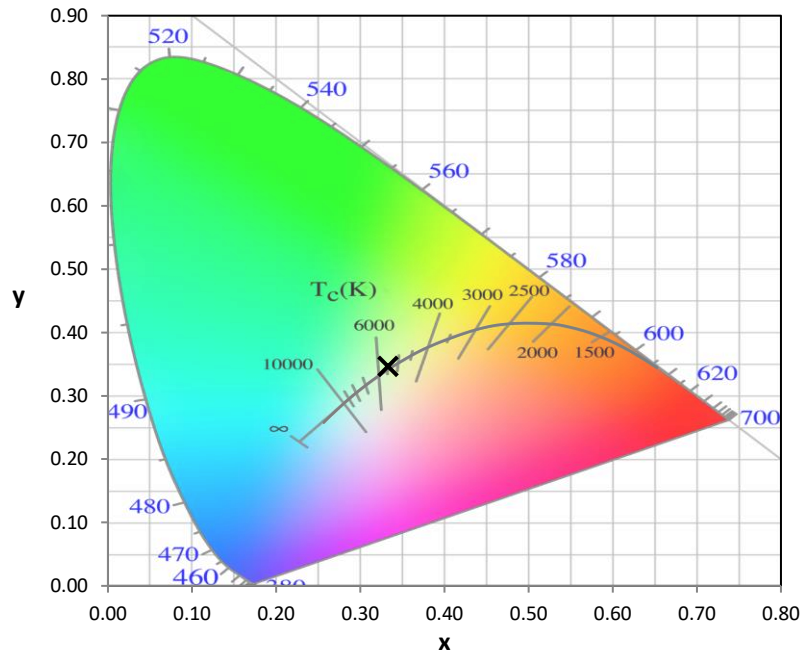
Stabilization Time: 240M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.6/31%  
 Sphere Temperature (°C): 25.9

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

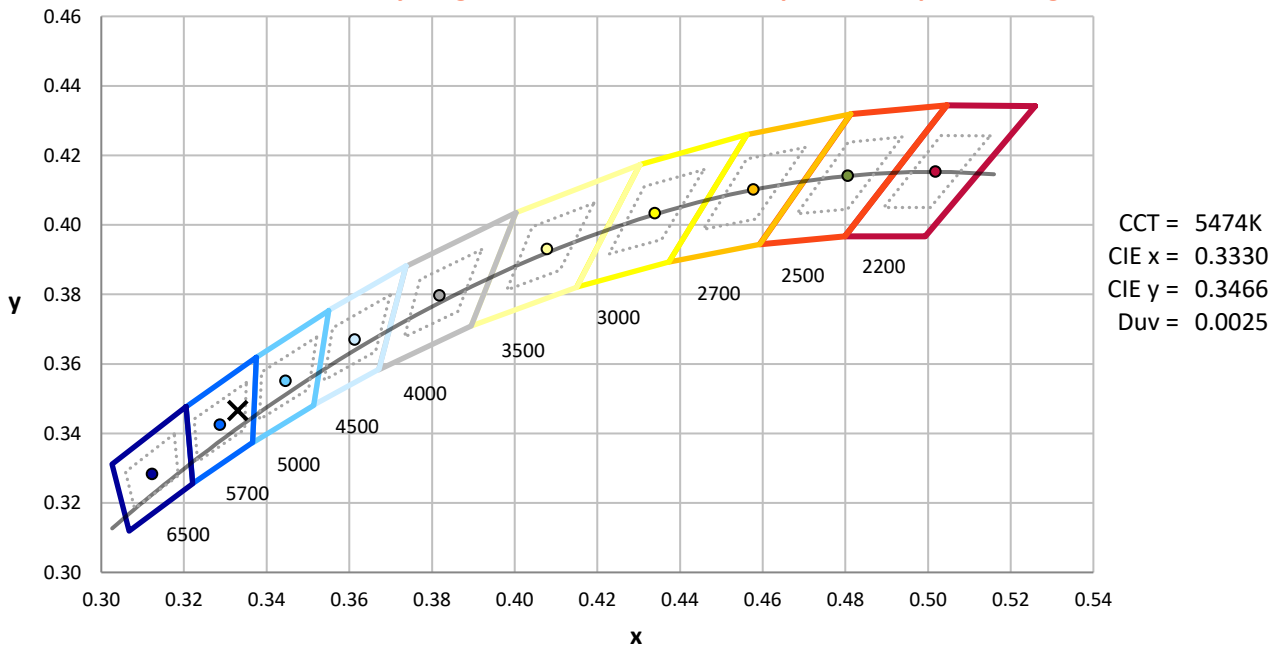
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date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

