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: P1200165

Luminaire Tested: GPC-SB2C-730-U-AFL-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: | P1200165 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/13/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2C-730-U-AFL-HSS |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE FRONTLIN OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 12767 lumens |
| Efficiency: | N/A |
| Efficacy: | 126.5 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Short |
| BUG Rating: | B1 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 100.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.857 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.994 |
| Total Harmonic Distortion (THDi): | 9.472 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

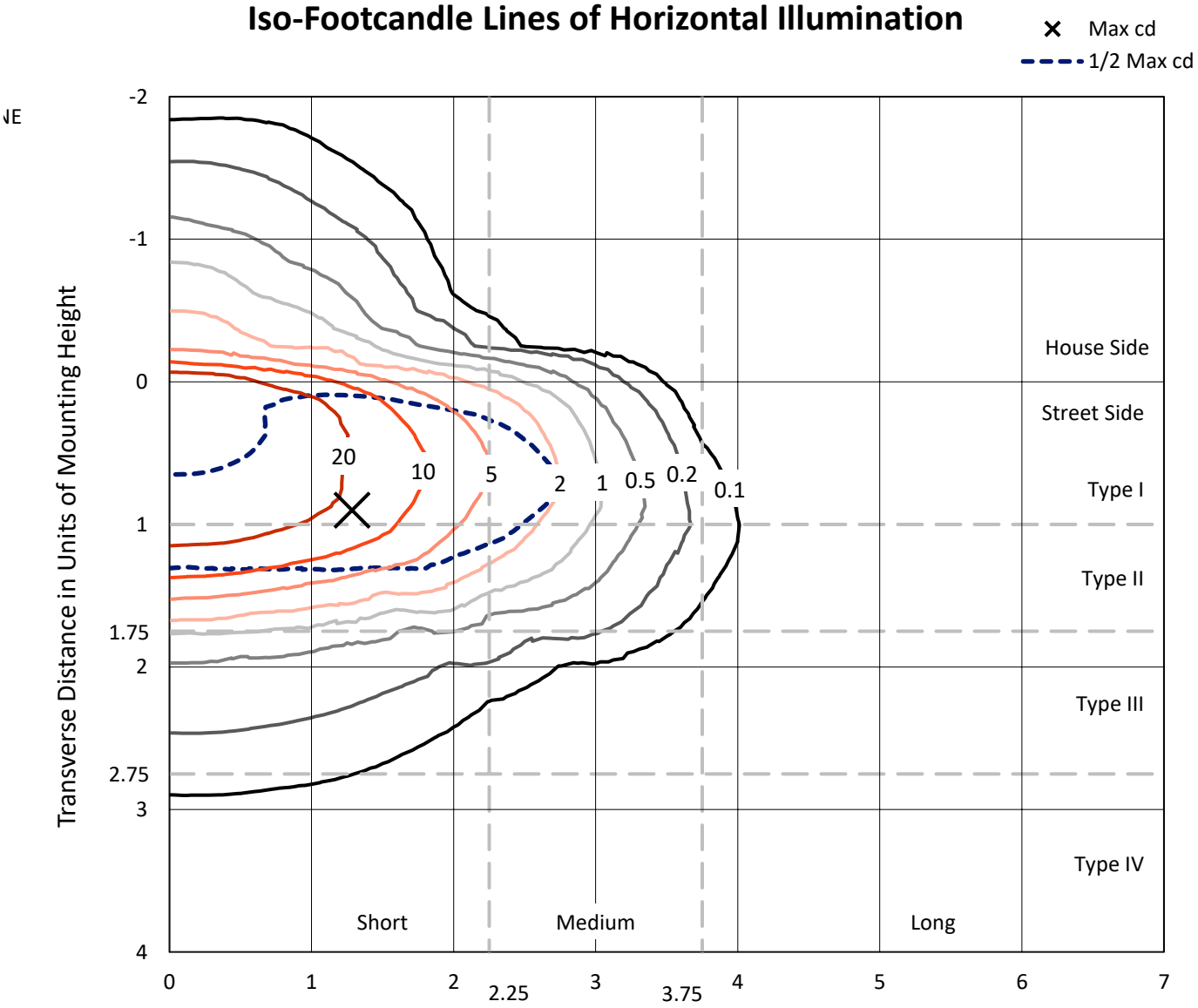


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Scaled Data Report

REPORT NUMBER: P1200165
CATALOG NUMBER: GPC-SB2C-730-U-AFL-HSS

## Iso-Footcandle Lines of Horizontal Illumination



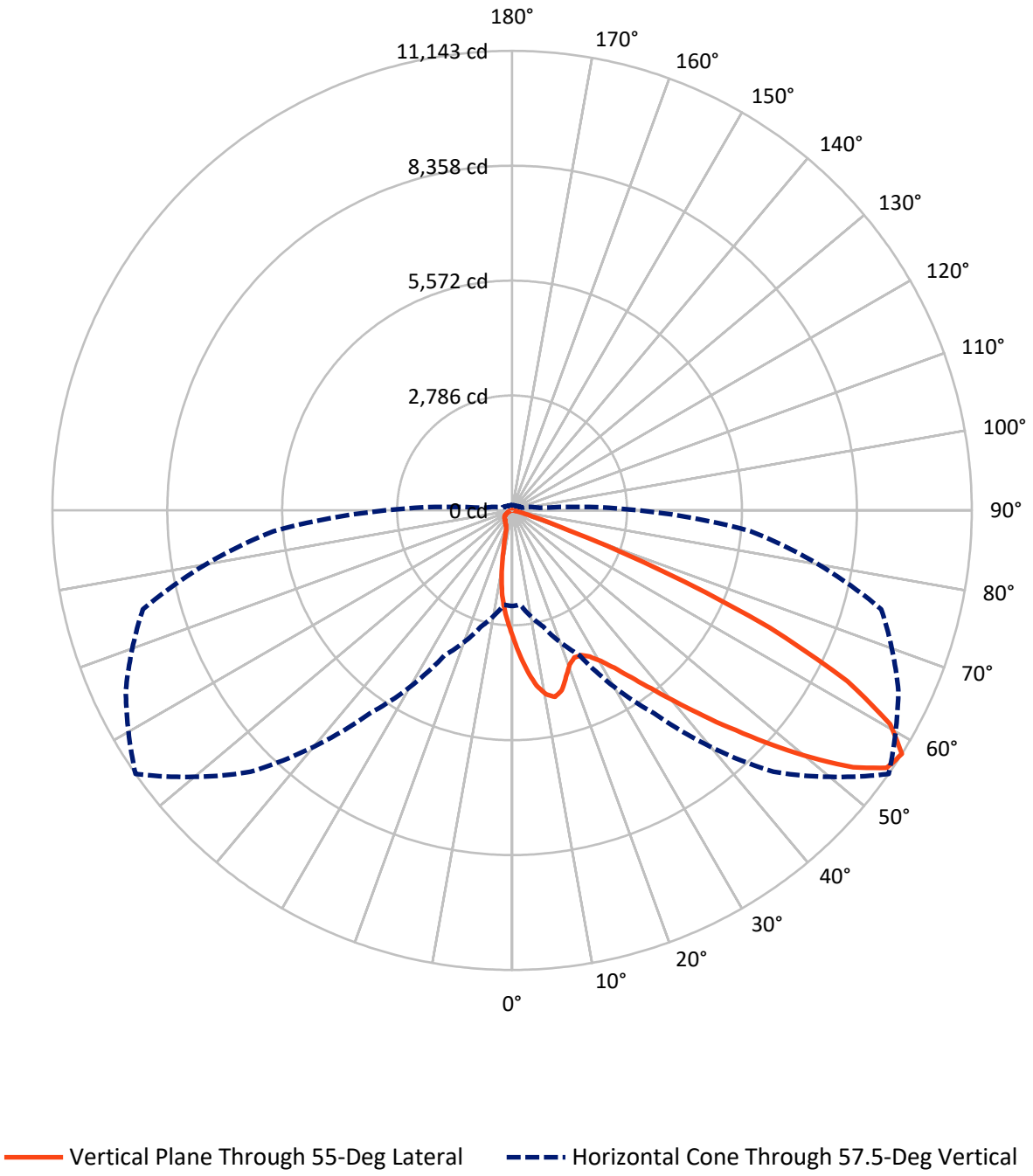

