Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1199703

Luminaire Tested: GPC-SB2B-730-U-T2R-HSS

Issue Date: 10/30/2025

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1199703 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/13/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2B-730-U-T2R-HSS |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II ROADWAY OPTIC WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 9533 lumens |
| Efficiency: | N/A |
| Efficacy: | 129.0 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B1 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 73.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.627 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.988 |
| Total Harmonic Distortion (THDi): | 13.593 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

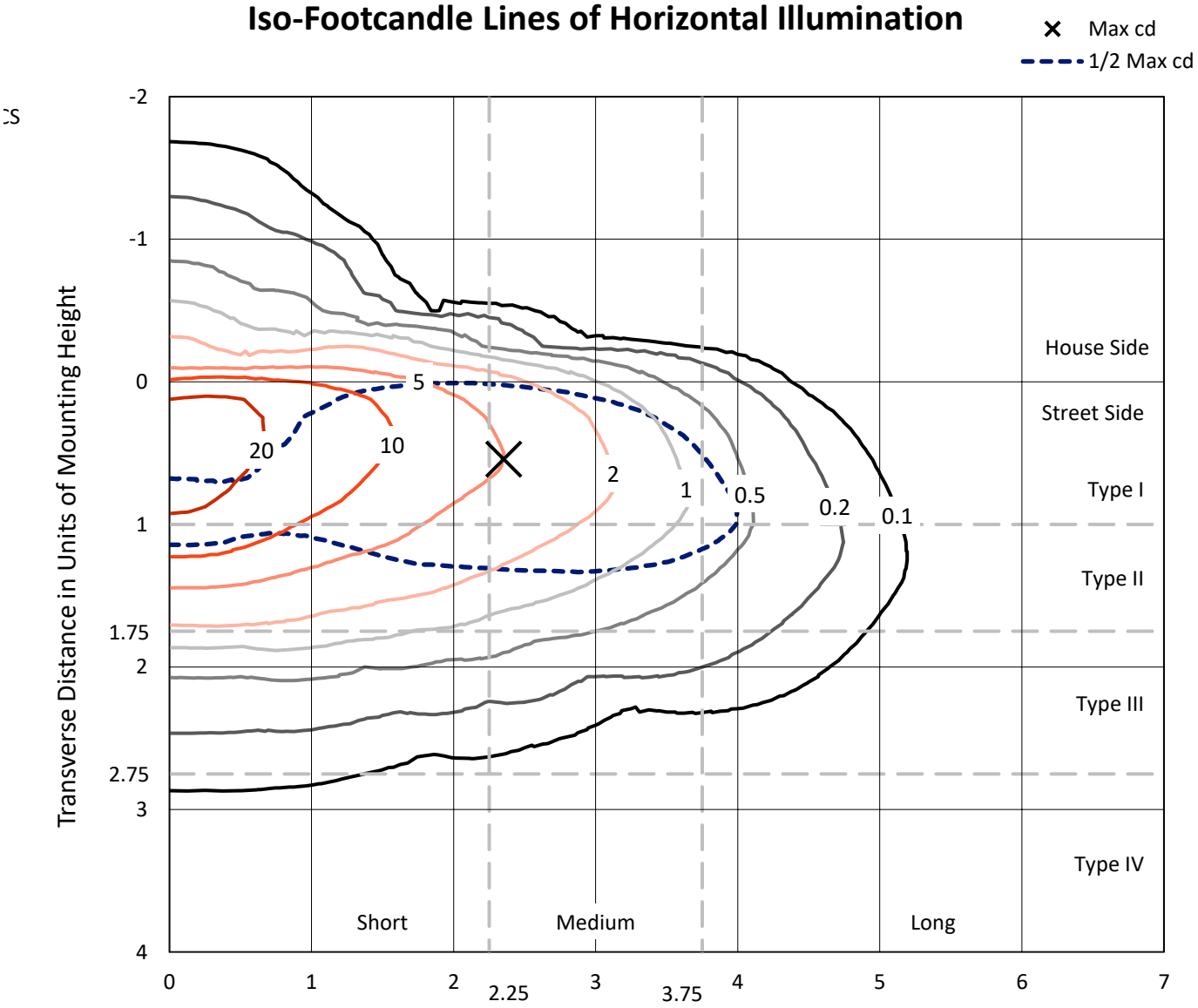


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## Iso-Footcandle Lines of Horizontal Illumination



