

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P634965

Luminaire Tested: GWS-SA3C-827-U-SLR-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3C-827-U-SLR-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6363.9 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

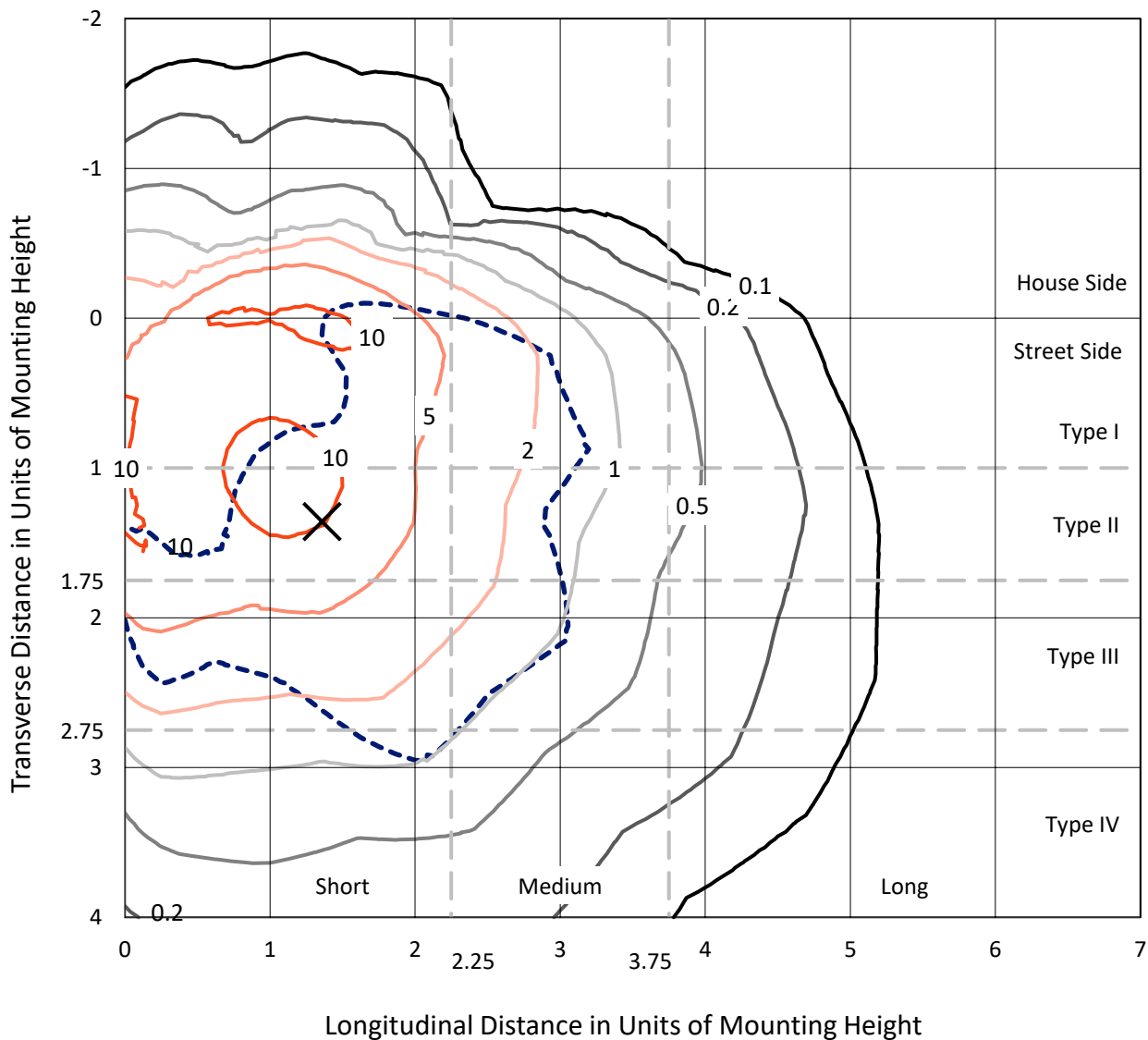
Input Watts (W): 93
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634965
 CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

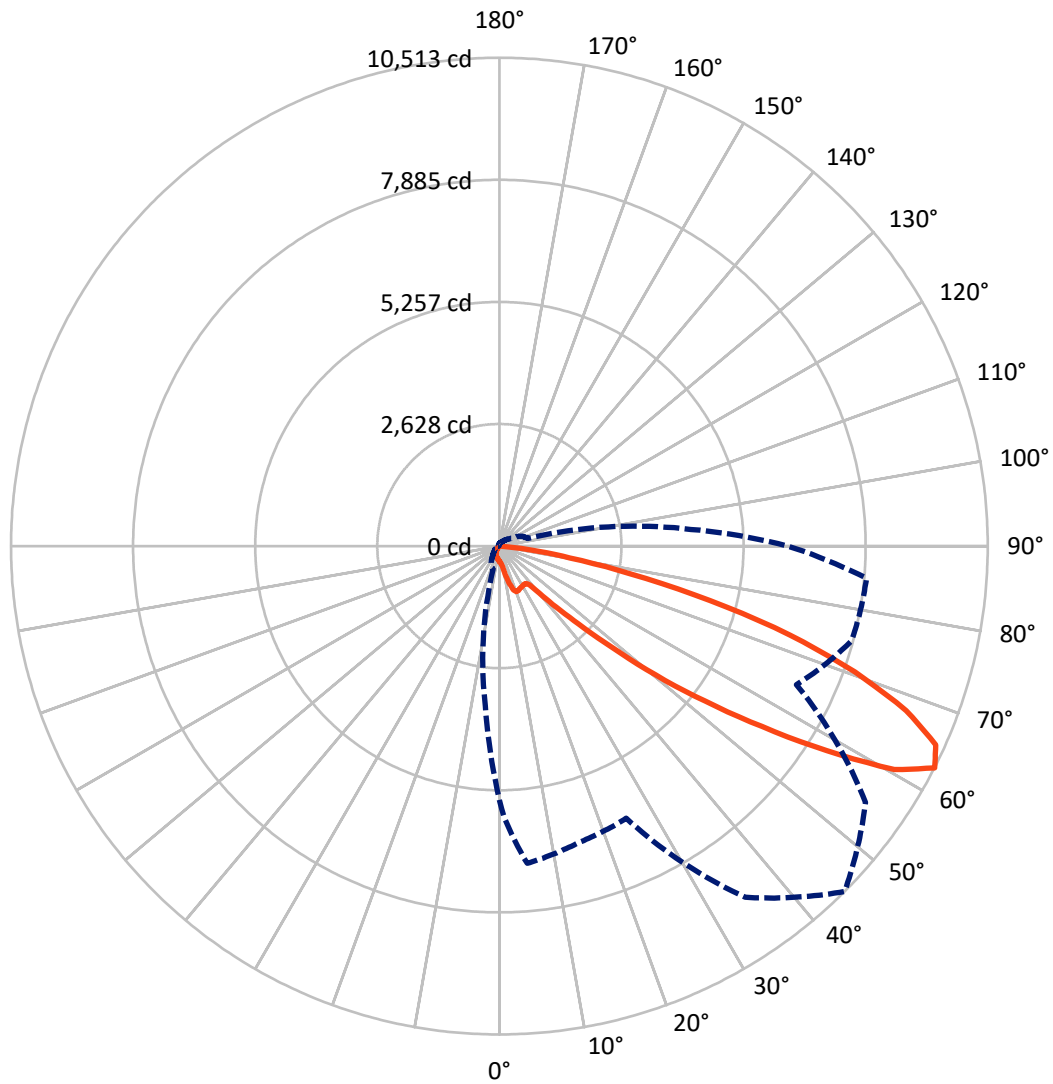
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P634965
CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P634965
 CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 785.3 | 0.0 | 785.3 |
| | % Fixture | 12.3 | 0.0 | 12.3 |
| Street Side | Lumens | 5578.6 | 0.0 | 5578.6 |
| | % Fixture | 87.7 | 0.0 | 87.7 |
| Total | Lumens | 6363.9 | 0.0 | 6363.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 29.3 | 0.5 |
| 10°-20° | 111.0 | 1.7 |
| 20°-30° | 241.2 | 3.8 |
| 30°-40° | 395.9 | 6.2 |
| 40°-50° | 727.8 | 11.4 |
| 50°-60° | 1562.9 | 24.6 |
| 60°-70° | 2099.2 | 33.0 |
| 70°-80° | 1093.1 | 17.2 |
| 80°-90° | 103.6 | 1.6 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 6363.9 | 100.0 |
| 0°-180° | 6363.9 | 100.0 |