Based on 10 foot mounting height. Maximum calculated value = 44 fc
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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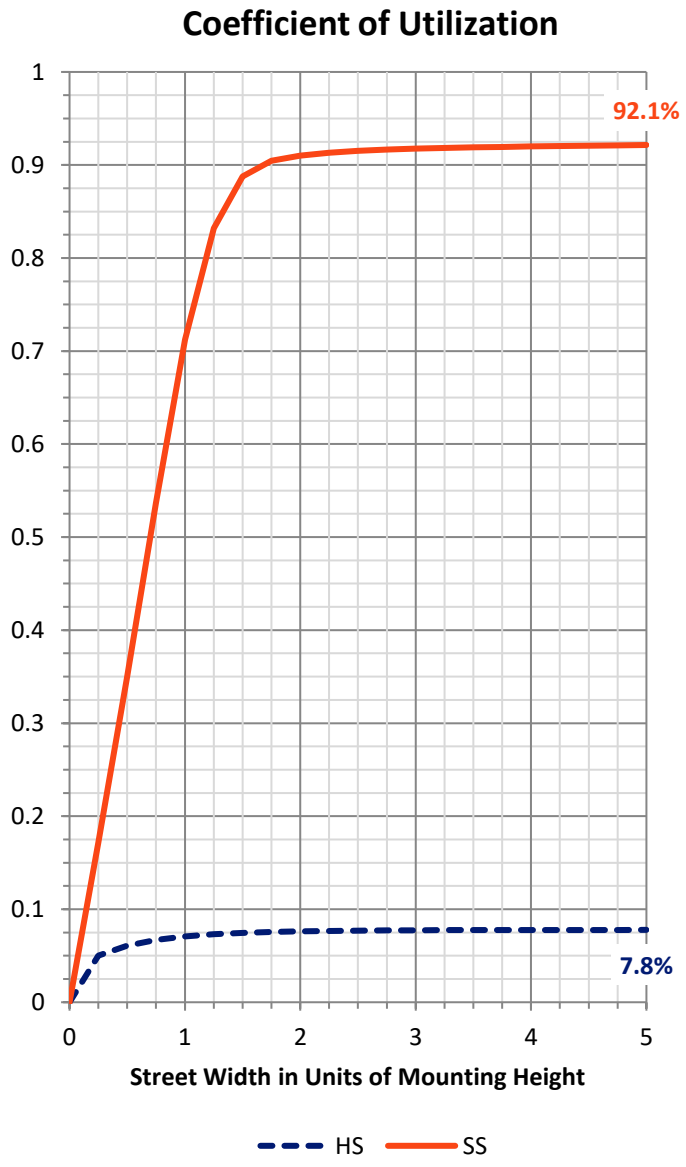
REPORT NUMBER: P1200165
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**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 997.1 | 0.0 | 997.1 |
| | % Fixture | 7.8 | 0.0 | 7.8 |
| **Street Side** | Lumens | 11770.0 | 0.0 | 11770.0 |
| | % Fixture | 92.2 | 0.0 | 92.2 |
| **Total** | Lumens | 12767.0 | 0.0 | 12767.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 286.3 | 2.2 |
| 10°-20° | 691.4 | 5.4 |
| 20°-30° | 1106.3 | 8.7 |
| 30°-40° | 1872.5 | 14.7 |
| 40°-50° | 3074.2 | 24.1 |
| 50°-60° | 3378.8 | 26.5 |
| 60°-70° | 1938.1 | 15.2 |
| 70°-80° | 396.0 | 3.1 |
| 80°-90° | 23.4 | 0.2 |
| 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° | 12767.0 | 100.0 |
| 0°-180° | 12767.0 | 100.0 |



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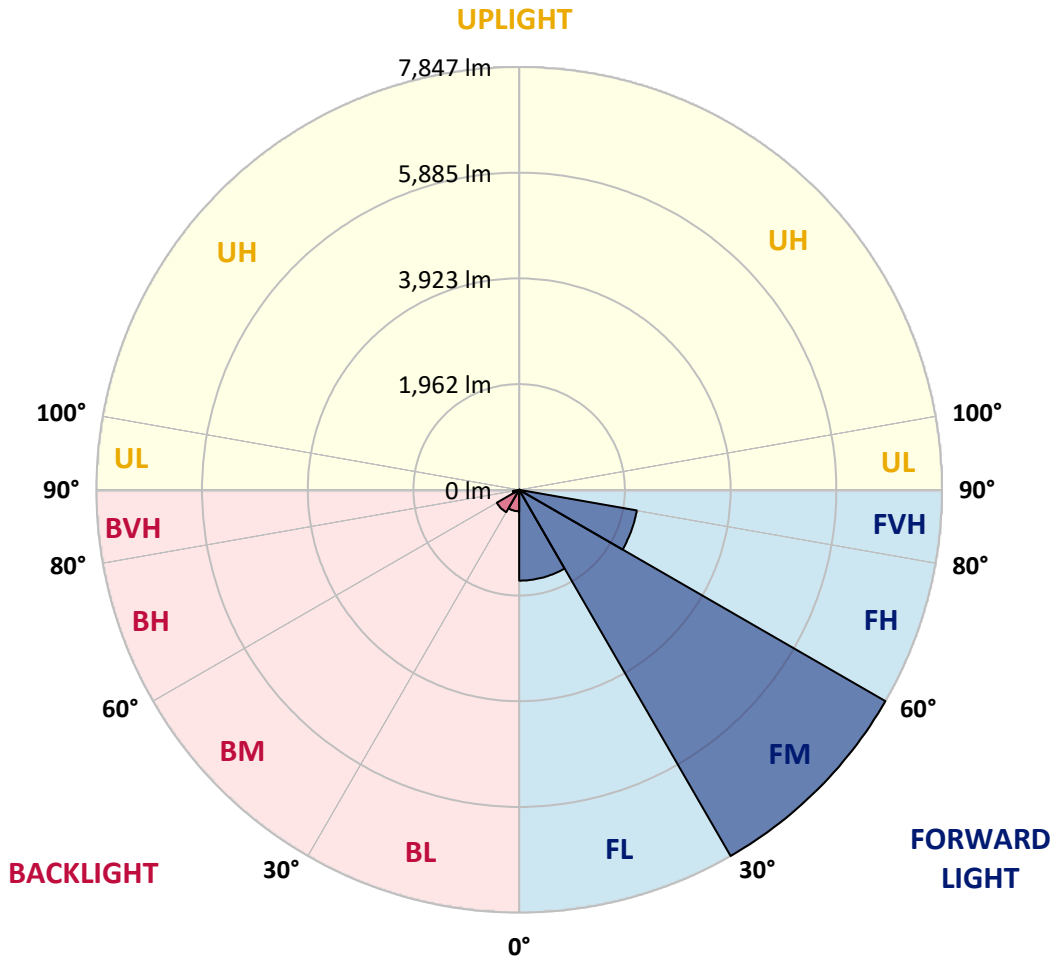
Scaled Data Report