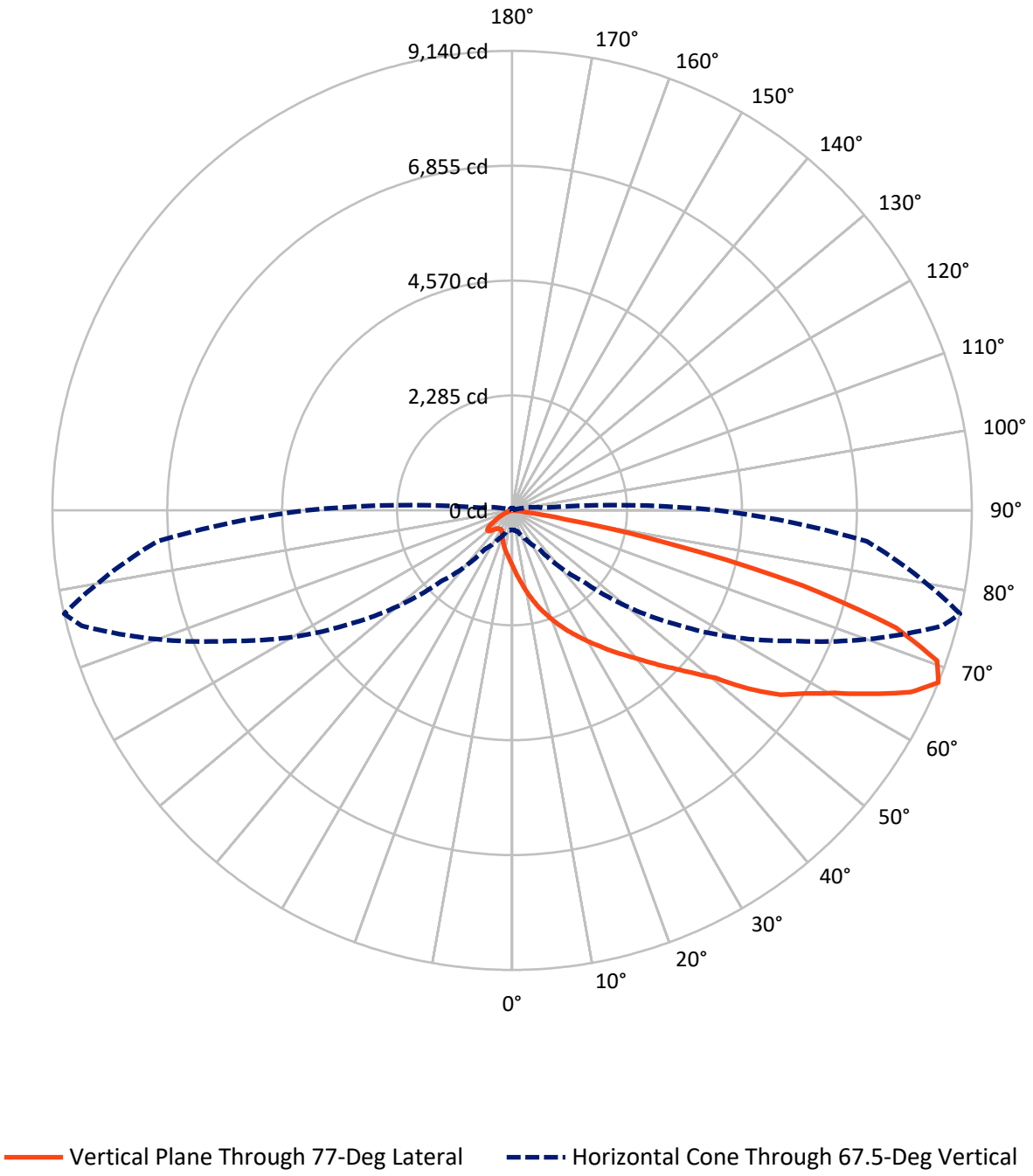

Based on 10 foot mounting height. Maximum calculated value = 25.7 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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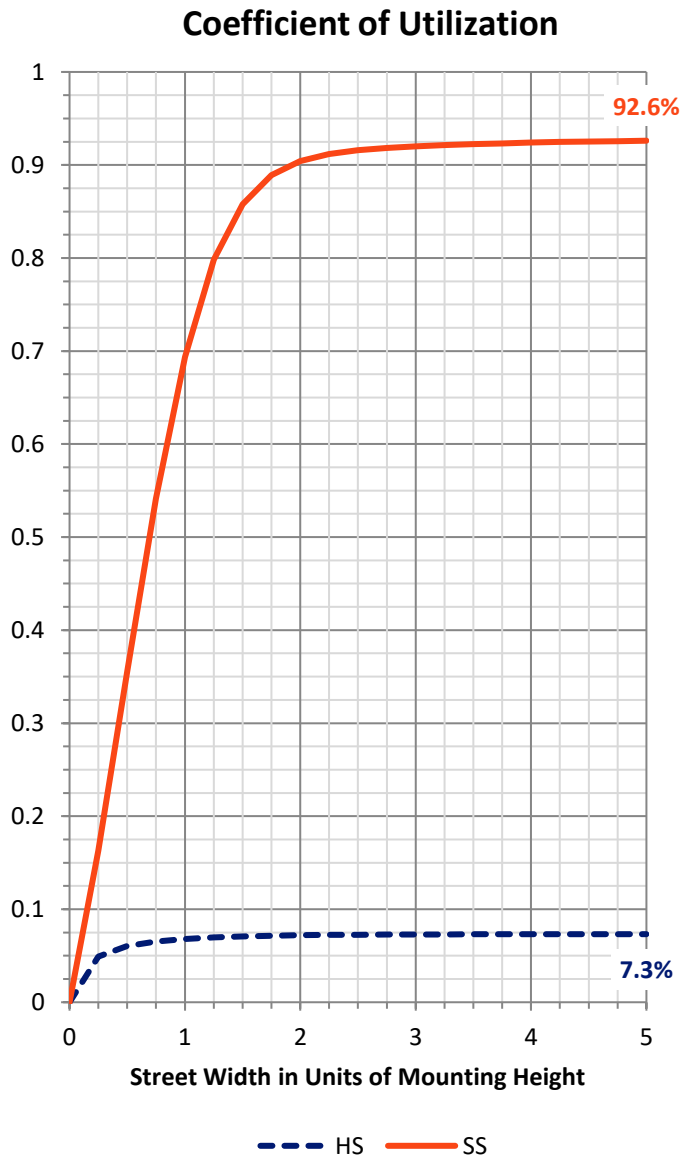
REPORT NUMBER: P1199703
CATALOG NUMBER: GPC-SB2B-730-U-T2R-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 701.4 | 0.0 | 701.4 |
| | % Fixture | 7.4 | 0.0 | 7.4 |
| **Street Side** | Lumens | 8831.7 | 0.0 | 8831.7 |
| | % Fixture | 92.6 | 0.0 | 92.6 |
| **Total** | Lumens | 9533.0 | 0.0 | 9533.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 112.2 | 1.2 |
| 10°-20° | 392.9 | 4.1 |
| 20°-30° | 758.2 | 8.0 |
| 30°-40° | 1316.3 | 13.8 |
| 40°-50° | 1911.2 | 20.0 |
| 50°-60° | 2194.8 | 23.0 |
| 60°-70° | 1905.5 | 20.0 |
| 70°-80° | 897.5 | 9.4 |
| 80°-90° | 44.4 | 0.5 |
| 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° | 9533.0 | 100.0 |
| 0°-180° | 9533.0 | 100.0 |



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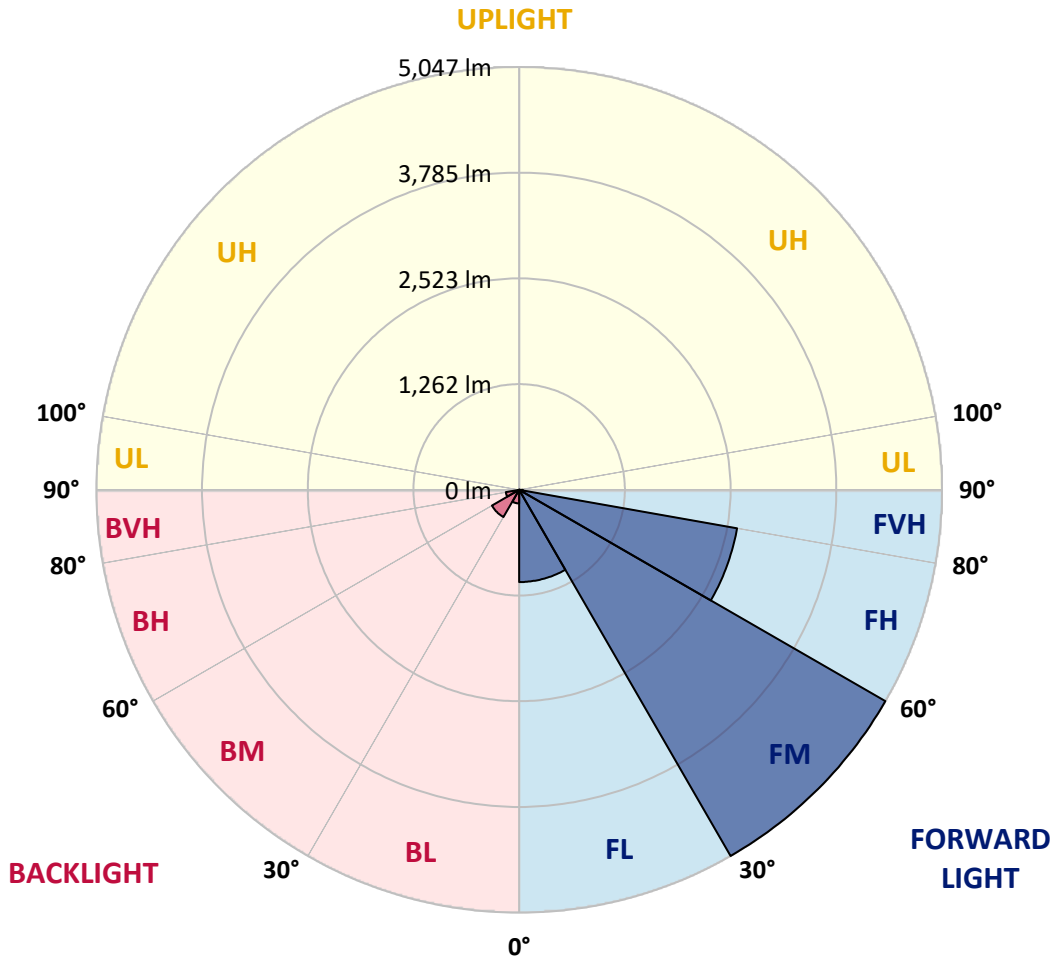
Scaled Data Report