Coefficient of Utilization

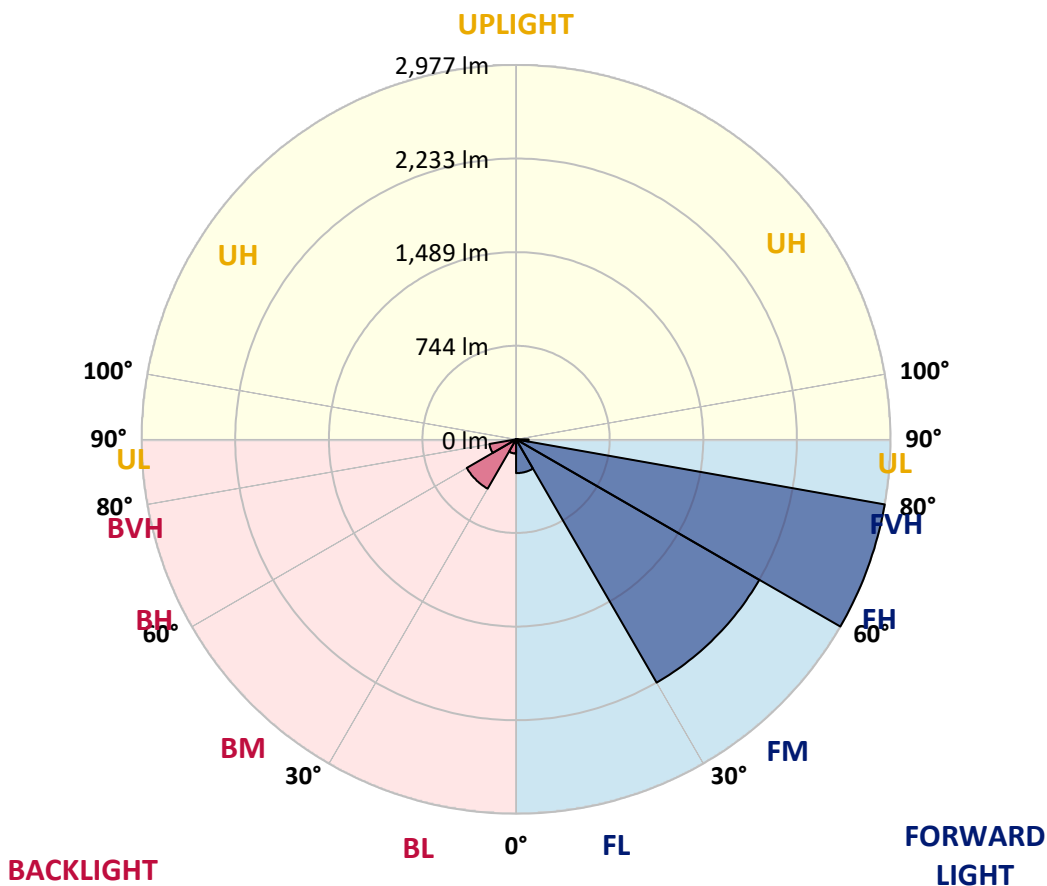


REPORT NUMBER: P634965
 CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 268.8 | 4.2 | | | |
| FM (30°-60°) | 2233.7 | 35.1 | | | |
| FH (60°-80°) | 2977.1 | 46.8 | | | G2/5000 |
| FVH (80°-90°) | 99.0 | 1.6 | | | G1/100 |
| BL (0°-30°) | 112.6 | 1.8 | B1/500 | | |
| BM (30°-60°) | 452.9 | 7.1 | B1/1000 | | |
| BH (60°-80°) | 215.2 | 3.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 4.6 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type IV Short