REPORT NUMBER: P1200165
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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°) | 1686.0 | 13.2 | | | |
| FM | (30°-60°) | 7846.7 | 61.5 | | | |
| FH | (60°-80°) | 2215.5 | 17.4 | | | G2/5000 |
| FVH | (80°-90°) | 21.8 | 0.2 | | | G1/100 |
| BL | (0°-30°) | 398.0 | 3.1 | B1/500 | | |
| BM | (30°-60°) | 478.9 | 3.8 | B1/1000 | | |
| BH | (60°-80°) | 118.6 | 0.9 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 1.6 | 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 Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | *3076.5* | 3076.5 | 3076.5 | 3076.5 | 3076.5 |
| 2.5° | 3817.3 | 3769.3 | 3762.2 | 3752.8 | 3661.5 | 3593.0 | *3493.8* | 3385.1 | 3263.1 | 3138.7 | 3083.6 |
| 5° | 4410.1 | 4372.3 | 4365.2 | 4321.2 | 4217.2 | 4100.7 | *3924.4* | 3701.6 | 3474.1 | 3206.4 | 3091.5 |
| 7.5° | 4525.1 | 4518.0 | 4550.2 | 4548.7 | 4534.5 | 4442.4 | *4293.6* | 4028.3 | 3686.6 | 3289.9 | 3112.0 |
| 10° | 4012.6 | 4030.7 | 4126.7 | 4210.9 | 4438.5 | 4570.7 | *4538.4* | 4319.6 | 3905.5 | 3385.1 | 3134.8 |
| 12.5° | 3545.7 | 3524.5 | 3593.0 | 3688.2 | 3952.7 | 4346.3 | *4640.0* | 4562.8 | 4155.8 | 3493.0 | 3168.6 |
| 15° | 3252.9 | 3244.2 | 3282.8 | 3326.9 | 3528.4 | 3925.2 | *4521.9* | 4760.4 | 4396.7 | 3620.5 | 3219.8 |
| 17.5° | 3159.2 | 3152.1 | 3163.9 | 3174.9 | 3305.6 | 3612.6 | *4240.9* | 4881.7 | 4627.4 | 3766.2 | 3276.5 |
| 20° | 3235.6 | 3226.1 | 3224.5 | 3215.9 | 3270.2 | 3479.6 | *3986.6* | 4890.3 | 4834.4 | 3898.4 | 3325.3 |
| 22.5° | 3458.3 | 3447.3 | 3408.7 | 3374.1 | 3378.8 | 3497.7 | *3873.2* | 4803.7 | 4990.3 | 4022.0 | 3356.0 |
| 25° | 3862.2 | 3844.1 | 3763.8 | 3647.3 | 3573.3 | 3623.7 | *3890.5* | 4689.6 | 5139.1 | 4118.8 | 3341.0 |
| 27.5° | 4367.6 | 4344.0 | 4240.9 | 4067.7 | 3898.4 | 3837.0 | *4015.7* | 4610.9 | 5262.7 | 4192.8 | 3308.8 |
| 30° | 4862.8 | 4832.1 | 4730.5 | 4595.9 | 4348.7 | 4155.1 | *4241.6* | 4645.5 | 5409.9 | 4270.0 | 3266.3 |
| 32.5° | 5397.3 | 5368.2 | 5233.6 | 5066.7 | 4862.0 | 4601.4 | *4551.0* | 4814.8 | 5590.2 | 4377.8 | 3236.3 |
| 35° | 6073.6 | 6027.9 | 5836.6 | 5609.1 | 5391.8 | 5128.1 | *4969.8* | 5106.8 | 5830.3 | 4542.4 | 3252.9 |
| 37.5° | 6843.5 | 6782.1 | 6575.8 | 6261.7 | 5978.3 | 5683.1 | *5480.0* | 5508.3 | 6182.2 | 4762.8 | 3304.0 |
| 40° | 7569.3 | 7513.4 | 7322.9 | 7026.9 | 6671.1 | 6312.9 | *6096.4* | 6033.4 | 6667.9 | 5031.2 | 3393.8 |
| 42.5° | 8004.7 | 7954.3 | 7874.0 | 7748.8 | 7448.9 | 7083.6 | *6810.4* | 6674.2 | 7242.6 | 5352.4 | 3503.2 |
| 45° | 8029.1 | 7985.0 | 8092.8 | 8238.5 | 8179.4 | 7936.2 | *7603.2* | 7353.6 | 7819.7 | 5654.0 | 3616.6 |
| 47.5° | 7638.6 | 7608.7 | 7936.2 | 8444.7 | 8698.2 | 8800.6 | *8493.5* | 7976.3 | 8295.9 | 5870.4 | 3663.0 |
| 50° | 6574.2 | 6563.2 | 7237.1 | 8170.8 | 8895.8 | 9557.9 | *9432.7* | 8555.7 | 8665.1 | 5982.2 | 3618.9 |
| 52.5° | 5700.4 | 5660.3 | 6053.1 | 7293.8 | 8608.5 | 9956.2 | *10350.6* | 9124.1 | 8923.4 | 6003.5 | 3515.8 |
| 55° | 4323.5 | 4288.1 | 4780.9 | 5826.4 | 7681.9 | 9814.5 | *11022.1* | 9710.6 | 9108.4 | 5949.2 | 3330.8 |
| 57.5° | *2319.2* | *2297.2* | *2919.9* | *3877.9* | *6005.1* | *8964.3* | *11143.4* | *10330.9* | *9264.2* | *5805.1* | *3071.8* |
| 60° | 903.0 | 899.0 | 1132.1 | 1881.5 | 3649.6 | 7293.0 | *10531.7* | 10703.3 | 9361.9 | 5628.0 | 2855.3 |
| 62.5° | 546.3 | 558.2 | 595.9 | 844.7 | 1612.3 | 4530.6 | *9121.7* | 10279.8 | 9427.2 | 5465.8 | 2676.6 |
| 65° | 451.9 | 452.7 | 457.4 | 580.2 | 772.3 | 1895.7 | *6867.1* | 8886.4 | 9265.8 | 5176.9 | 2423.1 |
| 67.5° | 387.3 | 394.4 | 412.5 | 460.5 | 544.8 | 831.3 | *3953.5* | 6883.6 | 8284.1 | 4504.6 | 2027.9 |
| 70° | 305.4 | 314.9 | 337.7 | 378.7 | 420.4 | 520.4 | *1461.1* | 4580.2 | 6328.6 | 3395.4 | 1533.5 |
| 72.5° | 257.4 | 256.6 | 268.4 | 307.8 | 333.8 | 366.1 | *562.1* | 2566.4 | 3678.0 | 1620.9 | 758.9 |