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

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 5700K 4-step quadrangle

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

**Photopic Flux vs. Wavelength**

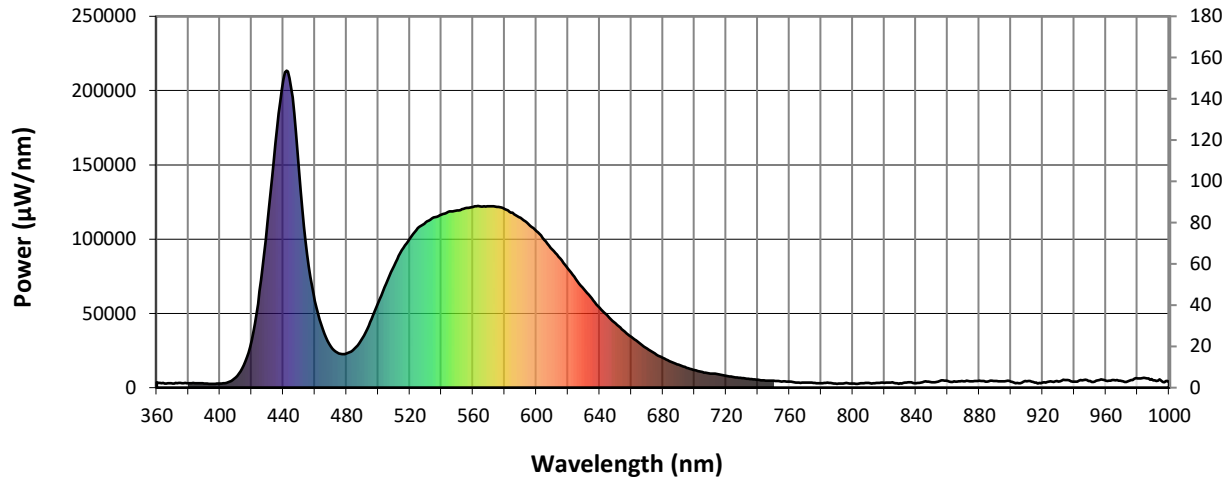


#####

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

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

Scotopic Flux vs. Wavelength



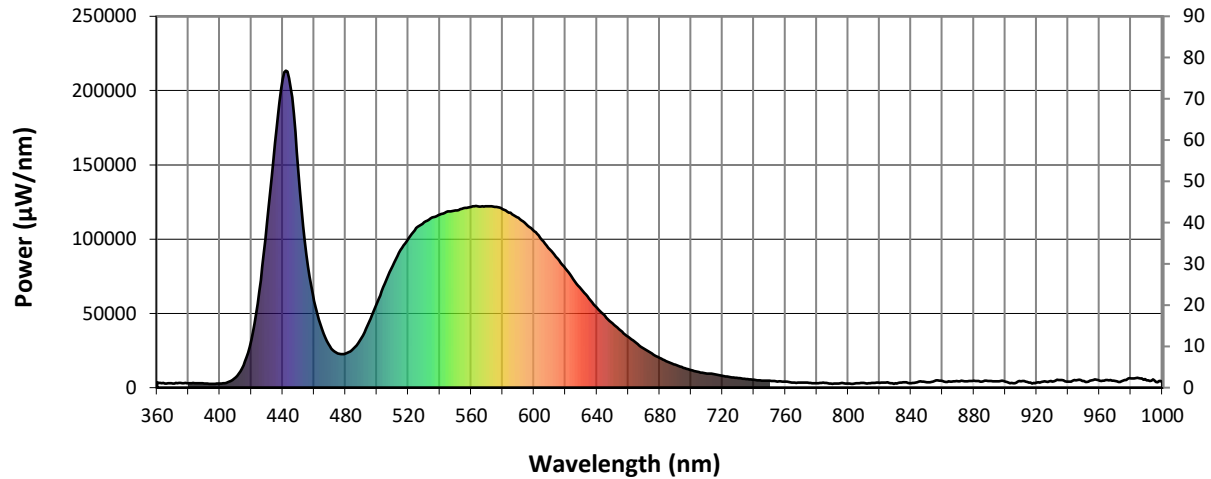
Scotopic Lumens: 13759.3

S/P: 1.85

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