REPORT NUMBER: P634965

CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 0° | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 |
| 2.5° | 337.4 | 338.9 | 340.3 | 345.5 | 349.2 | 352.1 | 352.8 | 350.6 | 345.5 | 340.3 | 333.0 |
| 5° | 327.1 | 328.6 | 333.7 | 347.7 | 361.7 | 372.7 | 376.4 | 374.2 | 361.7 | 345.5 | 328.6 |
| 7.5° | 326.4 | 329.3 | 341.8 | 371.2 | 401.4 | 424.1 | 430.0 | 424.9 | 401.4 | 369.0 | 334.5 |
| 10° | 352.8 | 358.0 | 376.4 | 429.3 | 484.4 | 524.9 | 541.0 | 519.0 | 481.5 | 422.7 | 366.1 |
| 12.5° | 421.9 | 430.8 | 466.0 | 543.2 | 628.5 | 682.2 | 704.2 | 677.0 | 618.2 | 532.9 | 443.3 |
| 15° | 530.7 | 544.0 | 596.9 | 712.3 | 813.0 | 860.8 | 868.1 | 852.7 | 784.3 | 690.2 | 569.7 |
| 17.5° | 684.4 | 703.5 | 785.8 | 903.4 | 976.2 | 993.1 | 990.9 | 974.7 | 924.7 | 860.1 | 746.1 |
| 20° | 868.1 | 890.9 | 971.8 | 1068.8 | 1076.2 | 1056.3 | 1045.3 | 1035.7 | 1018.8 | 1007.8 | 918.9 |
| 22.5° | 1053.4 | 1081.3 | 1165.8 | 1190.1 | 1123.9 | 1066.6 | 1039.4 | 1046.8 | 1071.8 | 1126.2 | 1090.1 |
| 25° | 1237.9 | 1264.4 | 1343.7 | 1278.3 | 1146.0 | 1050.4 | 1015.9 | 1033.5 | 1093.1 | 1210.7 | 1257.0 |
| 27.5° | 1453.3 | 1473.1 | 1520.2 | 1338.6 | 1149.7 | 1037.2 | 1003.4 | 1030.6 | 1103.4 | 1263.6 | 1440.0 |
| 30° | 1677.5 | 1689.2 | 1666.4 | 1354.8 | 1137.2 | 1017.4 | 990.9 | 1030.6 | 1121.0 | 1298.9 | 1577.5 |
| 32.5° | 1842.1 | 1844.3 | 1770.1 | 1356.2 | 1130.6 | 1001.2 | 979.1 | 1026.2 | 1137.9 | 1328.3 | 1710.5 |
| 35° | 2011.9 | 2000.9 | 1869.3 | 1378.3 | 1148.2 | 1007.1 | 988.0 | 1038.7 | 1164.4 | 1362.9 | 1827.4 |
| 37.5° | 2183.9 | 2164.1 | 1980.3 | 1414.3 | 1193.8 | 1071.0 | 1059.3 | 1102.6 | 1207.0 | 1410.6 | 1956.1 |
| 40° | 2360.4 | 2333.2 | 2095.7 | 1468.7 | 1295.2 | 1288.6 | 1329.0 | 1323.9 | 1323.9 | 1471.6 | 2088.4 |
| 42.5° | 2575.7 | 2544.1 | 2266.3 | 1622.3 | 1531.9 | 1679.7 | 1789.9 | 1721.6 | 1595.1 | 1612.0 | 2260.4 |
| 45° | 2860.2 | 2833.0 | 2561.8 | 1916.4 | 1903.1 | 2242.8 | 2391.2 | 2256.0 | 1941.4 | 1936.2 | 2547.8 |
| 47.5° | 3315.2 | 3310.1 | 3033.0 | 2257.5 | 2357.4 | 2959.5 | 3246.1 | 2985.9 | 2336.1 | 2279.5 | 3091.8 |
| 50° | 3954.8 | 3939.3 | 3620.3 | 2657.3 | 2897.7 | 3847.5 | 4359.1 | 3925.4 | 2813.2 | 2680.1 | 3820.3 |
| 52.5° | 4675.2 | 4691.3 | 4442.9 | 3094.0 | 3471.8 | 4835.4 | 5547.7 | 5001.5 | 3331.4 | 3189.5 | 4736.9 |
| 55° | 5353.6 | 5446.3 | 5380.8 | 3604.9 | 4032.7 | 5926.3 | 6853.2 | 6182.1 | 3973.2 | 3856.3 | 5764.6 |
| 57.5° | 5884.4 | 6145.3 | 6604.0 | 4347.3 | 4692.1 | 7202.4 | 8310.9 | 7461.9 | 4722.2 | 4939.1 | 7163.4 |
| 60° | 5913.8 | 6259.3 | 7324.4 | 5900.6 | 5540.4 | 8296.9 | 9766.4 | 8712.3 | 5899.8 | 6777.5 | 8259.4 |
| 62.5° | 5470.5 | 5841.0 | 6855.4 | 6606.2 | 6464.4 | 9228.3 | 10513.2 | 9623.8 | 7058.3 | 7854.4 | 7934.5 |
| 65° | 4963.3 | 5337.5 | 6332.0 | 5805.7 | 6357.0 | 9188.6 | 10323.6 | 9645.1 | 7163.4 | 7122.3 | 7353.1 |
| 67.5° | 4196.6 | 4532.6 | 5433.0 | 5139.0 | 5859.4 | 8745.3 | 9447.4 | 9037.2 | 6599.6 | 6661.4 | 6764.3 |
| 70° | 3063.1 | 3386.6 | 4222.3 | 4237.0 | 5116.9 | 7946.3 | 8117.6 | 8061.0 | 6077.7 | 6143.1 | 5849.1 |
| 72.5° | 2212.6 | 2485.3 | 3206.5 | 3474.8 | 4084.9 | 6663.6 | 6545.2 | 6763.5 | 5214.7 | 5471.3 | 4697.9 |
| 75° | 1590.7 | 1795.1 | 2352.3 | 3022.7 | 3238.1 | 4948.6 | 4685.5 | 5238.2 | 4184.1 | 4711.2 | 3532.1 |
| 77.5° | 645.4 | 717.4 | 925.5 | 2036.2 | 2128.1 | 3329.2 | 2868.3 | 3804.8 | 2983.0 | 3095.5 | 1712.0 |
| 80° | 26.5 | 29.4 | 38.2 | 1051.2 | 1459.1 | 1873.0 | 1534.9 | 2034.0 | 1970.0 | 1246.7 | 404.3 |
| 82.5° | 2.9 | 2.9 | 6.6 | 302.9 | 638.8 | 1033.5 | 723.3 | 1171.7 | 997.5 | 528.5 | 183.8 |
| 85° | 0.7 | 0.7 | 1.5 | 34.5 | 150.0 | 165.4 | 97.8 | 359.5 | 463.8 | 216.1 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 6.6 | 7.4 | 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: P634965
 CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 |
| 2.5° | 333.0 | 329.3 | 324.9 | 320.5 | 318.3 | 312.4 | 310.2 | 308.7 | 307.3 | 308.0 | 308.0 |
| 5° | 322.0 | 313.9 | 304.3 | 294.8 | 289.6 | 283.7 | 280.8 | 279.3 | 280.1 | 283.0 | 283.0 |
| 7.5° | 320.5 | 305.1 | 284.5 | 272.0 | 266.1 | 261.7 | 258.8 | 257.3 | 258.0 | 261.7 | 263.2 |
| 10° | 344.8 | 317.6 | 280.8 | 259.5 | 252.9 | 248.5 | 245.5 | 243.3 | 241.8 | 244.8 | 245.5 |
| 12.5° | 396.9 | 359.5 | 298.4 | 258.0 | 246.3 | 240.4 | 238.2 | 233.8 | 231.6 | 233.0 | 233.8 |
| 15° | 505.0 | 440.3 | 333.7 | 263.9 | 240.4 | 233.8 | 230.1 | 226.4 | 222.7 | 222.0 | 222.7 |
| 17.5° | 646.1 | 553.5 | 387.4 | 277.9 | 236.0 | 227.9 | 222.7 | 217.6 | 212.4 | 211.7 | 211.0 |
| 20° | 821.1 | 692.5 | 462.4 | 299.9 | 232.3 | 222.7 | 215.4 | 208.0 | 201.4 | 199.2 | 199.2 |
| 22.5° | 980.6 | 860.1 | 558.7 | 327.1 | 227.1 | 215.4 | 206.6 | 197.7 | 190.4 | 186.7 | 186.0 |
| 25° | 1175.4 | 1037.9 | 674.1 | 358.7 | 219.8 | 205.8 | 196.3 | 187.4 | 180.1 | 175.7 | 174.2 |
| 27.5° | 1371.7 | 1225.4 | 804.9 | 399.9 | 211.0 | 196.3 | 187.4 | 179.4 | 171.3 | 166.1 | 164.7 |
| 30° | 1562.1 | 1427.5 | 951.9 | 451.3 | 204.4 | 186.7 | 179.4 | 171.3 | 163.9 | 155.8 | 153.6 |
| 32.5° | 1766.4 | 1634.1 | 1116.6 | 508.7 | 199.2 | 180.1 | 172.0 | 164.7 | 155.1 | 147.8 | 144.1 |
| 35° | 1963.4 | 1847.3 | 1298.2 | 564.5 | 194.1 | 174.2 | 165.4 | 158.0 | 147.8 | 139.7 | 134.5 |
| 37.5° | 2161.9 | 2064.1 | 1487.8 | 598.4 | 186.7 | 166.1 | 158.0 | 152.2 | 140.4 | 130.8 | 125.0 |
| 40° | 2372.1 | 2288.3 | 1692.9 | 584.4 | 180.1 | 157.3 | 152.9 | 146.3 | 133.1 | 122.0 | 114.7 |
| 42.5° | 2602.9 | 2502.2 | 1901.7 | 530.7 | 174.2 | 150.0 | 145.5 | 138.9 | 126.4 | 113.2 | 103.6 |
| 45° | 2893.3 | 2736.7 | 2072.9 | 449.9 | 177.2 | 142.6 | 133.8 | 132.3 | 120.6 | 103.6 | 91.9 |
| 47.5° | 3392.4 | 3096.9 | 2206.0 | 397.7 | 197.0 | 134.5 | 124.2 | 127.9 | 115.4 | 94.1 | 80.9 |
| 50° | 4156.2 | 3693.8 | 2330.2 | 394.0 | 227.1 | 130.8 | 115.4 | 125.0 | 110.3 | 84.5 | 71.3 |
| 52.5° | 4883.9 | 4300.3 | 2409.6 | 426.4 | 253.6 | 140.4 | 106.6 | 121.3 | 106.6 | 77.9 | 64.7 |
| 55° | 5580.1 | 4650.2 | 2267.7 | 449.9 | 278.6 | 169.1 | 100.0 | 115.4 | 102.2 | 74.2 | 62.5 |
| 57.5° | 6330.6 | 4806.0 | 1785.5 | 497.7 | 296.2 | 193.3 | 101.4 | 106.6 | 96.3 | 72.0 | 61.7 |
| 60° | 6554.8 | 4606.8 | 1077.6 | 560.1 | 286.7 | 200.7 | 112.5 | 94.8 | 88.2 | 67.6 | 59.5 |
| 62.5° | 6206.3 | 4134.1 | 635.9 | 510.2 | 278.6 | 189.7 | 128.6 | 87.5 | 80.1 | 61.7 | 55.1 |
| 65° | 5685.2 | 3492.4 | 414.6 | 430.8 | 295.5 | 169.1 | 136.7 | 83.8 | 72.8 | 55.9 | 48.5 |
| 67.5° | 5089.7 | 2813.2 | 290.4 | 254.3 | 272.7 | 152.2 | 115.4 | 83.1 | 65.4 | 47.0 | 39.7 |
| 70° | 4287.0 | 2106.8 | 204.4 | 168.3 | 227.1 | 135.3 | 89.7 | 80.9 | 57.3 | 38.2 | 30.9 |
| 72.5° | 3312.3 | 1318.7 | 152.2 | 108.8 | 161.7 | 110.3 | 71.3 | 68.4 | 46.3 | 31.6 | 23.5 |
| 75° | 2442.7 | 752.0 | 107.3 | 78.7 | 106.6 | 83.8 | 52.9 | 48.5 | 39.7 | 30.1 | 21.3 |
| 77.5° | 1275.4 | 376.4 | 66.9 | 60.3 | 61.0 | 52.2 | 38.2 | 35.3 | 36.8 | 30.1 | 19.8 |
| 80° | 244.8 | 75.0 | 40.4 | 44.1 | 33.1 | 33.1 | 27.9 | 29.4 | 32.3 | 24.3 | 16.9 |
| 82.5° | 102.2 | 16.2 | 22.1 | 25.0 | 20.6 | 22.8 | 22.8 | 23.5 | 22.8 | 17.6 | 12.5 |
| 85° | 0.0 | 0.0 | 9.6 | 10.3 | 14.0 | 14.0 | 11.8 | 11.8 | 11.8 | 10.3 | 7.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.2 | 4.4 | 5.1 | 5.9 | 4.4 | 2.9 |
| 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: P634965

CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 |
| 2.5° | 307.3 | 305.8 | 308.0 | 309.5 | 310.9 | 310.9 | 309.5 | 308.0 | 305.8 | 308.0 | 305.8 |
| 5° | 283.7 | 285.9 | 289.6 | 291.1 | 292.6 | 289.6 | 288.2 | 283.7 | 280.1 | 280.8 | 279.3 |
| 7.5° | 265.4 | 267.6 | 272.0 | 274.9 | 274.9 | 273.5 | 269.0 | 264.6 | 258.8 | 258.8 | 258.0 |
| 10° | 248.5 | 251.4 | 256.5 | 260.2 | 261.7 | 260.2 | 255.8 | 249.9 | 244.8 | 244.8 | 242.6 |
| 12.5° | 234.5 | 238.2 | 244.0 | 249.2 | 250.7 | 249.2 | 244.8 | 238.9 | 233.0 | 233.0 | 231.6 |
| 15° | 222.7 | 227.1 | 233.8 | 239.6 | 241.8 | 239.6 | 234.5 | 227.1 | 221.3 | 222.0 | 219.8 |
| 17.5° | 211.7 | 215.4 | 224.2 | 230.8 | 233.0 | 230.8 | 224.2 | 214.6 | 208.8 | 210.2 | 208.8 |
| 20° | 199.2 | 203.6 | 212.4 | 219.8 | 222.0 | 219.8 | 212.4 | 202.1 | 196.3 | 196.3 | 197.0 |
| 22.5° | 186.0 | 190.4 | 199.2 | 204.4 | 207.3 | 205.1 | 197.7 | 188.2 | 182.3 | 182.3 | 183.0 |
| 25° | 174.2 | 176.4 | 183.0 | 188.2 | 188.9 | 186.7 | 180.8 | 173.5 | 169.1 | 171.3 | 172.0 |
| 27.5° | 163.2 | 163.2 | 166.1 | 169.1 | 168.3 | 166.1 | 163.9 | 158.0 | 157.3 | 159.5 | 161.7 |
| 30° | 151.4 | 147.8 | 146.3 | 144.1 | 143.3 | 142.6 | 144.8 | 144.8 | 146.3 | 149.2 | 151.4 |
| 32.5° | 141.1 | 133.8 | 127.2 | 120.6 | 116.9 | 119.8 | 125.7 | 130.8 | 136.0 | 140.4 | 142.6 |
| 35° | 129.4 | 117.6 | 106.6 | 97.8 | 91.9 | 96.3 | 105.9 | 115.4 | 124.2 | 130.1 | 133.8 |
| 37.5° | 117.6 | 100.7 | 87.5 | 76.4 | 72.0 | 75.7 | 86.0 | 99.2 | 112.5 | 119.8 | 125.0 |
| 40° | 105.1 | 83.8 | 68.4 | 59.5 | 55.1 | 58.8 | 69.1 | 82.3 | 100.0 | 109.5 | 116.1 |
| 42.5° | 92.6 | 69.1 | 55.1 | 46.3 | 44.1 | 46.3 | 54.4 | 67.6 | 86.7 | 98.5 | 107.3 |
| 45° | 80.1 | 57.3 | 44.1 | 37.5 | 35.3 | 37.5 | 44.1 | 55.1 | 74.2 | 87.5 | 97.8 |
| 47.5° | 69.1 | 48.5 | 36.8 | 30.9 | 29.4 | 31.6 | 36.8 | 46.3 | 62.5 | 75.7 | 87.5 |
| 50° | 60.3 | 42.6 | 31.6 | 26.5 | 25.0 | 27.2 | 31.6 | 39.0 | 52.9 | 64.7 | 77.2 |
| 52.5° | 54.4 | 39.7 | 27.9 | 22.8 | 22.1 | 23.5 | 27.2 | 33.1 | 44.8 | 55.1 | 66.9 |
| 55° | 52.9 | 39.7 | 25.7 | 20.6 | 19.8 | 21.3 | 24.3 | 28.7 | 39.0 | 47.8 | 58.1 |
| 57.5° | 54.4 | 42.6 | 24.3 | 17.6 | 16.9 | 18.4 | 21.3 | 25.0 | 33.8 | 41.2 | 50.7 |
| 60° | 54.4 | 43.4 | 21.3 | 14.0 | 13.2 | 14.7 | 17.6 | 22.1 | 30.1 | 36.0 | 44.1 |
| 62.5° | 49.3 | 39.7 | 17.6 | 11.0 | 9.6 | 11.0 | 14.7 | 18.4 | 26.5 | 32.3 | 39.0 |
| 65° | 42.6 | 33.8 | 14.7 | 8.1 | 6.6 | 8.1 | 11.8 | 15.4 | 22.8 | 27.9 | 35.3 |
| 67.5° | 34.5 | 25.7 | 11.0 | 5.9 | 4.4 | 5.9 | 8.8 | 12.5 | 19.1 | 24.3 | 31.6 |
| 70° | 25.7 | 18.4 | 8.8 | 5.1 | 4.4 | 5.1 | 8.1 | 11.8 | 16.9 | 22.1 | 29.4 |
| 72.5° | 19.1 | 12.5 | 7.4 | 5.1 | 3.7 | 5.1 | 7.4 | 11.0 | 16.2 | 21.3 | 27.9 |
| 75° | 16.2 | 10.3 | 6.6 | 4.4 | 3.7 | 4.4 | 6.6 | 10.3 | 14.7 | 19.8 | 26.5 |
| 77.5° | 15.4 | 9.6 | 5.9 | 3.7 | 2.9 | 3.7 | 5.9 | 8.8 | 13.2 | 18.4 | 25.7 |
| 80° | 13.2 | 8.1 | 5.1 | 2.9 | 2.2 | 2.9 | 5.1 | 7.4 | 10.3 | 14.0 | 19.8 |
| 82.5° | 10.3 | 6.6 | 3.7 | 1.5 | 0.7 | 1.5 | 3.7 | 4.4 | 6.6 | 8.1 | 11.8 |
| 85° | 6.6 | 3.7 | 1.5 | 0.0 | 0.0 | 0.0 | 1.5 | 2.9 | 2.9 | 3.7 | 5.9 |
| 87.5° | 2.9 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 1.5 | 2.2 |
| 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: P634965