REPORT NUMBER: P1199703
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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1101.0 | 11.5 | | | |
| FM | (30°-60°) | 5046.5 | 52.9 | | | |
| FH | (60°-80°) | 2640.6 | 27.7 | | | G2/5000 |
| FVH | (80°-90°) | 43.6 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 162.4 | 1.7 | B1/500 | | |
| BM | (30°-60°) | 375.8 | 3.9 | B1/1000 | | |
| BH | (60°-80°) | 162.4 | 1.7 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 0.8 | 0.0 | | | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | *1099.3* | 1099.3 |
| 2.5° | 1522.0 | 1531.4 | 1517.8 | 1491.8 | 1452.7 | 1427.2 | 1365.1 | 1306.5 | 1241.4 | *1220.6* | 1155.5 |
| 5° | 1855.2 | 1863.5 | 1848.1 | 1819.7 | 1767.6 | 1717.9 | 1636.2 | 1513.7 | 1386.4 | *1345.6* | 1230.1 |
| 7.5° | 2102.1 | 2106.8 | 2100.9 | 2074.9 | 2025.1 | 1968.9 | 1877.7 | 1732.7 | 1543.9 | *1498.9* | 1321.9 |
| 10° | 2279.7 | 2295.1 | 2293.3 | 2283.2 | 2250.1 | 2204.5 | 2107.4 | 1942.3 | 1720.3 | *1662.3* | 1425.5 |
| 12.5° | 2397.5 | 2414.7 | 2424.7 | 2447.2 | 2445.4 | 2416.4 | 2331.2 | 2156.6 | 1896.1 | *1828.0* | 1542.1 |
| 15° | 2431.8 | 2450.2 | 2488.7 | 2540.8 | 2586.9 | 2601.7 | 2541.9 | 2366.7 | 2089.7 | *2002.6* | 1661.7 |
| 17.5° | 2412.3 | 2440.7 | 2486.9 | 2569.2 | 2670.4 | 2737.3 | 2730.8 | 2569.8 | 2265.5 | *2166.0* | 1778.9 |
| 20° | 2455.5 | 2482.7 | 2518.8 | 2588.1 | 2705.9 | 2827.3 | 2875.8 | 2763.9 | 2440.1 | *2335.9* | 1902.0 |
| 22.5° | 2694.7 | 2689.9 | 2693.5 | 2704.7 | 2775.2 | 2895.3 | 2995.4 | 2940.3 | 2613.0 | *2506.4* | 2032.2 |
| 25° | 3073.5 | 3052.2 | 3016.1 | 2955.1 | 2937.4 | 2995.4 | 3099.6 | 3096.6 | 2795.3 | *2681.0* | 2165.4 |
| 27.5° | 3508.0 | 3504.5 | 3419.8 | 3273.0 | 3190.1 | 3167.7 | 3217.4 | 3248.8 | 2975.9 | *2853.9* | 2299.2 |
| 30° | 3924.2 | 3933.7 | 3819.4 | 3656.0 | 3503.9 | 3415.7 | 3370.7 | 3393.2 | 3159.4 | *3040.4* | 2437.2 |
| 32.5° | 4286.5 | 4296.5 | 4172.2 | 3981.0 | 3792.8 | 3686.2 | 3591.5 | 3535.9 | 3359.5 | *3229.8* | 2588.7 |
| 35° | 4592.5 | 4602.6 | 4459.9 | 4248.6 | 4047.9 | 3951.4 | 3844.3 | 3692.1 | 3560.7 | *3440.0* | 2757.4 |
| 37.5° | 4866.0 | 4863.1 | 4671.9 | 4458.7 | 4261.6 | 4185.3 | 4129.0 | 3884.5 | 3767.9 | *3651.3* | 2944.5 |
| 40° | 5027.6 | 5040.1 | 4876.7 | 4641.7 | 4450.5 | 4394.8 | 4391.3 | 4123.1 | 4007.1 | *3894.0* | 3149.3 |
| 42.5° | 5075.0 | 5096.9 | 4978.5 | 4785.5 | 4612.1 | 4551.7 | 4644.6 | 4381.2 | 4285.3 | *4175.2* | 3380.8 |
| 45° | 4989.7 | 5011.1 | 4957.2 | 4823.4 | 4722.2 | 4683.1 | 4862.5 | 4648.8 | 4582.5 | *4473.5* | 3641.8 |
| 47.5° | 4741.1 | 4767.8 | 4780.8 | 4752.4 | 4751.2 | 4790.8 | 5057.8 | 4930.5 | 4935.3 | *4824.0* | 3944.3 |
| 50° | 4259.8 | 4304.8 | 4424.4 | 4525.0 | 4680.7 | 4876.1 | 5247.8 | 5236.0 | 5333.1 | *5237.2* | 4338.6 |
| 52.5° | 3384.9 | 3448.8 | 3860.9 | 4136.1 | 4486.0 | 4860.1 | 5456.8 | 5726.2 | 6031.0 | *5890.7* | 4894.4 |
| 55° | 2720.1 | 2720.1 | 3055.2 | 3570.2 | 4105.9 | 4754.7 | 5548.0 | 6044.6 | 6506.4 | *6473.2* | 5285.7 |
| 57.5° | 2217.5 | 2244.2 | 2457.9 | 2913.1 | 3556.0 | 4503.7 | 5604.2 | 6244.7 | 6889.4 | *6865.1* | 5668.1 |
| 60° | 1368.6 | 1426.1 | 1829.8 | 2279.1 | 2930.3 | 4056.8 | 5568.7 | 6447.2 | 7354.1 | *7373.6* | 6128.7 |
| 62.5° | 770.7 | 792.1 | 972.0 | 1639.8 | 2278.5 | 3455.9 | 5297.0 | 6560.3 | 7948.4 | *8031.3* | 6603.5 |
| 65° | 532.2 | 542.8 | 612.1 | 1020.6 | 1579.4 | 2751.5 | 4766.0 | 6489.8 | 8544.0 | *8711.5* | 7006.0 |
| 67.5° | *386.6* | *391.9* | *435.1* | *623.3* | *937.1* | *1995.0* | *3933.7* | *6134.6* | *8859.5* | *9139.5* | *7083.0* |
| 70° | 297.2 | 300.7 | 332.1 | 409.6 | 553.5 | 1231.3 | 2856.9 | 5428.4 | 8631.0 | *8965.4* | 6688.7 |
| 72.5° | 241.5 | 245.1 | 269.3 | 303.1 | 367.0 | 728.1 | 1731.5 | 4408.4 | 7622.3 | *7983.4* | 5694.2 |
| 75° | 203.6 | 208.4 | 230.3 | 252.2 | 287.7 | 467.7 | 812.2 | 3070.0 | 5732.1 | *5968.9* | 3959.7 |
| 77.5° | 113.1 | 104.2 | 187.1 | 209.0 | 242.7 | 296.0 | 380.0 | 1806.7 | 3210.3 | *3276.0* | 1757.0 |
| 80° | 70.4 | 72.8 | 148.6 | 168.1 | 186.5 | 149.2 | 174.0 | 695.6 | 1112.9 | *1057.3* | 340.4 |
| 82.5° | 4.1 | 9.5 | 114.3 | 121.4 | 127.9 | 63.9 | 65.7 | 236.2 | 268.2 | *246.3* | 60.4 |
| 85° | 0.0 | 0.0 | 52.1 | 42.0 | 44.4 | 18.4 | 18.9 | 55.1 | 36.1 | *39.1* | 11.8 |
| 87.5° | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 1.8 | 3.6 | 4.7 | 1.8 | *2.4* | 4.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* | 0.0 |