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

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: 5527.6 M/P: 0.74**

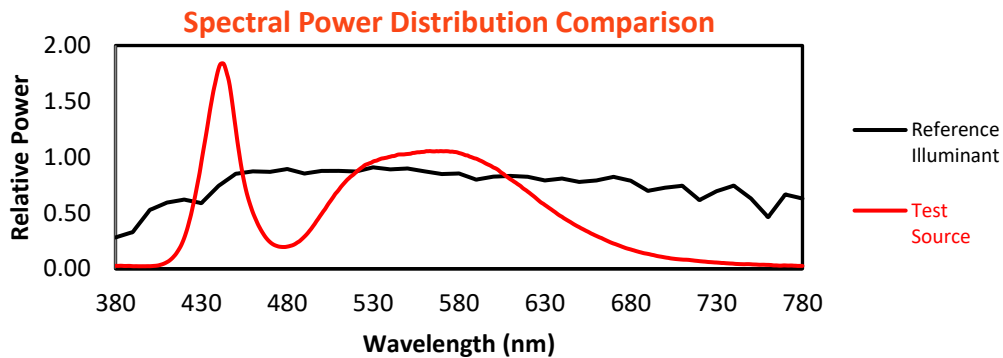
| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------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

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

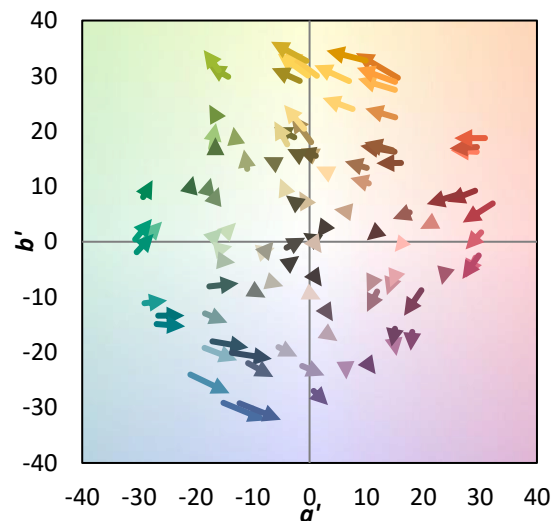
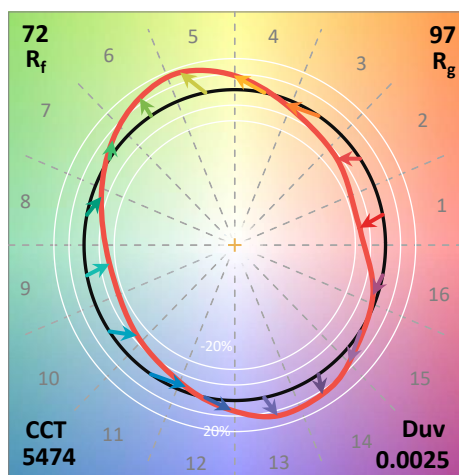
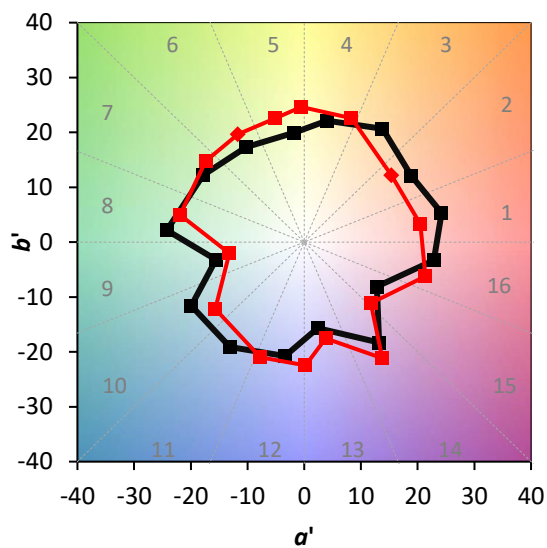
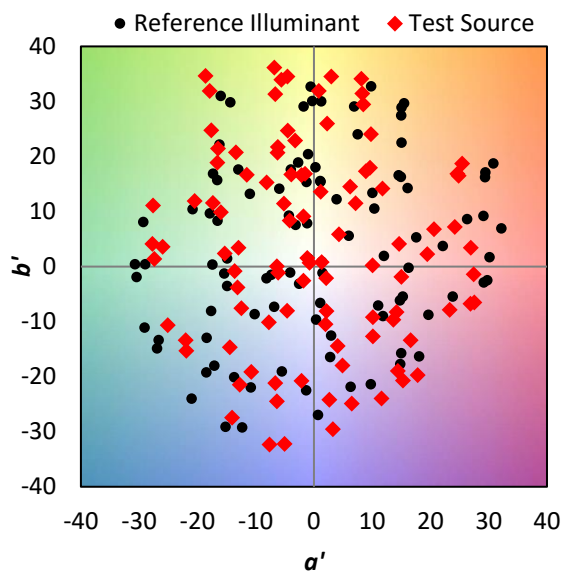
**TM-30-18**