| 75° | 199.2 | 207.0 | 222.0 | 257.4 | 273.2 | 265.3 | *304.7* | 937.6 | 1317.8 | 491.2 | 258.2 |
| 77.5° | 155.9 | 162.2 | 175.6 | 210.2 | 225.9 | 188.2 | *175.6* | 335.4 | 423.5 | 176.3 | 116.5 |
| 80° | 70.1 | 75.6 | 119.7 | 155.1 | 184.2 | 129.9 | *95.3* | 171.6 | 188.2 | 80.3 | 59.0 |
| 82.5° | 12.6 | 21.3 | 70.1 | 81.9 | 94.5 | 84.2 | *49.6* | 89.0 | 92.1 | 32.3 | 20.5 |
| 85° | 0.8 | 1.6 | 24.4 | 29.9 | 37.8 | 27.6 | *15.0* | 35.4 | 30.7 | 11.0 | 7.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 3.9 | *4.7* | 6.3 | 4.7 | 3.9 | 3.1 |
| 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: P1200165
CATALOG NUMBER: GPC-SB2C-730-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 | 3076.5 |
| 2.5° | 3026.9 | 2915.1 | 2806.5 | 2717.6 | 2665.6 | 2577.4 | 2519.2 | 2509.7 | 2485.3 | 2506.6 |
| 5° | 2968.7 | 2768.7 | 2566.4 | 2385.3 | 2236.5 | 2044.5 | 1901.2 | 1840.6 | 1787.8 | 1805.9 |
| 7.5° | 2941.1 | 2625.4 | 2310.5 | 2001.2 | 1683.1 | 1376.1 | 1147.8 | 1052.5 | 980.1 | 990.3 |
| 10° | 2904.1 | 2476.7 | 1983.1 | 1510.7 | 1084.8 | 781.7 | 624.3 | 566.0 | 533.7 | 534.5 |
| 12.5° | 2875.8 | 2298.7 | 1602.8 | 1024.2 | 660.5 | 499.1 | 450.3 | 436.1 | 426.7 | 427.5 |
| 15° | 2861.6 | 2089.3 | 1227.3 | 682.5 | 472.3 | 422.7 | 410.9 | 404.6 | 398.3 | 397.6 |
| 17.5° | 2838.0 | 1856.3 | 898.2 | 498.3 | 413.3 | 396.0 | 385.7 | 378.7 | 370.8 | 369.2 |
| 20° | 2802.6 | 1591.8 | 656.6 | 421.2 | 387.3 | 373.9 | 359.8 | 350.3 | 340.9 | 339.3 |
| 22.5° | 2737.2 | 1312.3 | 504.6 | 389.7 | 368.4 | 353.5 | 336.2 | 325.1 | 315.7 | 314.1 |
| 25° | 2616.0 | 1050.2 | 425.1 | 370.0 | 351.9 | 333.8 | 314.9 | 299.9 | 291.3 | 289.7 |
| 27.5° | 2462.5 | 825.0 | 385.7 | 351.9 | 330.6 | 314.1 | 292.9 | 278.7 | 270.8 | 269.2 |
| 30° | 2281.4 | 635.3 | 362.9 | 331.4 | 305.4 | 291.3 | 272.4 | 260.6 | 255.9 | 255.9 |
| 32.5° | 2086.2 | 507.8 | 353.5 | 311.0 | 283.4 | 267.7 | 252.7 | 248.0 | 246.4 | 245.6 |
| 35° | 1902.8 | 440.9 | 348.7 | 294.4 | 263.7 | 248.8 | 242.5 | 243.3 | 246.4 | 246.4 |
| 37.5° | 1739.8 | 419.6 | 346.4 | 282.6 | 246.4 | 233.0 | 237.0 | 244.0 | 240.9 | 240.9 |
| 40° | 1592.6 | 422.0 | 344.8 | 274.0 | 232.2 | 224.4 | 232.2 | 226.7 | 218.9 | 218.1 |
| 42.5° | 1480.0 | 441.6 | 341.7 | 266.9 | 223.6 | 218.1 | 214.9 | 206.3 | 205.5 | 207.0 |
| 45° | 1398.1 | 459.0 | 340.9 | 263.7 | 214.1 | 203.9 | 200.0 | 191.3 | 207.0 | 211.0 |
| 47.5° | 1301.3 | 459.0 | 340.9 | 252.7 | 198.4 | 194.4 | 188.2 | 178.7 | 194.4 | 198.4 |
| 50° | 1176.1 | 429.8 | 327.5 | 240.1 | 185.8 | 183.4 | 172.4 | 160.6 | 157.4 | 159.8 |
| 52.5° | 1017.9 | 377.1 | 293.6 | 222.8 | 173.2 | 168.5 | 155.1 | 146.4 | 144.1 | 144.1 |
| 55° | 837.6 | 315.7 | 248.0 | 197.6 | 159.8 | 151.2 | 141.7 | 137.8 | 135.4 | 133.8 |
| 57.5° | *681.0* | *259.0* | *199.2* | *175.6* | *147.2* | *136.2* | *133.0* | *128.3* | *124.4* | *122.0* |
| 60° | 558.9 | 203.9 | 164.5 | 155.9 | 134.6 | 124.4 | 123.6 | 117.3 | 107.1 | 105.5 |
| 62.5° | 431.4 | 149.6 | 138.6 | 135.4 | 122.0 | 113.4 | 111.8 | 99.2 | 83.4 | 80.3 |
| 65° | 304.7 | 116.5 | 111.8 | 118.9 | 108.6 | 100.8 | 96.8 | 77.9 | 61.4 | 59.0 |
| 67.5° | 214.1 | 97.6 | 88.2 | 103.9 | 94.5 | 84.2 | 81.9 | 66.1 | 51.2 | 49.6 |
| 70° | 152.7 | 79.5 | 72.4 | 89.0 | 75.6 | 74.0 | 69.3 | 55.1 | 41.7 | 40.1 |
| 72.5° | 107.9 | 60.6 | 55.9 | 77.1 | 52.0 | 63.8 | 56.7 | 42.5 | 31.5 | 29.9 |
| 75° | 79.5 | 43.3 | 39.4 | 44.9 | 37.8 | 48.0 | 40.1 | 28.3 | 19.7 | 18.9 |
| 77.5° | 58.3 | 27.6 | 23.6 | 22.0 | 22.0 | 29.9 | 22.0 | 11.8 | 8.7 | 7.9 |
| 80° | 40.9 | 12.6 | 11.0 | 9.4 | 8.7 | 7.1 | 3.1 | 1.6 | 0.8 | 0.8 |
| 82.5° | 24.4 | 5.5 | 5.5 | 3.9 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 5.5 | 2.4 | 2.4 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.8 | 0.8 | 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 |