CATALOG NUMBER: GWS-SA3C-827-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

| | 285° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 359° | 360° |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0° | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 | 330.8 |
| 2.5° | 310.2 | 310.9 | 312.4 | 314.6 | 319.8 | 324.2 | 328.6 | 334.5 | 337.4 | 337.4 |
| 5° | 280.8 | 281.5 | 282.3 | 285.2 | 292.6 | 298.4 | 308.0 | 319.8 | 325.6 | 327.1 |
| 7.5° | 258.0 | 259.5 | 261.0 | 263.2 | 270.5 | 278.6 | 291.1 | 313.1 | 324.2 | 326.4 |
| 10° | 244.8 | 247.0 | 249.9 | 254.3 | 261.0 | 269.8 | 291.1 | 330.8 | 349.2 | 352.8 |
| 12.5° | 234.5 | 238.2 | 241.1 | 246.3 | 254.3 | 268.3 | 310.9 | 380.8 | 413.1 | 421.9 |
| 15° | 224.2 | 228.6 | 233.0 | 238.2 | 247.0 | 273.5 | 349.2 | 470.5 | 524.1 | 530.7 |
| 17.5° | 213.9 | 219.1 | 224.9 | 230.8 | 241.8 | 285.9 | 409.4 | 594.7 | 669.7 | 684.4 |
| 20° | 202.1 | 208.8 | 216.9 | 224.2 | 236.7 | 305.8 | 493.2 | 742.4 | 836.5 | 868.1 |
| 22.5° | 189.7 | 197.7 | 207.3 | 216.9 | 230.8 | 330.1 | 594.7 | 901.2 | 1032.8 | 1053.4 |
| 25° | 179.4 | 187.4 | 196.3 | 205.8 | 221.3 | 359.5 | 717.4 | 1098.2 | 1218.0 | 1237.9 |
| 27.5° | 169.8 | 177.9 | 186.0 | 194.8 | 211.7 | 397.7 | 865.2 | 1307.7 | 1432.7 | 1453.3 |
| 30° | 159.5 | 169.1 | 177.2 | 186.0 | 202.9 | 444.7 | 1035.7 | 1540.0 | 1658.4 | 1677.5 |
| 32.5° | 150.7 | 160.2 | 168.3 | 177.2 | 196.3 | 496.2 | 1215.1 | 1745.8 | 1842.1 | 1842.1 |
| 35° | 143.3 | 153.6 | 159.5 | 171.3 | 191.1 | 529.3 | 1384.9 | 1942.1 | 2014.9 | 2011.9 |
| 37.5° | 135.3 | 147.8 | 152.2 | 160.2 | 184.5 | 532.9 | 1544.4 | 2149.4 | 2203.1 | 2183.9 |
| 40° | 127.2 | 140.4 | 147.0 | 151.4 | 177.2 | 502.8 | 1719.4 | 2339.8 | 2385.4 | 2360.4 |
| 42.5° | 119.8 | 130.1 | 139.7 | 144.8 | 172.7 | 449.9 | 1859.8 | 2543.4 | 2597.8 | 2575.7 |
| 45° | 112.5 | 121.3 | 127.2 | 136.7 | 175.7 | 413.1 | 1980.3 | 2780.8 | 2876.4 | 2860.2 |
| 47.5° | 105.1 | 112.5 | 116.1 | 130.8 | 195.5 | 396.2 | 2053.8 | 3148.4 | 3328.5 | 3315.2 |
| 50° | 97.0 | 105.9 | 105.9 | 129.4 | 224.9 | 402.1 | 2117.8 | 3680.6 | 3959.2 | 3954.8 |
| 52.5° | 88.9 | 98.5 | 97.0 | 140.4 | 247.7 | 429.3 | 2190.6 | 4150.3 | 4634.7 | 4675.2 |
| 55° | 80.9 | 89.7 | 91.2 | 162.5 | 261.0 | 452.8 | 1909.0 | 4348.0 | 5211.8 | 5353.6 |
| 57.5° | 72.0 | 77.2 | 94.8 | 179.4 | 256.5 | 521.2 | 1307.7 | 4384.1 | 5580.1 | 5884.4 |
| 60° | 62.5 | 66.9 | 107.3 | 175.7 | 242.6 | 481.5 | 823.3 | 4060.6 | 5527.9 | 5913.8 |
| 62.5° | 54.4 | 61.7 | 113.2 | 155.1 | 247.0 | 417.5 | 524.9 | 3460.8 | 5030.2 | 5470.5 |
| 65° | 47.8 | 59.5 | 102.9 | 140.4 | 249.9 | 283.0 | 354.3 | 2815.4 | 4544.3 | 4963.3 |
| 67.5° | 42.6 | 66.2 | 84.5 | 125.0 | 214.6 | 199.2 | 243.3 | 2187.6 | 3821.0 | 4196.6 |
| 70° | 39.0 | 67.6 | 69.1 | 107.3 | 166.1 | 127.9 | 160.2 | 1472.4 | 2633.8 | 3063.1 |
| 72.5° | 35.3 | 50.0 | 52.2 | 86.0 | 107.3 | 77.9 | 103.6 | 842.4 | 1920.0 | 2212.6 |
| 75° | 33.8 | 33.8 | 36.0 | 55.9 | 59.5 | 56.6 | 66.9 | 502.8 | 1376.8 | 1590.7 |
| 77.5° | 31.6 | 25.7 | 22.8 | 36.0 | 32.3 | 40.4 | 39.7 | 223.5 | 596.9 | 645.4 |
| 80° | 25.0 | 18.4 | 15.4 | 22.8 | 22.1 | 27.2 | 23.5 | 18.4 | 27.2 | 26.5 |
| 82.5° | 15.4 | 11.8 | 11.0 | 14.0 | 12.5 | 14.0 | 11.0 | 2.9 | 2.9 | 2.9 |
| 85° | 7.4 | 6.6 | 5.9 | 5.9 | 6.6 | 5.9 | 4.4 | 1.5 | 0.7 | 0.7 |
| 87.5° | 3.7 | 3.7 | 2.9 | 2.2 | 2.9 | 2.9 | 2.2 | 0.7 | 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 |

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



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Invue

Report Number: SP1-2407-157-9

Test Date: 10/03/2024

Luminaire Tested: EMM2-HTN-SA1A-827-U-5WQ

Data applicable to all product families utilizing light square engine

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-157-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/03/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Invue
 Catalog Number: **EMM2-HTN-SA1A-827-U-5WQ**
 Description: Epic Modern Light Square 40W 5WQ Optic

Spectral Parameters

CCT (K): 2764
 CIE u': 0.2591
 CIE v': 0.5290
 Duv: 0.0020
 CIE x: 0.4581
 CIE y: 0.4156
 CIE z: 0.1263
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 583
 Purity: 62.2537
 Rf: 84.7
 Rg: 94.6

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 80.9 | | |
| R1: | 78.8 | R9: | -1.5 |
| R2: | 89.9 | R10: | 77.9 |
| R3: | 96.2 | R11: | 78.9 |
| R4: | 79.1 | R12: | 71.6 |
| R5: | 79.1 | R13: | 81.2 |
| R6: | 88.8 | R14: | 98.5 |
| R7: | 81.3 | R15: | 69.9 |
| R8: | 54.3 | | |