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Scaled Data Report

REPORT NUMBER: P1199703
CATALOG NUMBER: GPC-SB2B-730-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 | 1099.3 |
| 2.5° | 1114.1 | 1072.7 | 988.6 | 906.3 | 839.4 | 777.3 | 732.9 | 690.8 | 669.5 | 668.3 | 667.2 |
| 5° | 1147.8 | 1060.8 | 892.7 | 744.1 | 624.5 | 528.6 | 466.5 | 422.1 | 399.6 | 391.9 | 390.7 |
| 7.5° | 1195.2 | 1064.4 | 808.6 | 602.0 | 461.1 | 378.9 | 343.3 | 329.1 | 324.4 | 319.1 | 317.9 |
| 10° | 1255.0 | 1072.7 | 733.5 | 484.8 | 363.5 | 322.0 | 307.8 | 301.9 | 298.4 | 294.8 | 293.6 |
| 12.5° | 1321.9 | 1080.4 | 658.9 | 402.5 | 319.7 | 298.4 | 288.3 | 281.2 | 276.5 | 272.3 | 271.1 |
| 15° | 1387.0 | 1085.1 | 581.3 | 345.1 | 297.2 | 280.0 | 269.3 | 261.7 | 255.1 | 250.4 | 249.8 |
| 17.5° | 1451.5 | 1091.6 | 508.5 | 310.8 | 278.8 | 261.7 | 251.0 | 241.5 | 236.2 | 230.9 | 230.3 |
| 20° | 1523.1 | 1090.4 | 439.8 | 286.5 | 260.5 | 243.3 | 232.1 | 223.2 | 217.8 | 211.9 | 211.3 |
| 22.5° | 1589.4 | 1084.5 | 379.5 | 265.8 | 241.5 | 224.9 | 212.5 | 203.6 | 198.3 | 193.6 | 193.0 |
| 25° | 1665.8 | 1079.8 | 329.1 | 246.9 | 223.8 | 207.2 | 193.6 | 185.3 | 179.4 | 175.2 | 174.6 |
| 27.5° | 1739.2 | 1072.7 | 292.4 | 229.7 | 206.6 | 190.6 | 177.6 | 168.1 | 162.8 | 159.8 | 159.8 |
| 30° | 1811.4 | 1070.9 | 278.8 | 213.1 | 191.2 | 175.2 | 162.2 | 153.3 | 149.2 | 148.0 | 147.4 |
| 32.5° | 1898.5 | 1075.6 | 284.7 | 207.2 | 177.0 | 161.0 | 148.6 | 142.1 | 137.9 | 137.9 | 137.9 |
| 35° | 1991.4 | 1074.4 | 293.6 | 212.5 | 167.5 | 146.8 | 137.3 | 133.2 | 129.1 | 129.1 | 129.1 |
| 37.5° | 2108.0 | 1076.2 | 300.7 | 221.4 | 164.0 | 135.0 | 129.6 | 124.3 | 121.9 | 121.9 | 121.9 |
| 40° | 2282.1 | 1134.8 | 297.2 | 229.1 | 162.8 | 126.7 | 116.0 | 114.3 | 112.5 | 112.5 | 112.5 |
| 42.5° | 2495.2 | 1262.1 | 301.9 | 229.7 | 162.2 | 120.8 | 106.6 | 110.1 | 106.0 | 105.4 | 104.8 |
| 45° | 2728.4 | 1401.2 | 332.1 | 217.3 | 161.6 | 117.8 | 101.8 | 106.0 | 99.5 | 99.5 | 99.5 |
| 47.5° | 2959.9 | 1539.1 | 362.9 | 199.5 | 159.8 | 117.2 | 97.7 | 95.3 | 93.5 | 94.1 | 94.1 |
| 50° | 3278.9 | 1651.6 | 374.7 | 175.2 | 155.7 | 116.0 | 90.0 | 90.6 | 89.4 | 90.6 | 90.6 |
| 52.5° | 3626.4 | 1675.3 | 360.5 | 148.0 | 143.8 | 112.5 | 84.7 | 87.0 | 86.4 | 87.6 | 87.6 |
| 55° | 3843.1 | 1649.8 | 297.8 | 123.1 | 125.5 | 98.3 | 79.3 | 84.1 | 84.1 | 84.1 | 84.1 |
| 57.5° | 4066.9 | 1541.5 | 211.3 | 100.0 | 104.2 | 80.5 | 74.6 | 81.1 | 80.5 | 79.9 | 79.9 |
| 60° | 4227.9 | 1366.3 | 139.1 | 82.3 | 82.9 | 66.3 | 69.3 | 76.4 | 75.8 | 72.8 | 72.8 |
| 62.5° | 4348.0 | 1172.7 | 89.4 | 69.9 | 63.3 | 59.8 | 63.3 | 69.3 | 66.9 | 60.4 | 59.2 |
| 65° | 4334.4 | 904.5 | 68.7 | 59.8 | 52.1 | 52.1 | 55.1 | 60.4 | 53.3 | 42.6 | 41.4 |
| 67.5° | *4081.7* | *612.1* | *56.8* | *50.3* | *43.8* | *43.2* | *45.6* | *50.3* | *45.6* | *36.1* | *34.9* |
| 70° | 3630.0 | 400.2 | 45.6 | 39.1 | 34.9 | 32.0 | 36.7 | 43.2 | 38.5 | 29.0 | 27.8 |
| 72.5° | 2946.3 | 243.9 | 34.3 | 28.4 | 25.5 | 20.7 | 29.0 | 35.5 | 30.8 | 21.3 | 20.1 |
| 75° | 1906.2 | 124.3 | 23.7 | 18.4 | 13.6 | 12.4 | 21.3 | 26.6 | 21.3 | 13.0 | 11.2 |
| 77.5° | 729.3 | 52.1 | 13.0 | 8.3 | 7.1 | 5.9 | 11.8 | 16.0 | 8.9 | 3.0 | 2.4 |
| 80° | 140.3 | 21.9 | 6.5 | 4.1 | 3.6 | 2.4 | 1.8 | 1.2 | 0.0 | 0.0 | 0.0 |
| 82.5° | 24.3 | 7.1 | 2.4 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 8.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.0 | 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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Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