**Summary**

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



**Color Vector Graphics**

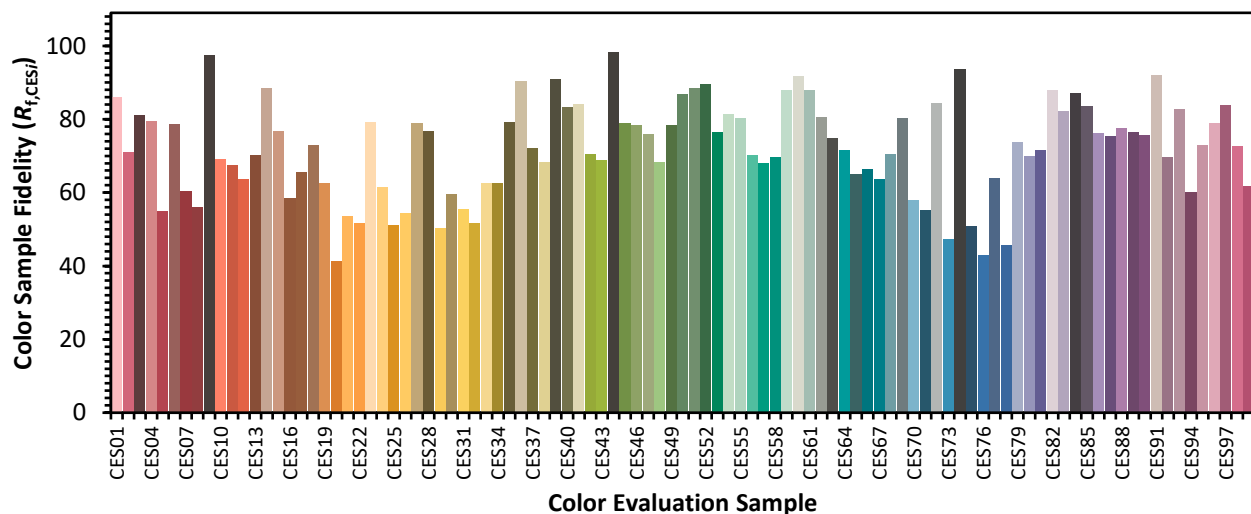


REPORT NUMBER: SP1-1908-441-9-R4

**TM-30-18**

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