Test Conditions

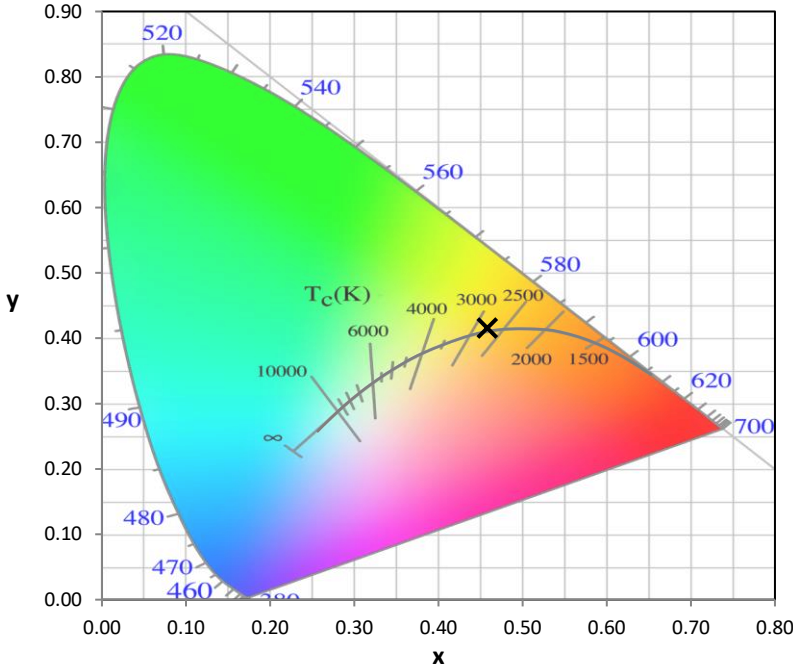
Stabilization Time: 81M
 Operation Time: 2H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-157-9

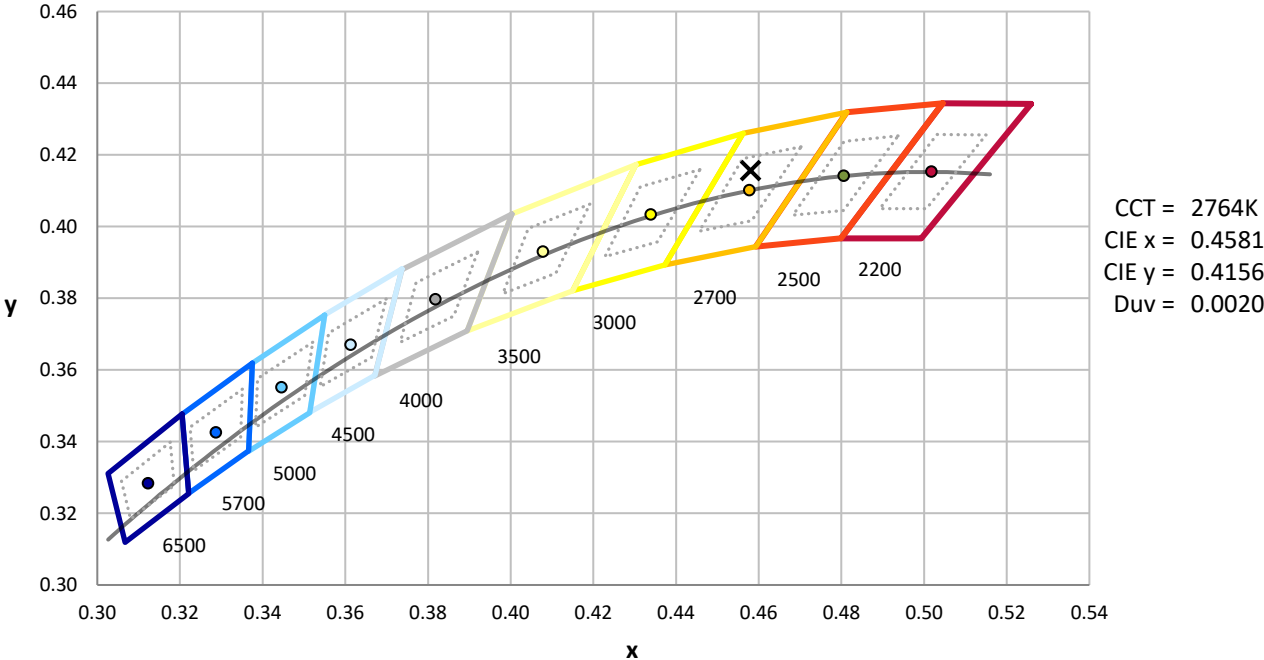
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

REPORT NUMBER: SP1-2407-157-9

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-9

Photopic Flux vs. Wavelength



Photopic Lumens: 4337.9

| 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 | 0 | 0.0 | 490 | 18018 | 2.6 | 620 | 87426 | 22.8 | 750 | 2680 | 0.0 | 880 | 58 | 0.0 |
| 365 | 0 | 0.0 | 495 | 22295 | 3.9 | 625 | 83013 | 18.2 | 755 | 2287 | 0.0 | 885 | 46 | 0.0 |
| 370 | 0 | 0.0 | 500 | 26478 | 5.8 | 630 | 78077 | 14.1 | 760 | 1944 | 0.0 | 890 | 45 | 0.0 |
| 375 | 0 | 0.0 | 505 | 30524 | 8.5 | 635 | 72080 | 10.7 | 765 | 1653 | 0.0 | 895 | 41 | 0.0 |
| 380 | 0 | 0.0 | 510 | 33611 | 11.5 | 640 | 66249 | 7.9 | 770 | 1413 | 0.0 | 900 | 38 | 0.0 |
| 385 | 0 | 0.0 | 515 | 36490 | 15.2 | 645 | 59973 | 5.7 | 775 | 1198 | 0.0 | 905 | 33 | 0.0 |
| 390 | 0 | 0.0 | 520 | 38610 | 18.7 | 650 | 53972 | 3.9 | 780 | 1025 | 0.0 | 910 | 30 | 0.0 |
| 395 | 0 | 0.0 | 525 | 40511 | 21.9 | 655 | 48369 | 2.7 | 785 | 874 | 0.0 | 915 | 23 | 0.0 |
| 400 | 48 | 0.0 | 530 | 42223 | 24.9 | 660 | 42641 | 1.8 | 790 | 747 | 0.0 | 920 | 24 | 0.0 |
| 405 | 201 | 0.0 | 535 | 44137 | 27.6 | 665 | 37602 | 1.1 | 795 | 639 | 0.0 | 925 | 22 | 0.0 |
| 410 | 457 | 0.0 | 540 | 46032 | 30.0 | 670 | 32798 | 0.7 | 800 | 547 | 0.0 | 930 | 22 | 0.0 |
| 415 | 925 | 0.0 | 545 | 48553 | 32.5 | 675 | 28558 | 0.5 | 805 | 473 | 0.0 | 935 | 17 | 0.0 |
| 420 | 1816 | 0.0 | 550 | 51408 | 34.9 | 680 | 24782 | 0.3 | 810 | 401 | 0.0 | 940 | 13 | 0.0 |
| 425 | 3217 | 0.0 | 555 | 54711 | 37.4 | 685 | 21386 | 0.2 | 815 | 351 | 0.0 | 945 | 6 | 0.0 |
| 430 | 5520 | 0.0 | 560 | 58847 | 40.0 | 690 | 18413 | 0.1 | 820 | 307 | 0.0 | 950 | 10 | 0.0 |
| 435 | 9225 | 0.1 | 565 | 63386 | 42.4 | 695 | 15721 | 0.1 | 825 | 261 | 0.0 | 955 | 11 | 0.0 |
| 440 | 15522 | 0.2 | 570 | 68196 | 44.3 | 700 | 13432 | 0.0 | 830 | 228 | 0.0 | 960 | 8 | 0.0 |
| 445 | 27642 | 0.6 | 575 | 73613 | 46.0 | 705 | 11513 | 0.0 | 835 | 193 | 0.0 | 965 | 12 | 0.0 |
| 450 | 36602 | 0.9 | 580 | 79207 | 47.1 | 710 | 9780 | 0.0 | 840 | 174 | 0.0 | 970 | 3 | 0.0 |
| 455 | 28292 | 0.9 | 585 | 84248 | 47.0 | 715 | 8356 | 0.0 | 845 | 151 | 0.0 | 975 | 8 | 0.0 |
| 460 | 21166 | 0.9 | 590 | 88397 | 45.7 | 720 | 7161 | 0.0 | 850 | 123 | 0.0 | 980 | 2 | 0.0 |
| 465 | 19092 | 1.0 | 595 | 91428 | 43.4 | 725 | 6067 | 0.0 | 855 | 106 | 0.0 | 985 | 13 | 0.0 |
| 470 | 14951 | 0.9 | 600 | 93452 | 40.3 | 730 | 5164 | 0.0 | 860 | 95 | 0.0 | 990 | 16 | 0.0 |
| 475 | 12606 | 1.0 | 605 | 93959 | 36.4 | 735 | 4393 | 0.0 | 865 | 82 | 0.0 | 995 | 20 | 0.0 |
| 480 | 13323 | 1.3 | 610 | 93079 | 32.0 | 740 | 3694 | 0.0 | 870 | 77 | 0.0 | 1000 | 0 | 0.0 |
| 485 | 15164 | 1.8 | 615 | 90707 | 27.3 | 745 | 3157 | 0.0 | 875 | 65 | 0.0 | | | |