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Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

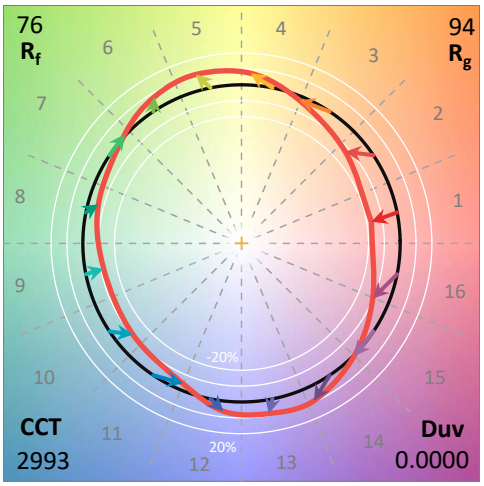
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-2-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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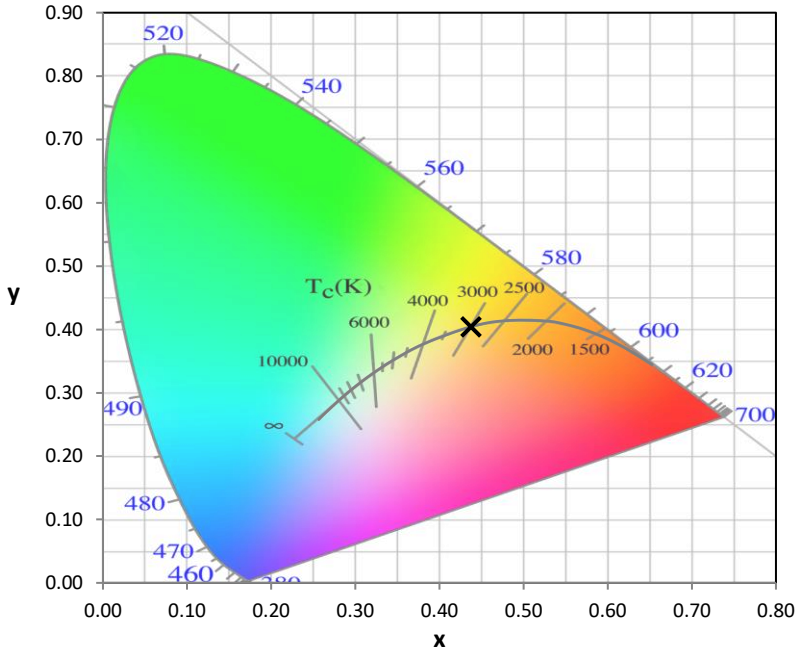
REPORT NUMBER: SP1-1908-441-2-R4

| 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 |

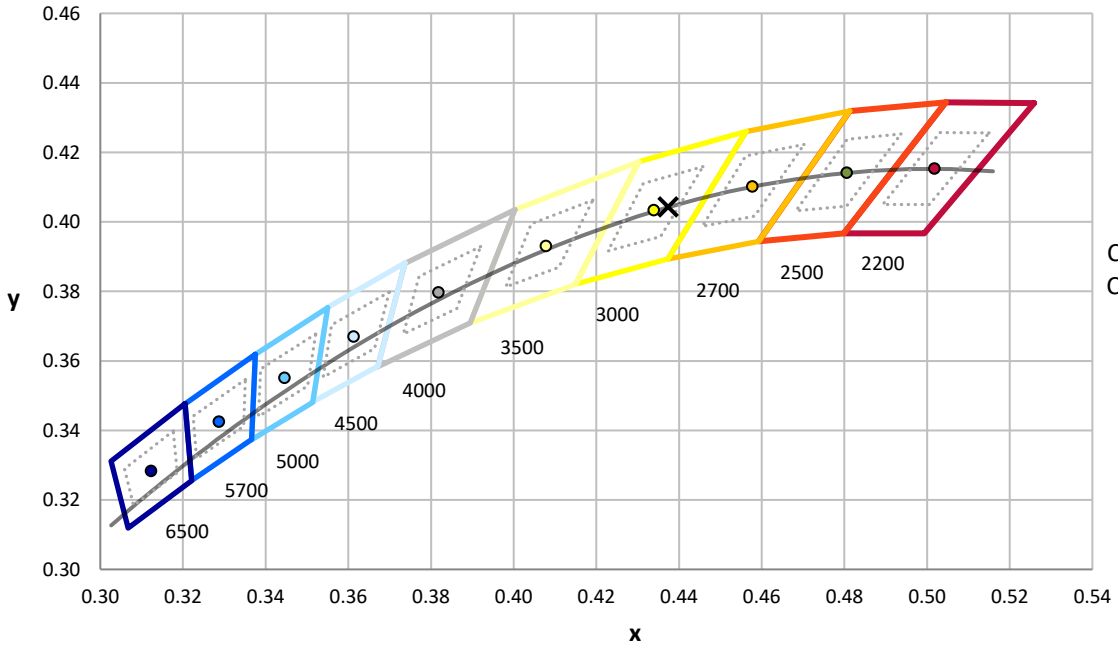
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