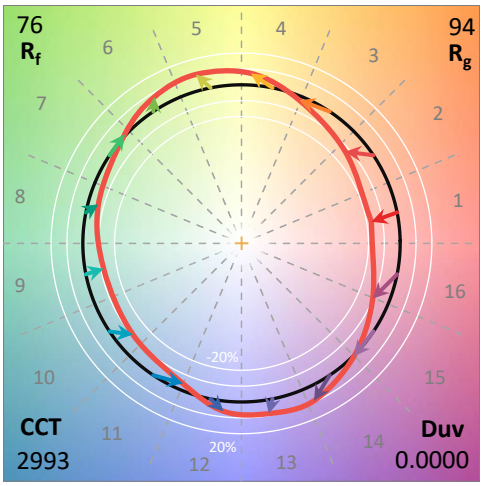
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-2-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-730-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-2-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. (1) 70 CRI, 3000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 2993 | CRI (Ra): | 71.8 | | |
| CIE u': | 0.2508 | R1: | 67.5 | R9: | -38.3 |
| CIE v': | 0.5215 | R2: | 82.9 | R10: | 62.5 |
| Duv: | 0.0000 | R3: | 94.7 | R11: | 63.7 |
| CIE x: | 0.4374 | R4: | 67.7 | R12: | 57.8 |
| CIE y: | 0.4043 | R5: | 67.9 | R13: | 70.4 |
| CIE z: | 0.1583 | R6: | 77.6 | R14: | 97.3 |
| Peak Wavelength (nm): | 593 | R7: | 76.0 | | |
| Dominant Wavelength (nm): | 582 | R8: | 40.5 | | |
| Purity: | 53 | | | | |

| | |
|---|---|
| Rf: | 75.7 |
| Rg: | 93.9 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 53M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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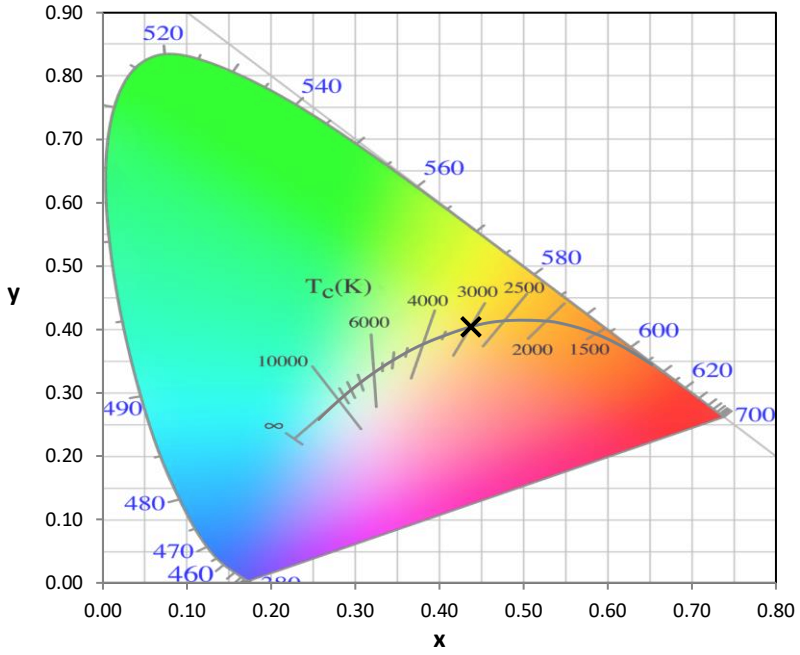
REPORT NUMBER: SP1-1908-441-2-R4

| 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 |

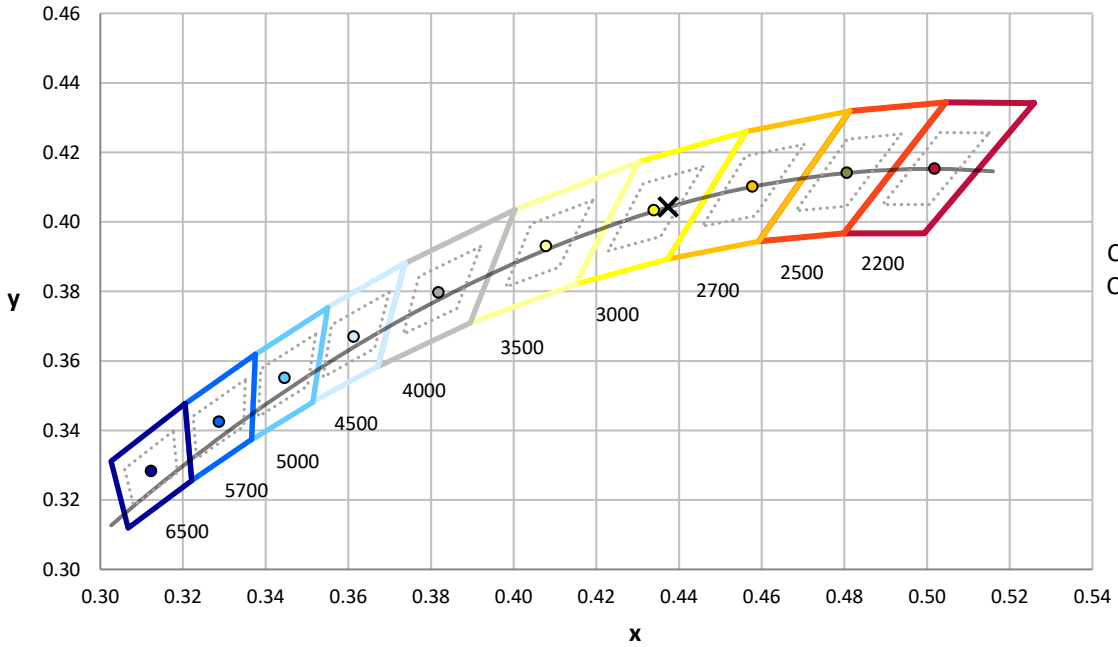
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1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

## CIE 1931 Chromaticity Diagram




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



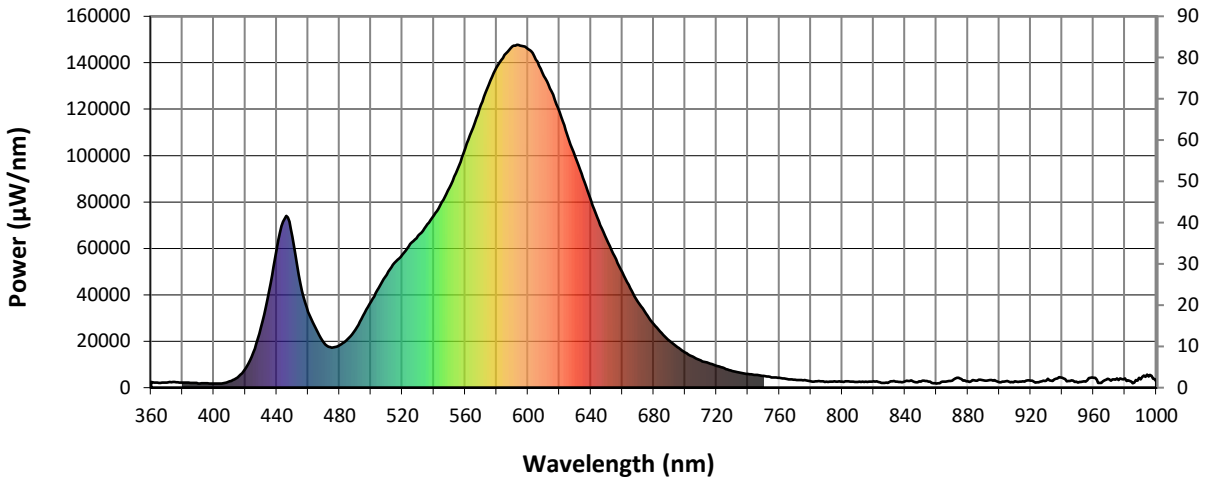

CCT = 2993K
CIE x = 0.4374
CIE y = 0.4043
Duv = 0.0000

Point lies inside the ANSI 3000K 4-step quadrangle

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Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