REPORT NUMBER: SP1-2407-157-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: 5286.7

S/P: 1.22

| λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360 | 0 | 0.0 | 490 | 18018 | 75.9 | 620 | 87426 | 0.4 | 750 | 2680 | 0.0 | 880 | 58 | 0.0 |
| 365 | 0 | 0.0 | 495 | 22295 | 93.2 | 625 | 83013 | 0.2 | 755 | 2287 | 0.0 | 885 | 46 | 0.0 |
| 370 | 0 | 0.0 | 500 | 26478 | 107.8 | 630 | 78077 | 0.1 | 760 | 1944 | 0.0 | 890 | 45 | 0.0 |
| 375 | 0 | 0.0 | 505 | 30524 | 118.7 | 635 | 72080 | 0.1 | 765 | 1653 | 0.0 | 895 | 41 | 0.0 |
| 380 | 0 | 0.0 | 510 | 33611 | 122.2 | 640 | 66249 | 0.1 | 770 | 1413 | 0.0 | 900 | 38 | 0.0 |
| 385 | 0 | 0.0 | 515 | 36490 | 120.8 | 645 | 59973 | 0.0 | 775 | 1198 | 0.0 | 905 | 33 | 0.0 |
| 390 | 0 | 0.0 | 520 | 38610 | 113.9 | 650 | 53972 | 0.0 | 780 | 1025 | 0.0 | 910 | 30 | 0.0 |
| 395 | 0 | 0.0 | 525 | 40511 | 104.1 | 655 | 48369 | 0.0 | 785 | 874 | 0.0 | 915 | 23 | 0.0 |
| 400 | 48 | 0.0 | 530 | 42223 | 92.4 | 660 | 42641 | 0.0 | 790 | 747 | 0.0 | 920 | 24 | 0.0 |
| 405 | 201 | 0.0 | 535 | 44137 | 80.5 | 665 | 37602 | 0.0 | 795 | 639 | 0.0 | 925 | 22 | 0.0 |
| 410 | 457 | 0.1 | 540 | 46032 | 68.2 | 670 | 32798 | 0.0 | 800 | 547 | 0.0 | 930 | 22 | 0.0 |
| 415 | 925 | 0.3 | 545 | 48553 | 57.1 | 675 | 28558 | 0.0 | 805 | 473 | 0.0 | 935 | 17 | 0.0 |
| 420 | 1816 | 1.1 | 550 | 51408 | 46.7 | 680 | 24782 | 0.0 | 810 | 401 | 0.0 | 940 | 13 | 0.0 |
| 425 | 3217 | 2.5 | 555 | 54711 | 37.4 | 685 | 21386 | 0.0 | 815 | 351 | 0.0 | 945 | 6 | 0.0 |
| 430 | 5520 | 5.9 | 560 | 58847 | 29.4 | 690 | 18413 | 0.0 | 820 | 307 | 0.0 | 950 | 10 | 0.0 |
| 435 | 9225 | 12.5 | 565 | 63386 | 22.5 | 695 | 15721 | 0.0 | 825 | 261 | 0.0 | 955 | 11 | 0.0 |
| 440 | 15522 | 26.3 | 570 | 68196 | 16.9 | 700 | 13432 | 0.0 | 830 | 228 | 0.0 | 960 | 8 | 0.0 |
| 445 | 27642 | 55.2 | 575 | 73613 | 12.4 | 705 | 11513 | 0.0 | 835 | 193 | 0.0 | 965 | 12 | 0.0 |
| 450 | 36602 | 85.4 | 580 | 79207 | 9.0 | 710 | 9780 | 0.0 | 840 | 174 | 0.0 | 970 | 3 | 0.0 |
| 455 | 28292 | 75.1 | 585 | 84248 | 6.3 | 715 | 8356 | 0.0 | 845 | 151 | 0.0 | 975 | 8 | 0.0 |
| 460 | 21166 | 63.2 | 590 | 88397 | 4.4 | 720 | 7161 | 0.0 | 850 | 123 | 0.0 | 980 | 2 | 0.0 |
| 465 | 19092 | 63.2 | 595 | 91428 | 3.0 | 725 | 6067 | 0.0 | 855 | 106 | 0.0 | 985 | 13 | 0.0 |
| 470 | 14951 | 54.2 | 600 | 93452 | 2.0 | 730 | 5164 | 0.0 | 860 | 95 | 0.0 | 990 | 16 | 0.0 |
| 475 | 12606 | 48.8 | 605 | 93959 | 1.3 | 735 | 4393 | 0.0 | 865 | 82 | 0.0 | 995 | 20 | 0.0 |
| 480 | 13323 | 54.2 | 610 | 93079 | 0.9 | 740 | 3694 | 0.0 | 870 | 77 | 0.0 | 1000 | 0 | 0.0 |
| 485 | 15164 | 63.3 | 615 | 90707 | 0.5 | 745 | 3157 | 0.0 | 875 | 65 | 0.0 | | | |

REPORT NUMBER: SP1-2407-157-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: 9797