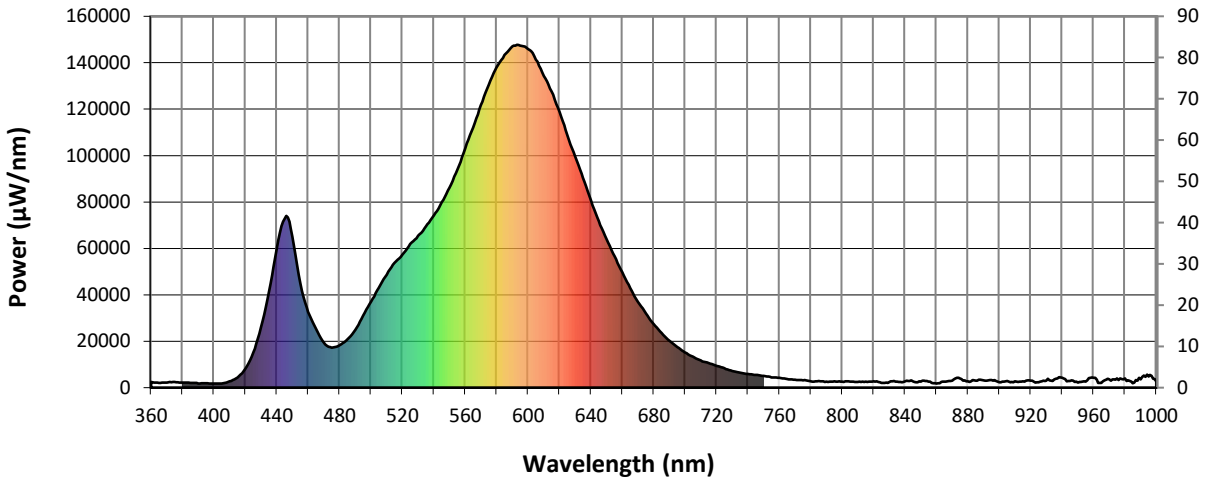

CCT = 2993K
CIE x = 0.4374
CIE y = 0.4043
Duv = 0.0000

Point lies inside the ANSI 3000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



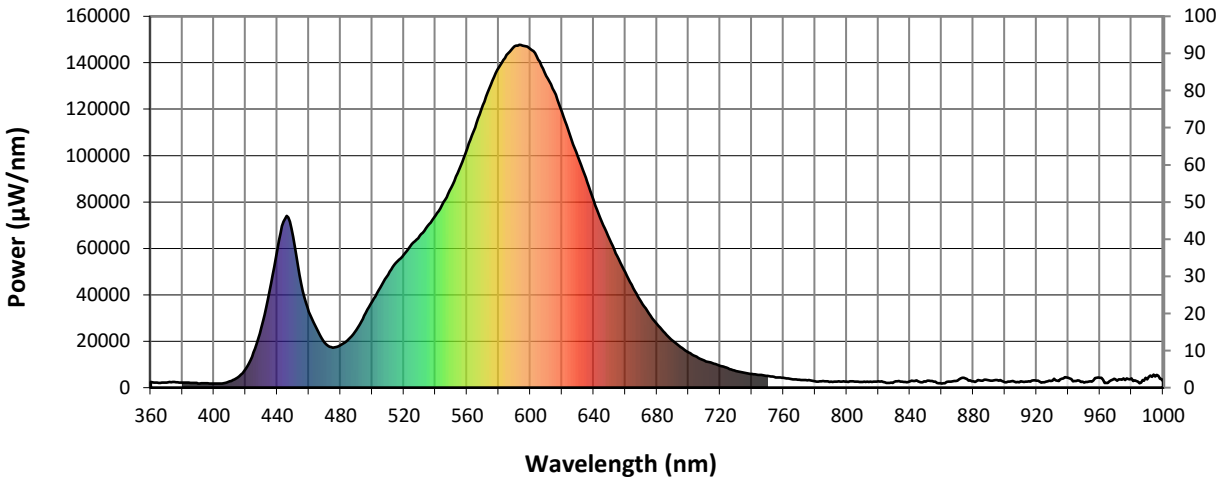

######

| 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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## Scotopic Flux vs. Wavelength



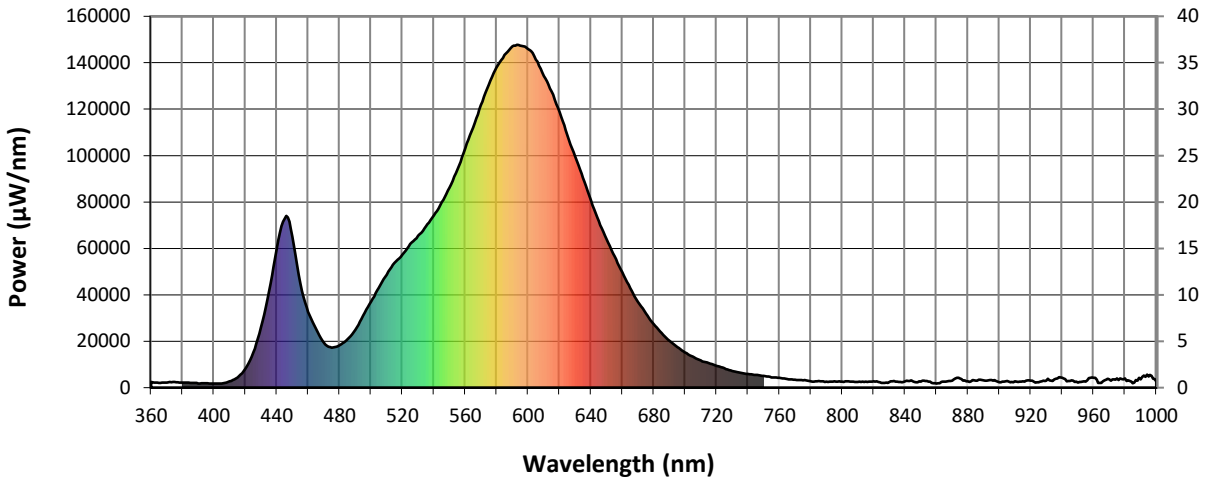

**Scotopic Lumens: 8494.8** **S/P: 1.23**

| 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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## 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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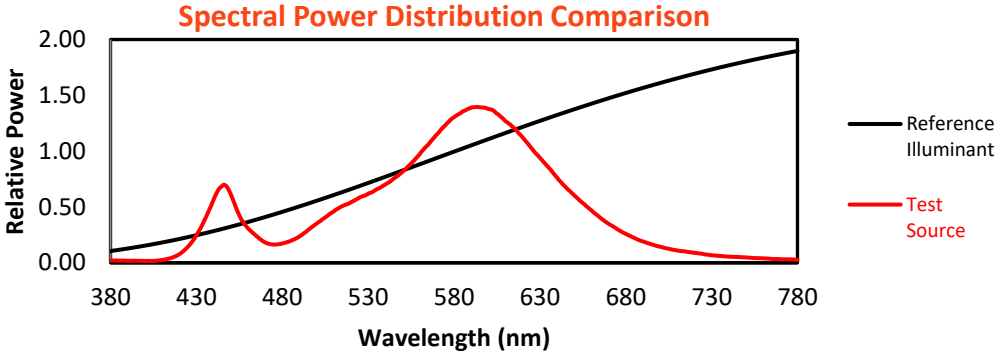
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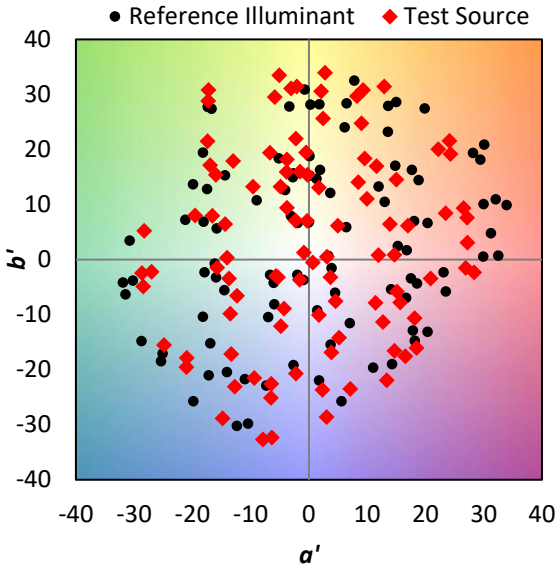
## Summary