## Photopic Flux vs. Wavelength



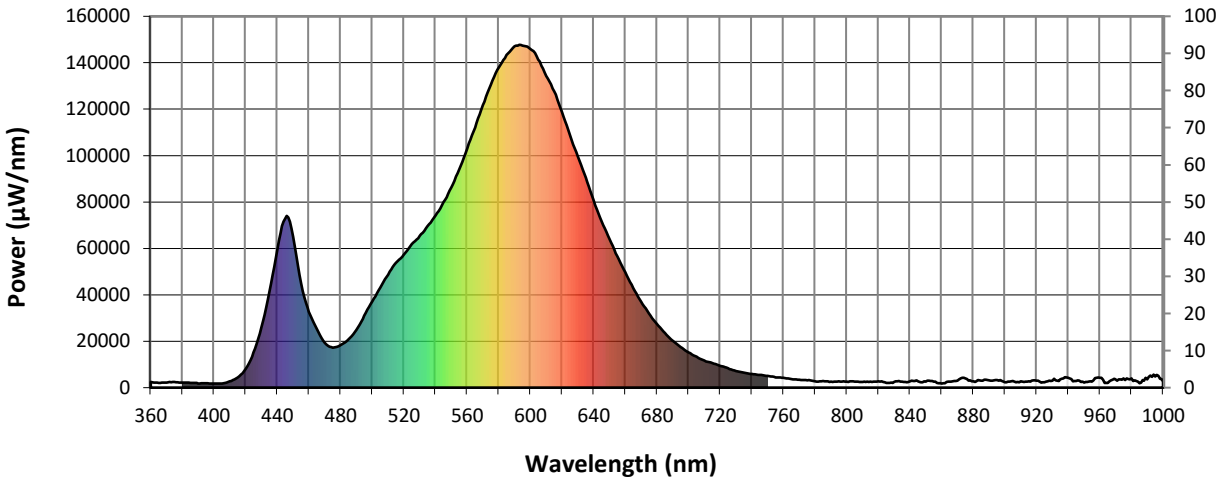

######

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

## Scotopic Flux vs. Wavelength



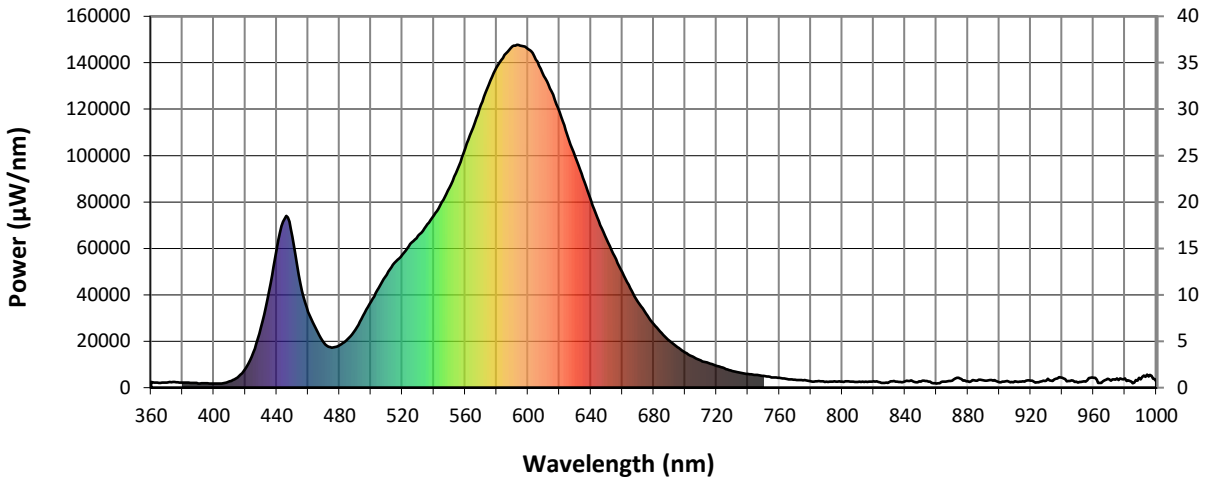

**Scotopic Lumens: 8494.8** **S/P: 1.23**

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 3101.5** **M/P: 0.45**

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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Peachtree City, GA 30269

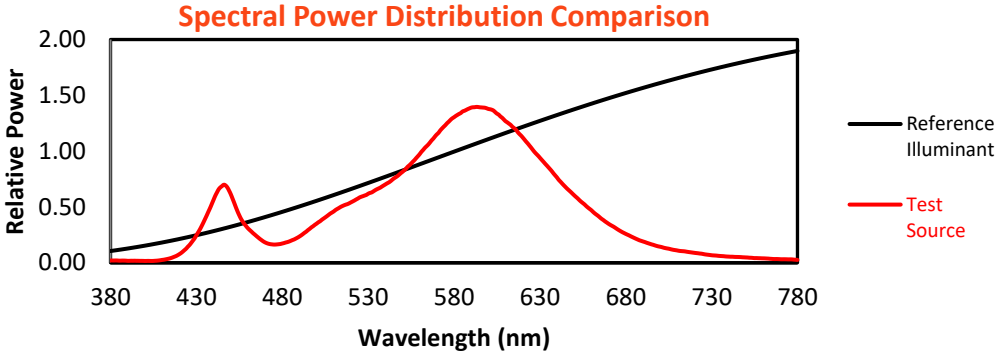
REPORT NUMBER: SP1-1908-441-2-R4

# TM-30-18

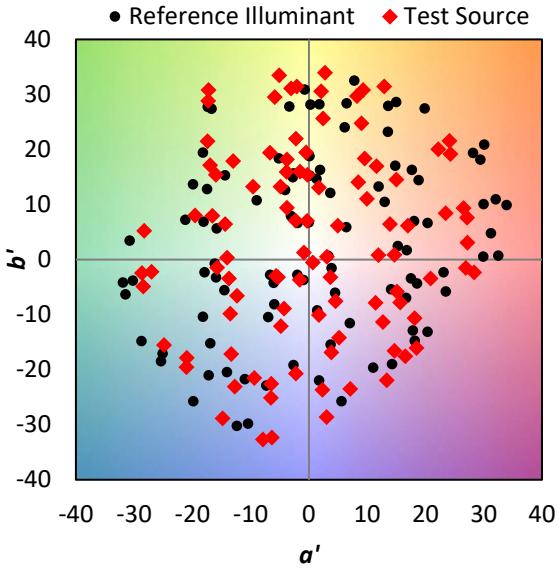
## Summary

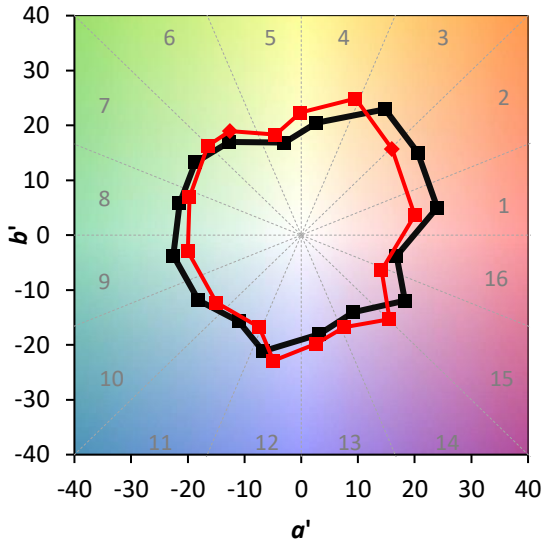
$R_f$ = 75.7
$R_g$ = 93.9
CIE $R_a$ = 71.8
$R_9$ = -38.3