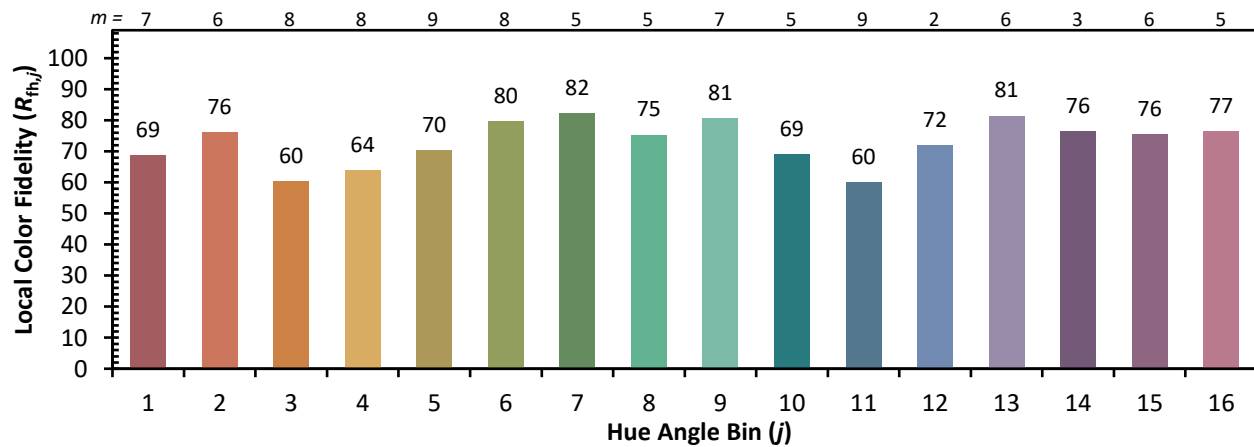
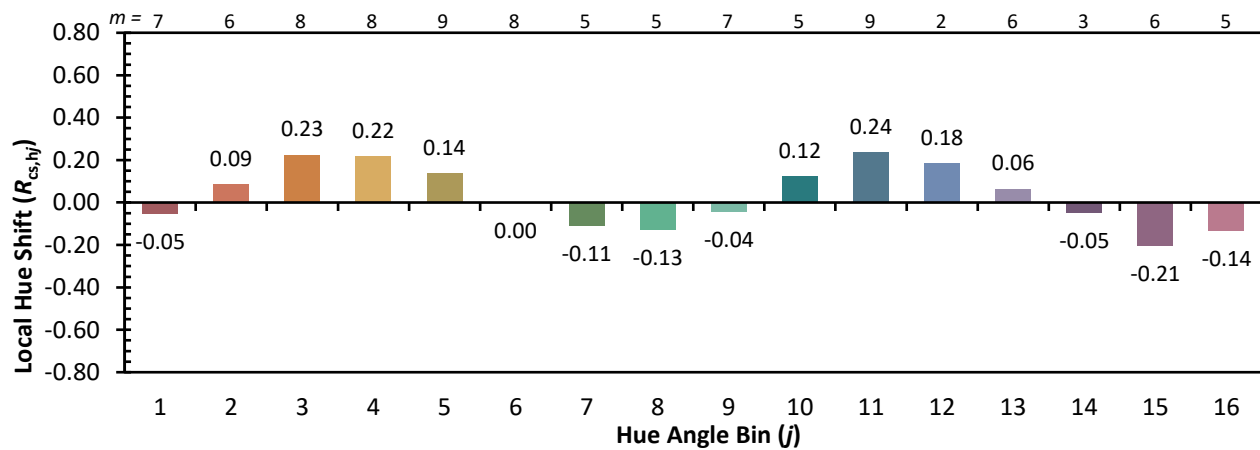
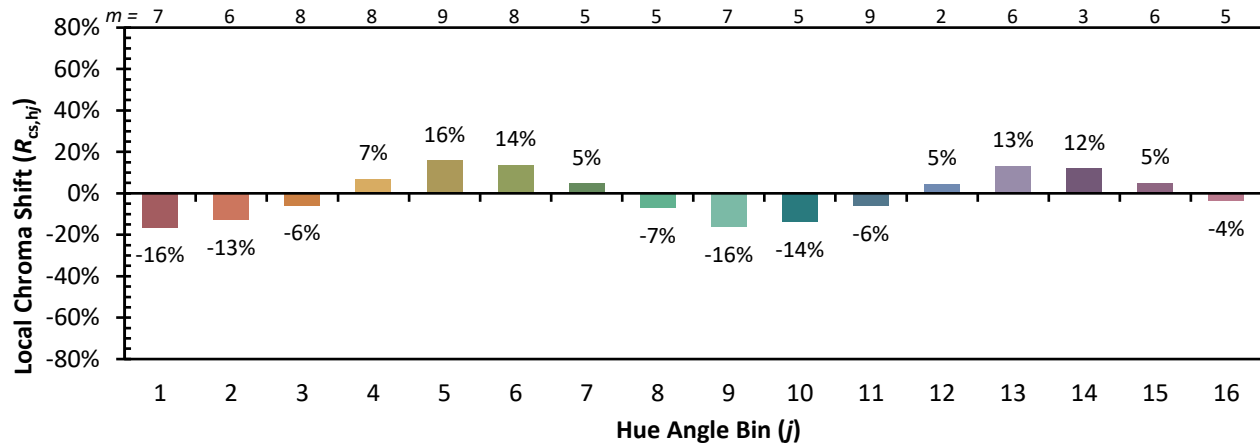
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54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