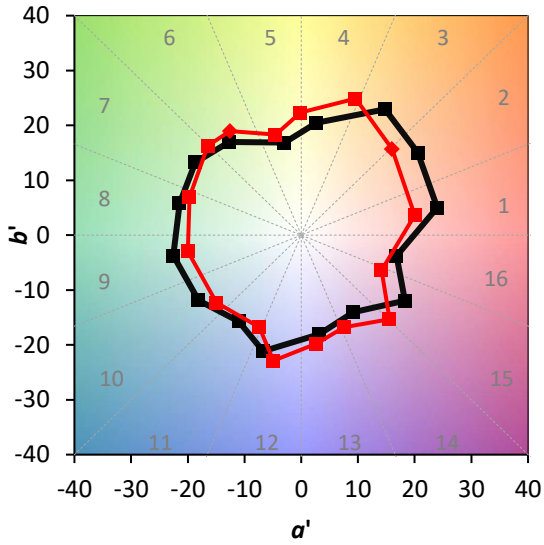
$R_f$ = 75.7
$R_g$ = 93.9
CIE $R_a$ = 71.8
$R_9$ = -38.3

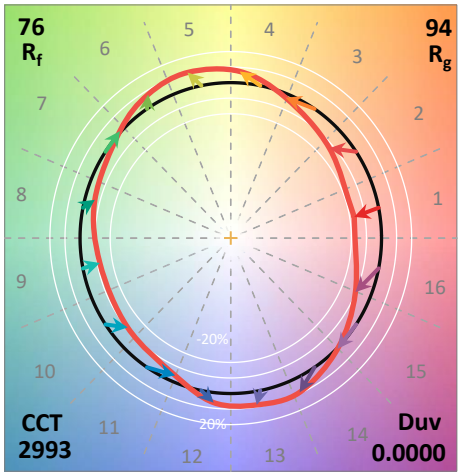
## Spectral Power Distribution Comparison

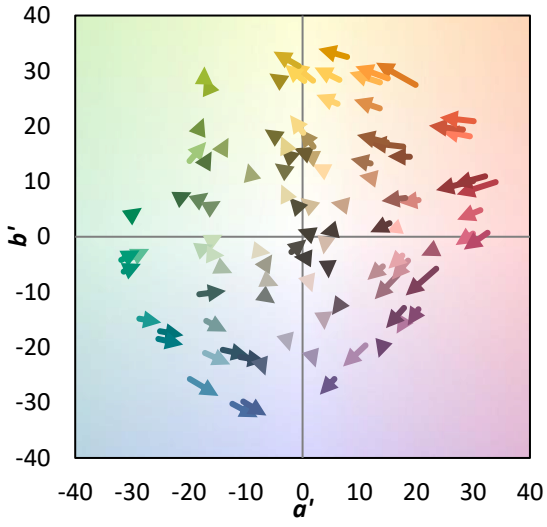



## Color Vector Graphics



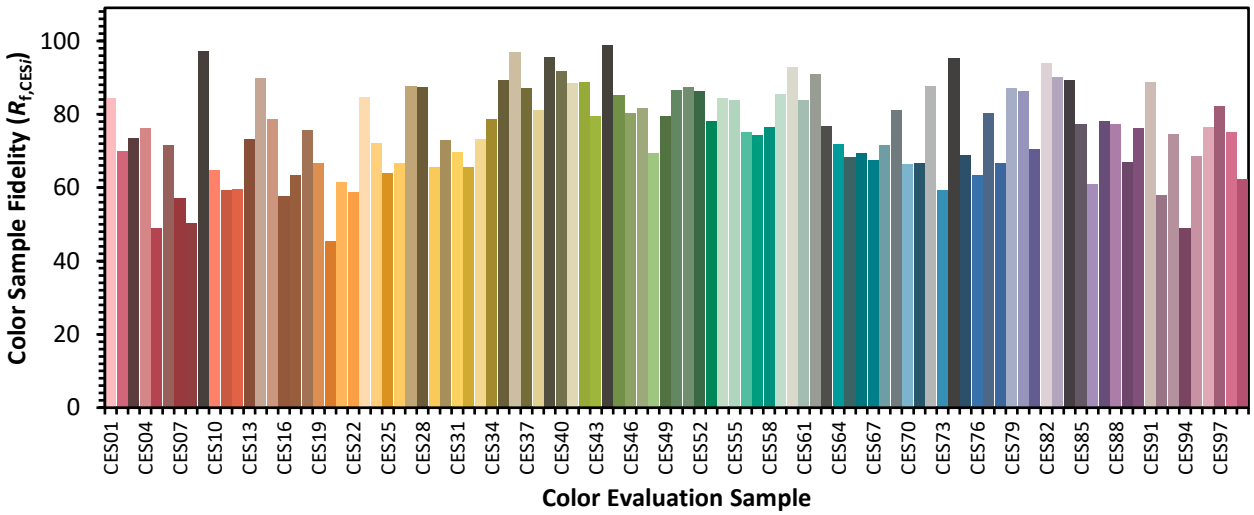
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## Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|---|---|---|---|
| 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 | |