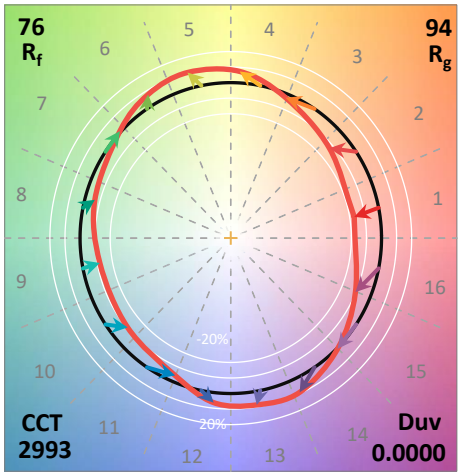
## Spectral Power Distribution Comparison

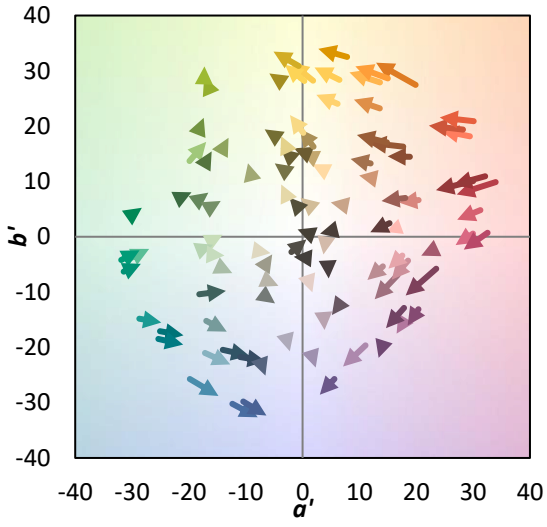



## Color Vector Graphics



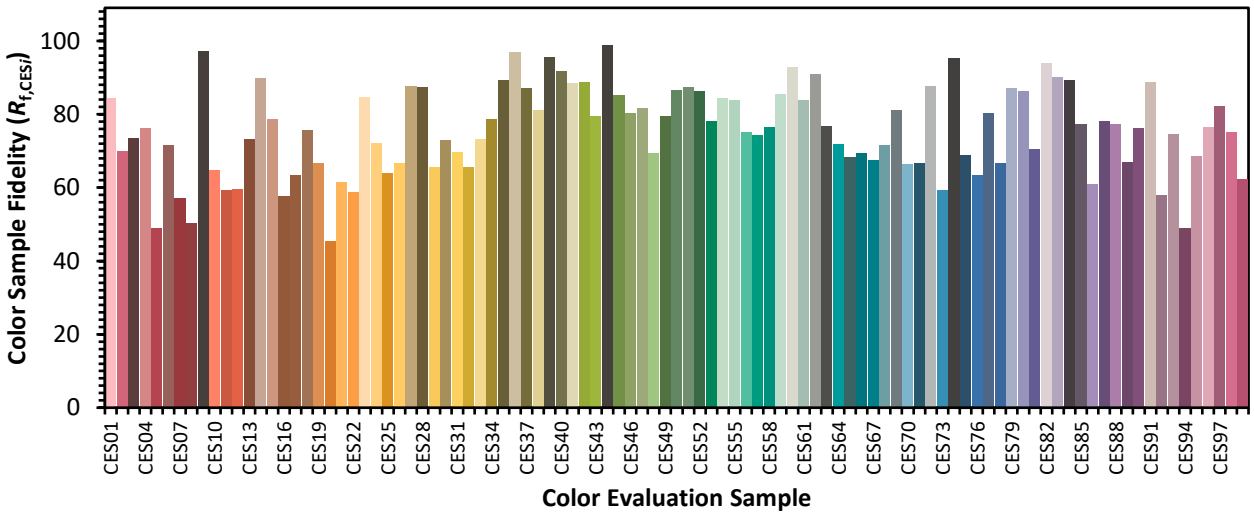
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1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

# TM-30-18

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

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 67 | CES51 = 87 | CES76 = 63 |
| CES02 = 63 | CES27 = 88 | CES52 = 86 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 78 | CES78 = 67 |
| CES04 = 71 | CES29 = 66 | CES54 = 84 | CES79 = 87 |
| CES05 = 49 | CES30 = 73 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 70 | CES56 = 75 | CES81 = 71 |
| CES07 = 41 | CES32 = 65 | CES57 = 74 | CES82 = 94 |
| CES08 = 40 | CES33 = 73 | CES58 = 76 | CES83 = 90 |
| CES09 = 29 | CES34 = 79 | CES59 = 85 | CES84 = 89 |
| CES10 = 76 | CES35 = 89 | CES60 = 93 | CES85 = 77 |
| CES11 = 59 | CES36 = 97 | CES61 = 84 | CES86 = 61 |
| CES12 = 65 | CES37 = 87 | CES62 = 91 | CES87 = 78 |
| CES13 = 43 | CES38 = 81 | CES63 = 77 | CES88 = 77 |
| CES14 = 74 | CES39 = 95 | CES64 = 72 | CES89 = 67 |
| CES15 = 71 | CES40 = 92 | CES65 = 68 | CES90 = 76 |
| CES16 = 47 | CES41 = 88 | CES66 = 69 | CES91 = 89 |
| CES17 = 50 | CES42 = 89 | CES67 = 67 | CES92 = 58 |
| CES18 = 56 | CES43 = 79 | CES68 = 72 | CES93 = 74 |
| CES19 = 73 | CES44 = 99 | CES69 = 81 | CES94 = 49 |
| CES20 = 66 | CES45 = 85 | CES70 = 66 | CES95 = 68 |
| CES21 = 87 | CES46 = 80 | CES71 = 67 | CES96 = 76 |
| CES22 = 79 | CES47 = 82 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 69 | CES73 = 59 | CES98 = 75 |
| CES24 = 91 | CES49 = 80 | CES74 = 95 | CES99 = 62 |
| CES25 = 73 | CES50 = 87 | CES75 = 69 | |