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

**TM-30-18**

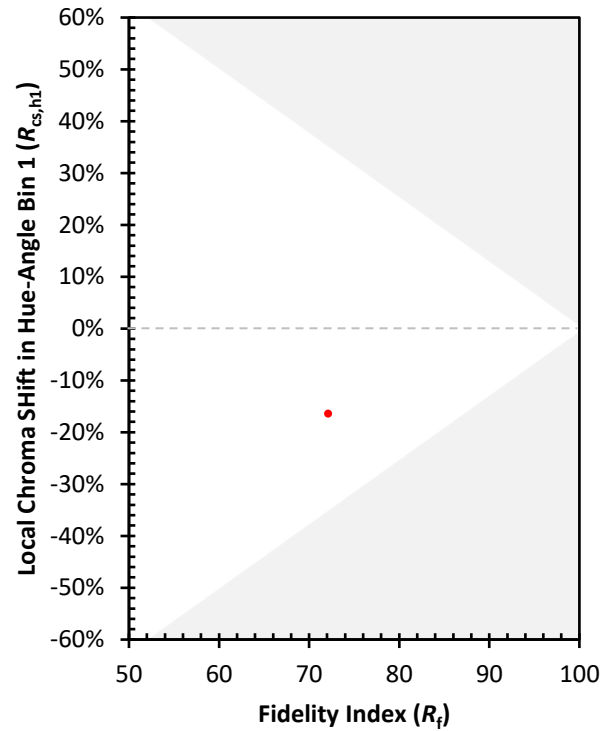
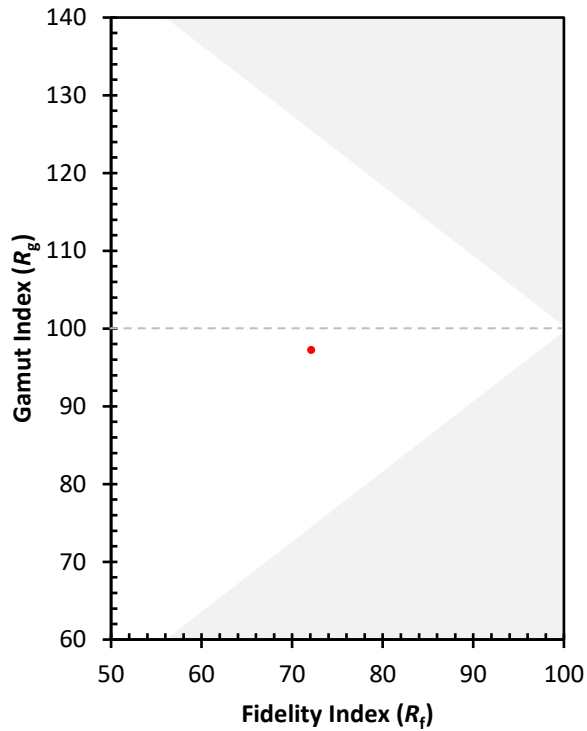
Color Rendition by Hue-Angle Bin



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

**TM-30-18**

**Measure Comparisons**



(END OF REPORT)