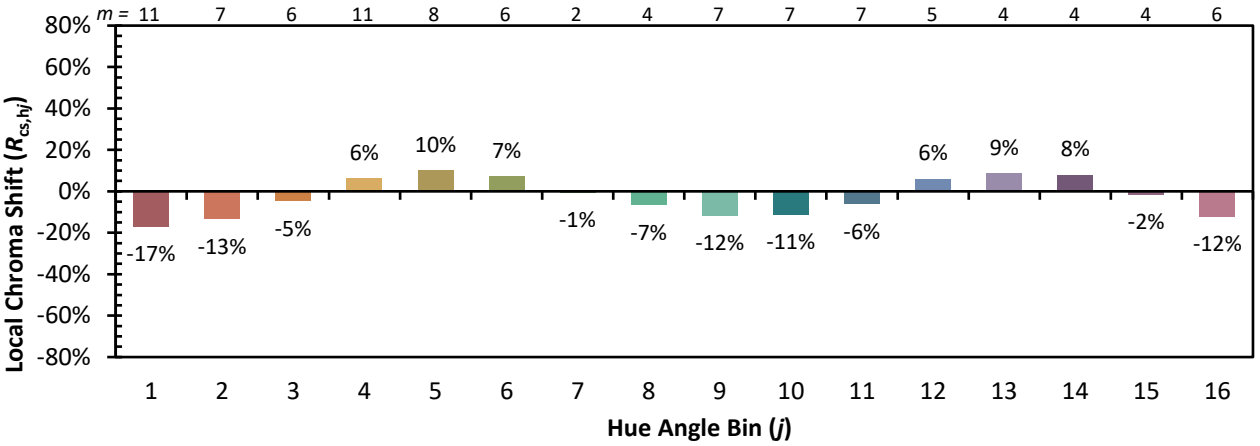


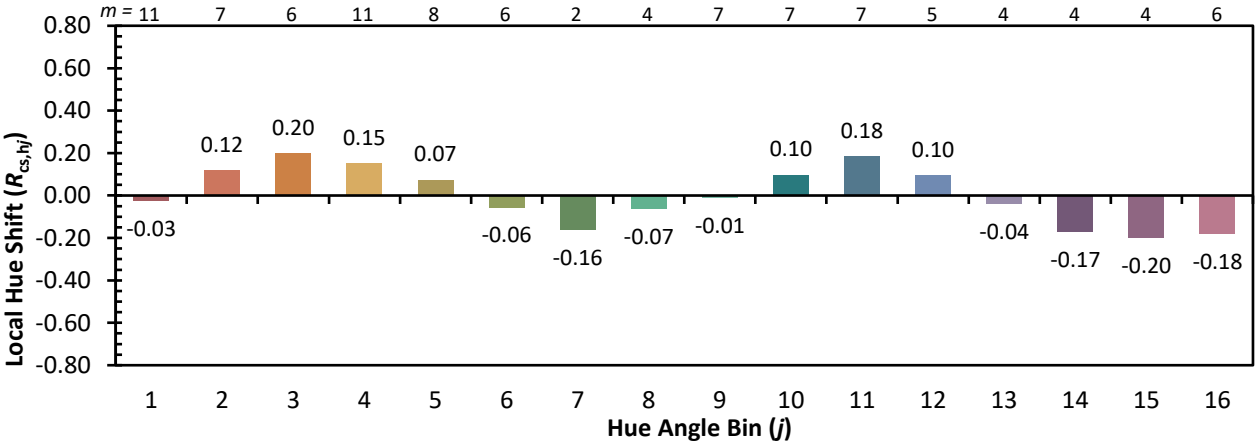
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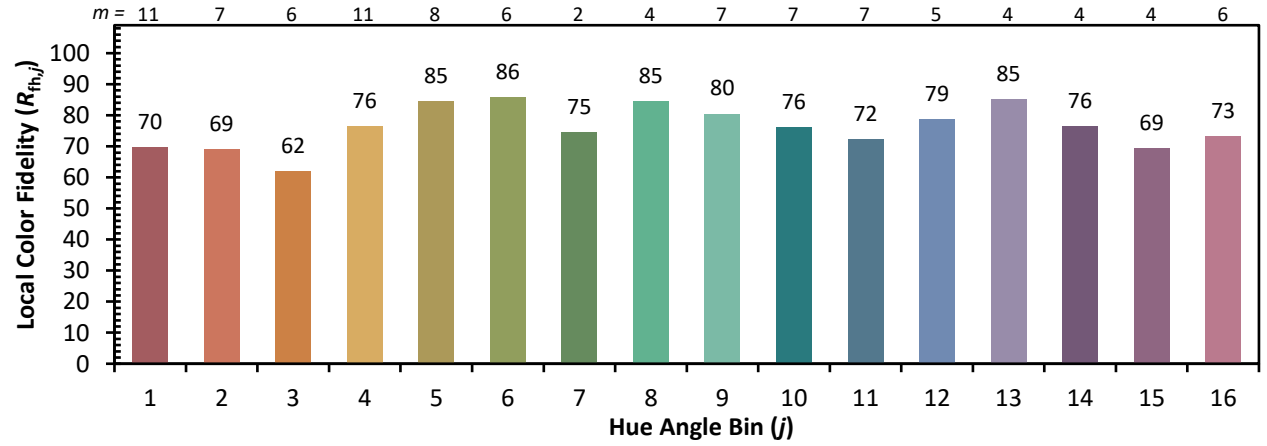
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## Color Rendition by Hue-Angle Bin



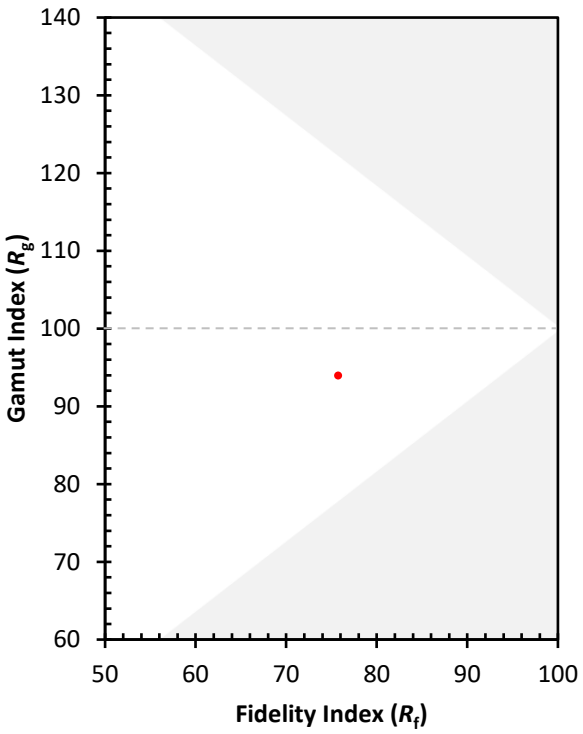



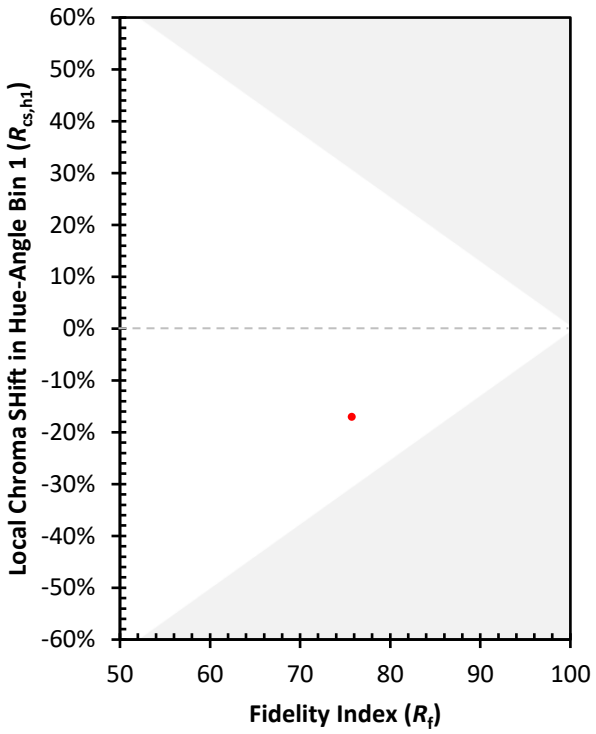
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### Measure Comparisons




(END OF REPORT)