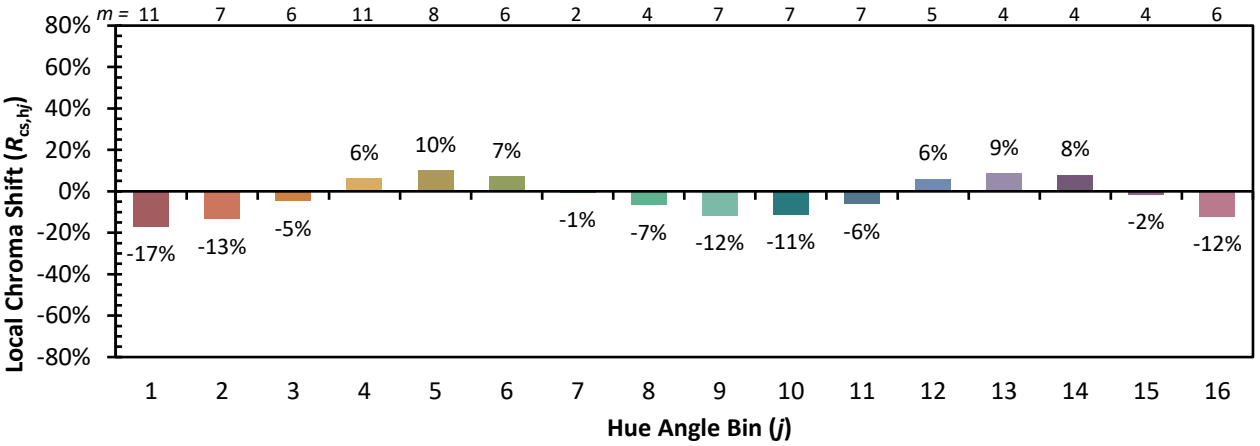


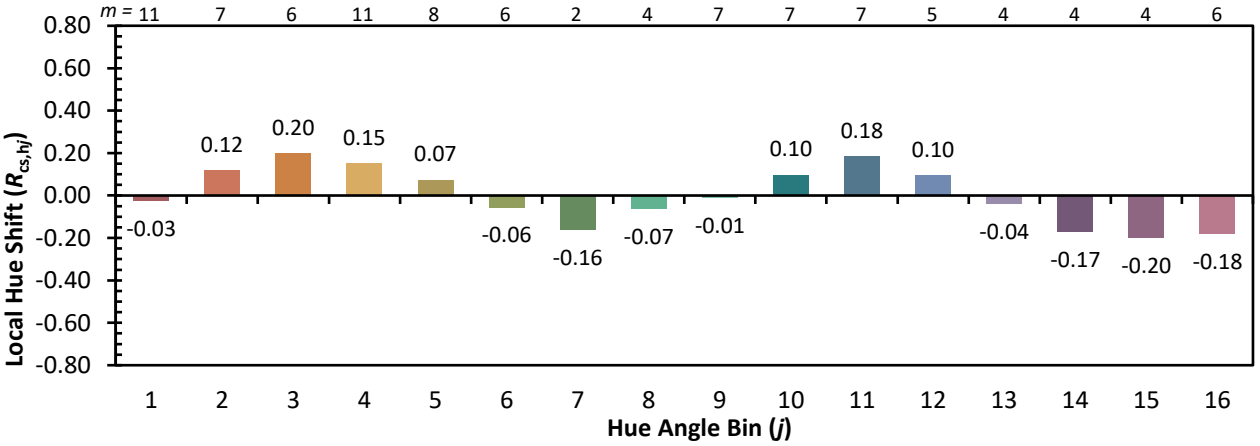
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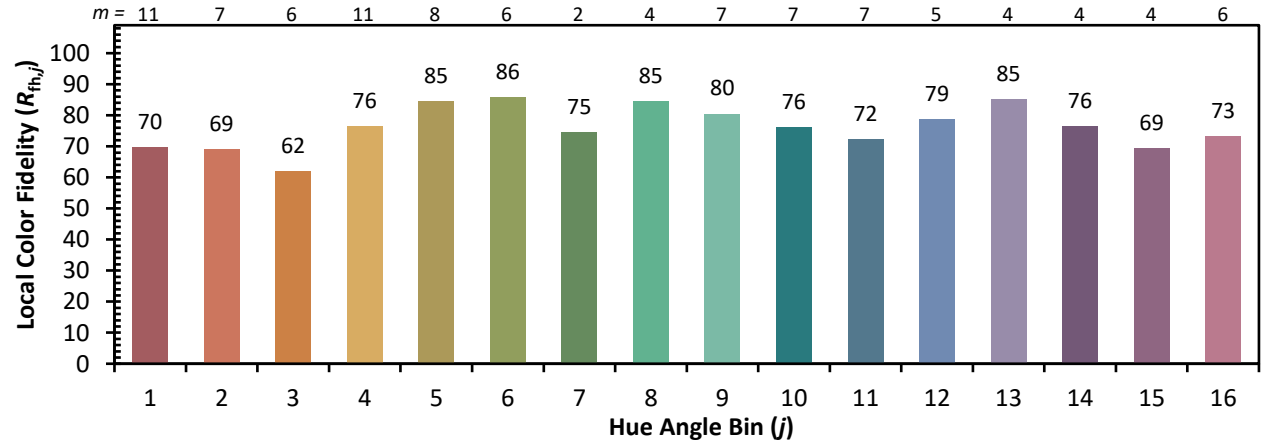
REPORT NUMBER: SP1-1908-441-2-R4

# TM-30-18

## Color Rendition by Hue-Angle Bin



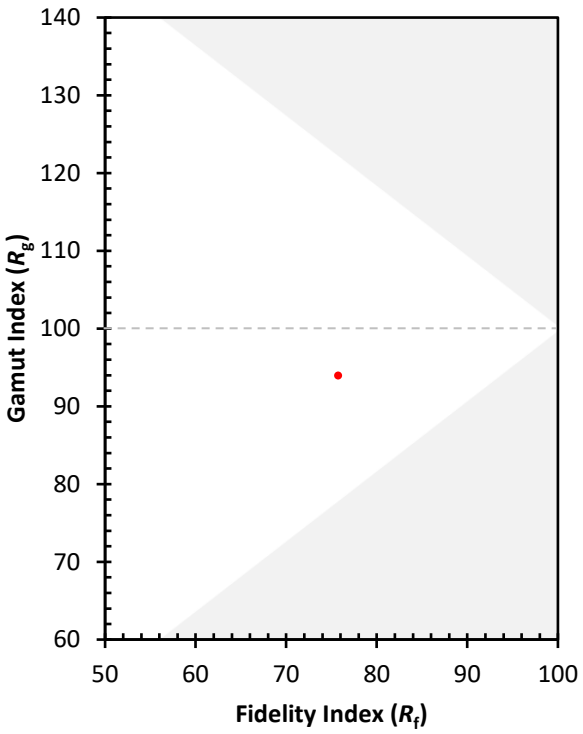



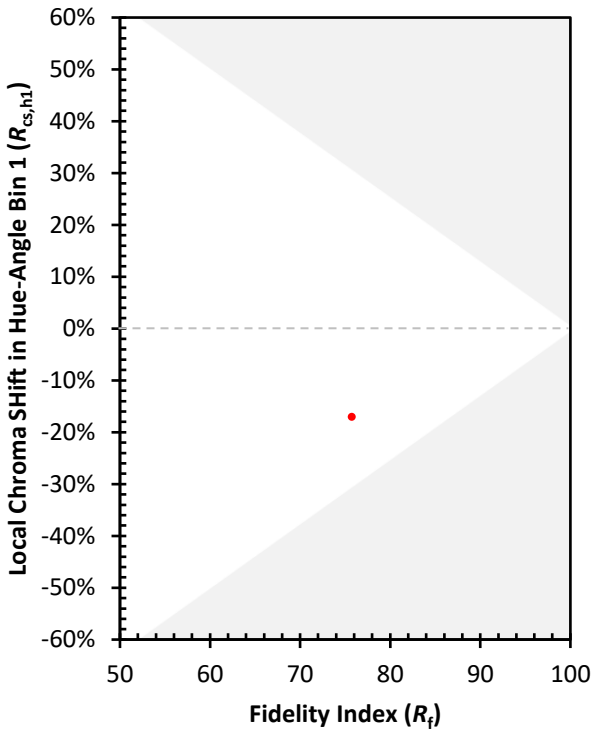
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REPORT NUMBER: SP1-1908-441-2-R4

## TM-30-18

### Measure Comparisons




(END OF REPORT)