M/P: 2.26

| 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 | 0 | 0.0 | 490 | 18018 | 27.7 | 620 | 87426 | 1.1 | 750 | 2680 | 0.0 | 880 | 58 | 0.0 |
| 365 | 0 | 0.0 | 495 | 22295 | 36.0 | 625 | 83013 | 0.7 | 755 | 2287 | 0.0 | 885 | 46 | 0.0 |
| 370 | 0 | 0.0 | 500 | 26478 | 44.2 | 630 | 78077 | 0.4 | 760 | 1944 | 0.0 | 890 | 45 | 0.0 |
| 375 | 0 | 0.0 | 505 | 30524 | 51.8 | 635 | 72080 | 0.3 | 765 | 1653 | 0.0 | 895 | 41 | 0.0 |
| 380 | 0 | 0.0 | 510 | 33611 | 57.0 | 640 | 66249 | 0.2 | 770 | 1413 | 0.0 | 900 | 38 | 0.0 |
| 385 | 0 | 0.0 | 515 | 36490 | 60.5 | 645 | 59973 | 0.1 | 775 | 1198 | 0.0 | 905 | 33 | 0.0 |
| 390 | 0 | 0.0 | 520 | 38610 | 61.4 | 650 | 53972 | 0.1 | 780 | 1025 | 0.0 | 910 | 30 | 0.0 |
| 395 | 0 | 0.0 | 525 | 40511 | 60.6 | 655 | 48369 | 0.0 | 785 | 874 | 0.0 | 915 | 23 | 0.0 |
| 400 | 48 | 0.0 | 530 | 42223 | 58.2 | 660 | 42641 | 0.0 | 790 | 747 | 0.0 | 920 | 24 | 0.0 |
| 405 | 201 | 0.0 | 535 | 44137 | 55.0 | 665 | 37602 | 0.0 | 795 | 639 | 0.0 | 925 | 22 | 0.0 |
| 410 | 457 | 0.0 | 540 | 46032 | 50.9 | 670 | 32798 | 0.0 | 800 | 547 | 0.0 | 930 | 22 | 0.0 |
| 415 | 925 | 0.1 | 545 | 48553 | 46.6 | 675 | 28558 | 0.0 | 805 | 473 | 0.0 | 935 | 17 | 0.0 |
| 420 | 1816 | 0.3 | 550 | 51408 | 42.0 | 680 | 24782 | 0.0 | 810 | 401 | 0.0 | 940 | 13 | 0.0 |
| 425 | 3217 | 0.8 | 555 | 54711 | 37.4 | 685 | 21386 | 0.0 | 815 | 351 | 0.0 | 945 | 6 | 0.0 |
| 430 | 5520 | 1.9 | 560 | 58847 | 32.9 | 690 | 18413 | 0.0 | 820 | 307 | 0.0 | 950 | 10 | 0.0 |
| 435 | 9225 | 4.1 | 565 | 63386 | 28.4 | 695 | 15721 | 0.0 | 825 | 261 | 0.0 | 955 | 11 | 0.0 |
| 440 | 15522 | 8.7 | 570 | 68196 | 24.1 | 700 | 13432 | 0.0 | 830 | 228 | 0.0 | 960 | 8 | 0.0 |
| 445 | 27642 | 18.5 | 575 | 73613 | 20.0 | 705 | 11513 | 0.0 | 835 | 193 | 0.0 | 965 | 12 | 0.0 |
| 450 | 36602 | 28.3 | 580 | 79207 | 16.3 | 710 | 9780 | 0.0 | 840 | 174 | 0.0 | 970 | 3 | 0.0 |
| 455 | 28292 | 24.7 | 585 | 84248 | 12.9 | 715 | 8356 | 0.0 | 845 | 151 | 0.0 | 975 | 8 | 0.0 |
| 460 | 21166 | 20.4 | 590 | 88397 | 9.8 | 720 | 7161 | 0.0 | 850 | 123 | 0.0 | 980 | 2 | 0.0 |
| 465 | 19092 | 20.1 | 595 | 91428 | 7.3 | 725 | 6067 | 0.0 | 855 | 106 | 0.0 | 985 | 13 | 0.0 |
| 470 | 14951 | 17.2 | 600 | 93452 | 5.3 | 730 | 5164 | 0.0 | 860 | 95 | 0.0 | 990 | 16 | 0.0 |
| 475 | 12606 | 15.7 | 605 | 93959 | 3.7 | 735 | 4393 | 0.0 | 865 | 82 | 0.0 | 995 | 20 | 0.0 |
| 480 | 13323 | 18.0 | 610 | 93079 | 2.5 | 740 | 3694 | 0.0 | 870 | 77 | 0.0 | 1000 | 0 | 0.0 |
| 485 | 15164 | 21.9 | 615 | 90707 | 1.7 | 745 | 3157 | 0.0 | 875 | 65 | 0.0 | | | |

Summary

$R_f = 84.7$
 $R_g = 94.6$
 CIE $R_a = 80.9$
 $R_9 = -1.5$



Color Vector Graphics

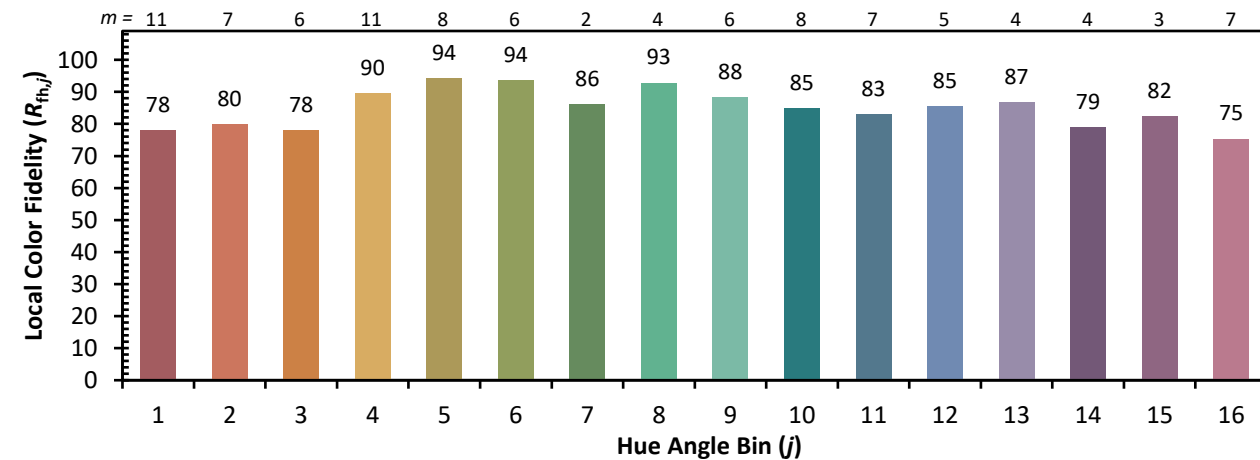


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 84 | CES51 = 95 | CES76 = 81 |
| CES02 = 63 | CES27 = 95 | CES52 = 94 | CES77 = 84 |
| CES03 = 31 | CES28 = 94 | CES53 = 89 | CES78 = 81 |
| CES04 = 71 | CES29 = 87 | CES54 = 91 | CES79 = 89 |
| CES05 = 50 | CES30 = 94 | CES55 = 90 | CES80 = 89 |
| CES06 = 52 | CES31 = 89 | CES56 = 86 | CES81 = 69 |
| CES07 = 43 | CES32 = 82 | CES57 = 85 | CES82 = 96 |
| CES08 = 41 | CES33 = 91 | CES58 = 86 | CES83 = 93 |
| CES09 = 29 | CES34 = 92 | CES59 = 91 | CES84 = 92 |
| CES10 = 77 | CES35 = 96 | CES60 = 94 | CES85 = 76 |
| CES11 = 60 | CES36 = 90 | CES61 = 89 | CES86 = 65 |
| CES12 = 66 | CES37 = 96 | CES62 = 94 | CES87 = 84 |
| CES13 = 44 | CES38 = 98 | CES63 = 87 | CES88 = 86 |
| CES14 = 74 | CES39 = 98 | CES64 = 82 | CES89 = 73 |
| CES15 = 72 | CES40 = 95 | CES65 = 78 | CES90 = 88 |
| CES16 = 48 | CES41 = 96 | CES66 = 81 | CES91 = 82 |
| CES17 = 50 | CES42 = 97 | CES67 = 80 | CES92 = 64 |
| CES18 = 57 | CES43 = 91 | CES68 = 83 | CES93 = 78 |
| CES19 = 73 | CES44 = 99 | CES69 = 88 | CES94 = 59 |
| CES20 = 67 | CES45 = 93 | CES70 = 80 | CES95 = 74 |
| CES21 = 87 | CES46 = 89 | CES71 = 79 | CES96 = 83 |
| CES22 = 79 | CES47 = 92 | CES72 = 92 | CES97 = 88 |
| CES23 = 92 | CES48 = 83 | CES73 = 75 | CES98 = 83 |
| CES24 = 91 | CES49 = 90 | CES74 = 91 | CES99 = 74 |
| CES25 = 72 | CES50 = 94 | CES75 = 81 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)